

#85

Benzo[j]+[k]fluoranthene

Concen: 7117.75 ng/mL

RT: 47.372 min Scan# 4305

Delta R.T. 0.018 min

Lab File: F811121409.D

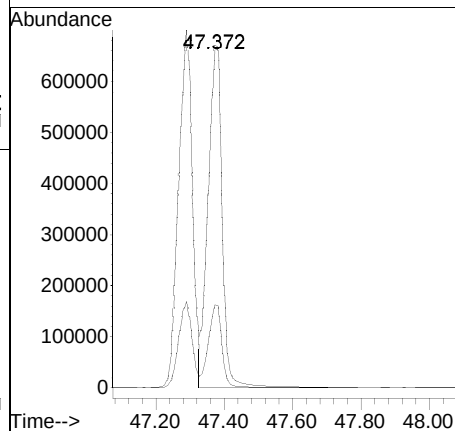
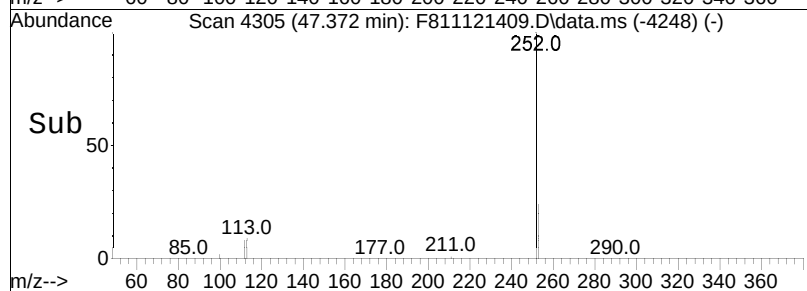
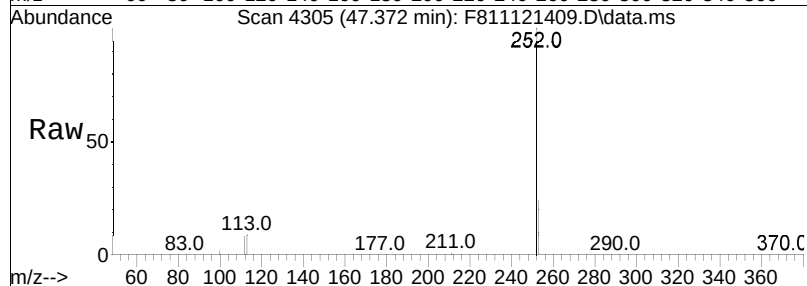
Acq: 13 Nov 2014 4:42 am

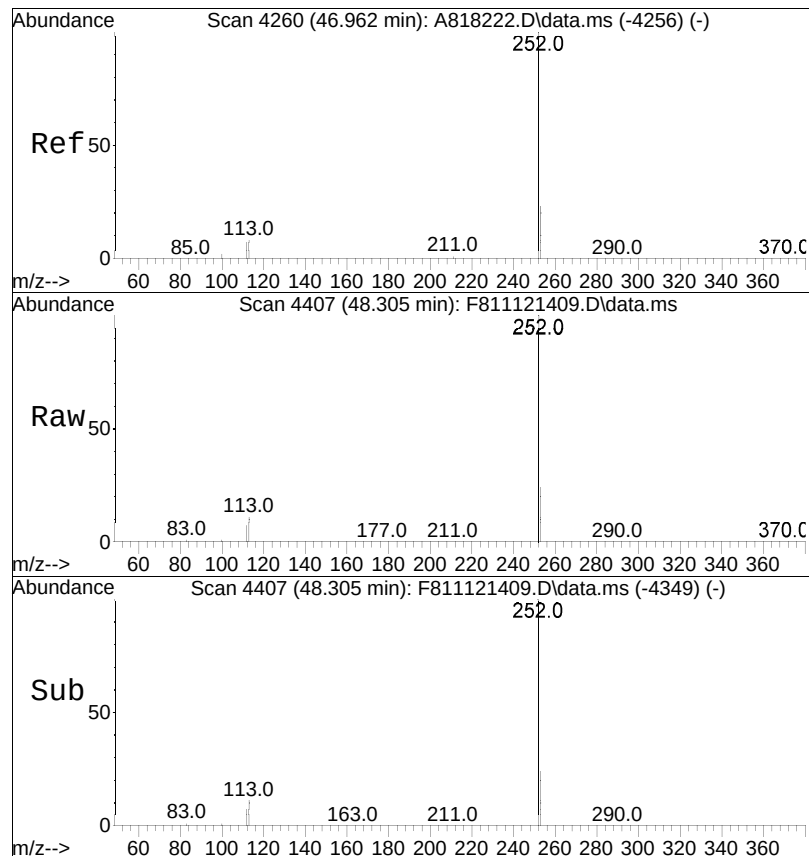
Tgt Ion: 252 Resp: 1913423

Ion Ratio Lower Upper

252 100

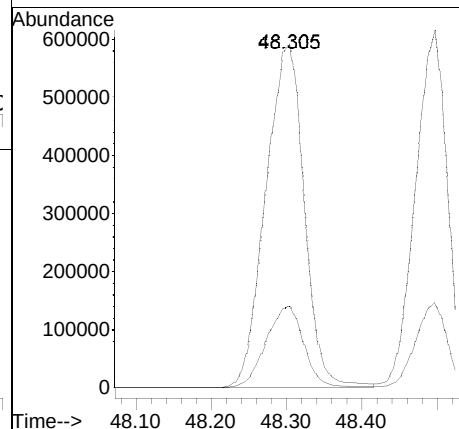
253 23.1 16.2 30.0

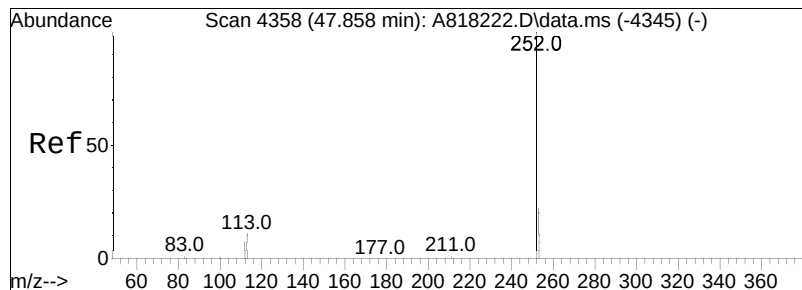




#87
 Benzo[e]pyrene
 Concen: 7605.86 ng/mL
 RT: 48.305 min Scan# 4407
 Delta R.T. 0.027 min
 Lab File: F811121409.D
 Acq: 13 Nov 2014 4:42 am

Tgt Ion	Ratio	Lower	Upper
252	100		
253	23.0	16.6	30.8





#89

Benzo[a]pyrene

Concen: 7073.30 ng/mL

RT: 48.497 min Scan# 4428

Delta R.T. 0.027 min

Lab File: F811121409.D

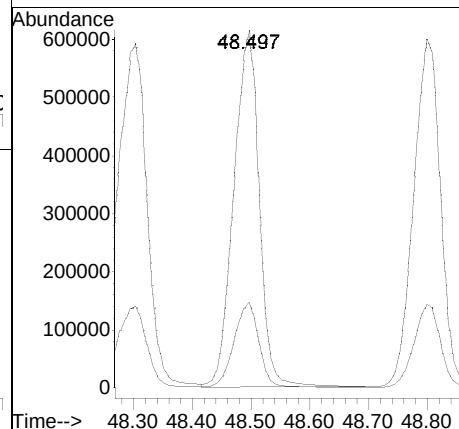
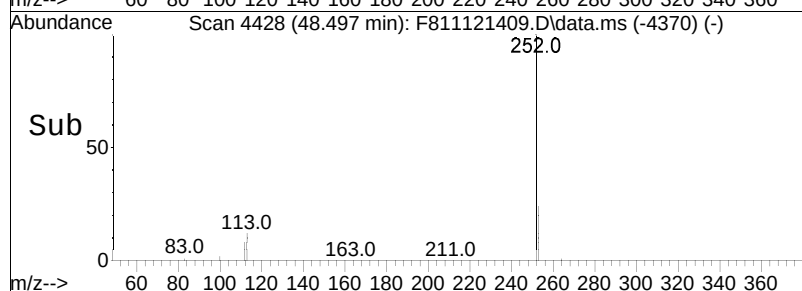
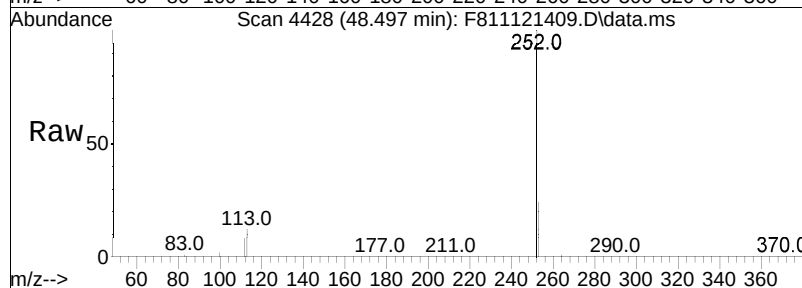
Acq: 13 Nov 2014 4:42 am

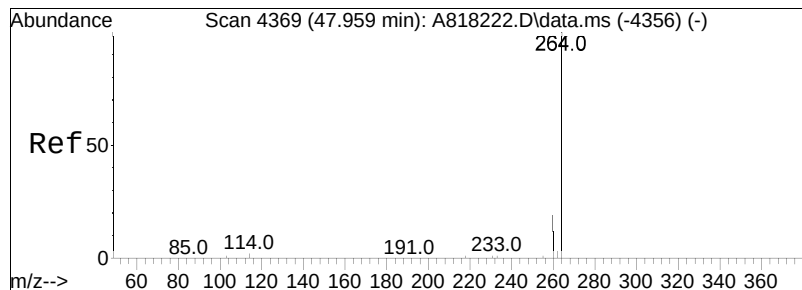
Tgt Ion: 252 Resp: 1838075

Ion Ratio Lower Upper

252 100

253 23.2 16.8 31.2





#90

Perylene

Concen: 7144.26 ng/mL

RT: 48.799 min Scan# 4461

Delta R.T. 0.018 min

Lab File: F811121409.D

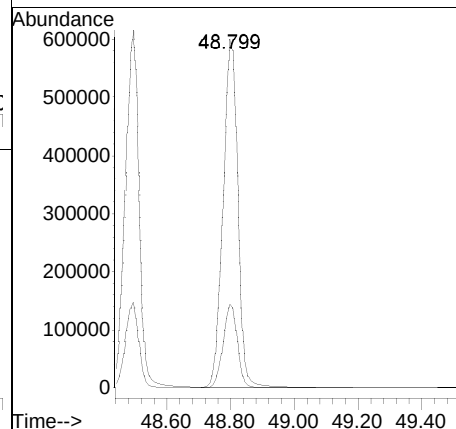
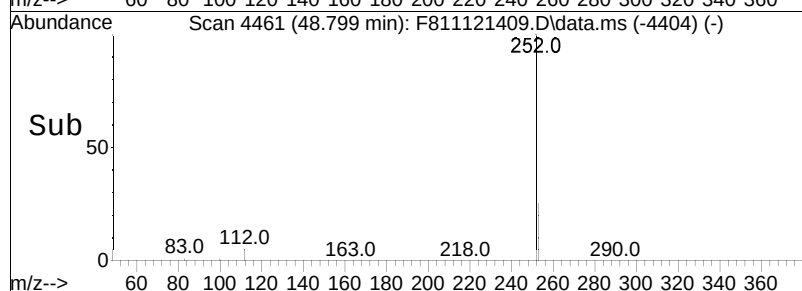
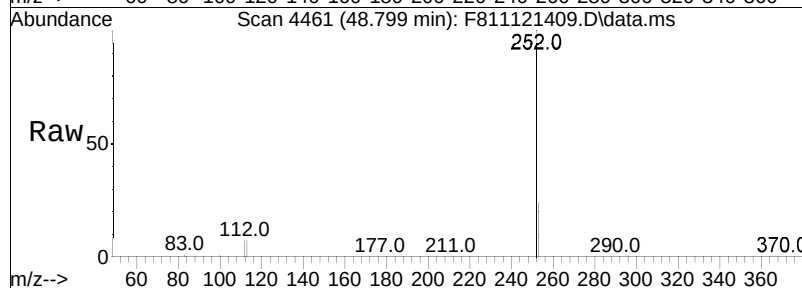
Acq: 13 Nov 2014 4:42 am

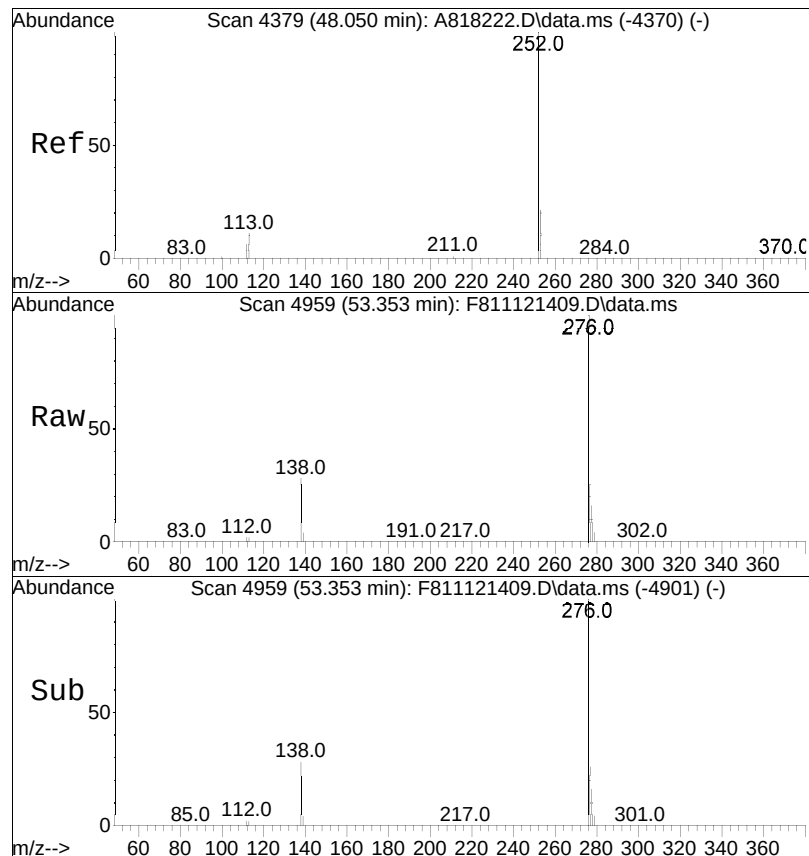
Tgt Ion: 252 Resp: 1938968

Ion Ratio Lower Upper

252 100

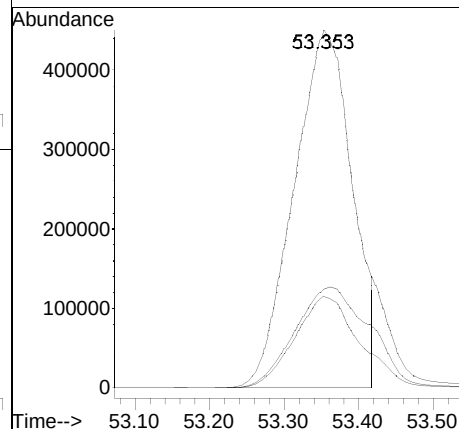
253 22.9 17.1 31.7

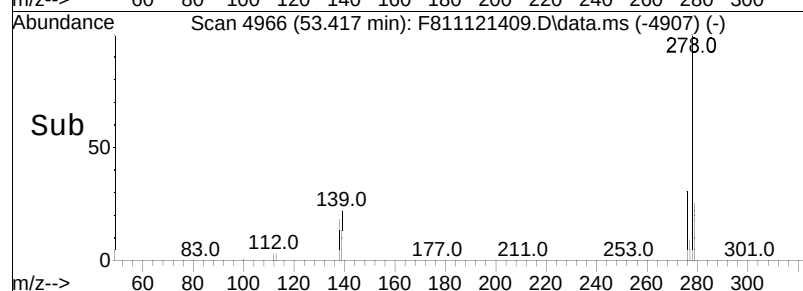
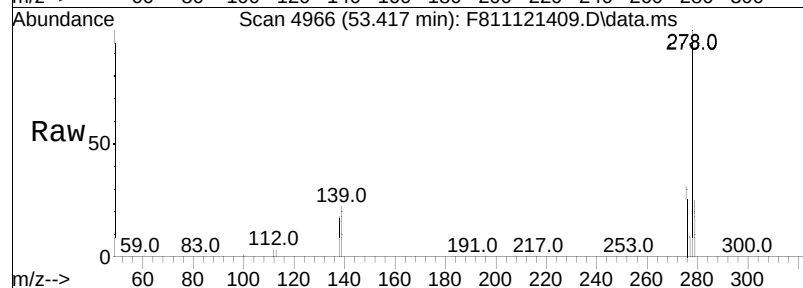
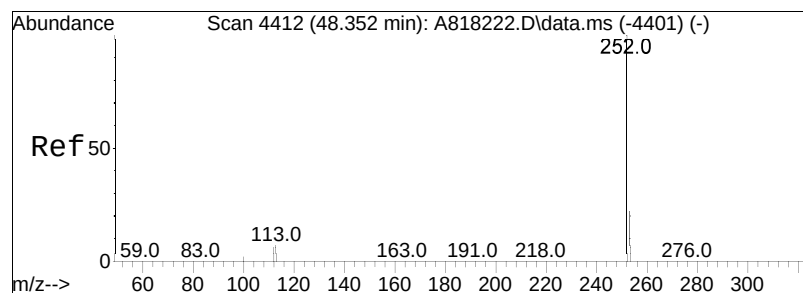




#91
 Indeno[1,2,3-cd]pyrene
 Concen: 7502.94 ng/mL M3
 RT: 53.353 min Scan# 4959
 Delta R.T. 0.027 min
 Lab File: F811121409.D
 Acq: 13 Nov 2014 4:42 am

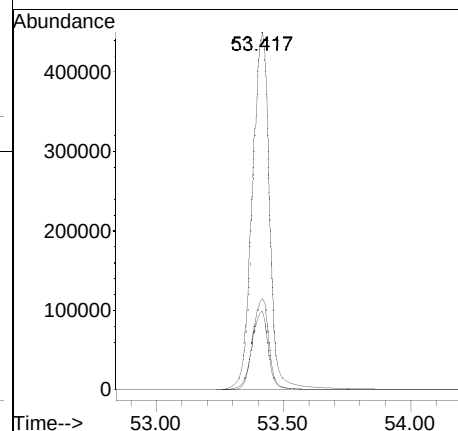
Tgt Ion	Ratio	Lower	Upper
276	100		
138	36.9	18.7	34.7#
277	29.1	16.7	30.9

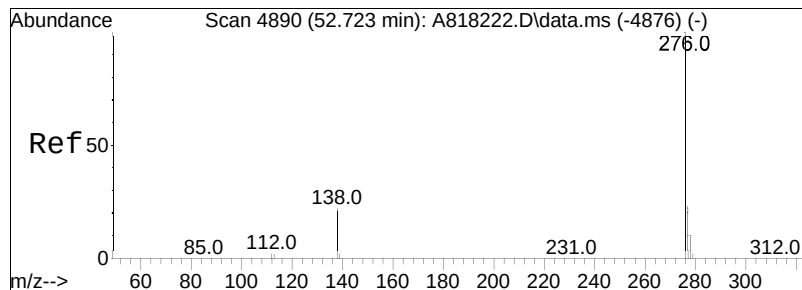




#92
 Dibenz[ah]+[ac]anthracene
 Concen: 7513.40 ng/mL
 RT: 53.417 min Scan# 4966
 Delta R.T. 0.036 min
 Lab File: F811121409.D
 Acq: 13 Nov 2014 4:42 am

Tgt Ion	Ratio	Lower	Upper
278	100		
139	21.7	15.1	28.1
279	24.5	16.9	31.3





#93

Benzo[g,h,i]perylene

Concen: 7638.06 ng/mL

RT: 54.678 min Scan# 5104

Delta R.T. 0.046 min

Lab File: F811121409.D

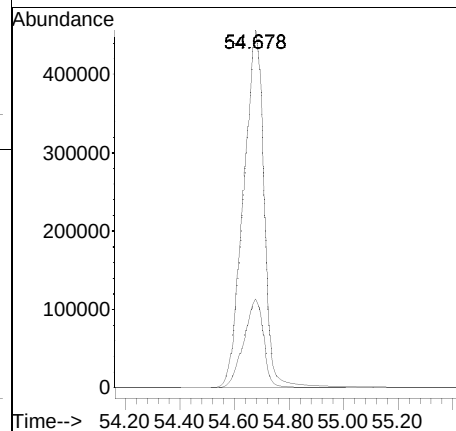
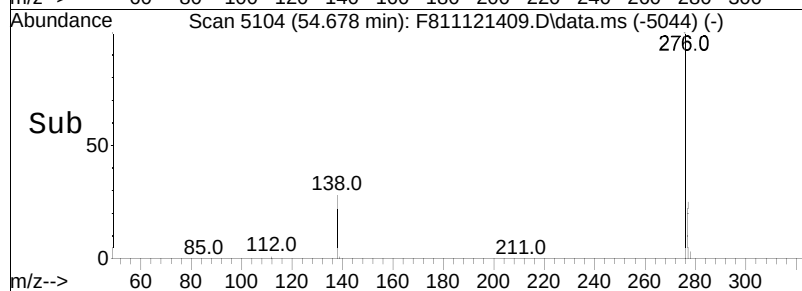
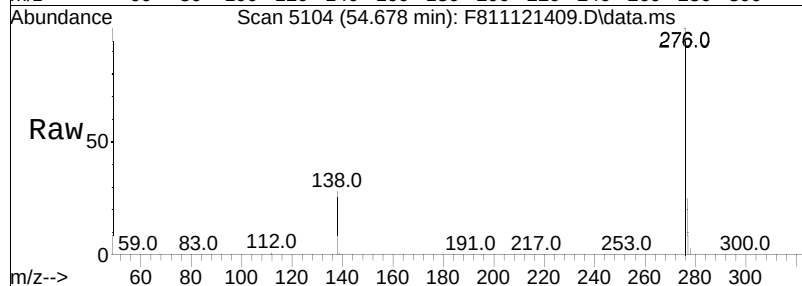
Acq: 13 Nov 2014 4:42 am

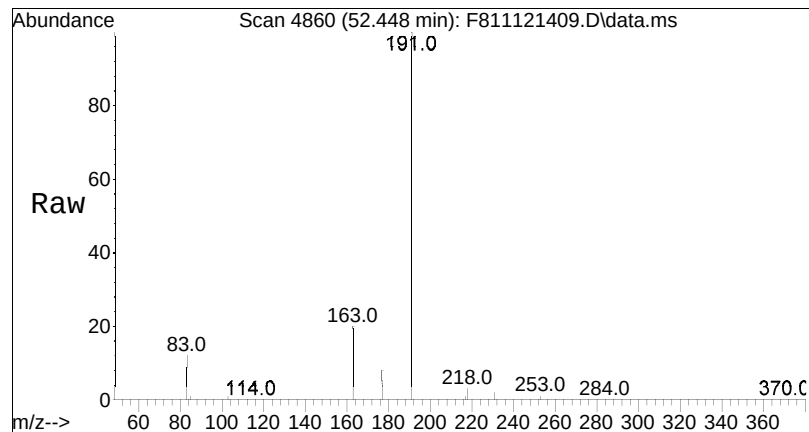
Tgt Ion: 276 Resp: 2368026

Ion Ratio Lower Upper

276 100

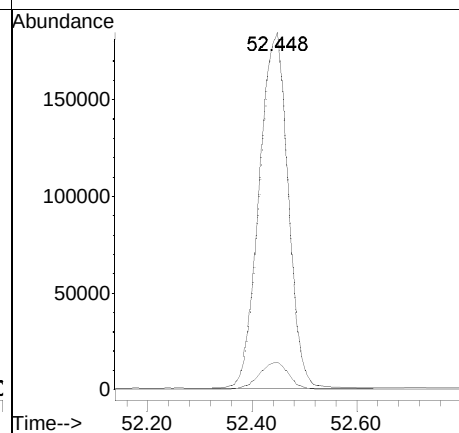
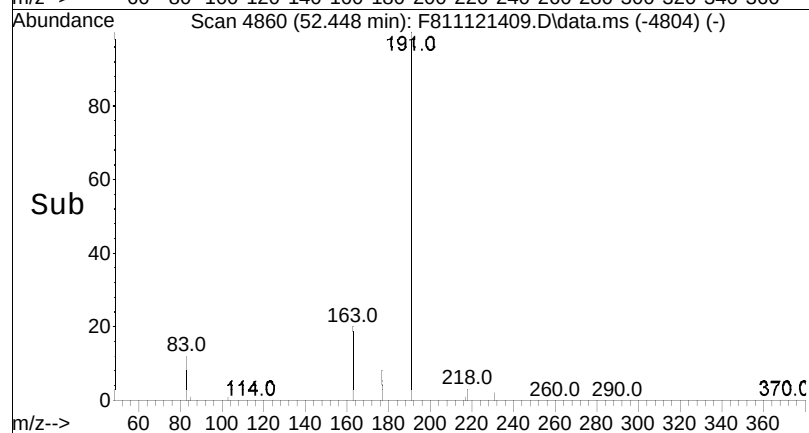
277 24.4 16.4 30.6

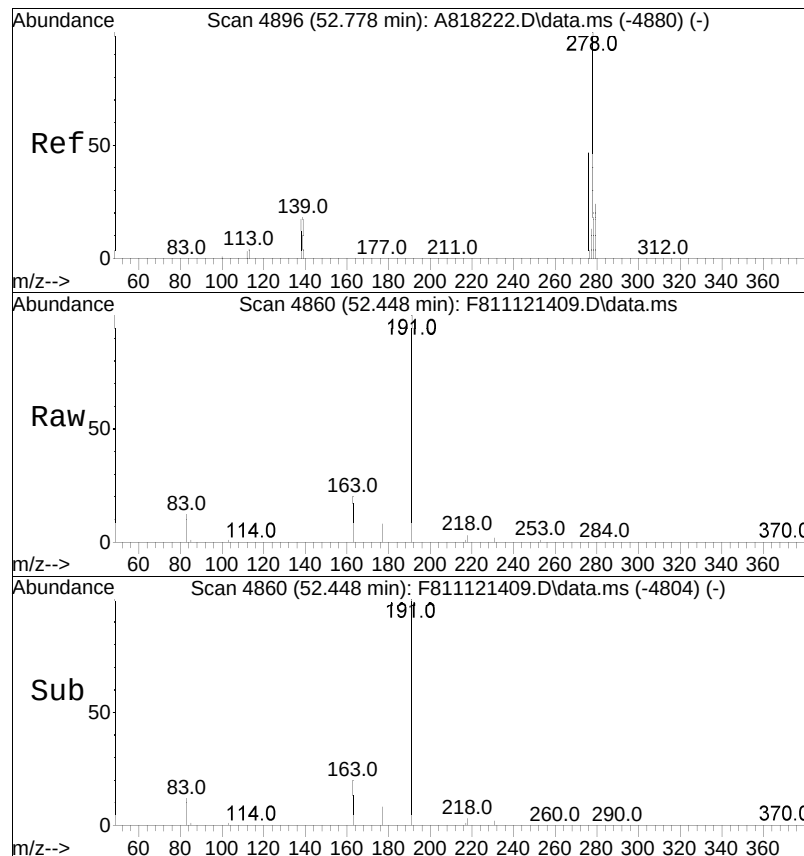




#94
 Hopane (T19)
 Concen: 10234.77 ng/mL
 RT: 52.448 min Scan# 4860
 Delta R.T. 0.009 min
 Lab File: F811121409.D
 Acq: 13 Nov 2014 4:42 am

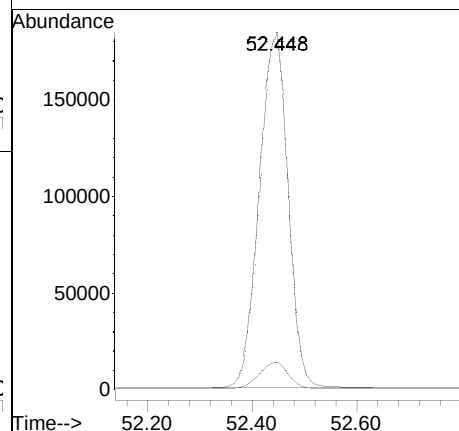
Tgt Ion	Ratio	Lower	Upper
191	100		
177	7.7	7.9	14.7#





#95
 17a(H),21B(H)-hopane - C₃₀H₅₂
 Concen: 10234.77 ng/mL
 RT: 52.448 min Scan# 4860
 Delta R.T. 0.009 min
 Lab File: F811121409.D
 Acq: 13 Nov 2014 4:42 am

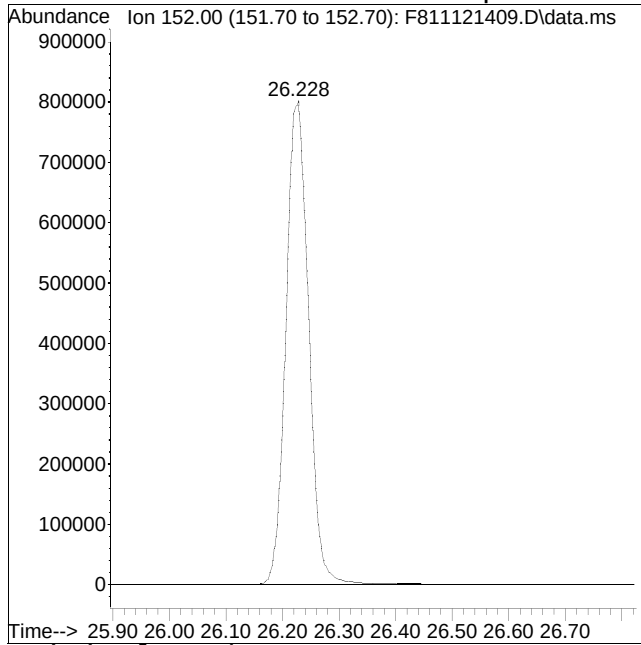
Tgt	Ion	Ratio	Lower	Upper
191	100			
177	7.7	7.9	14.7#	



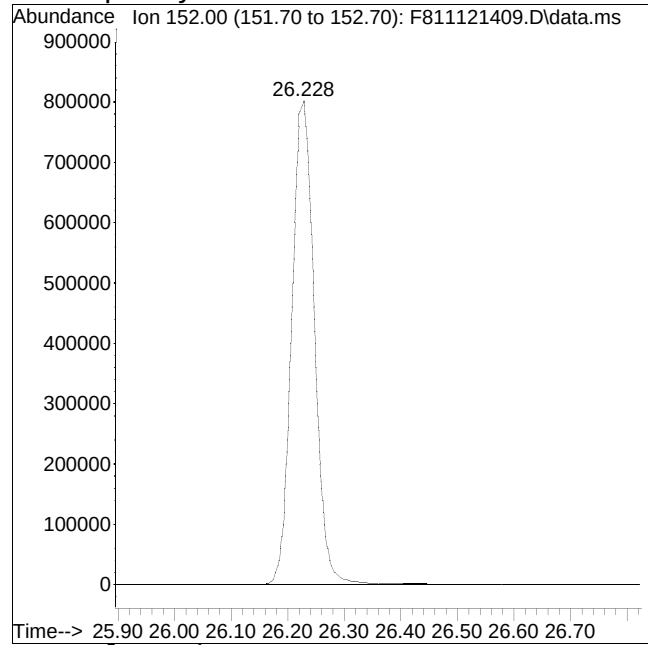
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121409.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 4:42 am Instrument : PAH8
Sample : i811121406 Quant Date : 11/13/2014 11:51 am

Compound #26: Acenaphthylene



Original Peak Response = 2248535



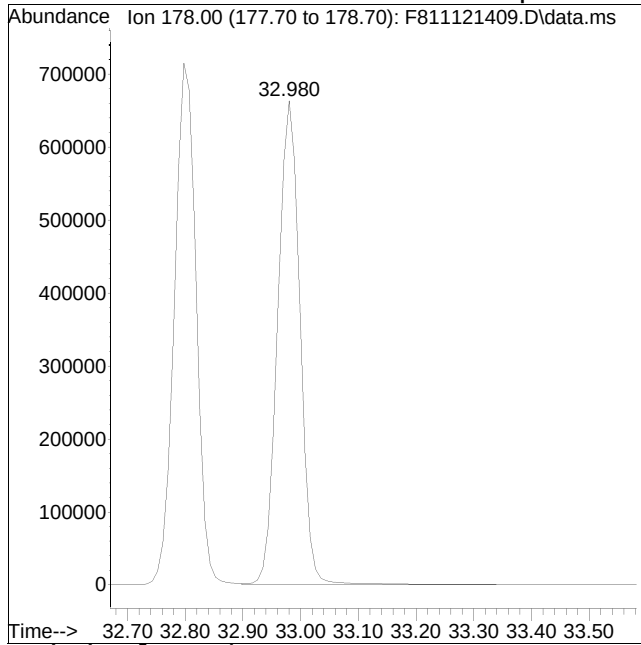
Manual Peak Response = 2243865 M4

M4 = Poor automated baseline construction.

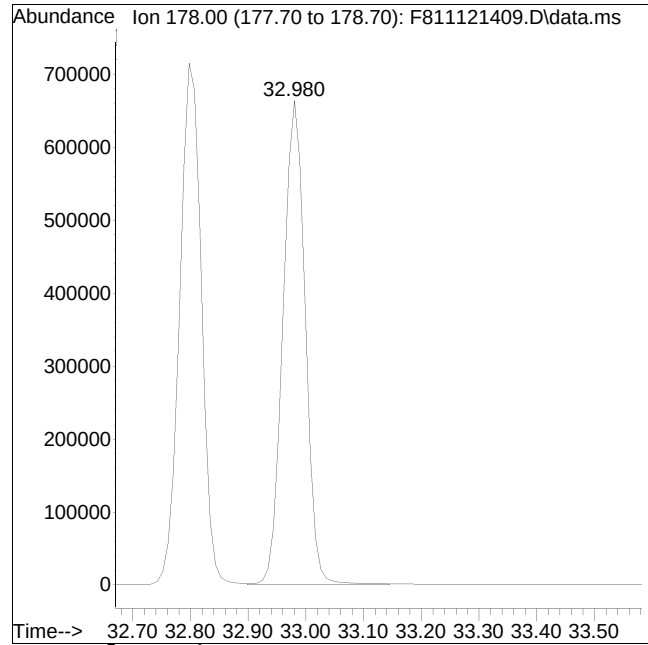
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121409.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 4:42 am Instrument : PAH8
Sample : i811121406 Quant Date : 11/13/2014 11:51 am

Compound #55: Anthracene



Original Peak Response = 1793231



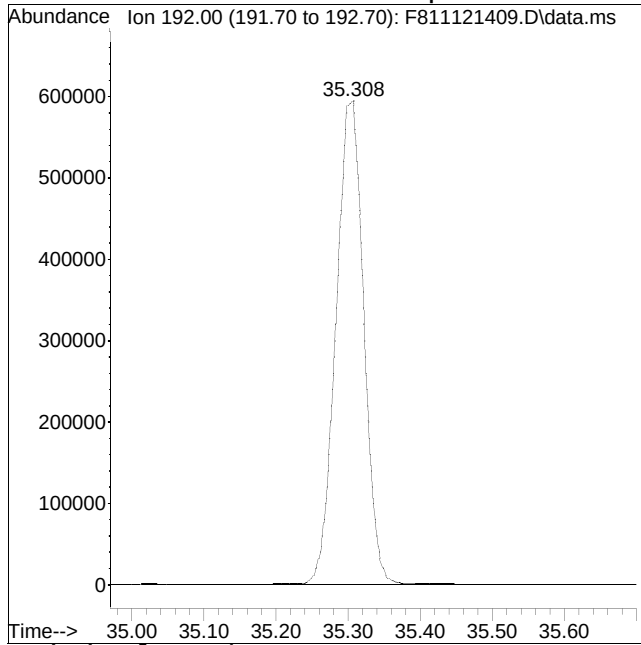
Manual Peak Response = 1777669 M4

M4 = Poor automated baseline construction.

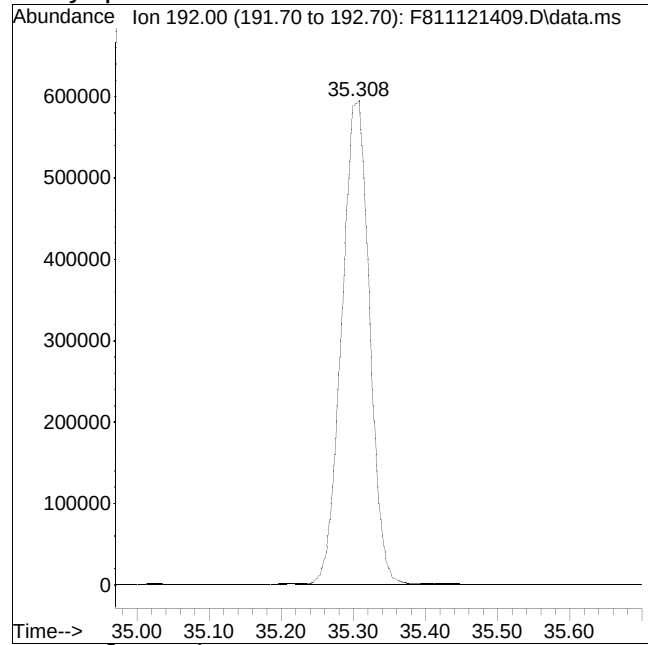
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121409.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 4:42 am Instrument : PAH8
Sample : i811121406 Quant Date : 11/13/2014 11:51 am

Compound #57: 1-Methylphenanthrene



Original Peak Response = 1605378



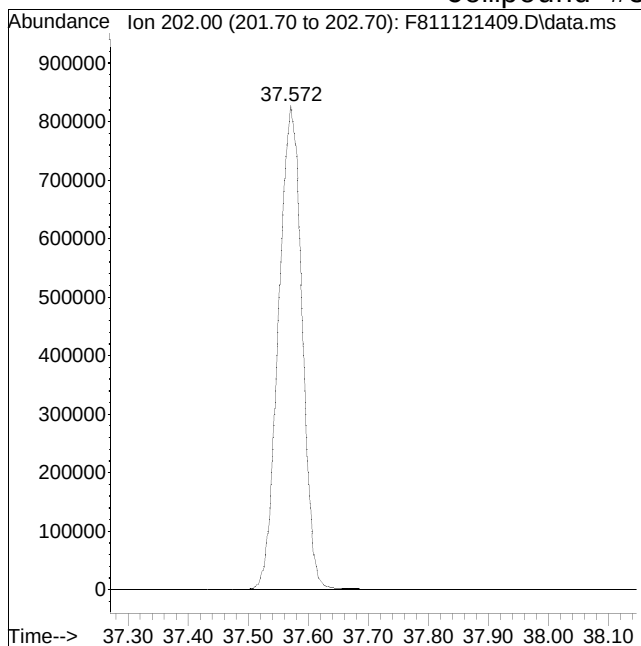
Manual Peak Response = 1601779 M4

M4 = Poor automated baseline construction.

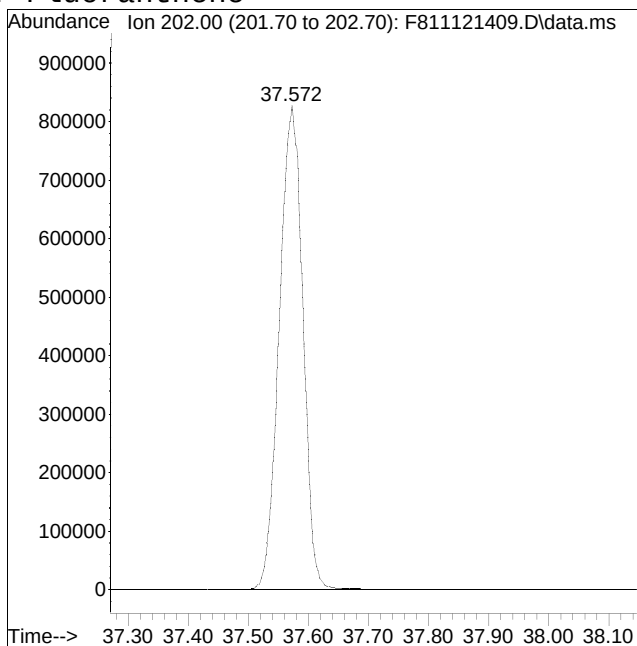
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121409.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 4:42 am Instrument : PAH8
Sample : i811121406 Quant Date : 11/13/2014 11:51 am

Compound #58: Fluoranthene



Original Peak Response = 2263377



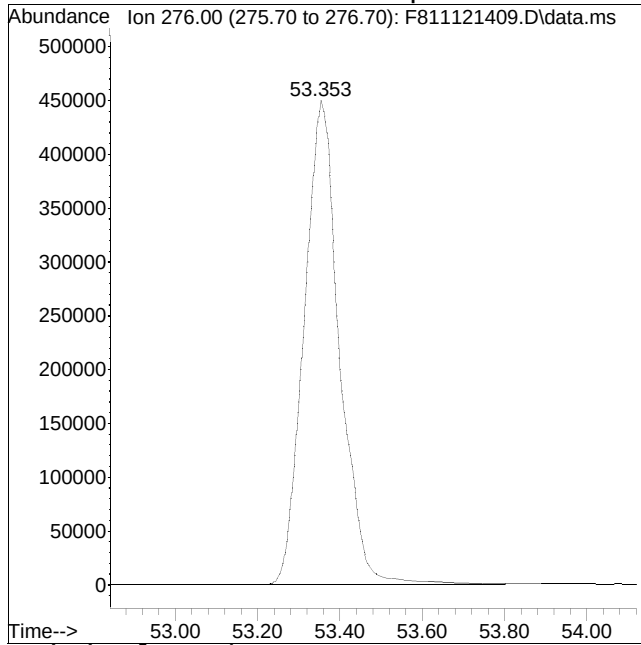
Manual Peak Response = 2264194 M4

M4 = Poor automated baseline construction.

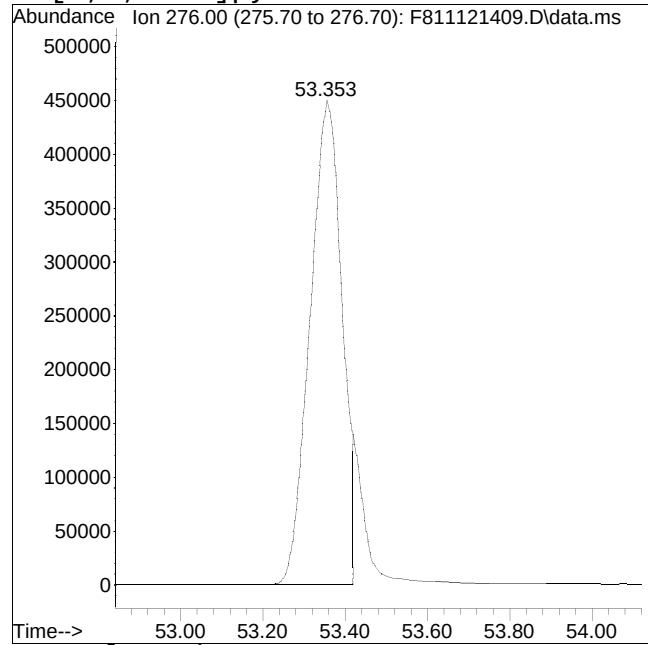
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121409.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 4:42 am Instrument : PAH8
Sample : i811121406 Quant Date : 11/13/2014 11:51 am

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 2706785



Manual Peak Response = 2442650 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\NOV14\NOV12\
 Data File : F811121410.D
 Acq On : 13 Nov 2014 6:07 am
 Operator : PAH8:SR
 Sample : i811121407
 Misc : WG740999,frau83 20000 ng/mL
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 14 08:29:35 2014
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Thu Nov 13 11:50:37 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.840	164	60946	500.000	ng/mL	0.00
74) Chrysene-d12	43.296	240	77712	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	19.868	136	3721190	14872.758	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1487.28%#			
42) Phenanthrene-d10	32.716	188	2792794	15390.135	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1539.01%#			
83) Benzo[b]fluoranthene-d12	47.217	264	3174972	19269.207	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1926.92%#			
88) Benzo[a]pyrene-d12	48.424	264	2528354	17186.908	ng/mL	0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1718.69%#			
129) 5B(H)Cholane - Surr	43.917	217	581110	21376.341	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2137.63%#			
Target Compounds						
					Qvalue	
3) trans-Decalin	16.510	138	535165	9909.102	ng/mL	100
4) cis-Decalin	17.733	138	406038	10084.930	ng/mL	100
10) Naphthalene	19.950	128	3697255	12785.623	ng/mL	100
16) 2-Methylnaphthalene	22.642	142	2905322	15389.063	ng/mL	100
17) 1-Methylnaphthalene	23.071	142	2634407	14774.261	ng/mL	100
18) Benzothiophene	20.169	134	3267277	13734.387	ng/mL	100
23) Biphenyl	24.522	154	3275284	14745.421	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.133	156	2383629	15262.560	ng/mL	100
25) Dibenzofuran	27.616	168	3269666	14268.276	ng/mL	98
26) Acenaphthylene	26.229	152	3946228M4	14055.111	ng/mL	
27) Acenaphthene	26.968	153	2227949	13649.835	ng/mL	90
28) 2,3,5-Trimethylnaphthalen	28.528	170	1938403	14924.745	ng/mL	95
29) Fluorene	28.993	166	2691041	14830.669	ng/mL	90
33) Dibenzothiophene	32.314	184	3686433	14422.947	ng/mL	99
43) Phenanthrene	32.816	178	3253816	13530.169	ng/mL	98
54) Retene	39.791	234	1052474	18732.866	ng/mL	95
55) Anthracene	32.989	178	2941736M4	12206.918	ng/mL	
56) Carbazole	33.665	167	3680916	15049.208	ng/mL	98
57) 1-Methylphenanthrene	35.317	192	2822156M4	16457.361	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\NOV14\NOV12\
 Data File : F811121410.D
 Acq On : 13 Nov 2014 6:07 am
 Operator : PAH8:SR
 Sample : i811121407
 Misc : WG740999,frau83 20000 ng/mL
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 14 08:29:35 2014
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Thu Nov 13 11:50:37 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
58)	Fluoranthene	37.581	202	3925909M4	15522.391	ng/mL	
59)	Benzo(b)fluorene	40.110	216	2298098	14994.427	ng/mL	91
60)	Pyrene	38.466	202	4111062	15446.225	ng/mL	99
66)	Naphthobenzothiophene	42.319	234	3771077	15393.975	ng/mL	98
67)	Naphthobenzothiophene-2,1	42.319	234	3771077	15393.975	ng/mL	98
75)	Benz[a]anthracene	43.242	228	3337805	14756.510	ng/mL	98
76)	Chrysene	43.415	228	3041723	14450.264	ng/mL	98
77)	Chrysene/Triphenylene	43.415	228	3041723	14450.264	ng/mL	98
84)	Benzo[b]fluoranthene	47.308	252	3425681	13695.476	ng/mL	97
85)	Benzo[j]+[k]fluoranthene	47.400	252	3251448	13329.926	ng/mL	97
87)	Benzo[e]pyrene	48.324	252	3752217	15005.522	ng/mL	99
89)	Benzo[a]pyrene	48.525	252	3199186	13568.054	ng/mL	99
90)	Perylene	48.827	252	3427066	13916.435	ng/mL	100
91)	Indeno[1,2,3-cd]pyrene	53.390	276	4516292M3	15288.731	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.445	278	3857872	15265.317	ng/mL	98
93)	Benzo[g,h,i]perylene	54.724	276	4308705	15316.592	ng/mL	96
94)	Hopane (T19)	0.000		0	N.D.	d	
95)	17a(H),21B(H)-hopane - C3	0.000		0	N.D.	d	

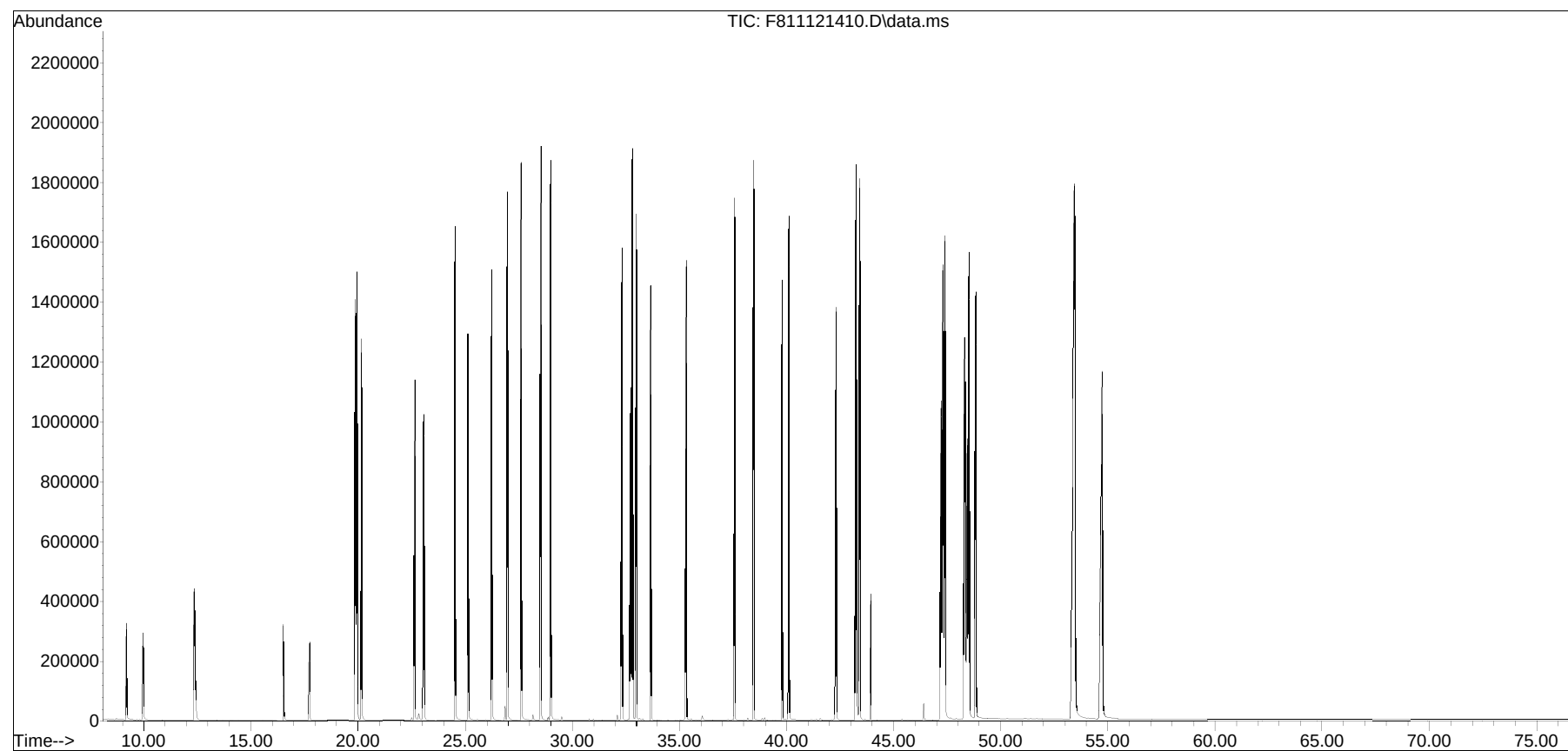
(#) = qualifier out of range (m) = manual integration (+) = signals summed

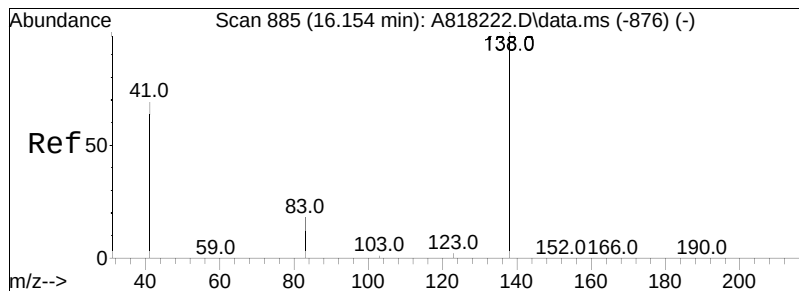
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\NOV14\NOV12\
Data File : F811121410.D
Acq On : 13 Nov 2014 6:07 am
Operator : PAH8:SR
Sample : i811121407
Misc : WG740999,frau83 20000 ng/mL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 14 08:29:35 2014
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8111214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Thu Nov 13 11:50:37 2014
Response via : Initial Calibration

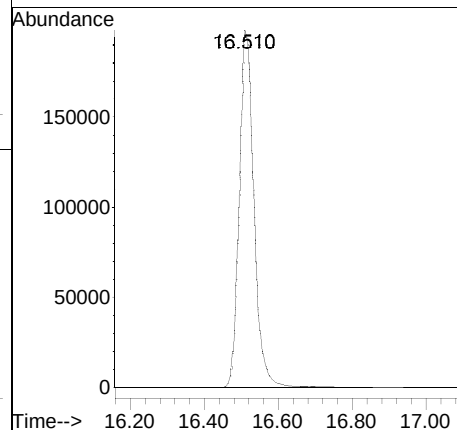
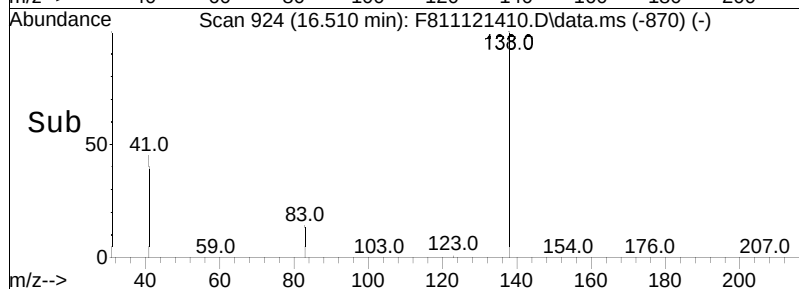
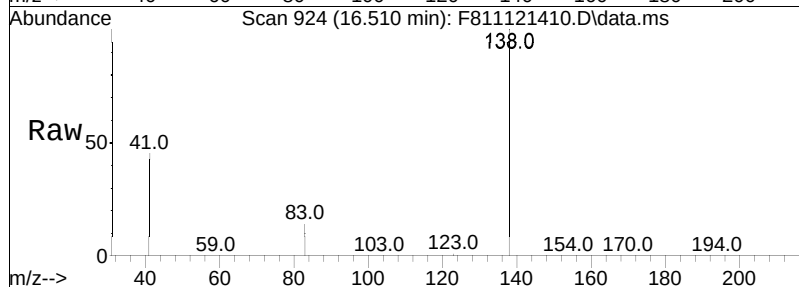
Sub List : ICAL_CCALT_REV2 - CC with five surrogates

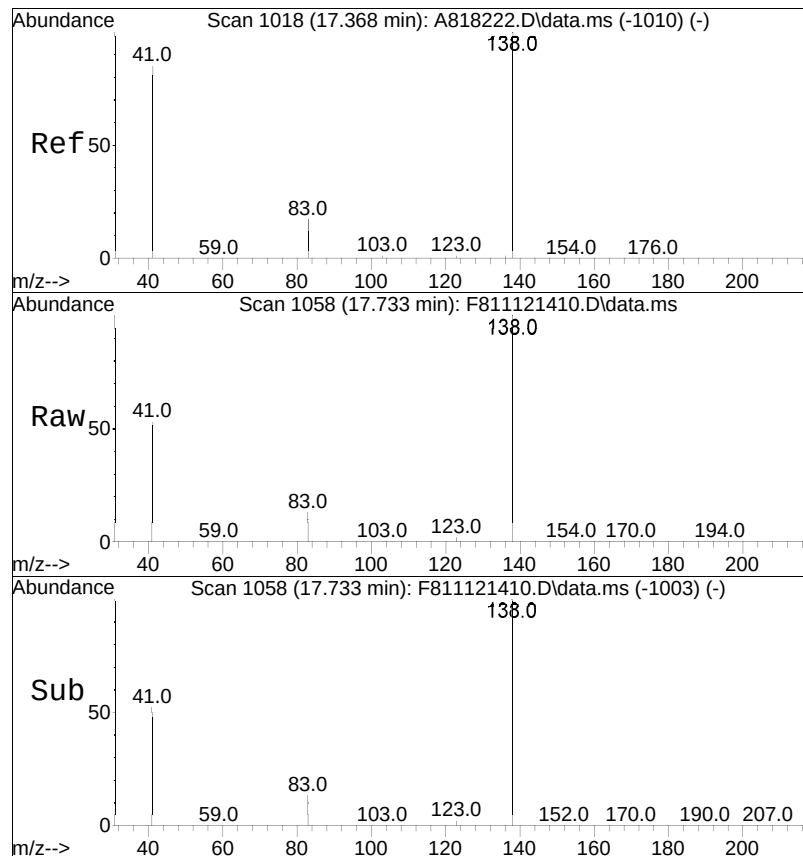




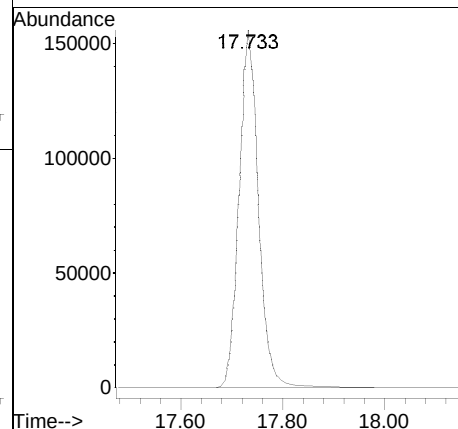
#3
trans-Decalin
Concen: 9909.10 ng/mL
RT: 16.510 min Scan# 924
Delta R.T. -0.009 min
Lab File: F811121410.D
Acq: 13 Nov 2014 6:07 am

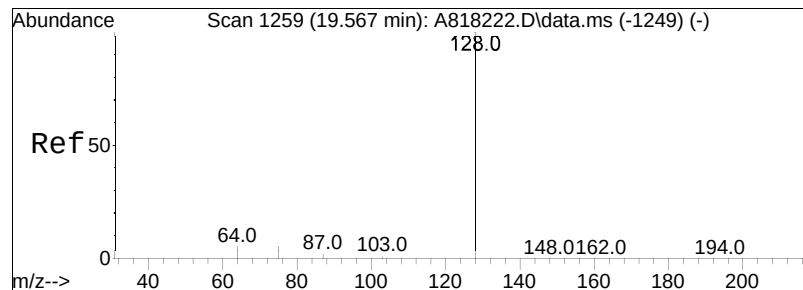
Tgt Ion:138 Resp: 535165





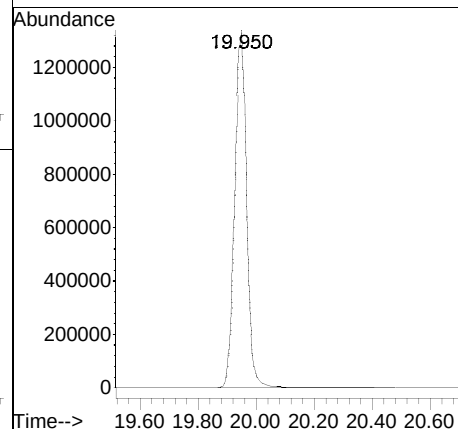
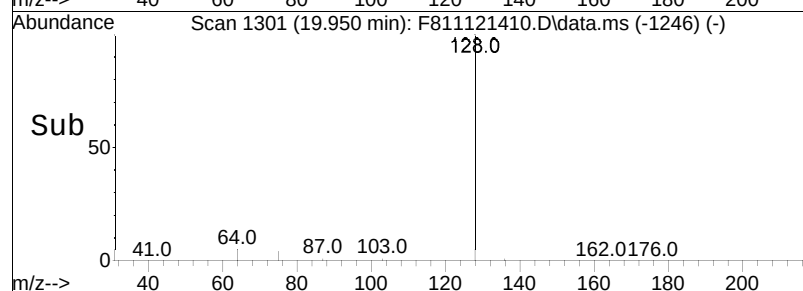
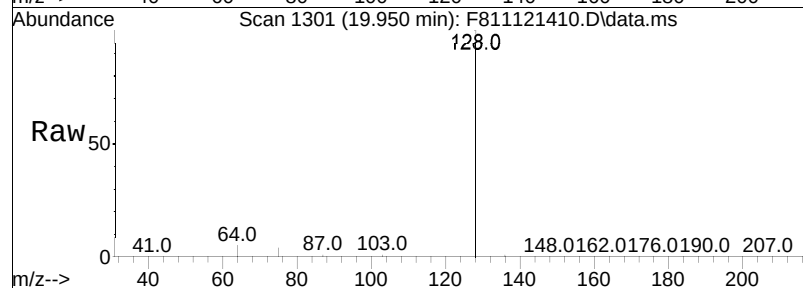
#4
 cis-Decalin
 Concen: 10084.93 ng/mL
 RT: 17.733 min Scan# 1058
 Delta R.T. -0.000 min
 Lab File: F811121410.D
 Acq: 13 Nov 2014 6:07 am
 Tgt Ion:138 Resp: 406038

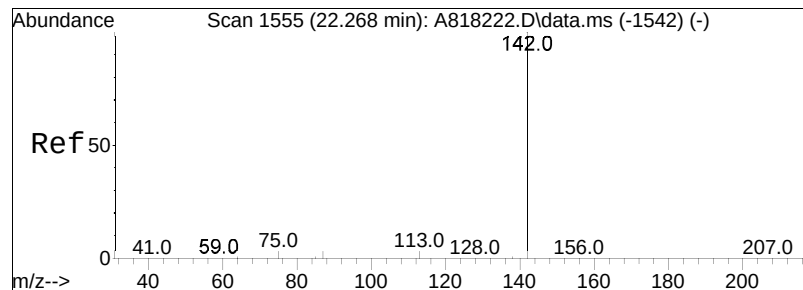




#10
Naphthalene
Concen: 12785.62 ng/mL
RT: 19.950 min Scan# 1301
Delta R.T. -0.000 min
Lab File: F811121410.D
Acq: 13 Nov 2014 6:07 am

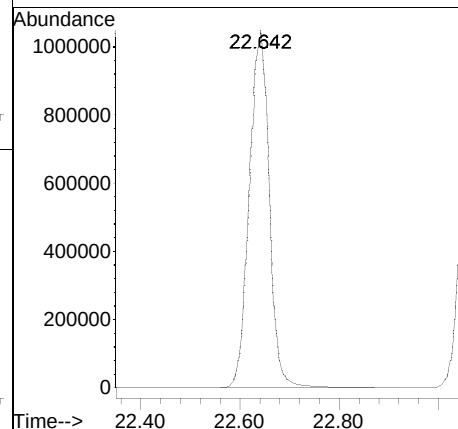
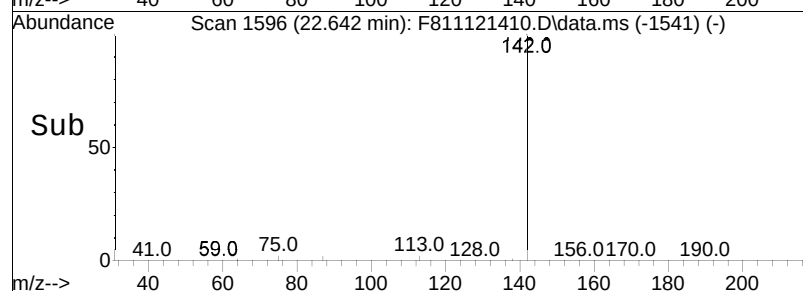
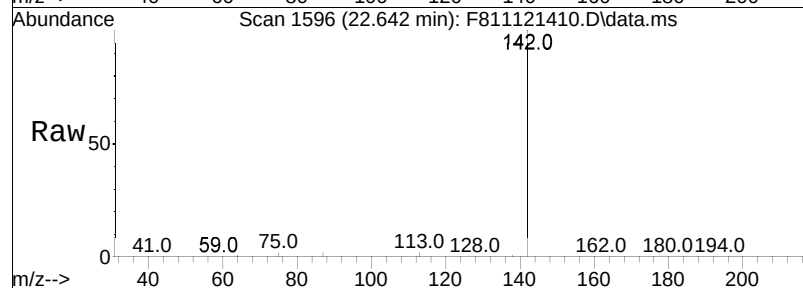
Tgt Ion:128 Resp: 3697255

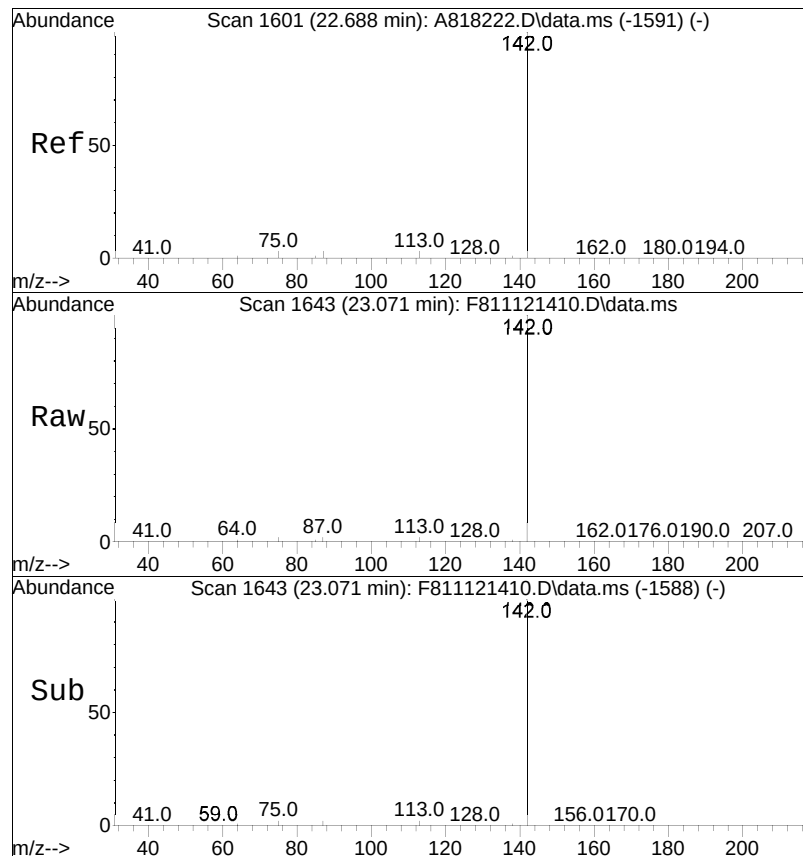




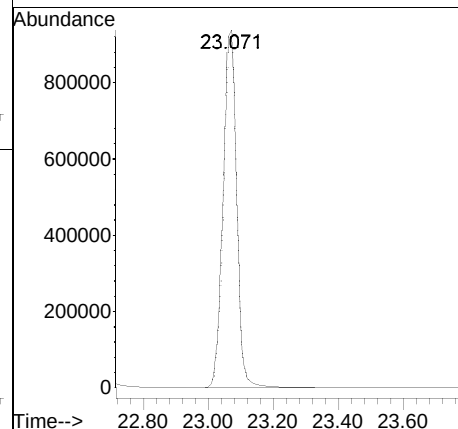
#16
2-Methylnaphthalene
Concen: 15389.06 ng/mL
RT: 22.642 min Scan# 1596
Delta R.T. -0.000 min
Lab File: F811121410.D
Acq: 13 Nov 2014 6:07 am

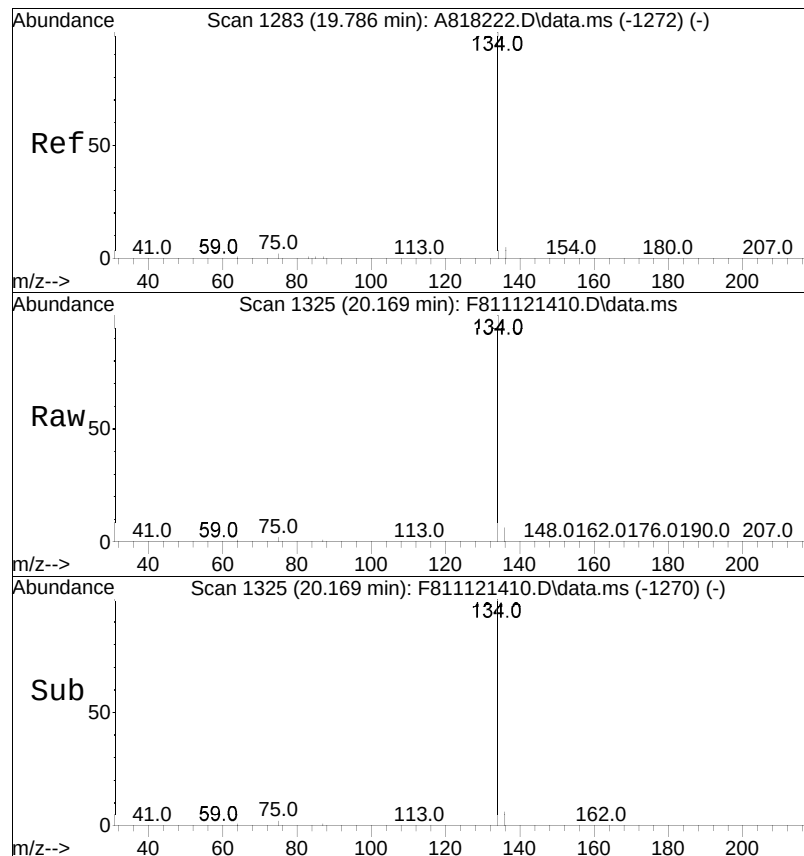
Tgt Ion:142 Resp: 2905322



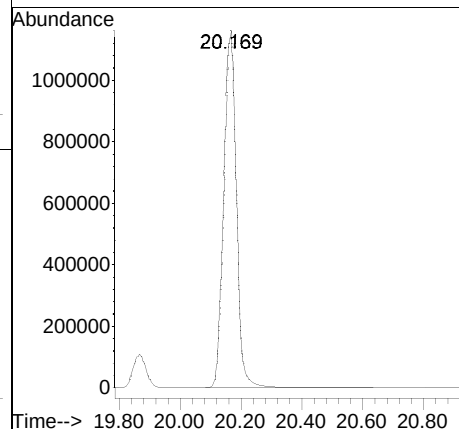


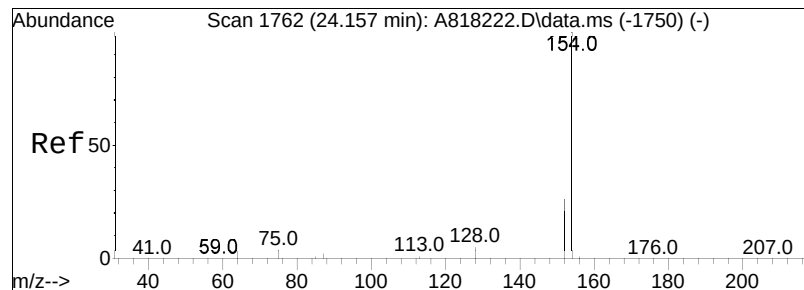
#17
1-Methylnaphthalene
Concen: 14774.26 ng/mL
RT: 23.071 min Scan# 1643
Delta R.T. -0.000 min
Lab File: F811121410.D
Acq: 13 Nov 2014 6:07 am
Tgt Ion:142 Resp: 2634407





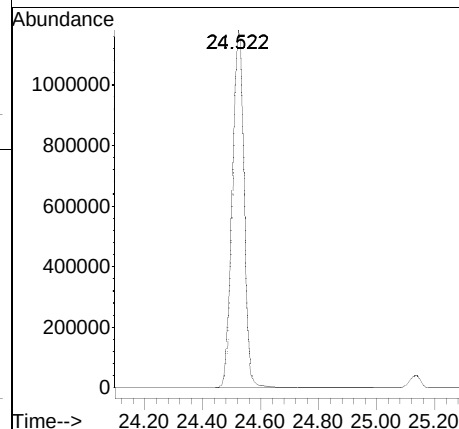
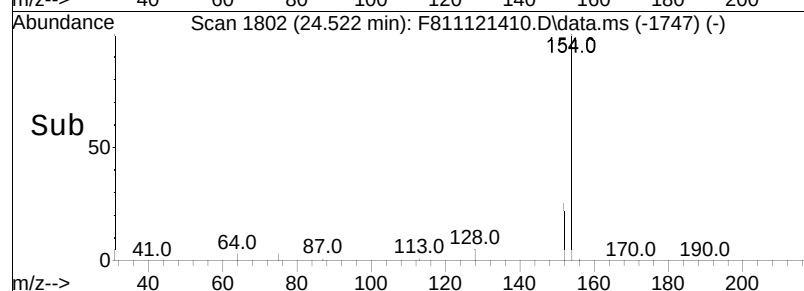
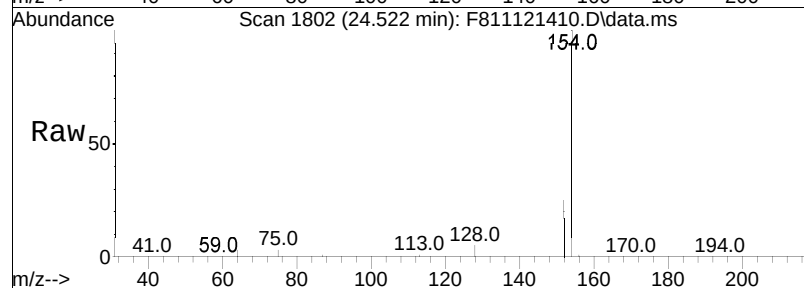
#18
 Benzothiophene
 Concen: 13734.39 ng/mL
 RT: 20.169 min Scan# 1325
 Delta R.T. -0.000 min
 Lab File: F811121410.D
 Acq: 13 Nov 2014 6:07 am
 Tgt Ion:134 Resp: 3267277

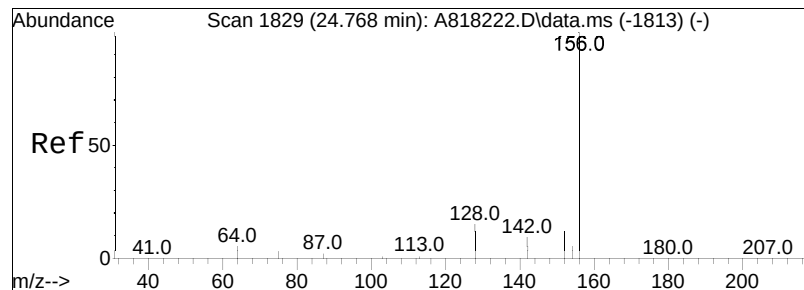




#23
Biphenyl
Concen: 14745.42 ng/mL
RT: 24.522 min Scan# 1802
Delta R.T. -0.000 min
Lab File: F811121410.D
Acq: 13 Nov 2014 6:07 am

Tgt Ion:154 Resp: 3275284





#24

2,6-Dimethylnaphthalene

Concen: 15262.56 ng/mL

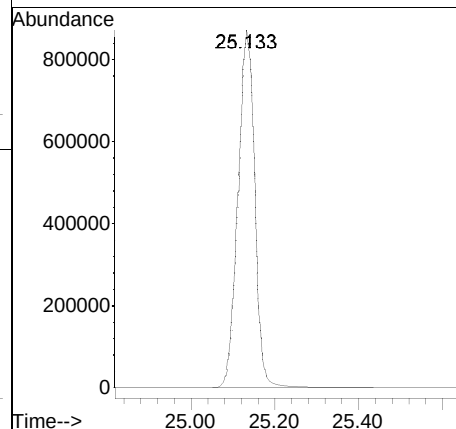
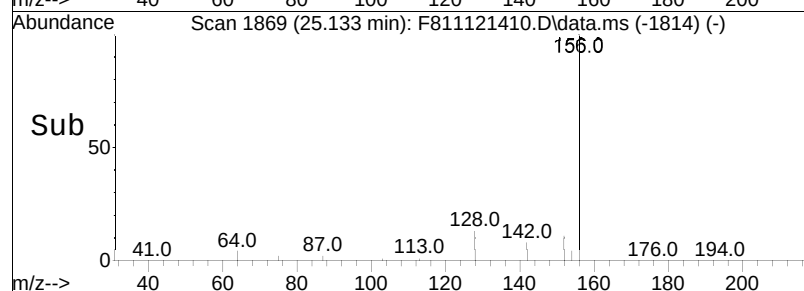
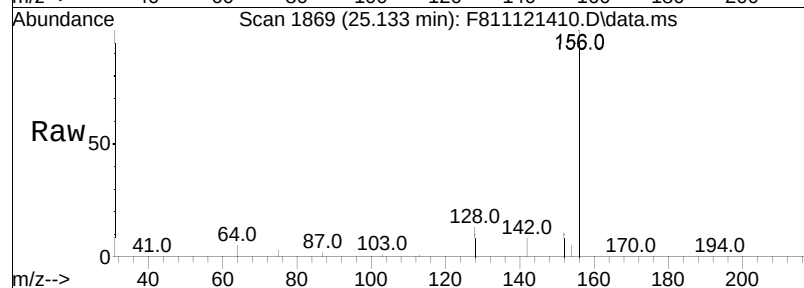
RT: 25.133 min Scan# 1869

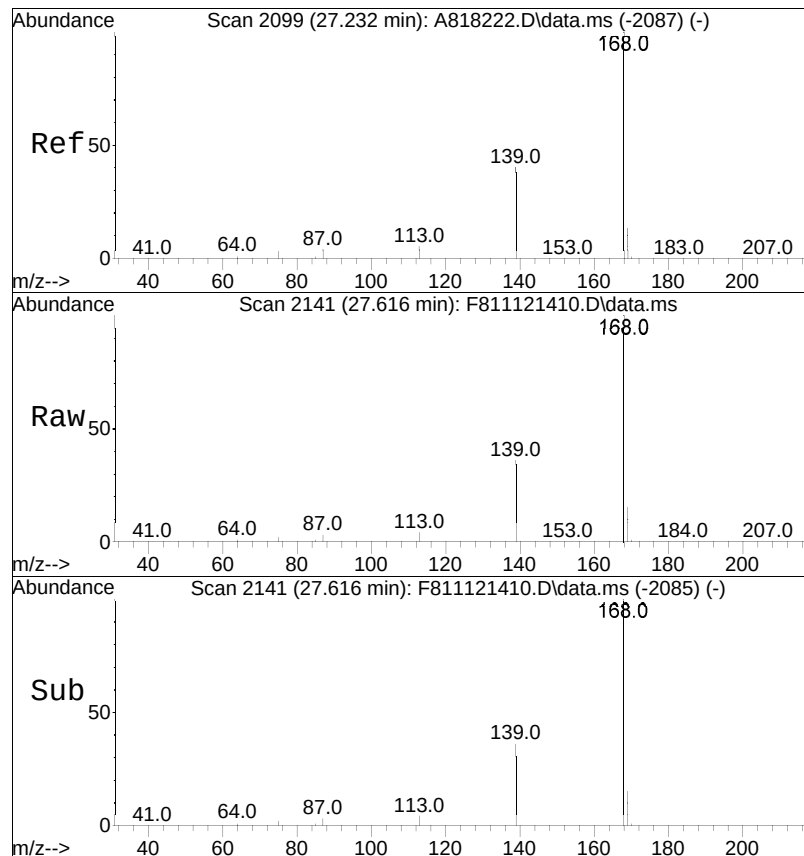
Delta R.T. -0.000 min

Lab File: F811121410.D

Acq: 13 Nov 2014 6:07 am

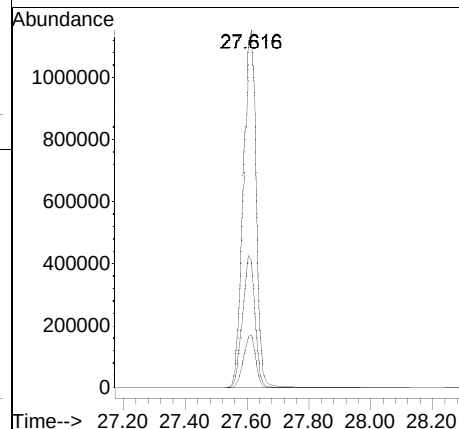
Tgt Ion:156 Resp: 2383629

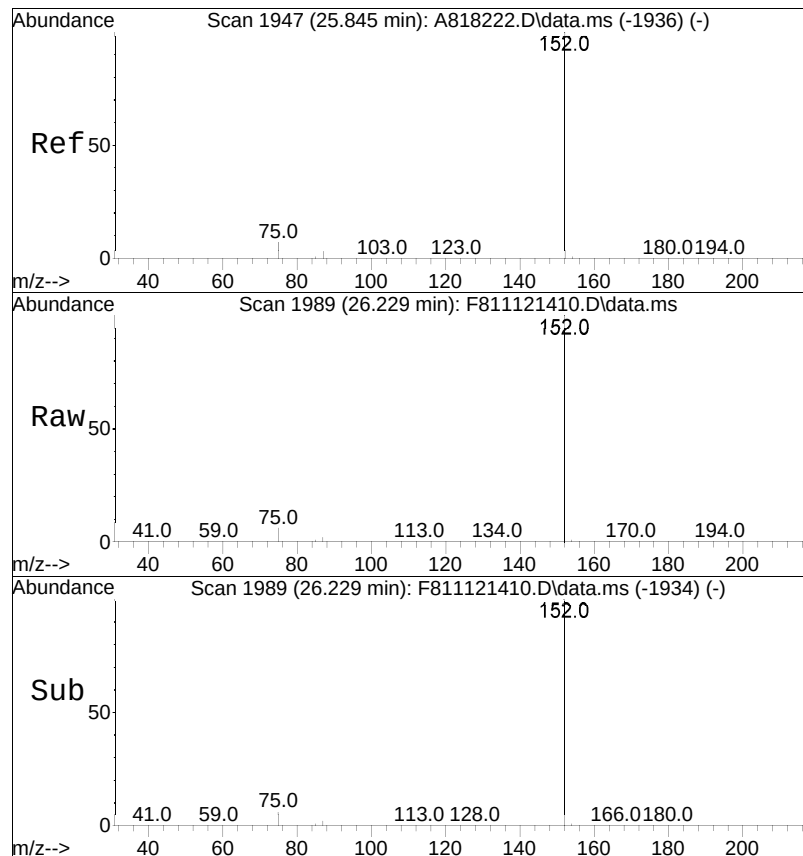




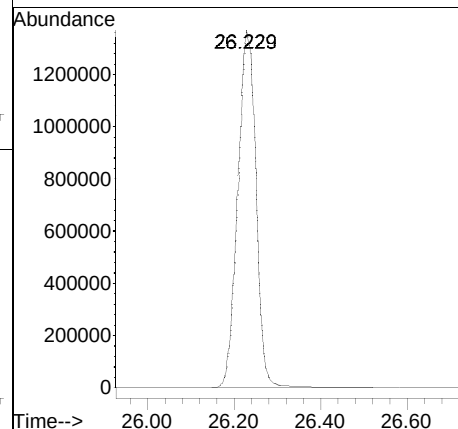
#25
 Dibenzofuran
 Concen: 14268.28 ng/mL
 RT: 27.616 min Scan# 2141
 Delta R.T. 0.009 min
 Lab File: F811121410.D
 Acq: 13 Nov 2014 6:07 am

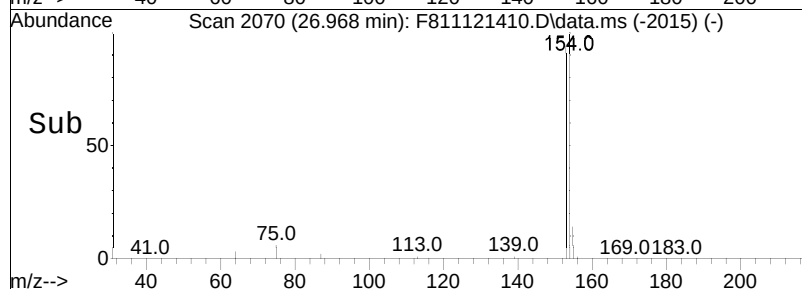
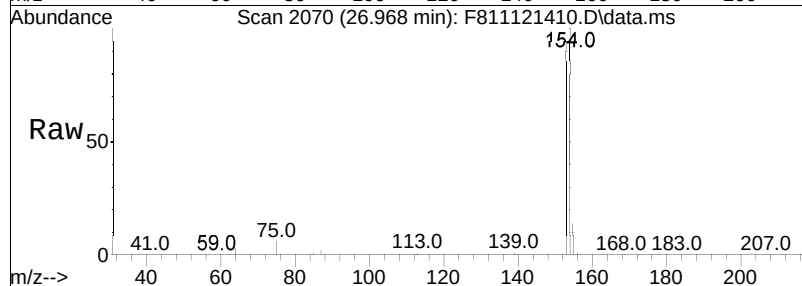
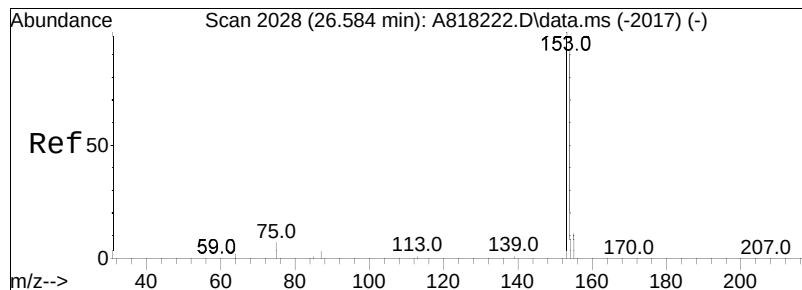
Tgt Ion:	168	Resp:	3269666
Ion Ratio	Lower	Upper	
168	100		
139	36.6	26.2	48.8
169	14.3	9.0	16.8





#26
 Acenaphthylene
 Concen: 14055.11 ng/mL M4
 RT: 26.229 min Scan# 1989
 Delta R.T. -0.000 min
 Lab File: F811121410.D
 Acq: 13 Nov 2014 6:07 am
 Tgt Ion:152 Resp: 3946228





#27

Acenaphthene

Concen: 13649.83 ng/mL

RT: 26.968 min Scan# 2070

Delta R.T. -0.000 min

Lab File: F811121410.D

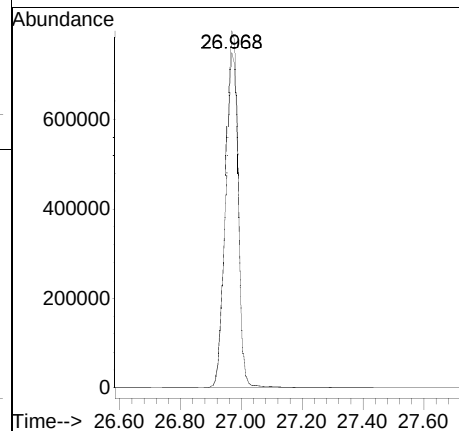
Acq: 13 Nov 2014 6:07 am

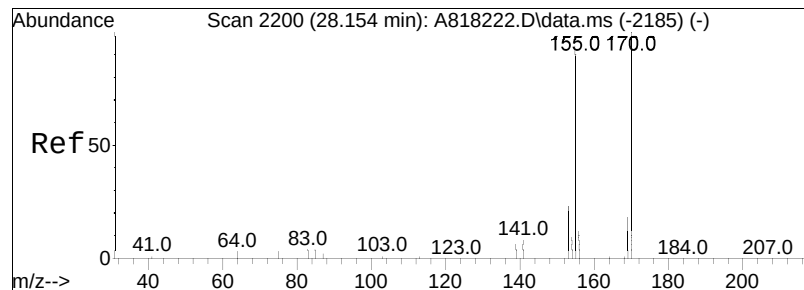
Tgt Ion:153 Resp: 2227949

Ion Ratio Lower Upper

153 100

154 103.4 65.3 121.3





#28

2,3,5-Trimethylnaphthalene

Concen: 14924.74 ng/mL

RT: 28.528 min Scan# 2241

Delta R.T. 0.009 min

Lab File: F811121410.D

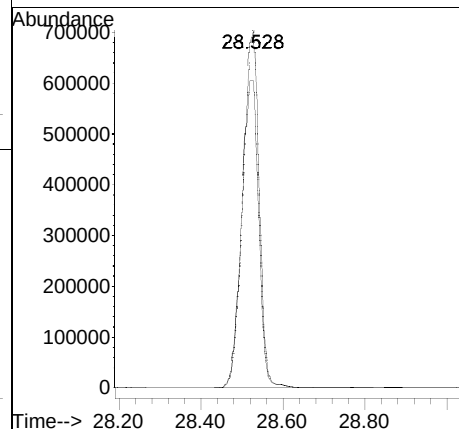
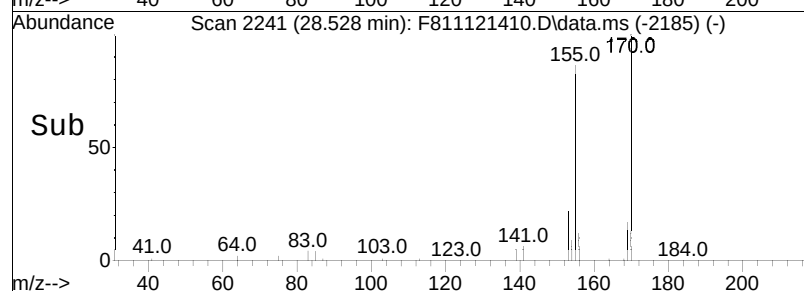
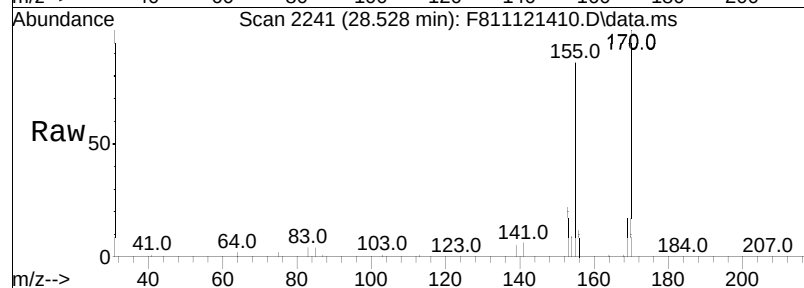
Acq: 13 Nov 2014 6:07 am

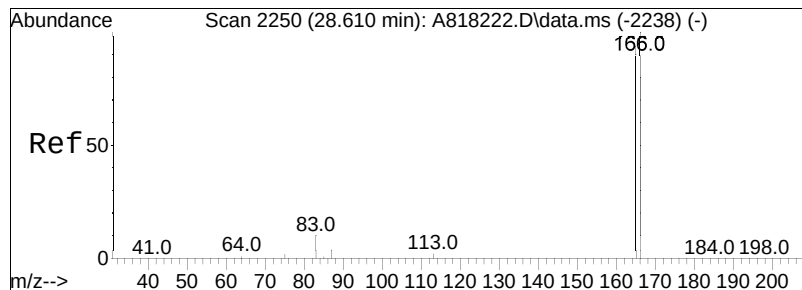
Tgt Ion:170 Resp: 1938403

Ion Ratio Lower Upper

170 100

155 89.8 66.2 123.0





#29

Fluorene

Concen: 14830.67 ng/mL

RT: 28.993 min Scan# 2292

Delta R.T. 0.009 min

Lab File: F811121410.D

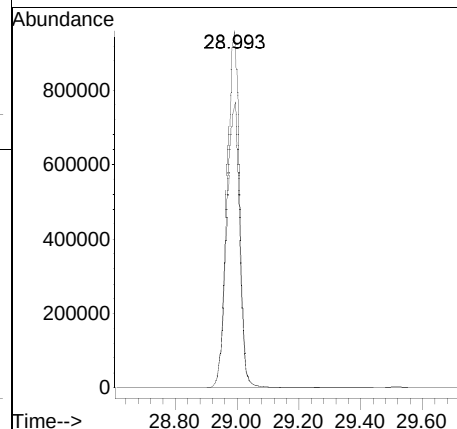
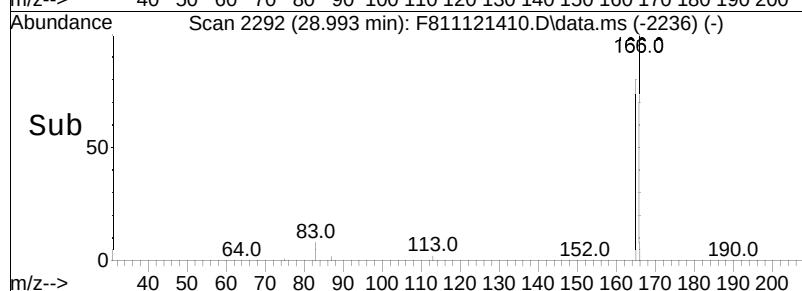
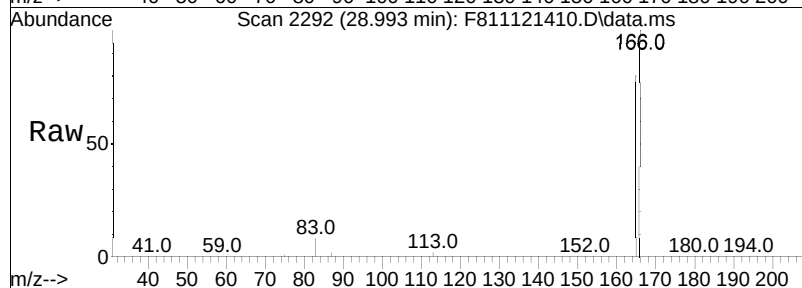
Acq: 13 Nov 2014 6:07 am

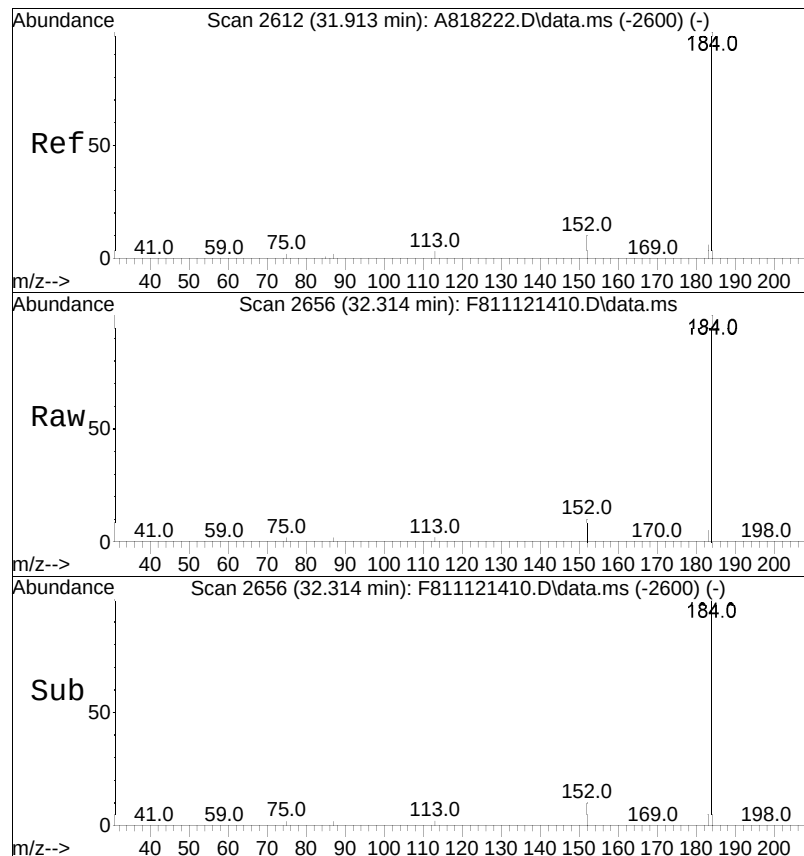
Tgt Ion:166 Resp: 2691041

Ion Ratio Lower Upper

166 100

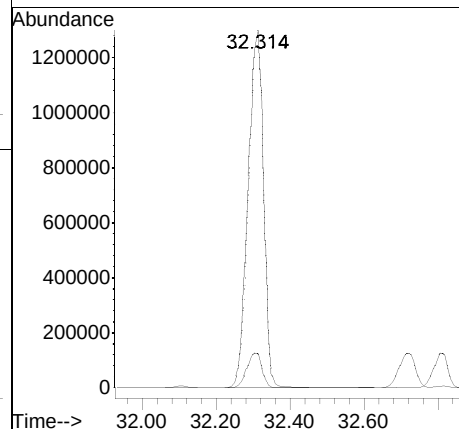
165 83.3 65.2 121.2

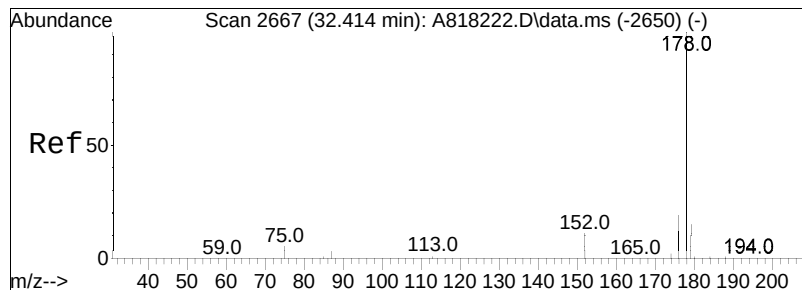




#33
 Dibenzothiophene
 Concen: 14422.95 ng/mL
 RT: 32.314 min Scan# 2656
 Delta R.T. 0.009 min
 Lab File: F811121410.D
 Acq: 13 Nov 2014 6:07 am

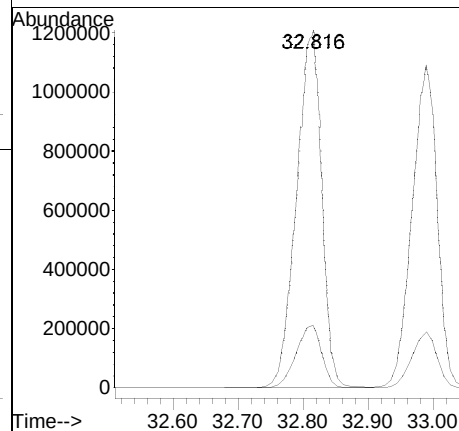
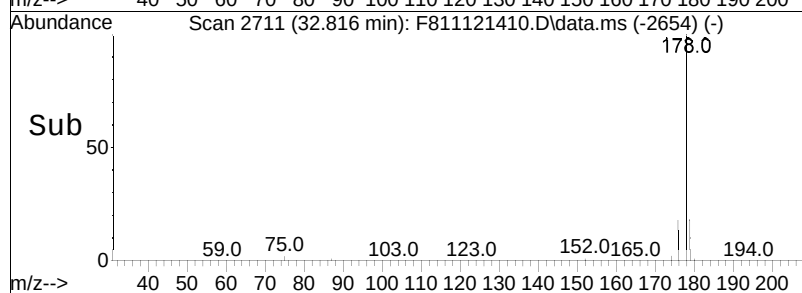
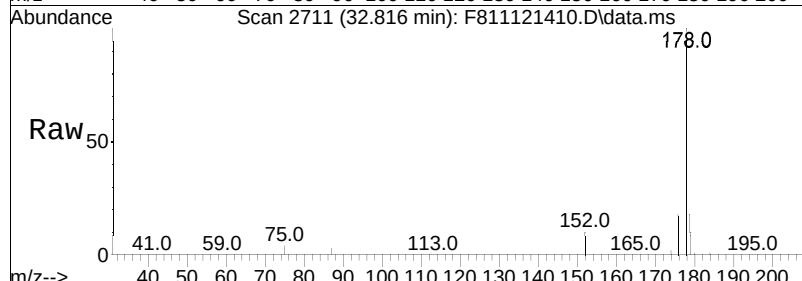
Tgt Ion:184 Resp: 3686433
 Ion Ratio Lower Upper
 184 100
 152 9.7 6.4 12.0

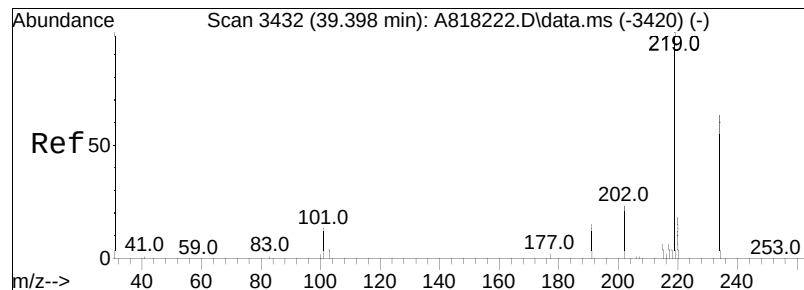




#43
 Phenanthrene
 Concen: 13530.17 ng/mL
 RT: 32.816 min Scan# 2711
 Delta R.T. 0.018 min
 Lab File: F811121410.D
 Acq: 13 Nov 2014 6:07 am

Tgt Ion:178 Resp: 3253816
 Ion Ratio Lower Upper
 178 100
 176 17.8 13.1 24.3





#54

Retene

Concen: 18732.87 ng/mL

RT: 39.791 min Scan# 3475

Delta R.T. 0.009 min

Lab File: F811121410.D

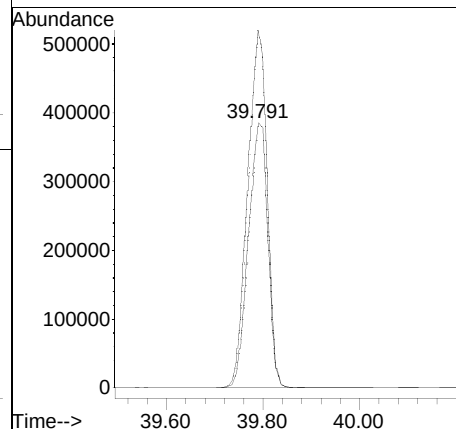
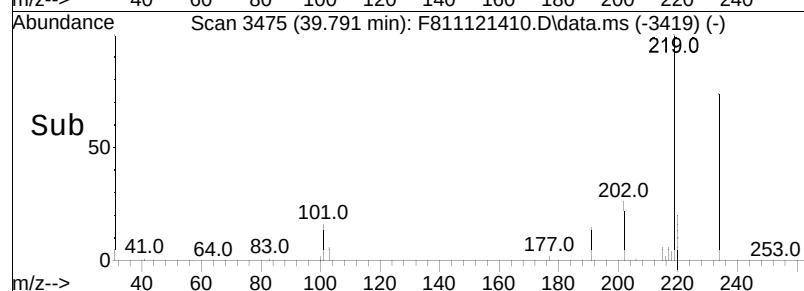
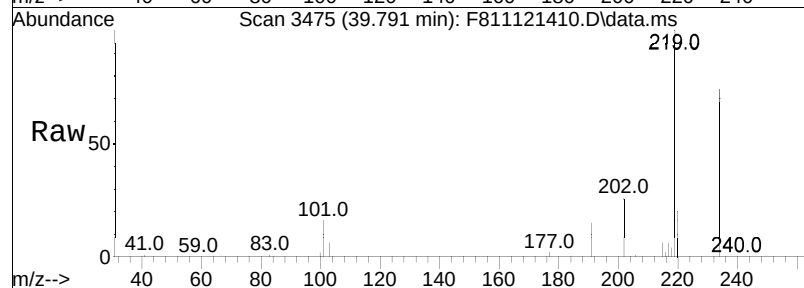
Acq: 13 Nov 2014 6:07 am

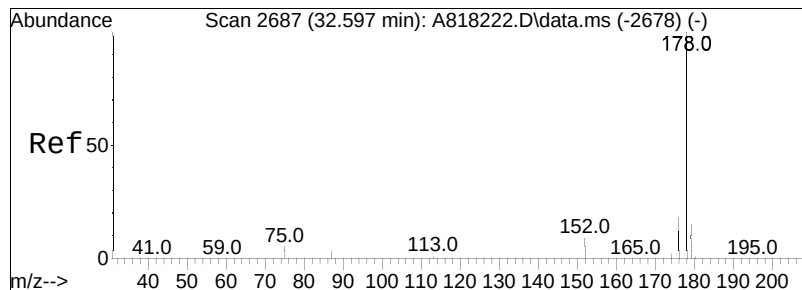
Tgt Ion: 234 Resp: 1052474

Ion Ratio Lower Upper

234 100

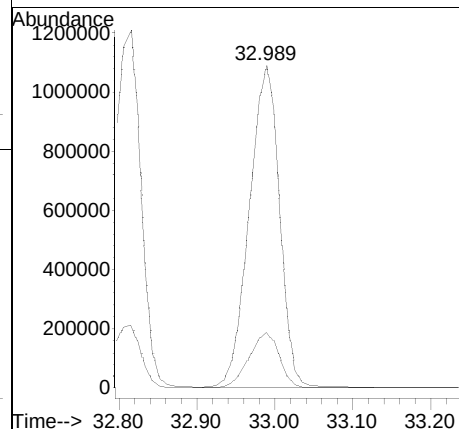
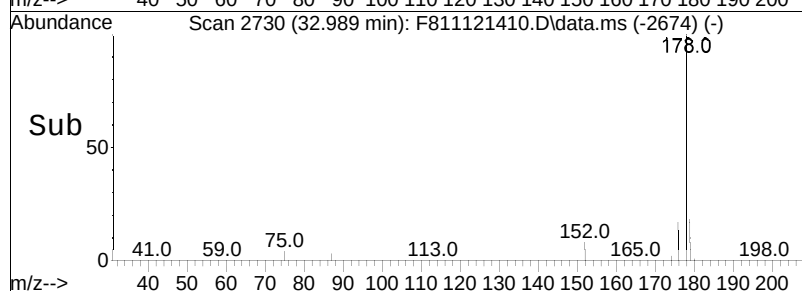
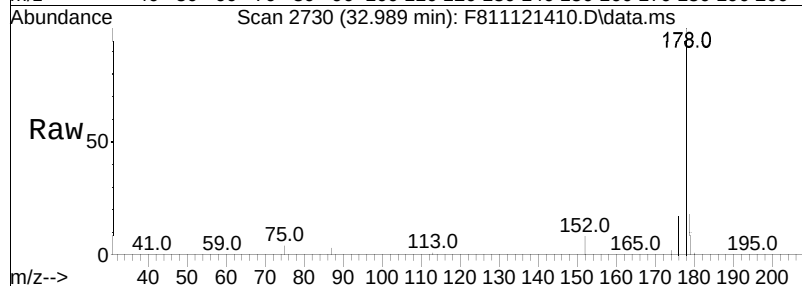
219 135.5 99.5 184.9

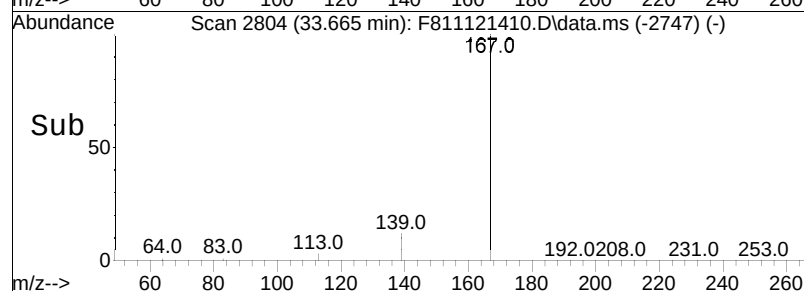
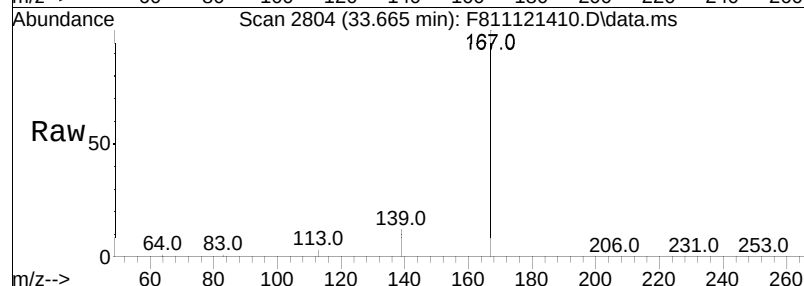
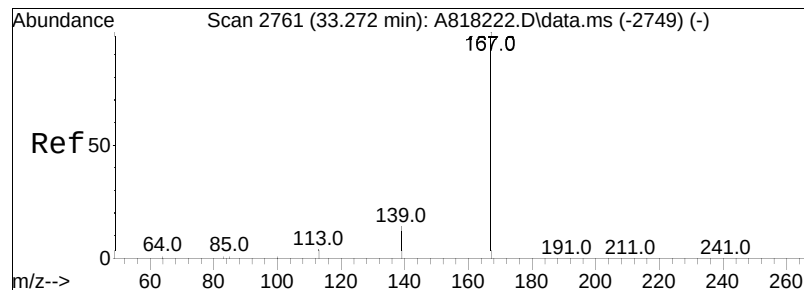




#55
 Anthracene
 Concen: 12206.92 ng/mL M4
 RT: 32.989 min Scan# 2730
 Delta R.T. 0.009 min
 Lab File: F811121410.D
 Acq: 13 Nov 2014 6:07 am

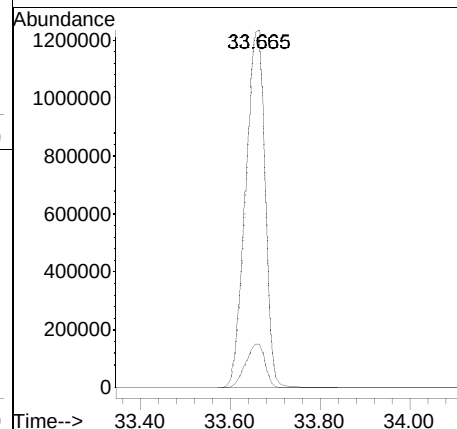
Tgt Ion:178 Resp: 2941736
 Ion Ratio Lower Upper
 178 100
 176 17.5 12.6 23.4

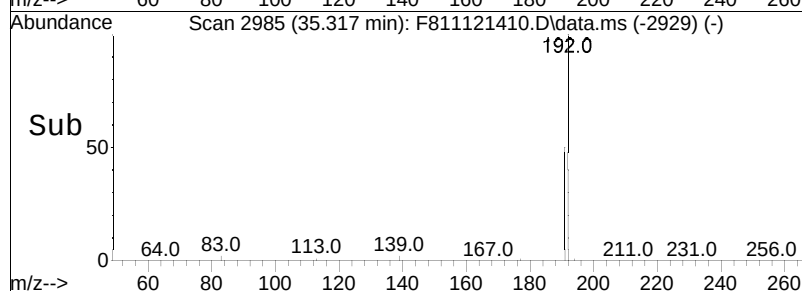
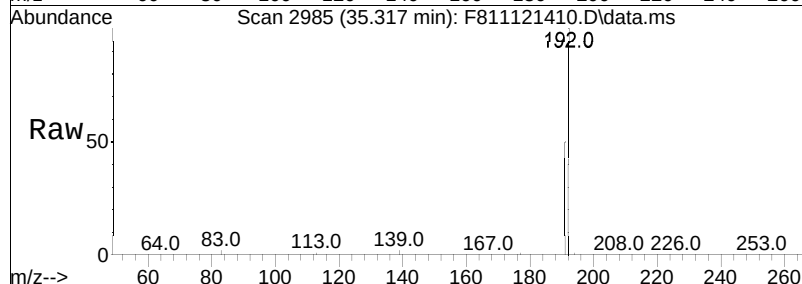
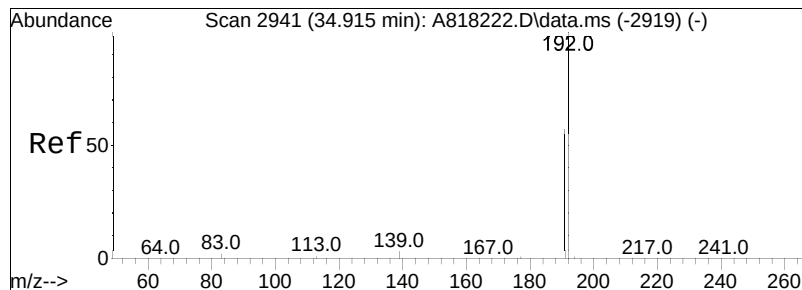




#56
 Carbazole
 Concen: 15049.21 ng/mL
 RT: 33.665 min Scan# 2804
 Delta R.T. 0.018 min
 Lab File: F811121410.D
 Acq: 13 Nov 2014 6:07 am

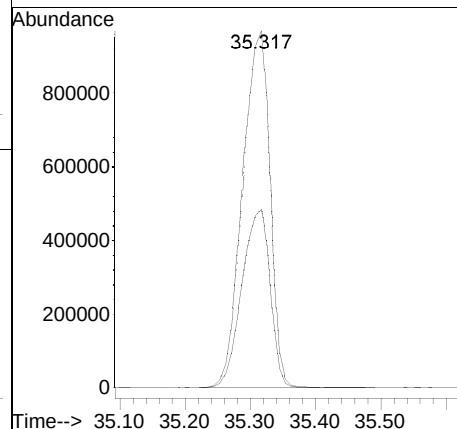
Tgt Ion:167 Resp: 3680916
 Ion Ratio Lower Upper
 167 100
 139 12.4 9.3 17.3

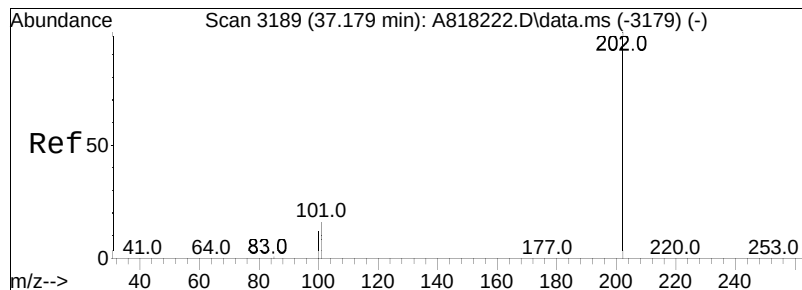




#57
 1-Methylphenanthrene
 Concen: 16457.36 ng/mL M4
 RT: 35.317 min Scan# 2985
 Delta R.T. 0.009 min
 Lab File: F811121410.D
 Acq: 13 Nov 2014 6:07 am

Tgt Ion:192 Resp: 2822156
 Ion Ratio Lower Upper
 192 100
 191 51.9 39.1 72.5





#58

Fluoranthene

Concen: 15522.39 ng/mL M4

RT: 37.581 min Scan# 3233

Delta R.T. 0.009 min

Lab File: F811121410.D

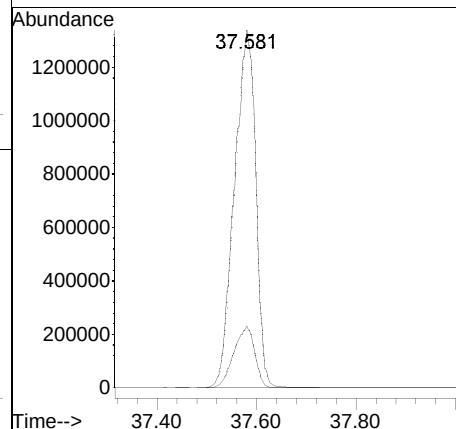
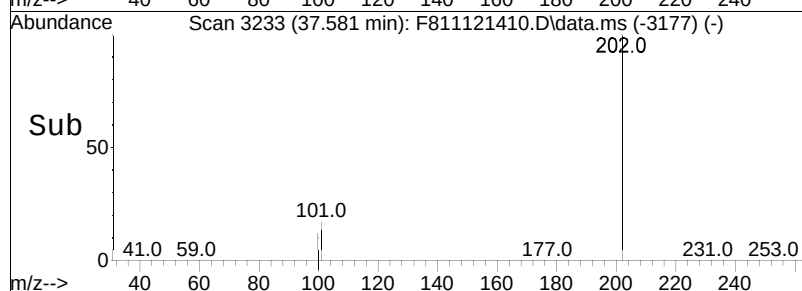
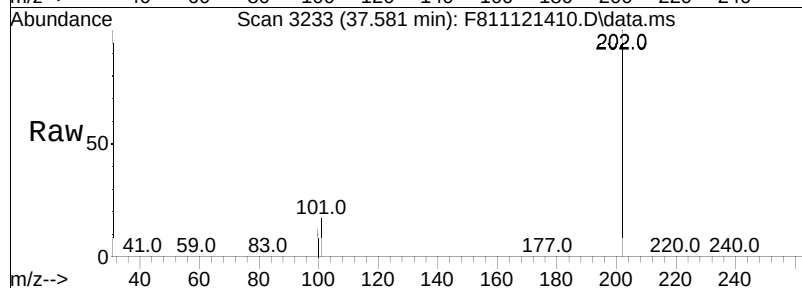
Acq: 13 Nov 2014 6:07 am

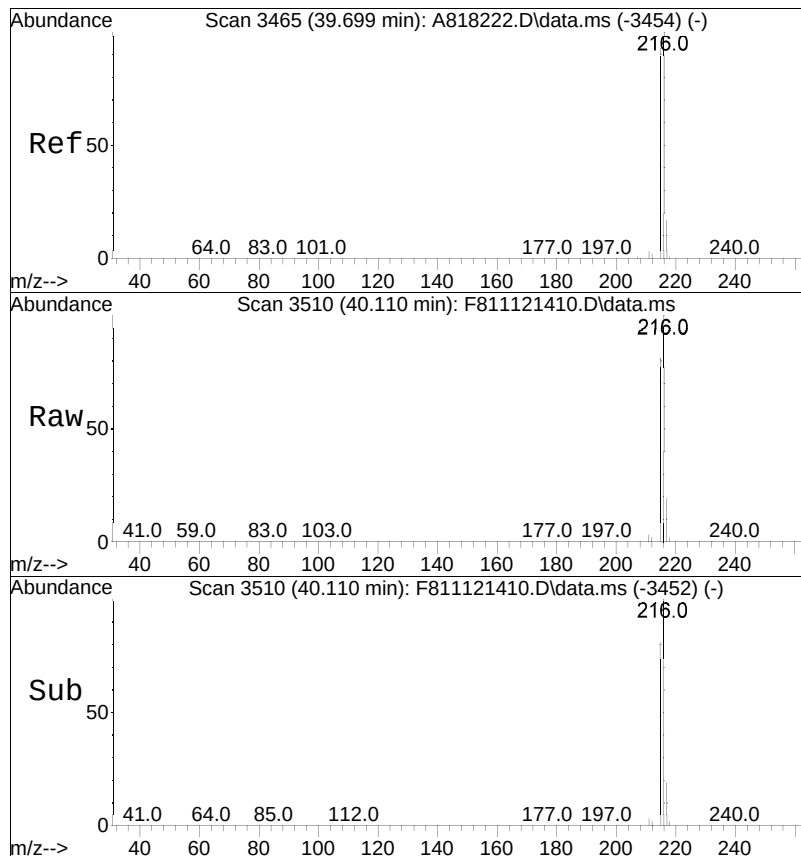
Tgt Ion:202 Resp: 3925909

Ion Ratio Lower Upper

202 100

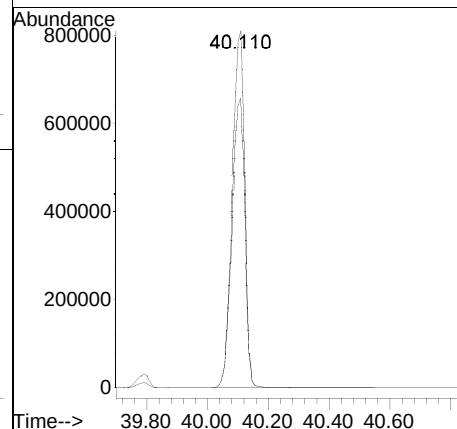
101 17.0 11.3 21.1

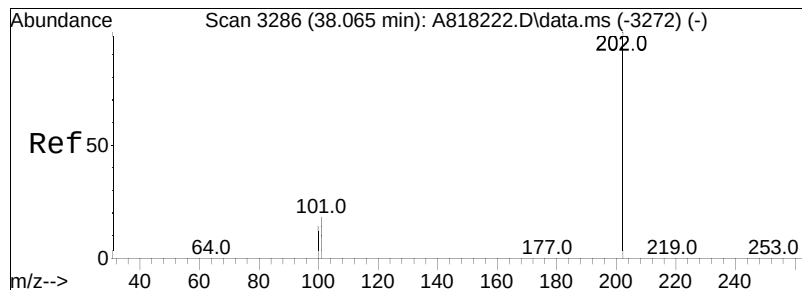




#59
 Benzo(b)fluorene
 Concen: 14994.43 ng/mL
 RT: 40.110 min Scan# 3510
 Delta R.T. 0.027 min
 Lab File: F811121410.D
 Acq: 13 Nov 2014 6:07 am

Tgt Ion:216 Resp: 2298098
 Ion Ratio Lower Upper
 216 100
 215 83.8 64.4 119.6





#60

Pyrene

Concen: 15446.22 ng/mL

RT: 38.466 min Scan# 3330

Delta R.T. 0.018 min

Lab File: F811121410.D

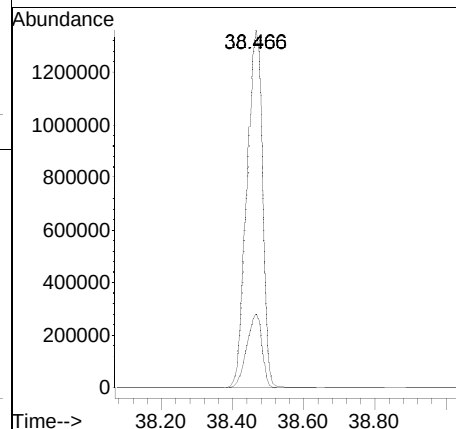
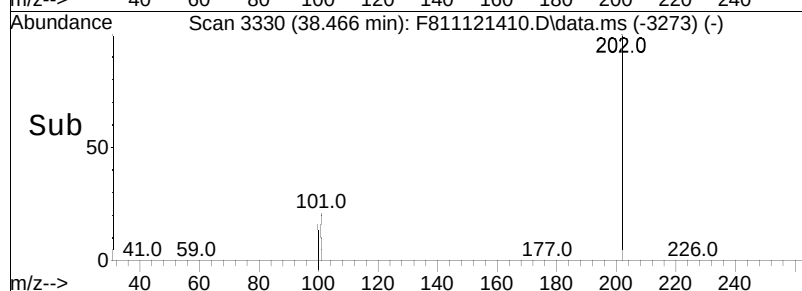
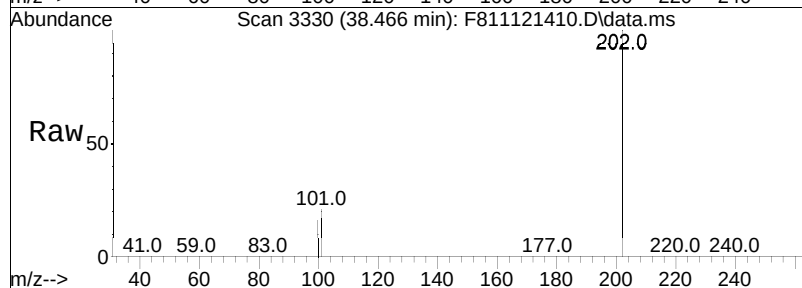
Acq: 13 Nov 2014 6:07 am

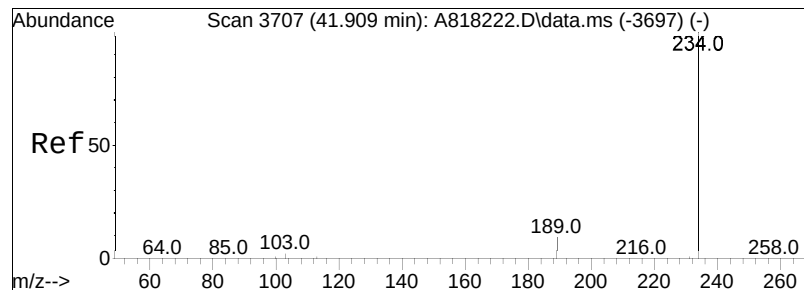
Tgt Ion: 202 Resp: 4111062

Ion Ratio Lower Upper

202 100

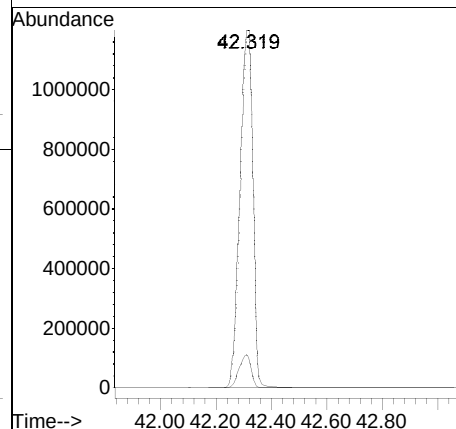
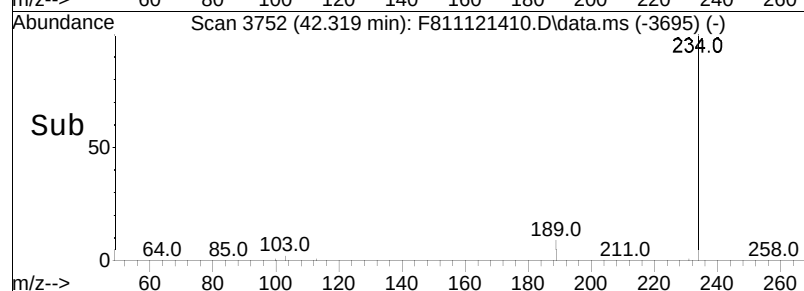
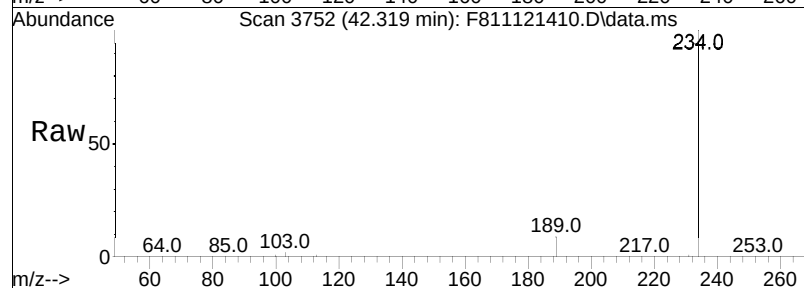
101 20.3 14.1 26.1

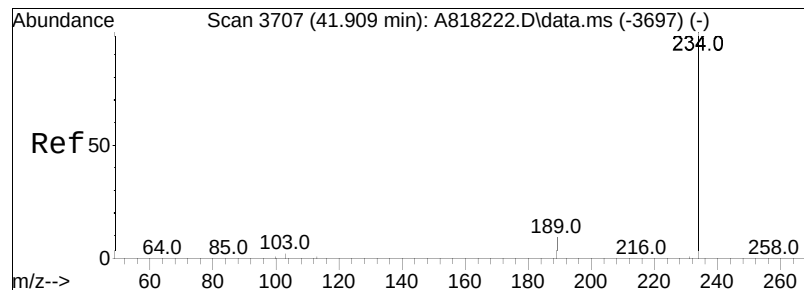




#66
 Naphthobenzothiophene
 Concen: 15393.97 ng/ml
 RT: 42.319 min Scan# 3752
 Delta R.T. 0.018 min
 Lab File: F811121410.D
 Acq: 13 Nov 2014 6:07 am

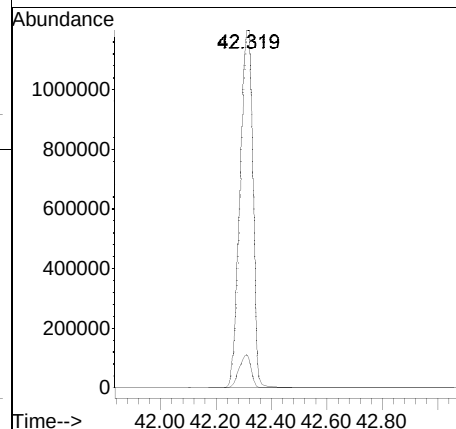
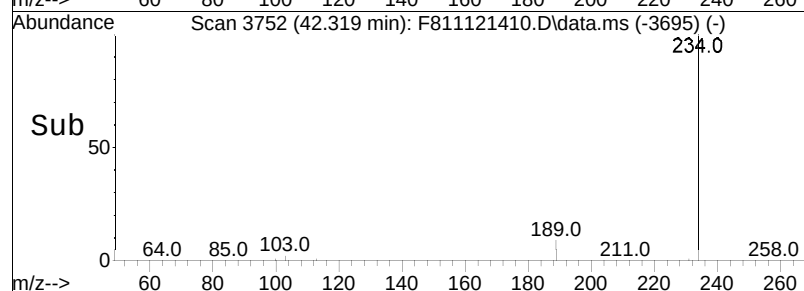
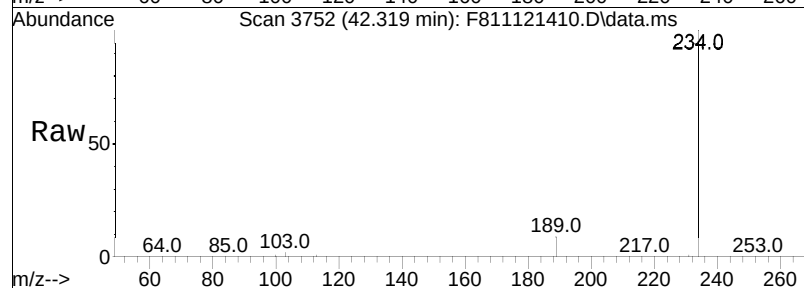
Tgt Ion: 234 Resp: 3771077
 Ion Ratio Lower Upper
 234 100
 189 8.9 5.7 10.7

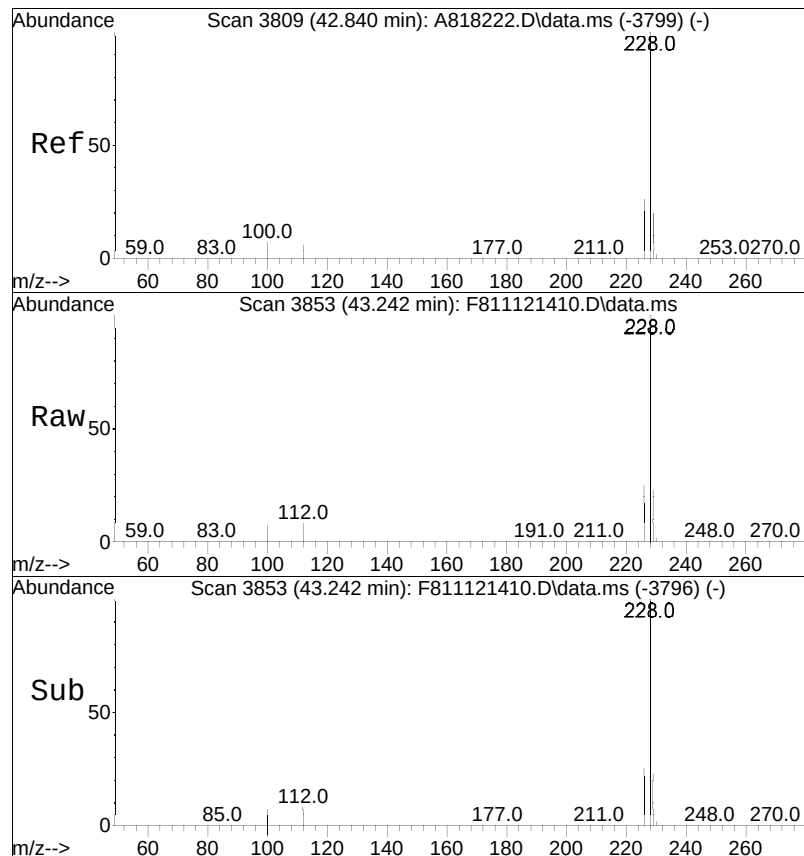




#67
 Naphthobenzothiophene-2,1-D
 Concen: 15393.97 ng/mL
 RT: 42.319 min Scan# 3752
 Delta R.T. 0.018 min
 Lab File: F811121410.D
 Acq: 13 Nov 2014 6:07 am

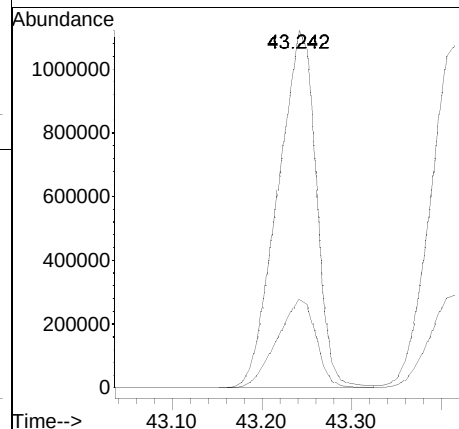
Tgt Ion: 234 Resp: 3771077
 Ion Ratio Lower Upper
 234 100
 189 8.9 5.7 10.7

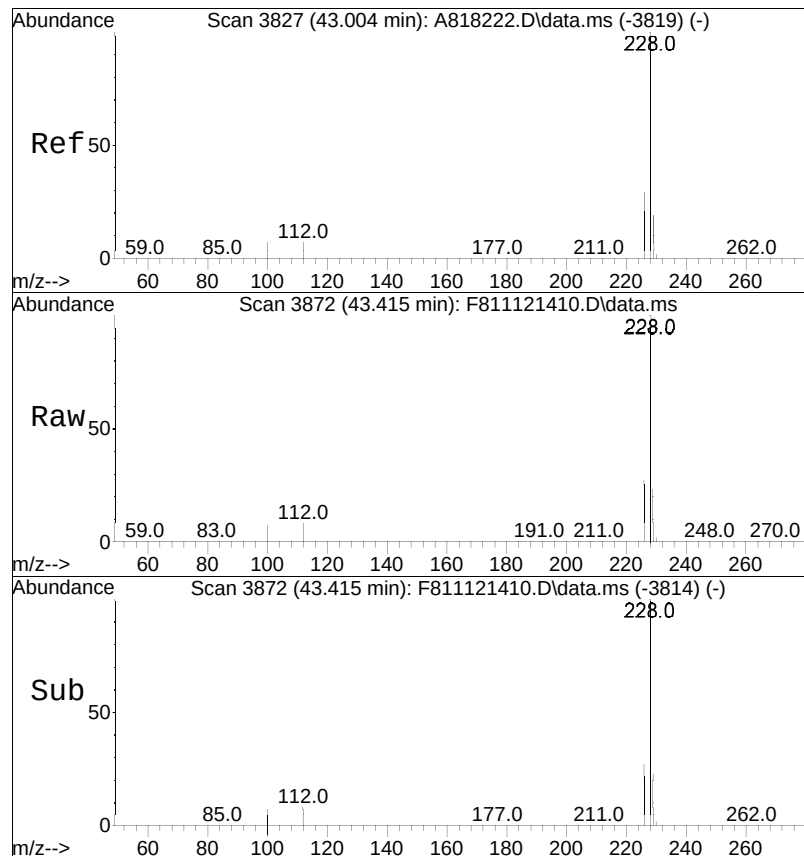




#75
 Benz[a]anthracene
 Concen: 14756.51 ng/mL
 RT: 43.242 min Scan# 3853
 Delta R.T. 0.018 min
 Lab File: F811121410.D
 Acq: 13 Nov 2014 6:07 am

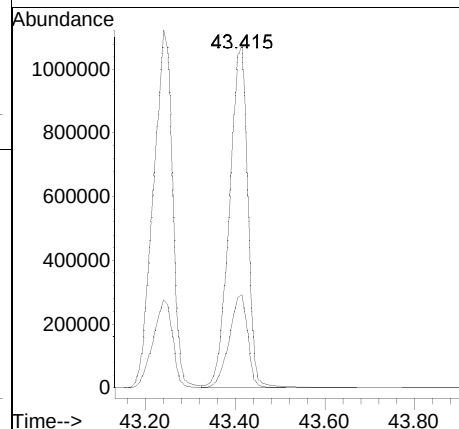
Tgt Ion	Ratio	Lower	Upper
228	100		
226	25.0	18.3	34.1

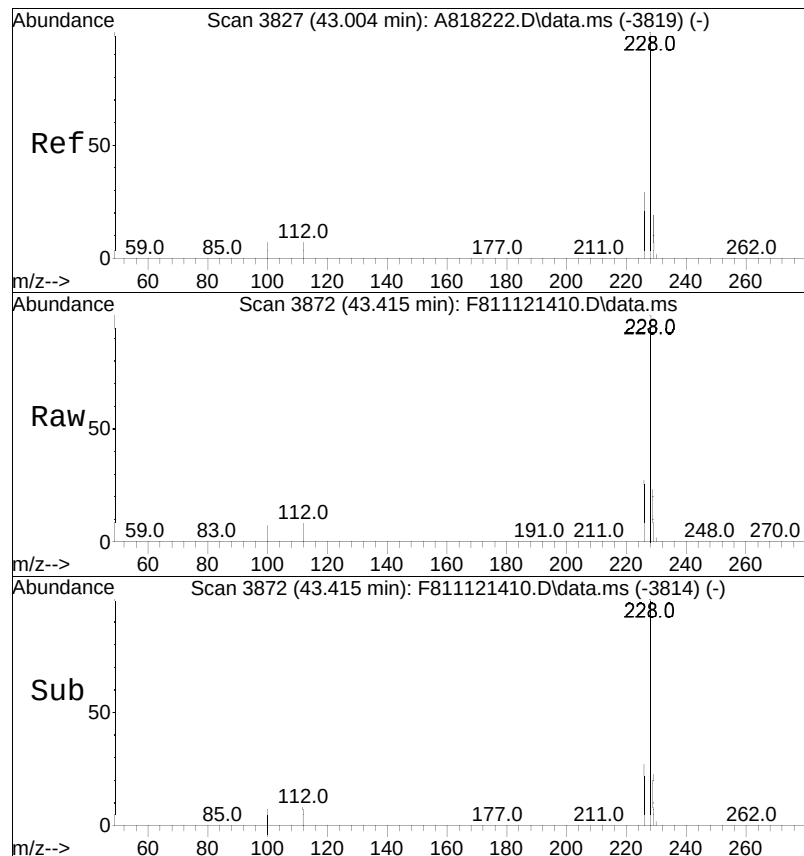




#76
 Chrysene
 Concen: 14450.26 ng/mL
 RT: 43.415 min Scan# 3872
 Delta R.T. 0.027 min
 Lab File: F811121410.D
 Acq: 13 Nov 2014 6:07 am

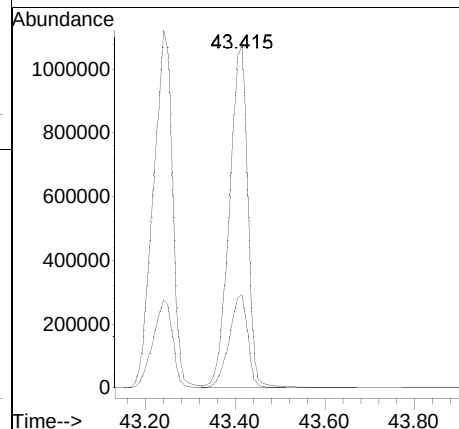
Tgt Ion	Ratio	Lower	Upper
228	100		
226	27.4	20.1	37.3

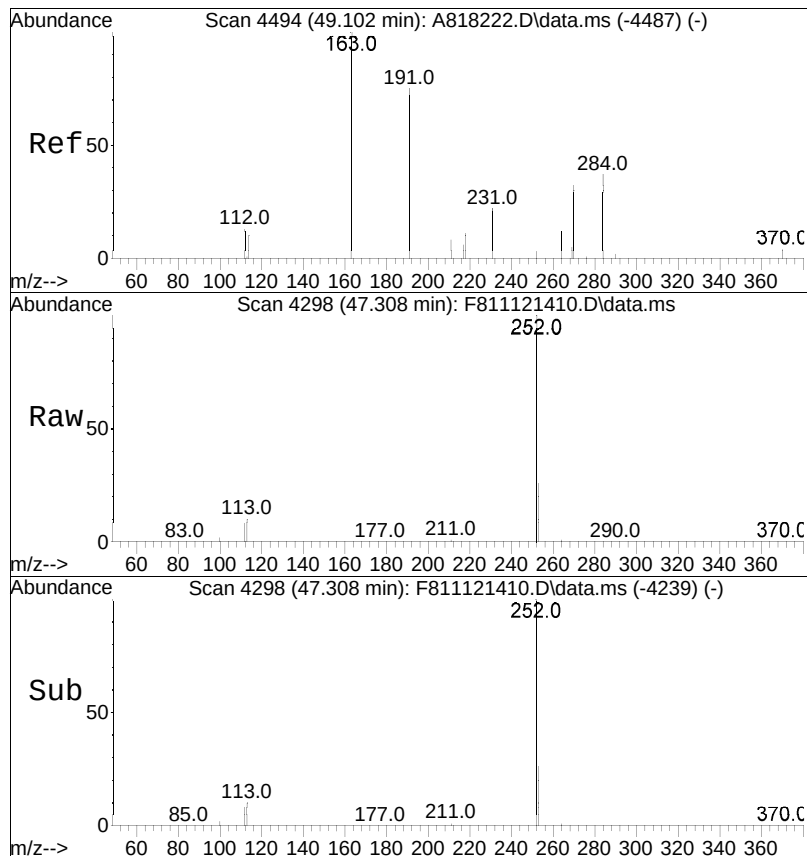




#77
 Chrysene/Triphenylene
 Concen: 14450.26 ng/mL
 RT: 43.415 min Scan# 3872
 Delta R.T. 0.027 min
 Lab File: F811121410.D
 Acq: 13 Nov 2014 6:07 am

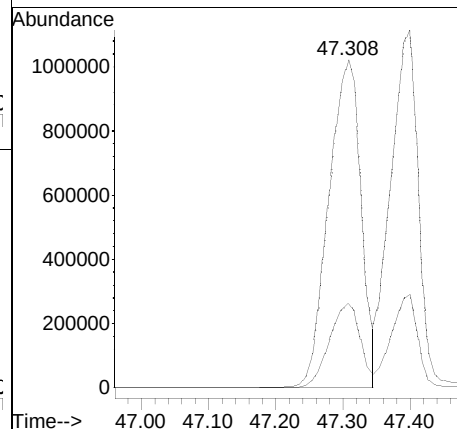
Tgt Ion	Ratio	Lower	Upper
228	100		
226	27.4	20.1	37.3

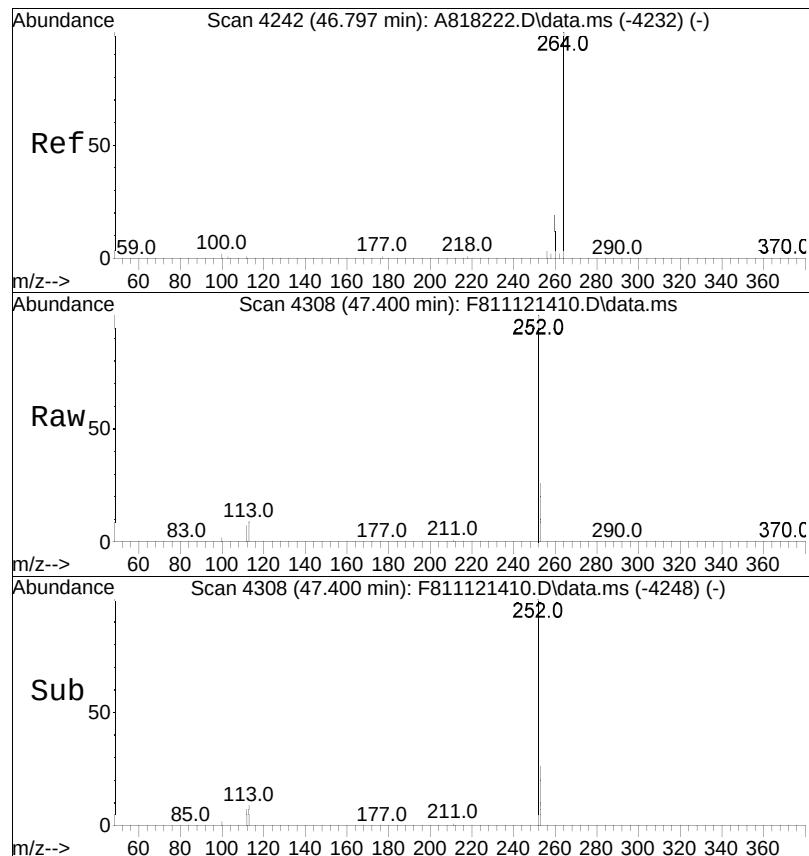




#84
 Benzo[b]fluoranthene
 Concen: 13695.48 ng/mL
 RT: 47.308 min Scan# 4298
 Delta R.T. 0.037 min
 Lab File: F811121410.D
 Acq: 13 Nov 2014 6:07 am

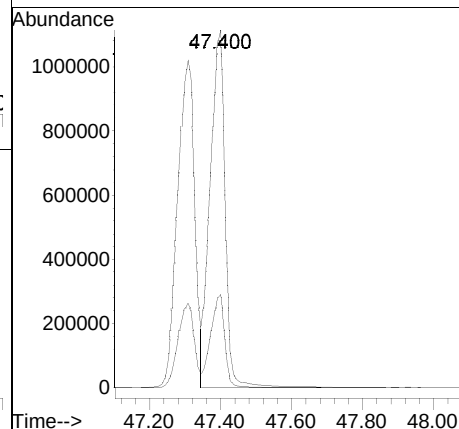
Tgt Ion: 252 Resp: 3425681
 Ion Ratio Lower Upper
 252 100
 253 24.6 16.1 29.9

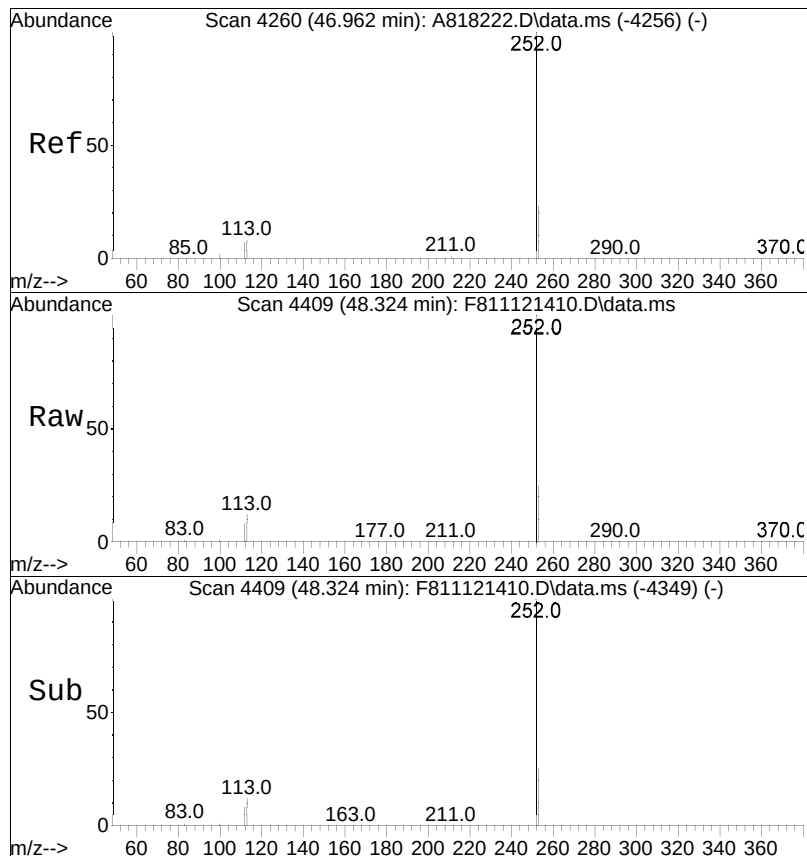




#85
 Benzo[j]+[k]fluoranthene
 Concen: 13329.93 ng/mL
 RT: 47.400 min Scan# 4308
 Delta R.T. 0.046 min
 Lab File: F811121410.D
 Acq: 13 Nov 2014 6:07 am

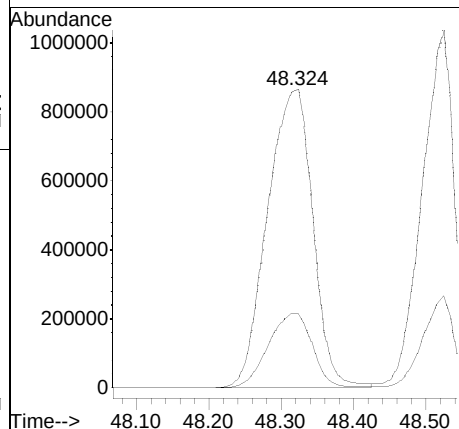
Tgt Ion	Ratio	Lower	Upper
252	100		
253	24.5	16.2	30.0

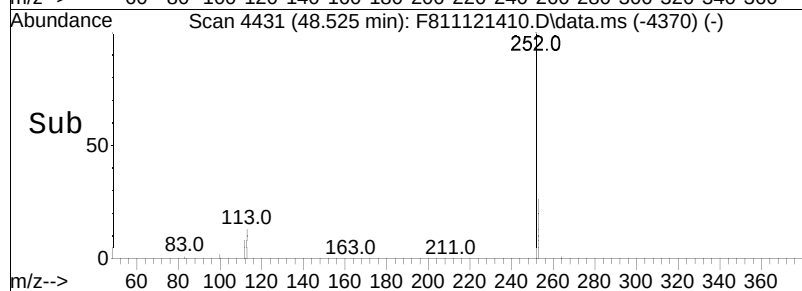
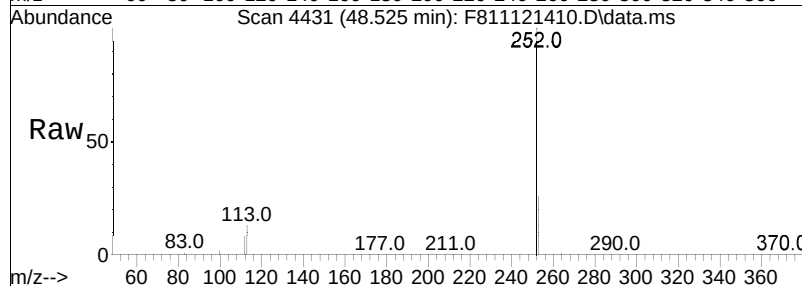
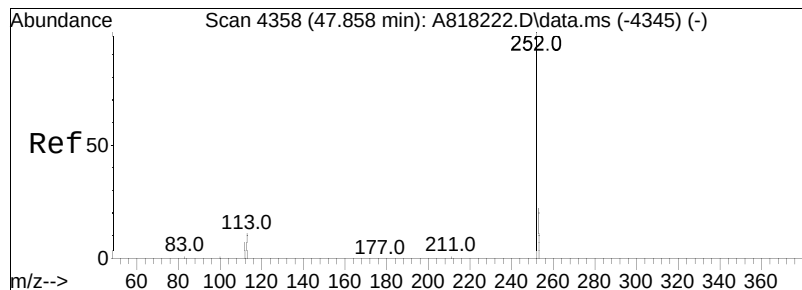




#87
 Benzo[e]pyrene
 Concen: 15005.52 ng/mL
 RT: 48.324 min Scan# 4409
 Delta R.T. 0.046 min
 Lab File: F811121410.D
 Acq: 13 Nov 2014 6:07 am

Tgt Ion	Ratio	Lower	Upper
252	100		
253	24.1	16.6	30.8





#89

Benzo[a]pyrene

Concen: 13568.05 ng/mL

RT: 48.525 min Scan# 4431

Delta R.T. 0.055 min

Lab File: F811121410.D

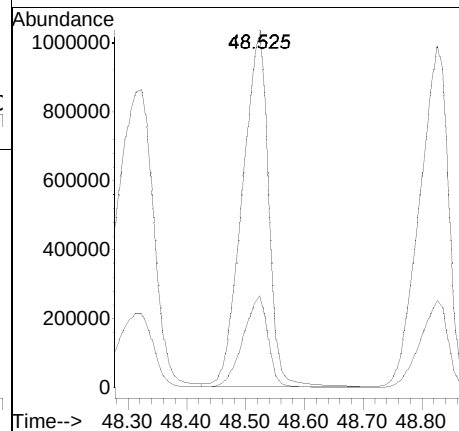
Acq: 13 Nov 2014 6:07 am

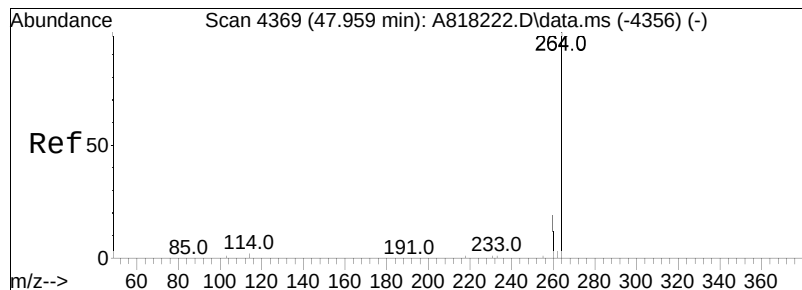
Tgt Ion: 252 Resp: 3199186

Ion Ratio Lower Upper

252 100

253 24.5 16.8 31.2





#90

Perylene

Concen: 13916.43 ng/mL

RT: 48.827 min Scan# 4464

Delta R.T. 0.046 min

Lab File: F811121410.D

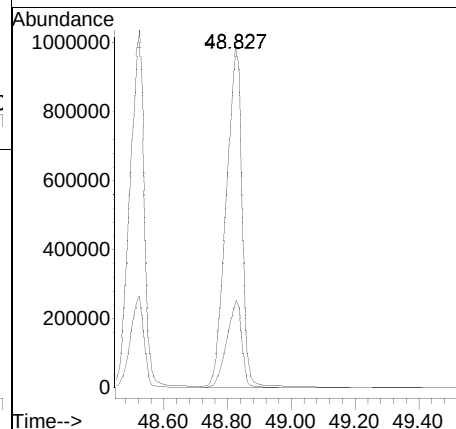
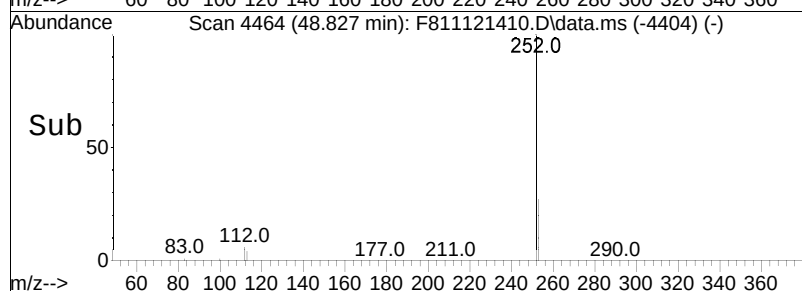
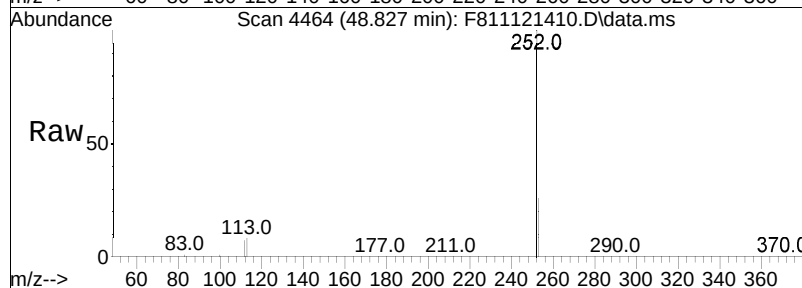
Acq: 13 Nov 2014 6:07 am

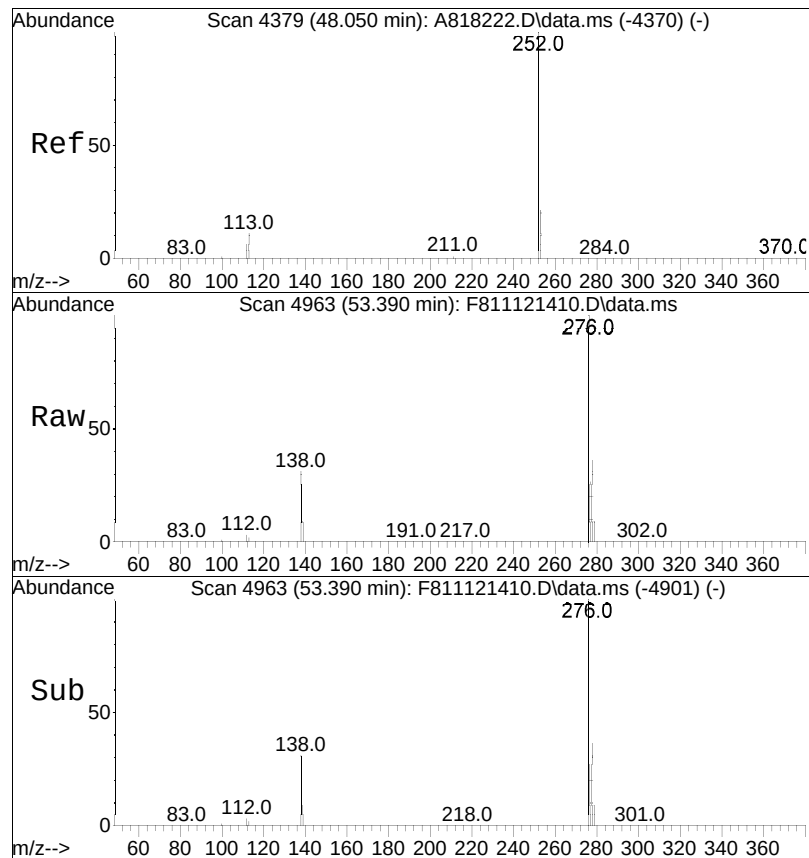
Tgt Ion: 252 Resp: 3427066

Ion Ratio Lower Upper

252 100

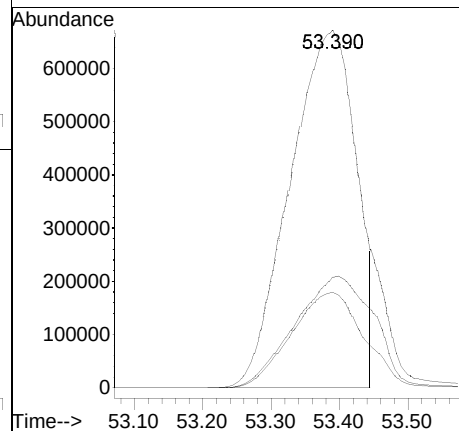
253 24.2 17.1 31.7

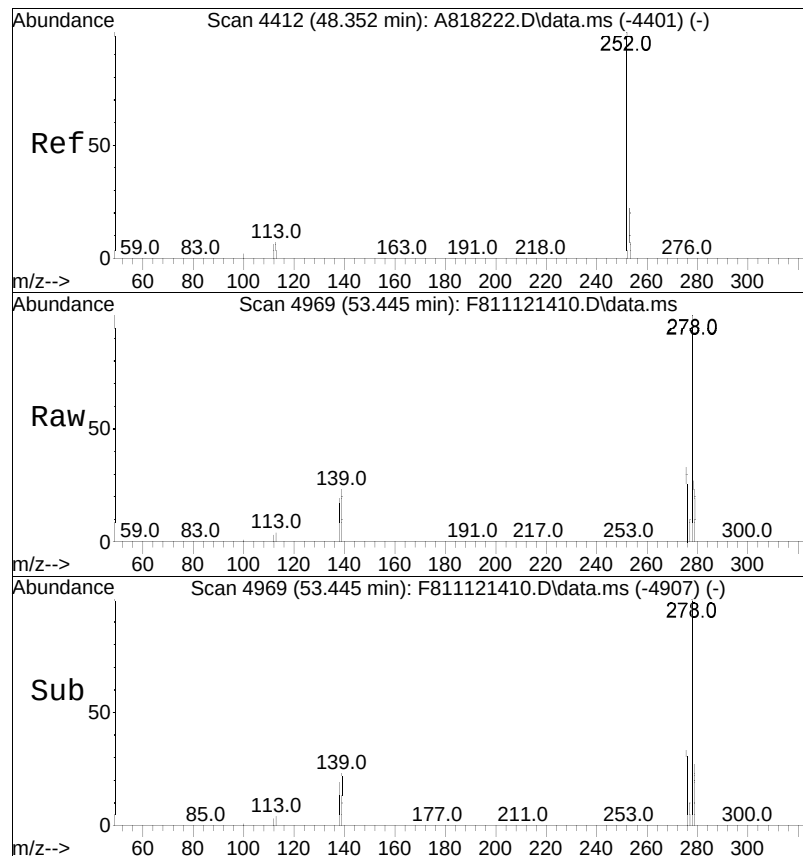




#91
 Indeno[1,2,3-cd]pyrene
 Concen: 15288.73 ng/mL M3
 RT: 53.390 min Scan# 4963
 Delta R.T. 0.064 min
 Lab File: F811121410.D
 Acq: 13 Nov 2014 6:07 am

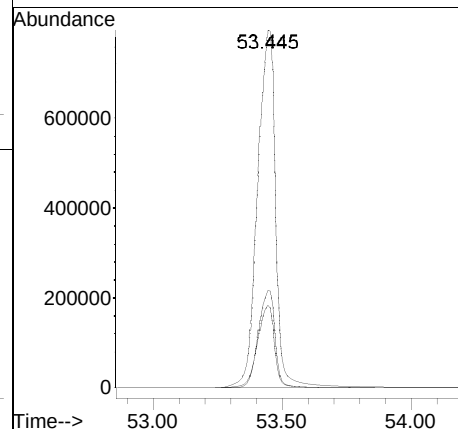
Tgt Ion	Ratio	Lower	Upper
276	100		
138	37.6	18.7	34.7#
277	29.7	16.7	30.9

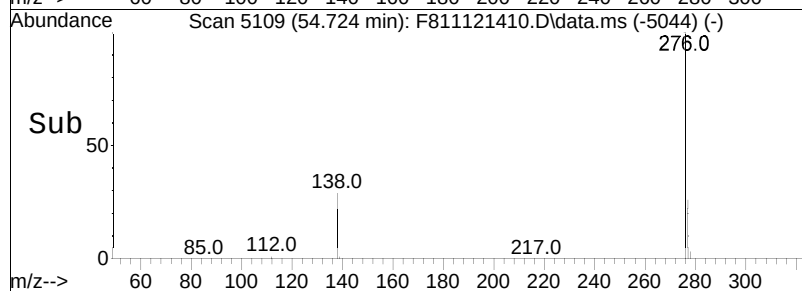
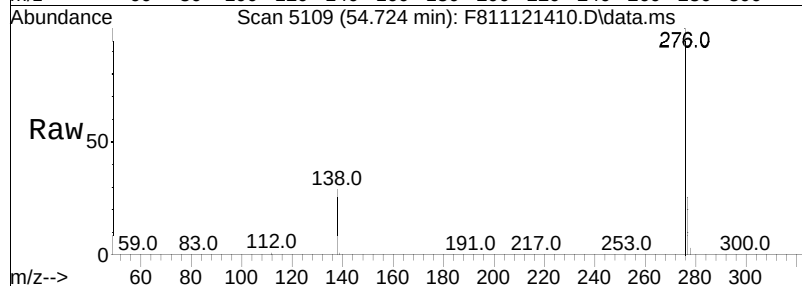
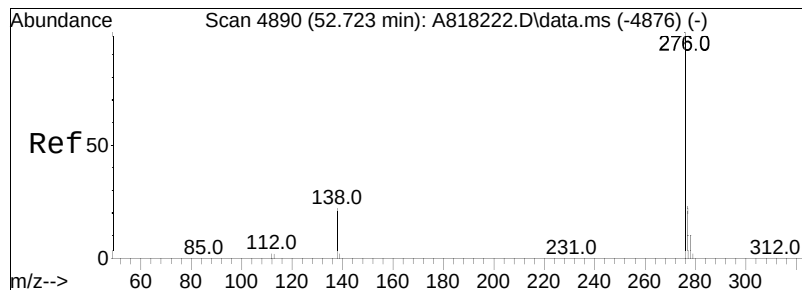




#92
 Dibenz[ah]+[ac]anthracene
 Concen: 15265.32 ng/mL
 RT: 53.445 min Scan# 4969
 Delta R.T. 0.064 min
 Lab File: F811121410.D
 Acq: 13 Nov 2014 6:07 am

Tgt Ion:	278	Resp:	3857872
Ion Ratio	Lower	Upper	
278	100		
139	22.3	15.1	28.1
279	25.7	16.9	31.3





#93

Benzo[g,h,i]perylene

Concen: 15316.59 ng/mL

RT: 54.724 min Scan# 5109

Delta R.T. 0.091 min

Lab File: F811121410.D

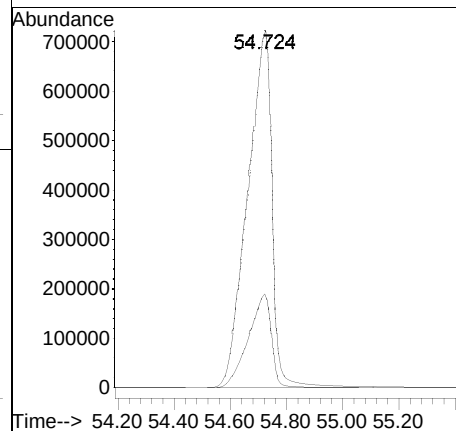
Acq: 13 Nov 2014 6:07 am

Tgt Ion: 276 Resp: 4308705

Ion Ratio Lower Upper

276 100

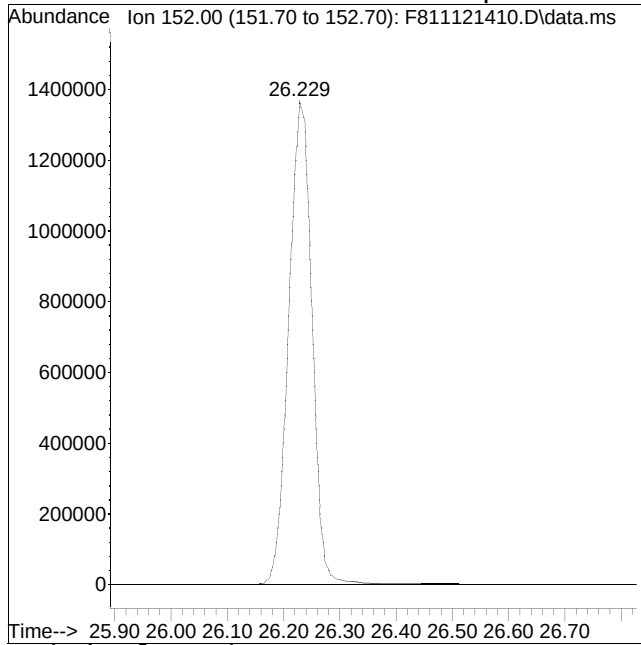
277 25.3 16.4 30.6



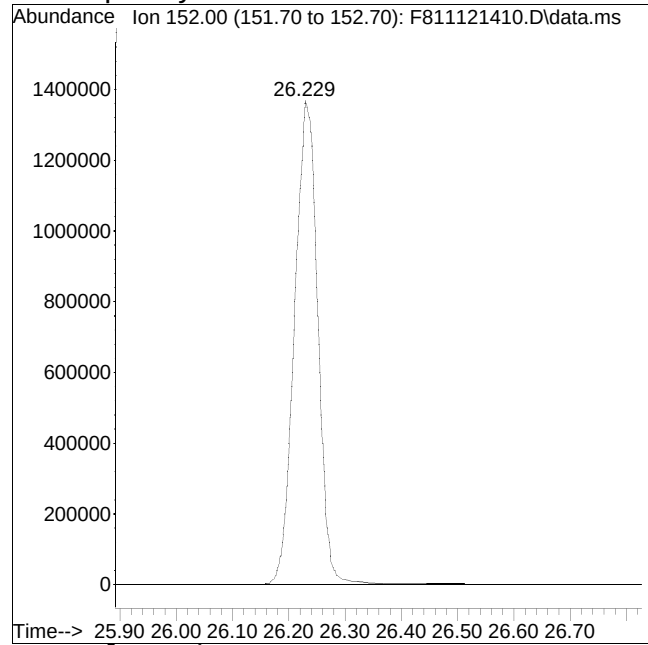
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121410.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 6:07 am Instrument : PAH8
Sample : i811121407 Quant Date : 11/13/2014 11:51 am

Compound #26: Acenaphthylene



Original Peak Response = 3952887



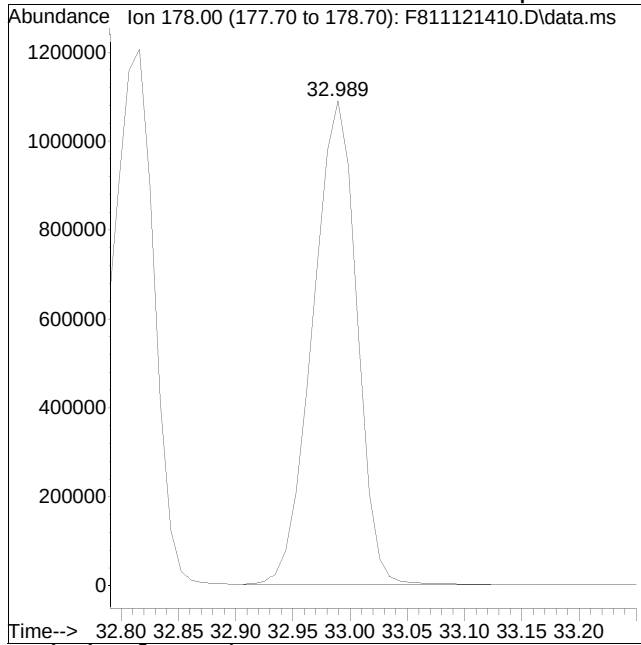
Manual Peak Response = 3946228 M4

M4 = Poor automated baseline construction.

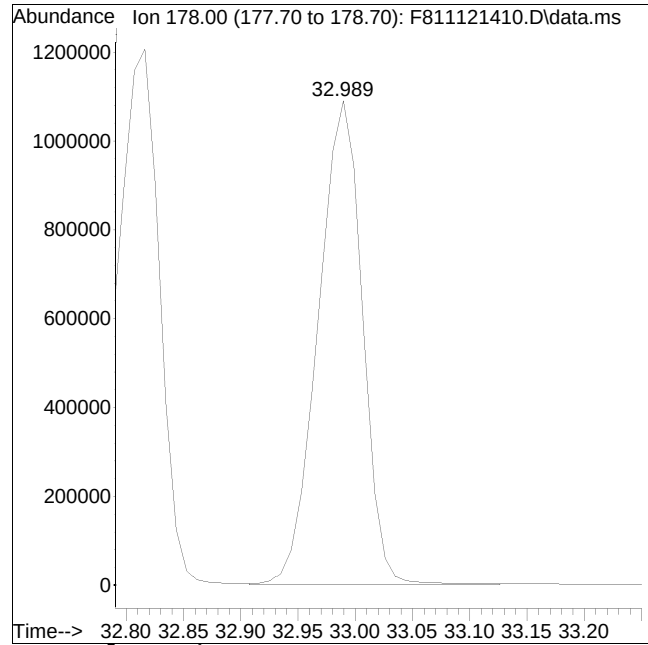
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121410.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 6:07 am Instrument : PAH8
Sample : i811121407 Quant Date : 11/13/2014 11:51 am

Compound #55: Anthracene



Original Peak Response = 2917421



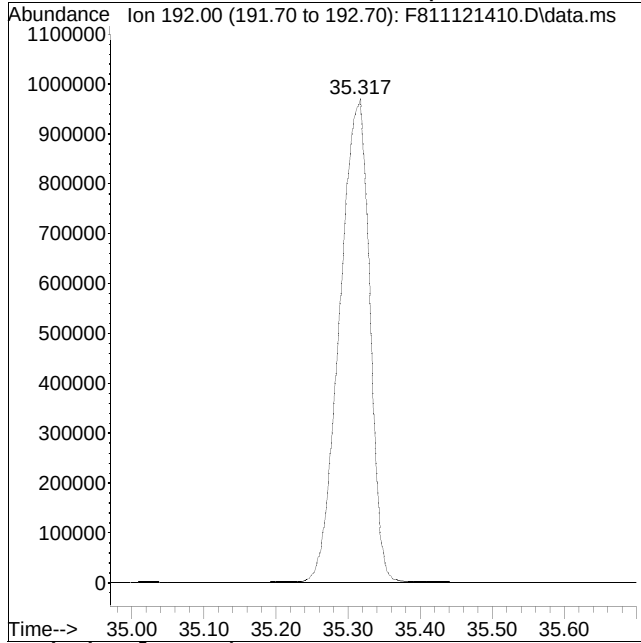
Manual Peak Response = 2941736 M4

M4 = Poor automated baseline construction.

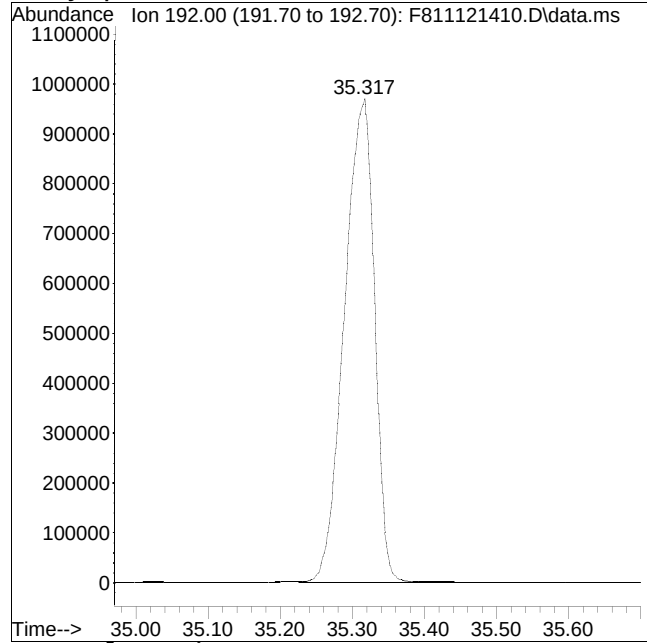
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121410.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 6:07 am Instrument : PAH8
Sample : i811121407 Quant Date : 11/13/2014 11:51 am

Compound #57: 1-Methylphenanthrene



Original Peak Response = 2828763



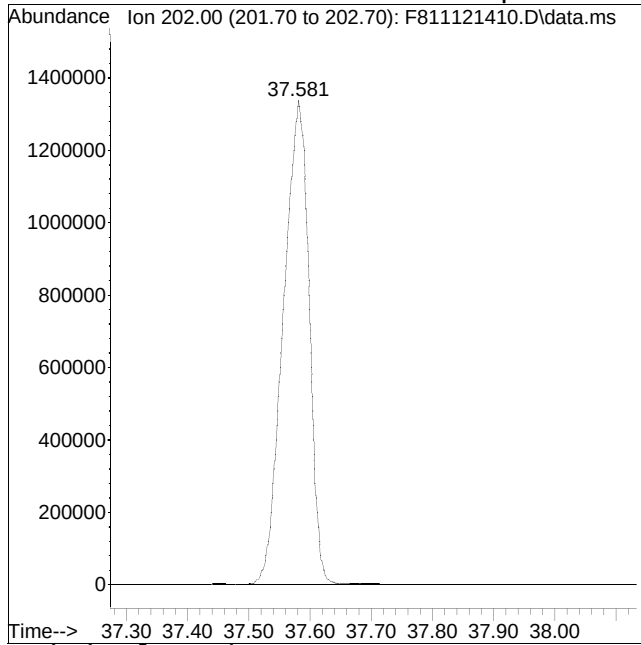
Manual Peak Response = 2822156 M4

M4 = Poor automated baseline construction.

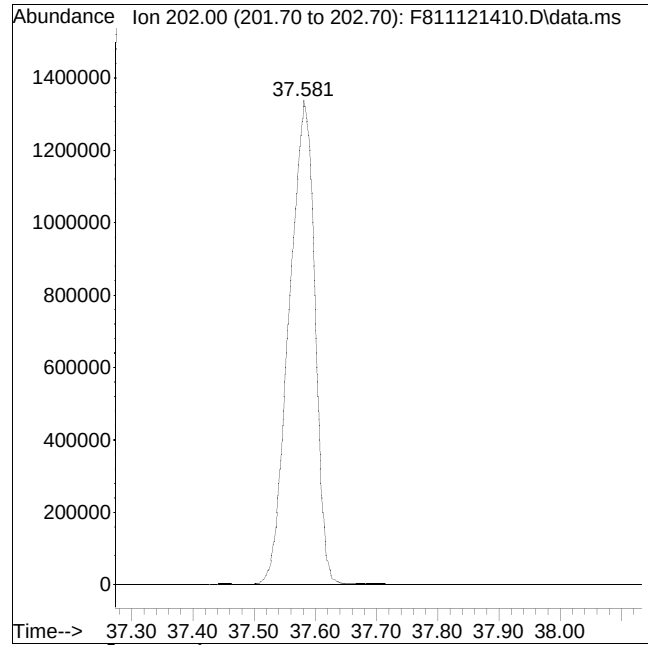
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121410.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 6:07 am Instrument : PAH8
Sample : i811121407 Quant Date : 11/13/2014 11:51 am

Compound #58: Fluoranthene



Original Peak Response = 3925446



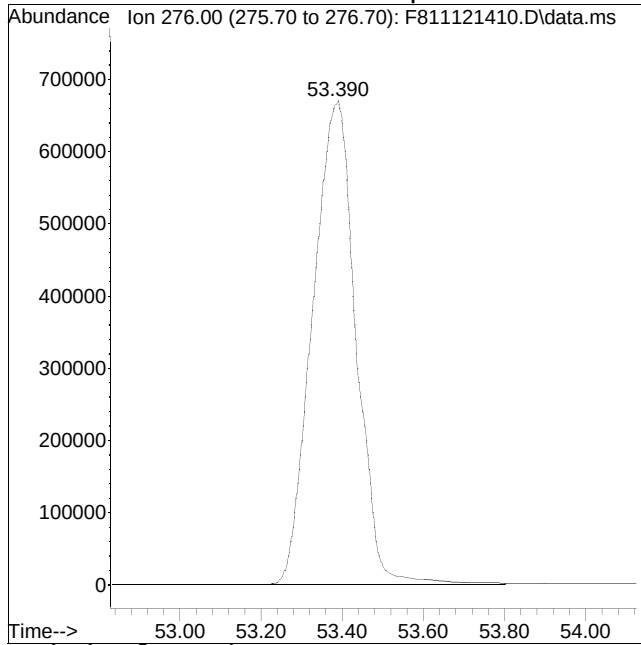
Manual Peak Response = 3925909 M4

M4 = Poor automated baseline construction.

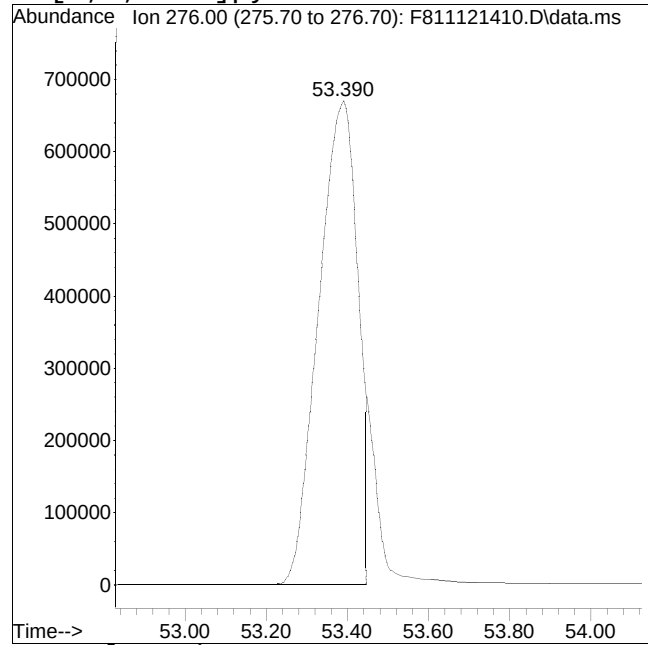
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121410.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 6:07 am Instrument : PAH8
Sample : i811121407 Quant Date : 11/13/2014 11:51 am

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 4996457



Manual Peak Response = 4516292 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Initial Calibration Verification

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH8\2014\NOV14\NOV12\
 Data File : F811121412.D
 Acq On : 13 Nov 2014 8:57 am
 Operator : PAH8:SR
 Sample : Cq811121401
 Misc : WG740999,frau88 500 ng/mL
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Nov 16 12:07:33 2014
 Quant Method : O:\Forensics\Data\PAH8\2014\NOV14\NOV12\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Sun Nov 16 12:07:28 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	95	0.00
3 A1	trans-Decalin	0.447	0.421	5.8	93	0.00
4 t	cis-Decalin	0.339	0.320	5.6	91	0.00
9 s	Naphthalene-d8	1.915	2.008	-4.9	92	0.00
10 A1	Naphthalene	2.063	2.349	-13.9	96	0.00
16 t	2-Methylnaphthalene	1.379	1.473	-6.8	97	0.00
17 t	1-Methylnaphthalene	1.334	1.390	-4.2	94	0.00
18 A1	Benzothiophene	1.712	1.867	-9.1	97	0.00
23 t	Biphenyl	1.659	1.852	-11.6	97	0.00
24 t	2,6-Dimethylnaphthalene	1.130	1.210	-7.1	95	0.00
25 t	Dibenzofuran	1.699	1.880	-10.7	96	0.00
26 t	Acenaphthylene	1.863	1.973	-5.9	94	0.00
27 t	Acenaphthene	1.183	1.321	-11.7	97	0.00
28 t	2,3,5-Trimethylnaphthalene	0.930	0.987	-6.1	95	0.00
29 A1	Fluorene	1.305	1.417	-8.6	96	0.00
33 A1	Dibenzothiophene	1.828	2.032	-11.2	97	0.00
42 s	Phenanthrene-d10	1.460	1.538	-5.3	93	0.00
43 A1	Phenanthrene	1.779	2.094	-17.7	97	0.00
54 t	Retene	0.439	0.506	-15.3	103	0.00
55 t	Anthracene	1.571	1.796	-14.3	95	0.00
56 t	Carbazole	1.656	1.784	-7.7	93	0.00
57 t	1-Methylphenanthrene	1.291	1.378	-6.7	94	0.00
58 A1	Fluoranthene	1.839	2.002	-8.9	93	0.00
59 t	Benzo(b)fluorene	0.993	1.106	-11.4	95	0.00
60 A1	Pyrene	1.917	2.241	-16.9	96	0.00
66 A1	Naphthobenzothiophene	1.773	2.013	-13.5	196	0.00
67 A2	Naphthobenzothiophene-2,1-D	1.773	2.013	-13.5	196	0.00
74 i	Chrysene-d12	1.000	1.000	0.0	93	0.00
75 t	Benz[a]anthracene	1.015	0.993	2.2	91	0.00
76 A1	Chrysene	1.022	1.086	-6.3	97	0.00
77 A2	Chrysene/Triphenylene	1.022	1.086	-6.3	97	0.00
83 s	Benzo[b]fluoranthene-d12	0.971	0.903	7.0	91	0.00
84 t	Benzo[b]fluoranthene	1.145	1.170	-2.2	93	0.00
85 A1	Benzo[j]+[k]fluoranthene	1.083	1.157	-6.8	99	0.00
87 t	Benzo[e]pyrene	1.163	1.118	3.9	90	0.00
88 s	Benzo[a]pyrene-d12	0.788	0.763	3.2	91	0.00
89 t	Benzo[a]pyrene	1.008	1.107	-9.8	96	0.00
90 t	Perylene	1.049	1.052	-0.3	94	0.00

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\PAH8\2014\NOV14\NOV12\
 Data File : F811121412.D
 Acq On : 13 Nov 2014 8:57 am
 Operator : PAH8:SR
 Sample : Cq811121401
 Misc : WG740999,frau88 500 ng/mL
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Nov 16 12:07:33 2014
 Quant Method : 0:\Forensics\Data\PAH8\2014\NOV14\NOV12\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Sun Nov 16 12:07:28 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.330	1.346	-1.2	97	0.00
92 t	Dibenz[ah]+[ac]anthracene	1.149	1.185	-3.1	95	0.00
93 t	Benzo[g,h,i]perylene	1.328	1.261	5.0	95	0.00
94 A1	Hopane (T19)	0.334	0.000#	100.0#	0#	-52.44#
95 A2	17a(H),21B(H)-hopane - C30H	0.334	0.000#	100.0#	0#	-52.44#
129 SA1	5B(H)Cholane - Surr	0.157	0.000#	100.0#	0#	-43.91#

* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Mass Discrimination (Concentration)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	0.81	0.70 - 1.30

Mass Discrimination (Response)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	1.02	0.70 - 2.00

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\NOV14\NOV12\
 Data File : F811121412.D
 Acq On : 13 Nov 2014 8:57 am
 Operator : PAH8:SR
 Sample : Cq811121401
 Misc : WG740999,frau88 500 ng/mL
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Nov 16 12:07:33 2014
 Quant Method : O:\Forensics\Data\PAH8\2014\NOV14\NOV12\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Sun Nov 16 12:07:28 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.840	164	63128	500.000	ng/mL	0.00
74) Chrysene-d12	43.287	240	106854	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	19.877	136	126779	524.389	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	52.44%		
42) Phenanthrene-d10	32.706	188	97101	526.589	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	52.66%		
83) Benzo[b]fluoranthene-d12	47.180	264	96441	464.560	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	46.46%#		
88) Benzo[a]pyrene-d12	48.378	264	81509	484.079	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	48.41%#		
129) 5B(H)Cholane - Surr	0.000	217	0	0.000	ng/mL	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#		
Target Compounds						
						Qvalue
3) trans-Decalin	16.510	138	13281	235.110	ng/mL	100
4) cis-Decalin	17.733	138	10111	236.342	ng/mL	100
10) Naphthalene	19.950	128	148295	569.291	ng/mL	100
16) 2-Methylnaphthalene	22.651	142	92982	534.084	ng/mL	100
17) 1-Methylnaphthalene	23.071	142	87745	521.111	ng/mL	100
18) Benzothiophene	20.169	134	117853	545.196	ng/mL	100
23) Biphenyl	24.531	154	116884	558.073	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.133	156	76354	535.365	ng/mL	100
25) Dibenzofuran	27.615	168	118682	553.340	ng/mL	99
26) Acenaphthylene	26.228	152	124534M4	529.504	ng/mL	
27) Acenaphthene	26.968	153	83379	558.053	ng/mL	100
28) 2,3,5-Trimethylnaphthalen	28.519	170	62328	530.996	ng/mL	99
29) Fluorene	28.984	166	89477	542.862	ng/mL	100
33) Dibenzothiophene	32.305	184	128295	555.979	ng/mL	99
43) Phenanthrene	32.798	178	132186	588.641	ng/mL	100
54) Retene	39.781	234	31922	576.466	ng/mL	97
55) Anthracene	32.980	178	113406M4	571.671	ng/mL	
56) Carbazole	33.655	167	112600	538.598	ng/mL	100
57) 1-Methylphenanthrene	35.308	192	87012	533.966	ng/mL	99
58) Fluoranthene	37.571	202	126404M4	544.361	ng/mL	
59) Benzo(b)fluorene	40.083	216	69794	556.567	ng/mL	100
60) Pyrene	38.448	202	141448	584.476	ng/mL	99
66) Naphthobenzothiophene	42.301	234	254170	1232.277	ng/mL	99
67) Naphthobenzothiophene-2,1	42.301	234	254170	1232.277	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\NOV14\NOV12\
 Data File : F811121412.D
 Acq On : 13 Nov 2014 8:57 am
 Operator : PAH8:SR
 Sample : Cq811121401
 Misc : WG740999,frau88 500 ng/mL
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Nov 16 12:07:33 2014
 Quant Method : O:\Forensics\Data\PAH8\2014\NOV14\NOV12\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Sun Nov 16 12:07:28 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.223	228	106108	489.186	ng/mL	100
76)	Chrysene	43.388	228	116073	531.501	ng/mL	100
77)	Chrysene/Triphenylene	43.388	228	116073	531.501	ng/mL	100
84)	Benzo[b]fluoranthene	47.272	252	124973	510.520	ng/mL	98
85)	Benzo[j]+[k]fluoranthene	47.354	252	123643	534.340	ng/mL	96
87)	Benzo[e]pyrene	48.278	252	119514	480.688	ng/mL	96
89)	Benzo[a]pyrene	48.470	252	118245	548.804	ng/mL	96
90)	Perylene	48.781	252	112416	501.637	ng/mL	95
91)	Indeno[1,2,3-cd]pyrene	53.326	276	143787M3	505.871	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.381	278	126603	515.494	ng/mL	98
93)	Benzo[g,h,i]perylene	54.633	276	134744	474.685	ng/mL	100
94)	Hopane (T19)	0.000		0	N.D.	d	
95)	17a(H),21B(H)-hopane - C3	0.000		0	N.D.	d	

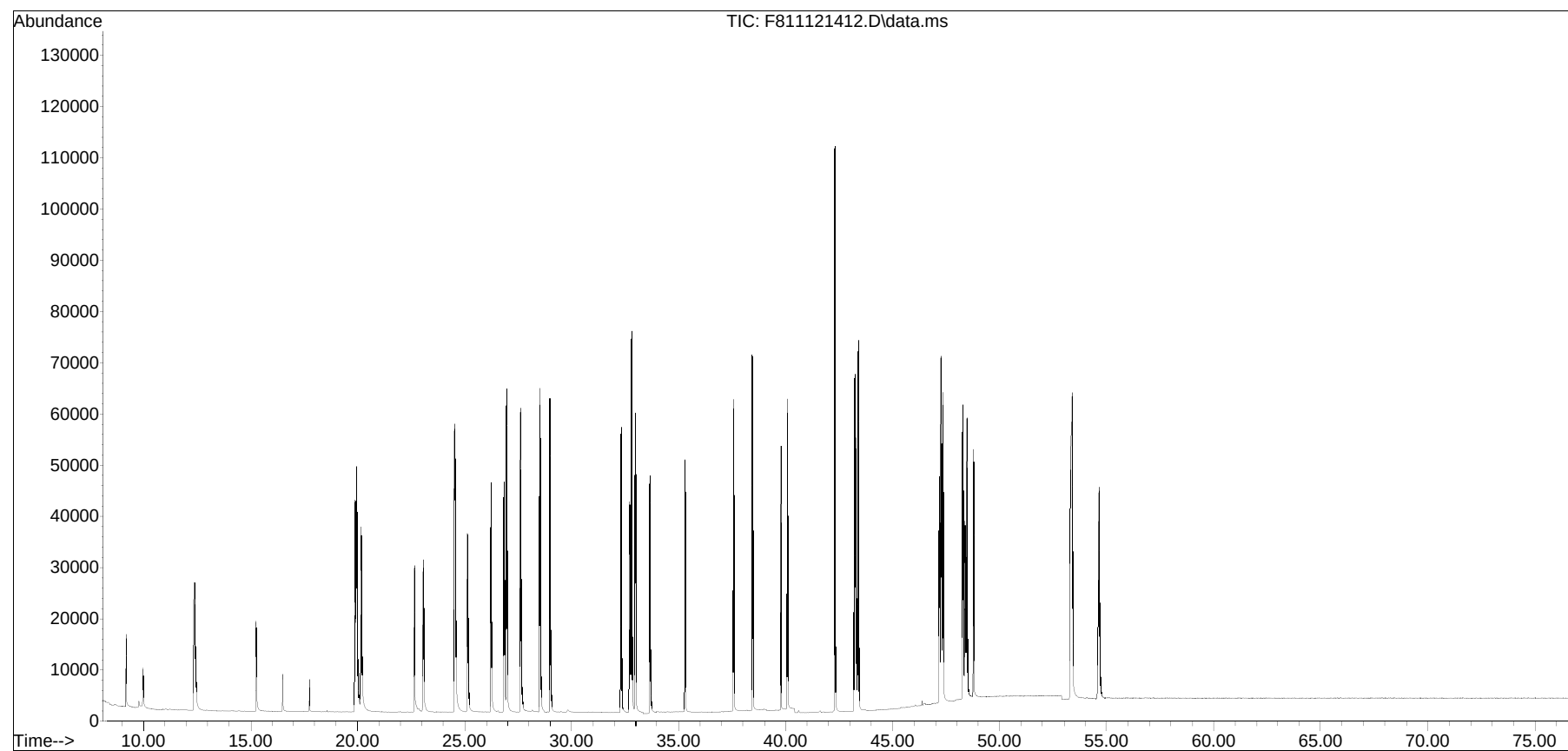
(#) = qualifier out of range (m) = manual integration (+) = signals summed

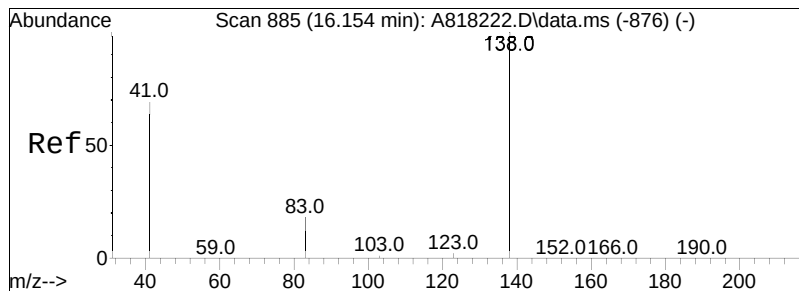
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\NOV14\NOV12\
Data File : F811121412.D
Acq On : 13 Nov 2014 8:57 am
Operator : PAH8:SR
Sample : Cq811121401
Misc : WG740999,frau88 500 ng/mL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Nov 16 12:07:33 2014
Quant Method : 0:\Forensics\Data\PAH8\2014\NOV14\NOV12\PAH8111214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Sun Nov 16 12:07:28 2014
Response via : Initial Calibration

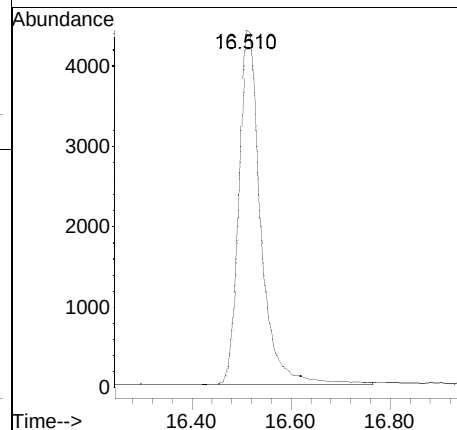
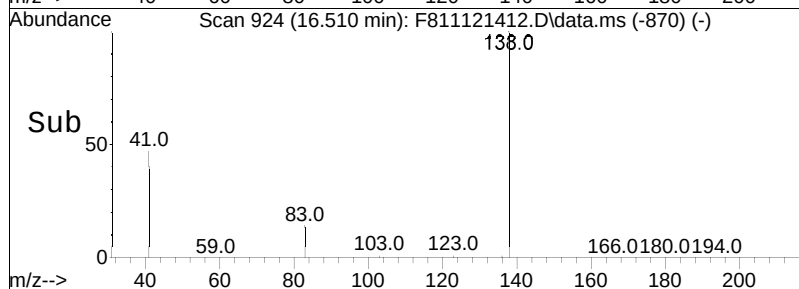
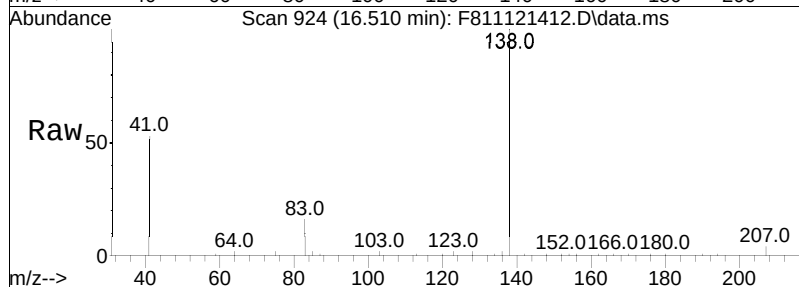
Sub List : ICAL_CCALT_REV2 - CC with five surrogates

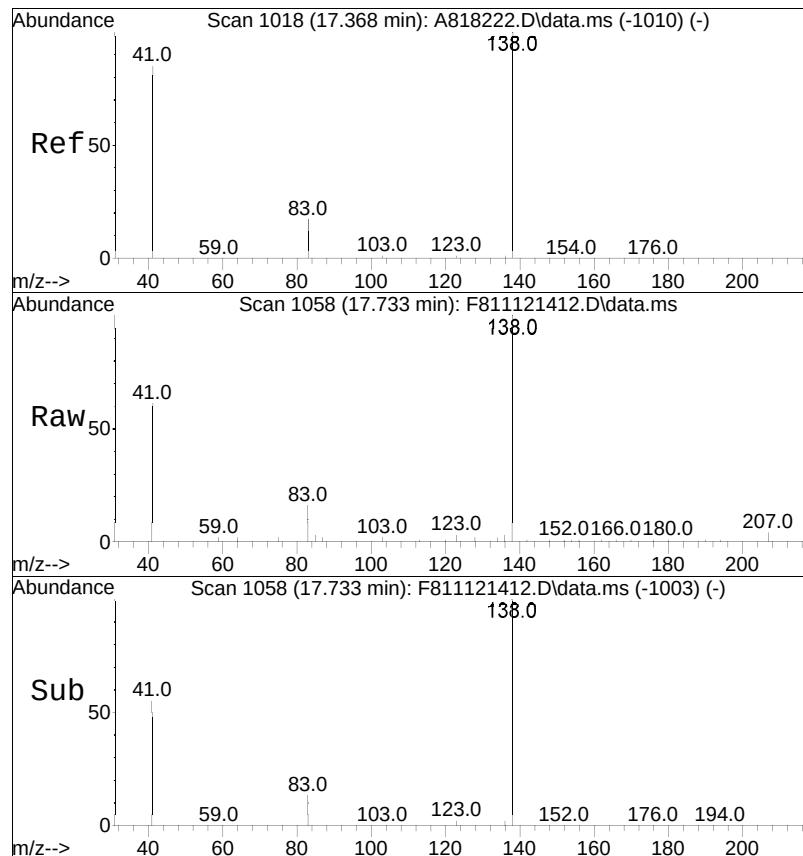




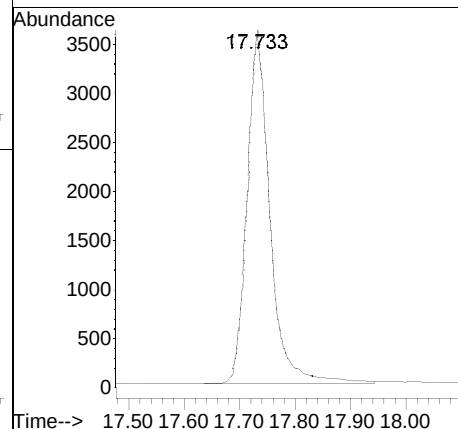
#3
trans-Decalin
Concen: 235.11 ng/mL
RT: 16.510 min Scan# 924
Delta R.T. -0.009 min
Lab File: F811121412.D
Acq: 13 Nov 2014 8:57 am

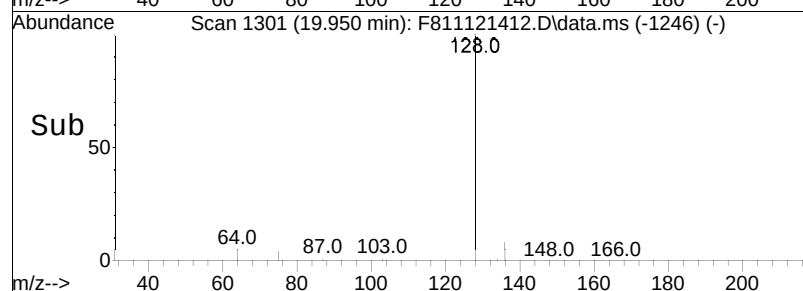
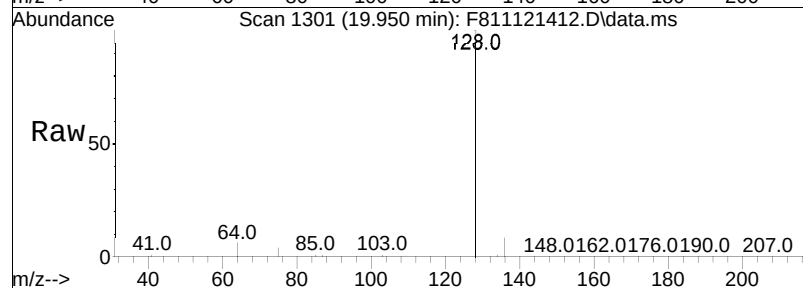
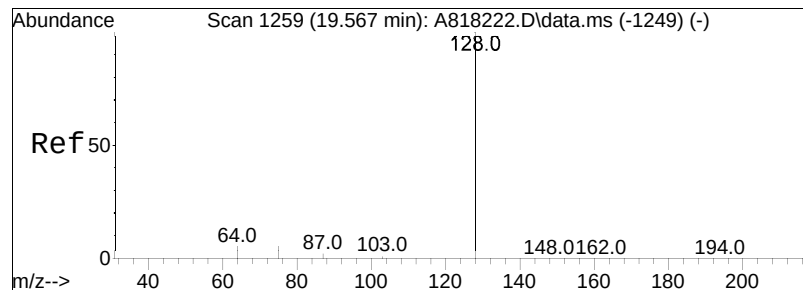
Tgt Ion:138 Resp: 13281



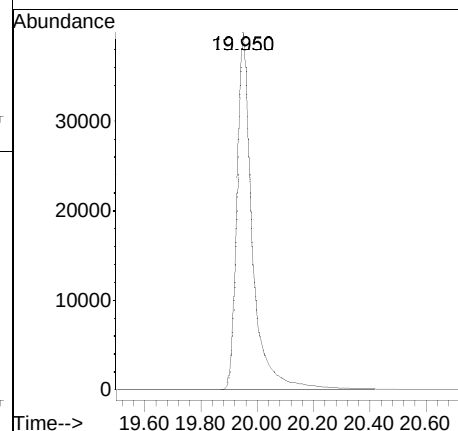


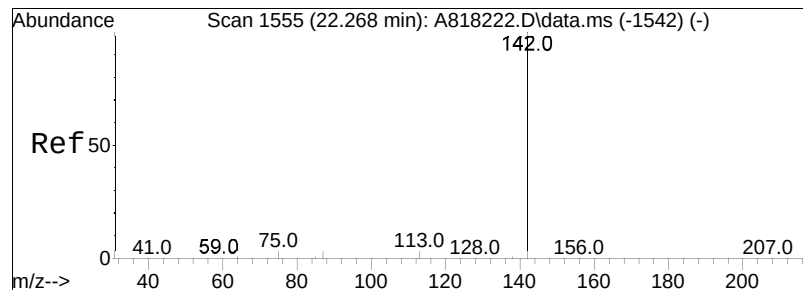
#4
 cis-Decalin
 Concen: 236.34 ng/mL
 RT: 17.733 min Scan# 1058
 Delta R.T. -0.000 min
 Lab File: F811121412.D
 Acq: 13 Nov 2014 8:57 am
 Tgt Ion:138 Resp: 10111





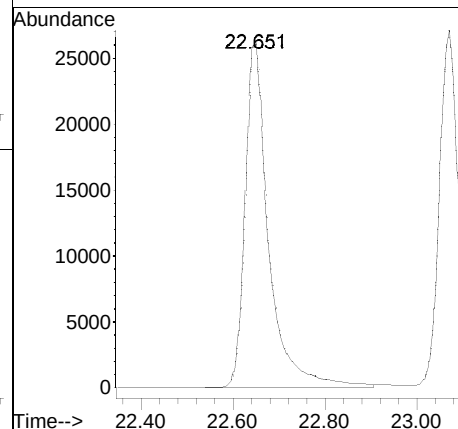
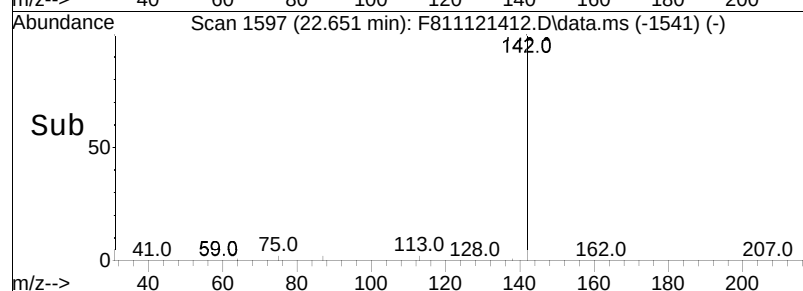
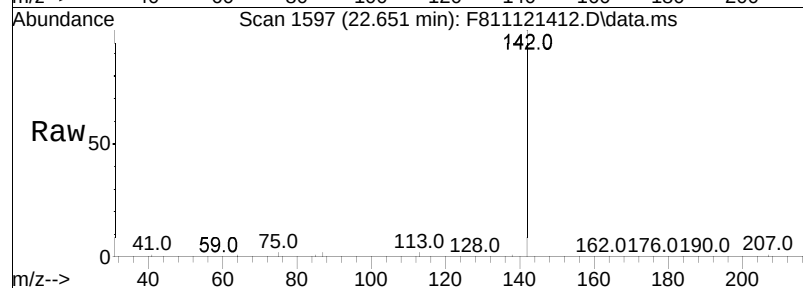
#10
 Naphthalene
 Concen: 569.29 ng/mL
 RT: 19.950 min Scan# 1301
 Delta R.T. 0.000 min
 Lab File: F811121412.D
 Acq: 13 Nov 2014 8:57 am
 Tgt Ion:128 Resp: 148295

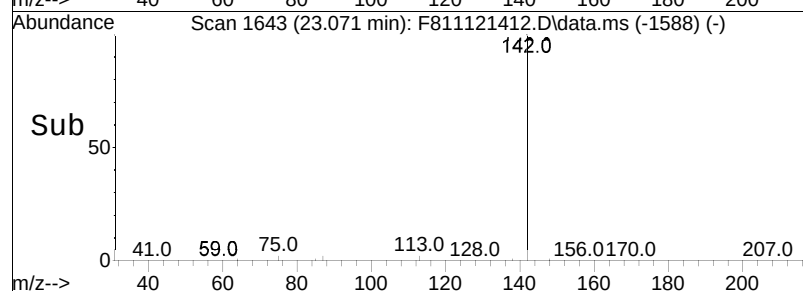
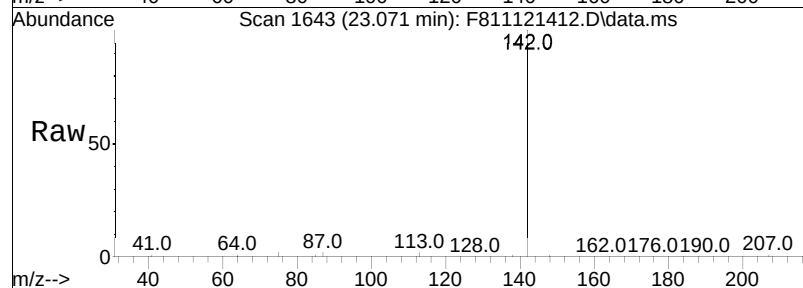
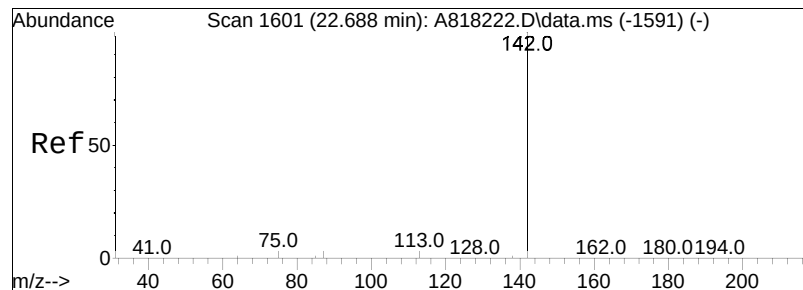




#16
2-Methylnaphthalene
Concen: 534.08 ng/mL
RT: 22.651 min Scan# 1597
Delta R.T. 0.009 min
Lab File: F811121412.D
Acq: 13 Nov 2014 8:57 am

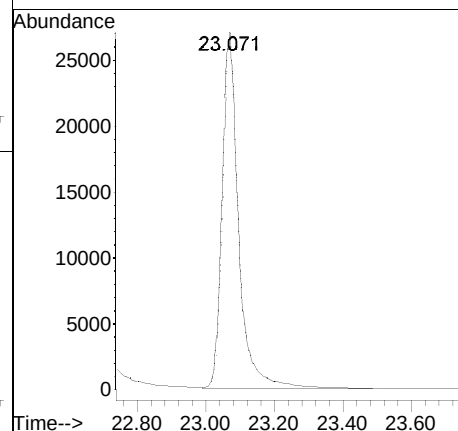
Tgt Ion:142 Resp: 92982

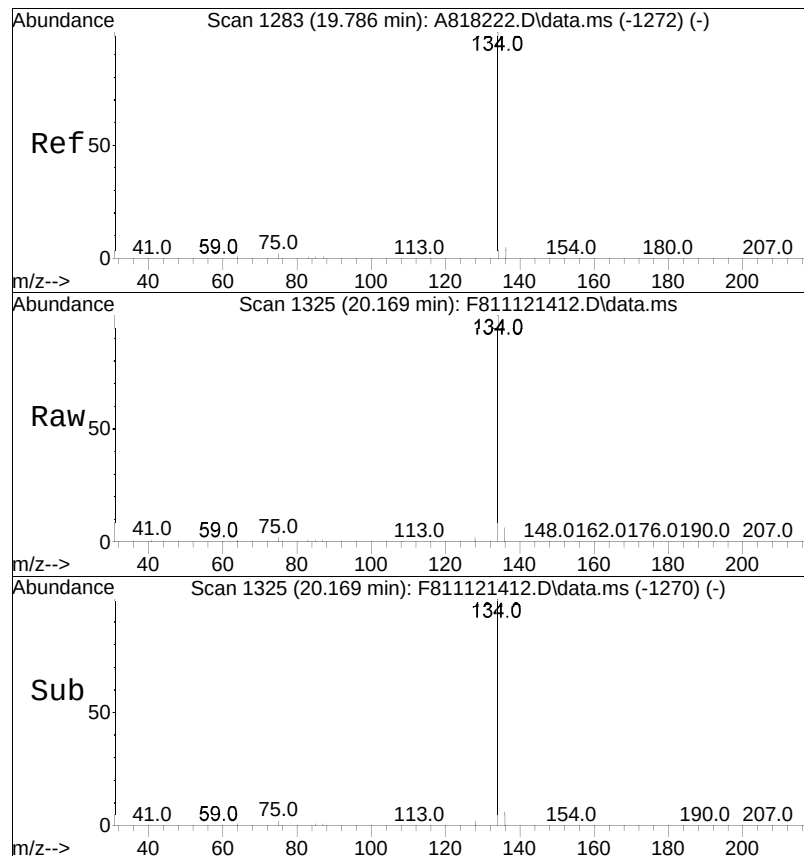




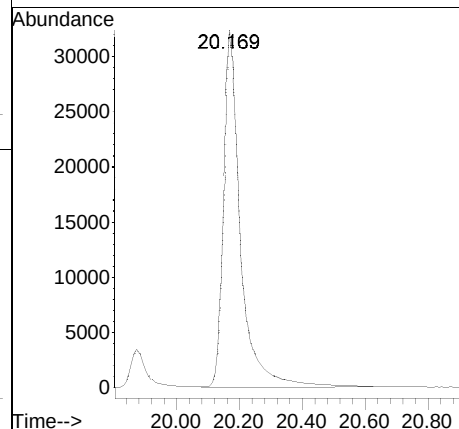
#17
 1-Methylnaphthalene
 Concen: 521.11 ng/mL
 RT: 23.071 min Scan# 1643
 Delta R.T. -0.000 min
 Lab File: F811121412.D
 Acq: 13 Nov 2014 8:57 am

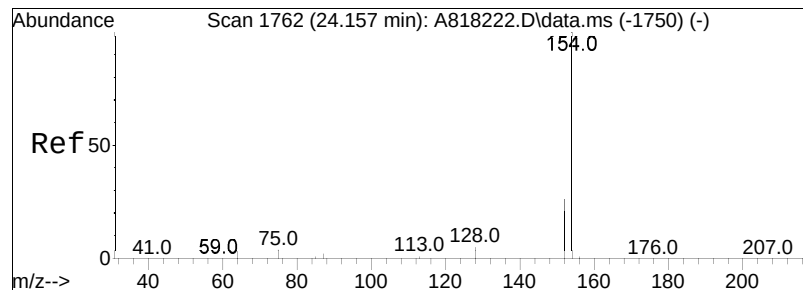
Tgt Ion:142 Resp: 87745



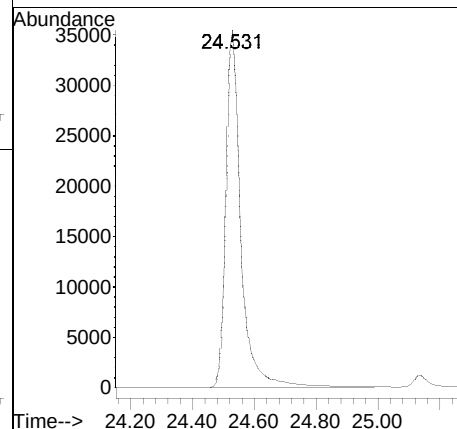
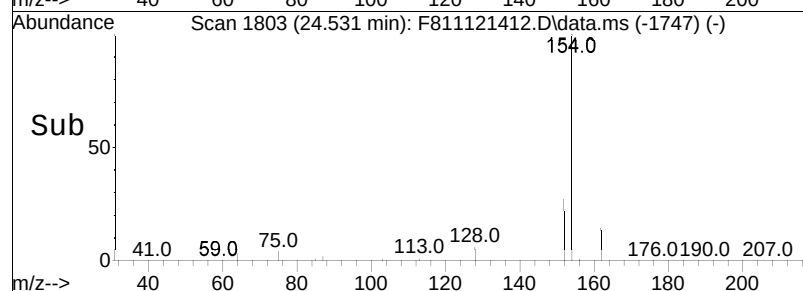
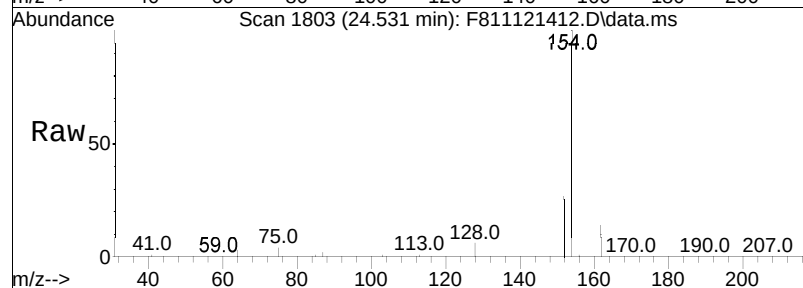


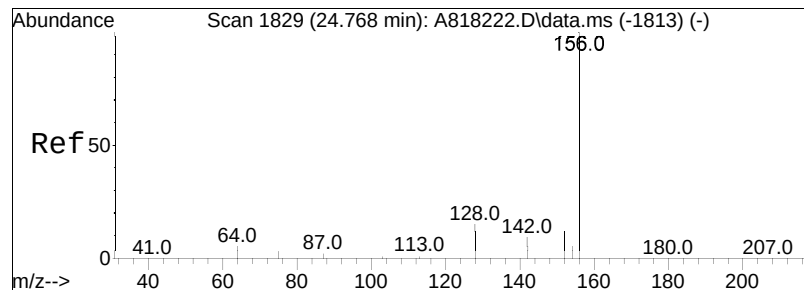
#18
Benzothiophene
Concen: 545.20 ng/mL
RT: 20.169 min Scan# 1325
Delta R.T. 0.000 min
Lab File: F811121412.D
Acq: 13 Nov 2014 8:57 am
Tgt Ion:134 Resp: 117853





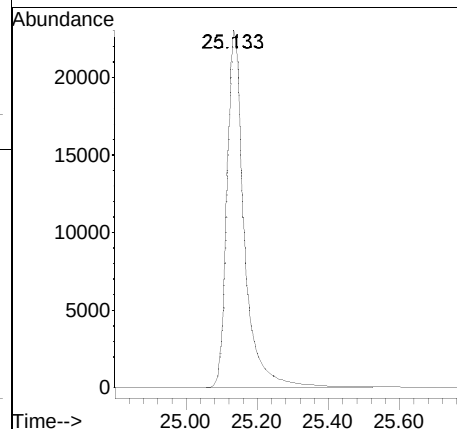
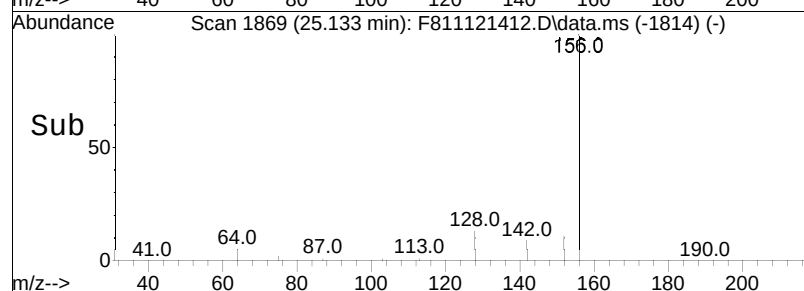
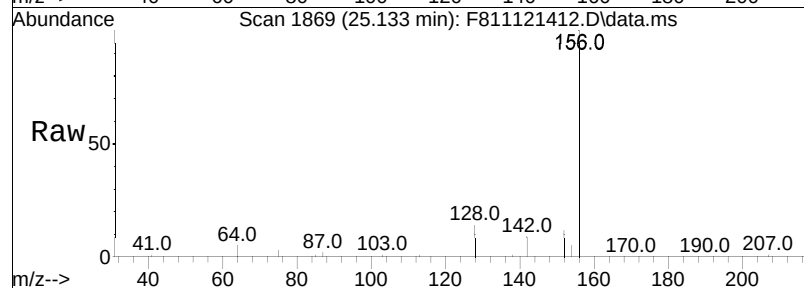
#23
Biphenyl
Concen: 558.07 ng/mL
RT: 24.531 min Scan# 1803
Delta R.T. 0.009 min
Lab File: F811121412.D
Acq: 13 Nov 2014 8:57 am
Tgt Ion:154 Resp: 116884

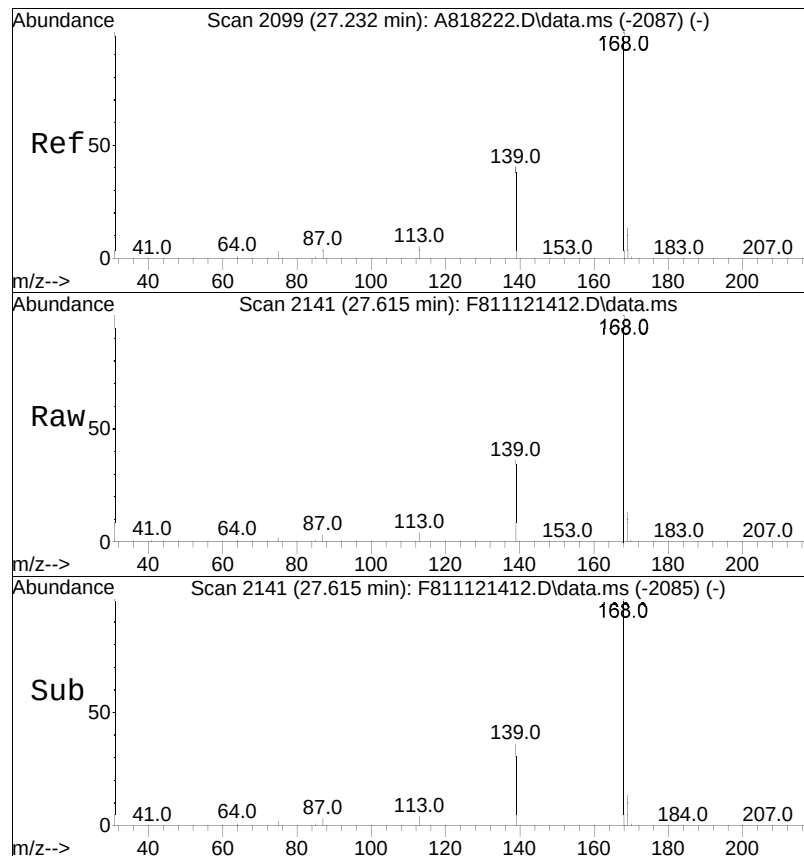




#24
2,6-Dimethylnaphthalene
Concen: 535.36 ng/mL
RT: 25.133 min Scan# 1869
Delta R.T. -0.001 min
Lab File: F811121412.D
Acq: 13 Nov 2014 8:57 am

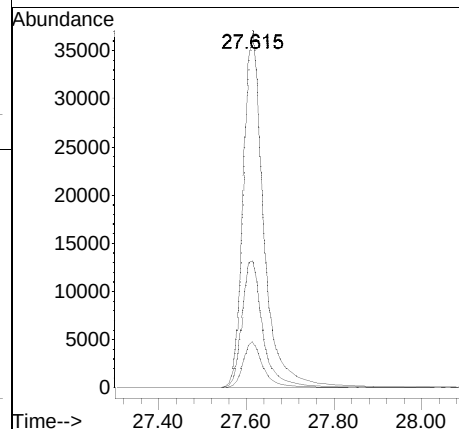
Tgt Ion:156 Resp: 76354

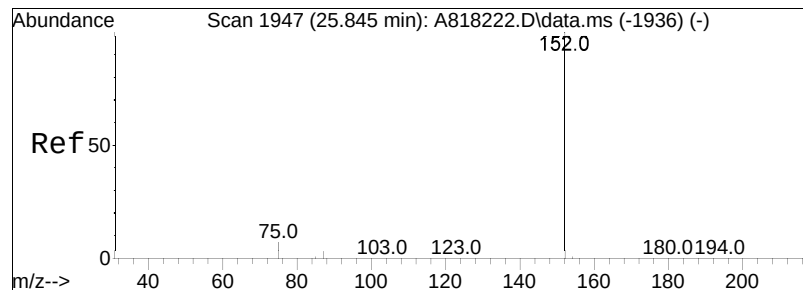




#25
 Dibenzofuran
 Concen: 553.34 ng/mL
 RT: 27.615 min Scan# 2141
 Delta R.T. 0.009 min
 Lab File: F811121412.D
 Acq: 13 Nov 2014 8:57 am

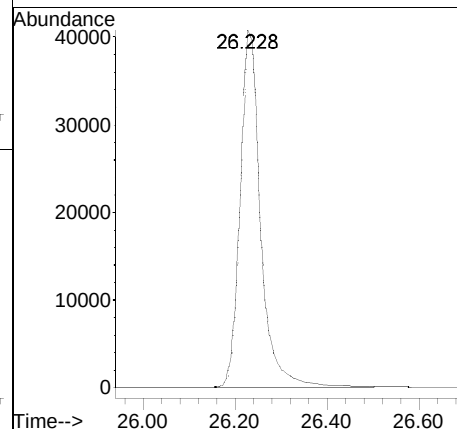
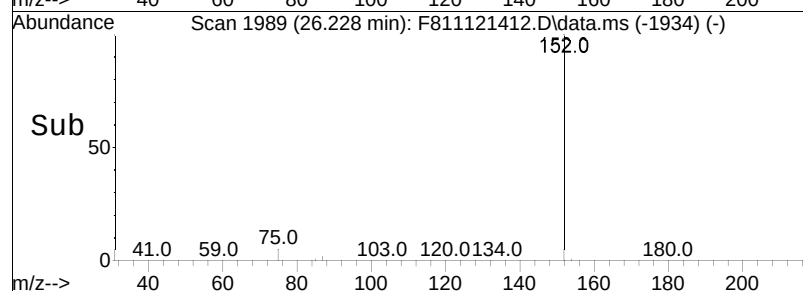
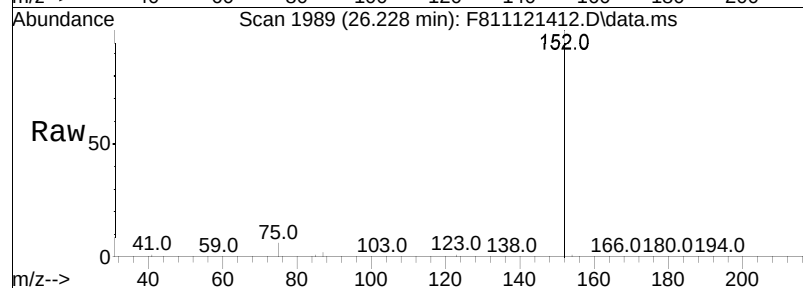
Tgt Ion:	168	Resp:	118682
Ion Ratio	Lower	Upper	
168	100		
139	36.5	26.2	48.8
169	12.7	9.0	16.8

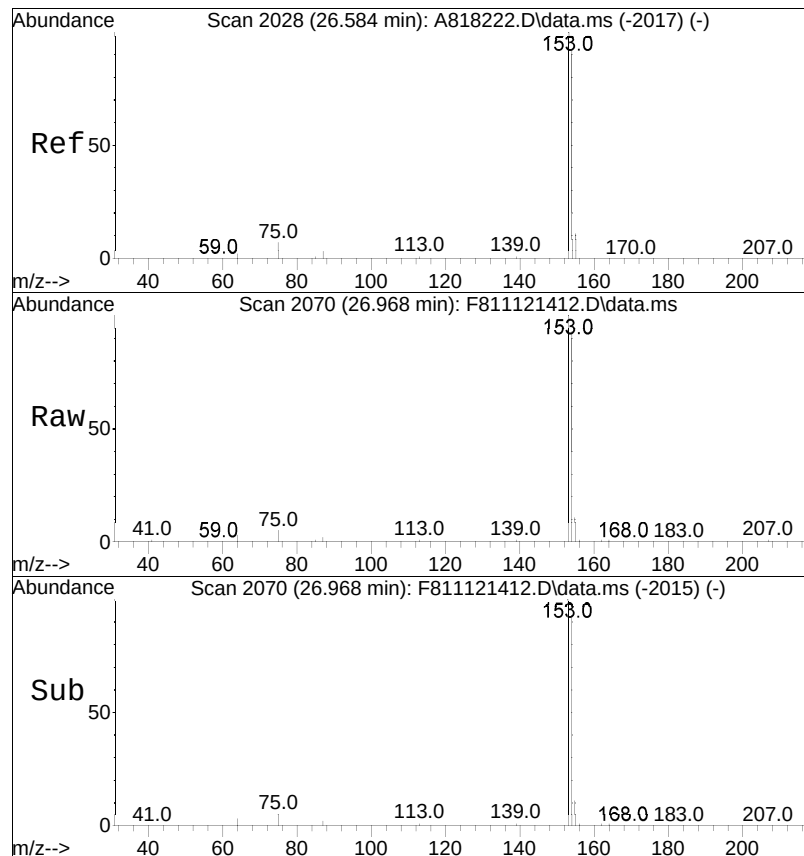




#26
Acenaphthylene
Concen: 529.50 ng/mL M4
RT: 26.228 min Scan# 1989
Delta R.T. -0.001 min
Lab File: F811121412.D
Acq: 13 Nov 2014 8:57 am

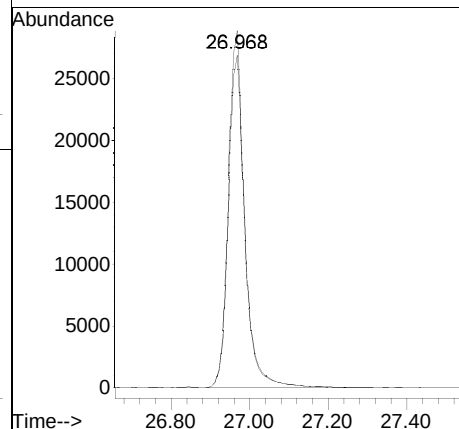
Tgt Ion:152 Resp: 124534

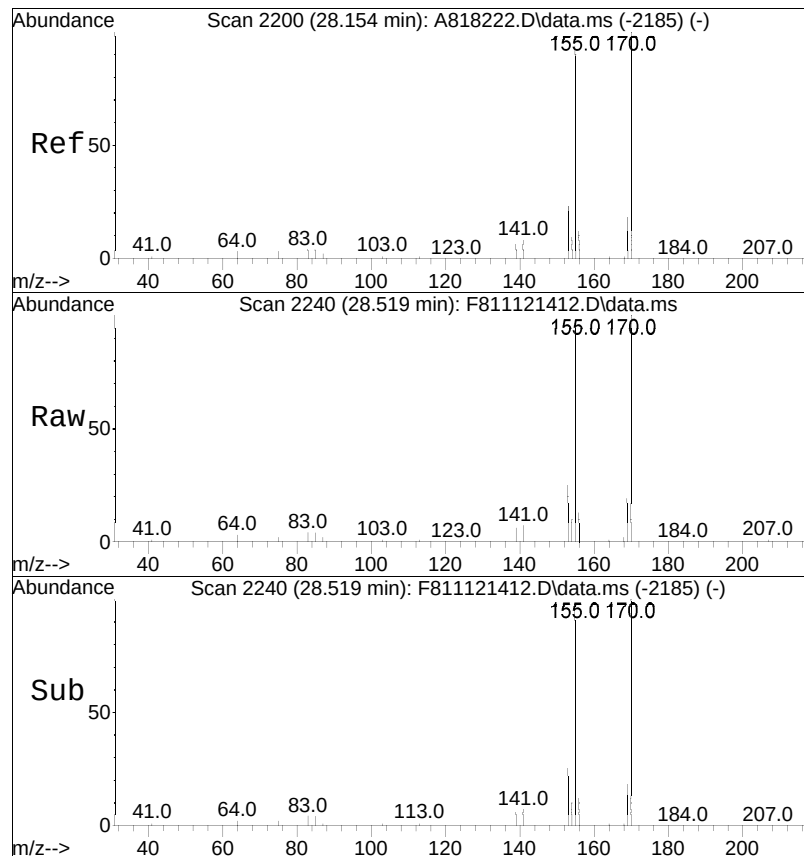




#27
 Acenaphthene
 Concen: 558.05 ng/mL
 RT: 26.968 min Scan# 2070
 Delta R.T. -0.000 min
 Lab File: F811121412.D
 Acq: 13 Nov 2014 8:57 am

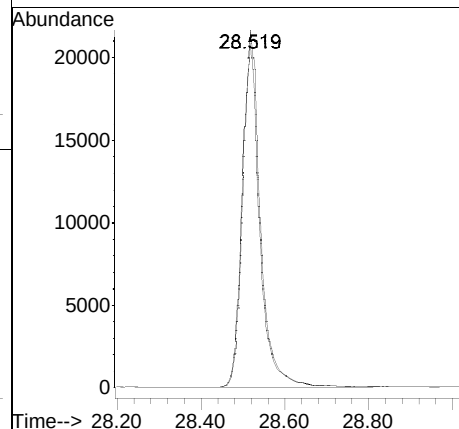
Tgt Ion	Ratio	Lower	Upper
153	100		
154	93.0	65.3	121.3

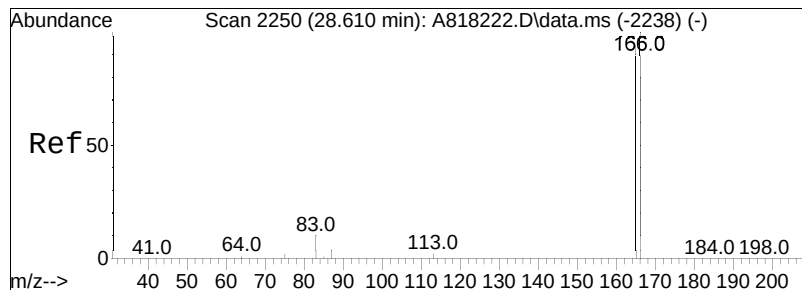




#28
 2,3,5-Trimethylnaphthalene
 Concen: 531.00 ng/mL
 RT: 28.519 min Scan# 2240
 Delta R.T. -0.000 min
 Lab File: F811121412.D
 Acq: 13 Nov 2014 8:57 am

Tgt Ion	Ratio	Lower	Upper
170	100		
155	95.9	66.2	123.0





#29

Fluorene

Concen: 542.86 ng/mL

RT: 28.984 min Scan# 2291

Delta R.T. 0.000 min

Lab File: F811121412.D

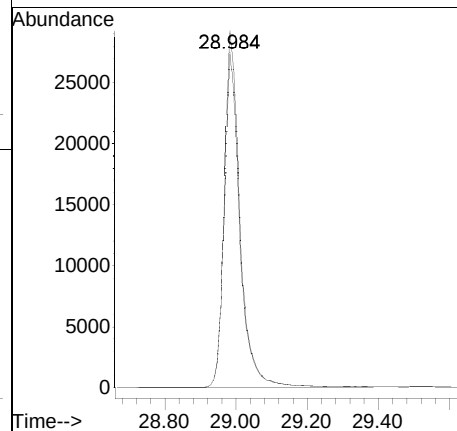
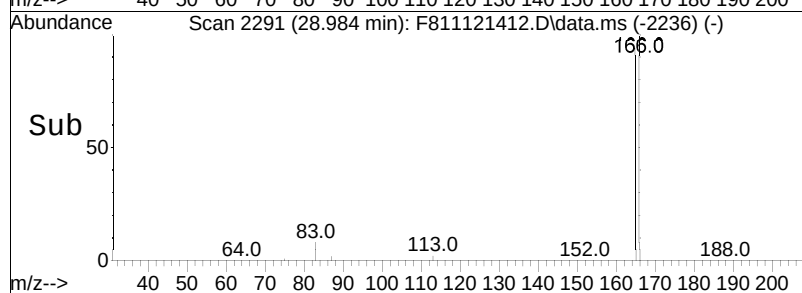
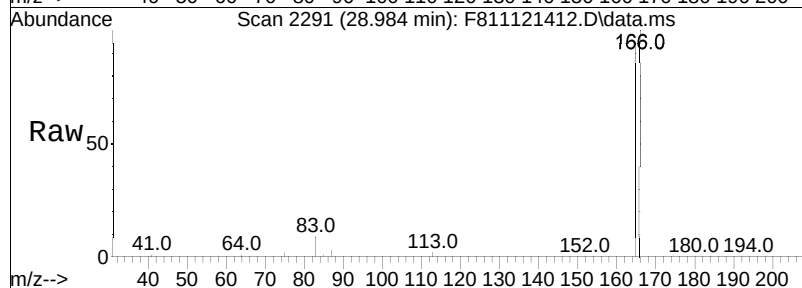
Acq: 13 Nov 2014 8:57 am

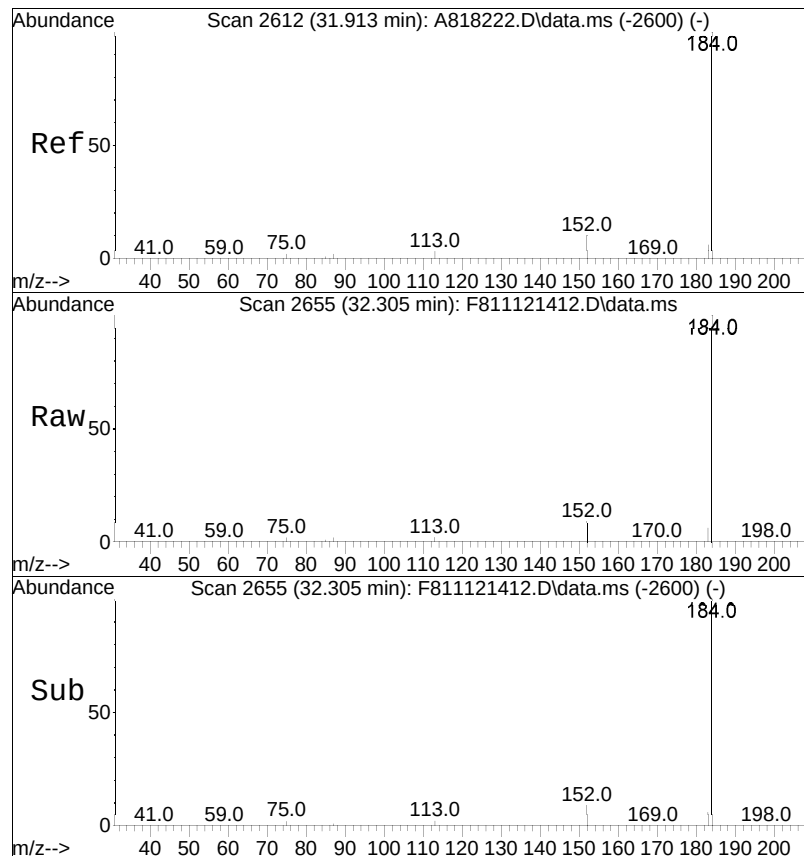
Tgt Ion: 166 Resp: 89477

Ion Ratio Lower Upper

166 100

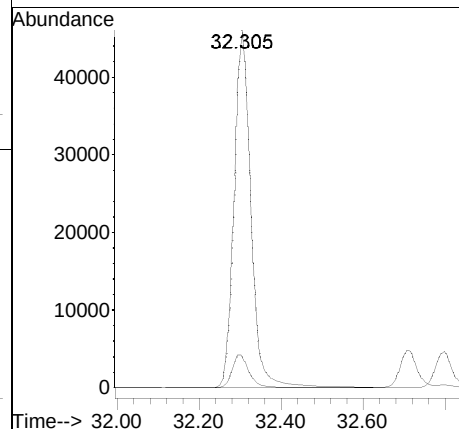
165 93.1 65.2 121.2

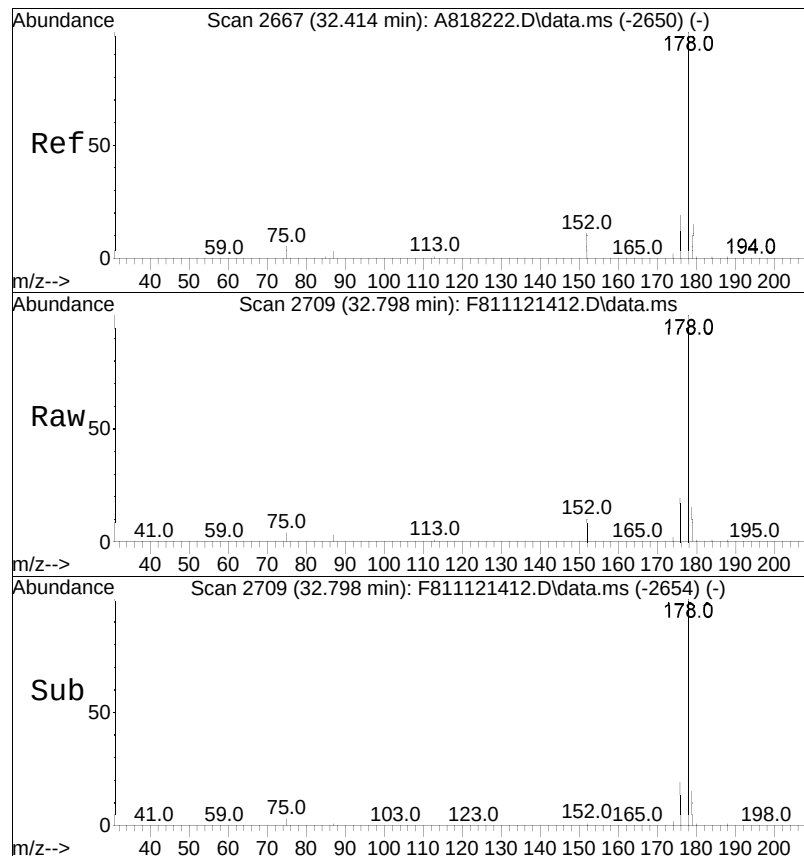




#33
 Dibenzothiophene
 Concen: 555.98 ng/mL
 RT: 32.305 min Scan# 2655
 Delta R.T. -0.000 min
 Lab File: F811121412.D
 Acq: 13 Nov 2014 8:57 am

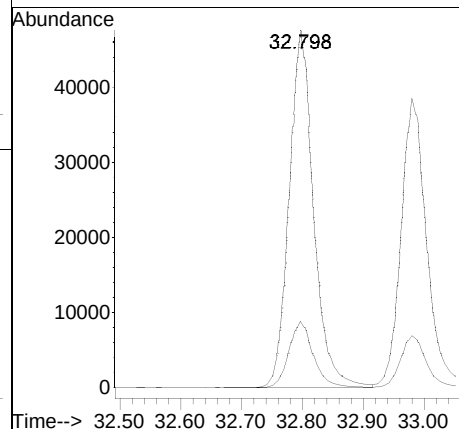
Tgt	Ion	Ratio	Lower	Upper
184	100			
152	9.4		6.4	12.0

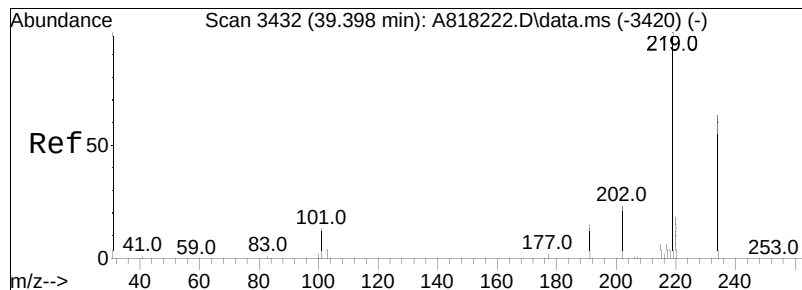




#43
 Phenanthrene
 Concen: 588.64 ng/mL
 RT: 32.798 min Scan# 2709
 Delta R.T. -0.000 min
 Lab File: F811121412.D
 Acq: 13 Nov 2014 8:57 am

Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.5	13.1	24.3





#54

Retene

Concen: 576.47 ng/mL

RT: 39.781 min Scan# 3474

Delta R.T. 0.000 min

Lab File: F811121412.D

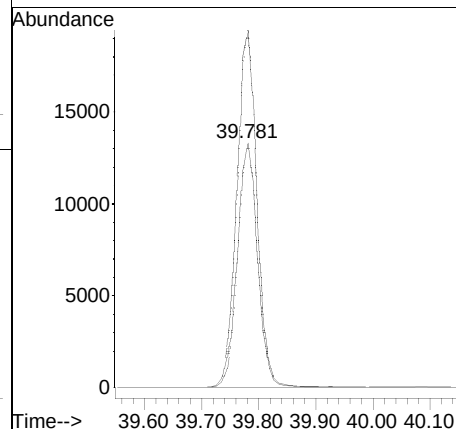
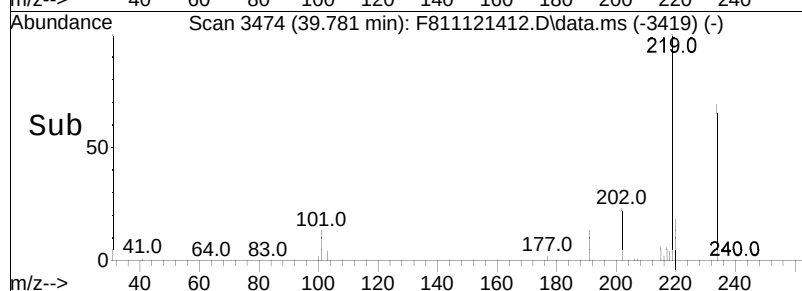
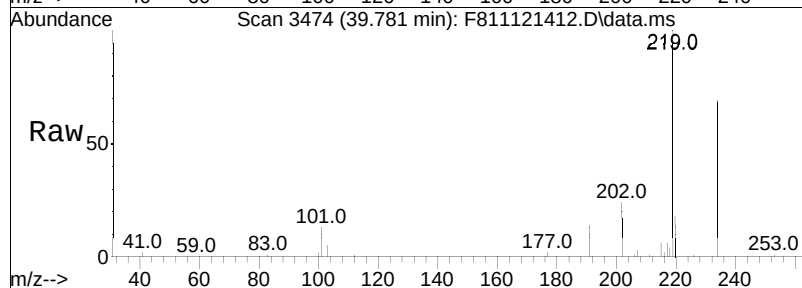
Acq: 13 Nov 2014 8:57 am

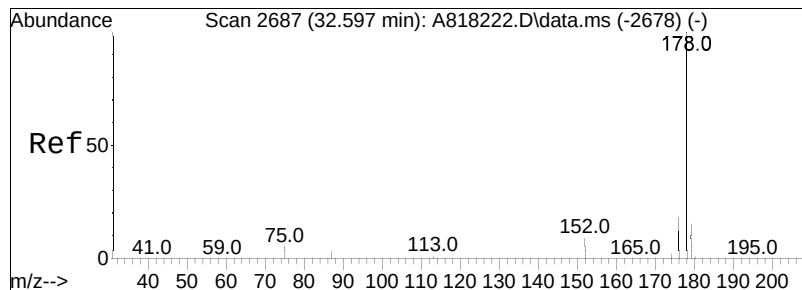
Tgt Ion: 234 Resp: 31922

Ion Ratio Lower Upper

234 100

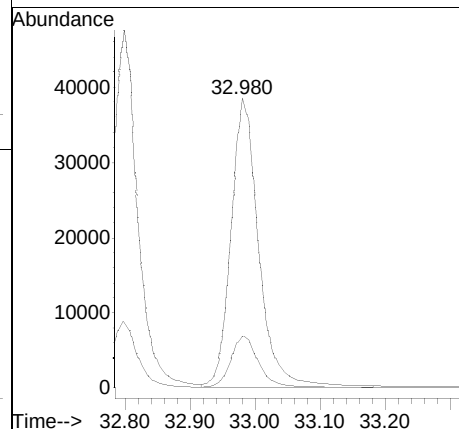
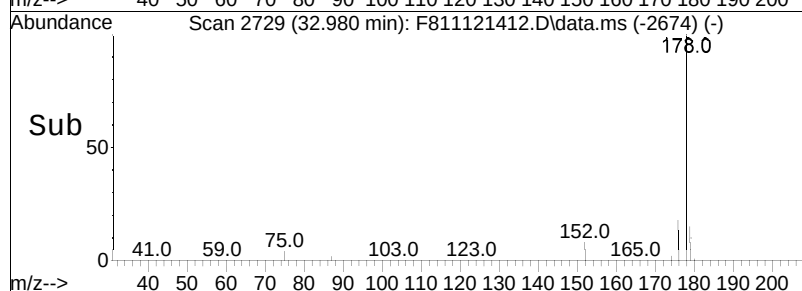
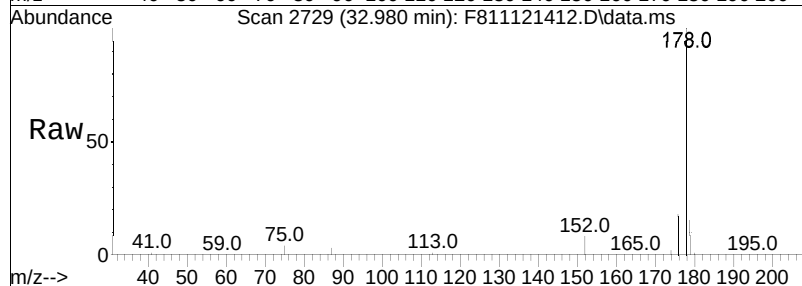
219 145.6 99.5 184.9

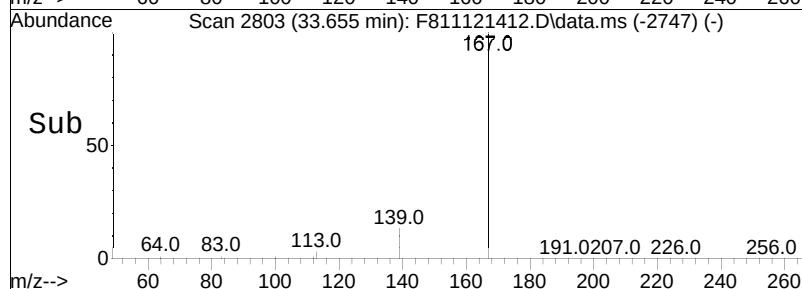
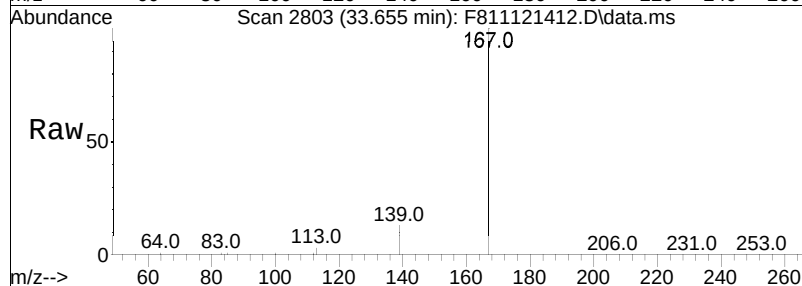
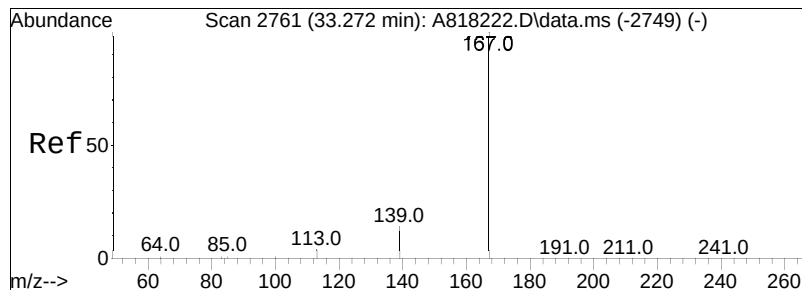




#55
 Anthracene
 Concen: 571.67 ng/mL M4
 RT: 32.980 min Scan# 2729
 Delta R.T. 0.000 min
 Lab File: F811121412.D
 Acq: 13 Nov 2014 8:57 am

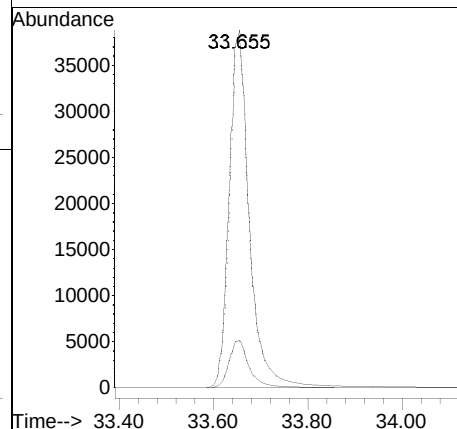
Tgt Ion	Ratio	Lower	Upper
178	100		
176	17.9	12.6	23.4

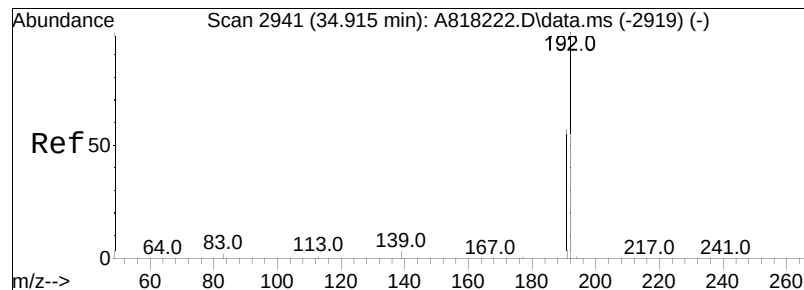




#56
 Carbazole
 Concen: 538.60 ng/mL
 RT: 33.655 min Scan# 2803
 Delta R.T. 0.009 min
 Lab File: F811121412.D
 Acq: 13 Nov 2014 8:57 am

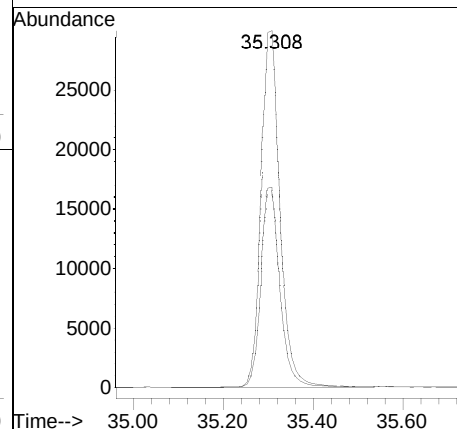
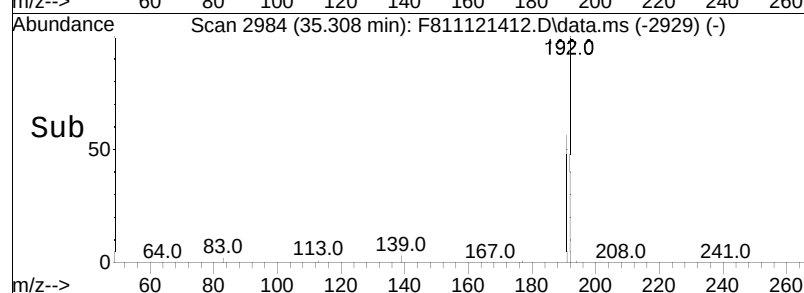
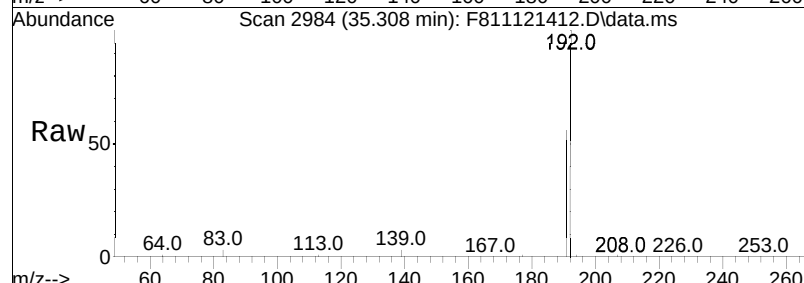
Tgt Ion	Ratio	Lower	Upper
167	100		
139	13.3	9.3	17.3

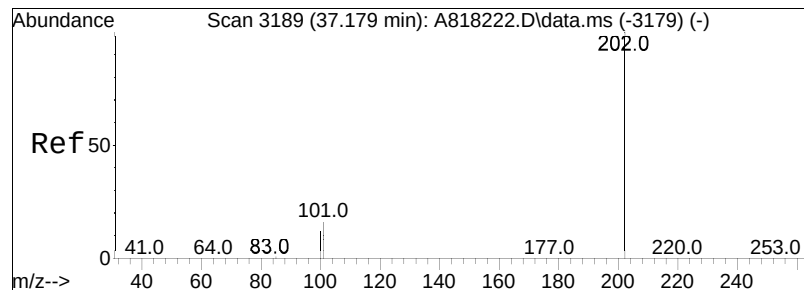




#57
 1-Methylphenanthrene
 Concen: 533.97 ng/mL
 RT: 35.308 min Scan# 2984
 Delta R.T. -0.000 min
 Lab File: F811121412.D
 Acq: 13 Nov 2014 8:57 am

Tgt Ion:192 Resp: 87012
 Ion Ratio Lower Upper
 192 100
 191 56.2 39.1 72.5





#58

Fluoranthene

Concen: 544.36 ng/mL M4

RT: 37.571 min Scan# 3232

Delta R.T. -0.001 min

Lab File: F811121412.D

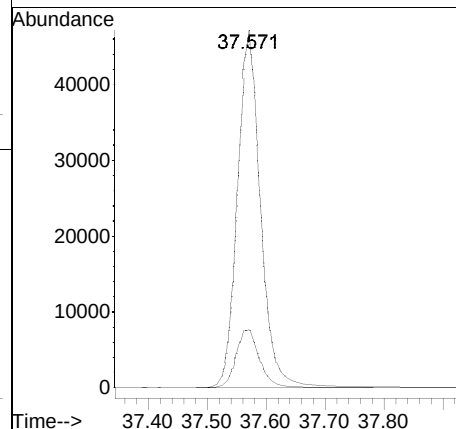
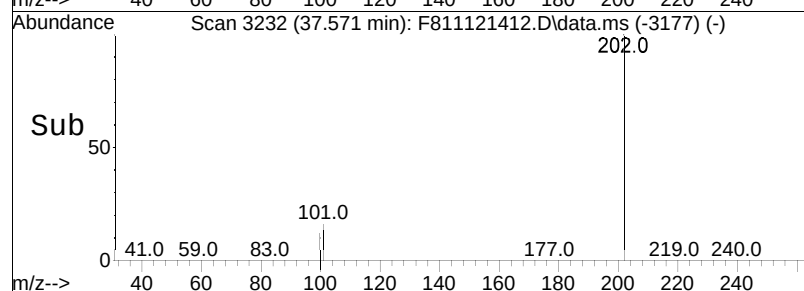
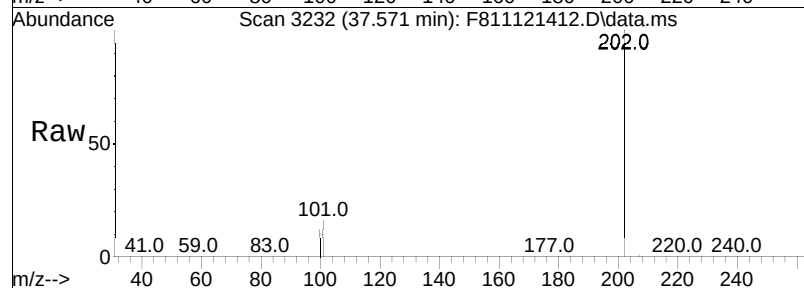
Acq: 13 Nov 2014 8:57 am

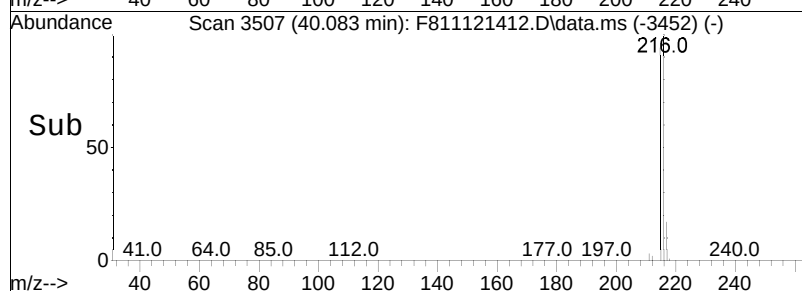
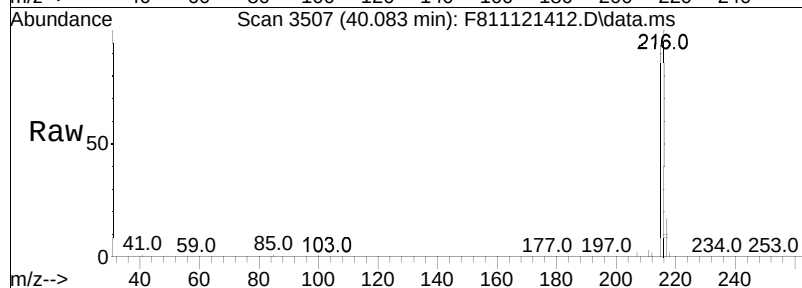
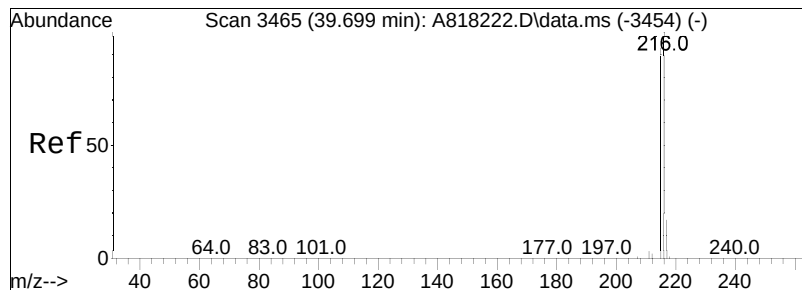
Tgt Ion: 202 Resp: 126404

Ion Ratio Lower Upper

202 100

101 16.6 11.3 21.1





#59

Benzo(b)fluorene

Concen: 556.57 ng/mL

RT: 40.083 min Scan# 3507

Delta R.T. -0.000 min

Lab File: F811121412.D

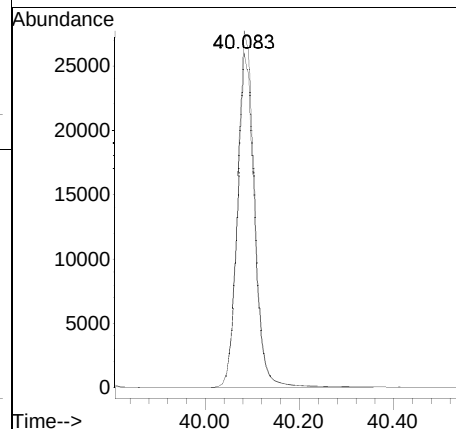
Acq: 13 Nov 2014 8:57 am

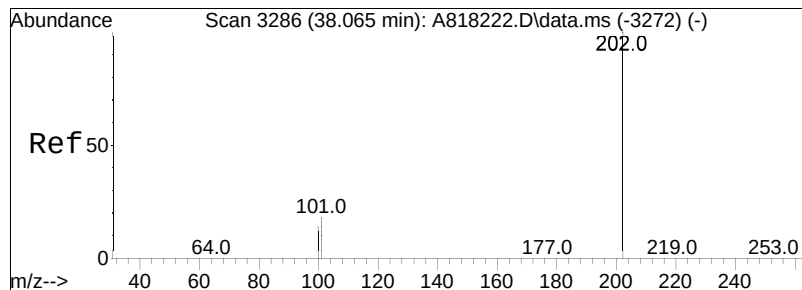
Tgt Ion:216 Resp: 69794

Ion Ratio Lower Upper

216 100

215 92.2 64.4 119.6





#60

Pyrene

Concen: 584.48 ng/mL

RT: 38.448 min Scan# 3328

Delta R.T. 0.000 min

Lab File: F811121412.D

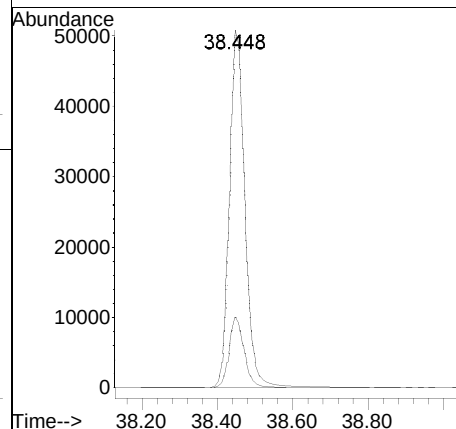
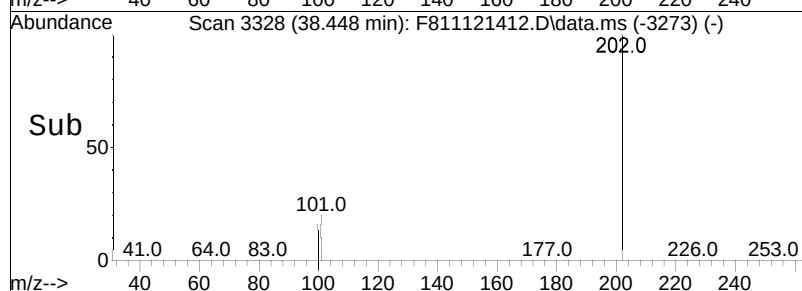
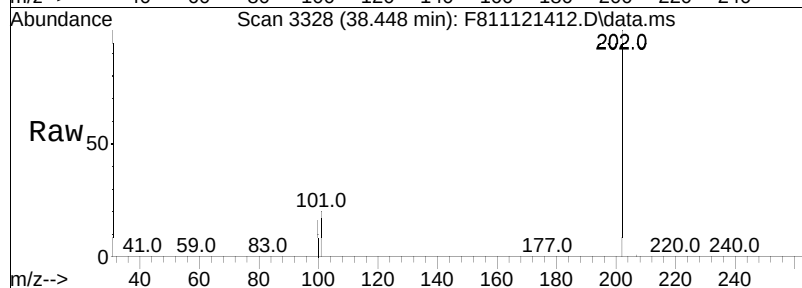
Acq: 13 Nov 2014 8:57 am

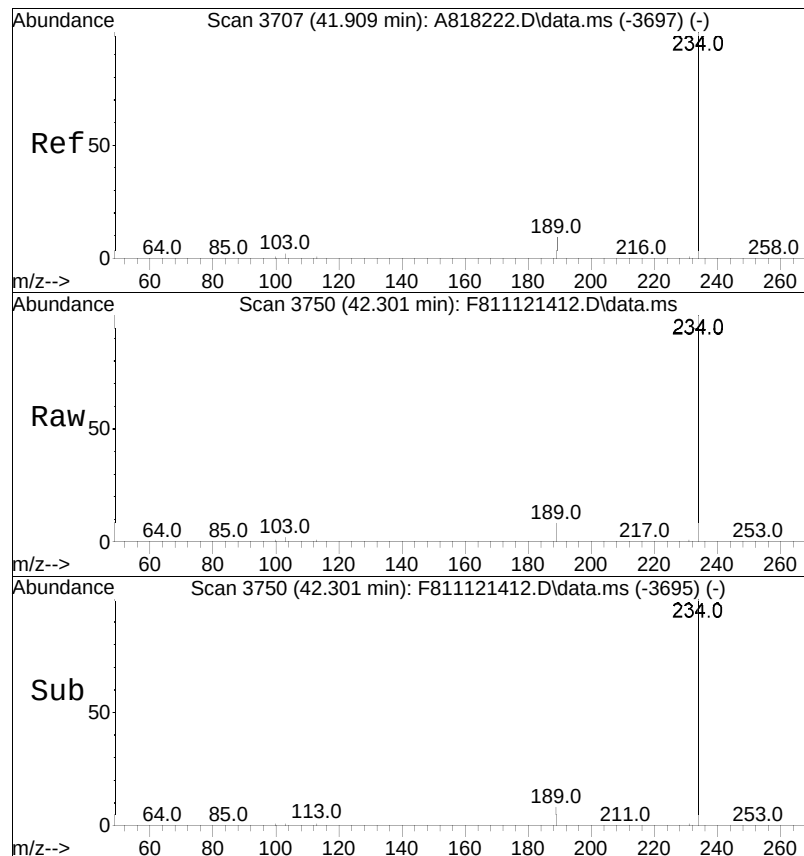
Tgt Ion: 202 Resp: 141448

Ion Ratio Lower Upper

202 100

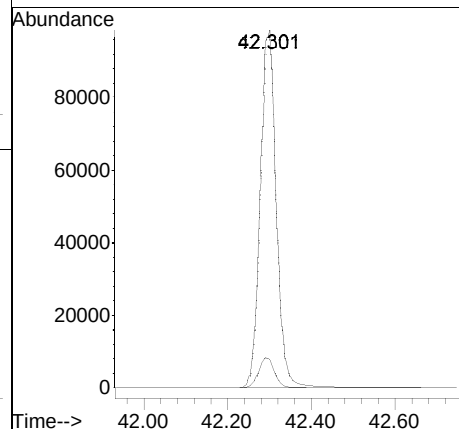
101 19.6 14.1 26.1

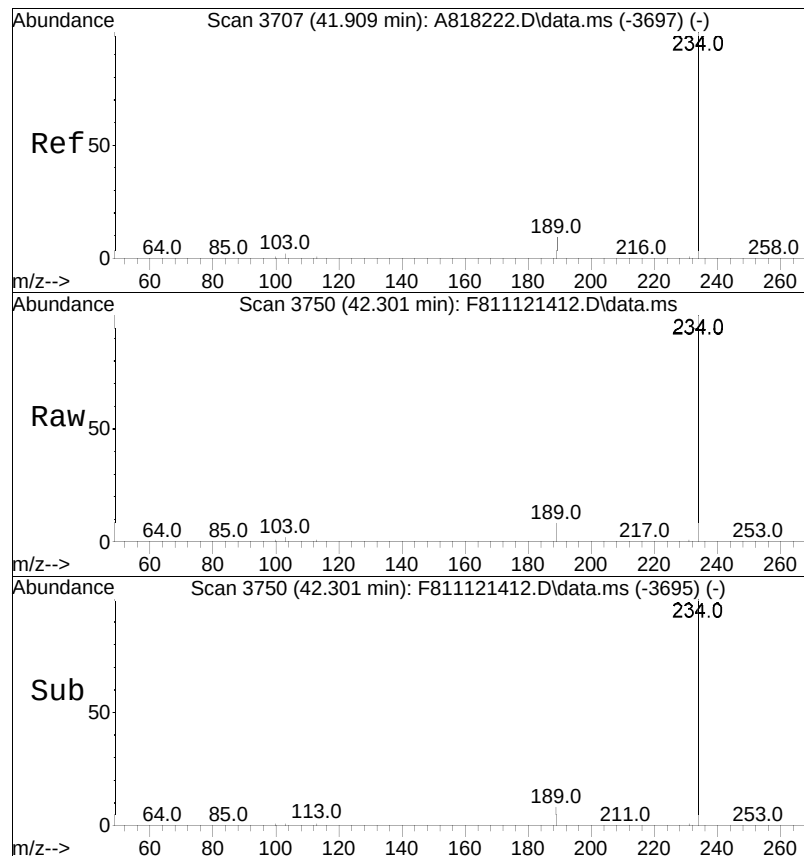




#66
 Naphthobenzothiophene
 Concen: 1232.28 ng/ml
 RT: 42.301 min Scan# 3750
 Delta R.T. 0.000 min
 Lab File: F811121412.D
 Acq: 13 Nov 2014 8:57 am

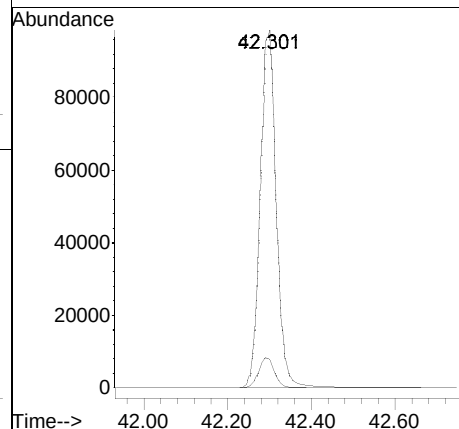
Tgt	Ion	Ratio	Resp	Lower	Upper
234	100		254170		
189	8.4		5.7	10.7	

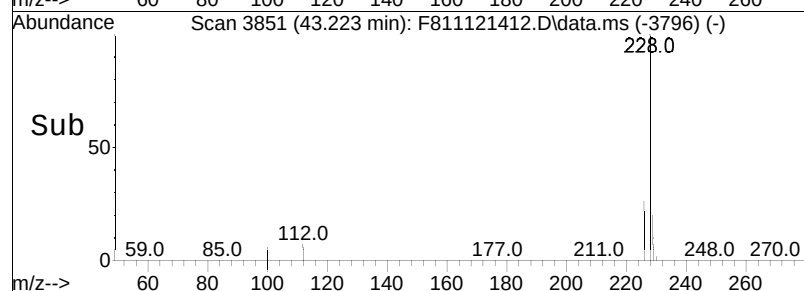
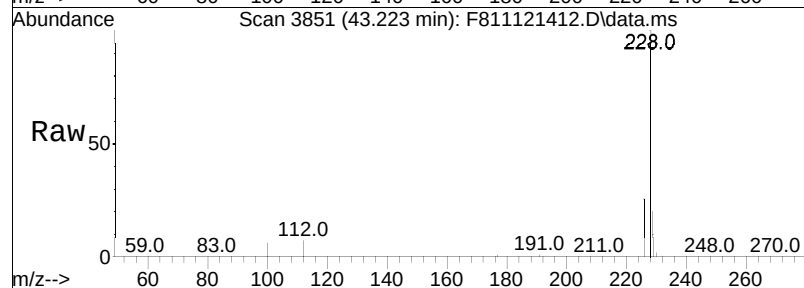
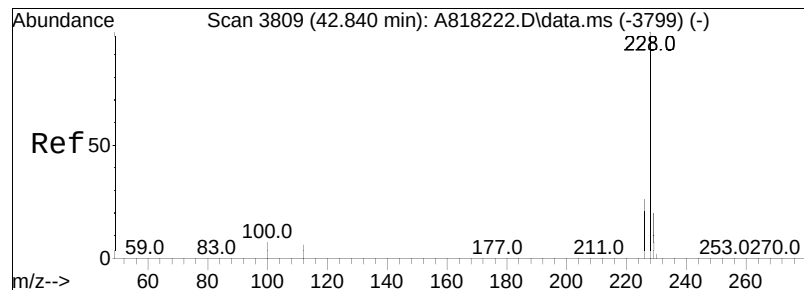




#67
 Naphthobenzothiophene-2,1-D
 Concen: 1232.28 ng/mL
 RT: 42.301 min Scan# 3750
 Delta R.T. 0.000 min
 Lab File: F811121412.D
 Acq: 13 Nov 2014 8:57 am

Tgt	Ion	Ratio	Lower	Upper
234	100			
189	8.4	5.7	10.7	





#75

Benz[a]anthracene

Concen: 489.19 ng/mL

RT: 43.223 min Scan# 3851

Delta R.T. 0.000 min

Lab File: F811121412.D

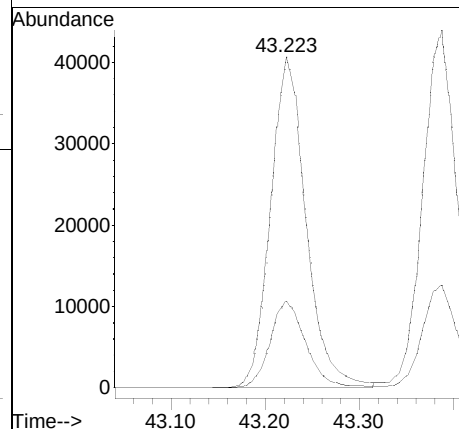
Acq: 13 Nov 2014 8:57 am

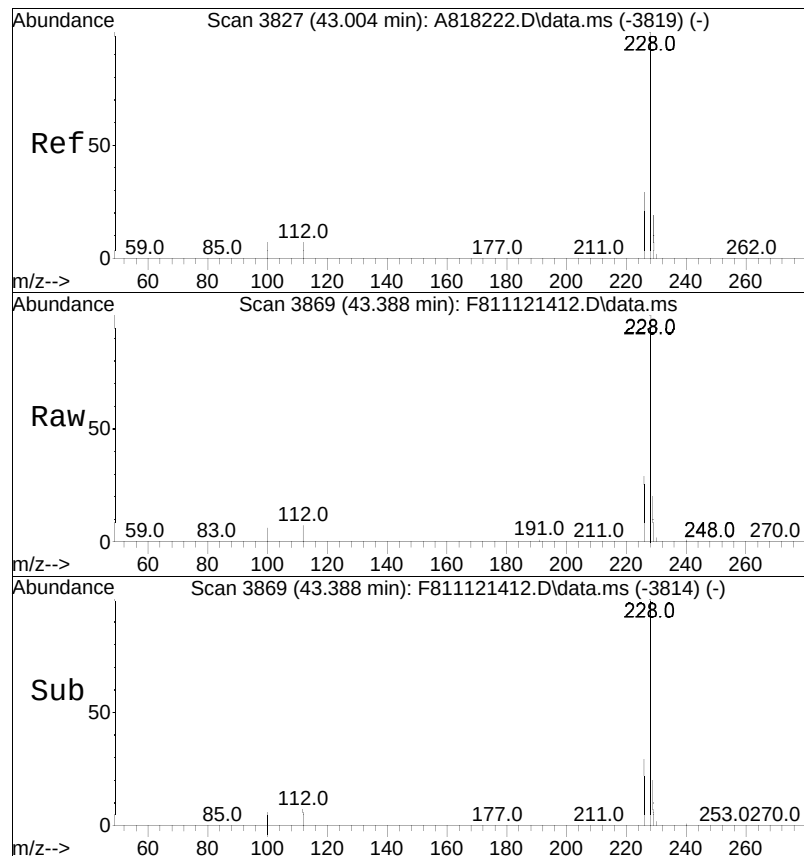
Tgt Ion: 228 Resp: 106108

Ion Ratio Lower Upper

228 100

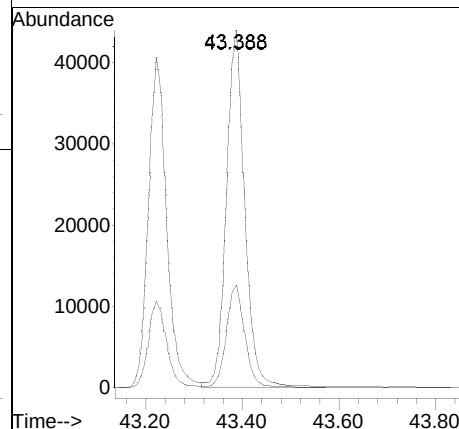
226 26.3 18.3 34.1

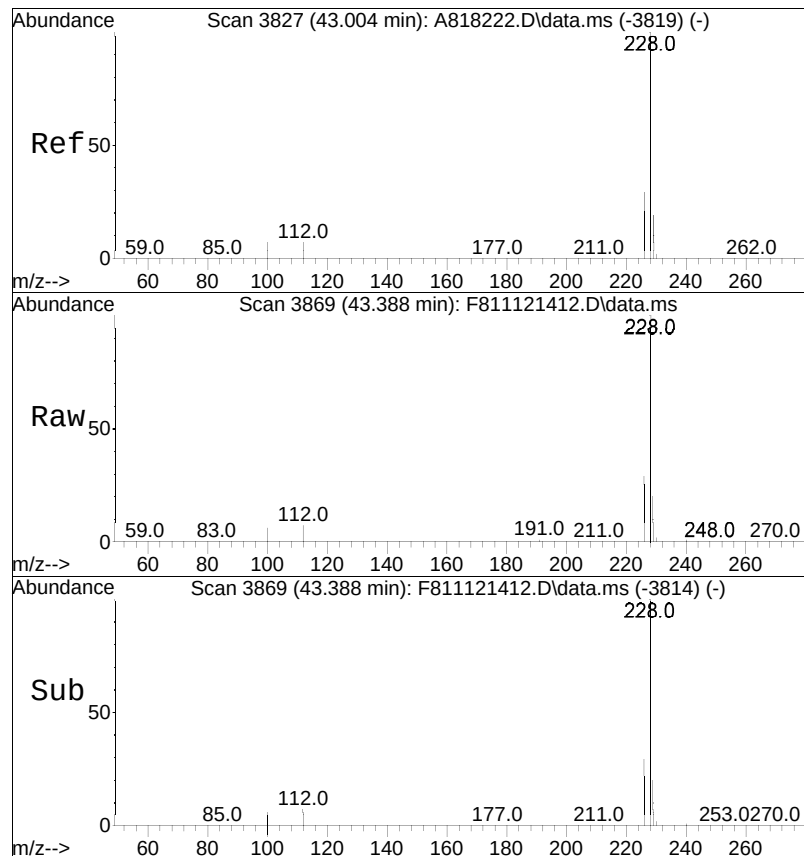




#76
 Chrysene
 Concen: 531.50 ng/mL
 RT: 43.388 min Scan# 3869
 Delta R.T. -0.000 min
 Lab File: F811121412.D
 Acq: 13 Nov 2014 8:57 am

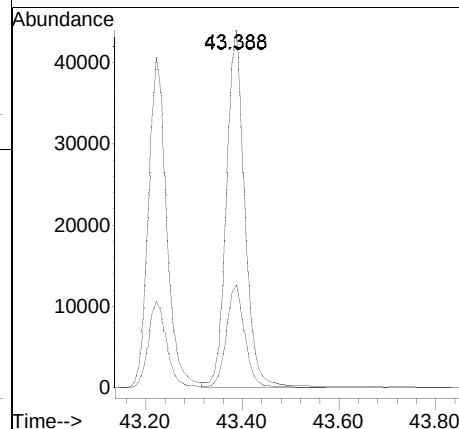
Tgt Ion	Ratio	Lower	Upper
228	100		
226	28.6	20.1	37.3

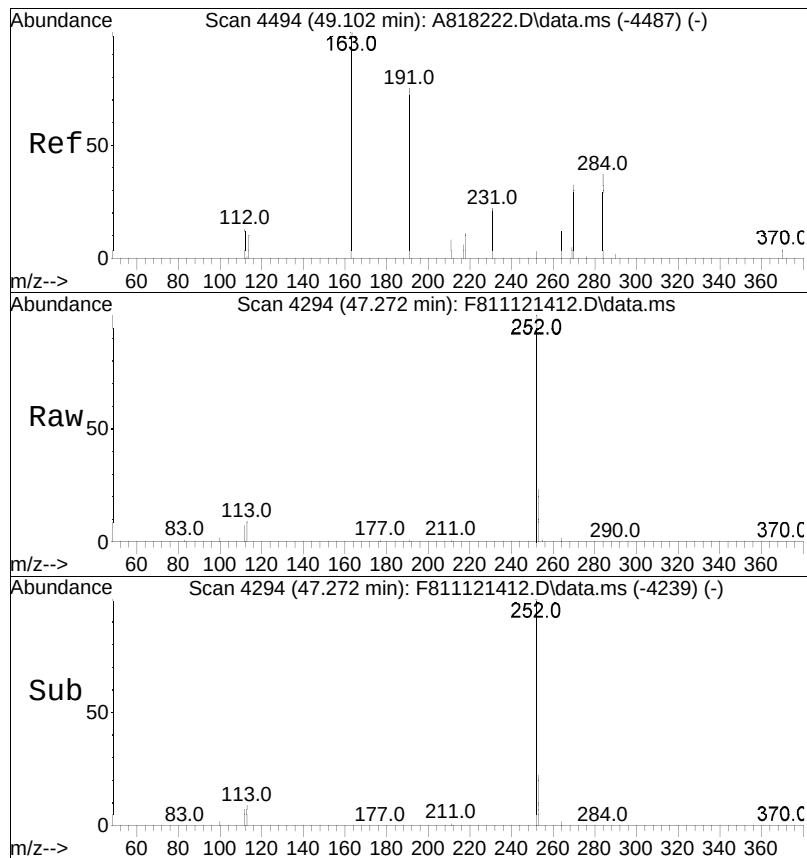




#77
 Chrysene/Triphenylene
 Concen: 531.50 ng/mL
 RT: 43.388 min Scan# 3869
 Delta R.T. -0.000 min
 Lab File: F811121412.D
 Acq: 13 Nov 2014 8:57 am

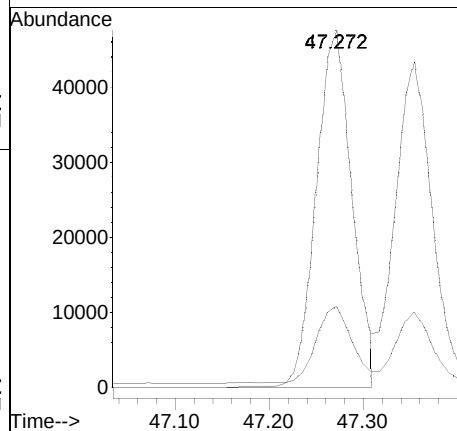
Tgt	Ion	Ratio	Lower	Upper
228	100			
226	28.6	20.1	37.3	

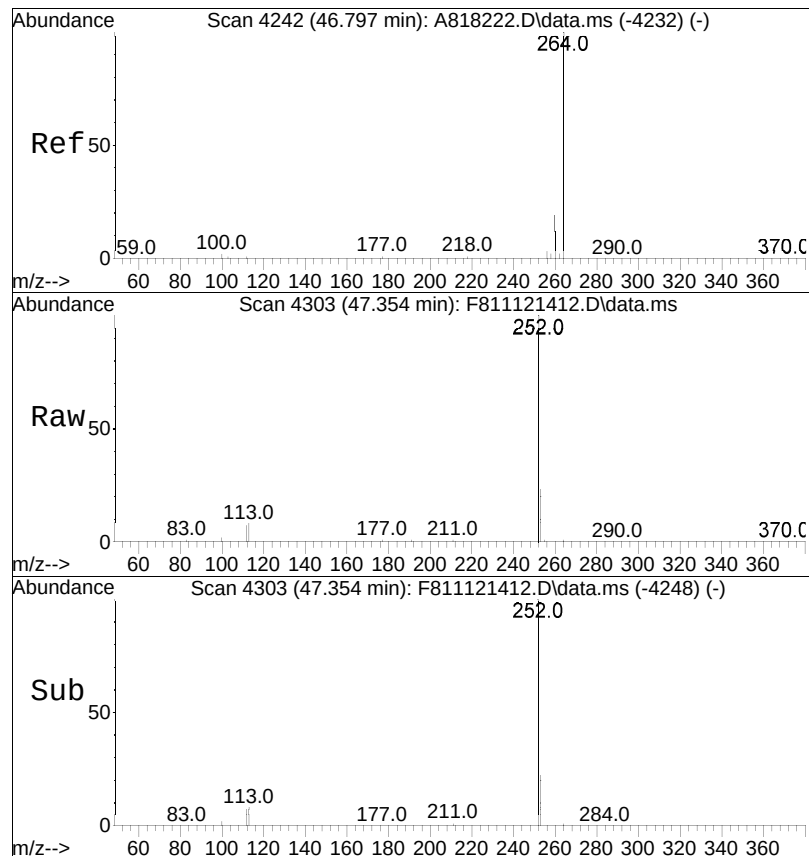




#84
 Benzo[b]fluoranthene
 Concen: 510.52 ng/mL
 RT: 47.272 min Scan# 4294
 Delta R.T. -0.000 min
 Lab File: F811121412.D
 Acq: 13 Nov 2014 8:57 am

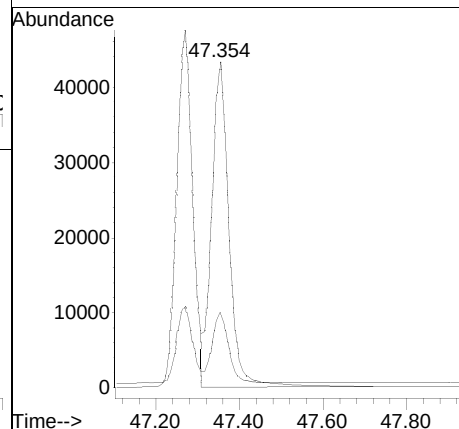
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.8	16.1	29.9	

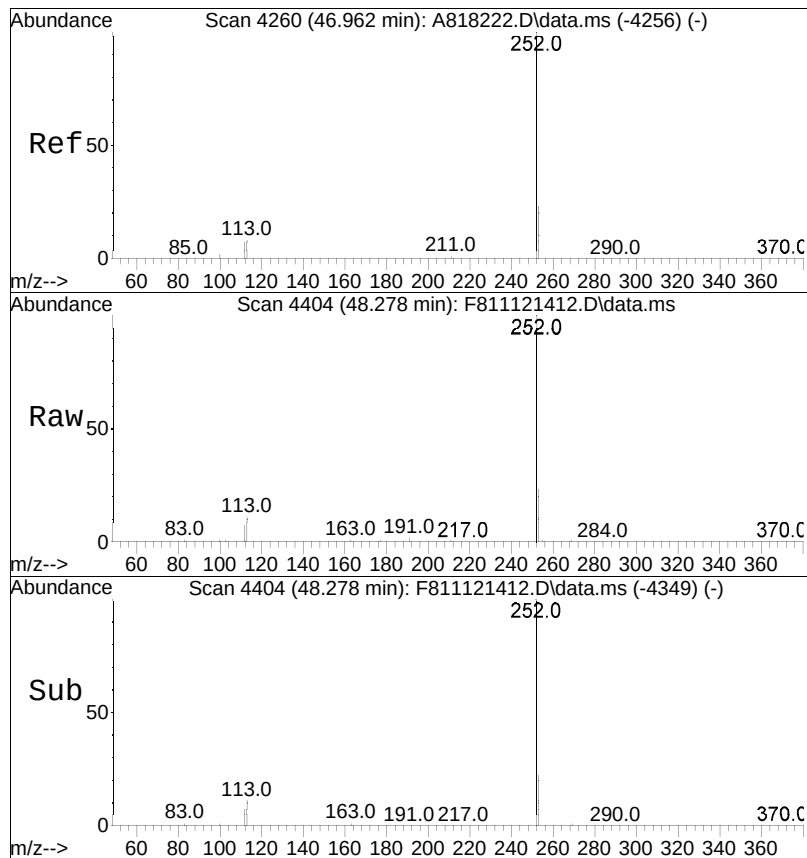




#85
 Benzo[j]+[k]fluoranthene
 Concen: 534.34 ng/mL
 RT: 47.354 min Scan# 4303
 Delta R.T. -0.000 min
 Lab File: F811121412.D
 Acq: 13 Nov 2014 8:57 am

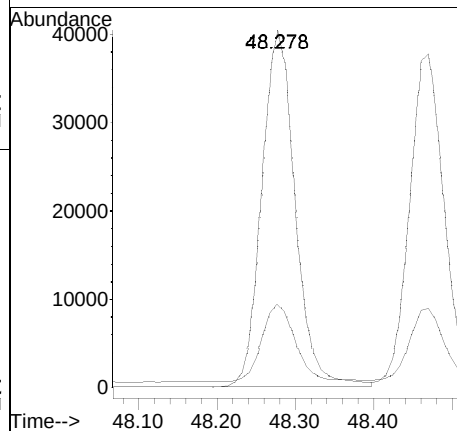
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.0	16.2	30.0	

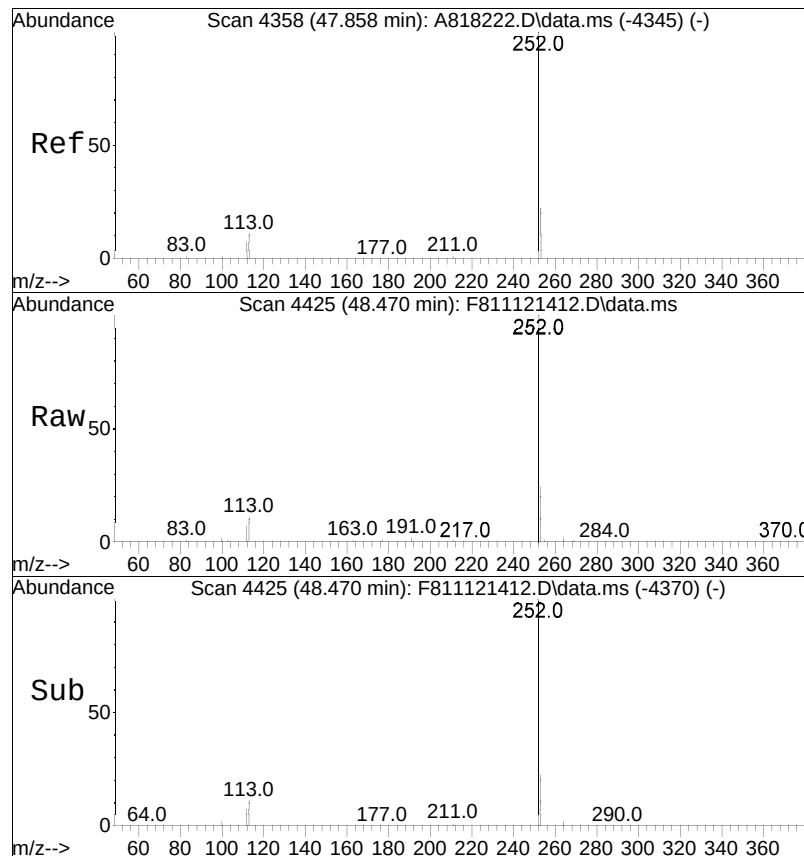




#87
 Benzo[e]pyrene
 Concen: 480.69 ng/mL
 RT: 48.278 min Scan# 4404
 Delta R.T. -0.000 min
 Lab File: F811121412.D
 Acq: 13 Nov 2014 8:57 am

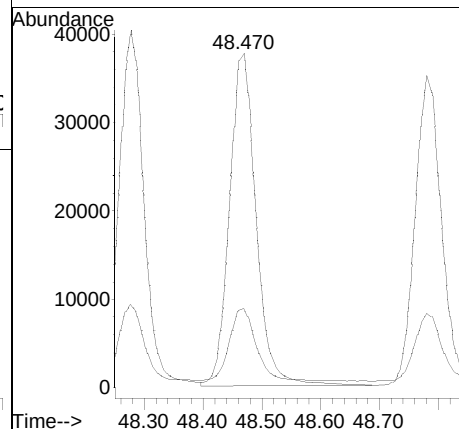
Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.9	16.6	30.8

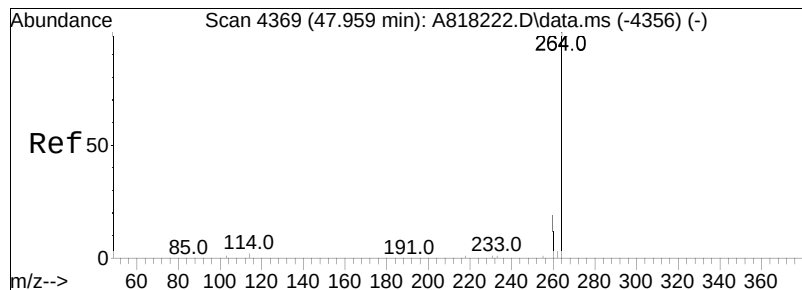




#89
 Benzo[a]pyrene
 Concen: 548.80 ng/mL
 RT: 48.470 min Scan# 4425
 Delta R.T. -0.000 min
 Lab File: F811121412.D
 Acq: 13 Nov 2014 8:57 am

Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.1	16.8	31.2





#90

Perylene

Concen: 501.64 ng/mL

RT: 48.781 min Scan# 4459

Delta R.T. -0.000 min

Lab File: F811121412.D

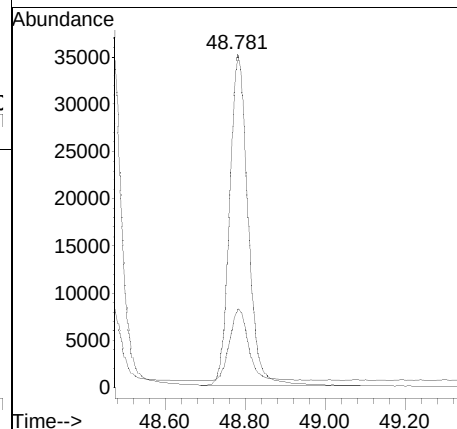
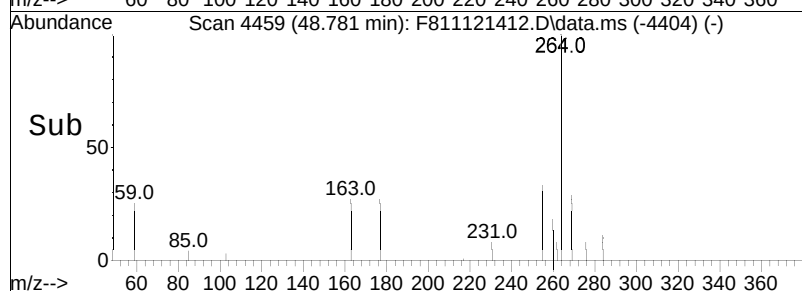
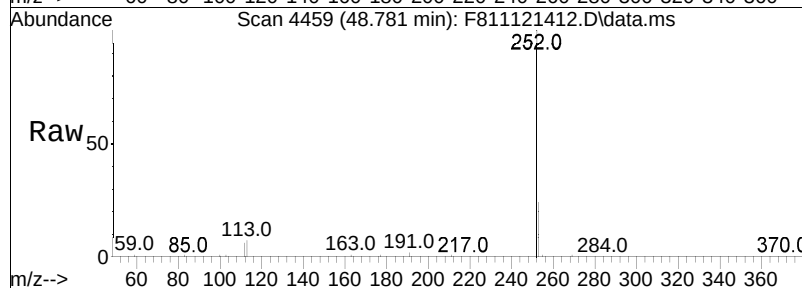
Acq: 13 Nov 2014 8:57 am

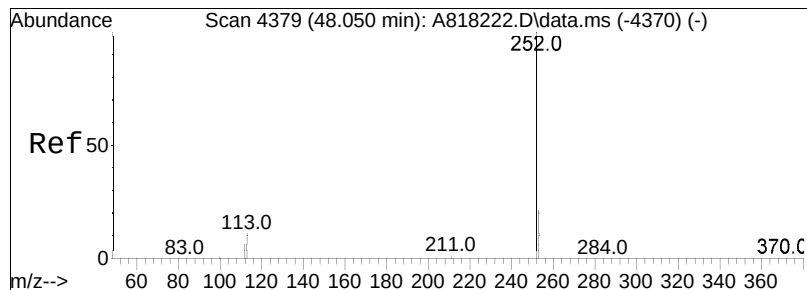
Tgt Ion: 252 Resp: 112416

Ion Ratio Lower Upper

252 100

253 22.0 17.1 31.7





#91

Indeno[1,2,3-cd]pyrene

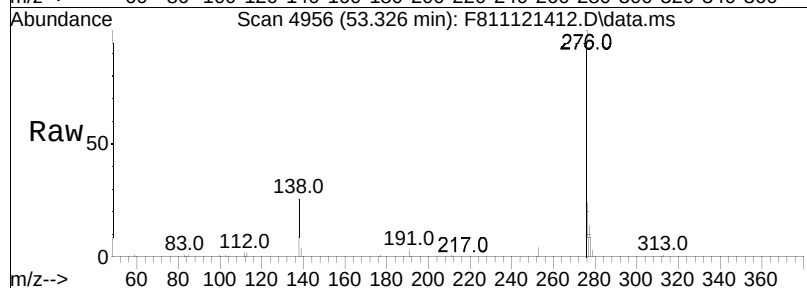
Concen: 505.87 ng/mL M3

RT: 53.326 min Scan# 4956

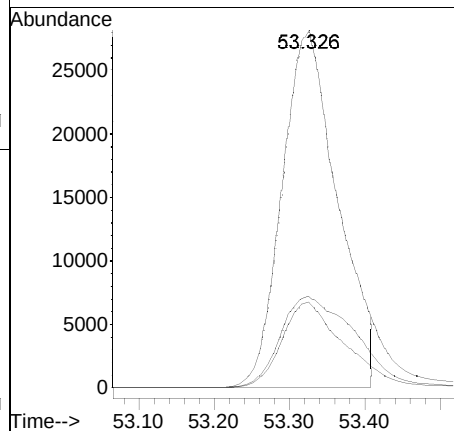
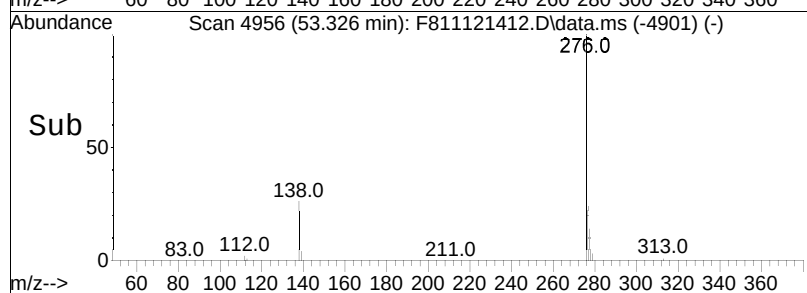
Delta R.T. -0.000 min

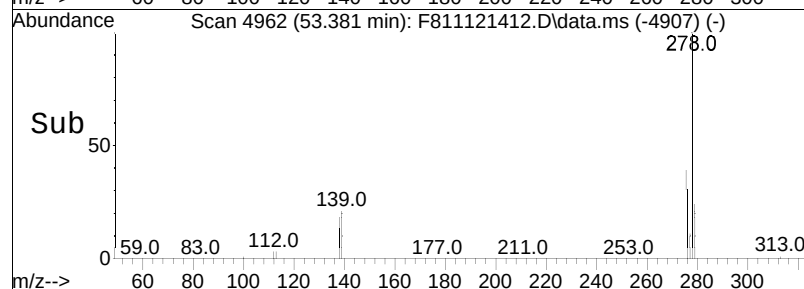
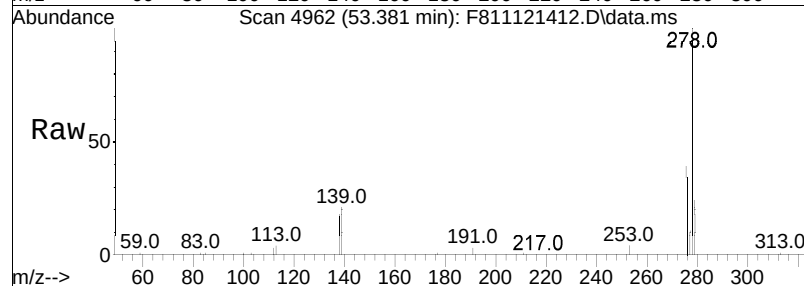
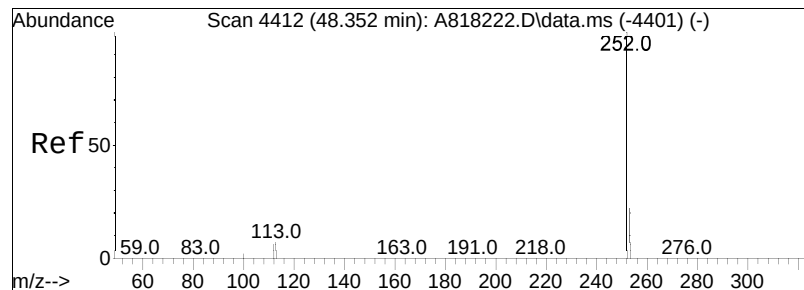
Lab File: F811121412.D

Acq: 13 Nov 2014 8:57 am



Tgt	Ion:276	Resp:	143787
Ion	Ratio	Lower	Upper
276	100		
138	34.4	18.7	34.7
277	27.3	16.7	30.9





#92

Dibenz[ah]+[ac]anthracene

Concen: 515.49 ng/mL

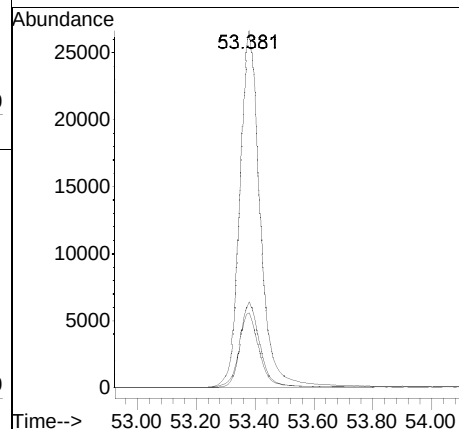
RT: 53.381 min Scan# 4962

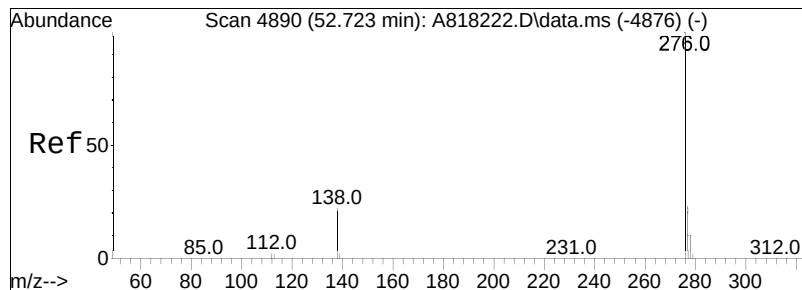
Delta R.T. -0.000 min

Lab File: F811121412.D

Acq: 13 Nov 2014 8:57 am

Tgt	Ion:278	Resp:	126603
Ion	Ratio	Lower	Upper
278	100		
139	20.7	15.1	28.1
279	23.2	16.9	31.3





#93

Benzo[g,h,i]perylene

Concen: 474.69 ng/mL

RT: 54.633 min Scan# 5099

Delta R.T. -0.000 min

Lab File: F811121412.D

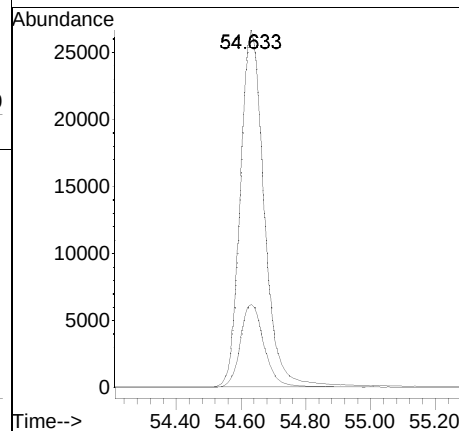
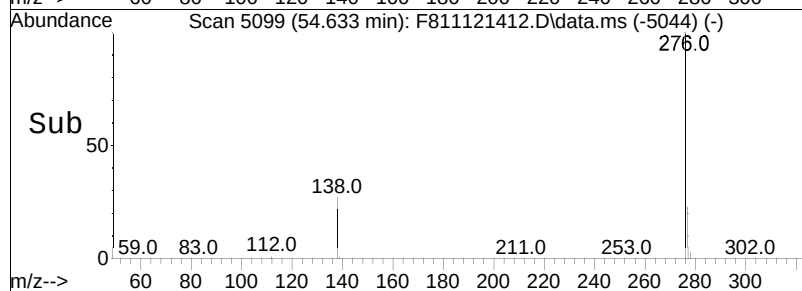
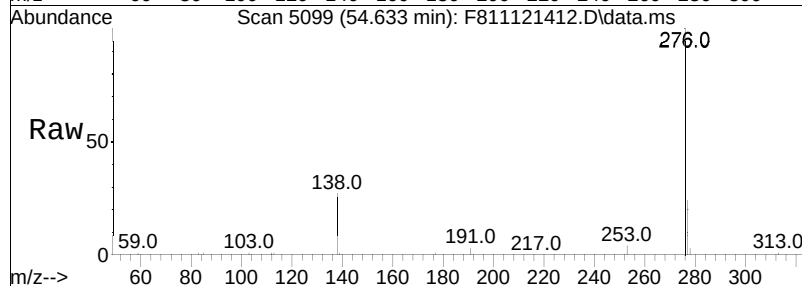
Acq: 13 Nov 2014 8:57 am

Tgt Ion: 276 Resp: 134744

Ion Ratio Lower Upper

276 100

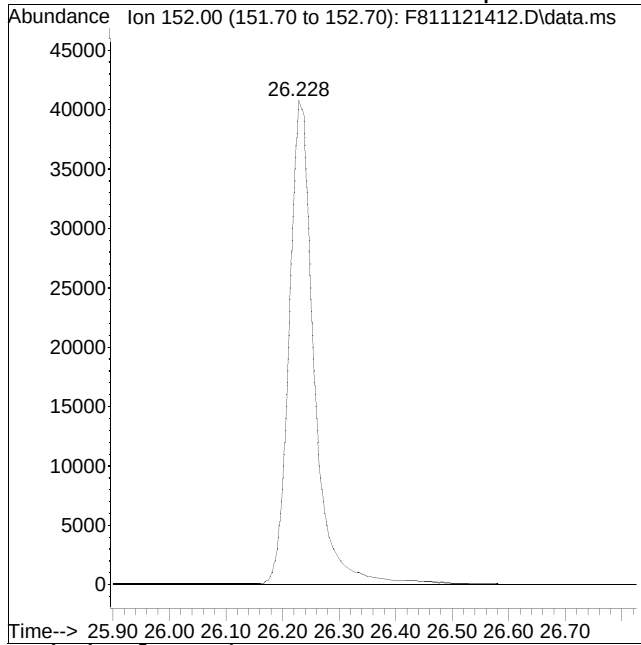
277 23.3 16.4 30.6



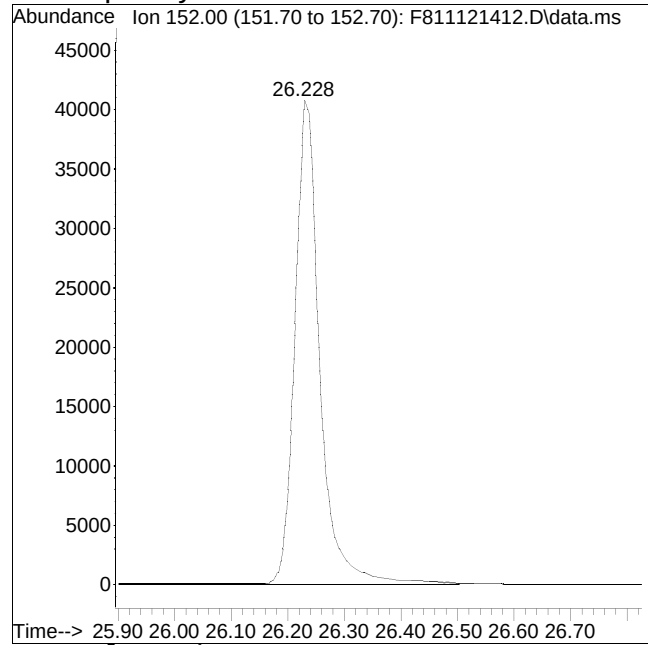
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121412.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 8:57 am Instrument : PAH8
Sample : Cq811121401 Quant Date : 11/16/2014 12:07 pm

Compound #26: Acenaphthylene



Original Peak Response = 126183



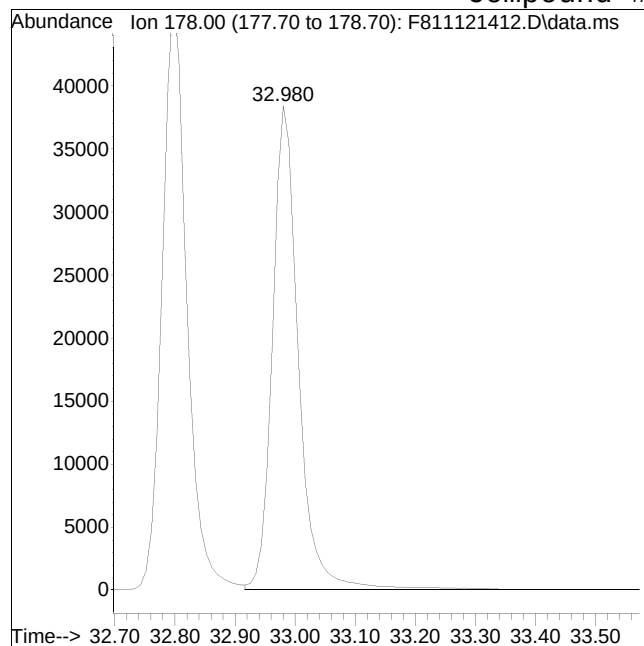
Manual Peak Response = 124534 M4

M4 = Poor automated baseline construction.

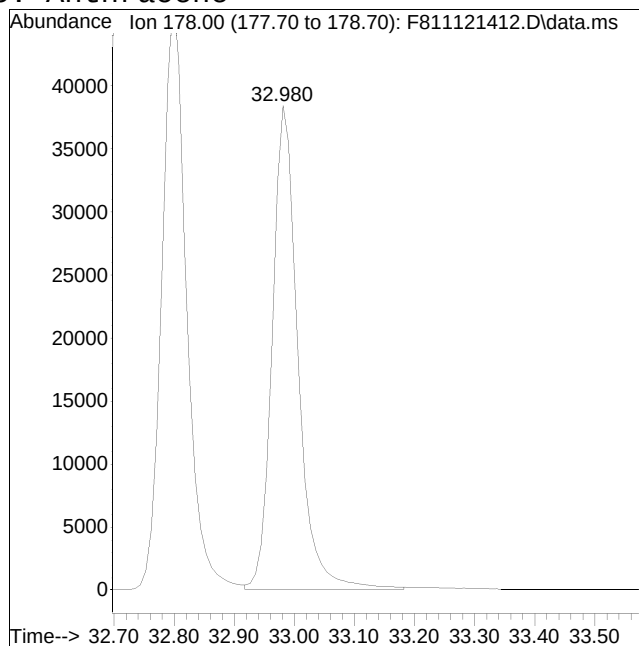
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121412.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 8:57 am Instrument : PAH8
Sample : Cq811121401 Quant Date : 11/16/2014 12:07 pm

Compound #55: Anthracene



Original Peak Response = 116889



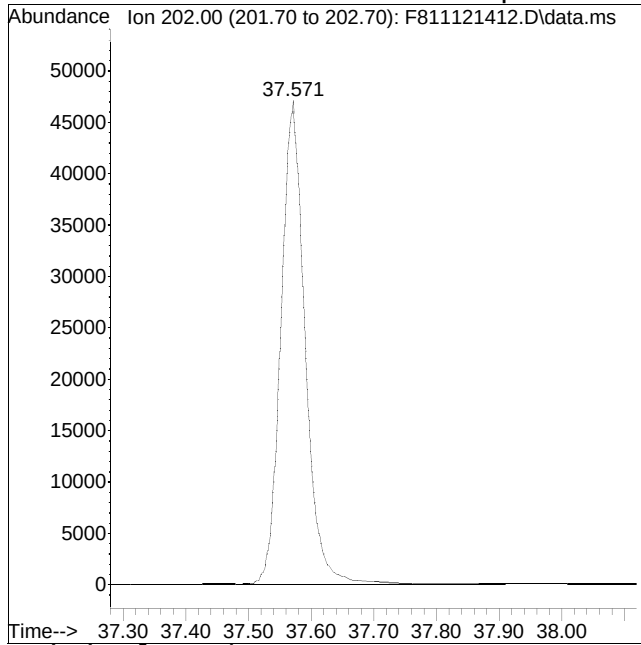
Manual Peak Response = 113406 M4

M4 = Poor automated baseline construction.

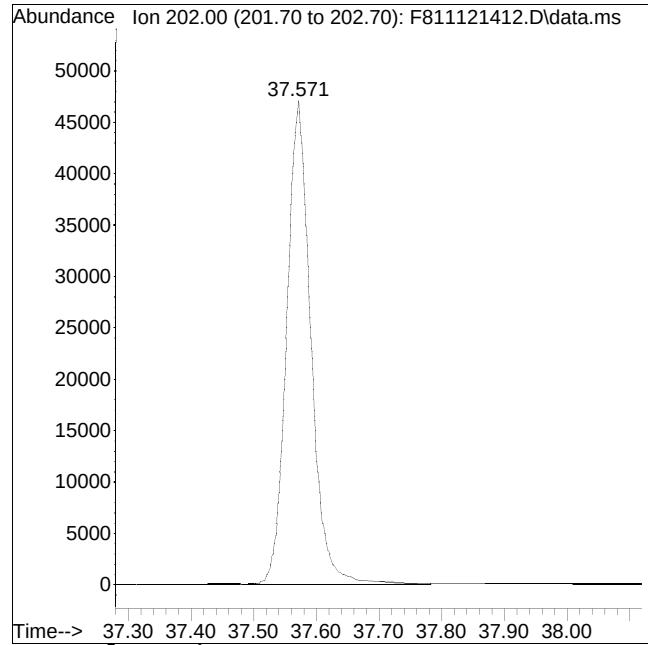
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121412.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 8:57 am Instrument : PAH8
Sample : Cq811121401 Quant Date : 11/16/2014 12:07 pm

Compound #58: Fluoranthene



Original Peak Response = 127057



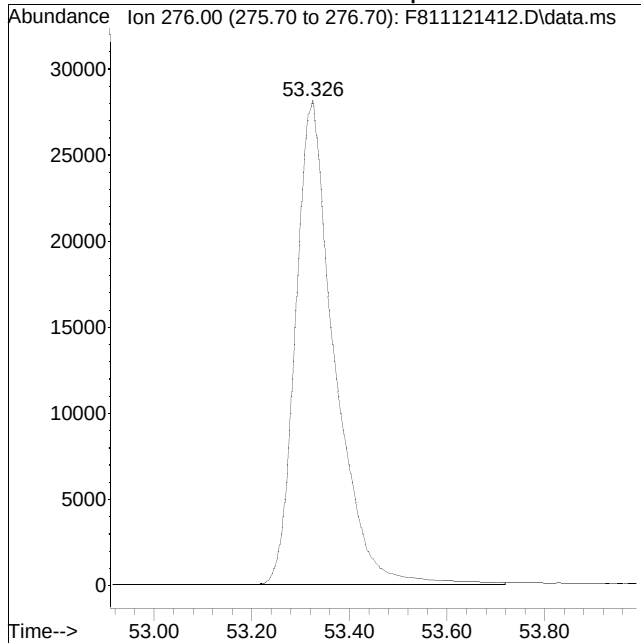
Manual Peak Response = 126404 M4

M4 = Poor automated baseline construction.

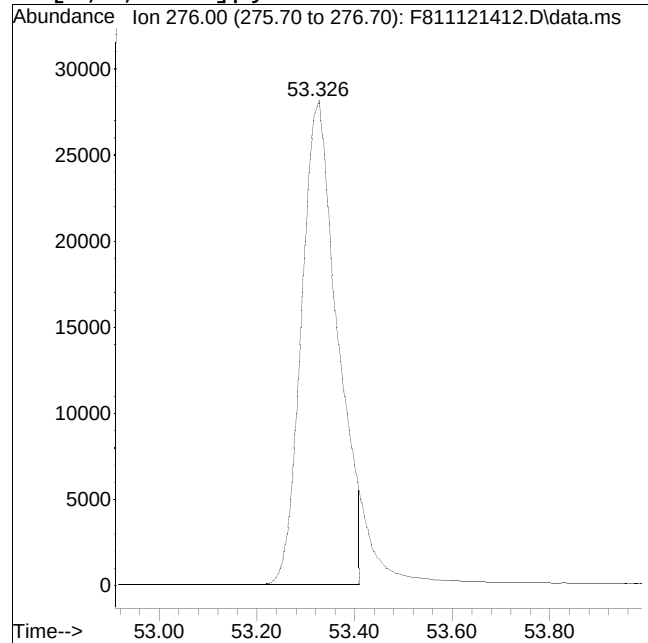
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121412.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 8:57 am Instrument : PAH8
Sample : Cq811121401 Quant Date : 11/16/2014 12:07 pm

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 155669



Manual Peak Response = 143787 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Alaska North Slope Crude (ANS)

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\NOV14\NOV12\
 Data File : F811121414.D
 Acq On : 13 Nov 2014 11:46 am
 Operator : PAH8:SR
 Sample : WG740999-1,0.05005
 Misc : WG740999,frau91 5.055 mg/Kg
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 16 11:42:46 2014
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Thu Nov 13 12:44:12 2014
 Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.840	164	53719M4	500.000	ng/mL	0.00
74) Chrysene-d12	43.287	240	82590	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	19.868	136	214916	1044.646	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	104.46%		
42) Phenanthrene-d10	32.707	188	151878	967.915	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	96.79%		
83) Benzo[b]fluoranthene-d12	47.189	264	162981	1015.735	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	101.57%		
88) Benzo[a]pyrene-d12	48.388	264	145968	1121.584	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	112.16%		
129) 5B(H)Cholane - Surr	43.917	217	26468	1023.711	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	102.37%		
Target Compounds						
						Qvalue
2) 2-butoxyethanol	0.000		0	N.D.	d	
3) trans-Decalin	16.519	138	111452	2318.578	ng/mL	100
4) cis-Decalin	17.733	138	5292	145.365	ng/mL	100
5) C1-Decalins	18.454	152	180858M5	3762.457	ng/mL	
6) C2-Decalins	19.777	166	159623M5	3320.697	ng/mL	
7) C3-Decalins	22.259	180	80917M5	1683.347	ng/mL	
8) C4-Decalins	25.645	194	74664M5	1553.263	ng/mL	
10) Naphthalene	19.941	128	678733	3061.972	ng/mL	100
11) C1-Naphthalenes	22.642	142	1535972M5	6929.238	ng/mL	
12) C2-Naphthalenes	25.480	156	1811761M5	8173.406	ng/mL	
13) C3-Naphthalenes	27.816	170	1208437M5	5451.628	ng/mL	
14) C4-Naphthalenes	30.581	184	652261M5	2942.548	ng/mL	
15) Glycol Ether Isomers	0.000		0	N.D.	d	
16) 2-Methylnaphthalene	22.642	142	891397	6016.941	ng/mL	100
17) 1-Methylnaphthalene	23.062	142	644360	4497.081	ng/mL	100
18) Benzothiophene	20.151	134	6402M4	34.803	ng/mL	
19) C1-Benzo(b)thiophenes	22.204	148	31279M5	170.043	ng/mL	
20) C2-Benzo(b)thiophenes	25.681	162	51996M5	282.668	ng/mL	
21) C3-Benzo(b)thiophenes	27.652	176	102787M5	558.785	ng/mL	
22) C4-Benzo(b)thiophenes	29.395	190	85855M5	466.737	ng/mL	
23) Biphenyl	24.522	154	153740	862.616	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.143	156	449136	3700.753	ng/mL	100
25) Dibenzofuran	27.606	168	55710	305.235	ng/mL	88
26) Acenaphthylene	26.229	152	7005	35.001	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\NOV14\NOV12\
 Data File : F811121414.D
 Acq On : 13 Nov 2014 11:46 am
 Operator : PAH8:SR
 Sample : WG740999-1,0.05005
 Misc : WG740999,frau91 5.055 mg/Kg
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 16 11:42:46 2014
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Thu Nov 13 12:44:12 2014
 Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acenaphthene	26.977	153	14325M3	112.670	ng/mL	
28) 2,3,5-Trimethylnaphthalen	28.519	170	90550M3	906.548	ng/mL	
29) Fluorene	28.984	166	59856M4	426.756	ng/mL	
30) C1-Fluorenes	31.347	180	129109M5	920.510	ng/mL	
31) C2-Fluorenes	33.546	194	197475M5	1407.940	ng/mL	
32) C3-Fluorenes	35.372	208	175265M5	1249.589	ng/mL	
33) Dibenzothiophene	32.305	184	149440	761.044	ng/mL#	73
34) 4-Methyldibenzothiophene(	34.076	198	147839	752.890	ng/mL	100
35) 2/3-Methyldibenzothiophen	34.422	198	106173	540.701	ng/mL	100
36) 1-Methyldibenzothiophene(	34.842	198	45882	233.660	ng/mL	100
37) OTP	34.495	198	15017M3	76.476	ng/mL	
38) C1-Dibenzothiophenes	34.076	198	321531M5	1637.441	ng/mL	
38) C1-Dibenzothiophenes BS	34.076	198	306514M5	1560.965	ng/mL	
39) C2-Dibenzothiophenes	36.120	212	398234M5	2028.062	ng/mL	
40) C3-Dibenzothiophenes	37.563	226	353024M5	1797.823	ng/mL	
41) C4-Dibenzothiophenes	39.252	240	196964M5	1003.066	ng/mL	
43) Phenanthrene	32.798	178	229122	1199.018	ng/mL	95
44) 3-Methylphenanthrene(3MP)	34.760	192	99795	522.237	ng/mL	96
45) 2-Methylphenanthrene(2MP)	34.879	192	103023	539.130	ng/mL	98
46) 2-Methylanthracene(2MA)	35.034	192	2924	15.302	ng/mL	89
47) 9/4-Methylphenanthrene(9M	35.217	192	155053	811.408	ng/mL	100
48) 1-Methylphenanthrene(1MP)	35.308	192	106243M4	555.980	ng/mL	
49) C1-Phenanthrenes/Anthrace	35.217	192	471534M5	2467.584	ng/mL	
50) C2-Phenanthrenes/Anthrace	37.024	206	495891M5	2595.047	ng/mL	
50) C2-Phenanthrenes/Anthr BS	37.024	206	495891M5	2595.047	ng/mL	
51) 5AA IS BKGD	0.000		0	N.D.	d	
52) C3-Phenanthrenes/Anthrace	38.868	220	305586M5	1599.162	ng/mL	
53) C4-Phenanthrenes/Anthrace	41.032	234	132168M5	691.648	ng/mL	
54) Retene	0.000		0	N.D.	d	
55) Anthracene	0.000		0	N.D.	d	
56) Carbazole	33.647	167	6602M4	37.110	ng/mL	
57) 1-Methylphenanthrene	35.308	192	106857M4	770.605	ng/mL	
58) Fluoranthene	37.572	202	4406M4	22.298	ng/mL	
59) Benzo(b)fluorene	40.092	216	4113	38.544	ng/mL	94
60) Pyrene	38.457	202	15559M4	75.552	ng/mL	
61) C1-Fluoranthenes/Pyrenes	39.845	216	64595M5	313.663	ng/mL	
62) C2-Fluoranthenes/Pyrenes	41.963	230	106331M5	516.326	ng/mL	
63) C3-Fluoranthenes/Pyrenes	43.662	244	127605M5	619.629	ng/mL	
64) C4-Fluoranthenes/Pyrenes	45.004	258	113010M5	548.758	ng/mL	
65) Bis-(2-ethylhexyl)fumarat	0.000		0	N.D.	d	
66) Naphthobenzothiophene	42.301	234	32887	172.673	ng/ml#	72

Quantitation Report (QT Reviewed)

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 Data File : F811121414.D
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 Operator : PAH8:SR
 Sample : WG740999-1,0.05005
 Misc : WG740999,frau91 5.055 mg/Kg
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 16 11:42:46 2014
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Thu Nov 13 12:44:12 2014
 Response via : Initial Calibration

Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
67)	Naphthobenzothiophene-2,1	42.301	234	32887	172.673	ng/mL#	72
68)	Naphthobenzothiophene-1,2	42.639	234	7964	41.815	ng/mL#	7
69)	Naphthobenzothiophene-2,3	42.940	234	3366M4	17.673	ng/mL	
70)	C1-Naphthobenzothiophenes	43.698	248	120802M5	634.271	ng/mL	
71)	C2-Naphthobenzothiophenes	45.699	262	175053M5	919.116	ng/mL	
72)	C3-Naphthobenzothiophenes	47.299	276	138061M5	724.890	ng/mL	
73)	C4-Naphthobenzothiophenes	48.379	290	95184M5	499.764	ng/mL	
75)	Benz[a]anthracene	43.233	228	2150M3	12.824	ng/mL	
76)	Chrysene	43.369	228	34374	203.641	ng/mL	92
77)	Chrysene/Triphenylene	43.369	228	34374	203.641	ng/mL	92
78)	C1-Chrysenes	44.858	242	64382M5	381.417	ng/mL	
79)	C2-Chrysenes	46.933	256	93134M5	551.752	ng/mL	
79)	C2-Chrysenes BS	46.933	256	87125M5	516.153	ng/mL	
80)	BBF-D12 Surr BKGD	47.189	256	6009	35.599	ng/mL	100
81)	C3-Chrysenes	49.659	270	98770M5	585.142	ng/mL	
82)	C4-Chrysenes	49.247	284	63072M5	373.656	ng/mL	
84)	Benzo[b]fluoranthene	47.272	252	5383M4	28.450	ng/mL	
85)	Benzo[j]+[k]fluoranthene	0.000		0	N.D.	d	
86)	Benzo[a]fluoranthene	0.000		0	N.D.	d	
87)	Benzo[e]pyrene	48.287	252	10022	52.151	ng/mL	89
89)	Benzo[a]pyrene	48.479	252	1560M3	9.367	ng/mL	
90)	Perylene	48.790	252	3074	17.747	ng/mL#	22
91)	Indeno[1,2,3-cd]pyrene	53.354	276	895	4.074	ng/mL#	50
92)	Dibenz[ah]+[ac]anthracene	53.390	278	1000M4	5.268	ng/mL	
93)	Benzo[g,h,i]perylene	54.642	276	4062	18.514	ng/mL#	78
94)	Hopane (T19)	52.439	191	45367	822.452	ng/mL	91
95)	17a(H),21B(H)-hopane - C3	52.439	191	45367	822.452	ng/mL	91
96)	C23 Tricyclic Terpane (T4	40.941	191	18366	332.955	ng/mL	100
97)	C24 Tricyclic Terpane (T5	41.662	191	11705	212.198	ng/mL	100
98)	C25 Tricyclic Terpane (T6	43.150	191	11251M1	203.968	ng/mL	
99)	C24 Tetracyclic Terpane (	44.474	191	3844M4	69.687	ng/mL	
100)	C26 Tricyclic Terpane-22S	44.210	191	3991M4	72.352	ng/mL	
101)	C26 Tricyclic Terpane-22R	44.301	191	4118M4	74.655	ng/mL	
102)	C28 Tricyclic Terpane-22S	46.586	191	4012M4	72.733	ng/mL	
103)	C28 Tricyclic Terpane-22R	46.750	191	4406M4	79.876	ng/mL	
104)	C29 Tricyclic Terpane-22S	47.272	191	4973	90.155	ng/mL	100
105)	C29 Tricyclic Terpane-22R	47.473	191	5215M4	94.542	ng/mL	
106)	18a-22,29,30-Trisnorneoho	48.607	191	7461	135.259	ng/mL	100
107)	C30 Tricyclic Terpane-22S	48.708	191	4212M4	76.359	ng/mL	
108)	C30 Tricyclic Terpane-22R	48.946	191	3965M4	71.881	ng/mL	
109)	17a(H)-22,29,30-Trisnorho	49.165	191	9020	163.522	ng/mL	100

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 Sample : WG740999-1,0.05005
 Misc : WG740999,frau91 5.055 mg/Kg
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 16 11:42:46 2014
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Thu Nov 13 12:44:12 2014
 Response via : Initial Calibration

Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110)	17a/b,21b/a 28,30-Bisnorh	50.363	191	1403	25.435	ng/ml	100
111)	17a(H),21b(H)-25-Norhopan	50.162	191	2378	43.110	ng/ml	100
112)	30-Norhopane (T15)	51.049	191	24901M4	451.427	ng/ml	
113)	18a(H)-30-Norneohopane-C2	51.159	191	6433M4	116.623	ng/ml	
114)	17a(H)-Diahopane (X)	51.278	191	3690M4	66.895	ng/ml	
115)	30-Normoretane (T17)	51.845	191	3167	57.414	ng/ml	100
116)	18a(H)&18b(H)-Oleananes (	52.220	191	1103M4	19.996	ng/ml	
117)	Moretane (T20)	53.143	191	4373M4	79.278	ng/ml	
118)	30-Homohopane-22S (T21)	54.258	191	19184	347.784	ng/ml	100
119)	30-Homohopane-22R (T22)	54.496	191	16126	292.346	ng/ml	100
120)	Gammacerane/C32-diahopane	55.053	191	3842	69.651	ng/mL	100
121)	30,31-Bishomohopane-22S (	55.839	191	14126	256.088	ng/ml	100
122)	30,31-Bishomohopane-22R (	56.232	191	10457	189.573	ng/ml	100
123)	30,31-Trishomohopane-22S	58.014	191	11516	208.772	ng/ml	100
124)	30,31-Trishomohopane-22R	58.645	191	7516M4	136.257	ng/ml	
125)	Tetrakishomohopane-22S (T	60.701	191	8977	162.743	ng/ml	100
126)	Tetrakishomohopane-22R (T	61.614	191	6178	112.000	ng/ml	100
127)	Pentakishomohopane-22S (T	63.890	191	9157	166.006	ng/ml	100
128)	Pentakishomohopane-22R (T	65.224	191	7092M4	128.570	ng/ml	
130)	13b(H),17a(H)-20S-Diachol	45.424	217	6396	247.380	ng/ml	100
131)	13b(H),17a(H)-20R-Diachol	45.845	217	2757	106.633	ng/ml	100
132)	13b,17a-20S-Methylchole	46.540	217	2476M4	95.765	ng/ml	
133)	14a,17a-20S-Chol/13b,17a-	47.418	217	7569	292.749	ng/ml	100
134)	14a,17a-20R-Chol/13b,17a-	47.940	217	8986	347.554	ng/ml	100
135)	Unknown Sterane (S18)	48.214	217	2466M4	95.378	ng/ml	
136)	13a,17b-20S-Ethylchole	48.497	217	461	17.830	ng/ml	100
137)	14a,17a-20S-Methylcholest	48.653	217	4353	168.362	ng/ml	100
138)	14a,17a-20R-Methylcholest	49.366	217	4007	154.980	ng/ml	100
139)	14a(H),17a(H)-20S-Ethylch	49.732	217	6601M4	255.309	ng/ml	
140)	14a(H),17a(H)-20R-Ethylch	50.647	217	4644M4	179.617	ng/ml	
141)	14b(H),17b(H)-20R-Cholest	47.510	218	5047M4	195.204	ng/ml	
142)	14b(H),17b(H)-20S-Cholest	47.592	218	5266M4	203.675	ng/ml	
143)	14b,17b-20R-Methylcholest	48.818	218	5258	203.365	ng/ml	100
144)	14b,17b-20S-Methylcholest	48.900	218	6857M4	265.210	ng/ml	
145)	14b(H),17b(H)-20R-Ethylch	49.979	218	6944	268.575	ng/ml	100
146)	14b(H),17b(H)-20S-Ethylch	50.016	218	5133M3	198.531	ng/ml	
147)	C26,20R- +C27,20S- triaro	49.677	231	40419	1563.298	ng/mL	100
148)	C28,20S-triaromatic stero	50.546	231	26737	1034.115	ng/mL	100
149)	C27,20R-triaromatic stero	51.013	231	24583	950.804	ng/mL	100
150)	C28,20R-triaromatic stero	52.229	231	21298	823.749	ng/mL	100

Quantitation Report (QT Reviewed)

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 Data File : F811121414.D
 Acq On : 13 Nov 2014 11:46 am
 Operator : PAH8:SR
 Sample : WG740999-1,0.05005
 Misc : WG740999,frau91 5.055 mg/Kg
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 16 11:42:46 2014
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Thu Nov 13 12:44:12 2014
 Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

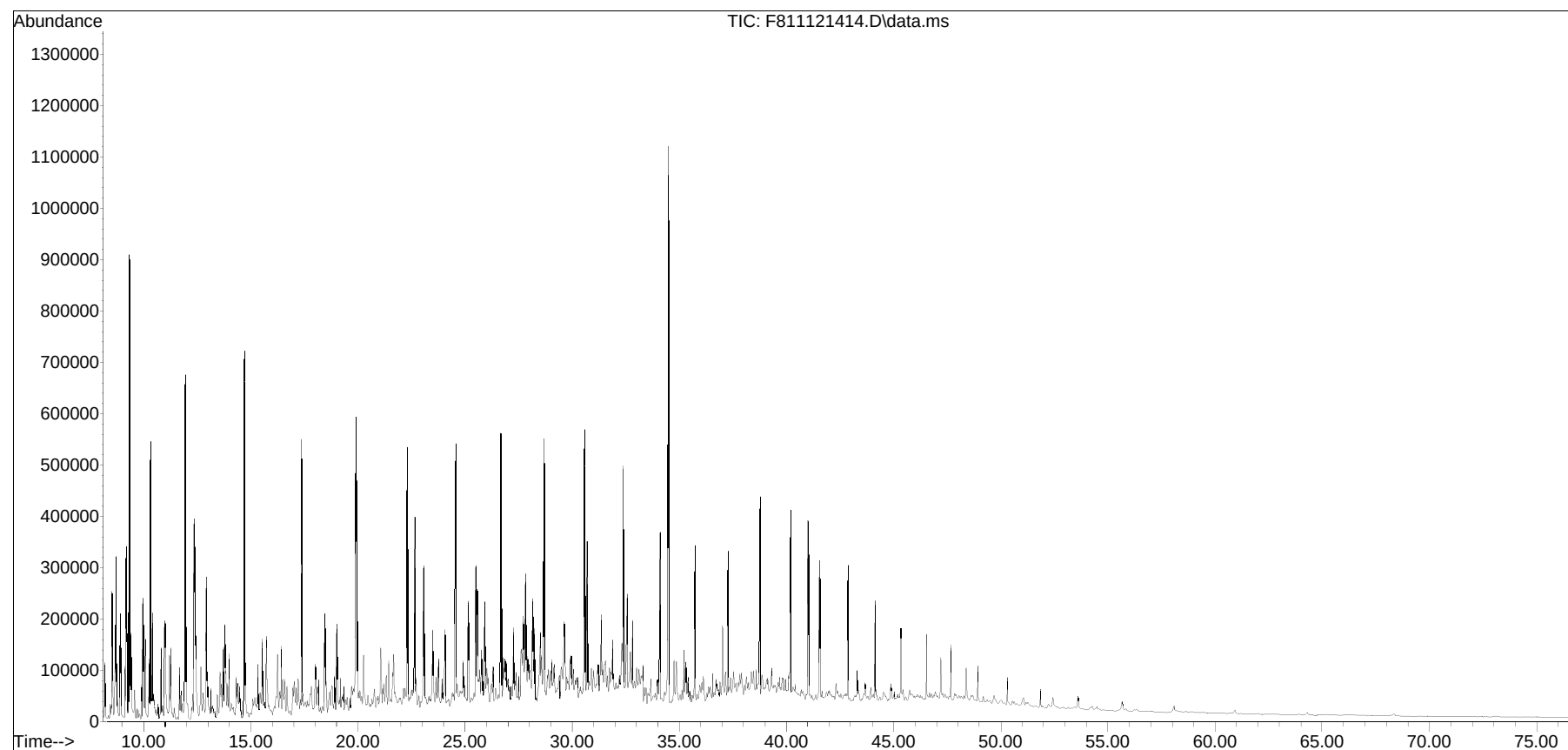
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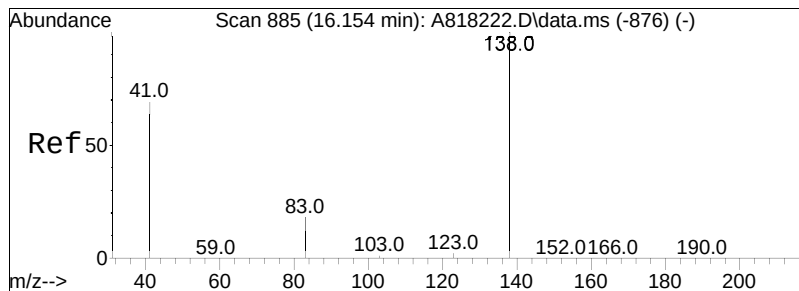
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\NOV14\NOV12\
Data File : F811121414.D
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QLast Update : Thu Nov 13 12:44:12 2014
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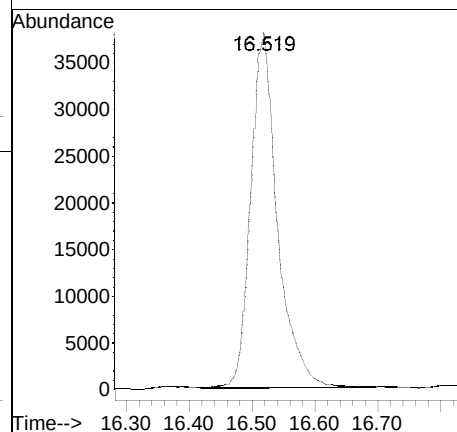
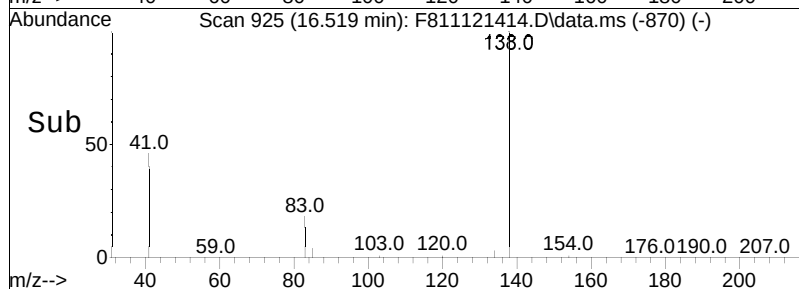
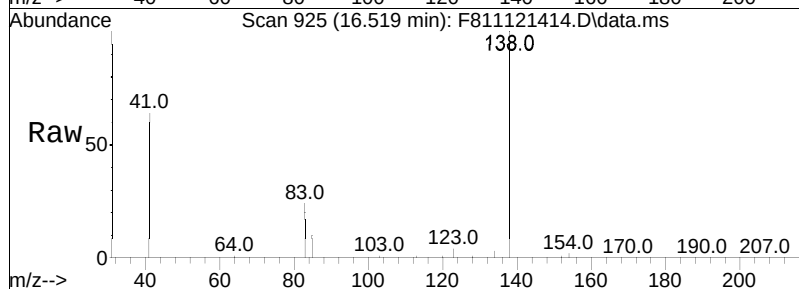
Sub List : Default - All compounds listed

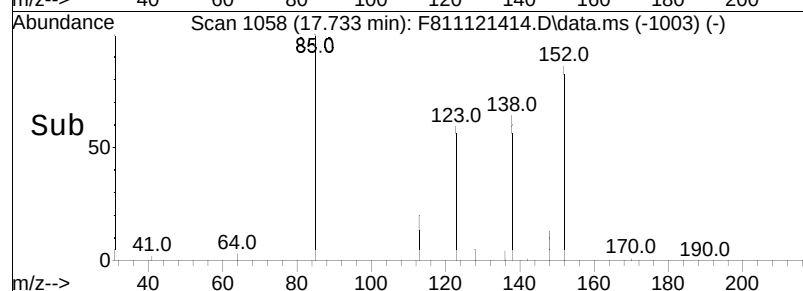
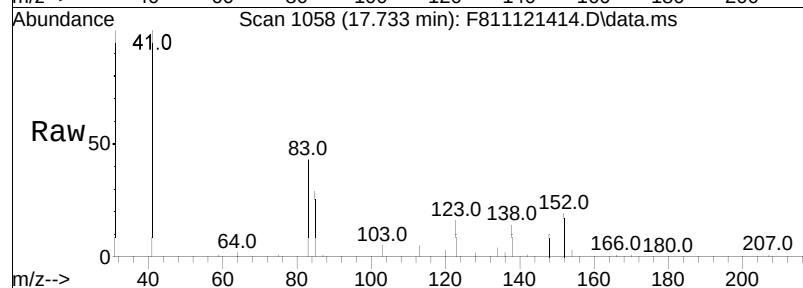
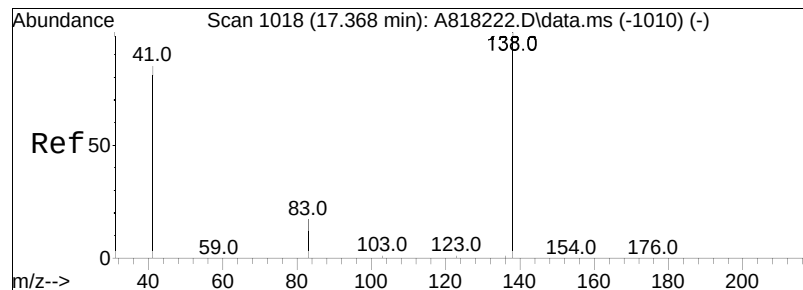




#3
trans-Decalin
Concen: 2318.58 ng/mL
RT: 16.519 min Scan# 925
Delta R.T. 0.000 min
Lab File: F811121414.D
Acq: 13 Nov 2014 11:46 am

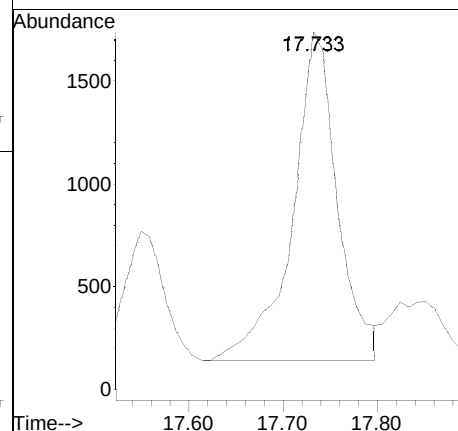
Tgt Ion:138 Resp: 111452

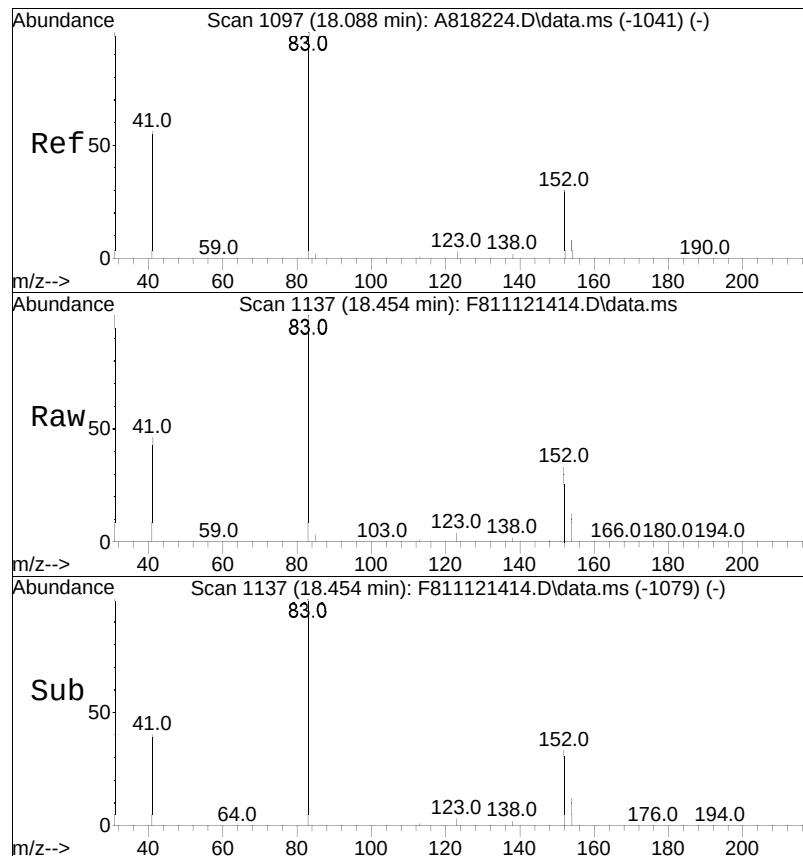




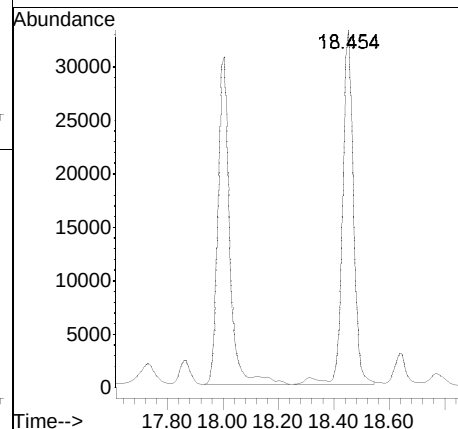
#4
 cis-Decalin
 Concen: 145.37 ng/mL
 RT: 17.733 min Scan# 1058
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

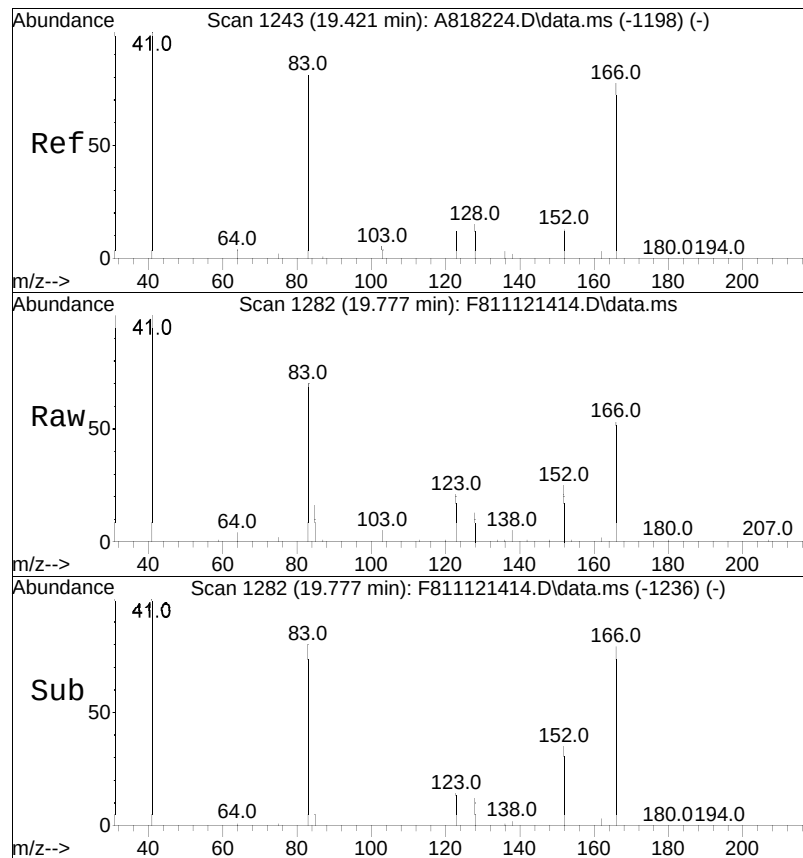
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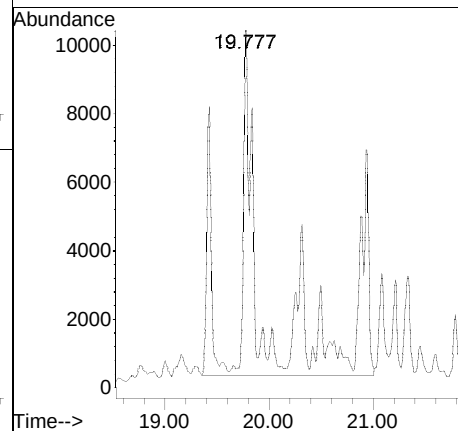


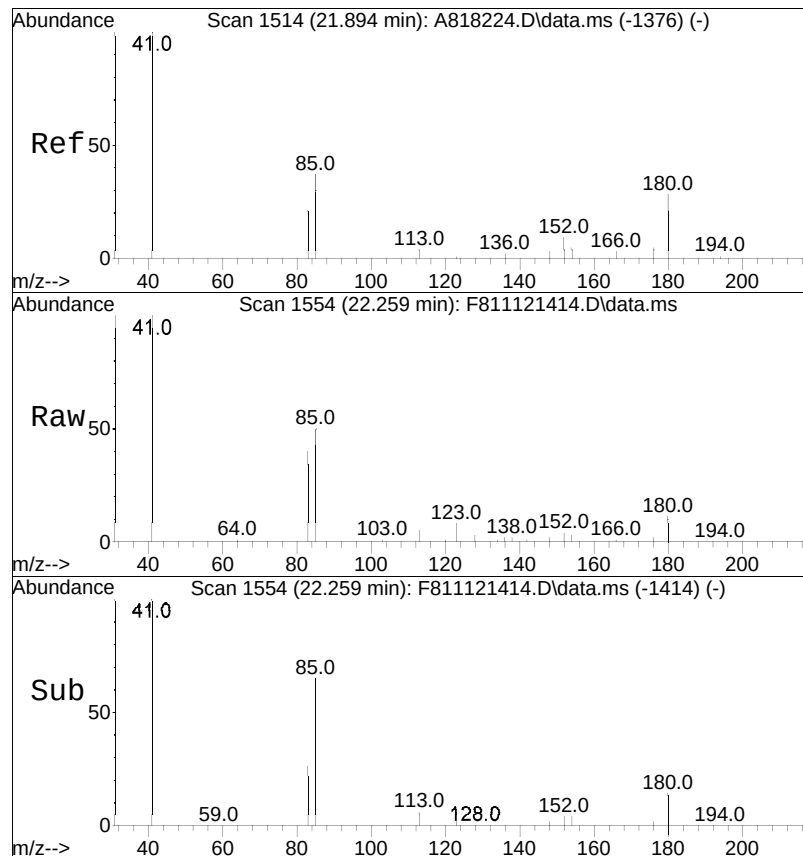
#5
 C1-Decalins
 Concen: 3762.46 ng/mL M5
 RT: 18.454 min Scan# 1137
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:152 Resp: 180858



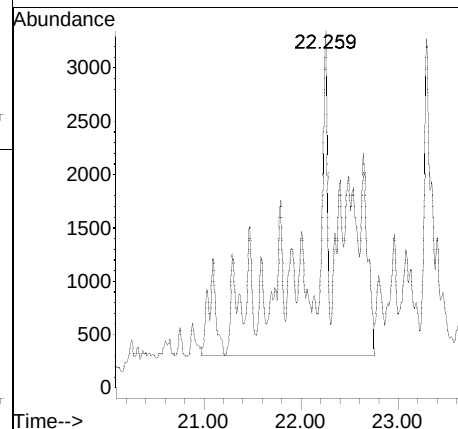


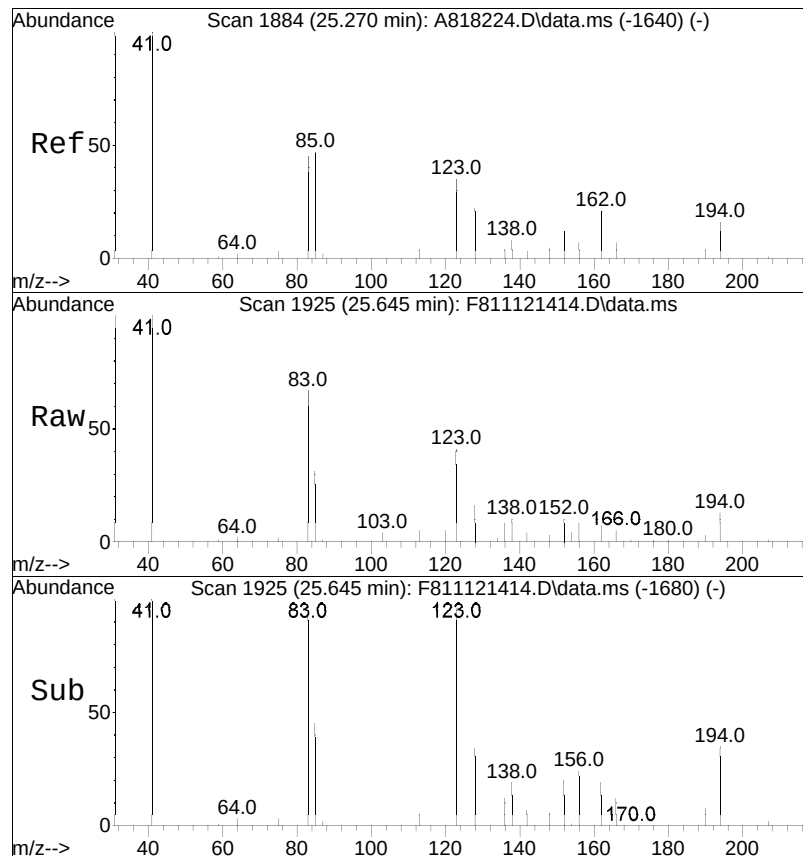
#6
 C2-Decalins
 Concen: 3320.70 ng/mL M5
 RT: 19.777 min Scan# 1282
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:166 Resp: 159623



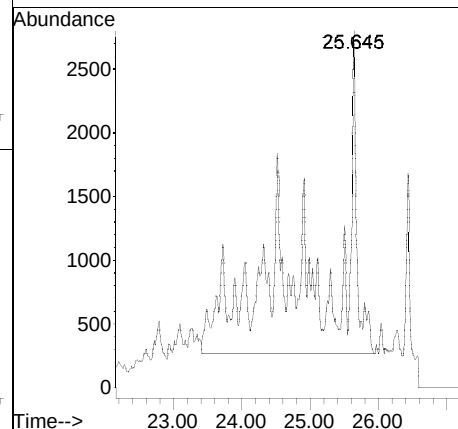


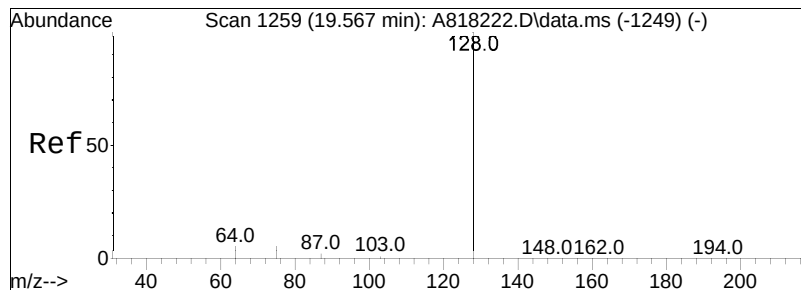
#7
 C3-Decalins
 Concen: 1683.35 ng/mL M5
 RT: 22.259 min Scan# 1554
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:180 Resp: 80917





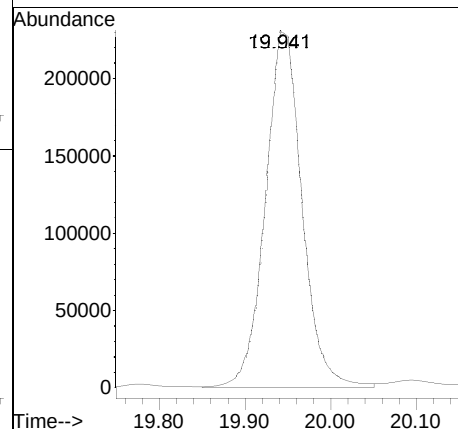
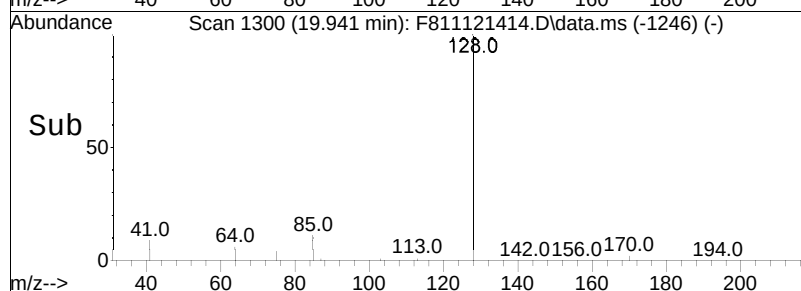
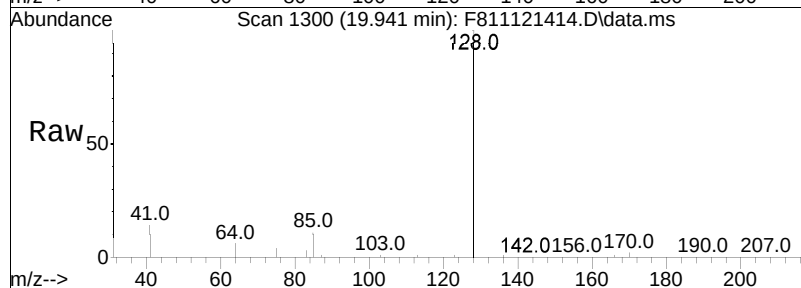
#8
 C4-Decalins
 Concen: 1553.26 ng/mL M5
 RT: 25.645 min Scan# 1925
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:194 Resp: 74664

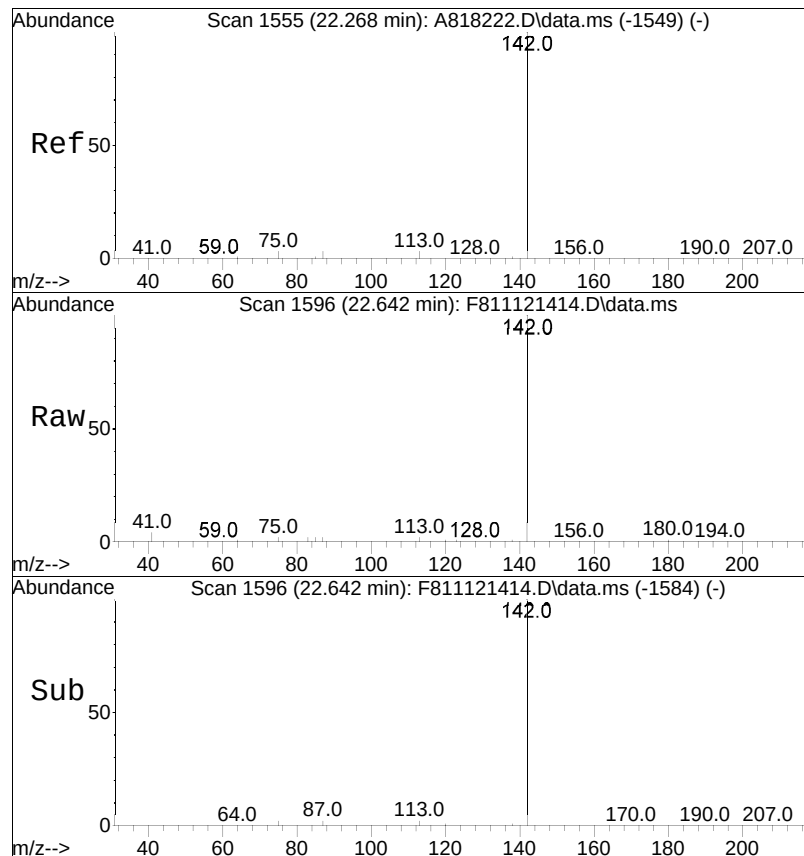




#10
Naphthalene
Concen: 3061.97 ng/mL
RT: 19.941 min Scan# 1300
Delta R.T. -0.009 min
Lab File: F811121414.D
Acq: 13 Nov 2014 11:46 am

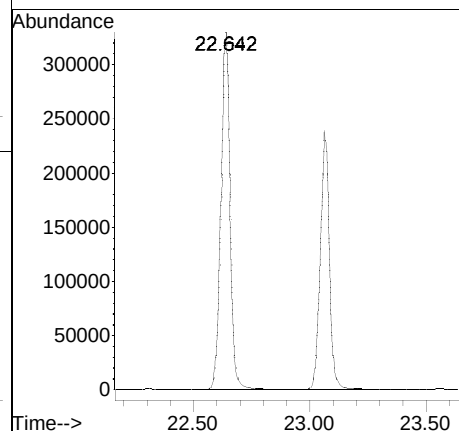
Tgt Ion:128 Resp: 678733

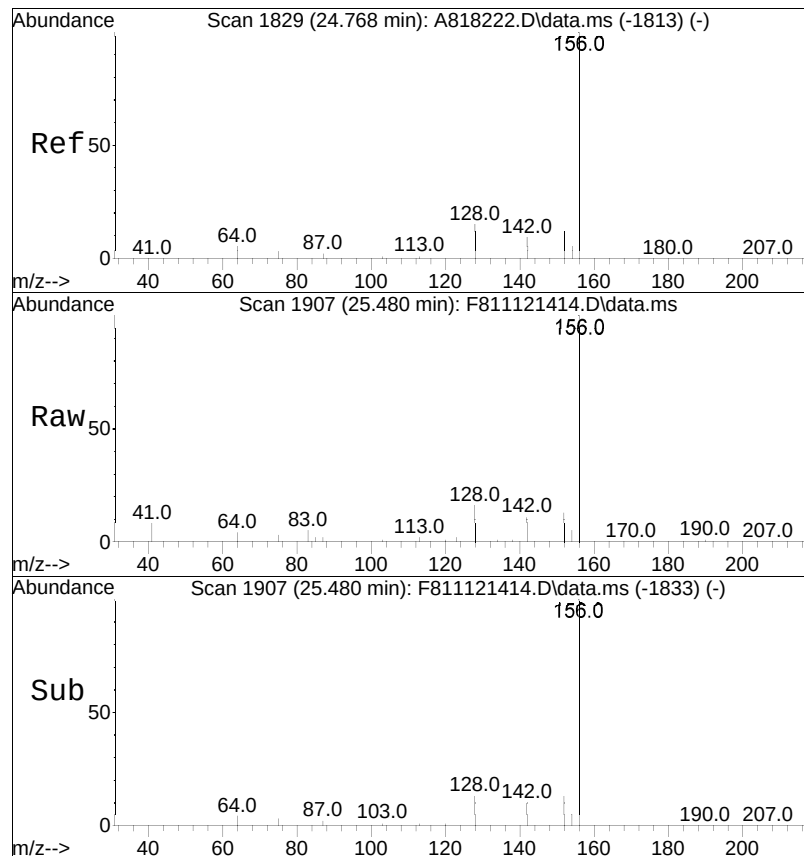




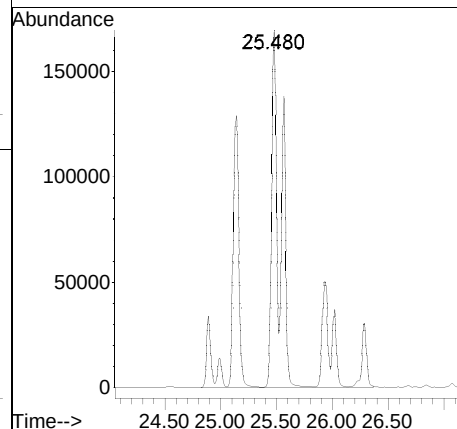
#11
 C1-Naphthalenes
 Concen: 6929.24 ng/mL M5
 RT: 22.642 min Scan# 1596
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

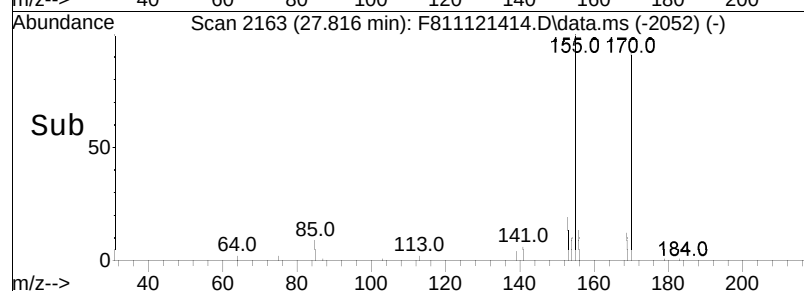
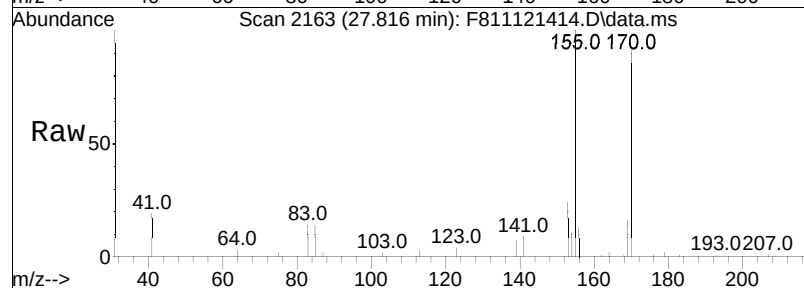
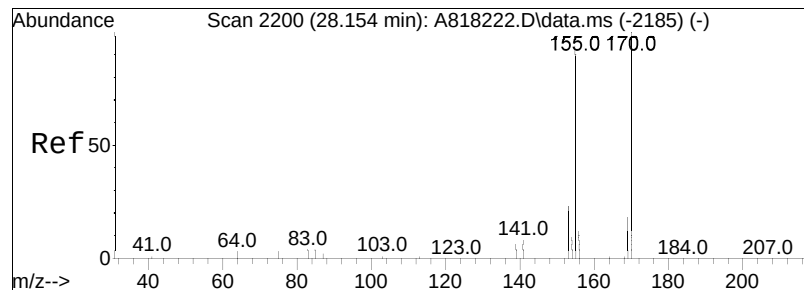
Tgt Ion:142 Resp: 1535972





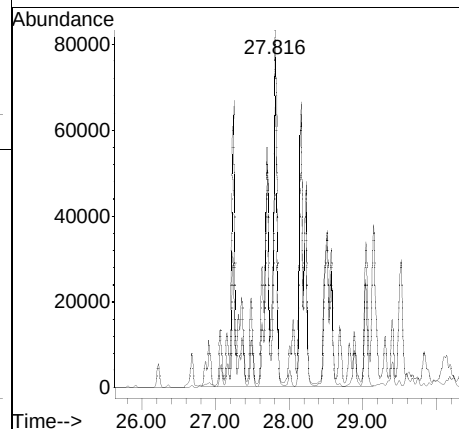
#12
C2-Naphthalenes
Concen: 8173.41 ng/mL M5
RT: 25.480 min Scan# 1907
Delta R.T. 0.000 min
Lab File: F811121414.D
Acq: 13 Nov 2014 11:46 am
Tgt Ion:156 Resp: 1811761

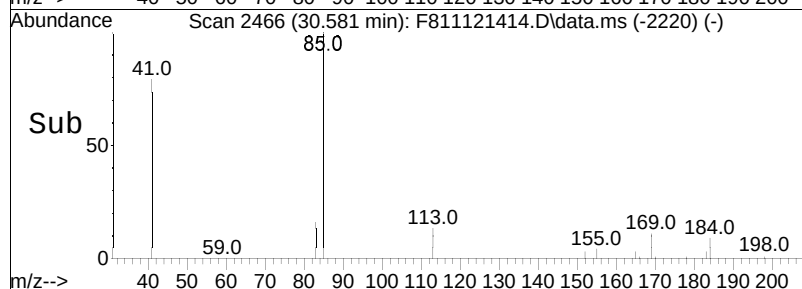
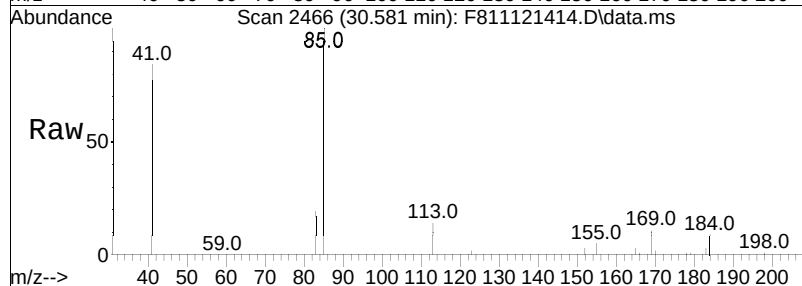
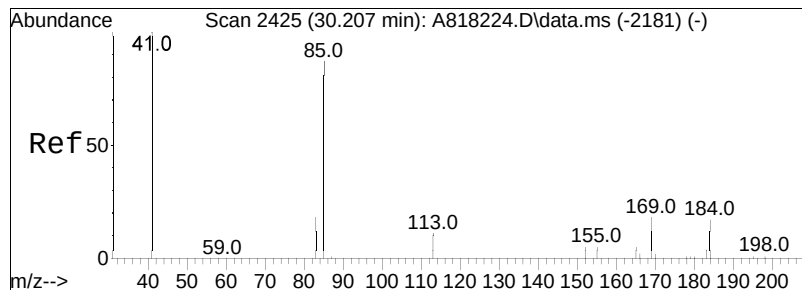




#13
C3-Naphthalenes
Concen: 5451.63 ng/mL M5
RT: 27.816 min Scan# 2163
Delta R.T. 0.000 min
Lab File: F811121414.D
Acq: 13 Nov 2014 11:46 am

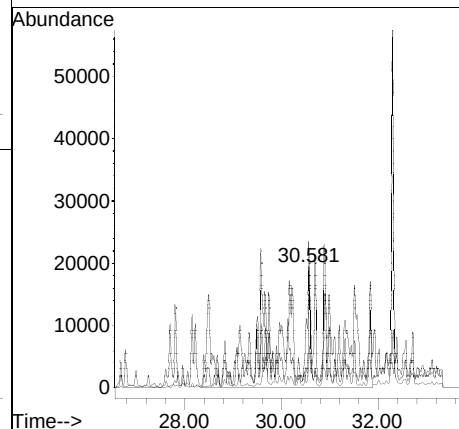
Tgt Ion:170 Resp: 1208437
Ion Ratio Lower Upper
170 100
155 20.1 75.9 141.1#

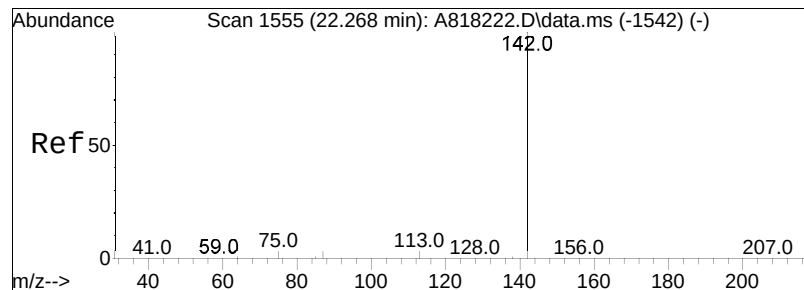




#14
 C4-Naphthalenes
 Concen: 2942.55 ng/mL M5
 RT: 30.581 min Scan# 2466
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

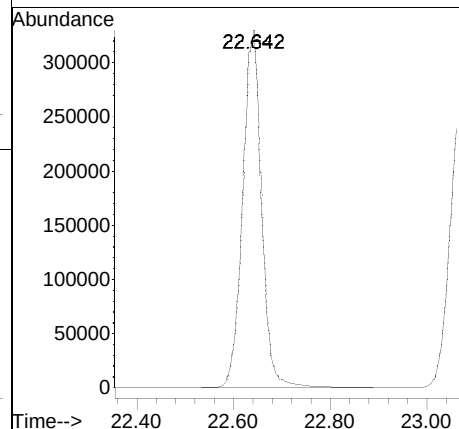
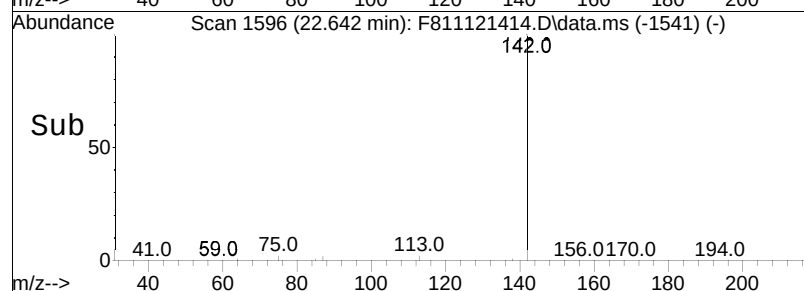
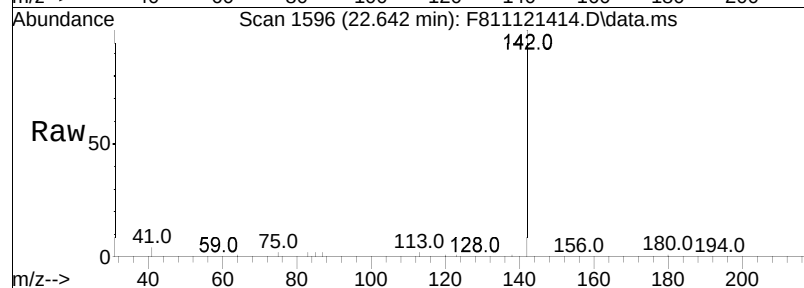
Tgt Ion	Ratio	Lower	Upper
184	100		
169	11.1	84.6	157.2#
183	2.4	23.9	44.5#

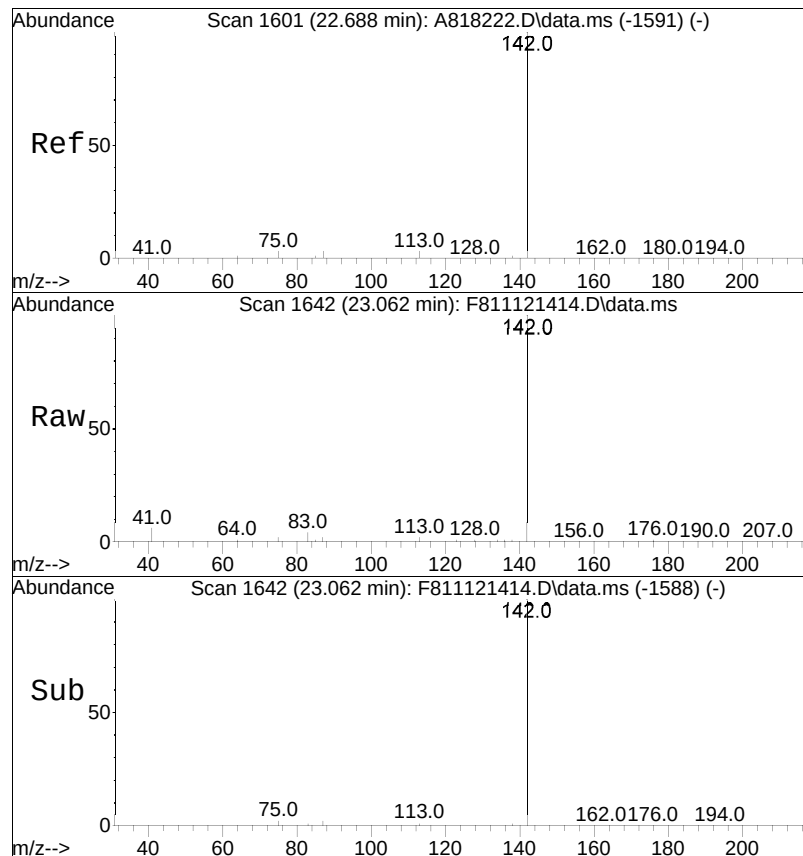




#16
2-Methylnaphthalene
Concen: 6016.94 ng/mL
RT: 22.642 min Scan# 1596
Delta R.T. 0.000 min
Lab File: F811121414.D
Acq: 13 Nov 2014 11:46 am

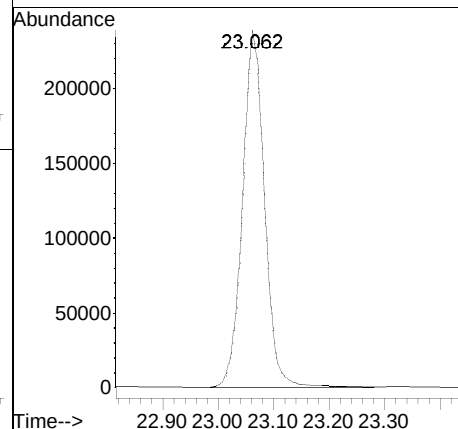
Tgt Ion:142 Resp: 891397

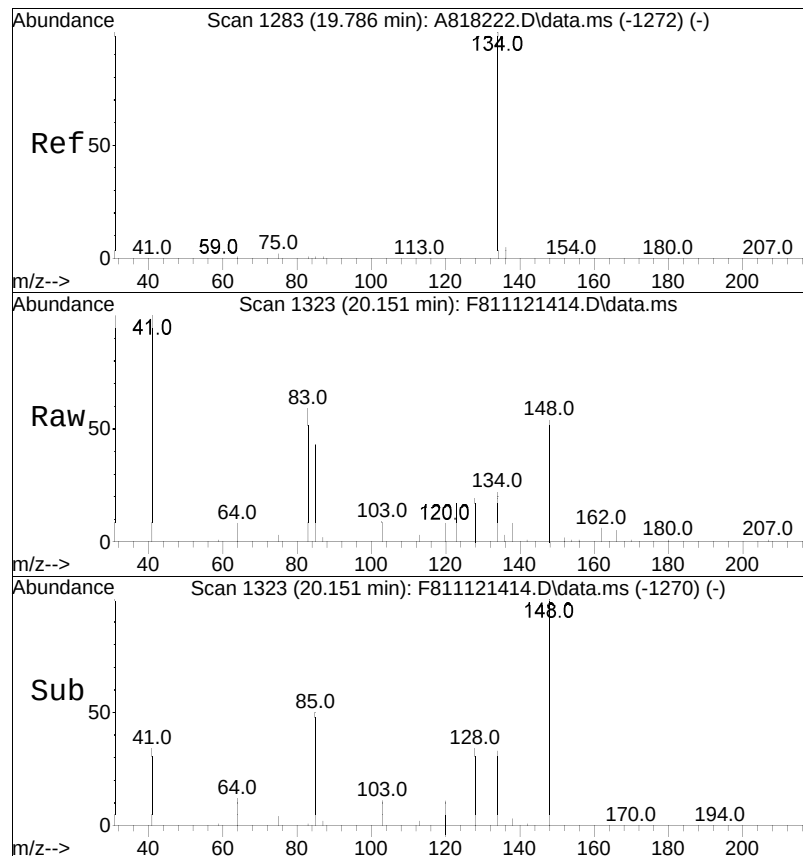




#17
1-Methylnaphthalene
Concen: 4497.08 ng/mL
RT: 23.062 min Scan# 1642
Delta R.T. -0.009 min
Lab File: F811121414.D
Acq: 13 Nov 2014 11:46 am

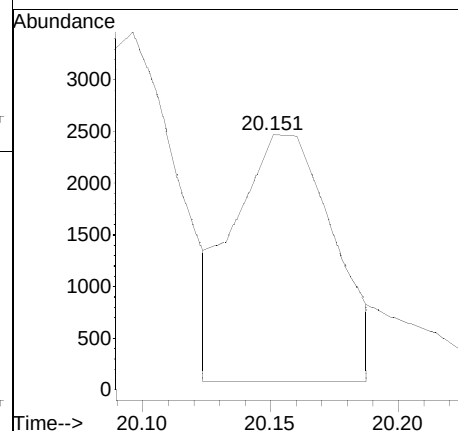
Tgt Ion:142 Resp: 644360

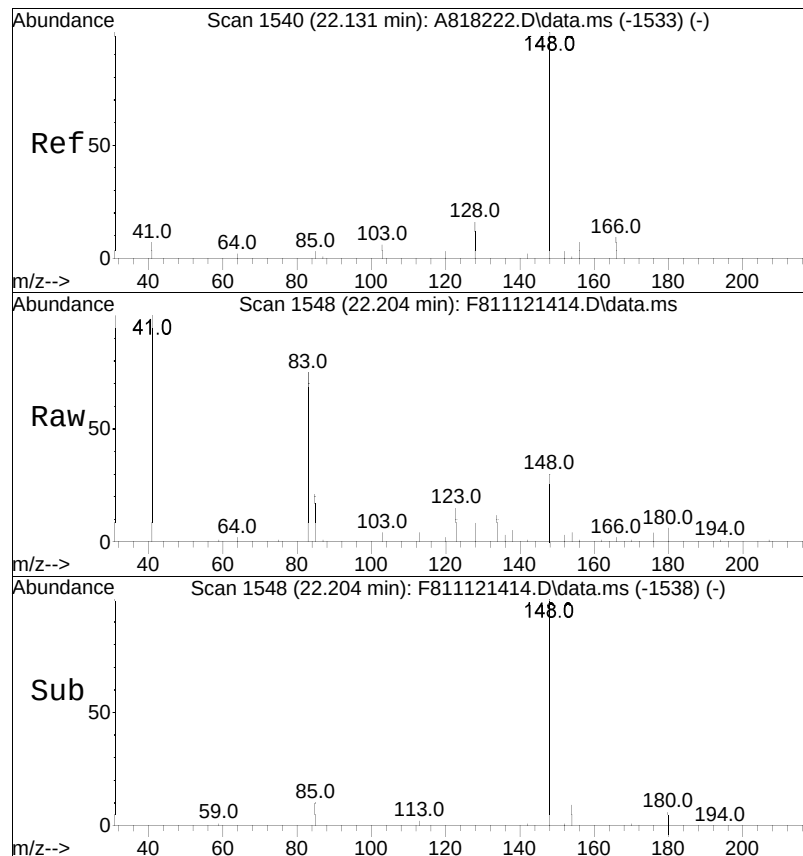




#18
 Benzothiophene
 Concen: 34.80 ng/mL M4
 RT: 20.151 min Scan# 1323
 Delta R.T. -0.018 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

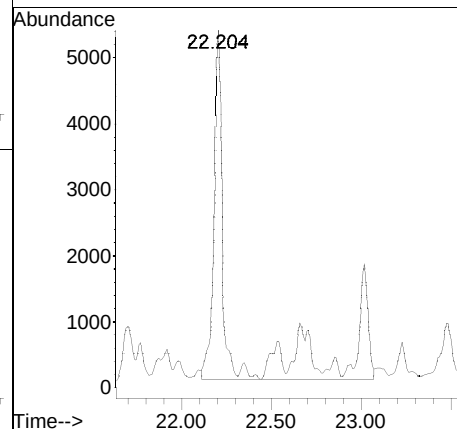
Tgt Ion:134 Resp: 6402

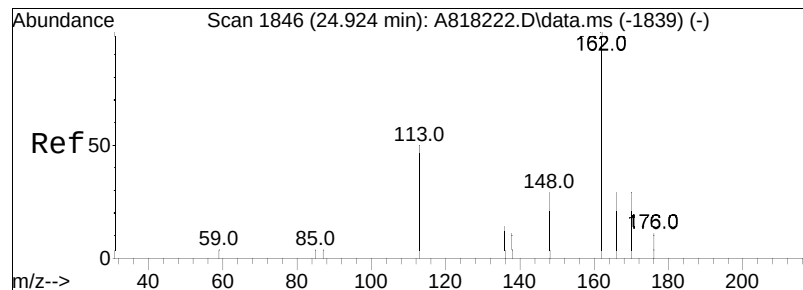




#19
 C1-Benzo(b)thiophenes
 Concen: 170.04 ng/mL M5
 RT: 22.204 min Scan# 1548
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

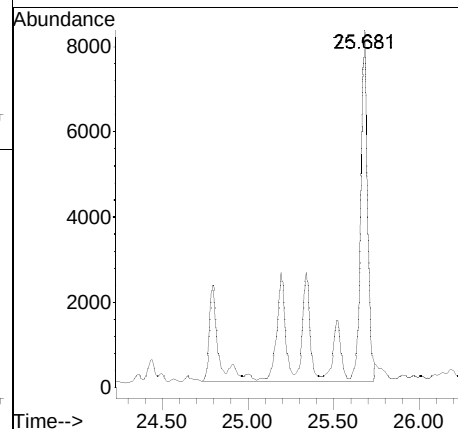
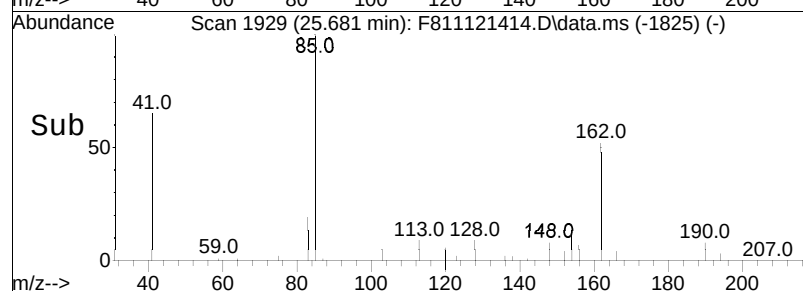
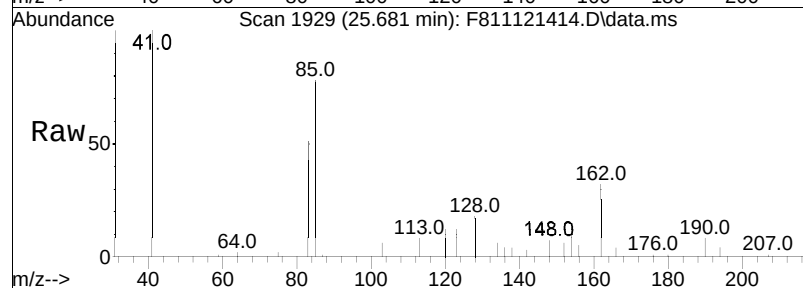
Tgt Ion:148 Resp: 31279

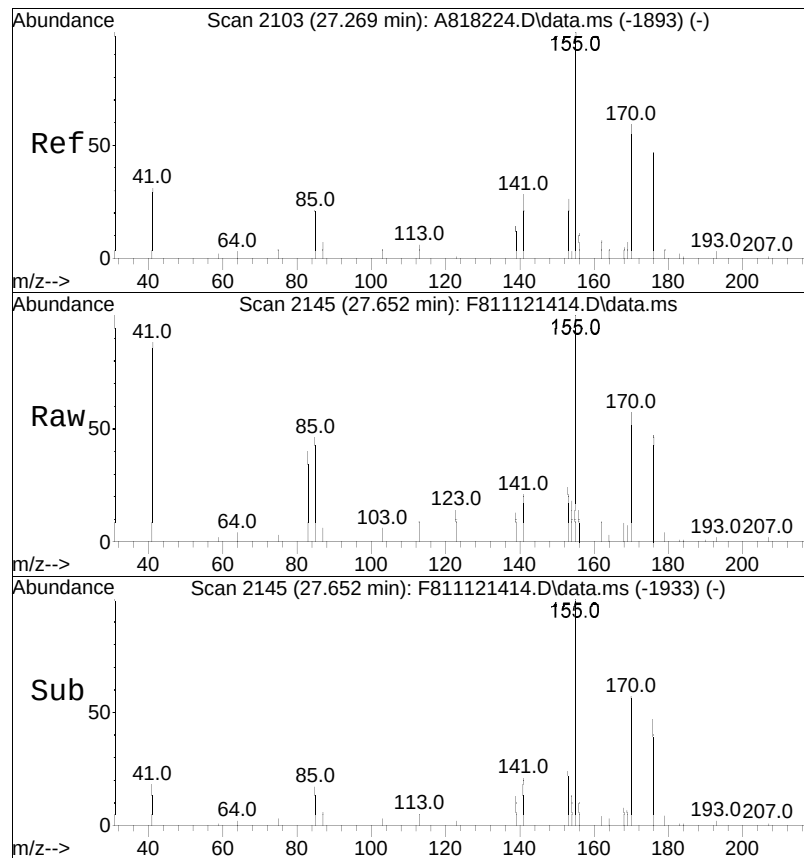




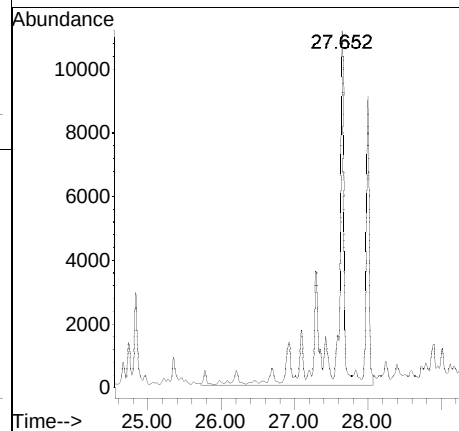
#20
 C2-Benzo(b)thiophenes
 Concen: 282.67 ng/mL M5
 RT: 25.681 min Scan# 1929
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

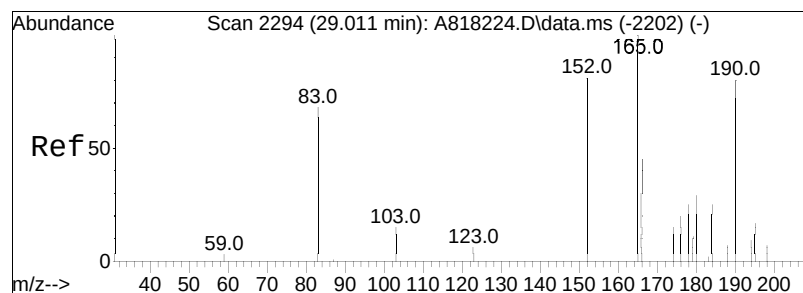
Tgt Ion:162 Resp: 51996





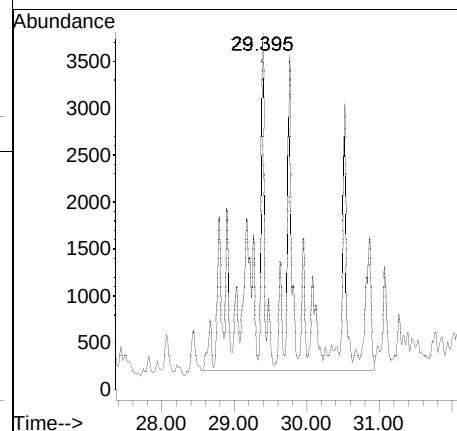
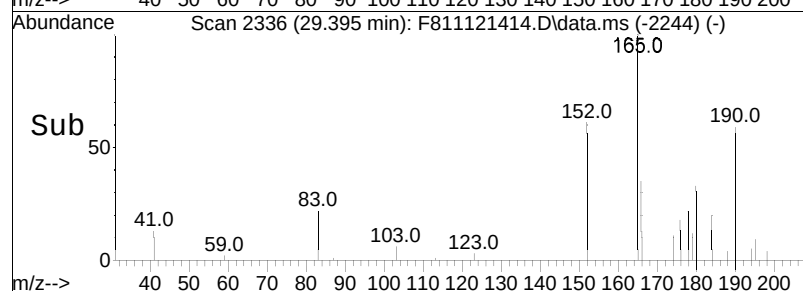
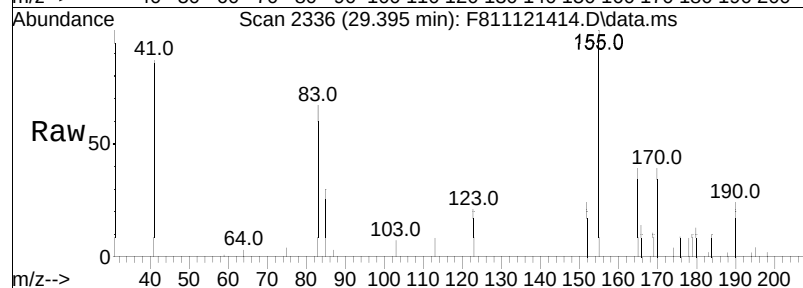
#21
 C3-Benzo(b)thiophenes
 Concen: 558.78 ng/mL M5
 RT: 27.652 min Scan# 2145
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:176 Resp: 102787

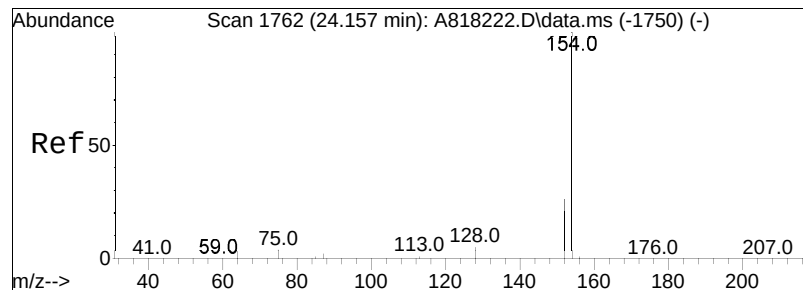




#22
 C4-Benzo(b)thiophenes
 Concen: 466.74 ng/mL M5
 RT: 29.395 min Scan# 2336
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

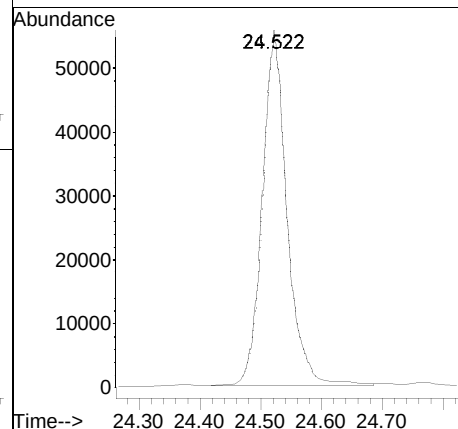
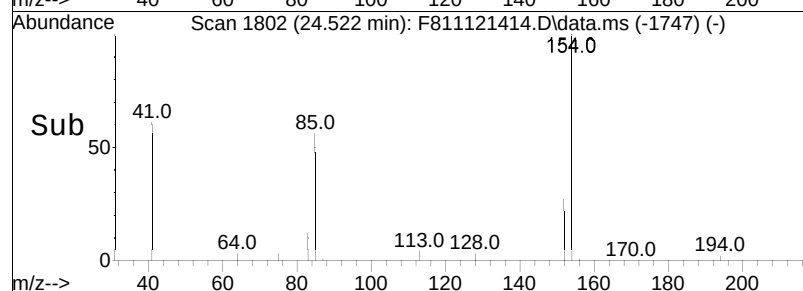
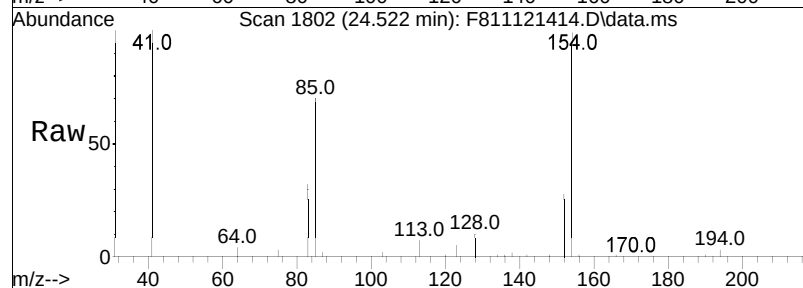
Tgt Ion:190 Resp: 85855

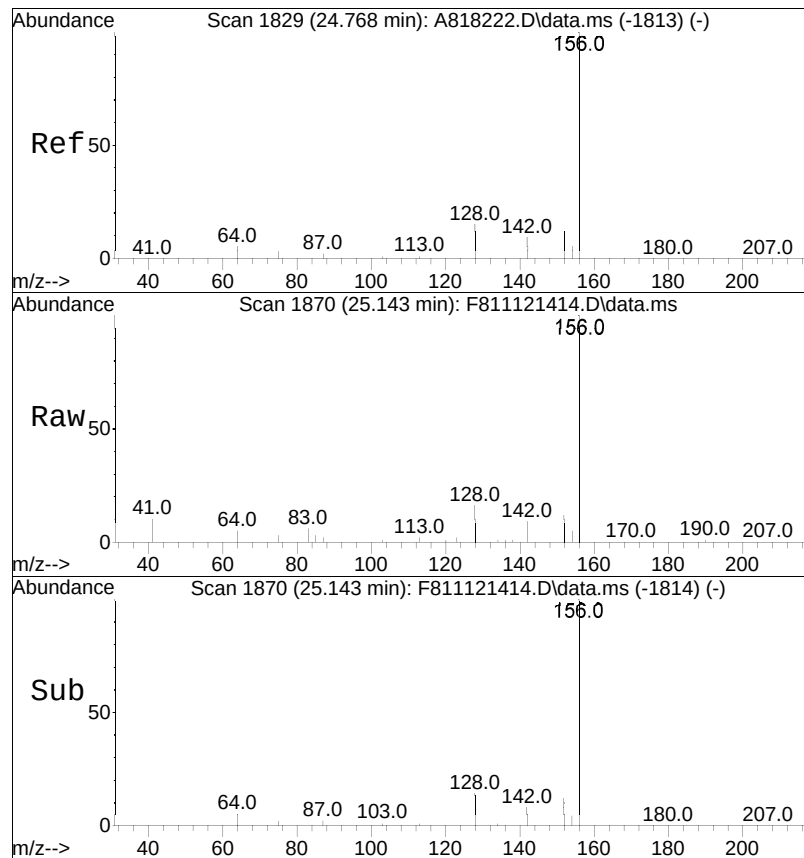




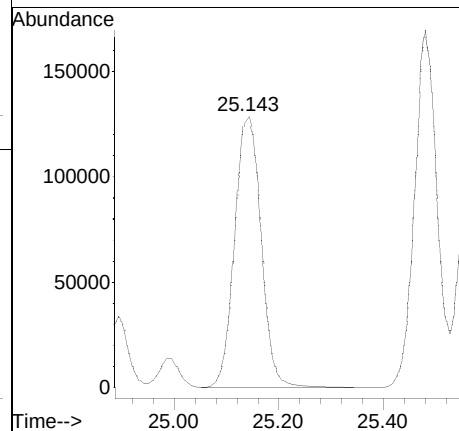
#23
 Biphenyl
 Concen: 862.62 ng/mL
 RT: 24.522 min Scan# 1802
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

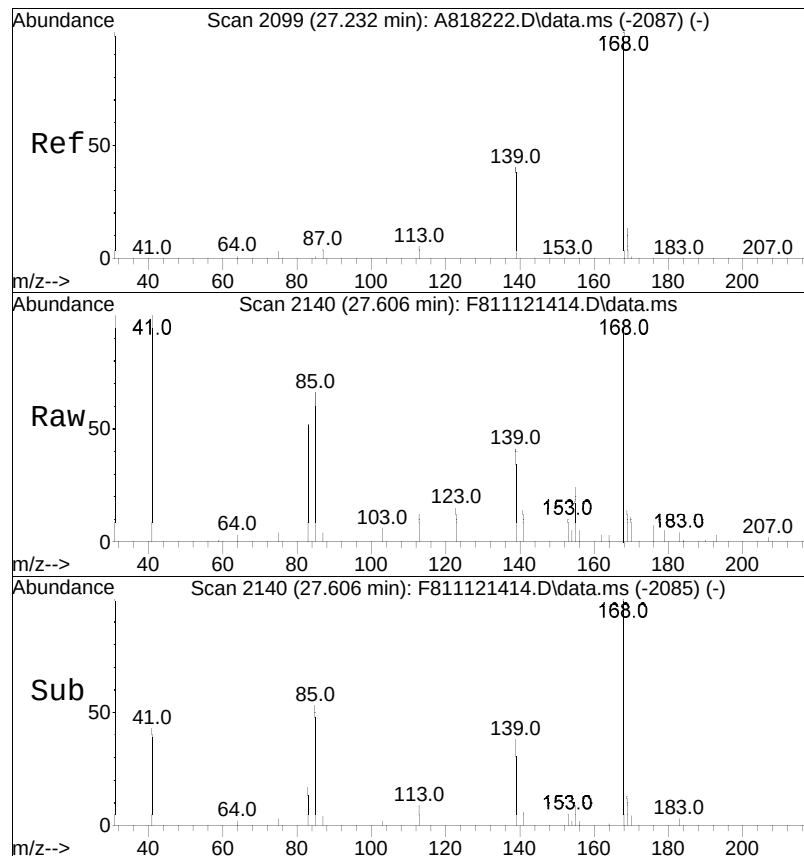
Tgt Ion:154 Resp: 153740





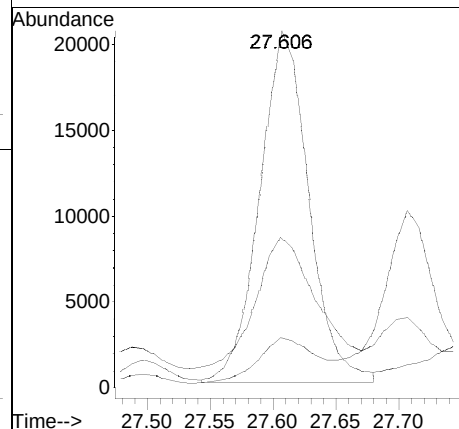
#24
2,6-Dimethylnaphthalene
Concen: 3700.75 ng/mL
RT: 25.143 min Scan# 1870
Delta R.T. 0.009 min
Lab File: F811121414.D
Acq: 13 Nov 2014 11:46 am
Tgt Ion:156 Resp: 449136

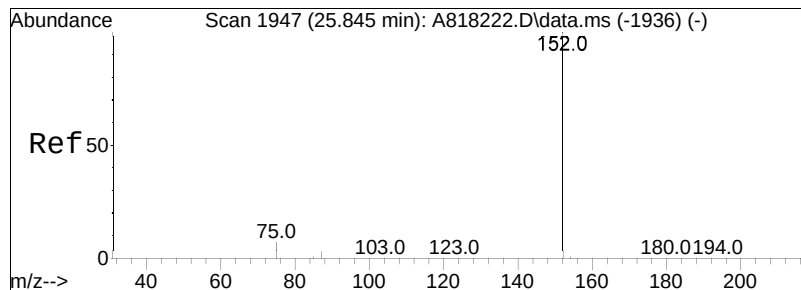




#25
 Dibenzofuran
 Concen: 305.24 ng/mL
 RT: 27.606 min Scan# 2140
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

Tgt Ion:	168	Resp:	55710
Ion Ratio	Lower	Upper	
168	100		
139	46.1	26.2	48.8
169	15.1	9.0	16.8





#26

Acenaphthylene

Concen: 35.00 ng/mL

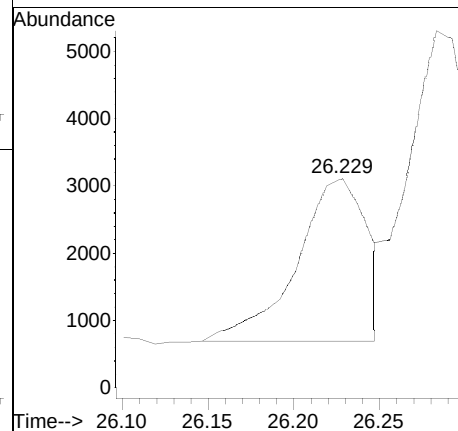
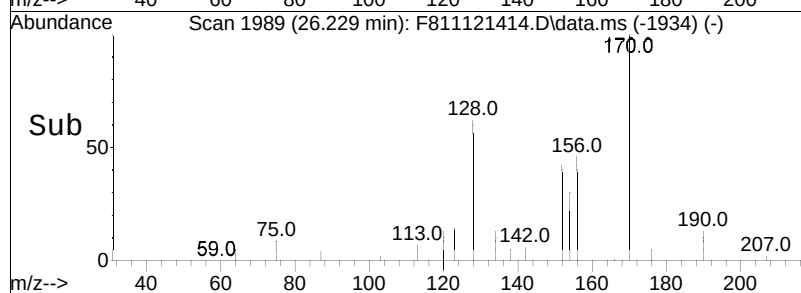
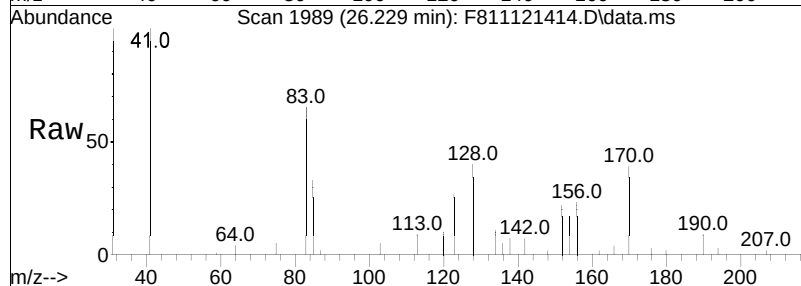
RT: 26.229 min Scan# 1989

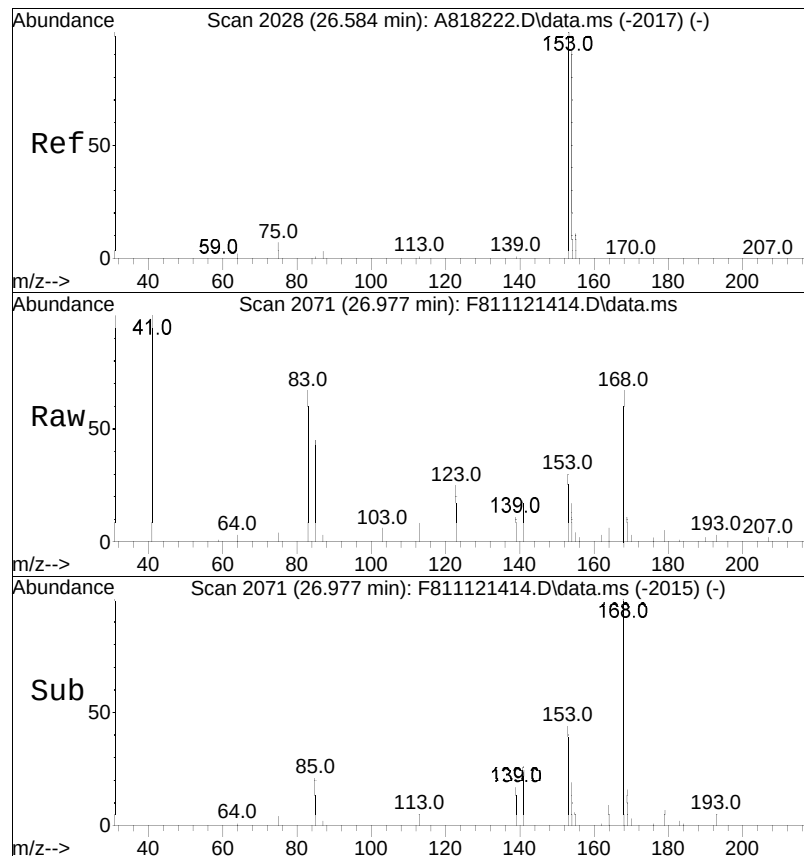
Delta R.T. -0.000 min

Lab File: F811121414.D

Acq: 13 Nov 2014 11:46 am

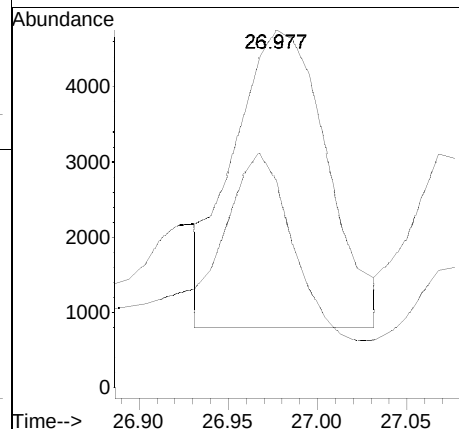
Tgt Ion:152 Resp: 7005

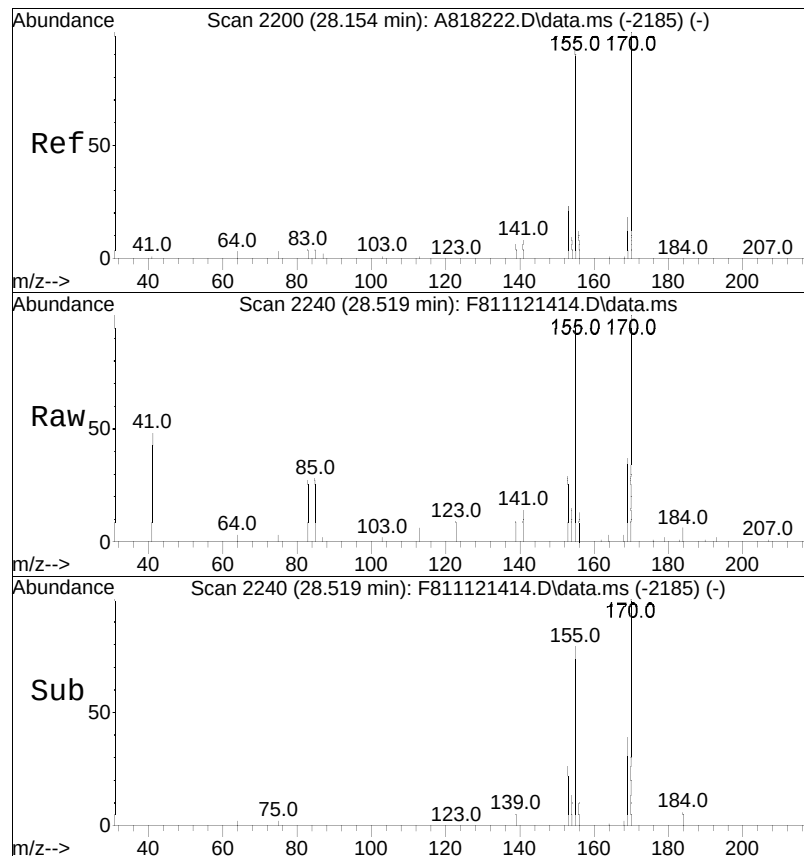




#27
 Acenaphthene
 Concen: 112.67 ng/mL M3
 RT: 26.977 min Scan# 2071
 Delta R.T. 0.009 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

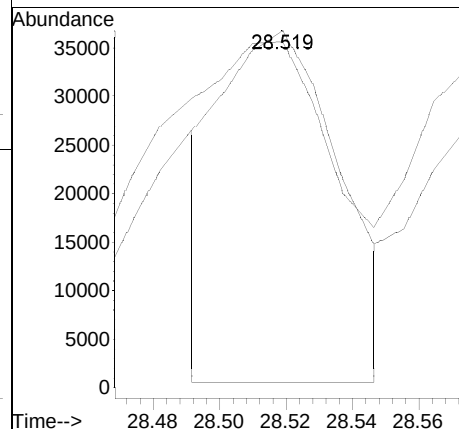
Tgt Ion	Ratio	Lower	Upper
153	100		
154	71.9	65.3	121.3

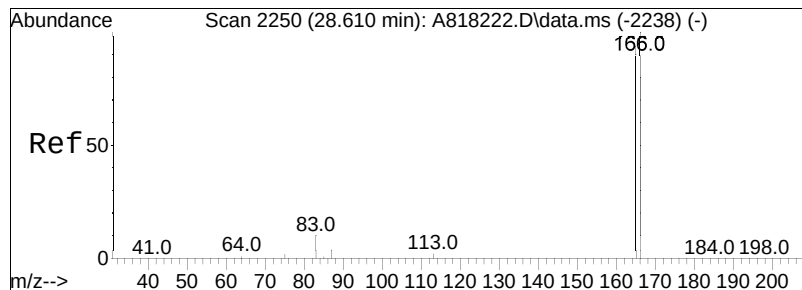




#28
 2,3,5-Trimethylnaphthalene
 Concen: 906.55 ng/mL M3
 RT: 28.519 min Scan# 2240
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

Tgt Ion	Ratio	Lower	Upper
170	100		
155	159.8	66.2	123.0#





#29

Fluorene

Concen: 426.76 ng/mL M4

RT: 28.984 min Scan# 2291

Delta R.T. 0.000 min

Lab File: F811121414.D

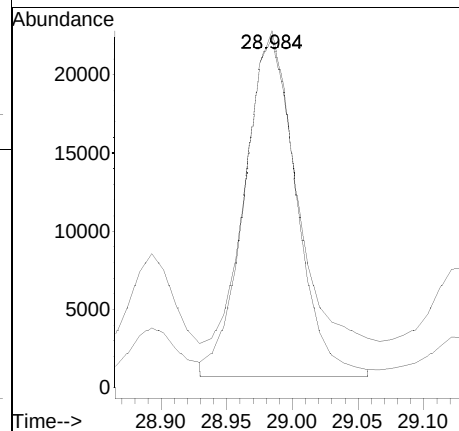
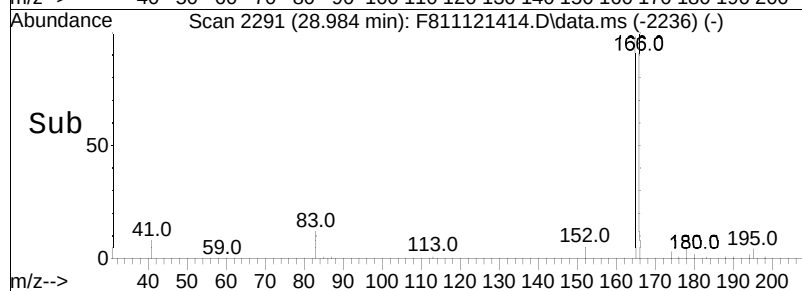
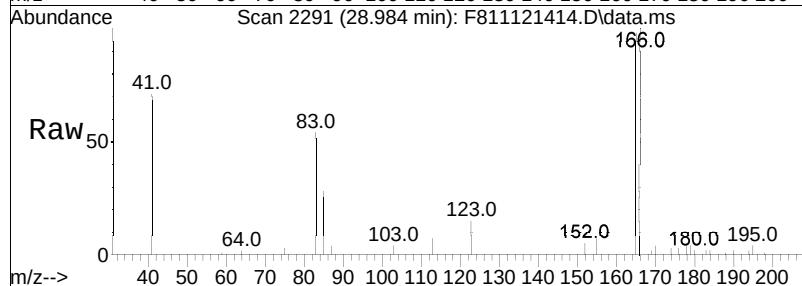
Acq: 13 Nov 2014 11:46 am

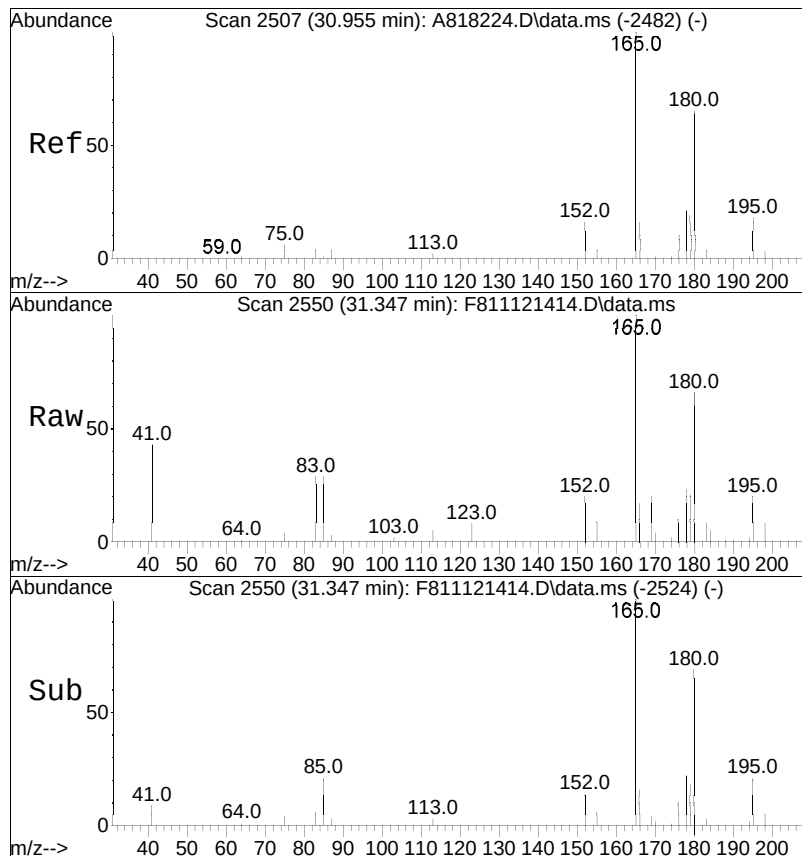
Tgt Ion:166 Resp: 59856

Ion Ratio Lower Upper

166 100

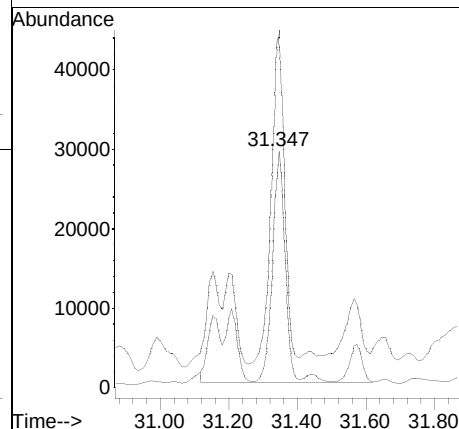
165 113.9 65.2 121.2

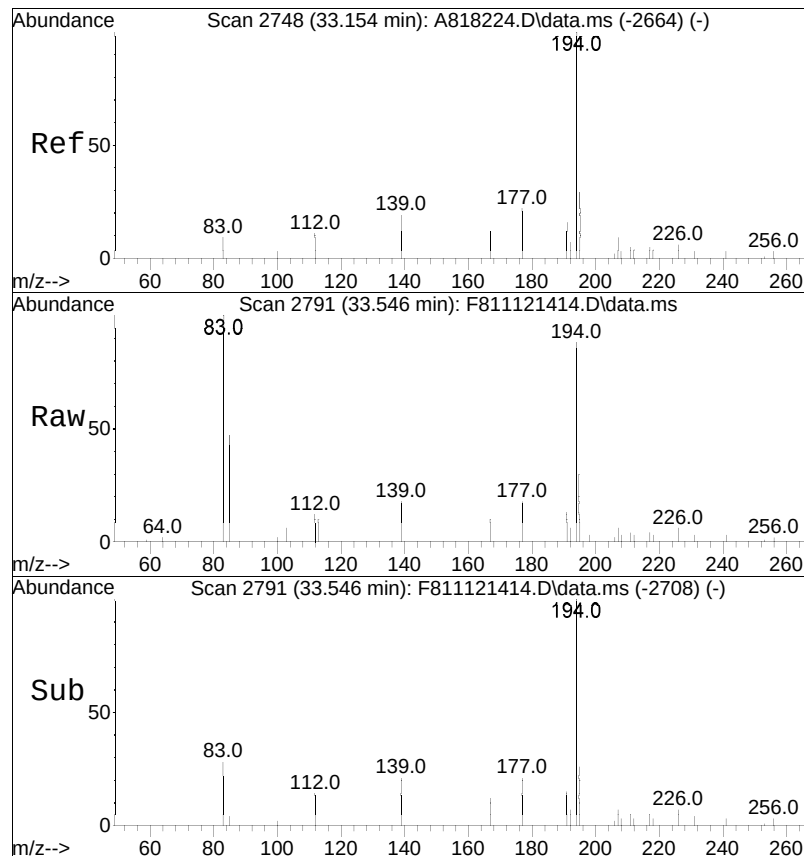




#30
 C1-Fluorenes
 Concen: 920.51 ng/mL M5
 RT: 31.347 min Scan# 2550
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

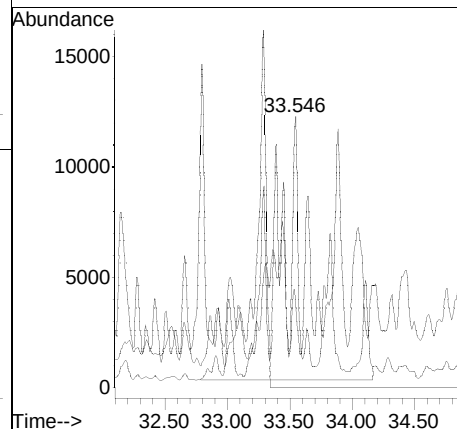
Tgt Ion	Ratio	Lower	Upper
180	100		
165	84.2	105.7	196.3#

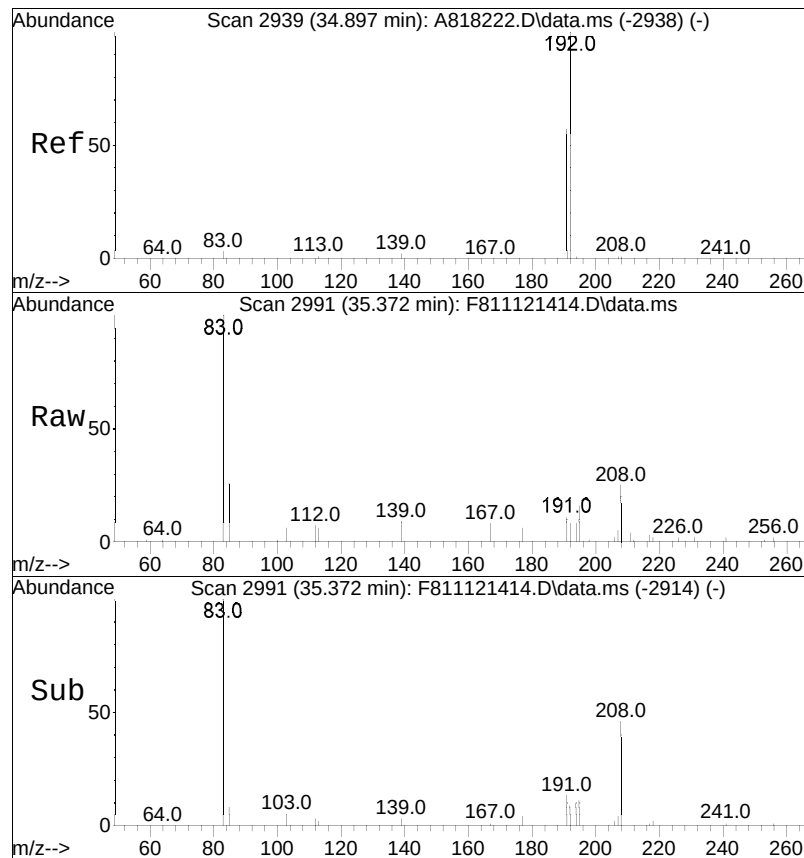




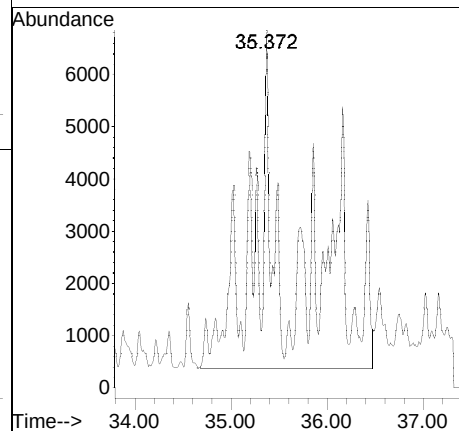
#31
 C2-Fluorenes
 Concen: 1407.94 ng/mL M5
 RT: 33.546 min Scan# 2791
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

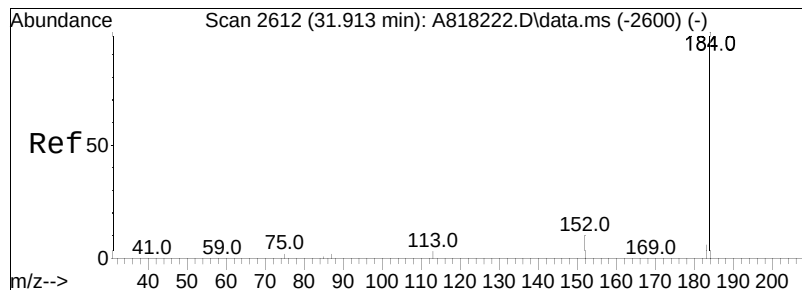
Tgt Ion:	194	Resp:	197475
Ion Ratio	Lower	Upper	
194	100		
179	0.0	0.0	0.0
195	3.9	23.6	43.8#





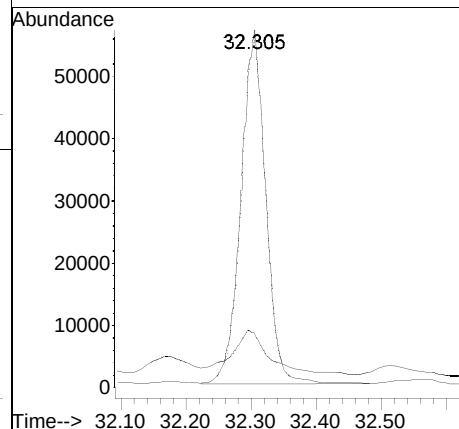
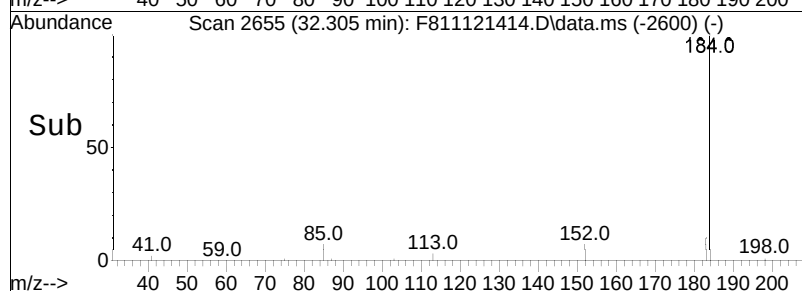
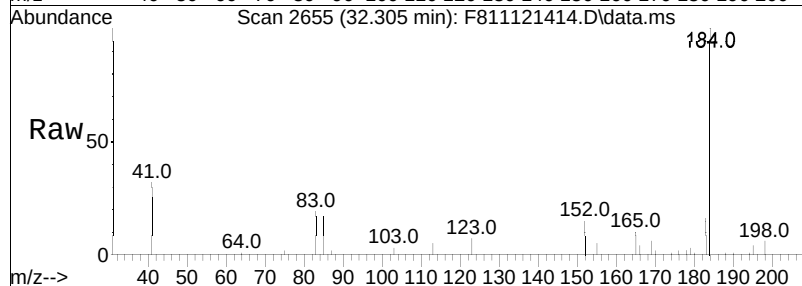
#32
 C3-Fluorenes
 Concen: 1249.59 ng/mL M5
 RT: 35.372 min Scan# 2991
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:208 Resp: 175265

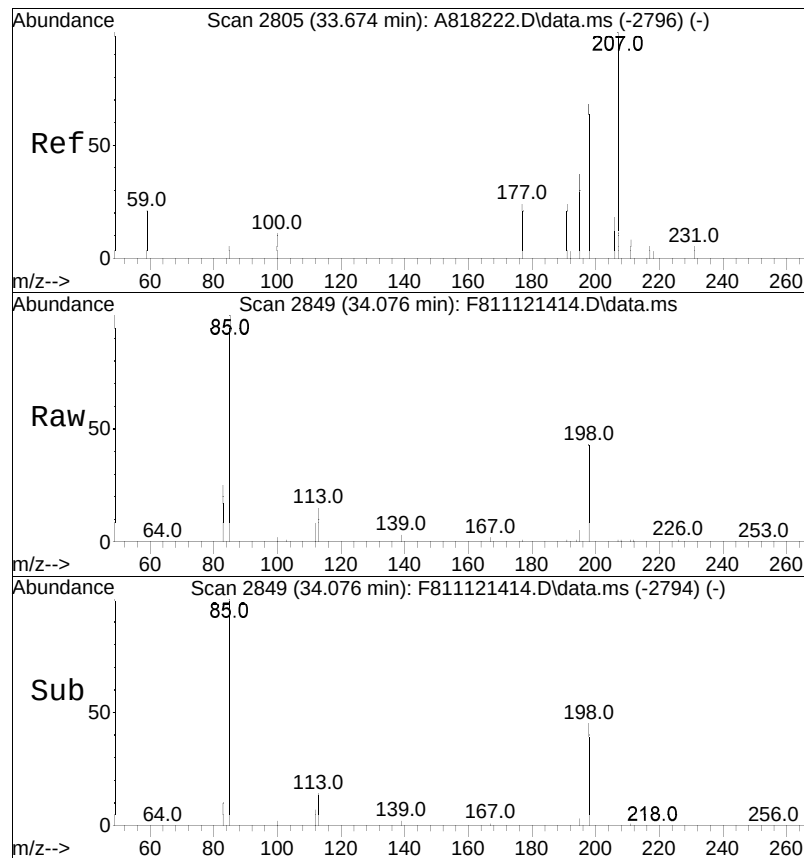




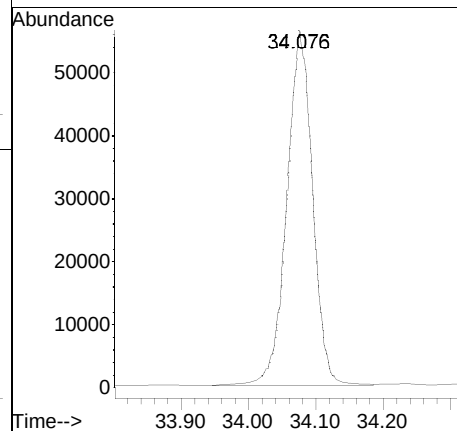
#33
Dibenzo[thiophene]
Concen: 761.04 ng/mL
RT: 32.305 min Scan# 2655
Delta R.T. 0.000 min
Lab File: F811121414.D
Acq: 13 Nov 2014 11:46 am

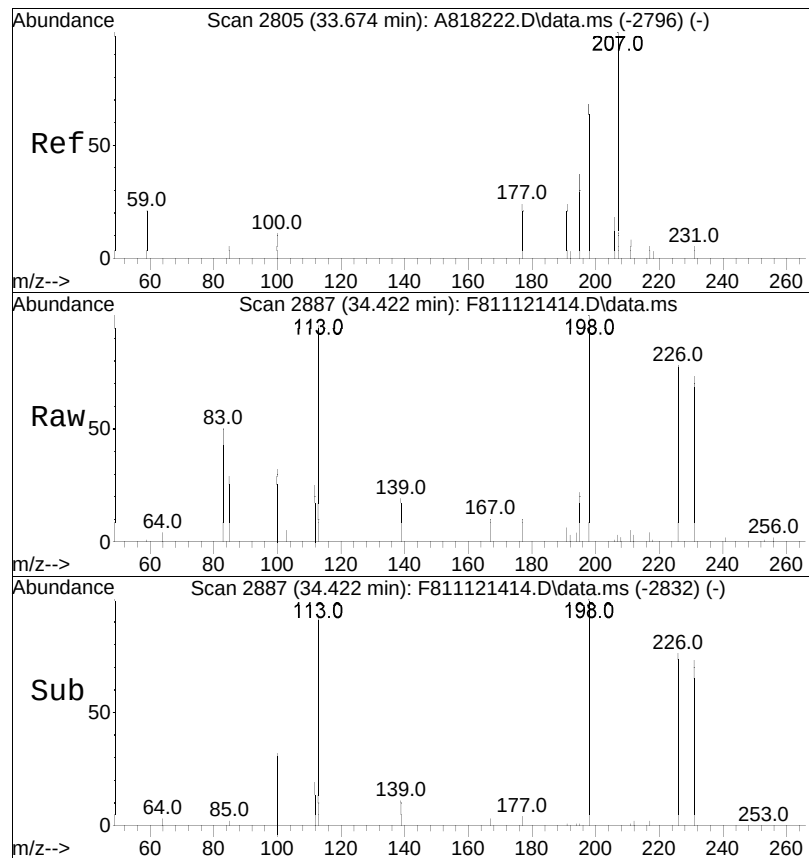
Tgt Ion	Ratio	Lower	Upper
184	100		
152	18.9	6.4	12.0#



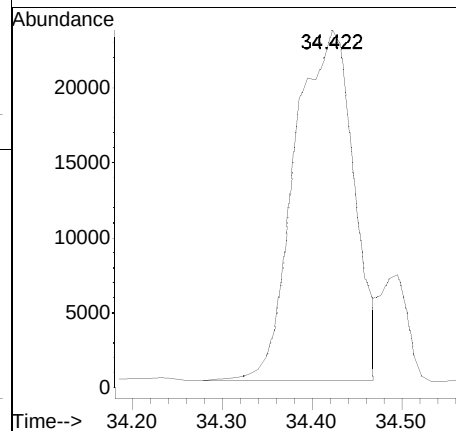


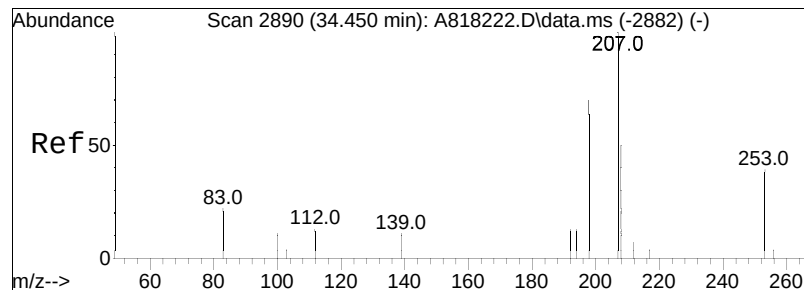
#34
 4-Methyldibenzothiophene(4MDT)
 Concen: 752.89 ng/mL
 RT: 34.076 min Scan# 2849
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:198 Resp: 147839





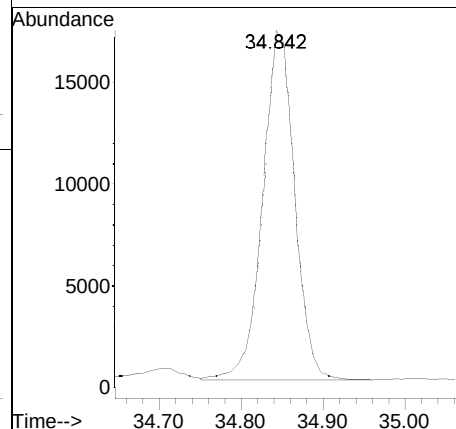
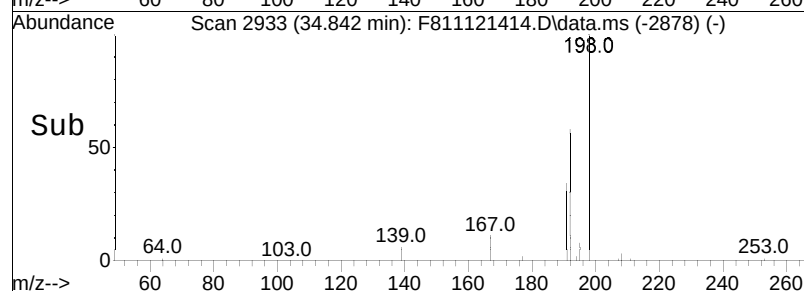
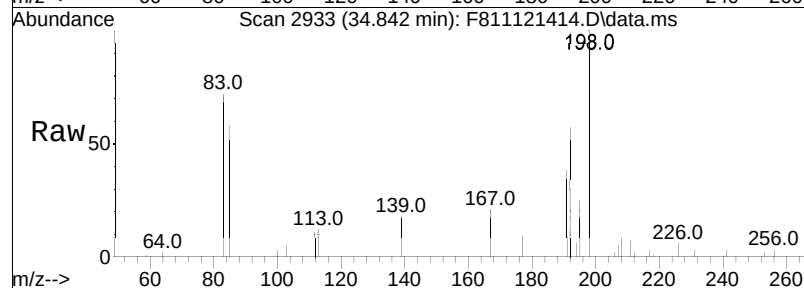
#35
2/3-Methyldibenzothiophene(2MD)
Concen: 540.70 ng/mL
RT: 34.422 min Scan# 2887
Delta R.T. 0.000 min
Lab File: F811121414.D
Acq: 13 Nov 2014 11:46 am
Tgt Ion:198 Resp: 106173

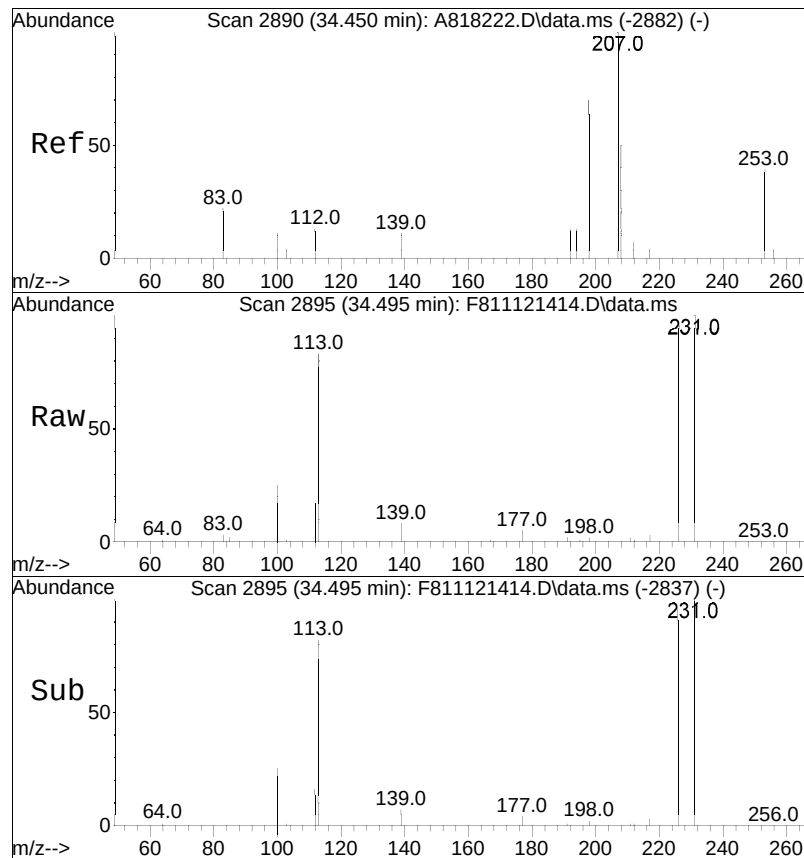




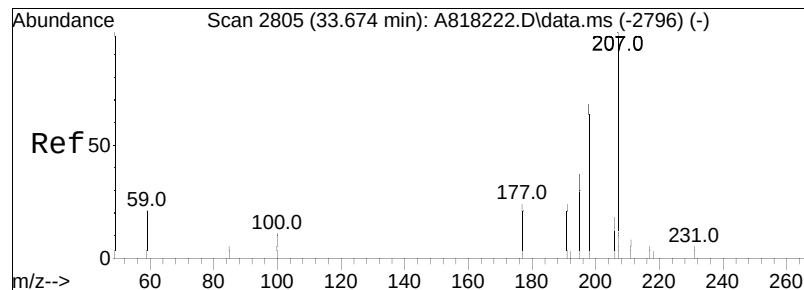
#36
 1-Methyldibenzothiophene(1MDT)
 Concen: 233.66 ng/mL
 RT: 34.842 min Scan# 2933
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

Tgt Ion:198 Resp: 45882



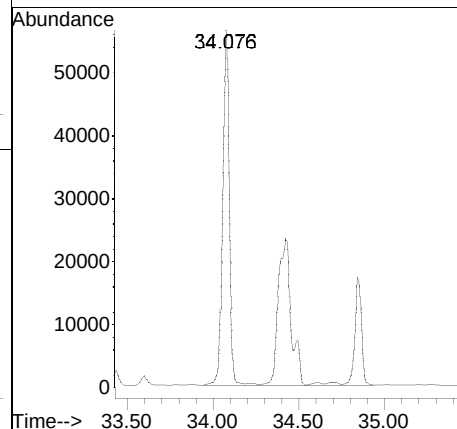
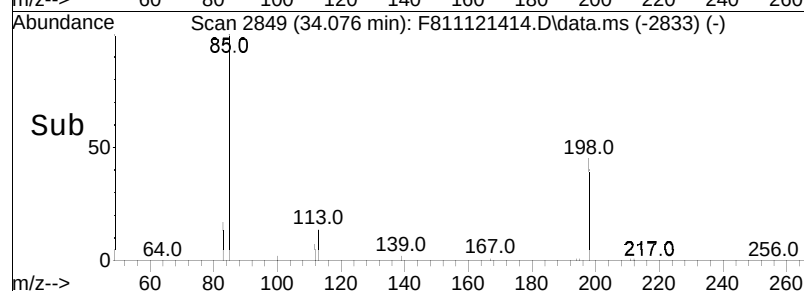
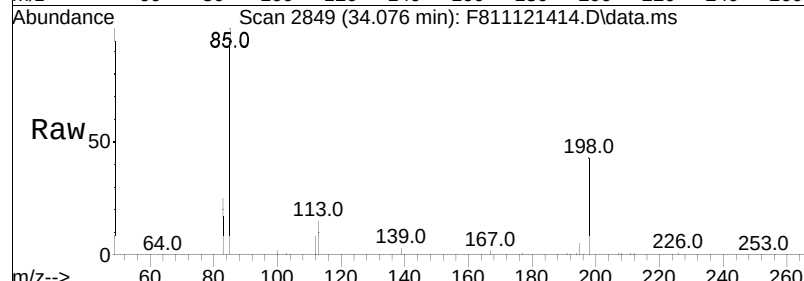


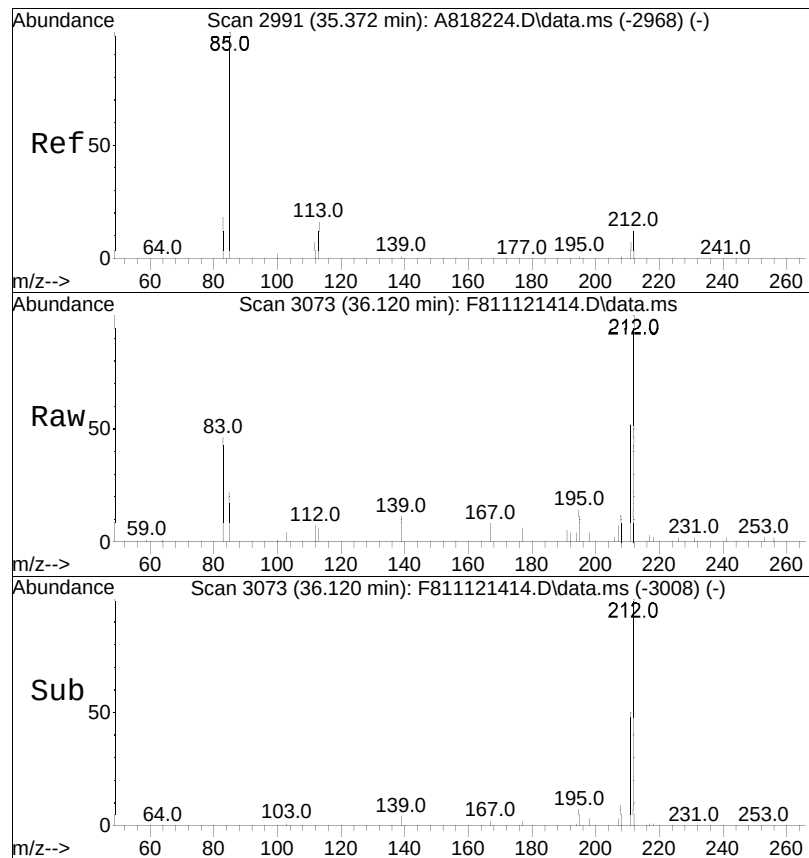
#37
 OTP
 Concen: 76.48 ng/mL M3
 RT: 34.495 min Scan# 2895
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:198 Resp: 15017



#38
 C1-Dibenzothiophenes
 Concen: 1637.44 ng/mL M5
 RT: 34.076 min Scan# 2849
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

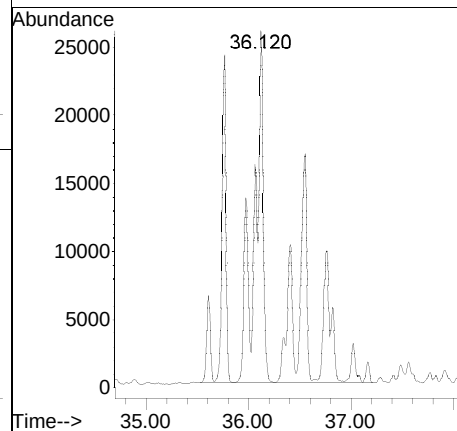
Tgt Ion:198 Resp: 321531

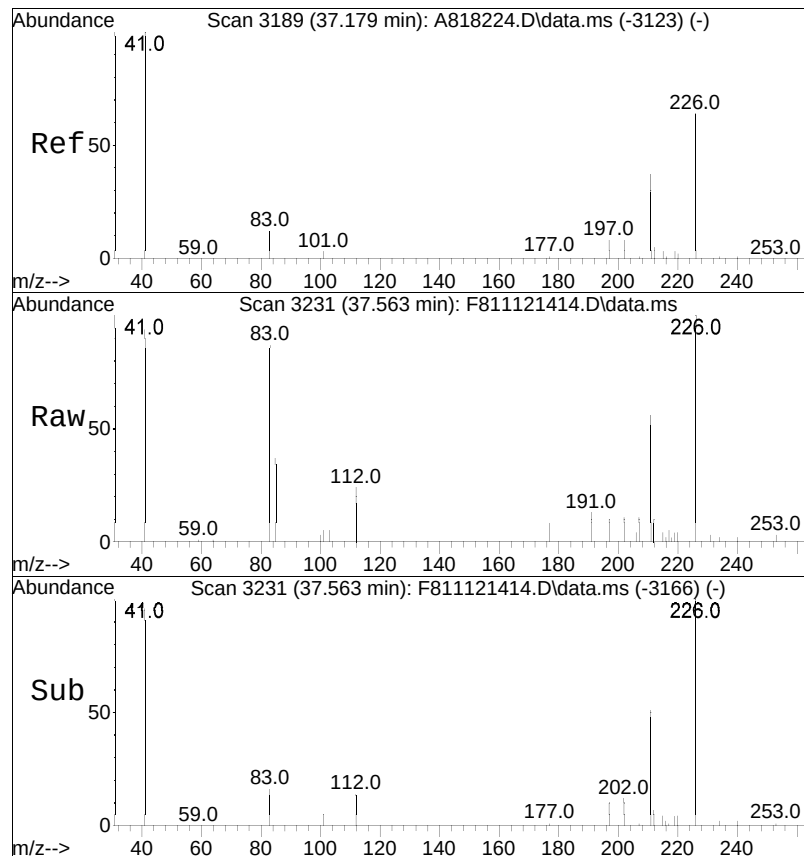




#39
C2-Dibenzothiophenes
Concen: 2028.06 ng/mL M5
RT: 36.120 min Scan# 3073
Delta R.T. 0.000 min
Lab File: F811121414.D
Acq: 13 Nov 2014 11:46 am

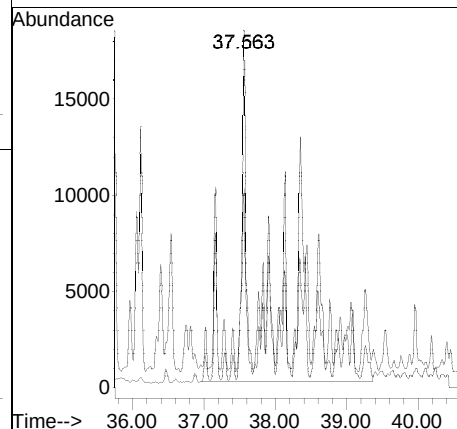
Tgt Ion:212 Resp: 398234

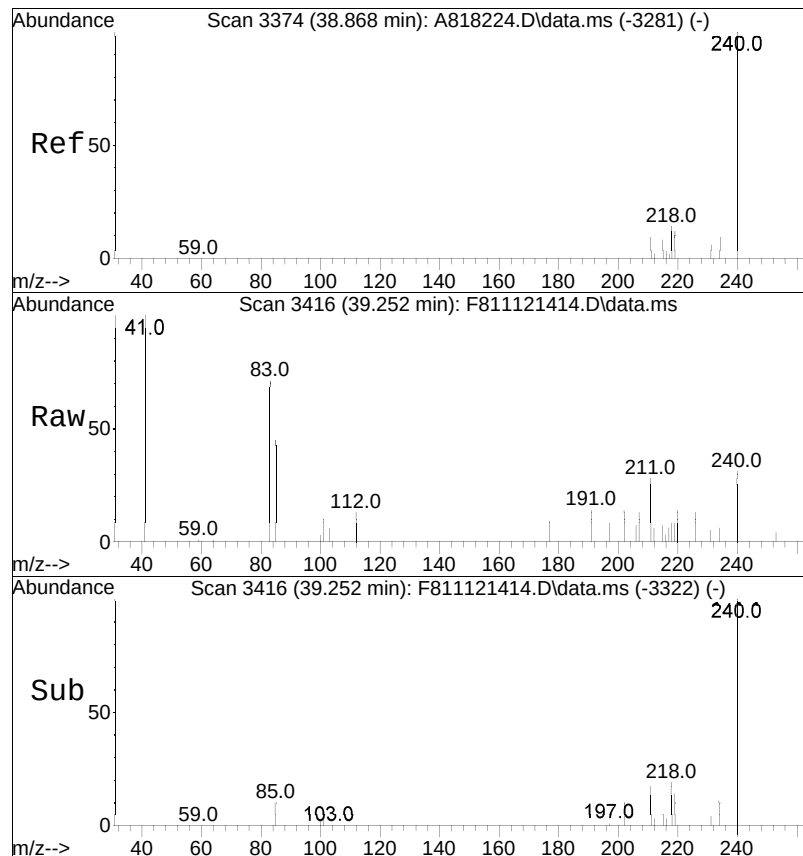




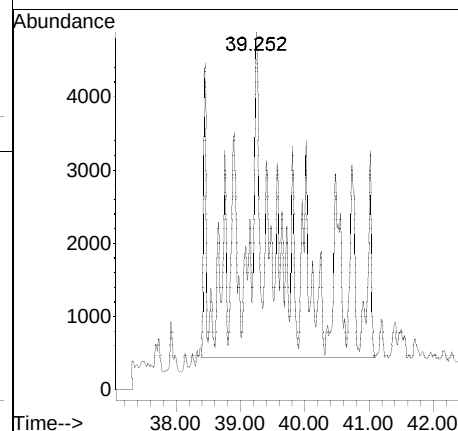
#40
 C3-Dibenzothiophenes
 Concen: 1797.82 ng/mL M5
 RT: 37.563 min Scan# 3231
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

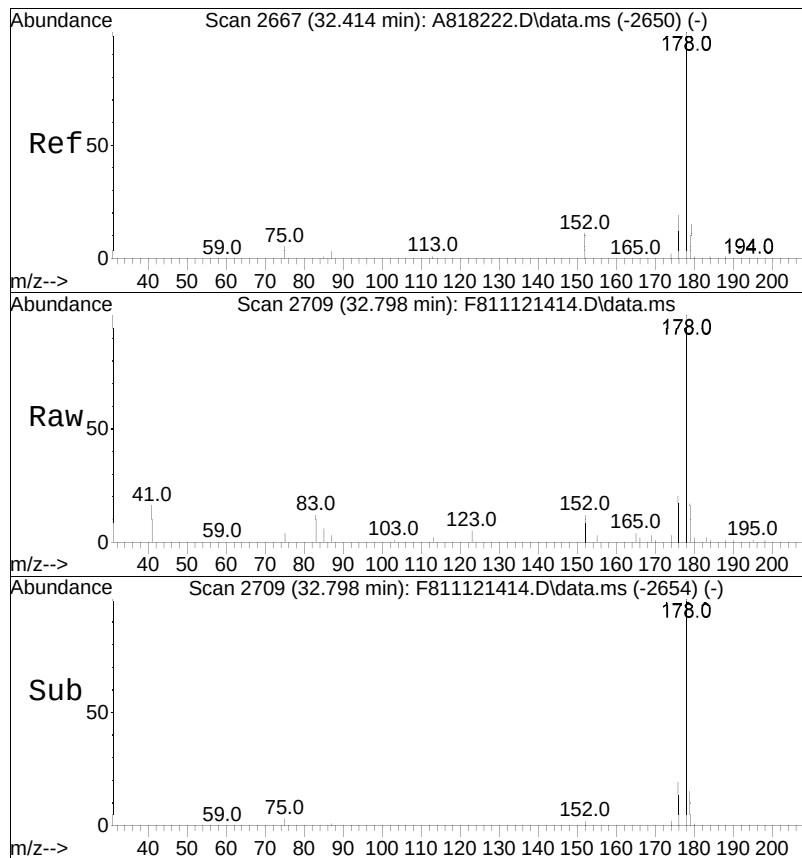
Tgt Ion:226 Resp: 353024
 Ion Ratio Lower Upper
 226 100
 211 12.5 39.1 72.7#





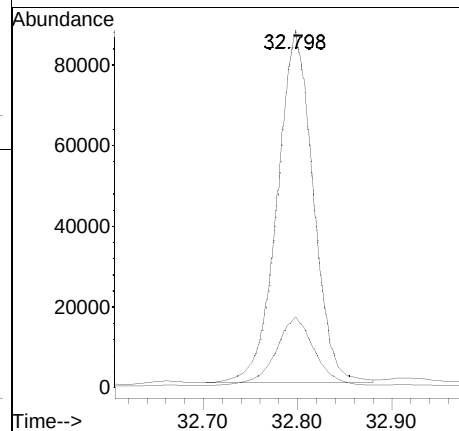
#41
 C4-Dibenzothiophenes
 Concen: 1003.07 ng/mL M5
 RT: 39.252 min Scan# 3416
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:240 Resp: 196964

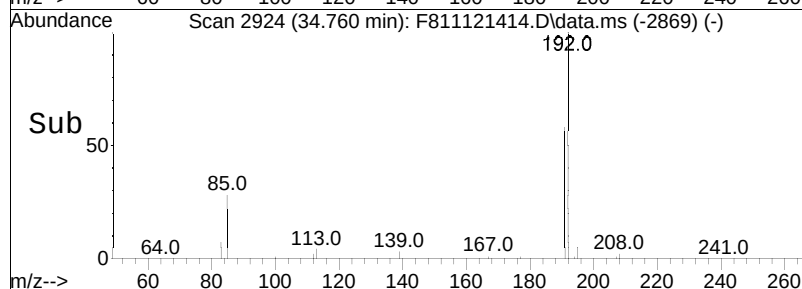
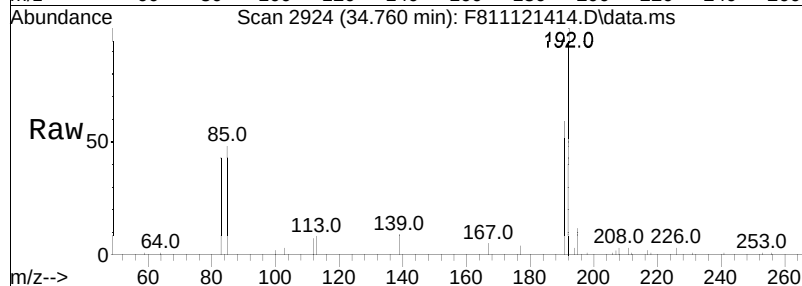
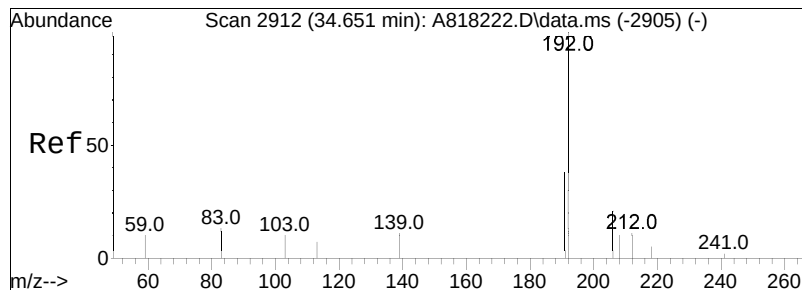




#43
 Phenanthrene
 Concen: 1199.02 ng/mL
 RT: 32.798 min Scan# 2709
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

Tgt Ion	Ratio	Lower	Upper
178	100		
176	20.9	13.1	24.3





#44

3-Methylphenanthrene(3MP)

Concen: 522.24 ng/mL

RT: 34.760 min Scan# 2924

Delta R.T. 0.000 min

Lab File: F811121414.D

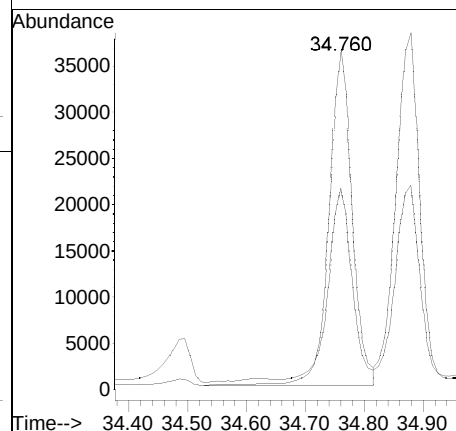
Acq: 13 Nov 2014 11:46 am

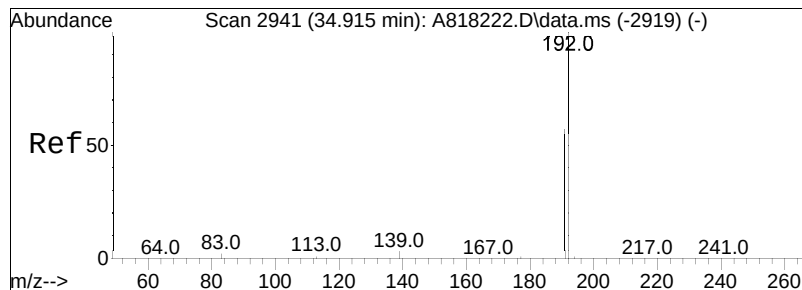
Tgt Ion:192 Resp: 99795

Ion Ratio Lower Upper

192 100

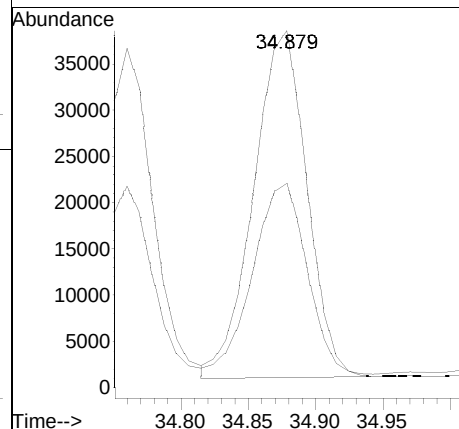
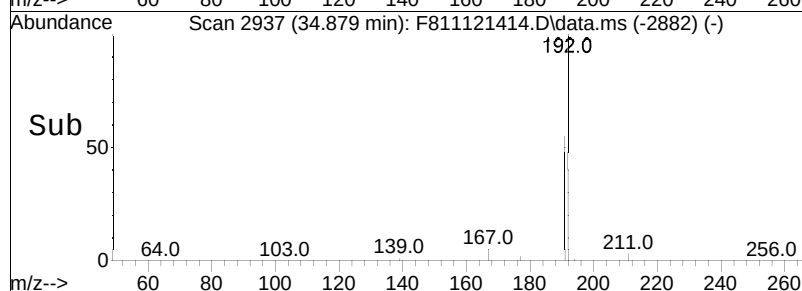
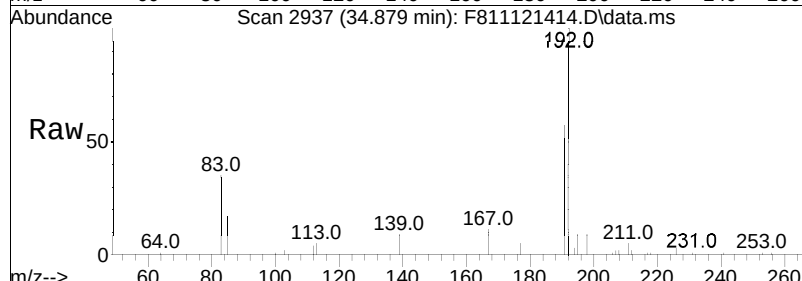
191 56.8 41.6 77.3

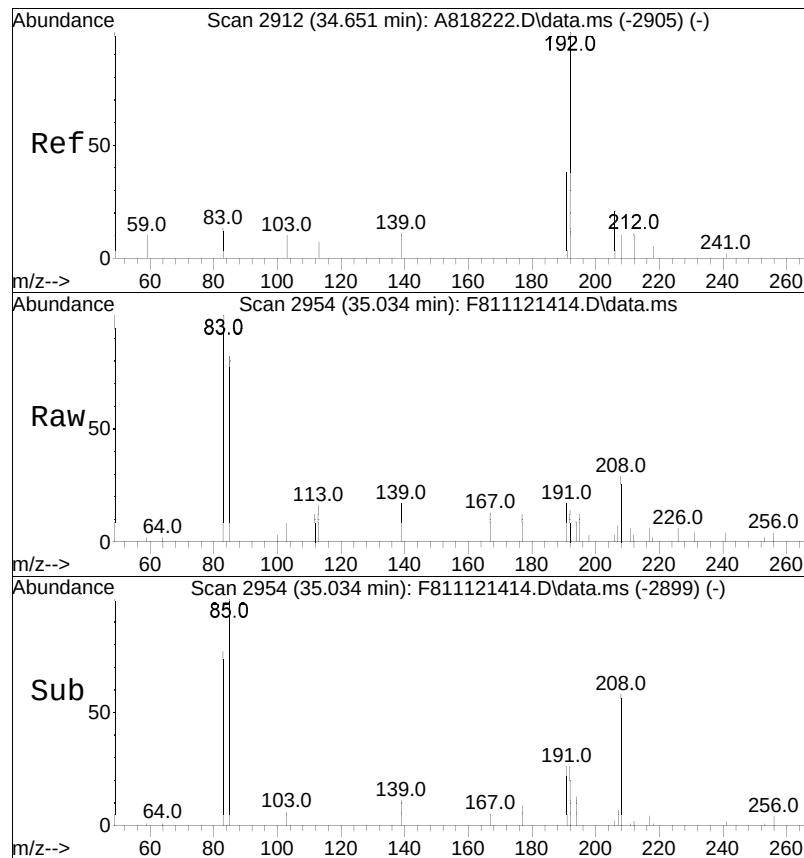




#45
 2-Methylphenanthrene(2MP)
 Concen: 539.13 ng/mL
 RT: 34.879 min Scan# 2937
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

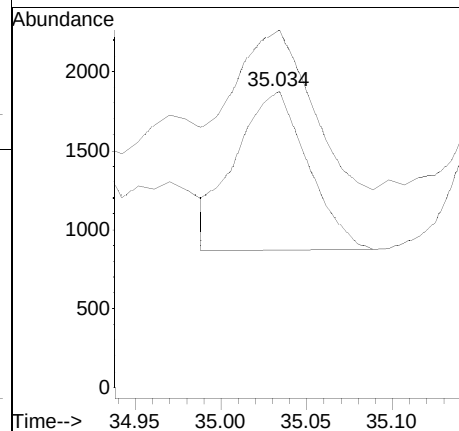
Tgt Ion	Ratio	Lower	Upper
192	100		
191	55.5	40.1	74.5

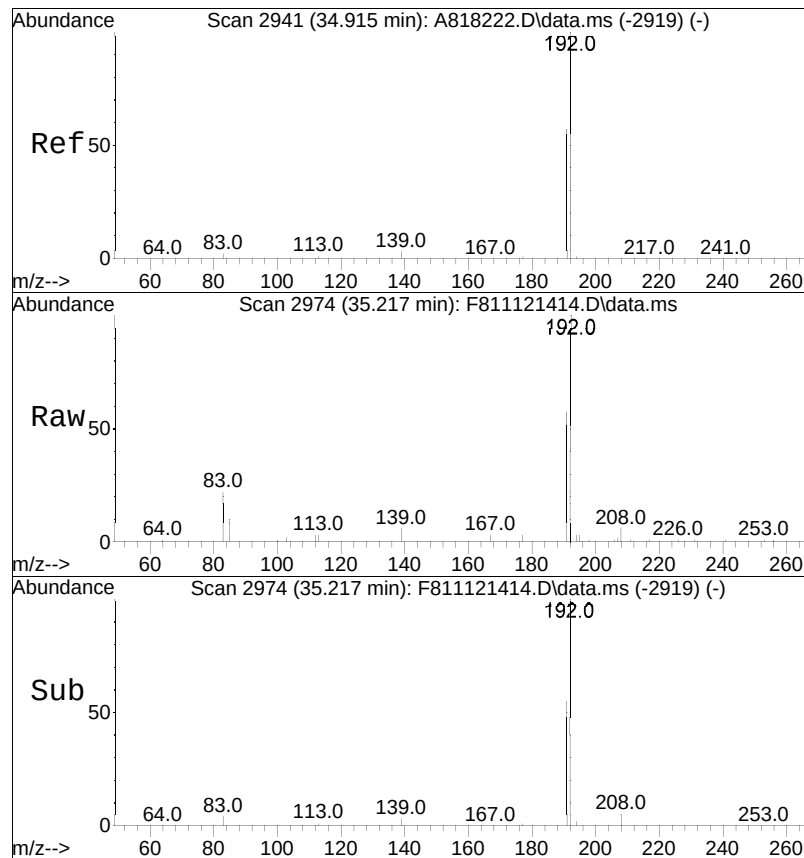




#46
 2-Methylantracene(2MA)
 Concen: 15.30 ng/mL
 RT: 35.034 min Scan# 2954
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

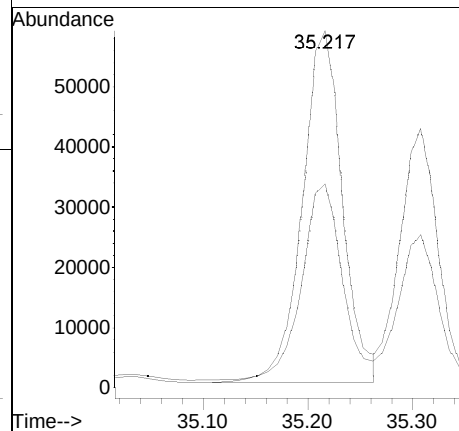
Tgt Ion	Ratio	Lower	Upper
192	100		
191	107.5	84.1	156.3

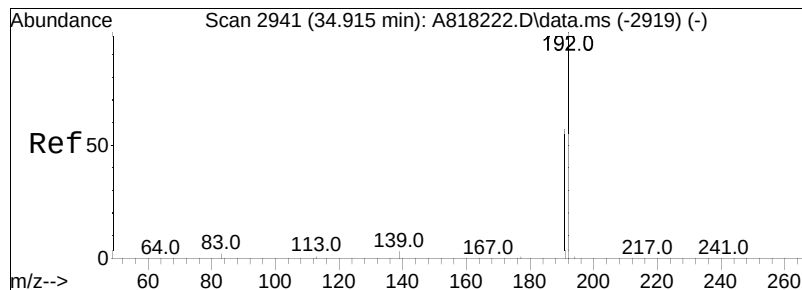




#47
 9/4-Methylphenanthrene(9MP)
 Concen: 811.41 ng/mL
 RT: 35.217 min Scan# 2974
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

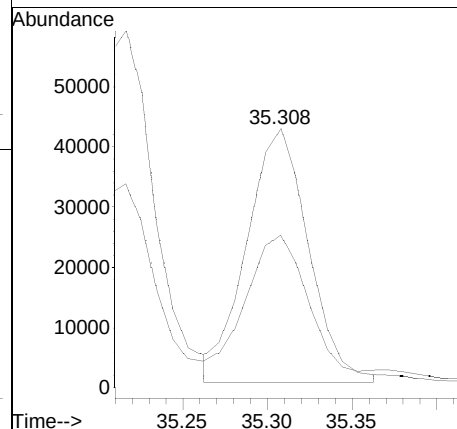
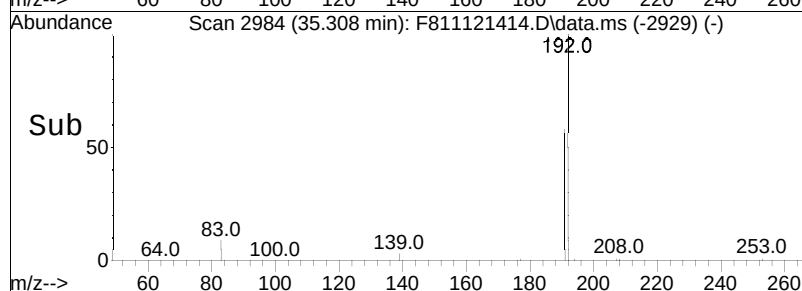
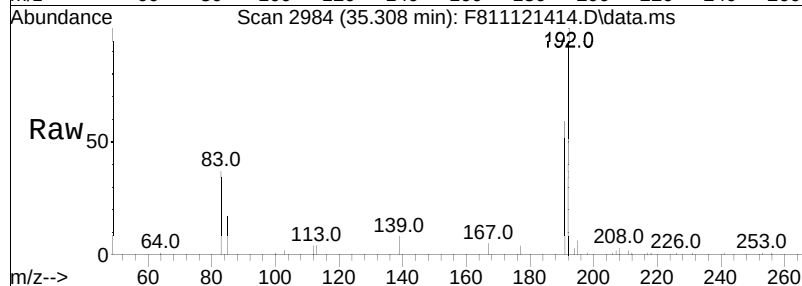
Tgt Ion	Ratio	Lower	Upper
192	100		
191	56.9	40.0	74.2

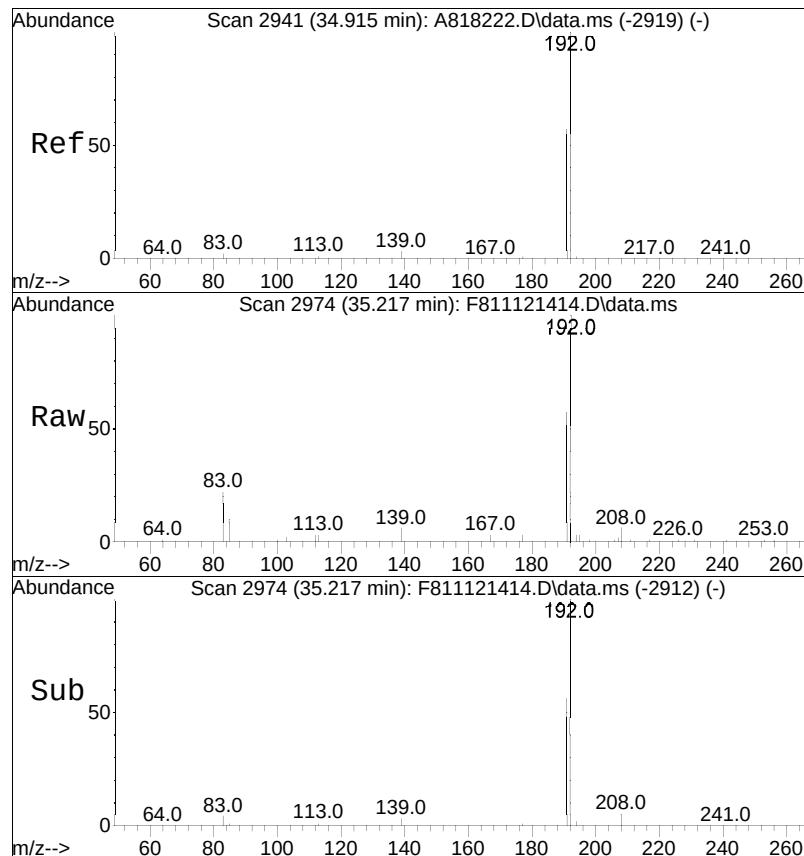




#48
 1-Methylphenanthrene(1MP)
 Concen: 555.98 ng/mL M4
 RT: 35.308 min Scan# 2984
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

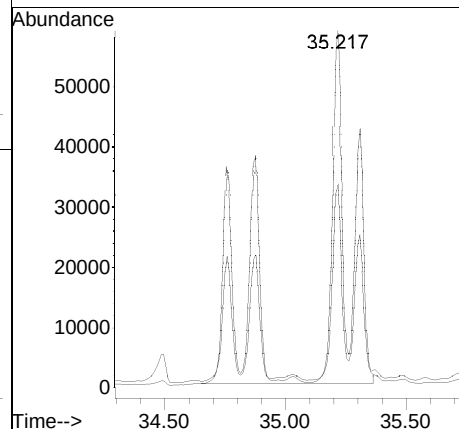
Tgt Ion	Ratio	Lower	Upper
192	100		
191	61.1	41.4	77.0

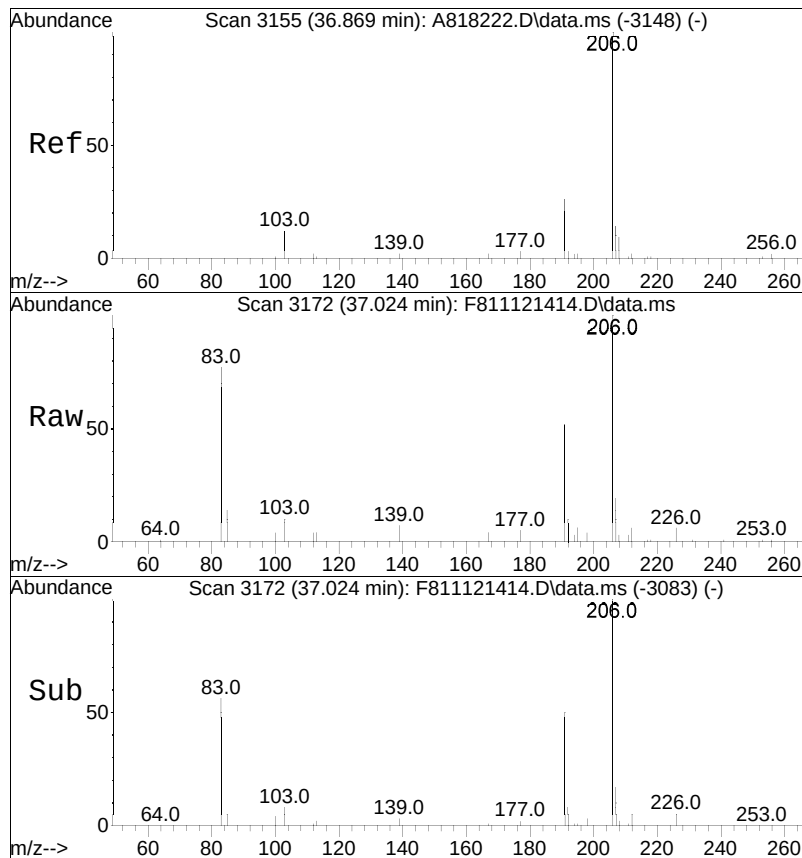




#49
 C1-Phenanthrenes/Anthracenes
 Concen: 2467.58 ng/mL M5
 RT: 35.217 min Scan# 2974
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

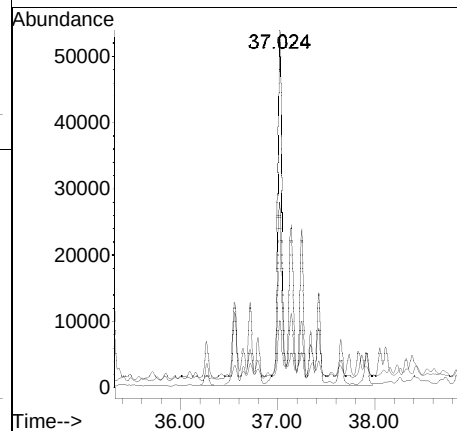
Tgt Ion	Ratio	Lower	Upper
192	100		
191	18.6	40.0	74.2#

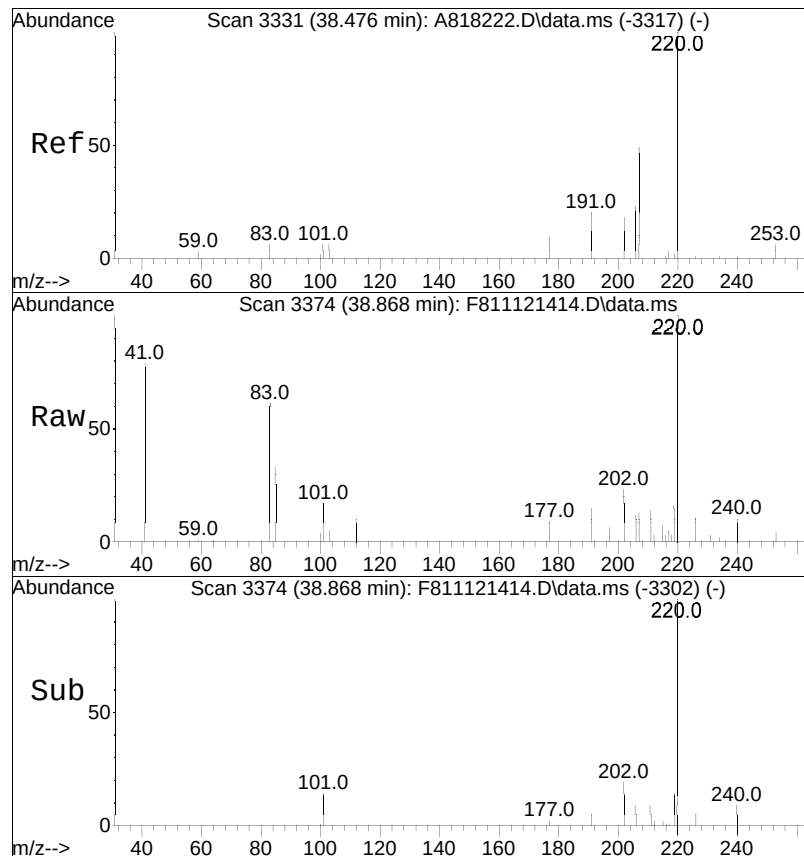




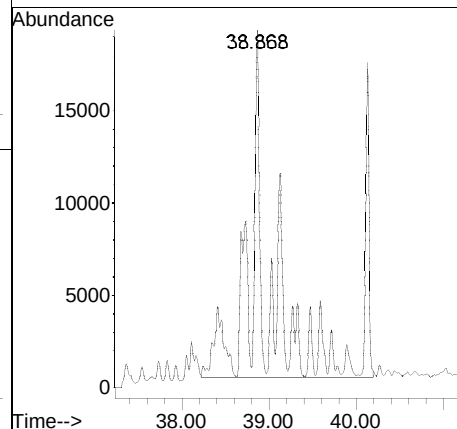
#50
 C2-Phenanthrenes/Anthracenes
 Concen: 2595.05 ng/mL M5
 RT: 37.024 min Scan# 3172
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

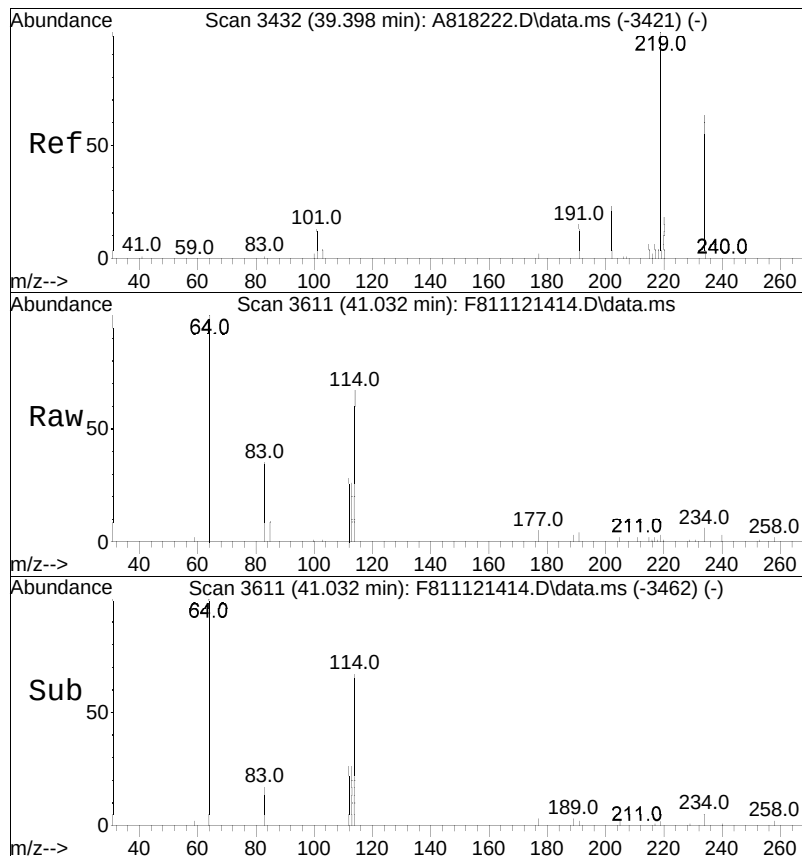
Tgt	Ion:206	Resp:	495891
Ion	Ratio	Lower	Upper
206	100		
191	16.1	36.5	67.7#
207	5.2	13.3	24.7#





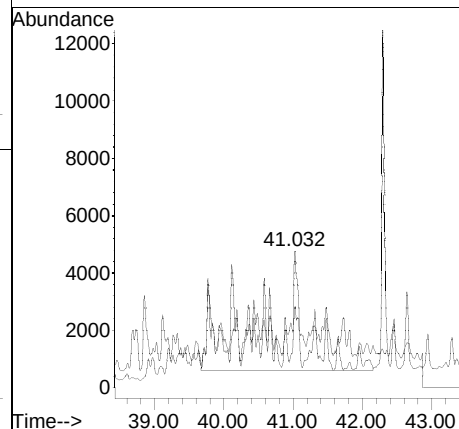
#52
 C3-Phenanthrenes/Anthracenes
 Concen: 1599.16 ng/mL M5
 RT: 38.868 min Scan# 3374
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:220 Resp: 305586

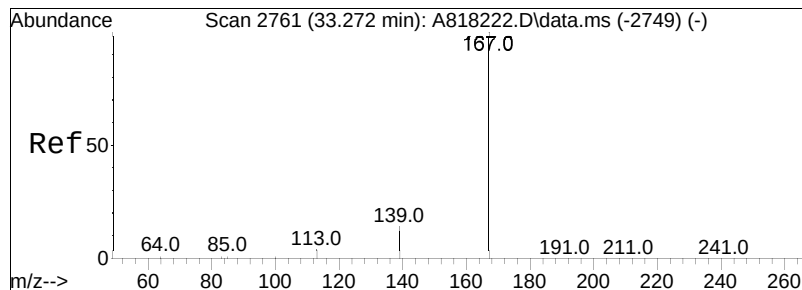




#53
 C4-Phenanthrenes/Anthracenes
 Concen: 691.65 ng/mL M5
 RT: 41.032 min Scan# 3611
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

Tgt	Ion	Ratio	Lower	Upper
234	100			
219	2.2	41.8	77.6	





#56

Carbazole

Concen: 37.11 ng/mL M4

RT: 33.647 min Scan# 2802

Delta R.T. 0.001 min

Lab File: F811121414.D

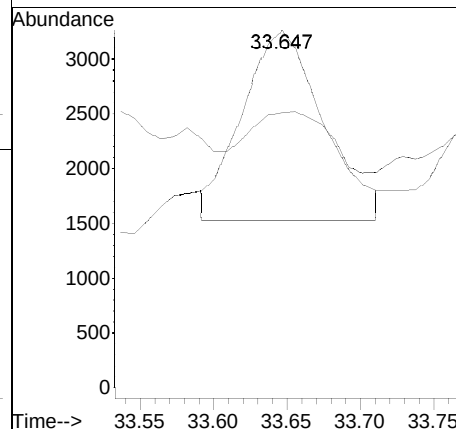
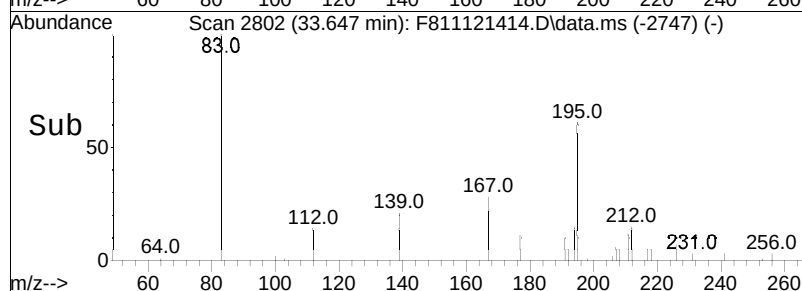
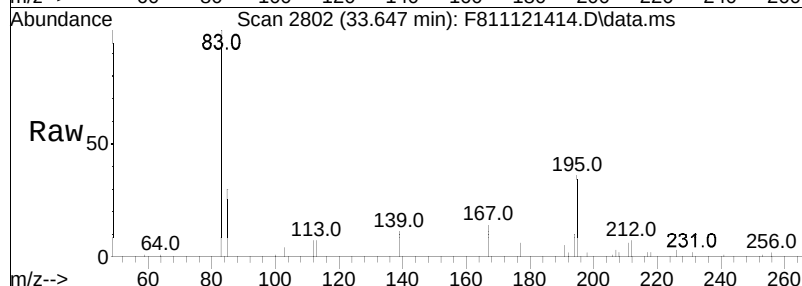
Acq: 13 Nov 2014 11:46 am

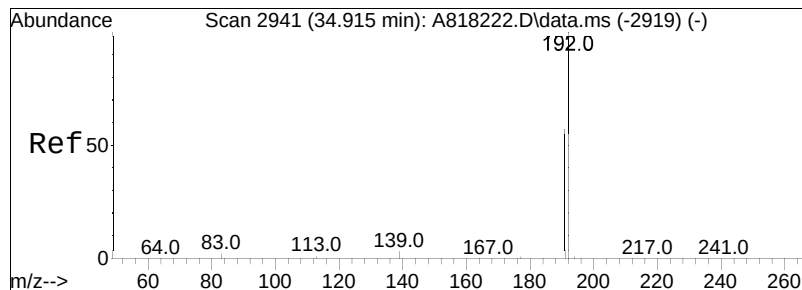
Tgt Ion:167 Resp: 6602

Ion Ratio Lower Upper

167 100

139 0.0 9.3 17.3#





#57

1-Methylphenanthrene

Concen: 770.61 ng/mL M4

RT: 35.308 min Scan# 2984

Delta R.T. -0.000 min

Lab File: F811121414.D

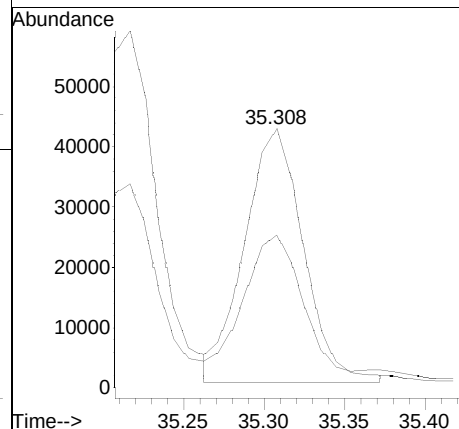
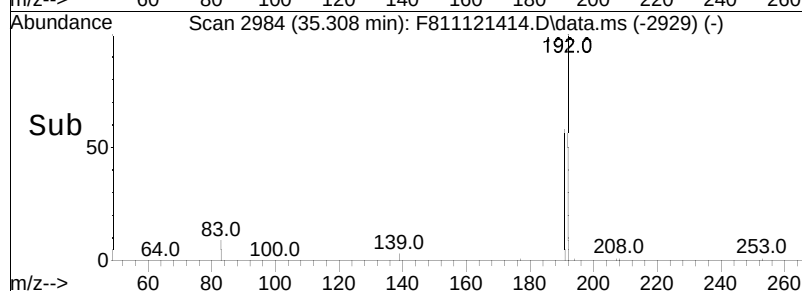
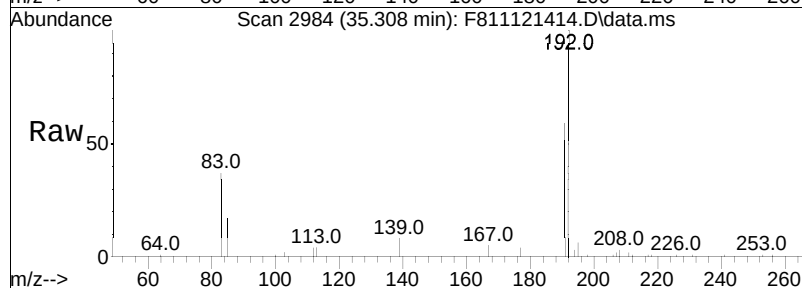
Acq: 13 Nov 2014 11:46 am

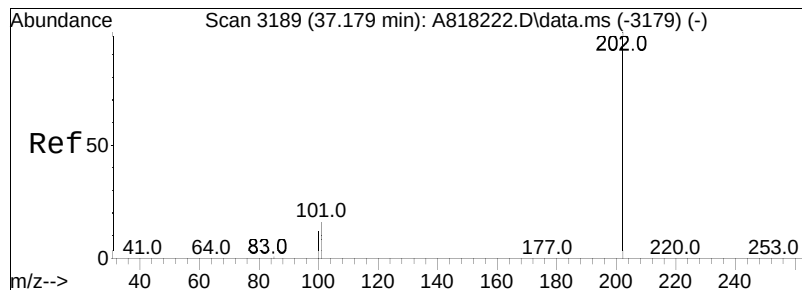
Tgt Ion:192 Resp: 106857

Ion Ratio Lower Upper

192 100

191 60.7 39.1 72.5





#58

Fluoranthene

Concen: 22.30 ng/mL M4

RT: 37.572 min Scan# 3232

Delta R.T. -0.000 min

Lab File: F811121414.D

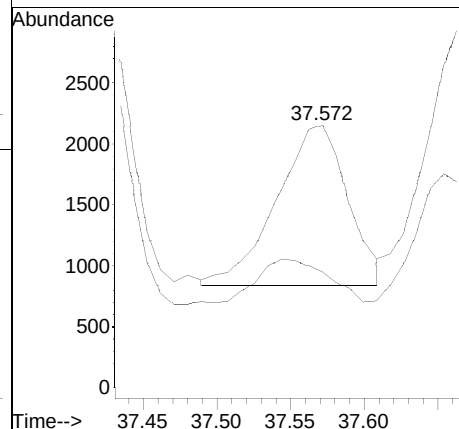
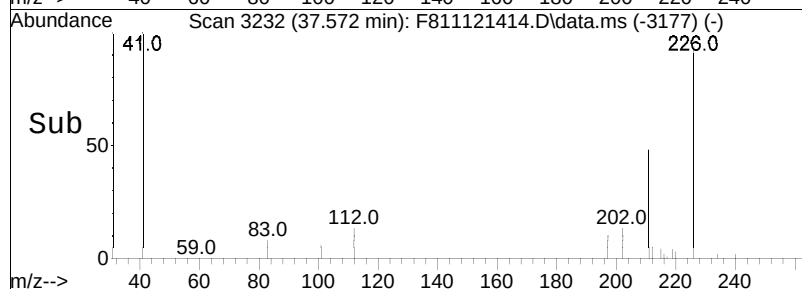
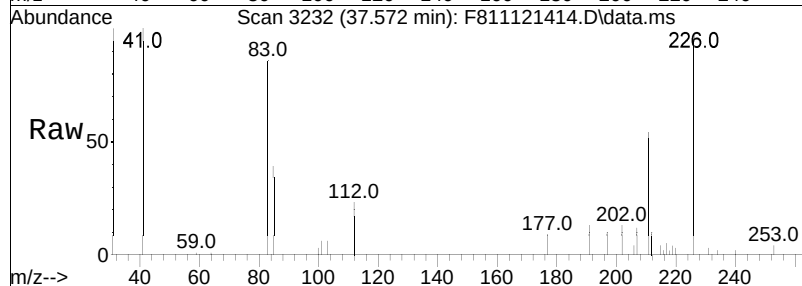
Acq: 13 Nov 2014 11:46 am

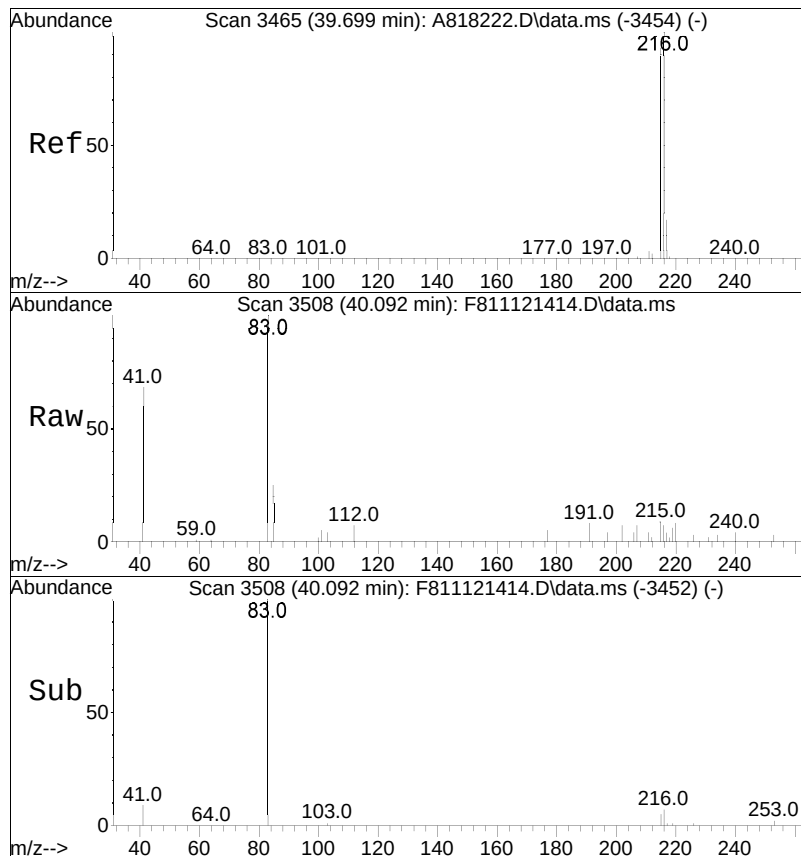
Tgt Ion: 202 Resp: 4406

Ion Ratio Lower Upper

202 100

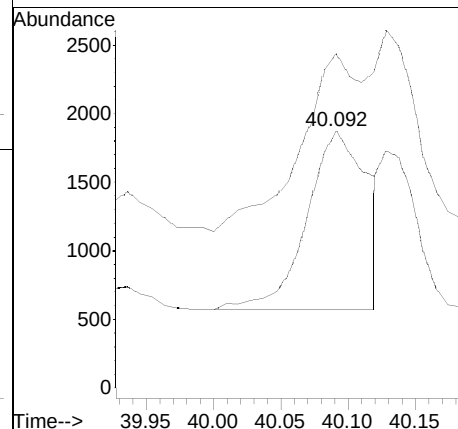
101 0.0 11.3 21.1#

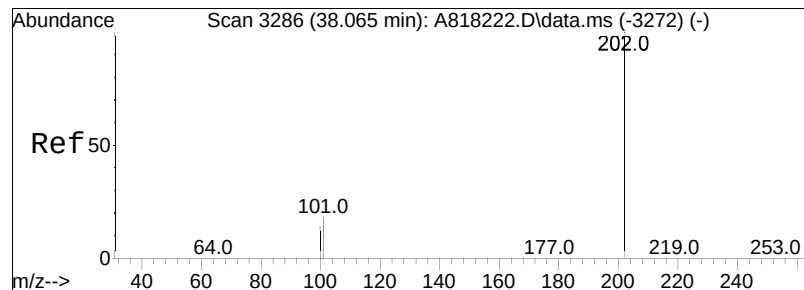




#59
 Benzo(b)fluorene
 Concen: 38.54 ng/mL
 RT: 40.092 min Scan# 3508
 Delta R.T. 0.009 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

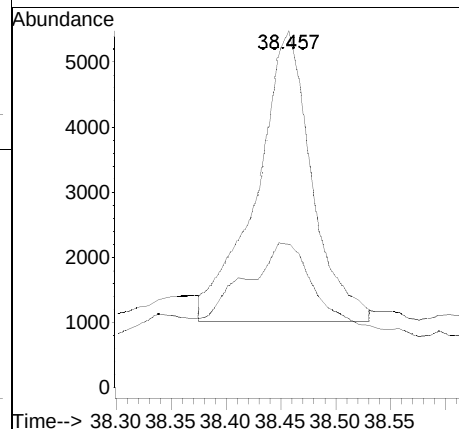
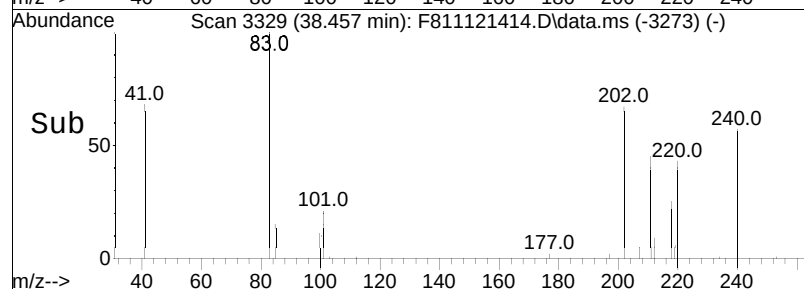
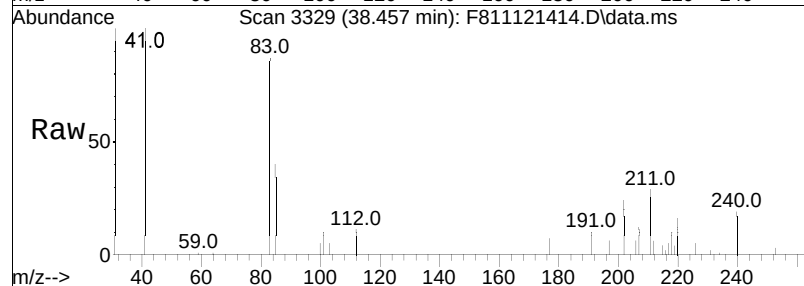
Tgt Ion	Ratio	Lower	Upper
216	100		
215	97.7	64.4	119.6

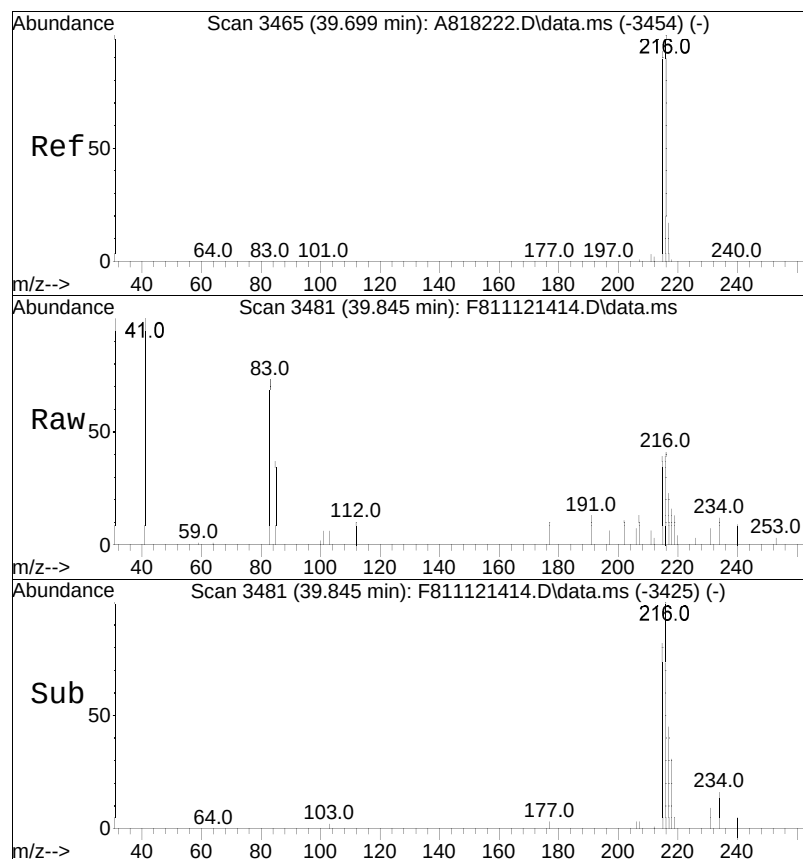




#60
 Pyrene
 Concen: 75.55 ng/mL M4
 RT: 38.457 min Scan# 3329
 Delta R.T. 0.009 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

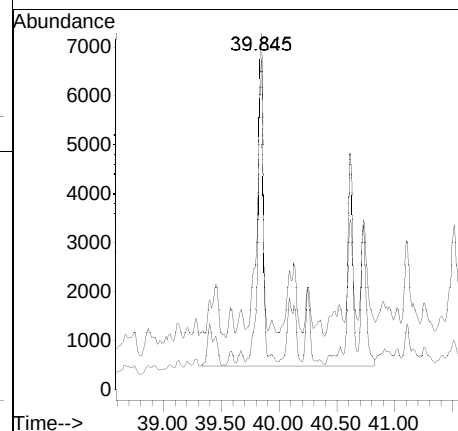
Tgt Ion	Ratio	Lower	Upper
202	100		
101	48.2	14.1	26.1

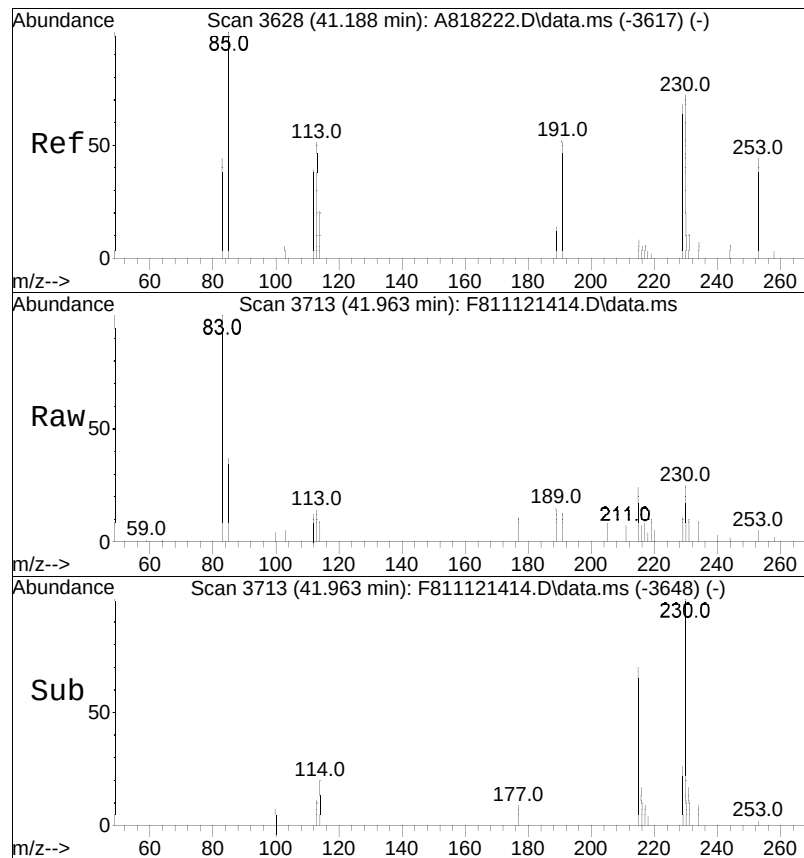




#61
 C1-Fluoranthenes/Pyrenes
 Concen: 313.66 ng/mL M5
 RT: 39.845 min Scan# 3481
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

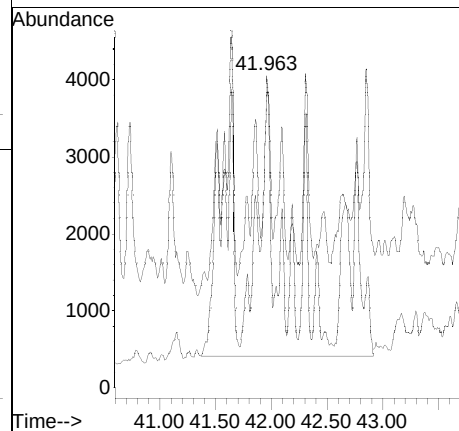
Tgt	Ion	Ratio	Lower	Upper
216	100			
215	29.4	65.0	120.8	

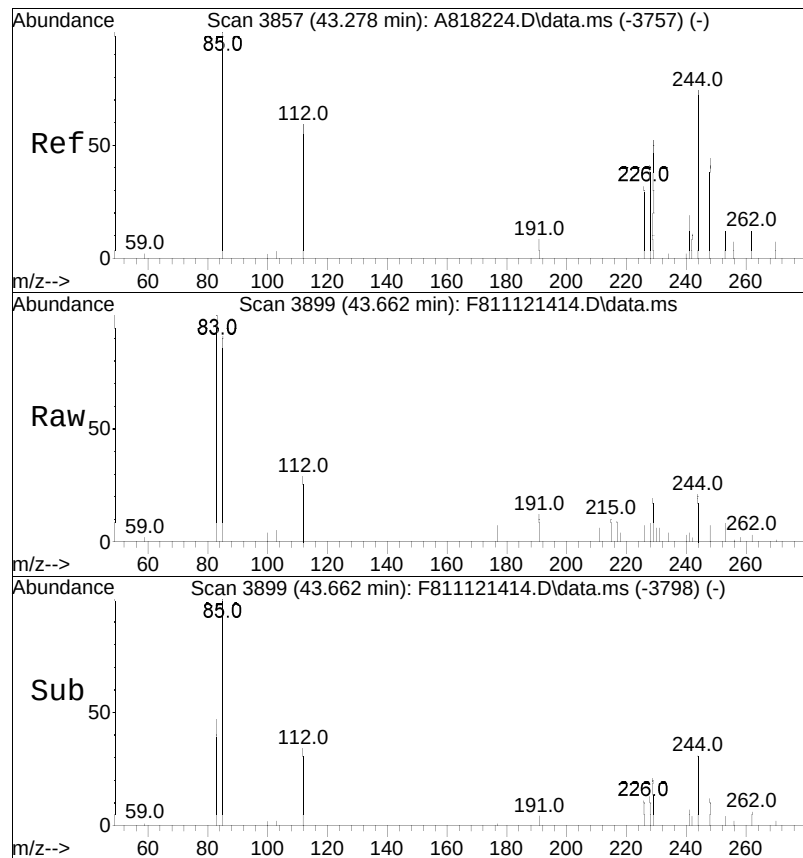




#62
 C2-Fluoranthenes/Pyrenes
 Concen: 516.33 ng/mL M5
 RT: 41.963 min Scan# 3713
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

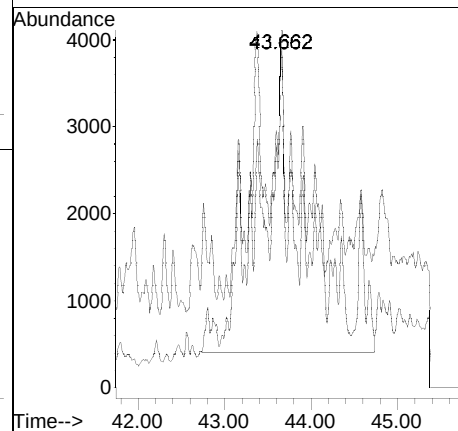
Tgt Ion	Ratio	Lower	Upper
230	100		
215	5.5	66.4	123.4#

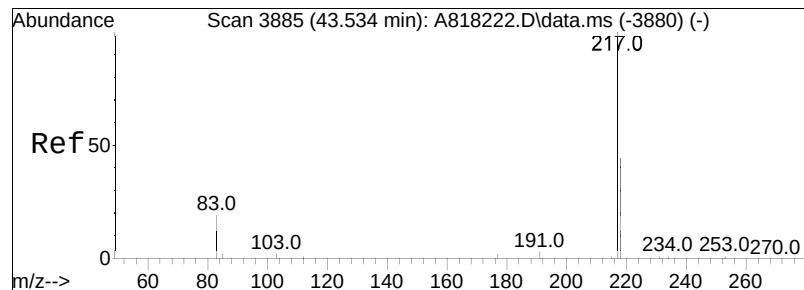




#63
 C3-Fluoranthenes/Pyrenes
 Concen: 619.63 ng/mL M5
 RT: 43.662 min Scan# 3899
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

Tgt Ion	Ratio	Lower	Upper
244	100		
229	4.7	65.8	122.2#





#64

C4-Fluoranthenes/Pyrenes

Concen: 548.76 ng/mL M5

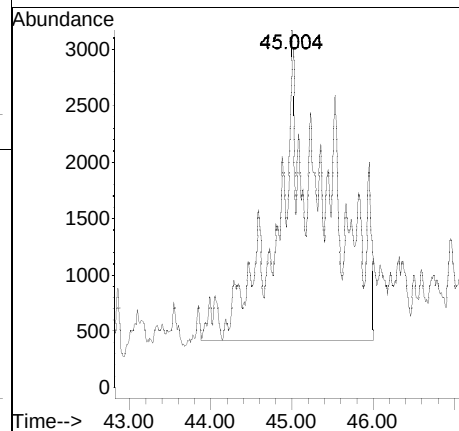
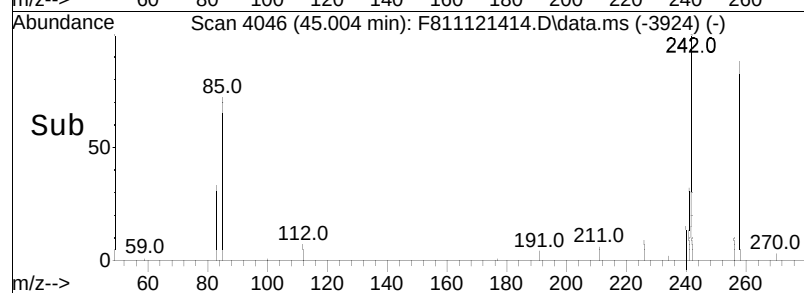
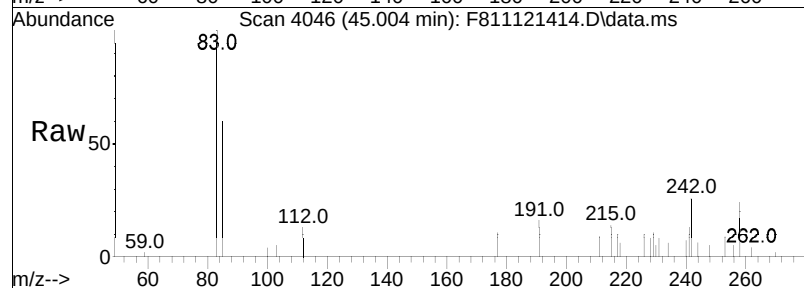
RT: 45.004 min Scan# 4046

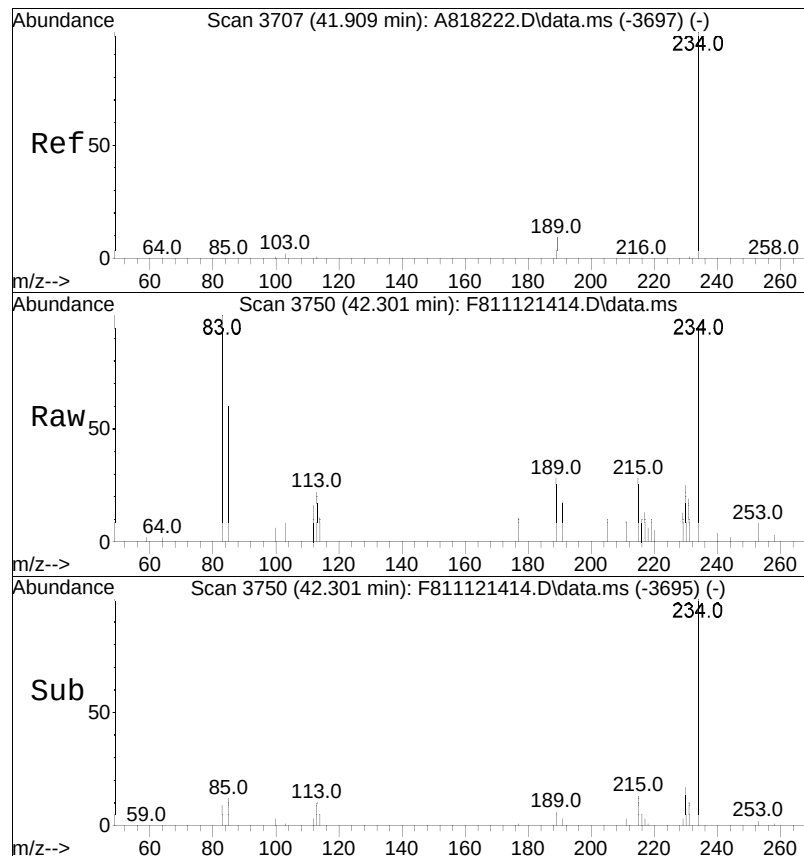
Delta R.T. 0.000 min

Lab File: F811121414.D

Acq: 13 Nov 2014 11:46 am

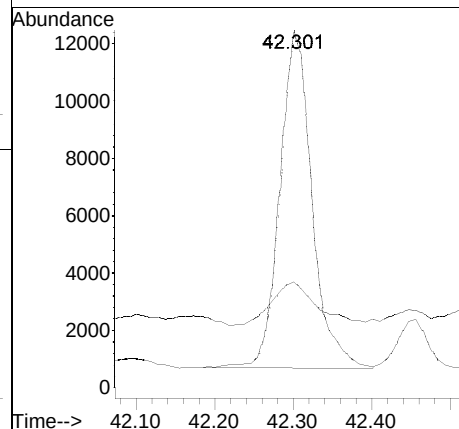
Tgt Ion:258 Resp: 113010

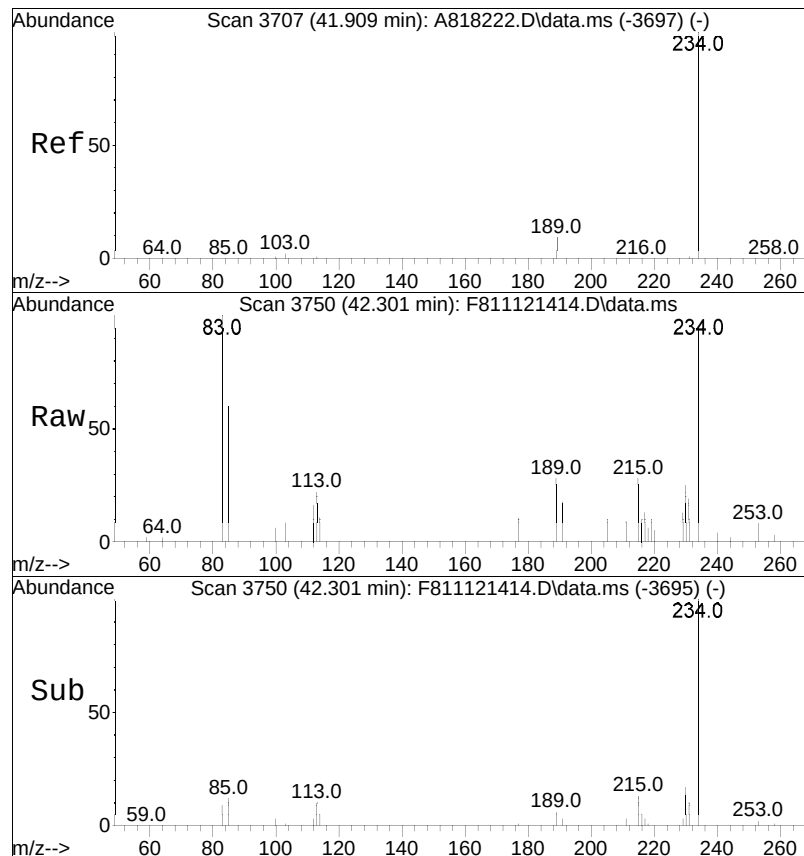




#66
 Naphthobenzothiophene
 Concen: 172.67 ng/ml
 RT: 42.301 min Scan# 3750
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

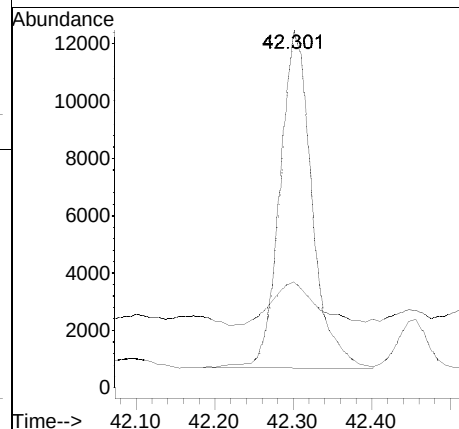
Tgt Ion	Ratio	Lower	Upper
234	100		
189	18.2	5.7	10.7#

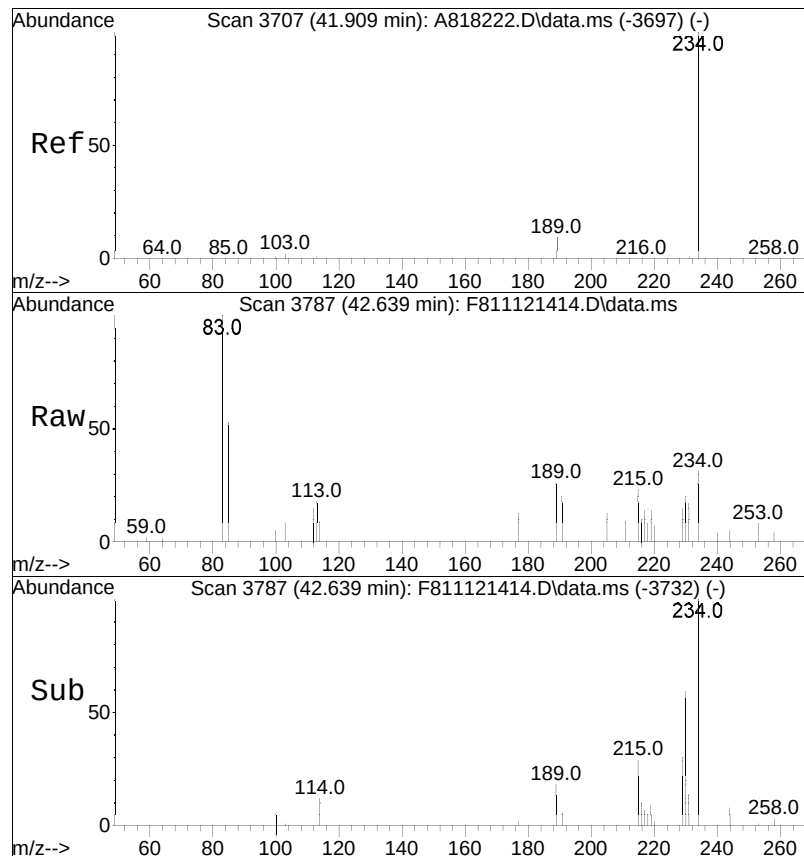




#67
 Naphthobenzothiophene-2,1-D
 Concen: 172.67 ng/mL
 RT: 42.301 min Scan# 3750
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

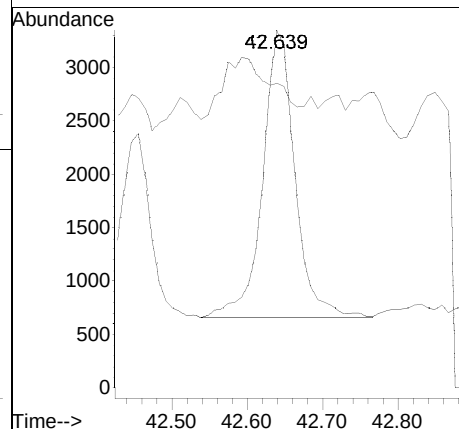
Tgt Ion	Ratio	Lower	Upper
234	100		
189	18.2	5.7	10.7#

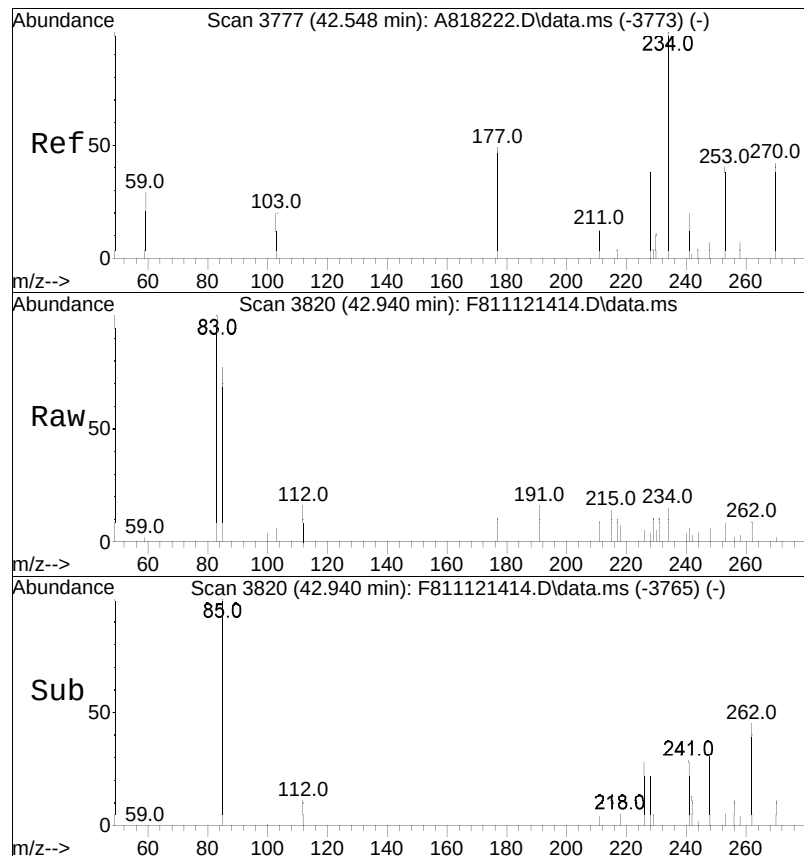




#68
 Naphthobenzothiophene-1,2-D
 Concen: 41.82 ng/mL
 RT: 42.639 min Scan# 3787
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

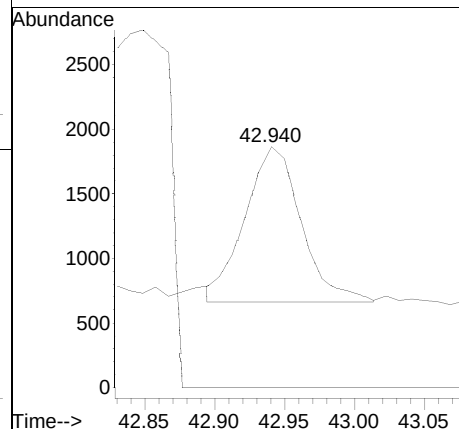
Tgt Ion: 234 Resp: 7964
 Ion Ratio Lower Upper
 234 100
 189 0.0 59.7 110.9#

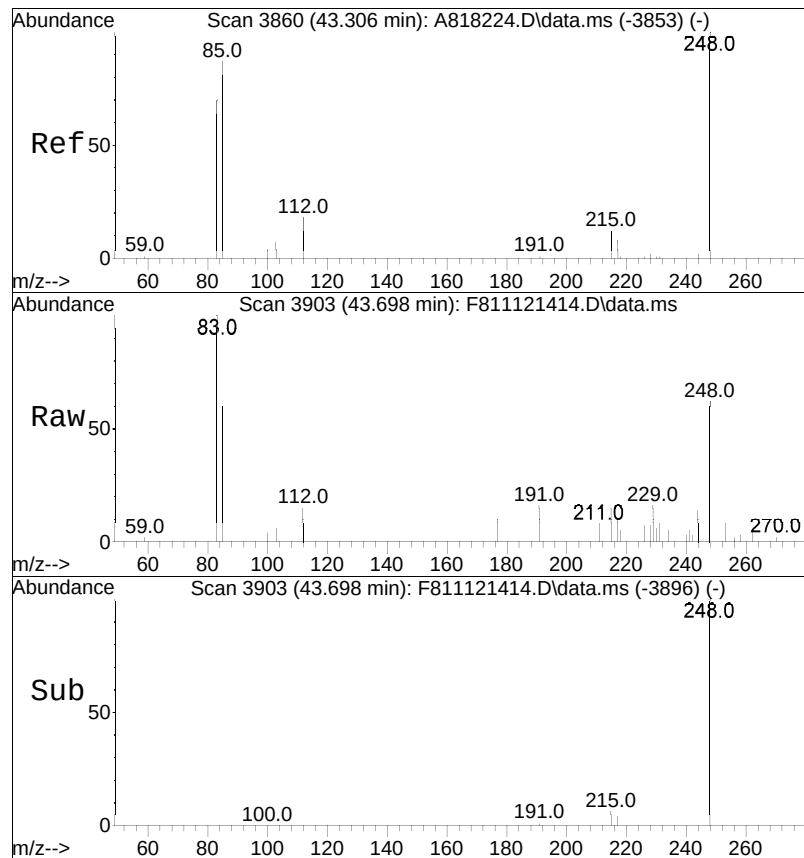




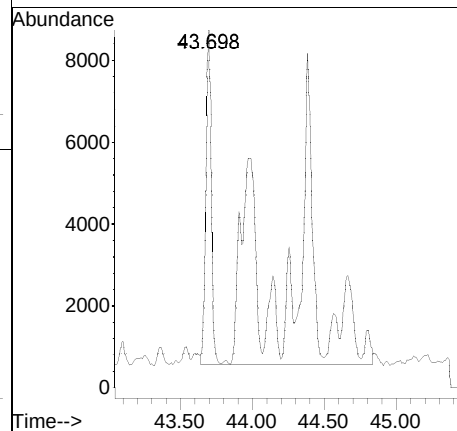
#69
Naphthobenzothiophene-2,3-D
Concen: 17.67 ng/mL M4
RT: 42.940 min Scan# 3820
Delta R.T. 0.000 min
Lab File: F811121414.D
Acq: 13 Nov 2014 11:46 am

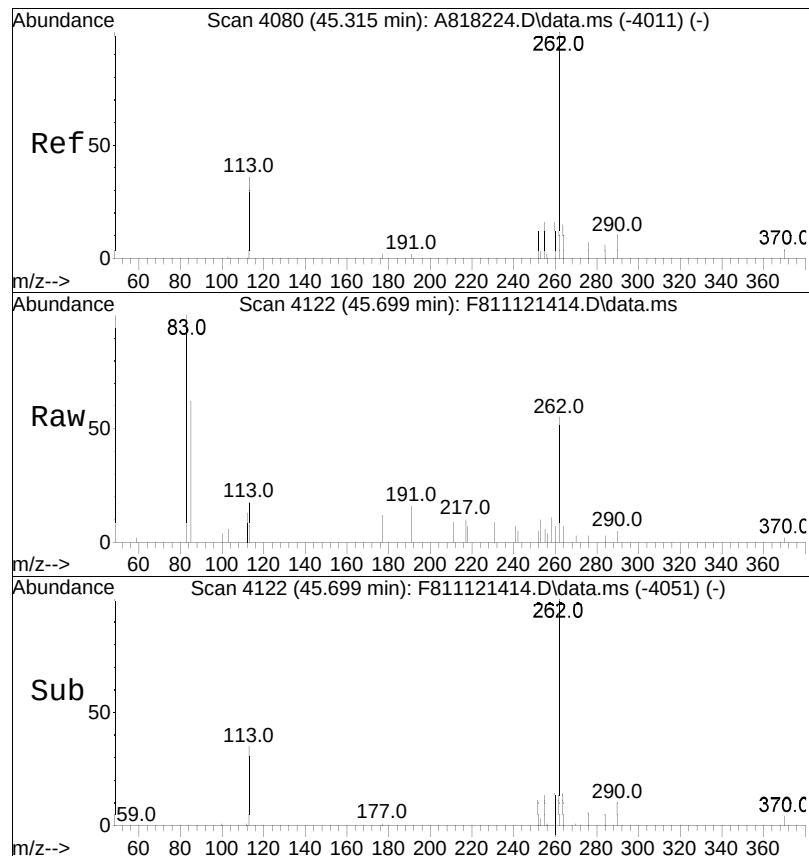
Tgt Ion	Ratio	Lower	Upper
234	100		
189	0.0	0.0	0.0



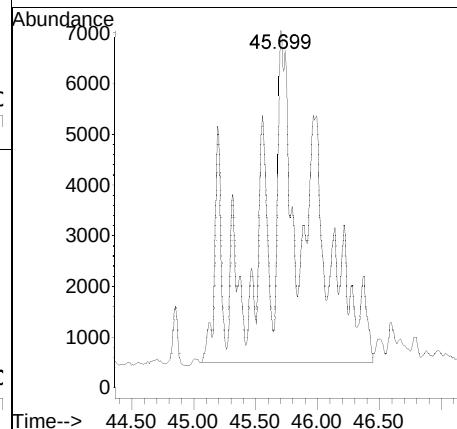


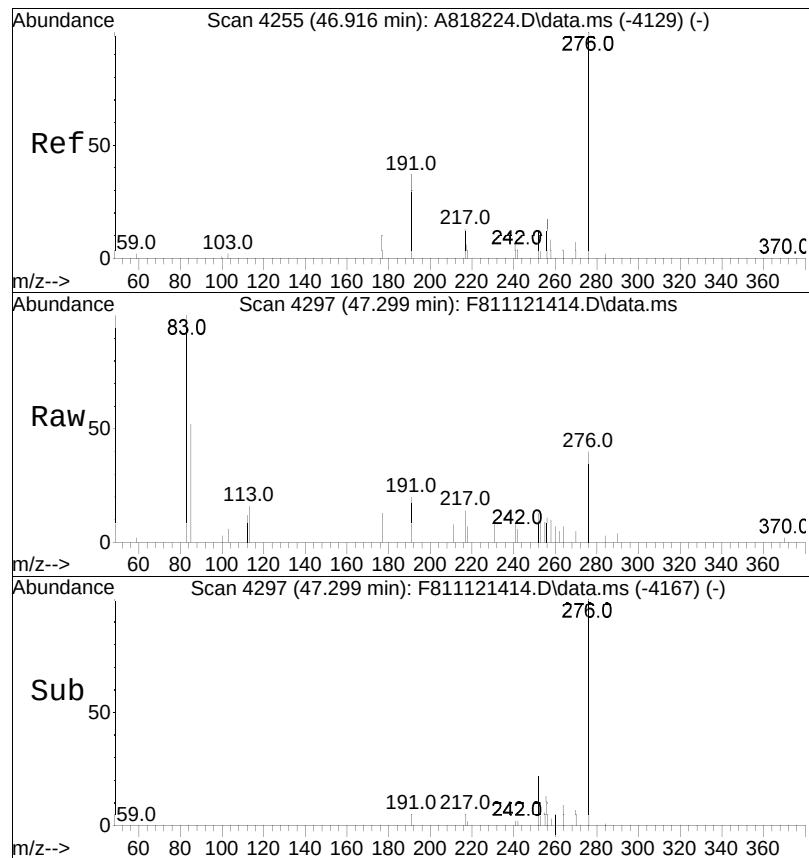
#70
 C1-Naphthobenzothiophenes
 Concen: 634.27 ng/ml M5
 RT: 43.698 min Scan# 3903
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:248 Resp: 120802





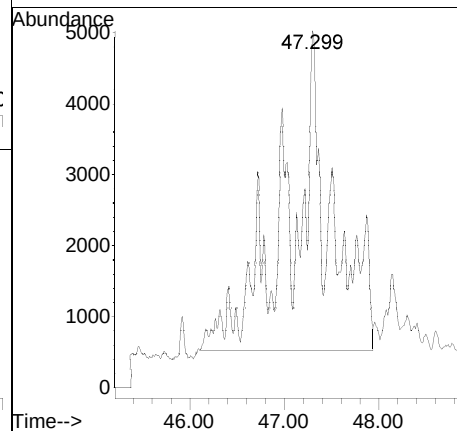
#71
 C2-Naphthobenzothiophenes
 Concen: 919.12 ng/ml M5
 RT: 45.699 min Scan# 4122
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:262 Resp: 175053

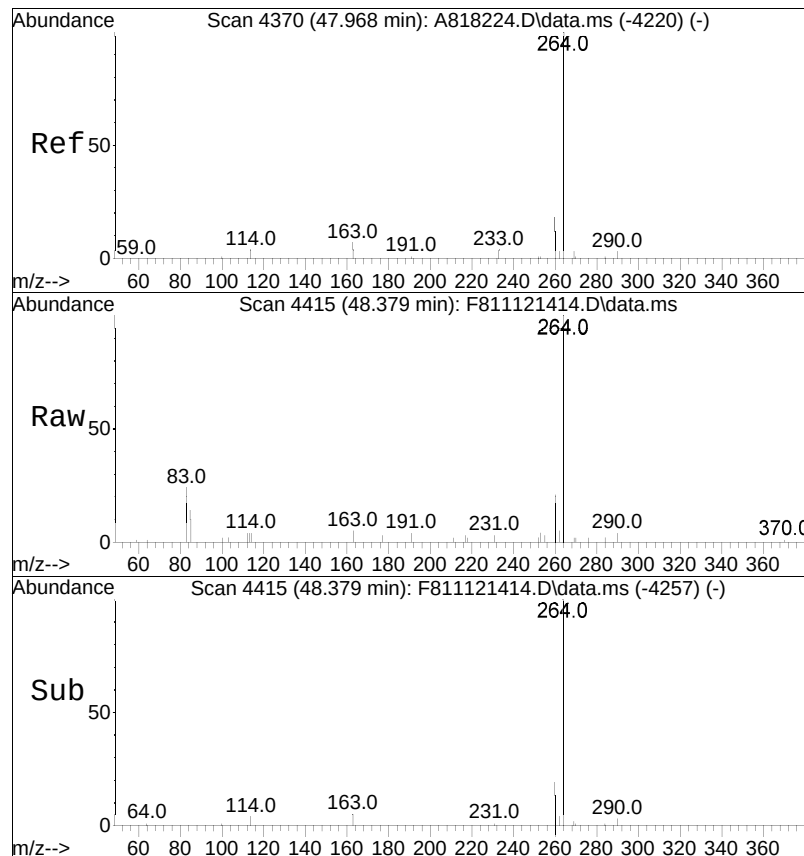




#72
C3-Naphthobenzothiophenes
Concen: 724.89 ng/ml M5
RT: 47.299 min Scan# 4297
Delta R.T. 0.000 min
Lab File: F811121414.D
Acq: 13 Nov 2014 11:46 am

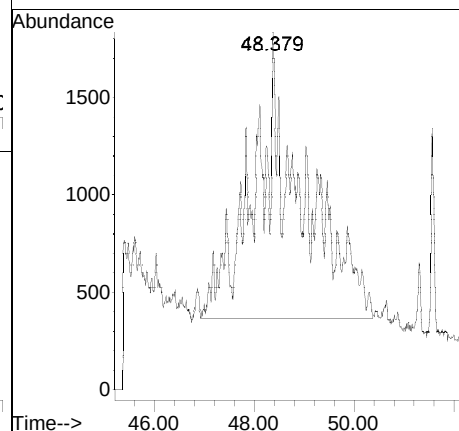
Tgt Ion:276 Resp: 138061

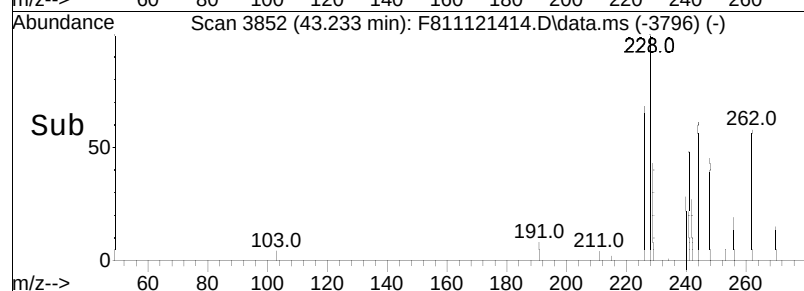
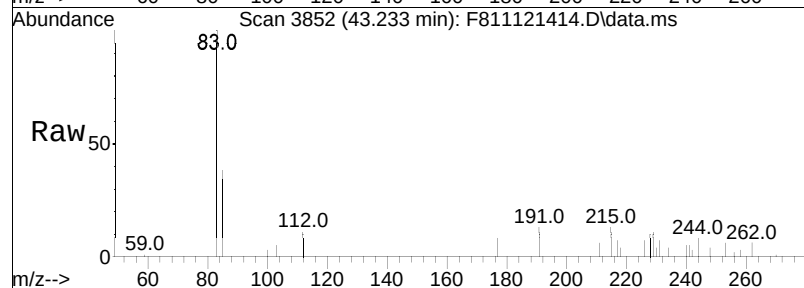
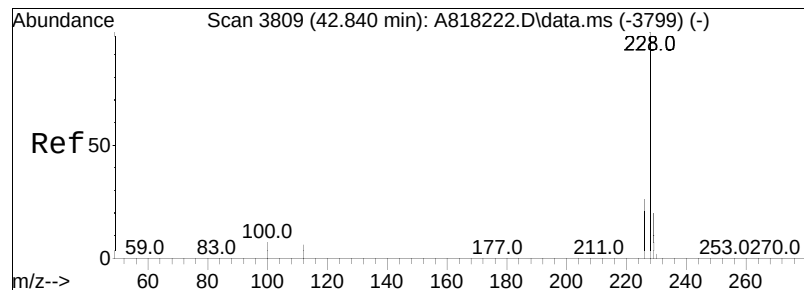




#73
 C4-Naphthobenzothiophenes
 Concen: 499.76 ng/mL M5
 RT: 48.379 min Scan# 4415
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

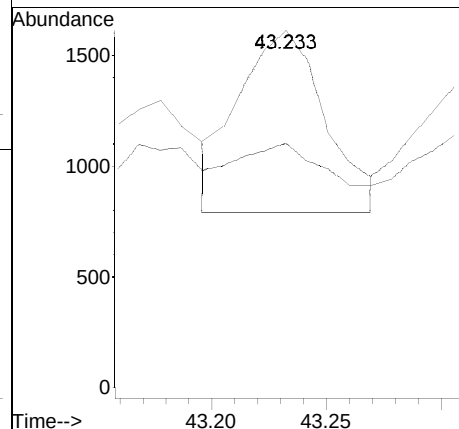
Tgt Ion:290 Resp: 95184

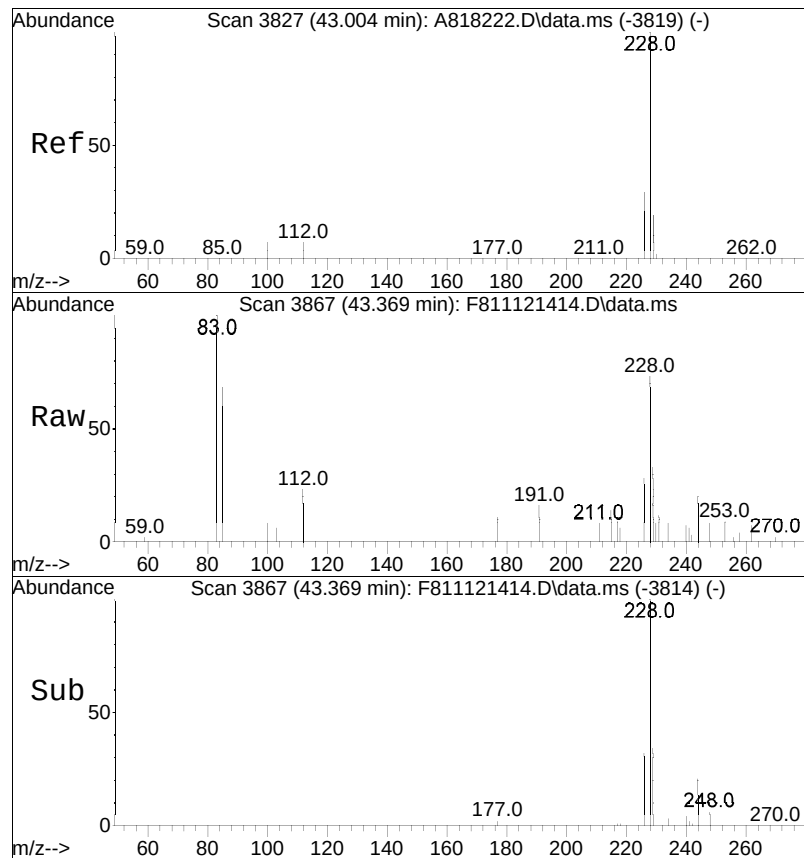




#75
Benz[a]anthracene
Concen: 12.82 ng/mL M3
RT: 43.233 min Scan# 3852
Delta R.T. 0.010 min
Lab File: F811121414.D
Acq: 13 Nov 2014 11:46 am

Tgt Ion	Ratio	Lower	Upper
228	100		
226	479.4	18.3	34.1#





#76

Chrysene

Concen: 203.64 ng/mL

RT: 43.369 min Scan# 3867

Delta R.T. -0.019 min

Lab File: F811121414.D

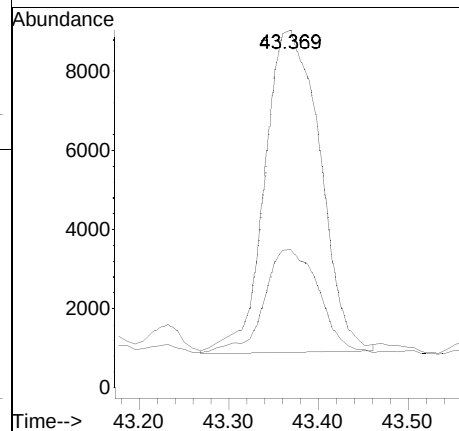
Acq: 13 Nov 2014 11:46 am

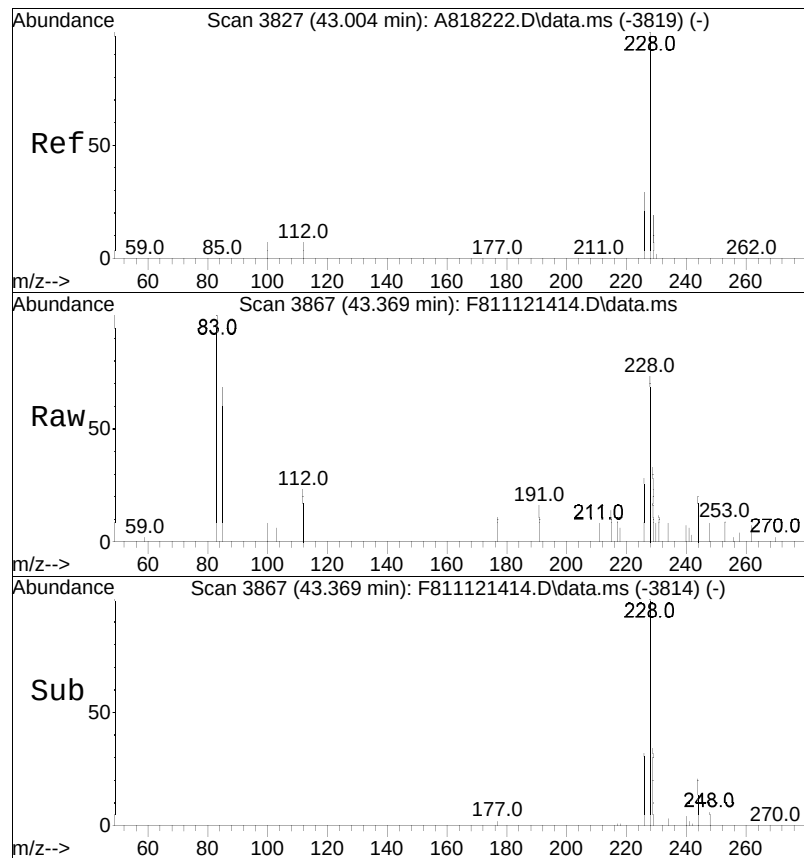
Tgt Ion:228 Resp: 34374

Ion Ratio Lower Upper

228 100

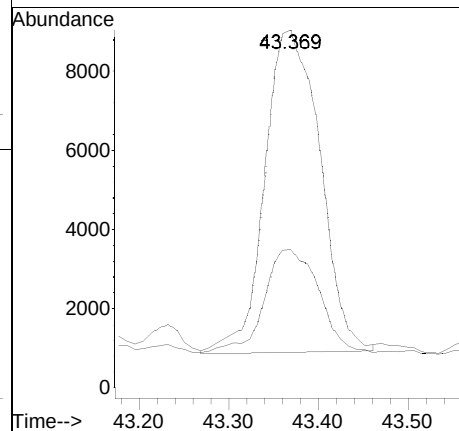
226 32.9 20.1 37.3

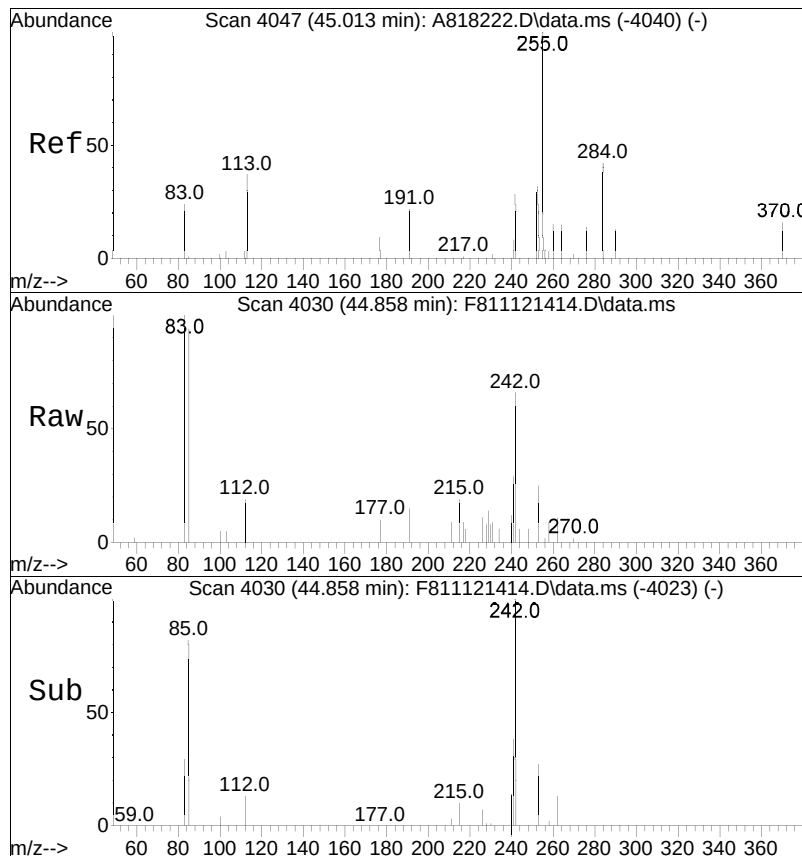




#77
 Chrysene/Triphenylene
 Concen: 203.64 ng/mL
 RT: 43.369 min Scan# 3867
 Delta R.T. -0.019 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

Tgt Ion	Ratio	Lower	Upper
228	100		
226	32.9	20.1	37.3





#78

C1-Chrysenes

Concen: 381.42 ng/mL M5

RT: 44.858 min Scan# 4030

Delta R.T. -0.000 min

Lab File: F811121414.D

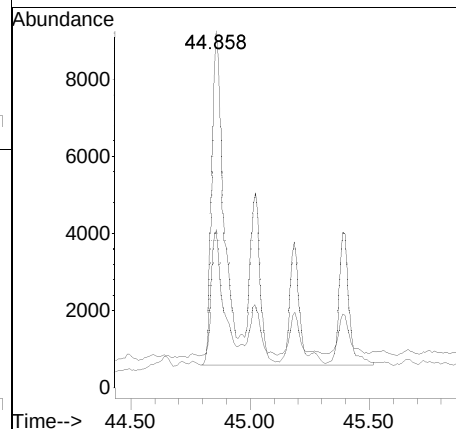
Acq: 13 Nov 2014 11:46 am

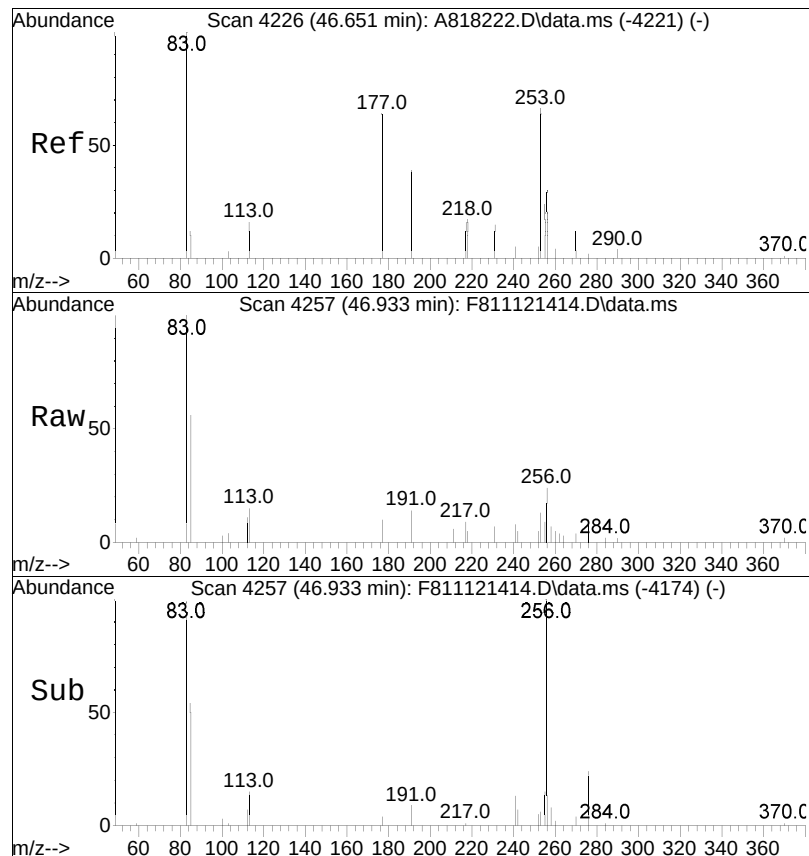
Tgt Ion:242 Resp: 64382

Ion Ratio Lower Upper

242 100

241 16.1 31.1 57.9#





#79

C2-Chrysenes

Concen: 551.75 ng/mL M5

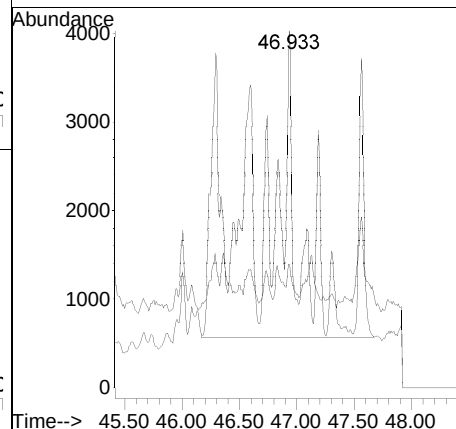
RT: 46.933 min Scan# 4257

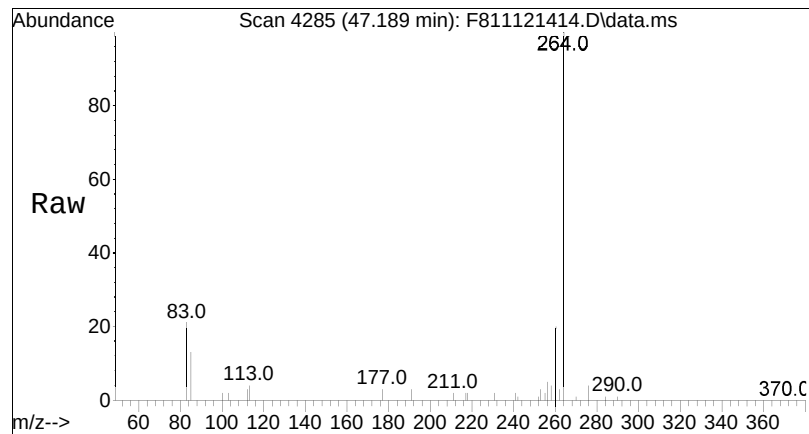
Delta R.T. 0.000 min

Lab File: F811121414.D

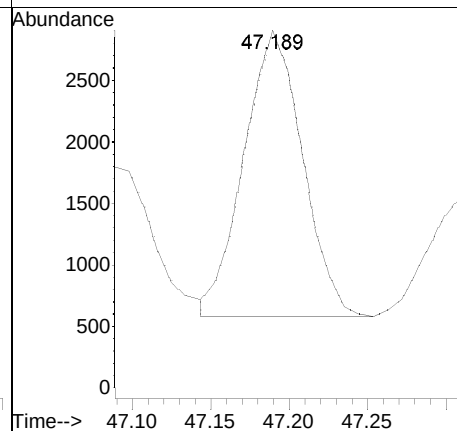
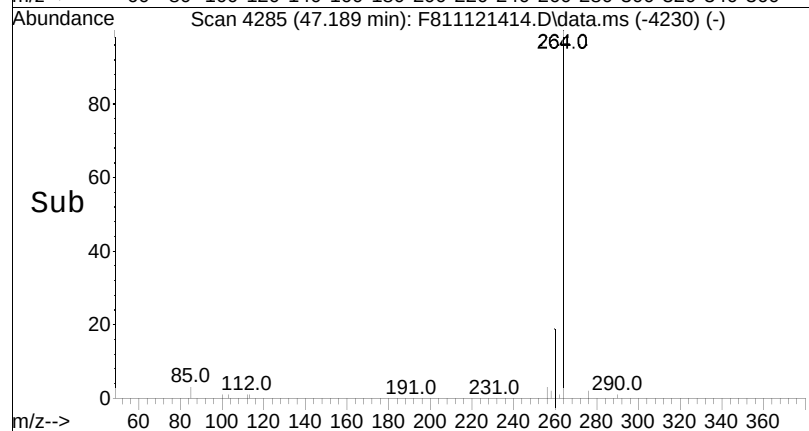
Acq: 13 Nov 2014 11:46 am

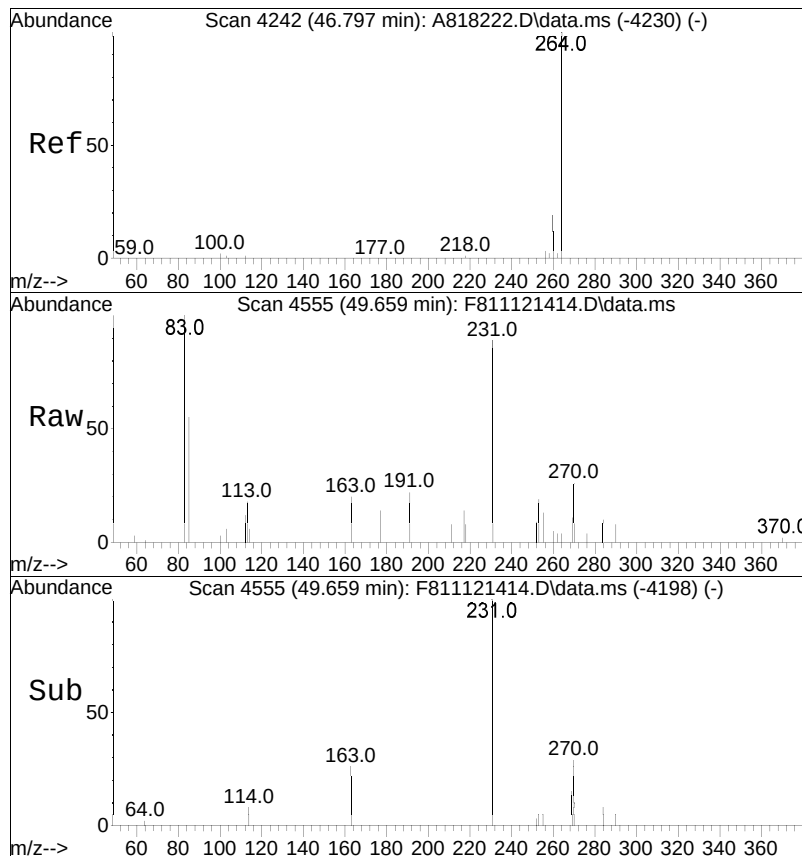
Tgt	Ion	Ratio	Lower	Upper
256	100			
241	3.9	24.1	44.8#	





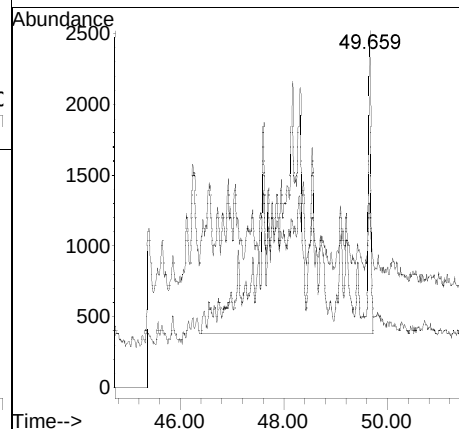
#80
 BBF-D12 Surr BKGD
 Concen: 35.60 ng/mL
 RT: 47.189 min Scan# 4285
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:256 Resp: 6009

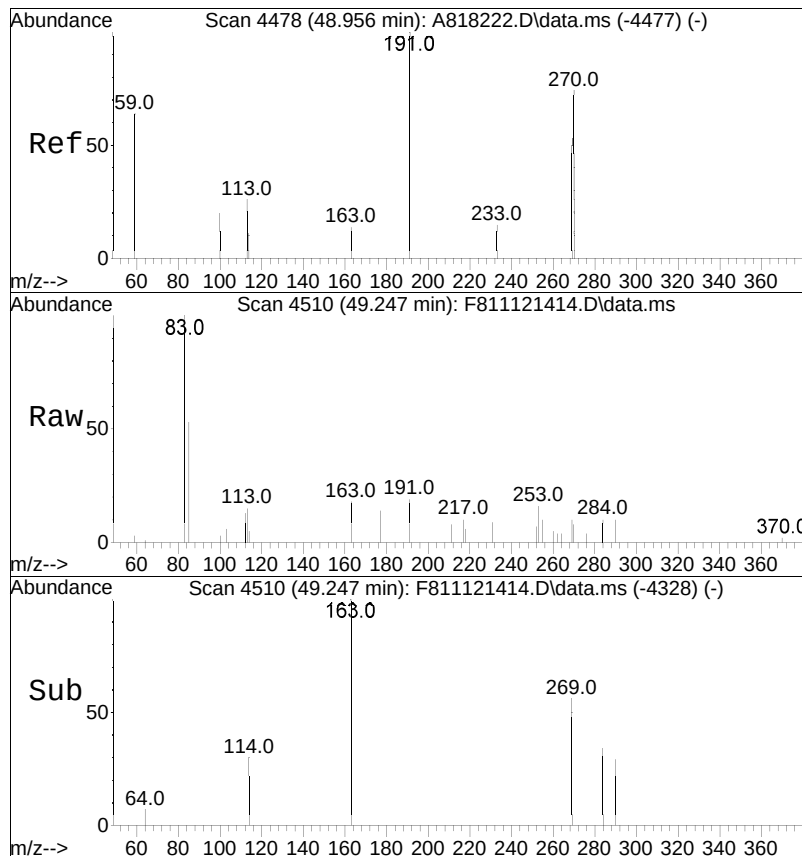




#81
 C3-Chrysenes
 Concen: 585.14 ng/mL M5
 RT: 49.659 min Scan# 4555
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

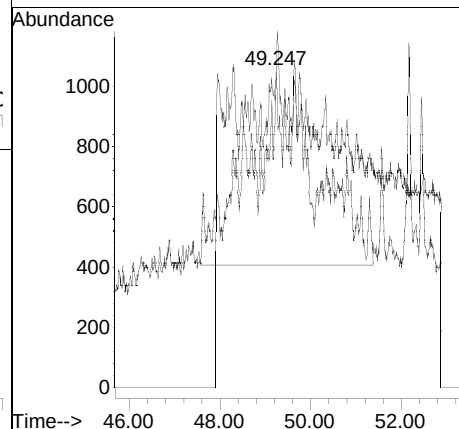
Tgt	Ion	Ratio	Lower	Upper
270	100			
255	1.2	35.4	65.7#	

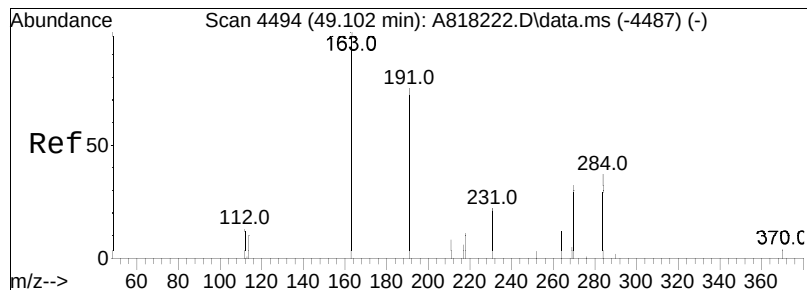




#82
 C4-Chrysenes
 Concen: 373.66 ng/mL M5
 RT: 49.247 min Scan# 4510
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

Tgt	Ion	Ratio	Lower	Upper
284	100			
269	0.0	68.2	126.6	





#84

Benzo[b]fluoranthene

Concen: 28.45 ng/mL M4

RT: 47.272 min Scan# 4294

Delta R.T. -0.000 min

Lab File: F811121414.D

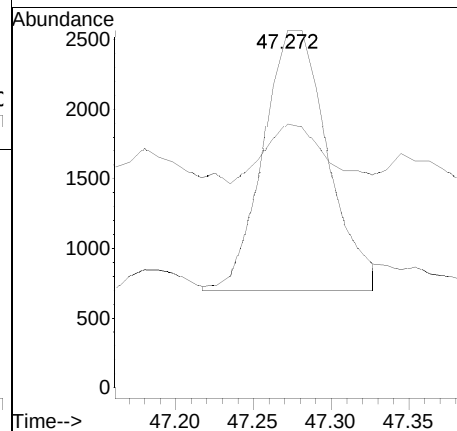
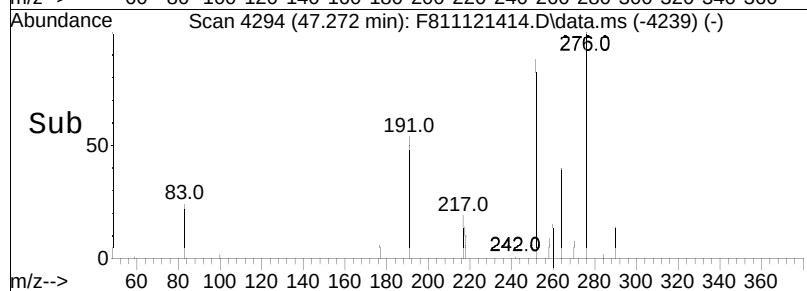
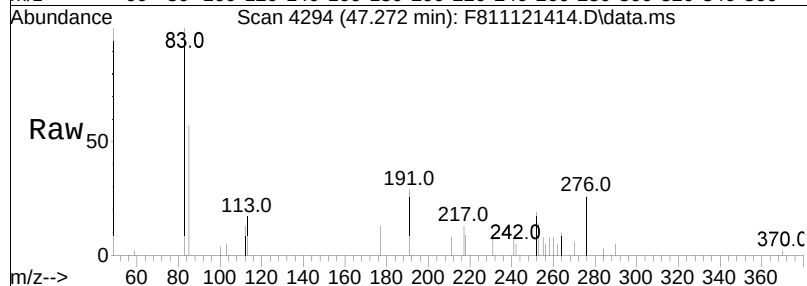
Acq: 13 Nov 2014 11:46 am

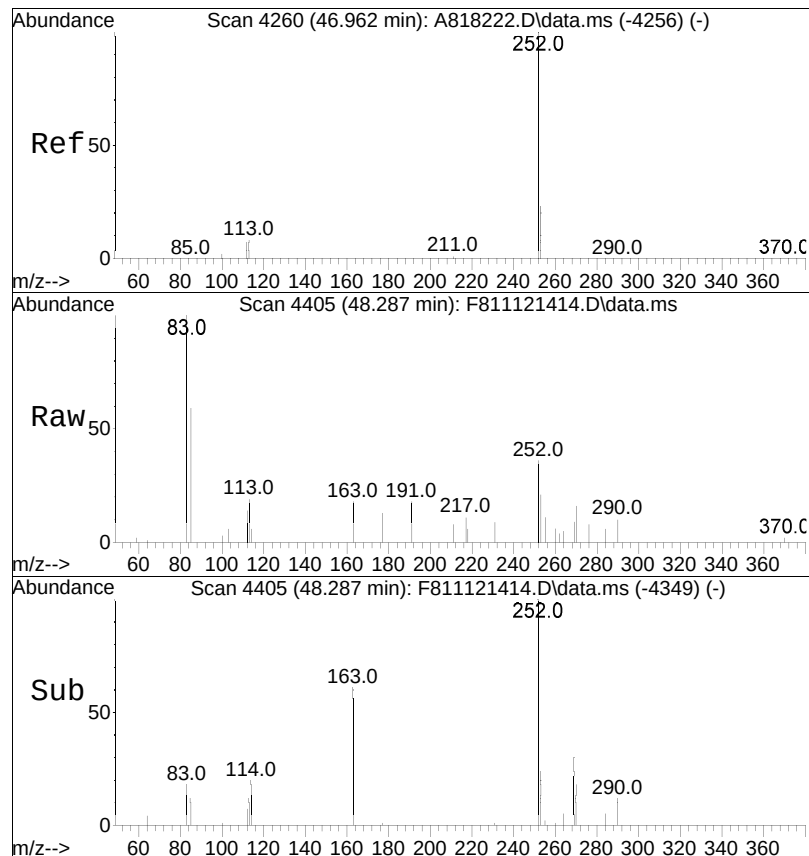
Tgt Ion: 252 Resp: 5383

Ion Ratio Lower Upper

252 100

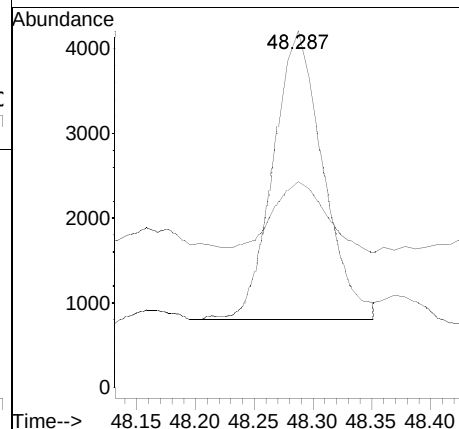
253 21.8 16.1 29.9

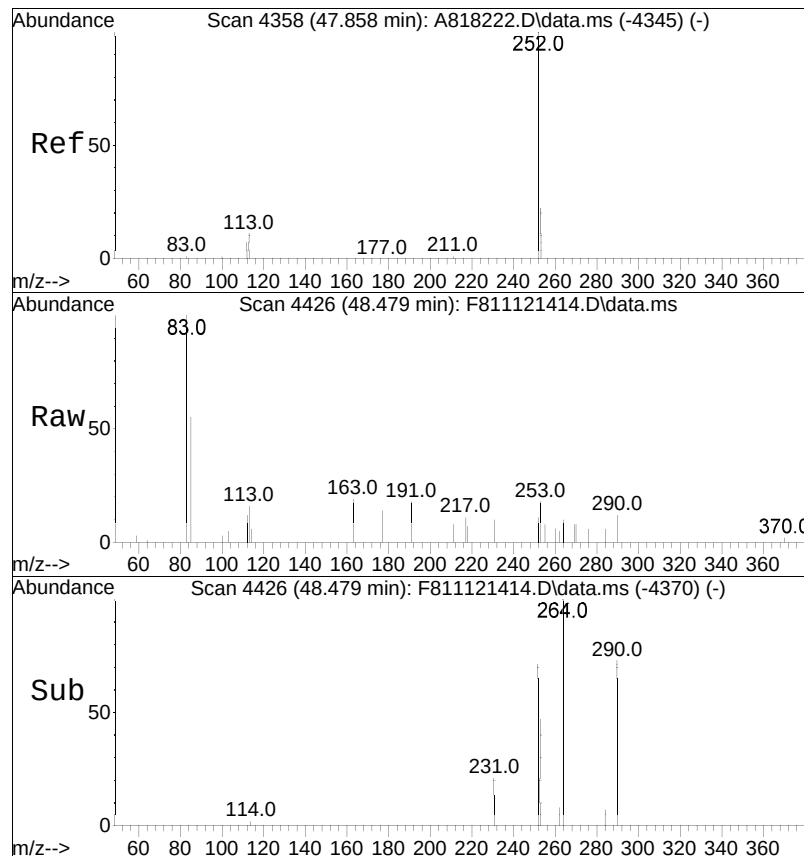




#87
 Benzo[e]pyrene
 Concen: 52.15 ng/mL
 RT: 48.287 min Scan# 4405
 Delta R.T. 0.009 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

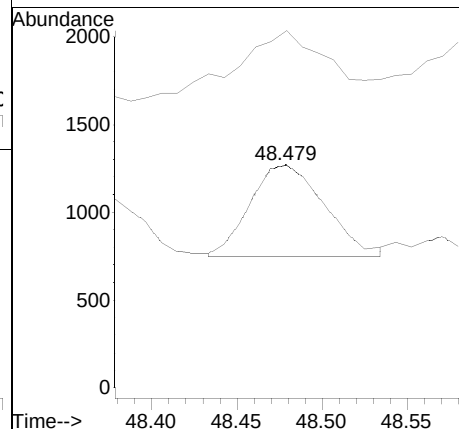
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	29.3	16.6	30.8	

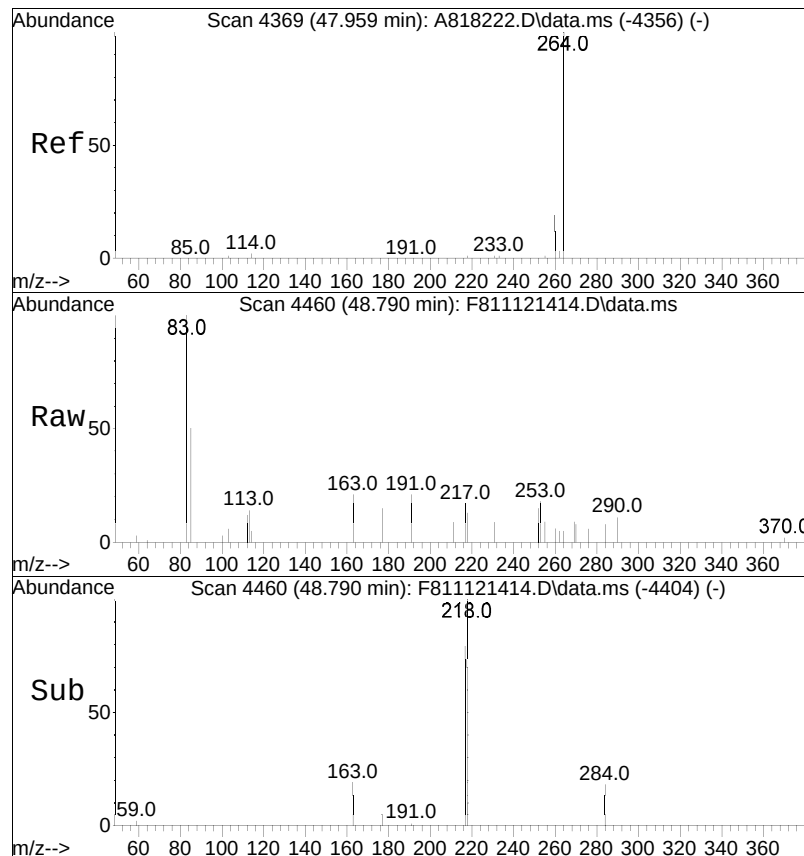




#89
 Benzo[a]pyrene
 Concen: 9.37 ng/mL M3
 RT: 48.479 min Scan# 4426
 Delta R.T. 0.009 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

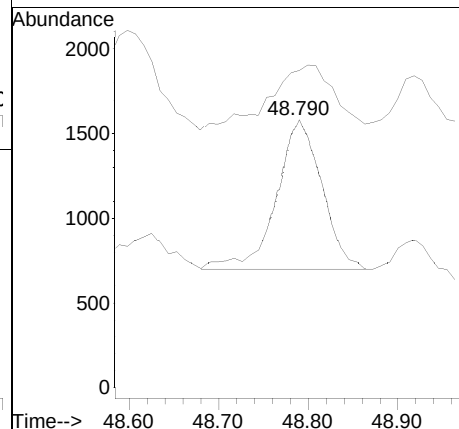
Tgt Ion	Ratio	Lower	Upper
252	100		
253	170.6	16.8	31.2#

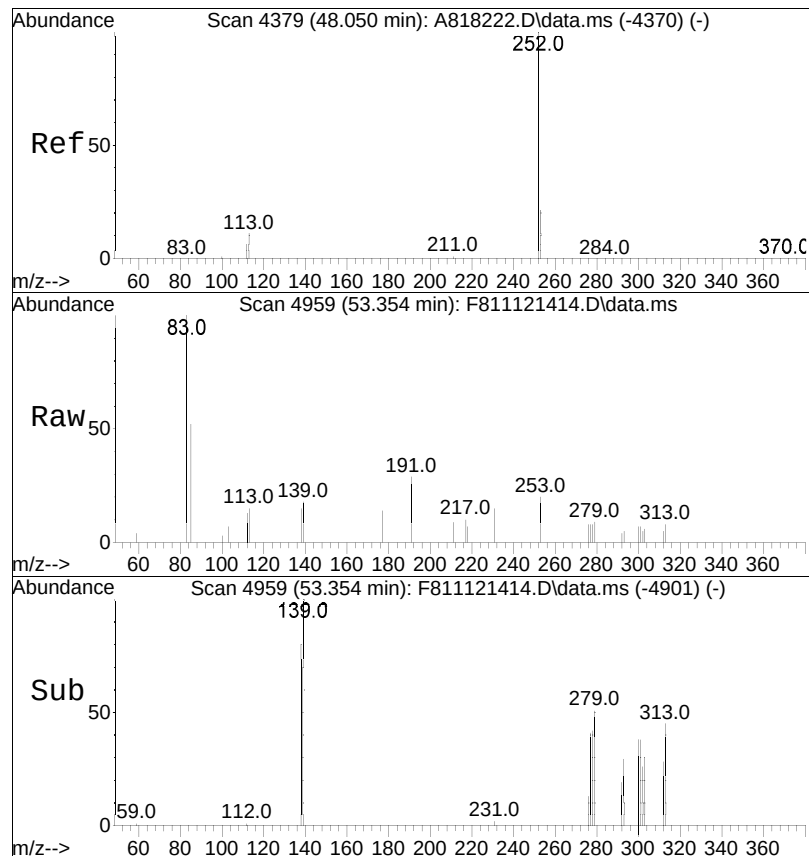




#90
 Perylene
 Concen: 17.75 ng/mL
 RT: 48.790 min Scan# 4460
 Delta R.T. 0.009 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

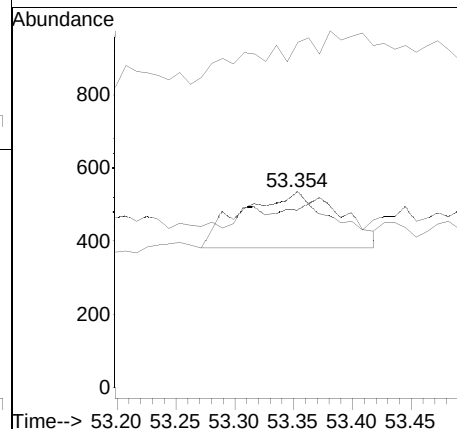
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	62.9	17.1	31.7#	

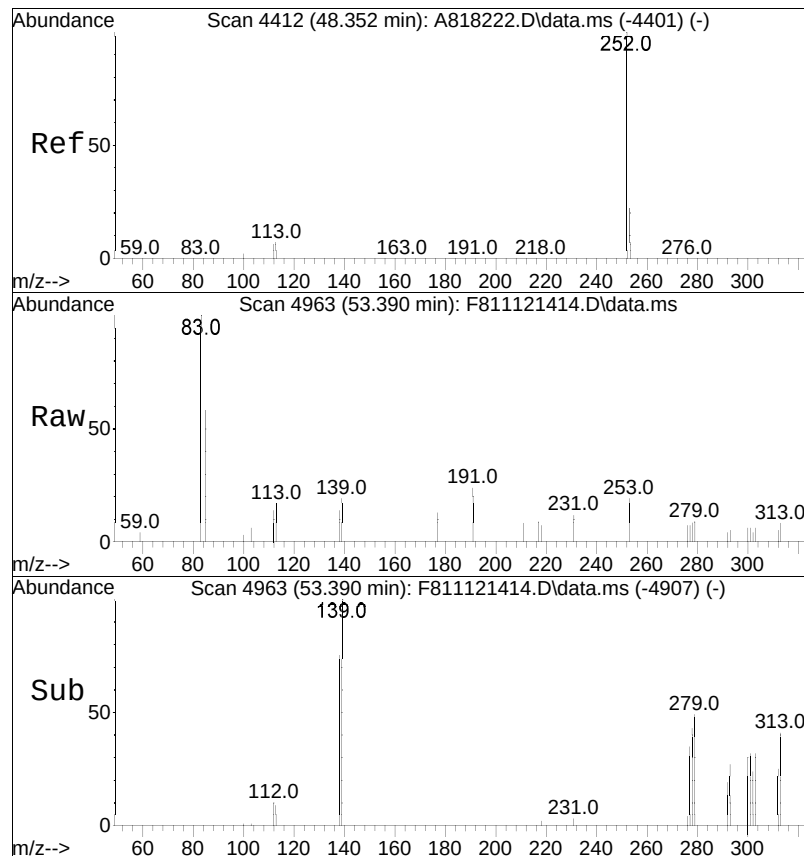




#91
 Indeno[1,2,3-cd]pyrene
 Concen: 4.07 ng/mL
 RT: 53.354 min Scan# 4959
 Delta R.T. 0.028 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

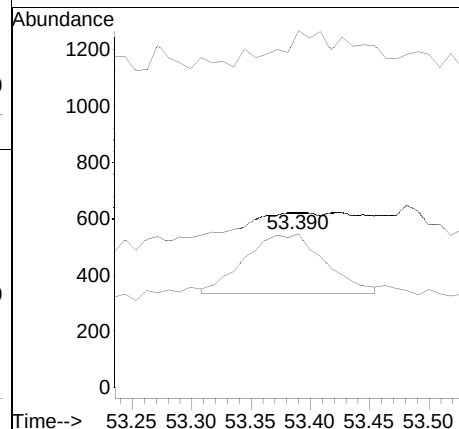
Tgt Ion	Ratio	Lower	Upper
276	100		
138	0.0	18.7	34.7#
277	0.0	16.7	30.9#

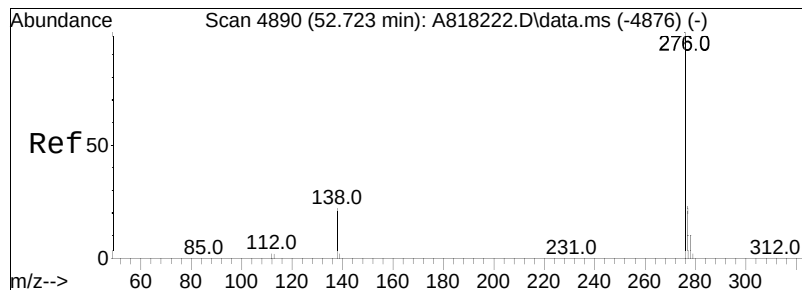




#92
 Dibenz[ah]+[ac]anthracene
 Concen: 5.27 ng/mL M4
 RT: 53.390 min Scan# 4963
 Delta R.T. 0.009 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

Tgt Ion	Ratio	Lower	Upper
278	100		
139	0.0	15.1	28.1#
279	0.0	16.9	31.3#





#93

Benzo[g,h,i]perylene

Concen: 18.51 ng/mL

RT: 54.642 min Scan# 5100

Delta R.T. 0.009 min

Lab File: F811121414.D

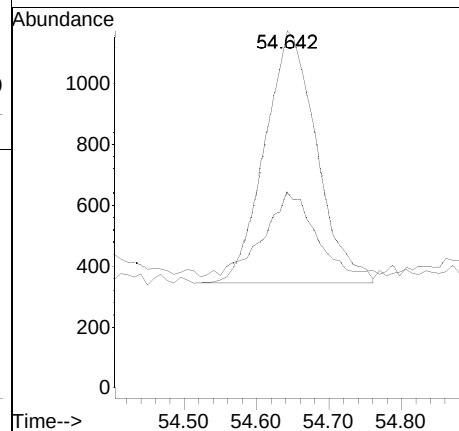
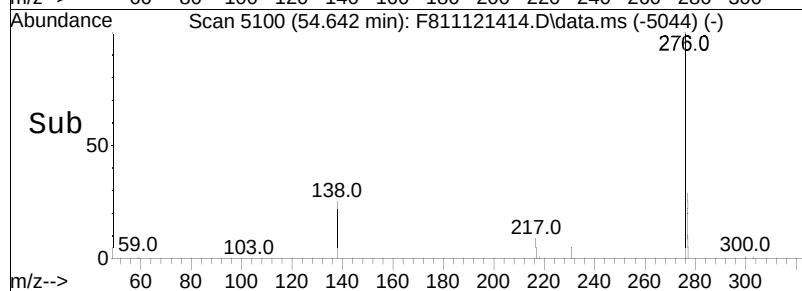
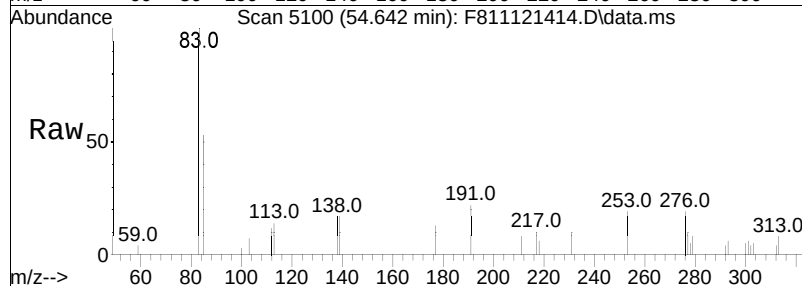
Acq: 13 Nov 2014 11:46 am

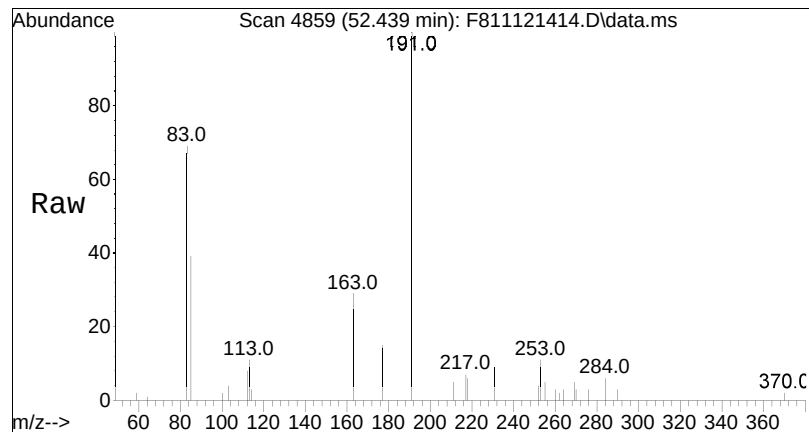
Tgt Ion: 276 Resp: 4062

Ion Ratio Lower Upper

276 100

277 34.1 16.4 30.6#





#94

Hopane (T19)

Concen: 822.45 ng/mL

RT: 52.439 min Scan# 4859

Delta R.T. 0.000 min

Lab File: F811121414.D

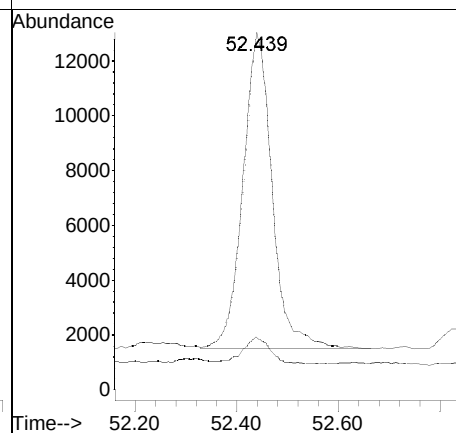
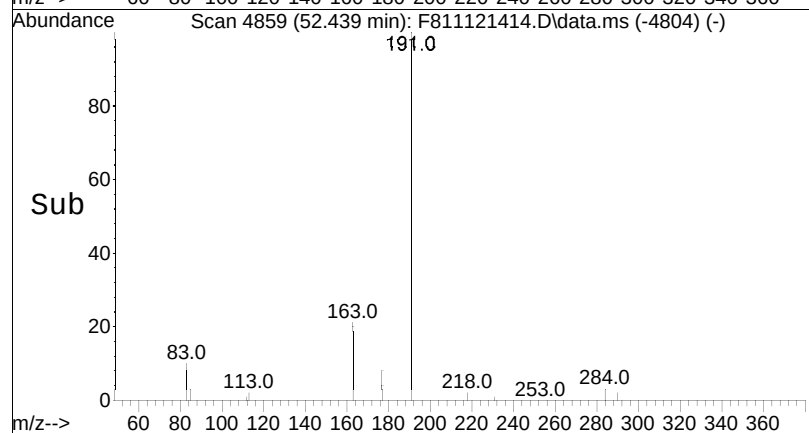
Acq: 13 Nov 2014 11:46 am

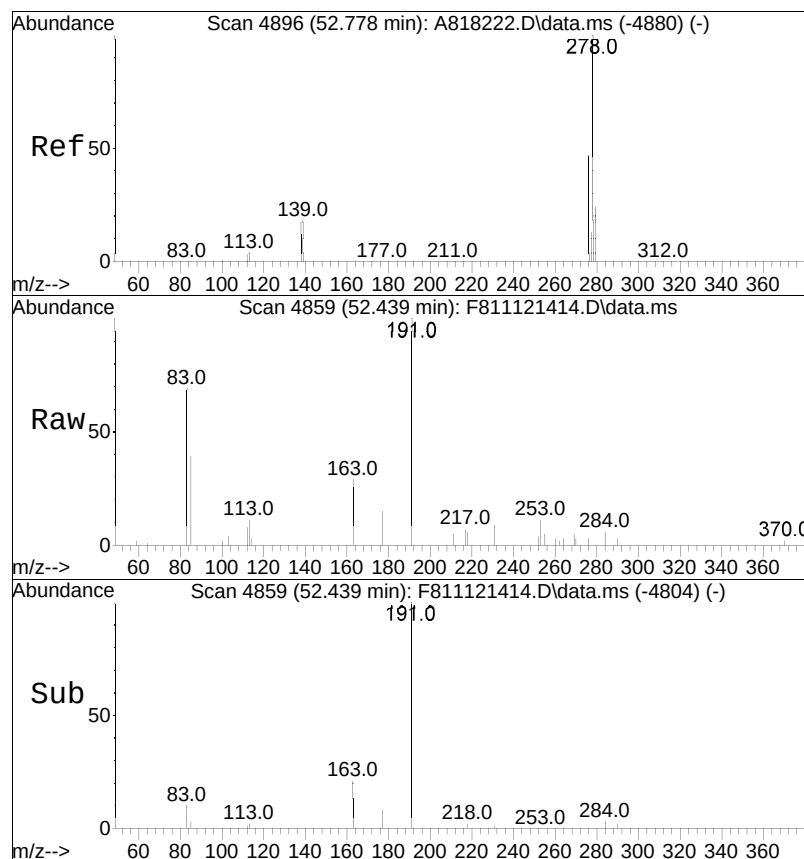
Tgt Ion:191 Resp: 45367

Ion Ratio Lower Upper

191 100

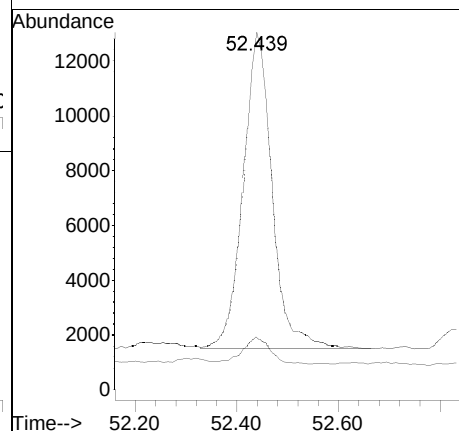
177 7.9 7.9 14.7

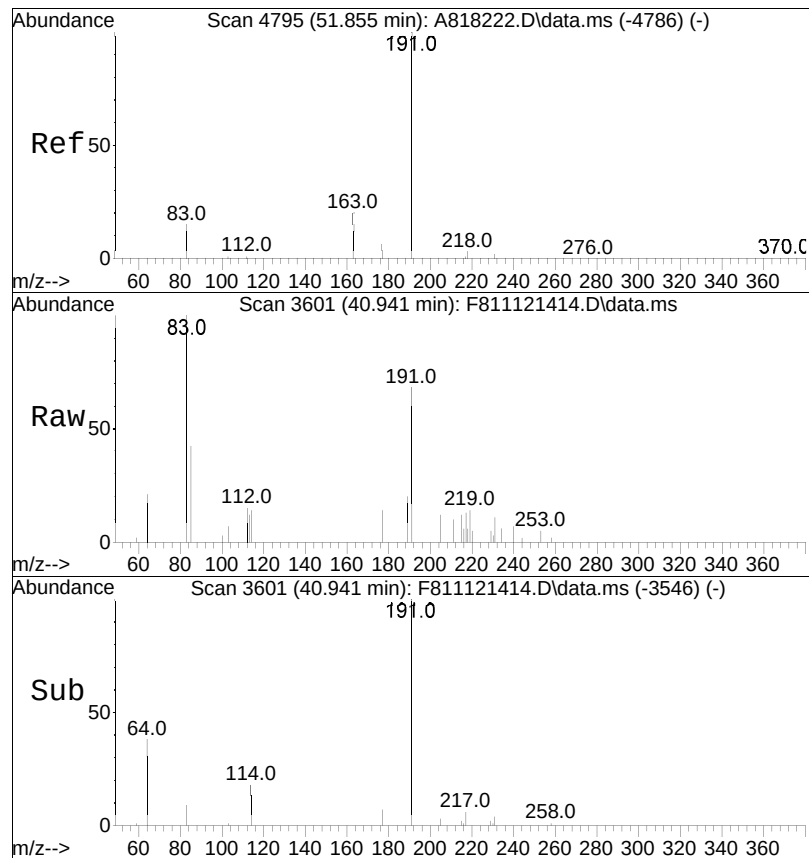




#95
 17a(H),21B(H)-hopane - C₃₀H₅₂
 Concen: 822.45 ng/mL
 RT: 52.439 min Scan# 4859
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

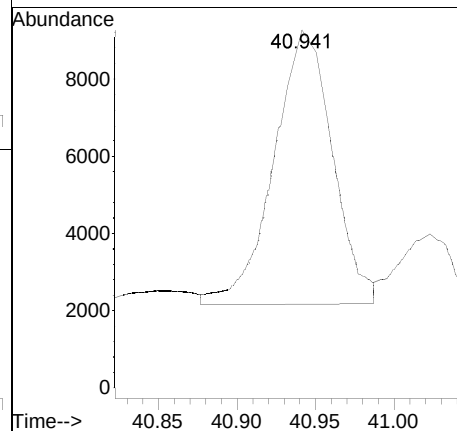
Tgt	Ion	Ratio	Resp	Lower	Upper
191	100		45367		
177	7.9			7.9	14.7

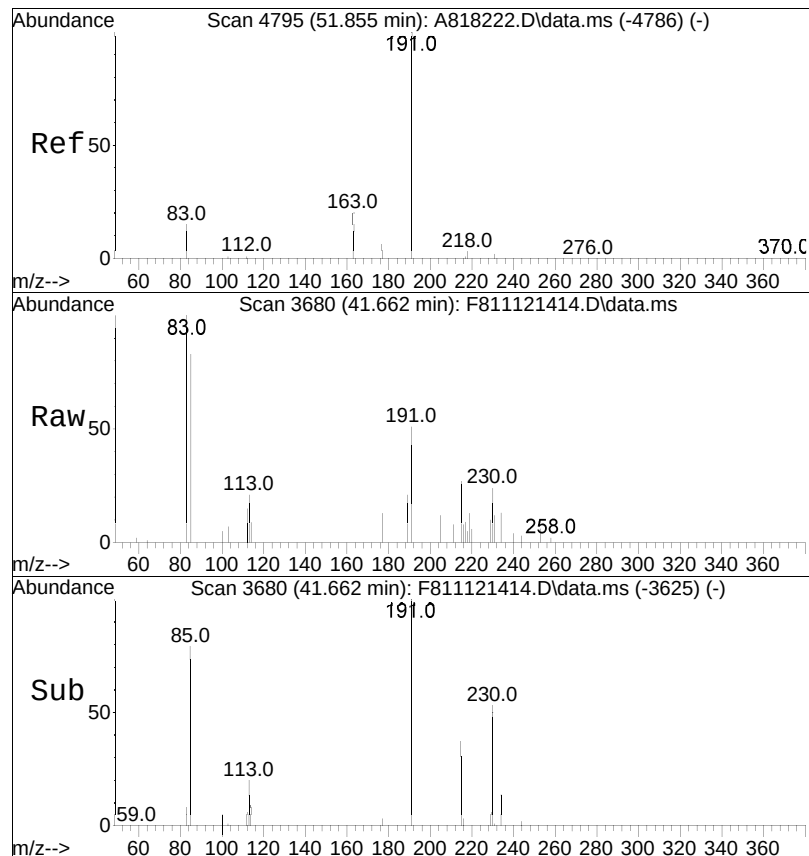




#96
 C23 Tricyclic Terpane (T4)
 Concen: 332.95 ng/ml
 RT: 40.941 min Scan# 3601
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

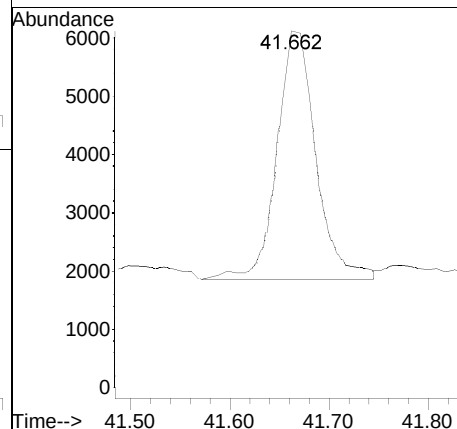
Tgt Ion:191 Resp: 18366

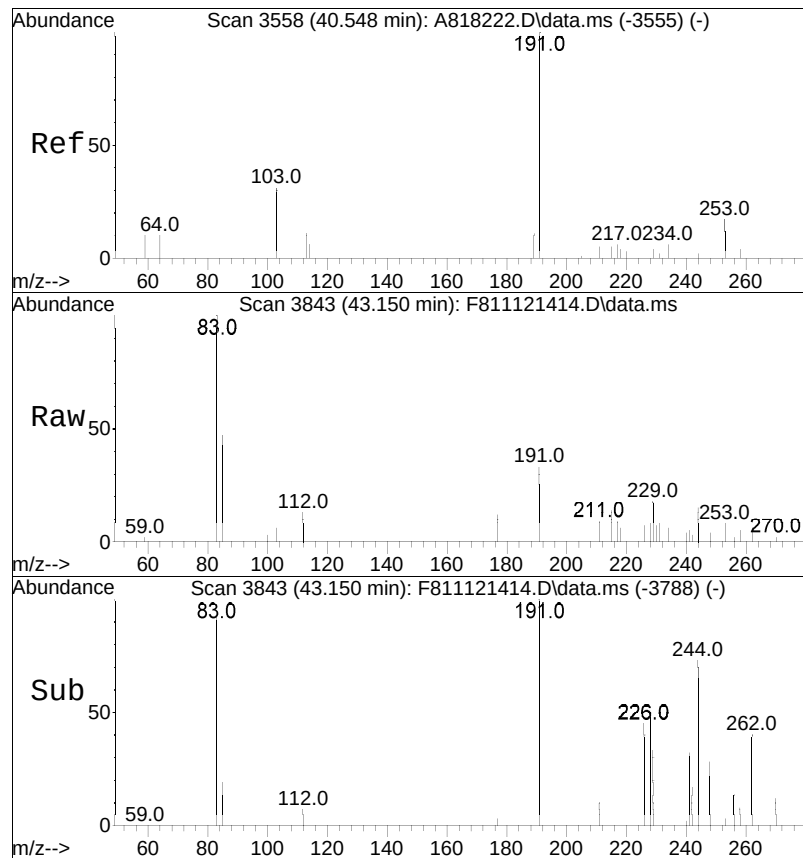




#97
 C24 Tricyclic Terpane (T5)
 Concen: 212.20 ng/ml
 RT: 41.662 min Scan# 3680
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

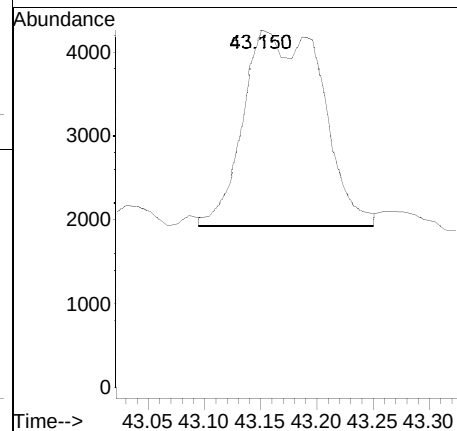
Tgt Ion:191 Resp: 11705

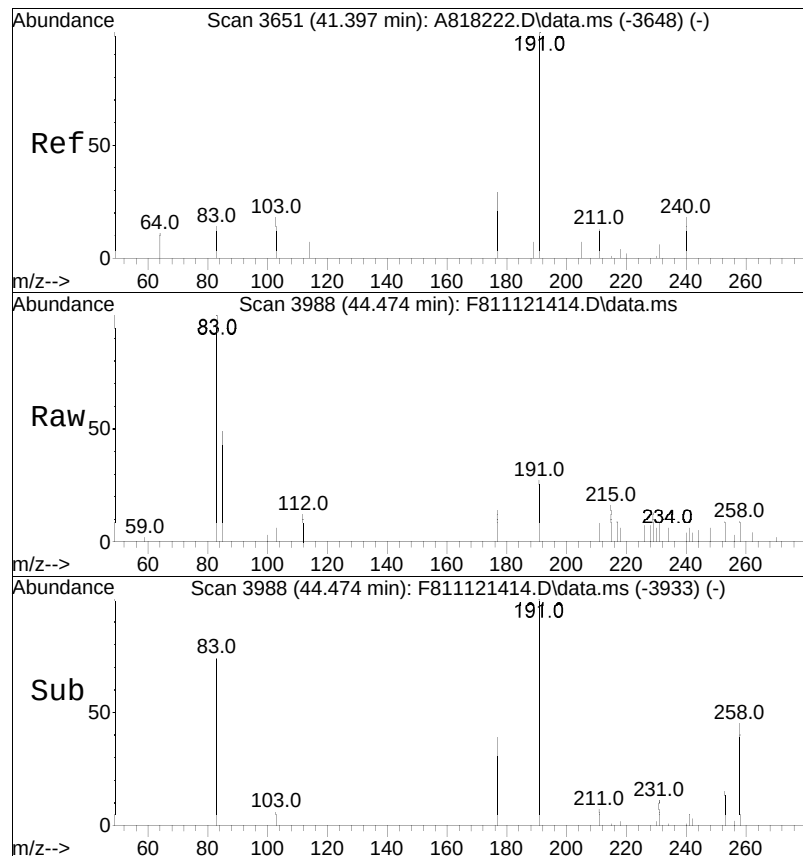




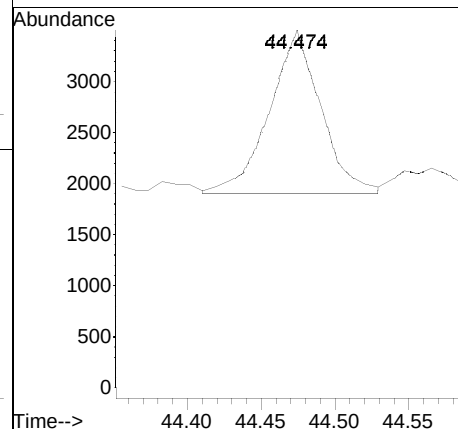
#98
C25 Tricyclic Terpane (T6)
Concen: 203.97 ng/ml M1
RT: 43.150 min Scan# 3843
Delta R.T. 0.000 min
Lab File: F811121414.D
Acq: 13 Nov 2014 11:46 am

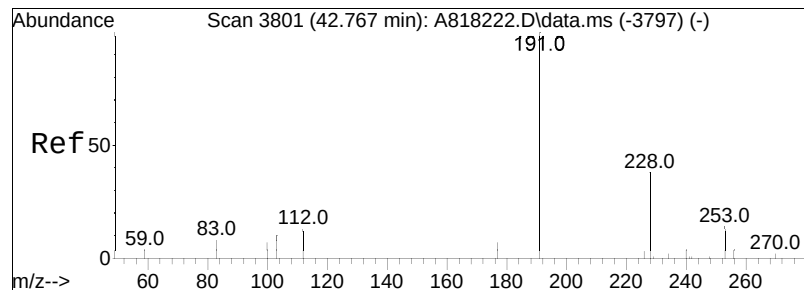
Tgt Ion:191 Resp: 11251





#99
 C24 Tetracyclic Terpane (T6a)
 Concen: 69.69 ng/ml M4
 RT: 44.474 min Scan# 3988
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:191 Resp: 3844





#100

C26 Tricyclic Terpane-22S (T6b)

Concen: 72.35 ng/ml M4

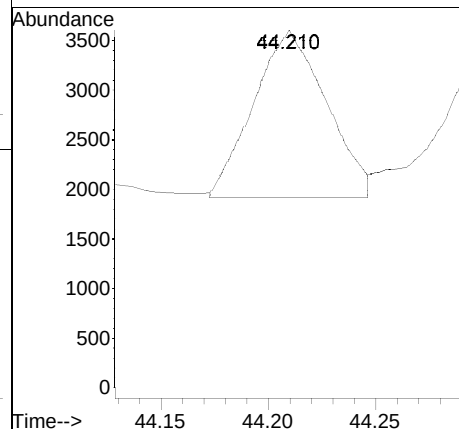
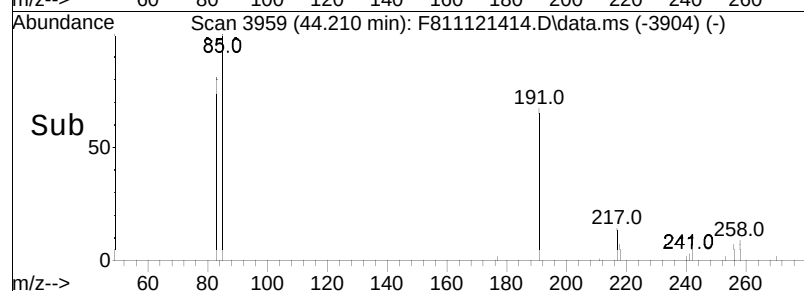
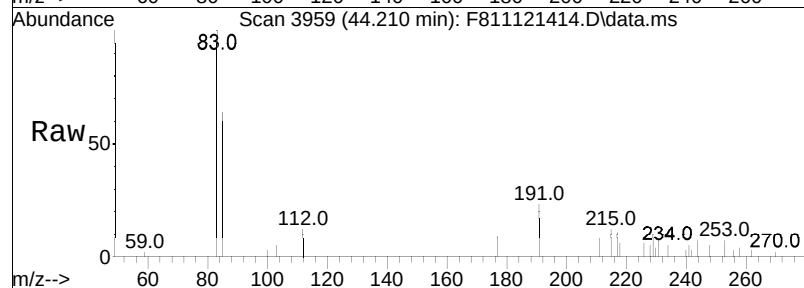
RT: 44.210 min Scan# 3959

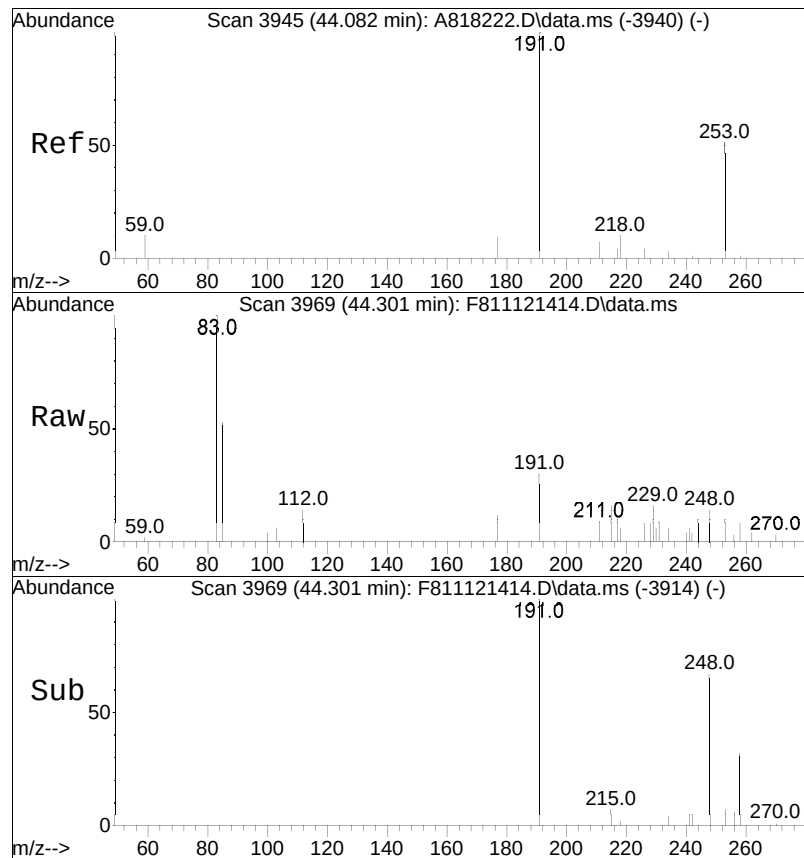
Delta R.T. -0.000 min

Lab File: F811121414.D

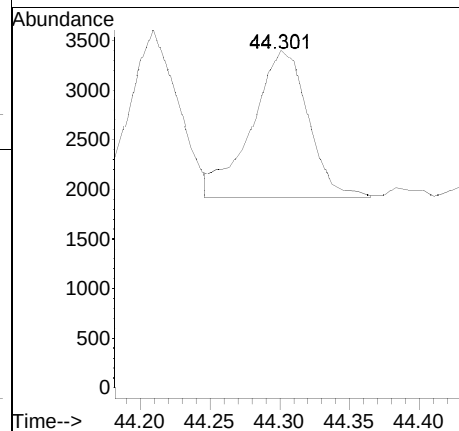
Acq: 13 Nov 2014 11:46 am

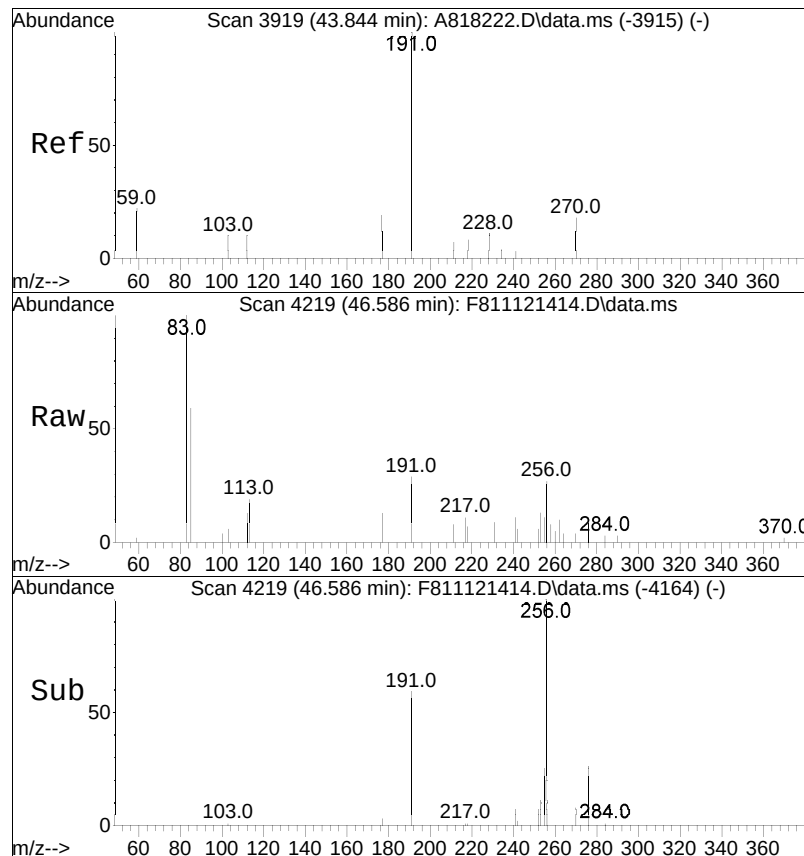
Tgt Ion:191 Resp: 3991





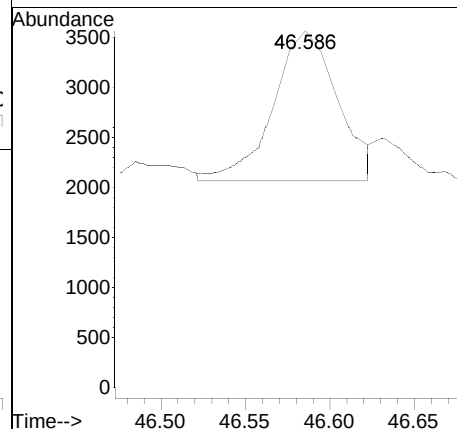
#101
 C26 Tricyclic Terpene-22R (T6c)
 Concen: 74.65 ng/ml M4
 RT: 44.301 min Scan# 3969
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:191 Resp: 4118

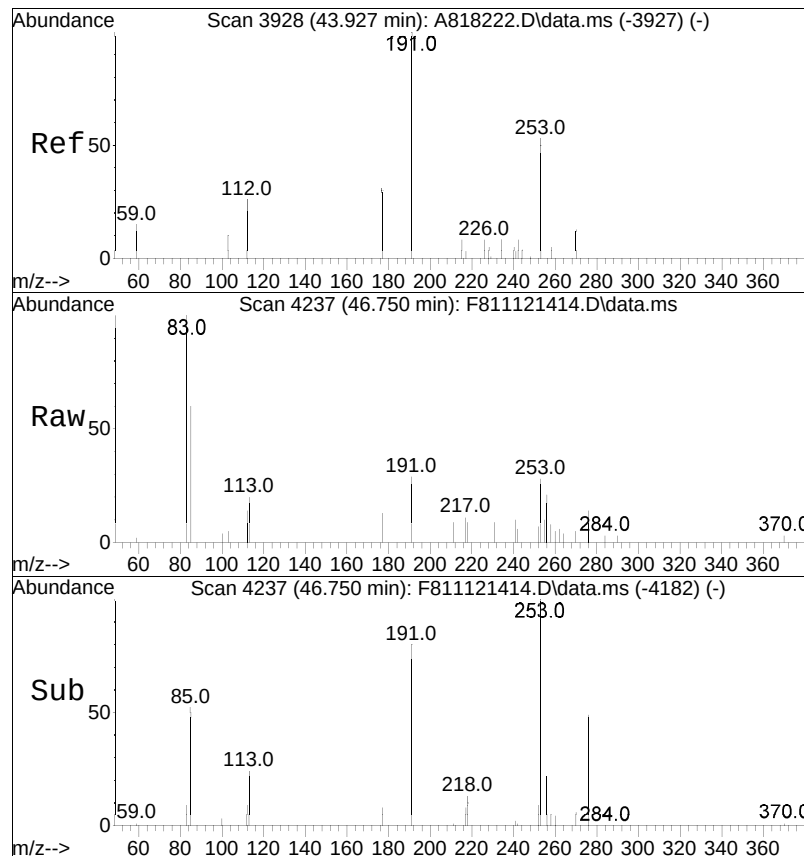




#102
 C28 Tricyclic Terpane-22S (T7)
 Concen: 72.73 ng/ml M4
 RT: 46.586 min Scan# 4219
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

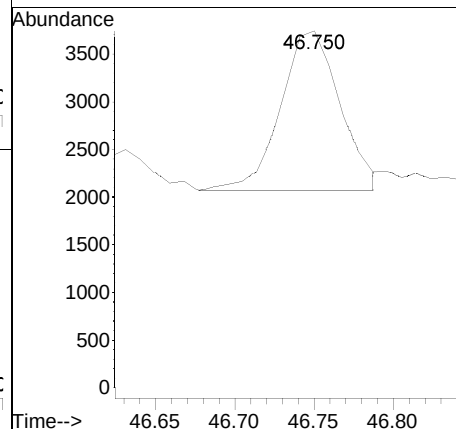
Tgt Ion:191 Resp: 4012

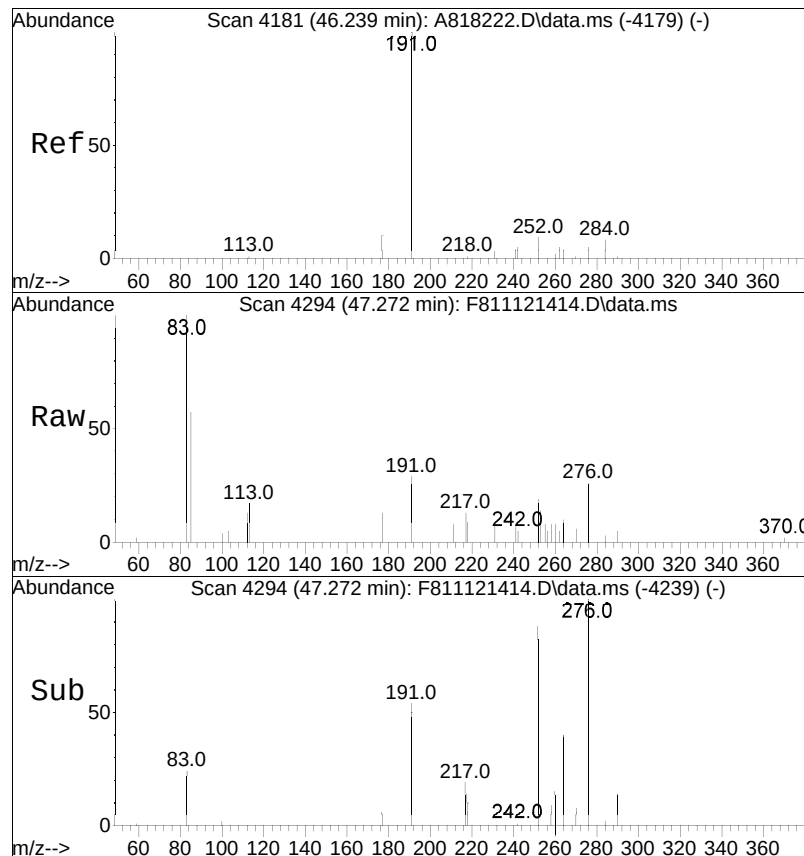




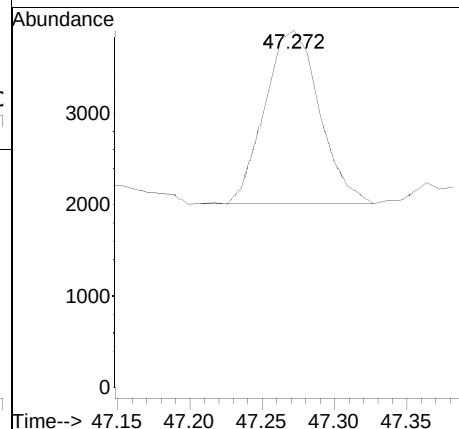
#103
 C28 Tricyclic Terpane-22R (T8)
 Concen: 79.88 ng/ml M4
 RT: 46.750 min Scan# 4237
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

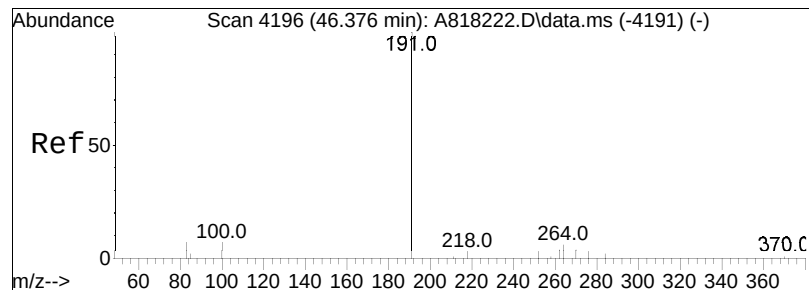
Tgt Ion:191 Resp: 4406





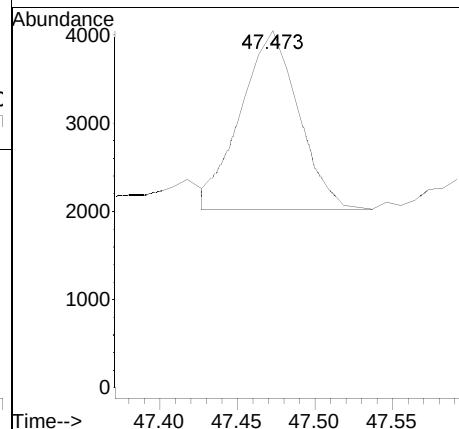
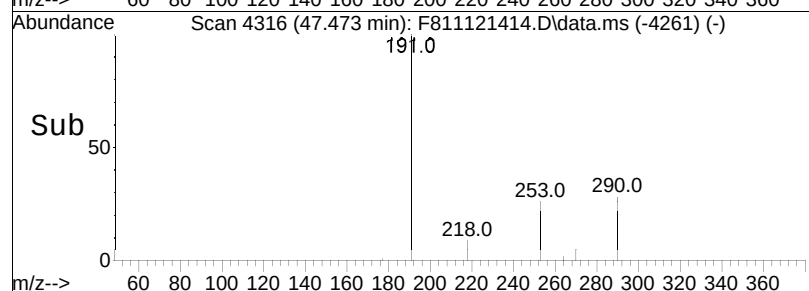
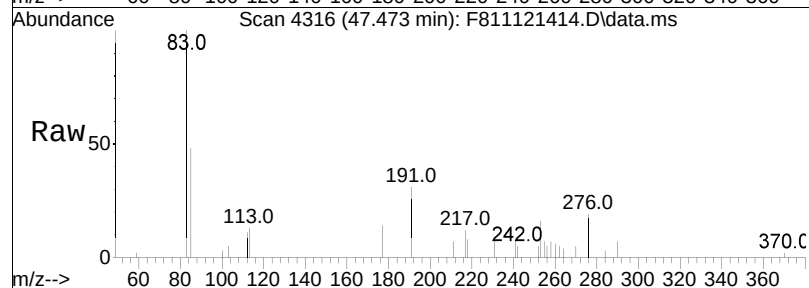
#104
 C29 Tricyclic Terpane-22S (T9)
 Concen: 90.15 ng/ml
 RT: 47.272 min Scan# 4294
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:191 Resp: 4973

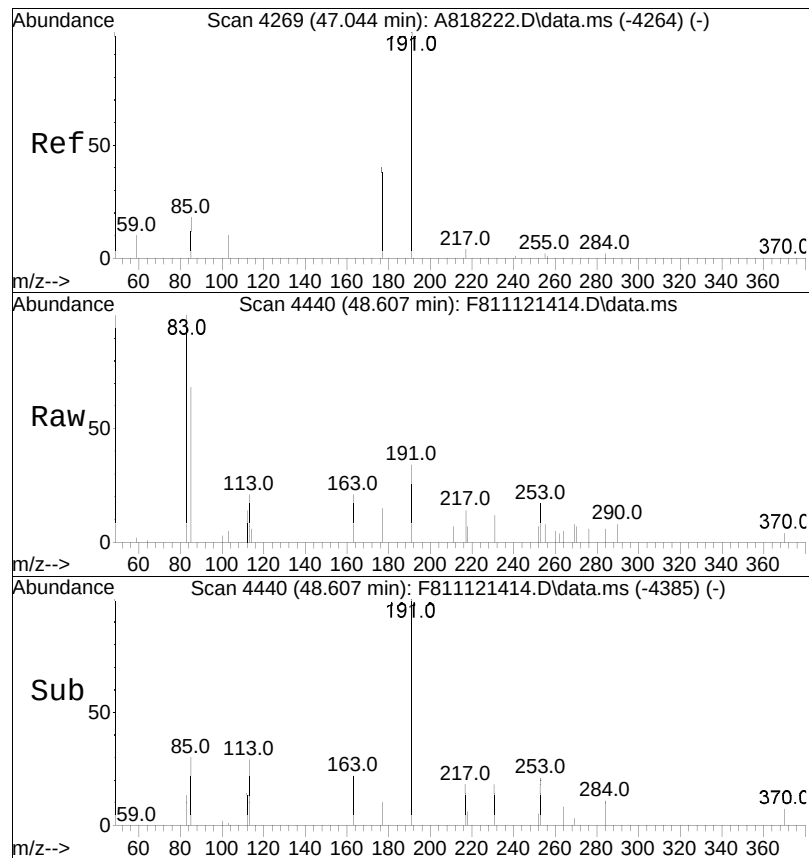




#105
 C29 Tricyclic Terpane-22R (T10)
 Concen: 94.54 ng/ml M4
 RT: 47.473 min Scan# 4316
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

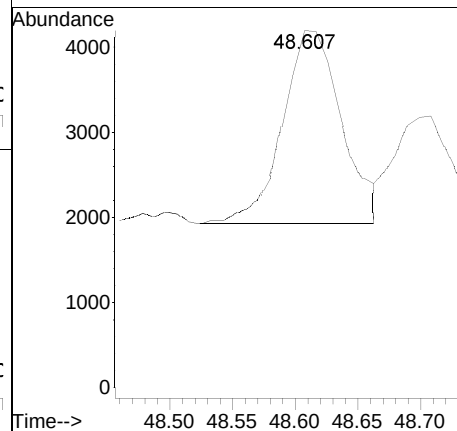
Tgt Ion:191 Resp: 5215

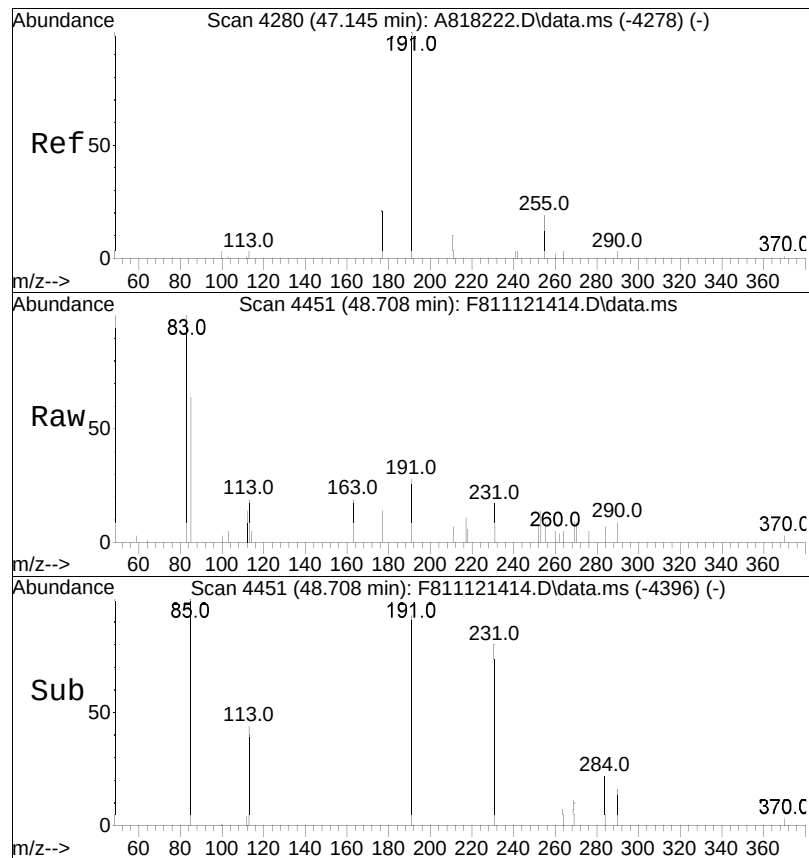




#106
 18a-22,29,30-Trisnorneohopane-
 Concen: 135.26 ng/ml
 RT: 48.607 min Scan# 4440
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

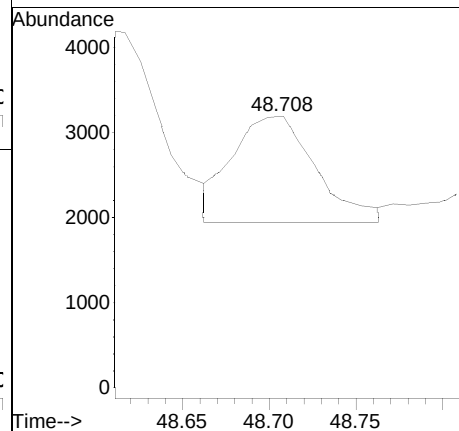
Tgt Ion:191 Resp: 7461

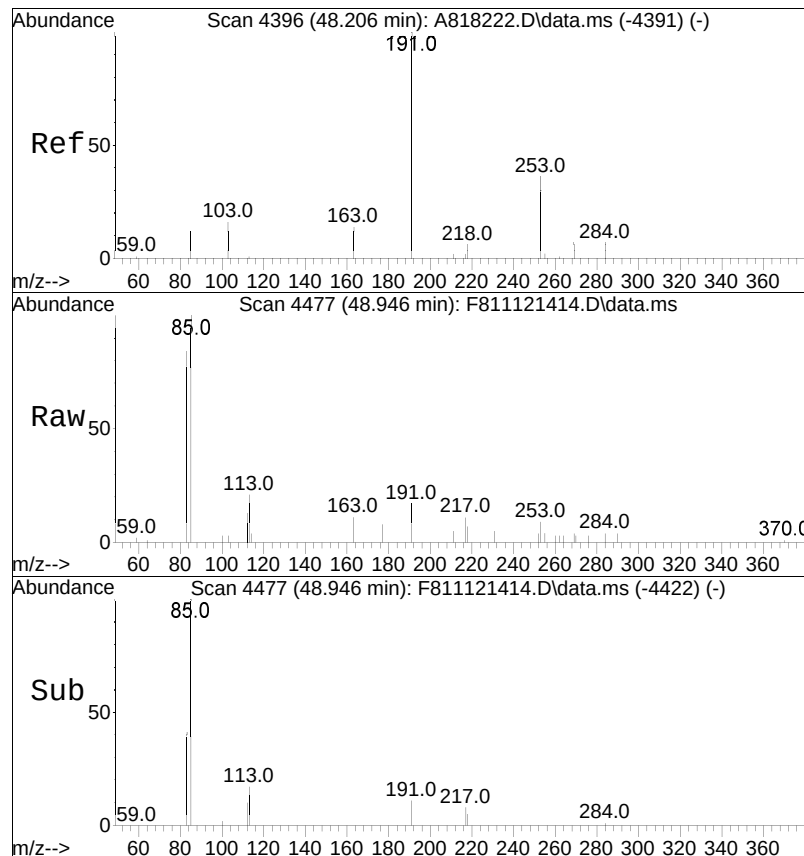




#107
 C30 Tricyclic Terpane-22S
 Concen: 76.36 ng/mL M4
 RT: 48.708 min Scan# 4451
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

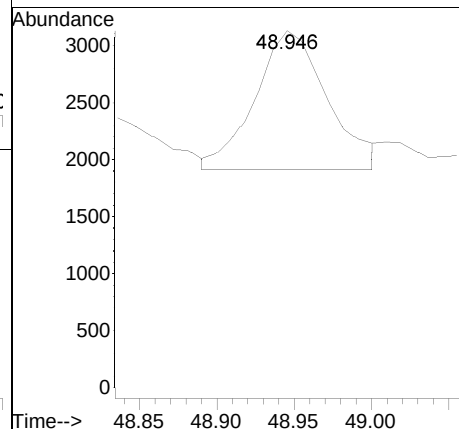
Tgt Ion:191 Resp: 4212

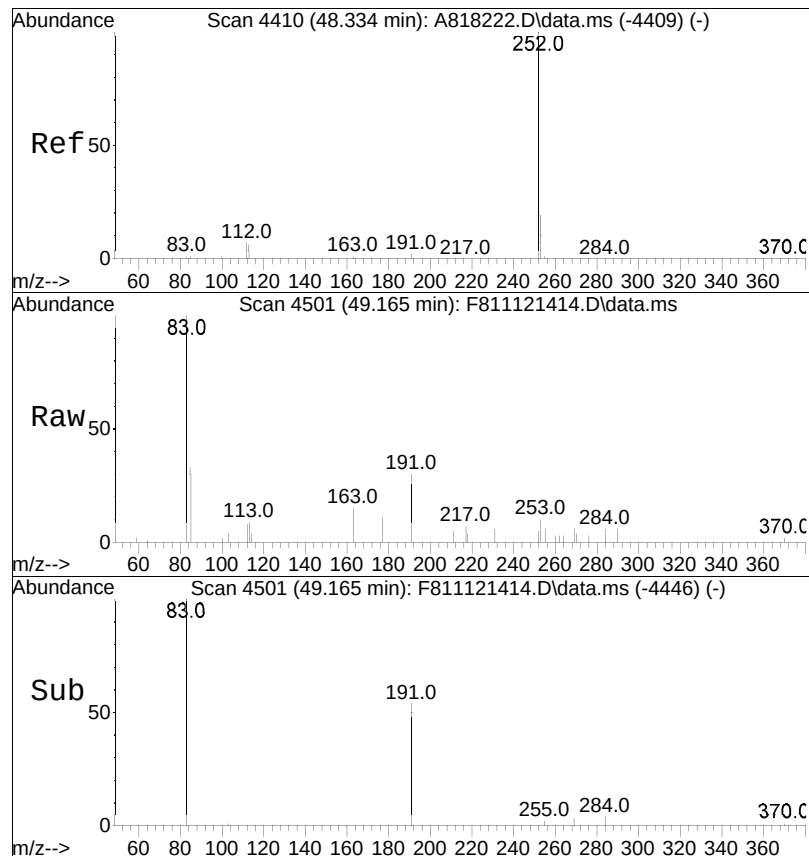




#108
C30 Tricyclic Terpane-22R
Concen: 71.88 ng/mL M4
RT: 48.946 min Scan# 4477
Delta R.T. -0.000 min
Lab File: F811121414.D
Acq: 13 Nov 2014 11:46 am

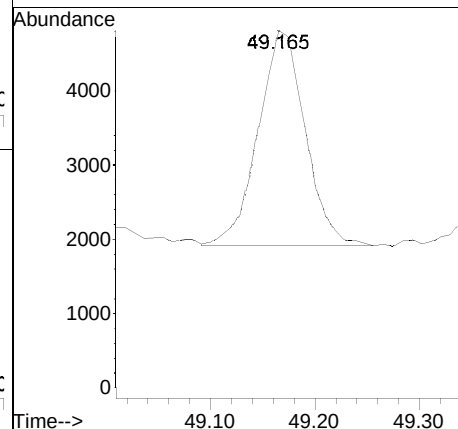
Tgt Ion:191 Resp: 3965

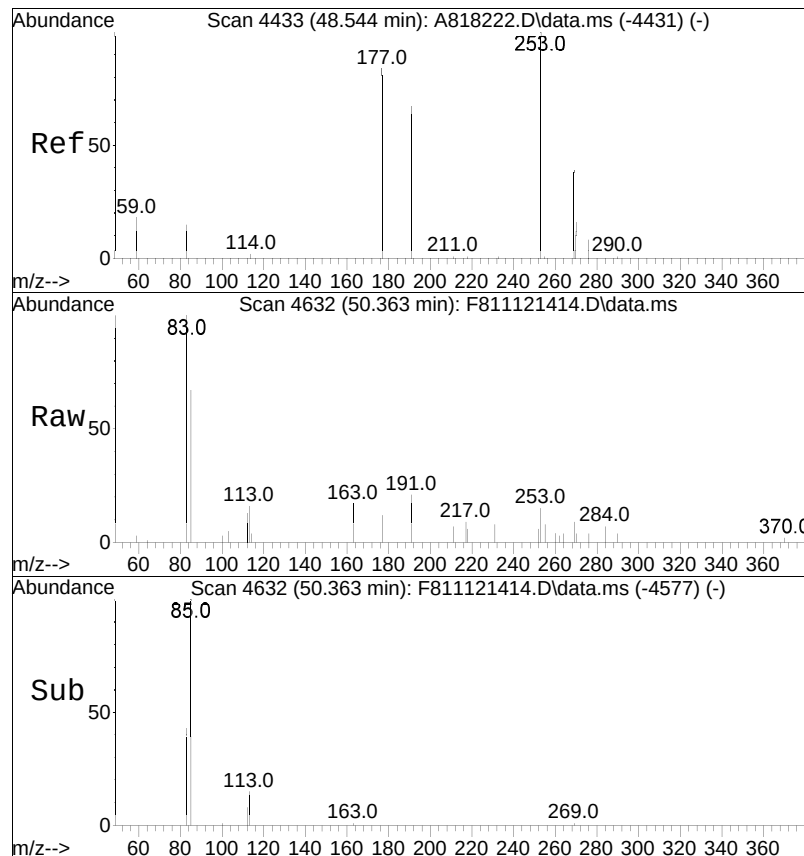




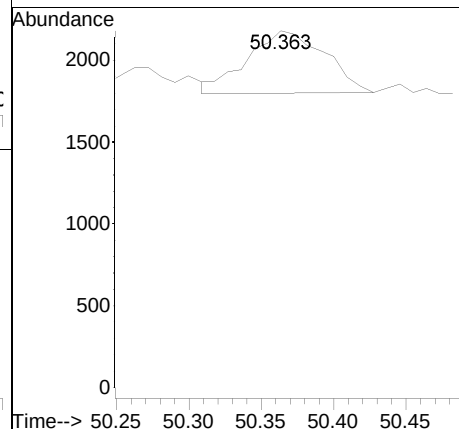
#109
 17a(H)-22,29,30-Trisnorhopane-
 Concen: 163.52 ng/ml
 RT: 49.165 min Scan# 4501
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

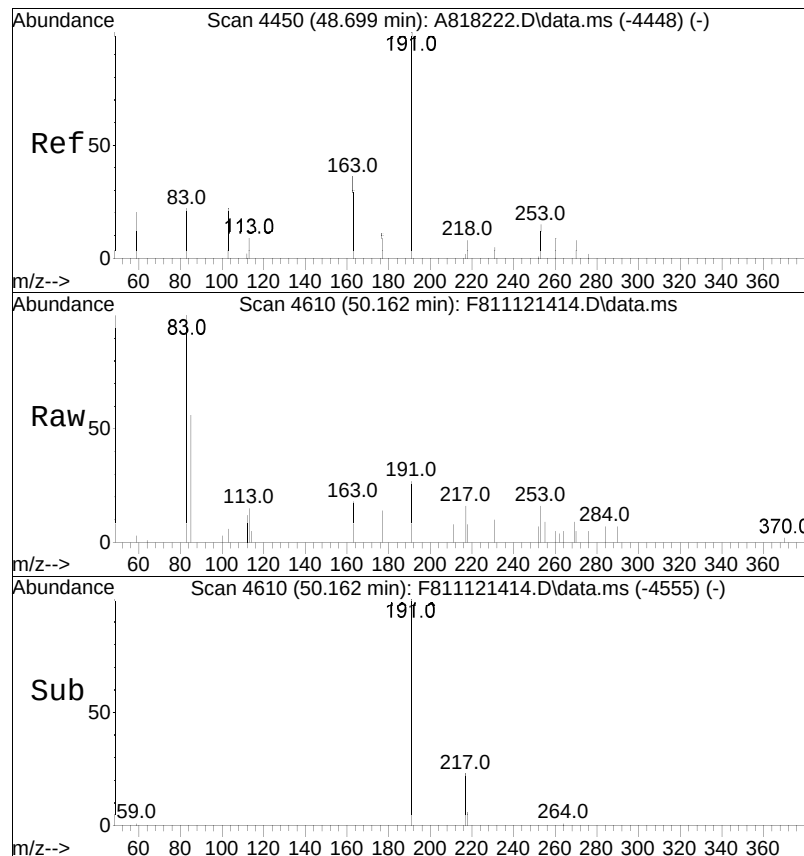
Tgt Ion:191 Resp: 9020





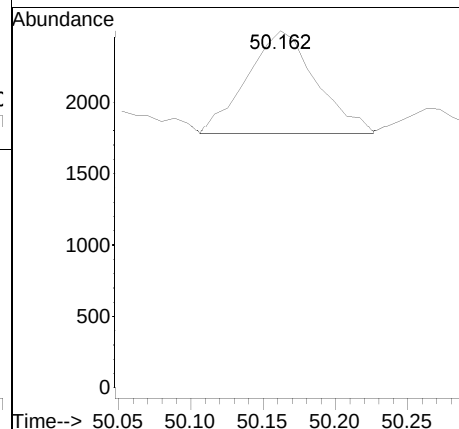
#110
 17a/b, 21b/a 28,30-Bisnorhopane
 Concen: 25.43 ng/ml
 RT: 50.363 min Scan# 4632
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:191 Resp: 1403

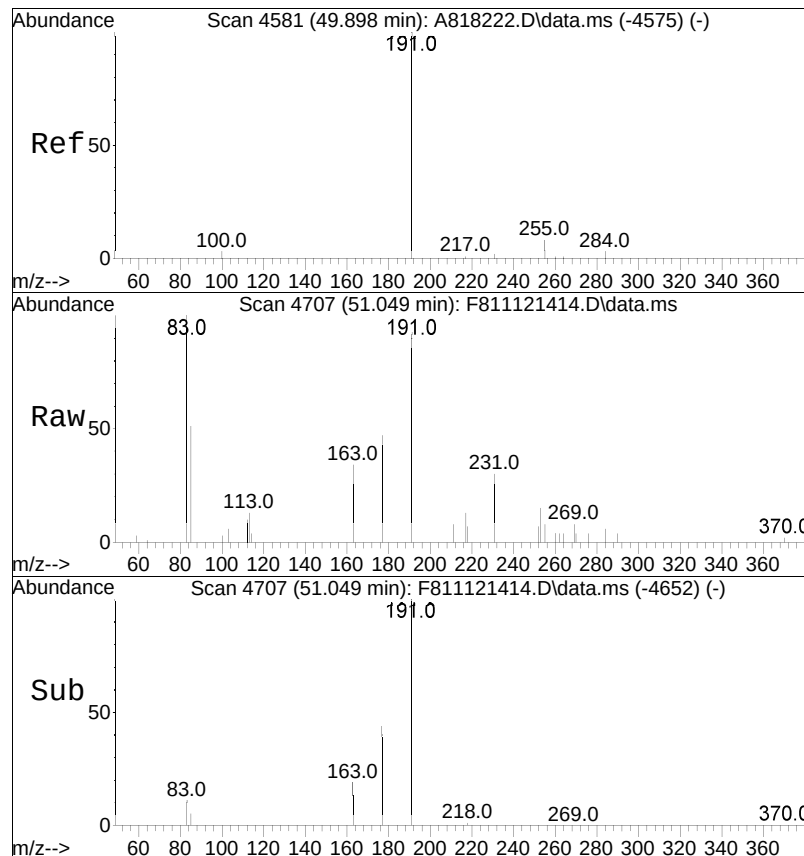




#111
 17a(H),21b(H)-25-Norhopane (T1
 Concen: 43.11 ng/ml
 RT: 50.162 min Scan# 4610
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

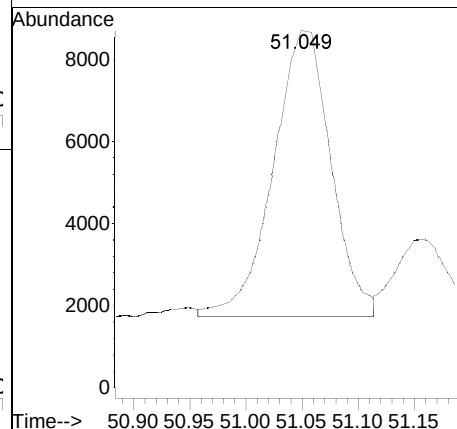
Tgt Ion:191 Resp: 2378

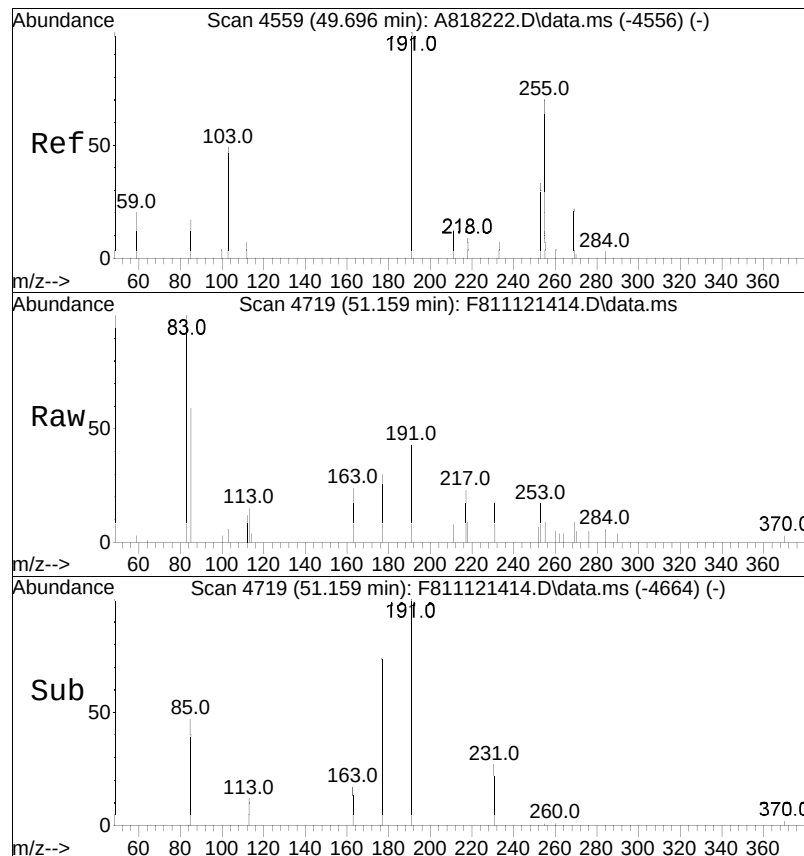




#112
 30-Norhopane (T15)
 Concen: 451.43 ng/ml M4
 RT: 51.049 min Scan# 4707
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

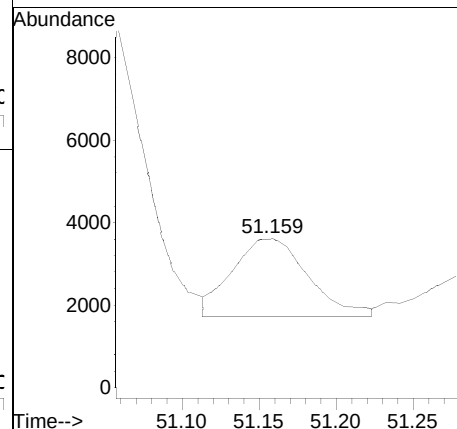
Tgt Ion:191 Resp: 24901

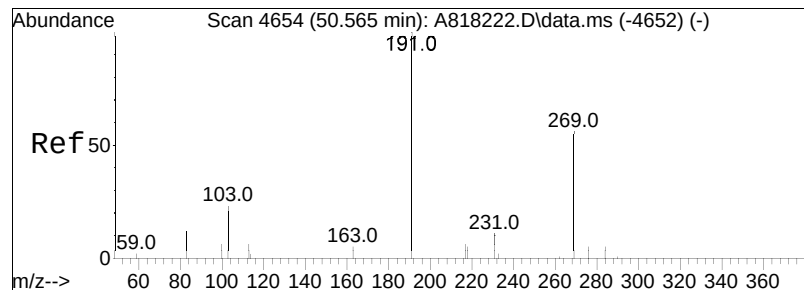




#113
 18a(H)-30-Norneohopane-C29Ts (
 Concen: 116.62 ng/ml M4
 RT: 51.159 min Scan# 4719
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

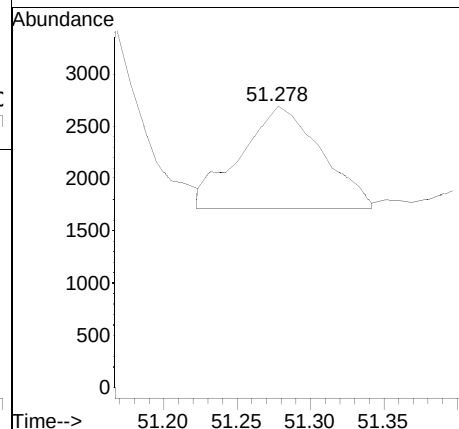
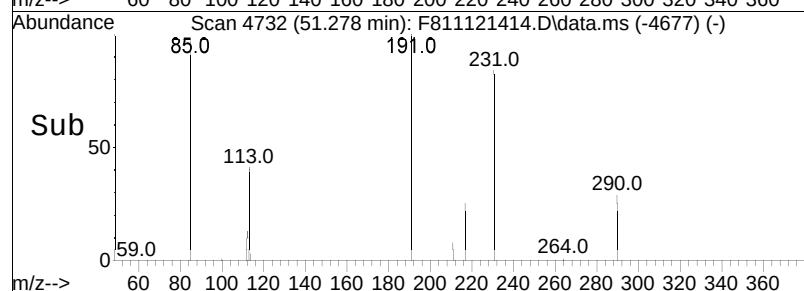
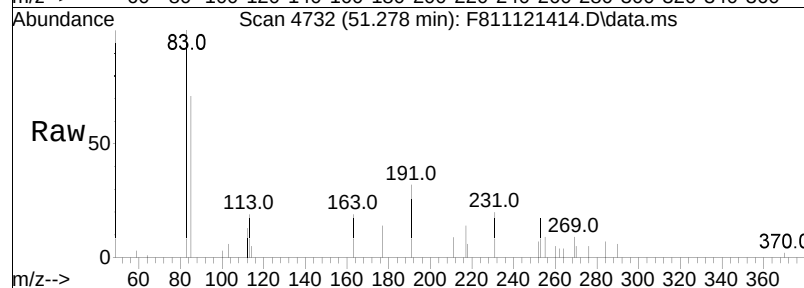
Tgt Ion:191 Resp: 6433

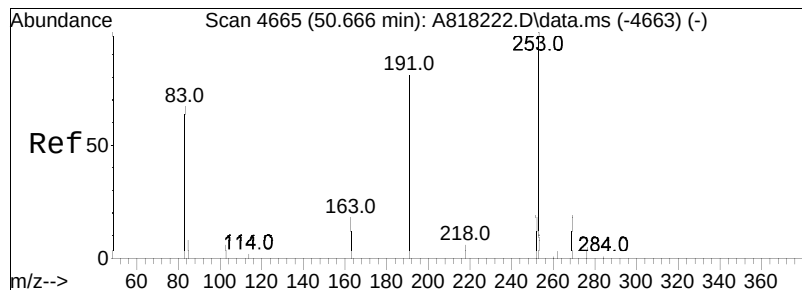




#114
 17a(H)-Diahopane (X)
 Concen: 66.90 ng/ml M4
 RT: 51.278 min Scan# 4732
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

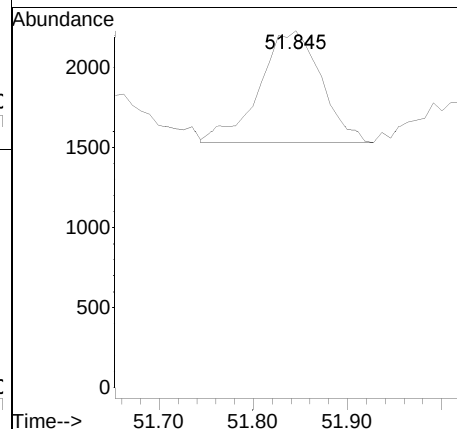
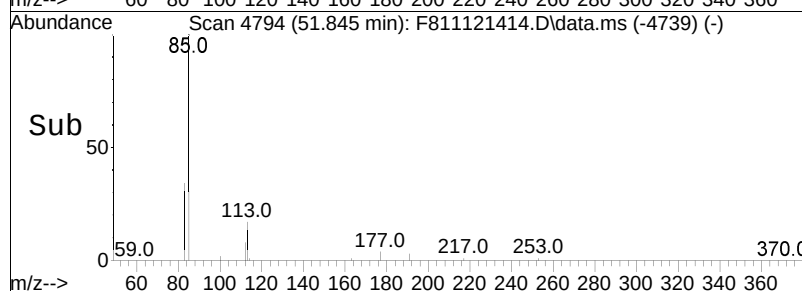
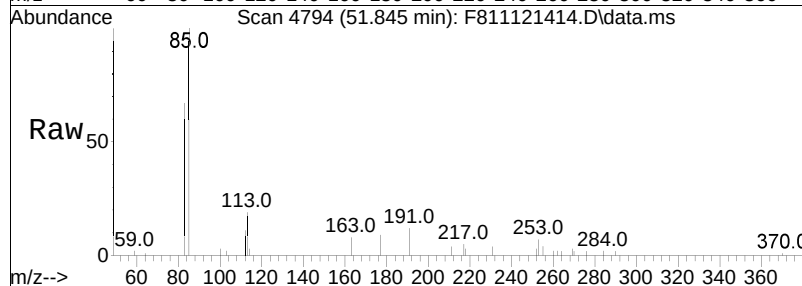
Tgt Ion:191 Resp: 3690

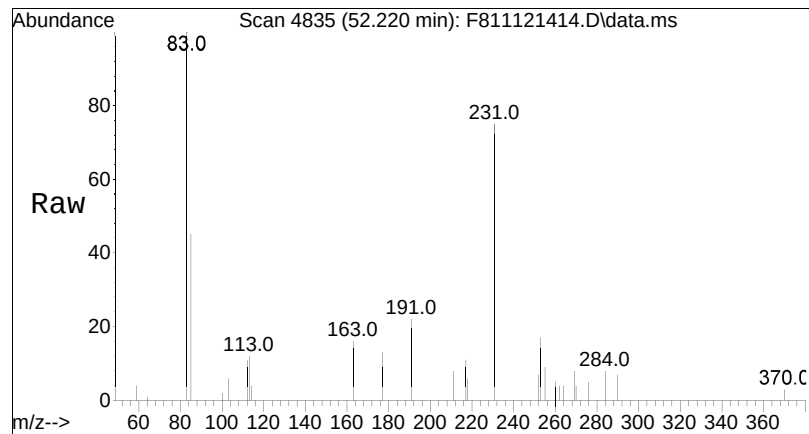




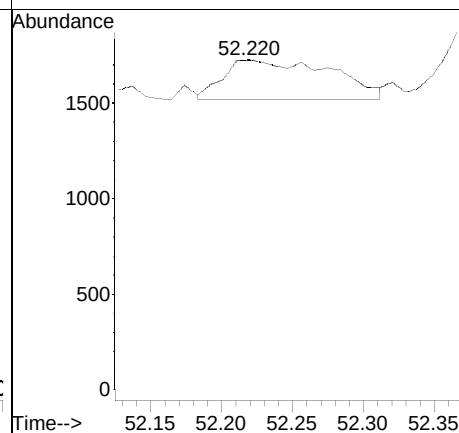
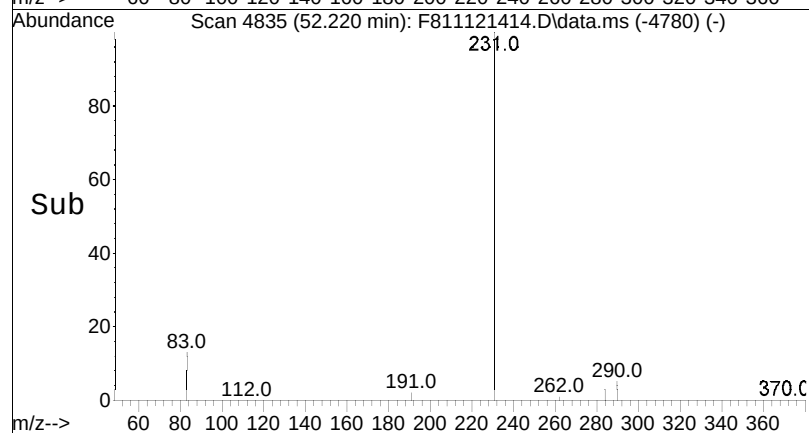
#115
 30-Normoretane (T17)
 Concen: 57.41 ng/ml
 RT: 51.845 min Scan# 4794
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

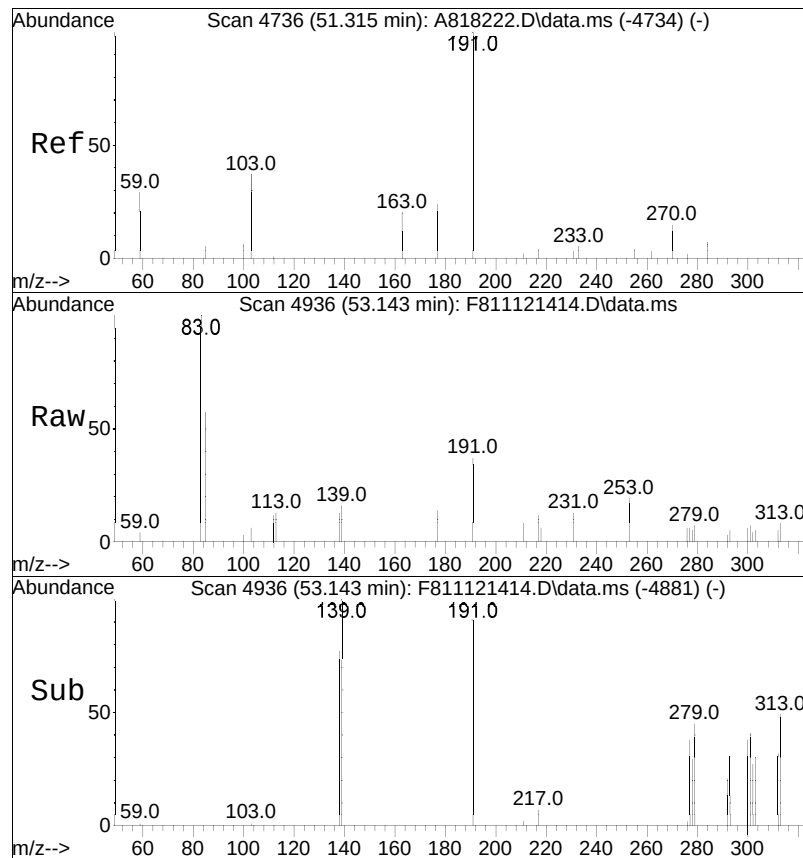
Tgt Ion:191 Resp: 3167





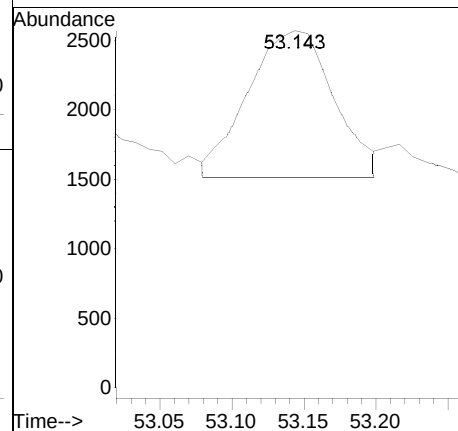
#116
 18a(H)&18b(H)-Oleananes (T18)
 Concen: 20.00 ng/ml M4
 RT: 52.220 min Scan# 4835
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:191 Resp: 1103

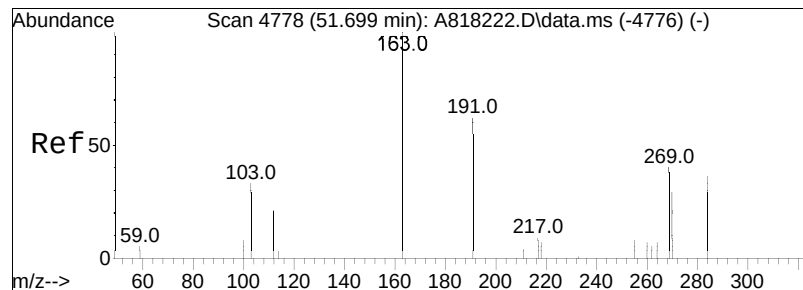




#117
 Moretane (T20)
 Concen: 79.28 ng/ml M4
 RT: 53.143 min Scan# 4936
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

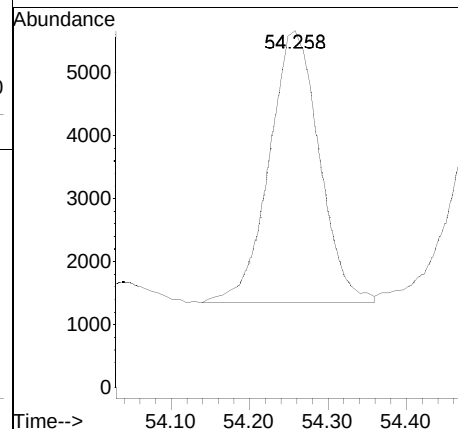
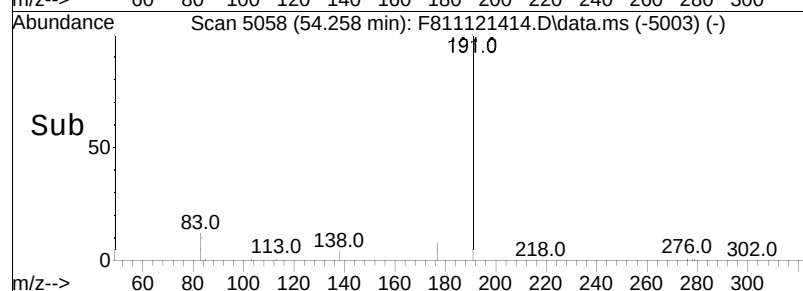
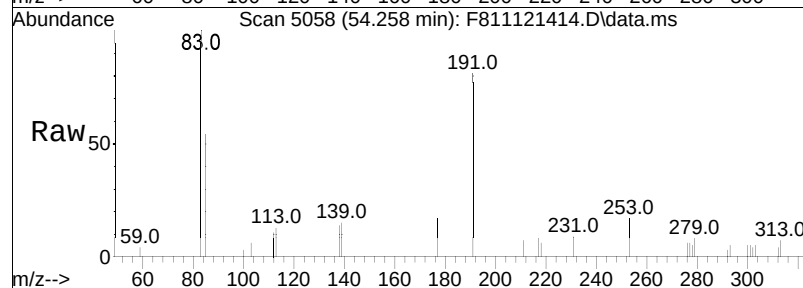
Tgt Ion:191 Resp: 4373

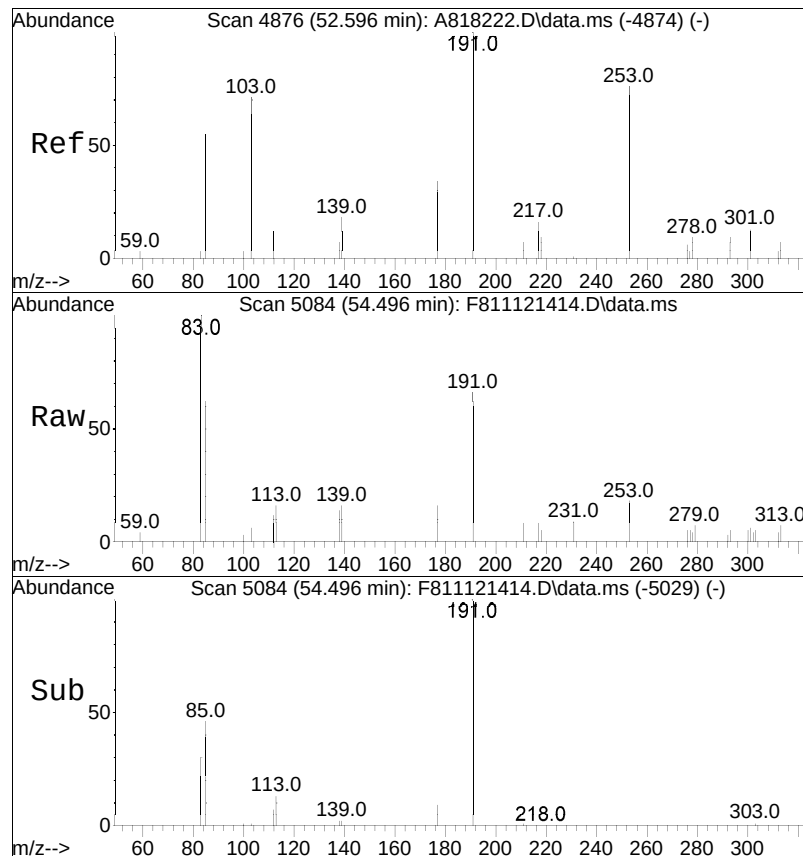




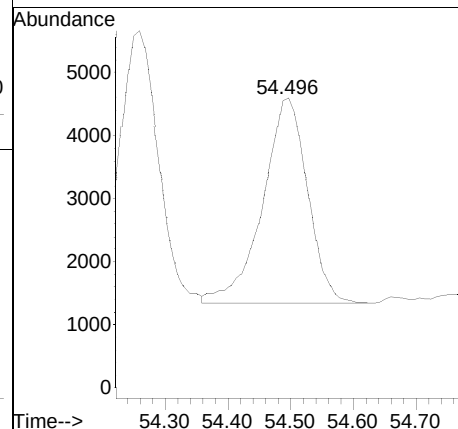
#118
 30-Homohopane-22S (T21)
 Concen: 347.78 ng/ml
 RT: 54.258 min Scan# 5058
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

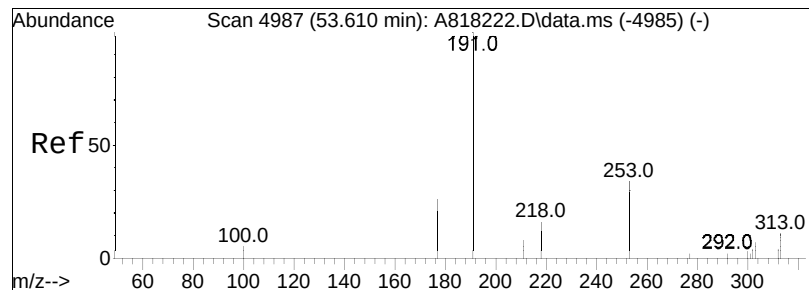
Tgt Ion:191 Resp: 19184





#119
 30-Homohopane-22R (T22)
 Concen: 292.35 ng/ml
 RT: 54.496 min Scan# 5084
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:191 Resp: 16126





#120

Gammacerane/C32-diahopane

Concen: 69.65 ng/mL

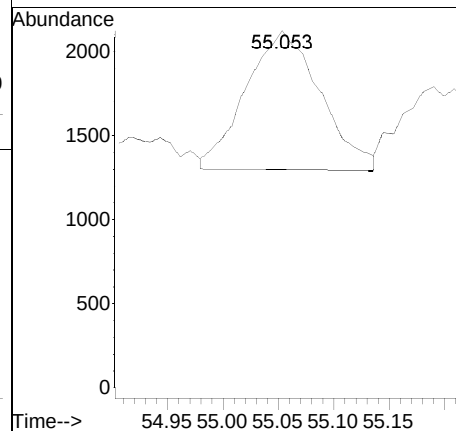
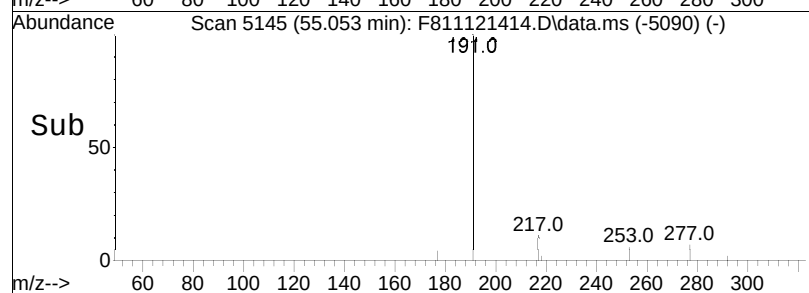
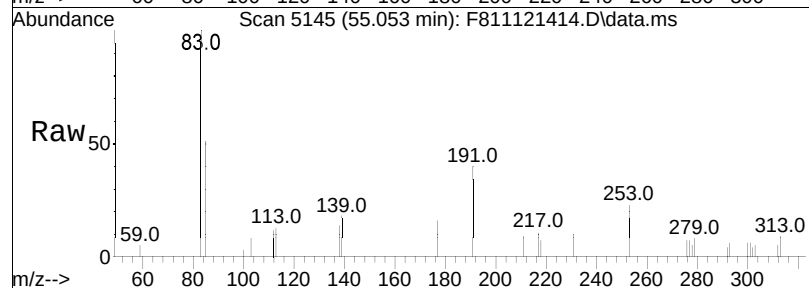
RT: 55.053 min Scan# 5145

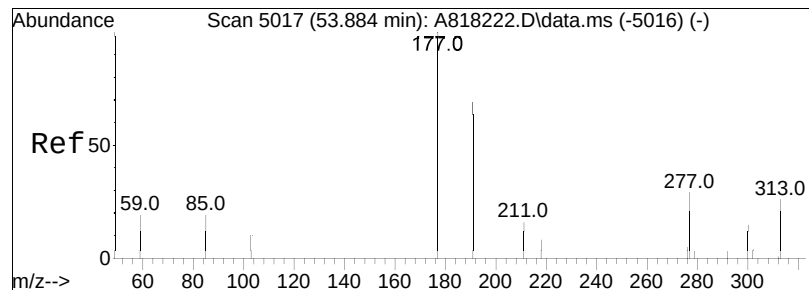
Delta R.T. 0.000 min

Lab File: F811121414.D

Acq: 13 Nov 2014 11:46 am

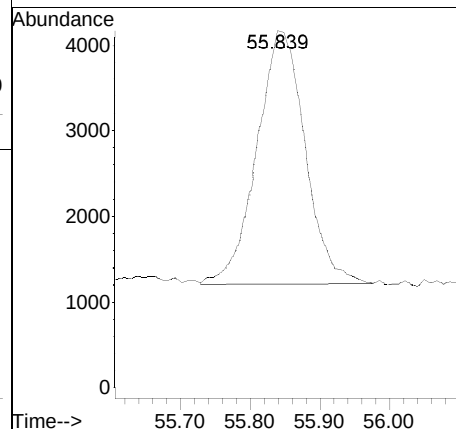
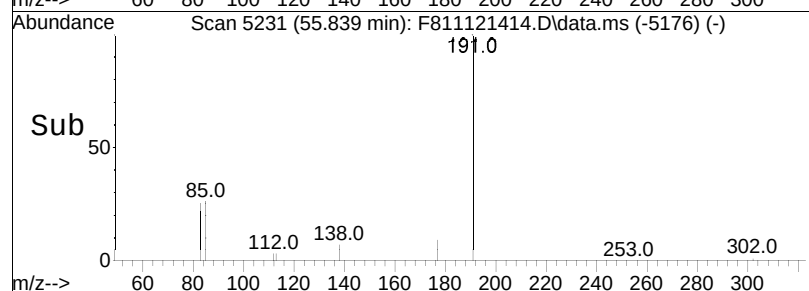
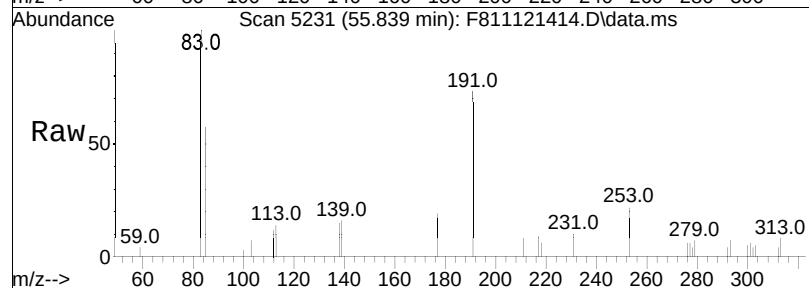
Tgt Ion:191 Resp: 3842

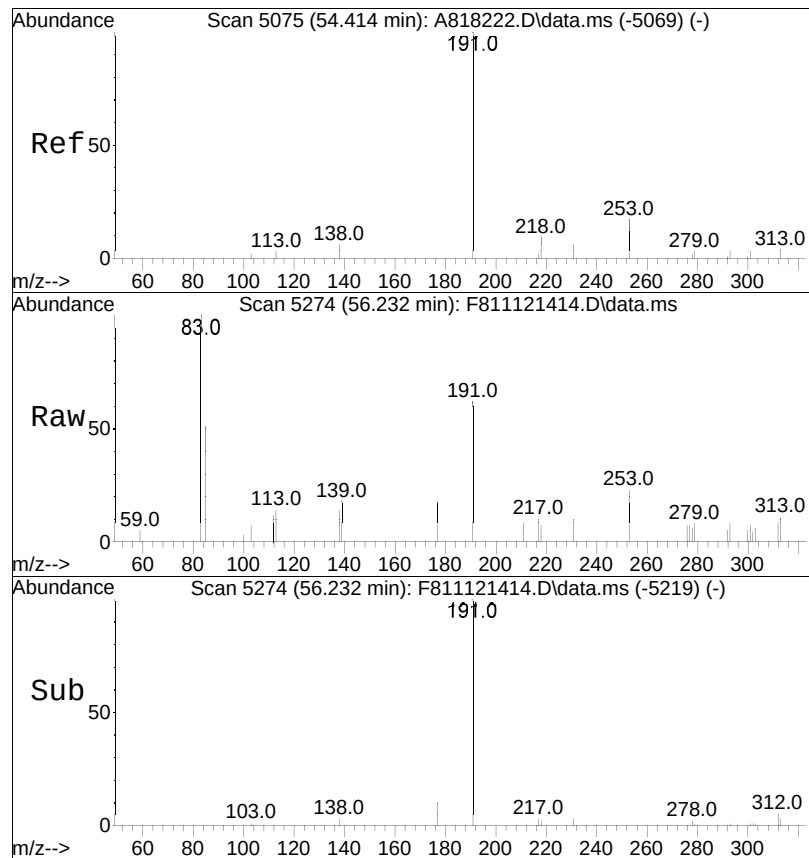




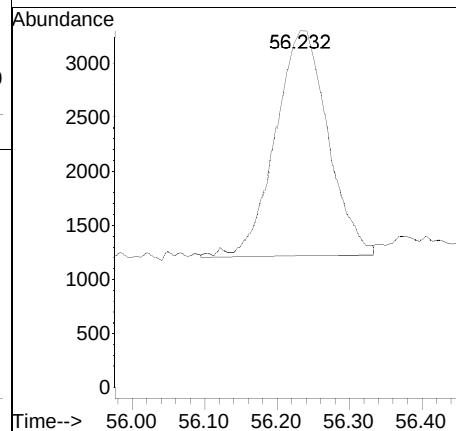
#121
30,31-Bishomohopane-22S (T26)
Concen: 256.09 ng/ml
RT: 55.839 min Scan# 5231
Delta R.T. 0.000 min
Lab File: F811121414.D
Acq: 13 Nov 2014 11:46 am

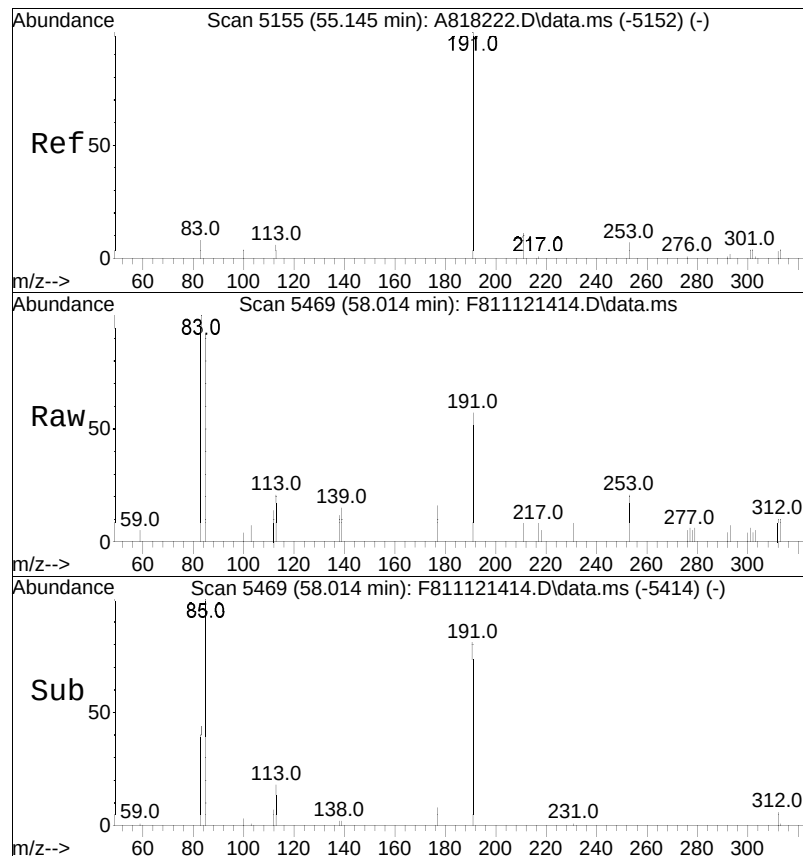
Tgt Ion:191 Resp: 14126



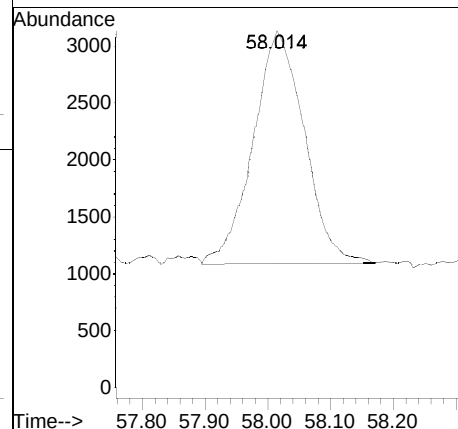


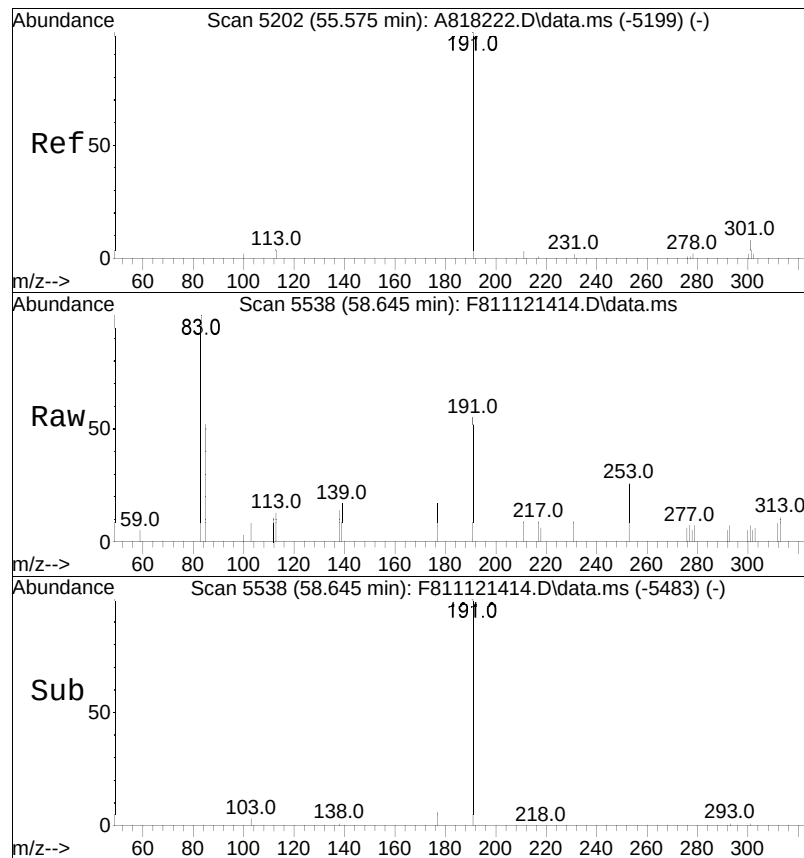
#122
30,31-Bishomohopane-22R (T27)
Concen: 189.57 ng/ml
RT: 56.232 min Scan# 5274
Delta R.T. 0.000 min
Lab File: F811121414.D
Acq: 13 Nov 2014 11:46 am
Tgt Ion:191 Resp: 10457



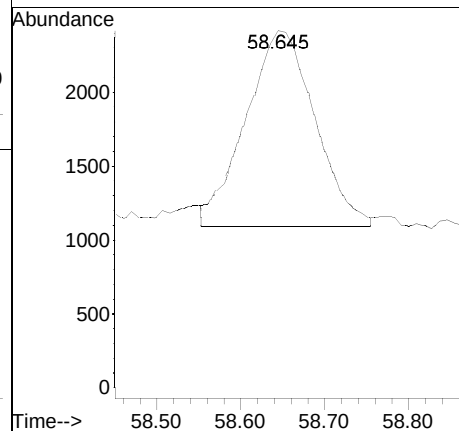


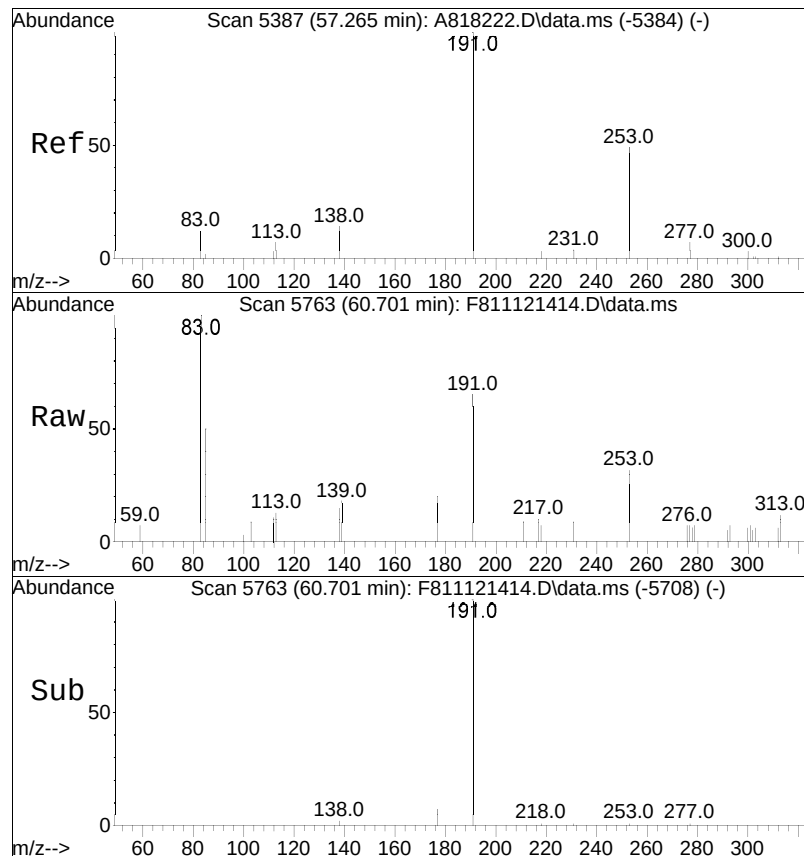
#123
 30,31-Trishomohopane-22S (T30)
 Concen: 208.77 ng/ml
 RT: 58.014 min Scan# 5469
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:191 Resp: 11516



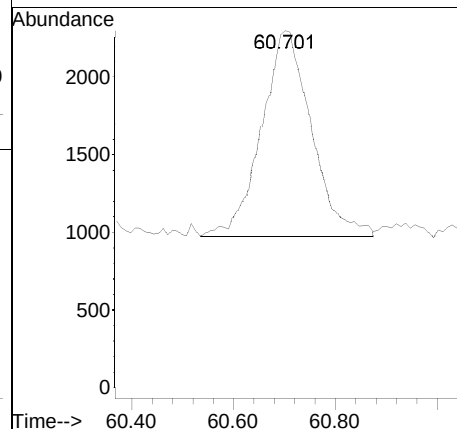


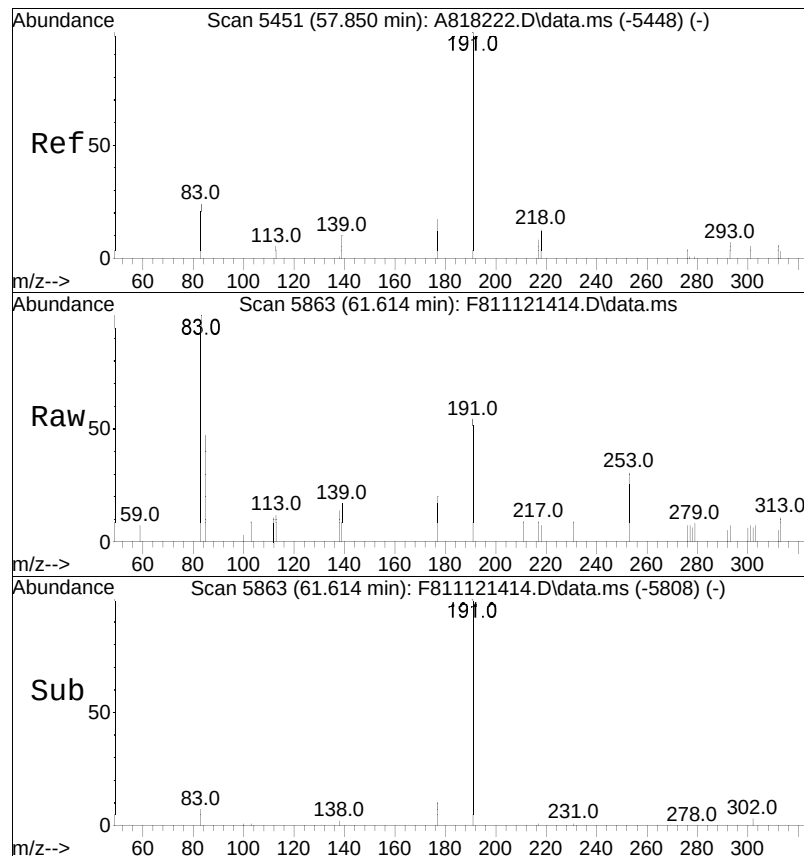
#124
 30,31-Trishomohopane-22R (T31)
 Concen: 136.26 ng/ml M4
 RT: 58.645 min Scan# 5538
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:191 Resp: 7516



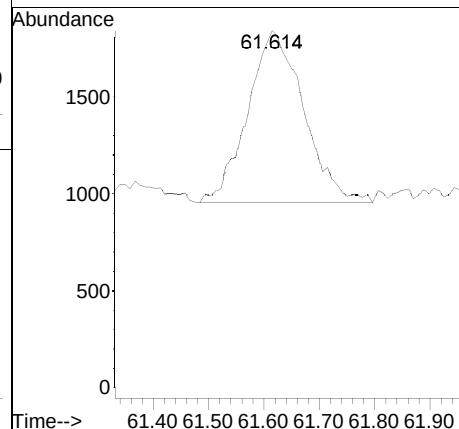


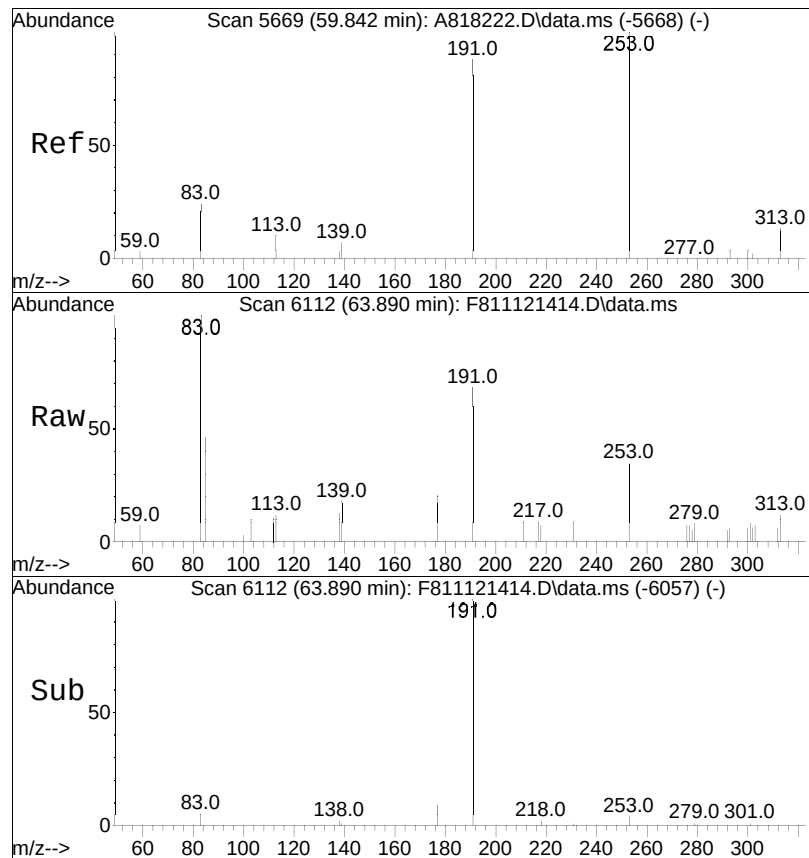
#125
 Tetrakishomohopane-22S (T32)
 Concen: 162.74 ng/ml
 RT: 60.701 min Scan# 5763
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:191 Resp: 8977





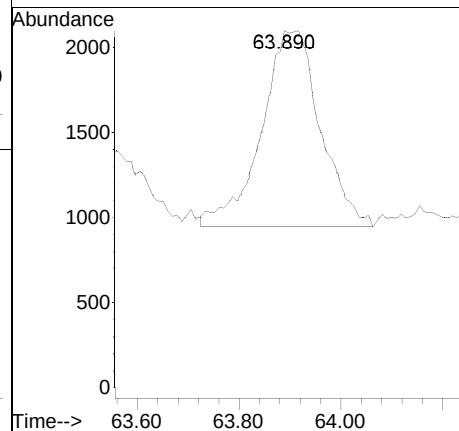
#126
 Tetrakishomohopane-22R (T33)
 Concen: 112.00 ng/ml
 RT: 61.614 min Scan# 5863
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:191 Resp: 6178

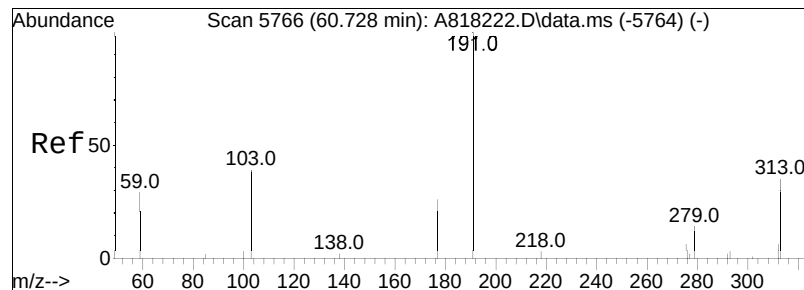




#127
 Pentakishomohopane-22S (T34)
 Concen: 166.01 ng/ml
 RT: 63.890 min Scan# 6112
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

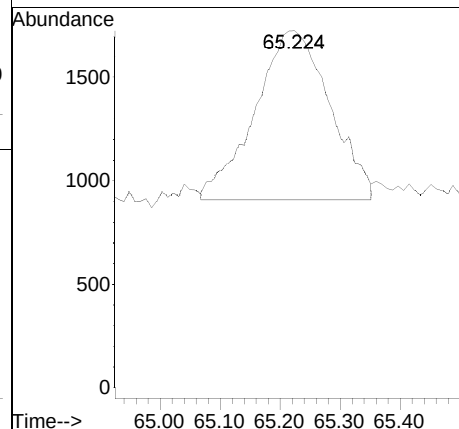
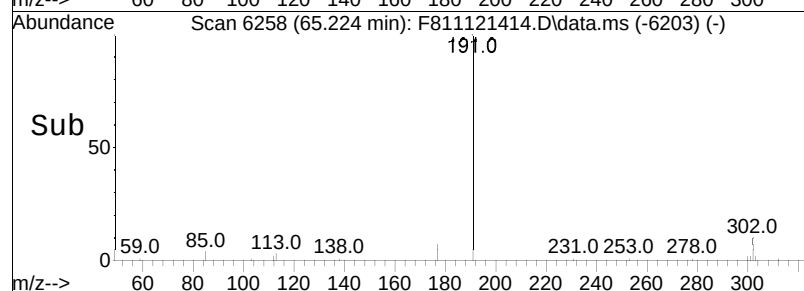
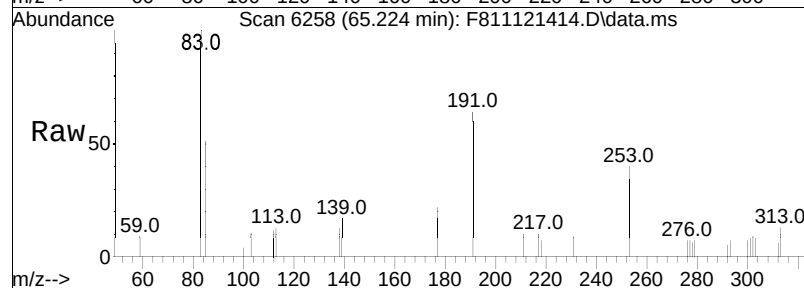
Tgt Ion:191 Resp: 9157

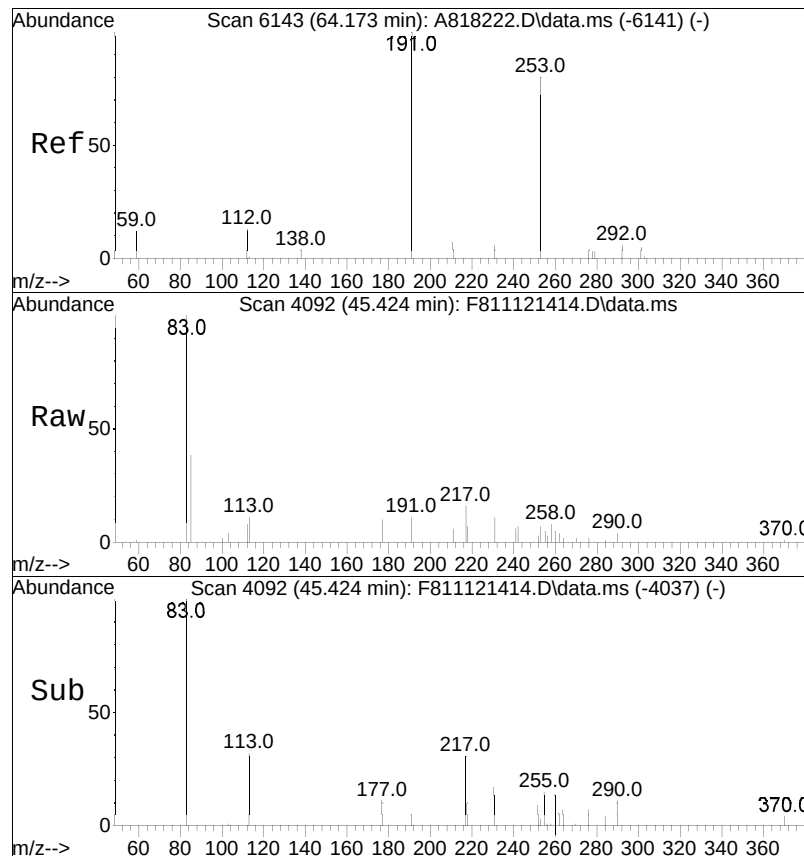




#128
 Pentakishomohopane-22R (T35)
 Concen: 128.57 ng/ml M4
 RT: 65.224 min Scan# 6258
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

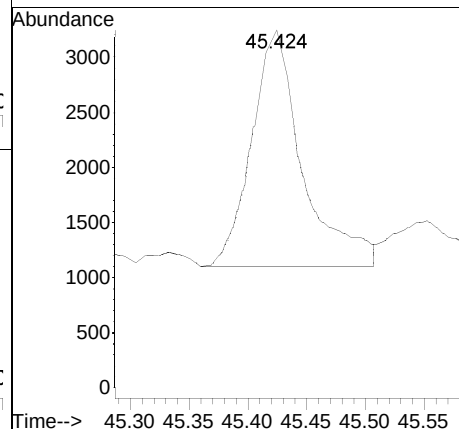
Tgt Ion:191 Resp: 7092

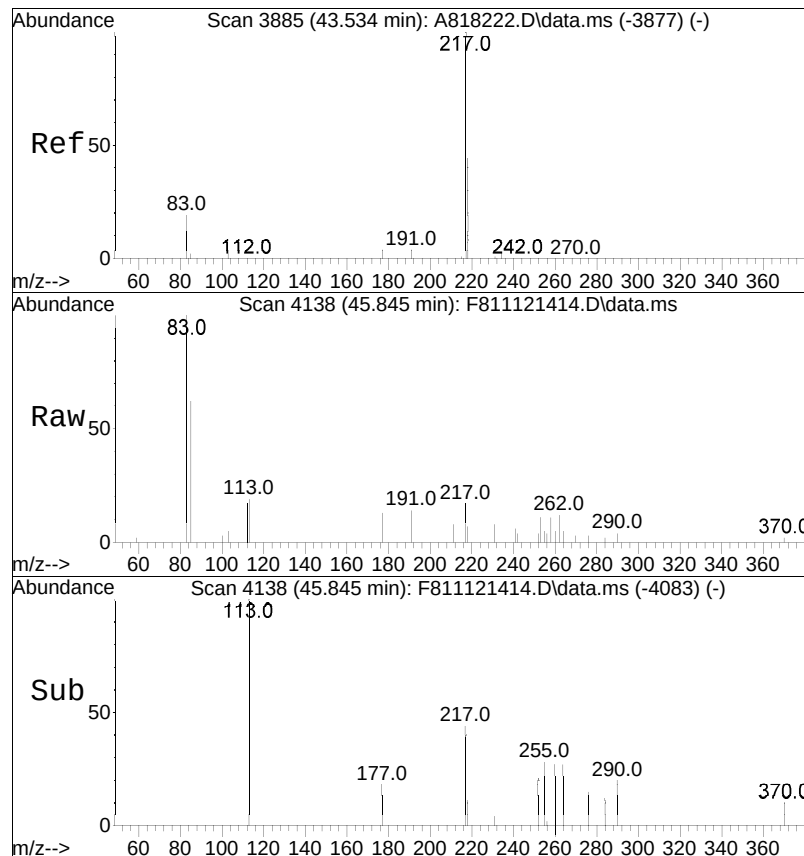




#130
 13b(H),17a(H)-20S-Diacholestane
 Concen: 247.38 ng/ml
 RT: 45.424 min Scan# 4092
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

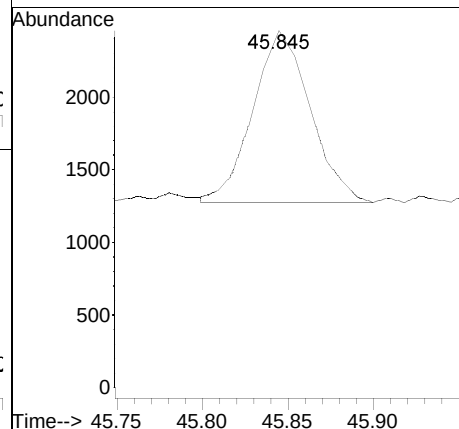
Tgt Ion:217 Resp: 6396

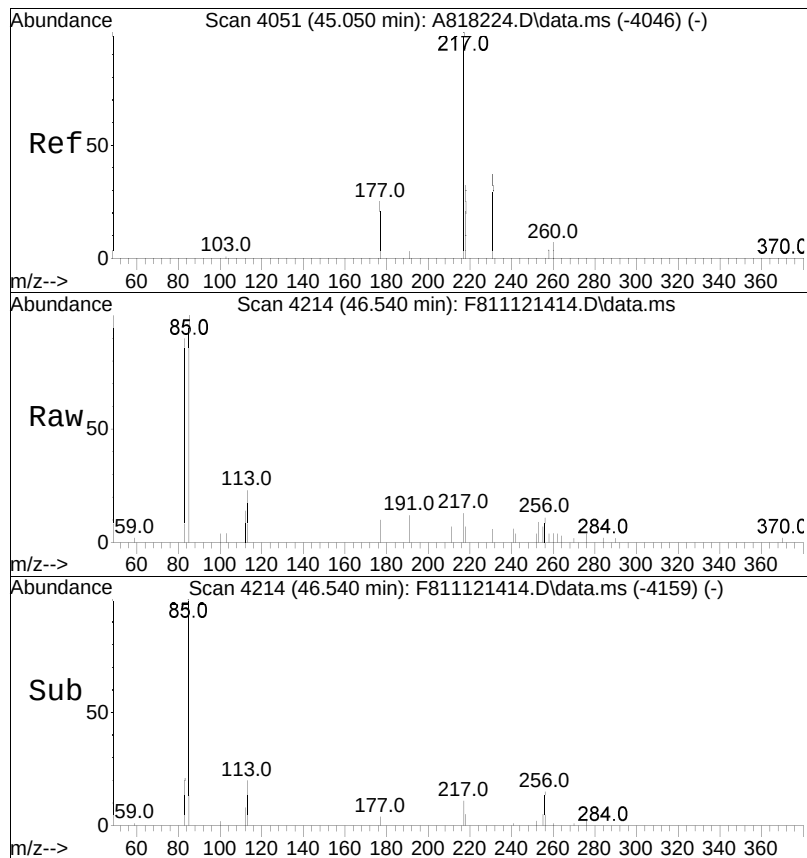




#131
 13b(H),17a(H)-20R-Diacholestane
 Concen: 106.63 ng/ml
 RT: 45.845 min Scan# 4138
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

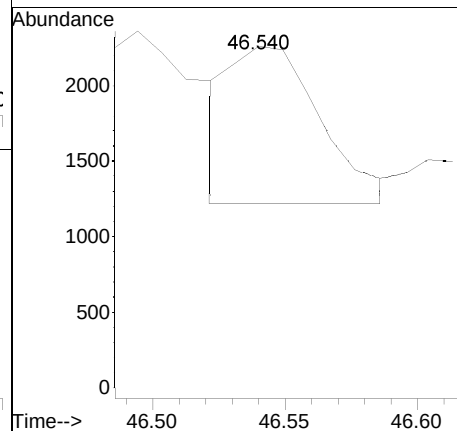
Tgt Ion:217 Resp: 2757

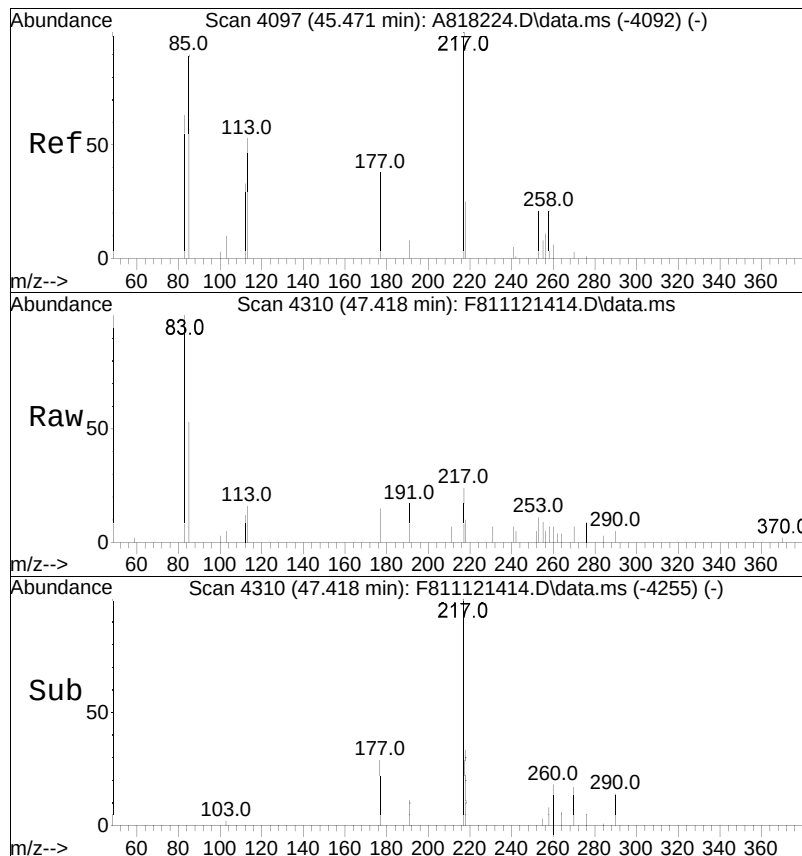




#132
 13b,17a-20S-Methyldiacholestan
 Concen: 95.77 ng/ml M4
 RT: 46.540 min Scan# 4214
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

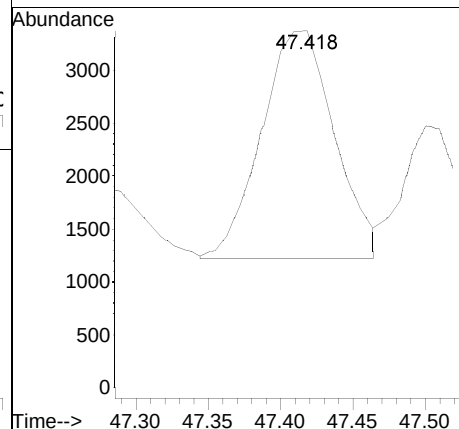
Tgt Ion:217 Resp: 2476

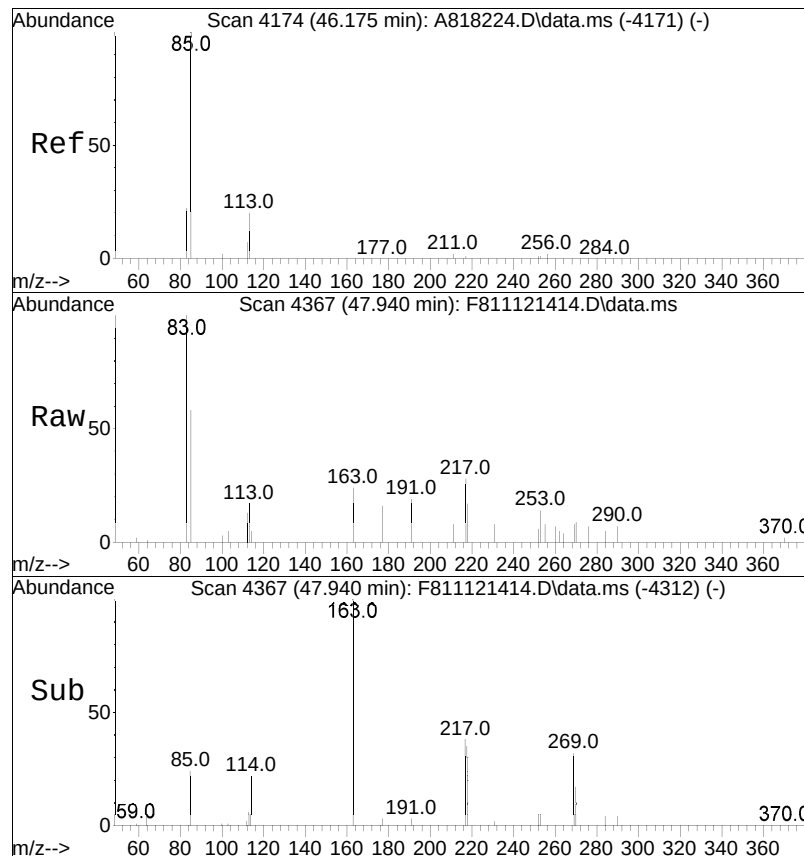




#133
14a,17a-20S-Chol/13b,17a-20S-E
Concen: 292.75 ng/ml
RT: 47.418 min Scan# 4310
Delta R.T. 0.000 min
Lab File: F811121414.D
Acq: 13 Nov 2014 11:46 am

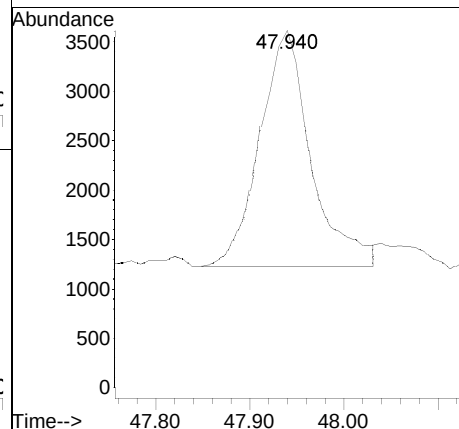
Tgt Ion:217 Resp: 7569

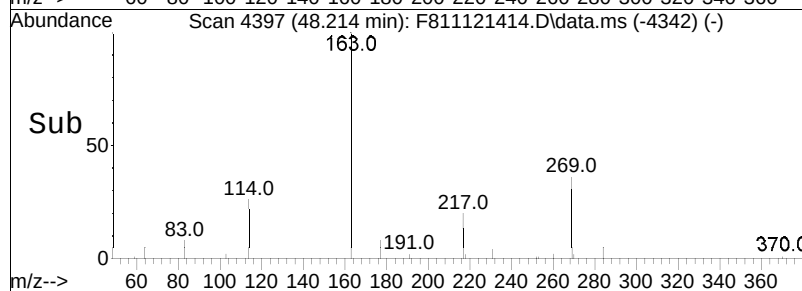
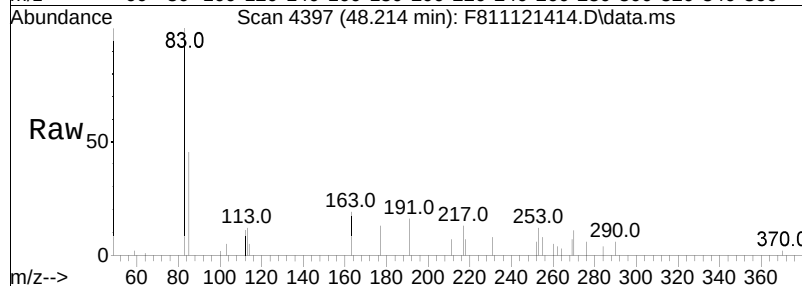
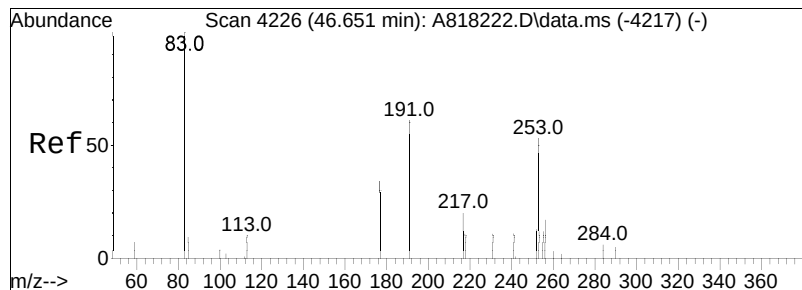




#134
 14a,17a-20R-Chol/13b,17a-20R-E
 Concen: 347.55 ng/ml
 RT: 47.940 min Scan# 4367
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

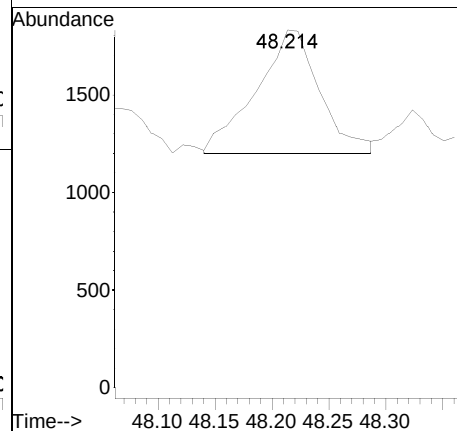
Tgt Ion:217 Resp: 8986

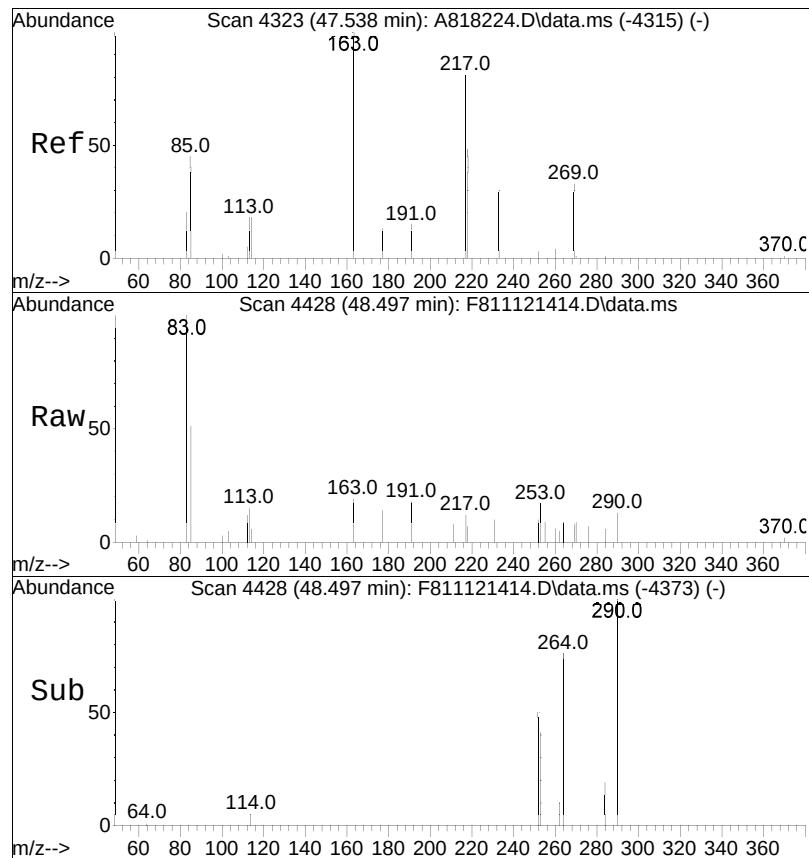




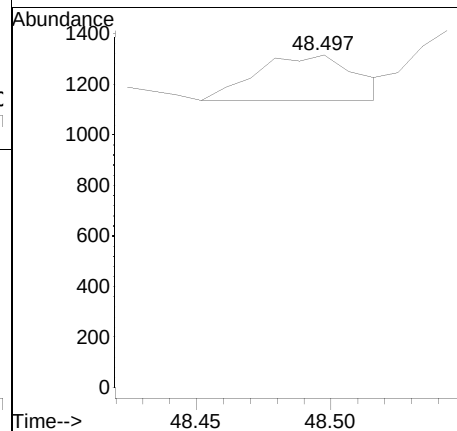
#135
 Unknown Sterane (S18)
 Concen: 95.38 ng/ml M4
 RT: 48.214 min Scan# 4397
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

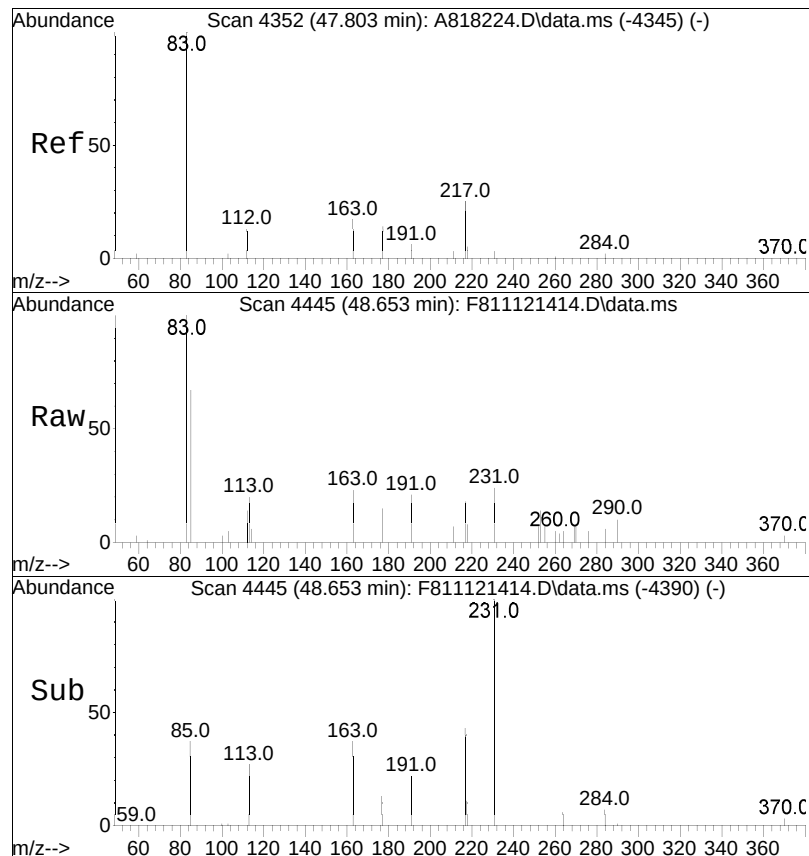
Tgt Ion:217 Resp: 2466





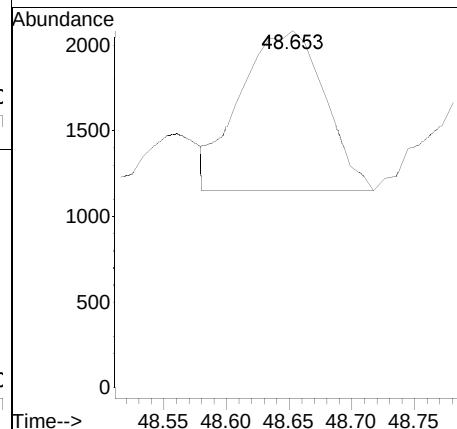
#136
 13a,17b-20S-Ethylidiacholestane
 Concen: 17.83 ng/ml
 RT: 48.497 min Scan# 4428
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am
 Tgt Ion:217 Resp: 461

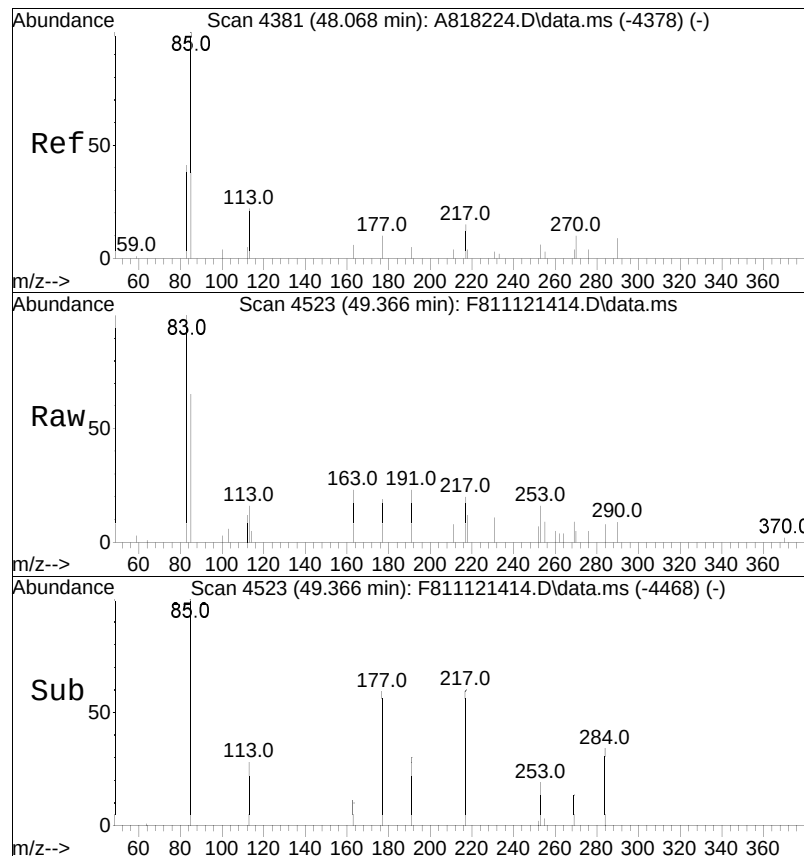




#137
 14a,17a-20S-Methylcholestane (
 Concen: 168.36 ng/ml
 RT: 48.653 min Scan# 4445
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

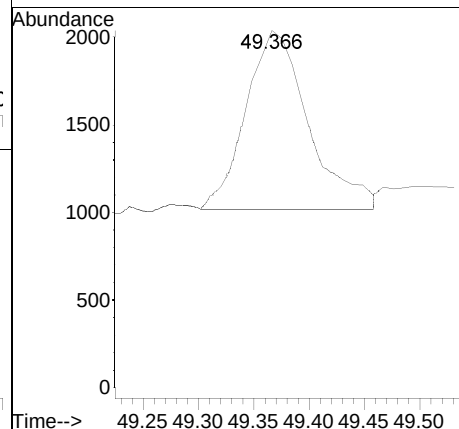
Tgt Ion:217 Resp: 4353

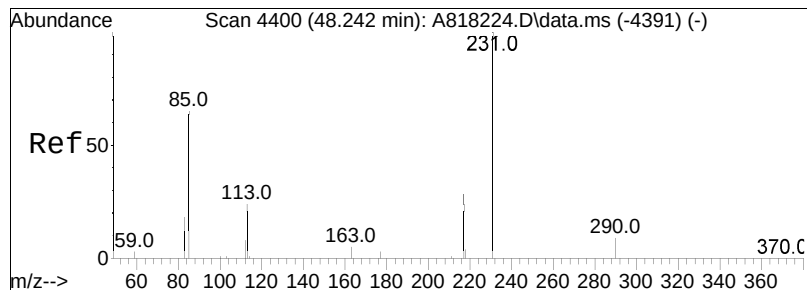




#138
 14a,17a-20R-Methylcholestane (
 Concen: 154.98 ng/ml
 RT: 49.366 min Scan# 4523
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

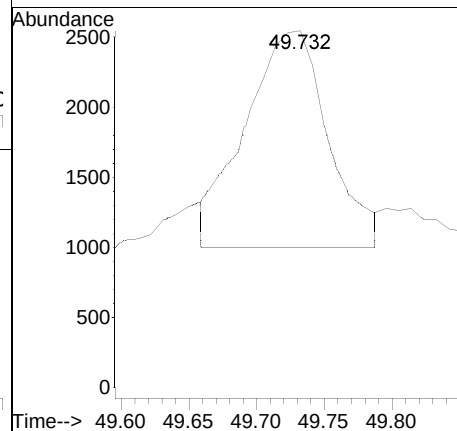
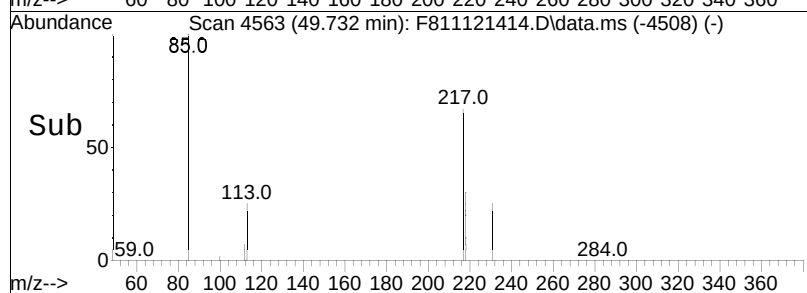
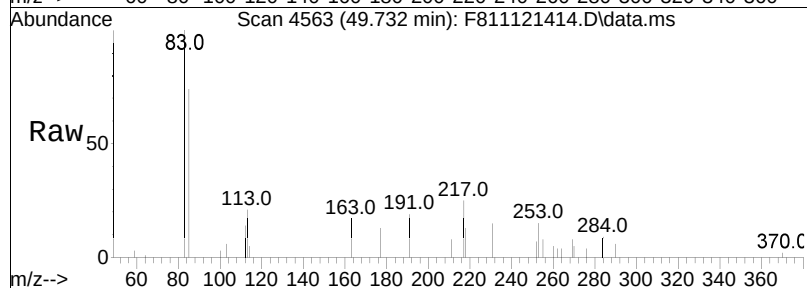
Tgt Ion:217 Resp: 4007

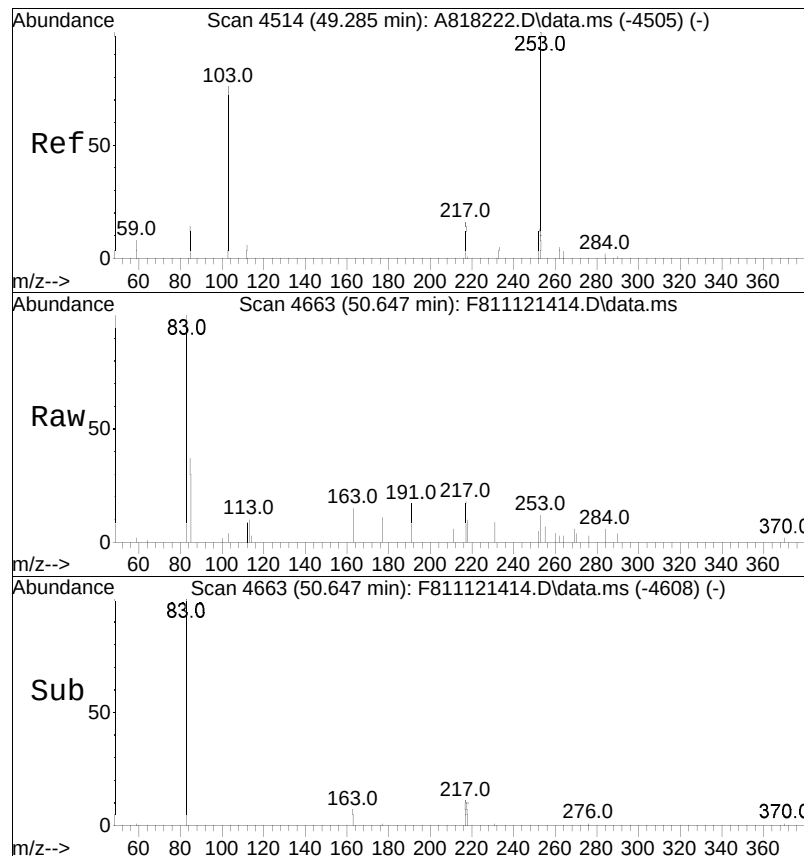




#139
14a(H),17a(H)-20S-Ethylcholest
Concen: 255.31 ng/ml M4
RT: 49.732 min Scan# 4563
Delta R.T. 0.000 min
Lab File: F811121414.D
Acq: 13 Nov 2014 11:46 am

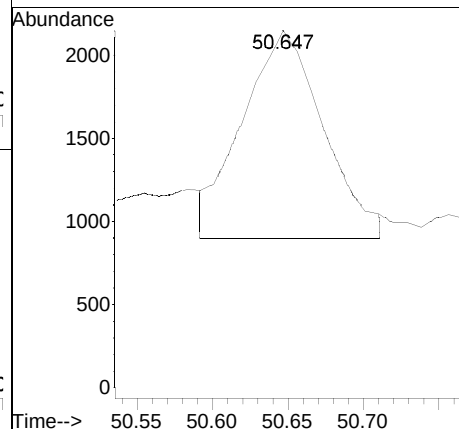
Tgt Ion:217 Resp: 6601

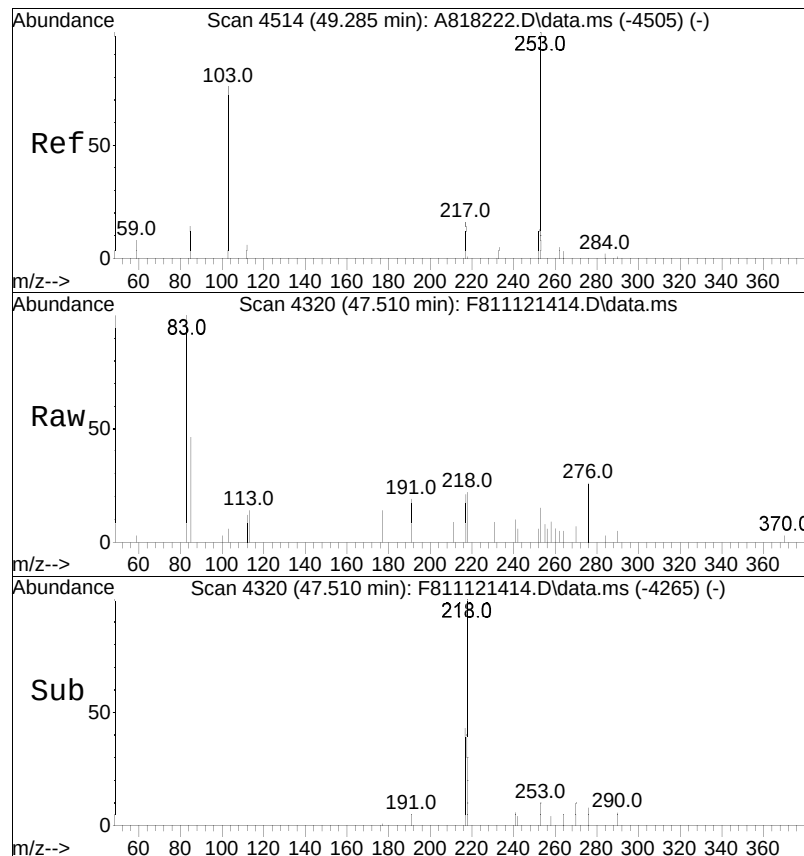




#140
14a(H),17a(H)-20R-Ethylcholest
Concen: 179.62 ng/ml M4
RT: 50.647 min Scan# 4663
Delta R.T. -0.000 min
Lab File: F811121414.D
Acq: 13 Nov 2014 11:46 am

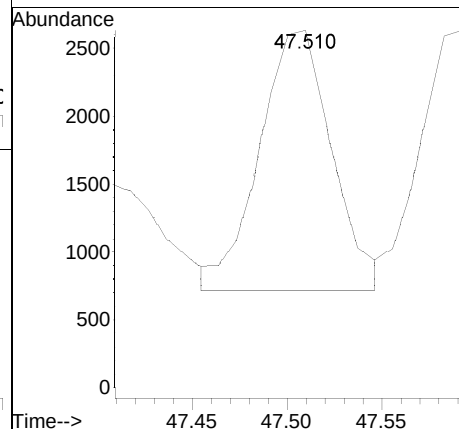
Tgt Ion:217 Resp: 4644

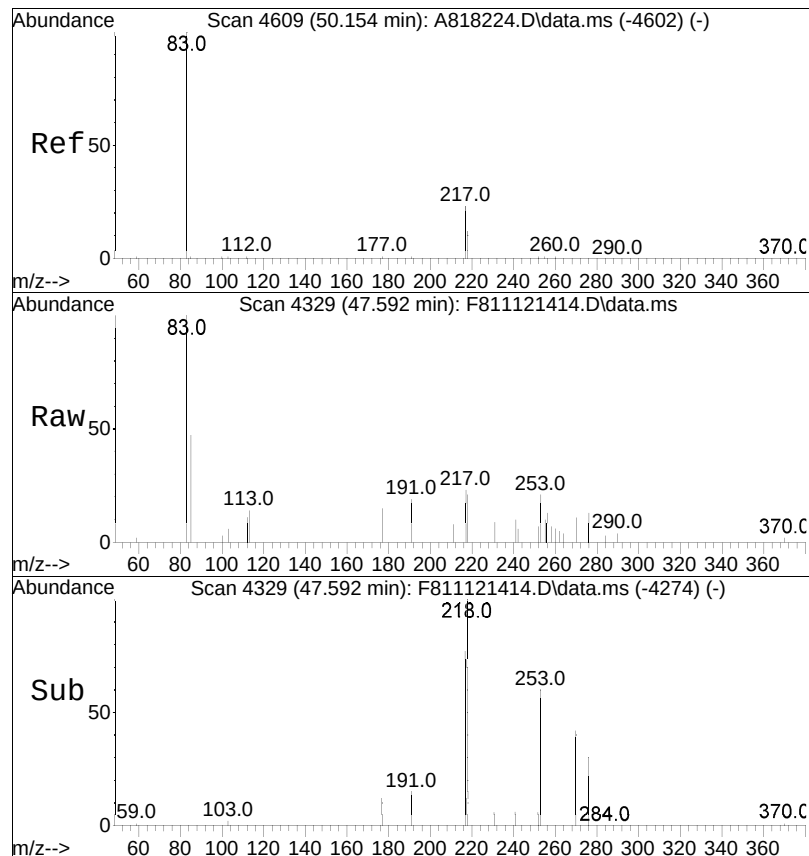




#141
 14b(H),17b(H)-20R-Cholestane (
 Concen: 195.20 ng/ml M4
 RT: 47.510 min Scan# 4320
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

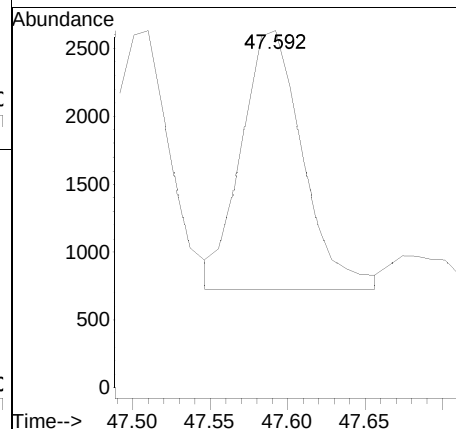
Tgt Ion:218 Resp: 5047

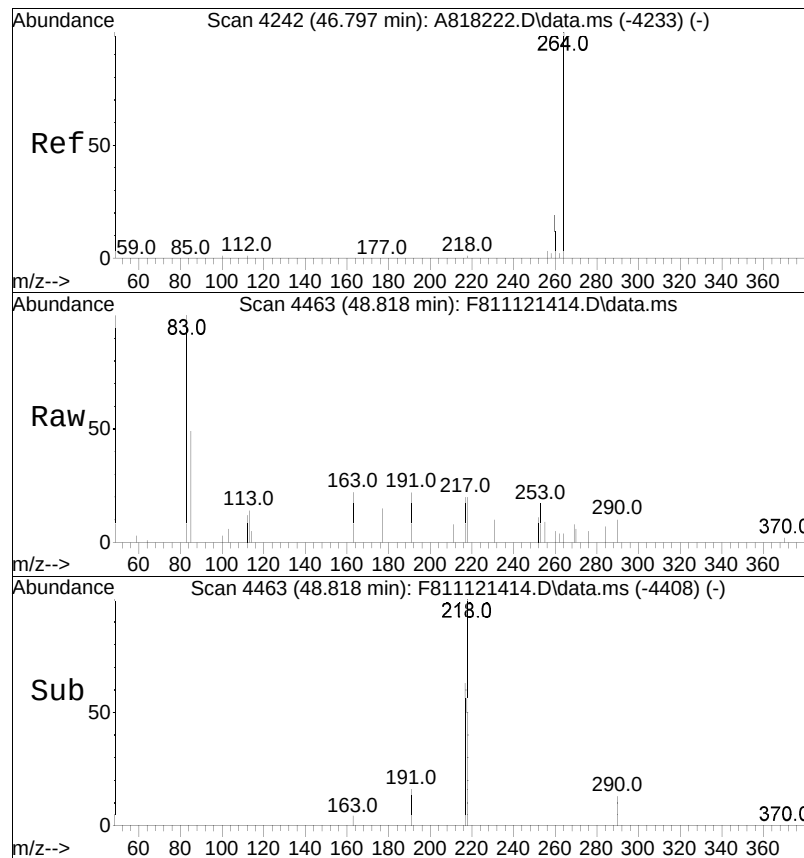




#142
 14b(H),17b(H)-20S-Cholestane (
 Concen: 203.67 ng/ml M4
 RT: 47.592 min Scan# 4329
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

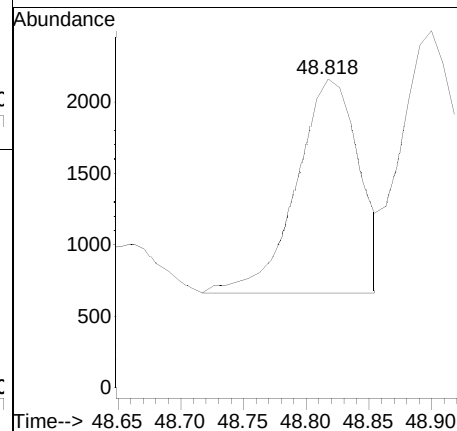
Tgt Ion:218 Resp: 5266

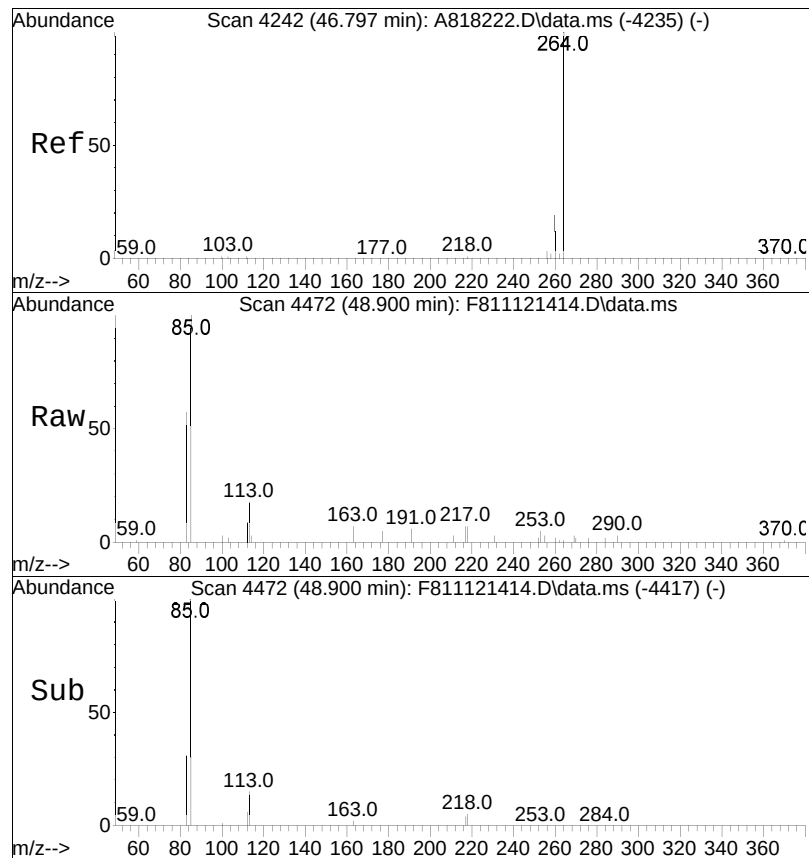




#143
14b,17b-20R-Methylcholestane (
Concen: 203.37 ng/ml
RT: 48.818 min Scan# 4463
Delta R.T. -0.000 min
Lab File: F811121414.D
Acq: 13 Nov 2014 11:46 am

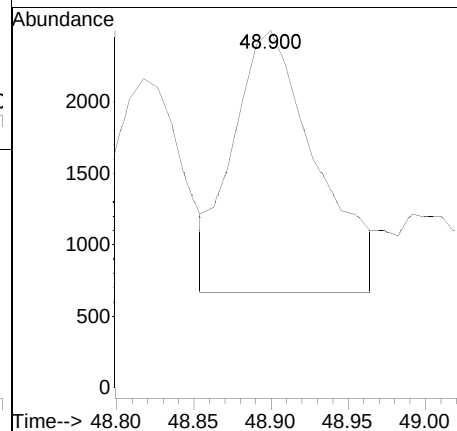
Tgt Ion:218 Resp: 5258

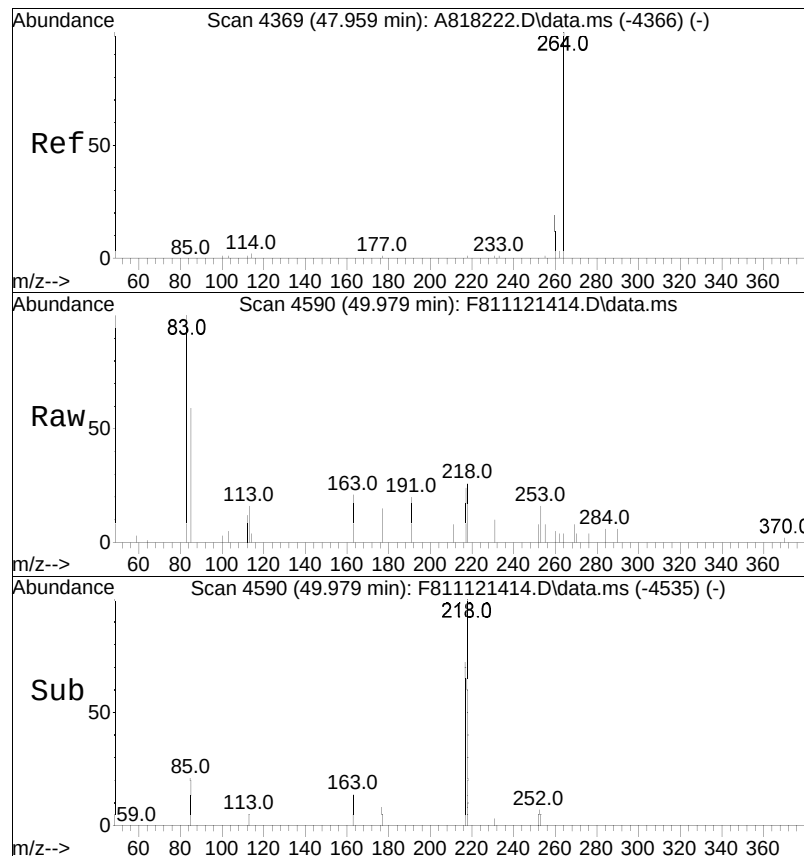




#144
 14b,17b-20S-Methylcholestane (
 Concen: 265.21 ng/ml M4
 RT: 48.900 min Scan# 4472
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

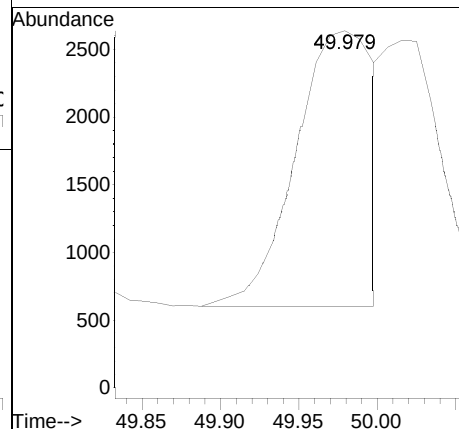
Tgt Ion:218 Resp: 6857

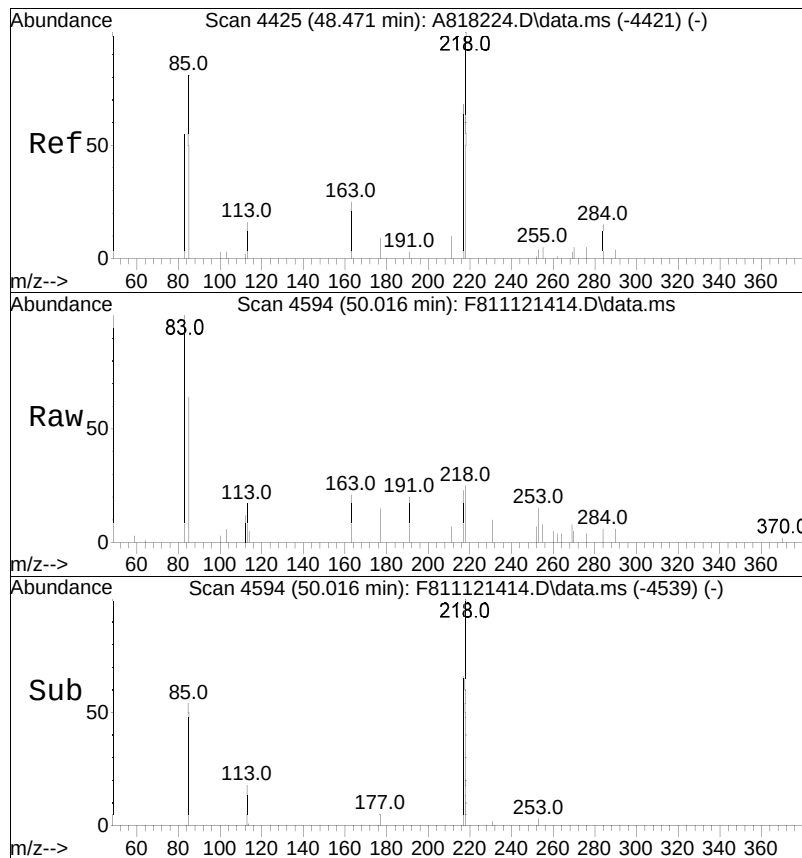




#145
 14b(H),17b(H)-20R-Ethylcholest
 Concen: 268.58 ng/ml
 RT: 49.979 min Scan# 4590
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

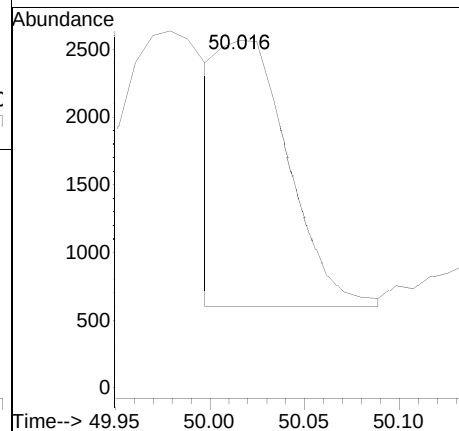
Tgt Ion:218 Resp: 6944

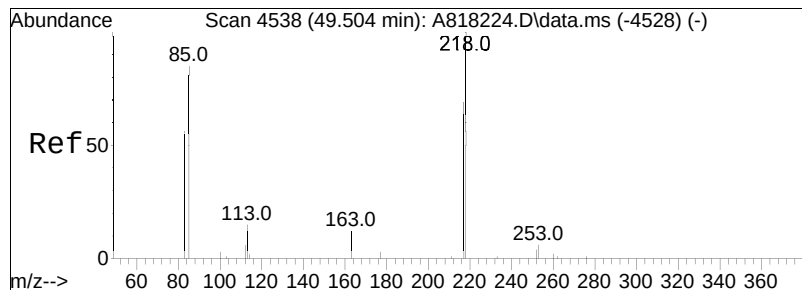




#146
 14b(H),17b(H)-20S-Ethylcholest
 Concen: 198.53 ng/ml M3
 RT: 50.016 min Scan# 4594
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

Tgt Ion:218 Resp: 5133





#147

C26,20R- +C27,20S- triaromatic

Concen: 1563.30 ng/mL

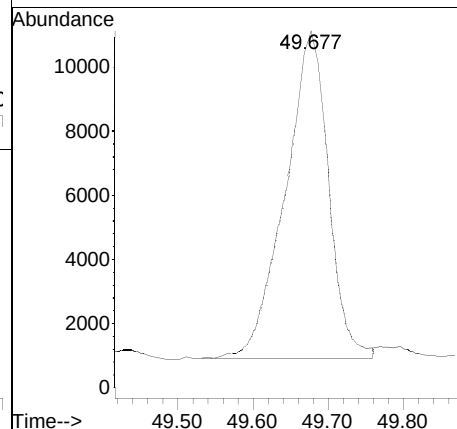
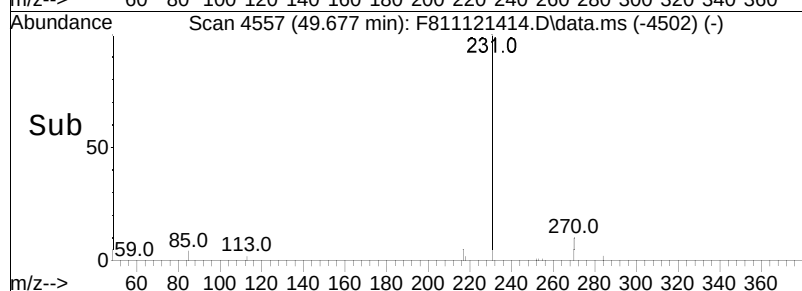
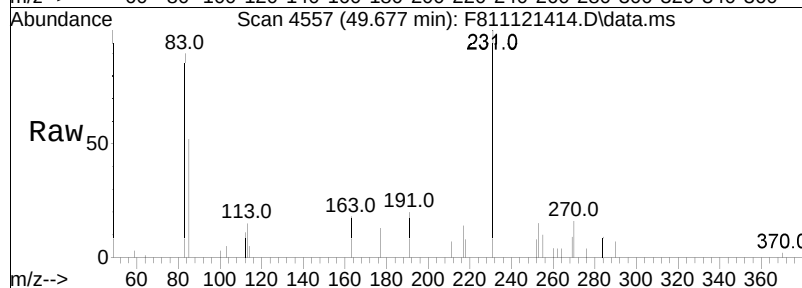
RT: 49.677 min Scan# 4557

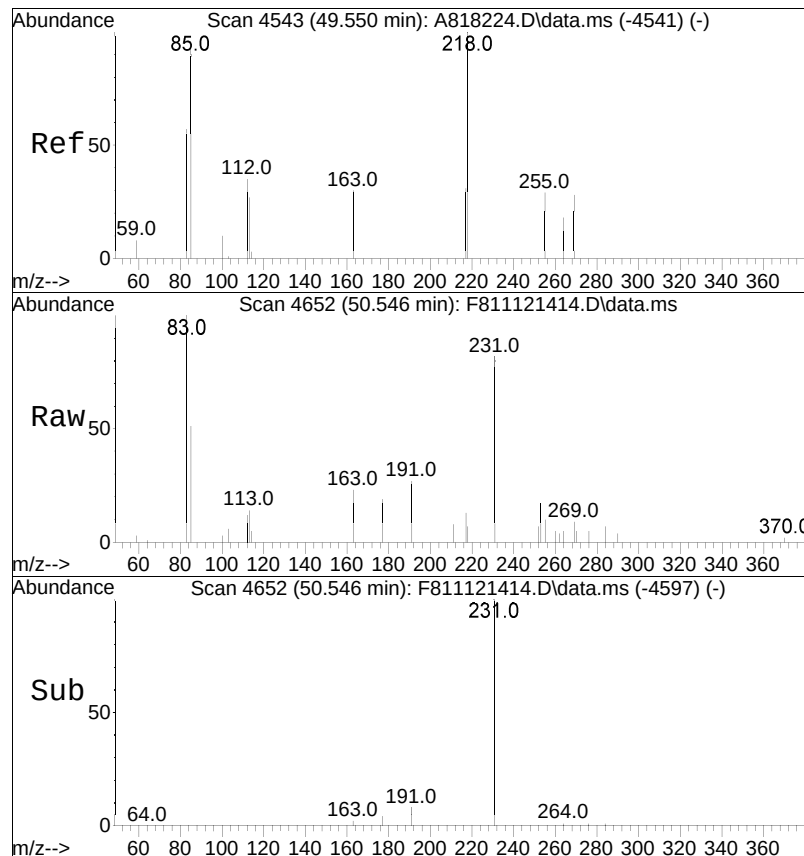
Delta R.T. 0.000 min

Lab File: F811121414.D

Acq: 13 Nov 2014 11:46 am

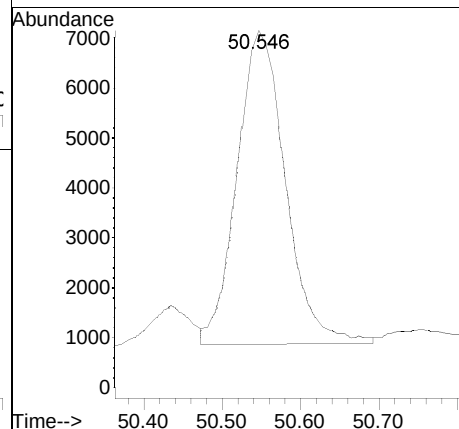
Tgt Ion:231 Resp: 40419

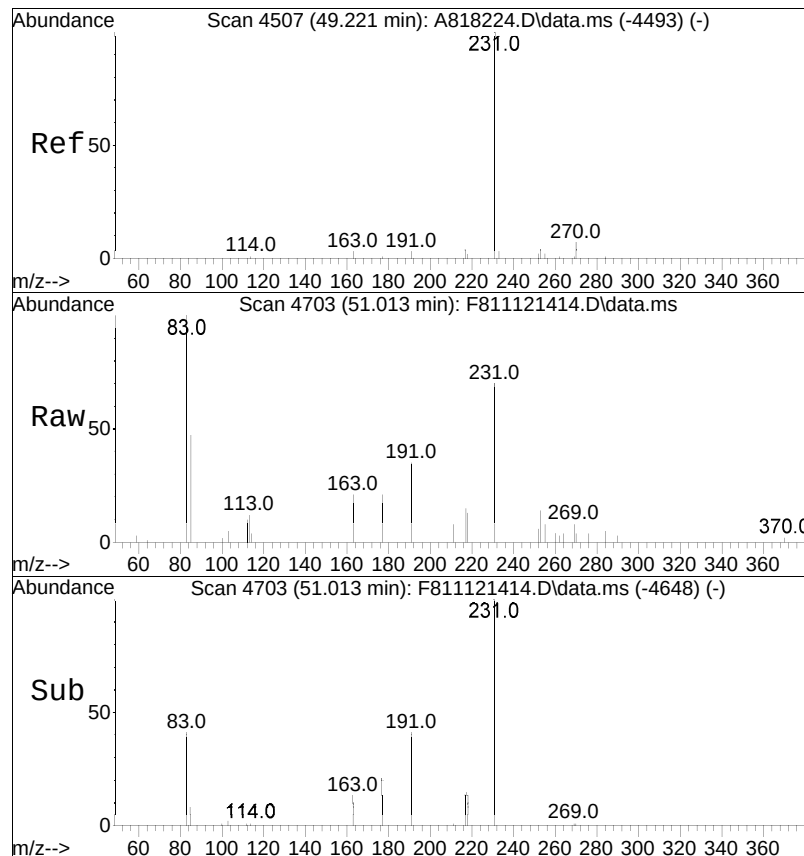




#148
 C28,20S-triaromatic steroid
 Concen: 1034.12 ng/mL
 RT: 50.546 min Scan# 4652
 Delta R.T. 0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

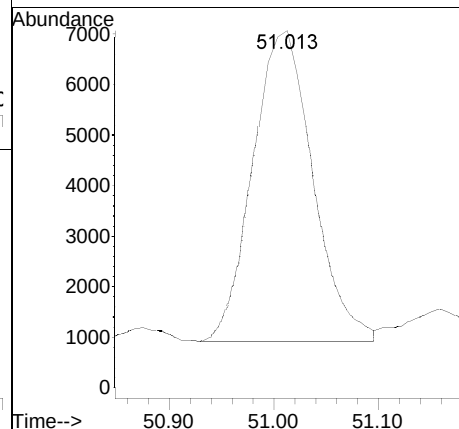
Tgt Ion:231 Resp: 26737

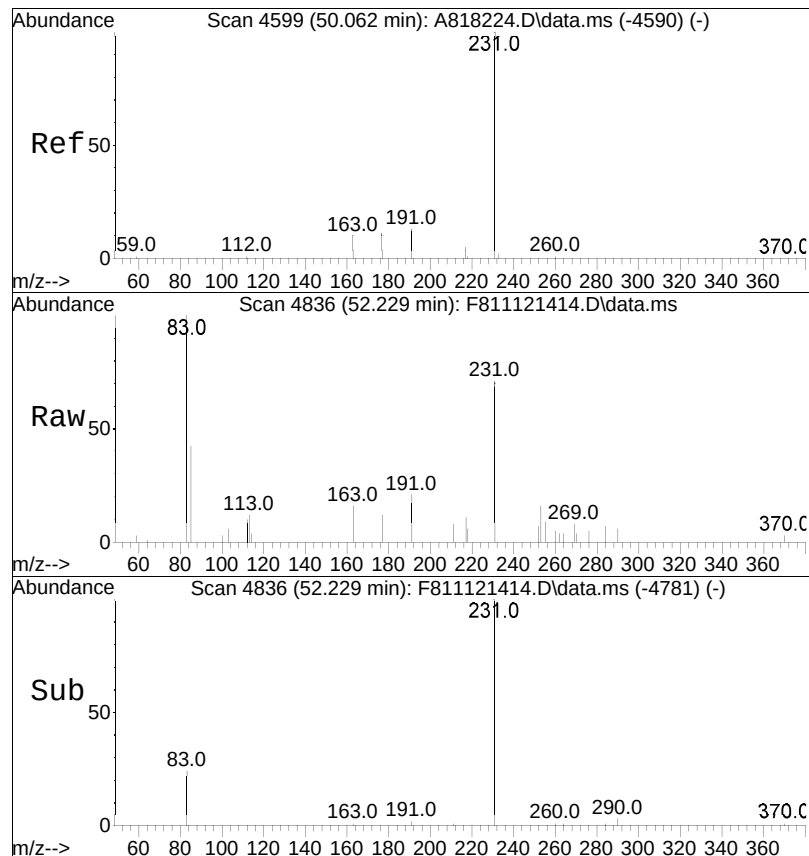




#149
 C27,20R-triaromatic steroid
 Concen: 950.80 ng/mL
 RT: 51.013 min Scan# 4703
 Delta R.T. -0.000 min
 Lab File: F811121414.D
 Acq: 13 Nov 2014 11:46 am

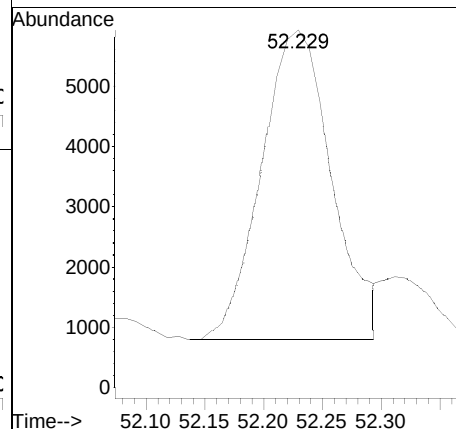
Tgt Ion:231 Resp: 24583





#150
C28,20R-triaromatic steroid
Concen: 823.75 ng/mL
RT: 52.229 min Scan# 4836
Delta R.T. 0.000 min
Lab File: F811121414.D
Acq: 13 Nov 2014 11:46 am

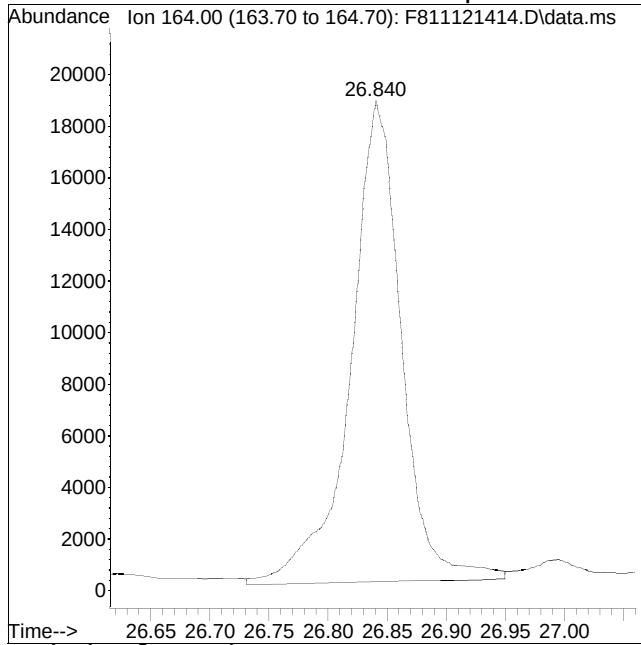
Tgt Ion:231 Resp: 21298



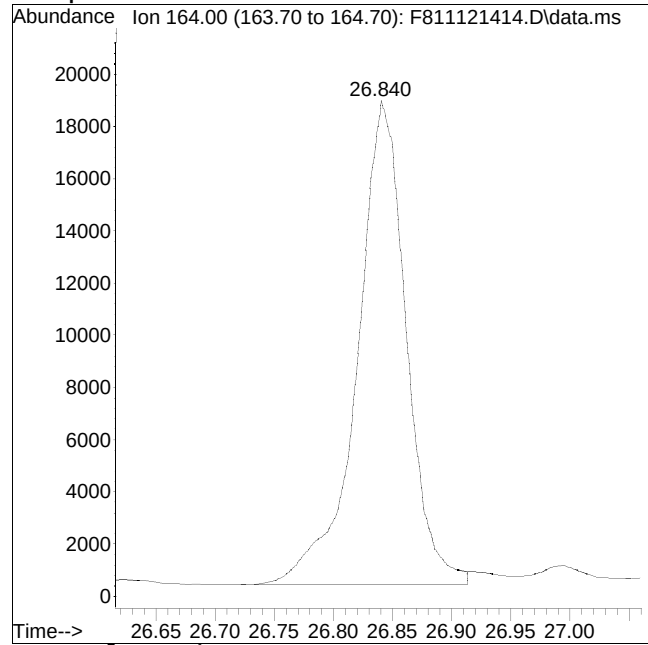
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #1: Acenaphthene-d10



Original Peak Response = 56047



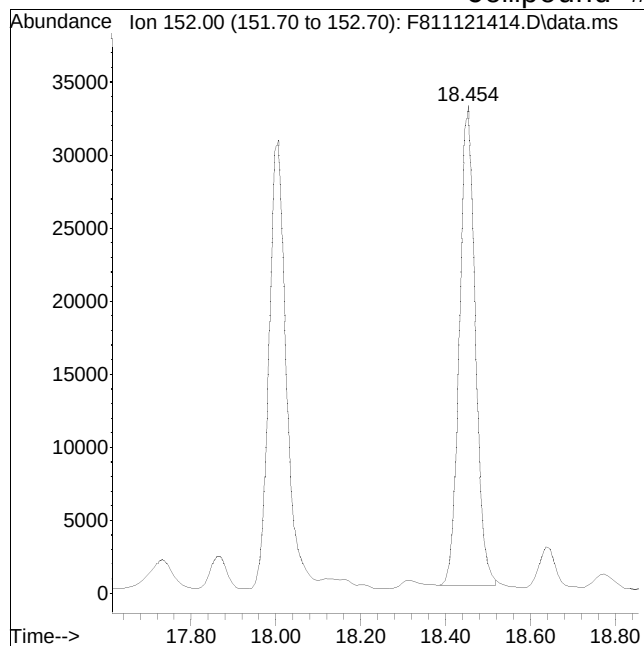
Manual Peak Response = 53719 M4

M4 = Poor automated baseline construction.

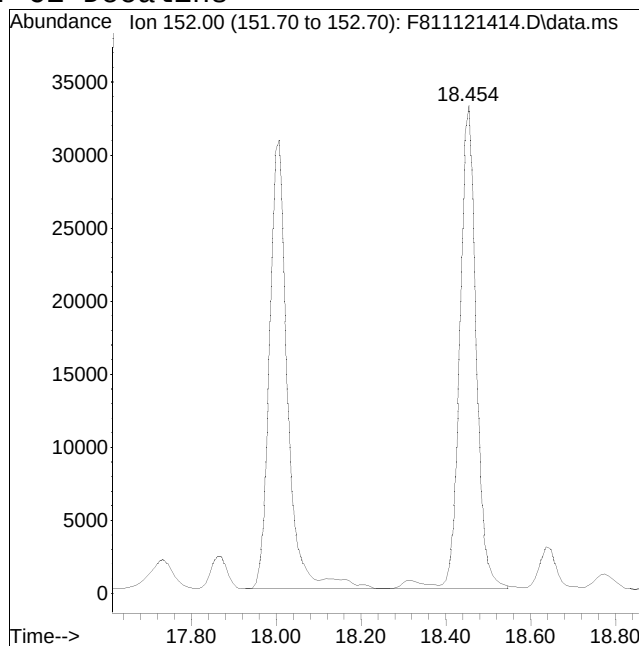
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #5: C1-Decalins



Original Peak Response = 84806



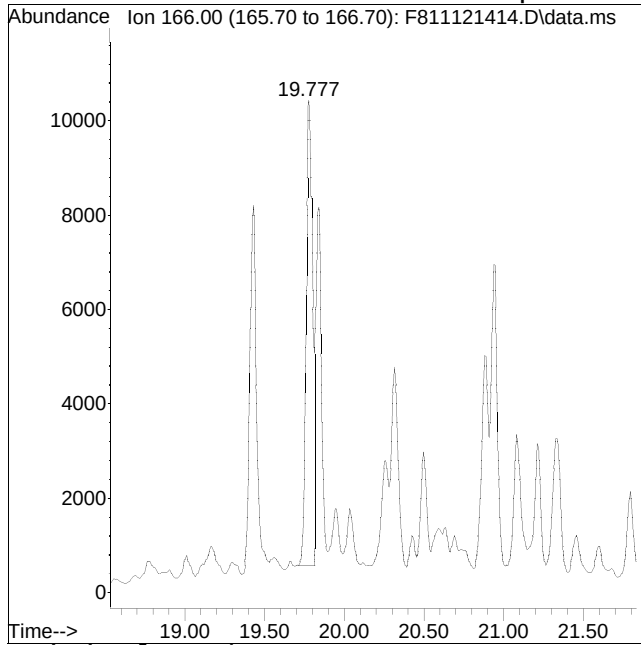
Manual Peak Response = 180858 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

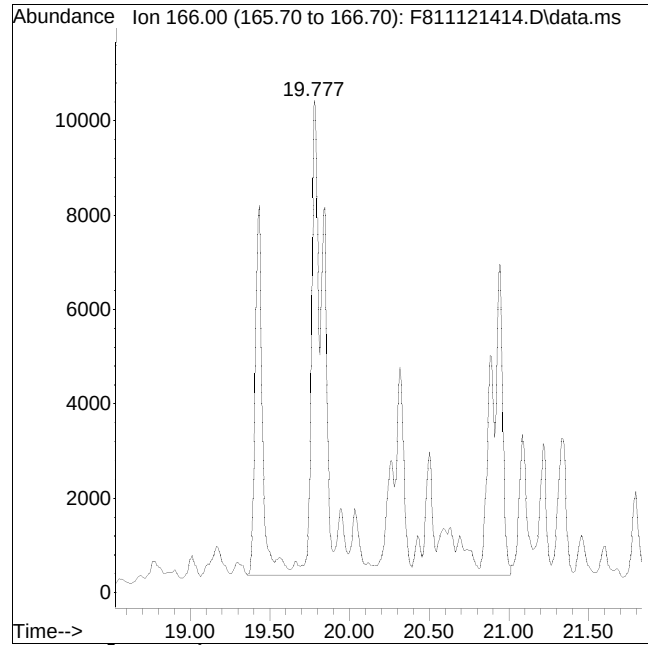
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #6: C2-Decalins



Original Peak Response = 28283

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

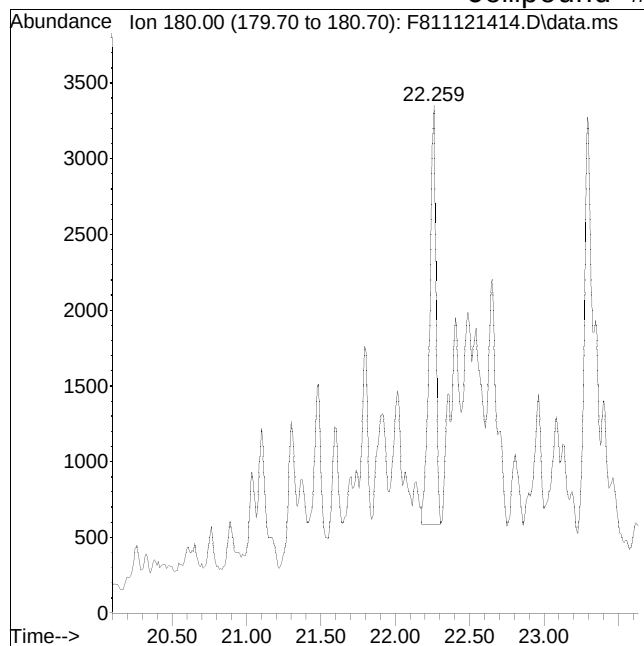


Manual Peak Response = 159623 M5

Manual Integration/Negative Proof Report

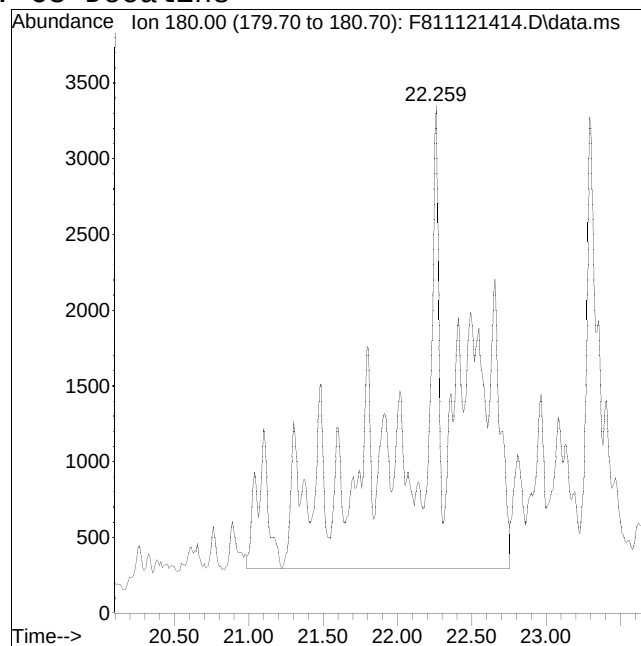
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #7: C3-Decalins



Original Peak Response = 8129

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

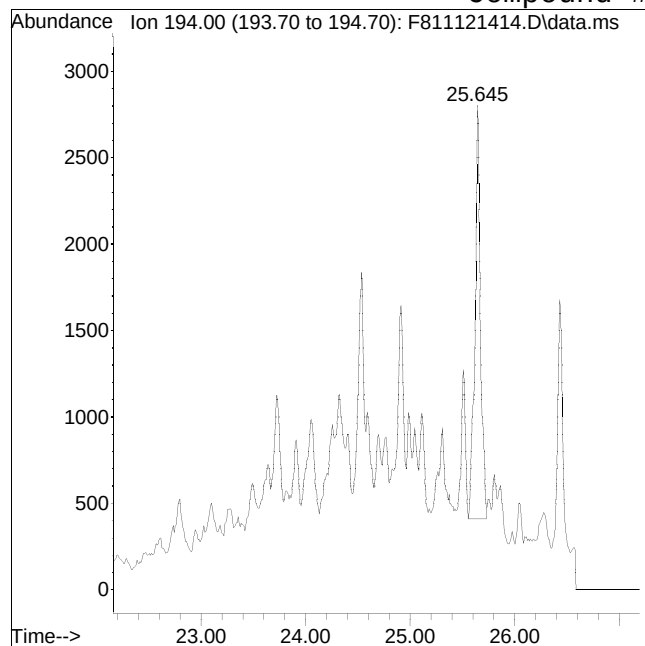


Manual Peak Response = 80917 M5

Manual Integration/Negative Proof Report

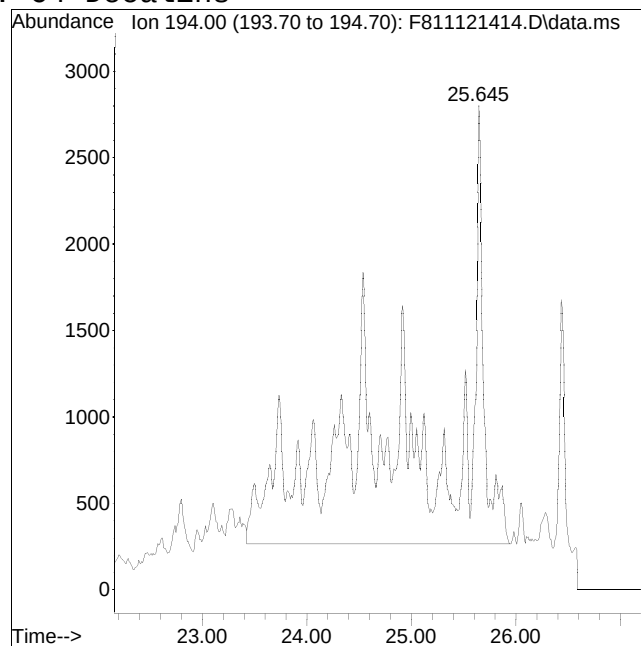
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #8: C4-Decalins



Original Peak Response = 8840

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

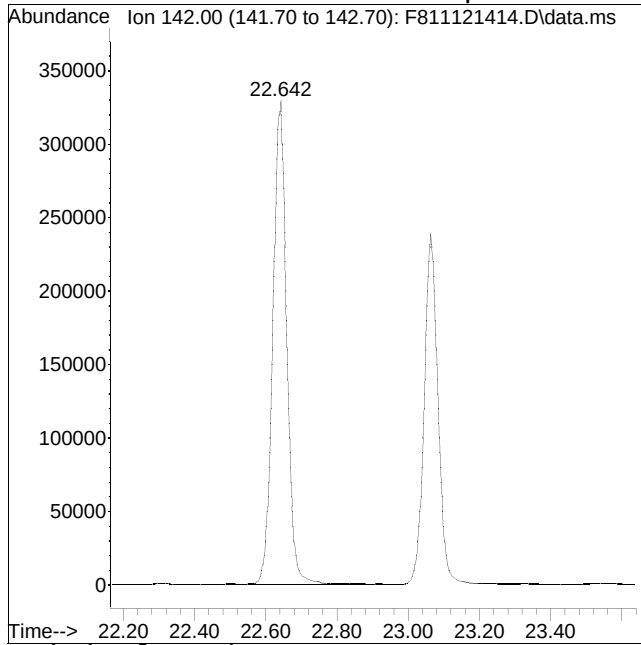


Manual Peak Response = 74664 M5

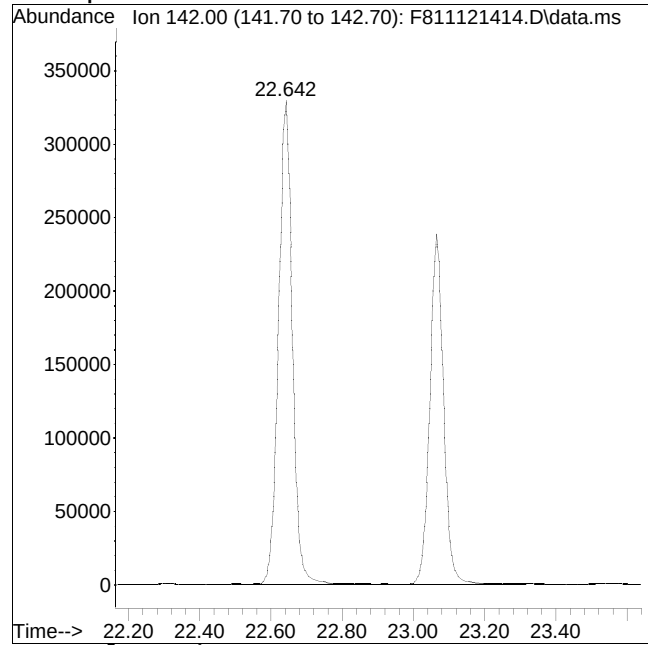
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #11: C1-Naphthalenes



Original Peak Response = 888390



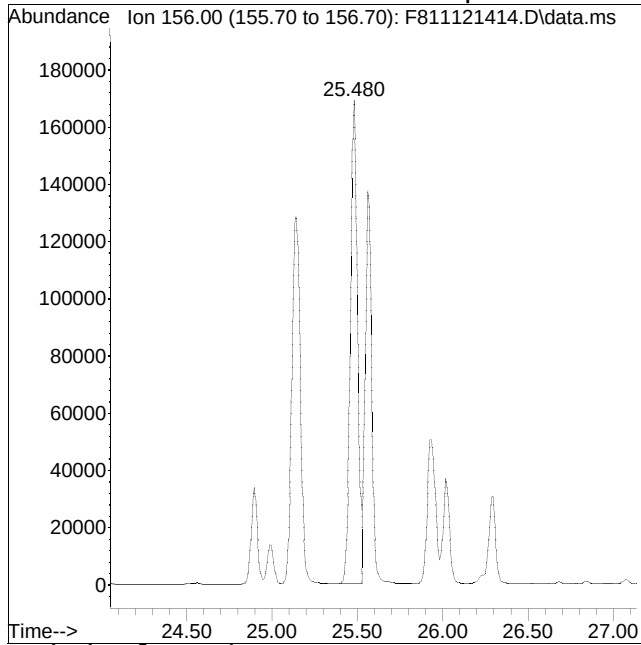
Manual Peak Response = 1535972 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

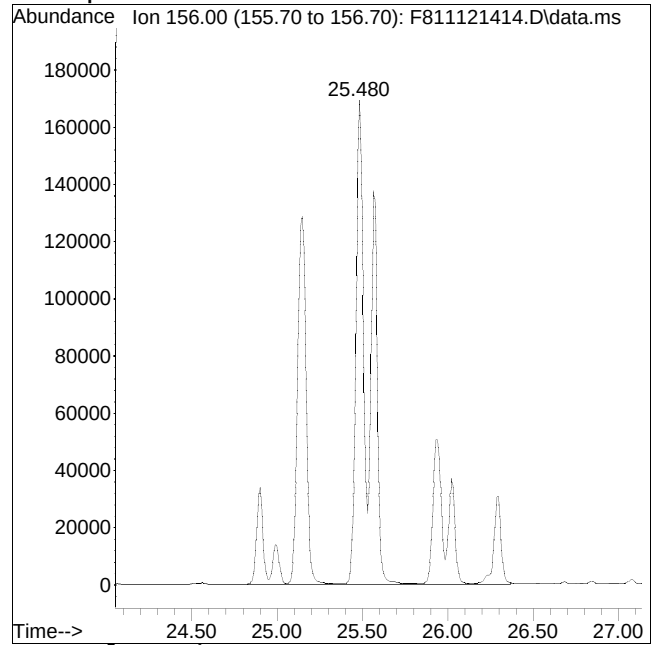
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #12: C2-Naphthalenes



Original Peak Response = 498498



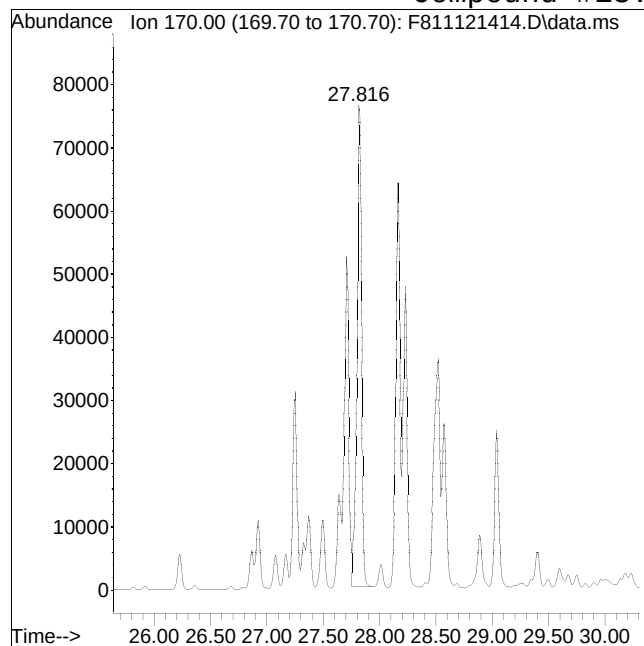
Manual Peak Response = 1811761 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

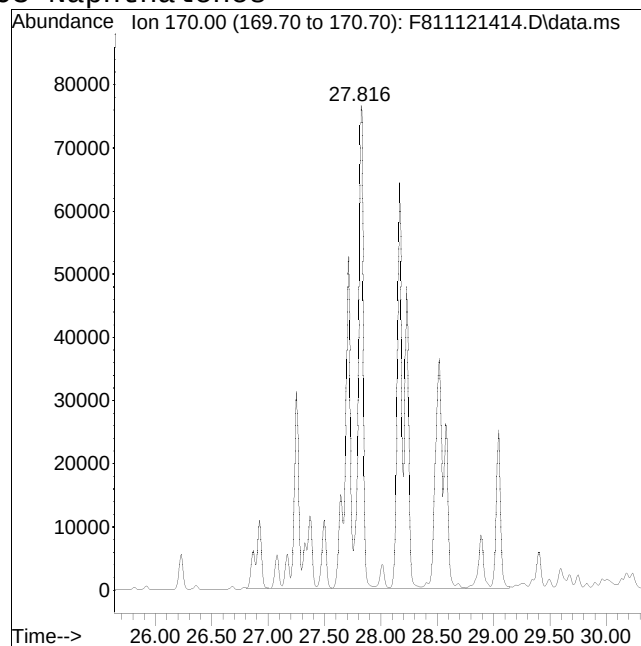
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #13: C3-Naphthalenes



Original Peak Response = 211071

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

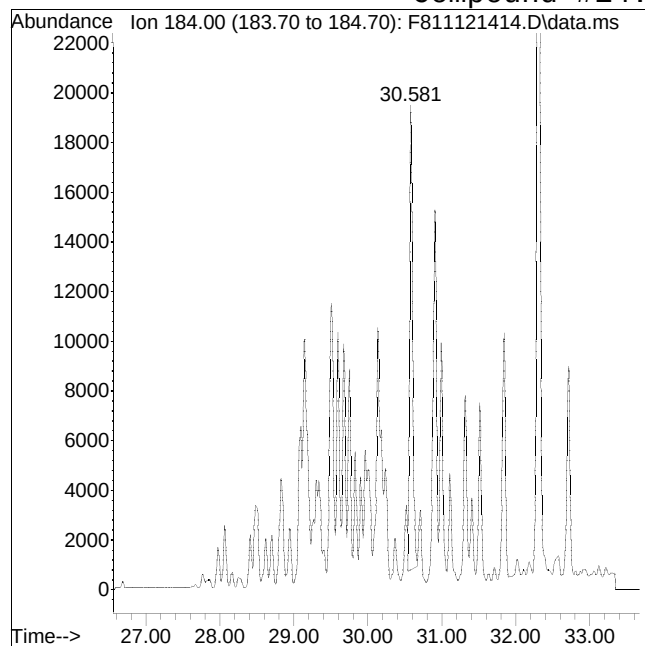


Manual Peak Response = 1208437 M5

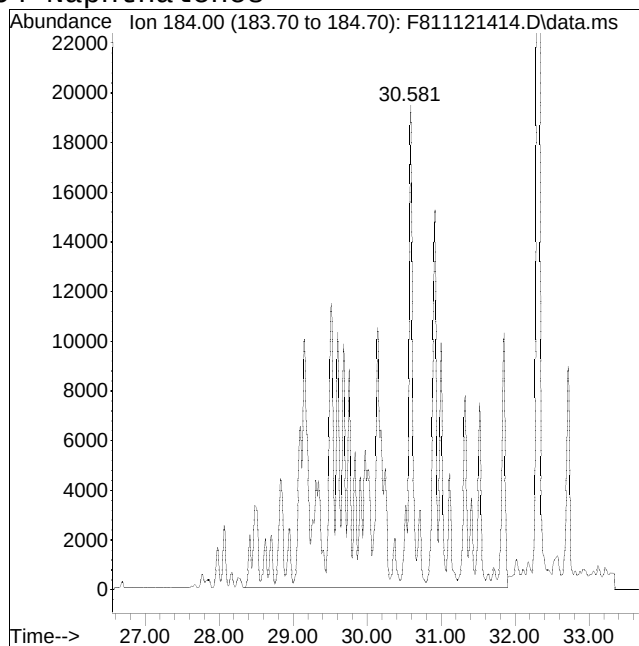
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #14: C4-Naphthalenes



Original Peak Response = 51855



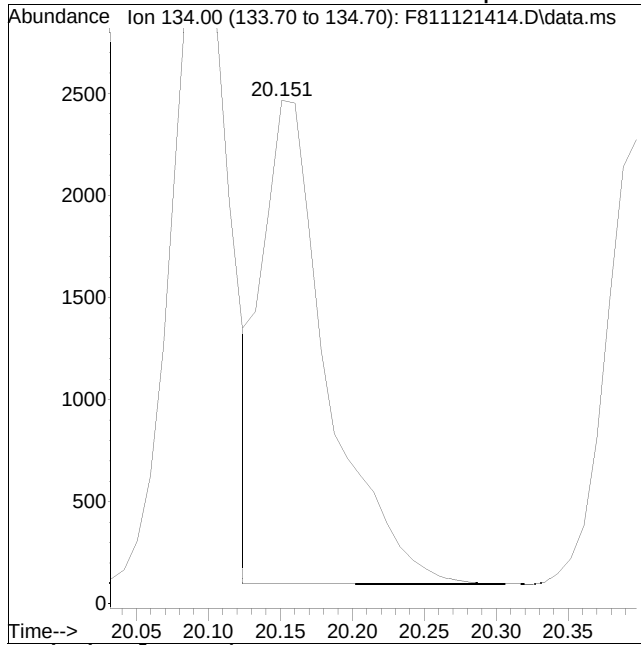
Manual Peak Response = 652261 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

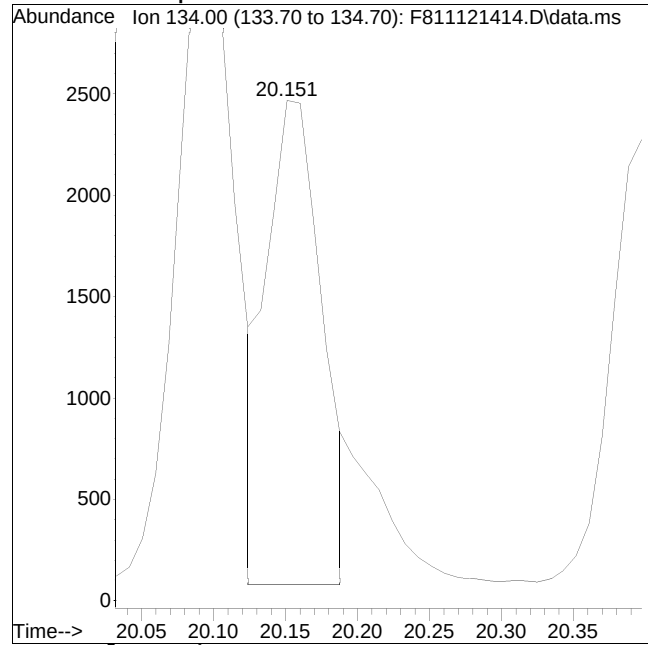
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #18: Benzothiophene



Original Peak Response = 7626

M4 = Poor automated baseline construction.

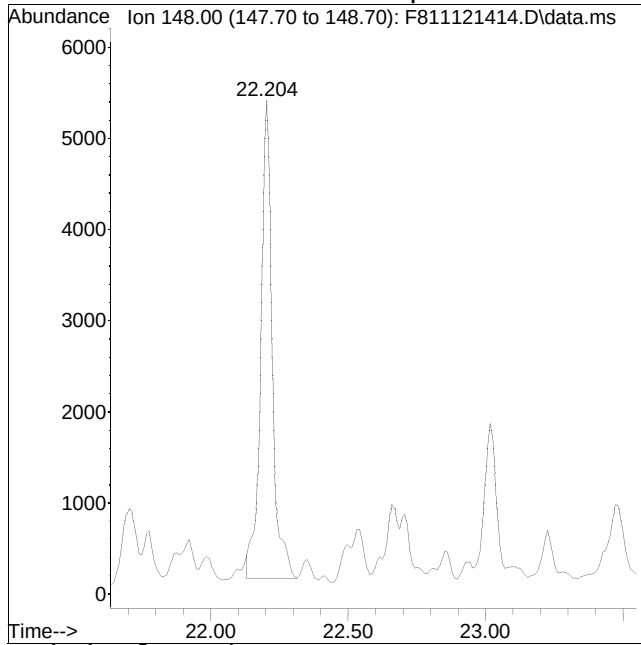


Manual Peak Response = 6402 M4

Manual Integration/Negative Proof Report

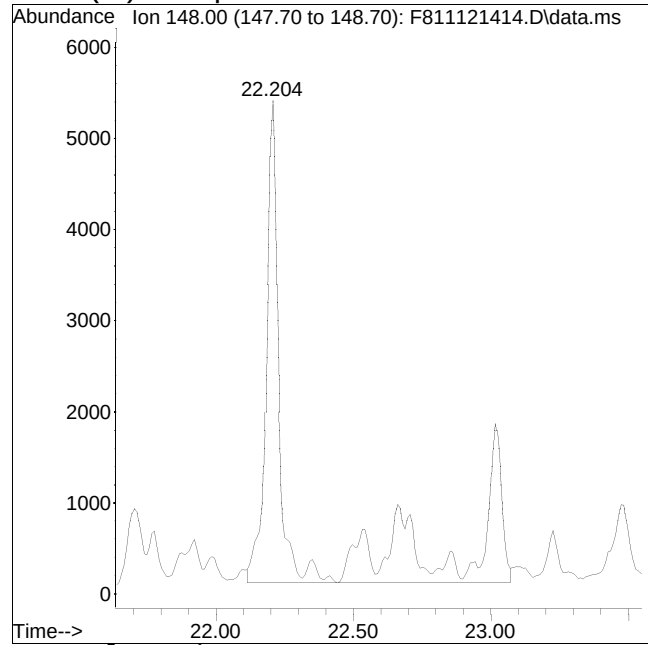
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #19: C1-Benzo(b)thiophenes



Original Peak Response = 15162

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

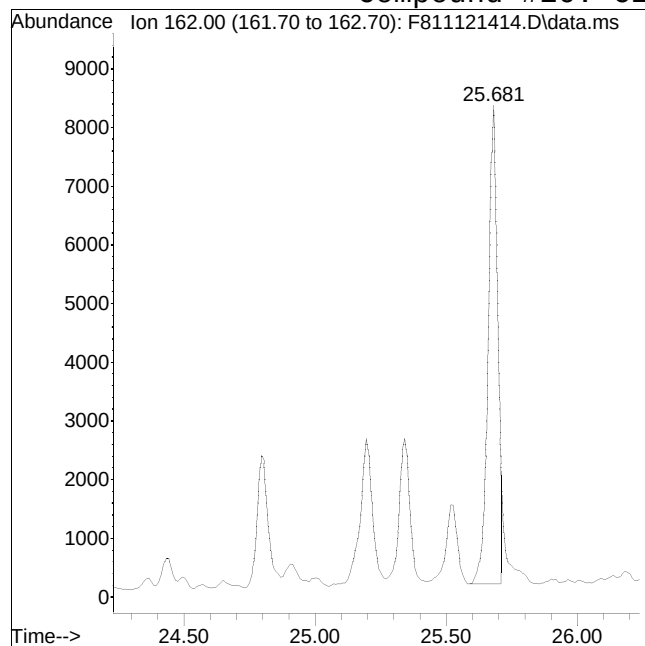


Manual Peak Response = 31279 M5

Manual Integration/Negative Proof Report

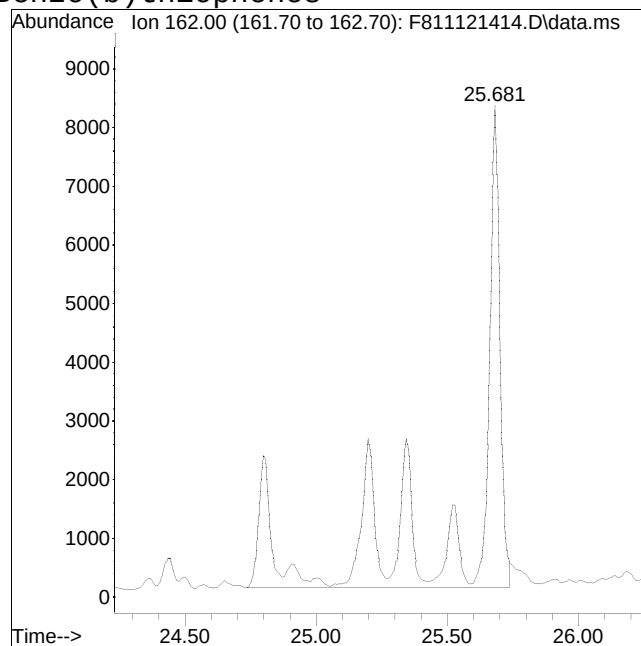
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
 Data File : F811121414.D Operator : PAH8:SR
 Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
 Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #20: C2-Benzo(b)thiophenes



Original Peak Response = 20701

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

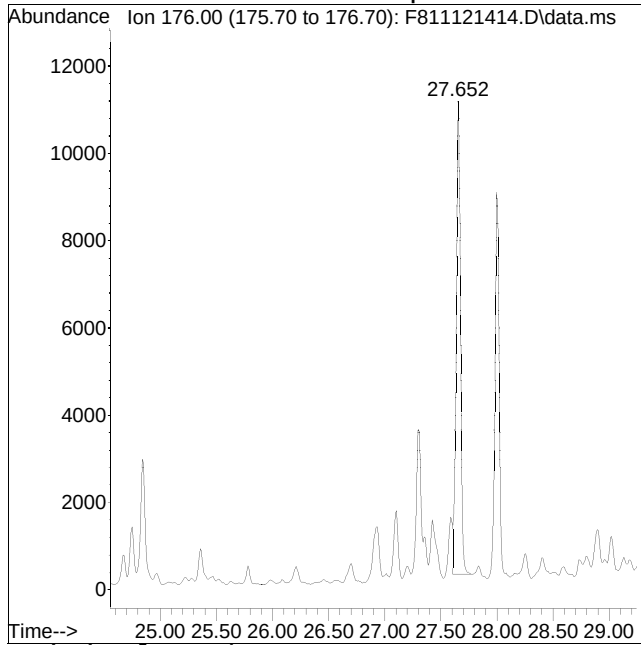


Manual Peak Response = 51996 M5

Manual Integration/Negative Proof Report

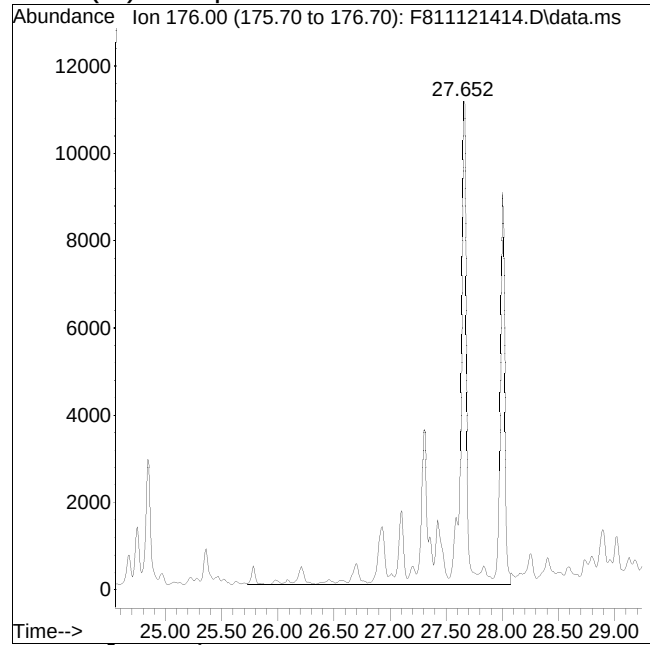
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #21: C3-Benzo(b)thiophenes



Original Peak Response = 29229

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

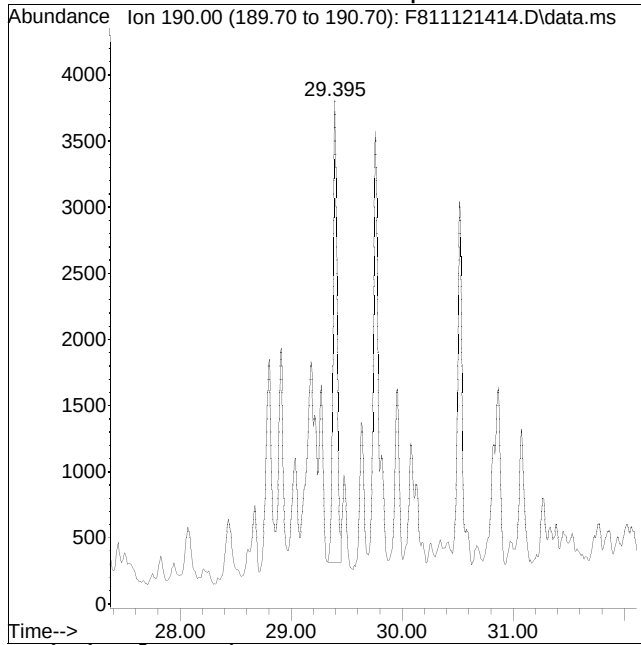


Manual Peak Response = 102787 M5

Manual Integration/Negative Proof Report

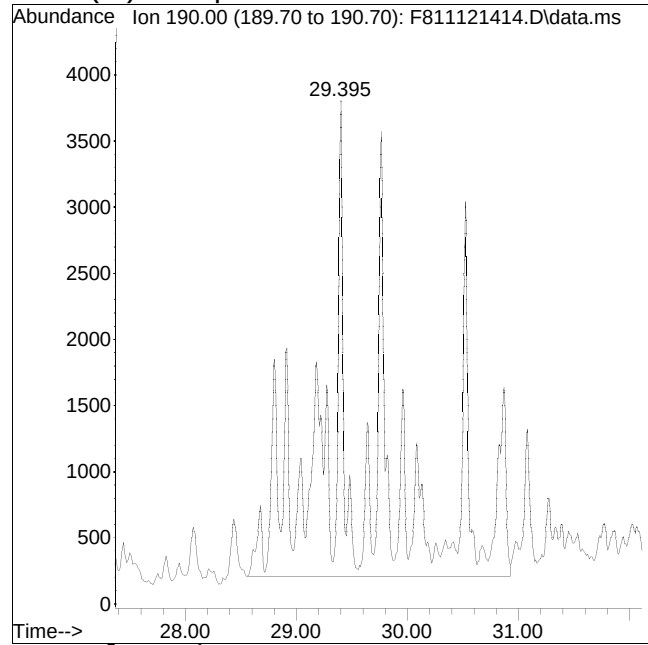
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #22: C4-Benzo(b)thiophenes



Original Peak Response = 8830

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

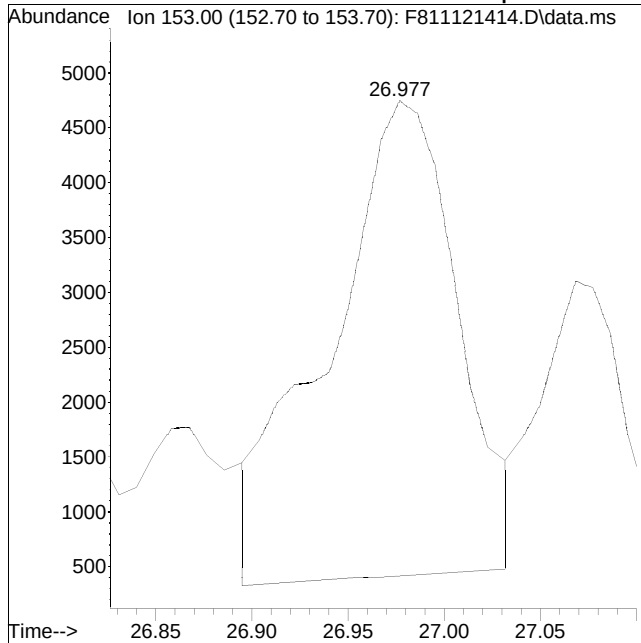


Manual Peak Response = 85855 M5

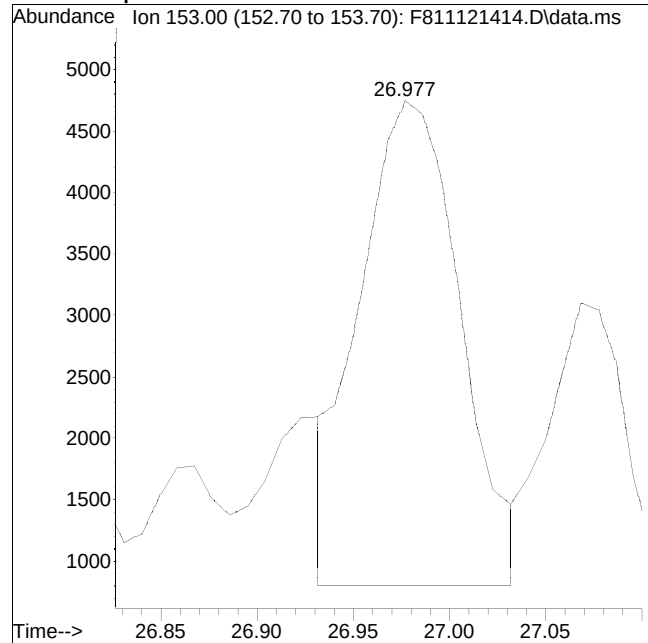
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #27: Acenaphthene



Original Peak Response = 20248



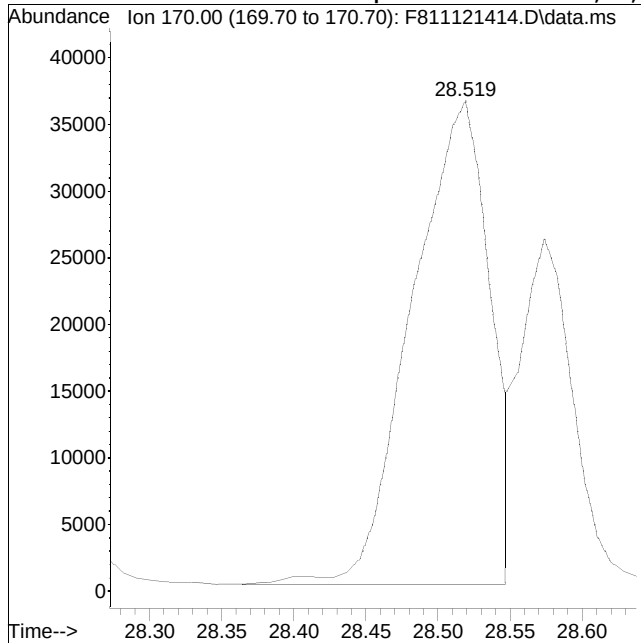
Manual Peak Response = 14325 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

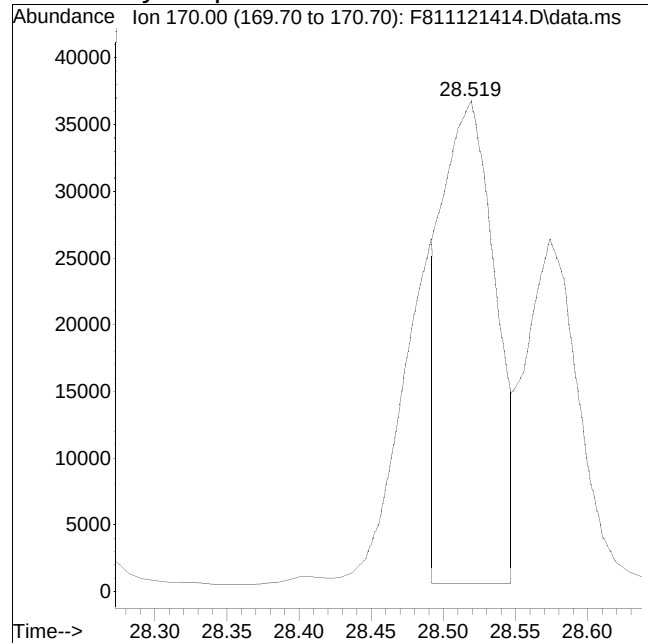
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #28: 2,3,5-Trimethylnaphthalene



Original Peak Response = 137384



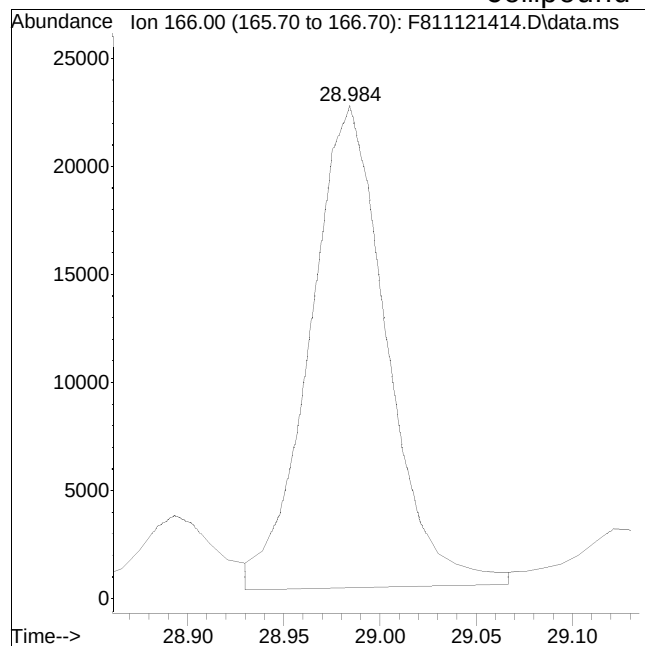
Manual Peak Response = 90550 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

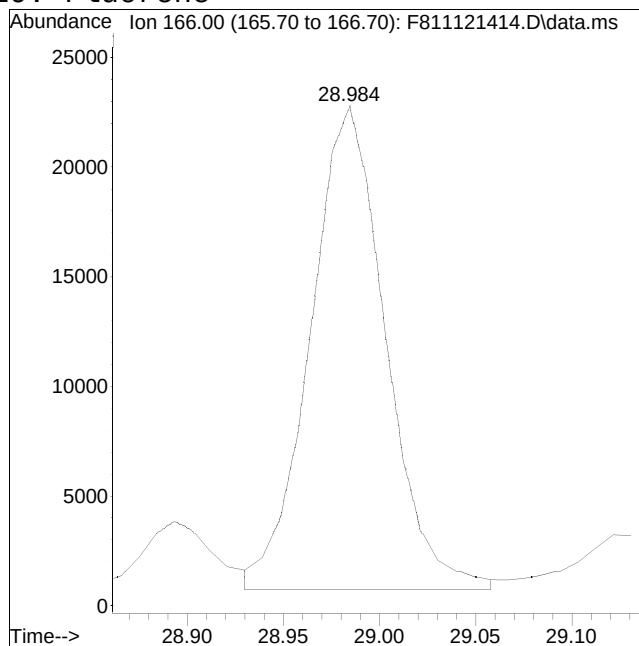
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #29: Fluorene



Original Peak Response = 61744



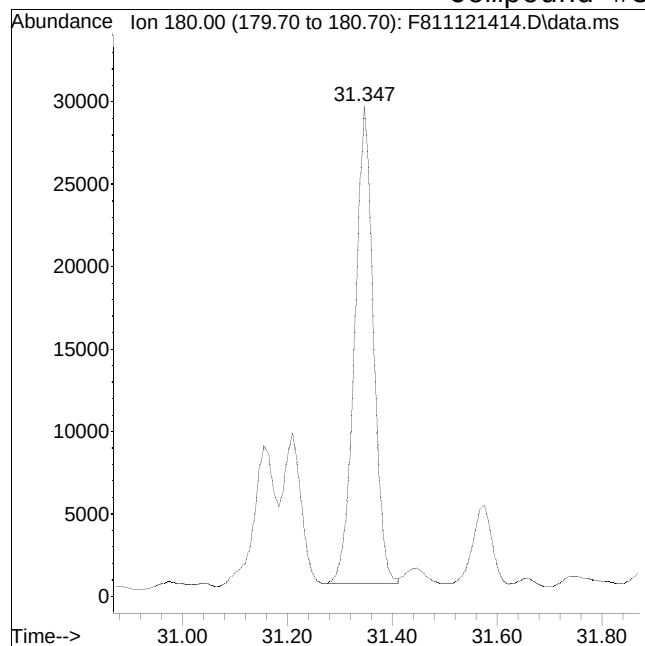
Manual Peak Response = 59856 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

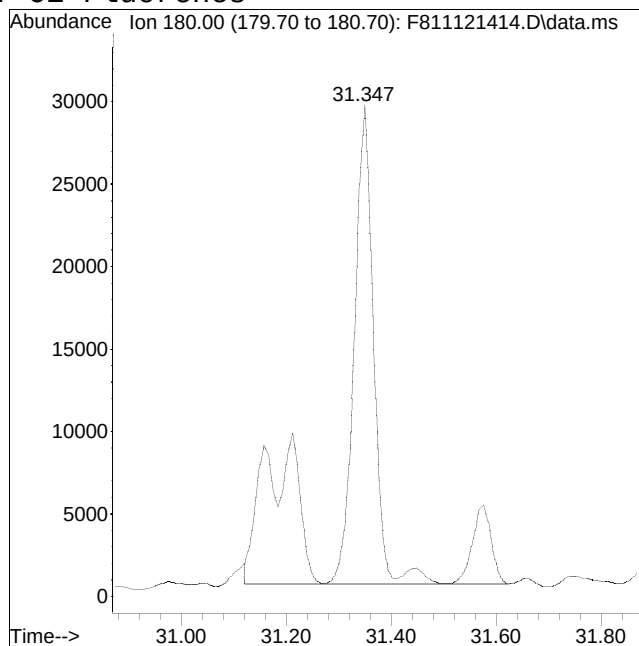
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
 Data File : F811121414.D Operator : PAH8:SR
 Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
 Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #30: C1-Fluorenes



Original Peak Response = 71735

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

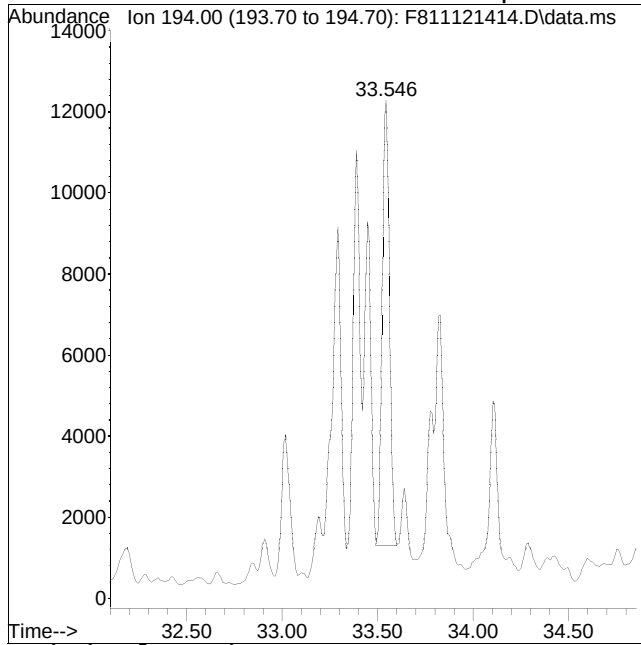


Manual Peak Response = 129109 M5

Manual Integration/Negative Proof Report

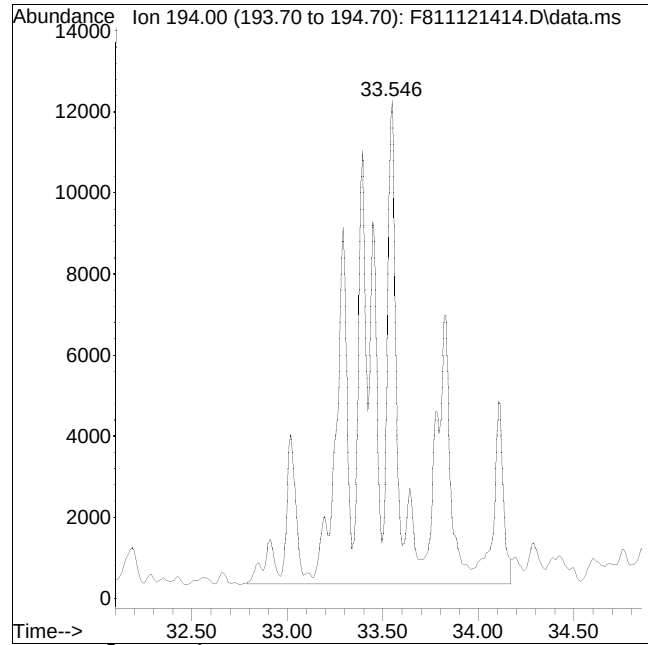
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #31: C2-Fluorenes



Original Peak Response = 29113

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

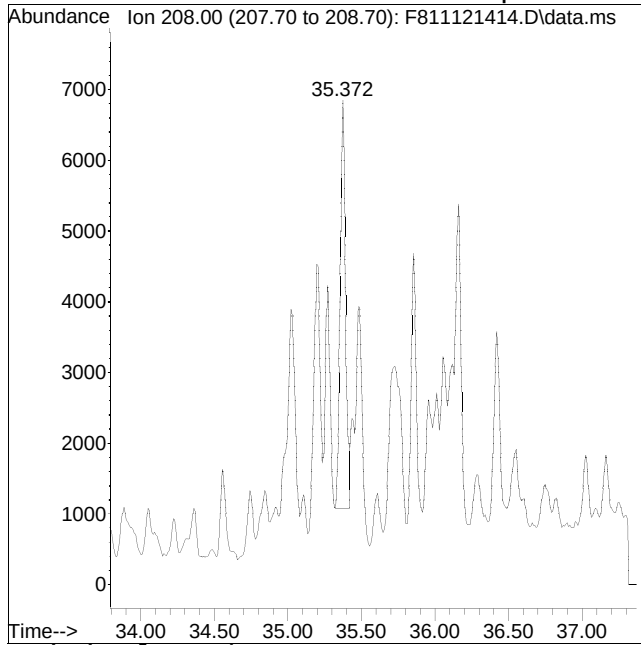


Manual Peak Response = 197475 M5

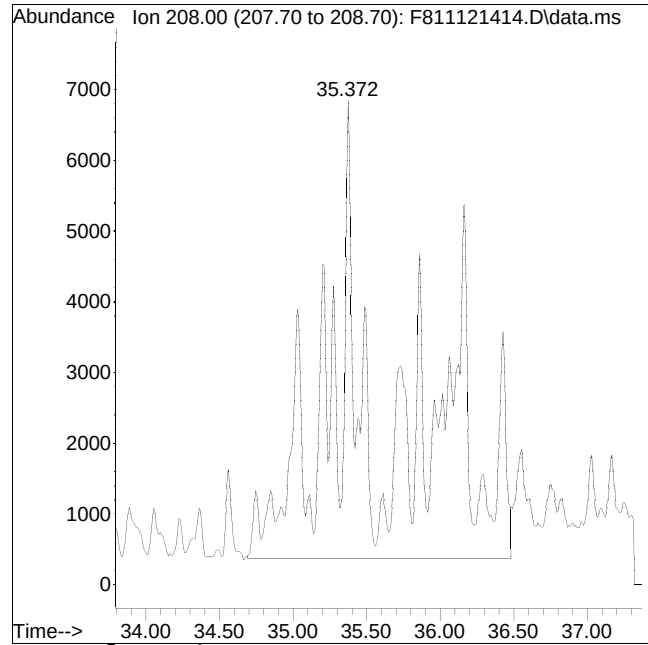
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #32: C3-Fluorenes



Original Peak Response = 14846



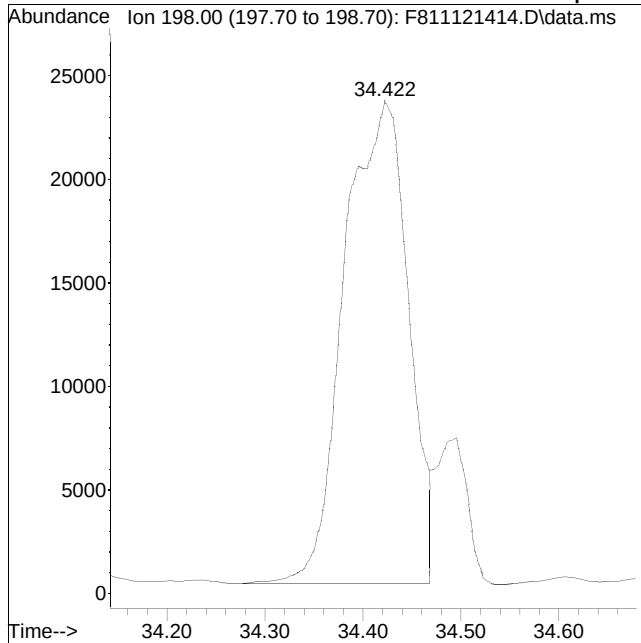
Manual Peak Response = 175265 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

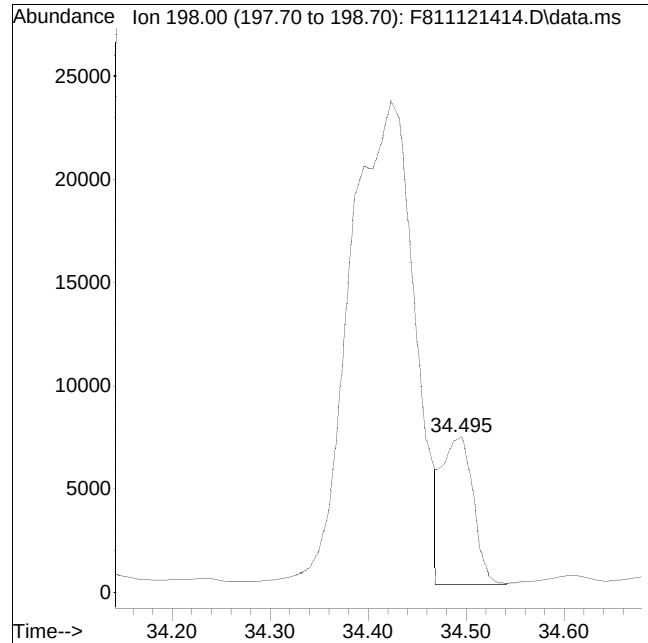
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #37: OTP



Original Peak Response = 106173



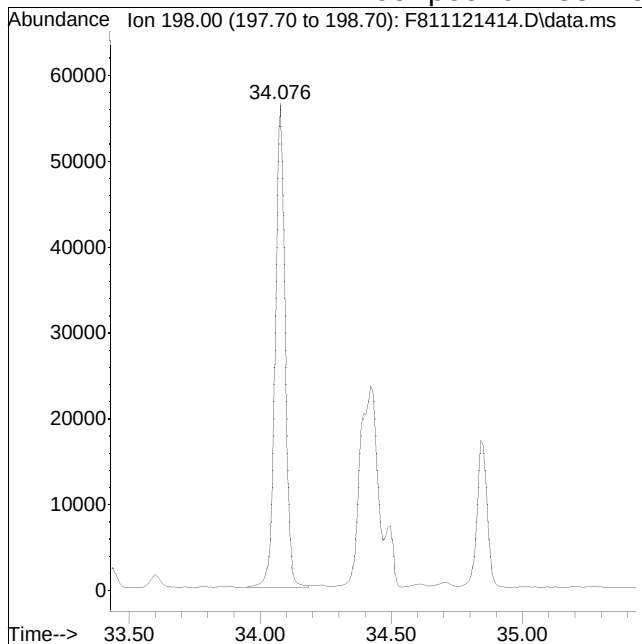
Manual Peak Response = 15017 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

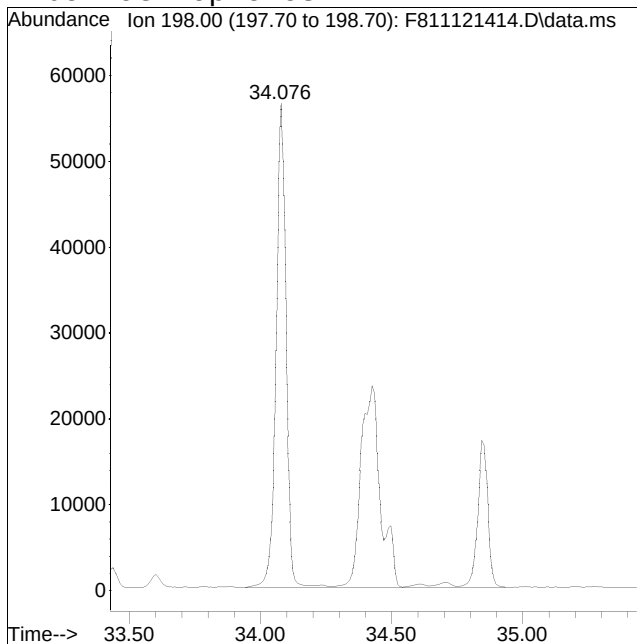
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
 Data File : F811121414.D Operator : PAH8:SR
 Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
 Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #38: C1-Dibenzothiophenes



Original Peak Response = 147327



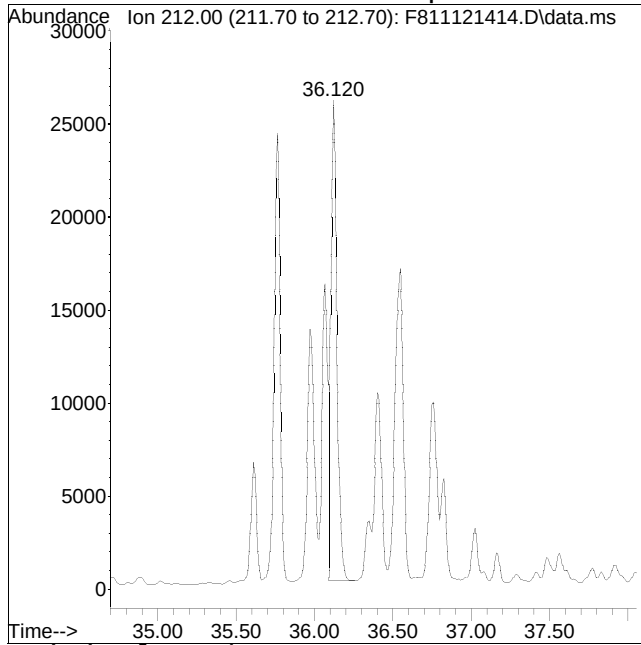
Manual Peak Response = 321531 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

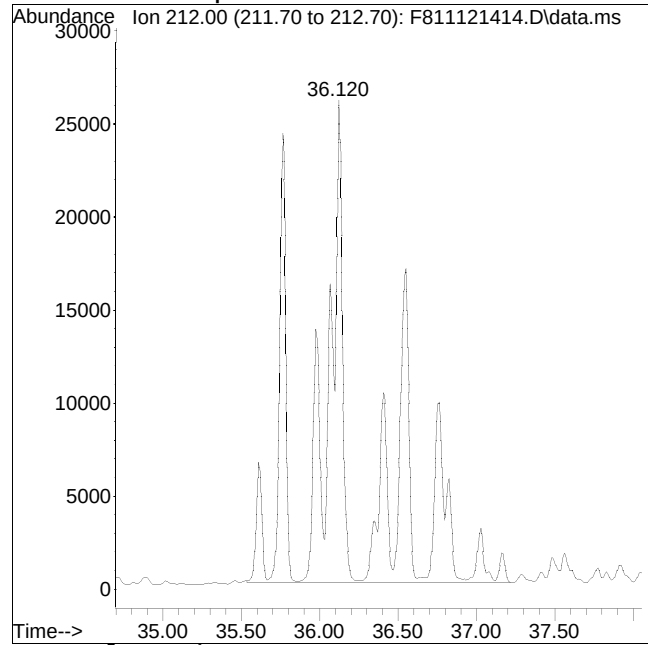
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #39: C2-Dibenzothiophenes



Original Peak Response = 66917

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

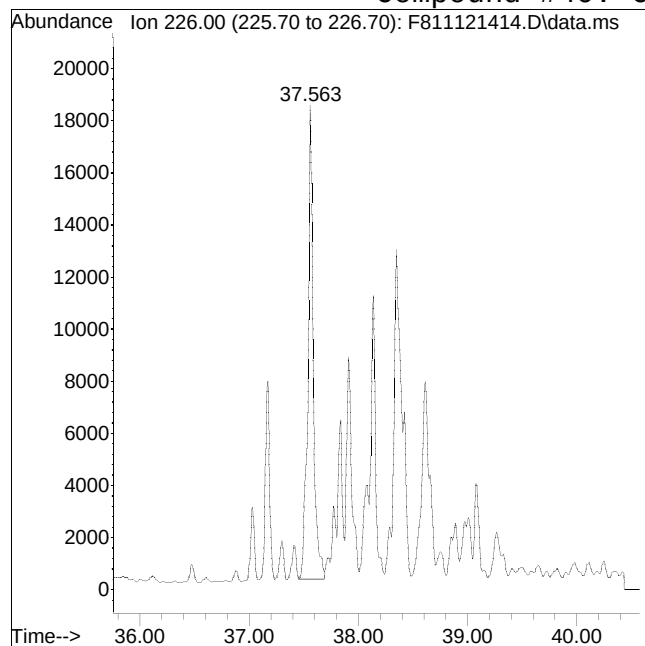


Manual Peak Response = 398234 M5

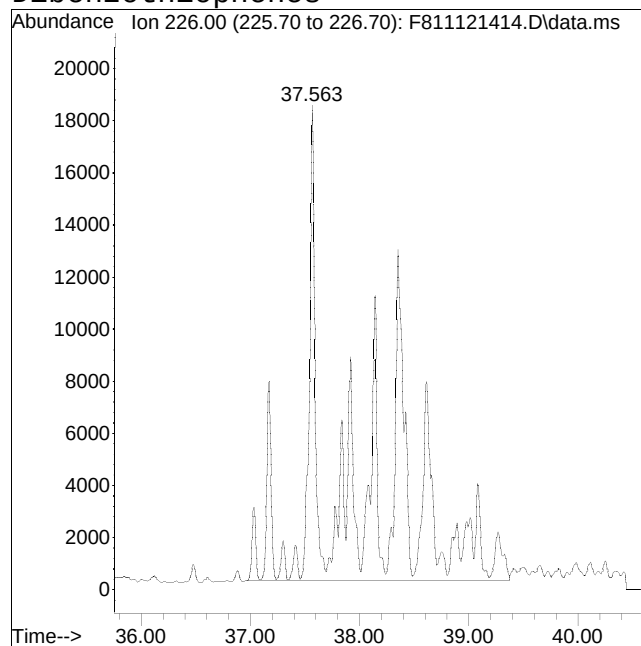
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
 Data File : F811121414.D Operator : PAH8:SR
 Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
 Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #40: C3-Dibenzothiophenes



Original Peak Response = 62098



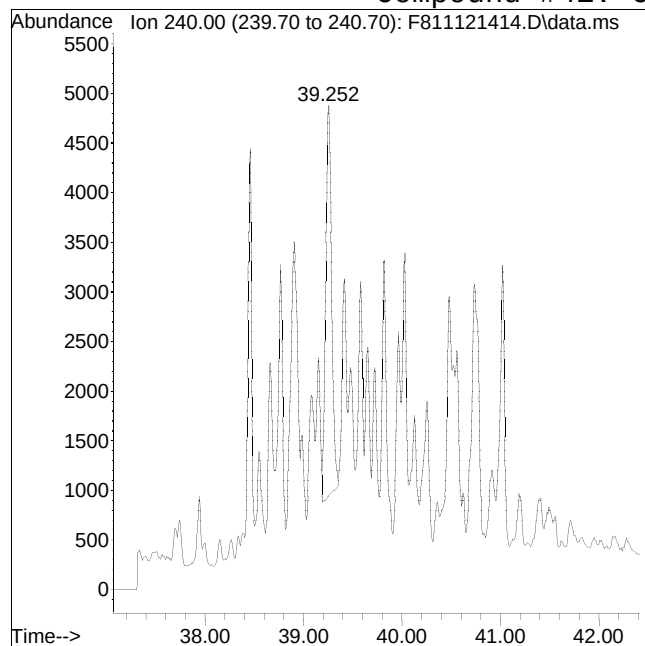
Manual Peak Response = 353024 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

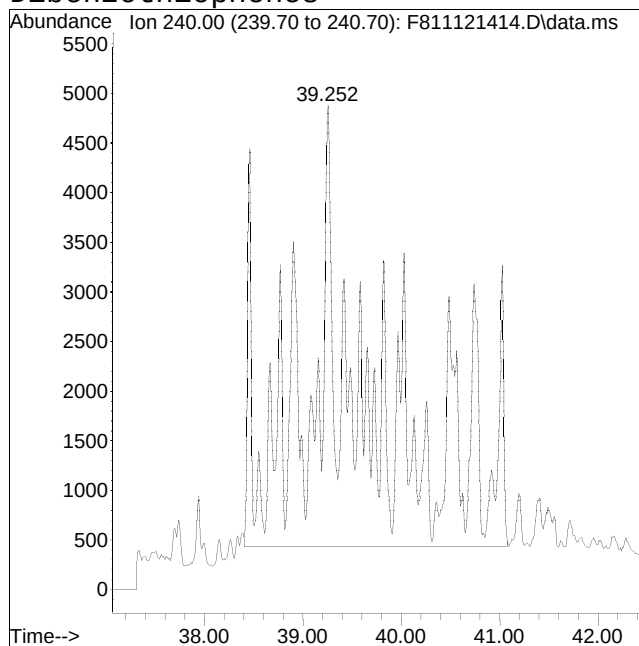
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #41: C4-Dibenzothiophenes



Original Peak Response = 16587

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

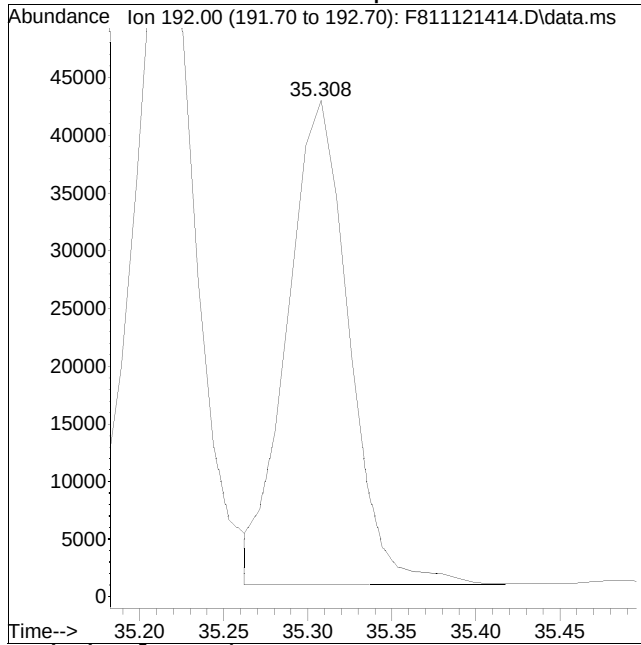


Manual Peak Response = 196964 M5

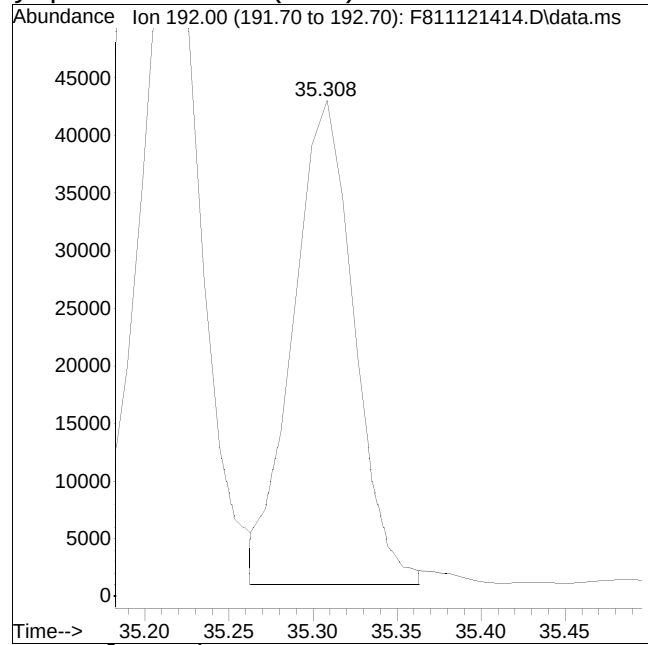
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #48: 1-Methylphenanthrene(1MP)



Original Peak Response = 107318



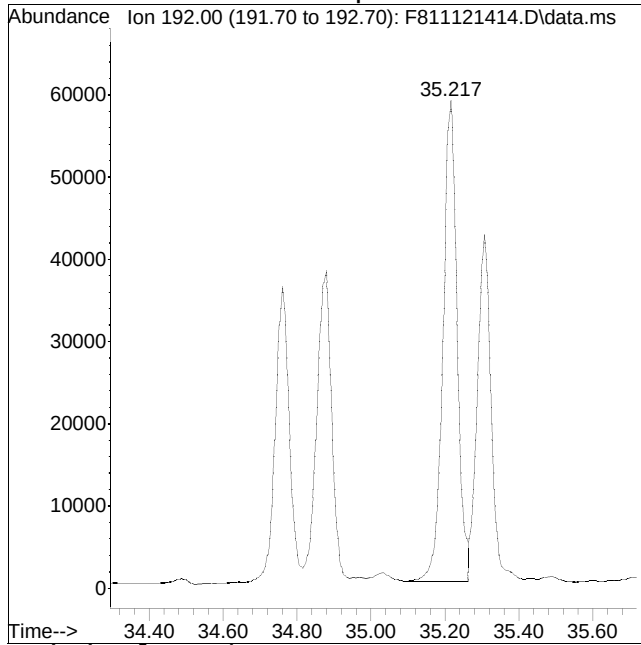
Manual Peak Response = 106243 M4

M4 = Poor automated baseline construction.

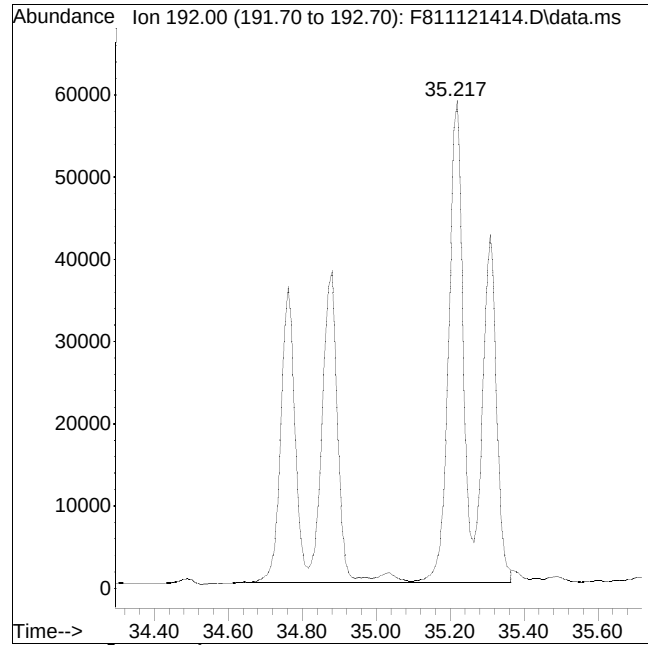
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #49: C1-Phenanthrenes/Anthracenes



Original Peak Response = 155053



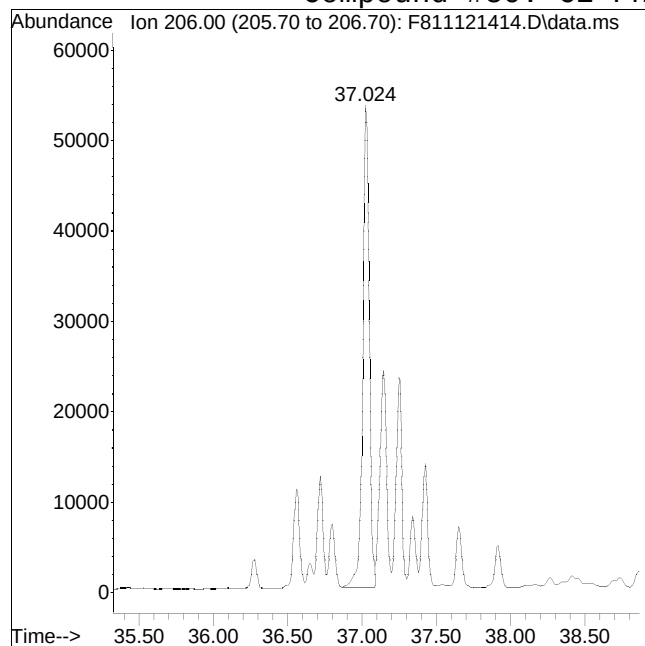
Manual Peak Response = 471534 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

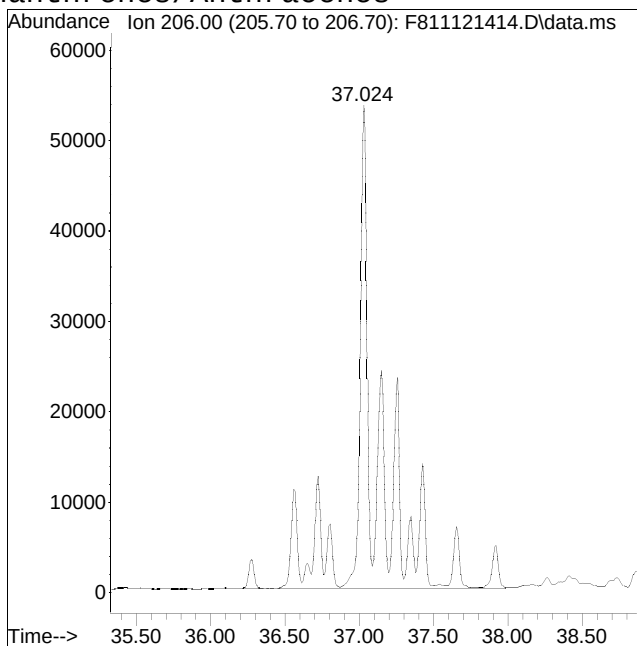
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
 Data File : F811121414.D Operator : PAH8:SR
 Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
 Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #50: C2-Phenanthrenes/Anthracenes



Original Peak Response = 161398



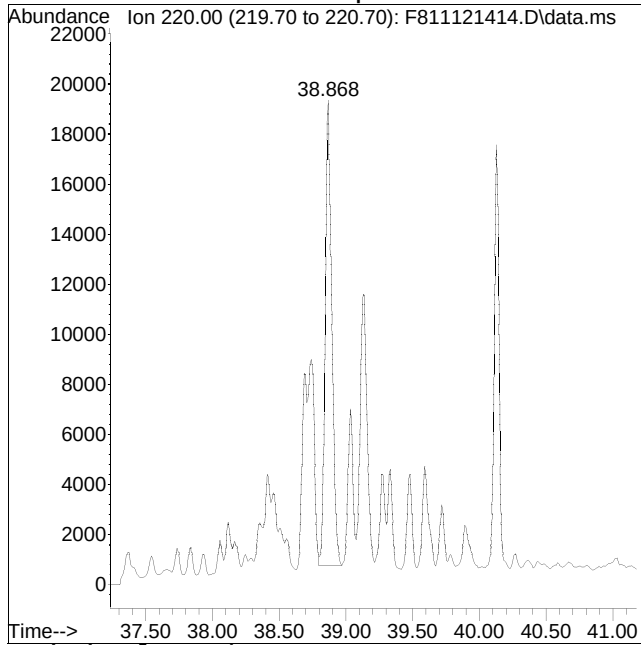
Manual Peak Response = 495891 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

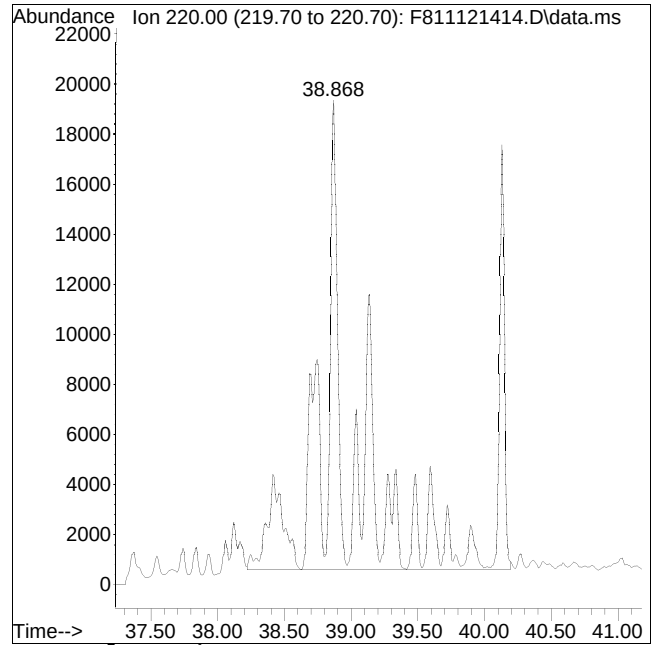
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #52: C3-Phenanthrenes/Anthracenes



Original Peak Response = 64396



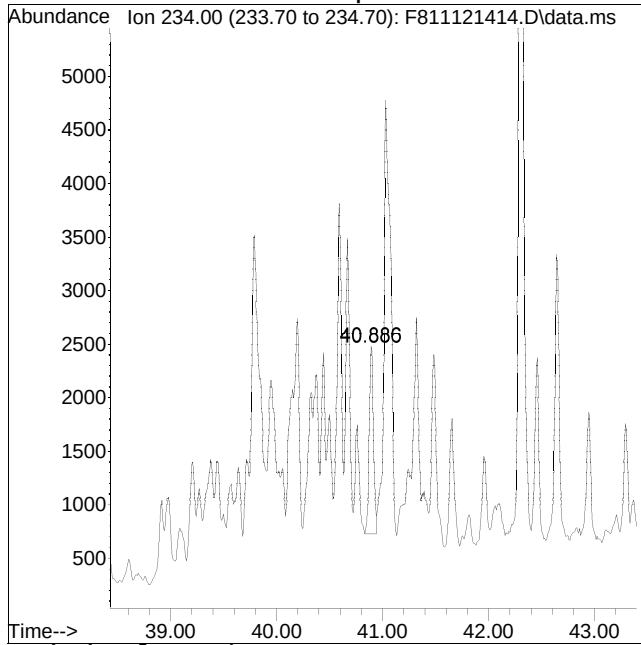
Manual Peak Response = 305586 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

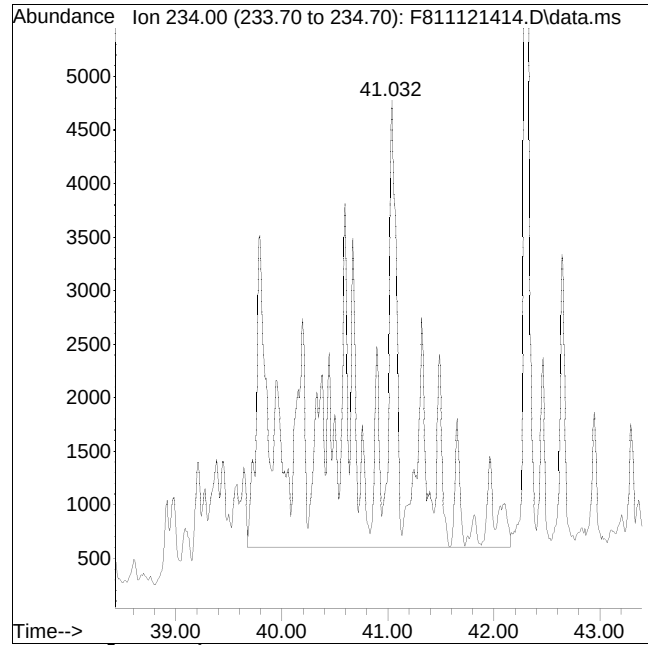
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #53: C4-Phenanthrenes/Anthracenes



Original Peak Response = 4939

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

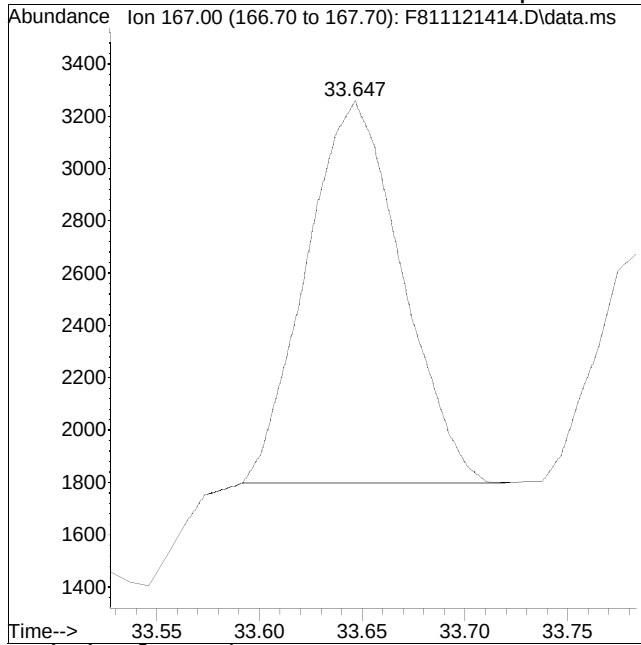


Manual Peak Response = 132168 M5

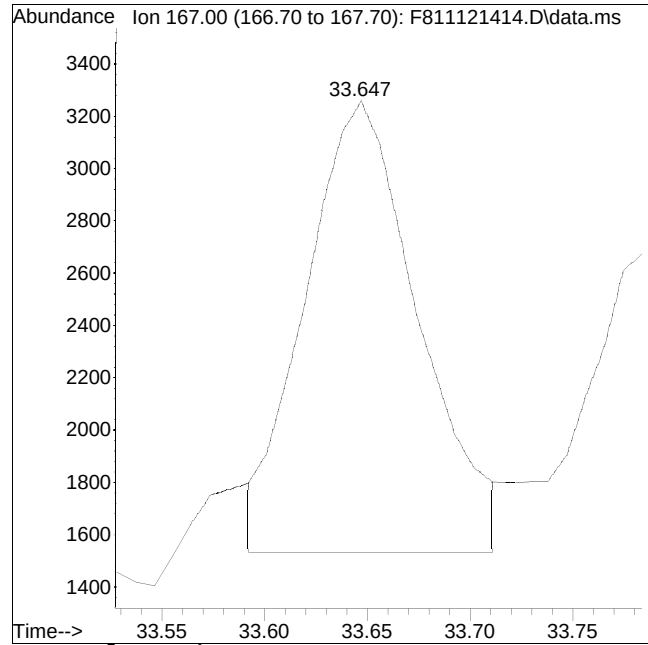
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #56: Carbazole



Original Peak Response = 4732



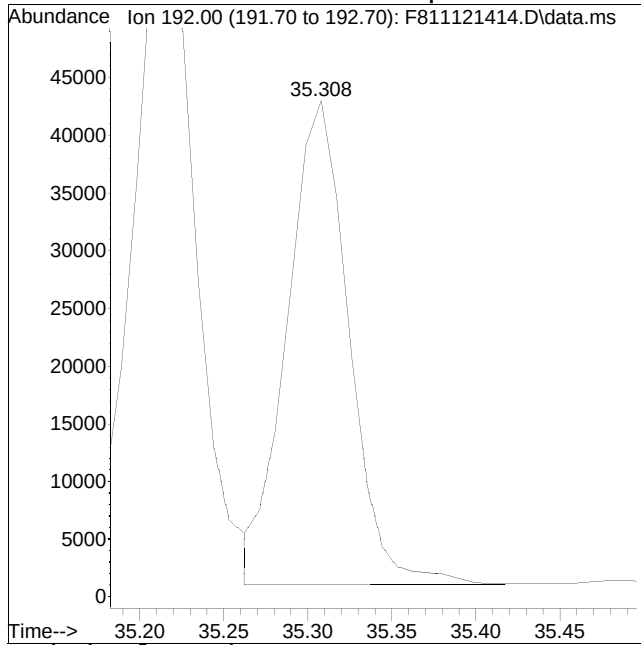
Manual Peak Response = 6602 M4

M4 = Poor automated baseline construction.

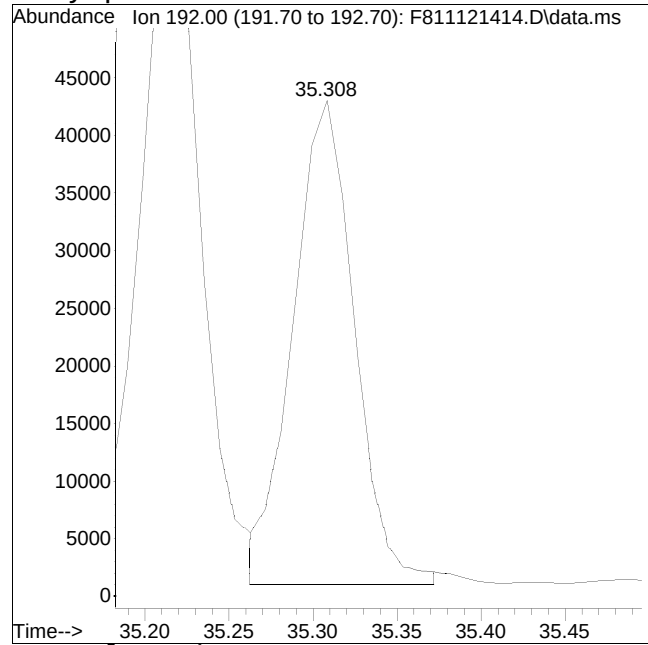
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #57: 1-Methylphenanthrene



Original Peak Response = 107318



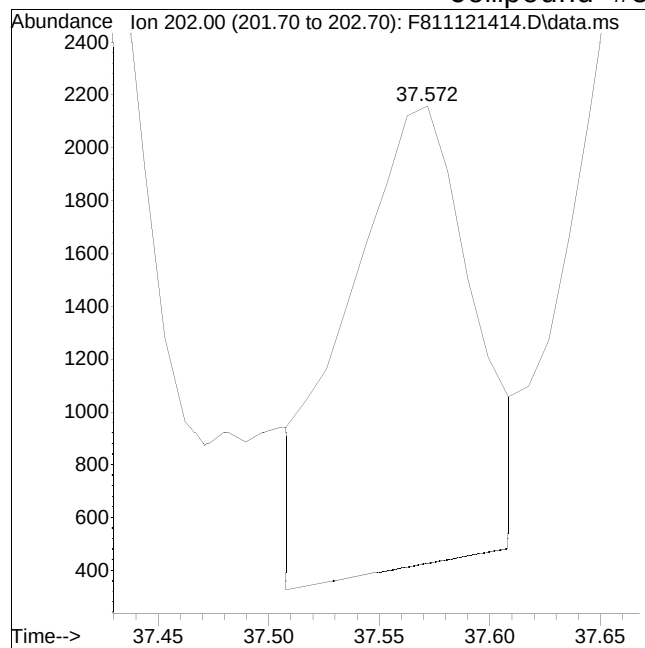
Manual Peak Response = 106857 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

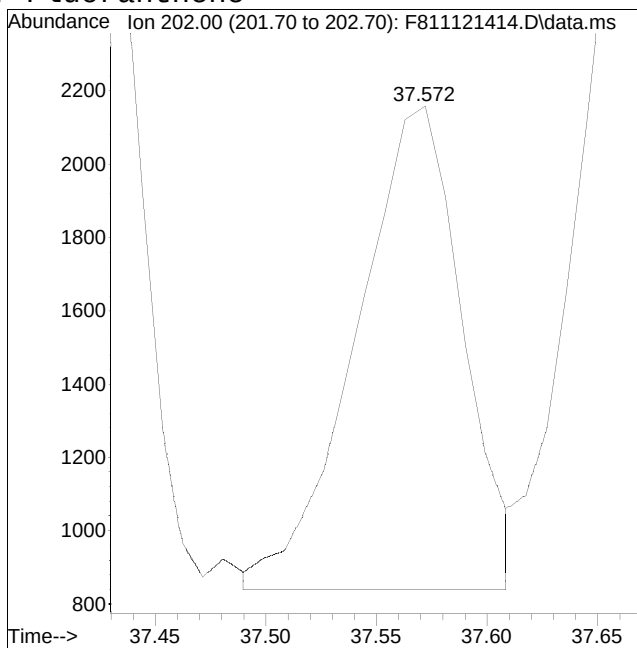
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
 Data File : F811121414.D Operator : PAH8:SR
 Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
 Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #58: Fluoranthene



Original Peak Response = 6923

M4 = Poor automated baseline construction.

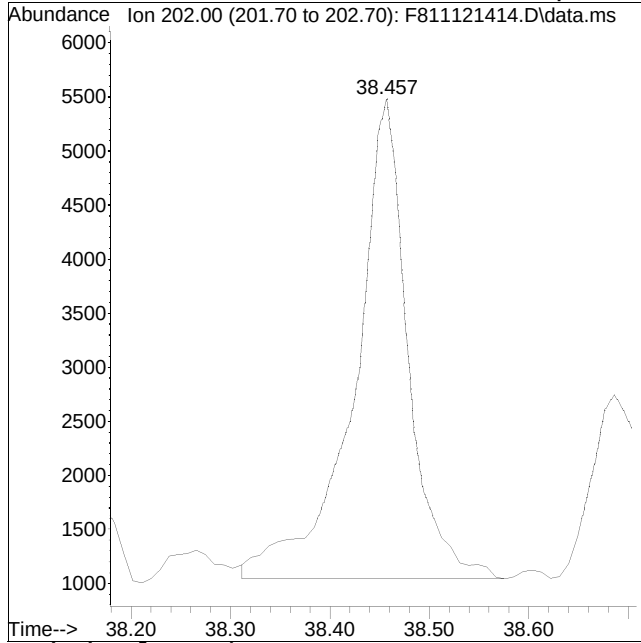


Manual Peak Response = 4406 M4

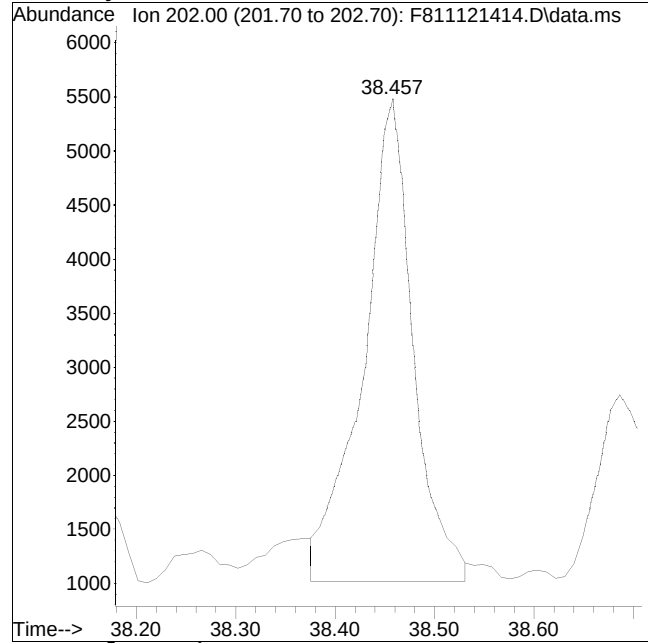
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #60: Pyrene



Original Peak Response = 16749



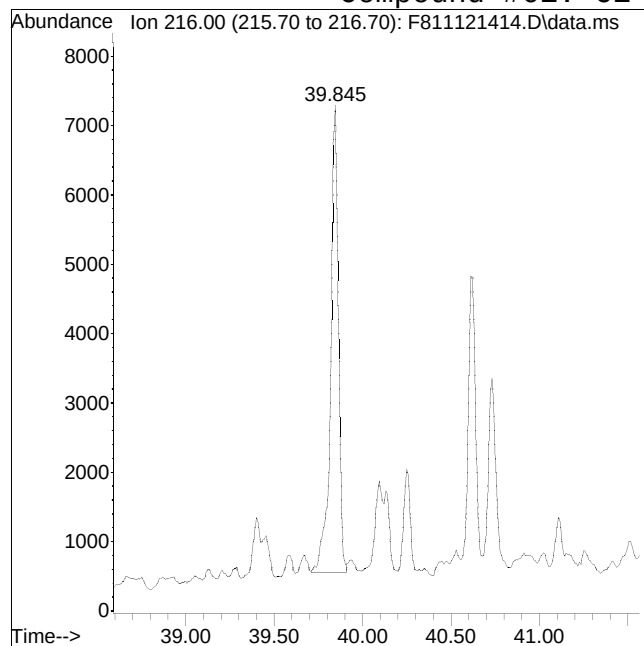
Manual Peak Response = 15559 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

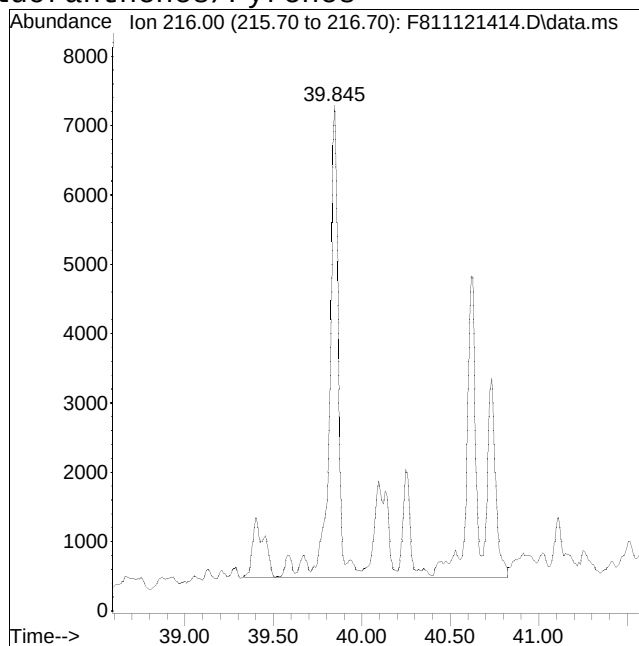
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #61: C1-Fluoranthenes/Pyrenes



Original Peak Response = 20705

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

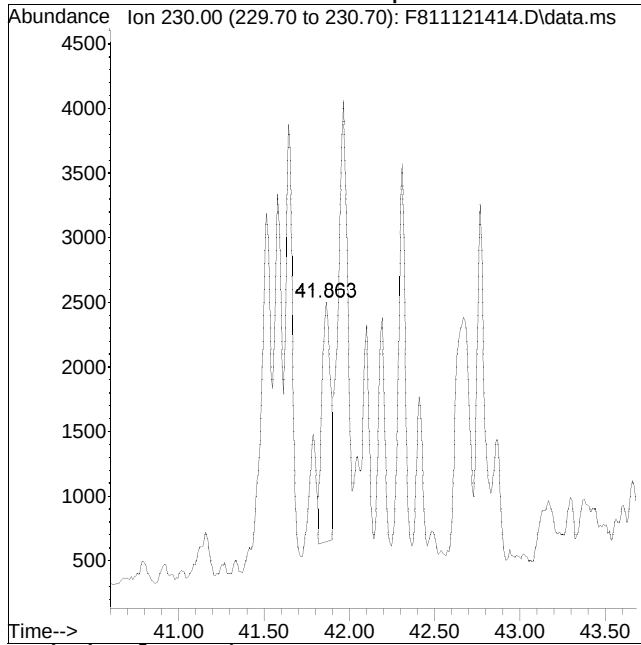


Manual Peak Response = 64595 M5

Manual Integration/Negative Proof Report

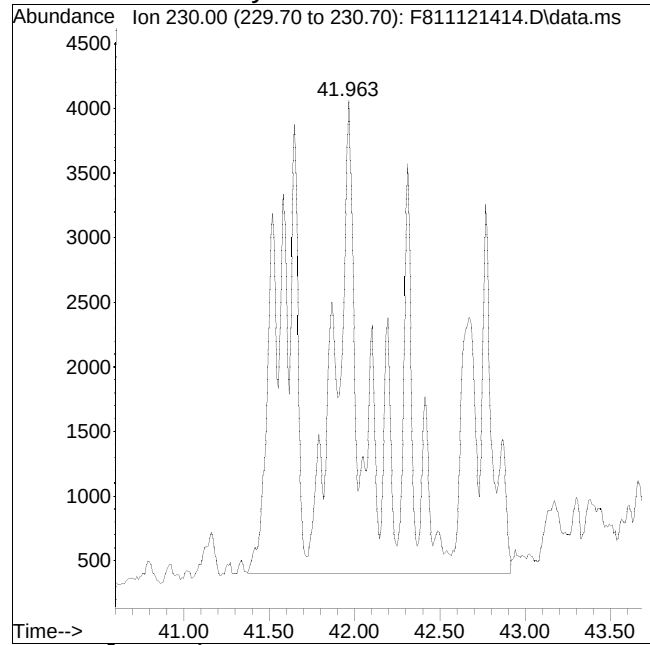
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #62: C2-Fluoranthenes/Pyrenes



Original Peak Response = 6520

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

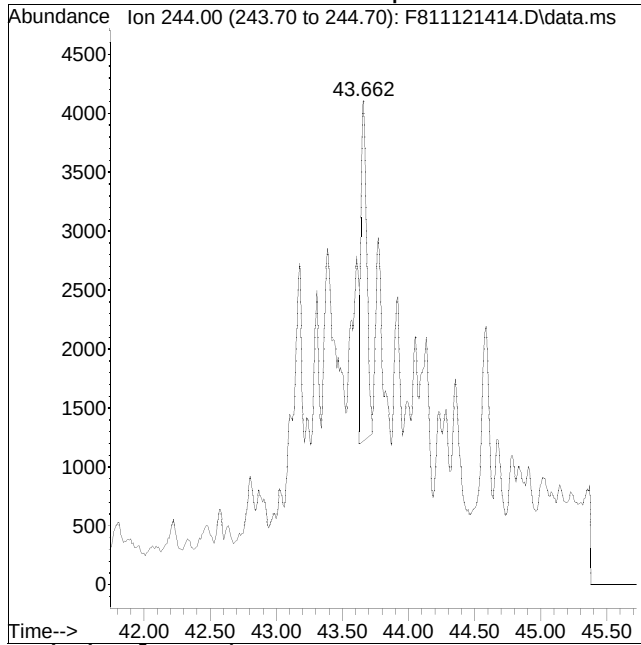


Manual Peak Response = 106331 M5

Manual Integration/Negative Proof Report

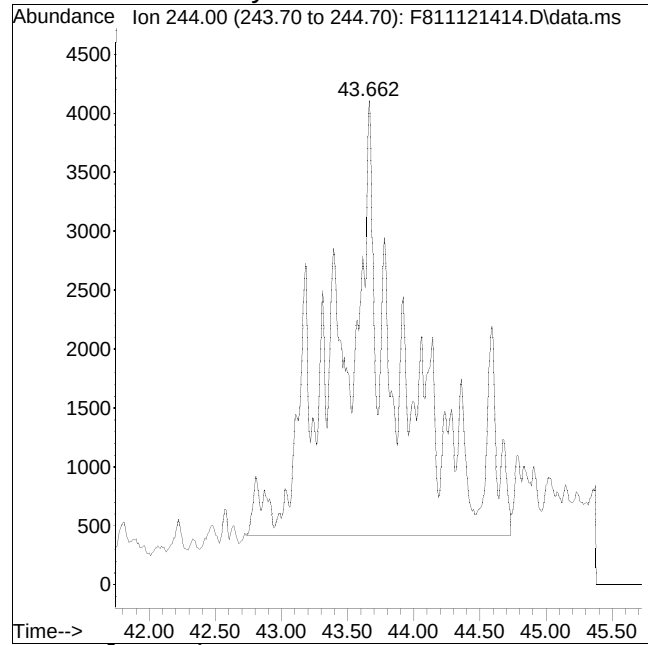
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #63: C3-Fluoranthenes/Pyrenes



Original Peak Response = 9036

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

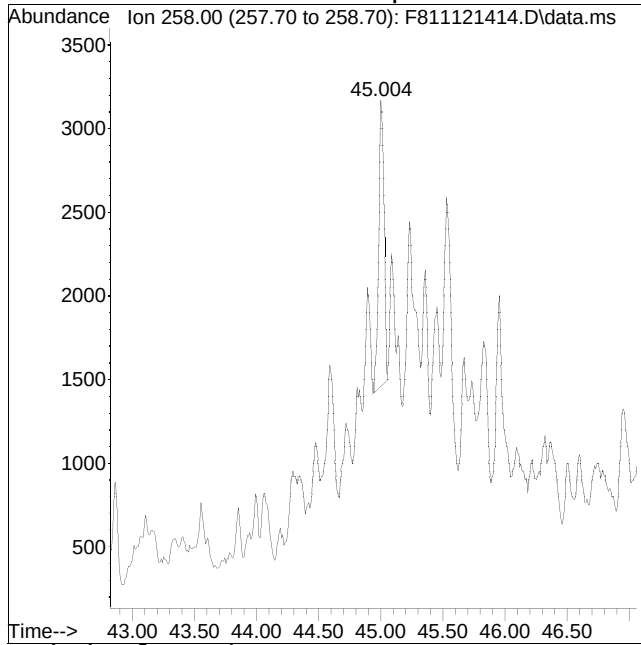


Manual Peak Response = 127605 M5

Manual Integration/Negative Proof Report

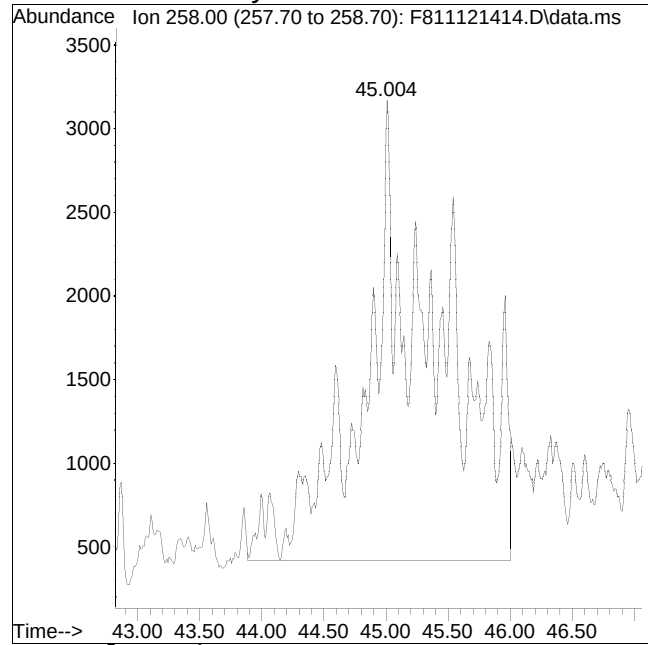
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #64: C4-Fluoranthenes/Pyrenes



Original Peak Response = 5126

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

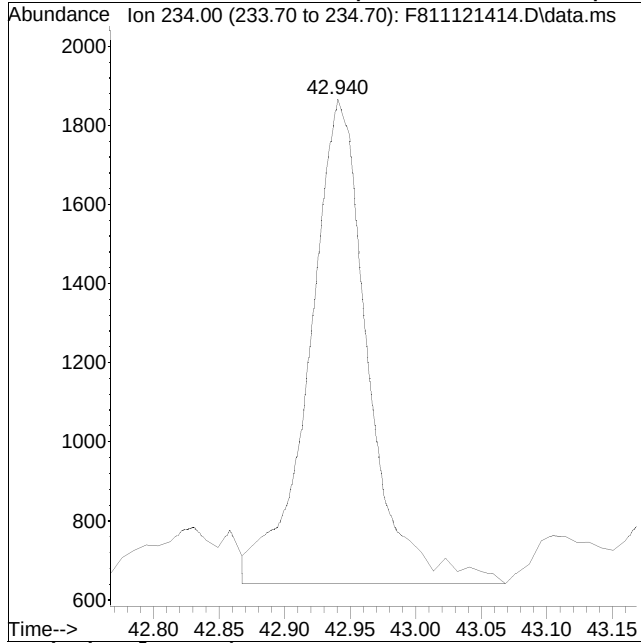


Manual Peak Response = 113010 M5

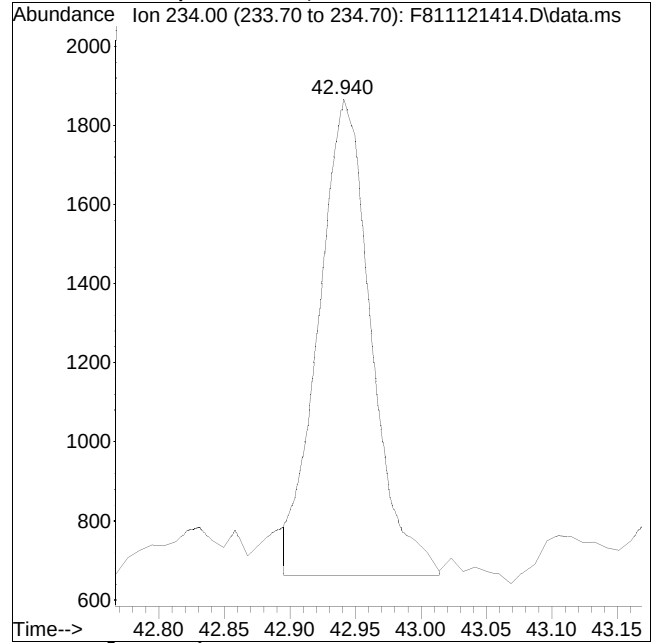
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #69: Naphthobenzothiophene-2,3-D



Original Peak Response = 3802



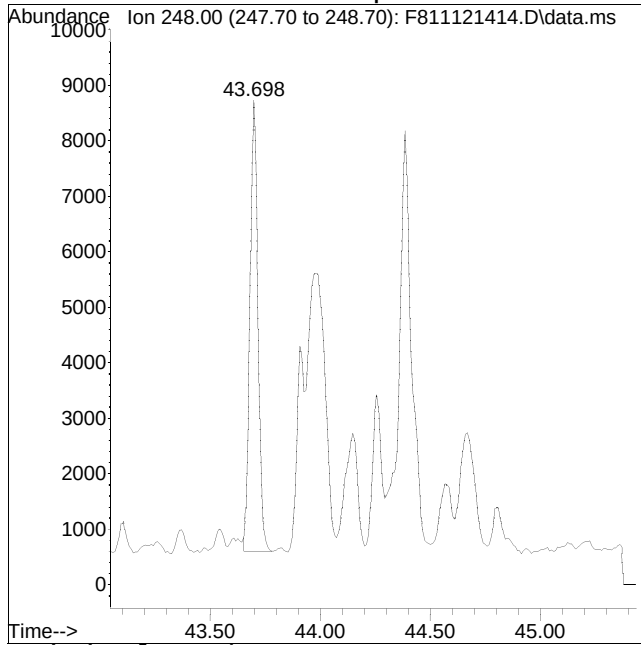
Manual Peak Response = 3366 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

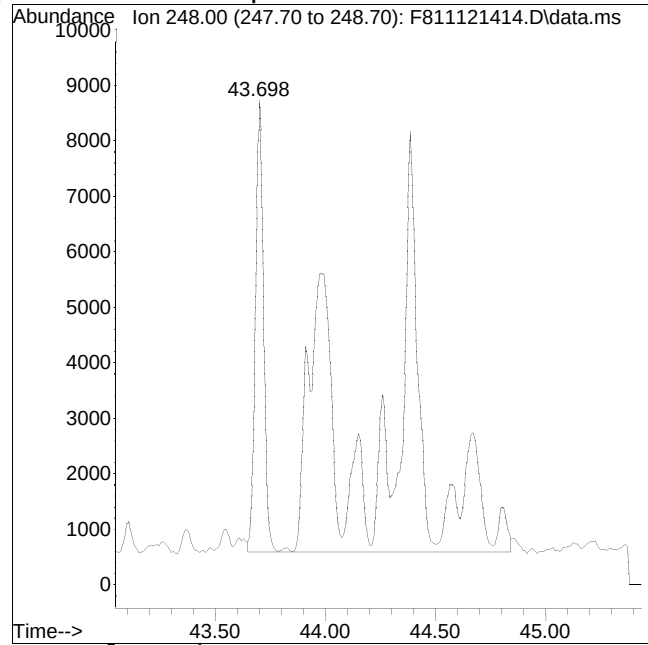
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #70: C1-Naphthobenzothiophenes



Original Peak Response = 20490

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

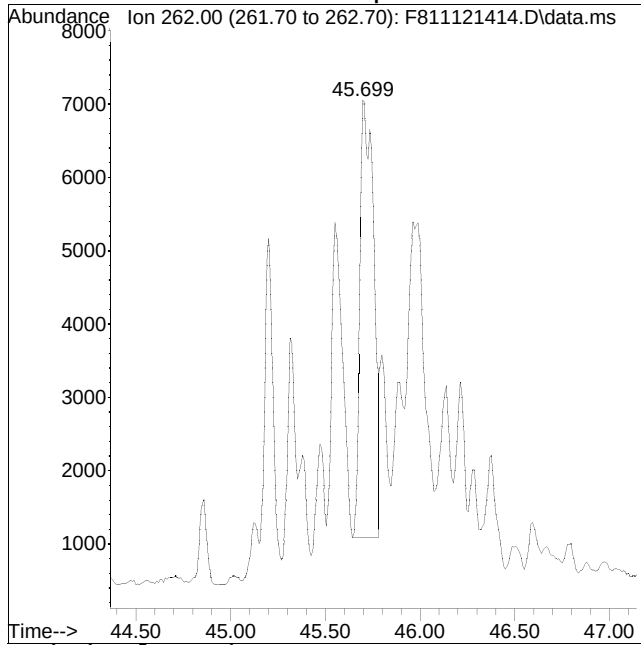


Manual Peak Response = 120802 M5

Manual Integration/Negative Proof Report

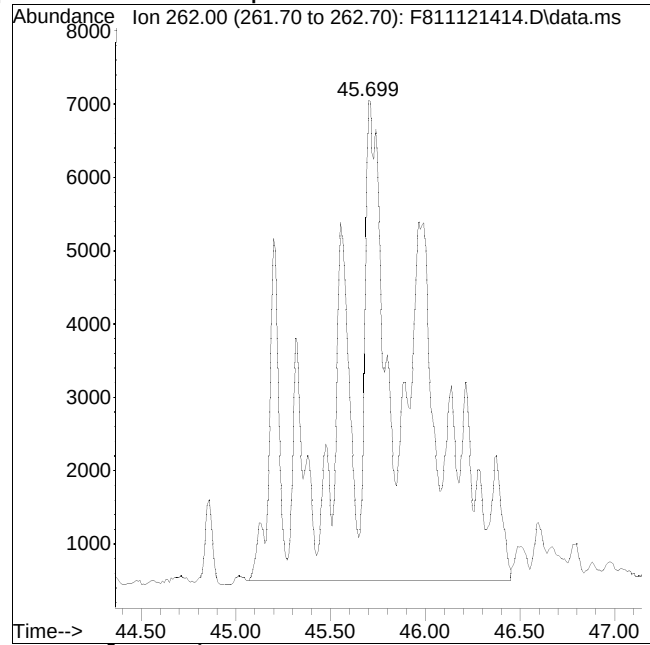
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #71: C2-Naphthobenzothiophenes



Original Peak Response = 30570

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

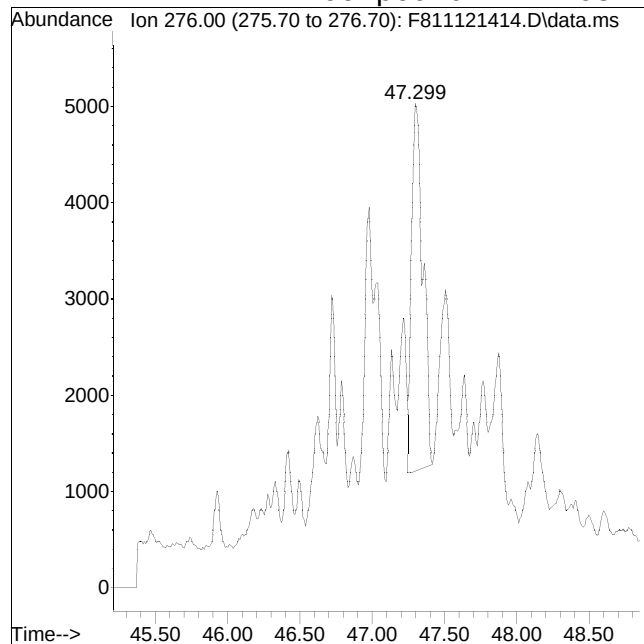


Manual Peak Response = 175053 M5

Manual Integration/Negative Proof Report

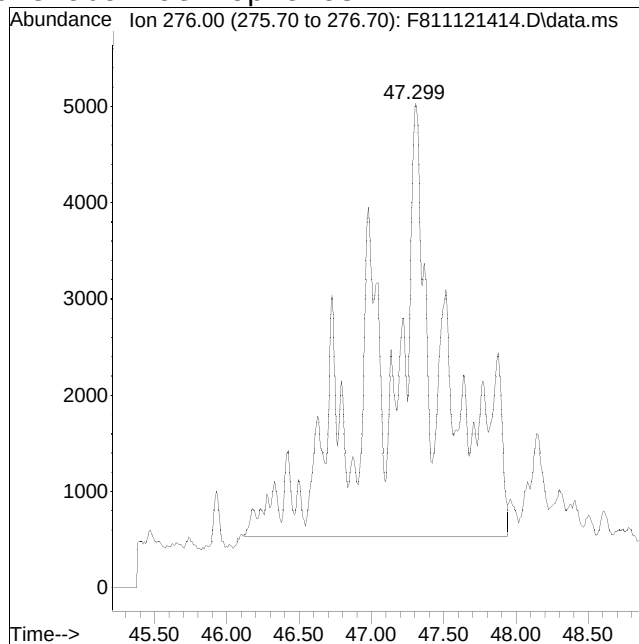
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #72: C3-Naphthobenzothiophenes



Original Peak Response = 21005

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

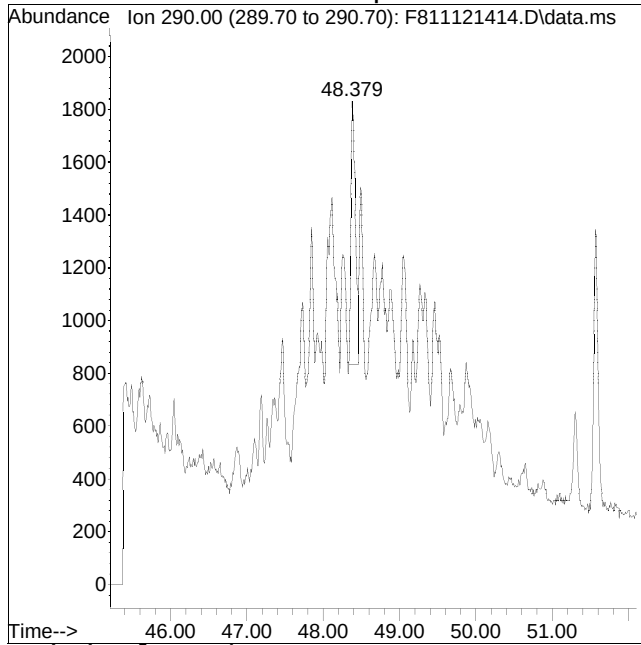


Manual Peak Response = 138061 M5

Manual Integration/Negative Proof Report

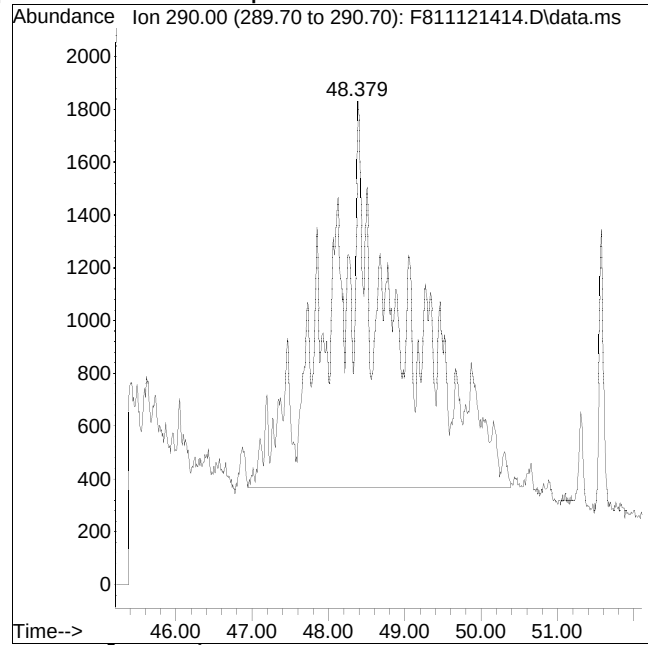
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #73: C4-Naphthobenzothiophenes



Original Peak Response = 4186

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

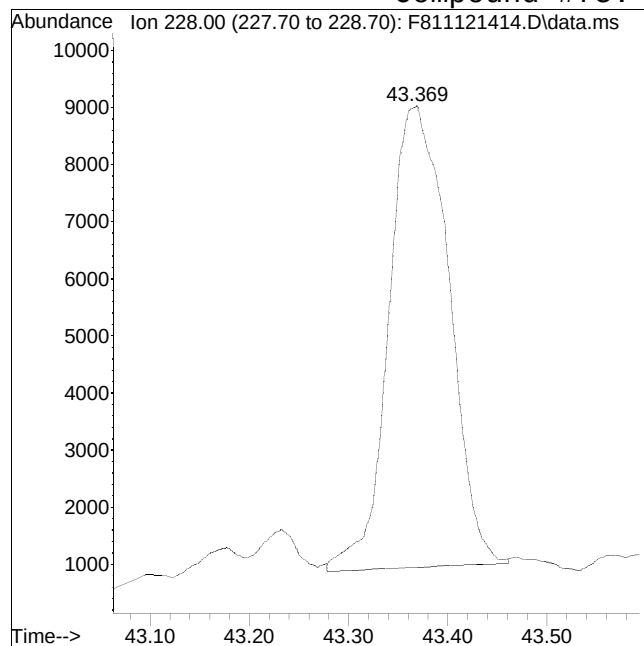


Manual Peak Response = 95184 M5

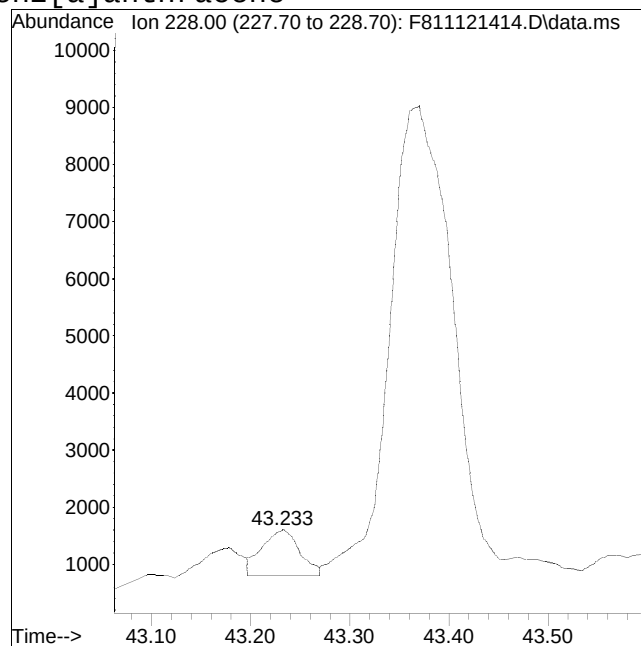
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
 Data File : F811121414.D Operator : PAH8:SR
 Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
 Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #75: Benz[a]anthracene



Original Peak Response = 33954



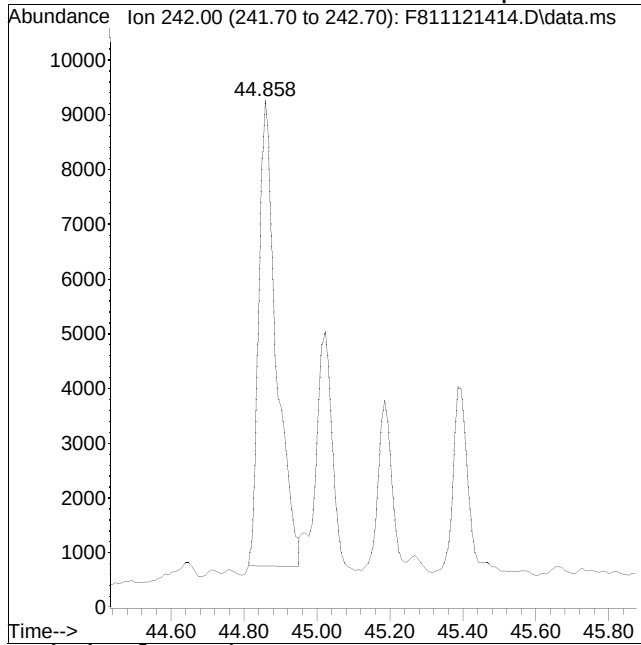
Manual Peak Response = 2150 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

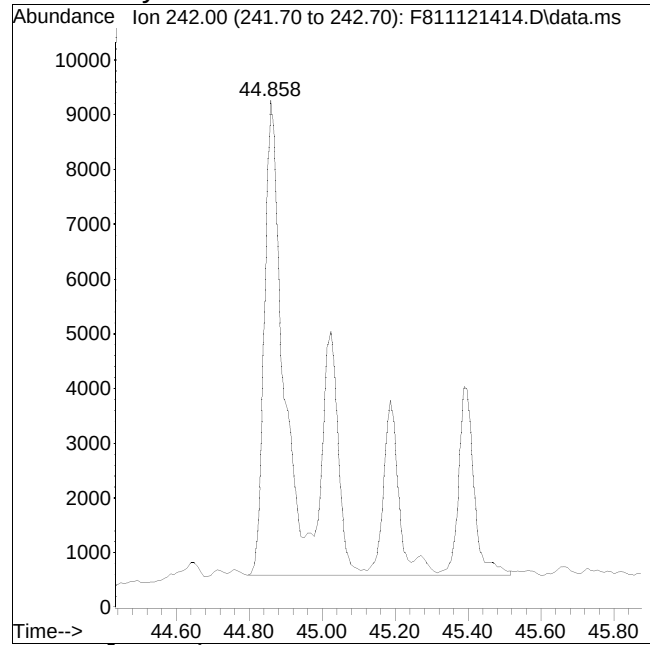
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #78: C1-Chrysenes



Original Peak Response = 28685



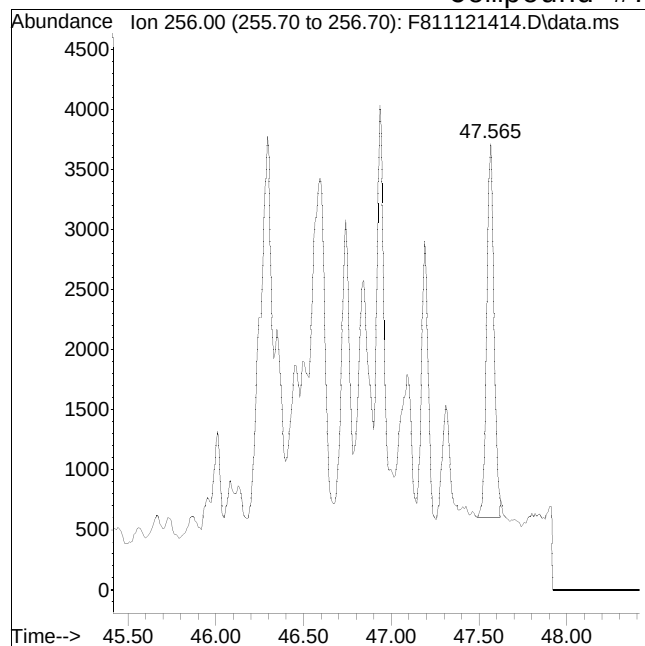
Manual Peak Response = 64382 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

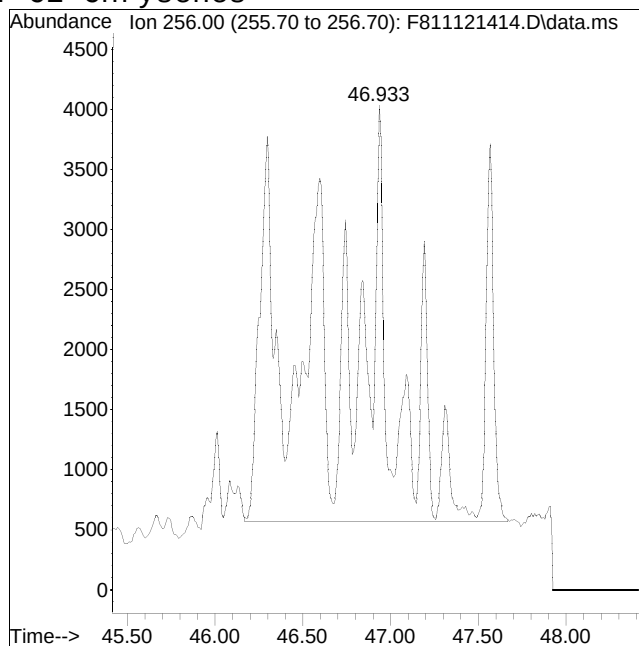
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #79: C2-Chrysenes



Original Peak Response = 8878

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

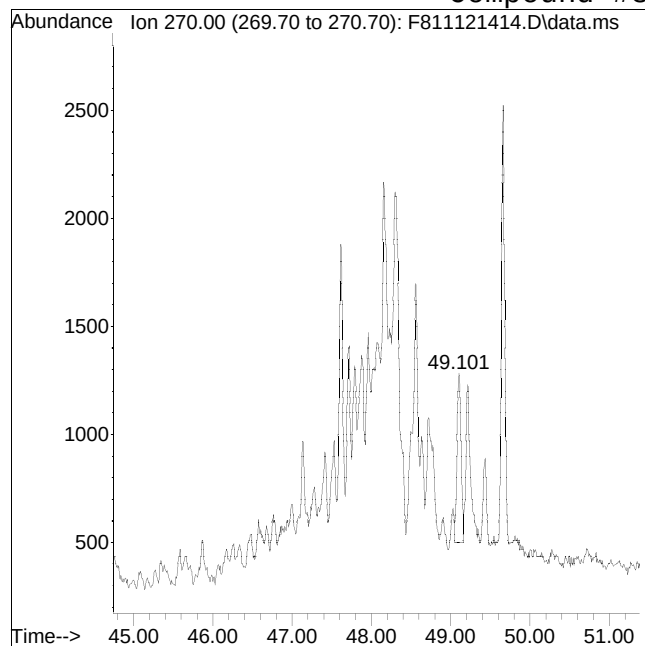


Manual Peak Response = 93134 M5

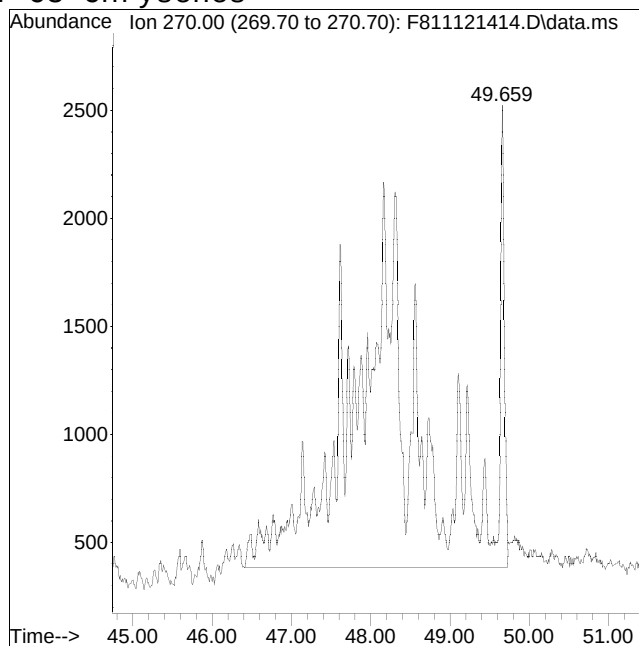
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #81: C3-Chrysenes



Original Peak Response = 2809



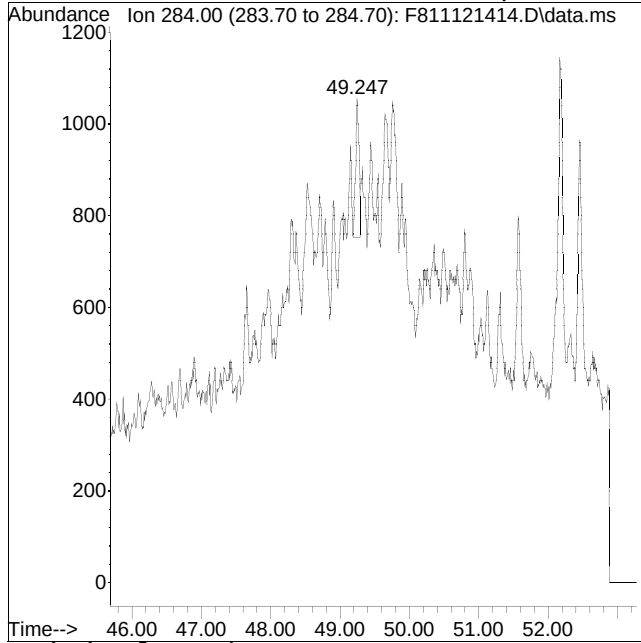
Manual Peak Response = 98770 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

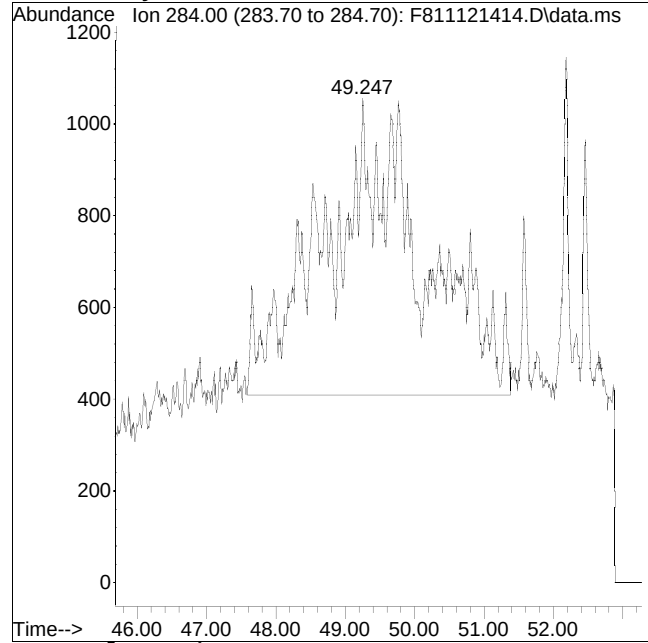
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #82: C4-Chrysenes



Original Peak Response = 1054

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

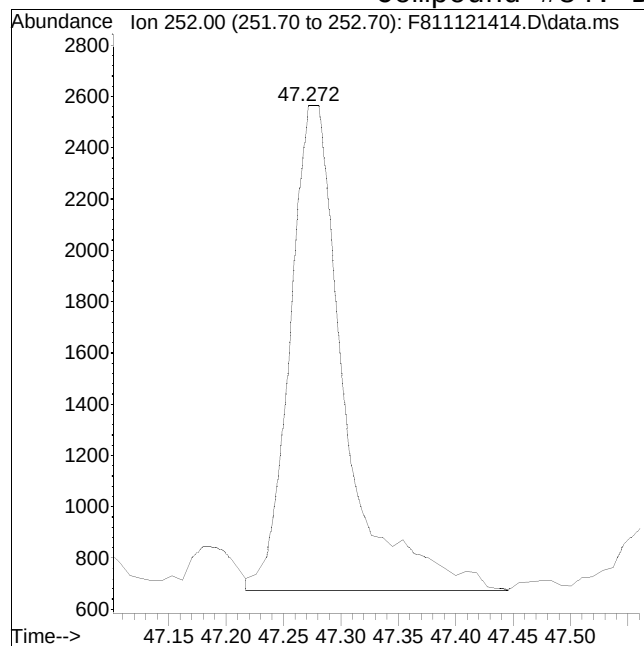


Manual Peak Response = 63072 M5

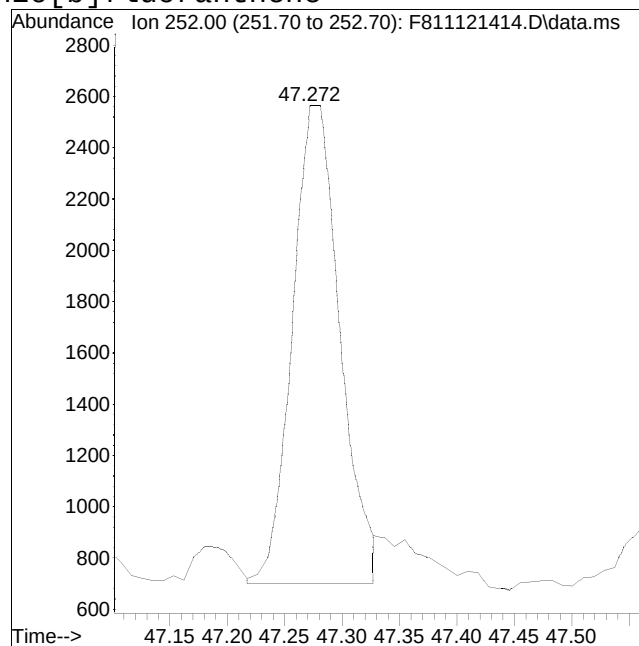
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #84: Benzo[b]fluoranthene



Original Peak Response = 6228



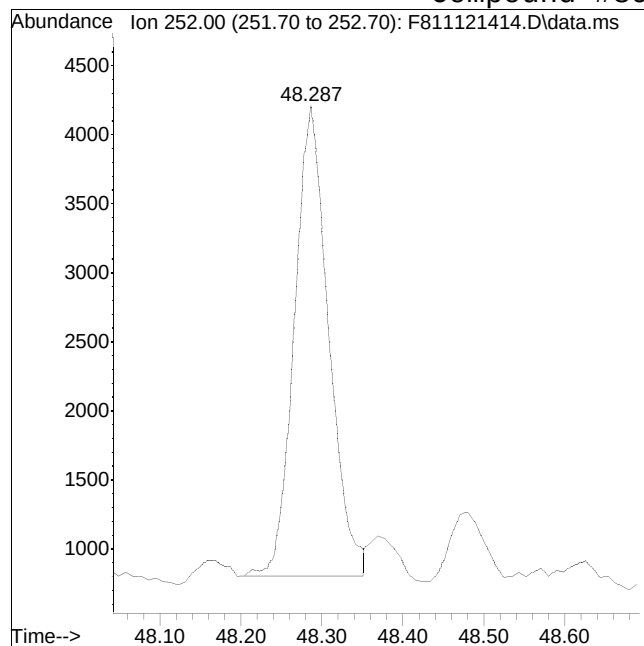
Manual Peak Response = 5383 M4

M4 = Poor automated baseline construction.

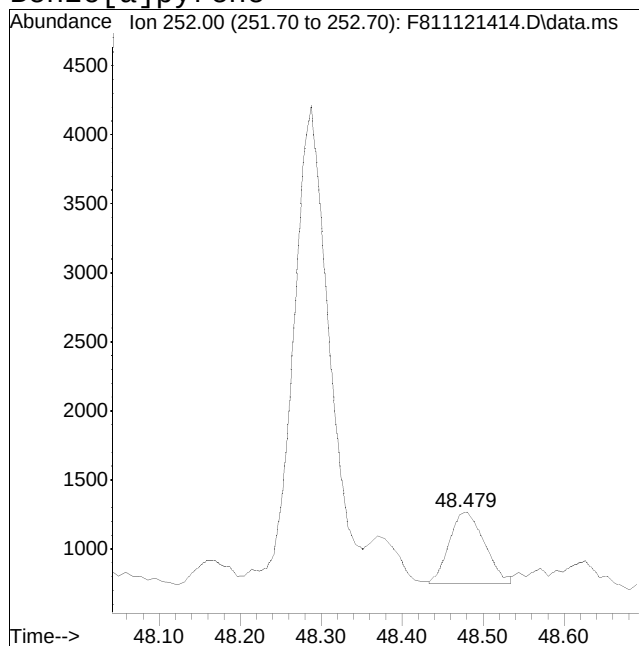
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #89: Benzo[a]pyrene



Original Peak Response = 10022



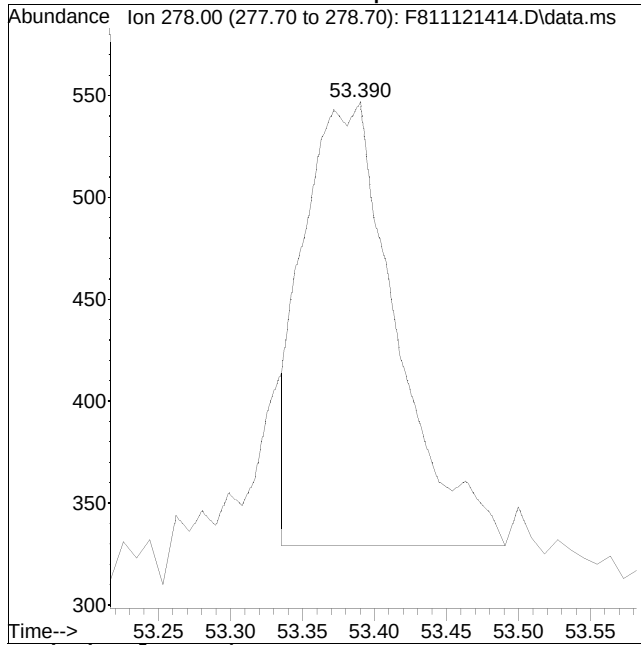
Manual Peak Response = 1560 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

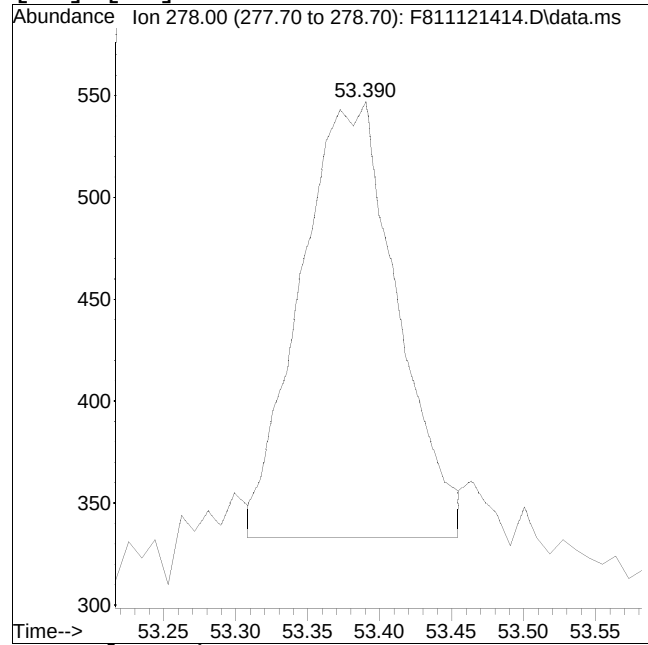
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #92: Dibenz[ah]+[ac]anthracene



Original Peak Response = 971

M4 = Poor automated baseline construction.

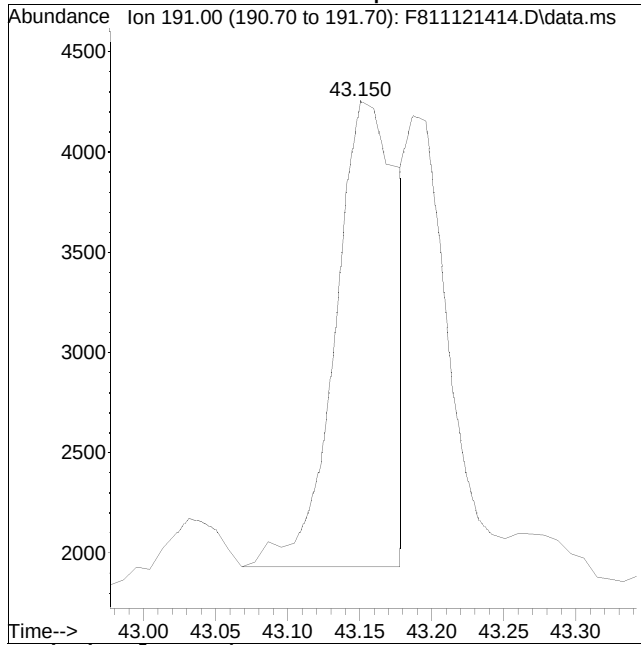


Manual Peak Response = 1000 M4

Manual Integration/Negative Proof Report

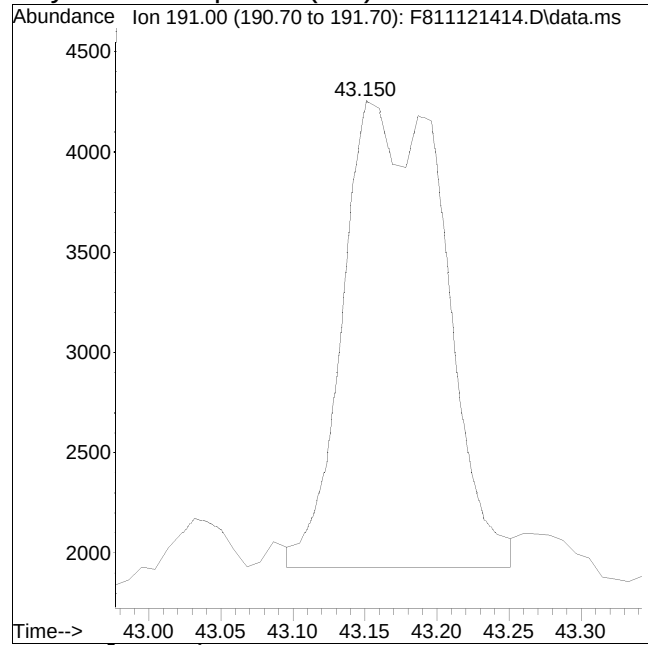
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #98: C25 Tricyclic Terpane (T6)



Original Peak Response = 6969

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

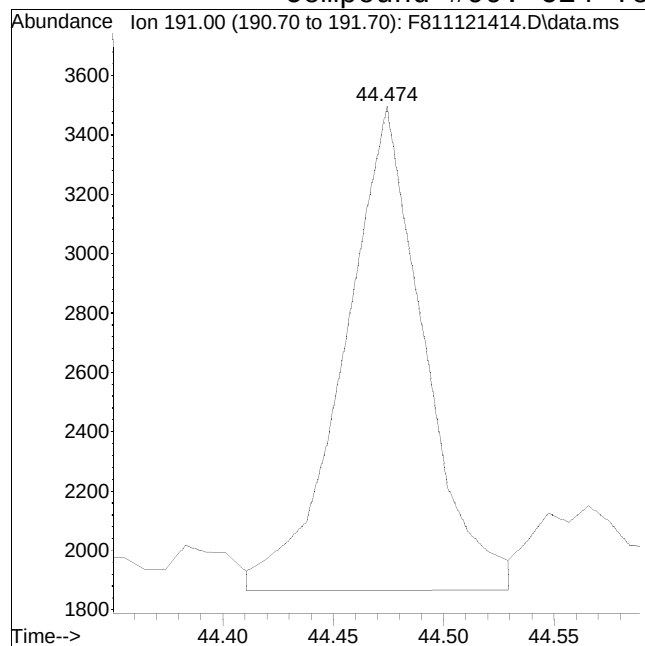


Manual Peak Response = 11251 M1

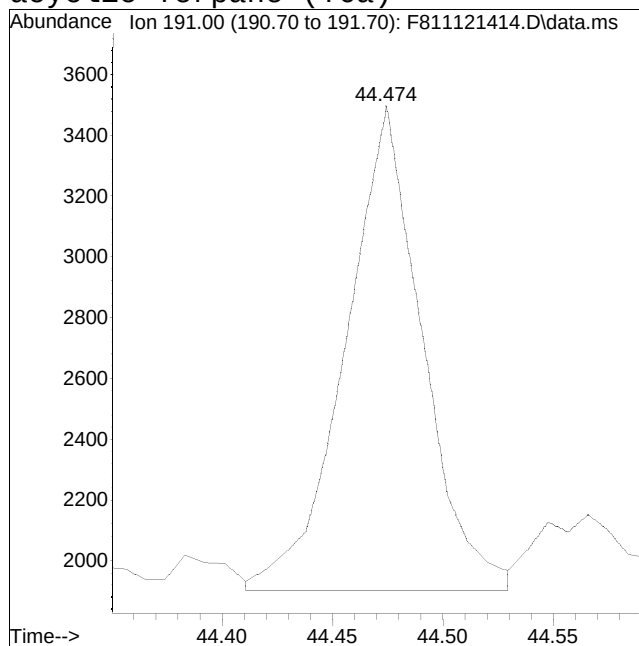
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #99: C24 Tetracyclic Terpane (T6a)



Original Peak Response = 4101



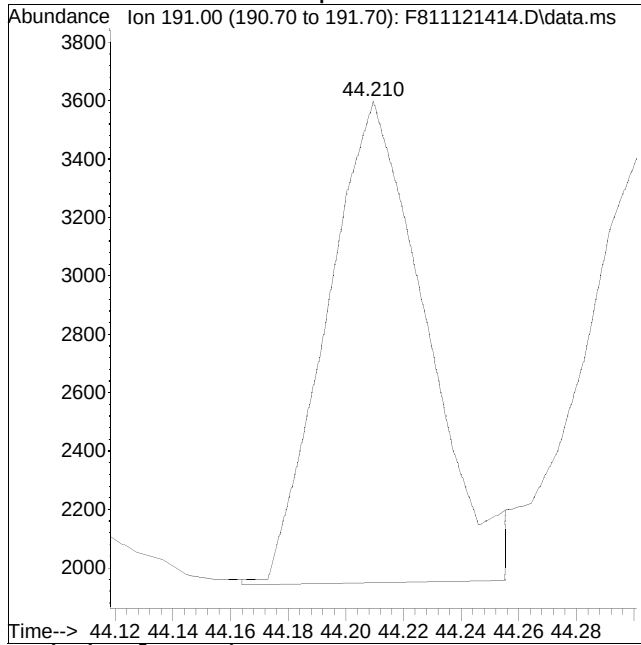
Manual Peak Response = 3844 M4

M4 = Poor automated baseline construction.

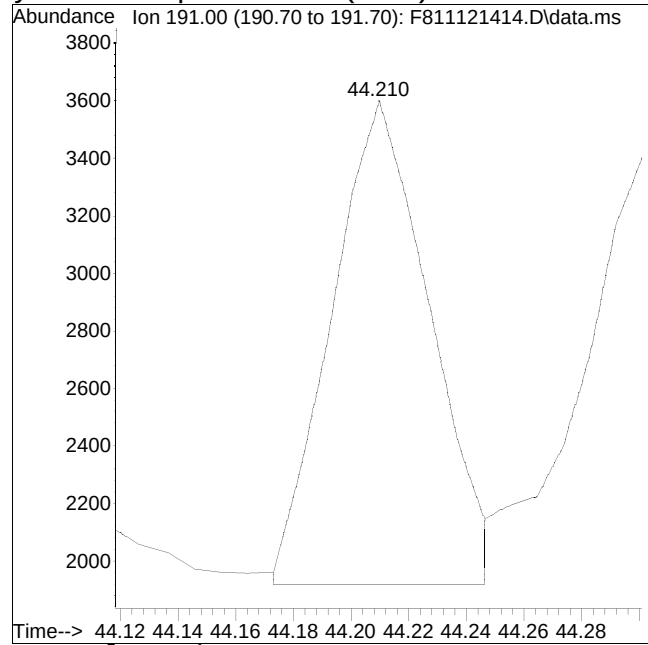
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #100: C26 Tricyclic Terpane-22S (T6b)



Original Peak Response = 3996



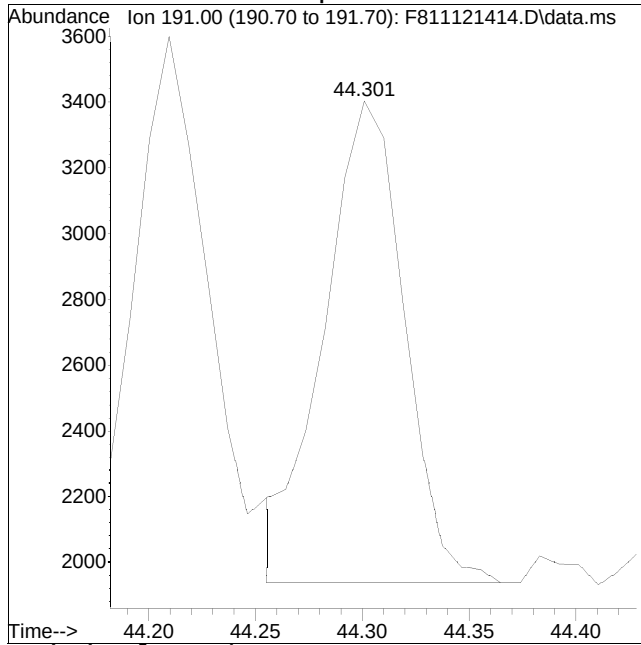
Manual Peak Response = 3991 M4

M4 = Poor automated baseline construction.

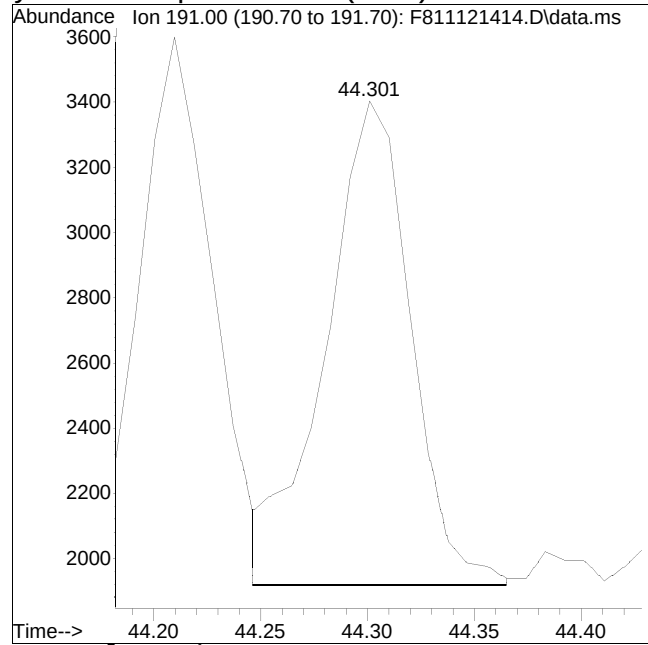
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #101: C26 Tricyclic Terpane-22R (T6c)



Original Peak Response = 3834



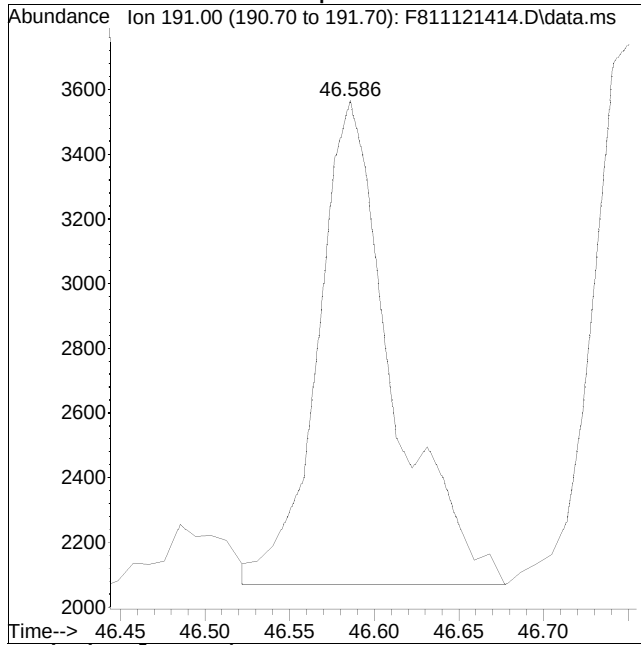
Manual Peak Response = 4118 M4

M4 = Poor automated baseline construction.

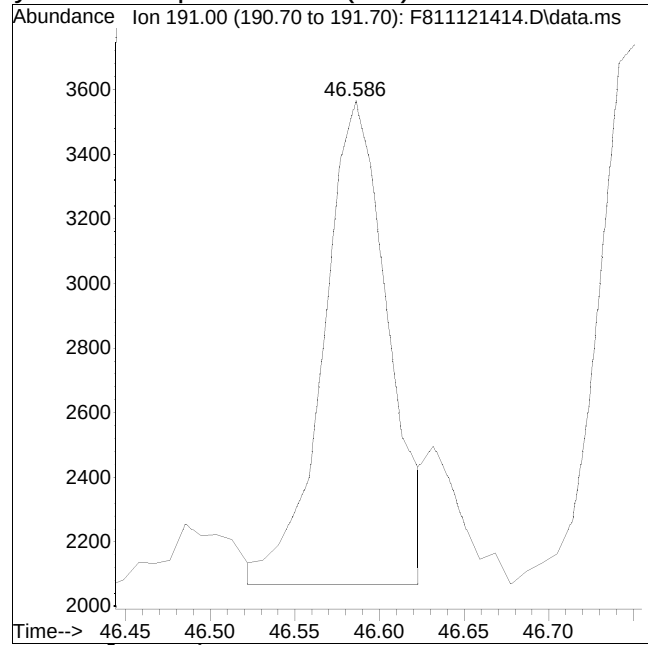
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #102: C28 Tricyclic Terpane-22S (T7)



Original Peak Response = 4604



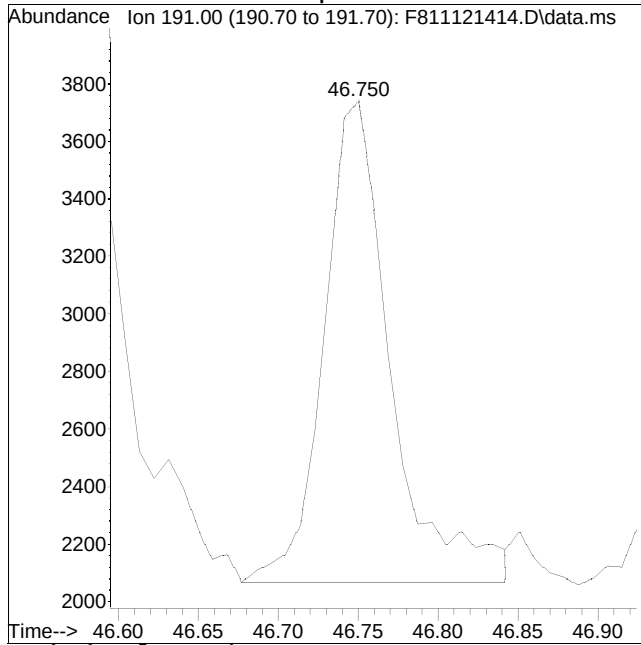
Manual Peak Response = 4012 M4

M4 = Poor automated baseline construction.

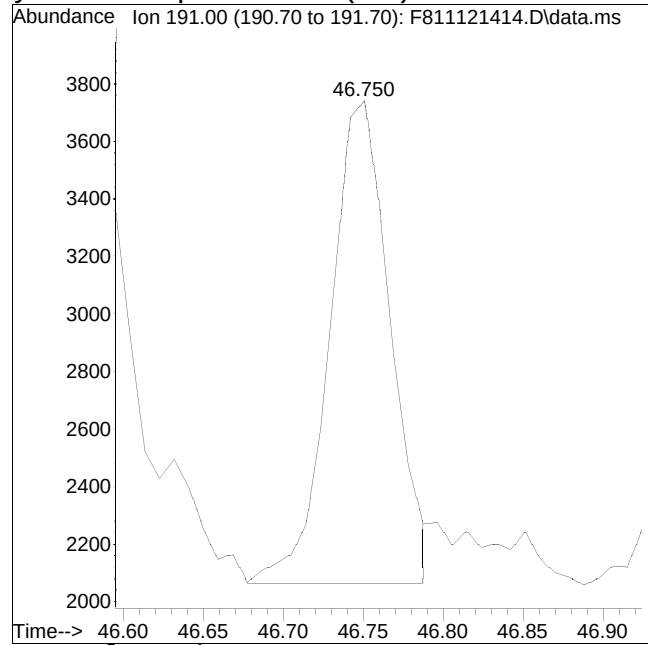
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #103: C28 Tricyclic Terpane-22R (T8)



Original Peak Response = 4860



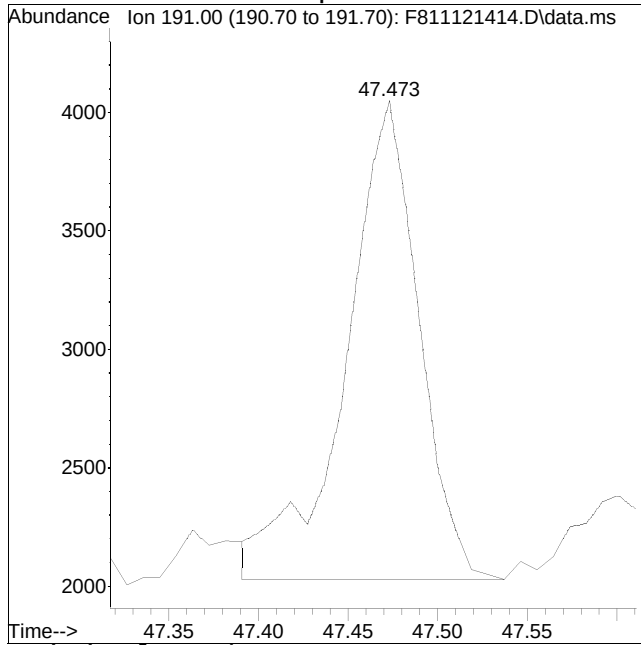
Manual Peak Response = 4406 M4

M4 = Poor automated baseline construction.

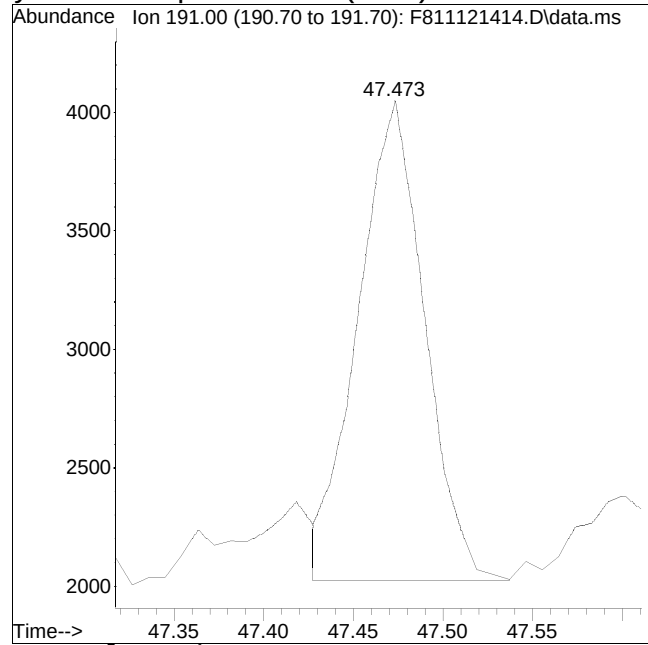
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #105: C29 Tricyclic Terpane-22R (T10)



Original Peak Response = 5733



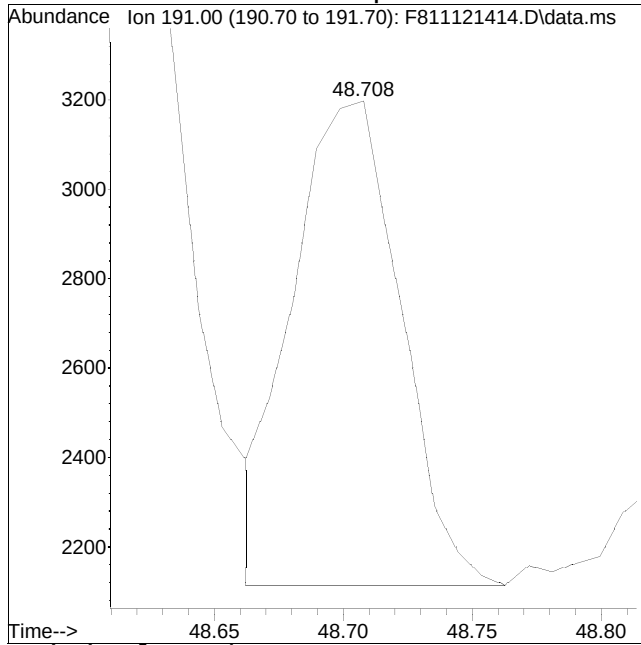
Manual Peak Response = 5215 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

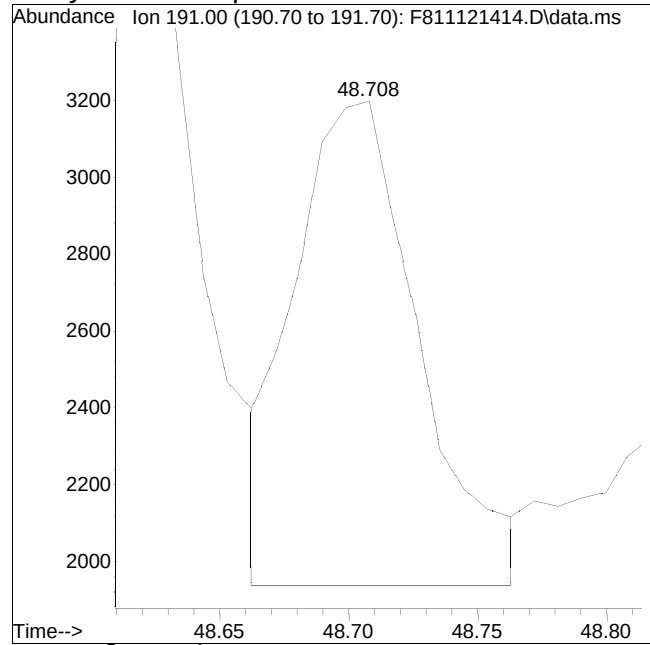
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #107: C30 Tricyclic Terpene-22S



Original Peak Response = 3150

M4 = Poor automated baseline construction.

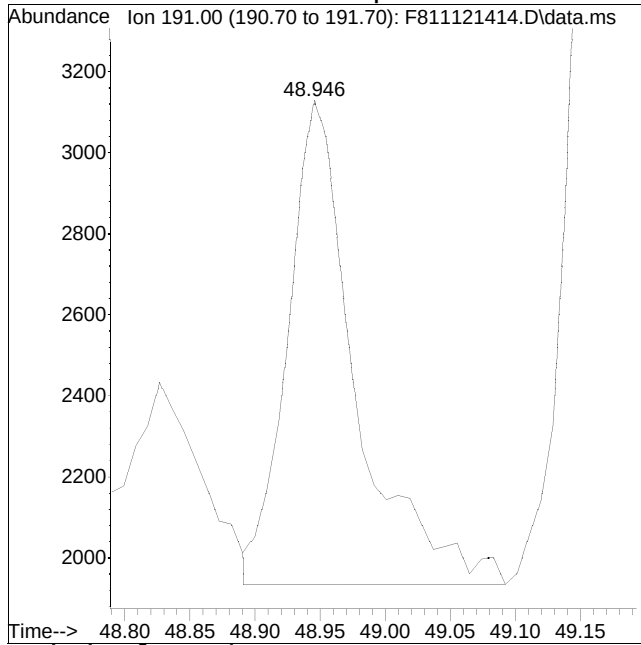


Manual Peak Response = 4212 M4

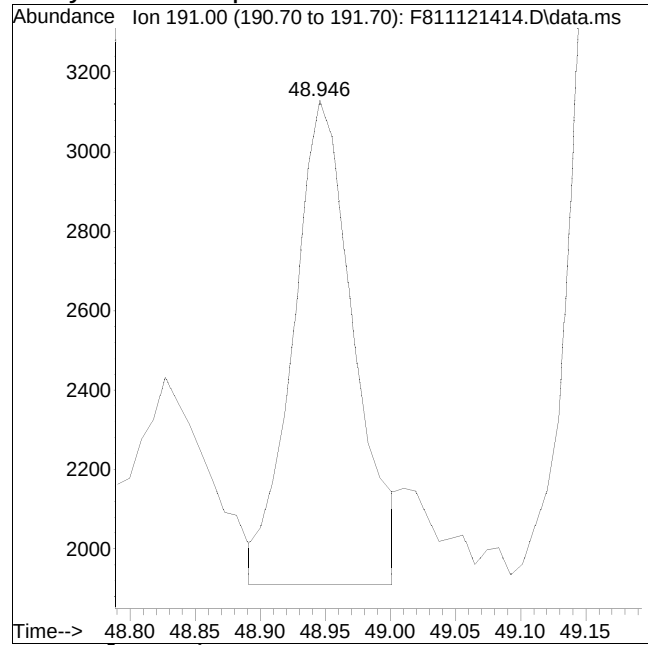
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #108: C30 Tricyclic Terpene-22R



Original Peak Response = 4362



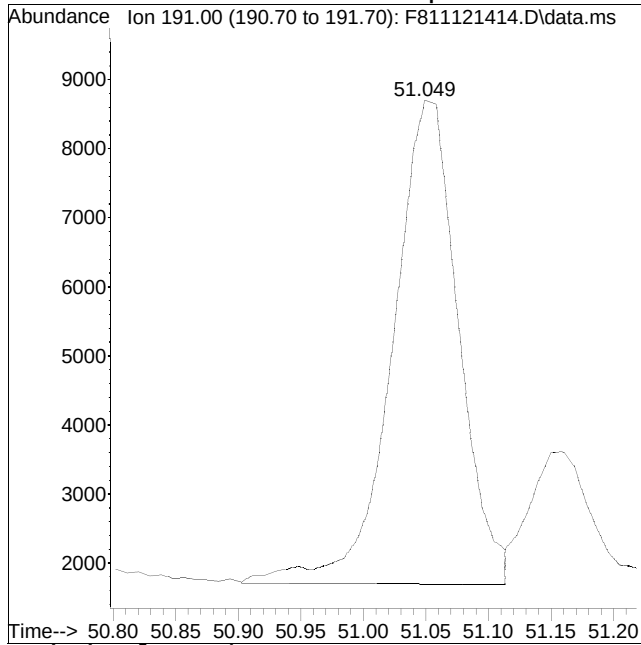
Manual Peak Response = 3965 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

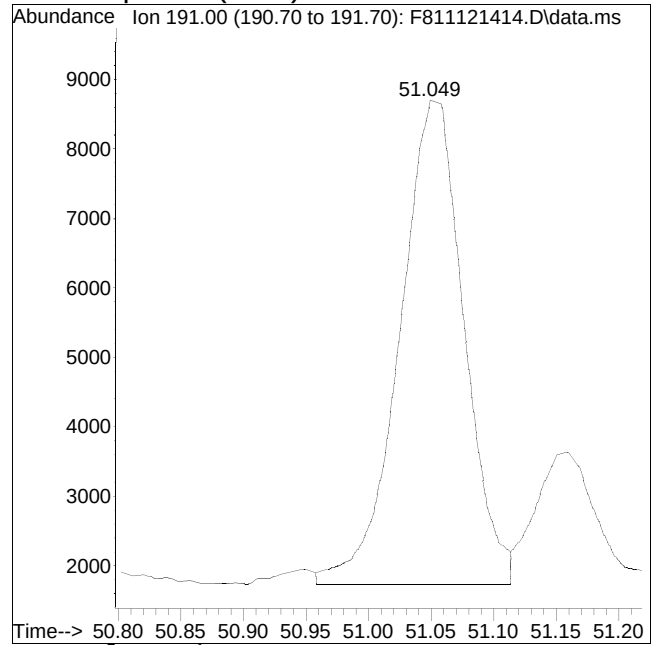
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #112: 30-Norhopane (T15)



Original Peak Response = 25807

M4 = Poor automated baseline construction.

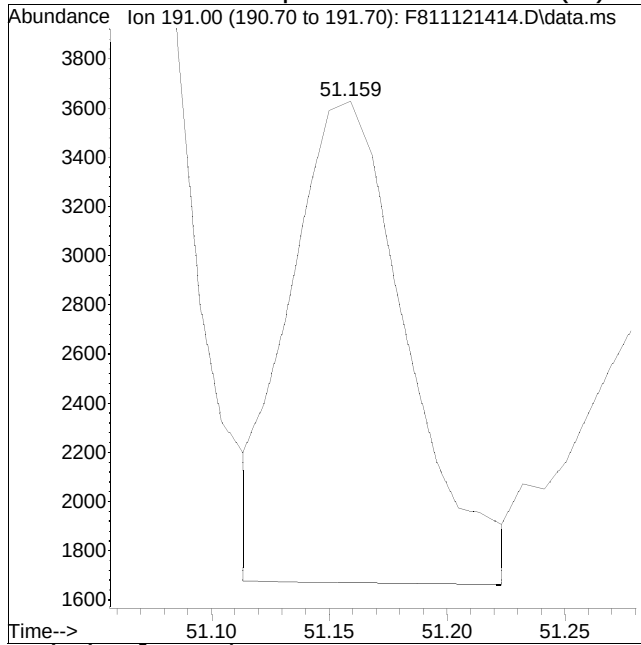


Manual Peak Response = 24901 M4

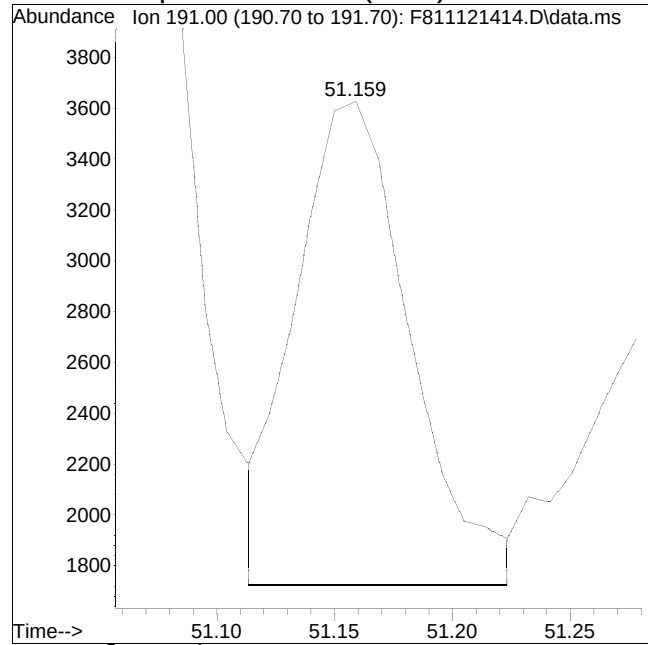
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #113: 18a(H)-30-Norneohopane-C29Ts (T16)



Original Peak Response = 6802



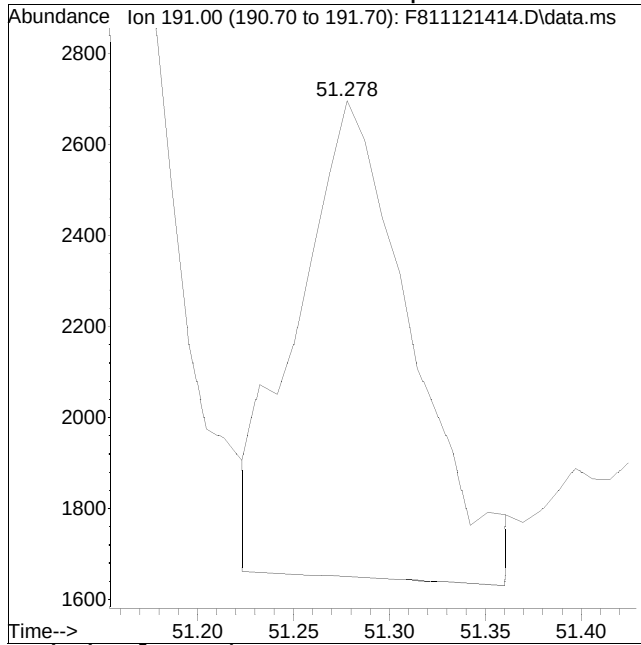
Manual Peak Response = 6433 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

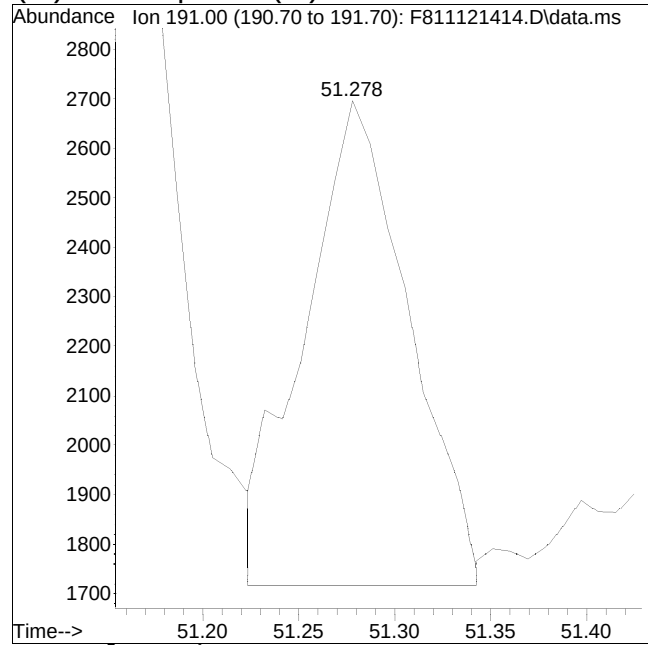
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #114: 17a(H)-Diahopane (X)



Original Peak Response = 4356

M4 = Poor automated baseline construction.

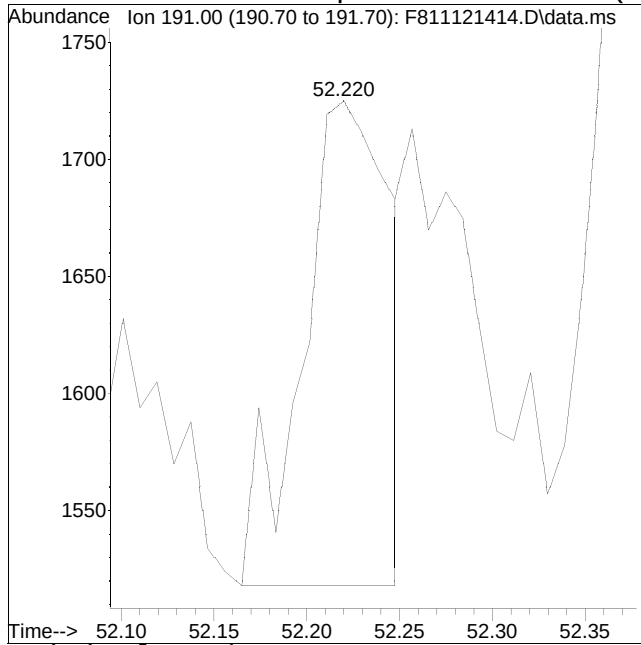


Manual Peak Response = 3690 M4

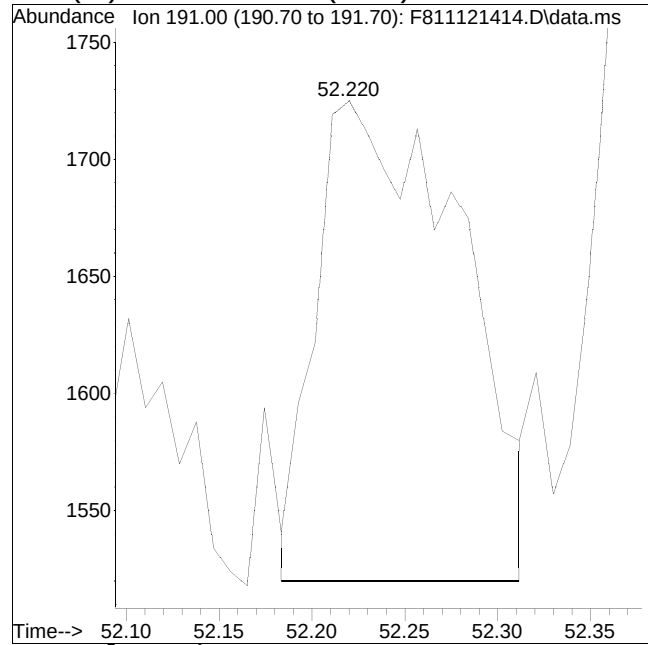
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #116: 18a(H)&18b(H)-Oleananes (T18)



Original Peak Response = 673



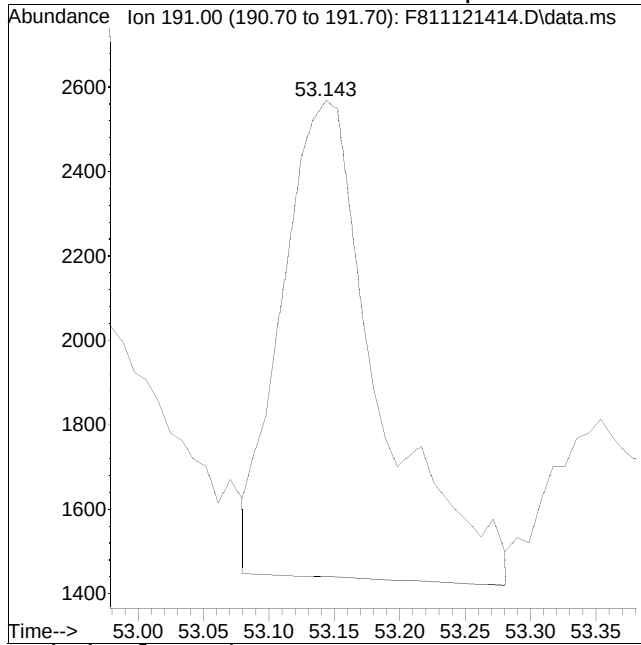
Manual Peak Response = 1103 M4

M4 = Poor automated baseline construction.

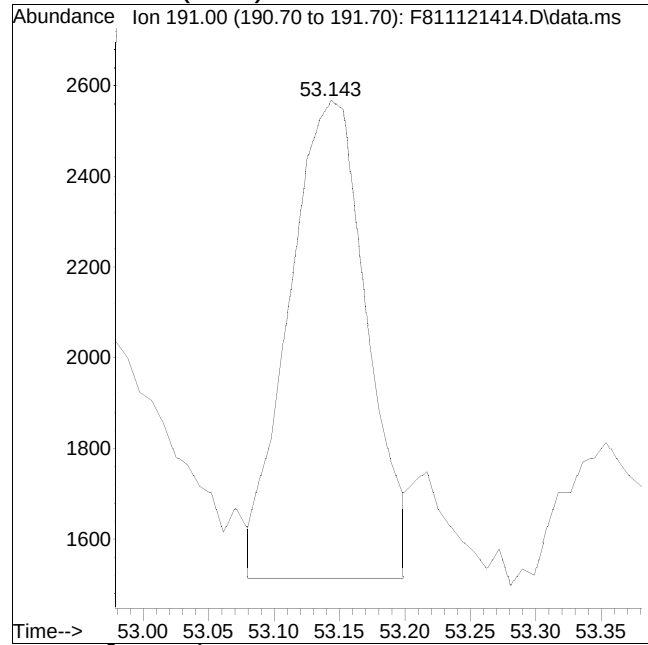
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #117: Moretane (T20)



Original Peak Response = 5829



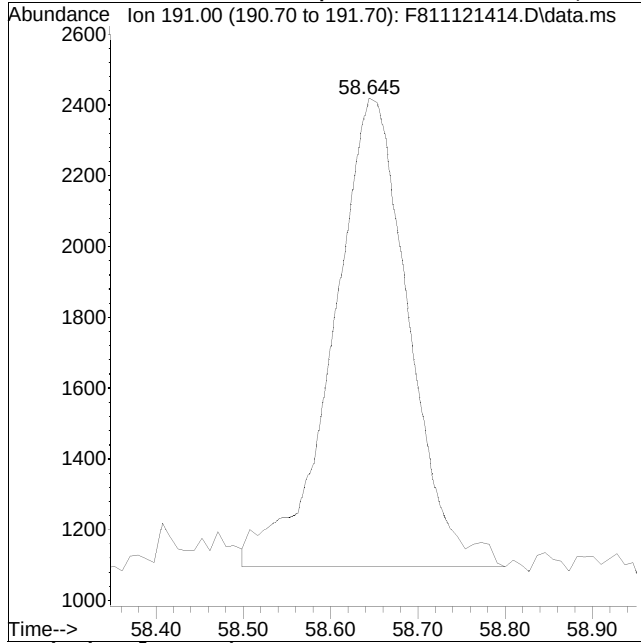
Manual Peak Response = 4373 M4

M4 = Poor automated baseline construction.

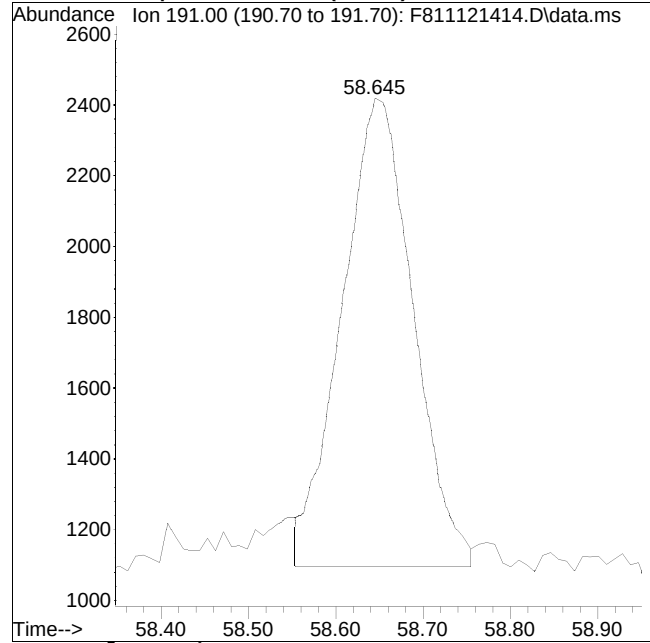
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #124: 30,31-Trishomohopane-22R (T31)



Original Peak Response = 8013



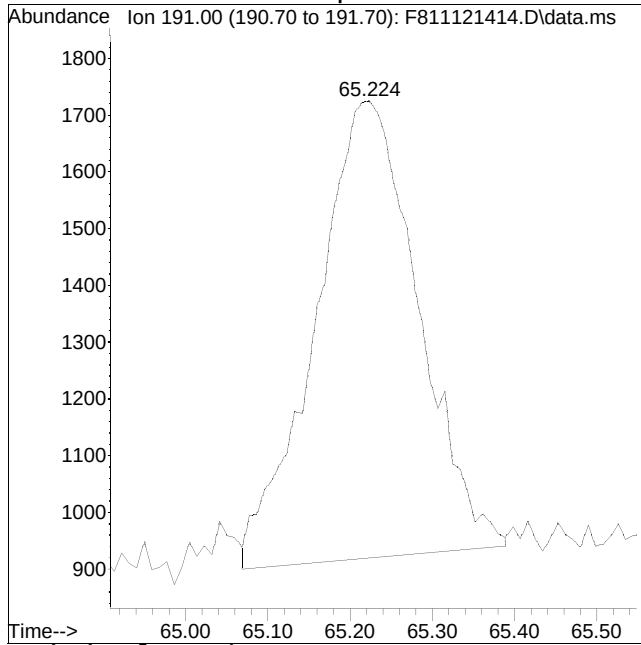
Manual Peak Response = 7516 M4

M4 = Poor automated baseline construction.

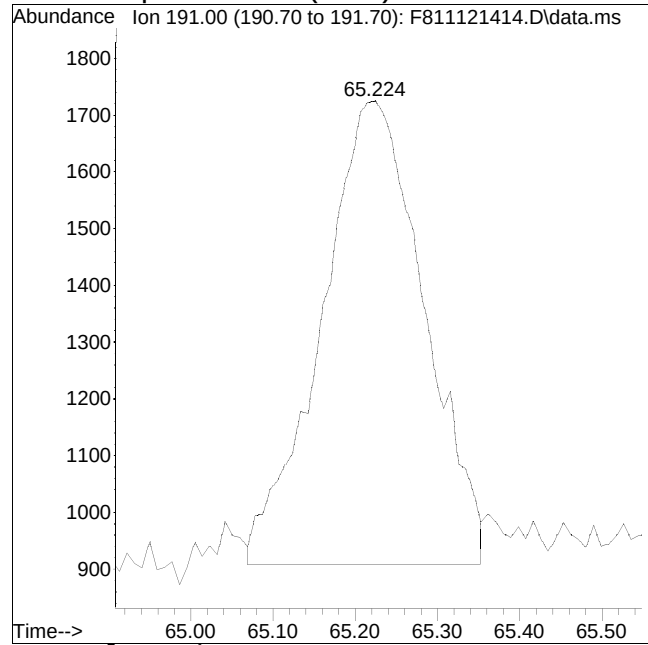
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #128: Pentakishomohopane-22R (T35)



Original Peak Response = 7009



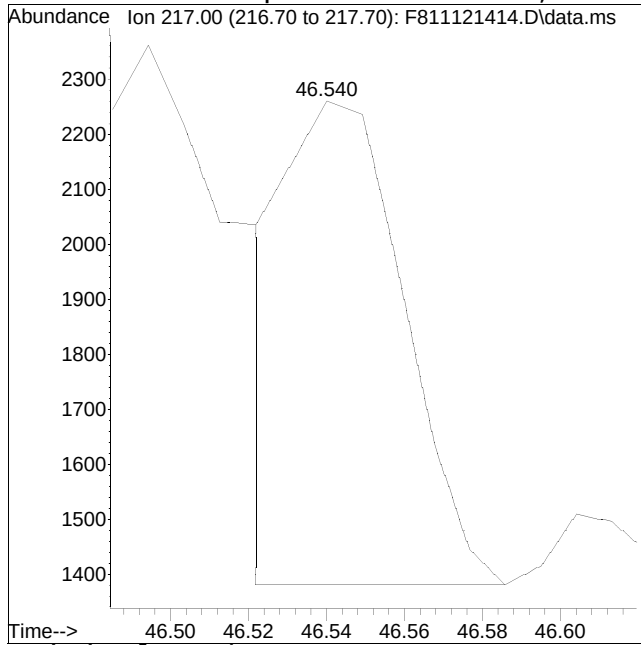
Manual Peak Response = 7092 M4

M4 = Poor automated baseline construction.

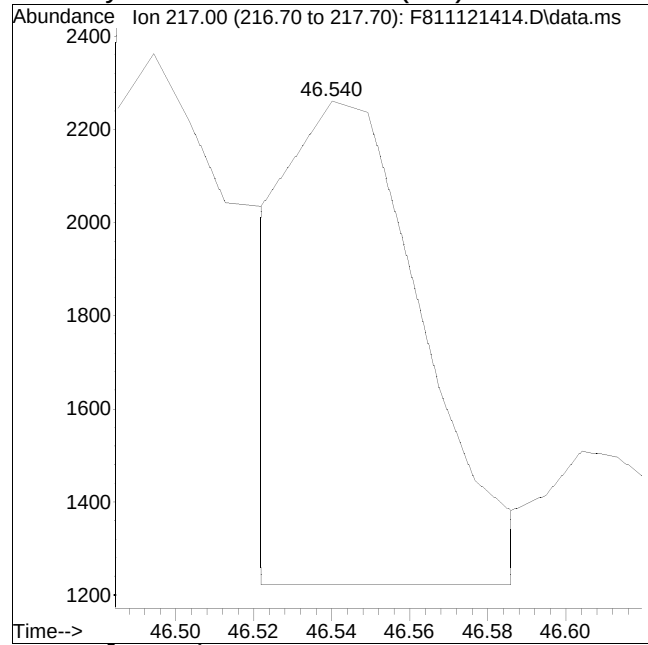
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #132: 13b,17a-20S-Methyldiacholestane (S8)



Original Peak Response = 1866



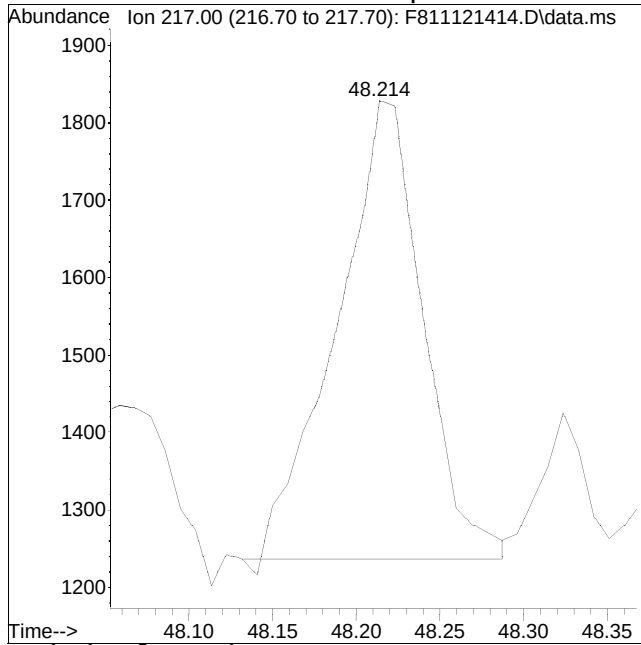
Manual Peak Response = 2476 M4

M4 = Poor automated baseline construction.

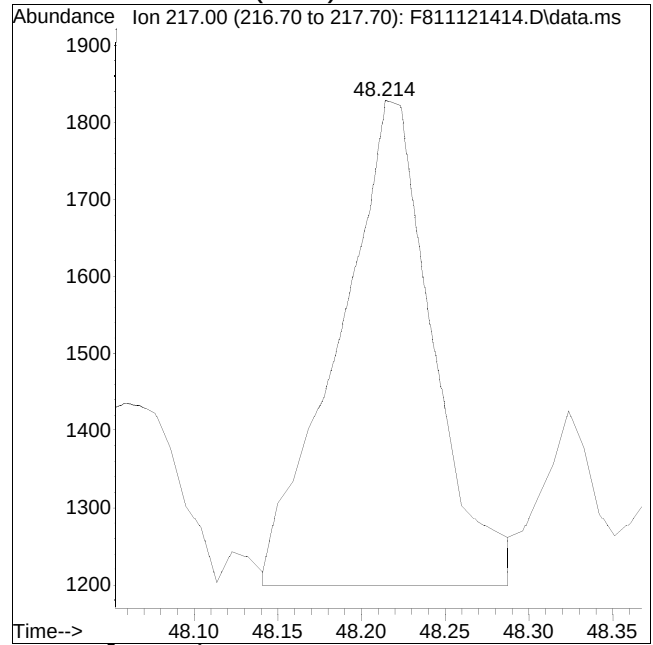
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #135: Unknown Sterane (S18)



Original Peak Response = 2130



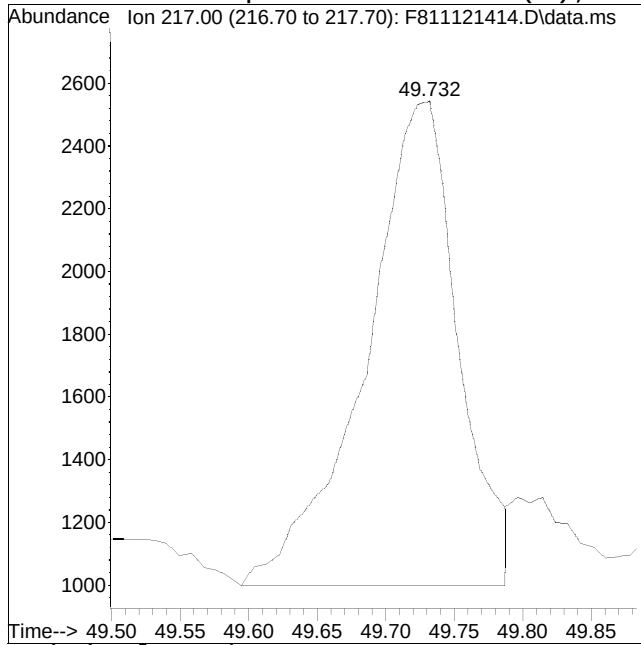
Manual Peak Response = 2466 M4

M4 = Poor automated baseline construction.

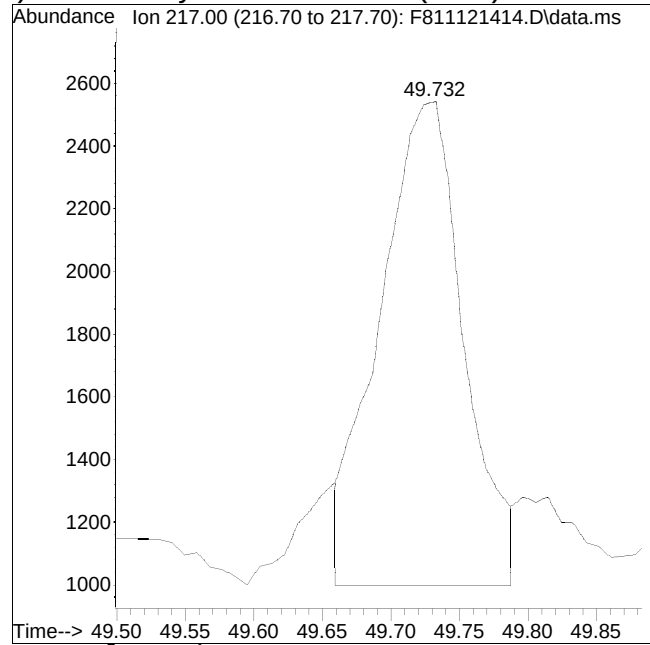
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #139: 14a(H),17a(H)-20S-Ethylcholestane (S25)



Original Peak Response = 7277



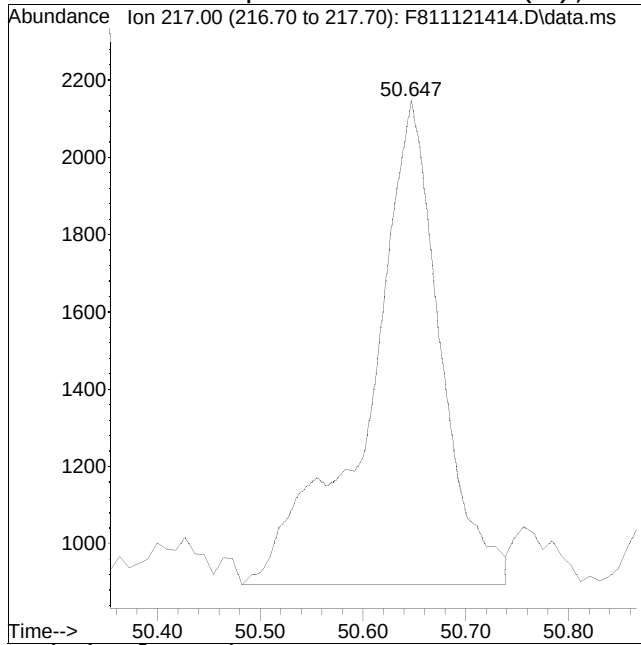
Manual Peak Response = 6601 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

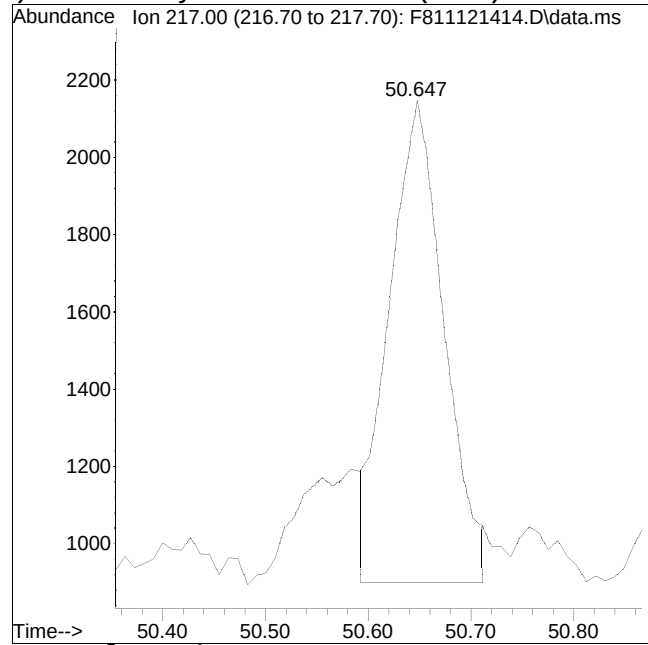
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #140: 14a(H),17a(H)-20R-Ethylcholestane (S28)



Original Peak Response = 6108

M4 = Poor automated baseline construction.

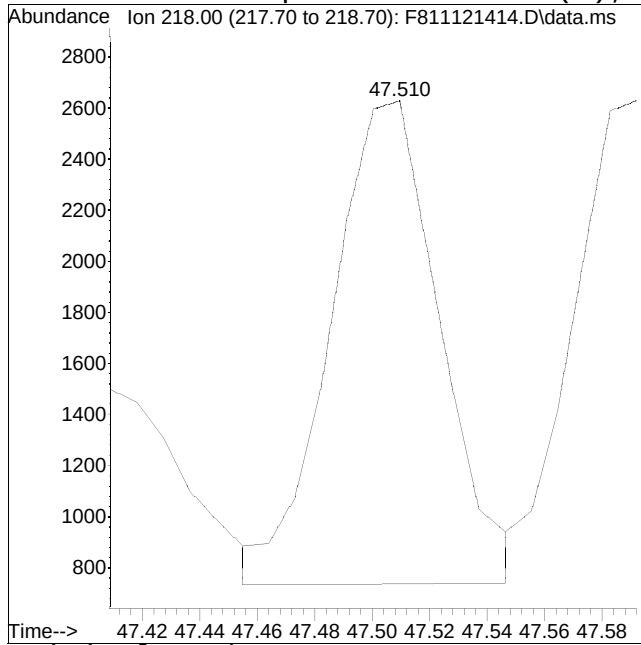


Manual Peak Response = 4644 M4

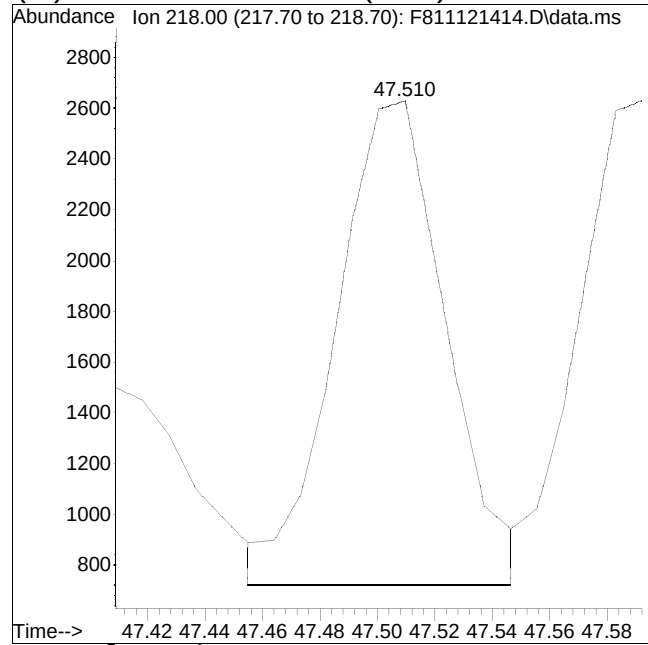
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #141: 14b(H),17b(H)-20R-Cholestane (S14)



Original Peak Response = 4959



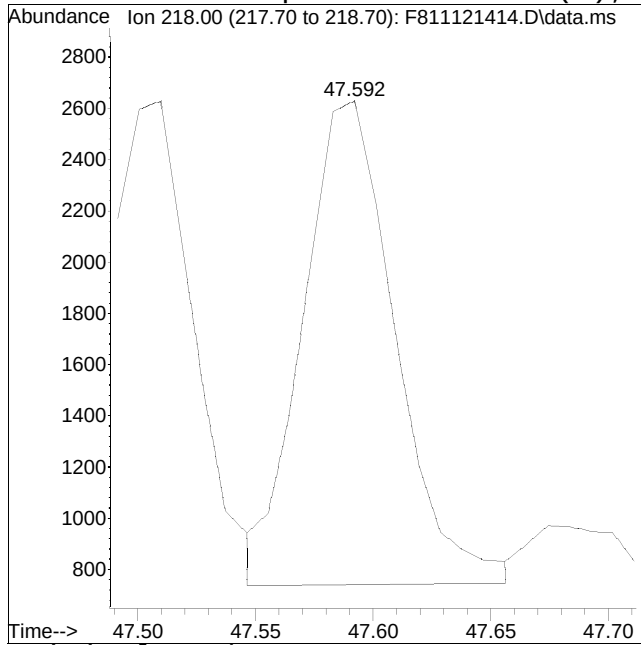
Manual Peak Response = 5047 M4

M4 = Poor automated baseline construction.

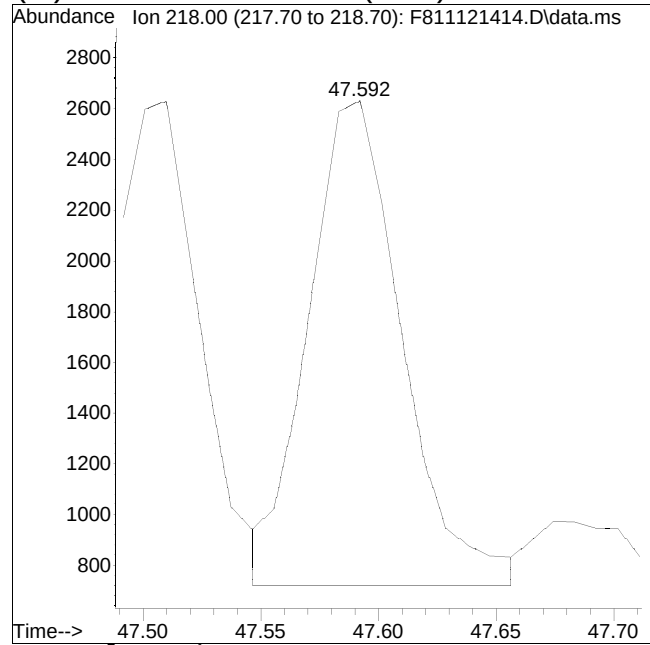
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #142: 14b(H),17b(H)-20S-Cholestane (S15)



Original Peak Response = 5125



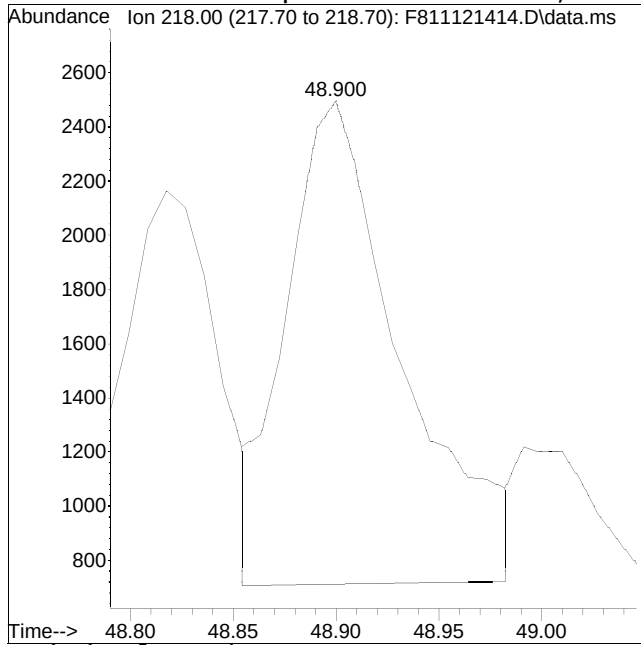
Manual Peak Response = 5266 M4

M4 = Poor automated baseline construction.

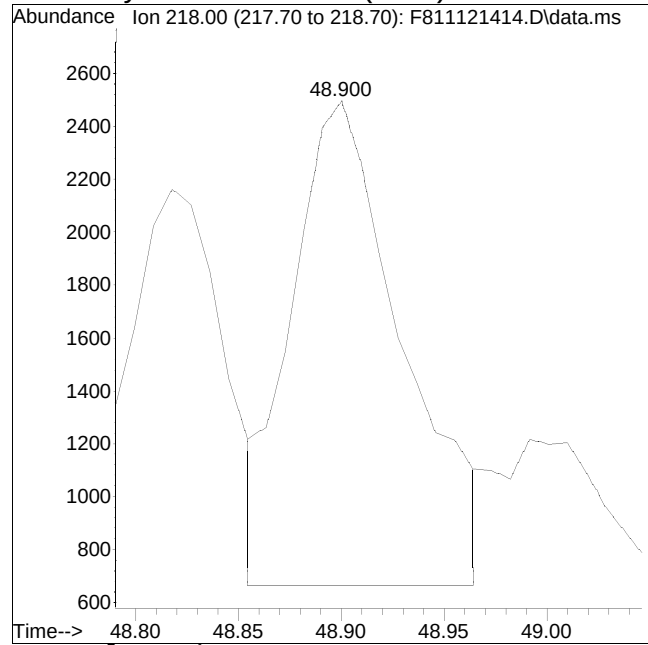
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #144: 14b,17b-20S-Methylcholestane (S23)



Original Peak Response = 6943



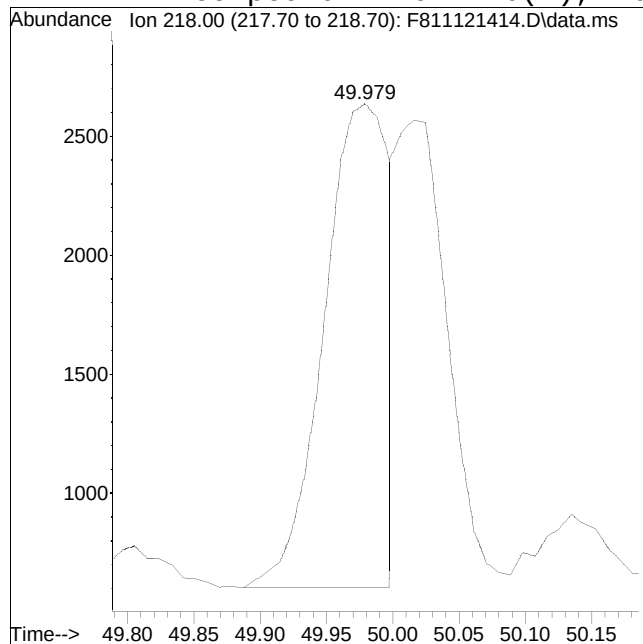
Manual Peak Response = 6857 M4

M4 = Poor automated baseline construction.

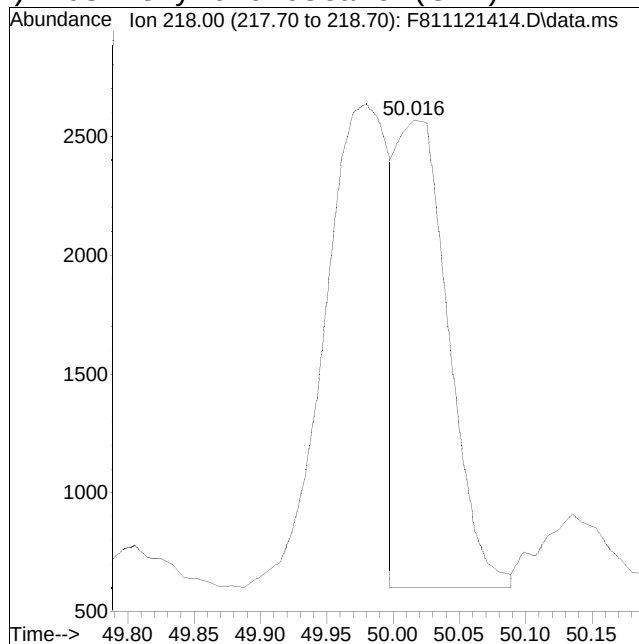
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8111214.M
Data File : F811121414.D Operator : PAH8:SR
Date Inj'd : 11/13/2014 11:46 am Instrument : PAH8
Sample : WG740999-1,0.05005 Quant Date : 11/13/2014 12:45 pm

Compound #146: 14b(H),17b(H)-20S-Ethylcholestane (S27)



Original Peak Response = 6944



Manual Peak Response = 5133 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Continuing Calibration

7B
SemiVolatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1430116

Instrument ID: PAH8 Calibration Date: 12/16/2014 Time: 16:09

Lab File ID: F812121413 Init. Calib. Date(s): 11/12/14 11/13/14

Sample No: WG752852-1,32 Init. Calib. Times : 14:50 06:07

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	76	-0.04
3 A1	trans-Decalin	0.447	0.416	6.9	74	-0.04
4 t	cis-Decalin	0.339	0.309	8.8	71	-0.04
9 s	Naphthalene-d8	1.915	1.901	0.7	71	-0.04
10 A1	Naphthalene	2.063	2.075	-0.6	68	-0.04
16 t	2-Methylnaphthalene	1.379	1.305	5.4	69	-0.03
17 t	1-Methylnaphthalene	1.334	1.280	4.0	70	-0.04
18 A1	Benzothiophene	1.712	1.703	0.5	71	-0.04
23 t	Biphenyl	1.659	1.704	-2.7	72	-0.04
24 t	2,6-Dimethylnaphthalene	1.130	1.155	-2.2	73	-0.03
25 t	Dibenzofuran	1.699	1.802	-6.1	74	-0.03
26 t	Acenaphthylene	1.863	2.012	-8.0	77	-0.04
27 t	Acenaphthene	1.183	1.256	-6.2	74	-0.04
28 t	2,3,5-Trimethylnaphthalene	0.930	1.000	-7.5	77	-0.04
29 A1	Fluorene	1.305	1.394	-6.8	76	-0.03
33 A1	Dibenzothiophene	1.828	2.015	-10.2	77	-0.04
42 s	Phenanthrene-d10	1.460	1.587	-8.7	78	-0.04
43 A1	Phenanthrene	1.779	2.028	-14.0	76	-0.04
54 t	Retene	0.439	0.507	-15.5	83	-0.04
55 t	Anthracene	1.571	1.882	-19.8	80	-0.03
56 t	Carbazole	1.656	1.755	-6.0	74	-0.03
57 t	1-Methylphenanthrene	1.291	1.422	-10.1	78	-0.03
58 A1	Fluoranthene	1.839	2.085	-13.4	79	-0.03
59 t	Benzo(b)fluorene	0.993	1.230	-23.9	85	-0.03
60 A1	Pyrene	1.917	2.303	-20.1	80	-0.04
66 A1	Naphthobenzothiophene	1.773	2.028	-14.4	80	-0.04
67 A2	Naphthobenzothiophene-2,1-D	1.773	2.028	-14.4	80	-0.04
74 i	Chrysene-d12	1.000	1.000	0.0	82	-0.04
75 t	Benz[a]anthracene	1.015	0.993	2.2	81	-0.04
76 A1	Chrysene	1.022	1.029	-0.7	81	-0.04
77 A2	Chrysene/Triphenylene	1.022	1.029	-0.7	81	-0.04
83 s	Benzo[b]fluoranthene-d12	0.971	0.953	1.9	85	-0.04
84 t	Benzo[b]fluoranthene	1.145	1.132	1.1	79	-0.05
85 A1	Benzo[j]+[k]fluoranthene	1.083	1.132	-4.5	86	-0.04
87 t	Benzo[e]pyrene	1.163	1.148	1.3	82	-0.05
88 s	Benzo[a]pyrene-d12	0.788	0.822	-4.3	87	-0.04
89 t	Benzo[a]pyrene	1.008	1.069	-6.1	82	-0.04
90 t	Perylene	1.049	1.068	-1.8	84	-0.05

PAH8111214.M Wed Dec 31 09:42:52 2014

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Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121413.D
 Acq On : 16 Dec 2014 4:09 pm
 Operator : PAH8:ML
 Sample : WG752852-1,32
 Misc : WG752852, cc frav19 500ng/ml
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 23 13:53:00 2014
 Quant Method : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.330	1.330	0.0	85	-0.05
92 t	Dibenz[ah]+[ac]anthracene	1.149	1.203	-4.7	86	-0.05
93 t	Benzo[g,h,i]perylene	1.328	1.306	1.7	87	-0.06
94 A1	Hopane (T19)	0.334	0.314	6.0	88	-0.05
95 A2	17a(H),21B(H)-hopane - C30H	0.334	0.314	6.0	88	-0.05
129 SA1	5B(H)Cholane - Surr	0.157	0.159	-1.3	89	-0.04

* Evaluation of CC level amount vs concentration.

FORM VII A2-ALKPAH/BIOMARKER

7B
SemiVolatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1430116

Instrument ID: PAH8 Calibration Date: 12/17/2014 Time: 02:13

Lab File ID: F812121420 Init. Calib. Date(s): 11/12/14 11/13/14

Sample No: WG752852-2,32 Init. Calib. Times : 14:50 06:07

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	83	-0.04
3 A1	trans-Decalin	0.447	0.409	8.5	79	-0.04
4 t	cis-Decalin	0.339	0.305	10.0	76	-0.04
9 s	Naphthalene-d8	1.915	1.894	1.1	76	-0.04
10 A1	Naphthalene	2.063	2.070	-0.3	73	-0.04
16 t	2-Methylnaphthalene	1.379	1.302	5.6	74	-0.02
17 t	1-Methylnaphthalene	1.334	1.264	5.2	74	-0.04
18 A1	Benzo[thiophene]	1.712	1.683	1.7	76	-0.04
23 t	Biphenyl	1.659	1.674	-0.9	76	-0.03
24 t	2,6-Dimethylnaphthalene	1.130	1.147	-1.5	79	-0.03
25 t	Dibenzofuran	1.699	1.792	-5.5	80	-0.03
26 t	Acenaphthylene	1.863	2.165	-16.2	90	-0.04
27 t	Acenaphthene	1.183	1.278	-8.0	82	-0.04
28 t	2,3,5-Trimethylnaphthalene	0.930	0.999	-7.4	84	-0.03
29 A1	Fluorene	1.305	1.417	-8.6	84	-0.03
33 A1	Dibenzothiophene	1.828	1.984	-8.5	82	-0.03
42 s	Phenanthrene-d10	1.460	1.584	-8.5	84	-0.04
43 A1	Phenanthrene	1.779	1.980	-11.3	80	-0.04
54 t	Retene	0.439	0.525	-19.6	93	-0.04
55 t	Anthracene	1.571	1.902	-21.1	88	-0.03
56 t	Carbazole	1.656	1.763	-6.5	80	-0.03
57 t	1-Methylphenanthrene	1.291	1.423	-10.2	85	-0.03
58 A1	Fluoranthene	1.839	2.079	-13.1	85	-0.04
59 t	Benzo(b)fluorene	0.993	1.266	-27.5#	94	-0.03
60 A1	Pyrene	1.917	2.266	-18.2	85	-0.04
66 A1	Naphthobenzothiophene	1.773	2.045	-15.3	87	-0.04
67 A2	Naphthobenzothiophene-2,1-D	1.773	2.045	-15.3	87	-0.04
74 i	Chrysene-d12	1.000	1.000	0.0	87	-0.04
75 t	Benz[a]anthracene	1.015	1.045	-3.0	90	-0.04
76 A1	Chrysene	1.022	1.017	0.5	85	-0.04
77 A2	Chrysene/Triphenylene	1.022	1.017	0.5	85	-0.04
83 s	Benzo[b]fluoranthene-d12	0.971	0.983	-1.2	93	-0.04
84 t	Benzo[b]fluoranthene	1.145	1.158	-1.1	86	-0.05
85 A1	Benzo[j]+[k]fluoranthene	1.083	1.128	-4.2	91	-0.04
87 t	Benzo[e]pyrene	1.163	1.167	-0.3	88	-0.05
88 s	Benzo[a]pyrene-d12	0.788	0.856	-8.6	96	-0.04
89 t	Benzo[a]pyrene	1.008	1.106	-9.7	90	-0.05
90 t	Perylene	1.049	1.102	-5.1	92	-0.05

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Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121420.D
 Acq On : 17 Dec 2014 2:13 am
 Operator : PAH8:ML
 Sample : WG752852-2,32
 Misc : WG752852, cc frav19 500ng/ml
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 31 09:31:24 2014
 Quant Method : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.330	1.347	-1.3	91	-0.05
92 t	Dibenz[ah]+[ac]anthracene	1.149	1.260	-9.7	95	-0.05
93 t	Benzo[g,h,i]perylene	1.328	1.306	1.7	92	-0.05
94 A1	Hopane (T19)	0.334	0.303	9.3	90	-0.05
95 A2	17a(H),21B(H)-hopane - C30H	0.334	0.303	9.3	90	-0.05
129 SA1	5B(H)Cholane - Surr	0.157	0.155	1.3	92	-0.04

* Evaluation of CC level amount vs concentration.

FORM VII A2-ALKPAH/BIOMARKER

7B
SemiVolatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1430116

Instrument ID: PAH8 Calibration Date: 12/17/2014 Time: 07:59

Lab File ID: F812121421 Init. Calib. Date(s): 11/12/14 11/13/14

Sample No: WG752852-3,32 Init. Calib. Times : 14:50 06:07

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	81	-0.04
3 A1	trans-Decalin	0.447	0.404	9.6	77	-0.04
4 t	cis-Decalin	0.339	0.306	9.7	75	-0.04
9 s	Naphthalene-d8	1.915	1.877	2.0	74	-0.04
10 A1	Naphthalene	2.063	2.050	0.6	72	-0.04
16 t	2-Methylnaphthalene	1.379	1.311	4.9	74	-0.03
17 t	1-Methylnaphthalene	1.334	1.232	7.6	72	-0.04
18 A1	Benzo[thiophene]	1.712	1.676	2.1	75	-0.04
23 t	Biphenyl	1.659	1.680	-1.3	76	-0.04
24 t	2,6-Dimethylnaphthalene	1.130	1.151	-1.9	78	-0.03
25 t	Dibenzofuran	1.699	1.770	-4.2	78	-0.03
26 t	Acenaphthylene	1.863	2.002	-7.5	82	-0.04
27 t	Acenaphthene	1.183	1.230	-4.0	78	-0.05
28 t	2,3,5-Trimethylnaphthalene	0.930	0.988	-6.2	82	-0.04
29 A1	Fluorene	1.305	1.372	-5.1	80	-0.04
33 A1	Dibenzothiophene	1.828	1.999	-9.4	82	-0.04
42 s	Phenanthrene-d10	1.460	1.580	-8.2	83	-0.04
43 A1	Phenanthrene	1.779	2.015	-13.3	80	-0.04
54 t	Retene	0.439	0.518	-18.0	91	-0.04
55 t	Anthracene	1.571	1.899	-20.9	86	-0.03
56 t	Carbazole	1.656	1.743	-5.3	78	-0.04
57 t	1-Methylphenanthrene	1.291	1.408	-9.1	83	-0.03
58 A1	Fluoranthene	1.839	2.096	-14.0	84	-0.04
59 t	Benzo(b)fluorene	0.993	1.257	-26.6#	92	-0.04
60 A1	Pyrene	1.917	2.292	-19.6	84	-0.04
66 A1	Naphthobenzothiophene	1.773	2.038	-14.9	85	-0.04
67 A2	Naphthobenzothiophene-2,1-D	1.773	2.038	-14.9	85	-0.04
74 i	Chrysene-d12	1.000	1.000	0.0	86	-0.04
75 t	Benz[a]anthracene	1.015	1.024	-0.9	88	-0.04
76 A1	Chrysene	1.022	1.034	-1.2	86	-0.04
77 A2	Chrysene/Triphenylene	1.022	1.034	-1.2	86	-0.04
83 s	Benzo[b]fluoranthene-d12	0.971	0.972	-0.1	91	-0.04
84 t	Benzo[b]fluoranthene	1.145	1.149	-0.3	85	-0.05
85 A1	Benzo[j]+[k]fluoranthene	1.083	1.144	-5.6	91	-0.03
87 t	Benzo[e]pyrene	1.163	1.152	0.9	86	-0.05
88 s	Benzo[a]pyrene-d12	0.788	0.841	-6.7	94	-0.04
89 t	Benzo[a]pyrene	1.008	1.080	-7.1	88	-0.04
90 t	Perylene	1.049	1.083	-3.2	90	-0.05

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Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121421.D
 Acq On : 17 Dec 2014 7:59 am
 Operator : PAH8:ML
 Sample : WG752852-3,32
 Misc : WG752852, cc frav19 500ng/ml
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 31 09:31:29 2014
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.330	1.209	9.1	81	-0.05
92 t	Dibenz[ah]+[ac]anthracene	1.149	1.241	-8.0	93	-0.05
93 t	Benzo[g,h,i]perylene	1.328	1.312	1.2	92	-0.06
94 A1	Hopane (T19)	0.334	0.300	10.2	89	-0.05
95 A2	17a(H),21B(H)-hopane - C30H	0.334	0.300	10.2	89	-0.05
129 SA1	5B(H)Cholane - Surr	0.157	0.153	2.5	90	-0.04

* Evaluation of CC level amount vs concentration.

FORM VII A2-ALKPAH/BIOMARKER

7B
SemiVolatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1430116

Instrument ID: PAH8 Calibration Date: 12/17/2014 Time: 13:23

Lab File ID: F812121423 Init. Calib. Date(s): 11/12/14 11/13/14

Sample No: WG752852-4,32 Init. Calib. Times : 14:50 06:07

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	87	-0.04
3 A1	trans-Decalin	0.447	0.407	8.9	83	-0.04
4 t	cis-Decalin	0.339	0.297	12.4	78	-0.04
9 s	Naphthalene-d8	1.915	1.870	2.3	79	-0.04
10 A1	Naphthalene	2.063	2.037	1.3	76	-0.04
16 t	2-Methylnaphthalene	1.379	1.298	5.9	78	-0.03
17 t	1-Methylnaphthalene	1.334	1.270	4.8	79	-0.04
18 A1	Benzo[thiophene]	1.712	1.656	3.3	79	-0.04
23 t	Biphenyl	1.659	1.672	-0.8	81	-0.03
24 t	2,6-Dimethylnaphthalene	1.130	1.147	-1.5	83	-0.03
25 t	Dibenzofuran	1.699	1.780	-4.8	84	-0.03
26 t	Acenaphthylene	1.863	2.017	-8.3	88	-0.04
27 t	Acenaphthene	1.183	1.243	-5.1	84	-0.04
28 t	2,3,5-Trimethylnaphthalene	0.930	0.984	-5.8	87	-0.03
29 A1	Fluorene	1.305	1.364	-4.5	85	-0.03
33 A1	Dibenzothiophene	1.828	1.983	-8.5	87	-0.03
42 s	Phenanthrene-d10	1.460	1.573	-7.7	88	-0.04
43 A1	Phenanthrene	1.779	1.993	-12.0	85	-0.04
54 t	Retene	0.439	0.503	-14.6	94	-0.04
55 t	Anthracene	1.571	1.841	-17.2	89	-0.03
56 t	Carbazole	1.656	1.718	-3.7	83	-0.03
57 t	1-Methylphenanthrene	1.291	1.394	-8.0	87	-0.03
58 A1	Fluoranthene	1.839	2.063	-12.2	89	-0.03
59 t	Benzo(b)fluorene	0.993	1.209	-21.8	95	-0.03
60 A1	Pyrene	1.917	2.270	-18.4	89	-0.04
66 A1	Naphthobenzothiophene	1.773	2.014	-13.6	90	-0.04
67 A2	Naphthobenzothiophene-2,1-D	1.773	2.014	-13.6	90	-0.04
74 i	Chrysene-d12	1.000	1.000	0.0	92	-0.04
75 t	Benz[a]anthracene	1.015	0.996	1.9	91	-0.04
76 A1	Chrysene	1.022	1.014	0.8	90	-0.04
77 A2	Chrysene/Triphenylene	1.022	1.014	0.8	90	-0.04
83 s	Benzo[b]fluoranthene-d12	0.971	0.955	1.6	96	-0.04
84 t	Benzo[b]fluoranthene	1.145	1.116	2.5	88	-0.05
85 A1	Benzo[j]+[k]fluoranthene	1.083	1.133	-4.6	97	-0.04
87 t	Benzo[e]pyrene	1.163	1.140	2.0	91	-0.05
88 s	Benzo[a]pyrene-d12	0.788	0.819	-3.9	98	-0.04
89 t	Benzo[a]pyrene	1.008	1.065	-5.7	92	-0.04
90 t	Perylene	1.049	1.051	-0.2	93	-0.05

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Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121423.D
 Acq On : 17 Dec 2014 1:23 pm
 Operator : PAH8:ML
 Sample : WG752852-4,32
 Misc : WG752852, cc frav19 500ng/ml
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 31 09:31:42 2014
 Quant Method : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Dec 10 07:58:10 2014

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.330	1.176	11.6	84	-0.05
92 t	Dibenz[ah]+[ac]anthracene	1.149	1.191	-3.7	95	-0.05
93 t	Benzo[g,h,i]perylene	1.328	1.269	4.4	95	-0.05
94 A1	Hopane (T19)	0.334	0.290	13.2	92	-0.05
95 A2	17a(H),21B(H)-hopane - C30H	0.334	0.290	13.2	92	-0.05
129 SA1	5B(H)Cholane - Surr	0.157	0.149	5.1	94	-0.04

* Evaluation of CC level amount vs concentration.

FORM VII A2-ALKPAH/BIOMARKER

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121413.D
 Acq On : 16 Dec 2014 4:09 pm
 Operator : PAH8:ML
 Sample : WG752852-1,32
 Misc : WG752852, cc frav19 500ng/ml
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 23 13:53:00 2014
 Quant Method : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	76	-0.04
3 A1	trans-Decalin	0.447	0.416	6.9	74	-0.04
4 t	cis-Decalin	0.339	0.309	8.8	71	-0.04
9 s	Naphthalene-d8	1.915	1.901	0.7	71	-0.04
10 A1	Naphthalene	2.063	2.075	-0.6	68	-0.04
16 t	2-Methylnaphthalene	1.379	1.305	5.4	69	-0.03
17 t	1-Methylnaphthalene	1.334	1.280	4.0	70	-0.04
18 A1	Benzothiophene	1.712	1.703	0.5	71	-0.04
23 t	Biphenyl	1.659	1.704	-2.7	72	-0.04
24 t	2,6-Dimethylnaphthalene	1.130	1.155	-2.2	73	-0.03
25 t	Dibenzofuran	1.699	1.802	-6.1	74	-0.03
26 t	Acenaphthylene	1.863	2.012	-8.0	77	-0.04
27 t	Acenaphthene	1.183	1.256	-6.2	74	-0.04
28 t	2,3,5-Trimethylnaphthalene	0.930	1.000	-7.5	77	-0.04
29 A1	Fluorene	1.305	1.394	-6.8	76	-0.03
33 A1	Dibenzothiophene	1.828	2.015	-10.2	77	-0.04
42 s	Phenanthrene-d10	1.460	1.587	-8.7	78	-0.04
43 A1	Phenanthrene	1.779	2.028	-14.0	76	-0.04
54 t	Retene	0.439	0.507	-15.5	83	-0.04
55 t	Anthracene	1.571	1.882	-19.8	80	-0.03
56 t	Carbazole	1.656	1.755	-6.0	74	-0.03
57 t	1-Methylphenanthrene	1.291	1.422	-10.1	78	-0.03
58 A1	Fluoranthene	1.839	2.085	-13.4	79	-0.03
59 t	Benzo(b)fluorene	0.993	1.230	-23.9	85	-0.03
60 A1	Pyrene	1.917	2.303	-20.1	80	-0.04
66 A1	Naphthobenzothiophene	1.773	2.028	-14.4	80	-0.04
67 A2	Naphthobenzothiophene-2,1-D	1.773	2.028	-14.4	80	-0.04
74 i	Chrysene-d12	1.000	1.000	0.0	82	-0.04
75 t	Benz[a]anthracene	1.015	0.993	2.2	81	-0.04
76 A1	Chrysene	1.022	1.029	-0.7	81	-0.04
77 A2	Chrysene/Triphenylene	1.022	1.029	-0.7	81	-0.04
83 s	Benzo[b]fluoranthene-d12	0.971	0.953	1.9	85	-0.04
84 t	Benzo[b]fluoranthene	1.145	1.132	1.1	79	-0.05
85 A1	Benzo[j]+[k]fluoranthene	1.083	1.132	-4.5	86	-0.04
87 t	Benzo[e]pyrene	1.163	1.148	1.3	82	-0.05
88 s	Benzo[a]pyrene-d12	0.788	0.822	-4.3	87	-0.04
89 t	Benzo[a]pyrene	1.008	1.069	-6.1	82	-0.04
90 t	Perylene	1.049	1.068	-1.8	84	-0.05

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121413.D
 Acq On : 16 Dec 2014 4:09 pm
 Operator : PAH8:ML
 Sample : WG752852-1,32
 Misc : WG752852, cc frav19 500ng/ml
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 23 13:53:00 2014
 Quant Method : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.330	1.330	0.0	85	-0.05
92 t	Dibenz[ah]+[ac]anthracene	1.149	1.203	-4.7	86	-0.05
93 t	Benzo[g,h,i]perylene	1.328	1.306	1.7	87	-0.06
94 A1	Hopane (T19)	0.334	0.314	6.0	88	-0.05
95 A2	17a(H),21B(H)-hopane - C30H	0.334	0.314	6.0	88	-0.05
129 SA1	5B(H)Cholane - Surr	0.157	0.159	-1.3	89	-0.04

* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Mass Discrimination (Concentration)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	0.86	0.70 - 1.30

Mass Discrimination (Response)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	1.20	0.70 - 2.00

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121413.D
 Acq On : 16 Dec 2014 4:09 pm
 Operator : PAH8:ML
 Sample : WG752852-1,32
 Misc : WG752852, cc frav19 500ng/ml
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 23 13:53:00 2014
 Quant Method : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.557	164	50922	500.000	ng/mL	-0.04
74) Chrysene-d12	43.004	240	94597	500.000	ng/mL	-0.04
System Monitoring Compounds						
9) Naphthalene-d8	19.594	136	96793	496.326	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	49.63%#		
42) Phenanthrene-d10	32.424	188	80792	543.167	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	54.32%		
83) Benzo[b]fluoranthene-d12	46.897	264	90185	490.713	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery =	49.07%#		
88) Benzo[a]pyrene-d12	48.068	264	77778	521.772	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery =	52.18%		
129) 5B(H)Cholane - Surr	43.634	217	15001	506.555	ng/ml	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery =	50.66%		
Target Compounds						
						Qvalue
3) trans-Decalin	16.245	138	10593	232.474	ng/mL	100
4) cis-Decalin	17.459	138	7873	228.141	ng/mL	100
10) Naphthalene	19.667	128	105643	502.765	ng/mL	100
16) 2-Methylnaphthalene	22.368	142	66466	473.289	ng/mL	100
17) 1-Methylnaphthalene	22.788	142	65171	479.821	ng/mL	100
18) Benzothiophene	19.886	134	86697	497.202	ng/mL	100
23) Biphenyl	24.248	154	86758	513.526	ng/mL	100
24) 2,6-Dimethylnaphthalene	24.860	156	58823	511.307	ng/mL	100
25) Dibenzofuran	27.333	168	91742	530.264	ng/mL	99
26) Acenaphthylene	25.946	152	102461M4	540.078	ng/mL	
27) Acenaphthene	26.685	153	63962	530.711	ng/mL	100
28) 2,3,5-Trimethylnaphthalen	28.236	170	50923	537.822	ng/mL	99
29) Fluorene	28.710	166	70998	533.999	ng/mL	99
33) Dibenzothiophene	32.013	184	102610	551.258	ng/mL	99
43) Phenanthrene	32.515	178	103291	570.222	ng/mL	99
54) Retene	39.498	234	25813	577.881	ng/mL	94
55) Anthracene	32.697	178	95846M4	598.964	ng/mL	
56) Carbazole	33.373	167	89359	529.885	ng/mL	100
57) 1-Methylphenanthrene	35.025	192	72425	550.985	ng/mL	100
58) Fluoranthene	37.289	202	106187	566.910	ng/mL	98
59) Benzo(b)fluorene	39.809	216	62635	619.203	ng/mL	100
60) Pyrene	38.165	202	117284	600.794	ng/mL	100
66) Naphthobenzothiophene	42.018	234	103290	572.113	ng/ml	100
67) Naphthobenzothiophene-2,1	42.018	234	103290	572.113	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121413.D
 Acq On : 16 Dec 2014 4:09 pm
 Operator : PAH8:ML
 Sample : WG752852-1,32
 Misc : WG752852, cc frav19 500ng/ml
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 23 13:53:00 2014
 Quant Method : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	42.940	228	93946	489.235	ng/mL	100
76)	Chrysene	43.105	228	97302	503.278	ng/mL	100
77)	Chrysene/Triphenylene	43.105	228	97302	503.278	ng/mL	100
84)	Benzo[b]fluoranthene	46.980	252	107091	494.155	ng/mL	98
85)	Benzo[j]+[k]fluoranthene	47.062	252	107123	522.931	ng/mL	96
87)	Benzo[e]pyrene	47.968	252	108571	493.255	ng/mL	98
89)	Benzo[a]pyrene	48.160	252	101101	530.033	ng/mL	95
90)	Perylene	48.461	252	101056	509.374	ng/mL	96
91)	Indeno[1,2,3-cd]pyrene	52.888	276	125791M4	499.900	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	52.952	278	113795	523.379	ng/mL	99
93)	Benzo[g,h,i]perylene	54.158	276	123587	491.793	ng/mL	99
94)	Hopane (T19)	52.019	191	29718	470.371	ng/mL	94
95)	17a(H),21B(H)-hopane - C3	52.019	191	29718	470.371	ng/mL	94

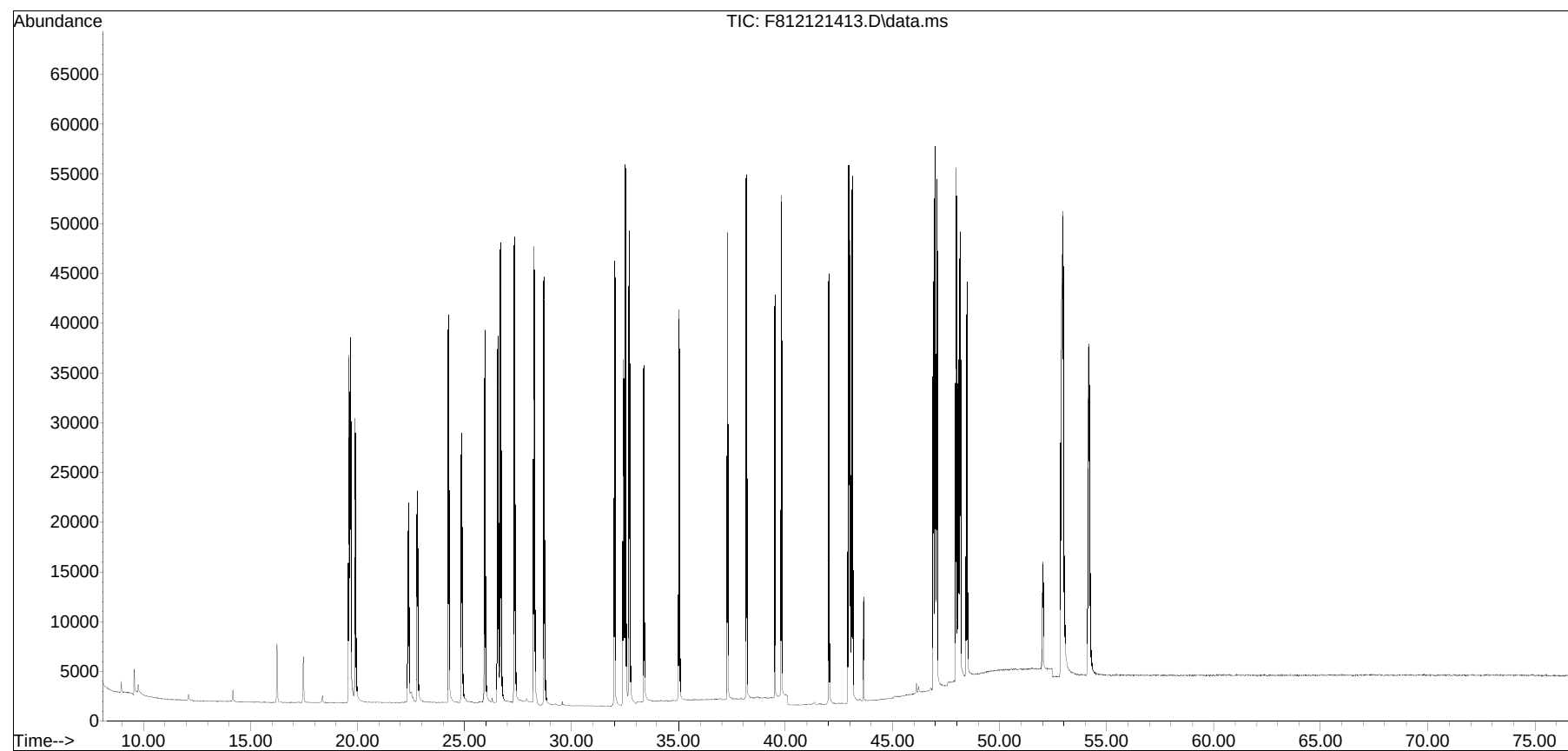
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\
Data File : F812121413.D
Acq On : 16 Dec 2014 4:09 pm
Operator : PAH8:ML
Sample : WG752852-1,32
Misc : WG752852, cc frav19 500ng/ml
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 23 13:53:00 2014
Quant Method : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 09 18:27:44 2014
Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates



Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121420.D
 Acq On : 17 Dec 2014 2:13 am
 Operator : PAH8:ML
 Sample : WG752852-2,32
 Misc : WG752852, cc frav19 500ng/ml
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 31 09:31:24 2014
 Quant Method : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	83	-0.04
3 A1	trans-Decalin	0.447	0.409	8.5	79	-0.04
4 t	cis-Decalin	0.339	0.305	10.0	76	-0.04
9 s	Naphthalene-d8	1.915	1.894	1.1	76	-0.04
10 A1	Naphthalene	2.063	2.070	-0.3	73	-0.04
16 t	2-Methylnaphthalene	1.379	1.302	5.6	74	-0.02
17 t	1-Methylnaphthalene	1.334	1.264	5.2	74	-0.04
18 A1	Benzothiophene	1.712	1.683	1.7	76	-0.04
23 t	Biphenyl	1.659	1.674	-0.9	76	-0.03
24 t	2,6-Dimethylnaphthalene	1.130	1.147	-1.5	79	-0.03
25 t	Dibenzofuran	1.699	1.792	-5.5	80	-0.03
26 t	Acenaphthylene	1.863	2.165	-16.2	90	-0.04
27 t	Acenaphthene	1.183	1.278	-8.0	82	-0.04
28 t	2,3,5-Trimethylnaphthalene	0.930	0.999	-7.4	84	-0.03
29 A1	Fluorene	1.305	1.417	-8.6	84	-0.03
33 A1	Dibenzothiophene	1.828	1.984	-8.5	82	-0.03
42 s	Phenanthrene-d10	1.460	1.584	-8.5	84	-0.04
43 A1	Phenanthrene	1.779	1.980	-11.3	80	-0.04
54 t	Retene	0.439	0.525	-19.6	93	-0.04
55 t	Anthracene	1.571	1.902	-21.1	88	-0.03
56 t	Carbazole	1.656	1.763	-6.5	80	-0.03
57 t	1-Methylphenanthrene	1.291	1.423	-10.2	85	-0.03
58 A1	Fluoranthene	1.839	2.079	-13.1	85	-0.04
59 t	Benzo(b)fluorene	0.993	1.266	-27.5#	94	-0.03
60 A1	Pyrene	1.917	2.266	-18.2	85	-0.04
66 A1	Naphthobenzothiophene	1.773	2.045	-15.3	87	-0.04
67 A2	Naphthobenzothiophene-2,1-D	1.773	2.045	-15.3	87	-0.04
74 i	Chrysene-d12	1.000	1.000	0.0	87	-0.04
75 t	Benz[a]anthracene	1.015	1.045	-3.0	90	-0.04
76 A1	Chrysene	1.022	1.017	0.5	85	-0.04
77 A2	Chrysene/Triphenylene	1.022	1.017	0.5	85	-0.04
83 s	Benzo[b]fluoranthene-d12	0.971	0.983	-1.2	93	-0.04
84 t	Benzo[b]fluoranthene	1.145	1.158	-1.1	86	-0.05
85 A1	Benzo[j]+[k]fluoranthene	1.083	1.128	-4.2	91	-0.04
87 t	Benzo[e]pyrene	1.163	1.167	-0.3	88	-0.05
88 s	Benzo[a]pyrene-d12	0.788	0.856	-8.6	96	-0.04
89 t	Benzo[a]pyrene	1.008	1.106	-9.7	90	-0.05
90 t	Perylene	1.049	1.102	-5.1	92	-0.05

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121420.D
 Acq On : 17 Dec 2014 2:13 am
 Operator : PAH8:ML
 Sample : WG752852-2,32
 Misc : WG752852, cc frav19 500ng/ml
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 31 09:31:24 2014
 Quant Method : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.330	1.347	-1.3	91	-0.05
92 t	Dibenz[ah]+[ac]anthracene	1.149	1.260	-9.7	95	-0.05
93 t	Benzo[g,h,i]perylene	1.328	1.306	1.7	92	-0.05
94 A1	Hopane (T19)	0.334	0.303	9.3	90	-0.05
95 A2	17a(H),21B(H)-hopane - C30H	0.334	0.303	9.3	90	-0.05
129 SA1	5B(H)Cholane - Surr	0.157	0.155	1.3	92	-0.04

* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Mass Discrimination (Concentration)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	0.88	0.70 - 1.30

Mass Discrimination (Response)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	1.20	0.70 - 2.00

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121420.D
 Acq On : 17 Dec 2014 2:13 am
 Operator : PAH8:ML
 Sample : WG752852-2,32
 Misc : WG752852, cc frav19 500ng/ml
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 31 09:31:24 2014
 Quant Method : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.557	164	55051	500.000	ng/mL	-0.04
74) Chrysene-d12	43.004	240	100187	500.000	ng/mL	-0.04
System Monitoring Compounds						
9) Naphthalene-d8	19.594	136	104294	494.678	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	49.47%#		
42) Phenanthrene-d10	32.424	188	87192	542.228	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	54.22%		
83) Benzo[b]fluoranthene-d12	46.897	264	98488	505.991	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery =	50.60%		
88) Benzo[a]pyrene-d12	48.068	264	85738	543.080	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery =	54.31%		
129) 5B(H)Cholane - Surr	43.634	217	15574	496.561	ng/ml	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery =	49.66%#		
Target Compounds						
						Qvalue
3) trans-Decalin	16.245	138	11251	228.396	ng/mL	100
4) cis-Decalin	17.459	138	8409	225.397	ng/mL	100
10) Naphthalene	19.667	128	113973	501.726	ng/mL	100
16) 2-Methylnaphthalene	22.377	142	71691	472.206	ng/mL	100
17) 1-Methylnaphthalene	22.788	142	69577	473.839	ng/mL	100
18) Benzothiophene	19.886	134	92678	491.638	ng/mL	100
23) Biphenyl	24.257	154	92167	504.625	ng/mL	100
24) 2,6-Dimethylnaphthalene	24.860	156	63164	507.861	ng/mL	100
25) Dibenzofuran	27.333	168	98669	527.527	ng/mL	99
26) Acenaphthylene	25.946	152	119211M4	581.239	ng/mL	
27) Acenaphthene	26.685	153	70345	539.895	ng/mL	99
28) 2,3,5-Trimethylnaphthalen	28.245	170	54983	537.147	ng/mL	99
29) Fluorene	28.710	166	77985	542.558	ng/mL	99
33) Dibenzothiophene	32.022	184	109199	542.655	ng/mL	100
43) Phenanthrene	32.515	178	108997	556.591	ng/mL	100
54) Retene	39.498	234	28886	598.174	ng/mL	93
55) Anthracene	32.697	178	104710M4	605.278	ng/mL	
56) Carbazole	33.373	167	97045	532.300	ng/mL	100
57) 1-Methylphenanthrene	35.025	192	78360	551.425	ng/mL	100
58) Fluoranthene	37.280	202	114429	565.092	ng/mL	98
59) Benzo(b)fluorene	39.809	216	69710	637.457	ng/mL	100
60) Pyrene	38.165	202	124758	591.147	ng/mL	99
66) Naphthobenzothiophene	42.018	234	112585	576.825	ng/ml	100
67) Naphthobenzothiophene-2,1	42.018	234	112585	576.825	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121420.D
 Acq On : 17 Dec 2014 2:13 am
 Operator : PAH8:ML
 Sample : WG752852-2,32
 Misc : WG752852, cc frav19 500ng/ml
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 31 09:31:24 2014
 Quant Method : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	42.940	228	104700	514.816	ng/mL	95
76)	Chrysene	43.105	228	101912	497.711	ng/mL	98
77)	Chrysene/Triphenylene	43.105	228	101912	497.711	ng/mL	98
84)	Benzo[b]fluoranthene	46.980	252	116007	505.429	ng/mL	97
85)	Benzo[j]+[k]fluoranthene	47.062	252	112968	520.695	ng/mL	97
87)	Benzo[e]pyrene	47.968	252	116899	501.458	ng/mL	97
89)	Benzo[a]pyrene	48.150	252	110797	548.456	ng/mL	96
90)	Perylene	48.461	252	110365	525.257	ng/mL	95
91)	Indeno[1,2,3-cd]pyrene	52.888	276	134934M3	506.315	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	52.952	278	126250	548.265	ng/mL	98
93)	Benzo[g,h,i]perylene	54.167	276	130855	491.661	ng/mL	99
94)	Hopane (T19)	52.019	191	30403	454.363	ng/mL	93
95)	17a(H),21B(H)-hopane - C3	52.019	191	30403	454.363	ng/mL	93

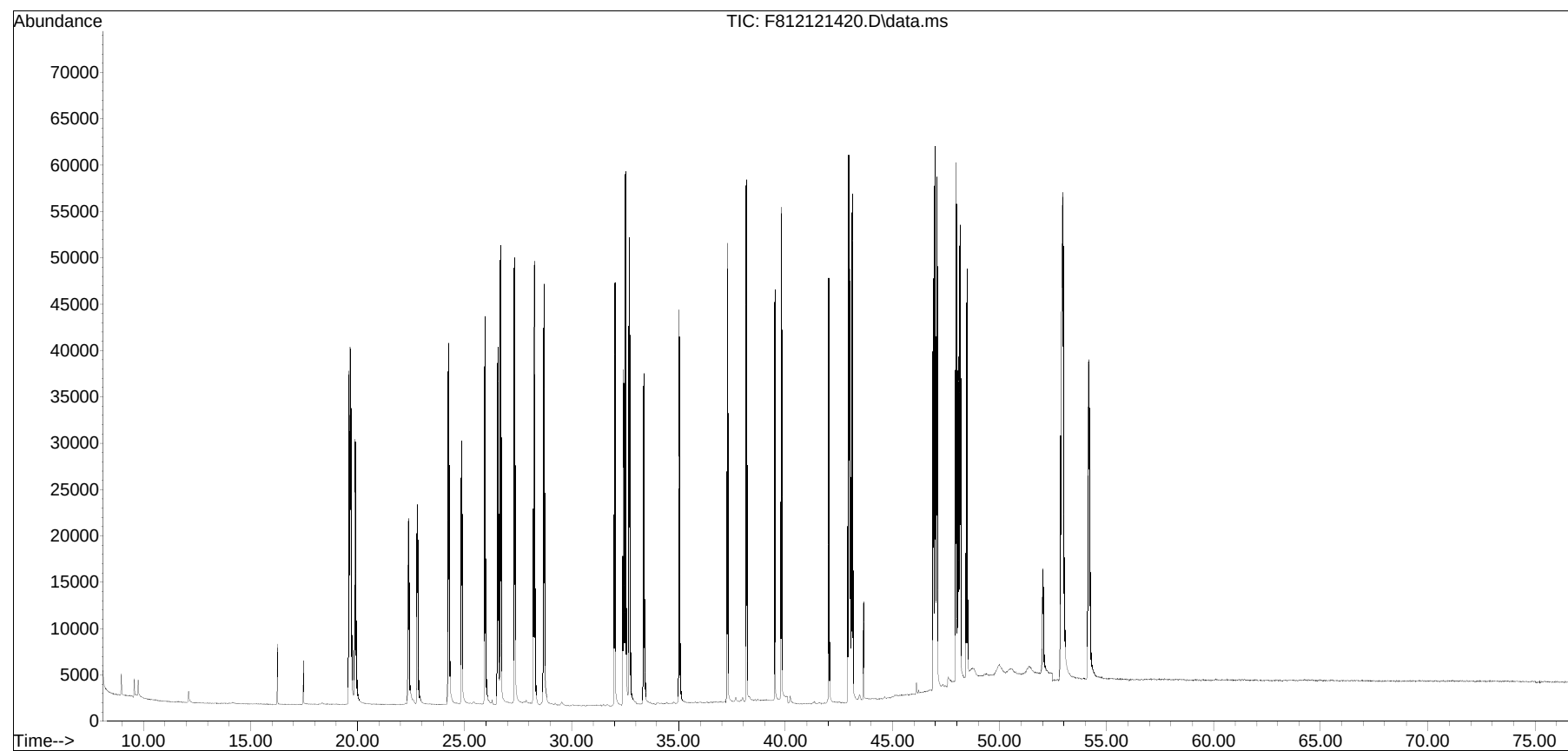
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\
Data File : F812121420.D
Acq On : 17 Dec 2014 2:13 am
Operator : PAH8:ML
Sample : WG752852-2,32
Misc : WG752852, cc frav19 500ng/ml
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 31 09:31:24 2014
Quant Method : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 09 18:27:44 2014
Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121421.D
 Acq On : 17 Dec 2014 7:59 am
 Operator : PAH8:ML
 Sample : WG752852-3,32
 Misc : WG752852, cc frav19 500ng/ml
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 31 09:31:29 2014
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	81	-0.04
3 A1	trans-Decalin	0.447	0.404	9.6	77	-0.04
4 t	cis-Decalin	0.339	0.306	9.7	75	-0.04
9 s	Naphthalene-d8	1.915	1.877	2.0	74	-0.04
10 A1	Naphthalene	2.063	2.050	0.6	72	-0.04
16 t	2-Methylnaphthalene	1.379	1.311	4.9	74	-0.03
17 t	1-Methylnaphthalene	1.334	1.232	7.6	72	-0.04
18 A1	Benzothiophene	1.712	1.676	2.1	75	-0.04
23 t	Biphenyl	1.659	1.680	-1.3	76	-0.04
24 t	2,6-Dimethylnaphthalene	1.130	1.151	-1.9	78	-0.03
25 t	Dibenzofuran	1.699	1.770	-4.2	78	-0.03
26 t	Acenaphthylene	1.863	2.002	-7.5	82	-0.04
27 t	Acenaphthene	1.183	1.230	-4.0	78	-0.05
28 t	2,3,5-Trimethylnaphthalene	0.930	0.988	-6.2	82	-0.04
29 A1	Fluorene	1.305	1.372	-5.1	80	-0.04
33 A1	Dibenzothiophene	1.828	1.999	-9.4	82	-0.04
42 s	Phenanthrene-d10	1.460	1.580	-8.2	83	-0.04
43 A1	Phenanthrene	1.779	2.015	-13.3	80	-0.04
54 t	Retene	0.439	0.518	-18.0	91	-0.04
55 t	Anthracene	1.571	1.899	-20.9	86	-0.03
56 t	Carbazole	1.656	1.743	-5.3	78	-0.04
57 t	1-Methylphenanthrene	1.291	1.408	-9.1	83	-0.03
58 A1	Fluoranthene	1.839	2.096	-14.0	84	-0.04
59 t	Benzo(b)fluorene	0.993	1.257	-26.6#	92	-0.04
60 A1	Pyrene	1.917	2.292	-19.6	84	-0.04
66 A1	Naphthobenzothiophene	1.773	2.038	-14.9	85	-0.04
67 A2	Naphthobenzothiophene-2,1-D	1.773	2.038	-14.9	85	-0.04
74 i	Chrysene-d12	1.000	1.000	0.0	86	-0.04
75 t	Benz[a]anthracene	1.015	1.024	-0.9	88	-0.04
76 A1	Chrysene	1.022	1.034	-1.2	86	-0.04
77 A2	Chrysene/Triphenylene	1.022	1.034	-1.2	86	-0.04
83 s	Benzo[b]fluoranthene-d12	0.971	0.972	-0.1	91	-0.04
84 t	Benzo[b]fluoranthene	1.145	1.149	-0.3	85	-0.05
85 A1	Benzo[j]+[k]fluoranthene	1.083	1.144	-5.6	91	-0.03
87 t	Benzo[e]pyrene	1.163	1.152	0.9	86	-0.05
88 s	Benzo[a]pyrene-d12	0.788	0.841	-6.7	94	-0.04
89 t	Benzo[a]pyrene	1.008	1.080	-7.1	88	-0.04
90 t	Perylene	1.049	1.083	-3.2	90	-0.05

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121421.D
 Acq On : 17 Dec 2014 7:59 am
 Operator : PAH8:ML
 Sample : WG752852-3,32
 Misc : WG752852, cc frav19 500ng/ml
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 31 09:31:29 2014
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.330	1.209	9.1	81	-0.05
92 t	Dibenz[ah]+[ac]anthracene	1.149	1.241	-8.0	93	-0.05
93 t	Benzo[g,h,i]perylene	1.328	1.312	1.2	92	-0.06
94 A1	Hopane (T19)	0.334	0.300	10.2	89	-0.05
95 A2	17a(H),21B(H)-hopane - C30H	0.334	0.300	10.2	89	-0.05
129 SA1	5B(H)Cholane - Surr	0.157	0.153	2.5	90	-0.04

* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Mass Discrimination (Concentration)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	0.87	0.70 - 1.30

Mass Discrimination (Response)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	1.19	0.70 - 2.00

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121421.D
 Acq On : 17 Dec 2014 7:59 am
 Operator : PAH8:ML
 Sample : WG752852-3,32
 Misc : WG752852, cc frav19 500ng/ml
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 31 09:31:29 2014
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.557	164	54336	500.000	ng/mL	-0.04
74) Chrysene-d12	43.004	240	99483	500.000	ng/mL	-0.04
System Monitoring Compounds						
9) Naphthalene-d8	19.594	136	101990	490.115	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	49.01%#		
42) Phenanthrene-d10	32.424	188	85835	540.813	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	54.08%		
83) Benzo[b]fluoranthene-d12	46.897	264	96678	500.207	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery =	50.02%		
88) Benzo[a]pyrene-d12	48.068	264	83645	533.571	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery =	53.36%		
129) 5B(H)Cholane - Surr	43.634	217	15221	488.740	ng/ml	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery =	48.87%#		
Target Compounds						
						Qvalue
3) trans-Decalin	16.245	138	10971	225.642	ng/mL	100
4) cis-Decalin	17.459	138	8306	225.566	ng/mL	100
10) Naphthalene	19.667	128	111379	496.759	ng/mL	100
16) 2-Methylnaphthalene	22.368	142	71226	475.317	ng/mL	100
17) 1-Methylnaphthalene	22.788	142	66963	462.038	ng/mL	100
18) Benzo[thiophene	19.886	134	91067	489.449	ng/mL	100
23) Biphenyl	24.248	154	91289	506.395	ng/mL	100
24) 2,6-Dimethylnaphthalene	24.860	156	62547	509.517	ng/mL	100
25) Dibenzofuran	27.333	168	96159	520.873	ng/mL	98
26) Acenaphthylene	25.946	152	108773	537.325	ng/mL	100
27) Acenaphthene	26.676	153	66856	519.869	ng/mL	100
28) 2,3,5-Trimethylnaphthalen	28.236	170	53705	531.566	ng/mL	98
29) Fluorene	28.701	166	74525m	525.308	ng/mL	
33) Dibenzothiophene	32.013	184	108641	546.987	ng/mL	100
43) Phenanthrene	32.515	178	109471	566.368	ng/mL	100
54) Retene	39.498	234	28141	590.415	ng/mL	93
55) Anthracene	32.697	178	103208m	604.447	ng/mL	
56) Carbazole	33.364	167	94727	526.423	ng/mL	100
57) 1-Methylphenanthrene	35.025	192	76500	545.419	ng/mL	97
58) Fluoranthene	37.280	202	113891	569.836	ng/mL	99
59) Benzo(b)fluorene	39.800	216	68275	632.551	ng/mL	99
60) Pyrene	38.165	202	124522	597.792	ng/mL	99
66) Naphthobenzothiophene	42.018	234	110735	574.812	ng/ml	100
67) Naphthobenzothiophene-2,1	42.018	234	110735	574.812	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121421.D
 Acq On : 17 Dec 2014 7:59 am
 Operator : PAH8:ML
 Sample : WG752852-3,32
 Misc : WG752852, cc frav19 500ng/ml
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 31 09:31:29 2014
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	42.940	228	101890	504.545	ng/mL	92
76)	Chrysene	43.105	228	102848	505.837	ng/mL	99
77)	Chrysene/Triphenylene	43.105	228	102848	505.837	ng/mL	99
84)	Benzo[b]fluoranthene	46.980	252	114301	501.520	ng/mL	97
85)	Benzo[j]+[k]fluoranthene	47.071	252	113796	528.223	ng/mL	96
87)	Benzo[e]pyrene	47.968	252	114576	494.971	ng/mL	97
89)	Benzo[a]pyrene	48.160	252	107439	535.597	ng/mL	96
90)	Perylene	48.462	252	107748	516.431	ng/mL	95
91)	Indeno[1,2,3-cd]pyrene	52.888	276	120279m	454.519	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	52.952	278	123479	540.026	ng/mL	98
93)	Benzo[g,h,i]perylene	54.158	276	130532	493.918	ng/mL	99
94)	Hopane (T19)	52.019	191	29890	449.858	ng/mL	93
95)	17a(H),21B(H)-hopane - C3	52.019	191	29890	449.858	ng/mL	93

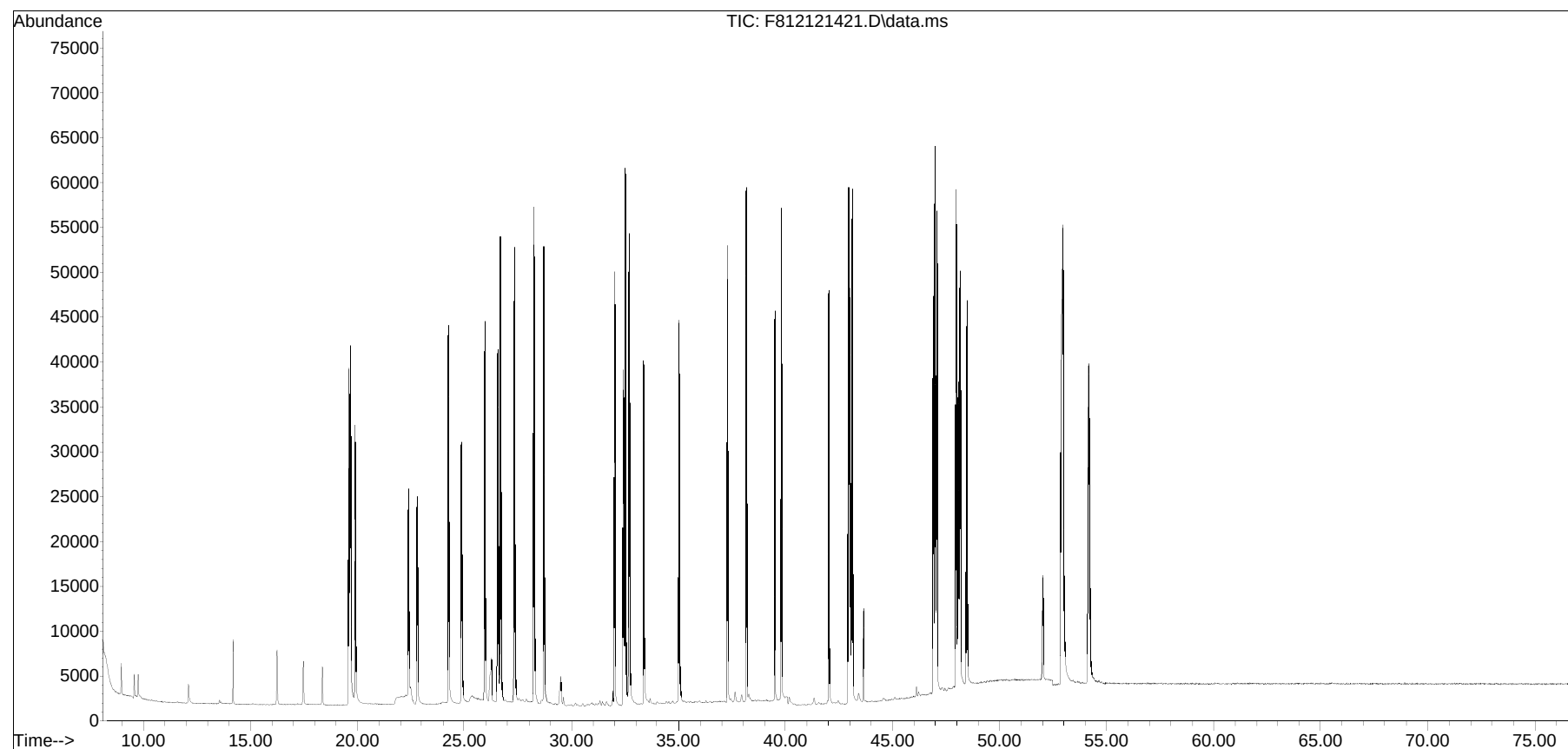
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\
Data File : F812121421.D
Acq On : 17 Dec 2014 7:59 am
Operator : PAH8:ML
Sample : WG752852-3,32
Misc : WG752852, cc frav19 500ng/ml
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 31 09:31:29 2014
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8111214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 09 18:27:44 2014
Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121423.D
 Acq On : 17 Dec 2014 1:23 pm
 Operator : PAH8:ML
 Sample : WG752852-4,32
 Misc : WG752852, cc frav19 500ng/ml
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 31 09:31:42 2014
 Quant Method : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Dec 10 07:58:10 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	87	-0.04
3 A1	trans-Decalin	0.447	0.407	8.9	83	-0.04
4 t	cis-Decalin	0.339	0.297	12.4	78	-0.04
9 s	Naphthalene-d8	1.915	1.870	2.3	79	-0.04
10 A1	Naphthalene	2.063	2.037	1.3	76	-0.04
16 t	2-Methylnaphthalene	1.379	1.298	5.9	78	-0.03
17 t	1-Methylnaphthalene	1.334	1.270	4.8	79	-0.04
18 A1	Benzothiophene	1.712	1.656	3.3	79	-0.04
23 t	Biphenyl	1.659	1.672	-0.8	81	-0.03
24 t	2,6-Dimethylnaphthalene	1.130	1.147	-1.5	83	-0.03
25 t	Dibenzofuran	1.699	1.780	-4.8	84	-0.03
26 t	Acenaphthylene	1.863	2.017	-8.3	88	-0.04
27 t	Acenaphthene	1.183	1.243	-5.1	84	-0.04
28 t	2,3,5-Trimethylnaphthalene	0.930	0.984	-5.8	87	-0.03
29 A1	Fluorene	1.305	1.364	-4.5	85	-0.03
33 A1	Dibenzothiophene	1.828	1.983	-8.5	87	-0.03
42 s	Phenanthrene-d10	1.460	1.573	-7.7	88	-0.04
43 A1	Phenanthrene	1.779	1.993	-12.0	85	-0.04
54 t	Retene	0.439	0.503	-14.6	94	-0.04
55 t	Anthracene	1.571	1.841	-17.2	89	-0.03
56 t	Carbazole	1.656	1.718	-3.7	83	-0.03
57 t	1-Methylphenanthrene	1.291	1.394	-8.0	87	-0.03
58 A1	Fluoranthene	1.839	2.063	-12.2	89	-0.03
59 t	Benzo(b)fluorene	0.993	1.209	-21.8	95	-0.03
60 A1	Pyrene	1.917	2.270	-18.4	89	-0.04
66 A1	Naphthobenzothiophene	1.773	2.014	-13.6	90	-0.04
67 A2	Naphthobenzothiophene-2,1-D	1.773	2.014	-13.6	90	-0.04
74 i	Chrysene-d12	1.000	1.000	0.0	92	-0.04
75 t	Benz[a]anthracene	1.015	0.996	1.9	91	-0.04
76 A1	Chrysene	1.022	1.014	0.8	90	-0.04
77 A2	Chrysene/Triphenylene	1.022	1.014	0.8	90	-0.04
83 s	Benzo[b]fluoranthene-d12	0.971	0.955	1.6	96	-0.04
84 t	Benzo[b]fluoranthene	1.145	1.116	2.5	88	-0.05
85 A1	Benzo[j]+[k]fluoranthene	1.083	1.133	-4.6	97	-0.04
87 t	Benzo[e]pyrene	1.163	1.140	2.0	91	-0.05
88 s	Benzo[a]pyrene-d12	0.788	0.819	-3.9	98	-0.04
89 t	Benzo[a]pyrene	1.008	1.065	-5.7	92	-0.04
90 t	Perylene	1.049	1.051	-0.2	93	-0.05

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121423.D
 Acq On : 17 Dec 2014 1:23 pm
 Operator : PAH8:ML
 Sample : WG752852-4,32
 Misc : WG752852, cc frav19 500ng/ml
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 31 09:31:42 2014
 Quant Method : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Dec 10 07:58:10 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.330	1.176	11.6	84	-0.05
92 t	Dibenz[ah]+[ac]anthracene	1.149	1.191	-3.7	95	-0.05
93 t	Benzo[g,h,i]perylene	1.328	1.269	4.4	95	-0.05
94 A1	Hopane (T19)	0.334	0.290	13.2	92	-0.05
95 A2	17a(H),21B(H)-hopane - C30H	0.334	0.290	13.2	92	-0.05
129 SA1	5B(H)Cholane - Surr	0.157	0.149	5.1	94	-0.04

* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Mass Discrimination (Concentration)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	0.85	0.70 - 1.30

Mass Discrimination (Response)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	1.16	0.70 - 2.00

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121423.D
 Acq On : 17 Dec 2014 1:23 pm
 Operator : PAH8:ML
 Sample : WG752852-4,32
 Misc : WG752852, cc frav19 500ng/ml
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 31 09:31:42 2014
 Quant Method : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Dec 10 07:58:10 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.557	164	58131	500.000	ng/mL	-0.04
74) Chrysene-d12	43.004	240	106340	500.000	ng/mL	-0.04
System Monitoring Compounds						
9) Naphthalene-d8	19.594	136	108694	488.232	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	48.82%#		
42) Phenanthrene-d10	32.424	188	91457	538.616	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	53.86%		
83) Benzo[b]fluoranthene-d12	46.897	264	101533	491.452	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	49.15%#		
88) Benzo[a]pyrene-d12	48.068	264	87145	520.053	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	52.01%		
129) 5B(H)Cholane - Surr	43.634	217	15843	475.910	ng/ml	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	47.59%#		
Target Compounds						
					Qvalue	
3) trans-Decalin	16.245	138	11840	227.618	ng/mL	100
4) cis-Decalin	17.459	138	8631	219.090	ng/mL	100
10) Naphthalene	19.667	128	118401	493.603	ng/mL	100
16) 2-Methylnaphthalene	22.368	142	75433	470.529	ng/mL	100
17) 1-Methylnaphthalene	22.788	142	73821	476.104	ng/mL	100
18) Benzo[thiophene	19.886	134	96261	483.590	ng/mL	100
23) Biphenyl	24.257	154	97217	504.072	ng/mL	100
24) 2,6-Dimethylnaphthalene	24.860	156	66665	507.610	ng/mL	100
25) Dibenzofuran	27.333	168	103489	523.981	ng/mL	99
26) Acenaphthylene	25.946	152	117244M4	541.360	ng/mL	
27) Acenaphthene	26.685	153	72245	525.099	ng/mL	97
28) 2,3,5-Trimethylnaphthalen	28.245	170	57214	529.328	ng/mL	94
29) Fluorene	28.710	166	79292	522.422	ng/mL	100
33) Dibenzothiophene	32.022	184	115260	542.427	ng/mL	99
43) Phenanthrene	32.515	178	115870	560.338	ng/mL	100
54) Retene	39.499	234	29248	573.580	ng/mL	98
55) Anthracene	32.697	178	107009M4	585.794	ng/mL	
56) Carbazole	33.373	167	99894	518.896	ng/mL	99
57) 1-Methylphenanthrene	35.025	192	81047	540.115	ng/mL	99
58) Fluoranthene	37.289	202	119897	560.723	ng/mL	98
59) Benzo(b)fluorene	39.809	216	70288	608.688	ng/mL	99
60) Pyrene	38.165	202	131938	592.044	ng/mL	98
66) Naphthobenzothiophene	42.018	234	117061	567.980	ng/ml#	61
67) Naphthobenzothiophene-2,1	42.018	234	117061	567.980	ng/mL#	61

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121423.D
 Acq On : 17 Dec 2014 1:23 pm
 Operator : PAH8:ML
 Sample : WG752852-4,32
 Misc : WG752852, cc frav19 500ng/ml
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 31 09:31:42 2014
 Quant Method : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Dec 10 07:58:10 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	42.940	228	105918	490.671	ng/mL	99
76)	Chrysene	43.105	228	107821	496.101	ng/mL	100
77)	Chrysene/Triphenylene	43.105	228	107821	496.101	ng/mL	100
84)	Benzo[b]fluoranthene	46.980	252	118638	486.984	ng/mL	97
85)	Benzo[j]+[k]fluoranthene	47.062	252	120454	523.075	ng/mL	97
87)	Benzo[e]pyrene	47.968	252	121235	489.967	ng/mL	97
89)	Benzo[a]pyrene	48.160	252	113265	528.231	ng/mL	94
90)	Perylene	48.462	252	111787	501.241	ng/mL	95
91)	Indeno[1,2,3-cd]pyrene	52.888	276	125103M4	442.265	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	52.952	278	126635	518.117	ng/mL	96
93)	Benzo[g,h,i]perylene	54.167	276	134910	477.567	ng/mL	99
94)	Hopane (T19)	52.019	191	30882	434.817	ng/mL#	88
95)	17a(H),21B(H)-hopane - C3	52.019	191	30882	434.817	ng/mL#	88

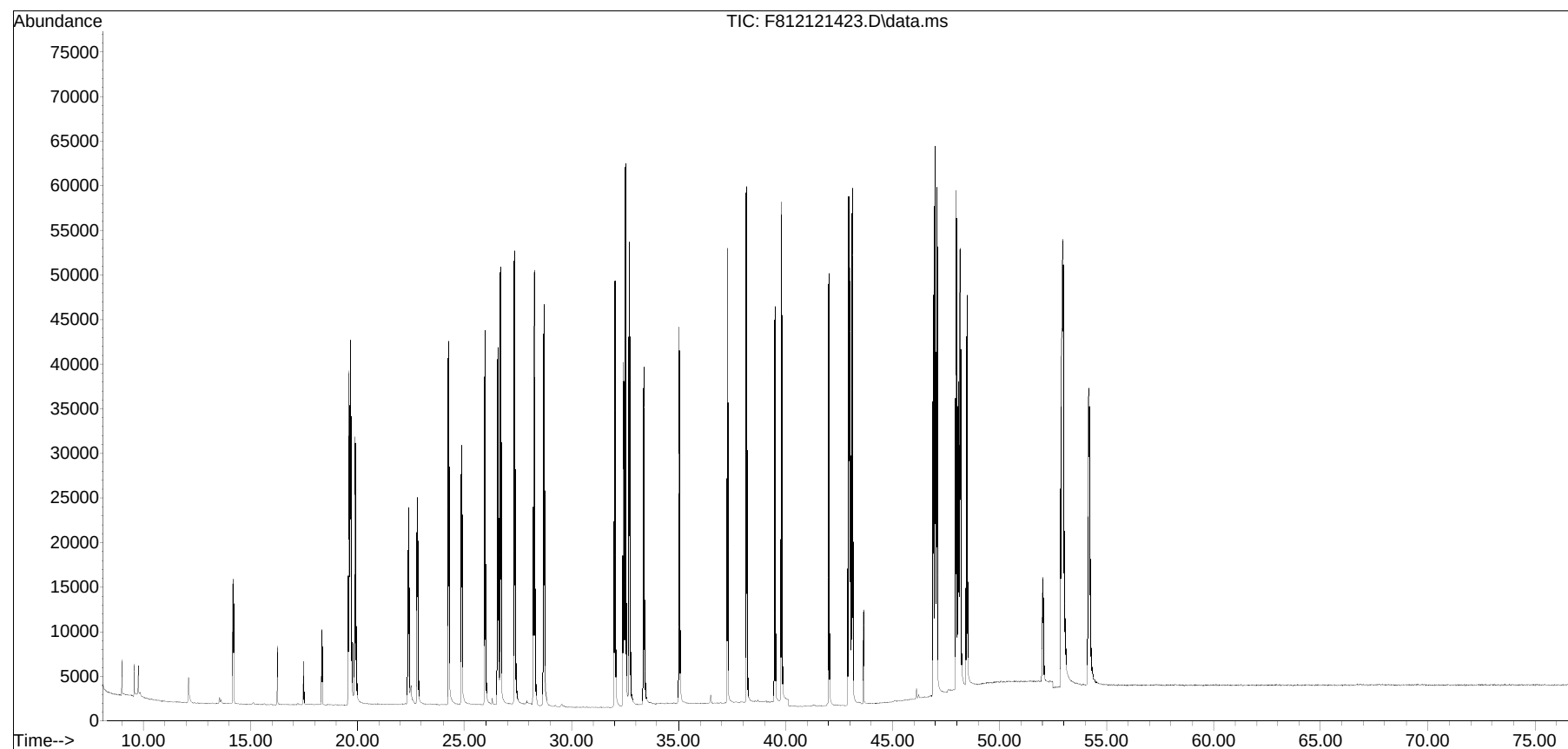
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\
Data File : F812121423.D
Acq On : 17 Dec 2014 1:23 pm
Operator : PAH8:ML
Sample : WG752852-4,32
Misc : WG752852, cc frav19 500ng/ml
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 31 09:31:42 2014
Quant Method : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Dec 10 07:58:10 2014
Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates



Semivolatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121416.D
 Acq On : 16 Dec 2014 8:28 pm
 Operator : PAH8:ML
 Sample : wg748955-1,32
 Misc : WG752852,WG748955,ICAL10396
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 31 09:30:59 2014
 Quant Method : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.557	164	49567	500.000	ng/mL	-0.04
74) Chrysene-d12	43.004	240	91311	500.000	ng/mL	-0.04
System Monitoring Compounds						
9) Naphthalene-d8	19.603	136	42994	226.487	ng/mL	-0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	22.65%#		
42) Phenanthrene-d10	32.433	188	37887	261.678	ng/mL	-0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	26.17%#		
83) Benzo[b]fluoranthene-d12	46.907	264	41136	231.883	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	23.19%#		
88) Benzo[a]pyrene-d12	48.077	264	35235	244.880	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	24.49%#		
129) 5B(H)Cholane - Surr	43.634	217	6845	239.461	ng/mL	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery =	23.95%#		
Target Compounds						
						Qvalue
10) Naphthalene	0.000		0		N.D.	
11) C1-Naphthalenes	0.000		0		N.D.	
12) C2-Naphthalenes	0.000		0		N.D.	
13) C3-Naphthalenes	0.000		0		N.D.	
14) C4-Naphthalenes	0.000		0		N.D.	
23) Biphenyl	0.000		0		N.D.	
25) Dibenzofuran	0.000		0		N.D.	
26) Acenaphthylene	25.955	152	131M2	0.709	ng/mL	
27) Acenaphthene	0.000		0		N.D.	d
29) Fluorene	0.000		0		N.D.	d
30) C1-Fluorenes	0.000		0		N.D.	
31) C2-Fluorenes	0.000		0		N.D.	
32) C3-Fluorenes	0.000		0		N.D.	
33) Dibenzothiophene	0.000		0		N.D.	d
37) OTP	0.000		0		N.D.	d
38) C1-Dibenzothiophenes	0.000		0		N.D.	d
38) C1-Dibenzothiophenes BS	0.000		0d	0.000	ng/mL	
39) C2-Dibenzothiophenes	0.000		0		N.D.	
40) C3-Dibenzothiophenes	0.000		0		N.D.	
41) C4-Dibenzothiophenes	0.000		0		N.D.	
43) Phenanthrene	0.000		0		N.D.	
49) C1-Phenanthrenes/Anthrace	0.000		0		N.D.	
50) C2-Phenanthrenes/Anthrace	0.000		0		N.D.	d
50) C2-Phenanthrenes/Anthr BS	0.000		0d	0.000	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121416.D
 Acq On : 16 Dec 2014 8:28 pm
 Operator : PAH8:ML
 Sample : wg748955-1,32
 Misc : WG752852,WG748955,ICAL10396
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 31 09:30:59 2014
 Quant Method : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) 5AA IS BKGD	0.000		0	N.D.	d	
52) C3-Phenanthrenes/Anthrace	0.000		0	N.D.		
53) C4-Phenanthrenes/Anthrace	0.000		0	N.D.		
55) Anthracene	0.000		0	N.D.		
56) Carbazole	0.000		0	N.D.	d	
58) Fluoranthene	0.000		0	N.D.	d	
59) Benzo(b)fluorene	0.000		0	N.D.		
60) Pyrene	0.000		0	N.D.		
61) C1-Fluoranthenes/Pyrenes	0.000		0	N.D.		
62) C2-Fluoranthenes/Pyrenes	0.000		0	N.D.		
63) C3-Fluoranthenes/Pyrenes	0.000		0	N.D.		
64) C4-Fluoranthenes/Pyrenes	0.000		0	N.D.		
66) Naphthobenzothiophene	0.000		0	N.D.		
67) Naphthobenzothiophene-2,1	0.000		0	N.D.		
68) Naphthobenzothiophene-1,2	0.000		0	N.D.		
69) Naphthobenzothiophene-2,3	0.000		0	N.D.	d	
70) C1-Naphthobenzothiophenes	0.000		0	N.D.		
71) C2-Naphthobenzothiophenes	0.000		0	N.D.		
72) C3-Naphthobenzothiophenes	0.000		0	N.D.		
73) C4-Naphthobenzothiophenes	0.000		0	N.D.		
75) Benz[a]anthracene	0.000		0	N.D.	d	
77) Chrysene/Triphenylene	0.000		0	N.D.	d	
78) C1-Chrysenes	0.000		0	N.D.		
79) C2-Chrysenes	0.000		0	N.D.	d	
79) C2-Chrysenes BS	0.000		0d	0.000	ng/mL	
80) BBF-D12 Surr BKGD	0.000		0	N.D.	d	
81) C3-Chrysenes	0.000		0	N.D.		
82) C4-Chrysenes	0.000		0	N.D.	d	
84) Benzo[b]fluoranthene	0.000		0	N.D.		
85) Benzo[j]+[k]fluoranthene	0.000		0	N.D.		
86) Benzo[a]fluoranthene	0.000		0	N.D.		
87) Benzo[e]pyrene	0.000		0	N.D.		
89) Benzo[a]pyrene	0.000		0	N.D.		
90) Perylene	0.000		0	N.D.		
91) Indeno[1,2,3-cd]pyrene	0.000		0	N.D.		
92) Dibenzo[ah]+[ac]anthracene	0.000		0	N.D.		
93) Benzo[g,h,i]perylene	0.000		0	N.D.		
94) Hopane (T19)	0.000		0	N.D.	d	
96) C23 Tricyclic Terpane (T4	0.000		0	N.D.	d	
97) C24 Tricyclic Terpane (T5	0.000		0	N.D.	d	
98) C25 Tricyclic Terpane (T6	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121416.D
 Acq On : 16 Dec 2014 8:28 pm
 Operator : PAH8:ML
 Sample : wg748955-1,32
 Misc : WG752852,WG748955,ICAL10396
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 31 09:30:59 2014
 Quant Method : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99) C24 Tetracyclic Terpane (	0.000		0	N.D.	d	
100) C26 Tricyclic Terpane-22S	0.000		0	N.D.	d	
101) C26 Tricyclic Terpane-22R	0.000		0	N.D.	d	
102) C28 Tricyclic Terpane-22S	0.000		0	N.D.	d	
103) C28 Tricyclic Terpane-22R	0.000		0	N.D.	d	
104) C29 Tricyclic Terpane-22S	0.000		0	N.D.	d	
105) C29 Tricyclic Terpane-22R	0.000		0	N.D.	d	
106) 18a-22,29,30-Trisnorneocho	0.000		0	N.D.	d	
107) C30 Tricyclic Terpane-22S	0.000		0	N.D.	d	
108) C30 Tricyclic Terpane-22R	0.000		0	N.D.	d	
109) 17a(H)-22,29,30-Trisnorho	0.000		0	N.D.	d	
110) 17a/b,21b/a 28,30-Bisnorh	0.000		0	N.D.	d	
111) 17a(H),21b(H)-25-Norhopan	0.000		0	N.D.	d	
112) 30-Norhopane (T15)	0.000		0	N.D.	d	
113) 18a(H)-30-Norneohopane-C2	0.000		0	N.D.	d	
114) 17a(H)-Diahopane (X)	0.000		0	N.D.	d	
115) 30-Normoretane (T17)	0.000		0	N.D.	d	
116) 18a(H)&18b(H)-Oleananes (	0.000		0	N.D.	d	
117) Moretane (T20)	0.000		0	N.D.	d	
118) 30-Homohopane-22S (T21)	0.000		0	N.D.	d	
119) 30-Homohopane-22R (T22)	0.000		0	N.D.	d	
120) Gammacerane/C32-diahopane	0.000		0	N.D.	d	
121) 30,31-Bishomohopane-22S (	0.000		0	N.D.	d	
122) 30,31-Bishomohopane-22R (	0.000		0	N.D.	d	
123) 30,31-Trishomohopane-22S	0.000		0	N.D.	d	
124) 30,31-Trishomohopane-22R	0.000		0	N.D.	d	
125) Tetrakishomohopane-22S (T	0.000		0	N.D.	d	
126) Tetrakishomohopane-22R (T	0.000		0	N.D.	d	
127) Pentakishomohopane-22S (T	0.000		0	N.D.	d	
128) Pentakishomohopane-22R (T	0.000		0	N.D.	d	
130) 13b(H),17a(H)-20S-Diachol	0.000		0	N.D.		
131) 13b(H),17a(H)-20R-Diachol	0.000		0	N.D.		
132) 13b,17a-20S-Methyl diachol	0.000		0	N.D.		
133) 14a,17a-20S-Chol/13b,17a-	0.000		0	N.D.		
134) 14a,17a-20R-Chol/13b,17a-	0.000		0	N.D.		
135) Unknown Sterane (S18)	0.000		0	N.D.		
136) 13a,17b-20S-Ethyl diachole	0.000		0	N.D.		
137) 14a,17a-20S-Methylcholest	0.000		0	N.D.		
138) 14a,17a-20R-Methylcholest	0.000		0	N.D.		
139) 14a(H),17a(H)-20S-Ethylch	0.000		0	N.D.		
140) 14a(H),17a(H)-20R-Ethylch	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121416.D
 Acq On : 16 Dec 2014 8:28 pm
 Operator : PAH8:ML
 Sample : wg748955-1,32
 Misc : WG752852,WG748955,ICAL10396
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 31 09:30:59 2014
 Quant Method : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
141)	14b(H),17b(H)-20R-Cholest	0.000		0	N.D.	d	
142)	14b(H),17b(H)-20S-Cholest	0.000		0	N.D.	d	
143)	14b,17b-20R-Methylcholest	0.000		0	N.D.	d	
144)	14b,17b-20S-Methylcholest	0.000		0	N.D.		
145)	14b(H),17b(H)-20R-Ethylch	0.000		0	N.D.		
146)	14b(H),17b(H)-20S-Ethylch	0.000		0	N.D.		
147)	C26,20R- +C27,20S- triaro	0.000		0	N.D.		
148)	C28,20S-triaromatic stero	0.000		0	N.D.		
149)	C27,20R-triaromatic stero	0.000		0	N.D.		
150)	C28,20R-triaromatic stero	0.000		0	N.D.		

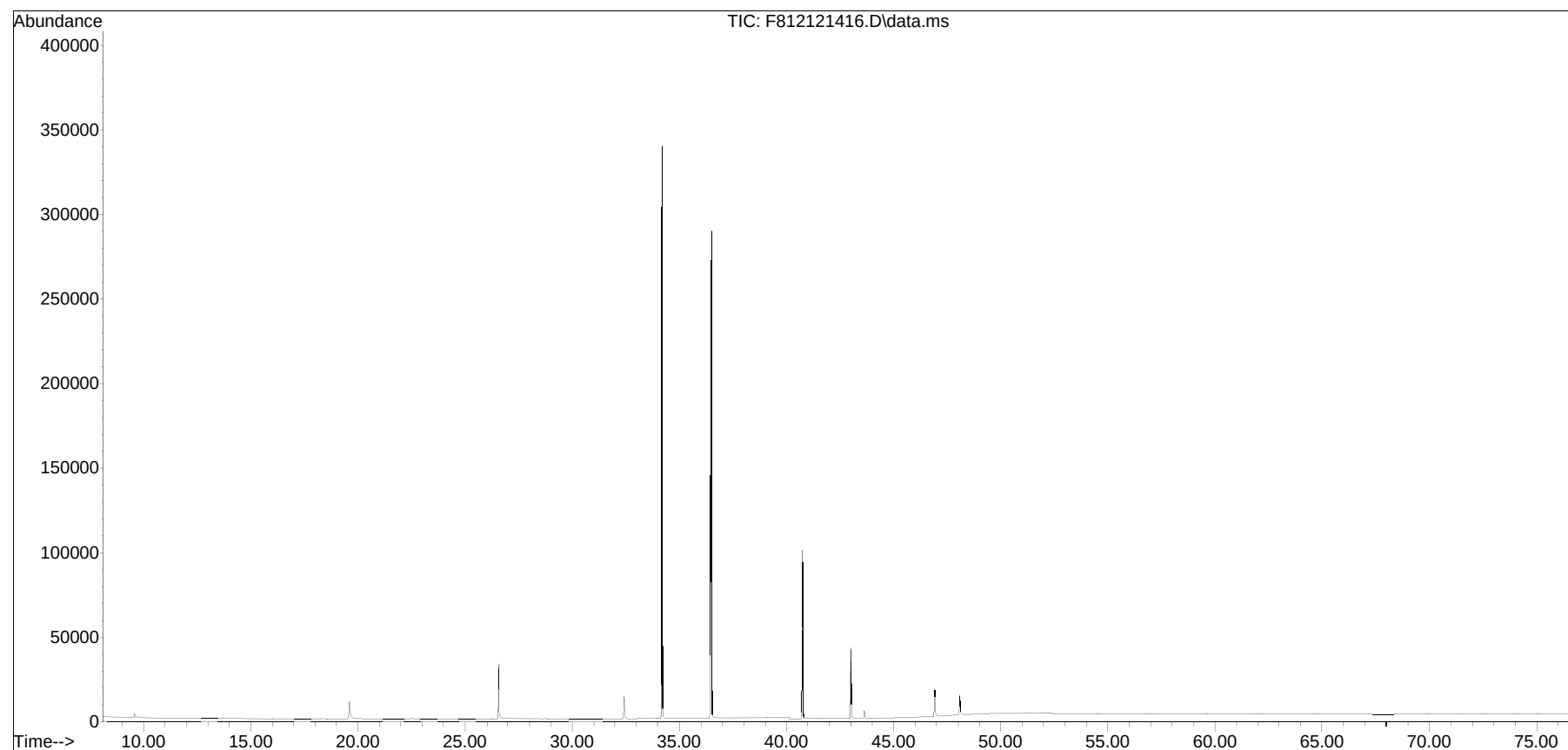
(#) = qualifier out of range (m) = manual integration (+) = signals summed

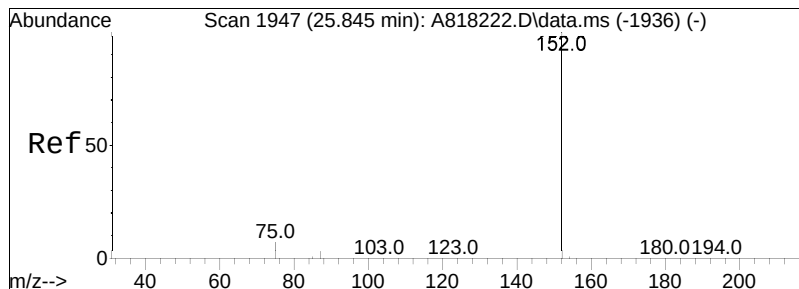
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\
Data File : F812121416.D
Acq On : 16 Dec 2014 8:28 pm
Operator : PAH8:ML
Sample : wg748955-1,32
Misc : WG752852,WG748955,ICAL10396
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 31 09:30:59 2014
Quant Method : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 09 18:27:44 2014
Response via : Initial Calibration

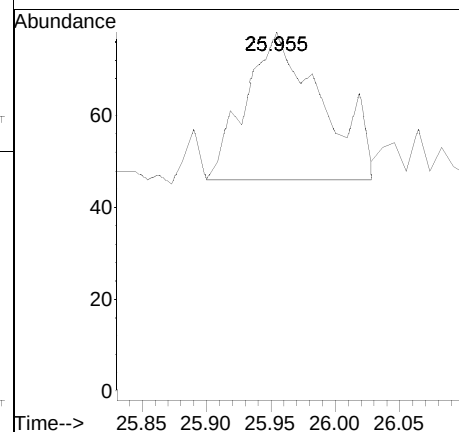
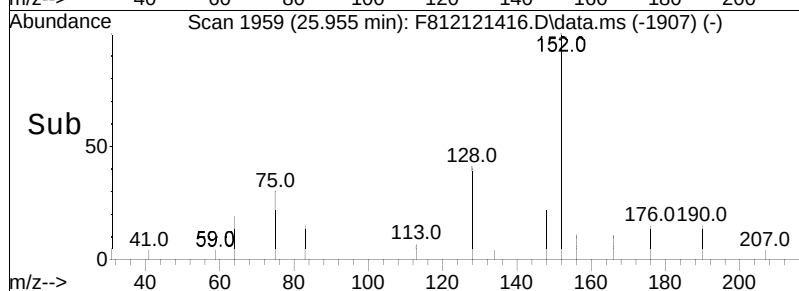
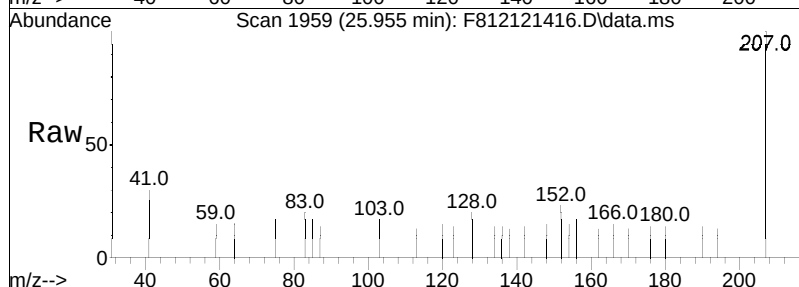
Sub List : ALKPAHURS - ALKPAH and BIO





#26
Acenaphthylene
Concen: 0.71 ng/mL M2
RT: 25.955 min Scan# 1959
Delta R.T. -0.027 min
Lab File: F812121416.D
Acq: 16 Dec 2014 8:28 pm

Tgt Ion:152 Resp: 131



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121417.D
 Acq On : 16 Dec 2014 9:54 pm
 Operator : PAH8:ML
 Sample : wg748955-2,32
 Misc : WG752852,WG748955,ICAL10396
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 31 09:31:05 2014
 Quant Method : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.557	164	48921	500.000	ng/mL	-0.04
74) Chrysene-d12	43.004	240	91092	500.000	ng/mL	-0.04
System Monitoring Compounds						
9) Naphthalene-d8	19.594	136	45633	243.563	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	24.36%#		
42) Phenanthrene-d10	32.424	188	38163	267.065	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	26.71%#		
83) Benzo[b]fluoranthene-d12	46.907	264	43493	245.759	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	24.58%#		
88) Benzo[a]pyrene-d12	48.077	264	37220	259.297	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	25.93%#		
129) 5B(H)Cholane - Surr	43.634	217	6889	241.579	ng/mL	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery =	24.16%#		
Target Compounds						
10) Naphthalene	19.667	128	49727	246.336	ng/mL	100
11) C1-Naphthalenes	0.000		0	N.D.	d	
12) C2-Naphthalenes	0.000		0	N.D.		
13) C3-Naphthalenes	0.000		0	N.D.		
14) C4-Naphthalenes	0.000		0	N.D.		
23) Biphenyl	0.000		0	N.D.	d	
25) Dibenzofuran	0.000		0	N.D.		
26) Acenaphthylene	25.946	152	46571	255.519	ng/mL	100
27) Acenaphthene	26.676	153	31207	269.524	ng/mL	100
29) Fluorene	28.701	166	33907	265.457	ng/mL	98
30) C1-Fluorenes	0.000		0	N.D.		
31) C2-Fluorenes	0.000		0	N.D.		
32) C3-Fluorenes	0.000		0	N.D.	d	
33) Dibenzothiophene	0.000		0	N.D.	d	
37) OTP	0.000		0	N.D.	d	
38) C1-Dibenzothiophenes	0.000		0	N.D.	d	
38) C1-Dibenzothiophenes BS	0.000		0d	0.000	ng/mL	
39) C2-Dibenzothiophenes	0.000		0	N.D.	d	
40) C3-Dibenzothiophenes	0.000		0	N.D.		
41) C4-Dibenzothiophenes	0.000		0	N.D.	d	
43) Phenanthrene	32.506	178	48295	277.520	ng/mL	99
49) C1-Phenanthrenes/Anthrace	0.000		0	N.D.		
50) C2-Phenanthrenes/Anthrace	0.000		0	N.D.	d	
50) C2-Phenanthrenes/Anthr BS	0.000		0d	0.000	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121417.D
 Acq On : 16 Dec 2014 9:54 pm
 Operator : PAH8:ML
 Sample : wg748955-2,32
 Misc : WG752852,WG748955,ICAL10396
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 31 09:31:05 2014
 Quant Method : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) 5AA IS BKGD	0.000		0	N.D.	d	
52) C3-Phenanthrenes/Anthrace	0.000		0	N.D.		
53) C4-Phenanthrenes/Anthrace	0.000		0	N.D.		
55) Anthracene	32.697	178	45130M4	293.564	ng/mL	
56) Carbazole	0.000		0	N.D.	d	
58) Fluoranthene	37.280	202	51477	286.066	ng/mL	98
59) Benzo(b)fluorene	0.000		0	N.D.		
60) Pyrene	38.165	202	53534	285.448	ng/mL	100
61) C1-Fluoranthenes/Pyrenes	0.000		0	N.D.		
62) C2-Fluoranthenes/Pyrenes	0.000		0	N.D.	d	
63) C3-Fluoranthenes/Pyrenes	0.000		0	N.D.		
64) C4-Fluoranthenes/Pyrenes	0.000		0	N.D.		
66) Naphthobenzothiophene	0.000		0	N.D.		
67) Naphthobenzothiophene-2,1	0.000		0	N.D.		
68) Naphthobenzothiophene-1,2	0.000		0	N.D.		
69) Naphthobenzothiophene-2,3	0.000		0	N.D.	d	
70) C1-Naphthobenzothiophenes	0.000		0	N.D.		
71) C2-Naphthobenzothiophenes	0.000		0	N.D.		
72) C3-Naphthobenzothiophenes	0.000		0	N.D.		
73) C4-Naphthobenzothiophenes	0.000		0	N.D.		
75) Benz[a]anthracene	42.941	228	46522	251.591	ng/mL	100
77) Chrysene/Triphenylene	43.105	228	46778	251.261	ng/mL	99
78) C1-Chrysenes	0.000		0	N.D.		
79) C2-Chrysenes	0.000		0	N.D.	d	
79) C2-Chrysenes BS	0.000		0d	0.000	ng/mL	
80) BBF-D12 Surr BKGD	0.000		0	N.D.	d	
81) C3-Chrysenes	0.000		0	N.D.		
82) C4-Chrysenes	0.000		0	N.D.		
84) Benzo[b]fluoranthene	46.989	252	53252	255.178	ng/mL	98
85) Benzo[j]+[k]fluoranthene	47.071	252	56320	285.510	ng/mL	96
86) Benzo[a]fluoranthene	0.000		0	N.D.	d	
87) Benzo[e]pyrene	0.000		0	N.D.	d	
89) Benzo[a]pyrene	48.160	252	52219	284.298	ng/mL	94
90) Perylene	0.000		0	N.D.	d	
91) Indeno[1,2,3-cd]pyrene	52.888	276	59962M4	247.461	ng/mL	
92) Dibenz[ah]+[ac]anthracene	52.952	278	54886	262.151	ng/mL	98
93) Benzo[g,h,i]perylene	54.167	276	57604	238.045	ng/mL	99
94) Hopane (T19)	0.000		0	N.D.	d	
96) C23 Tricyclic Terpane (T4	0.000		0	N.D.	d	
97) C24 Tricyclic Terpane (T5	0.000		0	N.D.		
98) C25 Tricyclic Terpane (T6	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121417.D
 Acq On : 16 Dec 2014 9:54 pm
 Operator : PAH8:ML
 Sample : wg748955-2,32
 Misc : WG752852,WG748955,ICAL10396
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 31 09:31:05 2014
 Quant Method : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99) C24 Tetracyclic Terpane (	0.000		0	N.D.		
100) C26 Tricyclic Terpane-22S	0.000		0	N.D.	d	
101) C26 Tricyclic Terpane-22R	0.000		0	N.D.	d	
102) C28 Tricyclic Terpane-22S	0.000		0	N.D.	d	
103) C28 Tricyclic Terpane-22R	0.000		0	N.D.	d	
104) C29 Tricyclic Terpane-22S	0.000		0	N.D.	d	
105) C29 Tricyclic Terpane-22R	0.000		0	N.D.	d	
106) 18a-22,29,30-Trisnorneo	0.000		0	N.D.	d	
107) C30 Tricyclic Terpane-22S	0.000		0	N.D.	d	
108) C30 Tricyclic Terpane-22R	0.000		0	N.D.	d	
109) 17a(H)-22,29,30-Trisnor	0.000		0	N.D.	d	
110) 17a/b,21b/a 28,30-Bisnor	0.000		0	N.D.	d	
111) 17a(H),21b(H)-25-Norhop	0.000		0	N.D.	d	
112) 30-Norhopane (T15)	0.000		0	N.D.	d	
113) 18a(H)-30-Norneohopane-C	0.000		0	N.D.	d	
114) 17a(H)-Diahopane (X)	0.000		0	N.D.	d	
115) 30-Normoretane (T17)	0.000		0	N.D.	d	
116) 18a(H)&18b(H)-Oleananes (	0.000		0	N.D.	d	
117) Moretane (T20)	0.000		0	N.D.	d	
118) 30-Homohopane-22S (T21)	0.000		0	N.D.	d	
119) 30-Homohopane-22R (T22)	0.000		0	N.D.	d	
120) Gammacerane/C32-diahopane	0.000		0	N.D.	d	
121) 30,31-Bishomohopane-22S (	0.000		0	N.D.	d	
122) 30,31-Bishomohopane-22R (	0.000		0	N.D.	d	
123) 30,31-Trishomohopane-22S	0.000		0	N.D.	d	
124) 30,31-Trishomohopane-22R	0.000		0	N.D.	d	
125) Tetrakishomohopane-22S (T	0.000		0	N.D.	d	
126) Tetrakishomohopane-22R (T	0.000		0	N.D.	d	
127) Pentakishomohopane-22S (T	0.000		0	N.D.	d	
128) Pentakishomohopane-22R (T	0.000		0	N.D.	d	
130) 13b(H),17a(H)-20S-Diachol	0.000		0	N.D.		
131) 13b(H),17a(H)-20R-Diachol	0.000		0	N.D.		
132) 13b,17a-20S-Methyldiachol	0.000		0	N.D.		
133) 14a,17a-20S-Chol/13b,17a-	0.000		0	N.D.		
134) 14a,17a-20R-Chol/13b,17a-	0.000		0	N.D.		
135) Unknown Sterane (S18)	0.000		0	N.D.		
136) 13a,17b-20S-Ethyldiachole	0.000		0	N.D.		
137) 14a,17a-20S-Methylcholest	0.000		0	N.D.		
138) 14a,17a-20R-Methylcholest	0.000		0	N.D.		
139) 14a(H),17a(H)-20S-Ethylch	0.000		0	N.D.		
140) 14a(H),17a(H)-20R-Ethylch	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121417.D
 Acq On : 16 Dec 2014 9:54 pm
 Operator : PAH8:ML
 Sample : wg748955-2,32
 Misc : WG752852,WG748955,ICAL10396
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 31 09:31:05 2014
 Quant Method : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
141)	14b(H),17b(H)-20R-Cholest	0.000		0	N.D.	d	
142)	14b(H),17b(H)-20S-Cholest	0.000		0	N.D.	d	
143)	14b,17b-20R-Methylcholest	0.000		0	N.D.	d	
144)	14b,17b-20S-Methylcholest	0.000		0	N.D.		
145)	14b(H),17b(H)-20R-Ethylch	0.000		0	N.D.		
146)	14b(H),17b(H)-20S-Ethylch	0.000		0	N.D.		
147)	C26,20R- +C27,20S- triaro	0.000		0	N.D.		
148)	C28,20S-triaromatic stero	0.000		0	N.D.		
149)	C27,20R-triaromatic stero	0.000		0	N.D.		
150)	C28,20R-triaromatic stero	0.000		0	N.D.		

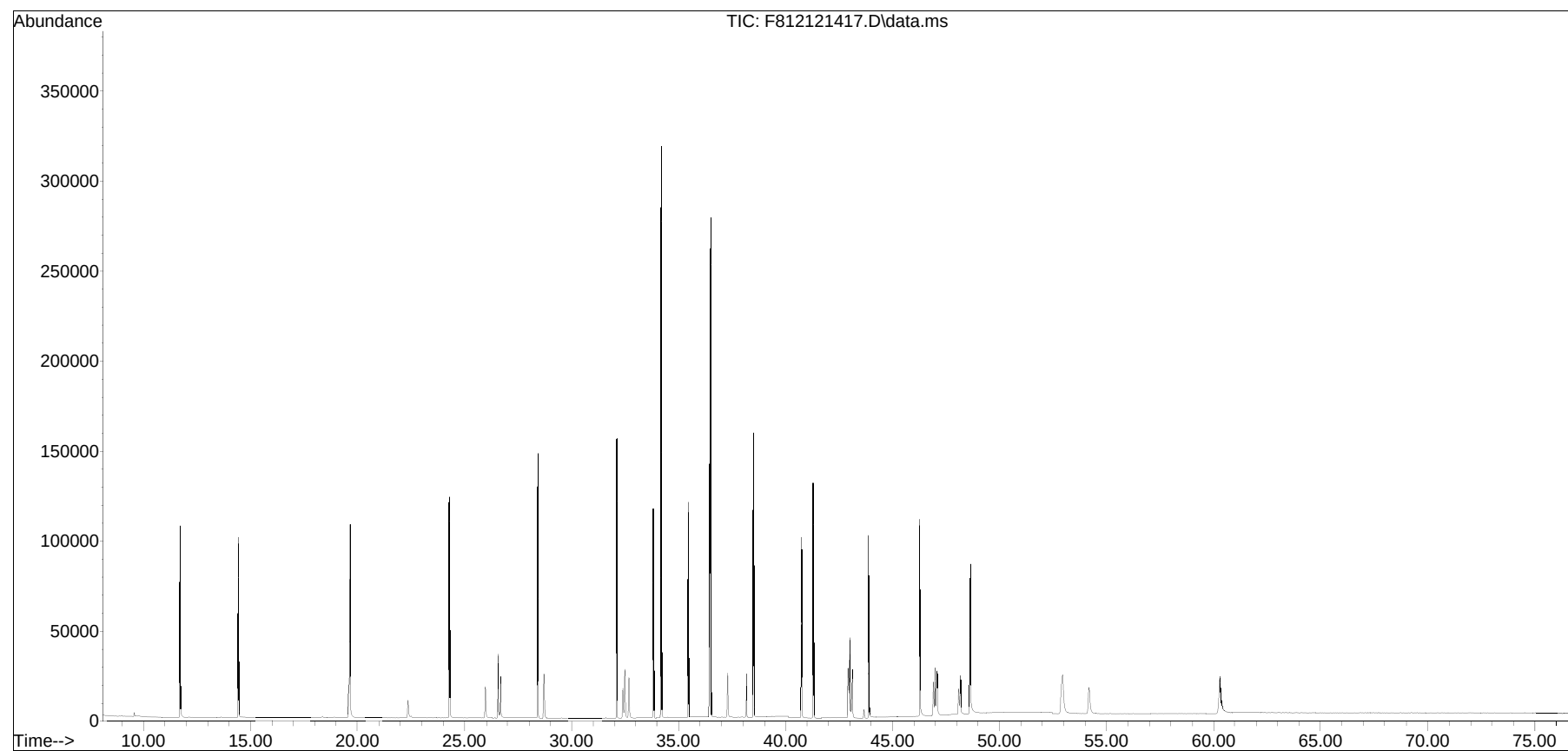
(#) = qualifier out of range (m) = manual integration (+) = signals summed

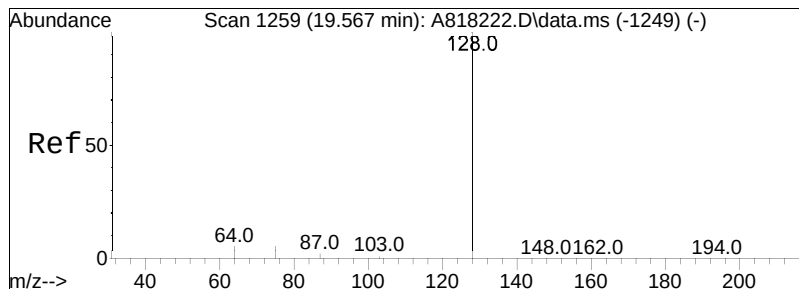
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\
Data File : F812121417.D
Acq On : 16 Dec 2014 9:54 pm
Operator : PAH8:ML
Sample : wg748955-2,32
Misc : WG752852,WG748955,ICAL10396
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 31 09:31:05 2014
Quant Method : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 09 18:27:44 2014
Response via : Initial Calibration

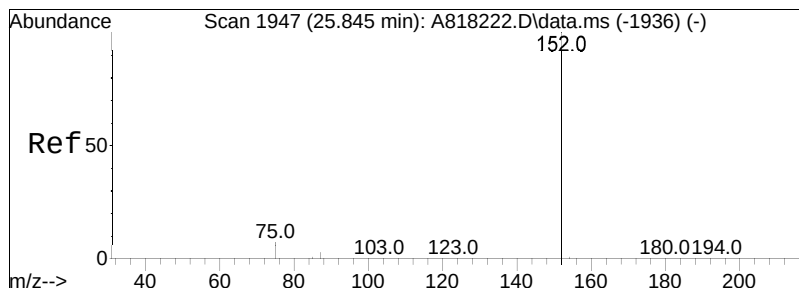
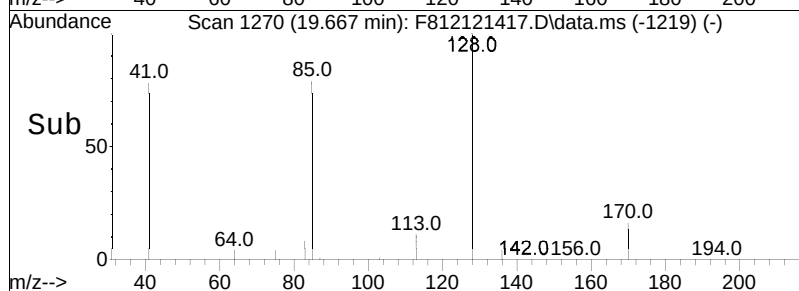
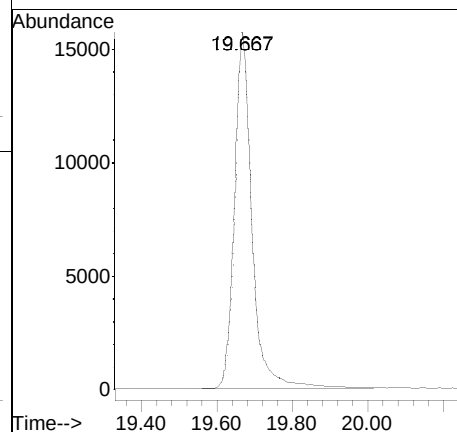
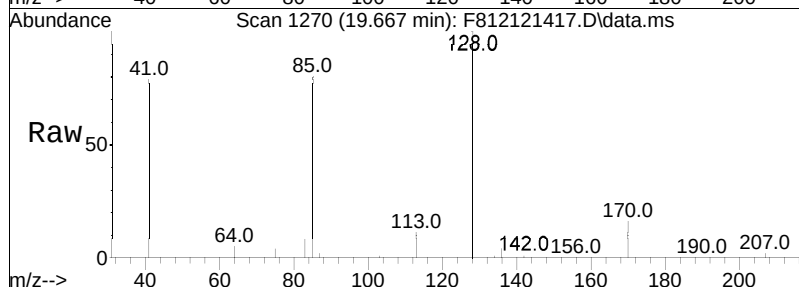
Sub List : ALKPAHURS - ALKPAH and BIO





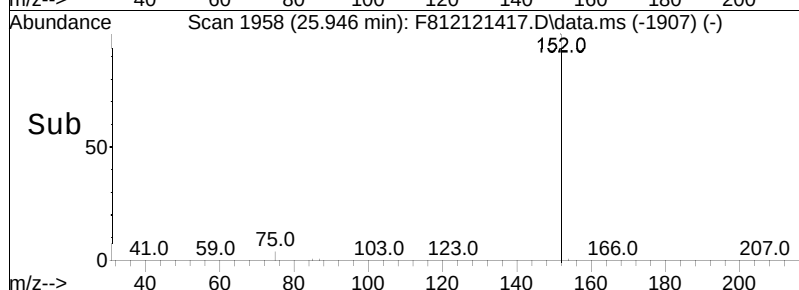
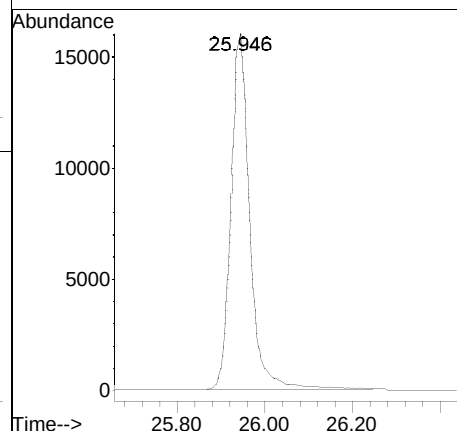
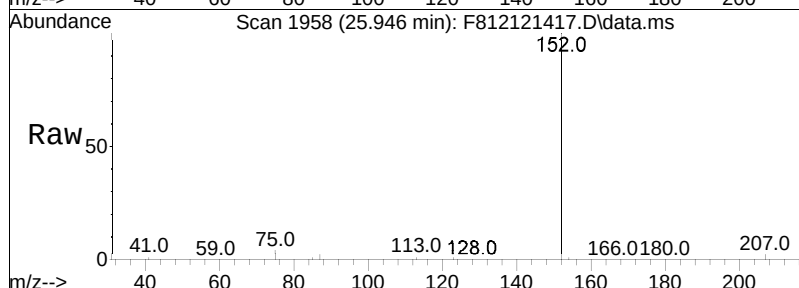
#10
Naphthalene
Concen: 246.34 ng/mL
RT: 19.667 min Scan# 1270
Delta R.T. -0.036 min
Lab File: F812121417.D
Acq: 16 Dec 2014 9:54 pm

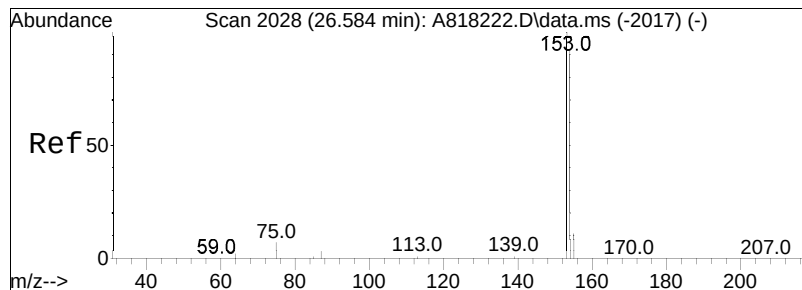
Tgt Ion:128 Resp: 49727



#26
Acenaphthylene
Concen: 255.52 ng/mL
RT: 25.946 min Scan# 1958
Delta R.T. -0.036 min
Lab File: F812121417.D
Acq: 16 Dec 2014 9:54 pm

Tgt Ion:152 Resp: 46571





#27

Acenaphthene

Concen: 269.52 ng/mL

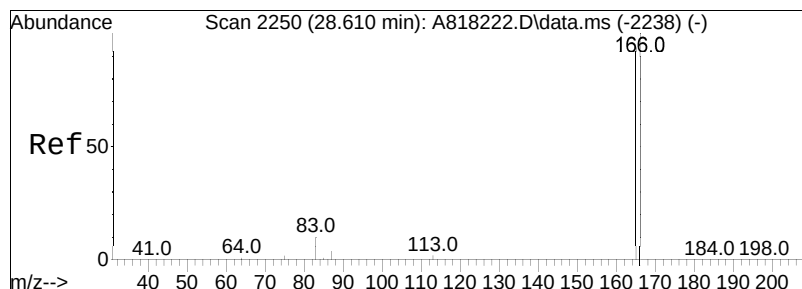
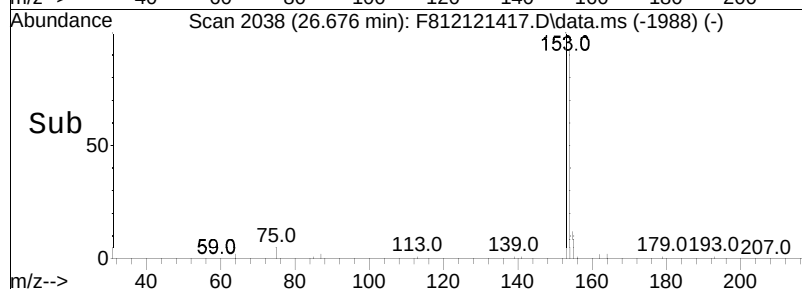
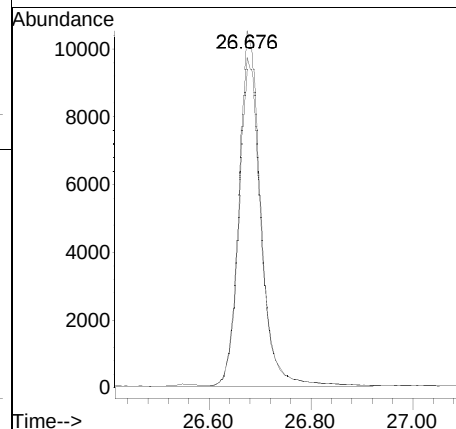
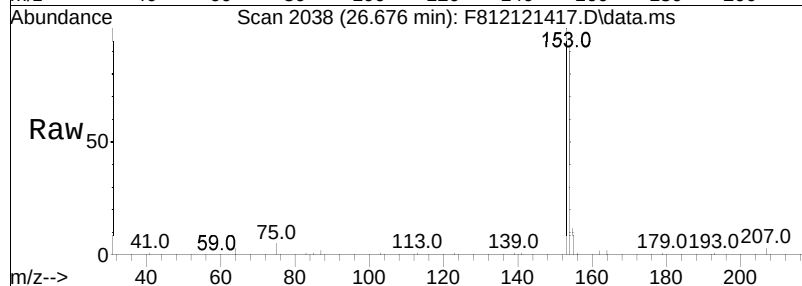
RT: 26.676 min Scan# 2038

Delta R.T. -0.046 min

Lab File: F812121417.D

Acq: 16 Dec 2014 9:54 pm

Tgt Ion	Ratio	Lower	Upper
153	100		
154	92.4	64.8	120.3



#29

Fluorene

Concen: 265.46 ng/mL

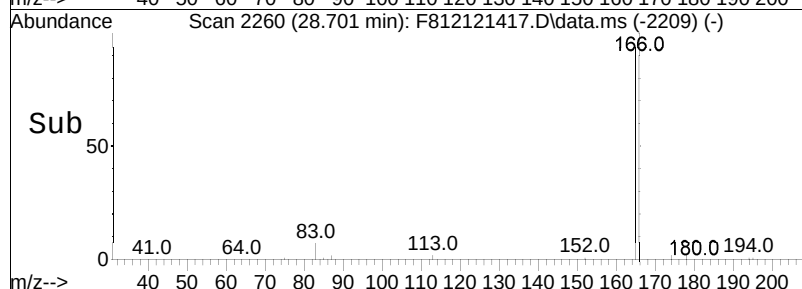
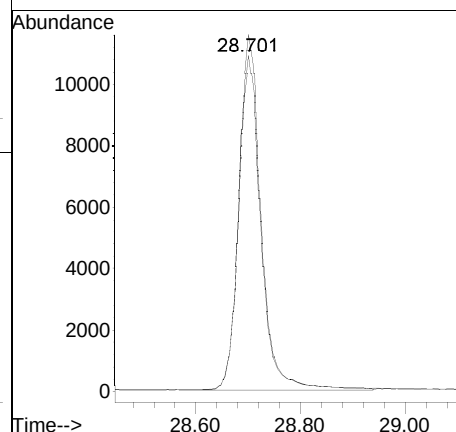
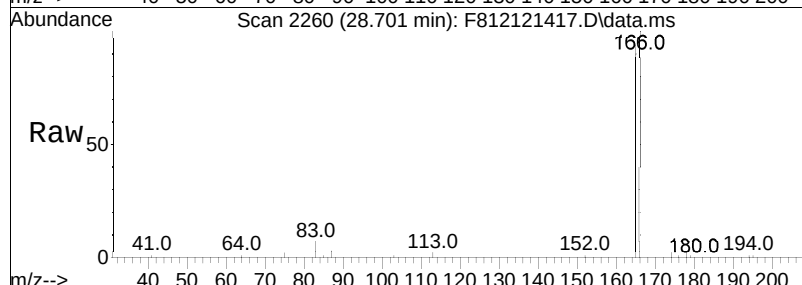
RT: 28.701 min Scan# 2260

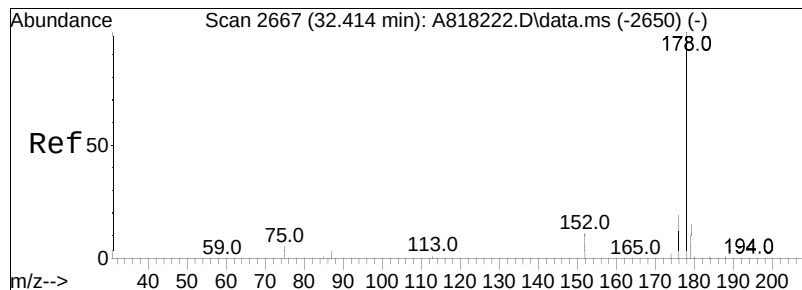
Delta R.T. -0.036 min

Lab File: F812121417.D

Acq: 16 Dec 2014 9:54 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
165	93.7	64.5	119.7





#43

Phenanthrene

Concen: 277.52 ng/mL

RT: 32.506 min Scan# 2677

Delta R.T. -0.046 min

Lab File: F812121417.D

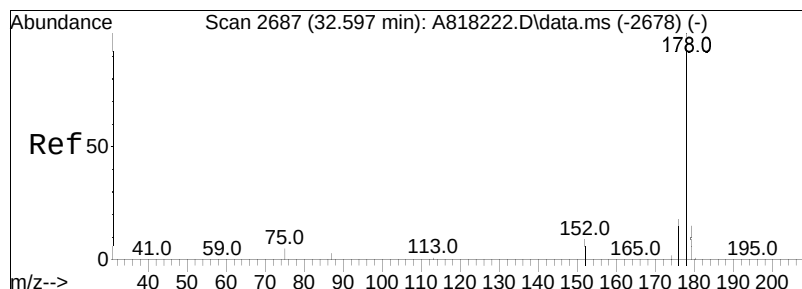
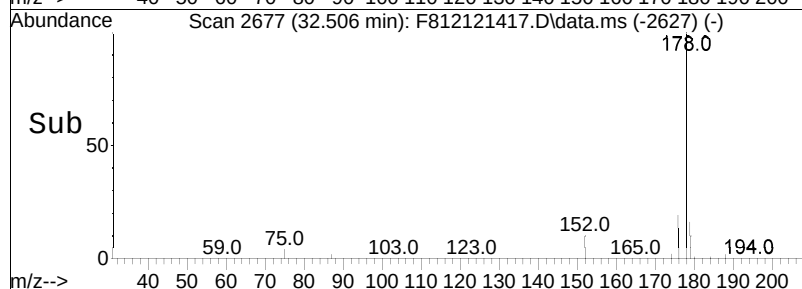
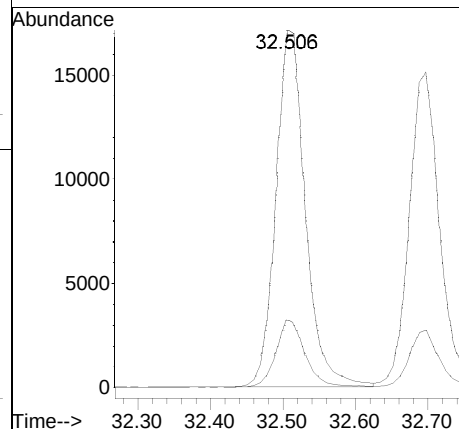
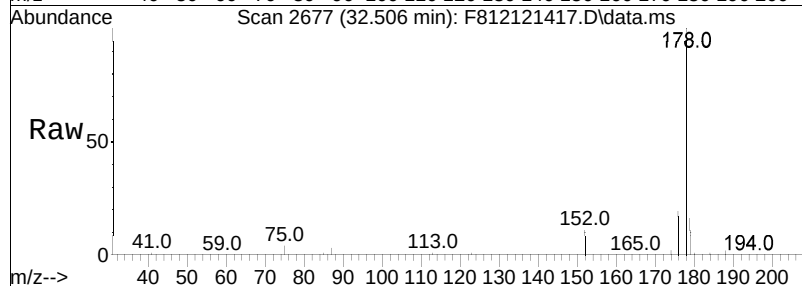
Acq: 16 Dec 2014 9:54 pm

Tgt Ion:178 Resp: 48295

Ion Ratio Lower Upper

178 100

176 18.5 12.6 23.4



#55

Anthracene

Concen: 293.56 ng/mL M4

RT: 32.697 min Scan# 2698

Delta R.T. -0.027 min

Lab File: F812121417.D

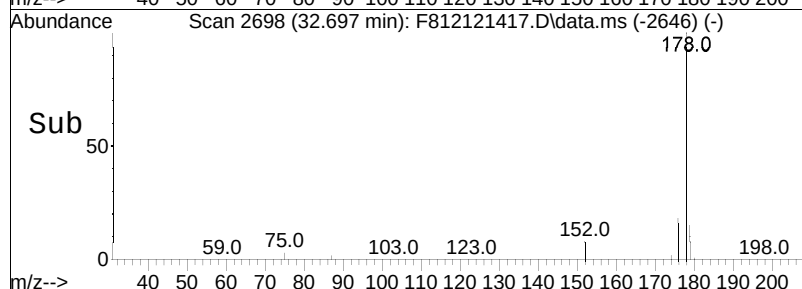
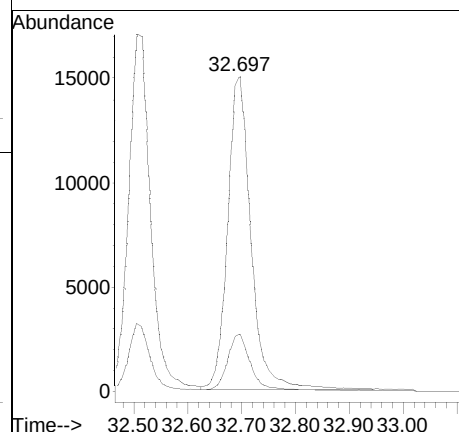
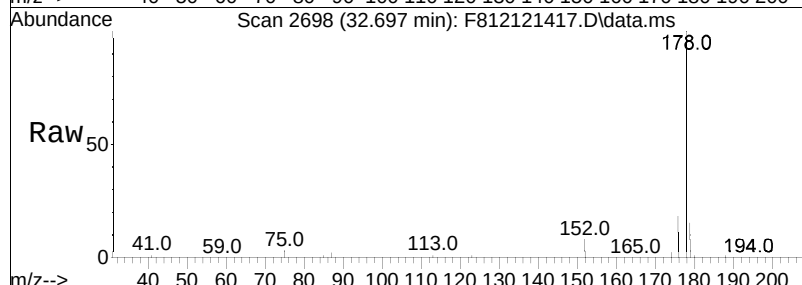
Acq: 16 Dec 2014 9:54 pm

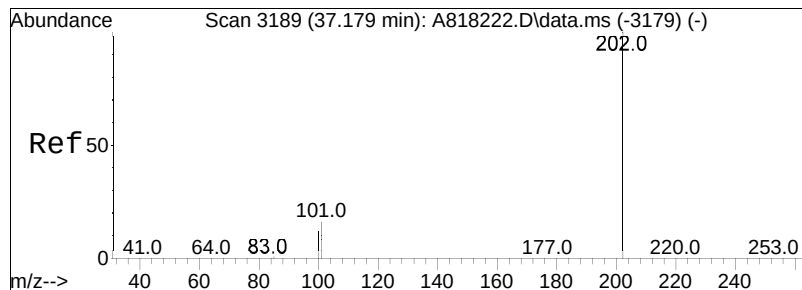
Tgt Ion:178 Resp: 45130

Ion Ratio Lower Upper

178 100

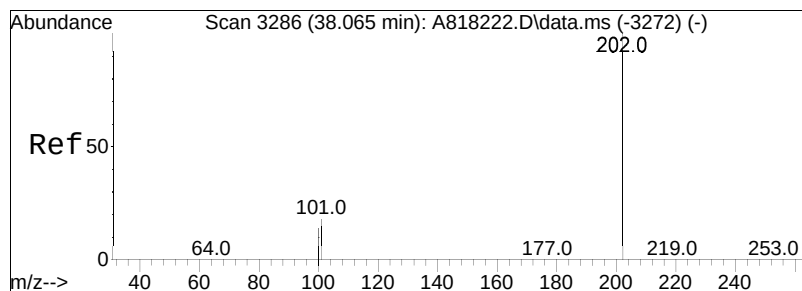
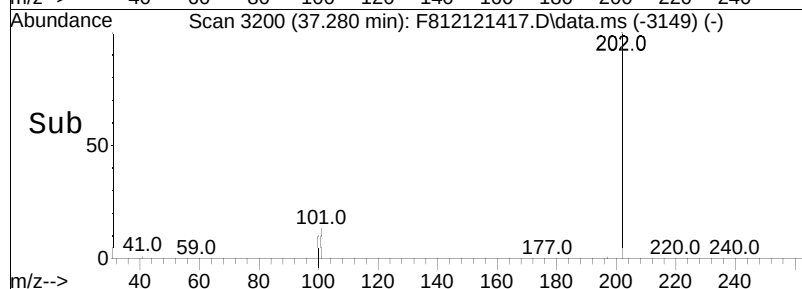
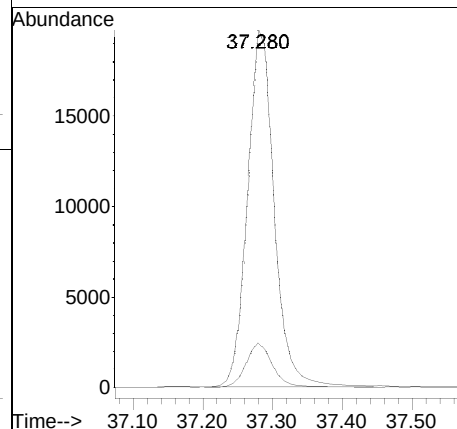
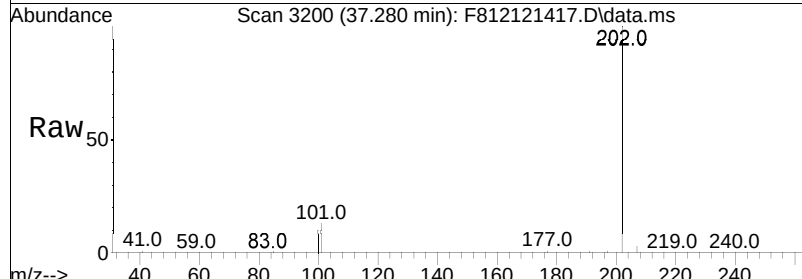
176 17.5 12.2 22.6





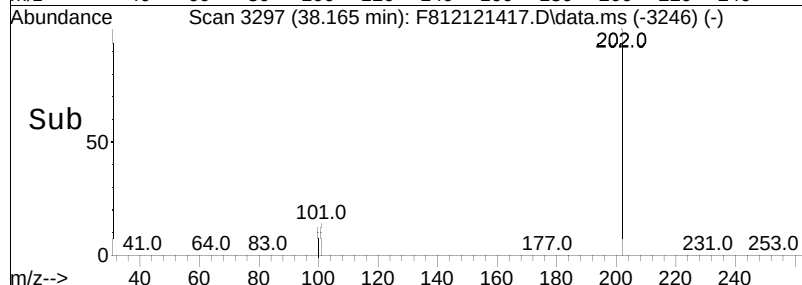
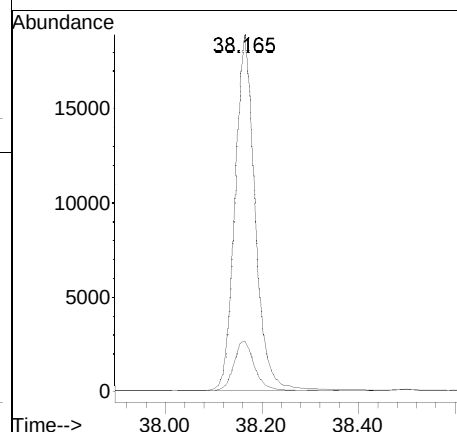
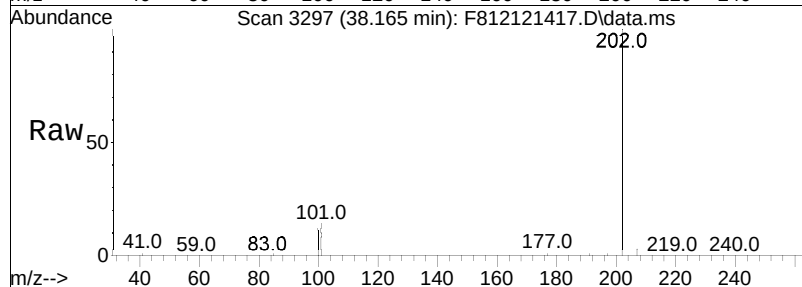
#58
 Fluoranthene
 Concen: 286.07 ng/mL
 RT: 37.280 min Scan# 3200
 Delta R.T. -0.037 min
 Lab File: F812121417.D
 Acq: 16 Dec 2014 9:54 pm

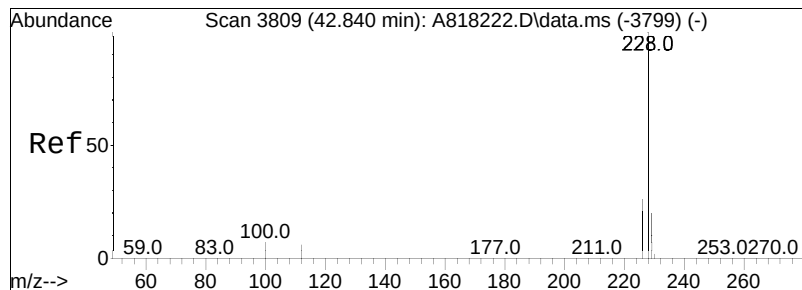
Tgt	Ion	Ratio	Lower	Upper
202	100			
101	12.2		9.1	16.9



#60
 Pyrene
 Concen: 285.45 ng/mL
 RT: 38.165 min Scan# 3297
 Delta R.T. -0.037 min
 Lab File: F812121417.D
 Acq: 16 Dec 2014 9:54 pm

Tgt	Ion	Ratio	Lower	Upper
202	100			
101	14.4		10.0	18.6





#75

Benz[a]anthracene

Concen: 251.59 ng/mL

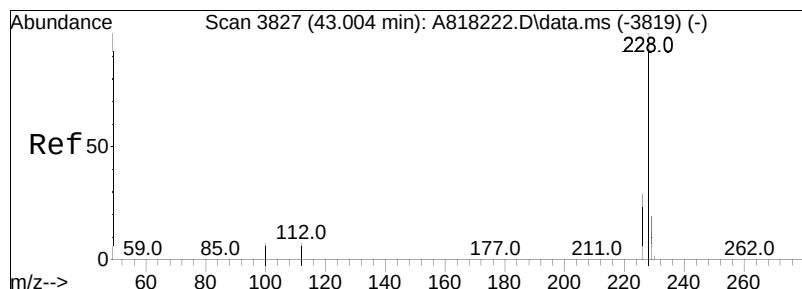
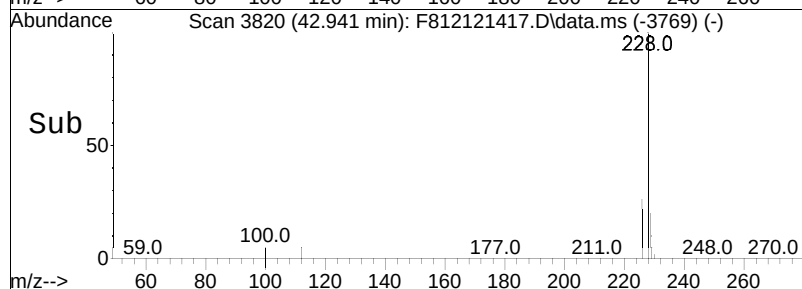
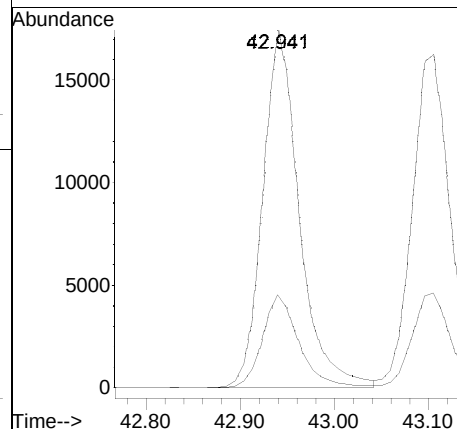
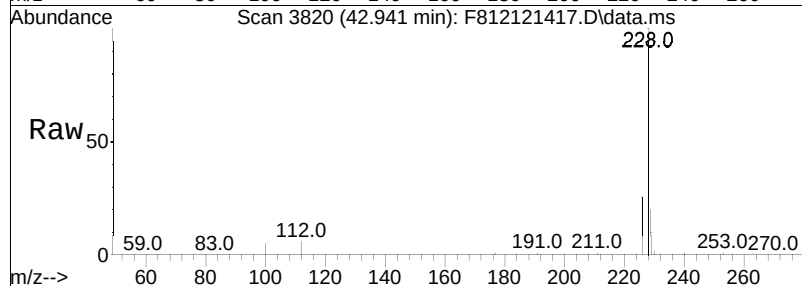
RT: 42.941 min Scan# 3820

Delta R.T. -0.036 min

Lab File: F812121417.D

Acq: 16 Dec 2014 9:54 pm

Tgt Ion	Ratio	Lower	Upper
228	100		
226	25.6	18.0	33.4



#77

Chrysene/Triphenylene

Concen: 251.26 ng/mL

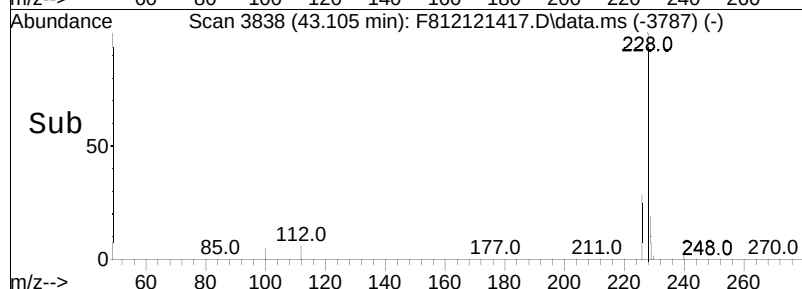
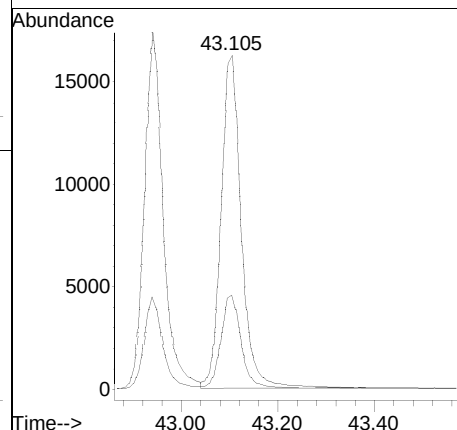
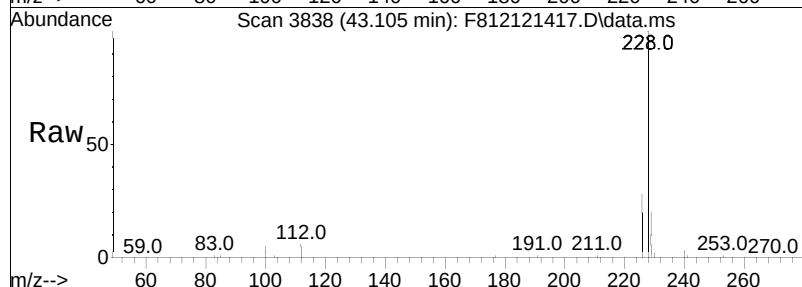
RT: 43.105 min Scan# 3838

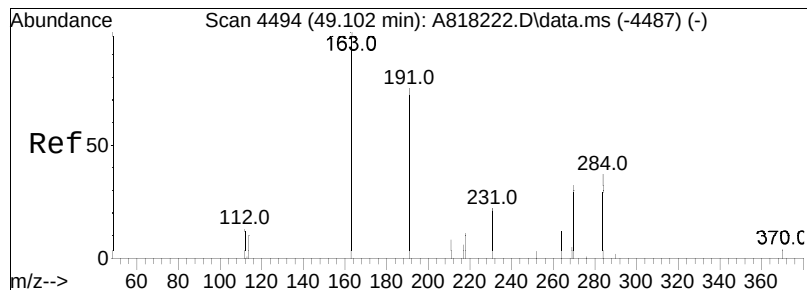
Delta R.T. -0.037 min

Lab File: F812121417.D

Acq: 16 Dec 2014 9:54 pm

Tgt Ion	Ratio	Lower	Upper
228	100		
226	27.9	19.3	35.8





#84

Benzo[b]fluoranthene

Concen: 255.18 ng/mL

RT: 46.989 min Scan# 4263

Delta R.T. -0.037 min

Lab File: F812121417.D

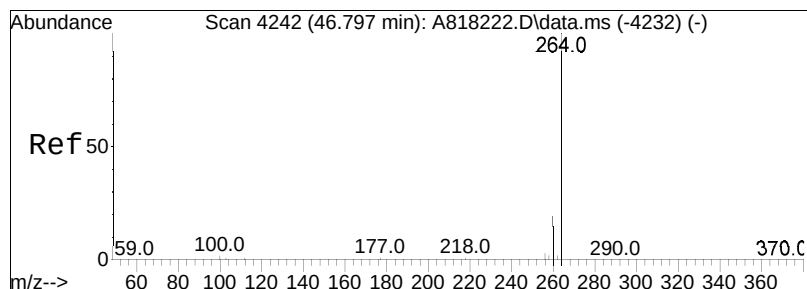
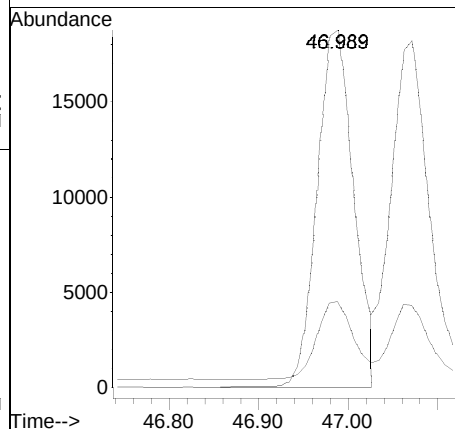
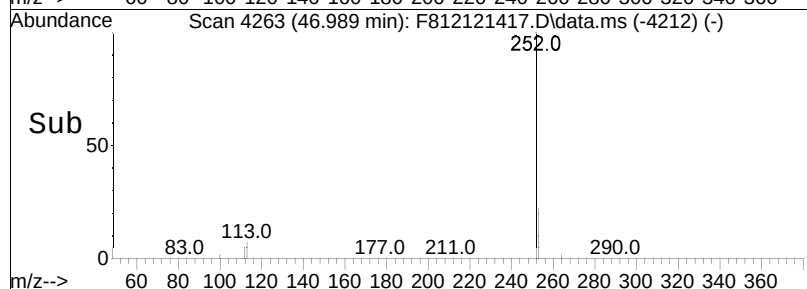
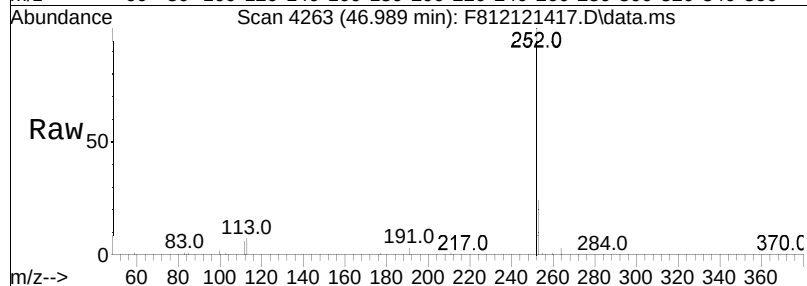
Acq: 16 Dec 2014 9:54 pm

Tgt Ion:252 Resp: 53252

Ion Ratio Lower Upper

252 100

253 22.1 16.1 29.9



#85

Benzo[j]+[k]fluoranthene

Concen: 285.51 ng/mL

RT: 47.071 min Scan# 4272

Delta R.T. -0.037 min

Lab File: F812121417.D

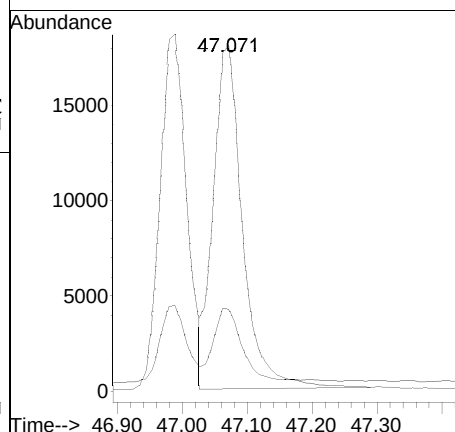
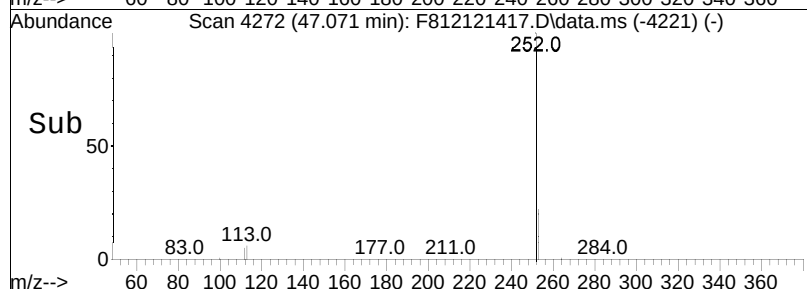
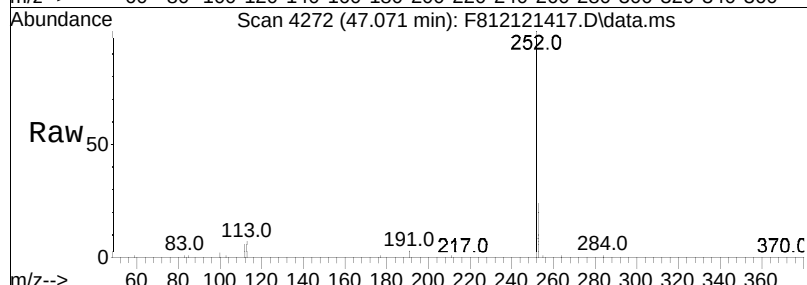
Acq: 16 Dec 2014 9:54 pm

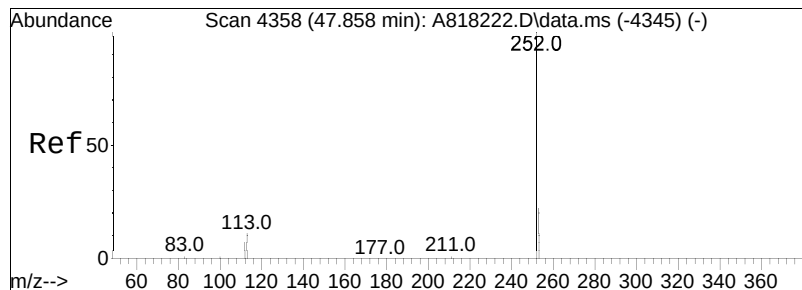
Tgt Ion:252 Resp: 56320

Ion Ratio Lower Upper

252 100

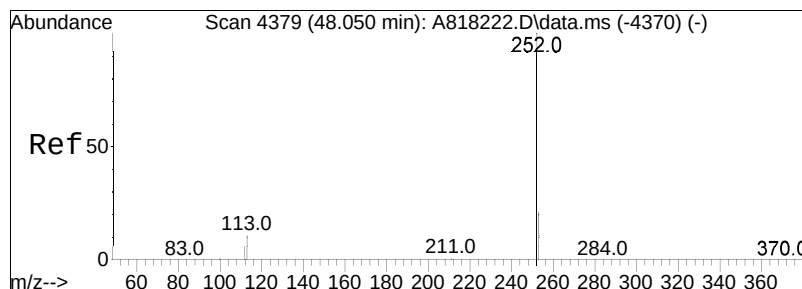
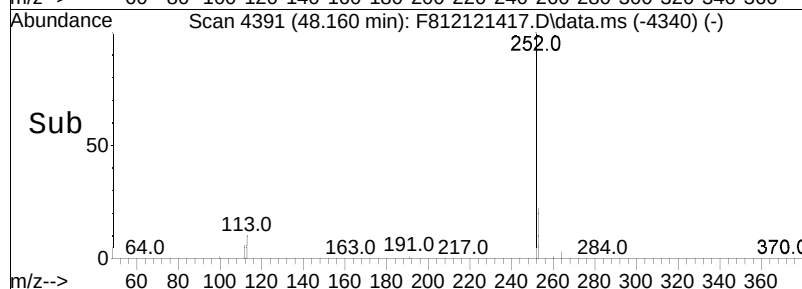
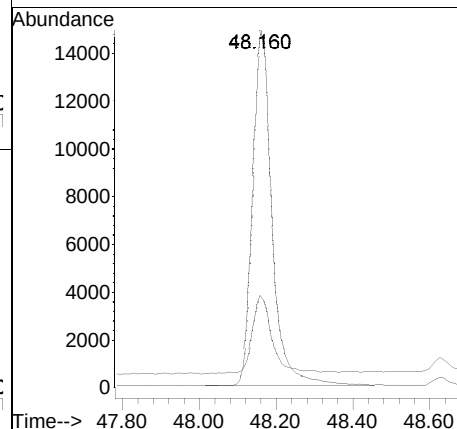
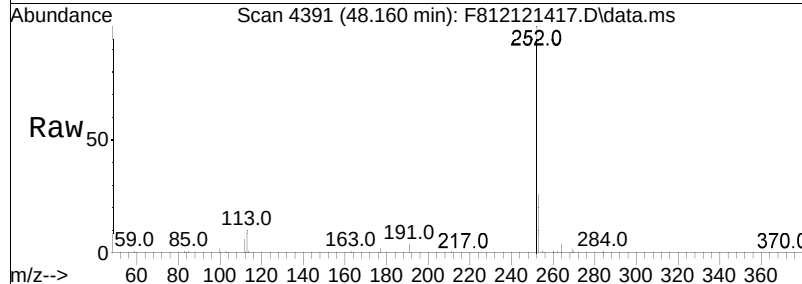
253 21.7 16.4 30.6





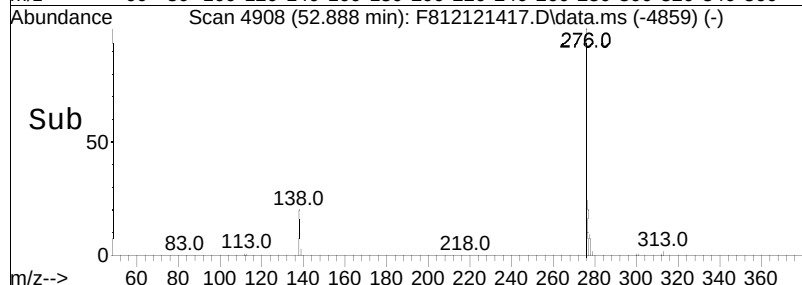
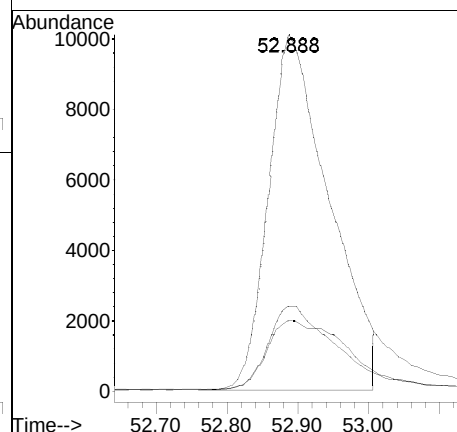
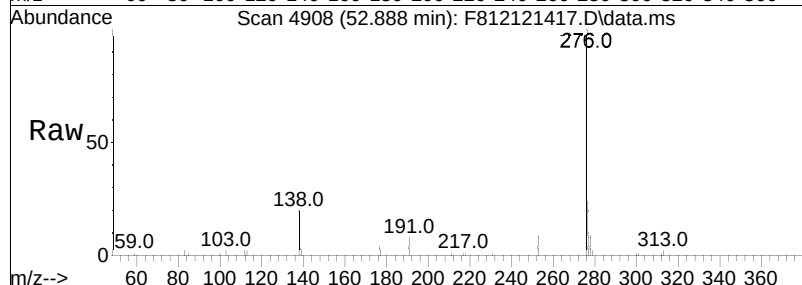
#89
Benzo[a]pyrene
Concen: 284.30 ng/mL
RT: 48.160 min Scan# 4391
Delta R.T. -0.037 min
Lab File: F812121417.D
Acq: 16 Dec 2014 9:54 pm

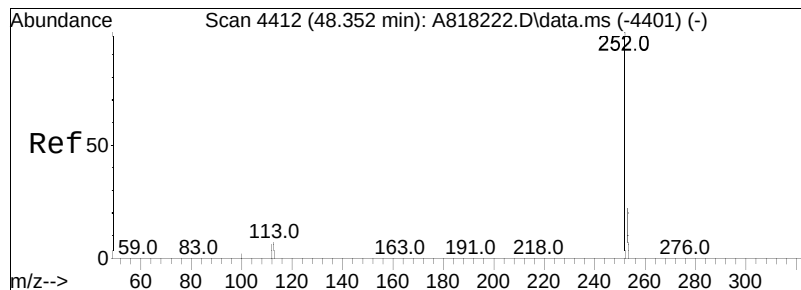
Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.0	16.7	30.9



#91
Indeno[1,2,3-cd]pyrene
Concen: 247.46 ng/mL M4
RT: 52.888 min Scan# 4908
Delta R.T. -0.055 min
Lab File: F812121417.D
Acq: 16 Dec 2014 9:54 pm

Tgt Ion	Ratio	Lower	Upper
276	100		
138	26.7	13.8	25.6#
277	27.5	16.9	31.5





#92

Dibenz[ah]+[ac]anthracene

Concen: 262.15 ng/mL

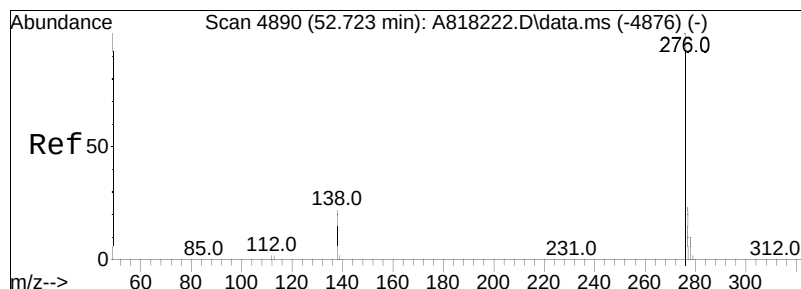
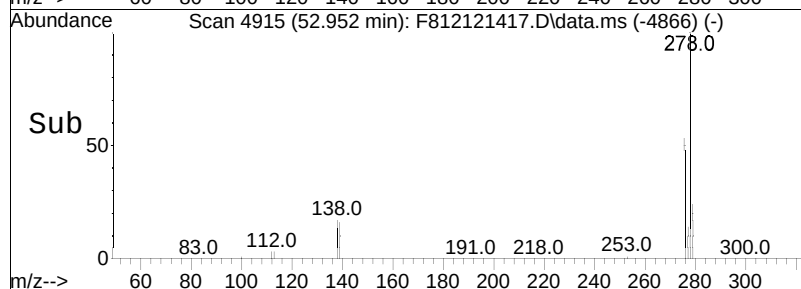
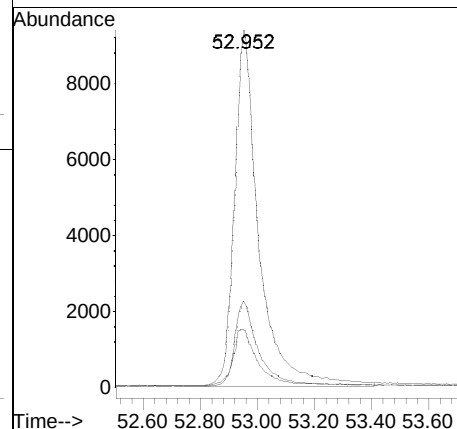
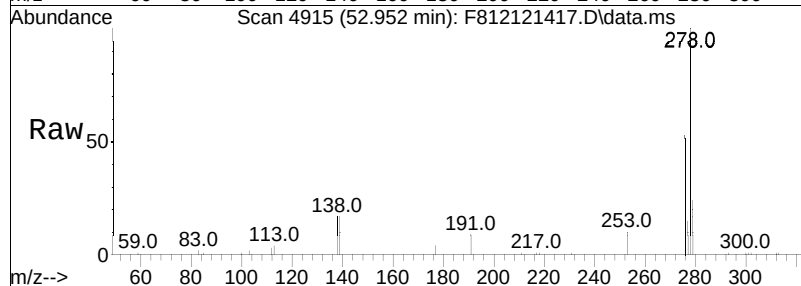
RT: 52.952 min Scan# 4915

Delta R.T. -0.055 min

Lab File: F812121417.D

Acq: 16 Dec 2014 9:54 pm

Tgt Ion:	278	Resp:	54886
Ion Ratio	Lower	Upper	
278	100		
139	15.3	11.1	20.5
279	23.0	17.1	31.7



#93

Benzo[g,h,i]perylene

Concen: 238.05 ng/mL

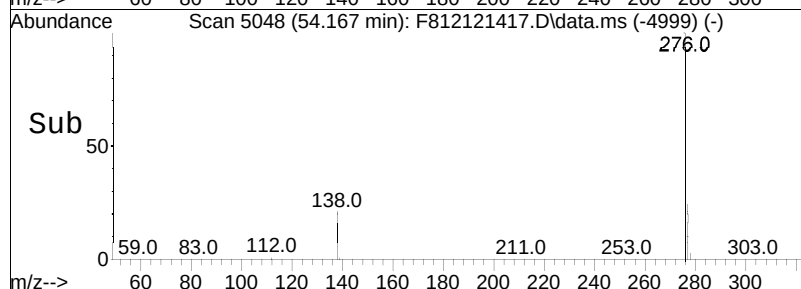
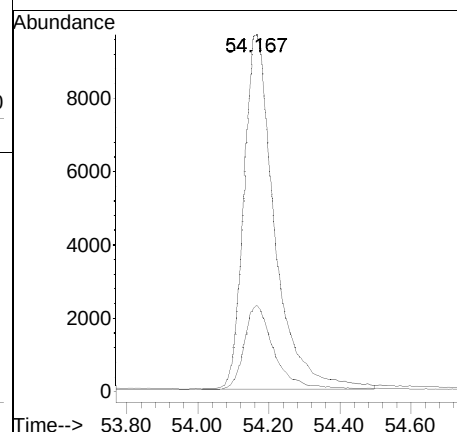
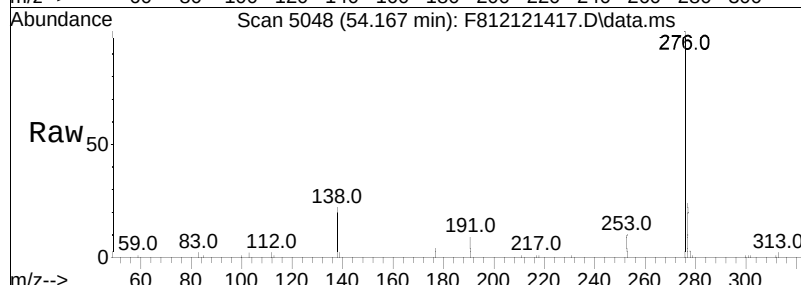
RT: 54.167 min Scan# 5048

Delta R.T. -0.055 min

Lab File: F812121417.D

Acq: 16 Dec 2014 9:54 pm

Tgt Ion:	276	Resp:	57604
Ion Ratio	Lower	Upper	
276	100		
277	23.3	16.6	30.8



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121418.D
 Acq On : 16 Dec 2014 11:20 pm
 Operator : PAH8:ML
 Sample : wg748955-3,32
 Misc : WG752852,WG748955,ICAL10396
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 31 09:31:11 2014
 Quant Method : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.557	164	48142	500.000	ng/mL	-0.04
74) Chrysene-d12	43.004	240	89588	500.000	ng/mL	-0.04
System Monitoring Compounds						
9) Naphthalene-d8	19.594	136	45195	245.129	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	24.51%#		
42) Phenanthrene-d10	32.424	188	37793	268.756	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	26.88%#		
83) Benzo[b]fluoranthene-d12	46.907	264	43122	247.754	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	24.78%#		
88) Benzo[a]pyrene-d12	48.077	264	36728	260.165	ng/mL	-0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery =	26.02%#		
129) 5B(H)Cholane - Surr	43.634	217	6872	245.029	ng/mL	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery =	24.50%#		
Target Compounds						
10) Naphthalene	19.667	128	49726	250.317	ng/mL	100
11) C1-Naphthalenes	0.000		0	N.D.	d	
12) C2-Naphthalenes	0.000		0	N.D.		
13) C3-Naphthalenes	0.000		0	N.D.		
14) C4-Naphthalenes	0.000		0	N.D.		
23) Biphenyl	0.000		0	N.D.	d	
25) Dibenzofuran	0.000		0	N.D.		
26) Acenaphthylene	25.946	152	47711M4	266.010	ng/mL	
27) Acenaphthene	26.685	153	31651	277.782	ng/mL	100
29) Fluorene	28.701	166	34762	276.554	ng/mL	99
30) C1-Fluorenes	0.000		0	N.D.		
31) C2-Fluorenes	0.000		0	N.D.		
32) C3-Fluorenes	0.000		0	N.D.		
33) Dibenzothiophene	0.000		0	N.D.	d	
37) OTP	0.000		0	N.D.	d	
38) C1-Dibenzothiophenes	0.000		0	N.D.	d	
38) C1-Dibenzothiophenes BS	0.000		0d	0.000	ng/mL	
39) C2-Dibenzothiophenes	0.000		0	N.D.	d	
40) C3-Dibenzothiophenes	0.000		0	N.D.		
41) C4-Dibenzothiophenes	0.000		0	N.D.	d	
43) Phenanthrene	32.515	178	49062	286.489	ng/mL	99
49) C1-Phenanthrenes/Anthrace	0.000		0	N.D.		
50) C2-Phenanthrenes/Anthrace	0.000		0	N.D.	d	
50) C2-Phenanthrenes/Anthr BS	0.000		0d	0.000	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121418.D
 Acq On : 16 Dec 2014 11:20 pm
 Operator : PAH8:ML
 Sample : wg748955-3,32
 Misc : WG752852,WG748955,ICAL10396
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 31 09:31:11 2014
 Quant Method : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

51) 5AA IS BKGD	0.000		0	N.D.	d	
52) C3-Phenanthrenes/Anthrace	0.000		0	N.D.		
53) C4-Phenanthrenes/Anthrace	0.000		0	N.D.		
55) Anthracene	32.697	178	46297M4	306.028	ng/mL	
56) Carbazole	0.000		0	N.D.	d	
58) Fluoranthene	37.280	202	52376	295.772	ng/mL	98
59) Benzo(b)fluorene	0.000		0	N.D.		
60) Pyrene	38.165	202	54284	294.130	ng/mL	100
61) C1-Fluoranthenes/Pyrenes	0.000		0	N.D.		
62) C2-Fluoranthenes/Pyrenes	0.000		0	N.D.	d	
63) C3-Fluoranthenes/Pyrenes	0.000		0	N.D.		
64) C4-Fluoranthenes/Pyrenes	0.000		0	N.D.		
66) Naphthobenzothiophene	0.000		0	N.D.		
67) Naphthobenzothiophene-2,1	0.000		0	N.D.		
68) Naphthobenzothiophene-1,2	0.000		0	N.D.		
69) Naphthobenzothiophene-2,3	0.000		0	N.D.	d	
70) C1-Naphthobenzothiophenes	0.000		0	N.D.		
71) C2-Naphthobenzothiophenes	0.000		0	N.D.		
72) C3-Naphthobenzothiophenes	0.000		0	N.D.		
73) C4-Naphthobenzothiophenes	0.000		0	N.D.		
75) Benz[a]anthracene	42.940	228	47044	258.685	ng/mL	100
77) Chrysene/Triphenylene	43.105	228	47071	257.079	ng/mL	98
78) C1-Chrysenes	0.000		0	N.D.		
79) C2-Chrysenes	0.000		0	N.D.	d	
79) C2-Chrysenes BS	0.000		0d	0.000	ng/mL	
80) BBF-D12 Surr BKGD	0.000		0	N.D.	d	
81) C3-Chrysenes	0.000		0	N.D.		
82) C4-Chrysenes	0.000		0	N.D.	d	
84) Benzo[b]fluoranthene	46.989	252	53956	262.892	ng/mL	99
85) Benzo[j]+[k]fluoranthene	47.071	252	57854	298.210	ng/mL	96
86) Benzo[a]fluoranthene	0.000		0	N.D.	d	
87) Benzo[e]pyrene	0.000		0	N.D.	d	
89) Benzo[a]pyrene	48.160	252	52384	289.984	ng/mL	95
90) Perylene	0.000		0	N.D.	d	
91) Indeno[1,2,3-cd]pyrene	52.888	276	59380M4	249.173	ng/mL	
92) Dibenzo[ah]+[ac]anthracene	52.952	278	55542	269.738	ng/mL	98
93) Benzo[g,h,i]perylene	54.167	276	57874	243.176	ng/mL	100
94) Hopane (T19)	0.000		0	N.D.	d	
96) C23 Tricyclic Terpane (T4	0.000		0	N.D.	d	
97) C24 Tricyclic Terpane (T5	0.000		0	N.D.		
98) C25 Tricyclic Terpane (T6	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121418.D
 Acq On : 16 Dec 2014 11:20 pm
 Operator : PAH8:ML
 Sample : wg748955-3,32
 Misc : WG752852,WG748955,ICAL10396
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 31 09:31:11 2014
 Quant Method : O:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99) C24 Tetracyclic Terpane (	0.000		0	N.D.		
100) C26 Tricyclic Terpane-22S	0.000		0	N.D.	d	
101) C26 Tricyclic Terpane-22R	0.000		0	N.D.	d	
102) C28 Tricyclic Terpane-22S	0.000		0	N.D.	d	
103) C28 Tricyclic Terpane-22R	0.000		0	N.D.	d	
104) C29 Tricyclic Terpane-22S	0.000		0	N.D.	d	
105) C29 Tricyclic Terpane-22R	0.000		0	N.D.	d	
106) 18a-22,29,30-Trisnorneocho	0.000		0	N.D.	d	
107) C30 Tricyclic Terpane-22S	0.000		0	N.D.	d	
108) C30 Tricyclic Terpane-22R	0.000		0	N.D.	d	
109) 17a(H)-22,29,30-Trisnorho	0.000		0	N.D.	d	
110) 17a/b,21b/a 28,30-Bisnorh	0.000		0	N.D.	d	
111) 17a(H),21b(H)-25-Norhopan	0.000		0	N.D.	d	
112) 30-Norhopane (T15)	0.000		0	N.D.	d	
113) 18a(H)-30-Norneohopane-C2	0.000		0	N.D.	d	
114) 17a(H)-Diahopane (X)	0.000		0	N.D.	d	
115) 30-Normoretane (T17)	0.000		0	N.D.	d	
116) 18a(H)&18b(H)-Oleananes (	0.000		0	N.D.	d	
117) Moretane (T20)	0.000		0	N.D.	d	
118) 30-Homohopane-22S (T21)	0.000		0	N.D.	d	
119) 30-Homohopane-22R (T22)	0.000		0	N.D.	d	
120) Gammacerane/C32-diahopane	0.000		0	N.D.	d	
121) 30,31-Bishomohopane-22S (	0.000		0	N.D.	d	
122) 30,31-Bishomohopane-22R (	0.000		0	N.D.	d	
123) 30,31-Trishomohopane-22S	0.000		0	N.D.	d	
124) 30,31-Trishomohopane-22R	0.000		0	N.D.	d	
125) Tetrakishomohopane-22S (T	0.000		0	N.D.	d	
126) Tetrakishomohopane-22R (T	0.000		0	N.D.	d	
127) Pentakishomohopane-22S (T	0.000		0	N.D.	d	
128) Pentakishomohopane-22R (T	0.000		0	N.D.	d	
130) 13b(H),17a(H)-20S-Diachol	0.000		0	N.D.		
131) 13b(H),17a(H)-20R-Diachol	0.000		0	N.D.		
132) 13b,17a-20S-Methyl diachol	0.000		0	N.D.		
133) 14a,17a-20S-Chol/13b,17a-	0.000		0	N.D.		
134) 14a,17a-20R-Chol/13b,17a-	0.000		0	N.D.		
135) Unknown Sterane (S18)	0.000		0	N.D.		
136) 13a,17b-20S-Ethyl diachole	0.000		0	N.D.		
137) 14a,17a-20S-Methylcholest	0.000		0	N.D.		
138) 14a,17a-20R-Methylcholest	0.000		0	N.D.		
139) 14a(H),17a(H)-20S-Ethylch	0.000		0	N.D.		
140) 14a(H),17a(H)-20R-Ethylch	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\
 Data File : F812121418.D
 Acq On : 16 Dec 2014 11:20 pm
 Operator : PAH8:ML
 Sample : wg748955-3,32
 Misc : WG752852,WG748955,ICAL10396
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 31 09:31:11 2014
 Quant Method : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 09 18:27:44 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

	Compound	R.T. QIon	Response	Conc	Units	Dev(Min)
141)	14b(H),17b(H)-20R-Cholest	0.000	0	N.D.	d	
142)	14b(H),17b(H)-20S-Cholest	0.000	0	N.D.	d	
143)	14b,17b-20R-Methylcholest	0.000	0	N.D.		
144)	14b,17b-20S-Methylcholest	0.000	0	N.D.		
145)	14b(H),17b(H)-20R-Ethylch	0.000	0	N.D.		
146)	14b(H),17b(H)-20S-Ethylch	0.000	0	N.D.		
147)	C26,20R- +C27,20S- triaro	0.000	0	N.D.		
148)	C28,20S-triaromatic stero	0.000	0	N.D.		
149)	C27,20R-triaromatic stero	0.000	0	N.D.		
150)	C28,20R-triaromatic stero	0.000	0	N.D.		

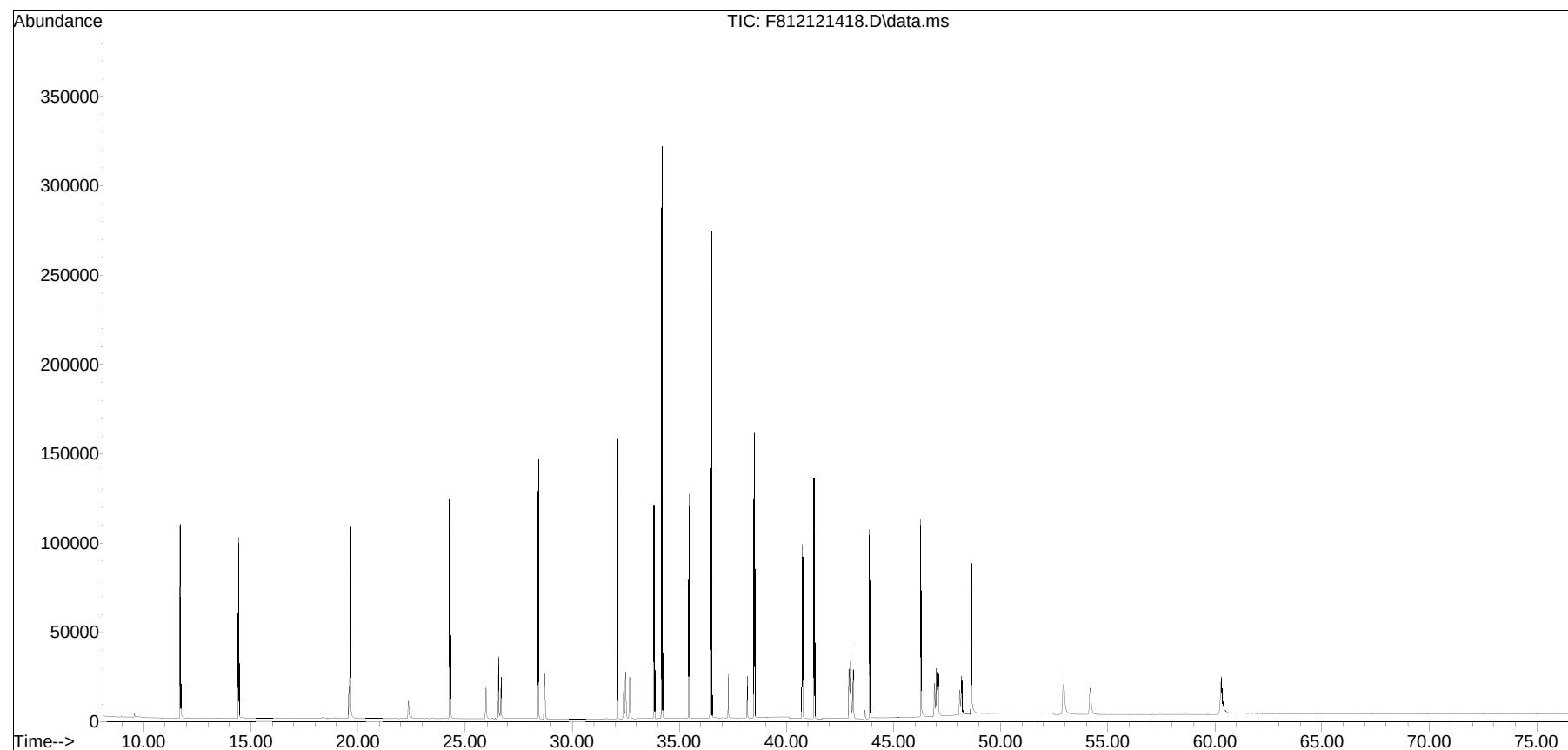
(#) = qualifier out of range (m) = manual integration (+) = signals summed

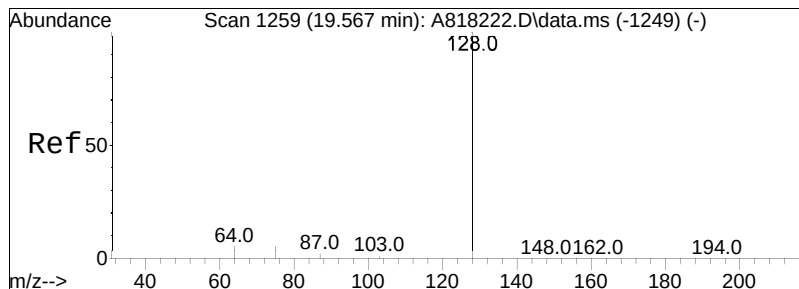
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\
Data File : F812121418.D
Acq On : 16 Dec 2014 11:20 pm
Operator : PAH8:ML
Sample : wg748955-3,32
Misc : WG752852,WG748955,ICAL10396
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 31 09:31:11 2014
Quant Method : 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\PAH8111214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 09 18:27:44 2014
Response via : Initial Calibration

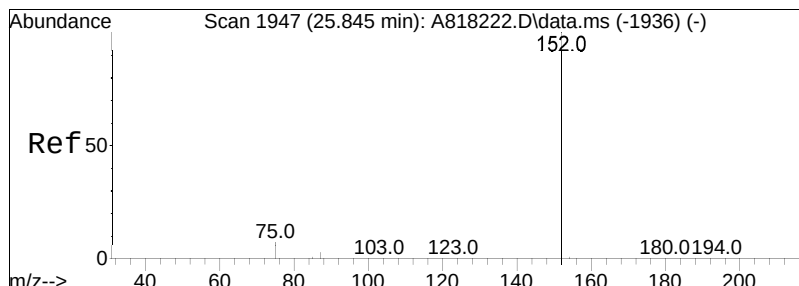
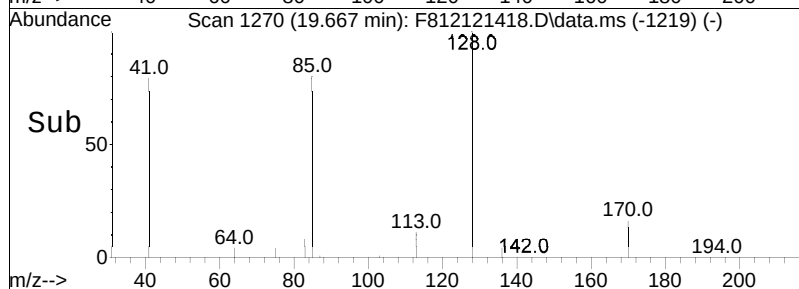
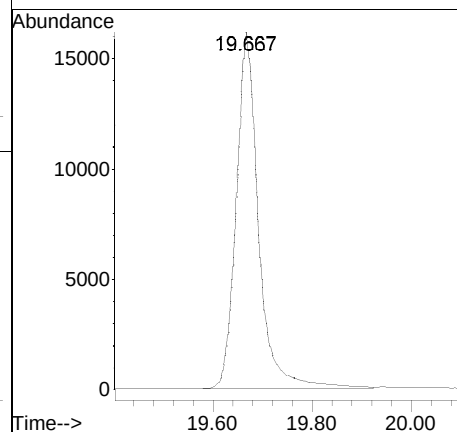
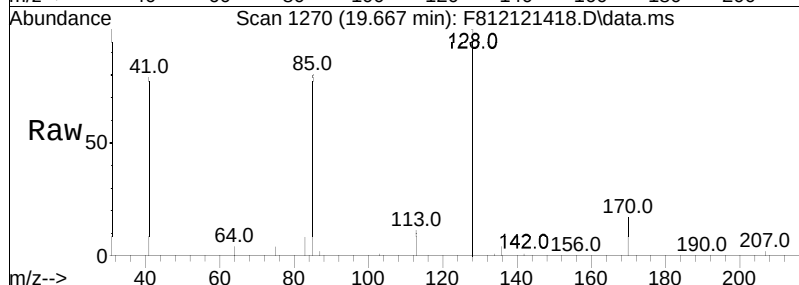
Sub List : ALKPAHURS - ALKPAH and BIO





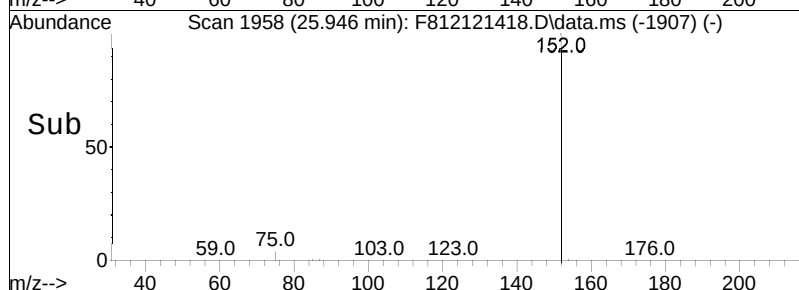
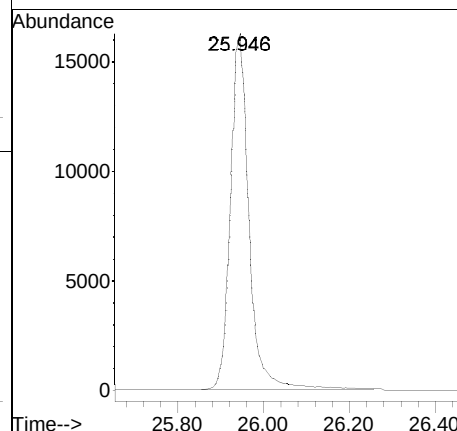
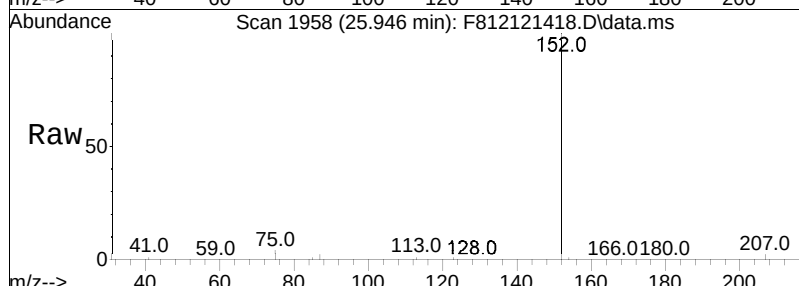
#10
Naphthalene
Concen: 250.32 ng/mL
RT: 19.667 min Scan# 1270
Delta R.T. -0.037 min
Lab File: F812121418.D
Acq: 16 Dec 2014 11:20 pm

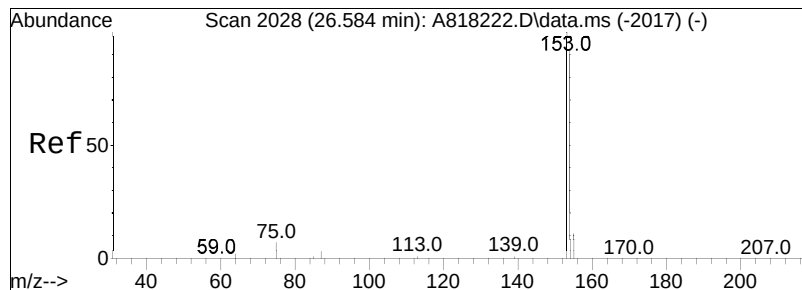
Tgt Ion:128 Resp: 49726



#26
Acenaphthylene
Concen: 266.01 ng/mL M4
RT: 25.946 min Scan# 1958
Delta R.T. -0.037 min
Lab File: F812121418.D
Acq: 16 Dec 2014 11:20 pm

Tgt Ion:152 Resp: 47711





#27

Acenaphthene

Concen: 277.78 ng/mL

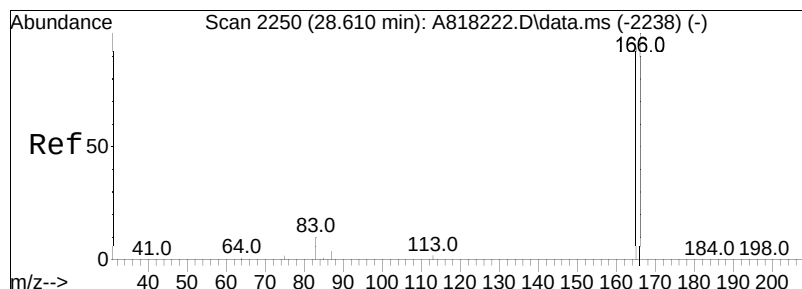
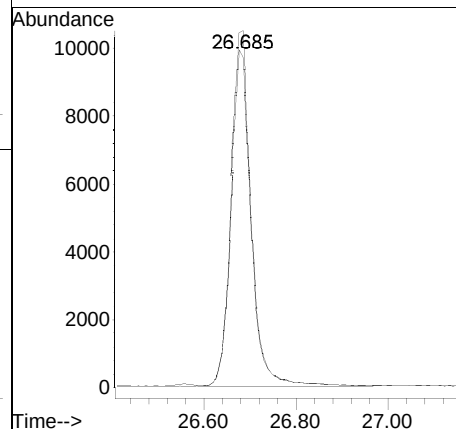
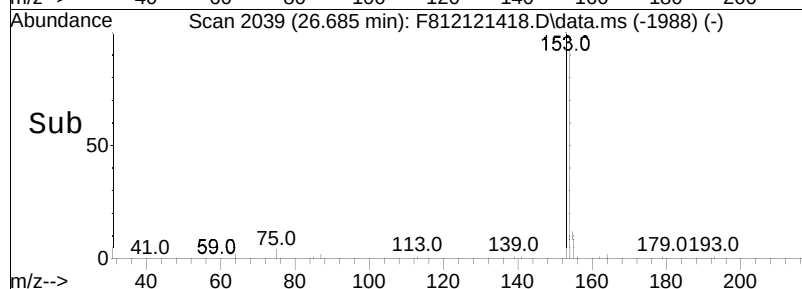
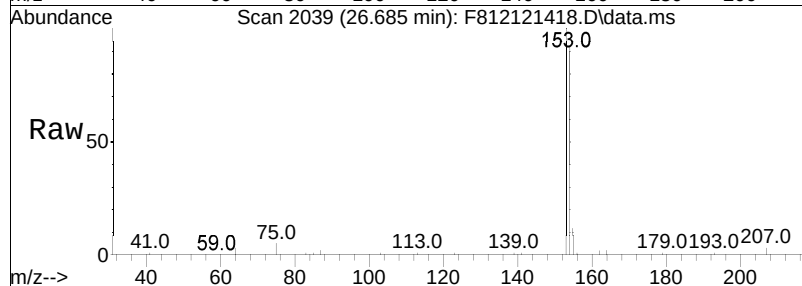
RT: 26.685 min Scan# 2039

Delta R.T. -0.037 min

Lab File: F812121418.D

Acq: 16 Dec 2014 11:20 pm

Tgt Ion	Ratio	Lower	Upper
153	100		
154	92.8	64.8	120.3



#29

Fluorene

Concen: 276.55 ng/mL

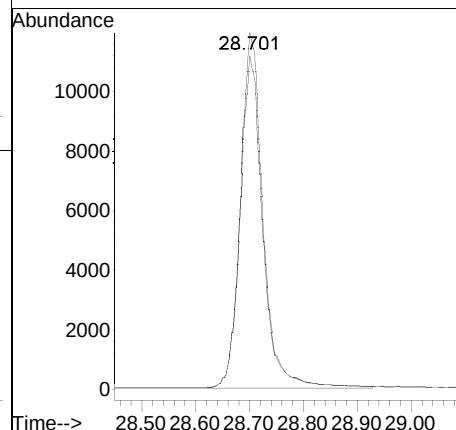
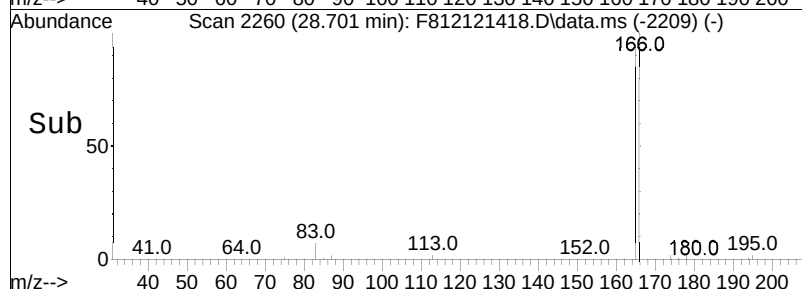
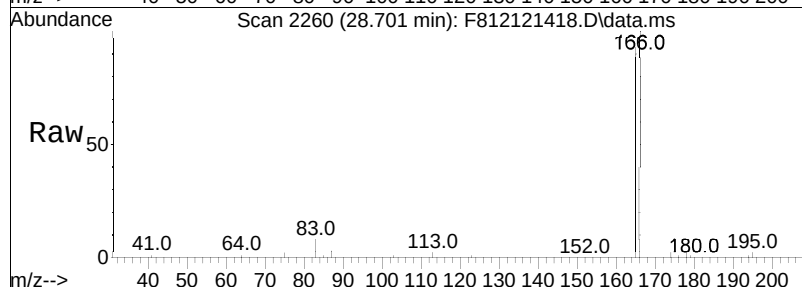
RT: 28.701 min Scan# 2260

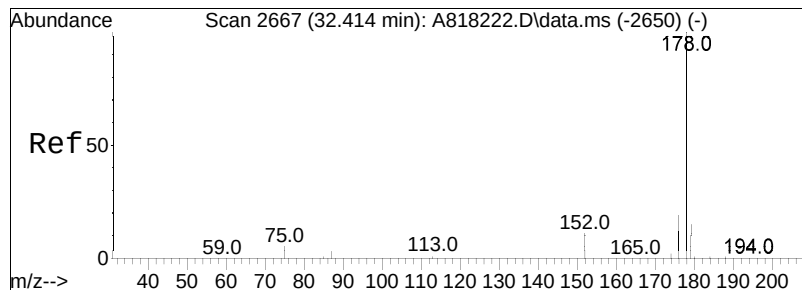
Delta R.T. -0.037 min

Lab File: F812121418.D

Acq: 16 Dec 2014 11:20 pm

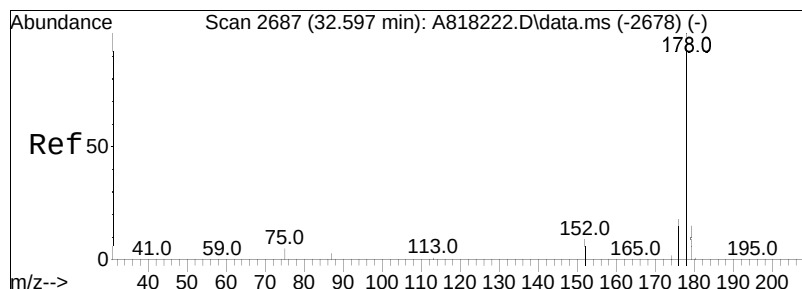
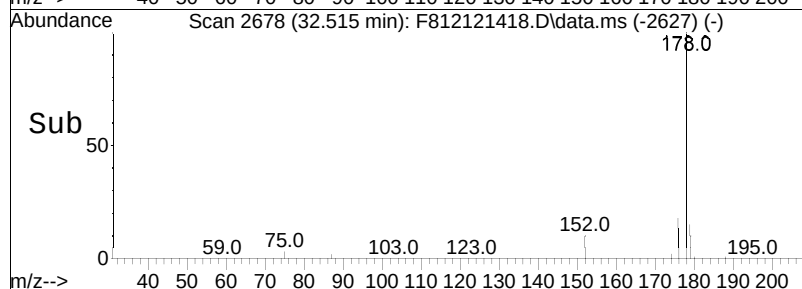
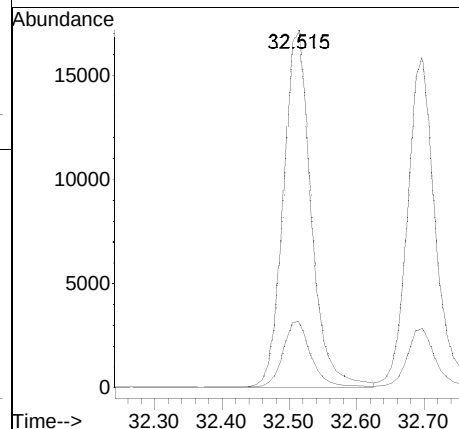
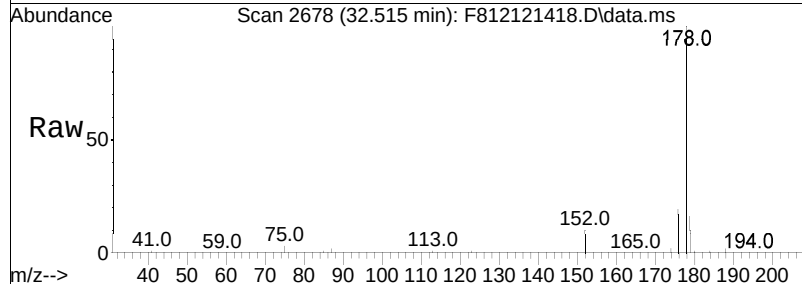
Tgt Ion	Ratio	Lower	Upper
166	100		
165	93.0	64.5	119.7





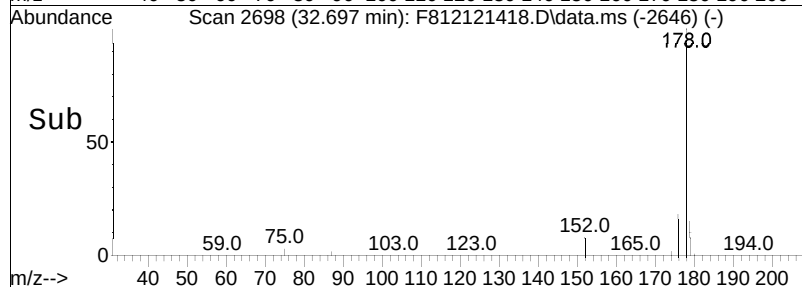
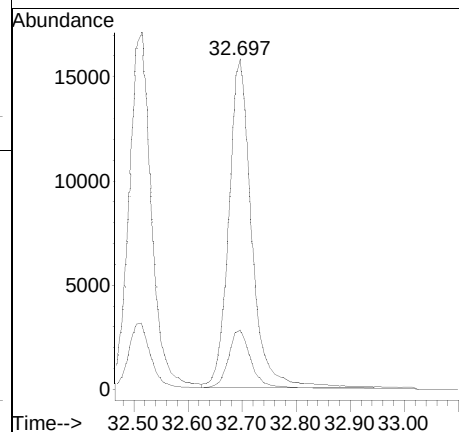
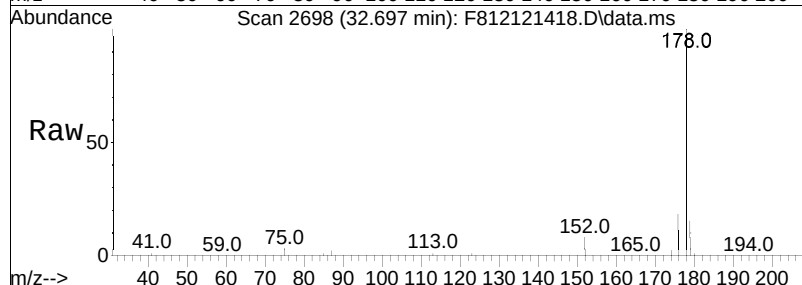
#43
 Phenanthrene
 Concen: 286.49 ng/mL
 RT: 32.515 min Scan# 2678
 Delta R.T. -0.037 min
 Lab File: F812121418.D
 Acq: 16 Dec 2014 11:20 pm

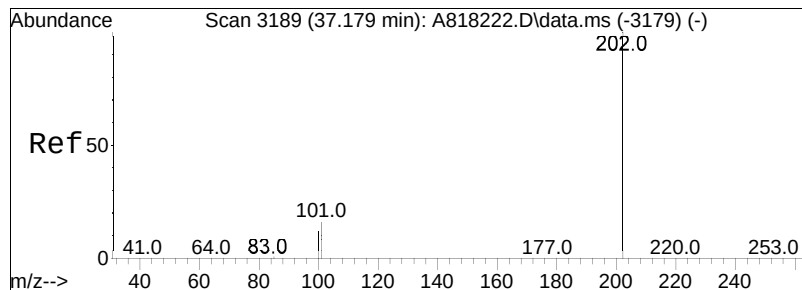
Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.3	12.6	23.4



#55
 Anthracene
 Concen: 306.03 ng/mL M4
 RT: 32.697 min Scan# 2698
 Delta R.T. -0.027 min
 Lab File: F812121418.D
 Acq: 16 Dec 2014 11:20 pm

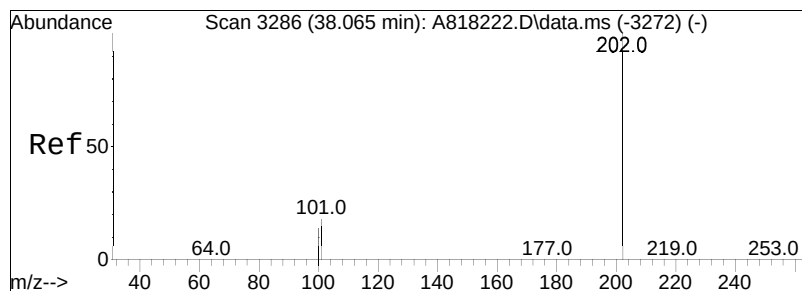
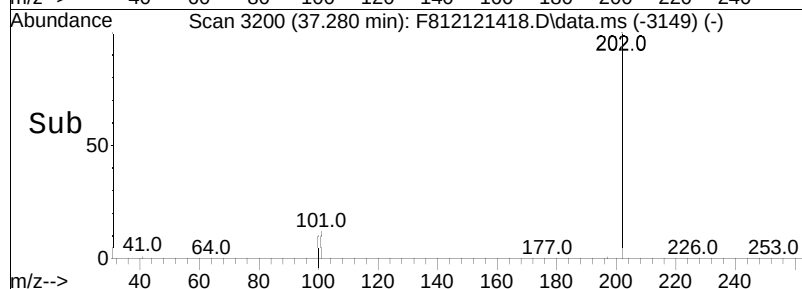
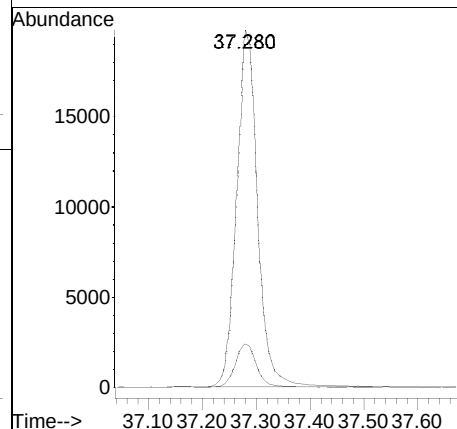
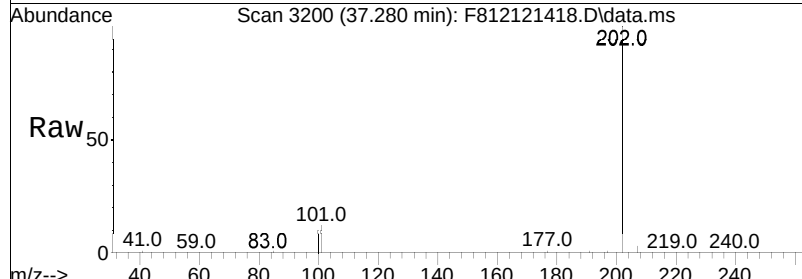
Tgt Ion	Ratio	Lower	Upper
178	100		
176	17.5	12.2	22.6





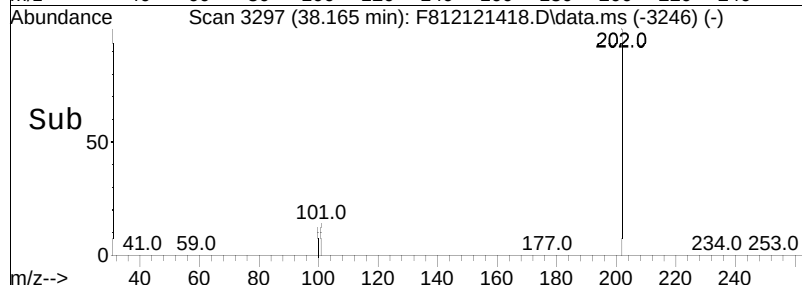
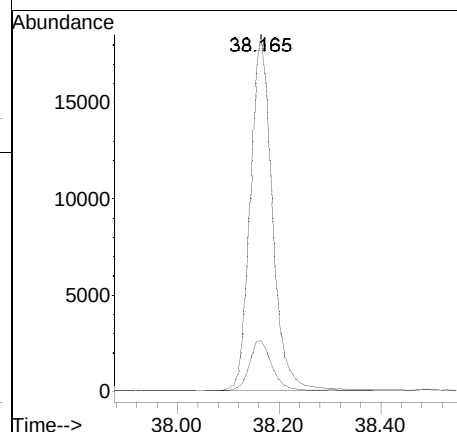
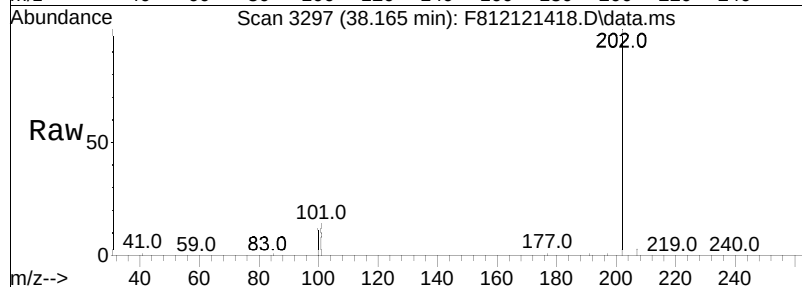
#58
Fluoranthene
 Concen: 295.77 ng/mL
 RT: 37.280 min Scan# 3200
 Delta R.T. -0.037 min
 Lab File: F812121418.D
 Acq: 16 Dec 2014 11:20 pm

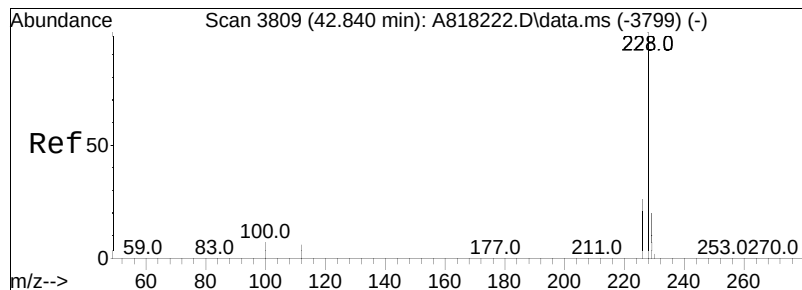
Tgt Ion	Ratio	Lower	Upper
202	100		
101	12.3	9.1	16.9



#60
Pyrene
 Concen: 294.13 ng/mL
 RT: 38.165 min Scan# 3297
 Delta R.T. -0.037 min
 Lab File: F812121418.D
 Acq: 16 Dec 2014 11:20 pm

Tgt Ion	Ratio	Lower	Upper
202	100		
101	14.4	10.0	18.6





#75

Benz[a]anthracene

Concen: 258.69 ng/mL

RT: 42.940 min Scan# 3820

Delta R.T. -0.037 min

Lab File: F812121418.D

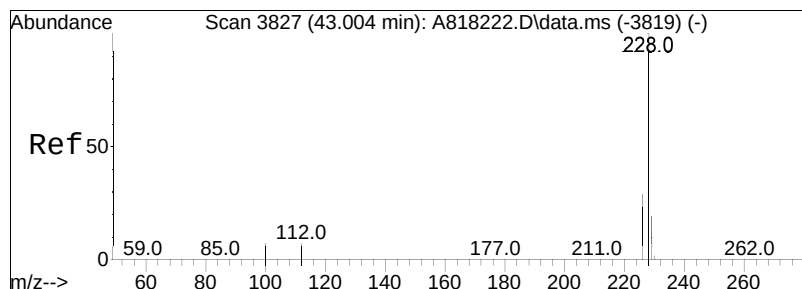
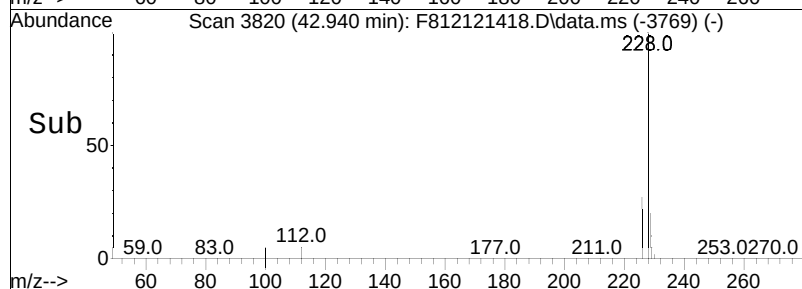
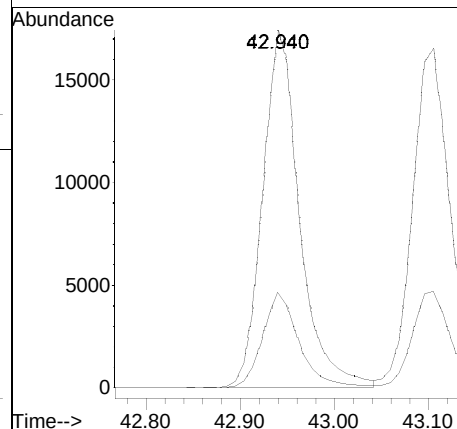
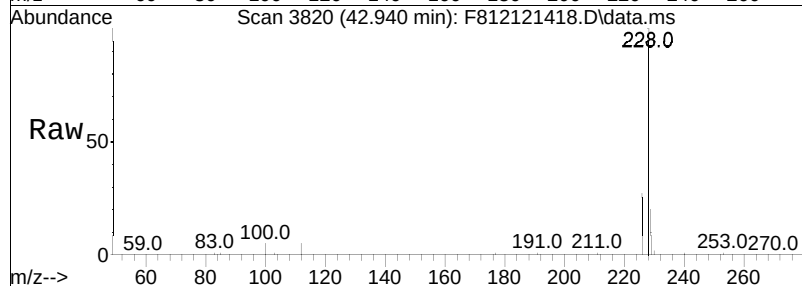
Acq: 16 Dec 2014 11:20 pm

Tgt Ion:228 Resp: 47044

Ion Ratio Lower Upper

228 100

226 25.9 18.0 33.4



#77

Chrysene/Triphenylene

Concen: 257.08 ng/mL

RT: 43.105 min Scan# 3838

Delta R.T. -0.037 min

Lab File: F812121418.D

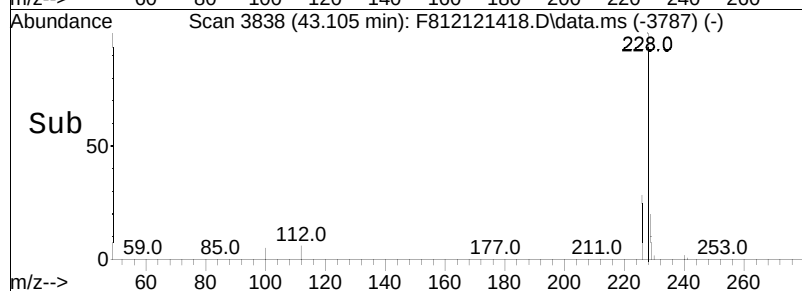
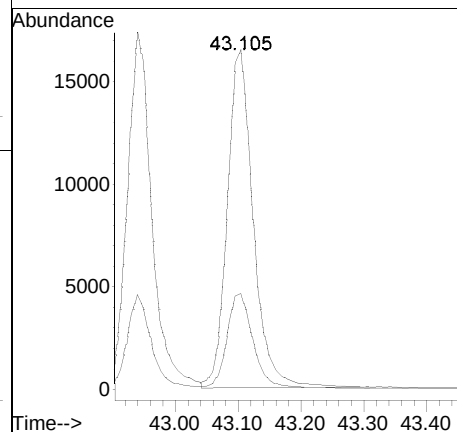
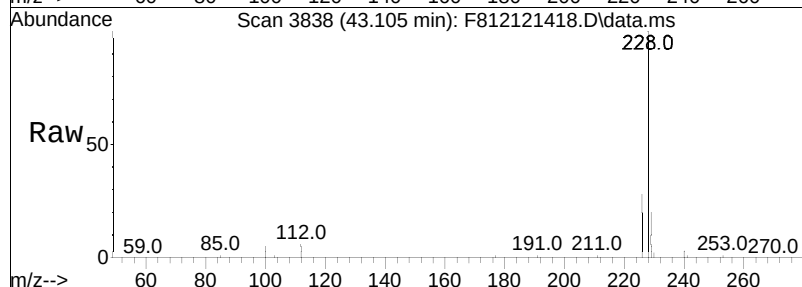
Acq: 16 Dec 2014 11:20 pm

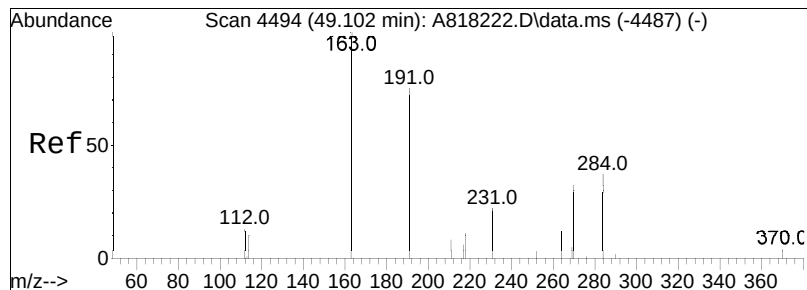
Tgt Ion:228 Resp: 47071

Ion Ratio Lower Upper

228 100

226 28.5 19.3 35.8





#84

Benzo[b]fluoranthene

Concen: 262.89 ng/mL

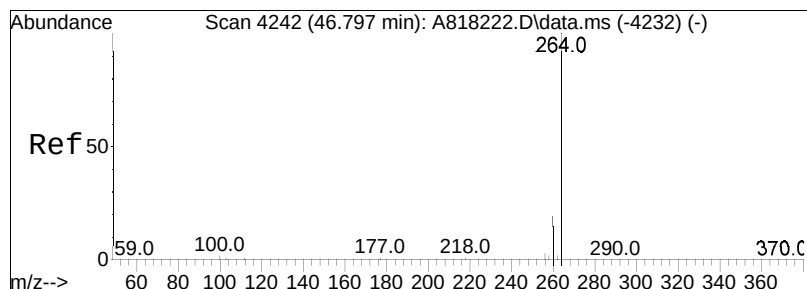
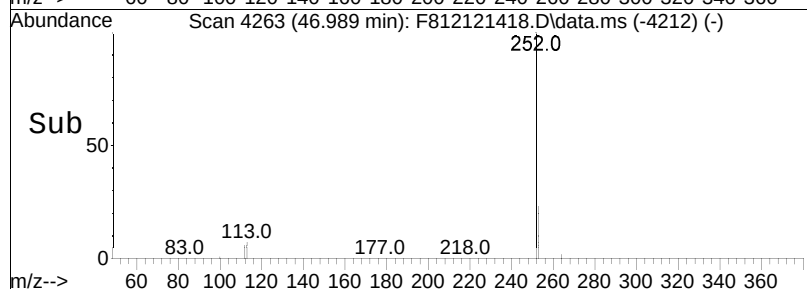
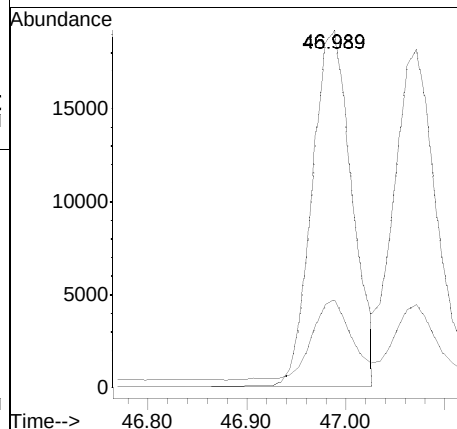
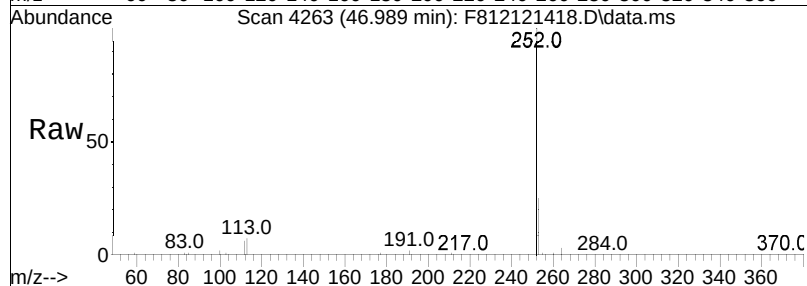
RT: 46.989 min Scan# 4263

Delta R.T. -0.037 min

Lab File: F812121418.D

Acq: 16 Dec 2014 11:20 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.4	16.1	29.9



#85

Benzo[j]+[k]fluoranthene

Concen: 298.21 ng/mL

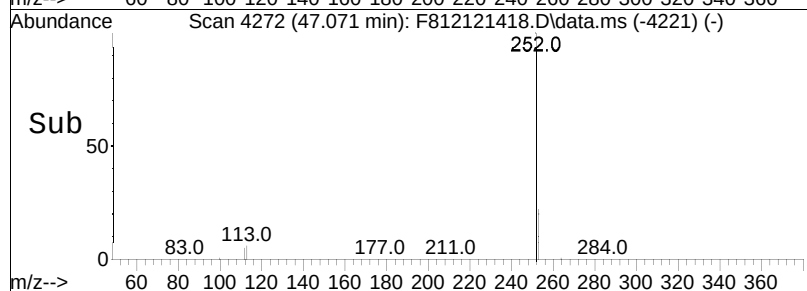
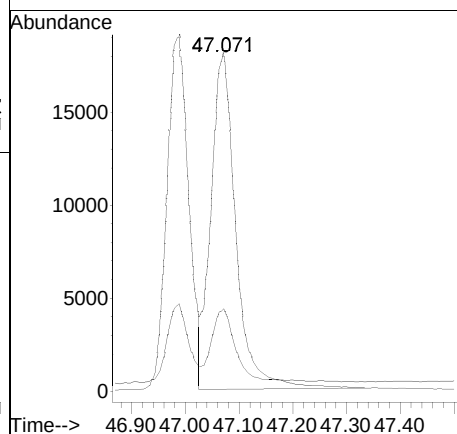
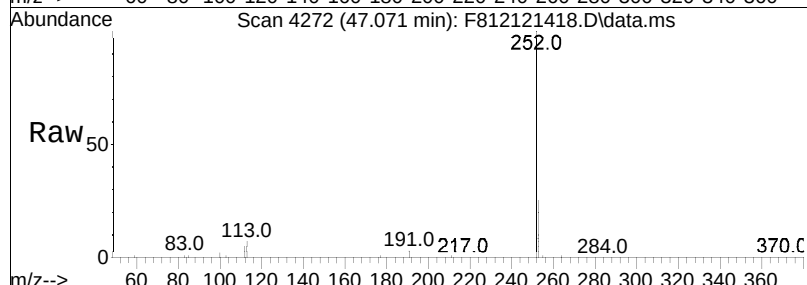
RT: 47.071 min Scan# 4272

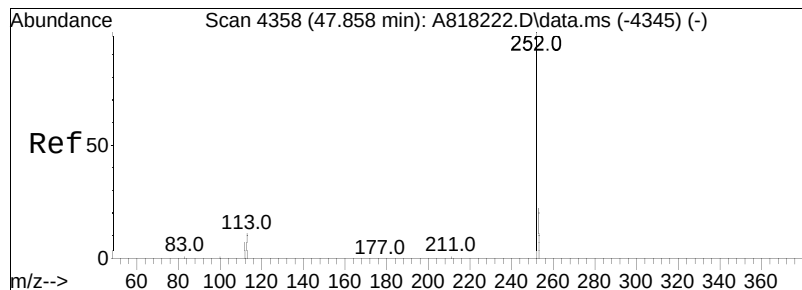
Delta R.T. -0.037 min

Lab File: F812121418.D

Acq: 16 Dec 2014 11:20 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.4	16.4	30.6





#89

Benzo[a]pyrene

Concen: 289.98 ng/mL

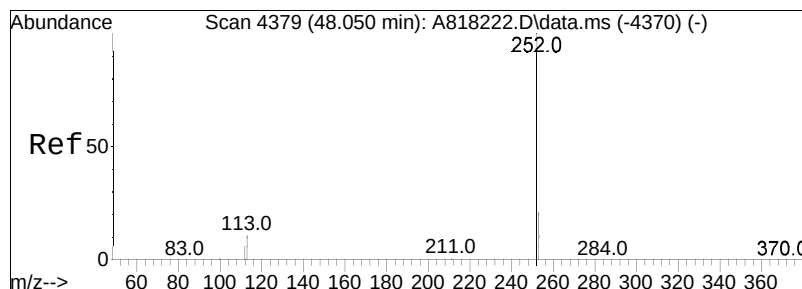
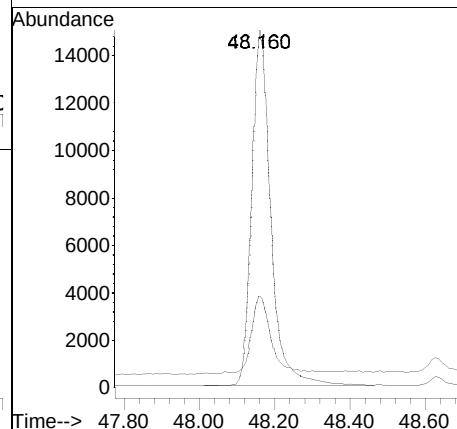
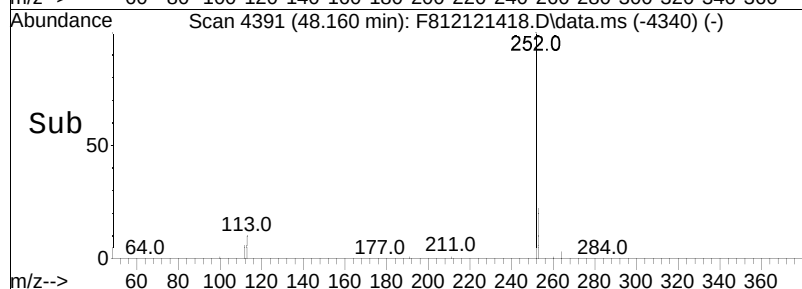
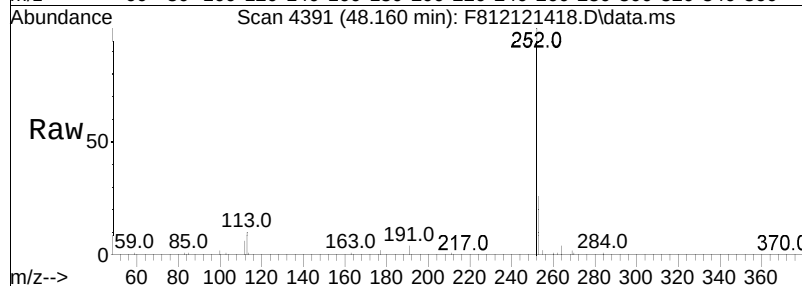
RT: 48.160 min Scan# 4391

Delta R.T. -0.037 min

Lab File: F812121418.D

Acq: 16 Dec 2014 11:20 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.2	16.7	30.9



#91

Indeno[1,2,3-cd]pyrene

Concen: 249.17 ng/mL M4

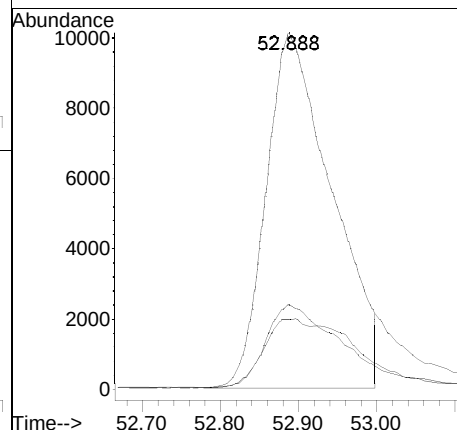
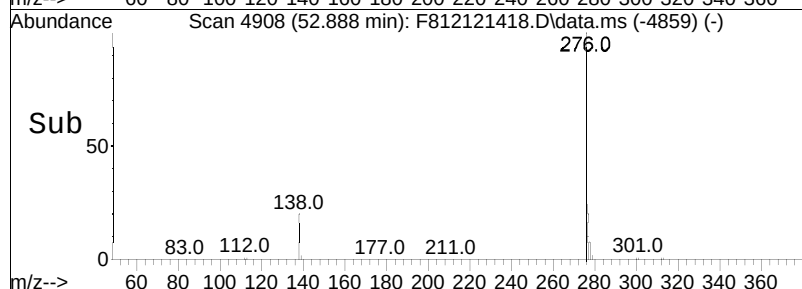
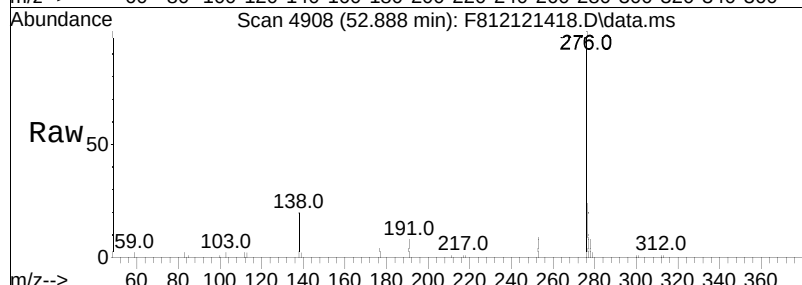
RT: 52.888 min Scan# 4908

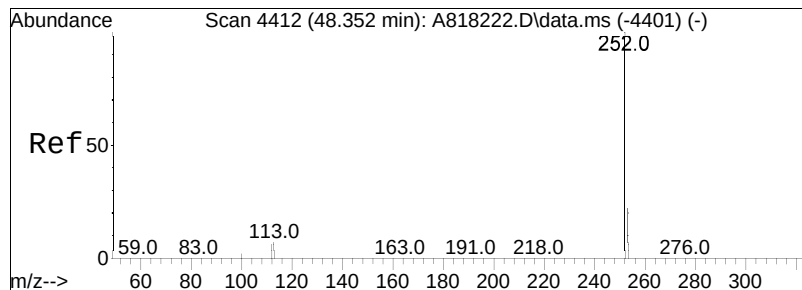
Delta R.T. -0.055 min

Lab File: F812121418.D

Acq: 16 Dec 2014 11:20 pm

Tgt Ion	Ratio	Lower	Upper
276	100		
138	27.7	13.8	25.6#
277	28.7	16.9	31.5





#92

Dibenz[ah]+[ac]anthracene

Concen: 269.74 ng/mL

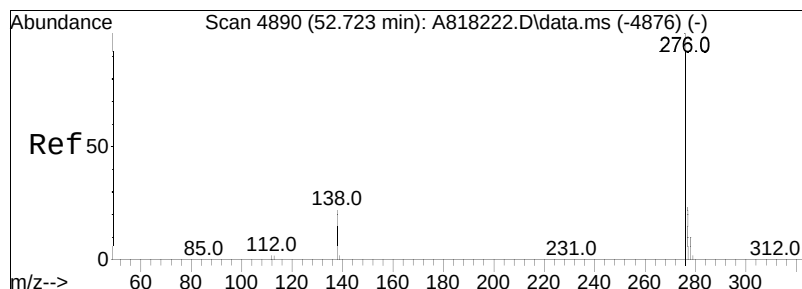
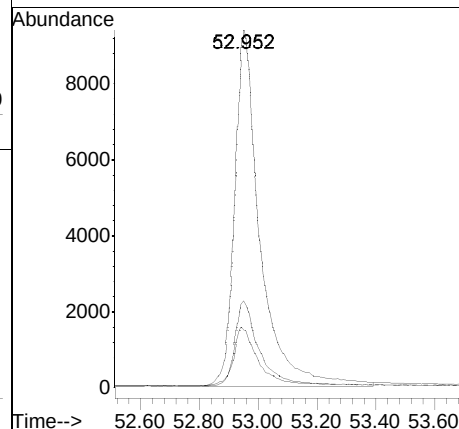
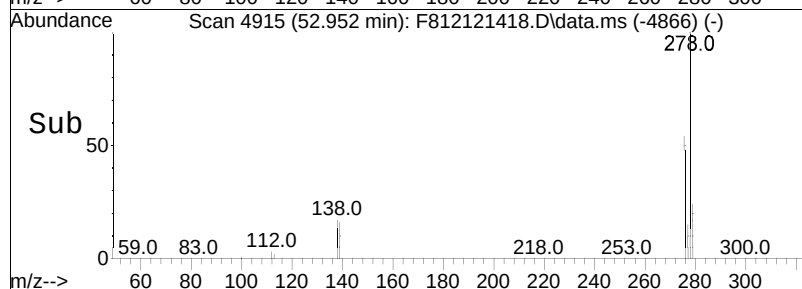
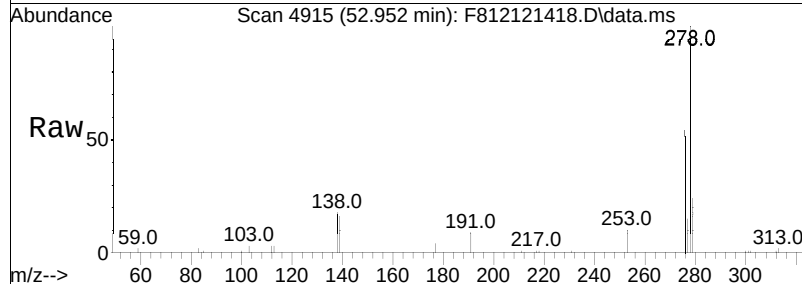
RT: 52.952 min Scan# 4915

Delta R.T. -0.055 min

Lab File: F812121418.D

Acq: 16 Dec 2014 11:20 pm

Tgt Ion:	278	Resp:	55542
Ion Ratio	Lower	Upper	
278	100		
139	15.6	11.1	20.5
279	22.6	17.1	31.7



#93

Benzo[g,h,i]perylene

Concen: 243.18 ng/mL

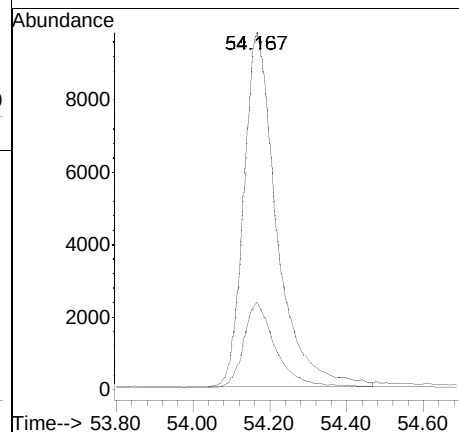
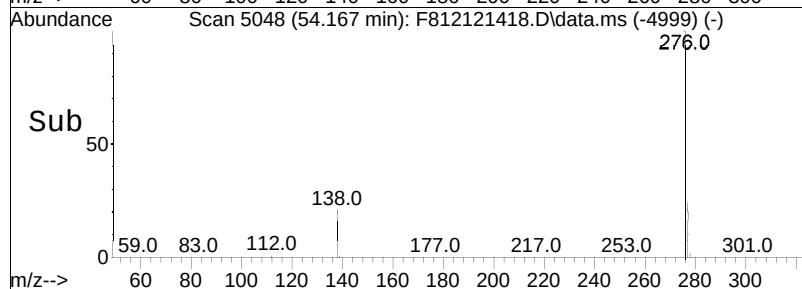
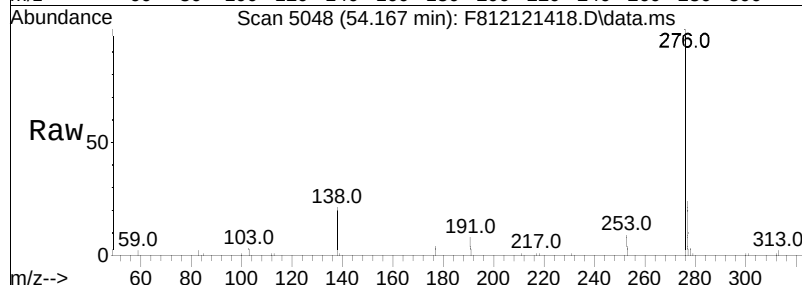
RT: 54.167 min Scan# 5048

Delta R.T. -0.055 min

Lab File: F812121418.D

Acq: 16 Dec 2014 11:20 pm

Tgt Ion:	276	Resp:	57874
Ion Ratio	Lower	Upper	
276	100		
277	23.6	16.6	30.8



Calculation of Semi Volatile Organic Compounds

Results of Water Analysis- calculation as performed in report form:

$$\text{Concentration (ug/L)} = \frac{(\text{Conc}) (\text{Vf}) (\text{DF})}{(\text{Vi})} \times 1000$$

where:

Conc =Raw on-column concentration obtained from the quantitation report using Initial Calibration results.

Vf = Final volume of extract (mL)

Vi= Volume of sample extracted (mL)

DF= Dilution factor

Results of Sediment/Soil Analysis- calculation as performed in report form:

$$\text{Concentration (ug/Kg)} = \frac{(\text{Conc}) (\text{Vf}) (\text{DF})}{(\text{W}) (\%S)}$$

where:

Conc =Raw on-column concentration obtained from the quantitation report using Initial Calibration results.

Vf = Final volume of extract (mL)

W= Aliquot of sample (wet), g

DF= Dilution factor

%S= Sample %solid (in decimal form)

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Dec 31 2014, 10:33 am

Work Group: WG748955 for Department: 2 Organic Preparation

Created: 16-DEC-14 Due: Operator: sa

Sample	Client ID	C Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1430116-01	NRW-7	S A2-TPH	OIL	DONE	U	1212	0106	S0	Vial-A-20
L1430116-01	NRW-7	S A2-ALKPAH/BIOMARKER	OIL	DONE	U	1212	0106	S0	Vial-A-20
WG748955-1	Laboratory Method Bl	S A2-TPH	OIL	DONE	U				
WG748955-1	Laboratory Method Bl	S A2-ALKPAH/BIOMARKER	OIL	DONE	U				
WG748955-2	Laboratory Control S	S A2-ALKPAH/BIOMARKER	OIL	DONE	U				
WG748955-2	Laboratory Control S	S A2-TPH	OIL	DONE	U				
WG748955-3	LCS Duplicate	S A2-ALKPAH/BIOMARKER	OIL	DONE	U				
WG748955-3	LCS Duplicate	S A2-TPH	OIL	DONE	U				
Comments:									
WG748955-3	WG748955-2								

Analysis log File

Total Files Reported in Log : 63

Log Generated From Directory: O:\Forensics\Data\PAH8\2014\NOV14\NOV12\

No.	DATA FILE	INJ METH	SAMPLE NAME	MISC	DATE INJ'D
1	F811121401.D	FRNC8A.M	prime L4 - RT check	1x	11/12/2014 10:30 am
2	F811121402.D	FRNC8A.M	L1 check	11 frau66	11/12/2014 12:01 pm
3	F811121403.D	FRNC8A.M	dcm	dcm	11/12/2014 1:26 pm
4	F811121404.D	FRNC8A.M	✓ i811121401	11 frau66 10 ng/mL	11/12/2014 2:50 pm
5	F811121405.D	FRNC8A.M	✓ i811121402	12 frau67 25 ng/mL	11/12/2014 11:02 pm
6	F811121406.D	FRNC8A.M	✓ i811121403	13 frau68 100 ng/mL	11/13/2014 12:28 am
7	F811121407.D	FRNC8A.M	✓ i811121404	14 frav11 500 ng/mL	11/13/2014 1:53 am
8	F811121408.D	FRNC8A.M	✓ i811121405	15 frau81 5000 ng/mL	11/13/2014 3:18 am
9	F811121409.D	FRNC8A.M	✓ i811121406	16 frau82 10000 ng/m..	11/13/2014 4:42 am
10	F811121410.D	FRNC8A.M	✓ i811121407	17 frau83 20000 ng/m..	11/13/2014 6:07 am
11	F811121411.D	FRNC8A.M	dcm	dcm	11/13/2014 7:32 am
12	F811121412.D	FRNC8A.M	✓ cq811121401	icc frau88 500 ng/m..	11/13/2014 8:57 am
13	F811121413.D	FRNC8A.M	dcm	dcm	11/13/2014 10:22 am
14	F811121414.D	FRNC8A.M	✓ WG740999-1	ans frau91 5.055 mg/..	11/13/2014 11:46 am
15	F811121415.D	FRNC8A.M	dcm	dcm	11/13/2014 1:10 pm
16	F811121416.D	FRNC8A.M	mc252811121401	frav12 10.29 mg/Kg	11/13/2014 2:34 pm
17	F811121417.D	FRNC8A.M	dcm	dcm	11/13/2014 3:58 pm
18	F811121418.D	FRNC8A.M	c811121401	cc frav19 500ng/ml	11/13/2014 5:24 pm
19	F811121419.D	FRNC8A.M	dcm	dcm	11/13/2014 6:49 pm
20	F811121420.D	FRNC8A.M	dcm	dcm	11/13/2014 8:15 pm
21	F811121421.D	FRNC8A.M	sw111114b04	1x etr1411004	11/13/2014 9:41 pm
22	F811121422.D	FRNC8A.M	sw111114lcs02	1x etr1411004	11/13/2014 11:06 pm
23	F811121423.D	FRNC8A.M	sw111114lcsd02	1x etr1411004	11/14/2014 12:31 am
24	F811121424.D	FRNC8A.M	1411004-01	1x etr1411004	11/14/2014 1:56 am
25	F811121425.D	FRNC8A.M	1411004-02	1x etr1411004	11/14/2014 3:21 am
26	F811121426.D	FRNC8A.M	1411004-03	1x etr1411004	11/14/2014 4:46 am
27	F811121427.D	FRNC8A.M	1411004-04	1x etr1411004	11/14/2014 6:11 am
28	F811121428.D	FRNC8A.M	1411004-05	1x etr1411004	11/14/2014 7:36 am
29	F811121429.D	FRNC8A.M	c811121402	cc frav19 500ng/ml	11/14/2014 9:01 am
30	F811121430.D	FRNC8A.M	1411004-06	1x etr1411004	11/14/2014 10:26 am
31	F811121431.D	FRNC8A.M	1411004-07	1x etr1411004	11/14/2014 11:51 am
32	F811121432.D	FRNC8A.M	1411004-08	1x etr1411004	11/14/2014 1:17 pm
33	F811121433.D	FRNC8A.M	1411004-09	1x etr1411004	11/14/2014 2:42 pm
34	F811121434.D	FRNC8A.M	1411004-10	1x etr1411004	11/14/2014 4:07 pm
35	F811121435.D	FRNC8A.M	spike check	1x etr1411004	11/14/2014 5:32 pm
36	F811121436.D	FRNC8A.M	c811121403	cc frav19 500ng/ml	11/14/2014 6:58 pm
37	F811121437.D	FRNC8A.M	dcm	dcm	11/14/2014 8:23 pm
38	F811121438.D	FRNC8A.M	dcm	dcm	11/14/2014 9:48 pm
39	F811121439.D	FRNC8A.M	sw111214b01	1x etr1411005_006	11/14/2014 11:13 pm
40	F811121440.D	FRNC8A.M	sw111214lcs01	1x etr1411005_006	11/15/2014 12:38 am
41	F811121441.D	FRNC8A.M	sw111214lcsd01	1x etr1411005_006	11/15/2014 2:03 am
42	F811121442.D	FRNC8A.M	1411005-01	1x etr1411005_006	11/15/2014 3:29 am
43	F811121443.D	FRNC8A.M	1411005-02	1x etr1411005_006	11/15/2014 4:55 am
44	F811121444.D	FRNC8A.M	1411005-03	1x etr1411005_006	11/15/2014 6:22 am
45	F811121445.D	FRNC8A.M	1411005-04	1x etr1411005_006	11/15/2014 7:49 am
46	F811121446.D	FRNC8A.M	1411005-05	1x etr1411005_006	11/15/2014 9:17 am
47	F811121447.D	FRNC8A.M	1411005-06	1x etr1411005_006	11/15/2014 10:43 am
48	F811121448.D	FRNC8A.M	1411005-07	1x etr1411005_006	11/15/2014 12:10 pm
49	F811121449.D	FRNC8A.M	c811121404	1x etr1411005_006	11/15/2014 1:38 pm
50	F811121450.D	FRNC8A.M	1411005-08	1x etr1411005_006	11/15/2014 3:05 pm
51	F811121451.D	FRNC8A.M	1411005-09	1x etr1411005_006	11/15/2014 4:32 pm
52	F811121452.D	FRNC8A.M	1411005-10	1x etr1411005_006	11/15/2014 5:59 pm
53	F811121453.D	FRNC8A.M	1411006-01	1x etr1411005_006	11/15/2014 7:26 pm
54	F811121454.D	FRNC8A.M	1411006-02	1x etr1411005_006	11/15/2014 8:50 pm
55	F811121455.D	FRNC8A.M	1411006-03	1x etr1411005_006	11/15/2014 10:15 pm
56	F811121456.D	FRNC8A.M	1411006-04	1x etr1411005_006	11/15/2014 11:39 pm
57	F811121457.D	FRNC8A.M	1411006-05	1x etr1411005_006	11/16/2014 1:04 am
58	F811121458.D	FRNC8A.M	1411006-06	1x etr1411005_006	11/16/2014 2:28 am
59	F811121459.D	FRNC8A.M	1411006-07	1x etr1411005_006	11/16/2014 3:52 am
60	F811121460.D	FRNC8A.M	c811121405	1x etr1411005_006	11/16/2014 5:17 am

Printed: 11/16/14

PAH8111214.M & FRAV19 500 ng/mL

SR
11/16/14

Page: 1

Analysis log File

Total Files Reported in Log : 26
 Log Generated From Directory: 0:\Forensics\Data\PAH8\2014\DEC14\DEC15\

No.	DATA FILE	INJ METH	SAMPLE NAME	MISC	DATE	INJ'D	
1	F812121401.D	FRNC8A.M	Prime	1x	12/15/2014	10:11	am
2	F812121402.D	FRNC8A.M	WG751462-4,32	WG751462, cc frav19 500..	12/15/2014	11:44	am
3	F812121403.D	FRNC8A.M	ans812151401	frau91 5.055	12/15/2014	1:55	pm
4	F812121404.D	FRNC8A.M	L1429258-01D,32,10	WG751462, WG747654, ICAL1..	12/15/2014	3:21	pm
5	F812121405.D	FRNC8A.M	L1429258-02D,32,10	WG751462, WG747654, ICAL1..	12/15/2014	4:47	pm
6	F812121406.D	FRNC8A.M	L1429258-04D,32,50	50x	12/15/2014	6:13	pm
7	F812121407.D	FRNC8A.M	WG751462-5,32	WG751462, cc frav19 500..	12/15/2014	7:39	pm
8	F812121408.D	FRNC8A.M	WG751462-6,32	WG751462, cc frav19 500..	12/16/2014	9:01	am
9	F812121409.D	FRNC8A.M	wg747655-3,32	WG751462, WG747655	12/16/2014	10:26	am
10	F812121410.D	FRNC8A.M	L1429258-04	50x remake	12/16/2014	11:52	am
11	F812121411.D	FRNC8A.M	WG751462-7,32	WG751462, cc frav19 500..	12/16/2014	1:18	pm
12	F812121412.D	FRNC8A.M	L1429258-04D,32,100	WG751462, WG747655, ICAL1..	12/16/2014	2:44	pm
13	F812121413.D	FRNC8A.M	WG752852-1,32	WG752852, cc frav19 500..	12/16/2014	4:09	pm
14	F812121414.D	FRNC8A.M	dcm	dcm	12/16/2014	5:36	pm
15	F812121415.D	FRNC8A.M	dcm	dcm	12/16/2014	7:02	pm
16	F812121416.D	FRNC8A.M	wg748955-1,32	WG752852, WG748955, ICAL1..	12/16/2014	8:28	pm
17	F812121417.D	FRNC8A.M	wg748955-2,32	WG752852, WG748955, ICAL1..	12/16/2014	9:54	pm
18	F812121418.D	FRNC8A.M	wg748955-3,32	WG752852, WG748955, ICAL1..	12/16/2014	11:20	pm
19	F812121419.D	FRNC8A.M	L1430116-01,32	WG752852, WG748955, ICAL1..	12/17/2014	12:46	am
20	F812121420.D	FRNC8A.M	WG752852-2,32	WG752852, cc frav19 500..	12/17/2014	2:13	am
21	F812121421.D	FRNC8A.M	WG752852-3,32	WG752852, cc frav19 500..	12/17/2014	7:59	am
22	F812121422.D	FRNC8A.M	L1430116-01D,32,20	WG752852, WG748955, ICAL1..	12/17/2014	11:57	am
23	F812121423.D	FRNC8A.M	WG752852-4,32	WG752852, cc frav19 500..	12/17/2014	1:23	pm
24	F812121424.D	FRNC8A.M	dcm		12/17/2014	2:50	pm
25	F812121425.D	FRNC8A.M	dcm		12/17/2014	4:17	pm
26	F812121426.D	FRNC8A.M	ll		12/17/2014	5:44	pm



ORGANIC ELN REPORT

Workgroup: WG748955

Prep Method: EPA 3580A Solvent Type: DCM Surrogate Type: A2-PAH/SHC Spike Type: A2-PAH/SHC Spike Verify by: WR Lims Spikelot: A2-PAH/SHC Additional Reagents/Stdts <table><tr><td>RIS</td><td>FRAV06</td></tr><tr><td>BIOMARKER</td><td>FRAV09</td></tr></table>	RIS	FRAV06	BIOMARKER	FRAV09	Conc.Method: Solvent Type: Lot #: Additional Reagents/Stdts	Cleanup 1 Cleanup Method 1: Cleanup Method 2: Solvent Type: Lot #: Additional Reagents/Stdts
RIS	FRAV06					
BIOMARKER	FRAV09					

Sample/ Type	Extraction										Concentration
	Extract Date	Analyst	Sample Weight g	Balanc e Id	Extract Vol ml	Split Vol ml	Surr Amt ml	Spike Amt ml	Is Amt ml	Final Vol ml	
WG748955-1 BLANK	12/16/14 09:49	Shayna Albanese	0.1	F30621	10	10	0.5		0.1	20	
	All samples spiked with 0.5mL Biomarker 12/16/14 SA										
WG748955-2 LCS	12/16/14 09:49	Shayna Albanese	0.1	F30621	10	10	0.5	0.5	0.1	20	
WG748955-3 LCSD	12/16/14 09:49	Shayna Albanese	0.1	F30621	10	10	0.5	0.5	0.1	20	
L1430116-01 OIL	12/16/14 09:49	Shayna Albanese	0.1029	F30621	10	10	0.5		0.1	20	

Petroleum Hydrocarbon Identification TPH-PHI

Petroleum QC Summary

Form 2
Surrogate Recovery
FID FORENSICS

Client: URS Corporation
Project Name: WILLIAMSBURG

Lab Number: L1430116
Project Number: 11176638
Matrix: Oil

GC Column 1: RTX-5

CLIENT ID (LAB SAMPLE NO.)	d50 %REC	OTP %REC	%REC	%REC	OTHER (1)	OTHER (2)	TOT OUT
WG748955-3LCSD	98	99	--	--			0
WG748955-2LCS	97	97	--	--			0
WG748955-1BLANK	96	95	--	--			0
NRW-7 (L1430116-01)	104	93	--	--			0

d50- = D50-TETRACOSANE
OTP = O-TERPHENYL

QC LIMITS
(50-130)
(50-130)

* Values outside of QC limits

FORM II A2-TPH



3
LAB CONTROL/LAB CONTROL DUPLICATE SAMPLE RECOVERY
OIL FID FORENSICS

Lab Name: Alpha Analytical Labs

SDG No.: L1430116

Lab Control Sample: WG748955-2LCS

Lab Control Dup : WG748955-3LCSD

Matrix: Oil

Injected: 12/18/14 04:06

Injected: 12/18/14 05:35

Lab File ID: F17121714016

Lab File ID: F17121714018

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONC mg/kg	LCS CONC mg/kg	LCS % REC	LCSD CONC mg/kg	LCSD % REC	% RPD	QC LIMITS RPD REC.
n-Nonane (C9)	1000	NA	976	98	1010	101	3	30 50-130
n-Decane (C10)	1000	NA	951	95	986	99	4	30 50-130
n-Dodecane (C12)	1000	NA	953	95	989	99	4	30 50-130
n-Tetradecane (C14)	1000	NA	907	91	947	95	4	30 50-130
n-Hexadecane (C16)	1000	NA	1030	103	1080	108	5	30 50-130
n-Octadecane (C18)	1000	NA	1060	106	1090	109	3	30 50-130
n-Nonadecane (C19)	1000	NA	958	96	998	100	4	30 50-130
n-Eicosane (C20)	1000	NA	972	97	1010	101	4	30 50-130
n-Docosane (C22)	1000	NA	999	100	1040	104	4	30 50-130
n-Tetracosane (C24)	1000	NA	988	99	1030	103	4	30 50-130
n-Hexacosane (C26)	1000	NA	977	98	1020	102	4	30 50-130
n-Octacosane (C28)	1000	NA	1000	100	1040	104	4	30 50-130
n-Triacontane (C30)	1000	NA	1020	102	1060	106	4	30 50-130
n-Hexatriacontane (C36)	1000	NA	984	98	1020	102	4	30 50-130

* Values outside of QC limits.

COMMENTS: _____

FORM III A2-TPH

SAMPLE NO.

WG748955-1BLANK

Lab File ID: F17121714012

Date Extracted: 12/16/14

Date Analyzed (2):

Time Analyzed (2):

Instrument ID (2):

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

[illegible]

COMMENTS: _____

8B

Lab Name: Alpha Analytical Labs

SDG No. : L1430116

Lab File ID (Standard): F17121714006

Date Analyzed: 12/17/14

Instrument ID : FID17

Time Analyzed: 20:36

[illegible]

IS1(5-A) = 5-ALPHA ANDROSTANE
IS2() =
IS3() =

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50 % of internal standard area
 RT UPPER LIMIT = +0.50 minutes of internal standard RT
 RT LOWER LIMIT = -0.50 minutes of internal standard RT

* Values outside of QC limits.

Determination of Method Detection Limits

Alpha Analytical Inc.
Mansfield, MA

Approved

Page 1 of 1
Analyst: JT
Date: 4/13, 4/20, 4/23-24/2012
Instrument ID: PAH3, FID6R, FID9F, FID17R, FID16F
Column ID: Phenomenex ZB-5
Prep Method: SOP OP-013
Prep Chemist: CS, DB

Method: EPA 8015D(M)

2012

GC/FID Saturated Hydrocarbons Soil

Table (MDL)		Instrument ID	PAH 3	PAH 3	FID 6R	FID 6R	FID 9F	FID 9F	FID 17R	FID 17R	FID 16F	FID 16F	T value used for calculating					
		Data File	MDL 01	MDL 02	MDL 03	MDL 04	MDL 05	MDL 06	MDL 07	MDL 08	MDL 09	MDL 10	MDL: 2.821					
		Date Analyzed	4/13/2012	4/13/2012	4/20/2012	4/20/2012	4/23/2012	4/23/2012	4/23/2012	4/23/2012	4/24/2012	4/24/2012	Mean	Mean	Standard	Calc. MDL	Current RL	
No.	Analytes	Target conc. (mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	Accuracy	Deviation	(mg/Kg)	(mg/Kg)	Comment
1	n-Octane (C8)	0.0667	0.0260	0.0197	0.0189	0.0223	0.0223	0.0212	0.0271	0.0266	0.0275	0.0219	0.0234	35%	0.0032	0.0090	0.0667	
2	n-Nonane (C9)	0.0667	0.0466	0.0398	0.0414	0.0457	0.0409	0.0419	0.0478	0.0476	0.0489	0.0417	0.0442	66%	0.0034	0.0096	0.0667	
3	n-Decane (C10)	0.0667	0.0546	0.0509	0.0527	0.0557	0.0445	0.0468	0.0507	0.0510	0.0497	0.0438	0.0500	75%	0.0040	0.0112	0.0667	
4	n-Undecane (C11)	0.0667	0.0575	0.0540	0.0544	0.0571	0.0462	0.0437	0.0484	0.0491	0.0491	0.0444	0.0504	76%	0.0050	0.0142	0.0667	
5	n-Dodecane (C12)	0.0667	0.0607	0.0560	0.0554	0.0577	0.0456	0.0505	0.0457	0.0497	0.0524	0.0480	0.0522	78%	0.0052	0.0145	0.0667	
6	n-Tridecane (C13)	0.0667	0.0591	0.0570	0.0567	0.0590	0.0404	0.0434	0.0487	0.0529	0.0533	0.0487	0.0519	78%	0.0065	0.0183	0.0667	
7	n-Tetradecane (C14)	0.0667	0.0589	0.0571	0.0573	0.0602	0.0514	0.0557	0.0515	0.0521	0.0586	0.0545	0.0557	84%	0.0032	0.0091	0.0667	
8	n-Pentadecane (C15)	0.0667	0.0622	0.0601	0.0603	0.0613	0.0613	0.0643	0.0559	0.0594	0.0655	0.0604	0.0611	92%	0.0027	0.0075	0.0667	
9	n-Hexadecane (C16)	0.0667	0.0617	0.0590	0.0586	0.0691	0.0612	0.0625	0.0570	0.0574	0.0631	0.0596	0.0609	91%	0.0036	0.0100	0.0667	
10	n-Heptadecane (C17)	0.0667	0.0621	0.0599	0.0591	0.0611	0.0513	0.0527	0.0503	0.0498	0.0583	0.0537	0.0558	84%	0.0047	0.0134	0.0667	
11	Pristane	0.0667	0.0617	0.0595	0.0623	0.0645	0.0673	0.0700	0.0673	0.0659	0.0699	0.0637	0.0652	98%	0.0035	0.0098	0.0667	
12	n-Octadecane (C18) *	0.0667	0.0629	0.0611	0.0641	0.0662	0.0729	0.0743	0.0620	0.0623	0.0688	0.0627	0.0657	99%	0.0047	0.0134	0.0667	
13	Phytane	0.0667	0.0625	0.0602	0.0631	0.0648	0.0689	0.0687	0.0666	0.0651	0.0676	0.0622	0.0650	97%	0.0030	0.0084	0.0667	
14	n-Nonadecane (C19)	0.0667	0.0636	0.0616	0.0622	0.0633	0.0590	0.0611	0.0571	0.0573	0.0627	0.0567	0.0605	91%	0.0027	0.0076	0.0667	
15	n-Eicosane (C20)	0.0667	0.0635	0.0616	0.0629	0.0638	0.0613	0.0639	0.0579	0.0583	0.0663	0.0599	0.0619	93%	0.0027	0.0075	0.0667	
16	n-Heneicosane (C21)	0.0667	0.0643	0.0622	0.0635	0.0646	0.0644	0.0658	0.0601	0.0604	0.0665	0.0601	0.0632	95%	0.0024	0.0067	0.0667	
17	n-Docosane (C22)	0.0667	0.0639	0.0615	0.0640	0.0652	0.0658	0.0649	0.0609	0.0615	0.0676	0.0604	0.0636	95%	0.0024	0.0068	0.0667	
18	n-Tricosane (C23)	0.0667	0.0641	0.0630	0.0667	0.0677	0.0653	0.0694	0.0633	0.0634	0.0688	0.0629	0.0655	98%	0.0025	0.0071	0.0667	
19	n-Tetracosane (C24)	0.0667	0.0641	0.0640	0.0663	0.0671	0.0622	0.0655	0.0611	0.0615	0.0666	0.0601	0.0639	96%	0.0025	0.0070	0.0667	
20	n-Pentacosane (C25) *	0.0667	0.0693	0.0657	0.0689	0.0687	0.0957	0.1005	0.0713	0.0715	0.0705	0.0657	0.0748	112%	0.0125	0.0353	0.0667	
21	n-Hexacosane (C26)	0.0667	0.0634	0.0625	0.0646	0.0655	0.0666	0.0694	0.0610	0.0610	0.0662	0.0608	0.0641	96%	0.0029	0.0081	0.0667	
22	n-Heptacosane (C27)	0.0667	0.0653	0.0642	0.0666	0.0685	0.0643	0.0695	0.0639	0.0633	0.0689	0.0621	0.0657	99%	0.0026	0.0072	0.0667	
23	n-Octacosane (C28)	0.0667	0.0642	0.0631	0.0742	0.0698	0.0662	0.0673	0.0621	0.0621	0.0674	0.0630	0.0660	99%	0.0039	0.0110	0.0667	
24	n-Nonacosane (C29) *	0.0667	0.0634	0.0621	0.0652	0.0657	0.0631	0.0648	0.0601	0.0595	0.0933	0.0862	0.0683	103%	0.0116	0.0327	0.0667	
25	n-Triacontane (C30)	0.0667	0.0657	0.0648	0.0669	0.0679	0.0686	0.0685	0.0635	0.0628	0.0670	0.0615	0.0657	99%	0.0025	0.0070	0.0667	
26	n-Hentriacontane (C31)	0.0667	0.0649	0.0637	0.0665	0.0677	0.0658	0.0680	0.0623	0.0607	0.0657	0.0599	0.0645	97%	0.0028	0.0079	0.0667	
27	n-Dotriacontane (C32)	0.0667	0.0637	0.0625	0.0655	0.0669	0.0639	0.0654	0.0615	0.0591	0.0629	0.0586	0.0630	95%	0.0027	0.0076	0.0667	
28	n-Tritriacontane (C33)	0.0667	0.0675	0.0663	0.0675	0.0701	0.0679	0.0694	0.0639	0.0601	0.0655	0.0613	0.0660	99%	0.0033	0.0093	0.0667	
29	n-tetratriacontane (C34)	0.0667	0.0645	0.0637	0.0656	0.0678	0.0634	0.0670	0.0613	0.0573	0.0600	0.0571	0.0628	94%	0.0038	0.0106	0.0667	
30	n-Pentatriacontane (C35)	0.0667	0.0655	0.0633	0.0655	0.0683	0.0618	0.0658	0.0605	0.0566	0.0598	0.0559	0.0623	93%	0.0041	0.0116	0.0667	
31	n-Hexatriacontane (C36)	0.0667	0.0647	0.0637	0.0661	0.0685	0.0643	0.0655	0.0596	0.0555	0.0579	0.0551	0.0621	93%	0.0047	0.0133	0.0667	
32	n-Heptatriacontane (C37)	0.0667	0.0641	0.0629	0.0657	0.0686	0.0615	0.0646	0.0585	0.0543	0.0556	0.0531	0.0609	91%	0.0052	0.0148	0.0667	
33	n-Octatriacontane (C38)	0.0667	0.0643	0.0631	0.0649	0.0671	0.0601	0.0635	0.0590	0.0545	0.0541	0.0505	0.0601	90%	0.0055	0.0155	0.0667	
34	n-Tetracontane (C40)	0.0667	0.0635	0.0617	0.0671	0.0670	0.0613	0.0615	0.0560	0.0515	0.0476	0.0459	0.0583	87%	0.0077	0.0216	0.0667	
Surrogates																		
1	ortho-terphenyl	1.6667	1.6365	1.5881	1.6001	1.6119	1.6243	1.6699	1.5931	1.5903	1.7721	1.6406	1.633	98%				
2	d50-Tetracosane	1.6667	1.6039	1.5647	1.6025	1.6249	1.5925	1.6319	1.5581	1.5591	1.6562	1.5391	1.593	96%				

Comments:

* Targets C18, C25, C29 are C qualified.

C= Coelution: Targets co-elute with MS surrogates

Client-specific MDL

Determination of Method Detection Limits

Alpha Analytical Inc.
Mansfield, MA

Approved

Page 1 of 1
Analyst: JT
Date: 4/9/12 - 4/12/12
Instrument ID: FID9F, 16R, 17F, 2R, 6F
Column ID: Phenomenex ZB-5
Prep Method: SOP OP-013
Prep Chemist: CS

Method: EPA 8015D(M)

2012

GC/FID Saturated Hydrocarbons Soil

Table (MDL)		Data File	A917413	A917415	A1610097	A1610099	A003174	A003176	C692936	C692938	E24723	E24725	T value used for calculating MDL: 2.821					
No.	Analytes	Inst/Date Analyzed	FID9R 4/9/12	FID9R 4/9/12	FID16R 4/9/12	FID16R 4/9/12	FID17F 4/10/12	FID17F 4/10/12	FID6F 4/12/12	FID6F 4/12/12	FID2 4/12/12	FID2 4/12/12	Mean (mg/Kg)	Mean Accuracy	Standard Deviation	Calc. MDL (mg/Kg)	Current RL (mg/Kg)	Comment
1	n-Octane (C8)	0.0667	0.0241	0.0234	0.0269	0.0229	0.0260	0.0245	0.0241	0.0217	0.0217	0.0254	0.0241	36%	0.0017	0.0049	0.0667	
2	n-Nonane (C9)	0.0667	0.0455	0.0466	0.0476	0.0418	0.0509	0.0505	0.0445	0.0437	0.0569	0.0650	0.0493	74%	0.0070	0.0198	0.0667	
3	n-Decane (C10)	0.0667	0.0501	0.0522	0.0485	0.0420	0.0541	0.0542	0.0481	0.0459	0.0609	0.0680	0.0524	79%	0.0075	0.0213	0.0667	
4	n-Undecane (C11)	0.0667	0.0507	0.0529	0.0500	0.0465	0.0390	0.0389	0.0463	0.0443	0.0563	0.0609	0.0486	73%	0.0071	0.0199	0.0667	
5	n-Dodecane (C12)	0.0667	0.0518	0.0541	0.0520	0.0495	0.0469	0.0467	0.0568	0.0532	0.0554	0.0583	0.0525	79%	0.0039	0.0110	0.0667	
6	n-Tridecane (C13)	0.0667	0.0527	0.0562	0.0501	0.0483	0.0466	0.0469	0.0523	0.0507	0.0556	0.0603	0.0520	78%	0.0044	0.0124	0.0667	
7	n-Tetradecane (C14)	0.0667	0.0541	0.0587	0.0569	0.0547	0.0494	0.0505	0.0527	0.0504	0.0568	0.0593	0.0543	82%	0.0036	0.0100	0.0667	
8	n-Pentadecane (C15)	0.0667	0.0627	0.0645	0.0640	0.0617	0.0564	0.0567	0.0609	0.0587	0.0593	0.0614	0.0606	91%	0.0028	0.0080	0.0667	
9	n-Hexadecane (C16)	0.0667	0.0649	0.0659	0.0687	0.0651	0.0622	0.0623	0.0633	0.0602	0.0602	0.0618	0.0635	95%	0.0027	0.0076	0.0667	
10	n-Heptadecane (C17)	0.0667	0.0587	0.0607	0.0550	0.0518	0.0421	0.0410	0.0507	0.0481	0.0609	0.0629	0.0532	80%	0.0078	0.0220	0.0667	
11	Pristane	0.0667	0.0637	0.0667	0.0724	0.0679	0.0738	0.0782	0.0674	0.0651	0.0621	0.0649	0.0682	102%	0.0050	0.0142	0.0667	
12	n-Octadecane (C18) *	0.0667	0.0656	0.0682	0.0684	0.0672	0.0610	0.0616	0.0655	0.0622	0.0631	0.0650	0.0648	97%	0.0027	0.0076	0.0667	
13	Phytane	0.0667	0.0621	0.0672	0.0705	0.0655	0.0680	0.0677	0.0681	0.0630	0.0635	0.0655	0.0661	99%	0.0027	0.0075	0.0667	
14	n-Nonadecane (C19)	0.0667	0.0619	0.0639	0.0569	0.0559	0.0487	0.0487	0.0556	0.0539	0.0634	0.0654	0.0574	86%	0.0061	0.0171	0.0667	
15	n-Eicosane (C20)	0.0667	0.0631	0.0655	0.0621	0.0604	0.0579	0.0580	0.0585	0.0565	0.0640	0.0655	0.0611	92%	0.0033	0.0094	0.0667	
16	n-Heneicosane (C21)	0.0667	0.0647	0.0673	0.0649	0.0631	0.0607	0.0611	0.0604	0.0587	0.0642	0.0664	0.0631	95%	0.0028	0.0080	0.0667	
17	n-Docosane (C22)	0.0667	0.0645	0.0669	0.0640	0.0627	0.0603	0.0600	0.0648	0.0605	0.0645	0.0662	0.0634	95%	0.0025	0.0070	0.0667	
18	n-Tricosane (C23)	0.0667	0.0676	0.0704	0.0661	0.0644	0.0621	0.0623	0.0639	0.0616	0.0667	0.0687	0.0654	98%	0.0030	0.0085	0.0667	
19	n-Tetracosane (C24)	0.0667	0.0652	0.0679	0.0638	0.0622	0.0668	0.0723	0.0613	0.0585	0.0660	0.0681	0.0652	98%	0.0040	0.0112	0.0667	
20	n-Pentacosane (C25) *	0.0667	0.0679	0.0699	0.0752	0.0735	0.0751	0.0696	0.0761	0.0748	0.0659	0.0681	0.0716	107%	0.0037	0.0105	0.0667	
21	n-Hexacosane (C26)	0.0667	0.0647	0.0673	0.0641	0.0626	0.0608	0.0605	0.0599	0.0577	0.0663	0.0683	0.0632	95%	0.0035	0.0098	0.0667	
22	n-Heptacosane (C27)	0.0667	0.0660	0.0691	0.0664	0.0648	0.0631	0.0633	0.0640	0.0613	0.0681	0.0700	0.0656	98%	0.0028	0.0080	0.0667	
23	n-Octacosane (C28)	0.0667	0.0655	0.0677	0.0671	0.0638	0.0746	0.0790	0.0656	0.0623	0.0689	0.0701	0.0685	103%	0.0051	0.0143	0.0667	
24	n-Nonacosane (C29) *	0.0667	0.0979	0.0986	0.0663	0.0640	0.0877	0.0887	0.0601	0.0573	0.0676	0.0701	0.0758	114%	0.0157	0.0444	0.0667	
25	n-Triacontane (C30)	0.0667	0.0667	0.0691	0.0670	0.0651	0.0640	0.0672	0.0651	0.0621	0.0693	0.0711	0.0667	100%	0.0027	0.0076	0.0667	
26	n-Hentriacontane (C31)	0.0667	0.0659	0.0684	0.0662	0.0647	0.0611	0.0623	0.0630	0.0603	0.0685	0.0701	0.0651	98%	0.0033	0.0094	0.0667	
27	n-Dotriacontane (C32)	0.0667	0.0649	0.0667	0.0651	0.0636	0.0613	0.0612	0.0627	0.0603	0.0677	0.0692	0.0643	96%	0.0030	0.0084	0.0667	
28	n-Tritriacontane (C33)	0.0667	0.0676	0.0698	0.0698	0.0679	0.0626	0.0638	0.0661	0.0644	0.0710	0.0727	0.0676	101%	0.0033	0.0094	0.0667	
29	n-tetratriacontane (C34)	0.0667	0.0657	0.0676	0.0667	0.0653	0.0603	0.0612	0.0643	0.0606	0.0684	0.0698	0.0650	97%	0.0033	0.0094	0.0667	
30	n-Pentatriacontane (C35)	0.0667	0.0650	0.0673	0.0661	0.0644	0.0591	0.0583	0.0629	0.0617	0.0681	0.0693	0.0642	96%	0.0037	0.0104	0.0667	
31	n-Hexatriacontane (C36)	0.0667	0.0652	0.0673	0.0670	0.0654	0.0581	0.0585	0.0632	0.0597	0.0687	0.0701	0.0643	96%	0.0043	0.0121	0.0667	
32	n-Heptatriacontane (C37)	0.0667	0.0647	0.0661	0.0663	0.0650	0.0572	0.0576	0.0617	0.0595	0.0683	0.0696	0.0636	95%	0.0044	0.0123	0.0667	
33	n-Octatriacontane (C38)	0.0667	0.0649	0.0665	0.0666	0.0651	0.0563	0.0566	0.0649	0.0603	0.0682	0.0691	0.0638	96%	0.0046	0.0129	0.0667	
34	n-Tetracontane (C40)	0.0667	0.0622	0.0637	0.0656	0.0626	0.0524	0.0536	0.0605	0.0571	0.0667	0.0677	0.0612	92%	0.0053	0.0150	0.0667	
Surrogates																		
1	ortho-terphenyl	1.670	1.602	1.642	1.669	1.626	1.613	1.612	1.593	1.589	1.617	1.657	1.622	97%				
2	d50-Tetracosane	1.670	1.558	1.602	1.612	1.571	1.534	1.538	1.523	1.525	1.626	1.659	1.575	94%				

Comments:

MDL for FID 9F, 16R, 17F, 2R, 6F

* Targets C18, C25, C29 are C qualified. C= Coelution: Targets co-elute with MS surrogates

Client-specific MDL

Petroleum Data

Form 1

FID FORENSICS

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1430116-01
 Client ID : NRW-7
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8015D(M)
 Lab File ID : F17121714026
 Sample Amount : 0.1029 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N
 Sulfur Cleanup : N

Lab Number : L1430116
 Project Number : 11176638
 Date Collected : 12/12/14 08:10
 Date Received : 12/12/14
 Date Analyzed : 12/18/14 11:34
 Date Extracted : 12/16/14
 Dilution Factor : 1
 Analyst : NL
 Instrument ID : FID17
 GC Column : RTX-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
NONE	Total Petroleum Hydrocarbons (C9-C44)	756000	6410	--	

Form 1

FID FORENSICS

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : WG748955-1
 Client ID : WG748955-1BLANK
 Sample Location :
 Sample Matrix : OIL
 Analytical Method : 1,8015D(M)
 Lab File ID : F17121714012
 Sample Amount : 0.1 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N
 Sulfur Cleanup : N

Lab Number : L1430116
 Project Number : 11176638
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 12/18/14 01:06
 Date Extracted : 12/16/14
 Dilution Factor : 1
 Analyst : NL
 Instrument ID : FID17
 GC Column : RTX-5
 %Solids : NA
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
NONE	Total Petroleum Hydrocarbons (C9-C44)	ND	6600	--	U

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC17\
 Data File : F17121714026.d
 Signal(s) : FID1A.CH
 Acq On : 18 Dec 2014 11:34 am
 Operator : FID17:NL
 Sample : L1430116-01,42
 Misc : WG750227,WG748955
 ALS Vial : 13 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Dec 29 17:55:28 2014
 Quant Method : C:\MSDCHEM\1\DATA\FID17\DECEMBER\DEC17\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Thu Dec 18 09:41:38 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Blank Name : IB1712171401F
 Blank File : F17121714010.D

Sub List : TPH - TPH

Compound	R.T.	Response	Conc Units

Internal Standards			
1) I 5-alpha-androstane	31.172	64306104	50.000 ug/mL M4
System Monitoring Compounds			
19) s ortho-terphenyl	29.142	16463536	11.633 ug/mL M4
Spiked Amount 50.000	Range 50 - 130	Recovery =	23.27%#
24) s d50-Tetracosane	35.825	15008471	13.058 ug/mL M4
Spiked Amount 50.000	Range 50 - 130	Recovery =	26.12%#
Target Compounds			
42) h C9-C44 Total Petroleu...	40.363	5539375872	4388.539 ug/mL m
42) h C9-C44 Total Petroleu BS	40.363	4911698090	3891.265 ug/mLm
45) h Total Resolved Hydroc...	40.749	3536743678	2801.965 ug/mL m

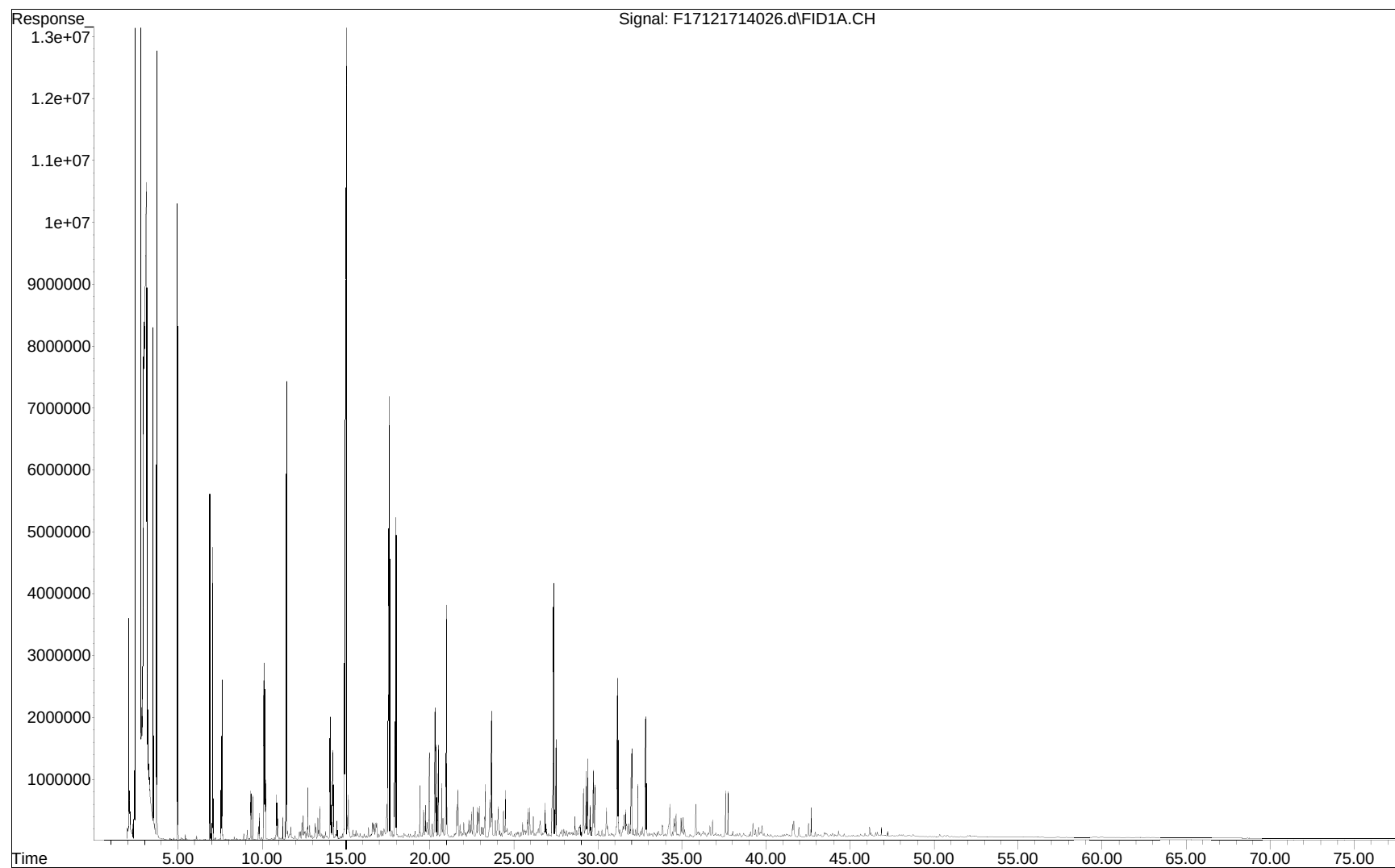
SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

File : 0:\Forensics\Data\FID17\2014\DEC2014\DEC17\F17121714026.d
Operator : FID17:NL
Acquired : 18 Dec 2014 11:34 am using AcqMethod FID17.M
Sample Name: L1430116-01,42
Instrument: FID17
Misc Info : WG750227,WG748955
Vial Number: 13
CurrentMeth: 0:\Forensics\Data\FID17\2014\DEC2014\DEC17\HC17111014F.M



Petroleum Standards Data

Initial Calibration

6B
FID FORENSICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1430116

Instrument ID: FID17

Calibration Date(s): 11/10/14

11/11/14

Calibration Times: 19:02

02:29

Calibration Files

1 =F17111014012.d 10 =F17111014014.d 50 =F17111014016.d 100 =F17111014018.d 200 =F17111014020.d
500 =F17111014022.d

Compound	1	10	50	100	200	500	Avg	%RSD
1) I 5-alpha-androstane	-----ISTD-----							
2) t n-Octane (C8)	0.858	0.822	0.839	0.861	0.855		0.847	1.94
3) t n-Nonane (C9)	0.883	0.849	0.862	0.888	0.874		0.871	1.81
4) t n-Decane (C10)	0.892	0.867	0.891	0.913	0.906		0.894	1.96
5) t n-Undecane (C11)	0.873	0.886	0.914	0.926	0.917		0.903	2.47
6) t n-Dodecane (C12)	0.883	0.905	0.933	0.938	0.930		0.918	2.55
7) t n-Tridecane (C13)	0.894	0.914	0.941	0.941	0.934		0.925	2.19
8) t 1380	0.908	0.928	0.953	0.950	0.943		0.936	2.00
9) t n-Tetradecane (C14)	0.908	0.928	0.953	0.950	0.943		0.936	2.00
10) t 1470	0.927	0.946	0.971	0.968	0.960		0.954	1.90
11) t n-Pentadecane (C15)	0.927	0.946	0.971	0.968	0.960		0.954	1.90
12) t n-Hexadecane (C16)	0.958	0.954	0.969	0.964	0.957		0.960	0.65
13) t 1650	0.910	0.946	0.975	0.971	0.966		0.953	2.81
14) t n-Heptadecane (C17)	0.910	0.946	0.975	0.971	0.966		0.953	2.81
15) t Pristane	1.010	0.976	0.989	0.982	0.968		0.985	1.63
16) t n-Octadecane (C18)	0.959	0.973	0.994	0.993	0.981		0.980	1.47
17) t Phytane	0.875	0.859	0.870	0.864	0.856		0.865	0.88
18) t n-Nonadecane (C19)	0.968	0.970	0.987	0.985	0.975		0.977	0.88
19) s ortho-terphenyl	1.173	1.089	1.093	1.096	1.076	1.076	1.100	3.34
20) t n-Eicosane (C20)	0.970	0.968	0.983	0.982	0.974		0.975	0.67
21) t n-Heneicosane (C21)	0.972	0.976	0.989	0.993	0.983		0.983	0.91
22) t n-Docosane (C22)	0.986	0.984	0.996	1.003	0.994		0.993	0.81
23) t n-Tricosane (C23)	1.001	0.992	1.003	1.013	1.003		1.002	0.77
24) s d50-Tetracosane	0.950	0.876	0.877	0.900	0.883	0.876	0.894	3.25
25) t n-Tetracosane (C24)	0.994	0.992	1.005	1.020	1.010		1.004	1.13
26) t n-Pentacosane (C25)	0.994	0.987	0.997	1.013	1.004		0.999	0.99
27) t n-Hexacosane (C26)	1.012	1.010	1.017	1.037	1.031		1.021	1.18
28) t n-Heptacosane (C27)	1.023	1.000	1.005	1.029	1.024		1.016	1.28
29) t n-Octacosane (C28)	1.031	0.992	0.999	1.027	1.024		1.015	1.76
30) t n-Nonacosane (C29)	1.009	0.999	1.002	1.038	1.037		1.017	1.86
31) t n-Triacontane (C30)	1.021	1.000	1.002	1.043	1.044		1.022	2.09
32) t n-Hentriacontane (C31)	1.016	1.000	0.999	1.048	1.049		1.023	2.42
33) t n-Dotriacontane (C32)	1.015	1.008	1.005	1.060	1.063		1.030	2.81
34) t n-Tritriacontane (C33)	0.965	0.948	0.948	1.006	1.009		0.975	3.11
35) t n-tetratriacontane (C34)	1.000	0.984	0.987	1.055	1.058		1.017	3.63
36) t n-Pentatriacontane (C35)	0.997	0.990	0.992	1.066	1.070		1.023	4.04
37) t n-Hexatriacontane (C36)	1.025	1.013	1.019	1.099	1.101		1.052	4.26
38) t n-Heptatriacontane (C37)	1.012	0.986	0.997	1.079	1.079		1.031	4.36
39) t n-Octatriacontane (C38)	0.984	0.968	0.982	1.062	1.060		1.011	4.55
40) t n-Nonatriacontane	1.028	1.004	1.033	1.114	1.105		1.057	4.66
41) t n-Tetracontane (C40)	1.028	1.004	1.033	1.114	1.105		1.057	4.66
42) h C9-C44 Total	0.970	0.963	0.976	1.002	0.997		0.981	1.75
43) h C9-C40 Total	0.970	0.963	0.976	1.002	0.997		0.981	1.75

6B
FID FORENSICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1430116

Instrument ID: FID17 Calibration Date(s): 11/10/14 11/11/14

Calibration Times: 19:02 02:29

Compound		1	10	50	100	200	500	Avg	%RSD
44) h	C10-C28 DRO	0.970	0.963	0.976	1.002	0.997		0.981	1.75
45) h	Total Resolve	0.970	0.963	0.976	1.002	0.997		0.981	1.75

FORM VI-A2-TPH

Response Factor Report FID17

Method Path : 0:\Forensics\Data\FID17\2014\NOV\NOV10\
 Method File : HC17111014F.M
 Title : FID Forensics
 Last Update : Mon Nov 17 14:46:09 2014
 Response Via : Initial Calibration

Calibration Files

1 =F17111014012.d 10 =F17111014014.d 50 =F17111014016.d 100 =F17111014018.d 200 =F17111014020.d
 500 =F17111014022.d

Compound		1	10	50	100	200	500	Avg	%RSD

1) I	5-alpha-androstane	-----ISTD-----							
2) t	n-Octane (C8)	0.858	0.822	0.839	0.861	0.855		0.847	1.94
3) t	n-Nonane (C9)	0.883	0.849	0.862	0.888	0.874		0.871	1.81
4) t	n-Decane (C10)	0.892	0.867	0.891	0.913	0.906		0.894	1.96
5) t	n-Undecane (C11)	0.873	0.886	0.914	0.926	0.917		0.903	2.47
6) t	n-Dodecane (C12)	0.883	0.905	0.933	0.938	0.930		0.918	2.55
7) t	n-Tridecane (...)	0.894	0.914	0.941	0.941	0.934		0.925	2.19
8) t	1380	0.908	0.928	0.953	0.950	0.943		0.936	2.00
9) t	n-Tetradecane...	0.908	0.928	0.953	0.950	0.943		0.936	2.00
10) t	1470	0.927	0.946	0.971	0.968	0.960		0.954	1.90
11) t	n-Pentadecane...	0.927	0.946	0.971	0.968	0.960		0.954	1.90
12) t	n-Hexadecane ...	0.958	0.954	0.969	0.964	0.957		0.960	0.65
13) t	1650	0.910	0.946	0.975	0.971	0.966		0.953	2.81
14) t	n-Heptadecane...	0.910	0.946	0.975	0.971	0.966		0.953	2.81
15) t	Pristane	1.010	0.976	0.989	0.982	0.968		0.985	1.63
16) t	n-Octadecane ...	0.959	0.973	0.994	0.993	0.981		0.980	1.47
17) t	Phytane	0.875	0.859	0.870	0.864	0.856		0.865	0.88
18) t	n-Nonadecane ...	0.968	0.970	0.987	0.985	0.975		0.977	0.88
19) s	ortho-terphenyl	1.173	1.089	1.093	1.096	1.076	1.076	1.100	3.34
20) t	n-Eicosane (C20)	0.970	0.968	0.983	0.982	0.974		0.975	0.67
21) t	n-Heneicosane...	0.972	0.976	0.989	0.993	0.983		0.983	0.91
22) t	n-Docosane (C22)	0.986	0.984	0.996	1.003	0.994		0.993	0.81
23) t	n-Tricosane (...)	1.001	0.992	1.003	1.013	1.003		1.002	0.77
24) s	d50-Tetracosane	0.950	0.876	0.877	0.900	0.883	0.876	0.894	3.25
25) t	n-Tetracosane...	0.994	0.992	1.005	1.020	1.010		1.004	1.13
26) t	n-Pentacosane...	0.994	0.987	0.997	1.013	1.004		0.999	0.99
27) t	n-Hexacosane ...	1.012	1.010	1.017	1.037	1.031		1.021	1.18
28) t	n-Heptacosane...	1.023	1.000	1.005	1.029	1.024		1.016	1.28
29) t	n-Octacosane ...	1.031	0.992	0.999	1.027	1.024		1.015	1.76
30) t	n-Nonacosane ...	1.009	0.999	1.002	1.038	1.037		1.017	1.86
31) t	n-Triacontane...	1.021	1.000	1.002	1.043	1.044		1.022	2.09

Response Factor Report FID17

Method Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
Method File : HC17111014F.M
Title : FID Forensics
Last Update : Mon Nov 17 14:46:09 2014
Response Via : Initial Calibration

Calibration Files

1 =F17111014012.d 10 =F17111014014.d 50 =F17111014016.d 100 =F17111014018.d 200 =F17111014020.d
500 =F17111014022.d

	Compound	1	10	50	100	200	500	Avg	%RSD
32) t	n-Hentriacont...	1.016	1.000	0.999	1.048	1.049		1.023	2.42
33) t	n-Dotriaconta...	1.015	1.008	1.005	1.060	1.063		1.030	2.81
34) t	n-Tritriacont...	0.965	0.948	0.948	1.006	1.009		0.975	3.11
35) t	n-tetatriacono...	1.000	0.984	0.987	1.055	1.058		1.017	3.63
36) t	n-Pentatriacono...	0.997	0.990	0.992	1.066	1.070		1.023	4.04
37) t	n-Hexatriacono...	1.025	1.013	1.019	1.099	1.101		1.052	4.26
38) t	n-Heptatriacono...	1.012	0.986	0.997	1.079	1.079		1.031	4.36
39) t	n-Octatriacono...	0.984	0.968	0.982	1.062	1.060		1.011	4.55
40) t	n-Nonatriacono...	1.028	1.004	1.033	1.114	1.105		1.057	4.66
41) t	n-Tetracontan...	1.028	1.004	1.033	1.114	1.105		1.057	4.66
42) h	C9-C44 Total ...	0.970	0.963	0.976	1.002	0.997		0.981	1.75
43) h	C9-C40 Total ...	0.970	0.963	0.976	1.002	0.997		0.981	1.75
44) h	C10-C28 DRO	0.970	0.963	0.976	1.002	0.997		0.981	1.75
45) h	Total Resolve...	0.970	0.963	0.976	1.002	0.997		0.981	1.75

(#) = Out of Range

RSF Update Summary Report

Method Path.....: O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Method File.....: HC17111014F.M
 Method Title.....: FID Forensics
 Last Update.....: Mon Nov 17 14:44:21 2014

Generating Average Response Factor For: C9-C44 Total Petroleum Hydrocarbons

No	Compound	Level	Conc	Response

1	n-Nonane (C9)	1	1.00000	956166.850
2	n-Decane (C10)	1	1.00000	965575.156
3	n-Undecane (C11)	1	1.00000	945978.032
4	n-Dodecane (C12)	1	1.00000	956040.780
5	n-Tridecane (C13)	1	1.00000	968666.065
6	n-Tetradecane (C14)	1	1.00000	982914.837
7	n-Pentadecane (C15)	1	1.00000	1003729.234
8	n-Hexadecane (C16)	1	1.00000	1037076.323
9	n-Heptadecane (C17)	1	1.00000	985154.446
10	Pristane	1	1.00000	1093918.178
11	n-Octadecane (C18)	1	1.00000	1038773.184
12	Phytane	1	1.00000	947367.010
13	n-Nonadecane (C19)	1	1.00000	1048873.675
14	n-Eicosane (C20)	1	1.00000	1050923.185
15	n-Heneicosane (C21)	1	1.00000	1052164.354
16	n-Docosane (C22)	1	1.00000	1067395.148
17	n-Tricosane (C23)	1	1.00000	1084446.063
18	n-Tetracosane (C24)	1	1.00000	1076773.677
19	n-Pentacosane (C25)	1	1.00000	1076154.642
20	n-Hexacosane (C26)	1	1.00000	1095972.739
21	n-Heptacosane (C27)	1	1.00000	1108389.553
22	n-Octacosane (C28)	1	1.00000	1117077.100
23	n-Nonacosane (C29)	1	1.00000	1093208.318
24	n-Triacontane (C30)	1	1.00000	1105800.579
25	n-Hentriacontane (C31)	1	1.00000	1100716.731
26	n-Dotriacontane (C32)	1	1.00000	1099085.755
27	n-Tritriacontane (C33)	1	1.00000	1045498.580
28	n-tetratriacontane (C34)	1	1.00000	1083357.182
29	n-Pentatriacontane (C35)	1	1.00000	1079522.254
30	n-Hexatriacontane (C36)	1	1.00000	1109798.951
31	n-Heptatriacontane (C37)	1	1.00000	1096538.366
32	n-Octatriacontane (C38)	1	1.00000	1065698.162
33	n-Tetracontane (C40)	1	1.00000	1113747.106

Avg RSF For: C9-C44 Total Petroleum			1.00000	1050075.825

1	n-Nonane (C9)	2	10.00000	9571218.032
2	n-Decane (C10)	2	10.00000	9773459.692
3	n-Undecane (C11)	2	10.00000	9991961.996
4	n-Dodecane (C12)	2	10.00000	10206110.806
5	n-Tridecane (C13)	2	10.00000	10303226.050
6	n-Tetradecane (C14)	2	10.00000	10460708.697
7	n-Pentadecane (C15)	2	10.00000	10664004.171
8	n-Hexadecane (C16)	2	10.00000	10751385.225
9	n-Heptadecane (C17)	2	10.00000	10666998.447
10	Pristane	2	10.00000	10997838.390
11	n-Octadecane (C18)	2	10.00000	10973499.727
12	Phytane	2	10.00000	9686819.949
13	n-Nonadecane (C19)	2	10.00000	10933111.412
14	n-Eicosane (C20)	2	10.00000	10914757.626

rfupdate.txt				
15	n-Heneicosane (C21)	2	10.00000	11005550.647
16	n-Docosane (C22)	2	10.00000	11090258.377
17	n-Tricosane (C23)	2	10.00000	11177596.766
18	n-Tetracosane (C24)	2	10.00000	11187494.340
19	n-Pentacosane (C25)	2	10.00000	11131468.403
20	n-Hexacosane (C26)	2	10.00000	11381761.427
21	n-Heptacosane (C27)	2	10.00000	11270080.304
22	n-Octacosane (C28)	2	10.00000	11186318.226
23	n-Nonacosane (C29)	2	10.00000	11258816.490
24	n-Triacontane (C30)	2	10.00000	11268522.448
25	n-Hentriacontane (C31)	2	10.00000	11275401.001
26	n-Dotriacontane (C32)	2	10.00000	11359576.684
27	n-Tritriacontane (C33)	2	10.00000	10681175.532
28	n-tetratriacontane (C34)	2	10.00000	11092909.132
29	n-Pentatriacontane (C35)	2	10.00000	11156812.789
30	n-Hexatriacontane (C36)	2	10.00000	11422542.616
31	n-Heptatriacontane (C37)	2	10.00000	11112602.223
32	n-Octatriacontane (C38)	2	10.00000	10908503.254
33	n-Tetracontane (C40)	2	10.00000	11317317.803

Avg RSF For: C9-C44 Total Petroleum			10.00000	10853933.596
1	n-Nonane (C9)	3	50.00000	46801134.640
2	n-Decane (C10)	3	50.00000	48405866.302
3	n-Undecane (C11)	3	50.00000	49661379.227
4	n-Dodecane (C12)	3	50.00000	50686941.286
5	n-Tridecane (C13)	3	50.00000	51093773.490
6	n-Tetradecane (C14)	3	50.00000	51735305.888
7	n-Pentadecane (C15)	3	50.00000	52726106.277
8	n-Hexadecane (C16)	3	50.00000	52629891.295
9	n-Heptadecane (C17)	3	50.00000	52933667.657
10	Pristane	3	50.00000	53728133.846
11	n-Octadecane (C18)	3	50.00000	53966088.468
12	Phytane	3	50.00000	47224331.509
13	n-Nonadecane (C19)	3	50.00000	53604297.258
14	n-Eicosane (C20)	3	50.00000	53373894.140
15	n-Heneicosane (C21)	3	50.00000	53706674.897
16	n-Docosane (C22)	3	50.00000	54114794.335
17	n-Tricosane (C23)	3	50.00000	54468080.152
18	n-Tetracosane (C24)	3	50.00000	54558609.238
19	n-Pentacosane (C25)	3	50.00000	54123508.809
20	n-Hexacosane (C26)	3	50.00000	55246629.154
21	n-Heptacosane (C27)	3	50.00000	54568290.738
22	n-Octacosane (C28)	3	50.00000	54246379.777
23	n-Nonacosane (C29)	3	50.00000	54437873.339
24	n-Triacontane (C30)	3	50.00000	54410127.134
25	n-Hentriacontane (C31)	3	50.00000	54264859.615
26	n-Dotriacontane (C32)	3	50.00000	54592430.086
27	n-Tritriacontane (C33)	3	50.00000	51478791.228
28	n-tetratriacontane (C34)	3	50.00000	53603676.807
29	n-Pentatriacontane (C35)	3	50.00000	53899156.017
30	n-Hexatriacontane (C36)	3	50.00000	55334260.358
31	n-Heptatriacontane (C37)	3	50.00000	54162137.881
32	n-Octatriacontane (C38)	3	50.00000	53323713.930
33	n-Tetracontane (C40)	3	50.00000	56122385.531

Avg RSF For: C9-C44 Total Petroleum			50.00000	53007066.373
1	n-Nonane (C9)	4	100.00000	92546861.192
2	n-Decane (C10)	4	100.00000	95150145.551
3	n-Undecane (C11)	4	100.00000	96504886.549
4	n-Dodecane (C12)	4	100.00000	97813354.954
5	n-Tridecane (C13)	4	100.00000	98128724.750
6	n-Tetradecane (C14)	4	100.00000	99098349.370
7	n-Pentadecane (C15)	4	100.00000	100894959.280
8	n-Hexadecane (C16)	4	100.00000	100542165.042

rfupdate.txt			
9 n-Heptadecane (C17)	4	100.00000	101195746.220
10 Pristane	4	100.00000	102363704.392
11 n-Octadecane (C18)	4	100.00000	103494807.730
12 Phytane	4	100.00000	90107645.961
13 n-Nonadecane (C19)	4	100.00000	102722661.551
14 n-Eicosane (C20)	4	100.00000	102338718.868
15 n-Heneicosane (C21)	4	100.00000	103561695.242
16 n-Docosane (C22)	4	100.00000	104611286.417
17 n-Tricosane (C23)	4	100.00000	105634839.540
18 n-Tetracosane (C24)	4	100.00000	106336756.883
19 n-Pentacosane (C25)	4	100.00000	105611101.081
20 n-Hexacosane (C26)	4	100.00000	108152181.990
21 n-Heptacosane (C27)	4	100.00000	107262727.666
22 n-Octacosane (C28)	4	100.00000	107073578.813
23 n-Nonacosane (C29)	4	100.00000	108209907.372
24 n-Triacontane (C30)	4	100.00000	108739389.295
25 n-Hentriacontane (C31)	4	100.00000	109245612.750
26 n-Dotriacontane (C32)	4	100.00000	110550981.571
27 n-Tritriacontane (C33)	4	100.00000	104844271.241
28 n-tetratriacontane (C34)	4	100.00000	110027218.622
29 n-Pentatriacontane (C35)	4	100.00000	111133176.317
30 n-Hexatriacontane (C36)	4	100.00000	114629087.490
31 n-Heptatriacontane (C37)	4	100.00000	112472231.403
32 n-Octatriacontane (C38)	4	100.00000	110748872.947
33 n-Tetracontane (C40)	4	100.00000	116119008.402

Avg RSF For: C9-C44 Total Petroleum		100.00000	104480807.771
1 n-Nonane (C9)	5	200.00000	183994497.292
2 n-Decane (C10)	5	200.00000	190630603.670
3 n-Undecane (C11)	5	200.00000	192977775.796
4 n-Dodecane (C12)	5	200.00000	195722039.931
5 n-Tridecane (C13)	5	200.00000	196451380.600
6 n-Tetradecane (C14)	5	200.00000	198370822.567
7 n-Pentadecane (C15)	5	200.00000	201966601.052
8 n-Hexadecane (C16)	5	200.00000	201302145.051
9 n-Heptadecane (C17)	5	200.00000	203355194.176
10 Pristane	5	200.00000	203706839.250
11 n-Octadecane (C18)	5	200.00000	206512059.176
12 Phytane	5	200.00000	180095178.986
13 n-Nonadecane (C19)	5	200.00000	205137349.145
14 n-Eicosane (C20)	5	200.00000	204858566.695
15 n-Heneicosane (C21)	5	200.00000	206881189.955
16 n-Docosane (C22)	5	200.00000	209103777.146
17 n-Tricosane (C23)	5	200.00000	211118913.202
18 n-Tetracosane (C24)	5	200.00000	212476277.808
19 n-Pentacosane (C25)	5	200.00000	211377509.264
20 n-Hexacosane (C26)	5	200.00000	216859002.454
21 n-Heptacosane (C27)	5	200.00000	215525450.662
22 n-Octacosane (C28)	5	200.00000	215543841.344
23 n-Nonacosane (C29)	5	200.00000	218200394.427
24 n-Triacontane (C30)	5	200.00000	219666382.510
25 n-Hentriacontane (C31)	5	200.00000	220837165.611
26 n-Dotriacontane (C32)	5	200.00000	223659666.599
27 n-Tritriacontane (C33)	5	200.00000	212305009.296
28 n-tetratriacontane (C34)	5	200.00000	222719307.925
29 n-Pentatriacontane (C35)	5	200.00000	225244105.605
30 n-Hexatriacontane (C36)	5	200.00000	231762250.063
31 n-Heptatriacontane (C37)	5	200.00000	226986887.768
32 n-Octatriacontane (C38)	5	200.00000	222999978.711
33 n-Tetracontane (C40)	5	200.00000	232479116.576

Avg RSF For: C9-C44 Total Petroleum		200.00000	209722038.797

Generating Reference Response Factors

		rfupdate.txt	
No	Compound	No	Reference Compound

8	1380	9	n-Tetradecane (C14)
10	1470	11	n-Pentadecane (C15)
13	1650	14	n-Heptadecane (C17)
40	n-Nonatriacontane (C39)	41	n-Tetracontane (C40)
43	C9-C40 Total Petroleum Hydrocarbons	42	C9-C44 Total Petroleum
44	C10-C28 DRO	42	C9-C44 Total Petroleum
45	Total Resolved Hydrocarbons	42	C9-C44 Total Petroleum

Abacus Response Factor Update Macro Ver. 1.0			

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014012.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 7:02 pm
 Operator : FID17:NL
 Sample : I1711011401R
 Misc : WG743851, FRAV23 1ug/mL
 ALS Vial : 6 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:28:33 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Tue Nov 05 21:46:11 2013
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.266	54151158	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.225	1270913	1.047	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 2.09%#
24) s	d50-Tetracosane	35.902	1028871	1.075	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 2.15%#
Target Compounds					
2) t	n-Octane (C8)	5.546	928802	0.968	ug/mL M4
3) t	n-Nonane (C9)	7.756	956167	0.949	ug/mL M4
4) t	n-Decane (C10)	10.249	965575	0.913	ug/mL M4
5) t	n-Undecane (C11)	12.766	945978	0.912	ug/mL M4
6) t	n-Dodecane (C12)	15.196	956041	0.915	ug/mL M4
7) t	n-Tridecane (C13)	17.506	968666	0.928	ug/mL M4
9) t	n-Tetradecane (C14)	19.691	982915	0.909	ug/mL M4
11) t	n-Pentadecane (C15)	21.760	1003729	0.940	ug/mL M4
12) t	n-Hexadecane (C16)	23.721	1037076	0.964	ug/mL M4
14) t	n-Heptadecane (C17)	25.581	985154	0.911	ug/mL M4
15) t	Pristane	25.691	1093918	1.009	ug/mL M4
16) t	n-Octadecane (C18)	27.353	1038773	0.966	ug/mL M4
17) t	Phytane	27.514	947367	0.867	ug/mL M4
18) t	n-Nonadecane (C19)	29.039	1048874	0.981	ug/mL M4
20) t	n-Eicosane (C20)	30.652	1050923	0.978	ug/mL M4
21) t	n-Heneicosane (C21)	32.194	1052164	0.968	ug/mL M4
22) t	n-Docosane (C22)	33.669	1067395	0.977	ug/mL M4
23) t	n-Tricosane (C23)	35.087	1084446	0.987	ug/mL M4
25) t	n-Tetracosane (C24)	36.448	1076774	0.979	ug/mL M4
26) t	n-Pentacosane (C25)	37.758	1076155	0.975	ug/mL M4
27) t	n-Hexacosane (C26)	39.019	1095973	0.973	ug/mL M4
28) t	n-Heptacosane (C27)	40.236	1108390	0.991	ug/mL M4
29) t	n-Octacosane (C28)	41.409	1117077	0.996	ug/mL M4
30) t	n-Nonacosane (C29)	42.544	1093208	0.966	ug/mL M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014012.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 7:02 pm
 Operator : FID17:NL
 Sample : I1711011401R
 Misc : WG743851, FRAV23 1ug/mL
 ALS Vial : 6 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:28:33 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Tue Nov 05 21:46:11 2013
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc Units
31) t	n-Triacontane (C30)	43.643	1105801	0.973 ug/mL M4
32) t	n-Hentriacontane (C31)	44.706	1100717	0.962 ug/mL M4
33) t	n-Dotriacontane (C32)	45.736	1099086	0.966 ug/mL M4
34) t	n-Tritriacontane (C33)	46.734	1045499	0.946 ug/mL M4
35) t	n-tetratriacontane (C34)	47.754	1083357	0.923 ug/mL M4
36) t	n-Pentatriacontane (C35)	48.902	1079522	0.925 ug/mL M4
37) t	n-Hexatriacontane (C36)	50.206	1109799	0.878 ug/mL M4
38) t	n-Heptatriacontane (C37)	51.723	1096538	0.930 ug/mL M4
39) t	n-Octatriacontane (C38)	53.487	1065698	0.904 ug/mL M4
41) t	n-Tetracontane (C40)	58.012	1113747	0.982 ug/mL M4

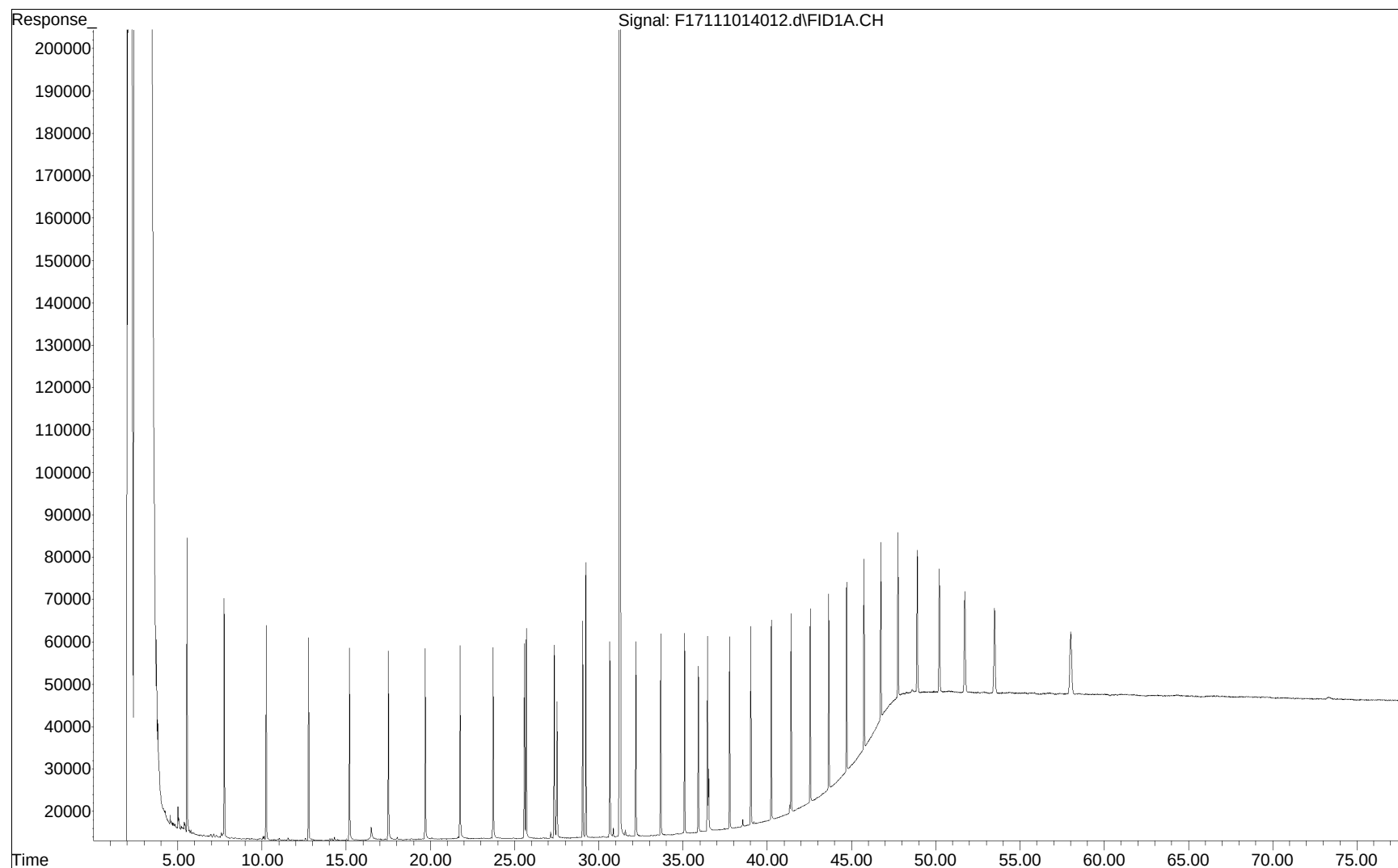
SemiQuant Compounds - Not Calibrated on this Instrument

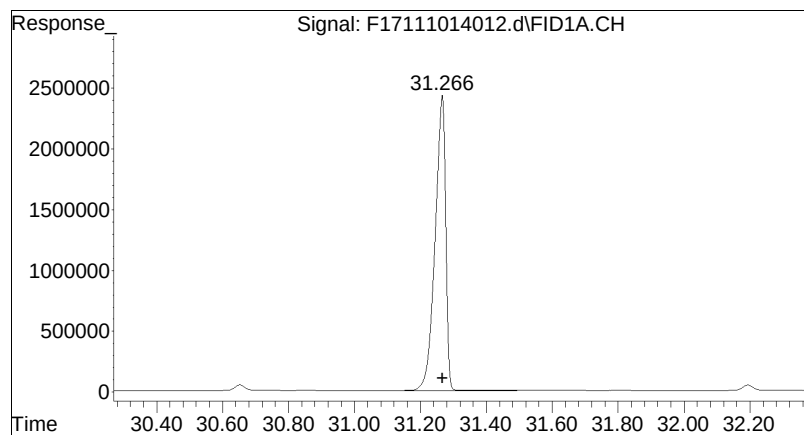
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

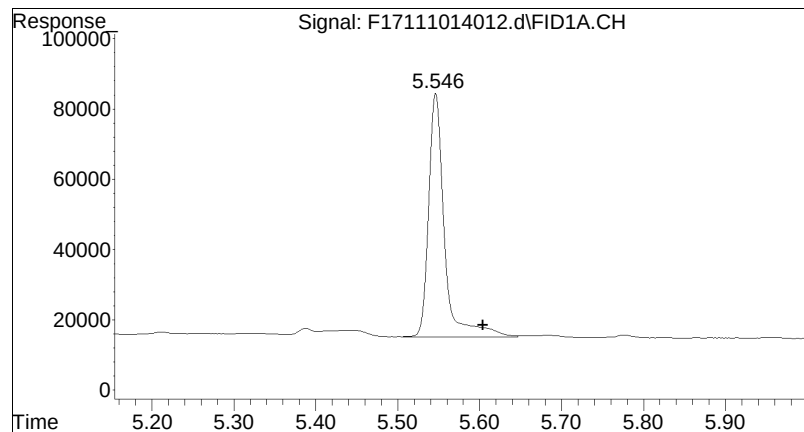
File : 0:\Forensics\Data\FID17\2014\NOV\NOV10\F17111014012.d
 Operator : FID17:NL
 Acquired : 10 Nov 2014 7:02 pm using AcqMethod FID17.M
 Sample Name: I1711011401R
 Instrument: FID17
 Misc Info : WG743851, FRAV23 1ug/mL
 Vial Number: 6
 CurrentMeth: 0:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M





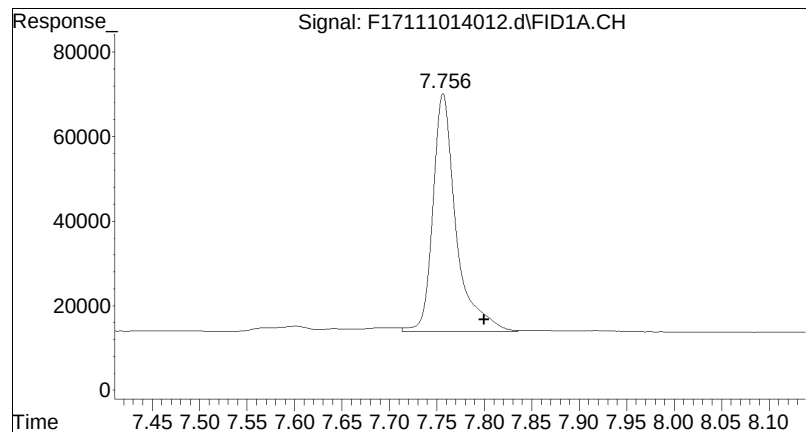
#1 5-alpha-androstane

R.T.: 31.266 min
Delta R.T.: -0.003 min
Response: 54151158
Conc: 50.00 ug/mL M4



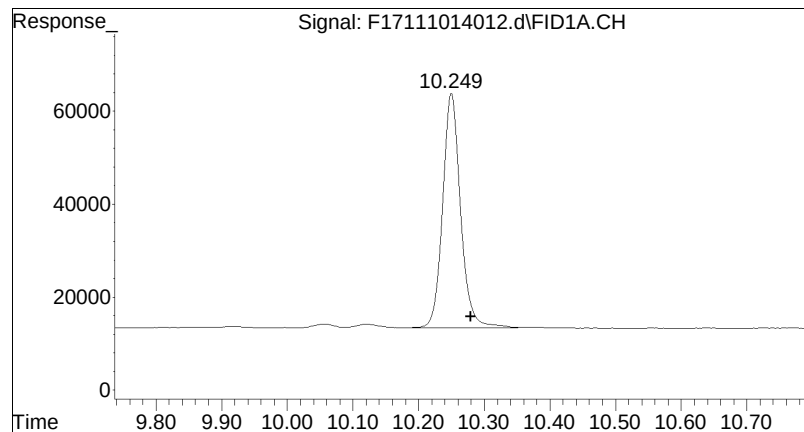
#2 n-Octane (C8)

R.T.: 5.546 min
Delta R.T.: -0.058 min
Response: 928802
Conc: 0.97 ug/mL M4



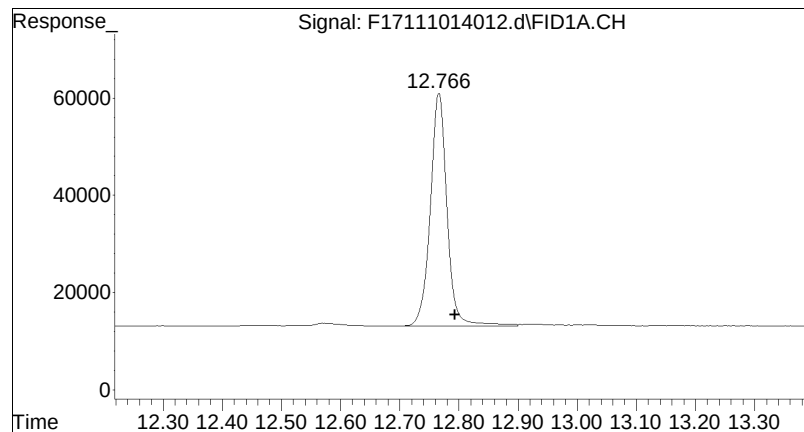
#3 n-Nonane (C9)

R.T.: 7.756 min
Delta R.T.: -0.044 min
Response: 956167
Conc: 0.95 ug/mL M4



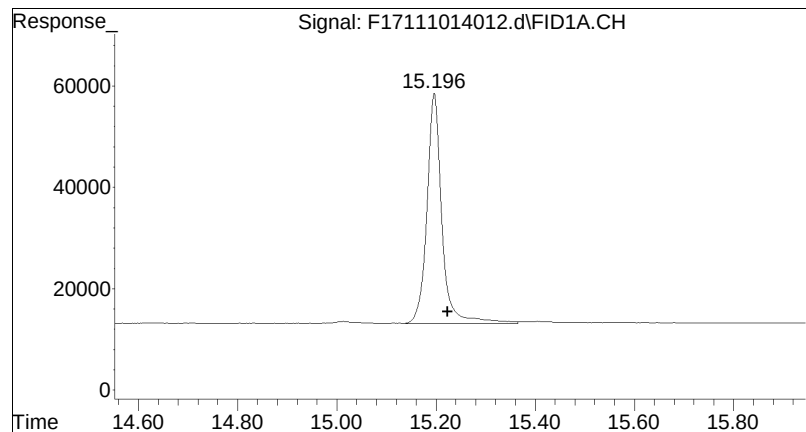
#4 n-Decane (C10)

R.T.: 10.249 min
Delta R.T.: -0.030 min
Response: 965575
Conc: 0.91 ug/mL M4



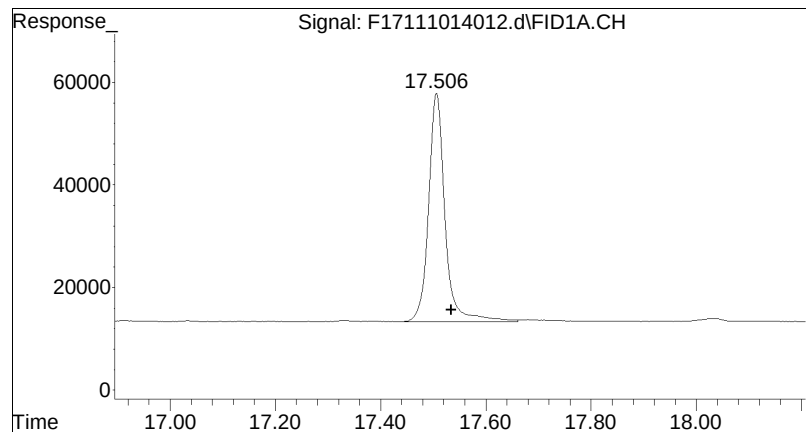
#5 n-Undecane (C11)

R.T.: 12.766 min
Delta R.T.: -0.027 min
Response: 945978
Conc: 0.91 ug/mL M4



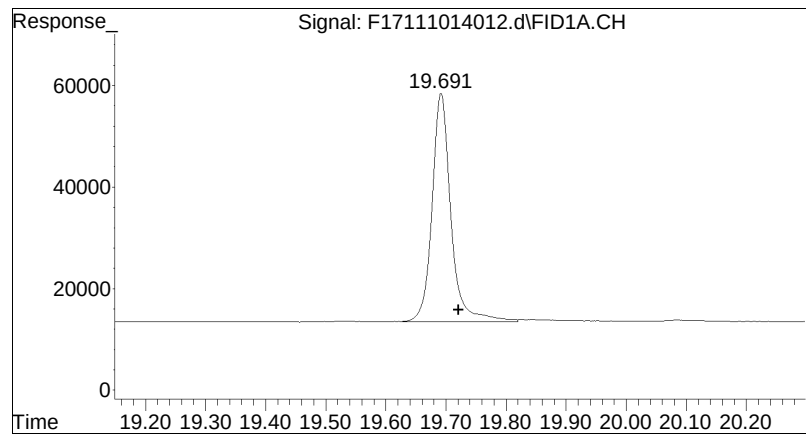
#6 n-Dodecane (C12)

R.T.: 15.196 min
Delta R.T.: -0.027 min
Response: 956041
Conc: 0.91 ug/mL M4



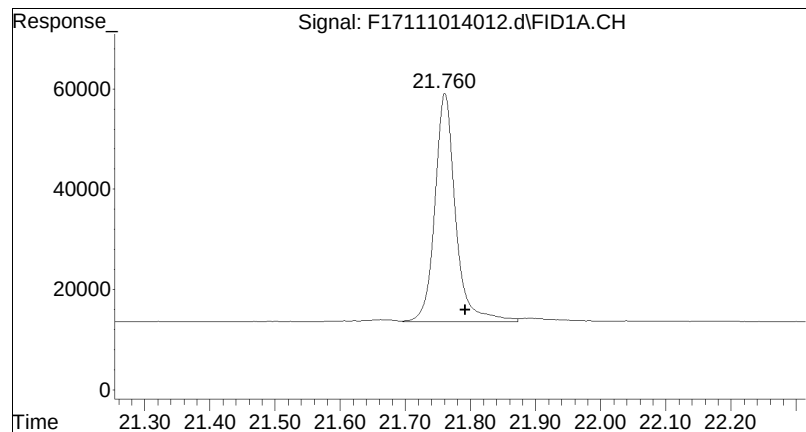
#7 n-Tridecane (C13)

R.T.: 17.506 min
Delta R.T.: -0.028 min
Response: 968666
Conc: 0.93 ug/mL M4



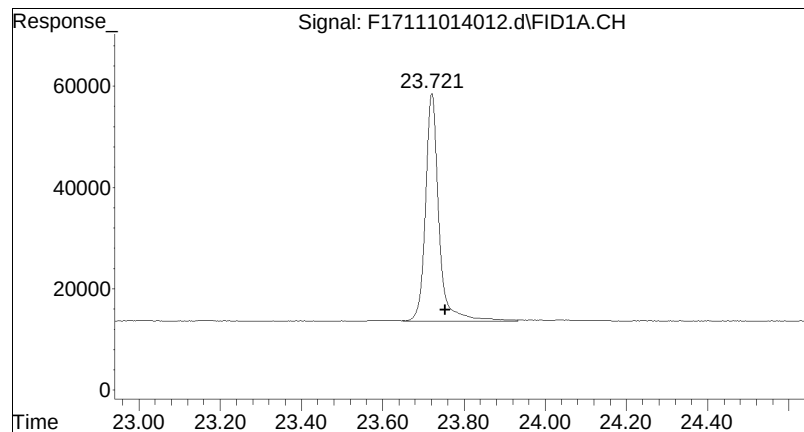
#9 n-Tetradecane (C14)

R.T.: 19.691 min
Delta R.T.: -0.030 min
Response: 982915
Conc: 0.91 ug/mL M4



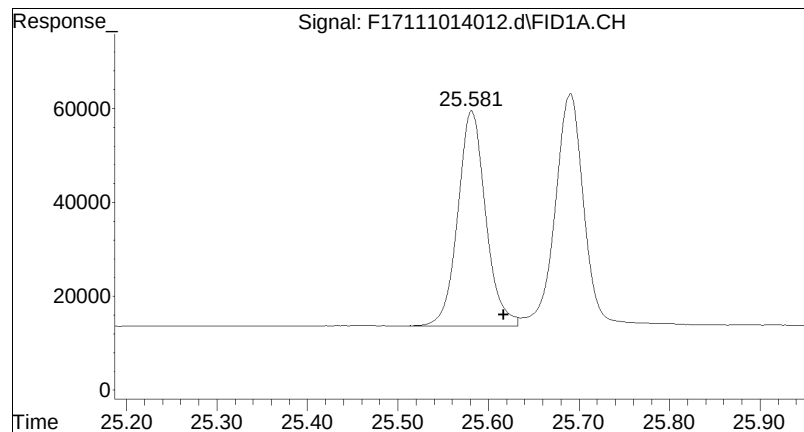
#11 n-Pentadecane (C15)

R.T.: 21.760 min
Delta R.T.: -0.032 min
Response: 1003729
Conc: 0.94 ug/mL M4



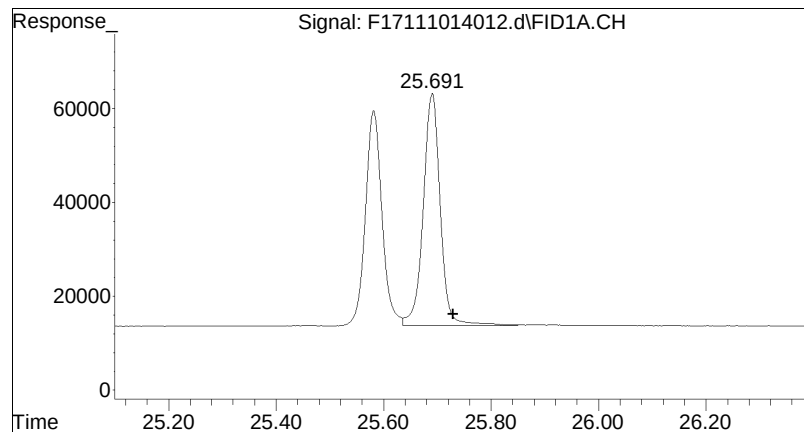
#12 n-Hexadecane (C16)

R.T.: 23.721 min
Delta R.T.: -0.032 min
Response: 1037076
Conc: 0.96 ug/mL M4



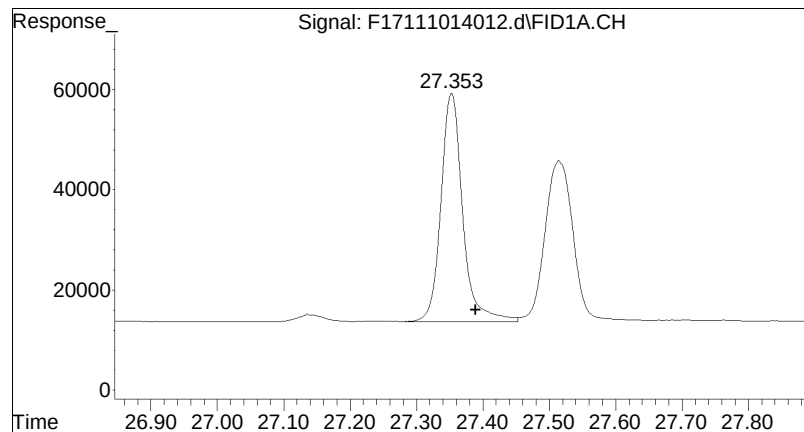
#14 n-Heptadecane (C17)

R.T.: 25.581 min
Delta R.T.: -0.036 min
Response: 985154
Conc: 0.91 ug/mL M4



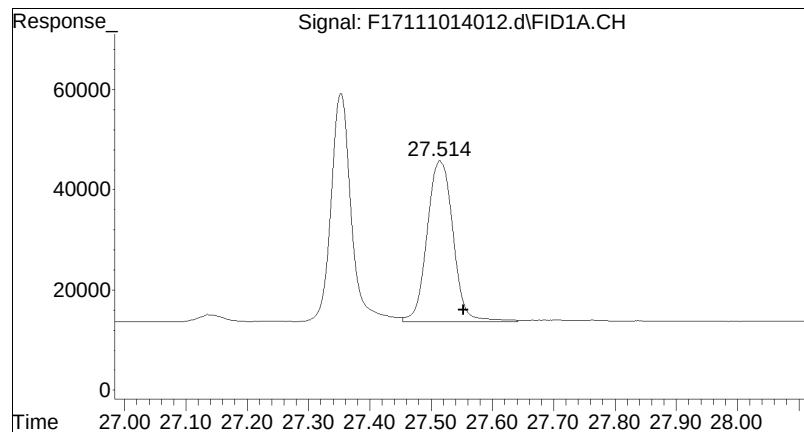
#15 Pristane

R.T.: 25.691 min
Delta R.T.: -0.039 min
Response: 1093918
Conc: 1.01 ug/mL M4



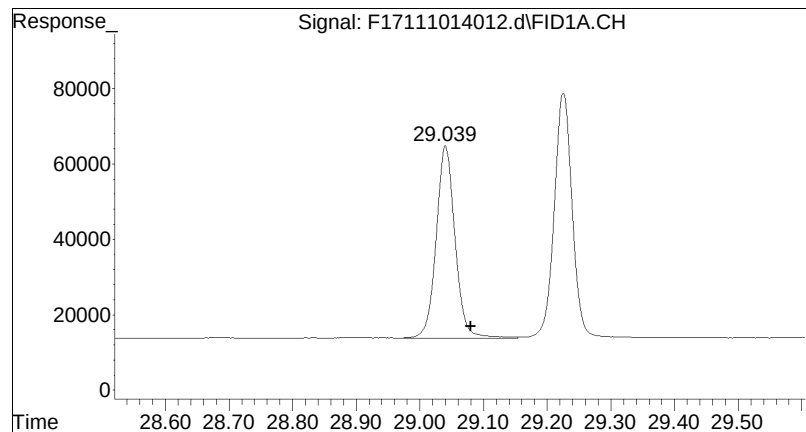
#16 n-Octadecane (C18)

R.T.: 27.353 min
Delta R.T.: -0.037 min
Response: 1038773
Conc: 0.97 ug/mL M4



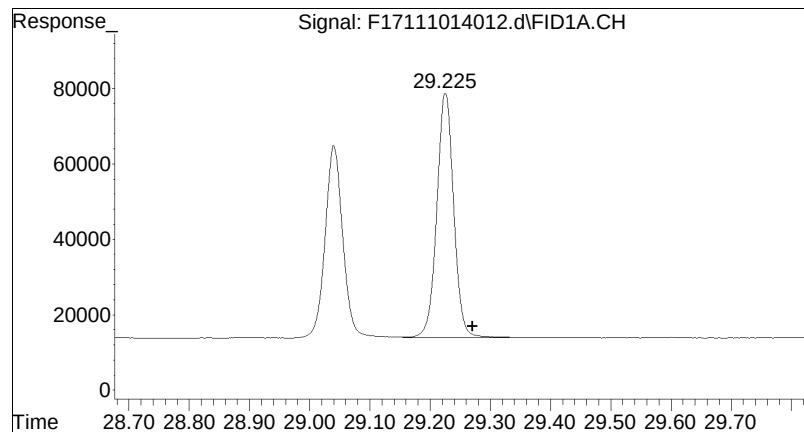
#17 Phytane

R.T.: 27.514 min
Delta R.T.: -0.039 min
Response: 947367
Conc: 0.87 ug/mL M4



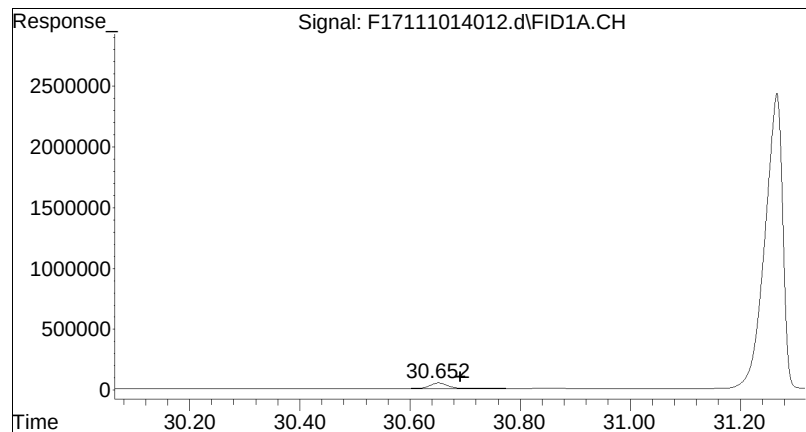
#18 n-Nonadecane (C19)

R.T.: 29.039 min
Delta R.T.: -0.041 min
Response: 1048874
Conc: 0.98 ug/mL M4



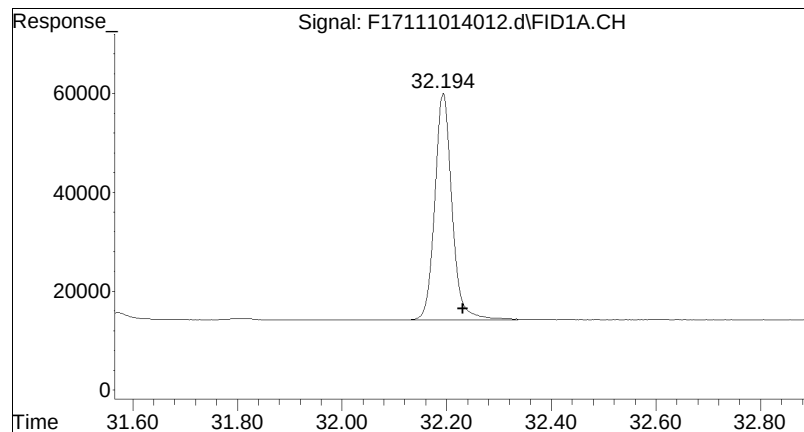
#19 ortho-terphenyl

R.T.: 29.225 min
Delta R.T.: -0.046 min
Response: 1270913
Conc: 1.05 ug/mL M4



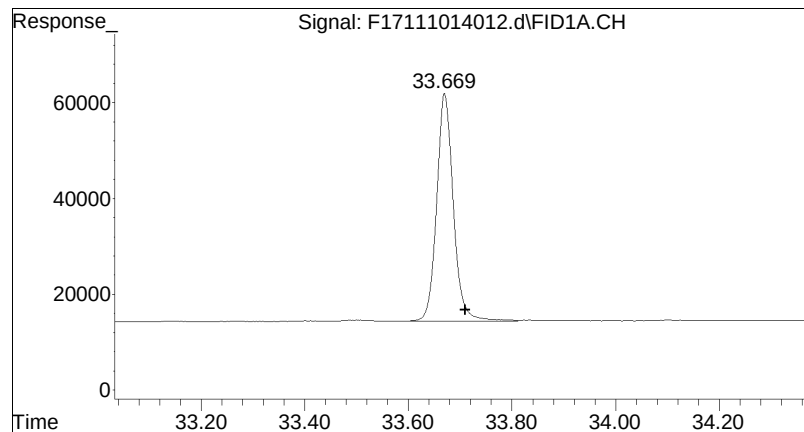
#20 n-Eicosane (C20)

R.T.: 30.652 min
Delta R.T.: -0.039 min
Response: 1050923
Conc: 0.98 ug/mL M4



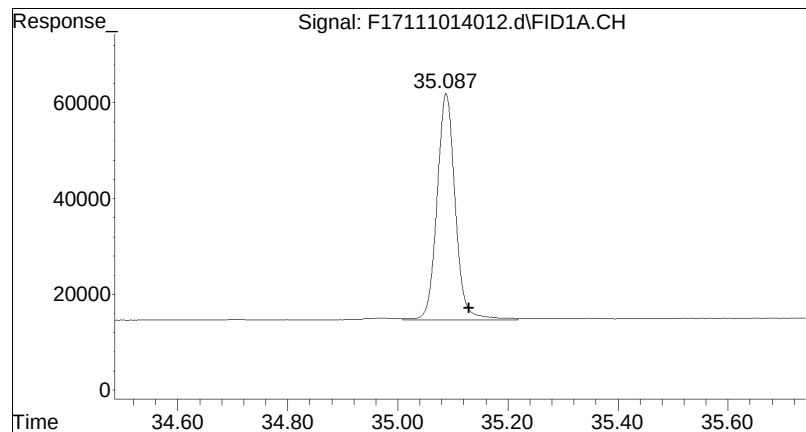
#21 n-Heneicosane (C21)

R.T.: 32.194 min
Delta R.T.: -0.037 min
Response: 1052164
Conc: 0.97 ug/mL M4



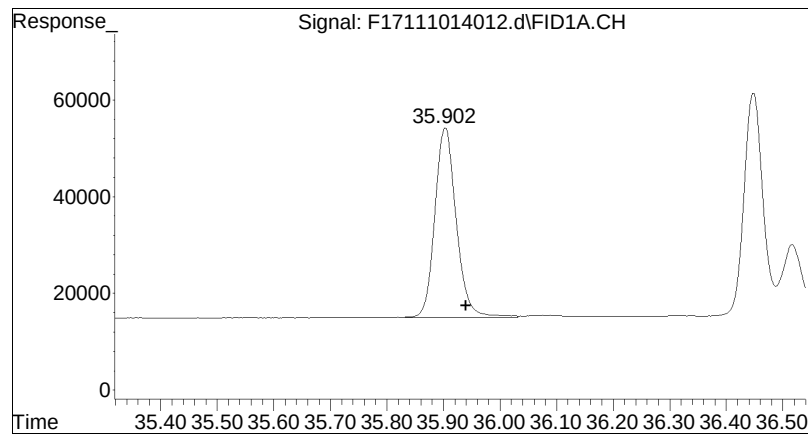
#22 n-Docosane (C22)

R.T.: 33.669 min
Delta R.T.: -0.040 min
Response: 1067395
Conc: 0.98 ug/mL M4



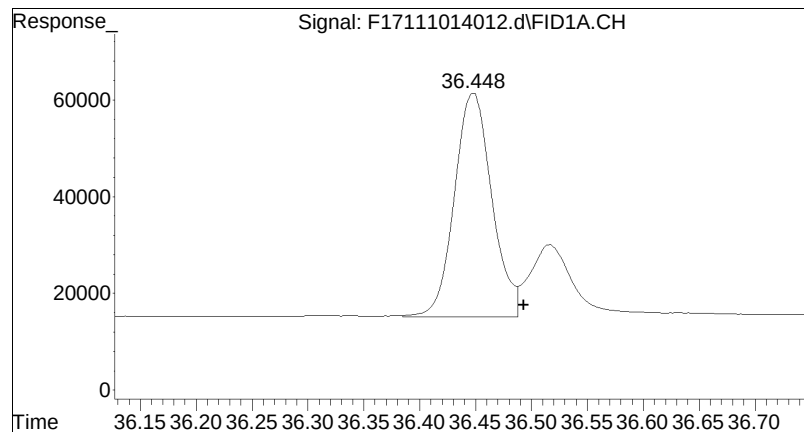
#23 n-Tricosane (C23)

R.T.: 35.087 min
Delta R.T.: -0.041 min
Response: 1084446
Conc: 0.99 ug/mL M4



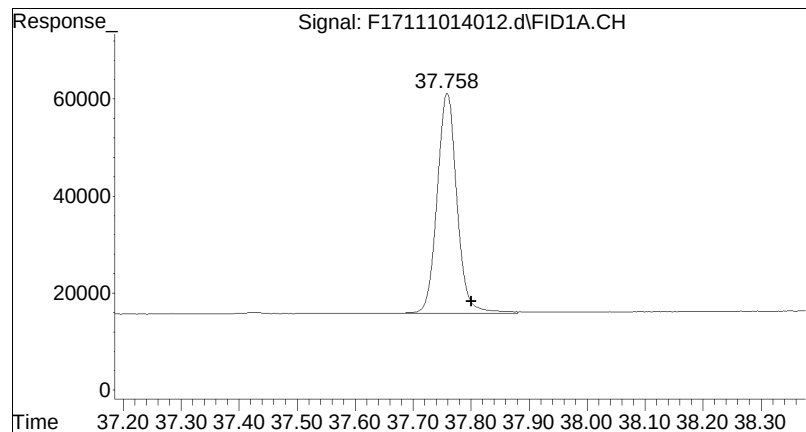
#24 d50-Tetracosane

R.T.: 35.902 min
Delta R.T.: -0.038 min
Response: 1028871
Conc: 1.07 ug/mL M4



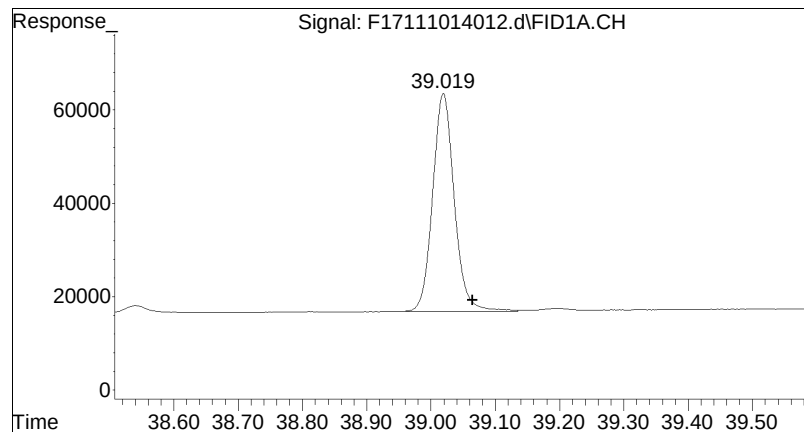
#25 n-Tetracosane (C24)

R.T.: 36.448 min
Delta R.T.: -0.045 min
Response: 1076774
Conc: 0.98 ug/mL M4



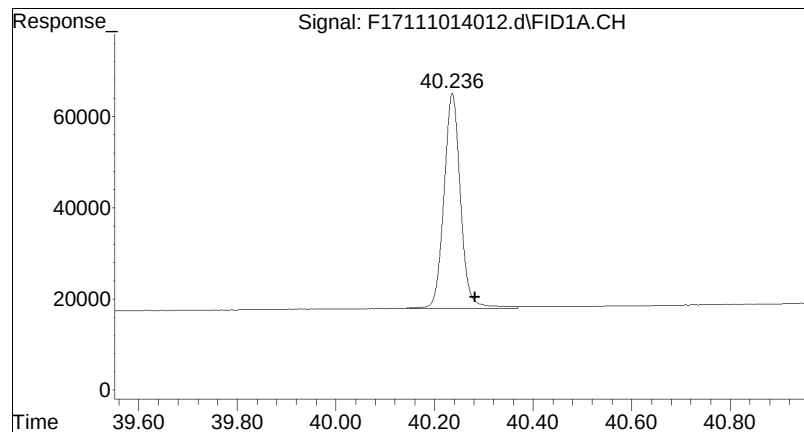
#26 n-Pentacosane (C25)

R.T.: 37.758 min
Delta R.T.: -0.041 min
Response: 1076155
Conc: 0.97 ug/mL M4



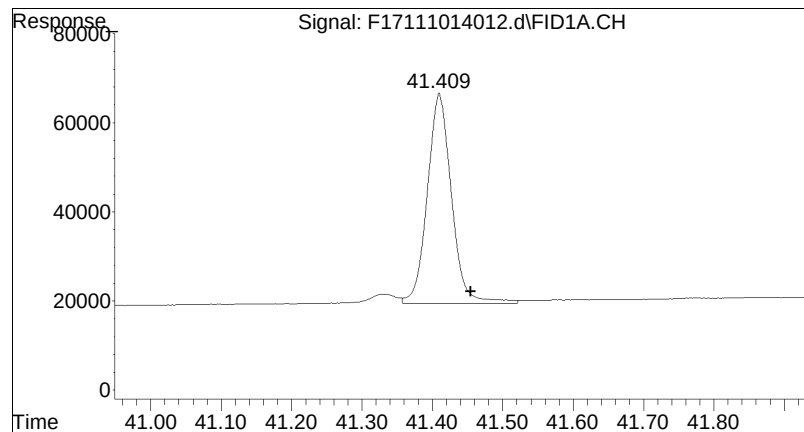
#27 n-Hexacosane (C26)

R.T.: 39.019 min
Delta R.T.: -0.045 min
Response: 1095973
Conc: 0.97 ug/mL M4



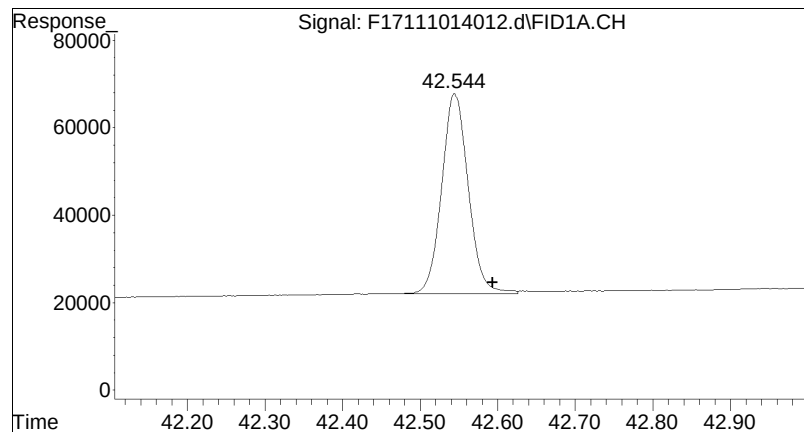
#28 n-Heptacosane (C27)

R.T.: 40.236 min
Delta R.T.: -0.046 min
Response: 1108390
Conc: 0.99 ug/mL M4



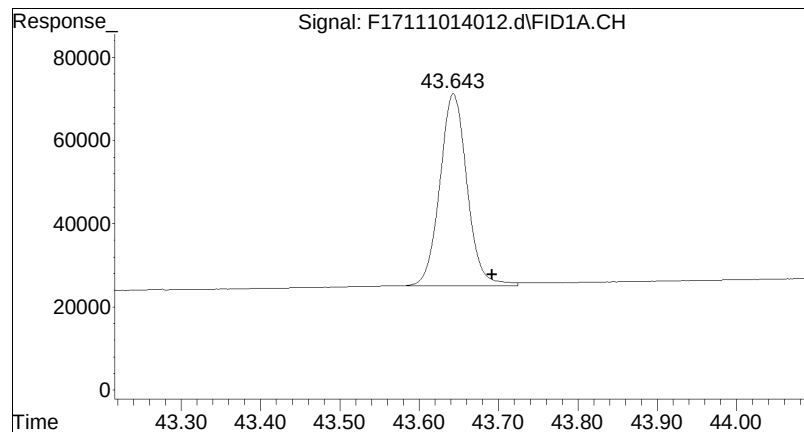
#29 n-Octacosane (C28)

R.T.: 41.409 min
Delta R.T.: -0.045 min
Response: 1117077
Conc: 1.00 ug/mL M4



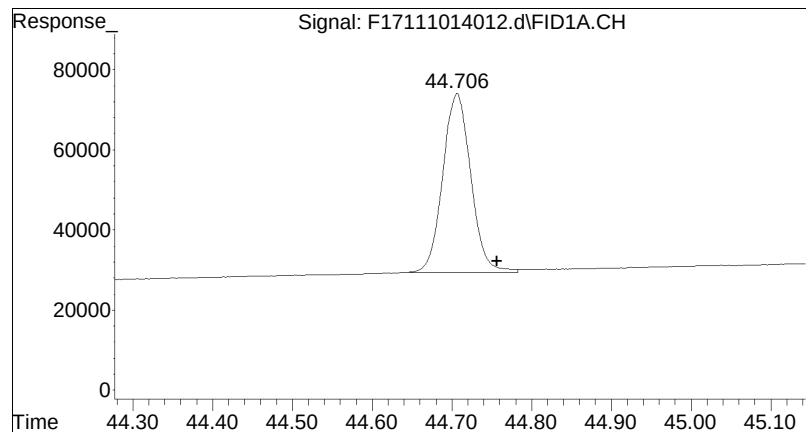
#30 n-Nonacosane (C29)

R.T.: 42.544 min
Delta R.T.: -0.049 min
Response: 1093208
Conc: 0.97 ug/mL M4



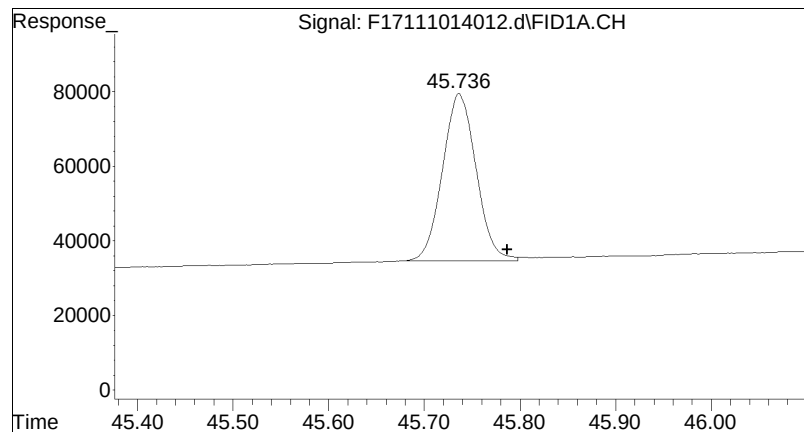
#31 n-Triacontane (C30)

R.T.: 43.643 min
Delta R.T.: -0.049 min
Response: 1105801
Conc: 0.97 ug/mL M4



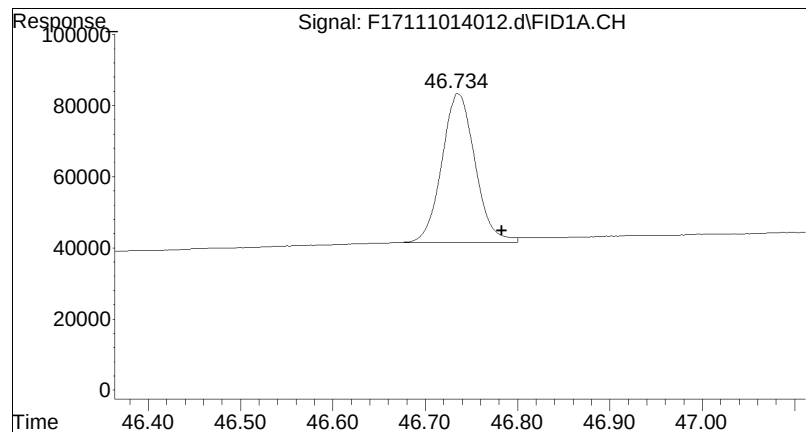
#32 n-Hentriacontane (C31)

R.T.: 44.706 min
Delta R.T.: -0.050 min
Response: 1100717
Conc: 0.96 ug/mL M4



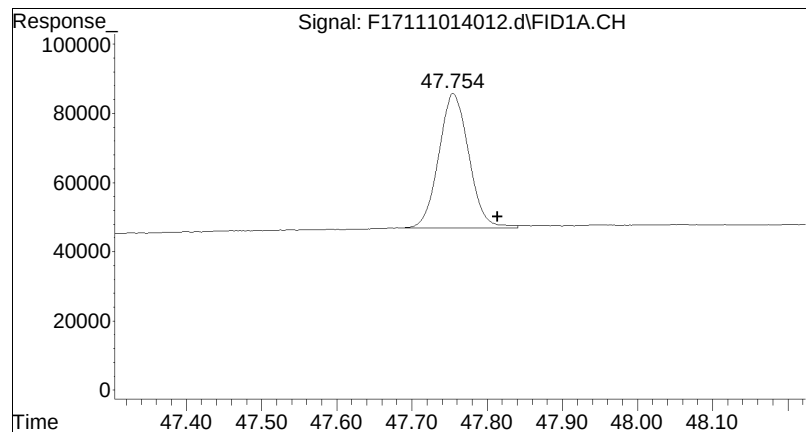
#33 n-Dotriacontane (C32)

R.T.: 45.736 min
Delta R.T.: -0.050 min
Response: 1099086
Conc: 0.97 ug/mL M4



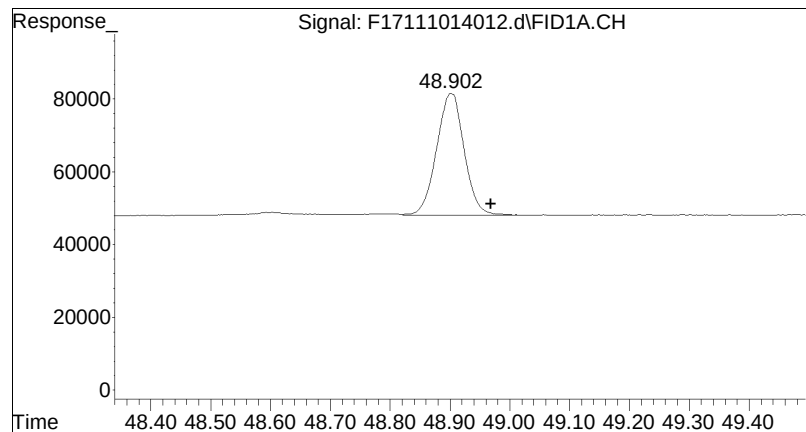
#34 n-Tritriacontane (C33)

R.T.: 46.734 min
Delta R.T.: -0.049 min
Response: 1045499
Conc: 0.95 ug/mL M4



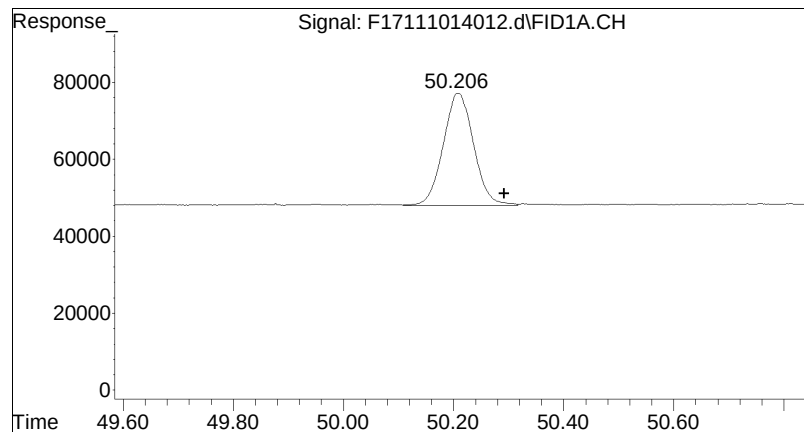
#35 n-tetratriacontane (C34)

R.T.: 47.754 min
Delta R.T.: -0.059 min
Response: 1083357
Conc: 0.92 ug/mL M4



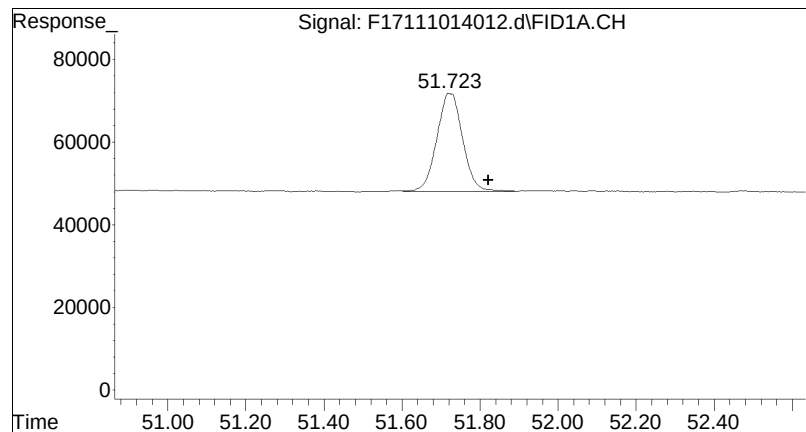
#36 n-Pentatriacontane (C35)

R.T.: 48.902 min
Delta R.T.: -0.066 min
Response: 1079522
Conc: 0.92 ug/mL M4



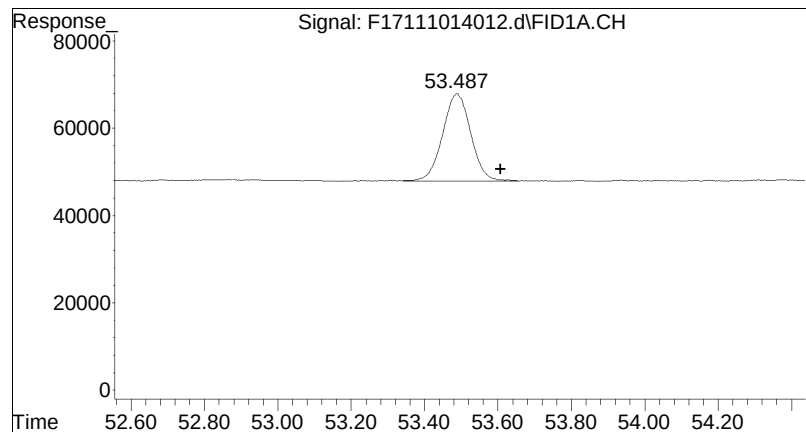
#37 n-Hexatriacontane (C36)

R.T.: 50.206 min
Delta R.T.: -0.086 min
Response: 1109799
Conc: 0.88 ug/mL M4



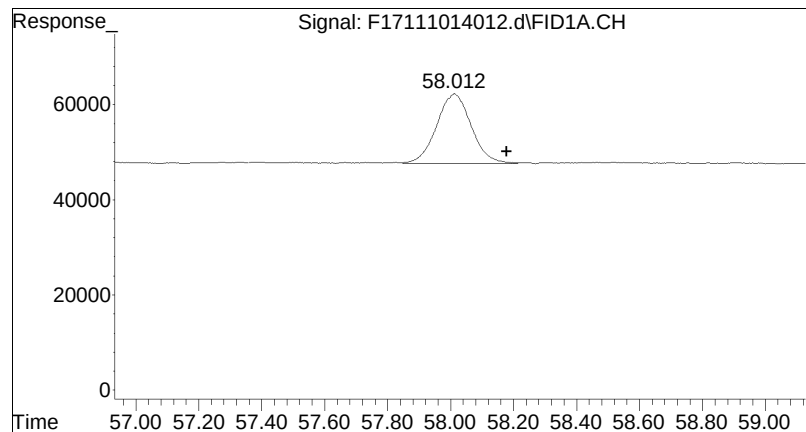
#38 n-Heptatriacontane (C37)

R.T.: 51.723 min
Delta R.T.: -0.099 min
Response: 1096538
Conc: 0.93 ug/mL M4



#39 n-Octatriacontane (C38)

R.T.: 53.487 min
Delta R.T.: -0.120 min
Response: 1065698
Conc: 0.90 ug/mL M4



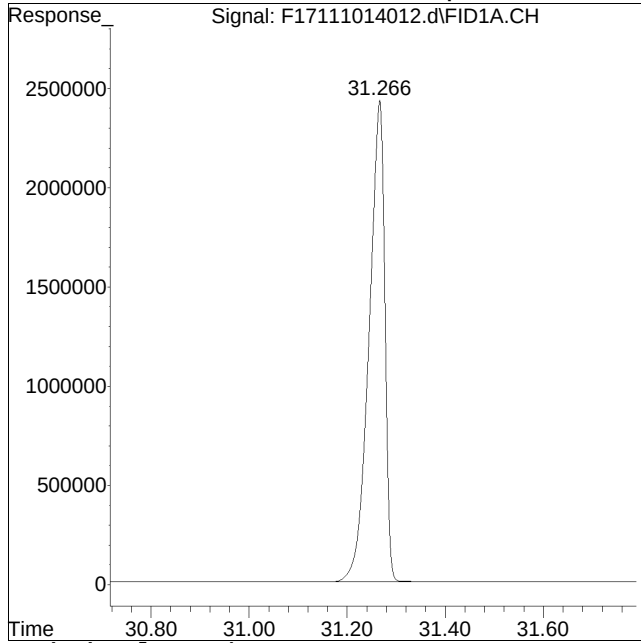
#41 n-Tetracontane (C40)

R.T.: 58.012 min
Delta R.T.: -0.166 min
Response: 1113747
Conc: 0.98 ug/mL M4

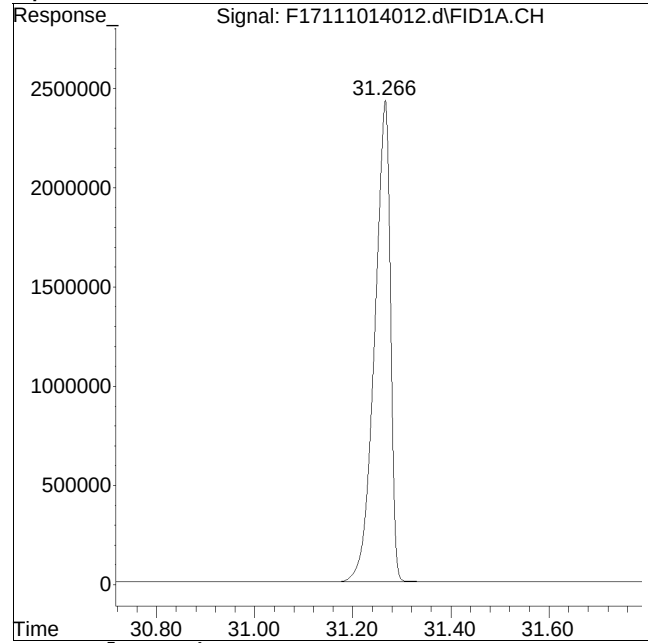
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #1: 5-alpha-androstane



Original Peak Response = 54120435



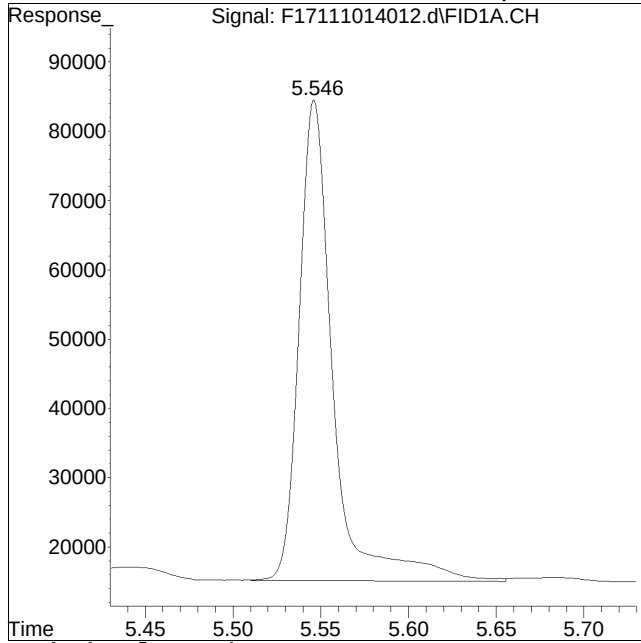
Manual Peak Response = 54151158 M4

M4 = Poor automated baseline construction.

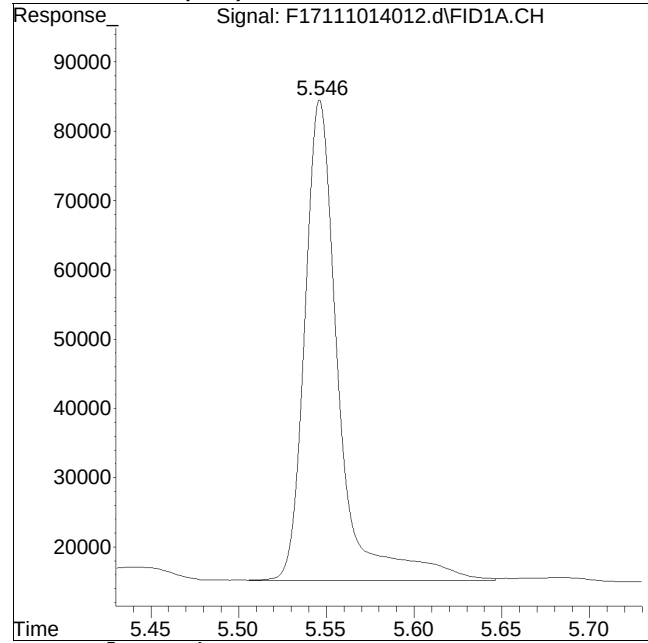
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #2: n-Octane (C8)



Original Peak Response = 936326



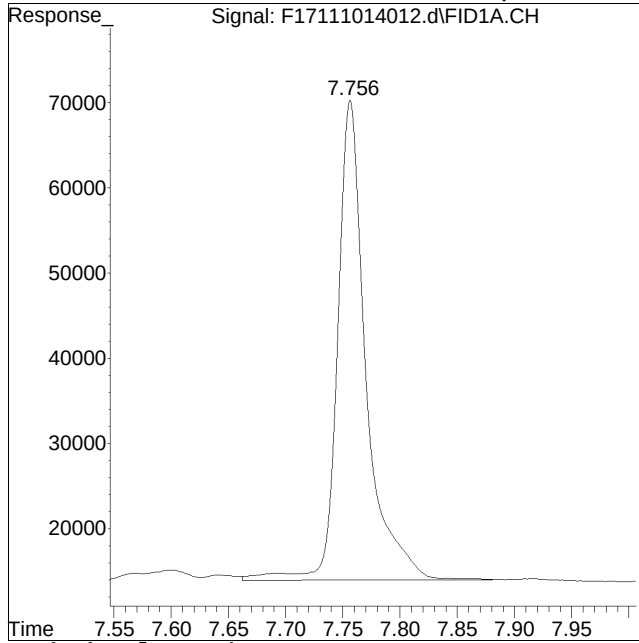
Manual Peak Response = 928802 M4

M4 = Poor automated baseline construction.

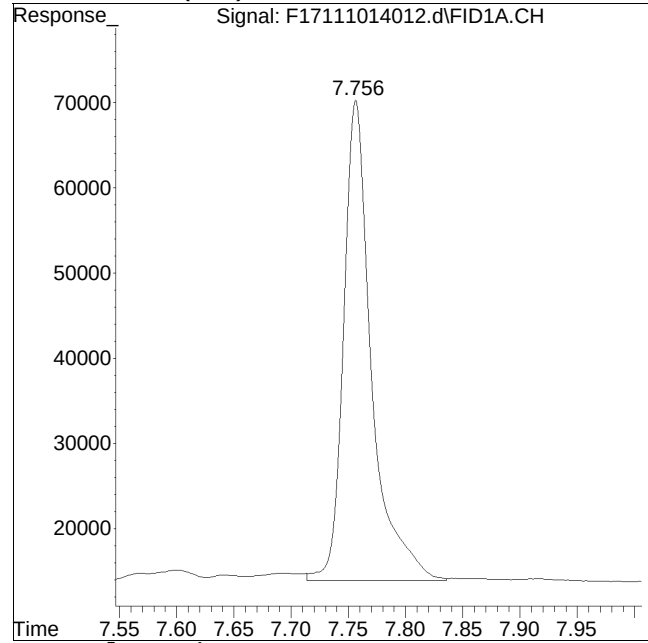
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #3: n-Nonane (C9)



Original Peak Response = 976987

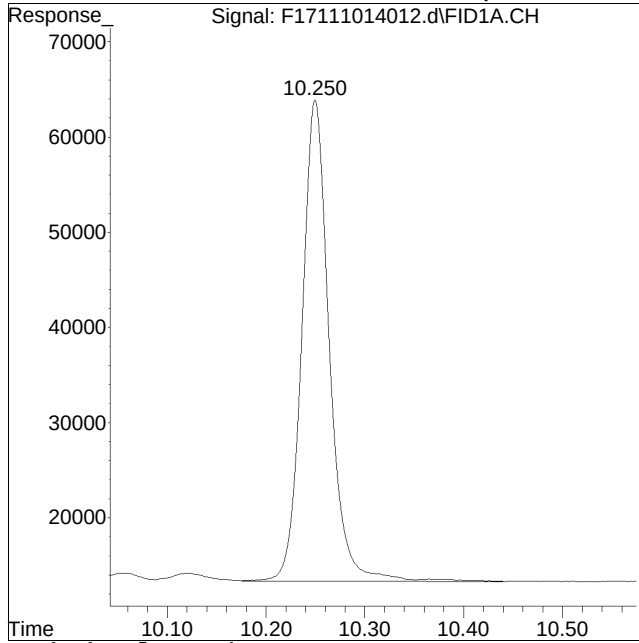


Manual Peak Response = 956167 M4

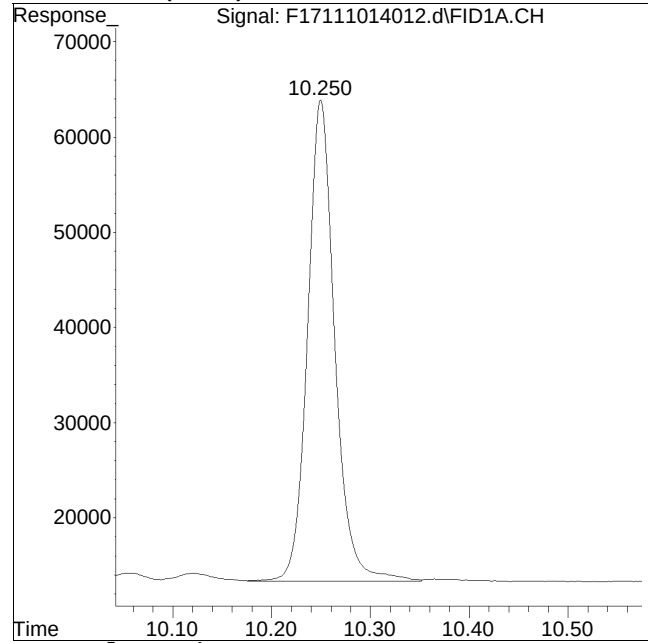
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #4: n-Decane (C10)



Original Peak Response = 974074



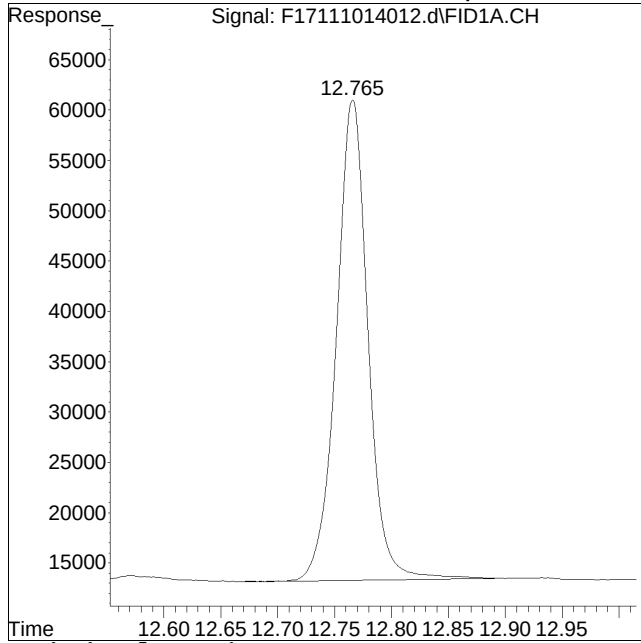
Manual Peak Response = 965575 M4

M4 = Poor automated baseline construction.

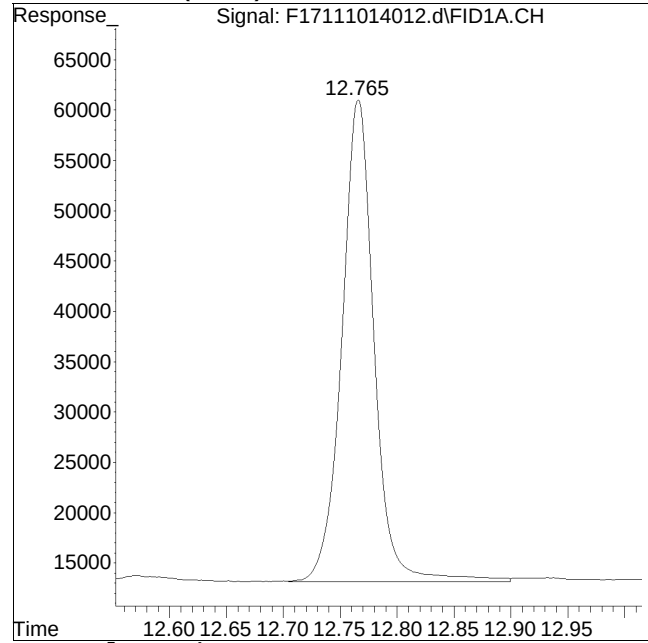
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #5: n-Undecane (C11)



Original Peak Response = 923969



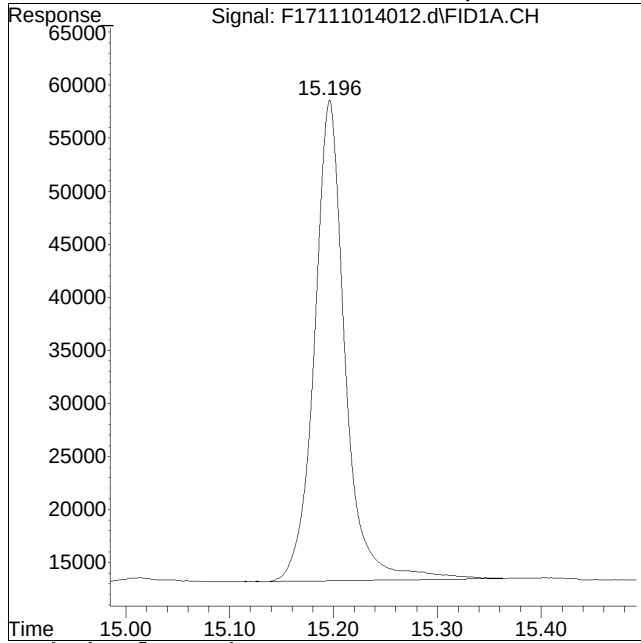
Manual Peak Response = 945978 M4

M4 = Poor automated baseline construction.

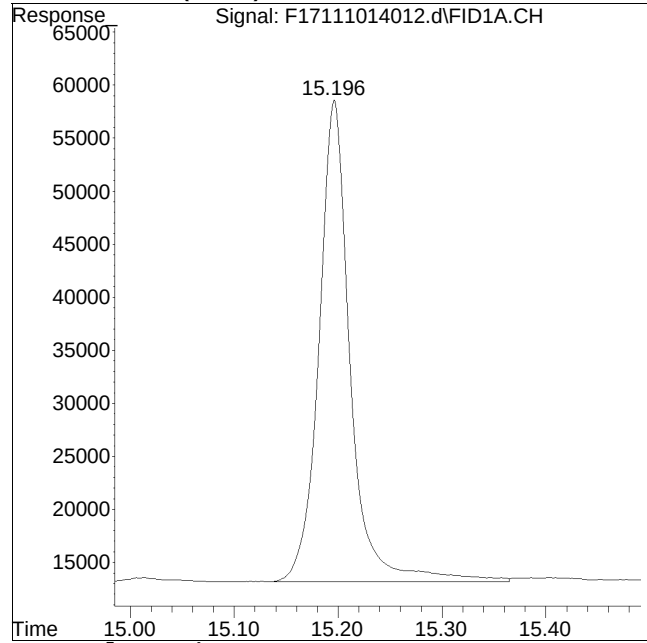
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #6: n-Dodecane (C12)



Original Peak Response = 930089



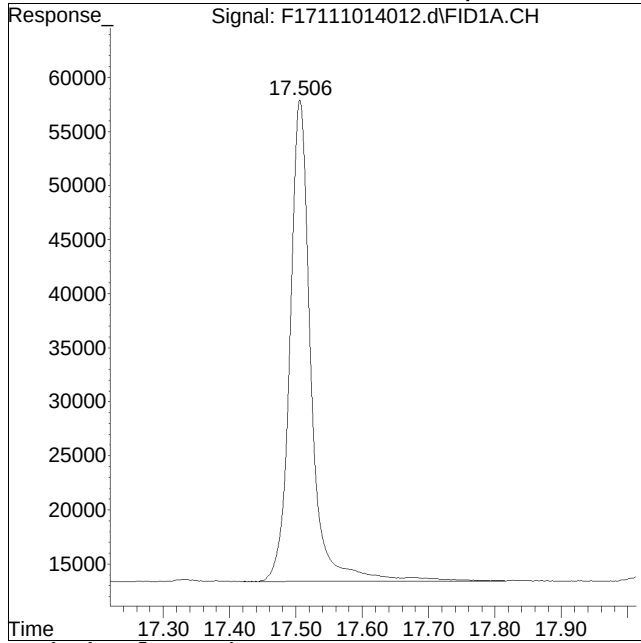
Manual Peak Response = 956041 M4

M4 = Poor automated baseline construction.

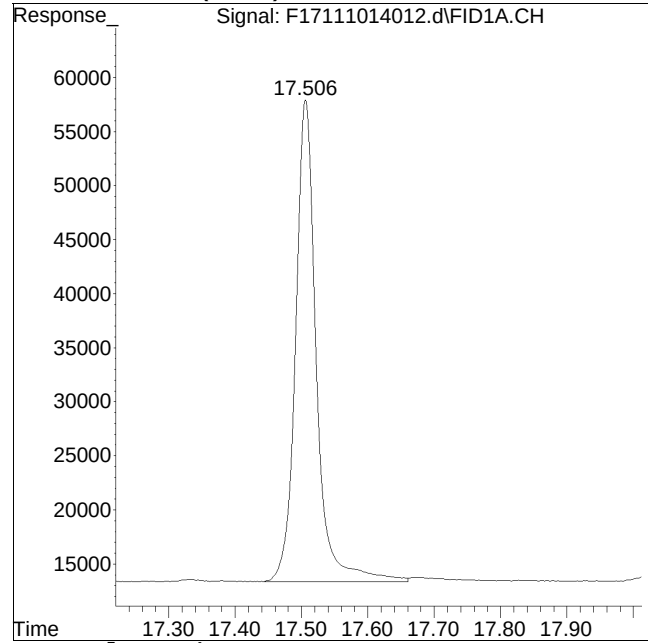
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #7: n-Tridecane (C13)



Original Peak Response = 977898



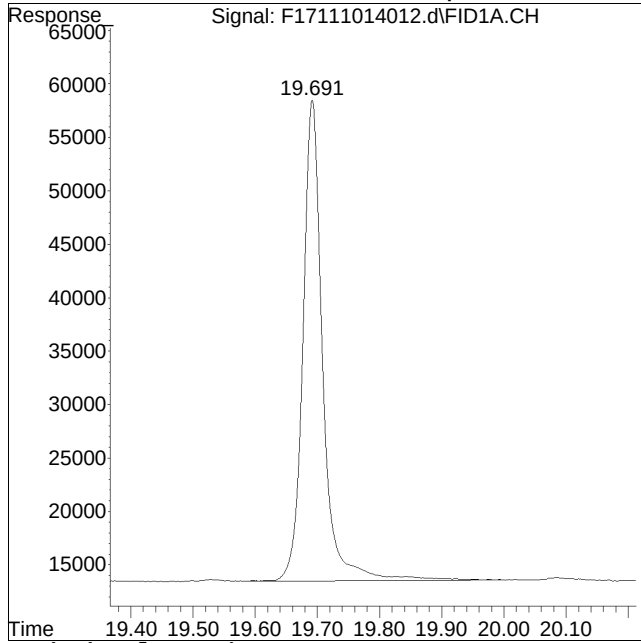
Manual Peak Response = 968666 M4

M4 = Poor automated baseline construction.

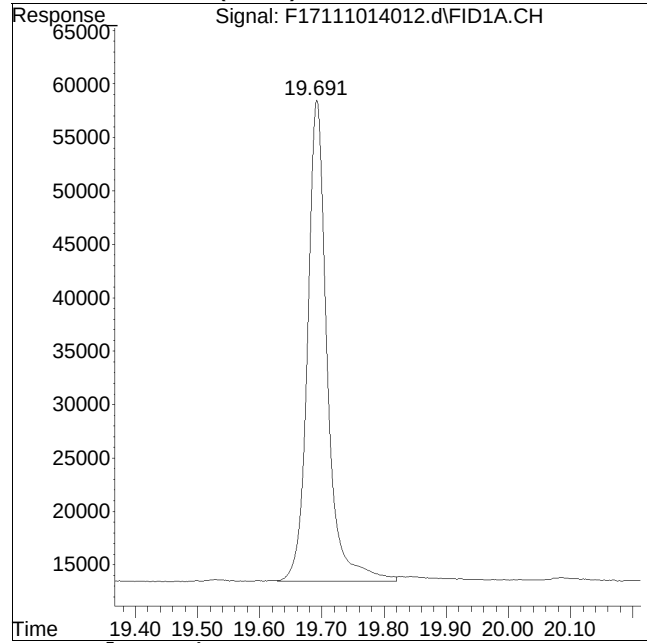
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #9: n-Tetradecane (C14)



Original Peak Response = 998749

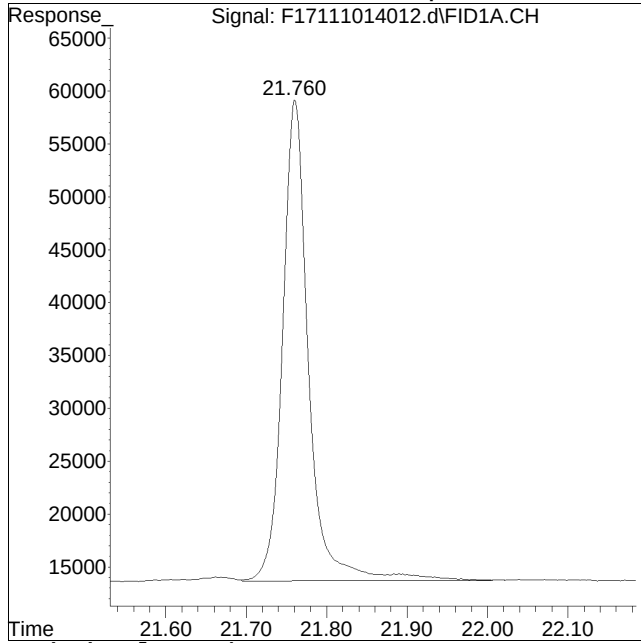


Manual Peak Response = 982915 M4

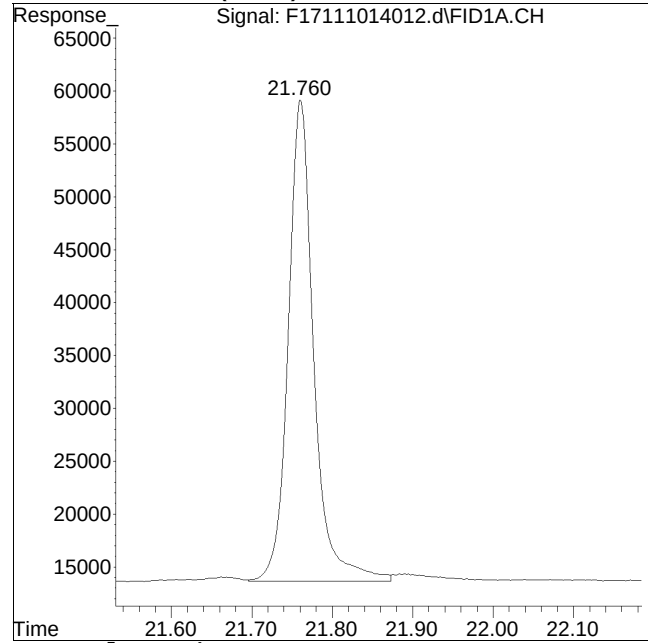
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #11: n-Pentadecane (C15)



Original Peak Response = 1021111

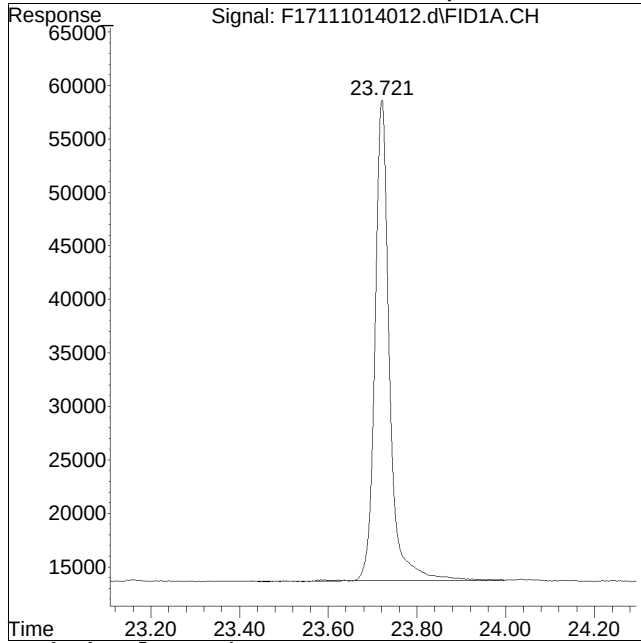


Manual Peak Response = 1003729 M4

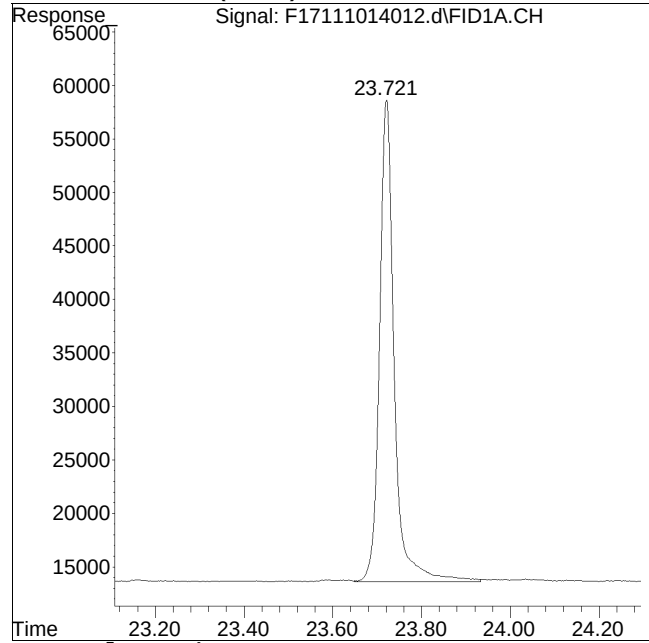
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #12: n-Hexadecane (C16)



Original Peak Response = 1020711



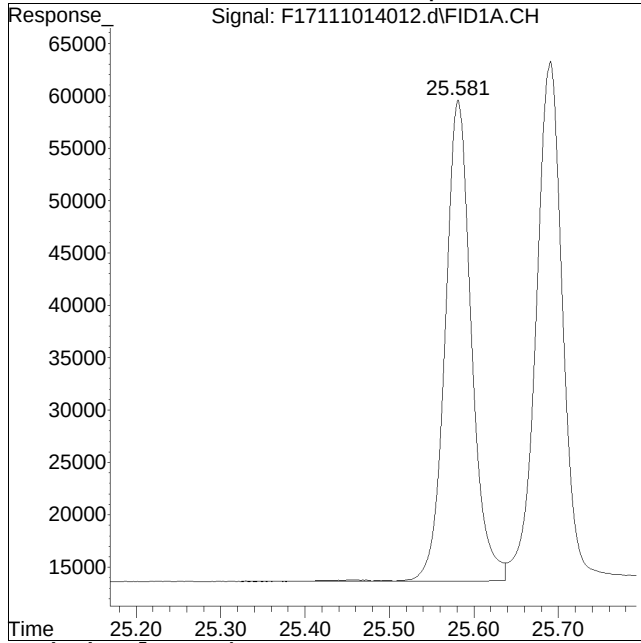
Manual Peak Response = 1037076 M4

M4 = Poor automated baseline construction.

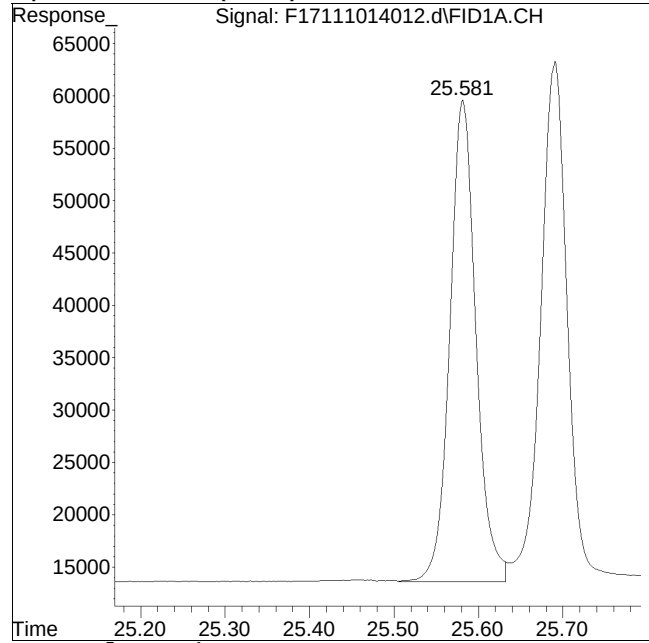
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #14: n-Heptadecane (C17)



Original Peak Response = 988250



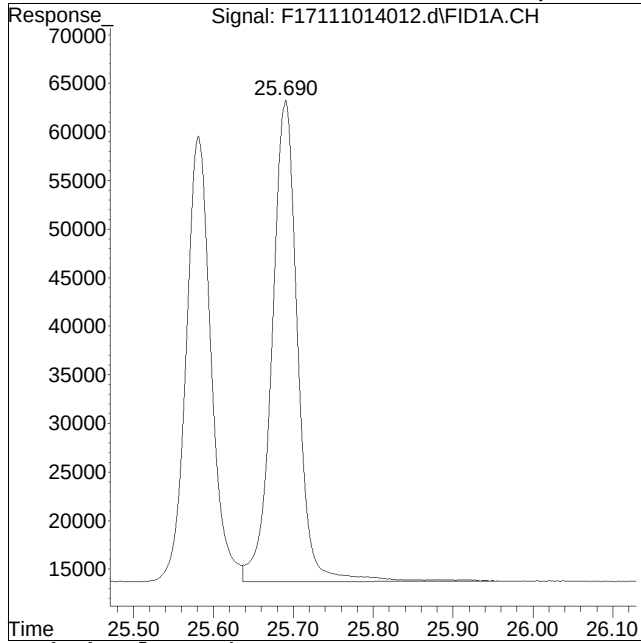
Manual Peak Response = 985154 M4

M4 = Poor automated baseline construction.

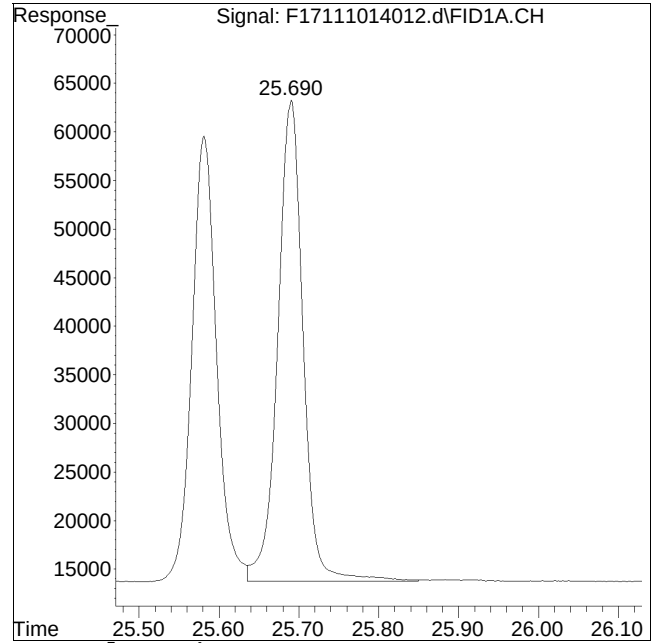
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #15: Pristane



Original Peak Response = 1102023



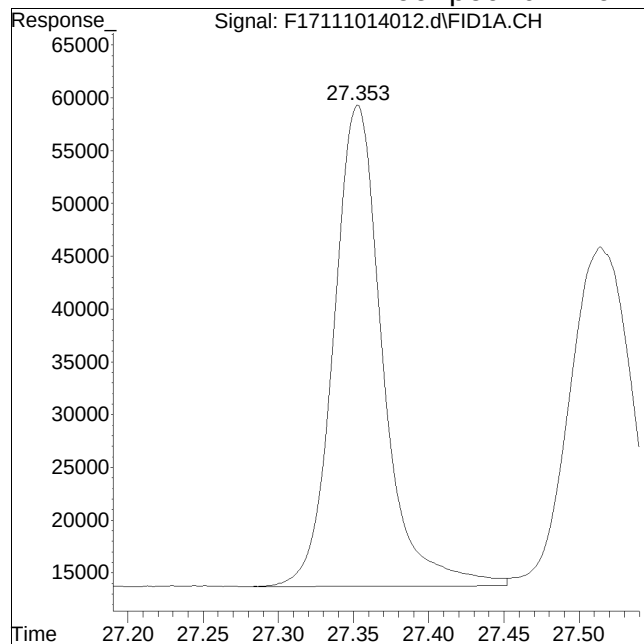
Manual Peak Response = 1093918 M4

M4 = Poor automated baseline construction.

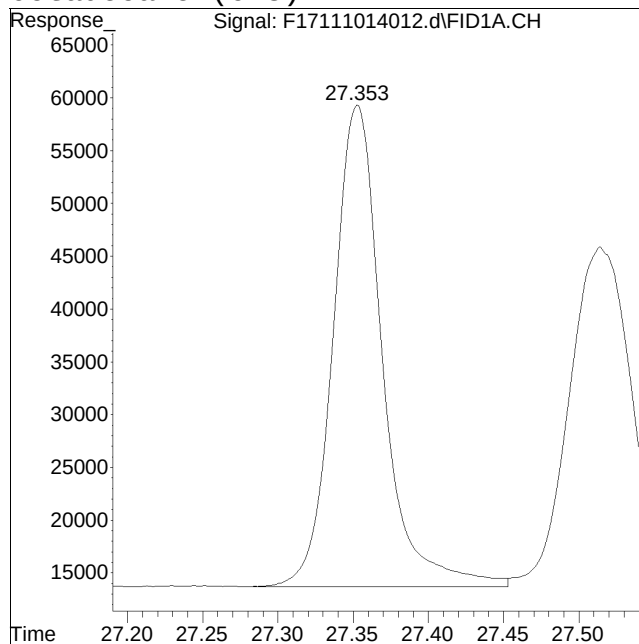
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #16: n-Octadecane (C18)



Original Peak Response = 1032053



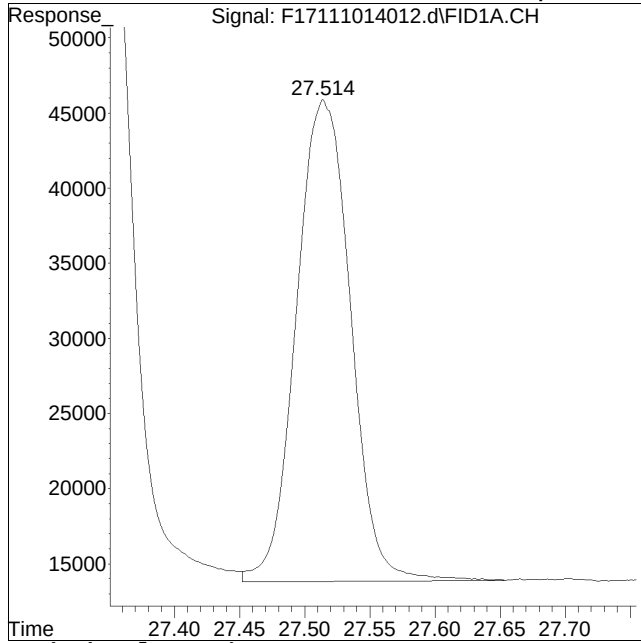
Manual Peak Response = 1038773 M4

M4 = Poor automated baseline construction.

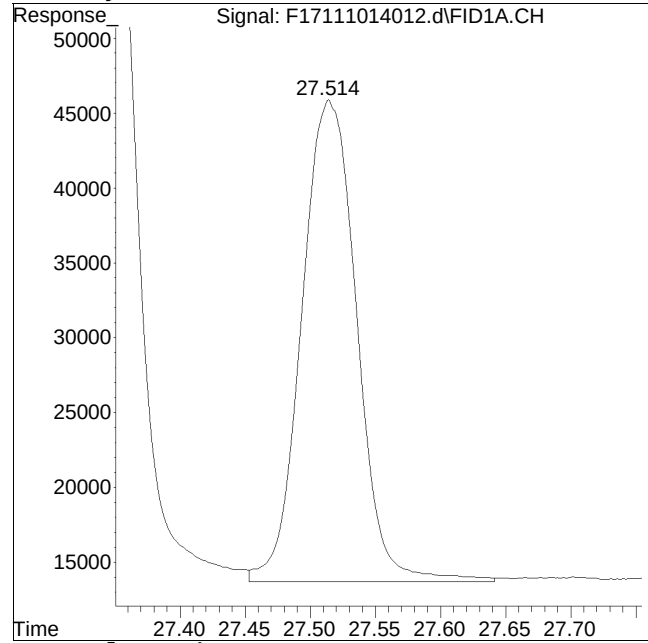
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #17: Phytane



Original Peak Response = 931411



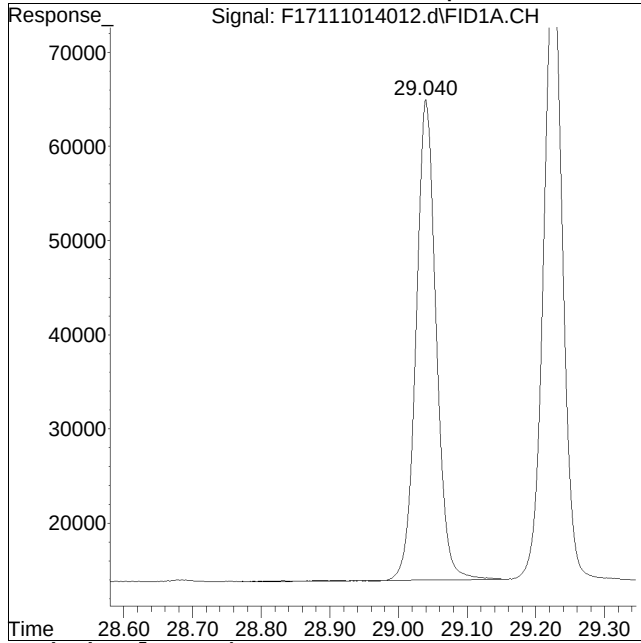
Manual Peak Response = 947367 M4

M4 = Poor automated baseline construction.

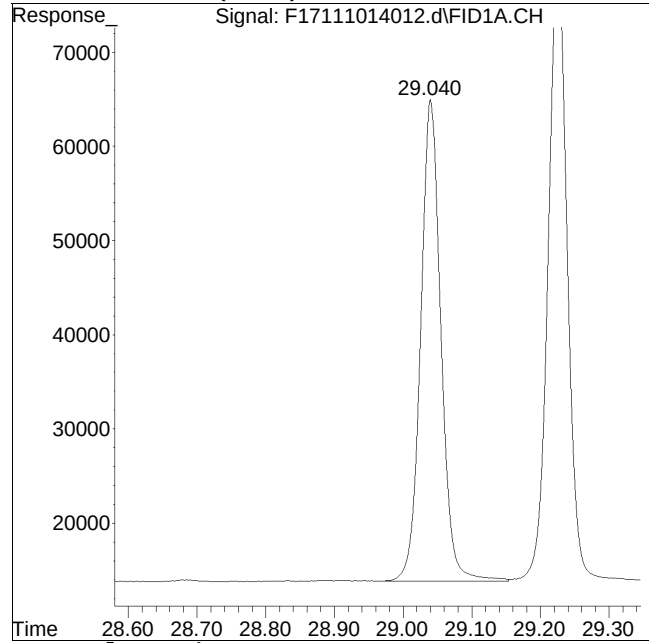
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #18: n-Nonadecane (C19)



Original Peak Response = 1036098



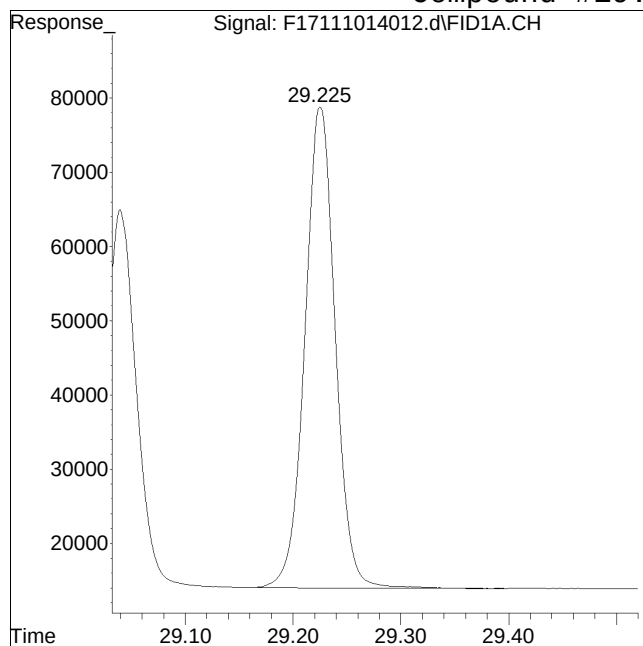
Manual Peak Response = 1048874 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

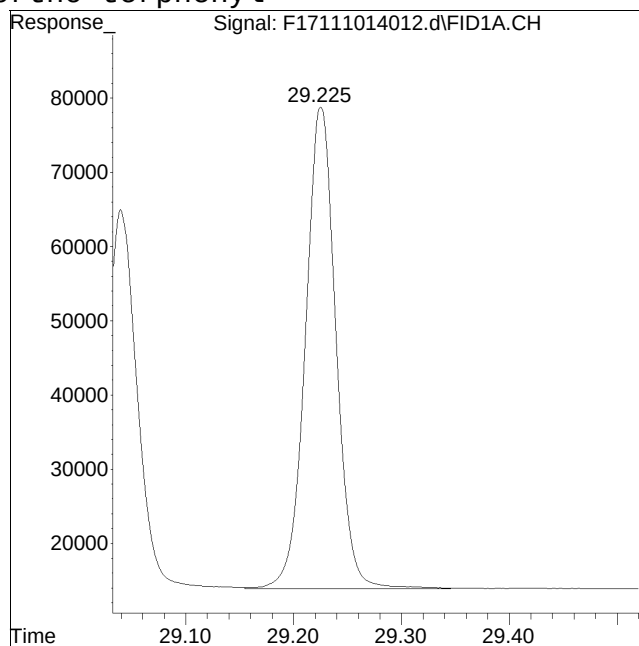
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #19: ortho-terphenyl



Original Peak Response = 1264243

M4 = Poor automated baseline construction.

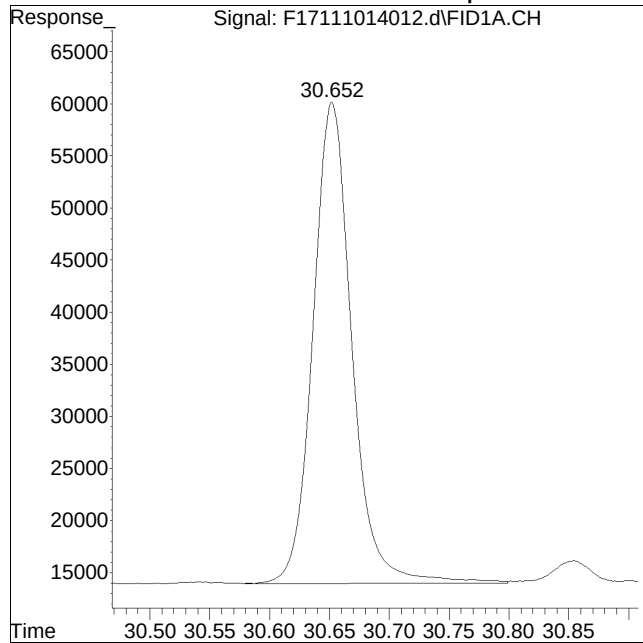


Manual Peak Response = 1270913 M4

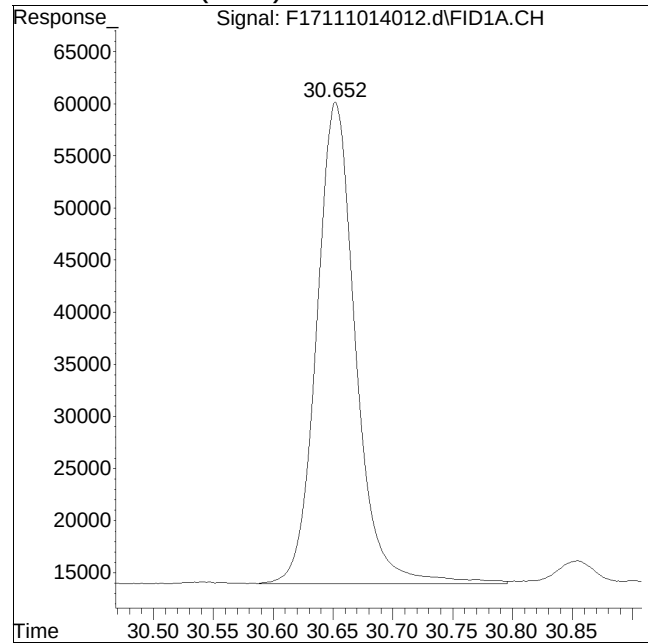
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #20: n-Eicosane (C20)



Original Peak Response = 1045495



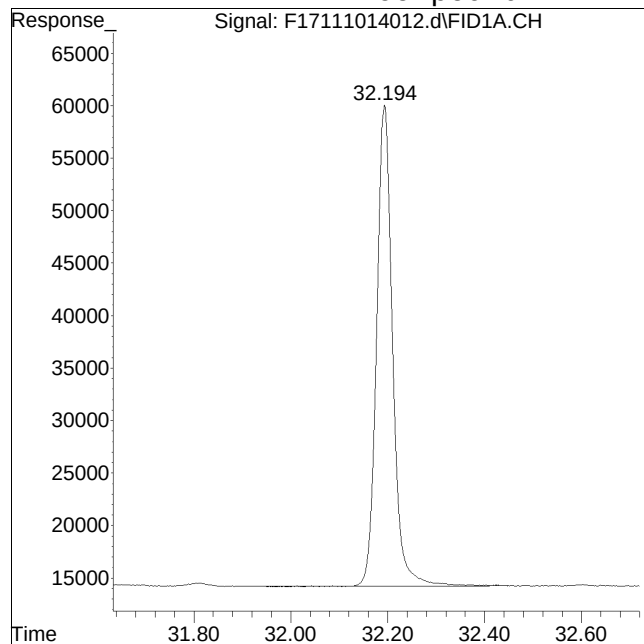
Manual Peak Response = 1050923 M4

M4 = Poor automated baseline construction.

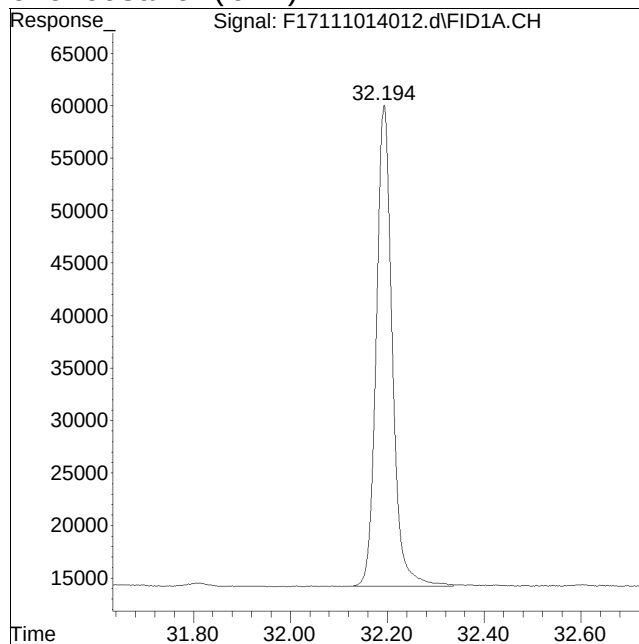
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #21: n-Heneicosane (C21)



Original Peak Response = 1049843



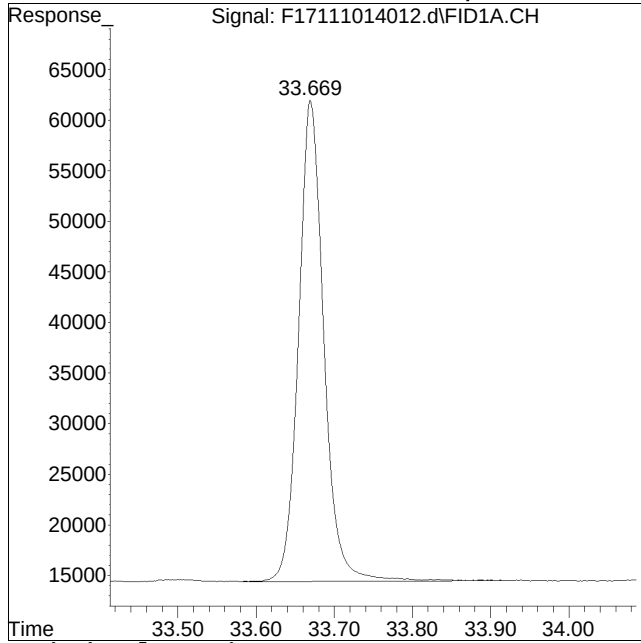
Manual Peak Response = 1052164 M4

M4 = Poor automated baseline construction.

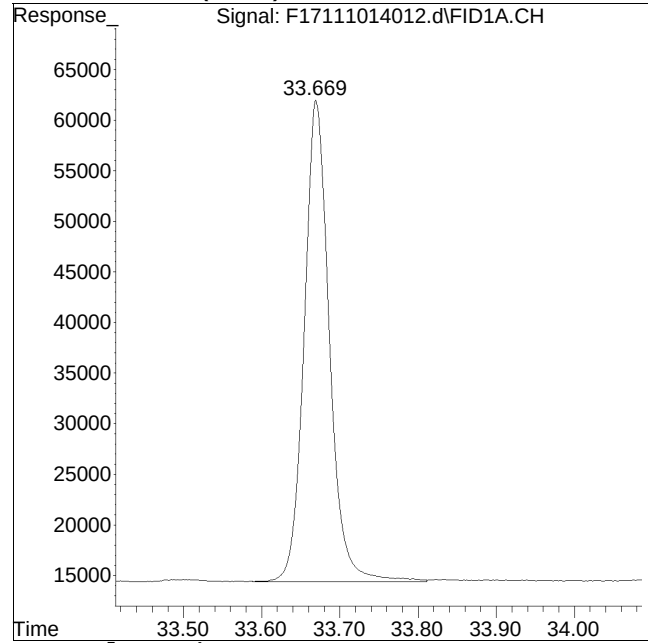
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #22: n-Docosane (C22)



Original Peak Response = 1066831



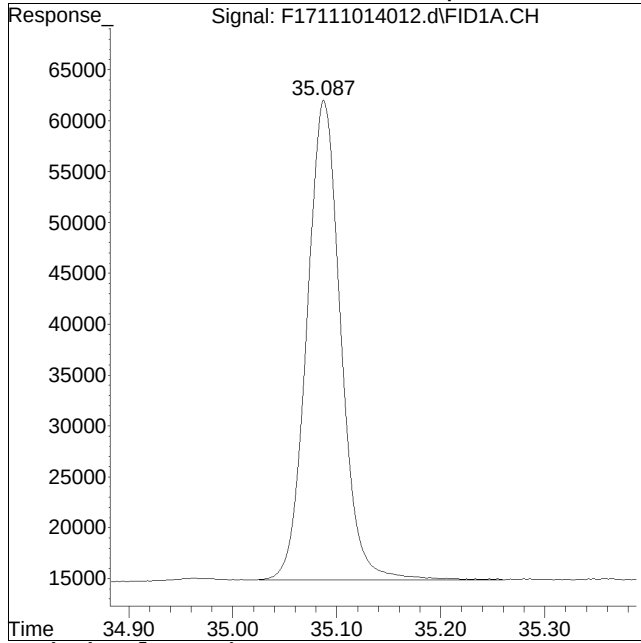
Manual Peak Response = 1067395 M4

M4 = Poor automated baseline construction.

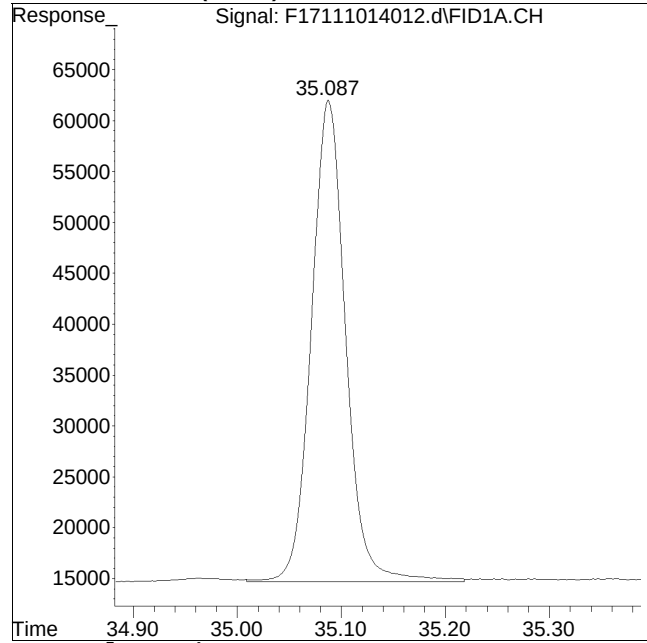
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #23: n-Tricosane (C23)



Original Peak Response = 1064606



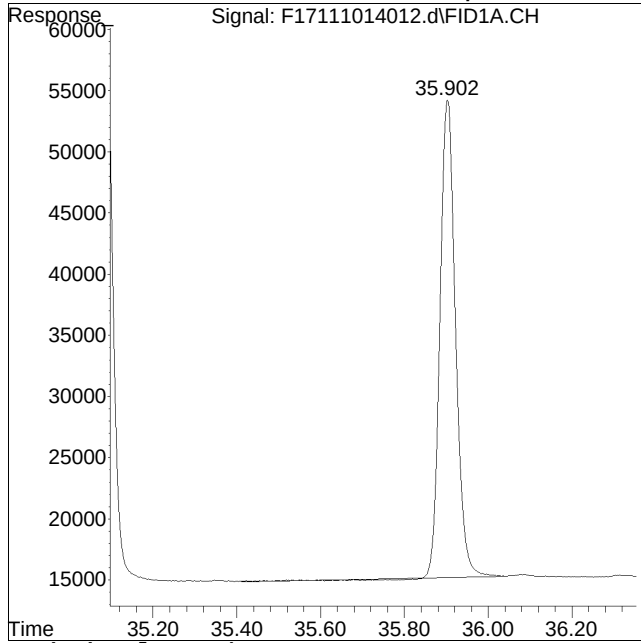
Manual Peak Response = 1084446 M4

M4 = Poor automated baseline construction.

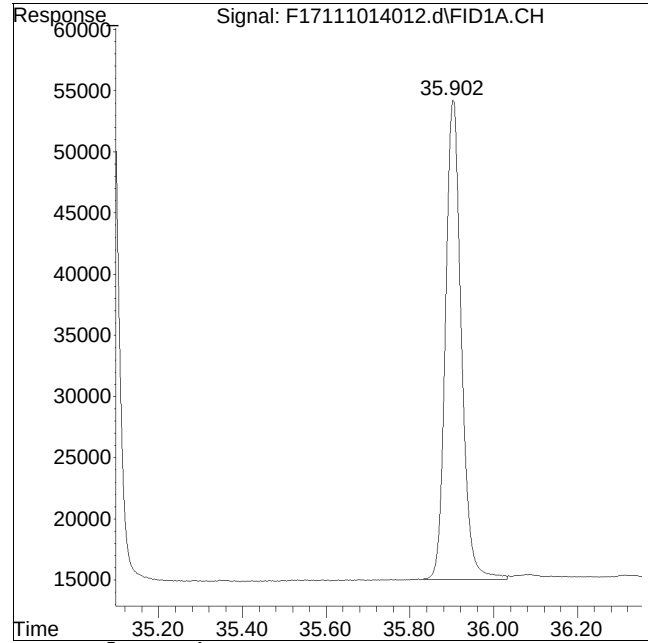
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #24: d50-Tetracosane



Original Peak Response = 1002696



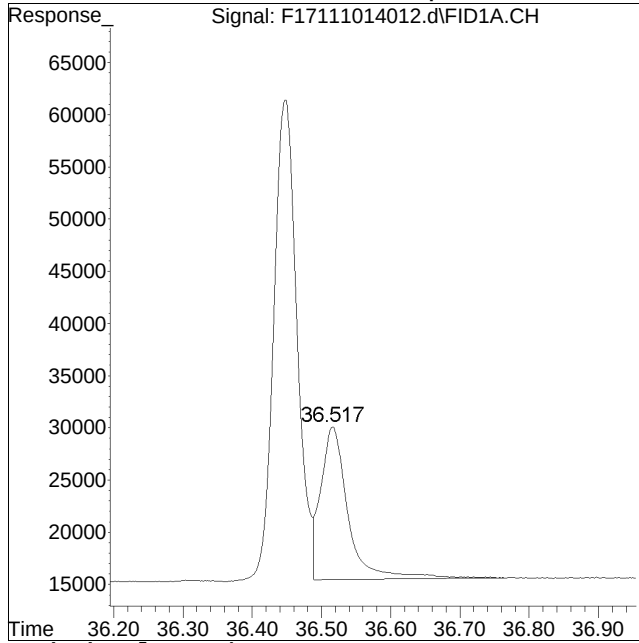
Manual Peak Response = 1028871 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

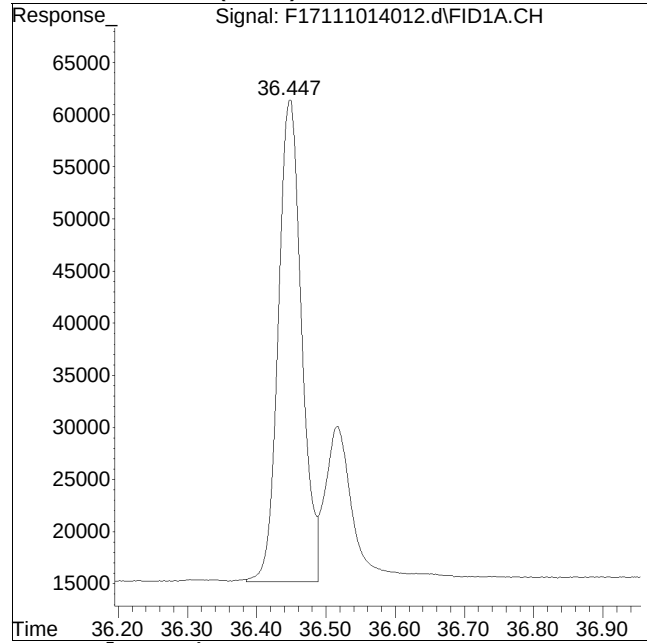
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #25: n-Tetracosane (C24)



Original Peak Response = 406392

M4 = Poor automated baseline construction.

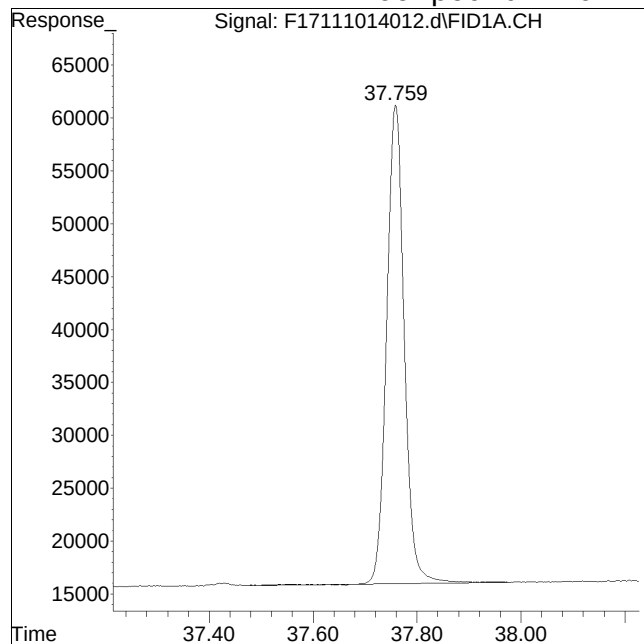


Manual Peak Response = 1076774 M4

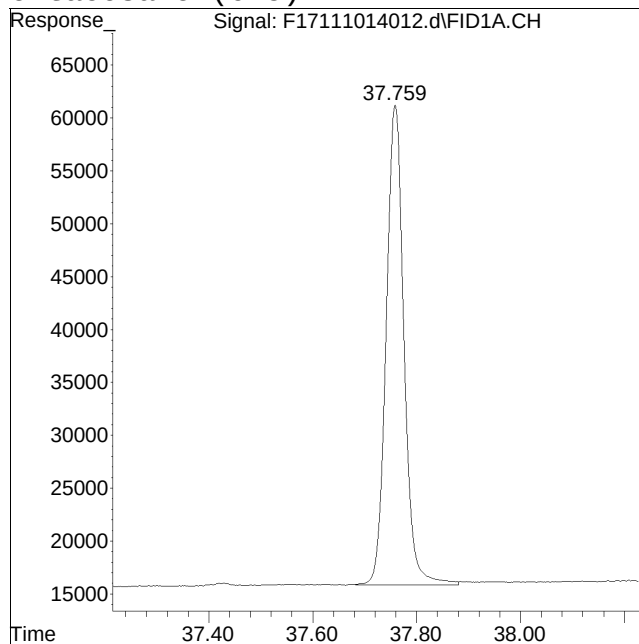
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #26: n-Pentacosane (C25)



Original Peak Response = 1068066



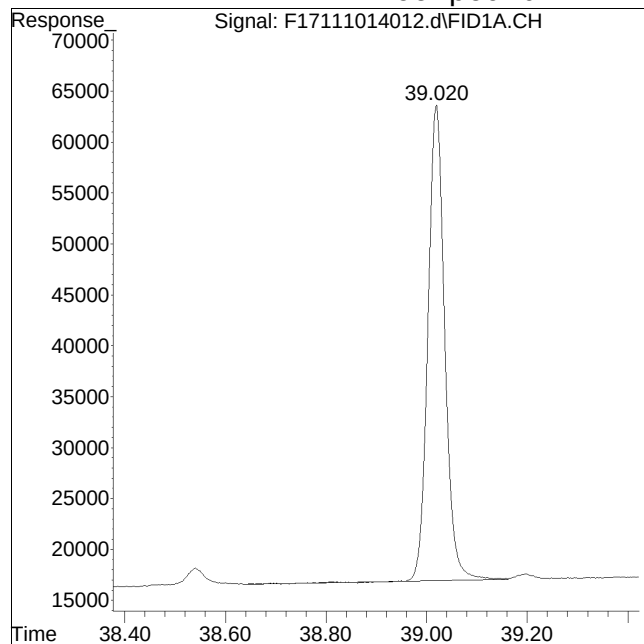
Manual Peak Response = 1076155 M4

M4 = Poor automated baseline construction.

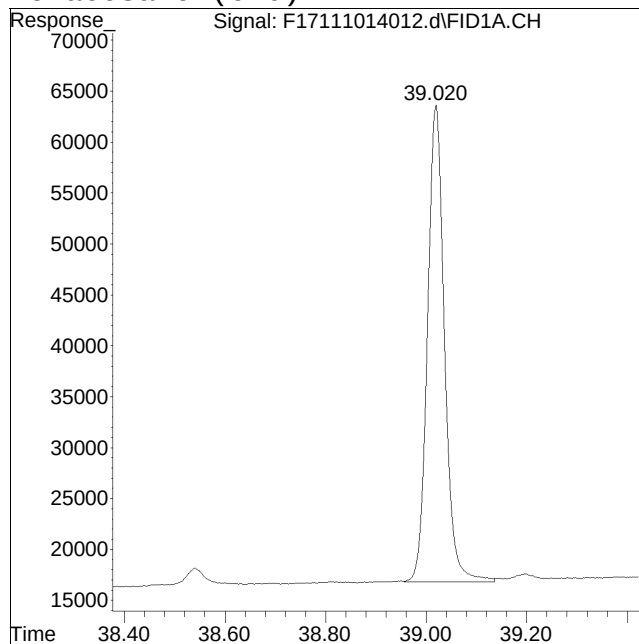
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #27: n-Hexacosane (C26)



Original Peak Response = 1084867



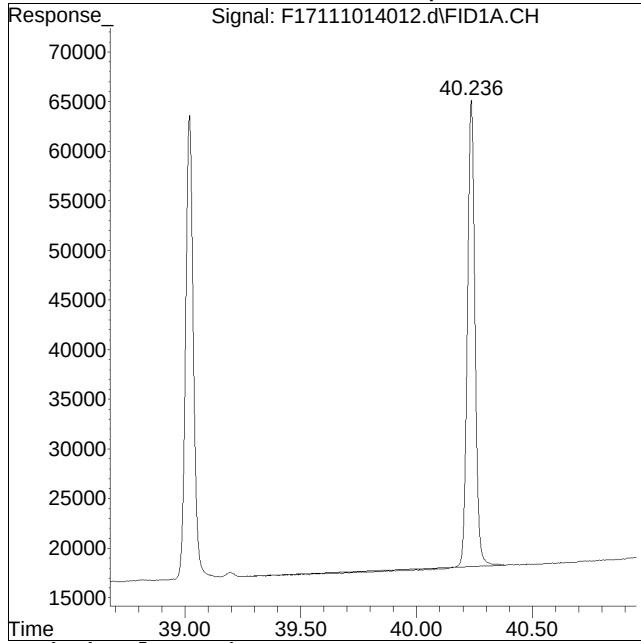
Manual Peak Response = 1095973 M4

M4 = Poor automated baseline construction.

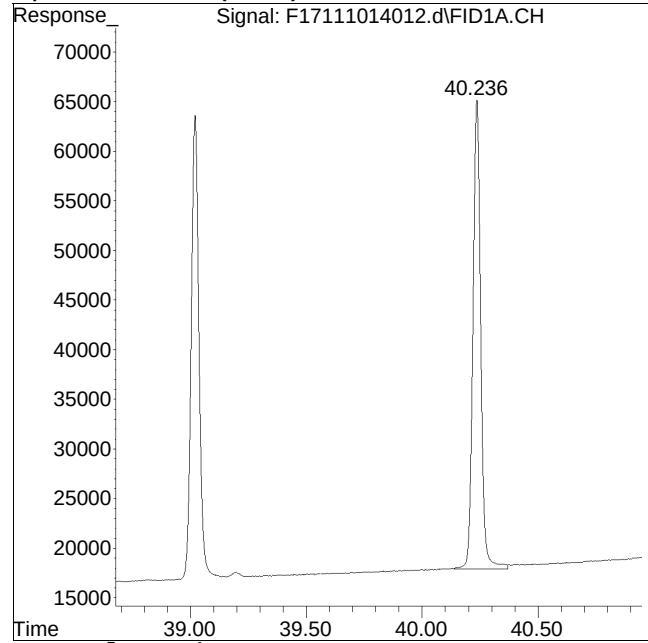
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #28: n-Heptacosane (C27)



Original Peak Response = 1035449



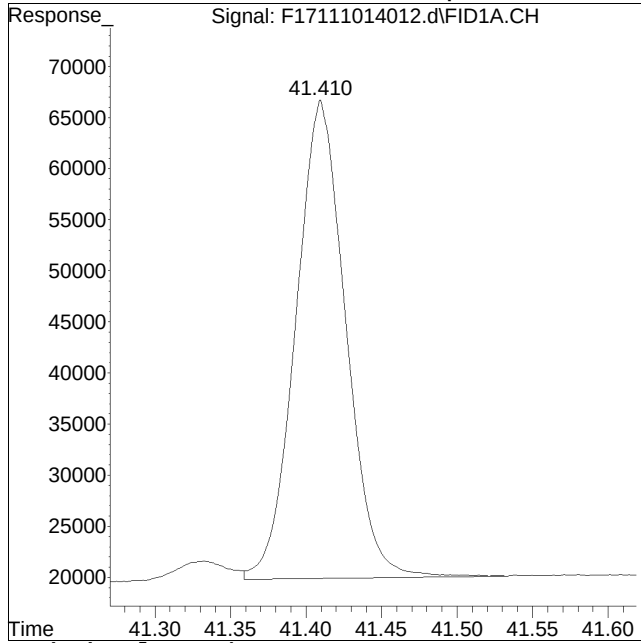
Manual Peak Response = 1108390 M4

M4 = Poor automated baseline construction.

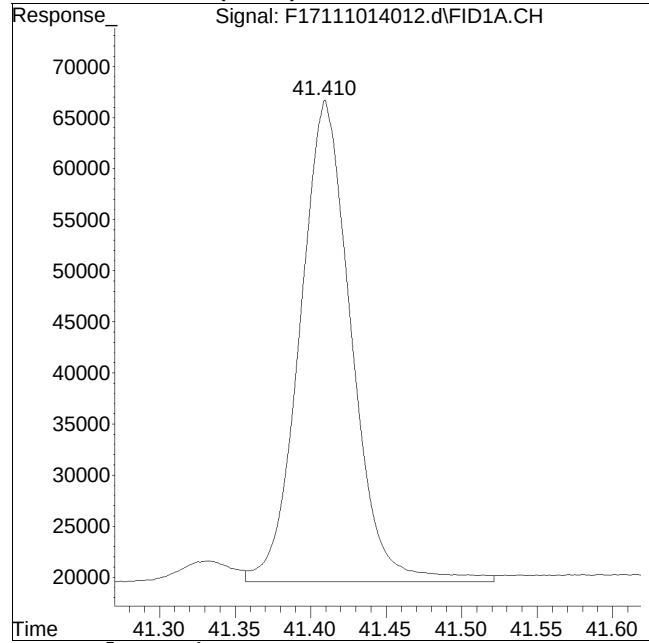
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #29: n-Octacosane (C28)



Original Peak Response = 1075963



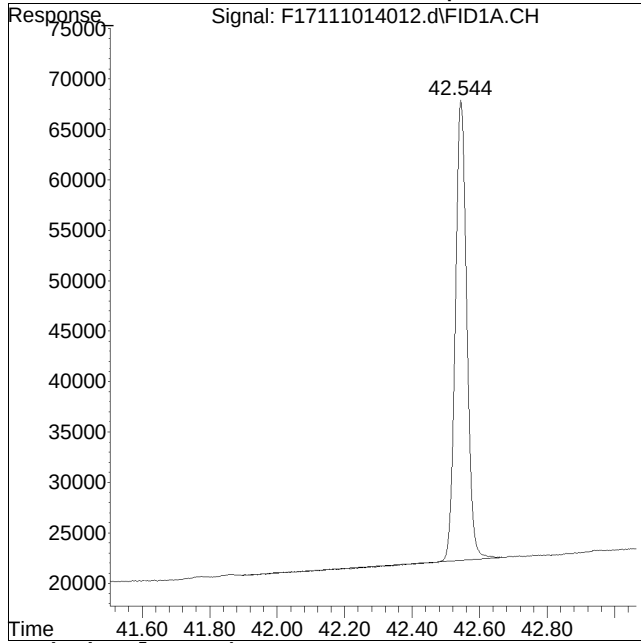
Manual Peak Response = 1117077 M4

M4 = Poor automated baseline construction.

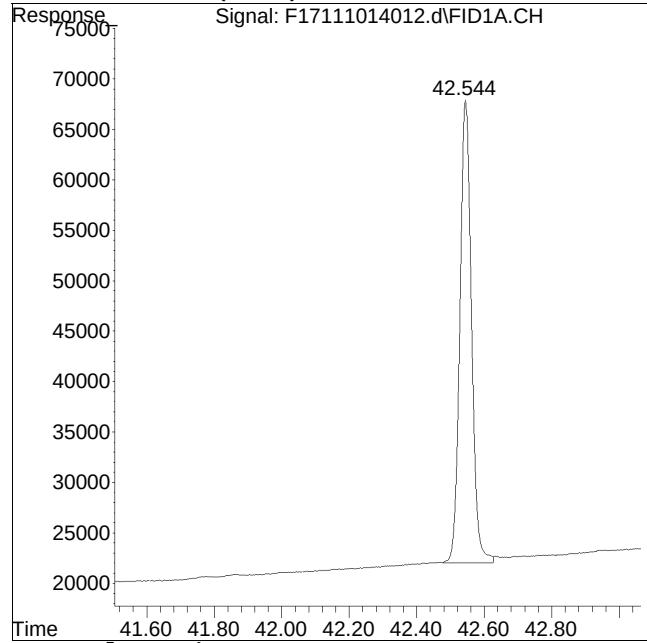
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #30: n-Nonacosane (C29)



Original Peak Response = 1066445



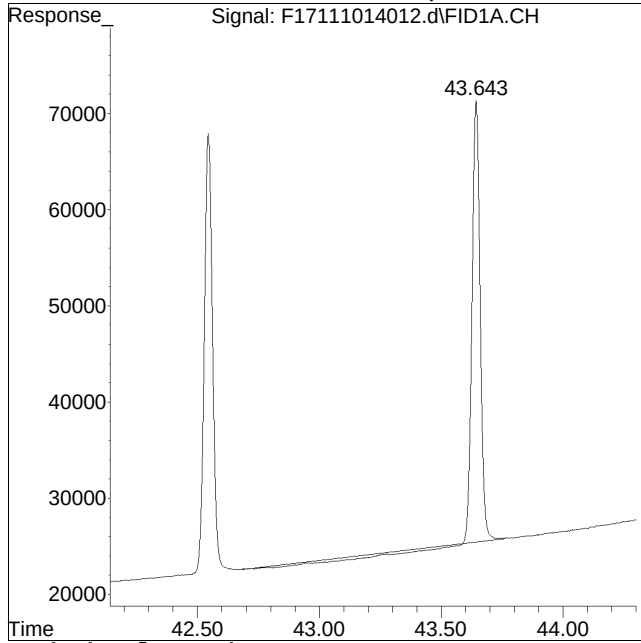
Manual Peak Response = 1093208 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

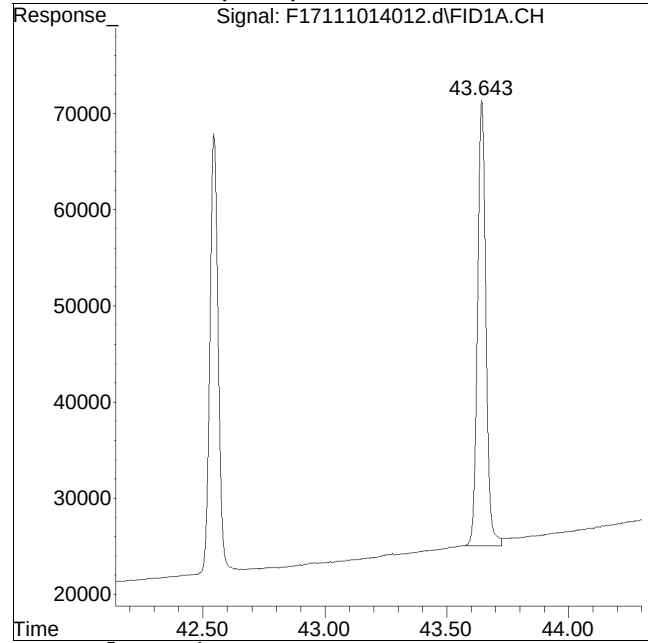
Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #31: n-Triacontane (C30)



Original Peak Response = 958793

M4 = Poor automated baseline construction.

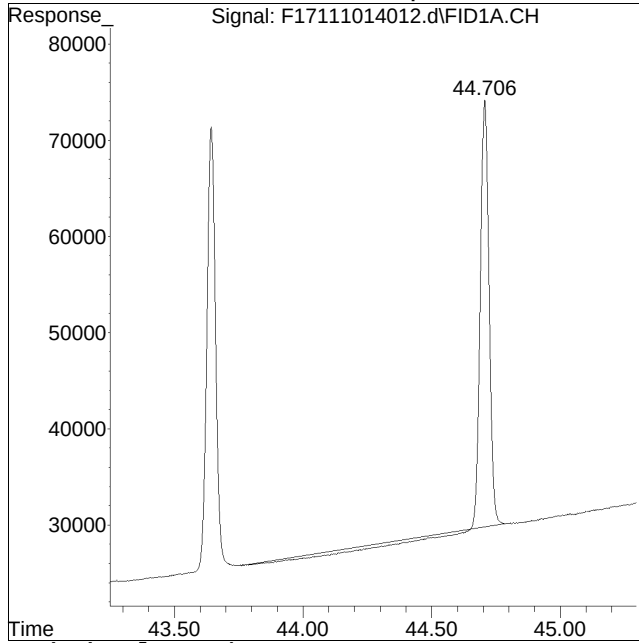


Manual Peak Response = 1105801 M4

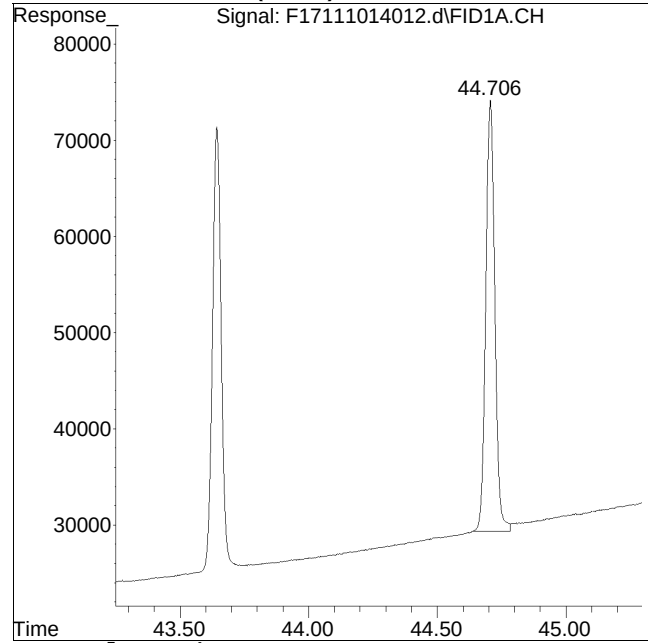
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #32: n-Hentriacontane (C31)



Original Peak Response = 915445



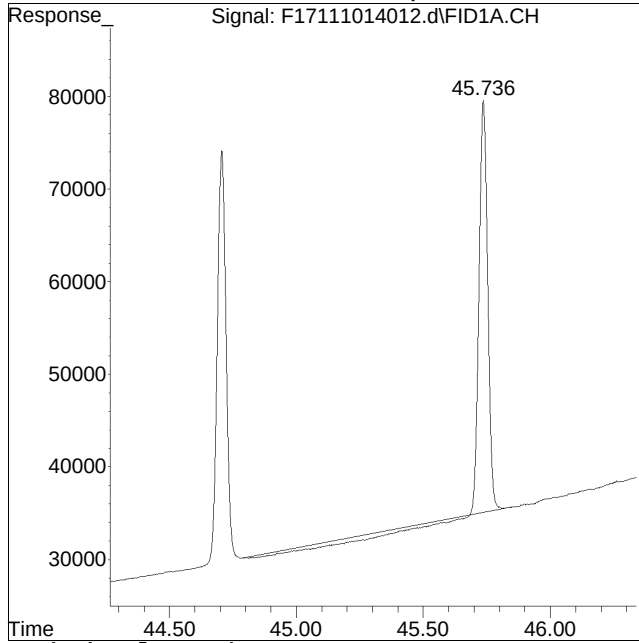
Manual Peak Response = 1100717 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

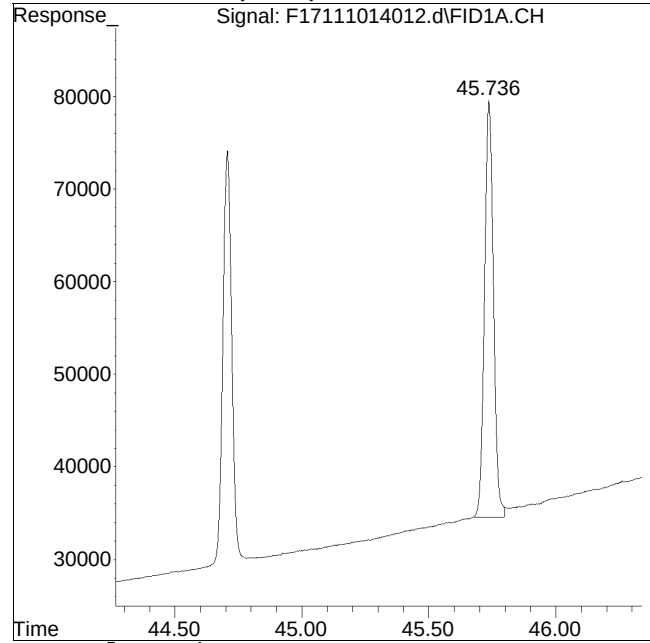
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #33: n-Dotriacontane (C32)



Original Peak Response = 878165

M4 = Poor automated baseline construction.

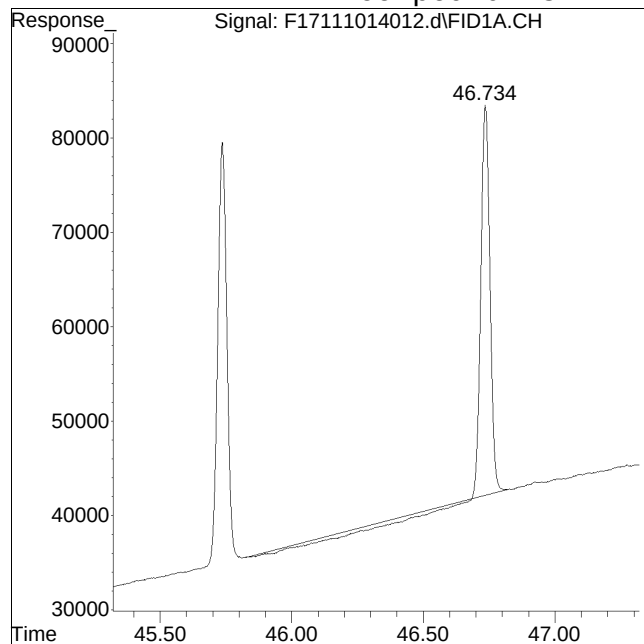


Manual Peak Response = 1099086 M4

Manual Integration/Negative Proof Report

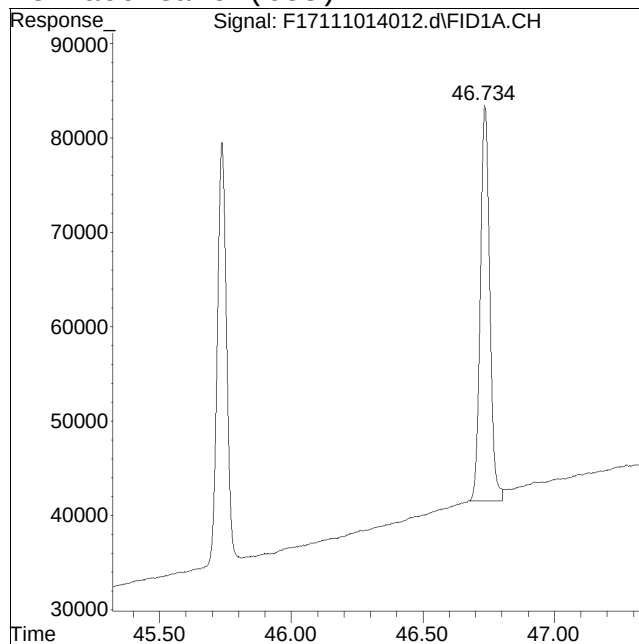
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #34: n-Tritriacontane (C33)



Original Peak Response = 829578

M4 = Poor automated baseline construction.

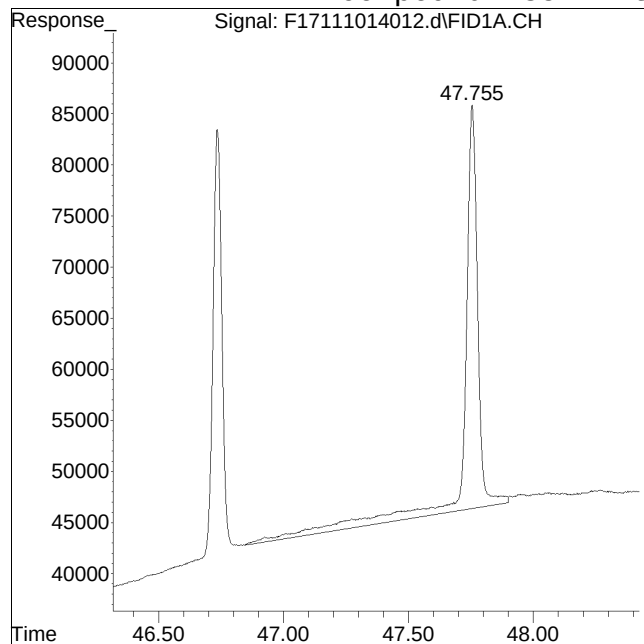


Manual Peak Response = 1045499 M4

Manual Integration/Negative Proof Report

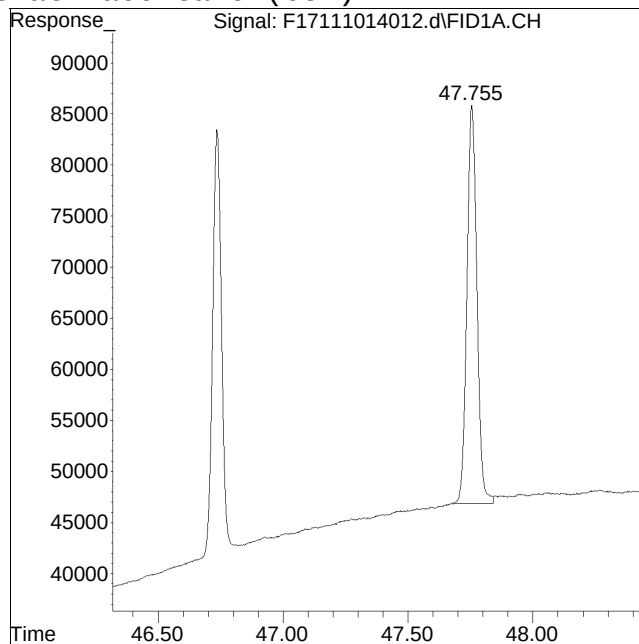
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #35: n-tetratriacontane (C34)



Original Peak Response = 1455441

M4 = Poor automated baseline construction.

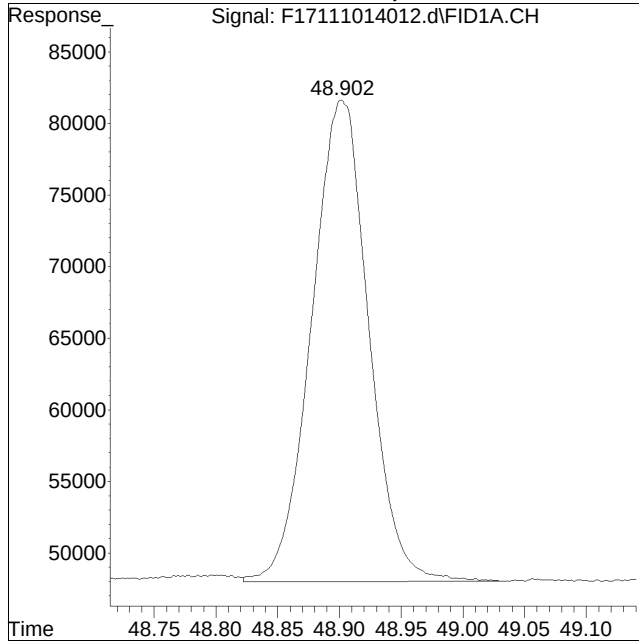


Manual Peak Response = 1083357 M4

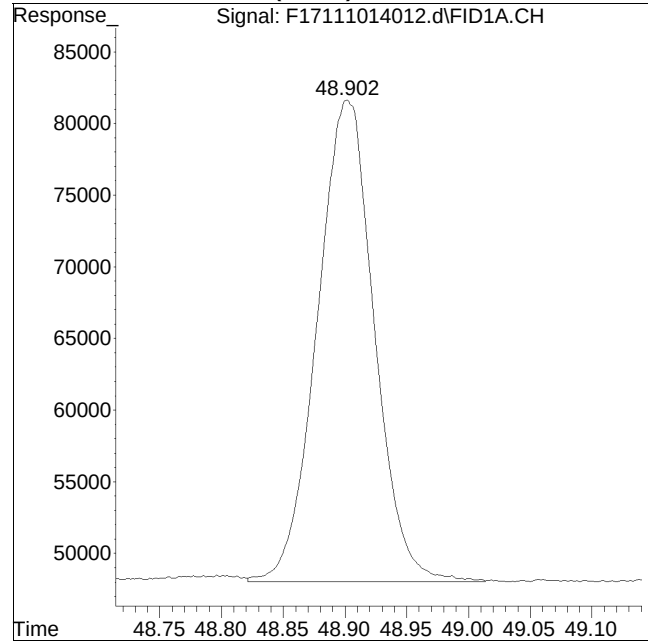
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #36: n-Pentatriacontane (C35)



Original Peak Response = 1082549



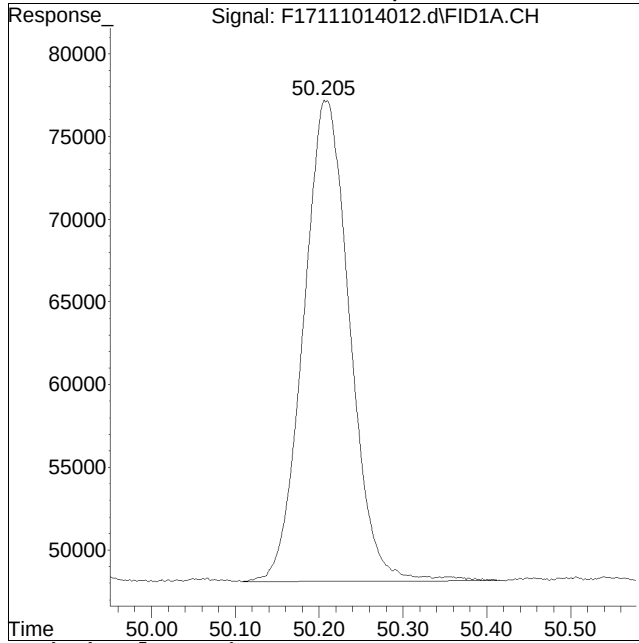
Manual Peak Response = 1079522 M4

M4 = Poor automated baseline construction.

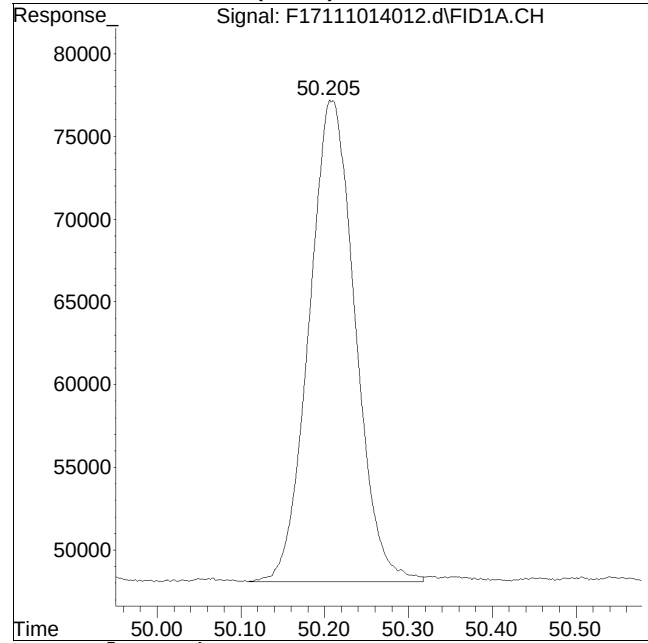
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #37: n-Hexatriacontane (C36)



Original Peak Response = 1115286



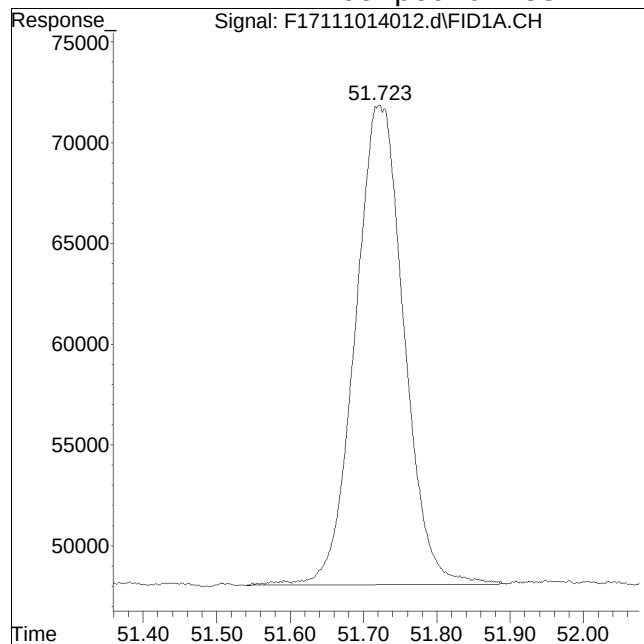
Manual Peak Response = 1109799 M4

M4 = Poor automated baseline construction.

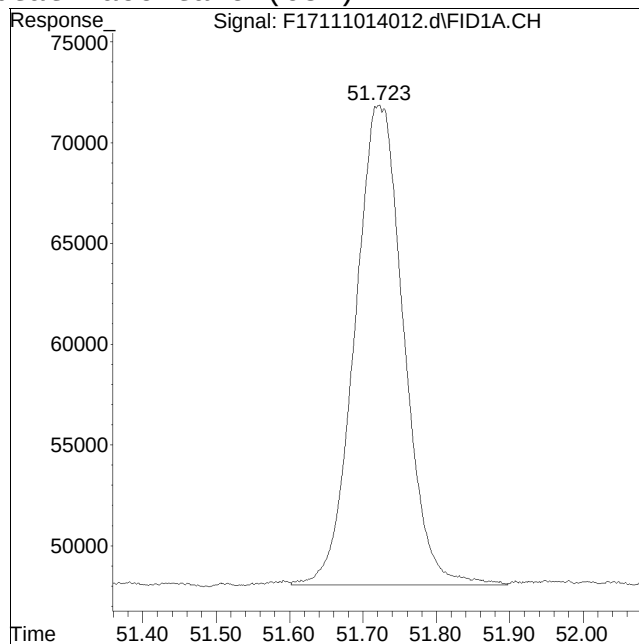
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #38: n-Heptatriacontane (C37)



Original Peak Response = 1095611



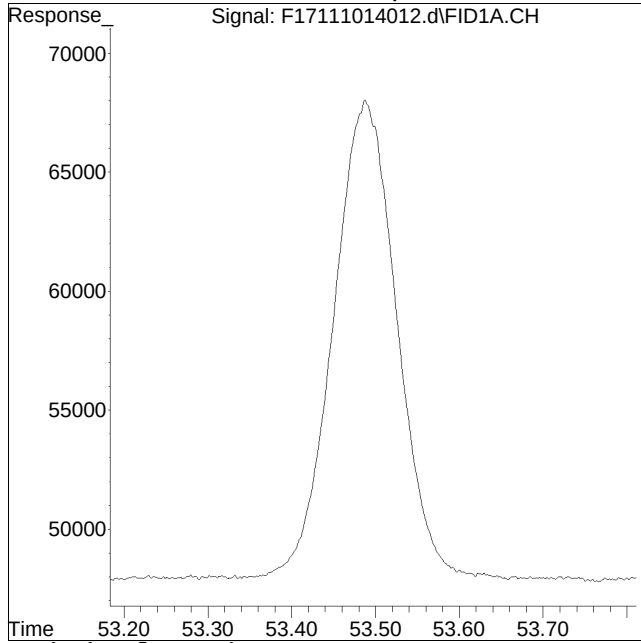
Manual Peak Response = 1096538 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

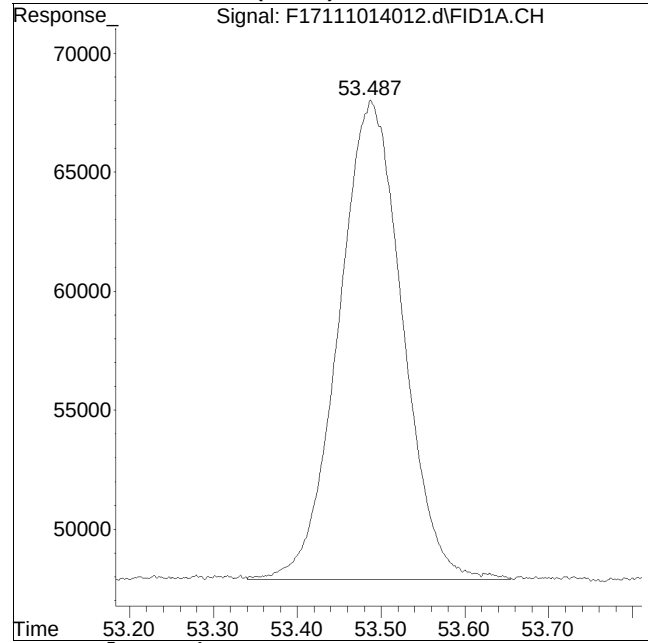
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #39: n-Octatriacontane (C38)



Original Peak Response = 0

M4 = Poor automated baseline construction.

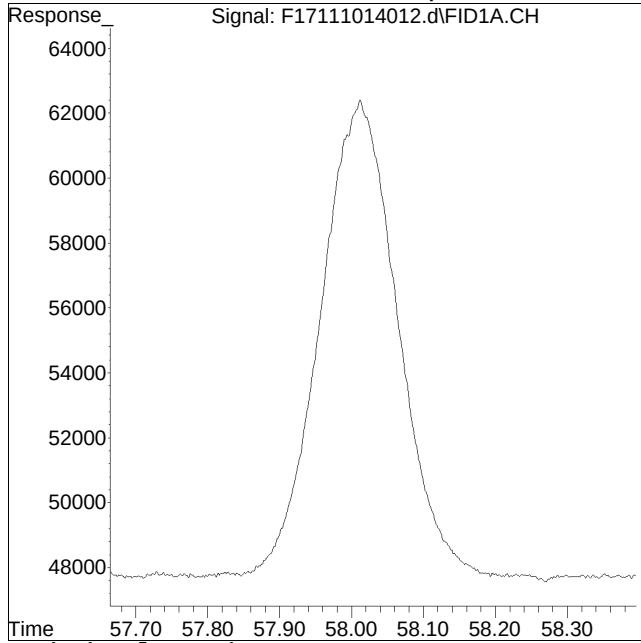


Manual Peak Response = 1065698 M4

Manual Integration/Negative Proof Report

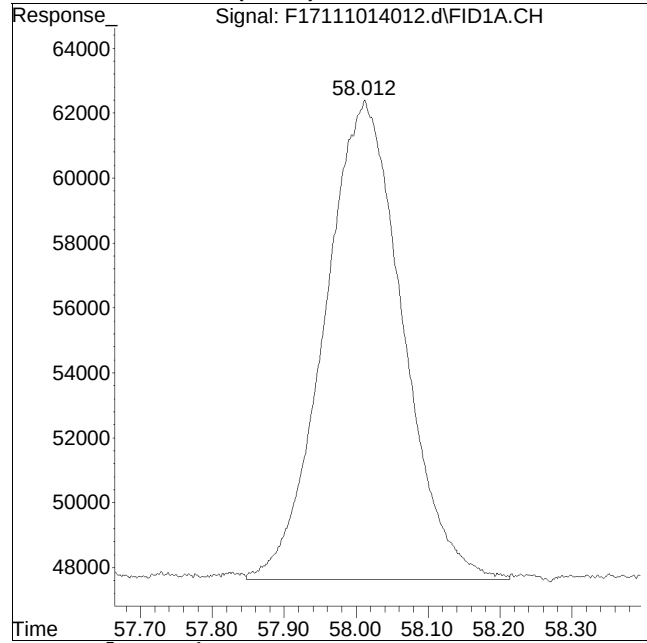
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #41: n-Tetracontane (C40)



Original Peak Response = 0

M4 = Poor automated baseline construction.



Manual Peak Response = 1113747 M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014014.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 8:31 pm
 Operator : FID17:NL
 Sample : I1711011402R
 Misc : WG743851, FRAV24 10ug/mL
 ALS Vial : 7 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:33:35 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.266	56364062	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.228	12275311	9.720	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 19.44%#
24) s	d50-Tetracosane	35.904	9879621	9.913	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 19.83%#
Target Compounds					
2) t	n-Octane (C8)	5.553	9260703	9.273	ug/mL M4
3) t	n-Nonane (C9)	7.759	9571218	9.122	ug/mL M4
4) t	n-Decane (C10)	10.251	9773460	8.876	ug/mL M4
5) t	n-Undecane (C11)	12.766	9991962	9.250	ug/mL M4
6) t	n-Dodecane (C12)	15.197	10206111	9.384	ug/mL M4
7) t	n-Tridecane (C13)	17.507	10303226	9.485	ug/mL M4
9) t	n-Tetradecane (C14)	19.693	10460709	9.290	ug/mL M4
11) t	n-Pentadecane (C15)	21.762	10664004	9.593	ug/mL M4
12) t	n-Hexadecane (C16)	23.722	10751385	9.597	ug/mL M4
14) t	n-Heptadecane (C17)	25.582	10666998	9.472	ug/mL M4
15) t	Pristane	25.693	10997838	9.743	ug/mL M4
16) t	n-Octadecane (C18)	27.354	10973500	9.804	ug/mL M4
17) t	Phytane	27.517	9686820	8.518	ug/mL M4
18) t	n-Nonadecane (C19)	29.043	10933111	9.823	ug/mL M4
20) t	n-Eicosane (C20)	30.655	10914758	9.761	ug/mL M4
21) t	n-Heneicosane (C21)	32.195	11005551	9.731	ug/mL M4
22) t	n-Docosane (C22)	33.673	11090258	9.751	ug/mL M4
23) t	n-Tricosane (C23)	35.090	11177597	9.772	ug/mL M4
25) t	n-Tetracosane (C24)	36.450	11187494	9.770	ug/mL M4
26) t	n-Pentacosane (C25)	37.758	11131468	9.688	ug/mL M4
27) t	n-Hexacosane (C26)	39.021	11381761	9.704	ug/mL M4
28) t	n-Heptacosane (C27)	40.239	11270080	9.681	ug/mL M4
29) t	n-Octacosane (C28)	41.414	11186318	9.579	ug/mL M4
30) t	n-Nonacosane (C29)	42.547	11258816	9.554	ug/mL M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014014.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 8:31 pm
 Operator : FID17:NL
 Sample : I1711011402R
 Misc : WG743851, FRAV24 10ug/mL
 ALS Vial : 7 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:33:35 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc Units
31) t	n-Triacontane (C30)	43.644	11268522	9.530 ug/mL M4
32) t	n-Hentriacontane (C31)	44.709	11275401	9.464 ug/mL M4
33) t	n-Dotriacontane (C32)	45.737	11359577	9.590 ug/mL M4
34) t	n-Tritriacontane (C33)	46.738	10681176	9.283 ug/mL M4
35) t	n-tetratriacontane (C34)	47.758	11092909	9.084 ug/mL M4
36) t	n-Pentatriacontane (C35)	48.907	11156813	9.183 ug/mL M4
37) t	n-Hexatriacontane (C36)	50.215	11422543	8.683 ug/mL M4
38) t	n-Heptatriacontane (C37)	51.728	11112602	9.054 ug/mL M4
39) t	n-Octatriacontane (C38)	53.487	10908503	8.894 ug/mL M4
41) t	n-Tetracontane (C40)	58.025	11317318	9.591 ug/mL M4

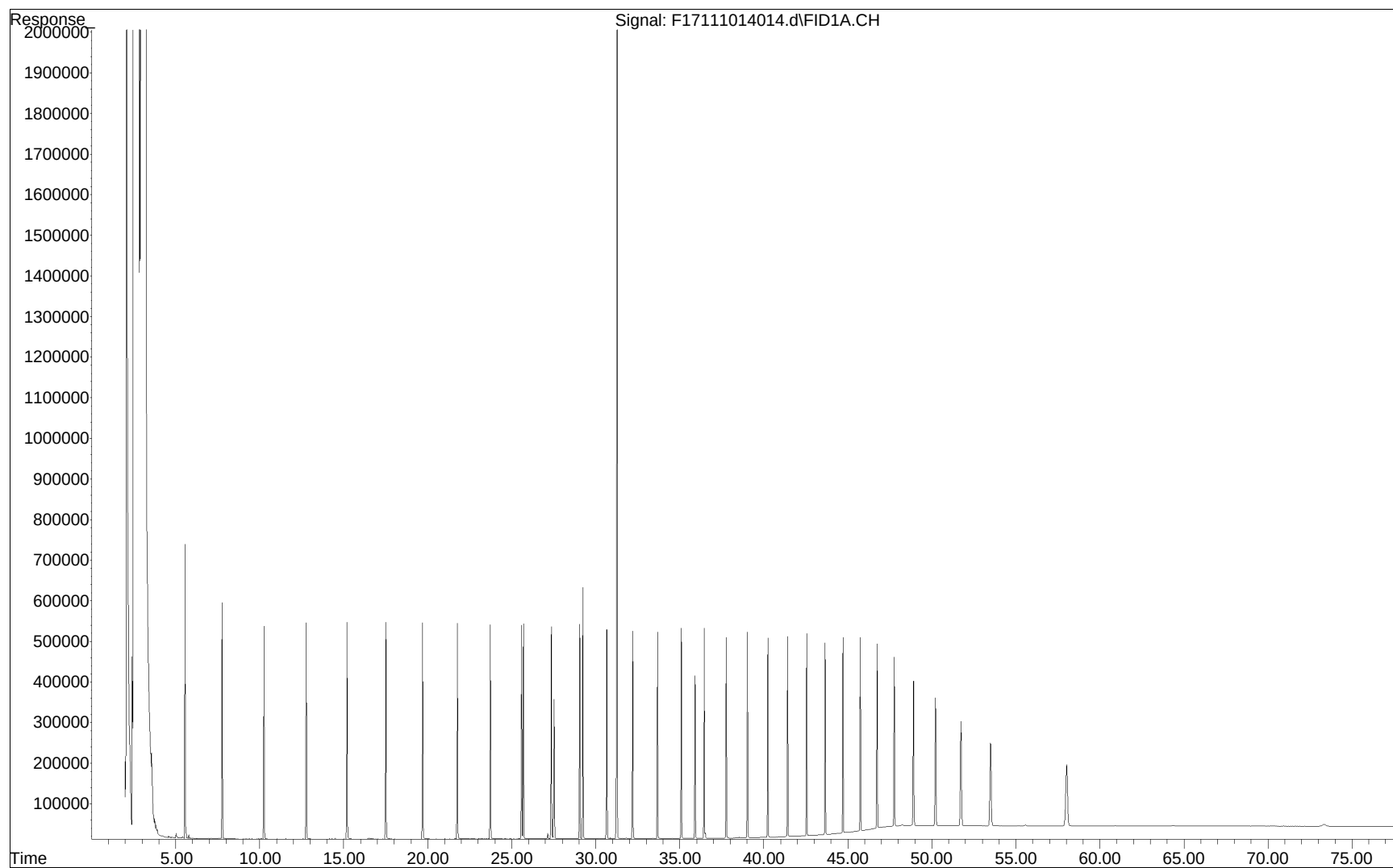
SemiQuant Compounds - Not Calibrated on this Instrument

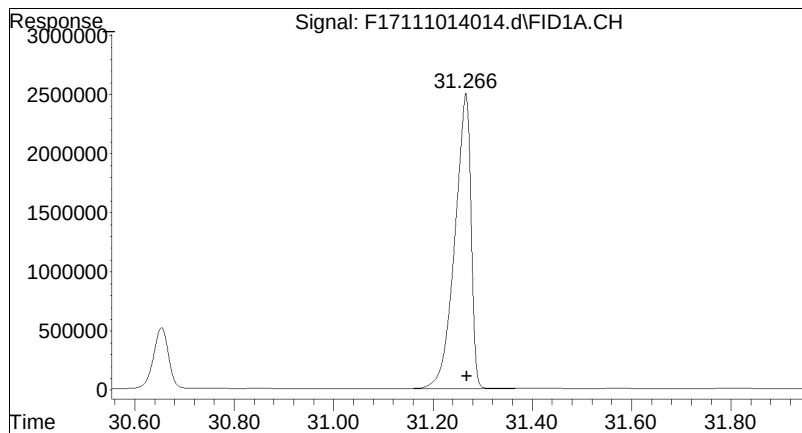
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

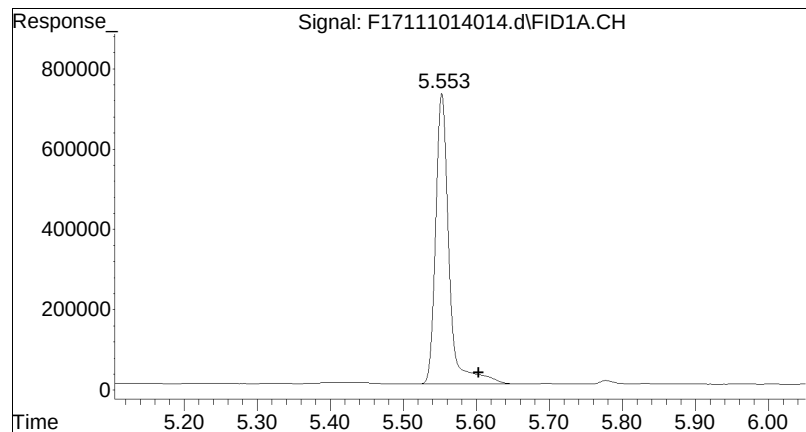
File : 0:\Forensics\Data\FID17\2014\NOV\NOV10\F17111014014.d
Operator : FID17:NL
Acquired : 10 Nov 2014 8:31 pm using AcqMethod FID17.M
Sample Name: I1711011402R
Instrument: FID17
Misc Info : WG743851, FRAV24 10ug/mL
Vial Number: 7
CurrentMeth: 0:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M





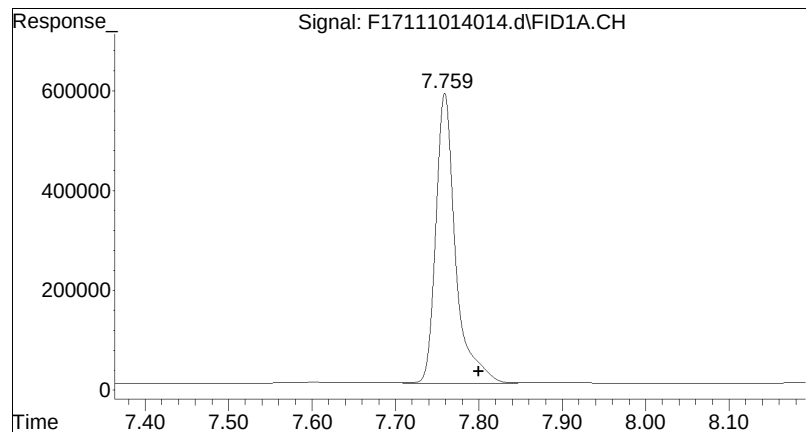
#1 5-alpha-androstane

R.T.: 31.266 min
Delta R.T.: -0.003 min
Response: 56364062
Conc: 50.00 ug/mL M4



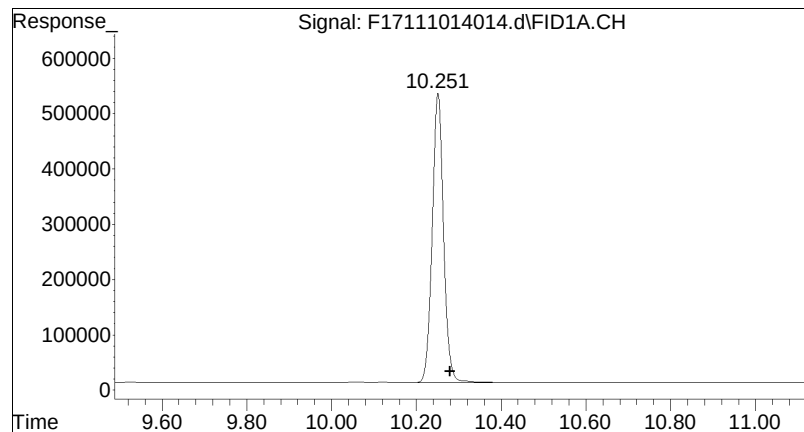
#2 n-Octane (C8)

R.T.: 5.553 min
Delta R.T.: -0.051 min
Response: 9260703
Conc: 9.27 ug/mL M4



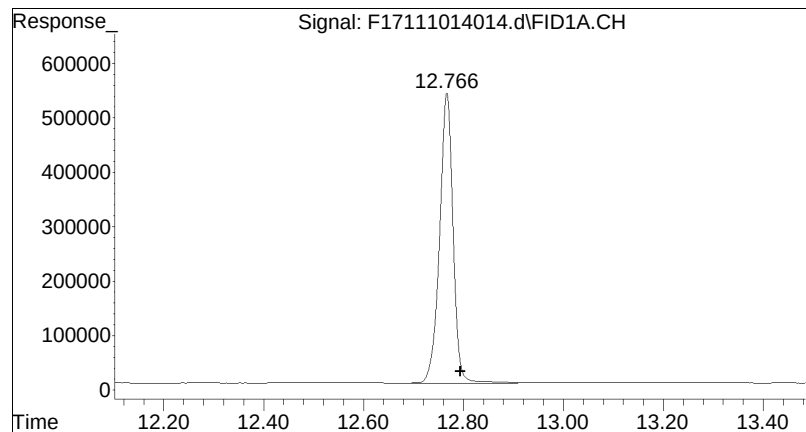
#3 n-Nonane (C9)

R.T.: 7.759 min
Delta R.T.: -0.041 min
Response: 9571218
Conc: 9.12 ug/mL M4



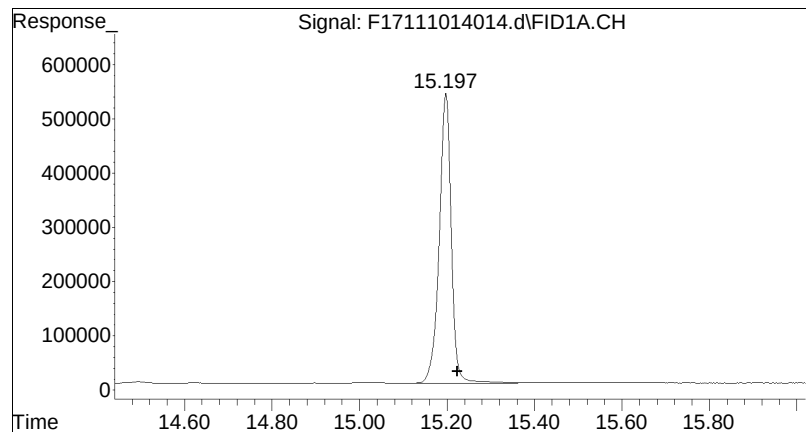
#4 n-Decane (C10)

R.T.: 10.251 min
Delta R.T.: -0.028 min
Response: 9773460
Conc: 8.88 ug/mL M4



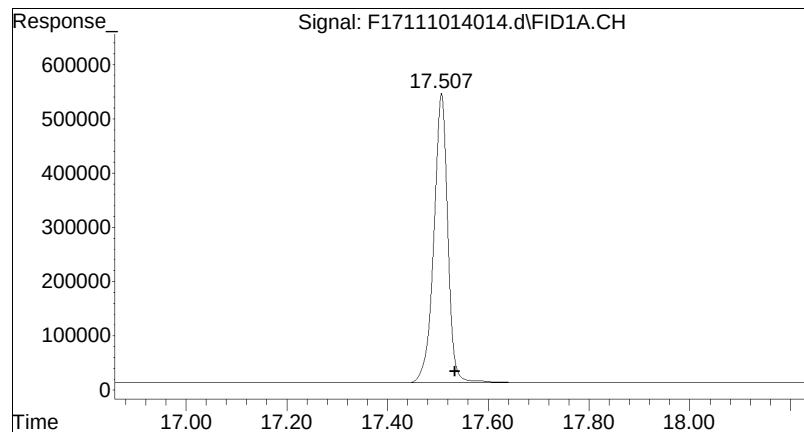
#5 n-Undecane (C11)

R.T.: 12.766 min
Delta R.T.: -0.027 min
Response: 9991962
Conc: 9.25 ug/mL M4



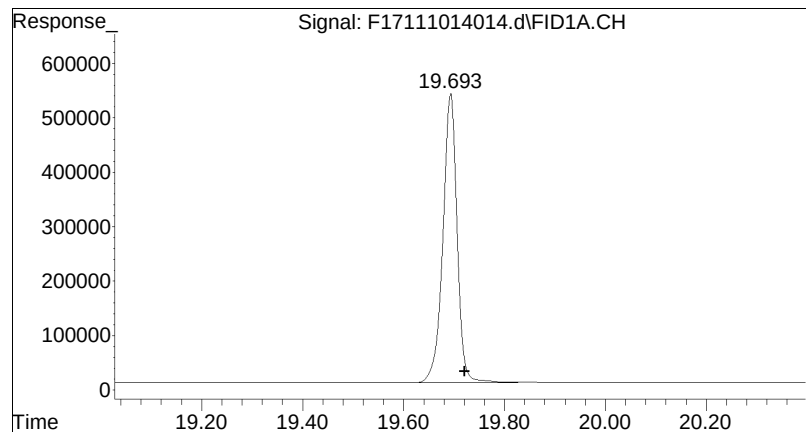
#6 n-Dodecane (C12)

R.T.: 15.197 min
Delta R.T.: -0.027 min
Response: 10206111
Conc: 9.38 ug/mL M4



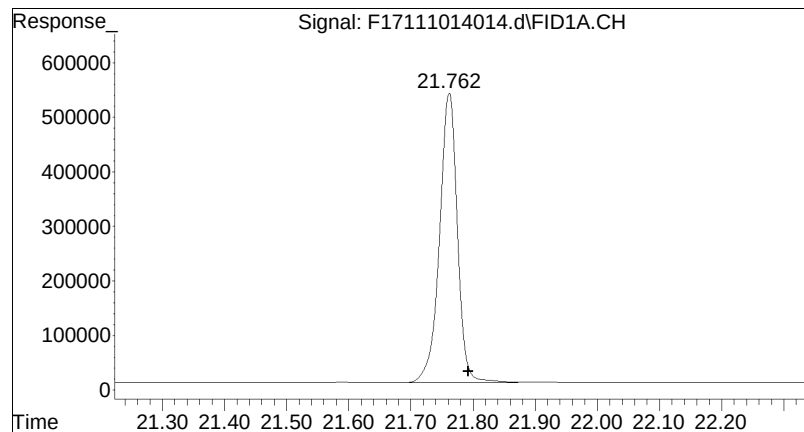
#7 n-Tridecane (C13)

R.T.: 17.507 min
Delta R.T.: -0.027 min
Response: 10303226
Conc: 9.48 ug/mL M4



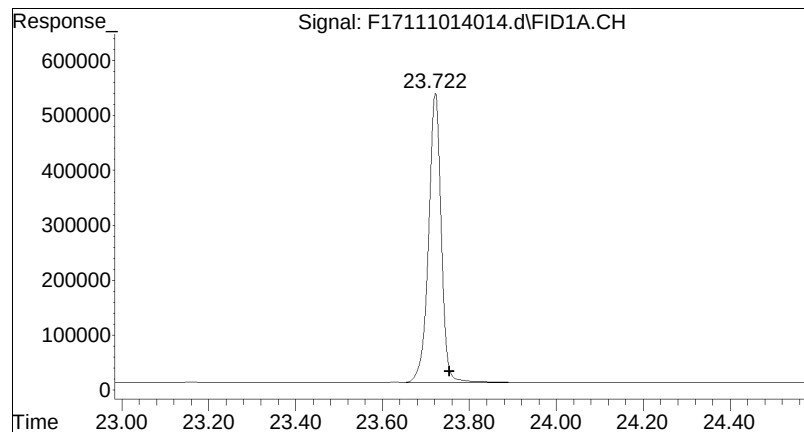
#9 n-Tetradecane (C14)

R.T.: 19.693 min
Delta R.T.: -0.028 min
Response: 10460709
Conc: 9.29 ug/mL M4



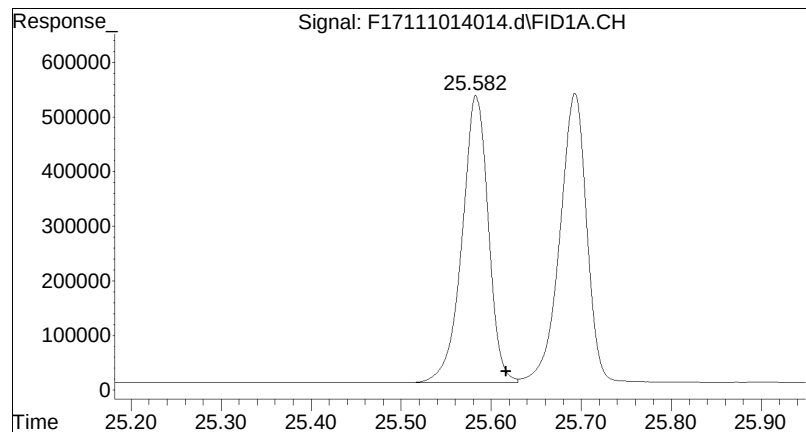
#11 n-Pentadecane (C15)

R.T.: 21.762 min
Delta R.T.: -0.030 min
Response: 10664004
Conc: 9.59 ug/mL M4



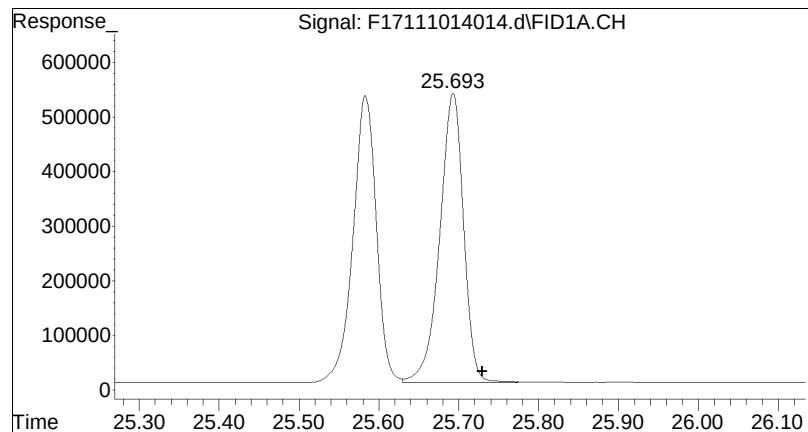
#12 n-Hexadecane (C16)

R.T.: 23.722 min
Delta R.T.: -0.031 min
Response: 10751385
Conc: 9.60 ug/mL M4



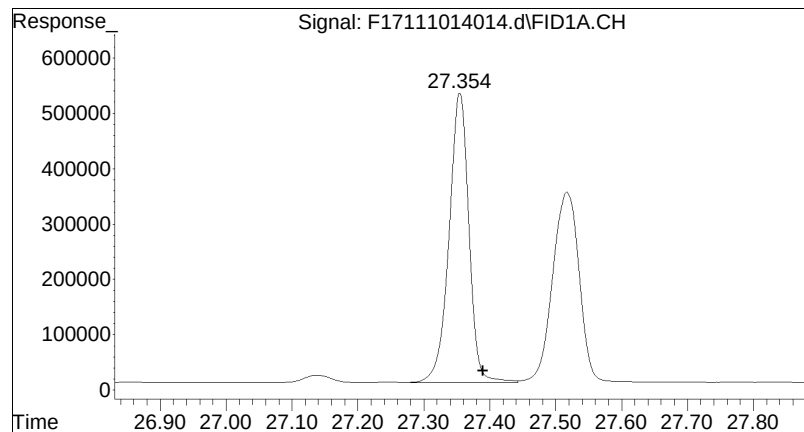
#14 n-Heptadecane (C17)

R.T.: 25.582 min
Delta R.T.: -0.034 min
Response: 10666998
Conc: 9.47 ug/mL M4



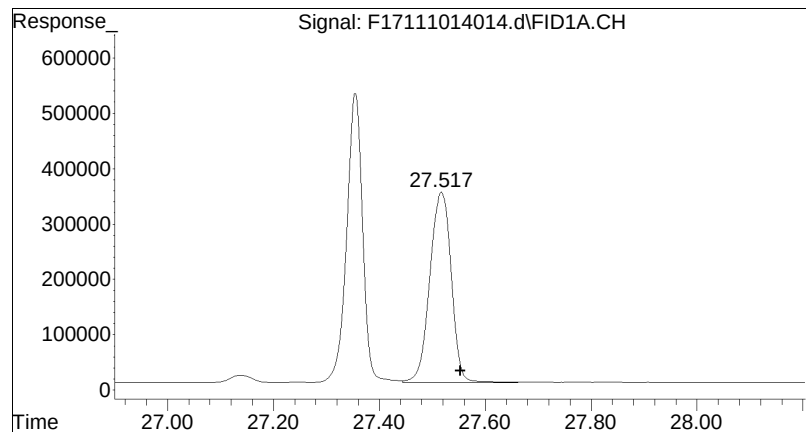
#15 Pristane

R.T.: 25.693 min
Delta R.T.: -0.037 min
Response: 10997838
Conc: 9.74 ug/mL M4



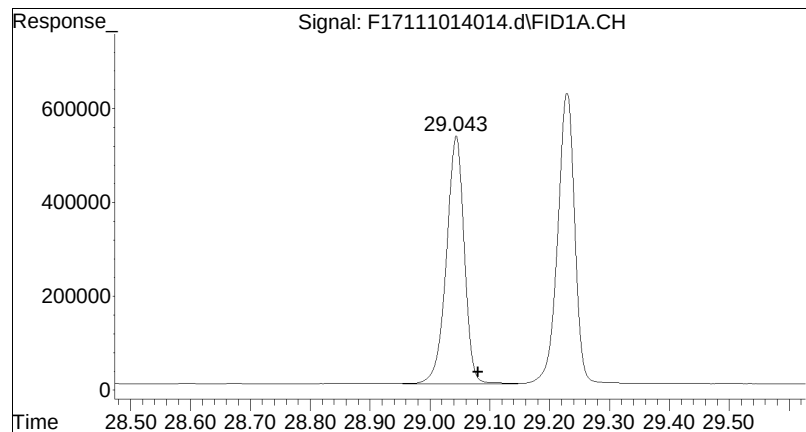
#16 n-Octadecane (C18)

R.T.: 27.354 min
Delta R.T.: -0.035 min
Response: 10973500
Conc: 9.80 ug/mL M4



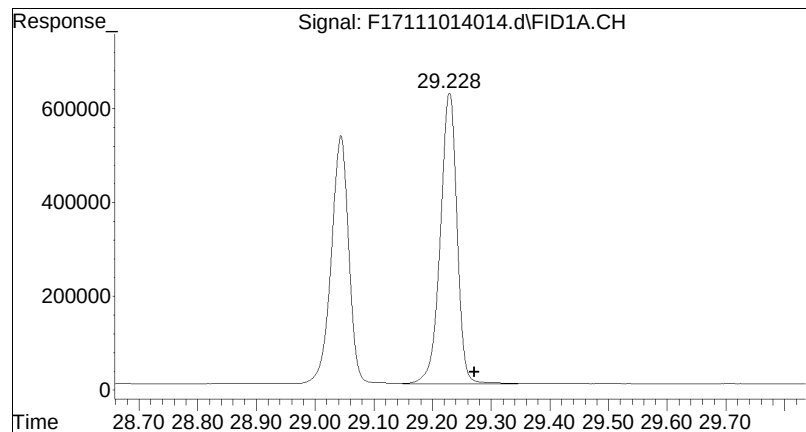
#17 Phytane

R.T.: 27.517 min
Delta R.T.: -0.036 min
Response: 9686820
Conc: 8.52 ug/mL M4



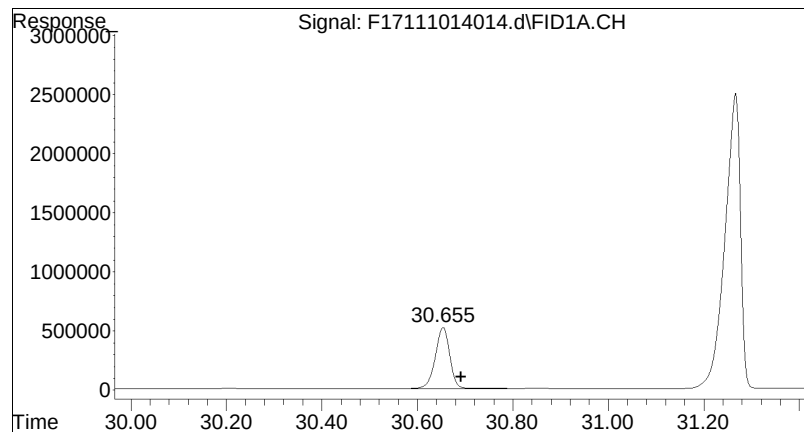
#18 n-Nonadecane (C19)

R.T.: 29.043 min
Delta R.T.: -0.036 min
Response: 10933111
Conc: 9.82 ug/mL M4



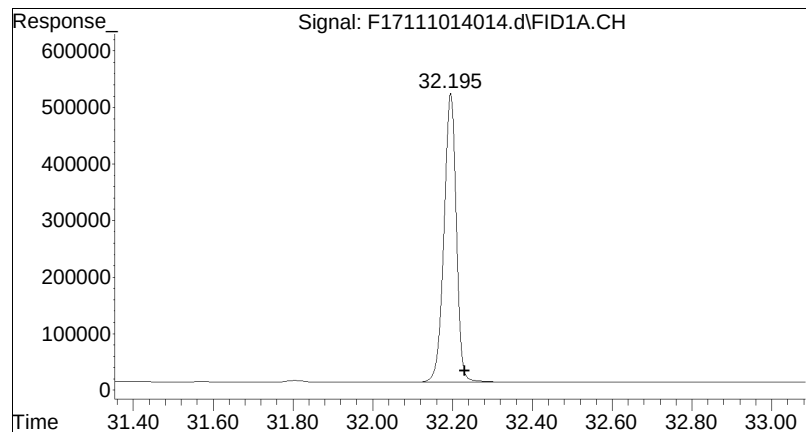
#19 ortho-terphenyl

R.T.: 29.228 min
Delta R.T.: -0.042 min
Response: 12275311
Conc: 9.72 ug/mL M4



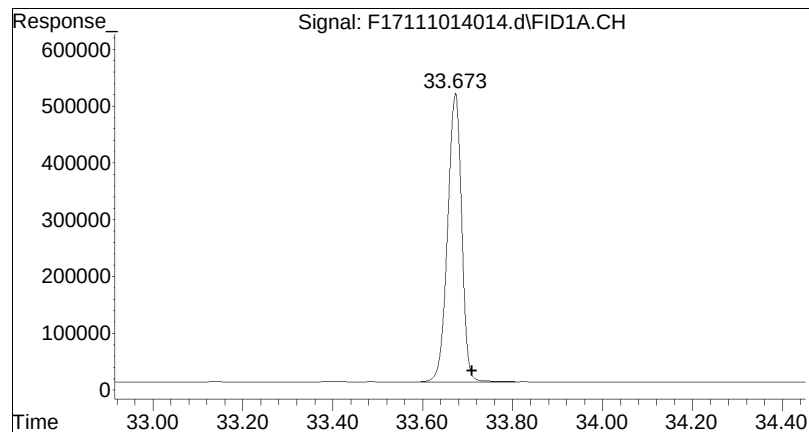
#20 n-Eicosane (C20)

R.T.: 30.655 min
Delta R.T.: -0.037 min
Response: 10914758
Conc: 9.76 ug/mL M4



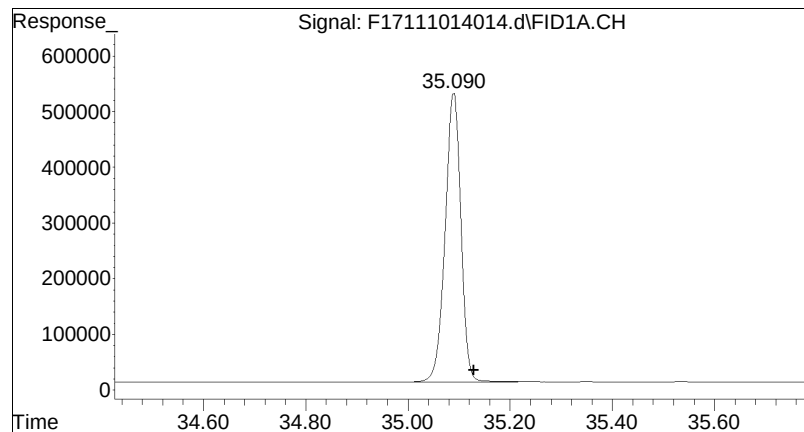
#21 n-Heneicosane (C21)

R.T.: 32.195 min
Delta R.T.: -0.036 min
Response: 11005551
Conc: 9.73 ug/mL M4



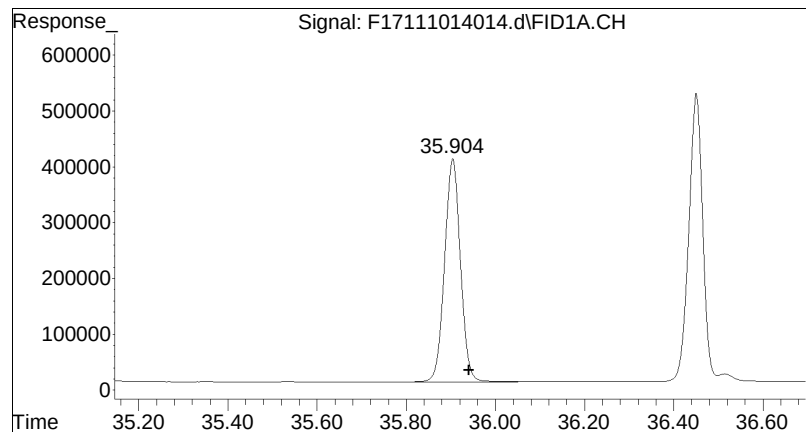
#22 n-Docosane (C22)

R.T.: 33.673 min
Delta R.T.: -0.036 min
Response: 11090258
Conc: 9.75 ug/mL M4



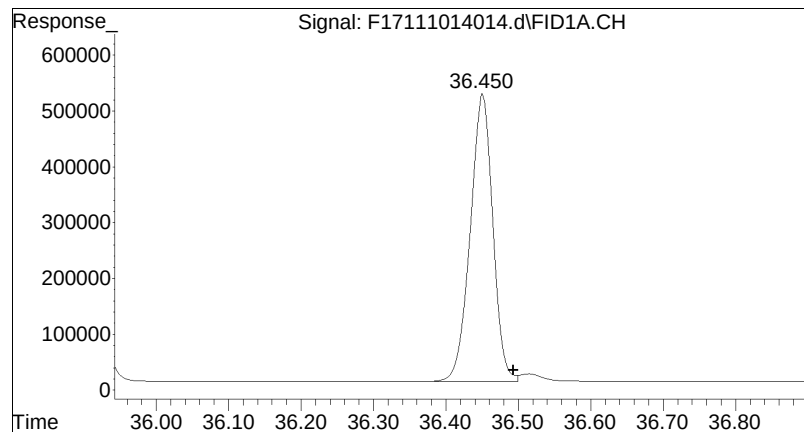
#23 n-Tricosane (C23)

R.T.: 35.090 min
Delta R.T.: -0.039 min
Response: 11177597
Conc: 9.77 ug/mL M4



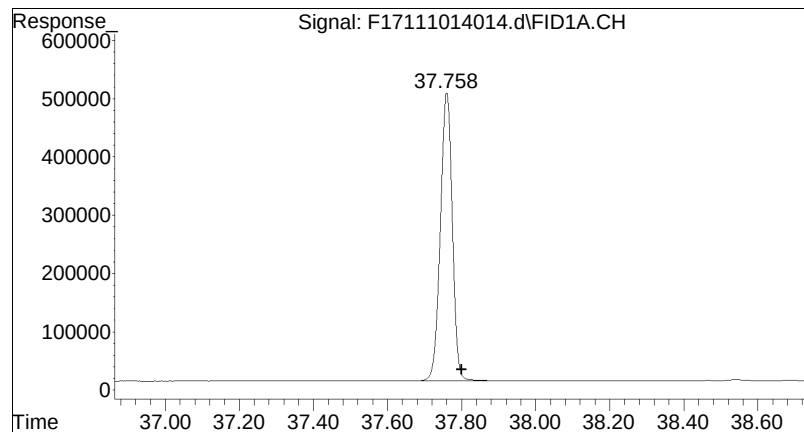
#24 d50-Tetracosane

R.T.: 35.904 min
Delta R.T.: -0.036 min
Response: 9879621
Conc: 9.91 ug/mL M4



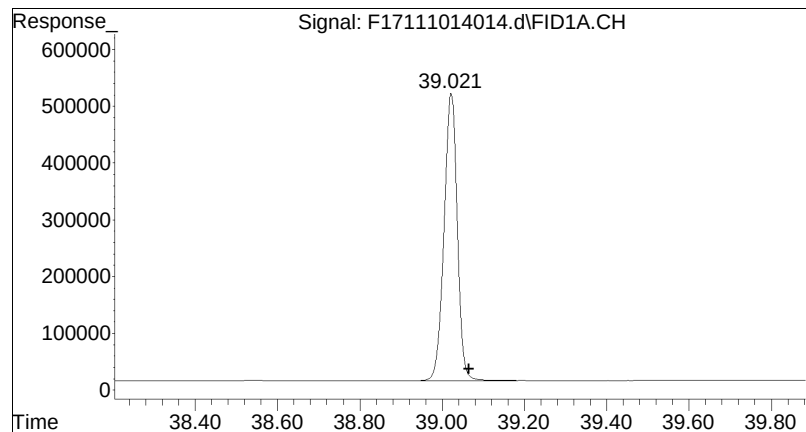
#25 n-Tetracosane (C24)

R.T.: 36.450 min
Delta R.T.: -0.044 min
Response: 11187494
Conc: 9.77 ug/mL M4



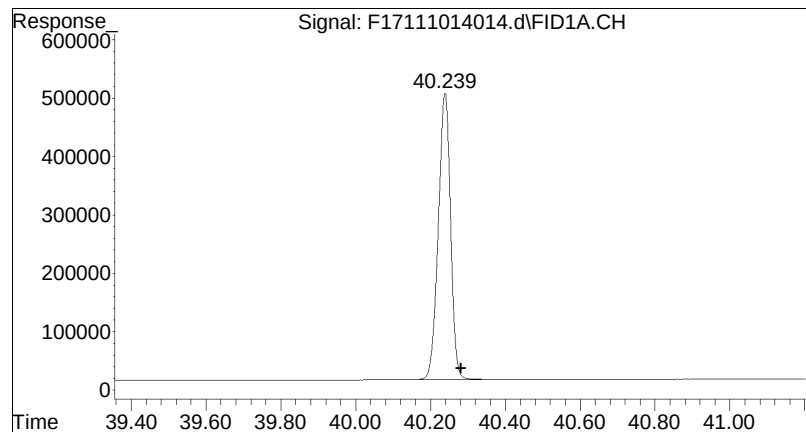
#26 n-Pentacosane (C25)

R.T.: 37.758 min
Delta R.T.: -0.042 min
Response: 11131468
Conc: 9.69 ug/mL M4



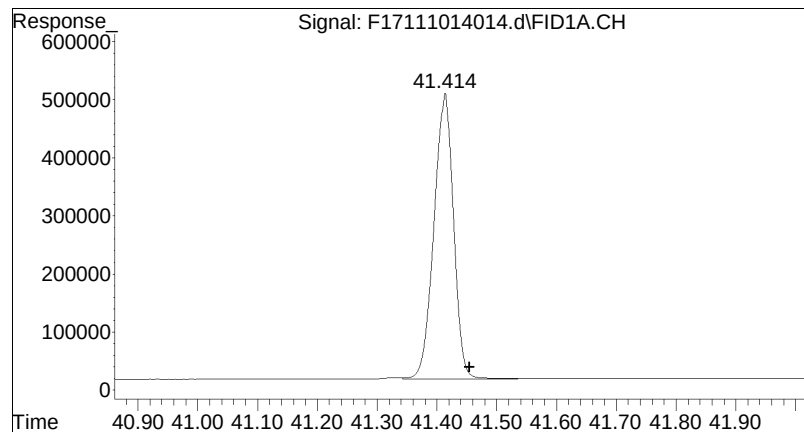
#27 n-Hexacosane (C26)

R.T.: 39.021 min
Delta R.T.: -0.044 min
Response: 11381761
Conc: 9.70 ug/mL M4



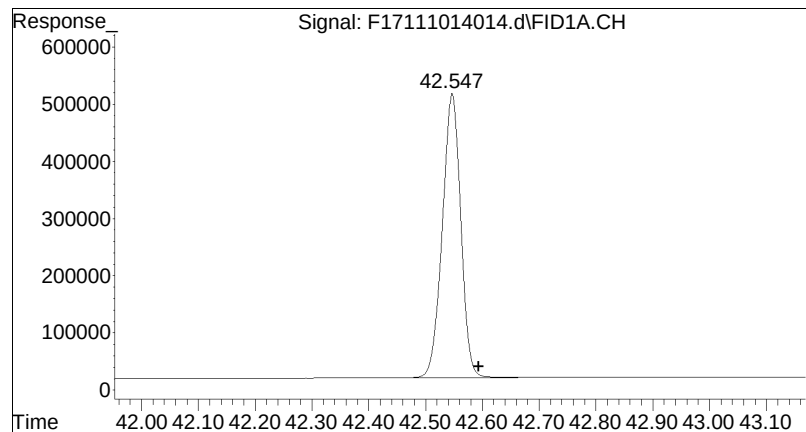
#28 n-Heptacosane (C27)

R.T.: 40.239 min
Delta R.T.: -0.042 min
Response: 11270080
Conc: 9.68 ug/mL M4



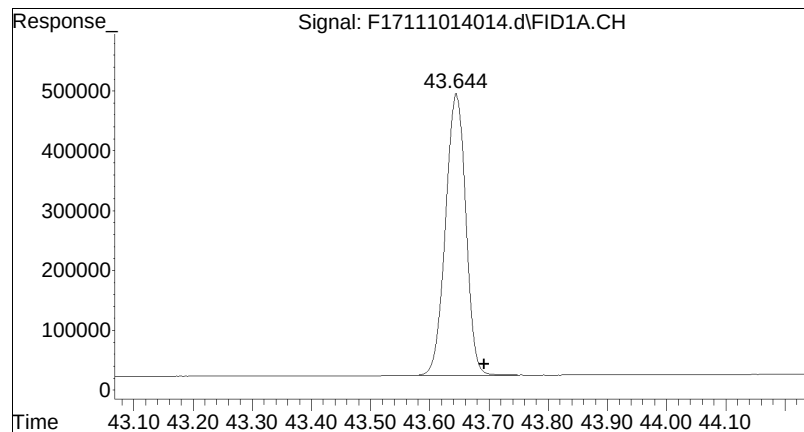
#29 n-Octacosane (C28)

R.T.: 41.414 min
Delta R.T.: -0.041 min
Response: 11186318
Conc: 9.58 ug/mL M4



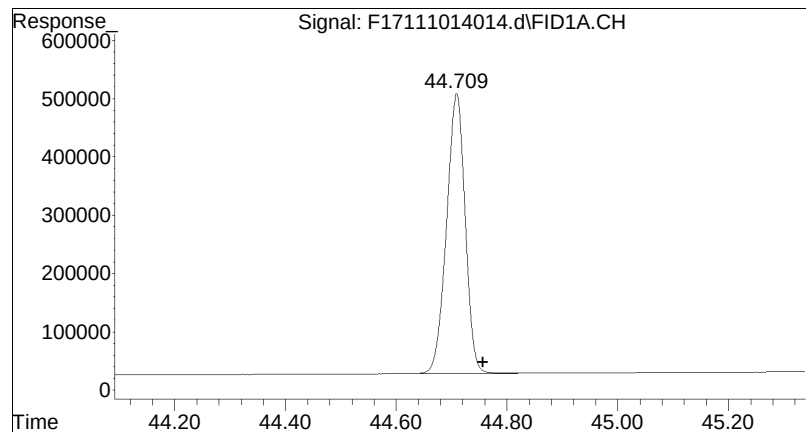
#30 n-Nonacosane (C29)

R.T.: 42.547 min
Delta R.T.: -0.047 min
Response: 11258816
Conc: 9.55 ug/mL M4



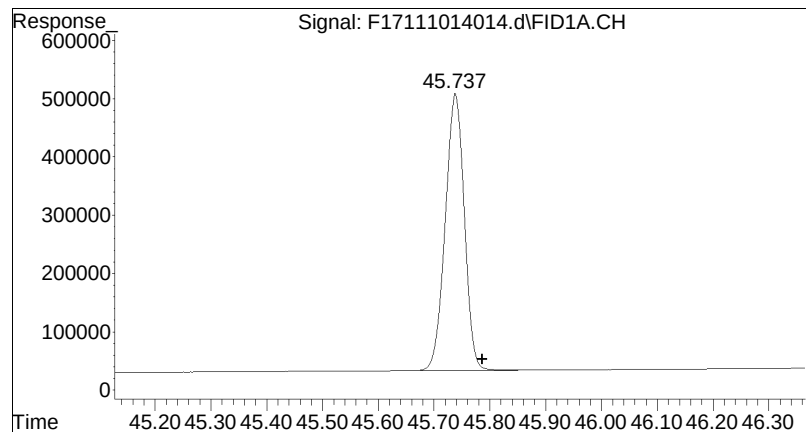
#31 n-Triacontane (C30)

R.T.: 43.644 min
Delta R.T.: -0.048 min
Response: 11268522
Conc: 9.53 ug/mL M4



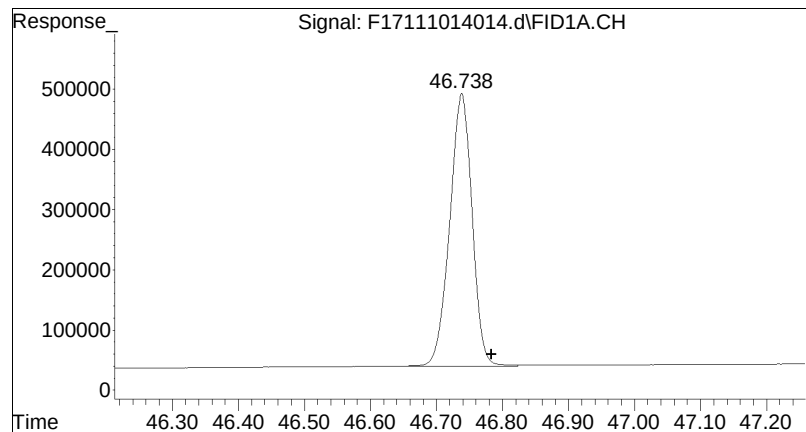
#32 n-Hentriacontane (C31)

R.T.: 44.709 min
Delta R.T.: -0.048 min
Response: 11275401
Conc: 9.46 ug/mL M4



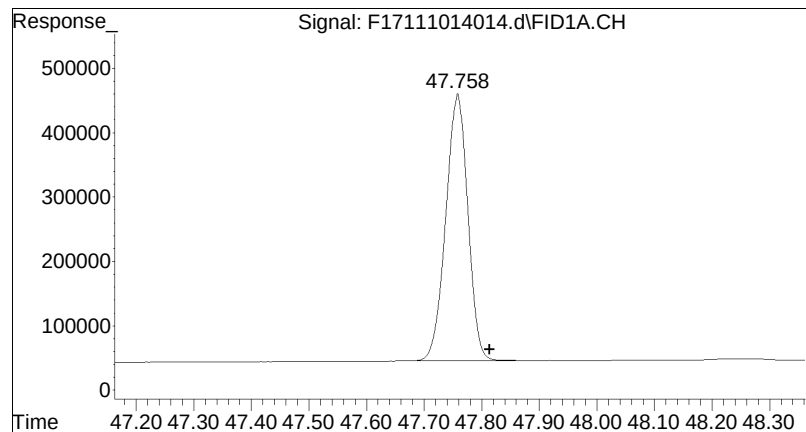
#33 n-Dotriacontane (C32)

R.T.: 45.737 min
Delta R.T.: -0.049 min
Response: 11359577
Conc: 9.59 ug/mL M4



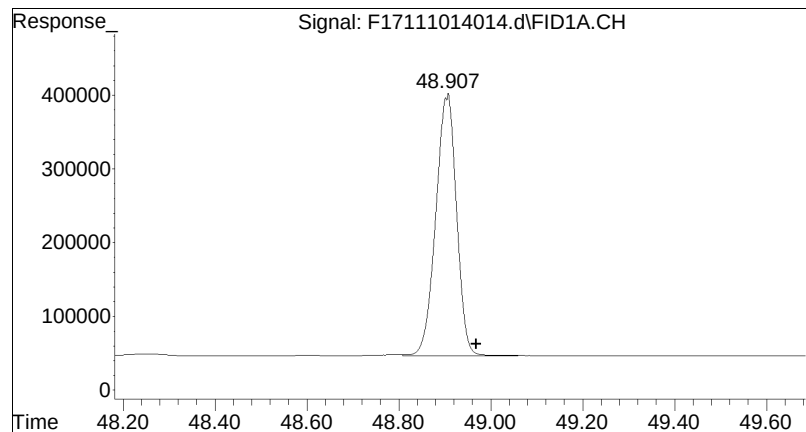
#34 n-Tritriacontane (C33)

R.T.: 46.738 min
Delta R.T.: -0.045 min
Response: 10681176
Conc: 9.28 ug/mL M4



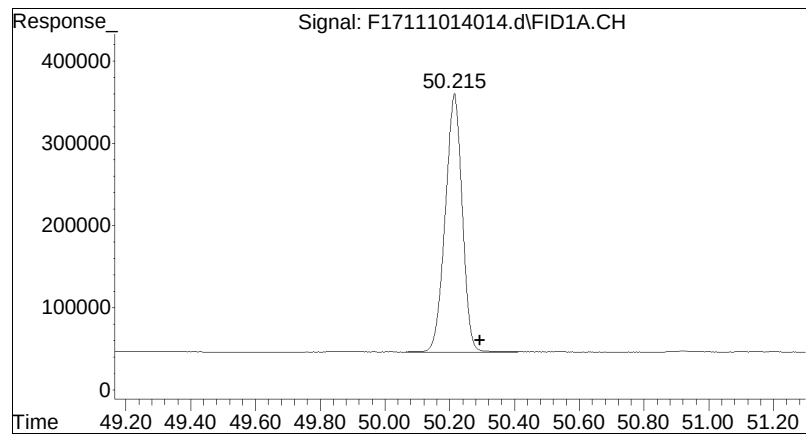
#35 n-tetratriacontane (C34)

R.T.: 47.758 min
Delta R.T.: -0.056 min
Response: 11092909
Conc: 9.08 ug/mL M4



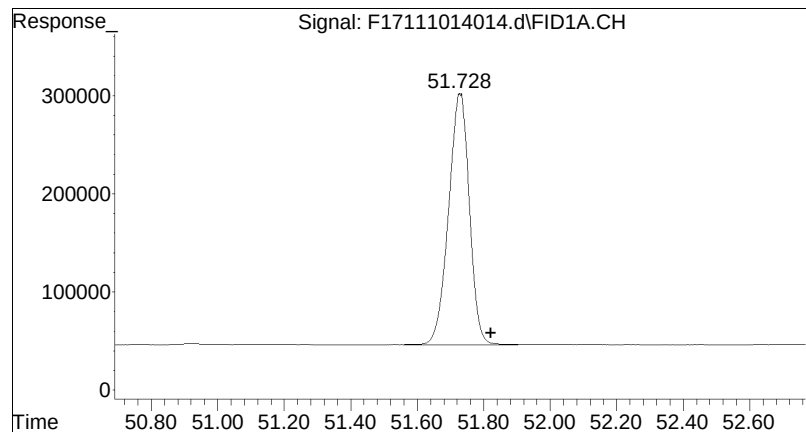
#36 n-Pentatriacontane (C35)

R.T.: 48.907 min
Delta R.T.: -0.060 min
Response: 11156813
Conc: 9.18 ug/mL M4



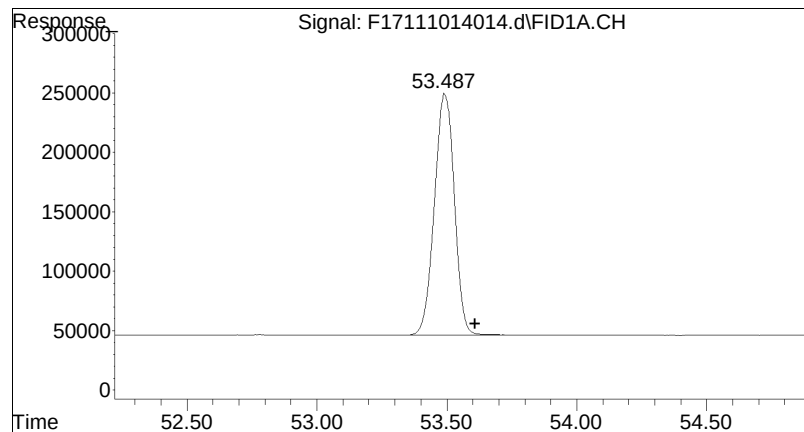
#37 n-Hexatriacontane (C36)

R.T.: 50.215 min
Delta R.T.: -0.078 min
Response: 11422543
Conc: 8.68 ug/mL M4



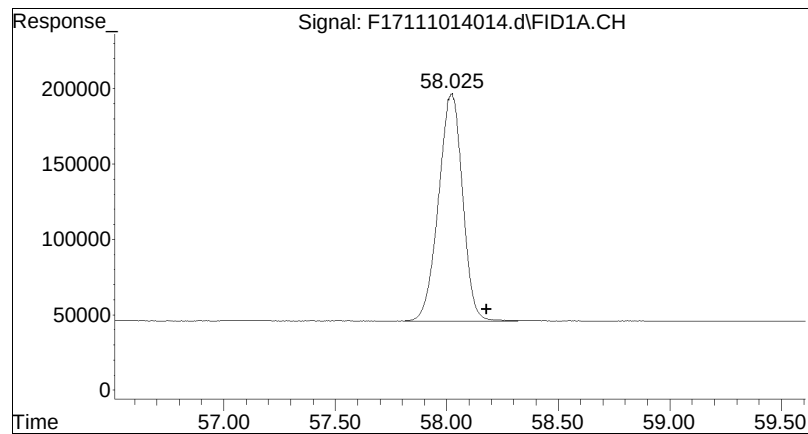
#38 n-Heptatriacontane (C37)

R.T.: 51.728 min
Delta R.T.: -0.094 min
Response: 11112602
Conc: 9.05 ug/mL M4



#39 n-Octatriacontane (C38)

R.T.: 53.487 min
Delta R.T.: -0.120 min
Response: 10908503
Conc: 8.89 ug/mL M4



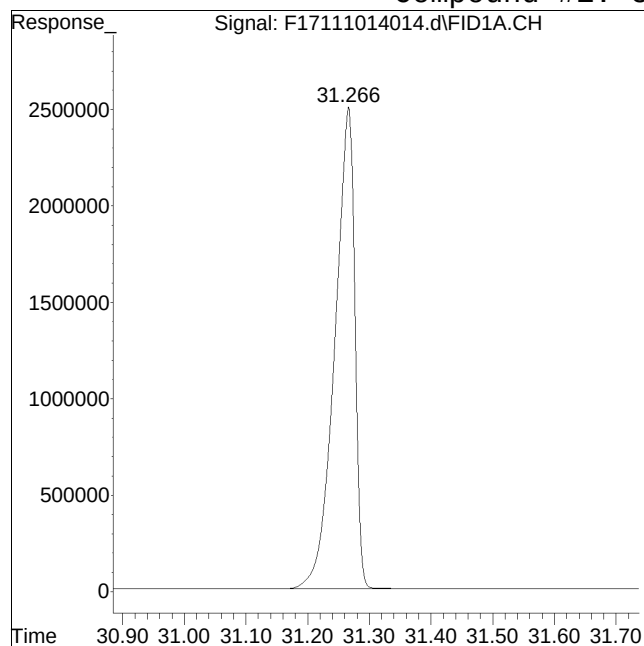
#41 n-Tetracontane (C40)

R.T.: 58.025 min
Delta R.T.: -0.153 min
Response: 11317318
Conc: 9.59 ug/mL M4

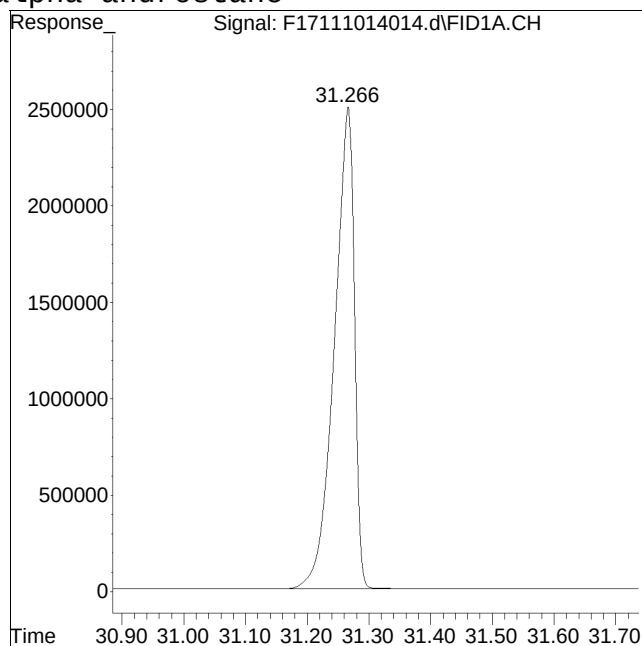
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #1: 5-alpha-androstane



Original Peak Response = 56431452



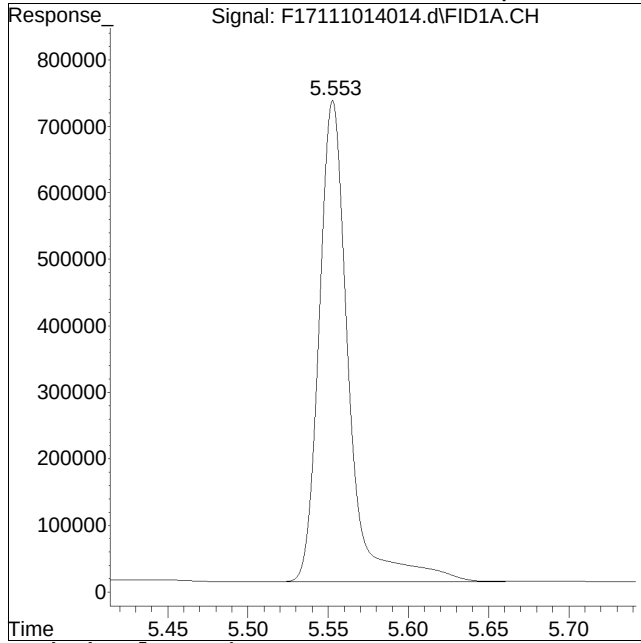
Manual Peak Response = 56364062 M4

M4 = Poor automated baseline construction.

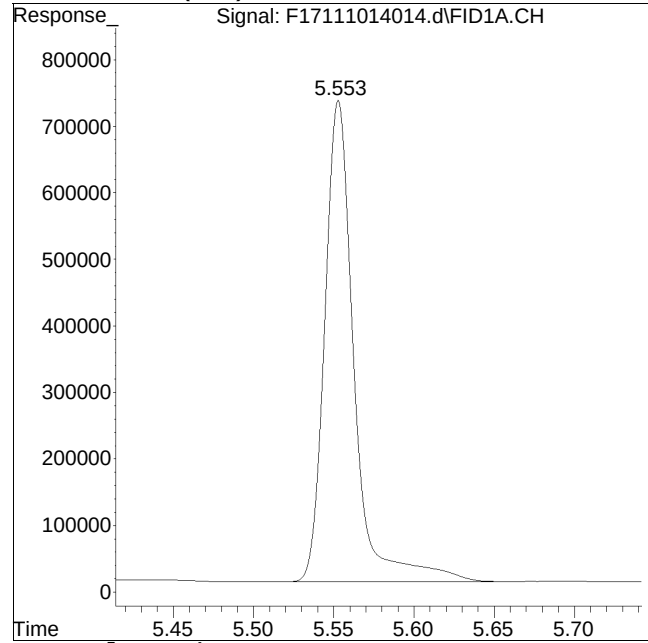
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #2: n-Octane (C8)



Original Peak Response = 9269586



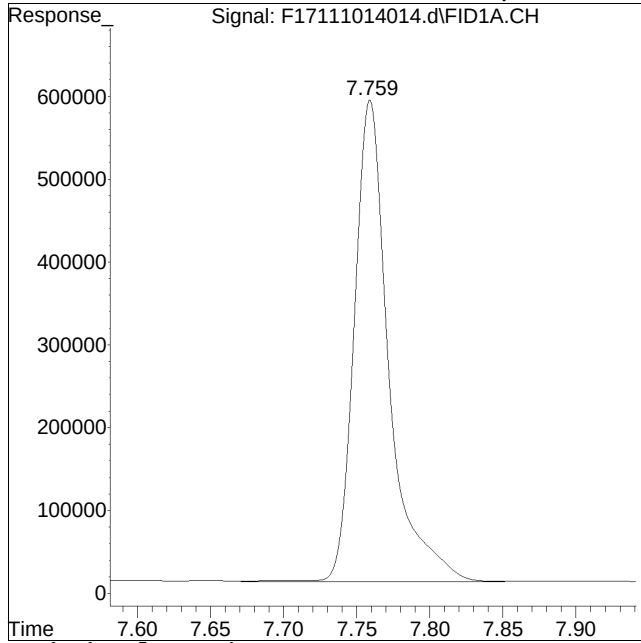
Manual Peak Response = 9260703 M4

M4 = Poor automated baseline construction.

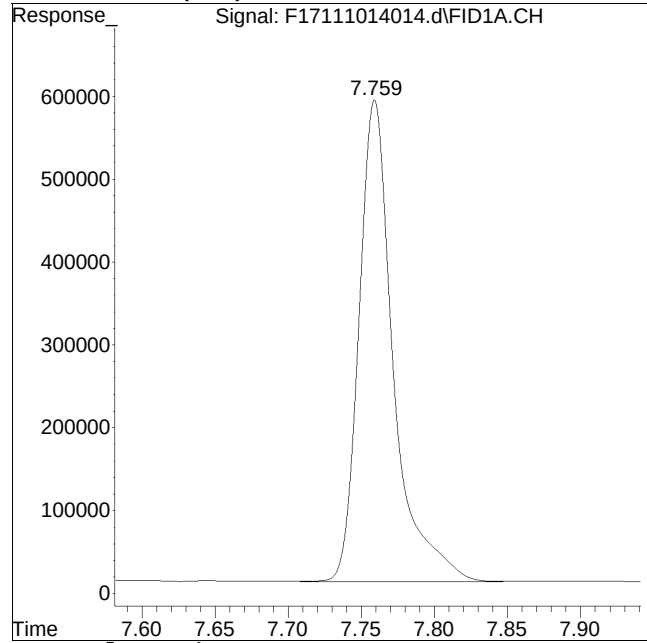
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #3: n-Nonane (C9)



Original Peak Response = 9627044



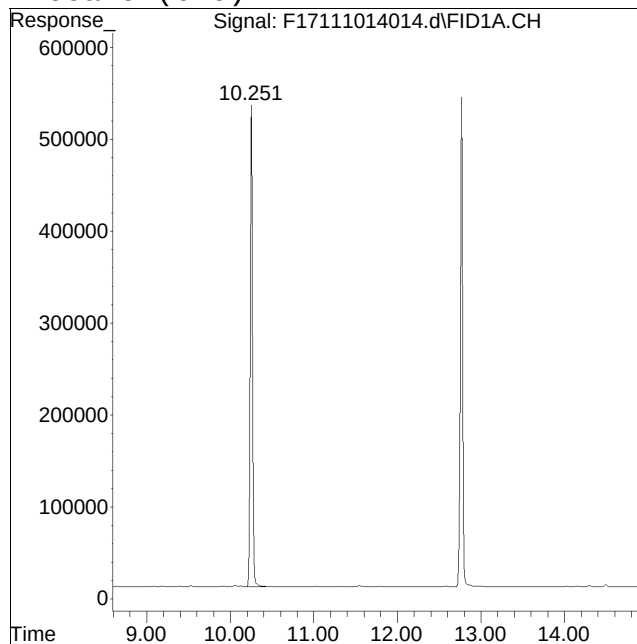
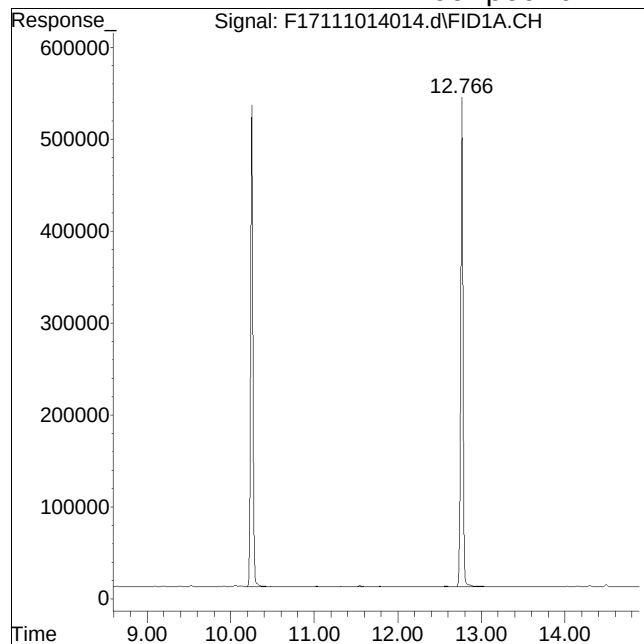
Manual Peak Response = 9571218 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #4: n-Decane (C10)



Original Peak Response = 9796895

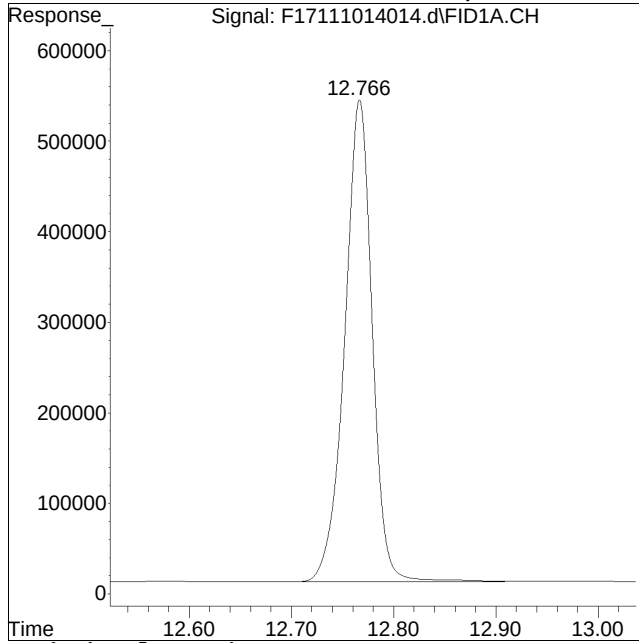
Manual Peak Response = 9773460 M4

M4 = Poor automated baseline construction.

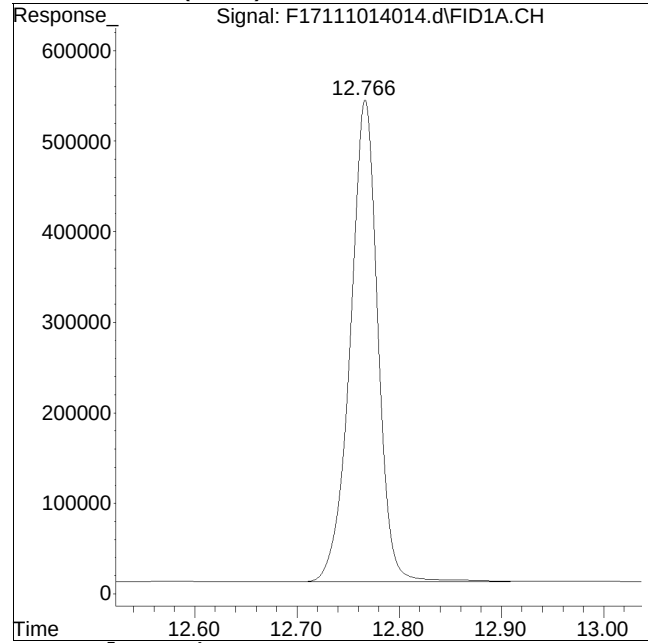
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #5: n-Undecane (C11)



Original Peak Response = 9949432



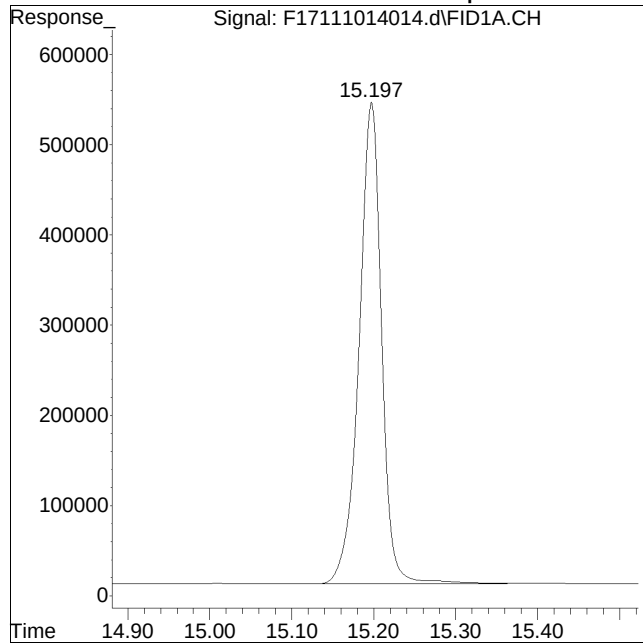
Manual Peak Response = 9991962 M4

M4 = Poor automated baseline construction.

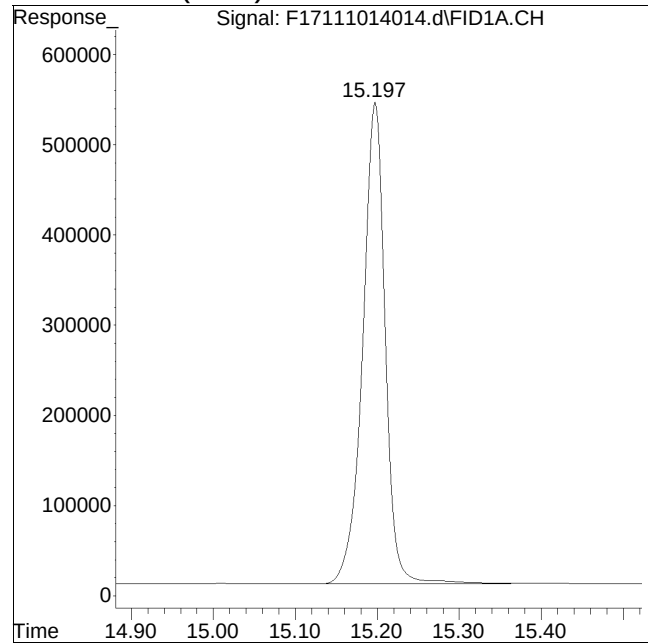
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #6: n-Dodecane (C12)



Original Peak Response = 10163447



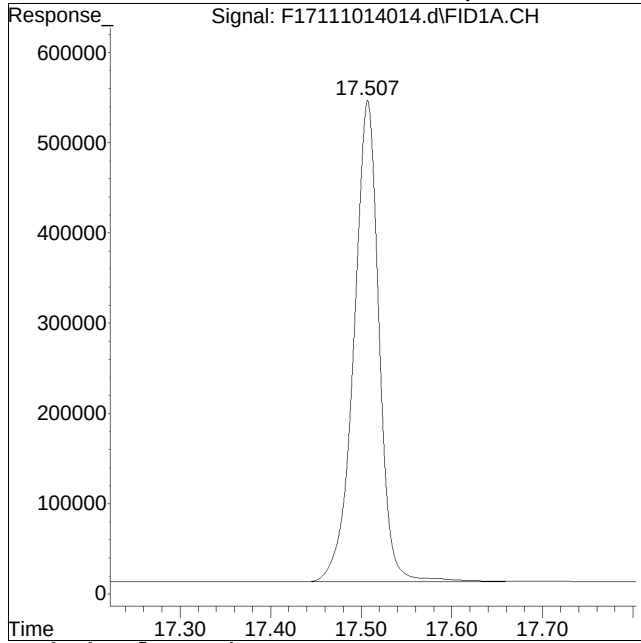
Manual Peak Response = 10206111 M4

M4 = Poor automated baseline construction.

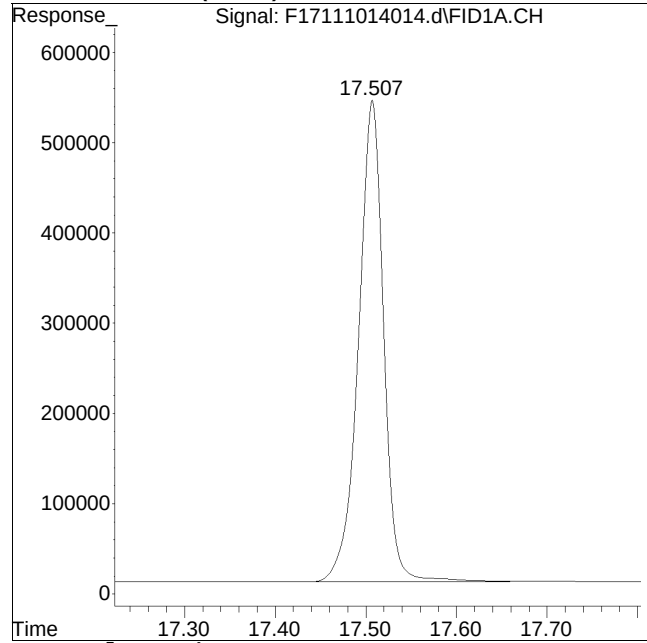
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #7: n-Tridecane (C13)



Original Peak Response = 10296893



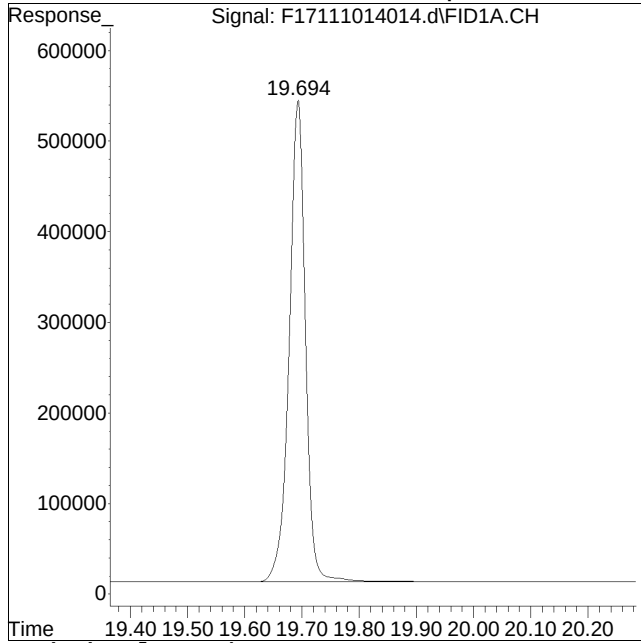
Manual Peak Response = 10303226 M4

M4 = Poor automated baseline construction.

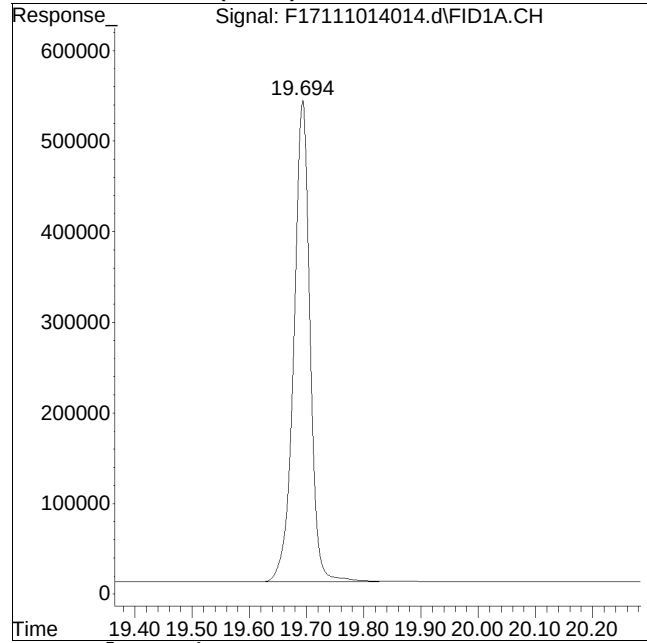
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #9: n-Tetradecane (C14)



Original Peak Response = 10501203



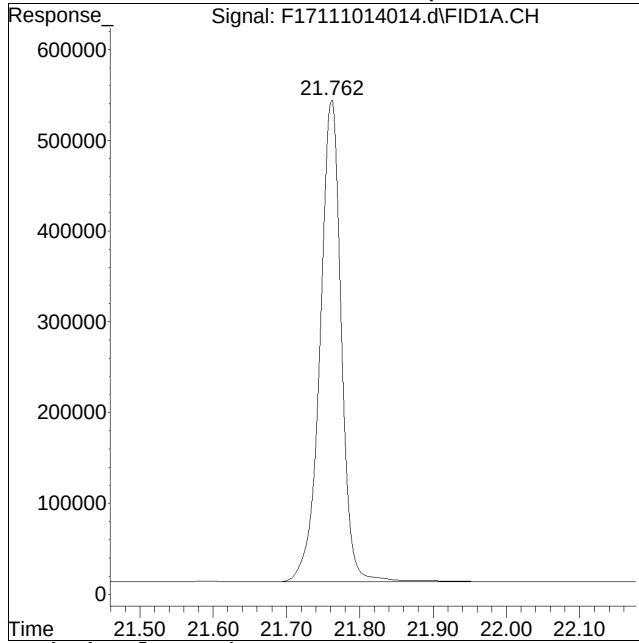
Manual Peak Response = 10460709 M4

M4 = Poor automated baseline construction.

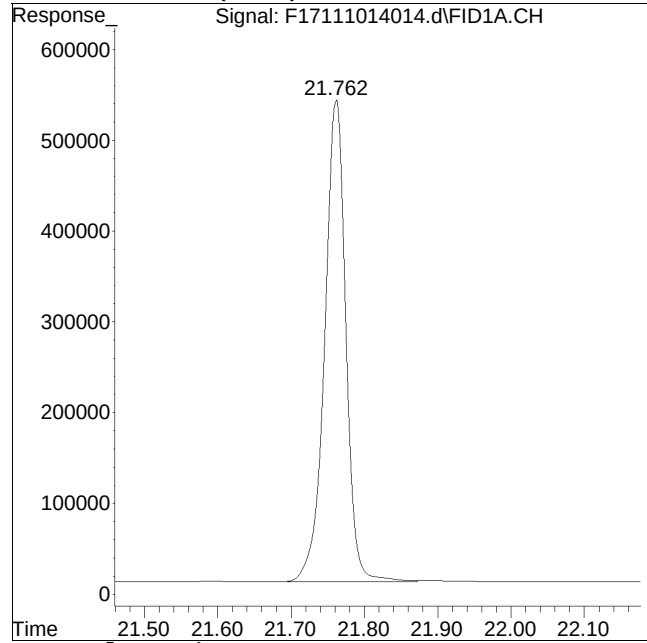
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #11: n-Pentadecane (C15)



Original Peak Response = 10692994



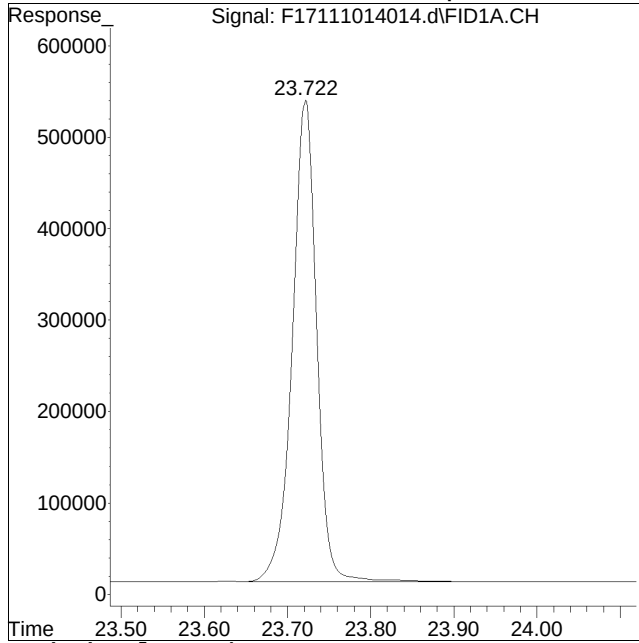
Manual Peak Response = 10664004 M4

M4 = Poor automated baseline construction.

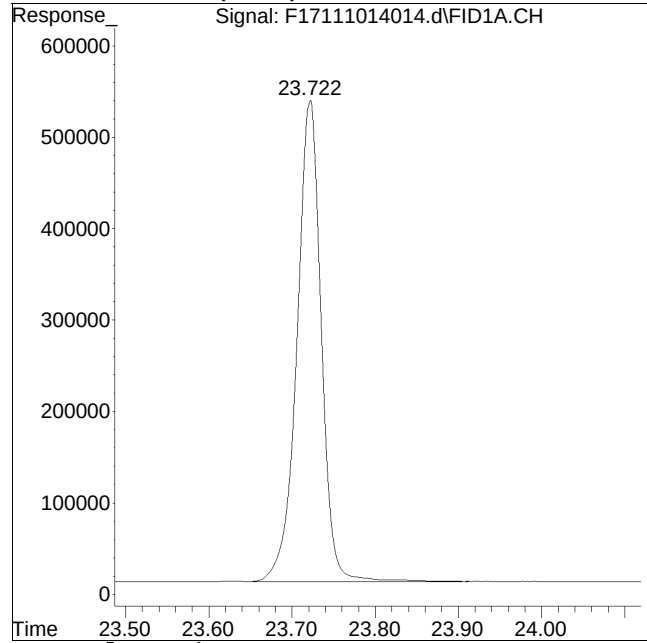
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #12: n-Hexadecane (C16)



Original Peak Response = 10702073



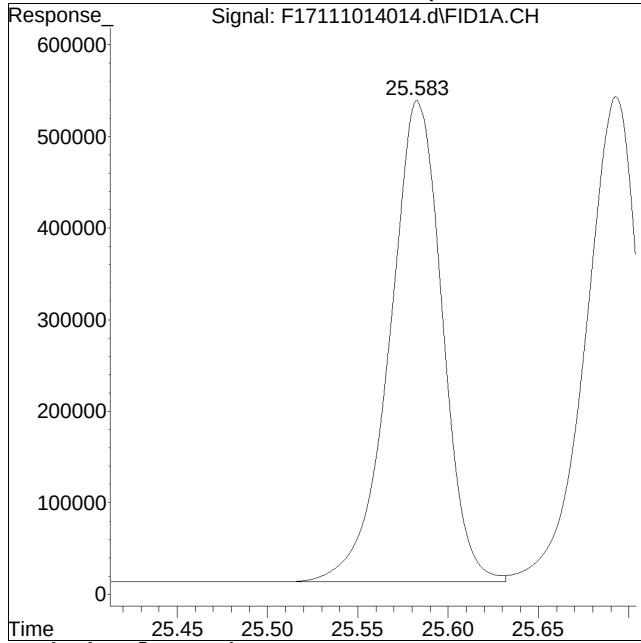
Manual Peak Response = 10751385 M4

M4 = Poor automated baseline construction.

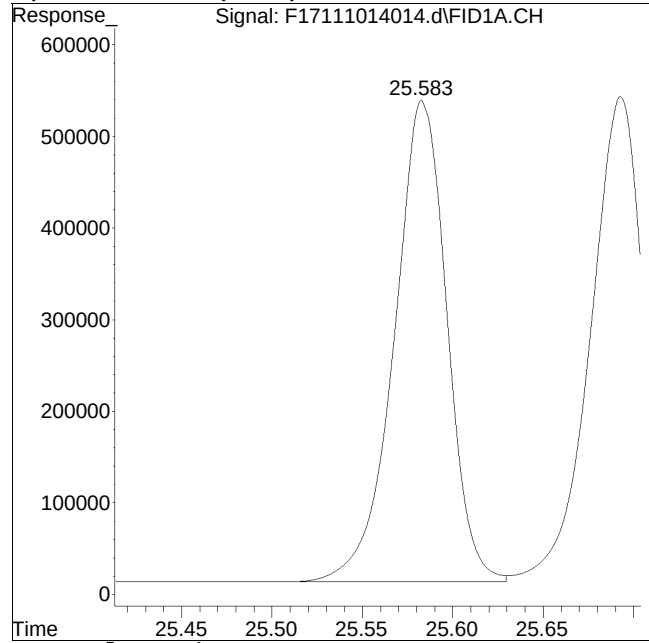
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #14: n-Heptadecane (C17)



Original Peak Response = 10660305



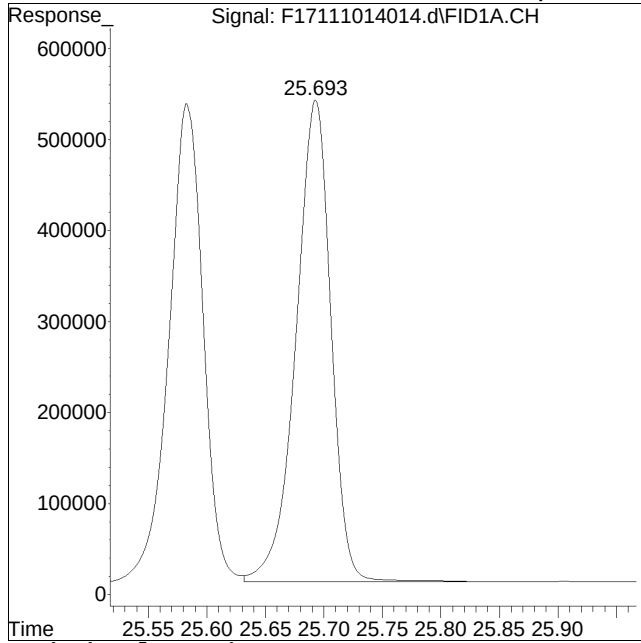
Manual Peak Response = 10666998 M4

M4 = Poor automated baseline construction.

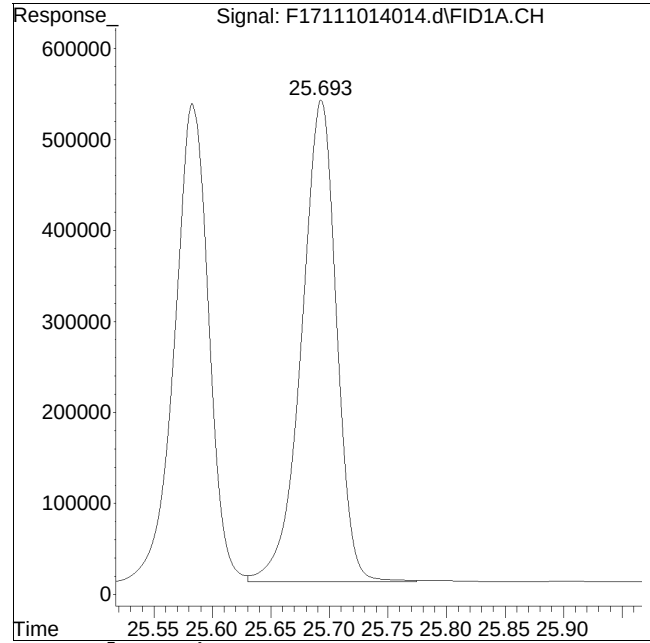
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #15: Pristane



Original Peak Response = 11004569



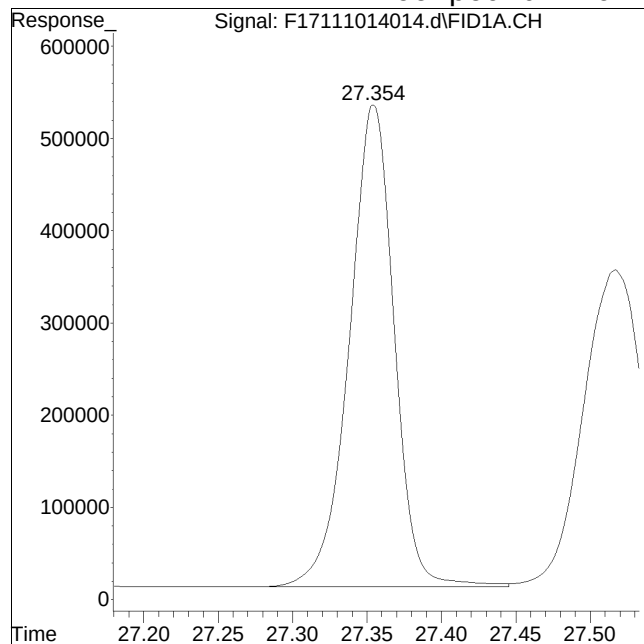
Manual Peak Response = 10997838 M4

M4 = Poor automated baseline construction.

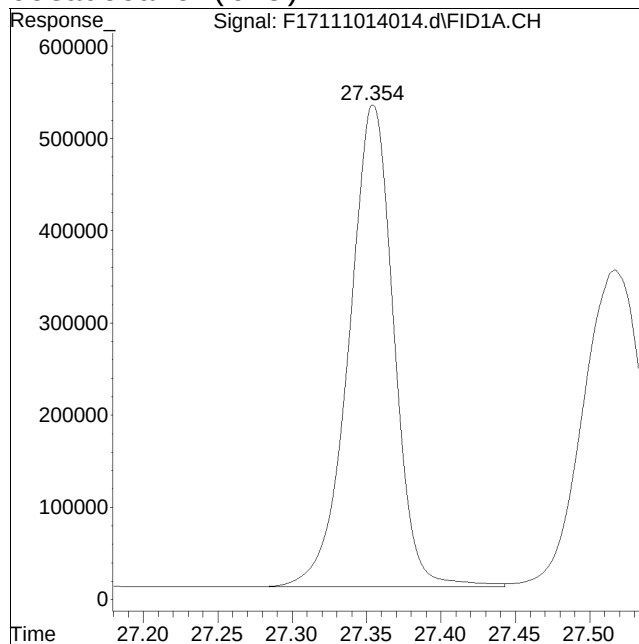
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #16: n-Octadecane (C18)



Original Peak Response = 10969424



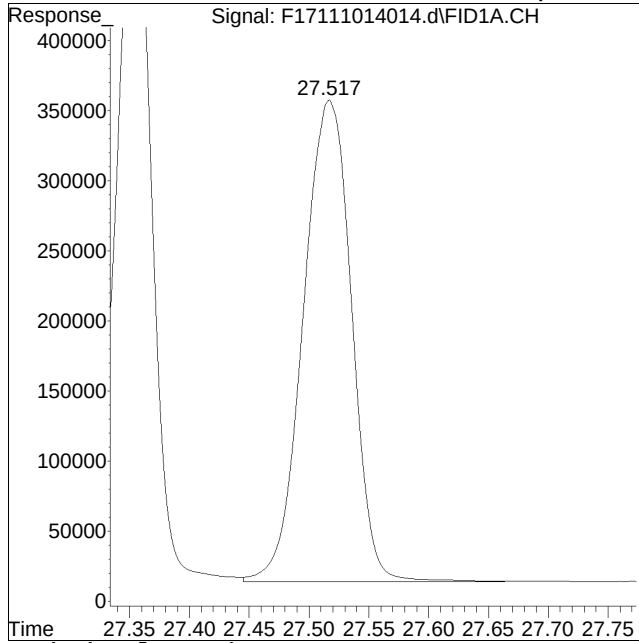
Manual Peak Response = 10973500 M4

M4 = Poor automated baseline construction.

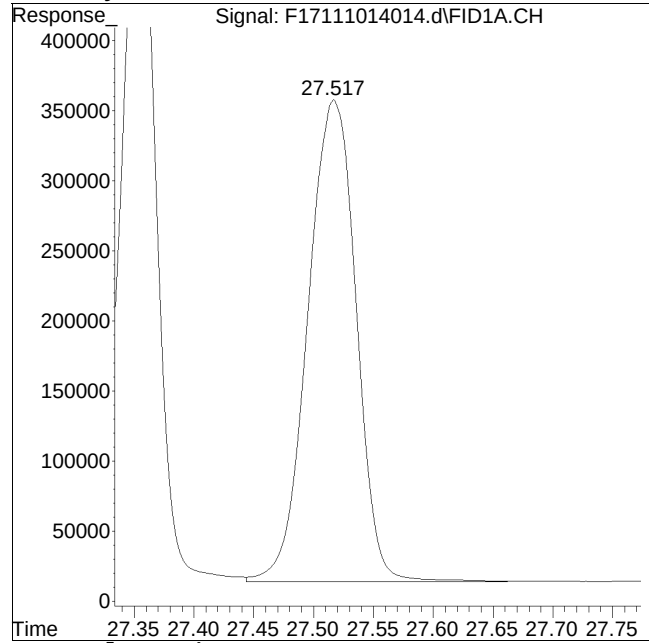
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #17: Phytane



Original Peak Response = 9671524



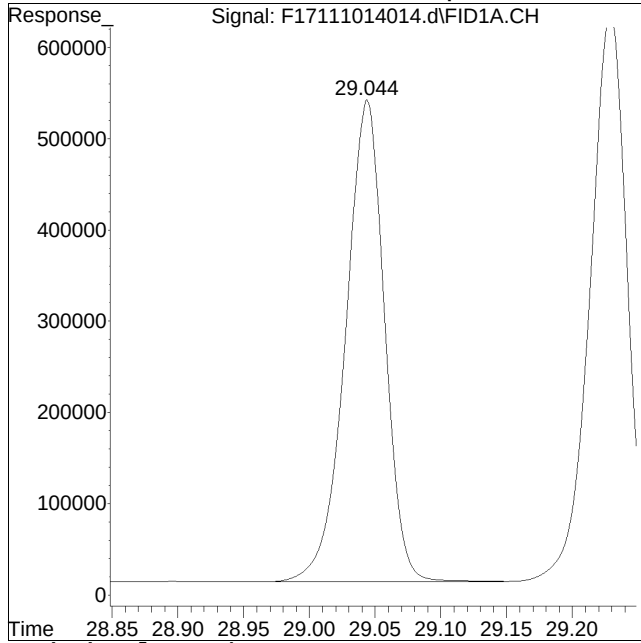
Manual Peak Response = 9686820 M4

M4 = Poor automated baseline construction.

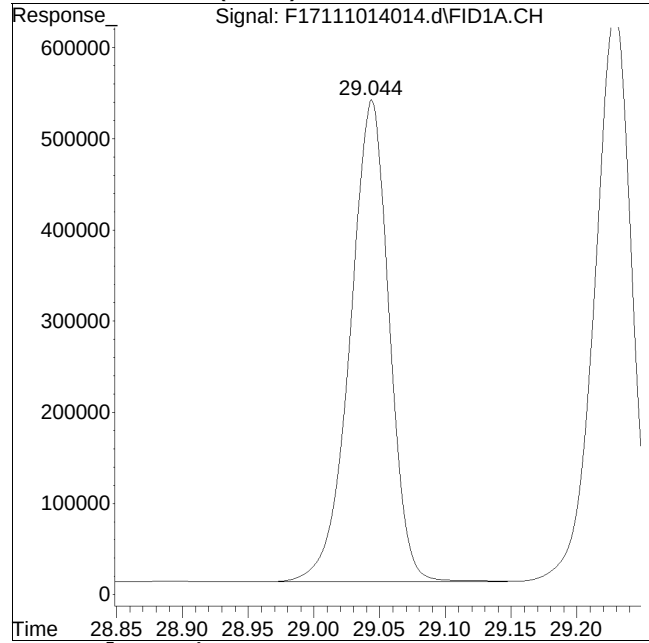
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #18: n-Nonadecane (C19)



Original Peak Response = 10892410



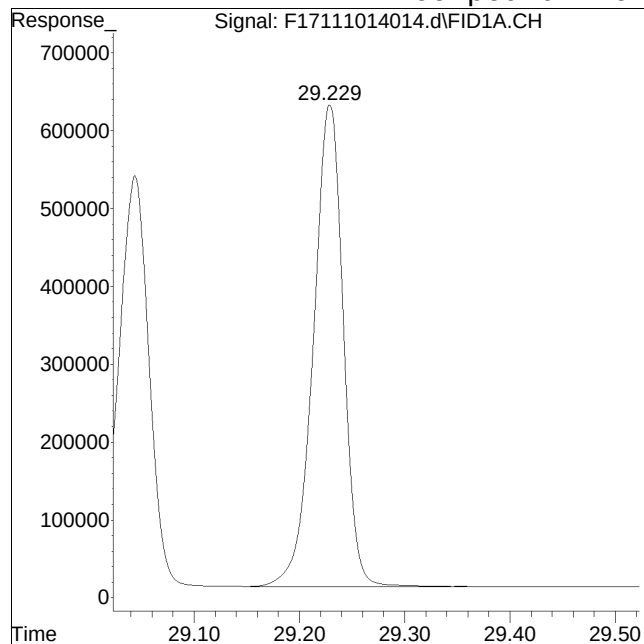
Manual Peak Response = 10933111 M4

M4 = Poor automated baseline construction.

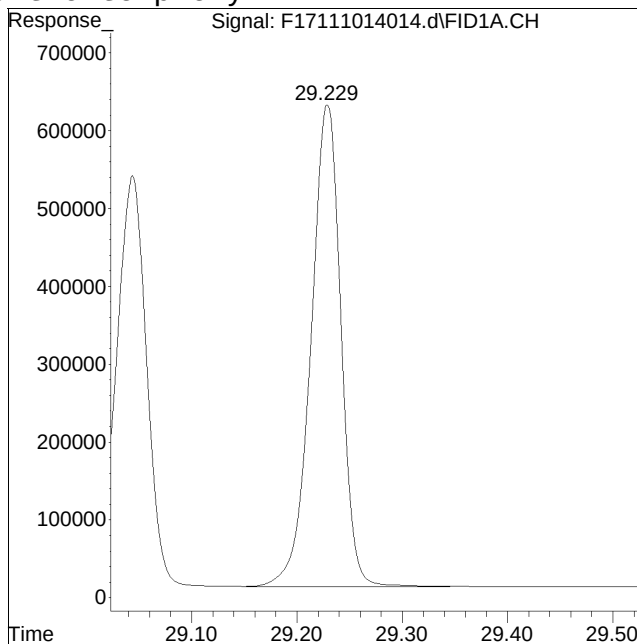
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #19: ortho-terphenyl



Original Peak Response = 12213350



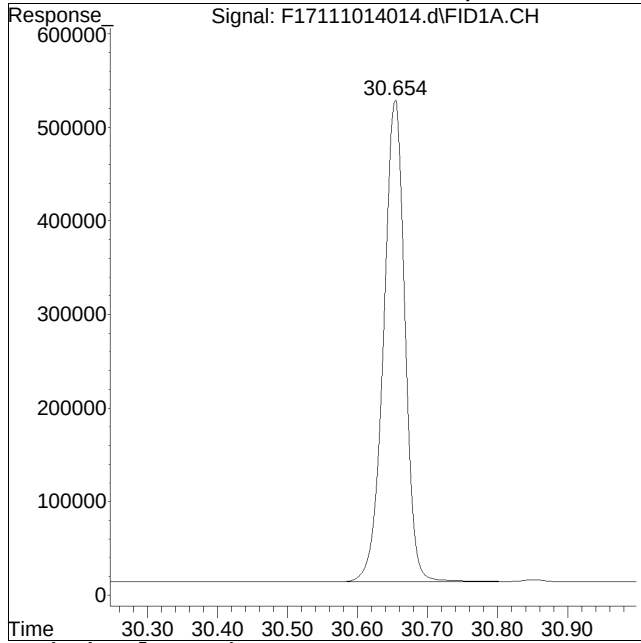
Manual Peak Response = 12275311 M4

M4 = Poor automated baseline construction.

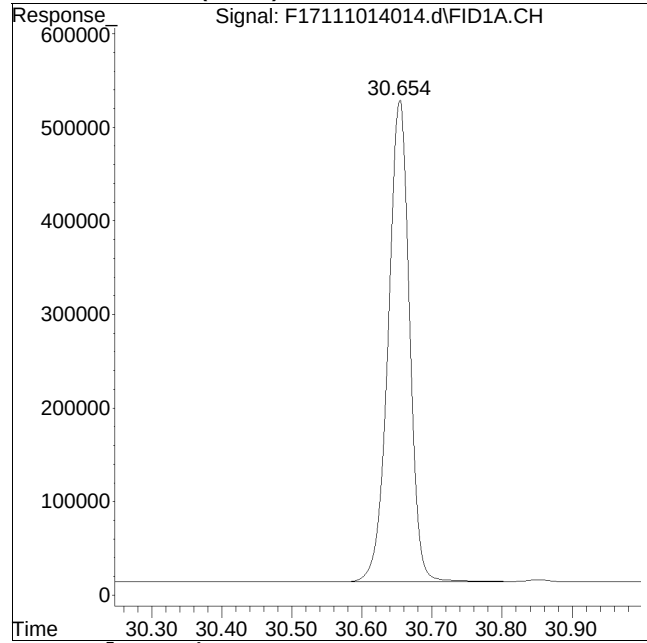
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #20: n-Eicosane (C20)



Original Peak Response = 10911685



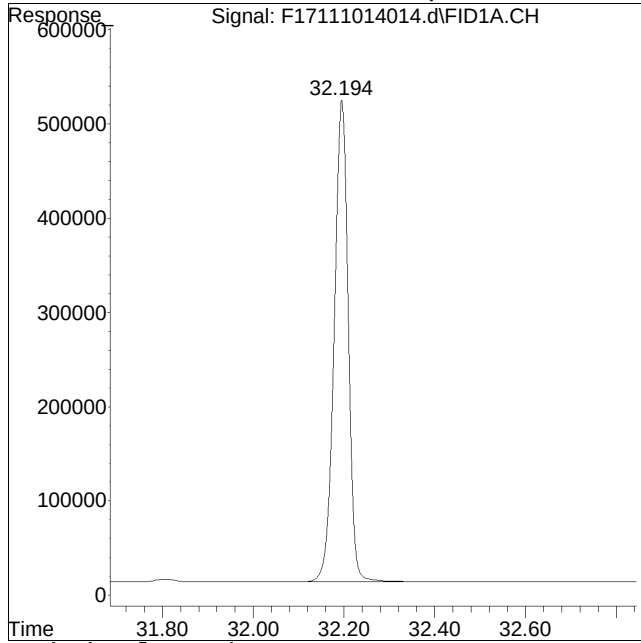
Manual Peak Response = 10914758 M4

M4 = Poor automated baseline construction.

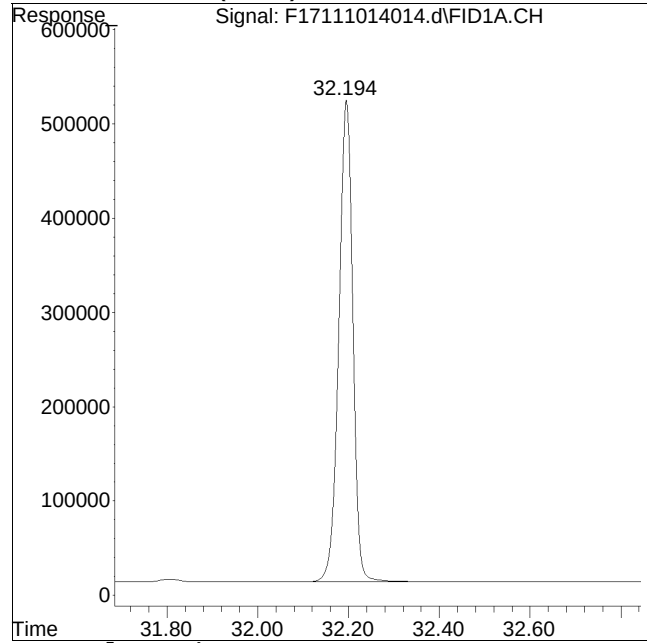
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\20140114
Data File : F17111014014.d
Date Inj'd : 11/10/2014 8:31 pm
Sample : I1711011402R
Method : HC17111014F.M
Operator : FID17:NL
Instrument : FID17
Quant Date : 11/14/2014 12:19 pm

Compound #21: n-Heneicosane (C21)



Original Peak Response = 11020565



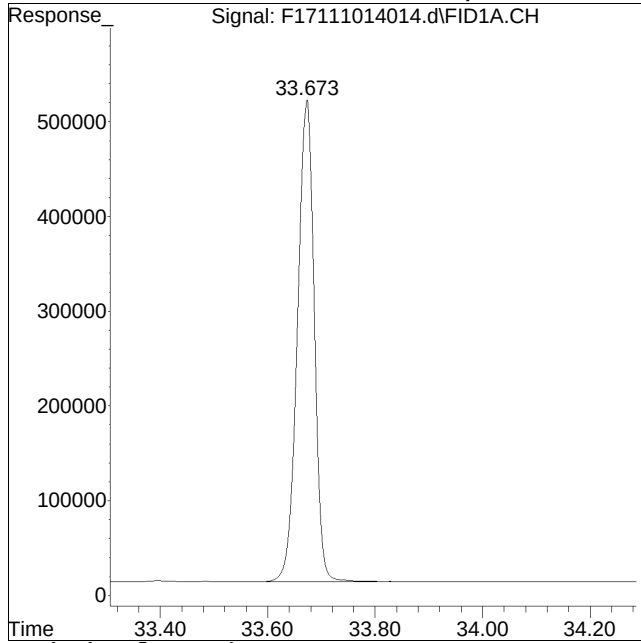
Manual Peak Response = 11005551 M4

M4 = Poor automated baseline construction.

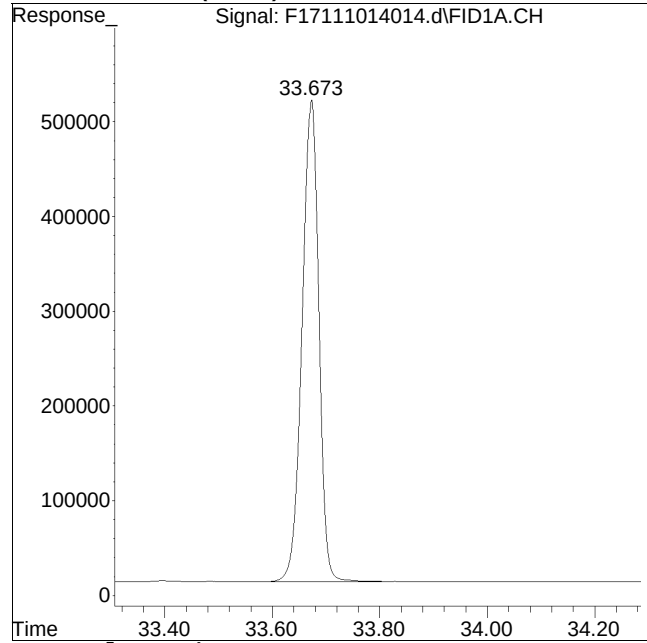
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #22: n-Docosane (C22)



Original Peak Response = 11113275



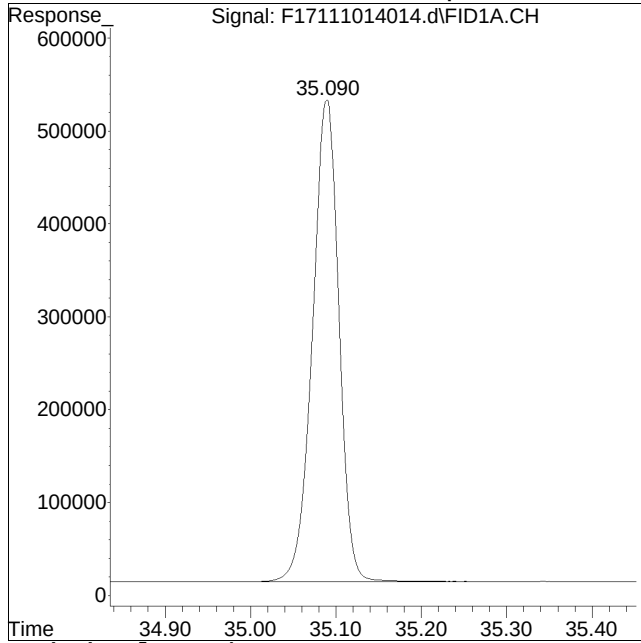
Manual Peak Response = 11090258 M4

M4 = Poor automated baseline construction.

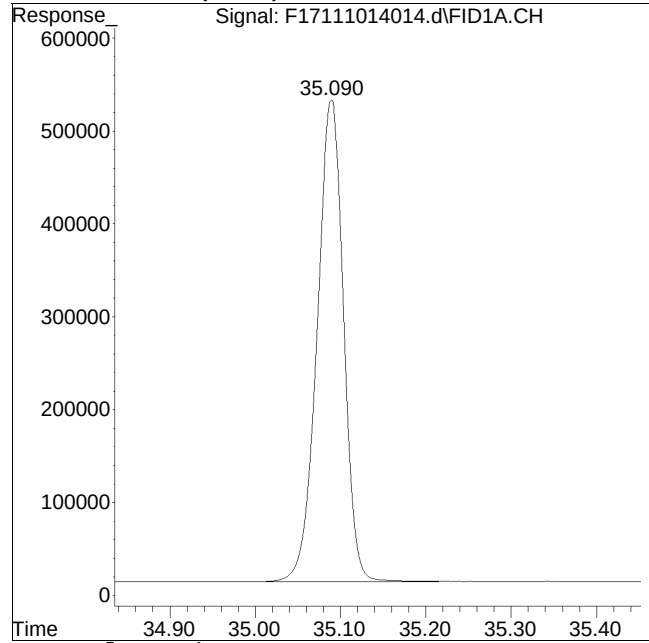
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #23: n-Tricosane (C23)



Original Peak Response = 11154956



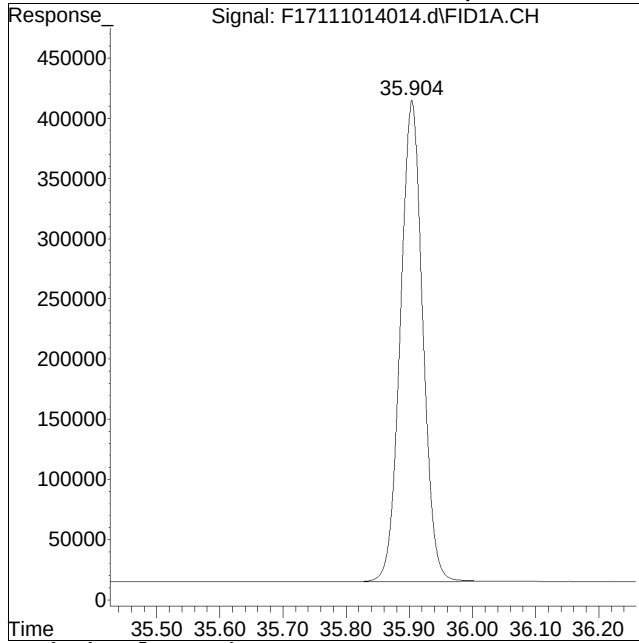
Manual Peak Response = 11177597 M4

M4 = Poor automated baseline construction.

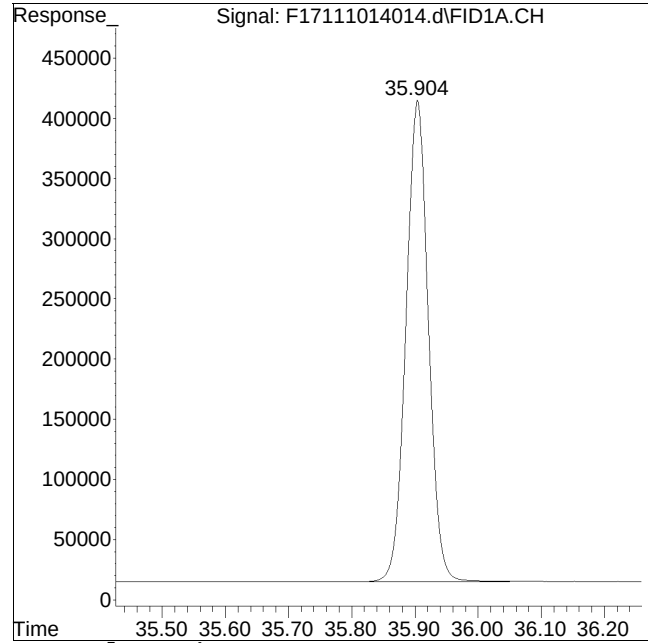
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #24: d50-Tetracosane



Original Peak Response = 9822957



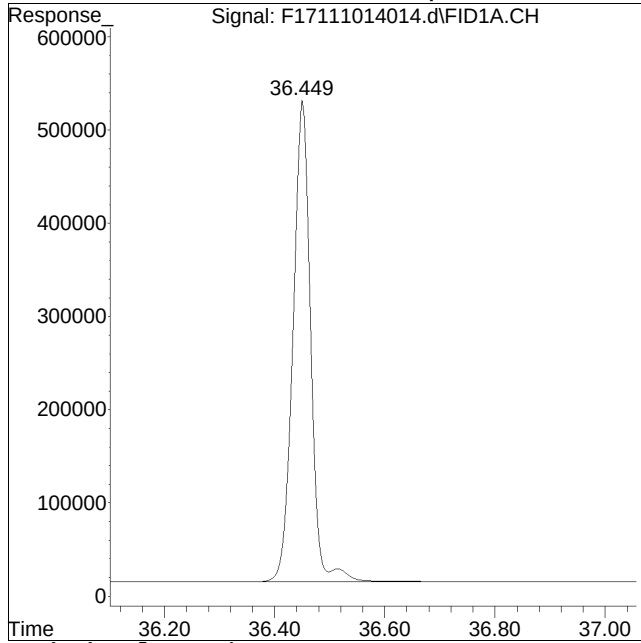
Manual Peak Response = 9879621 M4

M4 = Poor automated baseline construction.

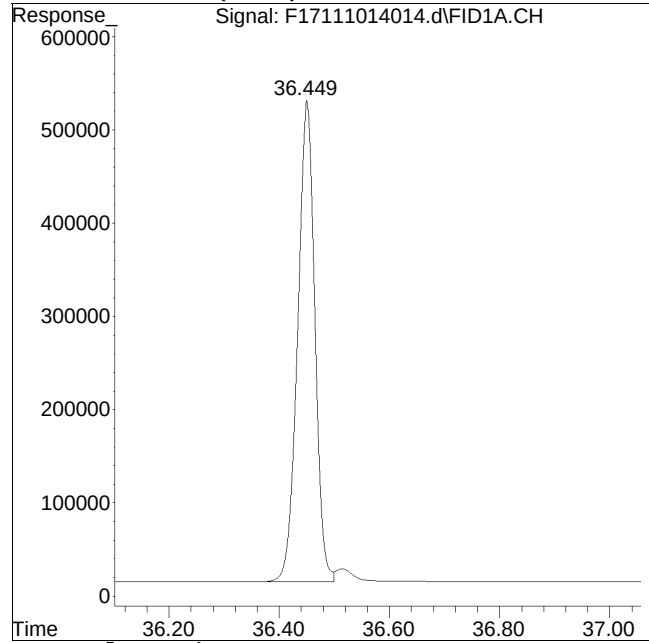
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #25: n-Tetracosane (C24)



Original Peak Response = 11541322



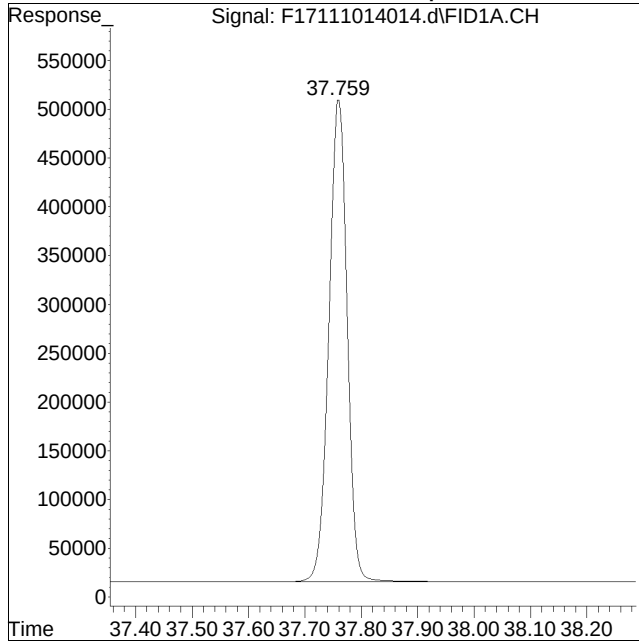
Manual Peak Response = 11187494 M4

M4 = Poor automated baseline construction.

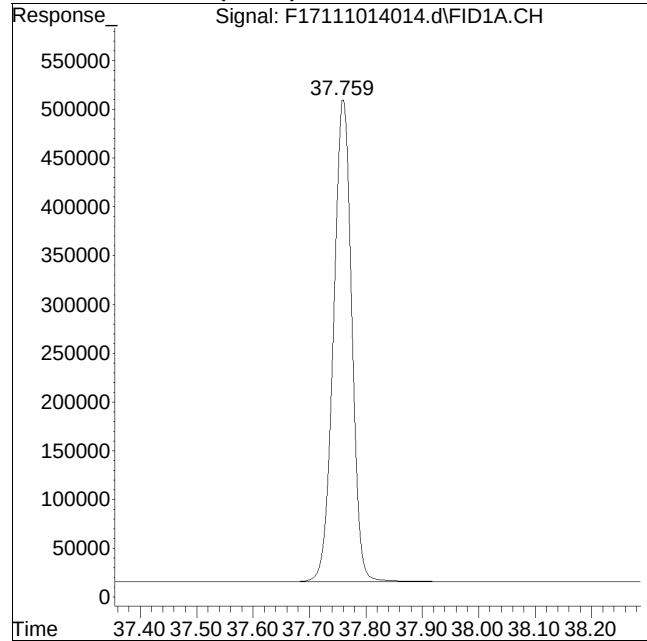
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #26: n-Pentacosane (C25)



Original Peak Response = 11133186



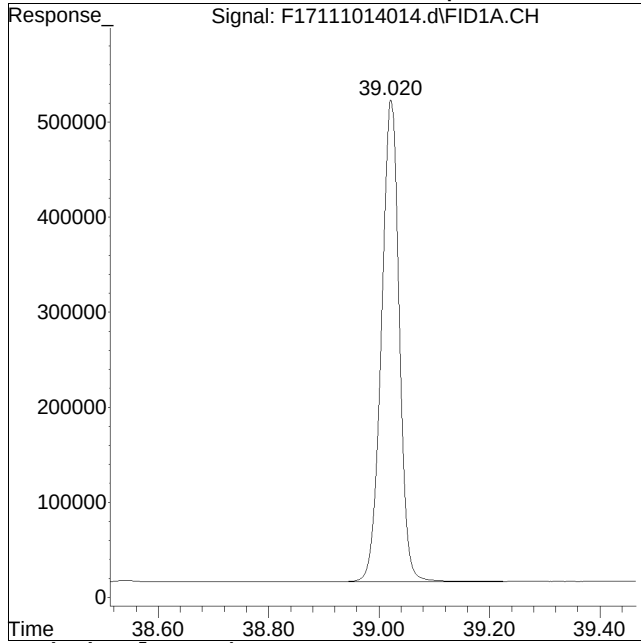
Manual Peak Response = 11131468 M4

M4 = Poor automated baseline construction.

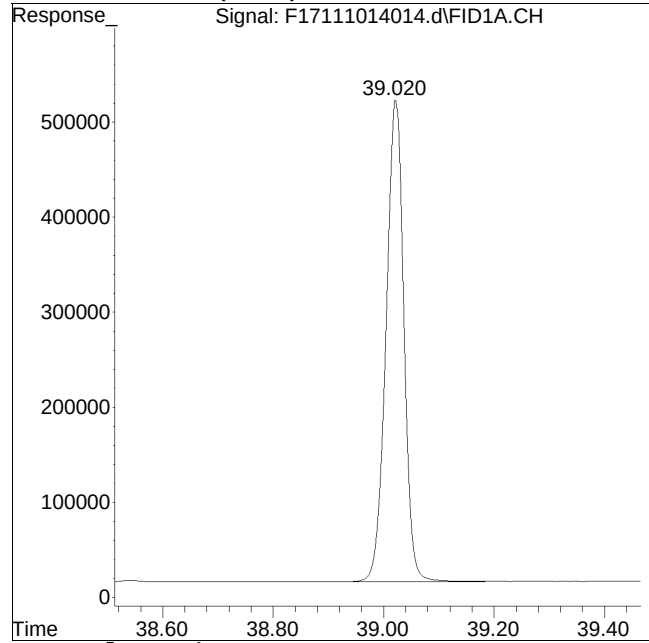
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #27: n-Hexacosane (C26)



Original Peak Response = 11373844



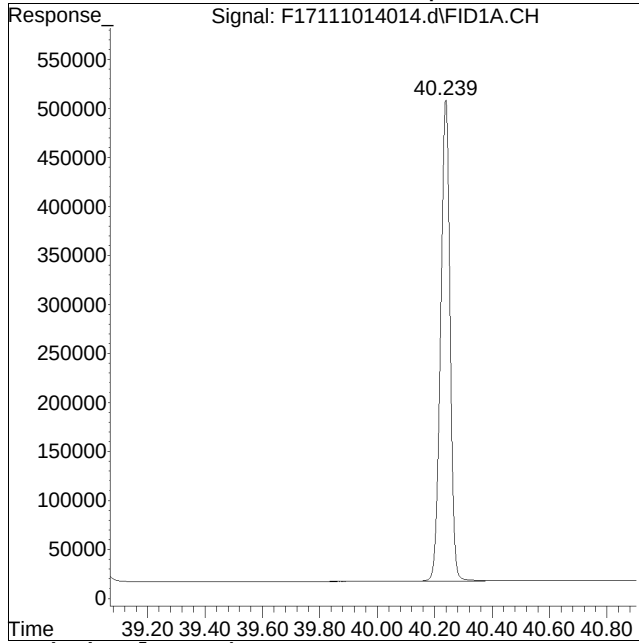
Manual Peak Response = 11381761 M4

M4 = Poor automated baseline construction.

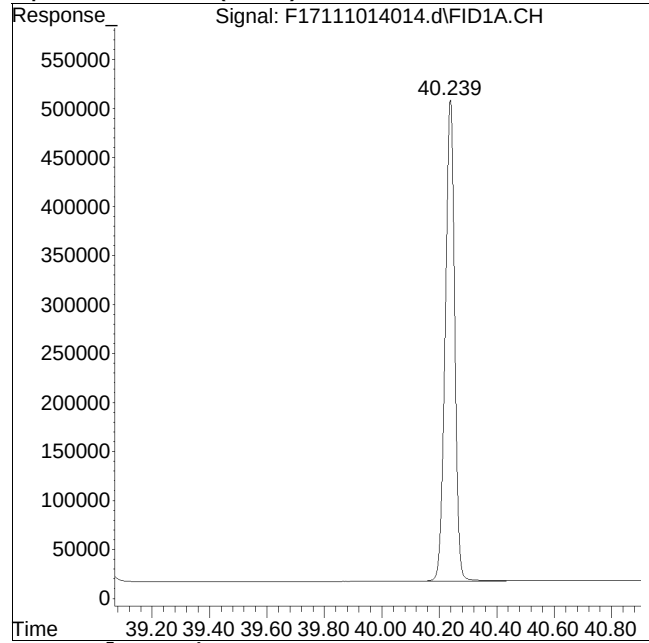
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #28: n-Heptacosane (C27)



Original Peak Response = 11228137



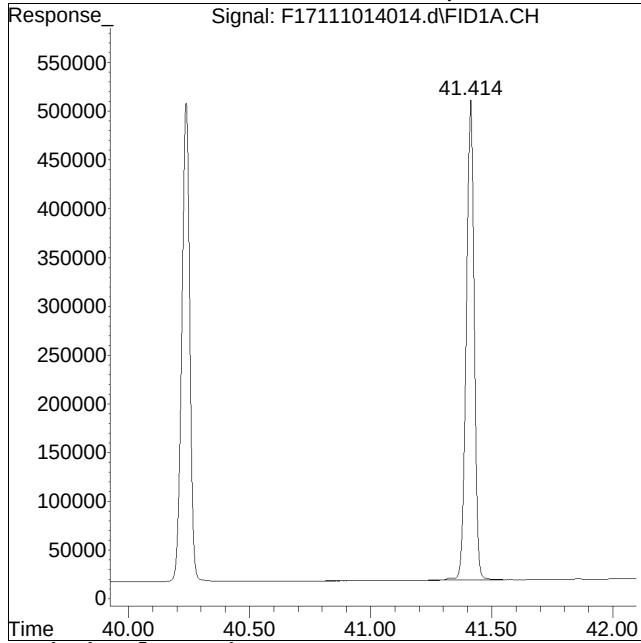
Manual Peak Response = 11270080 M4

M4 = Poor automated baseline construction.

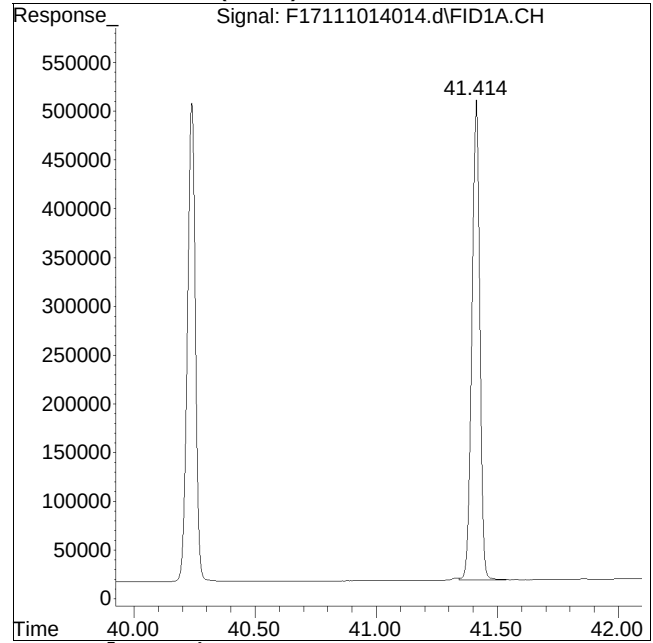
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #29: n-Octacosane (C28)



Original Peak Response = 11168974



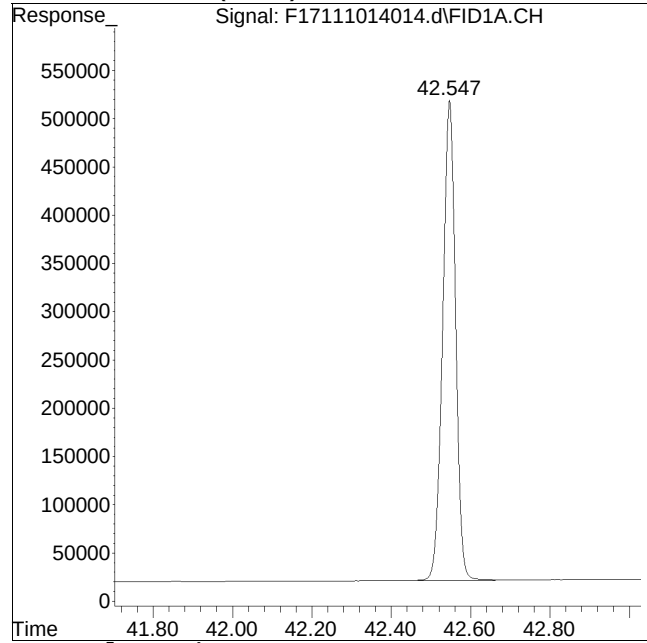
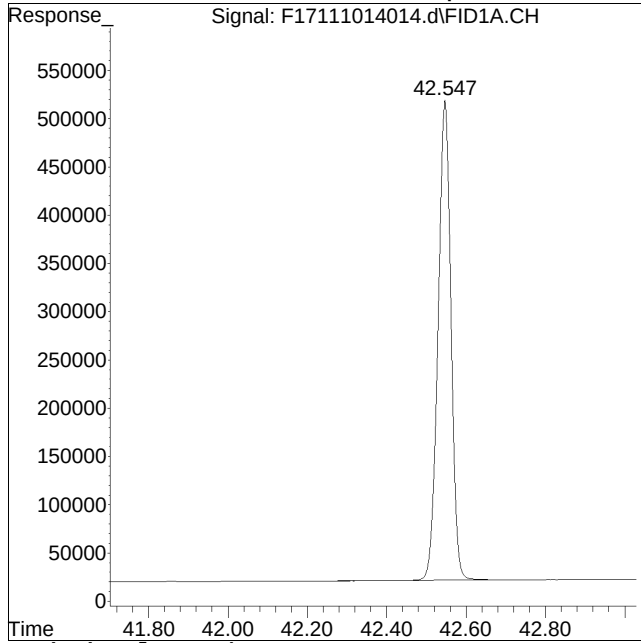
Manual Peak Response = 11186318 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #30: n-Nonacosane (C29)



Original Peak Response = 11206927

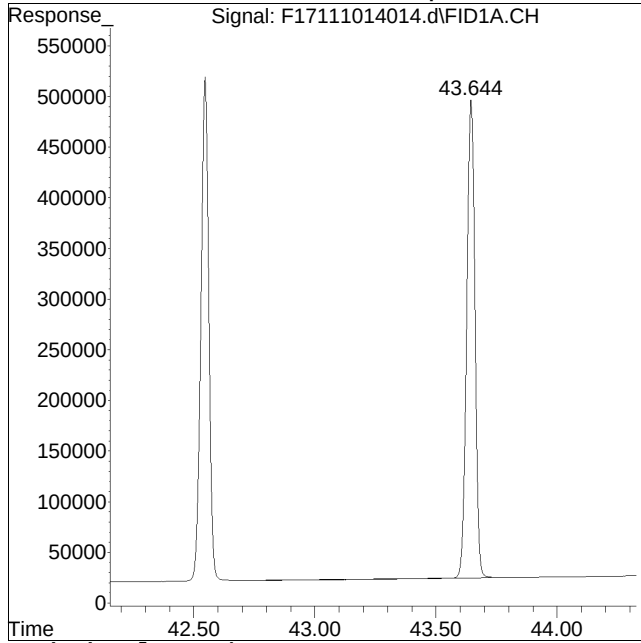
Manual Peak Response = 11258816 M4

M4 = Poor automated baseline construction.

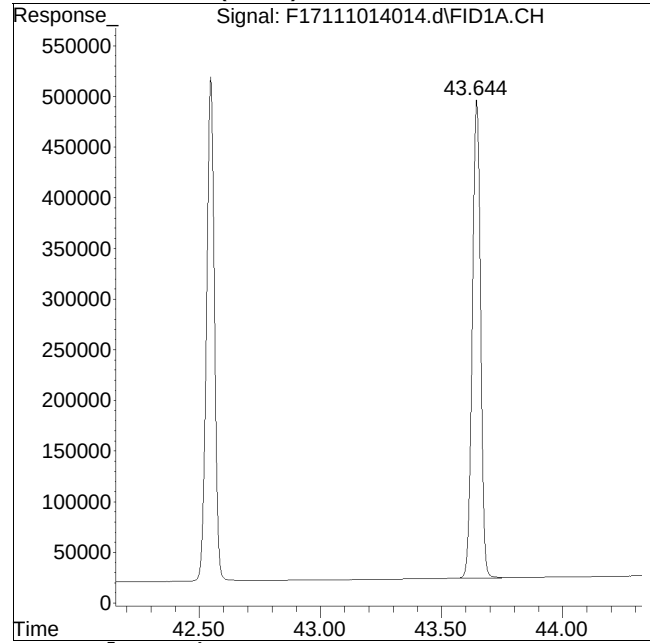
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #31: n-Triacontane (C30)



Original Peak Response = 11102349



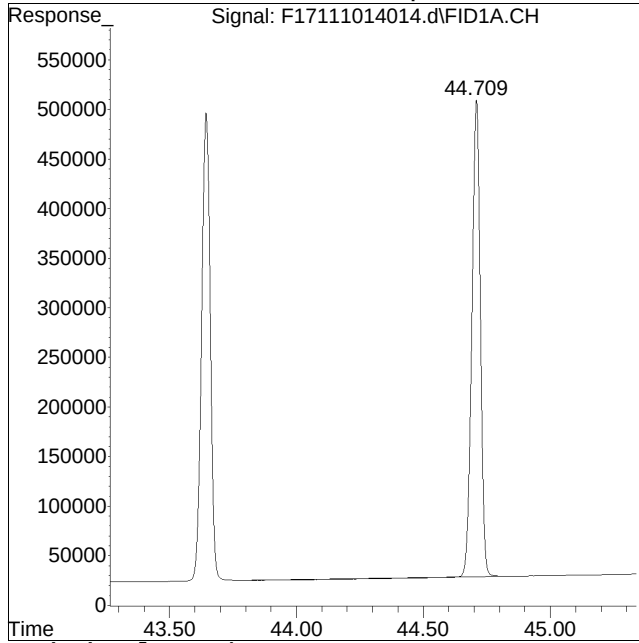
Manual Peak Response = 11268522 M4

M4 = Poor automated baseline construction.

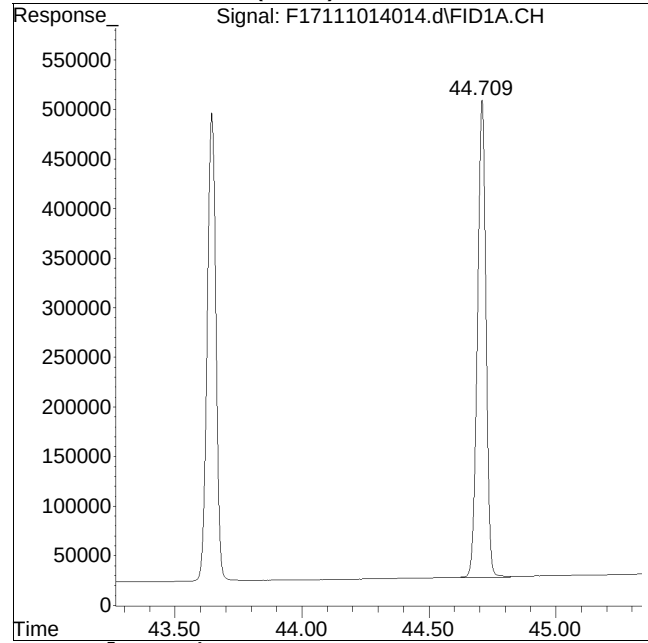
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #32: n-Hentriacontane (C31)



Original Peak Response = 11022452



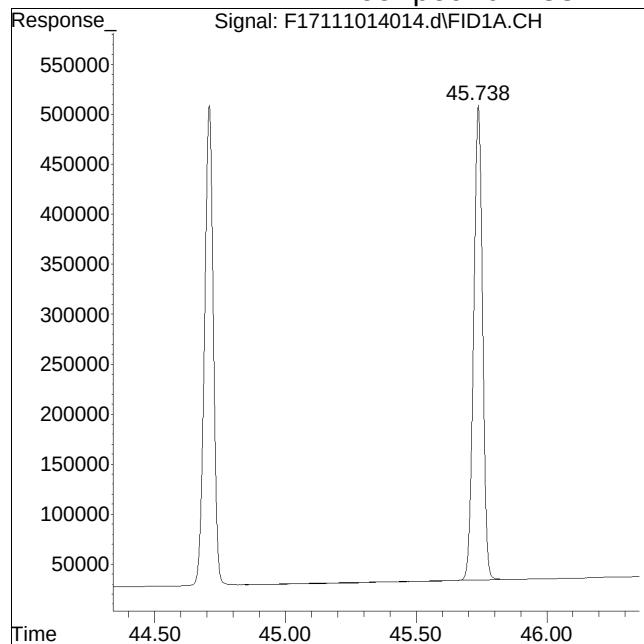
Manual Peak Response = 11275401 M4

M4 = Poor automated baseline construction.

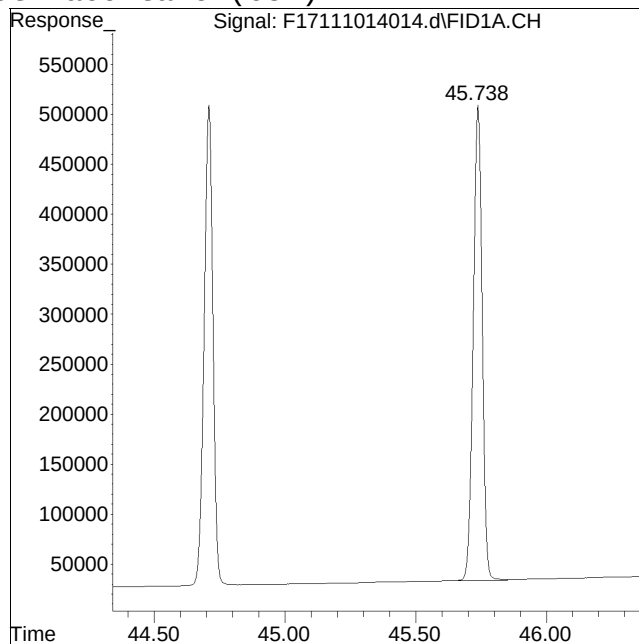
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #33: n-Dotriacontane (C32)



Original Peak Response = 11127782



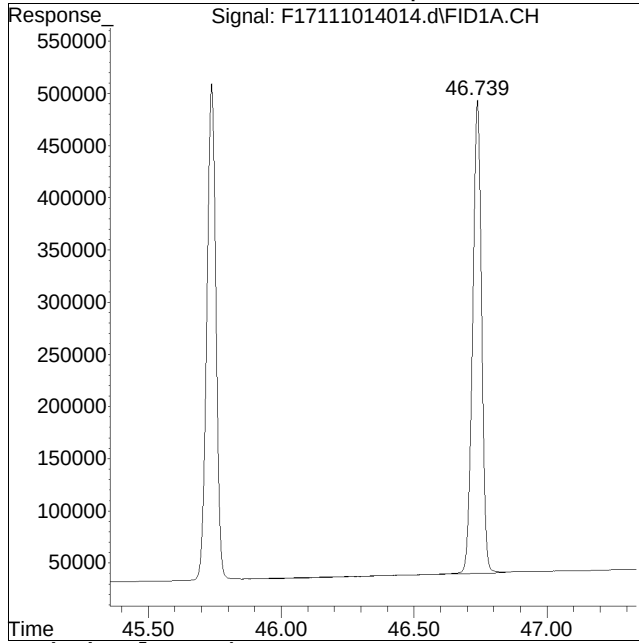
Manual Peak Response = 11359577 M4

M4 = Poor automated baseline construction.

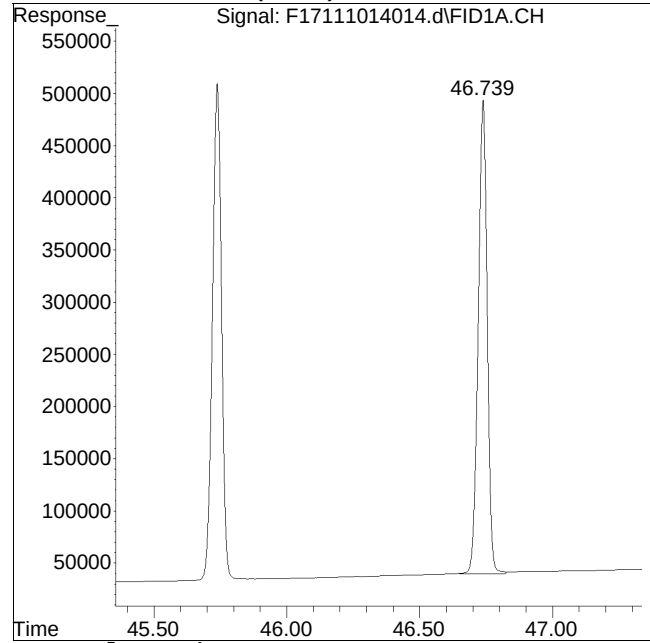
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #34: n-Tritriacontane (C33)



Original Peak Response = 10599200



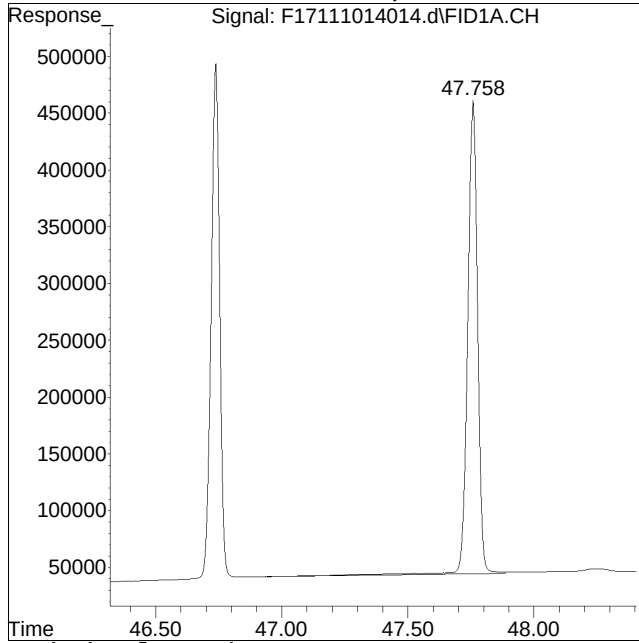
Manual Peak Response = 10681176 M4

M4 = Poor automated baseline construction.

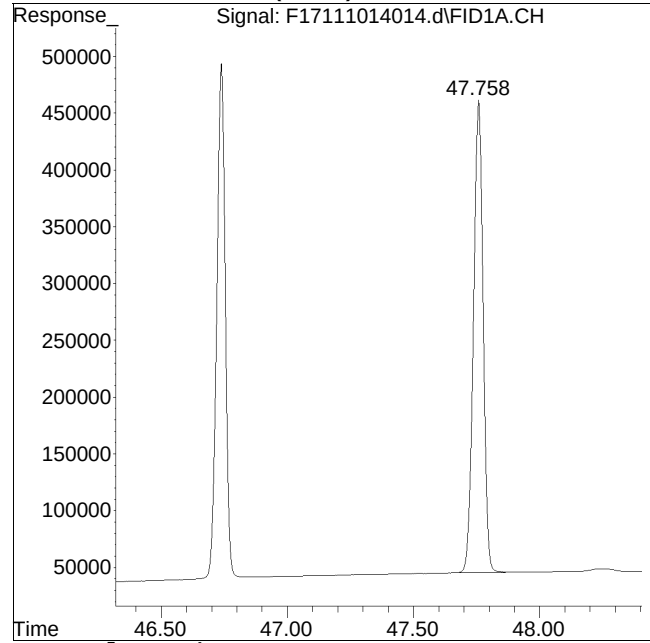
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #35: n-tetratriacontane (C34)



Original Peak Response = 11467704



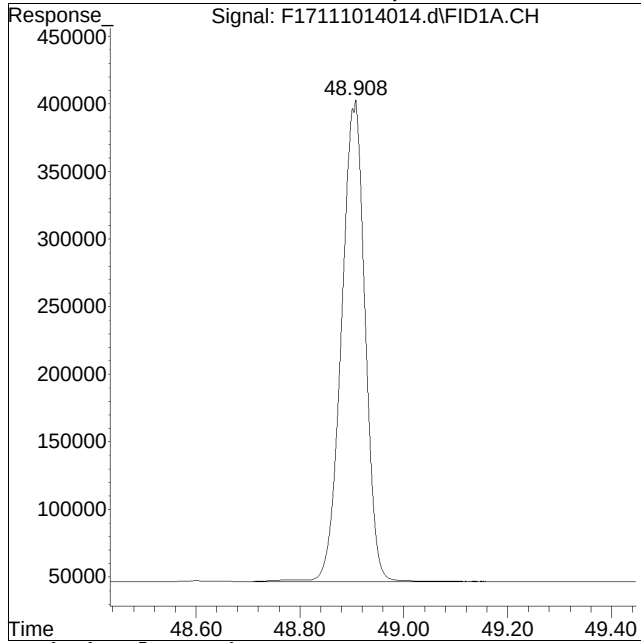
Manual Peak Response = 11092909 M4

M4 = Poor automated baseline construction.

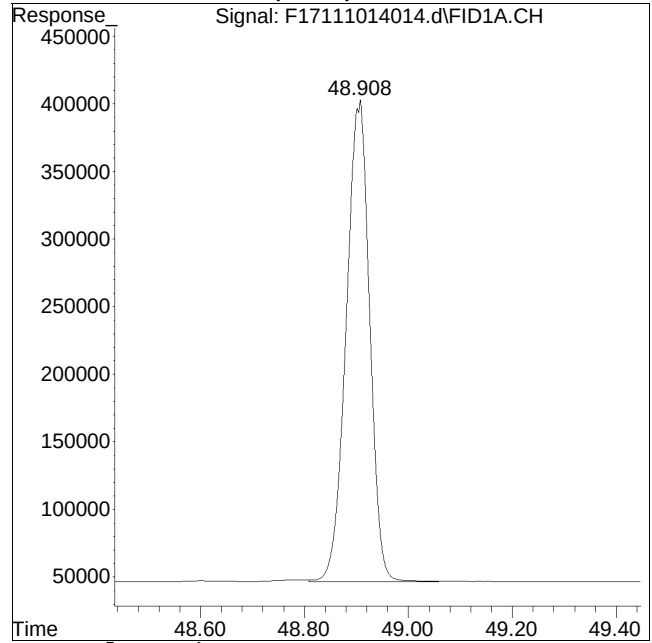
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #36: n-Pentatriacontane (C35)



Original Peak Response = 11244205



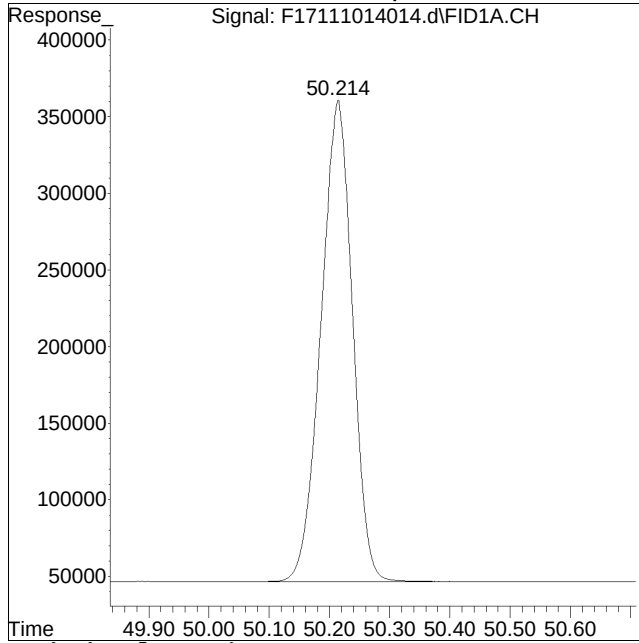
Manual Peak Response = 11156813 M4

M4 = Poor automated baseline construction.

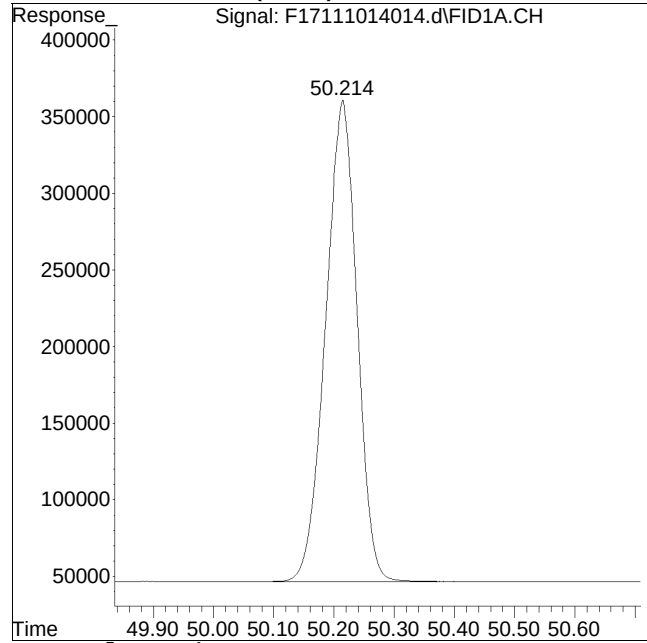
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #37: n-Hexatriacontane (C36)



Original Peak Response = 11421282



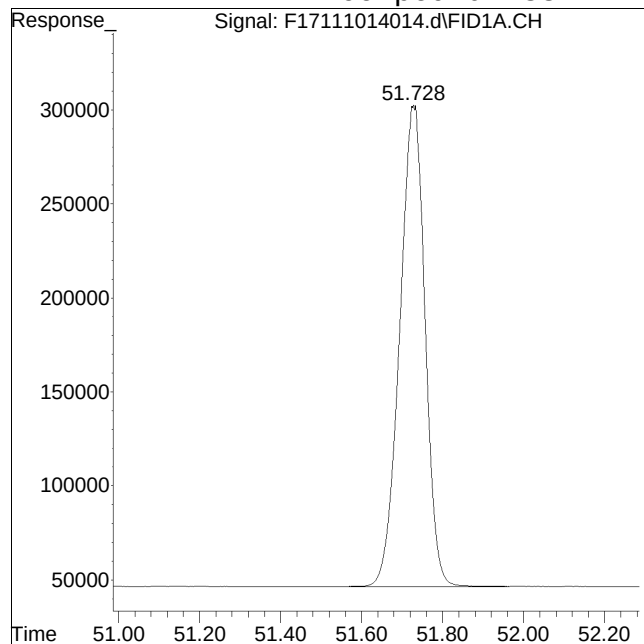
Manual Peak Response = 11422543 M4

M4 = Poor automated baseline construction.

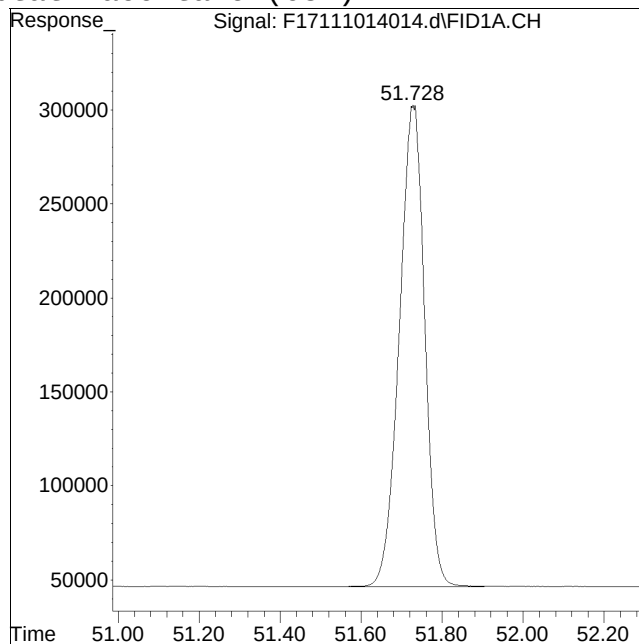
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #38: n-Heptatriacontane (C37)



Original Peak Response = 11116197



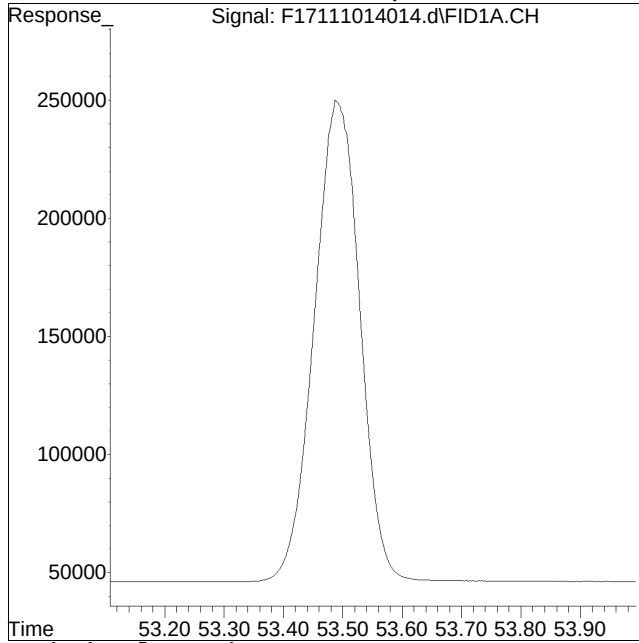
Manual Peak Response = 11112602 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

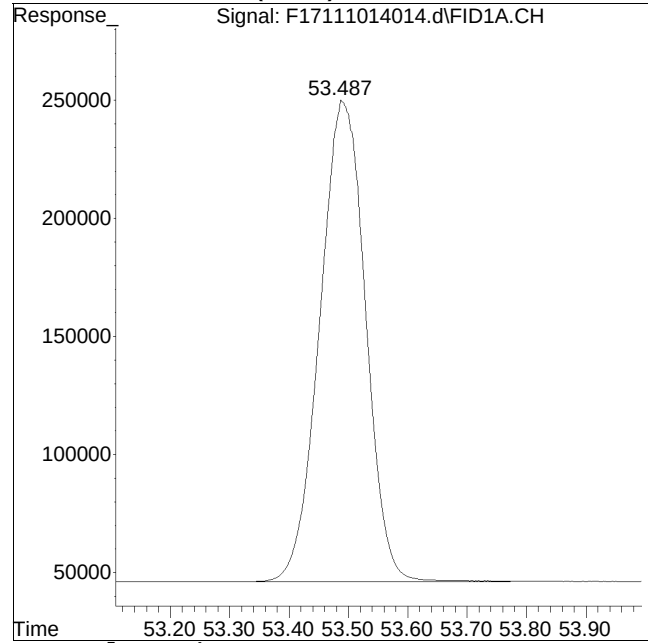
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #39: n-Octatriacontane (C38)



Original Peak Response = 0

M4 = Poor automated baseline construction.

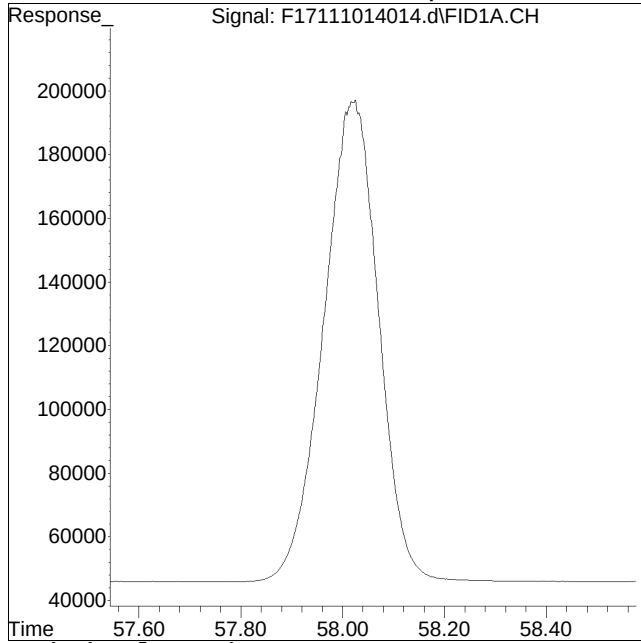


Manual Peak Response = 10908503 M4

Manual Integration/Negative Proof Report

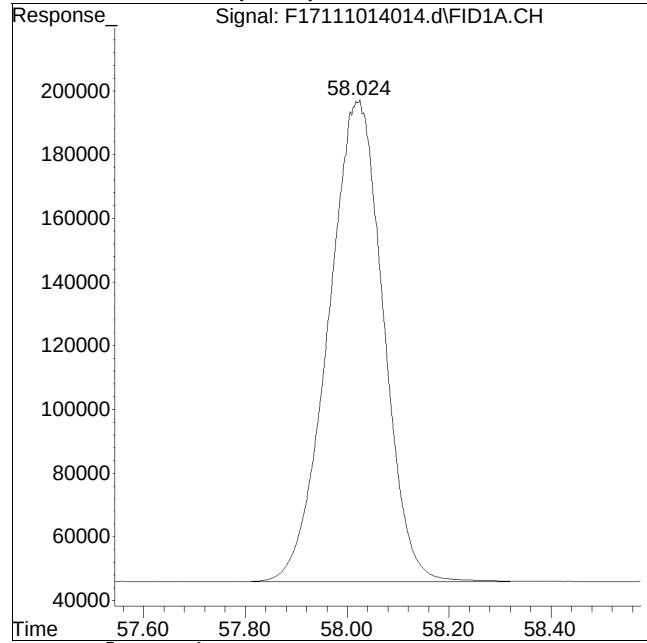
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I17111011402R Quant Date : 11/14/2014 12:19 pm

Compound #41: n-Tetracontane (C40)



Original Peak Response = 0

M4 = Poor automated baseline construction.



Manual Peak Response = 11317318 M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014016.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 10:01 pm
 Operator : FID17:NL
 Sample : I1711011403R
 Misc : WG743851, FRAV14 50ug/mL
 ALS Vial : 8 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:36:11 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.266	54310906	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.249	59342026	48.765	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 97.53%
24) s	d50-Tetracosane	35.922	47616898	49.586	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 99.17%
Target Compounds					
2) t	n-Octane (C8)	5.578	45560434	47.344	ug/mL M4
3) t	n-Nonane (C9)	7.777	46801135	46.290	ug/mL M4
4) t	n-Decane (C10)	10.264	48405866	45.622	ug/mL M4
5) t	n-Undecane (C11)	12.780	49661379	47.712	ug/mL M4
6) t	n-Dodecane (C12)	15.210	50686941	48.367	ug/mL M4
7) t	n-Tridecane (C13)	17.521	51093773	48.813	ug/mL M4
9) t	n-Tetradecane (C14)	19.708	51735306	47.681	ug/mL M4
11) t	n-Pentadecane (C15)	21.777	52726106	49.224	ug/mL M4
12) t	n-Hexadecane (C16)	23.737	52629891	48.757	ug/mL M4
14) t	n-Heptadecane (C17)	25.600	52933668	48.780	ug/mL M4
15) t	Pristane	25.711	53728134	49.395	ug/mL M4
16) t	n-Octadecane (C18)	27.372	53966088	50.035	ug/mL M4
17) t	Phytane	27.535	47224332	43.098	ug/mL M4
18) t	n-Nonadecane (C19)	29.062	53604297	49.982	ug/mL M4
20) t	n-Eicosane (C20)	30.671	53373894	49.539	ug/mL M4
21) t	n-Heneicosane (C21)	32.211	53706675	49.283	ug/mL M4
22) t	n-Docosane (C22)	33.690	54114794	49.379	ug/mL M4
23) t	n-Tricosane (C23)	35.108	54468080	49.419	ug/mL M4
25) t	n-Tetracosane (C24)	36.471	54558609	49.445	ug/mL M4
26) t	n-Pentacosane (C25)	37.781	54123509	48.884	ug/mL M4
27) t	n-Hexacosane (C26)	39.042	55246629	48.884	ug/mL M4
28) t	n-Heptacosane (C27)	40.259	54568291	48.648	ug/mL M4
29) t	n-Octacosane (C28)	41.432	54246380	48.210	ug/mL M4
30) t	n-Nonacosane (C29)	42.568	54437873	47.942	ug/mL M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014016.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 10:01 pm
 Operator : FID17:NL
 Sample : I1711011403R
 Misc : WG743851, FRAV14 50ug/mL
 ALS Vial : 8 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:36:11 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc Units
31) t	n-Triacontane (C30)	43.665	54410127	47.757 ug/mL M4
32) t	n-Hentriacontane (C31)	44.729	54264860	47.267 ug/mL M4
33) t	n-Dotriacontane (C32)	45.760	54592430	47.831 ug/mL M4
34) t	n-Tritriacontane (C33)	46.757	51478791	46.432 ug/mL M4
35) t	n-tetratriacontane (C34)	47.782	53603677	45.555 ug/mL M4
36) t	n-Pentatriacontane (C35)	48.929	53899156	46.041 ug/mL M4
37) t	n-Hexatriacontane (C36)	50.247	55334260	43.654 ug/mL M4
38) t	n-Heptatriacontane (C37)	51.769	54162138	45.796 ug/mL M4
39) t	n-Octatriacontane (C38)	53.546	53323714	45.119 ug/mL M4
41) t	n-Tetracontane (C40)	58.094	56122386	49.359 ug/mL M4

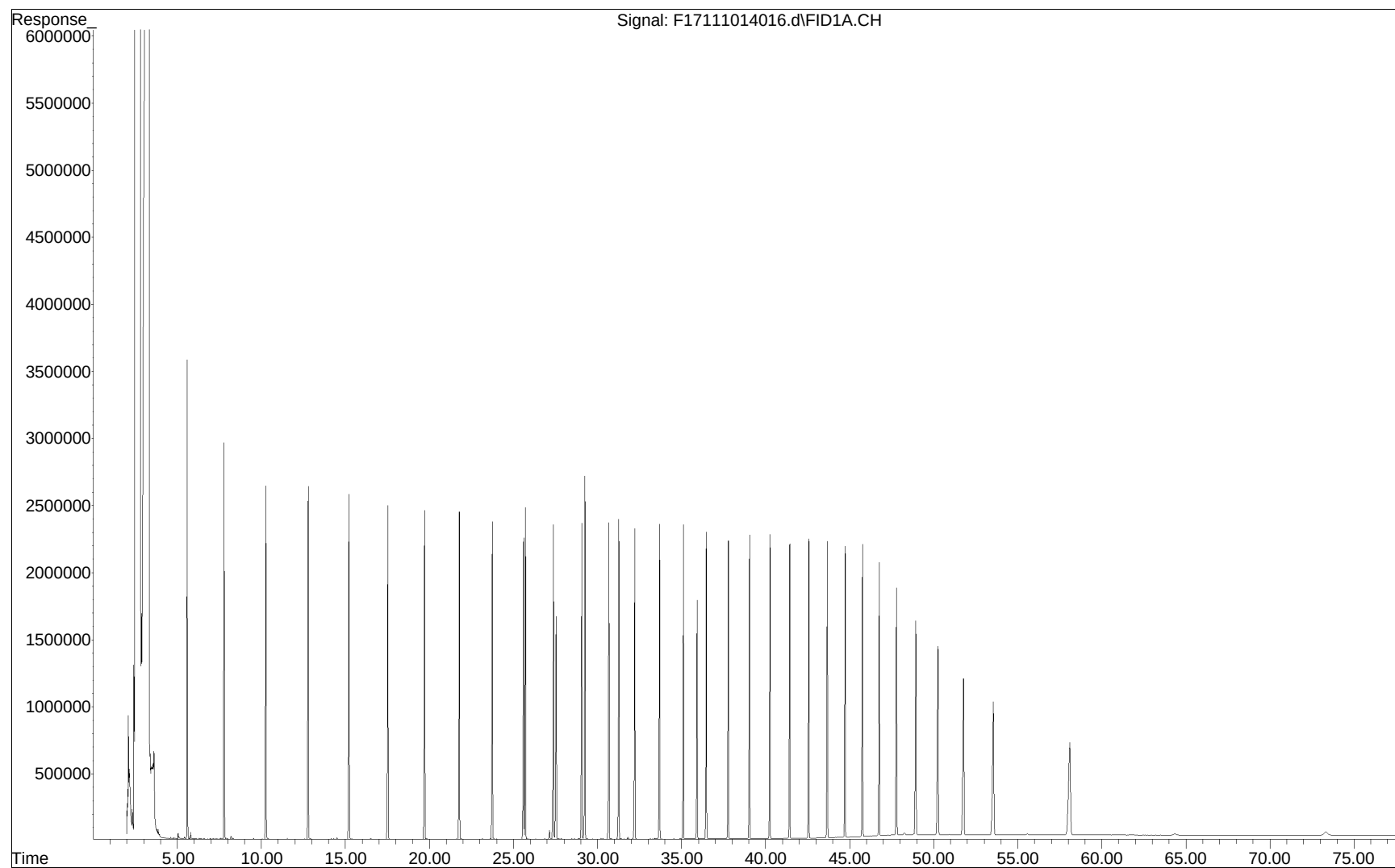
SemiQuant Compounds - Not Calibrated on this Instrument

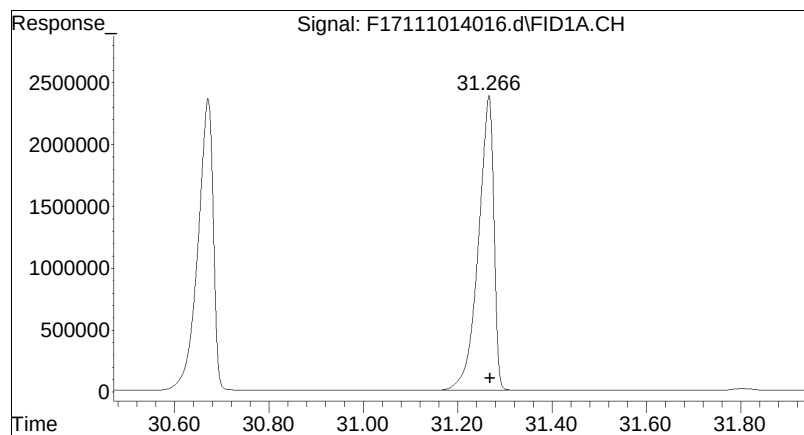
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

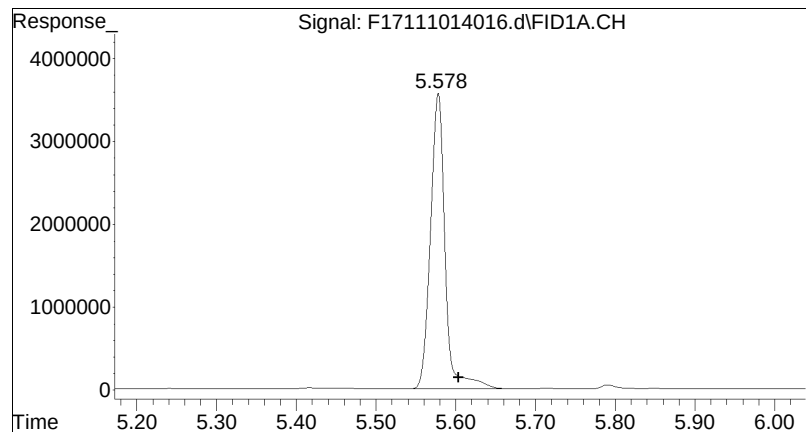
File : 0:\Forensics\Data\FID17\2014\NOV\NOV10\F17111014016.d
Operator : FID17:NL
Acquired : 10 Nov 2014 10:01 pm using AcqMethod FID17.M
Sample Name: I1711011403R
Instrument: FID17
Misc Info : WG743851, FRAV14 50ug/mL
Vial Number: 8
CurrentMeth: 0:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M





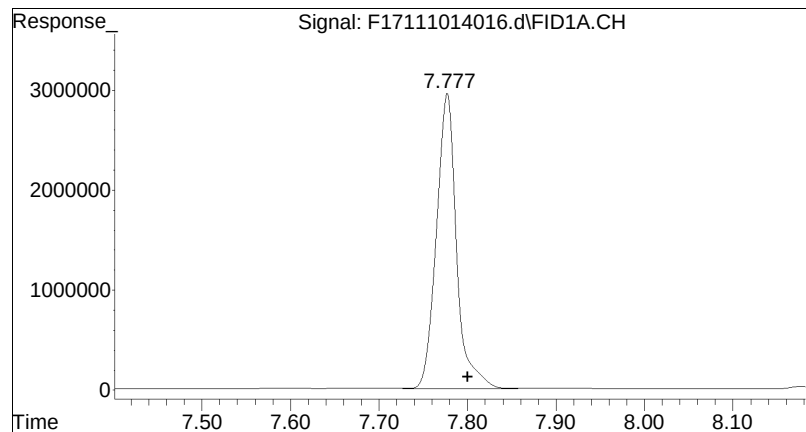
#1 5-alpha-androstane

R.T.: 31.266 min
Delta R.T.: -0.003 min
Response: 54310906
Conc: 50.00 ug/mL M4



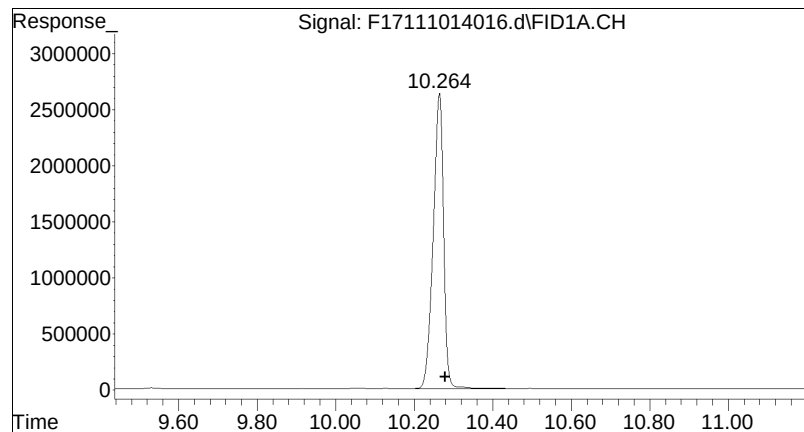
#2 n-Octane (C8)

R.T.: 5.578 min
Delta R.T.: -0.026 min
Response: 45560434
Conc: 47.34 ug/mL M4



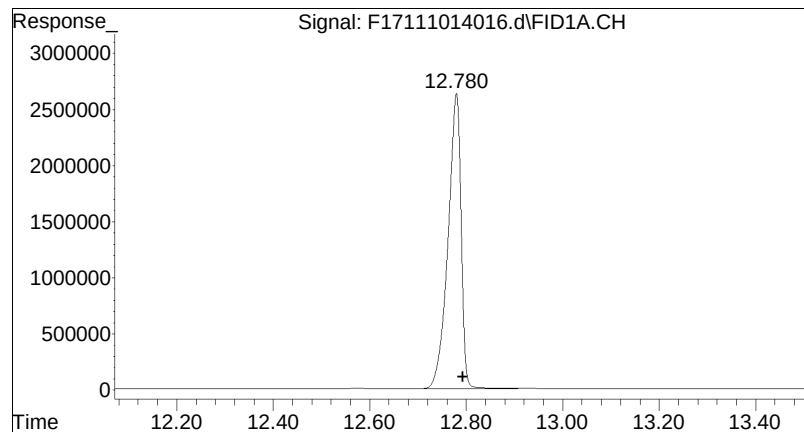
#3 n-Nonane (C9)

R.T.: 7.777 min
Delta R.T.: -0.023 min
Response: 46801135
Conc: 46.29 ug/mL M4



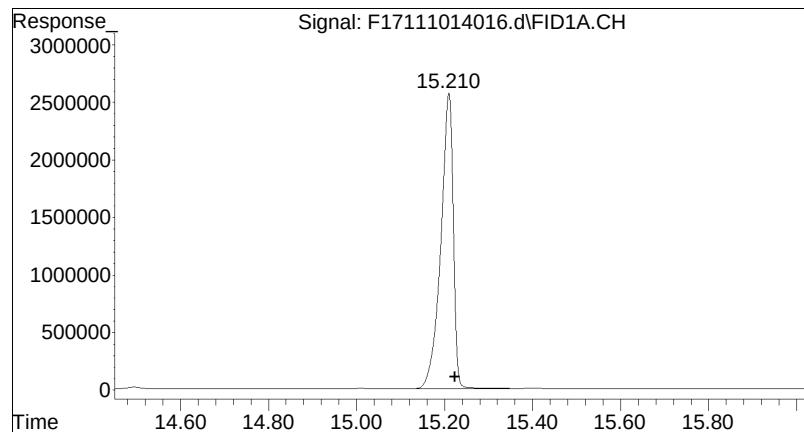
#4 n-Decane (C10)

R.T.: 10.264 min
Delta R.T.: -0.015 min
Response: 48405866
Conc: 45.62 ug/mL M4



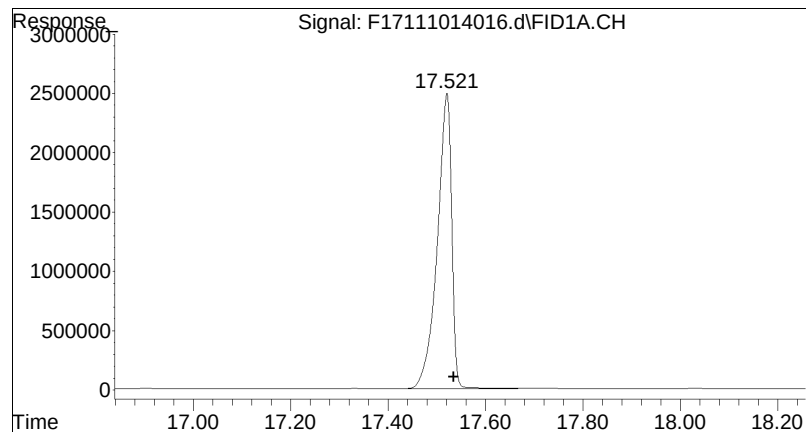
#5 n-Undecane (C11)

R.T.: 12.780 min
Delta R.T.: -0.013 min
Response: 49661379
Conc: 47.71 ug/mL M4



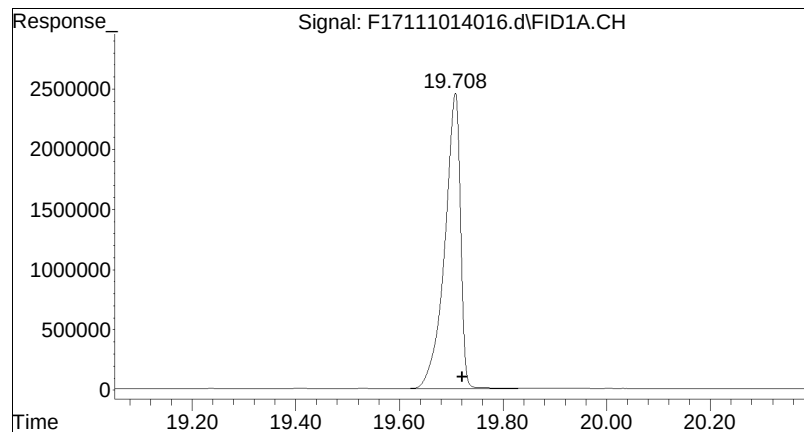
#6 n-Dodecane (C12)

R.T.: 15.210 min
Delta R.T.: -0.014 min
Response: 50686941
Conc: 48.37 ug/mL M4



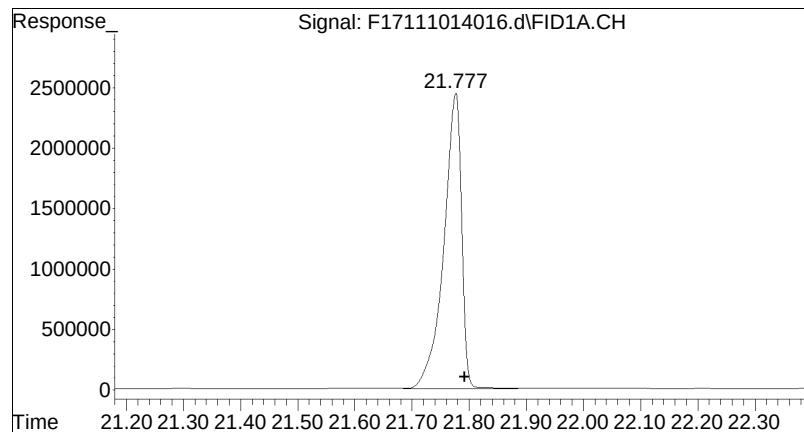
#7 n-Tridecane (C13)

R.T.: 17.521 min
Delta R.T.: -0.013 min
Response: 51093773
Conc: 48.81 ug/mL M4



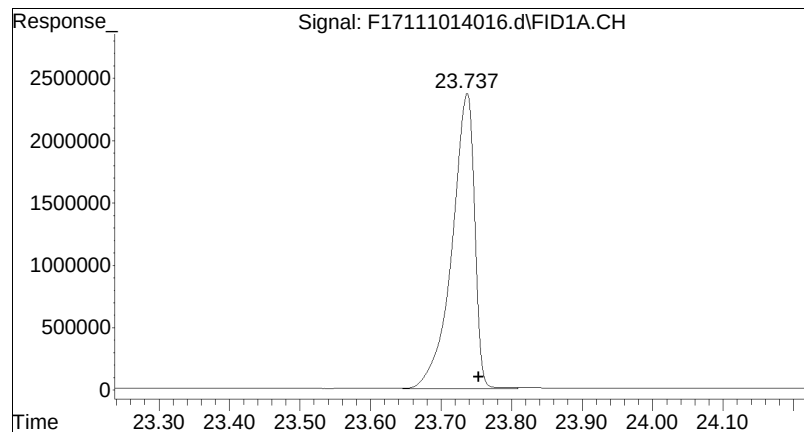
#9 n-Tetradecane (C14)

R.T.: 19.708 min
Delta R.T.: -0.014 min
Response: 51735306
Conc: 47.68 ug/mL M4



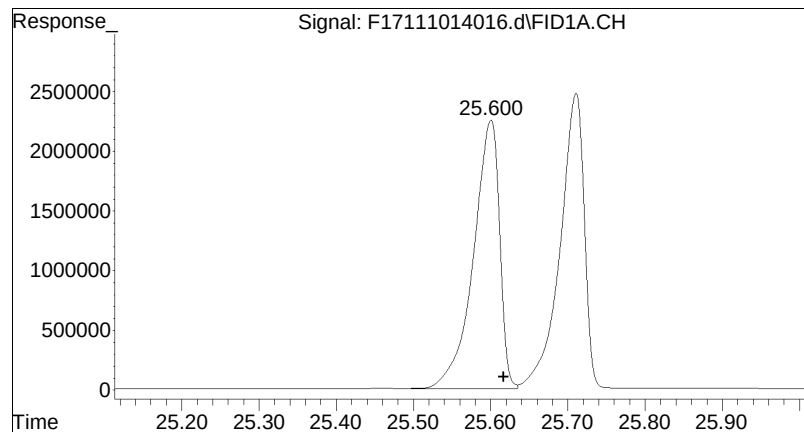
#11 n-Pentadecane (C15)

R.T.: 21.777 min
Delta R.T.: -0.015 min
Response: 52726106
Conc: 49.22 ug/mL M4



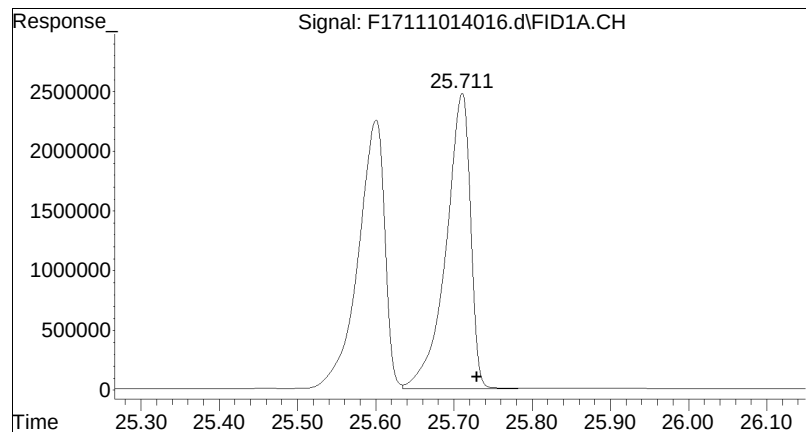
#12 n-Hexadecane (C16)

R.T.: 23.737 min
Delta R.T.: -0.016 min
Response: 52629891
Conc: 48.76 ug/mL M4



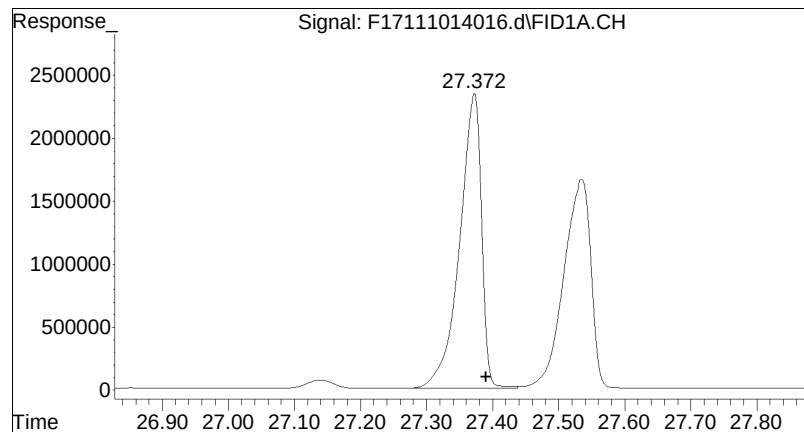
#14 n-Heptadecane (C17)

R.T.: 25.600 min
Delta R.T.: -0.016 min
Response: 52933668
Conc: 48.78 ug/mL M4



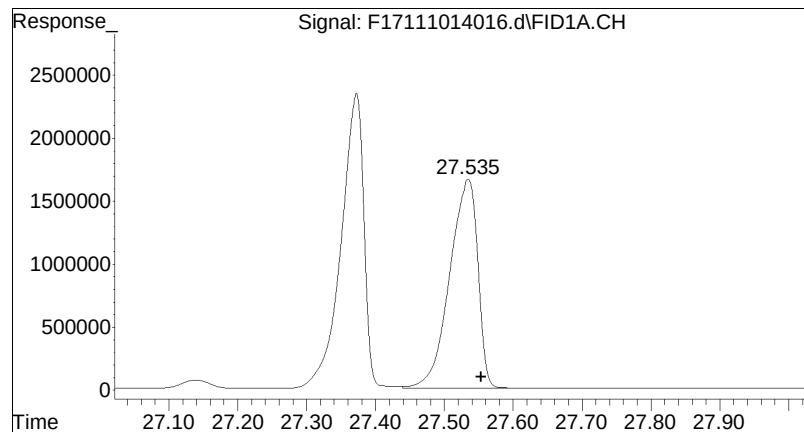
#15 Pristane

R.T.: 25.711 min
Delta R.T.: -0.019 min
Response: 53728134
Conc: 49.40 ug/mL M4



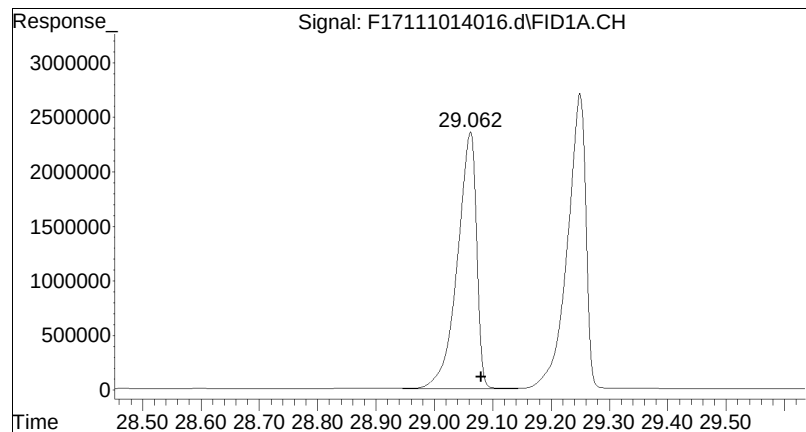
#16 n-Octadecane (C18)

R.T.: 27.372 min
Delta R.T.: -0.017 min
Response: 53966088
Conc: 50.04 ug/mL M4



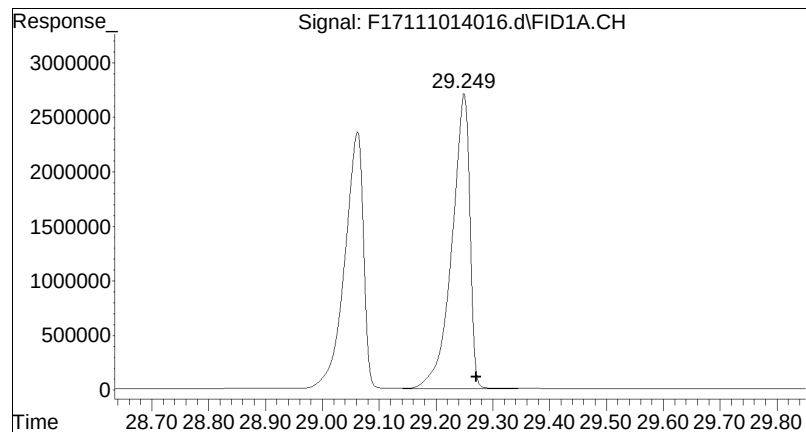
#17 Phytane

R.T.: 27.535 min
Delta R.T.: -0.018 min
Response: 47224332
Conc: 43.10 ug/mL M4



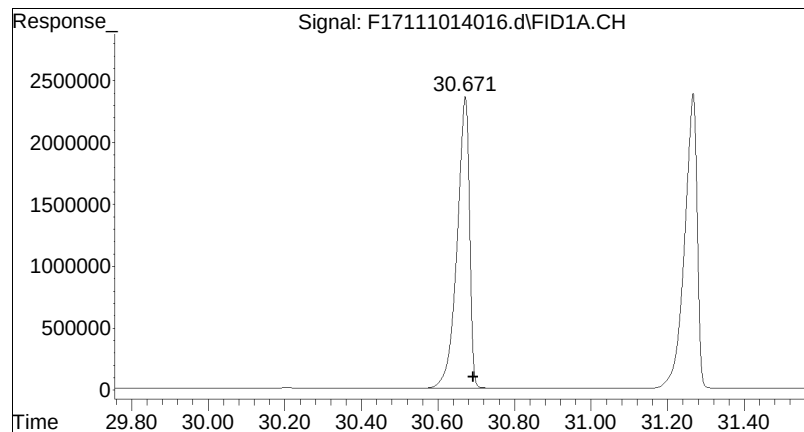
#18 n-Nonadecane (C19)

R.T.: 29.062 min
Delta R.T.: -0.018 min
Response: 53604297
Conc: 49.98 ug/mL M4



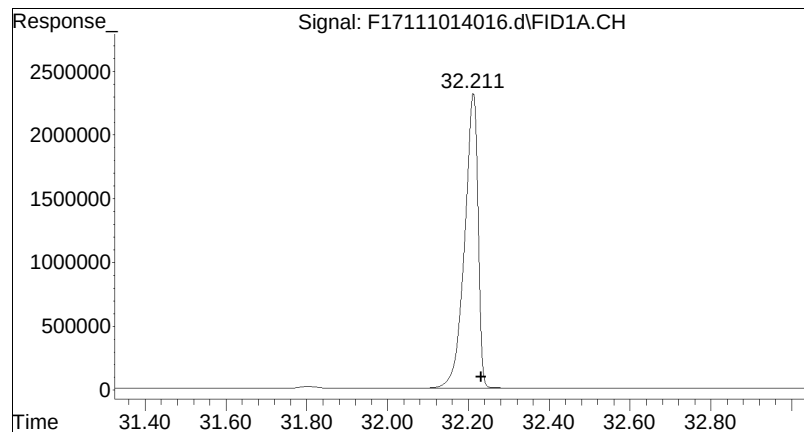
#19 ortho-terphenyl

R.T.: 29.249 min
Delta R.T.: -0.022 min
Response: 59342026
Conc: 48.76 ug/mL M4



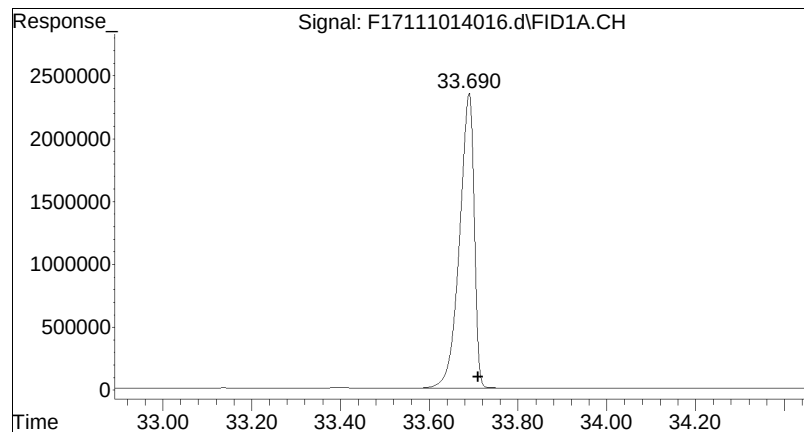
#20 n-Eicosane (C20)

R.T.: 30.671 min
Delta R.T.: -0.020 min
Response: 53373894
Conc: 49.54 ug/mL M4



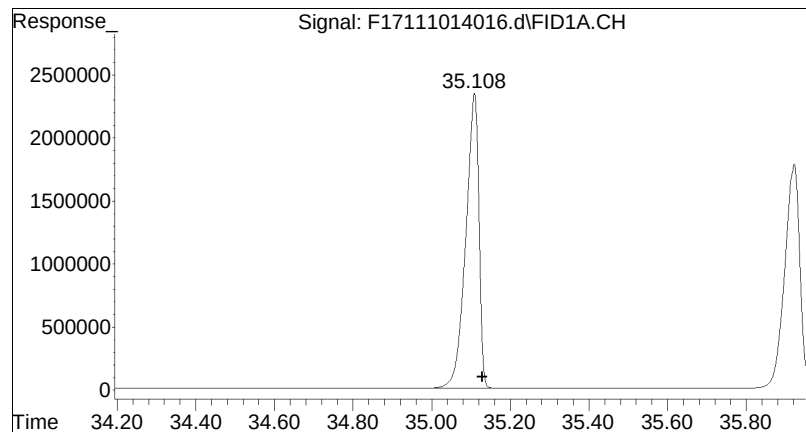
#21 n-Heneicosane (C21)

R.T.: 32.211 min
Delta R.T.: -0.020 min
Response: 53706675
Conc: 49.28 ug/mL M4



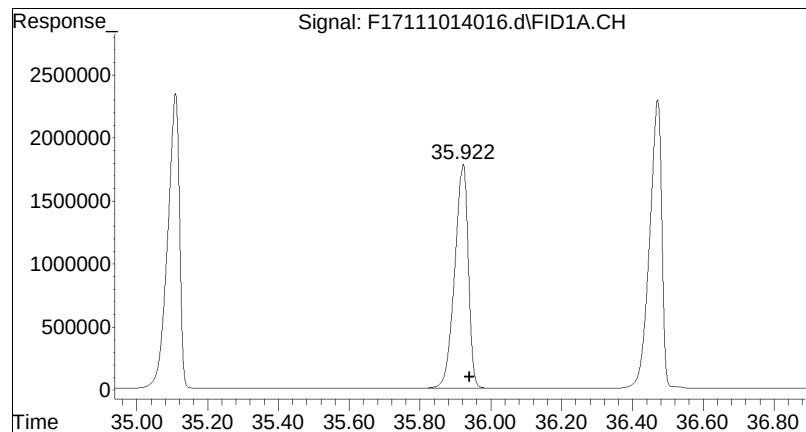
#22 n-Docosane (C22)

R.T.: 33.690 min
Delta R.T.: -0.020 min
Response: 54114794
Conc: 49.38 ug/mL M4



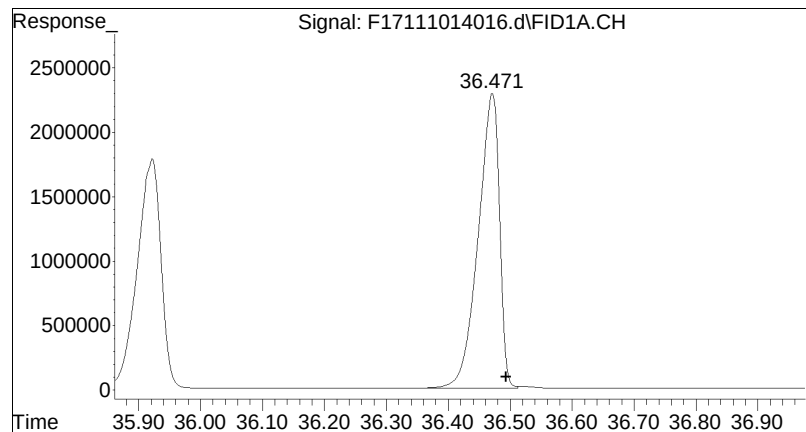
#23 n-Tricosane (C23)

R.T.: 35.108 min
Delta R.T.: -0.021 min
Response: 54468080
Conc: 49.42 ug/mL M4



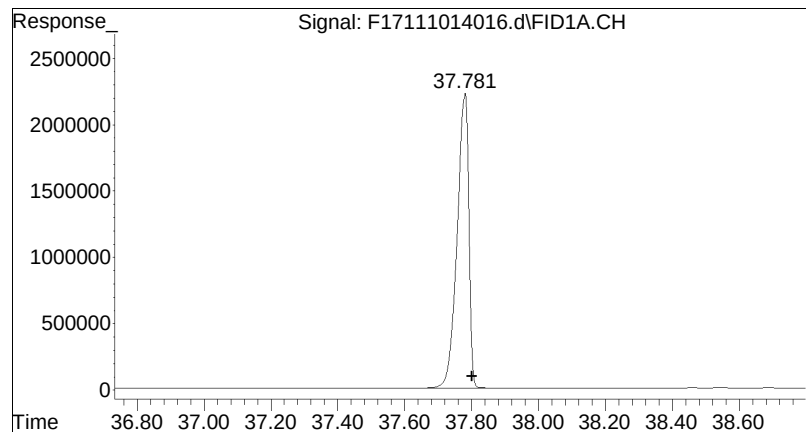
#24 d50-Tetracosane

R.T.: 35.922 min
Delta R.T.: -0.018 min
Response: 47616898
Conc: 49.59 ug/mL M4



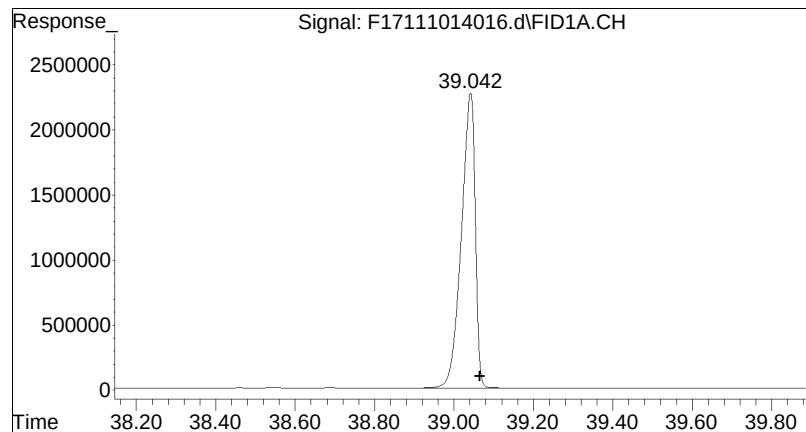
#25 n-Tetracosane (C24)

R.T.: 36.471 min
Delta R.T.: -0.023 min
Response: 54558609
Conc: 49.44 ug/mL M4



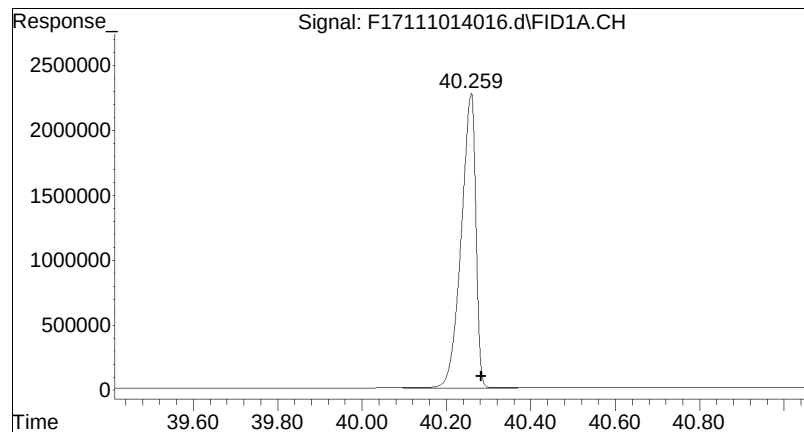
#26 n-Pentacosane (C25)

R.T.: 37.781 min
Delta R.T.: -0.019 min
Response: 54123509
Conc: 48.88 ug/mL M4



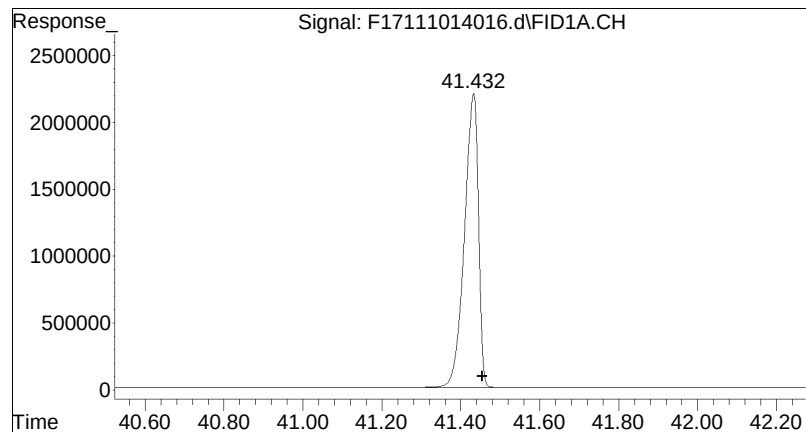
#27 n-Hexacosane (C26)

R.T.: 39.042 min
Delta R.T.: -0.022 min
Response: 55246629
Conc: 48.88 ug/mL M4



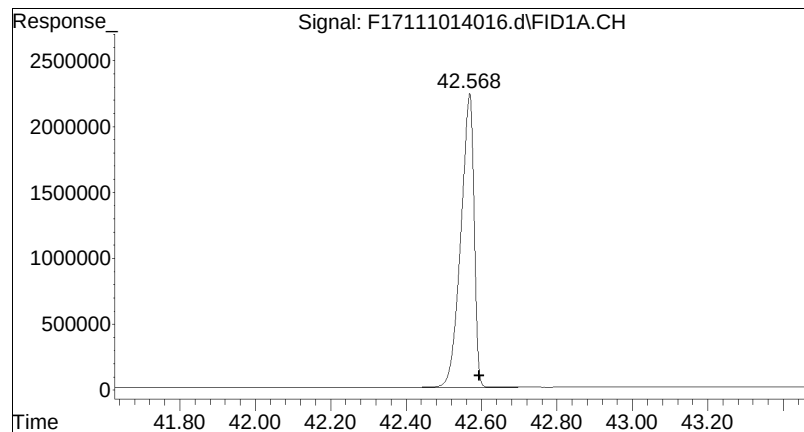
#28 n-Heptacosane (C27)

R.T.: 40.259 min
Delta R.T.: -0.022 min
Response: 54568291
Conc: 48.65 ug/mL M4



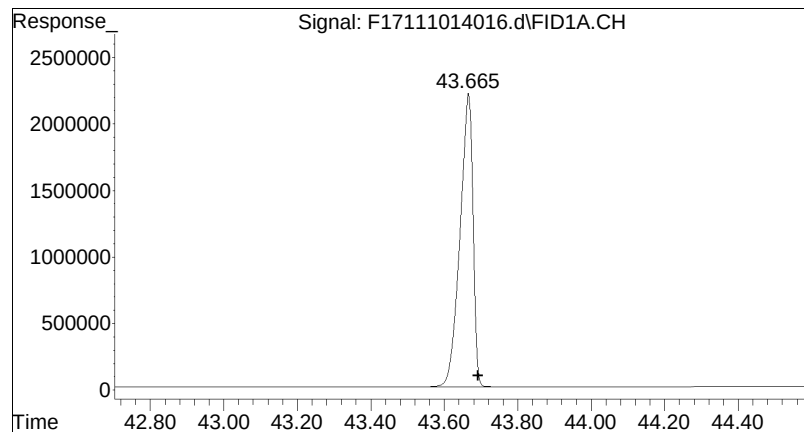
#29 n-Octacosane (C28)

R.T.: 41.432 min
Delta R.T.: -0.022 min
Response: 54246380
Conc: 48.21 ug/mL M4



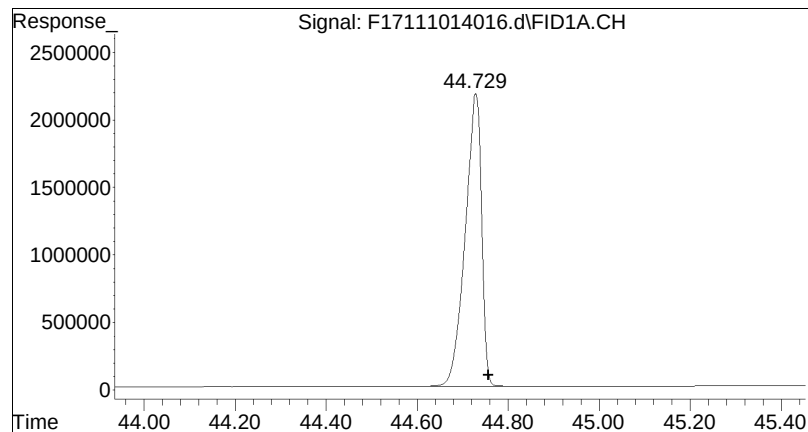
#30 n-Nonacosane (C29)

R.T.: 42.568 min
Delta R.T.: -0.025 min
Response: 54437873
Conc: 47.94 ug/mL M4



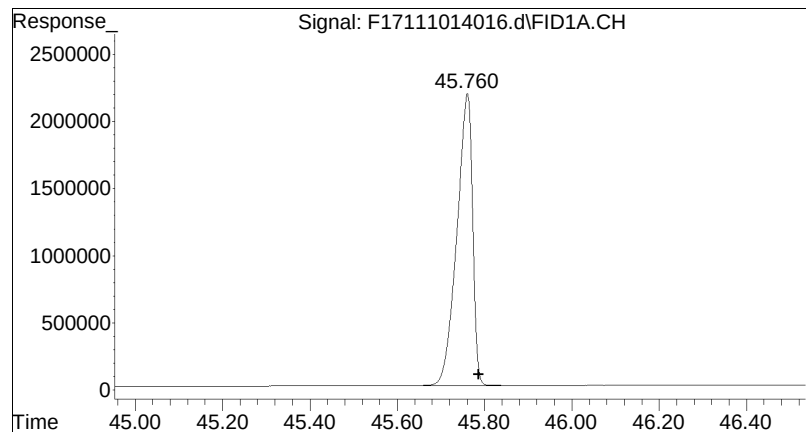
#31 n-Triacontane (C30)

R.T.: 43.665 min
Delta R.T.: -0.027 min
Response: 54410127
Conc: 47.76 ug/mL M4



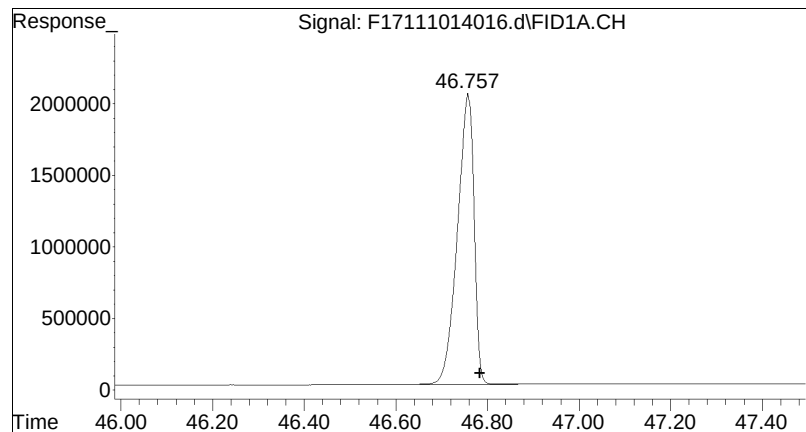
#32 n-Hentriacontane (C31)

R.T.: 44.729 min
Delta R.T.: -0.028 min
Response: 54264860
Conc: 47.27 ug/mL M4



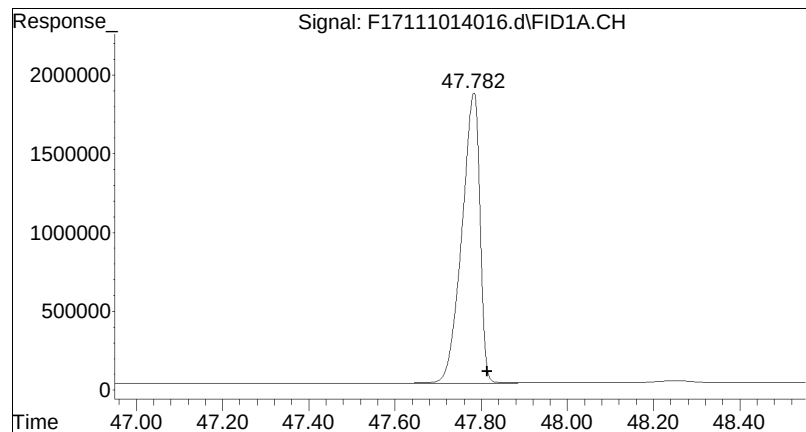
#33 n-Dotriacontane (C32)

R.T.: 45.760 min
Delta R.T.: -0.026 min
Response: 54592430
Conc: 47.83 ug/mL M4



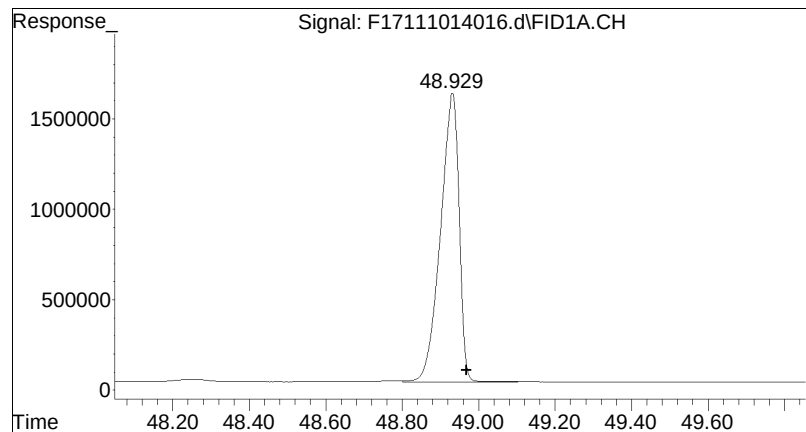
#34 n-Tritriacontane (C33)

R.T.: 46.757 min
Delta R.T.: -0.026 min
Response: 51478791
Conc: 46.43 ug/mL M4



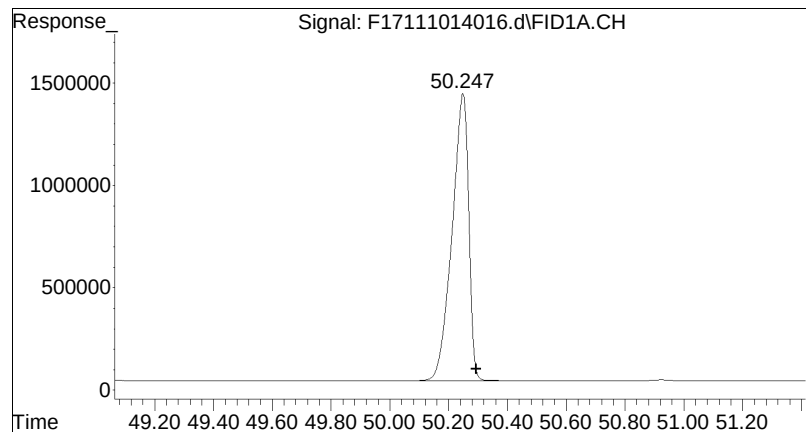
#35 n-tetratriacontane (C34)

R.T.: 47.782 min
Delta R.T.: -0.031 min
Response: 53603677
Conc: 45.56 ug/mL M4



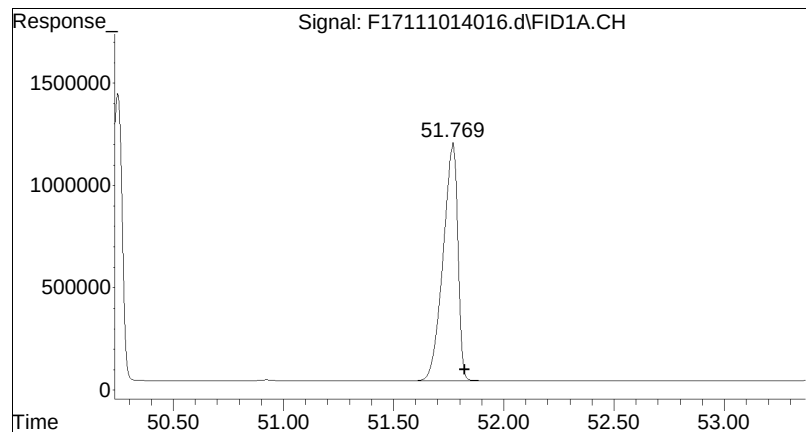
#36 n-Pentatriacontane (C35)

R.T.: 48.929 min
Delta R.T.: -0.038 min
Response: 53899156
Conc: 46.04 ug/mL M4



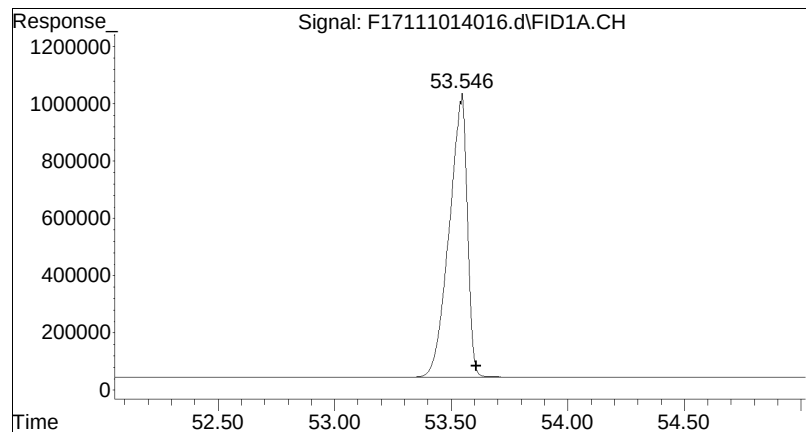
#37 n-Hexatriacontane (C36)

R.T.: 50.247 min
Delta R.T.: -0.046 min
Response: 55334260
Conc: 43.65 ug/mL M4



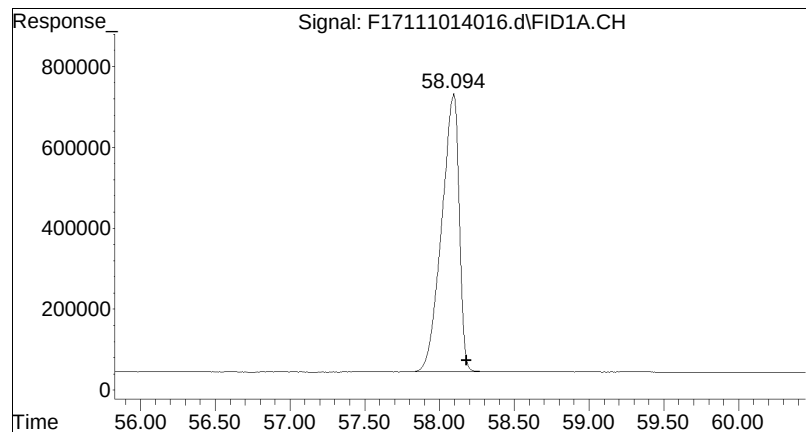
#38 n-Heptatriacontane (C37)

R.T.: 51.769 min
Delta R.T.: -0.053 min
Response: 54162138
Conc: 45.80 ug/mL M4



#39 n-Octatriacontane (C38)

R.T.: 53.546 min
Delta R.T.: -0.061 min
Response: 53323714
Conc: 45.12 ug/mL M4



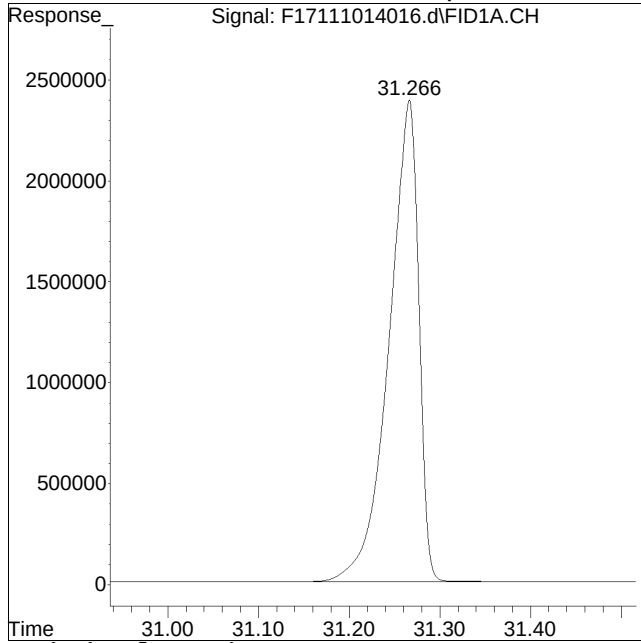
#41 n-Tetracontane (C40)

R.T.: 58.094 min
Delta R.T.: -0.084 min
Response: 56122386
Conc: 49.36 ug/mL M4

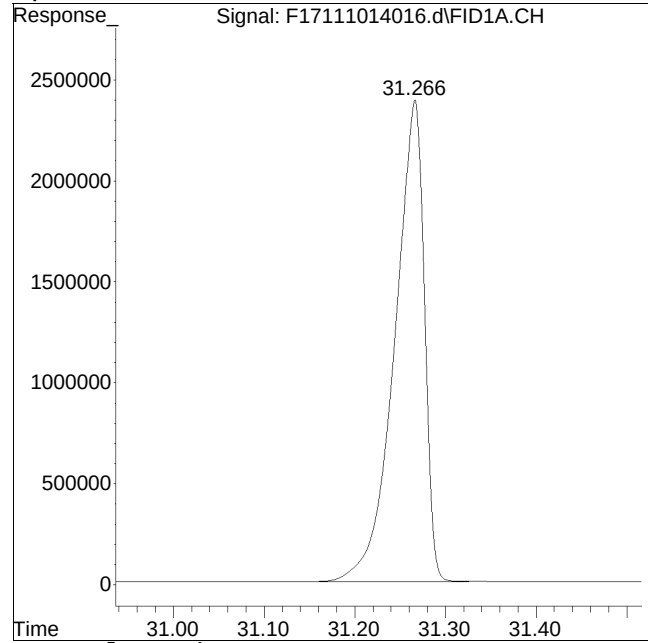
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #1: 5-alpha-androstane



Original Peak Response = 54311912



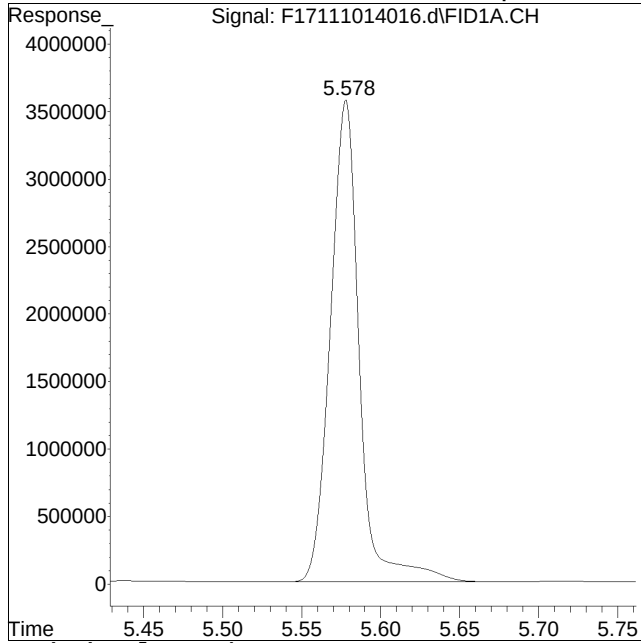
Manual Peak Response = 54310906 M4

M4 = Poor automated baseline construction.

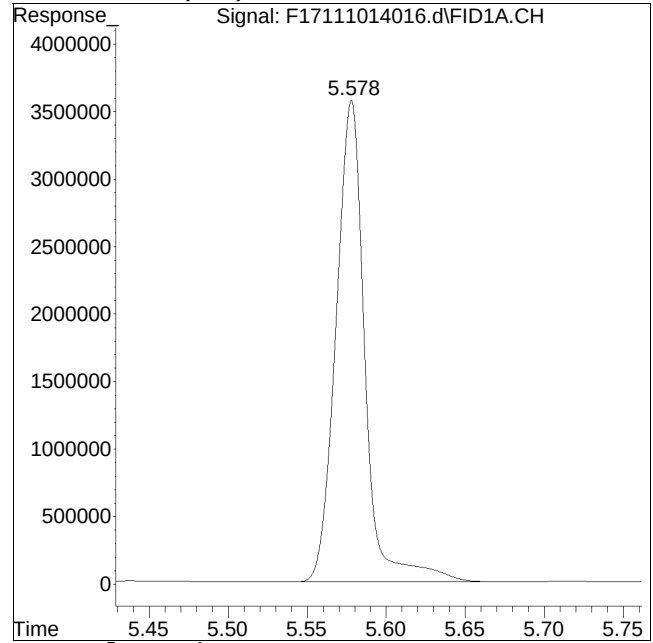
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #2: n-Octane (C8)



Original Peak Response = 45579669



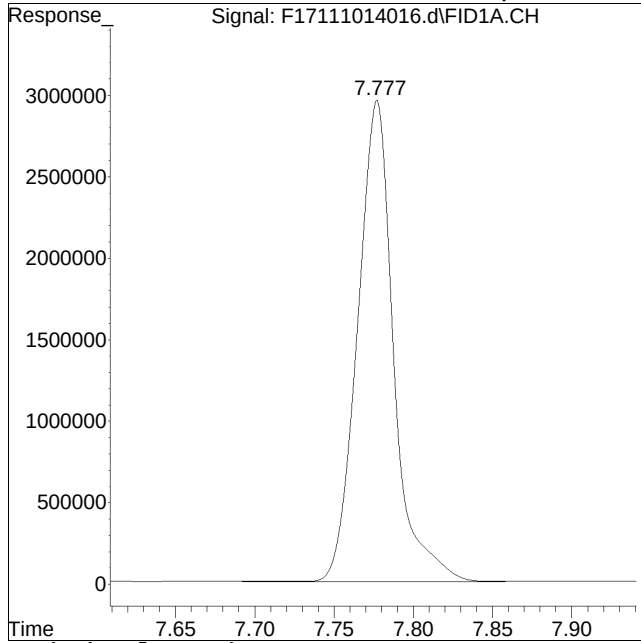
Manual Peak Response = 45560434 M4

M4 = Poor automated baseline construction.

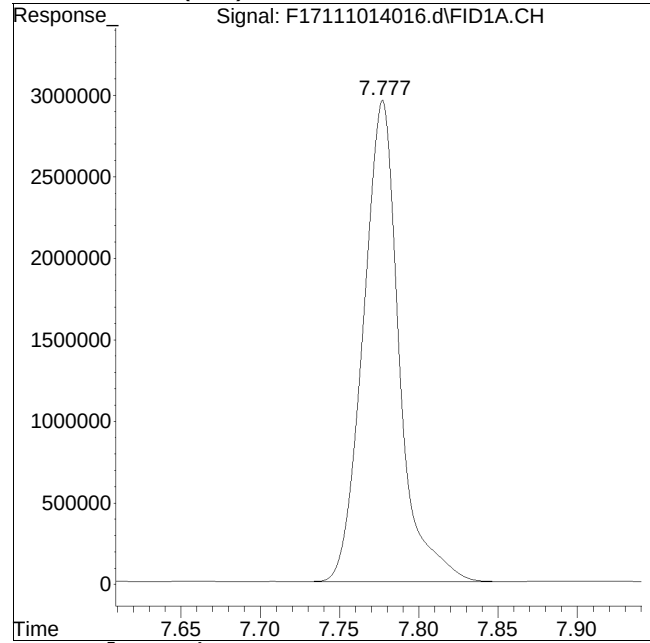
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #3: n-Nonane (C9)



Original Peak Response = 46953698



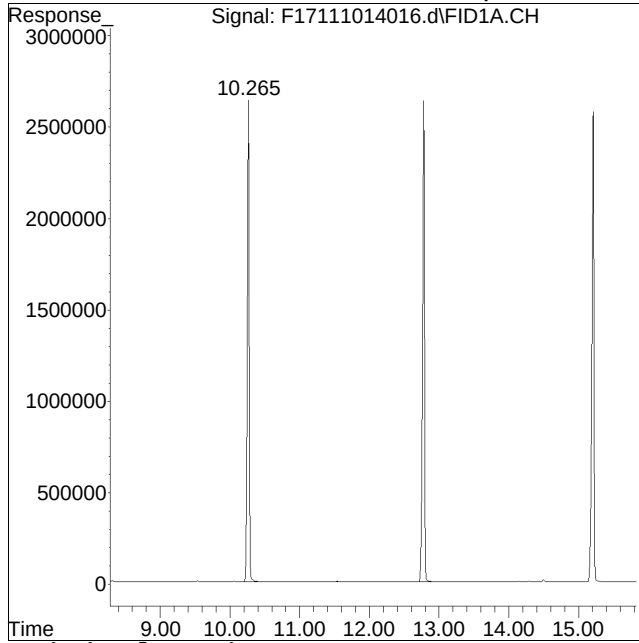
Manual Peak Response = 46801135 M4

M4 = Poor automated baseline construction.

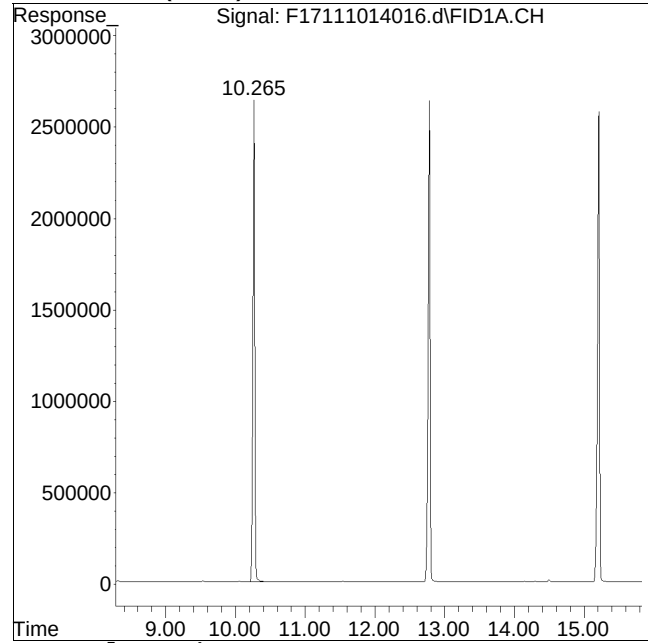
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #4: n-Decane (C10)



Original Peak Response = 47925067



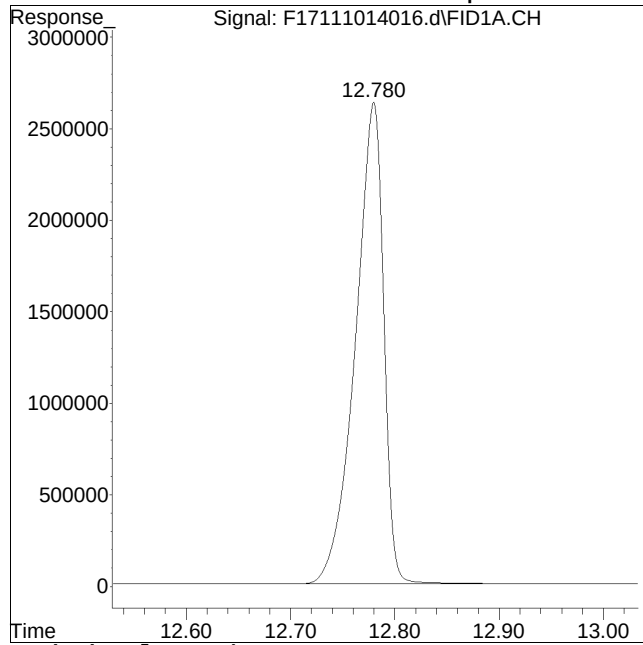
Manual Peak Response = 48405866 M4

M4 = Poor automated baseline construction.

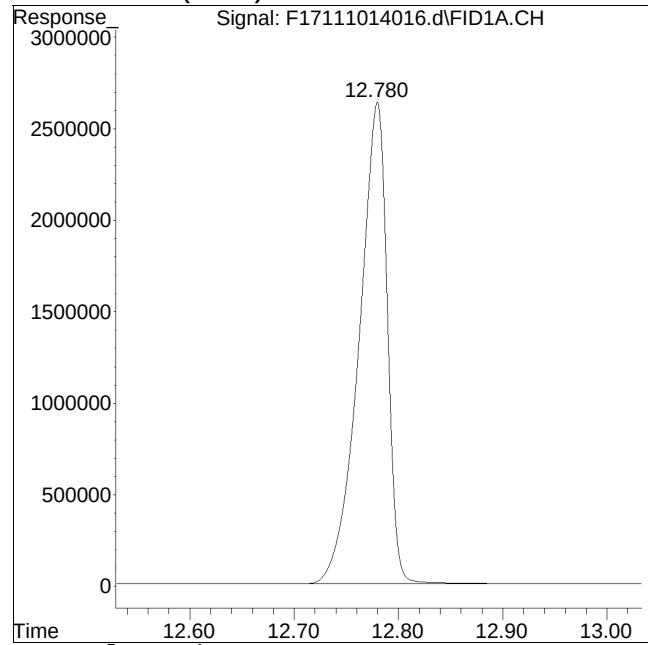
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #5: n-Undecane (C11)



Original Peak Response = 49639595



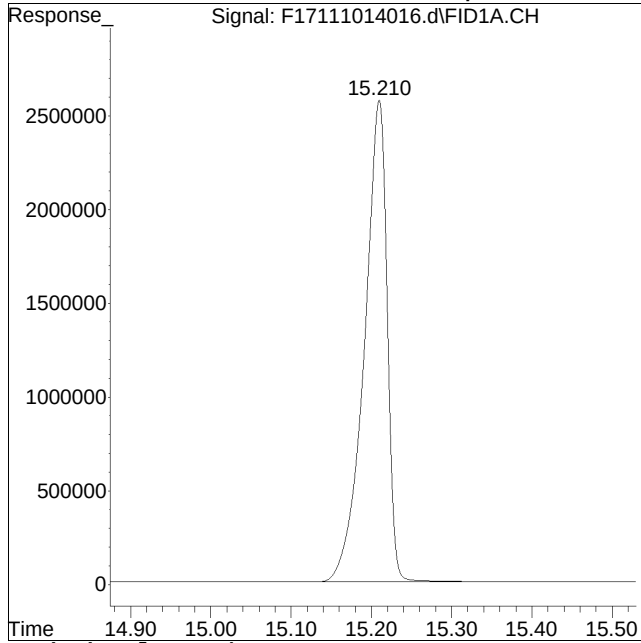
Manual Peak Response = 49661379 M4

M4 = Poor automated baseline construction.

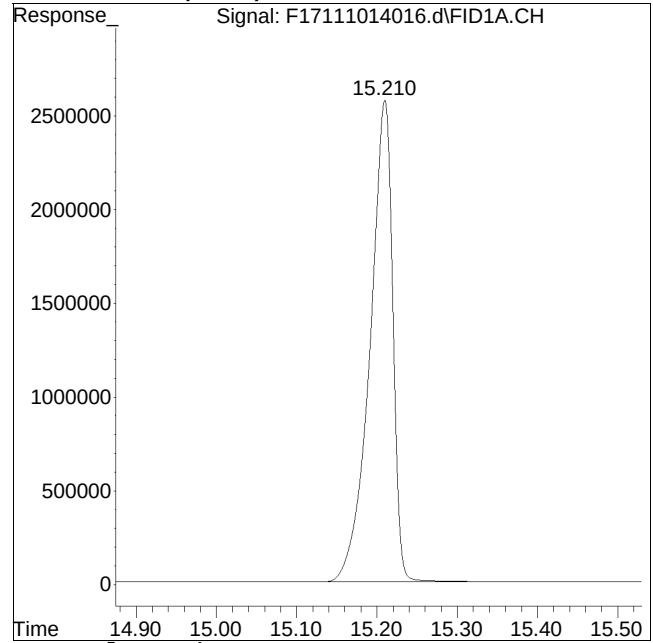
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #6: n-Dodecane (C12)



Original Peak Response = 50582409



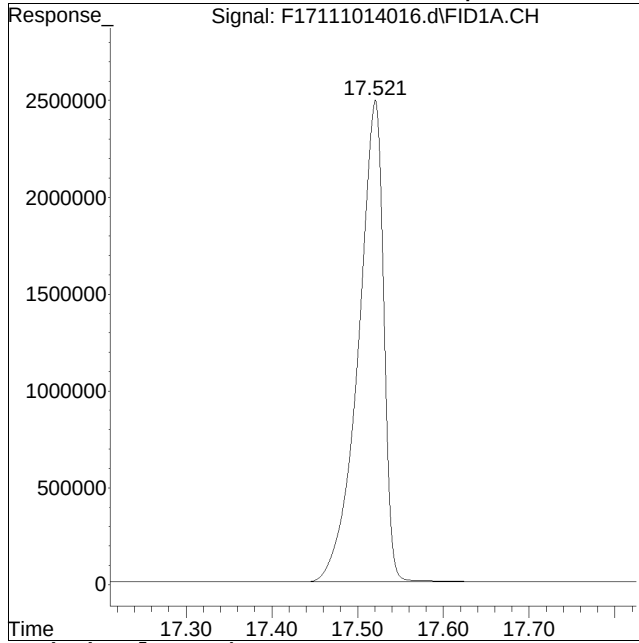
Manual Peak Response = 50686941 M4

M4 = Poor automated baseline construction.

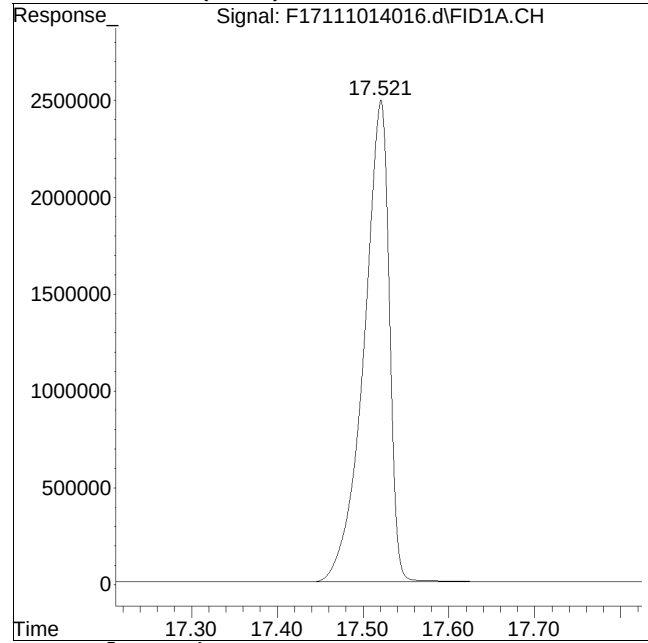
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #7: n-Tridecane (C13)



Original Peak Response = 51111533



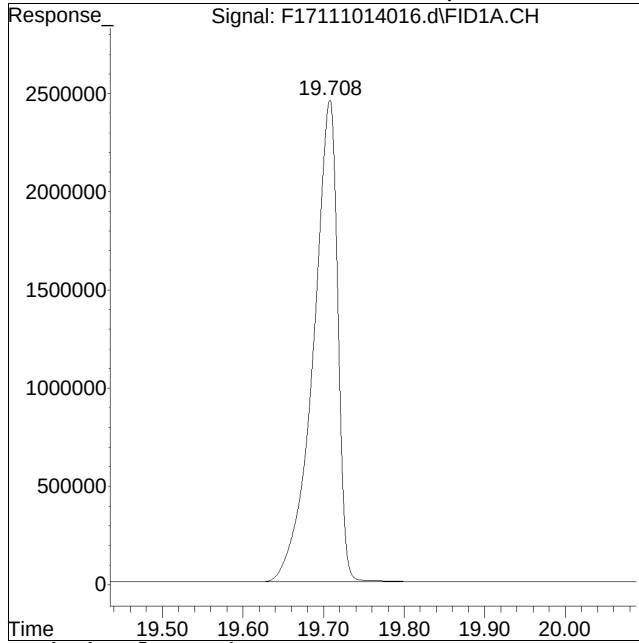
Manual Peak Response = 51093773 M4

M4 = Poor automated baseline construction.

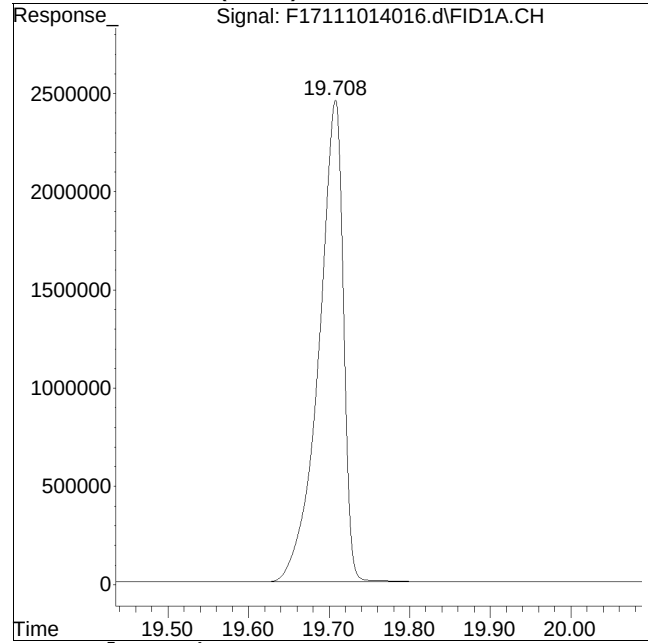
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #9: n-Tetradecane (C14)



Original Peak Response = 51786344



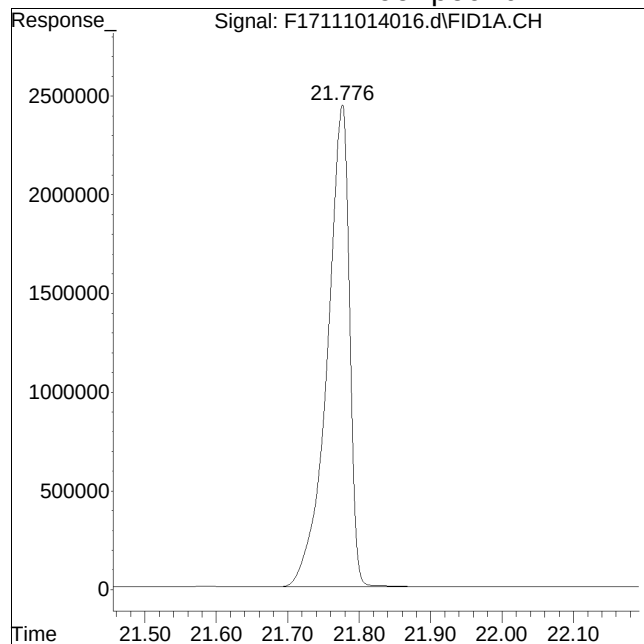
Manual Peak Response = 51735306 M4

M4 = Poor automated baseline construction.

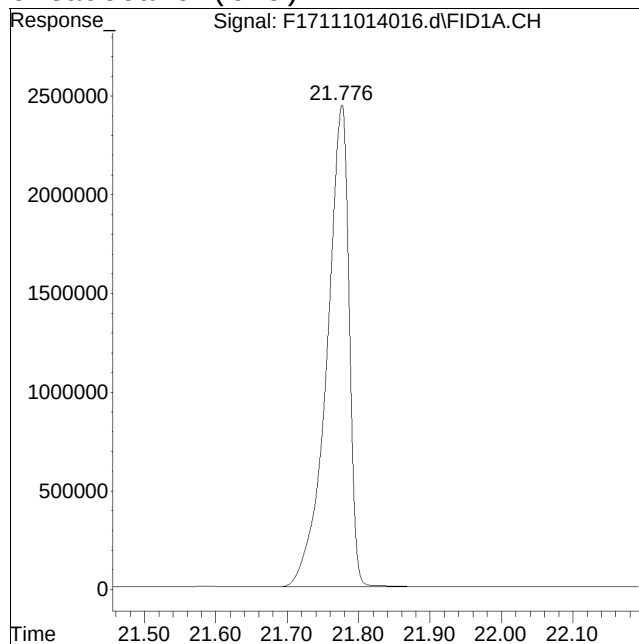
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #11: n-Pentadecane (C15)



Original Peak Response = 52765931



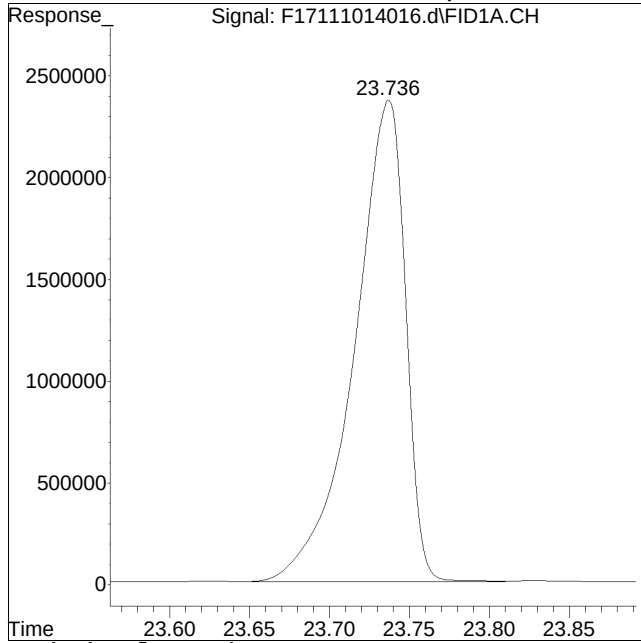
Manual Peak Response = 52726106 M4

M4 = Poor automated baseline construction.

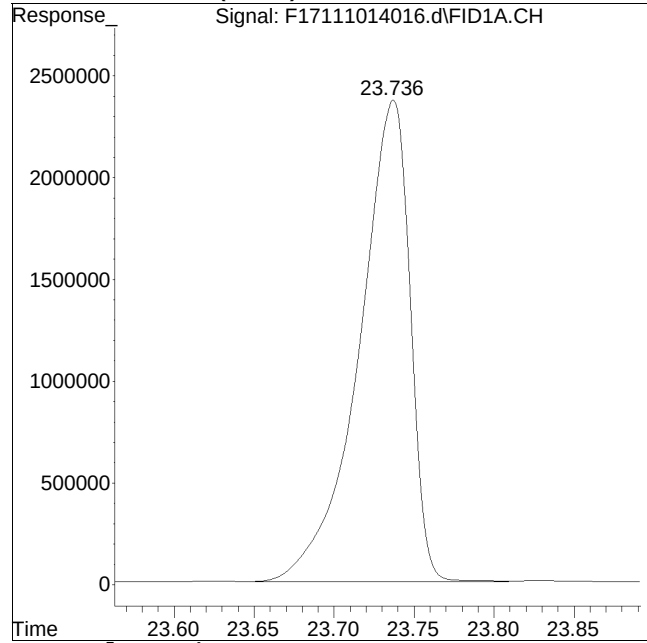
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #12: n-Hexadecane (C16)



Original Peak Response = 52595491



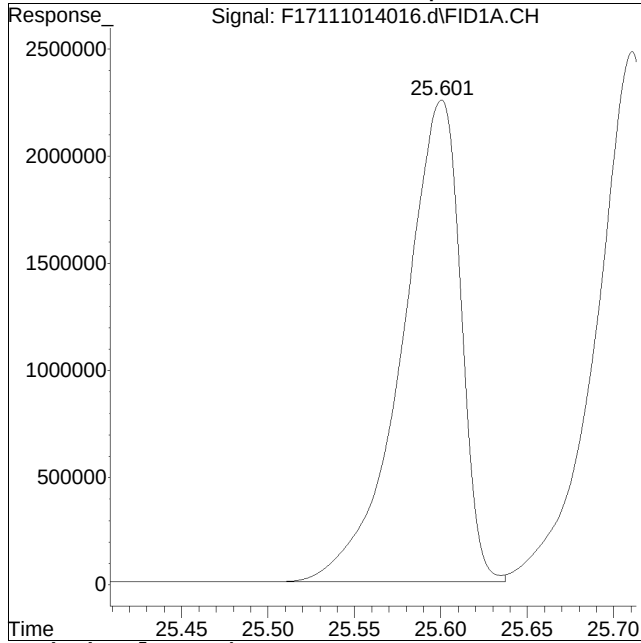
Manual Peak Response = 52629891 M4

M4 = Poor automated baseline construction.

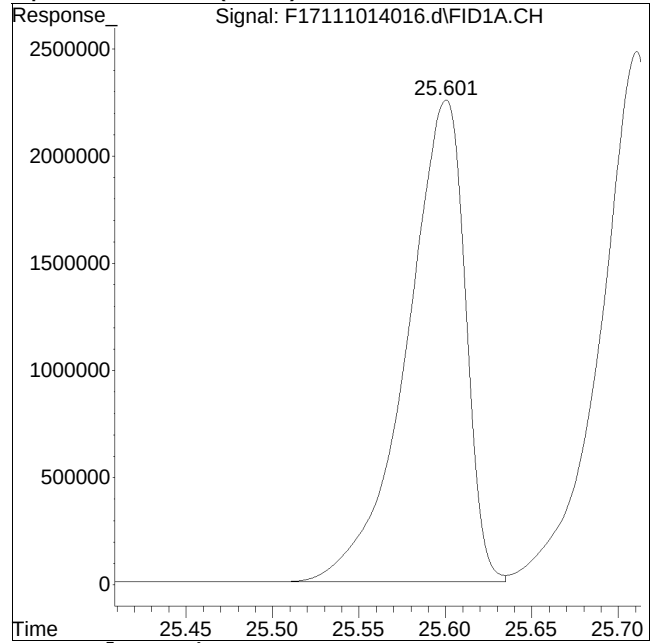
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #14: n-Heptadecane (C17)



Original Peak Response = 52949269



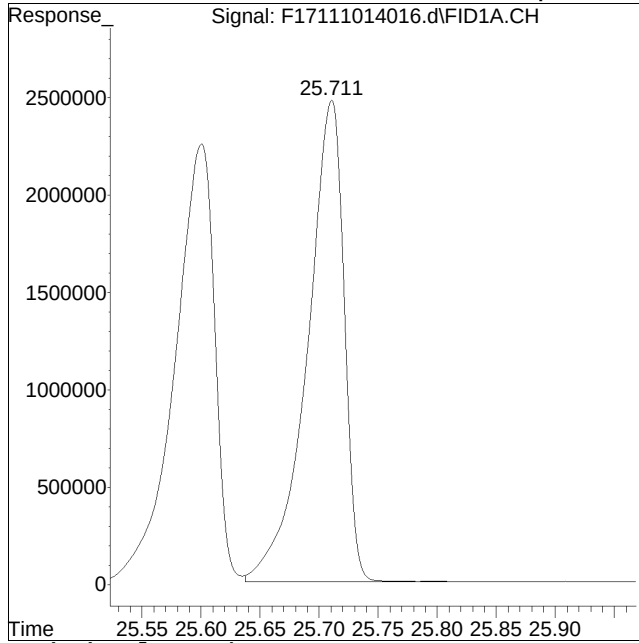
Manual Peak Response = 52933668 M4

M4 = Poor automated baseline construction.

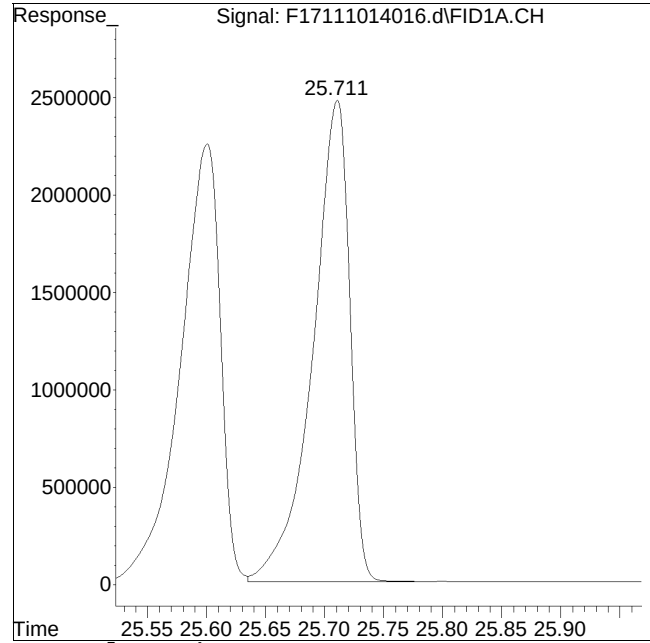
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I17111011403R Quant Date : 11/14/2014 12:19 pm

Compound #15: Pristane



Original Peak Response = 53810894



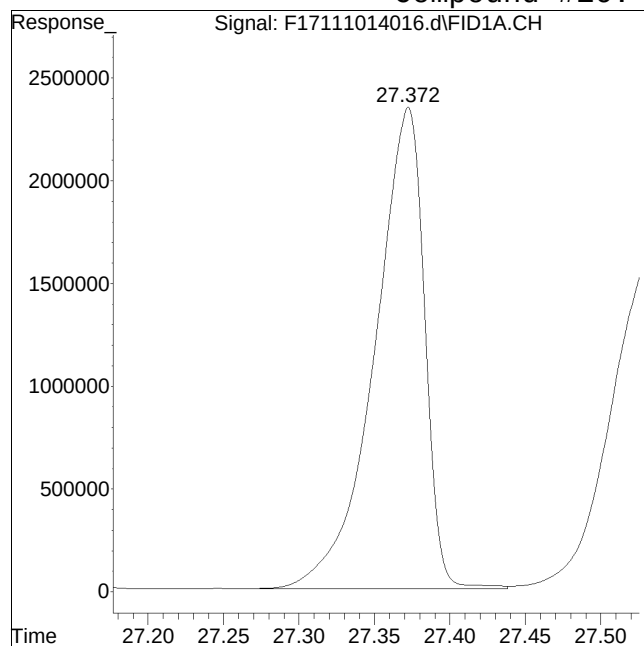
Manual Peak Response = 53728134 M4

M4 = Poor automated baseline construction.

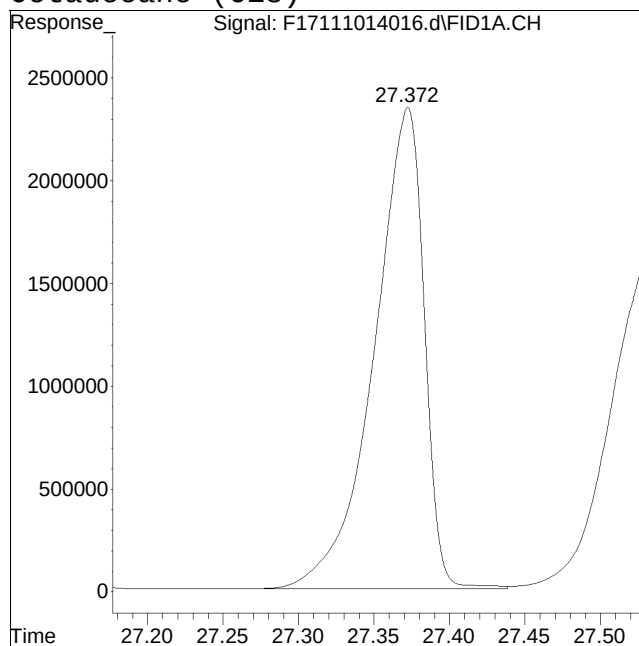
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #16: n-Octadecane (C18)



Original Peak Response = 54018157



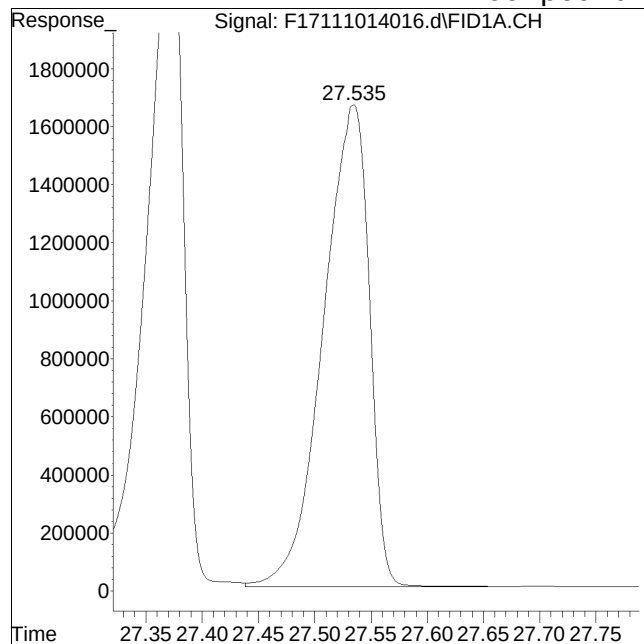
Manual Peak Response = 53966088 M4

M4 = Poor automated baseline construction.

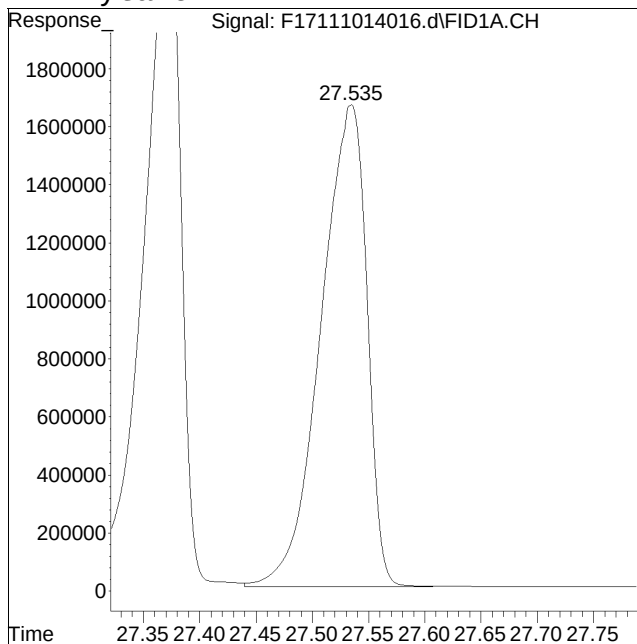
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #17: Phytane



Original Peak Response = 47399106



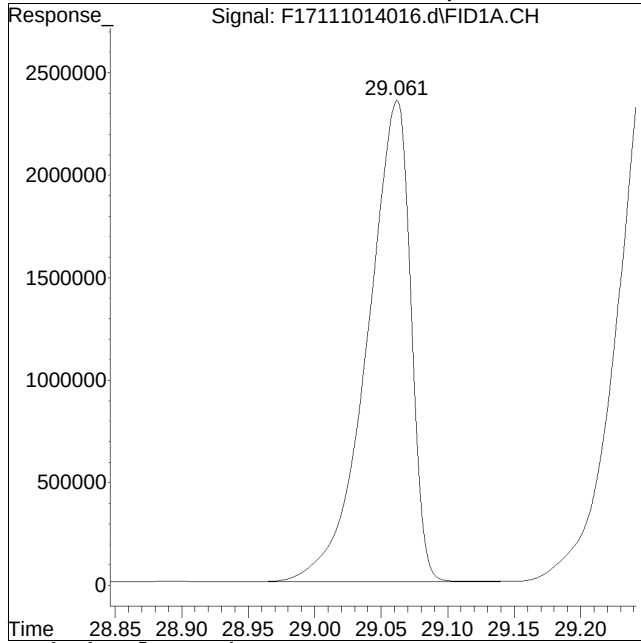
Manual Peak Response = 47224332 M4

M4 = Poor automated baseline construction.

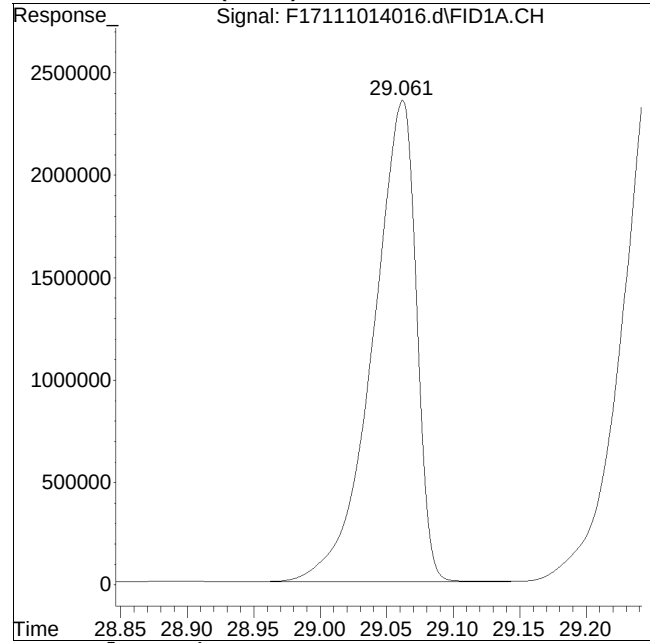
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #18: n-Nonadecane (C19)



Original Peak Response = 53485106



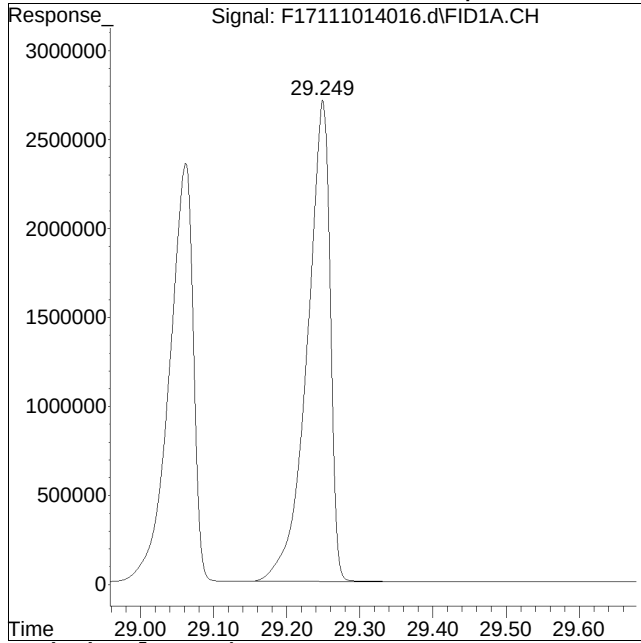
Manual Peak Response = 53604297 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

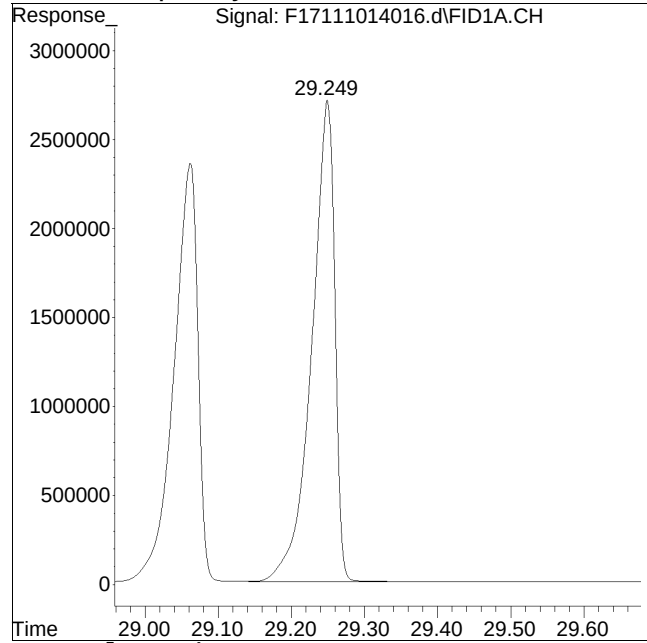
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #19: ortho-terphenyl



Original Peak Response = 58985869

M4 = Poor automated baseline construction.

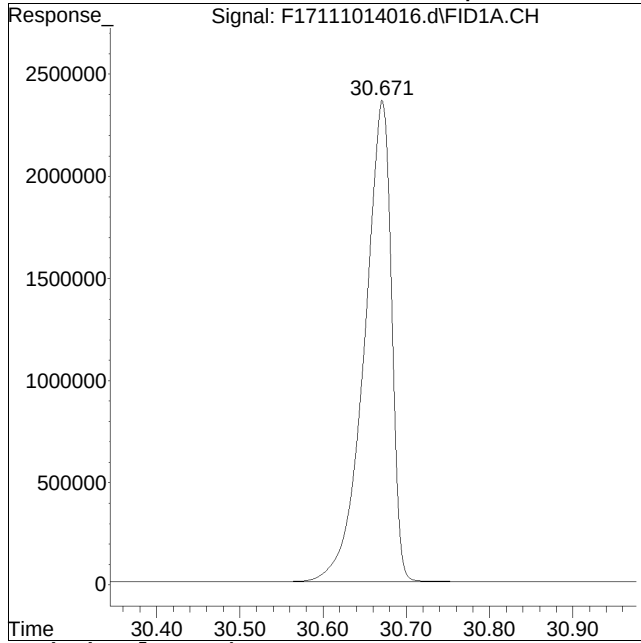


Manual Peak Response = 59342026 M4

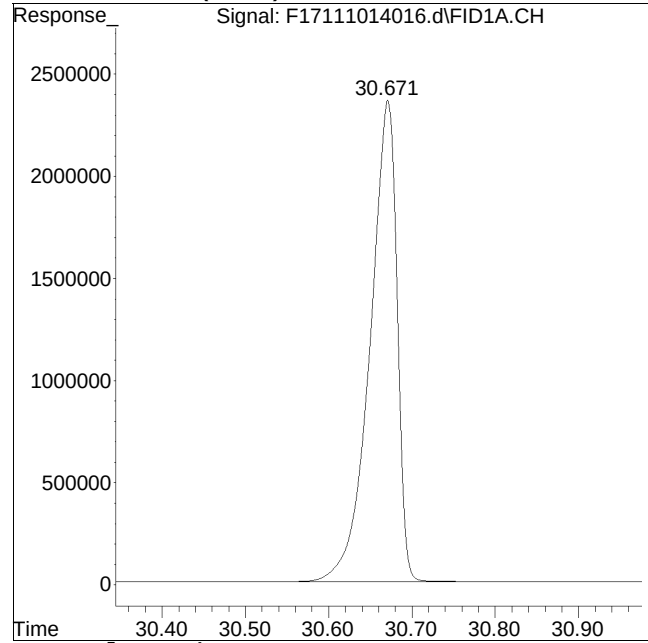
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #20: n-Eicosane (C20)



Original Peak Response = 53435368



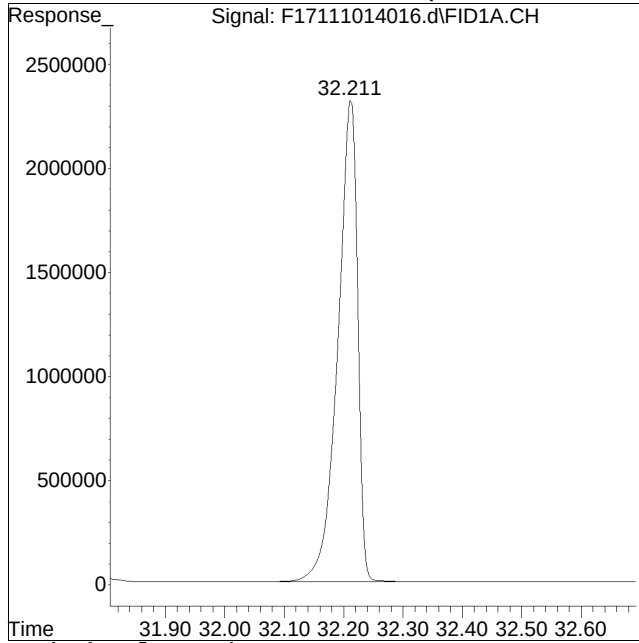
Manual Peak Response = 53373894 M4

M4 = Poor automated baseline construction.

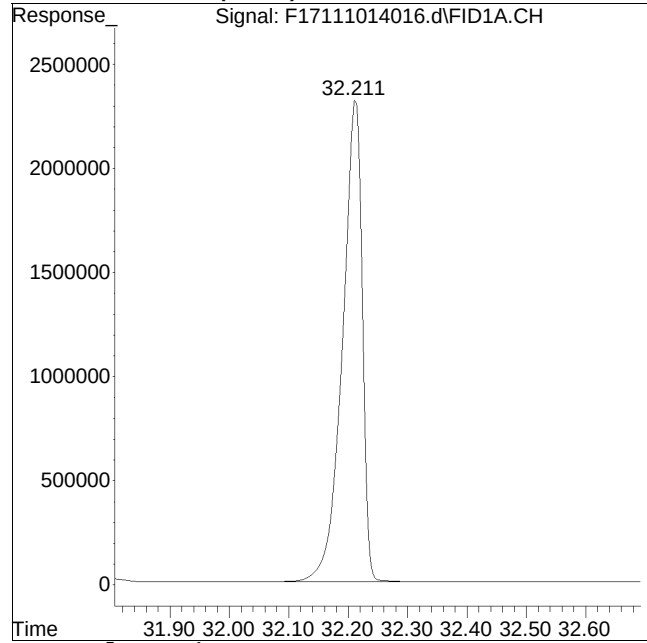
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I17111011403R Quant Date : 11/14/2014 12:19 pm

Compound #21: n-Heneicosane (C21)



Original Peak Response = 53650385



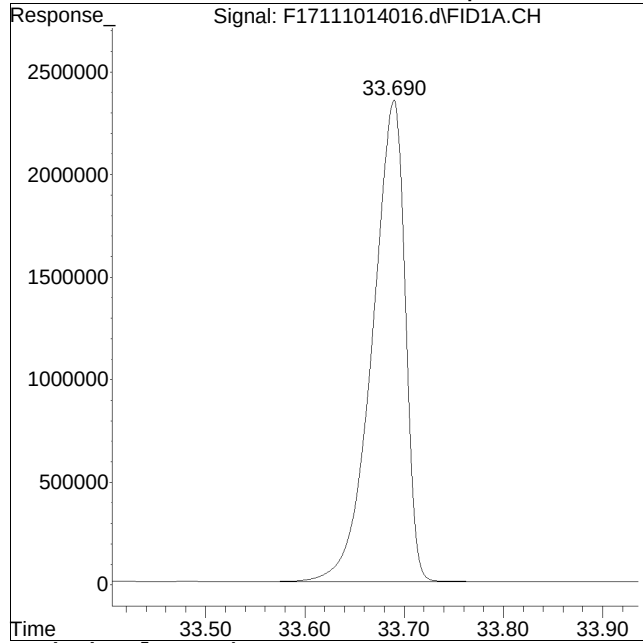
Manual Peak Response = 53706675 M4

M4 = Poor automated baseline construction.

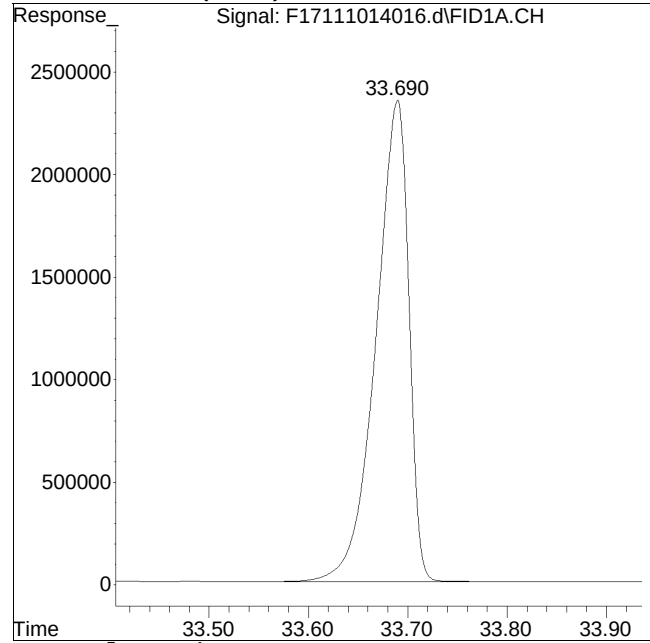
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #22: n-Docosane (C22)



Original Peak Response = 54124083



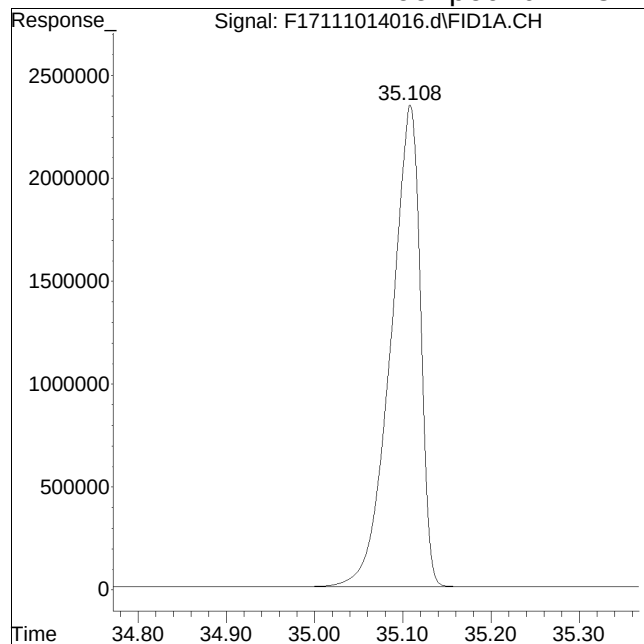
Manual Peak Response = 54114794 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

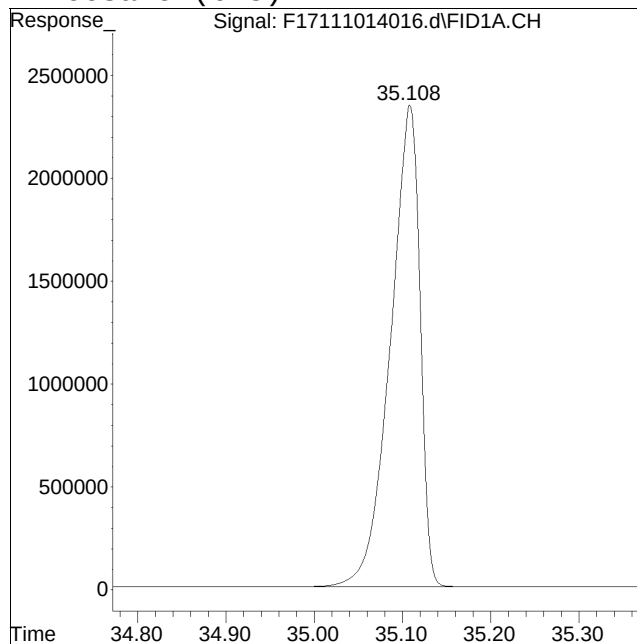
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #23: n-Tricosane (C23)



Original Peak Response = 54452941

M4 = Poor automated baseline construction.

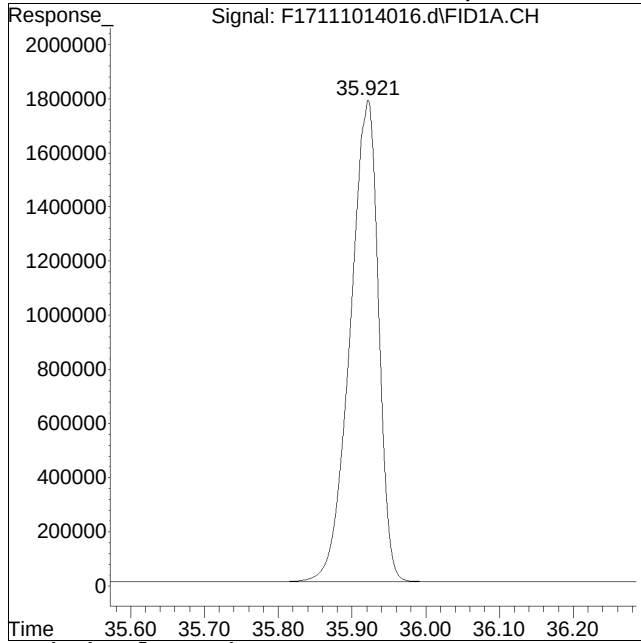


Manual Peak Response = 54468080 M4

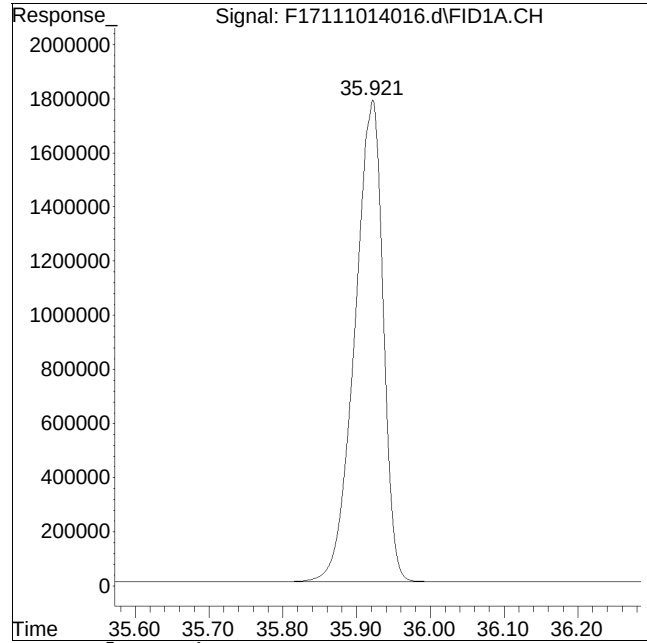
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #24: d50-Tetracosane



Original Peak Response = 47597293



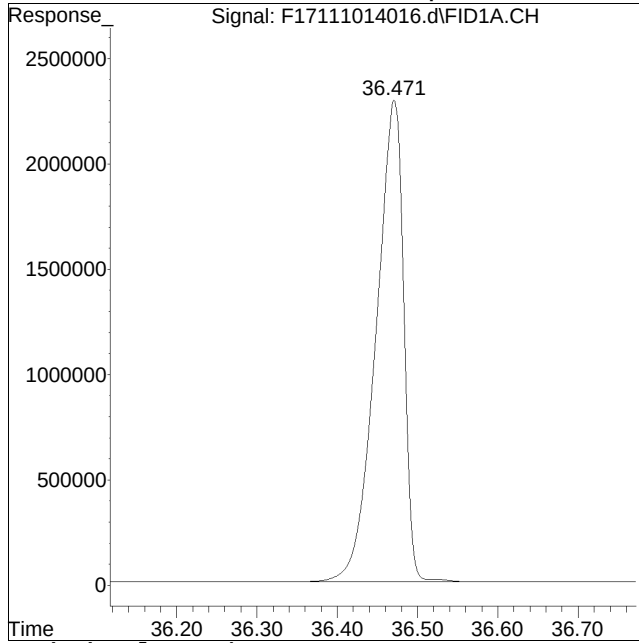
Manual Peak Response = 47616898 M4

M4 = Poor automated baseline construction.

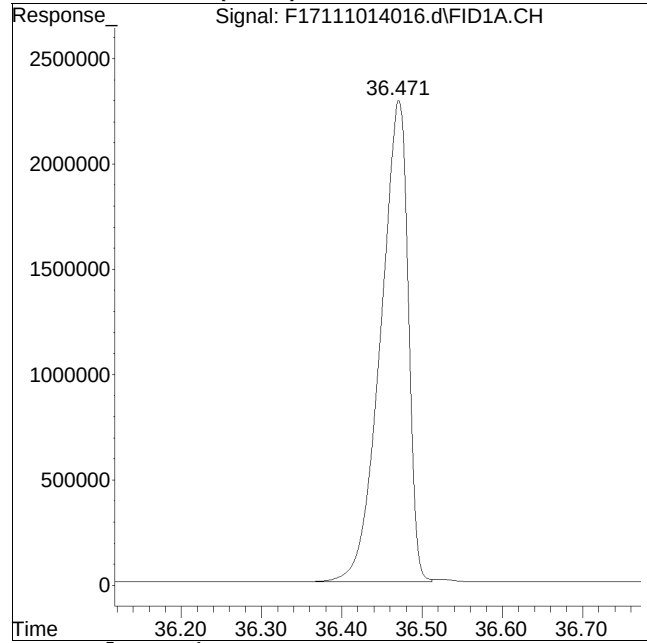
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #25: n-Tetracosane (C24)



Original Peak Response = 54837400



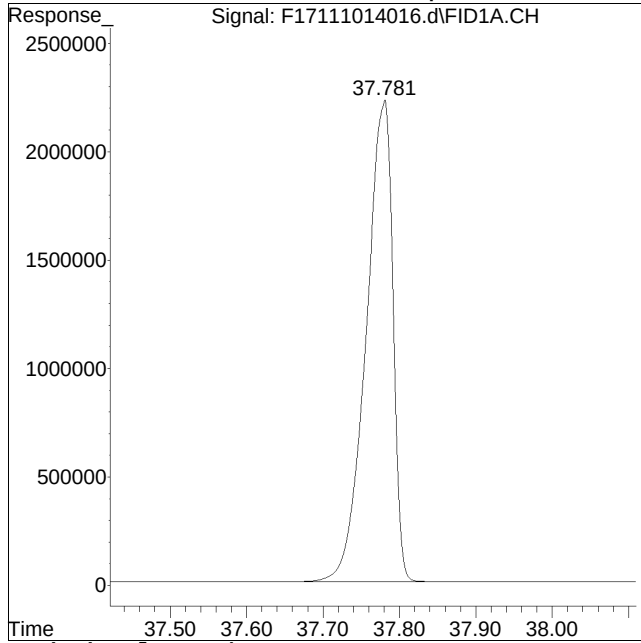
Manual Peak Response = 54558609 M4

M4 = Poor automated baseline construction.

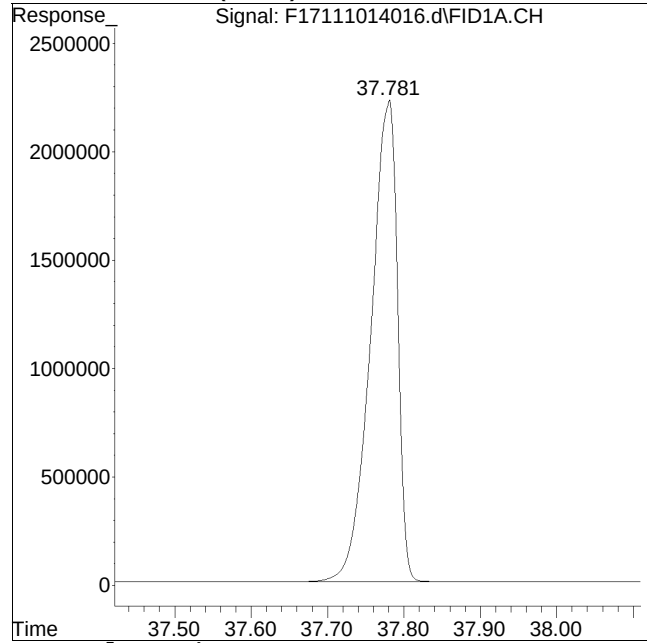
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #26: n-Pentacosane (C25)



Original Peak Response = 54103546



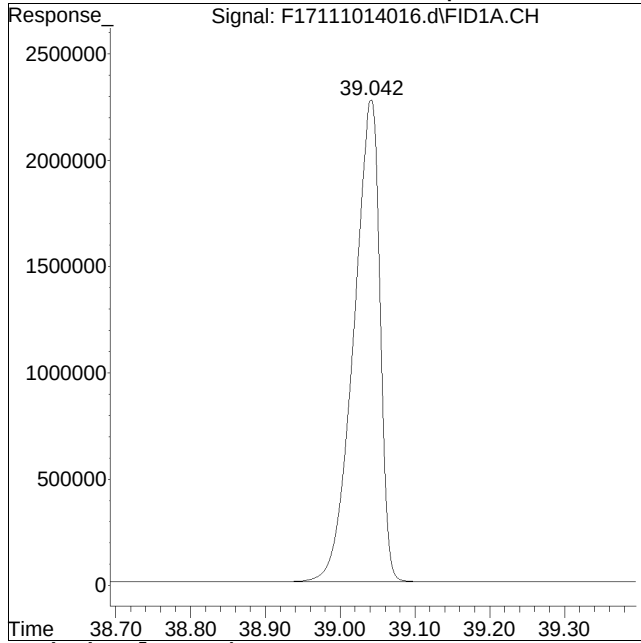
Manual Peak Response = 54123509 M4

M4 = Poor automated baseline construction.

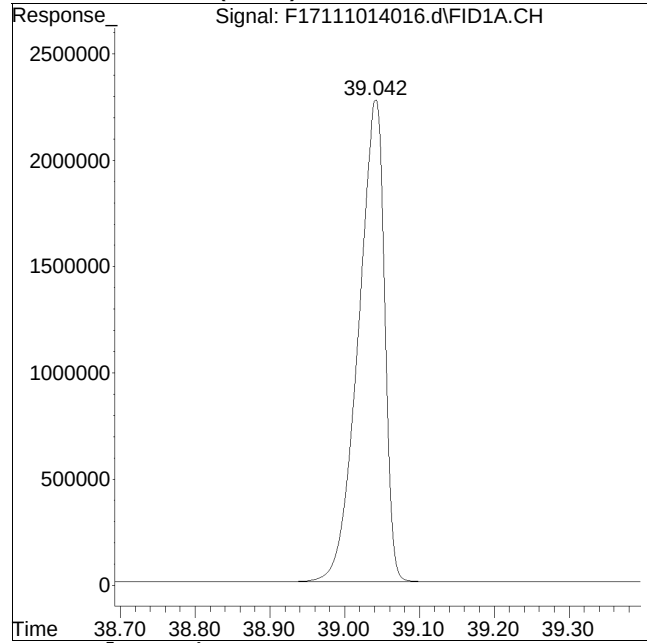
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #27: n-Hexacosane (C26)



Original Peak Response = 55232892



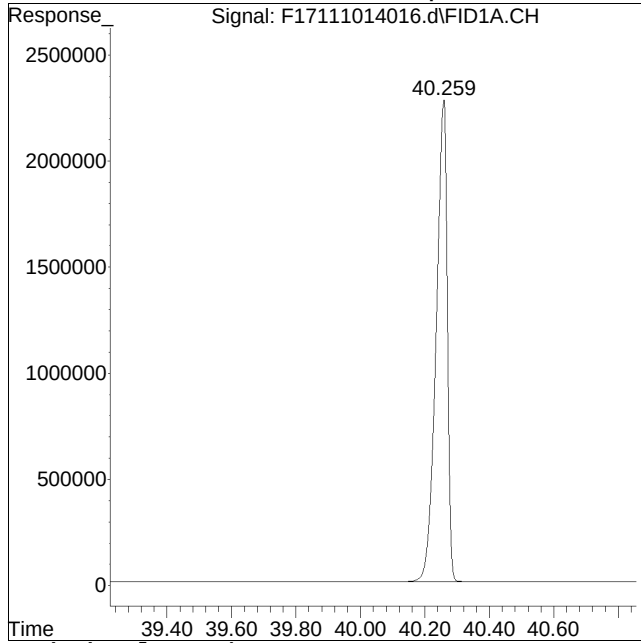
Manual Peak Response = 55246629 M4

M4 = Poor automated baseline construction.

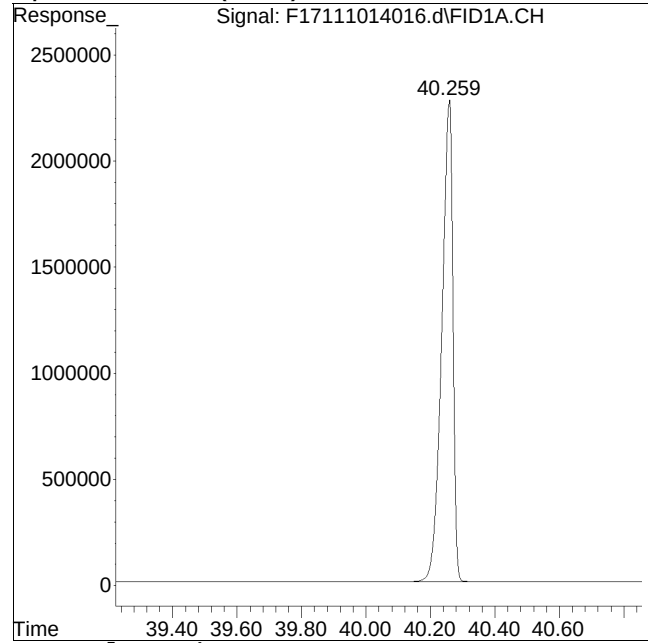
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #28: n-Heptacosane (C27)



Original Peak Response = 54542318



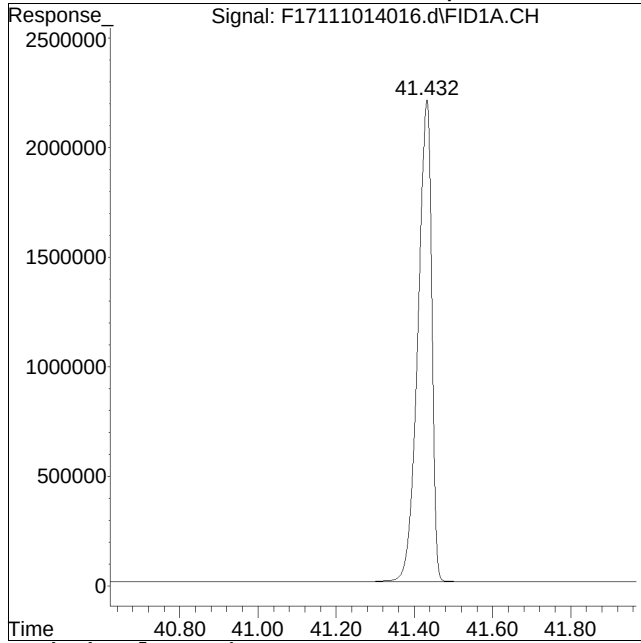
Manual Peak Response = 54568291 M4

M4 = Poor automated baseline construction.

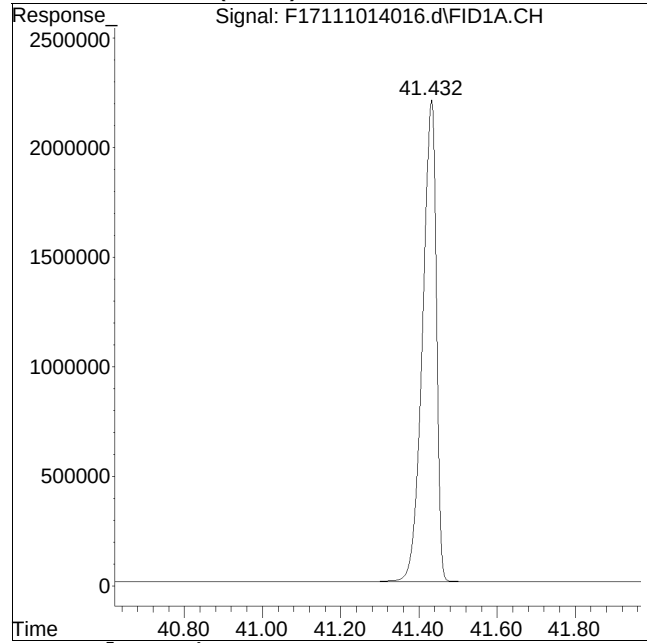
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #29: n-Octacosane (C28)



Original Peak Response = 54299410



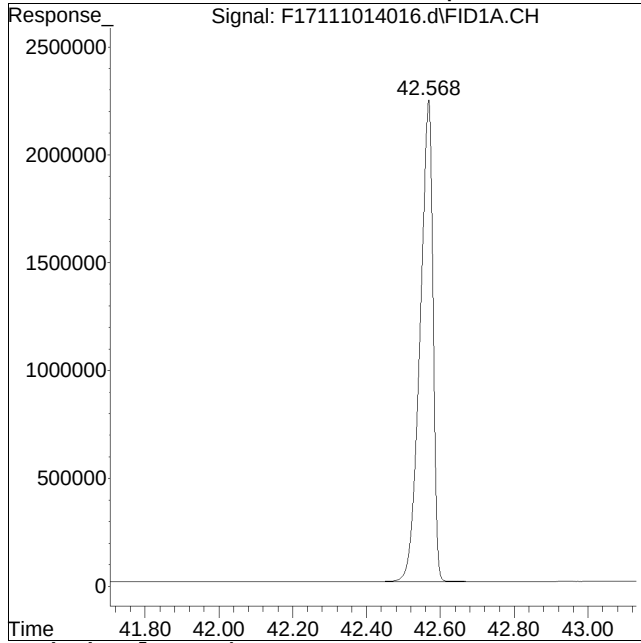
Manual Peak Response = 54246380 M4

M4 = Poor automated baseline construction.

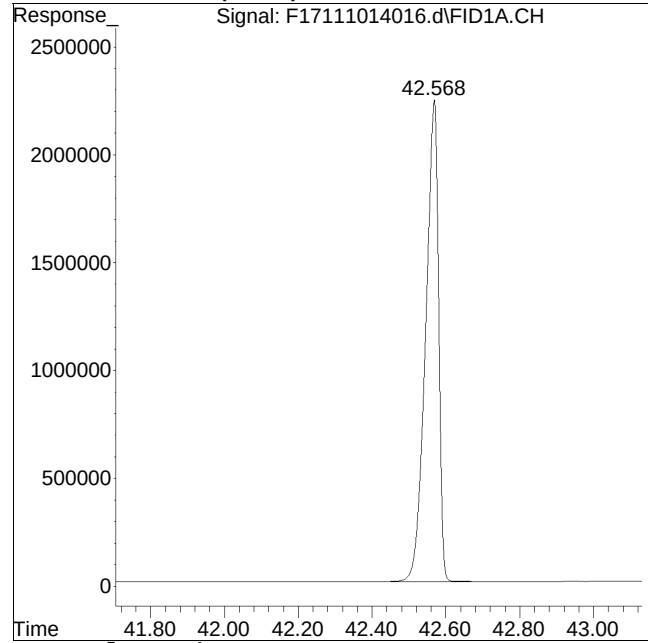
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #30: n-Nonacosane (C29)



Original Peak Response = 54457850



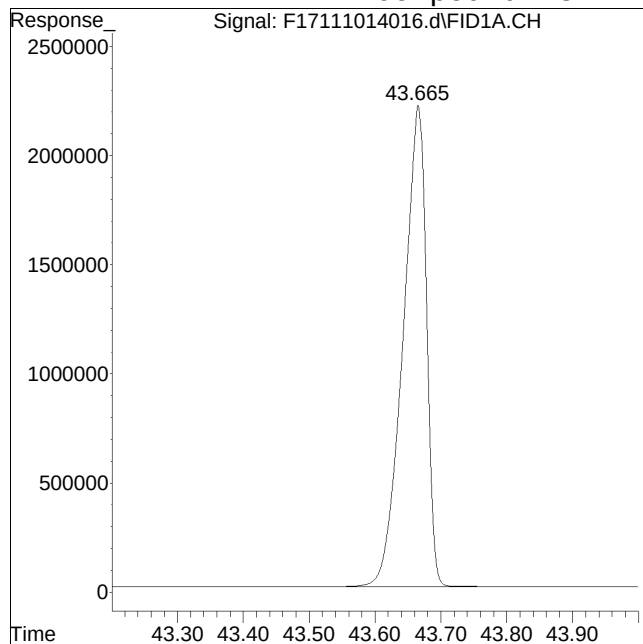
Manual Peak Response = 54437873 M4

M4 = Poor automated baseline construction.

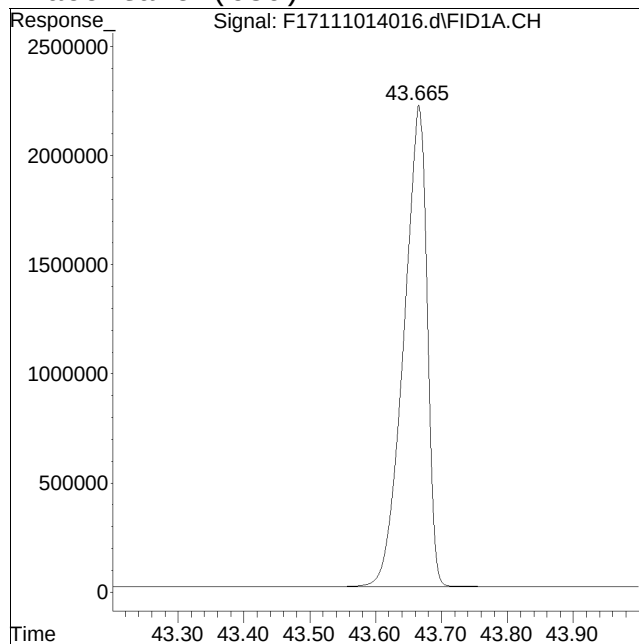
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #31: n-Triacontane (C30)



Original Peak Response = 54374506



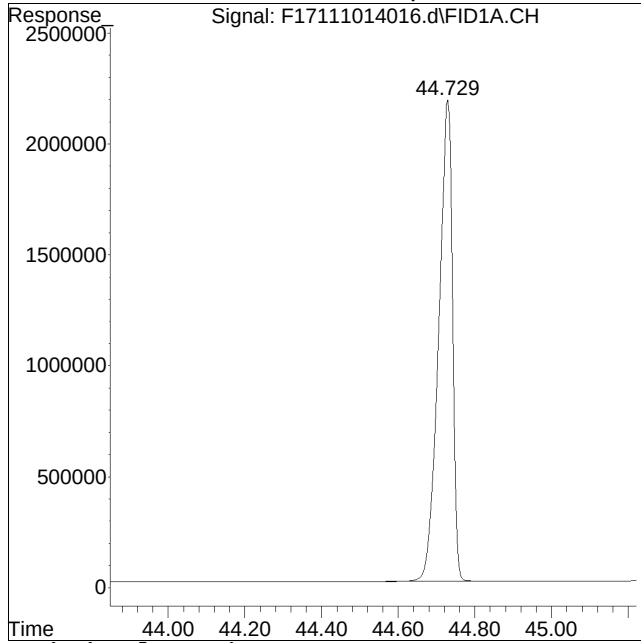
Manual Peak Response = 54410127 M4

M4 = Poor automated baseline construction.

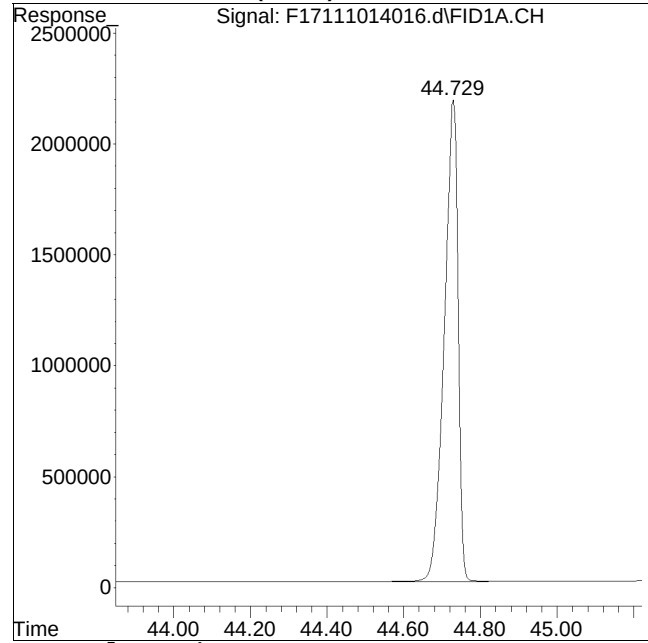
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #32: n-Hentriacontane (C31)



Original Peak Response = 54198024



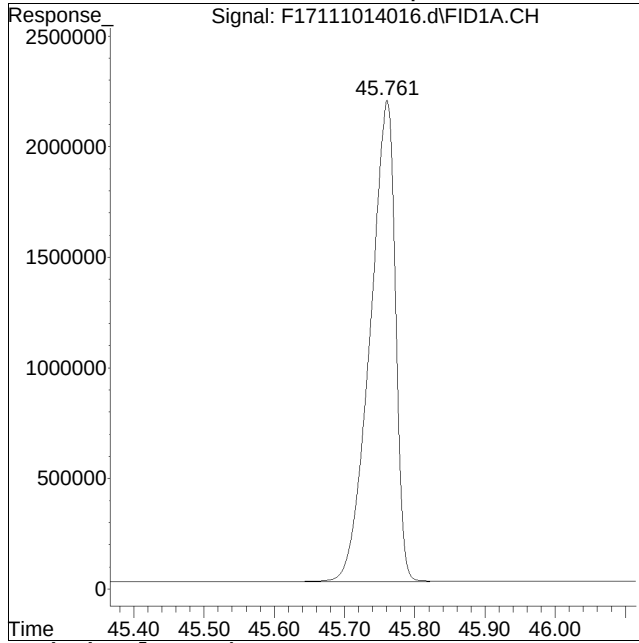
Manual Peak Response = 54264860 M4

M4 = Poor automated baseline construction.

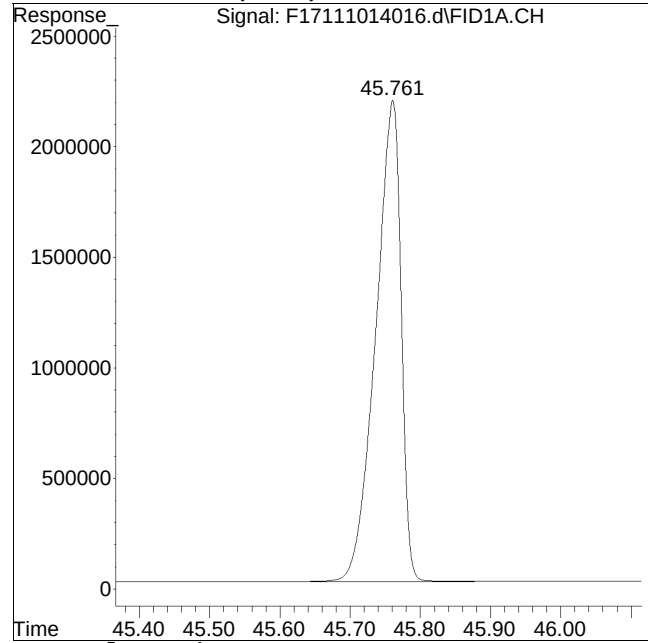
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #33: n-Dotriacontane (C32)



Original Peak Response = 54497181



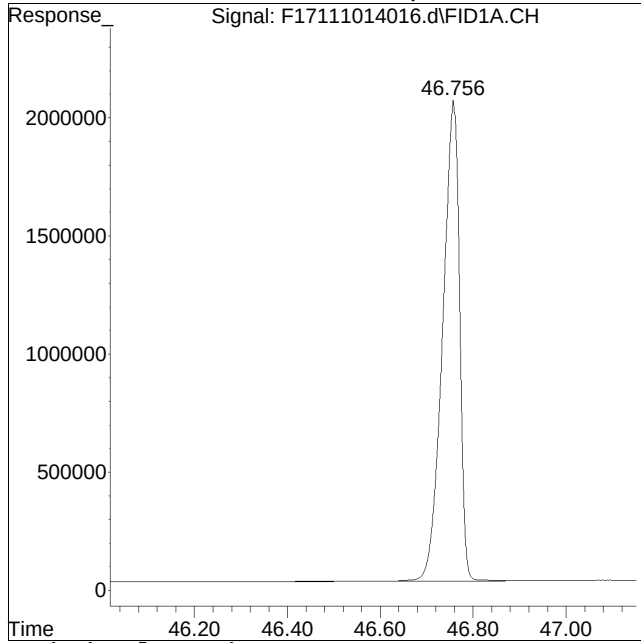
Manual Peak Response = 54592430 M4

M4 = Poor automated baseline construction.

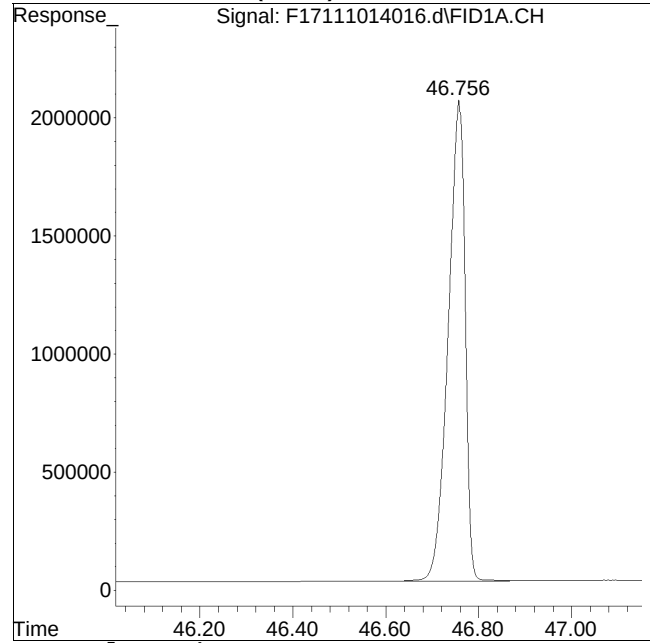
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #34: n-Tritriacontane (C33)



Original Peak Response = 51546038



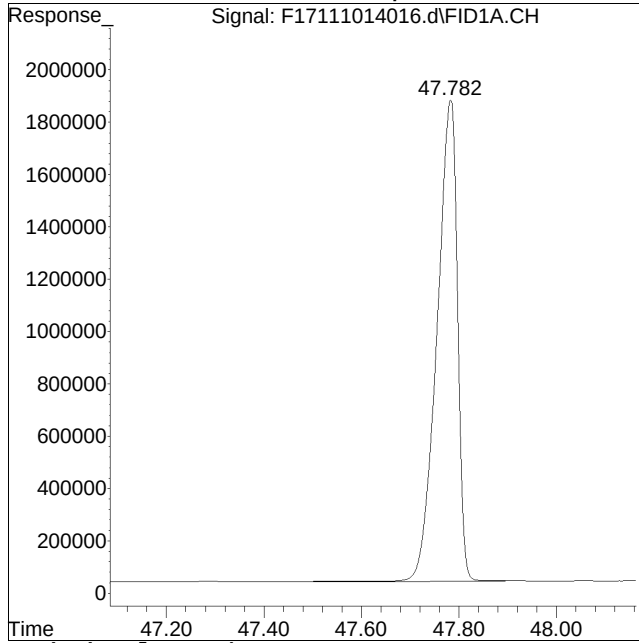
Manual Peak Response = 51478791 M4

M4 = Poor automated baseline construction.

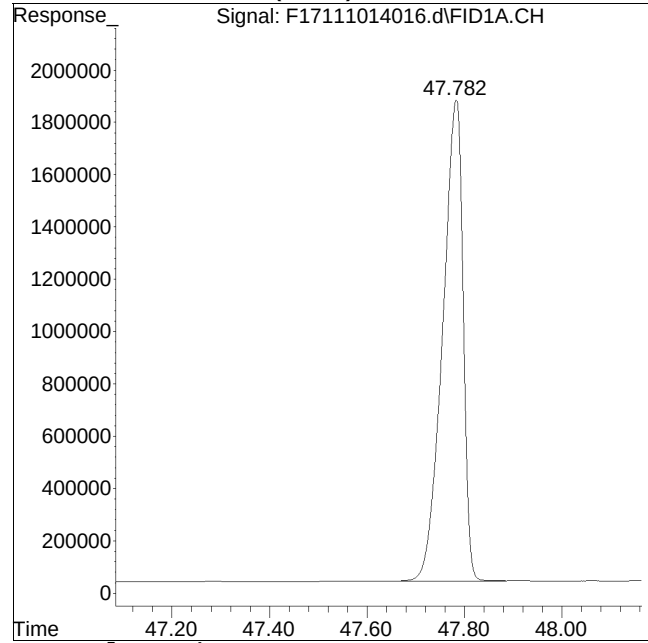
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #35: n-tetratriacontane (C34)



Original Peak Response = 53847701



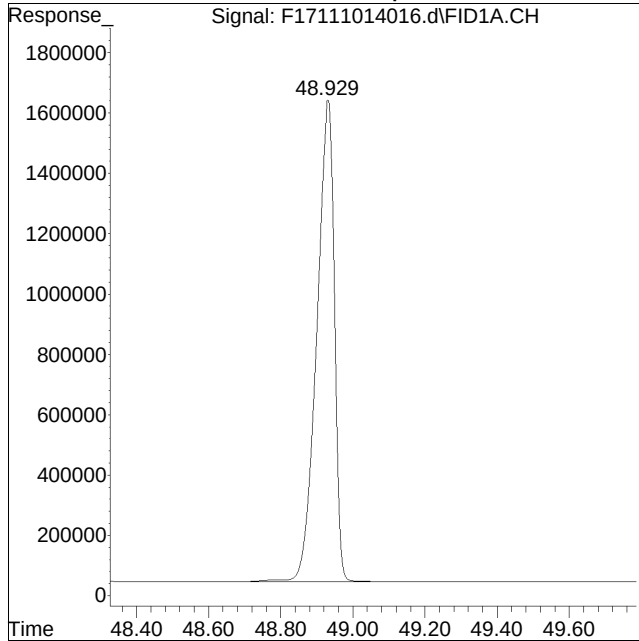
Manual Peak Response = 53603677 M4

M4 = Poor automated baseline construction.

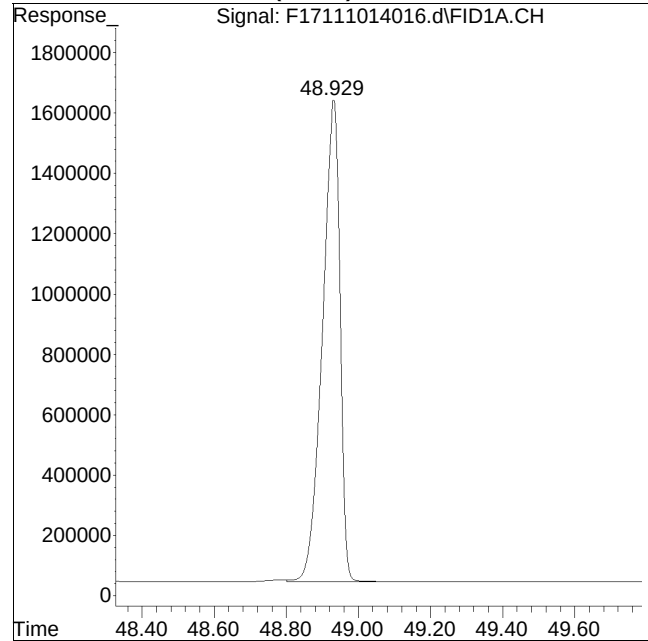
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #36: n-Pentatriacontane (C35)



Original Peak Response = 54222504



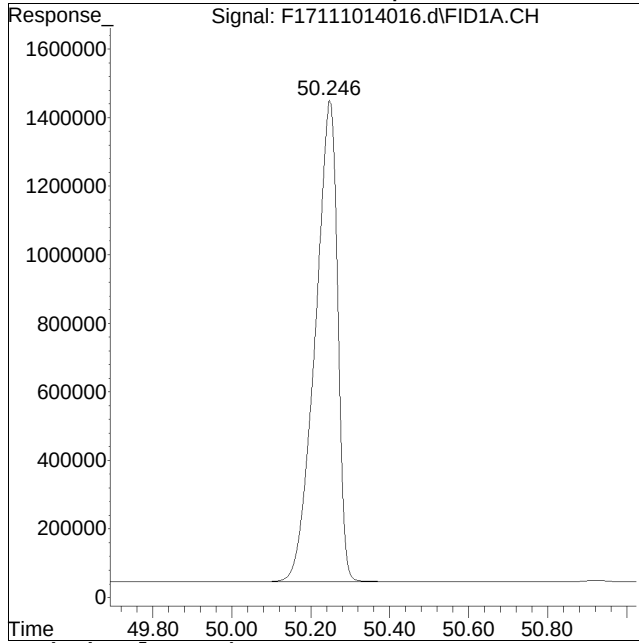
Manual Peak Response = 53899156 M4

M4 = Poor automated baseline construction.

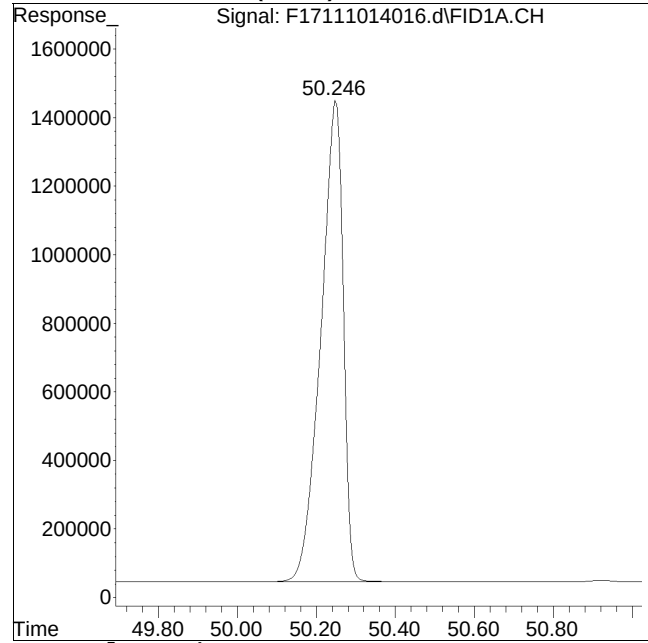
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I17111011403R Quant Date : 11/14/2014 12:19 pm

Compound #37: n-Hexatriacontane (C36)



Original Peak Response = 55467605



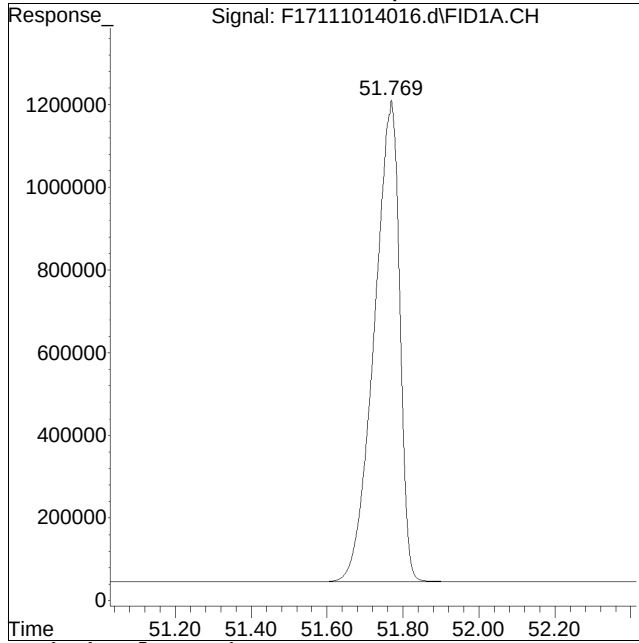
Manual Peak Response = 55334260 M4

M4 = Poor automated baseline construction.

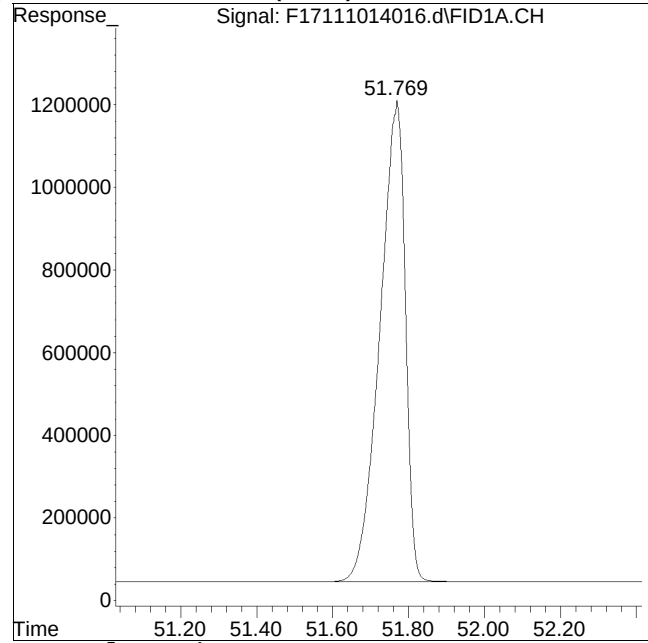
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #38: n-Heptatriacontane (C37)



Original Peak Response = 54107794



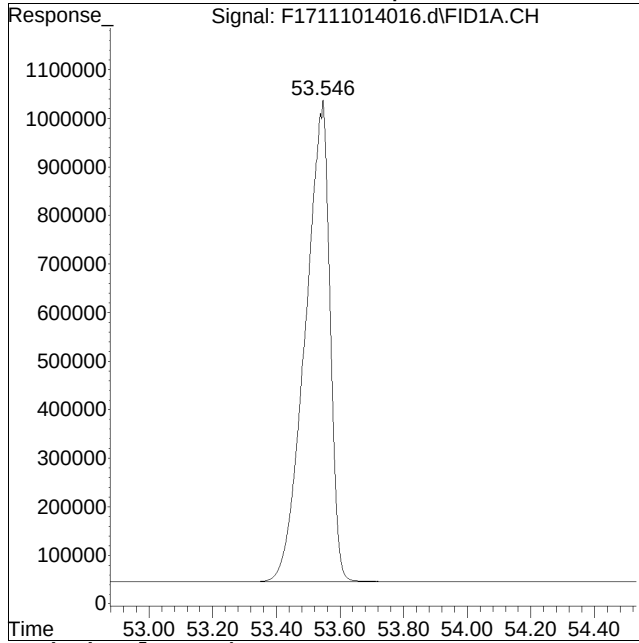
Manual Peak Response = 54162138 M4

M4 = Poor automated baseline construction.

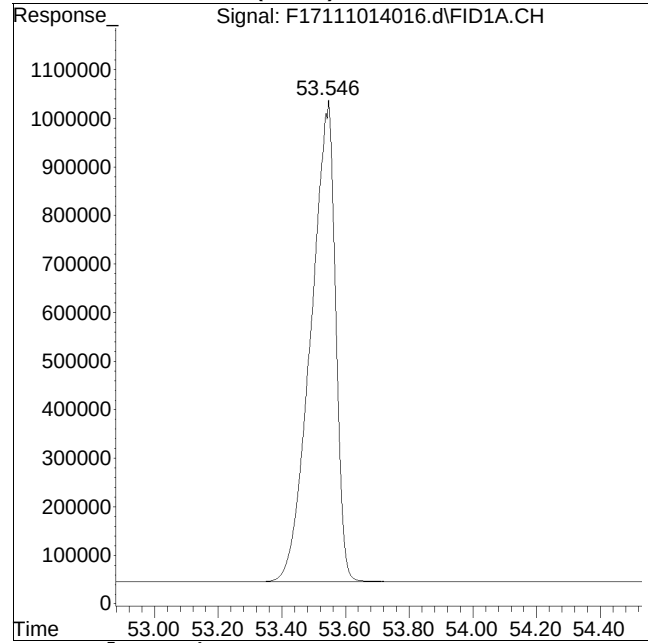
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I17111011403R Quant Date : 11/14/2014 12:19 pm

Compound #39: n-Octatriacontane (C38)



Original Peak Response = 53371314



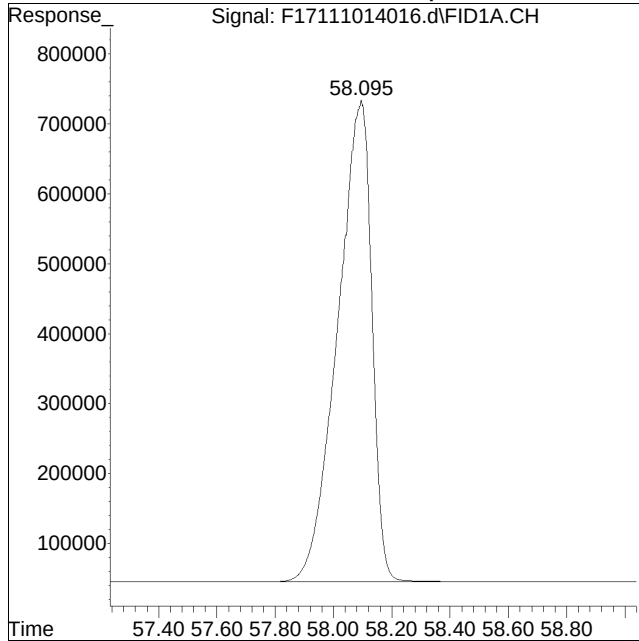
Manual Peak Response = 53323714 M4

M4 = Poor automated baseline construction.

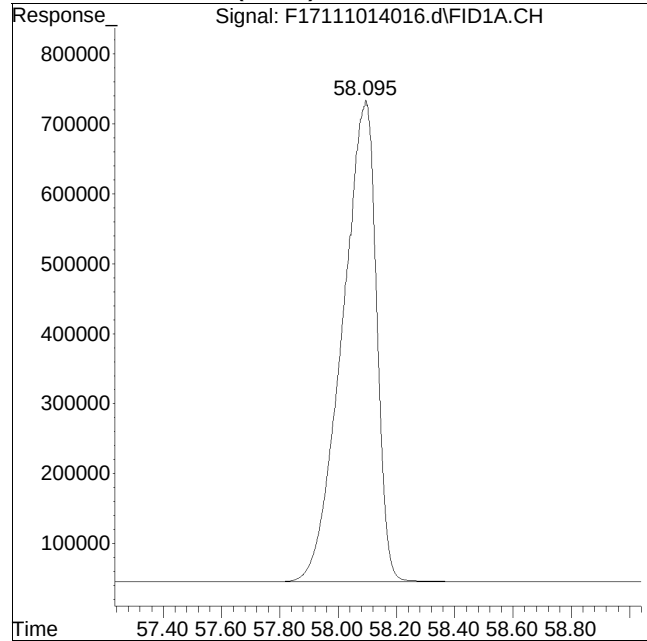
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #41: n-Tetracontane (C40)



Original Peak Response = 56078526



Manual Peak Response = 56122386 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014018.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 11:30 pm
 Operator : FID17:NL
 Sample : I1711011404R
 Misc : WG743851, FRAV25 100ug/mL
 ALS Vial : 9 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:40:38 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.269	52130313	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.271	114237478	97.803	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 195.61%#
24) s	d50-Tetracosane	35.940	93830621	101.798	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 203.60%#
Target Compounds					
2) t	n-Octane (C8)	5.604	89742592	97.156	ug/mL M4
3) t	n-Nonane (C9)	7.800	92546861	95.364	ug/mL M4
4) t	n-Decane (C10)	10.279	95150146	93.429	ug/mL M4
5) t	n-Undecane (C11)	12.793	96504887	96.595	ug/mL M4
6) t	n-Dodecane (C12)	15.224	97813355	97.240	ug/mL M4
7) t	n-Tridecane (C13)	17.534	98128725	97.669	ug/mL M4
9) t	n-Tetradecane (C14)	19.721	99098349	95.153	ug/mL M4
11) t	n-Pentadecane (C15)	21.792	100894959	98.133	ug/mL M4
12) t	n-Hexadecane (C16)	23.753	100542165	97.040	ug/mL M4
14) t	n-Heptadecane (C17)	25.617	101195746	97.156	ug/mL M4
15) t	Pristane	25.729	102363704	98.045	ug/mL M4
16) t	n-Octadecane (C18)	27.389	103494808	99.970	ug/mL M4
17) t	Phytane	27.553	90107646	85.674	ug/mL M4
18) t	n-Nonadecane (C19)	29.080	102722662	99.788	ug/mL M4
20) t	n-Eicosane (C20)	30.691	102338719	98.958	ug/mL M4
21) t	n-Heneicosane (C21)	32.231	103561695	99.007	ug/mL M4
22) t	n-Docosane (C22)	33.709	104611286	99.449	ug/mL M4
23) t	n-Tricosane (C23)	35.129	105634840	99.851	ug/mL M4
25) t	n-Tetracosane (C24)	36.493	106336757	100.401	ug/mL M4
26) t	n-Pentacosane (C25)	37.800	105611101	99.378	ug/mL M4
27) t	n-Hexacosane (C26)	39.064	108152182	99.699	ug/mL M4
28) t	n-Heptacosane (C27)	40.282	107262728	99.625	ug/mL M4
29) t	n-Octacosane (C28)	41.454	107073579	99.140	ug/mL M4
30) t	n-Nonacosane (C29)	42.593	108209907	99.283	ug/mL M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014018.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 11:30 pm
 Operator : FID17:NL
 Sample : I1711011404R
 Misc : WG743851, FRAV25 100ug/mL
 ALS Vial : 9 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:40:38 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc	Units
31) t	n-Triacontane (C30)	43.692	108739389	99.436	ug/mL M4
32) t	n-Hentriacontane (C31)	44.756	109245613	99.137	ug/mL M4
33) t	n-Dotriacontane (C32)	45.786	110550982	100.911	ug/mL M4
34) t	n-Tritriacontane (C33)	46.783	104844271	98.522	ug/mL M4
35) t	n-tetratriacontane (C34)	47.813	110027219	97.418	ug/mL M4
36) t	n-Pentatriacontane (C35)	48.968	111133176	98.902	ug/mL M4
37) t	n-Hexatriacontane (C36)	50.292	114629087	94.216	ug/mL M4
38) t	n-Heptatriacontane (C37)	51.822	112472231	99.077	ug/mL M4
39) t	n-Octatriacontane (C38)	53.607	110748873	97.628	ug/mL M4
41) t	n-Tetracontane (C40)	58.178	116119008	106.397	ug/mL M4

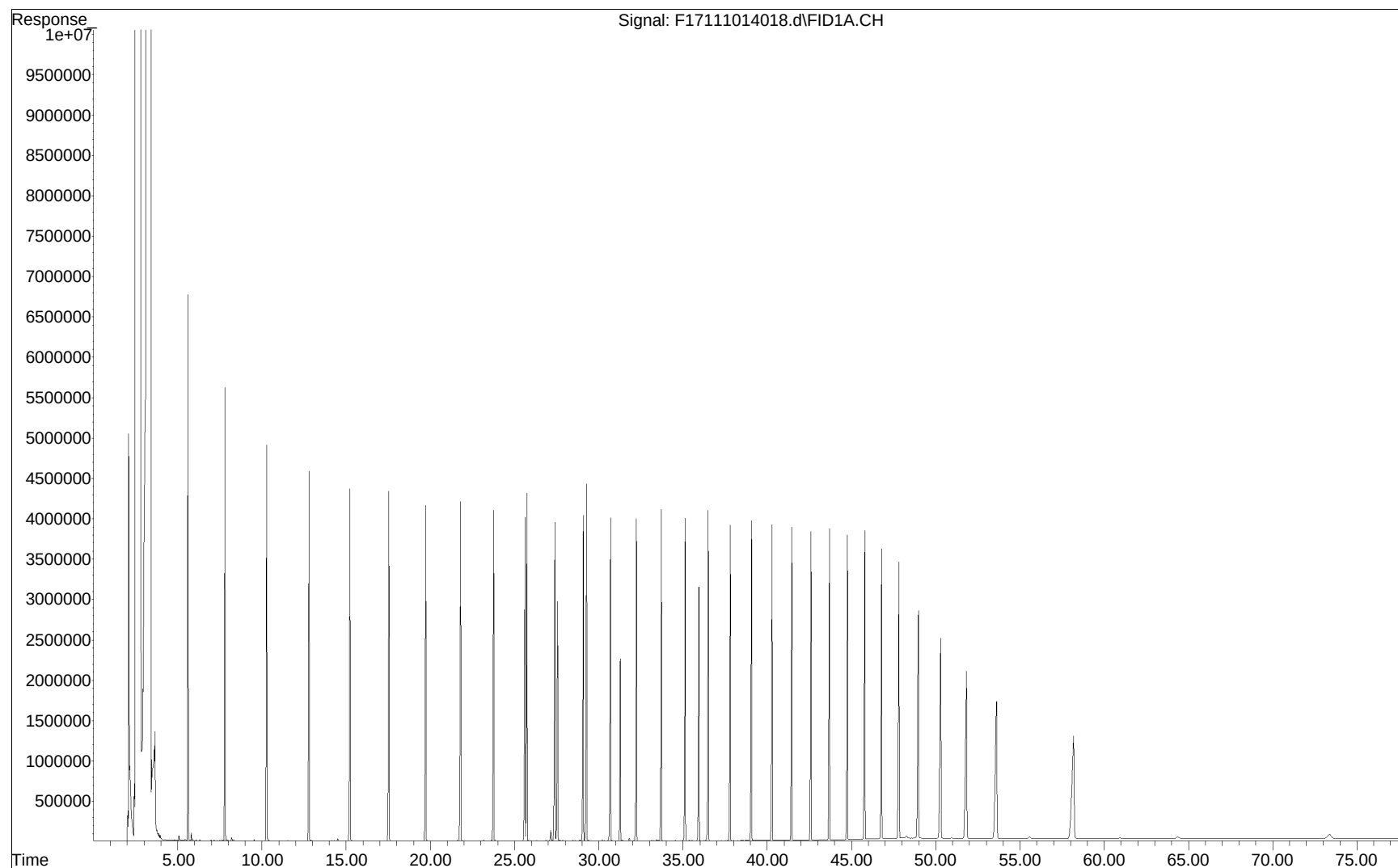
SemiQuant Compounds - Not Calibrated on this Instrument

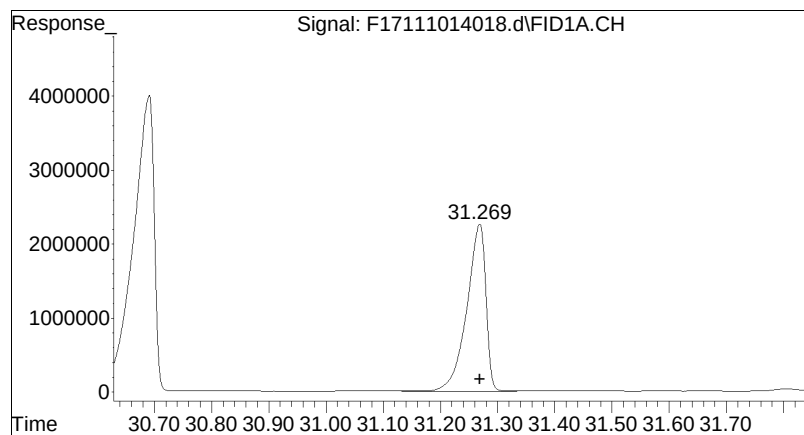
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

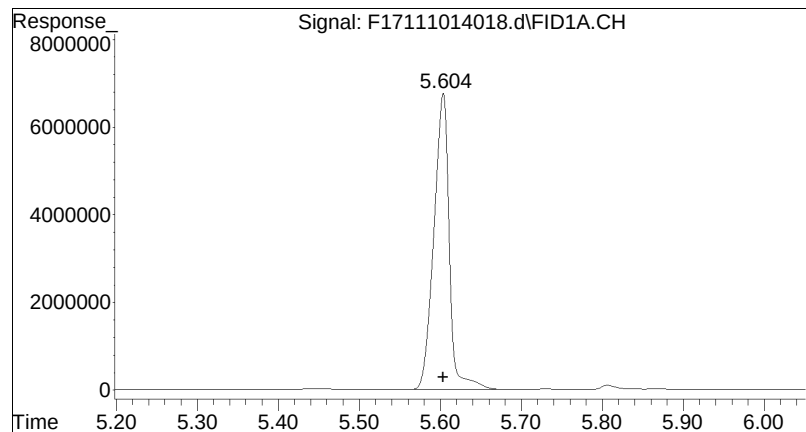
File : 0:\Forensics\Data\FID17\2014\NOV\NOV10\F17111014018.d
Operator : FID17:NL
Acquired : 10 Nov 2014 11:30 pm using AcqMethod FID17.M
Sample Name: I1711011404R
Instrument: FID17
Misc Info : WG743851, FRAV25 100ug/mL
Vial Number: 9
CurrentMeth: 0:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M





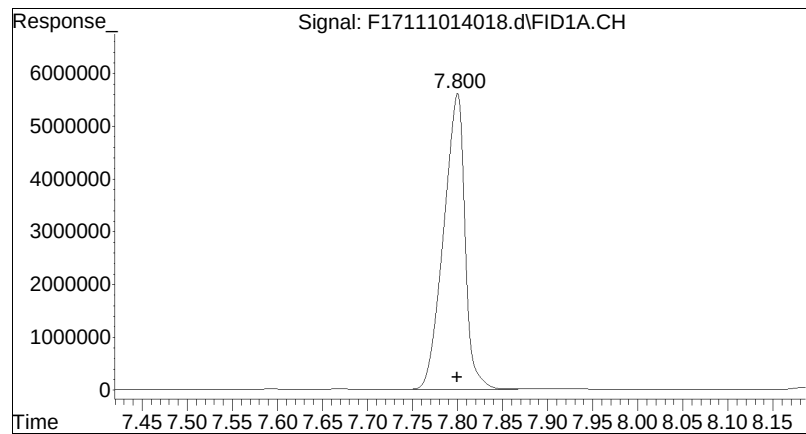
#1 5-alpha-androstane

R.T.: 31.269 min
Delta R.T.: 0.000 min
Response: 52130313
Conc: 50.00 ug/mL M4



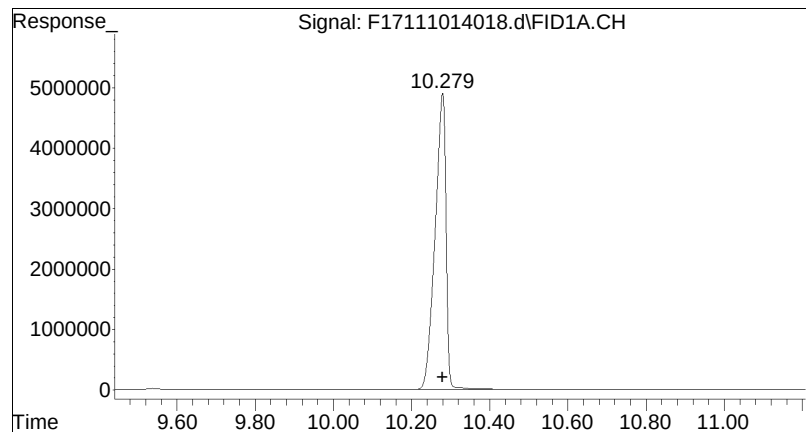
#2 n-Octane (C8)

R.T.: 5.604 min
Delta R.T.: 0.000 min
Response: 89742592
Conc: 97.16 ug/mL M4



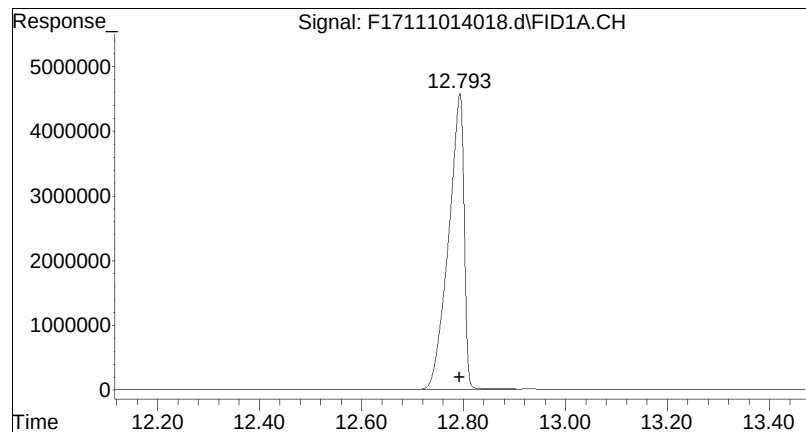
#3 n-Nonane (C9)

R.T.: 7.800 min
Delta R.T.: 0.000 min
Response: 92546861
Conc: 95.36 ug/mL M4



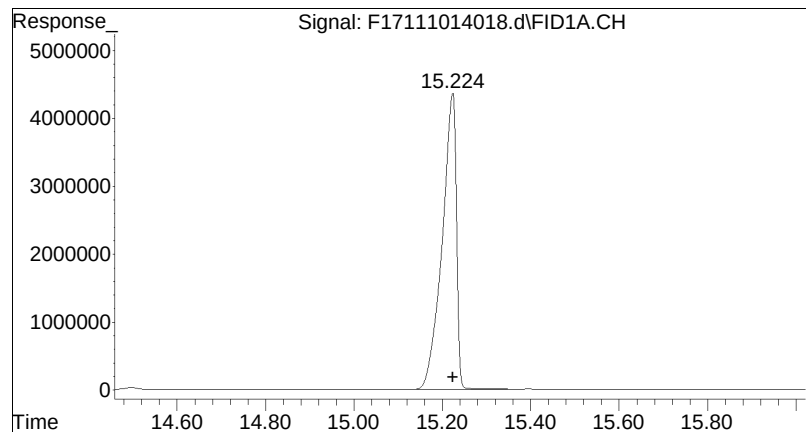
#4 n-Decane (C10)

R.T.: 10.279 min
Delta R.T.: 0.000 min
Response: 95150146
Conc: 93.43 ug/mL M4



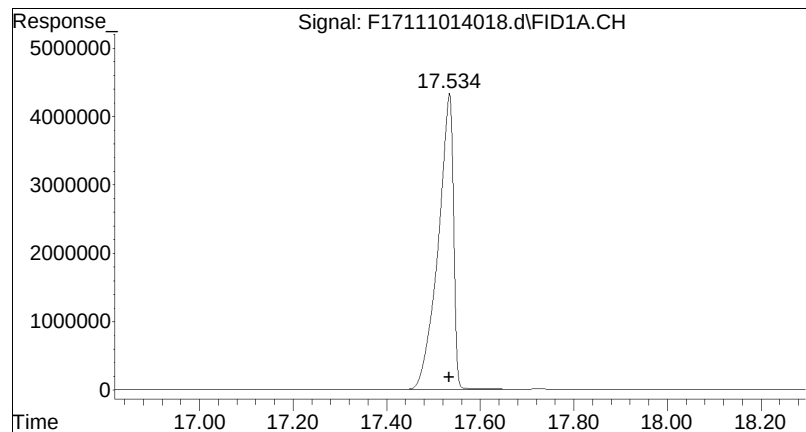
#5 n-Undecane (C11)

R.T.: 12.793 min
Delta R.T.: 0.000 min
Response: 96504887
Conc: 96.59 ug/mL M4



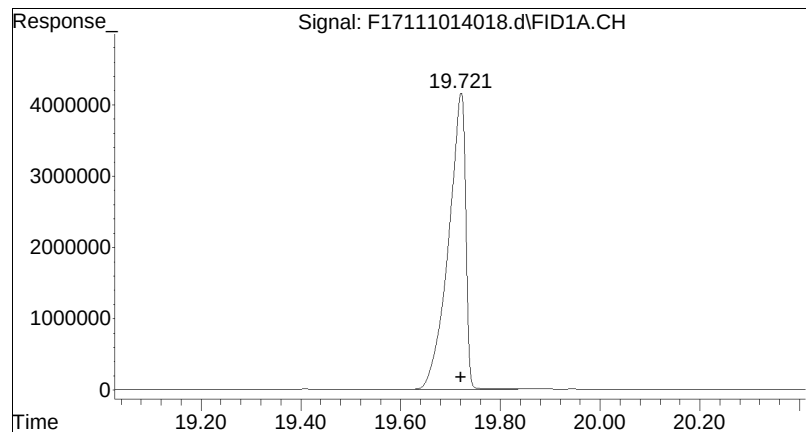
#6 n-Dodecane (C12)

R.T.: 15.224 min
Delta R.T.: 0.000 min
Response: 97813355
Conc: 97.24 ug/mL M4



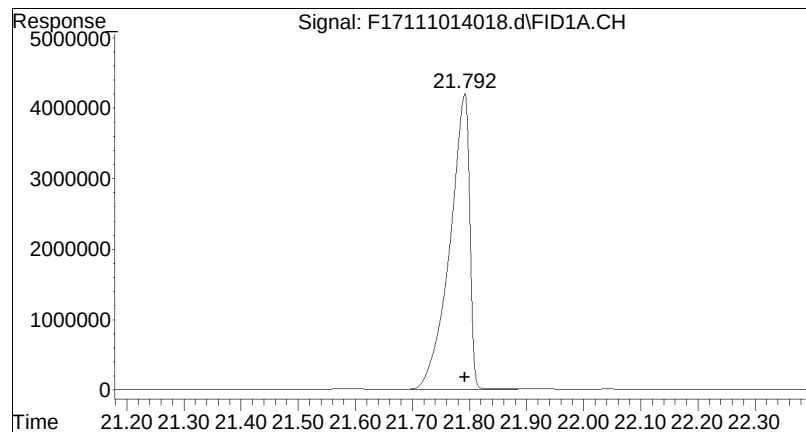
#7 n-Tridecane (C13)

R.T.: 17.534 min
Delta R.T.: 0.000 min
Response: 98128725
Conc: 97.67 ug/mL M4



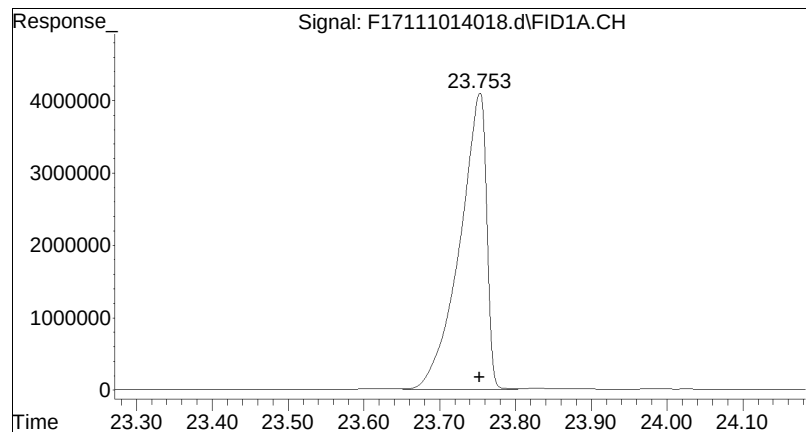
#9 n-Tetradecane (C14)

R.T.: 19.721 min
Delta R.T.: 0.000 min
Response: 99098349
Conc: 95.15 ug/mL M4



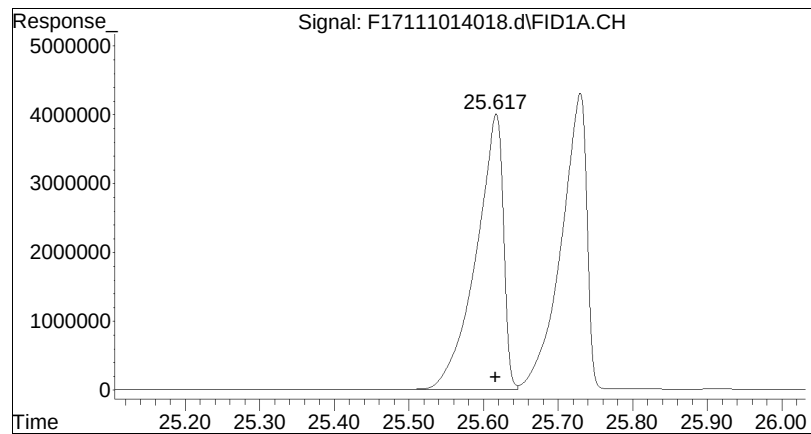
#11 n-Pentadecane (C15)

R.T.: 21.792 min
Delta R.T.: 0.000 min
Response: 100894959
Conc: 98.13 ug/mL M4



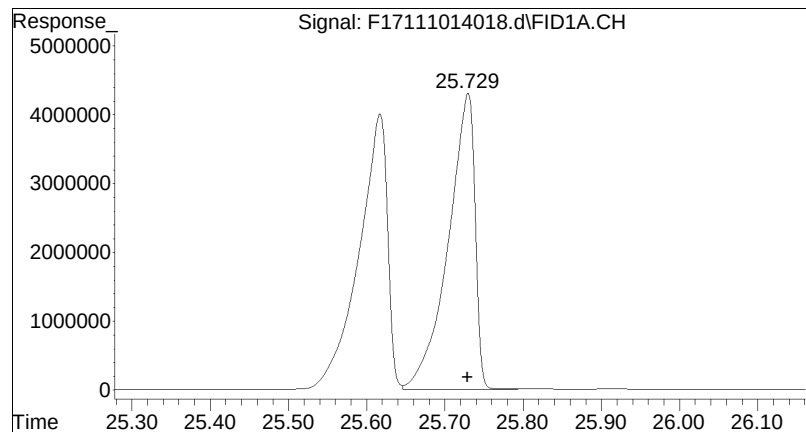
#12 n-Hexadecane (C16)

R.T.: 23.753 min
Delta R.T.: 0.000 min
Response: 100542165
Conc: 97.04 ug/mL M4



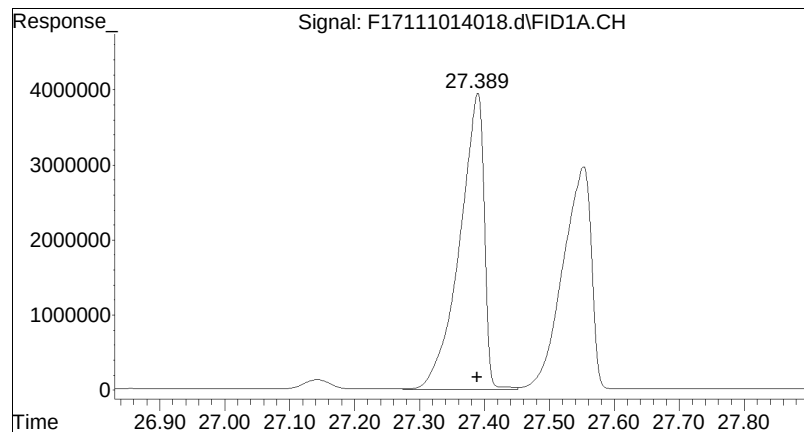
#14 n-Heptadecane (C17)

R.T.: 25.617 min
Delta R.T.: 0.000 min
Response: 101195746
Conc: 97.16 ug/mL M4



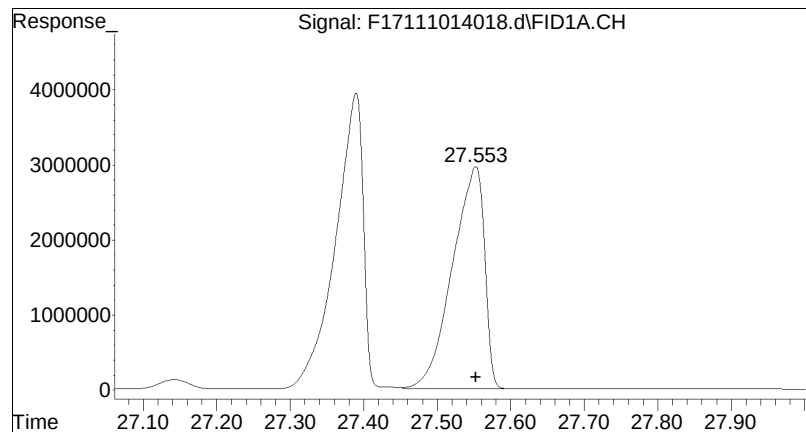
#15 Pristane

R.T.: 25.729 min
Delta R.T.: 0.000 min
Response: 102363704
Conc: 98.05 ug/mL M4



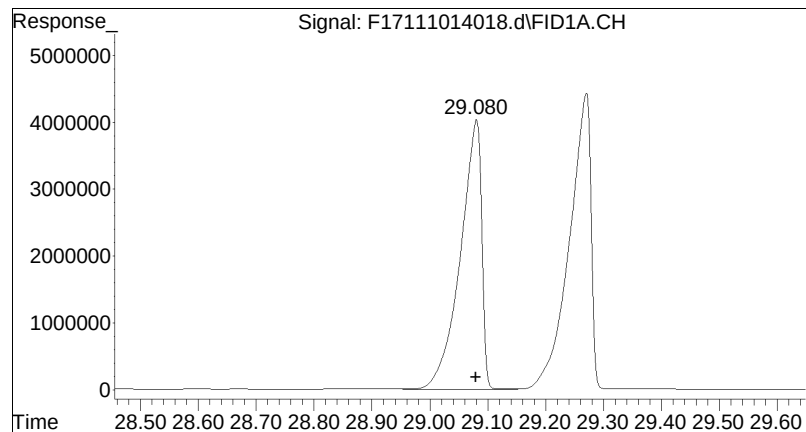
#16 n-Octadecane (C18)

R.T.: 27.389 min
Delta R.T.: 0.000 min
Response: 103494808
Conc: 99.97 ug/mL M4



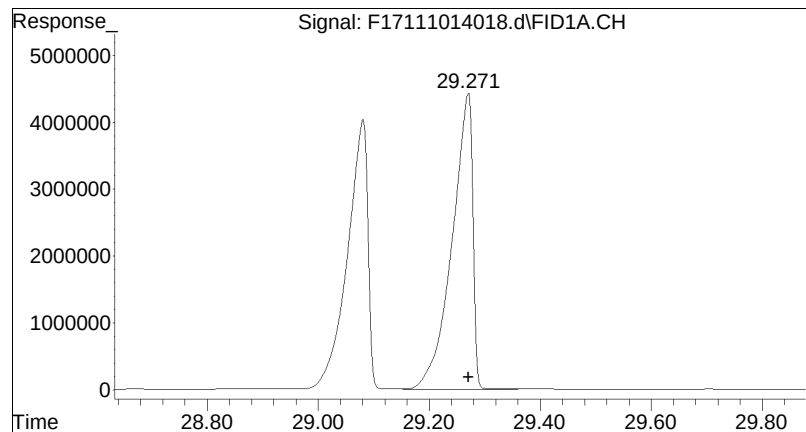
#17 Phytane

R.T.: 27.553 min
Delta R.T.: 0.000 min
Response: 90107646
Conc: 85.67 ug/mL M4



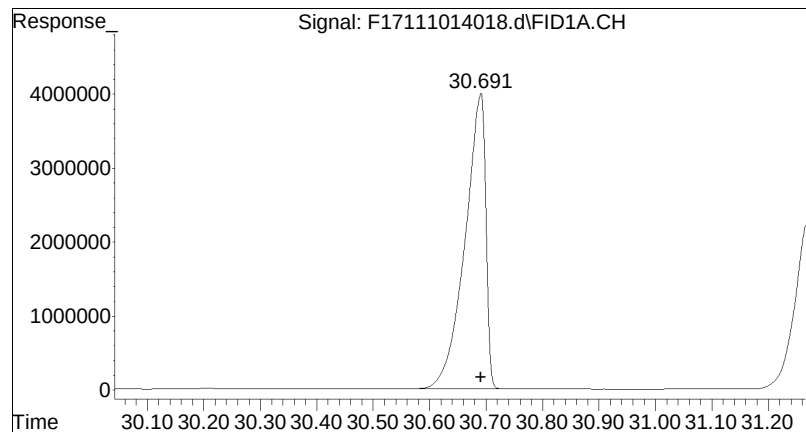
#18 n-Nonadecane (C19)

R.T.: 29.080 min
Delta R.T.: 0.000 min
Response: 102722662
Conc: 99.79 ug/mL M4



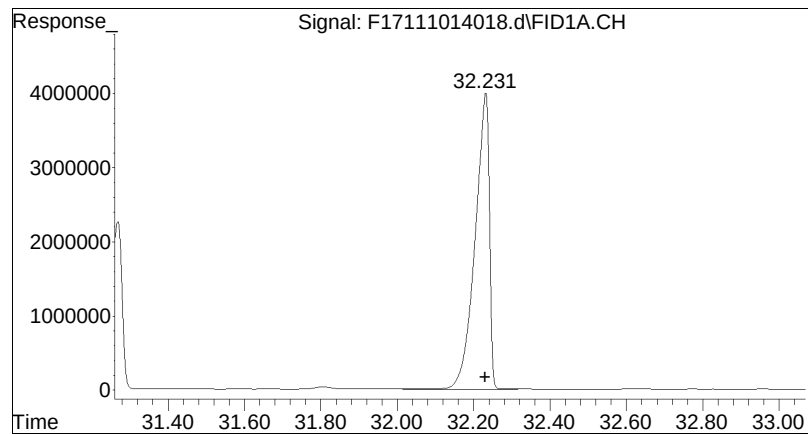
#19 ortho-terphenyl

R.T.: 29.271 min
Delta R.T.: 0.000 min
Response: 114237478
Conc: 97.80 ug/mL M4



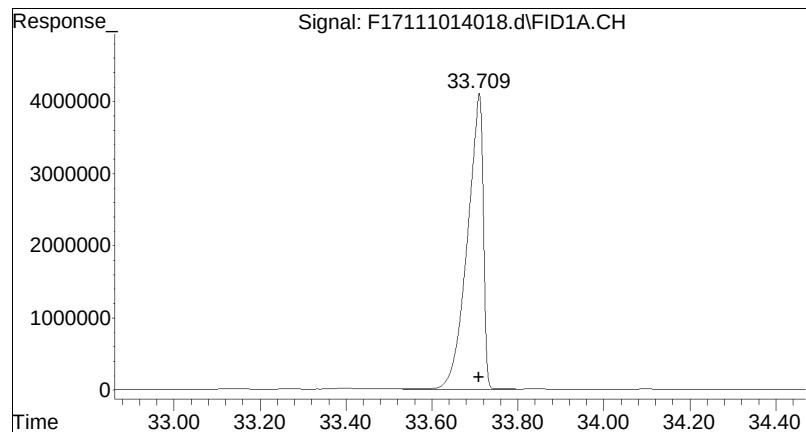
#20 n-Eicosane (C20)

R.T.: 30.691 min
Delta R.T.: 0.000 min
Response: 102338719
Conc: 98.96 ug/mL M4



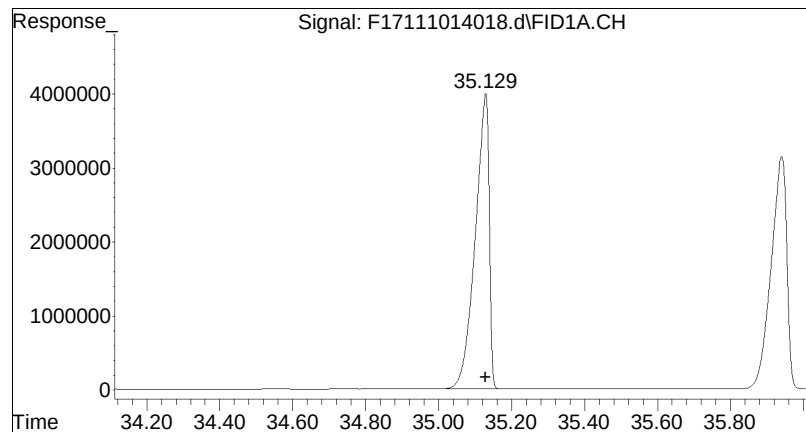
#21 n-Heneicosane (C21)

R.T.: 32.231 min
Delta R.T.: 0.000 min
Response: 103561695
Conc: 99.01 ug/mL M4



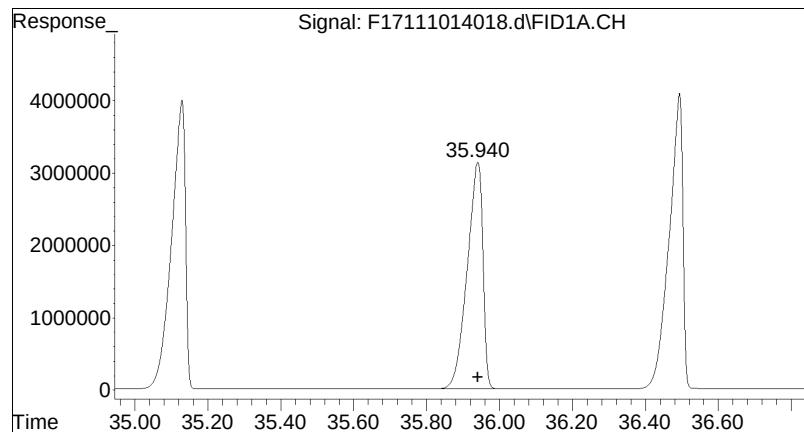
#22 n-Docosane (C22)

R.T.: 33.709 min
Delta R.T.: 0.000 min
Response: 104611286
Conc: 99.45 ug/mL M4



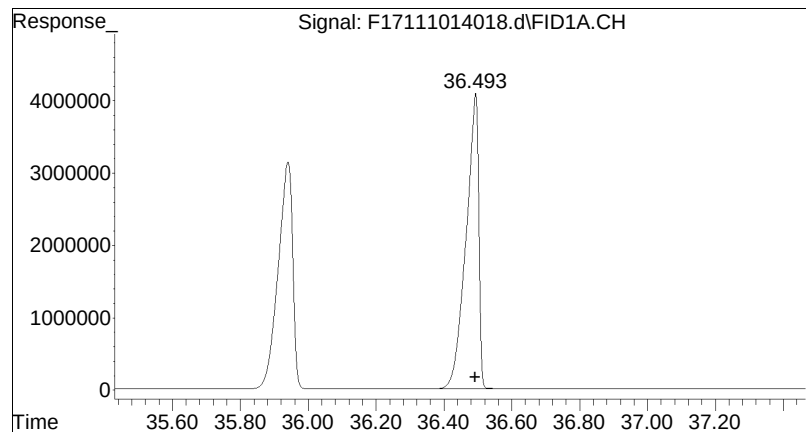
#23 n-Tricosane (C23)

R.T.: 35.129 min
Delta R.T.: 0.000 min
Response: 105634840
Conc: 99.85 ug/mL M4



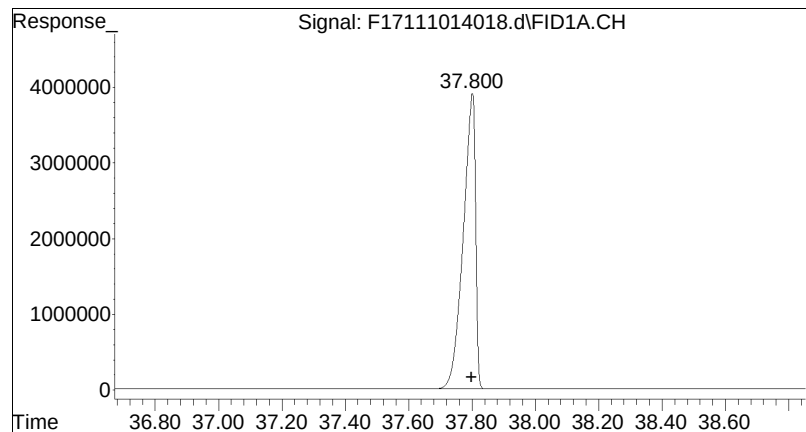
#24 d50-Tetracosane

R.T.: 35.940 min
Delta R.T.: 0.000 min
Response: 93830621
Conc: 101.80 ug/mL M4



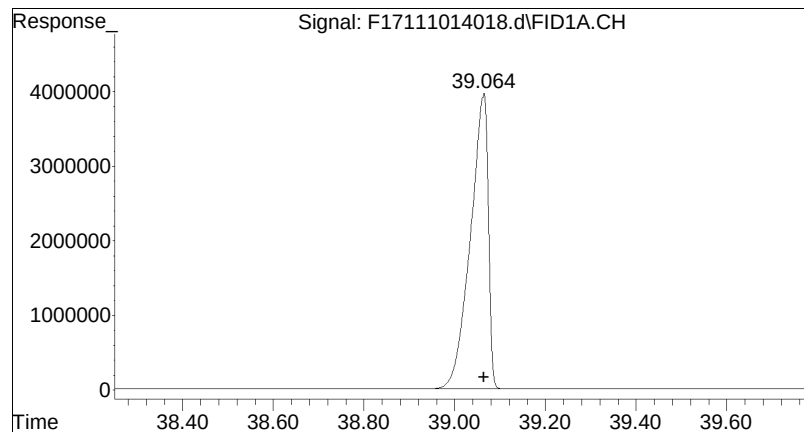
#25 n-Tetracosane (C24)

R.T.: 36.493 min
Delta R.T.: 0.000 min
Response: 106336757
Conc: 100.40 ug/mL M4



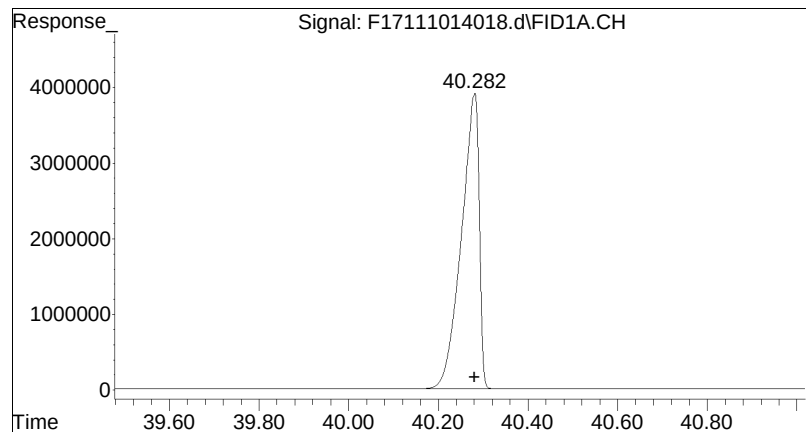
#26 n-Pentacosane (C25)

R.T.: 37.800 min
Delta R.T.: 0.000 min
Response: 105611101
Conc: 99.38 ug/mL M4



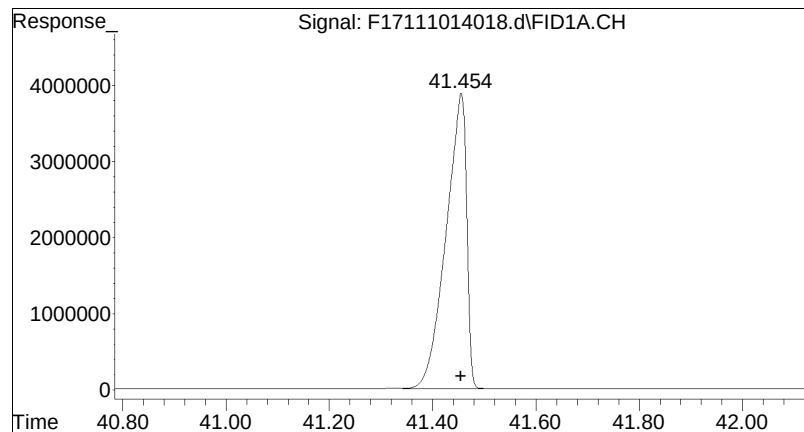
#27 n-Hexacosane (C26)

R.T.: 39.064 min
Delta R.T.: 0.000 min
Response: 108152182
Conc: 99.70 ug/mL M4



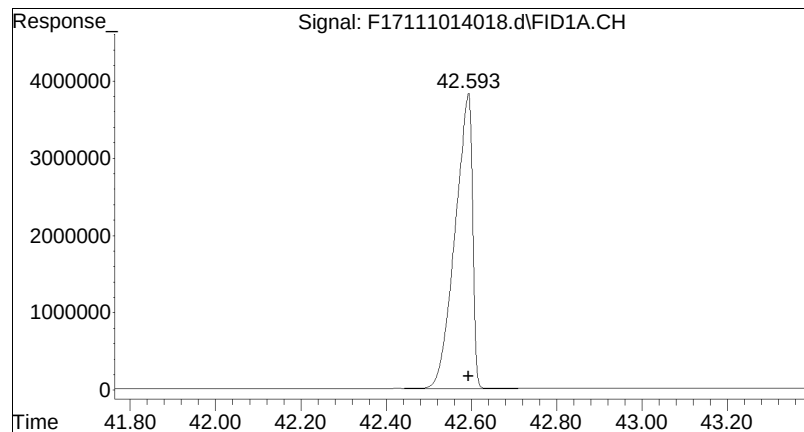
#28 n-Heptacosane (C27)

R.T.: 40.282 min
Delta R.T.: 0.000 min
Response: 107262728
Conc: 99.62 ug/mL M4



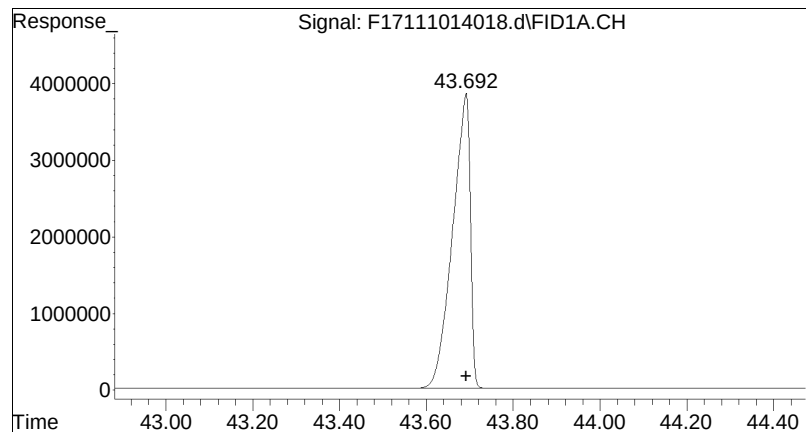
#29 n-Octacosane (C28)

R.T.: 41.454 min
Delta R.T.: 0.000 min
Response: 107073579
Conc: 99.14 ug/mL M4



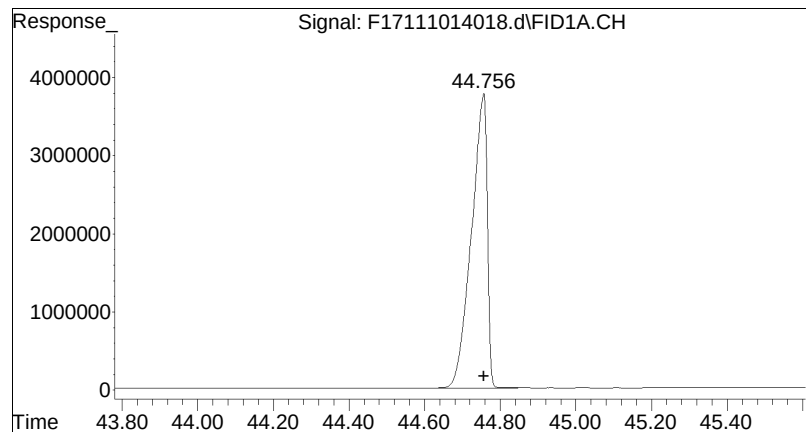
#30 n-Nonacosane (C29)

R.T.: 42.593 min
Delta R.T.: 0.000 min
Response: 108209907
Conc: 99.28 ug/mL M4



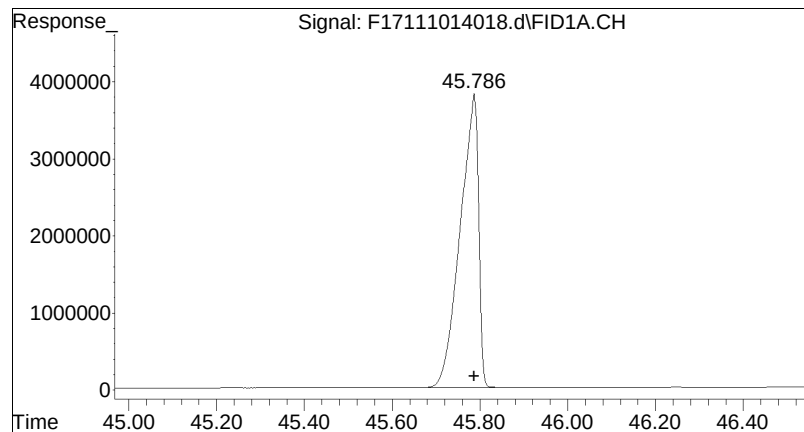
#31 n-Triacontane (C30)

R.T.: 43.692 min
Delta R.T.: 0.000 min
Response: 108739389
Conc: 99.44 ug/mL M4



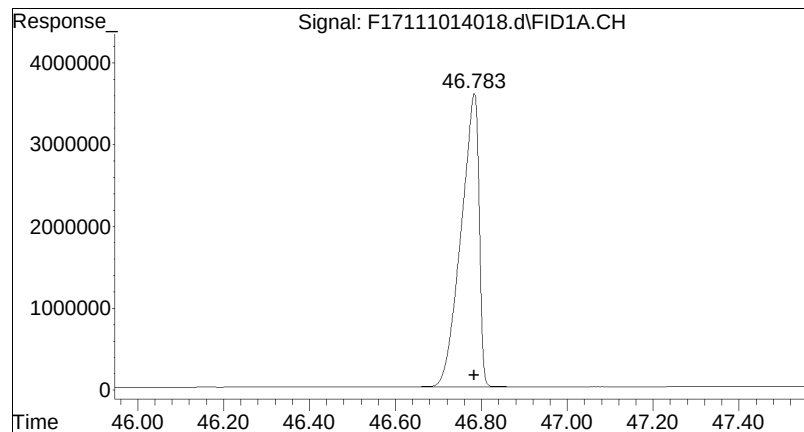
#32 n-Hentriacontane (C31)

R.T.: 44.756 min
Delta R.T.: 0.000 min
Response: 109245613
Conc: 99.14 ug/mL M4



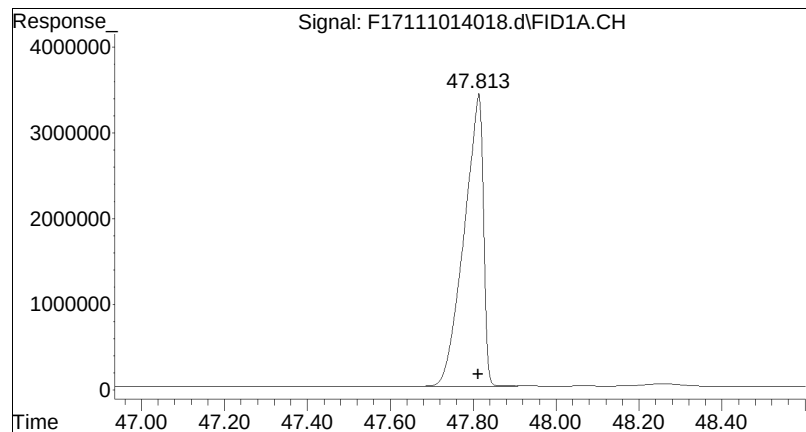
#33 n-Dotriacontane (C32)

R.T.: 45.786 min
Delta R.T.: 0.000 min
Response: 110550982
Conc: 100.91 ug/mL M4



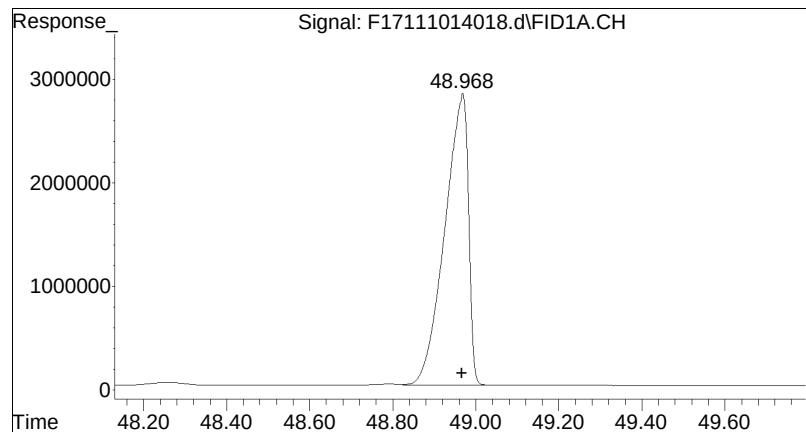
#34 n-Tritriacontane (C33)

R.T.: 46.783 min
Delta R.T.: 0.000 min
Response: 104844271
Conc: 98.52 ug/mL M4



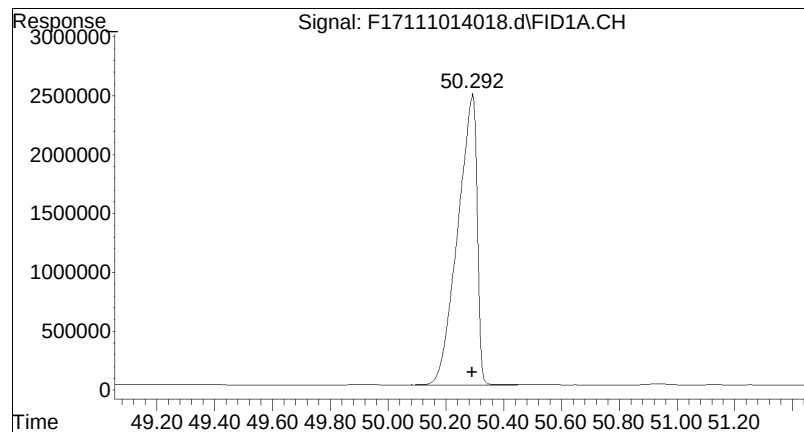
#35 n-tetratriacontane (C34)

R.T.: 47.813 min
Delta R.T.: 0.000 min
Response: 110027219
Conc: 97.42 ug/mL M4



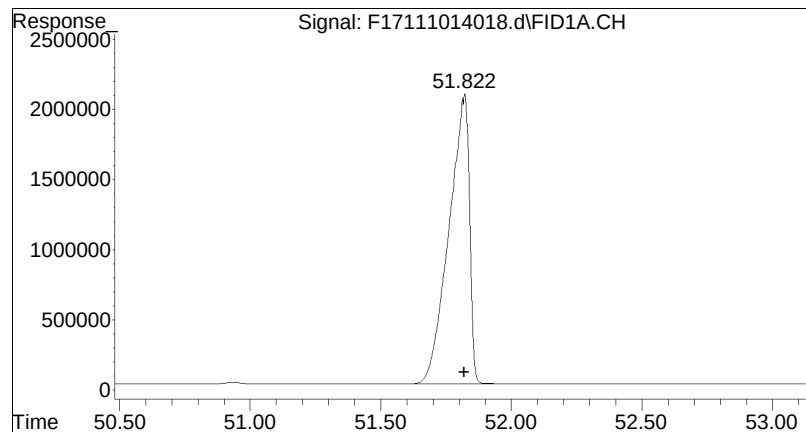
#36 n-Pentatriacontane (C35)

R.T.: 48.968 min
Delta R.T.: 0.000 min
Response: 111133176
Conc: 98.90 ug/mL M4



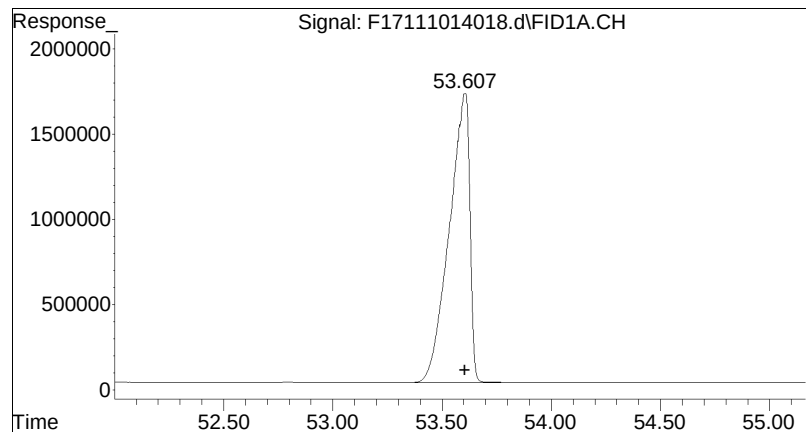
#37 n-Hexatriacontane (C36)

R.T.: 50.292 min
Delta R.T.: 0.000 min
Response: 114629087
Conc: 94.22 ug/mL M4



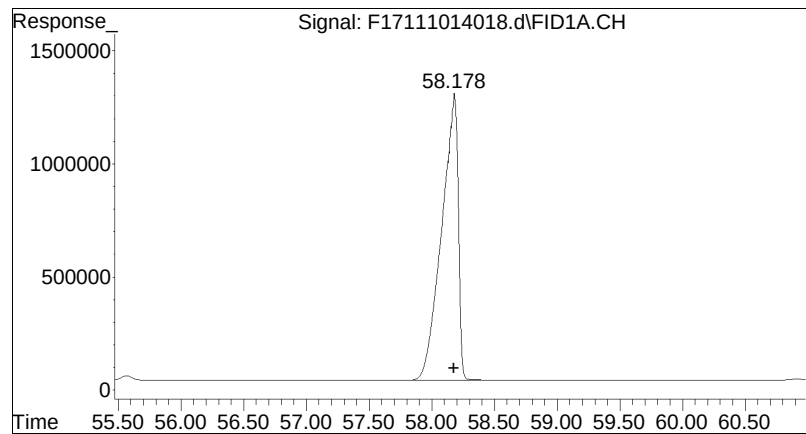
#38 n-Heptatriacontane (C37)

R.T.: 51.822 min
Delta R.T.: 0.000 min
Response: 112472231
Conc: 99.08 ug/mL M4



#39 n-Octatriacontane (C38)

R.T.: 53.607 min
Delta R.T.: 0.000 min
Response: 110748873
Conc: 97.63 ug/mL M4



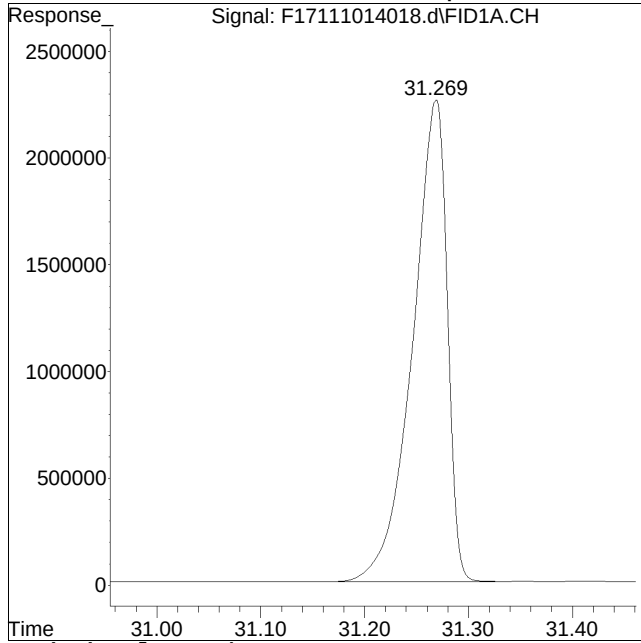
#41 n-Tetracontane (C40)

R.T.: 58.178 min
Delta R.T.: 0.000 min
Response: 116119008
Conc: 106.40 ug/mL M4

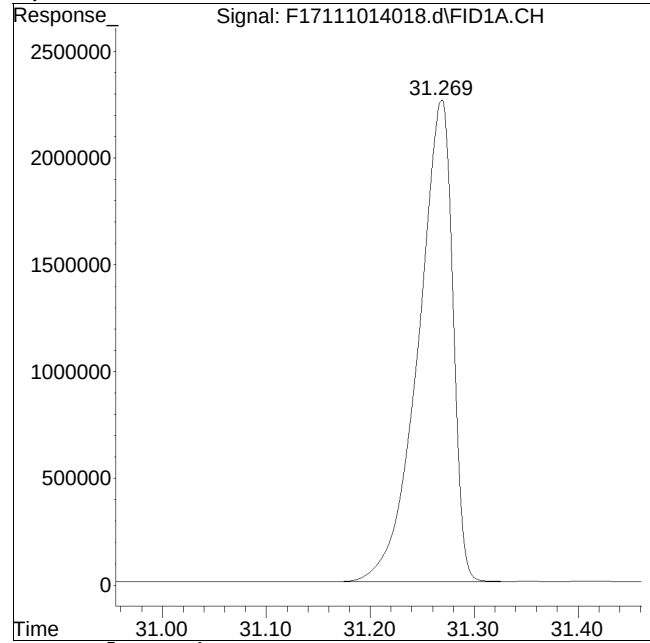
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #1: 5-alpha-androstane



Original Peak Response = 52114626



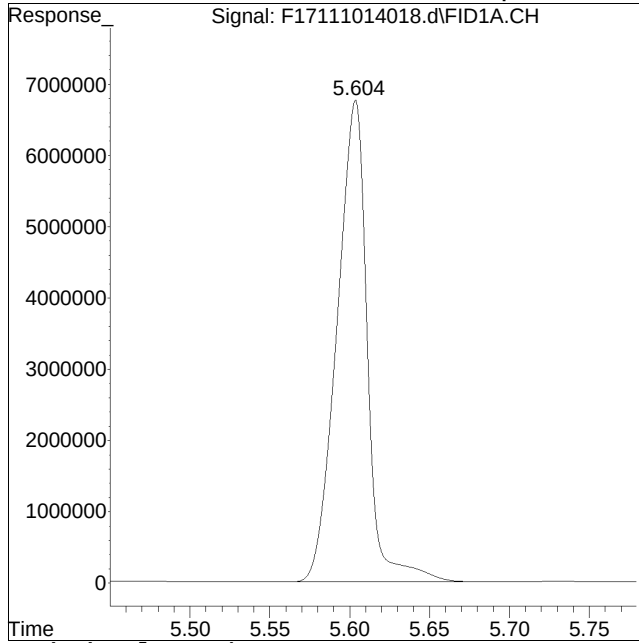
Manual Peak Response = 52130313 M4

M4 = Poor automated baseline construction.

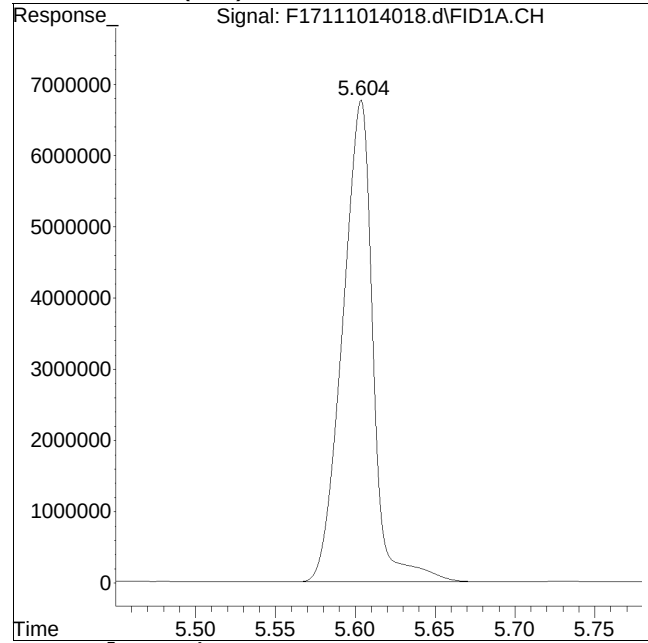
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #2: n-Octane (C8)



Original Peak Response = 89761593



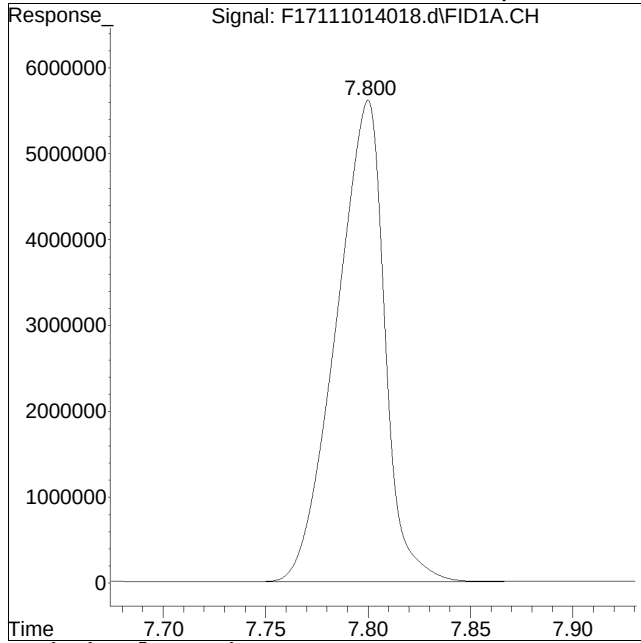
Manual Peak Response = 89742592 M4

M4 = Poor automated baseline construction.

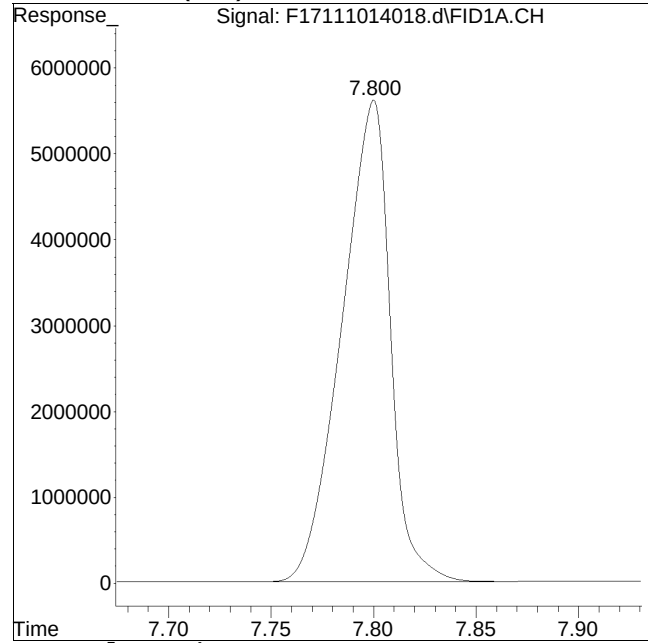
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #3: n-Nonane (C9)



Original Peak Response = 92650241



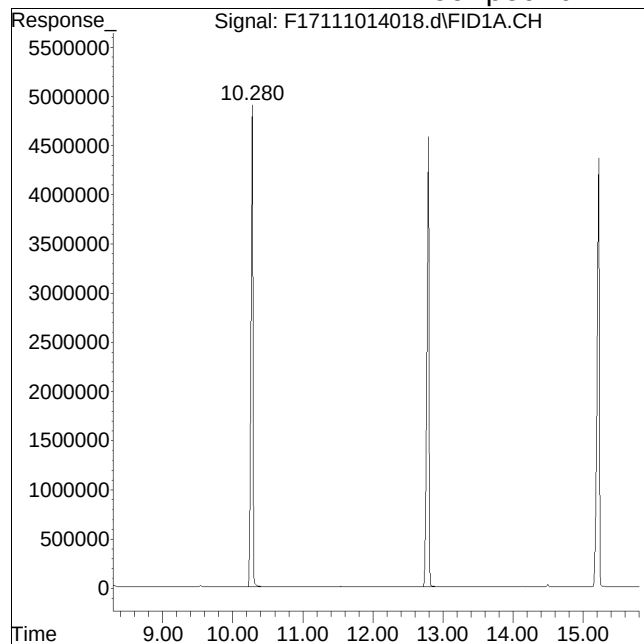
Manual Peak Response = 92546861 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

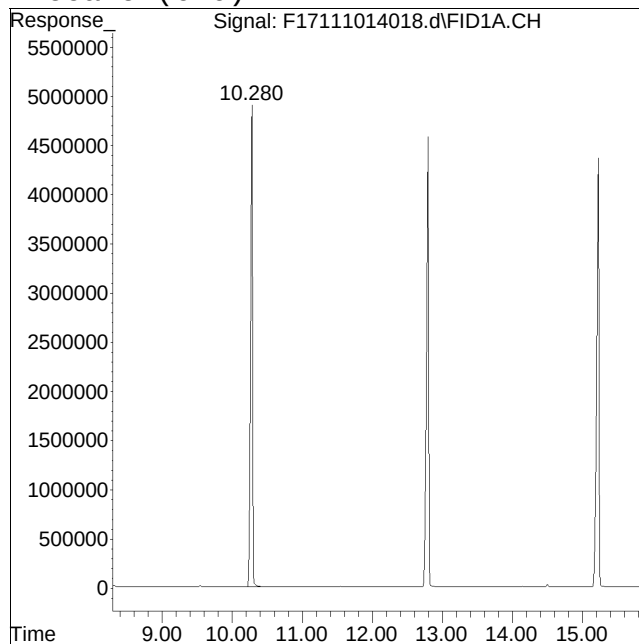
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
 Data File : F17111014018.d Operator : FID17:NL
 Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
 Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #4: n-Decane (C10)



Original Peak Response = 94438265

M4 = Poor automated baseline construction.

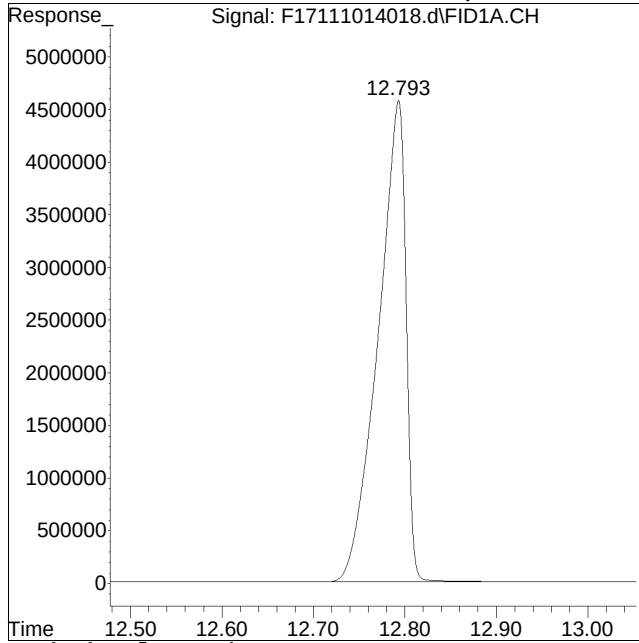


Manual Peak Response = 95150146 M4

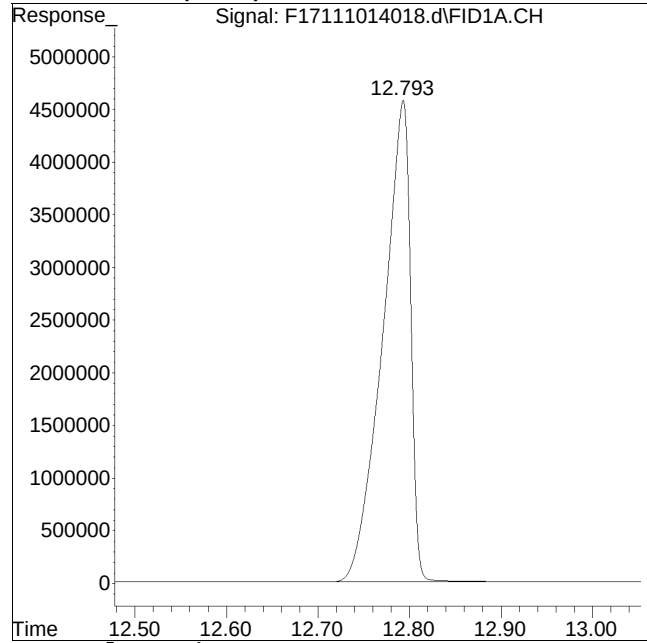
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #5: n-Undecane (C11)



Original Peak Response = 96522128



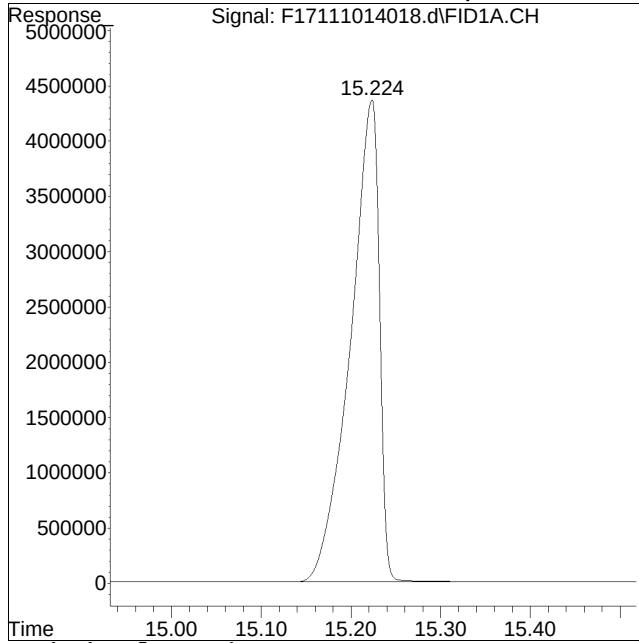
Manual Peak Response = 96504887 M4

M4 = Poor automated baseline construction.

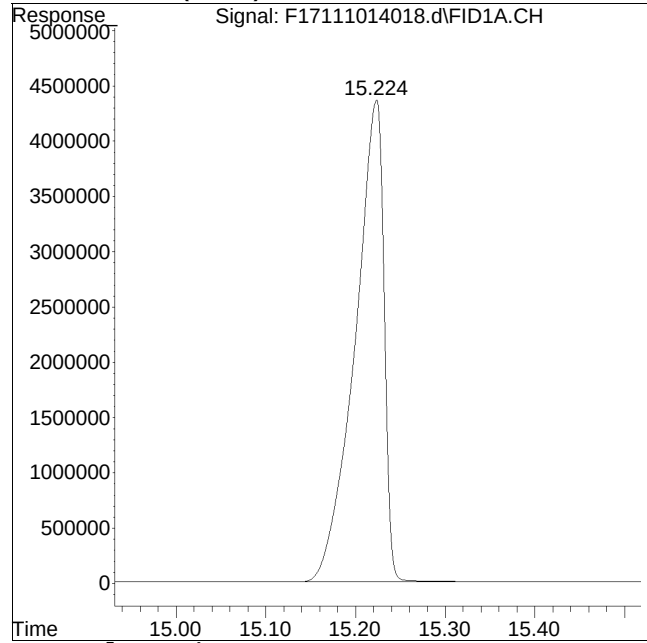
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #6: n-Dodecane (C12)



Original Peak Response = 97736580



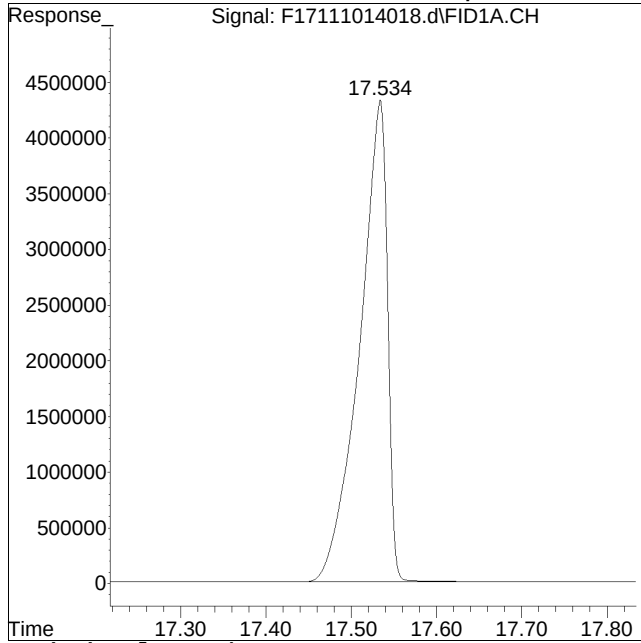
Manual Peak Response = 97813355 M4

M4 = Poor automated baseline construction.

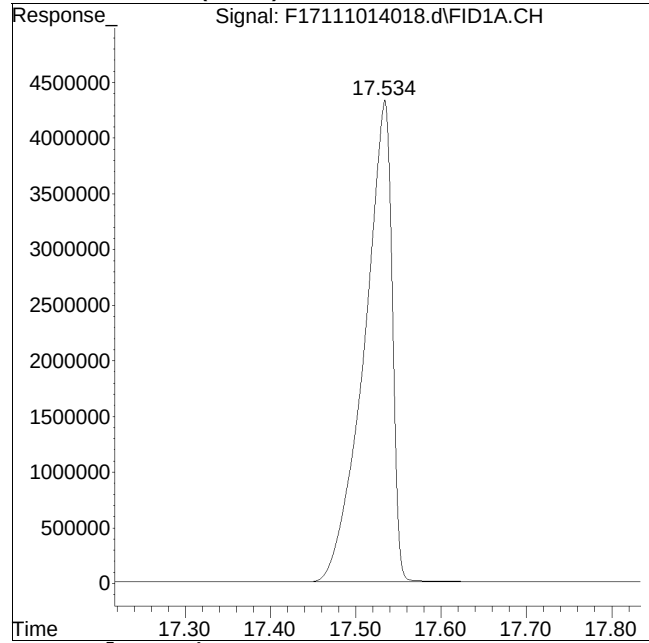
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #7: n-Tridecane (C13)



Original Peak Response = 98144870



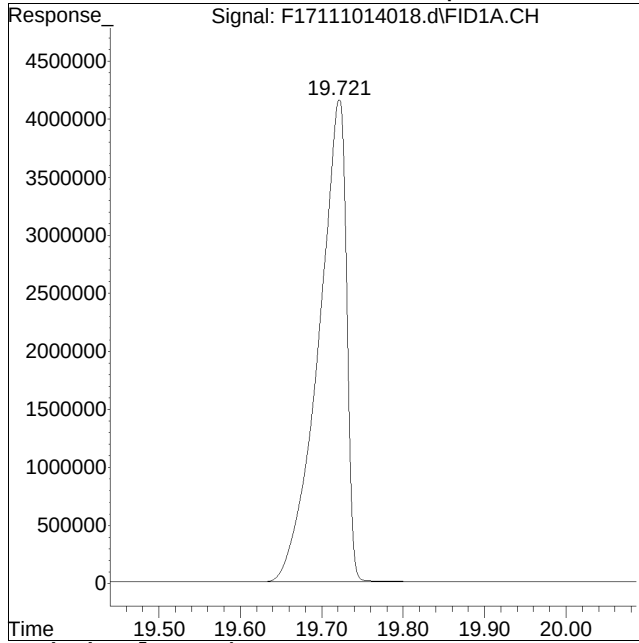
Manual Peak Response = 98128725 M4

M4 = Poor automated baseline construction.

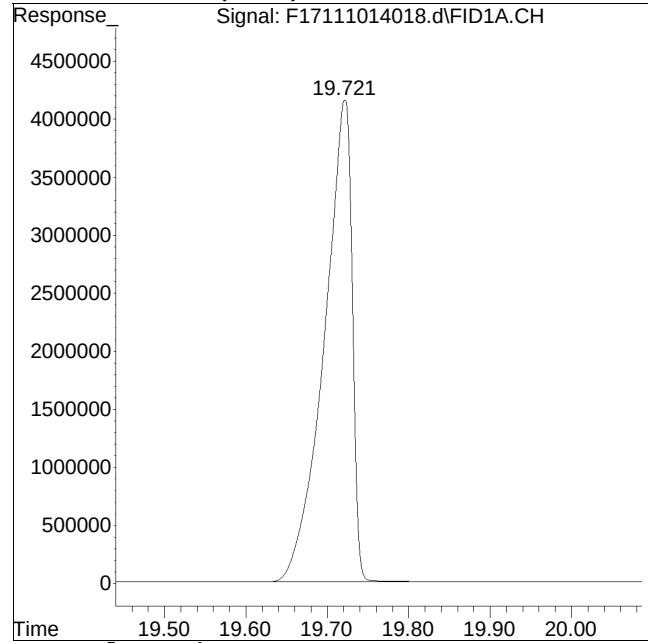
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #9: n-Tetradecane (C14)



Original Peak Response = 99196181



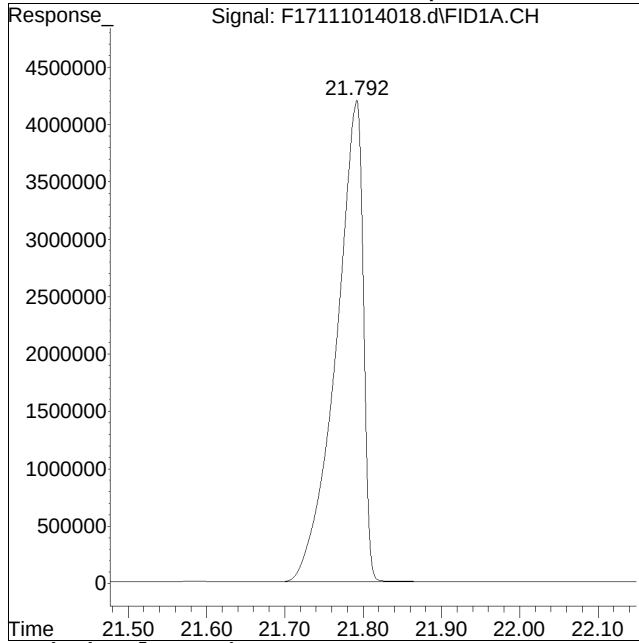
Manual Peak Response = 99098349 M4

M4 = Poor automated baseline construction.

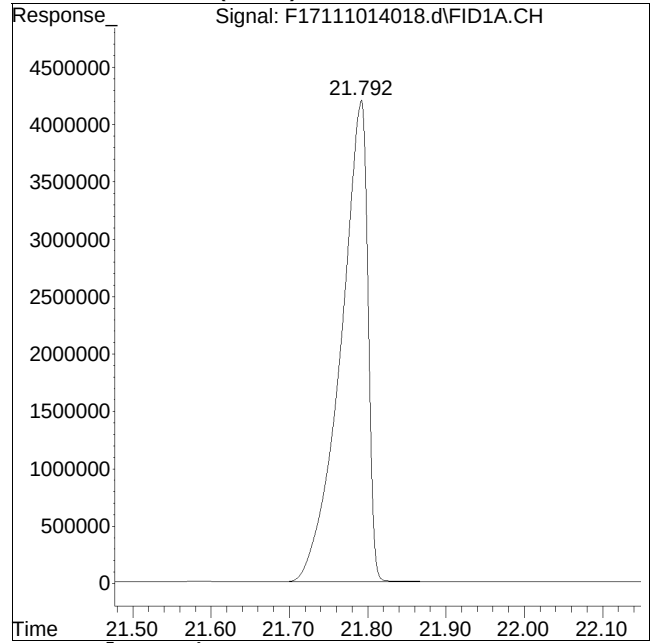
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #11: n-Pentadecane (C15)



Original Peak Response = 100967552



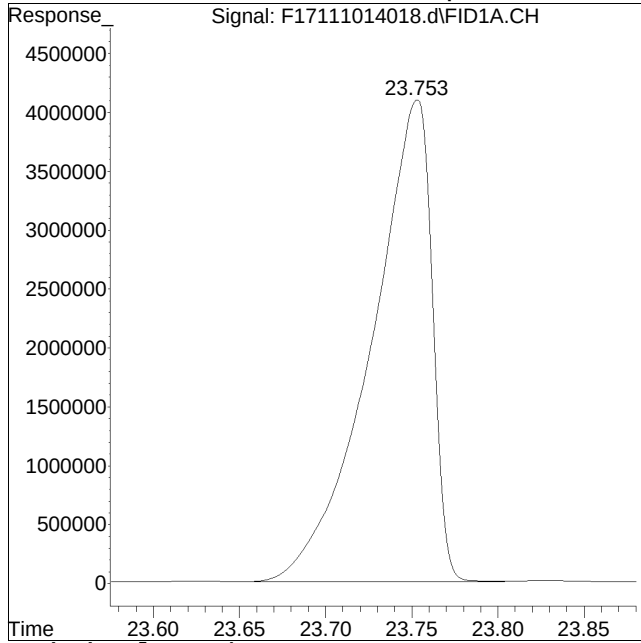
Manual Peak Response = 100894959 M4

M4 = Poor automated baseline construction.

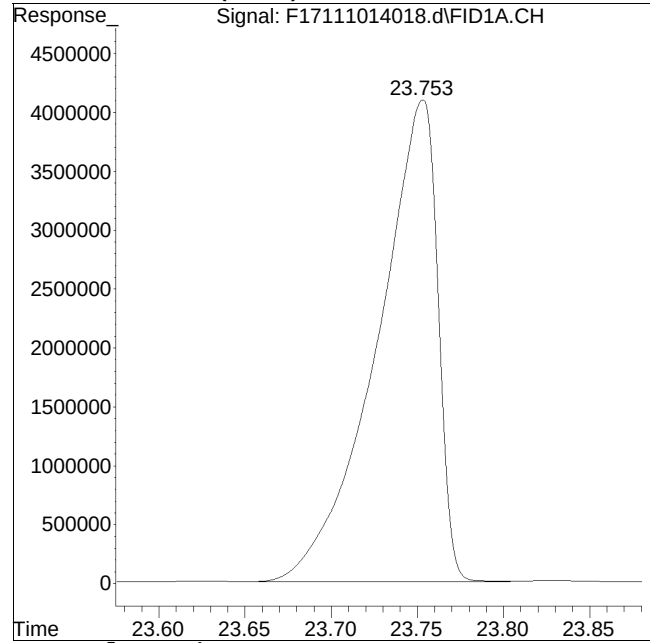
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #12: n-Hexadecane (C16)



Original Peak Response = 100502501



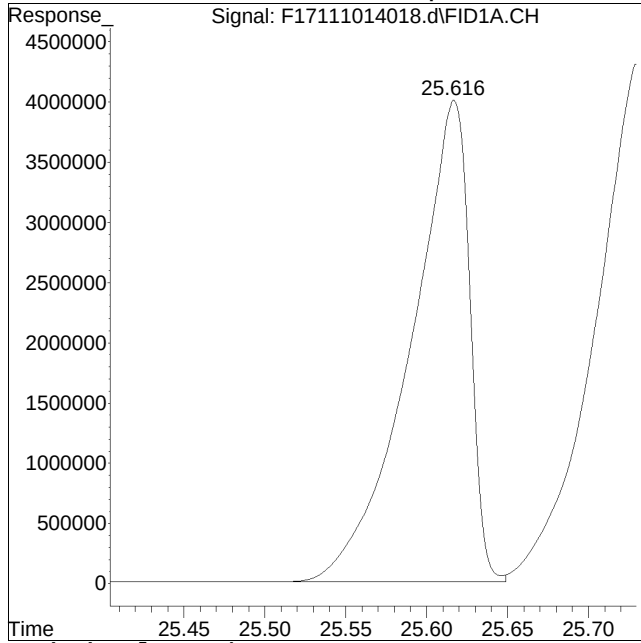
Manual Peak Response = 100542165 M4

M4 = Poor automated baseline construction.

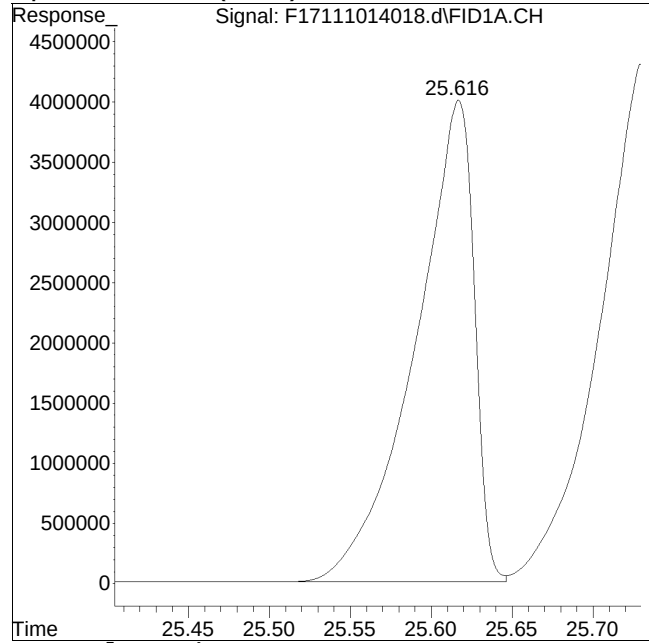
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #14: n-Heptadecane (C17)



Original Peak Response = 101308168



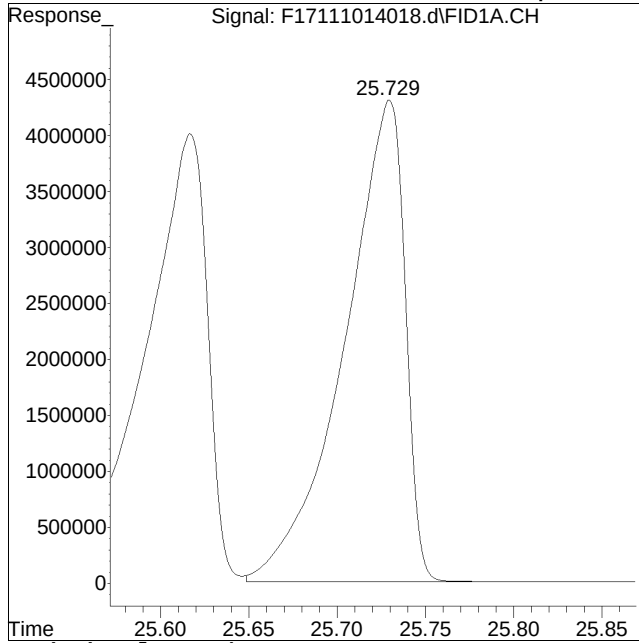
Manual Peak Response = 101195746 M4

M4 = Poor automated baseline construction.

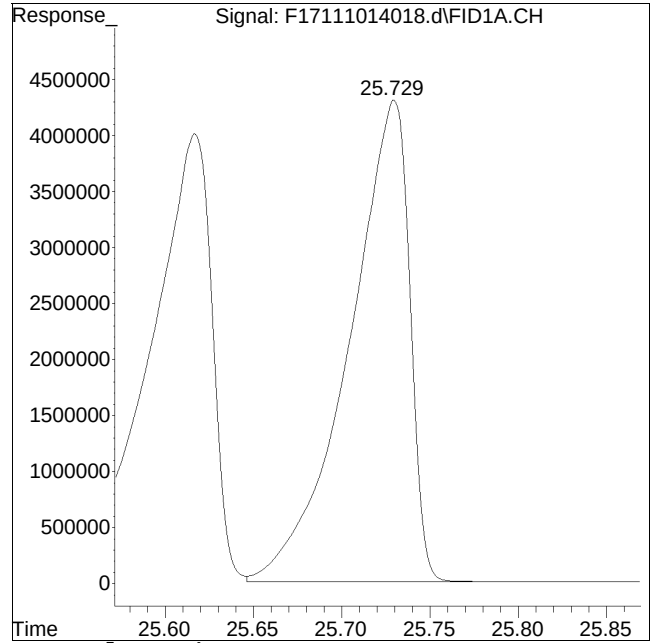
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #15: Pristane



Original Peak Response = 102335862



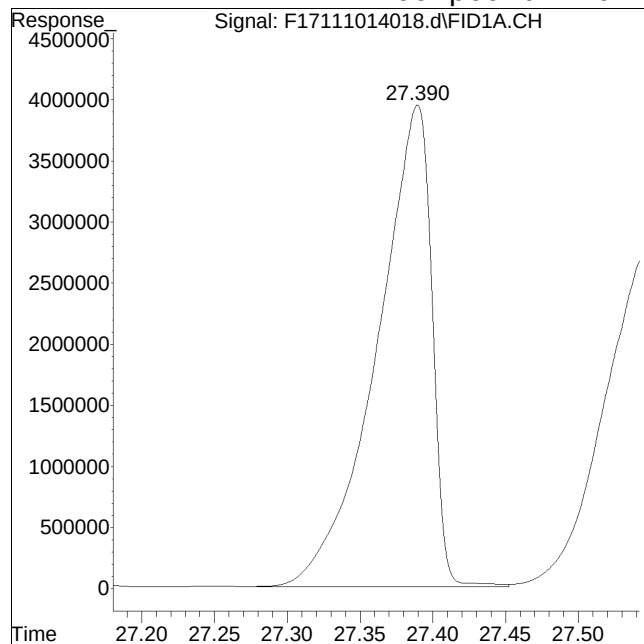
Manual Peak Response = 102363704 M4

M4 = Poor automated baseline construction.

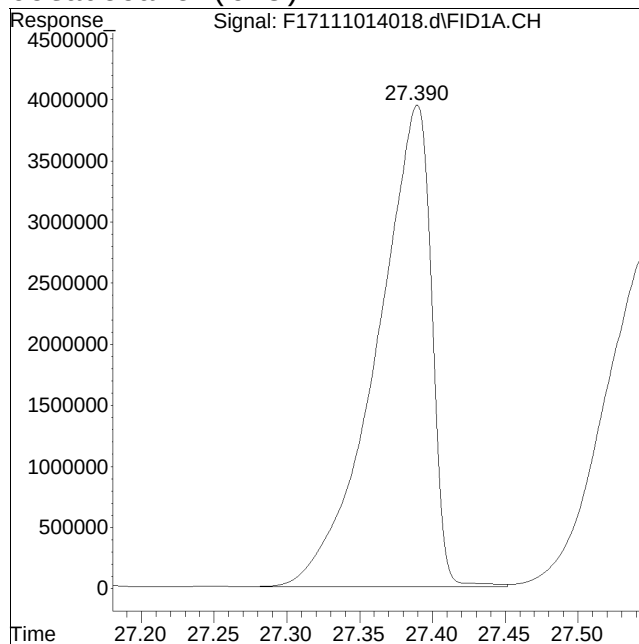
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #16: n-Octadecane (C18)



Original Peak Response = 103518717



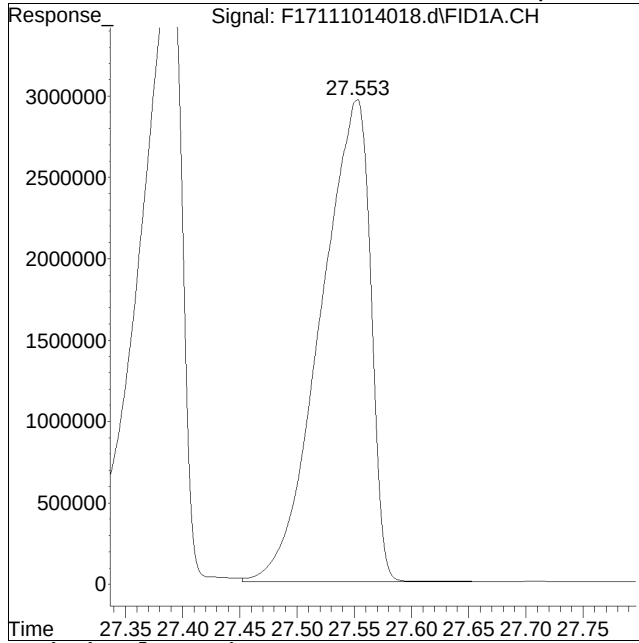
Manual Peak Response = 103494808 M4

M4 = Poor automated baseline construction.

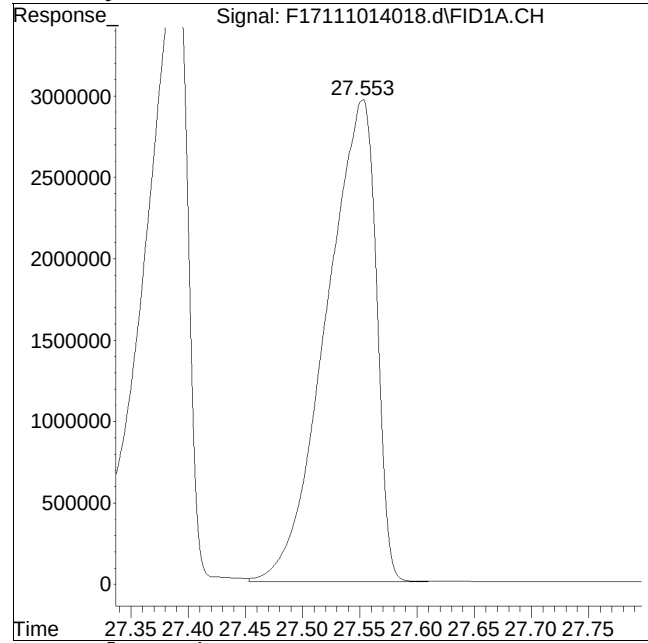
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #17: Phytane



Original Peak Response = 90336279



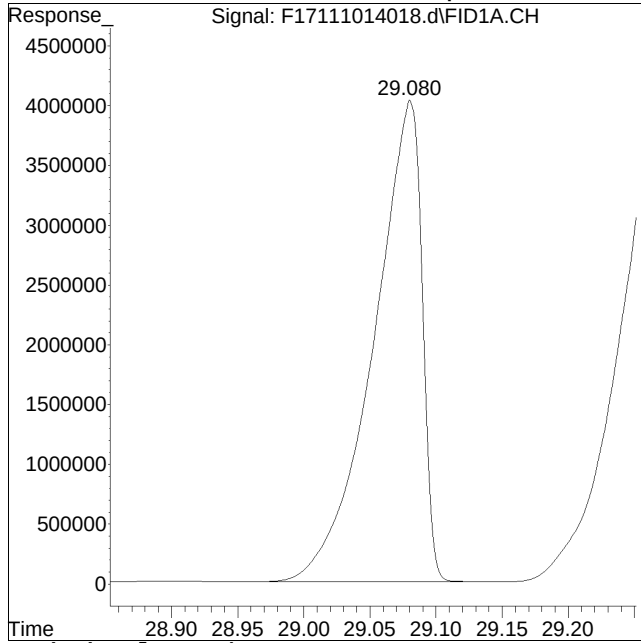
Manual Peak Response = 90107646 M4

M4 = Poor automated baseline construction.

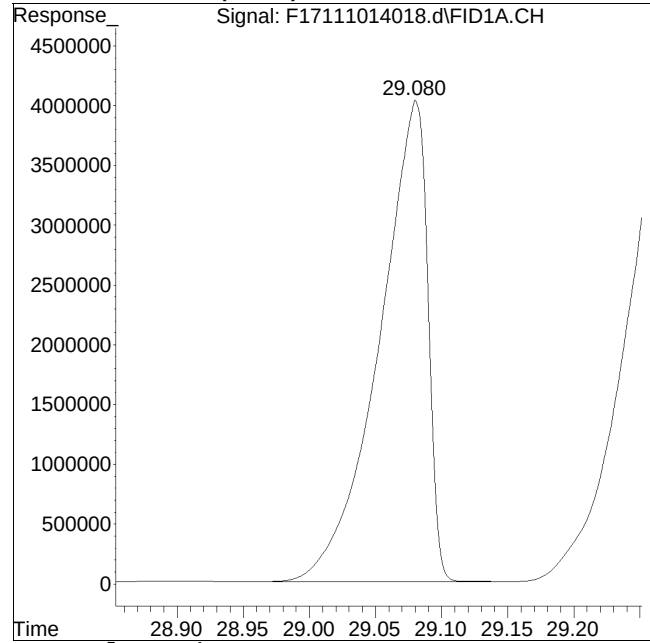
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #18: n-Nonadecane (C19)



Original Peak Response = 102556916



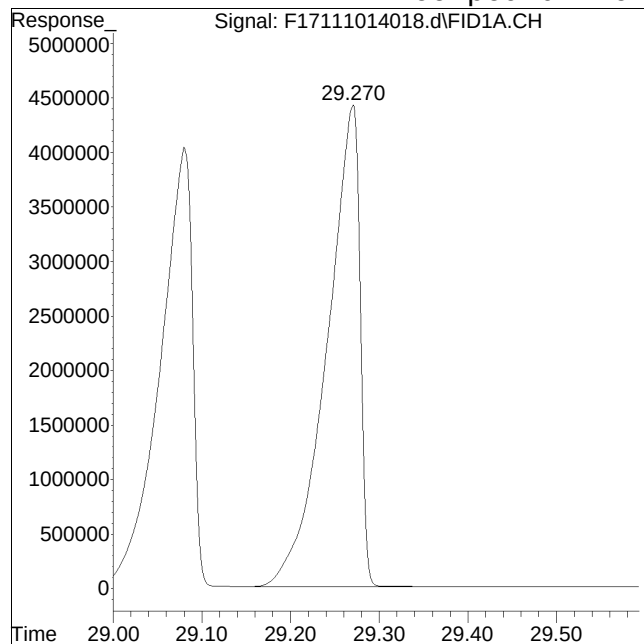
Manual Peak Response = 102722662 M4

M4 = Poor automated baseline construction.

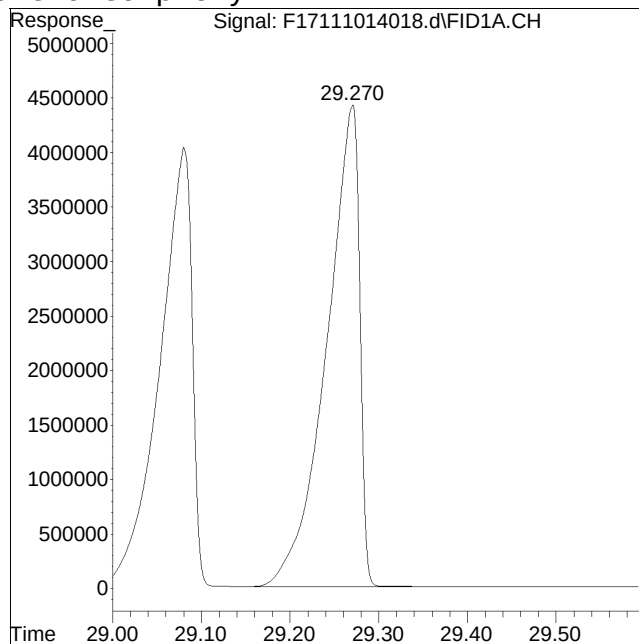
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010 Method : HC17111014F.M
 Data File : F17111014018.d Operator : FID17:NL
 Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
 Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #19: ortho-terphenyl



Original Peak Response = 113986234



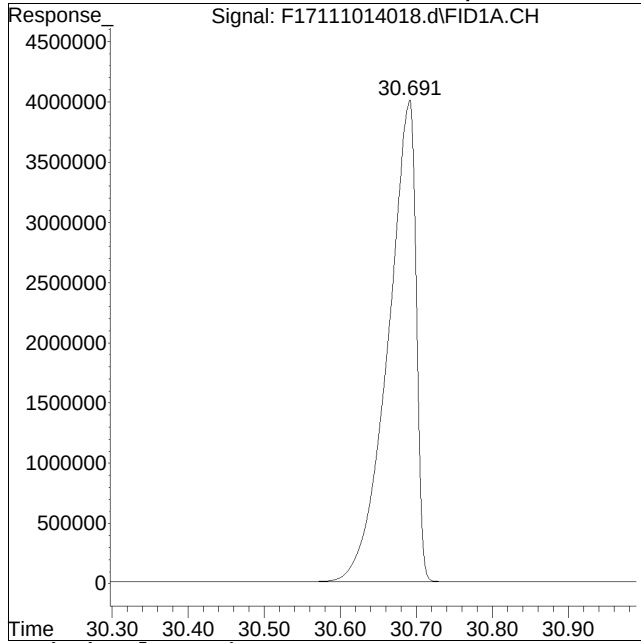
Manual Peak Response = 114237478 M4

M4 = Poor automated baseline construction.

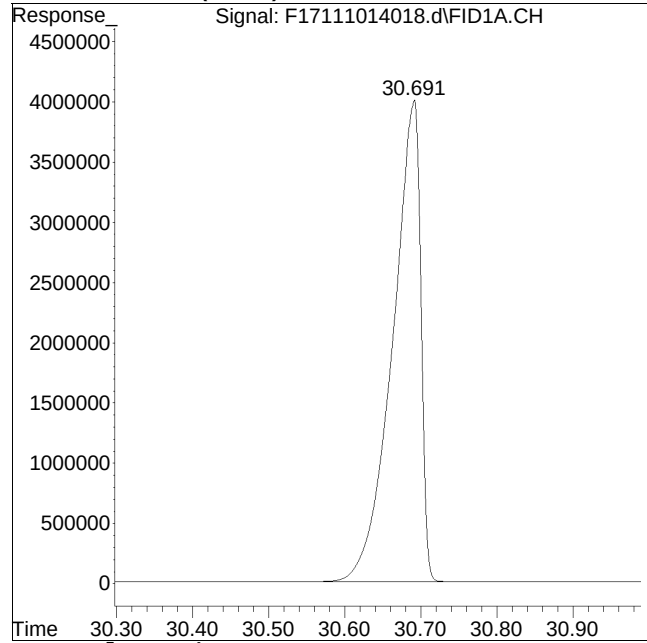
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #20: n-Eicosane (C20)



Original Peak Response = 102593918



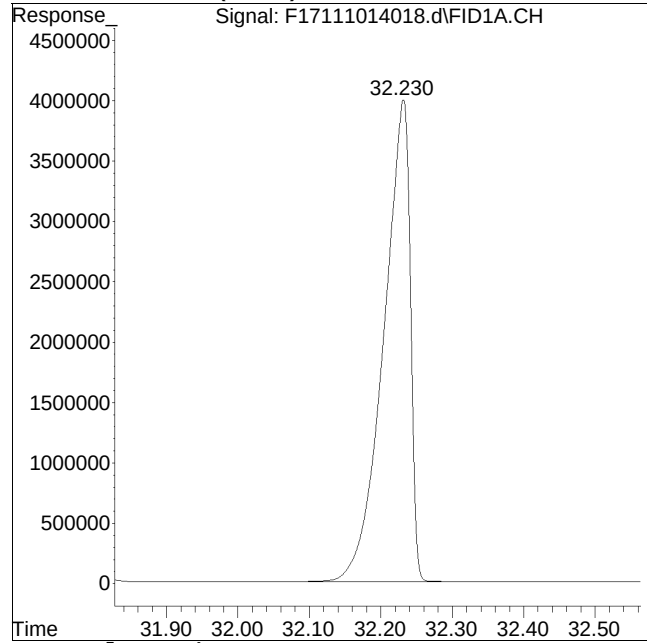
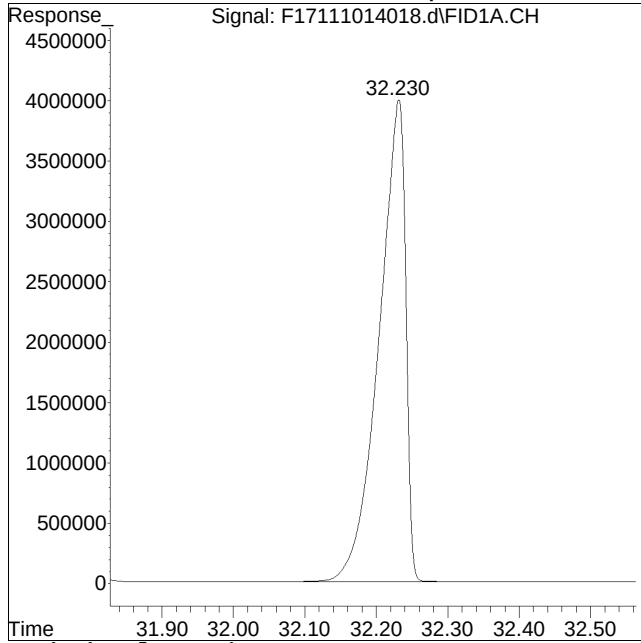
Manual Peak Response = 102338719 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #21: n-Heneicosane (C21)



Original Peak Response = 103486675

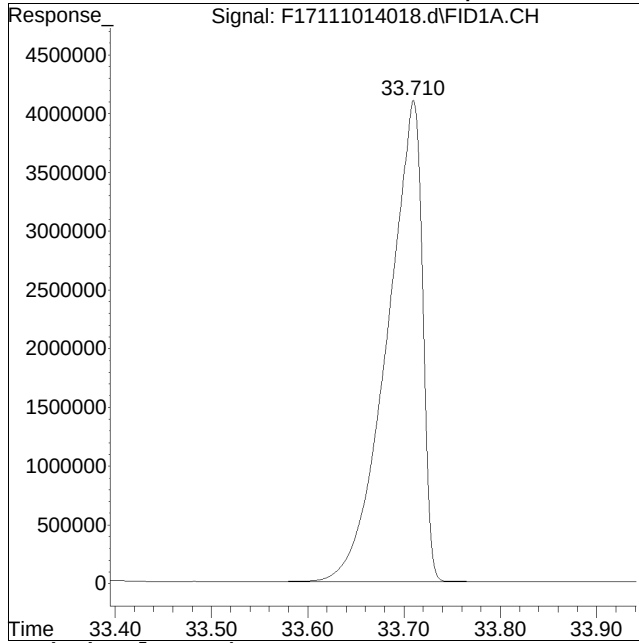
Manual Peak Response = 103561695 M4

M4 = Poor automated baseline construction.

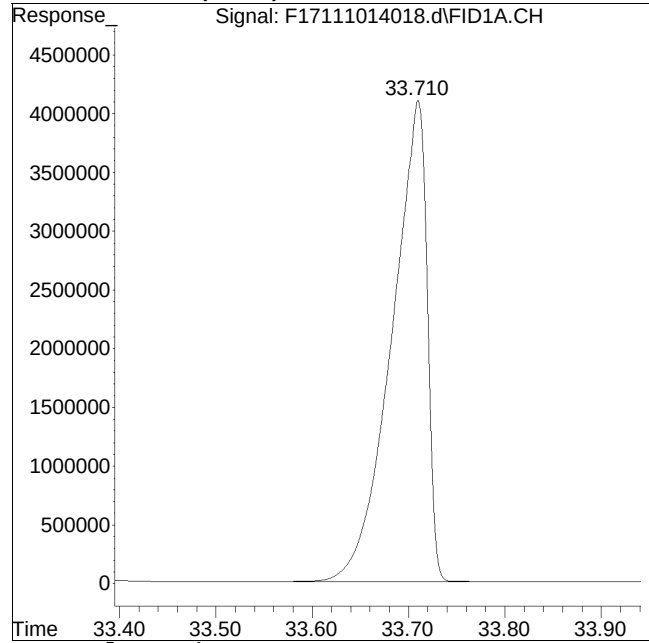
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #22: n-Docosane (C22)



Original Peak Response = 104629133



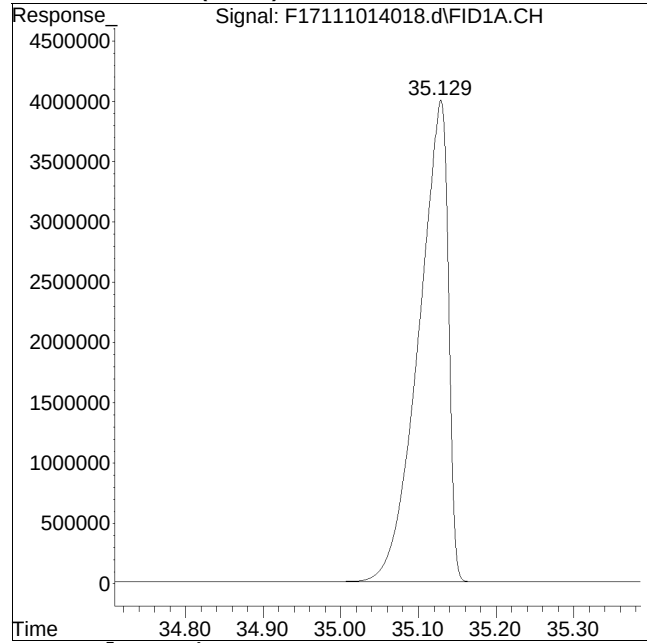
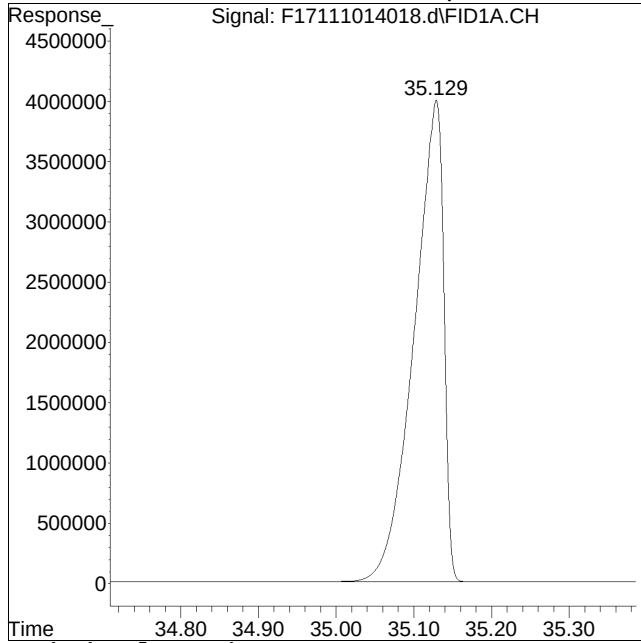
Manual Peak Response = 104611286 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #23: n-Tricosane (C23)



Original Peak Response = 105638678

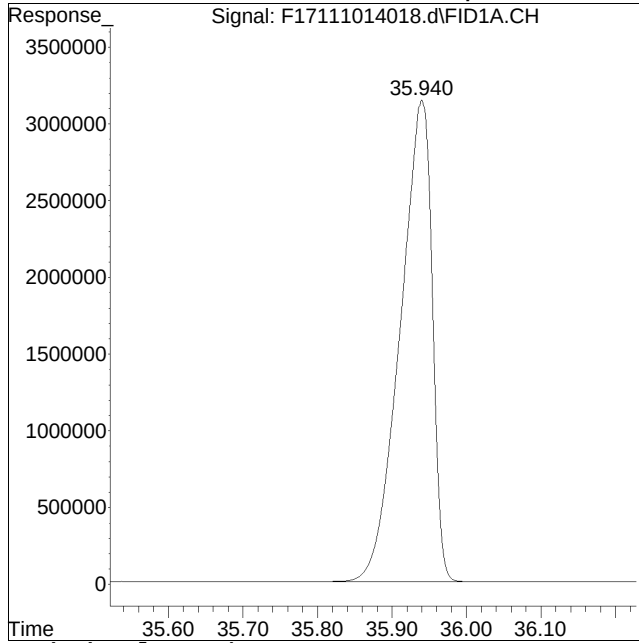
Manual Peak Response = 105634840 M4

M4 = Poor automated baseline construction.

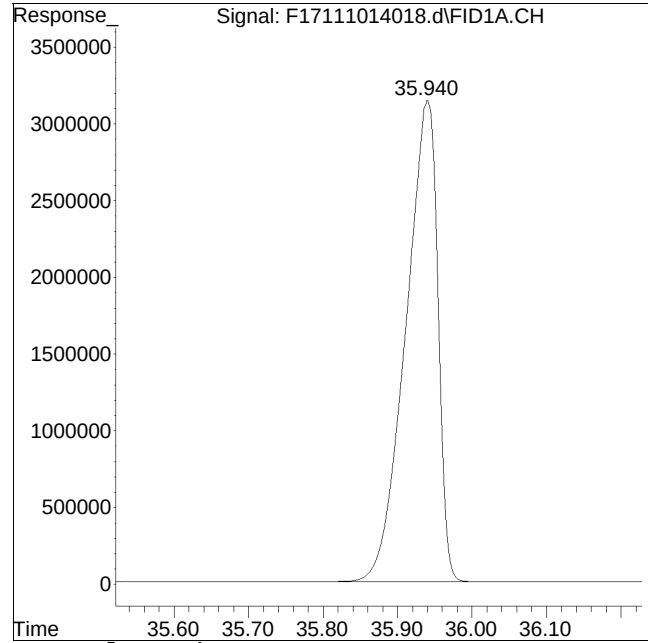
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #24: d50-Tetracosane



Original Peak Response = 93757081



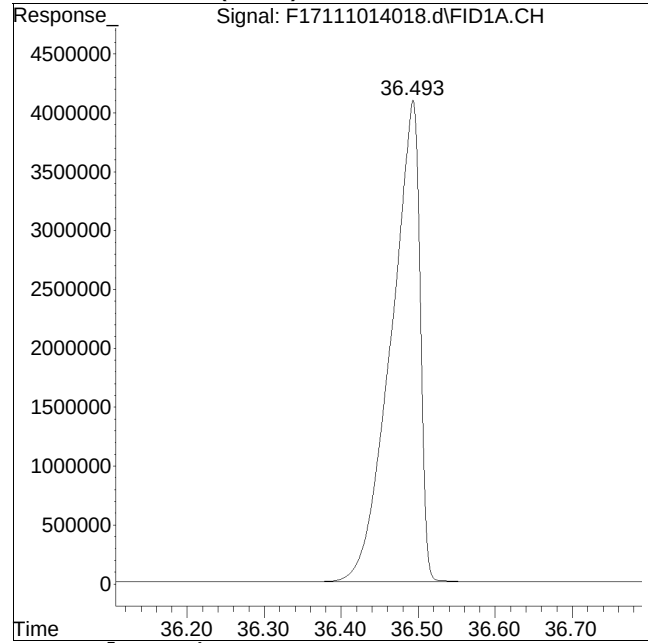
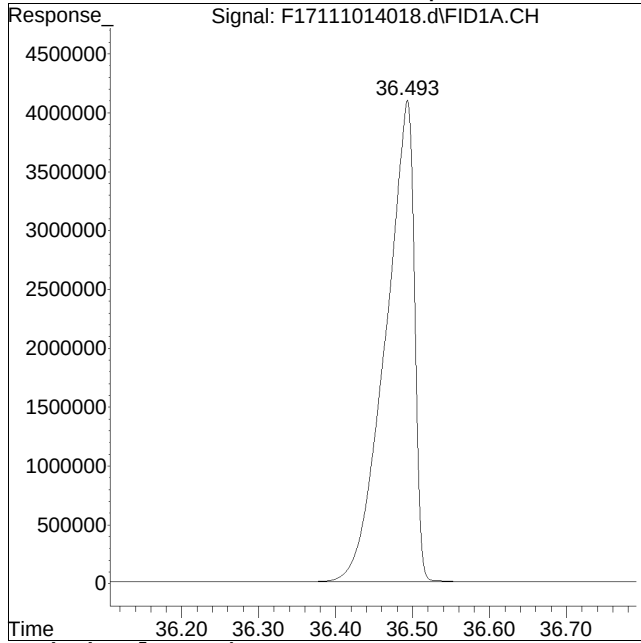
Manual Peak Response = 93830621 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #25: n-Tetracosane (C24)



Original Peak Response = 106346818

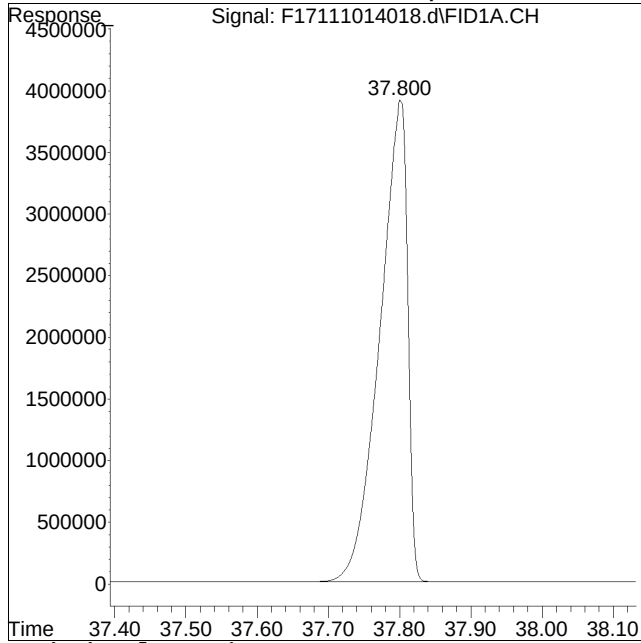
Manual Peak Response = 106336757 M4

M4 = Poor automated baseline construction.

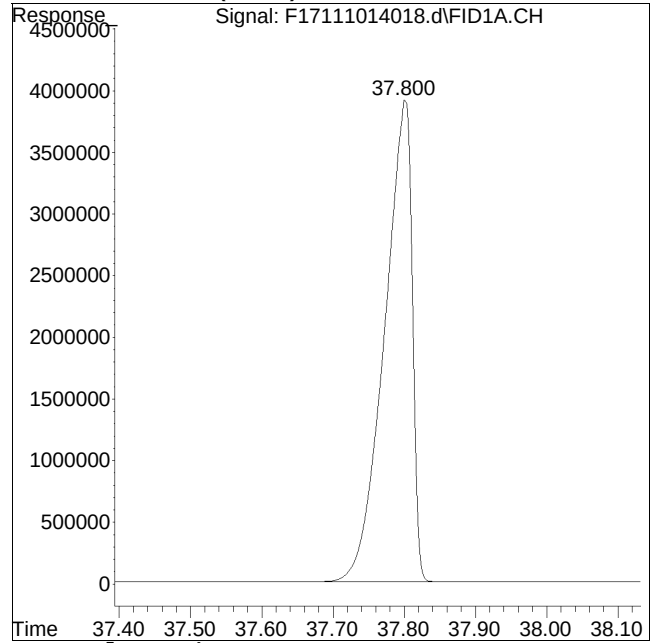
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010 Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #26: n-Pentacosane (C25)



Original Peak Response = 105582349



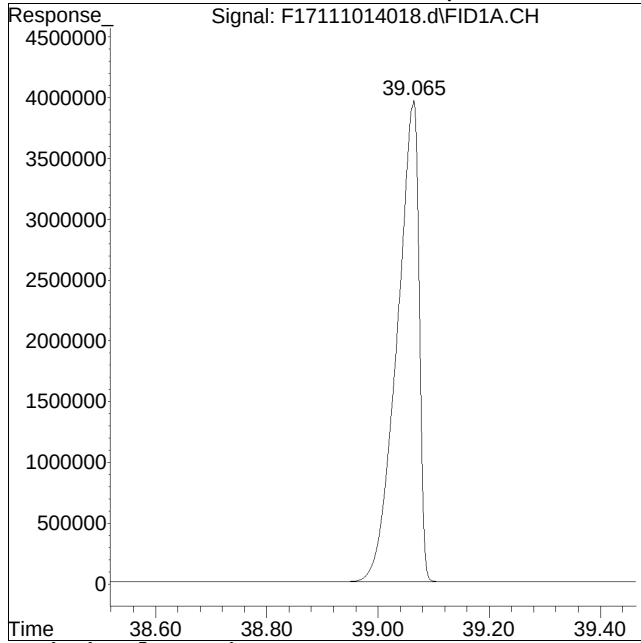
Manual Peak Response = 105611101 M4

M4 = Poor automated baseline construction.

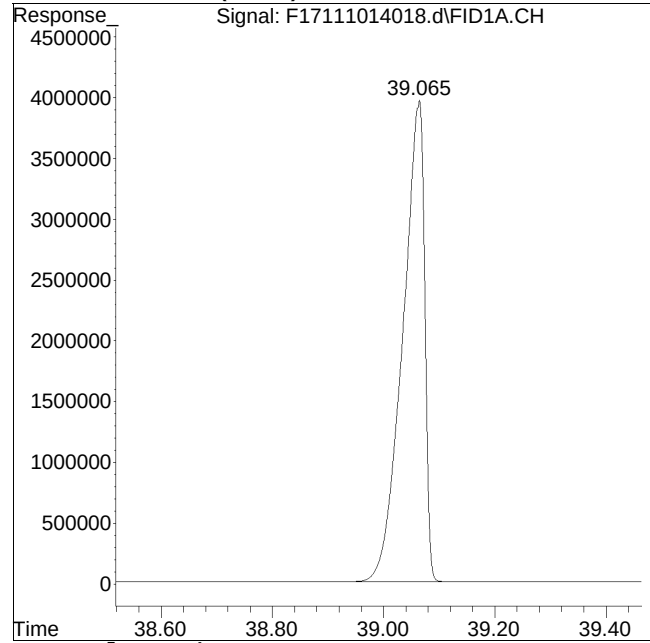
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #27: n-Hexacosane (C26)



Original Peak Response = 108274841



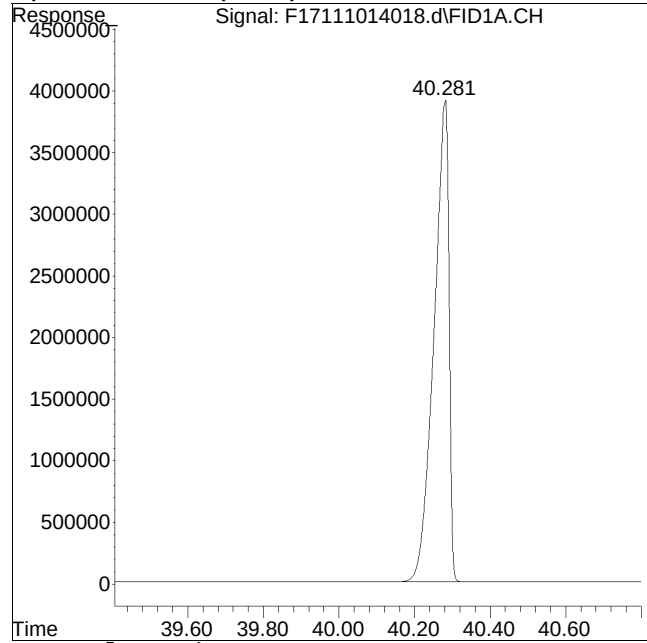
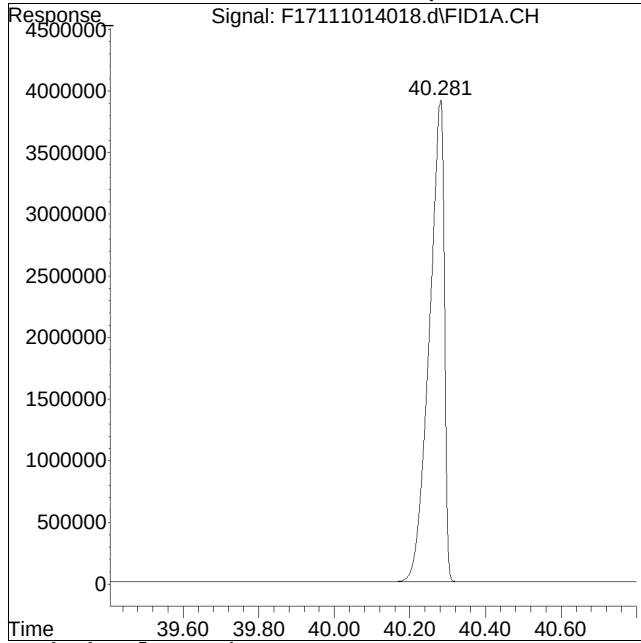
Manual Peak Response = 108152182 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #28: n-Heptacosane (C27)



Original Peak Response = 107291291

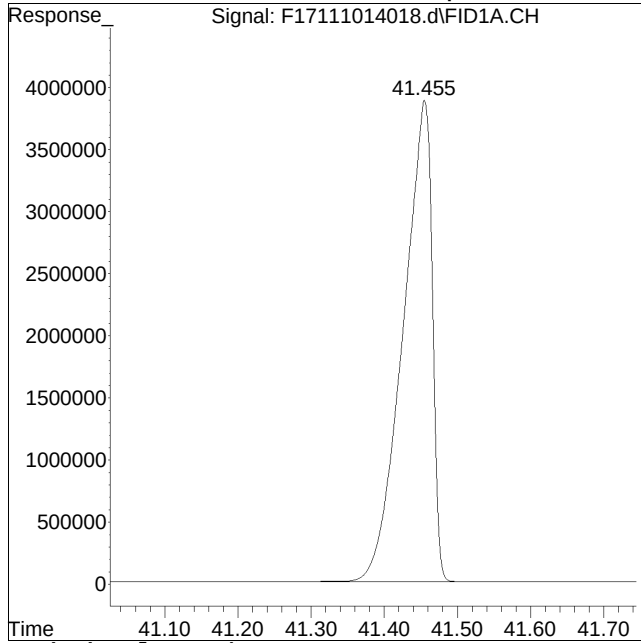
Manual Peak Response = 107262728 M4

M4 = Poor automated baseline construction.

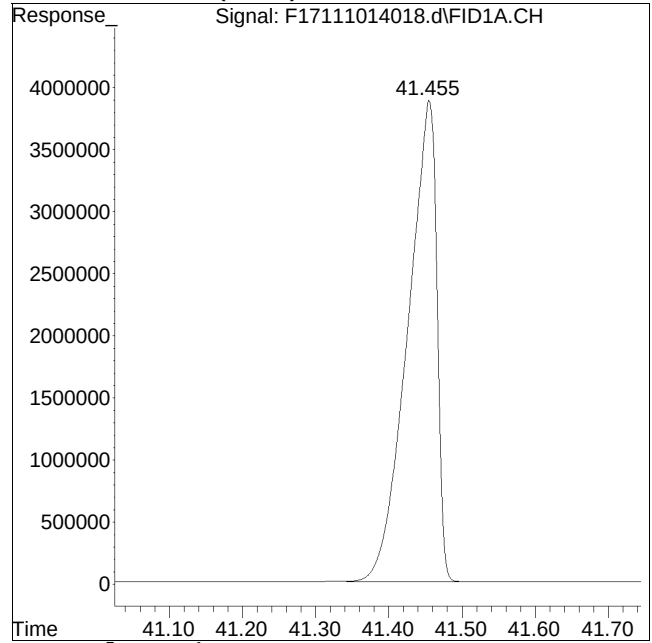
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #29: n-Octacosane (C28)



Original Peak Response = 107315946



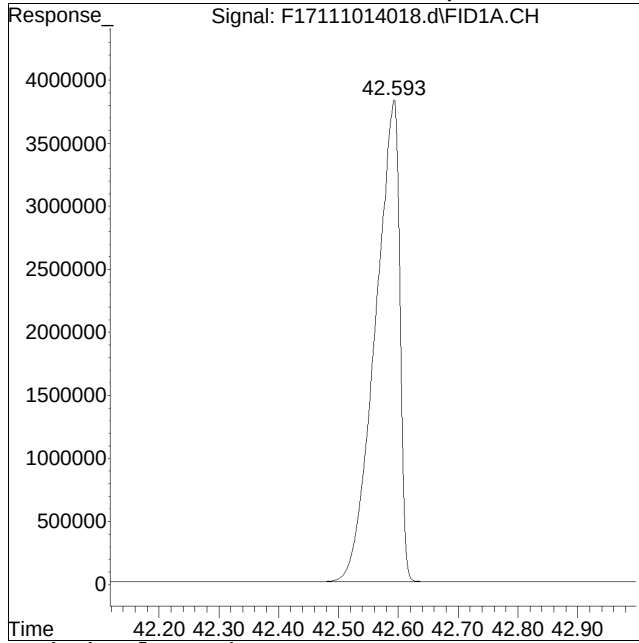
Manual Peak Response = 107073579 M4

M4 = Poor automated baseline construction.

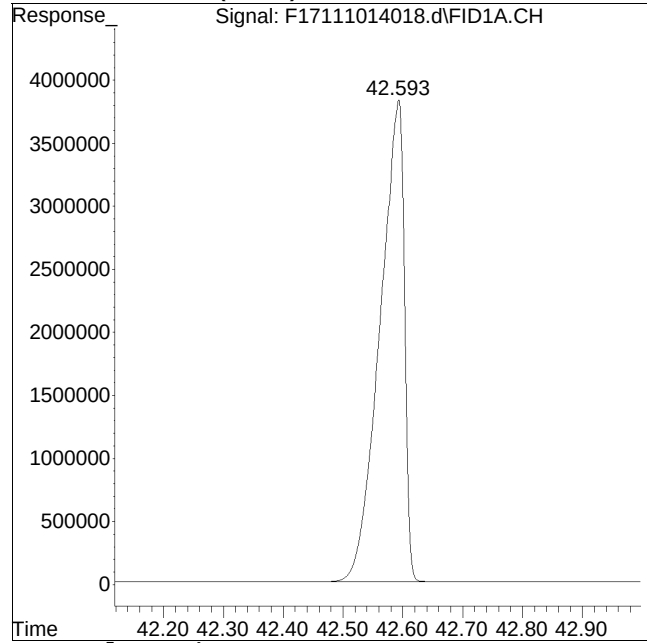
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #30: n-Nonacosane (C29)



Original Peak Response = 108225490



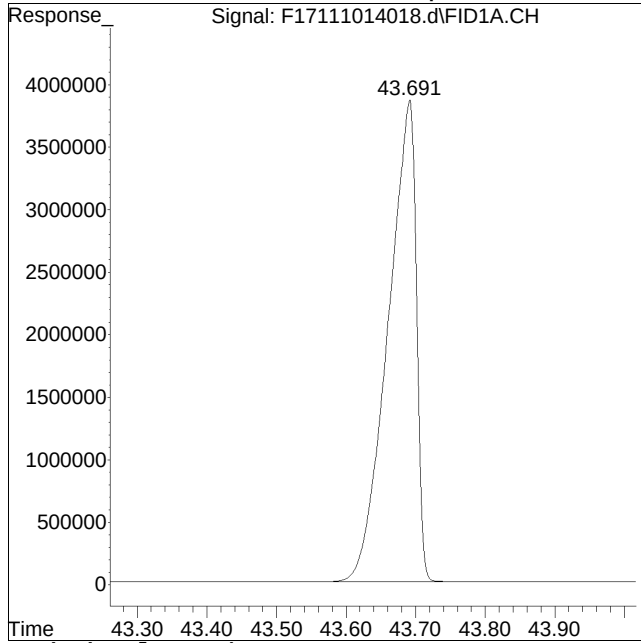
Manual Peak Response = 108209907 M4

M4 = Poor automated baseline construction.

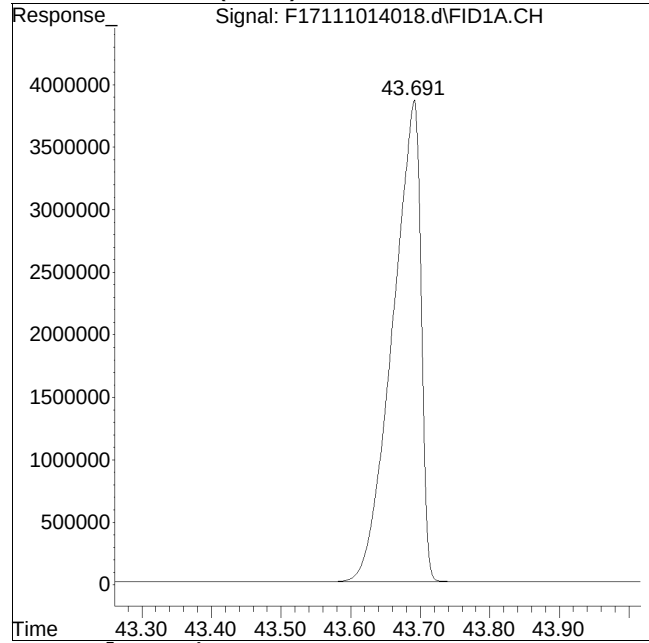
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #31: n-Triacontane (C30)



Original Peak Response = 108696266



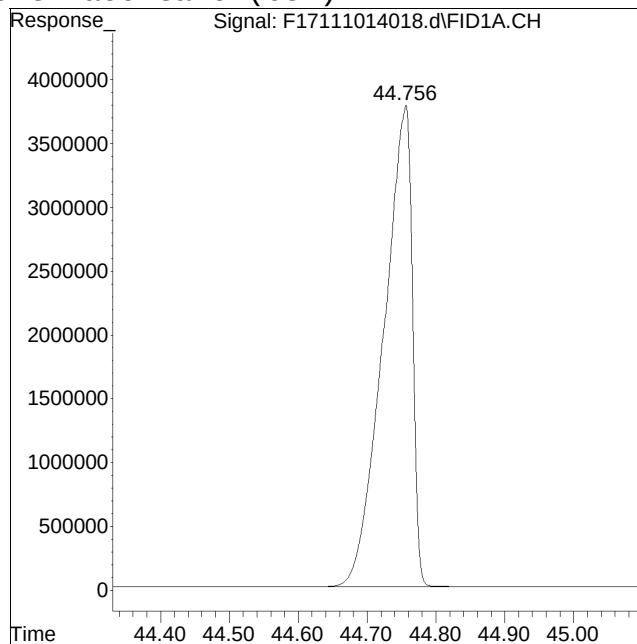
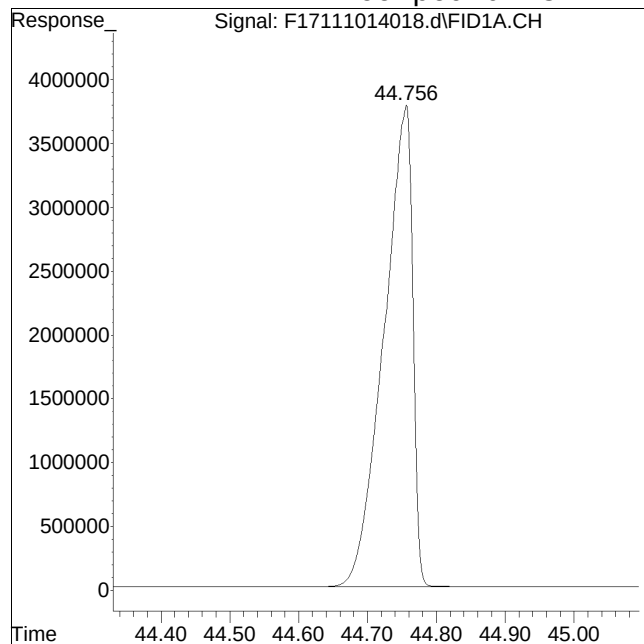
Manual Peak Response = 108739389 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #32: n-Hentriacontane (C31)



Original Peak Response = 109205352

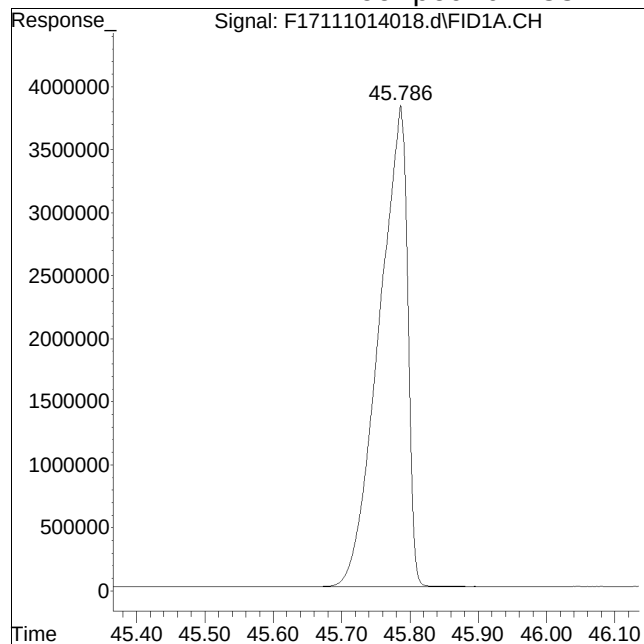
Manual Peak Response = 109245613 M4

M4 = Poor automated baseline construction.

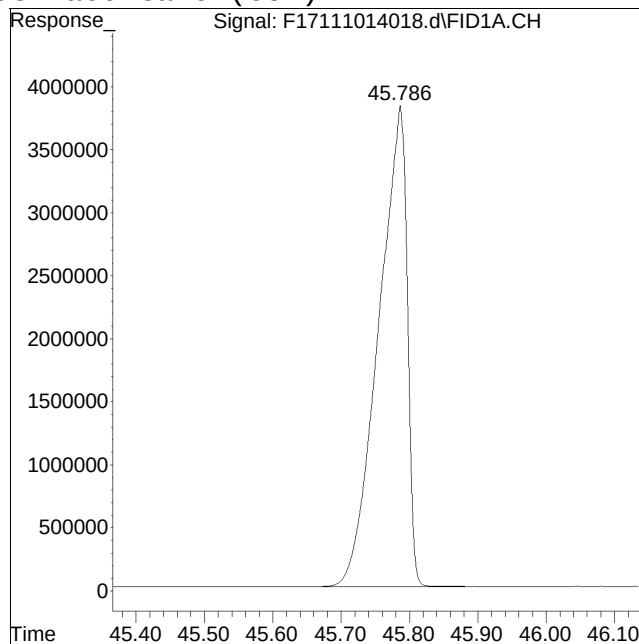
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #33: n-Dotriacontane (C32)



Original Peak Response = 110467144



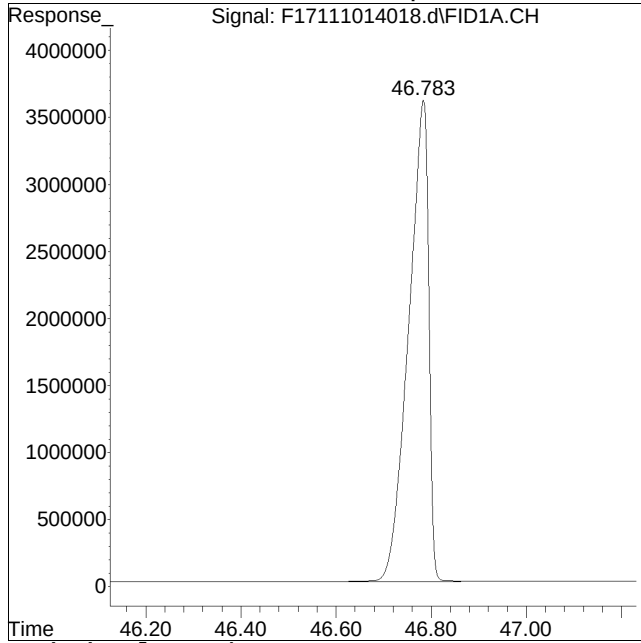
Manual Peak Response = 110550982 M4

M4 = Poor automated baseline construction.

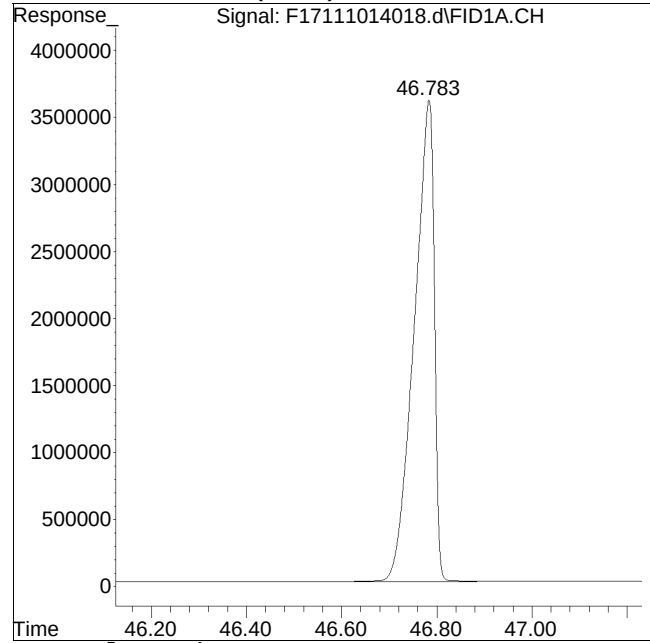
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #34: n-Tritriacontane (C33)



Original Peak Response = 105080883



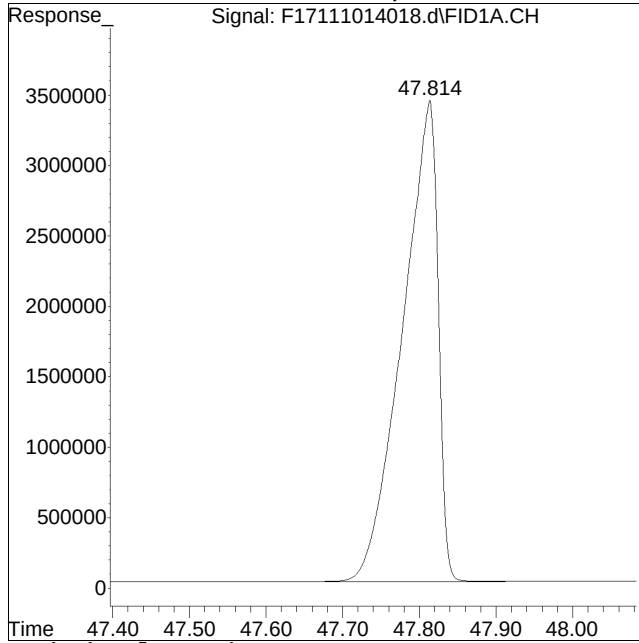
Manual Peak Response = 104844271 M4

M4 = Poor automated baseline construction.

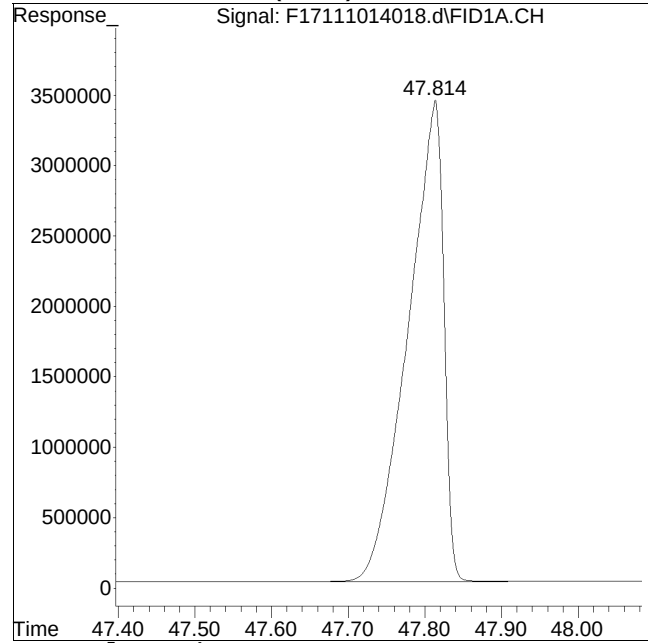
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #35: n-tetratriacontane (C34)



Original Peak Response = 110113503



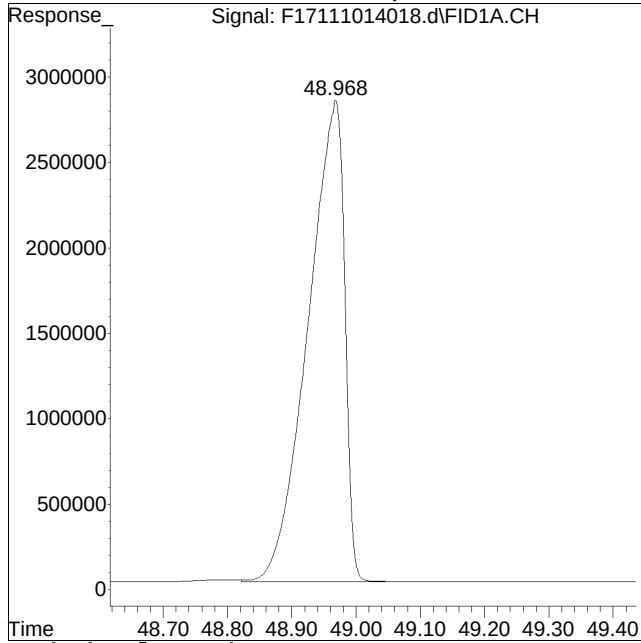
Manual Peak Response = 110027219 M4

M4 = Poor automated baseline construction.

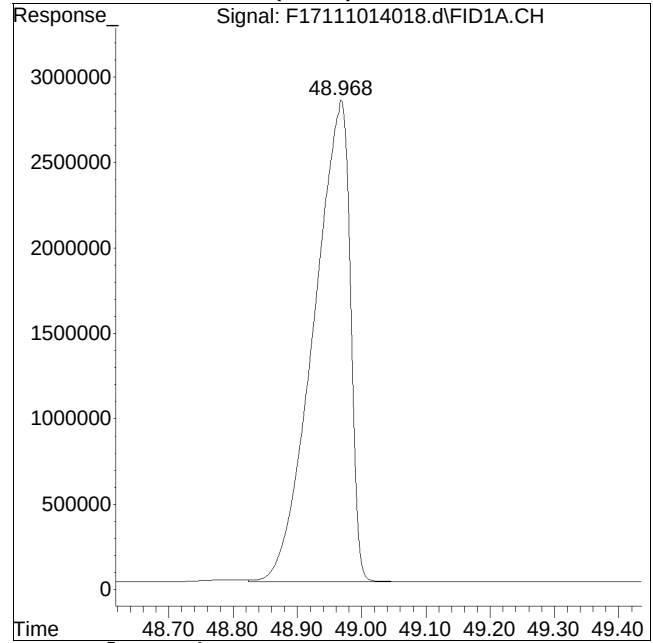
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #36: n-Pentatriacontane (C35)



Original Peak Response = 111213257



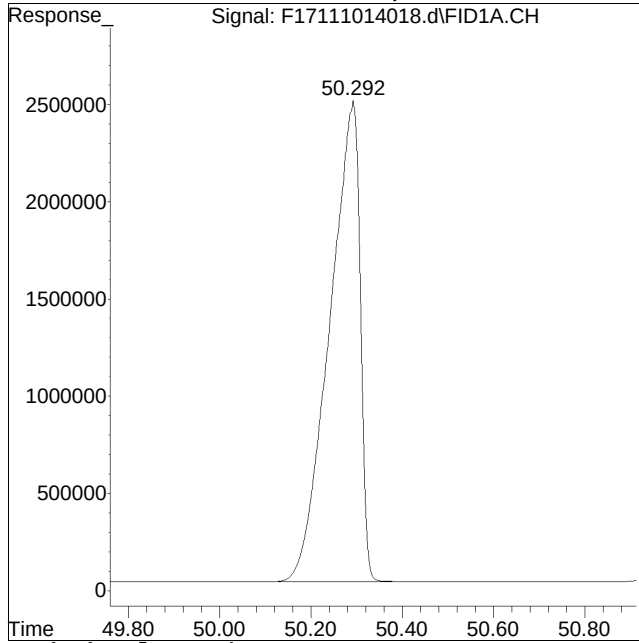
Manual Peak Response = 111133176 M4

M4 = Poor automated baseline construction.

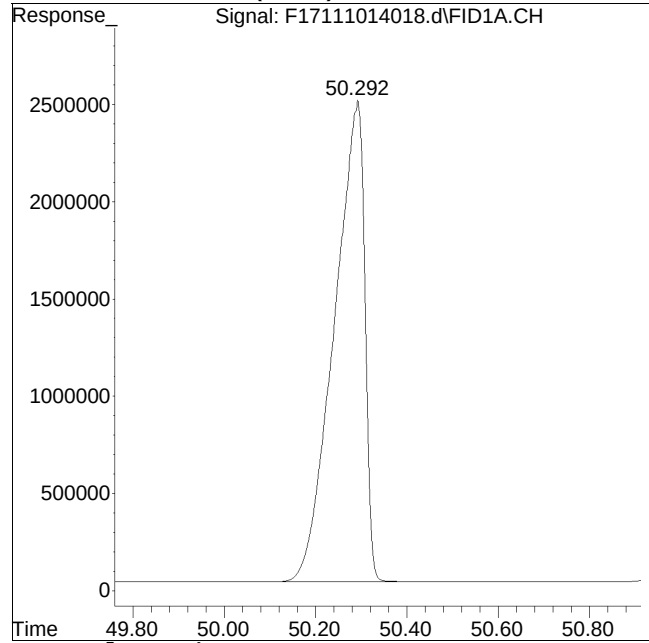
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #37: n-Hexatriacontane (C36)



Original Peak Response = 114718885



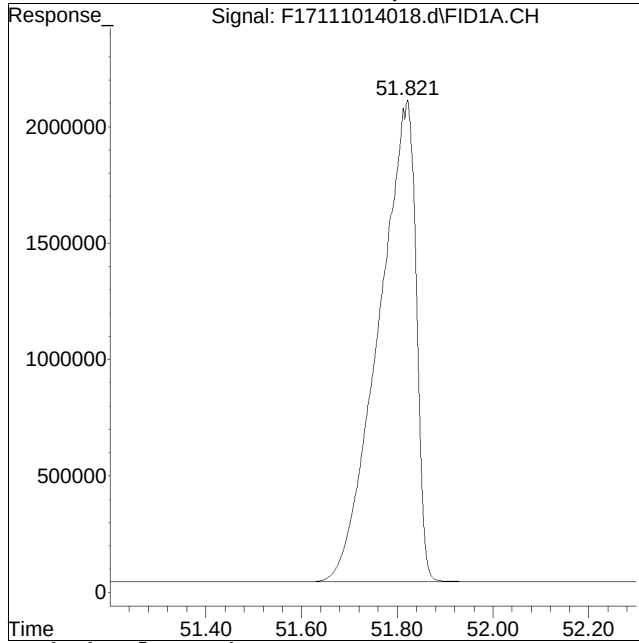
Manual Peak Response = 114629087 M4

M4 = Poor automated baseline construction.

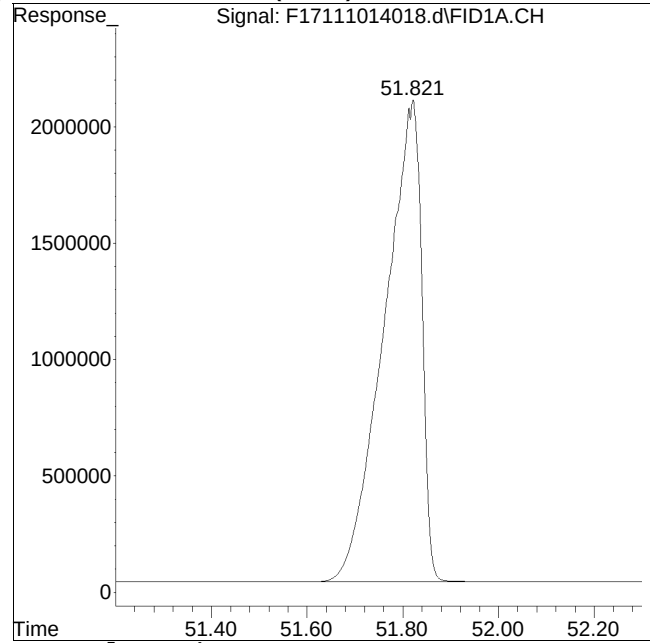
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #38: n-Heptatriacontane (C37)



Original Peak Response = 112287059



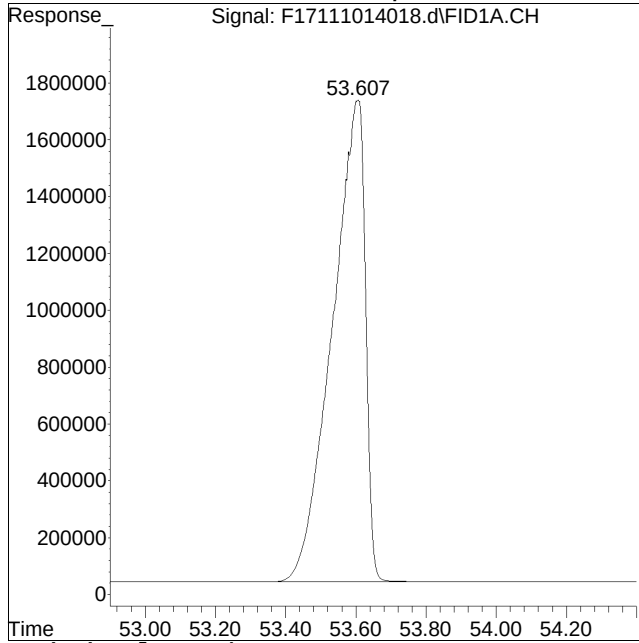
Manual Peak Response = 112472231 M4

M4 = Poor automated baseline construction.

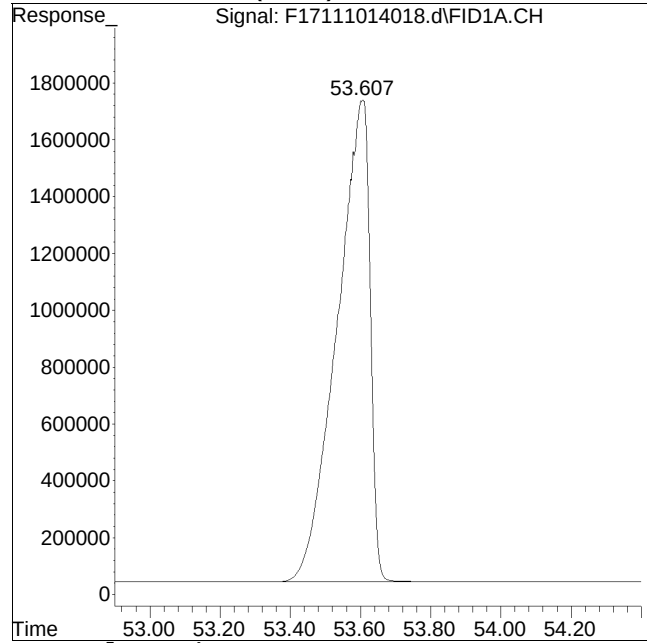
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #39: n-Octatriacontane (C38)



Original Peak Response = 110736741



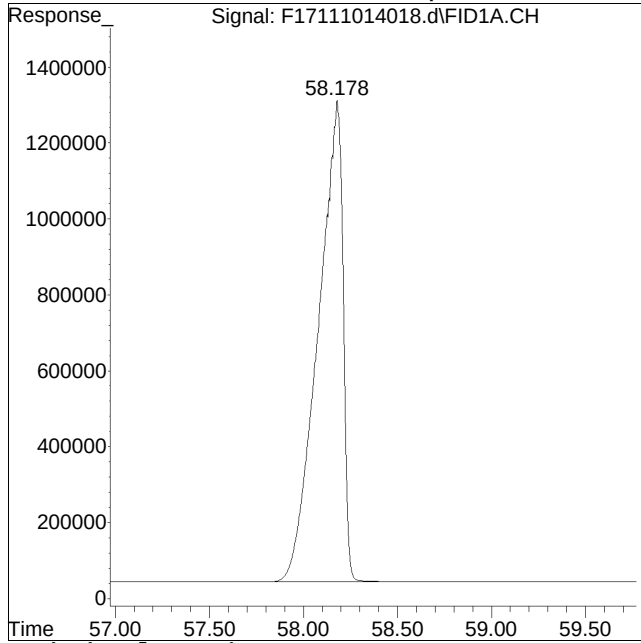
Manual Peak Response = 110748873 M4

M4 = Poor automated baseline construction.

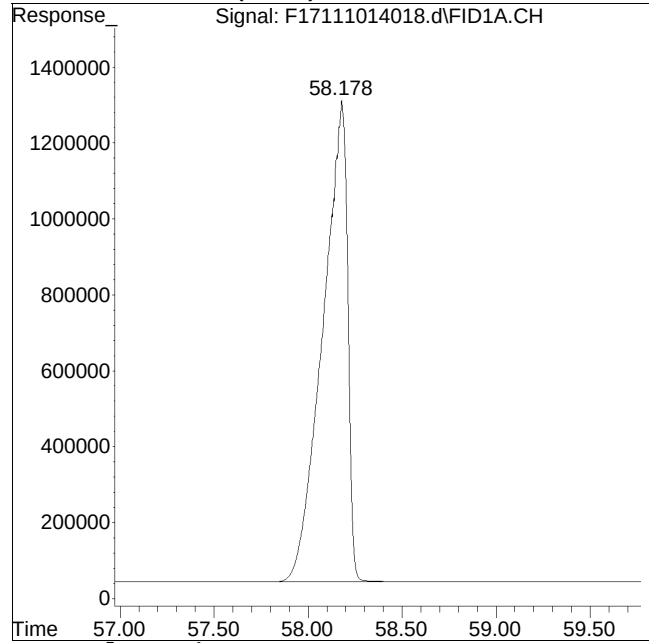
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #41: n-Tetracontane (C40)



Original Peak Response = 116134055



Manual Peak Response = 116119008 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014020.d
 Signal(s) : FID1A.CH
 Acq On : 11 Nov 2014 1:00 am
 Operator : FID17:NL
 Sample : I1711011405R
 Misc : WG743851, FRAV26 200ug/mL
 ALS Vial : 10 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:07:26 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.269	52608463	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.292	226451625	192.111	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 384.22%#
24) s	d50-Tetracosane	35.964	185908620	199.861	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 399.72%#
Target Compounds					
2) t	n-Octane (C8)	5.665	179952168	193.046	ug/mL M4
3) t	n-Nonane (C9)	7.843	183994497	187.873	ug/mL M4
4) t	n-Decane (C10)	10.307	190630604	185.480	ug/mL M4
5) t	n-Undecane (C11)	12.813	192977776	191.401	ug/mL M4
6) t	n-Dodecane (C12)	15.241	195722040	192.807	ug/mL M4
7) t	n-Tridecane (C13)	17.550	196451381	193.754	ug/mL M4
9) t	n-Tetradecane (C14)	19.740	198370823	188.742	ug/mL M4
11) t	n-Pentadecane (C15)	21.809	201966601	194.653	ug/mL M4
12) t	n-Hexadecane (C16)	23.770	201302145	192.523	ug/mL M4
14) t	n-Heptadecane (C17)	25.638	203355194	193.463	ug/mL M4
15) t	Pristane	25.751	203706839	193.339	ug/mL M4
16) t	n-Octadecane (C18)	27.411	206512059	197.666	ug/mL M4
17) t	Phytane	27.573	180095179	169.678	ug/mL M4
18) t	n-Nonadecane (C19)	29.100	205137349	197.465	ug/mL M4
20) t	n-Eicosane (C20)	30.711	204858567	196.291	ug/mL M4
21) t	n-Heneicosane (C21)	32.254	206881190	195.985	ug/mL M4
22) t	n-Docosane (C22)	33.732	209103777	196.978	ug/mL M4
23) t	n-Tricosane (C23)	35.154	211118913	197.747	ug/mL M4
25) t	n-Tetracosane (C24)	36.519	212476278	198.792	ug/mL M4
26) t	n-Pentacosane (C25)	37.828	211377509	197.094	ug/mL M4
27) t	n-Hexacosane (C26)	39.092	216859002	198.092	ug/mL M4
28) t	n-Heptacosane (C27)	40.309	215525451	198.359	ug/mL M4
29) t	n-Octacosane (C28)	41.485	215543841	197.759	ug/mL M4
30) t	n-Nonacosane (C29)	42.622	218200394	198.381	ug/mL M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014020.d
 Signal(s) : FID1A.CH
 Acq On : 11 Nov 2014 1:00 am
 Operator : FID17:NL
 Sample : I1711011405R
 Misc : WG743851, FRAV26 200ug/mL
 ALS Vial : 10 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:07:26 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc	Units	
31) t	n-Triacontane (C30)	43.722	219666383	199.046	ug/mL	M4
32) t	n-Hentriacontane (C31)	44.787	220837166	198.582	ug/mL	M4
33) t	n-Dotriacontane (C32)	45.818	223659667	202.301	ug/mL	M4
34) t	n-Tritriacontane (C33)	46.817	212305009	197.690	ug/mL	M4
35) t	n-tetratriacontane (C34)	47.853	222719308	195.403	ug/mL	M4
36) t	n-Pentatriacontane (C35)	49.015	225244106	198.632	ug/mL	M4
37) t	n-Hexatriacontane (C36)	50.347	231762250	188.759	ug/mL	M4
38) t	n-Heptatriacontane (C37)	51.885	226986888	198.137	ug/mL	M4
39) t	n-Octatriacontane (C38)	53.685	222999979	194.794	ug/mL	M4
41) t	n-Tetracontane (C40)	58.296	232479117	211.078	ug/mL	M4

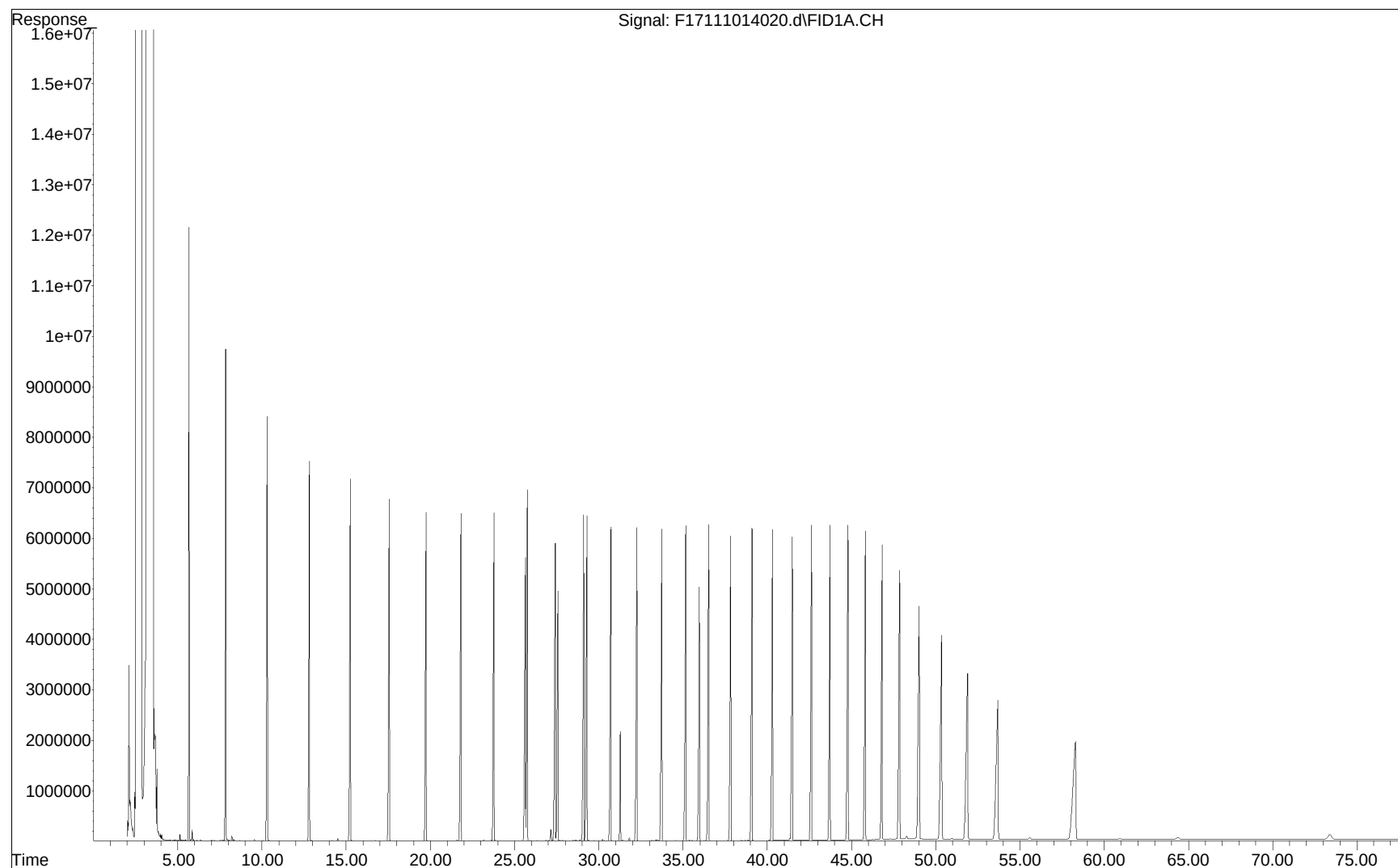
SemiQuant Compounds - Not Calibrated on this Instrument

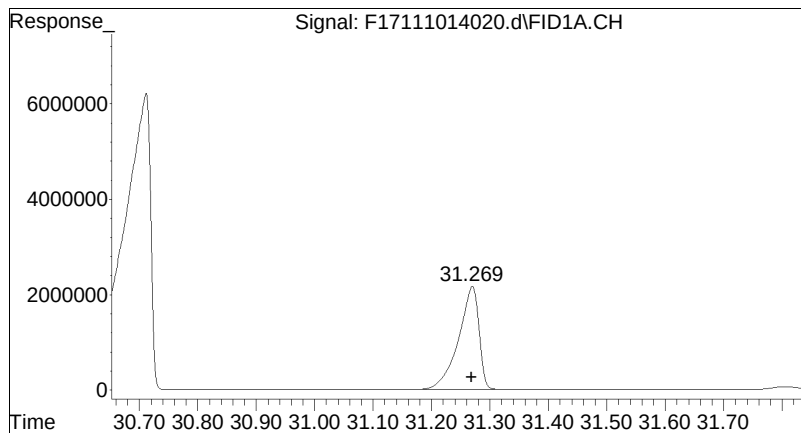
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

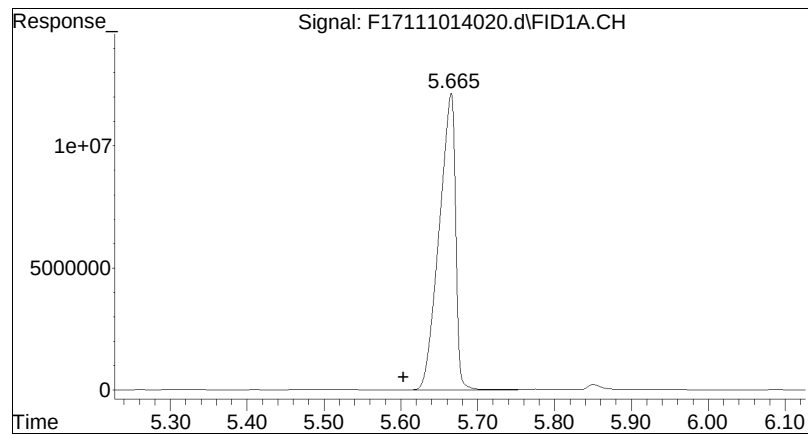
File : 0:\Forensics\Data\FID17\2014\NOV\NOV10\F17111014020.d
Operator : FID17:NL
Acquired : 11 Nov 2014 1:00 am using AcqMethod FID17.M
Sample Name: I1711011405R
Instrument: FID17
Misc Info : WG743851, FRAV26 200ug/mL
Vial Number: 10
CurrentMeth: 0:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M





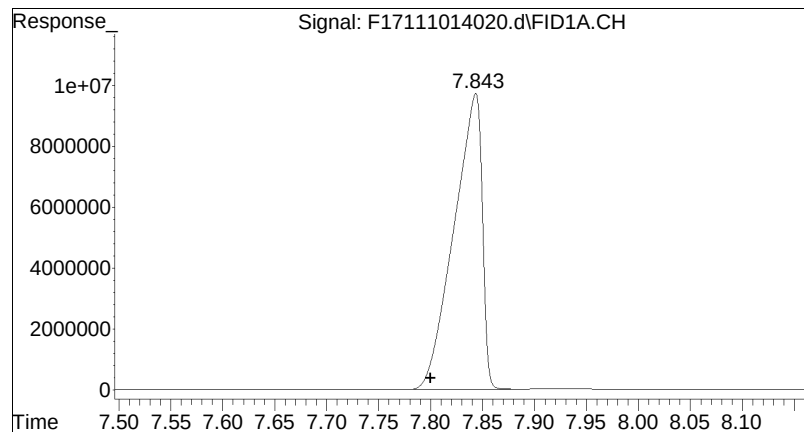
#1 5- α -androstan-3-one

R.T.: 31.269 min
Delta R.T.: 0.000 min
Response: 52608463
Conc: 50.00 ug/mL M4



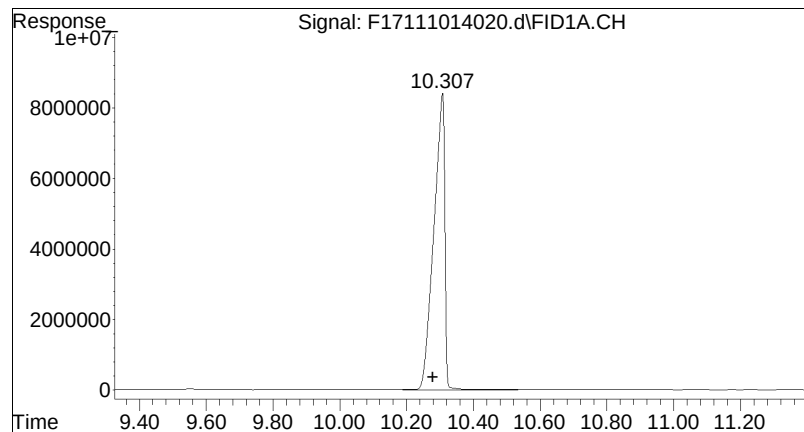
#2 n-Octane (C8)

R.T.: 5.665 min
Delta R.T.: 0.062 min
Response: 179952168
Conc: 193.05 ug/mL M4



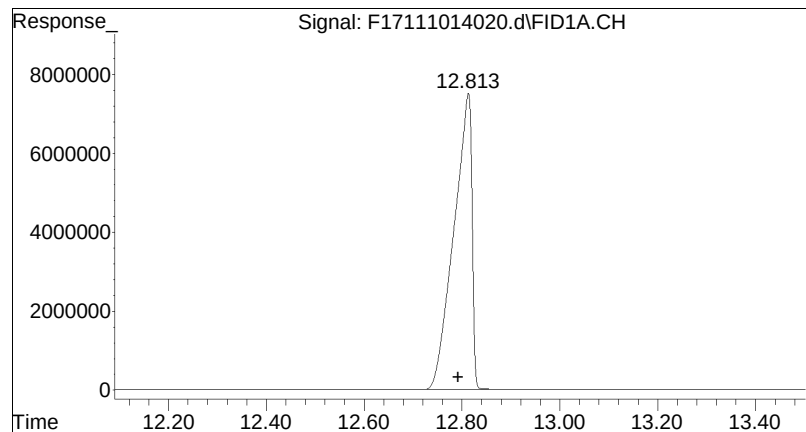
#3 n-Nonane (C9)

R.T.: 7.843 min
Delta R.T.: 0.043 min
Response: 183994497
Conc: 187.87 ug/mL M4



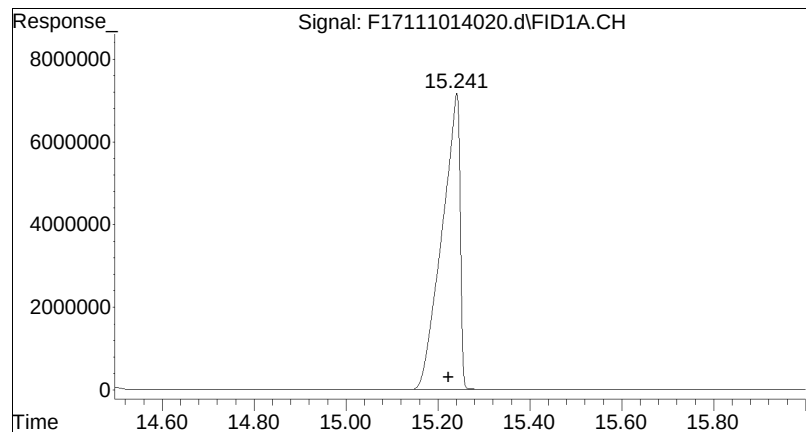
#4 n-Decane (C10)

R.T.: 10.307 min
Delta R.T.: 0.028 min
Response: 190630604
Conc: 185.48 ug/mL M4



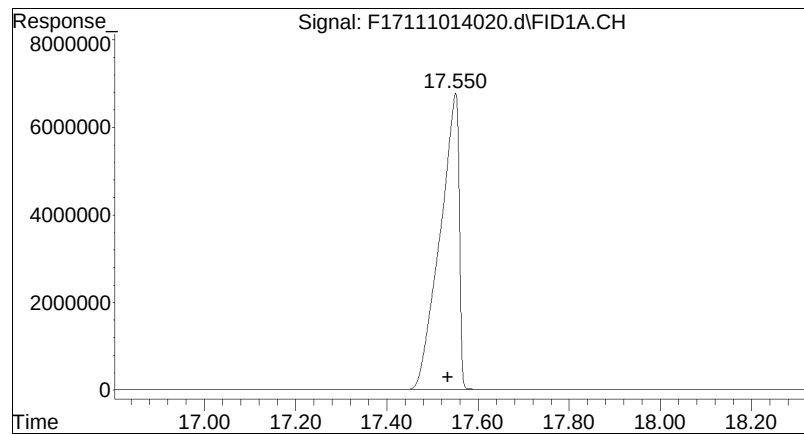
#5 n-Undecane (C11)

R.T.: 12.813 min
Delta R.T.: 0.020 min
Response: 19297776
Conc: 191.40 ug/mL M4



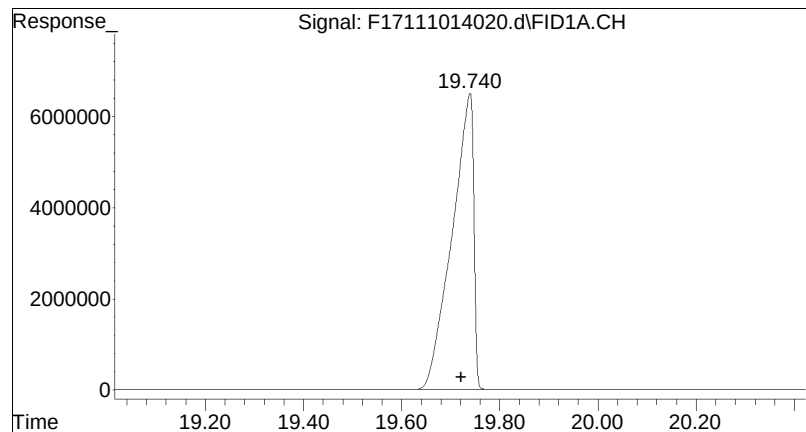
#6 n-Dodecane (C12)

R.T.: 15.241 min
Delta R.T.: 0.017 min
Response: 195722040
Conc: 192.81 ug/mL M4



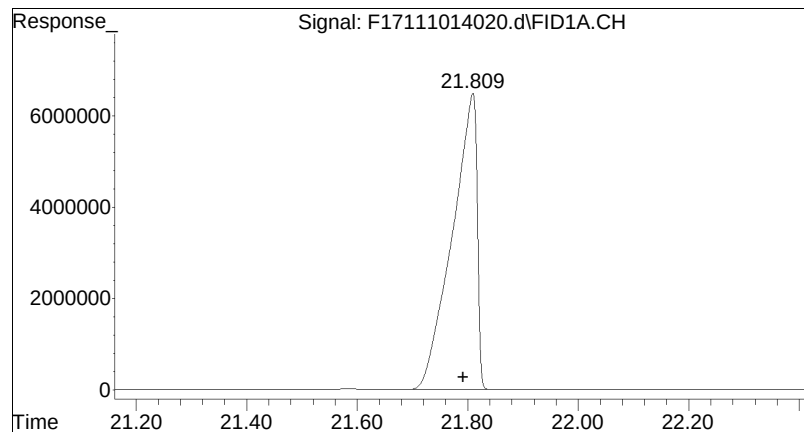
#7 n-Tridecane (C13)

R.T.: 17.550 min
Delta R.T.: 0.016 min
Response: 196451381
Conc: 193.75 ug/mL M4



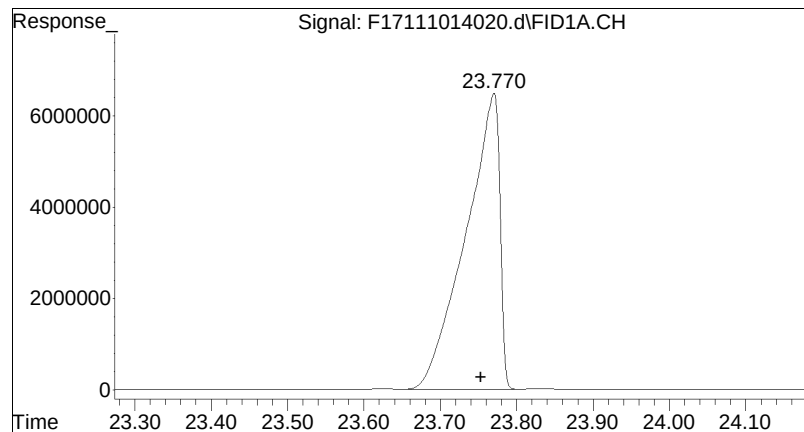
#9 n-Tetradecane (C14)

R.T.: 19.740 min
Delta R.T.: 0.018 min
Response: 198370823
Conc: 188.74 ug/mL M4



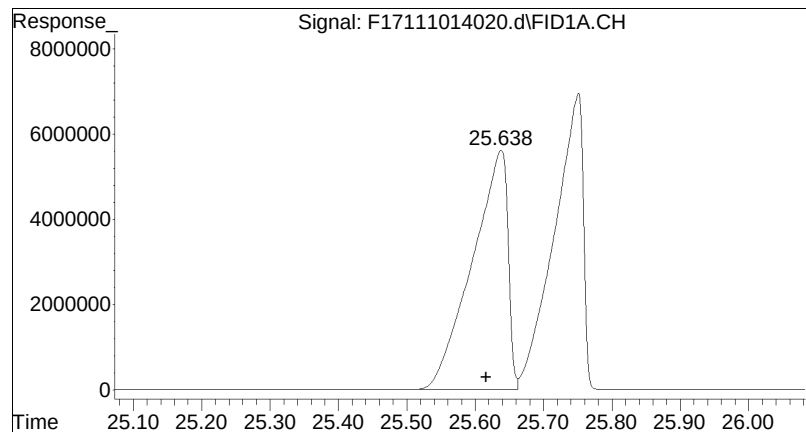
#11 n-Pentadecane (C15)

R.T.: 21.809 min
Delta R.T.: 0.017 min
Response: 201966601
Conc: 194.65 ug/mL M4



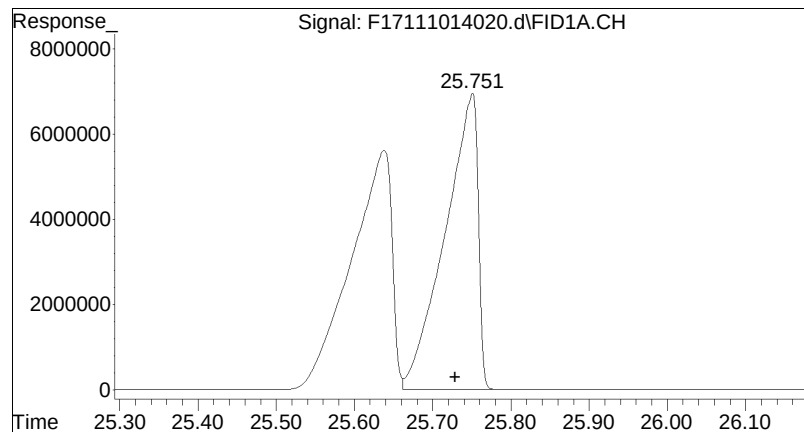
#12 n-Hexadecane (C16)

R.T.: 23.770 min
Delta R.T.: 0.017 min
Response: 201302145
Conc: 192.52 ug/mL M4



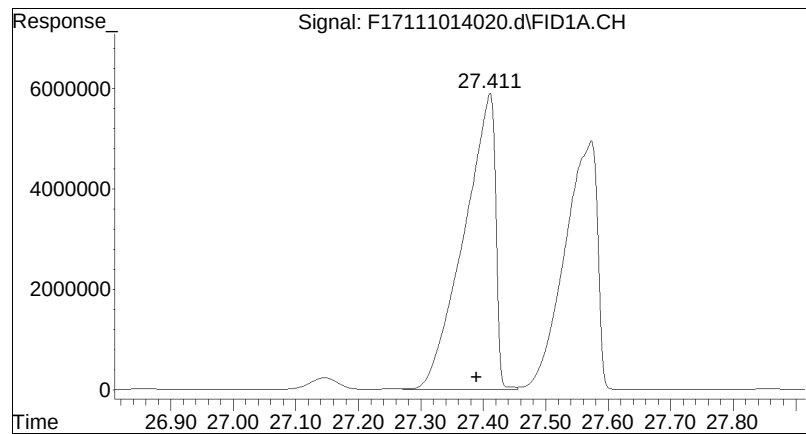
#14 n-Heptadecane (C17)

R.T.: 25.638 min
Delta R.T.: 0.021 min
Response: 203355194
Conc: 193.46 ug/mL M4



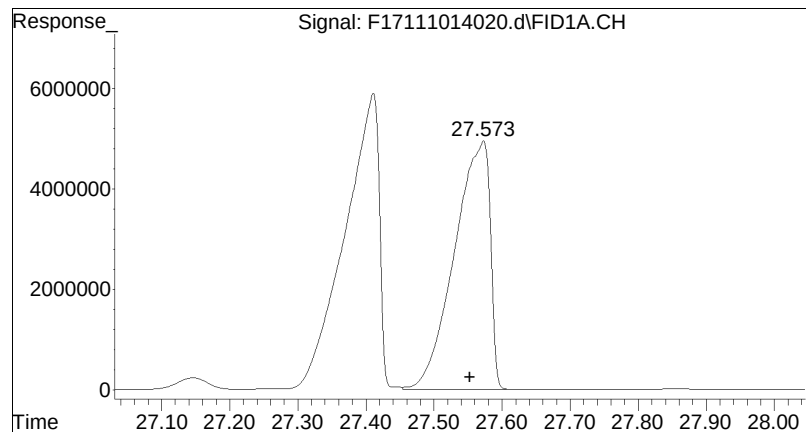
#15 Pristane

R.T.: 25.751 min
Delta R.T.: 0.022 min
Response: 203706839
Conc: 193.34 ug/mL M4



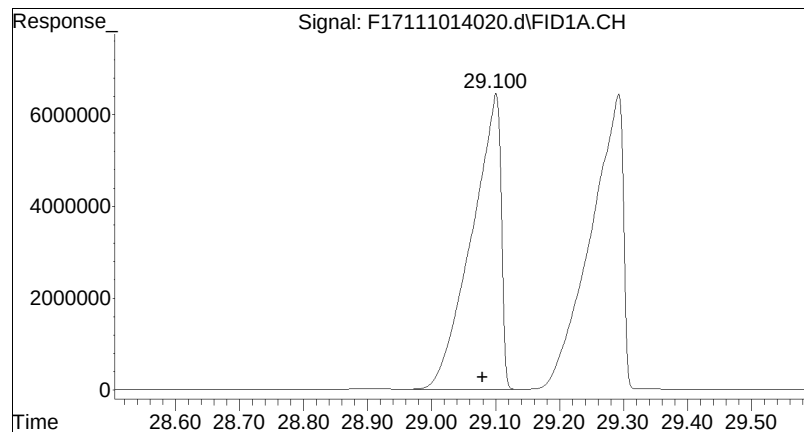
#16 n-Octadecane (C18)

R.T.: 27.411 min
Delta R.T.: 0.021 min
Response: 206512059
Conc: 197.67 ug/mL M4



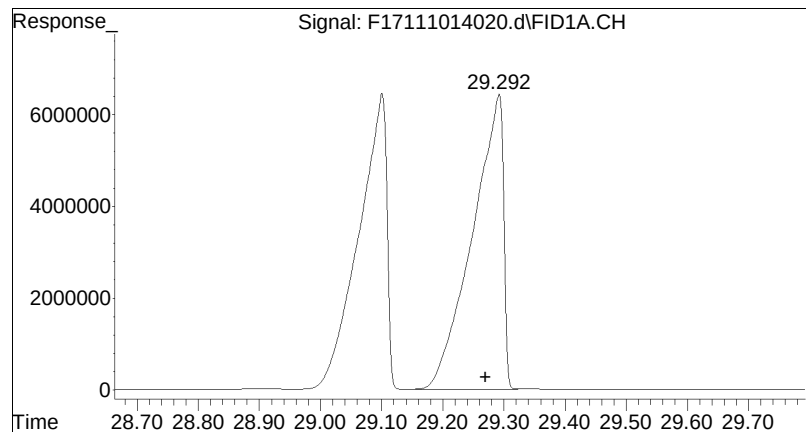
#17 Phytane

R.T.: 27.573 min
Delta R.T.: 0.020 min
Response: 180095179
Conc: 169.68 ug/mL M4



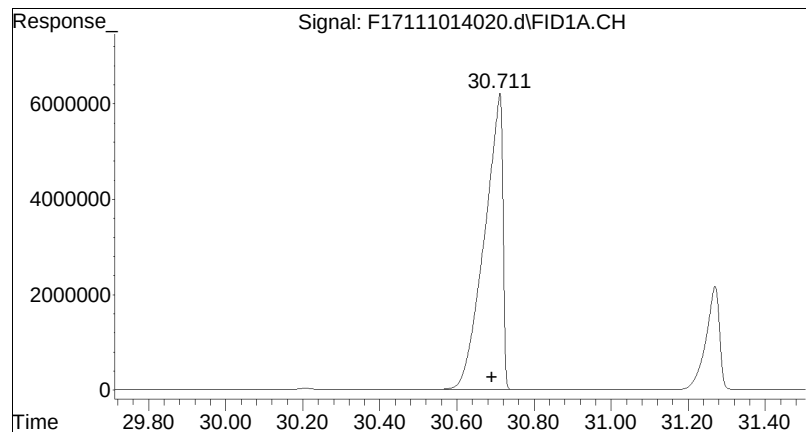
#18 n-Nonadecane (C19)

R.T.: 29.100 min
Delta R.T.: 0.020 min
Response: 205137349
Conc: 197.47 ug/mL M4



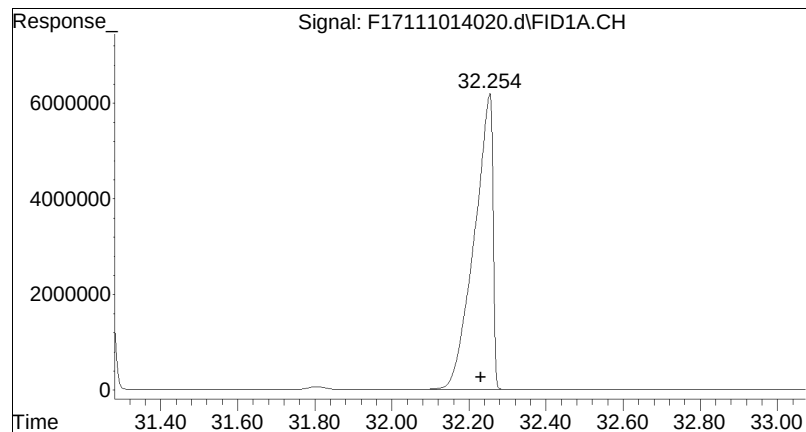
#19 ortho-terphenyl

R.T.: 29.292 min
Delta R.T.: 0.021 min
Response: 226451625
Conc: 192.11 ug/mL M4



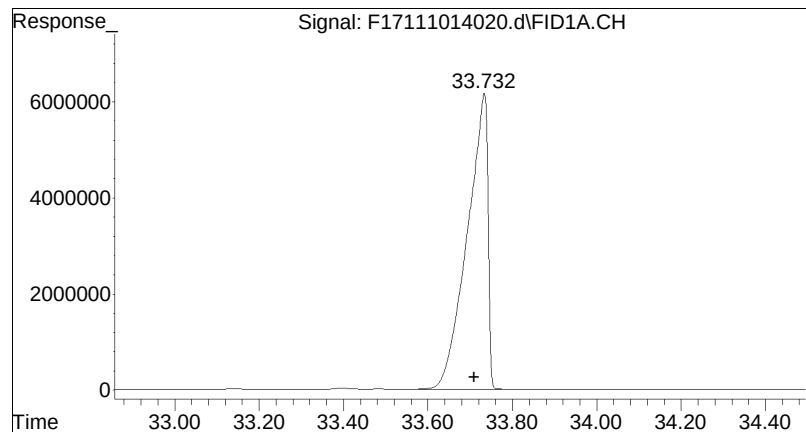
#20 n-Eicosane (C20)

R.T.: 30.711 min
Delta R.T.: 0.020 min
Response: 204858567
Conc: 196.29 ug/mL M4



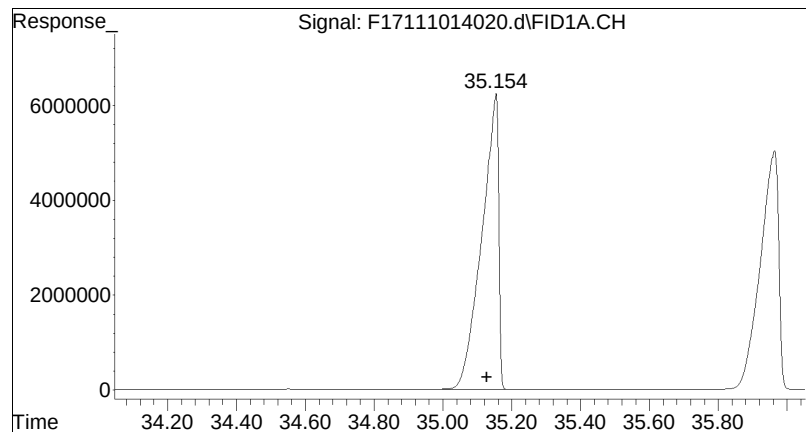
#21 n-Heneicosane (C21)

R.T.: 32.254 min
Delta R.T.: 0.024 min
Response: 206881190
Conc: 195.99 ug/mL M4



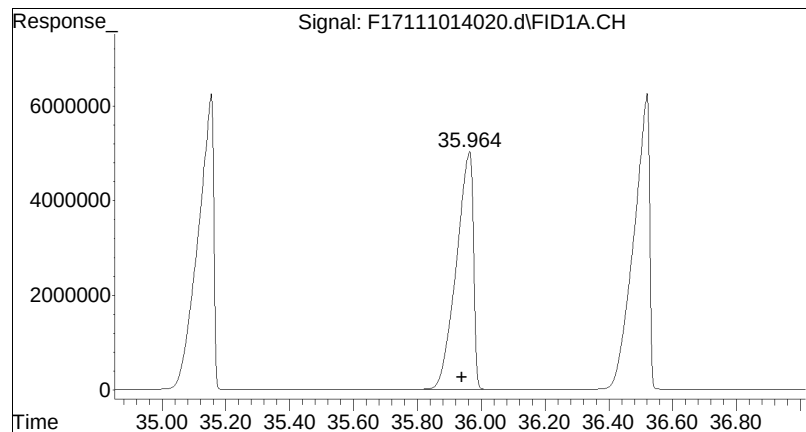
#22 n-Docosane (C22)

R.T.: 33.732 min
Delta R.T.: 0.023 min
Response: 209103777
Conc: 196.98 ug/mL M4



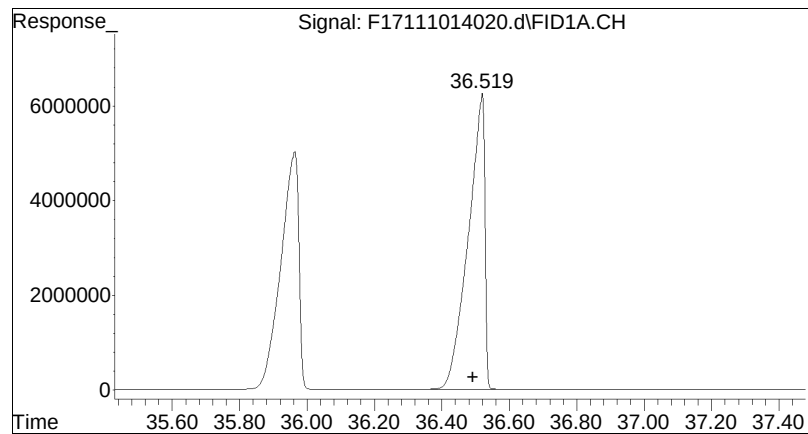
#23 n-Tricosane (C23)

R.T.: 35.154 min
Delta R.T.: 0.026 min
Response: 21118913
Conc: 197.75 ug/mL M4



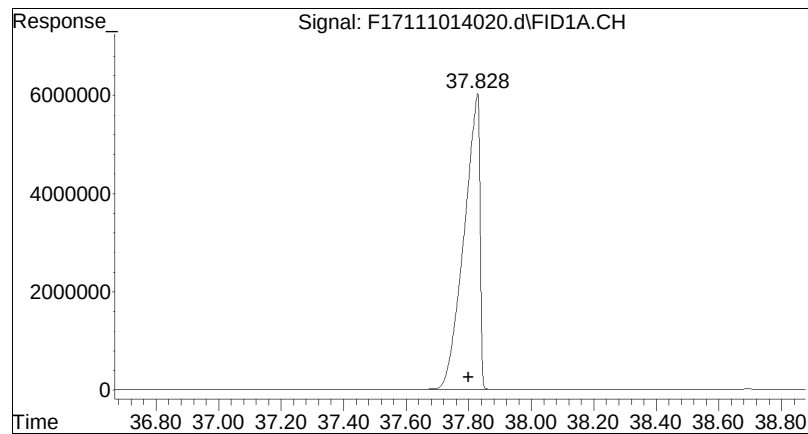
#24 d50-Tetracosane

R.T.: 35.964 min
Delta R.T.: 0.024 min
Response: 185908620
Conc: 199.86 ug/mL M4



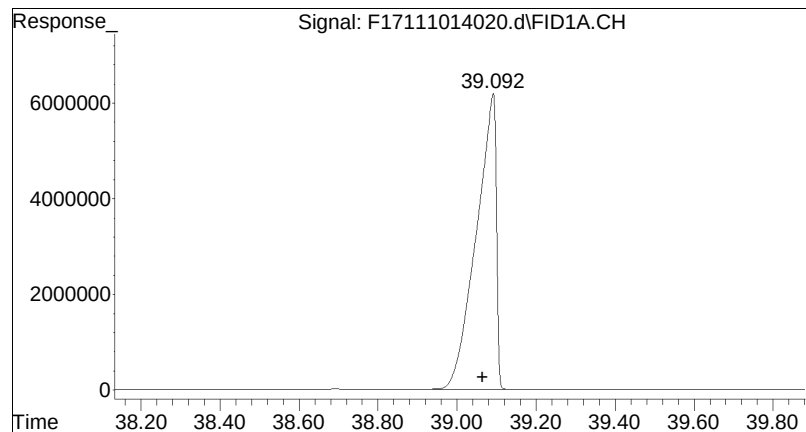
#25 n-Tetracosane (C24)

R.T.: 36.519 min
Delta R.T.: 0.026 min
Response: 212476278
Conc: 198.79 ug/mL M4



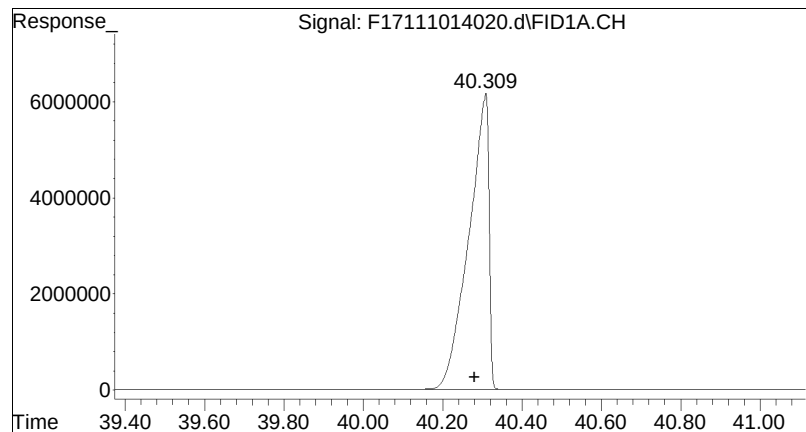
#26 n-Pentacosane (C25)

R.T.: 37.828 min
Delta R.T.: 0.028 min
Response: 211377509
Conc: 197.09 ug/mL M4



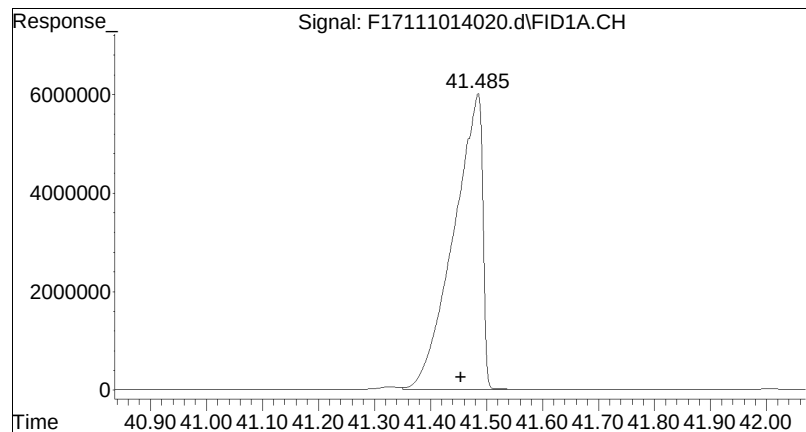
#27 n-Hexacosane (C26)

R.T.: 39.092 min
Delta R.T.: 0.027 min
Response: 216859002
Conc: 198.09 ug/mL M4



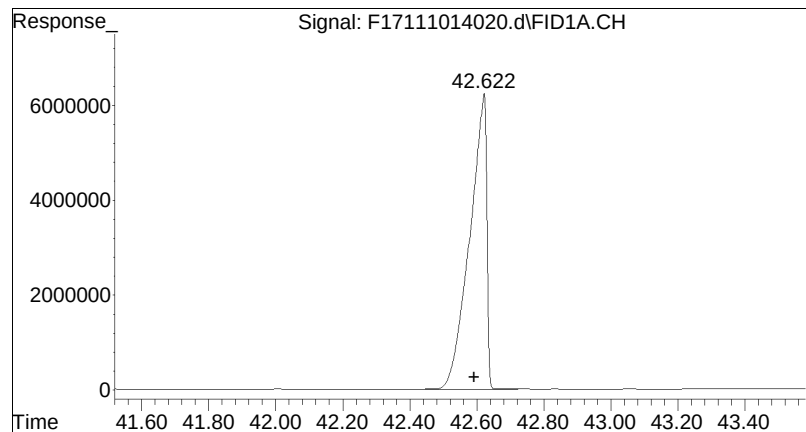
#28 n-Heptacosane (C27)

R.T.: 40.309 min
Delta R.T.: 0.027 min
Response: 215525451
Conc: 198.36 ug/mL M4



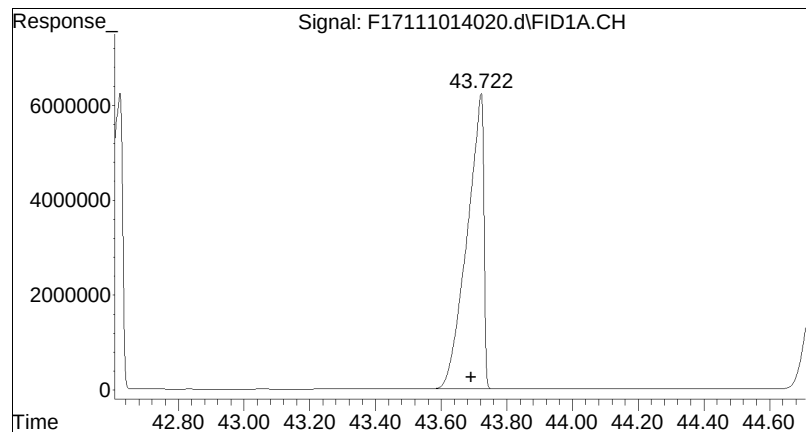
#29 n-Octacosane (C28)

R.T.: 41.485 min
Delta R.T.: 0.031 min
Response: 215543841
Conc: 197.76 ug/mL M4



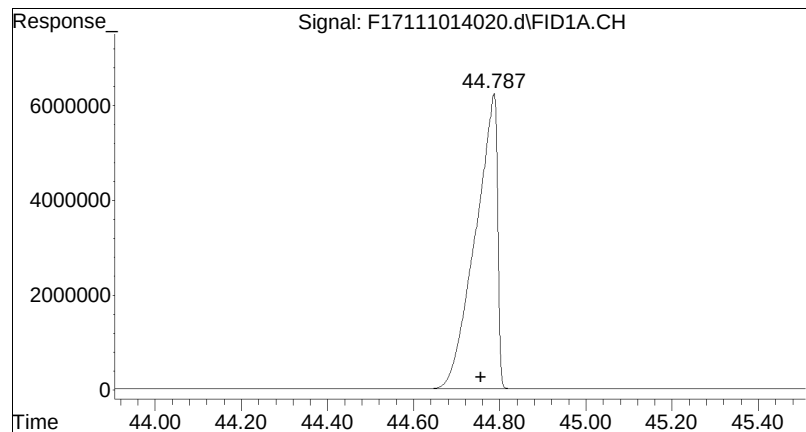
#30 n-Nonacosane (C29)

R.T.: 42.622 min
Delta R.T.: 0.029 min
Response: 218200394
Conc: 198.38 ug/mL M4



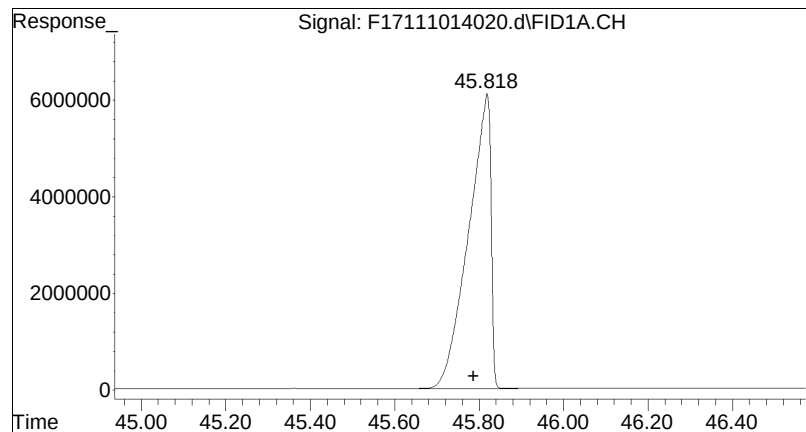
#31 n-Triacontane (C30)

R.T.: 43.722 min
Delta R.T.: 0.031 min
Response: 219666383
Conc: 199.05 ug/mL M4



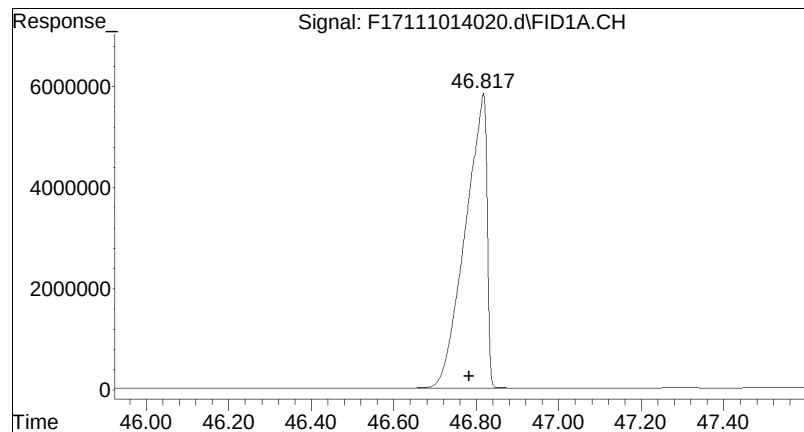
#32 n-Hentriacontane (C31)

R.T.: 44.787 min
Delta R.T.: 0.030 min
Response: 220837166
Conc: 198.58 ug/mL M4



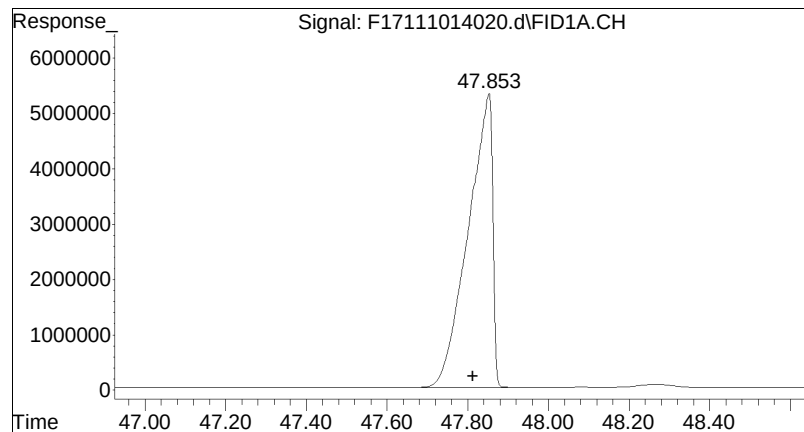
#33 n-Dotriacontane (C32)

R.T.: 45.818 min
Delta R.T.: 0.032 min
Response: 223659667
Conc: 202.30 ug/mL M4



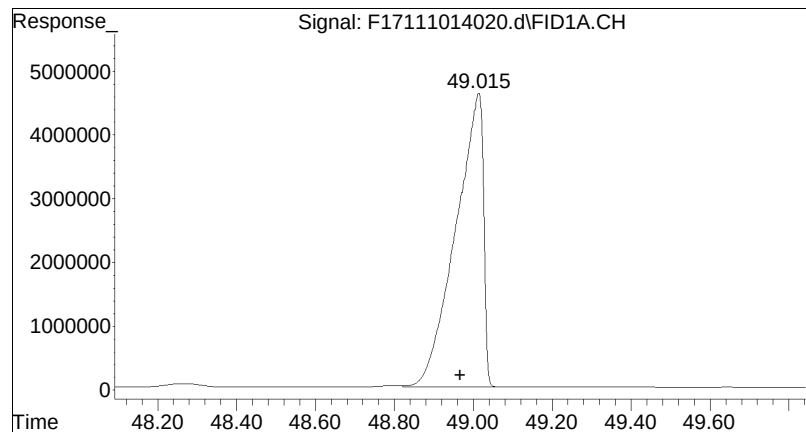
#34 n-Tritriacontane (C33)

R.T.: 46.817 min
Delta R.T.: 0.034 min
Response: 212305009
Conc: 197.69 ug/mL M4



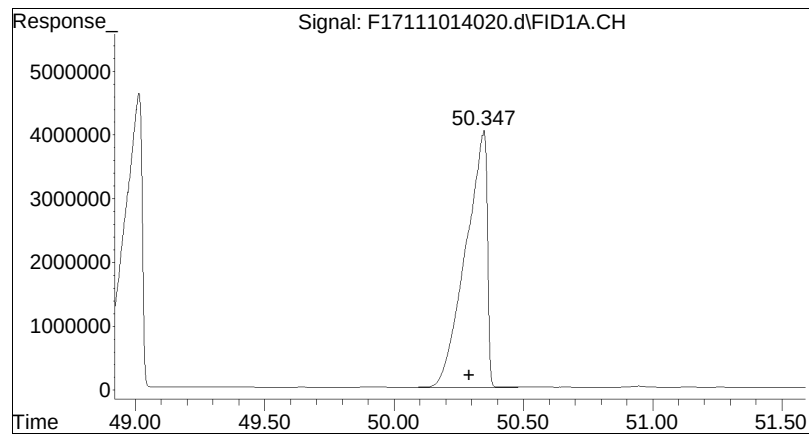
#35 n-tetratriacontane (C34)

R.T.: 47.853 min
Delta R.T.: 0.040 min
Response: 222719308
Conc: 195.40 ug/mL M4



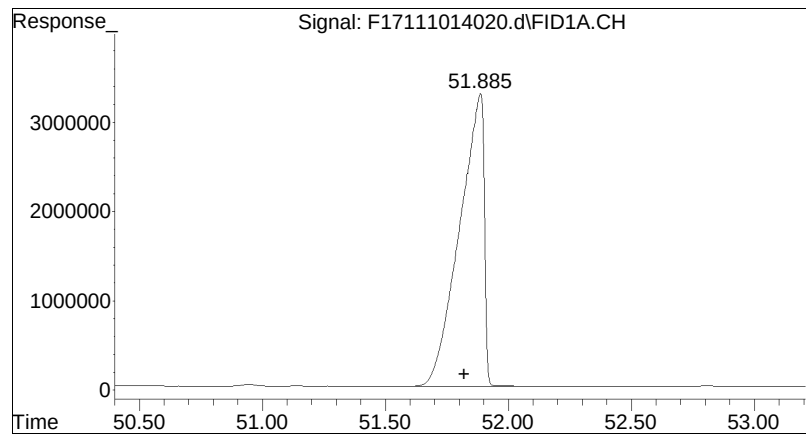
#36 n-Pentatriacontane (C35)

R.T.: 49.015 min
Delta R.T.: 0.047 min
Response: 225244106
Conc: 198.63 ug/mL M4



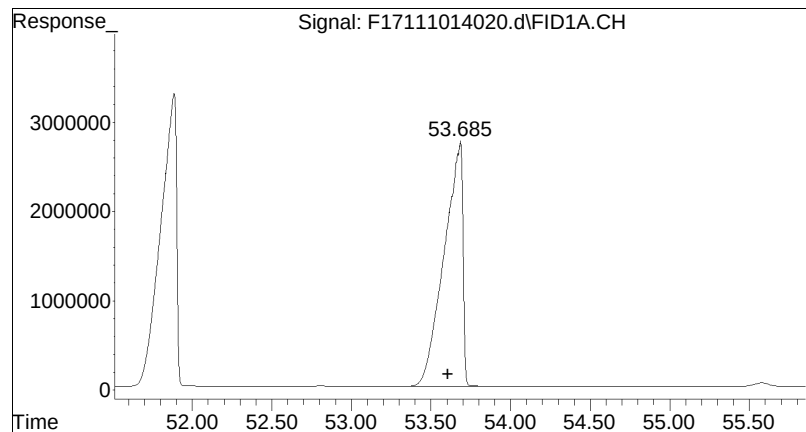
#37 n-Hexatriacontane (C36)

R.T.: 50.347 min
Delta R.T.: 0.055 min
Response: 231762250
Conc: 188.76 ug/mL M4



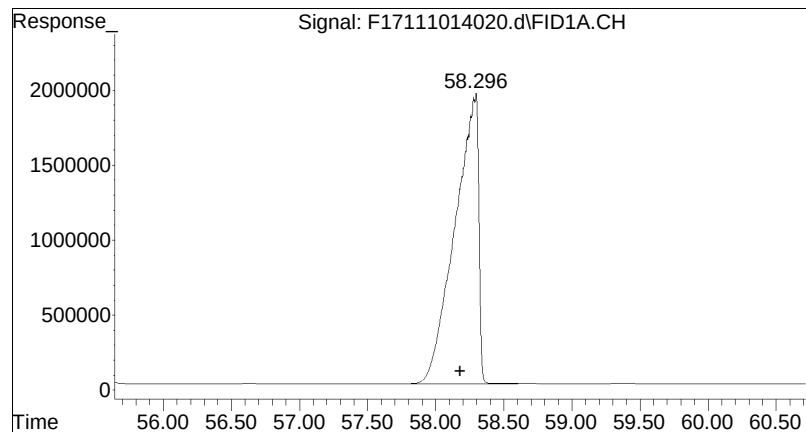
#38 n-Heptatriacontane (C37)

R.T.: 51.885 min
Delta R.T.: 0.063 min
Response: 226986888
Conc: 198.14 ug/mL M4



#39 n-Octatriacontane (C38)

R.T.: 53.685 min
Delta R.T.: 0.078 min
Response: 222999979
Conc: 194.79 ug/mL M4



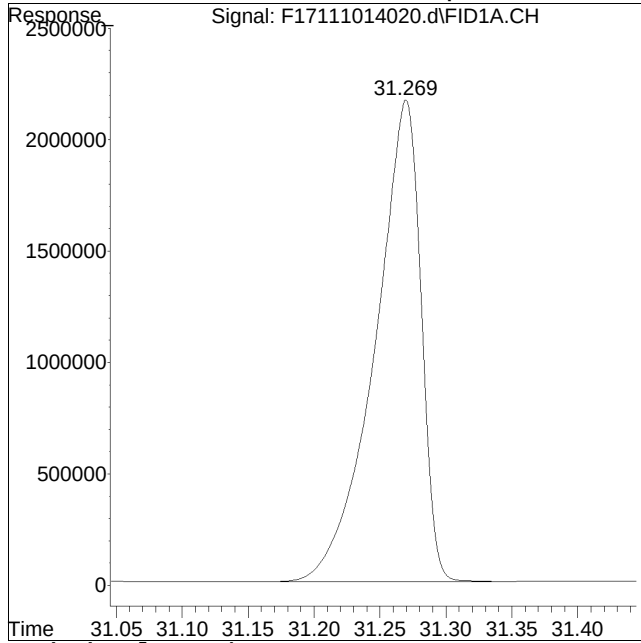
#41 n-Tetracontane (C40)

R.T.: 58.296 min
Delta R.T.: 0.118 min
Response: 232479117
Conc: 211.08 ug/mL M4

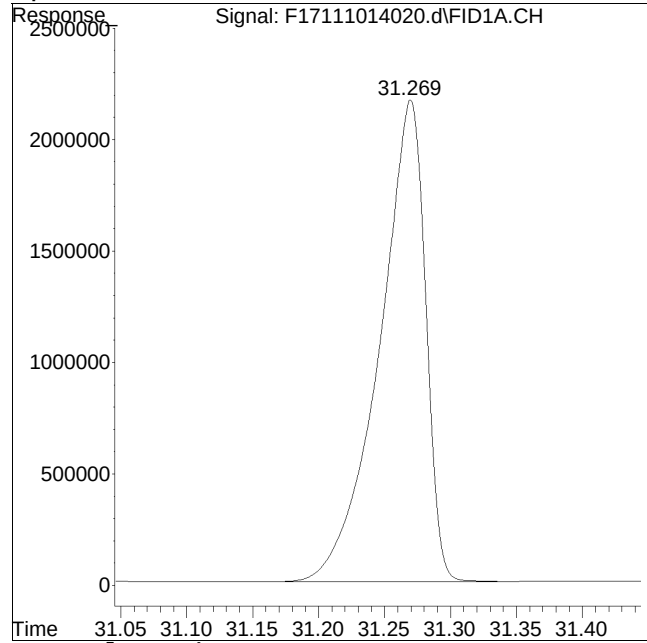
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #1: 5-alpha-androstane



Original Peak Response = 52594049



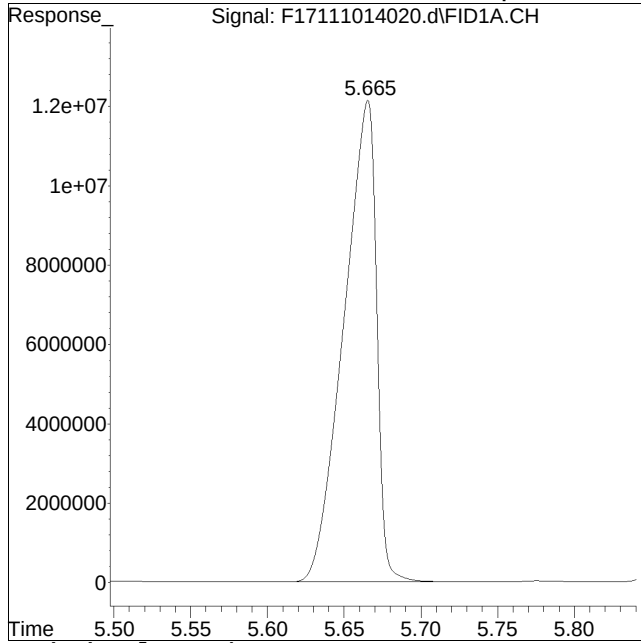
Manual Peak Response = 52608463 M4

M4 = Poor automated baseline construction.

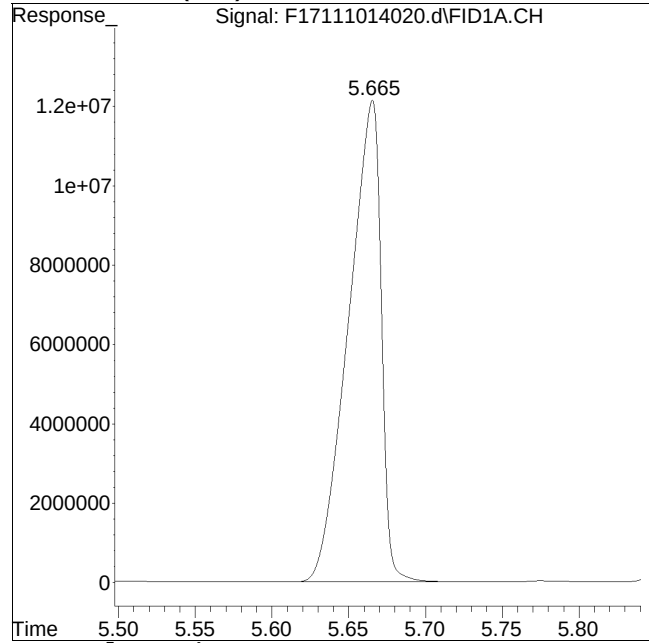
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #2: n-Octane (C8)



Original Peak Response = 179947142



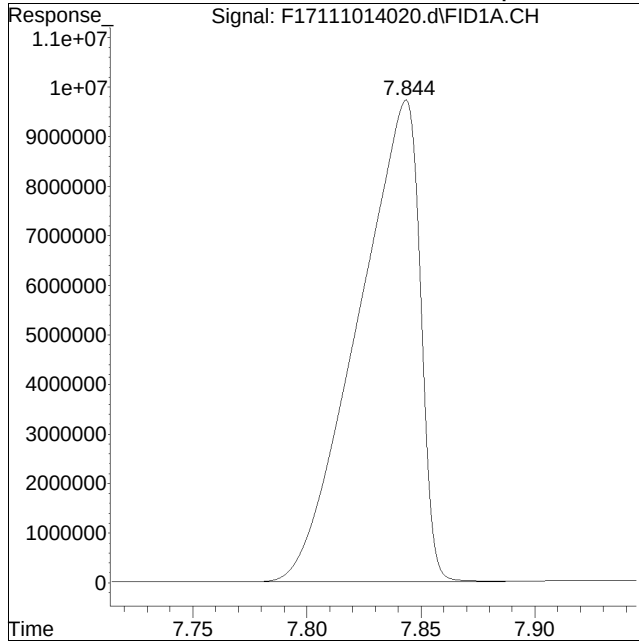
Manual Peak Response = 179952168 M4

M4 = Poor automated baseline construction.

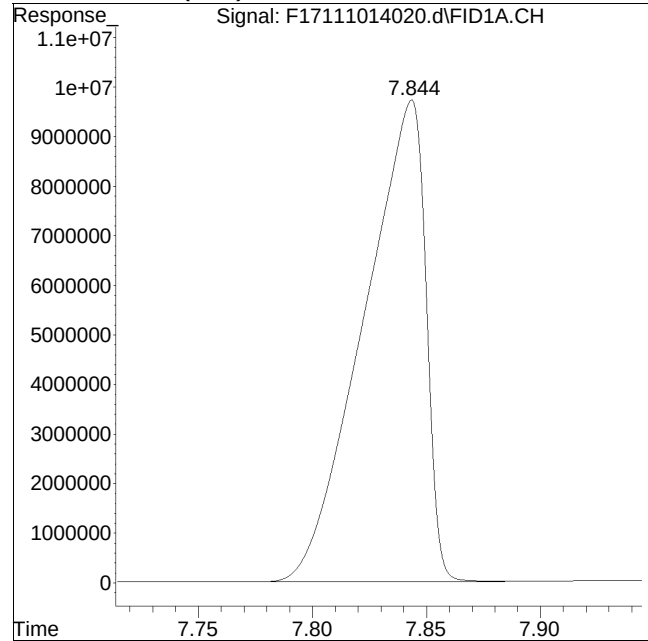
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #3: n-Nonane (C9)



Original Peak Response = 184176484



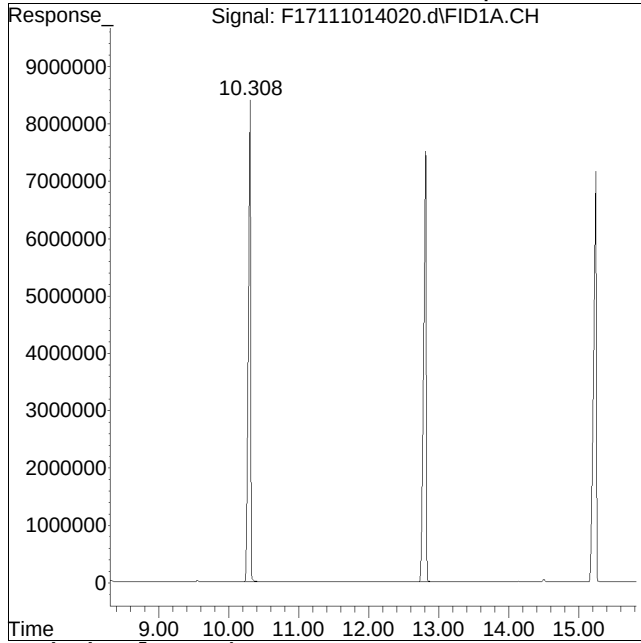
Manual Peak Response = 183994497 M4

M4 = Poor automated baseline construction.

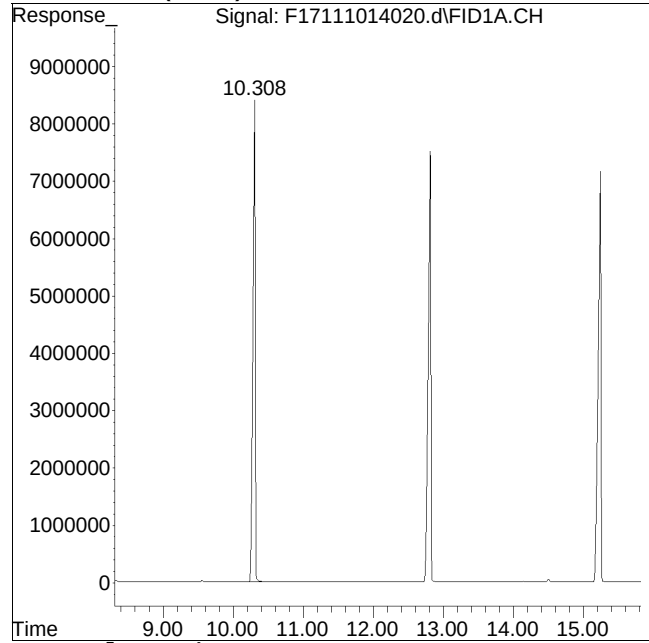
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #4: n-Decane (C10)



Original Peak Response = 188681070



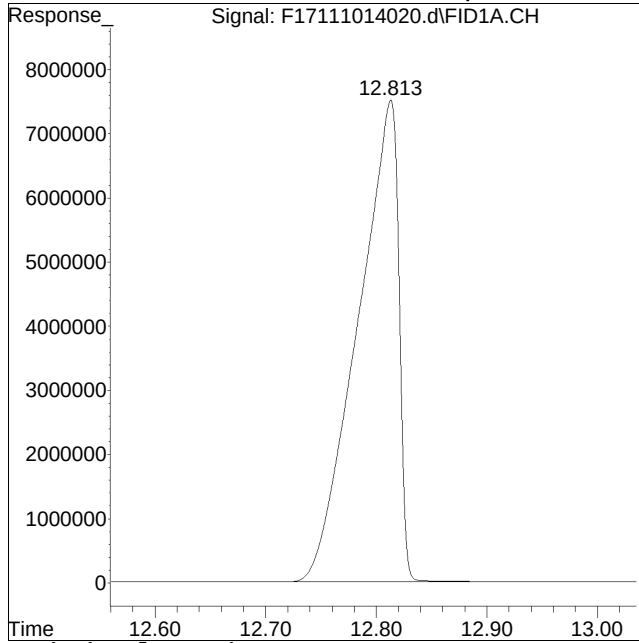
Manual Peak Response = 190630604 M4

M4 = Poor automated baseline construction.

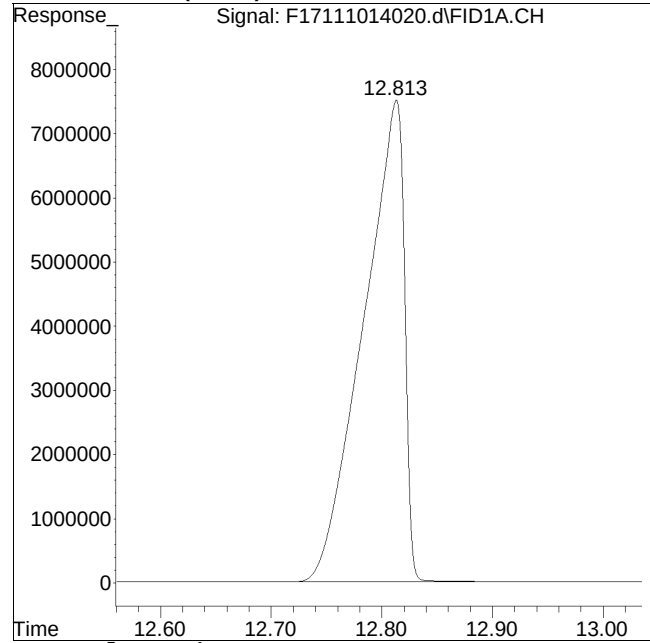
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #5: n-Undecane (C11)



Original Peak Response = 192984123



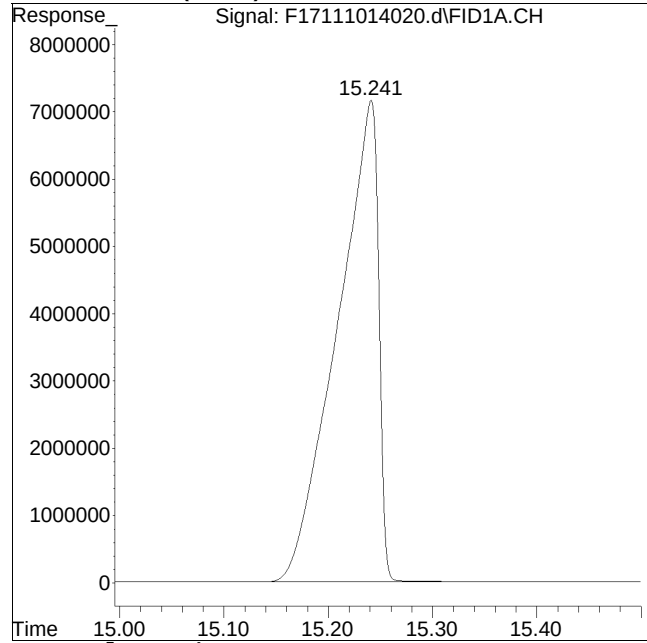
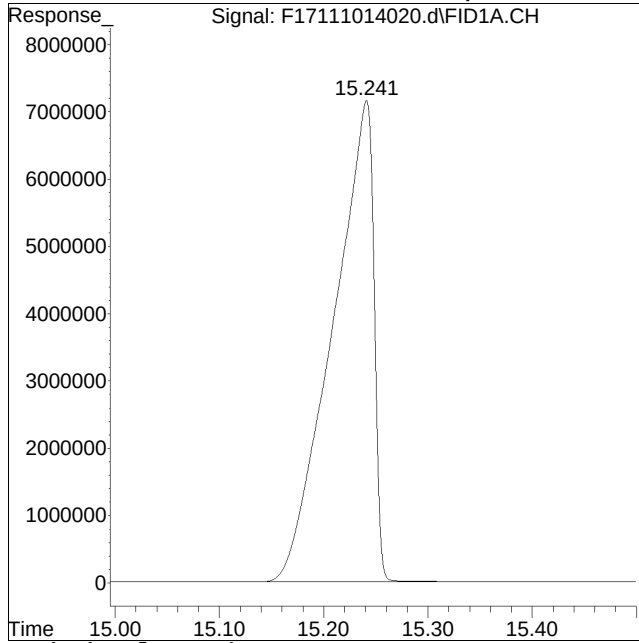
Manual Peak Response = 192977776 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #6: n-Dodecane (C12)



Original Peak Response = 195713454

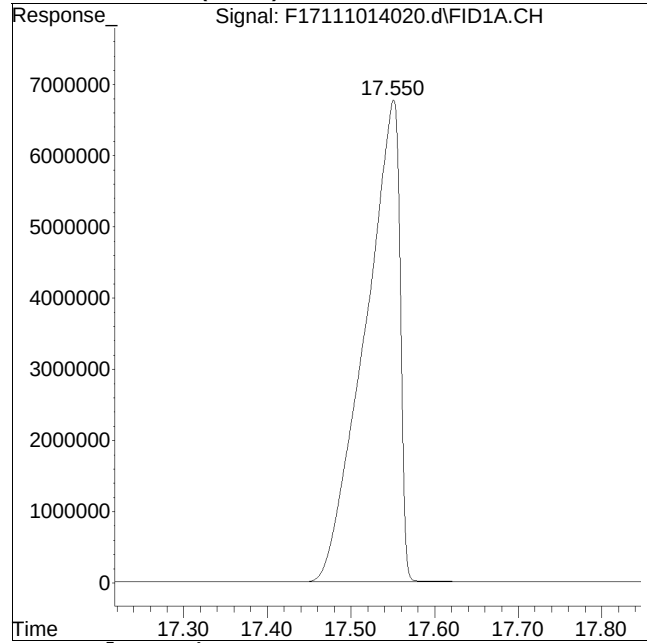
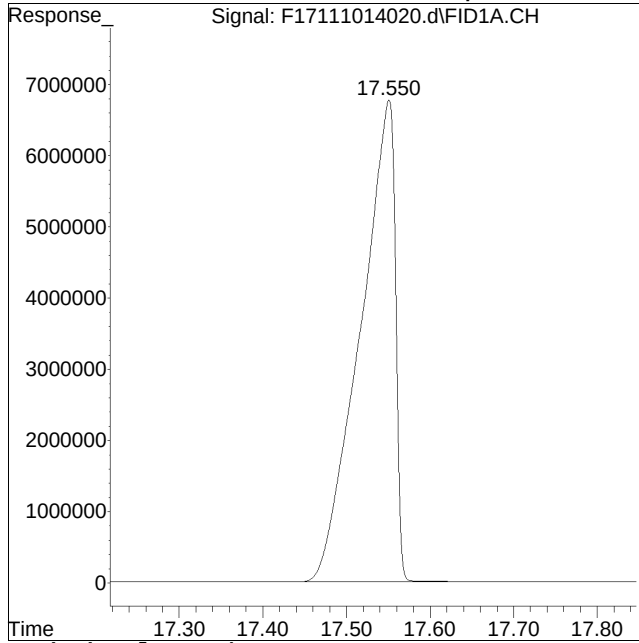
Manual Peak Response = 195722040 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #7: n-Tridecane (C13)



Original Peak Response = 196477164

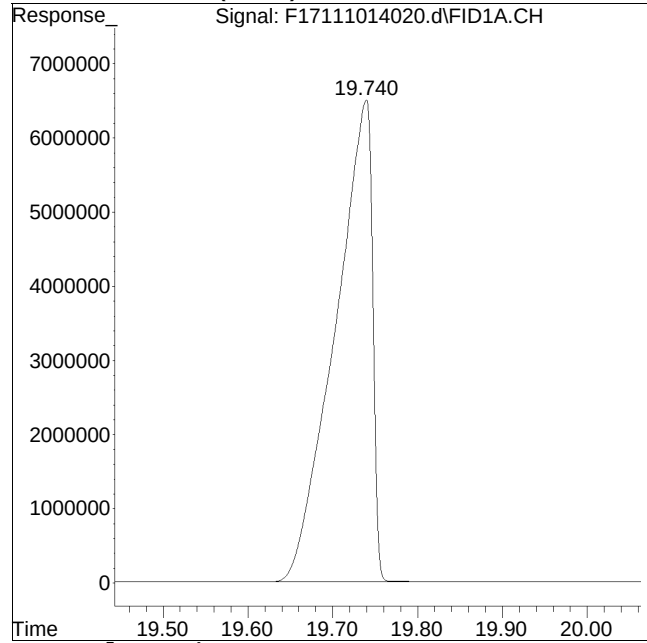
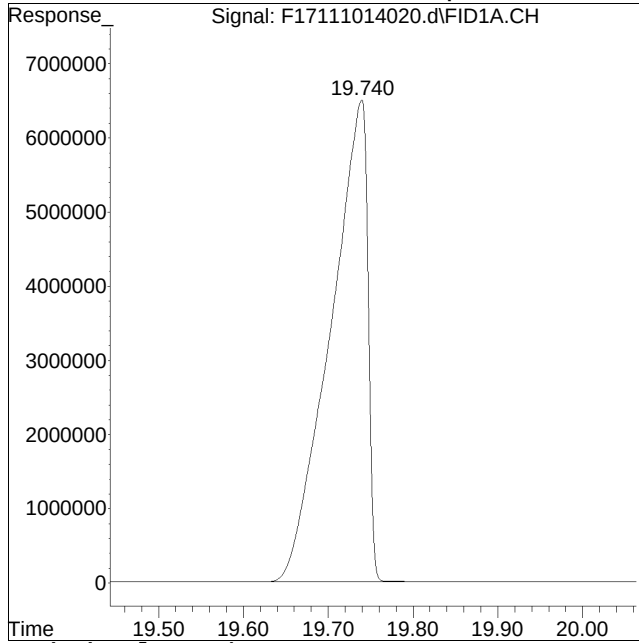
Manual Peak Response = 196451381 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #9: n-Tetradecane (C14)



Original Peak Response = 198425471

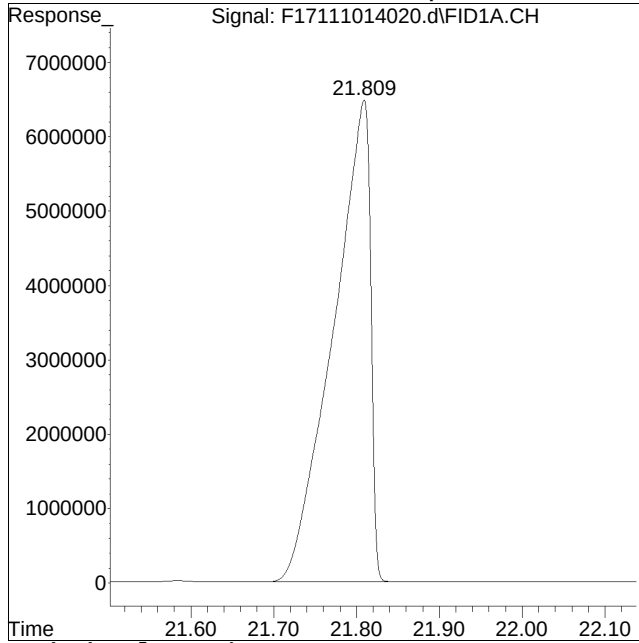
Manual Peak Response = 198370823 M4

M4 = Poor automated baseline construction.

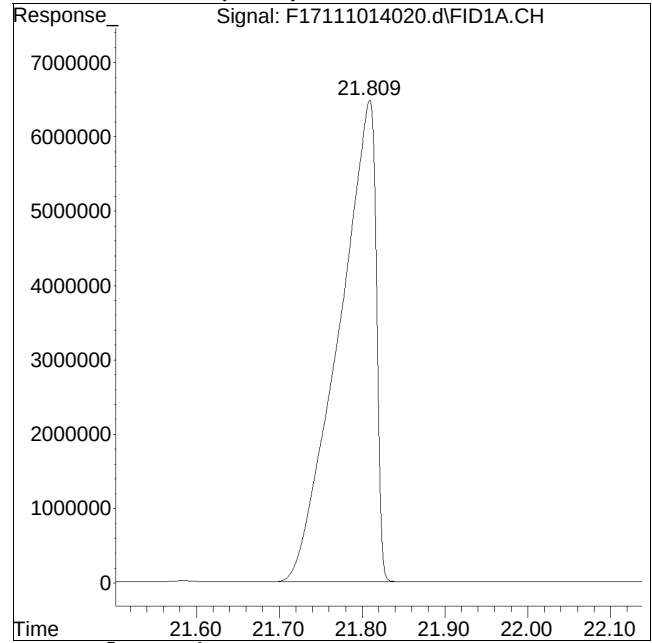
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #11: n-Pentadecane (C15)



Original Peak Response = 202043606



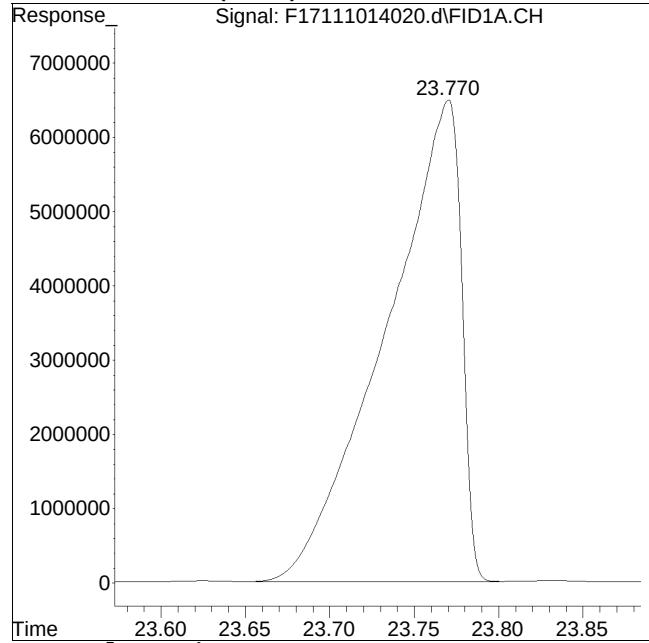
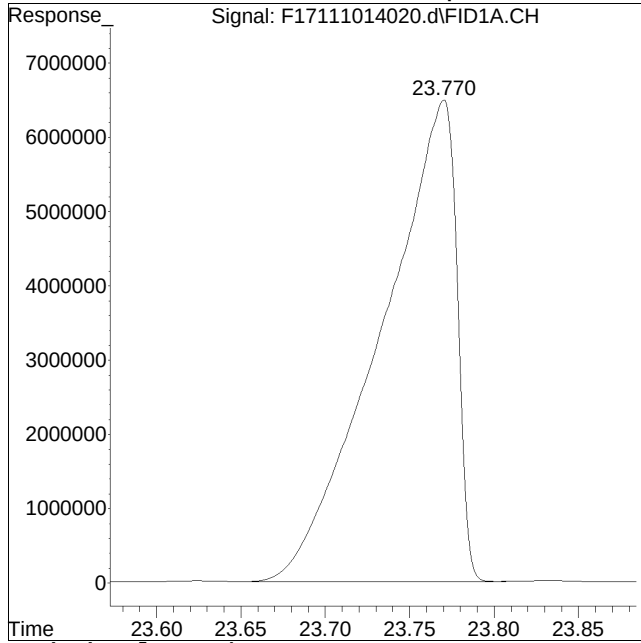
Manual Peak Response = 201966601 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #12: n-Hexadecane (C16)



Original Peak Response = 201304134

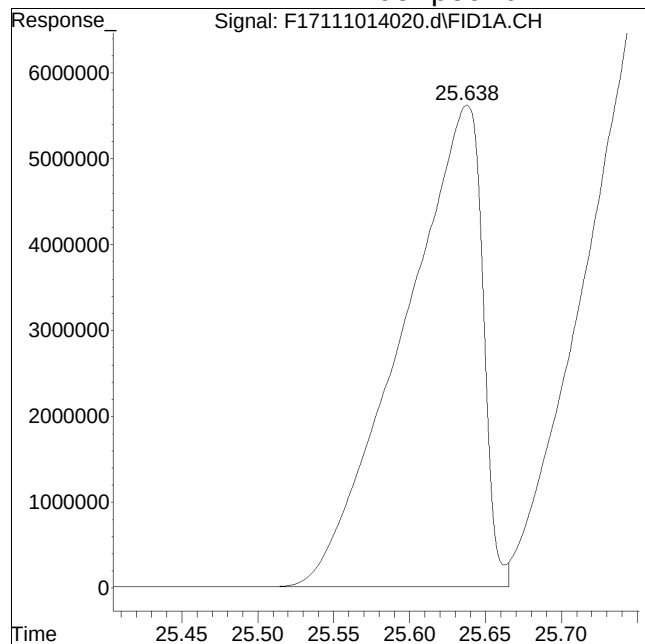
Manual Peak Response = 201302145 M4

M4 = Poor automated baseline construction.

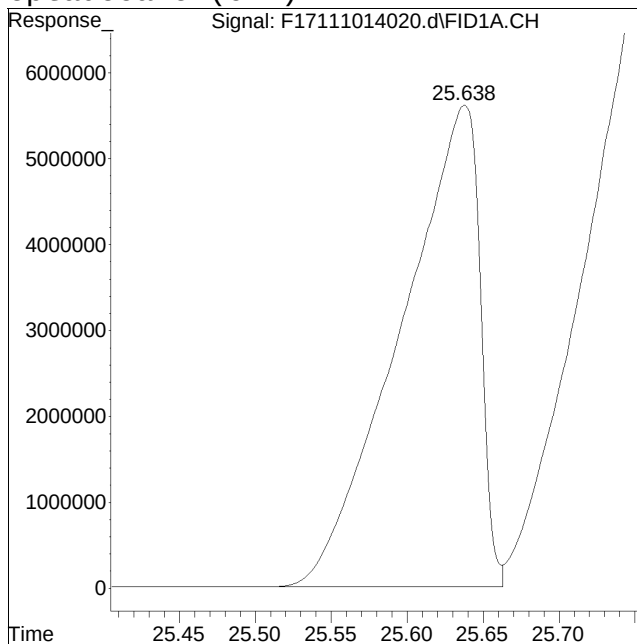
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
 Data File : F17111014020.d Operator : FID17:NL
 Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
 Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #14: n-Heptadecane (C17)



Original Peak Response = 203853308



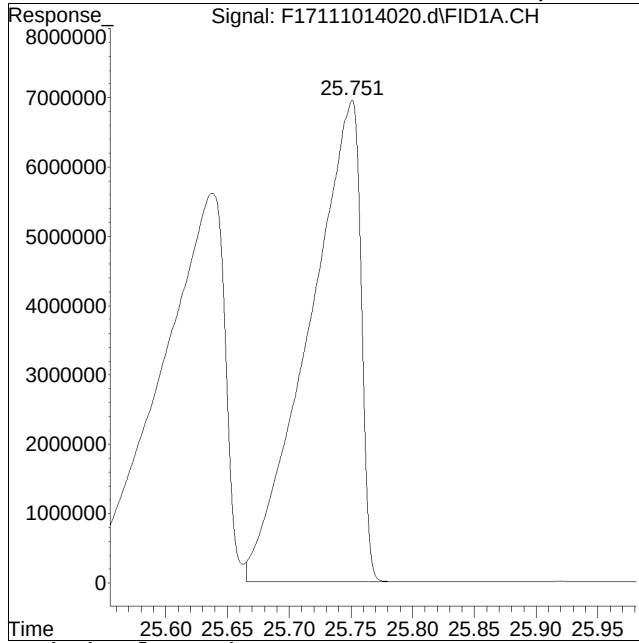
Manual Peak Response = 203355194 M4

M4 = Poor automated baseline construction.

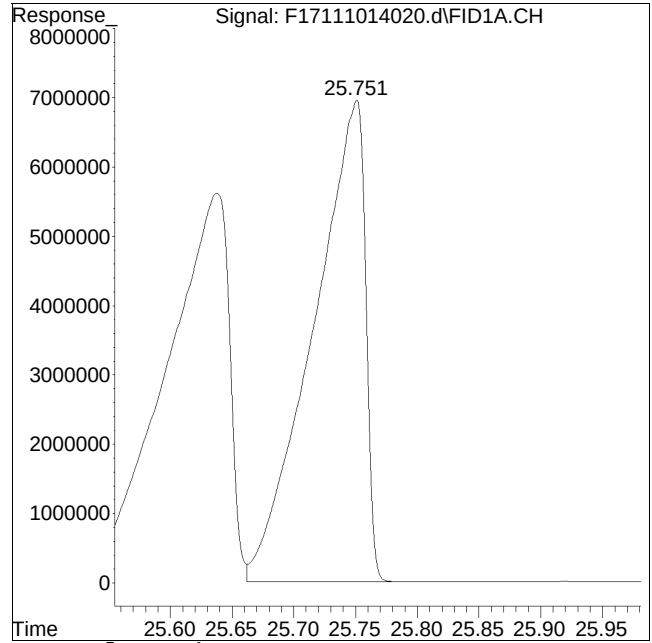
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #15: Pristane



Original Peak Response = 203372327



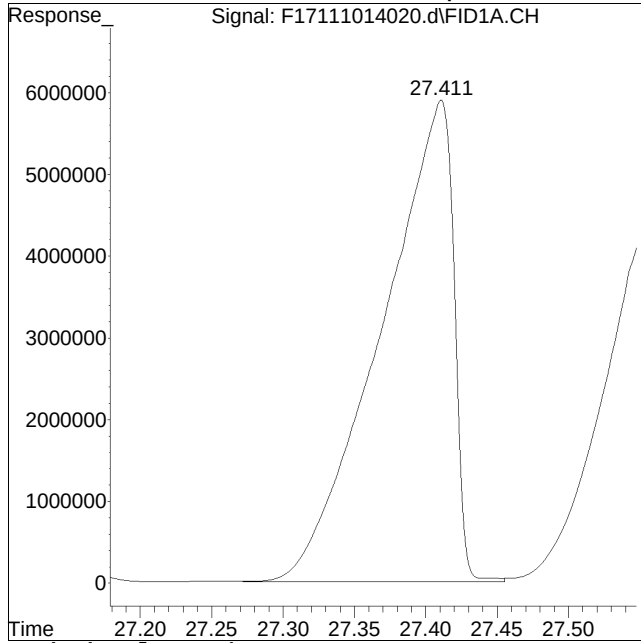
Manual Peak Response = 203706839 M4

M4 = Poor automated baseline construction.

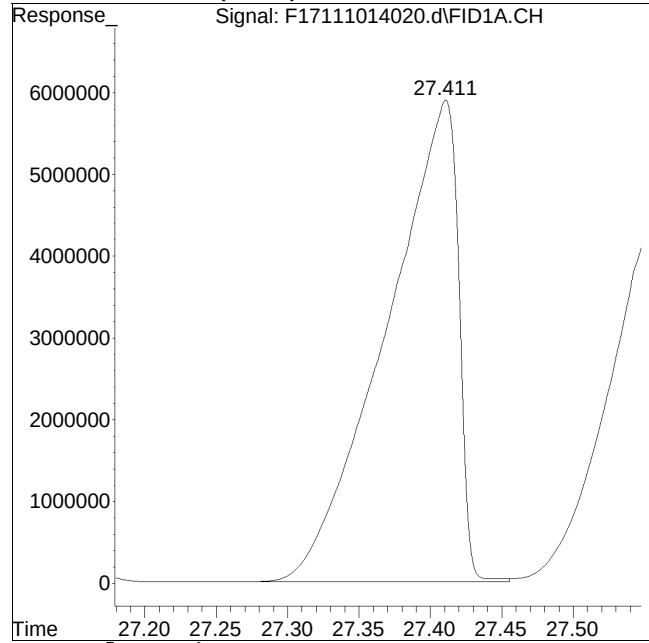
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #16: n-Octadecane (C18)



Original Peak Response = 206820252



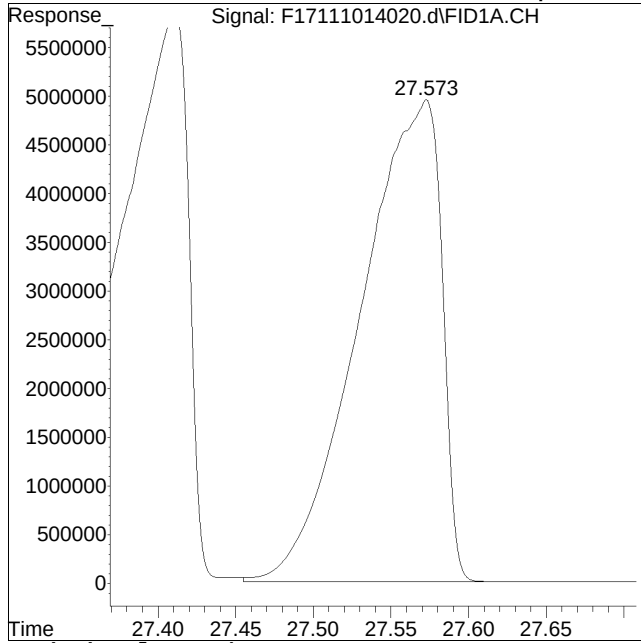
Manual Peak Response = 206512059 M4

M4 = Poor automated baseline construction.

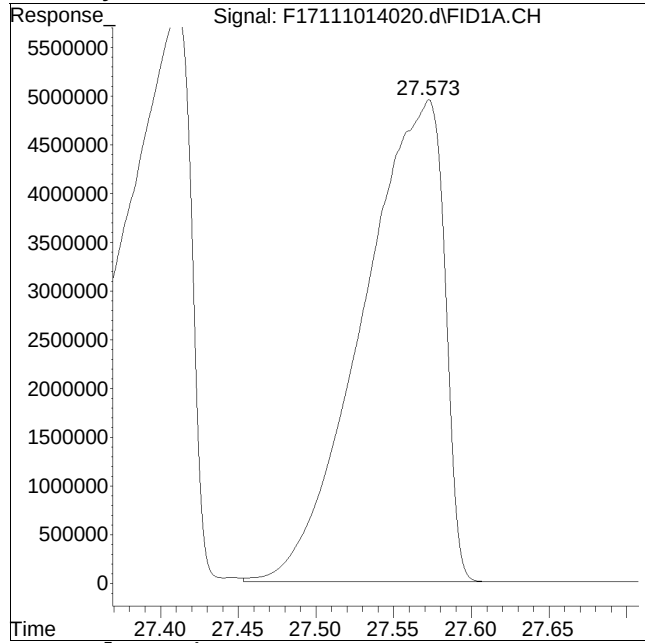
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #17: Phytane



Original Peak Response = 180203530



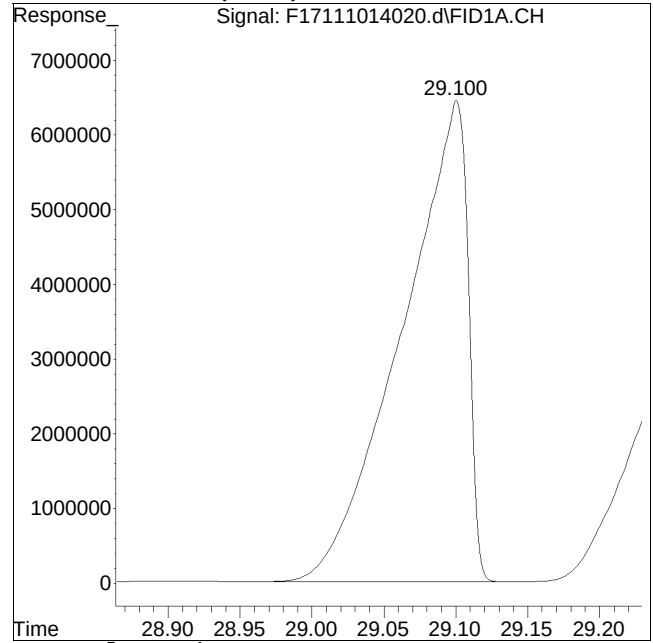
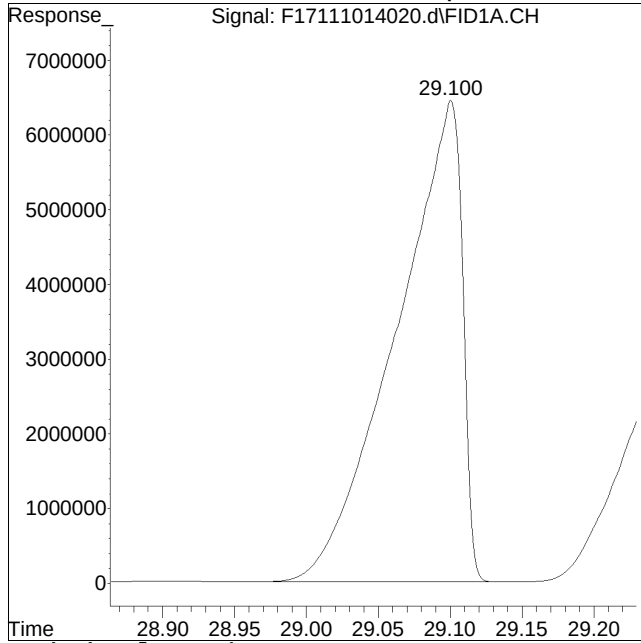
Manual Peak Response = 180095179 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #18: n-Nonadecane (C19)



Original Peak Response = 204759429

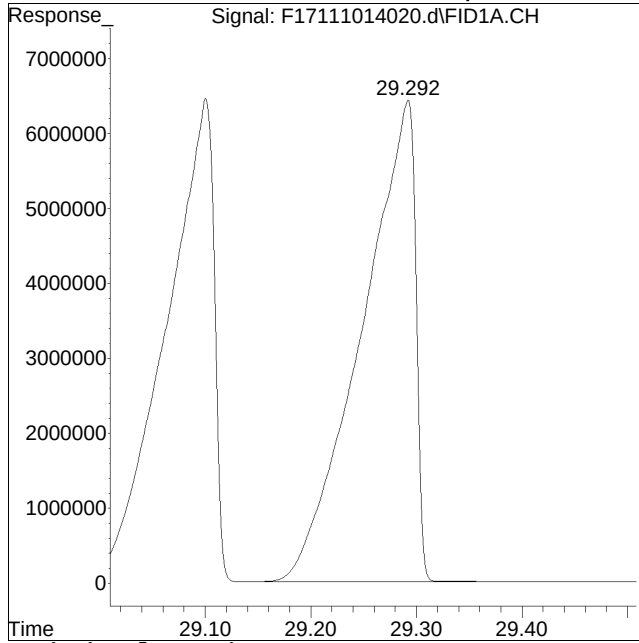
Manual Peak Response = 205137349 M4

M4 = Poor automated baseline construction.

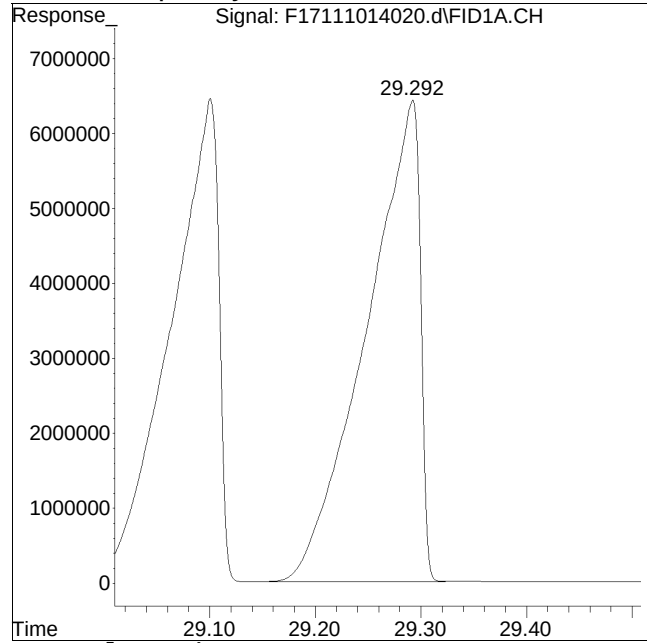
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #19: ortho-terphenyl



Original Peak Response = 226252762



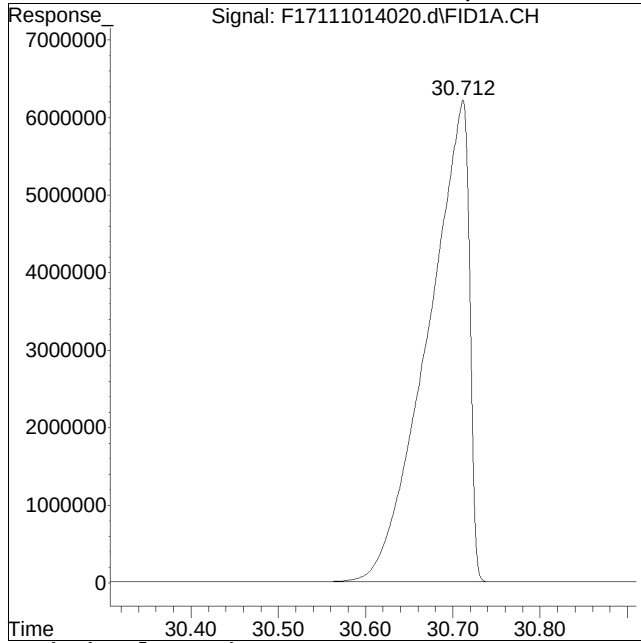
Manual Peak Response = 226451625 M4

M4 = Poor automated baseline construction.

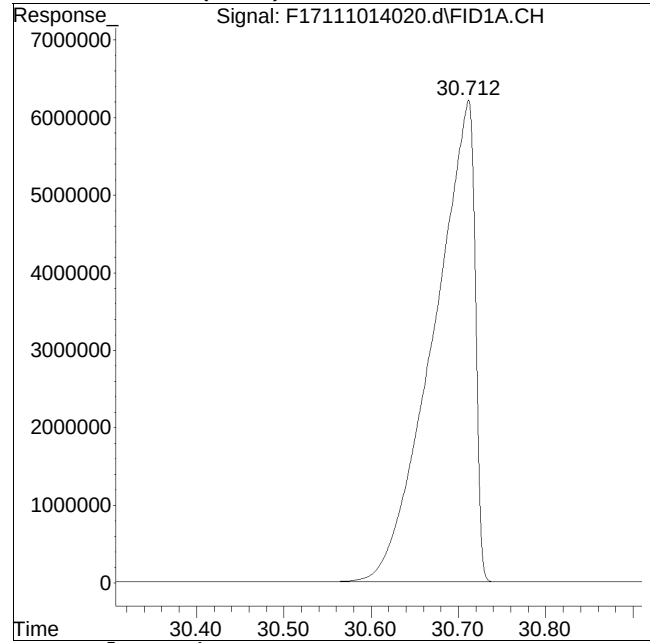
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #20: n-Eicosane (C20)



Original Peak Response = 204977130



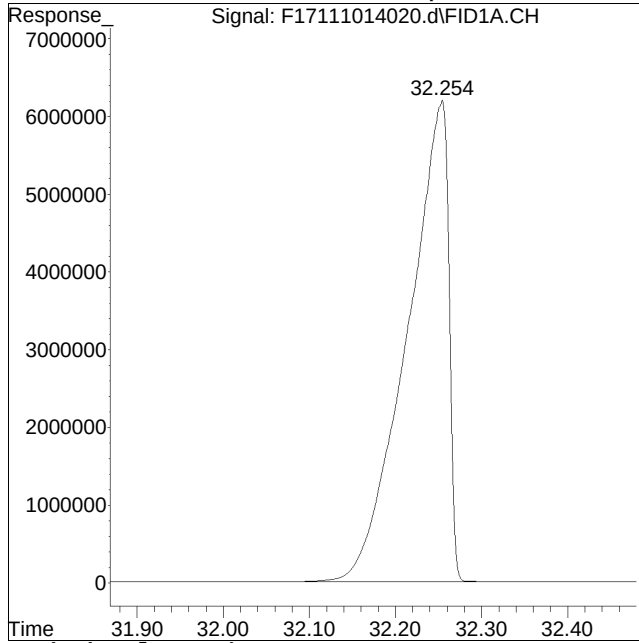
Manual Peak Response = 204858567 M4

M4 = Poor automated baseline construction.

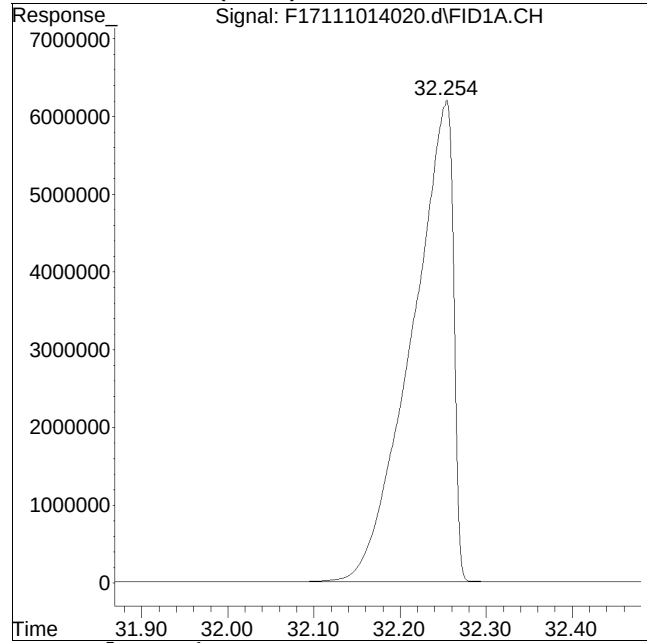
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #21: n-Heneicosane (C21)



Original Peak Response = 206843558



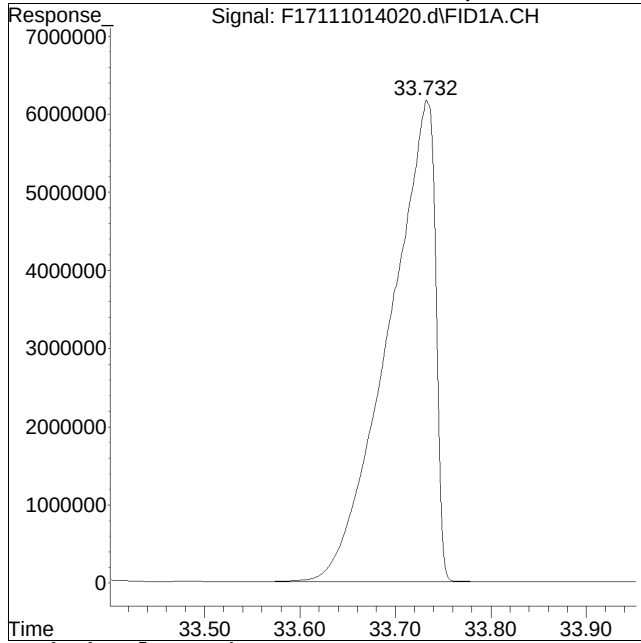
Manual Peak Response = 206881190 M4

M4 = Poor automated baseline construction.

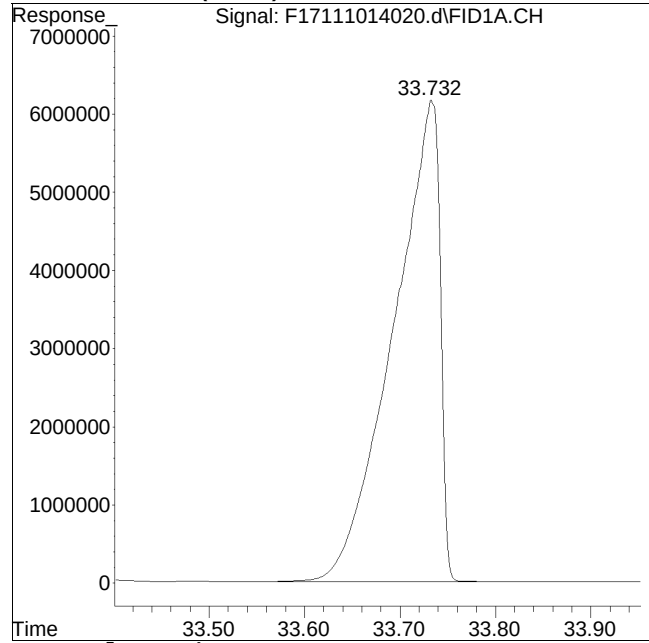
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #22: n-Docosane (C22)



Original Peak Response = 209031287



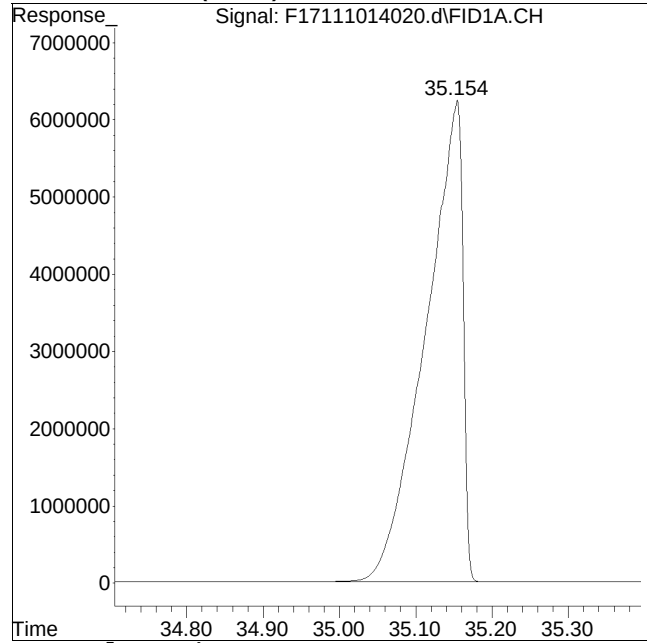
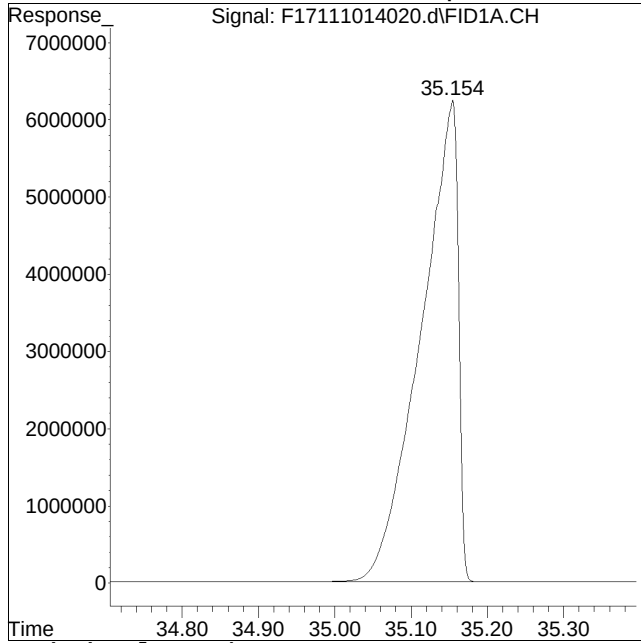
Manual Peak Response = 209103777 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #23: n-Tricosane (C23)



Original Peak Response = 211022944

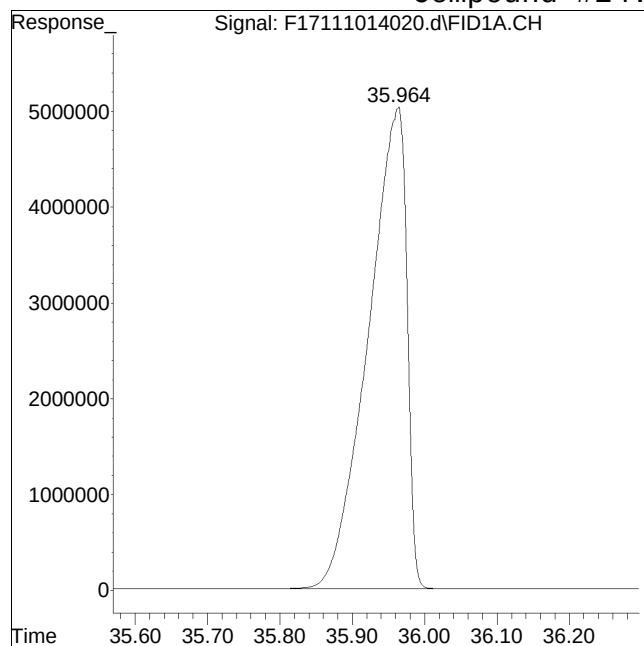
Manual Peak Response = 211118913 M4

M4 = Poor automated baseline construction.

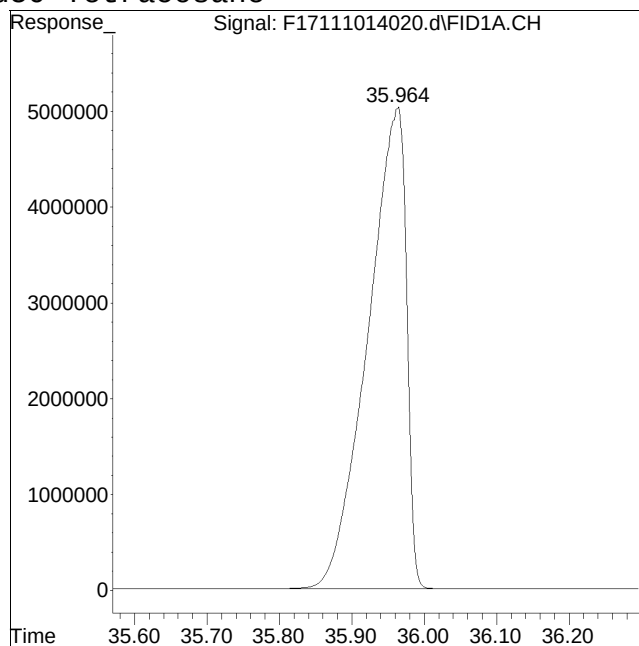
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #24: d50-Tetracosane



Original Peak Response = 185910734



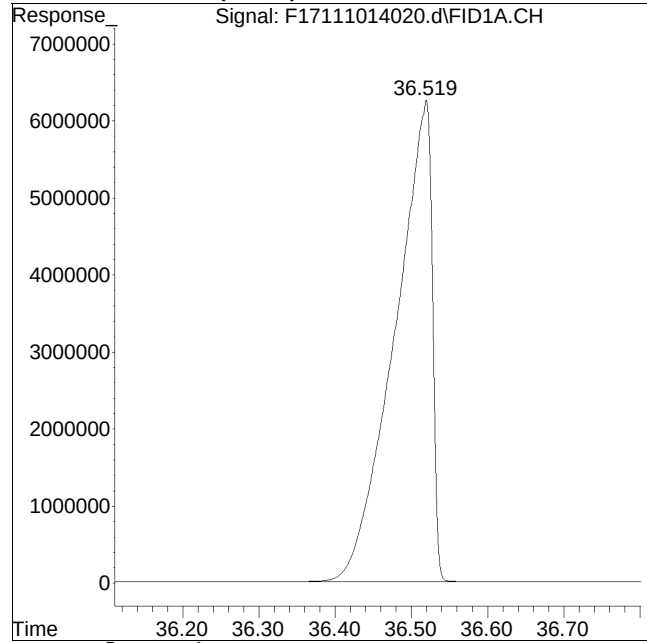
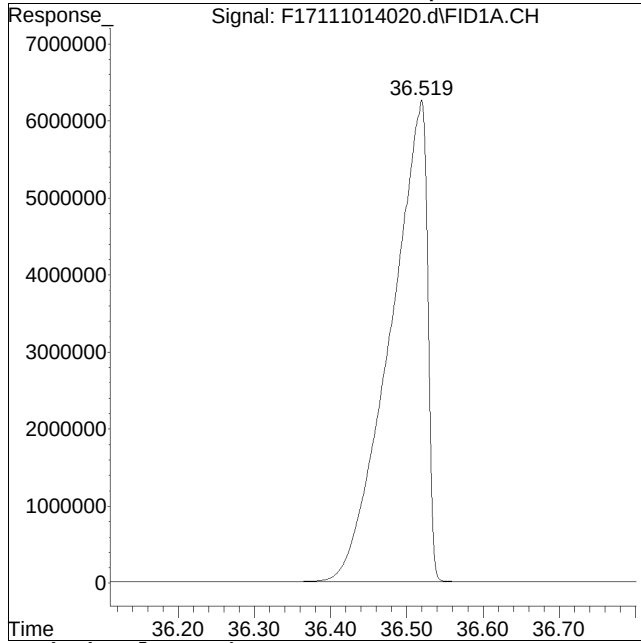
Manual Peak Response = 185908620 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #25: n-Tetracosane (C24)



Original Peak Response = 212528079

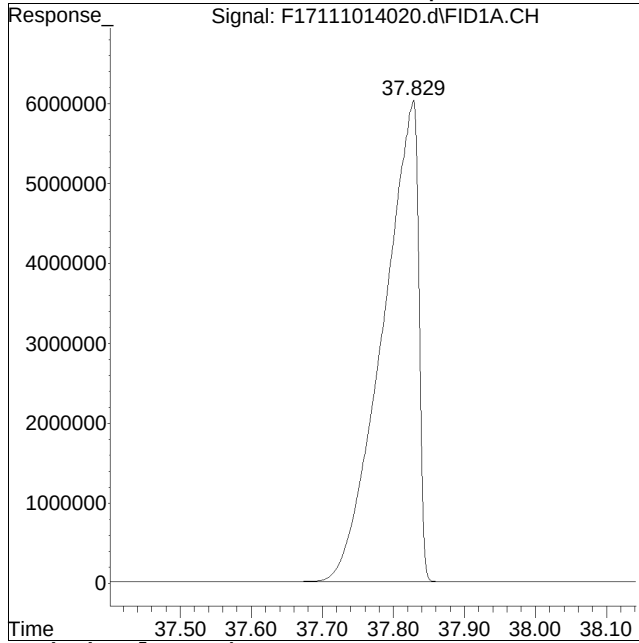
Manual Peak Response = 212476278 M4

M4 = Poor automated baseline construction.

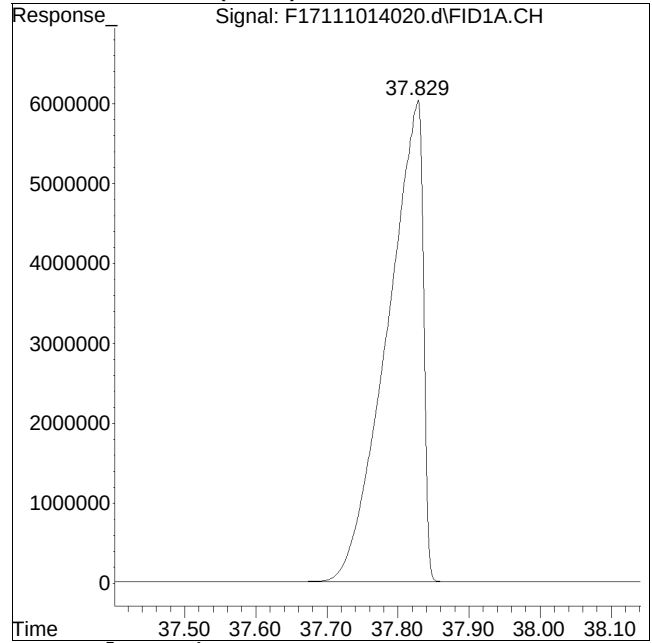
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #26: n-Pentacosane (C25)



Original Peak Response = 211323670



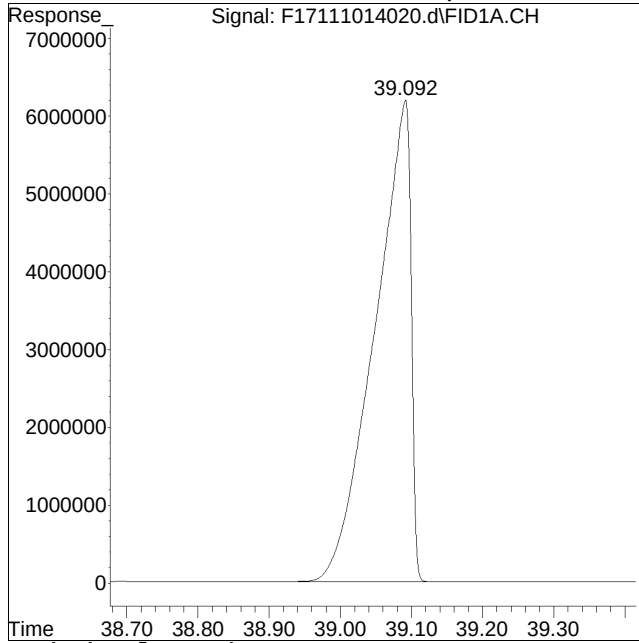
Manual Peak Response = 211377509 M4

M4 = Poor automated baseline construction.

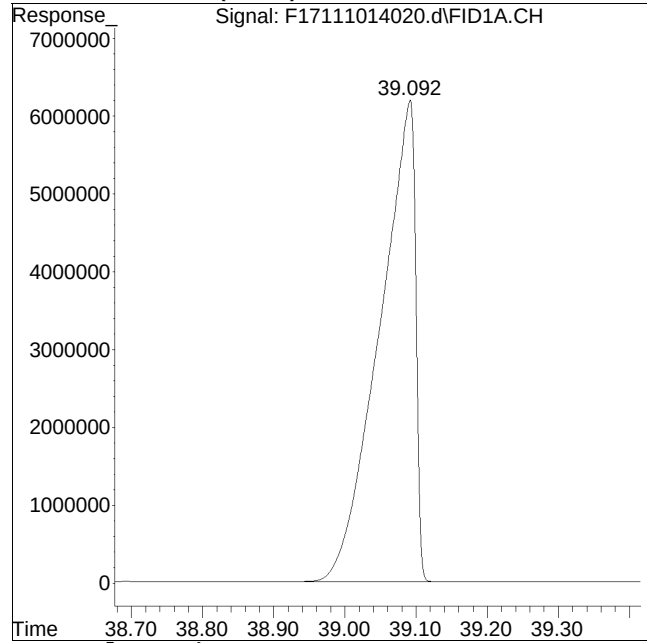
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #27: n-Hexacosane (C26)



Original Peak Response = 217009710



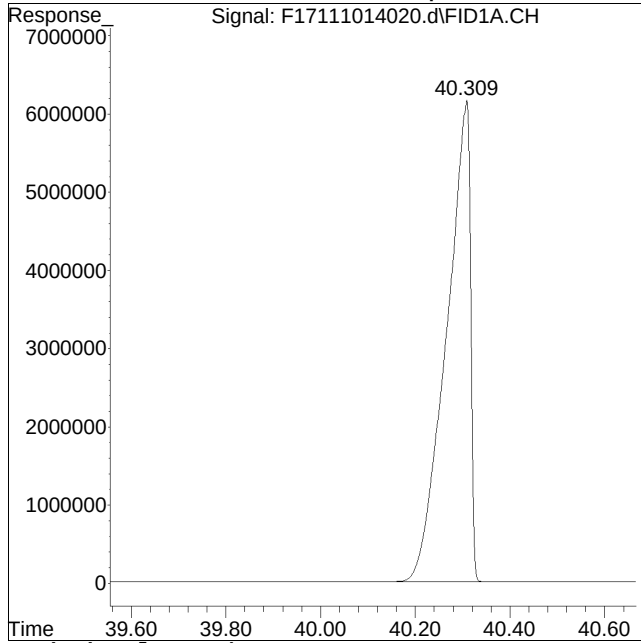
Manual Peak Response = 216859002 M4

M4 = Poor automated baseline construction.

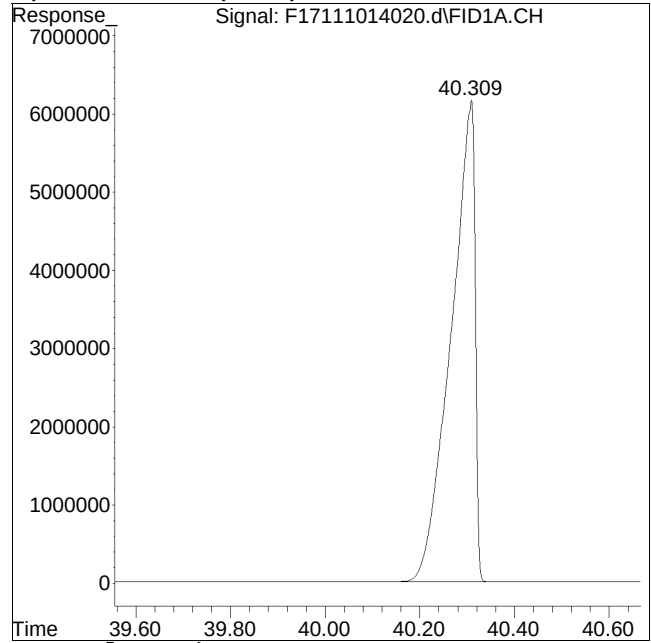
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #28: n-Heptacosane (C27)



Original Peak Response = 215224352



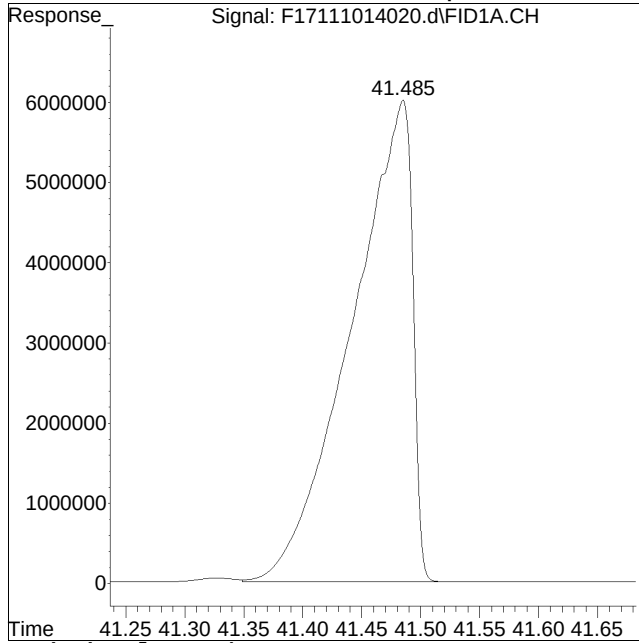
Manual Peak Response = 215525451 M4

M4 = Poor automated baseline construction.

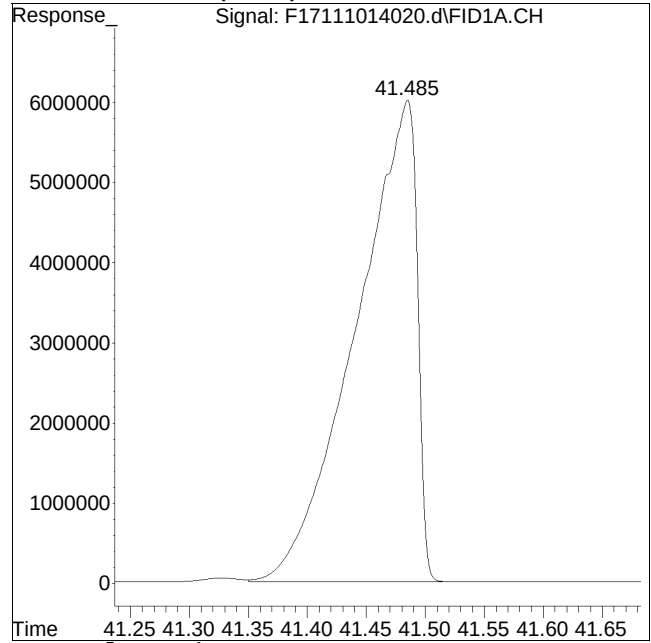
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #29: n-Octacosane (C28)



Original Peak Response = 215638183



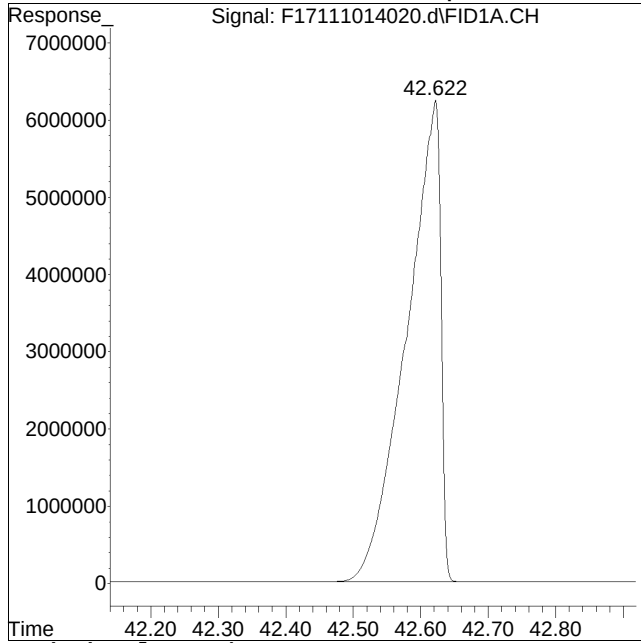
Manual Peak Response = 215543841 M4

M4 = Poor automated baseline construction.

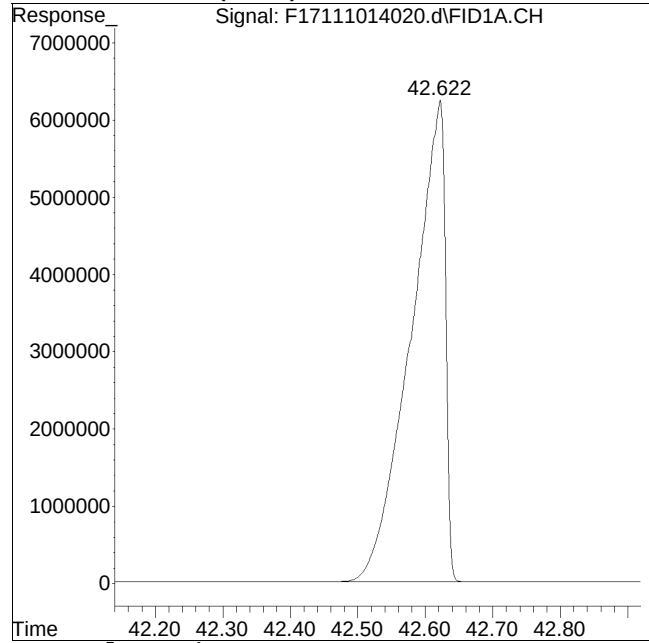
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #30: n-Nonacosane (C29)



Original Peak Response = 218189618



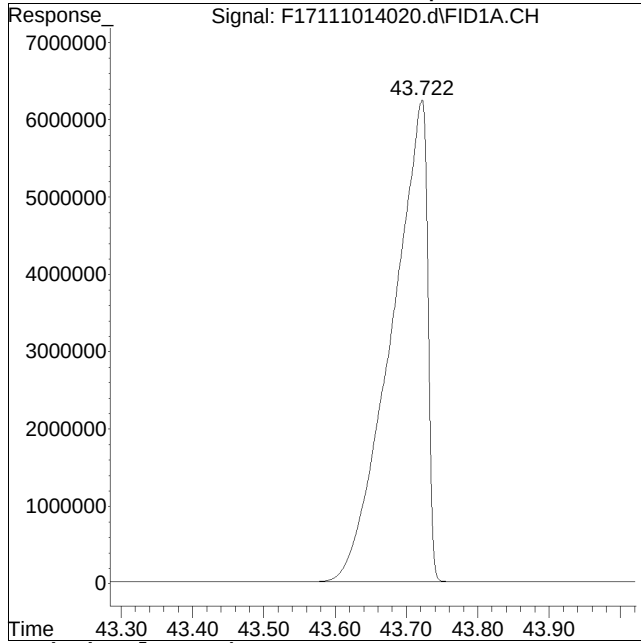
Manual Peak Response = 218200394 M4

M4 = Poor automated baseline construction.

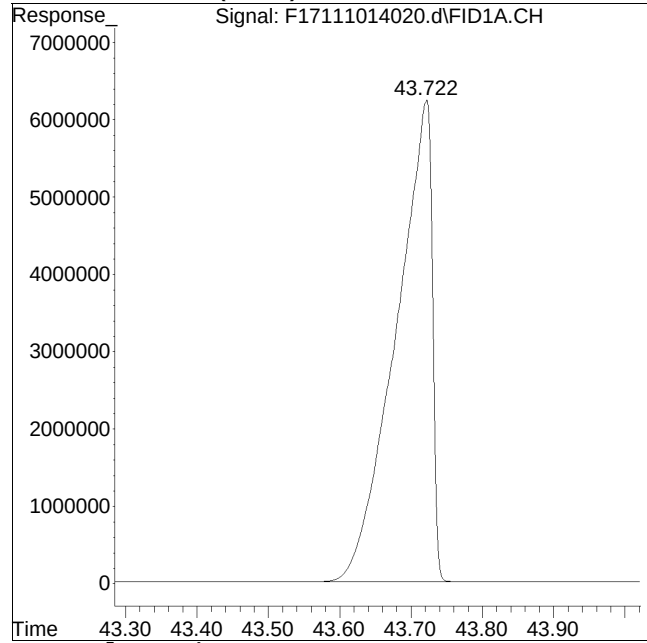
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #31: n-Triacontane (C30)



Original Peak Response = 219499838



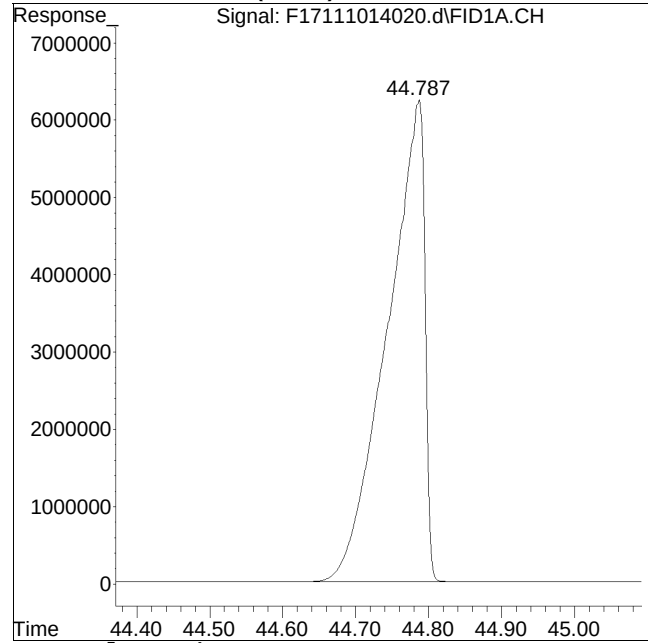
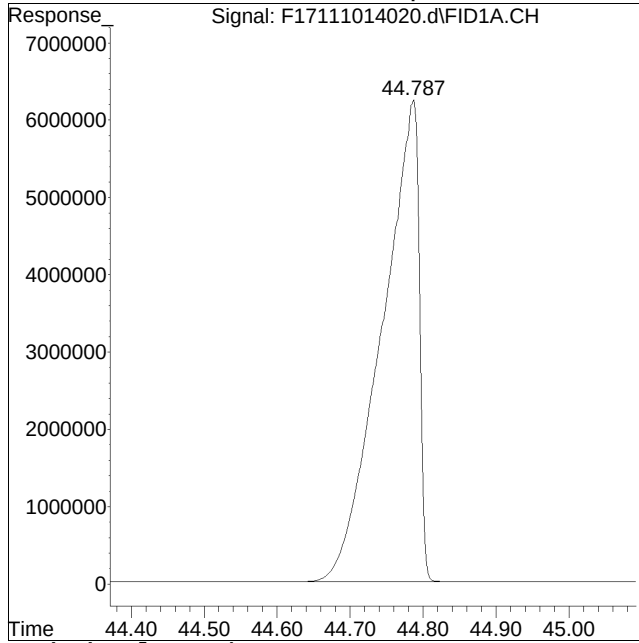
Manual Peak Response = 219666383 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #32: n-Hentriacontane (C31)



Original Peak Response = 220878986

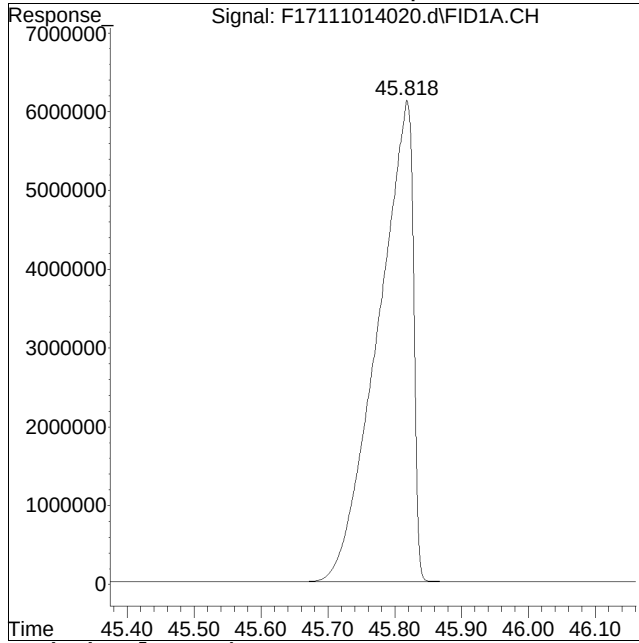
Manual Peak Response = 220837166 M4

M4 = Poor automated baseline construction.

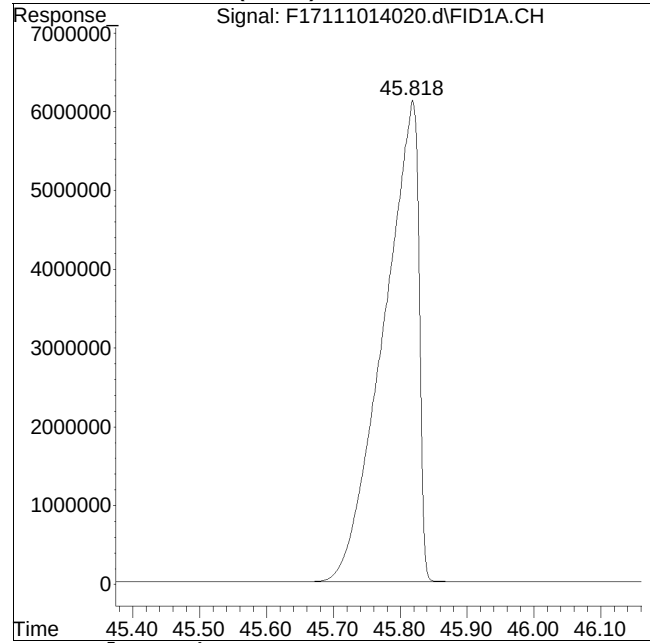
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #33: n-Dotriacontane (C32)



Original Peak Response = 223585637



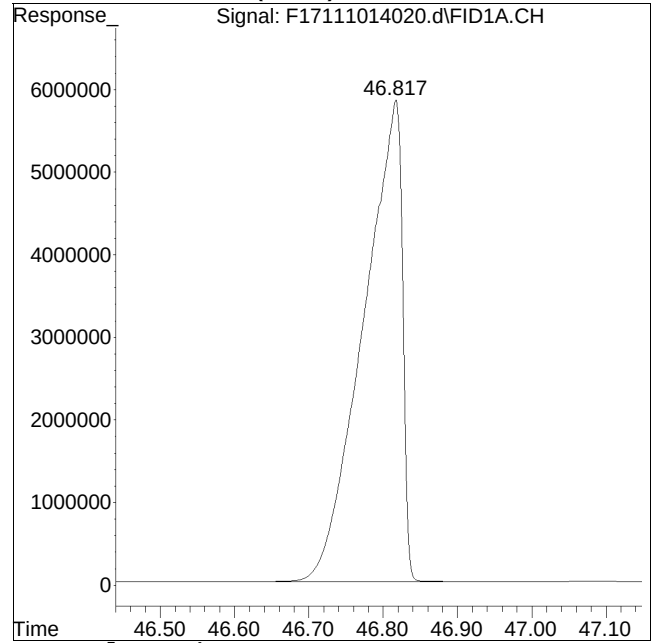
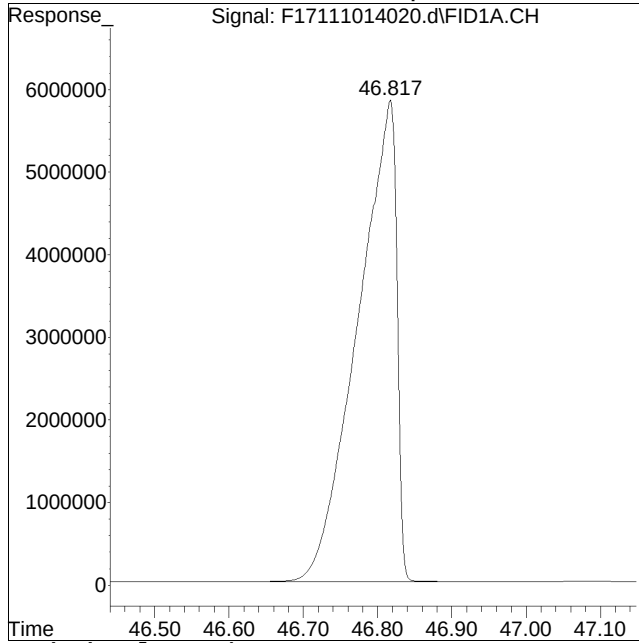
Manual Peak Response = 223659667 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #34: n-Tritriacontane (C33)



Original Peak Response = 212455471

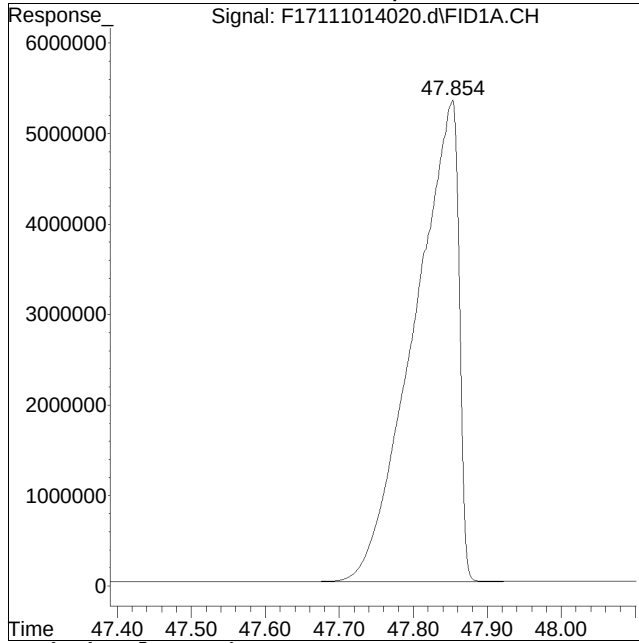
Manual Peak Response = 212305009 M4

M4 = Poor automated baseline construction.

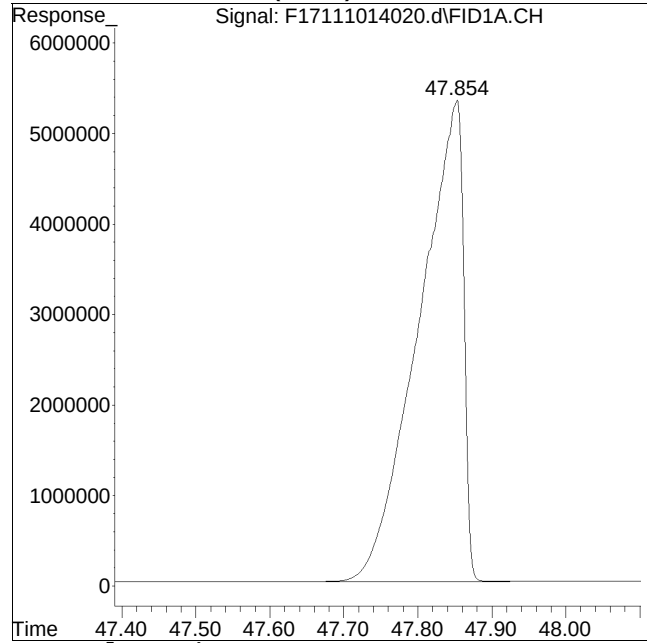
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #35: n-tetratriacontane (C34)



Original Peak Response = 222609394



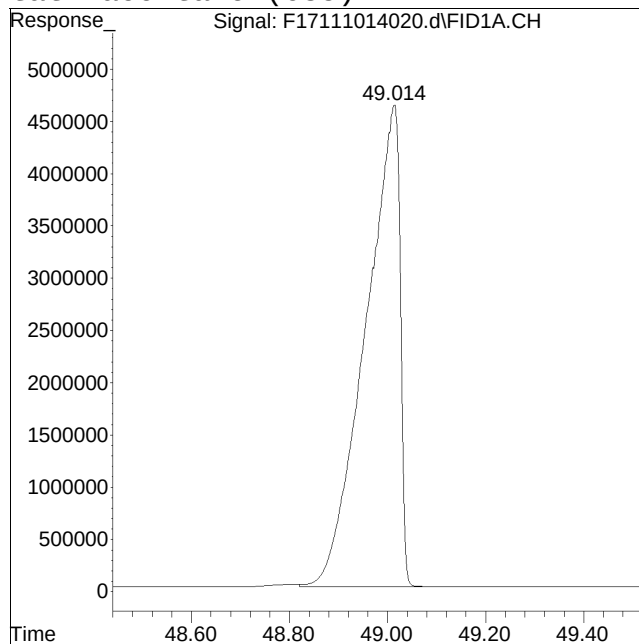
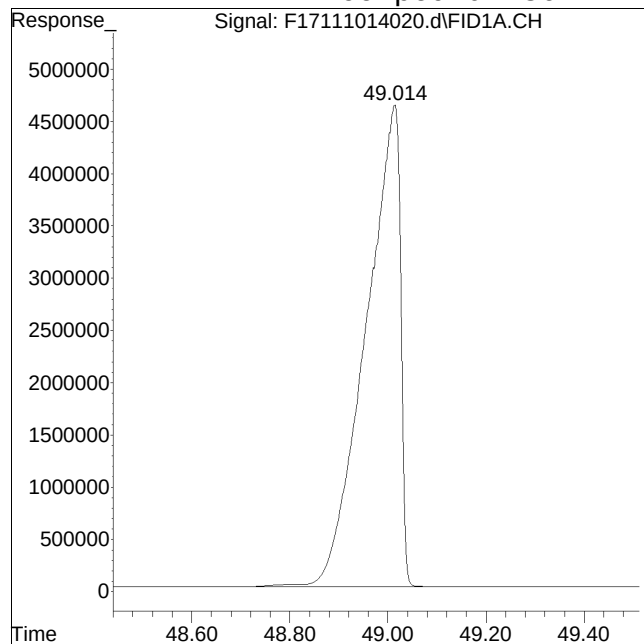
Manual Peak Response = 222719308 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
 Data File : F17111014020.d Operator : FID17:NL
 Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
 Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #36: n-Pentatriacontane (C35)



Original Peak Response = 226214044

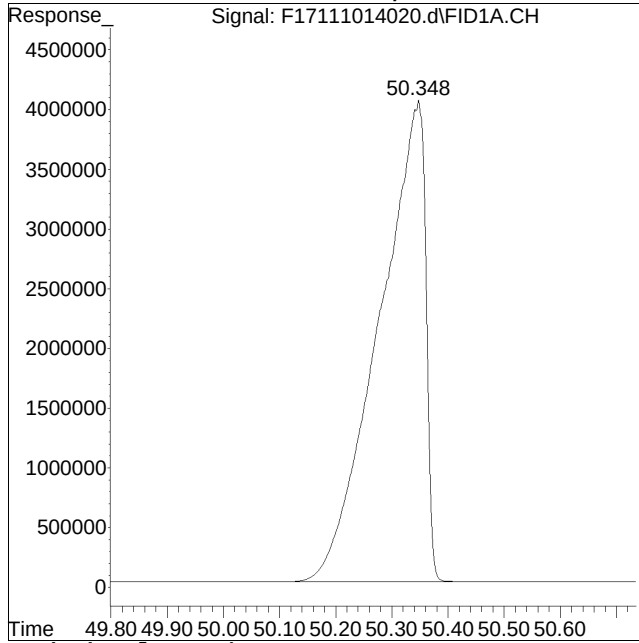
Manual Peak Response = 225244106 M4

M4 = Poor automated baseline construction.

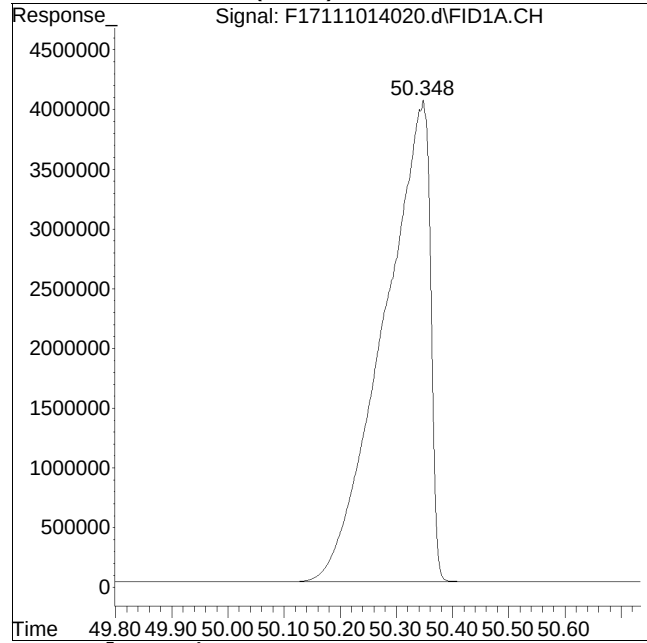
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #37: n-Hexatriacontane (C36)



Original Peak Response = 231785406



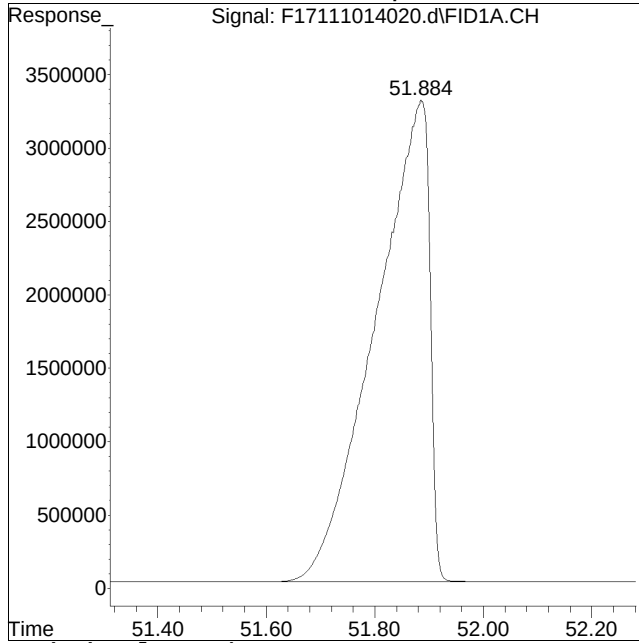
Manual Peak Response = 231762250 M4

M4 = Poor automated baseline construction.

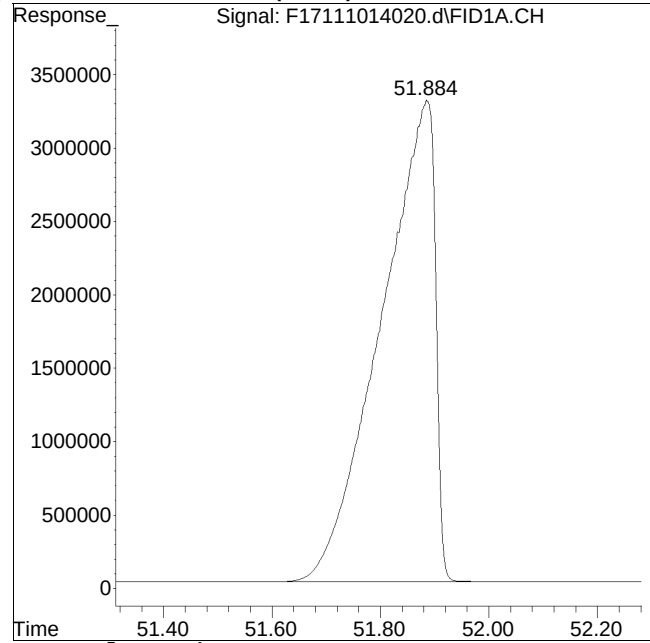
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #38: n-Heptatriacontane (C37)



Original Peak Response = 226689941



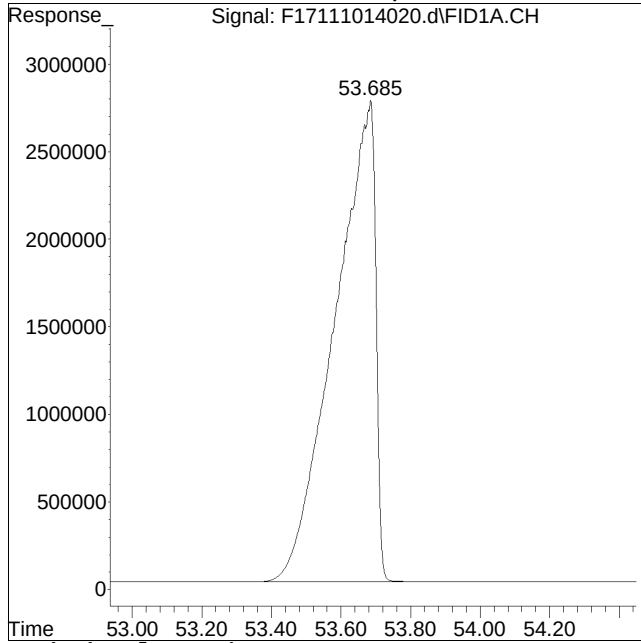
Manual Peak Response = 226986888 M4

M4 = Poor automated baseline construction.

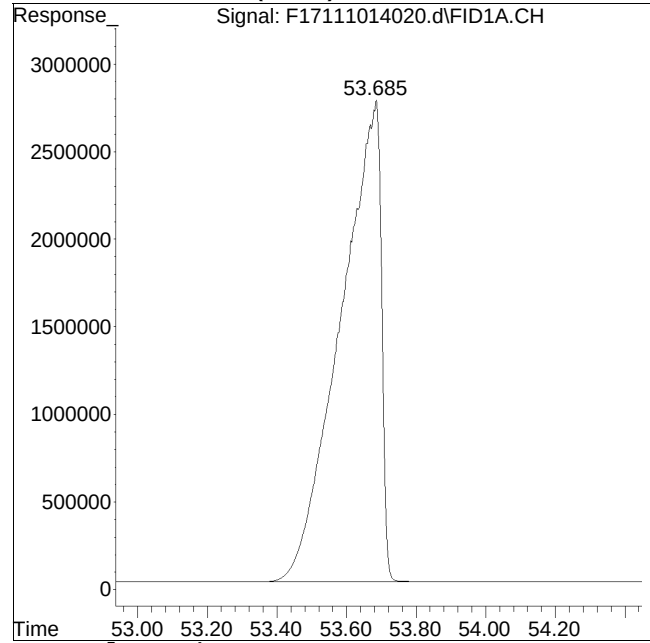
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #39: n-Octatriacontane (C38)



Original Peak Response = 222912539



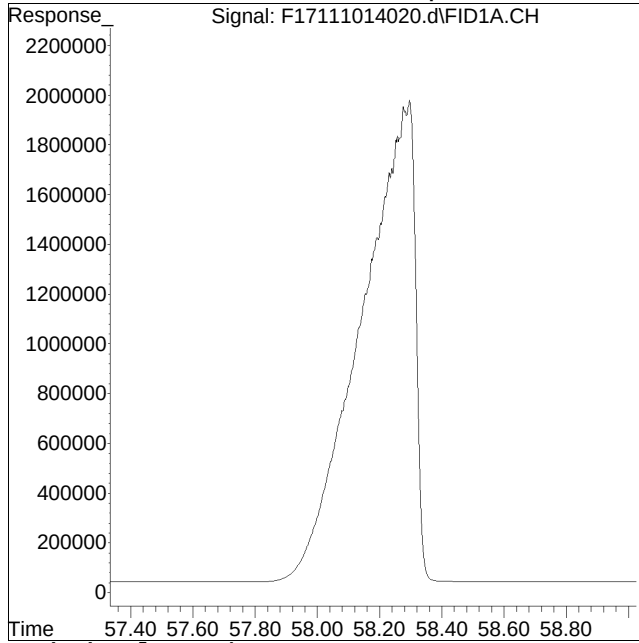
Manual Peak Response = 222999979 M4

M4 = Poor automated baseline construction.

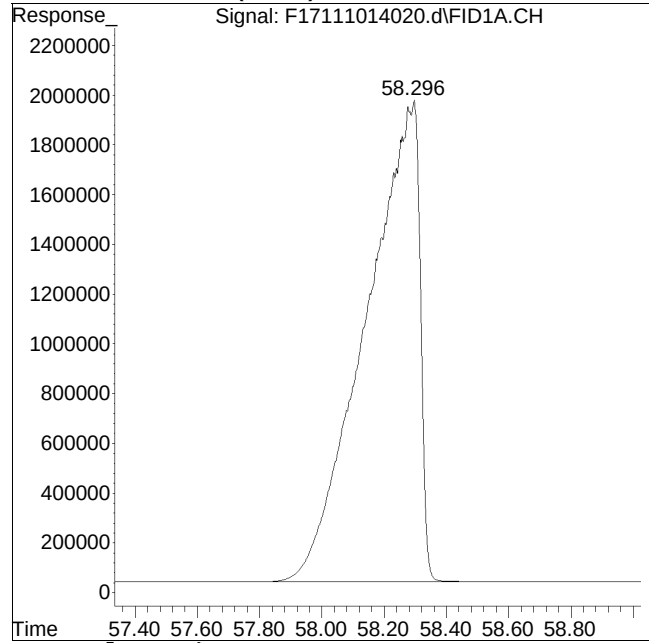
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #41: n-Tetracontane (C40)



Original Peak Response = 0



Manual Peak Response = 232479117 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014022.d
 Signal(s) : FID1A.CH
 Acq On : 11 Nov 2014 2:29 am
 Operator : FID17:NL
 Sample : I1711011406R
 Misc : WG743851, FRAV27 500ug/mL
 ALS Vial : 11 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:07:31 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc Units

Internal Standards				
1) I	5-alpha-androstane	31.267	53637140	50.000 ug/mL M4
System Monitoring Compounds				
19) s	ortho-terphenyl	29.347	576911715	480.039 ug/mL M4
Spiked Amount 50.000		Range 50 - 130	Recovery = 960.08%#	
24) s	d50-Tetracosane	36.014	469670030	495.236 ug/mL M4
Spiked Amount 50.000		Range 50 - 130	Recovery = 990.47%#	

Target Compounds

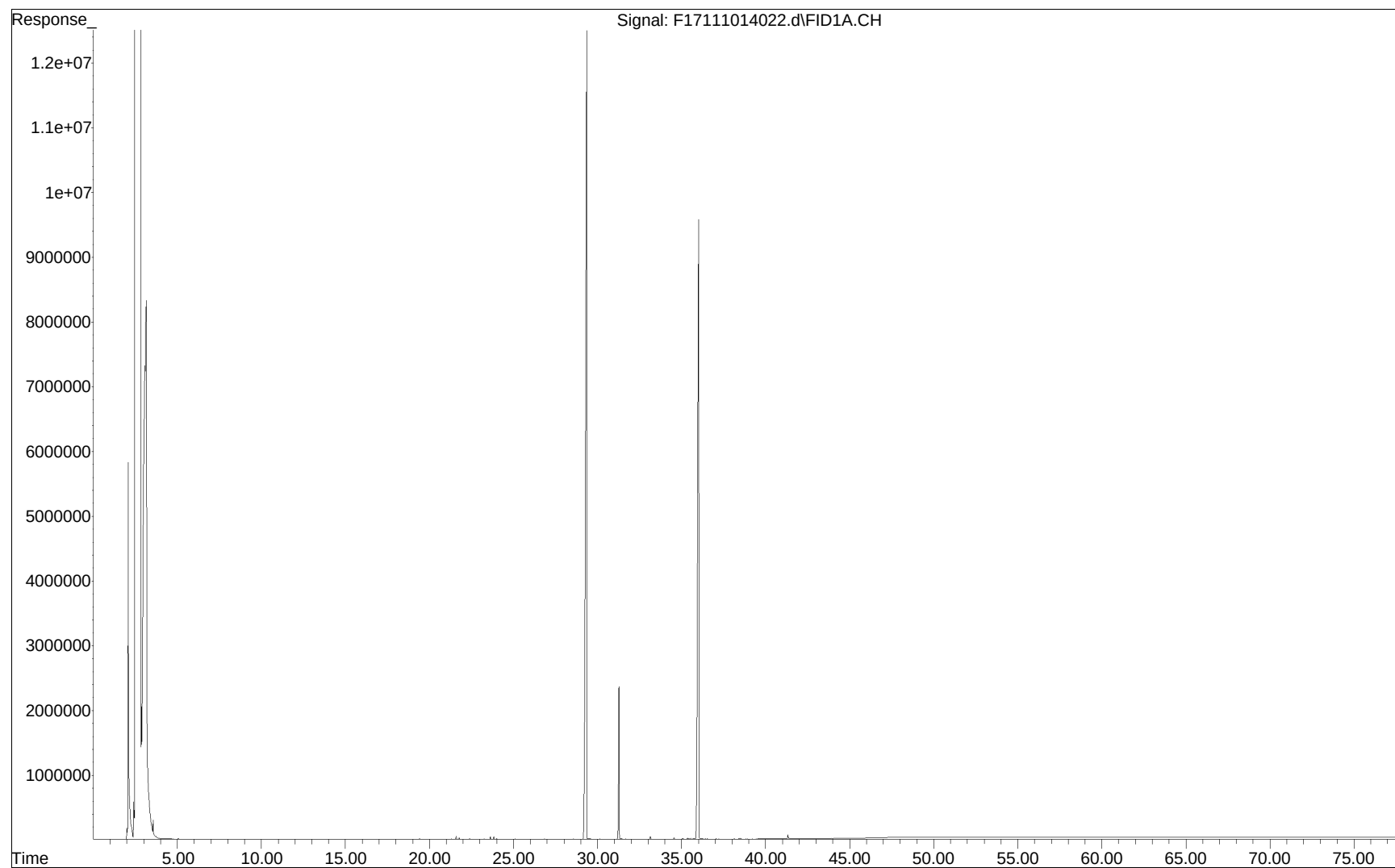
SemiQuant Compounds - Not Calibrated on this Instrument

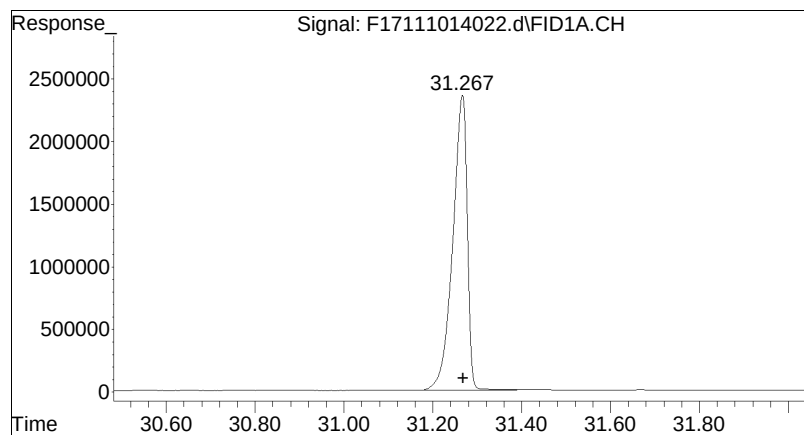
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

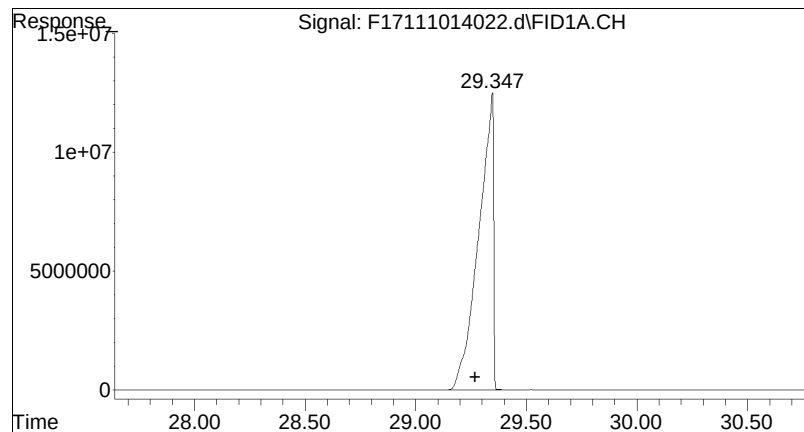
File : 0:\Forensics\Data\FID17\2014\NOV\NOV10\F17111014022.d
Operator : FID17:NL
Acquired : 11 Nov 2014 2:29 am using AcqMethod FID17.M
Sample Name: I1711011406R
Instrument: FID17
Misc Info : WG743851, FRAV27 500ug/mL
Vial Number: 11
CurrentMeth: 0:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M





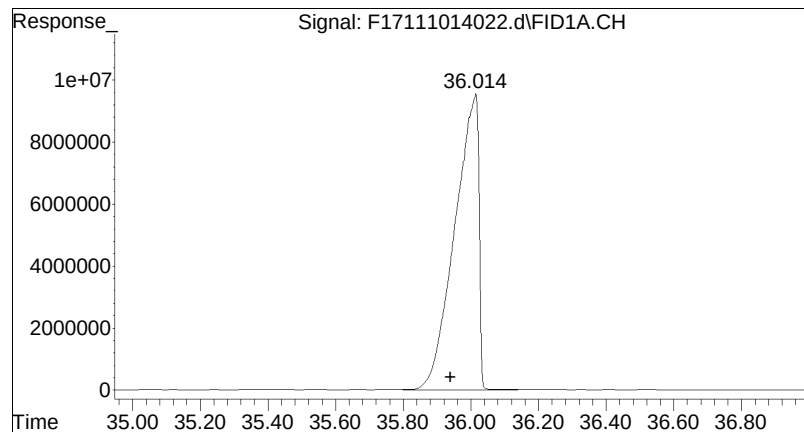
#1 5-alpha-androstane

R.T.: 31.267 min
Delta R.T.: -0.002 min
Response: 53637140
Conc: 50.00 ug/mL M4



#19 ortho-terphenyl

R.T.: 29.347 min
Delta R.T.: 0.076 min
Response: 576911715
Conc: 480.04 ug/mL M4



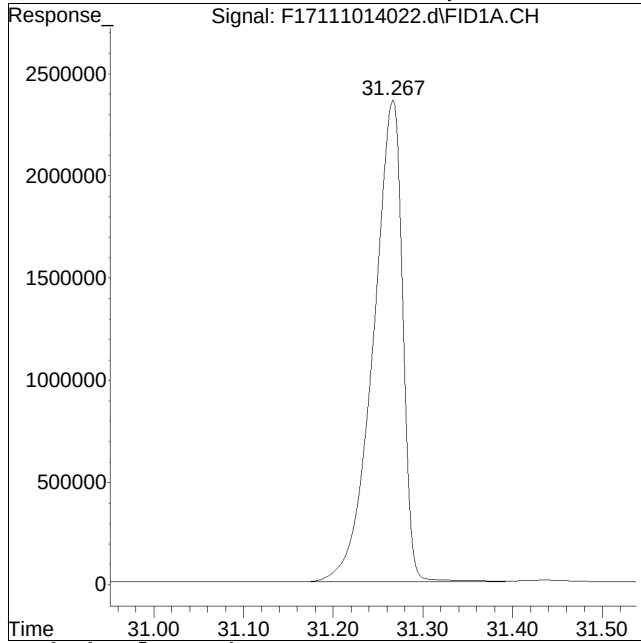
#24 d50-Tetracosane

R.T.: 36.014 min
Delta R.T.: 0.074 min
Response: 469670030
Conc: 495.24 ug/mL M4

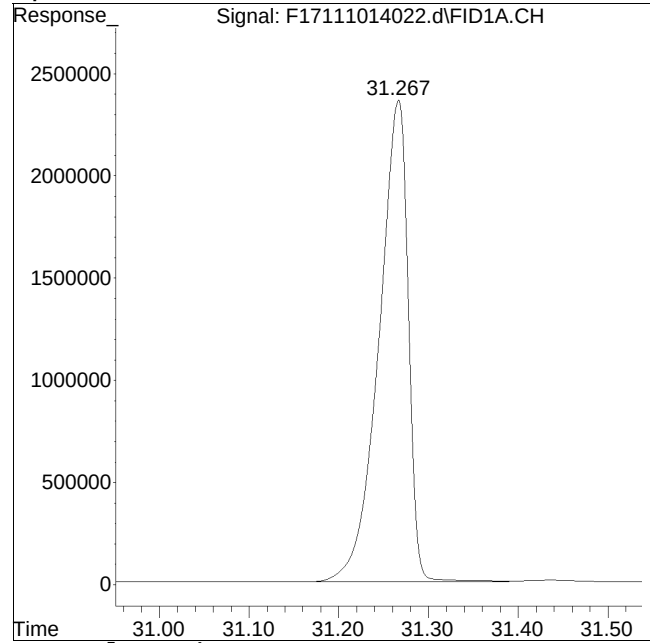
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014022.d Operator : FID17:NL
Date Inj'd : 11/11/2014 2:29 am Instrument : FID17
Sample : I1711011406R Quant Date : 11/14/2014 12:19 pm

Compound #1: 5-alpha-androstane



Original Peak Response = 53644600



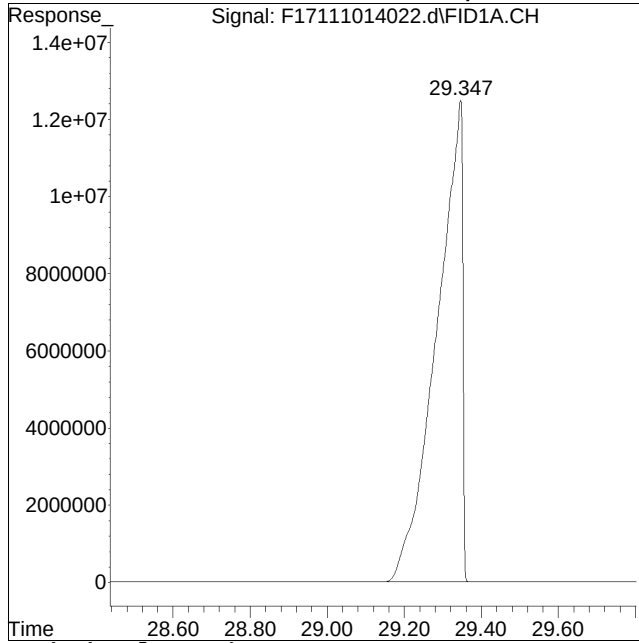
Manual Peak Response = 53637140 M4

M4 = Poor automated baseline construction.

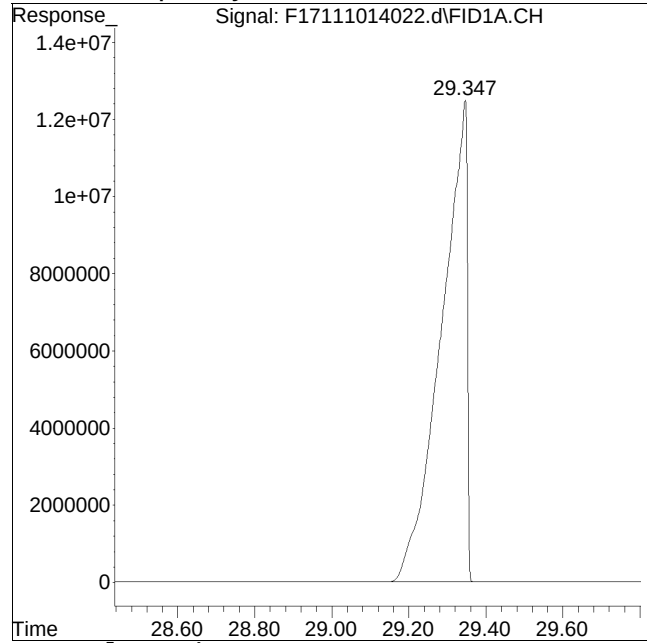
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014022.d Operator : FID17:NL
Date Inj'd : 11/11/2014 2:29 am Instrument : FID17
Sample : I1711011406R Quant Date : 11/14/2014 12:19 pm

Compound #19: ortho-terphenyl



Original Peak Response = 575997155



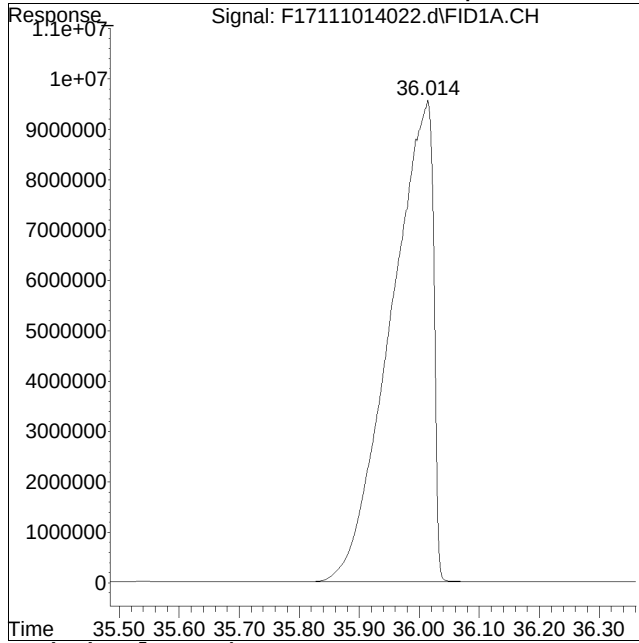
Manual Peak Response = 576911715 M4

M4 = Poor automated baseline construction.

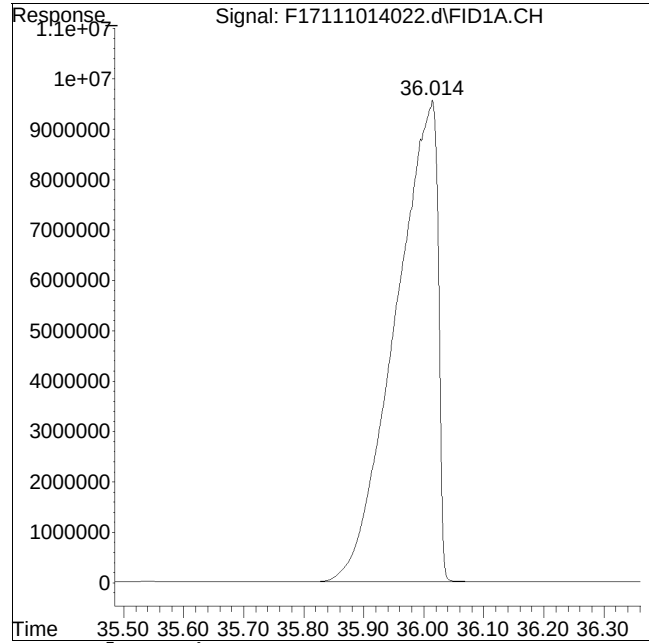
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014022.d Operator : FID17:NL
Date Inj'd : 11/11/2014 2:29 am Instrument : FID17
Sample : I1711011406R Quant Date : 11/14/2014 12:19 pm

Compound #24: d50-Tetracosane



Original Peak Response = 469841556



Manual Peak Response = 469670030 M4

M4 = Poor automated baseline construction.

Initial Calibration Verification

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014028.d
 Signal(s) : FID1A.CH
 Acq On : 11 Nov 2014 6:58 am
 Operator : FID17:NL
 Sample : WG743851-7,42
 Misc : WG743851, FRAV28 50ug/mL
 ALS Vial : 14 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 15:07:10 2014
 Quant Method : O:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Mon Nov 17 15:07:02 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 I	5-alpha-androstane	50.000	50.000	0.0	106	0.00
2 t	n-Octane (C8)	50.000	46.946	6.1	101	-0.03
3 t	n-Nonane (C9)	50.000	48.656	2.7	105	-0.02
4 t	n-Decane (C10)	50.000	50.645	-1.3	108	-0.01
5 t	n-Undecane (C11)	50.000	49.632	0.7	104	-0.01
6 t	n-Dodecane (C12)	50.000	49.480	1.0	104	-0.02
7 t	n-Tridecane (C13)	50.000	49.285	1.4	103	-0.02
9 t	n-Tetradecane (C14)	50.000	50.581	-1.2	106	-0.01
11 t	n-Pentadecane (C15)	50.000	49.125	1.8	103	-0.02
12 t	n-Hexadecane (C16)	50.000	49.127	1.7	104	-0.02
14 t	n-Heptadecane (C17)	50.000	49.744	0.5	104	-0.02
15 t	Pristane	50.000	48.613	2.8	103	-0.02
16 t	n-Octadecane (C18)	50.000	48.217	3.6	101	-0.02
17 t	Phytane	50.000	55.695	-11.4	118	-0.02
18 t	n-Nonadecane (C19)	50.000	48.179	3.6	101	-0.02
19 s	ortho-terphenyl	50.000	49.050	1.9	105	-0.02
20 t	n-Eicosane (C20)	50.000	48.449	3.1	102	-0.02
21 t	n-Heneicosane (C21)	50.000	48.514	3.0	103	-0.02
22 t	n-Docosane (C22)	50.000	48.284	3.4	102	-0.02
23 t	n-Tricosane (C23)	50.000	47.984	4.0	102	-0.02
24 s	d50-Tetracosane	50.000	48.399	3.2	105	-0.02
25 t	n-Tetracosane (C24)	50.000	47.916	4.2	102	-0.02
26 t	n-Pentacosane (C25)	50.000	48.148	3.7	103	-0.02
27 t	n-Hexacosane (C26)	50.000	47.888	4.2	102	-0.02
28 t	n-Heptacosane (C27)	50.000	47.537	4.9	102	-0.03
29 t	n-Octacosane (C28)	50.000	47.578	4.8	103	-0.02
30 t	n-Nonacosane (C29)	50.000	47.654	4.7	103	-0.03
31 t	n-Triacontane (C30)	50.000	47.330	5.3	103	-0.03
32 t	n-Hentriacontane (C31)	50.000	47.247	5.5	103	-0.03
33 t	n-Dotriacontane (C32)	50.000	46.266	7.5	101	-0.03
34 t	n-Tritriacontane (C33)	50.000	47.131	5.7	103	-0.03
35 t	n-tetratriacontane (C34)	50.000	47.532	4.9	104	-0.03
36 t	n-Pentatriacontane (C35)	50.000	47.134	5.7	103	-0.04
37 t	n-Hexatriacontane (C36)	50.000	49.057	1.9	108	-0.04
38 t	n-Heptatriacontane (C37)	50.000	46.715	6.6	103	-0.06
39 t	n-Octatriacontane (C38)	50.000	47.501	5.0	104	-0.06
41 t	n-Tetracontane (C40)	50.000	43.639	12.7	95	-0.09

Evaluate Continuing Calibration Report - Not Found

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Mass Discrimination (Response)	Ratio	Range Limits
n-Hexatriacontane (C36) to n-Eicosane (C20)	1.09	0.85 - 1.15

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014028.d
 Signal(s) : FID1A.CH
 Acq On : 11 Nov 2014 6:58 am
 Operator : FID17:NL
 Sample : WG743851-7,42
 Misc : WG743851, FRAV28 50ug/mL
 ALS Vial : 14 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 15:07:10 2014
 Quant Method : O:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Mon Nov 17 15:07:02 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 I	5-alpha-androstane	50.000	50.000	0.0	106	0.00
2 t	n-Octane (C8)	50.000	46.946	6.1	101	-0.03
3 t	n-Nonane (C9)	50.000	48.656	2.7	105	-0.02
4 t	n-Decane (C10)	50.000	50.645	-1.3	108	-0.01
5 t	n-Undecane (C11)	50.000	49.632	0.7	104	-0.01
6 t	n-Dodecane (C12)	50.000	49.480	1.0	104	-0.02
7 t	n-Tridecane (C13)	50.000	49.285	1.4	103	-0.02
9 t	n-Tetradecane (C14)	50.000	50.581	-1.2	106	-0.01
11 t	n-Pentadecane (C15)	50.000	49.125	1.8	103	-0.02
12 t	n-Hexadecane (C16)	50.000	49.127	1.7	104	-0.02
14 t	n-Heptadecane (C17)	50.000	49.744	0.5	104	-0.02
15 t	Pristane	50.000	48.613	2.8	103	-0.02
16 t	n-Octadecane (C18)	50.000	48.217	3.6	101	-0.02
17 t	Phytane	50.000	55.695	-11.4	118	-0.02
18 t	n-Nonadecane (C19)	50.000	48.179	3.6	101	-0.02
19 s	ortho-terphenyl	50.000	49.050	1.9	105	-0.02
20 t	n-Eicosane (C20)	50.000	48.449	3.1	102	-0.02
21 t	n-Heneicosane (C21)	50.000	48.514	3.0	103	-0.02
22 t	n-Docosane (C22)	50.000	48.284	3.4	102	-0.02
23 t	n-Tricosane (C23)	50.000	47.984	4.0	102	-0.02
24 s	d50-Tetracosane	50.000	48.399	3.2	105	-0.02
25 t	n-Tetracosane (C24)	50.000	47.916	4.2	102	-0.02
26 t	n-Pentacosane (C25)	50.000	48.148	3.7	103	-0.02
27 t	n-Hexacosane (C26)	50.000	47.888	4.2	102	-0.02
28 t	n-Heptacosane (C27)	50.000	47.537	4.9	102	-0.03
29 t	n-Octacosane (C28)	50.000	47.578	4.8	103	-0.02
30 t	n-Nonacosane (C29)	50.000	47.654	4.7	103	-0.03
31 t	n-Triacontane (C30)	50.000	47.330	5.3	103	-0.03
32 t	n-Hentriacontane (C31)	50.000	47.247	5.5	103	-0.03
33 t	n-Dotriacontane (C32)	50.000	46.266	7.5	101	-0.03
34 t	n-Tritriacontane (C33)	50.000	47.131	5.7	103	-0.03
35 t	n-tetratriacontane (C34)	50.000	47.532	4.9	104	-0.03
36 t	n-Pentatriacontane (C35)	50.000	47.134	5.7	103	-0.04
37 t	n-Hexatriacontane (C36)	50.000	49.057	1.9	108	-0.04
38 t	n-Heptatriacontane (C37)	50.000	46.715	6.6	103	-0.06
39 t	n-Octatriacontane (C38)	50.000	47.501	5.0	104	-0.06
41 t	n-Tetracontane (C40)	50.000	43.639	12.7	95	-0.09

Evaluate Continuing Calibration Report - Not Found

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Mass Discrimination (Response)	Ratio	Range Limits
n-Hexatriacontane (C36) to n-Eicosane (C20)	1.09	0.85 - 1.15

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014028.d
 Signal(s) : FID1A.CH
 Acq On : 11 Nov 2014 6:58 am
 Operator : FID17:NL
 Sample : WG743851-7,42
 Misc : WG743851,FRAV28 50ug/mL
 ALS Vial : 14 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 15:07:10 2014
 Quant Method : O:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Mon Nov 17 15:07:02 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound	R.T.	Response	Conc Units

Internal Standards			
1) I 5-alpha-androstane	31.264	57779435	50.000 ug/mL M4
System Monitoring Compounds			
19) s ortho-terphenyl	29.248	62373197	49.050 ug/mL M4
Spiked Amount 50.000 Range	50 - 130	Recovery =	98.10%
24) s d50-Tetracosane	35.919	49983701	48.399 ug/mL M4
Spiked Amount 50.000 Range	50 - 130	Recovery =	96.80%
Target Compounds			
2) t n-Octane (C8)	5.574	45937686	46.946 ug/mL M4
3) t n-Nonane (C9)	7.775	48980250	48.656 ug/mL M4
4) t n-Decane (C10)	10.264	52302066	50.645 ug/mL M4
5) t n-Undecane (C11)	12.778	51812091	49.632 ug/mL M4
6) t n-Dodecane (C12)	15.208	52486341	49.480 ug/mL M4
7) t n-Tridecane (C13)	17.519	52668836	49.285 ug/mL M4
9) t n-Tetradecane (C14)	19.707	54725250	50.581 ug/mL M4
11) t n-Pentadecane (C15)	21.775	54168850	49.125 ug/mL M4
12) t n-Hexadecane (C16)	23.736	54515136	49.127 ug/mL M4
14) t n-Heptadecane (C17)	25.599	54810624	49.744 ug/mL M4
15) t Pristane	25.710	55331736	48.613 ug/mL M4
16) t n-Octadecane (C18)	27.371	54607398	48.217 ug/mL M4
17) t Phytane	27.534	55654924	55.695 ug/mL M4
18) t n-Nonadecane (C19)	29.061	54399183	48.179 ug/mL M4
20) t n-Eicosane (C20)	30.670	54603600	48.449 ug/mL M4
21) t n-Heneicosane (C21)	32.211	55087763	48.514 ug/mL M4
22) t n-Docosane (C22)	33.691	55381679	48.284 ug/mL M4
23) t n-Tricosane (C23)	35.108	55584473	47.984 ug/mL M4
25) t n-Tetracosane (C24)	36.470	55601443	47.916 ug/mL M4
26) t n-Pentacosane (C25)	37.779	55584700	48.148 ug/mL M4
27) t n-Hexacosane (C26)	39.039	56520227	47.888 ug/mL M4
28) t n-Heptacosane (C27)	40.257	55822334	47.537 ug/mL M4
29) t n-Octacosane (C28)	41.429	55792477	47.578 ug/mL M4
30) t n-Nonacosane (C29)	42.567	56007887	47.654 ug/mL M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014028.d
 Signal(s) : FID1A.CH
 Acq On : 11 Nov 2014 6:58 am
 Operator : FID17:NL
 Sample : WG743851-7,42
 Misc : WG743851,FRAV28 50ug/mL
 ALS Vial : 14 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 15:07:10 2014
 Quant Method : O:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Mon Nov 17 15:07:02 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc Units
31) t	n-Triacontane (C30)	43.664	55890152	47.330 ug/mL M4
32) t	n-Hentriacontane (C31)	44.729	55831872	47.247 ug/mL M4
33) t	n-Dotriacontane (C32)	45.759	55077837	46.266 ug/mL M4
34) t	n-Tritriacontane (C33)	46.757	53104426	47.131 ug/mL M4
35) t	n-tetratriacontane (C34)	47.781	55861107	47.532 ug/mL M4
36) t	n-Pentatriacontane (C35)	48.932	55722183	47.134 ug/mL M4
37) t	n-Hexatriacontane (C36)	50.249	59610361	49.057 ug/mL M4
38) t	n-Heptatriacontane (C37)	51.766	55634288	46.715 ug/mL M4
39) t	n-Octatriacontane (C38)	53.545	55500204	47.501 ug/mL M4
41) t	n-Tetracontane (C40)	58.090	53295101	43.639 ug/mL M4

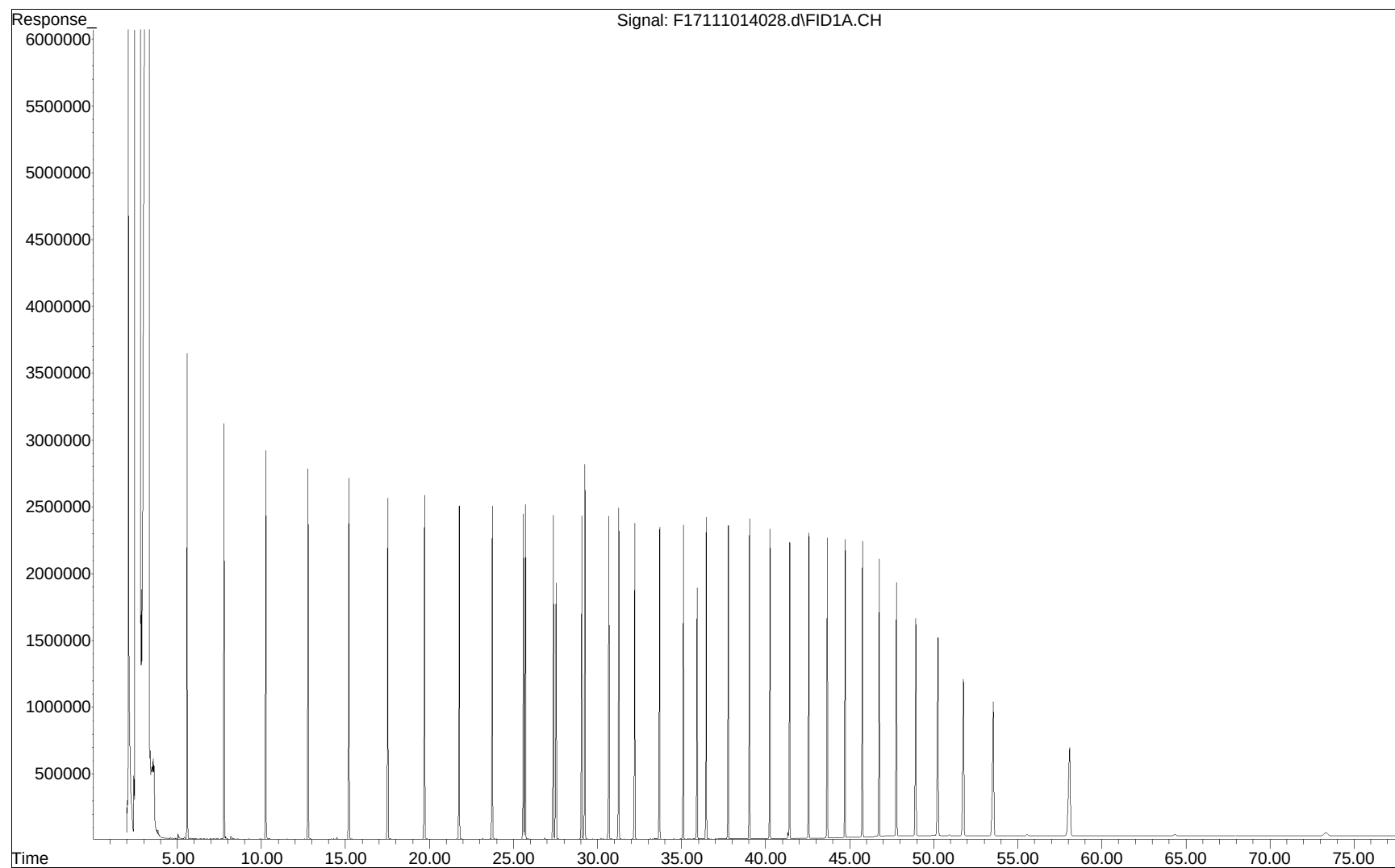
SemiQuant Compounds - Not Calibrated on this Instrument

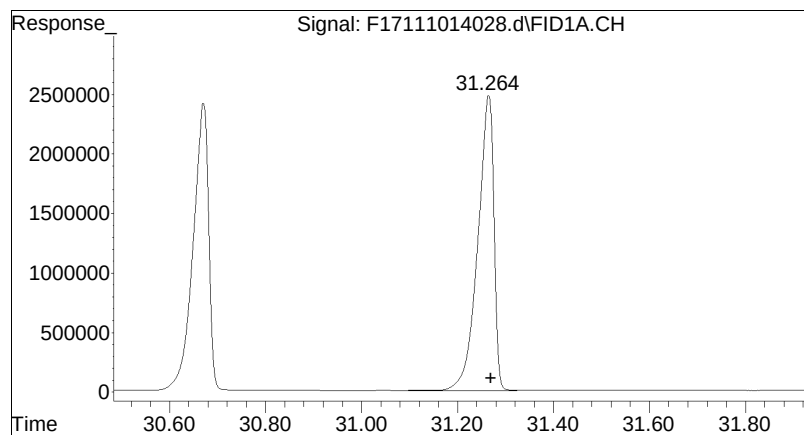
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

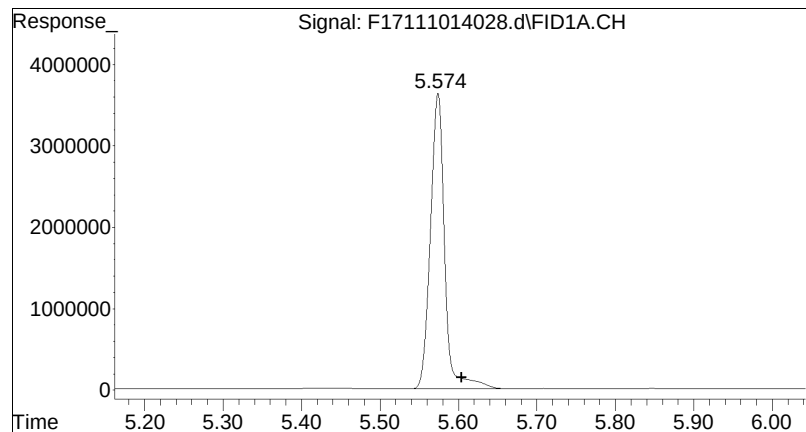
File : 0:\Forensics\Data\FID17\2014\NOV\NOV10\F17111014028.d
Operator : FID17:NL
Acquired : 11 Nov 2014 6:58 am using AcqMethod FID17.M
Sample Name: WG743851-7,42
Instrument: FID17
Misc Info : WG743851, FRAV28 50ug/mL
Vial Number: 14
CurrentMeth: 0:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M





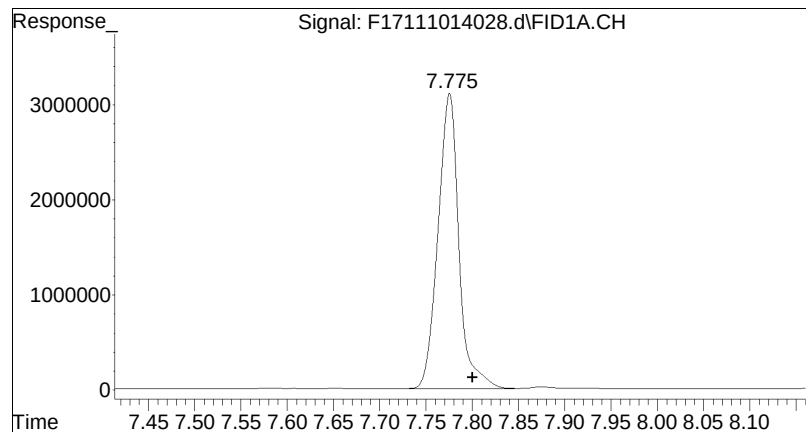
#1 5-alpha-androstane

R.T.: 31.264 min
Delta R.T.: -0.005 min
Response: 57779435
Conc: 50.00 ug/mL M4



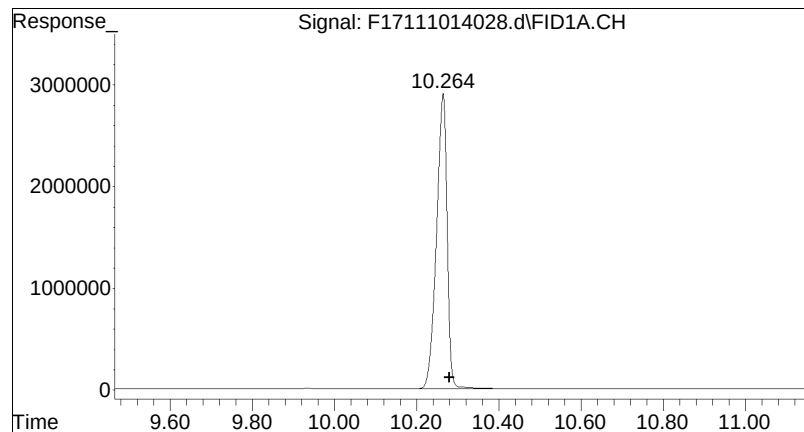
#2 n-Octane (C8)

R.T.: 5.574 min
Delta R.T.: -0.030 min
Response: 45937686
Conc: 46.95 ug/mL M4



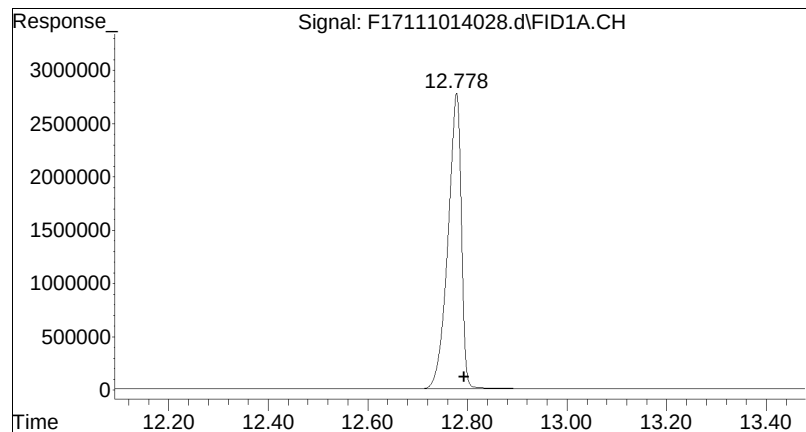
#3 n-Nonane (C9)

R.T.: 7.775 min
Delta R.T.: -0.025 min
Response: 48980250
Conc: 48.66 ug/mL M4



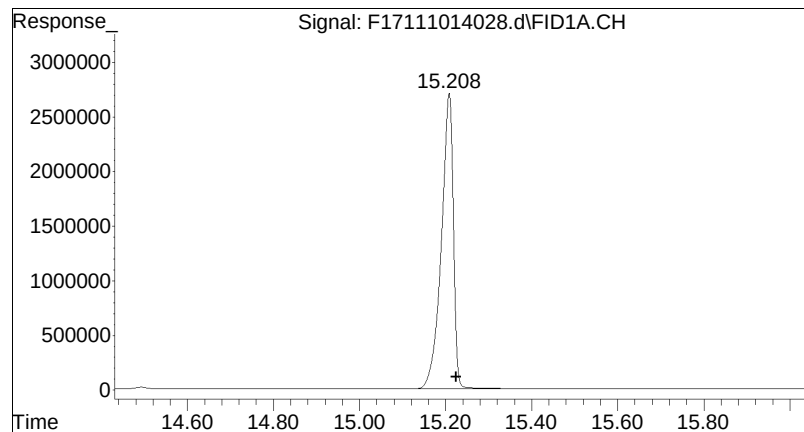
#4 n-Decane (C10)

R.T.: 10.264 min
Delta R.T.: -0.015 min
Response: 52302066
Conc: 50.65 ug/mL M4



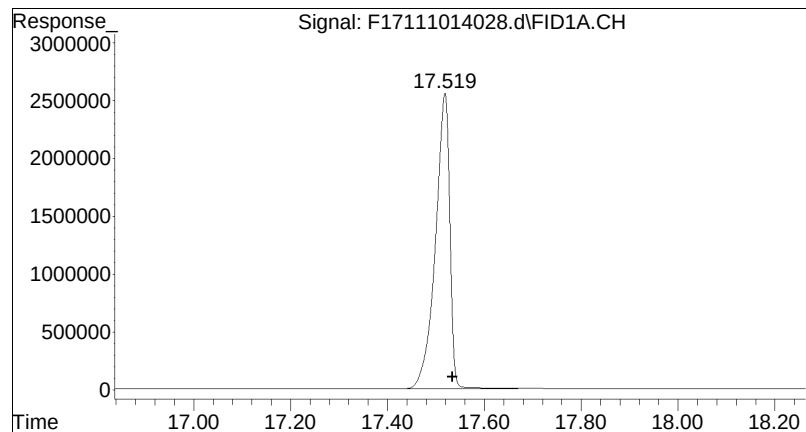
#5 n-Undecane (C11)

R.T.: 12.778 min
Delta R.T.: -0.015 min
Response: 51812091
Conc: 49.63 ug/mL M4



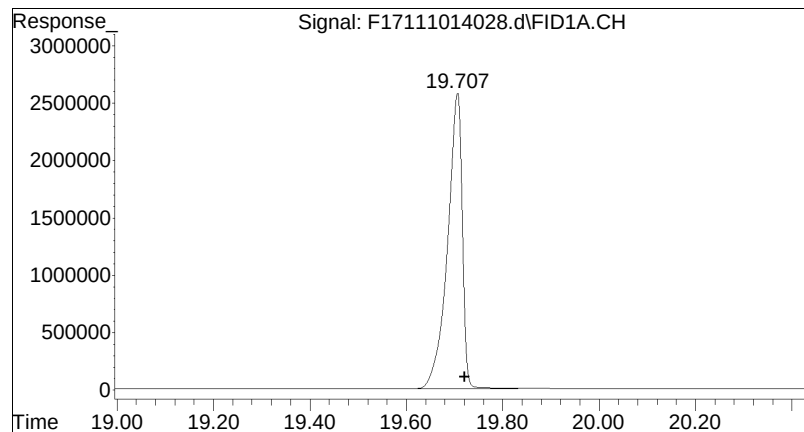
#6 n-Dodecane (C12)

R.T.: 15.208 min
Delta R.T.: -0.016 min
Response: 52486341
Conc: 49.48 ug/mL M4



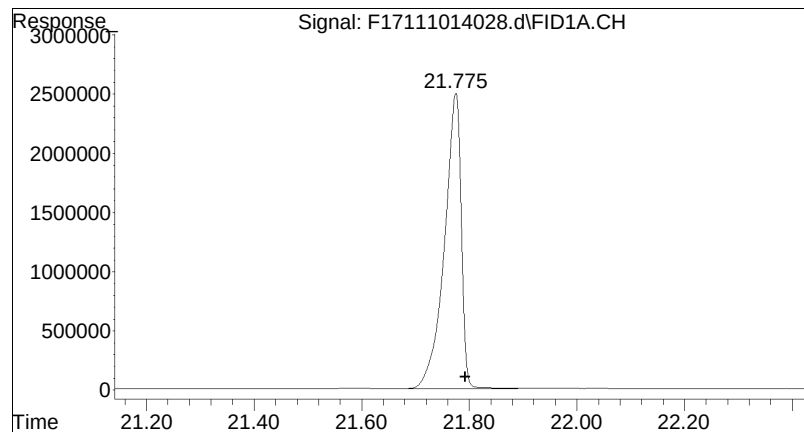
#7 n-Tridecane (C13)

R.T.: 17.519 min
Delta R.T.: -0.015 min
Response: 52668836
Conc: 49.28 ug/mL M4



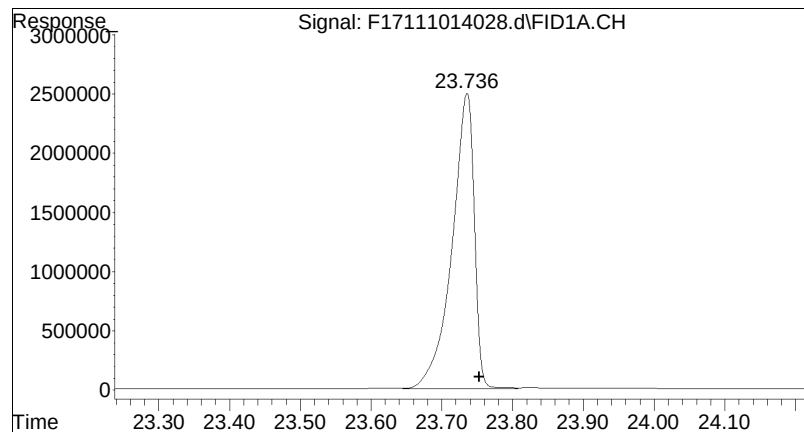
#9 n-Tetradecane (C14)

R.T.: 19.707 min
Delta R.T.: -0.014 min
Response: 54725250
Conc: 50.58 ug/mL M4



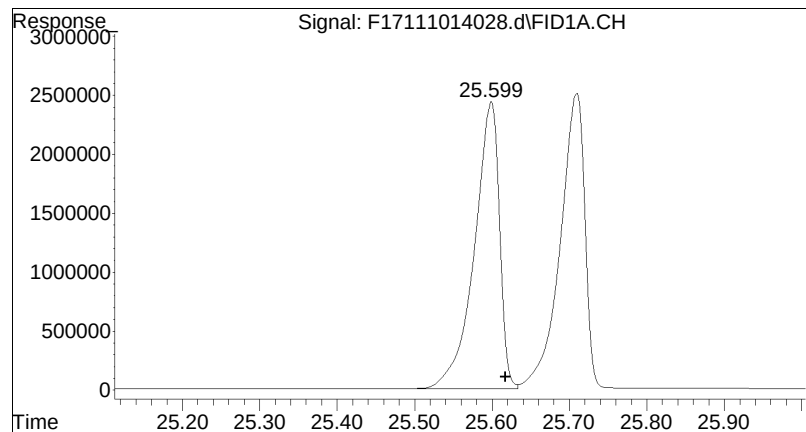
#11 n-Pentadecane (C15)

R.T.: 21.775 min
Delta R.T.: -0.017 min
Response: 54168850
Conc: 49.12 ug/mL M4



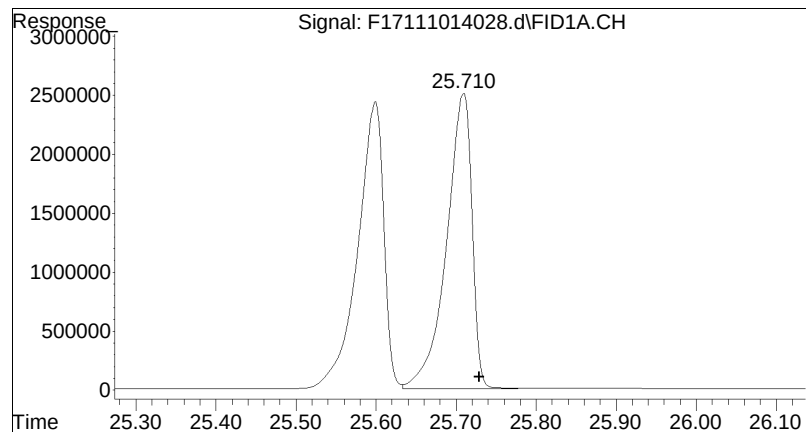
#12 n-Hexadecane (C16)

R.T.: 23.736 min
Delta R.T.: -0.017 min
Response: 54515136
Conc: 49.13 ug/mL M4



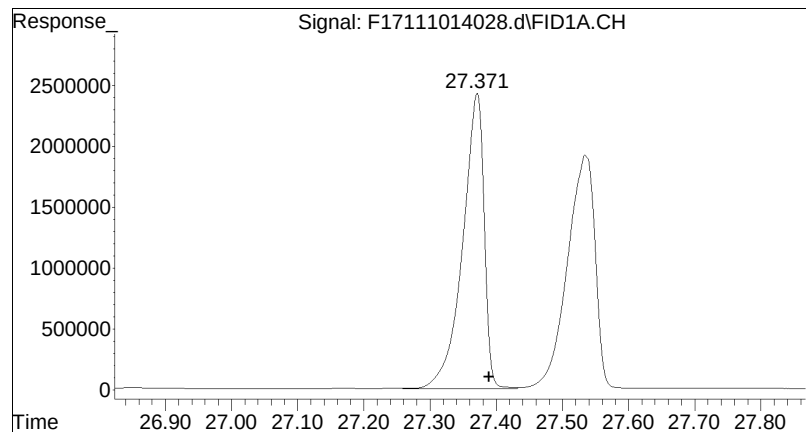
#14 n-Heptadecane (C17)

R.T.: 25.599 min
Delta R.T.: -0.018 min
Response: 54810624
Conc: 49.74 ug/mL M4



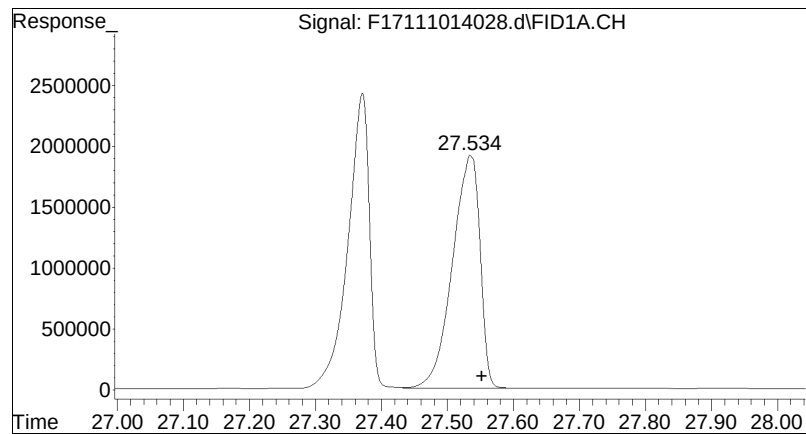
#15 Pristane

R.T.: 25.710 min
Delta R.T.: -0.019 min
Response: 55331736
Conc: 48.61 ug/mL M4



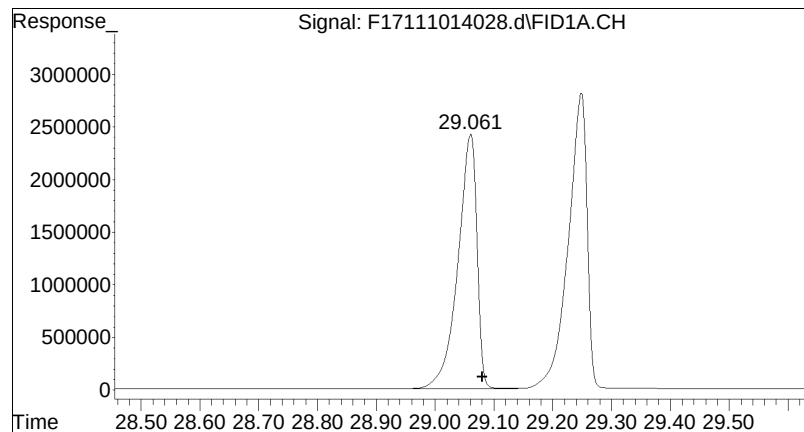
#16 n-Octadecane (C18)

R.T.: 27.371 min
Delta R.T.: -0.018 min
Response: 54607398
Conc: 48.22 ug/mL M4



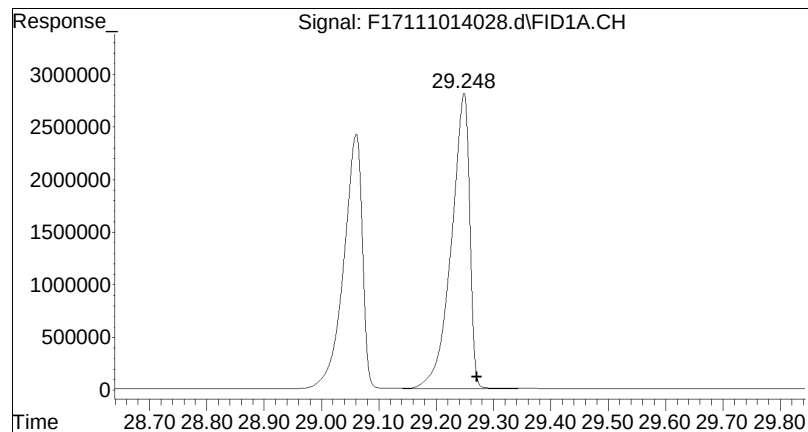
#17 Phytane

R.T.: 27.534 min
Delta R.T.: -0.019 min
Response: 55654924
Conc: 55.70 ug/mL M4



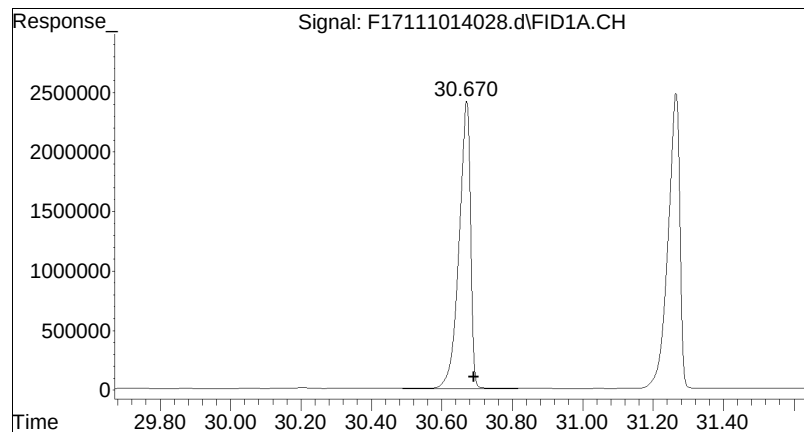
#18 n-Nonadecane (C19)

R.T.: 29.061 min
Delta R.T.: -0.019 min
Response: 54399183
Conc: 48.18 ug/mL M4



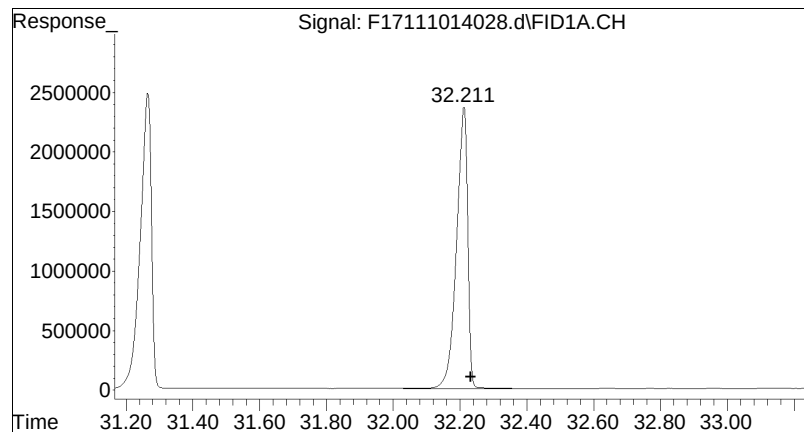
#19 ortho-terphenyl

R.T.: 29.248 min
Delta R.T.: -0.023 min
Response: 62373197
Conc: 49.05 ug/mL M4



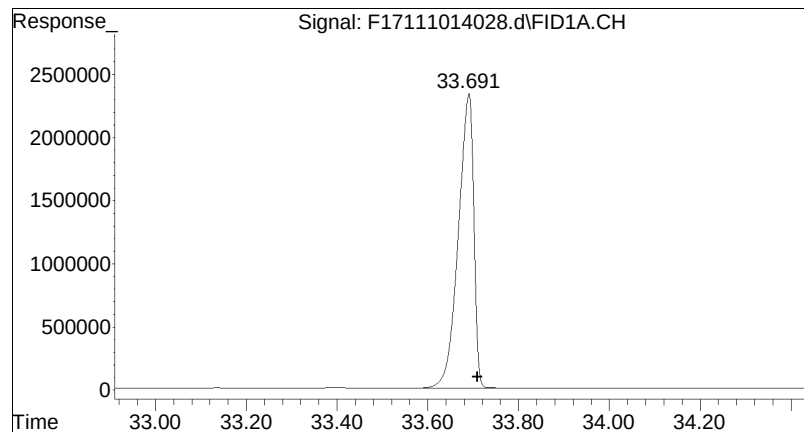
#20 n-Eicosane (C20)

R.T.: 30.670 min
Delta R.T.: -0.021 min
Response: 54603600
Conc: 48.45 ug/mL M4



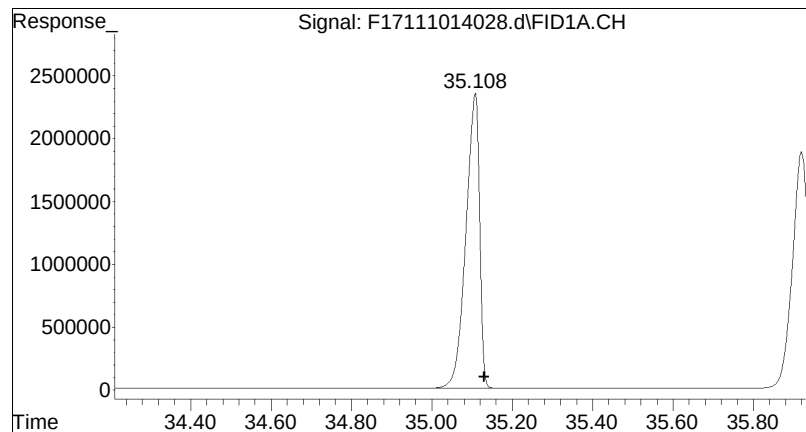
#21 n-Heneicosane (C21)

R.T.: 32.211 min
Delta R.T.: -0.020 min
Response: 55087763
Conc: 48.51 ug/mL M4



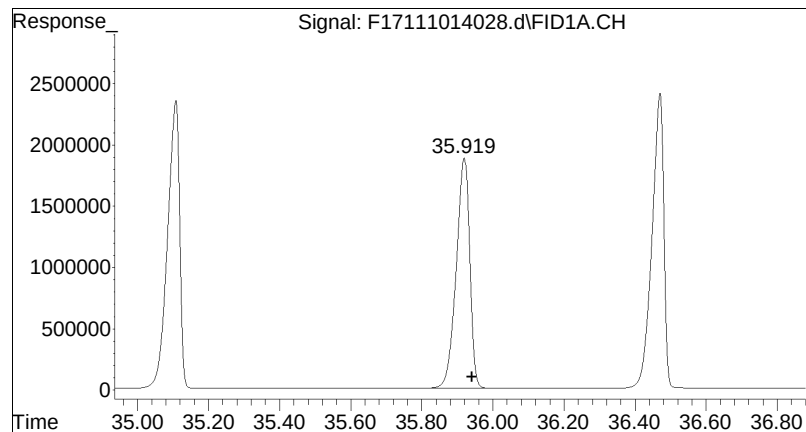
#22 n-Docosane (C22)

R.T.: 33.691 min
Delta R.T.: -0.018 min
Response: 55381679
Conc: 48.28 ug/mL M4



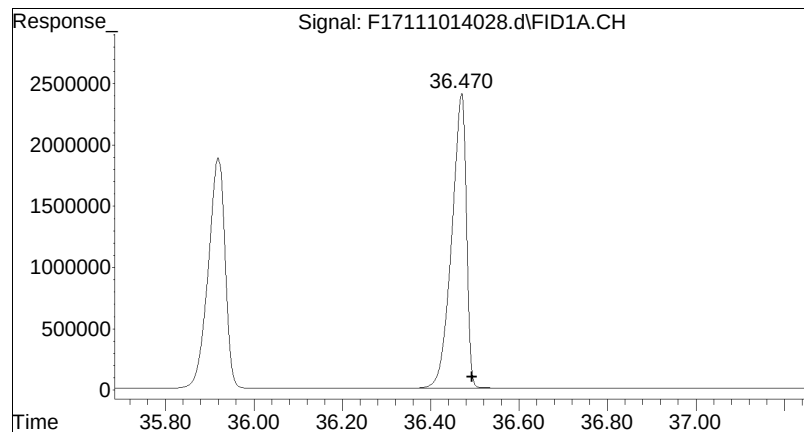
#23 n-Tricosane (C23)

R.T.: 35.108 min
Delta R.T.: -0.021 min
Response: 55584473
Conc: 47.98 ug/mL M4



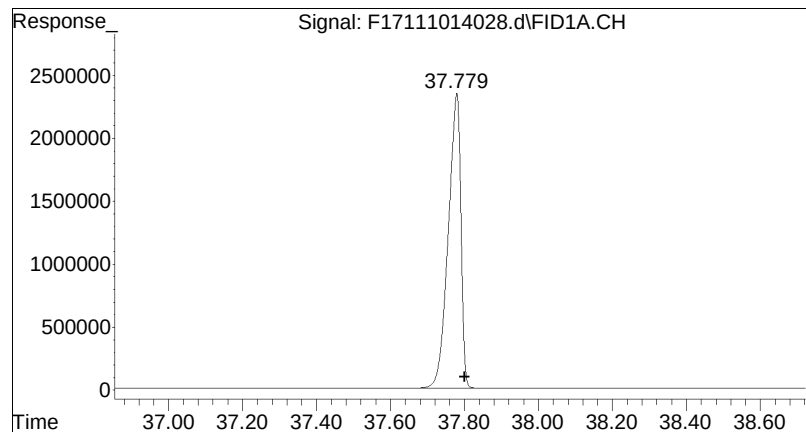
#24 d50-Tetracosane

R.T.: 35.919 min
Delta R.T.: -0.021 min
Response: 49983701
Conc: 48.40 ug/mL M4



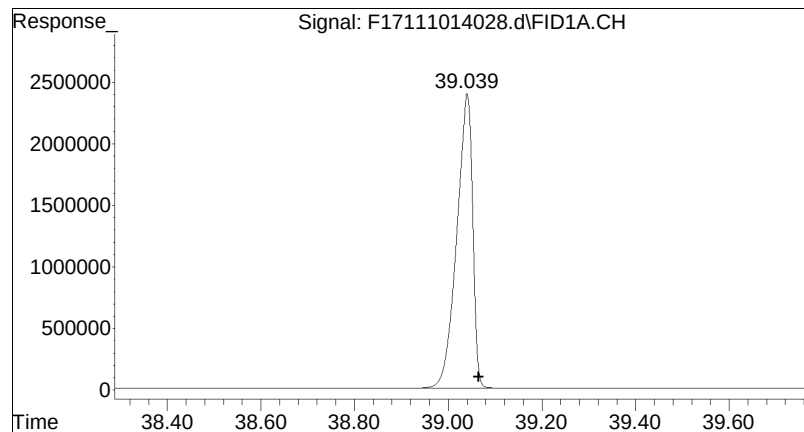
#25 n-Tetracosane (C24)

R.T.: 36.470 min
Delta R.T.: -0.023 min
Response: 55601443
Conc: 47.92 ug/mL M4



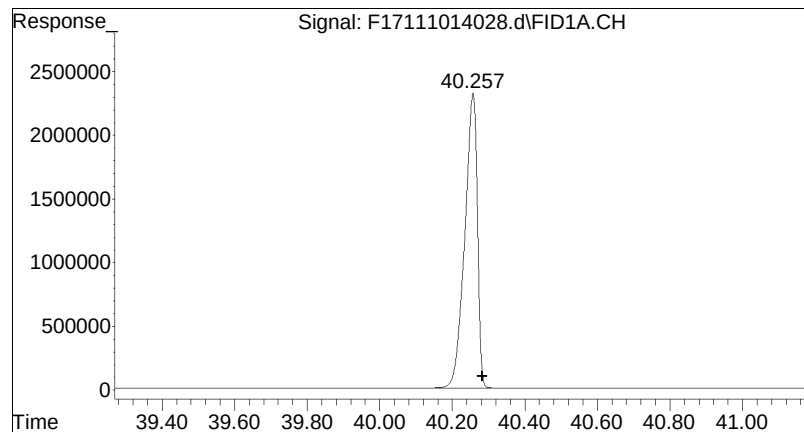
#26 n-Pentacosane (C25)

R.T.: 37.779 min
Delta R.T.: -0.021 min
Response: 55584700
Conc: 48.15 ug/mL M4



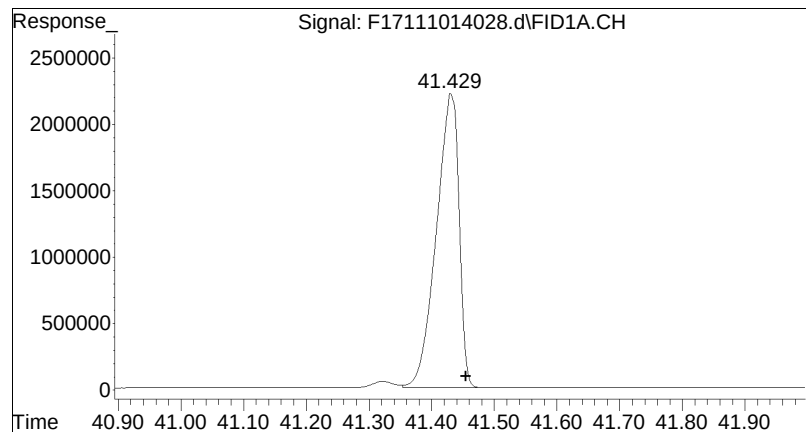
#27 n-Hexacosane (C26)

R.T.: 39.039 min
Delta R.T.: -0.025 min
Response: 56520227
Conc: 47.89 ug/mL M4



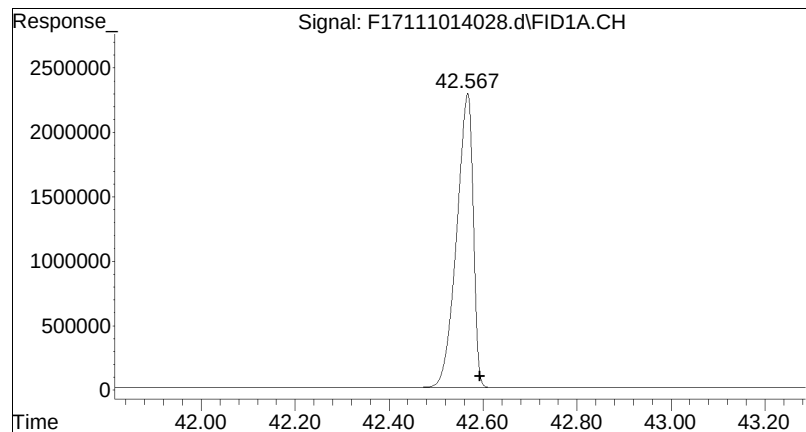
#28 n-Heptacosane (C27)

R.T.: 40.257 min
Delta R.T.: -0.025 min
Response: 55822334
Conc: 47.54 ug/mL M4



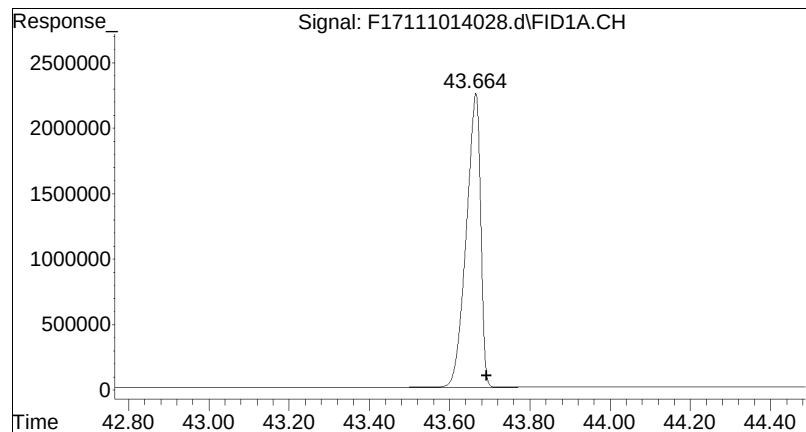
#29 n-Octacosane (C28)

R.T.: 41.429 min
Delta R.T.: -0.025 min
Response: 55792477
Conc: 47.58 ug/mL M4



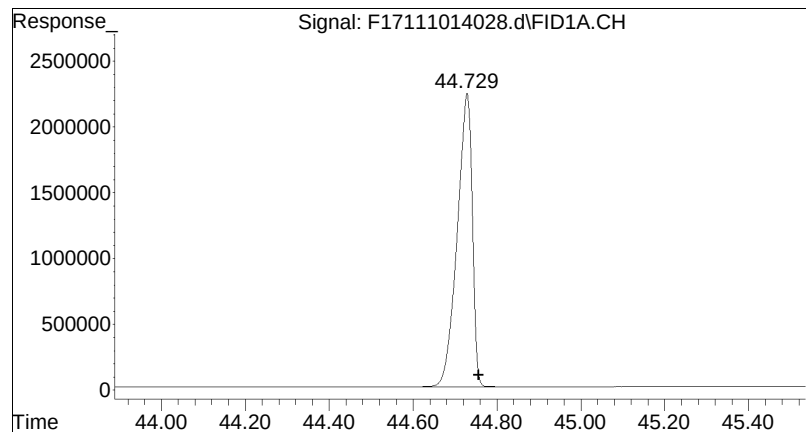
#30 n-Nonacosane (C29)

R.T.: 42.567 min
Delta R.T.: -0.026 min
Response: 56007887
Conc: 47.65 ug/mL M4



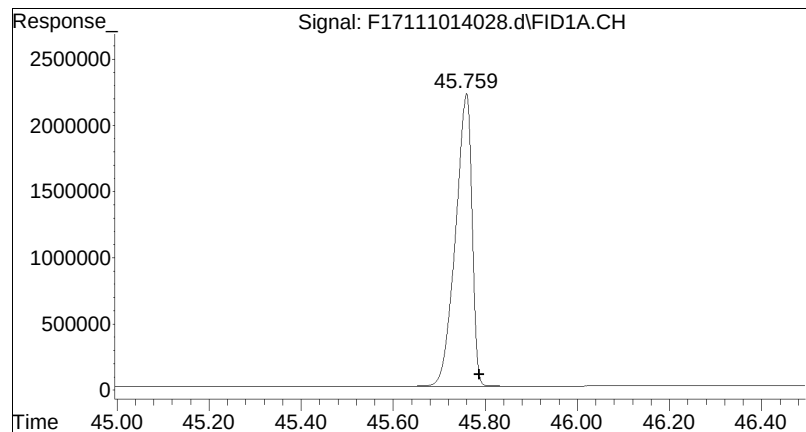
#31 n-Triacontane (C30)

R.T.: 43.664 min
Delta R.T.: -0.028 min
Response: 55890152
Conc: 47.33 ug/mL M4



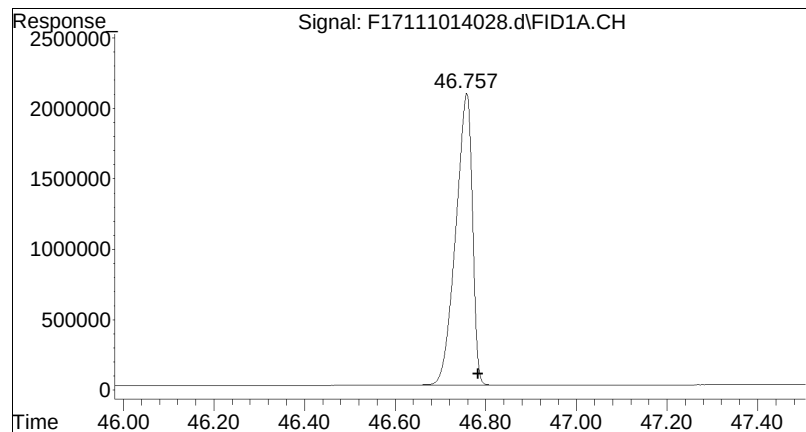
#32 n-Hentriacontane (C31)

R.T.: 44.729 min
Delta R.T.: -0.027 min
Response: 55831872
Conc: 47.25 ug/mL M4



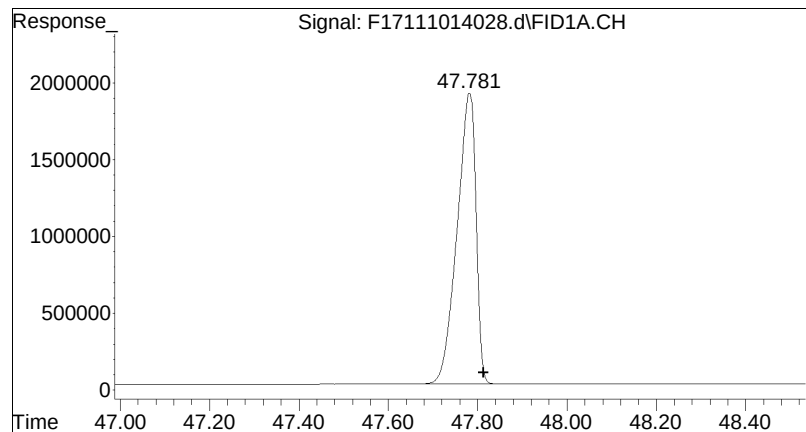
#33 n-Dotriacontane (C32)

R.T.: 45.759 min
Delta R.T.: -0.027 min
Response: 55077837
Conc: 46.27 ug/mL M4



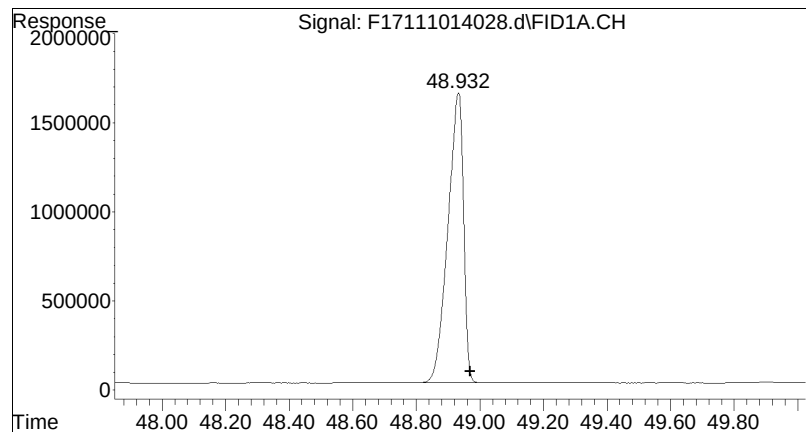
#34 n-Tritriacontane (C33)

R.T.: 46.757 min
Delta R.T.: -0.026 min
Response: 53104426
Conc: 47.13 ug/mL M4



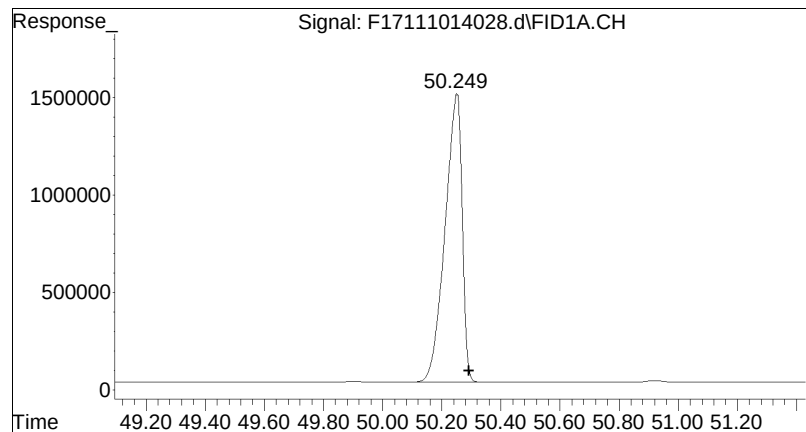
#35 n-tetratriacontane (C34)

R.T.: 47.781 min
Delta R.T.: -0.032 min
Response: 55861107
Conc: 47.53 ug/mL M4



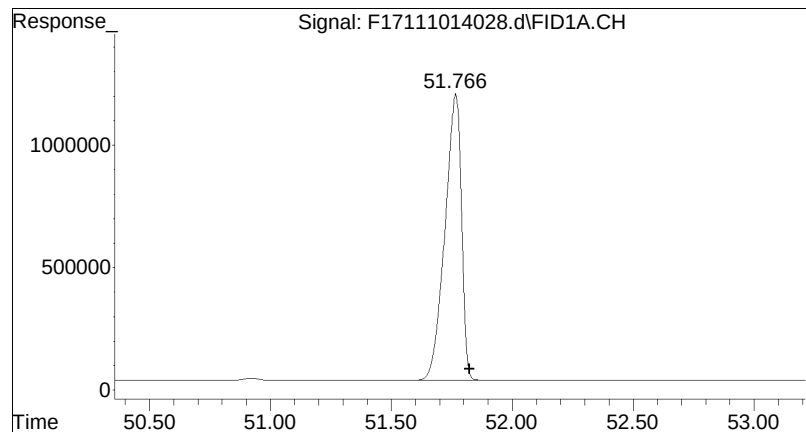
#36 n-Pentatriacontane (C35)

R.T.: 48.932 min
Delta R.T.: -0.036 min
Response: 55722183
Conc: 47.13 ug/mL M4



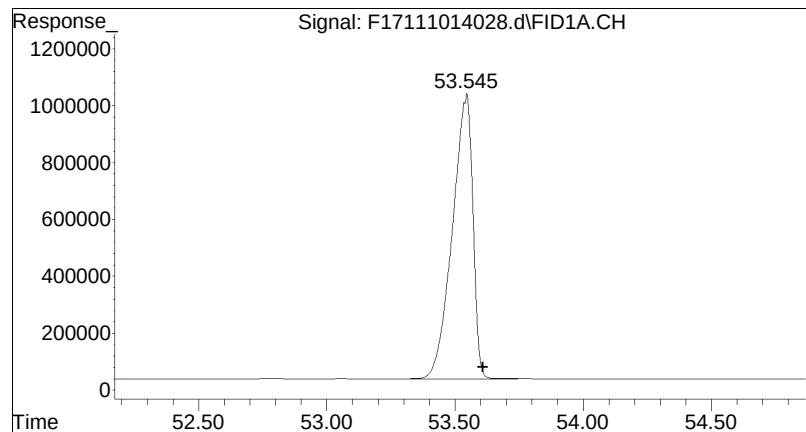
#37 n-Hexatriacontane (C36)

R.T.: 50.249 min
Delta R.T.: -0.043 min
Response: 59610361
Conc: 49.06 ug/mL M4



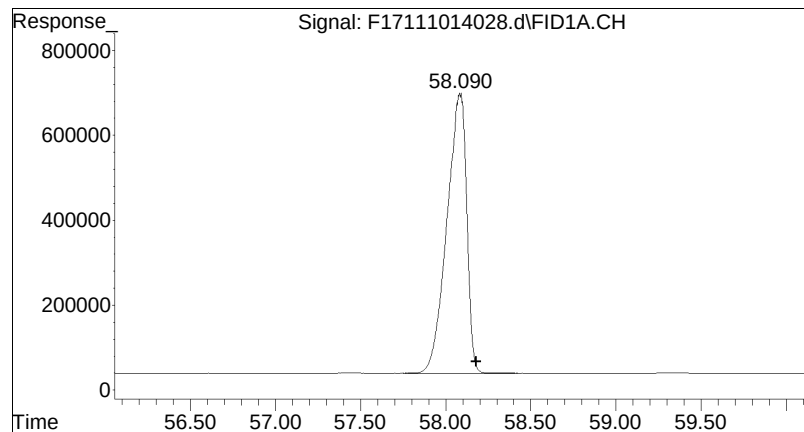
#38 n-Heptatriacontane (C37)

R.T.: 51.766 min
Delta R.T.: -0.056 min
Response: 55634288
Conc: 46.71 ug/mL M4



#39 n-Octatriacontane (C38)

R.T.: 53.545 min
Delta R.T.: -0.062 min
Response: 55500204
Conc: 47.50 ug/mL M4



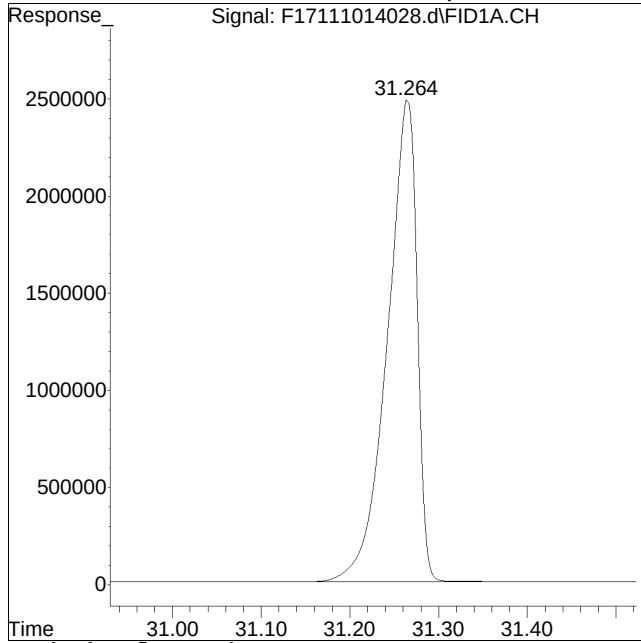
#41 n-Tetracontane (C40)

R.T.: 58.090 min
Delta R.T.: -0.088 min
Response: 53295101
Conc: 43.64 ug/mL M4

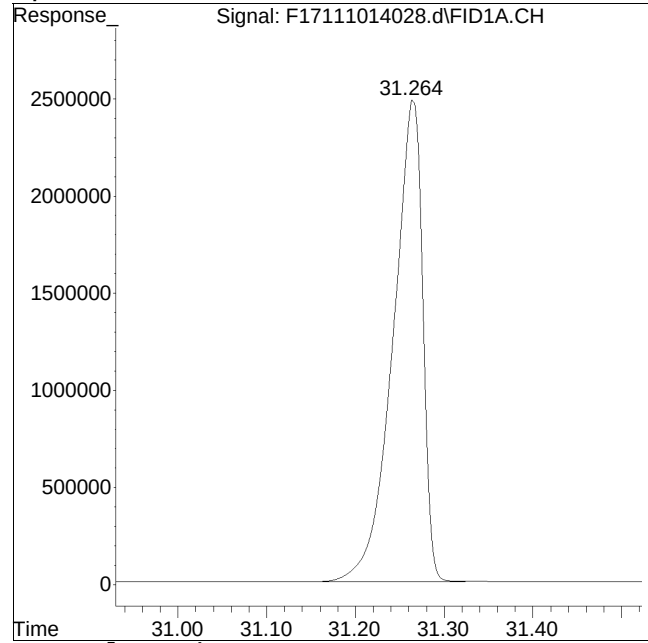
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #1: 5-alpha-androstane



Original Peak Response = 57810641



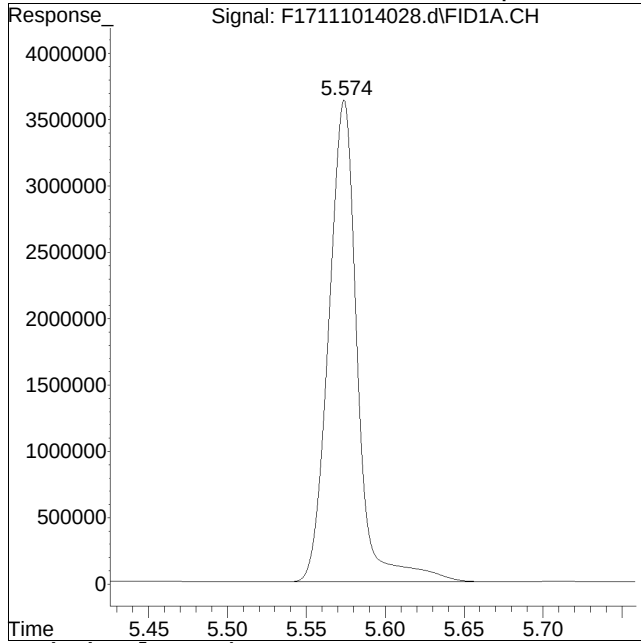
Manual Peak Response = 57779435 M4

M4 = Poor automated baseline construction.

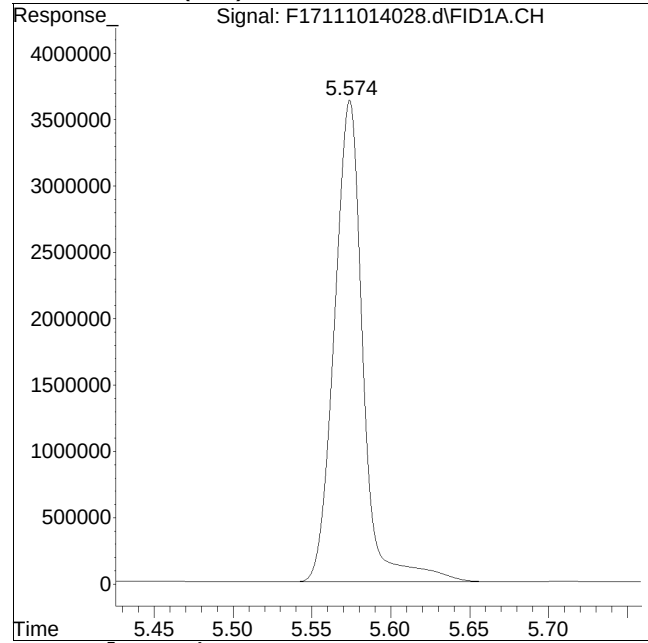
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #2: n-Octane (C8)



Original Peak Response = 45955159



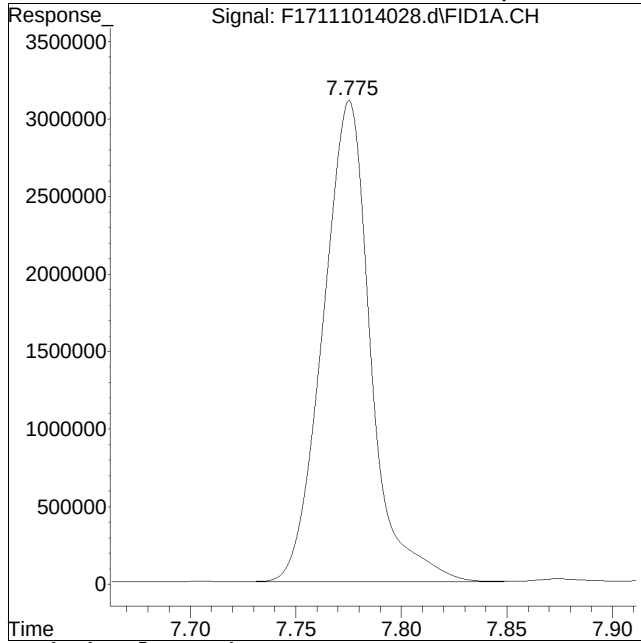
Manual Peak Response = 45937686 M4

M4 = Poor automated baseline construction.

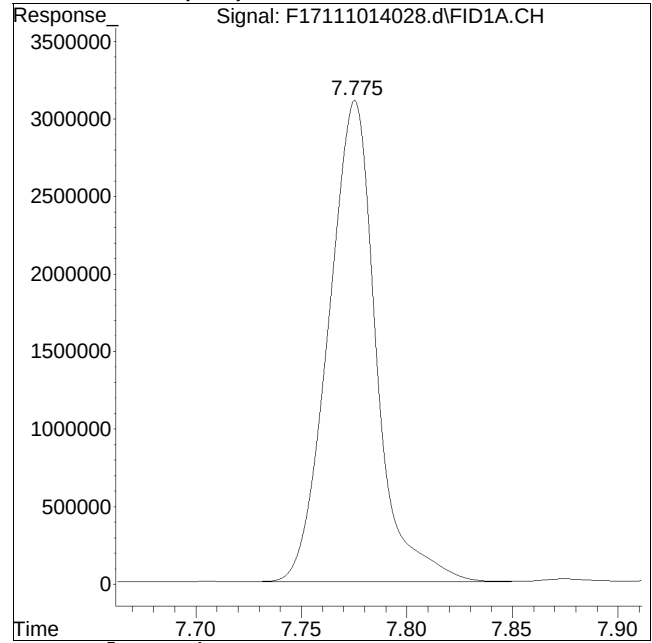
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #3: n-Nonane (C9)



Original Peak Response = 48984915



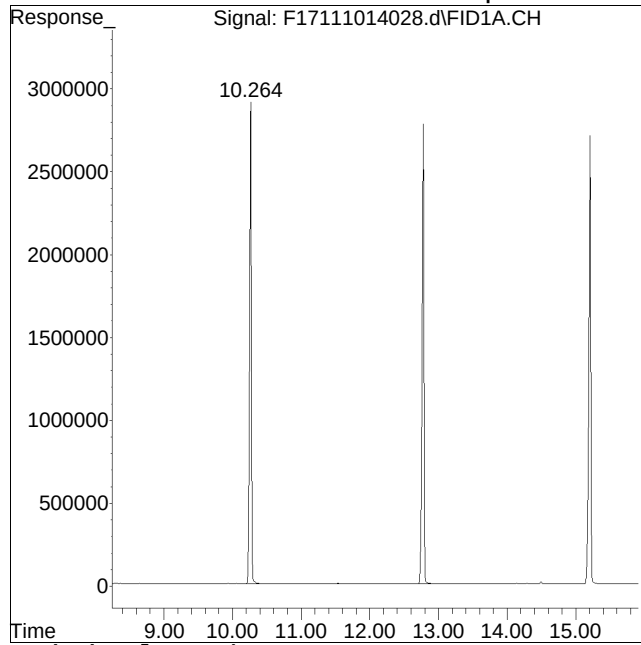
Manual Peak Response = 48980250 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

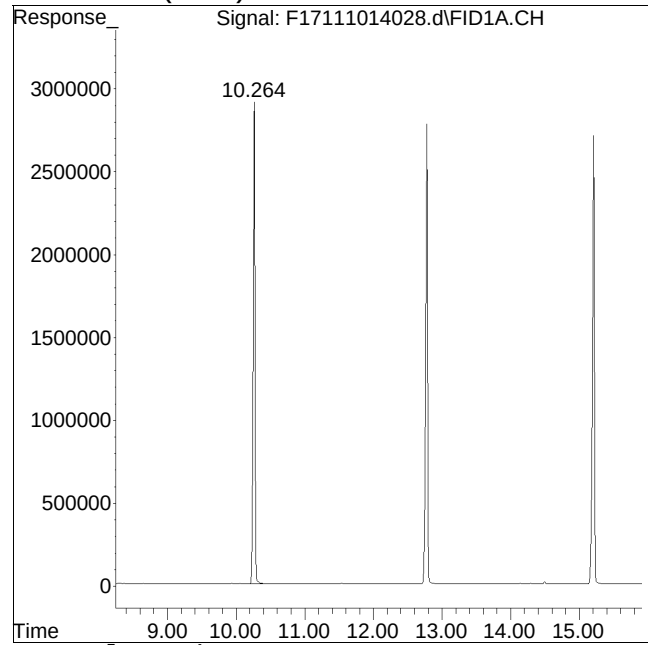
Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #4: n-Decane (C10)



Original Peak Response = 51656043

M4 = Poor automated baseline construction.

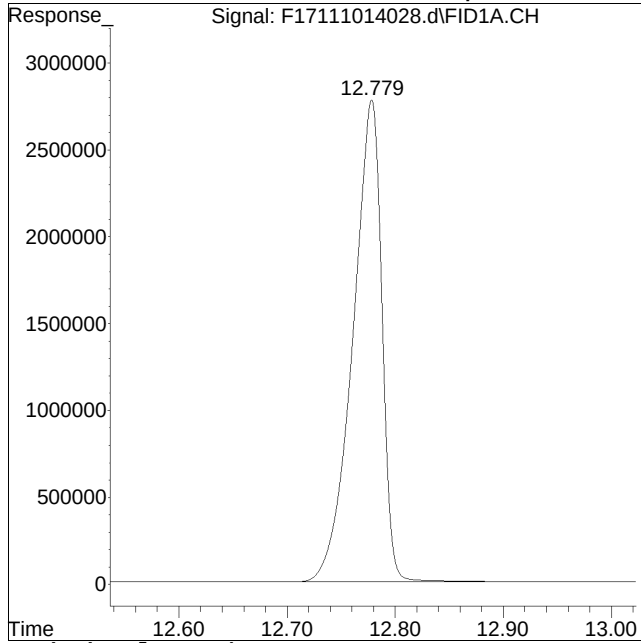


Manual Peak Response = 52302066 M4

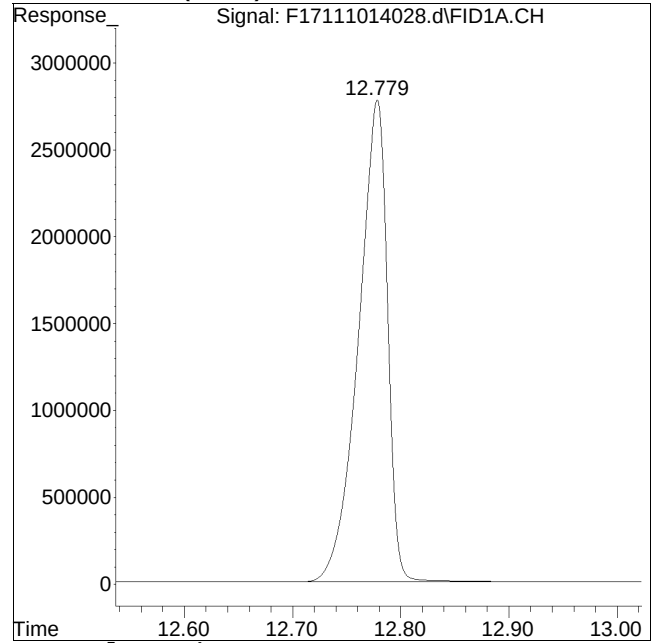
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #5: n-Undecane (C11)



Original Peak Response = 51789676



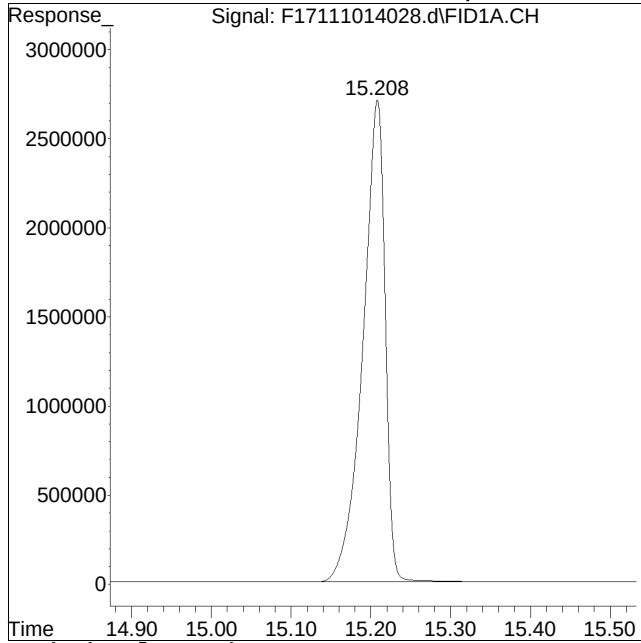
Manual Peak Response = 51812091 M4

M4 = Poor automated baseline construction.

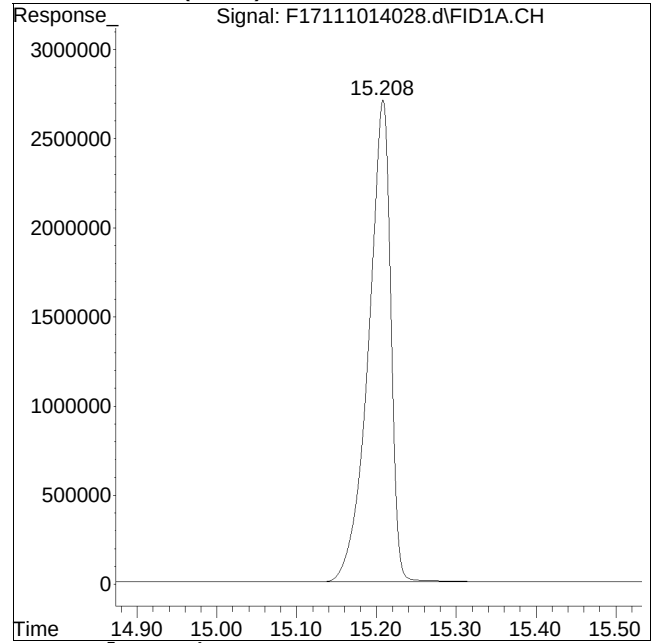
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #6: n-Dodecane (C12)



Original Peak Response = 52373765



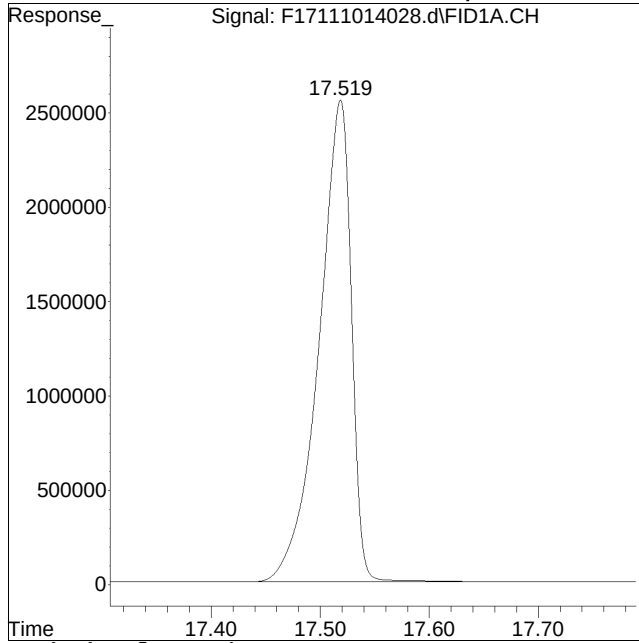
Manual Peak Response = 52486341 M4

M4 = Poor automated baseline construction.

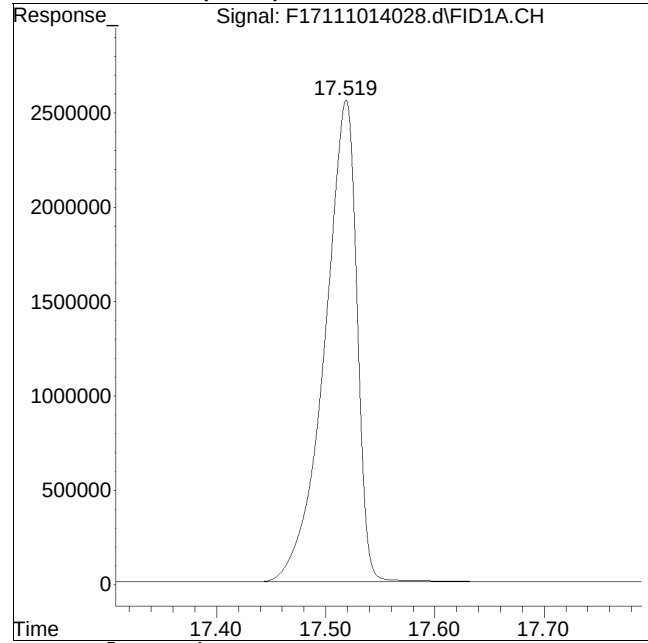
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #7: n-Tridecane (C13)



Original Peak Response = 52650885



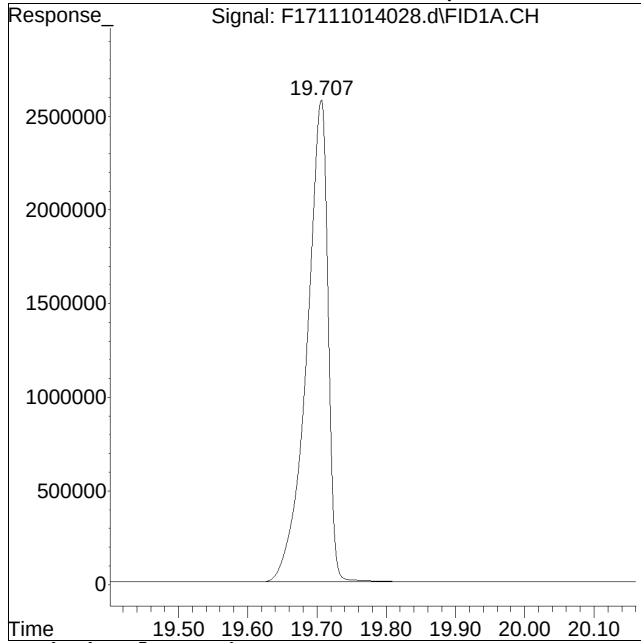
Manual Peak Response = 52668836 M4

M4 = Poor automated baseline construction.

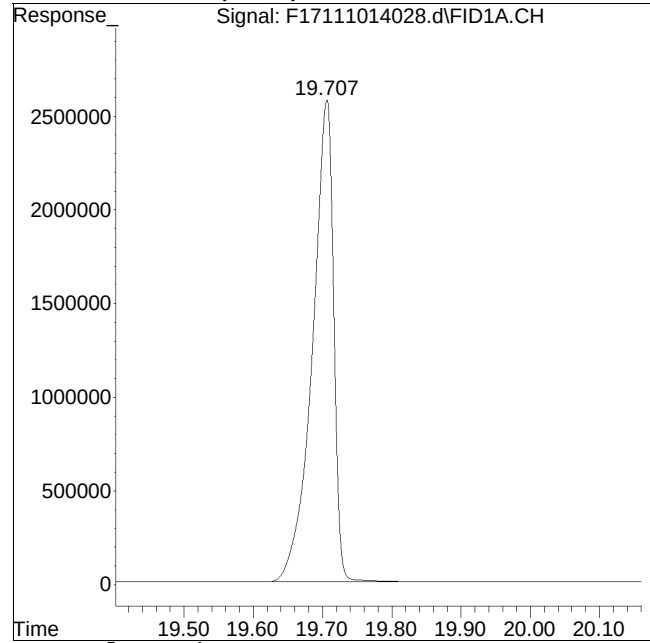
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #9: n-Tetradecane (C14)



Original Peak Response = 54838832



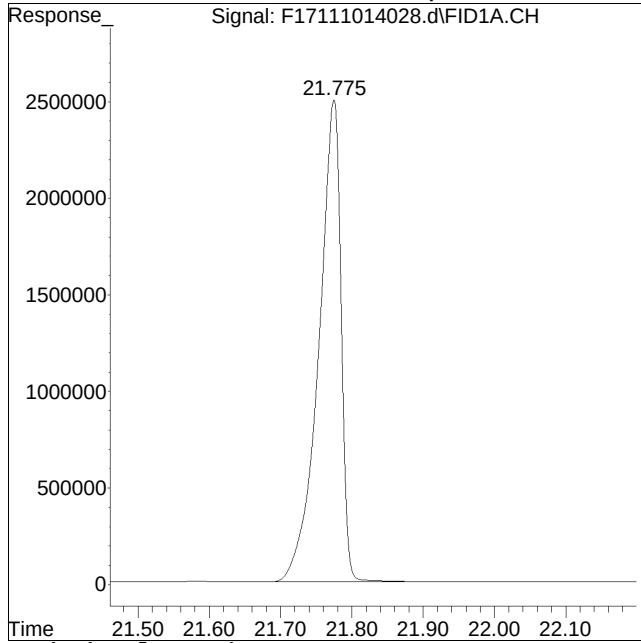
Manual Peak Response = 54725250 M4

M4 = Poor automated baseline construction.

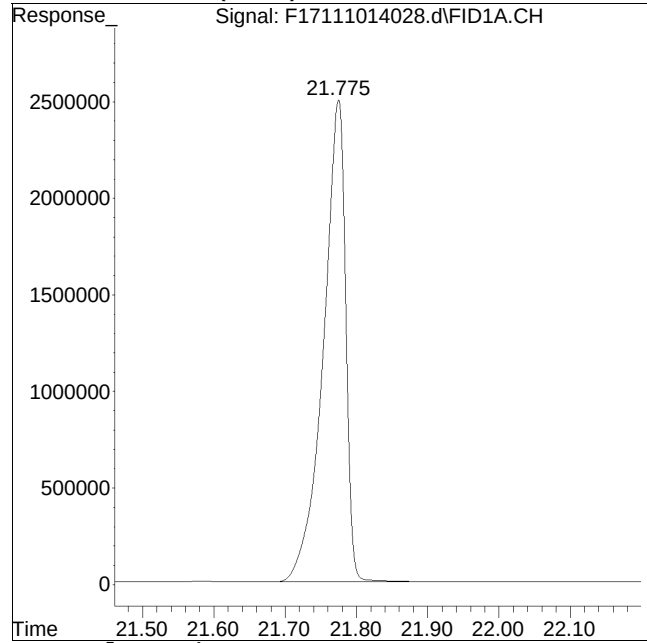
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #11: n-Pentadecane (C15)



Original Peak Response = 54161252



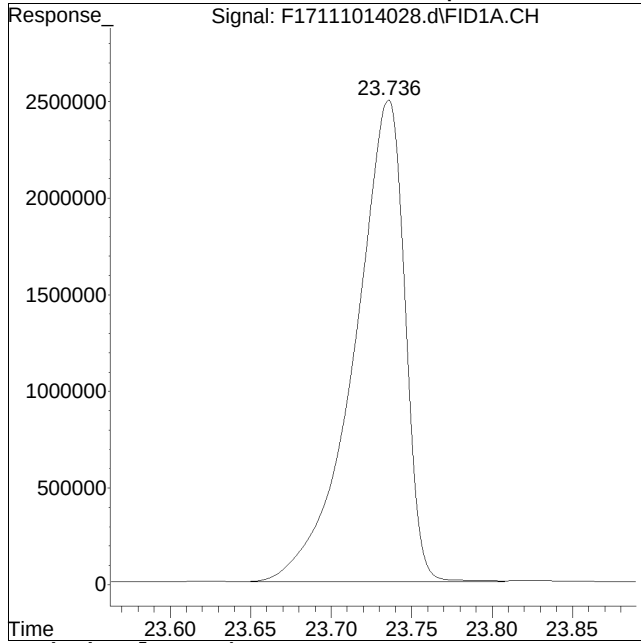
Manual Peak Response = 54168850 M4

M4 = Poor automated baseline construction.

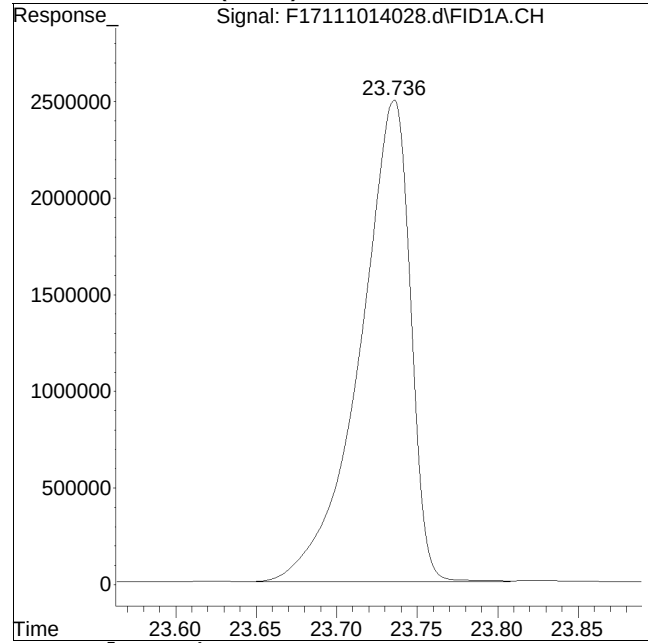
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #12: n-Hexadecane (C16)



Original Peak Response = 54520372



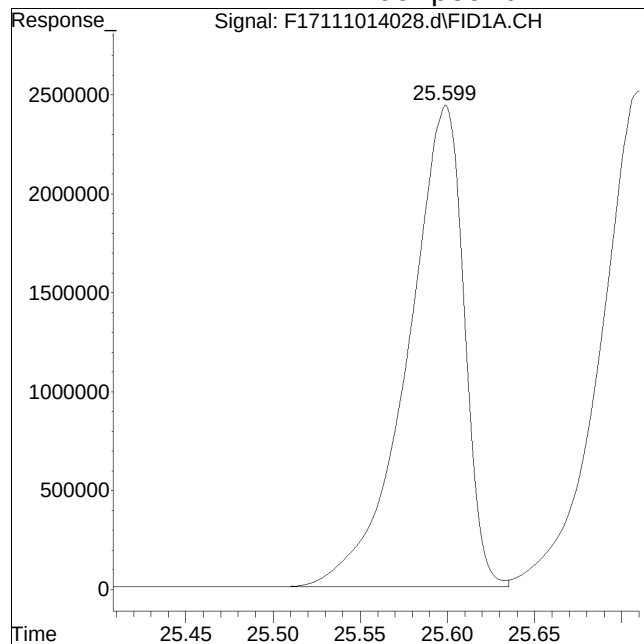
Manual Peak Response = 54515136 M4

M4 = Poor automated baseline construction.

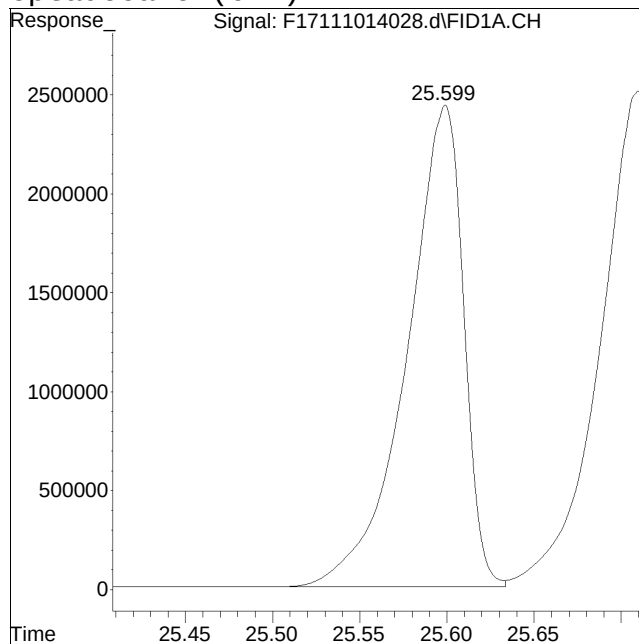
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #14: n-Heptadecane (C17)



Original Peak Response = 54807903



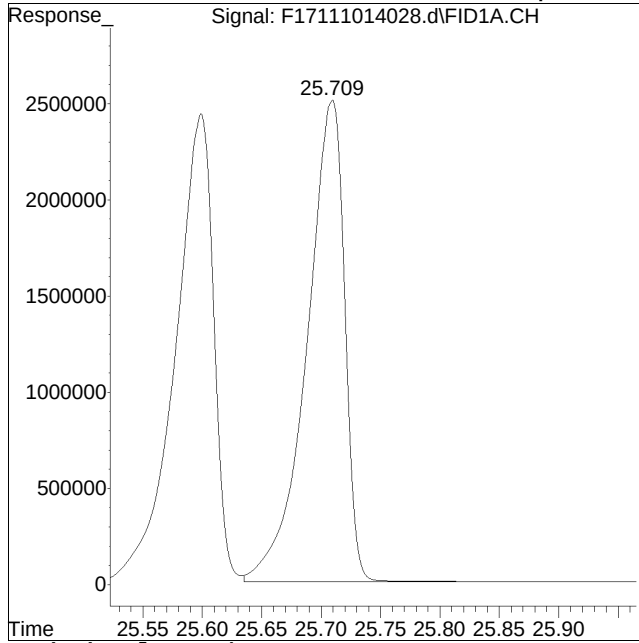
Manual Peak Response = 54810624 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

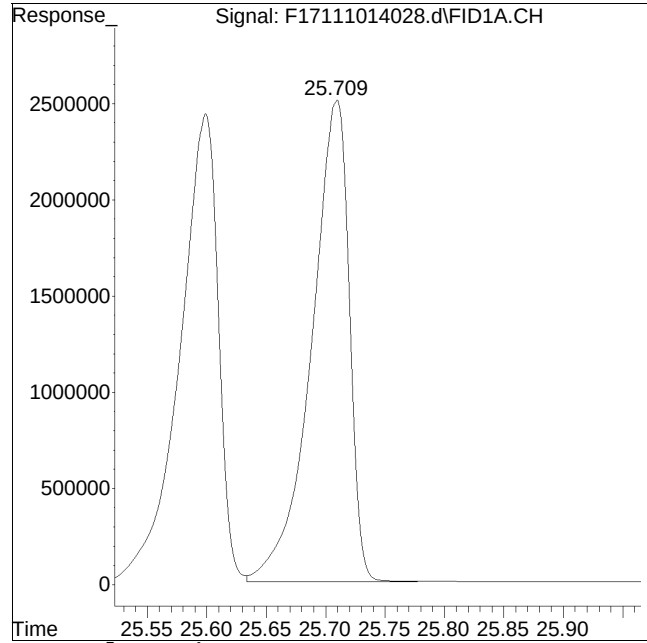
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #15: Pristane



Original Peak Response = 55462518

M4 = Poor automated baseline construction.

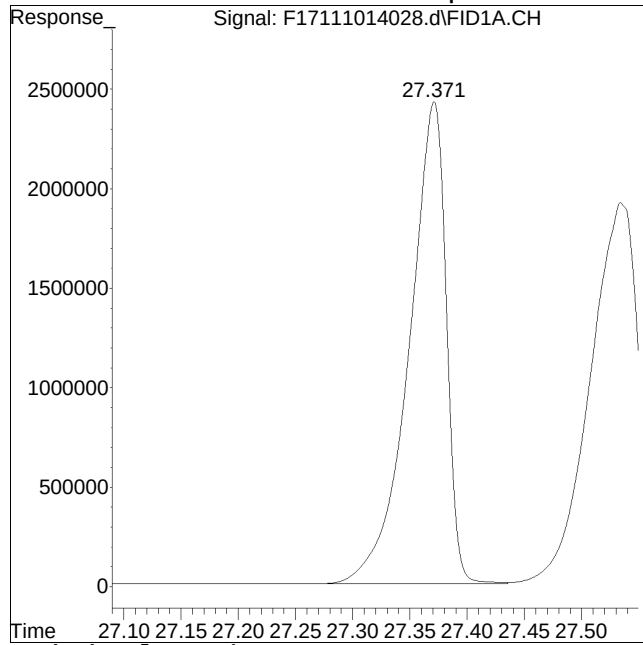


Manual Peak Response = 55331736 M4

Manual Integration/Negative Proof Report

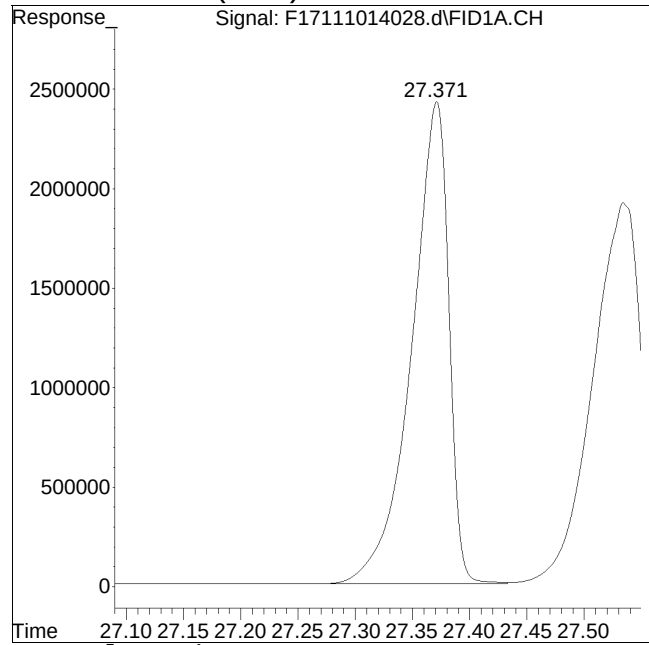
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #16: n-Octadecane (C18)



Original Peak Response = 54661867

M4 = Poor automated baseline construction.

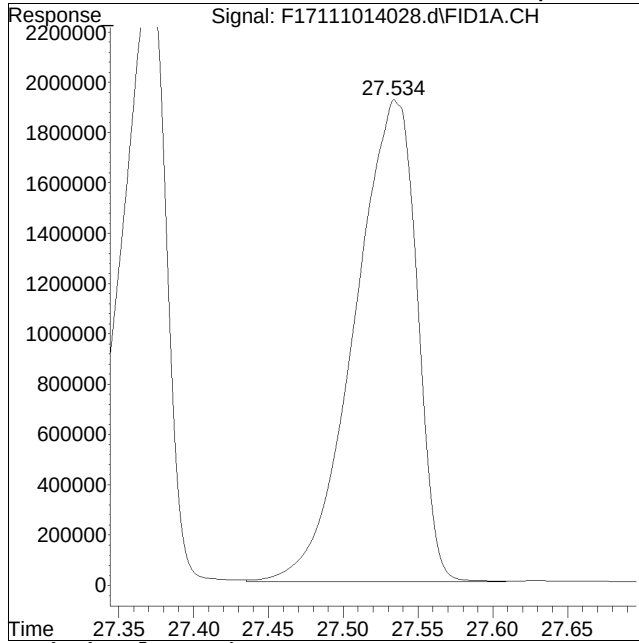


Manual Peak Response = 54607398 M4

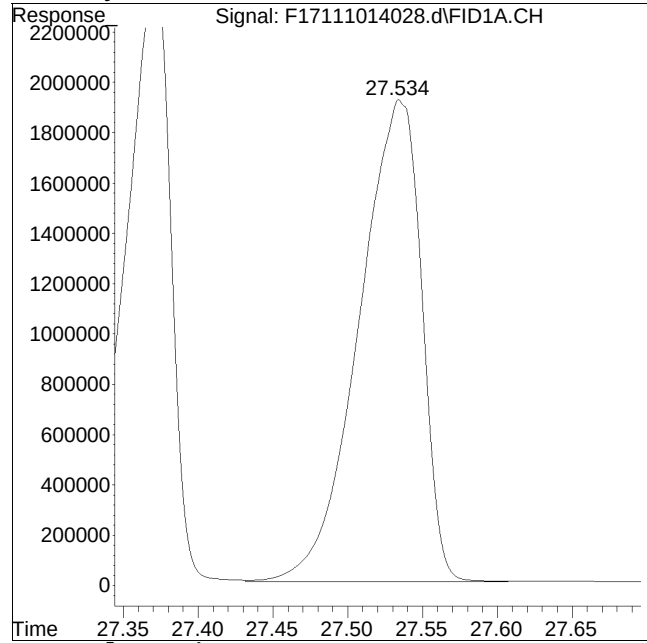
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #17: Phytane



Original Peak Response = 55708840



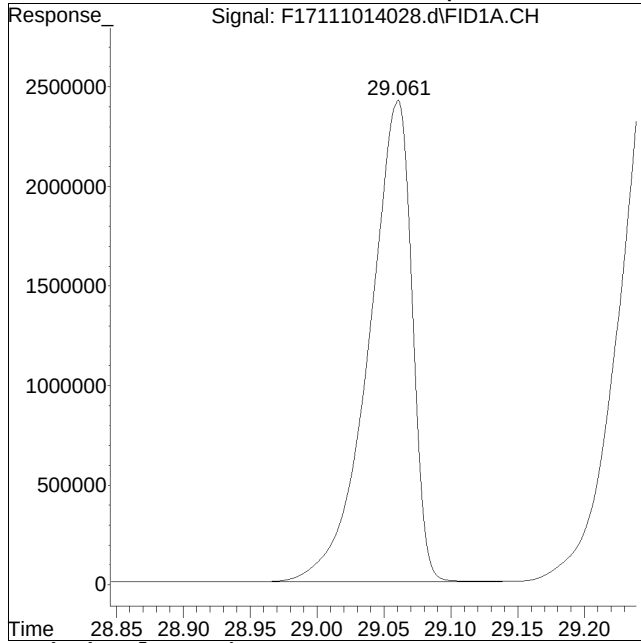
Manual Peak Response = 55654924 M4

M4 = Poor automated baseline construction.

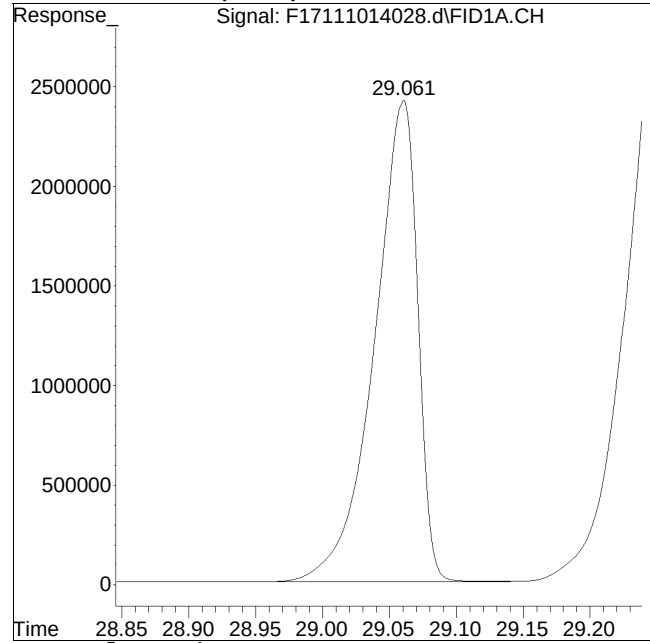
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #18: n-Nonadecane (C19)



Original Peak Response = 54256496



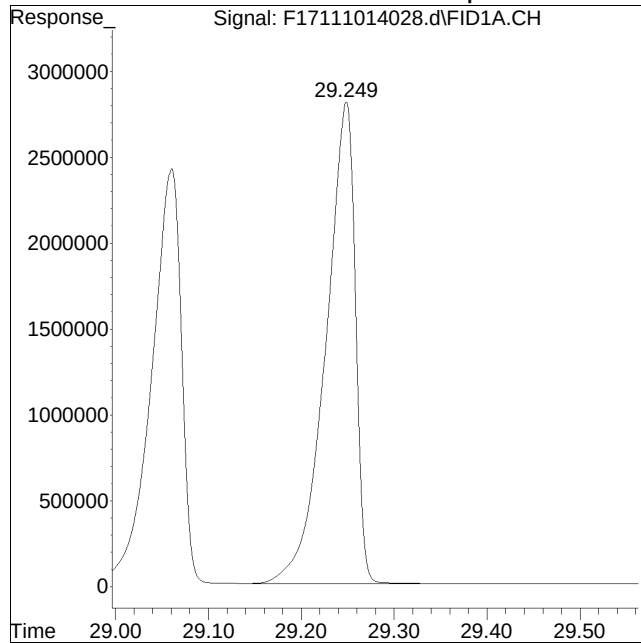
Manual Peak Response = 54399183 M4

M4 = Poor automated baseline construction.

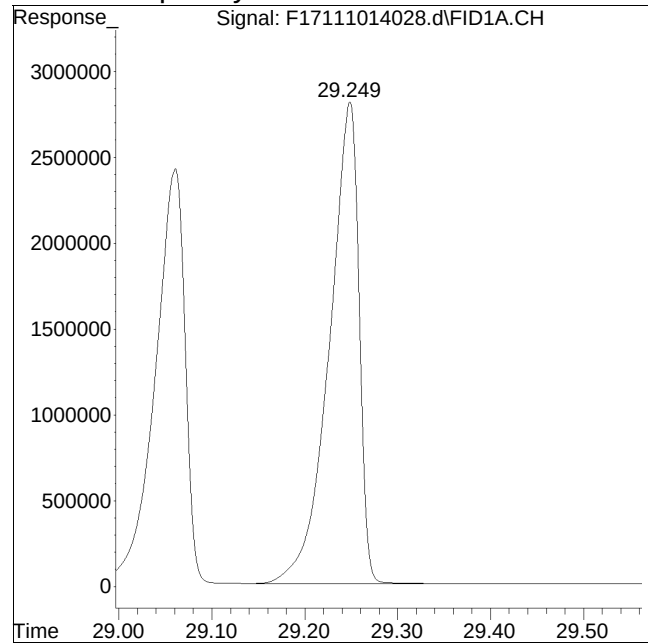
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #19: ortho-terphenyl



Original Peak Response = 62183463



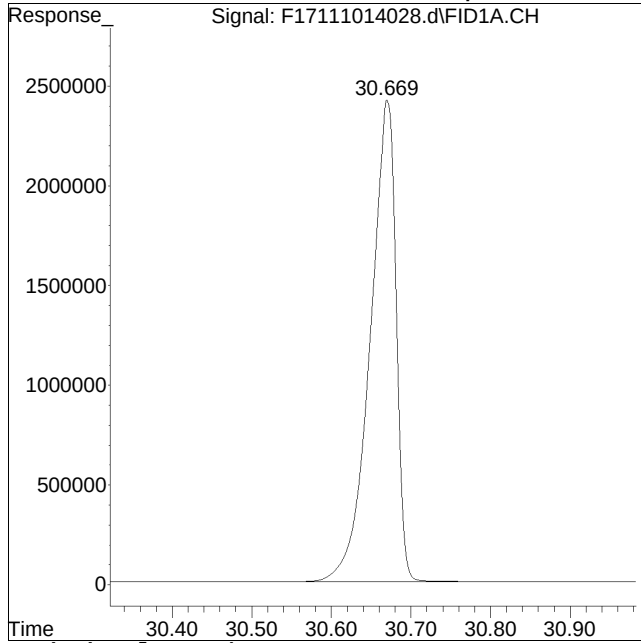
Manual Peak Response = 62373197 M4

M4 = Poor automated baseline construction.

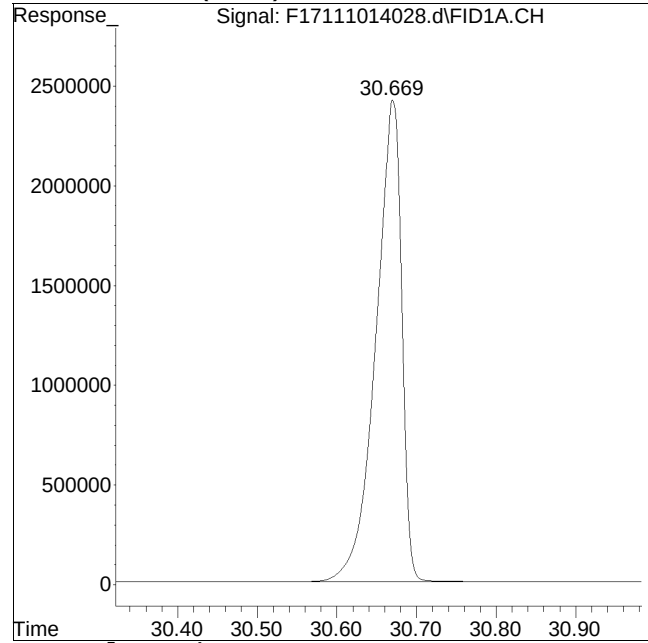
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #20: n-Eicosane (C20)



Original Peak Response = 54662198



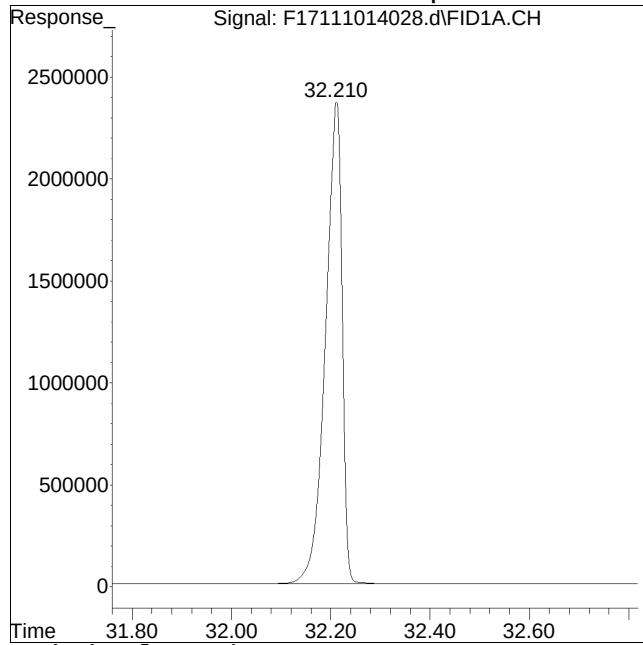
Manual Peak Response = 54603600 M4

M4 = Poor automated baseline construction.

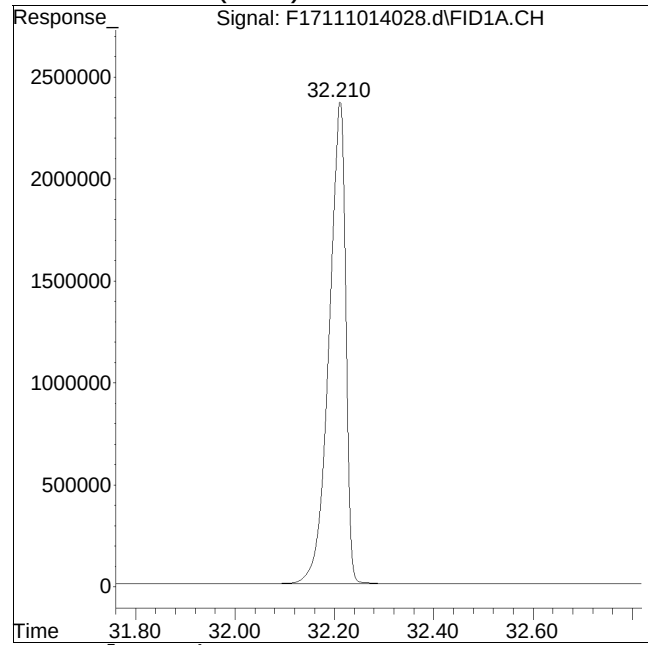
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #21: n-Heneicosane (C21)



Original Peak Response = 54970870



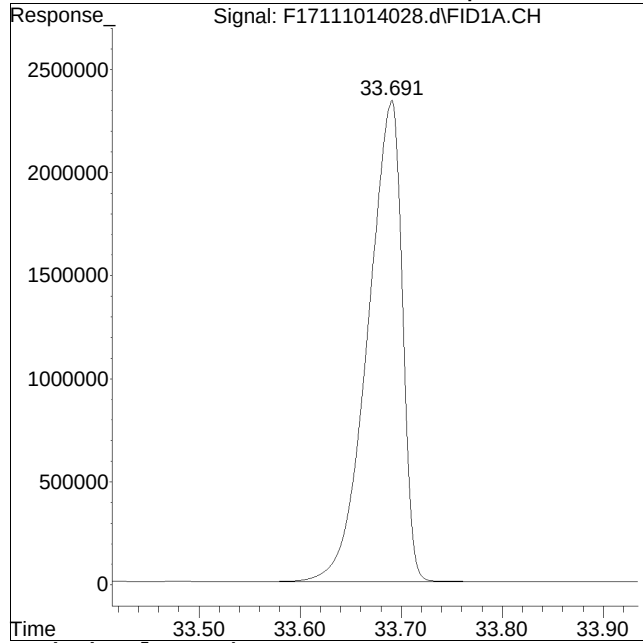
Manual Peak Response = 55087763 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

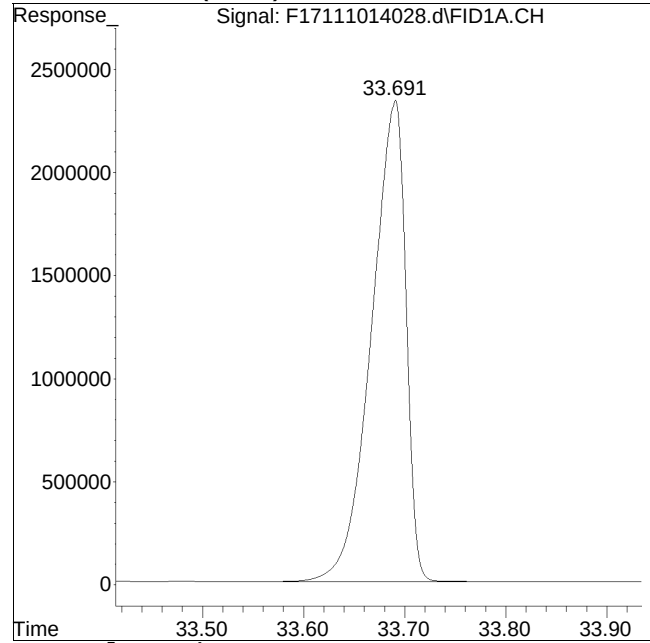
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #22: n-Docosane (C22)



Original Peak Response = 55330223

M4 = Poor automated baseline construction.

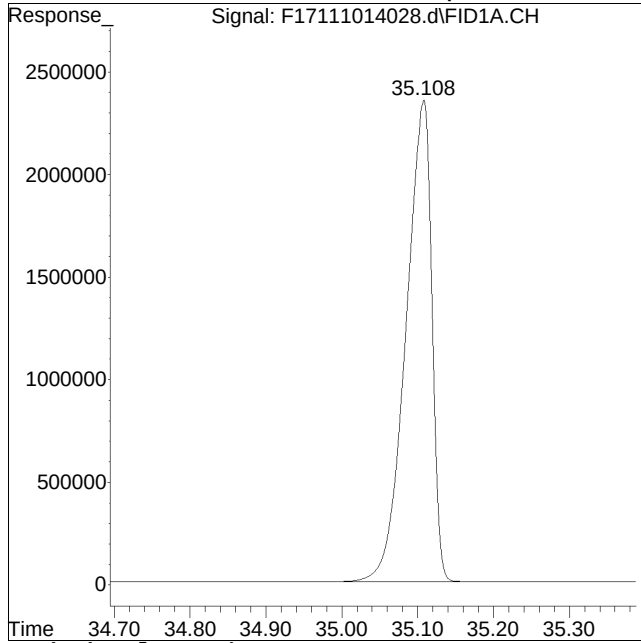


Manual Peak Response = 55381679 M4

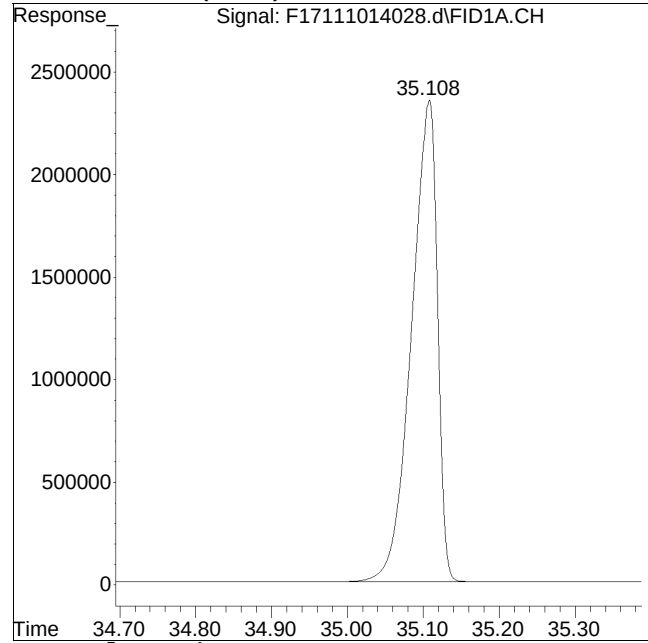
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #23: n-Tricosane (C23)



Original Peak Response = 55580721



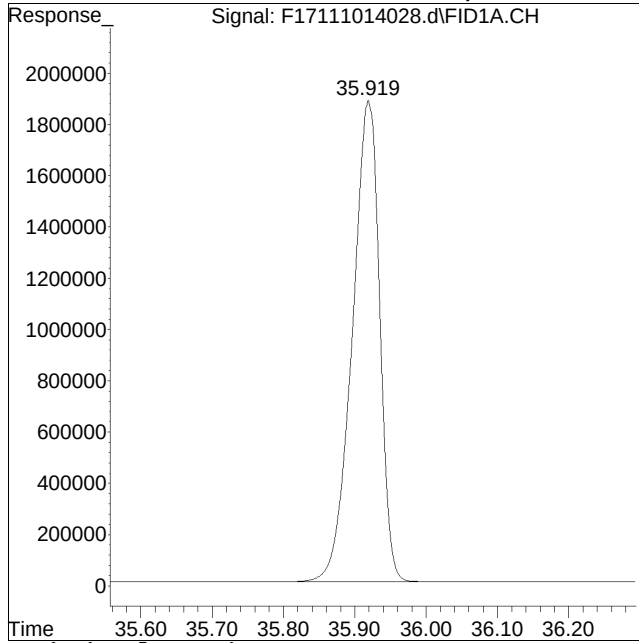
Manual Peak Response = 55584473 M4

M4 = Poor automated baseline construction.

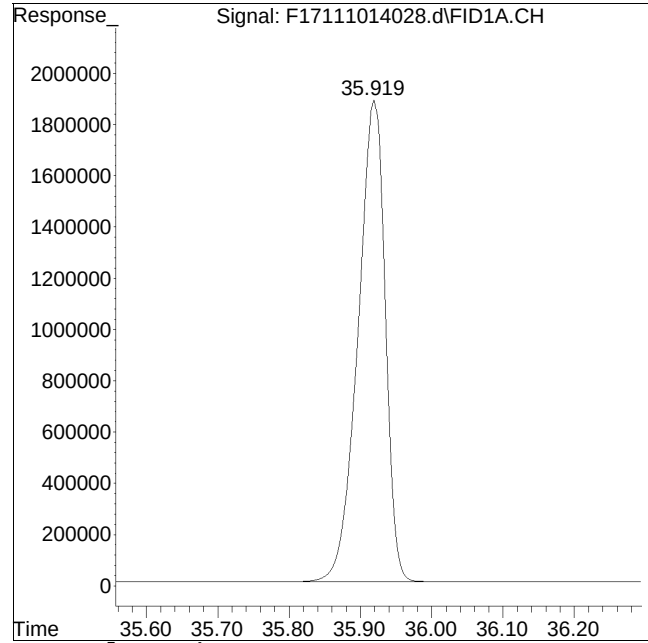
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #24: d50-Tetracosane



Original Peak Response = 49999498



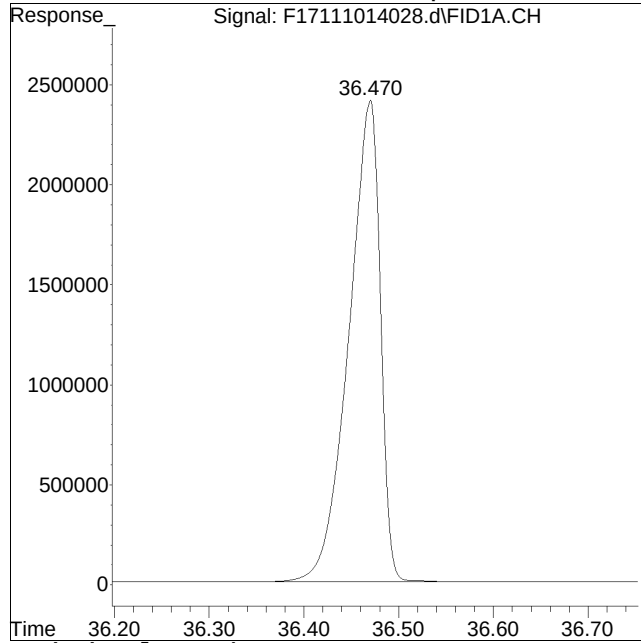
Manual Peak Response = 49983701 M4

M4 = Poor automated baseline construction.

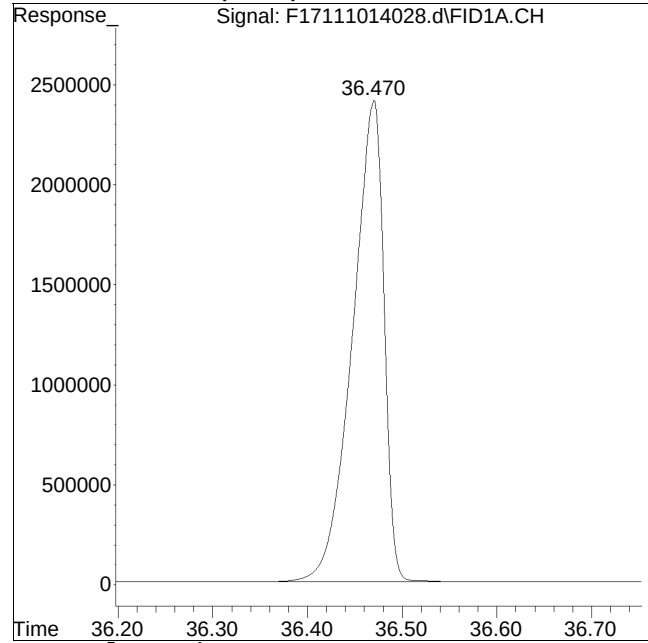
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #25: n-Tetracosane (C24)



Original Peak Response = 55592063



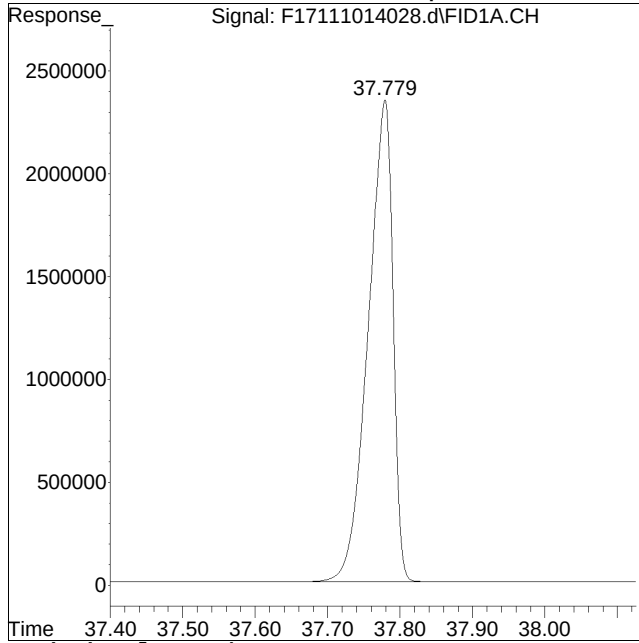
Manual Peak Response = 55601443 M4

M4 = Poor automated baseline construction.

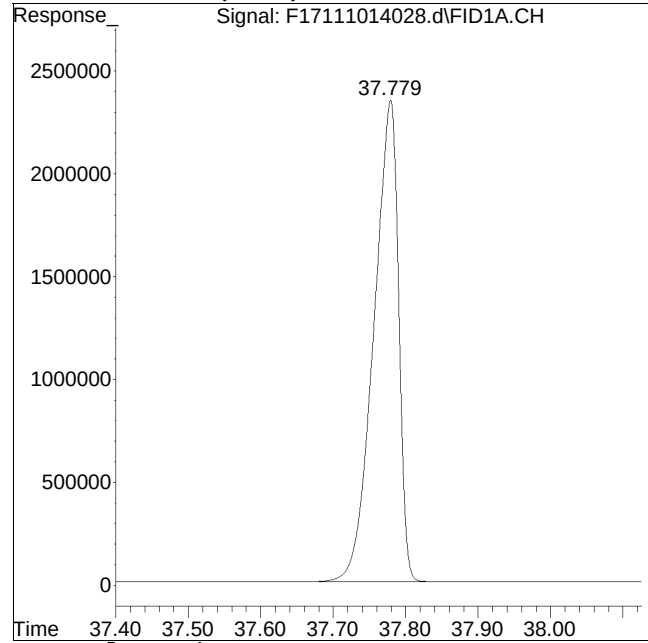
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #26: n-Pentacosane (C25)



Original Peak Response = 55605391



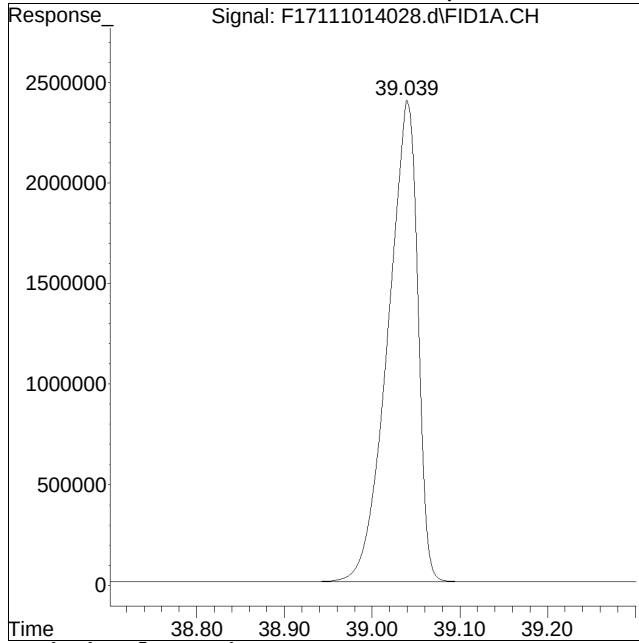
Manual Peak Response = 55584700 M4

M4 = Poor automated baseline construction.

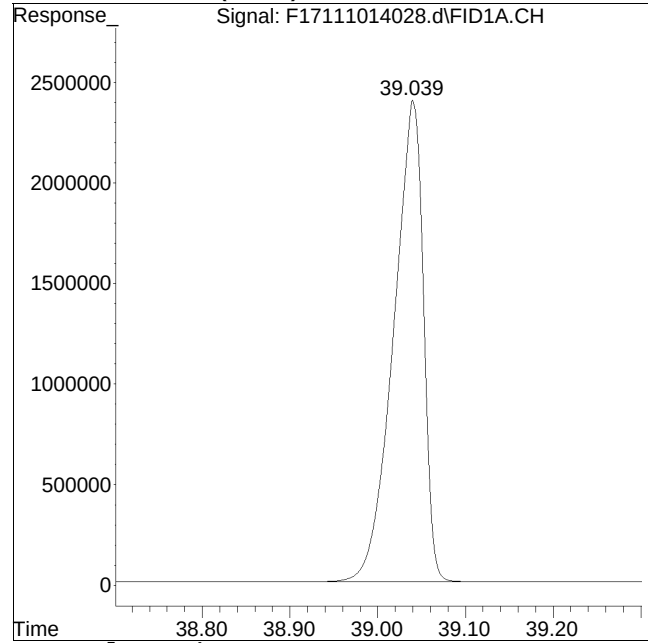
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #27: n-Hexacosane (C26)



Original Peak Response = 56554758



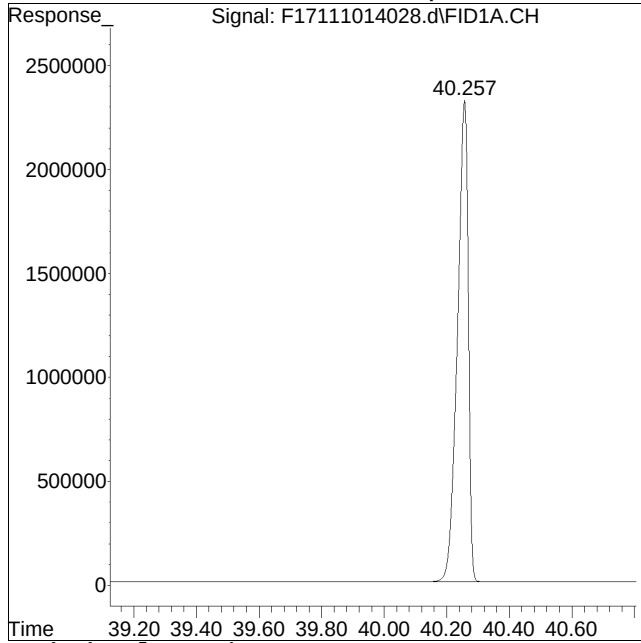
Manual Peak Response = 56520227 M4

M4 = Poor automated baseline construction.

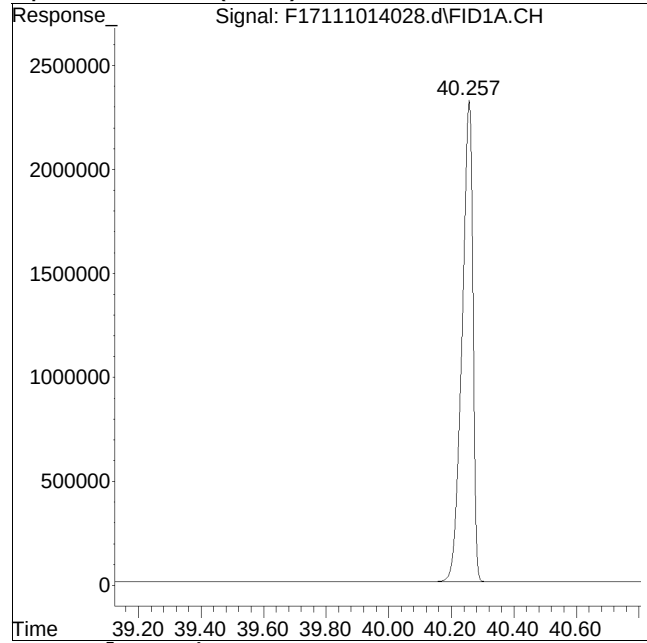
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #28: n-Heptacosane (C27)



Original Peak Response = 55844588



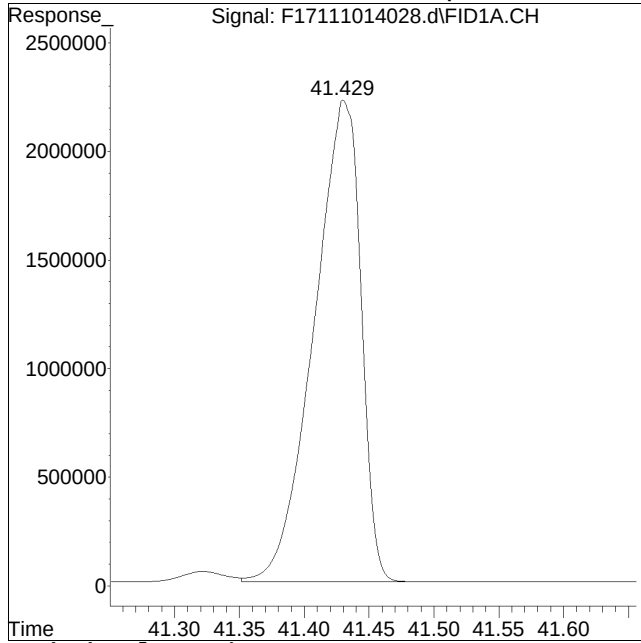
Manual Peak Response = 55822334 M4

M4 = Poor automated baseline construction.

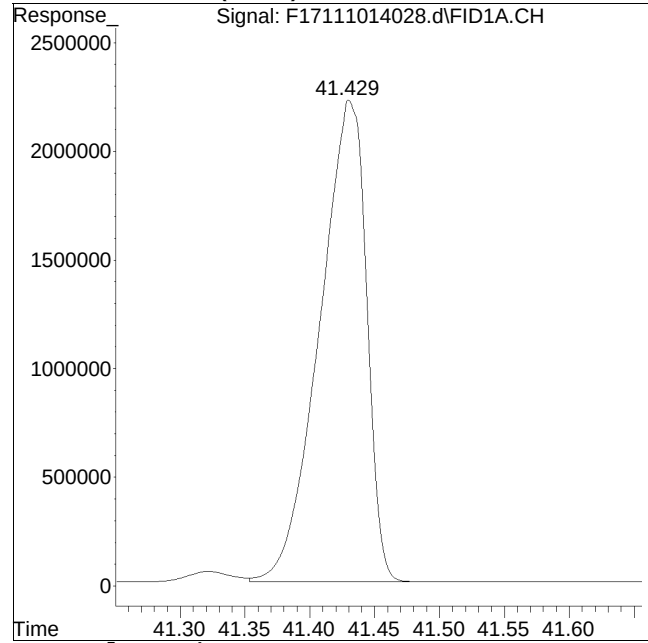
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #29: n-Octacosane (C28)



Original Peak Response = 55854682



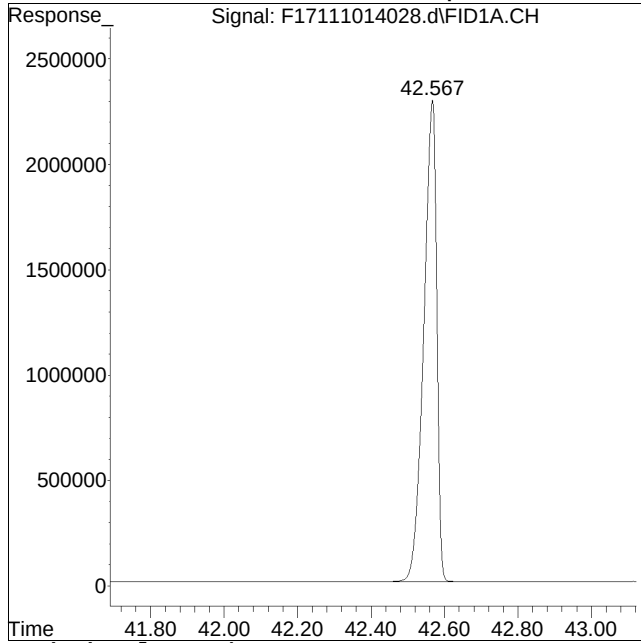
Manual Peak Response = 55792477 M4

M4 = Poor automated baseline construction.

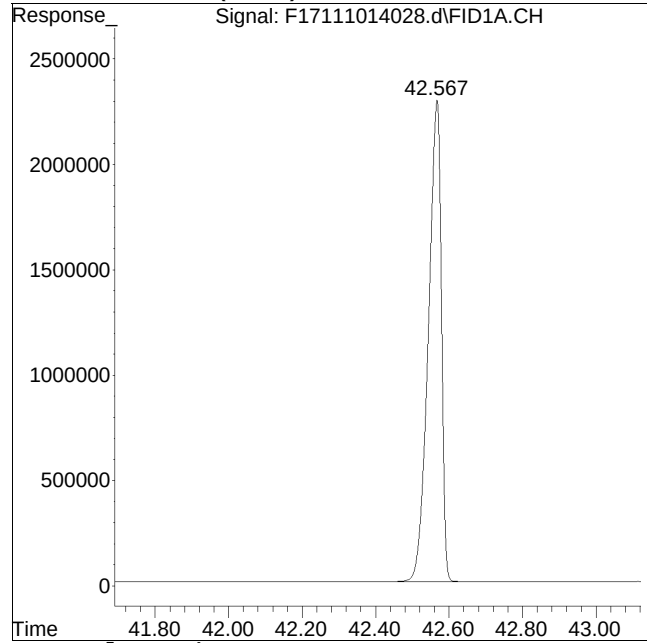
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #30: n-Nonacosane (C29)



Original Peak Response = 56030723



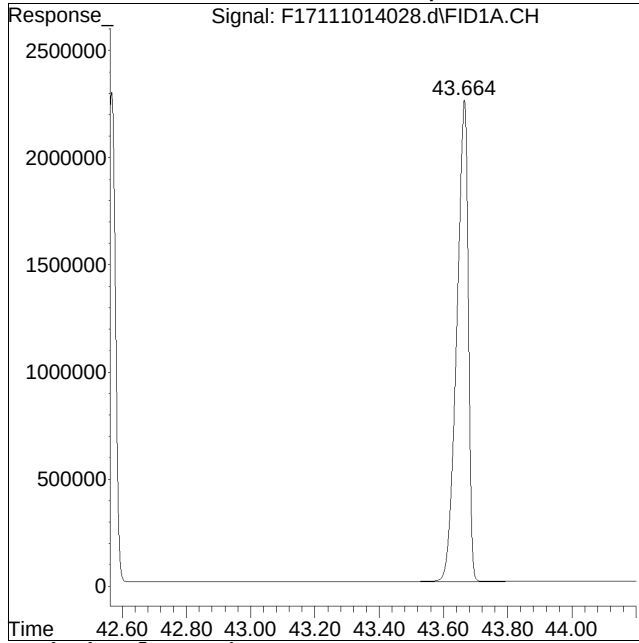
Manual Peak Response = 56007887 M4

M4 = Poor automated baseline construction.

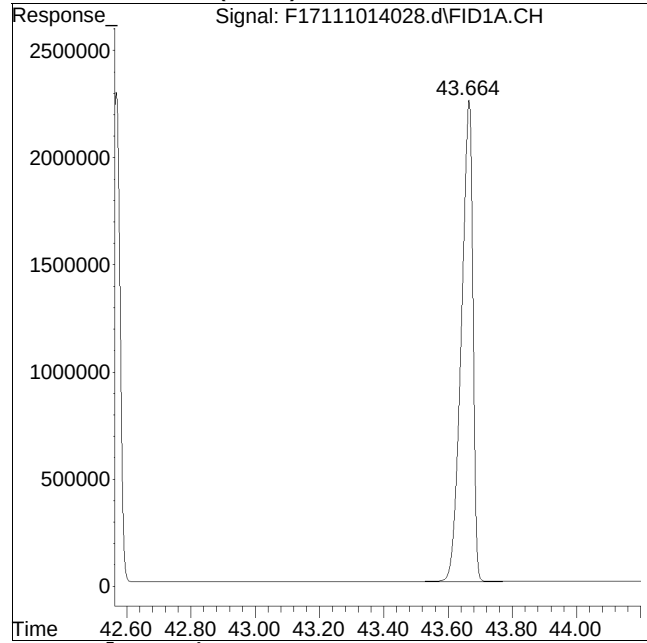
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #31: n-Triacontane (C30)



Original Peak Response = 55875908



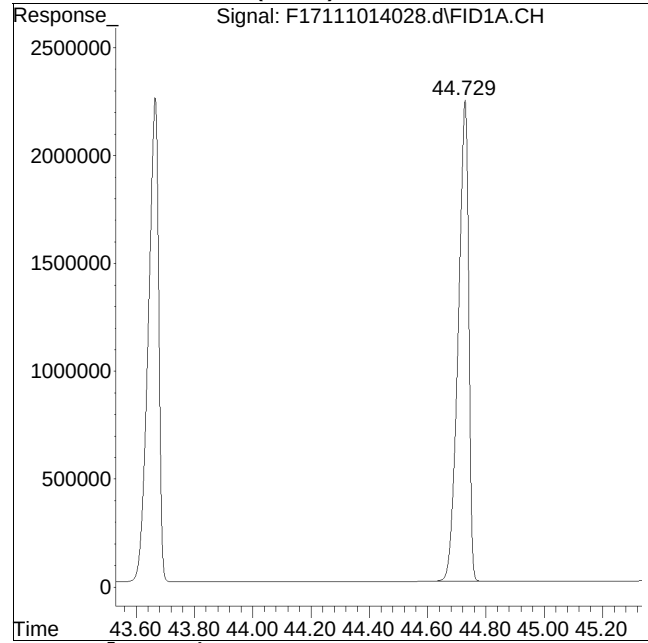
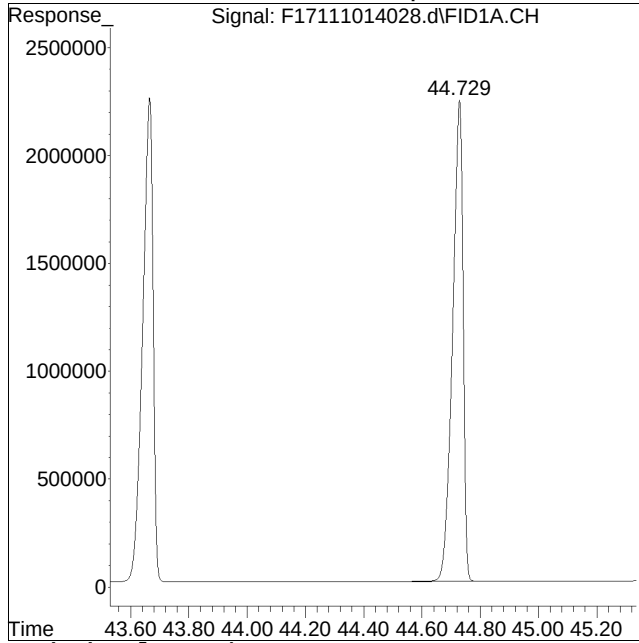
Manual Peak Response = 55890152 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #32: n-Hentriacontane (C31)



Original Peak Response = 55776747

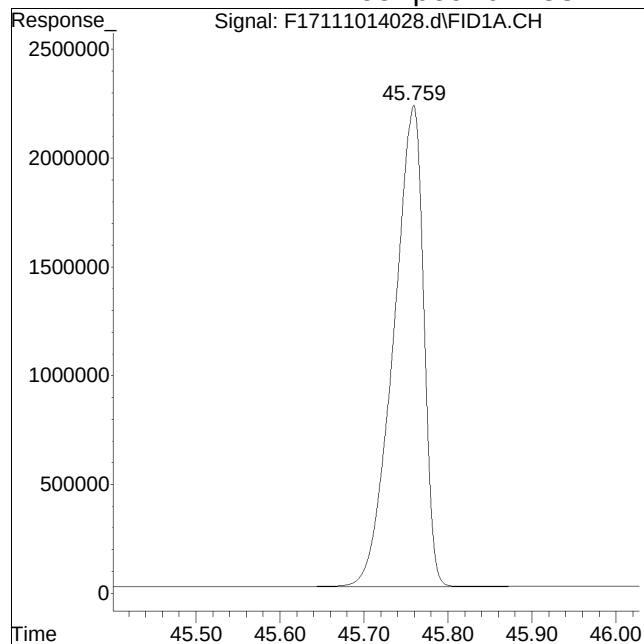
Manual Peak Response = 55831872 M4

M4 = Poor automated baseline construction.

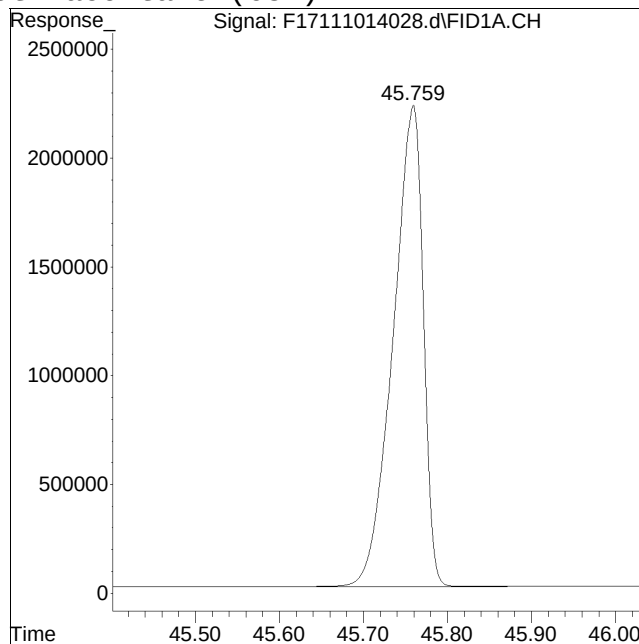
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #33: n-Dotriacontane (C32)



Original Peak Response = 55094420



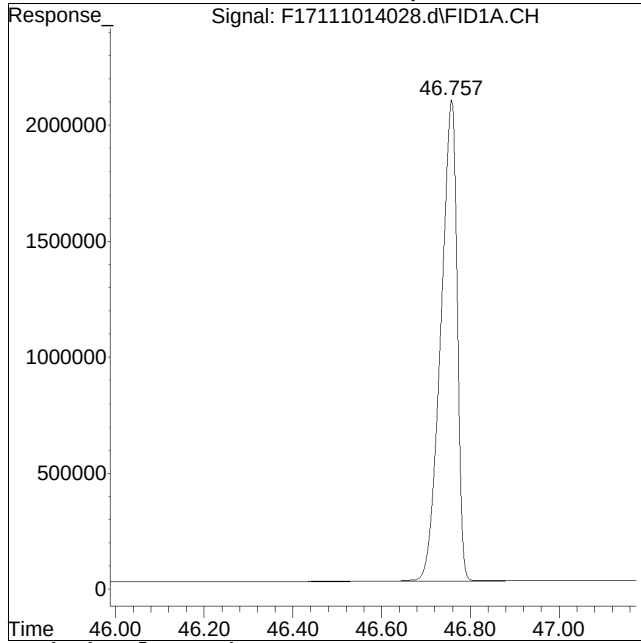
Manual Peak Response = 55077837 M4

M4 = Poor automated baseline construction.

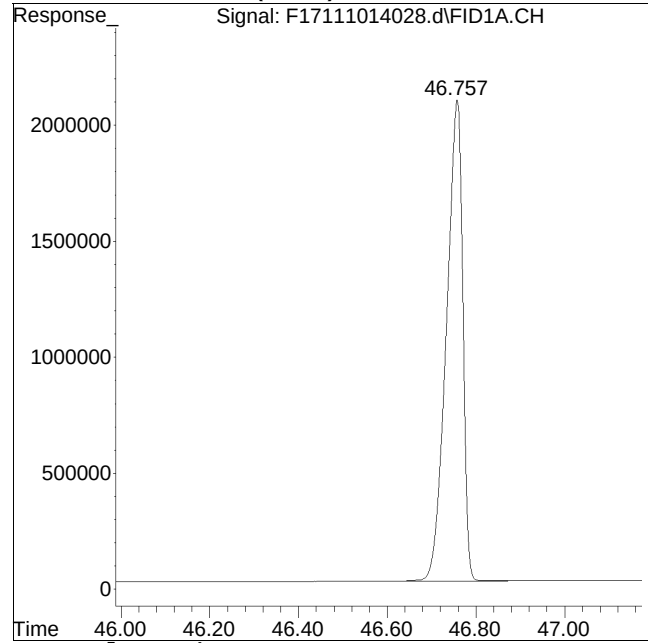
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #34: n-Tritriacontane (C33)



Original Peak Response = 53224242



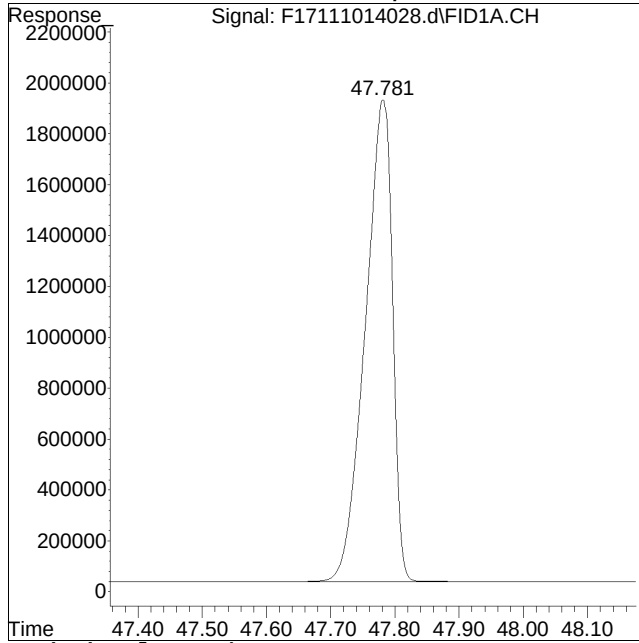
Manual Peak Response = 53104426 M4

M4 = Poor automated baseline construction.

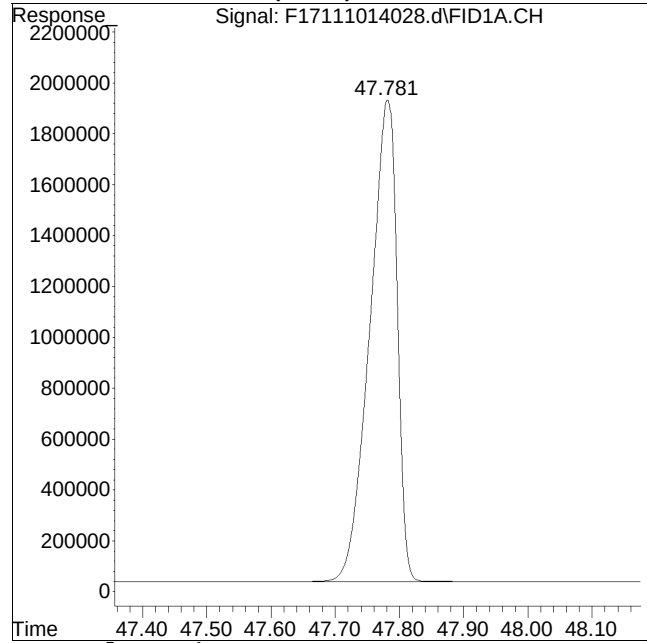
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #35: n-tetratriacontane (C34)



Original Peak Response = 55947322



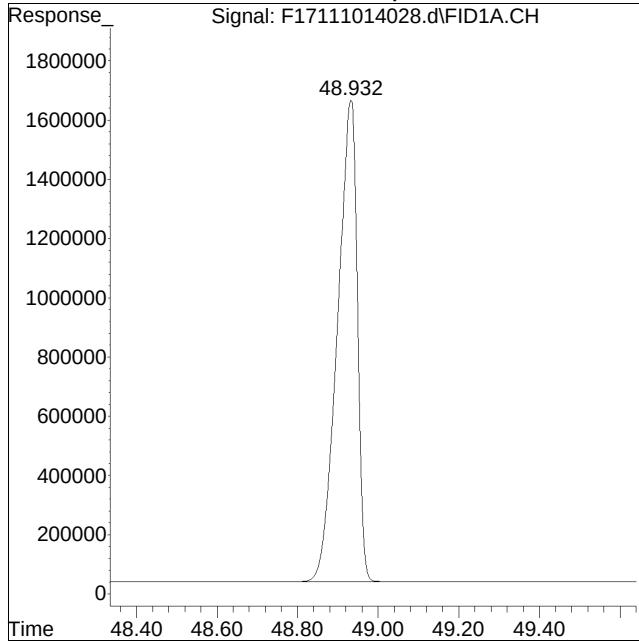
Manual Peak Response = 55861107 M4

M4 = Poor automated baseline construction.

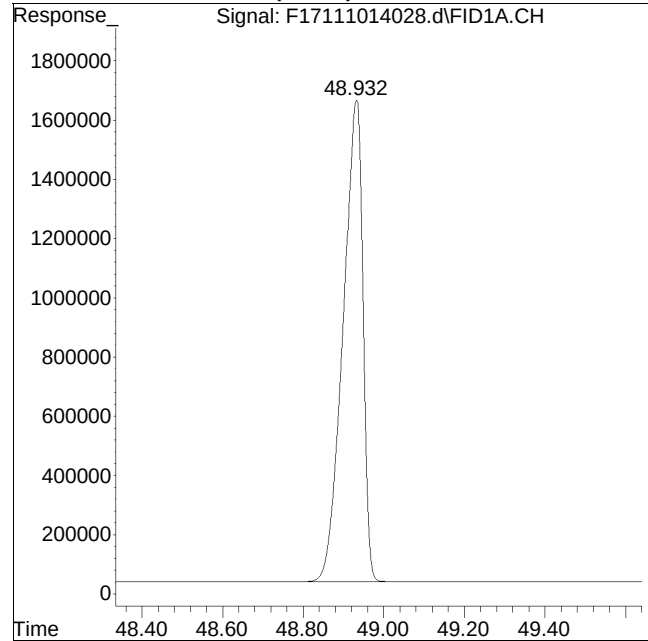
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #36: n-Pentatriacontane (C35)



Original Peak Response = 55771209



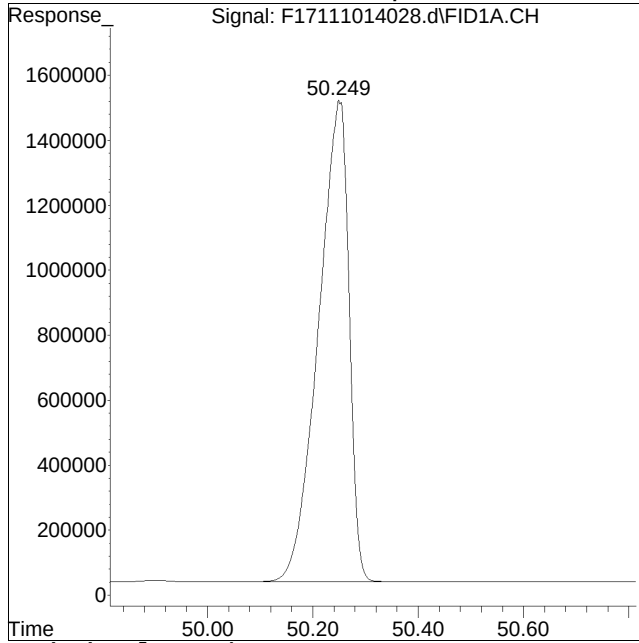
Manual Peak Response = 55722183 M4

M4 = Poor automated baseline construction.

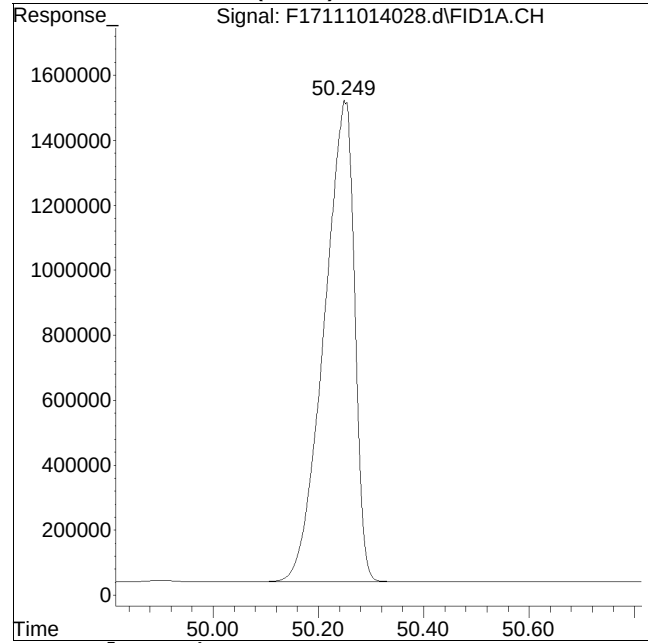
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #37: n-Hexatriacontane (C36)



Original Peak Response = 59638827



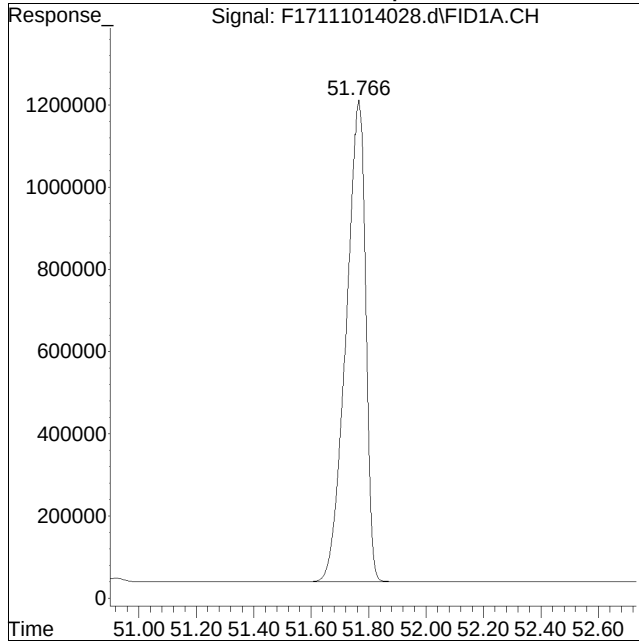
Manual Peak Response = 59610361 M4

M4 = Poor automated baseline construction.

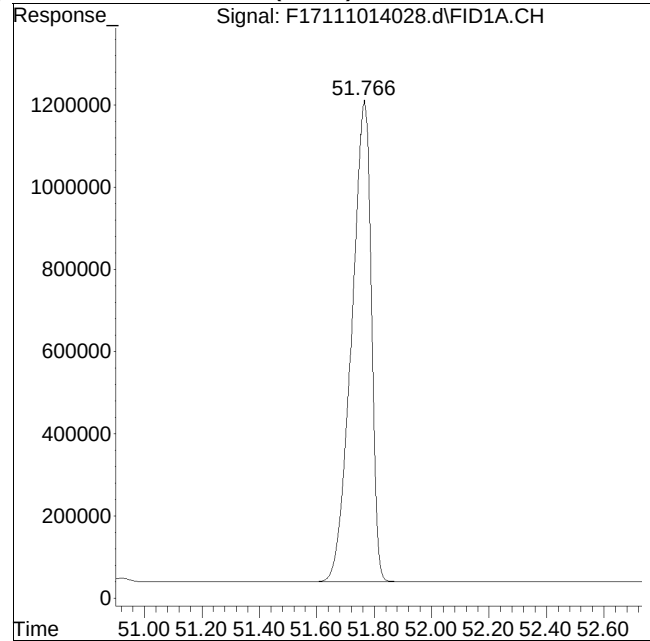
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #38: n-Heptatriacontane (C37)



Original Peak Response = 55660971



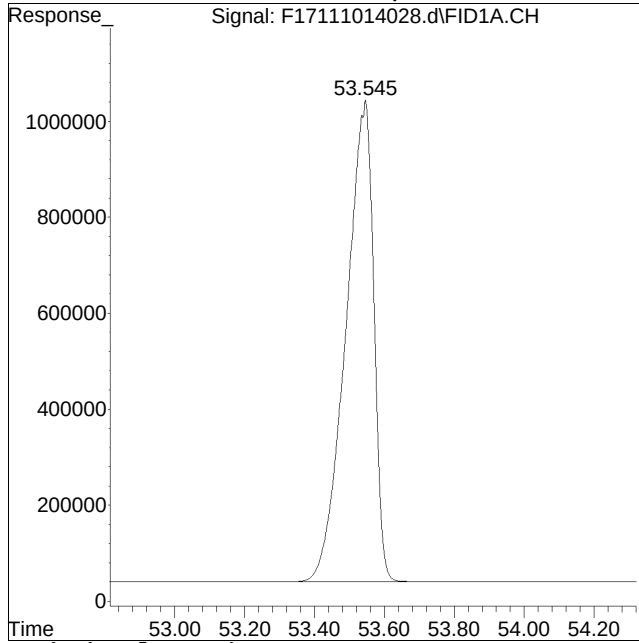
Manual Peak Response = 55634288 M4

M4 = Poor automated baseline construction.

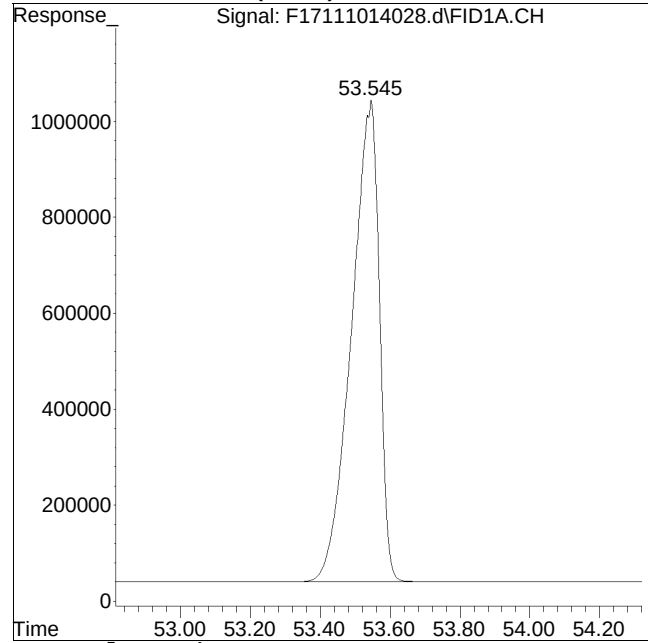
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #39: n-Octatriacontane (C38)



Original Peak Response = 55516242



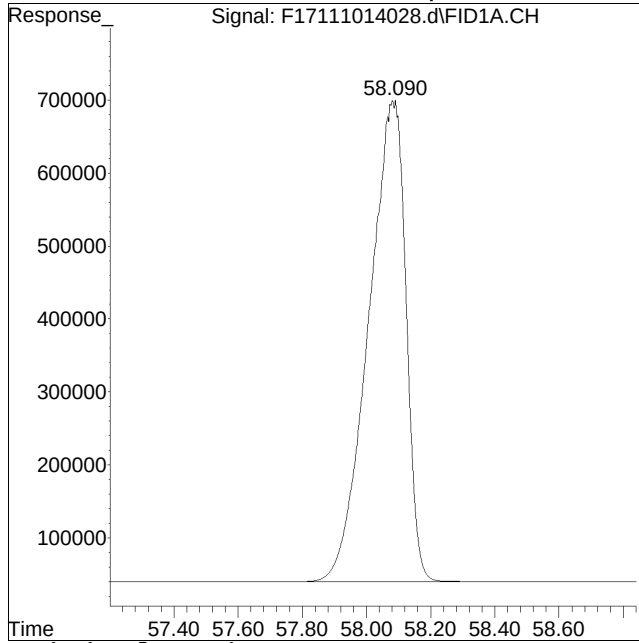
Manual Peak Response = 55500204 M4

M4 = Poor automated baseline construction.

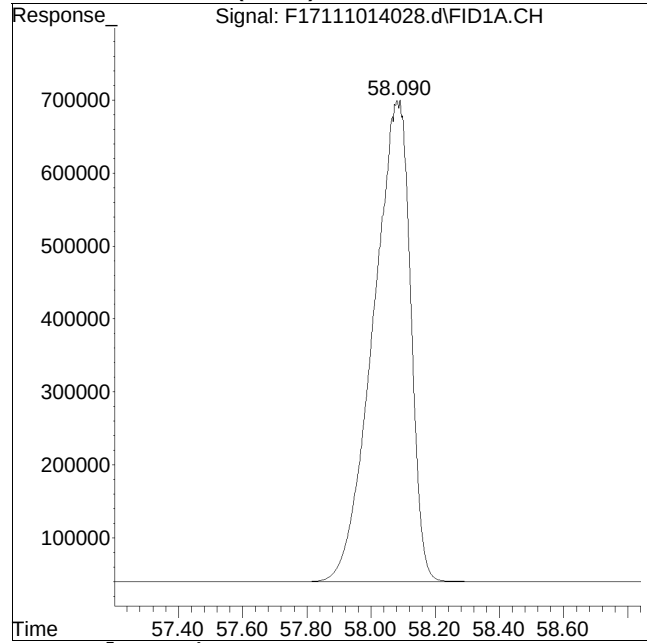
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #41: n-Tetracontane (C40)



Original Peak Response = 53279992



Manual Peak Response = 53295101 M4

M4 = Poor automated baseline construction.

Continuing Calibration

7
FID FORENSICS CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1430116

Instrument ID: FID17 Calibration Date: 12/17/2014 Time: 20:36

Lab File ID: F17121714006 Init. Calib. Date(s): 11/10/14 11/11/14

Sample No: WG750227-1 Init. Calib. Times : 19:02 02:29

Injection Time: 12/17/2014 20:36

Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 I	5-alpha-androstane	50.000	50.000	0.0	111	0.00
2 t	n-Octane (C8)	50.000	49.178	1.6	110	0.00
3 t	n-Nonane (C9)	50.000	49.821	0.4	112	0.00
4 t	n-Decane (C10)	50.000	50.269	-0.5	112	0.00
5 t	n-Undecane (C11)	50.000	49.379	1.2	108	0.00
6 t	n-Dodecane (C12)	50.000	50.493	-1.0	110	0.00
7 t	n-Tridecane (C13)	50.000	50.537	-1.1	110	0.00
9 t	n-Tetradecane (C14)	50.000	50.713	-1.4	111	0.00
11 t	n-Pentadecane (C15)	50.000	50.699	-1.4	111	0.00
12 t	n-Hexadecane (C16)	50.000	50.596	-1.2	111	0.00
14 t	n-Heptadecane (C17)	50.000	50.258	-0.5	109	0.00
15 t	Pristane	50.000	50.505	-1.0	112	0.00
16 t	n-Octadecane (C18)	50.000	50.469	-0.9	110	0.00
17 t	Phytane	50.000	50.133	-0.3	111	0.00
18 t	n-Nonadecane (C19)	50.000	50.143	-0.3	110	0.00
19 s	ortho-terphenyl	50.000	49.771	0.5	111	0.00
20 t	n-Eicosane (C20)	50.000	50.116	-0.2	110	0.00
21 t	n-Heneicosane (C21)	50.000	50.125	-0.3	111	0.00
22 t	n-Docosane (C22)	50.000	49.981	0.0	110	0.00
23 t	n-Tricosane (C23)	50.000	49.851	0.3	111	0.00
24 s	d50-Tetracosane	50.000	48.914	2.2	111	0.00
25 t	n-Tetracosane (C24)	50.000	49.982	0.0	111	0.00
26 t	n-Pentacosane (C25)	50.000	49.823	0.4	111	0.00
27 t	n-Hexacosane (C26)	50.000	49.747	0.5	111	0.00
28 t	n-Heptacosane (C27)	50.000	49.459	1.1	111	0.00
29 t	n-Octacosane (C28)	50.000	49.409	1.2	111	0.00
30 t	n-Nonacosane (C29)	50.000	49.460	1.1	111	0.00
31 t	n-Triacontane (C30)	50.000	49.210	1.6	111	0.00
32 t	n-Hentriacontane (C31)	50.000	49.249	1.5	112	0.00
33 t	n-Dotriacontane (C32)	50.000	49.461	1.1	112	0.00
34 t	n-Tritriacontane (C33)	50.000	49.483	1.0	113	0.00
35 t	n-tetratriacontane (C34)	50.000	49.563	0.9	113	0.00

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\FID17\2014\DEC2014\DEC17\
 Data File : F17121714006.d
 Signal(s) : FID1A.CH
 Acq On : 17 Dec 2014 8:36 pm
 Operator : FID17:NL
 Sample : WG750227-1
 Misc : WG750227,FRAV14 50ug/mL
 ALS Vial : 3 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Dec 29 17:26:38 2014
 Quant Method : C:\msdchem\1\DATA\FID17\December\DEC17\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Thu Dec 18 09:41:38 2014
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
36 t	n-Pentatriacontane (C35)	50.000	49.722	0.6	114	0.00
37 t	n-Hexatriacontane (C36)	50.000	49.732	0.5	114	0.00
38 t	n-Heptatriacontane (C37)	50.000	49.485	1.0	113	0.00
39 t	n-Octatriacontane (C38)	50.000	49.355	1.3	113	0.00
41 t	n-Tetracontane (C40)	50.000	48.803	2.4	111	0.00

Evaluate Continuing Calibration Report - Not Founds

FORM VII A2-TPH

7
FID FORENSICS CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1430116

Instrument ID: FID17 Calibration Date: 12/18/2014 Time: 13:04

Lab File ID: F17121714028 Init. Calib. Date(s): 11/10/14 11/11/14

Sample No: WG750227-2 Init. Calib. Times : 19:02 02:29

Injection Time: 12/18/2014 13:04

Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 I	5-alpha-androstane	50.000	50.000	0.0	113	0.00
2 t	n-Octane (C8)	50.000	46.924	6.2	107	0.00
3 t	n-Nonane (C9)	50.000	48.579	2.8	111	0.00
4 t	n-Decane (C10)	50.000	49.848	0.3	113	0.00
5 t	n-Undecane (C11)	50.000	50.129	-0.3	111	0.00
6 t	n-Dodecane (C12)	50.000	50.896	-1.8	113	0.00
7 t	n-Tridecane (C13)	50.000	50.932	-1.9	113	0.00
9 t	n-Tetradecane (C14)	50.000	50.990	-2.0	113	0.00
11 t	n-Pentadecane (C15)	50.000	51.087	-2.2	113	0.00
12 t	n-Hexadecane (C16)	50.000	50.745	-1.5	113	0.00
14 t	n-Heptadecane (C17)	50.000	50.527	-1.1	111	0.00
15 t	Pristane	50.000	50.629	-1.3	113	0.00
16 t	n-Octadecane (C18)	50.000	50.619	-1.2	112	0.00
17 t	Phytane	50.000	50.343	-0.7	113	0.00
18 t	n-Nonadecane (C19)	50.000	50.307	-0.6	112	0.00
19 s	ortho-terphenyl	50.000	49.806	0.4	113	0.00
20 t	n-Eicosane (C20)	50.000	50.161	-0.3	112	0.00
21 t	n-Heneicosane (C21)	50.000	50.186	-0.4	112	0.00
22 t	n-Docosane (C22)	50.000	49.958	0.1	112	0.00
23 t	n-Tricosane (C23)	50.000	49.829	0.3	112	0.00
24 s	d50-Tetracosane	50.000	48.858	2.3	112	0.00
25 t	n-Tetracosane (C24)	50.000	49.910	0.2	112	0.00
26 t	n-Pentacosane (C25)	50.000	49.759	0.5	112	0.00
27 t	n-Hexacosane (C26)	50.000	49.694	0.6	112	0.00
28 t	n-Heptacosane (C27)	50.000	49.339	1.3	112	0.00
29 t	n-Octacosane (C28)	50.000	49.632	0.7	114	0.00
30 t	n-Nonacosane (C29)	50.000	49.388	1.2	113	0.00
31 t	n-Triacontane (C30)	50.000	49.130	1.7	113	0.00
32 t	n-Hentriacontane (C31)	50.000	49.108	1.8	113	0.00
33 t	n-Dotriacontane (C32)	50.000	49.168	1.7	113	0.00
34 t	n-Tritriacontane (C33)	50.000	49.229	1.5	114	0.00
35 t	n-tetratriacontane (C34)	50.000	49.253	1.5	114	0.00

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\FID17\2014\DEC2014\DEC17\
 Data File : F17121714028.d
 Signal(s) : FID1A.CH
 Acq On : 18 Dec 2014 1:04 pm
 Operator : FID17:NL
 Sample : WG750227-2
 Misc : WG750227,FRAV14 50ug/mL
 ALS Vial : 14 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Dec 29 17:27:14 2014
 Quant Method : C:\MSDCHEM\1\DATA\FID17\DECEMBER\DEC17\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Thu Dec 18 09:41:38 2014
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
36 t	n-Pentatriacontane (C35)	50.000	49.419	1.2	115	0.00
37 t	n-Hexatriacontane (C36)	50.000	49.404	1.2	115	0.00
38 t	n-Heptatriacontane (C37)	50.000	49.199	1.6	114	-0.01
39 t	n-Octatriacontane (C38)	50.000	49.154	1.7	114	0.00
41 t	n-Tetracontane (C40)	50.000	48.585	2.8	112	0.00

Evaluate Continuing Calibration Report - Not Founds

FORM VII A2-TPH

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC17\
 Data File : F17121714006.d
 Signal(s) : FID1A.CH
 Acq On : 17 Dec 2014 8:36 pm
 Operator : FID17:NL
 Sample : WG750227-1
 Misc : WG750227,FRAV14 50ug/mL
 ALS Vial : 3 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Dec 29 17:26:38 2014
 Quant Method : C:\msdchem\1\DATA\FID17\December\DEC17\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Thu Dec 18 09:41:38 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 I	5-alpha-androstane	50.000	50.000	0.0	111	0.00
2 t	n-Octane (C8)	50.000	49.178	1.6	110	0.00
3 t	n-Nonane (C9)	50.000	49.821	0.4	112	0.00
4 t	n-Decane (C10)	50.000	50.269	-0.5	112	0.00
5 t	n-Undecane (C11)	50.000	49.379	1.2	108	0.00
6 t	n-Dodecane (C12)	50.000	50.493	-1.0	110	0.00
7 t	n-Tridecane (C13)	50.000	50.537	-1.1	110	0.00
9 t	n-Tetradecane (C14)	50.000	50.713	-1.4	111	0.00
11 t	n-Pentadecane (C15)	50.000	50.699	-1.4	111	0.00
12 t	n-Hexadecane (C16)	50.000	50.596	-1.2	111	0.00
14 t	n-Heptadecane (C17)	50.000	50.258	-0.5	109	0.00
15 t	Pristane	50.000	50.505	-1.0	112	0.00
16 t	n-Octadecane (C18)	50.000	50.469	-0.9	110	0.00
17 t	Phytane	50.000	50.133	-0.3	111	0.00
18 t	n-Nonadecane (C19)	50.000	50.143	-0.3	110	0.00
19 s	ortho-terphenyl	50.000	49.771	0.5	111	0.00
20 t	n-Eicosane (C20)	50.000	50.116	-0.2	110	0.00
21 t	n-Heneicosane (C21)	50.000	50.125	-0.3	111	0.00
22 t	n-Docosane (C22)	50.000	49.981	0.0	110	0.00
23 t	n-Tricosane (C23)	50.000	49.851	0.3	111	0.00
24 s	d50-Tetracosane	50.000	48.914	2.2	111	0.00
25 t	n-Tetracosane (C24)	50.000	49.982	0.0	111	0.00
26 t	n-Pentacosane (C25)	50.000	49.823	0.4	111	0.00
27 t	n-Hexacosane (C26)	50.000	49.747	0.5	111	0.00
28 t	n-Heptacosane (C27)	50.000	49.459	1.1	111	0.00
29 t	n-Octacosane (C28)	50.000	49.409	1.2	111	0.00
30 t	n-Nonacosane (C29)	50.000	49.460	1.1	111	0.00
31 t	n-Triacontane (C30)	50.000	49.210	1.6	111	0.00
32 t	n-Hentriacontane (C31)	50.000	49.249	1.5	112	0.00
33 t	n-Dotriacontane (C32)	50.000	49.461	1.1	112	0.00
34 t	n-Tritriacontane (C33)	50.000	49.483	1.0	113	0.00
35 t	n-tetratriacontane (C34)	50.000	49.563	0.9	113	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC17\
 Data File : F17121714006.d
 Signal(s) : FID1A.CH
 Acq On : 17 Dec 2014 8:36 pm
 Operator : FID17:NL
 Sample : WG750227-1
 Misc : WG750227,FRAV14 50ug/mL
 ALS Vial : 3 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Dec 29 17:26:38 2014
 Quant Method : C:\msdchem\1\DATA\FID17\December\DEC17\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Thu Dec 18 09:41:38 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
36 t	n-Pentatriacontane (C35)	50.000	49.722	0.6	114	0.00
37 t	n-Hexatriacontane (C36)	50.000	49.732	0.5	114	0.00
38 t	n-Heptatriacontane (C37)	50.000	49.485	1.0	113	0.00
39 t	n-Octatriacontane (C38)	50.000	49.355	1.3	113	0.00
41 t	n-Tetracontane (C40)	50.000	48.803	2.4	111	0.00

Evaluate Continuing Calibration Report - Not Found

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Mass Discrimination (Response)	Ratio	Range Limits
n-Hexatriacontane (C36) to n-Eicosane (C20)	1.07	0.85 - 1.15

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC17\
 Data File : F17121714006.d
 Signal(s) : FID1A.CH
 Acq On : 17 Dec 2014 8:36 pm
 Operator : FID17:NL
 Sample : WG750227-1
 Misc : WG750227,FRAV14 50ug/mL
 ALS Vial : 3 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Dec 29 17:26:38 2014
 Quant Method : C:\msdchem\1\DATA\FID17\December\DEC17\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Thu Dec 18 09:41:38 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.173	60249309	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.155	65994612	49.771	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 99.54%
24) s	d50-Tetracosane	35.845	52675361	48.914	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 97.83%
Target Compounds					
2) t	n-Octane (C8)	5.520	50178781	49.178	ug/mL M4
3) t	n-Nonane (C9)	7.707	52297639	49.821	ug/mL M4
4) t	n-Decane (C10)	10.185	54132029	50.269	ug/mL M4
5) t	n-Undecane (C11)	12.696	53752185	49.379	ug/mL M4
6) t	n-Dodecane (C12)	15.125	55849467	50.493	ug/mL M4
7) t	n-Tridecane (C13)	17.436	56316323	50.537	ug/mL M4
9) t	n-Tetradecane (C14)	19.623	57212565	50.713	ug/mL M4
11) t	n-Pentadecane (C15)	21.691	58294424	50.699	ug/mL M4
12) t	n-Hexadecane (C16)	23.653	58544759	50.596	ug/mL M4
14) t	n-Heptadecane (C17)	25.518	57744489	50.258	ug/mL M4
15) t	Pristane	25.629	59941862	50.505	ug/mL M4
16) t	n-Octadecane (C18)	27.292	59600790	50.469	ug/mL M4
17) t	Phytane	27.450	52237817	50.133	ug/mL M4
18) t	n-Nonadecane (C19)	28.981	59036293	50.143	ug/mL M4
20) t	n-Eicosane (C20)	30.592	58897043	50.116	ug/mL M4
21) t	n-Heneicosane (C21)	32.134	59349617	50.125	ug/mL M4
22) t	n-Docosane (C22)	33.613	59778110	49.981	ug/mL M4
23) t	n-Tricosane (C23)	35.033	60215875	49.851	ug/mL M4
25) t	n-Tetracosane (C24)	36.397	60478321	49.982	ug/mL M4
26) t	n-Pentacosane (C25)	37.707	59976932	49.823	ug/mL M4
27) t	n-Hexacosane (C26)	38.968	61223320	49.747	ug/mL M4
28) t	n-Heptacosane (C27)	40.187	60562245	49.459	ug/mL M4
29) t	n-Octacosane (C28)	41.364	60416417	49.409	ug/mL M4
30) t	n-Nonacosane (C29)	42.500	60615004	49.460	ug/mL M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC17\
 Data File : F17121714006.d
 Signal(s) : FID1A.CH
 Acq On : 17 Dec 2014 8:36 pm
 Operator : FID17:NL
 Sample : WG750227-1
 Misc : WG750227,FRAV14 50ug/mL
 ALS Vial : 3 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Dec 29 17:26:38 2014
 Quant Method : C:\msdchem\1\DATA\FID17\December\DEC17\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Thu Dec 18 09:41:38 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc Units
31) t	n-Triacontane (C30)	43.599	60593385	49.210 ug/mL M4
32) t	n-Hentriacontane (C31)	44.663	60685296	49.249 ug/mL M4
33) t	n-Dotriacontane (C32)	45.695	61398313	49.461 ug/mL M4
34) t	n-Tritriacontane (C33)	46.695	58137718	49.483 ug/mL M4
35) t	n-tetratriacontane (C34)	47.714	60738793	49.563 ug/mL M4
36) t	n-Pentatriacontane (C35)	48.852	61294536	49.722 ug/mL M4
37) t	n-Hexatriacontane (C36)	50.157	63013975	49.732 ug/mL M4
38) t	n-Heptatriacontane (C37)	51.664	61452389	49.485 ug/mL M4
39) t	n-Octatriacontane (C38)	53.415	60131273	49.355 ug/mL M4
41) t	n-Tetracontane (C40)	57.920	62148584	48.803 ug/mL M4

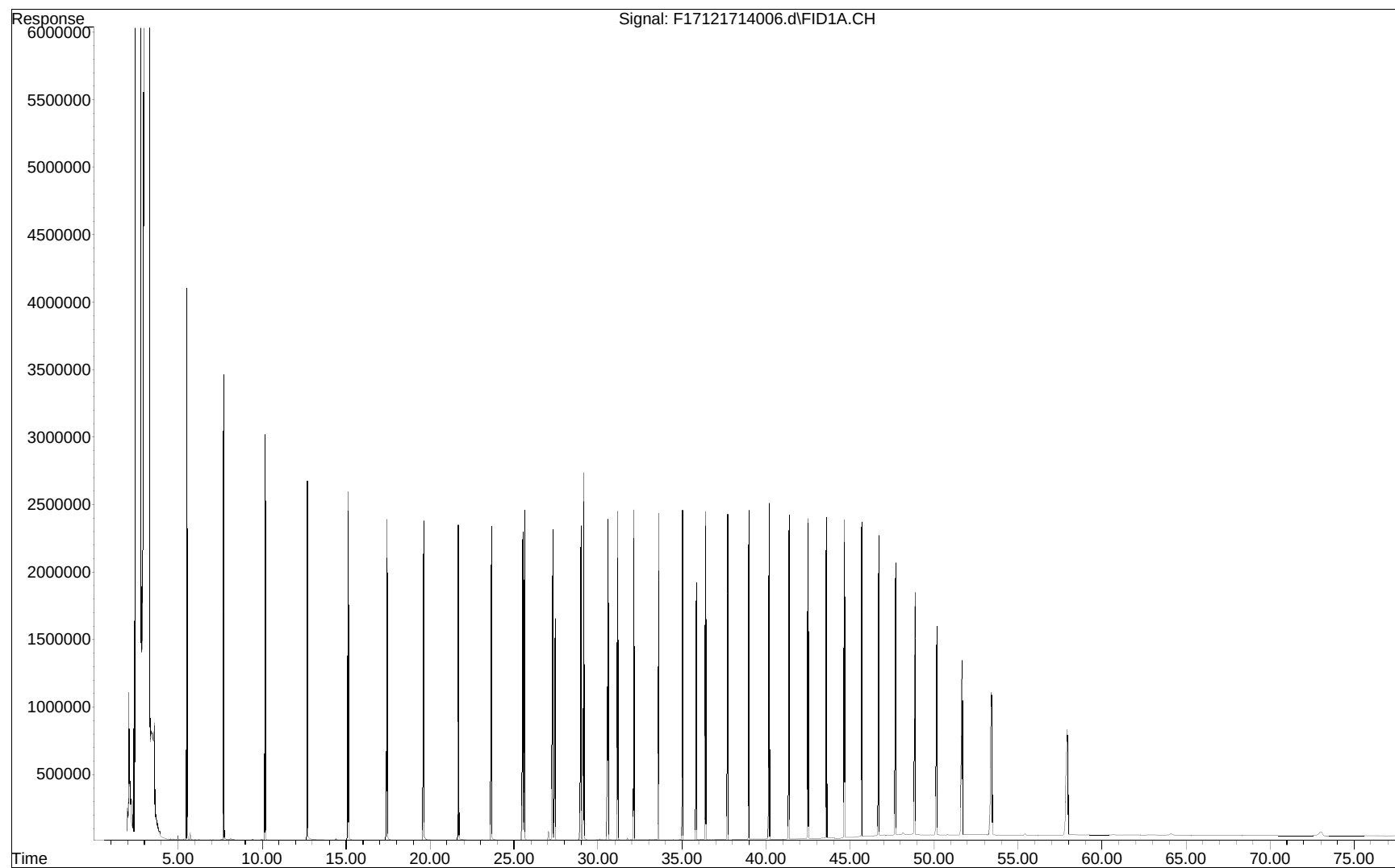
SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\FID17\2014\DEC2014\DEC17\
Data File : F17121714006.d
Operator : FID17:NL
Acquired : 17 Dec 2014 8:36 pm using AcqMethod FID17.M
Instrument: FID17
Sample : WG750227-1
Misc Info : WG750227,FRAV14 50ug/mL
ALS Vial : 3



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC17\
 Data File : F17121714028.d
 Signal(s) : FID1A.CH
 Acq On : 18 Dec 2014 1:04 pm
 Operator : FID17:NL
 Sample : WG750227-2
 Misc : WG750227,FRAV14 50ug/mL
 ALS Vial : 14 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Dec 29 17:27:14 2014
 Quant Method : C:\MSDCHEM\1\DATA\FID17\DECEMBER\DEC17\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Thu Dec 18 09:41:38 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 I	5-alpha-androstane	50.000	50.000	0.0	113	0.00
2 t	n-Octane (C8)	50.000	46.924	6.2	107	0.00
3 t	n-Nonane (C9)	50.000	48.579	2.8	111	0.00
4 t	n-Decane (C10)	50.000	49.848	0.3	113	0.00
5 t	n-Undecane (C11)	50.000	50.129	-0.3	111	0.00
6 t	n-Dodecane (C12)	50.000	50.896	-1.8	113	0.00
7 t	n-Tridecane (C13)	50.000	50.932	-1.9	113	0.00
9 t	n-Tetradecane (C14)	50.000	50.990	-2.0	113	0.00
11 t	n-Pentadecane (C15)	50.000	51.087	-2.2	113	0.00
12 t	n-Hexadecane (C16)	50.000	50.745	-1.5	113	0.00
14 t	n-Heptadecane (C17)	50.000	50.527	-1.1	111	0.00
15 t	Pristane	50.000	50.629	-1.3	113	0.00
16 t	n-Octadecane (C18)	50.000	50.619	-1.2	112	0.00
17 t	Phytane	50.000	50.343	-0.7	113	0.00
18 t	n-Nonadecane (C19)	50.000	50.307	-0.6	112	0.00
19 s	ortho-terphenyl	50.000	49.806	0.4	113	0.00
20 t	n-Eicosane (C20)	50.000	50.161	-0.3	112	0.00
21 t	n-Heneicosane (C21)	50.000	50.186	-0.4	112	0.00
22 t	n-Docosane (C22)	50.000	49.958	0.1	112	0.00
23 t	n-Tricosane (C23)	50.000	49.829	0.3	112	0.00
24 s	d50-Tetracosane	50.000	48.858	2.3	112	0.00
25 t	n-Tetracosane (C24)	50.000	49.910	0.2	112	0.00
26 t	n-Pentacosane (C25)	50.000	49.759	0.5	112	0.00
27 t	n-Hexacosane (C26)	50.000	49.694	0.6	112	0.00
28 t	n-Heptacosane (C27)	50.000	49.339	1.3	112	0.00
29 t	n-Octacosane (C28)	50.000	49.632	0.7	114	0.00
30 t	n-Nonacosane (C29)	50.000	49.388	1.2	113	0.00
31 t	n-Triacontane (C30)	50.000	49.130	1.7	113	0.00
32 t	n-Hentriacontane (C31)	50.000	49.108	1.8	113	0.00
33 t	n-Dotriacontane (C32)	50.000	49.168	1.7	113	0.00
34 t	n-Tritriacontane (C33)	50.000	49.229	1.5	114	0.00
35 t	n-tetratriacontane (C34)	50.000	49.253	1.5	114	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC17\
 Data File : F17121714028.d
 Signal(s) : FID1A.CH
 Acq On : 18 Dec 2014 1:04 pm
 Operator : FID17:NL
 Sample : WG750227-2
 Misc : WG750227,FRAV14 50ug/mL
 ALS Vial : 14 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Dec 29 17:27:14 2014
 Quant Method : C:\MSDCHEM\1\DATA\FID17\DECEMBER\DEC17\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Thu Dec 18 09:41:38 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
36 t	n-Pentatriacontane (C35)	50.000	49.419	1.2	115	0.00
37 t	n-Hexatriacontane (C36)	50.000	49.404	1.2	115	0.00
38 t	n-Heptatriacontane (C37)	50.000	49.199	1.6	114	-0.01
39 t	n-Octatriacontane (C38)	50.000	49.154	1.7	114	0.00
41 t	n-Tetracontane (C40)	50.000	48.585	2.8	112	0.00

Evaluate Continuing Calibration Report - Not Found

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Mass Discrimination (Response)	Ratio	Range Limits
n-Hexatriacontane (C36) to n-Eicosane (C20)	1.06	0.85 - 1.15

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC17\
 Data File : F17121714028.d
 Signal(s) : FID1A.CH
 Acq On : 18 Dec 2014 1:04 pm
 Operator : FID17:NL
 Sample : WG750227-2
 Misc : WG750227,FRAV14 50ug/mL
 ALS Vial : 14 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Dec 29 17:27:14 2014
 Quant Method : C:\MSDCHEM\1\DATA\FID17\DECEMBER\DEC17\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Thu Dec 18 09:41:38 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.167	61133285	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.149	67010161	49.806	ug/mL M4
Spiked Amount 50.000		Range 50 - 130	Recovery =	99.61%	
24) s	d50-Tetracosane	35.840	53387363	48.858	ug/mL M4
Spiked Amount 50.000		Range 50 - 130	Recovery =	97.72%	
Target Compounds					
2) t	n-Octane (C8)	5.514	48582193	46.924	ug/mL M4
3) t	n-Nonane (C9)	7.704	51741692	48.579	ug/mL M4
4) t	n-Decane (C10)	10.181	54466873	49.848	ug/mL M4
5) t	n-Undecane (C11)	12.692	55368663	50.129	ug/mL M4
6) t	n-Dodecane (C12)	15.123	57121923	50.896	ug/mL M4
7) t	n-Tridecane (C13)	17.433	57588811	50.932	ug/mL M4
9) t	n-Tetradecane (C14)	19.620	58368913	50.990	ug/mL M4
11) t	n-Pentadecane (C15)	21.688	59602425	51.087	ug/mL M4
12) t	n-Hexadecane (C16)	23.649	59578213	50.745	ug/mL M4
14) t	n-Heptadecane (C17)	25.513	58905063	50.527	ug/mL M4
15) t	Pristane	25.624	60970949	50.629	ug/mL M4
16) t	n-Octadecane (C18)	27.286	60655062	50.619	ug/mL M4
17) t	Phytane	27.446	53226828	50.343	ug/mL M4
18) t	n-Nonadecane (C19)	28.975	60098856	50.307	ug/mL M4
20) t	n-Eicosane (C20)	30.588	59813757	50.161	ug/mL M4
21) t	n-Heneicosane (C21)	32.130	60293832	50.186	ug/mL M4
22) t	n-Docosane (C22)	33.609	60627855	49.958	ug/mL M4
23) t	n-Tricosane (C23)	35.028	61072442	49.829	ug/mL M4
25) t	n-Tetracosane (C24)	36.391	61277122	49.910	ug/mL M4
26) t	n-Pentacosane (C25)	37.703	60779011	49.759	ug/mL M4
27) t	n-Hexacosane (C26)	38.966	62056074	49.694	ug/mL M4
28) t	n-Heptacosane (C27)	40.183	61301176	49.339	ug/mL M4
29) t	n-Octacosane (C28)	41.359	61579892	49.632	ug/mL M4
30) t	n-Nonacosane (C29)	42.494	61415517	49.388	ug/mL M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC17\
 Data File : F17121714028.d
 Signal(s) : FID1A.CH
 Acq On : 18 Dec 2014 1:04 pm
 Operator : FID17:NL
 Sample : WG750227-2
 Misc : WG750227,FRAV14 50ug/mL
 ALS Vial : 14 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Dec 29 17:27:14 2014
 Quant Method : C:\MSDCHEM\1\DATA\FID17\DECEMBER\DEC17\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Thu Dec 18 09:41:38 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc Units
31) t	n-Triacontane (C30)	43.595	61382995	49.130 ug/mL M4
32) t	n-Hentriacontane (C31)	44.661	61399165	49.108 ug/mL M4
33) t	n-Dotriacontane (C32)	45.692	61930395	49.168 ug/mL M4
34) t	n-Tritriacontane (C33)	46.691	58688849	49.229 ug/mL M4
35) t	n-tetratriacontane (C34)	47.712	61243817	49.253 ug/mL M4
36) t	n-Pentatriacontane (C35)	48.849	61815515	49.419 ug/mL M4
37) t	n-Hexatriacontane (C36)	50.156	63517747	49.404 ug/mL M4
38) t	n-Heptatriacontane (C37)	51.652	61993761	49.199 ug/mL M4
39) t	n-Octatriacontane (C38)	53.409	60765271	49.154 ug/mL M4
41) t	n-Tetracontane (C40)	57.911	62778938	48.585 ug/mL M4

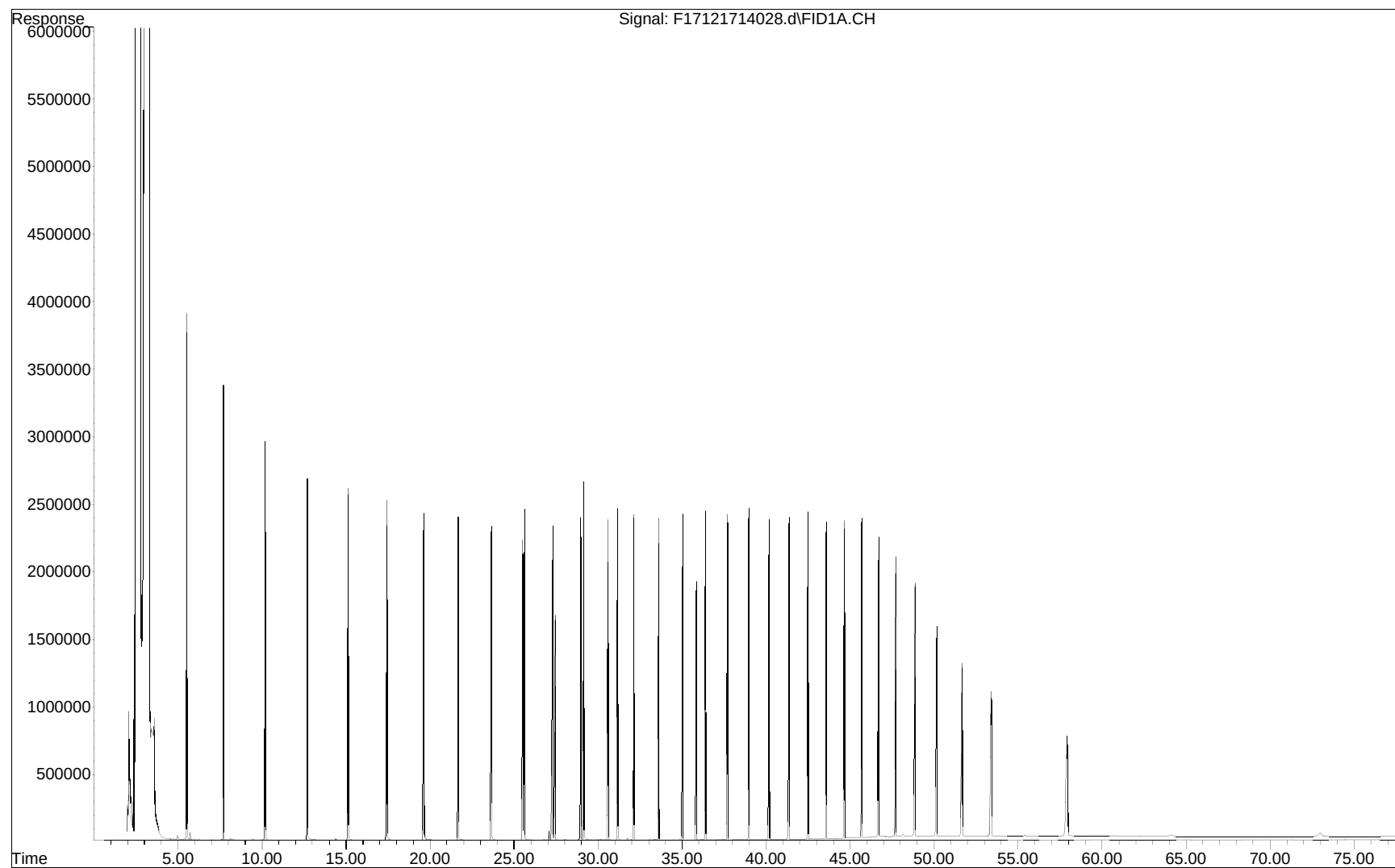
SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\FID17\2014\DEC2014\DEC17\
Data File : F17121714028.d
Operator : FID17:NL
Acquired : 18 Dec 2014 1:04 pm using AcqMethod FID17.M
Instrument: FID17
Sample : WG750227-2
Misc Info : WG750227,FRAV14 50ug/mL
ALS Vial : 14



Petroleum Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\FID17\2014\DEC2014\DEC17\
 Data File : F17121714012.d
 Signal(s) : FID1A.CH
 Acq On : 18 Dec 2014 1:06 am
 Operator : FID17:NL
 Sample : WG748955-1,42
 Misc : WG750227,WG748955
 ALS Vial : 6 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Dec 29 17:26:50 2014
 Quant Method : C:\msdchem\1\DATA\FID17\December\DEC17\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Thu Dec 18 09:41:38 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Blank Name : IB1712171401F
 Blank File : F17121714010.D

Sub List : TPH - TPH

Compound	R.T.	Response	Conc Units

Internal Standards			
1) I 5-alpha-androstane	31.169	56877441	50.000 ug/mL M4
System Monitoring Compounds			
19) s ortho-terphenyl	29.132	14809085	11.831 ug/mL M4
Spiked Amount 50.000	Range 50 - 130	Recovery =	23.66%#
24) s d50-Tetracosane	35.828	12253289	12.053 ug/mL M4
Spiked Amount 50.000	Range 50 - 130	Recovery =	24.11%#
Target Compounds			
42) h C9-C44 Total Petroleu...	40.363	608157443	544.738 ug/mL m
42) h C9-C44 Total Petroleu BS	40.363	-19520339	N.D. ug/mLm
45) h Total Resolved Hydroc...	40.749	5933604	5.315 ug/mL m

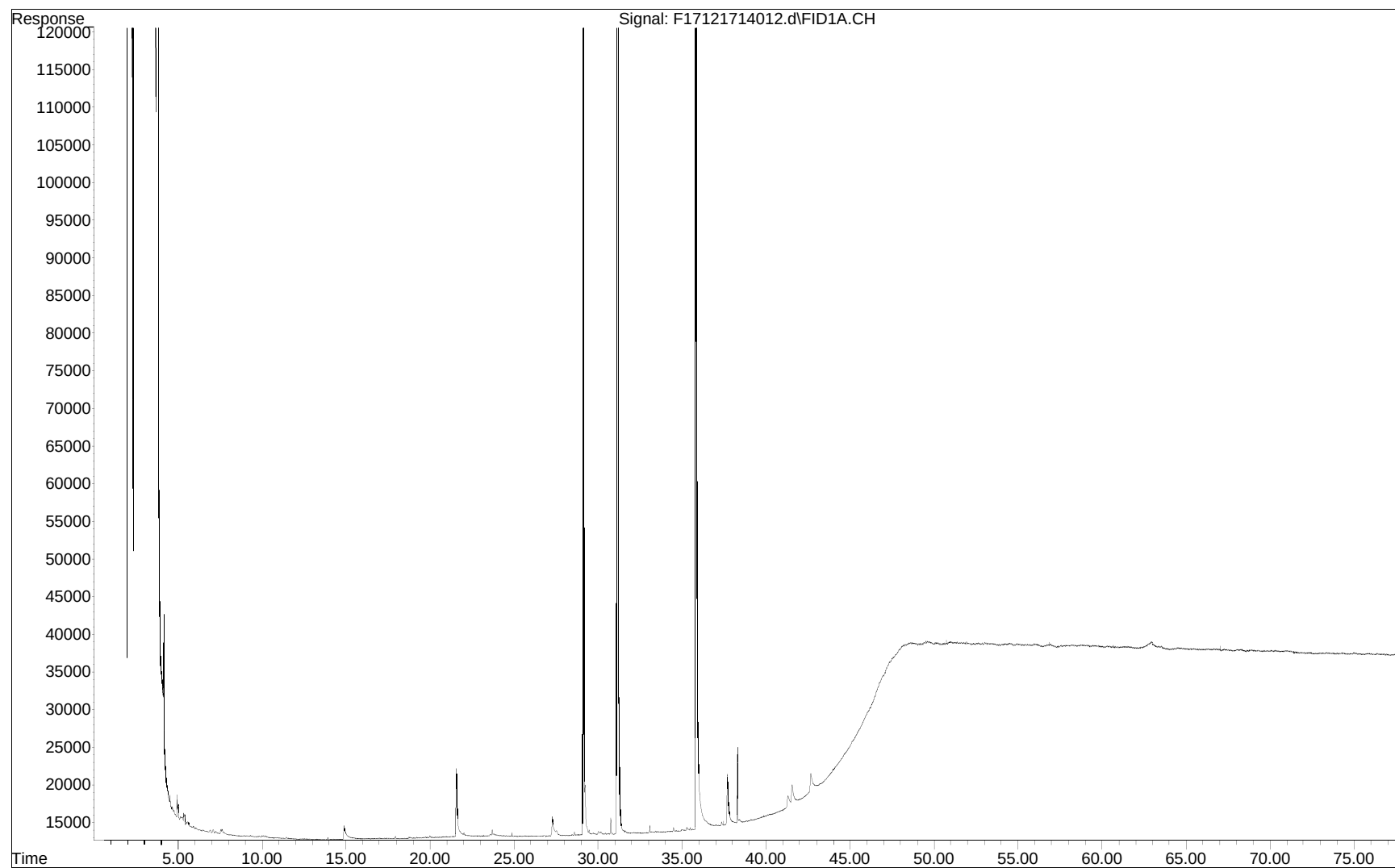
SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

File : 0:\Forensics\Data\FID17\2014\DEC2014\DEC17\F17121714012.d
Operator : FID17:NL
Acquired : 18 Dec 2014 1:06 am using AcqMethod FID17.M
Sample Name: WG748955-1,42
Instrument: FID17
Misc Info : WG750227,WG748955
Vial Number: 6
CurrentMeth: 0:\Forensics\Data\FID17\2014\DEC2014\DEC17\HC17111014F.M



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC17\
 Data File : F17121714016.d
 Signal(s) : FID1A.CH
 Acq On : 18 Dec 2014 4:06 am
 Operator : FID17:NL
 Sample : WG748955-2,42
 Misc : WG750227,WG748955
 ALS Vial : 8 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Dec 29 17:49:42 2014
 Quant Method : C:\msdchem\1\DATA\FID17\December\DEC17\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Thu Dec 18 09:41:38 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Blank Name : IB1712171401F
 Blank File : F17121714010.D

Sub List : TPH_QC_Samples - TPH_QC_Samples

Compound			R.T.	Response	Conc Units	

Internal Standards						
1) I	5-alpha-androstane		31.167	58584462	50.000 ug/mL	M4
System Monitoring Compounds						
19) s	ortho-terphenyl		29.131	15665506	12.150 ug/mL	M4
Spiked Amount		50.000	Range 50 - 130	Recovery =	24.30%#	
24) s	d50-Tetracosane		35.829	12650953	12.081 ug/mL	M4
Spiked Amount		50.000	Range 50 - 130	Recovery =	24.16%#	
Target Compounds						
3) t	n-Nonane (C9)		7.681	4979760	4.879 ug/mL	M4
4) t	n-Decane (C10)		10.166	4979089	4.755 ug/mL	M4
6) t	n-Dodecane (C12)		15.112	5126504	4.766 ug/mL	M4
9) t	n-Tetradecane (C14)		19.610	4976240	4.536 ug/mL	M4
12) t	n-Hexadecane (C16)		23.644	5816707	5.170 ug/mL	M4
16) t	n-Octadecane (C18)		27.272	6061814	5.279 ug/mL	M4
18) t	n-Nonadecane (C19)		28.960	5484737	4.791 ug/mL	M4
20) t	n-Eicosane (C20)		30.579	5555546	4.862 ug/mL	M4
22) t	n-Docosane (C22)		33.599	5808674	4.995 ug/mL	M4
25) t	n-Tetracosane (C24)		36.377	5811280	4.939 ug/mL	M4
27) t	n-Hexacosane (C26)		38.948	5845258	4.885 ug/mL	M4
29) t	n-Octacosane (C28)		41.342	5962561	5.015 ug/mL	M4
31) t	n-Triacontane (C30)		43.573	6111898	5.105 ug/mL	M4
37) t	n-Hexatriacontane (C36)		50.112	6062924	4.921 ug/mL	M4
42) h	C9-C44 Total Petroleu...		40.363	666641917	579.724 ug/mL	m
42) h	C9-C44 Total Petroleu BS		40.363	38964135	33.884 ug/mL	m
45) h	Total Resolved Hydroc...		40.749	85729177	74.552 ug/mL	m

SemiQuant Compounds - Not Calibrated on this Instrument

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC17\
 Data File : F17121714016.d
 Signal(s) : FID1A.CH
 Acq On : 18 Dec 2014 4:06 am
 Operator : FID17:NL
 Sample : WG748955-2,42
 Misc : WG750227,WG748955
 ALS Vial : 8 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Dec 29 17:49:42 2014
 Quant Method : C:\msdchem\1\DATA\FID17\December\DEC17\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Thu Dec 18 09:41:38 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Blank Name : IB1712171401F
 Blank File : F17121714010.D

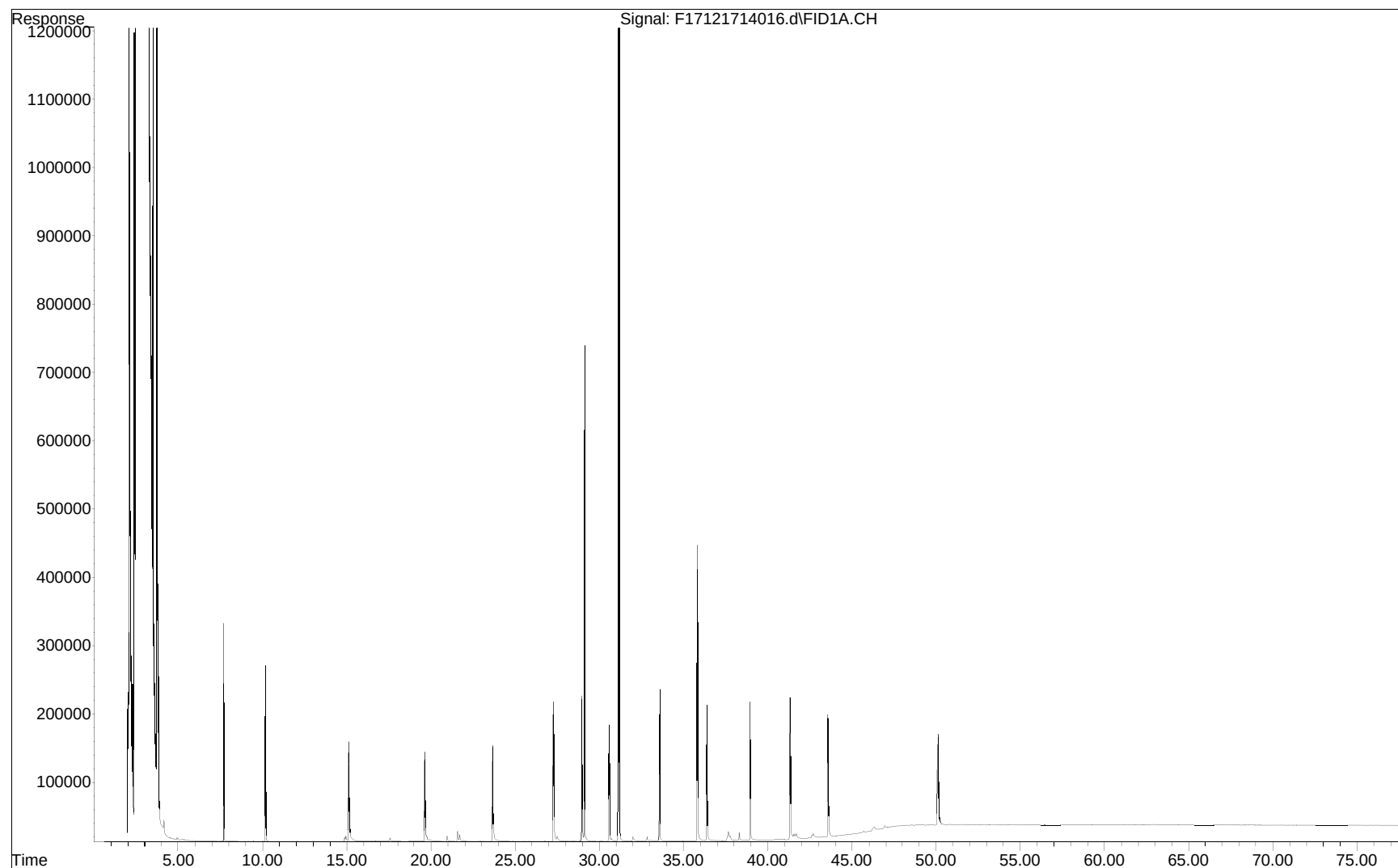
Sub List : TPH_QC_Samples - TPH_QC_Samples

Compound	R.T.	Response	Conc Units

(f)=RT Delta > 1/2 Window			(m)=manual int.

Quantitation Report (QT Reviewed)

File : 0:\Forensics\Data\FID17\2014\DEC2014\DEC17\F17121714016.d
Operator : FID17:NL
Acquired : 18 Dec 2014 4:06 am using AcqMethod FID17.M
Sample Name: WG748955-2,42
Instrument: FID17
Misc Info : WG750227,WG748955
Vial Number: 8
CurrentMeth: 0:\Forensics\Data\FID17\2014\DEC2014\DEC17\HC17111014F.M



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC17\
 Data File : F17121714018.d
 Signal(s) : FID1A.CH
 Acq On : 18 Dec 2014 5:35 am
 Operator : FID17:NL
 Sample : WG748955-3,42
 Misc : WG750227,WG748955
 ALS Vial : 9 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Dec 29 17:50:52 2014
 Quant Method : C:\msdchem\1\DATA\FID17\December\DEC17\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Thu Dec 18 09:41:38 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Blank Name : IB1712171401F
 Blank File : F17121714010.D

Sub List : TPH_QC_Samples - TPH_QC_Samples

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.163	56013476	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.129	15226903	12.352	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 24.70%#
24) s	d50-Tetracosane	35.825	12277009	12.262	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 24.52%#
Target Compounds					
3) t	n-Nonane (C9)	7.678	4938442	5.060	ug/mL M4
4) t	n-Decane (C10)	10.164	4936037	4.930	ug/mL M4
6) t	n-Dodecane (C12)	15.110	5086469	4.946	ug/mL M4
9) t	n-Tetradecane (C14)	19.609	4968240	4.737	ug/mL M4
12) t	n-Hexadecane (C16)	23.644	5813841	5.404	ug/mL M4
16) t	n-Octadecane (C18)	27.270	6007146	5.471	ug/mL M4
18) t	n-Nonadecane (C19)	28.958	5460447	4.989	ug/mL M4
20) t	n-Eicosane (C20)	30.577	5537316	5.068	ug/mL M4
22) t	n-Docosane (C22)	33.595	5791861	5.209	ug/mL M4
25) t	n-Tetracosane (C24)	36.375	5796910	5.153	ug/mL M4
27) t	n-Hexacosane (C26)	38.947	5865430	5.126	ug/mL M4
29) t	n-Octacosane (C28)	41.336	5931706	5.218	ug/mL M4
31) t	n-Triacontane (C30)	43.570	6077953	5.309	ug/mL M4
37) t	n-Hexatriacontane (C36)	50.108	6012545	5.104	ug/mL M4
42) h	C9-C44 Total Petroleu...	40.363	657428403	597.953	ug/mL m
42) h	C9-C44 Total Petroleu BS	40.363	29750621	27.059	ug/mLm
45) h	Total Resolved Hydroc...	40.749	85354265	77.633	ug/mL m

SemiQuant Compounds - Not Calibrated on this Instrument

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\FID17\2014\DEC2014\DEC17\
 Data File : F17121714018.d
 Signal(s) : FID1A.CH
 Acq On : 18 Dec 2014 5:35 am
 Operator : FID17:NL
 Sample : WG748955-3,42
 Misc : WG750227,WG748955
 ALS Vial : 9 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Dec 29 17:50:52 2014
 Quant Method : C:\msdchem\1\DATA\FID17\December\DEC17\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Thu Dec 18 09:41:38 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Blank Name : IB1712171401F
 Blank File : F17121714010.D

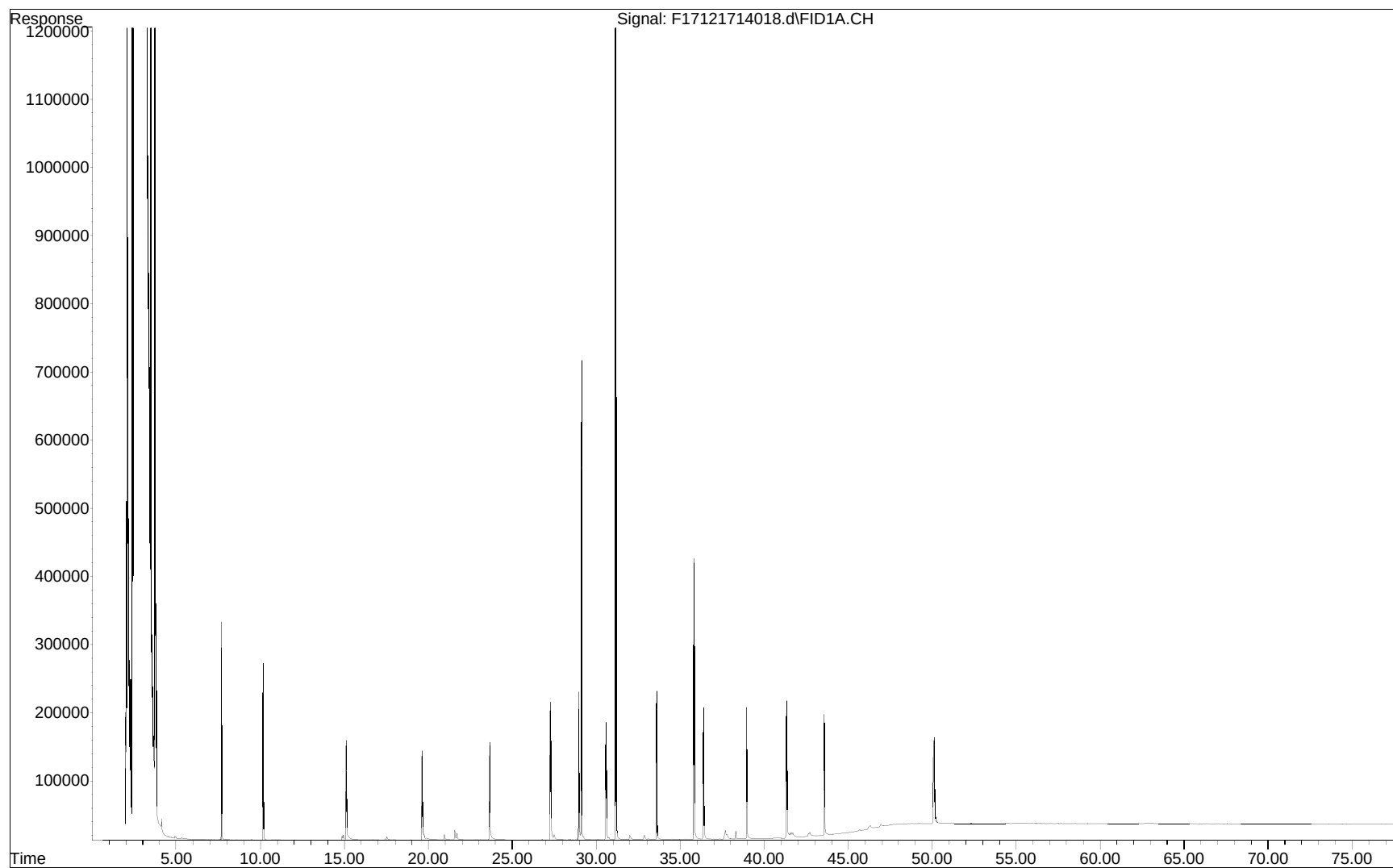
Sub List : TPH_QC_Samples - TPH_QC_Samples

Compound	R.T.	Response	Conc Units

(f)=RT Delta > 1/2 Window			(m)=manual int.

Quantitation Report (QT Reviewed)

File : 0:\Forensics\Data\FID17\2014\DEC2014\DEC17\F17121714018.d
Operator : FID17:NL
Acquired : 18 Dec 2014 5:35 am using AcqMethod FID17.M
Sample Name: WG748955-3,42
Instrument: FID17
Misc Info : WG750227,WG748955
Vial Number: 9
CurrentMeth: 0:\Forensics\Data\FID17\2014\DEC2014\DEC17\HC17111014F.M



Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC17\
 Data File : F17121714010.d
 Signal(s) : FID1A.CH
 Acq On : 17 Dec 2014 11:36 pm
 Operator : FID17:NL
 Sample : IB1712171401F
 Misc : DCM
 ALS Vial : 5 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Dec 29 17:42:57 2014
 Quant Method : C:\msdchem\1\DATA\FID17\December\DEC17\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Thu Dec 18 09:41:38 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : TPH - TPH

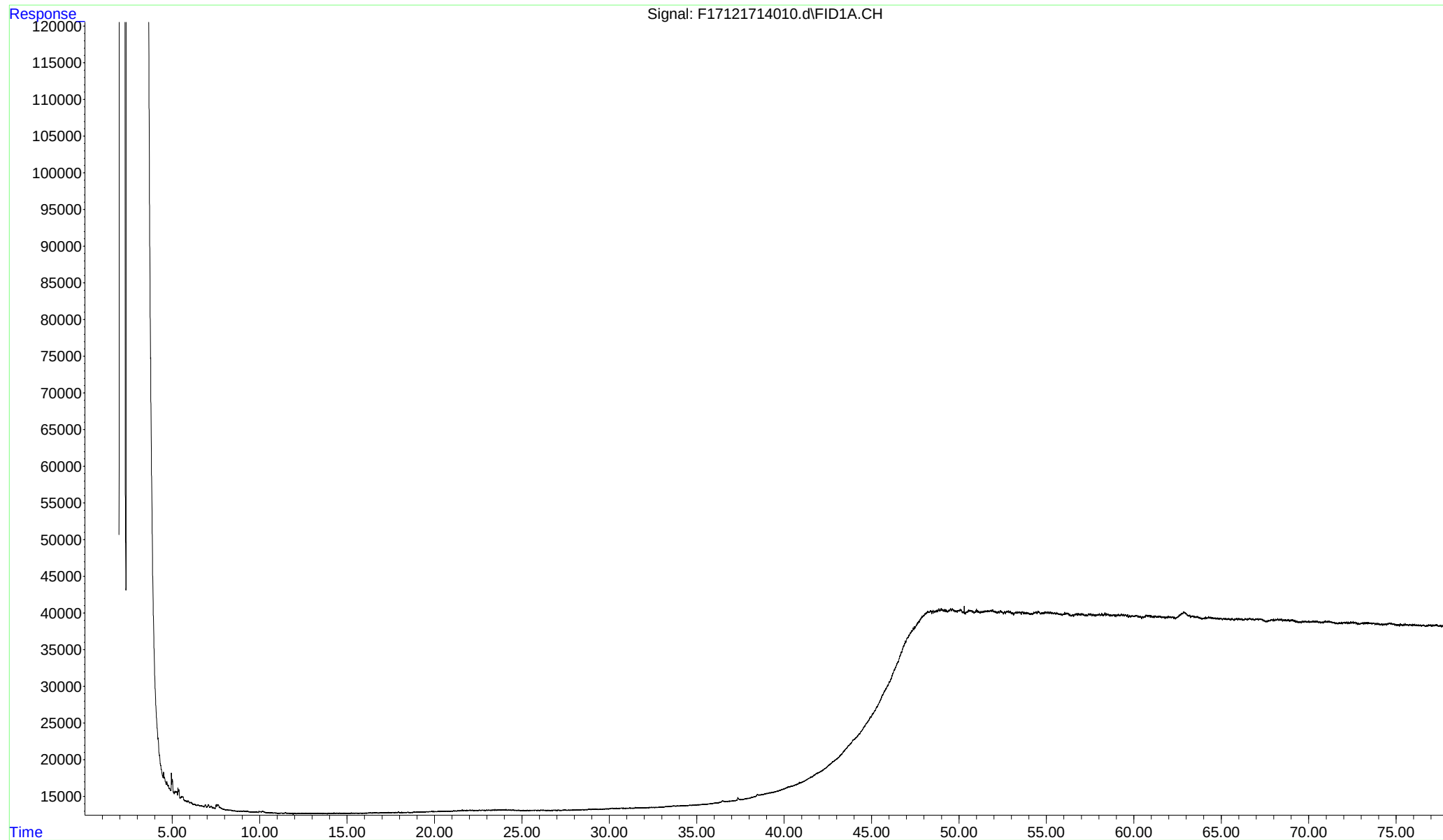
Compound	R.T.	Response	Conc	Units
Internal Standards				
1) I 5-alpha-androstane	31.198	951	50.000	ug/mL M4
System Monitoring Compounds				
19) s ortho-terphenyl	0.000	0	N.D.	ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery	=	0.00%#
24) s d50-Tetracosane	0.000	0	N.D.	ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery	=	0.00%#
Target Compounds				
42) h C9-C44 Total Petroleu...	40.363	627677782	33629314.394	ug/mL M5

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : 0:\Forensics\Data\FID17\2014\DEC2014\DEC17\
Data File : F17121714010.d
Operator : FID17:NL
Acquired : 17 Dec 2014 11:36 pm using AcqMethod FID17.M
Instrument: FID17
Sample : IB1712171401F
Misc Info : DCM
ALS Vial : 5





Calculation of GC Organic Compounds

Aqueous Concentration Formula: $\text{Amt} * \text{DF} * 1000 * (1/\text{Vo}) * \text{Vf}$

Where:

DF = Dilution Factor

Vo = Volume of Sample (mL)

Vf = Extraction Lab Final Volume (mL)

Soil Concentration Formula: $\text{Amt} * \text{DF} * 1000 * (1/\text{Wt}) * \text{Vf} * (100/\text{TS})$

Where:

DF = Dilution Factor

Wt = Weight of Sample (g)

Vf = Extraction Lab Final Volume (mL)

TS = Total Solids

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Dec 30 2014, 04:48 pm

Work Group: WG748955 for Department: 2 Organic Preparation

Created: 16-DEC-14 Due: Operator: sa

Sample	Client ID	C Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1430116-01	NRW-7	S A2-TPH	OIL	DONE	U	1212	0106	S0	Vial-A-20
L1430116-01	NRW-7	S A2-ALKPAH/BIOMARKER	OIL	DONE	U	1212	0106	S0	Vial-A-20
WG748955-1	Laboratory Method Bl	S A2-TPH	OIL	DONE	U				
WG748955-1	Laboratory Method Bl	S A2-ALKPAH/BIOMARKER	OIL	DONE	U				
WG748955-2	Laboratory Control S	S A2-ALKPAH/BIOMARKER	OIL	DONE	U				
WG748955-2	Laboratory Control S	S A2-TPH	OIL	DONE	U				
WG748955-3	LCS Duplicate	S A2-ALKPAH/BIOMARKER	OIL	DONE	U				
WG748955-3	LCS Duplicate	S A2-TPH	OIL	DONE	U				
Comments:									
WG748955-3	WG748955-2								

Analysis log File

Total Files Reported in Log : 16

Log Generated From Directory: O:\Forensics\Data\FID17\2014\NOV\NOV10\

11/20/14

No.	DATA FILE	INJ METH	SAMPLE NAME	MISC	DATE INJ'D
1	F17111014002.d	FID17.M	Primer	Primer	11/10/2014 11:38 a
2	F17111014004.d	FID17.M	ANS	FRAU76	11/10/2014 1:06 p
3	F17111014006.d	FID17.M	DCM	DCM	11/10/2014 2:35 p
4	F17111014008.d	FID17.M	IB1711101401F	DCM	11/10/2014 4:04 p
5	F17111014010.d	FID17.M	Primer	Primer	11/10/2014 5:32 p
6	F17111014012.d	FID17.M	I1711101401R	FRAV23 1ug/mL	11/10/2014 7:02 p
7	F17111014014.d	FID17.M	I1711101402R	FRAV24 10ug/mL	11/10/2014 8:31 p
8	F17111014016.d	FID17.M	I1711101403R	FRAV14 50ug/mL	11/10/2014 10:01 p
9	F17111014018.d	FID17.M	I1711101404R	FRAV25 100ug/mL	11/10/2014 11:30 p
10	F17111014020.d	FID17.M	I1711101405R	FRAV26 200ug/mL	11/11/2014 1:00 a
11	F17111014022.d	FID17.M	I1711101406R	FRAV27 500ug/mL	11/11/2014 2:29 a
12	F17111014024.d	FID17.M	DCM	DCM	11/11/2014 3:59 a
13	F17111014026.d	FID17.M	IB1711101402F	DCM	11/11/2014 5:28 a
14	F17111014028.d	FID17.M	CQ1711101401R	FRAV28 50ug/mL	11/11/2014 6:58 a
15	F17111014030.d	FID17.M	TO111714ANC01	1X FRAU76 10.045mg/mL	11/11/2014 8:27 a
16	F17111014032.d	FID17.M	TO111714MC201	1X FRAU77 5.227mg/mL	11/11/2014 9:56 a

ICAL
S.V.S

Processing Method: HC17111014F.M

Printed: 11/17/14

Page: 1

Analysis log File

Total Files Reported in Log : 16

Log Generated From Directory: O:\Forensics\Data\FID17\2014\DEC2014\DEC17\

8/22/14

No.	DATA FILE	INJ METH	SAMPLE NAME	MISC	DATE	INJ'D
1	F17121714002.d	FID17.M	Spike Check	Spike Check	12/17/2014	5:37 p
2	F17121714004.d	FID17.M	ANS	FRAU76 10.045mg/mL	12/17/2014	7:06 p
3	F17121714006.d	FID17.M	WG750227-1	WG750227, FRAV14 50ug..	12/17/2014	8:36 p
4	F17121714008.d	FID17.M	DCM	DCM	12/17/2014	10:06 p
5	F17121714010.d	FID17.M	IB1712171401F	DCM	12/17/2014	11:36 p
6	F17121714012.d	FID17.M	WG748955-1,42	WG750227, WG748955	12/18/2014	1:06 a
7	F17121714014.d	FID17.M	WG749577-1,42	WG750227, WG749577	12/18/2014	2:36 a
8	F17121714016.d	FID17.M	WG748955-2,42	WG750227, WG748955	12/18/2014	4:06 a
9	F17121714018.d	FID17.M	WG748955-3,42	WG750227, WG748955	12/18/2014	5:35 a
10	F17121714020.d	FID17.M	WG749577-2,42	WG750227, WG749577	12/18/2014	7:05 a
11	F17121714022.d	FID17.M	WG749577-3,42	WG750227, WG749577	12/18/2014	8:34 a
12	F17121714024.d	FID17.M	L1430190-01,42	WG750227, WG749577	12/18/2014	10:04 a
13	F17121714026.d	FID17.M	L1430116-01,42	WG750227, WG748955	12/18/2014	11:34 a
14	F17121714028.d	FID17.M	WG750227-2	WG750227, FRAV14 50ug..	12/18/2014	1:04 p
15	F17121714030.d	FID17.M	DCM	DCM	12/18/2014	2:33 p
16	F17121714032.d	FID17.M	IB1712171402F	DCM	12/18/2014	4:03 p

Processing Method: HC17111014F.11

CEV - FRAV14 - 50ug/mL

Printed: 12/29/14

Page: 1

Workgroup: WG748955

Prep Method: EPA 3580A Solvent Type: DCM Surrogate Type: A2-PAH/SHC Spike Type: A2-PAH/SHC Spike Verify by: WR Lims Spikelot: A2-PAH/SHC Additional Reagents/Stdts <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">RIS</td> <td style="width: 50%;">FRAV06</td> </tr> <tr> <td>BIOMARKER</td> <td>FRAV09</td> </tr> </table>	RIS	FRAV06	BIOMARKER	FRAV09	Conc.Method: Solvent Type: Lot #: Additional Reagents/Stdts	Cleanup 1 Cleanup Method 1: Cleanup Method 2: Solvent Type: Lot #: Additional Reagents/Stdts
RIS	FRAV06					
BIOMARKER	FRAV09					

Sample/ Type	Extraction										Concentration	
	Extract Date	Analyst	Sample Weight g	Balanc e Id	Extract Vol ml	Split Vol ml	Surr Amt ml	Spike Amt ml	Is Amt ml	Final Vol ml		
WG748955-1 BLANK	12/16/14 09:49	Shayna Albanese	0.1	F30621	10	10	0.5		0.1	20		
	All samples spiked with 0.5mL Biomarker 12/16/14 SA											
WG748955-2 LCS	12/16/14 09:49	Shayna Albanese	0.1	F30621	10	10	0.5	0.5	0.1	20		
WG748955-3 LCSD	12/16/14 09:49	Shayna Albanese	0.1	F30621	10	10	0.5	0.5	0.1	20		
L1430116-01 OIL	12/16/14 09:49	Shayna Albanese	0.1029	F30621	10	10	0.5		0.1	20		



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Alpha Analytical

Laboratory Code: 11148

SDG Number: L1430198

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CC Quant - WG754959-2 Inst. PAH9 12/20/14 02:32	871
CC Summary - PAH9 Run: 12/22/14 17:54	915
CC Quant - WG754959-3 Inst. PAH9 12/22/14 17:54	917
CC Summary - PAH9 Run: 12/23/14 00:56	961
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Project Name: WILLIAMSBURG
Project Number: 11176638

Lab Number: L1430198
Report Date: 01/13/15

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1430198-01	GTP-07-3'	SOIL	BROOKLYN	12/15/14 11:00	12/16/14

Project Name: WILLIAMSBURG
Project Number: 11176638

Lab Number: L1430198
Report Date: 01/12/15

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: WILLIAMSBURG
Project Number: 11176638

Lab Number: L1430198
Report Date: 01/12/15

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Semivolatile Organics

Samples L1430198-01 demonstrated a high total extract weight during the gravimetric weighing procedure, which resulted in elevated reporting limits.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: 

Report Date: 01/12/15

Title: Technical Director/Representative

List of Organic Method Qualifiers

Table 1

Qualifier (Q)	Description
B	Entered if the analyte is found in the associated blank as well as the sample.
C	Applied to pesticide results when the identification has been confirmed by GC/MS.
D	Included when the all identified compounds in the analysis are at the secondary dilution factor.
E	Identified compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
J	Indicates an estimated value, may indicate one of the following, depending on the situation: (1) The reported value is estimated and below the MDL. (2) Used when estimating a concentration for TIC where a 1:1 response is assumed or when the result indicates the presence of a compound that meets the identification criteria, but the results is less than the quantitation limit, but greater than zero. (3) QC associated with this analyte is within warning limits.
N	Included for TIC that indicate presumptive evidence of a compound.
U	Entered if the analyte was analyzed for, but not detected.
P	Used for a pesticide/Aroclor target analyte when the concentration difference between 2 GC columns is greater than 25%; the lower value is flagged with a "P".
EMPC	"Estimated Maximum Possible Concentration" – The amount of analyte cannot be accurately quantified, so a maximum concentration has been estimated for the compound.
"XYZ"	"Wildcard" or Laboratory defined qualifier.

Note: Form I allows only one character in each qualifier column. If multiple qualifiers are applicable, please assess qualifier priority in the following order: U, E, J, B, D, C, P, N. Reporting done in the EDD may include multiple qualifiers when applicable, separated by a single space.

(Information obtained from NYSDEC ASP Exhibit B, 7/2005, page 64)

List of Inorganic Method Qualifiers

Table 2

Qualifier	Column (1)	Description
Concentration qualifiers		
B	C	Entered if the reported value was less than the CRDL, but greater than the IDL.
U	C	Entered if the analyte was analyzed for, but not detected.
J	C	Entered if the reported value is estimated and below the MDL.
*	C	Duplicate precision exceeds RPD limit.
M	C	Replicate precision exceeds RPD limit.
"XYZ"	C	"Wildcard" or Laboratory defined qualifier.
Qualifier specific entries		
E	Q	Entered if the reported value is estimated because of the presence of interferences.
Method qualifiers		
A	M	Flame atomic absorption
AS	M	Semi-automated spectrophotometric
AV	M	Automated cold vapor atomic absorption
C	M	Manual spectrophotometric
F	M	Furnace atomic absorption
MS	M	Mass spectrometry (ICP-MS)
NR	M	Analyte is not required to be analyzed
P	M	Inductively coupled plasma (ICP)
" "	M	No data have been entered

(1) The term "Column" is used to indicate under which column heading in the reporting forms that the qualifier will be found under.

Note: Form I allows only one character in each qualifier column. If multiple qualifiers are applicable to column C, please assess qualifier priority in the following order: U, J, B. Reporting done in the EDD may include multiple qualifiers when applicable, separated by a single space.

(Information obtained from NYSDEC ASP Exhibit B, 7/2005, page 65)

Volatile Organics Instruments

Volatile Organics: Jack

Instrument: Agilent 5975MSD
Trap: Supelco K Trap (VOACARB 3000)
Concentrator: EST Encon
Autosampler: EST Centurion
Purge time: 11 min

Column Type: RTX-VMS
Column Length: 20 Meters
df: 1.00um
ID: 0.18mm
Desorb: 2 min

Volatile Organics: Quimby

Instrument: Agilent 5973MSD
Trap: Supelco K Trap (VOACARB 3000)
Concentrator: EST Encon
Autosampler: EST Centurion
Purge time: 11 min

Column Type: RTX-VMS
Column Length: 20 Meters
df: 1.00um
ID: 0.18mm
Desorb: 2 min

Volatile Organics: Curly

Instrument: Agilent 5972 MSD
Trap: Supelco K Trap (VOACARB 3000)
Concentrator: Tekmar 3000
Autosampler: Archon
Purge time: 11 min

Column Type: Restek RTX-502.2
Column Length: 40 Meters
df: 1.00 um
ID: 0.18 mm
Desorb: 2 min

Volatile Organics: Elaine

Instrument: Agilent 5973 MSD
Trap: Supelco K Trap (VOACARB 3000)
Concentrator: Teledyne Velocity
Autosampler: Teledyne Solatek
Purge time: 11 min

Column Type: Restek RTX-502.2
Column Length: 40 Meters
df: 1.00 um
ID: 0.18 mm
Desorb: 2 min



Volatile Organics: Gonzo

Instrument: Agilent 5973 MSD
Trap: Supelco K Trap (VOACARB 3000)
Concentrator: Teledyne Velocity
Autosampler: Teledyne Solatek
Purge time: 11 min

Column Type: Restek RTX-502.2
Column Length: 40 Meters
df: 1.00 μm
ID: 0.18 mm
Desorb: 2 min

Volatile Organics: VOA101

Instrument: Agilent 5975C inert XL MSD
Trap: EST K Trap (VOACARB 3000)
Concentrator: Encon Evolution
Autosampler: EST Centurion
Purge time: 11 min

Column Type: Restek RTX-VMS
Column Length: 30 Meters
df: 1.40 μm
ID: 0.25 mm
Desorb: 1 min

Volatile Organics: Charlie/Voa100/Voa104

Instrument: Agilent 5975C MSD
Trap: Supelco K Trap (VOACARB 3000)
Concentrator: Encon Evolution
Autosampler: EST Centurion
Purge time: 11 min

Column Type: Agilent DB-624
Column Length: 25 Meters
df: 1.12 μm
ID: 0.20 mm
Desorb: 2 min

Volatile Organics: M

Instrument: Agilent 6890

Concentrator: Tekmar 2016
Autosampler: Tekmar 3100

Column Type: Restek RTX 502.2
Column Length: 105 Meters
df: 3.00 μm
ID: 0.53 mm

Volatile Organics: L/N

Instrument: Agilent 6890

Concentrator: Encon Evolution
Autosampler: EST Centurion

Column Type: Restek RTX 502.2
Column Length: 105 Meters
df: 3.00 μm
ID: 0.53 mm

Volatile Organics: O/P

Instrument: Agilent 7890A

Concentrator: Encon Evolution
Autosampler: EST Centurion

Column Type: Restek RTX 502.2
Column Length: 105 Meters
df: 3.00 μm
ID: 0.53 mm

Volatile Organics in Air Instruments

Volatile Organics in Air:

Instrument: Agilent 6890 GC / 5975 MSD	Column Type: Restek RTX-1
	Column Length: 60 Meters
Concentrator: Entech 7100A	df: 1.00 um
Autosampler: Entech 7016CA	ID: 0.52 mm
Trap 1: Glass Bead: manufacturer-Entech: 20 cm packing material	
Trap 2: Tenax: manufacturer-Entech: 20 cm packing material	

Semivolatile Organics Instruments

Semivolatile Organics (Acid/Base/Neutral Extractables): Buffy

Instrument: Agilent 5973N MSD	Injection volume: 1 ul
Column Type: Restek RTX-5MS	df: 0.25 um
Column Length: 30 Meters	ID: 0.32 mm

Semivolatile Organics (Acid/Base/Neutral Extractables): Juliet/GCMS5/GCMS7

Instrument: Agilent 5973N MSD	Injection volume: 1 ul
Column Type: Restek RXI-5SIL MS	df: 0.25 um
Column Length: 30 Meters	ID: 0.32 mm

Polynuclear Aromatic Hydrocarbons by 8270 SIM: Dakota/Mork

Instrument: Agilent 5973 MSD	Injection volume: 1 ul
Column Type: Restek RTX-5MS	df: 0.25 um
Column Length: 30 Meters	ID: 0.32 mm

Polynuclear Aromatic Hydrocarbons by 8270 SIM: Mindy

Instrument: Agilent 5973N MSD	Injection volume: 1 ul
Column Type: Restek RXI-5SIL MS	df: 0.25 um
Column Length: 30 Meters	ID: 0.32 mm

Pesticides/PCB : Pest 11/Pest2/Pest7/Pest12

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1uL
Column Type: Restek RTX-CLP (Channel A)	df: 0.32 um
Column: Restek RTX-CLPPesticide II (Channel B)	df: 0.25 um
Column Length: 30 Meters (Both)	ID: 0.32 mm (Both)

Pesticides/PCB: Pest 10/ Pest9

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1uL
Column Type: Restek STX-CLP (Channel A)	df: 0.32 um
Column: Restek STX-CLPPesticide II (Channel B)	df: 0.25 um
Column Length: 30 Meters (Both)	ID: 0.32 mm (Both)

Herbicides

Instrument: Agilent 6890 w/Dual Micro ECDs
Column Type: Restek RTX-1701 (Channel A)
Column Type: Restek RTX-5 (Channel B)
Column Length: 30 Meters (Both)

Injection Volume: 1uL
df: 0.25 um
df: 0.25 um
ID: 0.32 mm (Both)

Petro9

Instrument: Agilent 6890 w/FID
Column: Restek RTX-5
Column Length: 30 Meters

Injection Volume: 1uL
df: 0.25 um
ID: 0.32 mm

EPH Petro10/ Petro11

Instrument: Agilent 6890N w/FID
Column: Restek RTX-5-MS
Column Length: 30 Meters

Injection Volume: 1uL
df: 0.25um
ID: 0.32 mm

Explosives

Instrument: Dionex ICS-3000, AS50 Autosampler and PDA-100 detectors.
Injection Volume: 100uL
Column: Phenomenex Synergi 4u Hydro-RP and Luna 5u Phenyl-Hexyl.

GC/MS Forensic Semivolatile Organic Instruments

Semivolatile Organics (ALK-PAH extractables): PAH1/PAH2/PAH3/PAH4

Instrument: Agilent 5973C MSD
Column Type: Phenomenex ZB-5
Column Length: 60 Meters

Injection volume: 1 ul
df: 0.25 um
ID: 0.25 mm

Semivolatile Organics (ALK-PAH extractables): PAH8/PAH9/PAH10/PAH11/PAH12/PAH13/PAH14

Instrument: Agilent 5975C MSD
Column Type: Phenomenex ZB-5
Column Length: 60 Meters

Injection volume: 1 ul
df: 0.25 um
ID: 0.25 mm

Semivolatile Organics (ALK-PAH extractables): PAH17/PAH18/PAH19

Instrument: Agilent 5975C MSD
Column Type: Phenomenex ZB-5
Column Length: 60 Meters

Injection volume: 1 ul
df: 0.25 um
ID: 0.25 mm

GC/FID Forensic Semivolatile Organic Instruments

Semivolatile Organics (SHC extractables):PAH1/PAH2/PAH3/PAH4/PAH8

Instrument: Agilent 6890N w/FID
Column: Restek RTX-5
Column Length: 60 Meters

Injection Volume: 1uL
df: 0.25um
ID: 0.25 mm

Semivolatile Organics (SHC extractables): FID6 (dual column)/ FID9 (dual column)/ FID17 (dual column)

Instrument: Agilent 6890N w/FID
Column: Restek RTX-5
Column Length: 60 Meters

Injection Volume: 1uL
df: 0.25um
ID: 0.25 mm

Semivolatile Organics (SHC extractables):FID7 (dual column)

Instrument: Agilent 7890N w/FID
Column: Restek RTX-5
Column Length: 60 Meters

Injection Volume: 1uL
df: 0.25um
ID: 0.25 mm



Sample Delivery Group Form

Laboratory Job number: L1430198

Project Number: 11176638

Project Name: WILLIAMSBURG

Received: 12/16/2014 11:55

Client Account: URS Corporation

Received by: RR

Samples Delivered by: COURIER

Call Tracker #

Bill Of Laden N/A

Trackingnum

Coc Present Present

Container Status Intact

Sample IDs

All Containers Accounted For? Yes

Were Extra Samples Received? No

Do Sample Labels and COC agree? Yes

Are Samples in Appropriate Containers? Yes

Are Samples Received within Holding time? Yes

pH of Samples upon Receipt N/A

Are samples Properly Preserved? Yes

Initial pH preserved in house with

Final pH

Other Issues

Chlorine Check N/A

Are VOA/VPV Vials Present? No

Aqueous: Do Vials Contain Head Space? N/A

Soils: Is MeOH Covering the Soil? N/A

Reagent H2O Preserved vials Frozen on N/A

Frozen by Client N/A

Cooler	Seal	Ice Present	Blue Ice Present	Temp. (Celsius)	Frozen upon Receipt	Delivered Direct from Site
A	Present/Intact	Yes	No	2.6 - IR Gun	No	No

Project Manager: Gina Bartolomeo

Review Date: 12/16/2014

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Jan 13 2015, 02:46 pm

Login Number: L1430198

Account: URS-BUFFALO URS Corporation Project: 11176638

Sample #	Client ID	Received: 16DEC14	Due Date: 12JAN15
		Mat PR Collected	Container

L1430198-01 GTP-07-3' 3 S0 15DEC14 11:00 2-Ampule, 1-Glass-A.120

Hard TAT must go 12-JAN-15 (wanted RUSH and 15 day is fastest TAT) ALK/PAH: reporting list built, see
Scanned info ASP-B Package Due Date: 01/12/15

A2-ALKPAH/BIOMARKER, A2-TPH, A2-TS, ASP-B

Page 1

Logged By: Gina Bartolomeo



NEW YORK CHAIN OF CUSTODY

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers

Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1
of 1

Date Rec'd
in Lab

12/17/14

ALPHA Job #

11430198

Client Information

Client: URS Corp
Address: 257 W. Gorsest
Suite 400, Buffalo, NY
Phone: 716-923-1207
Fax:
Email: Jon.Sundqvist@URS.com

Project Information

Project Name: Williamsburg
Project Location: Brooklyn
Project # 11176638
(Use Project name as Project #) ☐
Project Manager: Jon Sundqvist
ALPHAQuote #:
Turn-Around Time

Standard ☐
Rush (only if pre approved) ☒

Due Date: 01/12/15
of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQUIS (1 File) ☐ EQUIS (4 File)
☐ Other

Billing Information

☐ Same as Client Info
PO #

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

E

Please specify Metals or TAL.

ANALYSIS

Sample Filtration

☐ Done
☐ Lab to do
Preservation
☐ Lab to do

(Please Specify below)

Sample Specific Comments

Total Bottle

ALPHA LAB ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials											Sample Specific Comments	
		Date	Time														
30198-01	GTP-07-3'	12/15/14	1100	So	MD	1										Same analysis for both	
	GTP-07-3'	12/15/14	1100	S	MD	2										Same analysis for both	

Preservative Code:

A = None
B = HCl
C = HNO₃
D = H₂SO₄
E = NaOH
F = MeOH
G = NaHSO₄
H = Na₂S₂O₃
K/E = Zn Ac/NaOH
O = Other

Container Code

P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935

Mansfield: Certification No: MA015

Container Type

A G

Preservative

A A

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Relinquished By:	Date/Time	Received By:	Date/Time
<u>Moony Daniel</u>	12/16/14 11:55	<u>Tom Tolan</u>	12/16/14 11:55
<u>Tom Tolan</u>	12/16/14 18:35	<u>Tom Tolan</u>	12/16/14 18:35
<u>Tom Tolan</u>	12/16/14 00:45	<u>Tom Tolan</u>	12/17/14 00:45
	12/17/14		

Organics

Semivolatiles Data- Method 8270C-SIM

Semivolatiles QC Summary

Form 2
Surrogate Recovery
SemiVolatile Organics

Client: URS Corporation
Project Name: WILLIAMSBURG

Lab Number: L1430198
Project Number: 11176638
Matrix: Soil

CLIENT ID (LAB SAMPLE NO.)	S1 (ND8)	S2 (PHE)	S3 (BAP)	S4 (5HC)	S5 ()	S6 ()	TOT OUT
GTP-07-3' (L1430198-01)	76	85	99	103	--	--	0
WG749631-3LCSD	91	99	101	95	--	--	0
WG749631-2LCS	93	100	103	99	--	--	0
WG749631-1BLANK	86	94	100	98	--	--	0

ND8 = NAPHTHALENE-D8
PHE = PHENANTHRENE-D10
BAP = BENZO(A)PYRENE-D12
5HC = 5B(H)CHOLANE)

QC LIMITS
(50-130)
(50-130)
(50-130)
(50-130)

* Values outside of QC limits

FORM II A2-ALKPAH/BIOMARKER



3D
LAB CONTROL/LAB CONTROL DUPLICATE SAMPLE RECOVERY
SOIL SEMIVOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1430198

Lab Control Sample: WG749631-2LCS

Lab Control Dup : WG749631-3LCSD

Matrix: Soil

Injected: 12/19/14 22:20

Injected: 12/19/14 23:44

Lab File ID: A912191407

Lab File ID: A912191408

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONC ug/kg	LCS CONC ug/kg	LCS % REC	LCSD CONC ug/kg	LCSD % REC	% RPD	QC LIMITS RPD REC.
Naphthalene	33.3	NA	28.8	86	29.2	88	2	30 50-130
Acenaphthylene	33.3	NA	29.0	87	29.9	90	3	30 50-130
Acenaphthene	33.3	NA	30.1	90	30.7	92	2	30 50-130
Fluorene	33.3	NA	29.8	89	30.1	90	1	30 50-130
Phenanthrene	33.3	NA	31.3	94	31.2	94	0	30 50-130
Anthracene	33.3	NA	32.6	98	32.4	97	1	30 50-130
Fluoranthene	33.3	NA	32.3	97	31.8	95	2	30 50-130
Pyrene	33.3	NA	30.9	93	30.6	92	1	30 50-130
Benz(a)anthracene	33.3	NA	33.1	99	32.2	97	2	30 50-130
Chrysene/Triphenylene	33.3	NA	32.4	97	31.6	95	2	30 50-130
Benzo(b)fluoranthene	33.3	NA	33.9	102	33.0	99	3	30 50-130
Benzo(j)+(k)Fluoranthene	33.3	NA	34.5	103	33.4	100	3	30 50-130
Benzo(a)pyrene	33.3	NA	33.1	99	32.4	97	2	30 50-130
Indeno(1,2,3-cd)Pyrene	33.3	NA	33.5	100	31.6	95	5	30 50-130
Dibenz(a,h)+(a,c)anthrac	33.3	NA	32.1	96	30.3	91	5	30 50-130
Benzo(g,h,i)perylene	33.3	NA	30.8	92	29.4	88	4	30 50-130

* Values outside of QC limits.

COMMENTS: _____

FORM III A2-ALKPAH/BIOMARKER

4B

WG749631-1BLANK

Time Analyzed: 20:55

[illegible]

COMMENTS: _____

8B

Lab Name: Alpha Analytical Labs

SDG No.: L1430198

Lab File ID (Standard): A912191402

Date Analyzed: 12/19/14

Instrument ID : PAH9

Time Analyzed: 15:18

[illegible]

IS1(ANT) = ACENAPHTHENE-D10
IS2(CRY) = CHRYSENE-D12
IS3() =

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50 % of internal standard area
 RT UPPER LIMIT = +0.50 minutes of internal standard RT
 RT LOWER LIMIT = -0.50 minutes of internal standard RT

* Values outside of QC limits.

8B

Lab Name: Alpha Analytical Labs

SDG No. : L1430198

Lab File ID (Standard): A912191412

Date Analyzed: 12/22/14

Instrument ID : PAH9

Time Analyzed: 17:54

[illegible]

IS1(ANT) = ACENAPHTHENE-D10
IS2(CRY) = CHRYSENE-D12
IS3() =

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50 % of internal standard area
 RT UPPER LIMIT = +0.50 minutes of internal standard RT
 RT LOWER LIMIT = -0.50 minutes of internal standard RT

* Values outside of QC limits.

Determination of Method Detection Limits

Alpha Analytical Inc.
Mansfield, MA

Approved

Page 1 of 1
Analyst: AC, RZ
Date: 4/10/12- 4/12/12
Instrument ID: PAH2, 3, 14, 18, 19
Column ID: Phenomenex ZB-5
Prep Method: SOP OP-018
Prep Chemist: SF

Method: EPA 8270C

2012

GC/MS Alkylated PAH Soil

Table (MDL)

No.	Analytes	Data File	E24672	E24674	C34277	C34279	A184934	A184935	S1903485	S1903486	A14096022	A14096023	T value used for calculating MDL: 2.821					Comment
		Inst/Date An. Target conc. (ug/Kg)	PAH2 4/10/2012 Rep-1 (ug/Kg)	PAH2 4/10/2012 Rep-2 (ug/Kg)	PAH3 4/11/12 Rep-3 (ug/Kg)	PAH3 4/12/12 Rep-4 (ug/Kg)	PAH18 4/10/12 Rep-5 (ug/Kg)	PAH18 4/10/12 Rep-6 (ug/Kg)	PAH19 4/10/12 Rep-7 (ug/Kg)	PAH19 4/10/12 Rep-8 (ug/Kg)	PAH14 4/11/12 Rep-9 (ug/Kg)	PAH14 4/11/12 Rep-10 (ug/Kg)	Mean (ug/Kg)	Mean Accuracy	Standard Deviation	Calc.MDL (ug/Kg)	Current RL (ug/Kg)	
1	trans-Decalin	0.53	0.595	0.607	0.513	0.573	0.599	0.526	0.621	0.569	0.603	0.574	0.578	108%	0.035	0.099	0.50	
2	cis-Decalin	0.53	0.555	0.526	0.462	0.430	0.427	0.390	0.406	0.399	0.442	0.449	0.449	84%	0.054	0.152	0.50	
3	Naphthalene	1.07	1.074	1.142	0.834	0.985	0.865	0.860	0.857	0.938	0.998	0.958	0.951	89%	0.102	0.287	1.00	
4	2-Methylnaphthalene	1.07	0.918	1.003	0.919	0.997	0.739	0.799	0.810	0.787	0.828	0.833	0.863	81%	0.091	0.256	1.00	
5	1-Methylnaphthalene	1.07	0.928	1.115	0.830	0.894	0.796	0.832	0.772	0.761	0.727	0.889	0.854	80%	0.112	0.315	1.00	
6	Benzo[thiophene]	1.07	0.919	1.072	0.898	0.857	0.785	0.805	0.850	0.808	1.110	0.945	0.905	85%	0.111	0.313	1.00	
7	Biphenyl	1.07	0.944	0.951	1.040	0.979	0.761	0.833	0.823	0.750	0.796	0.726	0.860	81%	0.110	0.309	1.00	
8	2,6-Dimethylnaphthalene	1.07	0.848	0.906	0.868	0.996	0.786	0.857	0.757	0.727	0.802	0.733	0.828	78%	0.084	0.238	1.00	
9	Dibenzofuran	1.07	0.879	0.916	0.915	0.907	0.811	0.850	0.604	0.647	0.843	0.794	0.817	77%	0.109	0.309	1.00	
10	Acenaphthylene	1.07	0.890	0.990	0.842	0.848	0.838	0.775	0.790	0.791	0.796	0.765	0.832	78%	0.068	0.191	1.00	
11	Acenaphthene	1.07	0.873	1.016	0.872	0.900	0.906	0.870	0.795	0.797	0.872	0.841	0.874	82%	0.062	0.176	1.00	
12	2,3,5-Trimethylnaphthalene	1.07	0.905	0.942	0.919	0.971	0.905	0.881	0.881	0.875	0.801	0.782	0.886	83%	0.058	0.164	1.00	
13	Fluorene	1.07	0.914	0.946	0.962	0.981	0.894	0.859	0.742	0.747	0.754	0.782	0.858	80%	0.095	0.267	1.00	
14	Dibenzothiophene	1.07	0.941	0.970	0.928	0.942	0.914	0.924	0.813	0.824	0.923	0.877	0.906	85%	0.052	0.146	1.00	
15	Phenanthrene	1.07	0.943	1.003	0.938	0.925	1.031	1.022	0.910	0.927	1.032	0.991	0.972	91%	0.048	0.136	1.00	
16	Retene	1.07	0.862	0.856	1.042	0.955	0.927	0.916	0.865	0.872	0.757	0.752	0.880	83%	0.087	0.245	1.00	
17	Anthracene	1.07	0.903	0.982	0.937	0.905	0.915	0.898	0.819	0.842	0.812	0.772	0.878	82%	0.065	0.183	1.00	
18	Carbazole	1.07	0.755	0.855	0.890	0.743	0.867	0.849	0.742	0.801	0.493	0.849	0.784	74%	0.116	0.327	1.00	
19	1-Methylphenanthrene	1.07	0.873	0.972	1.005	1.062	1.003	0.952	0.934	0.947	0.982	0.969	0.970	91%	0.050	0.141	1.00	
20	Fluoranthene	1.07	1.009	1.056	1.070	1.131	1.011	1.088	0.985	0.986	0.986	1.002	1.032	97%	0.051	0.144	1.00	
21	Benzo(b)fluorene	1.07	0.910	0.934	1.053	0.973	0.985	0.904	0.969	0.965	0.720	0.761	0.917	86%	0.103	0.290	1.00	
22	Pyrene	1.07	0.948	1.065	1.049	1.081	0.988	1.036	0.986	1.005	0.995	0.976	1.013	95%	0.043	0.121	1.00	
23	Naphthobenzothiophene	1.07	1.005	1.067	1.093	1.077	1.074	1.088	1.080	1.100	1.040	0.937	1.056	99%	0.050	0.142	1.00	
24	Naphthobenzothiophene-2,1-D	1.07	1.005	1.070	1.093	1.077	1.074	1.088	1.080	1.100	1.040	0.937	1.056	99%	0.050	0.142	1.00	
25	Benz(a)anthracene	1.07	0.867	0.921	0.947	0.914	0.846	0.848	0.856	0.853	0.832	0.870	0.876	82%	0.038	0.108	1.00	
26	Chrysene/Trphenylene	1.07	0.840	0.897	0.977	0.949	0.945	0.970	0.907	0.924	1.080	1.055	0.954	89%	0.072	0.202	1.00	
27	Benzo(b)fluoranthene	1.07	0.866	0.969	1.012	1.030	0.963	0.972	0.875	0.858	0.791	0.827	0.916	86%	0.083	0.233	1.00	
28	Benzo(k)fluoranthene	1.07	0.835	0.915	0.970	0.955	0.989	1.054	0.957	0.986	1.051	1.065	0.978	92%	0.070	0.198	1.00	
29	Benzo(e)pyrene	1.07	0.876	0.937	0.977	1.051	1.014	0.997	0.914	0.935	0.900	0.947	0.955	90%	0.054	0.153	1.00	
30	Benzo(a)pyrene	1.07	0.835	0.905	0.950	0.942	0.924	0.937	0.916	0.957	1.139	1.154	0.966	91%	0.101	0.285	1.00	
31	Perylene	1.07	0.732	0.859	0.951	0.895	0.759	0.766	0.809	0.871	0.809	0.795	0.824	77%	0.068	0.193	1.00	
32	Indeno[1,2,3-cd]pyrene	1.07	0.891	1.071	0.982	0.981	0.972	0.935	0.926	0.892	0.757	0.790	0.920	86%	0.093	0.263	1.00	
33	Dibenz(a,h)anthracene	1.07	0.791	0.871	0.961	0.881	0.963	0.883	0.877	0.880	0.625	0.851	0.859	80%	0.096	0.270	1.00	
34	Benzo(g,h,i)perylene	1.07	0.830	0.935	1.008	1.092	0.943	0.923	0.881	0.883	0.815	0.819	0.913	86%	0.088	0.248	1.00	
35	Hopane (T19)	1.07	1.069	1.164	1.098	0.903	0.937	0.955	1.048	1.162	1.096	0.987	1.042	98%	0.092	0.261	1.00	
Surrogates																		
1	Naphthalene-d8	1,000.0	802.725	871.581	777.785	754.718	742.442	703.283	734.936	708.662	745.326	668.547	751.00	75%				
2	Phenanthrene-d10	1,000.0	914.404	992.828	916.696	913.783	1053.875	1032.16	935.66	930.812	1062.837	1011.04	976.41	98%				
3	Benzo(a)pyrene-d12	1,000.0	947.283	1028.6	963.571	956.926	1017.036	951.457	946.743	966.178	1096.963	1059.784	993.45	99%				
4	5B(H)Cholane	1,070	1.134	1.274	1.198	1.298	1.125	1.192	1.071	1.128	1.079	1.099	1.16	108%				

Comments:

Client-specific MDL

Semivolatile Sample Data

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1430198-01
 Client ID : GTP-07-3'
 Sample Location : BROOKLYN
 Sample Matrix : SOIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : A912191416
 Sample Amount : 12.31 g
 Extraction Method : ALPHA OP-013
 Extract Volume : 10000 uL
 GPC Cleanup : N

Lab Number : L1430198
 Project Number : 11176638
 Date Collected : 12/15/14 11:00
 Date Received : 12/16/14
 Date Analyzed : 12/22/14 23:32
 Date Extracted : 12/17/14
 Dilution Factor : 1
 Analyst : SR
 Instrument ID : PAH9
 GC Column : ZB-5
 %Solids : 56
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
91-20-3	Naphthalene	9280	87.3	25.1	
91-20-3C1	C1-Naphthalenes	20600	87.3	25.1	
91-20-3C2	C2-Naphthalenes	43200	87.3	25.1	
91-20-3C3	C3-Naphthalenes	54500	87.3	25.1	
91-20-3C4	C4-Naphthalenes	33700	87.3	25.1	
92-52-4	Biphenyl	3280	87.3	27.0	
132-64-9	Dibenzofuran	1170	87.3	27.5	
208-96-8	Acenaphthylene	601.	87.3	16.7	
83-32-9	Acenaphthene	1800	87.3	15.4	
86-73-7	Fluorene	3680	87.3	23.3	
86-73-7C1	C1-Fluorenes	10200	87.3	23.3	
86-73-7C2	C2-Fluorenes	24300	87.3	23.3	
86-73-7C3	C3-Fluorenes	21400	87.3	23.3	
132-65-0	Dibenzothiophene	857.	87.3	24.1	
132-65-0C1	C1-Dibenzothiophenes BS	3360	87.3	24.1	
132-65-0C2	C2-Dibenzothiophenes	6270	87.3	24.1	
132-65-0C3	C3-Dibenzothiophenes	5950	87.3	24.1	
132-65-0C4	C4-Dibenzothiophenes	3560	87.3	24.1	
85-01-8	Phenanthrene	10400	87.3	28.9	
PHENANTHC1	C1-Phenanthrenes/Anthracenes	23400	87.3	28.9	
PHENANTHC2	C2-Phenanthrenes/Anthr BS	26200	87.3	28.9	
PHENANTHC3	C3-Phenanthrenes/Anthracenes	15900	87.3	28.9	
PHENANTHC4	C4-Phenanthrenes/Anthracenes	6540	87.3	28.9	
120-12-7	Anthracene	1450	87.3	18.0	



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CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
86-74-8	Carbazole	654.	87.3	28.6	
206-44-0	Fluoranthene	4700	87.3	27.8	
243-17-4	Benzo(b)fluorene	894.	87.3	25.3	
129-00-0	Pyrene	6380	87.3	23.0	
FLUORPYRC1	C1-Fluoranthenes/Pyrenes	6120	87.3	23.0	
FLUORPYRC2	C2-Fluoranthenes/Pyrenes	4260	87.3	23.0	
FLUORPYRC3	C3-Fluoranthenes/Pyrenes	2920	87.3	23.0	
FLUORPYRC4	C4-Fluoranthenes/Pyrenes	2490	87.3	23.0	
61523-34-0	Naphthobenzothiophenes	721.	87.3	24.4	
NAPBENZOTHIOPC1	C1-Naphthobenzothiophenes	1320	87.3	24.4	
NAPBENZOTHIOPC2	C2-Naphthobenzothiophenes	2080	87.3	24.4	
NAPBENZOTHIOPC3	C3-Naphthobenzothiophenes	1910	87.3	24.4	
NAPBENZOTHIOPC4	C4-Naphthobenzothiophenes	2180	87.3	24.4	
56-55-3	Benz(a)anthracene	2260	87.3	17.8	
218-01-9/217-59-4	Chrysene/Triphenylene	3180	87.3	17.6	
218-01-9C1	C1-Chrysenes	2480	87.3	17.6	
218-01-9C2	C2-Chrysenes BS	2370	87.3	17.6	
218-01-9C3	C3-Chrysenes	2640	87.3	17.6	
218-01-9C4	C4-Chrysenes	1670	87.3	17.6	
205-99-2	Benzo(b)fluoranthene	2670	87.3	22.7	
205-82-3/207-08-9	Benzo(j)+(k)fluoranthene	2410	87.3	17.3	
203-33-8	Benzo(a)fluoranthene	551.	87.3	17.3	
192-97-2	Benzo(e)pyrene	2450	87.3	18.0	
50-32-8	Benzo(a)pyrene	2540	87.3	24.9	



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 Analyst : SR
 Instrument ID : PAH9
 GC Column : ZB-5
 %Solids : 56
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
198-55-0	Perylene	750.	87.3	16.8	
193-39-5	Indeno(1,2,3-cd)pyrene	2210	87.3	23.7	
215-58-7/53-70-3	Dibenz(a,h)+(a,c)anthracene	572.	87.3	23.6	
191-24-2	Benzo(g,h,i)perylene	2850	87.3	23.2	
NONE	Hopane (T19)	31000	87.3	24.8	
NONE	C23 Tricyclic Terpane (T4)	5640	87.3	24.8	
NONE	C24 Tricyclic Terpane (T5)	3090	87.3	24.8	
NONE	C25 Tricyclic Terpane (T6)	3320	87.3	24.8	
NONE	C24 Tetracyclic Terpane (T6a)	3820	87.3	24.8	
NONE	C26 Tricyclic Terpane-22S (T6b)	1440	87.3	24.8	
NONE	C26 Tricyclic Terpane-22R (T6c)	1420	87.3	24.8	
NONE	C28 Tricyclic Terpane-22S (T7)	1840	87.3	24.8	
NONE	C28 Tricyclic Terpane-22R (T8)	2020	87.3	24.8	
NONE	C29 Tricyclic Terpane-22S (T9)	1920	87.3	24.8	
NONE	C29 Tricyclic Terpane-22R (T10)	2220	87.3	24.8	
NONE	18a-22,29,30-Trisnorhopane-TS (T11)	8130	87.3	24.8	
NONE	C30 Tricyclic Terpane-22S	1880	87.3	24.8	
NONE	C30 Tricyclic Terpane-22R	1560	87.3	24.8	
53584-59-1	17a(H)-22,29,30-Trisnorhopane-TM (T12)	7980	87.3	24.8	
NONE	17a/b,21b/a 28,30-Bisnorhopane (T14a)	1910	87.3	24.8	
NONE	17a(H),21b(H)-25-Norhopane (T14b)	918.	87.3	24.8	
NONE	30-Norhopane (T15)	27600	87.3	24.8	
NONE	18a(H)-30-Norneohopane-C29Ts (T16)	6630	87.3	24.8	
NONE	17a(H)-Diahopane (X)	1600	87.3	24.8	

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CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
NONE	30-Normoretane (T17)	3120	87.3	24.8	
NONE	18a(H)&18b(H)-Oleananes (T18)	1640	87.3	24.8	
1176-44-9	Moretane (T20)	3260	87.3	24.8	
NONE	30-Homohopane-22S (T21)	13700	87.3	24.8	
NONE	30-Homohopane-22R (T22)	11400	87.3	24.8	
NONE	Gammacerane/C32-Diahopane	3000	87.3	24.8	
NONE	30,31-Bishomohopane-22S (T26)	8450	87.3	24.8	
NONE	30,31-Bishomohopane-22R (T27)	5940	87.3	24.8	
NONE	30,31-Trishomohopane-22S (T30)	5240	87.3	24.8	
NONE	30,31-Trishomohopane-22R (T31)	3410	87.3	24.8	
NONE	Tetrakishomohopane-22S (T32)	3300	87.3	24.8	
NONE	Tetrakishomohopane-22R (T33)	2090	87.3	24.8	
NONE	Pentakishomohopane-22S (T34)	2860	87.3	24.8	
NONE	Pentakishomohopane-22R (T35)	2040	87.3	24.8	
NONE	13b(H),17a(H)-20S-Diacholestane (S4)	6470	87.3	19.4	
82079-08-1	13b(H),17a(H)-20R-Diacholestane (S5)	3430	87.3	19.4	
NONE	13b,17a-20S-Methyldiacholestane (S8)	3470	87.3	19.4	
NONE	17a(H)20SC27/C29dia	10300	87.3	19.4	
NONE	17a(H)20RC27/C29dia	11100	87.3	19.4	
NONE	Unknown Sterane (S18)	2490	87.3	19.4	
NONE	13a,17b-20S-Ethyldiacholestane (S19)	575.	87.3	19.4	
NONE	14a,17a-20S-Methylcholestane (S20)	4880	87.3	19.4	
NONE	14a,17a-20R-Methylcholestane (S24)	4230	87.3	19.4	
NONE	14a(H),17a(H)-20S-Ethylcholestane (S25)	5700	87.3	19.4	

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 Analyst : SR
 Instrument ID : PAH9
 GC Column : ZB-5
 %Solids : 56
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
NONE	14a(H),17a(H)-20R-Ethylcholestane (S28)	5910	87.3	19.4	
NONE	14b(H),17b(H)-20R-Cholestane (S14)	7320	87.3	19.4	
NONE	14b(H),17b(H)-20S-Cholestane (S15)	7220	87.3	19.4	
NONE	14b,17b-20R-Methylcholestane (S22)	5900	87.3	19.4	
NONE	14b,17b-20S-Methylcholestane (S23)	7930	87.3	19.4	
NONE	14b(H),17b(H)-20R-Ethylcholestane (S26)	11600	87.3	19.4	
NONE	14b(H),17b(H)-20S-Ethylcholestane (S27)	7240	87.3	19.4	
NONE	C26,20R- +C27,20S- Triaromatic Steroid	4860	87.3	19.4	
NONE	C28,20S-Triaromatic Steroid	4780	87.3	19.4	
NONE	C27,20R-Triaromatic Steroid	3880	87.3	19.4	
NONE	C28,20R-Triaromatic Steroid	2860	87.3	19.4	

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : WG749631-1
 Client ID : WG749631-1BLANK
 Sample Location :
 Sample Matrix : SOIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : A912191406
 Sample Amount : 30 g
 Extraction Method : ALPHA OP-013
 Extract Volume : 4000 uL
 GPC Cleanup : N

Lab Number : L1430198
 Project Number : 11176638
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 12/19/14 20:55
 Date Extracted : 12/17/14
 Dilution Factor : 1
 Analyst : SR
 Instrument ID : PAH9
 GC Column : ZB-5
 %Solids : NA
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
91-20-3	Naphthalene	ND	1.00	0.287	U
91-20-3C1	C1-Naphthalenes	ND	1.00	0.287	U
91-20-3C2	C2-Naphthalenes	ND	1.00	0.287	U
91-20-3C3	C3-Naphthalenes	ND	1.00	0.287	U
91-20-3C4	C4-Naphthalenes	ND	1.00	0.287	U
92-52-4	Biphenyl	ND	1.00	0.309	U
132-64-9	Dibenzofuran	ND	1.00	0.315	U
208-96-8	Acenaphthylene	ND	1.00	0.191	U
83-32-9	Acenaphthene	ND	1.00	0.176	U
86-73-7	Fluorene	ND	1.00	0.267	U
86-73-7C1	C1-Fluorenes	ND	1.00	0.267	U
86-73-7C2	C2-Fluorenes	ND	1.00	0.267	U
86-73-7C3	C3-Fluorenes	ND	1.00	0.267	U
132-65-0	Dibenzothiophene	ND	1.00	0.276	U
132-65-0C1	C1-Dibenzothiophenes BS	ND	1.00	0.276	U
132-65-0C2	C2-Dibenzothiophenes	ND	1.00	0.276	U
132-65-0C3	C3-Dibenzothiophenes	ND	1.00	0.276	U
132-65-0C4	C4-Dibenzothiophenes	ND	1.00	0.276	U
85-01-8	Phenanthrene	ND	1.00	0.331	U
PHENANTHC1	C1-Phenanthrenes/Anthracenes	ND	1.00	0.331	U
PHENANTHC2	C2-Phenanthrenes/Anthr BS	ND	1.00	0.331	U
PHENANTHC3	C3-Phenanthrenes/Anthracenes	ND	1.00	0.331	U
PHENANTHC4	C4-Phenanthrenes/Anthracenes	ND	1.00	0.331	U
120-12-7	Anthracene	ND	1.00	0.206	U



Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : WG749631-1
 Client ID : WG749631-1BLANK
 Sample Location :
 Sample Matrix : SOIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : A912191406
 Sample Amount : 30 g
 Extraction Method : ALPHA OP-013
 Extract Volume : 4000 uL
 GPC Cleanup : N

Lab Number : L1430198
 Project Number : 11176638
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 12/19/14 20:55
 Date Extracted : 12/17/14
 Dilution Factor : 1
 Analyst : SR
 Instrument ID : PAH9
 GC Column : ZB-5
 %Solids : NA
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
86-74-8	Carbazole	ND	1.00	0.327	U
206-44-0	Fluoranthene	ND	1.00	0.318	U
243-17-4	Benzo(b)fluorene	ND	1.00	0.290	U
129-00-0	Pyrene	ND	1.00	0.263	U
FLUORPYRC1	C1-Fluoranthenes/Pyrenes	ND	1.00	0.263	U
FLUORPYRC2	C2-Fluoranthenes/Pyrenes	ND	1.00	0.263	U
FLUORPYRC3	C3-Fluoranthenes/Pyrenes	ND	1.00	0.263	U
FLUORPYRC4	C4-Fluoranthenes/Pyrenes	ND	1.00	0.263	U
61523-34-0	Naphthobenzothiophenes	ND	1.00	0.280	U
NAPBENZOTHIOPC1	C1-Naphthobenzothiophenes	ND	1.00	0.280	U
NAPBENZOTHIOPC2	C2-Naphthobenzothiophenes	ND	1.00	0.280	U
NAPBENZOTHIOPC3	C3-Naphthobenzothiophenes	ND	1.00	0.280	U
NAPBENZOTHIOPC4	C4-Naphthobenzothiophenes	ND	1.00	0.280	U
56-55-3	Benz(a)anthracene	ND	1.00	0.204	U
218-01-9/217-59-4	Chrysene/Triphenylene	0.215	1.00	0.202	J
218-01-9C1	C1-Chrysenes	ND	1.00	0.202	U
218-01-9C2	C2-Chrysenes BS	ND	1.00	0.202	U
218-01-9C3	C3-Chrysenes	ND	1.00	0.202	U
218-01-9C4	C4-Chrysenes	ND	1.00	0.202	U
205-99-2	Benzo(b)fluoranthene	ND	1.00	0.260	U
205-82-3/207-08-9	Benzo(j)+(k)fluoranthene	ND	1.00	0.198	U
203-33-8	Benzo(a)fluoranthene	ND	1.00	0.198	U
192-97-2	Benzo(e)pyrene	ND	1.00	0.206	U
50-32-8	Benzo(a)pyrene	ND	1.00	0.285	U



Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : WG749631-1
 Client ID : WG749631-1BLANK
 Sample Location :
 Sample Matrix : SOIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : A912191406
 Sample Amount : 30 g
 Extraction Method : ALPHA OP-013
 Extract Volume : 4000 uL
 GPC Cleanup : N

Lab Number : L1430198
 Project Number : 11176638
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 12/19/14 20:55
 Date Extracted : 12/17/14
 Dilution Factor : 1
 Analyst : SR
 Instrument ID : PAH9
 GC Column : ZB-5
 %Solids : NA
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
198-55-0	Perylene	ND	1.00	0.193	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.00	0.271	U
215-58-7/53-70-3	Dibenz(a,h)+(a,c)anthracene	ND	1.00	0.270	U
191-24-2	Benzo(g,h,i)perylene	ND	1.00	0.266	U
NONE	Hopane (T19)	ND	1.00	0.285	U
NONE	C23 Tricyclic Terpane (T4)	ND	1.00	0.285	U
NONE	C24 Tricyclic Terpane (T5)	ND	1.00	0.285	U
NONE	C25 Tricyclic Terpane (T6)	ND	1.00	0.285	U
NONE	C24 Tetracyclic Terpane (T6a)	ND	1.00	0.285	U
NONE	C26 Tricyclic Terpane-22S (T6b)	ND	1.00	0.285	U
NONE	C26 Tricyclic Terpane-22R (T6c)	ND	1.00	0.285	U
NONE	C28 Tricyclic Terpane-22S (T7)	ND	1.00	0.285	U
NONE	C28 Tricyclic Terpane-22R (T8)	ND	1.00	0.285	U
NONE	C29 Tricyclic Terpane-22S (T9)	ND	1.00	0.285	U
NONE	C29 Tricyclic Terpane-22R (T10)	ND	1.00	0.285	U
NONE	18a-22,29,30-Trisnorhopane-TS (T11)	ND	1.00	0.285	U
NONE	C30 Tricyclic Terpane-22S	ND	1.00	0.285	U
NONE	C30 Tricyclic Terpane-22R	ND	1.00	0.285	U
53584-59-1	17a(H)-22,29,30-Trisnorhopane-TM (T12)	ND	1.00	0.285	U
NONE	17a/b,21b/a 28,30-Bisnorhopane (T14a)	ND	1.00	0.285	U
NONE	17a(H),21b(H)-25-Norhopane (T14b)	ND	1.00	0.285	U
NONE	30-Norhopane (T15)	ND	1.00	0.285	U
NONE	18a(H)-30-Norneohopane-C29Ts (T16)	ND	1.00	0.285	U
NONE	17a(H)-Diahopane (X)	ND	1.00	0.285	U



Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : WG749631-1
 Client ID : WG749631-1BLANK
 Sample Location :
 Sample Matrix : SOIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : A912191406
 Sample Amount : 30 g
 Extraction Method : ALPHA OP-013
 Extract Volume : 4000 uL
 GPC Cleanup : N

Lab Number : L1430198
 Project Number : 11176638
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 12/19/14 20:55
 Date Extracted : 12/17/14
 Dilution Factor : 1
 Analyst : SR
 Instrument ID : PAH9
 GC Column : ZB-5
 %Solids : NA
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
NONE	30-Normoretane (T17)	ND	1.00	0.285	U
NONE	18a(H)&18b(H)-Oleananes (T18)	ND	1.00	0.285	U
1176-44-9	Moretane (T20)	ND	1.00	0.285	U
NONE	30-Homohopane-22S (T21)	ND	1.00	0.285	U
NONE	30-Homohopane-22R (T22)	ND	1.00	0.285	U
NONE	Gammacerane/C32-Diahopane	ND	1.00	0.285	U
NONE	30,31-Bishomohopane-22S (T26)	ND	1.00	0.285	U
NONE	30,31-Bishomohopane-22R (T27)	ND	1.00	0.285	U
NONE	30,31-Trishomohopane-22S (T30)	ND	1.00	0.285	U
NONE	30,31-Trishomohopane-22R (T31)	ND	1.00	0.285	U
NONE	Tetrakishomohopane-22S (T32)	ND	1.00	0.285	U
NONE	Tetrakishomohopane-22R (T33)	ND	1.00	0.285	U
NONE	Pentakishomohopane-22S (T34)	ND	1.00	0.285	U
NONE	Pentakishomohopane-22R (T35)	ND	1.00	0.285	U
NONE	13b(H),17a(H)-20S-Diacholestane (S4)	ND	1.00	0.222	U
82079-08-1	13b(H),17a(H)-20R-Diacholestane (S5)	ND	1.00	0.222	U
NONE	13b,17a-20S-Methyldiacholestane (S8)	ND	1.00	0.222	U
NONE	17a(H)20SC27/C29dia	ND	1.00	0.222	U
NONE	17a(H)20RC27/C29dia	ND	1.00	0.222	U
NONE	Unknown Sterane (S18)	ND	1.00	0.222	U
NONE	13a,17b-20S-Ethylidiacholestane (S19)	ND	1.00	0.222	U
NONE	14a,17a-20S-Methylcholestane (S20)	ND	1.00	0.222	U
NONE	14a,17a-20R-Methylcholestane (S24)	ND	1.00	0.222	U
NONE	14a(H),17a(H)-20S-Ethylcholestane (S25)	ND	1.00	0.222	U



Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : WG749631-1
 Client ID : WG749631-1BLANK
 Sample Location :
 Sample Matrix : SOIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : A912191406
 Sample Amount : 30 g
 Extraction Method : ALPHA OP-013
 Extract Volume : 4000 uL
 GPC Cleanup : N

Lab Number : L1430198
 Project Number : 11176638
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 12/19/14 20:55
 Date Extracted : 12/17/14
 Dilution Factor : 1
 Analyst : SR
 Instrument ID : PAH9
 GC Column : ZB-5
 %Solids : NA
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
NONE	14a(H),17a(H)-20R-Ethylcholestane (S28)	ND	1.00	0.222	U
NONE	14b(H),17b(H)-20R-Cholestane (S14)	ND	1.00	0.222	U
NONE	14b(H),17b(H)-20S-Cholestane (S15)	ND	1.00	0.222	U
NONE	14b,17b-20R-Methylcholestane (S22)	ND	1.00	0.222	U
NONE	14b,17b-20S-Methylcholestane (S23)	ND	1.00	0.222	U
NONE	14b(H),17b(H)-20R-Ethylcholestane (S26)	ND	1.00	0.222	U
NONE	14b(H),17b(H)-20S-Ethylcholestane (S27)	ND	1.00	0.222	U
NONE	C26,20R- +C27,20S- Triaromatic Steroid	0.738	1.00	0.222	J
NONE	C28,20S-Triaromatic Steroid	ND	1.00	0.222	U
NONE	C27,20R-Triaromatic Steroid	0.484	1.00	0.222	J
NONE	C28,20R-Triaromatic Steroid	0.227	1.00	0.222	J

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191416.D
 Acq On : 22 Dec 2014 11:32 pm
 Operator : PAH9:SR
 Sample : l1430198-01,32
 Misc : WG754959,WG749631,ICAL10505
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 12 09:21:33 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.031	164	85393M4	500.000	ng/mL	0.00
74) Chrysene-d12	43.470	240	149225	500.000	ng/mL	0.04
System Monitoring Compounds						
9) Naphthalene-d8	20.069	136	36607M4	94.681	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	9.47%#		
42) Phenanthrene-d10	32.889	188	31168	106.343	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	10.63%#		
83) Benzo[b]fluoranthene-d12	47.381	264	37840	122.572	ng/mL	0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery =	12.26%#		
88) Benzo[a]pyrene-d12	48.588	264	35212M4	124.287	ng/mL	0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery =	12.43%#		
129) 5B(H)Cholane - Surr	44.091	217	6082M3	129.041	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	12.90%#		
Target Compounds						
					Qvalue	
10) Naphthalene	20.142	128	753490M4	1594.148	ng/mL	
11) C1-Naphthalenes	22.834	142	1672783M5	3539.084	ng/mL	
12) C2-Naphthalenes	25.672	156	3505775M5	7417.119	ng/mL	
13) C3-Naphthalenes	28.008	170	4420402M5	9352.183	ng/mL	
14) C4-Naphthalenes	30.763	184	2738329M5	5793.444	ng/mL	
23) Biphenyl	24.714	154	177981	562.757	ng/mL	100
25) Dibenzofuran	27.798	168	66615	200.635	ng/mL#	67
26) Acenaphthylene	26.420	152	40490	103.174	ng/mL	100
27) Acenaphthene	27.159	153	73178M4	309.283	ng/mL	
29) Fluorene	29.167	166	168152M4	632.081	ng/mL	
30) C1-Fluorenes	31.530	180	466725M5	1754.414	ng/mL	
31) C2-Fluorenes	33.573	194	1111524M5	4178.205	ng/mL	
32) C3-Fluorenes	35.545	208	976578M5	3670.945	ng/mL	
33) Dibenzothiophene	32.488	184	57474	147.111	ng/mL#	1
38) C1-Dibenzothiophenes	34.258	198	225612M5	577.480	ng/mL	
38) C1-Dibenzothiophenes BS	34.258	198	225612M5	577.480	ng/mL	
39) C2-Dibenzothiophenes	35.937	212	420462M5	1076.221	ng/mL	
40) C3-Dibenzothiophenes	37.736	226	398970M5	1021.209	ng/mL	
41) C4-Dibenzothiophenes	39.416	240	238844M5	611.349	ng/mL	
43) Phenanthrene	32.980	178	660185	1778.408	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191416.D
 Acq On : 22 Dec 2014 11:32 pm
 Operator : PAH9:SR
 Sample : l1430198-01,32
 Misc : WG754959,WG749631,ICAL10505
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 12 09:21:33 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49)	C1-Phenanthrenes/Anthrace	35.052	192	1490475M5	4015.046	ng/mL	
50)	C2-Phenanthrenes/Anthrace	37.206	206	1670587M5	4500.232	ng/mL	
50)	C2-Phenanthrenes/Anthr BS	37.206	206	1670587M5	4500.232	ng/mL	
52)	C3-Phenanthrenes/Anthrace	39.032	220	1016077M5	2737.111	ng/mL	
53)	C4-Phenanthrenes/Anthrace	41.233	234	417064M5	1123.488	ng/mL	
55)	Anthracene	33.172	178	85531M4	249.484	ng/mL	
56)	Carbazole	33.820	167	37055	112.311	ng/mL#	72
58)	Fluoranthene	37.754	202	304017	806.633	ng/mL	96
59)	Benzo(b)fluorene	40.265	216	34969M3	153.606	ng/mL	
60)	Pyrene	38.631	202	439013	1095.017	ng/mL	95
61)	C1-Fluoranthenes/Pyrenes	40.429	216	421574M5	1051.519	ng/mL	
62)	C2-Fluoranthenes/Pyrenes	42.484	230	293511M5	732.096	ng/mL	
63)	C3-Fluoranthenes/Pyrenes	43.944	244	201337M5	502.189	ng/mL	
64)	C4-Fluoranthenes/Pyrenes	45.716	258	171472M5	427.697	ng/mL	
66)	Naphthobenzothiophene	42.484	234	33262	83.184	ng/mL#	42
70)	C1-Naphthobenzothiophenes	43.880	248	90647M5	226.696	ng/mL	
71)	C2-Naphthobenzothiophenes	45.881	262	142881M5	357.327	ng/mL	
72)	C3-Naphthobenzothiophenes	47.491	276	131025M5	327.676	ng/mL	
73)	C4-Naphthobenzothiophenes	48.579	290	149446M5	373.745	ng/mL	
75)	Benz[a]anthracene	43.406	228	128312M4	388.070	ng/mL	
77)	Chrysene/Triphenylene	43.561	228	178497	546.045	ng/mL	99
78)	C1-Chrysenes	45.040	242	139519M5	426.807	ng/mL	
79)	C2-Chrysenes	46.466	256	133228M5	407.562	ng/mL	
79)	C2-Chrysenes BS	46.466	256	133228M5	407.562	ng/mL	
81)	C3-Chrysenes	48.350	270	148448M5	454.122	ng/mL	
82)	C4-Chrysenes	49.960	284	93615M5	286.380	ng/mL	
84)	Benzo[b]fluoranthene	47.463	252	179544	459.043	ng/mL	95
85)	Benzo[j]+[k]fluoranthene	47.536	252	154786	413.206	ng/mL	96
86)	Benzo[a]fluoranthene	47.856	252	35450M3	94.635	ng/mL	
87)	Benzo[e]pyrene	48.488	252	157770	421.184	ng/mL	99
89)	Benzo[a]pyrene	48.680	252	160298M4	436.677	ng/mL	
90)	Perylene	49.000	252	47729	128.816	ng/mL	90
91)	Indeno[1,2,3-cd]pyrene	53.591	276	172857M4	379.611	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.627	278	44137M3	98.215	ng/mL	
93)	Benzo[g,h,i]perylene	54.925	276	216473	489.393	ng/mL	99
94)	Hopane (T19)	52.676	191	486757M3	5323.653	ng/mL	
100)	C26 Tricyclic Terpane-22S	44.374	191	22645M4	247.668	ng/mL	
101)	C26 Tricyclic Terpane-22R	44.465	191	22237M4	243.206	ng/mL	
102)	C28 Tricyclic Terpane-22S	46.750	191	28882	315.882	ng/mL	100
103)	C28 Tricyclic Terpane-22R	46.914	191	31796M4	347.752	ng/mL	
104)	C29 Tricyclic Terpane-22S	47.436	191	30112	329.334	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191416.D
 Acq On : 22 Dec 2014 11:32 pm
 Operator : PAH9:SR
 Sample : l1430198-01,32
 Misc : WG754959,WG749631,ICAL10505
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 12 09:21:33 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105)	C29 Tricyclic Terpane-22R	47.637	191	34944M4	382.182	ng/ml	
106)	18a-22,29,30-Trisnorneocho	48.808	191	127632M6	1395.909	ng/ml	
107)	C30 Tricyclic Terpane-22S	48.881	191	29510M4	322.750	ng/mL	
108)	C30 Tricyclic Terpane-22R	49.128	191	24427M4	267.158	ng/mL	
109)	17a(H)-22,29,30-Trisnorho	49.375	191	125227	1369.606	ng/ml	100
110)	17a/b,21b/a 28,30-Bisnorh	50.582	191	30037M4	328.514	ng/ml	
111)	17a(H),21b(H)-25-Norhopan	50.353	191	14421	157.722	ng/ml	100
112)	30-Norhopane (T15)	51.277	191	432728M4	4732.739	ng/ml	
113)	18a(H)-30-Norneohopane-C2	51.378	191	104088M4	1138.409	ng/ml	
114)	17a(H)-Diahopane (X)	51.506	191	25180M4	275.393	ng/ml	
115)	30-Normoretane (T17)	52.073	191	49023	536.164	ng/ml	100
116)	18a(H)&18b(H)-Oleananes (	52.484	191	25707	281.157	ng/ml	100
117)	Moretane (T20)	53.381	191	51246M4	560.477	ng/ml	
118)	30-Homohopane-22S (T21)	54.505	191	215382M4	2355.629	ng/ml	
119)	30-Homohopane-22R (T22)	54.742	191	178958	1957.261	ng/ml	100
120)	Gammacerane/C32-diahopane	55.318	191	47027M4	514.334	ng/mL	
121)	30,31-Bishomohopane-22S (	56.104	191	132733	1451.699	ng/ml	100
122)	30,31-Bishomohopane-22R (	56.497	191	93309M4	1020.519	ng/ml	
123)	30,31-Trishomohopane-22S	58.278	191	82234M4	899.392	ng/ml	
124)	30,31-Trishomohopane-22R	58.909	191	53498	585.107	ng/ml	100
125)	Tetrakishomohopane-22S (T	60.974	191	51862	567.214	ng/ml	100
126)	Tetrakishomohopane-22R (T	61.897	191	32878	359.586	ng/ml	100
127)	Pentakishomohopane-22S (T	64.191	191	44916	491.246	ng/ml	100
128)	Pentakishomohopane-22R (T	65.516	191	32119	351.285	ng/ml	100
130)	13b(H),17a(H)-20S-Diachol	45.588	217	52379	1111.316	ng/ml	100
131)	13b(H),17a(H)-20R-Diachol	46.009	217	27751	588.788	ng/ml	100
132)	13b,17a-20S-Methyldiachol	46.704	217	28054M6	595.217	ng/ml	
133)	14a,17a-20S-Chol/13b,17a-	47.582	217	83069	1762.460	ng/ml	100
134)	14a,17a-20R-Chol/13b,17a-	48.113	217	89975M4	1908.983	ng/ml	
135)	Unknown Sterane (S18)	48.396	217	20135	427.201	ng/ml	100
136)	13a,17b-20S-Ethyldiachole	48.661	217	4654	98.743	ng/ml	100
137)	14a,17a-20S-Methylcholest	48.826	217	39533	838.765	ng/ml	100
138)	14a,17a-20R-Methylcholest	49.558	217	34262M4	726.931	ng/ml	
139)	14a(H),17a(H)-20S-Ethylch	49.914	217	46170M4	979.581	ng/ml	
140)	14a(H),17a(H)-20R-Ethylch	50.856	217	47867M4	1015.586	ng/ml	
141)	14b(H),17b(H)-20R-Cholest	47.683	218	59227M4	1256.609	ng/ml	
142)	14b(H),17b(H)-20S-Cholest	47.765	218	58484M4	1240.845	ng/ml	
143)	14b,17b-20R-Methylcholest	49.009	218	47733M4	1012.742	ng/ml	
144)	14b,17b-20S-Methylcholest	49.091	218	64187M4	1361.844	ng/ml	
145)	14b(H),17b(H)-20R-Ethylch	50.180	218	94373M3	2002.295	ng/ml	
146)	14b(H),17b(H)-20S-Ethylch	50.216	218	58646M3	1244.282	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191416.D
 Acq On : 22 Dec 2014 11:32 pm
 Operator : PAH9:SR
 Sample : l1430198-01,32
 Misc : WG754959,WG749631,ICAL10505
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 12 09:21:33 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
147)	C26,20R- +C27,20S- triaro	49.869	231	39320	834.245	ng/mL	100
148)	C28,20S-triaromatic stero	50.756	231	38690	820.879	ng/mL	100
149)	C27,20R-triaromatic stero	51.213	231	31388	665.954	ng/mL	100
150)	C28,20R-triaromatic stero	52.439	231	23181	491.827	ng/mL	100

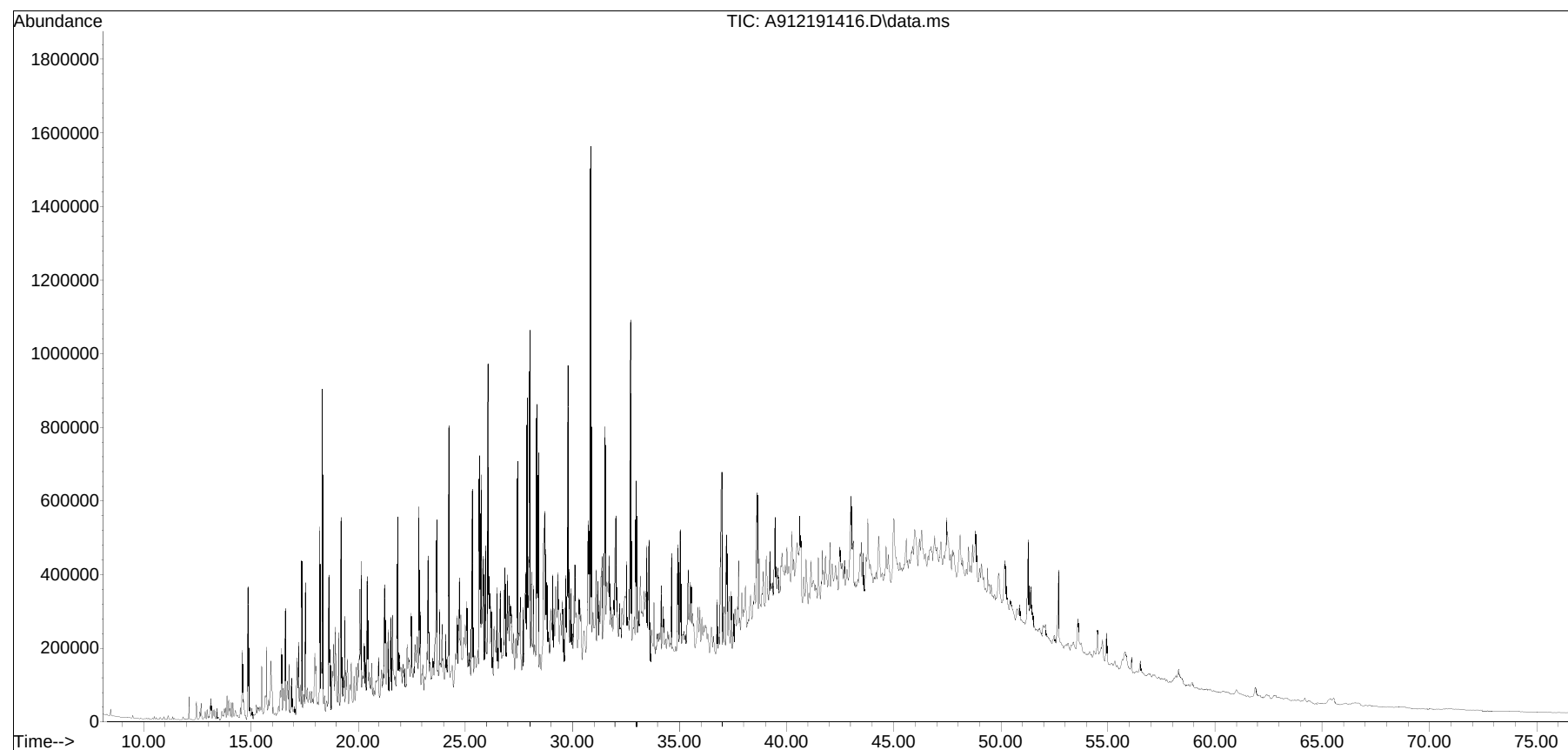
(#) = qualifier out of range (m) = manual integration (+) = signals summed

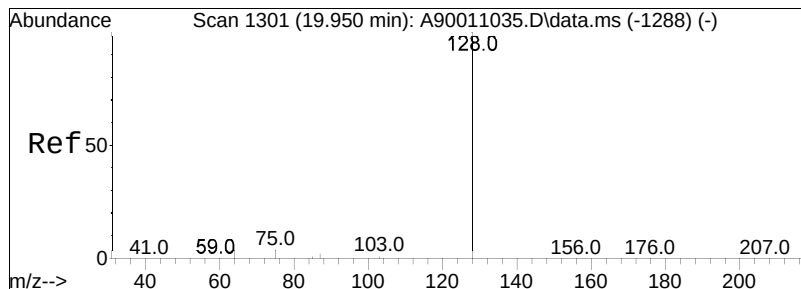
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC19\
Data File : A912191416.D
Acq On : 22 Dec 2014 11:32 pm
Operator : PAH9:SR
Sample : l1430198-01,32
Misc : WG754959,WG749631,ICAL10505
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 12 09:21:33 2015
Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 15 13:02:08 2014
Response via : Initial Calibration

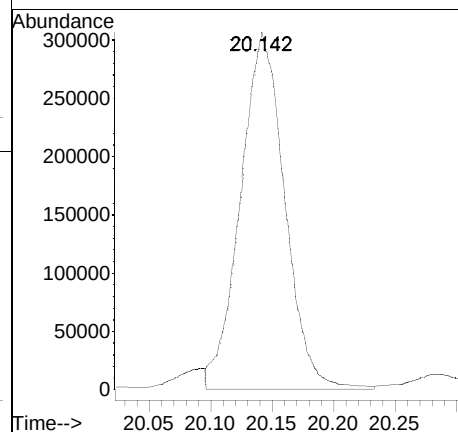
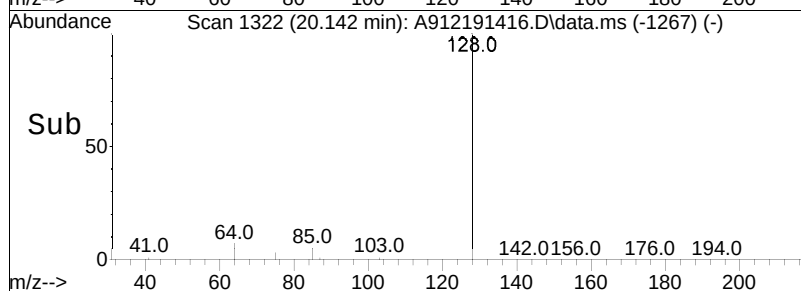
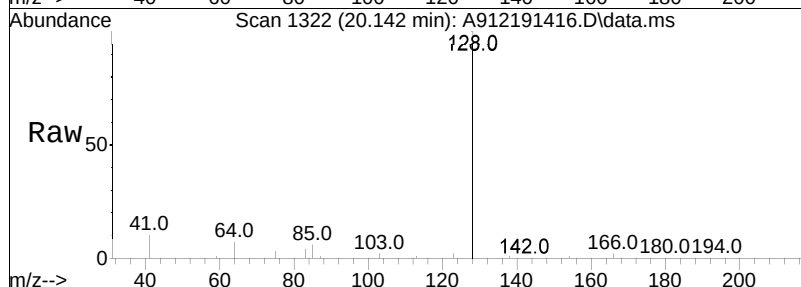
Sub List : ALKPAHURS - ALKPAH and BIO

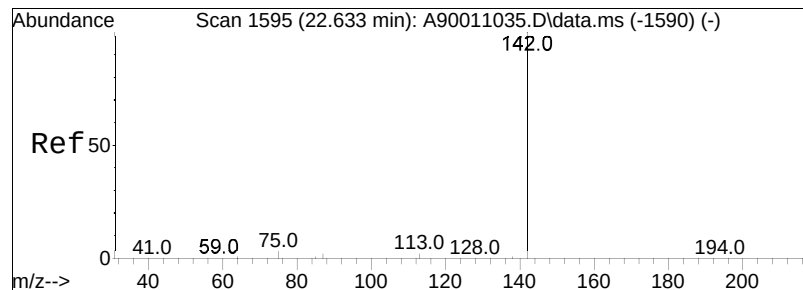




#10
Naphthalene
Concen: 1594.15 ng/mL M4
RT: 20.142 min Scan# 1322
Delta R.T. -0.000 min
Lab File: A912191416.D
Acq: 22 Dec 2014 11:32 pm

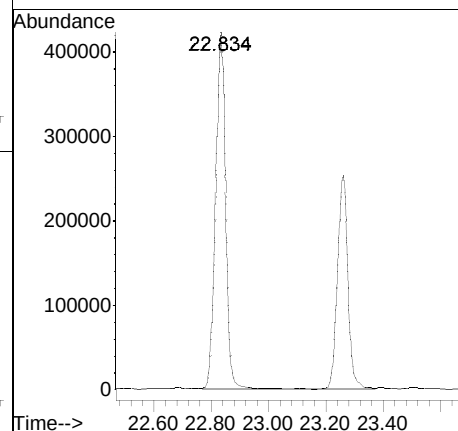
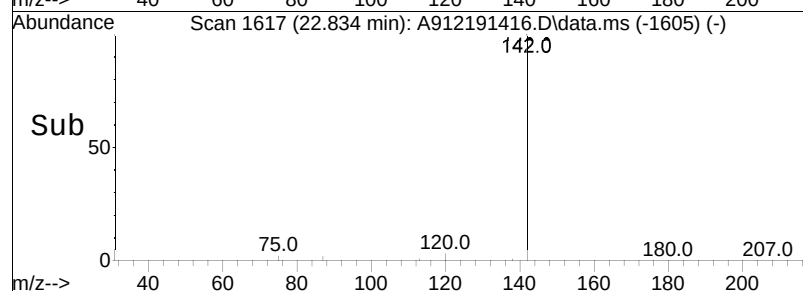
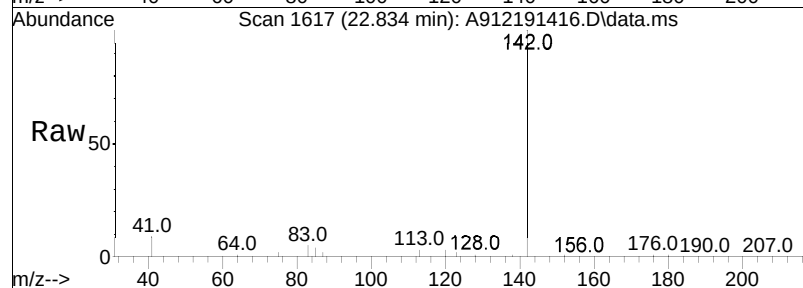
Tgt Ion:128 Resp: 753490

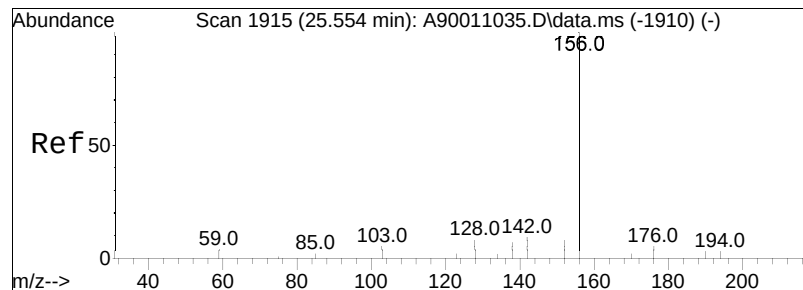




#11
 C1-Naphthalenes
 Concen: 3539.08 ng/mL M5
 RT: 22.834 min Scan# 1617
 Delta R.T. -0.000 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

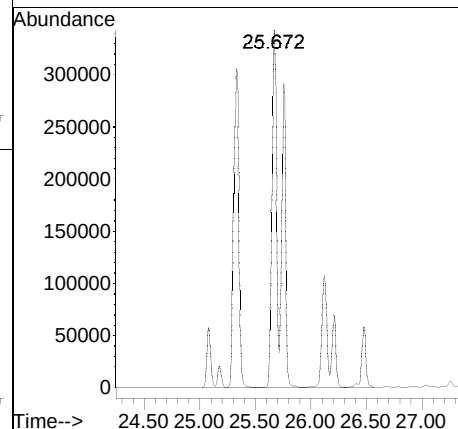
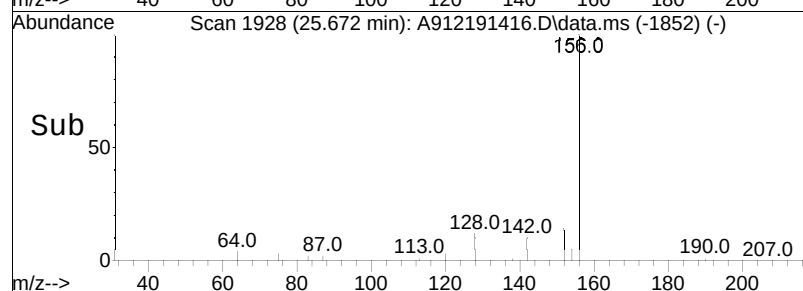
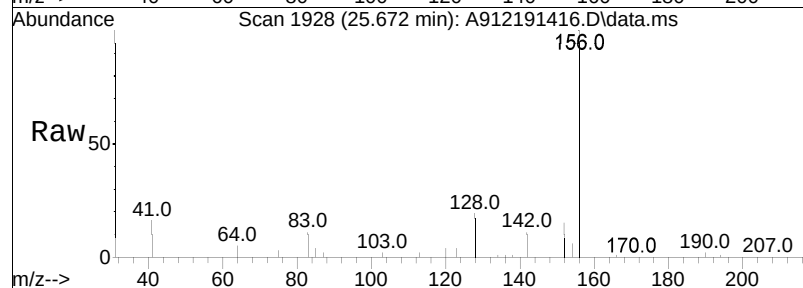
Tgt Ion:142 Resp: 1672783

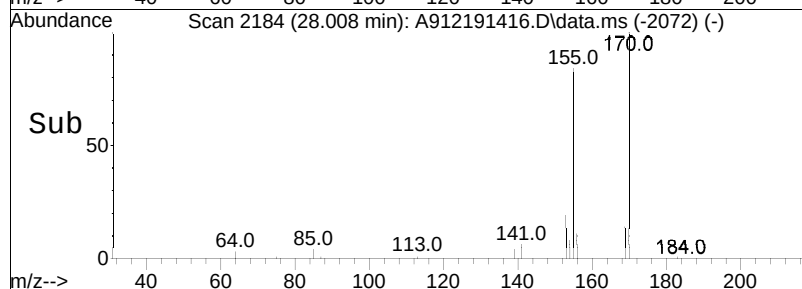
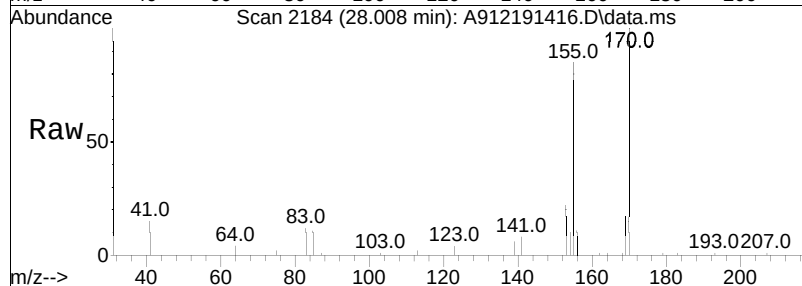
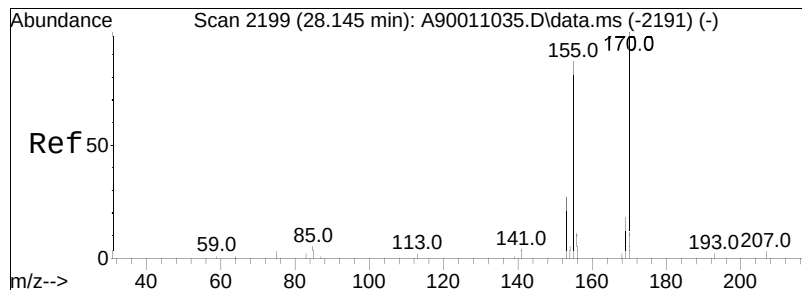




#12
 C2-Naphthalenes
 Concen: 7417.12 ng/mL M5
 RT: 25.672 min Scan# 1928
 Delta R.T. -0.000 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

Tgt Ion:156 Resp: 3505775





#13

C3-Naphthalenes

Concen: 9352.18 ng/mL M5

RT: 28.008 min Scan# 2184

Delta R.T. -0.000 min

Lab File: A912191416.D

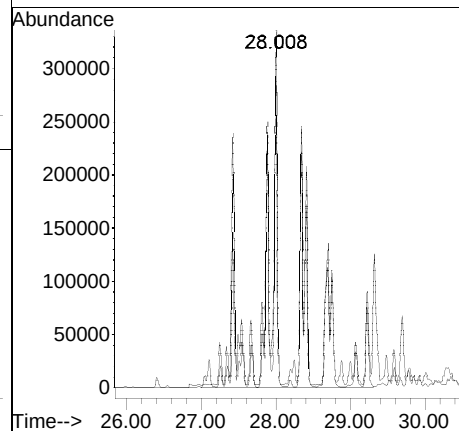
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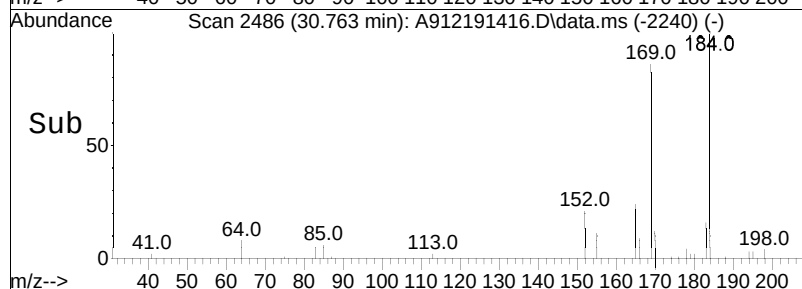
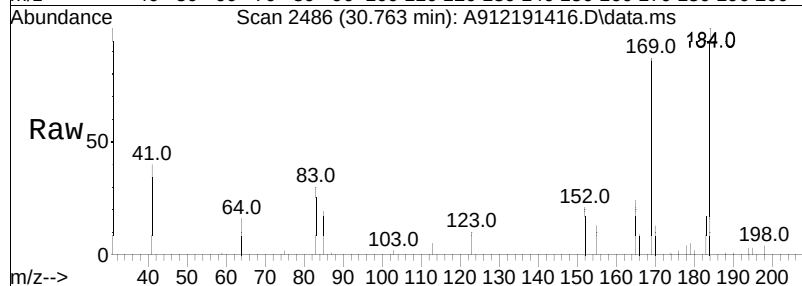
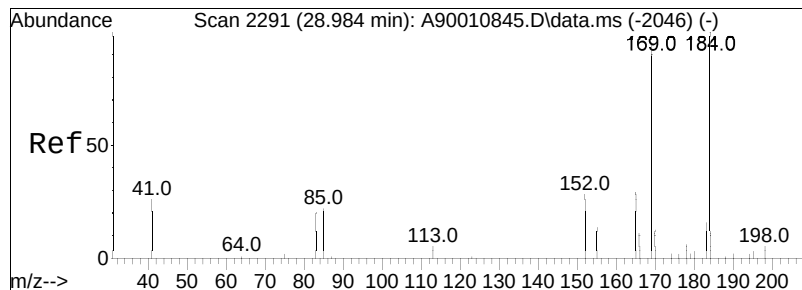
Tgt Ion:170 Resp: 4420402

Ion Ratio Lower Upper

170 100

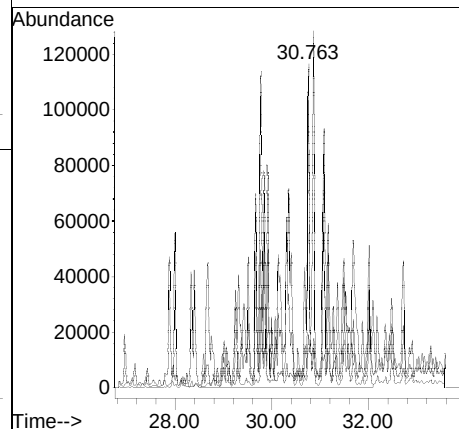
155 16.7 57.2 106.2#

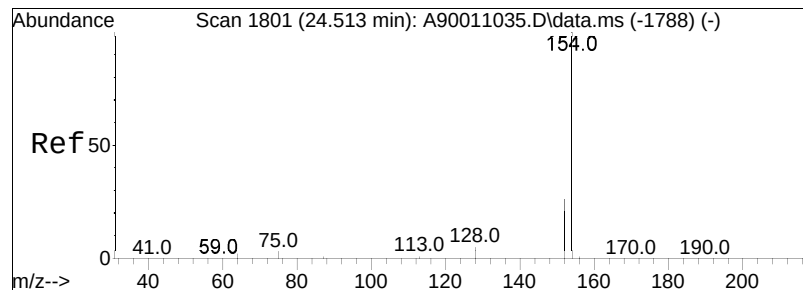




#14
 C4-Naphthalenes
 Concen: 5793.44 ng/mL M5
 RT: 30.763 min Scan# 2486
 Delta R.T. -0.000 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

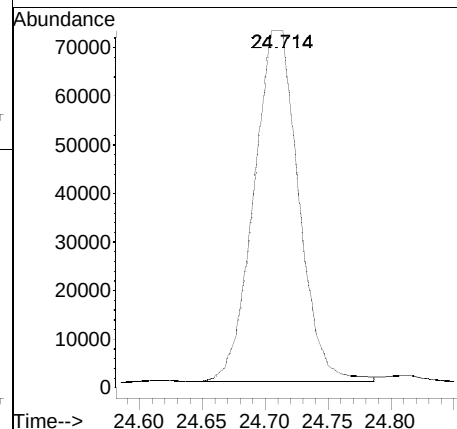
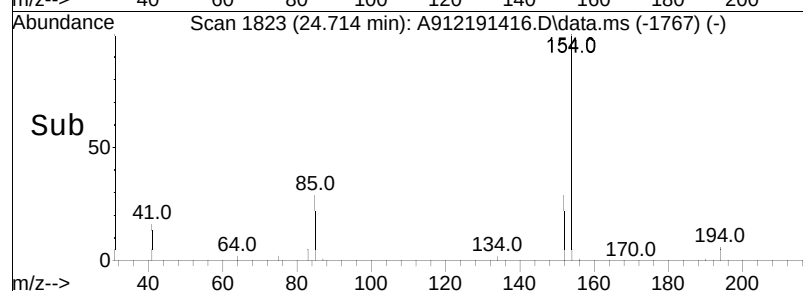
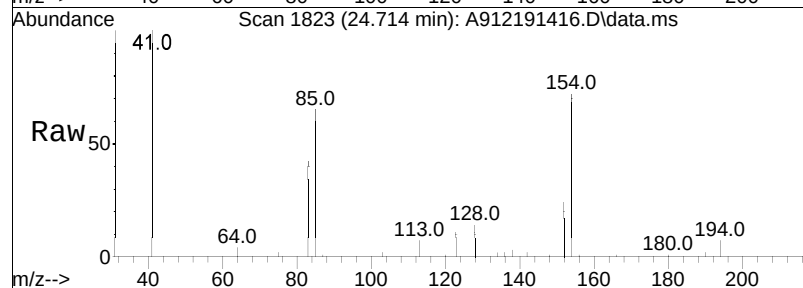
Tgt Ion	Ratio	Lower	Upper
184	100		
169	5.0	75.9	140.9#
183	1.3	22.3	41.5#

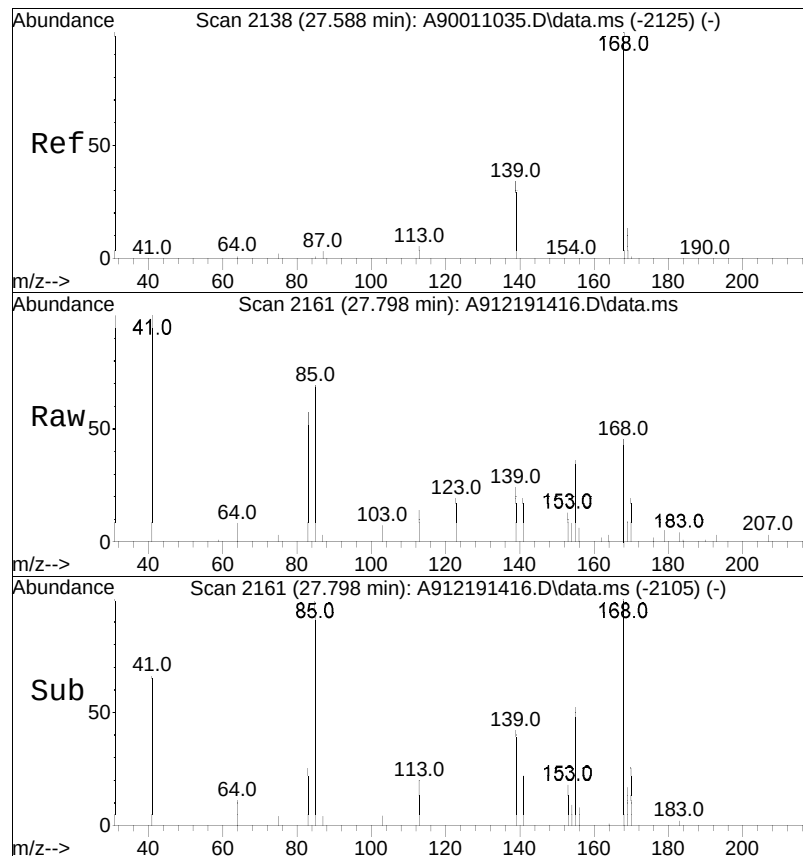




#23
 Biphenyl
 Concen: 562.76 ng/mL
 RT: 24.714 min Scan# 1823
 Delta R.T. 0.009 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

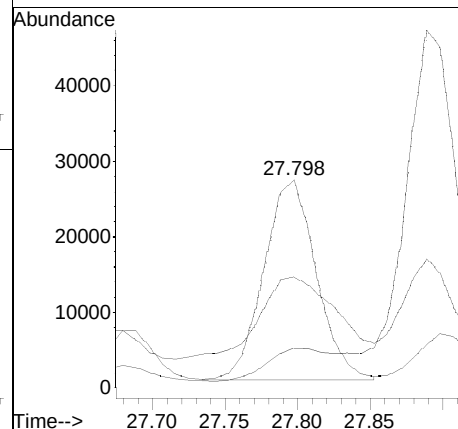
Tgt Ion:154 Resp: 177981

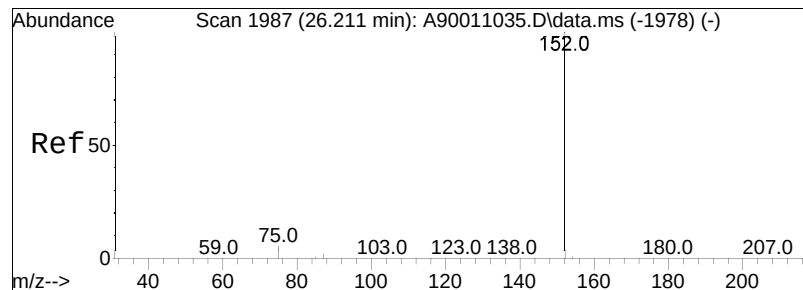




#25
Dibenzofuran
Concen: 200.64 ng/mL
RT: 27.798 min Scan# 2161
Delta R.T. 0.009 min
Lab File: A912191416.D
Acq: 22 Dec 2014 11:32 pm

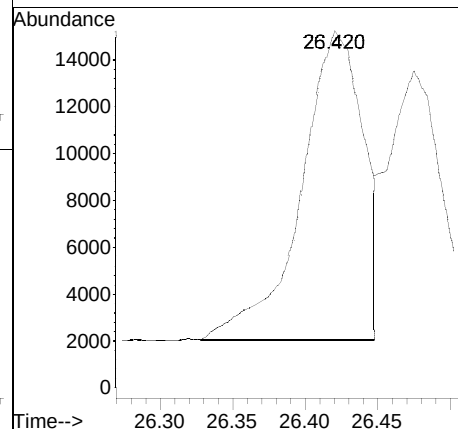
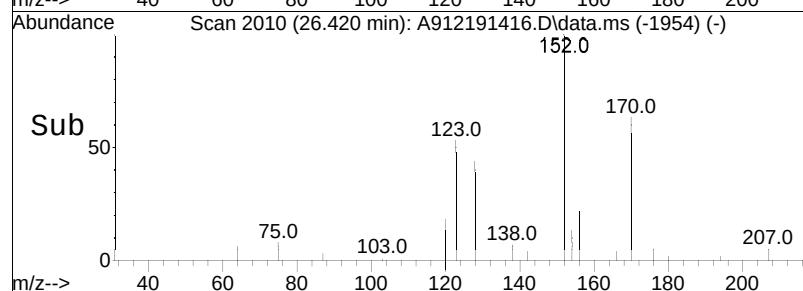
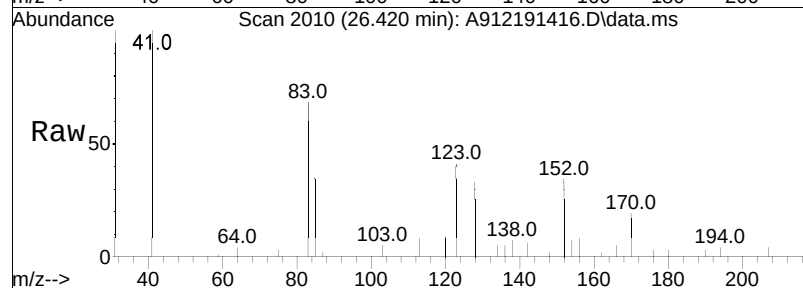
Tgt Ion:	168	Resp:	66615
Ion Ratio	Lower	Upper	
168	100		
139	59.8	25.1	46.7#
169	20.4	10.2	19.0#

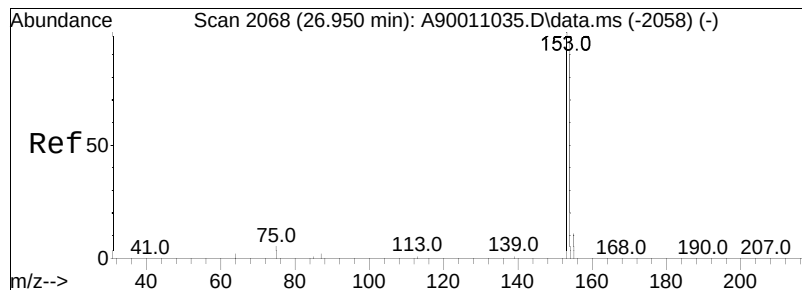




#26
 Acenaphthylene
 Concen: 103.17 ng/mL
 RT: 26.420 min Scan# 2010
 Delta R.T. 0.009 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

Tgt Ion:152 Resp: 40490





#27

Acenaphthene

Concen: 309.28 ng/mL M4

RT: 27.159 min Scan# 2091

Delta R.T. 0.018 min

Lab File: A912191416.D

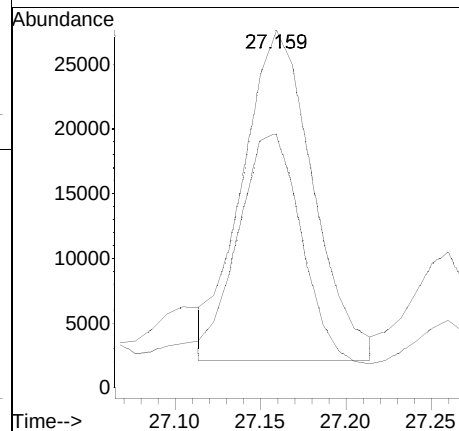
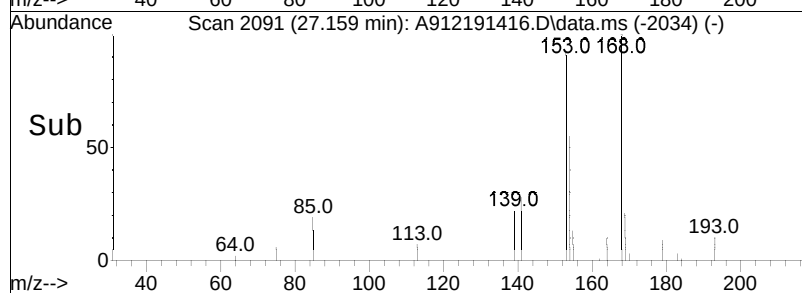
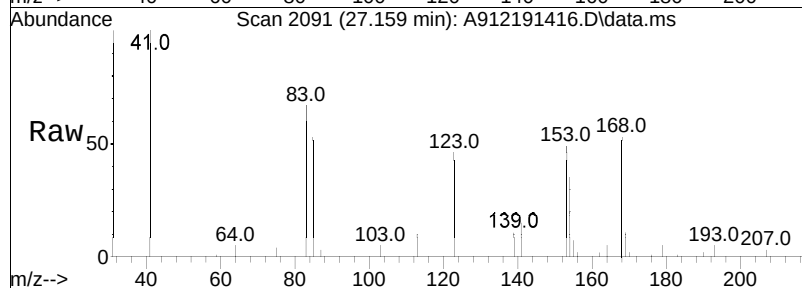
Acq: 22 Dec 2014 11:32 pm

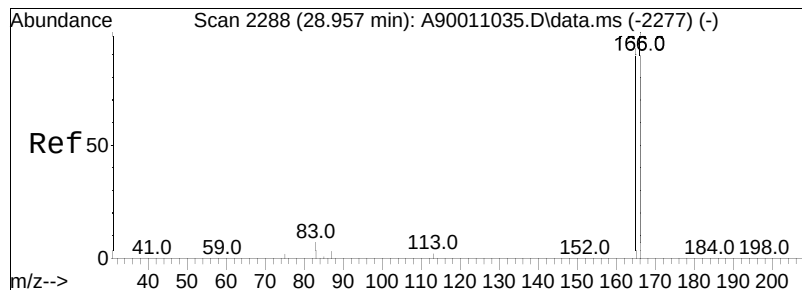
Tgt Ion:153 Resp: 73178

Ion Ratio Lower Upper

153 100

154 67.2 64.9 120.5





#29

Fluorene

Concen: 632.08 ng/mL M4

RT: 29.167 min Scan# 2311

Delta R.T. 0.009 min

Lab File: A912191416.D

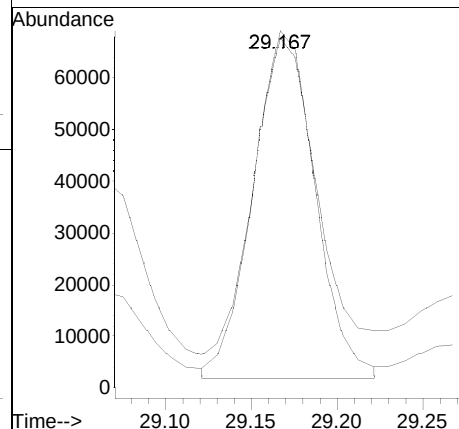
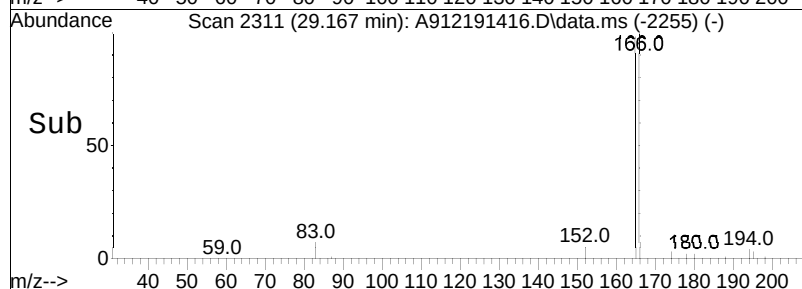
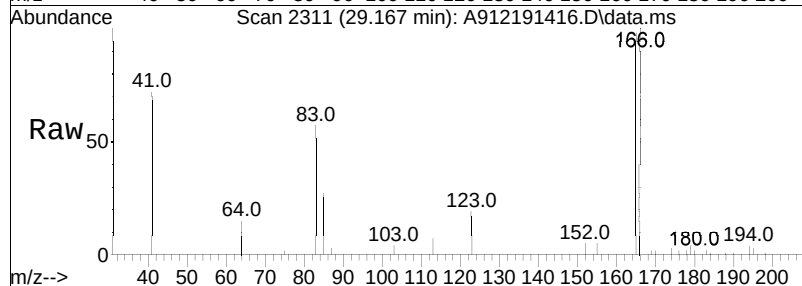
Acq: 22 Dec 2014 11:32 pm

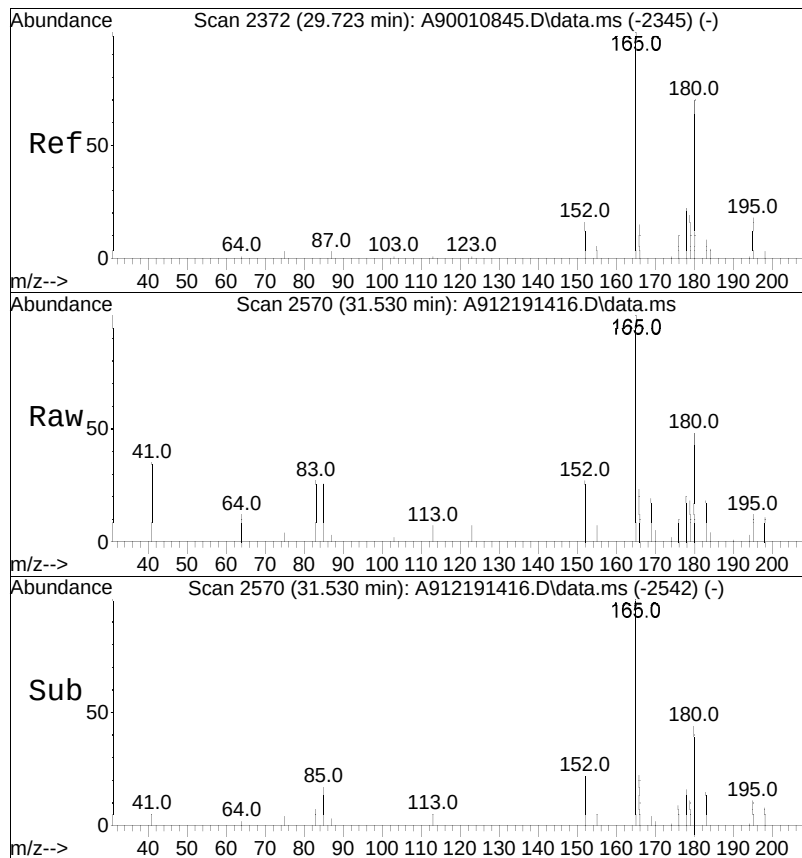
Tgt Ion: 166 Resp: 168152

Ion Ratio Lower Upper

166 100

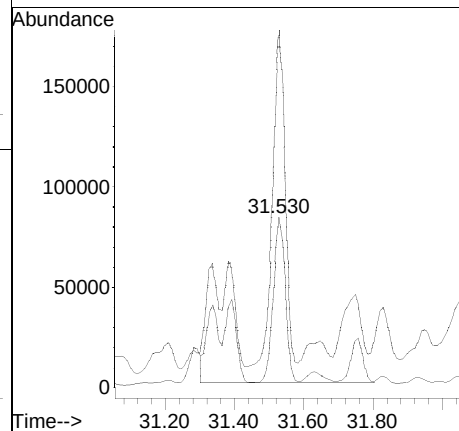
165 108.4 65.5 121.7

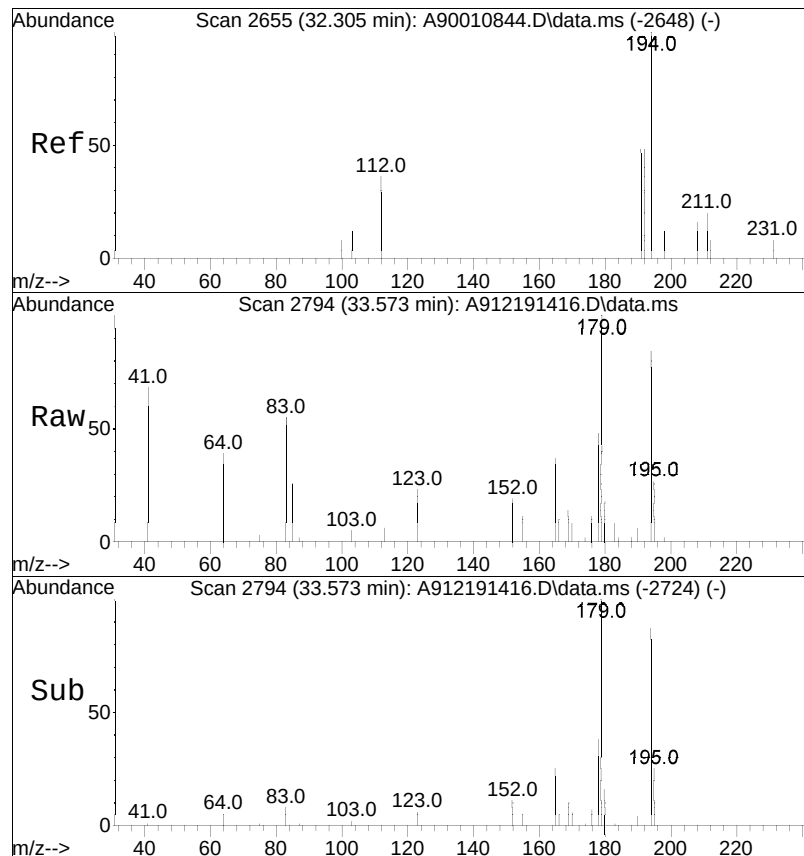




#30
 C1-Fluorenes
 Concen: 1754.41 ng/mL M5
 RT: 31.530 min Scan# 2570
 Delta R.T. -0.000 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

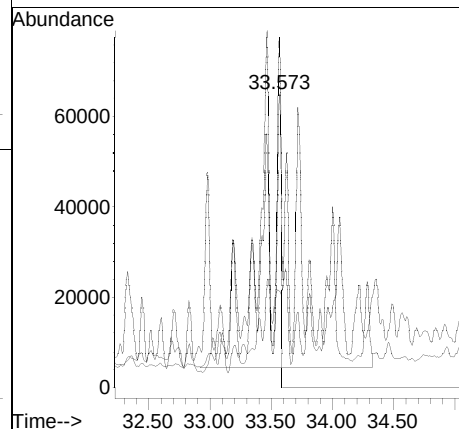
Tgt	Ion	Ratio	Lower	Upper
180	100			
165	22.5	98.6	183.2#	

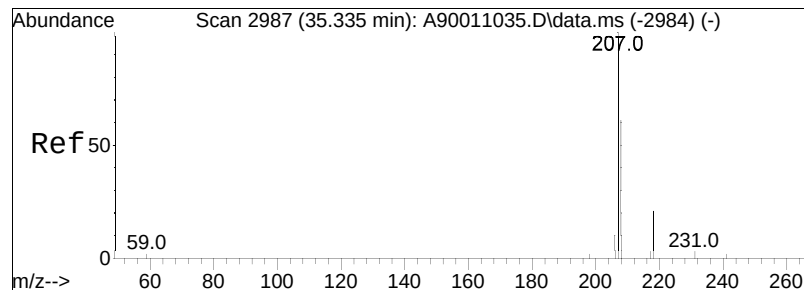




#31
 C2-Fluorenes
 Concen: 4178.21 ng/mL M5
 RT: 33.573 min Scan# 2794
 Delta R.T. -0.146 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

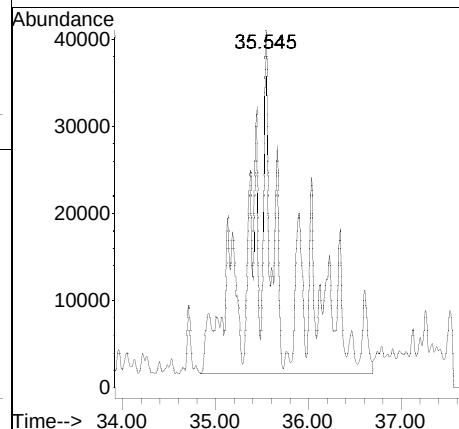
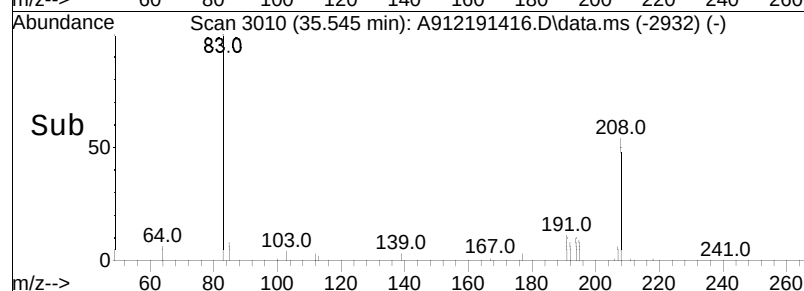
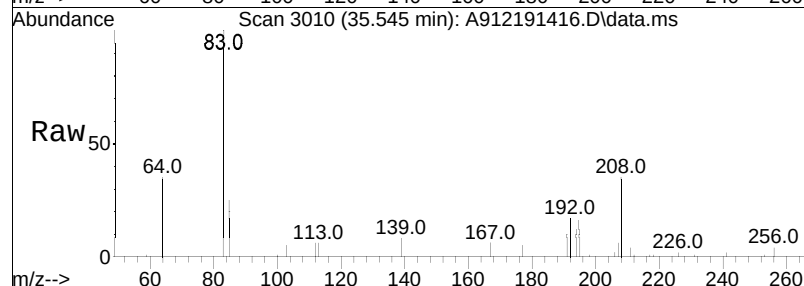
Tgt Ion:	194	Resp:	1111524
Ion Ratio	Lower	Upper	
194	100		
179	0.0	0.0	0.0
195	3.1	21.5	39.9#

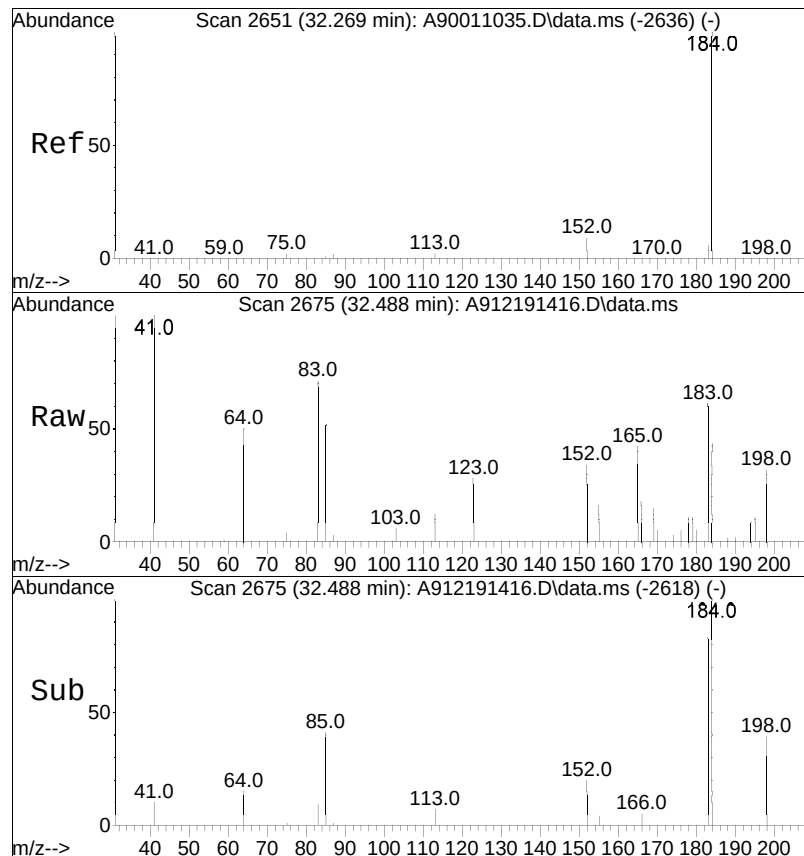




#32
C3-Fluorenes
Concen: 3670.94 ng/mL M5
RT: 35.545 min Scan# 3010
Delta R.T. 0.009 min
Lab File: A912191416.D
Acq: 22 Dec 2014 11:32 pm

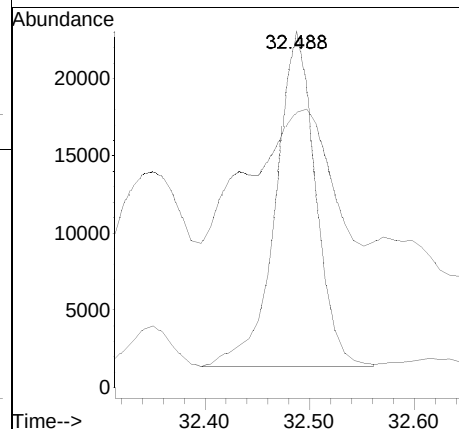
Tgt Ion:208 Resp: 976578

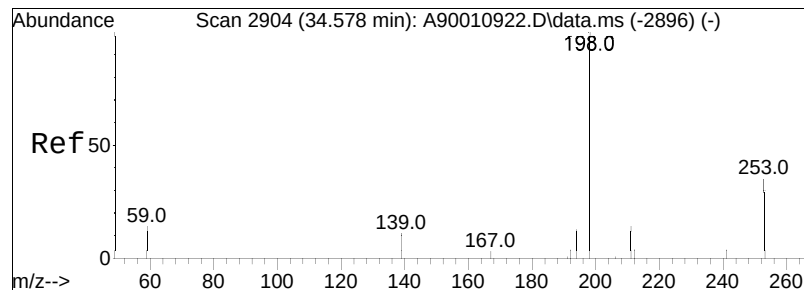




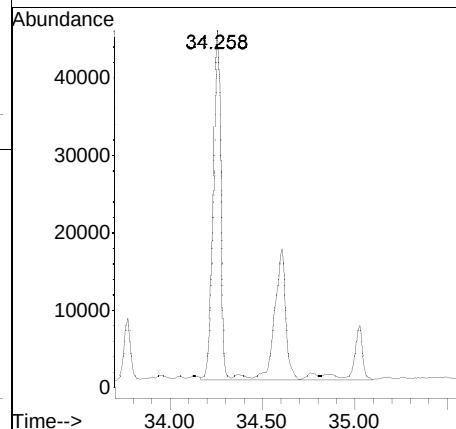
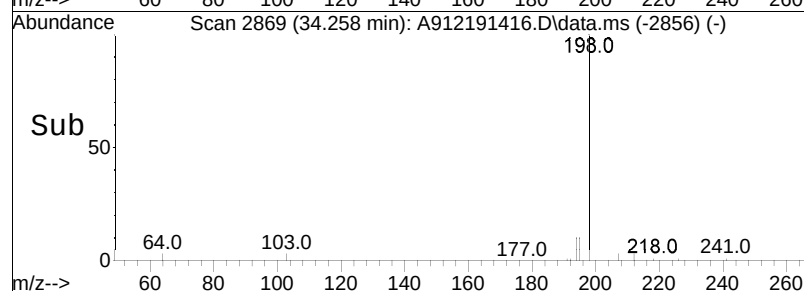
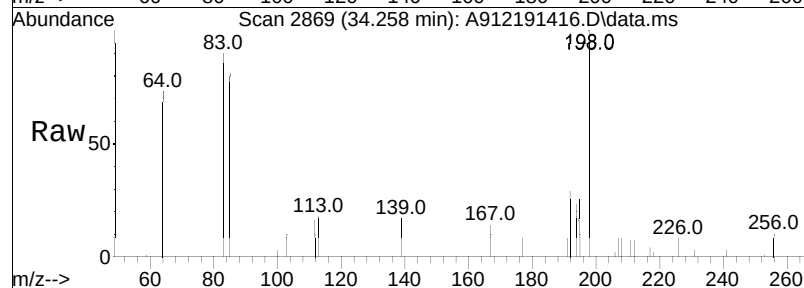
#33
 Dibenzothiophene
 Concen: 147.11 ng/mL
 RT: 32.488 min Scan# 2675
 Delta R.T. 0.019 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

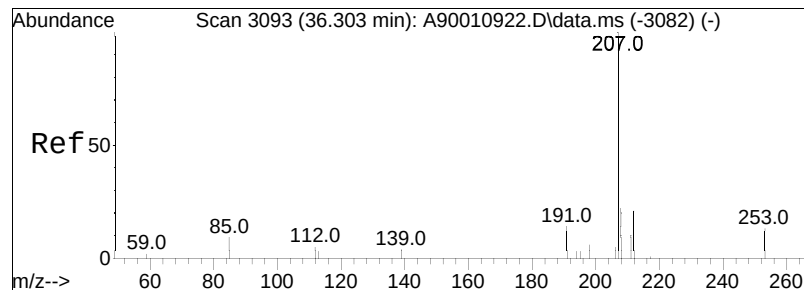
Tgt Ion:184 Resp: 57474
 Ion Ratio Lower Upper
 184 100
 152 79.1 6.3 11.7#





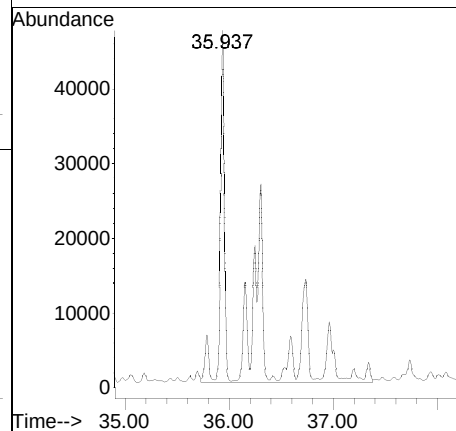
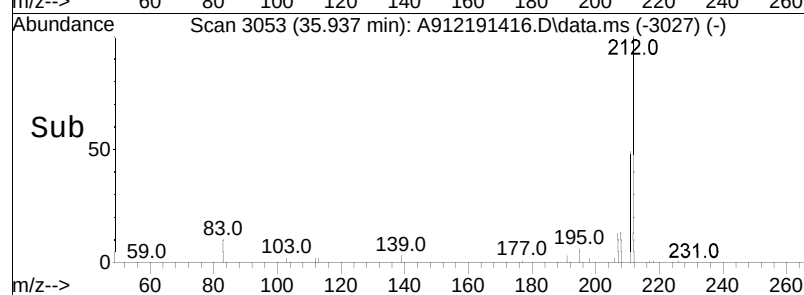
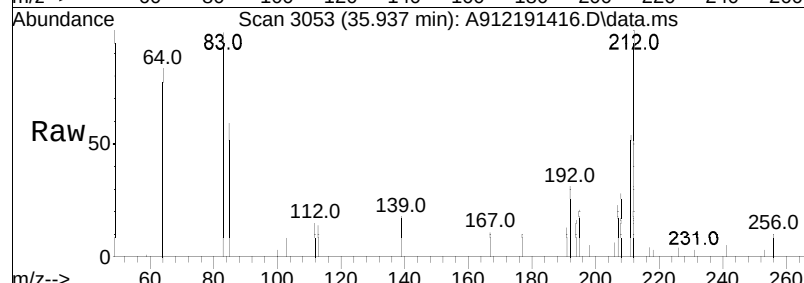
#38
 C1-Dibenzothiophenes
 Concen: 577.48 ng/mL M5
 RT: 34.258 min Scan# 2869
 Delta R.T. 0.009 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm
 Tgt Ion:198 Resp: 225612

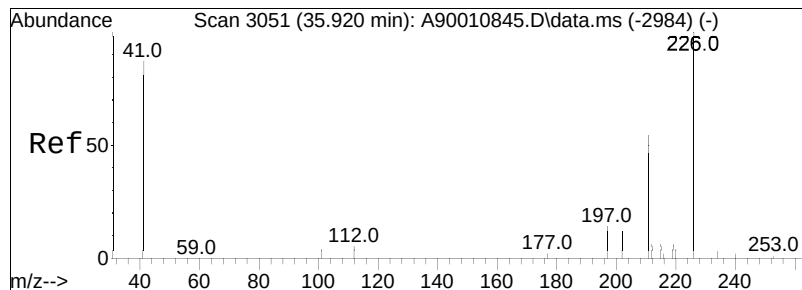




#39
C2-Dibenzothiophenes
Concen: 1076.22 ng/mL M5
RT: 35.937 min Scan# 3053
Delta R.T. 0.009 min
Lab File: A912191416.D
Acq: 22 Dec 2014 11:32 pm

Tgt Ion:212 Resp: 420462





#40

C3-Dibenzothiophenes

Concen: 1021.21 ng/mL M5

RT: 37.736 min Scan# 3250

Delta R.T. 0.009 min

Lab File: A912191416.D

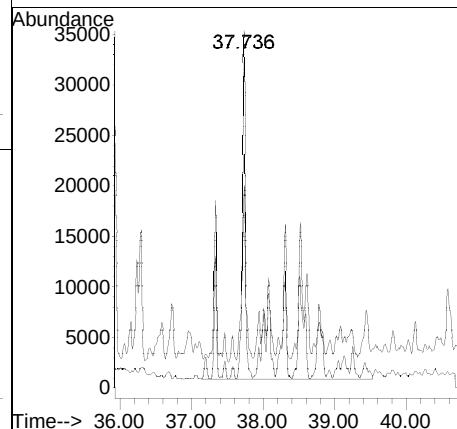
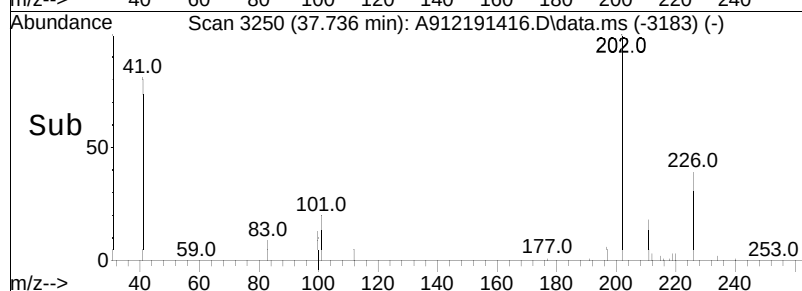
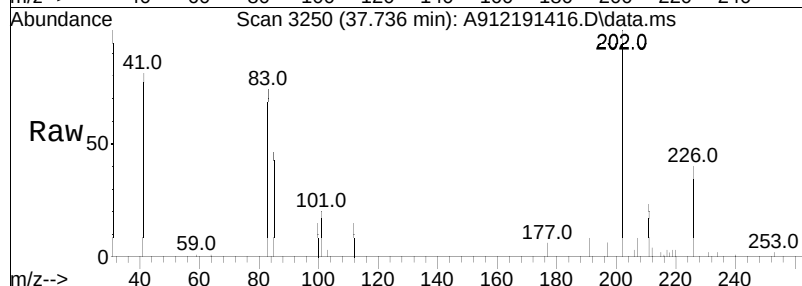
Acq: 22 Dec 2014 11:32 pm

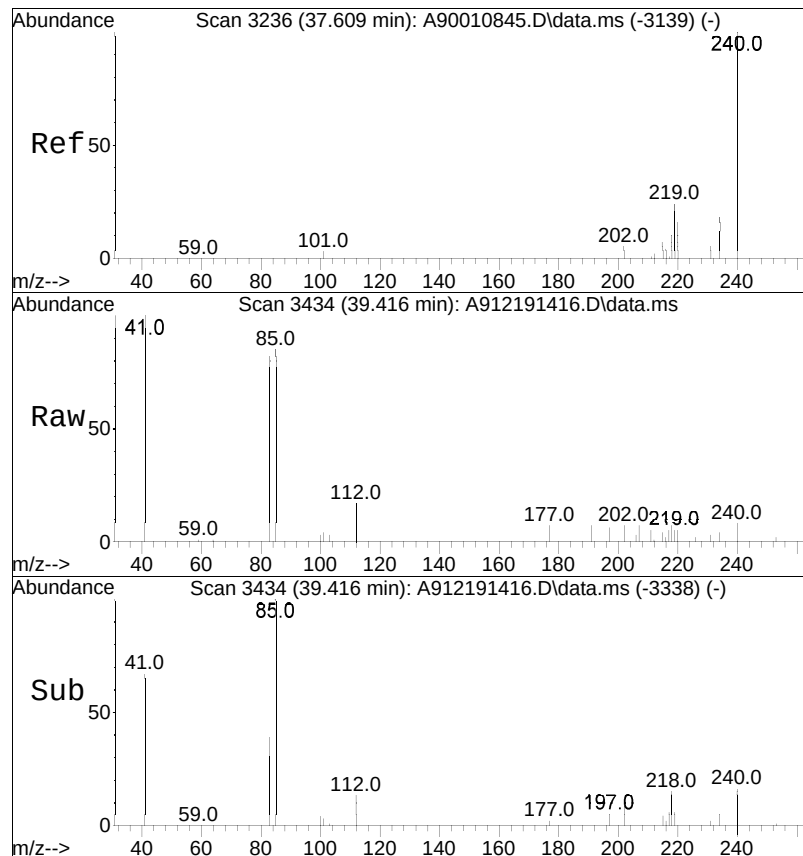
Tgt Ion: 226 Resp: 398970

Ion Ratio Lower Upper

226 100

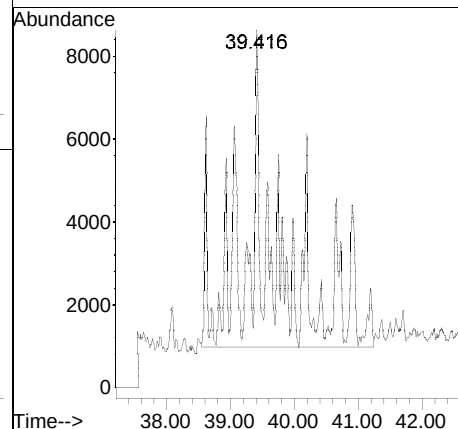
211 16.0 41.5 77.1#

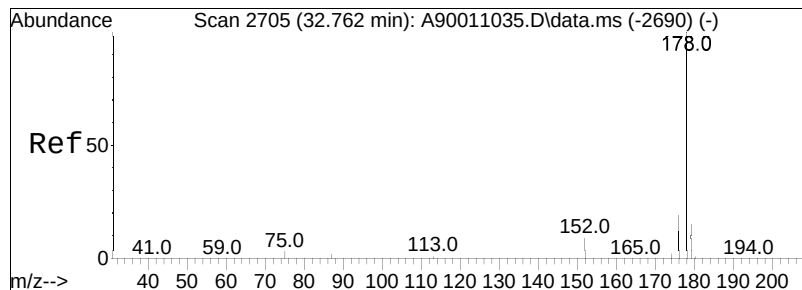




#41
 C4-Dibenzothiophenes
 Concen: 611.35 ng/mL M5
 RT: 39.416 min Scan# 3434
 Delta R.T. 0.009 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

Tgt Ion:240 Resp: 238844





#43

Phenanthrene

Concen: 1778.41 ng/mL

RT: 32.980 min Scan# 2729

Delta R.T. 0.018 min

Lab File: A912191416.D

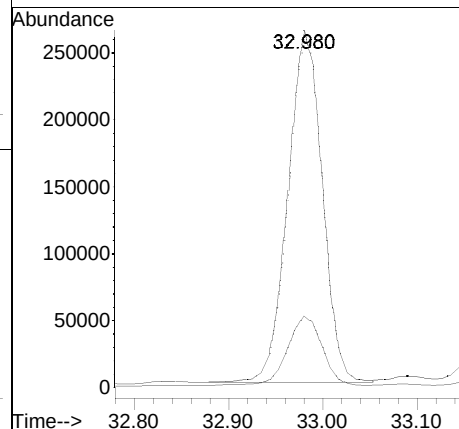
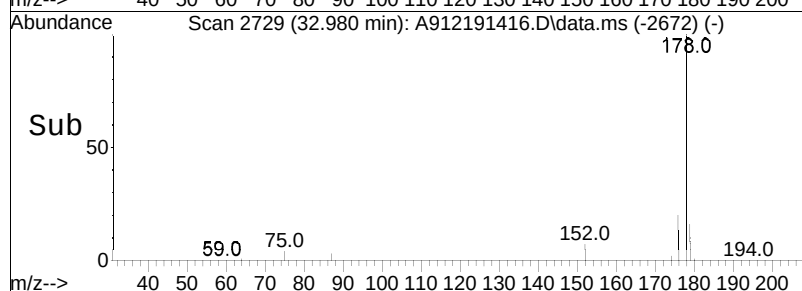
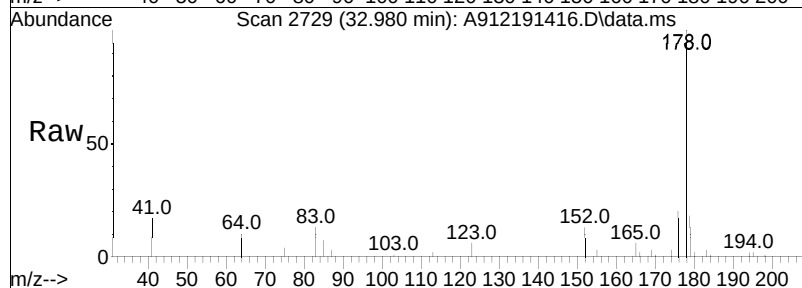
Acq: 22 Dec 2014 11:32 pm

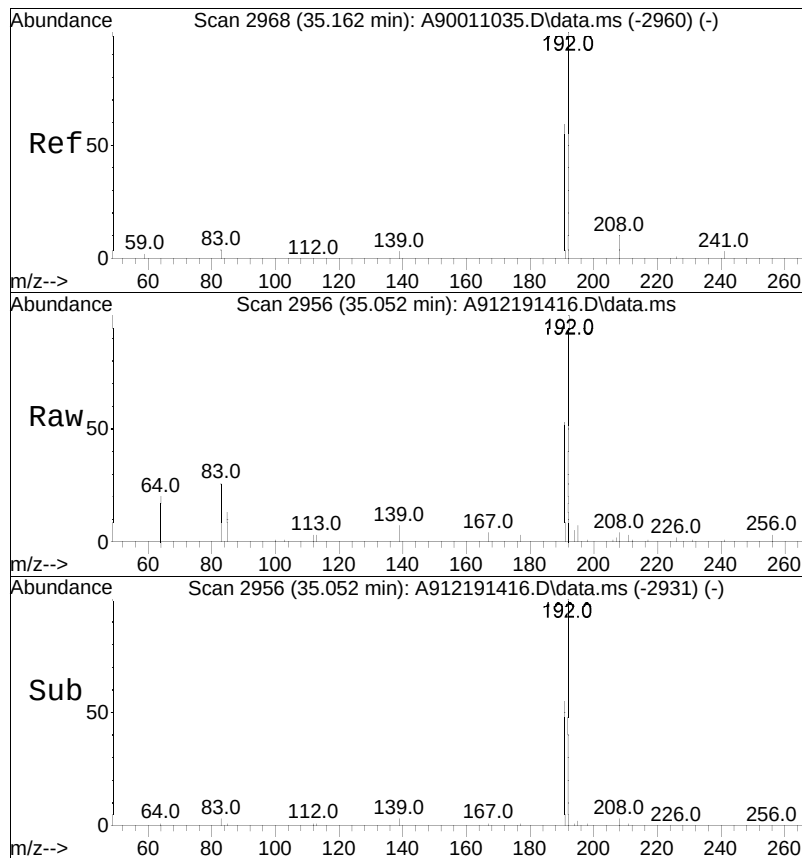
Tgt Ion:178 Resp: 660185

Ion Ratio Lower Upper

178 100

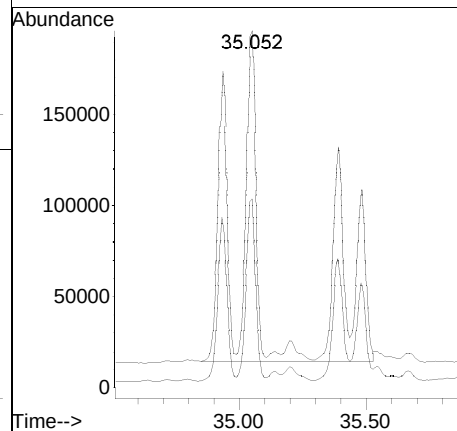
176 20.2 13.7 25.5

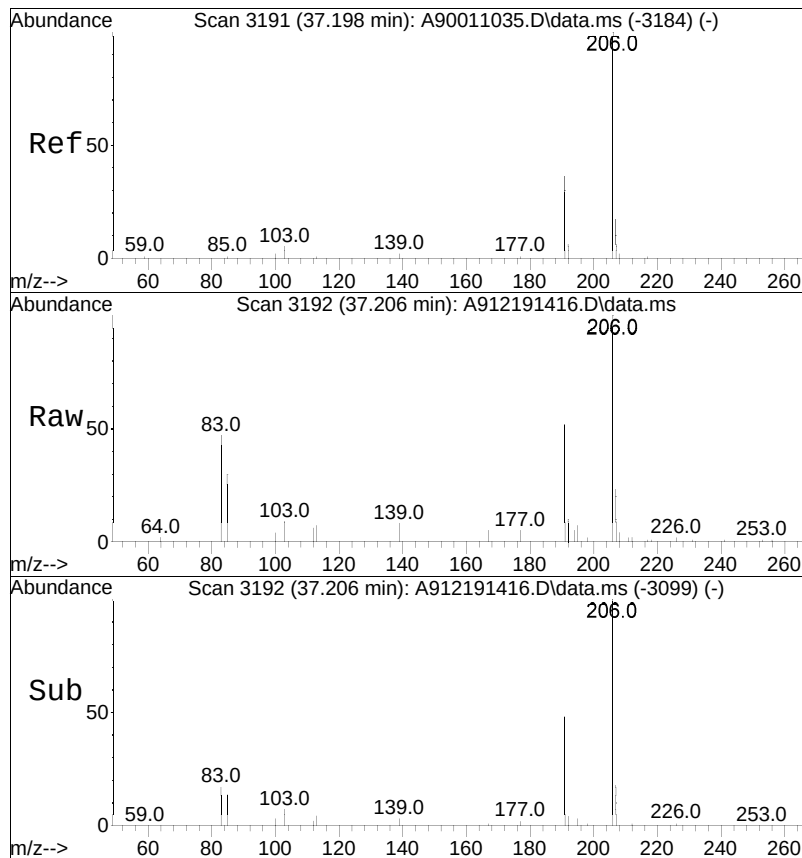




#49
 C1-Phenanthrenes/Anthracenes
 Concen: 4015.05 ng/mL M5
 RT: 35.052 min Scan# 2956
 Delta R.T. -0.338 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

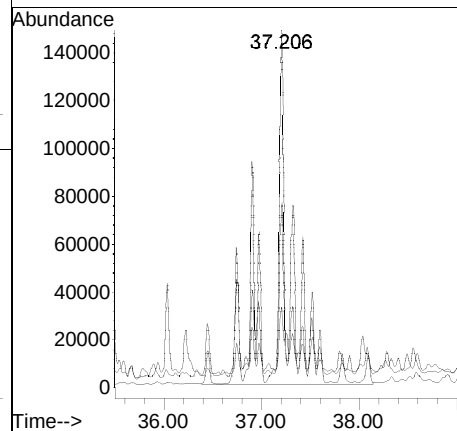
Tgt Ion	Ratio	Lower	Upper
192	100		
191	12.8	39.6	73.6

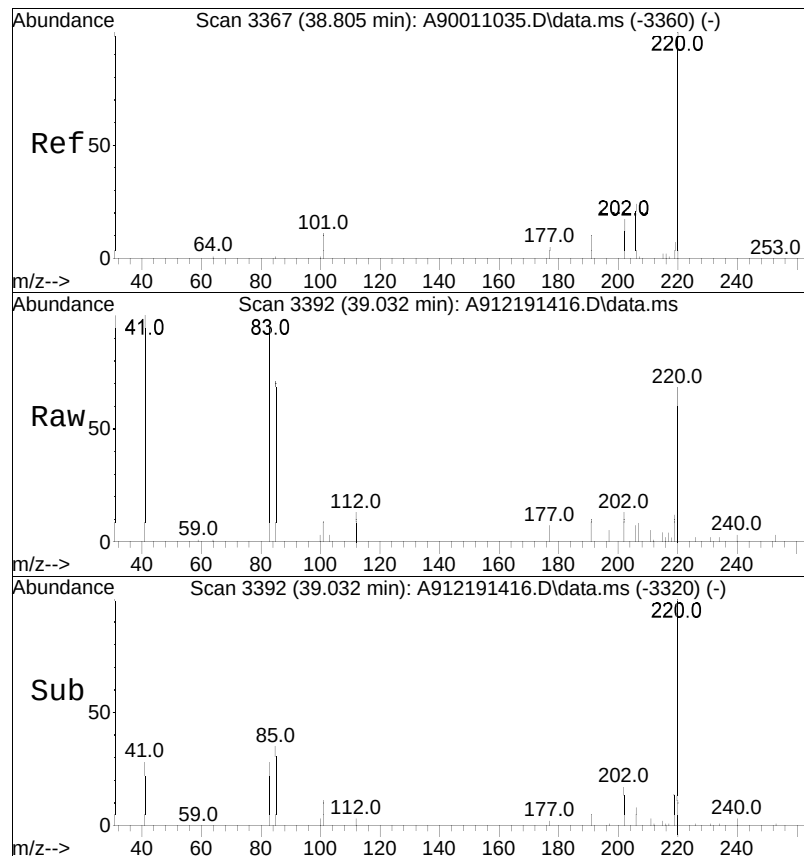




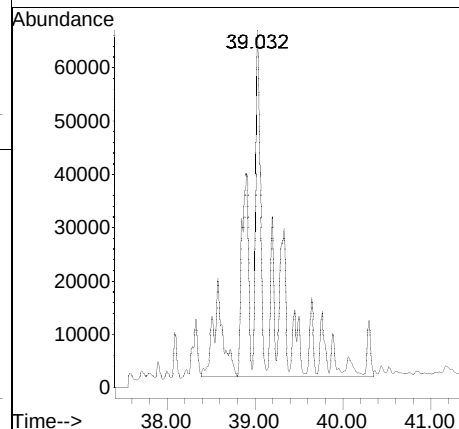
#50
 C2-Phenanthrenes/Anthracenes
 Concen: 4500.23 ng/mL M5
 RT: 37.206 min Scan# 3192
 Delta R.T. 0.009 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

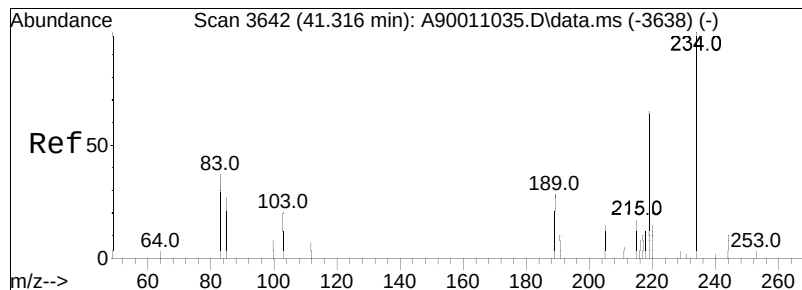
Tgt	Ion:206	Resp: 1670587	
Ion	Ratio	Lower	Upper
206	100		
191	12.9	34.6	64.3#
207	4.5	15.2	28.2#





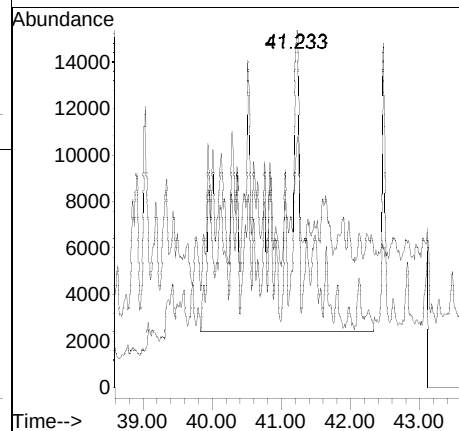
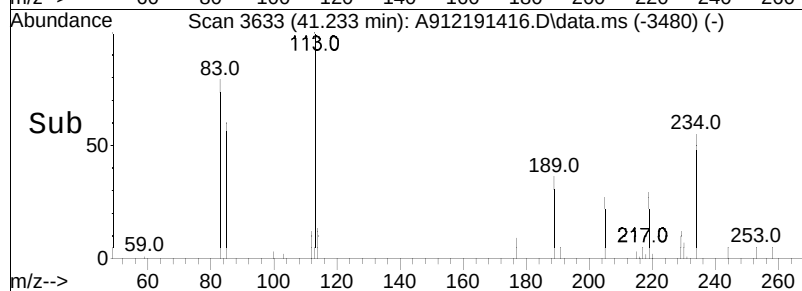
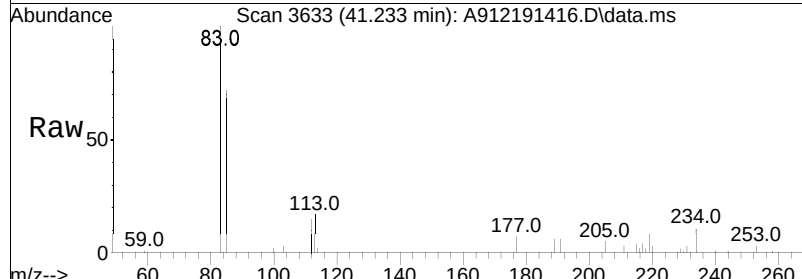
#52
 C3-Phenanthrenes/Anthracenes
 Concen: 2737.11 ng/mL M5
 RT: 39.032 min Scan# 3392
 Delta R.T. 0.009 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm
 Tgt Ion:220 Resp: 1016077

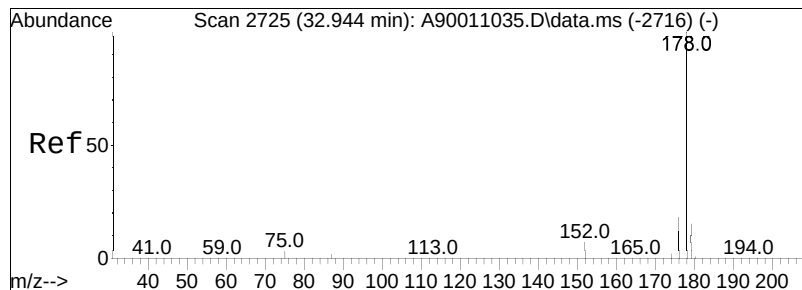




#53
 C4-Phenanthrenes/Anthracenes
 Concen: 1123.49 ng/mL M5
 RT: 41.233 min Scan# 3633
 Delta R.T. 0.036 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

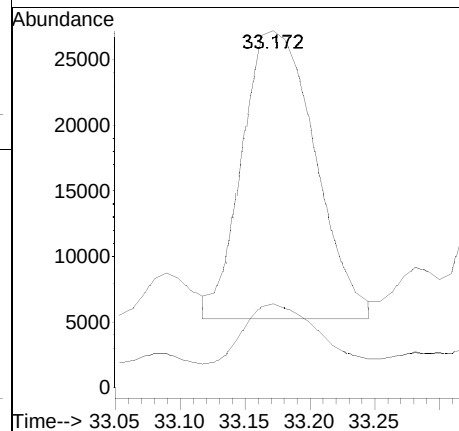
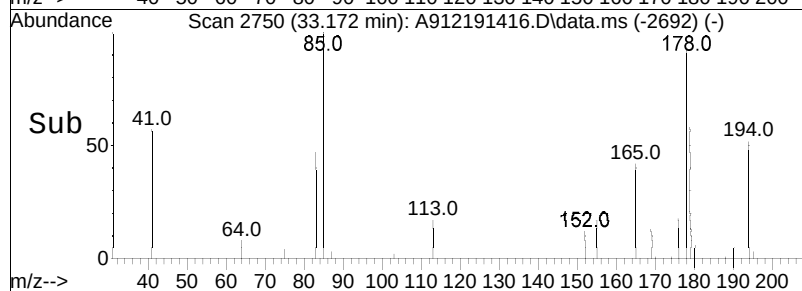
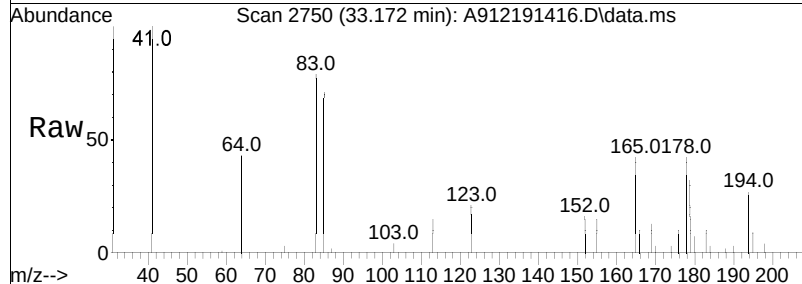
Tgt Ion	Ratio	Lower	Upper
234	100		
219	2.5	38.3	71.1#

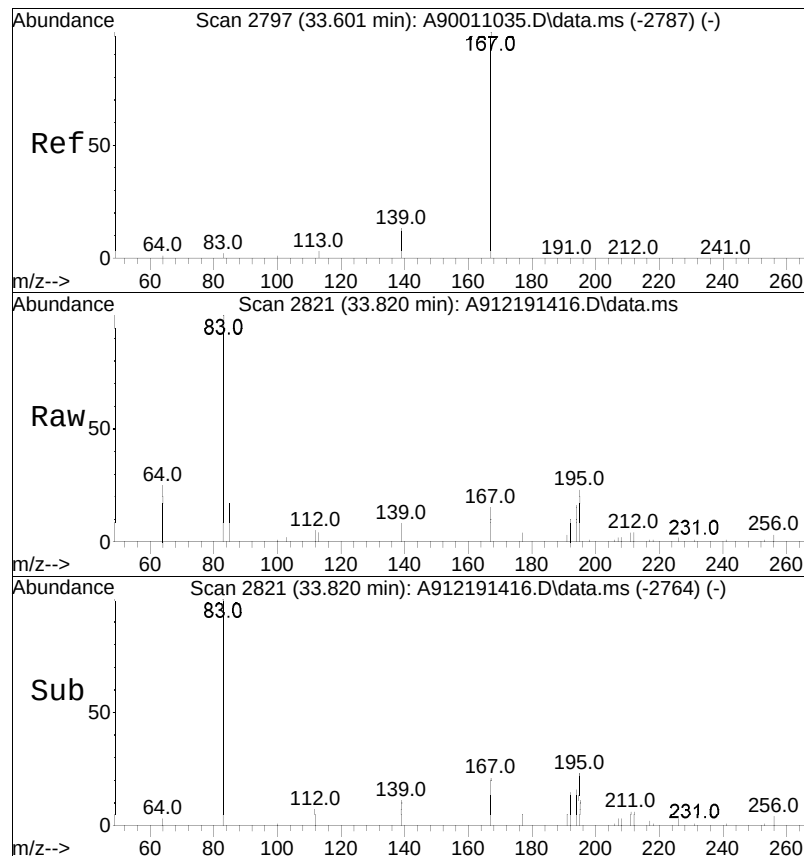




#55
 Anthracene
 Concen: 249.48 ng/mL M4
 RT: 33.172 min Scan# 2750
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

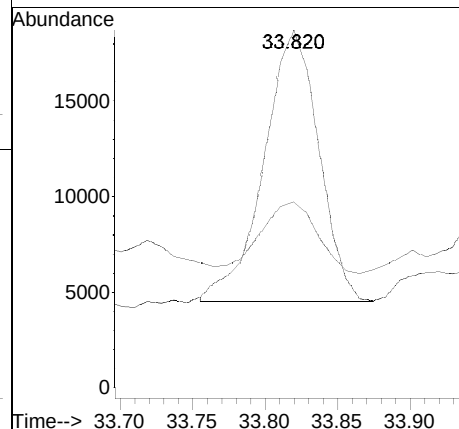
Tgt Ion:178 Resp: 85531
 Ion Ratio Lower Upper
 178 100
 176 20.3 13.4 24.8

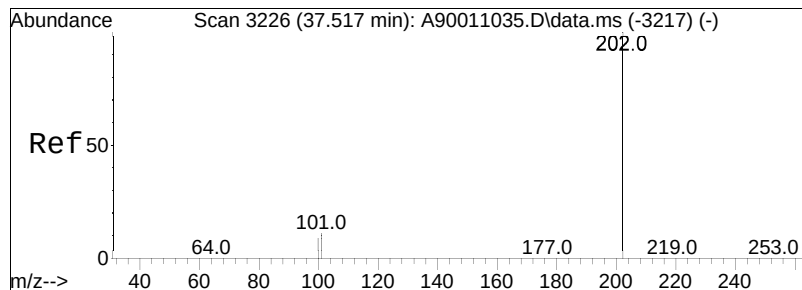




#56
 Carbazole
 Concen: 112.31 ng/mL
 RT: 33.820 min Scan# 2821
 Delta R.T. 0.018 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

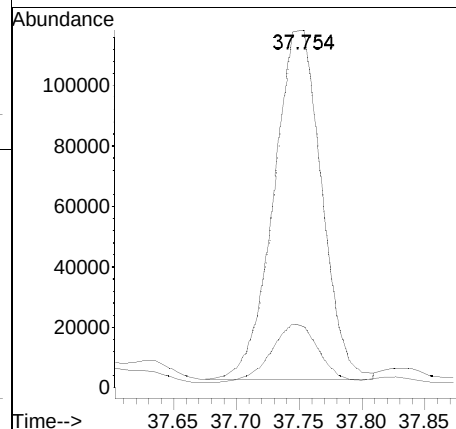
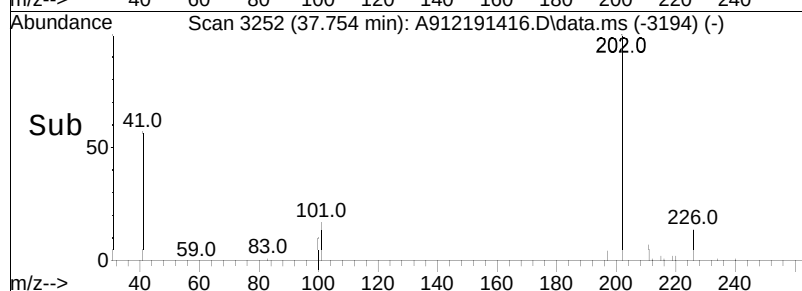
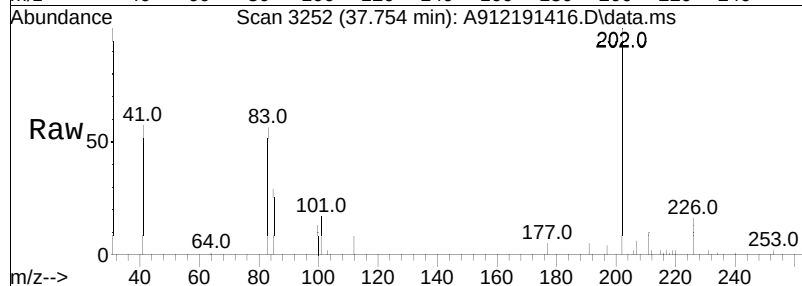
Tgt Ion	Ratio	Lower	Upper
167	100		
139	25.4	9.9	18.3#

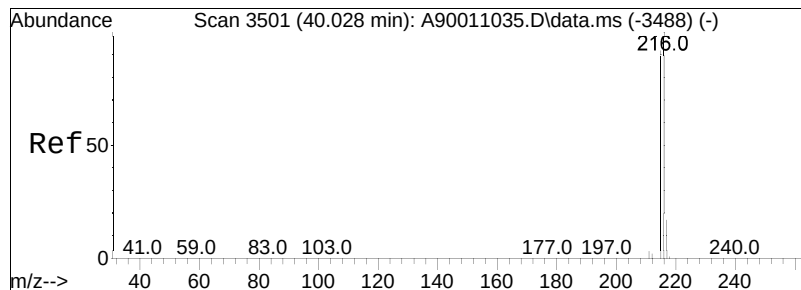




#58
 Fluoranthene
 Concen: 806.63 ng/mL
 RT: 37.754 min Scan# 3252
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

Tgt Ion	Ratio	Lower	Upper
202	100		
101	18.7	11.8	22.0





#59

Benzo(b)fluorene

Concen: 153.61 ng/mL M3

RT: 40.265 min Scan# 3527

Delta R.T. 0.027 min

Lab File: A912191416.D

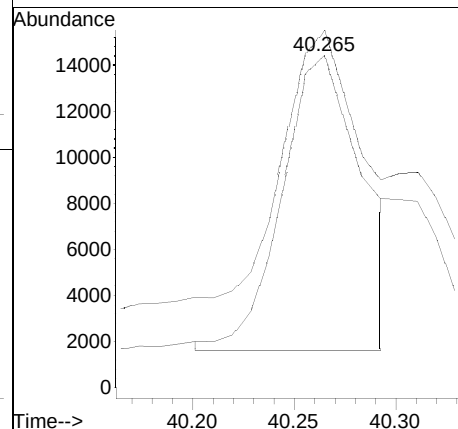
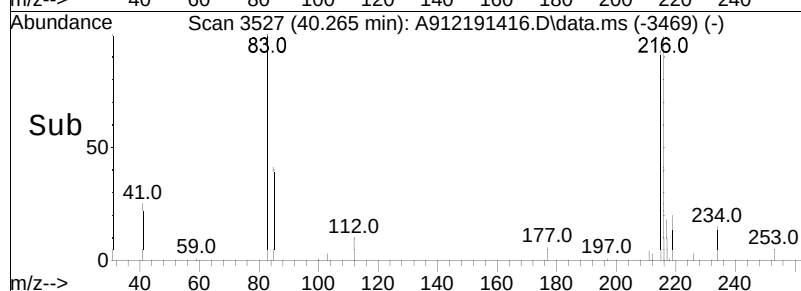
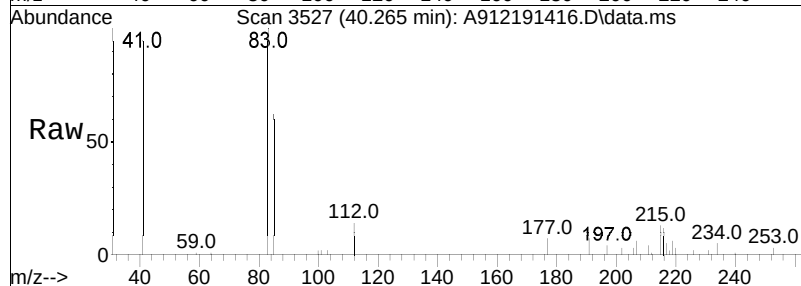
Acq: 22 Dec 2014 11:32 pm

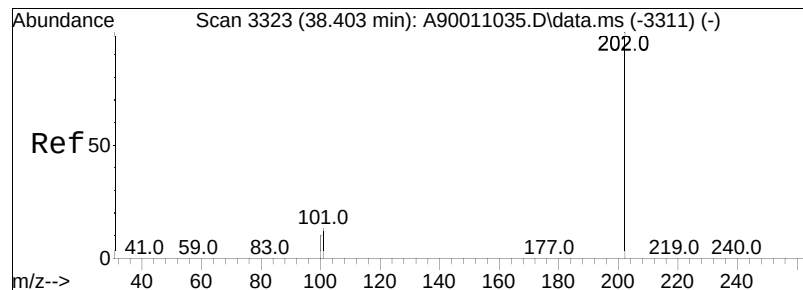
Tgt Ion:216 Resp: 34969

Ion Ratio Lower Upper

216 100

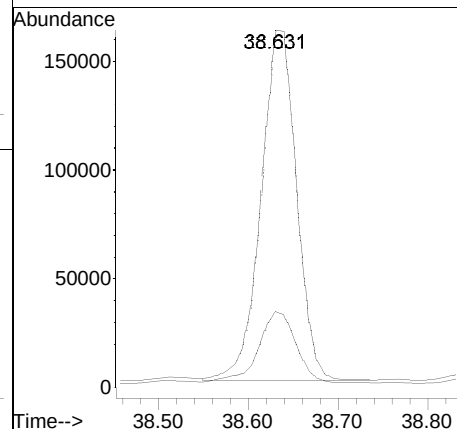
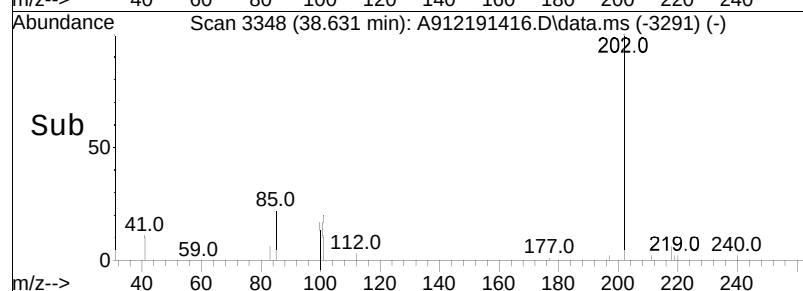
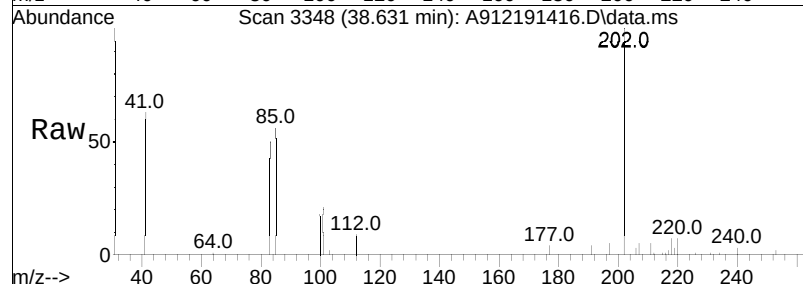
215 138.0 64.3 119.3#

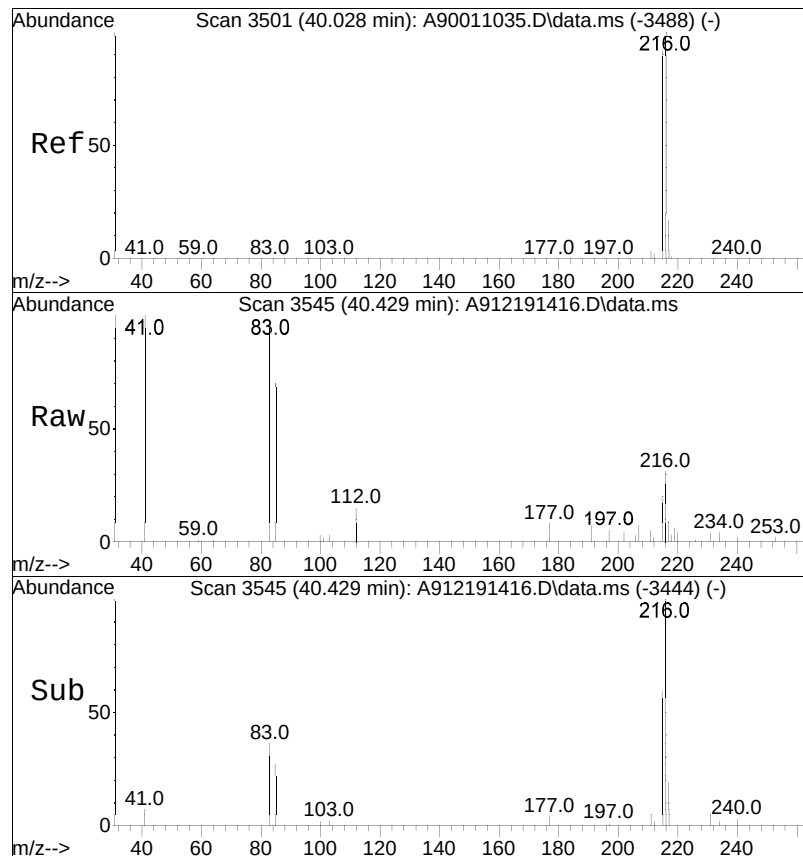




#60
 Pyrene
 Concen: 1095.02 ng/mL
 RT: 38.631 min Scan# 3348
 Delta R.T. 0.018 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

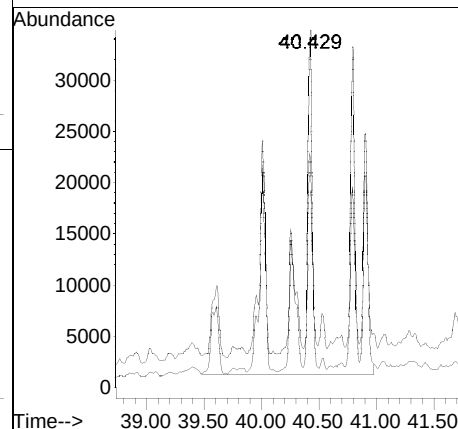
Tgt Ion	Ratio	Lower	Upper
202	100		
101	22.4	14.2	26.4

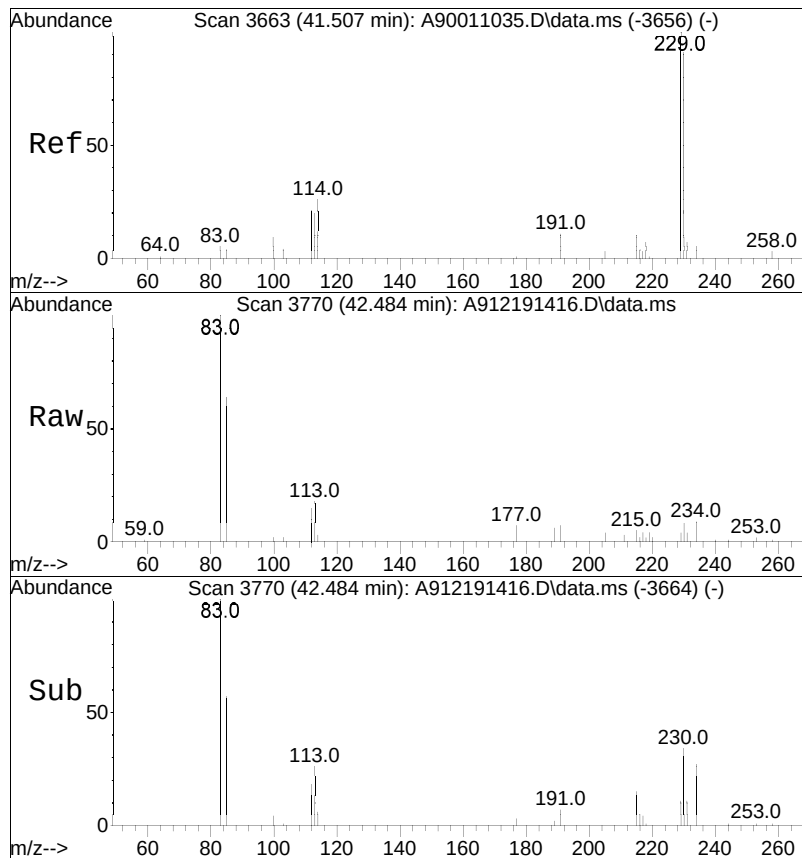




#61
 C1-Fluoranthenes/Pyrenes
 Concen: 1051.52 ng/mL M5
 RT: 40.429 min Scan# 3545
 Delta R.T. 0.420 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

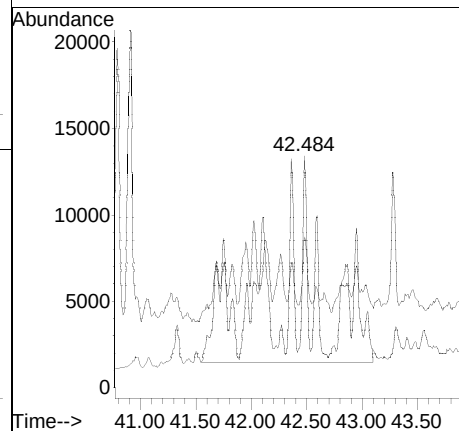
Tgt Ion	Ratio	Lower	Upper
216	100		
215	12.0	64.0	118.8#

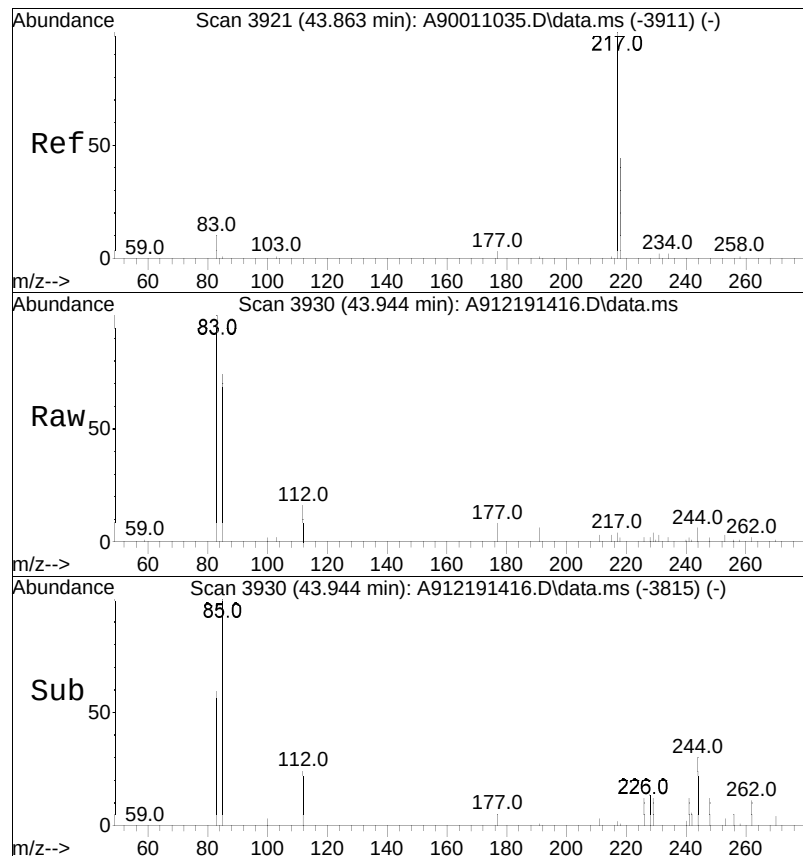




#62
 C2-Fluoranthenes/Pyrenes
 Concen: 732.10 ng/mL M5
 RT: 42.484 min Scan# 3770
 Delta R.T. 0.676 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

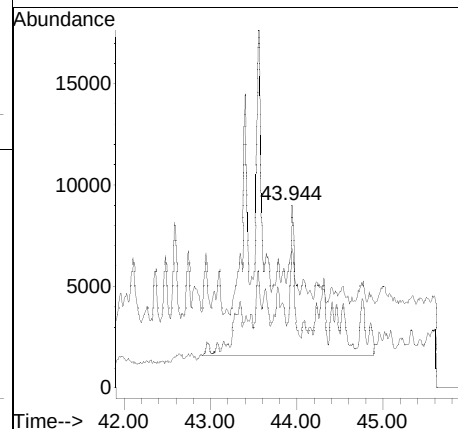
Tgt	Ion	Ratio	Resp	Lower	Upper
230	100		293511		
215	3.0	66.8	124.0#		

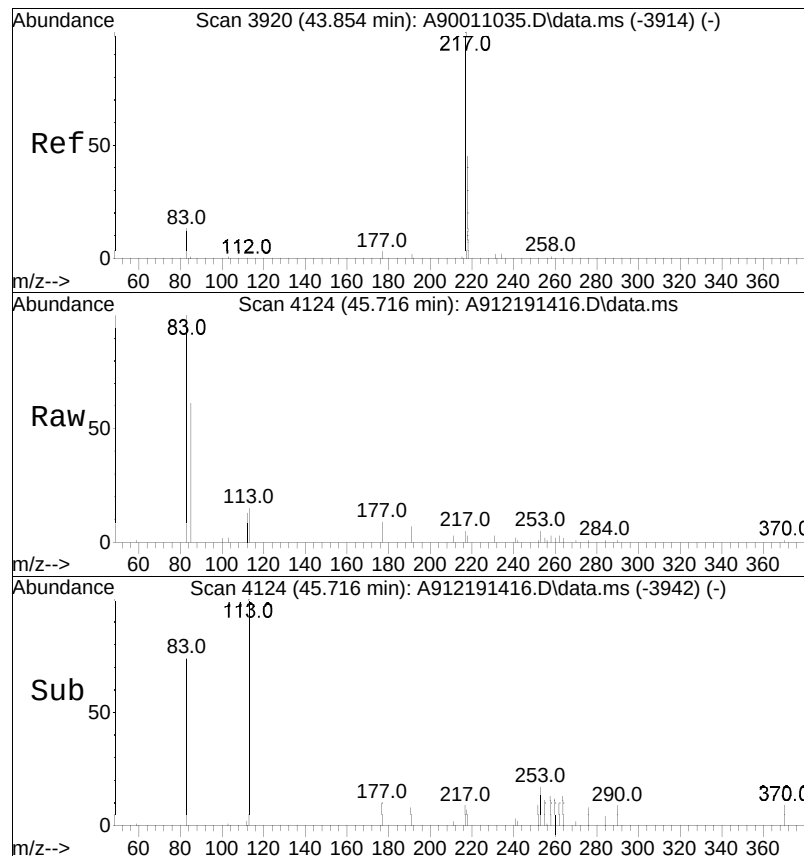




#63
 C3-Fluoranthenes/Pyrenes
 Concen: 502.19 ng/mL M5
 RT: 43.944 min Scan# 3930
 Delta R.T. 0.128 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

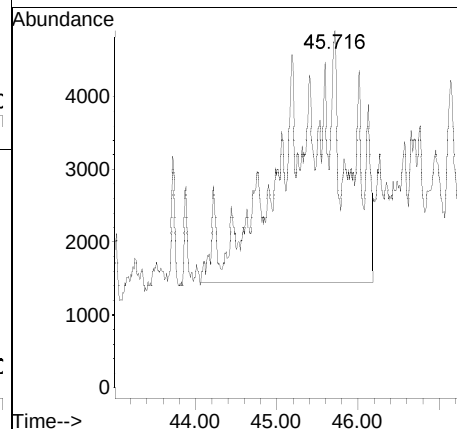
Tgt Ion	Ratio	Lower	Upper
244	100		
229	3.2	60.7	112.7#

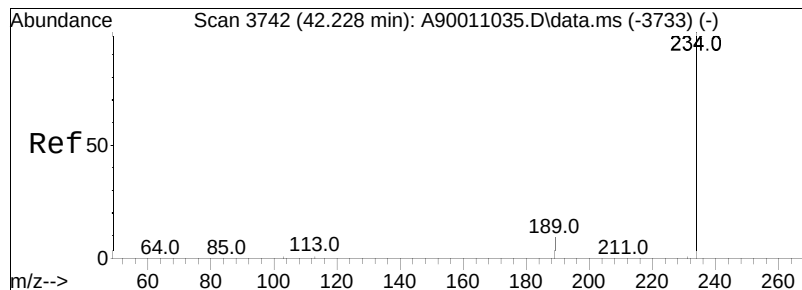




#64
 C4-Fluoranthenes/Pyrenes
 Concen: 427.70 ng/mL M5
 RT: 45.716 min Scan# 4124
 Delta R.T. 0.557 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

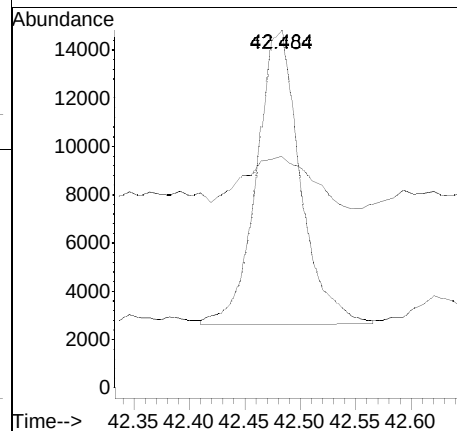
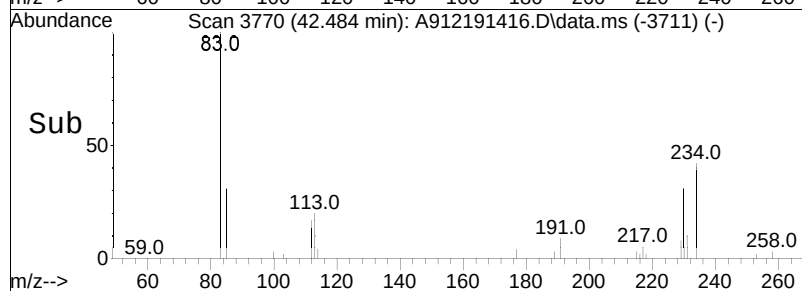
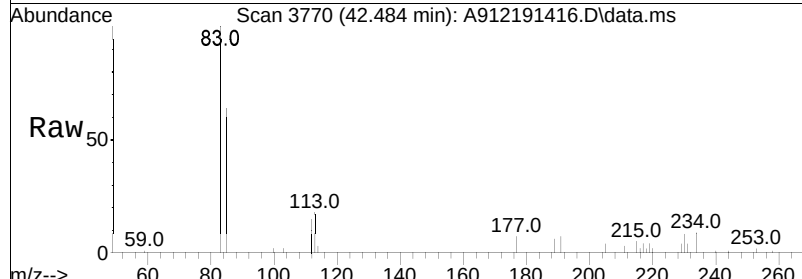
Tgt Ion:258 Resp: 171472

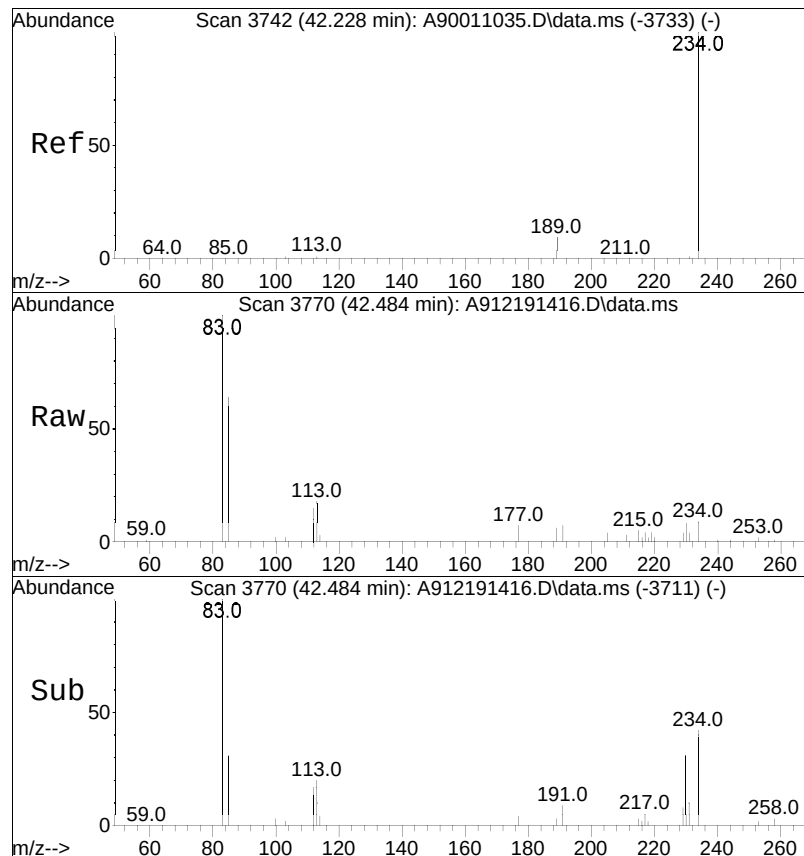




#66
 Naphthobenzothiophene
 Concen: 83.18 ng/ml
 RT: 42.484 min Scan# 3770
 Delta R.T. 0.037 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

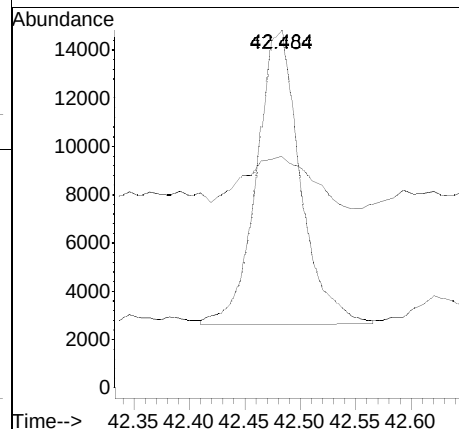
Tgt Ion	Ratio	Lower	Upper
234	100		
189	26.9	4.9	9.1#

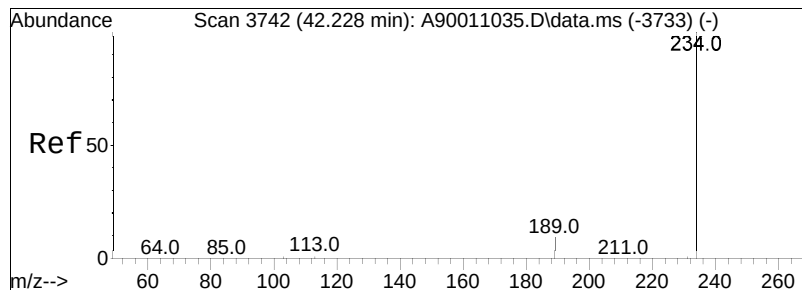




#67
 Naphthobenzothiophene-2,1-D
 Concen: 83.18 ng/mL
 RT: 42.484 min Scan# 3770
 Delta R.T. 0.037 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

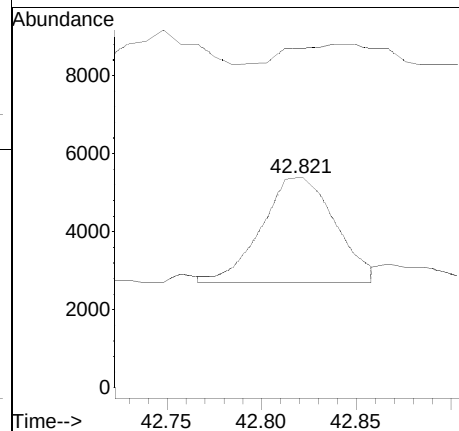
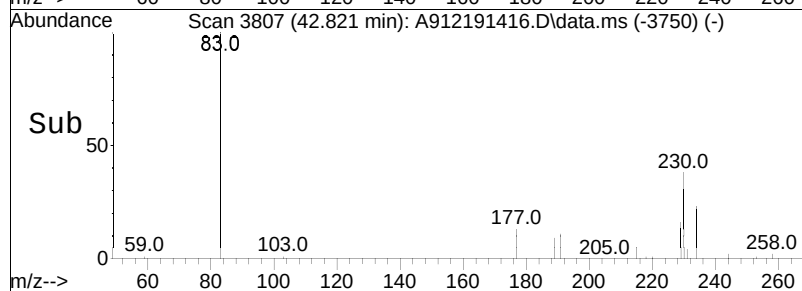
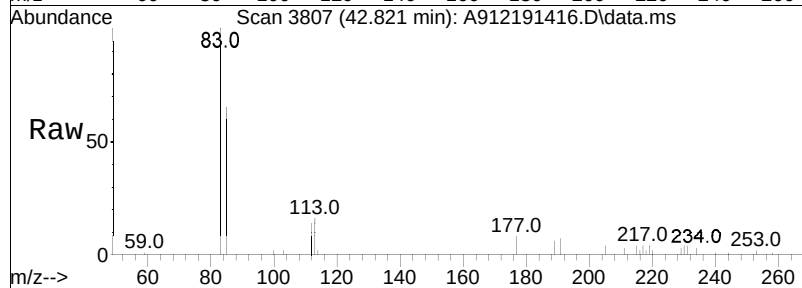
Tgt Ion	Ratio	Lower	Upper
234	100		
189	26.9	4.9	9.1#

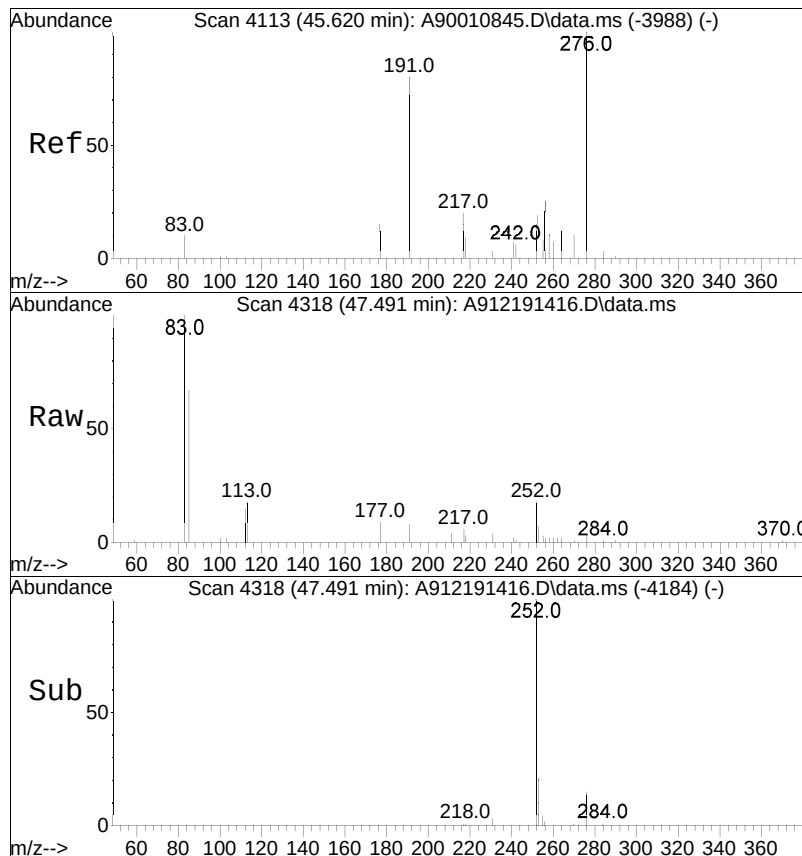




#68
 Naphthobenzothiophene-1,2-D
 Concen: 18.01 ng/mL M4
 RT: 42.821 min Scan# 3807
 Delta R.T. 0.018 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

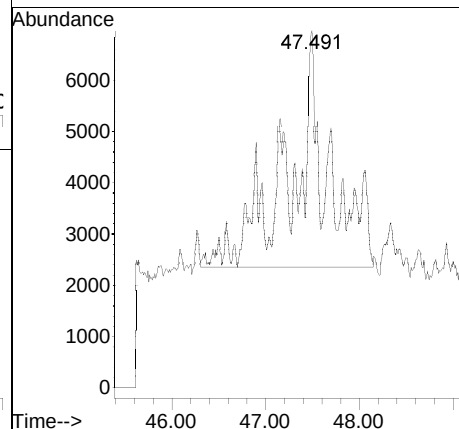
Tgt Ion: 234 Resp: 7201
 Ion Ratio Lower Upper
 234 100
 189 0.0 37.9 70.5#

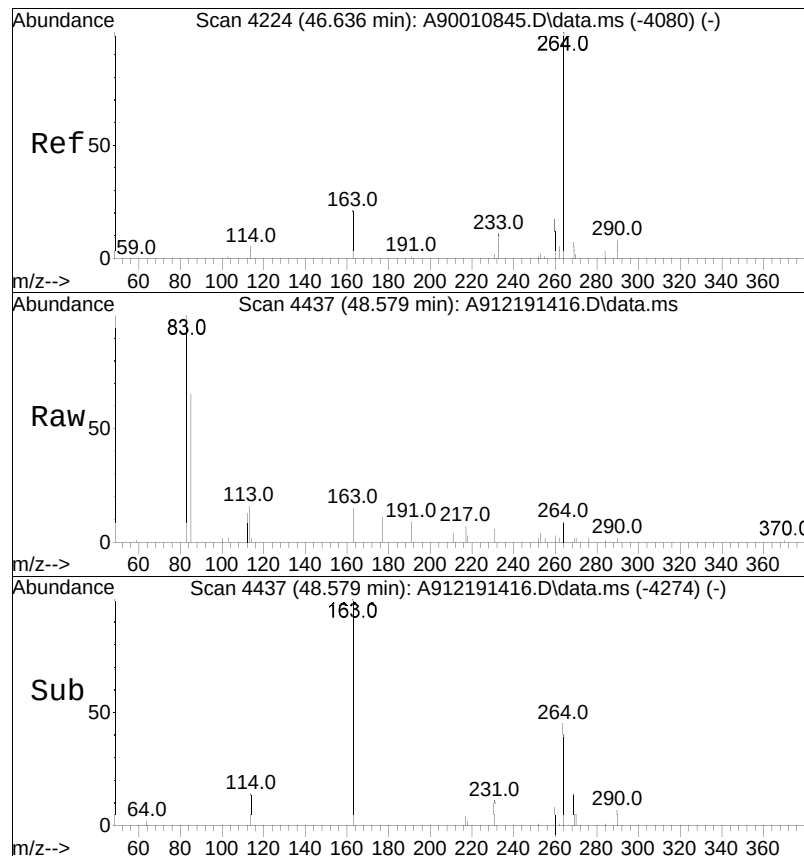




#72
 C3-Naphthobenzothiophenes
 Concen: 327.68 ng/ml M5
 RT: 47.491 min Scan# 4318
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

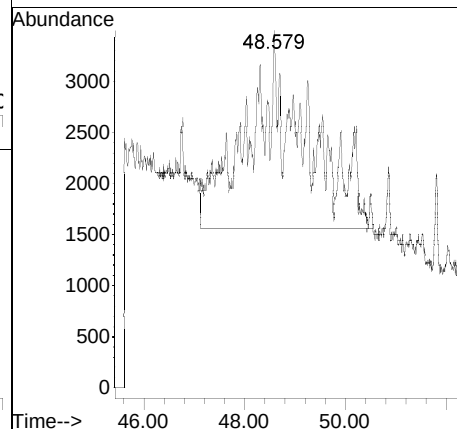
Tgt Ion:276 Resp: 131025

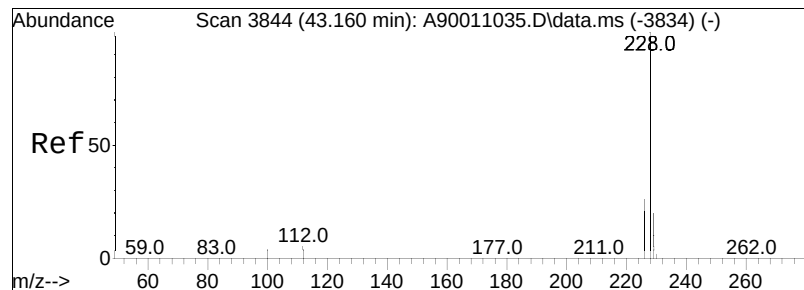




#73
 C4-Naphthobenzothiophenes
 Concen: 373.74 ng/mL M5
 RT: 48.579 min Scan# 4437
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

Tgt Ion:290 Resp: 149446





#75

Benz[a]anthracene

Concen: 388.07 ng/mL M4

RT: 43.406 min Scan# 3871

Delta R.T. 0.037 min

Lab File: A912191416.D

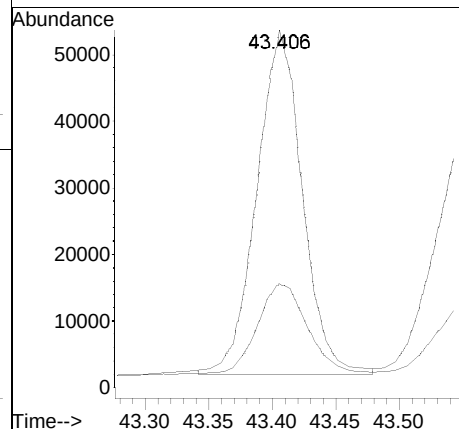
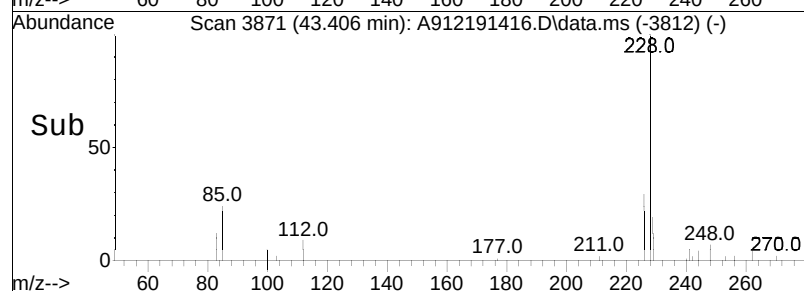
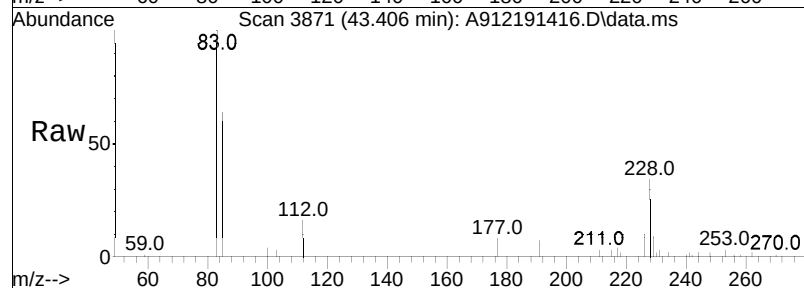
Acq: 22 Dec 2014 11:32 pm

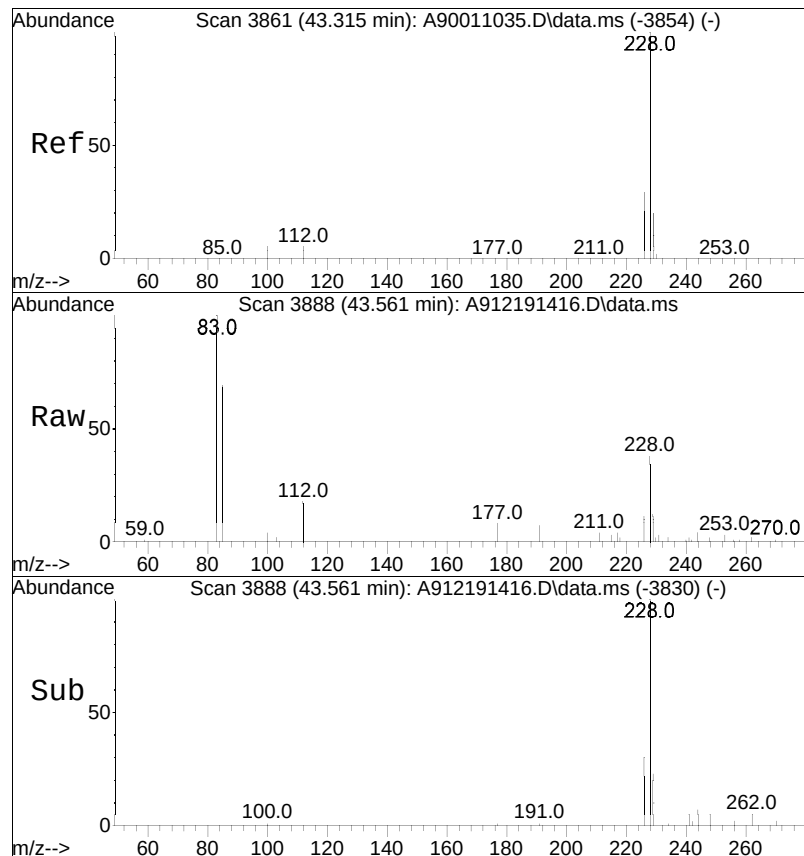
Tgt Ion:228 Resp: 128312

Ion Ratio Lower Upper

228 100

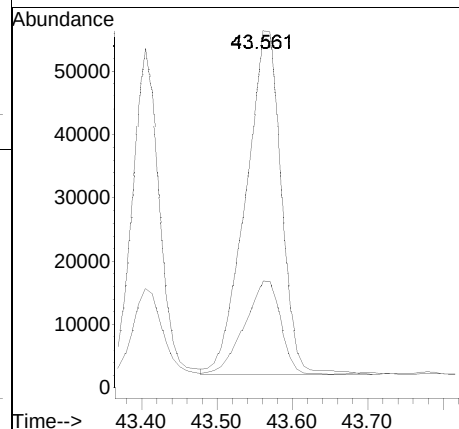
226 27.9 17.3 32.1

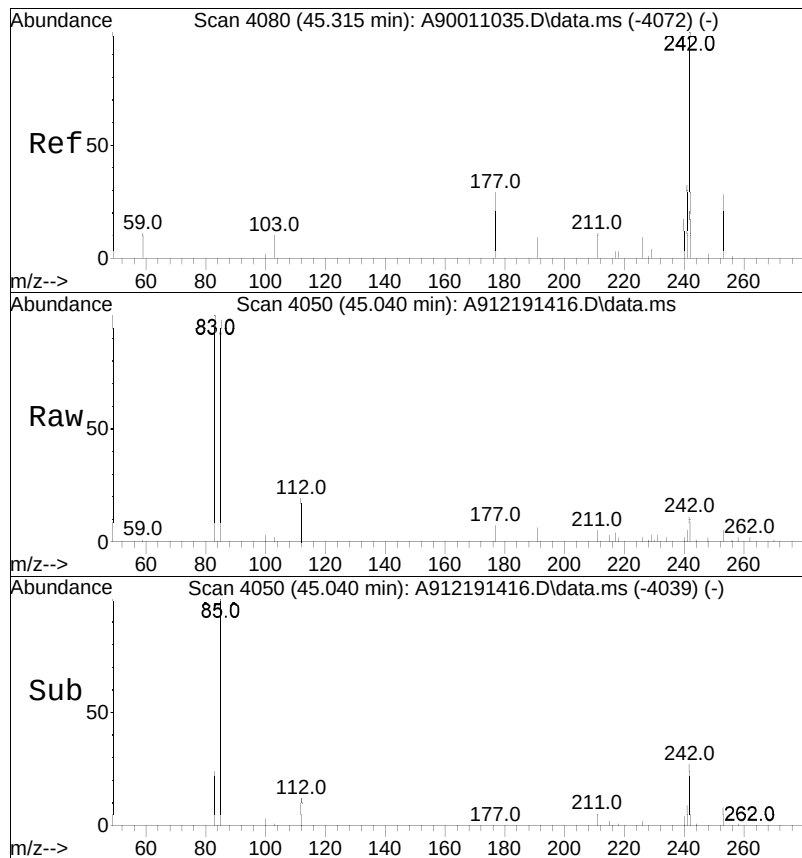




#77
 Chrysene/Triphenylene
 Concen: 546.05 ng/mL
 RT: 43.561 min Scan# 3888
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

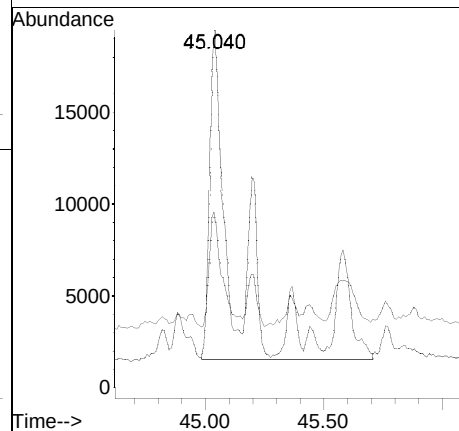
Tgt Ion	Ratio	Lower	Upper
228	100		
226	27.2	18.8	34.8

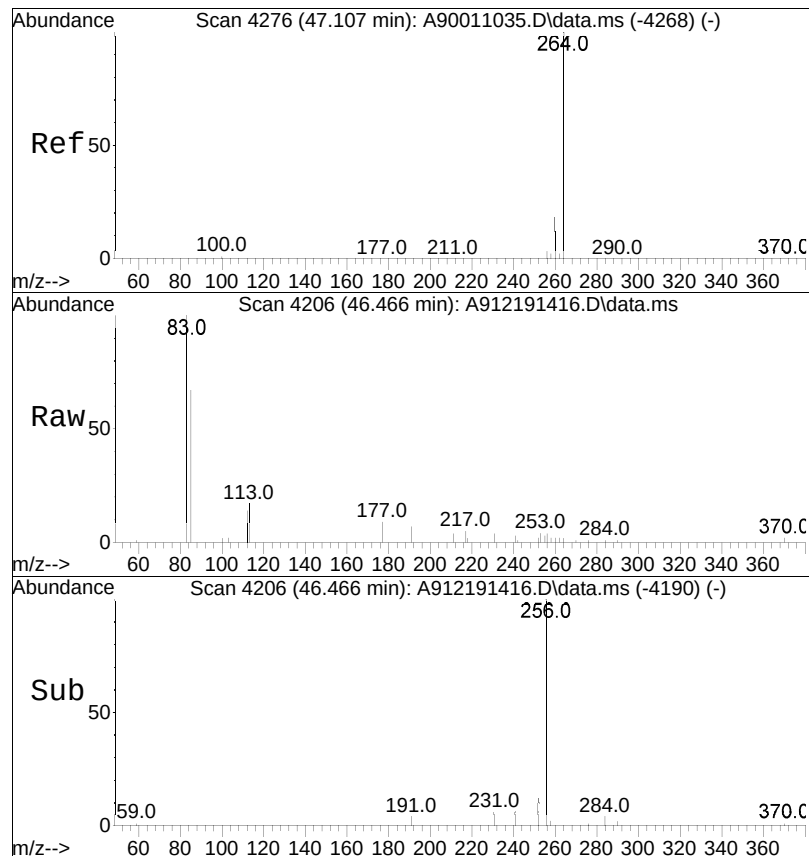




#78
C1-Chrysenes
 Concen: 426.81 ng/mL M5
 RT: 45.040 min Scan# 4050
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

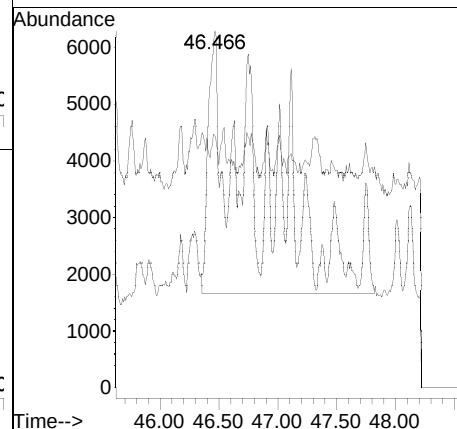
Tgt Ion	Ratio	Lower	Upper
242	100		
241	16.3	30.9	57.5#

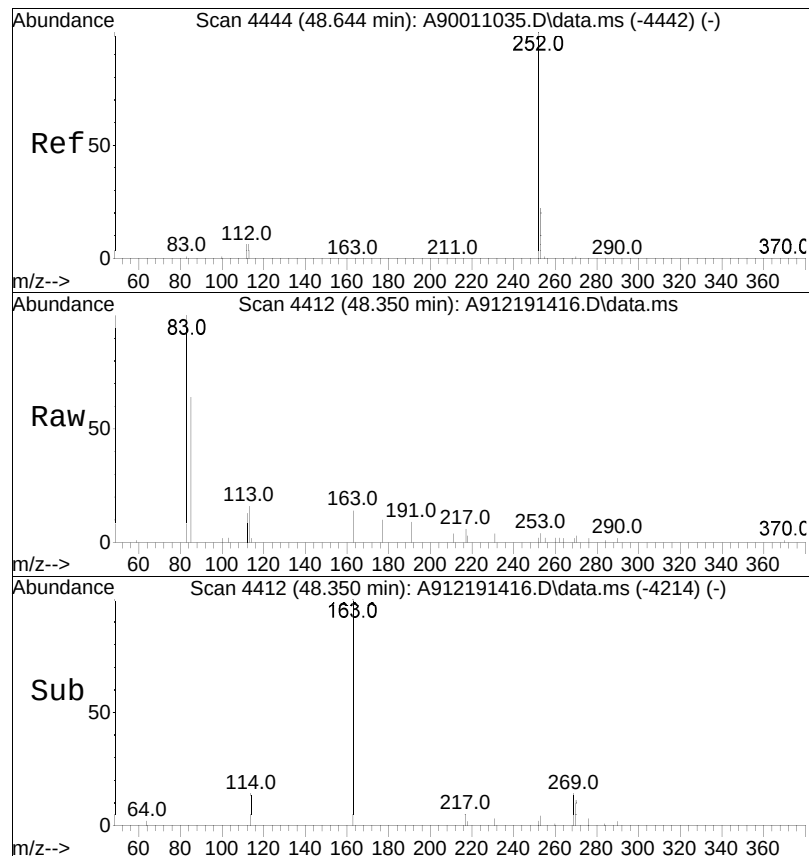




#79
 C2-Chrysenes
 Concen: 407.56 ng/mL M5
 RT: 46.466 min Scan# 4206
 Delta R.T. -0.622 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

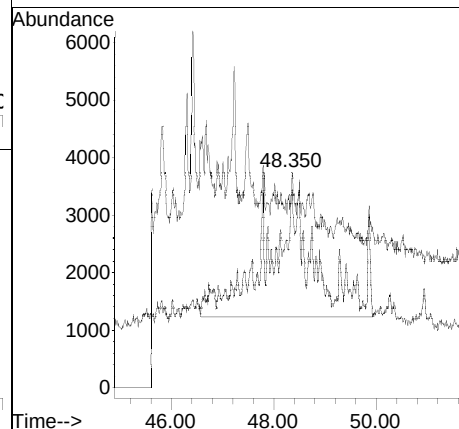
Tgt	Ion	Ratio	Lower	Upper
256	100			
241	1.4	22.1	41.1#	

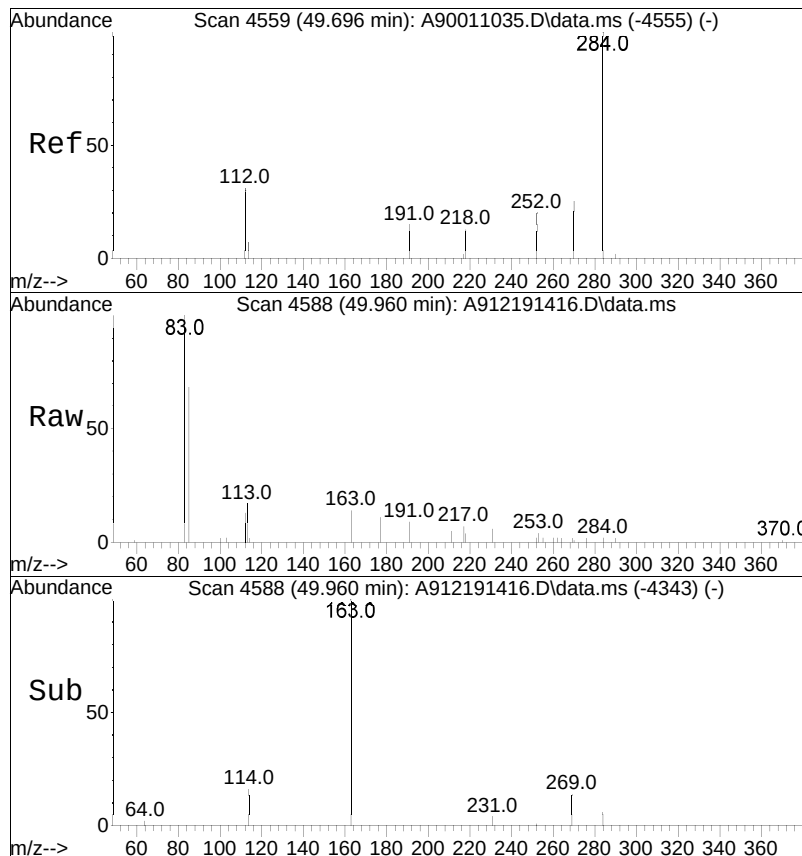




#81
 C3-Chrysenes
 Concen: 454.12 ng/mL M5
 RT: 48.350 min Scan# 4412
 Delta R.T. -1.482 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

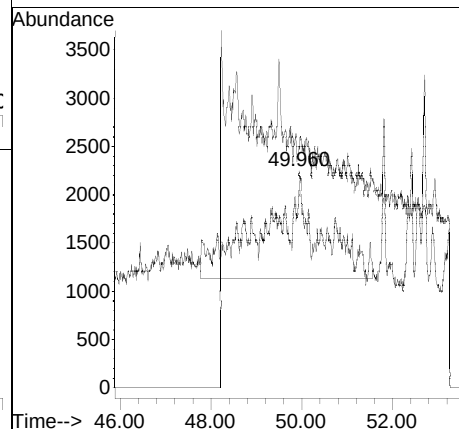
Tgt	Ion	Ratio	Lower	Upper
270	100			
255	0.3	26.8	49.8	

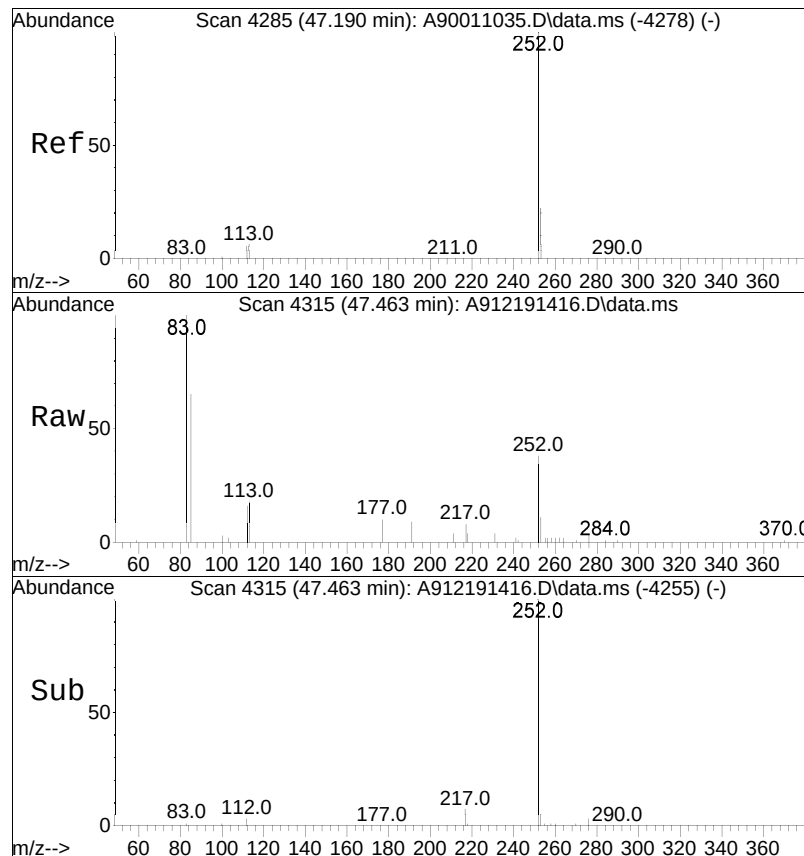




#82
 C4-Chrysenes
 Concen: 286.38 ng/mL M5
 RT: 49.960 min Scan# 4588
 Delta R.T. 0.540 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

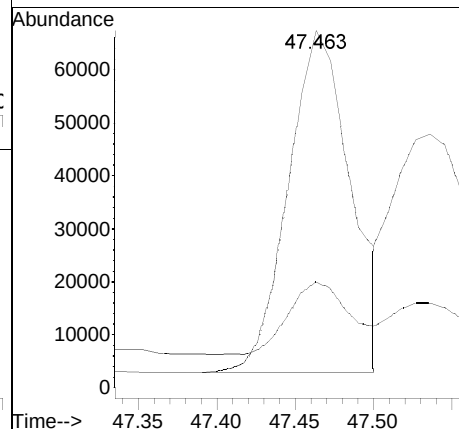
Tgt	Ion	Ratio	Lower	Upper
284	100			
269	0.0	54.7	101.5	

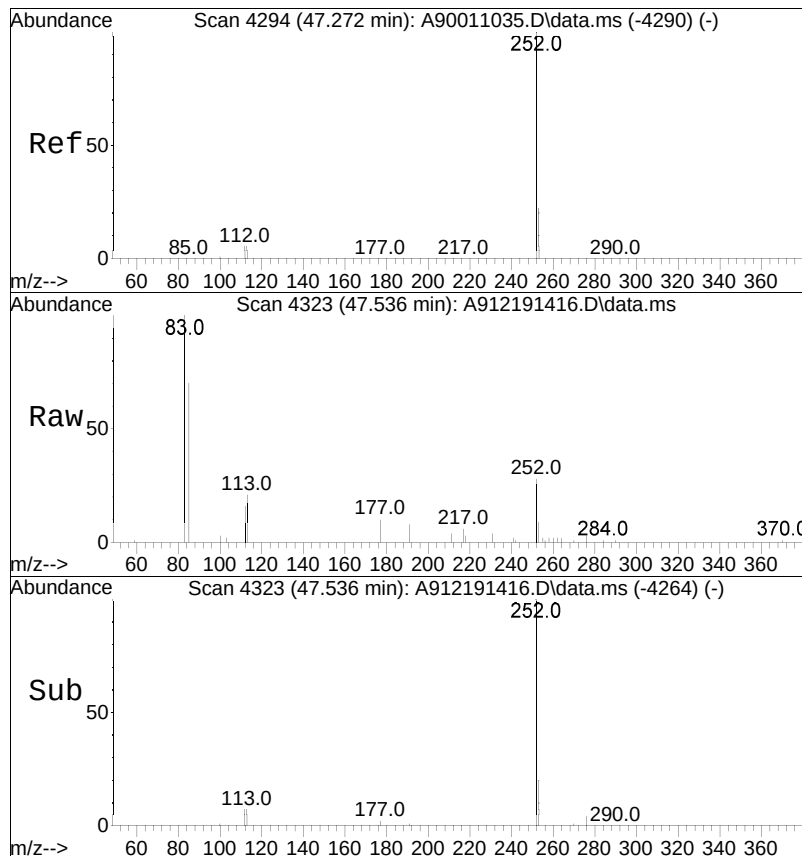




#84
Benzo[b]fluoranthene
Concen: 459.04 ng/mL
RT: 47.463 min Scan# 4315
Delta R.T. 0.045 min
Lab File: A912191416.D
Acq: 22 Dec 2014 11:32 pm

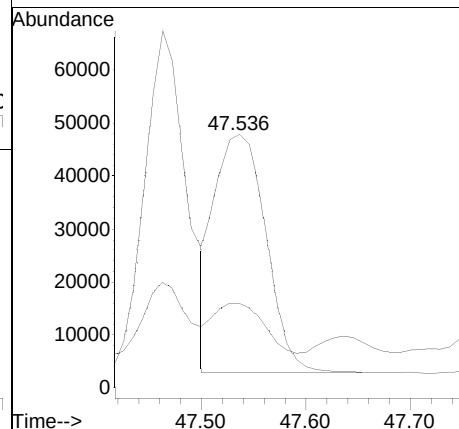
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.1	16.4	30.4	

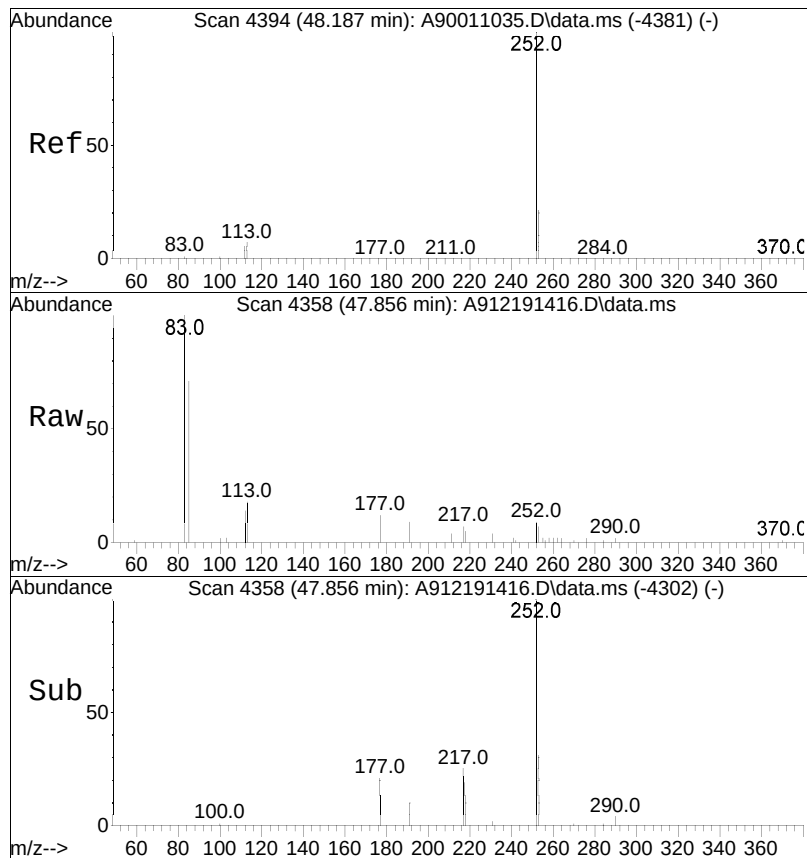




#85
 Benzo[j]+[k]fluoranthene
 Concen: 413.21 ng/mL
 RT: 47.536 min Scan# 4323
 Delta R.T. 0.036 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

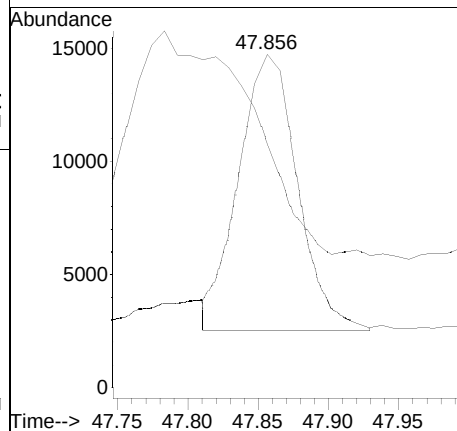
Tgt	Ion:252	Resp:	154786
Ion	Ratio	Lower	Upper
252	100		
253	21.1	16.1	29.9

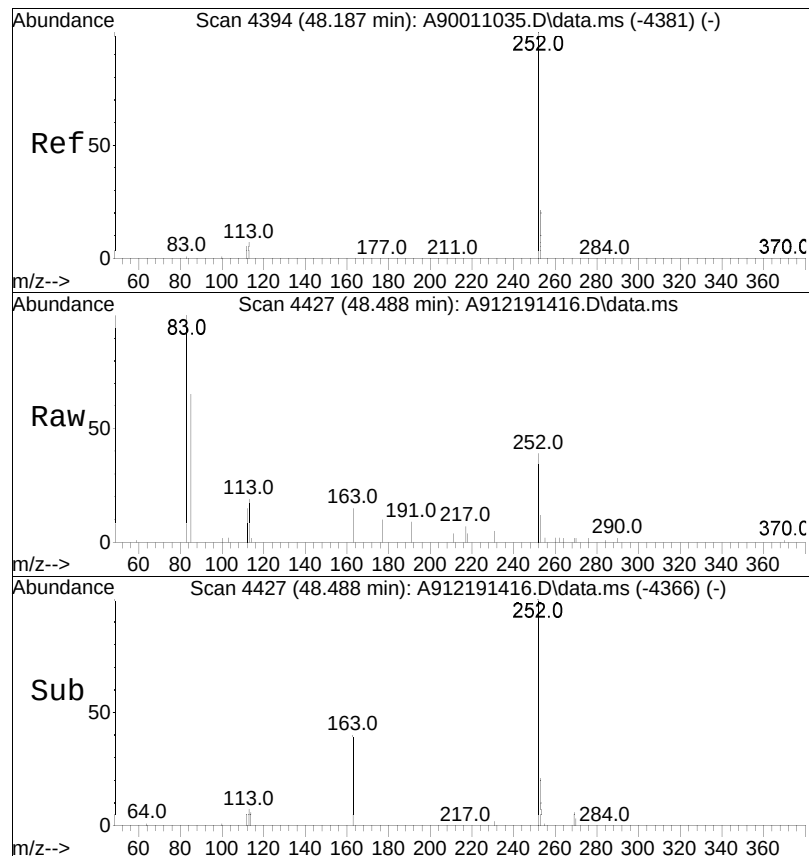




#86
 Benzo[a]fluoranthene
 Concen: 94.63 ng/mL M3
 RT: 47.856 min Scan# 4358
 Delta R.T. 0.012 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

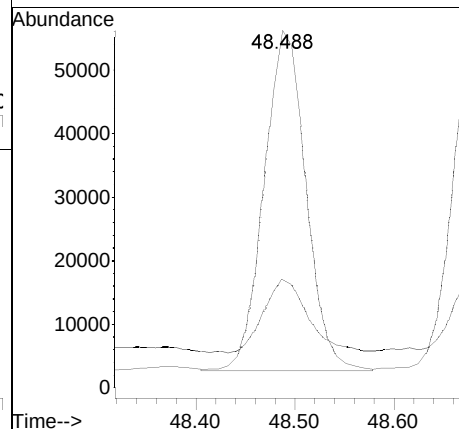
Tgt Ion	Ratio	Lower	Upper
252	100		
253	92.2	20.8	38.6

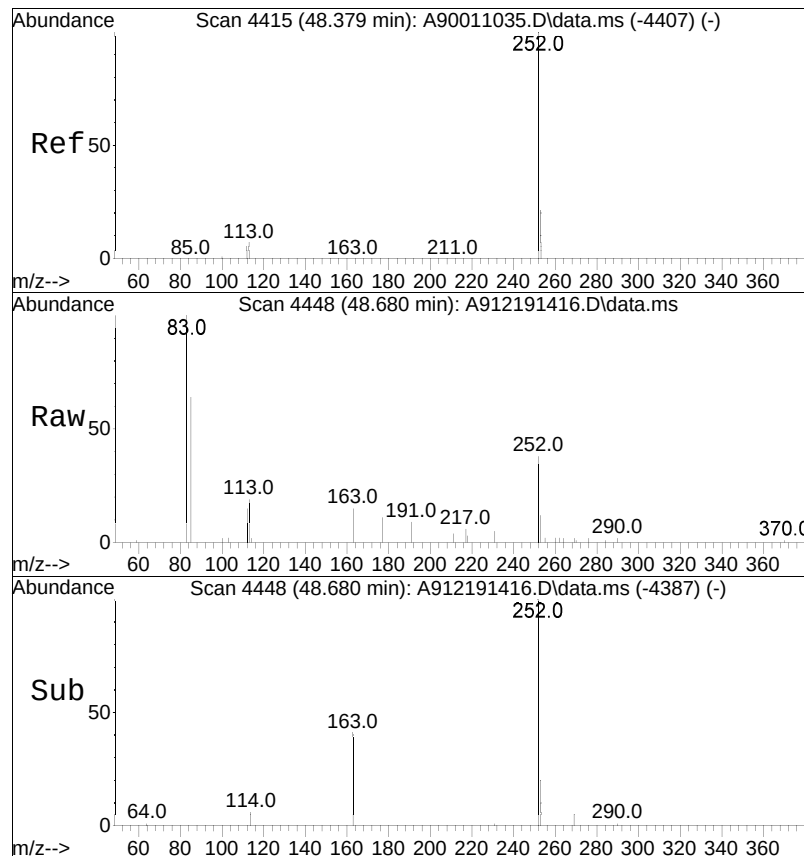




#87
 Benzo[e]pyrene
 Concen: 421.18 ng/mL
 RT: 48.488 min Scan# 4427
 Delta R.T. 0.055 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

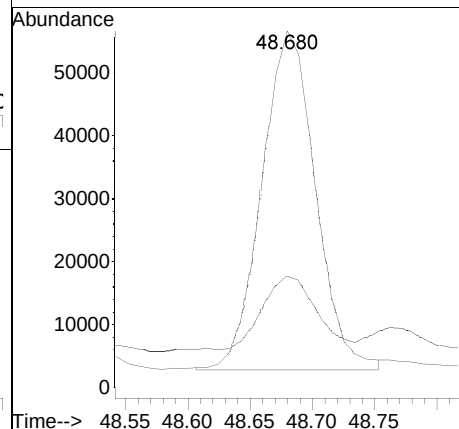
Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.6	16.2	30.0

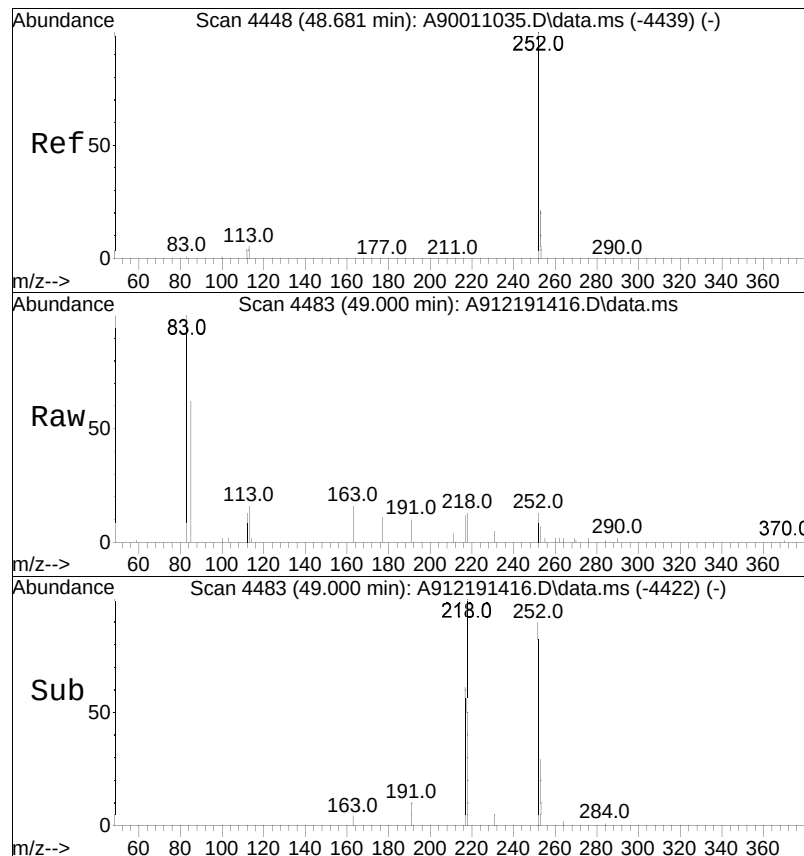




#89
 Benzo[a]pyrene
 Concen: 436.68 ng/mL M4
 RT: 48.680 min Scan# 4448
 Delta R.T. 0.055 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

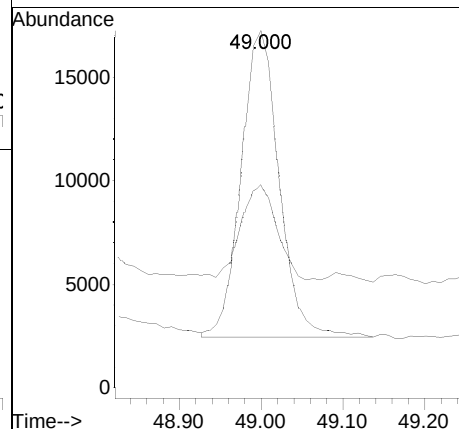
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	25.1	16.4	30.6	

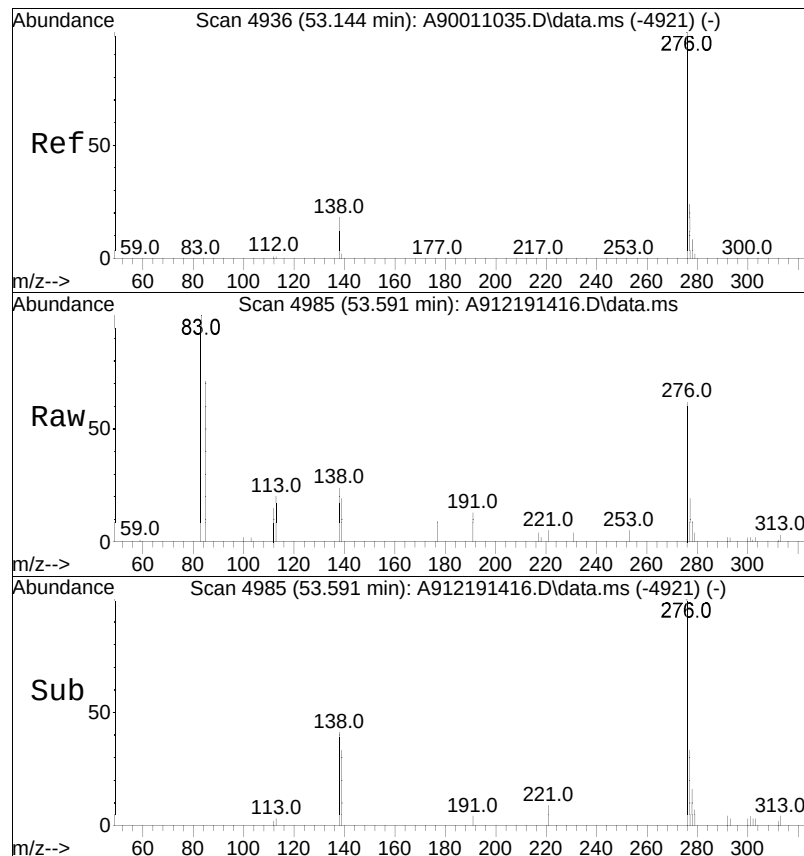




#90
 Perylene
 Concen: 128.82 ng/mL
 RT: 49.000 min Scan# 4483
 Delta R.T. 0.055 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

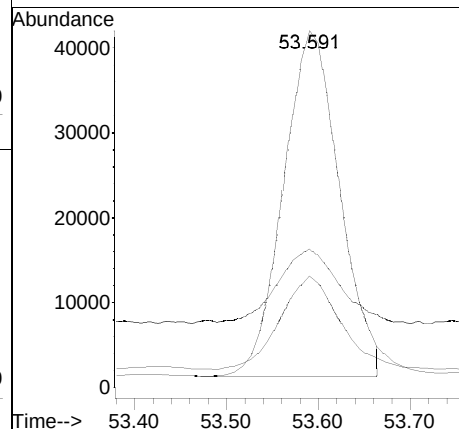
Tgt Ion	Ratio	Lower	Upper
252	100		
253	28.7	16.6	30.8

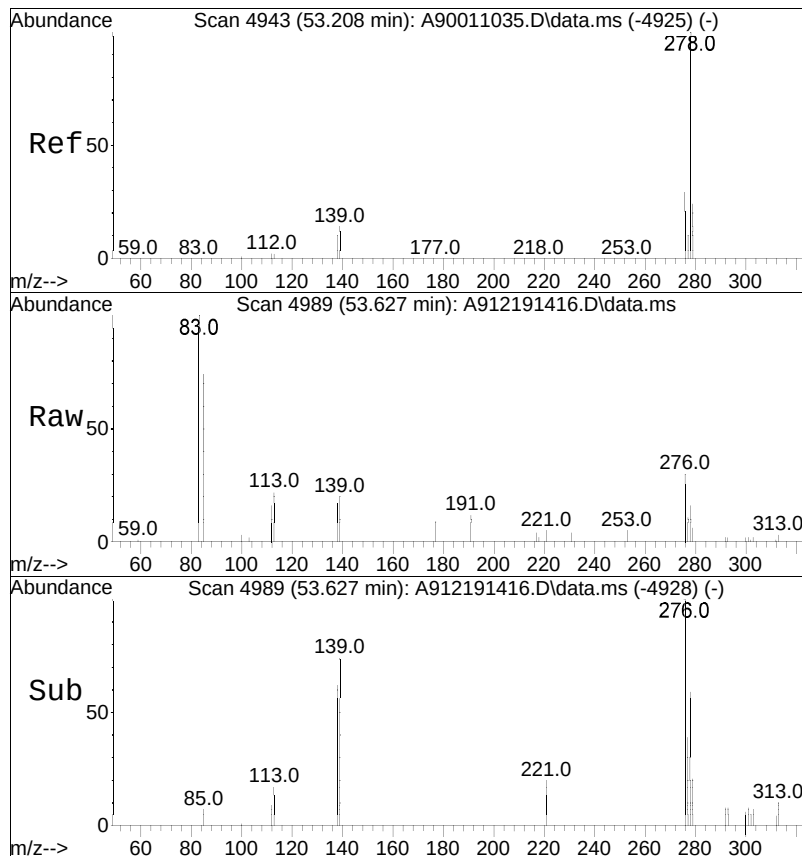




#91
 Indeno[1,2,3-cd]pyrene
 Concen: 379.61 ng/mL M4
 RT: 53.591 min Scan# 4985
 Delta R.T. 0.082 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

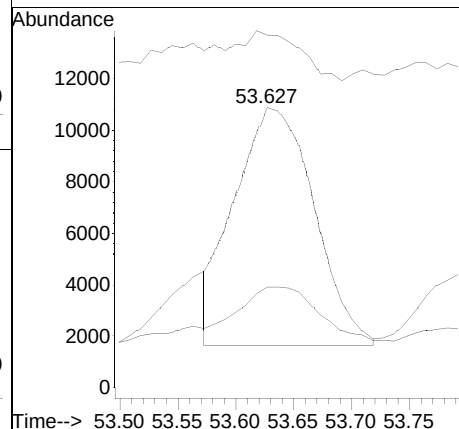
Tgt Ion:	276	Resp:	172857
Ion Ratio	Lower	Upper	
276	100		
138	23.1	15.7	29.1
277	28.4	17.9	33.3

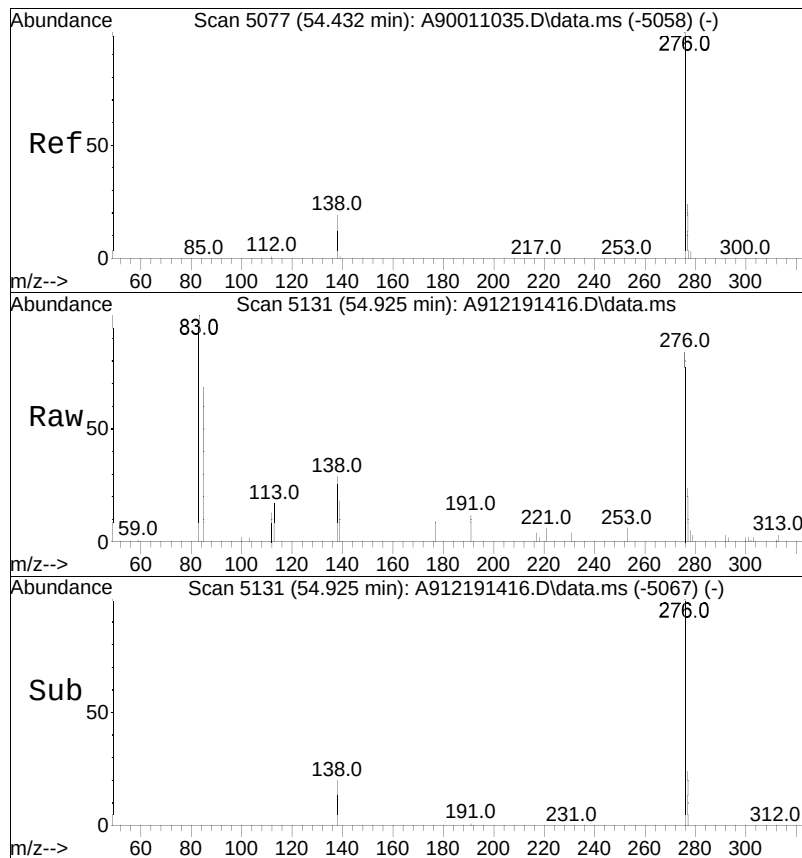




#92
 Dibenz[ah]+[ac]anthracene
 Concen: 98.21 ng/mL M3
 RT: 53.627 min Scan# 4989
 Delta R.T. 0.054 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

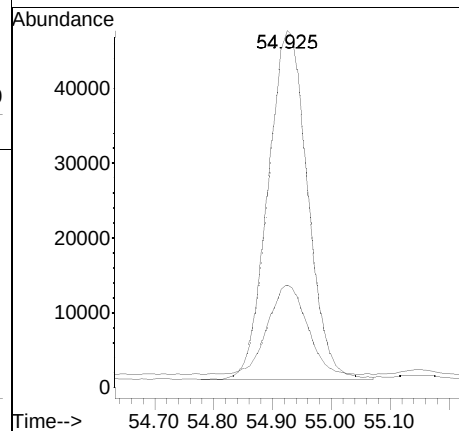
Tgt Ion:	278	Resp:	44137
Ion Ratio	Lower	Upper	
278	100		
139	0.0	11.4	21.2#
279	21.7	16.3	30.3

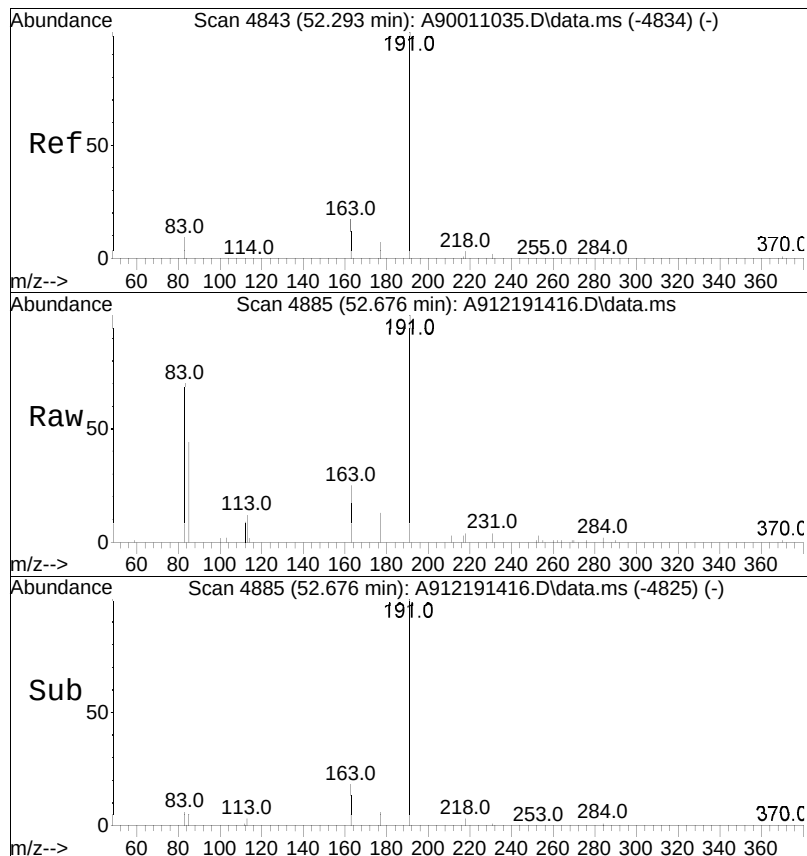




#93
 Benzo[g,h,i]perylene
 Concen: 489.39 ng/mL
 RT: 54.925 min Scan# 5131
 Delta R.T. 0.082 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

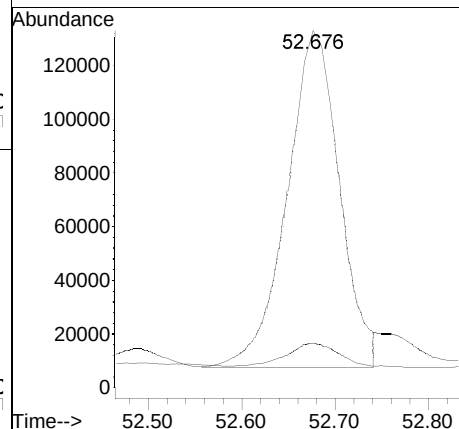
Tgt Ion	Ratio	Lower	Upper
276	100		
277	25.5	17.4	32.2

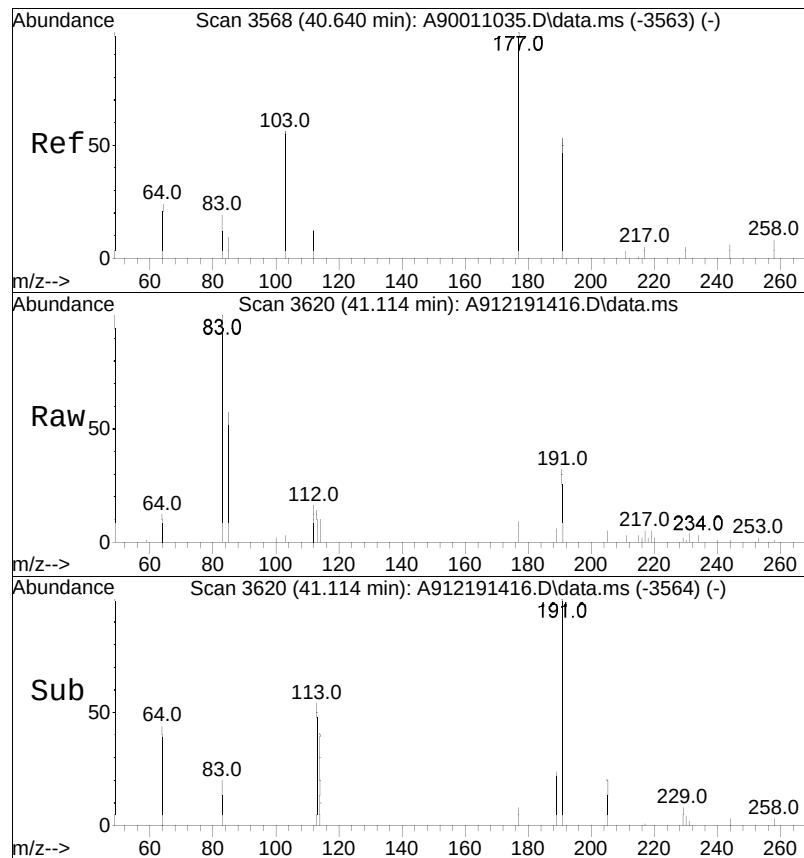




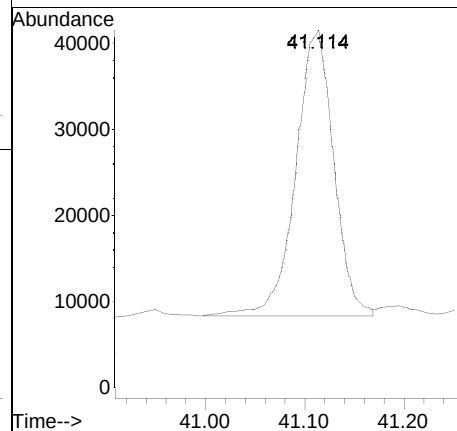
#94
Hopane (T19)
Concen: 5323.65 ng/mL M3
RT: 52.676 min Scan# 4885
Delta R.T. 0.045 min
Lab File: A912191416.D
Acq: 22 Dec 2014 11:32 pm

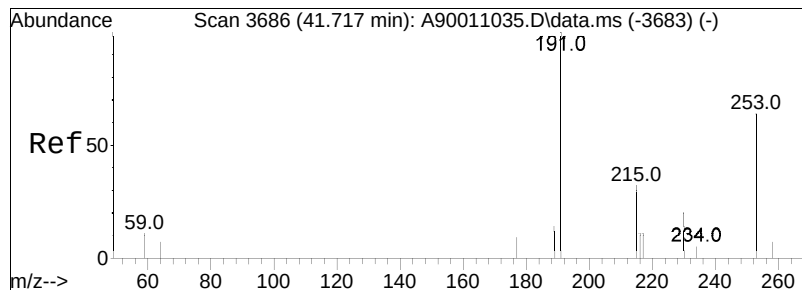
Tgt	Ion	Ratio	Lower	Upper
191	100			
177	0.5	8.5	15.9	





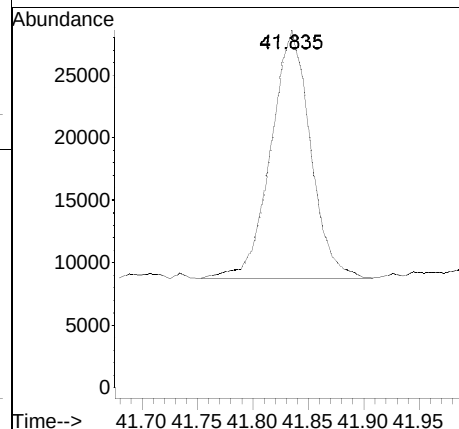
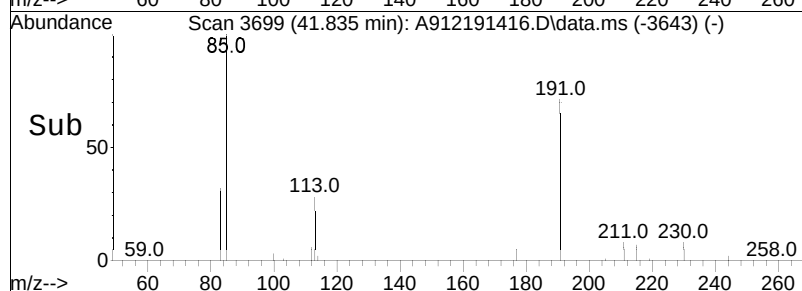
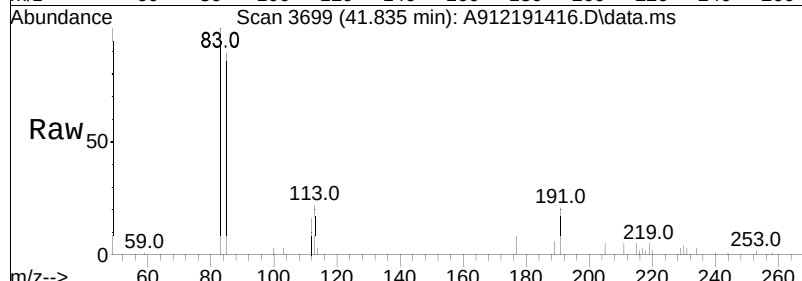
#96
 C23 Tricyclic Terpane (T4)
 Concen: 968.56 ng/ml
 RT: 41.114 min Scan# 3620
 Delta R.T. 0.009 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm
 Tgt Ion:191 Resp: 88558

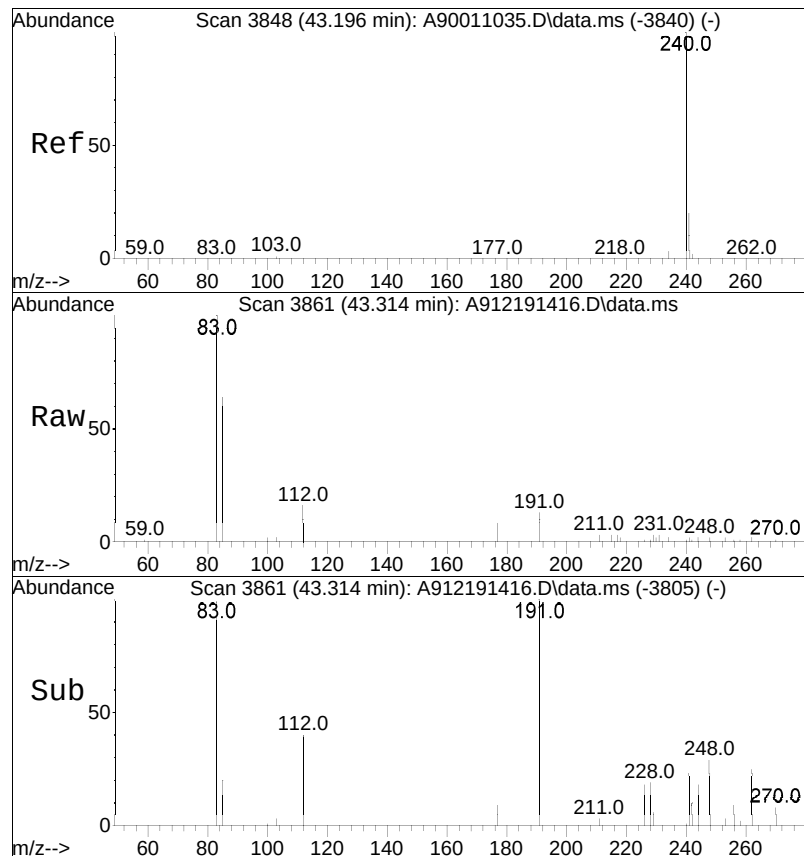




#97
 C24 Tricyclic Terpane (T5)
 Concen: 530.32 ng/ml
 RT: 41.835 min Scan# 3699
 Delta R.T. 0.009 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

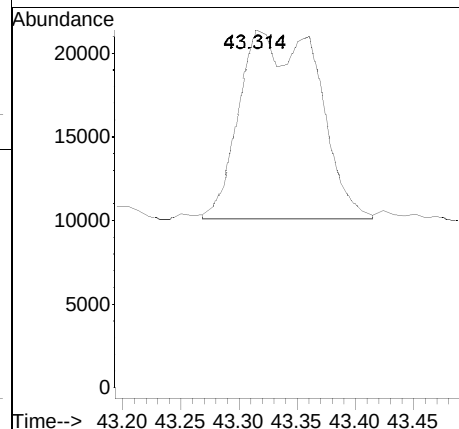
Tgt Ion:191 Resp: 48489

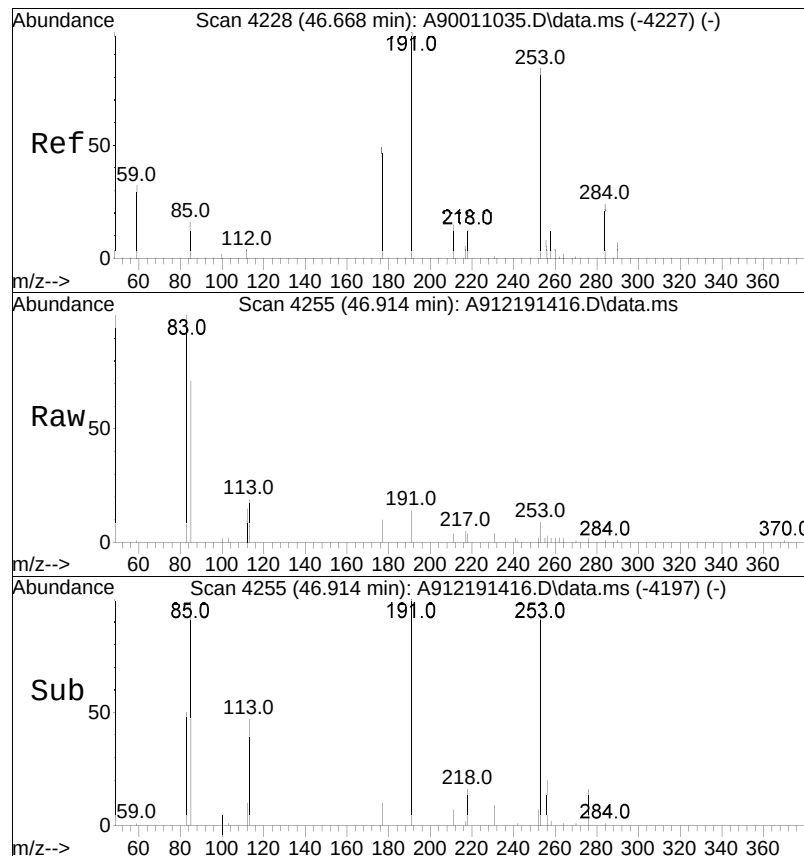




#98
C25 Tricyclic Terpane (T6)
Concen: 570.30 ng/ml M1
RT: 43.314 min Scan# 3861
Delta R.T. 0.009 min
Lab File: A912191416.D
Acq: 22 Dec 2014 11:32 pm

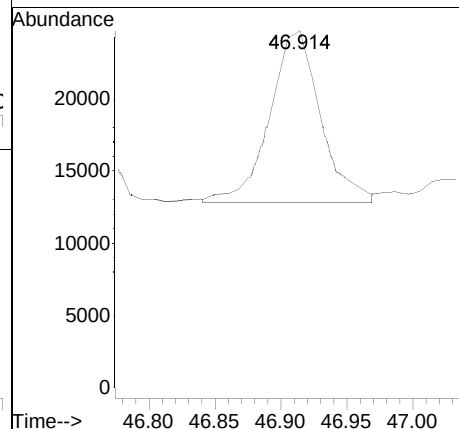
Tgt Ion:191 Resp: 52144

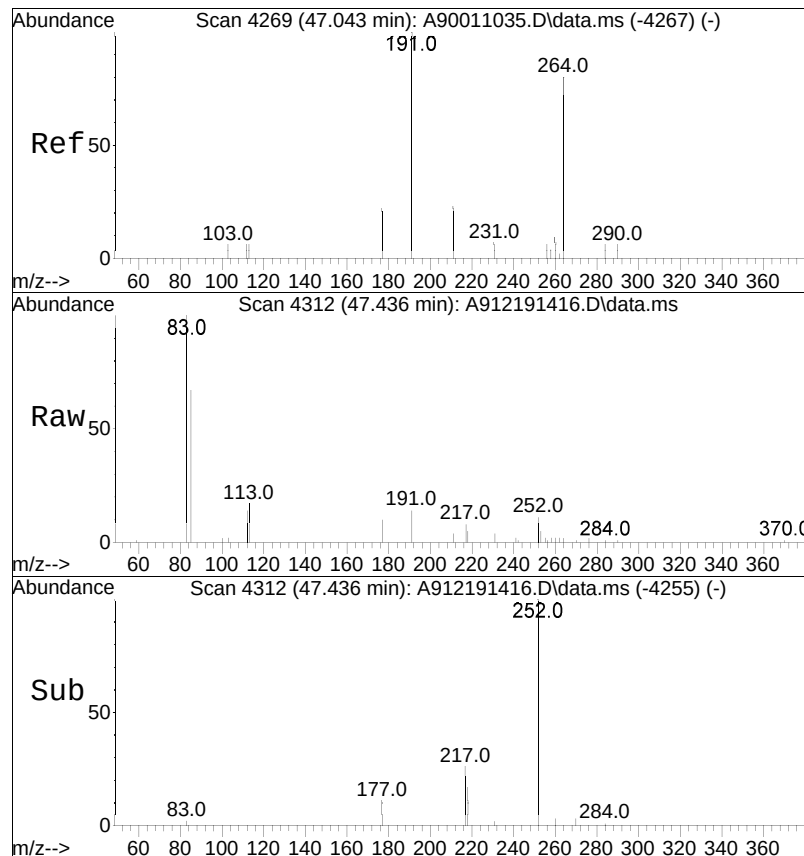




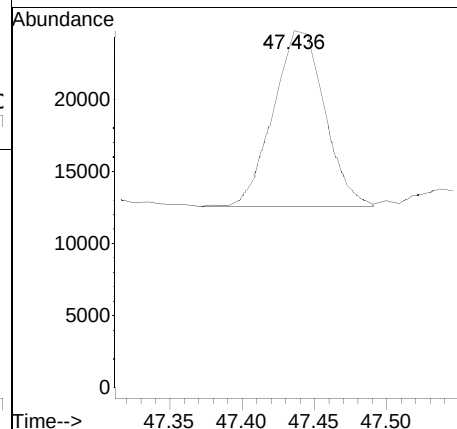
#103
 C28 Tricyclic Terpane-22R (T8)
 Concen: 347.75 ng/ml M4
 RT: 46.914 min Scan# 4255
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

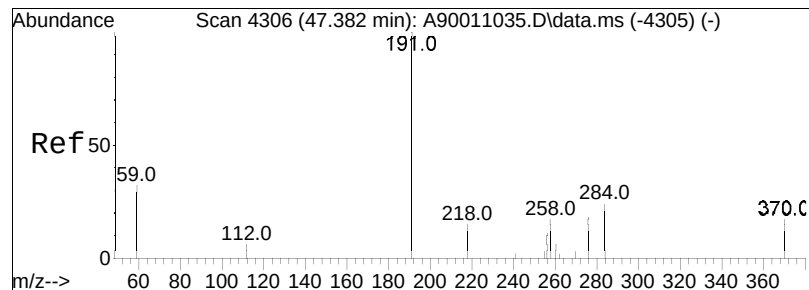
Tgt Ion:191 Resp: 31796



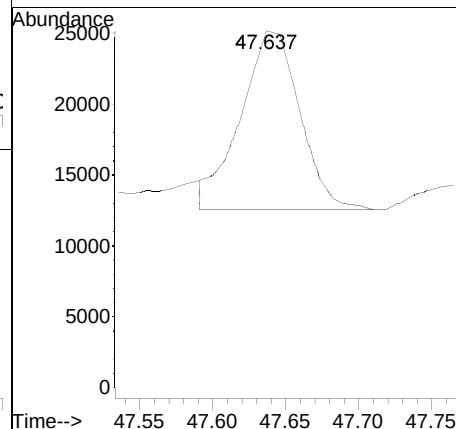
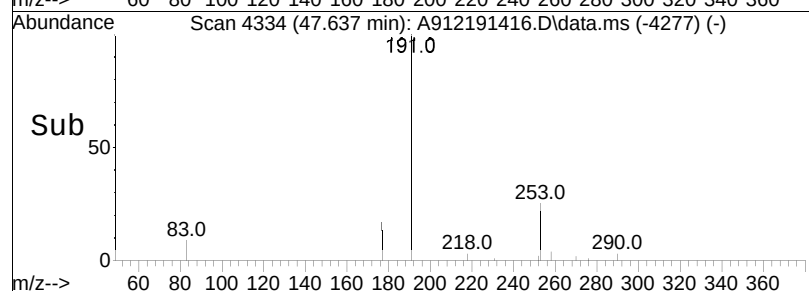
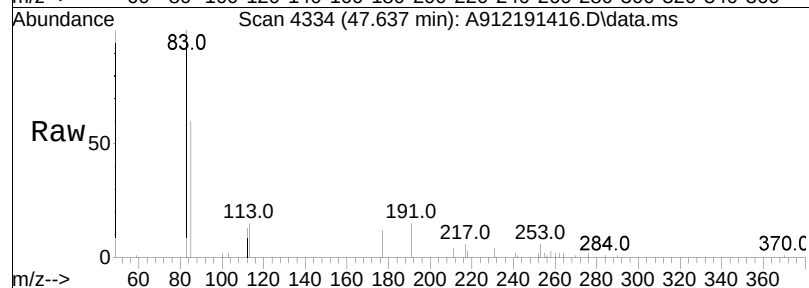


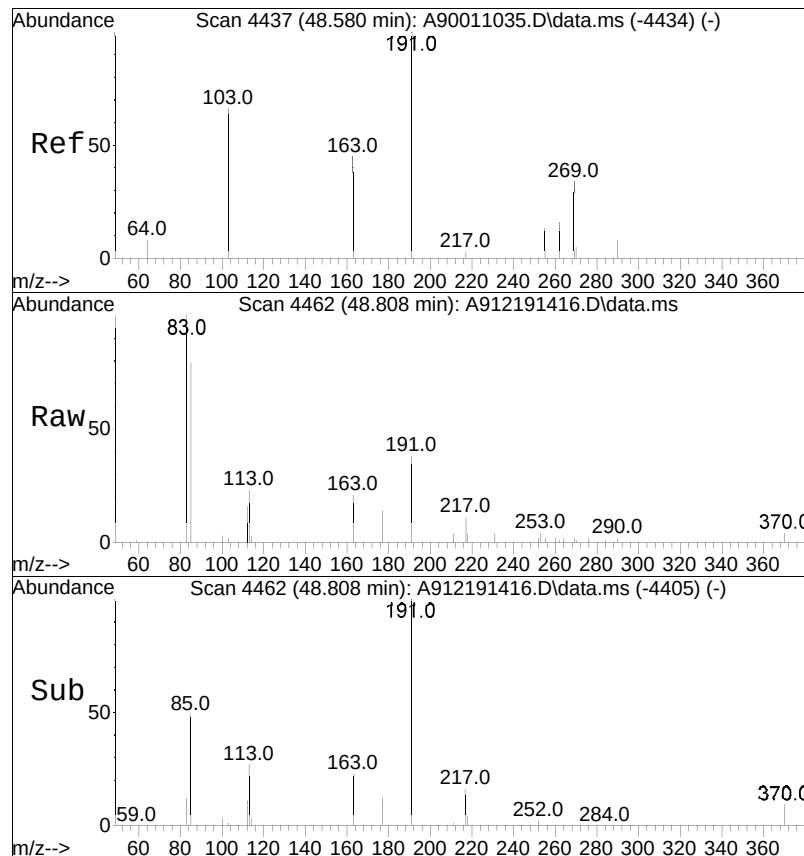
#104
 C29 Tricyclic Terpane-22S (T9)
 Concen: 329.33 ng/ml
 RT: 47.436 min Scan# 4312
 Delta R.T. 0.018 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm
 Tgt Ion:191 Resp: 30112





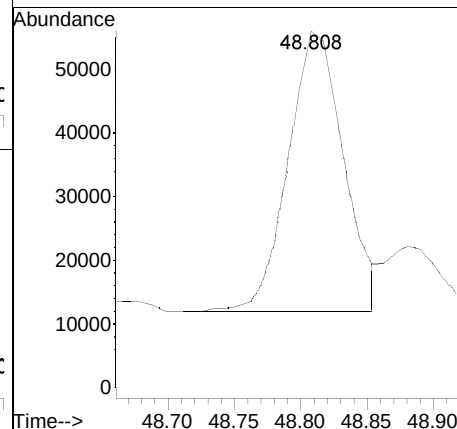
#105
 C29 Tricyclic Terpane-22R (T10)
 Concen: 382.18 ng/ml M4
 RT: 47.637 min Scan# 4334
 Delta R.T. 0.018 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm
 Tgt Ion:191 Resp: 34944

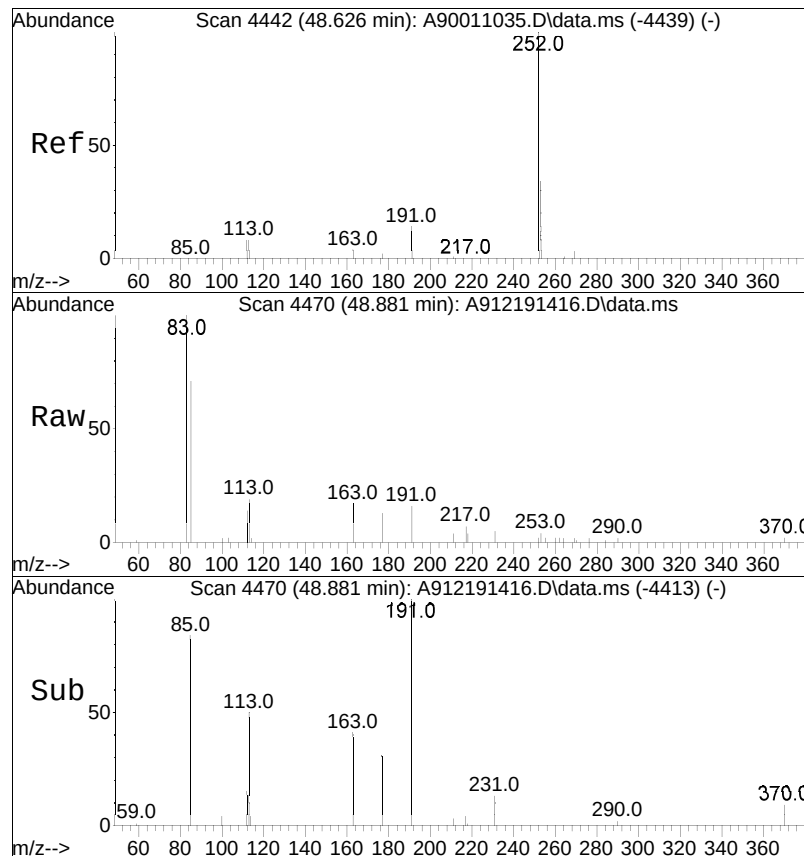




#106
 18a-22,29,30-Trisnorneohopane-
 Concen: 1395.91 ng/ml M6
 RT: 48.808 min Scan# 4462
 Delta R.T. 0.018 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

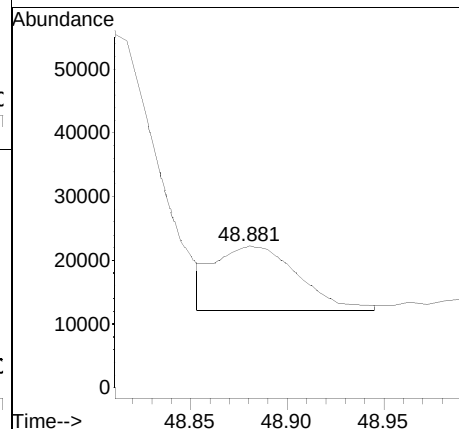
Tgt Ion:191 Resp: 127632

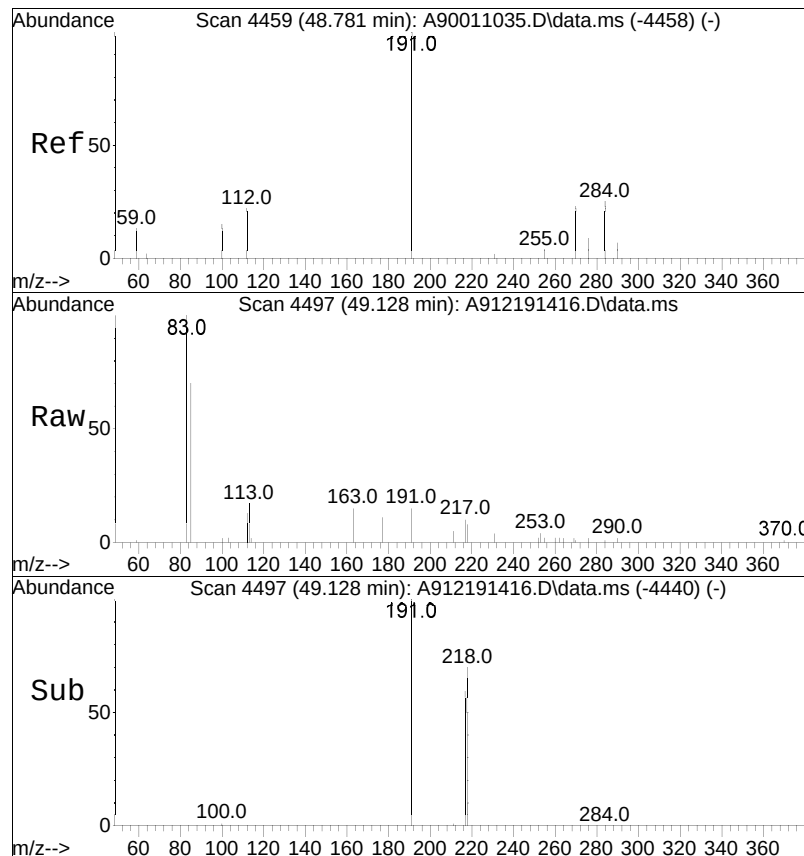




#107
 C30 Tricyclic Terpane-22S
 Concen: 322.75 ng/mL M4
 RT: 48.881 min Scan# 4470
 Delta R.T. 0.018 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

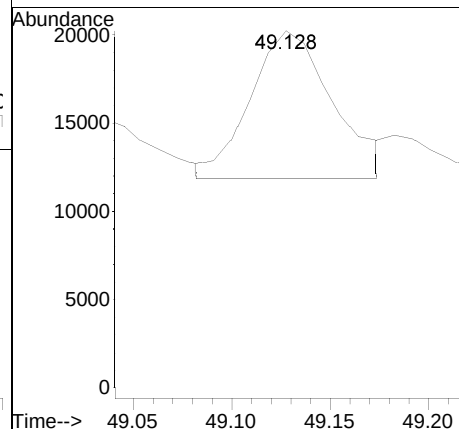
Tgt Ion:191 Resp: 29510

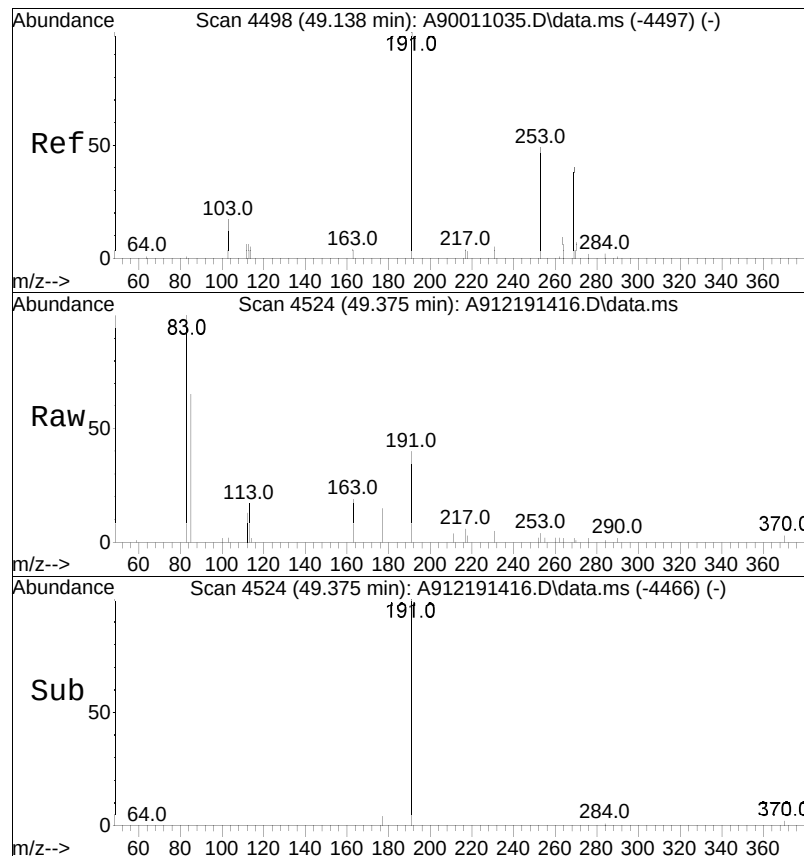




#108
 C30 Tricyclic Terpane-22R
 Concen: 267.16 ng/mL M4
 RT: 49.128 min Scan# 4497
 Delta R.T. 0.018 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

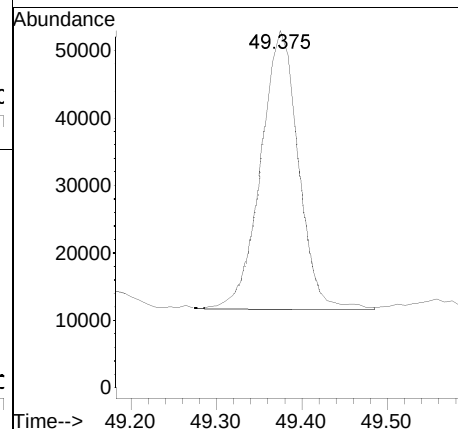
Tgt Ion:191 Resp: 24427

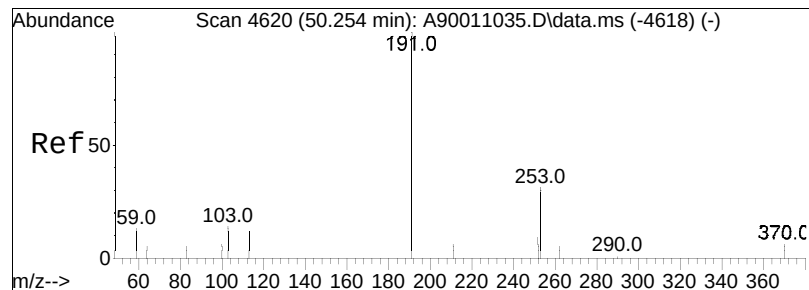




#109
 17a(H)-22,29,30-Trisnorhopane-
 Concen: 1369.61 ng/ml
 RT: 49.375 min Scan# 4524
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

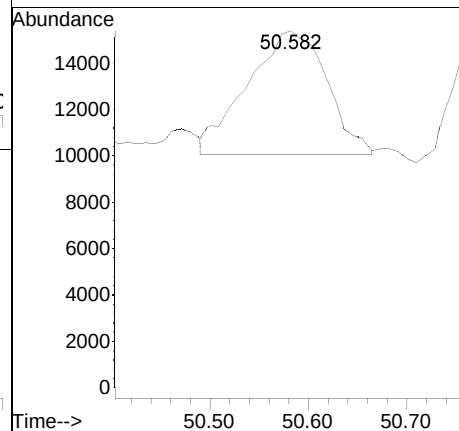
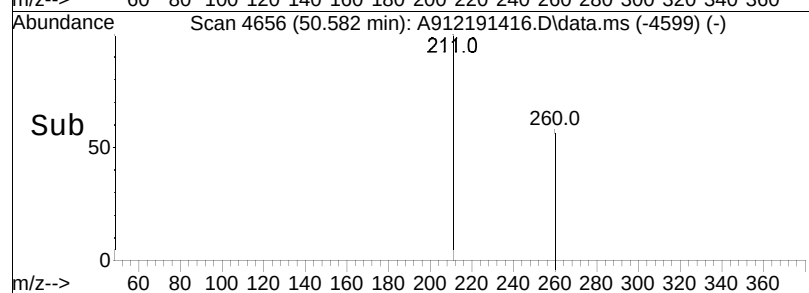
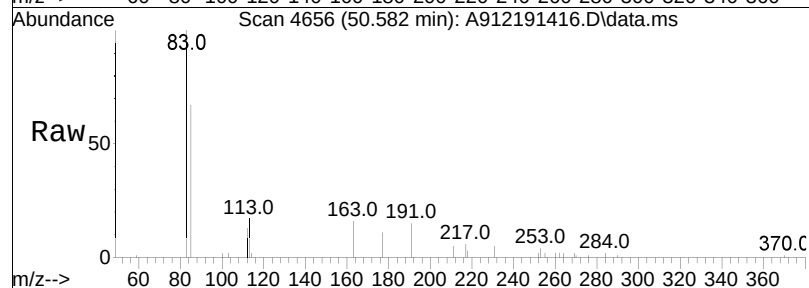
Tgt Ion:191 Resp: 125227

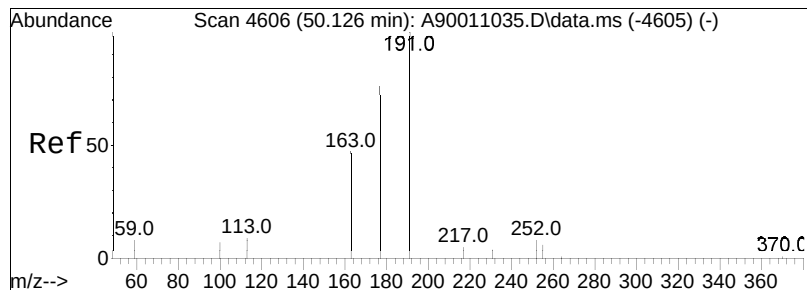




#110
 17a/b,21b/a 28,30-Bisnorhopane
 Concen: 328.51 ng/ml M4
 RT: 50.582 min Scan# 4656
 Delta R.T. 0.018 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

Tgt Ion:191 Resp: 30037





#111

17a(H),21b(H)-25-Norhopane (T1

Concen: 157.72 ng/ml

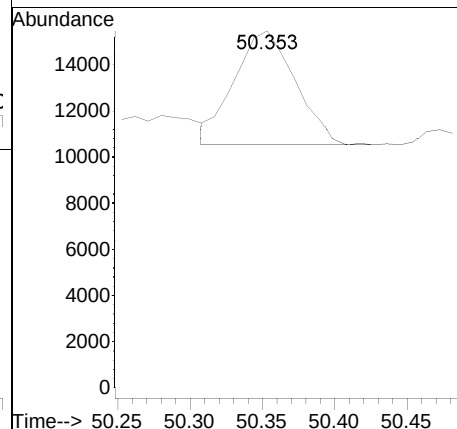
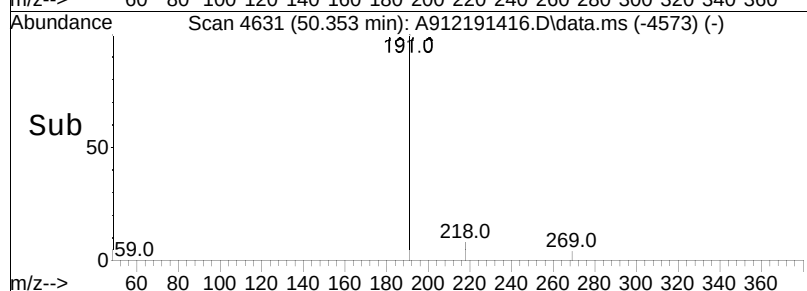
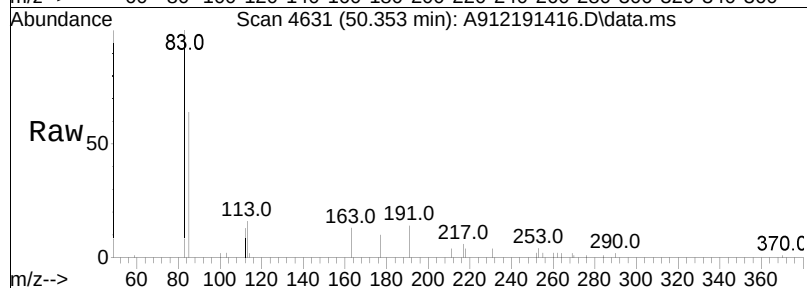
RT: 50.353 min Scan# 4631

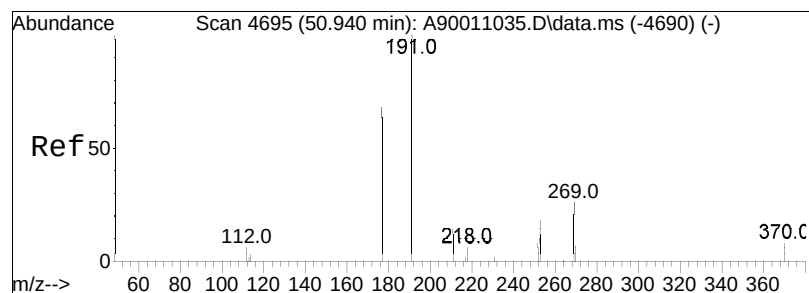
Delta R.T. 0.027 min

Lab File: A912191416.D

Acq: 22 Dec 2014 11:32 pm

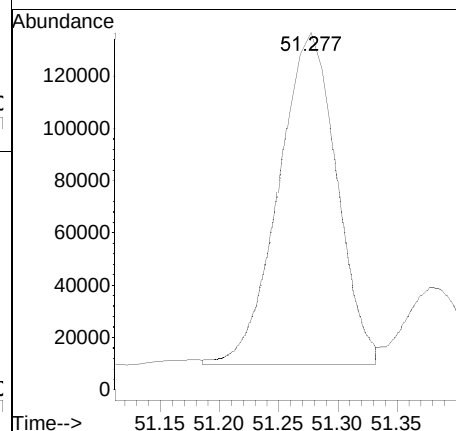
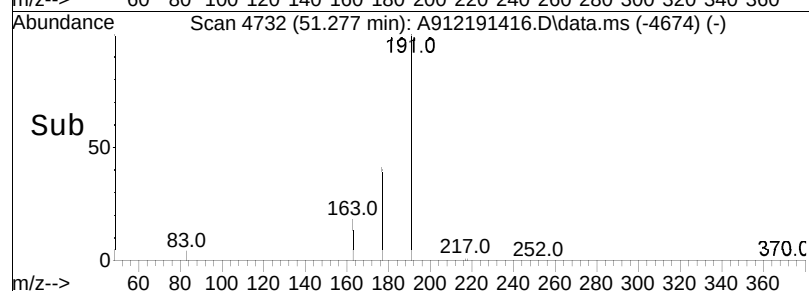
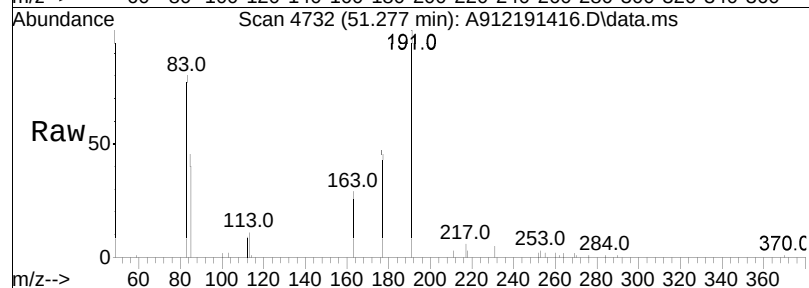
Tgt Ion:191 Resp: 14421

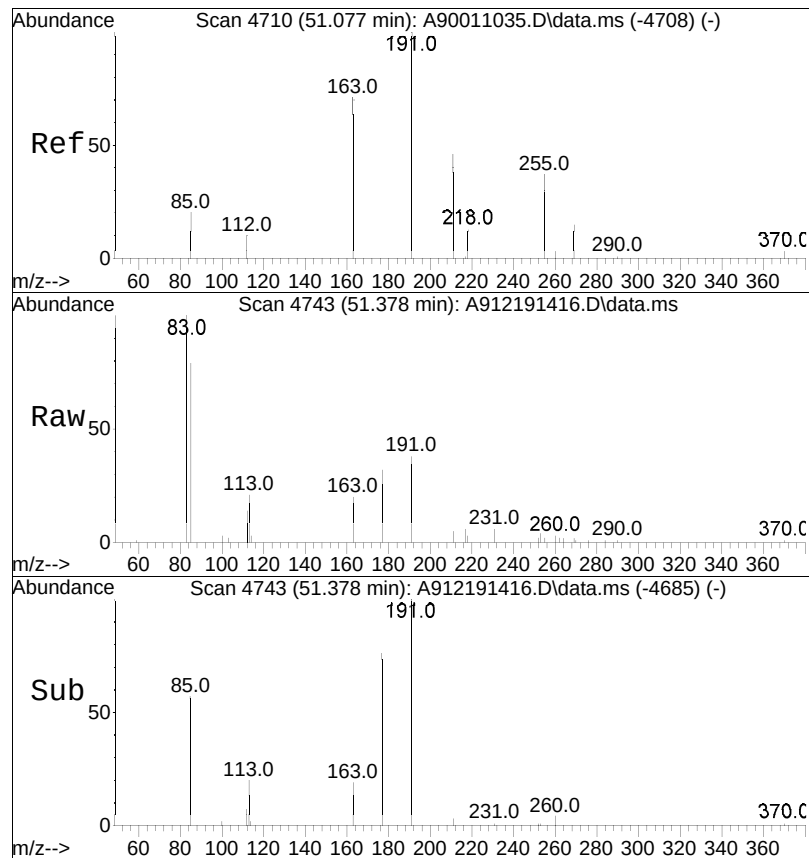




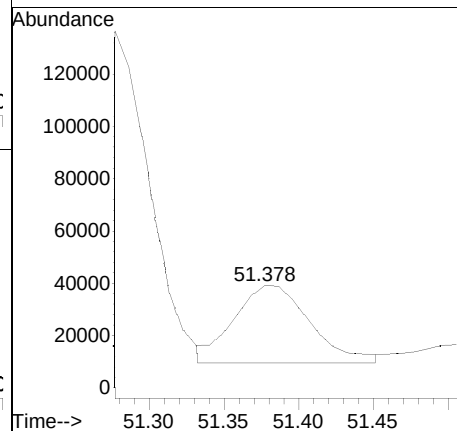
#112
 30-Norhopane (T15)
 Concen: 4732.74 ng/ml M4
 RT: 51.277 min Scan# 4732
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

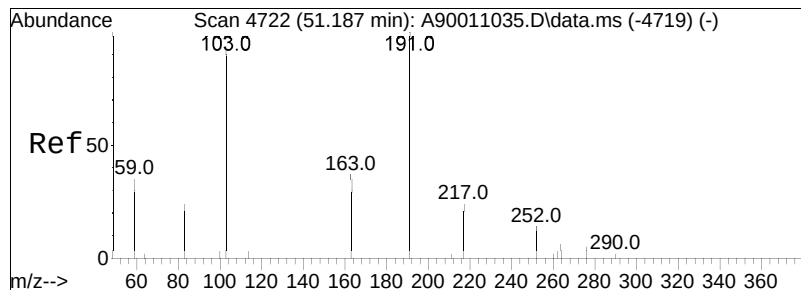
Tgt Ion:191 Resp: 432728





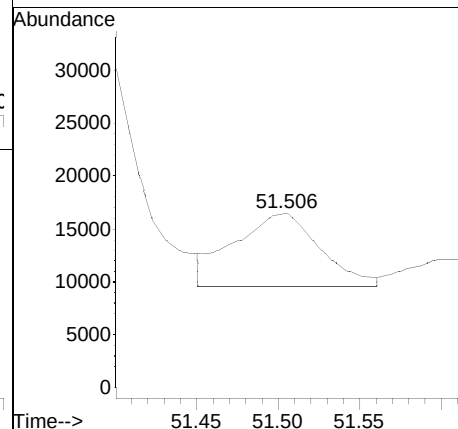
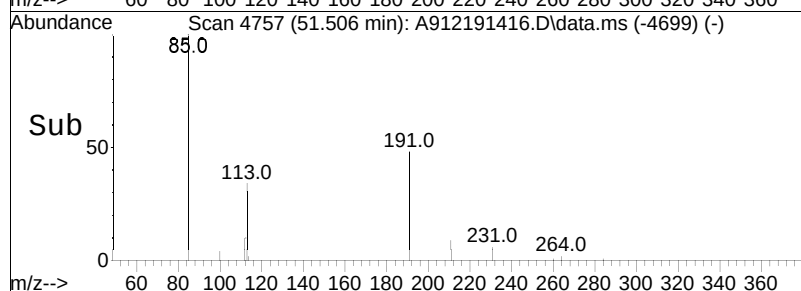
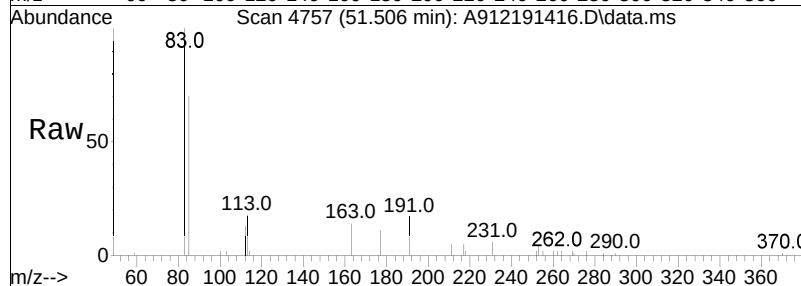
#113
 18a(H)-30-Norneohopane-C29Ts (
 Concen: 1138.41 ng/ml M4
 RT: 51.378 min Scan# 4743
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm
 Tgt Ion:191 Resp: 104088

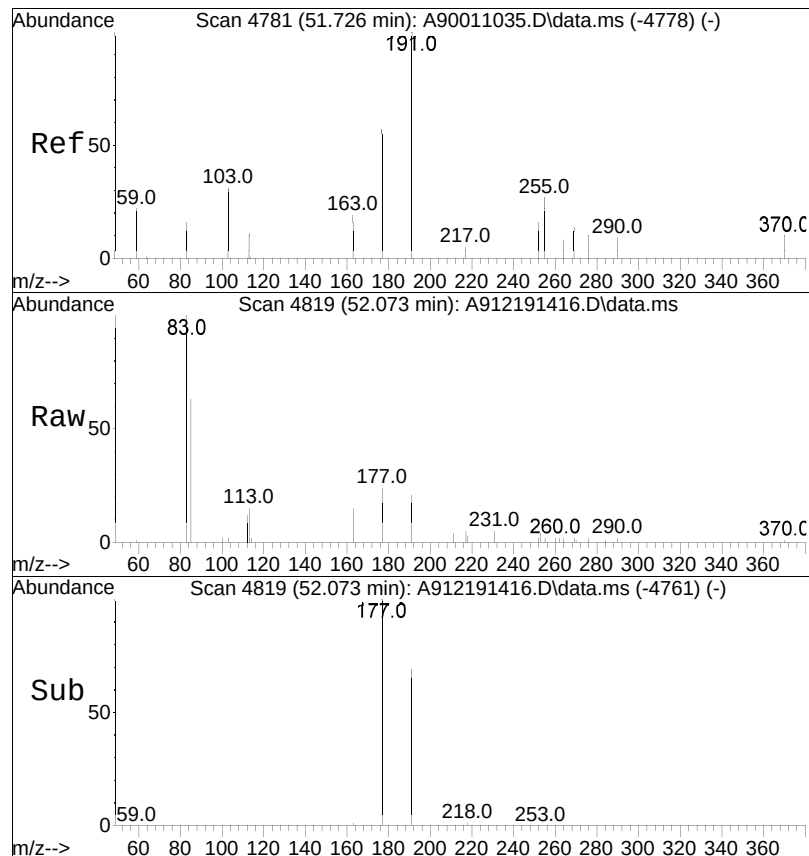




#114
 17a(H)-Diahopane (X)
 Concen: 275.39 ng/ml M4
 RT: 51.506 min Scan# 4757
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

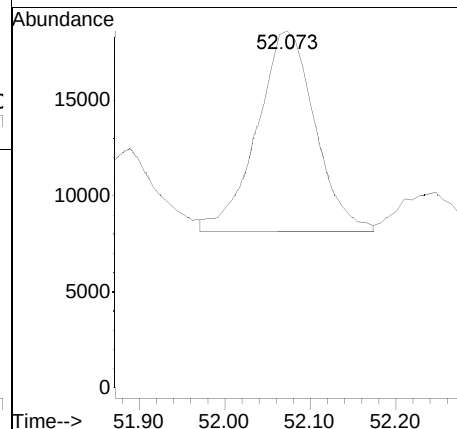
Tgt Ion:191 Resp: 25180

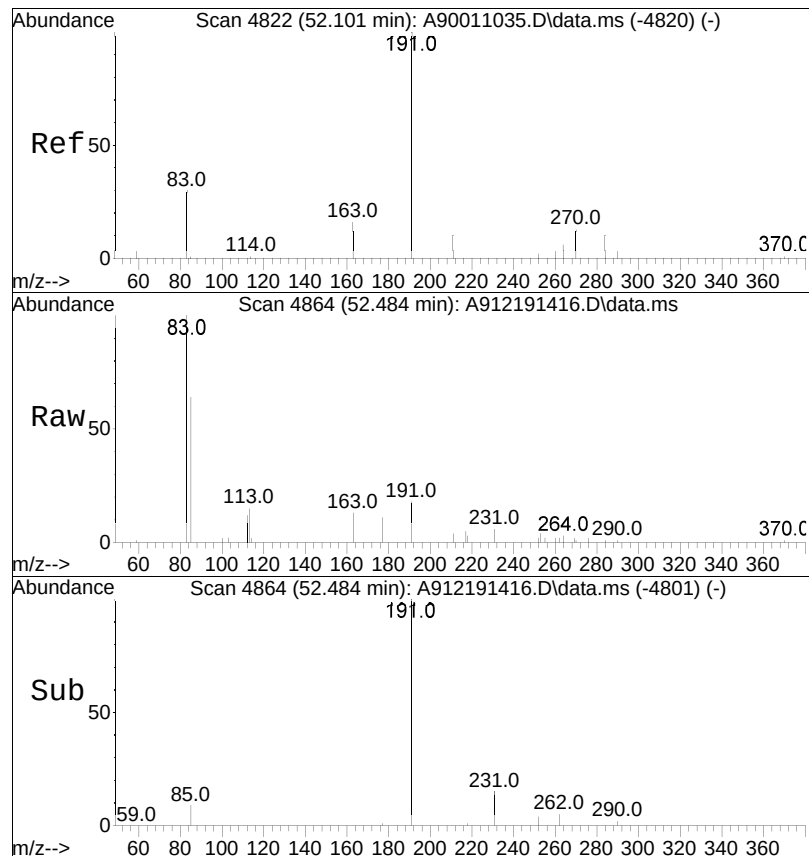




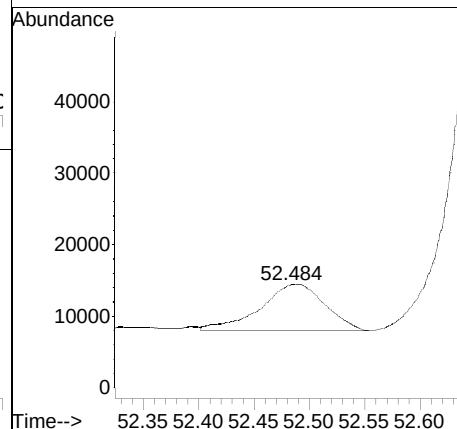
#115
 30-Normoretane (T17)
 Concen: 536.16 ng/ml
 RT: 52.073 min Scan# 4819
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

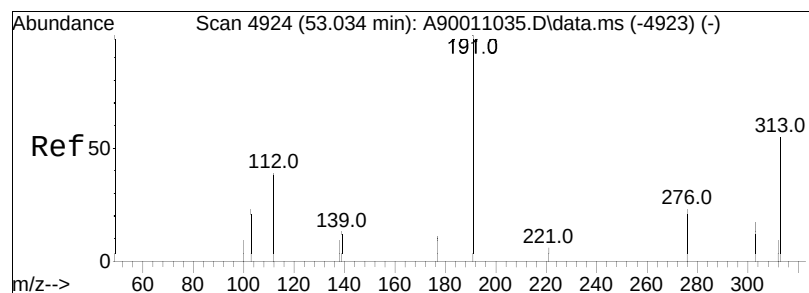
Tgt Ion:191 Resp: 49023





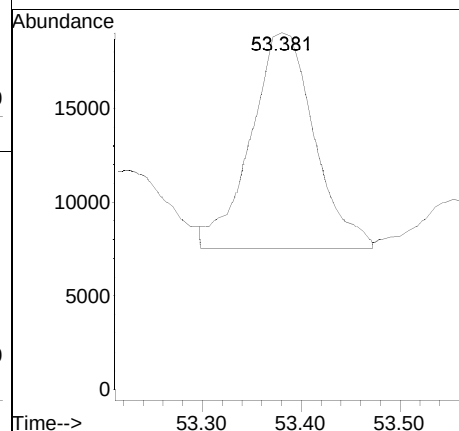
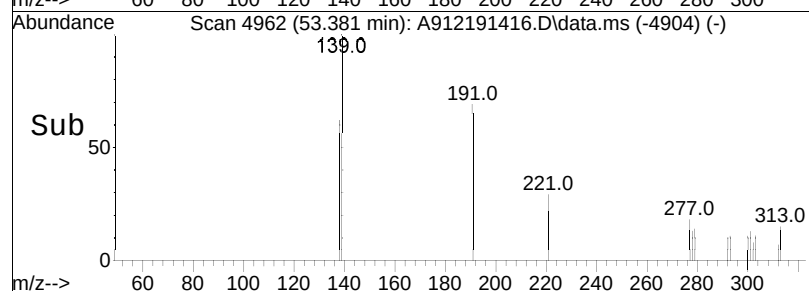
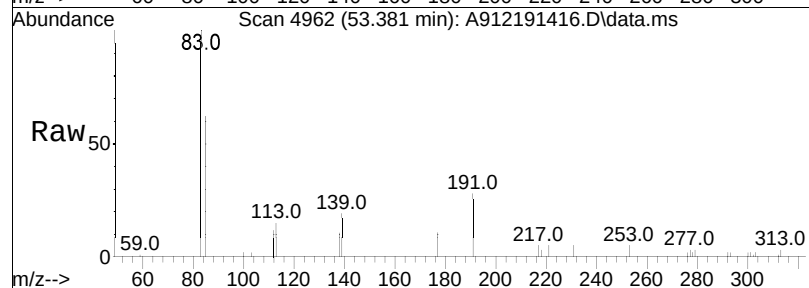
#116
18a(H)&18b(H)-Oleananes (T18)
Concen: 281.16 ng/ml
RT: 52.484 min Scan# 4864
Delta R.T. 0.073 min
Lab File: A912191416.D
Acq: 22 Dec 2014 11:32 pm
Tgt Ion:191 Resp: 25707

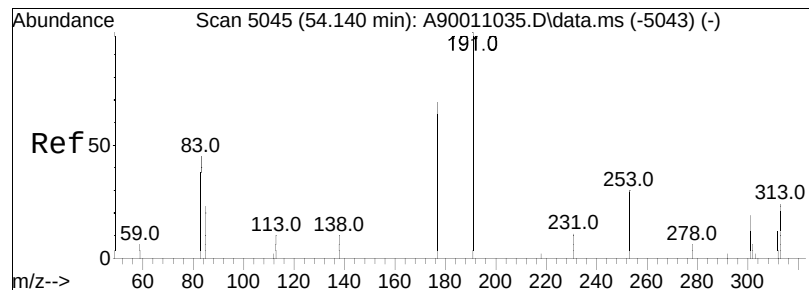




#117
 Moretane (T20)
 Concen: 560.48 ng/ml M4
 RT: 53.381 min Scan# 4962
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

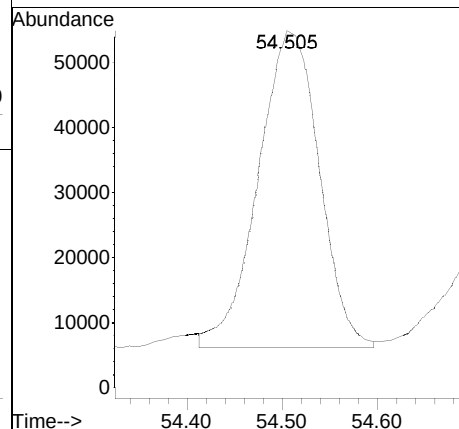
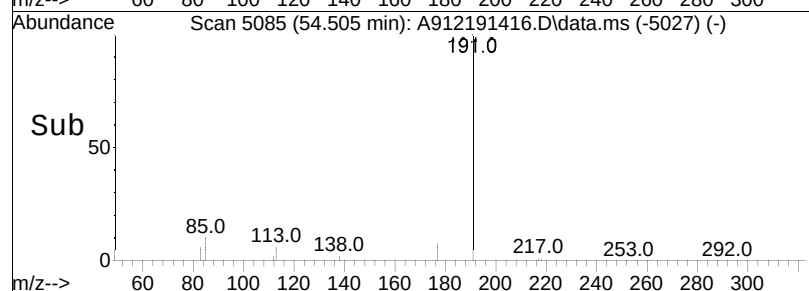
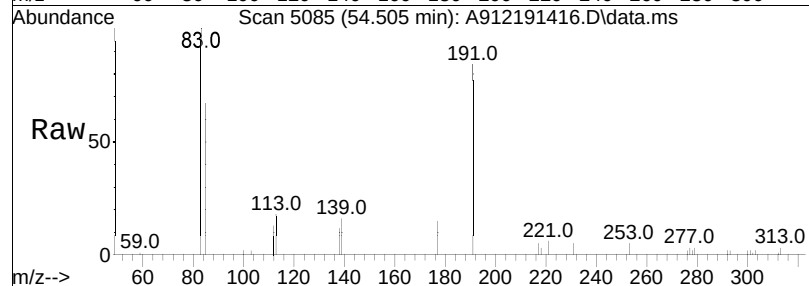
Tgt Ion:191 Resp: 51246

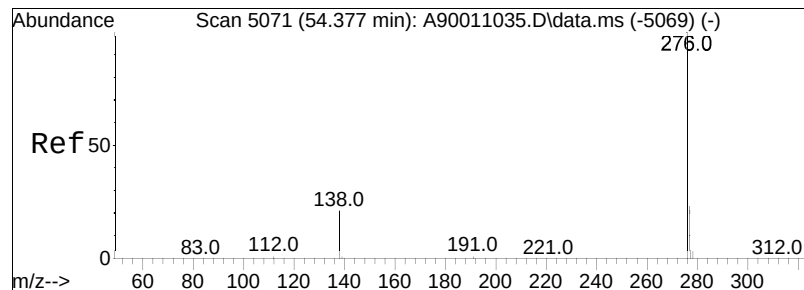




#118
 30-Homohopane-22S (T21)
 Concen: 2355.63 ng/ml M4
 RT: 54.505 min Scan# 5085
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

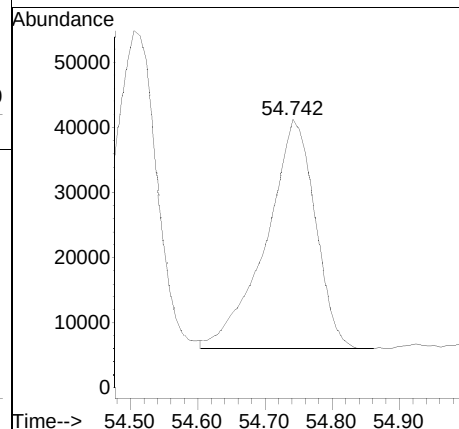
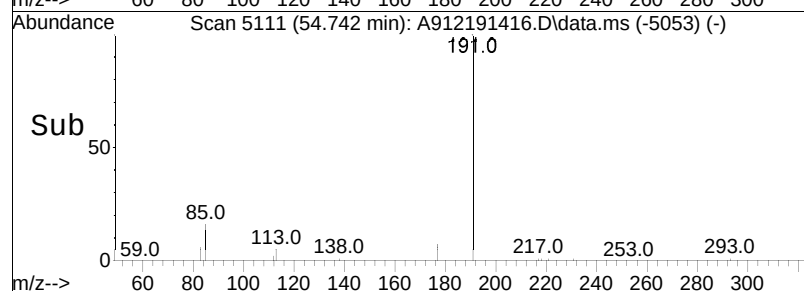
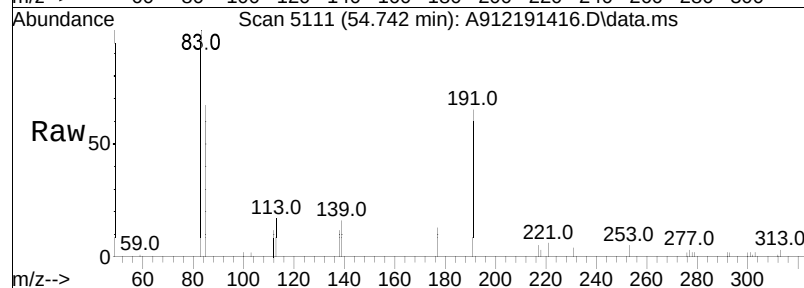
Tgt Ion:191 Resp: 215382

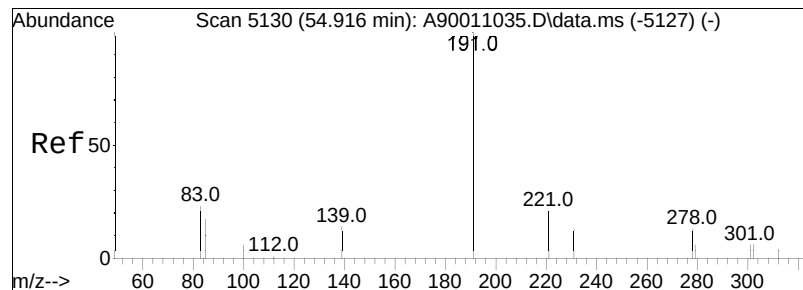




#119
 30-Homohopane-22R (T22)
 Concen: 1957.26 ng/ml
 RT: 54.742 min Scan# 5111
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

Tgt Ion:191 Resp: 178958





#120

Gammacerane/C32-diahopane

Concen: 514.33 ng/mL M4

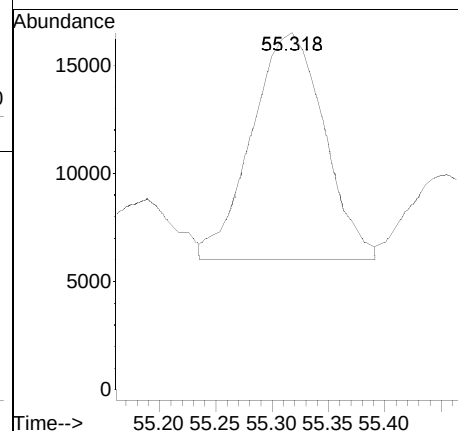
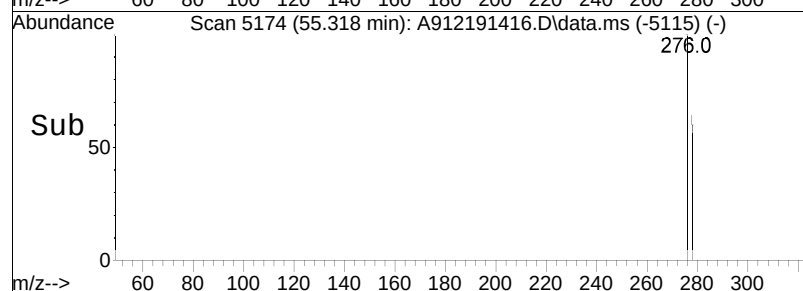
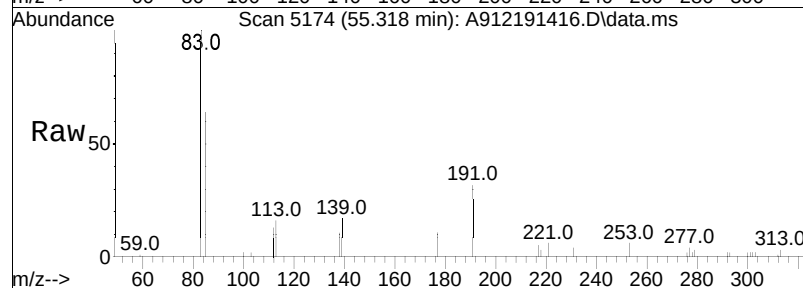
RT: 55.318 min Scan# 5174

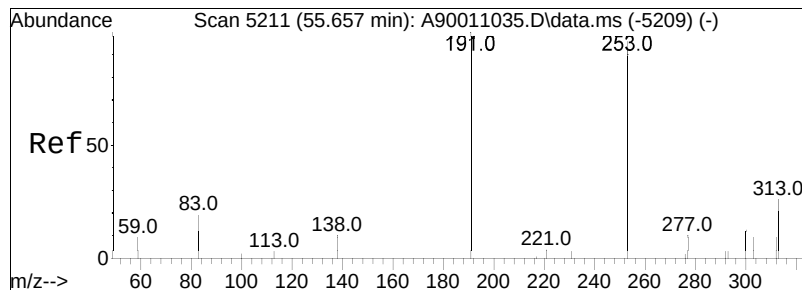
Delta R.T. 0.037 min

Lab File: A912191416.D

Acq: 22 Dec 2014 11:32 pm

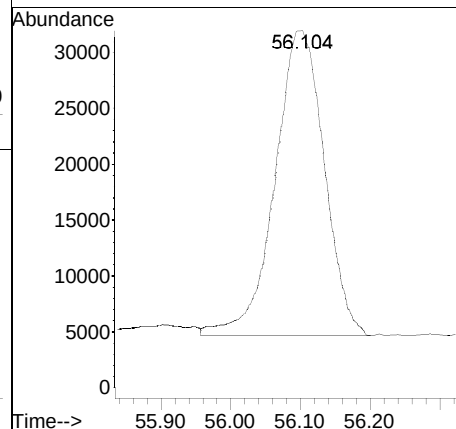
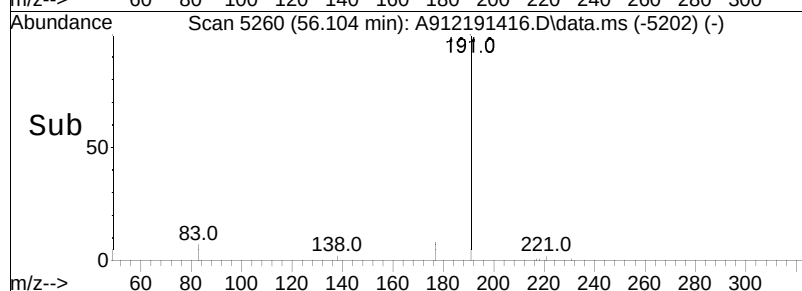
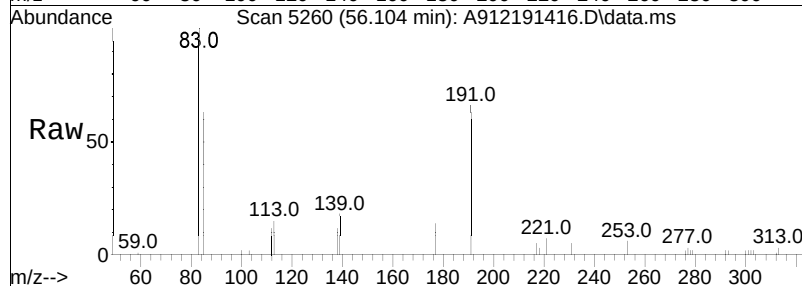
Tgt Ion:191 Resp: 47027

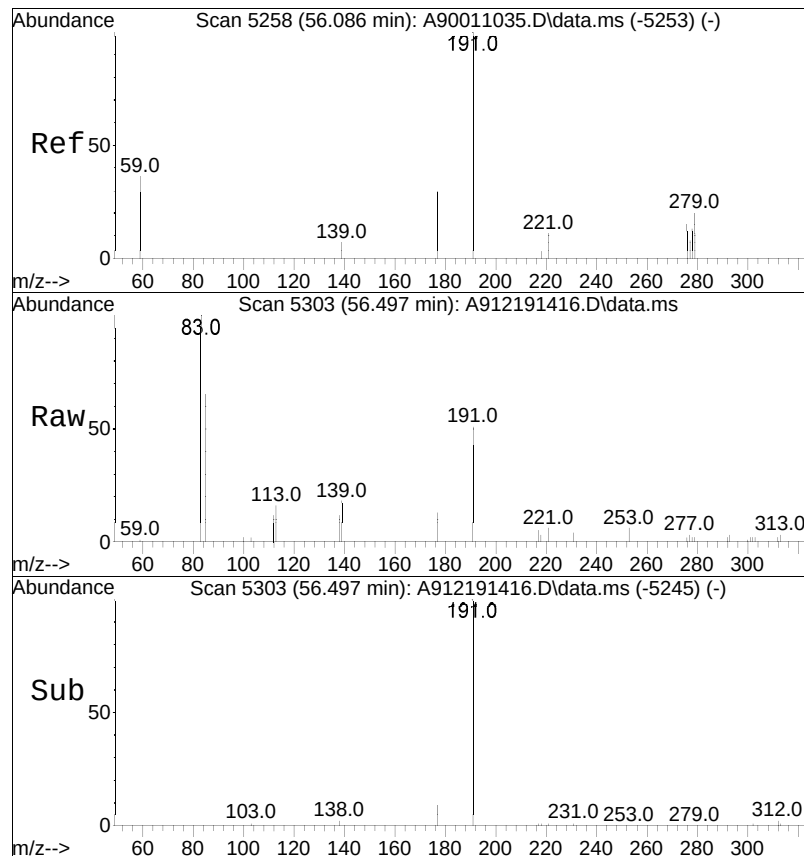




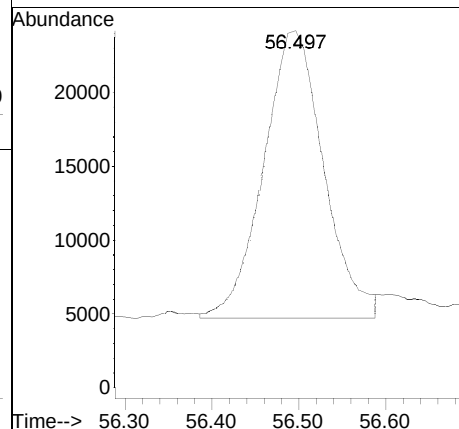
#121
 30,31-Bishomohopane-22S (T26)
 Concen: 1451.70 ng/ml
 RT: 56.104 min Scan# 5260
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

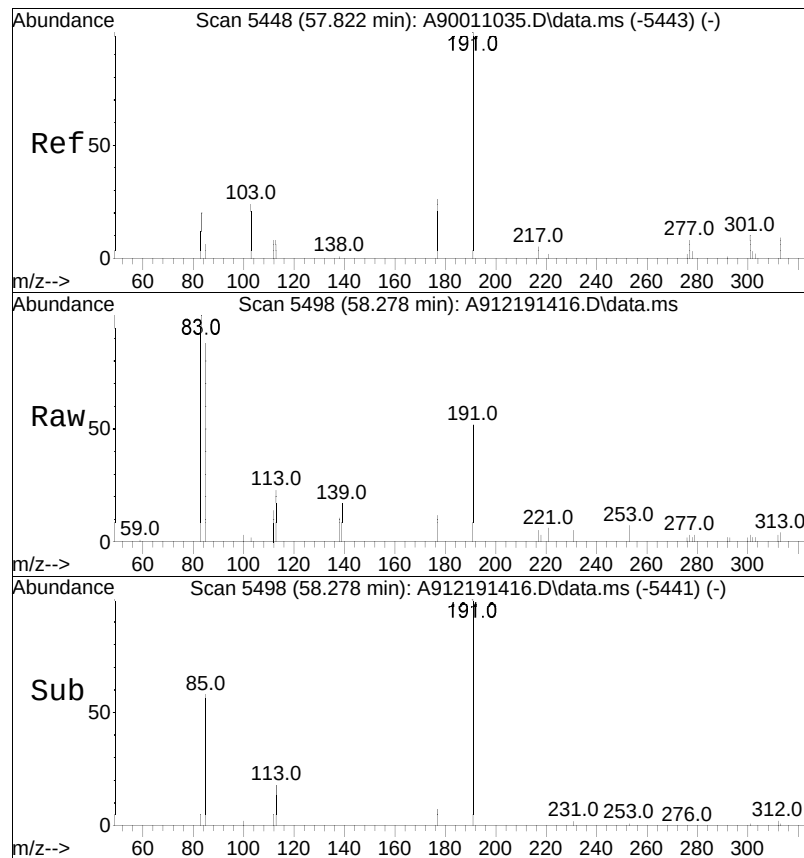
Tgt Ion:191 Resp: 132733



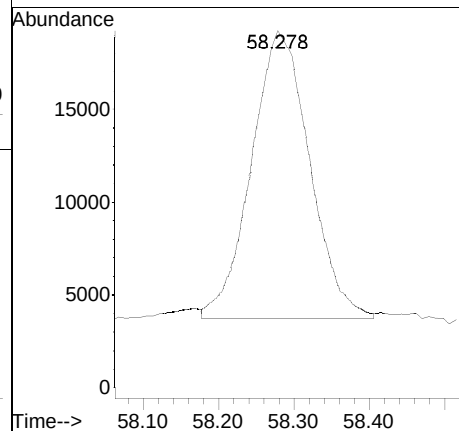


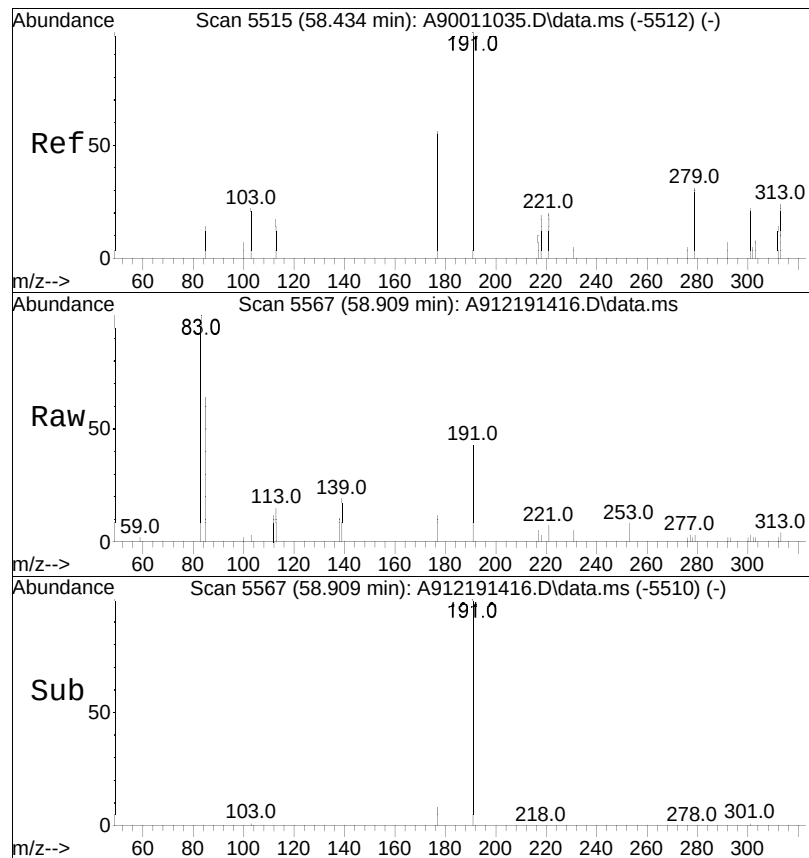
#122
 30,31-Bishomohopane-22R (T27)
 Concen: 1020.52 ng/ml M4
 RT: 56.497 min Scan# 5303
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm
 Tgt Ion:191 Resp: 93309



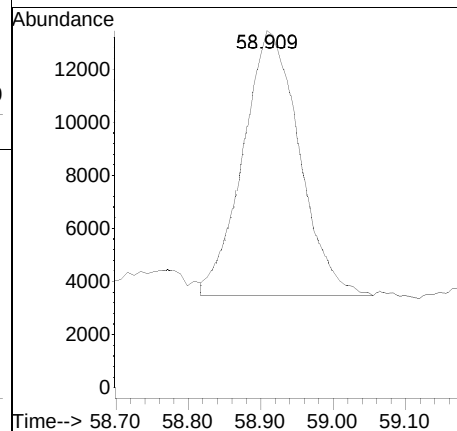


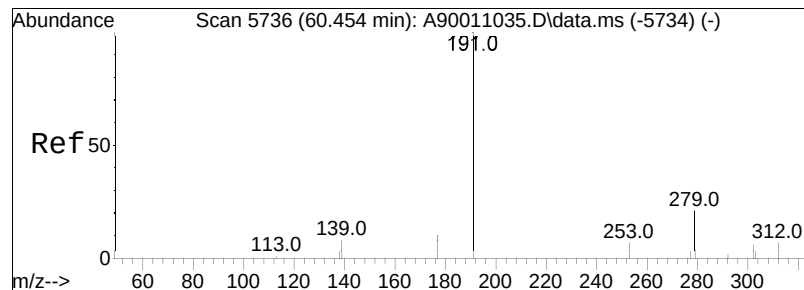
#123
30,31-Trishomohopane-22S (T30)
Concen: 899.39 ng/ml M4
RT: 58.278 min Scan# 5498
Delta R.T. 0.018 min
Lab File: A912191416.D
Acq: 22 Dec 2014 11:32 pm
Tgt Ion:191 Resp: 82234





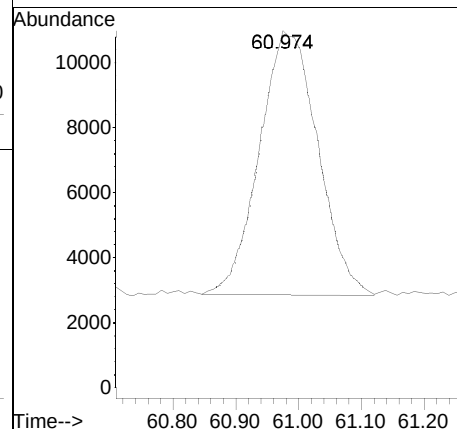
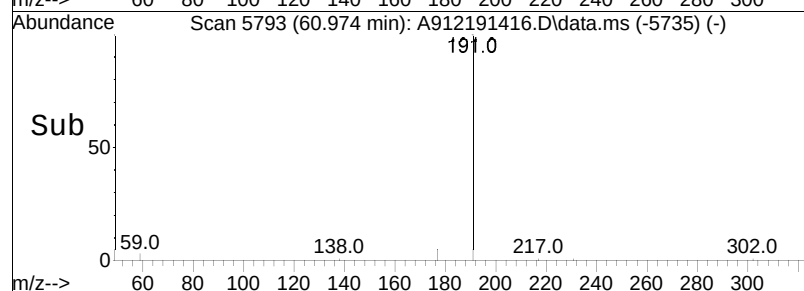
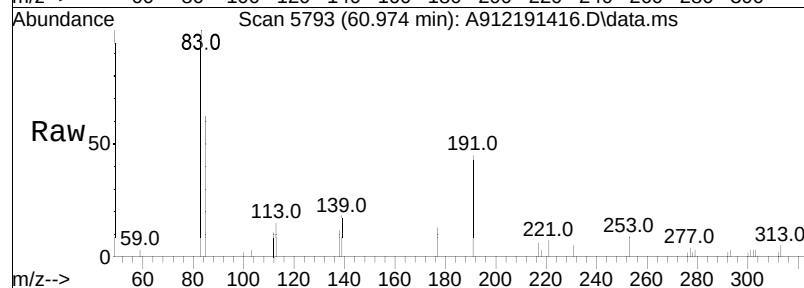
#124
 30,31-Trishomohopane-22R (T31)
 Concen: 585.11 ng/ml
 RT: 58.909 min Scan# 5567
 Delta R.T. 0.018 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm
 Tgt Ion:191 Resp: 53498

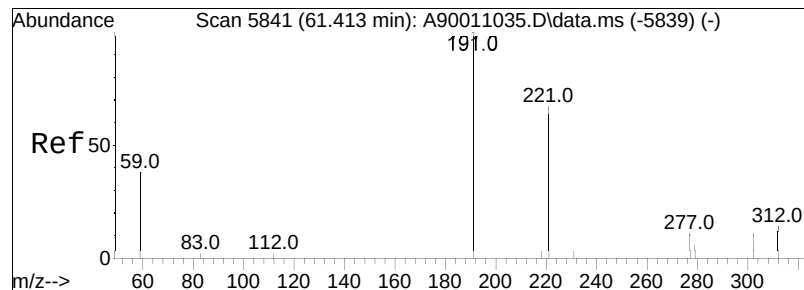




#125
Tetrakishomohopane-22S (T32)
Concen: 567.21 ng/ml
RT: 60.974 min Scan# 5793
Delta R.T. 0.027 min
Lab File: A912191416.D
Acq: 22 Dec 2014 11:32 pm

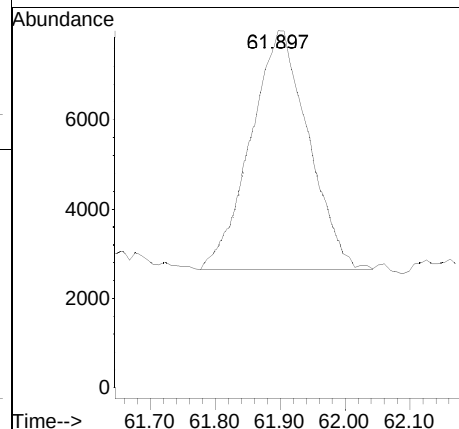
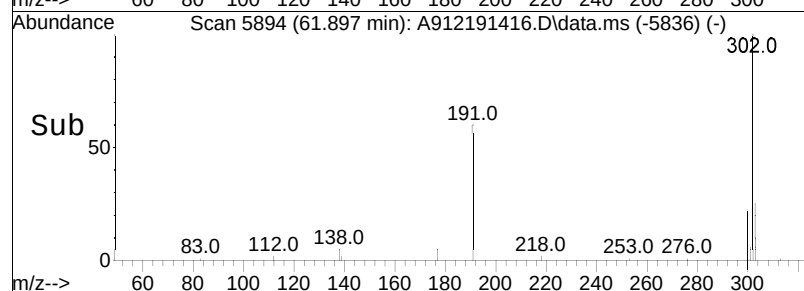
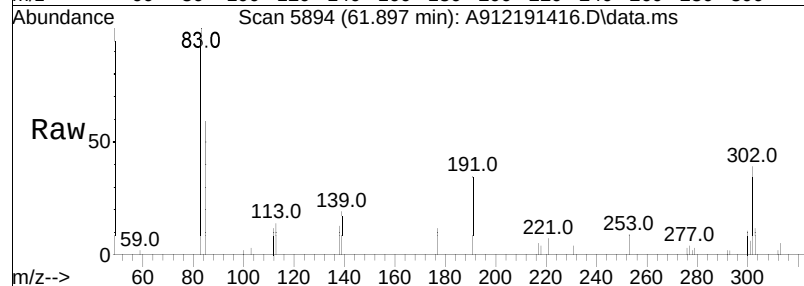
Tgt Ion:191 Resp: 51862

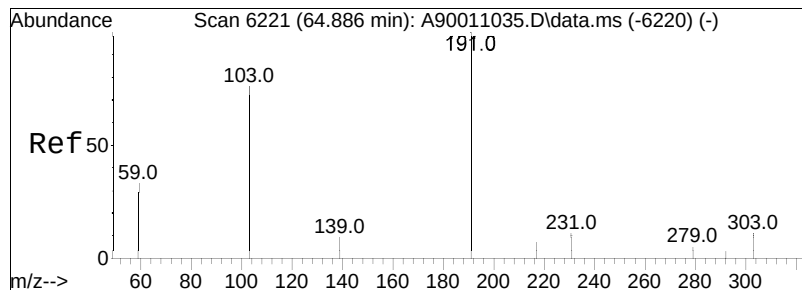




#126
 Tetrakishomohopane-22R (T33)
 Concen: 359.59 ng/ml
 RT: 61.897 min Scan# 5894
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

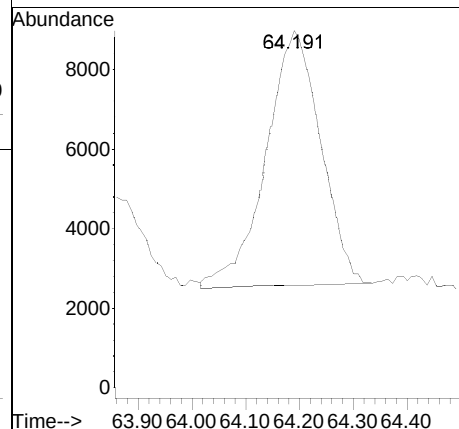
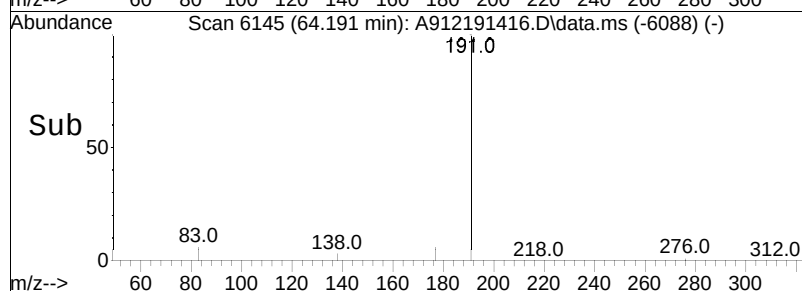
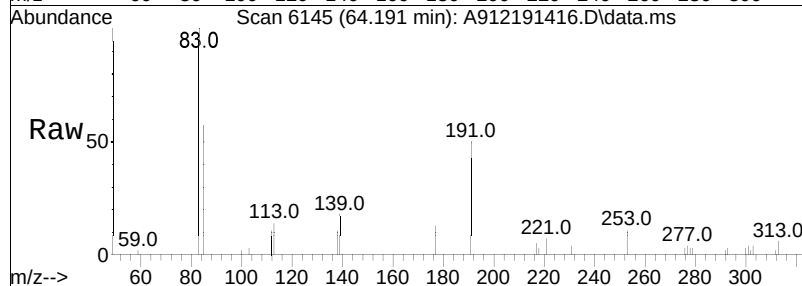
Tgt Ion:191 Resp: 32878

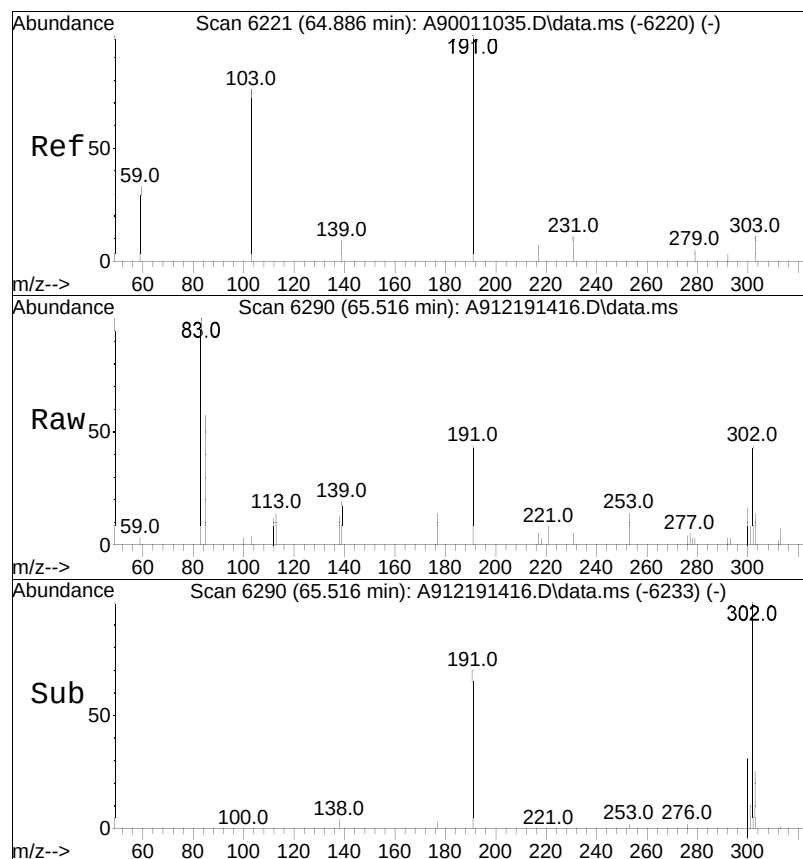




#127
 Pentakishomohopane-22S (T34)
 Concen: 491.25 ng/ml
 RT: 64.191 min Scan# 6145
 Delta R.T. 0.018 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

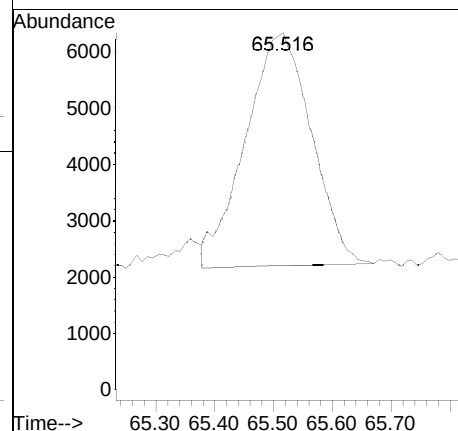
Tgt Ion:191 Resp: 44916

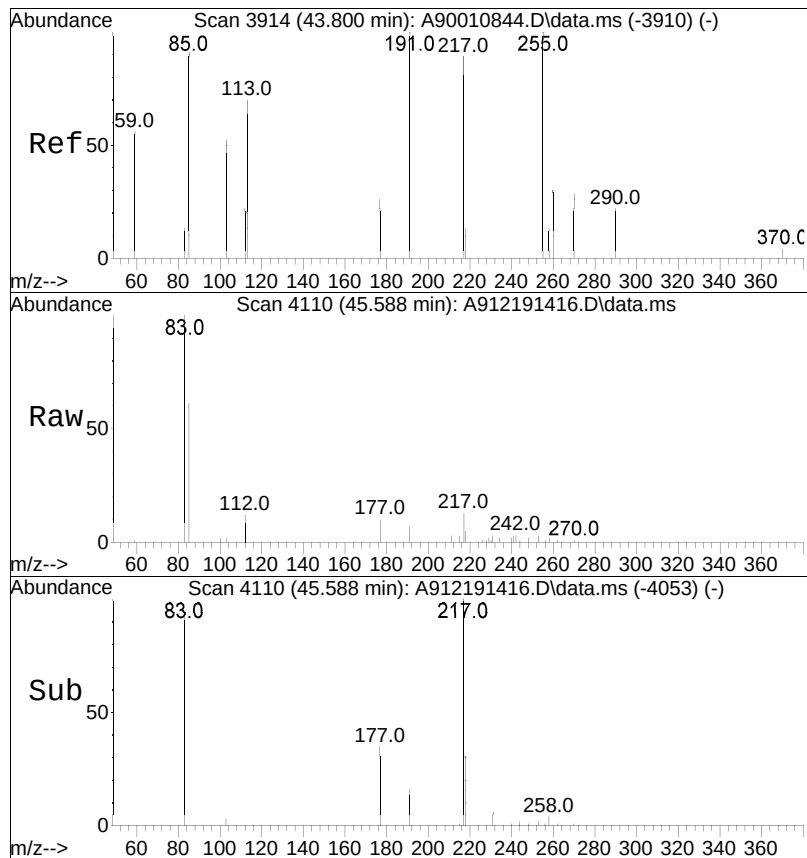




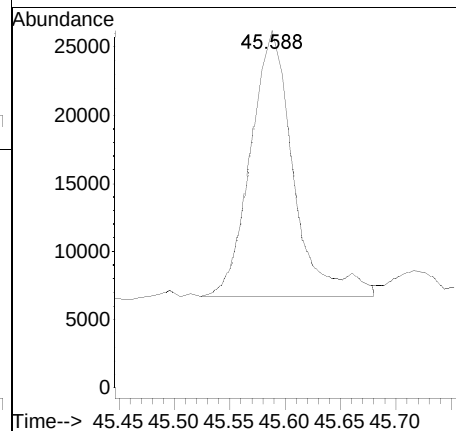
#128
 Pentakishomohopane-22R (T35)
 Concen: 351.28 ng/ml
 RT: 65.516 min Scan# 6290
 Delta R.T. 0.018 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

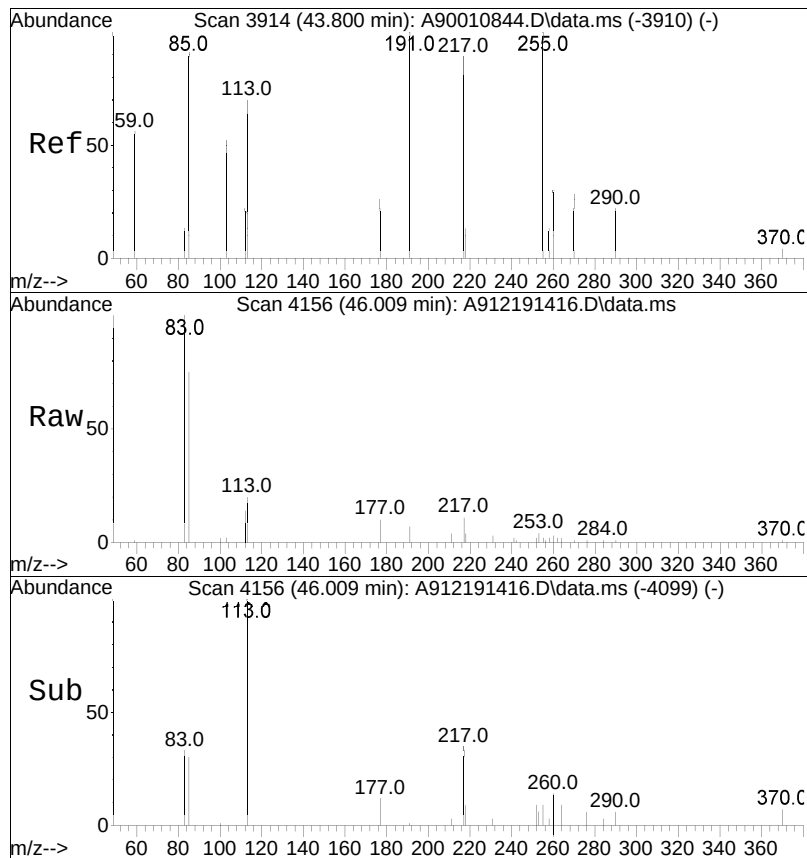
Tgt Ion:191 Resp: 32119



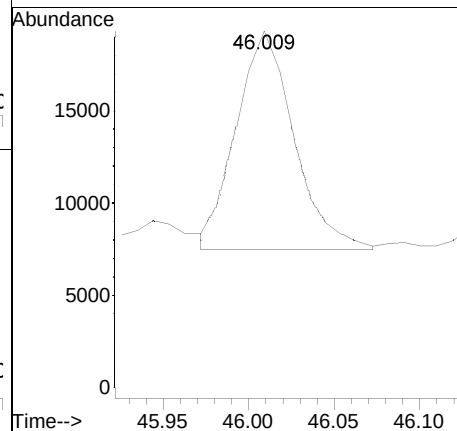


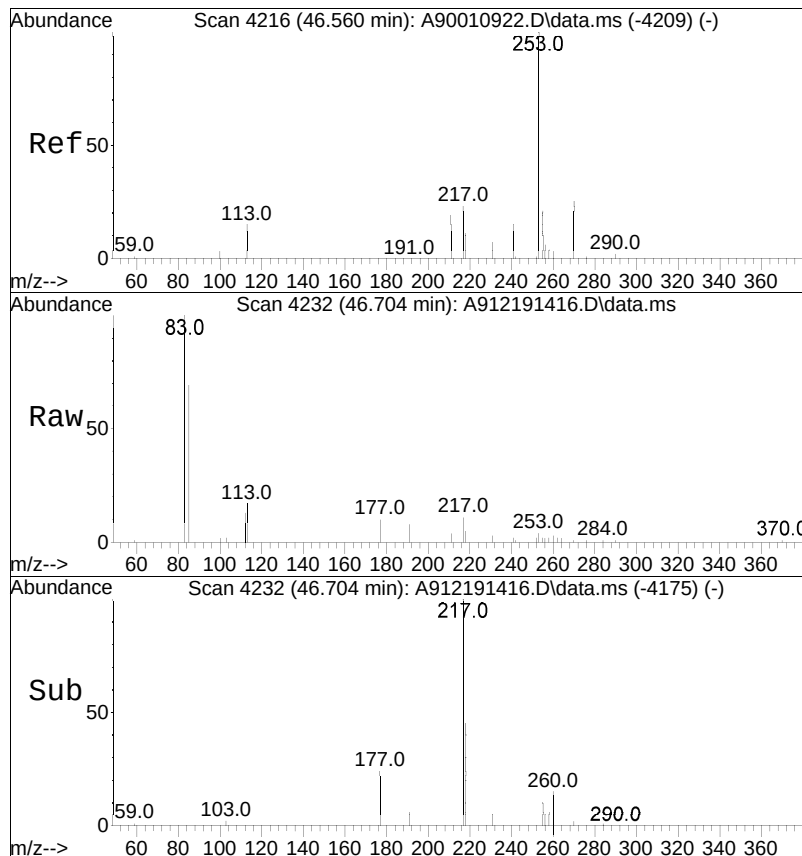
#130
 13b(H),17a(H)-20S-Diacholestan
 Concen: 1111.32 ng/ml
 RT: 45.588 min Scan# 4110
 Delta R.T. 0.018 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm
 Tgt Ion:217 Resp: 52379



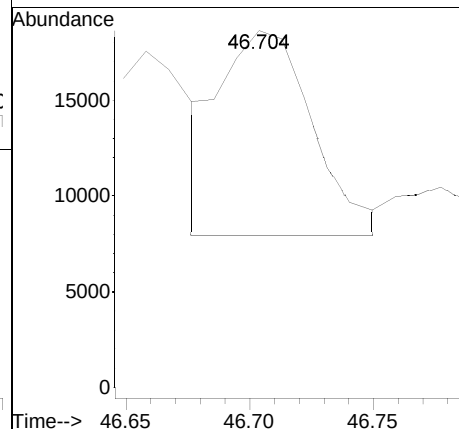


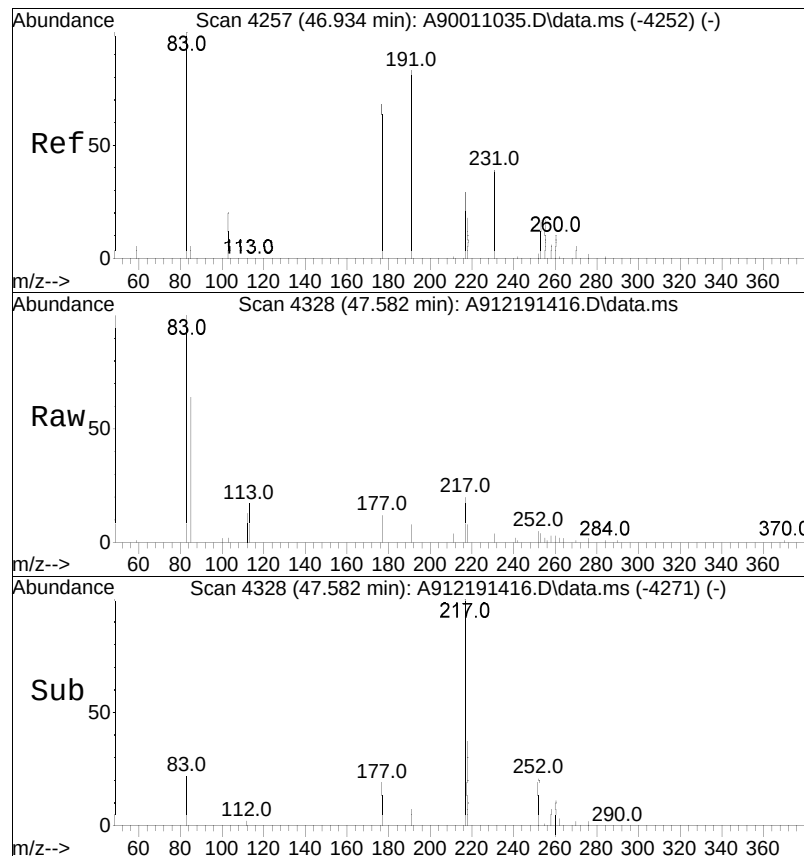
#131
 13b(H),17a(H)-20R-Diacholestane
 Concen: 588.79 ng/ml
 RT: 46.009 min Scan# 4156
 Delta R.T. 0.018 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm
 Tgt Ion:217 Resp: 27751



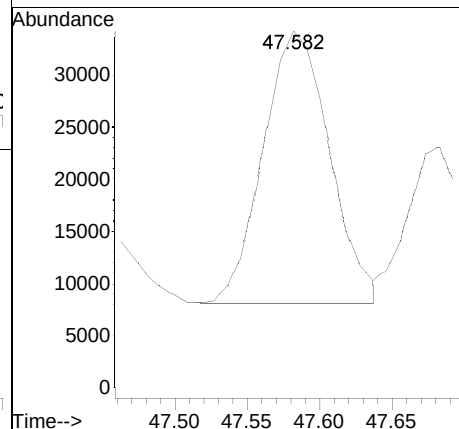


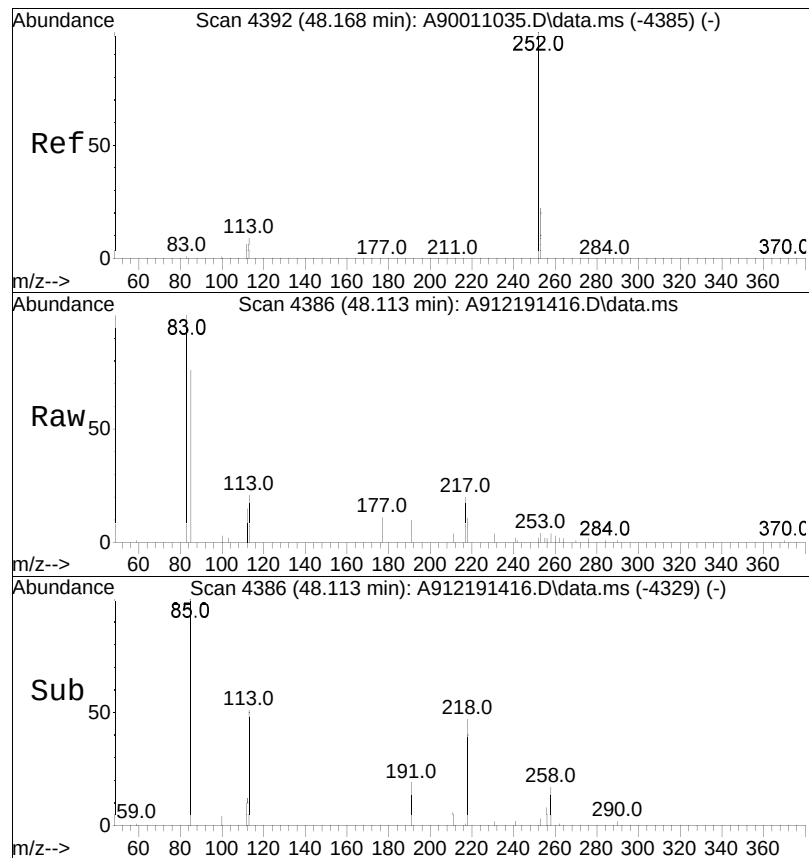
#132
 13b,17a-20S-Methyldiacholestan
 Concen: 595.22 ng/ml M6
 RT: 46.704 min Scan# 4232
 Delta R.T. 0.018 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm
 Tgt Ion:217 Resp: 28054





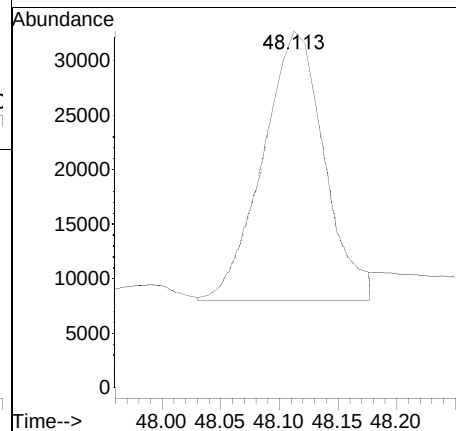
#133
 14a,17a-20S-Chol/13b,17a-20S-E
 Concen: 1762.46 ng/ml
 RT: 47.582 min Scan# 4328
 Delta R.T. 0.018 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm
 Tgt Ion:217 Resp: 83069

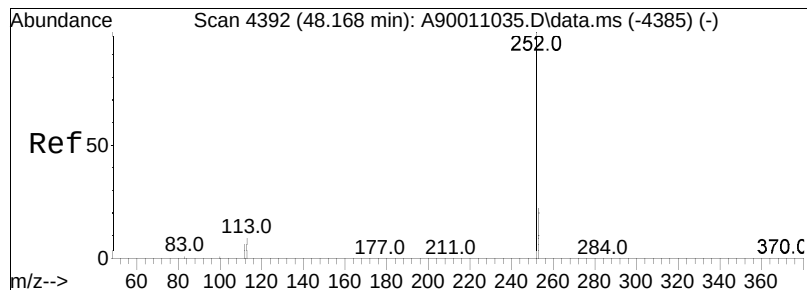




#134
14a,17a-20R-Chol/13b,17a-20R-E
Concen: 1908.98 ng/ml M4
RT: 48.113 min Scan# 4386
Delta R.T. 0.018 min
Lab File: A912191416.D
Acq: 22 Dec 2014 11:32 pm

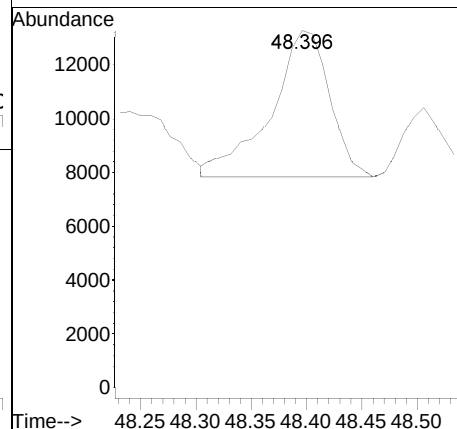
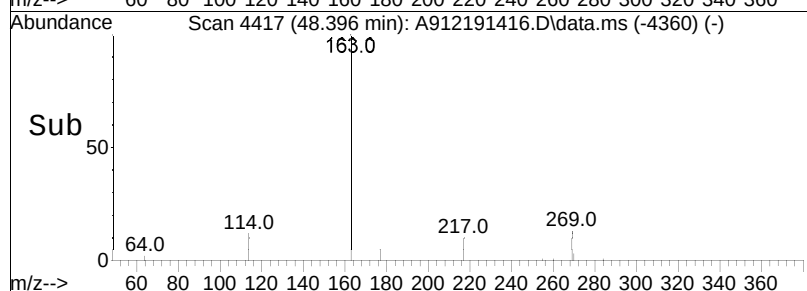
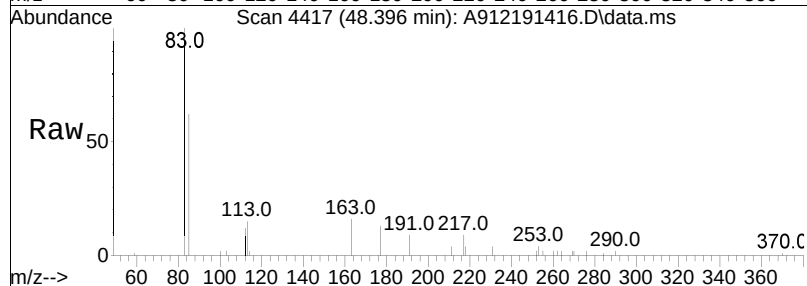
Tgt Ion:217 Resp: 89975

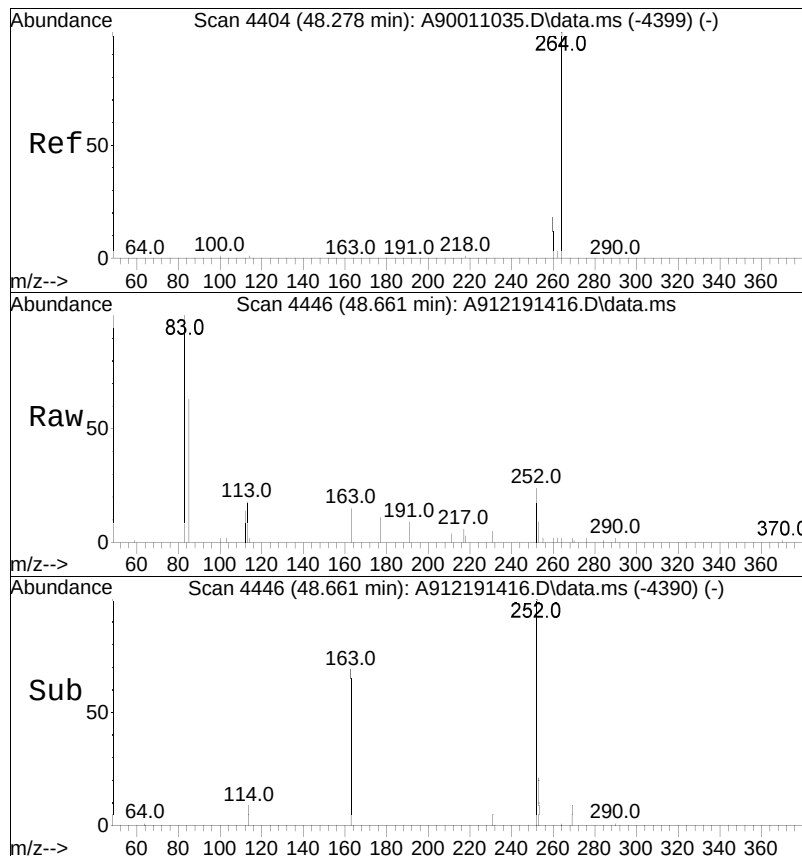




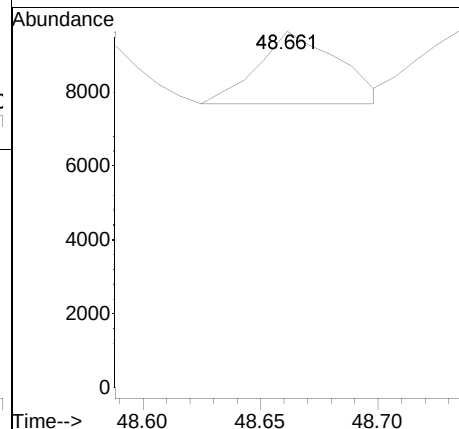
#135
 Unknown Sterane (S18)
 Concen: 427.20 ng/ml
 RT: 48.396 min Scan# 4417
 Delta R.T. 0.018 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

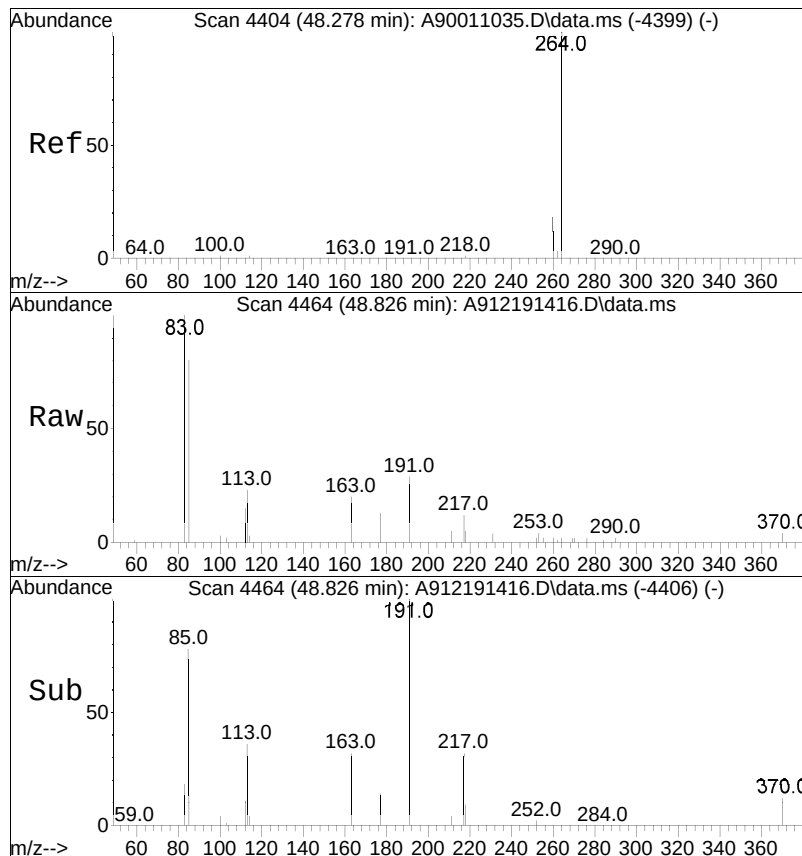
Tgt Ion:217 Resp: 20135





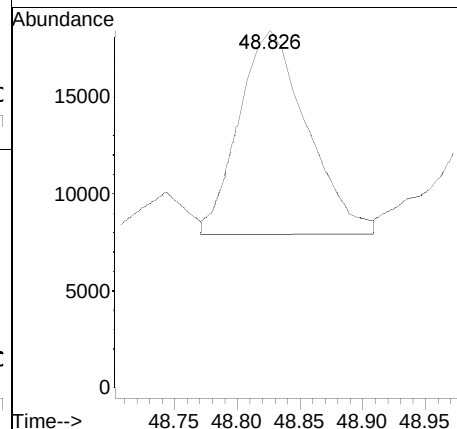
#136
 13a,17b-20S-Ethylidiacholestane
 Concen: 98.74 ng/ml
 RT: 48.661 min Scan# 4446
 Delta R.T. 0.009 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm
 Tgt Ion:217 Resp: 4654

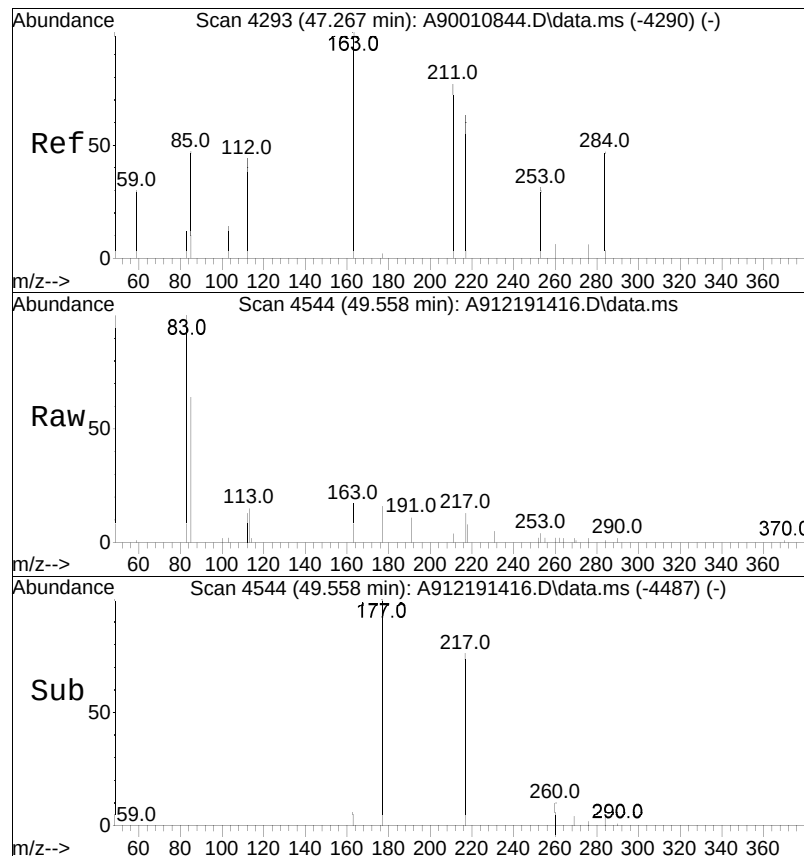




#137
 14a,17a-20S-Methylcholestane (
 Concen: 838.76 ng/ml
 RT: 48.826 min Scan# 4464
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

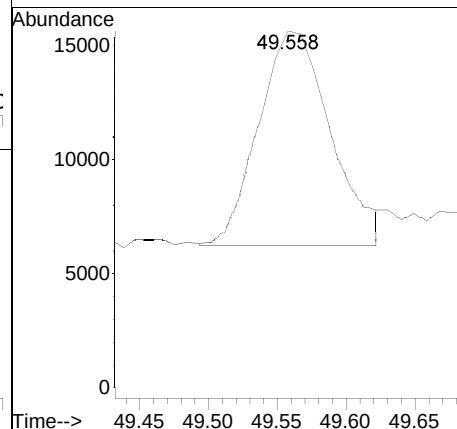
Tgt Ion:217 Resp: 39533

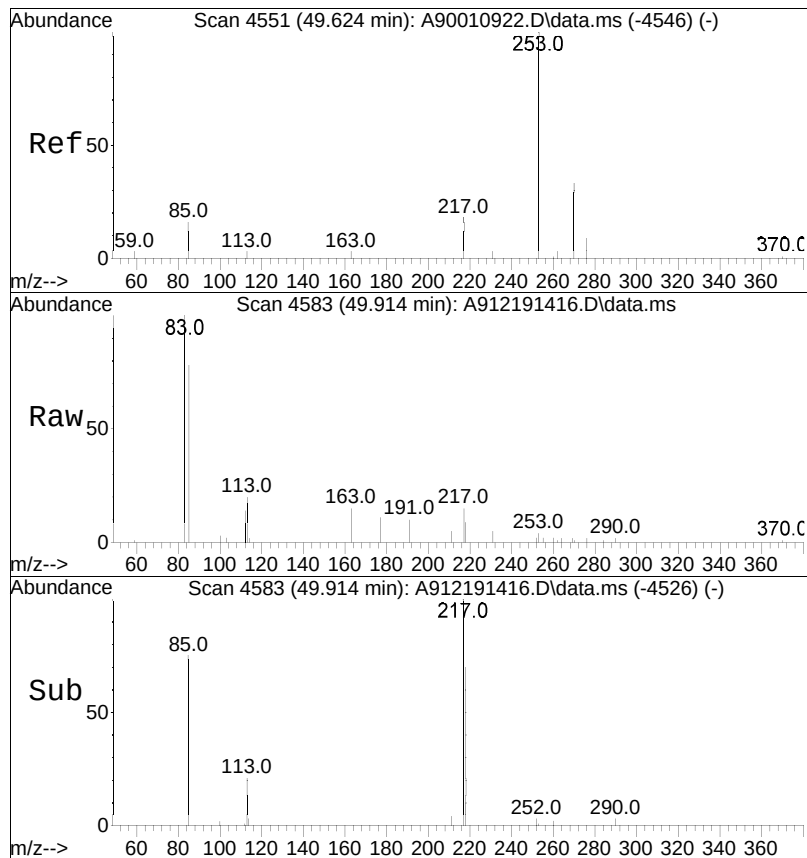




#138
 14a,17a-20R-Methylcholestane (
 Concen: 726.93 ng/ml M4
 RT: 49.558 min Scan# 4544
 Delta R.T. 0.018 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

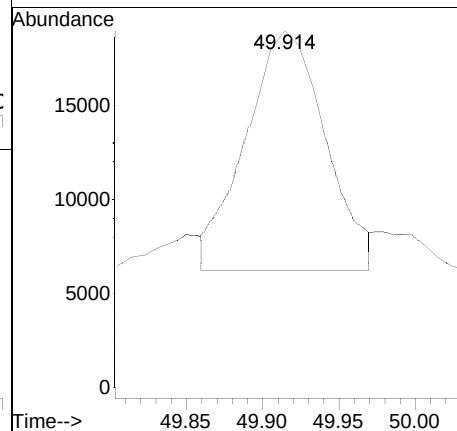
Tgt Ion:217 Resp: 34262

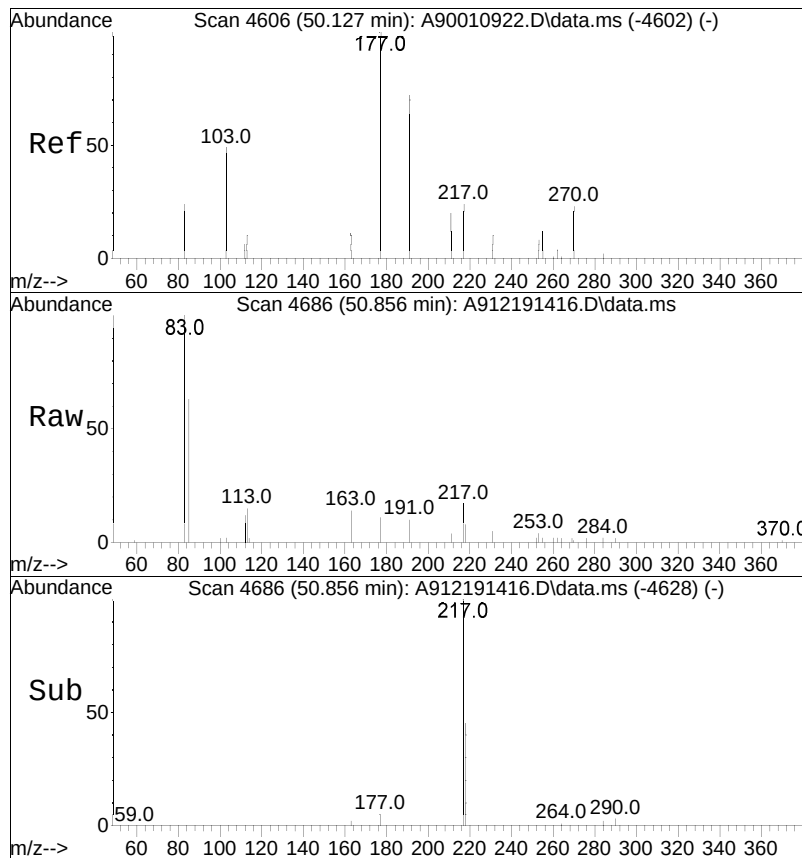




#139
 14a(H),17a(H)-20S-Ethylcholest
 Concen: 979.58 ng/ml M4
 RT: 49.914 min Scan# 4583
 Delta R.T. 0.018 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

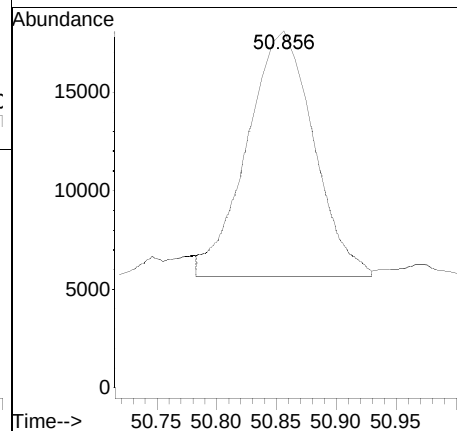
Tgt Ion:217 Resp: 46170

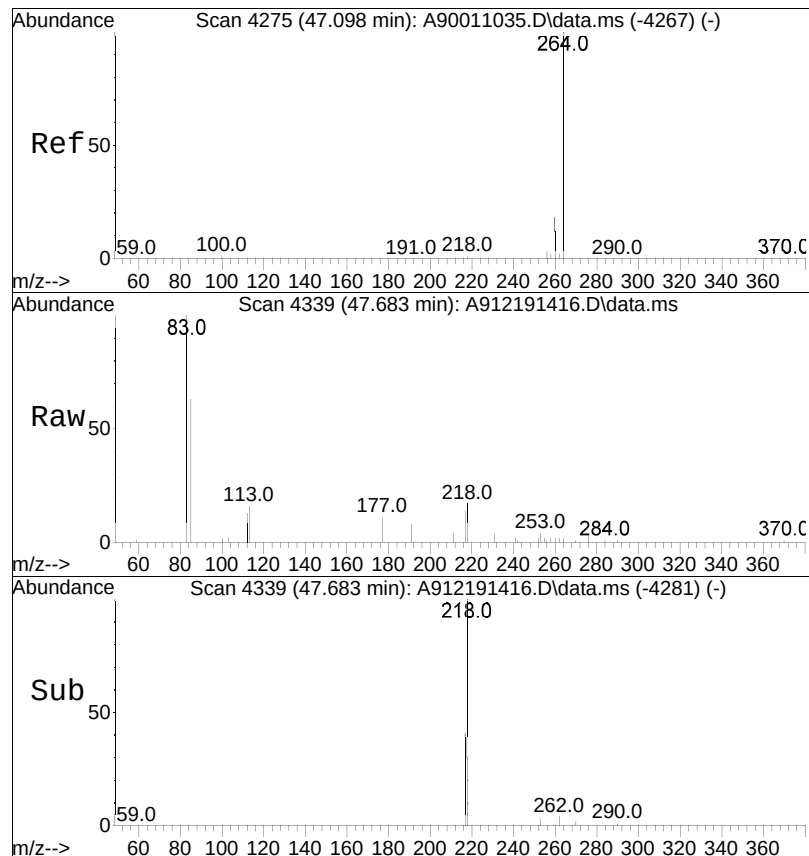




#140
 14a(H),17a(H)-20R-Ethylcholest
 Concen: 1015.59 ng/ml M4
 RT: 50.856 min Scan# 4686
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

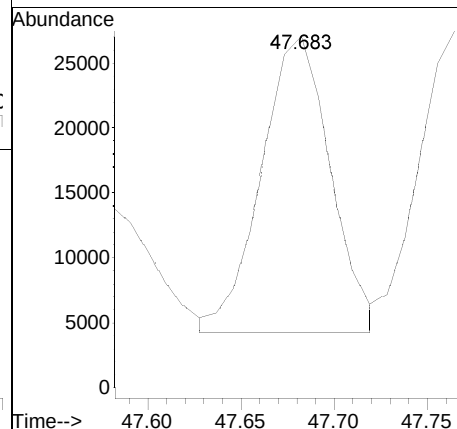
Tgt Ion:217 Resp: 47867

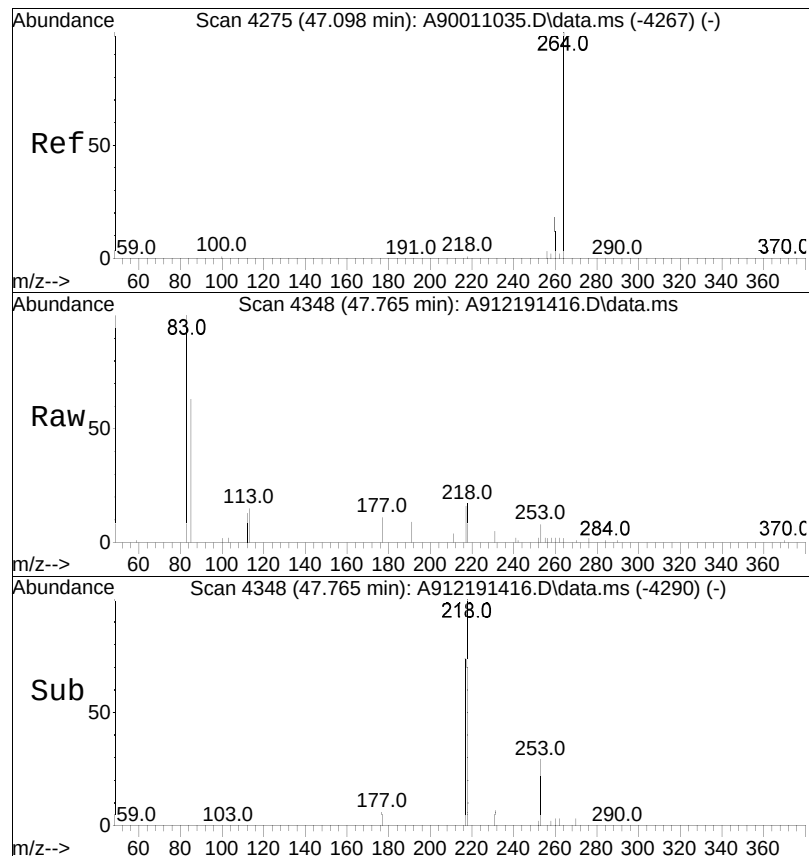




#141
 14b(H),17b(H)-20R-Cholestane (
 Concen: 1256.61 ng/ml M4
 RT: 47.683 min Scan# 4339
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

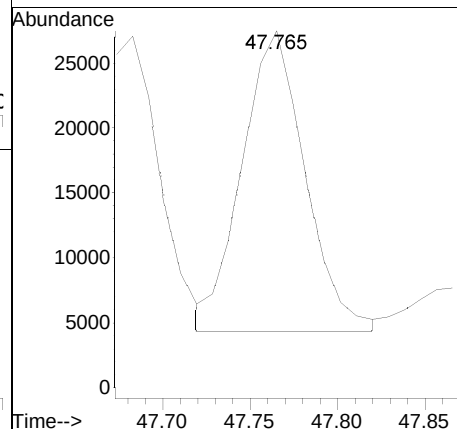
Tgt Ion:218 Resp: 59227

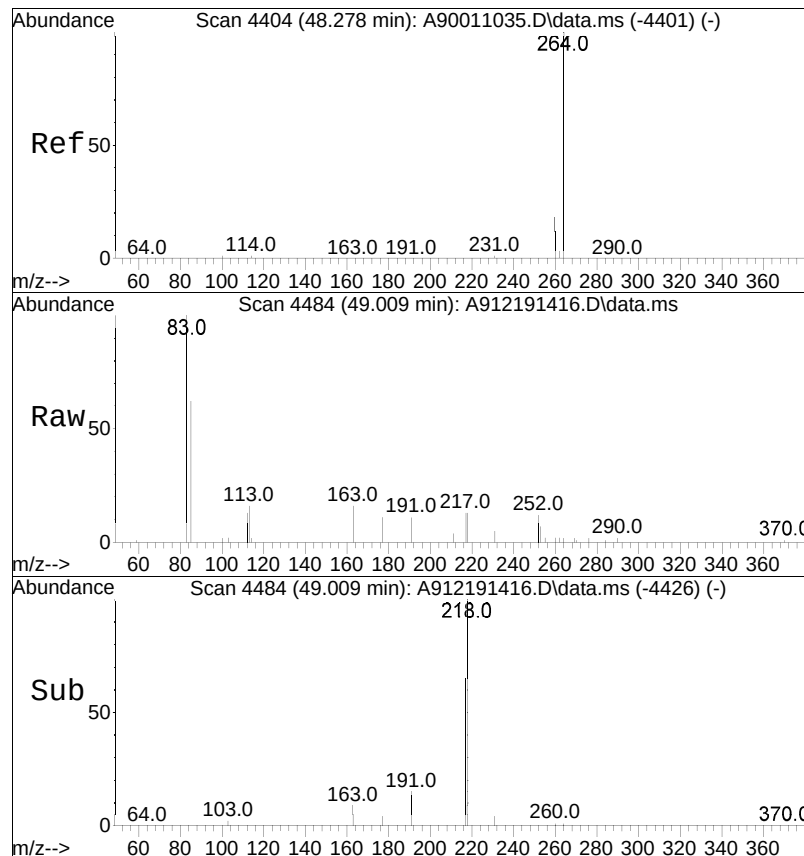




#142
 14b(H),17b(H)-20S-Cholestane (
 Concen: 1240.84 ng/ml M4
 RT: 47.765 min Scan# 4348
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

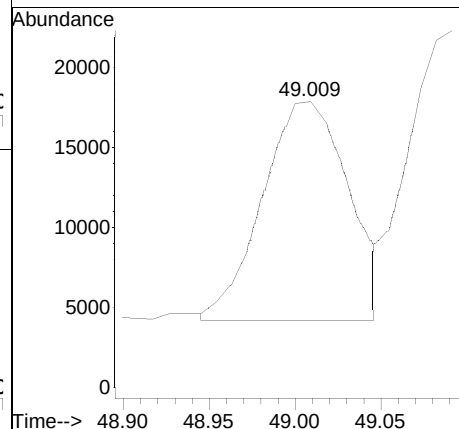
Tgt Ion:218 Resp: 58484

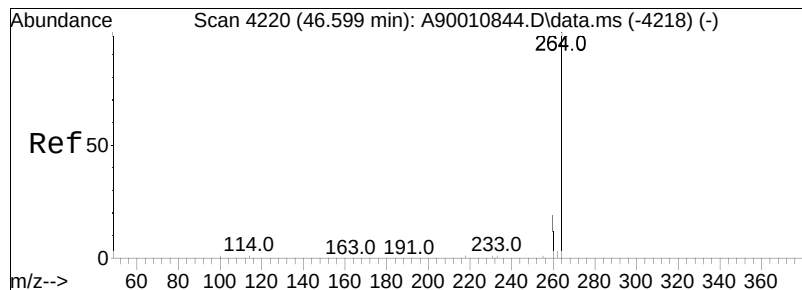




#143
 14b,17b-20R-Methylcholestane (
 Concen: 1012.74 ng/ml M4
 RT: 49.009 min Scan# 4484
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

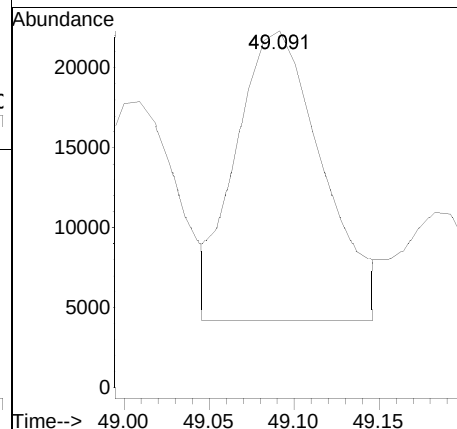
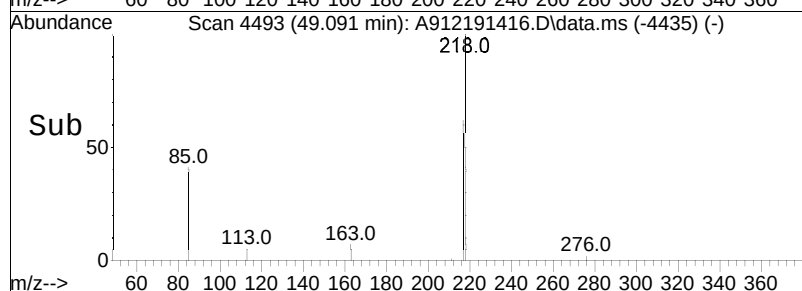
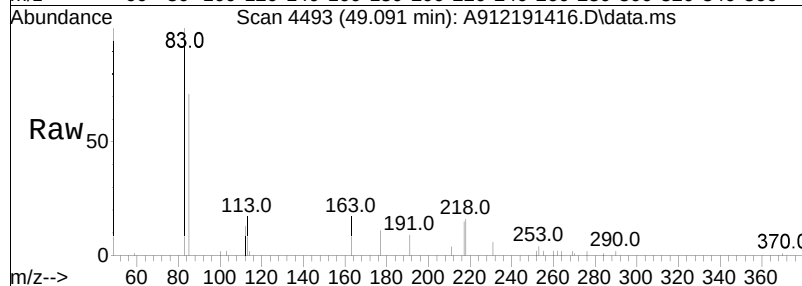
Tgt Ion:218 Resp: 47733

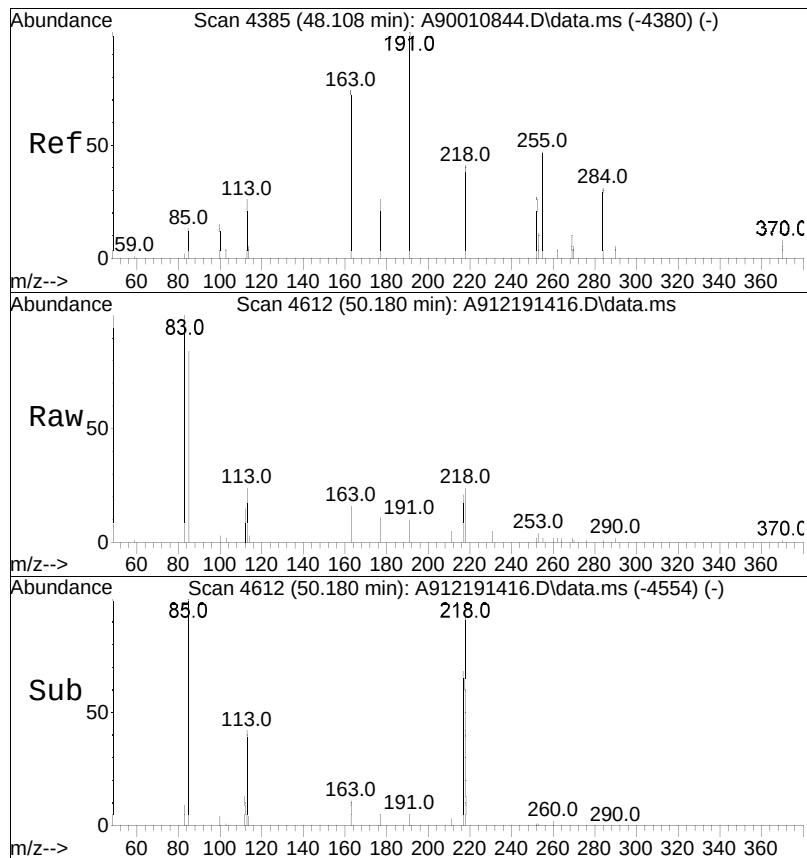




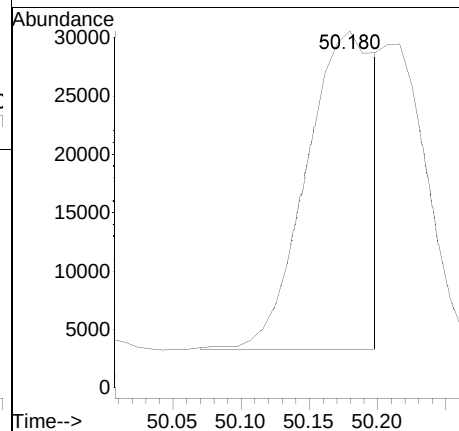
#144
 14b,17b-20S-Methylcholestane (
 Concen: 1361.84 ng/ml M4
 RT: 49.091 min Scan# 4493
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

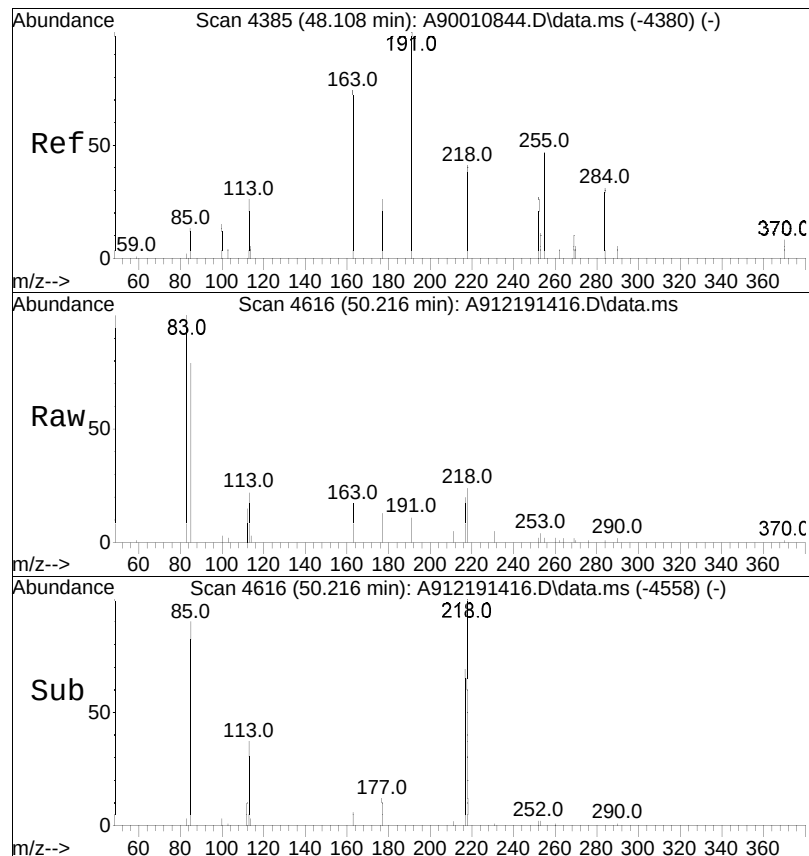
Tgt Ion:218 Resp: 64187



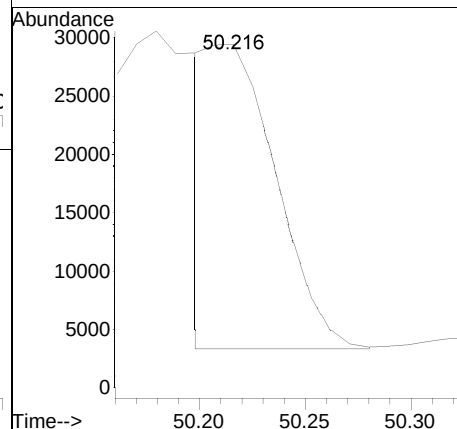


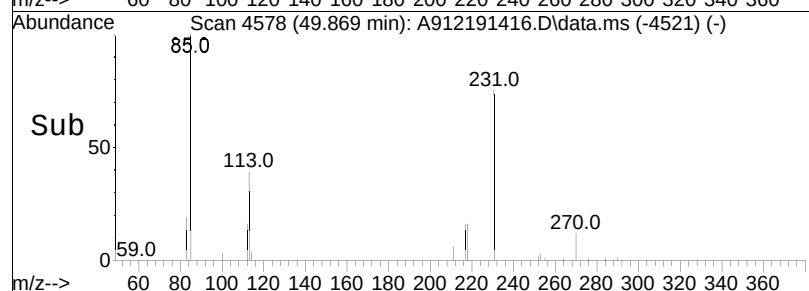
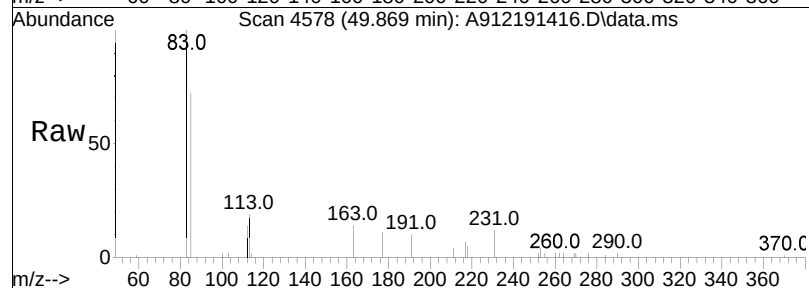
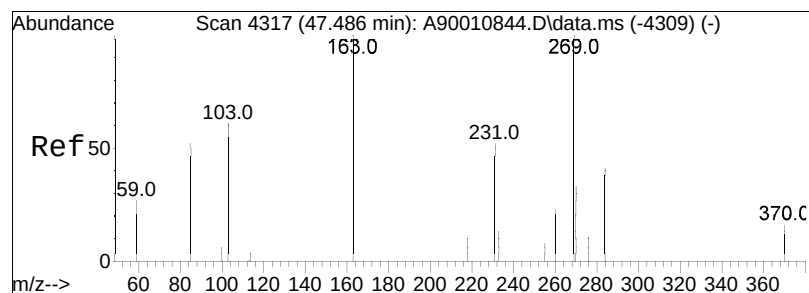
#145
 14b(H),17b(H)-20R-Ethylcholest
 Concen: 2002.30 ng/ml M3
 RT: 50.180 min Scan# 4612
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm
 Tgt Ion:218 Resp: 94373



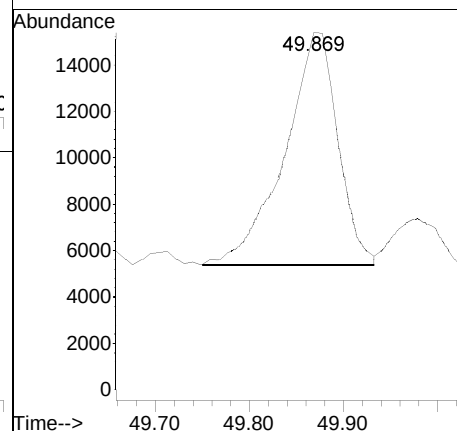


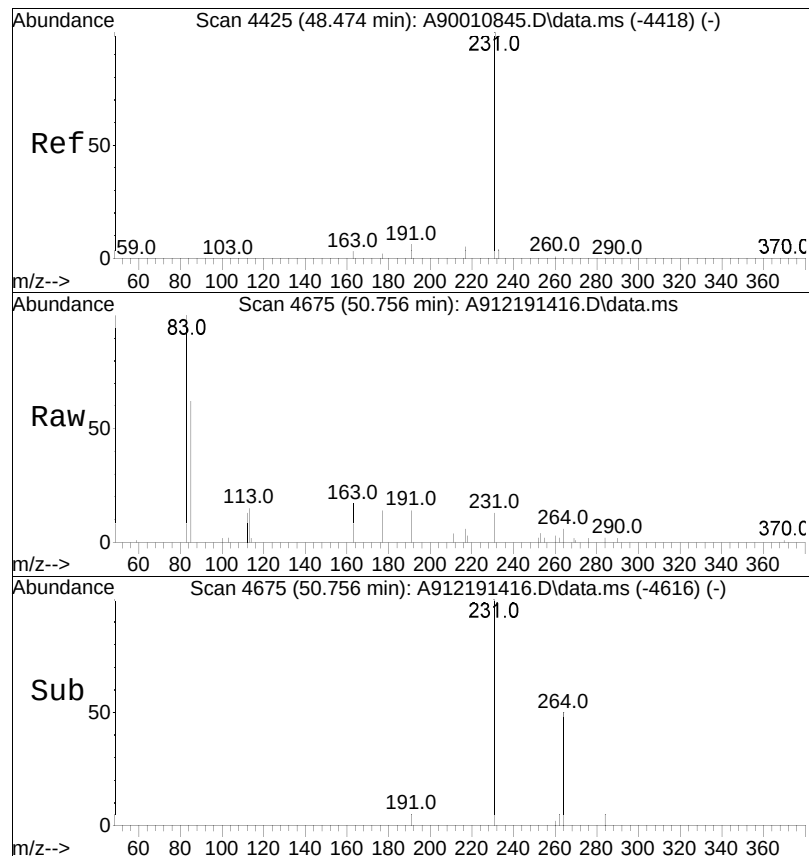
#146
 14b(H),17b(H)-20S-Ethylcholest
 Concen: 1244.28 ng/ml M3
 RT: 50.216 min Scan# 4616
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm
 Tgt Ion:218 Resp: 58646





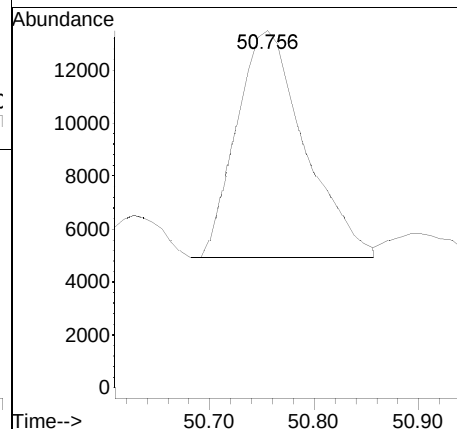
#147
 C26,20R- +C27,20S- triaromatic
 Concen: 834.25 ng/mL
 RT: 49.869 min Scan# 4578
 Delta R.T. 0.018 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm
 Tgt Ion:231 Resp: 39320

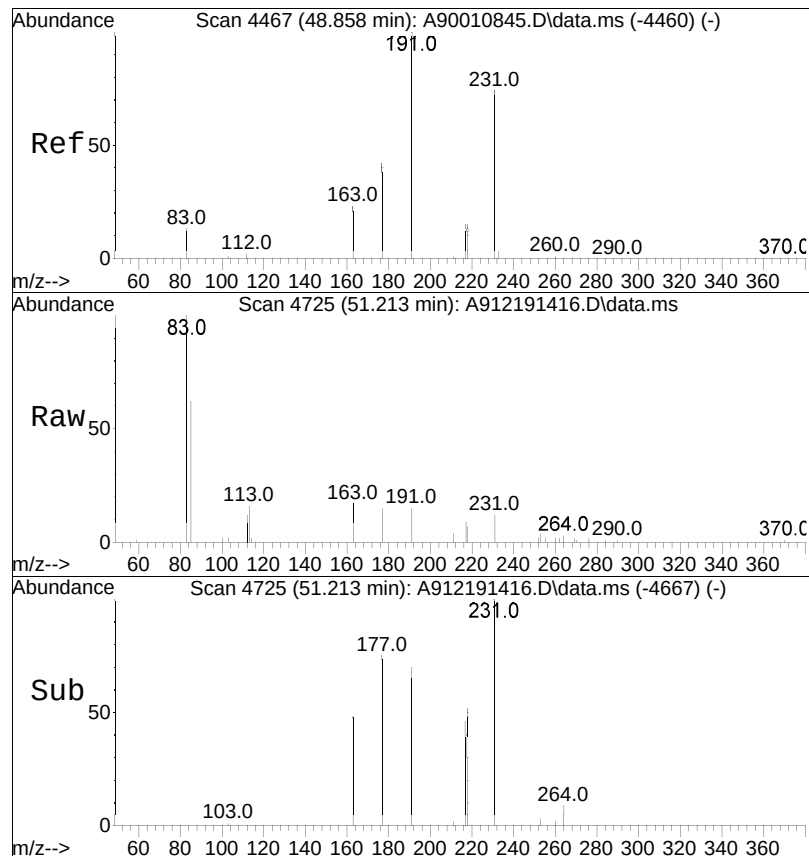




#148
 C28,20S-triaromatic steroid
 Concen: 820.88 ng/mL
 RT: 50.756 min Scan# 4675
 Delta R.T. 0.037 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

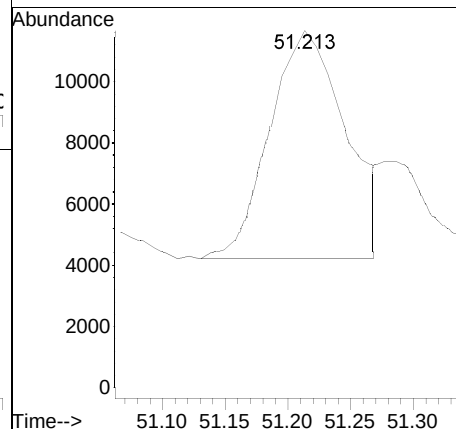
Tgt Ion:231 Resp: 38690

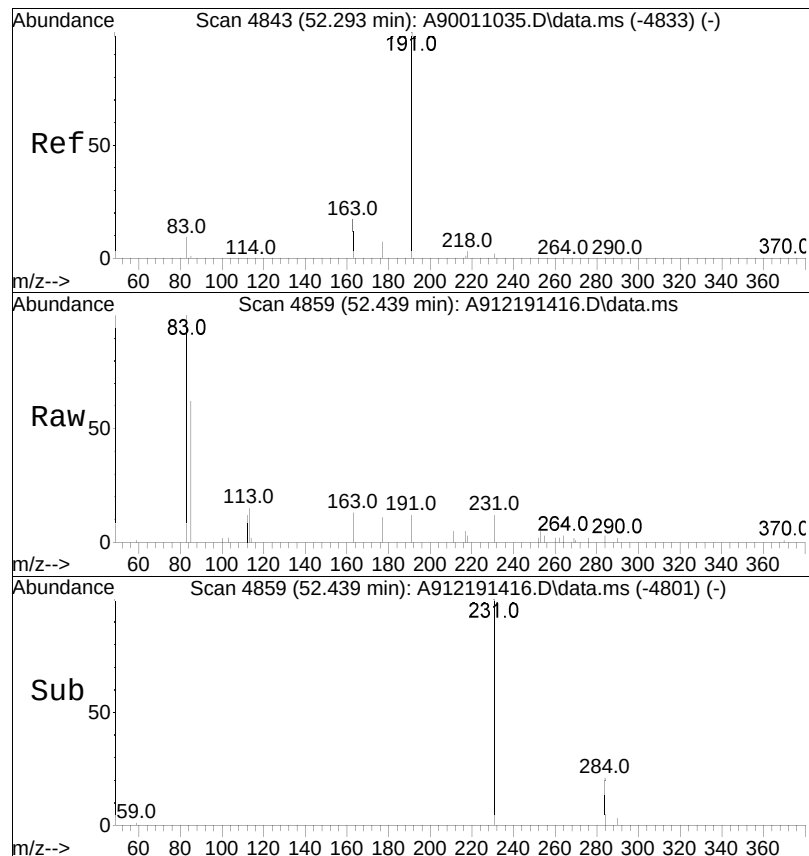




#149
 C27,20R-triaromatic steroid
 Concen: 665.95 ng/mL
 RT: 51.213 min Scan# 4725
 Delta R.T. 0.027 min
 Lab File: A912191416.D
 Acq: 22 Dec 2014 11:32 pm

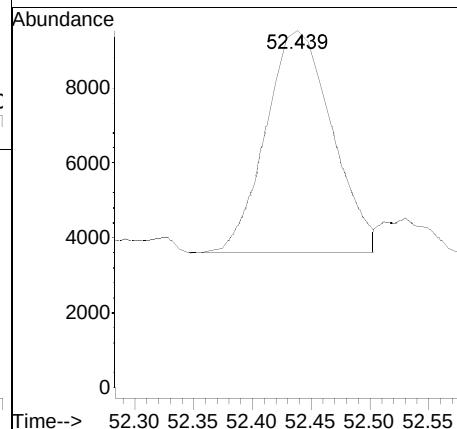
Tgt Ion:231 Resp: 31388





#150
C28,20R-triaromatic steroid
Concen: 491.83 ng/mL
RT: 52.439 min Scan# 4859
Delta R.T. 0.027 min
Lab File: A912191416.D
Acq: 22 Dec 2014 11:32 pm

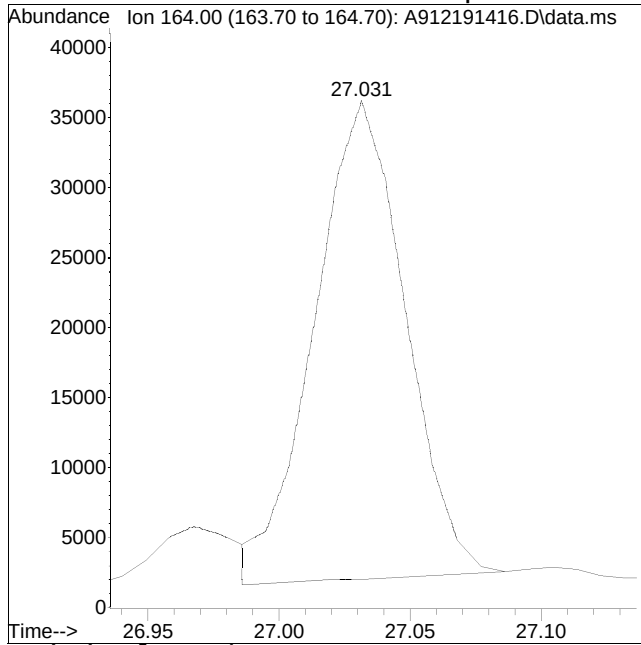
Tgt Ion:231 Resp: 23181



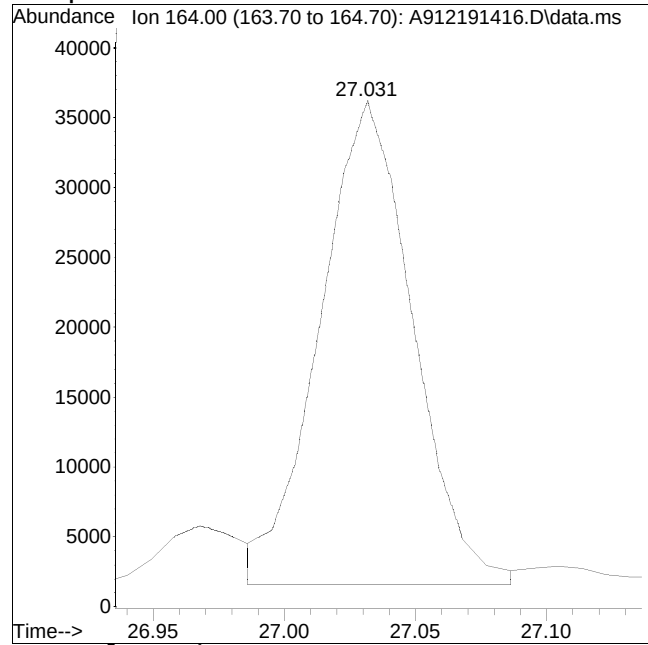
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #1: Acenaphthene-d10



Original Peak Response = 81987



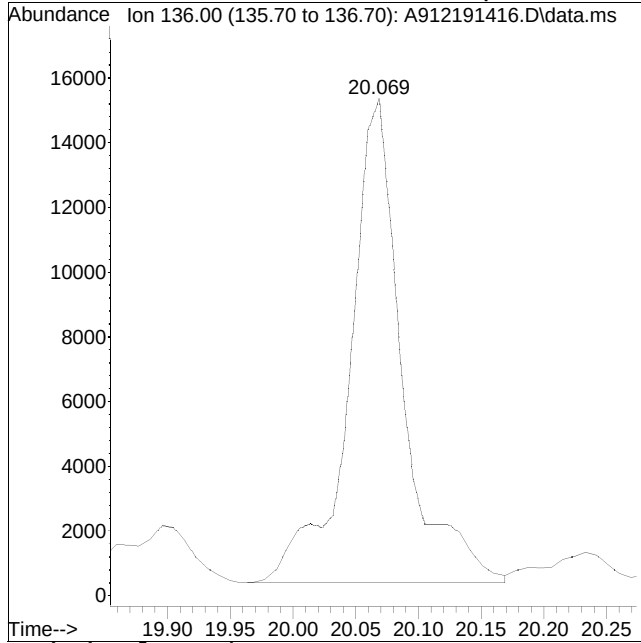
Manual Peak Response = 85393 M4

M4 = Poor automated baseline construction.

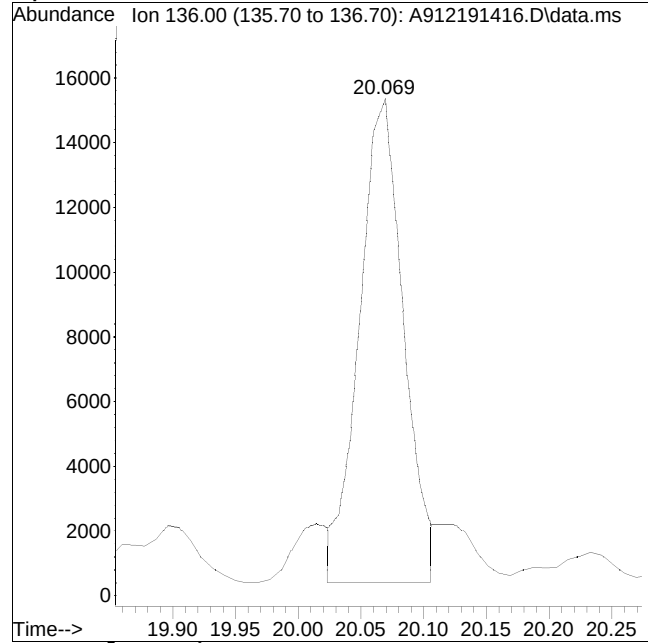
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #9: Naphthalene-d8



Original Peak Response = 44317



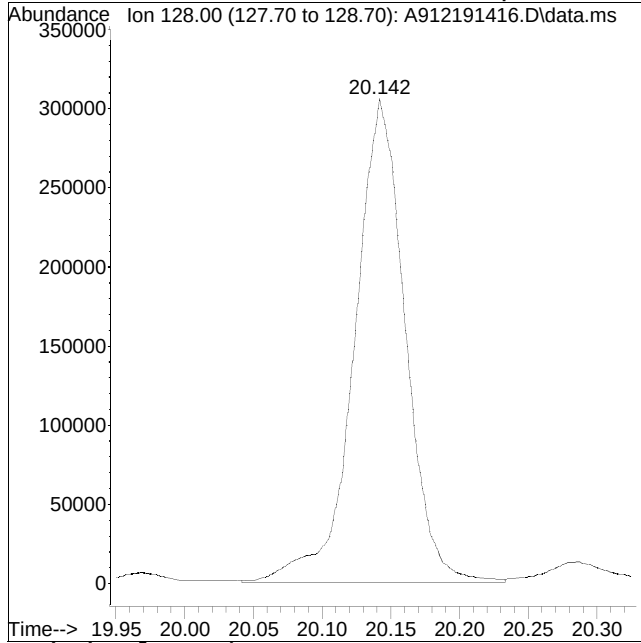
Manual Peak Response = 36607 M4

M4 = Poor automated baseline construction.

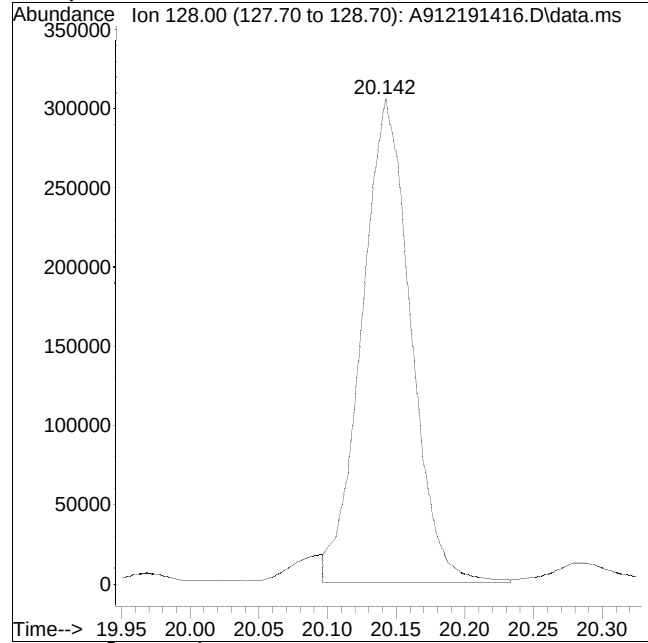
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #10: Naphthalene



Original Peak Response = 788642



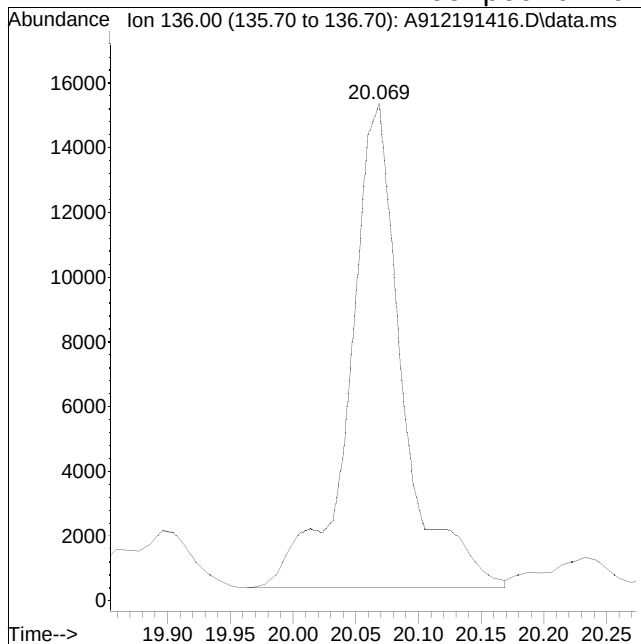
Manual Peak Response = 753490 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

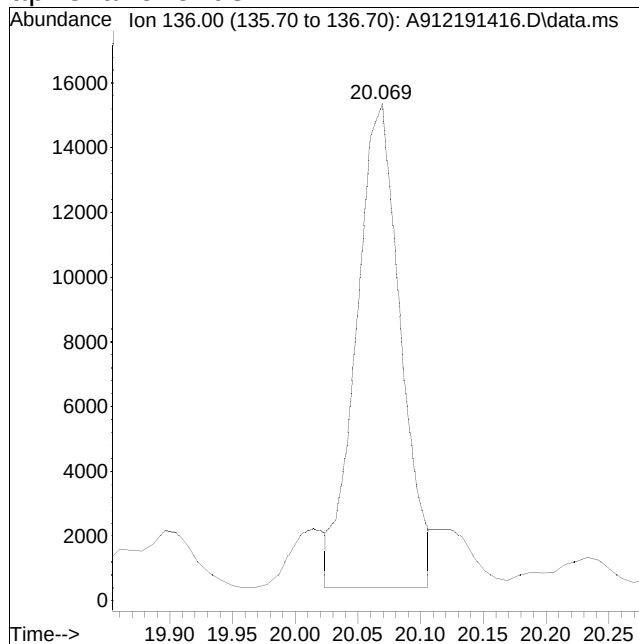
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #9: Naphthalene-d8



Original Peak Response = 44317

M4 = Poor automated baseline construction.

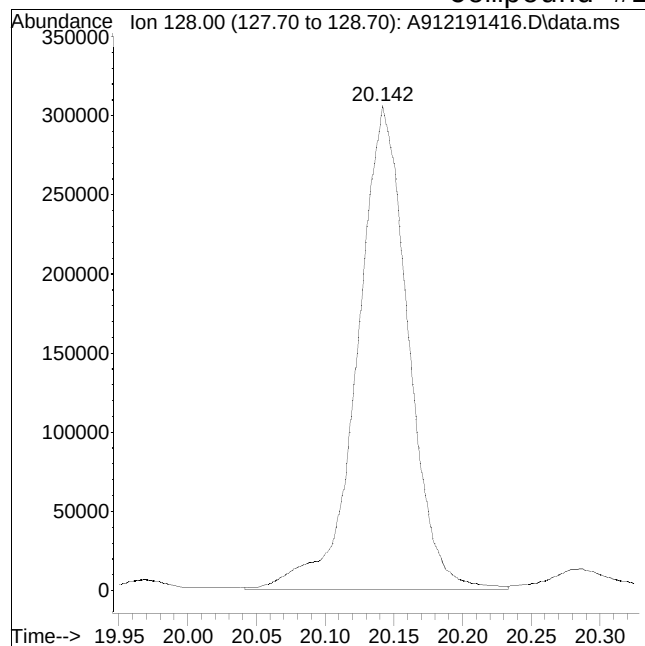


Manual Peak Response = 36607 M4

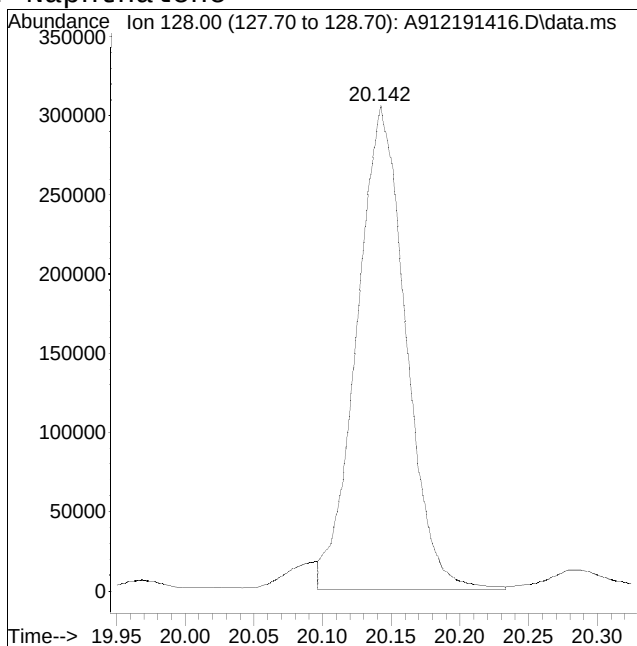
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #10: Naphthalene



Original Peak Response = 788642



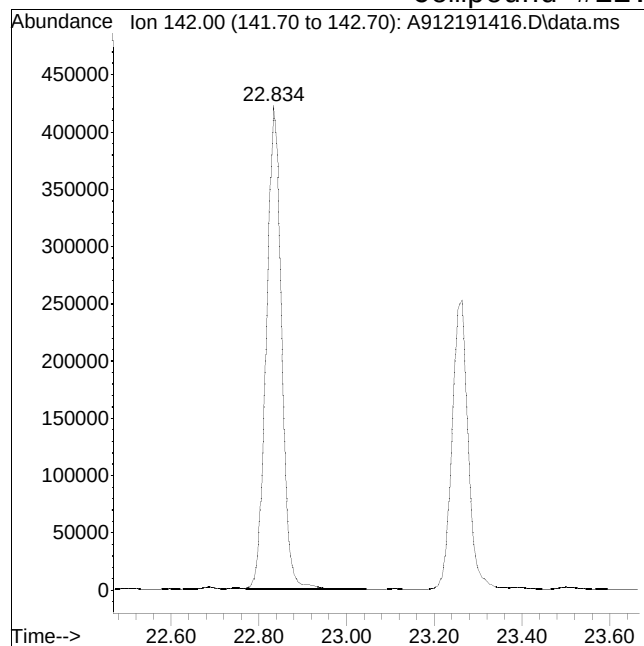
Manual Peak Response = 753490 M4

M4 = Poor automated baseline construction.

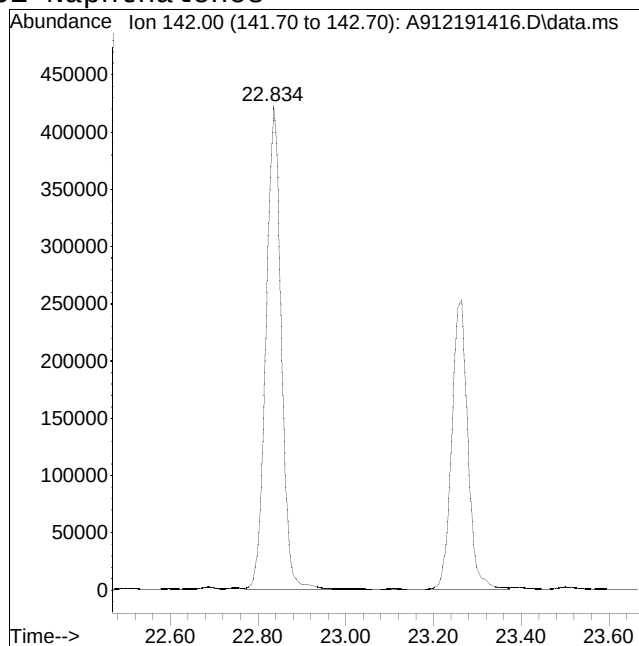
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #11: C1-Naphthalenes



Original Peak Response = 1018047



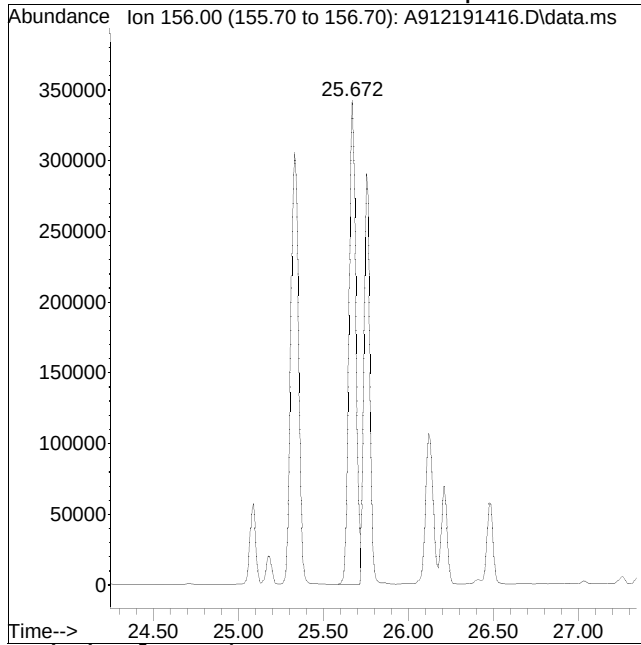
Manual Peak Response = 1672783 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

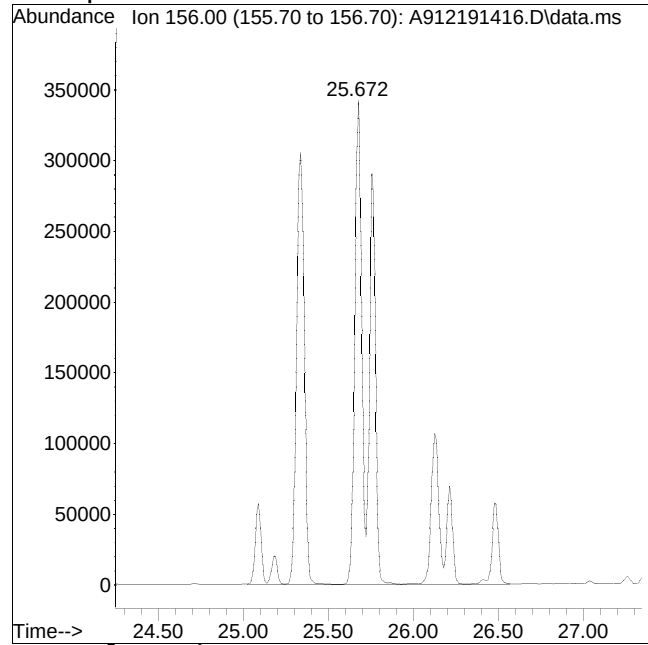
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #12: C2-Naphthalenes



Original Peak Response = 964032



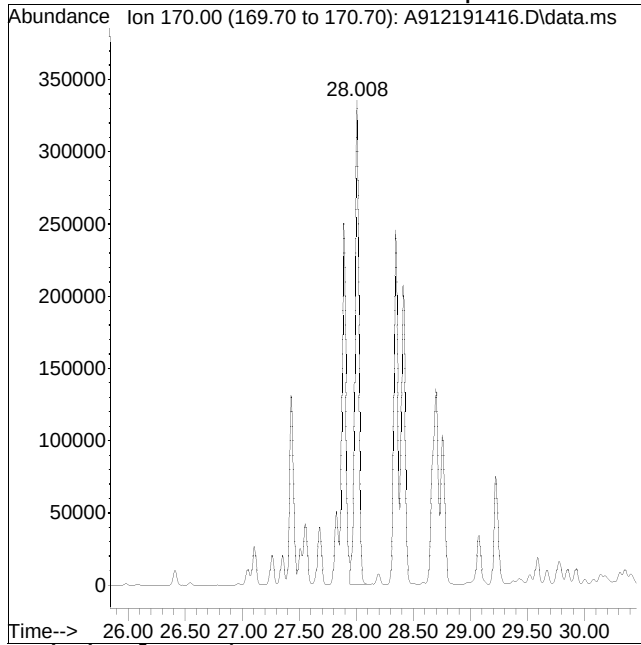
Manual Peak Response = 3505775 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

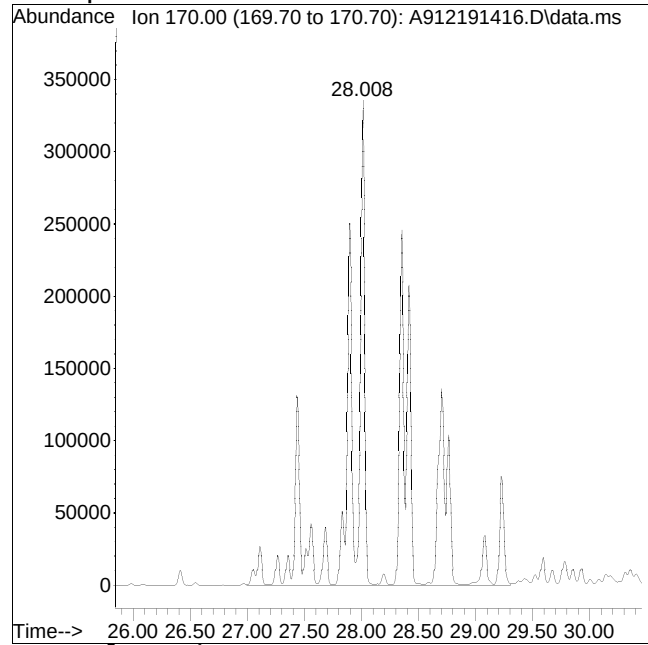
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #13: C3-Naphthalenes



Original Peak Response = 791272



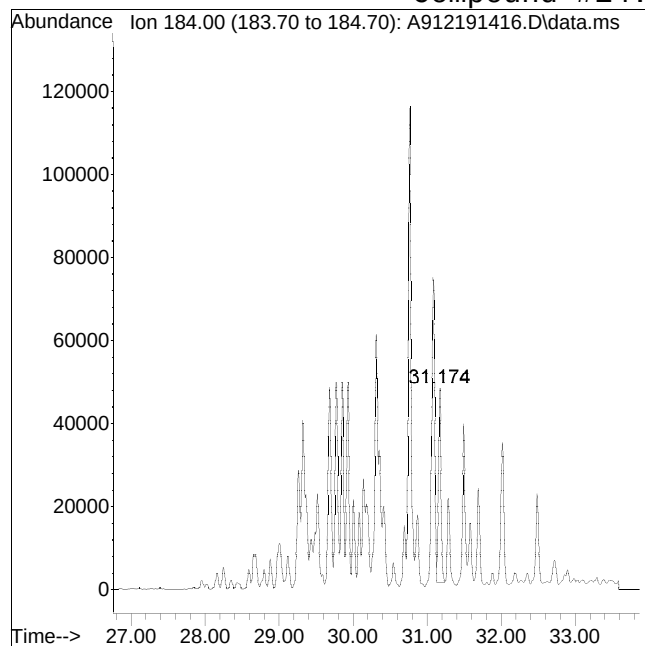
Manual Peak Response = 4420402 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

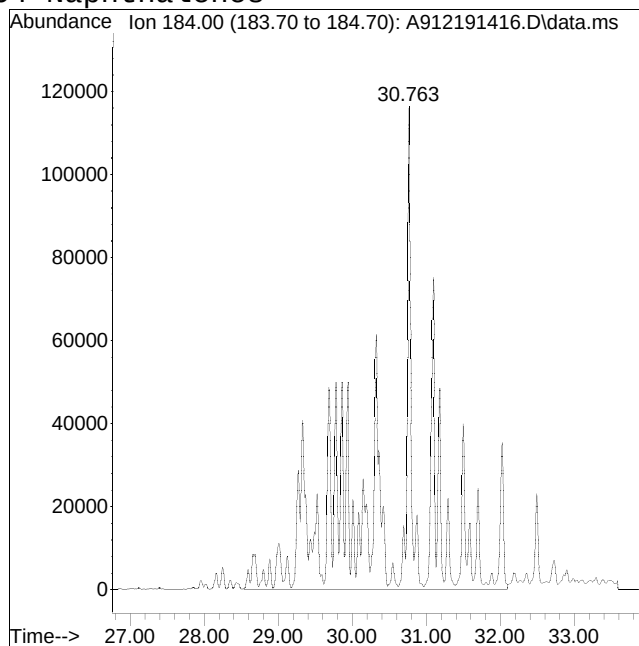
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #14: C4-Naphthalenes



Original Peak Response = 112237



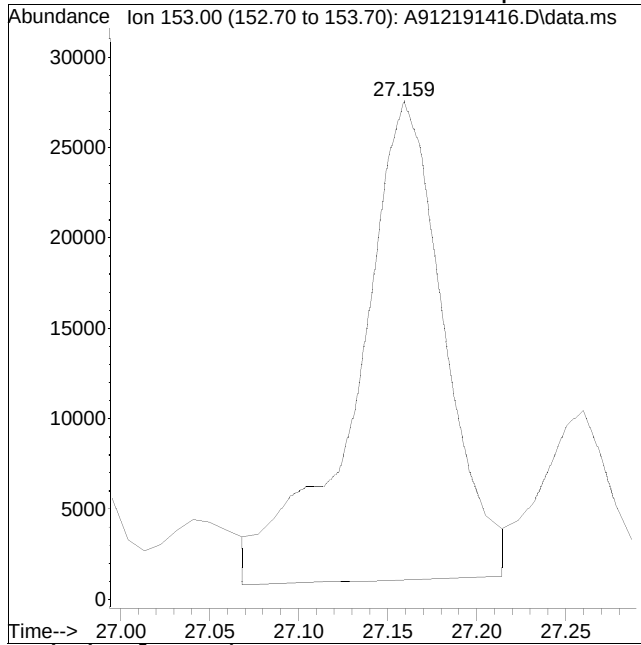
Manual Peak Response = 2738329 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

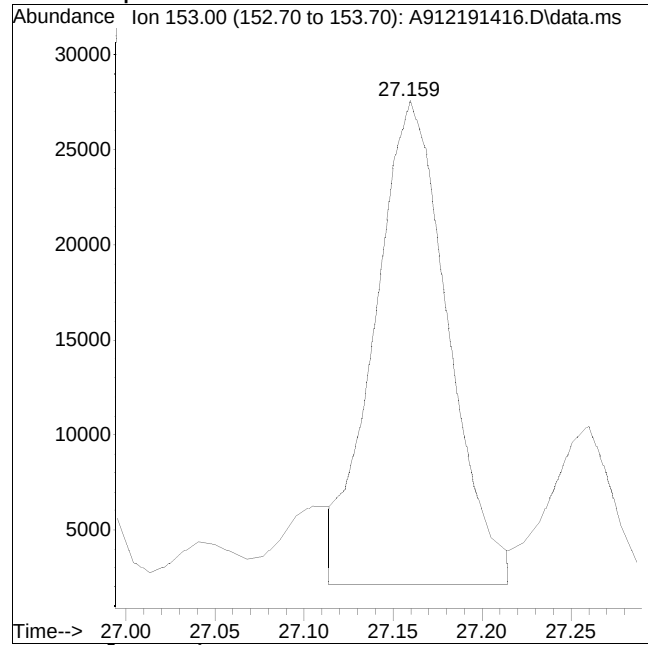
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #27: Acenaphthene



Original Peak Response = 91058



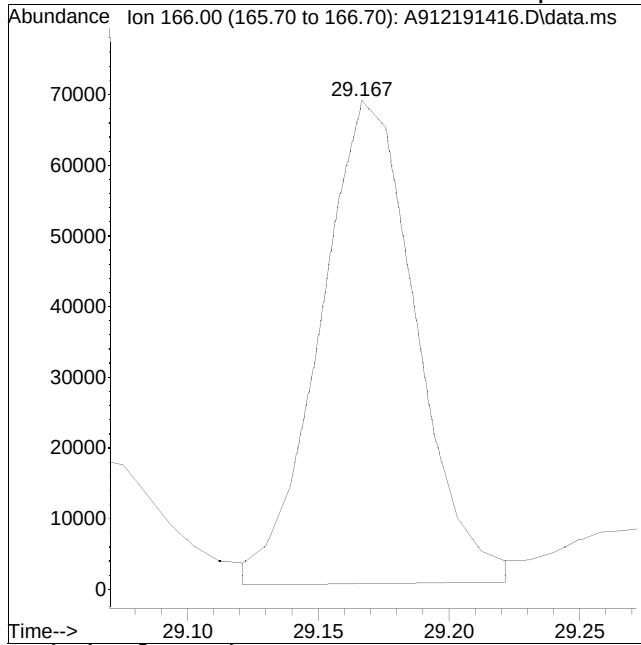
Manual Peak Response = 73178 M4

M4 = Poor automated baseline construction.

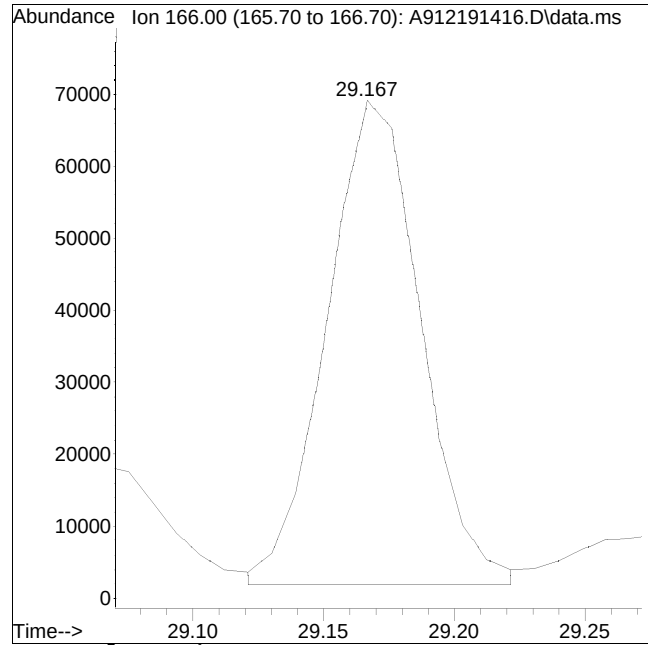
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #29: Fluorene



Original Peak Response = 174439



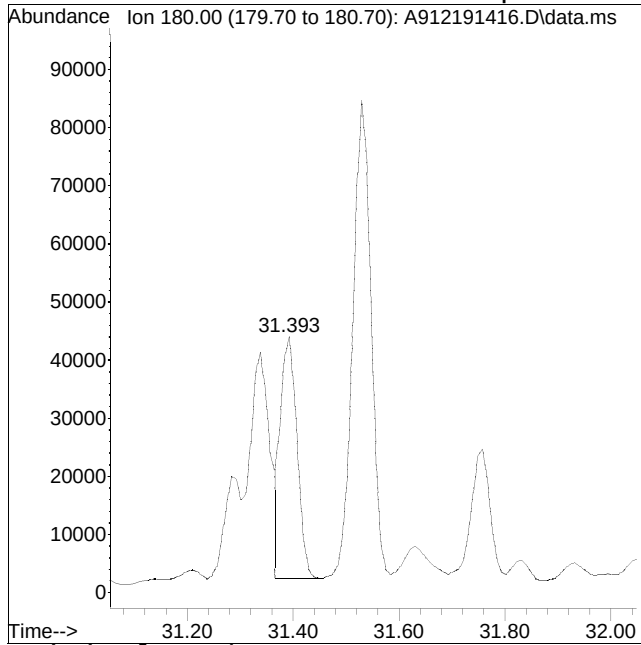
Manual Peak Response = 168152 M4

M4 = Poor automated baseline construction.

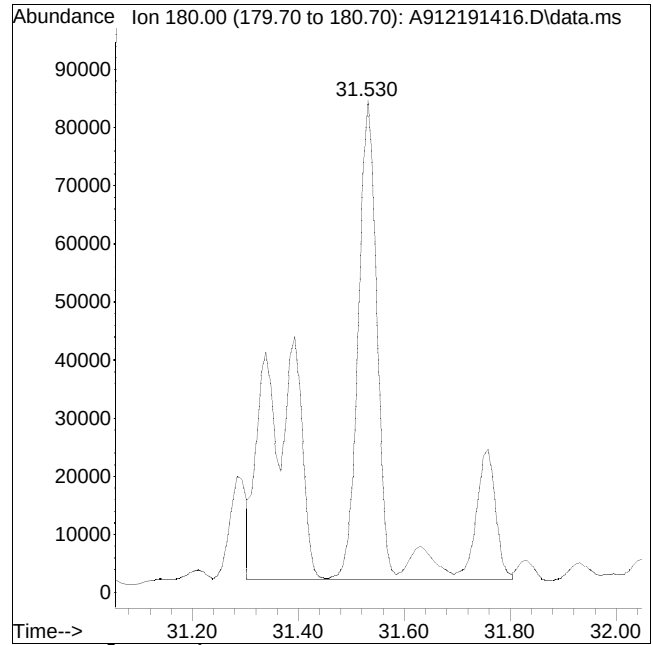
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #30: C1-Fluorenes



Original Peak Response = 89732



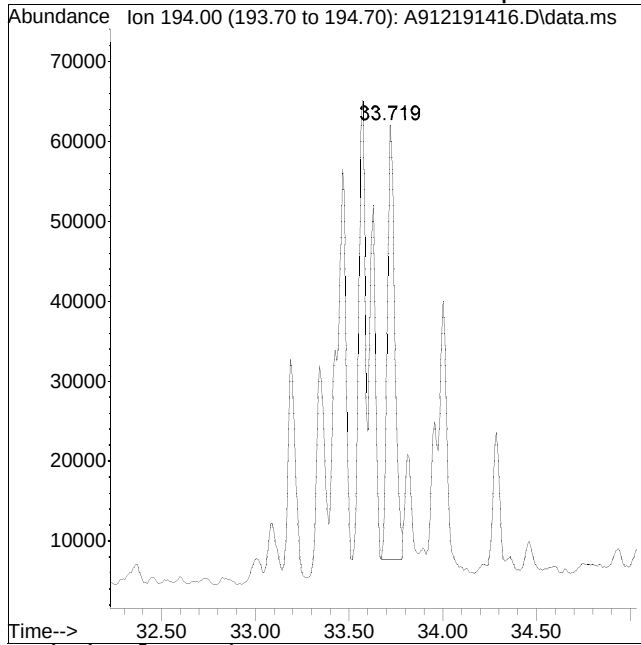
Manual Peak Response = 466725 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

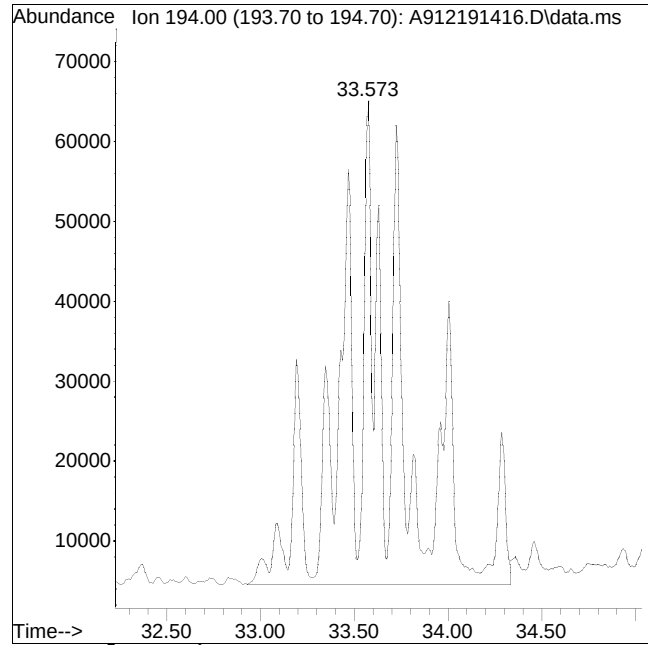
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #31: C2-Fluorenes



Original Peak Response = 153378



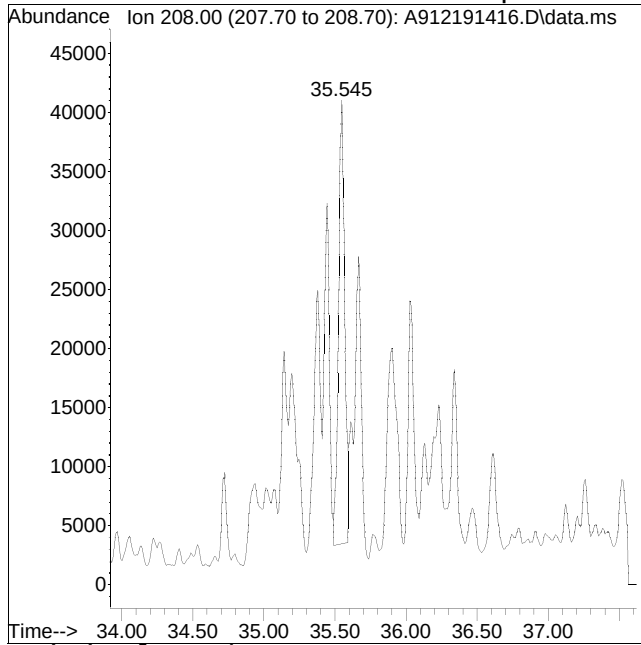
Manual Peak Response = 1111524 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

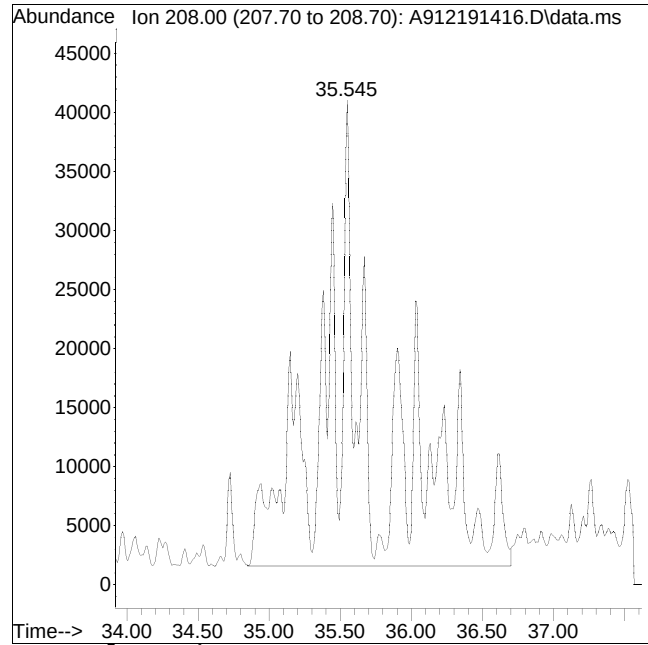
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #32: C3-Fluorenes



Original Peak Response = 113177



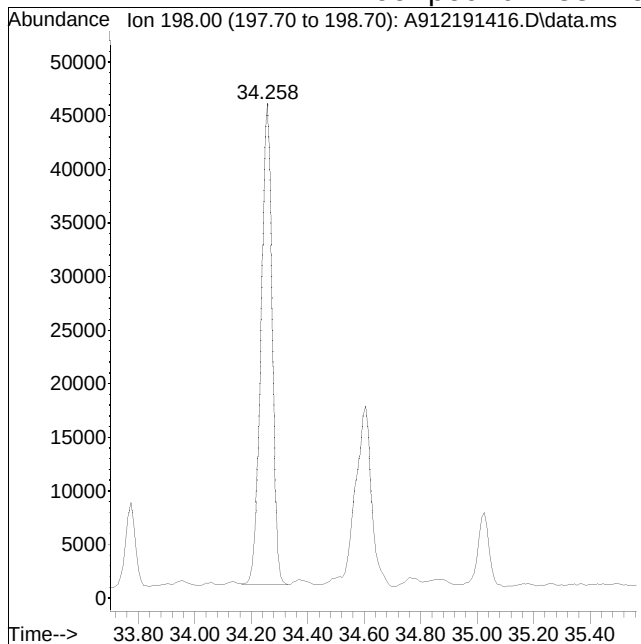
Manual Peak Response = 976578 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

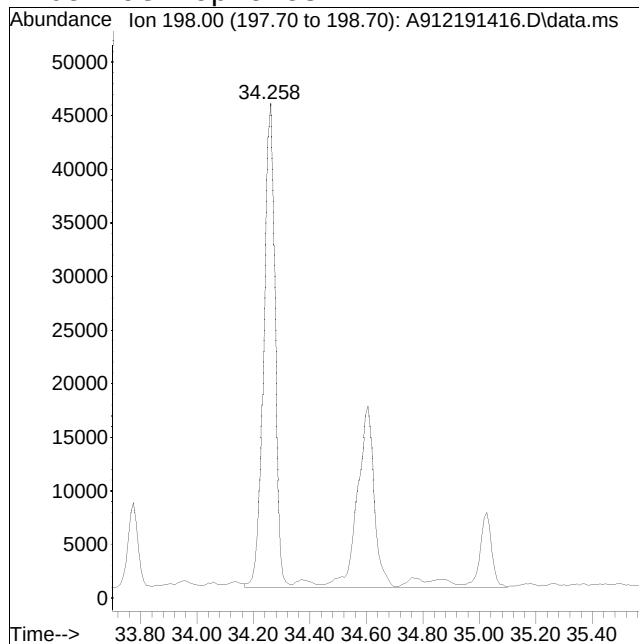
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #38: C1-Dibenzothiophenes



Original Peak Response = 123615



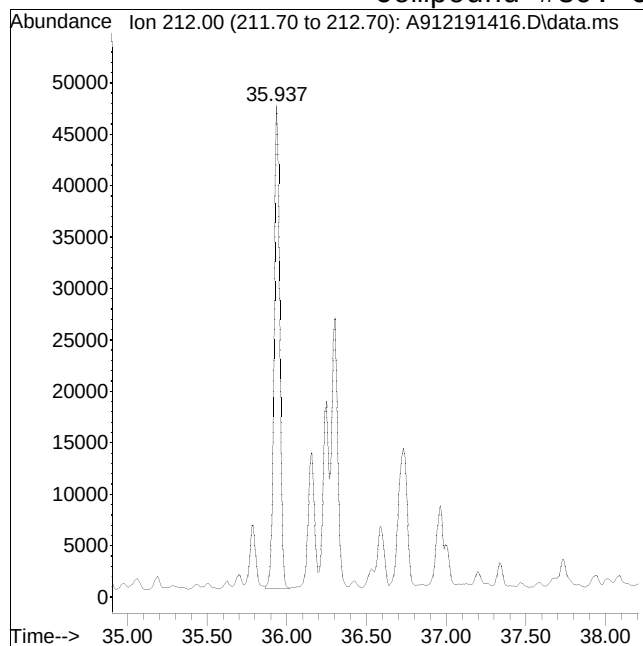
Manual Peak Response = 225612 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

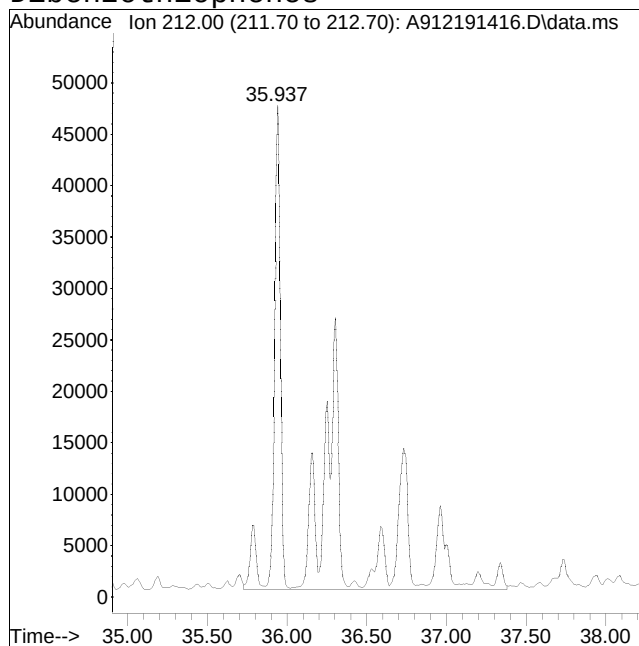
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #39: C2-Dibenzothiophenes



Original Peak Response = 116783



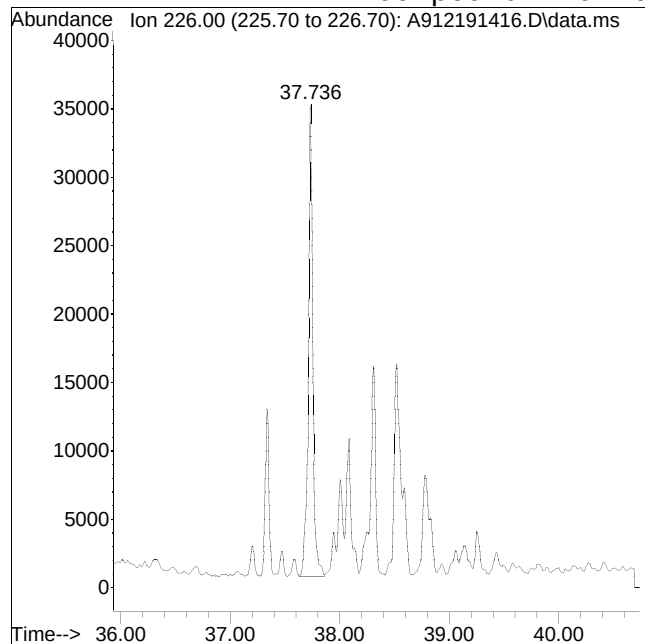
Manual Peak Response = 420462 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

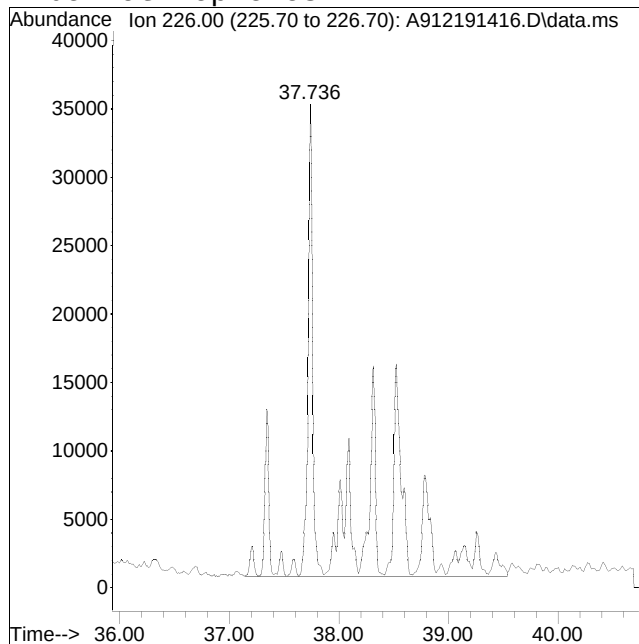
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912191416.D Operator : PAH9:SR
 Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
 Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #40: C3-Dibenzothiophenes



Original Peak Response = 98370



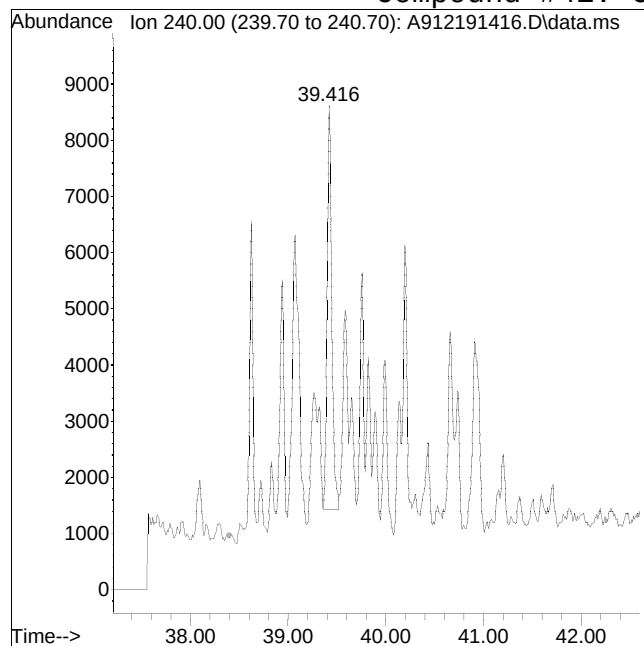
Manual Peak Response = 398970 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

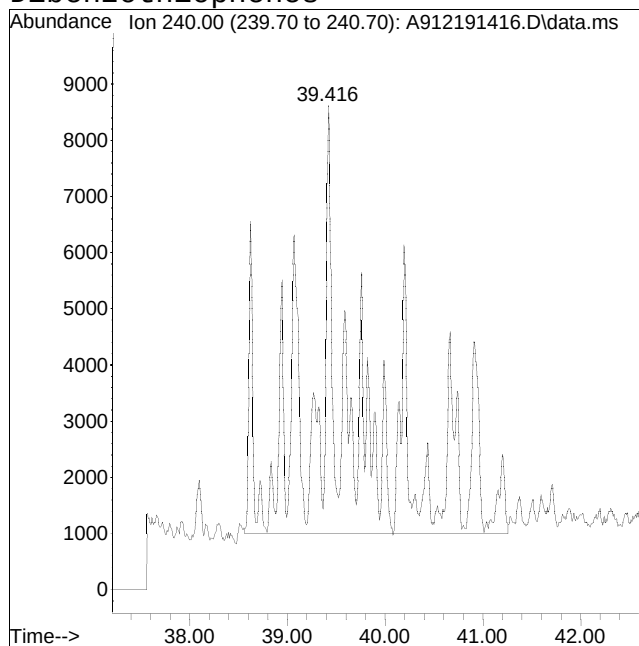
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #41: C4-Dibenzothiophenes



Original Peak Response = 23710



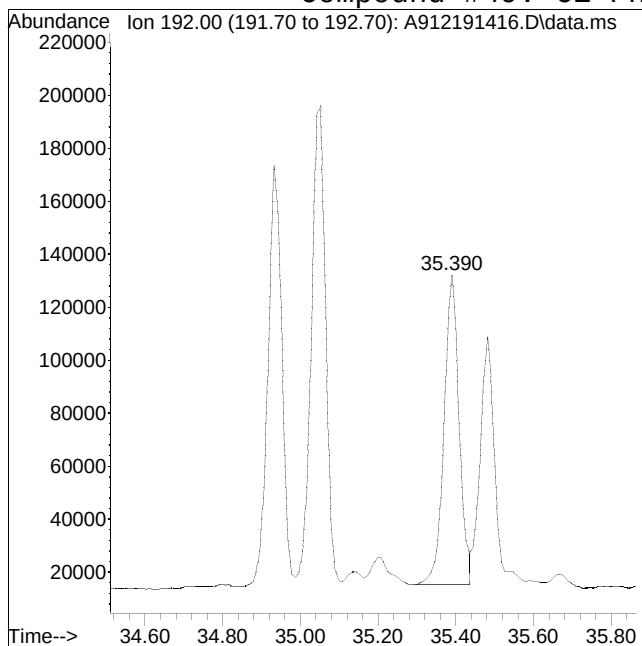
Manual Peak Response = 238844 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

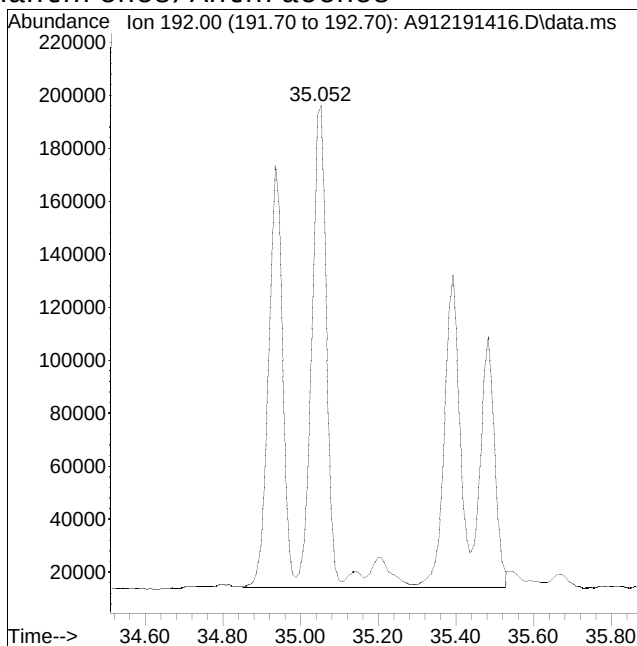
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912191416.D Operator : PAH9:SR
 Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
 Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #49: C1-Phenanthrenes/Anthracenes



Original Peak Response = 316840



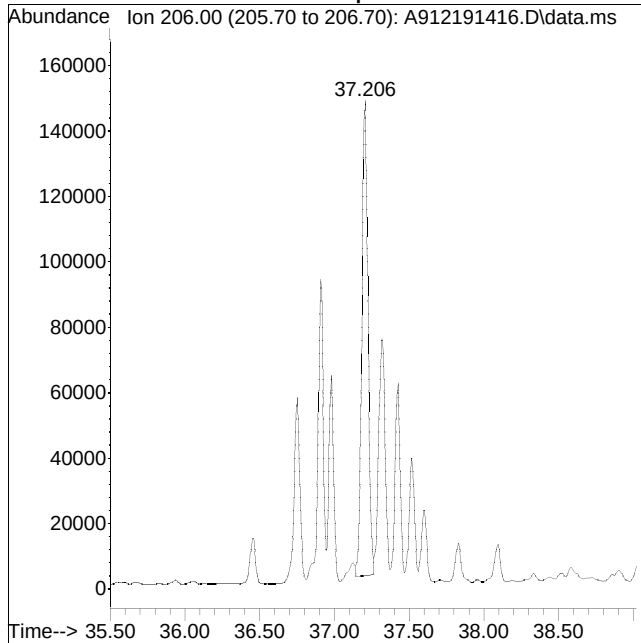
Manual Peak Response = 1490475 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

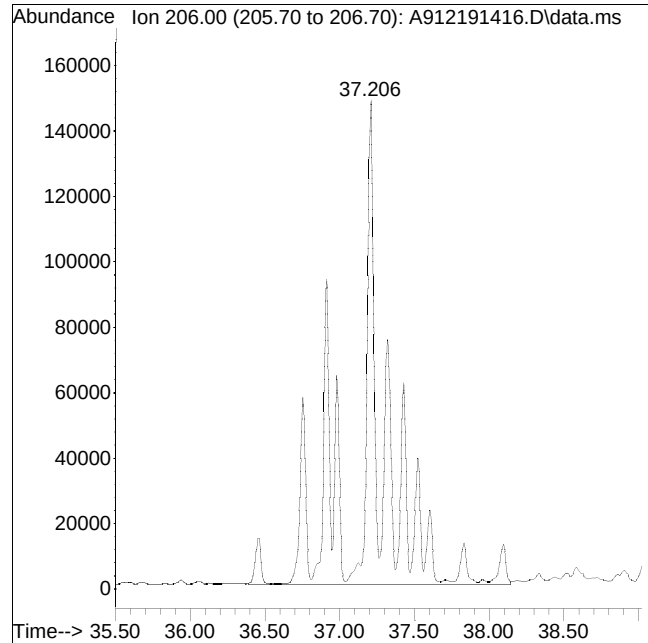
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #50: C2-Phenanthrenes/Anthracenes



Original Peak Response = 415080



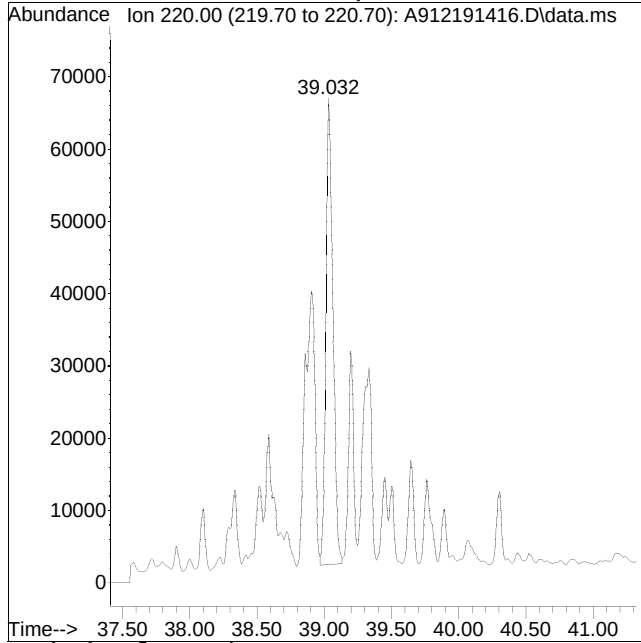
Manual Peak Response = 1670587 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

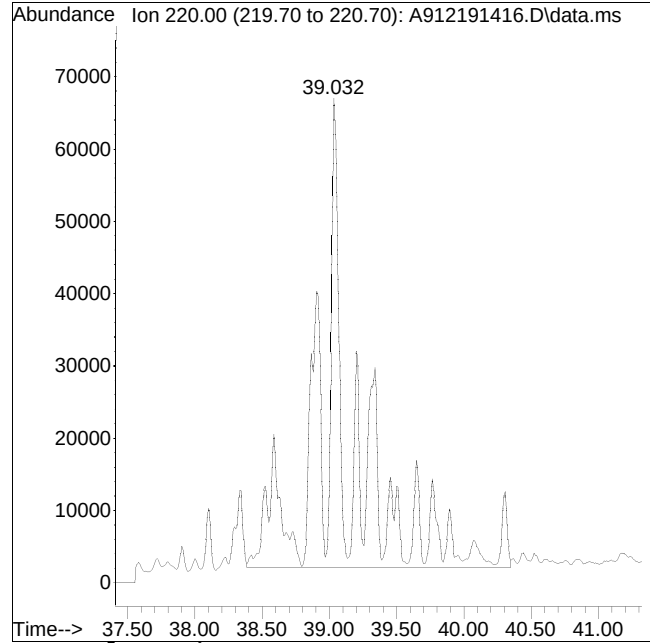
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #52: C3-Phenanthrenes/Anthracenes



Original Peak Response = 236098



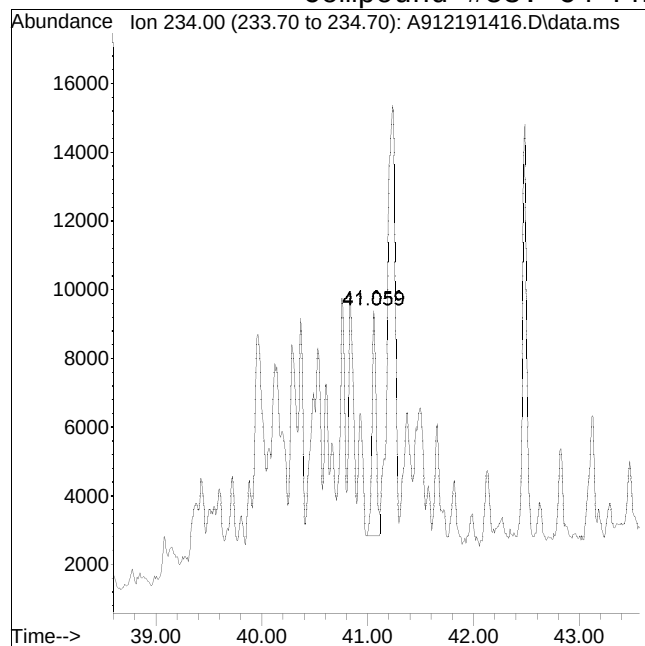
Manual Peak Response = 1016077 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

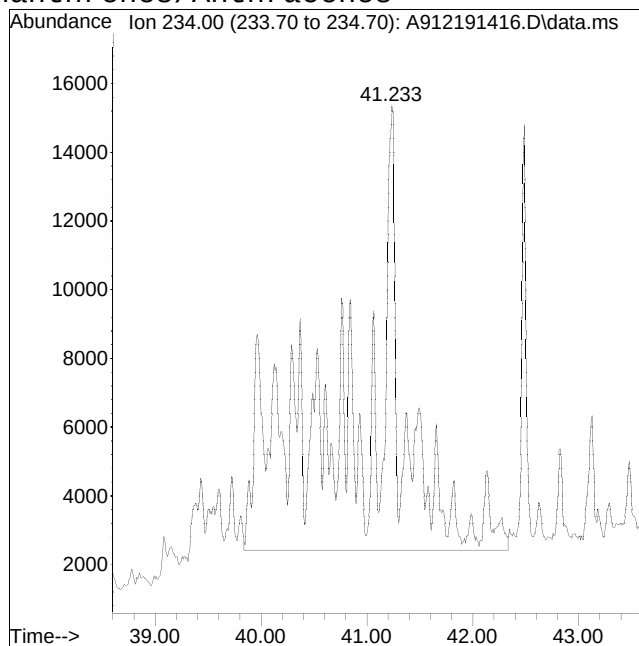
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912191416.D Operator : PAH9:SR
 Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
 Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #53: C4-Phenanthrenes/Anthracenes



Original Peak Response = 17751

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

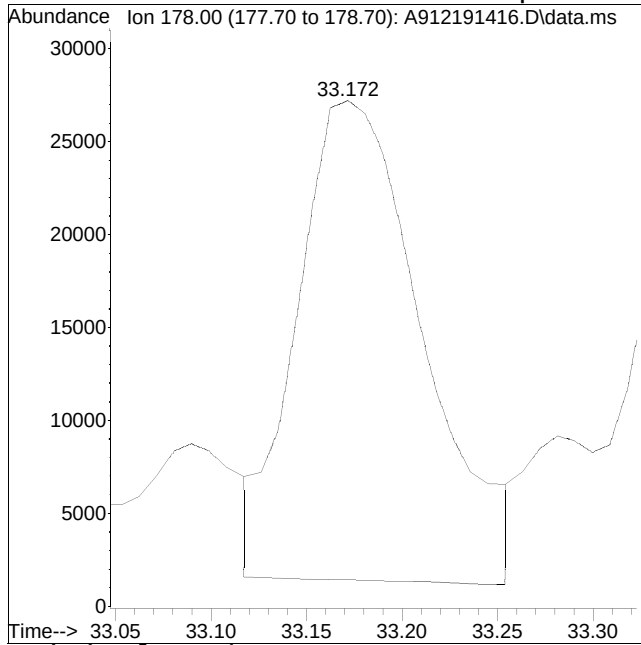


Manual Peak Response = 417064 M5

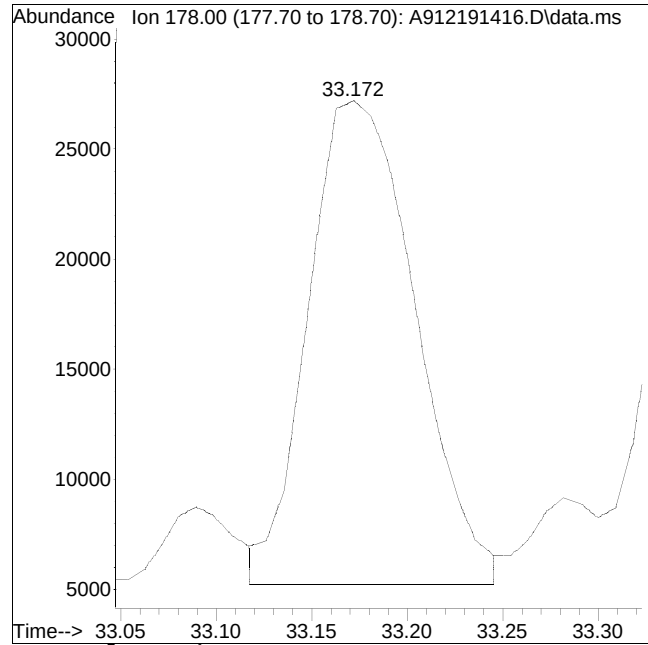
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #55: Anthracene



Original Peak Response = 117719



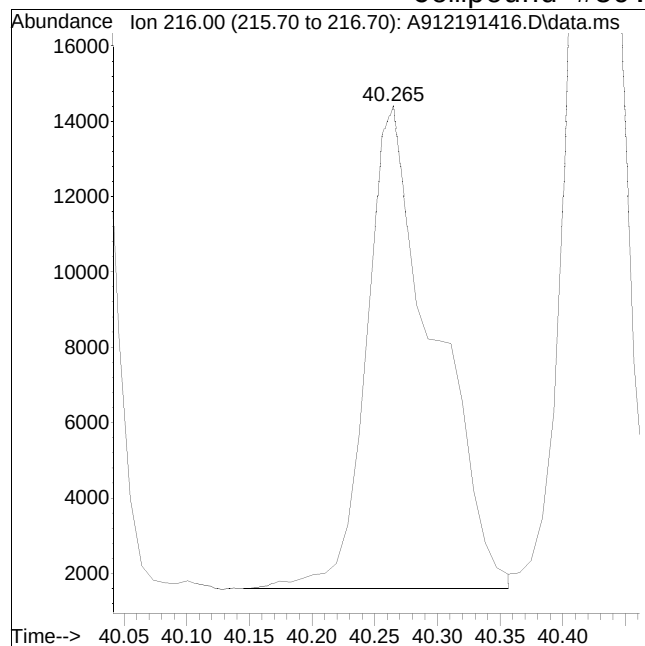
Manual Peak Response = 85531 M4

M4 = Poor automated baseline construction.

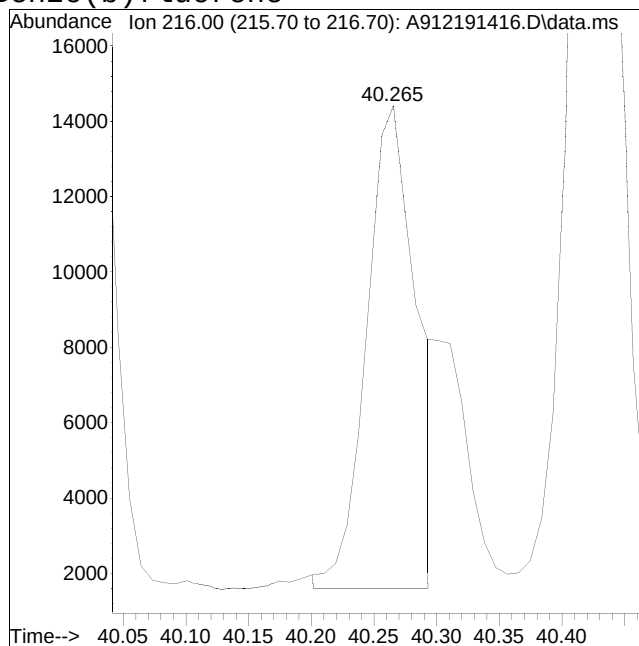
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #59: Benzo(b)fluorene



Original Peak Response = 48131



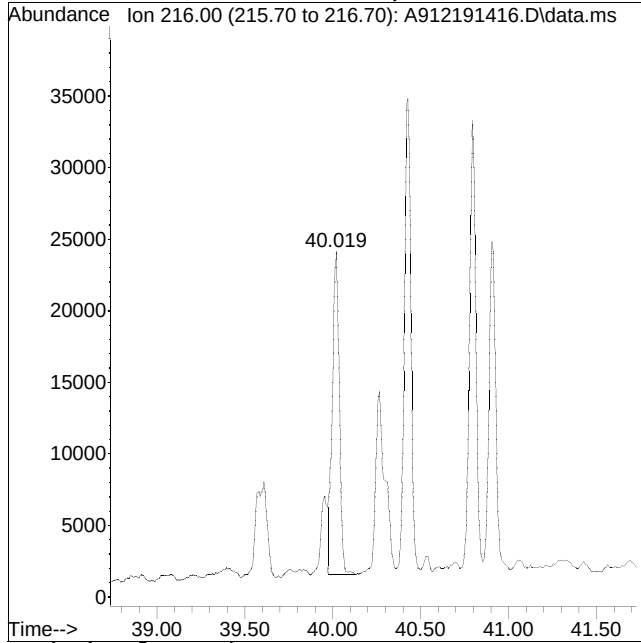
Manual Peak Response = 34969 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

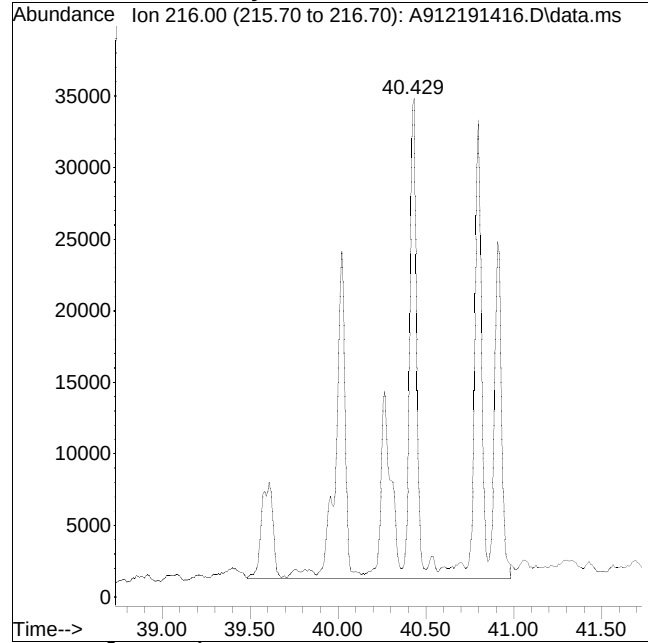
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #61: C1-Fluoranthenes/Pyrenes



Original Peak Response = 62912



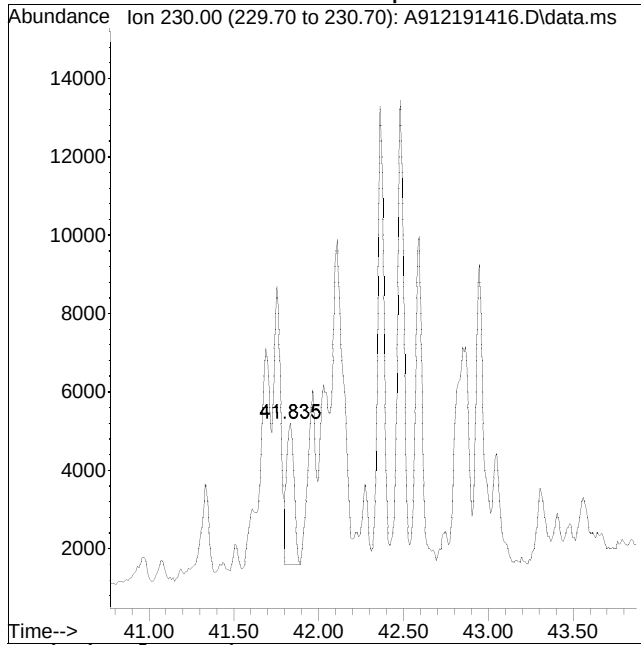
Manual Peak Response = 421574 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

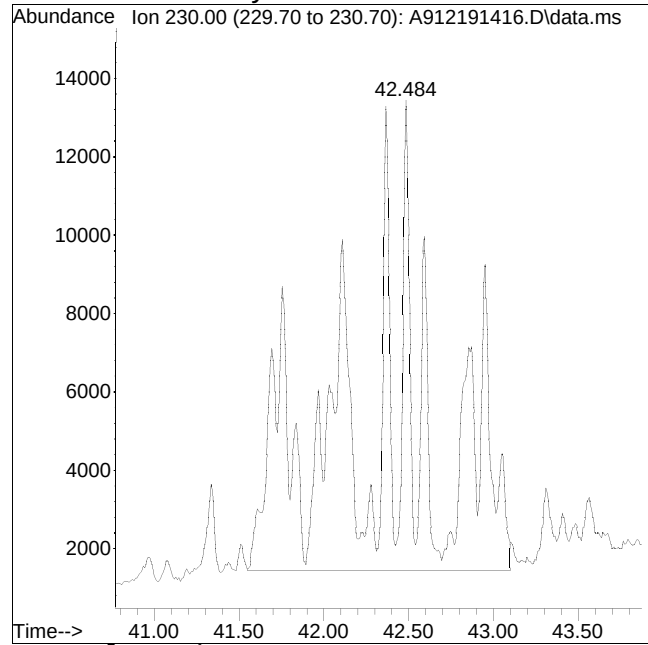
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #62: C2-Fluoranthenes/Pyrenes



Original Peak Response = 10854



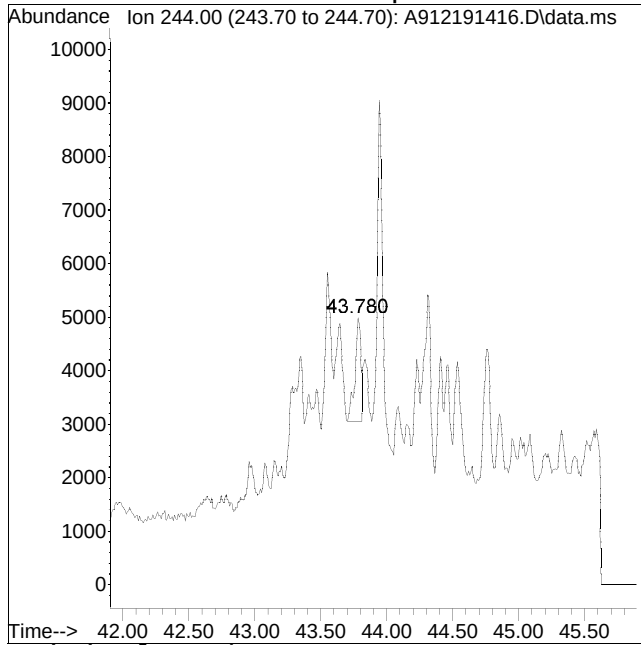
Manual Peak Response = 293511 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

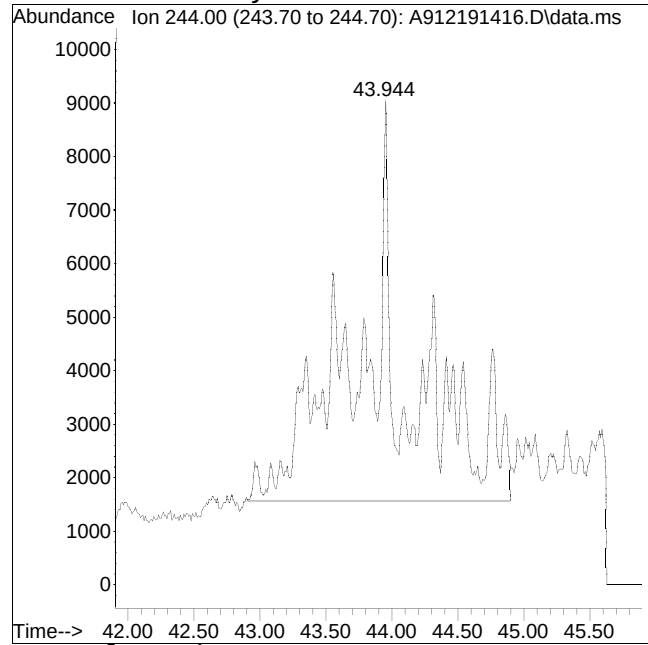
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #63: C3-Fluoranthenes/Pyrenes



Original Peak Response = 6209

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

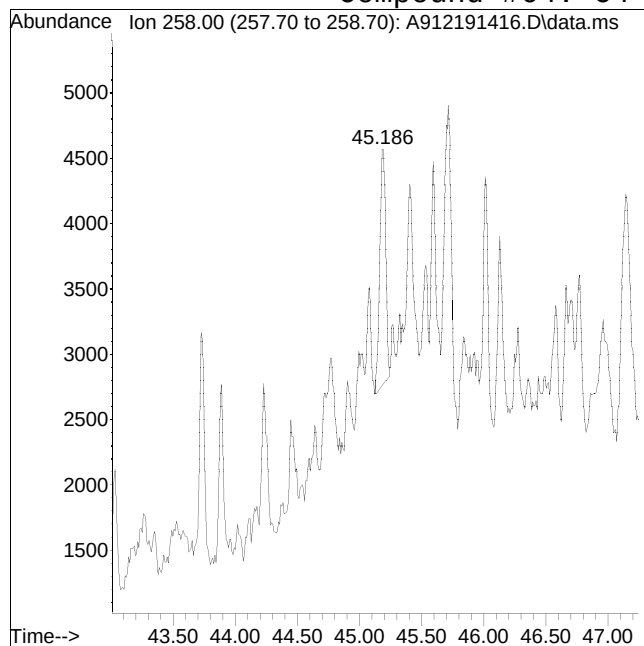


Manual Peak Response = 201337 M5

Manual Integration/Negative Proof Report

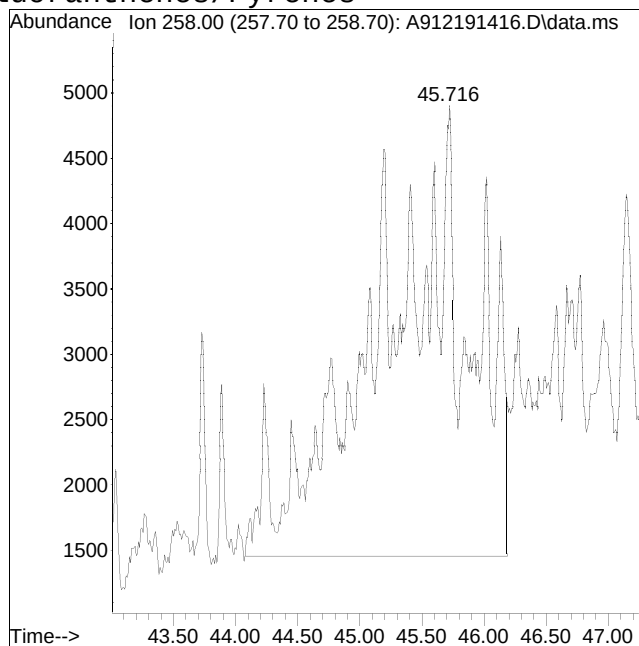
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #64: C4-Fluoranthenes/Pyrenes



Original Peak Response = 6029

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

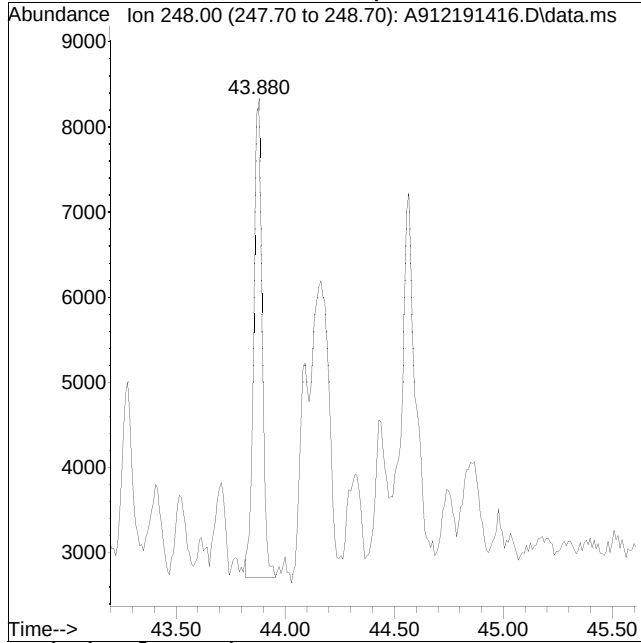


Manual Peak Response = 171472 M5

Manual Integration/Negative Proof Report

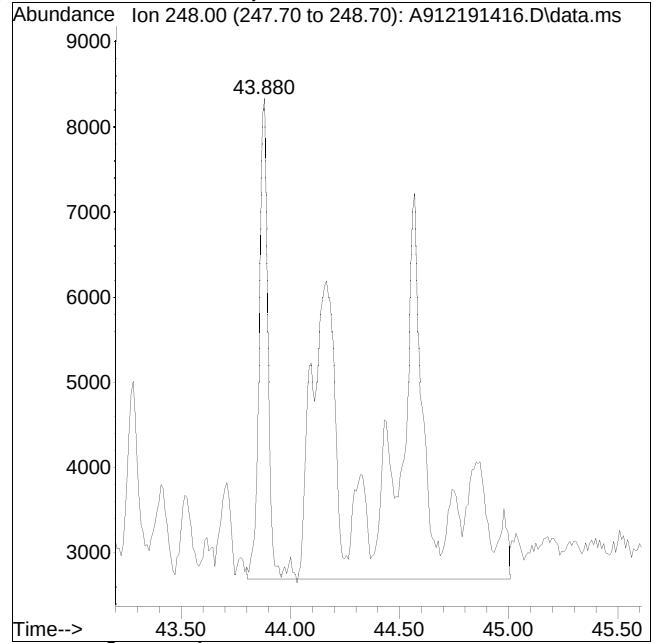
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #70: C1-Naphthobenzothiophenes



Original Peak Response = 15245

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

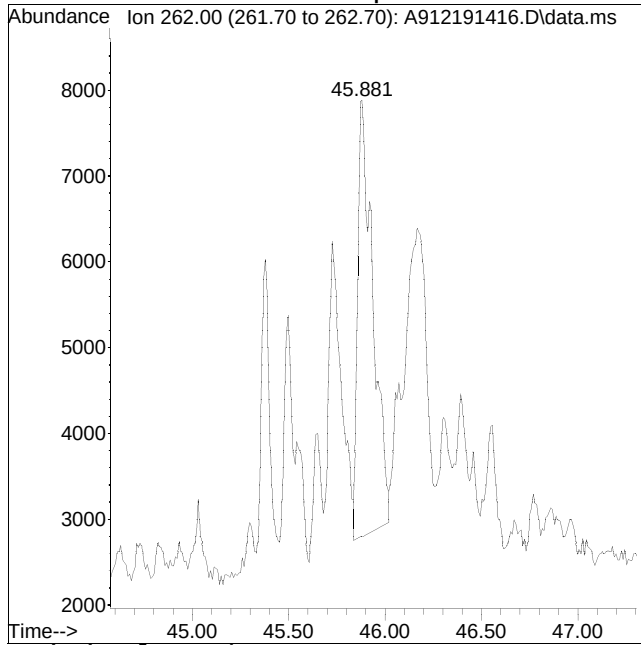


Manual Peak Response = 90647 M5

Manual Integration/Negative Proof Report

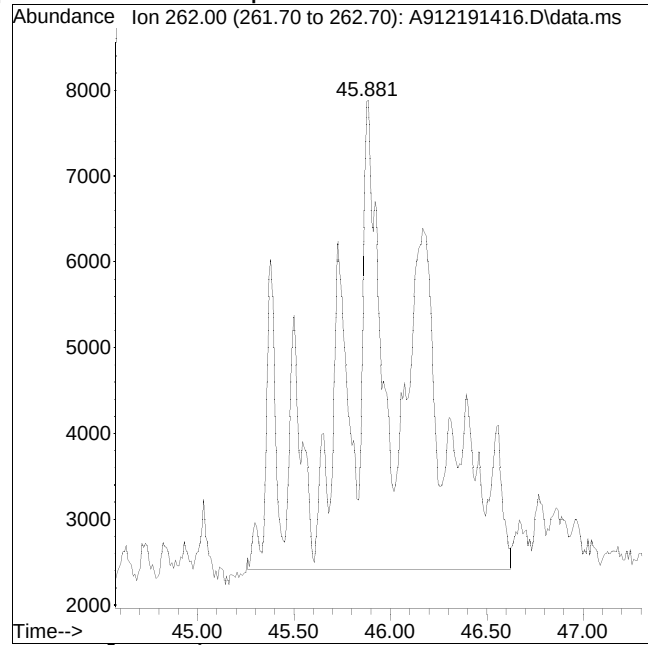
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #71: C2-Naphthobenzothiophenes



Original Peak Response = 27781

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

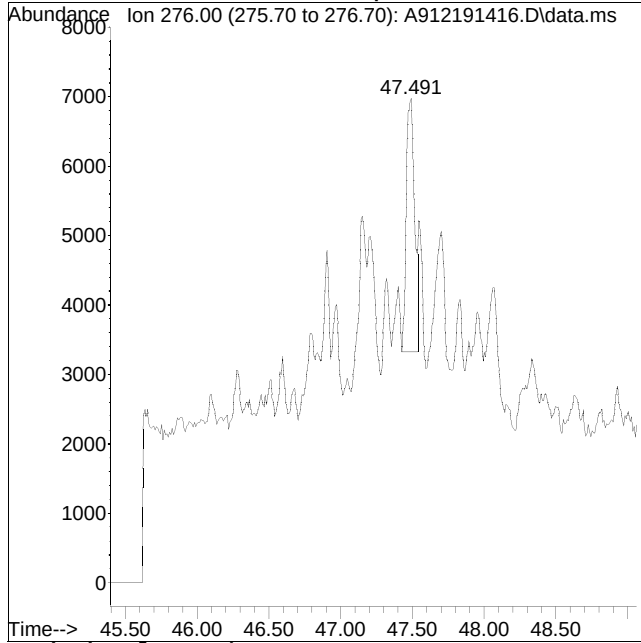


Manual Peak Response = 142881 M5

Manual Integration/Negative Proof Report

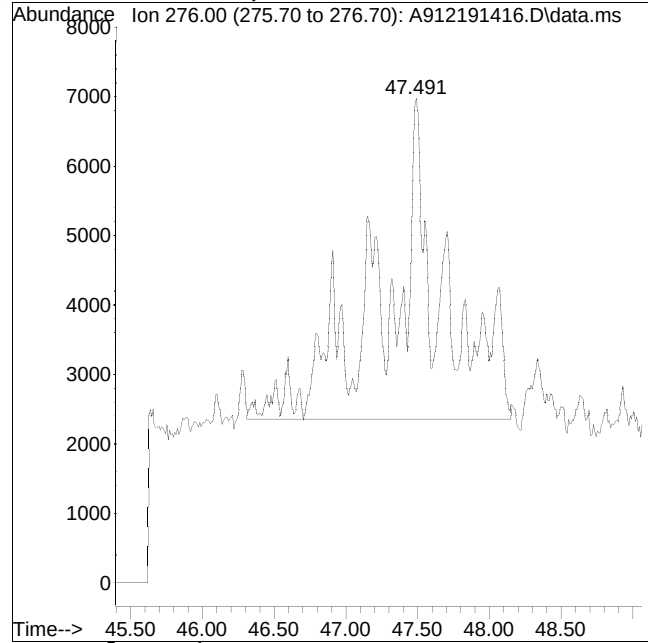
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #72: C3-Naphthobenzothiophenes



Original Peak Response = 14879

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

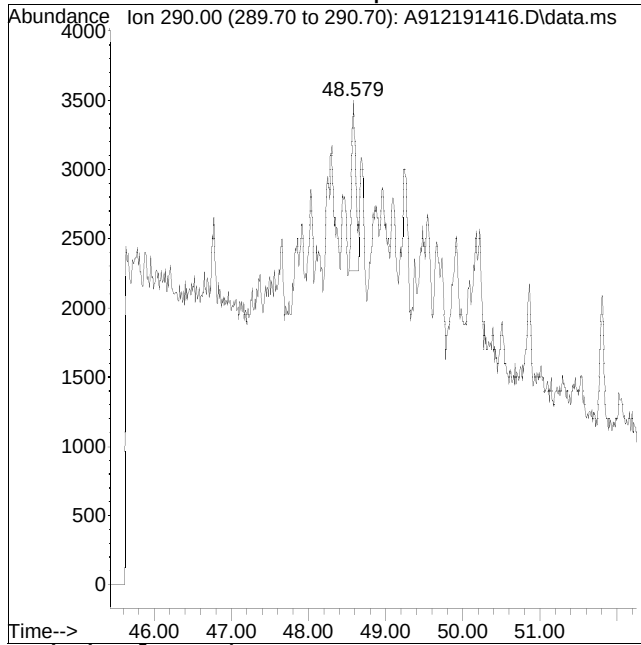


Manual Peak Response = 131025 M5

Manual Integration/Negative Proof Report

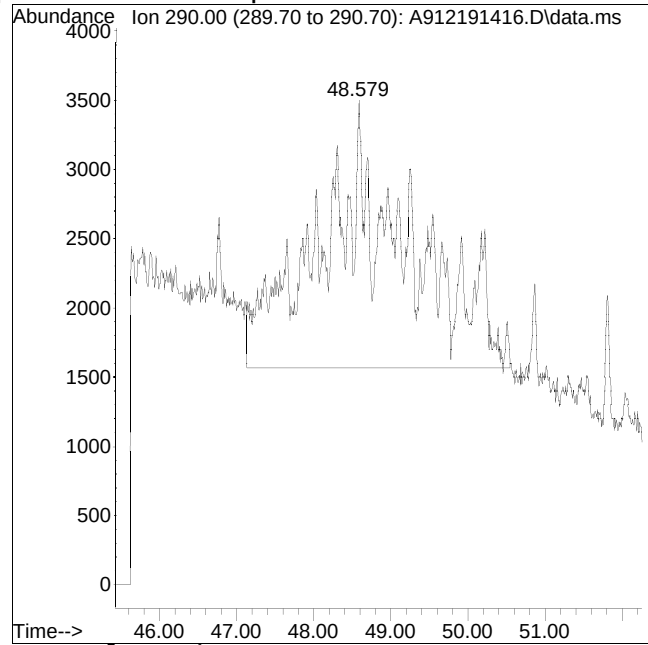
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #73: C4-Naphthobenzothiophenes



Original Peak Response = 4866

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

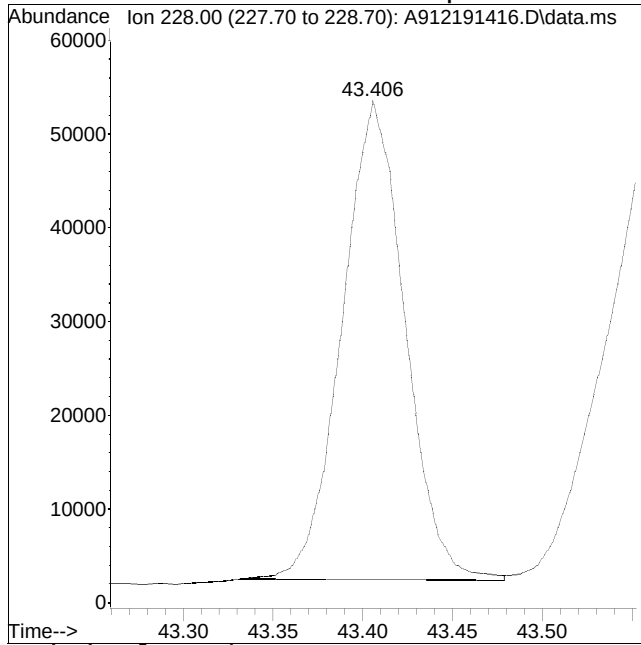


Manual Peak Response = 149446 M5

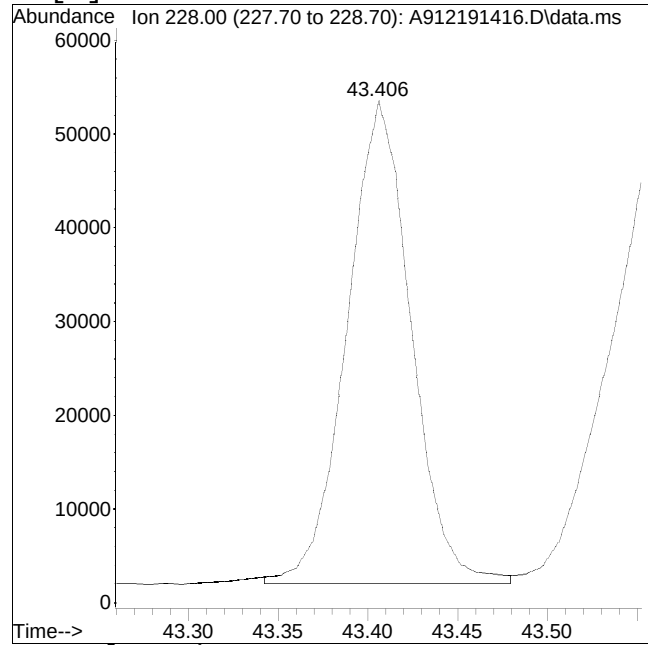
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #75: Benz[a]anthracene



Original Peak Response = 124662



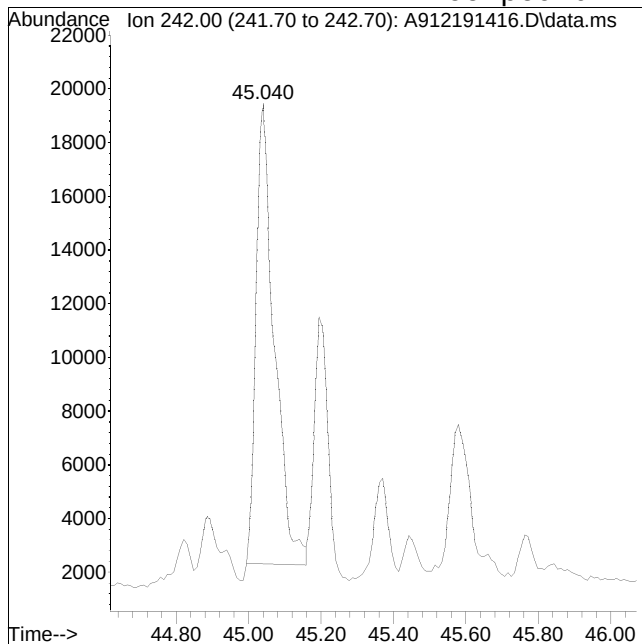
Manual Peak Response = 128312 M4

M4 = Poor automated baseline construction.

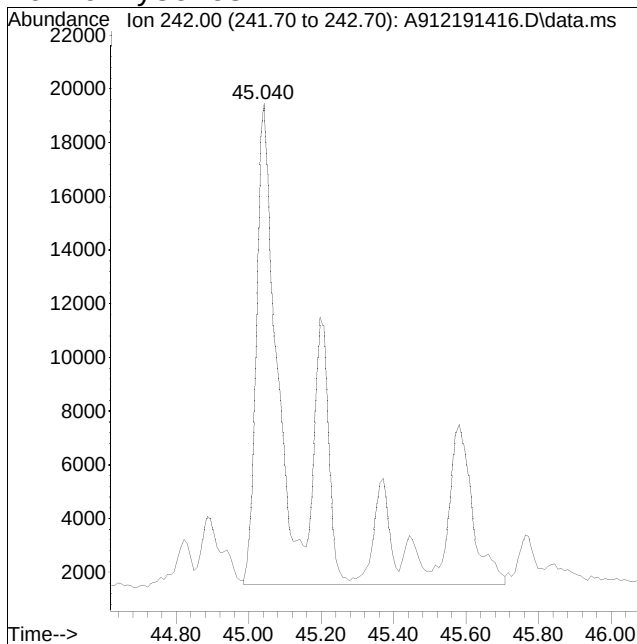
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912191416.D Operator : PAH9:SR
 Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
 Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #78: C1-Chrysenes



Original Peak Response = 60230



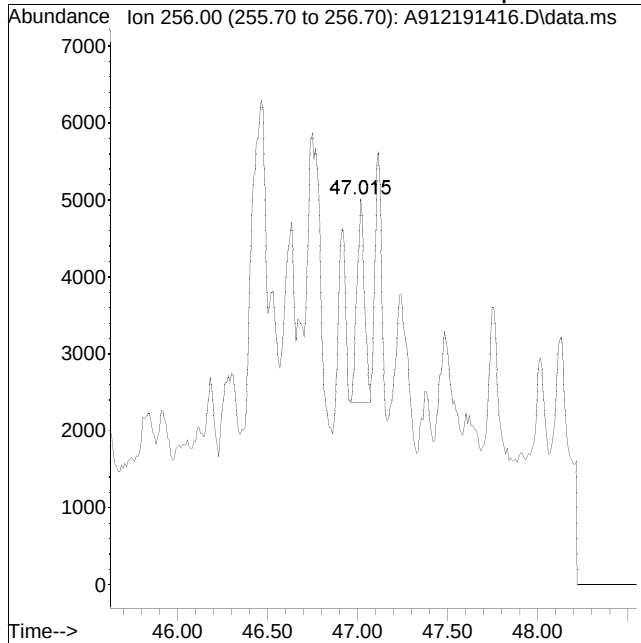
Manual Peak Response = 139519 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

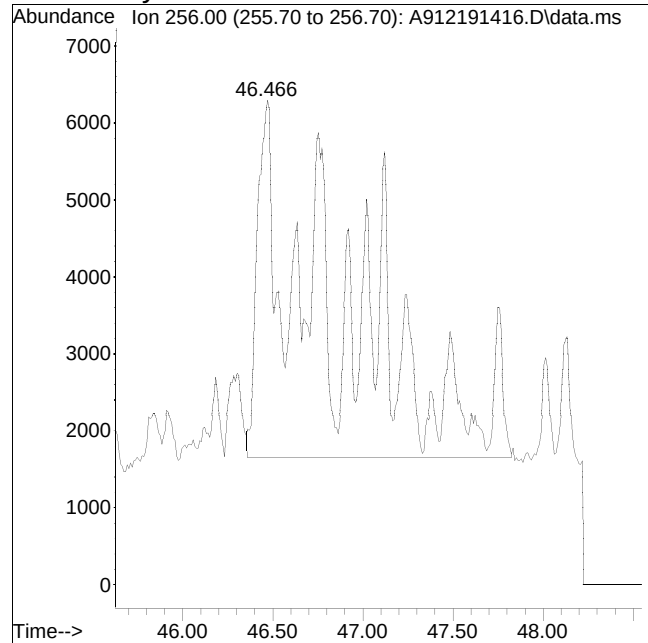
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #79: C2-Chrysenes



Original Peak Response = 7726

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

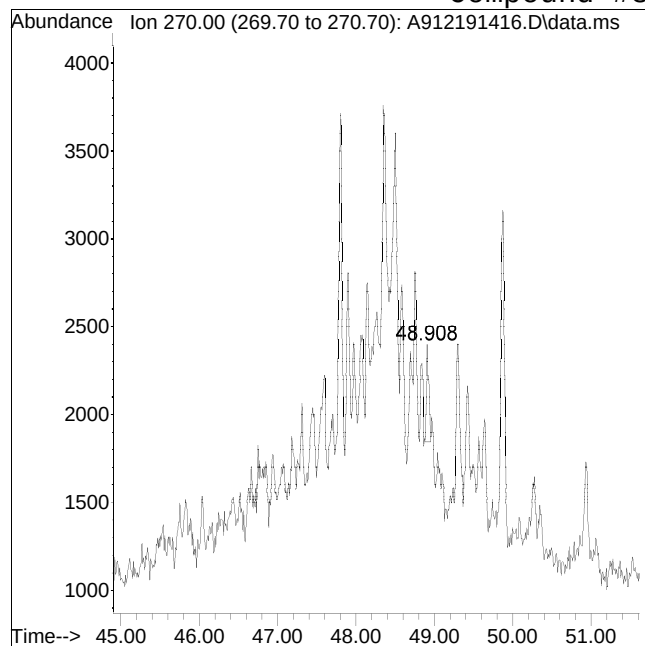


Manual Peak Response = 133228 M5

Manual Integration/Negative Proof Report

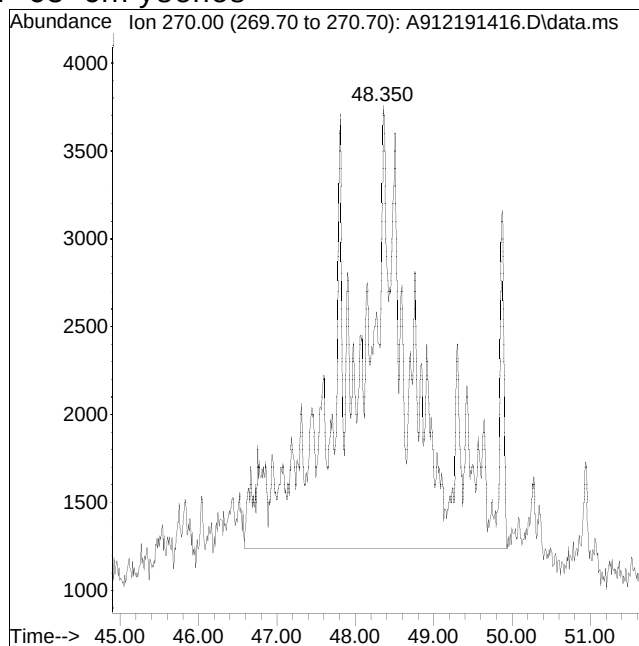
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #81: C3-Chrysenes



Original Peak Response = 1113

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

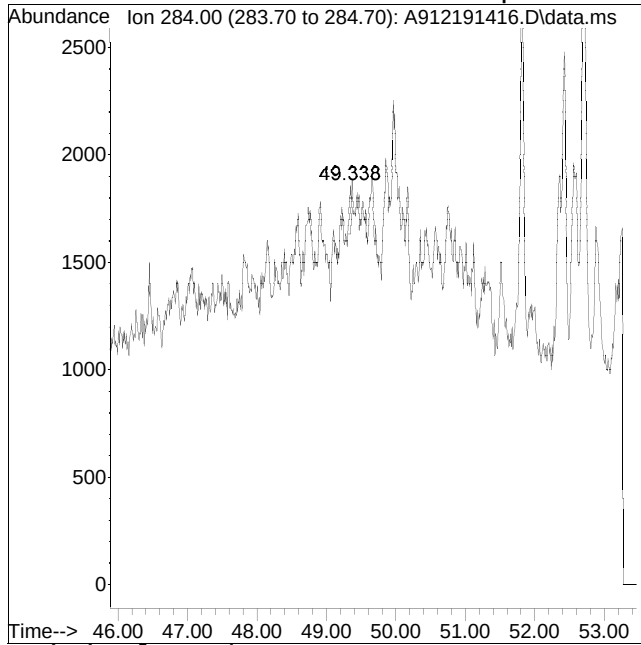


Manual Peak Response = 148448 M5

Manual Integration/Negative Proof Report

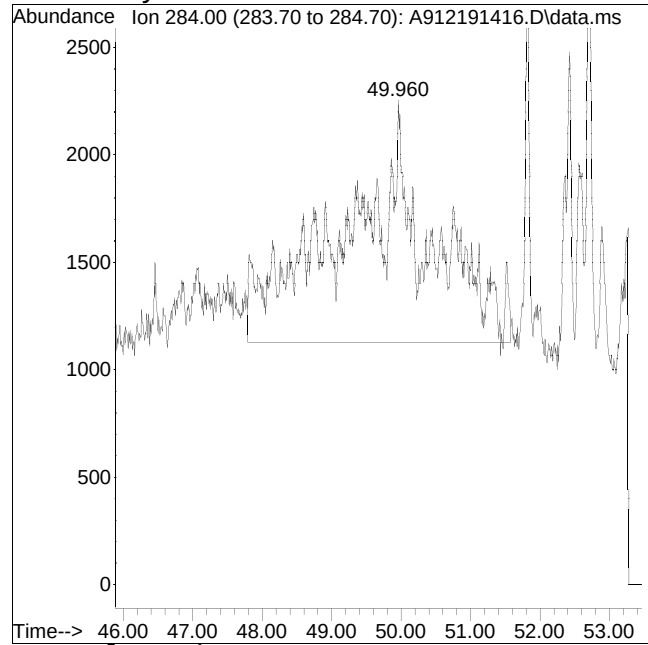
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #82: C4-Chrysenes



Original Peak Response = 395

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

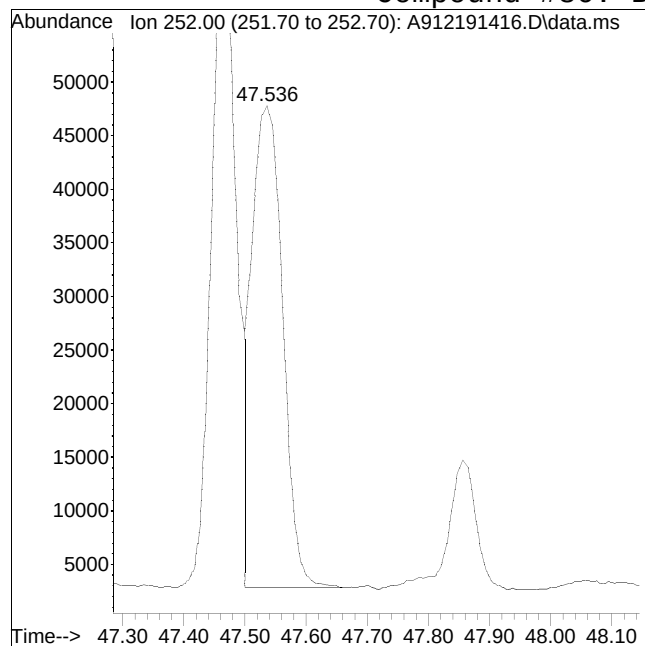


Manual Peak Response = 93615 M5

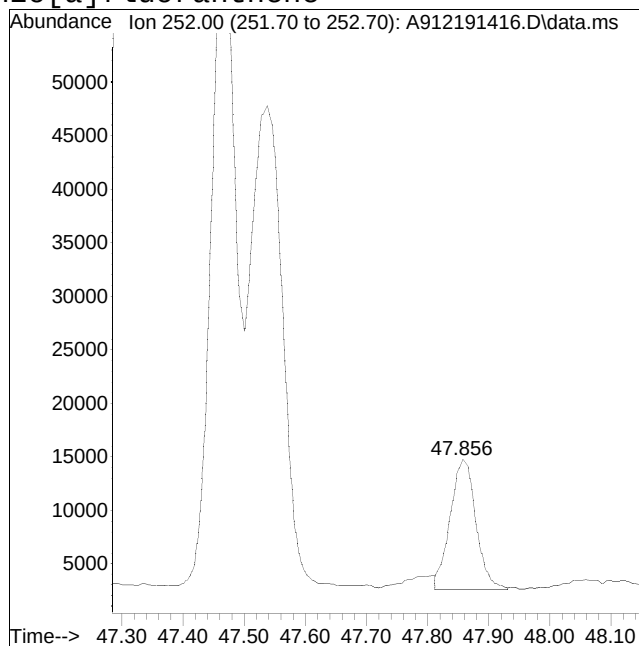
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912191416.D Operator : PAH9:SR
 Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
 Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #86: Benzo[a]fluoranthene



Original Peak Response = 154767



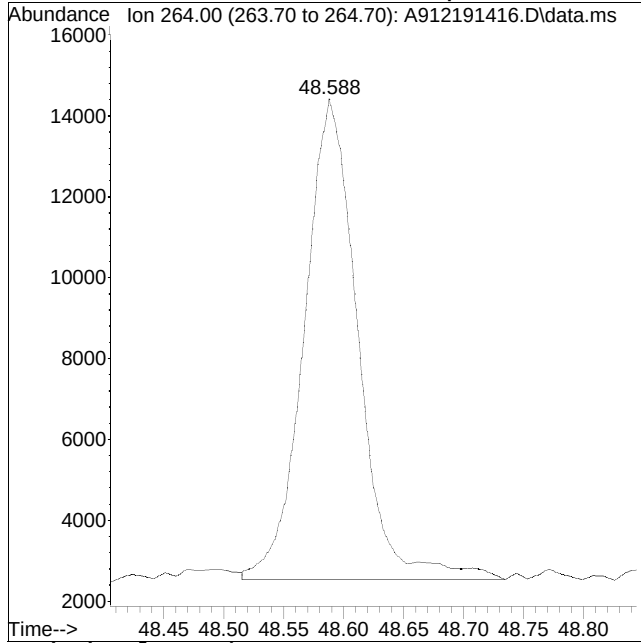
Manual Peak Response = 35450 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

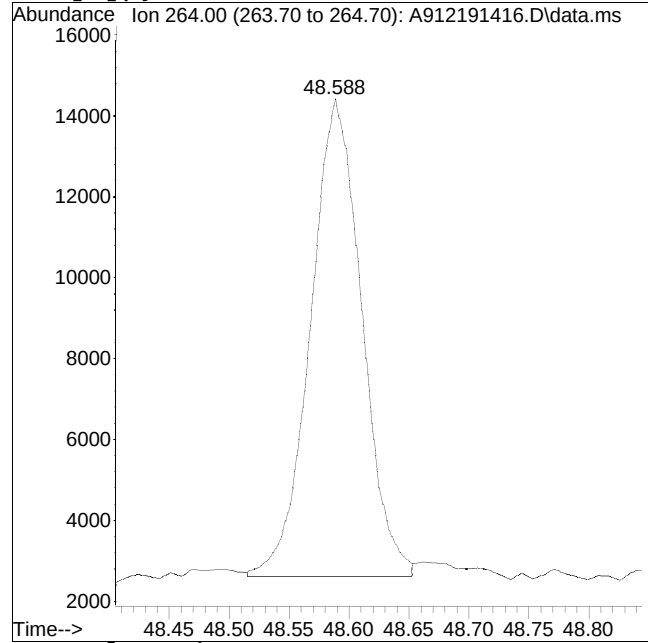
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #88: Benzo[a]pyrene-d12



Original Peak Response = 37151



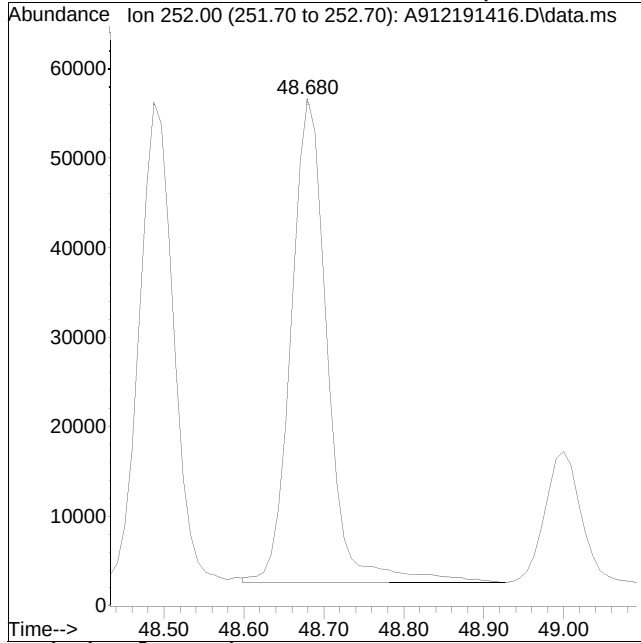
Manual Peak Response = 35212 M4

M4 = Poor automated baseline construction.

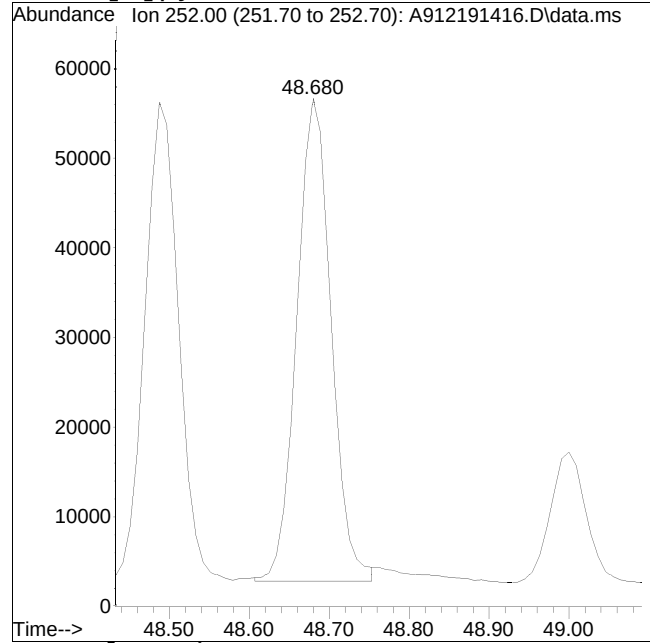
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #89: Benzo[a]pyrene



Original Peak Response = 170564



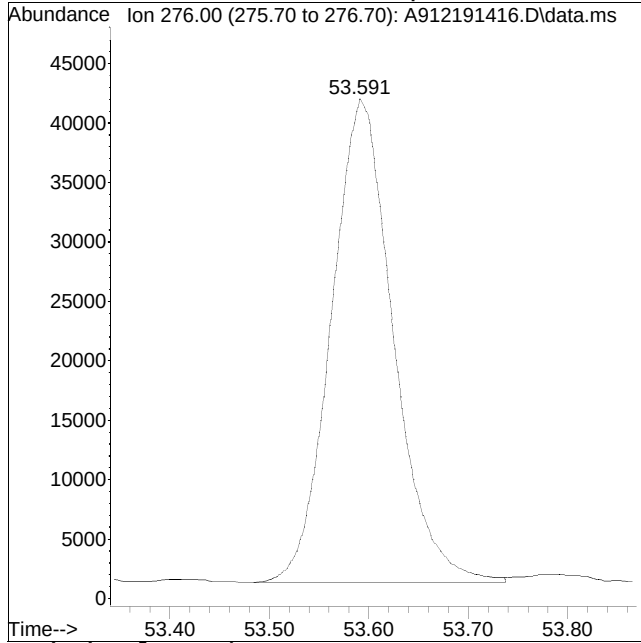
Manual Peak Response = 160298 M4

M4 = Poor automated baseline construction.

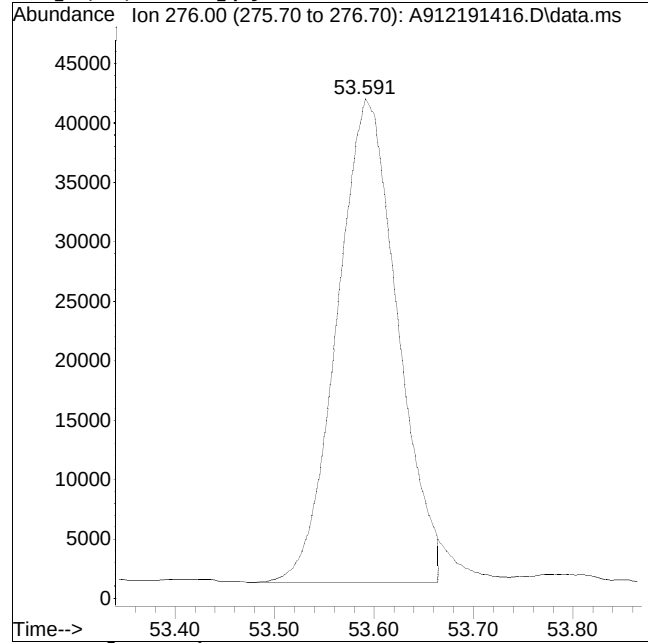
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 176963



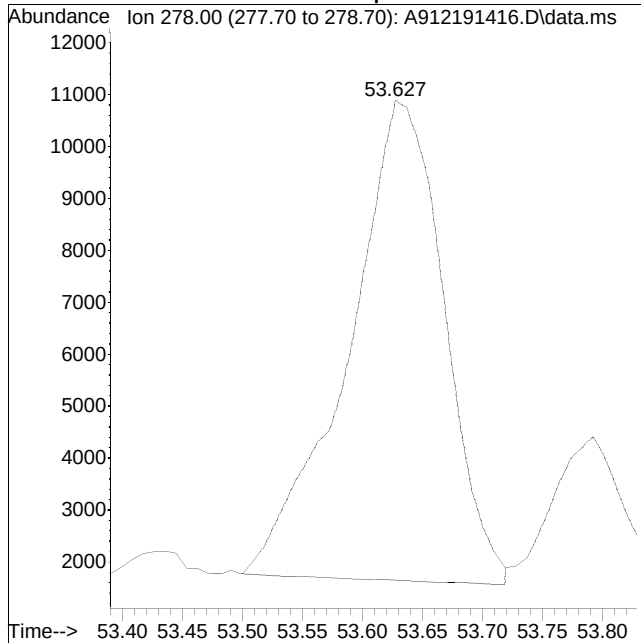
Manual Peak Response = 172857 M4

M4 = Poor automated baseline construction.

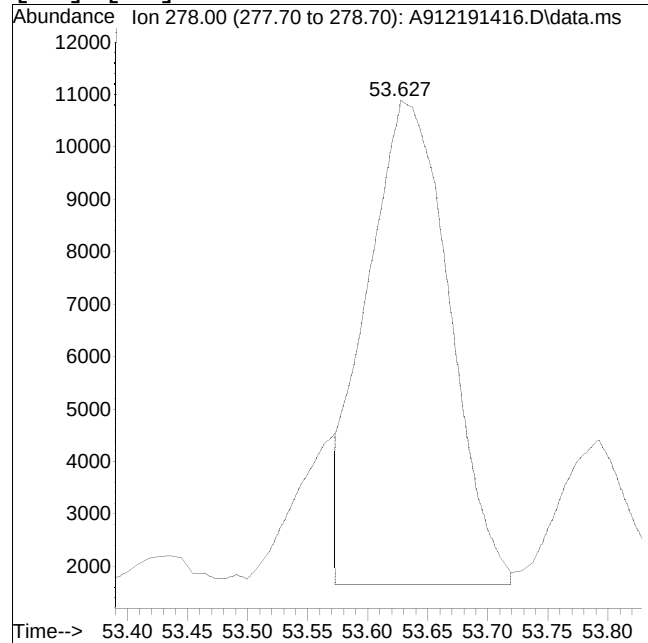
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #92: Dibenz[ah]+[ac]anthracene



Original Peak Response = 51291



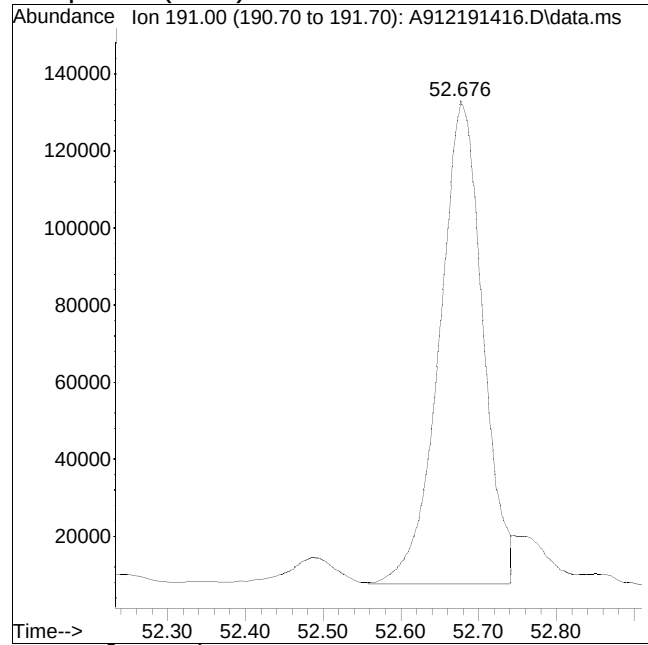
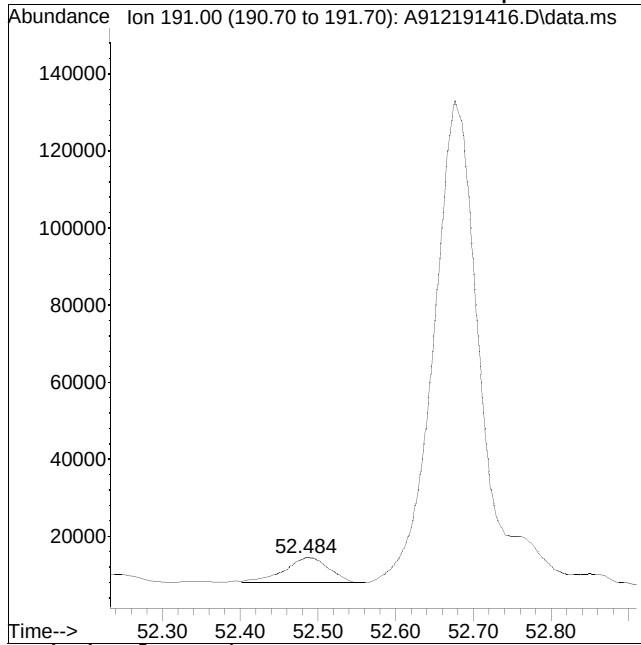
Manual Peak Response = 44137 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #94: Hopane (T19)

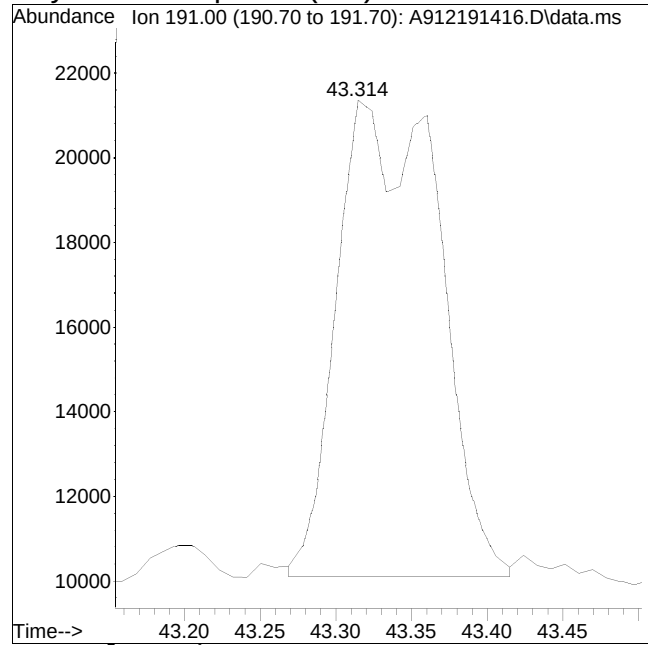
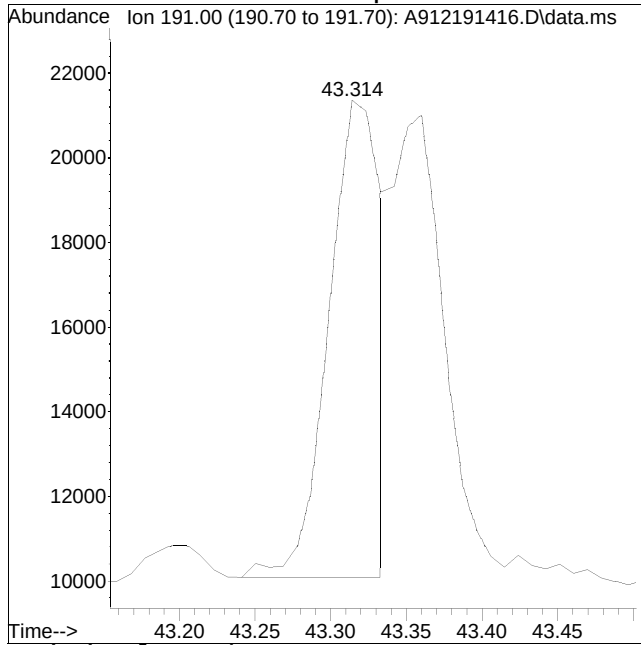


M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #98: C25 Tricyclic Terpane (T6)

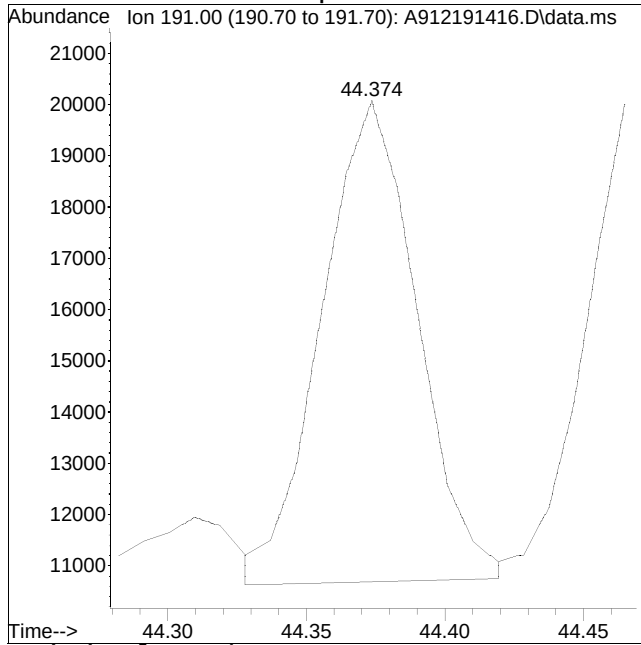


M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

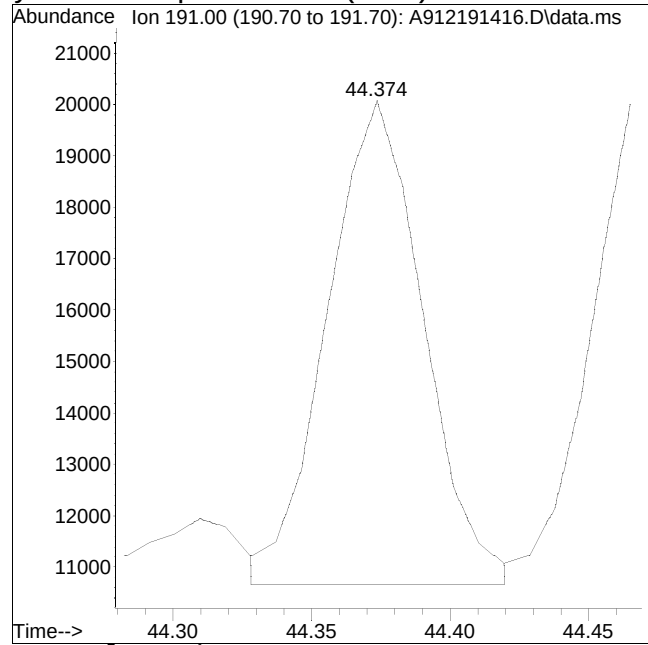
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #100: C26 Tricyclic Terpane-22S (T6b)



Original Peak Response = 22489



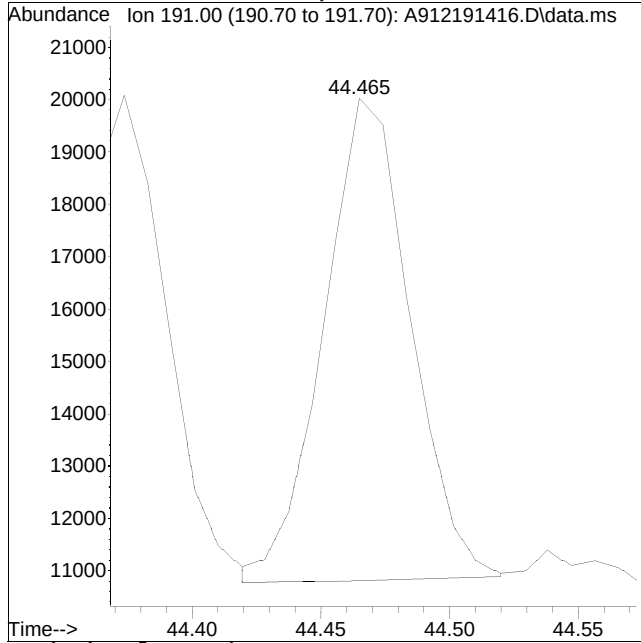
Manual Peak Response = 22645 M4

M4 = Poor automated baseline construction.

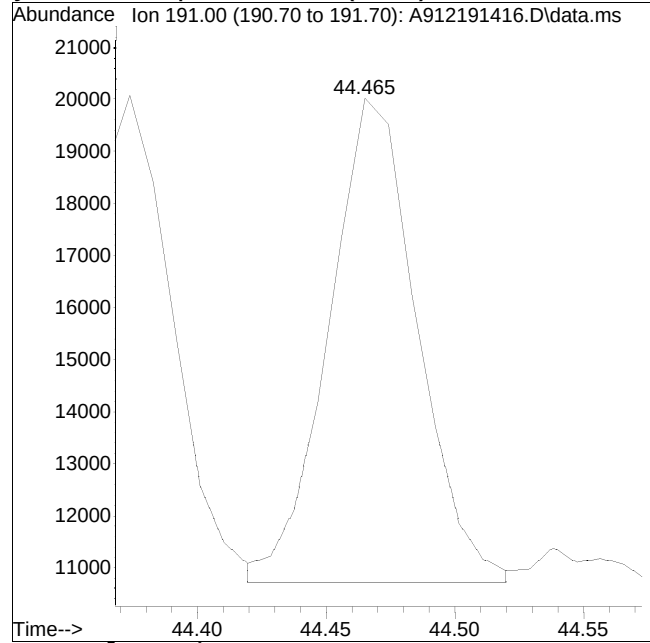
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #101: C26 Tricyclic Terpane-22R (T6c)



Original Peak Response = 21496



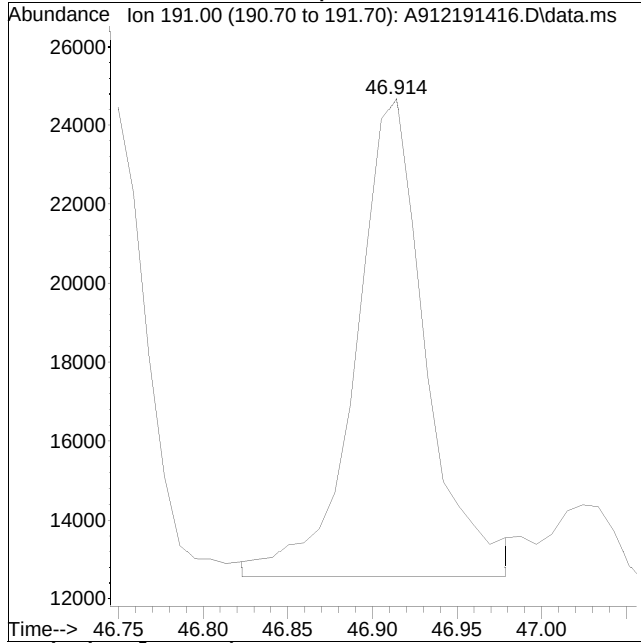
Manual Peak Response = 22237 M4

M4 = Poor automated baseline construction.

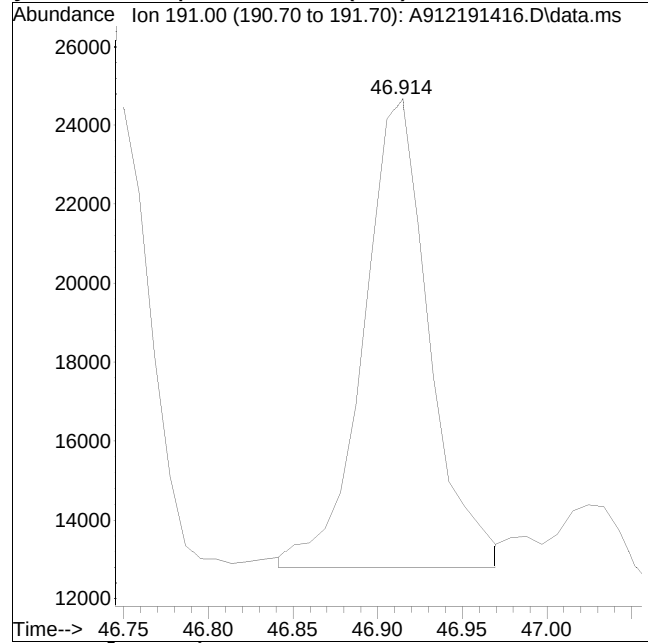
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #103: C28 Tricyclic Terpane-22R (T8)



Original Peak Response = 34811



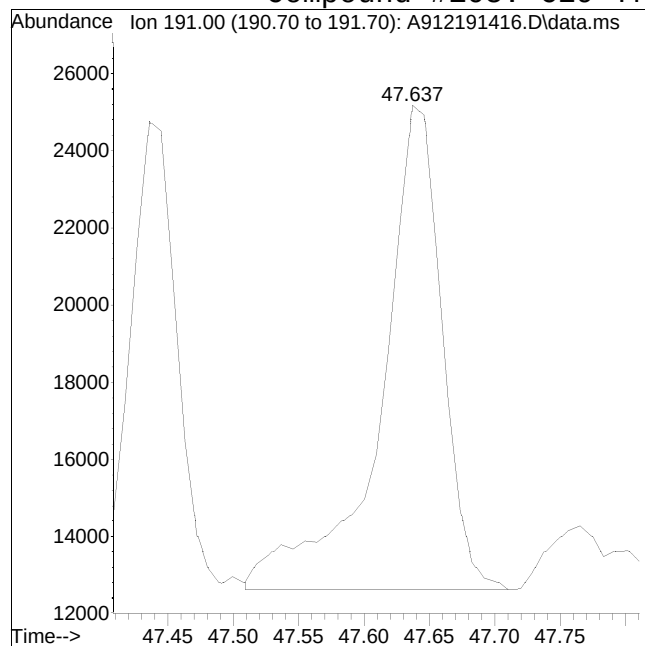
Manual Peak Response = 31796 M4

M4 = Poor automated baseline construction.

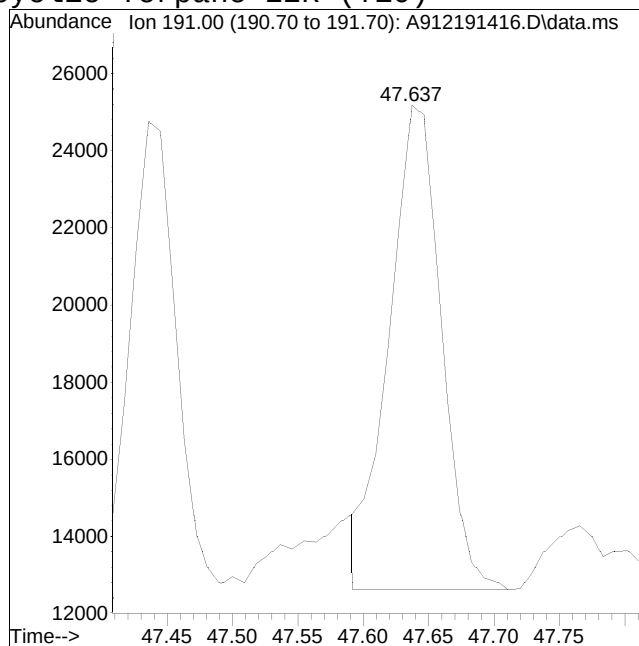
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #105: C29 Tricyclic Terpane-22R (T10)



Original Peak Response = 41237



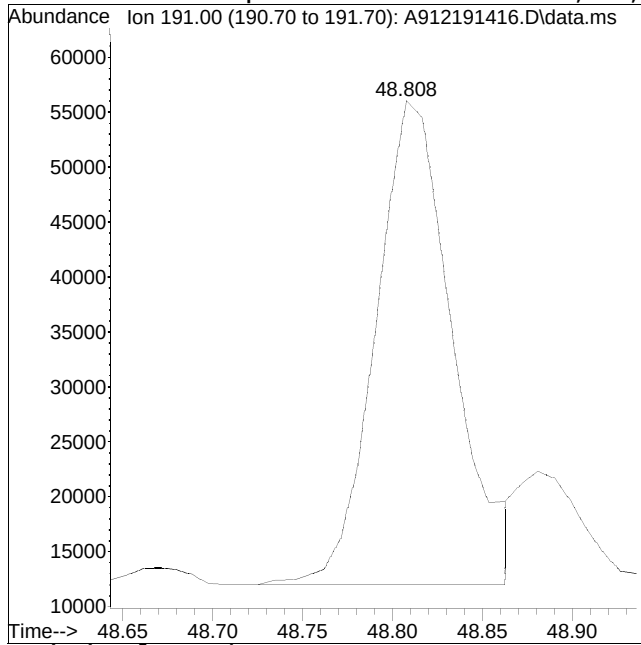
Manual Peak Response = 34944 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

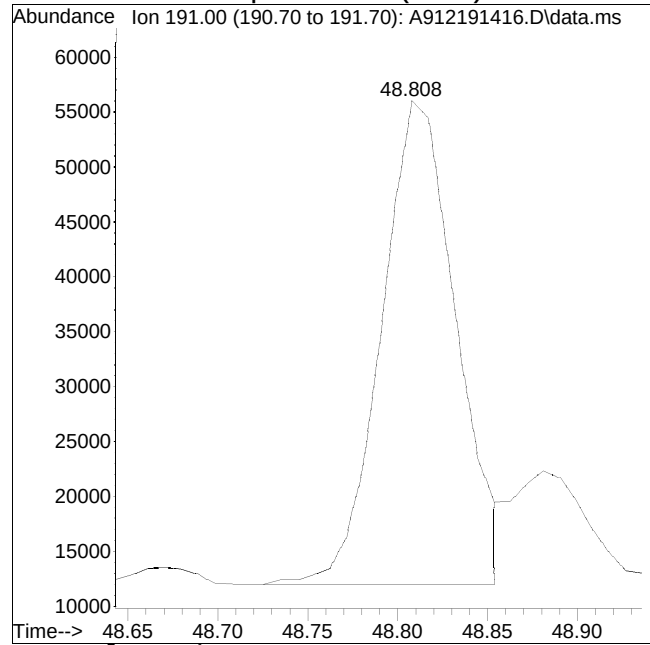
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #106: 18a-22,29,30-Trisnorneohopane-TS (T11)



Original Peak Response = 131516

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

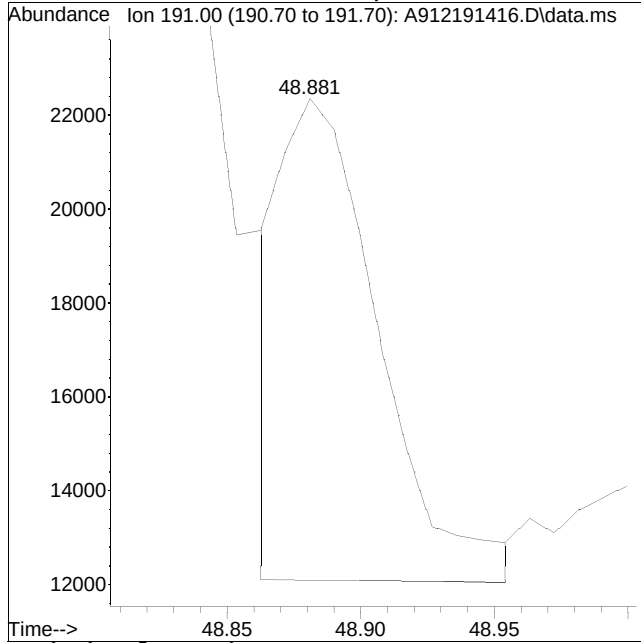


Manual Peak Response = 127632 M6

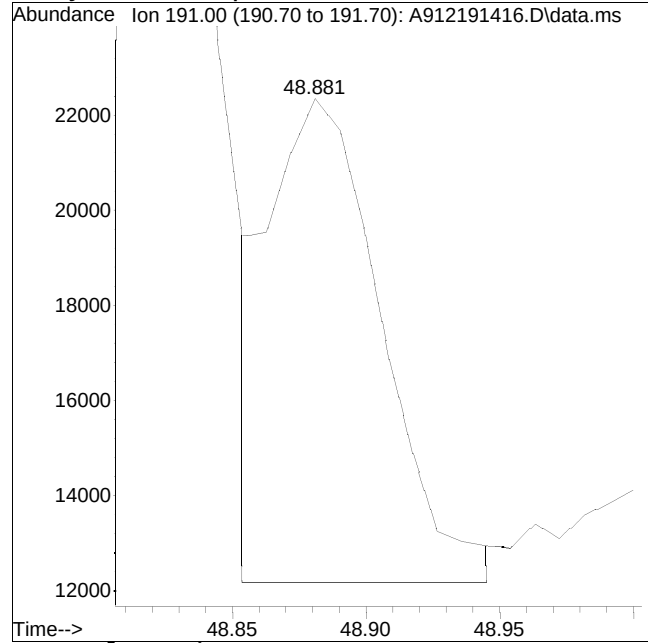
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #107: C30 Tricyclic Terpene-22S



Original Peak Response = 26374



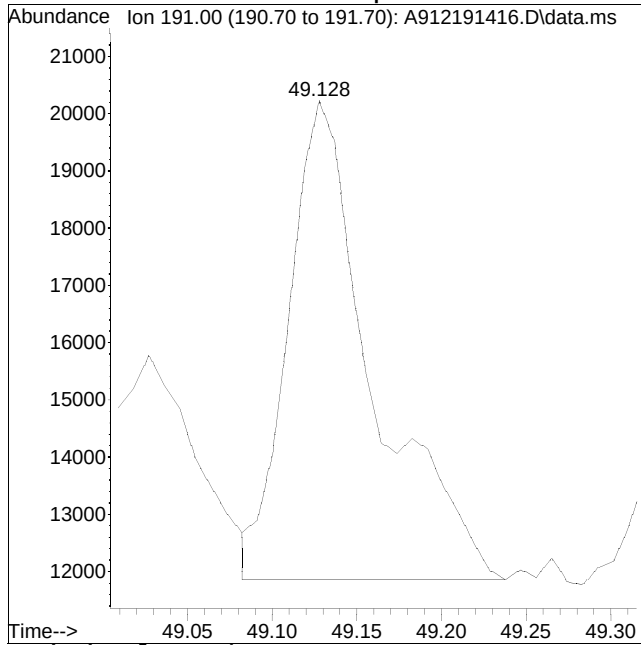
Manual Peak Response = 29510 M4

M4 = Poor automated baseline construction.

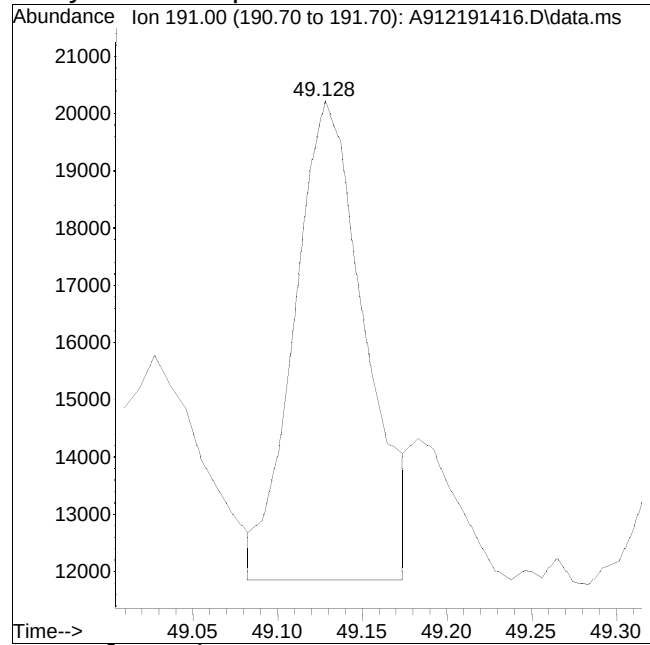
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #108: C30 Tricyclic Terpene-22R



Original Peak Response = 28869



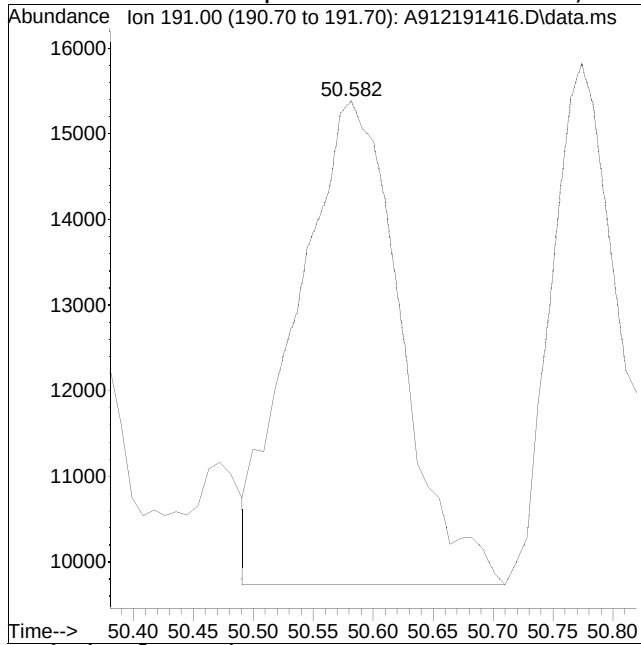
Manual Peak Response = 24427 M4

M4 = Poor automated baseline construction.

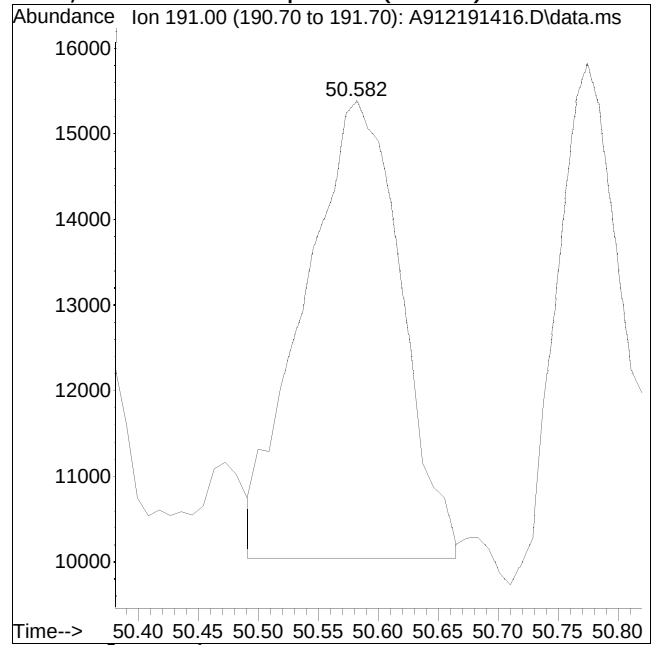
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #110: 17a/b,21b/a 28,30-Bisnorhopane (T14a)



Original Peak Response = 34229



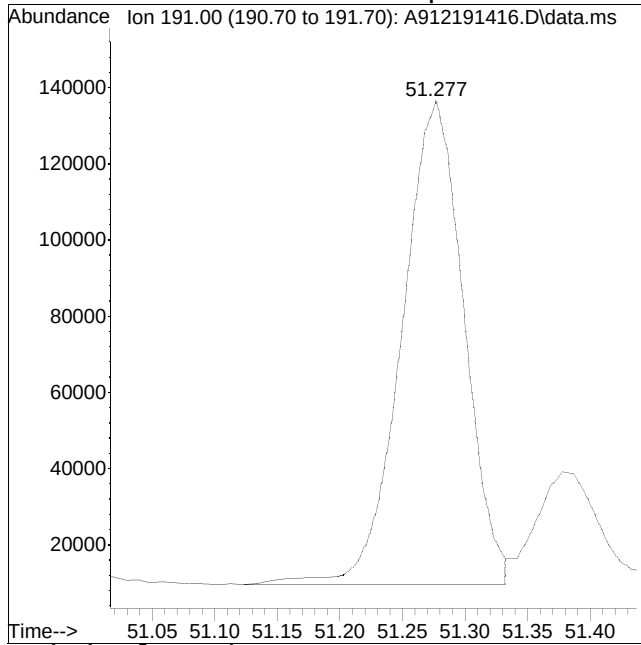
Manual Peak Response = 30037 M4

M4 = Poor automated baseline construction.

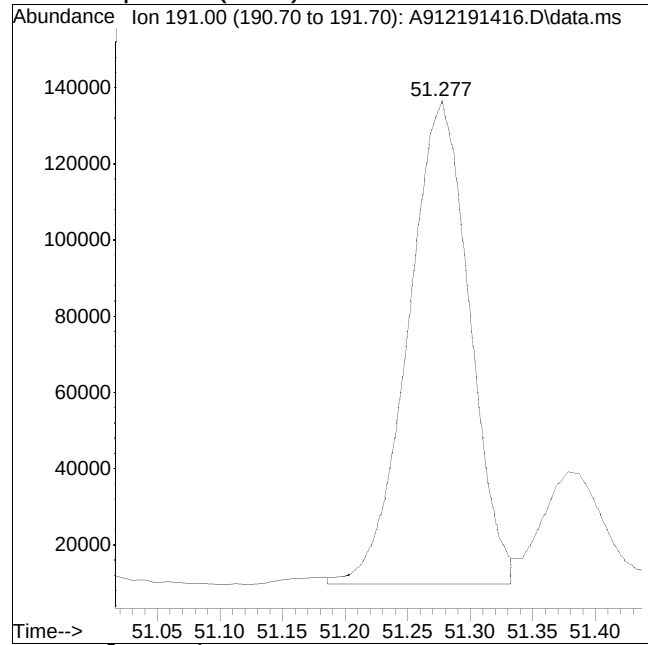
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #112: 30-Norhopane (T15)



Original Peak Response = 438649



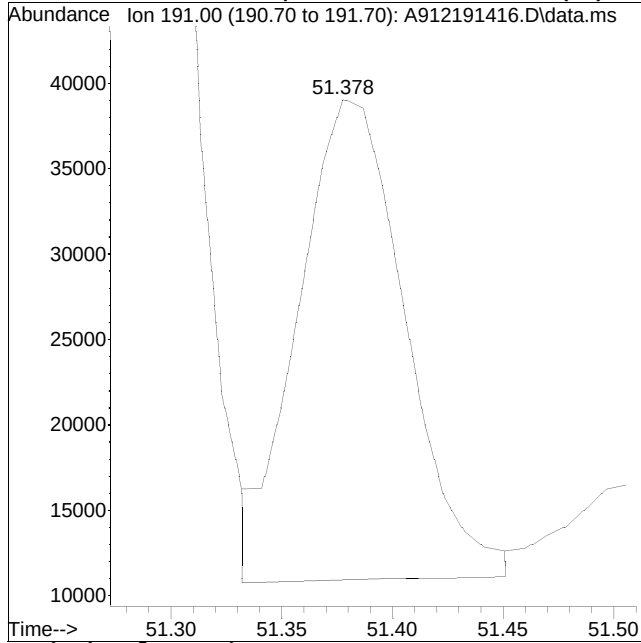
Manual Peak Response = 432728 M4

M4 = Poor automated baseline construction.

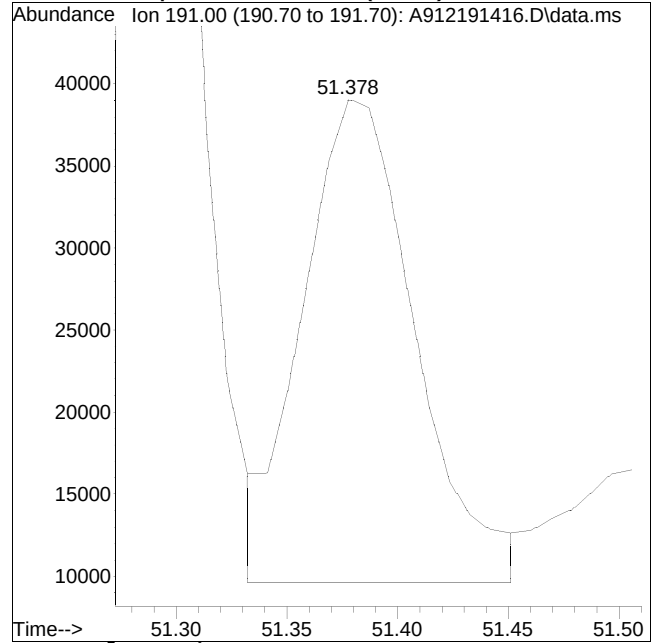
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #113: 18a(H)-30-Norneohopane-C29Ts (T16)



Original Peak Response = 94439



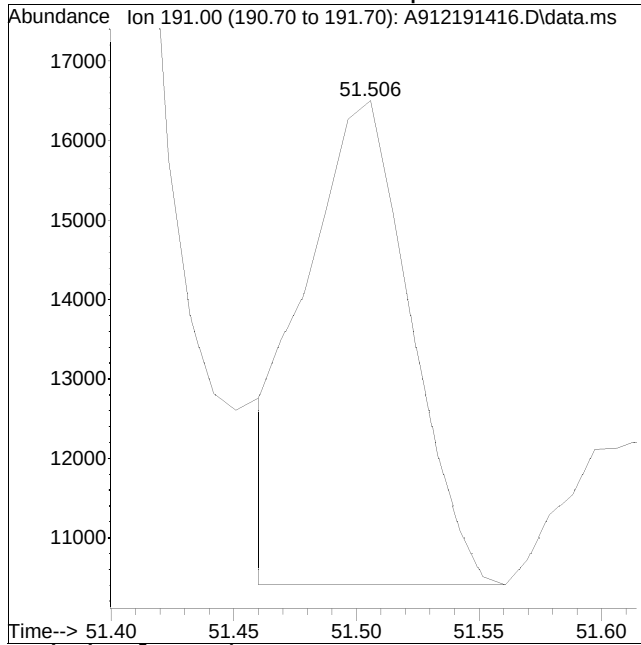
Manual Peak Response = 104088 M4

M4 = Poor automated baseline construction.

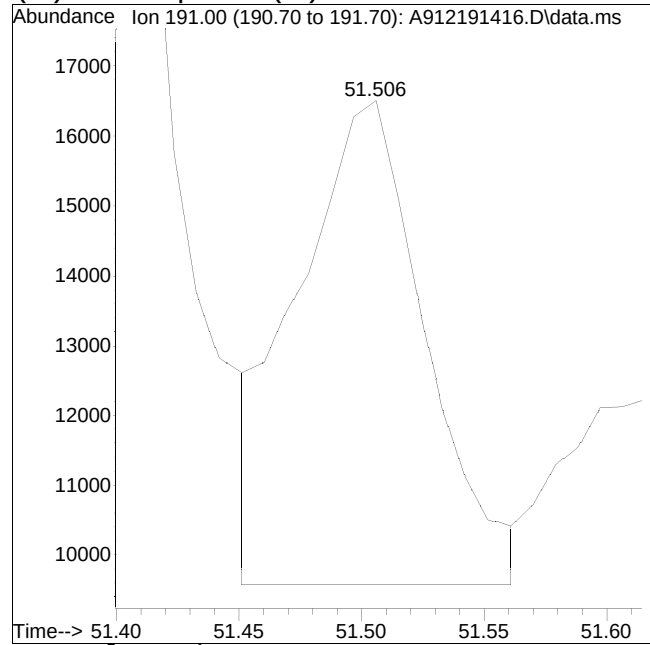
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #114: 17a(H)-Diahopane (X)



Original Peak Response = 18397



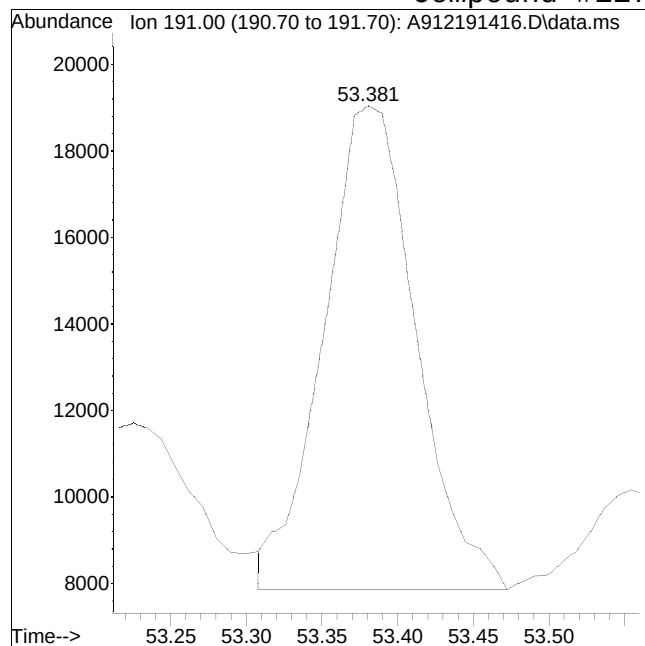
Manual Peak Response = 25180 M4

M4 = Poor automated baseline construction.

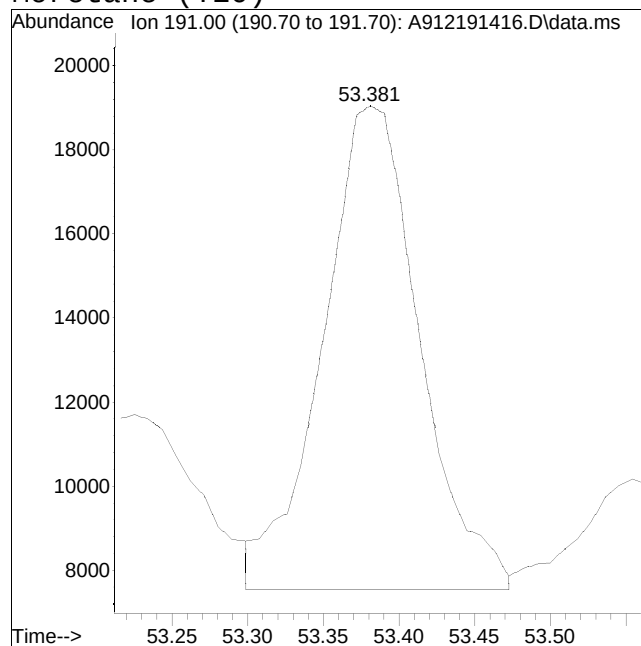
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #117: Moretane (T20)



Original Peak Response = 47469



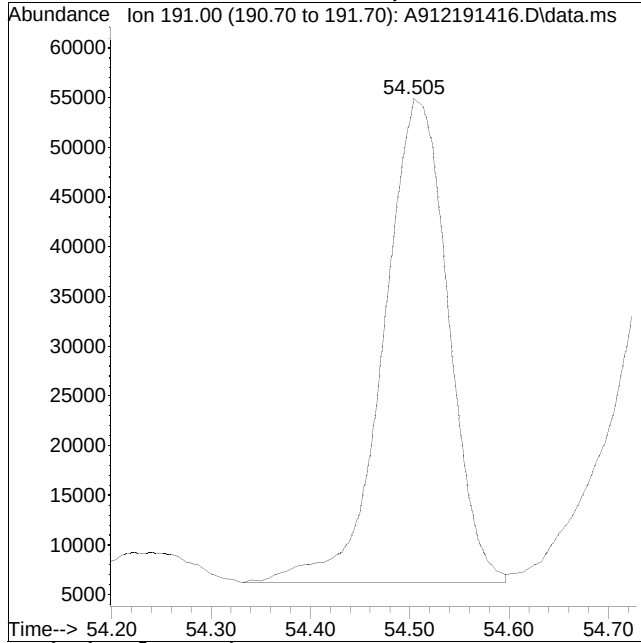
Manual Peak Response = 51246 M4

M4 = Poor automated baseline construction.

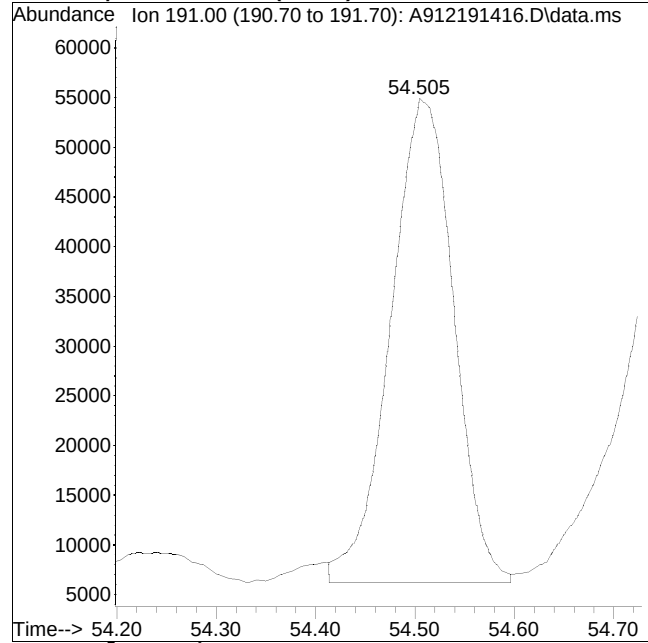
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #118: 30-Homohopane-22S (T21)



Original Peak Response = 221205



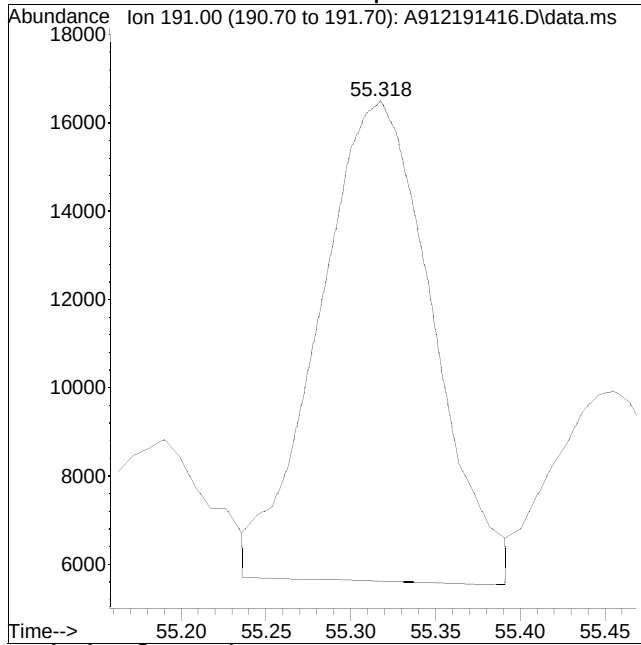
Manual Peak Response = 215382 M4

M4 = Poor automated baseline construction.

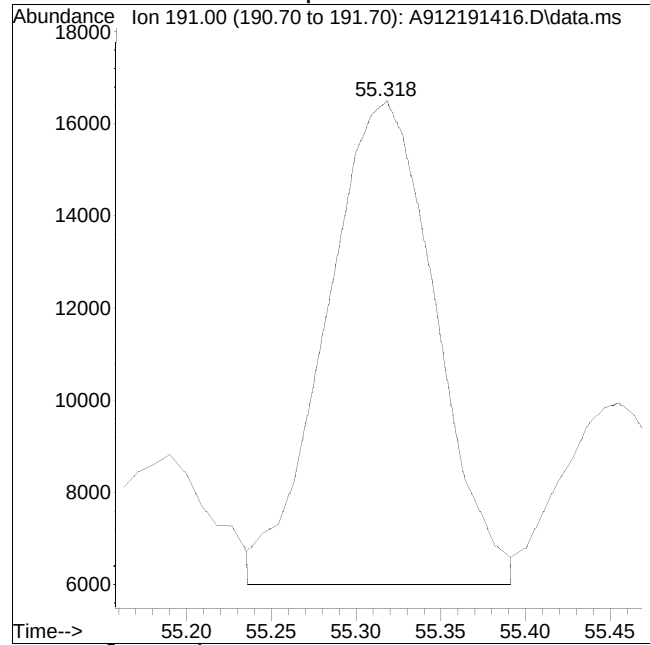
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #120: Gammacerane/C32-diahopane



Original Peak Response = 50466



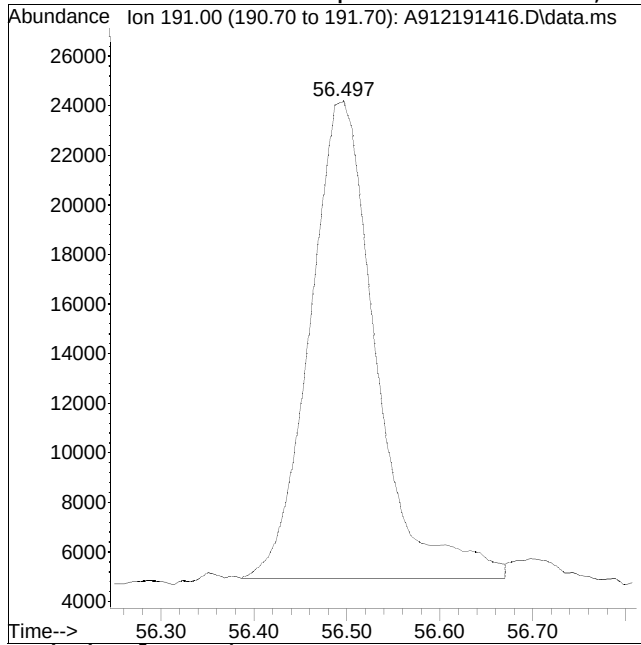
Manual Peak Response = 47027 M4

M4 = Poor automated baseline construction.

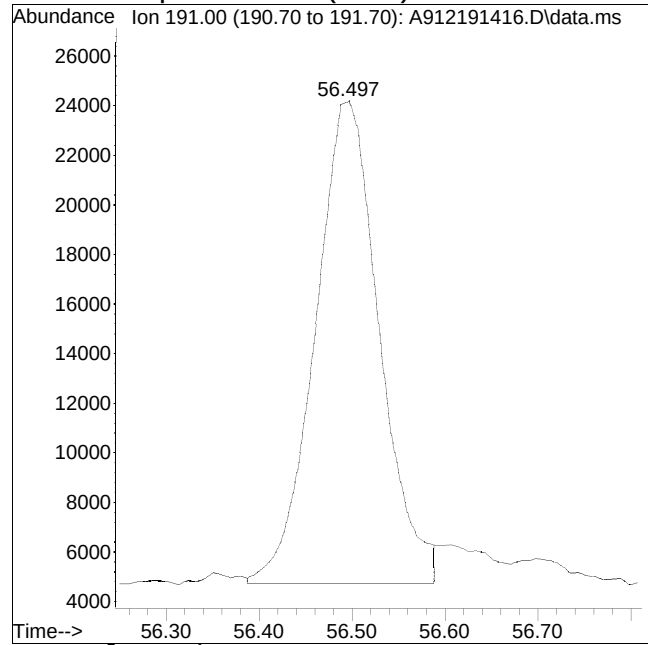
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #122: 30,31-Bishomohopane-22R (T27)



Original Peak Response = 95581



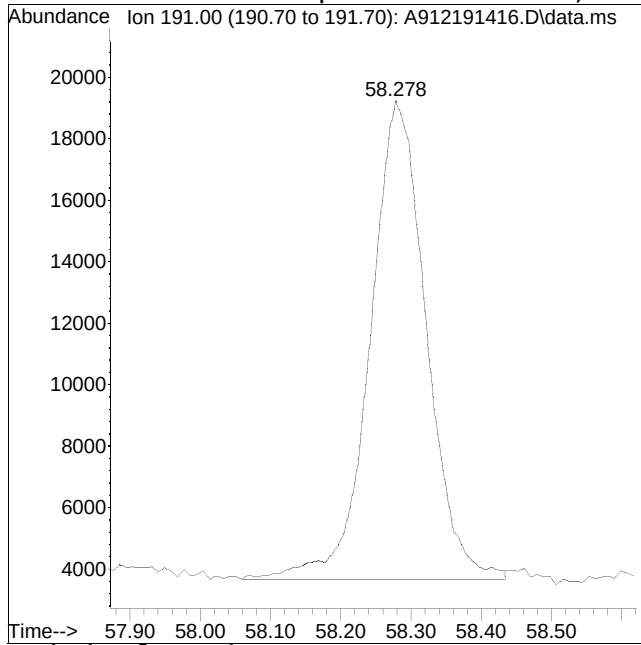
Manual Peak Response = 93309 M4

M4 = Poor automated baseline construction.

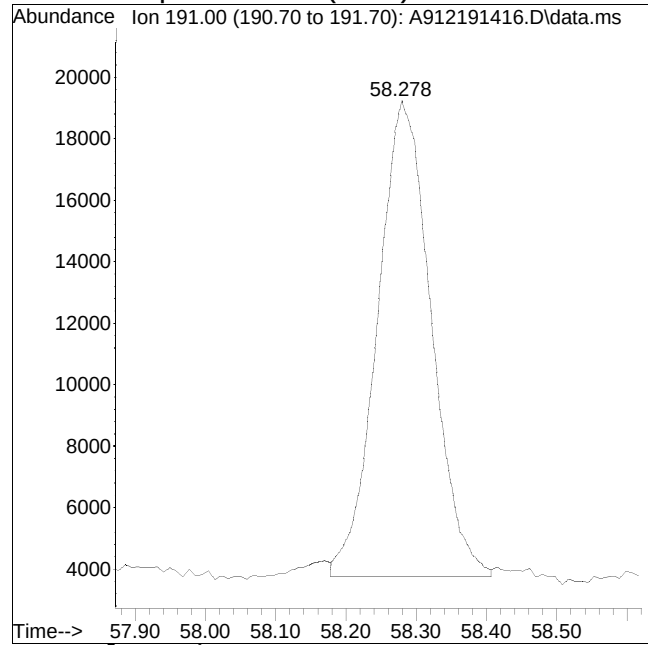
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #123: 30,31-Trishomohopane-22S (T30)



Original Peak Response = 86078



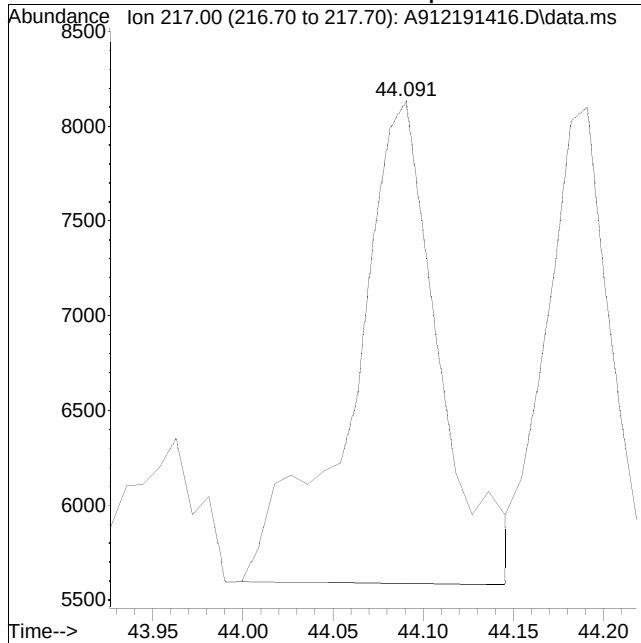
Manual Peak Response = 82234 M4

M4 = Poor automated baseline construction.

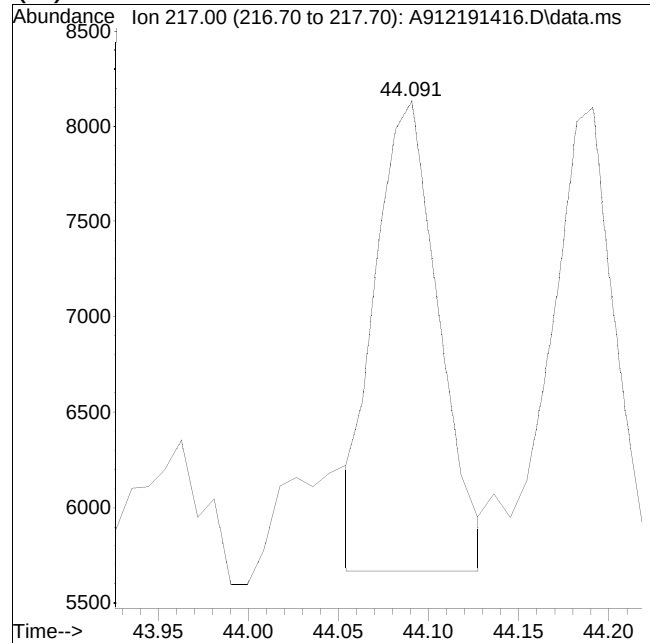
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #129: 5B(H)Cholane - Surr



Original Peak Response = 8558



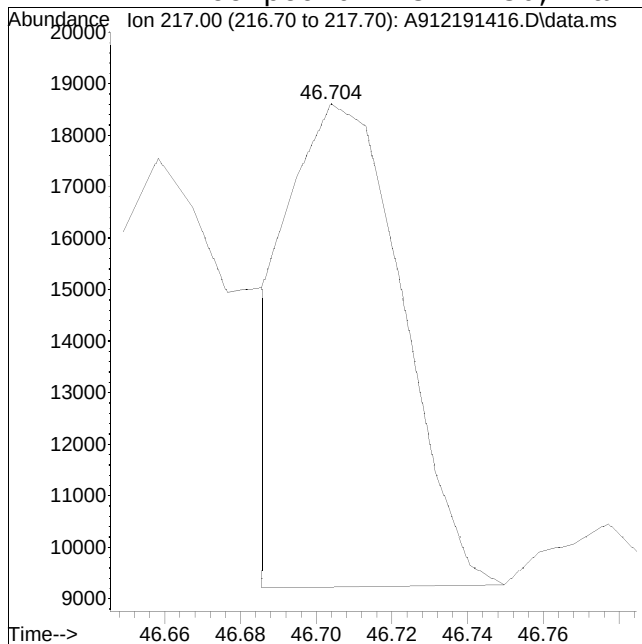
Manual Peak Response = 6082 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

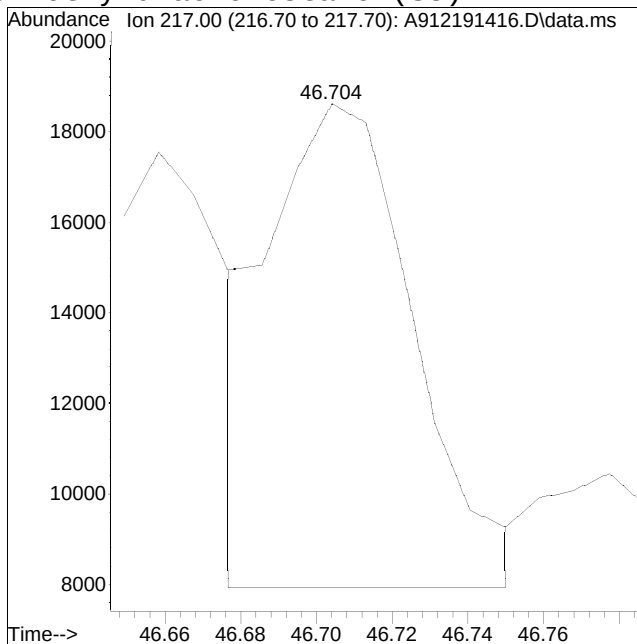
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912191416.D Operator : PAH9:SR
 Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
 Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #132: 13b,17a-20S-Methyldiacholestane (S8)



Original Peak Response = 19092

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

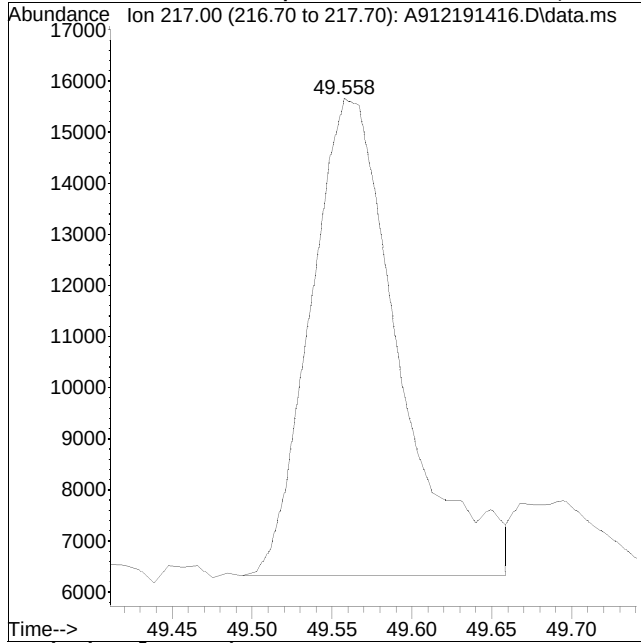


Manual Peak Response = 28054 M6

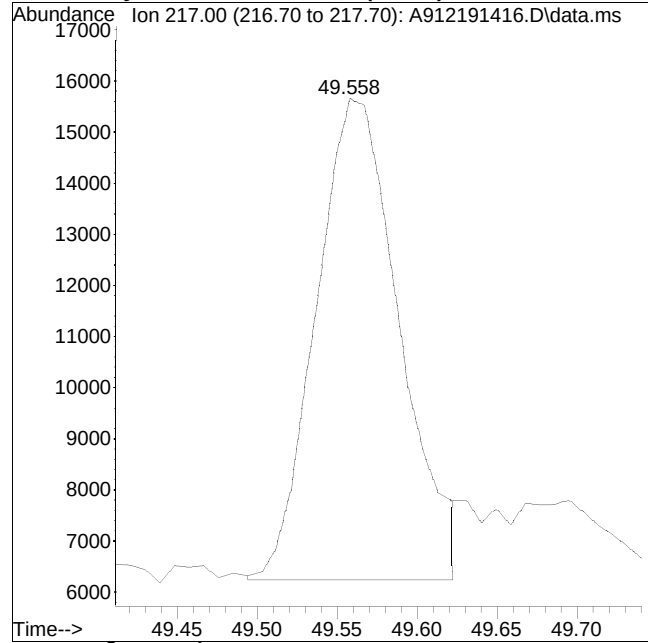
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #138: 14a,17a-20R-Methylcholestane (S24)



Original Peak Response = 36341



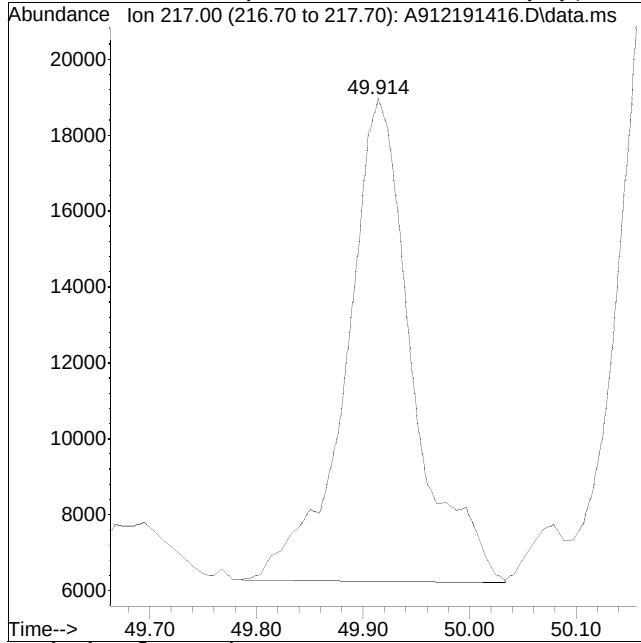
Manual Peak Response = 34262 M4

M4 = Poor automated baseline construction.

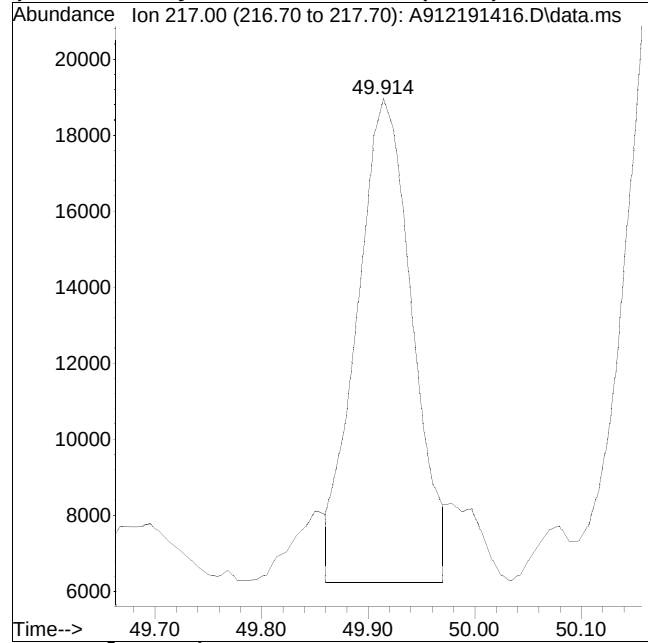
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #139: 14a(H),17a(H)-20S-Ethylcholestane (S25)



Original Peak Response = 54951



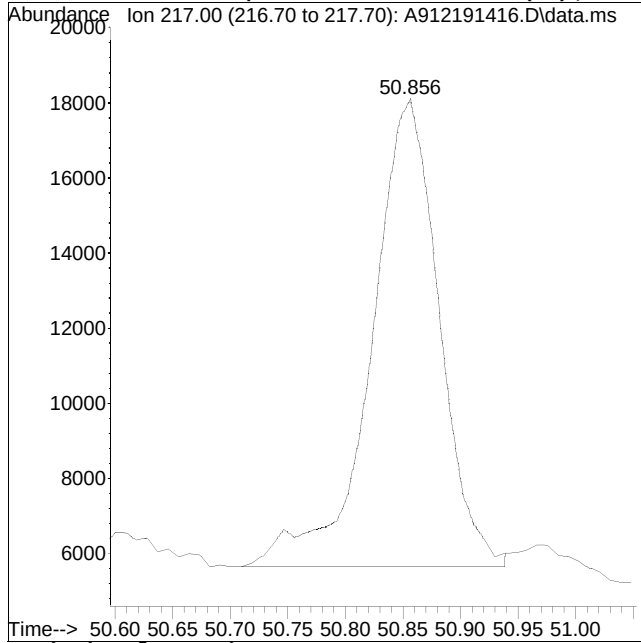
Manual Peak Response = 46170 M4

M4 = Poor automated baseline construction.

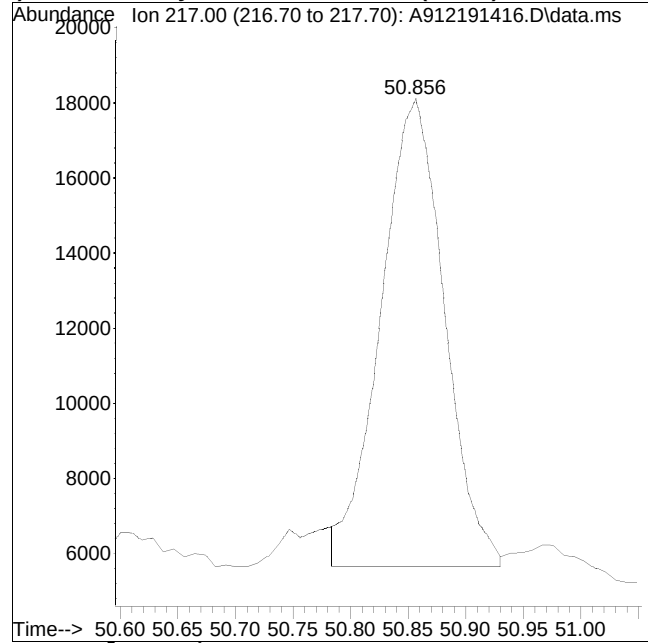
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #140: 14a(H),17a(H)-20R-Ethylcholestane (S28)



Original Peak Response = 51006



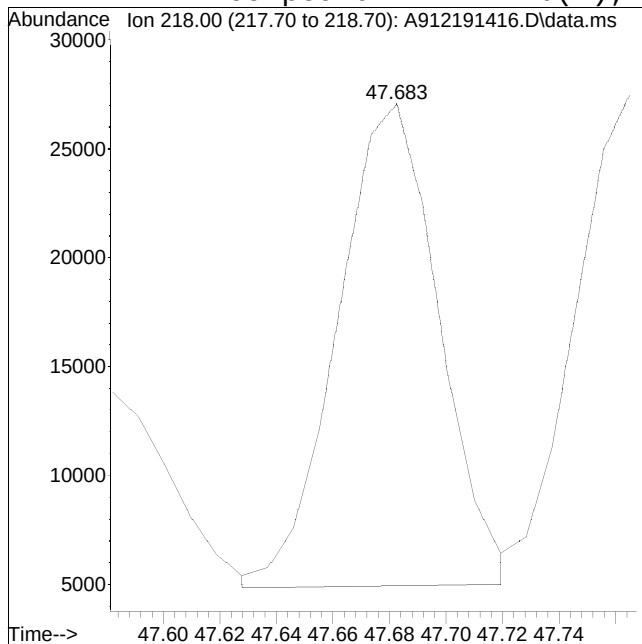
Manual Peak Response = 47867 M4

M4 = Poor automated baseline construction.

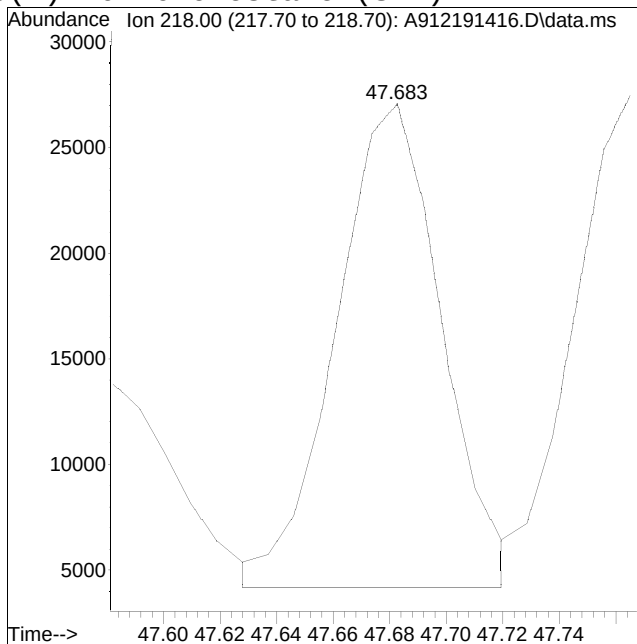
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912191416.D Operator : PAH9:SR
 Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
 Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #141: 14b(H),17b(H)-20R-Cholestane (S14)



Original Peak Response = 55130



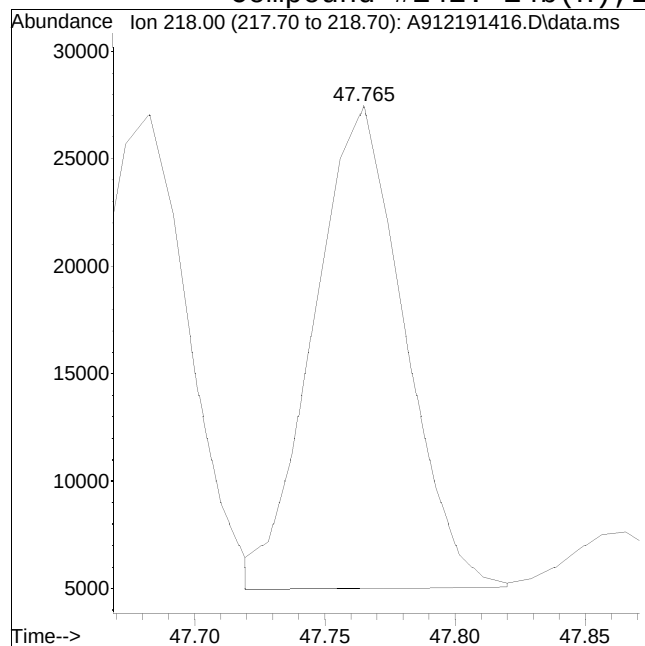
Manual Peak Response = 59227 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

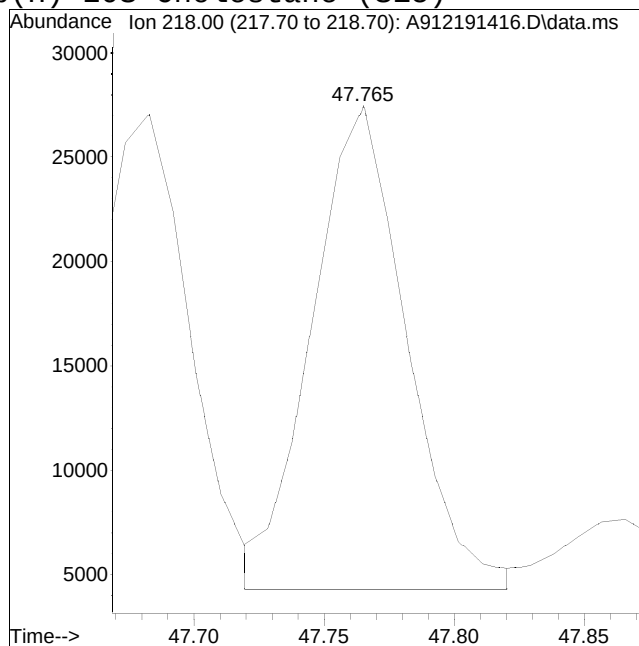
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #142: 14b(H),17b(H)-20S-Cholestane (S15)



Original Peak Response = 53906

M4 = Poor automated baseline construction.

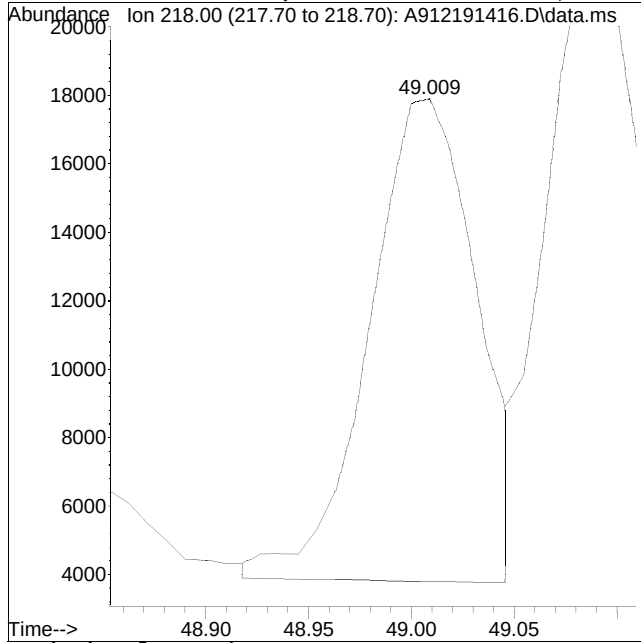


Manual Peak Response = 58484 M4

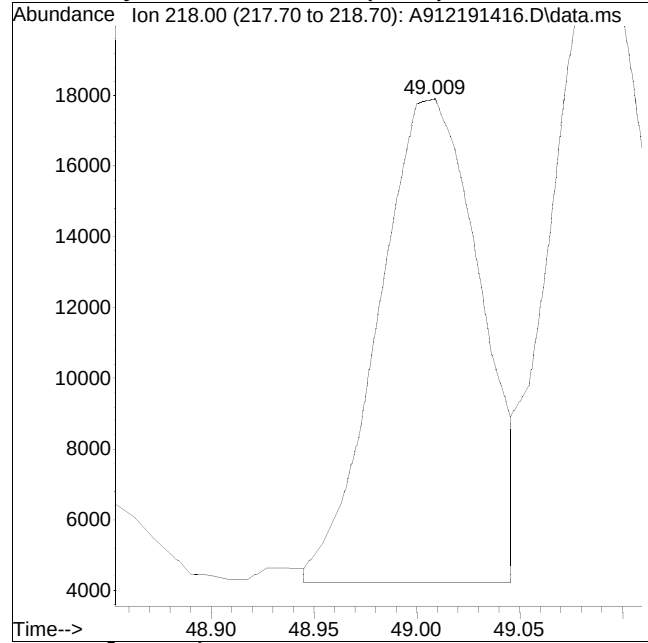
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #143: 14b,17b-20R-Methylcholestane (S22)



Original Peak Response = 51394



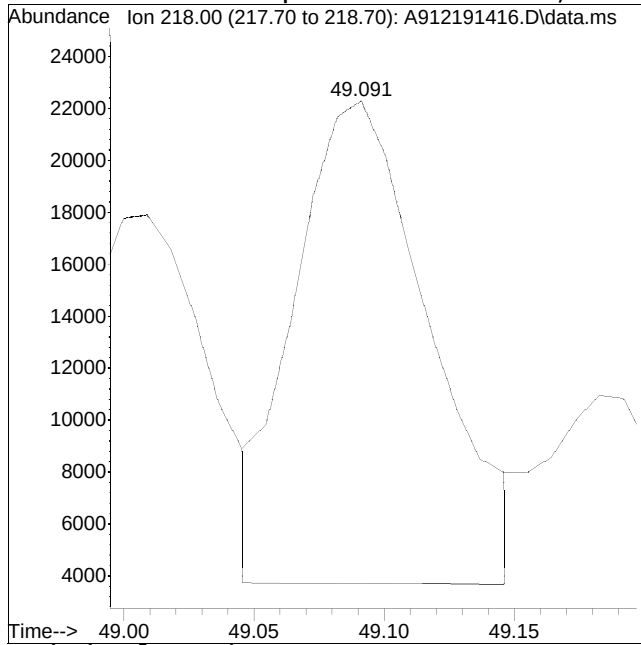
Manual Peak Response = 47733 M4

M4 = Poor automated baseline construction.

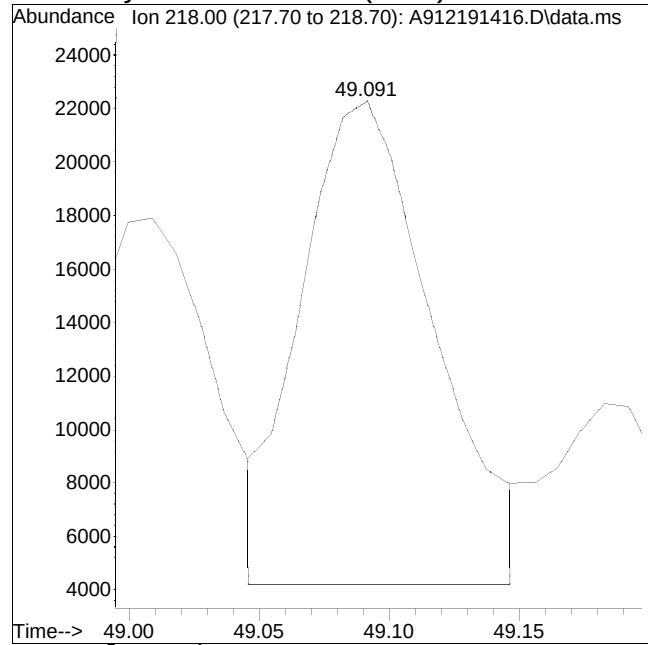
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #144: 14b,17b-20S-Methylcholestane (S23)



Original Peak Response = 67072



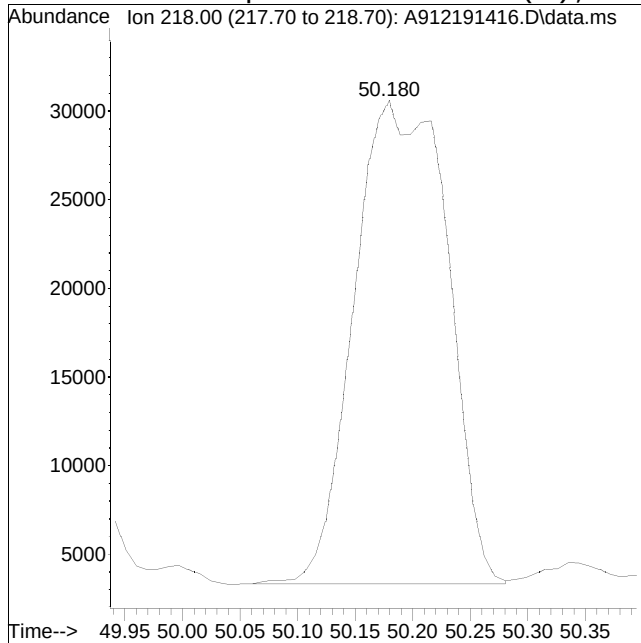
Manual Peak Response = 64187 M4

M4 = Poor automated baseline construction.

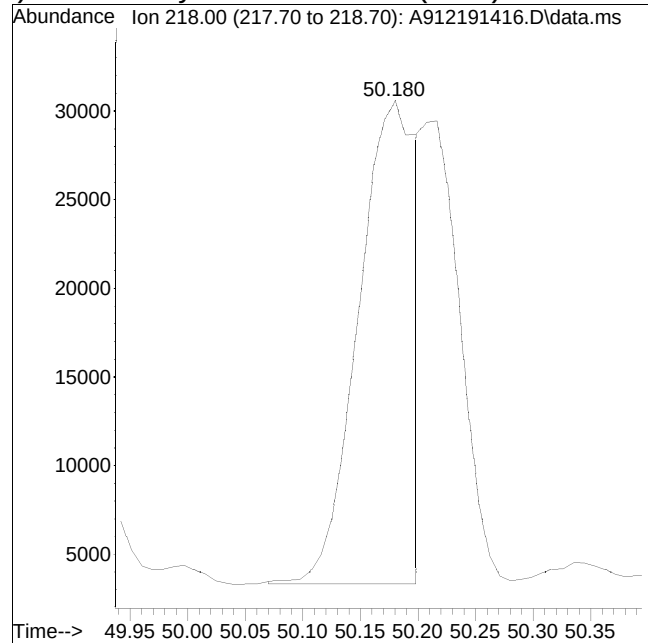
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191416.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #145: 14b(H),17b(H)-20R-Ethylcholestane (S26)



Original Peak Response = 153125



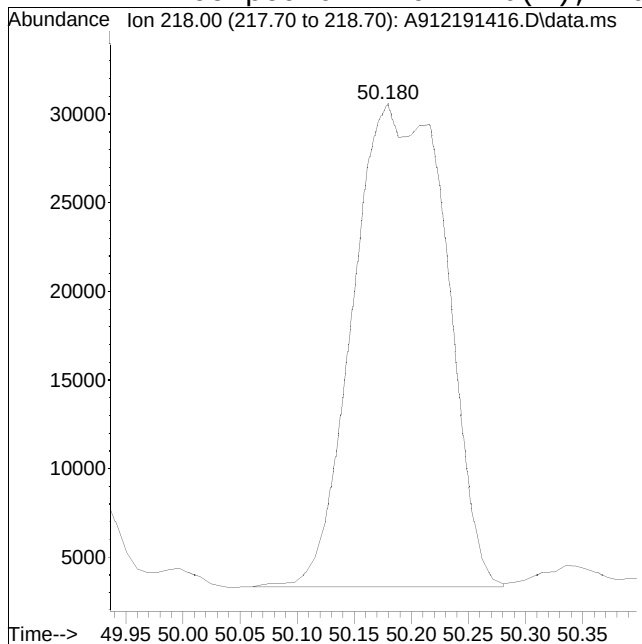
Manual Peak Response = 94373 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

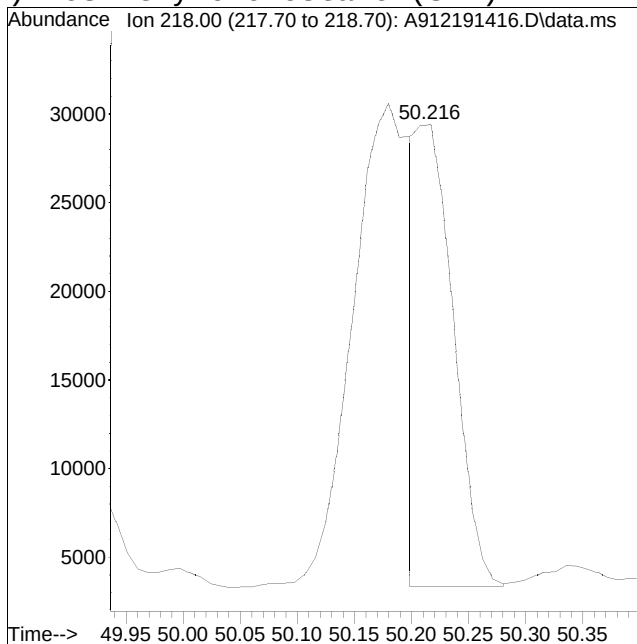
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912191416.D Operator : PAH9:SR
 Date Inj'd : 12/22/2014 11:32 pm Instrument : PAH 9
 Sample : l1430198-01,32 Quant Date : 12/23/2014 7:27 am

Compound #146: 14b(H),17b(H)-20S-Ethylcholestane (S27)



Original Peak Response = 153125



Manual Peak Response = 58646 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Semivolatiles Standards Data

Initial Calibration

6B
SEMIVOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1430198

Instrument ID: PAH9

Calibration Date(s): 12/12/14

12/12/14

Calibration Times: 15:05

23:32

Calibration Files

10 =A912121402.D 25 =A912121403.D 100 =A912121404.D 500 =A912121405.D 5000=A912121406.D
1e4 =A912121407.D 2e4 =A912121408.D

Compound	10	25	100	500	5000	1e4	2e4	Avg	%RSD
1) i Acenaphthene-d10	-----ISTD-----								
2) t 2-butoxyethanol	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.00
3) A1 trans-Decalin	0.453	0.469	0.477	0.454	0.435	0.452	0.485	0.461	3.73
4) t cis-Decalin	0.386	0.360	0.344	0.334	0.327	0.422	0.362	0.362	9.05
5) A2 C1-Decalins	0.453	0.469	0.477	0.454	0.435	0.452	0.485	0.461	3.73
6) A2 C2-Decalins	0.453	0.469	0.477	0.454	0.435	0.452	0.485	0.461	3.73
7) A2 C3-Decalins	0.453	0.469	0.477	0.454	0.435	0.452	0.485	0.461	3.73
8) A2 C4-Decalins	0.453	0.469	0.477	0.454	0.435	0.452	0.485	0.461	3.73
9) s Naphthalene-d8	2.306	2.365	2.390	2.239	2.102	2.150	2.295	2.264	4.73
10) A1 Naphthalene	2.788	2.911	2.905	2.755	2.587	2.640	2.787	2.768	4.40
11) A2 C1-Naphthalenes	2.788	2.911	2.905	2.755	2.587	2.640	2.787	2.768	4.40
12) A2 C2-Naphthalenes	2.788	2.911	2.905	2.755	2.587	2.640	2.787	2.768	4.40
13) A2 C3-Naphthalenes	2.788	2.911	2.905	2.755	2.587	2.640	2.787	2.768	4.40
14) A2 C4-Naphthalenes	2.788	2.911	2.905	2.755	2.587	2.640	2.787	2.768	4.40
15) t Glycol Ether I	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.00
16) t 2-Methylnaphthalene	1.556	1.509	1.529	1.494	1.435	1.461	1.531	1.502	2.82
17) t 1-Methylnaphthalene	1.582	1.482	1.486	1.454	1.387	1.415	1.473	1.468	4.22
18) A1 Benzothiophene	2.653	2.632	2.624	2.504	2.364	2.394	2.538	2.530	4.60
19) A2 C1-Benzo(b)thi	2.653	2.632	2.624	2.504	2.364	2.394	2.538	2.530	4.60
20) A2 C2-Benzo(b)thi	2.653	2.632	2.624	2.504	2.364	2.394	2.538	2.530	4.60
21) A2 C3-Benzo(b)thi	2.653	2.632	2.624	2.504	2.364	2.394	2.538	2.530	4.60
22) A2 C4-Benzo(b)thi	2.653	2.632	2.624	2.504	2.364	2.394	2.538	2.530	4.60
23) t Biphenyl	1.950	1.888	1.907	1.863	1.757	1.784	1.813	1.852	3.77
24) t 2,6-Dimethylnaphthalene	1.261	1.224	1.221	1.207	1.195	1.211	1.228	1.221	1.72
25) t Dibenzofuran	1.964	1.999	1.994	1.966	1.874	1.900	1.911	1.944	2.51
26) t Acenaphthylene	2.303	2.199	2.233	2.254	2.306	2.375	2.415	2.298	3.35
27) t Acenaphthene	1.412	1.366	1.410	1.398	1.355	1.363	1.393	1.385	1.71
28) t 2,3,5-Trimethylnaphthalen	1.153	1.132	1.127	1.146	1.143	1.291	1.163	1.165	4.87
29) A1 Fluorene	1.502	1.493	1.501	1.519	1.490	1.877	1.521	1.558	9.08
30) A2 C1-Fluorenes	1.502	1.493	1.501	1.519	1.490	1.877	1.521	1.558	9.08
31) A2 C2-Fluorenes	1.502	1.493	1.501	1.519	1.490	1.877	1.521	1.558	9.08
32) A2 C3-Fluorenes	1.502	1.493	1.501	1.519	1.490	1.877	1.521	1.558	9.08
33) A1 Dibenzothiophene	2.356	2.267	2.299	2.319	2.227	2.296	2.250	2.288	1.91
34) A2 4-Methyldibenz	2.356	2.267	2.299	2.319	2.227	2.296	2.250	2.288	1.91
35) A2 2/3-Methyldibe	2.356	2.267	2.299	2.319	2.227	2.296	2.250	2.288	1.91
36) A2 1-Methyldibenz	2.356	2.267	2.299	2.319	2.227	2.296	2.250	2.288	1.91
37) A2 OTP	2.356	2.267	2.299	2.319	2.227	2.296	2.250	2.288	1.91
38) A2 C1-Dibenzothio	2.356	2.267	2.299	2.319	2.227	2.296	2.250	2.288	1.91
39) A2 C2-Dibenzothio	2.356	2.267	2.299	2.319	2.227	2.296	2.250	2.288	1.91
40) A2 C3-Dibenzothio	2.356	2.267	2.299	2.319	2.227	2.296	2.250	2.288	1.91
41) A2 C4-Dibenzothio	2.356	2.267	2.299	2.319	2.227	2.296	2.250	2.288	1.91
42) s Phenanthrene-d10	1.821	1.737	1.780	1.672	1.644	1.703	1.656	1.716	3.87
43) A1 Phenanthrene	2.264	2.112	2.185	2.220	2.140	2.167	2.127	2.174	2.49

6B
SEMIVOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1430198

Instrument ID: PAH9

Calibration Date(s): 12/12/14

12/12/14

Calibration Times: 15:05

23:32

Compound	10	25	100	500	5000	1e4	2e4	Avg	%RSD
44) A2 3-Methylphenan	2.264	2.112	2.185	2.220	2.140	2.167	2.127	2.174	2.49
45) A2 2-Methylphenan	2.264	2.112	2.185	2.220	2.140	2.167	2.127	2.174	2.49
46) A2 2-Methylanthra	2.264	2.112	2.185	2.220	2.140	2.167	2.127	2.174	2.49
47) A2 9/4-Methylphen	2.264	2.112	2.185	2.220	2.140	2.167	2.127	2.174	2.49
48) A2 1-Methylphenan	2.264	2.112	2.185	2.220	2.140	2.167	2.127	2.174	2.49
49) A2 C1-Phenanthren	2.264	2.112	2.185	2.220	2.140	2.167	2.127	2.174	2.49
50) A2 C2-Phenanthren	2.264	2.112	2.185	2.220	2.140	2.167	2.127	2.174	2.49
51) A2 5AA IS BKGD	2.264	2.112	2.185	2.220	2.140	2.167	2.127	2.174	2.49
52) A2 C3-Phenanthren	2.264	2.112	2.185	2.220	2.140	2.167	2.127	2.174	2.49
53) A2 C4-Phenanthren	2.264	2.112	2.185	2.220	2.140	2.167	2.127	2.174	2.49
54) t Retene	0.566	0.532	0.573	0.603	0.635	0.659	0.618	0.598	7.34
55) t Anthracene	1.956	1.872	1.938	2.038	2.065	2.103	2.080	2.007	4.28
56) t Carbazole	1.847	1.788	1.871	1.966	1.981	2.045	2.025	1.932	5.03
57) t 1-Methylphenanthrene	1.443	1.365	1.406	1.450	1.460	1.510	1.443	1.439	3.14
58) A1 Fluoranthene	2.223	2.091	2.163	2.219	2.234	2.332	2.186	2.207	3.33
59) t Benzo(b)fluorene	1.255	1.199	1.270	1.343	1.418	1.466	1.381	1.333	7.21
60) A1 Pyrene	2.214	2.122	2.180	2.470	2.485	2.569	2.393	2.347	7.41
61) A2 C1-Fluoranthen	2.214	2.122	2.180	2.470	2.485	2.569	2.393	2.347	7.41
62) A2 C2-Fluoranthen	2.214	2.122	2.180	2.470	2.485	2.569	2.393	2.347	7.41
63) A2 C3-Fluoranthen	2.214	2.122	2.180	2.470	2.485	2.569	2.393	2.347	7.41
64) A2 C4-Fluoranthen	2.214	2.122	2.180	2.470	2.485	2.569	2.393	2.347	7.41
65) t Bis-(2-ethylhe	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.00
66) A1 Naphthobenzothiophene	2.317	2.262	2.327	2.366	2.378	2.462	2.277	2.341	2.90
67) A2 Naphthobenzothiophene-2,1	2.317	2.262	2.327	2.366	2.378	2.462	2.277	2.341	2.90
68) A2 Naphthobenzoth	2.317	2.262	2.327	2.366	2.378	2.462	2.277	2.341	2.90
69) A2 Naphthobenzoth	2.317	2.262	2.327	2.366	2.378	2.462	2.277	2.341	2.90
70) A2 C1-Naphthobenz	2.317	2.262	2.327	2.366	2.378	2.462	2.277	2.341	2.90
71) A2 C2-Naphthobenz	2.317	2.262	2.327	2.366	2.378	2.462	2.277	2.341	2.90
72) A2 C3-Naphthobenz	2.317	2.262	2.327	2.366	2.378	2.462	2.277	2.341	2.90
73) A2 C4-Naphthobenz	2.317	2.262	2.327	2.366	2.378	2.462	2.277	2.341	2.90
74) i Chrysene-d12	-----ISTD-----								
75) t Benz[a]anthracene	1.124	1.063	1.105	1.083	1.136	1.145	1.099	1.108	2.67
76) A1 Chrysene	1.075	1.074	1.114	1.123	1.111	1.098	1.071	1.095	1.97
77) A2 Chrysene/Triphenylene	1.075	1.074	1.114	1.123	1.111	1.098	1.071	1.095	1.97
78) A2 C1-Chrysenes	1.075	1.074	1.114	1.123	1.111	1.098	1.071	1.095	1.97
79) A2 C2-Chrysenes	1.075	1.074	1.114	1.123	1.111	1.098	1.071	1.095	1.97
80) A2 BBF-d12 Surr BKGD	1.075	1.074	1.114	1.123	1.111	1.098	1.071	1.095	1.97
81) A2 C3-Chrysenes	1.075	1.074	1.114	1.123	1.111	1.098	1.071	1.095	1.97
82) A2 C4-Chrysenes	1.075	1.074	1.114	1.123	1.111	1.098	1.071	1.095	1.97
83) S Benzo[b]fluoranthene-d12	1.110	1.061	1.057	0.991	1.001	1.025	0.996	1.034	4.21
84) t Benzo[b]fluoranthene	1.395	1.318	1.317	1.271	1.294	1.290	1.288	1.311	3.12
85) A1 Benzo[j]+[k]fluoranthene	1.336	1.255	1.296	1.219	1.234	1.238	1.208	1.255	3.64
86) A2 Benzo[a]fluora	1.336	1.255	1.296	1.219	1.234	1.238	1.208	1.255	3.64
87) t Benzo[e]pyrene	1.296	1.267	1.255	1.246	1.241	1.249	1.231	1.255	1.70
88) s Benzo[a]pyrene-d12	0.998	0.965	0.959	0.904	0.930	0.943	0.945	0.949	3.11
89) t Benzo[a]pyrene	1.278	1.175	1.182	1.230	1.239	1.249	1.257	1.230	3.11
90) t Perylene	1.346	1.252	1.224	1.203	1.203	1.222	1.240	1.241	3.99

6B
SEMIVOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1430198

Instrument ID: PAH9

Calibration Date(s): 12/12/14

12/12/14

Calibration Times: 15:05

23:32

Compound	10	25	100	500	5000	1e4	2e4	Avg	%RSD
91) t Indeno[1,2,3-cd]pyrene	1.623	1.551	1.462	1.461	1.439	1.614	1.531	1.526	4.90
92) t Dibenz[ah]+[ac]anthracene	1.474	1.457	1.487	1.427	1.435	1.769	1.491	1.506	7.89
93) t Benzo[g,h,i]perylene	1.582	1.446	1.434	1.369	1.367	1.730	1.446	1.482	8.82
94) A1 Hopane (T19)	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
95) A2 17a(H),21B(H)-hopane - C3	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
96) A2 C23 Tricyclic	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
97) A2 C24 Tricyclic	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
98) A2 C25 Tricyclic	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
99) A2 C24 Tetracycli	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
100) A2 C26 Tricyclic	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
101) A2 C26 Tricyclic	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
102) A2 C28 Tricyclic	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
103) A2 C28 Tricyclic	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
104) A2 C29 Tricyclic	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
105) A2 C29 Tricyclic	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
106) A2 18a-22,29,30-T	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
107) A2 C30 Tricyclic	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
108) A2 C30 Tricyclic	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
109) A2 17a(H)-22,29,3	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
110) A2 17a/b,21b/a 28	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
111) A2 17a(H),21b(H)-	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
112) A2 30-Norhopane (	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
113) A2 18a(H)-30-Norn	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
114) A2 17a(H)-Diahopa	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
115) A2 30-Normoretane	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
116) A2 18a(H)&18b(H)-	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
117) A2 Moretane (T20)	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
118) A2 30-Homohopane-	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
119) A2 30-Homohopane-	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
120) A2 Gammacerane/C3	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
121) A2 30,31-Bishomoh	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
122) A2 30,31-Bishomoh	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
123) A2 30,31-Trishomo	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
124) A2 30,31-Trishomo	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
125) A2 Tetrakishomoho	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
126) A2 Tetrakishomoho	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
127) A2 Pentakishomoho	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
128) A2 Pentakishomoho	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
129) SA1 5B(H)Cholane - Surr	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
130) A2 13b(H),17a(H)-	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
131) A2 13b(H),17a(H)-	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
132) A2 13b,17a-20S-Me	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
133) A2 14a,17a-20S-Ch	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
134) A2 14a,17a-20R-Ch	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
135) A2 Unknown Steran	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
136) A2 13a,17b-20S-Et	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
137) A2 14a,17a-20S-Me	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03

6B
SEMIVOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1430198

Instrument ID: PAH9

Calibration Date(s): 12/12/14

12/12/14

Calibration Times: 15:05

23:32

Compound	10	25	100	500	5000	1e4	2e4	Avg	%RSD
138) A2 14a, 17a-20R-Me	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
139) A2 14a(H), 17a(H)-	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
140) A2 14a(H), 17a(H)-	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
141) A2 14b(H), 17b(H)-	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
142) A2 14b(H), 17b(H)-	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
143) A2 14b, 17b-20R-Me	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
144) A2 14b, 17b-20S-Me	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
145) A2 14b(H), 17b(H)-	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
146) A2 14b(H), 17b(H)-	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
147) A2 C26, 20R- +C27,	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
148) A2 C28, 20S-triaro	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
149) A2 C27, 20R-triaro	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
150) A2 C28, 20R-triaro	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03

FORM VI-A2-ALKPAHBIOM

Response Factor Report PAH 9

Method Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Method File : PAH9121214.M
 Title : Decalins & Alkylated PAH's
 Last Update : Tue Dec 16 11:51:04 2014
 Response Via : Initial Calibration

Calibration Files

10 =A912121402.D 25 =A912121403.D 100 =A912121404.D 500 =A912121405.D 5000=A912121406.D
 1e4 =A912121407.D 2e4 =A912121408.D

Compound		10	25	100	500	5000	1e4	2e4	Avg	%RSD
-----		-----								
1) i	Acenaphthene-d10	-----ISTD-----								
2) t	2-butoxyethanol	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.00
3) A1	trans-Decalin	0.453	0.469	0.477	0.454	0.435	0.452	0.485	0.461	3.73
4) t	cis-Decalin	0.386	0.360	0.344	0.334	0.327	0.422	0.362	0.362	9.05
5) A2	C1-Decalins	0.453	0.469	0.477	0.454	0.435	0.452	0.485	0.461	3.73
6) A2	C2-Decalins	0.453	0.469	0.477	0.454	0.435	0.452	0.485	0.461	3.73
7) A2	C3-Decalins	0.453	0.469	0.477	0.454	0.435	0.452	0.485	0.461	3.73
8) A2	C4-Decalins	0.453	0.469	0.477	0.454	0.435	0.452	0.485	0.461	3.73
9) s	Naphthalene-d8	2.306	2.365	2.390	2.239	2.102	2.150	2.295	2.264	4.73
10) A1	Naphthalene	2.788	2.911	2.905	2.755	2.587	2.640	2.787	2.768	4.40
11) A2	C1-Naphthalenes	2.788	2.911	2.905	2.755	2.587	2.640	2.787	2.768	4.40
12) A2	C2-Naphthalenes	2.788	2.911	2.905	2.755	2.587	2.640	2.787	2.768	4.40
13) A2	C3-Naphthalenes	2.788	2.911	2.905	2.755	2.587	2.640	2.787	2.768	4.40
14) A2	C4-Naphthalenes	2.788	2.911	2.905	2.755	2.587	2.640	2.787	2.768	4.40
15) t	Glycol Ether I...	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.00
16) t	2-Methylnaphth...	1.556	1.509	1.529	1.494	1.435	1.461	1.531	1.502	2.82
17) t	1-Methylnaphth...	1.582	1.482	1.486	1.454	1.387	1.415	1.473	1.468	4.22
18) A1	Benzothiophene	2.653	2.632	2.624	2.504	2.364	2.394	2.538	2.530	4.60
19) A2	C1-Benzo(b)thi...	2.653	2.632	2.624	2.504	2.364	2.394	2.538	2.530	4.60
20) A2	C2-Benzo(b)thi...	2.653	2.632	2.624	2.504	2.364	2.394	2.538	2.530	4.60
21) A2	C3-Benzo(b)thi...	2.653	2.632	2.624	2.504	2.364	2.394	2.538	2.530	4.60
22) A2	C4-Benzo(b)thi...	2.653	2.632	2.624	2.504	2.364	2.394	2.538	2.530	4.60
23) t	Biphenyl	1.950	1.888	1.907	1.863	1.757	1.784	1.813	1.852	3.77
24) t	2,6-Dimethylna...	1.261	1.224	1.221	1.207	1.195	1.211	1.228	1.221	1.72
25) t	Dibenzofuran	1.964	1.999	1.994	1.966	1.874	1.900	1.911	1.944	2.51
26) t	Acenaphthylene	2.303	2.199	2.233	2.254	2.306	2.375	2.415	2.298	3.35
27) t	Acenaphthene	1.412	1.366	1.410	1.398	1.355	1.363	1.393	1.385	1.71
28) t	2,3,5-Trimethy...	1.153	1.132	1.127	1.146	1.143	1.291	1.163	1.165	4.87
29) A1	Fluorene	1.502	1.493	1.501	1.519	1.490	1.877	1.521	1.558	9.08
30) A2	C1-Fluorenes	1.502	1.493	1.501	1.519	1.490	1.877	1.521	1.558	9.08
31) A2	C2-Fluorenes	1.502	1.493	1.501	1.519	1.490	1.877	1.521	1.558	9.08

Response Factor Report PAH 9

Method Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Method File : PAH9121214.M
 Title : Decalins & Alkylated PAH's
 Last Update : Tue Dec 16 11:51:04 2014
 Response Via : Initial Calibration

Calibration Files

10 =A912121402.D 25 =A912121403.D 100 =A912121404.D 500 =A912121405.D 5000=A912121406.D
 1e4 =A912121407.D 2e4 =A912121408.D

	Compound	10	25	100	500	5000	1e4	2e4	Avg	%RSD
32)	A2 C3-Fluorenes	1.502	1.493	1.501	1.519	1.490	1.877	1.521	1.558	9.08
33)	A1 Dibenzothiophene	2.356	2.267	2.299	2.319	2.227	2.296	2.250	2.288	1.91
34)	A2 4-Methyldibenz...	2.356	2.267	2.299	2.319	2.227	2.296	2.250	2.288	1.91
35)	A2 2/3-Methyldibe...	2.356	2.267	2.299	2.319	2.227	2.296	2.250	2.288	1.91
36)	A2 1-Methyldibenz...	2.356	2.267	2.299	2.319	2.227	2.296	2.250	2.288	1.91
37)	A2 OTP	2.356	2.267	2.299	2.319	2.227	2.296	2.250	2.288	1.91
38)	A2 C1-Dibenzothio...	2.356	2.267	2.299	2.319	2.227	2.296	2.250	2.288	1.91
39)	A2 C2-Dibenzothio...	2.356	2.267	2.299	2.319	2.227	2.296	2.250	2.288	1.91
40)	A2 C3-Dibenzothio...	2.356	2.267	2.299	2.319	2.227	2.296	2.250	2.288	1.91
41)	A2 C4-Dibenzothio...	2.356	2.267	2.299	2.319	2.227	2.296	2.250	2.288	1.91
42)	s Phenanthrene-d10	1.821	1.737	1.780	1.672	1.644	1.703	1.656	1.716	3.87
43)	A1 Phenanthrene	2.264	2.112	2.185	2.220	2.140	2.167	2.127	2.174	2.49
44)	A2 3-Methylphenan...	2.264	2.112	2.185	2.220	2.140	2.167	2.127	2.174	2.49
45)	A2 2-Methylphenan...	2.264	2.112	2.185	2.220	2.140	2.167	2.127	2.174	2.49
46)	A2 2-Methylanthra...	2.264	2.112	2.185	2.220	2.140	2.167	2.127	2.174	2.49
47)	A2 9/4-Methylphen...	2.264	2.112	2.185	2.220	2.140	2.167	2.127	2.174	2.49
48)	A2 1-Methylphenan...	2.264	2.112	2.185	2.220	2.140	2.167	2.127	2.174	2.49
49)	A2 C1-Phenanthren...	2.264	2.112	2.185	2.220	2.140	2.167	2.127	2.174	2.49
50)	A2 C2-Phenanthren...	2.264	2.112	2.185	2.220	2.140	2.167	2.127	2.174	2.49
51)	A2 5AA IS BKGD	2.264	2.112	2.185	2.220	2.140	2.167	2.127	2.174	2.49
52)	A2 C3-Phenanthren...	2.264	2.112	2.185	2.220	2.140	2.167	2.127	2.174	2.49
53)	A2 C4-Phenanthren...	2.264	2.112	2.185	2.220	2.140	2.167	2.127	2.174	2.49
54)	t Retene	0.566	0.532	0.573	0.603	0.635	0.659	0.618	0.598	7.34
55)	t Anthracene	1.956	1.872	1.938	2.038	2.065	2.103	2.080	2.007	4.28
56)	t Carbazole	1.847	1.788	1.871	1.966	1.981	2.045	2.025	1.932	5.03
57)	t 1-Methylphenan...	1.443	1.365	1.406	1.450	1.460	1.510	1.443	1.439	3.14
58)	A1 Fluoranthene	2.223	2.091	2.163	2.219	2.234	2.332	2.186	2.207	3.33
59)	t Benzo(b)fluorene	1.255	1.199	1.270	1.343	1.418	1.466	1.381	1.333	7.21
60)	A1 Pyrene	2.214	2.122	2.180	2.470	2.485	2.569	2.393	2.347	7.41
61)	A2 C1-Fluoranthen...	2.214	2.122	2.180	2.470	2.485	2.569	2.393	2.347	7.41
62)	A2 C2-Fluoranthen...	2.214	2.122	2.180	2.470	2.485	2.569	2.393	2.347	7.41
63)	A2 C3-Fluoranthen...	2.214	2.122	2.180	2.470	2.485	2.569	2.393	2.347	7.41

Response Factor Report PAH 9

Method Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Method File : PAH9121214.M
 Title : Decalins & Alkylated PAH's
 Last Update : Tue Dec 16 11:51:04 2014
 Response Via : Initial Calibration

Calibration Files

10 =A912121402.D 25 =A912121403.D 100 =A912121404.D 500 =A912121405.D 5000=A912121406.D
 1e4 =A912121407.D 2e4 =A912121408.D

	Compound	10	25	100	500	5000	1e4	2e4	Avg	%RSD
64)	A2 C4-Fluoranthene...	2.214	2.122	2.180	2.470	2.485	2.569	2.393	2.347	7.41
65)	t Bis-(2-ethylhe...	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.00
66)	A1 Naphthobenzoth...	2.317	2.262	2.327	2.366	2.378	2.462	2.277	2.341	2.90
67)	A2 Naphthobenzoth...	2.317	2.262	2.327	2.366	2.378	2.462	2.277	2.341	2.90
68)	A2 Naphthobenzoth...	2.317	2.262	2.327	2.366	2.378	2.462	2.277	2.341	2.90
69)	A2 Naphthobenzoth...	2.317	2.262	2.327	2.366	2.378	2.462	2.277	2.341	2.90
70)	A2 C1-Naphthobenz...	2.317	2.262	2.327	2.366	2.378	2.462	2.277	2.341	2.90
71)	A2 C2-Naphthobenz...	2.317	2.262	2.327	2.366	2.378	2.462	2.277	2.341	2.90
72)	A2 C3-Naphthobenz...	2.317	2.262	2.327	2.366	2.378	2.462	2.277	2.341	2.90
73)	A2 C4-Naphthobenz...	2.317	2.262	2.327	2.366	2.378	2.462	2.277	2.341	2.90
74)	i Chrysene-d12	-----ISTD-----								
75)	t Benz[a]anthracene	1.124	1.063	1.105	1.083	1.136	1.145	1.099	1.108	2.67
76)	A1 Chrysene	1.075	1.074	1.114	1.123	1.111	1.098	1.071	1.095	1.97
77)	A2 Chrysene/Triph...	1.075	1.074	1.114	1.123	1.111	1.098	1.071	1.095	1.97
78)	A2 C1-Chrysenes	1.075	1.074	1.114	1.123	1.111	1.098	1.071	1.095	1.97
79)	A2 C2-Chrysenes	1.075	1.074	1.114	1.123	1.111	1.098	1.071	1.095	1.97
80)	A2 BBF-d12 Surr BKGD	1.075	1.074	1.114	1.123	1.111	1.098	1.071	1.095	1.97
81)	A2 C3-Chrysenes	1.075	1.074	1.114	1.123	1.111	1.098	1.071	1.095	1.97
82)	A2 C4-Chrysenes	1.075	1.074	1.114	1.123	1.111	1.098	1.071	1.095	1.97
83)	S Benzo[b]fluora...	1.110	1.061	1.057	0.991	1.001	1.025	0.996	1.034	4.21
84)	t Benzo[b]fluora...	1.395	1.318	1.317	1.271	1.294	1.290	1.288	1.311	3.12
85)	A1 Benzo[j]+[k]fl...	1.336	1.255	1.296	1.219	1.234	1.238	1.208	1.255	3.64
86)	A2 Benzo[a]fluora...	1.336	1.255	1.296	1.219	1.234	1.238	1.208	1.255	3.64
87)	t Benzo[e]pyrene	1.296	1.267	1.255	1.246	1.241	1.249	1.231	1.255	1.70
88)	s Benzo[a]pyrene...	0.998	0.965	0.959	0.904	0.930	0.943	0.945	0.949	3.11
89)	t Benzo[a]pyrene	1.278	1.175	1.182	1.230	1.239	1.249	1.257	1.230	3.11
90)	t Perylene	1.346	1.252	1.224	1.203	1.203	1.222	1.240	1.241	3.99
91)	t Indeno[1,2,3-c...	1.623	1.551	1.462	1.461	1.439	1.614	1.531	1.526	4.90
92)	t Dibenz[ah]+[ac...	1.474	1.457	1.487	1.427	1.435	1.769	1.491	1.506	7.89
93)	t Benzo[g,h,i]pe...	1.582	1.446	1.434	1.369	1.367	1.730	1.446	1.482	8.82
94)	A1 Hopane (T19)	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32

Response Factor Report PAH 9

Method Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Method File : PAH9121214.M
 Title : Decalins & Alkylated PAH's
 Last Update : Tue Dec 16 11:51:04 2014
 Response Via : Initial Calibration

Calibration Files

10 =A912121402.D 25 =A912121403.D 100 =A912121404.D 500 =A912121405.D 5000=A912121406.D
 1e4 =A912121407.D 2e4 =A912121408.D

	Compound	10	25	100	500	5000	1e4	2e4	Avg	%RSD
95)	A2 17a(H),21B(H)-...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
96)	A2 C23 Tricyclic ...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
97)	A2 C24 Tricyclic ...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
98)	A2 C25 Tricyclic ...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
99)	A2 C24 Tetracycli...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
100)	A2 C26 Tricyclic ...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
101)	A2 C26 Tricyclic ...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
102)	A2 C28 Tricyclic ...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
103)	A2 C28 Tricyclic ...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
104)	A2 C29 Tricyclic ...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
105)	A2 C29 Tricyclic ...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
106)	A2 18a-22,29,30-T...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
107)	A2 C30 Tricyclic ...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
108)	A2 C30 Tricyclic ...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
109)	A2 17a(H)-22,29,3...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
110)	A2 17a/b,21b/a 28...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
111)	A2 17a(H),21b(H)-...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
112)	A2 30-Norhopane (...)	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
113)	A2 18a(H)-30-Norn...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
114)	A2 17a(H)-Diahopa...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
115)	A2 30-Normoretane...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
116)	A2 18a(H)&18b(H)-...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
117)	A2 Moretane (T20)	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
118)	A2 30-Homohopane-...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
119)	A2 30-Homohopane-...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
120)	A2 Gammacerane/C3...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
121)	A2 30,31-Bishomoh...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
122)	A2 30,31-Bishomoh...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
123)	A2 30,31-Trishomo...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
124)	A2 30,31-Trishomo...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
125)	A2 Tetrakishomoho...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
126)	A2 Tetrakishomoho...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32

Response Factor Report PAH 9

Method Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Method File : PAH9121214.M
 Title : Decalins & Alkylated PAH's
 Last Update : Tue Dec 16 11:51:04 2014
 Response Via : Initial Calibration

Calibration Files

10 =A912121402.D 25 =A912121403.D 100 =A912121404.D 500 =A912121405.D 5000=A912121406.D
 1e4 =A912121407.D 2e4 =A912121408.D

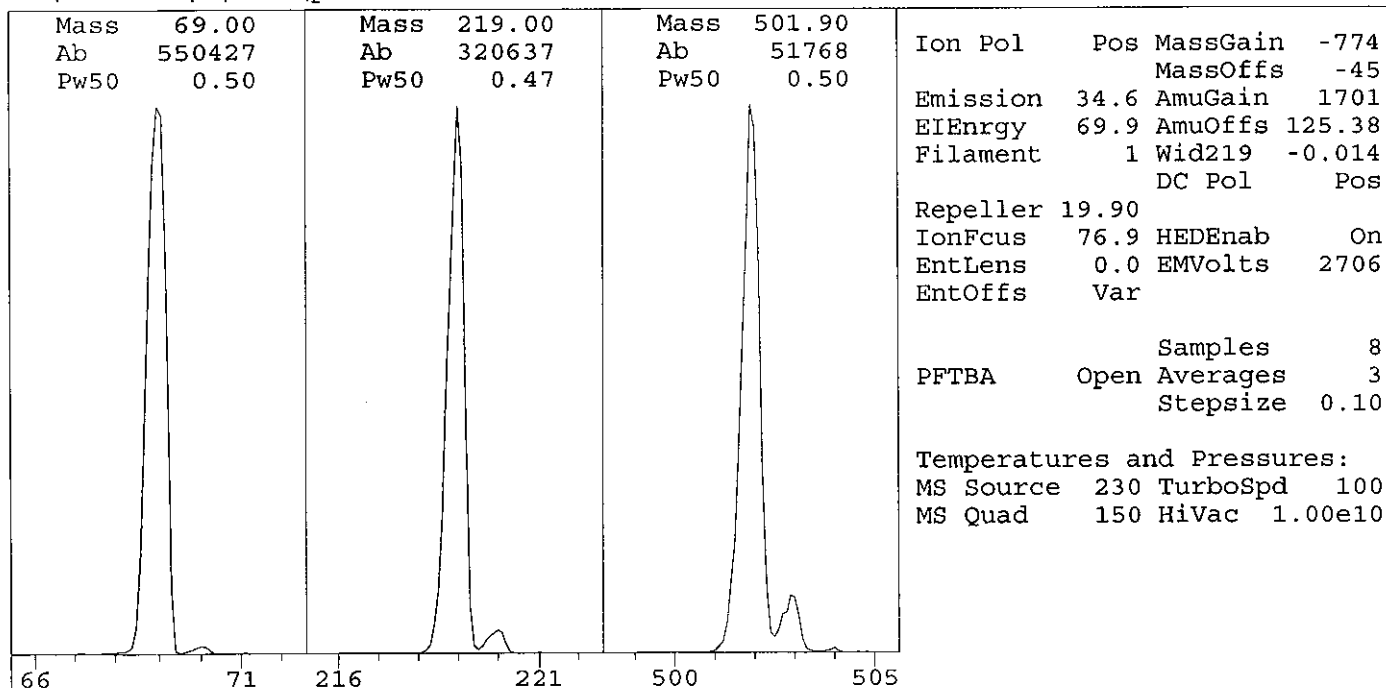
	Compound	10	25	100	500	5000	1e4	2e4	Avg	%RSD
127)	A2 Pentakishomoho...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
128)	A2 Pentakishomoho...	0.387	0.321	0.297	0.263	0.278	0.293		0.306	14.32
129)	SA1 5B(H)Cholane -...	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
130)	A2 13b(H),17a(H)-...	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
131)	A2 13b(H),17a(H)-...	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
132)	A2 13b,17a-20S-Me...	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
133)	A2 14a,17a-20S-Ch...	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
134)	A2 14a,17a-20R-Ch...	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
135)	A2 Unknown Steran...	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
136)	A2 13a,17b-20S-Et...	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
137)	A2 14a,17a-20S-Me...	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
138)	A2 14a,17a-20R-Me...	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
139)	A2 14a(H),17a(H)-...	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
140)	A2 14a(H),17a(H)-...	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
141)	A2 14b(H),17b(H)-...	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
142)	A2 14b(H),17b(H)-...	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
143)	A2 14b,17b-20R-Me...	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
144)	A2 14b,17b-20S-Me...	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
145)	A2 14b(H),17b(H)-...	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
146)	A2 14b(H),17b(H)-...	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
147)	A2 C26,20R- +C27,...	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
148)	A2 C28,20S-triaro...	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
149)	A2 C27,20R-triaro...	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03
150)	A2 C28,20R-triaro...	0.174	0.158	0.151	0.150	0.158	0.160	0.155	0.158	5.03

(#) = Out of Range

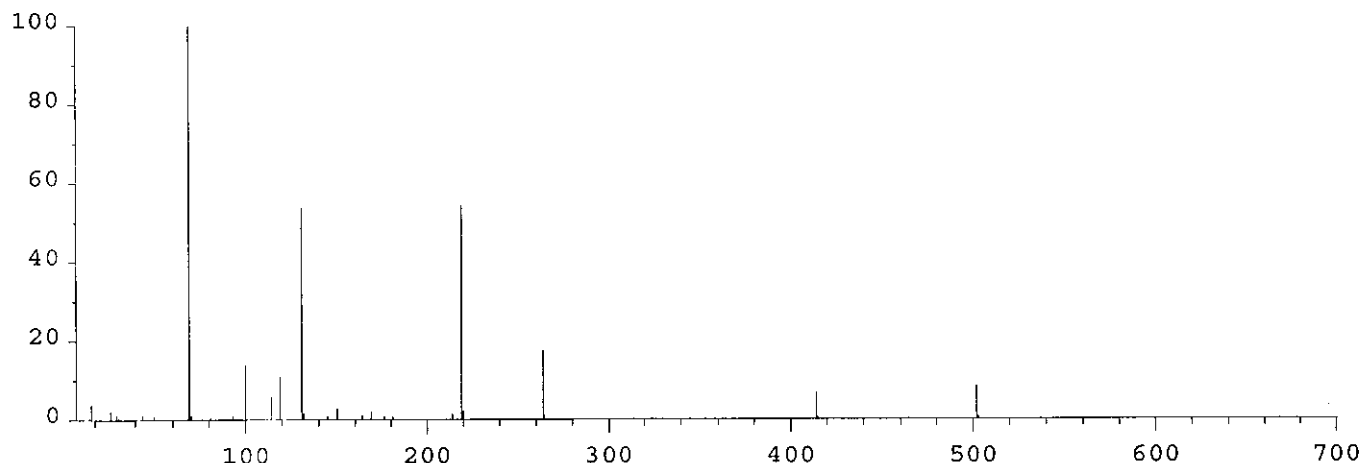
PFTBA Tune Raw Data

Fri Dec 12 13:27:45 2014
C:\MSDCHEM\1\5975\pftba.U

Instrument: PAH 9
US10163301



Scan: 10.00 - 701.00 Samples: 8 Thresh: 100 Step: 0.10
216 peaks Base: 69.00 Abundance: 504768



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	504768	100.00	70.00	5547	1.10
219.00	273728	54.23	220.00	11963	4.37
502.00	43544	8.63	503.00	4627	10.63

Air/Water Check: H2O~3.92% N2~2.30% O2~0.69% CO2~1.26% N2/H2O~58.65%

Ramp Criteria:

Ion Focus Maximum 90 volts using ion 502; EM Gain 396709
Repeller Maximum 20 volts using ion 219; Gain Factor 3.97

MassGain Values(Samples): -758(3) -750(2) -733(1) -710(0) -649(FS)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset:	125.4	125.4	125.4	125.4	125.4	125.4	125.4
Entrance Lens Offset:	6.3	6.3	8.0	9.8	16.6	21.8	21.8
Target Abund(%)	1.0	100.0	55.0	60.0	8.0	10.0	
Actual Tune Abund(%)	1.0	100.0	53.7	54.2	6.9	8.6	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Data File : A912121402.D
 Acq On : 12 Dec 2014 3:05 pm
 Operator : PAH9:SR
 Sample : i912121401
 Misc : WG749024,frau66 10 ng/mL
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 16 10:49:33 2014
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Oct 13 09:26:14 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.023	164	67365	500.000	ng/mL	0.00
74) Chrysene-d12	43.442	240	127257	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	20.069	136	3107	11.591	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.16%#		
42) Phenanthrene-d10	32.880	188	2454	11.839	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.18%#		
83) Benzo[b]fluoranthene-d12	47.335	264	2824	11.374	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.14%#		
88) Benzo[a]pyrene-d12	48.533	264	2541	11.124	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.11%#		
129) 5B(H)Cholane - Surr	44.054	217	442	10.568	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.06%#		
Target Compounds						
						Qvalue
3) trans-Decalin	16.729	138	305	5.004	ng/mL	100
4) cis-Decalin	17.943	138	260	5.499	ng/mL	100
10) Naphthalene	20.142	128	3756	13.060	ng/mL	100
16) 2-Methylnaphthalene	22.834	142	2096	11.764	ng/mL	100
17) 1-Methylnaphthalene	23.254	142	2131	12.283	ng/mL	100
18) Benzothiophene	20.361	134	3574	14.676	ng/mL	100
23) Biphenyl	24.705	154	2627	11.669	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.316	156	1699	10.899	ng/mL	100
25) Dibenzofuran	27.789	168	2646	11.397	ng/mL	96
26) Acenaphthylene	26.411	152	3103	11.348	ng/mL	100
27) Acenaphthene	27.141	153	1902	11.294	ng/mL	97
28) 2,3,5-Trimethylnaphthalen	28.692	170	1554	11.410	ng/mL	89
29) Fluorene	29.158	166	2024M4	10.842	ng/mL	
33) Dibenzothiophene	32.479	184	3174	13.034	ng/mL	99
43) Phenanthrene	32.971	178	3050	11.818	ng/mL	100
54) Retene	39.937	234	762	11.231	ng/mL	95
55) Anthracene	33.154	178	2635M4	11.106	ng/mL	
56) Carbazole	33.811	167	2489	10.269	ng/mL	99
57) 1-Methylphenanthrene	35.463	192	1944	10.986	ng/mL	98
58) Fluoranthene	37.727	202	2995	12.068	ng/mL	98
59) Benzo(b)fluorene	40.238	216	1691	11.443	ng/mL	98
60) Pyrene	38.613	202	2983	11.280	ng/mL	94
66) Naphthobenzothiophene	42.447	234	3122	13.325	ng/mL	95
67) Naphthobenzothiophene-2,1	42.447	234	3122	13.325	ng/mL	95

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Data File : A912121402.D
 Acq On : 12 Dec 2014 3:05 pm
 Operator : PAH9:SR
 Sample : i912121401
 Misc : WG749024,frau66 10 ng/mL
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 16 10:49:33 2014
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Oct 13 09:26:14 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

75)	Benz[a]anthracene	43.369	228	2861M4	12.357	ng/mL	
76)	Chrysene	43.534	228	2737	12.013	ng/mL	96
77)	Chrysene/Triphenylene	43.534	228	2737	12.013	ng/mL	96
84)	Benzo[b]fluoranthene	47.418	252	3551M3	12.580	ng/mL	
85)	Benzo[j]+[k]fluoranthene	47.500	252	3400	12.304	ng/mL	90
87)	Benzo[e]pyrene	48.442	252	3299	11.994	ng/mL#	73
89)	Benzo[a]pyrene	48.625	252	3252	12.208	ng/mL#	62
90)	Perylene	48.945	252	3426	12.625	ng/mL#	83
91)	Indeno[1,2,3-cd]pyrene	53.518	276	4130M3	12.074	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.582	278	3752	11.696	ng/mL	91
93)	Benzo[g,h,i]perylene	54.843	276	4026	12.228	ng/mL	95
94)	Hopane (T19)	52.631	191	984M4	10.940	ng/mL	
95)	17a(H),21B(H)-hopane - C3	52.631	191	959M4	10.662	ng/mL	

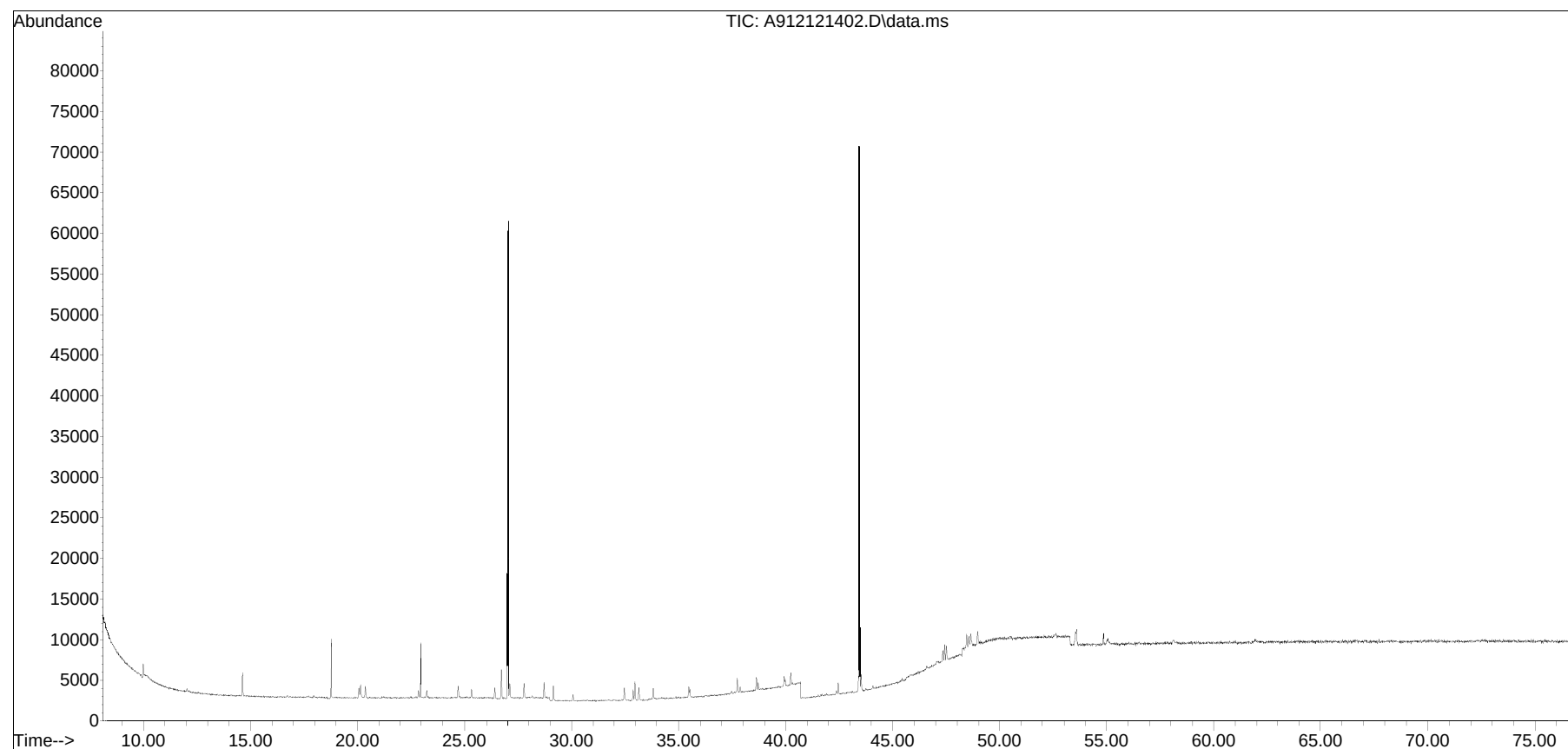
(#) = qualifier out of range (m) = manual integration (+) = signals summed

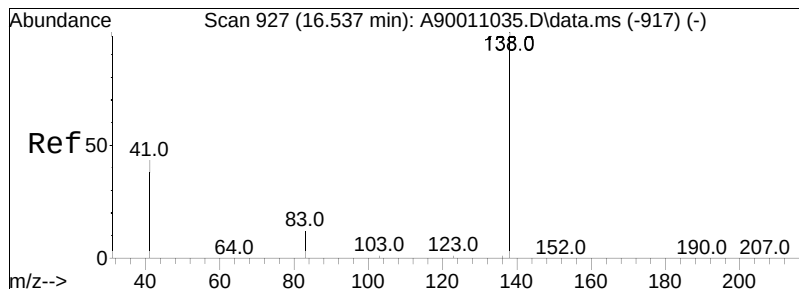
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC12\
Data File : A912121402.D
Acq On : 12 Dec 2014 3:05 pm
Operator : PAH9:SR
Sample : i912121401
Misc : WG749024,frau66 10 ng/mL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 16 10:49:33 2014
Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Oct 13 09:26:14 2014
Response via : Initial Calibration

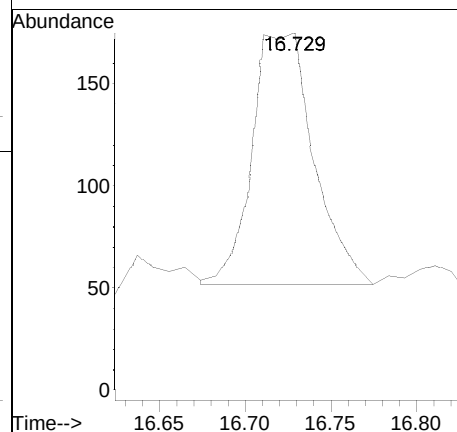
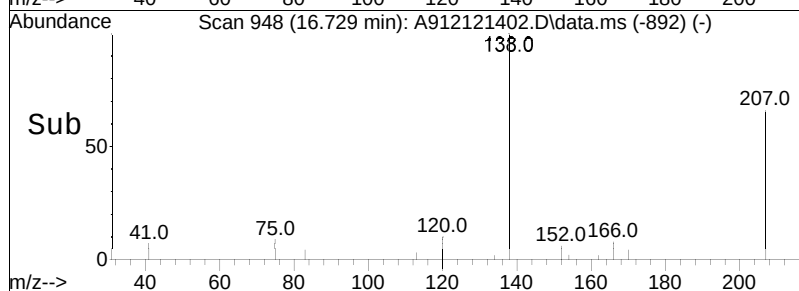
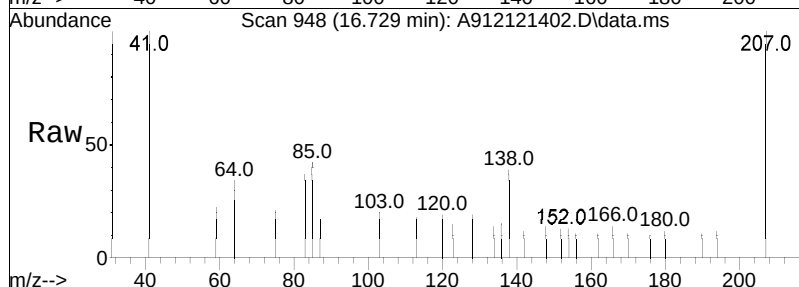
Sub List : ICAL_CCALT_REV2 - CC with five surrogates

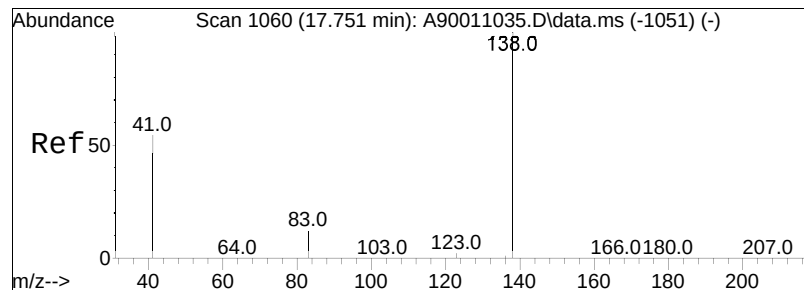




#3
trans-Decalin
Concen: 5.00 ng/mL
RT: 16.729 min Scan# 948
Delta R.T. 0.009 min
Lab File: A912121402.D
Acq: 12 Dec 2014 3:05 pm

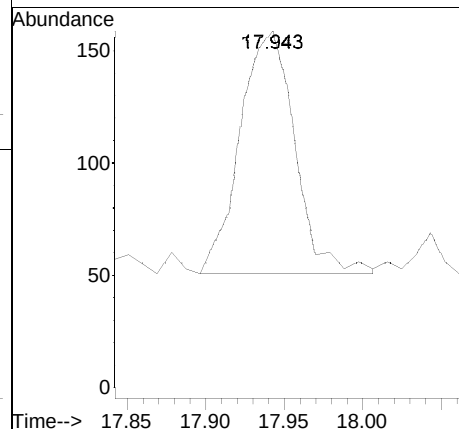
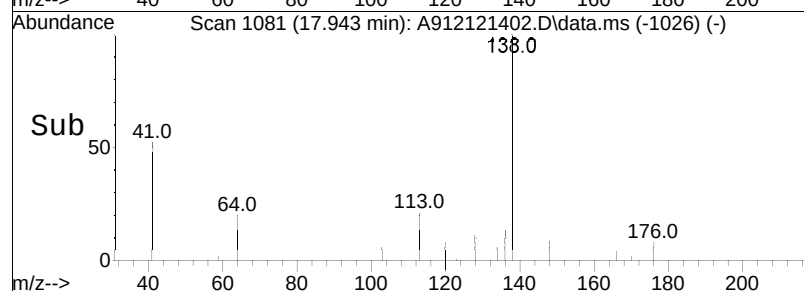
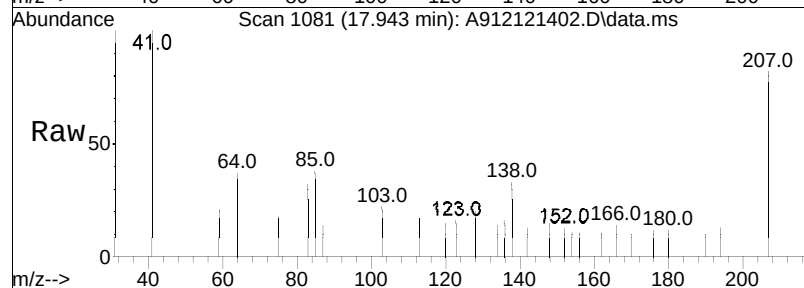
Tgt Ion:138 Resp: 305

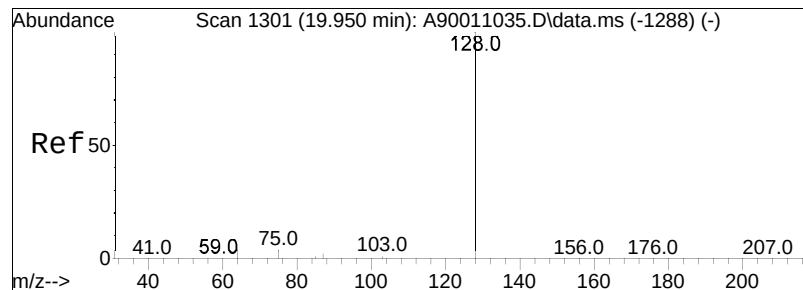




#4
 cis-Decalin
 Concen: 5.50 ng/mL
 RT: 17.943 min Scan# 1081
 Delta R.T. 0.000 min
 Lab File: A912121402.D
 Acq: 12 Dec 2014 3:05 pm

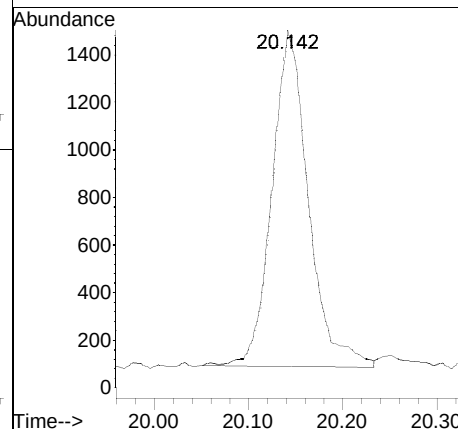
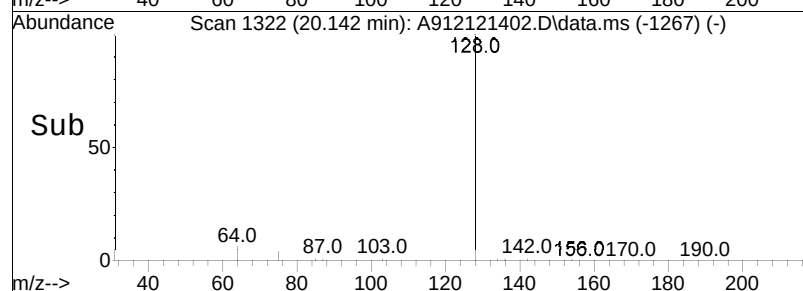
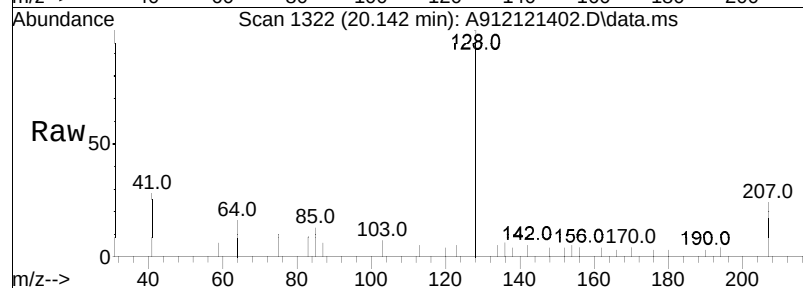
Tgt Ion:138 Resp: 260

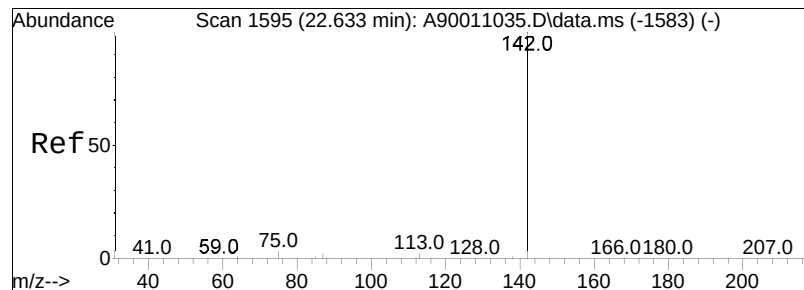




#10
Naphthalene
Concen: 13.06 ng/mL
RT: 20.142 min Scan# 1322
Delta R.T. 0.000 min
Lab File: A912121402.D
Acq: 12 Dec 2014 3:05 pm

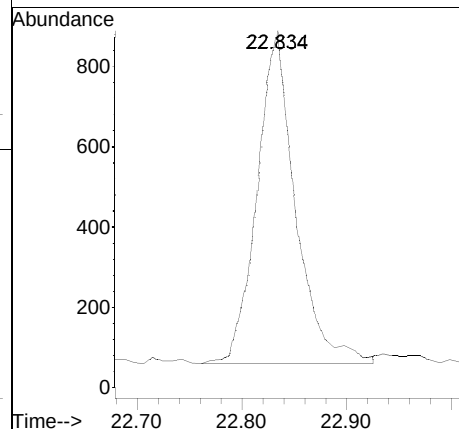
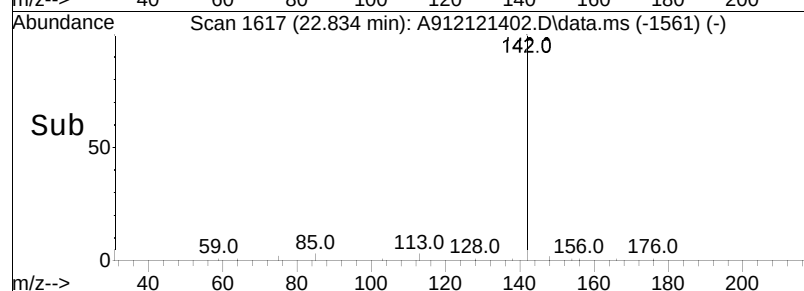
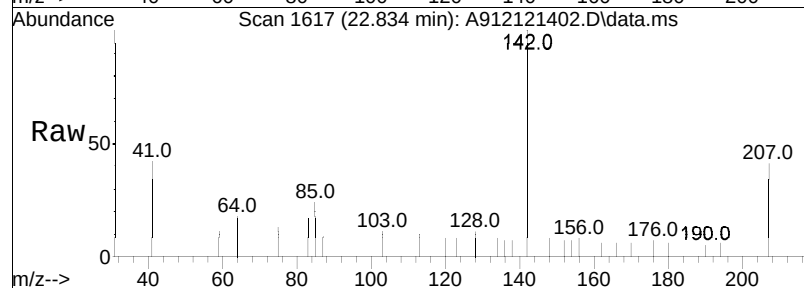
Tgt Ion:128 Resp: 3756

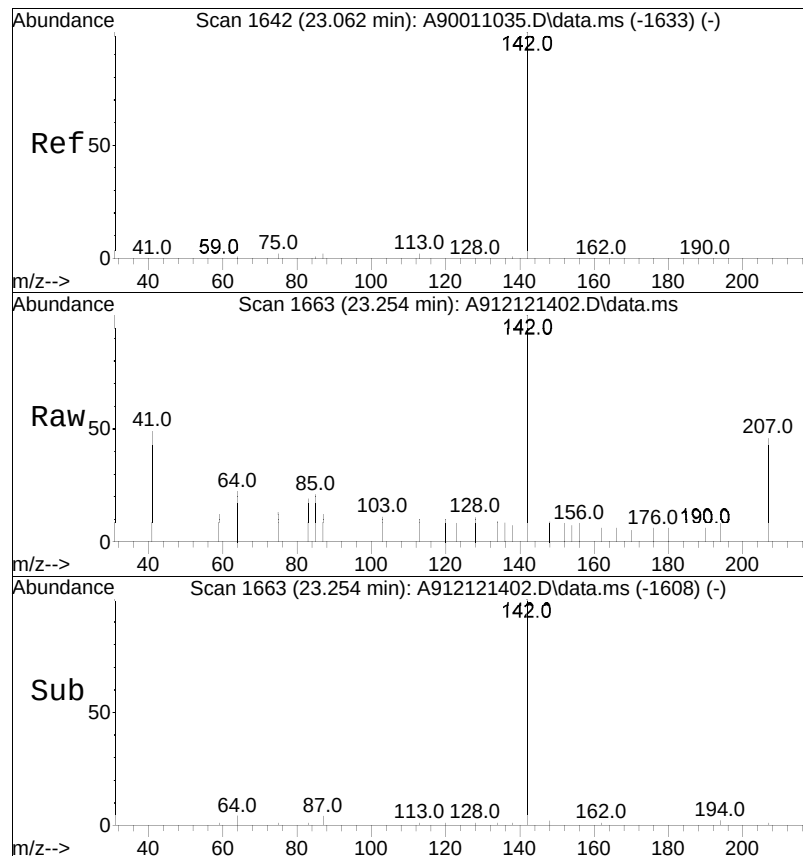




#16
2-Methylnaphthalene
Concen: 11.76 ng/mL
RT: 22.834 min Scan# 1617
Delta R.T. 0.009 min
Lab File: A912121402.D
Acq: 12 Dec 2014 3:05 pm

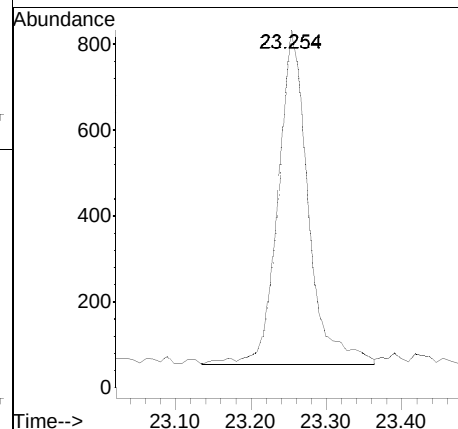
Tgt Ion:142 Resp: 2096

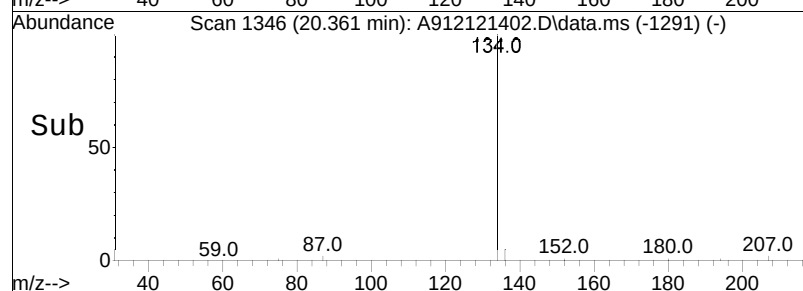
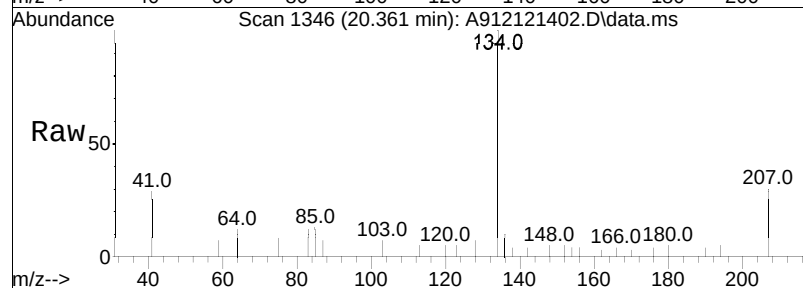
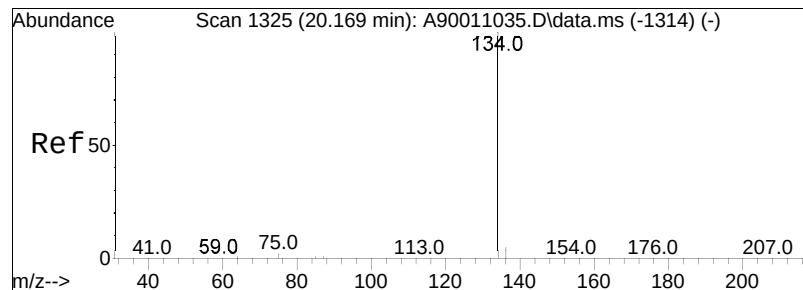




#17
1-Methylnaphthalene
Concen: 12.28 ng/mL
RT: 23.254 min Scan# 1663
Delta R.T. 0.000 min
Lab File: A912121402.D
Acq: 12 Dec 2014 3:05 pm

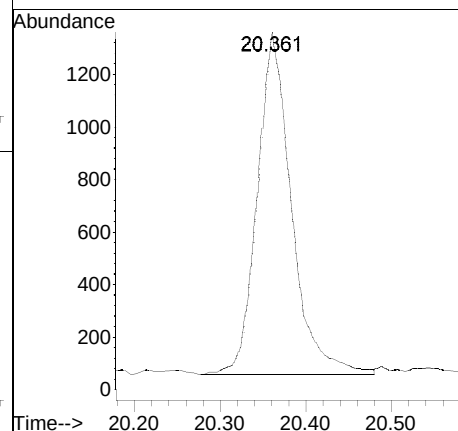
Tgt Ion:142 Resp: 2131

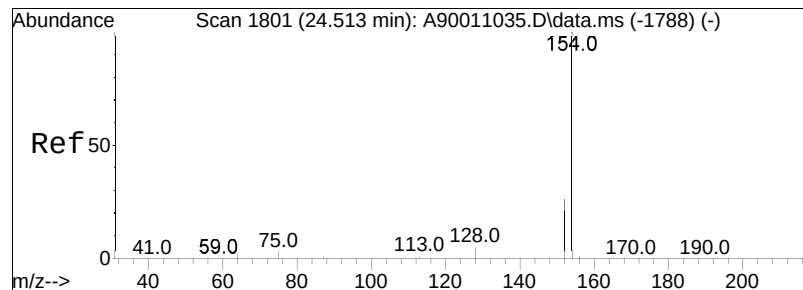




#18
 Benzothiophene
 Concen: 14.68 ng/mL
 RT: 20.361 min Scan# 1346
 Delta R.T. 0.000 min
 Lab File: A912121402.D
 Acq: 12 Dec 2014 3:05 pm

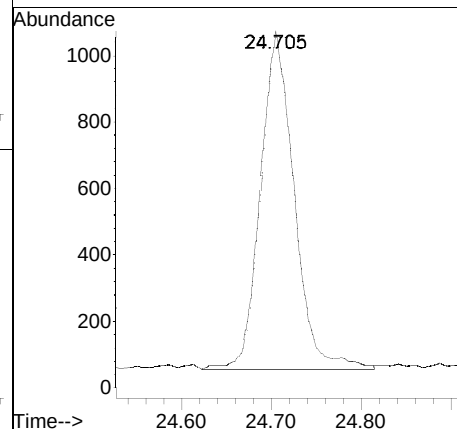
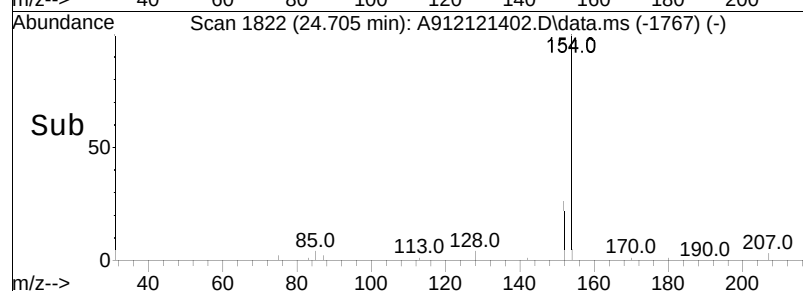
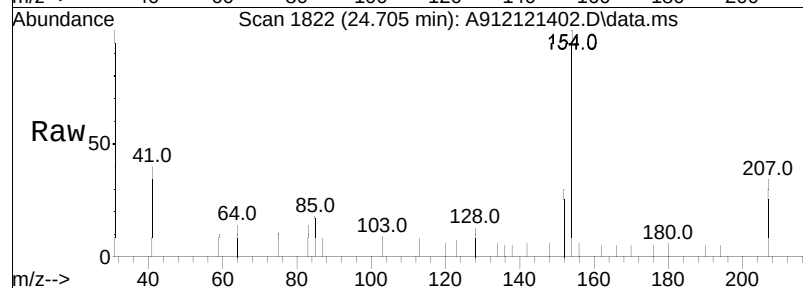
Tgt Ion:134 Resp: 3574

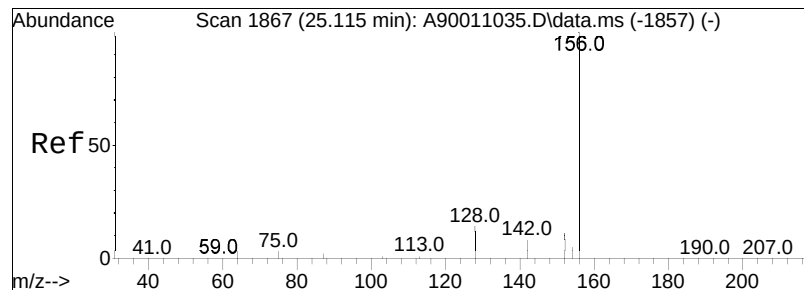




#23
Biphenyl
Concen: 11.67 ng/mL
RT: 24.705 min Scan# 1822
Delta R.T. 0.000 min
Lab File: A912121402.D
Acq: 12 Dec 2014 3:05 pm

Tgt Ion:154 Resp: 2627





#24

2,6-Dimethylnaphthalene

Concen: 10.90 ng/mL

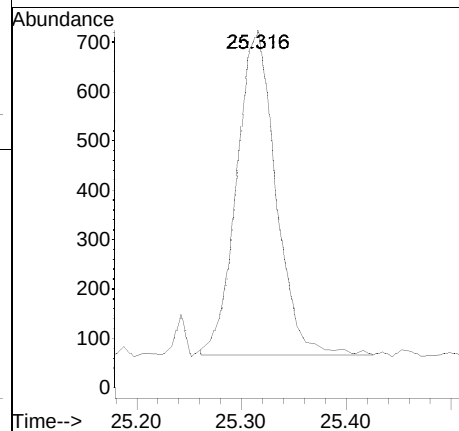
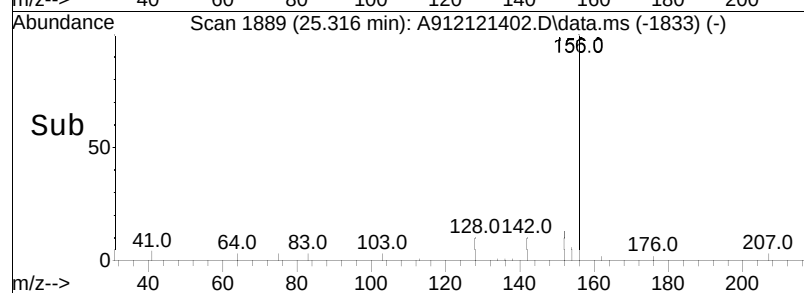
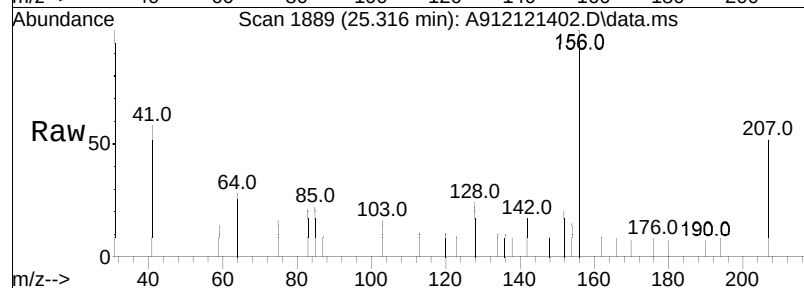
RT: 25.316 min Scan# 1889

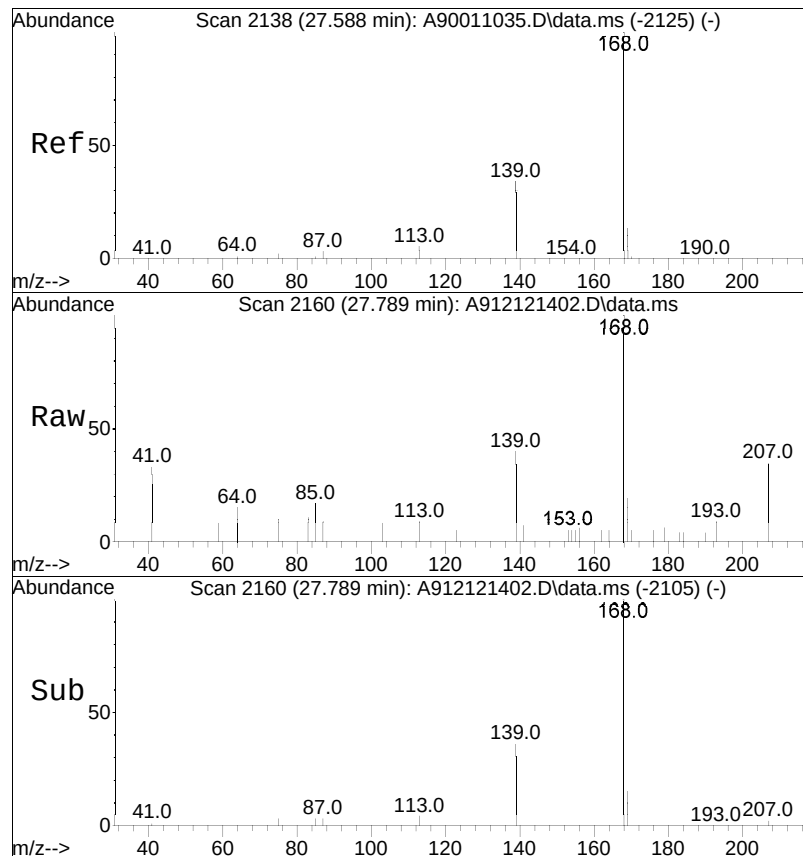
Delta R.T. 0.009 min

Lab File: A912121402.D

Acq: 12 Dec 2014 3:05 pm

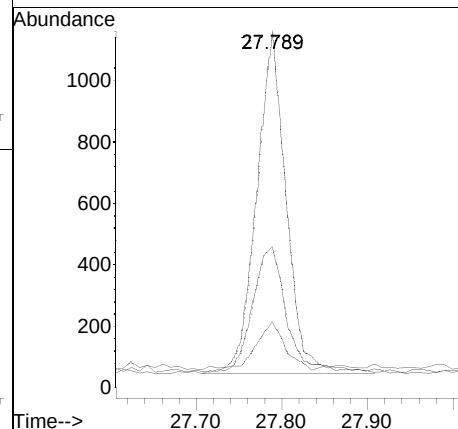
Tgt Ion:156 Resp: 1699

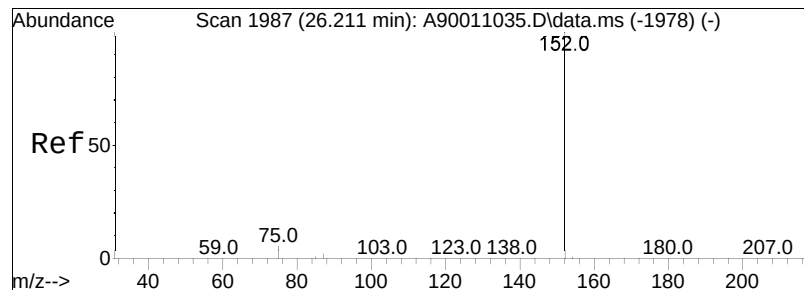




#25
 Dibenzofuran
 Concen: 11.40 ng/mL
 RT: 27.789 min Scan# 2160
 Delta R.T. 0.000 min
 Lab File: A912121402.D
 Acq: 12 Dec 2014 3:05 pm

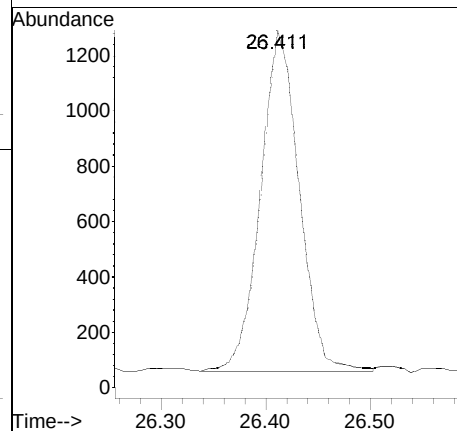
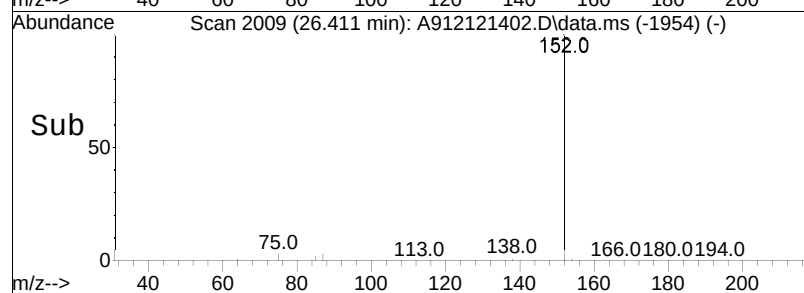
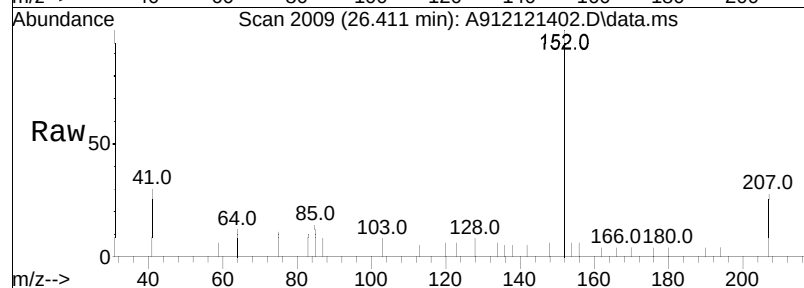
Tgt Ion	Ratio	Lower	Upper
168	100		
139	38.8	25.1	46.7
169	15.5	10.2	19.0

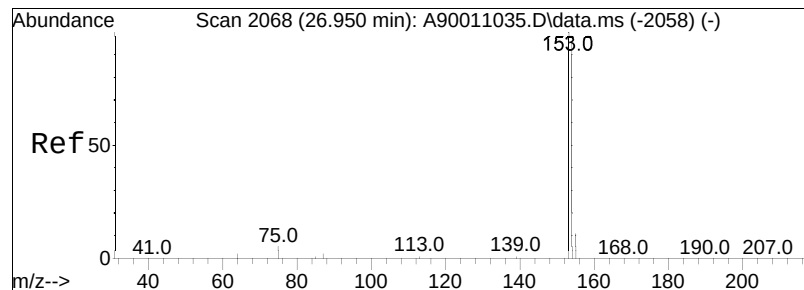




#26
 Acenaphthylene
 Concen: 11.35 ng/mL
 RT: 26.411 min Scan# 2009
 Delta R.T. 0.000 min
 Lab File: A912121402.D
 Acq: 12 Dec 2014 3:05 pm

Tgt Ion:152 Resp: 3103





#27

Acenaphthene

Concen: 11.29 ng/mL

RT: 27.141 min Scan# 2089

Delta R.T. 0.000 min

Lab File: A912121402.D

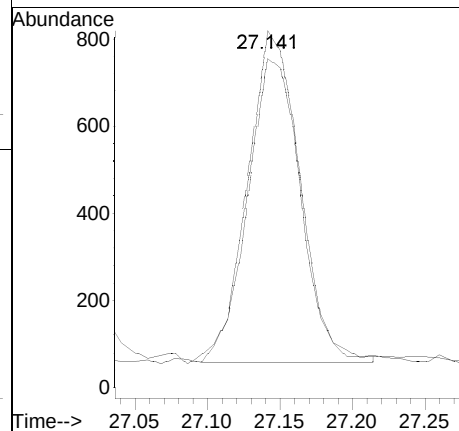
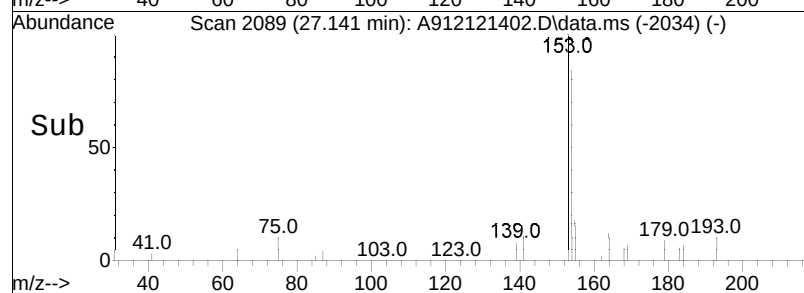
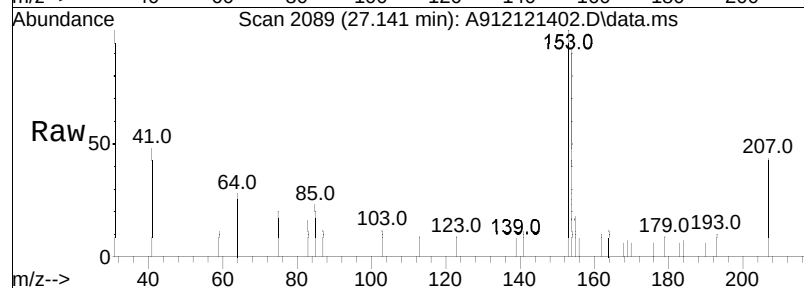
Acq: 12 Dec 2014 3:05 pm

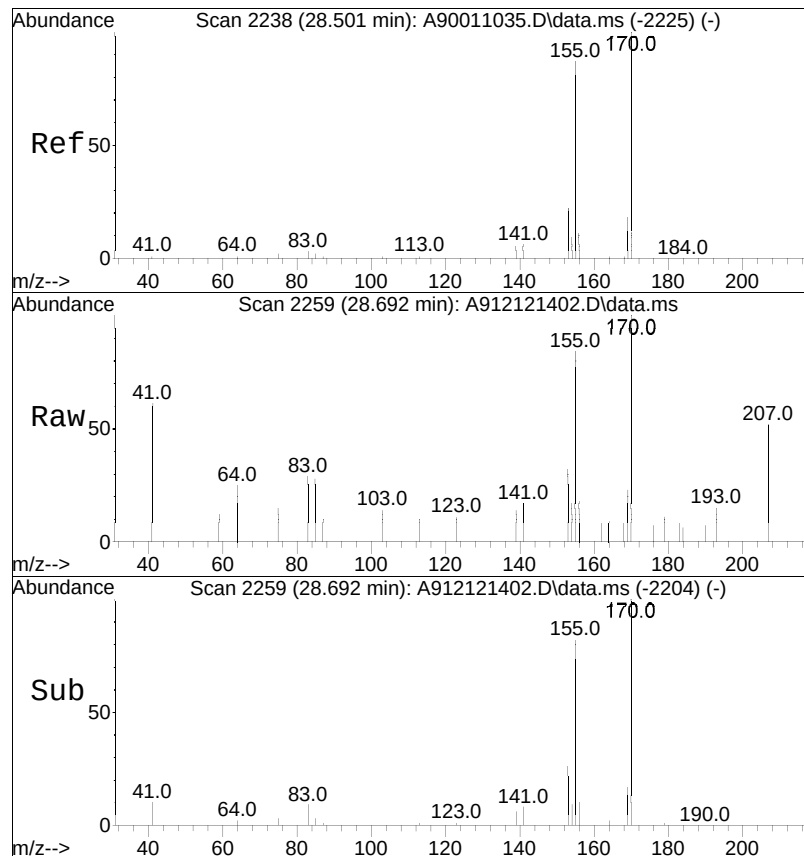
Tgt Ion:153 Resp: 1902

Ion Ratio Lower Upper

153 100

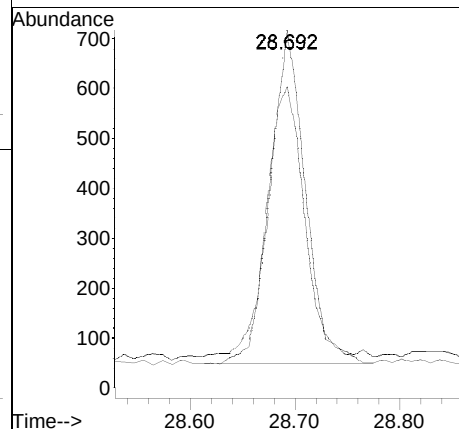
154 95.6 64.9 120.5

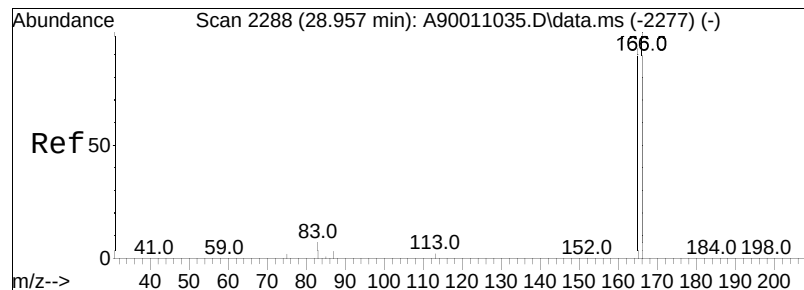




#28
 2,3,5-Trimethylnaphthalene
 Concen: 11.41 ng/mL
 RT: 28.692 min Scan# 2259
 Delta R.T. 0.000 min
 Lab File: A912121402.D
 Acq: 12 Dec 2014 3:05 pm

Tgt Ion	Ratio	Lower	Upper
170	100		
155	89.7	55.9	103.9





#29

Fluorene

Concen: 10.84 ng/mL M4

RT: 29.158 min Scan# 2310

Delta R.T. 0.000 min

Lab File: A912121402.D

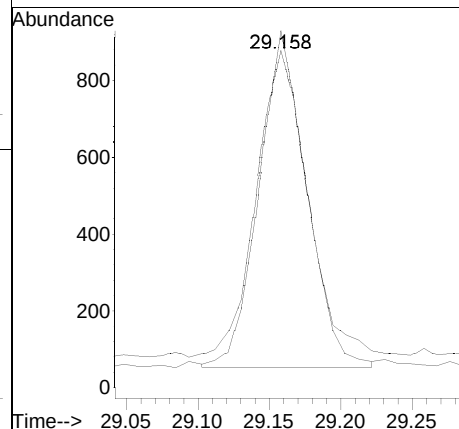
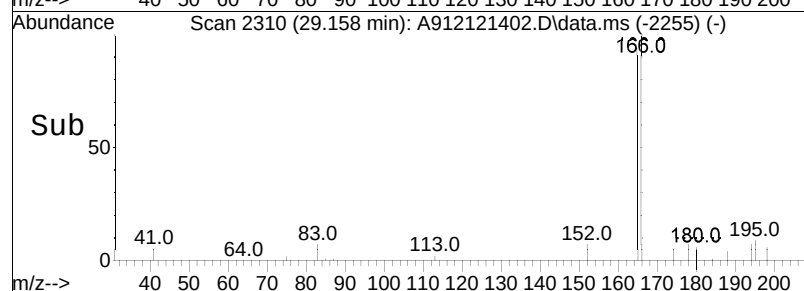
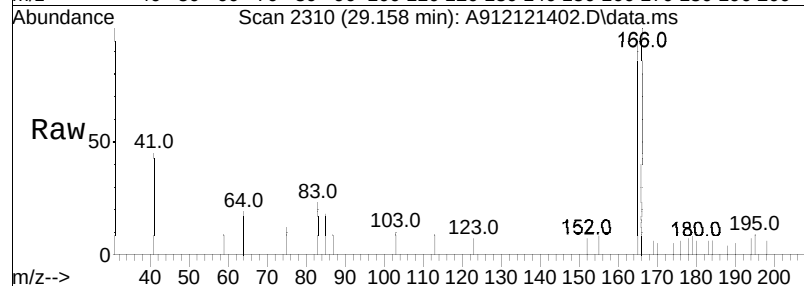
Acq: 12 Dec 2014 3:05 pm

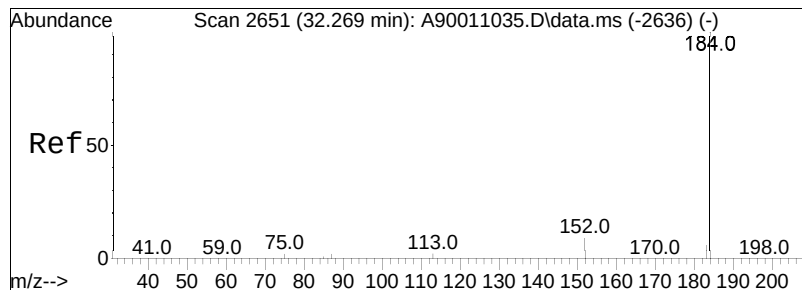
Tgt Ion:166 Resp: 2024

Ion Ratio Lower Upper

166 100

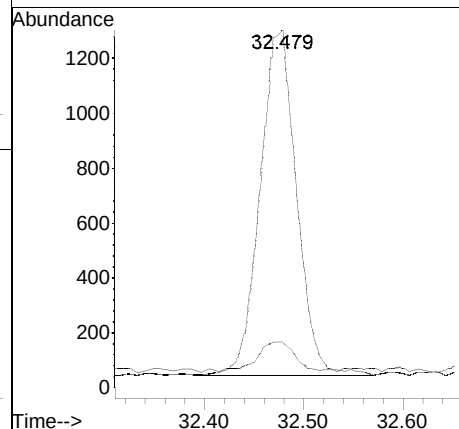
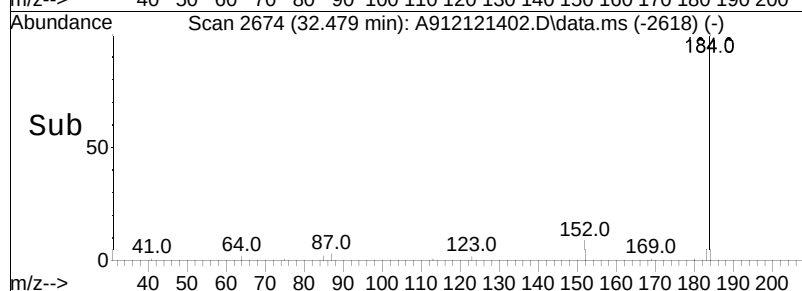
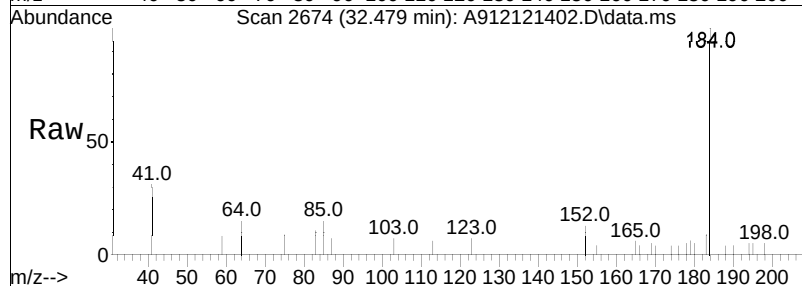
165 99.0 65.5 121.7

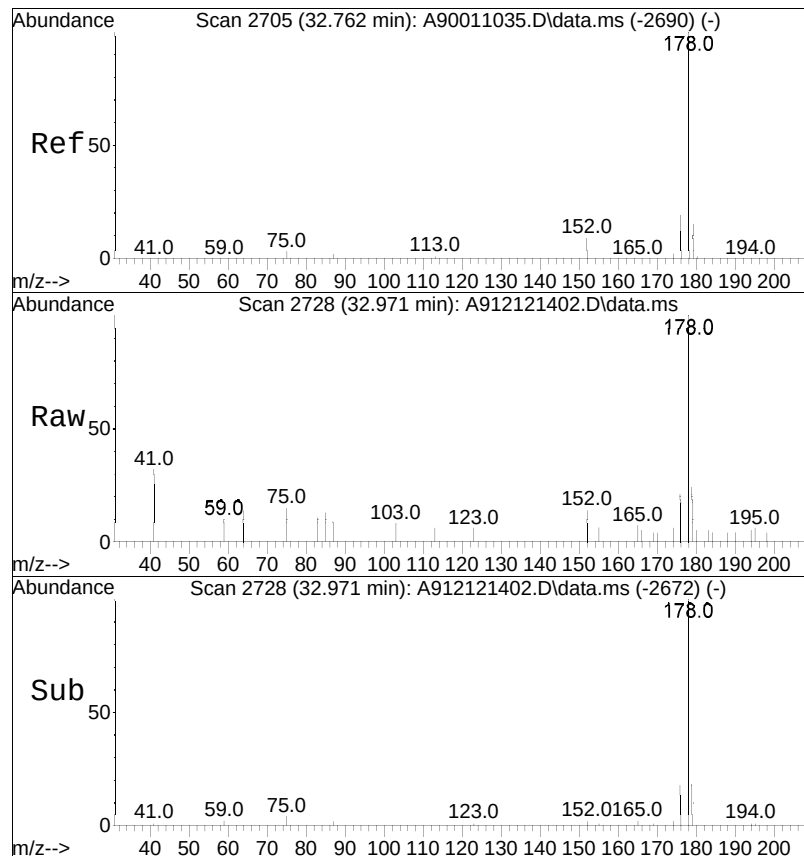




#33
 Dibenzothiophene
 Concen: 13.03 ng/mL
 RT: 32.479 min Scan# 2674
 Delta R.T. 0.009 min
 Lab File: A912121402.D
 Acq: 12 Dec 2014 3:05 pm

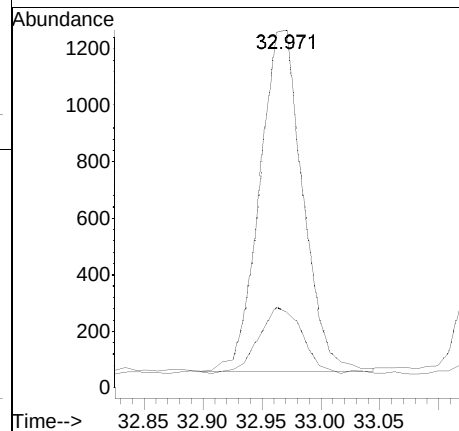
Tgt Ion	Ratio	Lower	Upper
184	100		
152	9.5	6.3	11.7

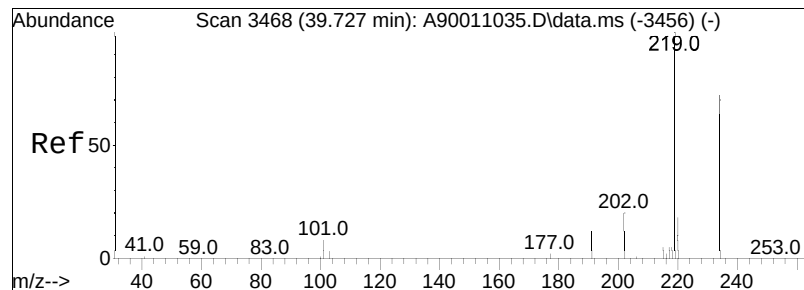




#43
 Phenanthrene
 Concen: 11.82 ng/mL
 RT: 32.971 min Scan# 2728
 Delta R.T. 0.009 min
 Lab File: A912121402.D
 Acq: 12 Dec 2014 3:05 pm

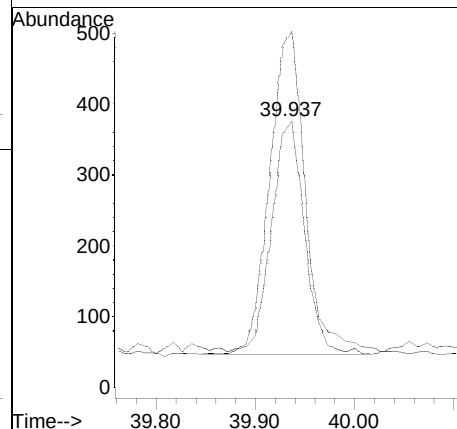
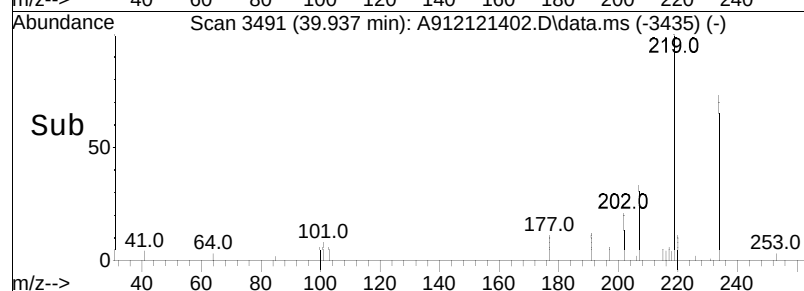
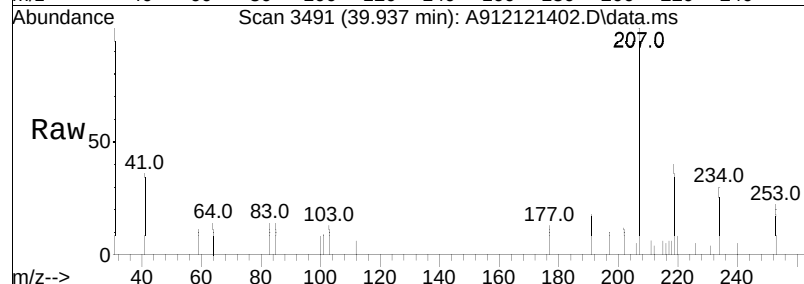
Tgt Ion	Ratio	Lower	Upper
178	100		
176	19.7	13.7	25.5

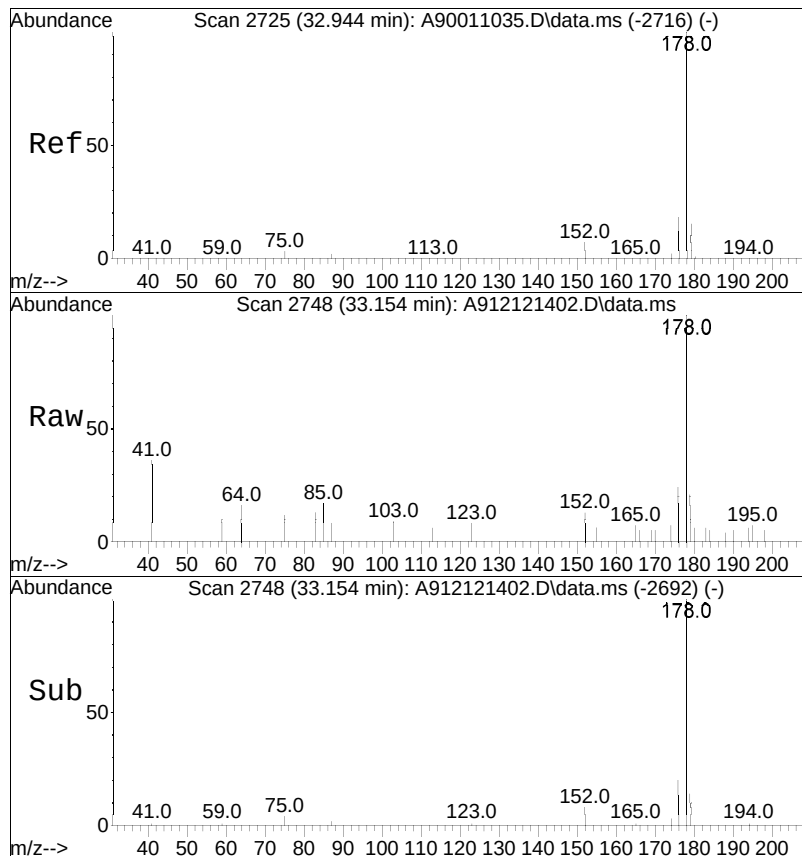




#54
 Retene
 Concen: 11.23 ng/mL
 RT: 39.937 min Scan# 3491
 Delta R.T. 0.009 min
 Lab File: A912121402.D
 Acq: 12 Dec 2014 3:05 pm

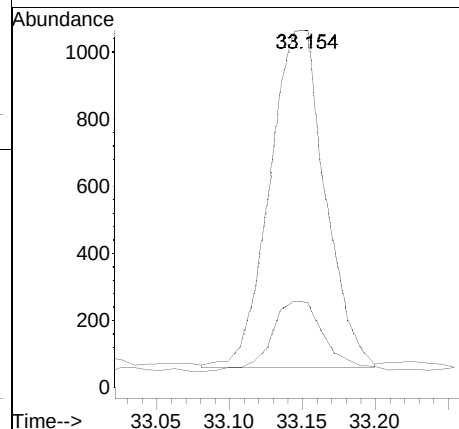
Tgt Ion	Ratio	Lower	Upper
234	100		
219	144.1	96.7	179.7

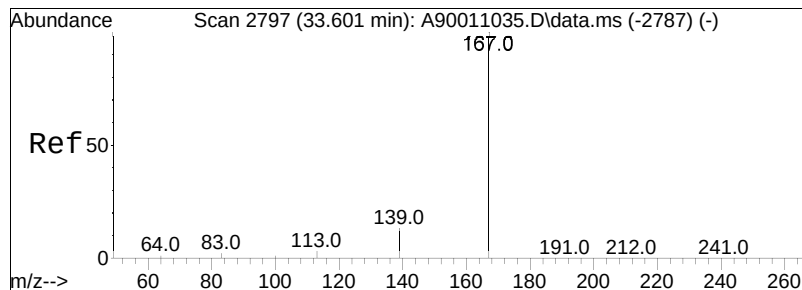




#55
 Anthracene
 Concen: 11.11 ng/mL M4
 RT: 33.154 min Scan# 2748
 Delta R.T. 0.009 min
 Lab File: A912121402.D
 Acq: 12 Dec 2014 3:05 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
176	19.5	13.4	24.8





#56

Carbazole

Concen: 10.27 ng/mL

RT: 33.811 min Scan# 2820

Delta R.T. 0.009 min

Lab File: A912121402.D

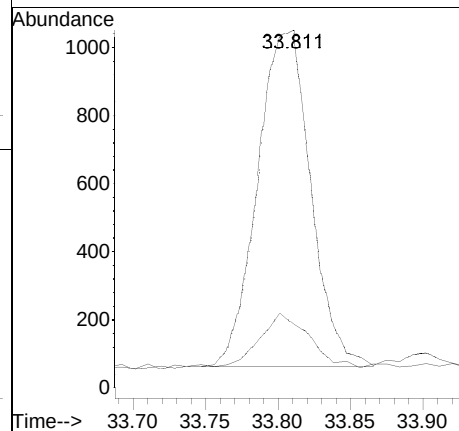
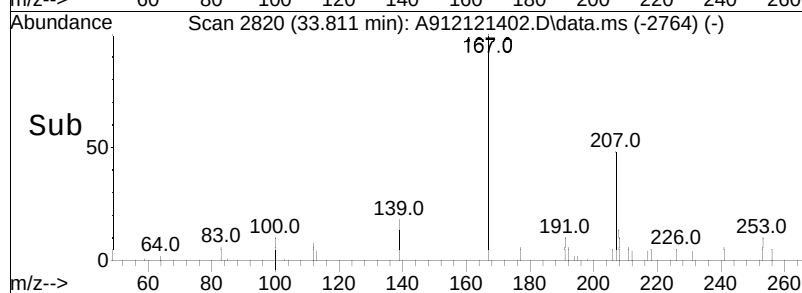
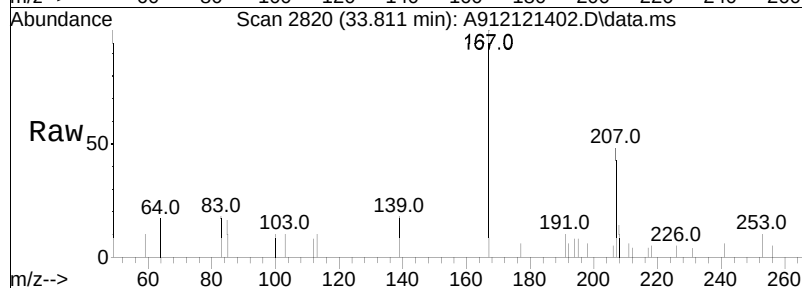
Acq: 12 Dec 2014 3:05 pm

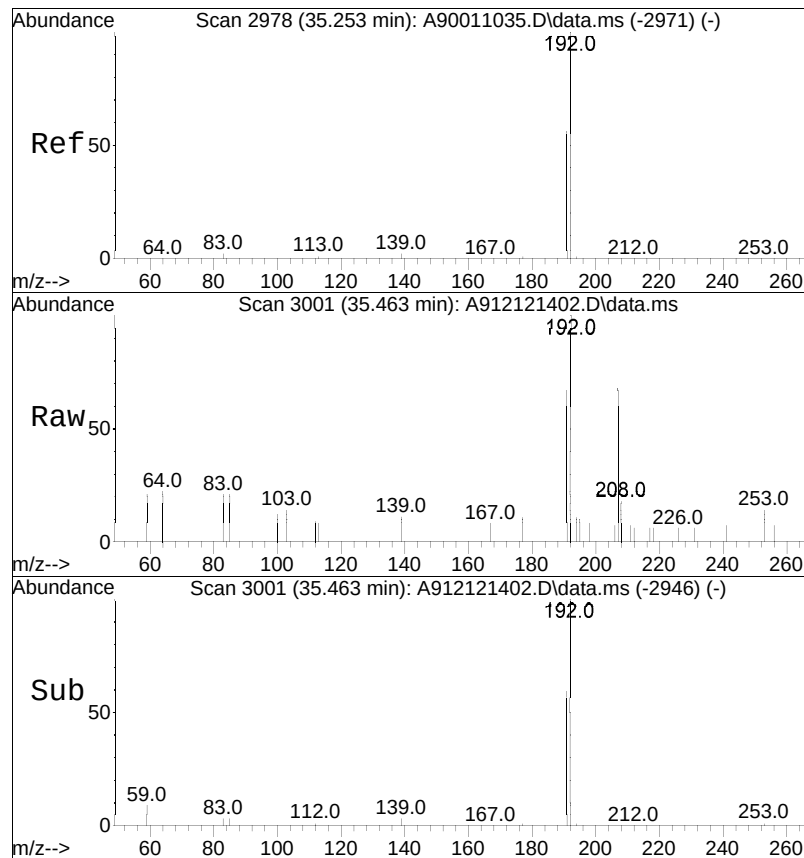
Tgt Ion: 167 Resp: 2489

Ion Ratio Lower Upper

167 100

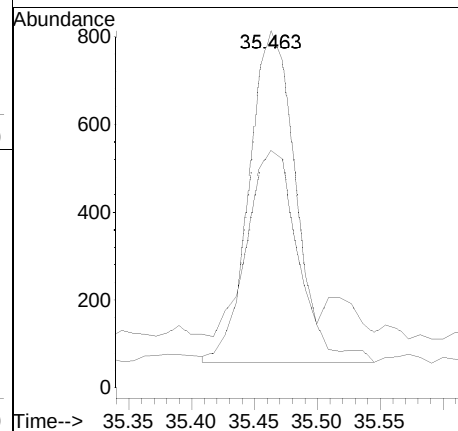
139 14.7 9.9 18.3

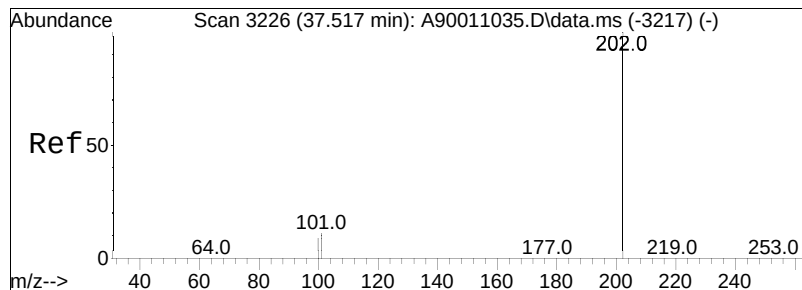




#57
 1-Methylphenanthrene
 Concen: 10.99 ng/mL
 RT: 35.463 min Scan# 3001
 Delta R.T. 0.000 min
 Lab File: A912121402.D
 Acq: 12 Dec 2014 3:05 pm

Tgt Ion:192 Resp: 1944
 Ion Ratio Lower Upper
 192 100
 191 55.1 39.8 74.0





#58

Fluoranthene

Concen: 12.07 ng/mL

RT: 37.727 min Scan# 3249

Delta R.T. 0.000 min

Lab File: A912121402.D

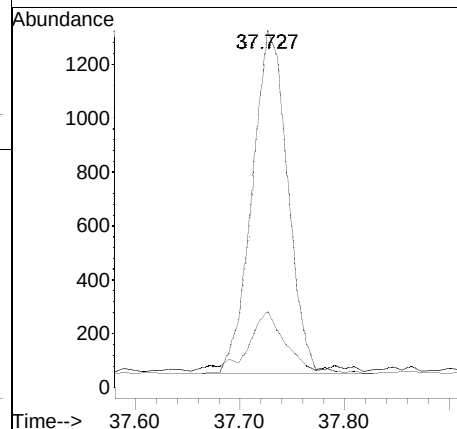
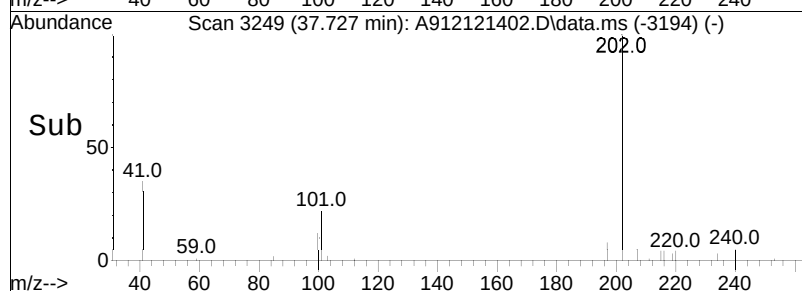
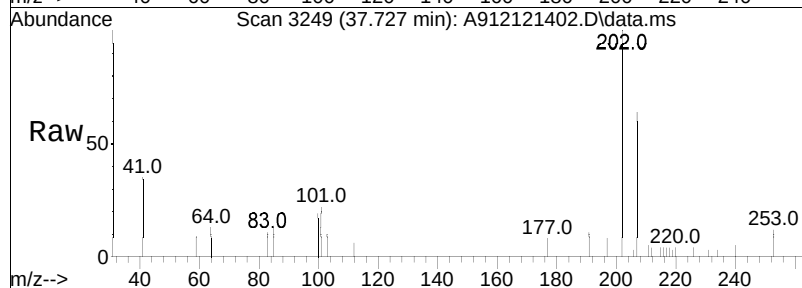
Acq: 12 Dec 2014 3:05 pm

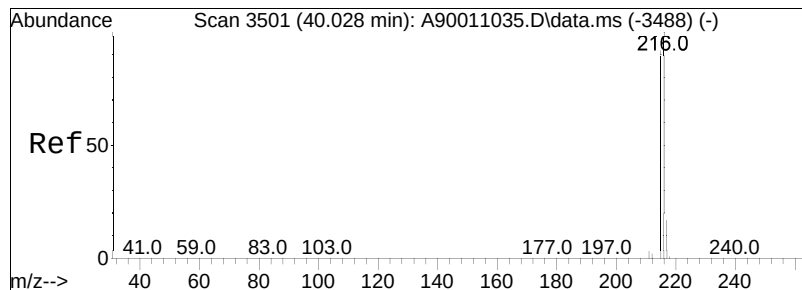
Tgt Ion: 202 Resp: 2995

Ion Ratio Lower Upper

202 100

101 16.0 11.8 22.0





#59

Benzo(b)fluorene

Concen: 11.44 ng/mL

RT: 40.238 min Scan# 3524

Delta R.T. 0.000 min

Lab File: A912121402.D

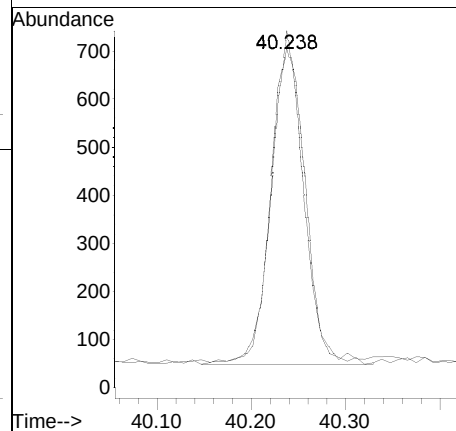
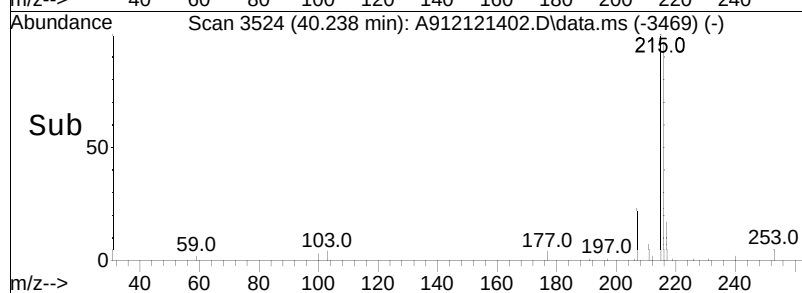
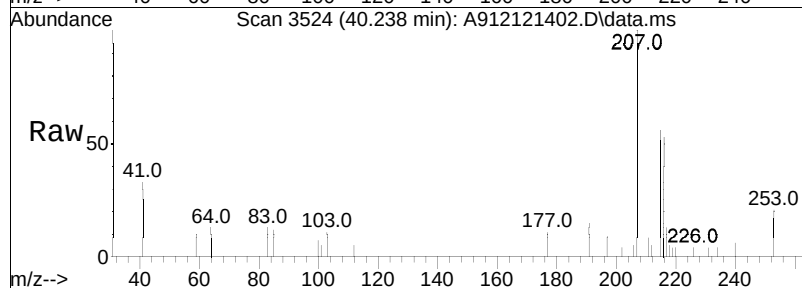
Acq: 12 Dec 2014 3:05 pm

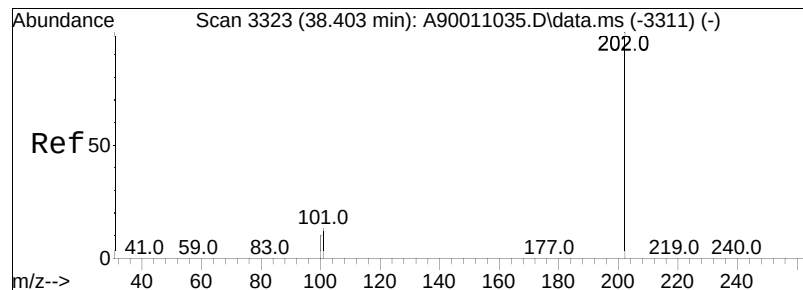
Tgt Ion:216 Resp: 1691

Ion Ratio Lower Upper

216 100

215 94.0 64.3 119.3





#60

Pyrene

Concen: 11.28 ng/mL

RT: 38.613 min Scan# 3346

Delta R.T. 0.000 min

Lab File: A912121402.D

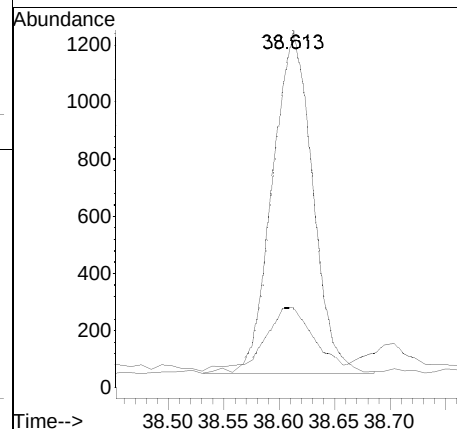
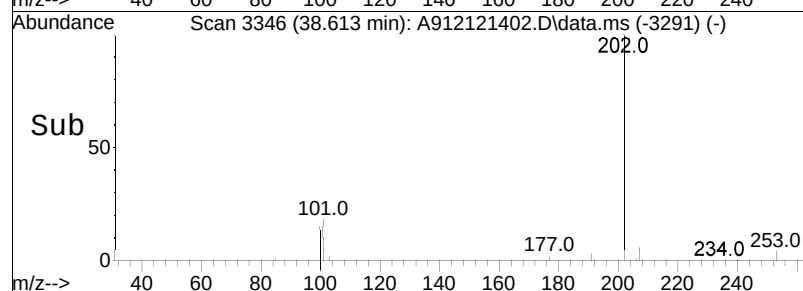
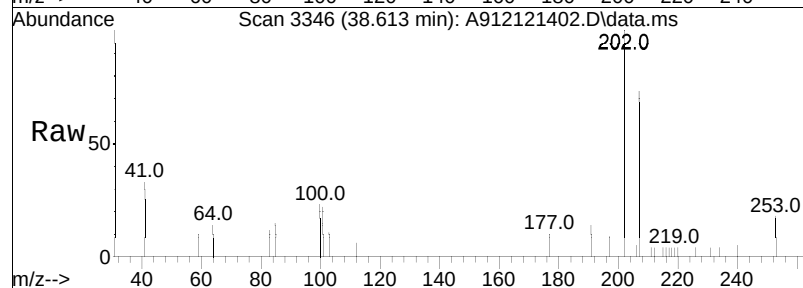
Acq: 12 Dec 2014 3:05 pm

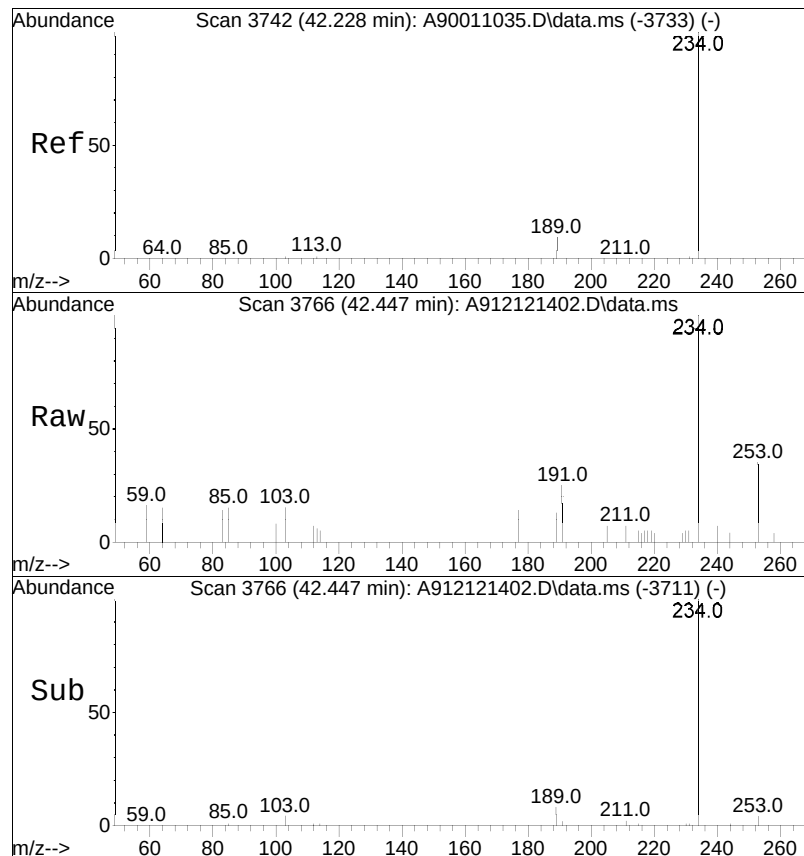
Tgt Ion: 202 Resp: 2983

Ion Ratio Lower Upper

202 100

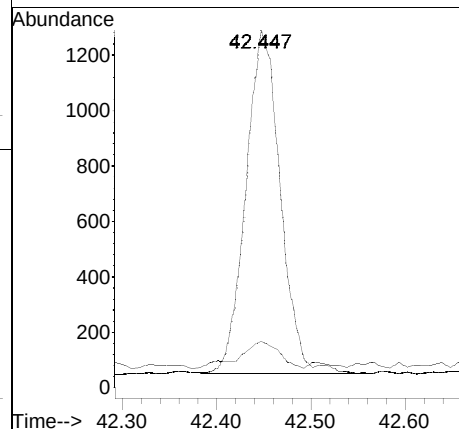
101 22.9 14.2 26.4

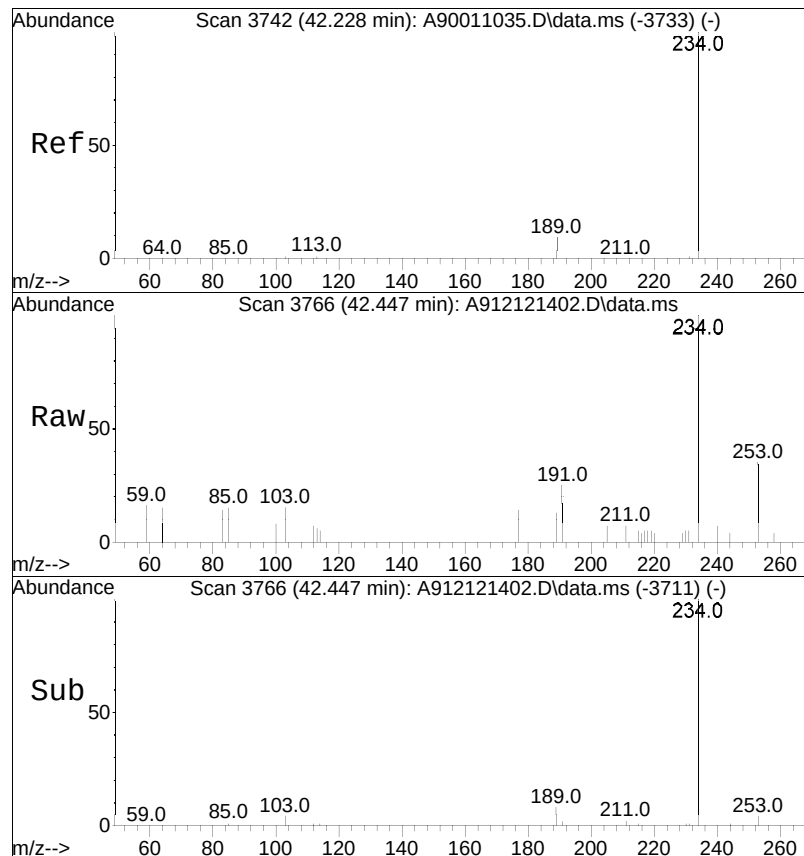




#66
 Naphthobenzothiophene
 Concen: 13.32 ng/ml
 RT: 42.447 min Scan# 3766
 Delta R.T. 0.000 min
 Lab File: A912121402.D
 Acq: 12 Dec 2014 3:05 pm

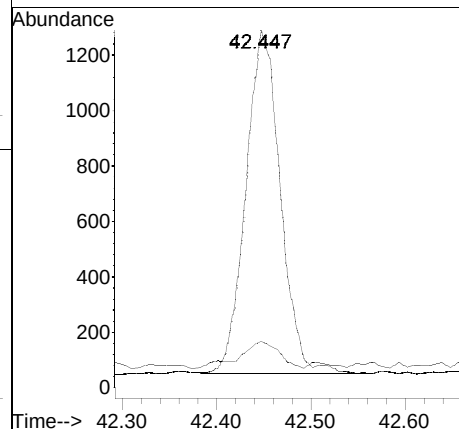
Tgt Ion	Ratio	Lower	Upper
234	100		
189	8.8	4.9	9.1

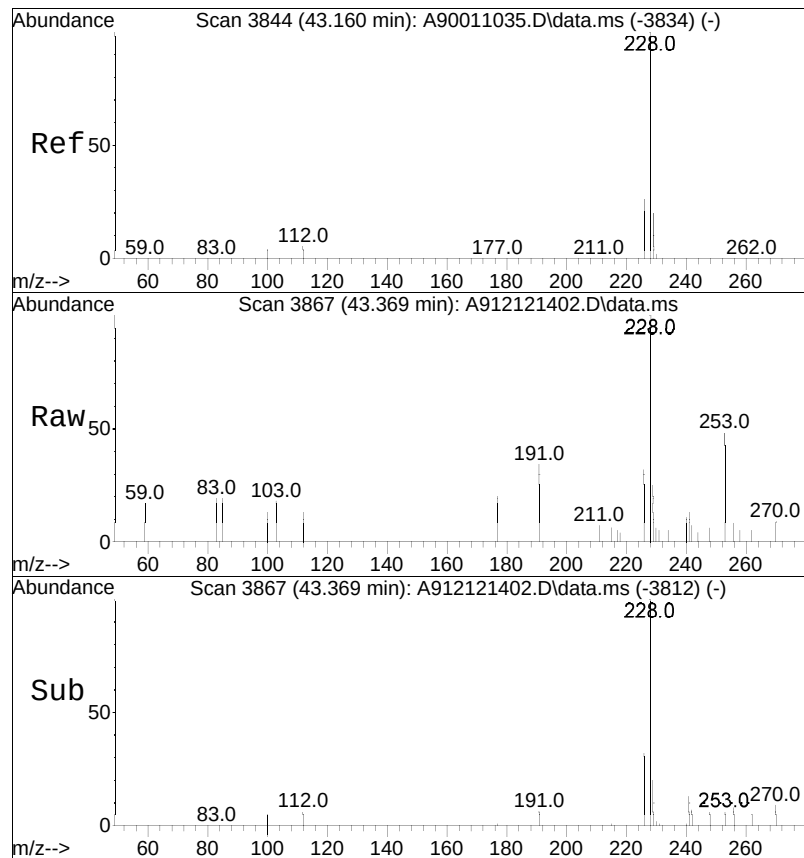




#67
 Naphthobenzothiophene-2,1-D
 Concen: 13.32 ng/mL
 RT: 42.447 min Scan# 3766
 Delta R.T. 0.000 min
 Lab File: A912121402.D
 Acq: 12 Dec 2014 3:05 pm

Tgt Ion: 234 Resp: 3122
 Ion Ratio Lower Upper
 234 100
 189 8.8 4.9 9.1





#75

Benz[a]anthracene

Concen: 12.36 ng/mL M4

RT: 43.369 min Scan# 3867

Delta R.T. 0.000 min

Lab File: A912121402.D

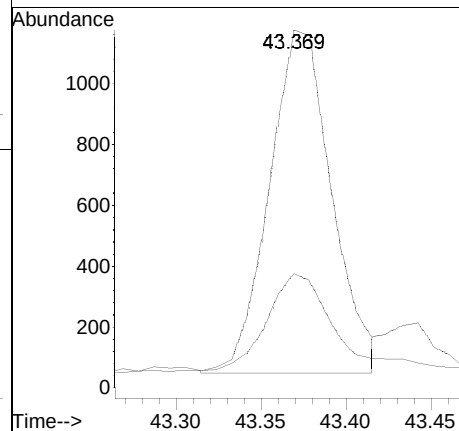
Acq: 12 Dec 2014 3:05 pm

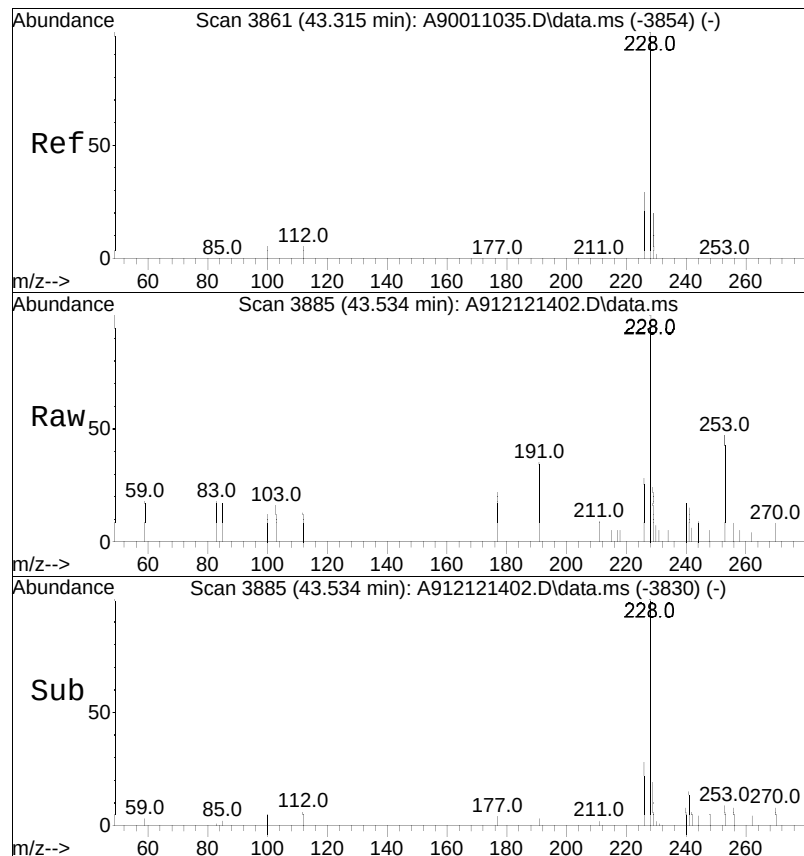
Tgt Ion:228 Resp: 2861

Ion Ratio Lower Upper

228 100

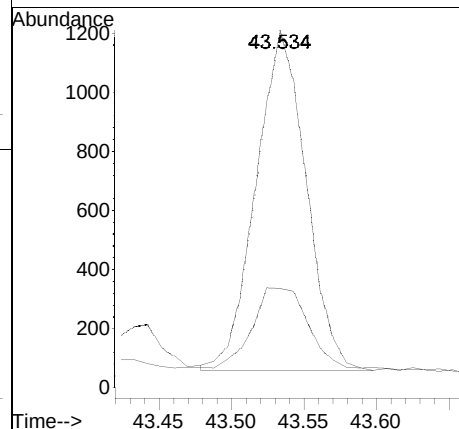
226 30.7 17.3 32.1

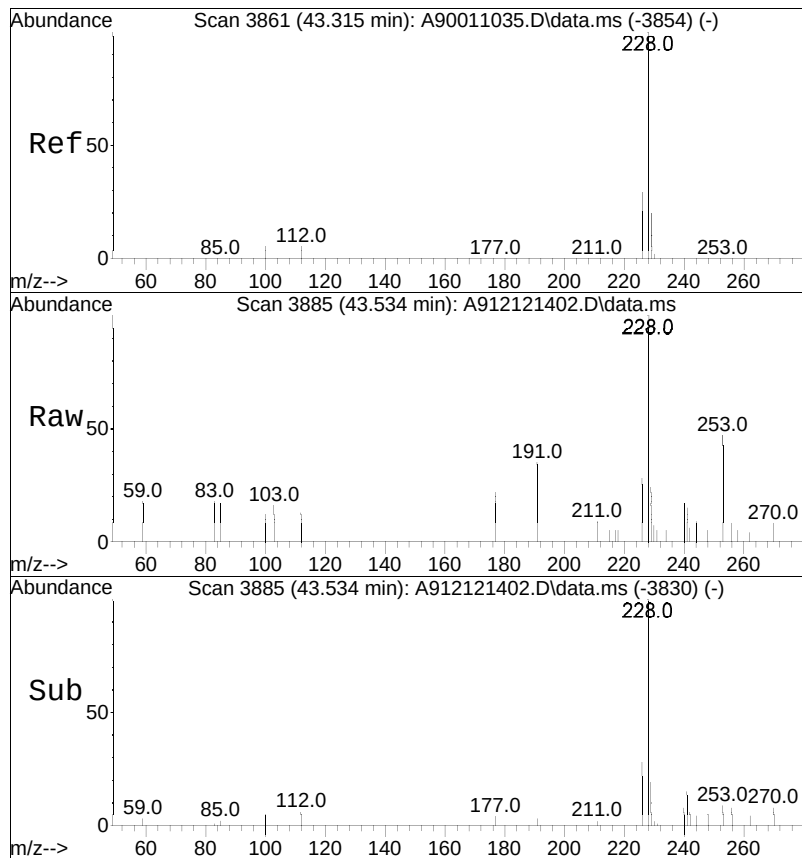




#76
 Chrysene
 Concen: 12.01 ng/mL
 RT: 43.534 min Scan# 3885
 Delta R.T. 0.000 min
 Lab File: A912121402.D
 Acq: 12 Dec 2014 3:05 pm

Tgt Ion	Ratio	Lower	Upper
228	100		
226	28.8	18.8	34.8





#77

Chrysene/Triphenylene

Concen: 12.01 ng/mL

RT: 43.534 min Scan# 3885

Delta R.T. 0.000 min

Lab File: A912121402.D

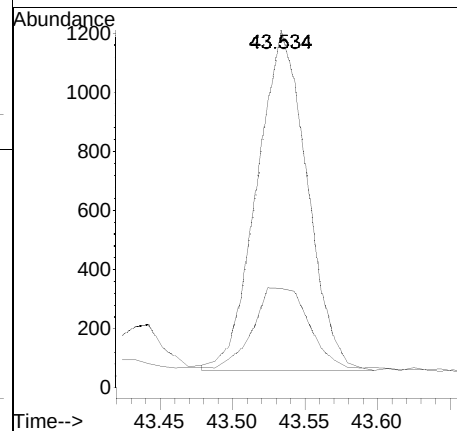
Acq: 12 Dec 2014 3:05 pm

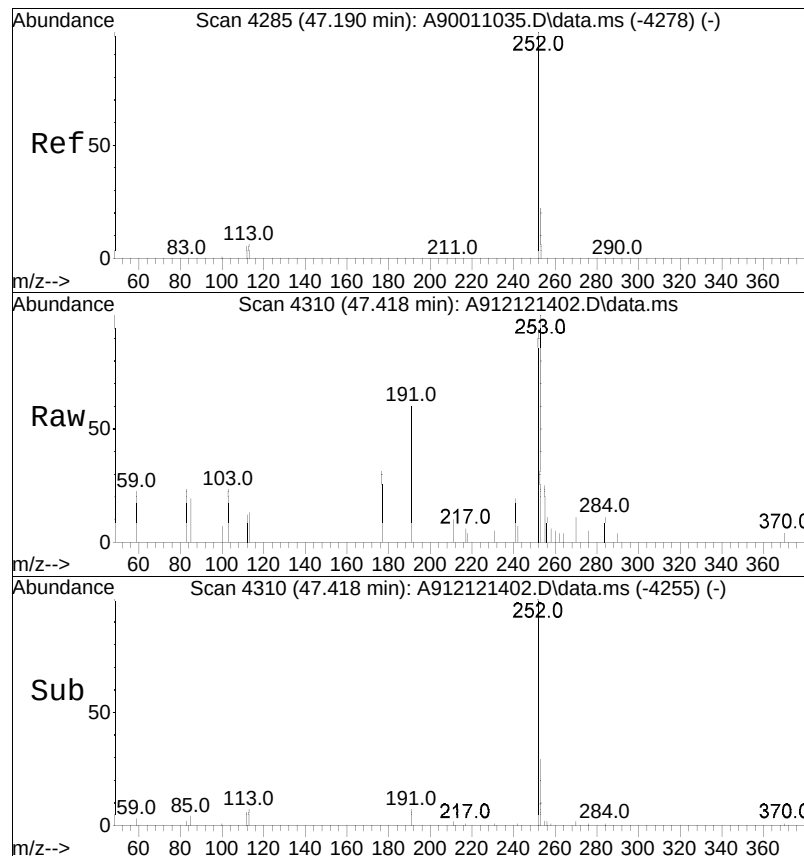
Tgt Ion:228 Resp: 2737

Ion Ratio Lower Upper

228 100

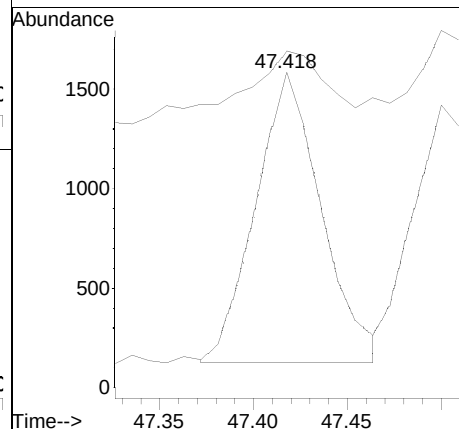
226 28.8 18.8 34.8

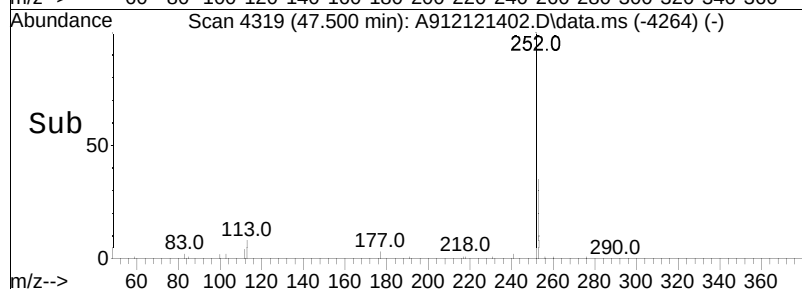
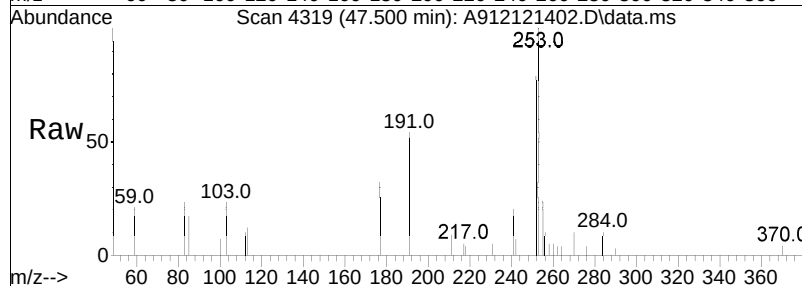
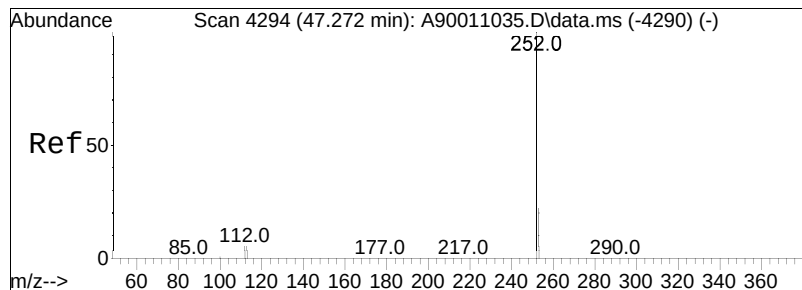




#84
Benzo[b]fluoranthene
Concen: 12.58 ng/mL M3
RT: 47.418 min Scan# 4310
Delta R.T. 0.000 min
Lab File: A912121402.D
Acq: 12 Dec 2014 3:05 pm

Tgt Ion: 252 Resp: 3551
Ion Ratio Lower Upper
252 100
253 26.8 16.4 30.4





#85

Benzo[j]+[k]fluoranthene

Concen: 12.30 ng/mL

RT: 47.500 min Scan# 4319

Delta R.T. 0.000 min

Lab File: A912121402.D

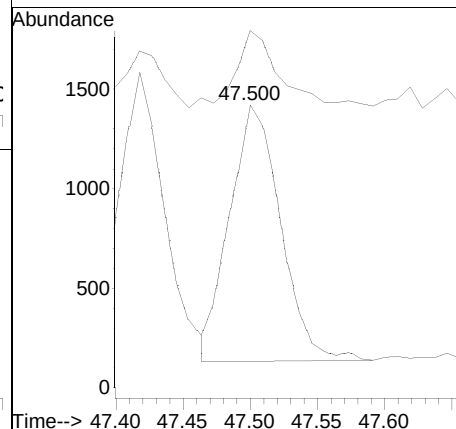
Acq: 12 Dec 2014 3:05 pm

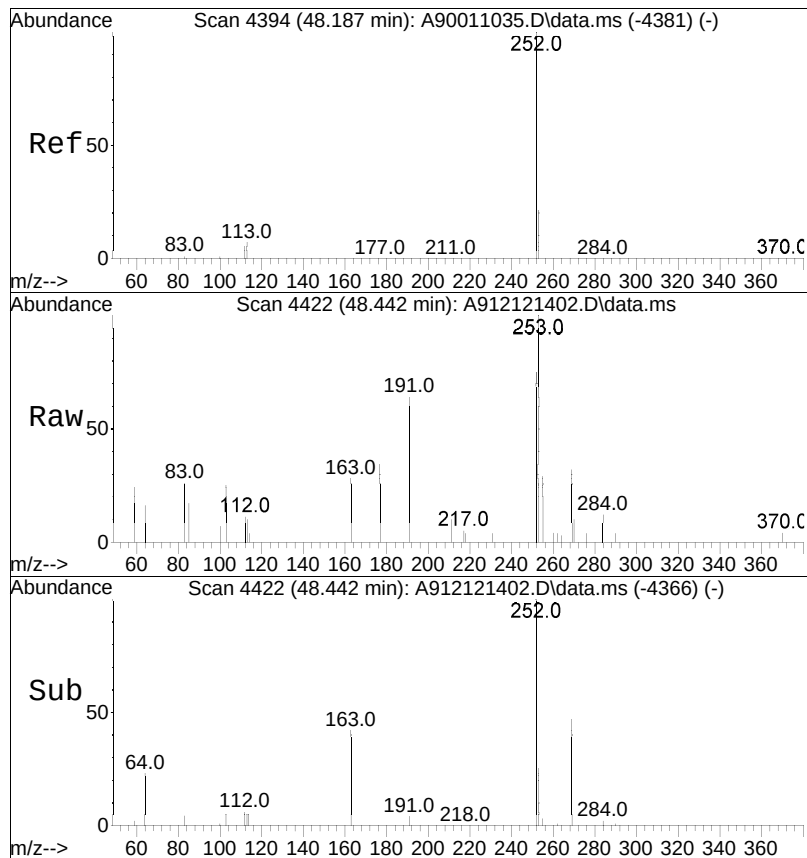
Tgt Ion: 252 Resp: 3400

Ion Ratio Lower Upper

252 100

253 28.0 16.1 29.9





#87

Benzo[e]pyrene

Concen: 11.99 ng/mL

RT: 48.442 min Scan# 4422

Delta R.T. 0.009 min

Lab File: A912121402.D

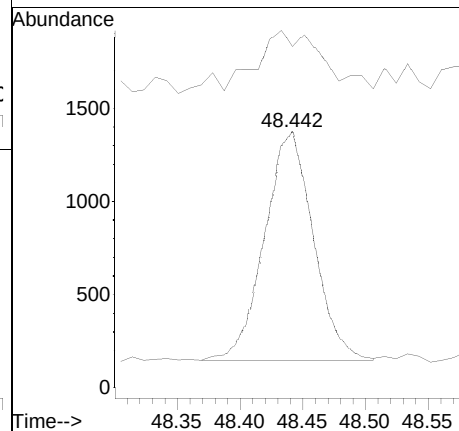
Acq: 12 Dec 2014 3:05 pm

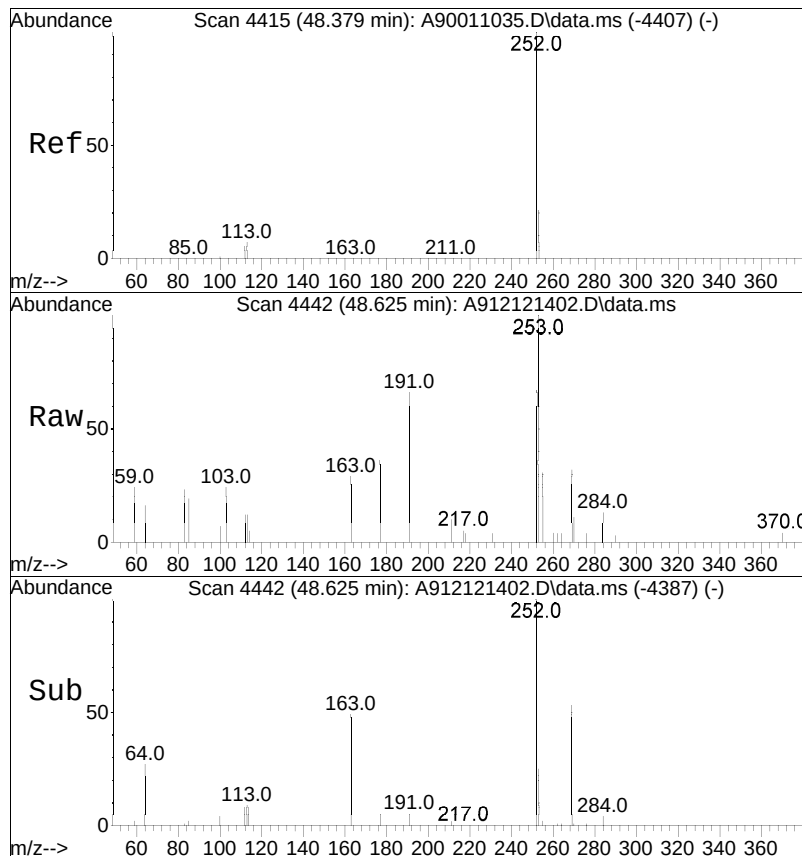
Tgt Ion: 252 Resp: 3299

Ion Ratio Lower Upper

252 100

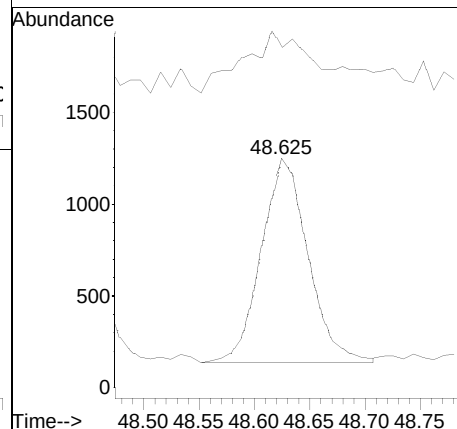
253 36.3 16.2 30.0#

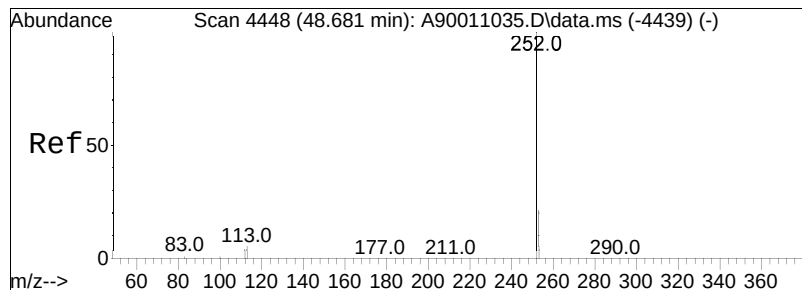




#89
Benzo[a]pyrene
Concen: 12.21 ng/mL
RT: 48.625 min Scan# 4442
Delta R.T. 0.000 min
Lab File: A912121402.D
Acq: 12 Dec 2014 3:05 pm

Tgt Ion: 252 Resp: 3252
Ion Ratio Lower Upper
252 100
253 42.1 16.4 30.6#





#90

Perylene

Concen: 12.63 ng/mL

RT: 48.945 min Scan# 4477

Delta R.T. 0.000 min

Lab File: A912121402.D

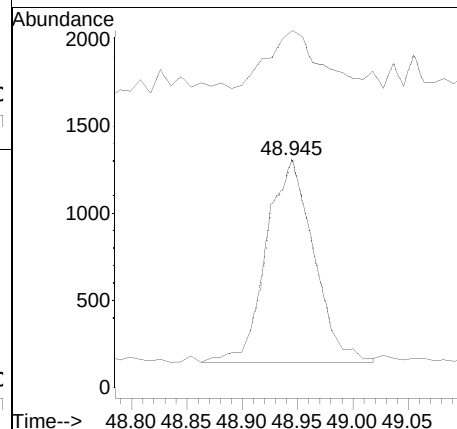
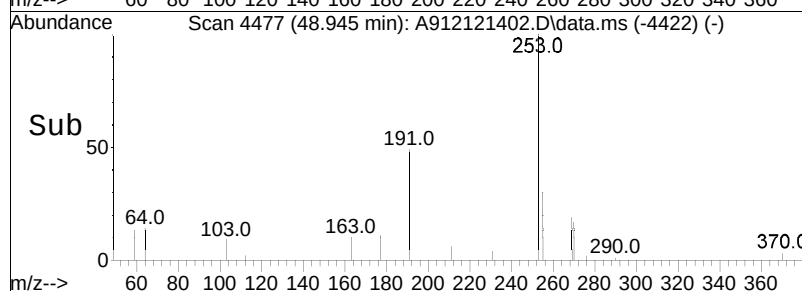
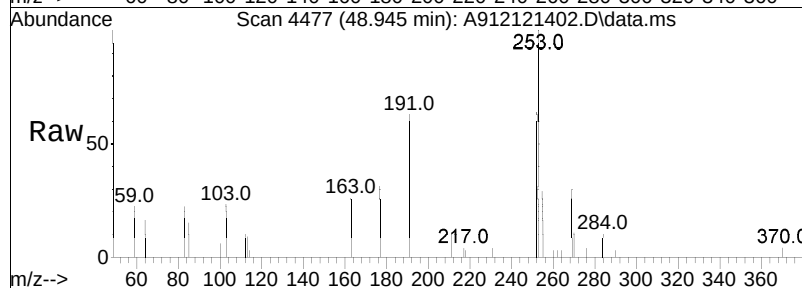
Acq: 12 Dec 2014 3:05 pm

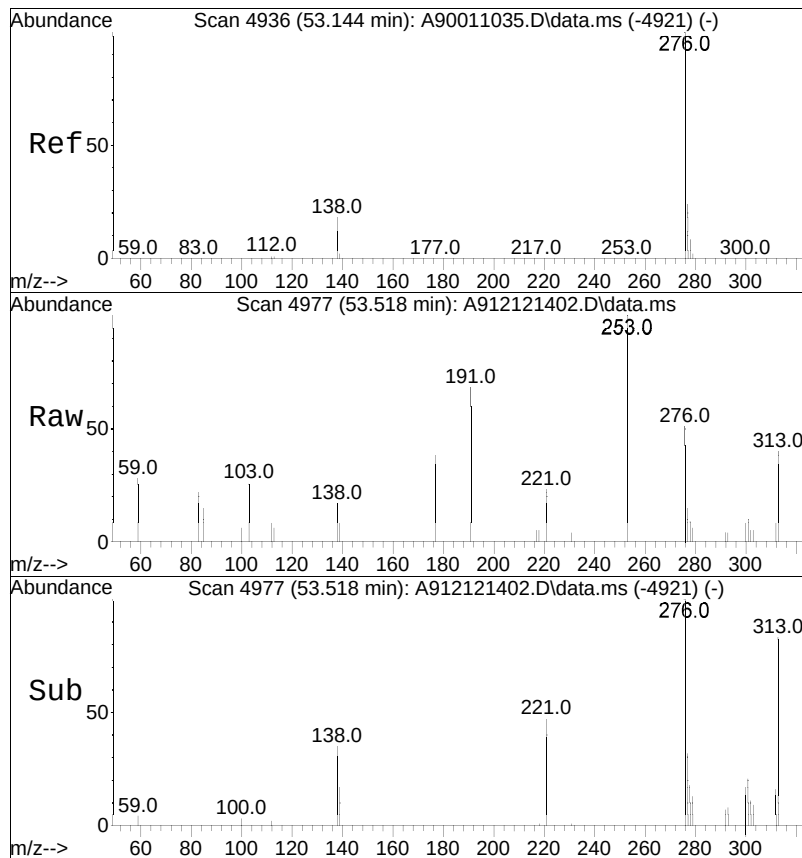
Tgt Ion: 252 Resp: 3426

Ion Ratio Lower Upper

252 100

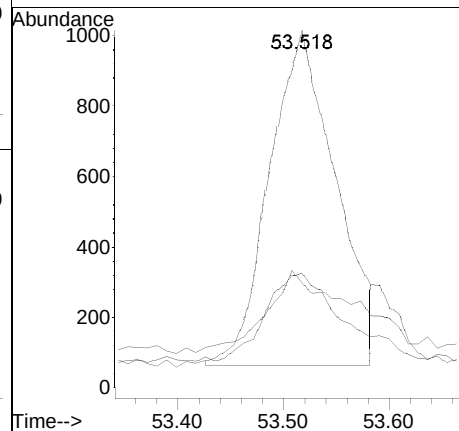
253 32.1 16.6 30.8#

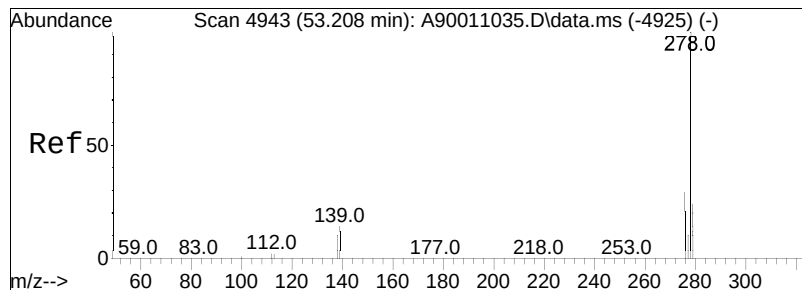




#91
 Indeno[1,2,3-cd]pyrene
 Concen: 12.07 ng/mL M3
 RT: 53.518 min Scan# 4977
 Delta R.T. 0.009 min
 Lab File: A912121402.D
 Acq: 12 Dec 2014 3:05 pm

Tgt Ion:	276	Resp:	4130
Ion Ratio	Lower	Upper	
276	100		
138	25.8	15.7	29.1
277	31.1	17.9	33.3





#92

Dibenz[ah]+[ac]anthracene

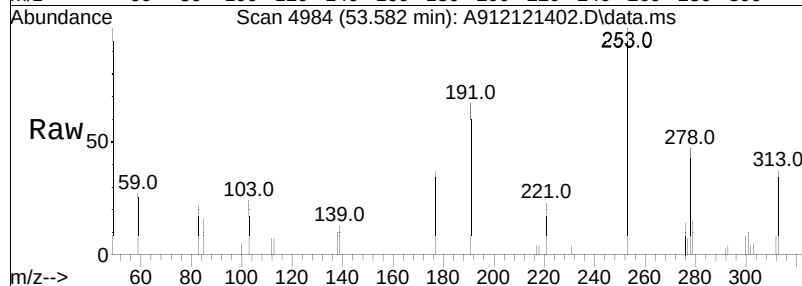
Concen: 11.70 ng/mL

RT: 53.582 min Scan# 4984

Delta R.T. 0.009 min

Lab File: A912121402.D

Acq: 12 Dec 2014 3:05 pm



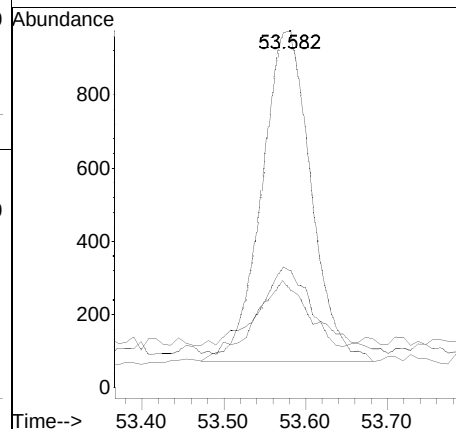
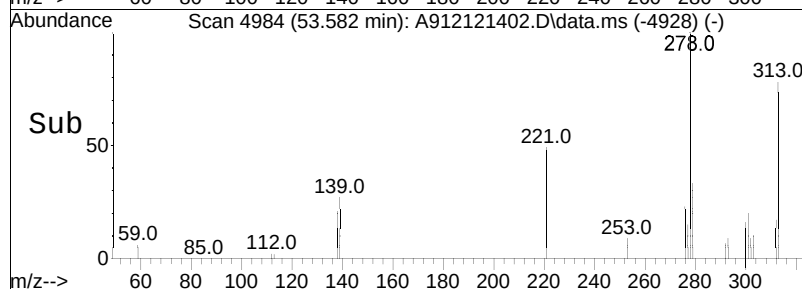
Tgt Ion: 278 Resp: 3752

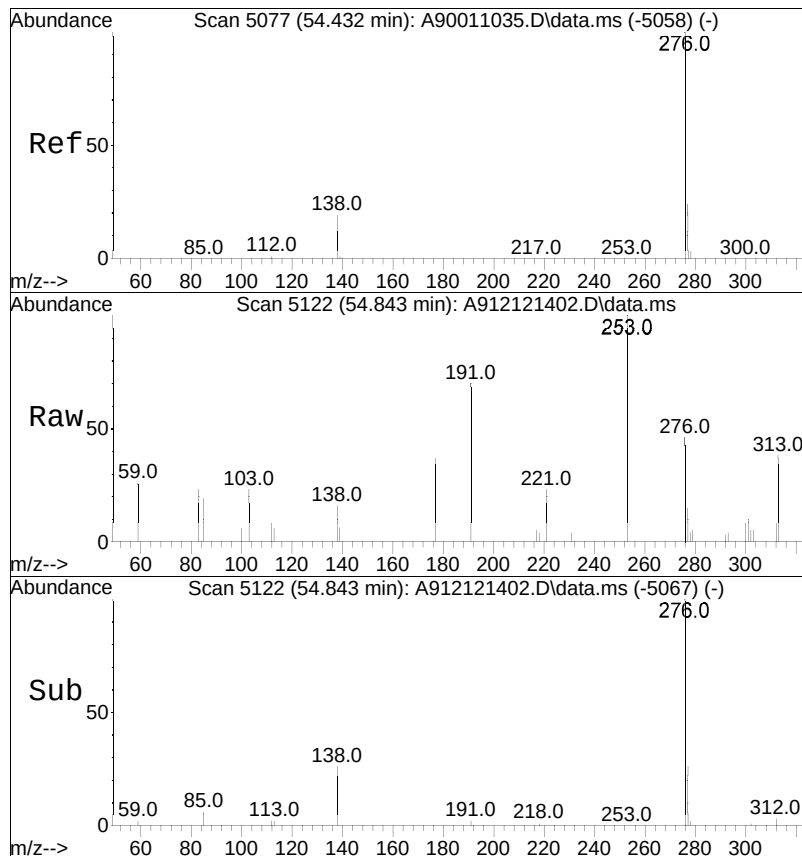
Ion Ratio Lower Upper

278 100

139 20.4 11.4 21.2

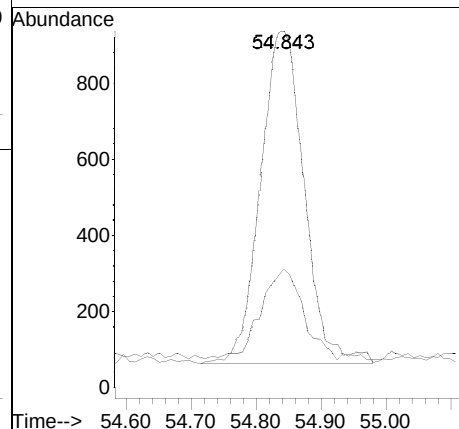
279 27.3 16.3 30.3

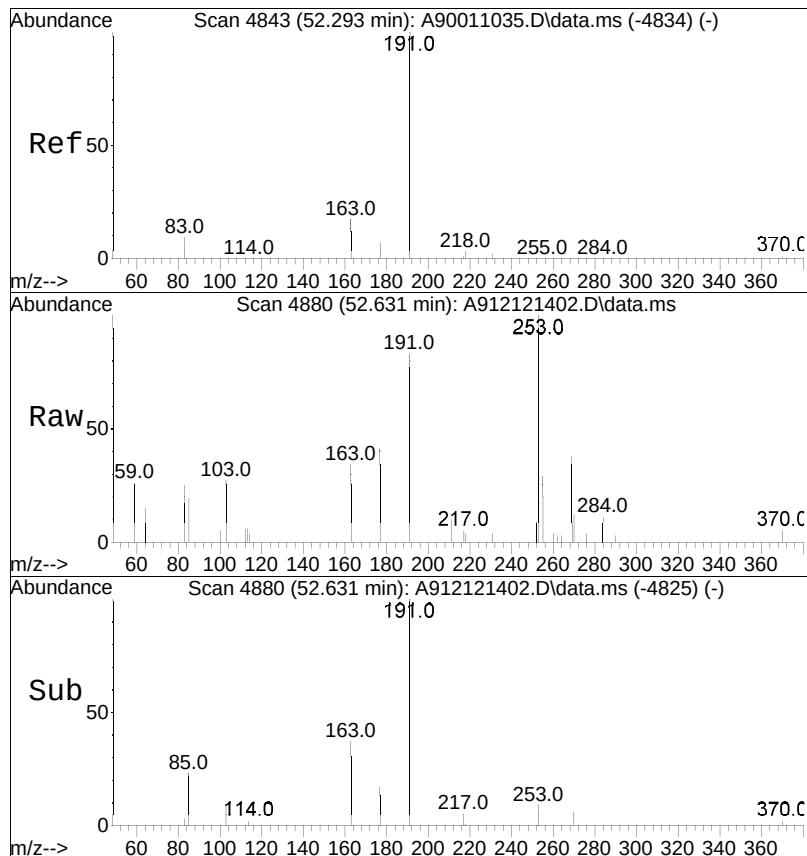




#93
 Benzo[g,h,i]perylene
 Concen: 12.23 ng/mL
 RT: 54.843 min Scan# 5122
 Delta R.T. 0.000 min
 Lab File: A912121402.D
 Acq: 12 Dec 2014 3:05 pm

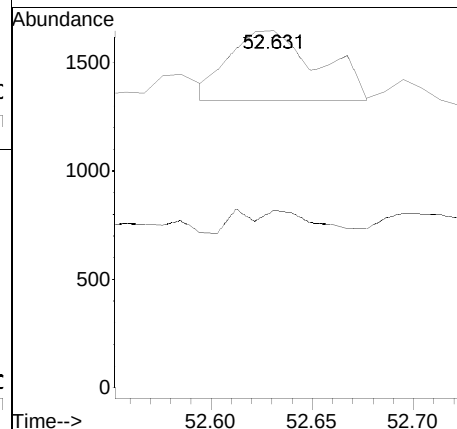
Tgt Ion	Ratio	Lower	Upper
276	100		
277	27.1	17.4	32.2

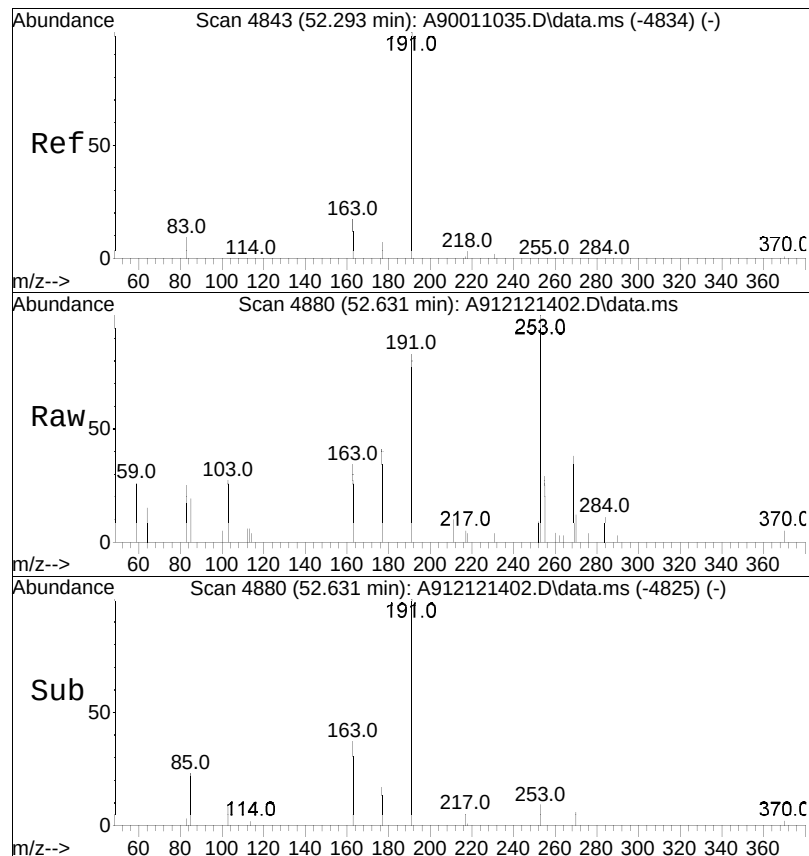




#94
Hopane (T19)
Concen: 10.94 ng/mL M4
RT: 52.631 min Scan# 4880
Delta R.T. 0.000 min
Lab File: A912121402.D
Acq: 12 Dec 2014 3:05 pm

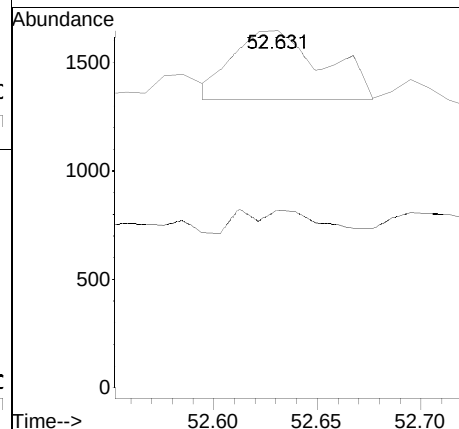
Tgt	Ion	Ratio	Lower	Upper
191	100			
177	26.6	8.5	15.9	





#95
 17a(H),21B(H)-hopane - C₃₀H₅₂
 Concen: 10.66 ng/mL M4
 RT: 52.631 min Scan# 4880
 Delta R.T. 0.000 min
 Lab File: A912121402.D
 Acq: 12 Dec 2014 3:05 pm

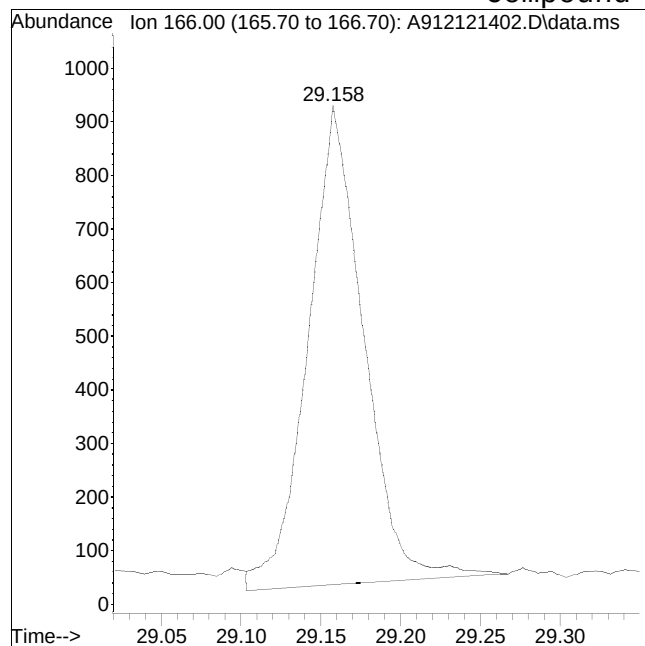
Tgt Ion	Ratio	Lower	Upper
191	100		
177	27.3	8.5	15.9#



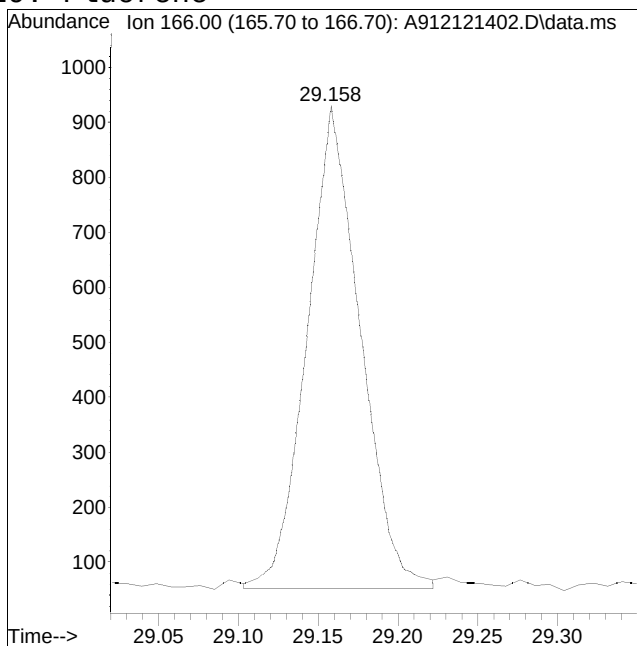
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121402.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 3:05 pm Instrument : PAH 9
Sample : i912121401 Quant Date : 12/15/2014 10:36 am

Compound #29: Fluorene



Original Peak Response = 2159



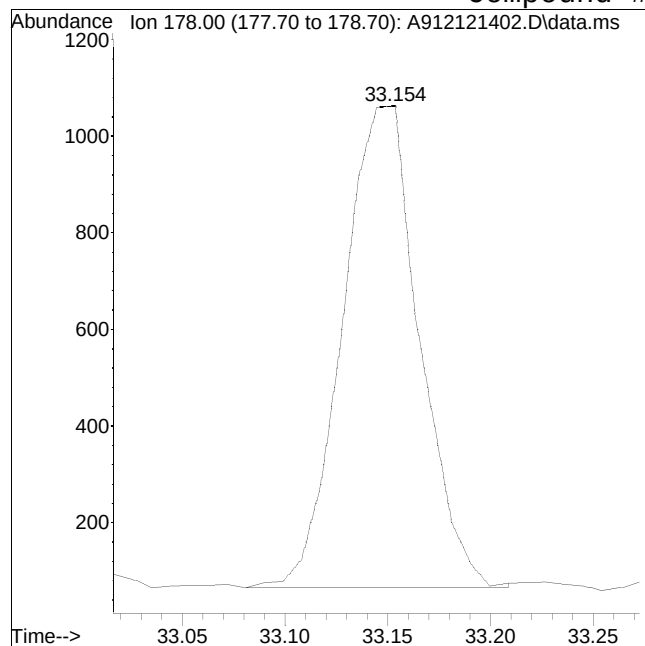
Manual Peak Response = 2024 M4

M4 = Poor automated baseline construction.

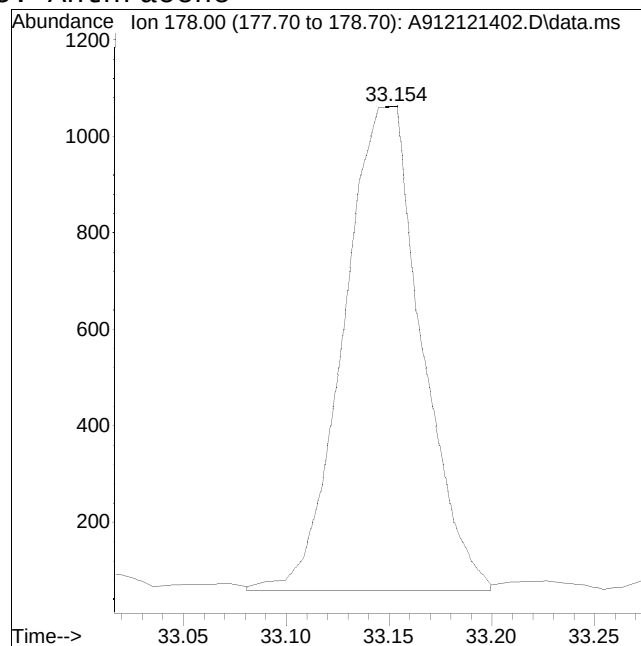
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121402.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 3:05 pm Instrument : PAH 9
Sample : i912121401 Quant Date : 12/15/2014 10:36 am

Compound #55: Anthracene



Original Peak Response = 2583



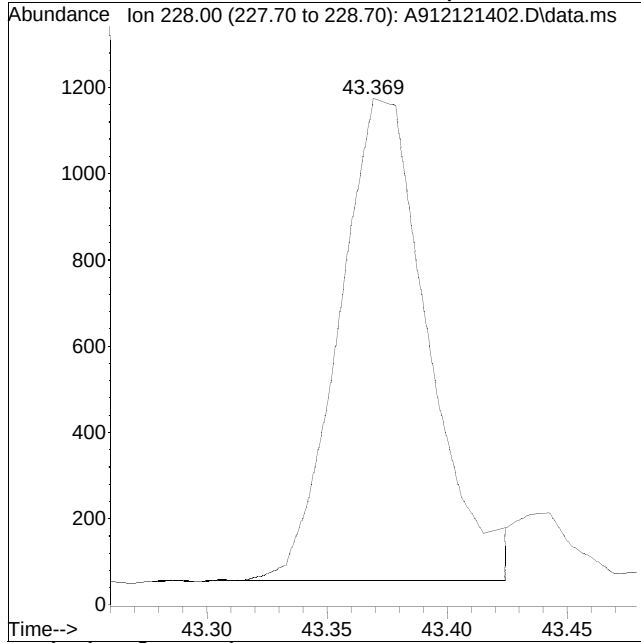
Manual Peak Response = 2635 M4

M4 = Poor automated baseline construction.

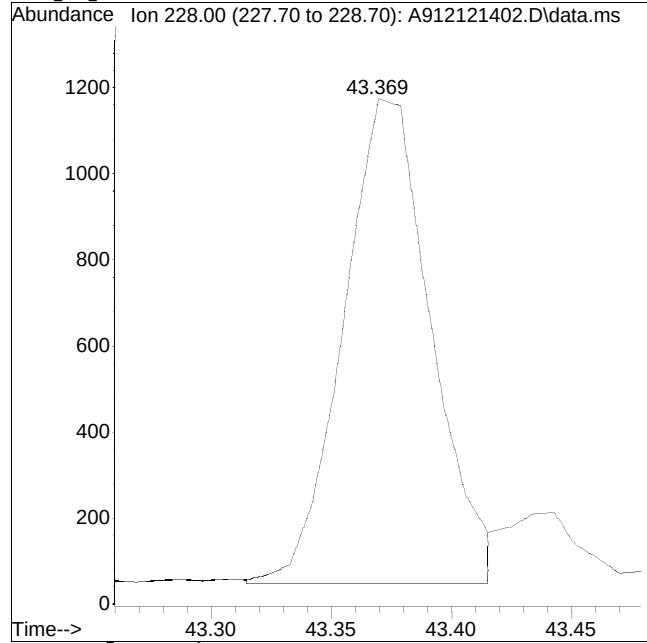
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121402.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 3:05 pm Instrument : PAH 9
Sample : i912121401 Quant Date : 12/15/2014 10:36 am

Compound #75: Benz[a]anthracene



Original Peak Response = 2886



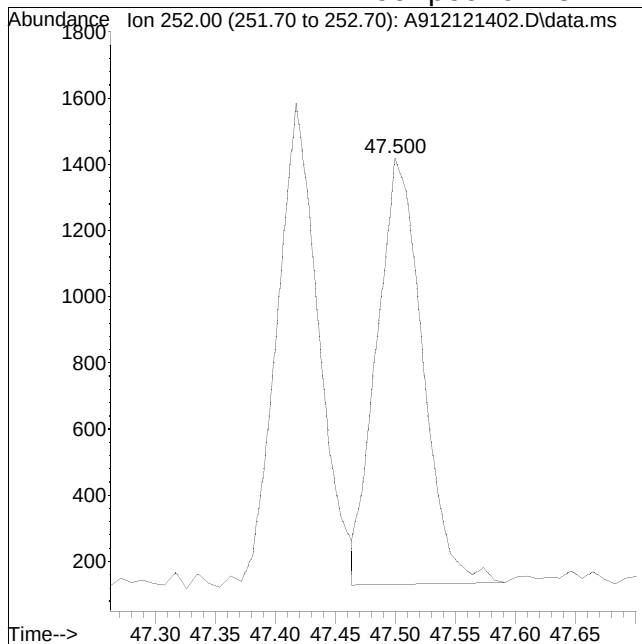
Manual Peak Response = 2861 M4

M4 = Poor automated baseline construction.

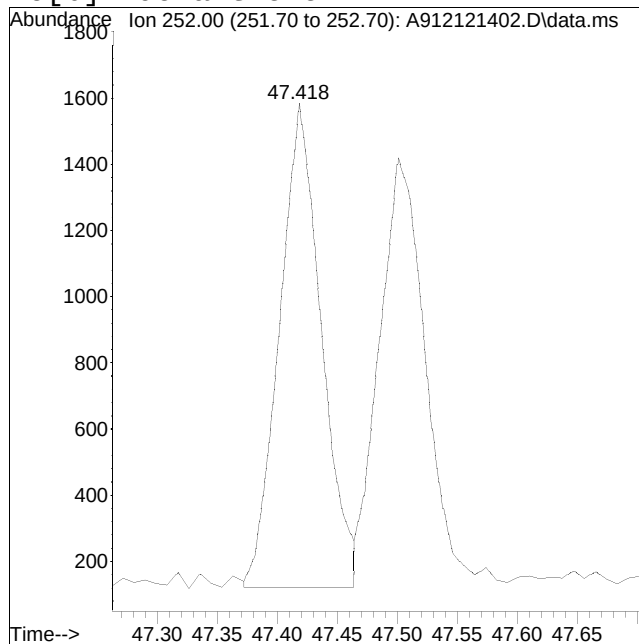
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121402.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 3:05 pm Instrument : PAH 9
Sample : i912121401 Quant Date : 12/15/2014 10:36 am

Compound #84: Benzo[b]fluoranthene



Original Peak Response = 3400



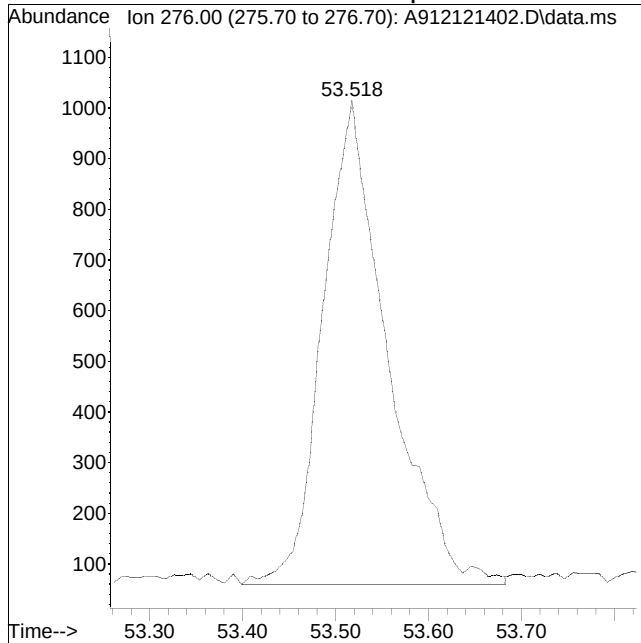
Manual Peak Response = 3551 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

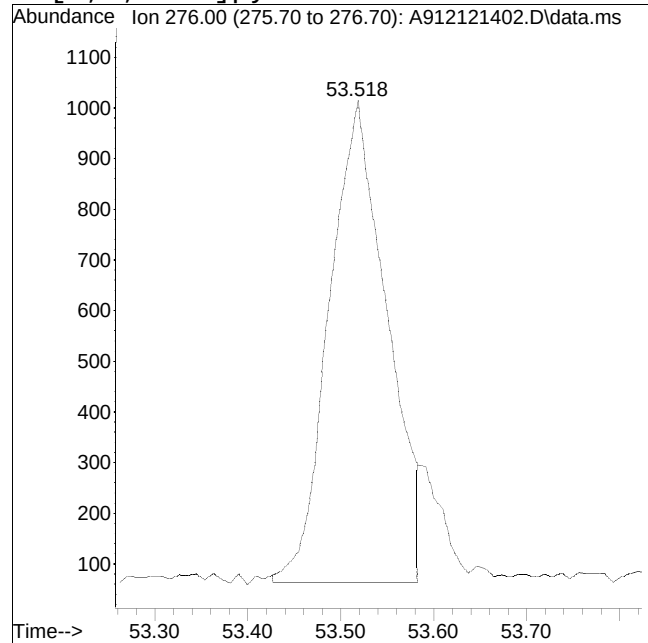
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121402.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 3:05 pm Instrument : PAH 9
Sample : i912121401 Quant Date : 12/15/2014 10:36 am

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 4646



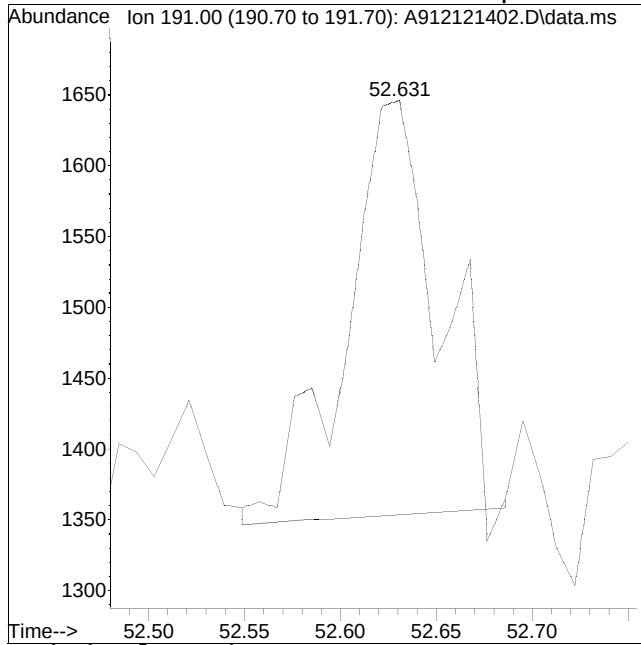
Manual Peak Response = 4130 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

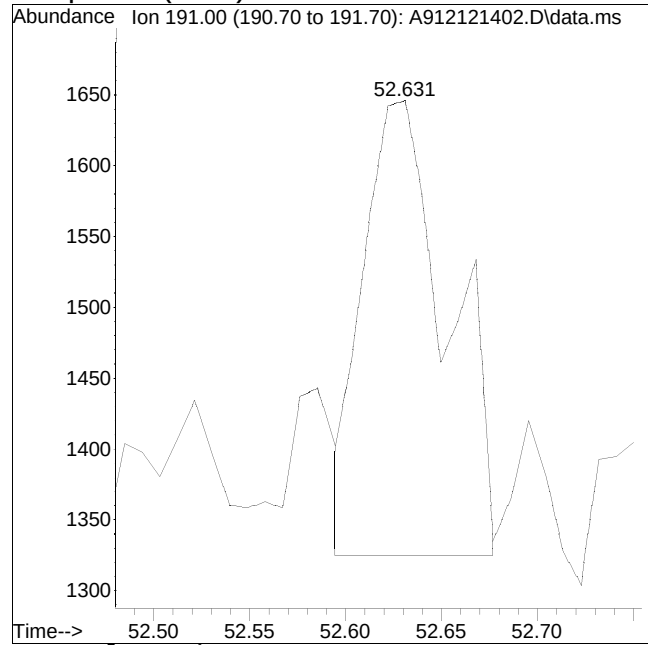
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121402.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 3:05 pm Instrument : PAH 9
Sample : i912121401 Quant Date : 12/15/2014 10:36 am

Compound #94: Hopane (T19)



Original Peak Response = 987



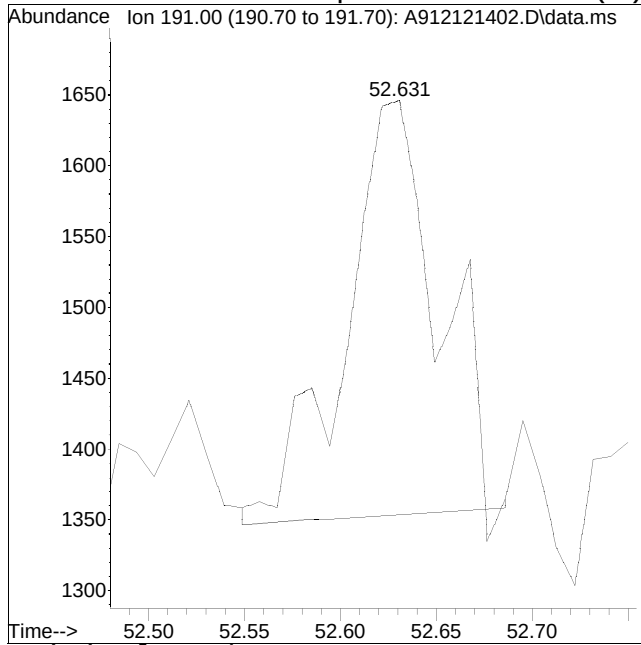
Manual Peak Response = 984 M4

M4 = Poor automated baseline construction.

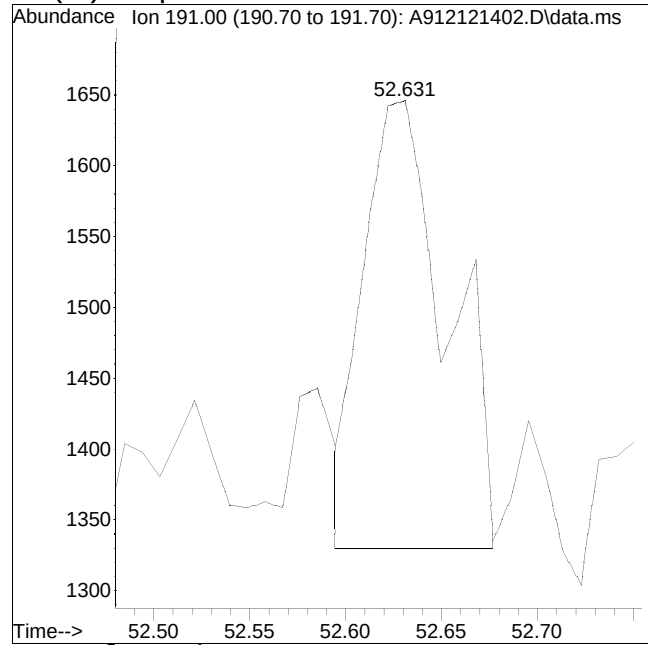
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121402.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 3:05 pm Instrument : PAH 9
Sample : i912121401 Quant Date : 12/15/2014 10:36 am

Compound #95: 17a(H),21B(H)-hopane - C30H52



Original Peak Response = 987



Manual Peak Response = 959 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Data File : A912121403.D
 Acq On : 12 Dec 2014 4:29 pm
 Operator : PAH9:SR
 Sample : i912121402
 Misc : WG749024,frau67 25 ng/mL
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 16 10:49:52 2014
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 10:35:44 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.022	164	74165	500.000	ng/mL	0.00
74) Chrysene-d12	43.433	240	139180	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	20.069	136	8771	29.722	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	2.97%#		
42) Phenanthrene-d10	32.880	188	6441	28.225	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	2.82%#		
83) Benzo[b]fluoranthene-d12	47.335	264	7386	27.200	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	2.72%#		
88) Benzo[a]pyrene-d12	48.542	264	6718	26.891	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	2.69%#		
129) 5B(H)Cholane - Surr	44.063	217	1103	24.112	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	2.41%#		
Target Compounds						
						Qvalue
3) trans-Decalin	16.720	138	870	12.964	ng/mL	100
4) cis-Decalin	17.942	138	667	12.813	ng/mL	100
10) Naphthalene	20.142	128	10794	34.091	ng/mL	100
16) 2-Methylnaphthalene	22.834	142	5594	28.517	ng/mL	100
17) 1-Methylnaphthalene	23.253	142	5495	28.769	ng/mL	100
18) Benzothiophene	20.361	134	9761	36.408	ng/mL	100
23) Biphenyl	24.704	154	7003	28.255	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.316	156	4540	26.454	ng/mL	100
25) Dibenzofuran	27.789	168	7414	29.006	ng/mL	98
26) Acenaphthylene	26.411	152	8154	27.087	ng/mL	100
27) Acenaphthene	27.150	153	5065	27.319	ng/mL	97
28) 2,3,5-Trimethylnaphthalen	28.692	170	4198	27.997	ng/mL	99
29) Fluorene	29.157	166	5537	26.942	ng/mL	100
33) Dibenzothiophene	32.478	184	8407	31.359	ng/mL	100
43) Phenanthrene	32.962	178	7833	27.568	ng/mL	99
54) Retene	39.927	234	1971	26.386	ng/mL	91
55) Anthracene	33.144	178	6943M4	26.580	ng/mL	
56) Carbazole	33.801	167	6630	24.846	ng/mL	99
57) 1-Methylphenanthrene	35.463	192	5060	25.973	ng/mL	97
58) Fluoranthene	37.727	202	7755	28.383	ng/mL	96
59) Benzo(b)fluorene	40.238	216	4445	27.322	ng/mL	99
60) Pyrene	38.612	202	7870	27.031	ng/mL	98
66) Naphthobenzothiophene	42.447	234	8389	32.521	ng/mL	98
67) Naphthobenzothiophene-2,1	42.447	234	8389	32.521	ng/mL	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Data File : A912121403.D
 Acq On : 12 Dec 2014 4:29 pm
 Operator : PAH9:SR
 Sample : i912121402
 Misc : WG749024,frau67 25 ng/mL
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 16 10:49:52 2014
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 10:35:44 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.369	228	7394M3	29.200	ng/mL	
76)	Chrysene	43.533	228	7473M4	29.989	ng/mL	
77)	Chrysene/Triphenylene	43.533	228	7458M4	29.929	ng/mL	
84)	Benzo[b]fluoranthene	47.417	252	9175	29.720	ng/mL	91
85)	Benzo[j]+[k]fluoranthene	47.500	252	8735	28.903	ng/mL	94
87)	Benzo[e]pyrene	48.442	252	8816	29.305	ng/mL	89
89)	Benzo[a]pyrene	48.625	252	8175	28.061	ng/mL	88
90)	Perylene	48.945	252	8715	29.364	ng/mL	96
91)	Indeno[1,2,3-cd]pyrene	53.509	276	10793M3	28.850	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.572	278	10138	28.896	ng/mL	97
93)	Benzo[g,h,i]perylene	54.834	276	10064	27.947	ng/mL	95
94)	Hopane (T19)	52.631	191	2235	22.719	ng/mL	97
95)	17a(H),21B(H)-hopane - C3	52.631	191	2235	22.719	ng/mL	97

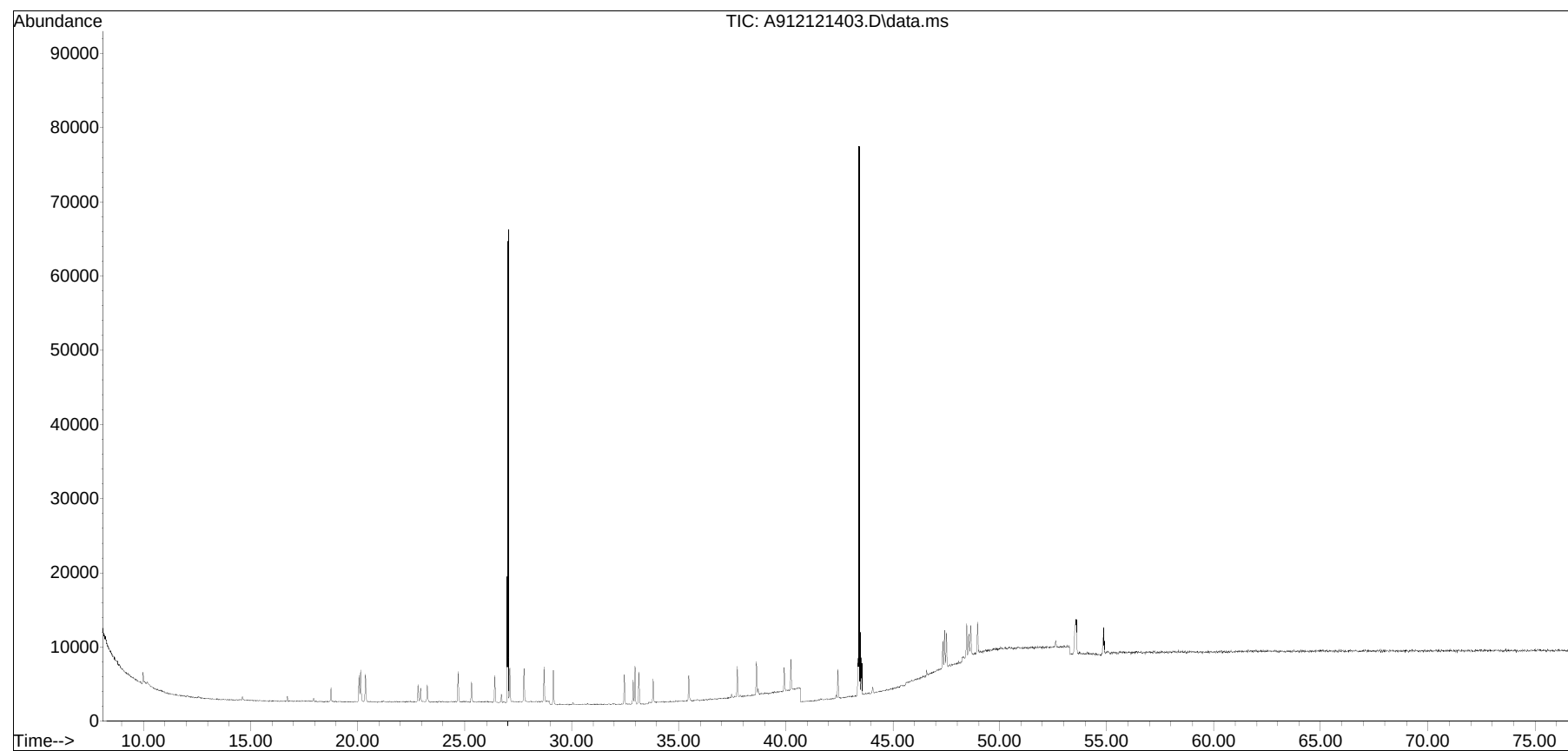
(#) = qualifier out of range (m) = manual integration (+) = signals summed

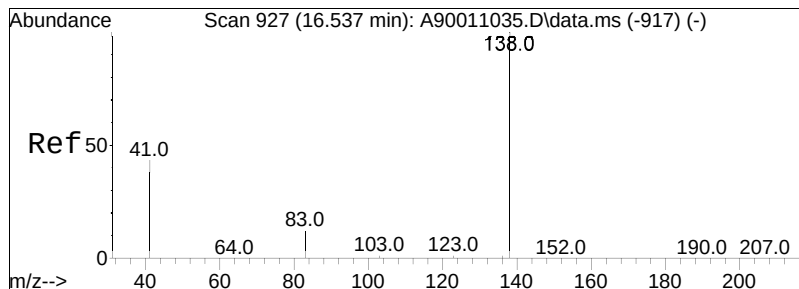
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC12\
Data File : A912121403.D
Acq On : 12 Dec 2014 4:29 pm
Operator : PAH9:SR
Sample : i912121402
Misc : WG749024,frau67 25 ng/mL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 16 10:49:52 2014
Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 15 10:35:44 2014
Response via : Initial Calibration

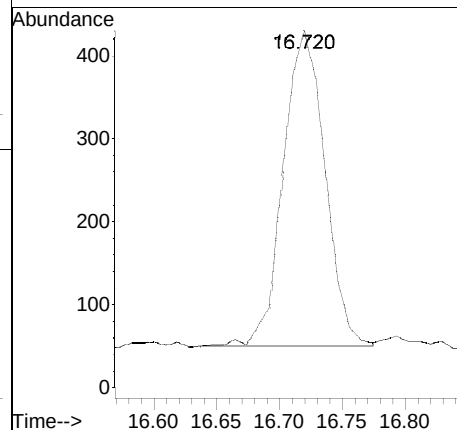
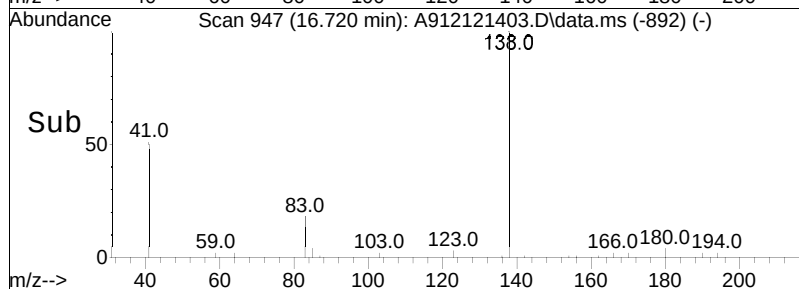
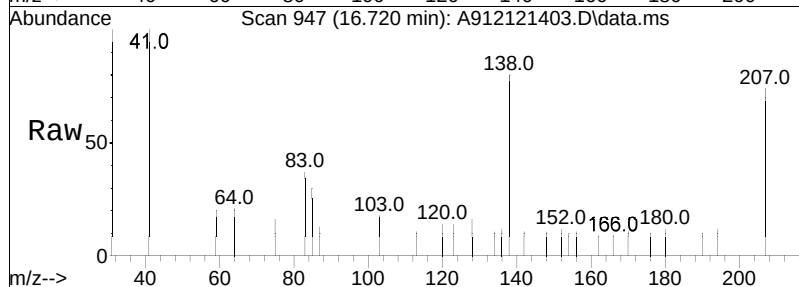
Sub List : ICAL_CCALT_REV2 - CC with five surrogates

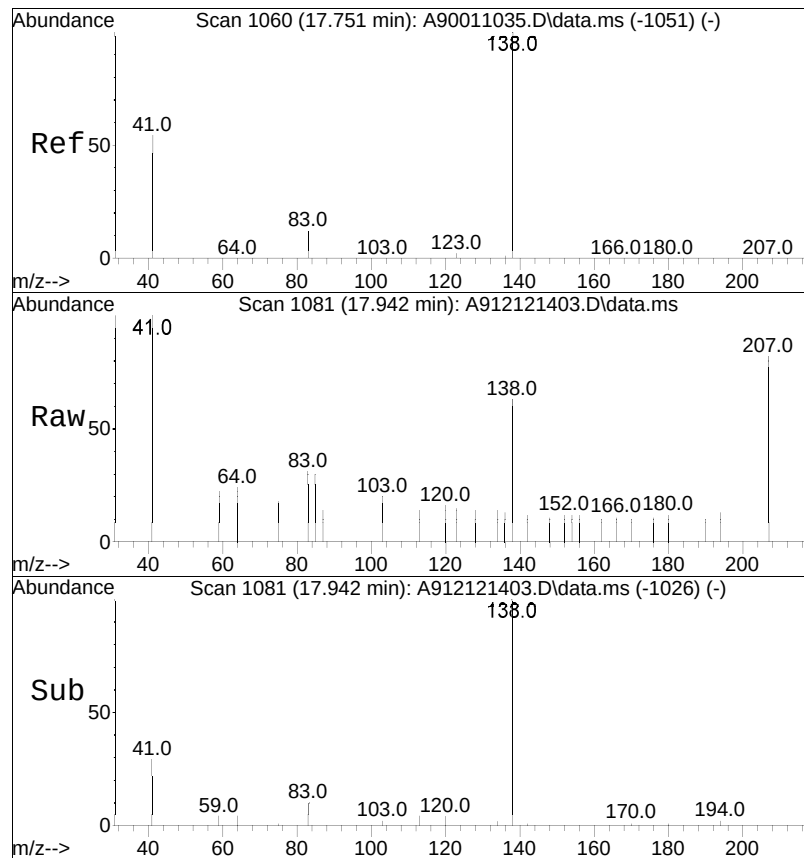




#3
trans-Decalin
Concen: 12.96 ng/mL
RT: 16.720 min Scan# 947
Delta R.T. -0.000 min
Lab File: A912121403.D
Acq: 12 Dec 2014 4:29 pm

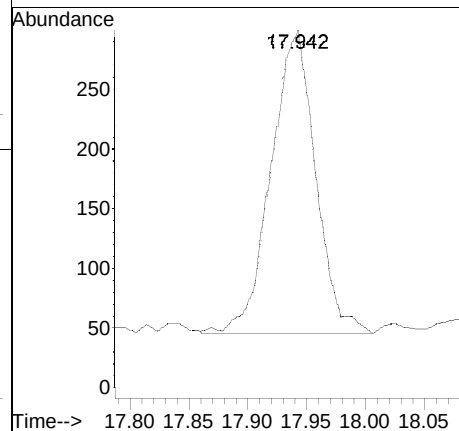
Tgt Ion:138 Resp: 870

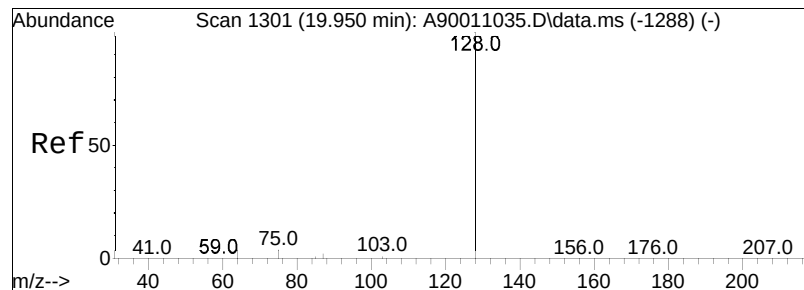




#4
 cis-Decalin
 Concen: 12.81 ng/mL
 RT: 17.942 min Scan# 1081
 Delta R.T. -0.000 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm

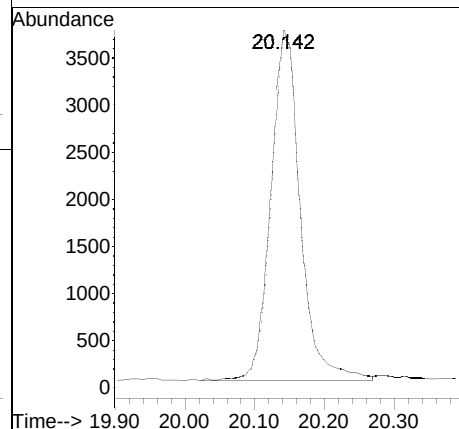
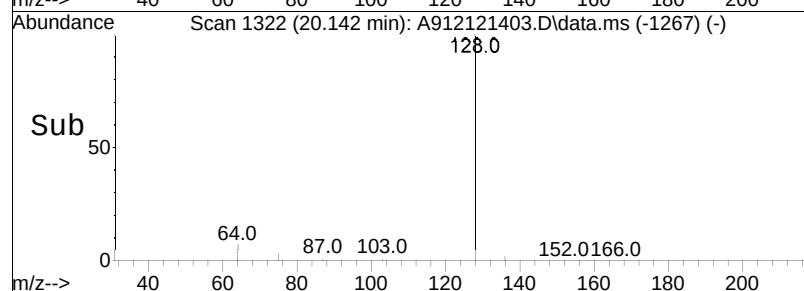
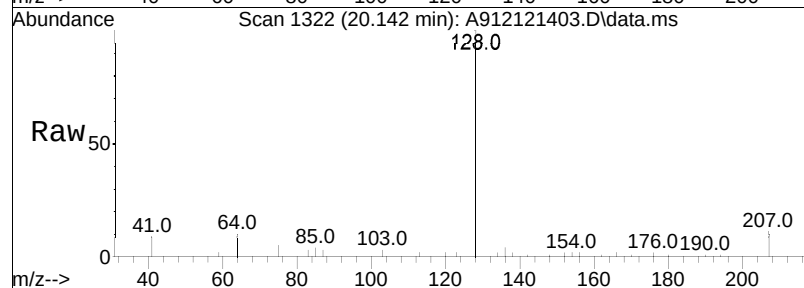
Tgt Ion:138 Resp: 667

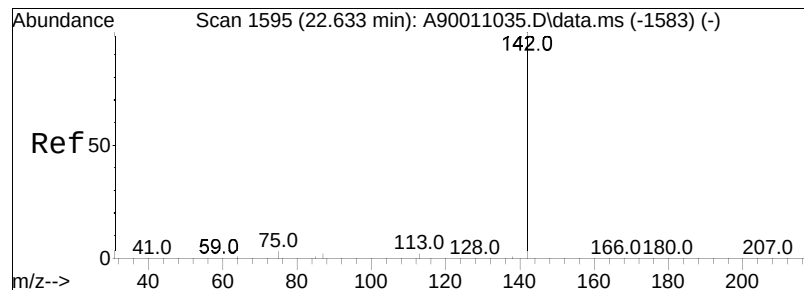




#10
Naphthalene
Concen: 34.09 ng/mL
RT: 20.142 min Scan# 1322
Delta R.T. -0.000 min
Lab File: A912121403.D
Acq: 12 Dec 2014 4:29 pm

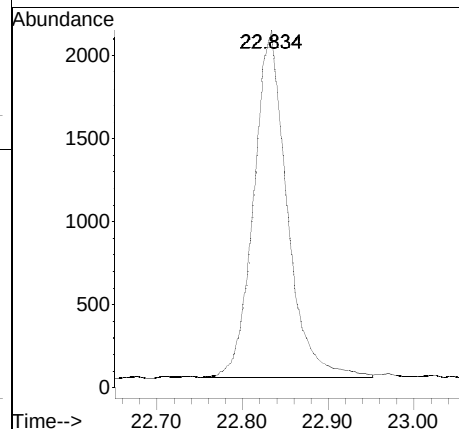
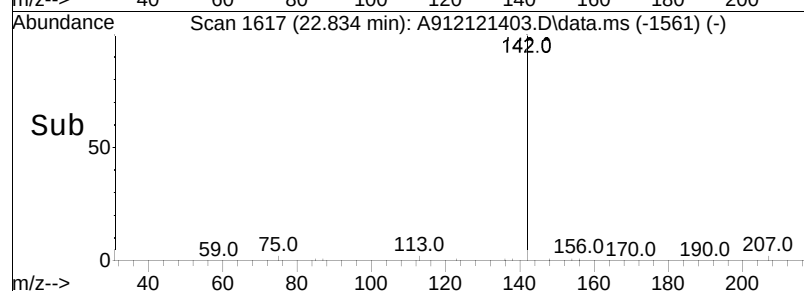
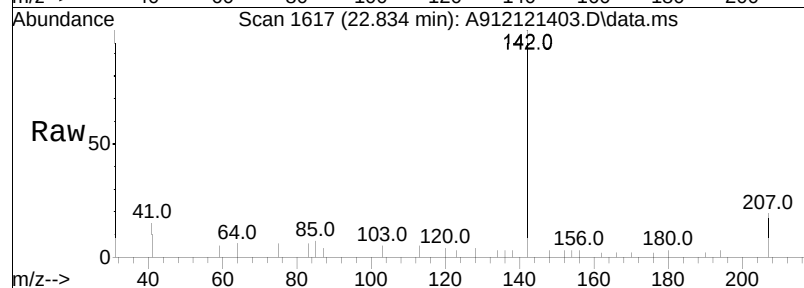
Tgt Ion:128 Resp: 10794

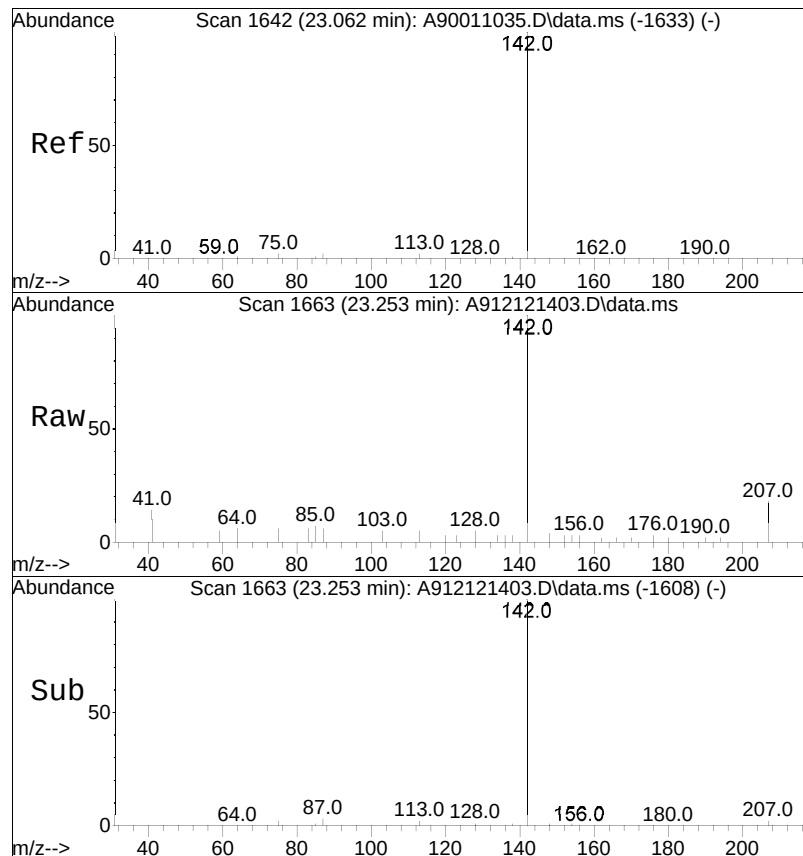




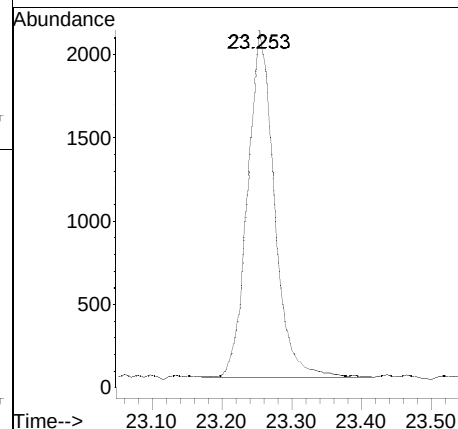
#16
2-Methylnaphthalene
Concen: 28.52 ng/mL
RT: 22.834 min Scan# 1617
Delta R.T. 0.009 min
Lab File: A912121403.D
Acq: 12 Dec 2014 4:29 pm

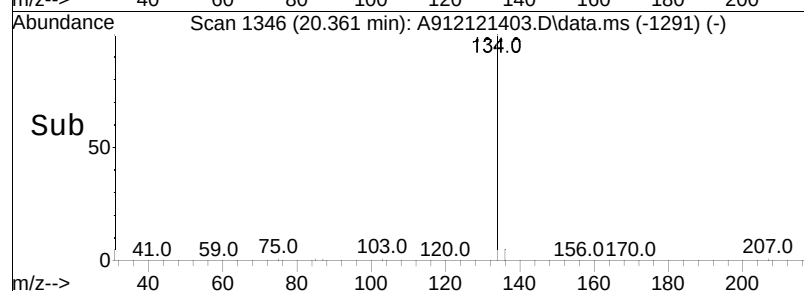
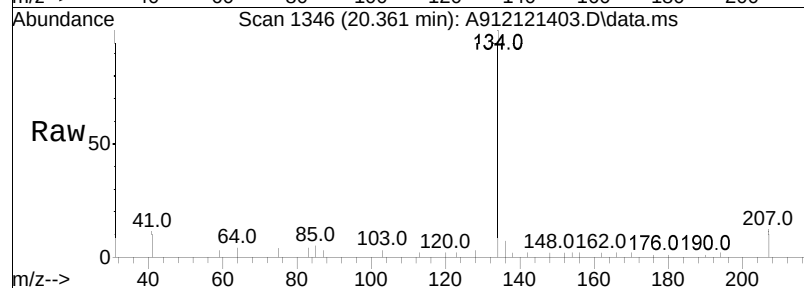
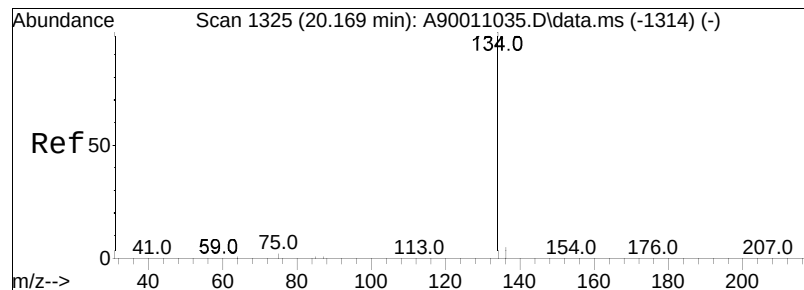
Tgt Ion:142 Resp: 5594





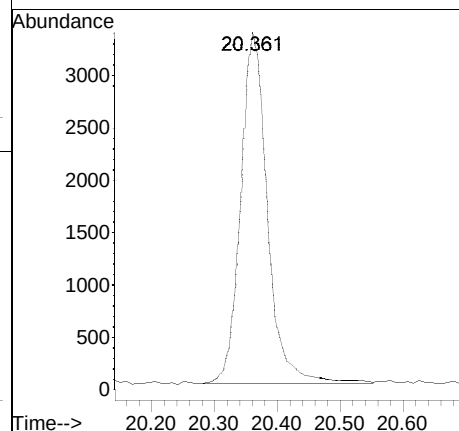
#17
 1-Methylnaphthalene
 Concen: 28.77 ng/mL
 RT: 23.253 min Scan# 1663
 Delta R.T. -0.000 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm
 Tgt Ion:142 Resp: 5495

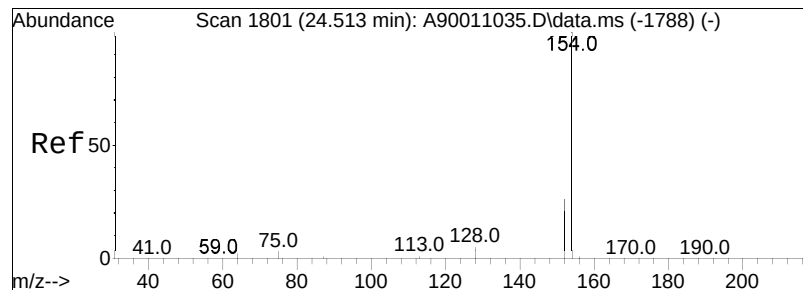




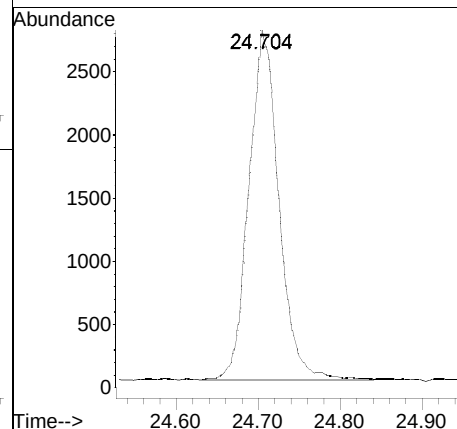
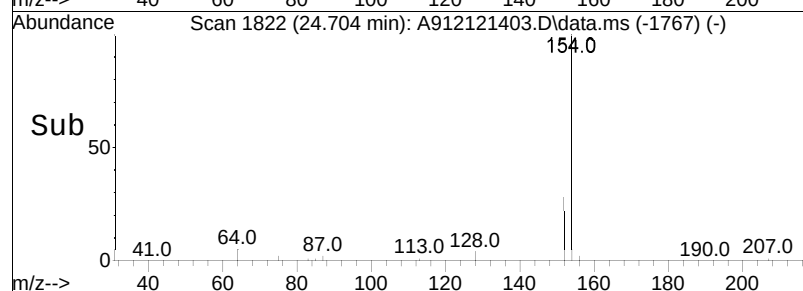
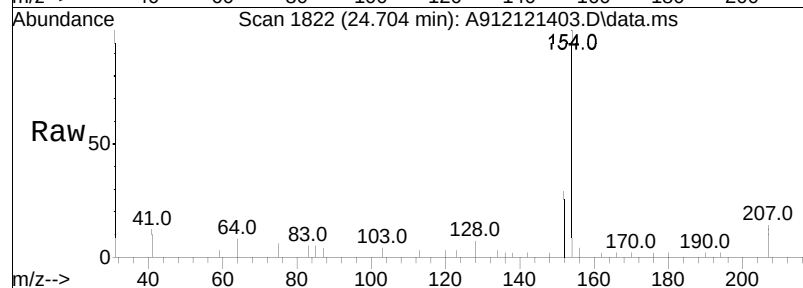
#18
Benzothiophene
Concen: 36.41 ng/mL
RT: 20.361 min Scan# 1346
Delta R.T. -0.000 min
Lab File: A912121403.D
Acq: 12 Dec 2014 4:29 pm

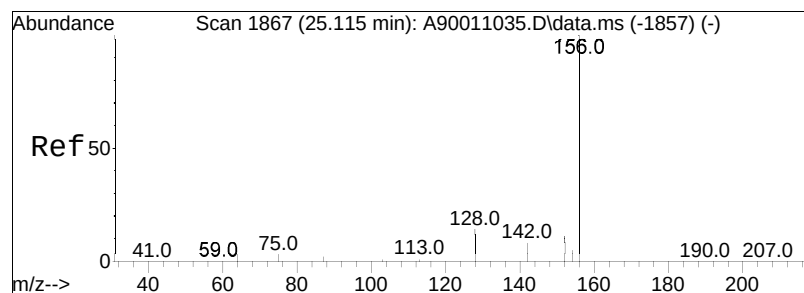
Tgt Ion:134 Resp: 9761





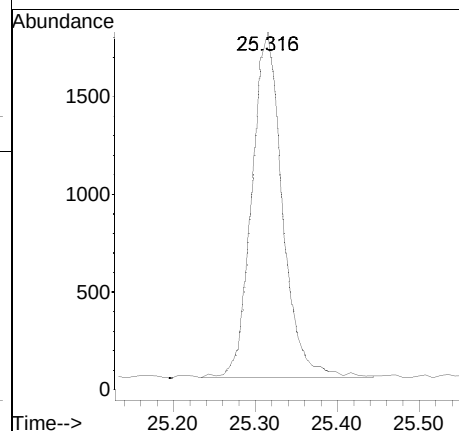
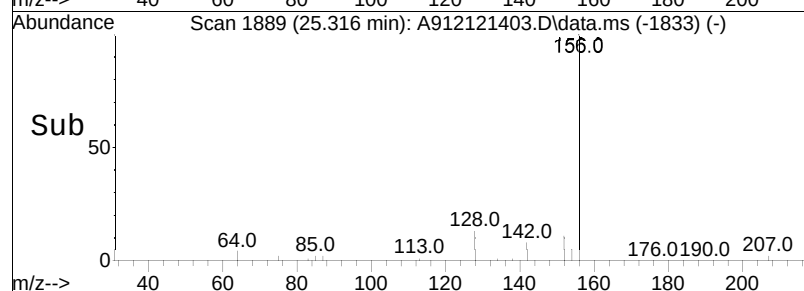
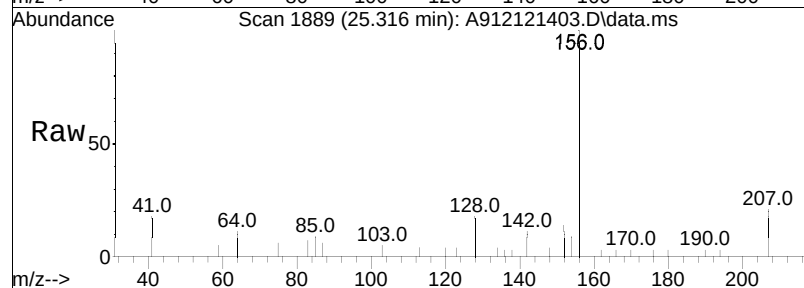
#23
Biphenyl
Concen: 28.26 ng/mL
RT: 24.704 min Scan# 1822
Delta R.T. -0.000 min
Lab File: A912121403.D
Acq: 12 Dec 2014 4:29 pm
Tgt Ion:154 Resp: 7003

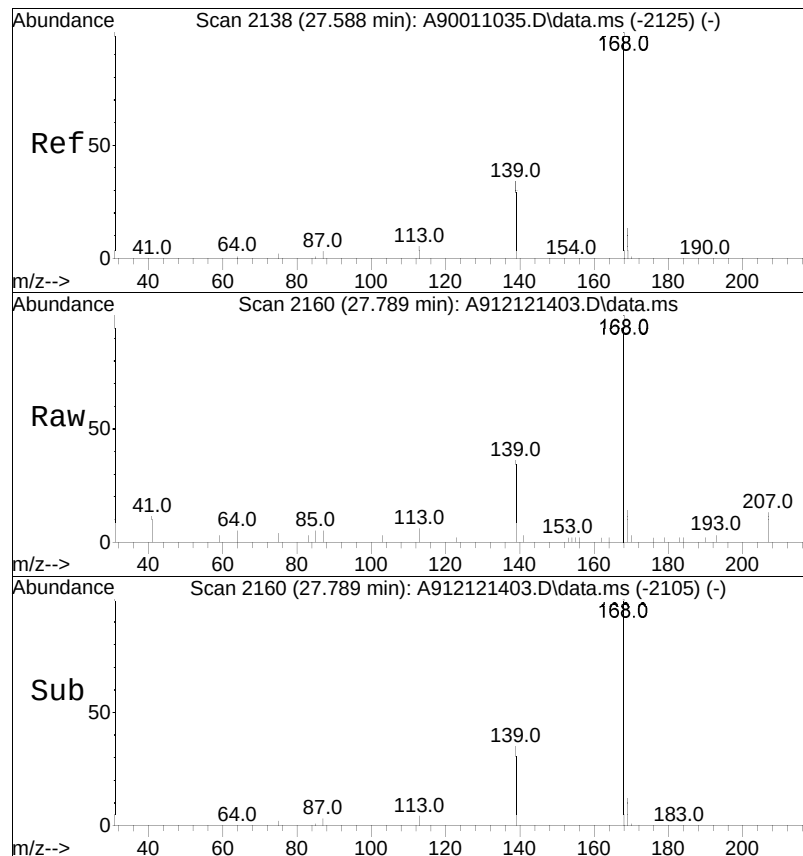




#24
 2,6-Dimethylnaphthalene
 Concen: 26.45 ng/mL
 RT: 25.316 min Scan# 1889
 Delta R.T. 0.009 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm

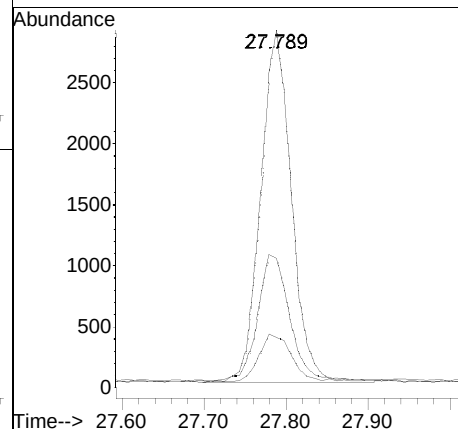
Tgt Ion:156 Resp: 4540

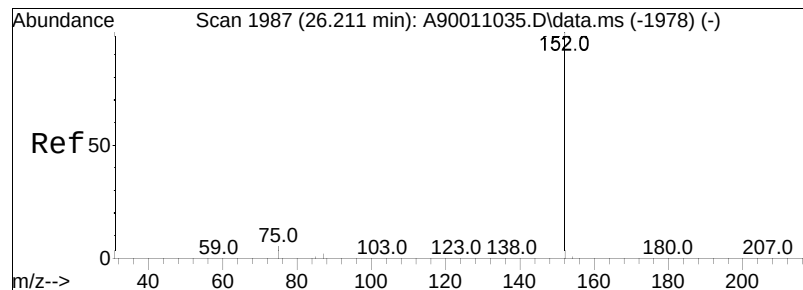




#25
 Dibenzofuran
 Concen: 29.01 ng/mL
 RT: 27.789 min Scan# 2160
 Delta R.T. -0.000 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm

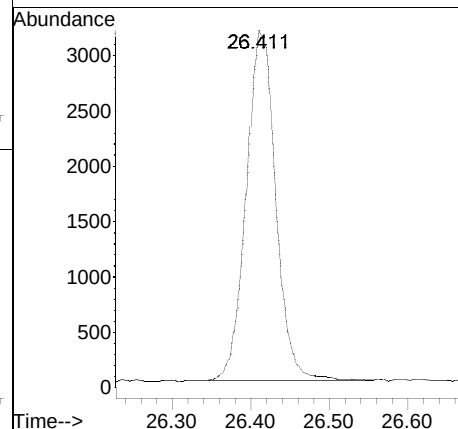
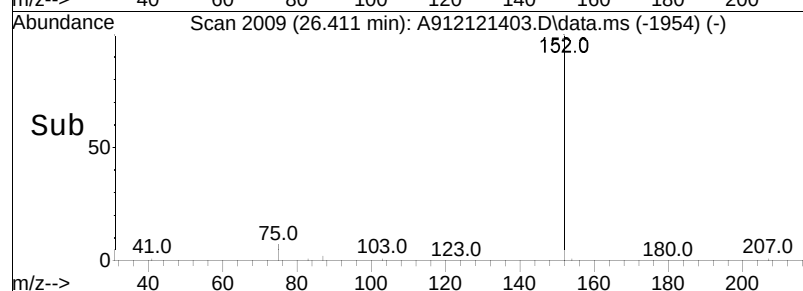
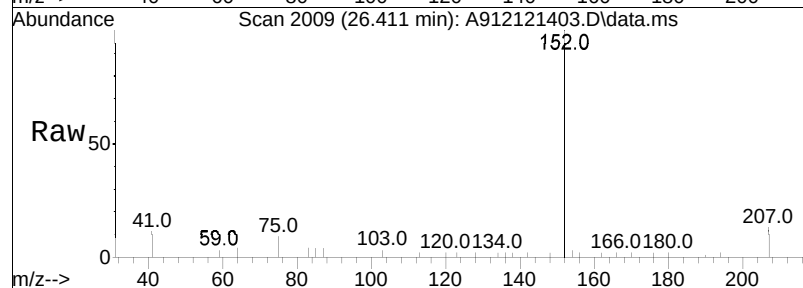
Tgt Ion:	168	Resp:	7414
Ion Ratio	Lower	Upper	
168	100		
139	37.3	25.1	46.7
169	14.6	10.2	19.0

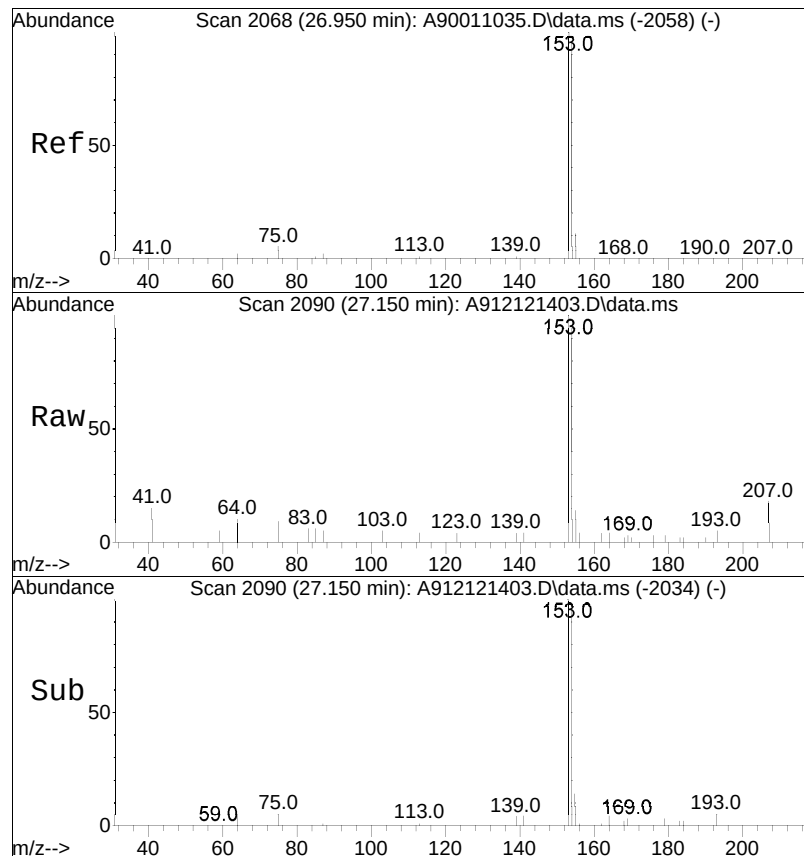




#26
Acenaphthylene
Concen: 27.09 ng/mL
RT: 26.411 min Scan# 2009
Delta R.T. -0.000 min
Lab File: A912121403.D
Acq: 12 Dec 2014 4:29 pm

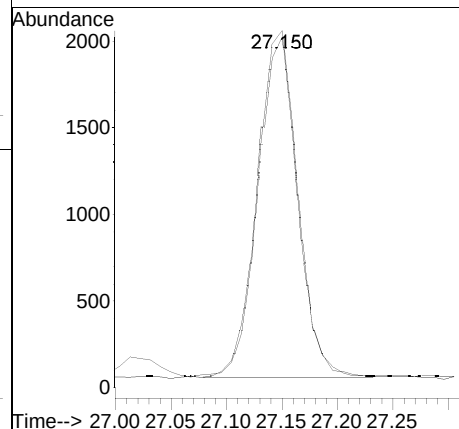
Tgt Ion:152 Resp: 8154

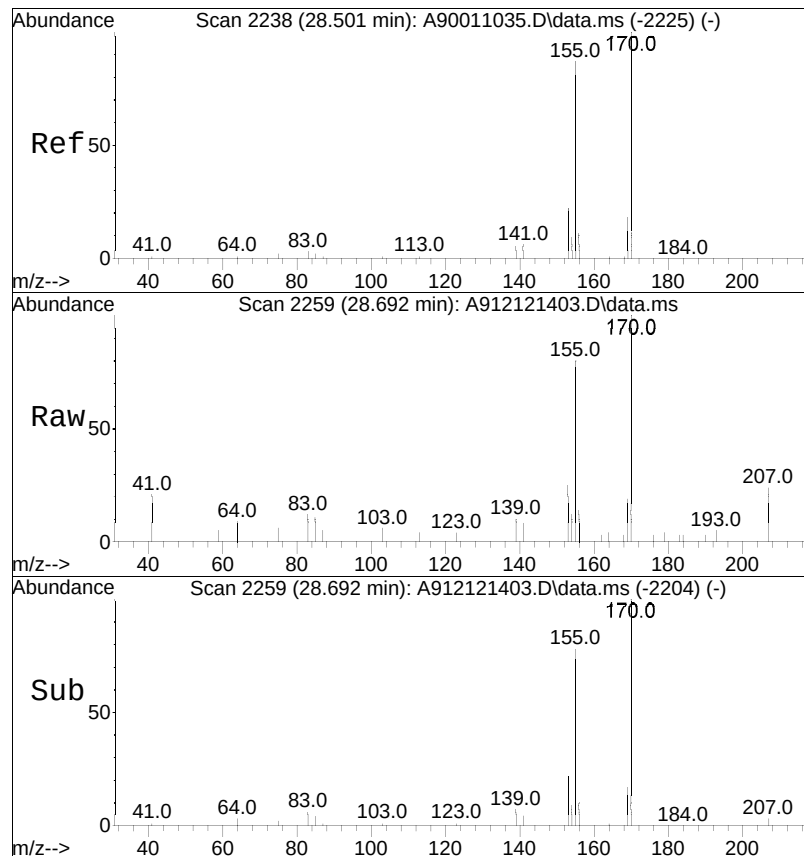




#27
 Acenaphthene
 Concen: 27.32 ng/mL
 RT: 27.150 min Scan# 2090
 Delta R.T. 0.009 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm

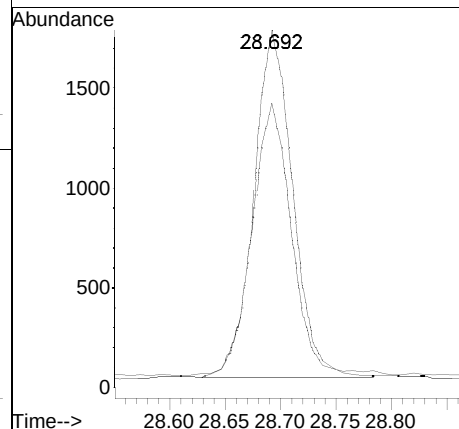
Tgt Ion	Ratio	Lower	Upper
153	100		
154	95.5	64.9	120.5

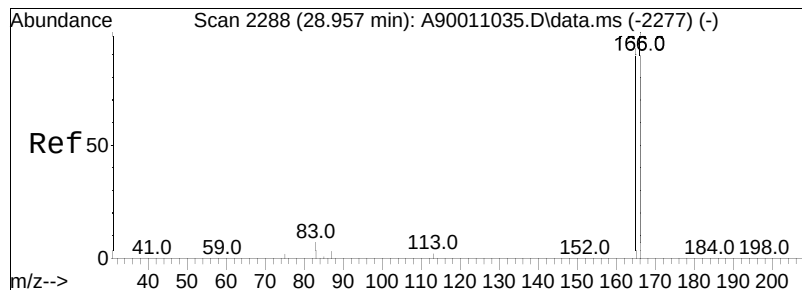




#28
 2,3,5-Trimethylnaphthalene
 Concen: 28.00 ng/mL
 RT: 28.692 min Scan# 2259
 Delta R.T. -0.000 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm

Tgt Ion	Ratio	Lower	Upper
170	100		
155	80.8	55.9	103.9





#29

Fluorene

Concen: 26.94 ng/mL

RT: 29.157 min Scan# 2310

Delta R.T. -0.000 min

Lab File: A912121403.D

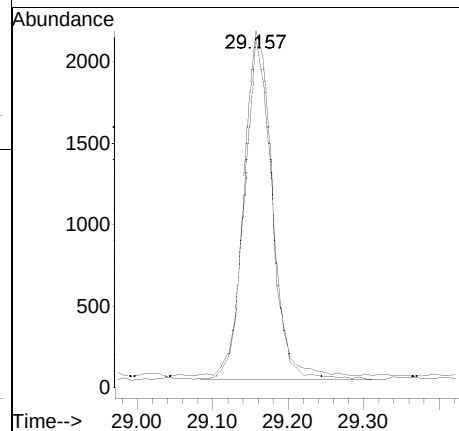
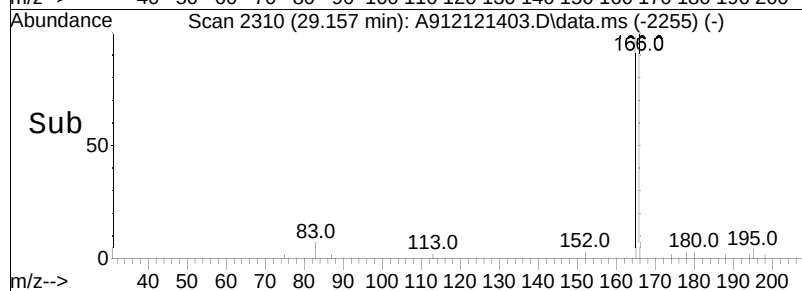
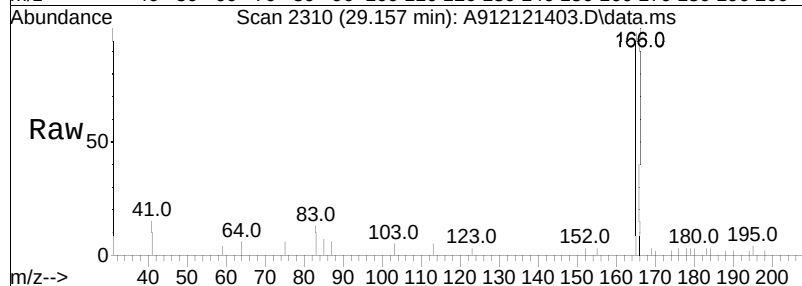
Acq: 12 Dec 2014 4:29 pm

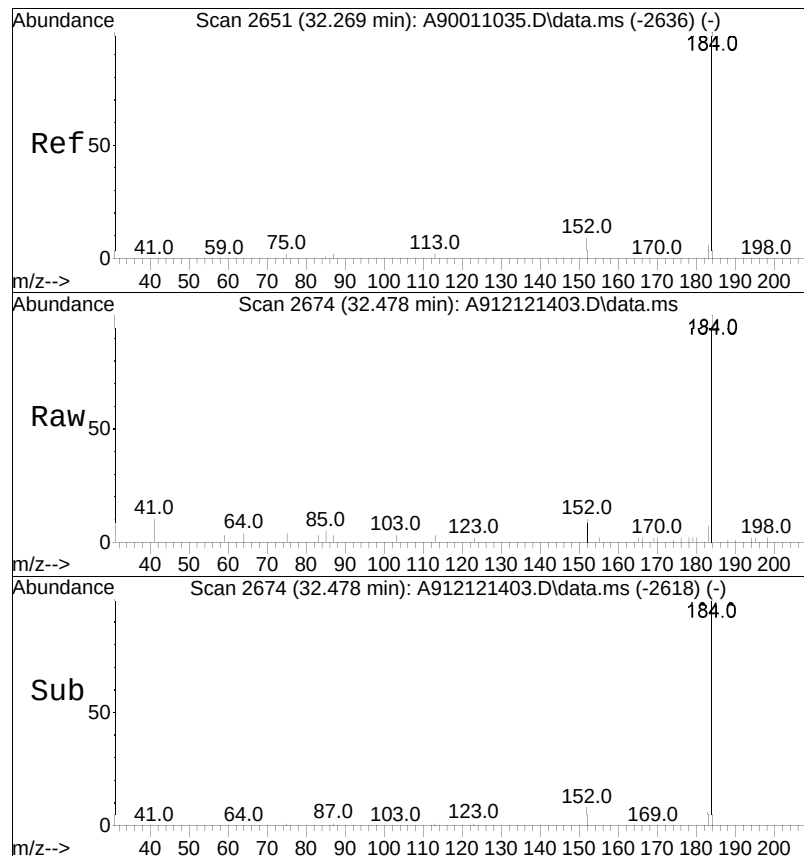
Tgt Ion:166 Resp: 5537

Ion Ratio Lower Upper

166 100

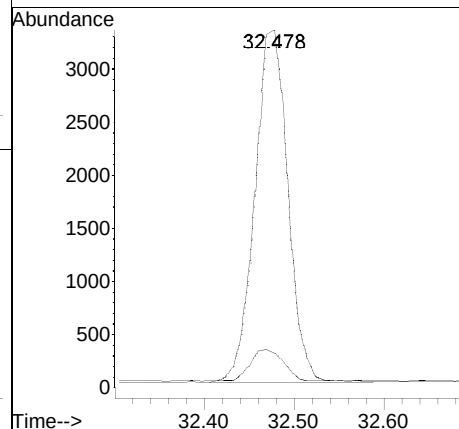
165 93.2 65.5 121.7

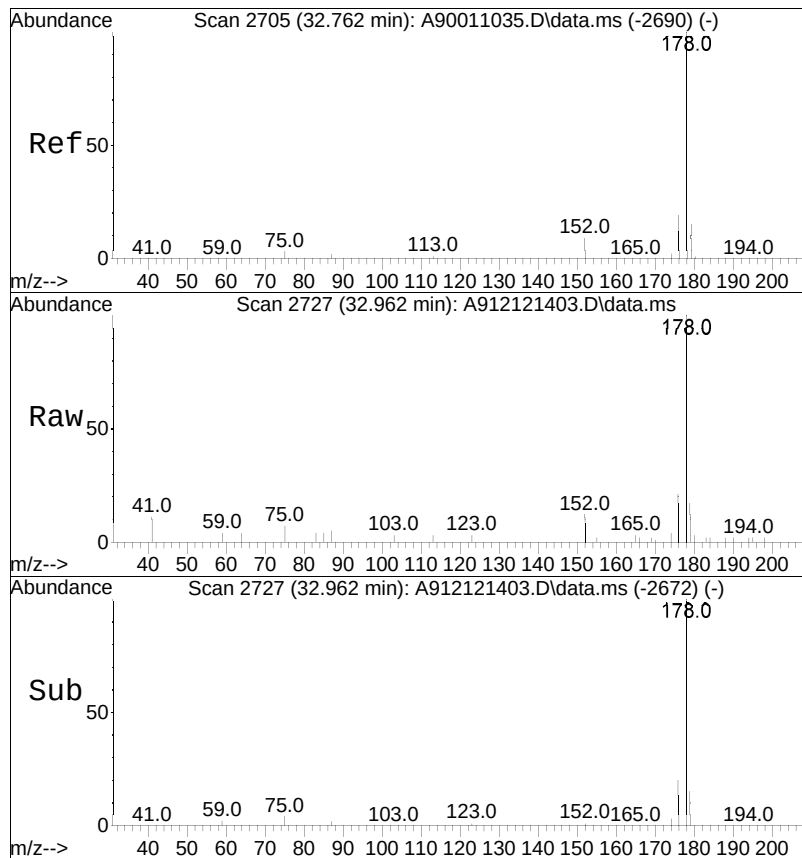




#33
 Dibenzothiophene
 Concen: 31.36 ng/mL
 RT: 32.478 min Scan# 2674
 Delta R.T. 0.009 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm

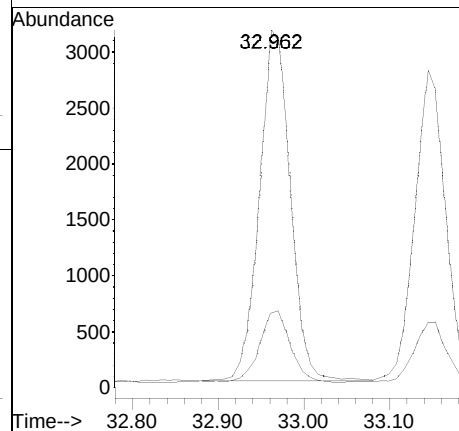
Tgt Ion	Ratio	Lower	Upper
184	100		
152	9.1	6.3	11.7

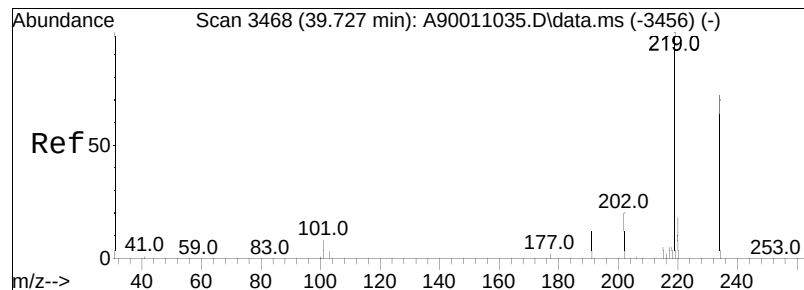




#43
 Phenanthrene
 Concen: 27.57 ng/mL
 RT: 32.962 min Scan# 2727
 Delta R.T. -0.000 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm

Tgt Ion:178 Resp: 7833
 Ion Ratio Lower Upper
 178 100
 176 20.2 13.7 25.5





#54

Retene

Concen: 26.39 ng/mL

RT: 39.927 min Scan# 3490

Delta R.T. -0.000 min

Lab File: A912121403.D

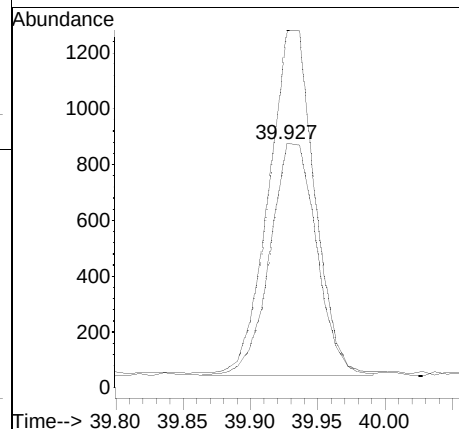
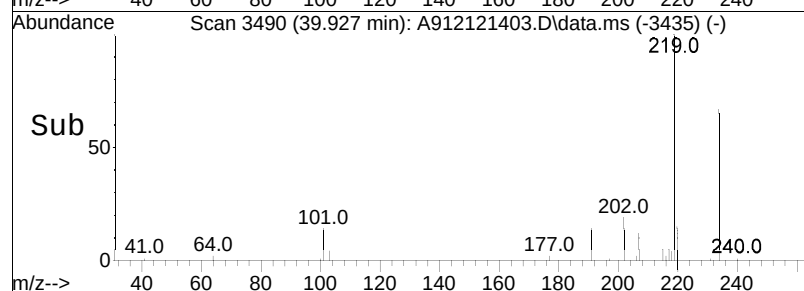
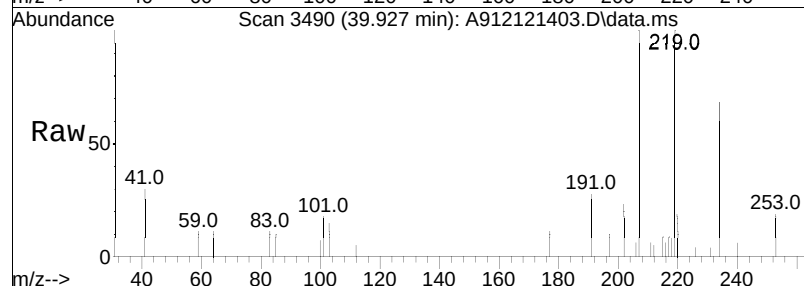
Acq: 12 Dec 2014 4:29 pm

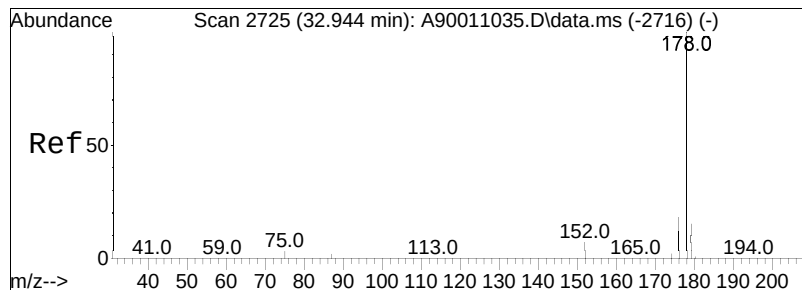
Tgt Ion: 234 Resp: 1971

Ion Ratio Lower Upper

234 100

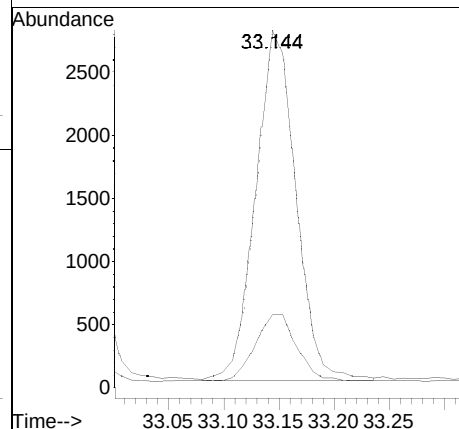
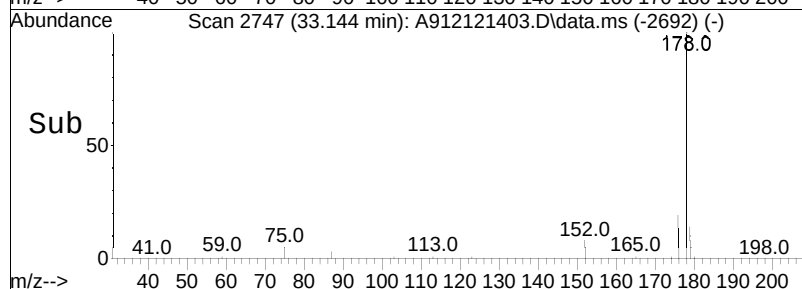
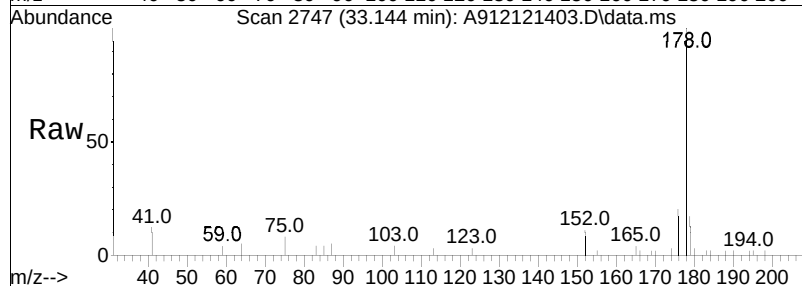
219 148.9 96.7 179.7

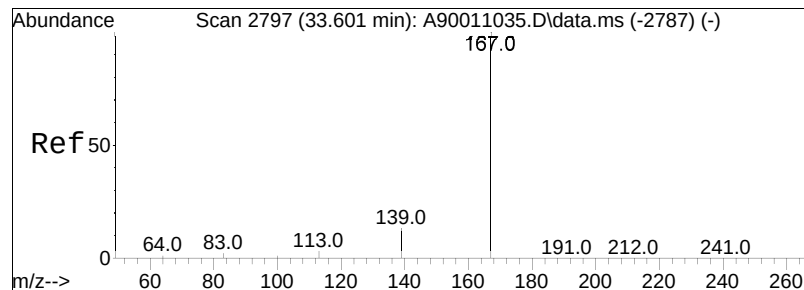




#55
 Anthracene
 Concen: 26.58 ng/mL M4
 RT: 33.144 min Scan# 2747
 Delta R.T. -0.000 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
176	19.6	13.4	24.8





#56

Carbazole

Concen: 24.85 ng/mL

RT: 33.801 min Scan# 2819

Delta R.T. -0.000 min

Lab File: A912121403.D

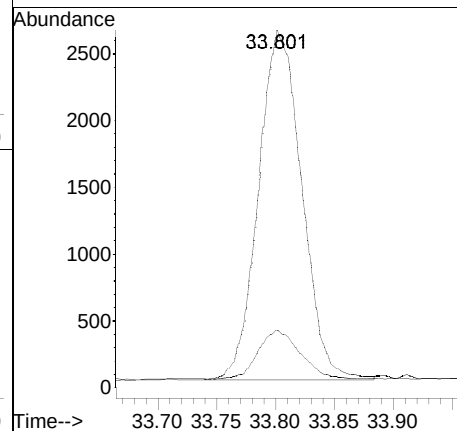
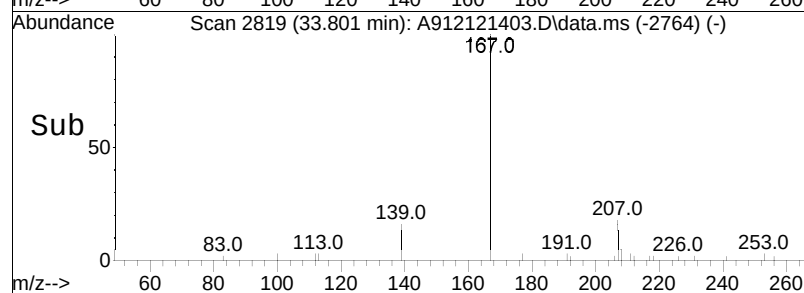
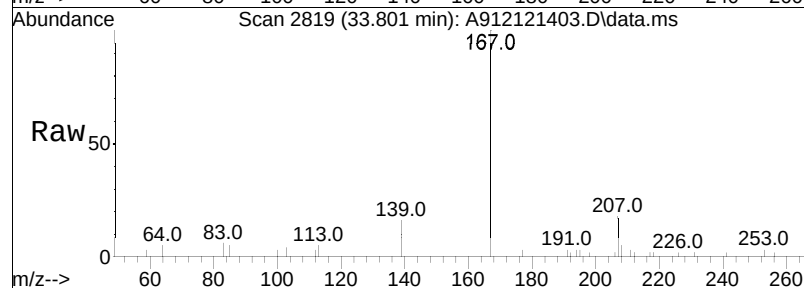
Acq: 12 Dec 2014 4:29 pm

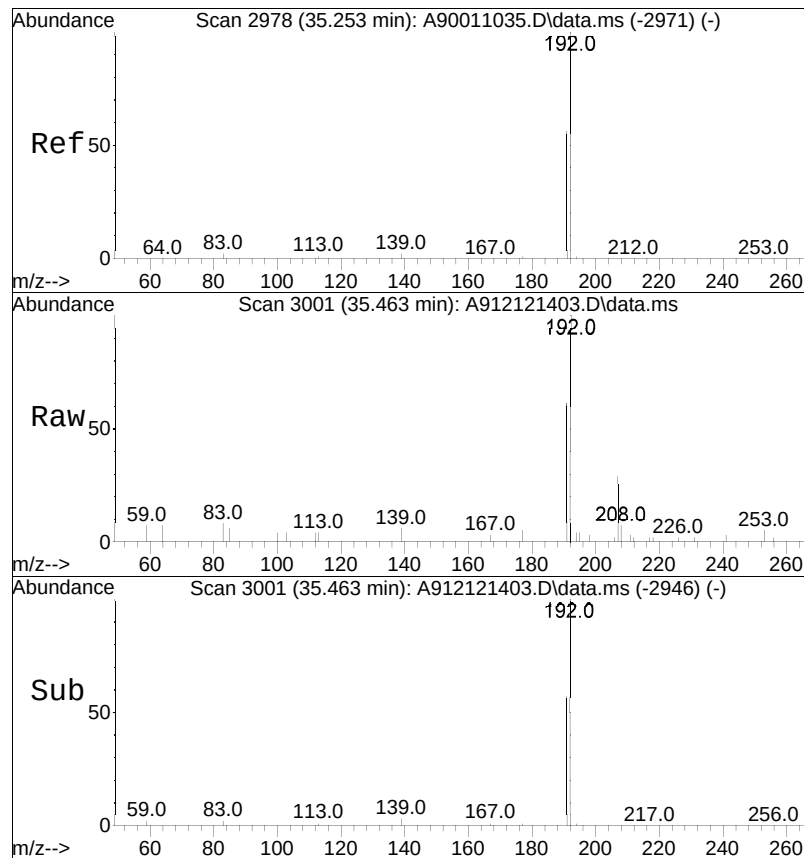
Tgt Ion:167 Resp: 6630

Ion Ratio Lower Upper

167 100

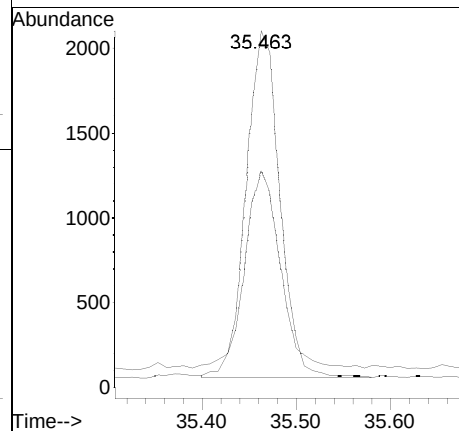
139 14.4 9.9 18.3

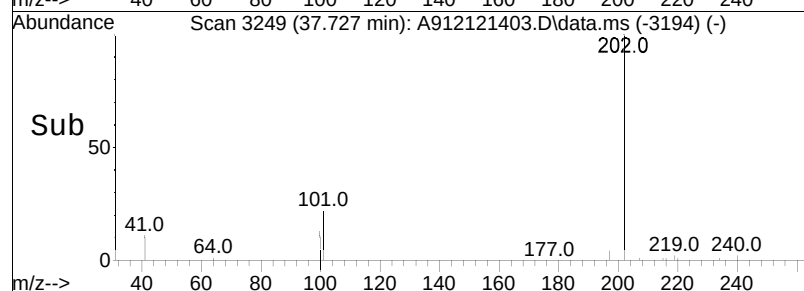
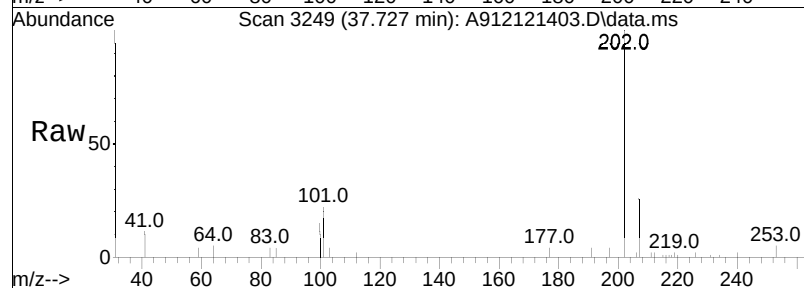
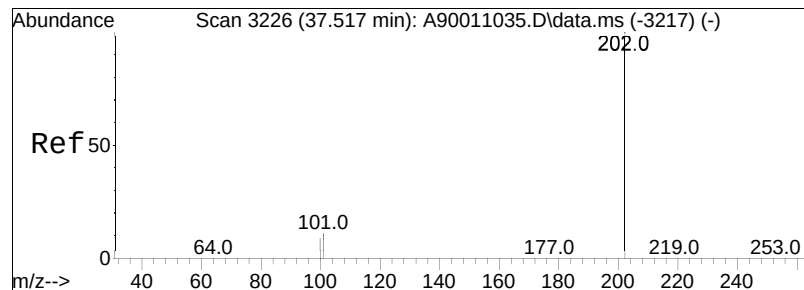




#57
 1-Methylphenanthrene
 Concen: 25.97 ng/mL
 RT: 35.463 min Scan# 3001
 Delta R.T. -0.000 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm

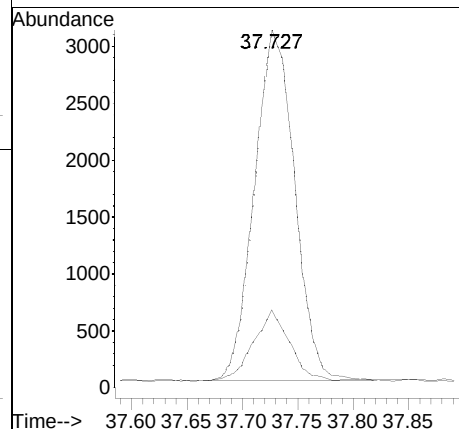
Tgt Ion	Ratio	Lower	Upper
192	100		
191	59.2	39.8	74.0

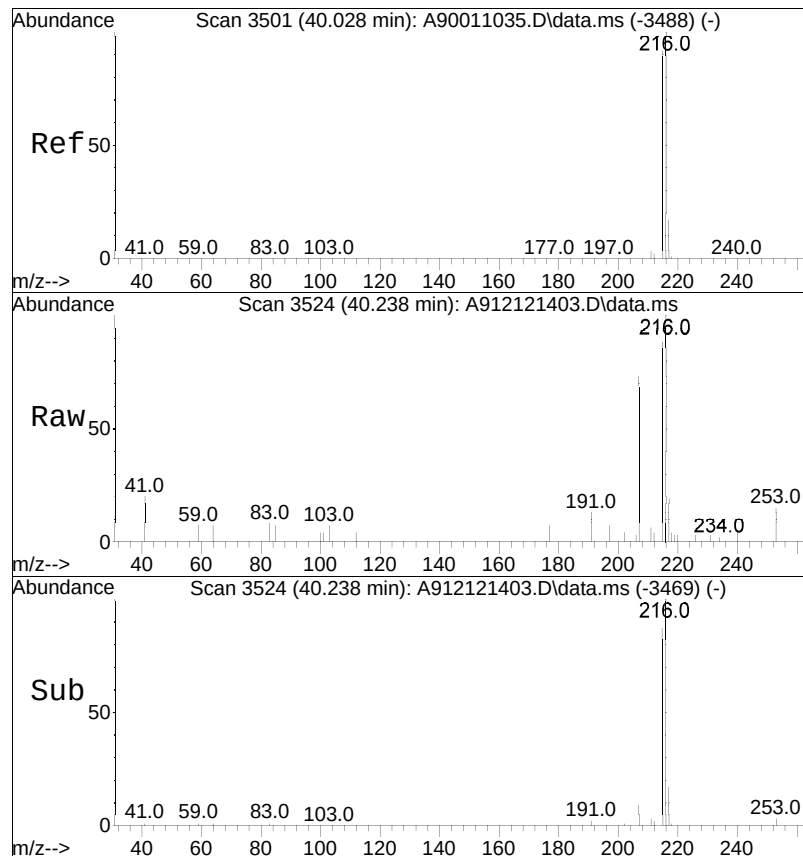




#58
 Fluoranthene
 Concen: 28.38 ng/mL
 RT: 37.727 min Scan# 3249
 Delta R.T. -0.000 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm

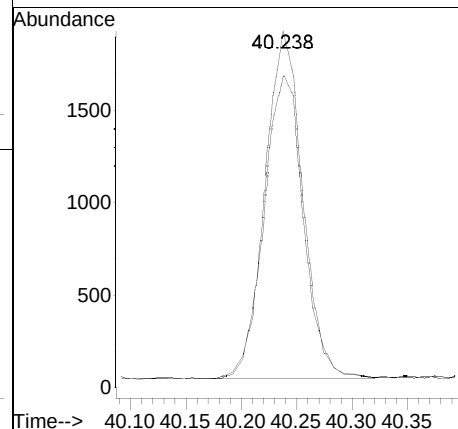
Tgt	Ion	Ratio	Lower	Upper
202	100			
101	18.4	11.8	22.0	

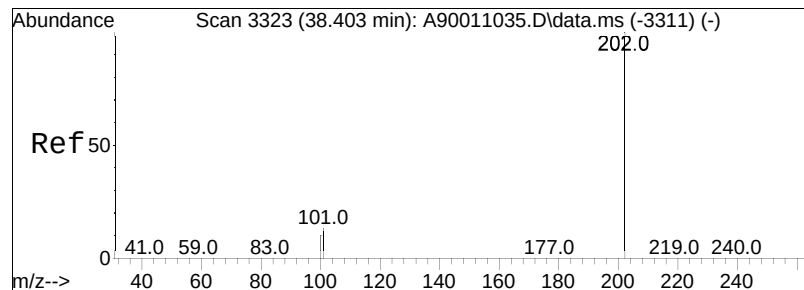




#59
 Benzo(b)fluorene
 Concen: 27.32 ng/mL
 RT: 40.238 min Scan# 3524
 Delta R.T. -0.000 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm

Tgt Ion	Ratio	Lower	Upper
216	100		
215	91.1	64.3	119.3





#60

Pyrene

Concen: 27.03 ng/mL

RT: 38.612 min Scan# 3346

Delta R.T. -0.000 min

Lab File: A912121403.D

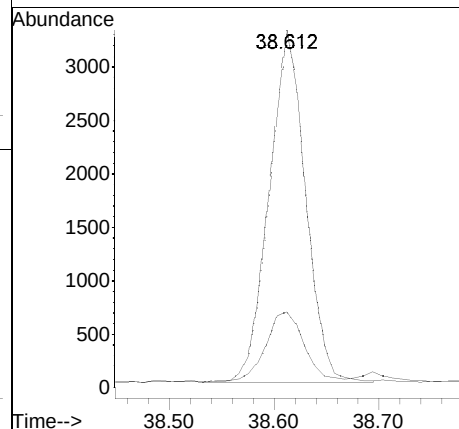
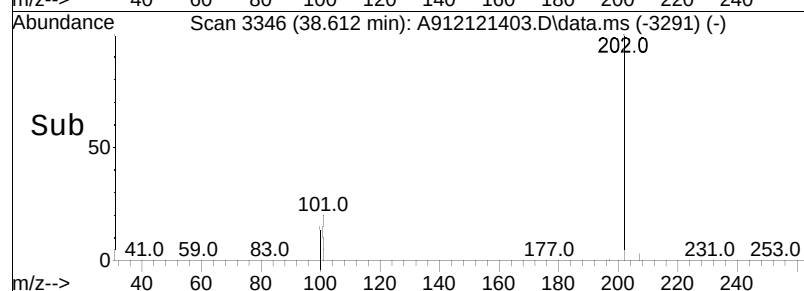
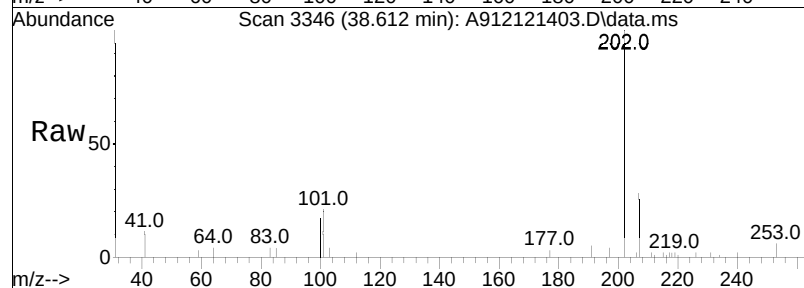
Acq: 12 Dec 2014 4:29 pm

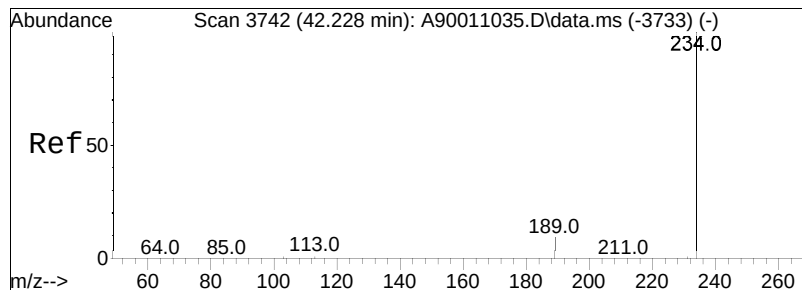
Tgt Ion: 202 Resp: 7870

Ion Ratio Lower Upper

202 100

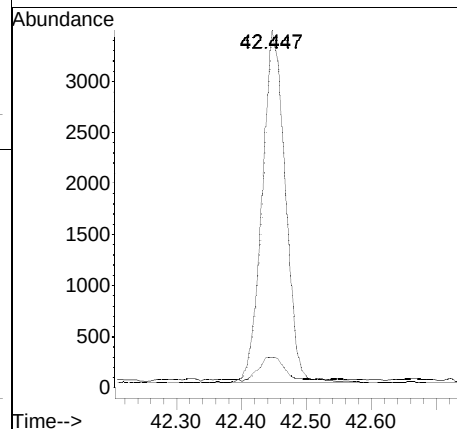
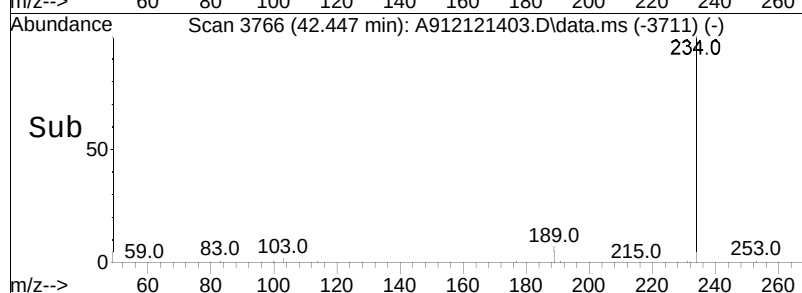
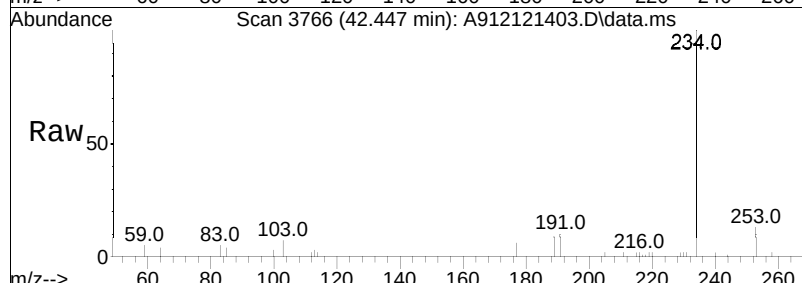
101 21.0 14.2 26.4

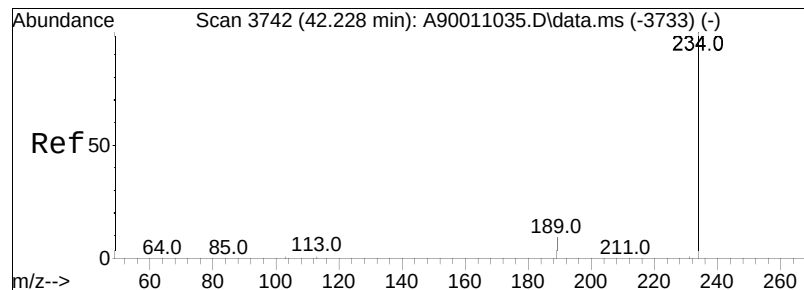




#66
 Naphthobenzothiophene
 Concen: 32.52 ng/ml
 RT: 42.447 min Scan# 3766
 Delta R.T. -0.000 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm

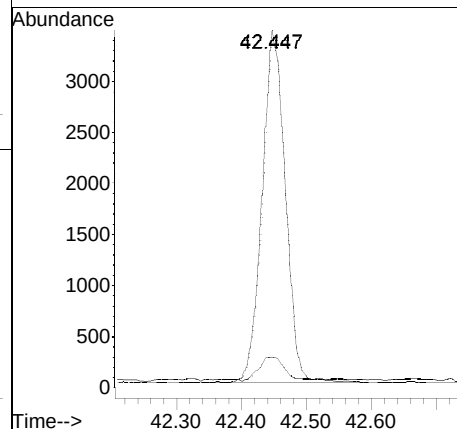
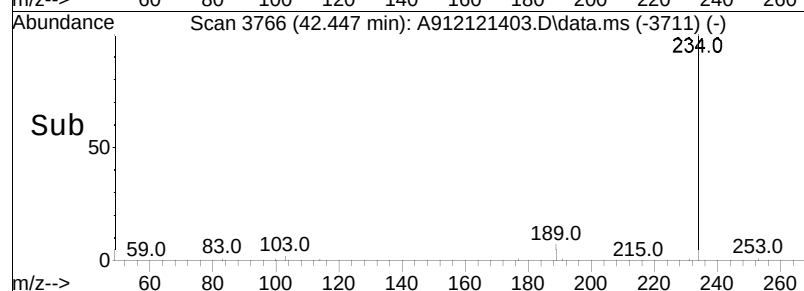
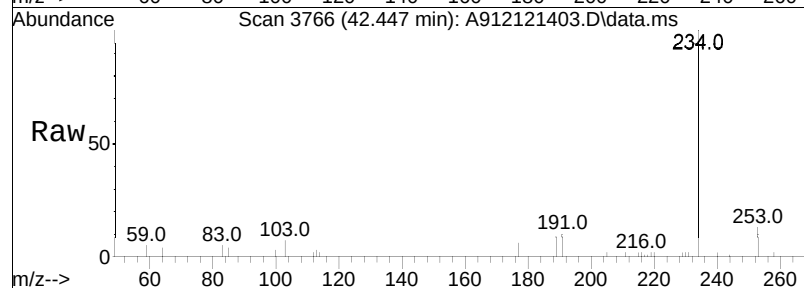
Tgt Ion	Ratio	Lower	Upper
234	100		
189	7.7	4.9	9.1

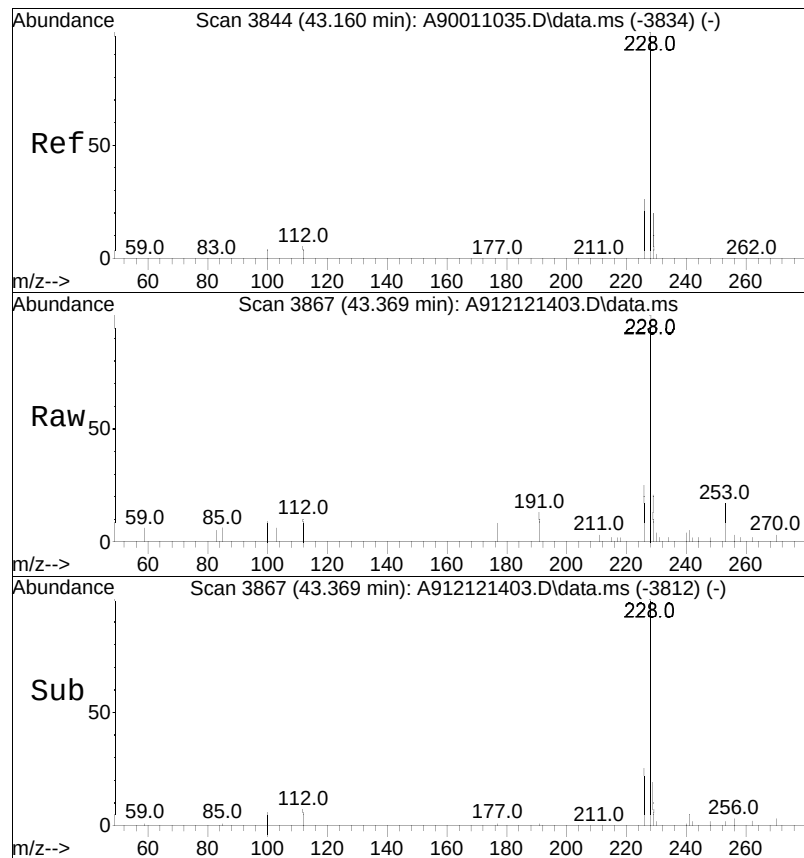




#67
 Naphthobenzothiophene-2,1-D
 Concen: 32.52 ng/mL
 RT: 42.447 min Scan# 3766
 Delta R.T. -0.000 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm

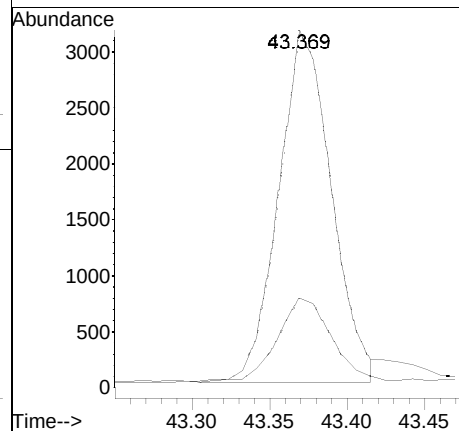
Tgt Ion	Ratio	Lower	Upper
234	100		
189	7.7	4.9	9.1

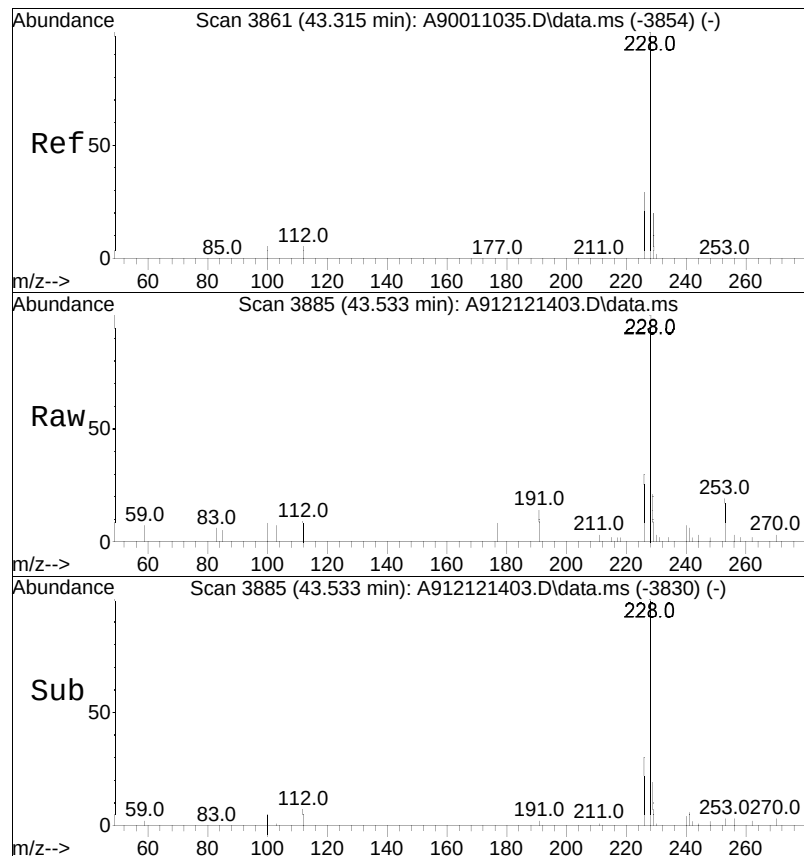




#75
Benz[a]anthracene
Concen: 29.20 ng/mL M3
RT: 43.369 min Scan# 3867
Delta R.T. -0.000 min
Lab File: A912121403.D
Acq: 12 Dec 2014 4:29 pm

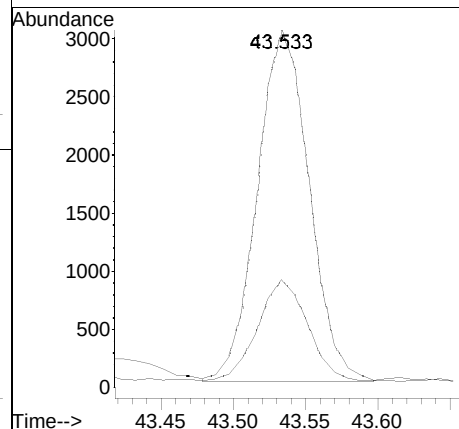
Tgt	Ion	Ratio	Lower	Upper
228	228	100		
226	226	23.6	17.3	32.1

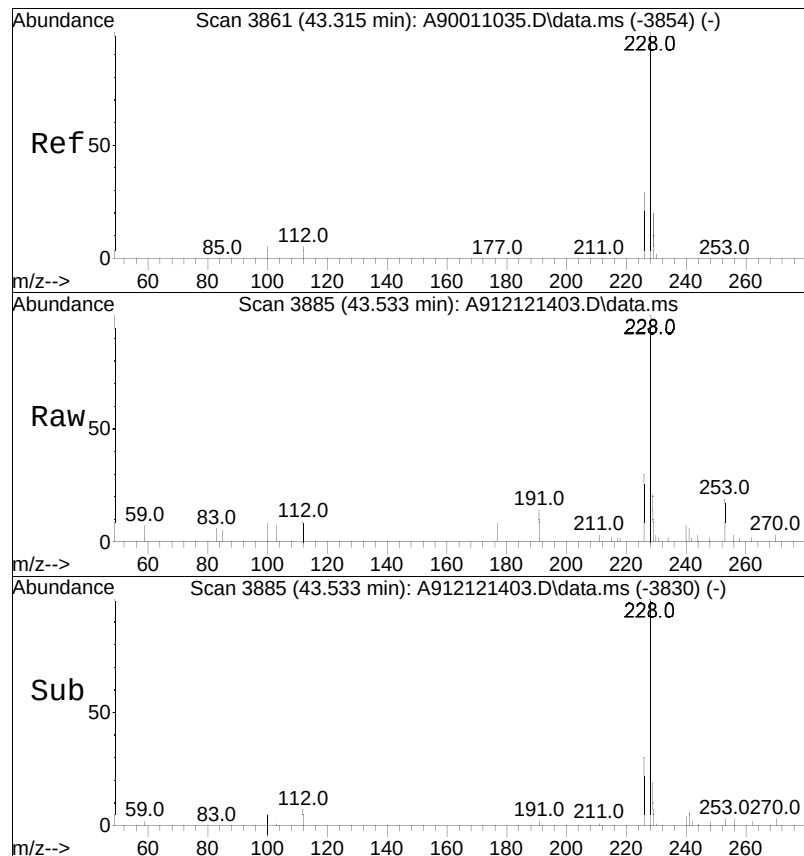




#76
 Chrysene
 Concen: 29.99 ng/mL M4
 RT: 43.533 min Scan# 3885
 Delta R.T. -0.000 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm

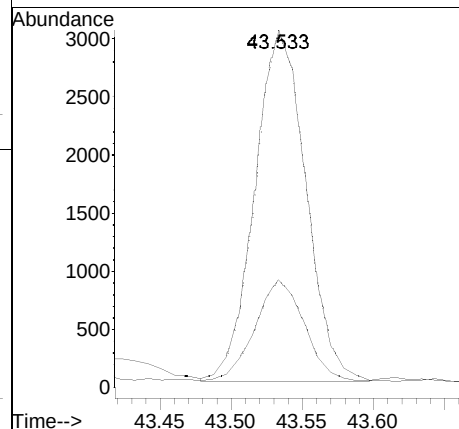
Tgt Ion	Ratio	Lower	Upper
228	100		
226	27.6	18.8	34.8

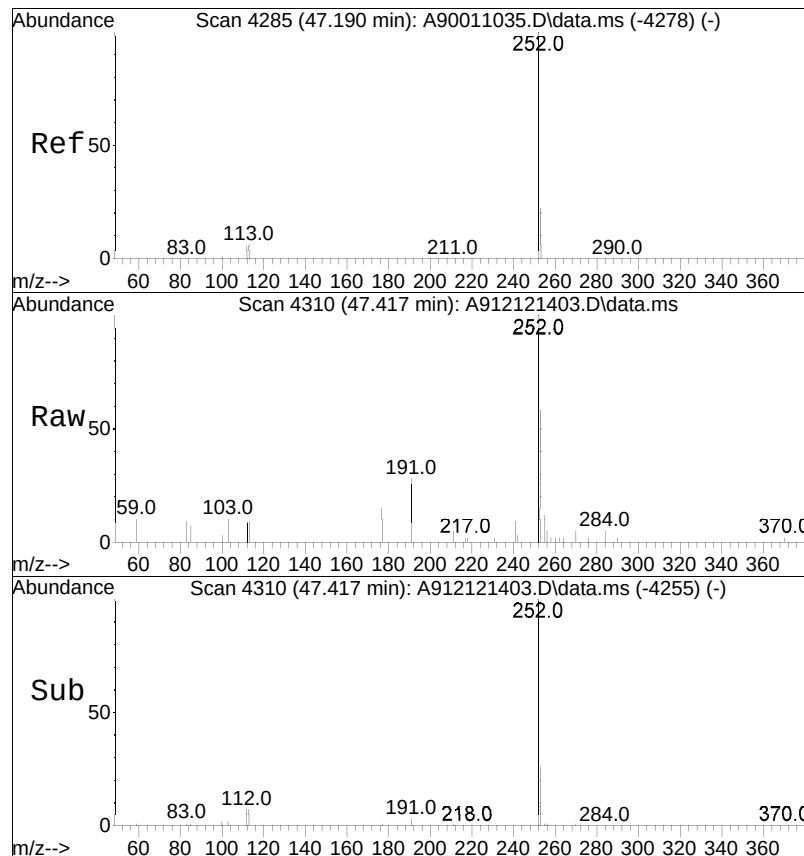




#77
 Chrysene/Triphenylene
 Concen: 29.93 ng/mL M4
 RT: 43.533 min Scan# 3885
 Delta R.T. -0.000 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm

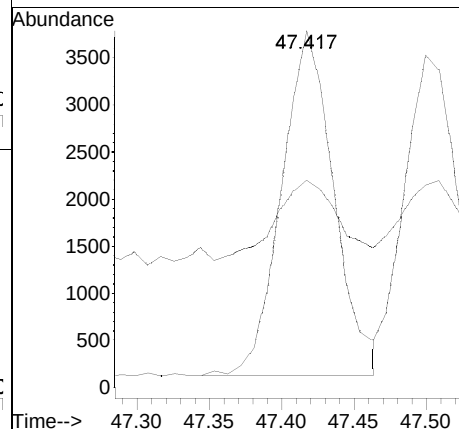
Tgt Ion	Ratio	Lower	Upper
228	100		
226	27.6	18.8	34.8

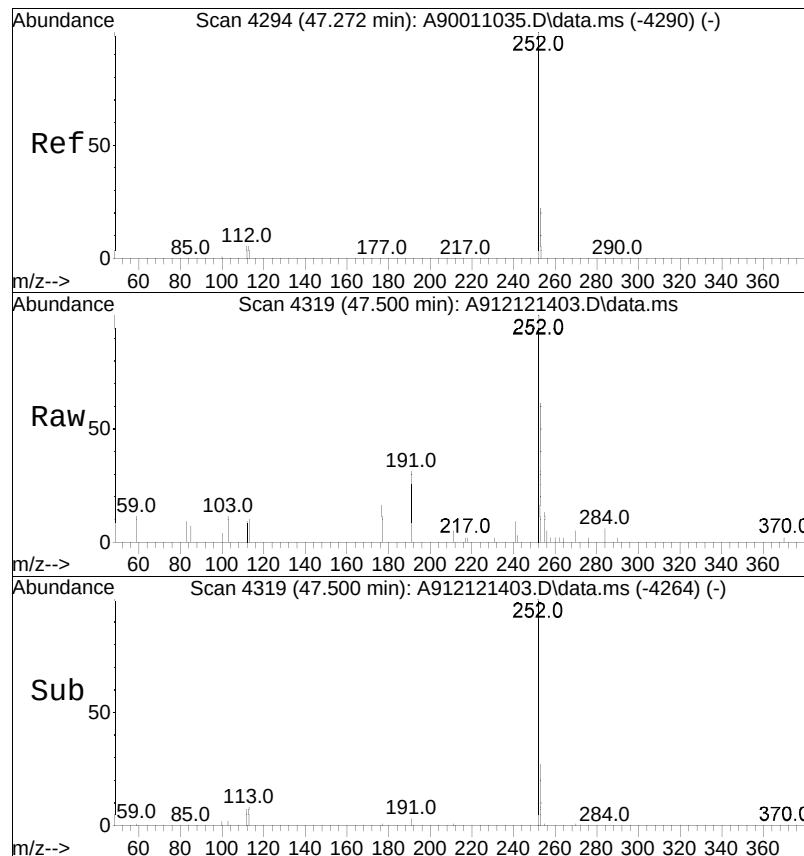




#84
 Benzo[b]fluoranthene
 Concen: 29.72 ng/mL
 RT: 47.417 min Scan# 4310
 Delta R.T. -0.000 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm

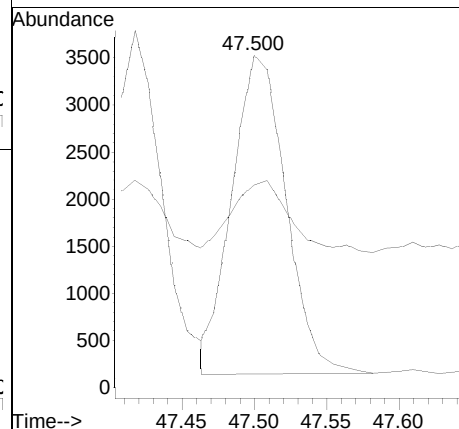
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	27.6	16.4	30.4	

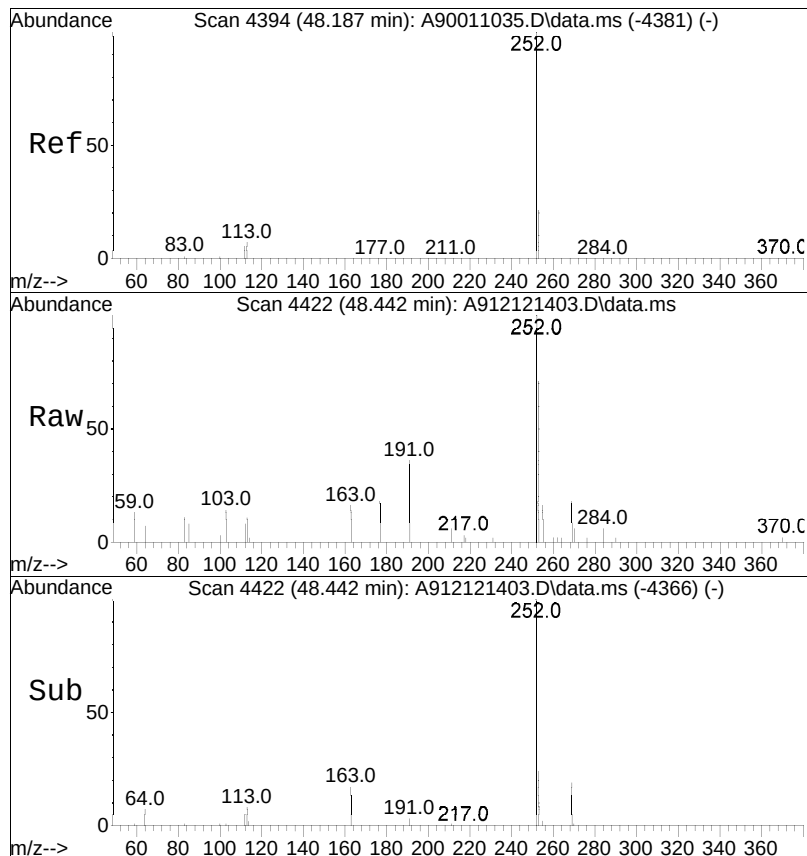




#85
 Benzo[j]+[k]fluoranthene
 Concen: 28.90 ng/mL
 RT: 47.500 min Scan# 4319
 Delta R.T. -0.000 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm

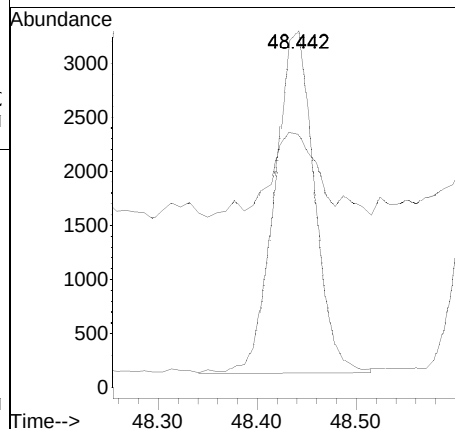
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	25.7	16.1	29.9	

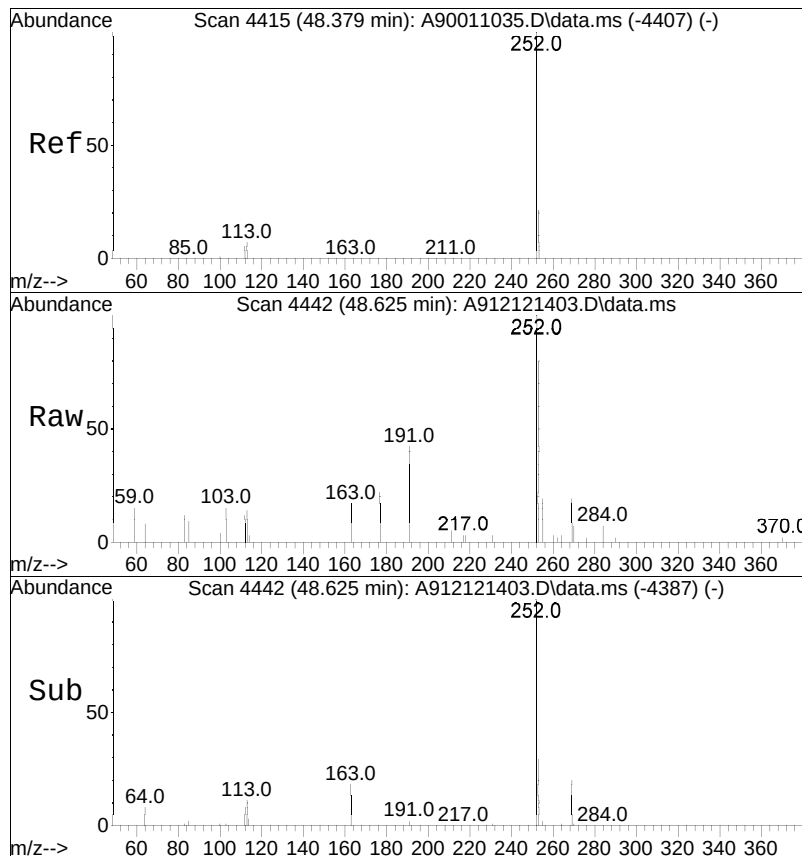




#87
 Benzo[e]pyrene
 Concen: 29.31 ng/mL
 RT: 48.442 min Scan# 4422
 Delta R.T. 0.009 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm

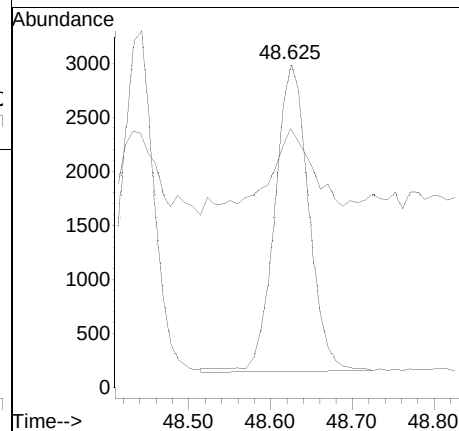
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	28.3	16.2	30.0	

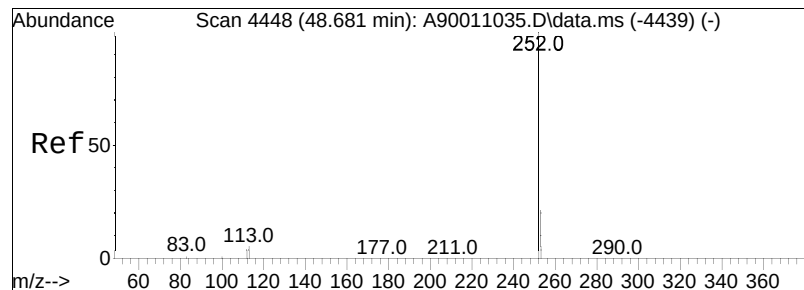




#89
 Benzo[a]pyrene
 Concen: 28.06 ng/mL
 RT: 48.625 min Scan# 4442
 Delta R.T. -0.000 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm

Tgt	Ion	Ratio	Lower	Upper
252	100			
253	29.6	16.4	30.6	





#90

Perylene

Concen: 29.36 ng/mL

RT: 48.945 min Scan# 4477

Delta R.T. -0.000 min

Lab File: A912121403.D

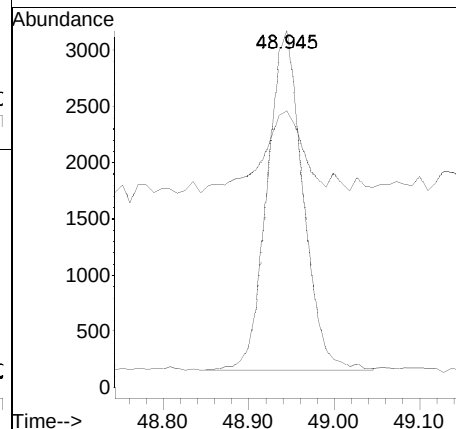
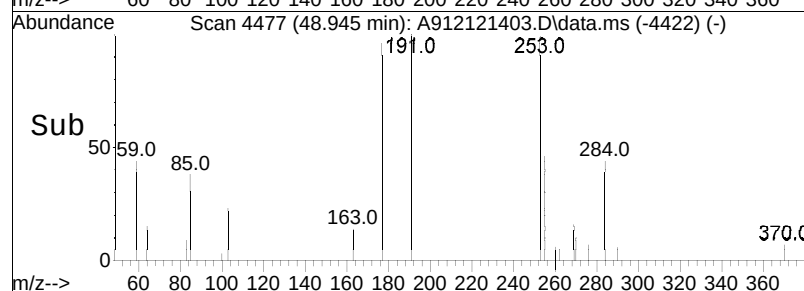
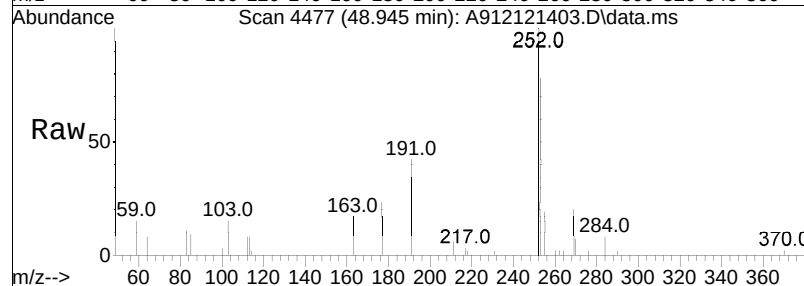
Acq: 12 Dec 2014 4:29 pm

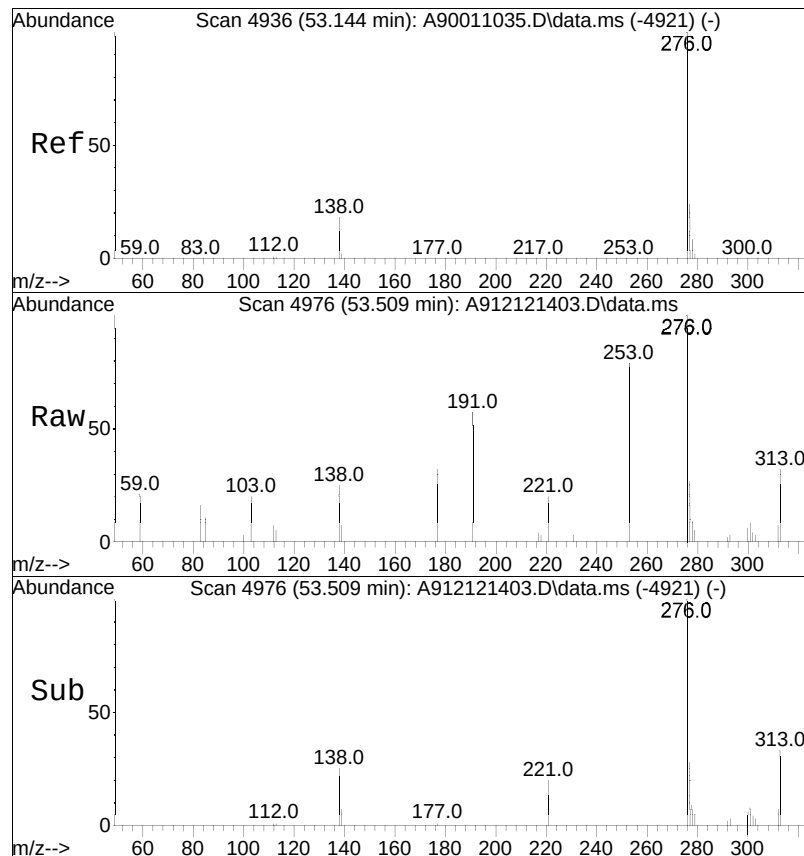
Tgt Ion: 252 Resp: 8715

Ion Ratio Lower Upper

252 100

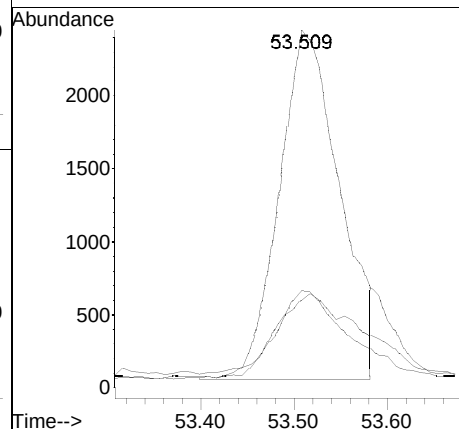
253 25.9 16.6 30.8

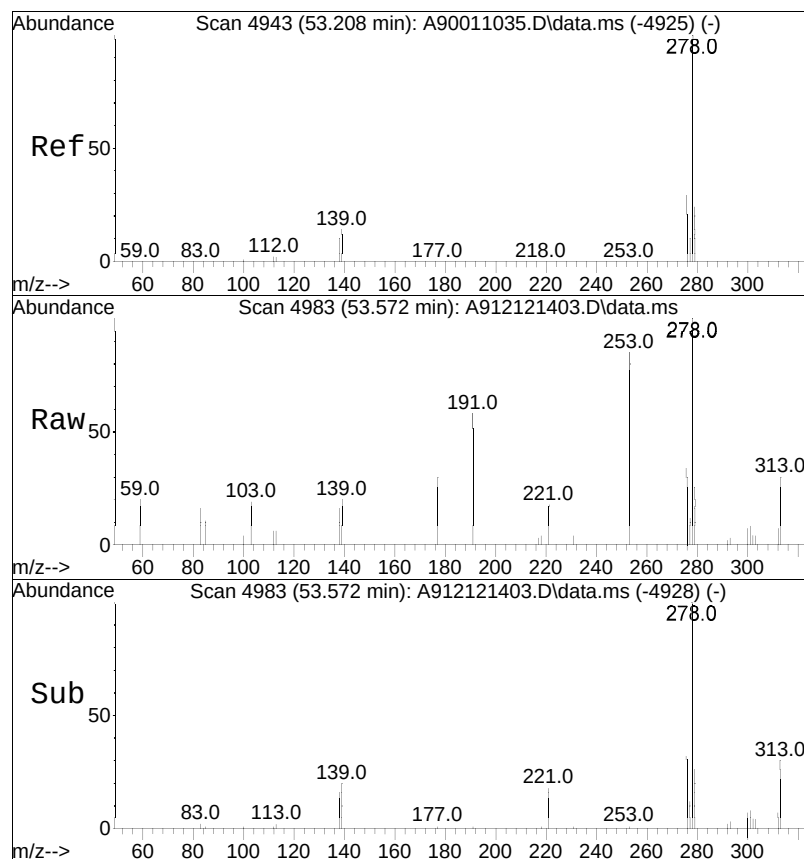




#91
 Indeno[1,2,3-cd]pyrene
 Concen: 28.85 ng/mL M3
 RT: 53.509 min Scan# 4976
 Delta R.T. -0.000 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm

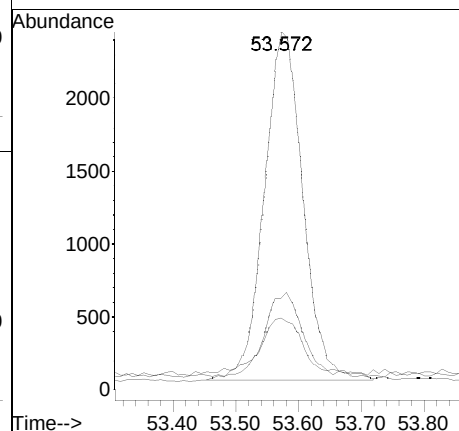
Tgt Ion:	276	Resp:	10793
Ion Ratio	Lower	Upper	
276	100		
138	32.4	15.7	29.1#
277	28.0	17.9	33.3

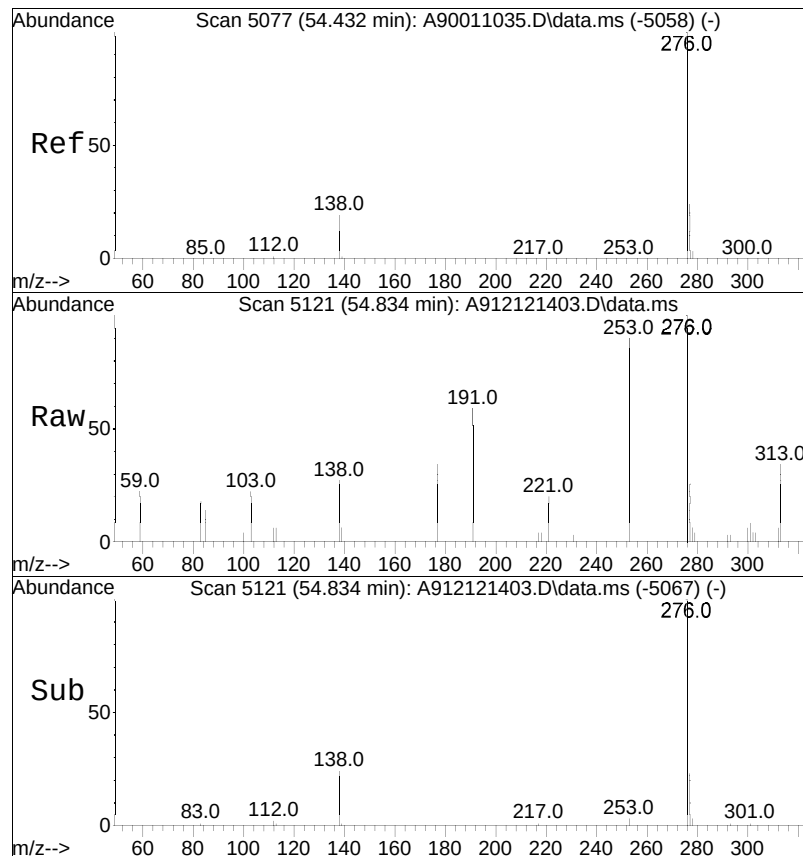




#92
 Dibenz[ah]+[ac]anthracene
 Concen: 28.90 ng/mL
 RT: 53.572 min Scan# 4983
 Delta R.T. -0.000 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm

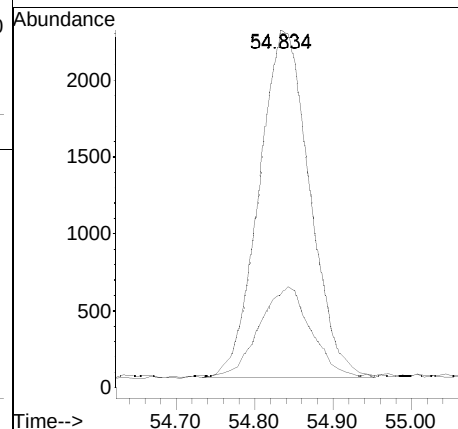
Tgt Ion:	278	Resp:	10138
Ion Ratio	Lower	Upper	
278	100		
139	18.3	11.4	21.2
279	22.2	16.3	30.3

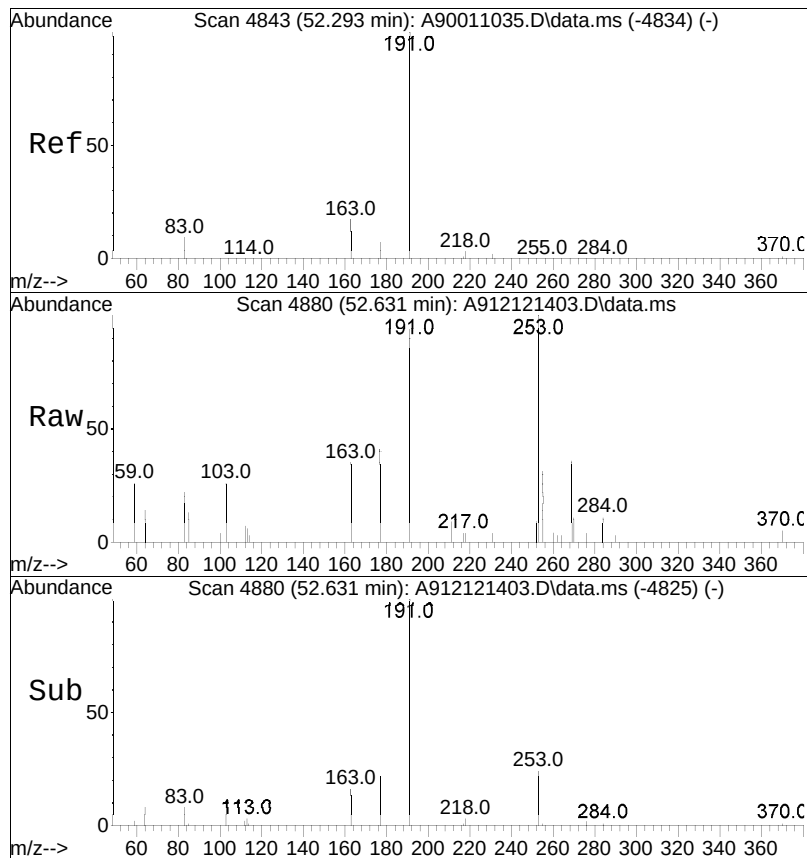




#93
 Benzo[g,h,i]perylene
 Concen: 27.95 ng/mL
 RT: 54.834 min Scan# 5121
 Delta R.T. -0.009 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm

Tgt	Ion	Ratio	Lower	Upper
276	100			
277	27.2	17.4	32.2	





#94

Hopane (T19)

Concen: 22.72 ng/mL

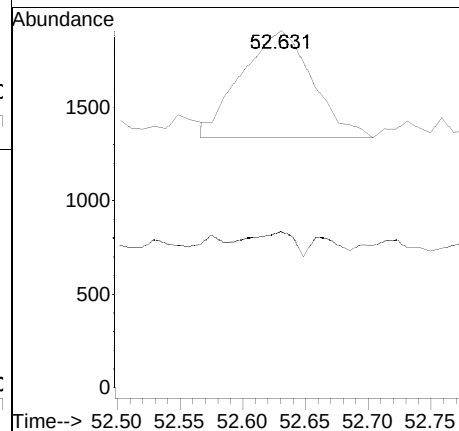
RT: 52.631 min Scan# 4880

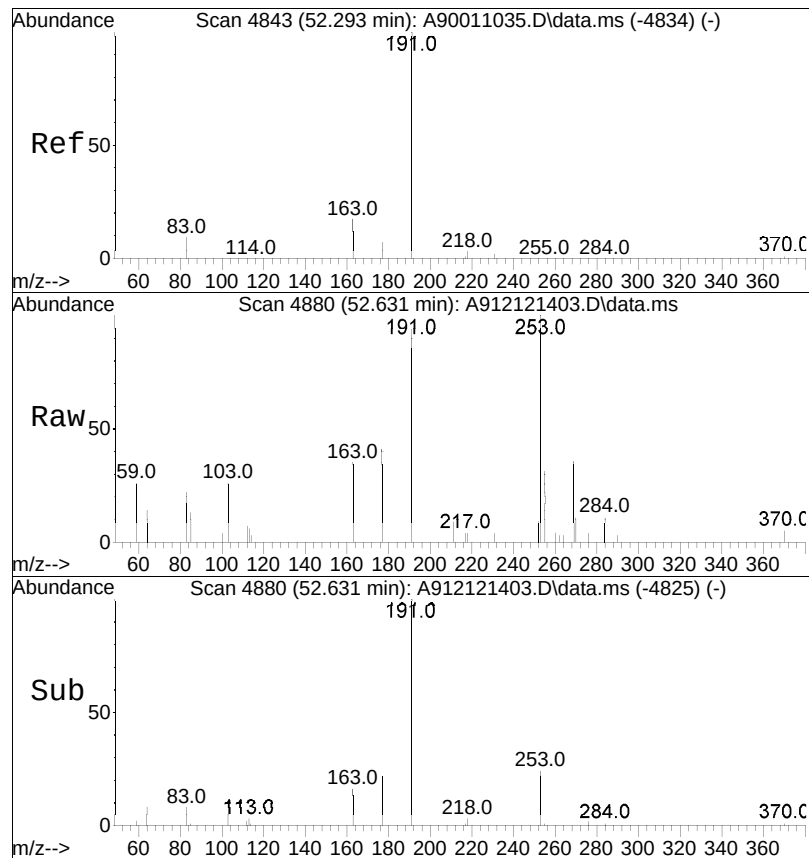
Delta R.T. -0.000 min

Lab File: A912121403.D

Acq: 12 Dec 2014 4:29 pm

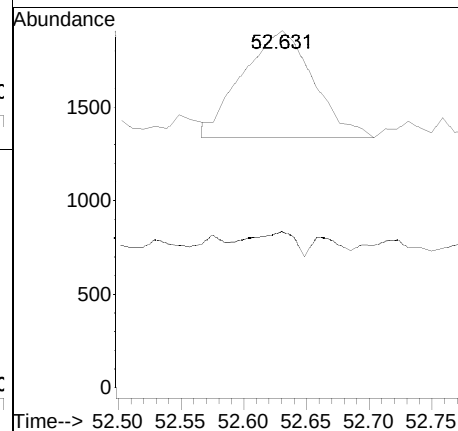
Tgt Ion	191	Resp	2235
Ion Ratio	Lower	Upper	
191	100		
177	13.5	8.5	15.9





#95
 17a(H),21B(H)-hopane - C₃₀H₅₂
 Concen: 22.72 ng/mL
 RT: 52.631 min Scan# 4880
 Delta R.T. -0.000 min
 Lab File: A912121403.D
 Acq: 12 Dec 2014 4:29 pm

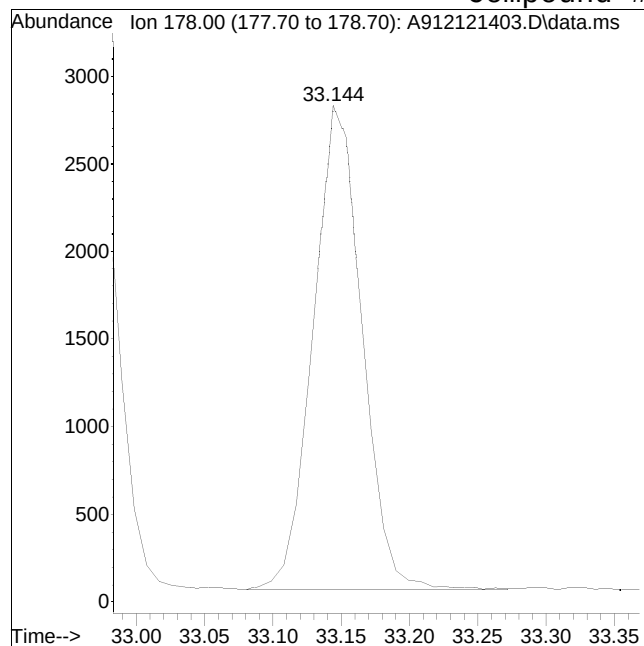
Tgt Ion	191	Resp	2235
Ion Ratio	Lower	Upper	
191	100		
177	13.5	8.5	15.9



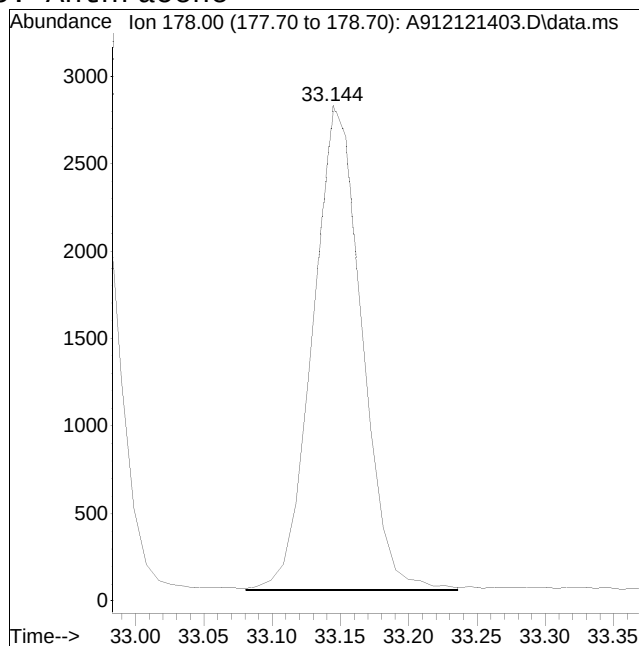
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121403.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 4:29 pm Instrument : PAH 9
Sample : i912121402 Quant Date : 12/15/2014 10:36 am

Compound #55: Anthracene



Original Peak Response = 6908



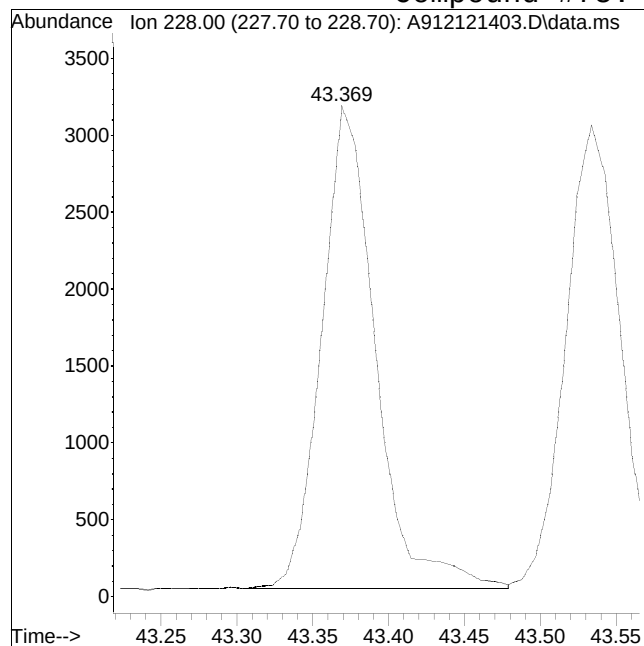
Manual Peak Response = 6943 M4

M4 = Poor automated baseline construction.

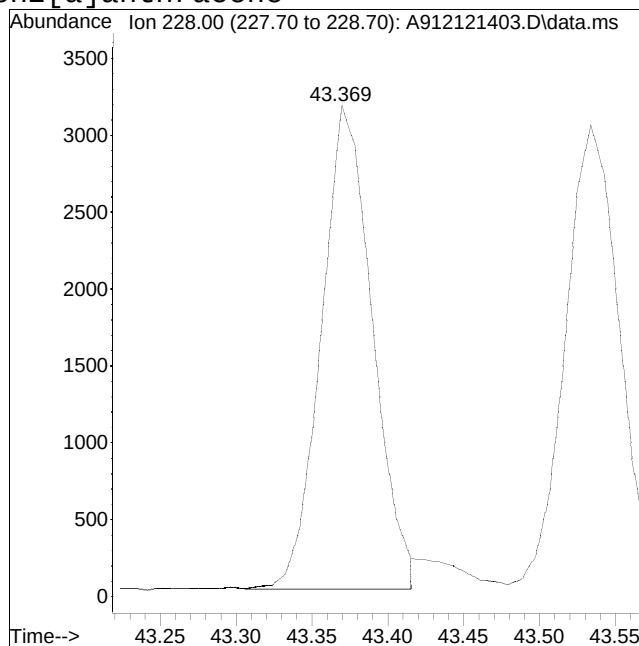
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121403.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 4:29 pm Instrument : PAH 9
Sample : i912121402 Quant Date : 12/15/2014 10:36 am

Compound #75: Benz[a]anthracene



Original Peak Response = 7782



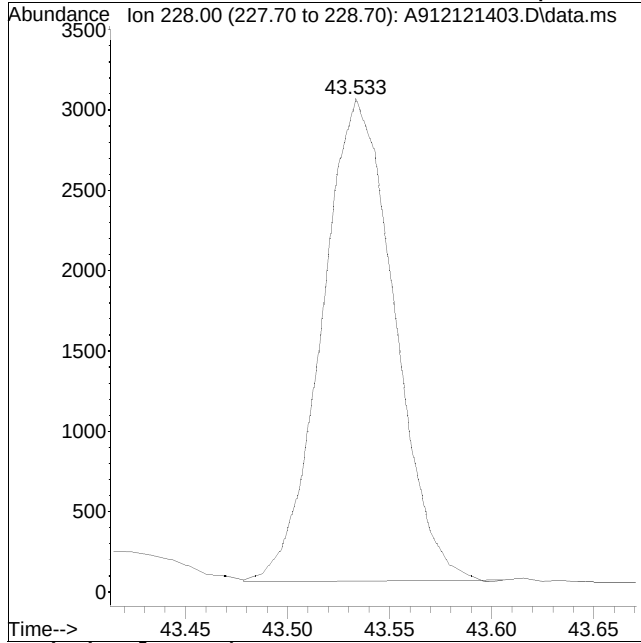
Manual Peak Response = 7394 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

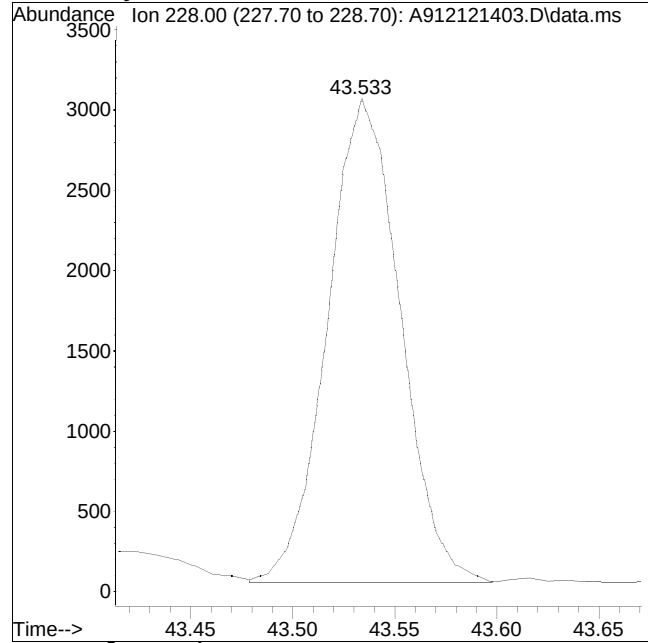
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121403.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 4:29 pm Instrument : PAH 9
Sample : i912121402 Quant Date : 12/15/2014 10:36 am

Compound #76: Chrysene



Original Peak Response = 7355



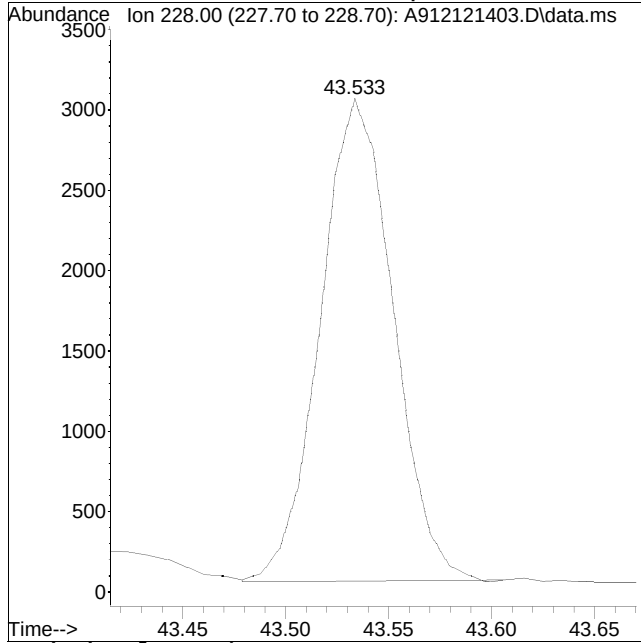
Manual Peak Response = 7473 M4

M4 = Poor automated baseline construction.

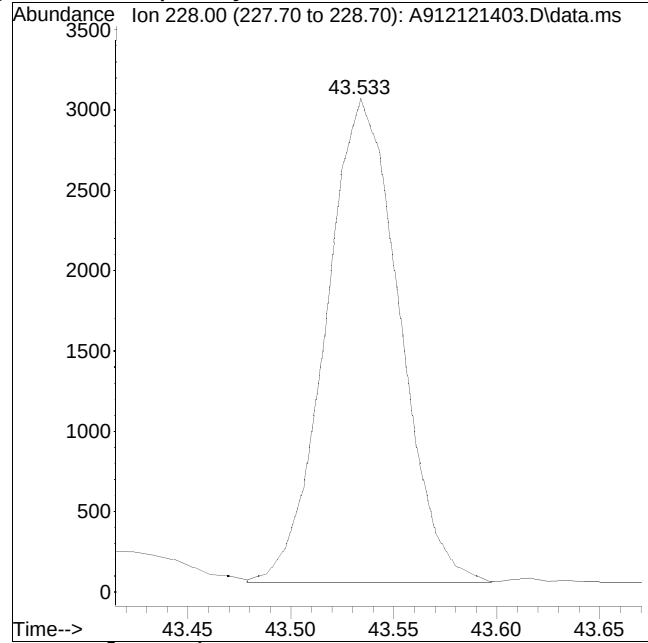
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121403.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 4:29 pm Instrument : PAH 9
Sample : i912121402 Quant Date : 12/15/2014 10:36 am

Compound #77: Chrysene/Triphenylene



Original Peak Response = 7355



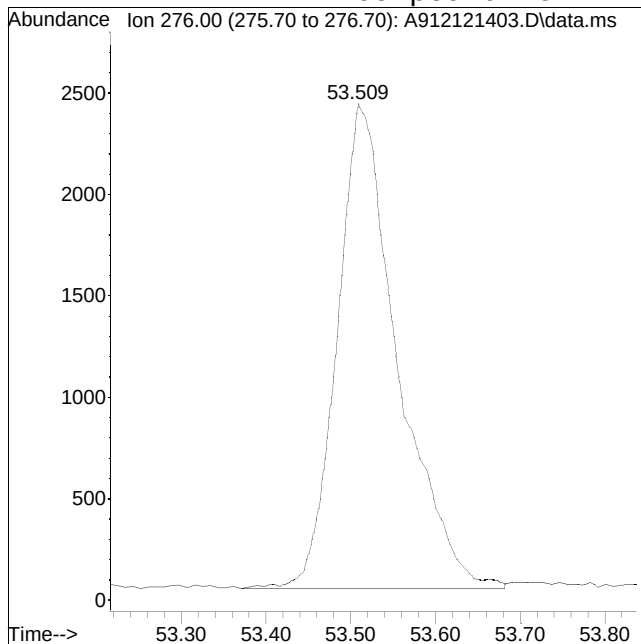
Manual Peak Response = 7458 M4

M4 = Poor automated baseline construction.

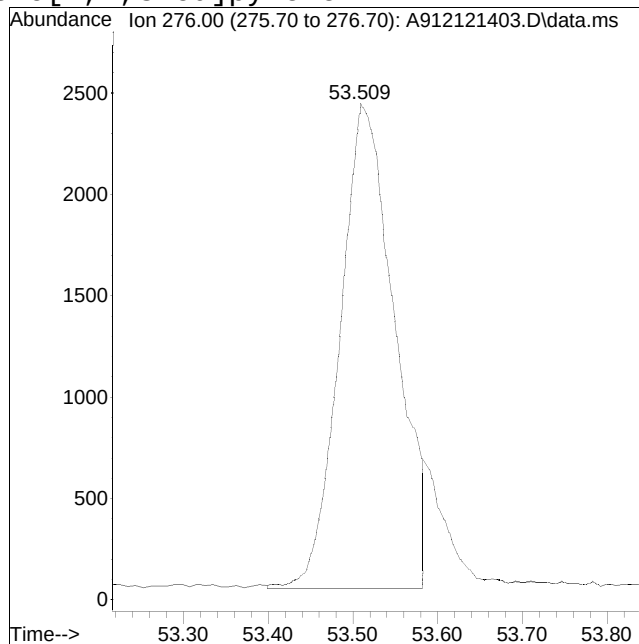
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121403.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 4:29 pm Instrument : PAH 9
Sample : i912121402 Quant Date : 12/15/2014 10:36 am

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 11811



Manual Peak Response = 10793 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Data File : A912121404.D
 Acq On : 12 Dec 2014 5:54 pm
 Operator : PAH9:SR
 Sample : i912121403
 Misc : WG749024,l3 frau68 100 ng/mL
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 16 10:49:57 2014
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 10:35:44 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.022	164	75620M4	500.000	ng/mL	0.00
74) Chrysene-d12	43.433	240	144667	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	20.069	136	36148	120.136	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	12.01%#		
42) Phenanthrene-d10	32.880	188	26919	115.690	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	11.57%#		
83) Benzo[b]fluoranthene-d12	47.335	264	30573	108.320	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	10.83%#		
88) Benzo[a]pyrene-d12	48.533	264	27744	106.841	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	10.68%#		
129) 5B(H)Cholane - Surr	44.063	217	4373	91.971	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	9.20%#		
Target Compounds						
					Qvalue	
3) trans-Decalin	16.720	138	3604	52.672	ng/mL	100
4) cis-Decalin	17.933	138	2598	48.946	ng/mL	100
10) Naphthalene	20.142	128	43929	136.072	ng/mL	100
16) 2-Methylnaphthalene	22.834	142	23127	115.629	ng/mL	100
17) 1-Methylnaphthalene	23.254	142	22468	115.368	ng/mL	100
18) Benzothiophene	20.361	134	39687	145.182	ng/mL	100
23) Biphenyl	24.705	154	28849	114.158	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.316	156	18461	105.502	ng/mL	100
25) Dibenzofuran	27.789	168	30158	115.718	ng/mL	99
26) Acenaphthylene	26.411	152	33773	110.033	ng/mL	100
27) Acenaphthene	27.141	153	21331	112.839	ng/mL	99
28) 2,3,5-Trimethylnaphthalen	28.692	170	17051	111.527	ng/mL	98
29) Fluorene	29.158	166	22699M4	108.323	ng/mL	
33) Dibenzothiophene	32.469	184	34766	127.186	ng/mL	99
43) Phenanthrene	32.962	178	33053	114.091	ng/mL	99
54) Retene	39.927	234	8667	113.794	ng/mL	99
55) Anthracene	33.145	178	29308M4	110.041	ng/mL	
56) Carbazole	33.802	167	28298	104.008	ng/mL	99
57) 1-Methylphenanthrene	35.463	192	21269	107.073	ng/mL	99
58) Fluoranthene	37.727	202	32716M4	117.436	ng/mL	
59) Benzo(b)fluorene	40.238	216	19202	115.757	ng/mL	100
60) Pyrene	38.612	202	32963	111.038	ng/mL	100
66) Naphthobenzothiophene	42.447	234	35190	133.795	ng/mL	100
67) Naphthobenzothiophene-2,1	42.447	234	35190	133.795	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Data File : A912121404.D
 Acq On : 12 Dec 2014 5:54 pm
 Operator : PAH9:SR
 Sample : i912121403
 Misc : WG749024,l3 frau68 100 ng/mL
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 16 10:49:57 2014
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 10:35:44 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.369	228	31963	121.440	ng/mL	99
76)	Chrysene	43.534	228	32231	124.437	ng/mL	100
77)	Chrysene/Triphenylene	43.534	228	32231	124.437	ng/mL	100
84)	Benzo[b]fluoranthene	47.417	252	38110	118.765	ng/mL	97
85)	Benzo[j]+[k]fluoranthene	47.500	252	37512	119.416	ng/mL	99
87)	Benzo[e]pyrene	48.433	252	36315	116.136	ng/mL	94
89)	Benzo[a]pyrene	48.625	252	34206	112.959	ng/mL	98
90)	Perylene	48.945	252	35416	114.804	ng/mL	96
91)	Indeno[1,2,3-cd]pyrene	53.518	276	42303M3	108.790	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.573	278	43025	117.981	ng/mL	100
93)	Benzo[g,h,i]perylene	54.834	276	41489	110.843	ng/mL	98
94)	Hopane (T19)	52.622	191	8584	83.948	ng/mL	92
95)	17a(H),21B(H)-hopane - C3	52.622	191	8584	83.948	ng/mL	92

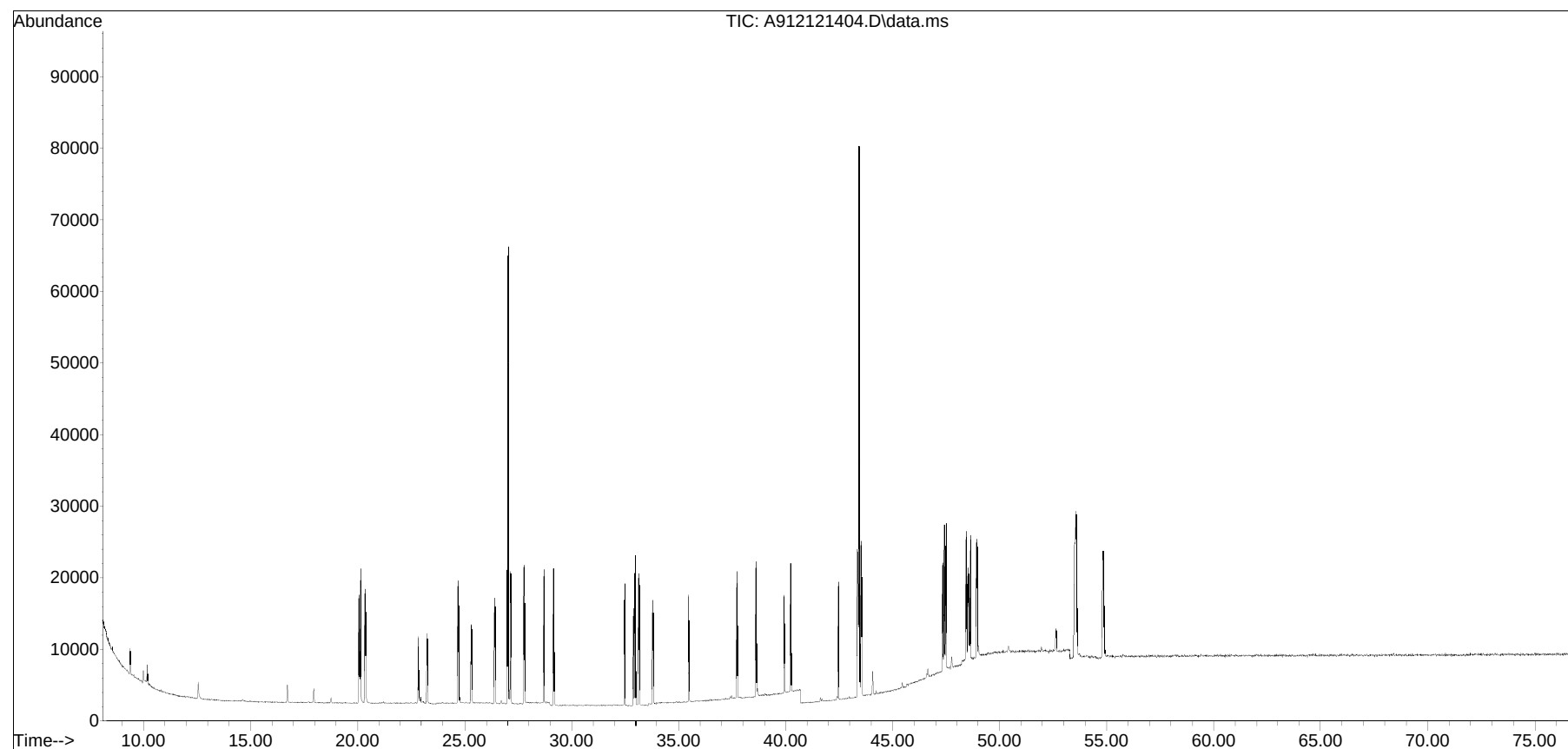
(#) = qualifier out of range (m) = manual integration (+) = signals summed

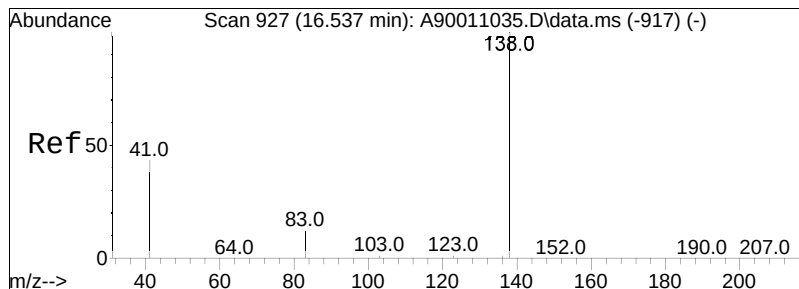
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC12\
Data File : A912121404.D
Acq On : 12 Dec 2014 5:54 pm
Operator : PAH9:SR
Sample : i912121403
Misc : WG749024,l3 frau68 100 ng/mL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 16 10:49:57 2014
Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 15 10:35:44 2014
Response via : Initial Calibration

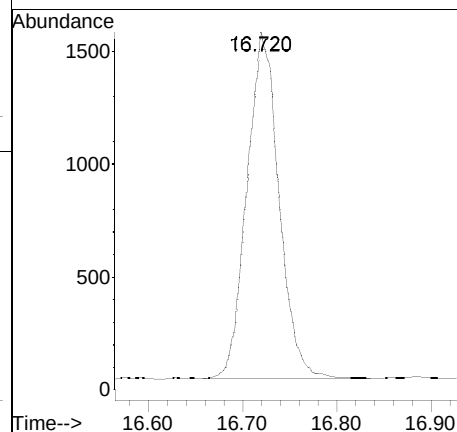
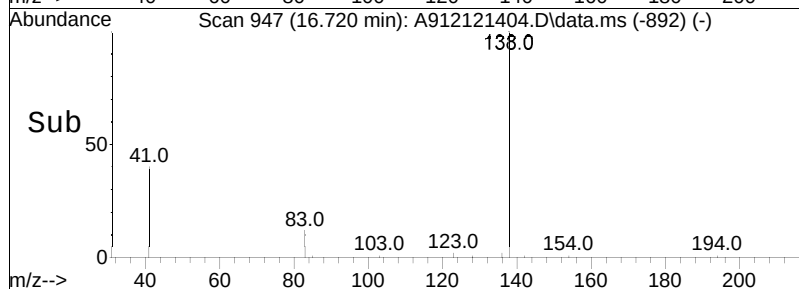
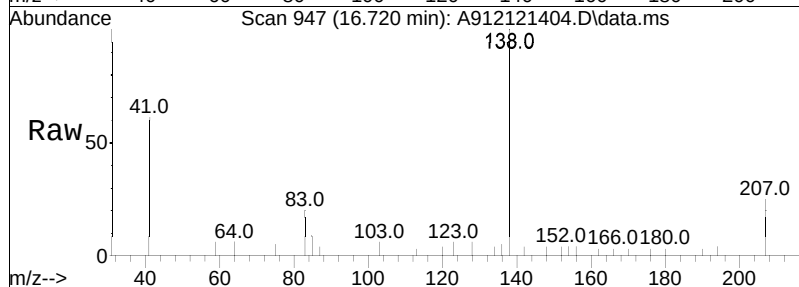
Sub List : ICAL_CCALT_REV2 - CC with five surrogates

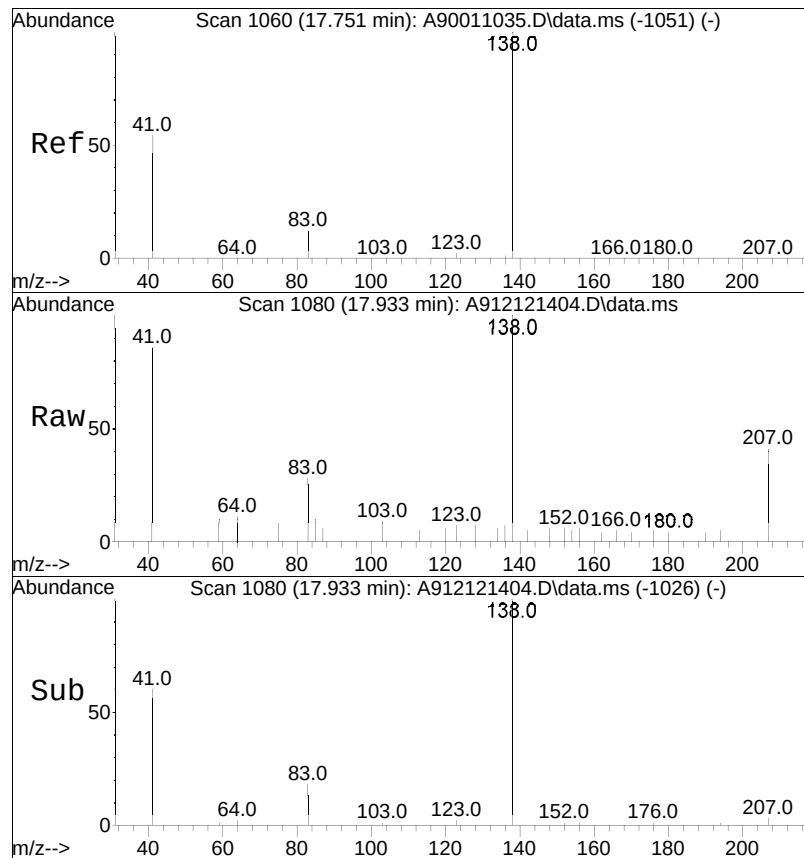




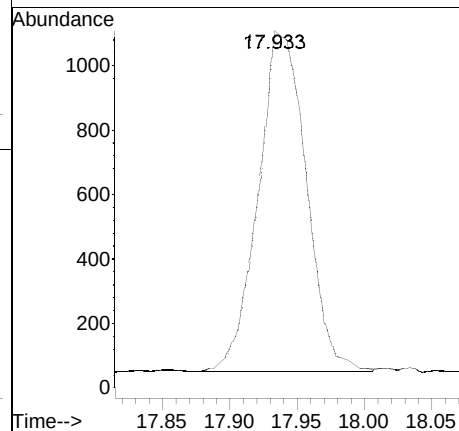
#3
 trans-Decalin
 Concen: 52.67 ng/mL
 RT: 16.720 min Scan# 947
 Delta R.T. -0.000 min
 Lab File: A912121404.D
 Acq: 12 Dec 2014 5:54 pm

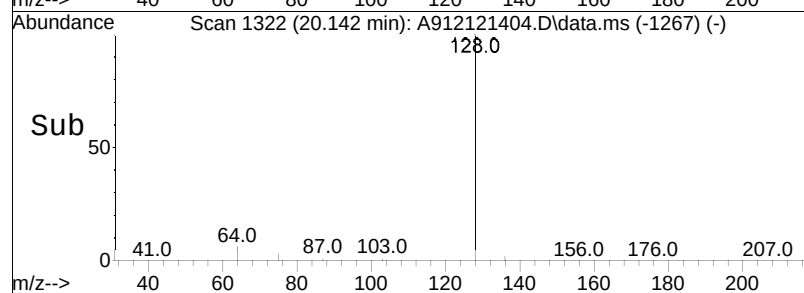
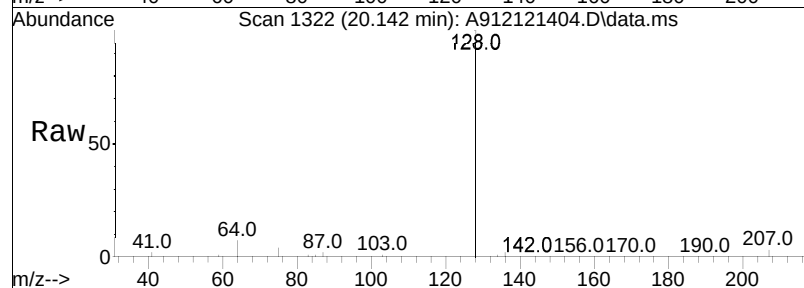
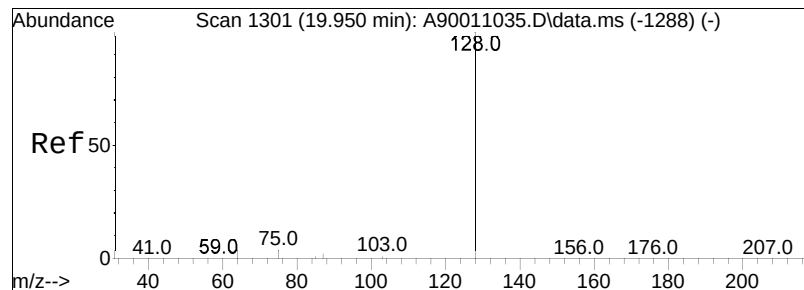
Tgt Ion:138 Resp: 3604





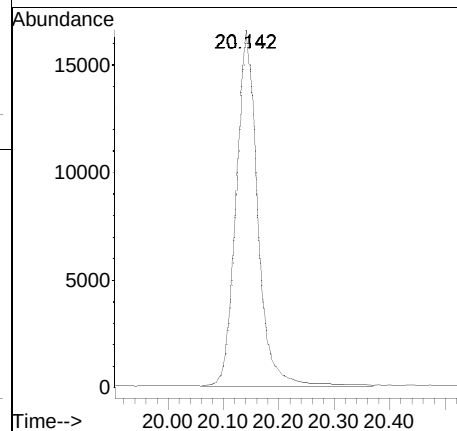
#4
 cis-Decalin
 Concen: 48.95 ng/mL
 RT: 17.933 min Scan# 1080
 Delta R.T. -0.009 min
 Lab File: A912121404.D
 Acq: 12 Dec 2014 5:54 pm
 Tgt Ion:138 Resp: 2598

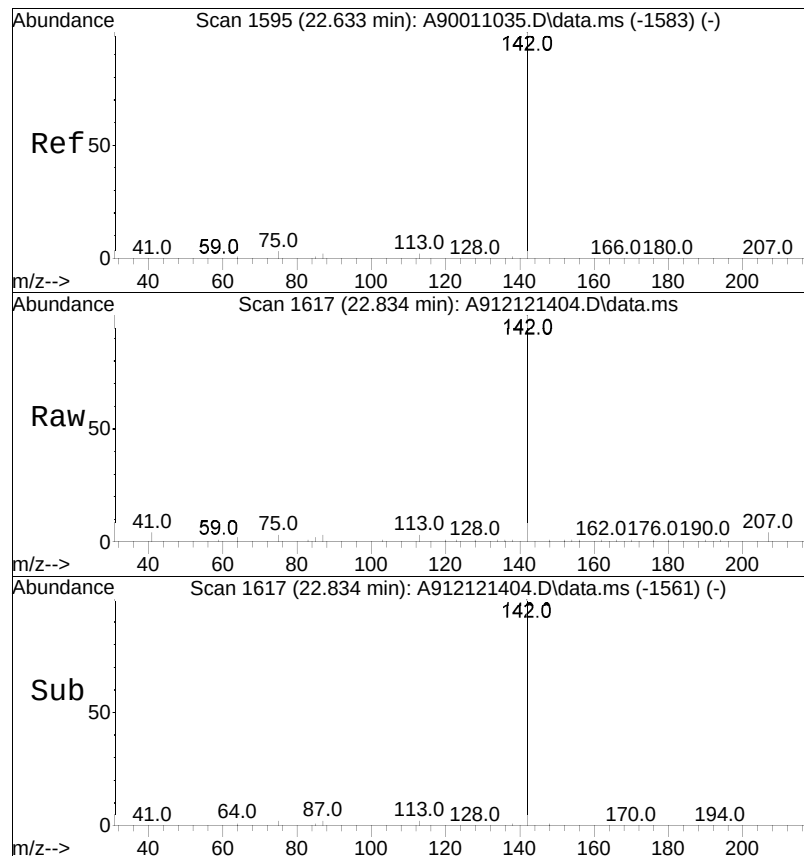




#10
Naphthalene
Concen: 136.07 ng/mL
RT: 20.142 min Scan# 1322
Delta R.T. -0.000 min
Lab File: A912121404.D
Acq: 12 Dec 2014 5:54 pm

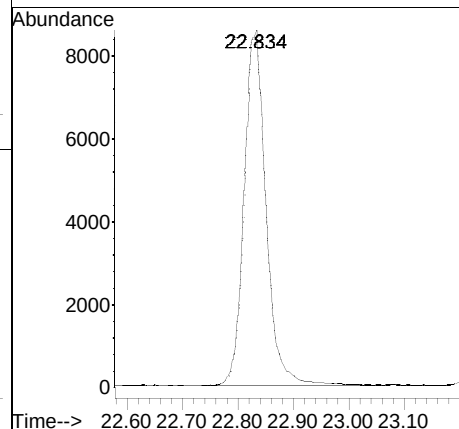
Tgt Ion:128 Resp: 43929

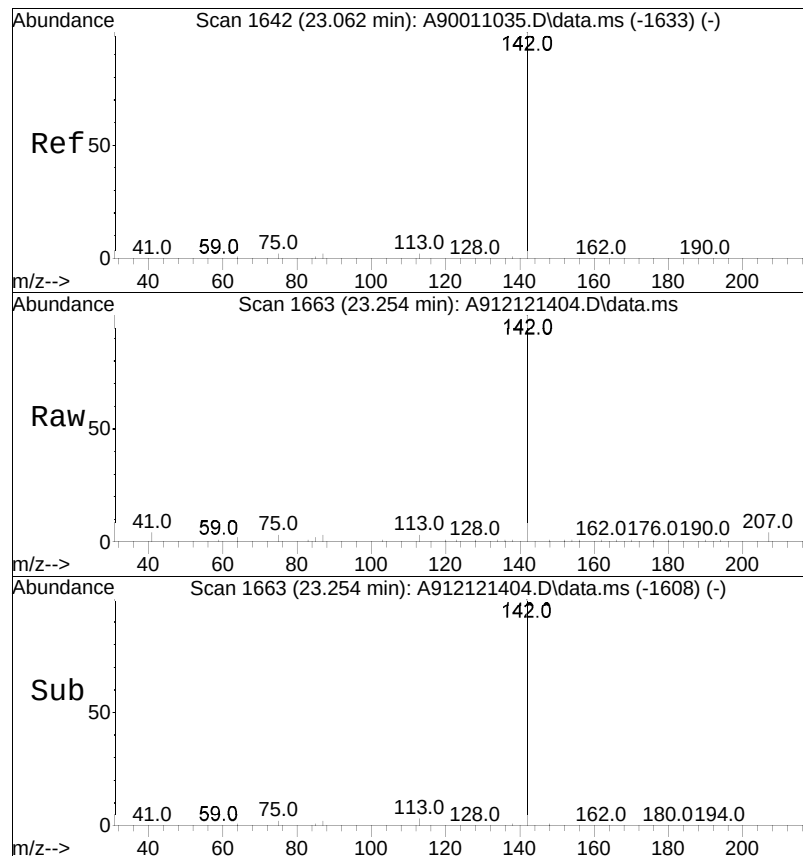




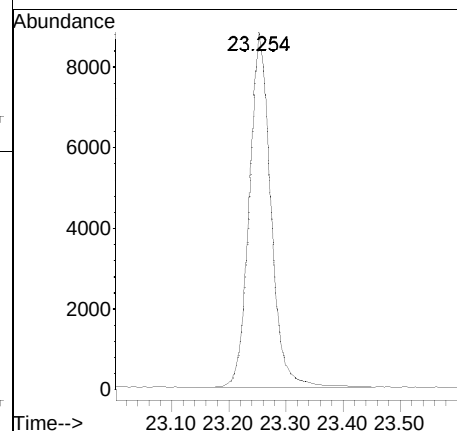
#16
2-Methylnaphthalene
Concen: 115.63 ng/mL
RT: 22.834 min Scan# 1617
Delta R.T. 0.009 min
Lab File: A912121404.D
Acq: 12 Dec 2014 5:54 pm

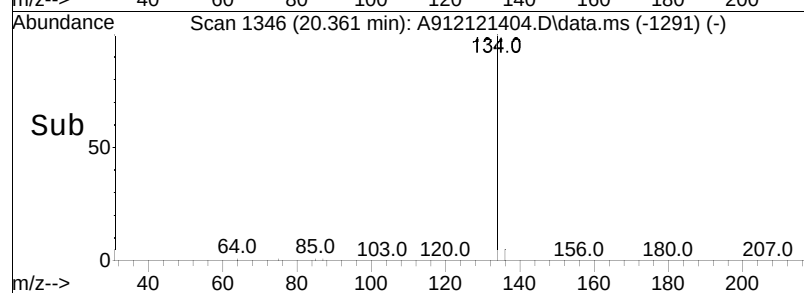
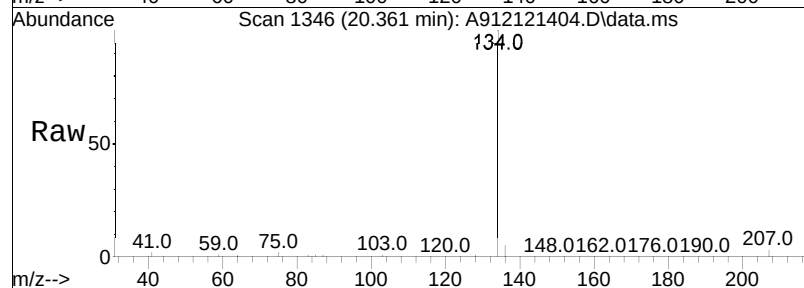
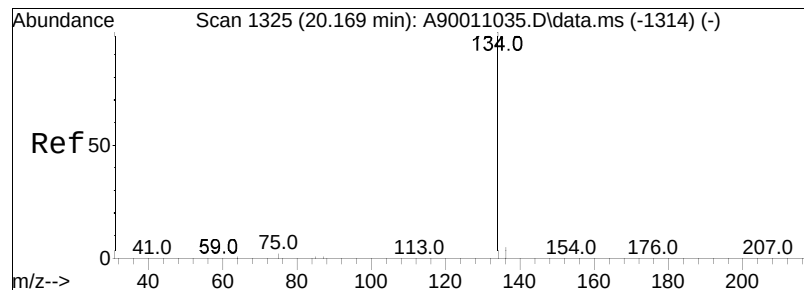
Tgt Ion:142 Resp: 23127



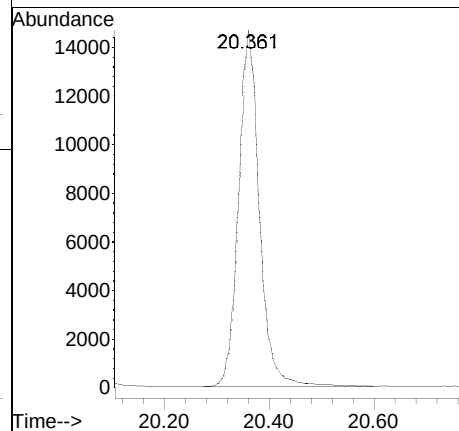


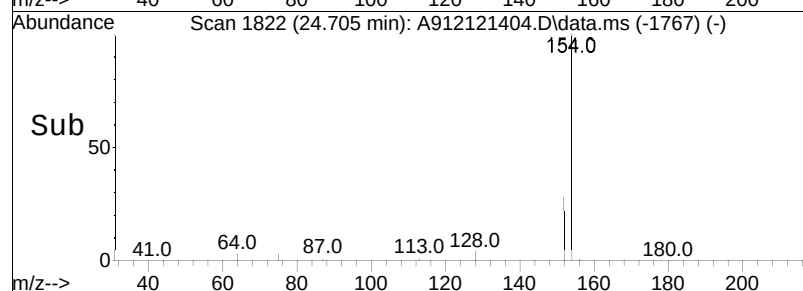
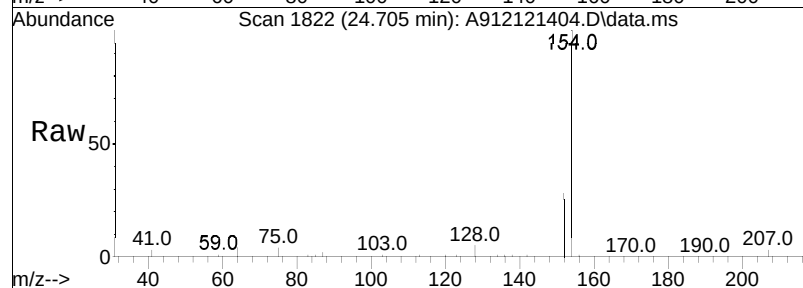
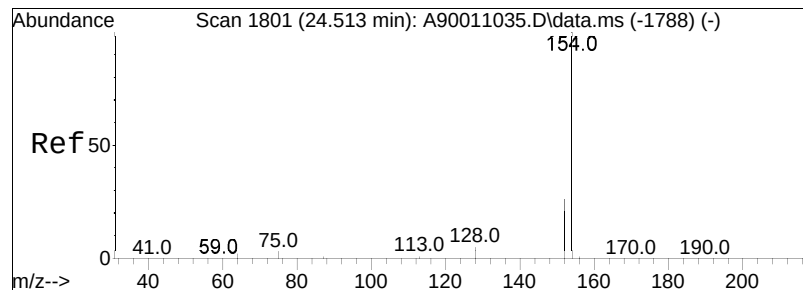
#17
1-Methylnaphthalene
Concen: 115.37 ng/mL
RT: 23.254 min Scan# 1663
Delta R.T. -0.000 min
Lab File: A912121404.D
Acq: 12 Dec 2014 5:54 pm
Tgt Ion:142 Resp: 22468



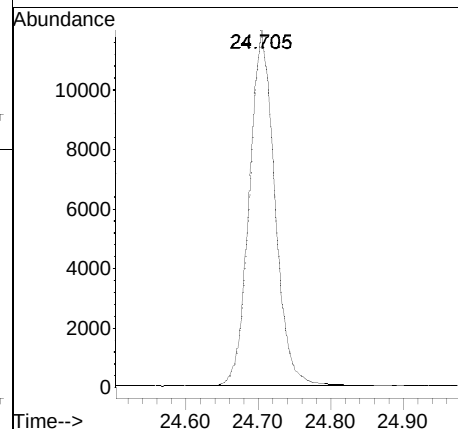


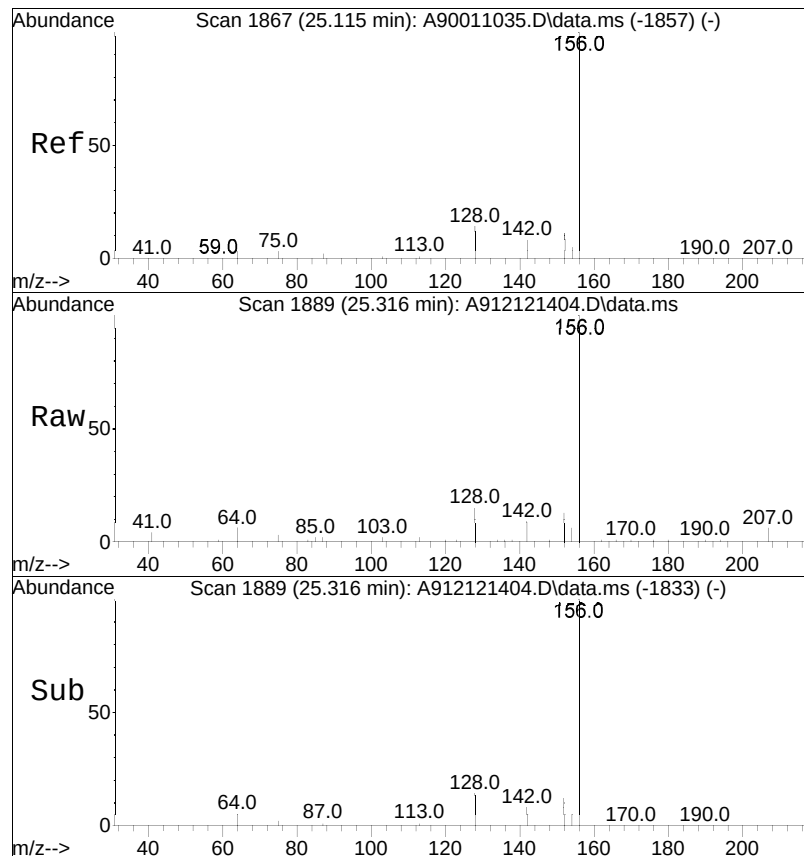
#18
 Benzo[thiophene]
 Concen: 145.18 ng/mL
 RT: 20.361 min Scan# 1346
 Delta R.T. -0.000 min
 Lab File: A912121404.D
 Acq: 12 Dec 2014 5:54 pm
 Tgt Ion:134 Resp: 39687



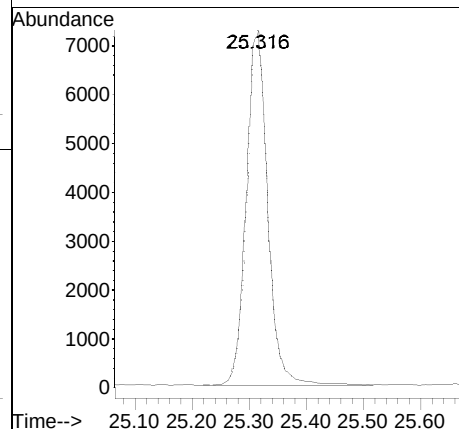


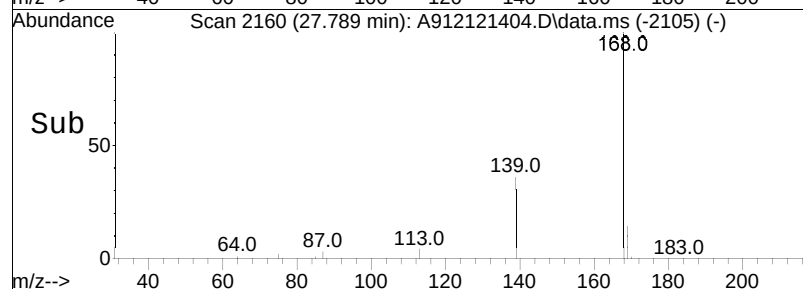
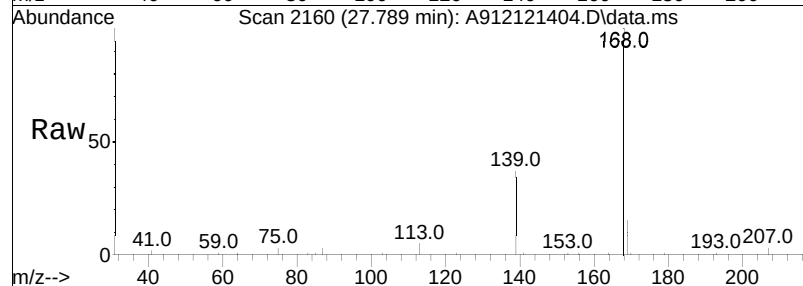
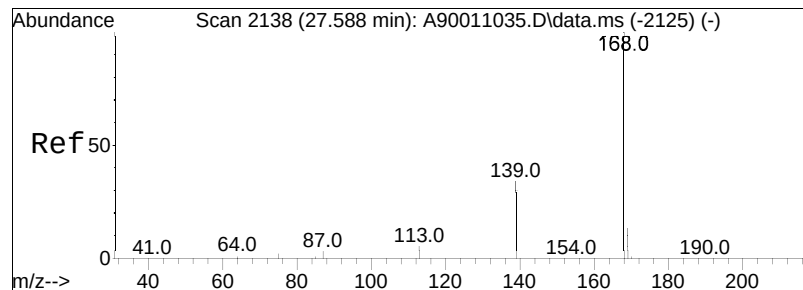
#23
Biphenyl
Concen: 114.16 ng/mL
RT: 24.705 min Scan# 1822
Delta R.T. -0.000 min
Lab File: A912121404.D
Acq: 12 Dec 2014 5:54 pm
Tgt Ion:154 Resp: 28849





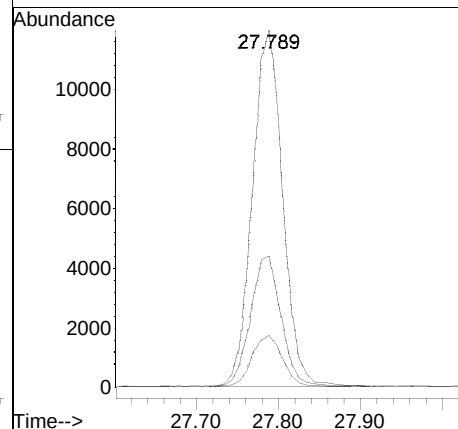
#24
2,6-Dimethylnaphthalene
Concen: 105.50 ng/mL
RT: 25.316 min Scan# 1889
Delta R.T. 0.009 min
Lab File: A912121404.D
Acq: 12 Dec 2014 5:54 pm
Tgt Ion:156 Resp: 18461

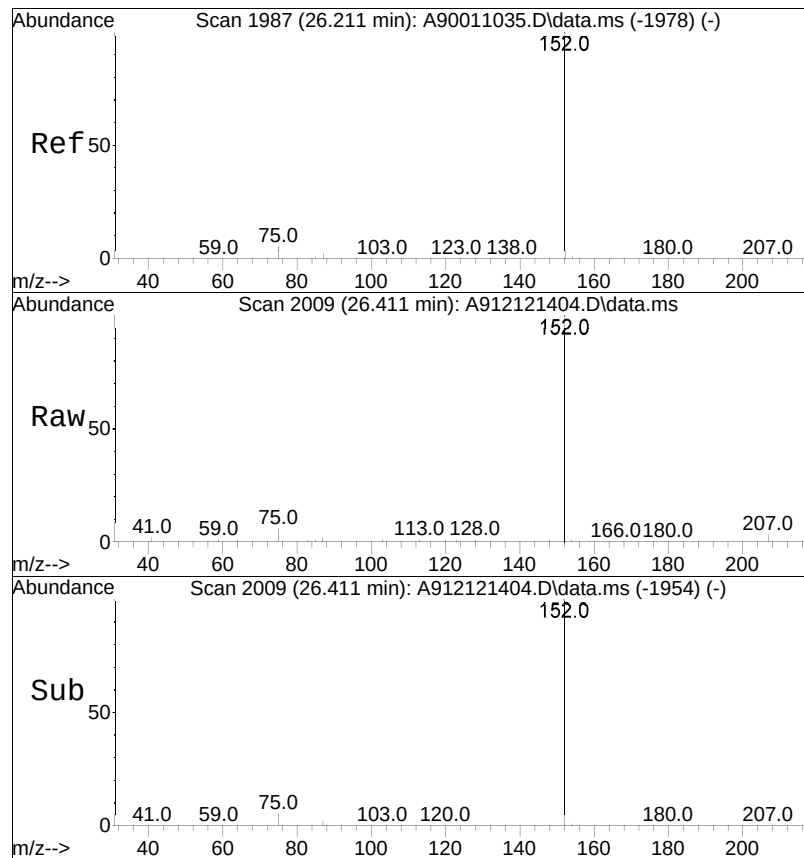




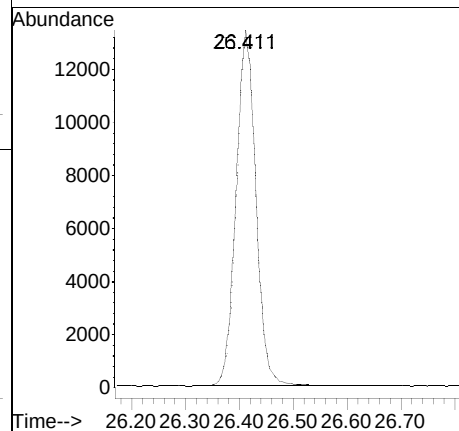
#25
 Dibenzofuran
 Concen: 115.72 ng/mL
 RT: 27.789 min Scan# 2160
 Delta R.T. -0.000 min
 Lab File: A912121404.D
 Acq: 12 Dec 2014 5:54 pm

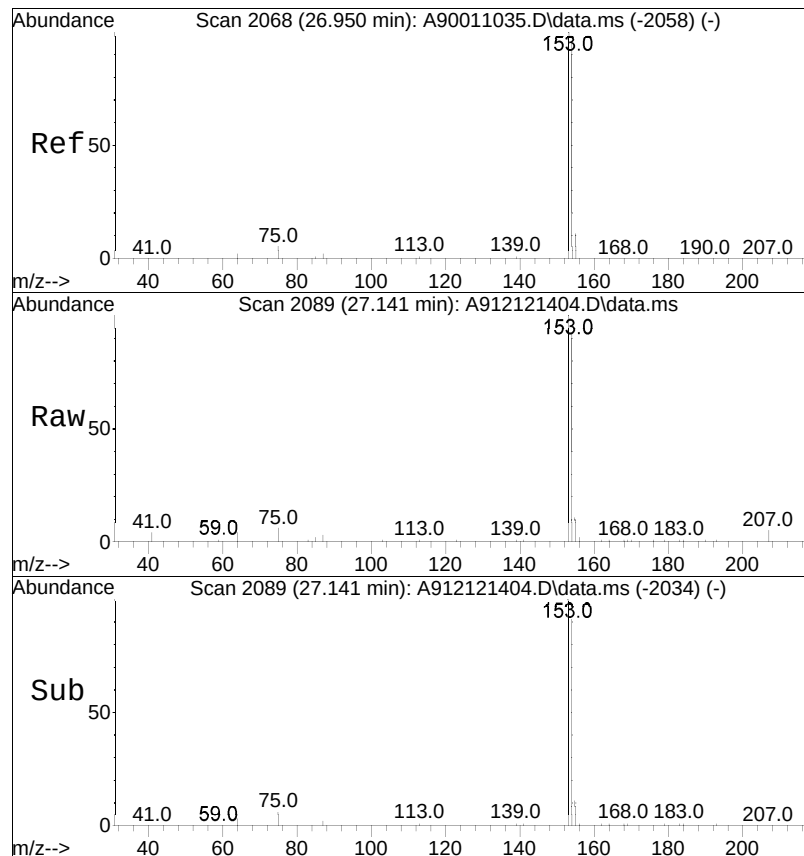
Tgt Ion	Ratio	Lower	Upper
168	100		
139	37.0	25.1	46.7
169	14.6	10.2	19.0





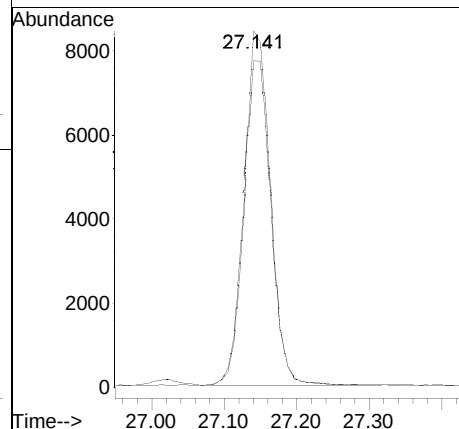
#26
Acenaphthylene
Concen: 110.03 ng/mL
RT: 26.411 min Scan# 2009
Delta R.T. -0.000 min
Lab File: A912121404.D
Acq: 12 Dec 2014 5:54 pm
Tgt Ion:152 Resp: 33773

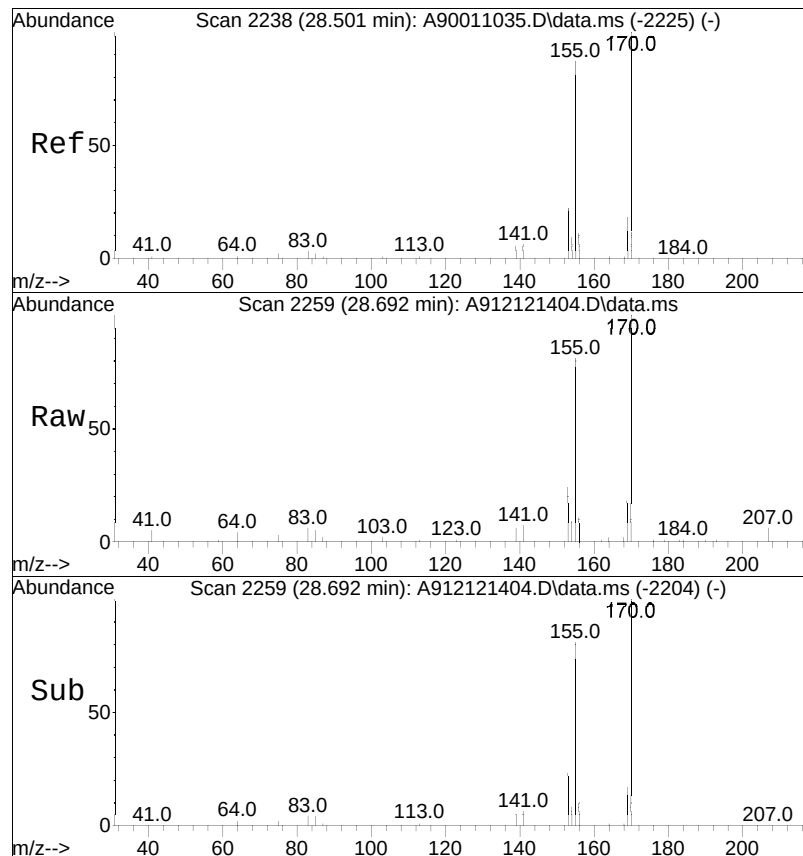




#27
 Acenaphthene
 Concen: 112.84 ng/mL
 RT: 27.141 min Scan# 2089
 Delta R.T. -0.000 min
 Lab File: A912121404.D
 Acq: 12 Dec 2014 5:54 pm

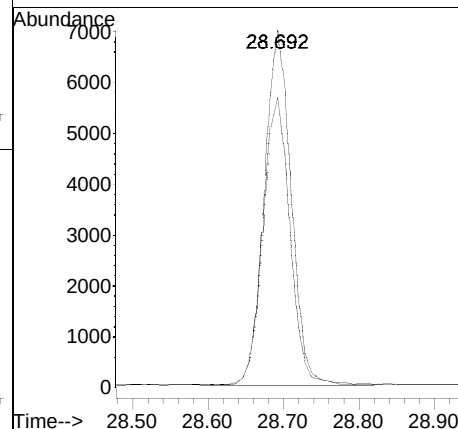
Tgt Ion	Ratio	Lower	Upper
153	100		
154	93.7	64.9	120.5

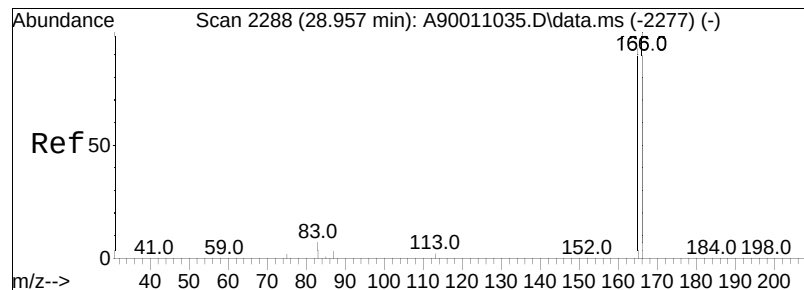




#28
 2,3,5-Trimethylnaphthalene
 Concen: 111.53 ng/mL
 RT: 28.692 min Scan# 2259
 Delta R.T. -0.000 min
 Lab File: A912121404.D
 Acq: 12 Dec 2014 5:54 pm

Tgt Ion	Ratio	Lower	Upper
170	100		
155	81.3	55.9	103.9





#29

Fluorene

Concen: 108.32 ng/mL M4

RT: 29.158 min Scan# 2310

Delta R.T. -0.000 min

Lab File: A912121404.D

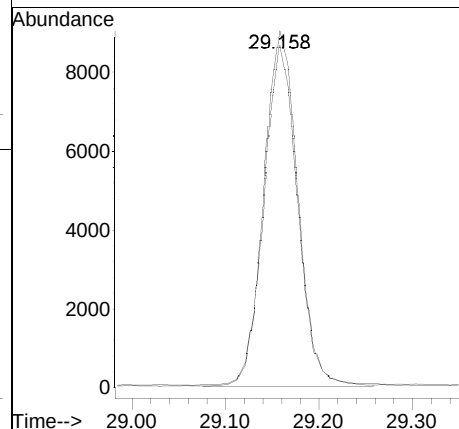
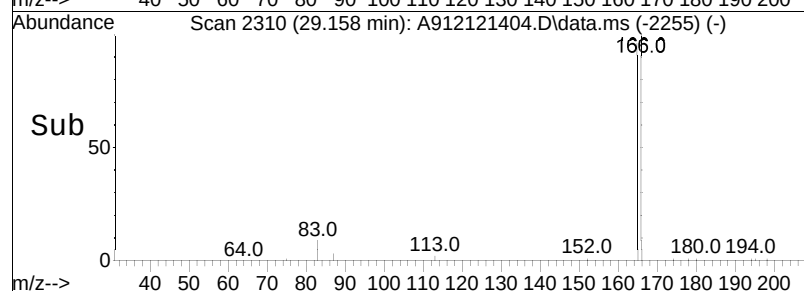
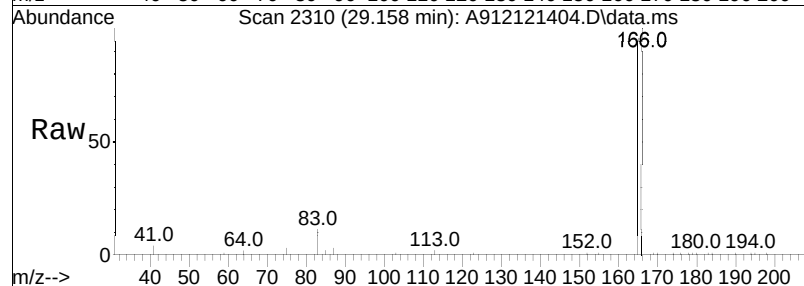
Acq: 12 Dec 2014 5:54 pm

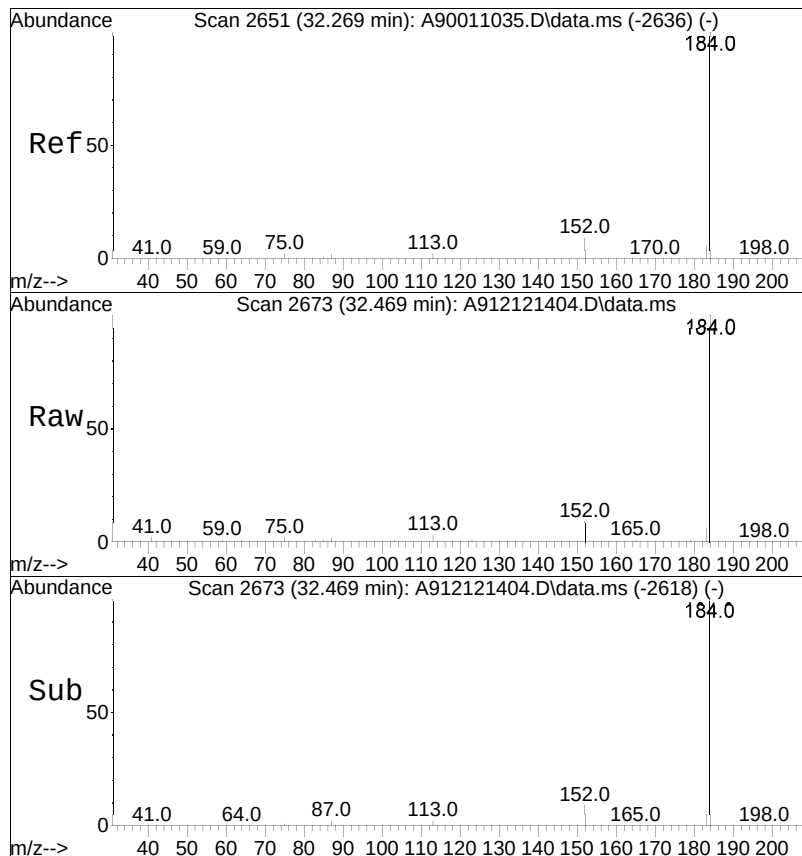
Tgt Ion:166 Resp: 22699

Ion Ratio Lower Upper

166 100

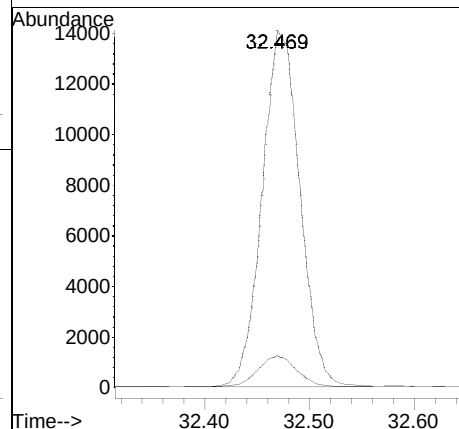
165 95.5 65.5 121.7

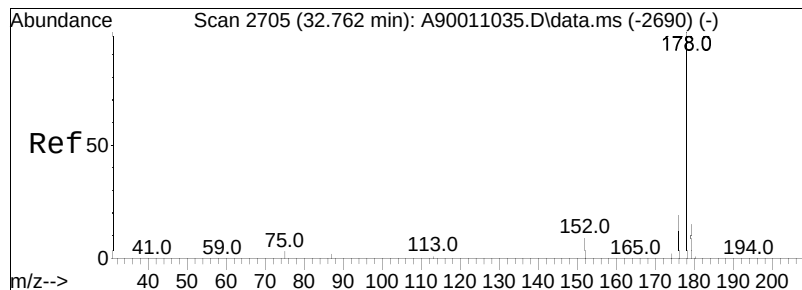




#33
 Dibenzothiophene
 Concen: 127.19 ng/mL
 RT: 32.469 min Scan# 2673
 Delta R.T. -0.000 min
 Lab File: A912121404.D
 Acq: 12 Dec 2014 5:54 pm

Tgt Ion	Ratio	Lower	Upper
184	100		
152	8.8	6.3	11.7





#43

Phenanthrene

Concen: 114.09 ng/mL

RT: 32.962 min Scan# 2727

Delta R.T. -0.000 min

Lab File: A912121404.D

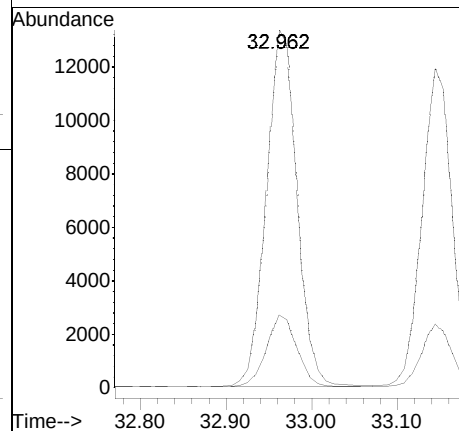
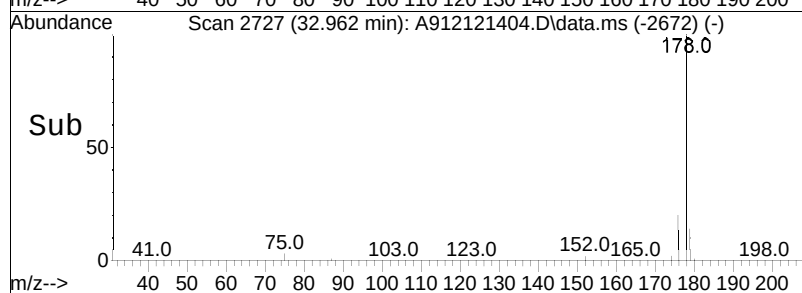
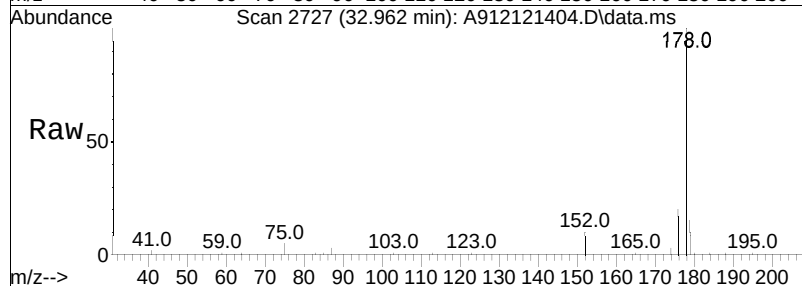
Acq: 12 Dec 2014 5:54 pm

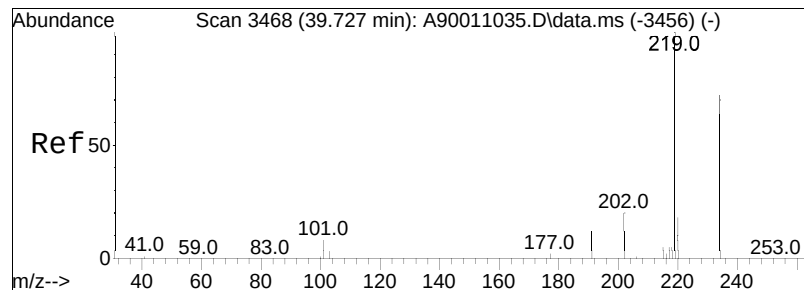
Tgt Ion:178 Resp: 33053

Ion Ratio Lower Upper

178 100

176 19.8 13.7 25.5





#54

Retene

Concen: 113.79 ng/mL

RT: 39.927 min Scan# 3490

Delta R.T. -0.000 min

Lab File: A912121404.D

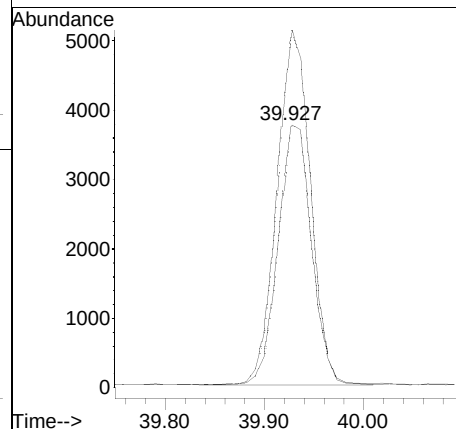
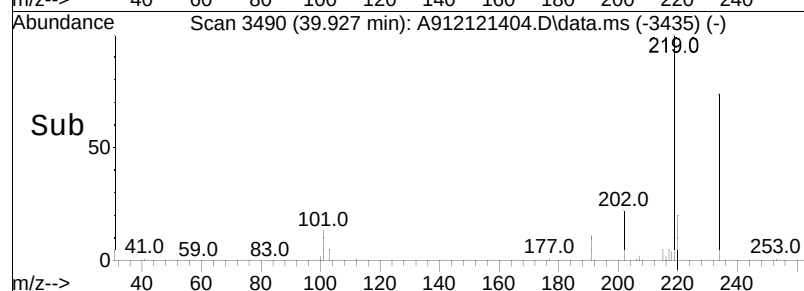
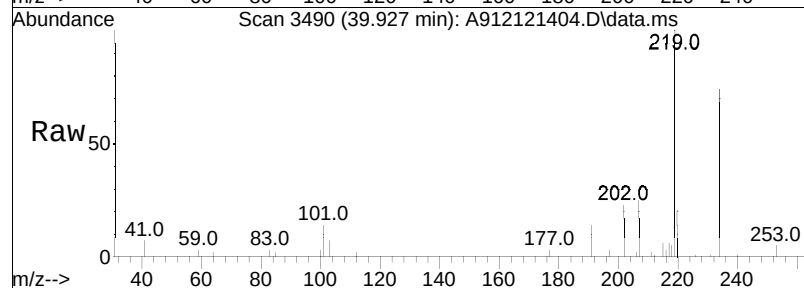
Acq: 12 Dec 2014 5:54 pm

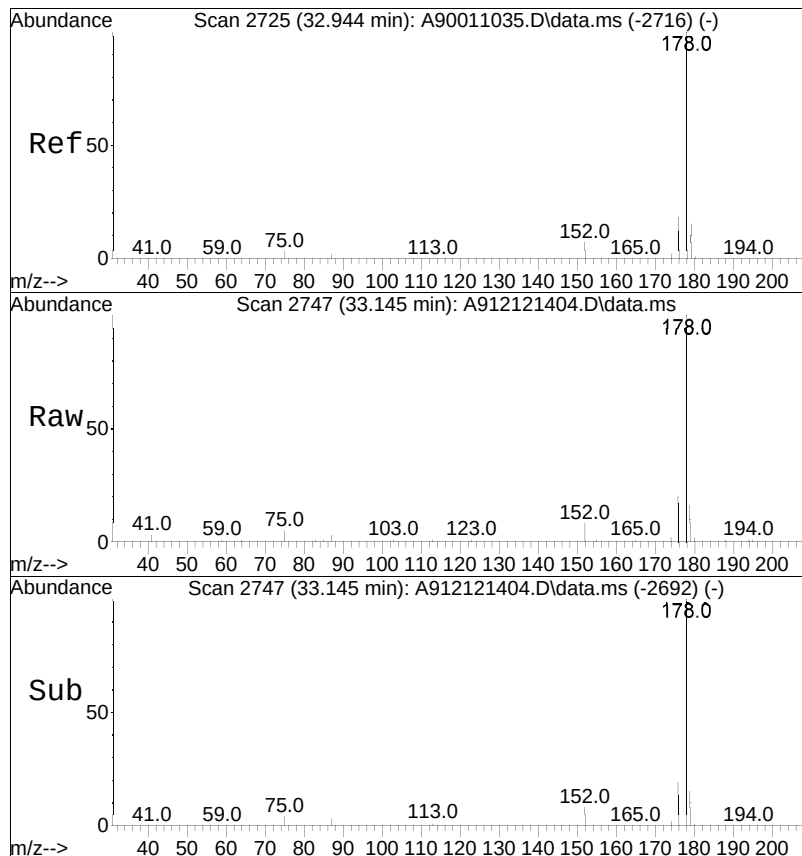
Tgt Ion: 234 Resp: 8667

Ion Ratio Lower Upper

234 100

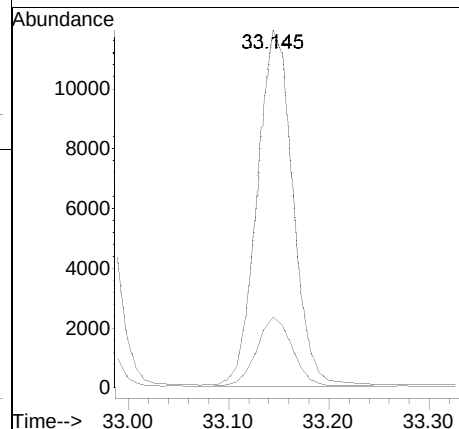
219 136.5 96.7 179.7

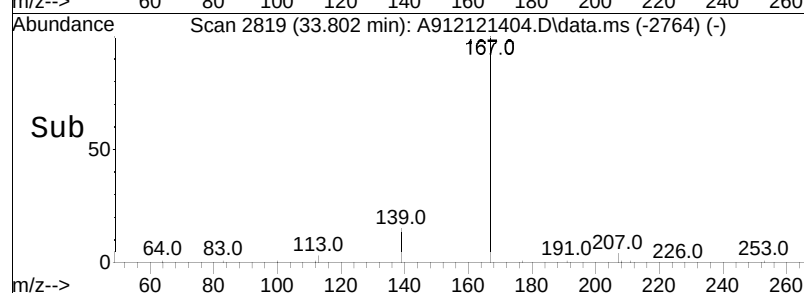
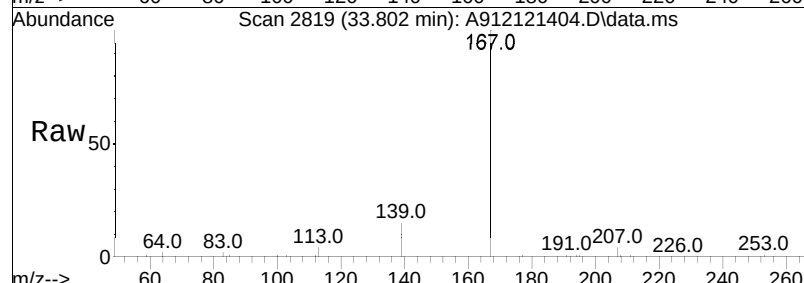
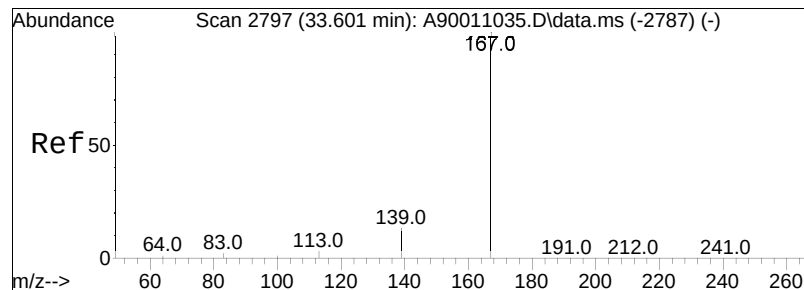




#55
 Anthracene
 Concen: 110.04 ng/mL M4
 RT: 33.145 min Scan# 2747
 Delta R.T. -0.000 min
 Lab File: A912121404.D
 Acq: 12 Dec 2014 5:54 pm

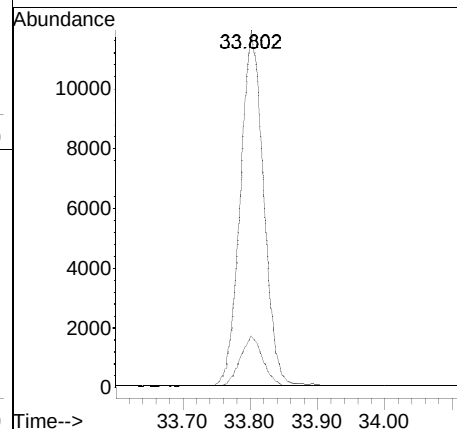
Tgt Ion	Ratio	Lower	Upper
178	100		
176	19.5	13.4	24.8

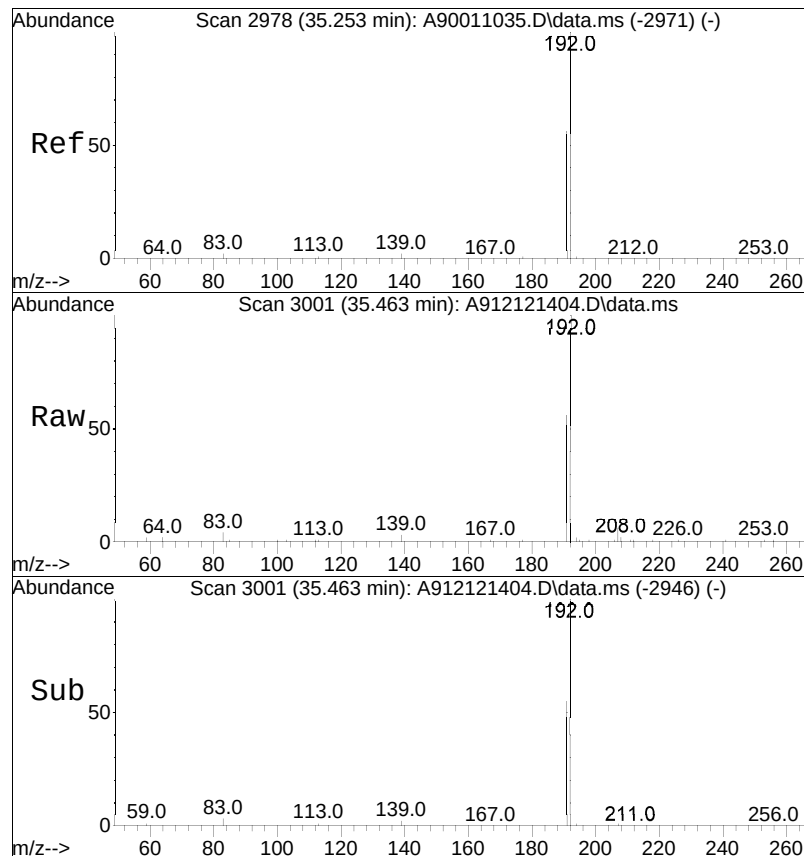




#56
 Carbazole
 Concen: 104.01 ng/mL
 RT: 33.802 min Scan# 2819
 Delta R.T. -0.000 min
 Lab File: A912121404.D
 Acq: 12 Dec 2014 5:54 pm

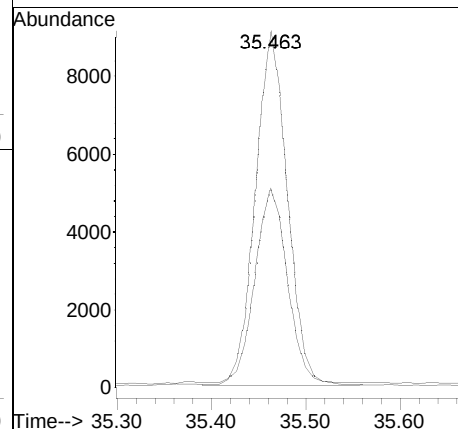
Tgt Ion	Ratio	Lower	Upper
167	100		
139	13.8	9.9	18.3

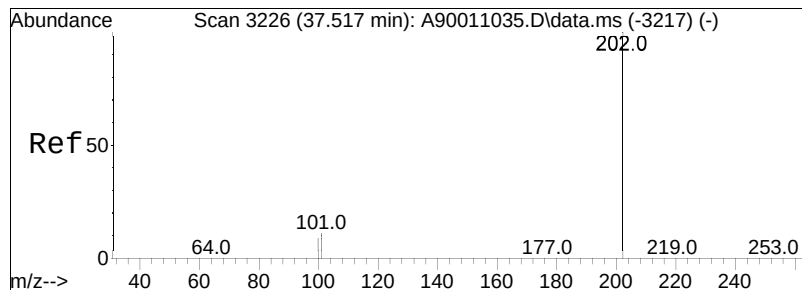




#57
 1-Methylphenanthrene
 Concen: 107.07 ng/mL
 RT: 35.463 min Scan# 3001
 Delta R.T. -0.000 min
 Lab File: A912121404.D
 Acq: 12 Dec 2014 5:54 pm

Tgt Ion	Ratio	Lower	Upper
192	100		
191	55.9	39.8	74.0





#58

Fluoranthene

Concen: 117.44 ng/mL M4

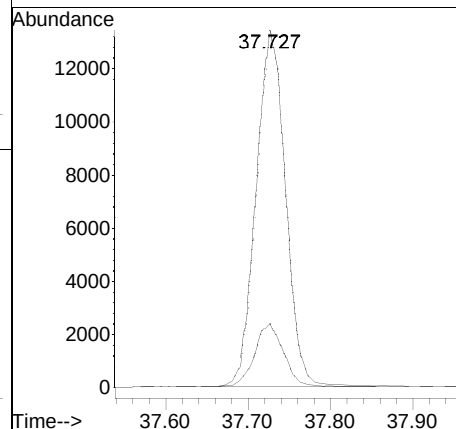
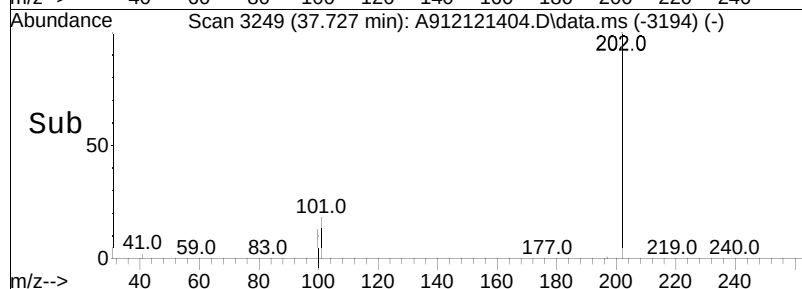
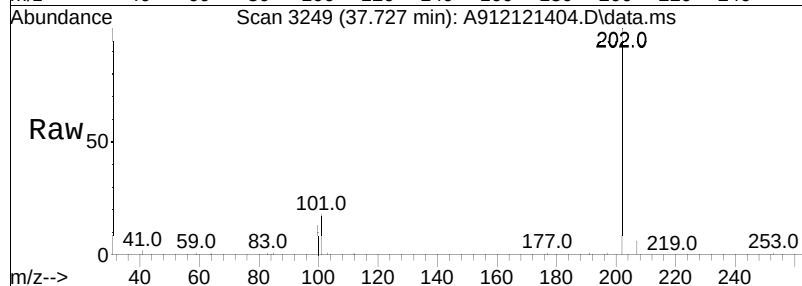
RT: 37.727 min Scan# 3249

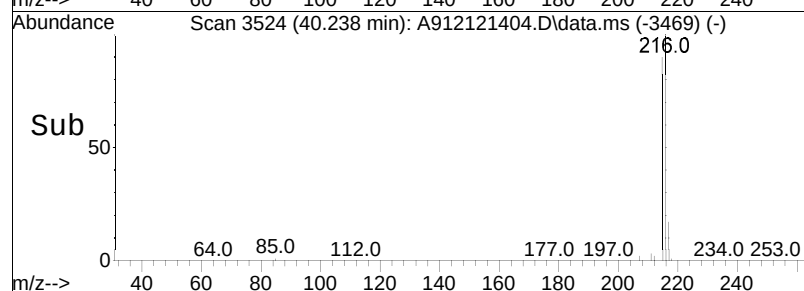
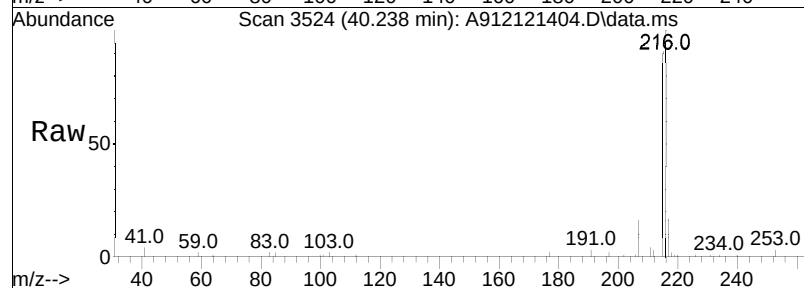
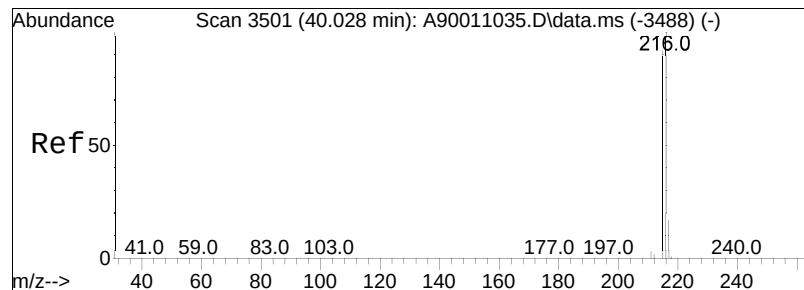
Delta R.T. -0.000 min

Lab File: A912121404.D

Acq: 12 Dec 2014 5:54 pm

Tgt Ion	Ratio	Lower	Upper
202	100		
101	17.1	11.8	22.0





#59

Benzo(b)fluorene

Concen: 115.76 ng/mL

RT: 40.238 min Scan# 3524

Delta R.T. -0.000 min

Lab File: A912121404.D

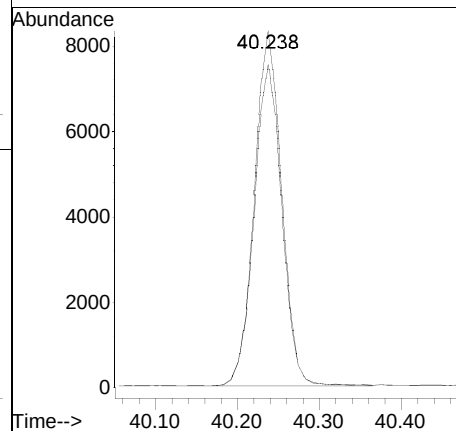
Acq: 12 Dec 2014 5:54 pm

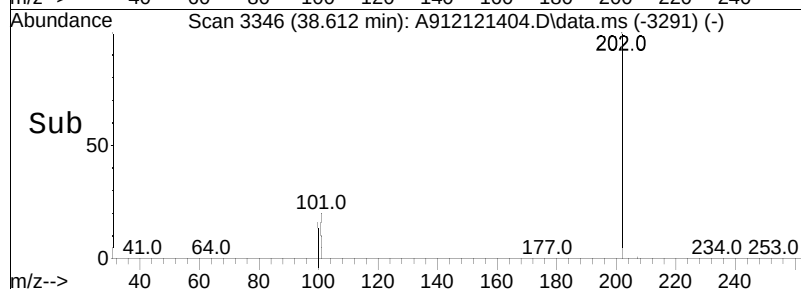
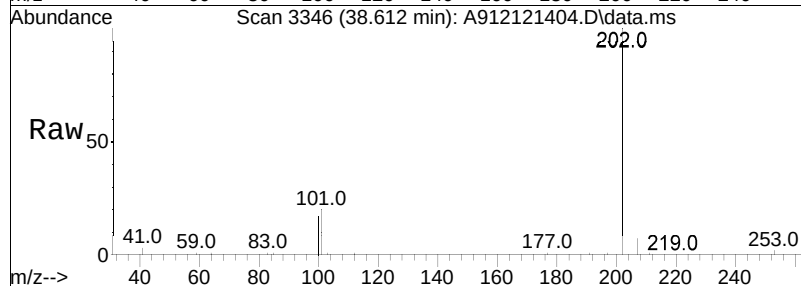
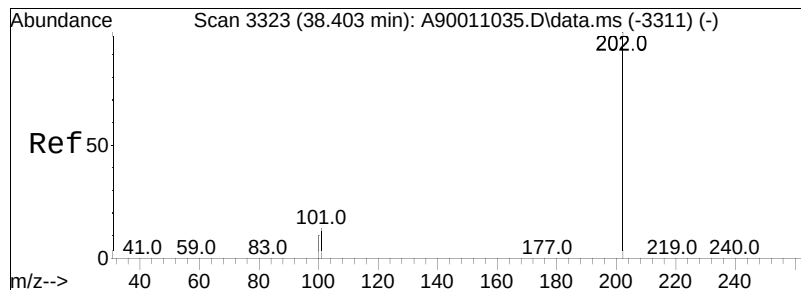
Tgt Ion: 216 Resp: 19202

Ion Ratio Lower Upper

216 100

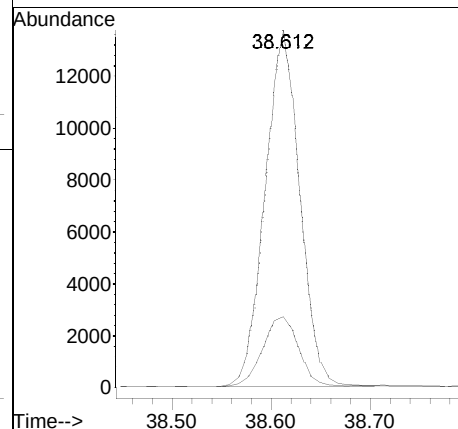
215 92.1 64.3 119.3

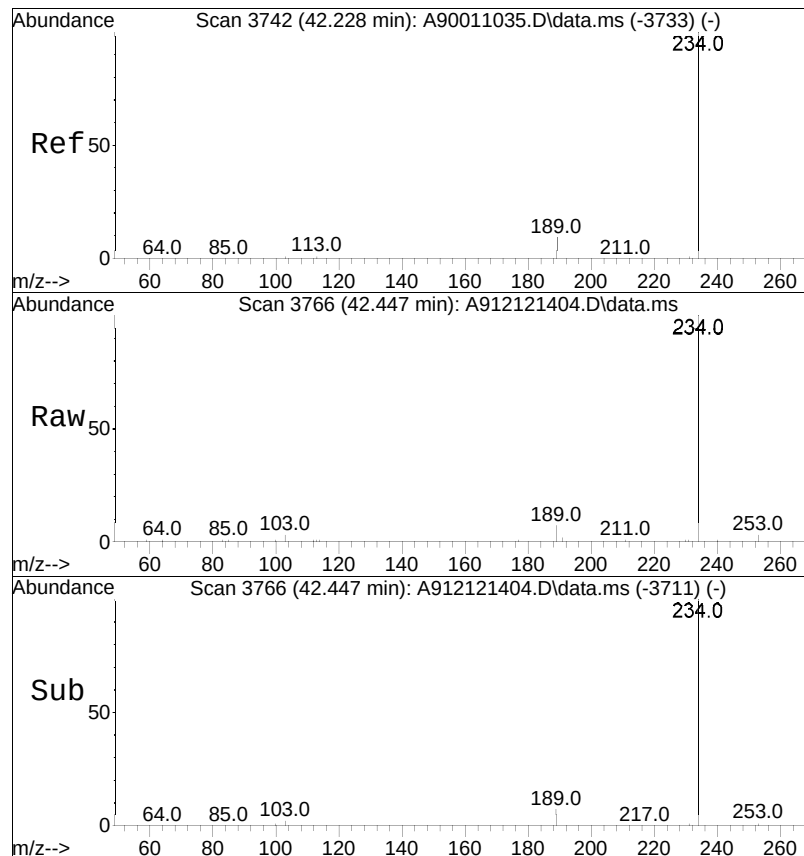




#60
 Pyrene
 Concen: 111.04 ng/mL
 RT: 38.612 min Scan# 3346
 Delta R.T. -0.000 min
 Lab File: A912121404.D
 Acq: 12 Dec 2014 5:54 pm

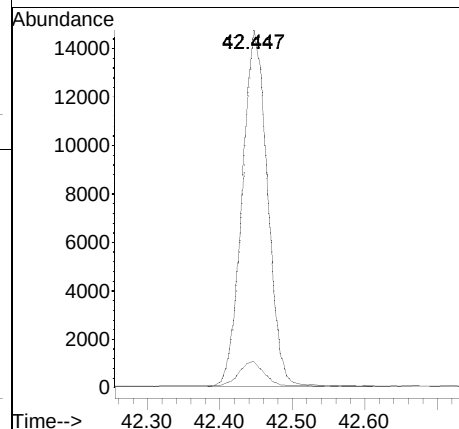
Tgt	Ion	Ratio	Lower	Upper
202	100			
101	20.4	14.2	26.4	

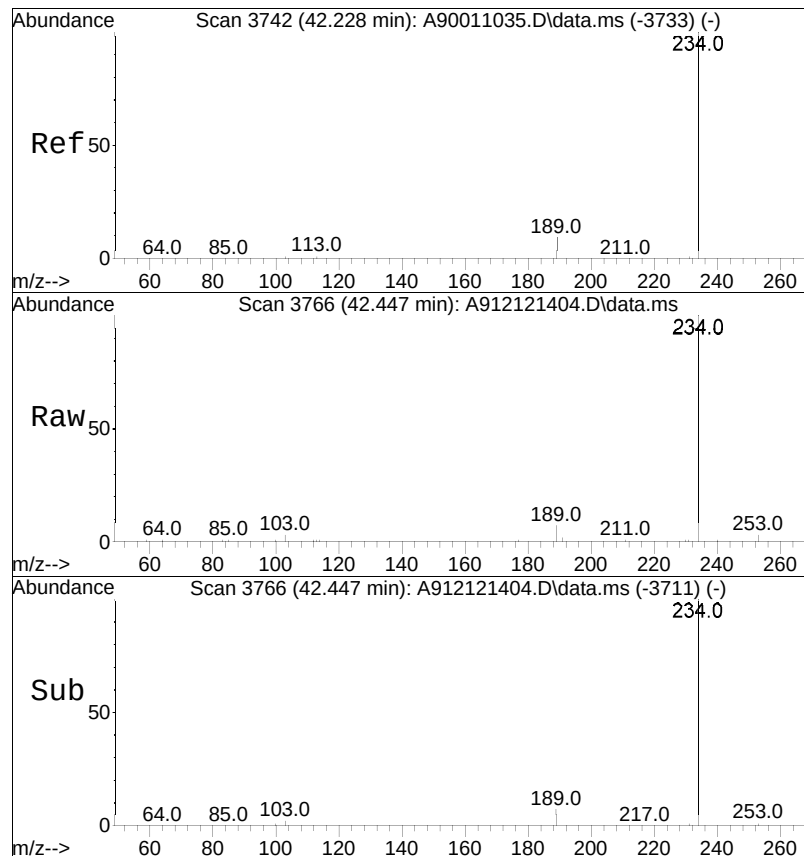




#66
 Naphthobenzothiophene
 Concen: 133.79 ng/ml
 RT: 42.447 min Scan# 3766
 Delta R.T. -0.000 min
 Lab File: A912121404.D
 Acq: 12 Dec 2014 5:54 pm

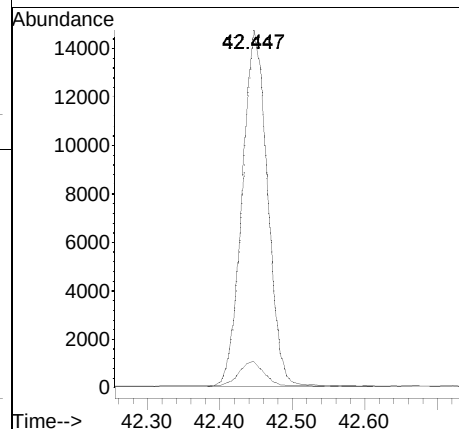
Tgt Ion	Ratio	Lower	Upper
234	100		
189	6.9	4.9	9.1

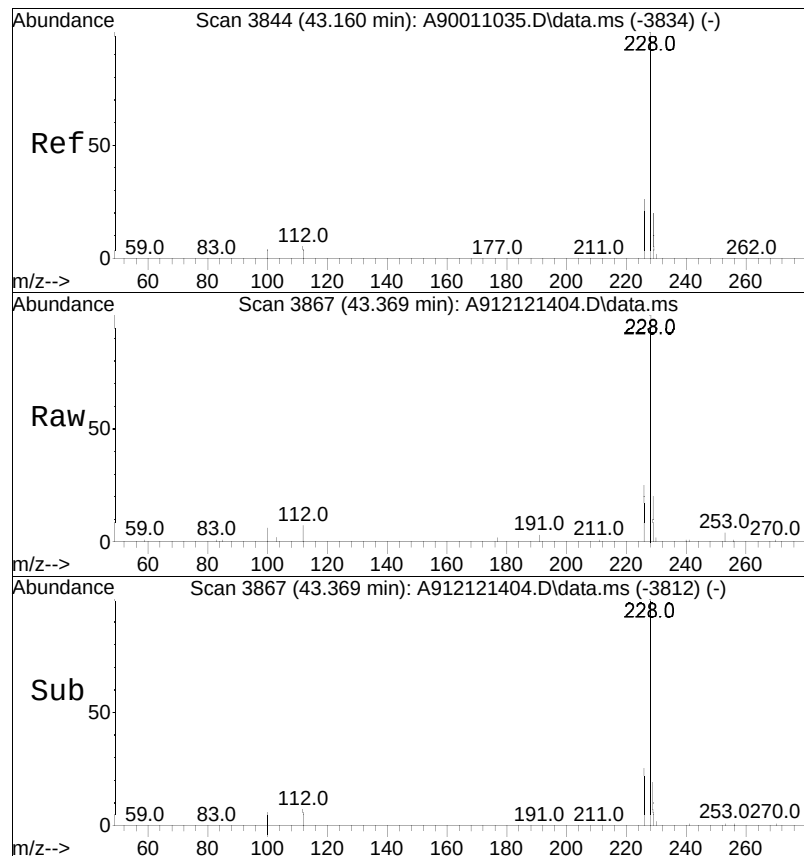




#67
 Naphthobenzothiophene-2,1-D
 Concen: 133.79 ng/mL
 RT: 42.447 min Scan# 3766
 Delta R.T. -0.000 min
 Lab File: A912121404.D
 Acq: 12 Dec 2014 5:54 pm

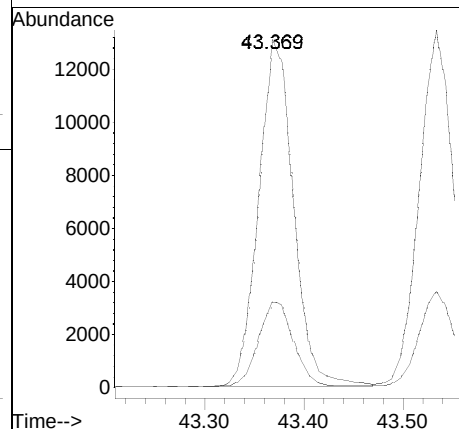
Tgt	Ion	Ratio	Resp	Lower	Upper
234	100		35190		
189	6.9		4.9		9.1

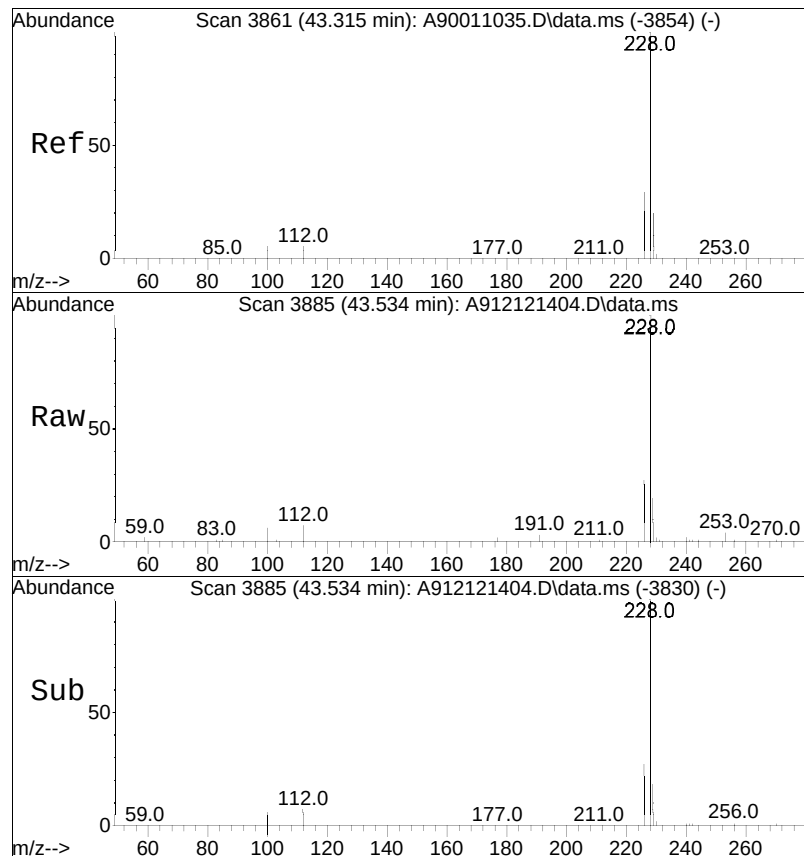




#75
Benz[a]anthracene
Concen: 121.44 ng/mL
RT: 43.369 min Scan# 3867
Delta R.T. -0.000 min
Lab File: A912121404.D
Acq: 12 Dec 2014 5:54 pm

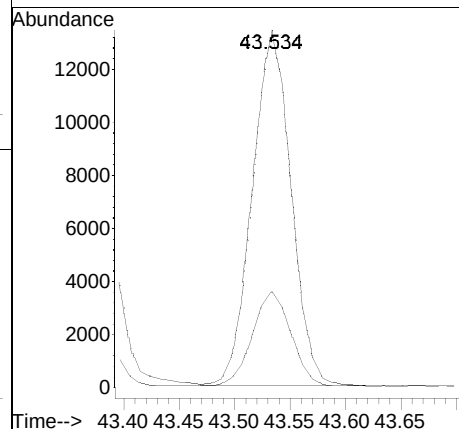
Tgt Ion:228 Resp: 31963
Ion Ratio Lower Upper
228 100
226 24.3 17.3 32.1

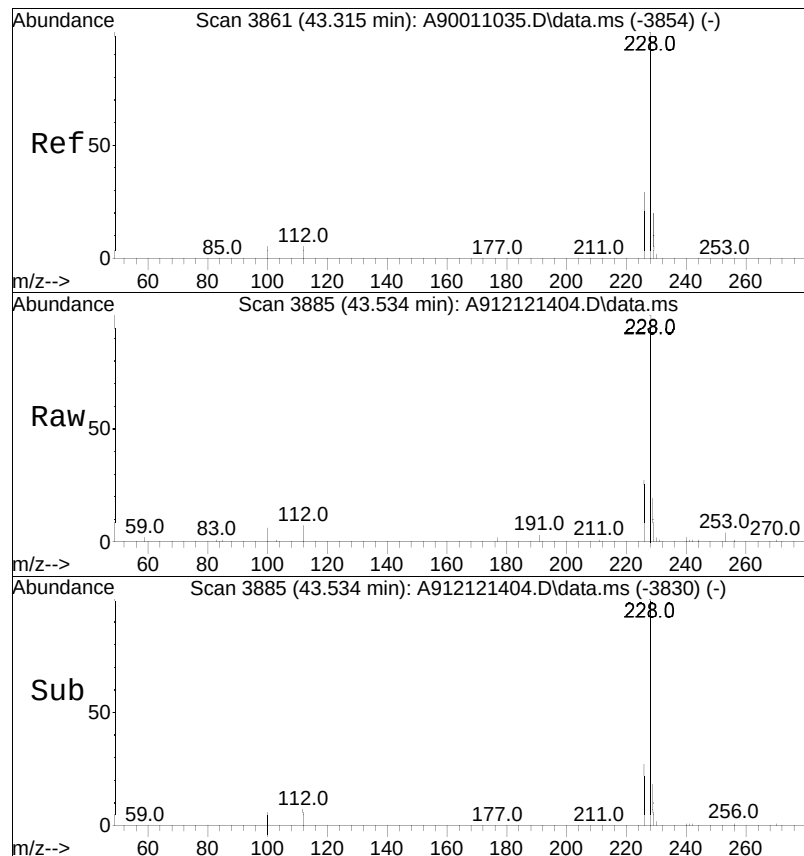




#76
 Chrysene
 Concen: 124.44 ng/mL
 RT: 43.534 min Scan# 3885
 Delta R.T. -0.000 min
 Lab File: A912121404.D
 Acq: 12 Dec 2014 5:54 pm

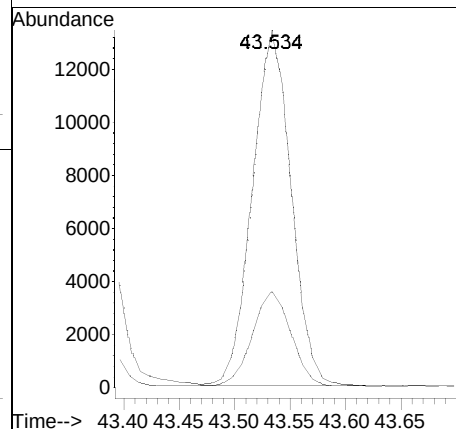
Tgt	Ion	Ratio	Lower	Upper
228	228	100		
226	226	26.8	18.8	34.8

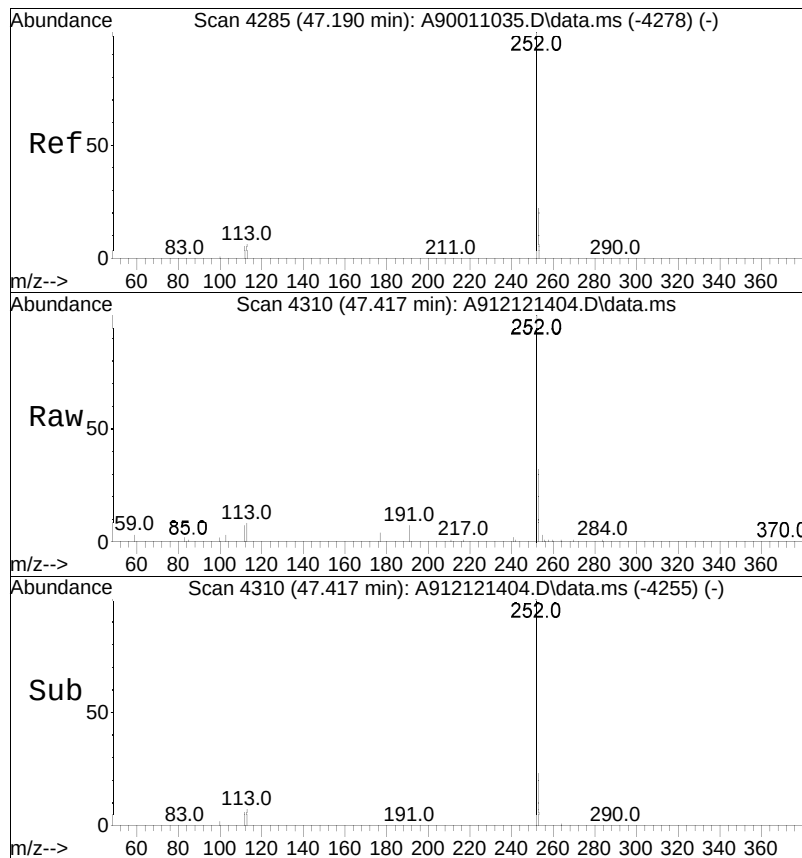




#77
 Chrysene/Triphenylene
 Concen: 124.44 ng/mL
 RT: 43.534 min Scan# 3885
 Delta R.T. -0.000 min
 Lab File: A912121404.D
 Acq: 12 Dec 2014 5:54 pm

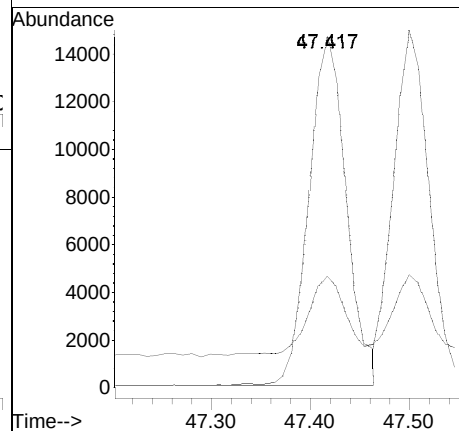
Tgt Ion:228 Resp: 32231
 Ion Ratio Lower Upper
 228 100
 226 26.8 18.8 34.8

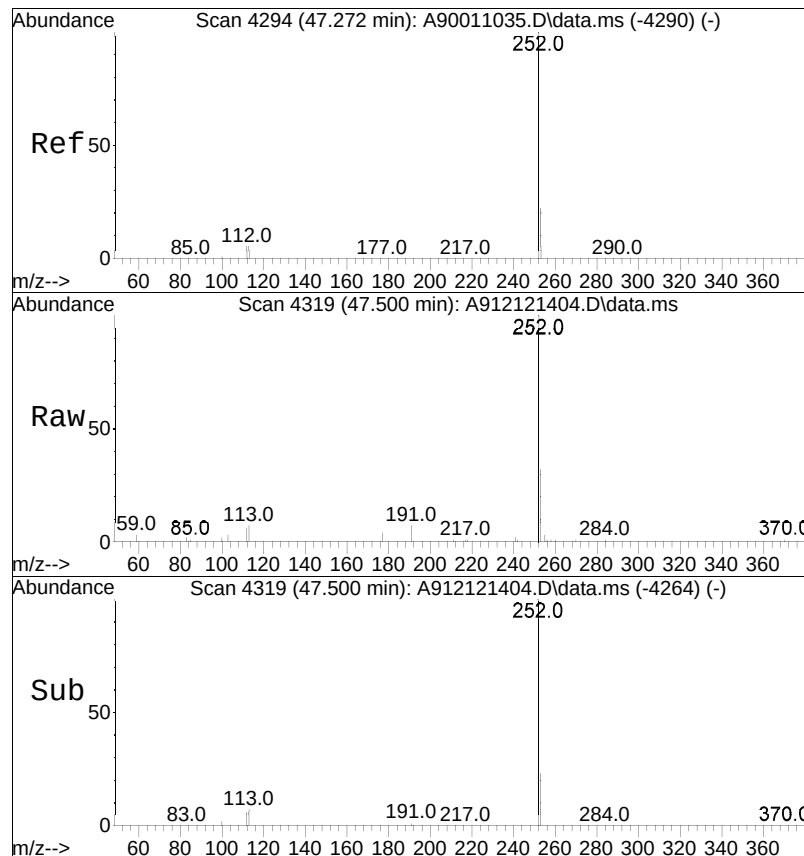




#84
 Benzo[b]fluoranthene
 Concen: 118.77 ng/mL
 RT: 47.417 min Scan# 4310
 Delta R.T. -0.000 min
 Lab File: A912121404.D
 Acq: 12 Dec 2014 5:54 pm

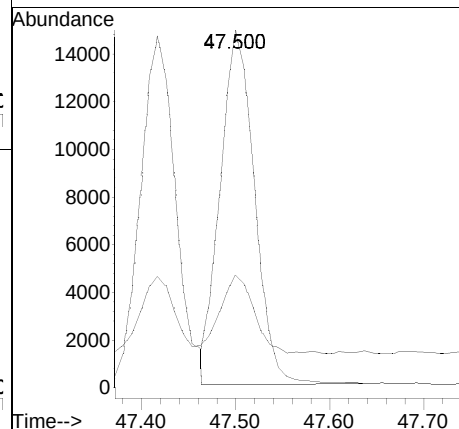
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	25.0	16.4	30.4	

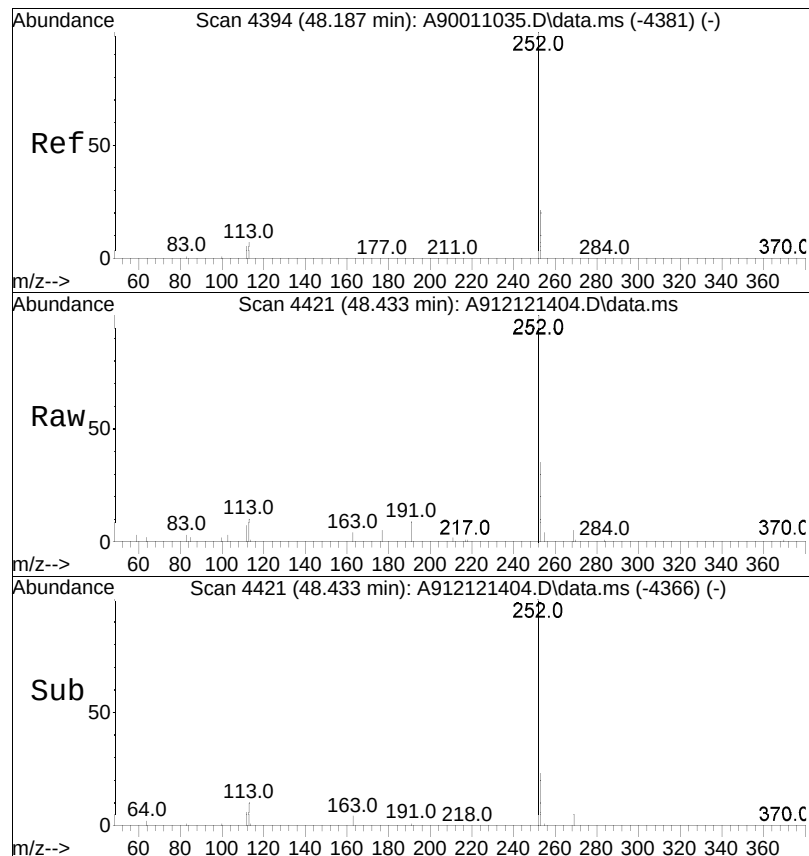




#85
 Benzo[j]+[k]fluoranthene
 Concen: 119.42 ng/mL
 RT: 47.500 min Scan# 4319
 Delta R.T. -0.000 min
 Lab File: A912121404.D
 Acq: 12 Dec 2014 5:54 pm

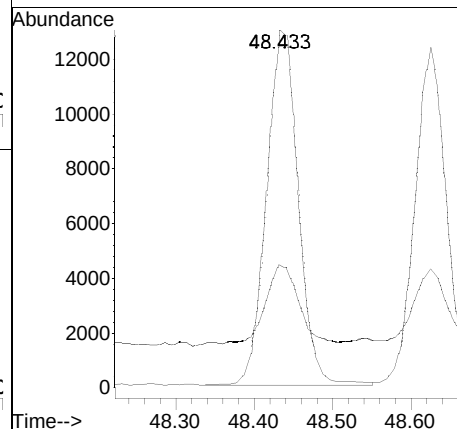
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	23.2	16.1	29.9	

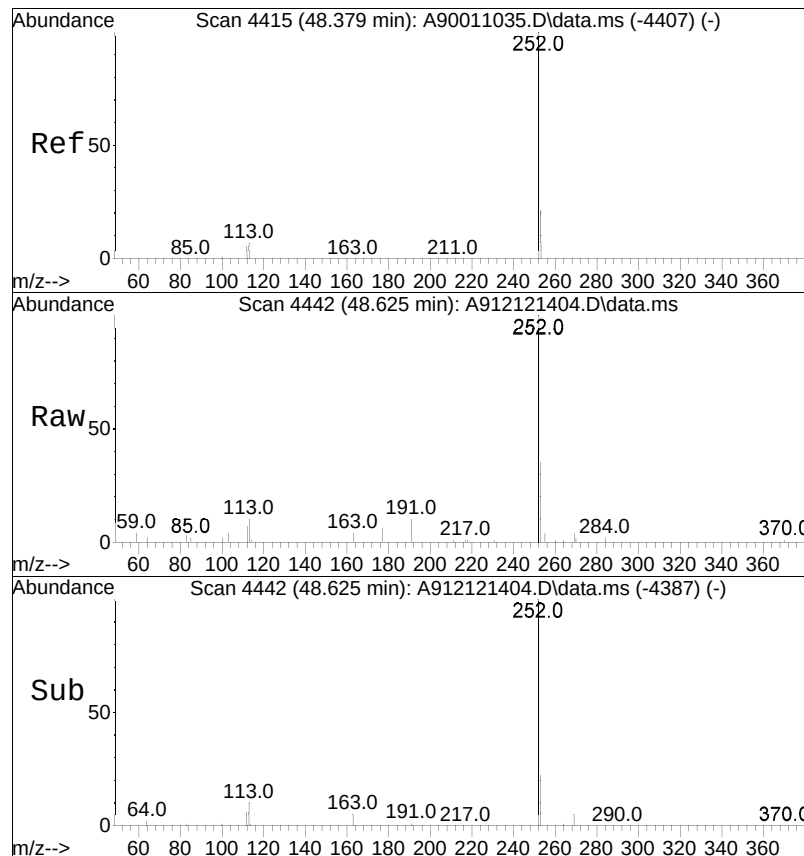




#87
Benzo[e]pyrene
Concen: 116.14 ng/mL
RT: 48.433 min Scan# 4421
Delta R.T. -0.000 min
Lab File: A912121404.D
Acq: 12 Dec 2014 5:54 pm

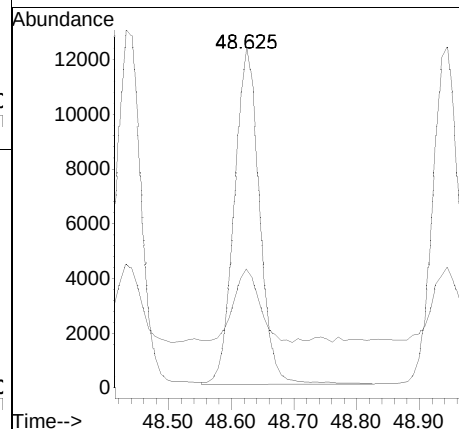
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	25.9	16.2	30.0	

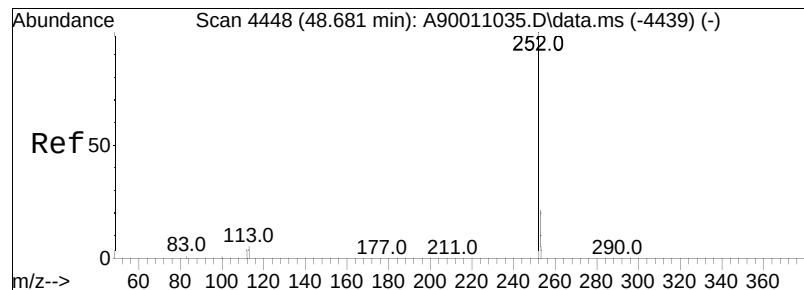




#89
 Benzo[a]pyrene
 Concen: 112.96 ng/mL
 RT: 48.625 min Scan# 4442
 Delta R.T. -0.000 min
 Lab File: A912121404.D
 Acq: 12 Dec 2014 5:54 pm

Tgt	Ion	Ratio	Lower	Upper
252	100			
253	22.5	16.4	30.6	





#90

Perylene

Concen: 114.80 ng/mL

RT: 48.945 min Scan# 4477

Delta R.T. -0.000 min

Lab File: A912121404.D

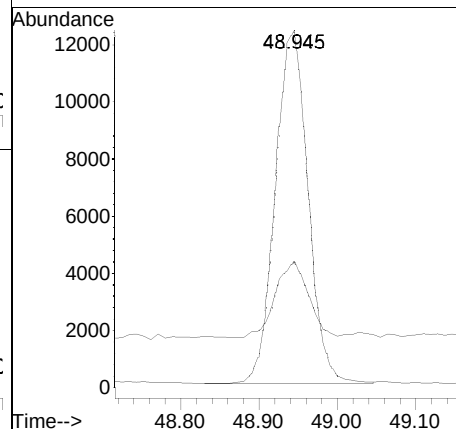
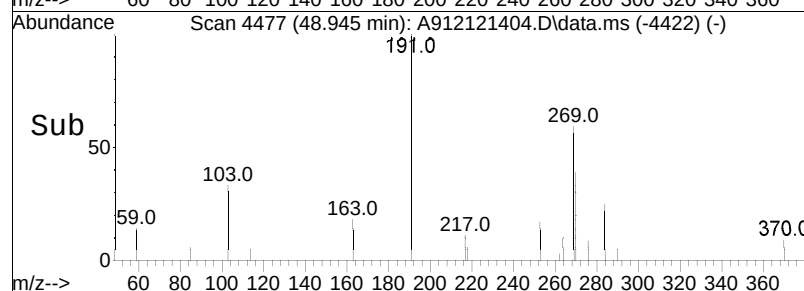
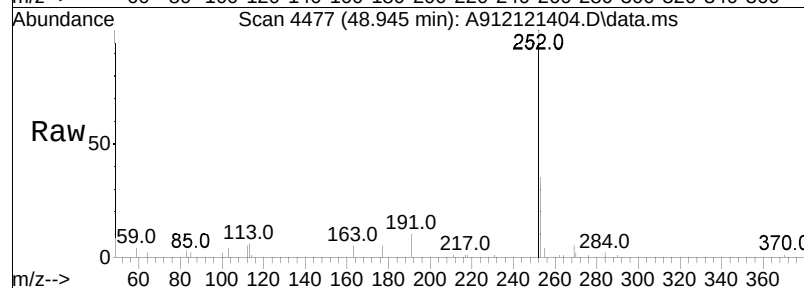
Acq: 12 Dec 2014 5:54 pm

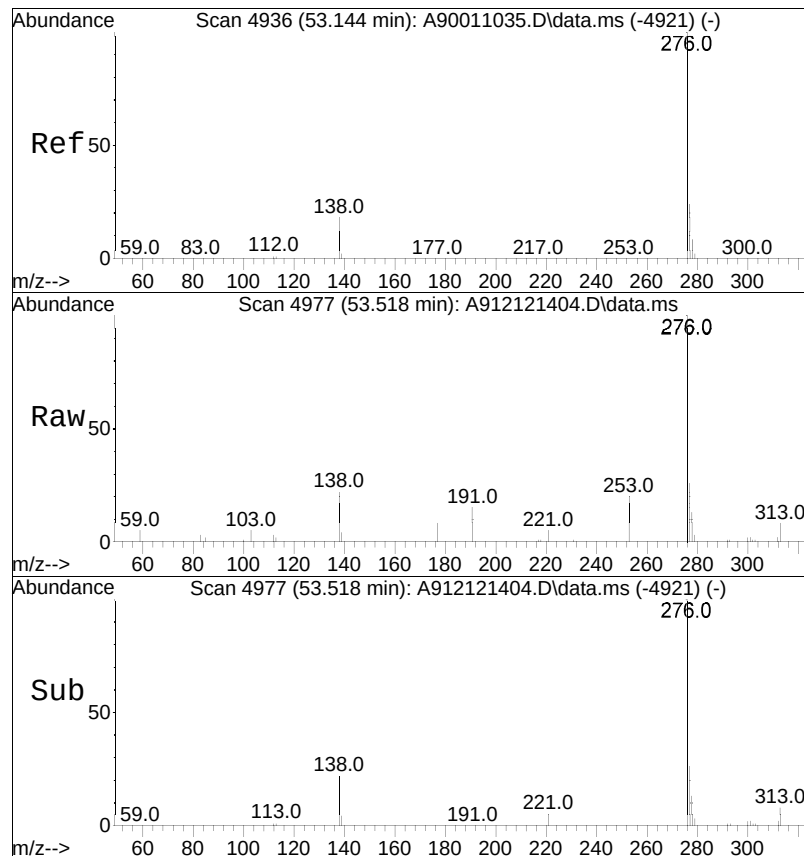
Tgt Ion: 252 Resp: 35416

Ion Ratio Lower Upper

252 100

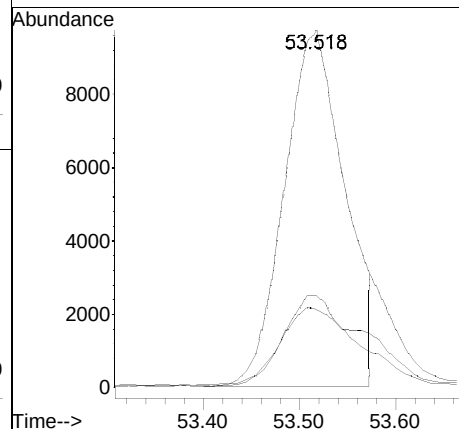
253 21.9 16.6 30.8

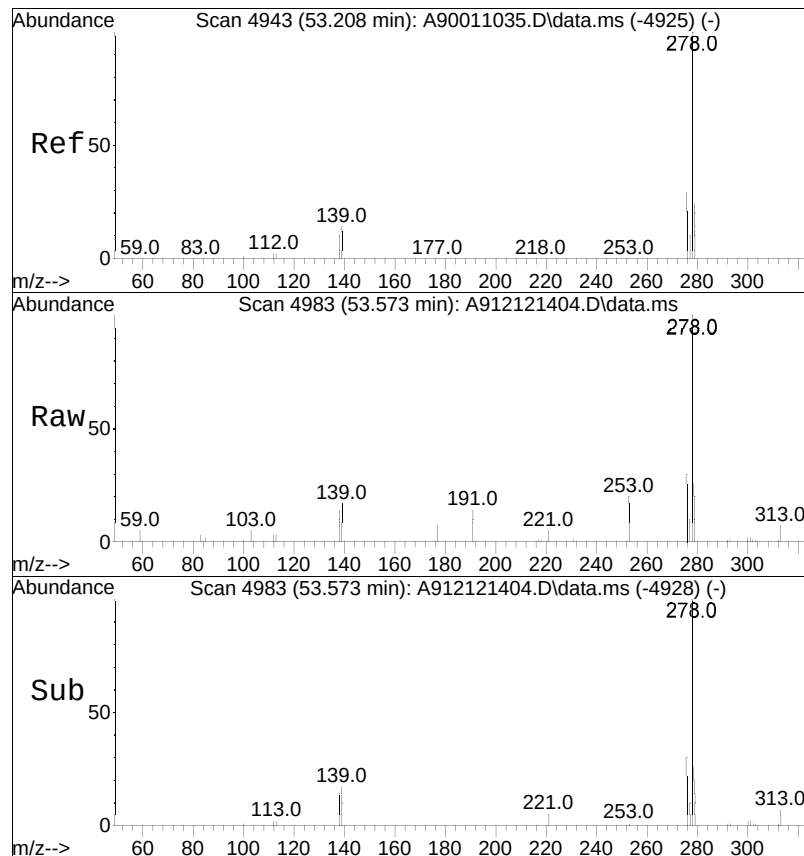




#91
 Indeno[1,2,3-cd]pyrene
 Concen: 108.79 ng/mL M3
 RT: 53.518 min Scan# 4977
 Delta R.T. 0.009 min
 Lab File: A912121404.D
 Acq: 12 Dec 2014 5:54 pm

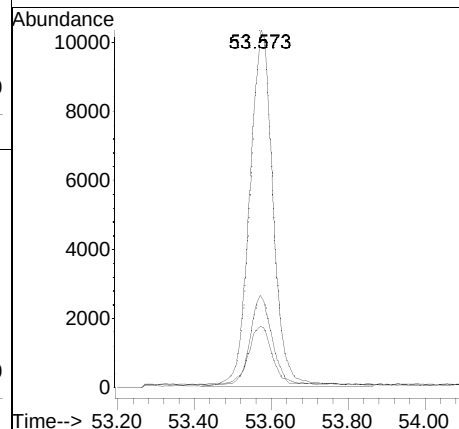
Tgt Ion:	276	Resp:	42303
Ion Ratio	Lower	Upper	
276	100		
138	30.6	15.7	29.1#
277	30.3	17.9	33.3

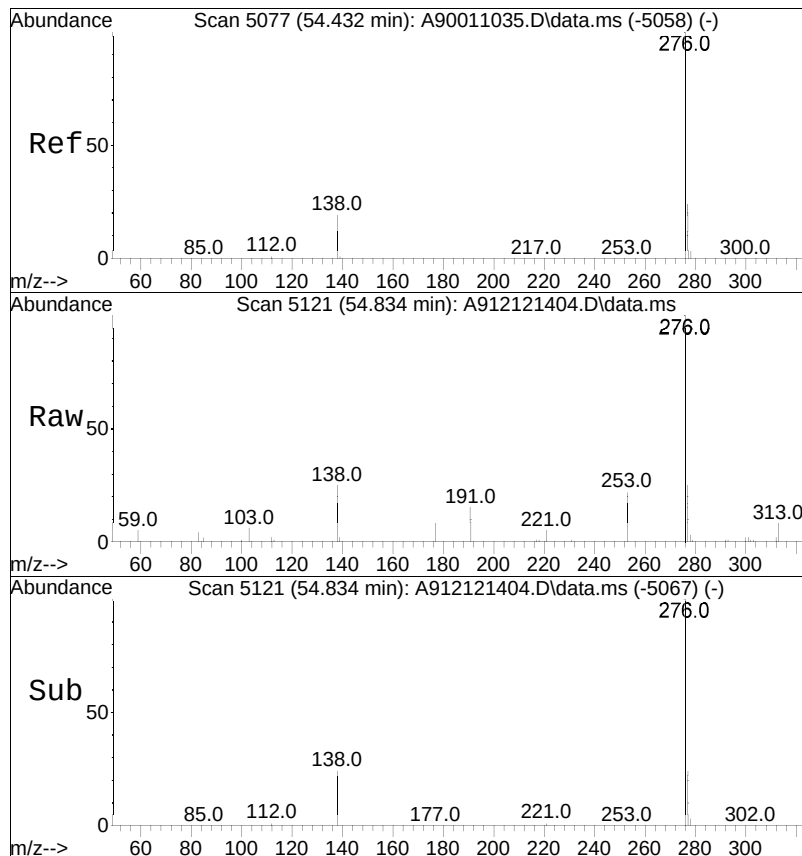




#92
 Dibenz[ah]+[ac]anthracene
 Concen: 117.98 ng/mL
 RT: 53.573 min Scan# 4983
 Delta R.T. -0.000 min
 Lab File: A912121404.D
 Acq: 12 Dec 2014 5:54 pm

Tgt Ion:	278	Resp:	43025
Ion Ratio	Lower	Upper	
278	100		
139	16.1	11.4	21.2
279	23.1	16.3	30.3





#93

Benzo[g,h,i]perylene

Concen: 110.84 ng/mL

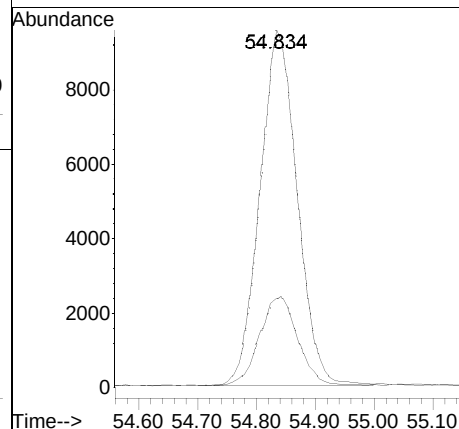
RT: 54.834 min Scan# 5121

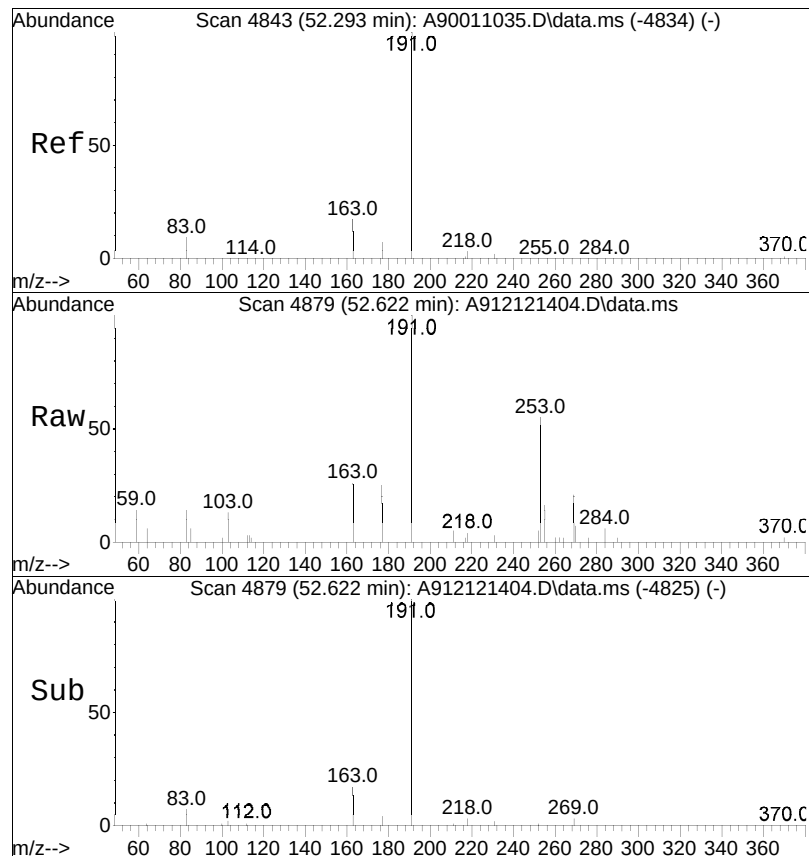
Delta R.T. -0.009 min

Lab File: A912121404.D

Acq: 12 Dec 2014 5:54 pm

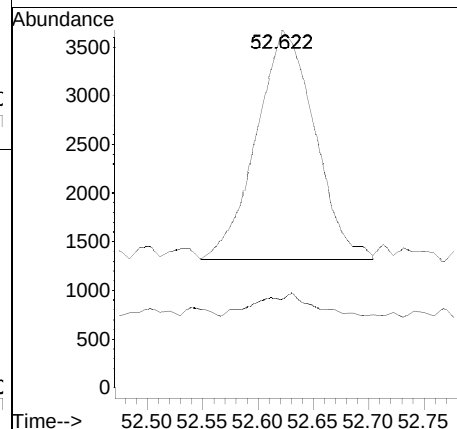
Tgt	Ion	Ratio	Lower	Upper
276	100			
277	25.8	17.4	32.2	

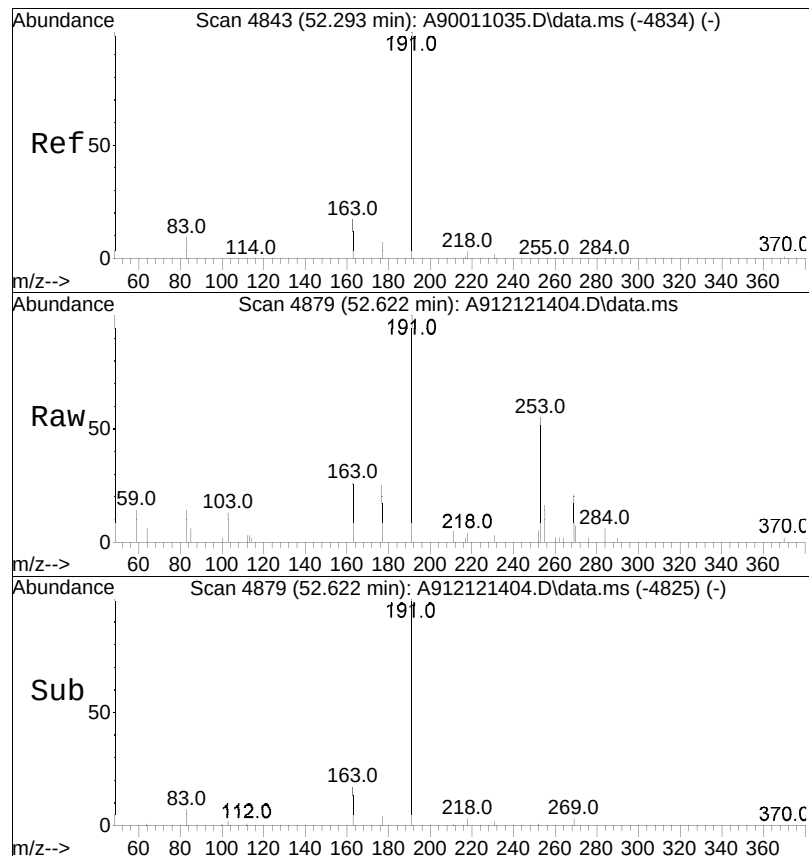




#94
Hopane (T19)
Concen: 83.95 ng/mL
RT: 52.622 min Scan# 4879
Delta R.T. -0.009 min
Lab File: A912121404.D
Acq: 12 Dec 2014 5:54 pm

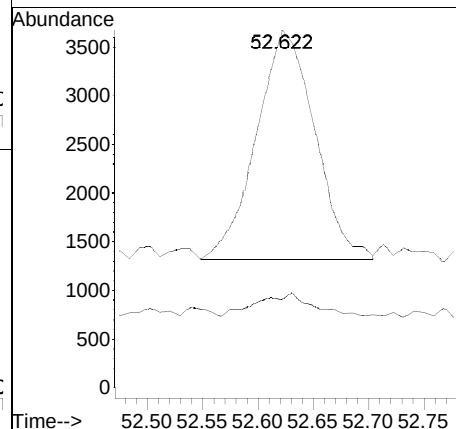
Tgt Ion	191	Resp	8584
Ion Ratio	Lower	Upper	
191	100		
177	9.1	8.5	15.9





#95
 17a(H),21B(H)-hopane - C₃₀H₅₂
 Concen: 83.95 ng/mL
 RT: 52.622 min Scan# 4879
 Delta R.T. -0.009 min
 Lab File: A912121404.D
 Acq: 12 Dec 2014 5:54 pm

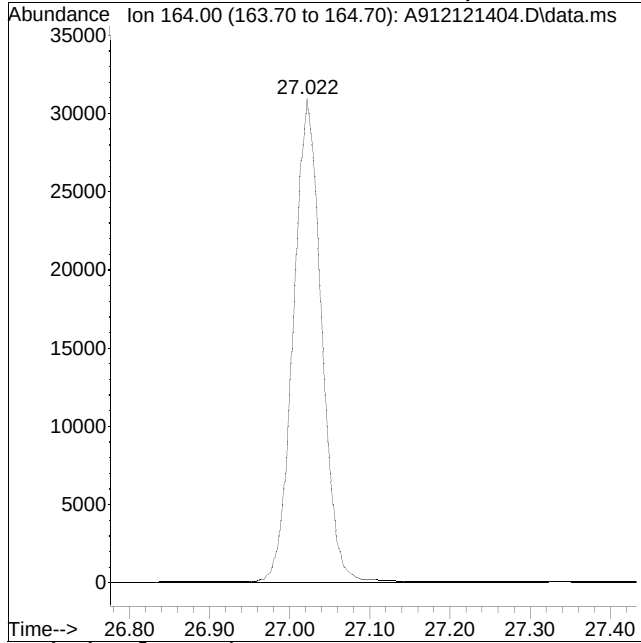
Tgt Ion	191	Resp	8584
Ion Ratio	Lower	Upper	
191	100		
177	9.1	8.5	15.9



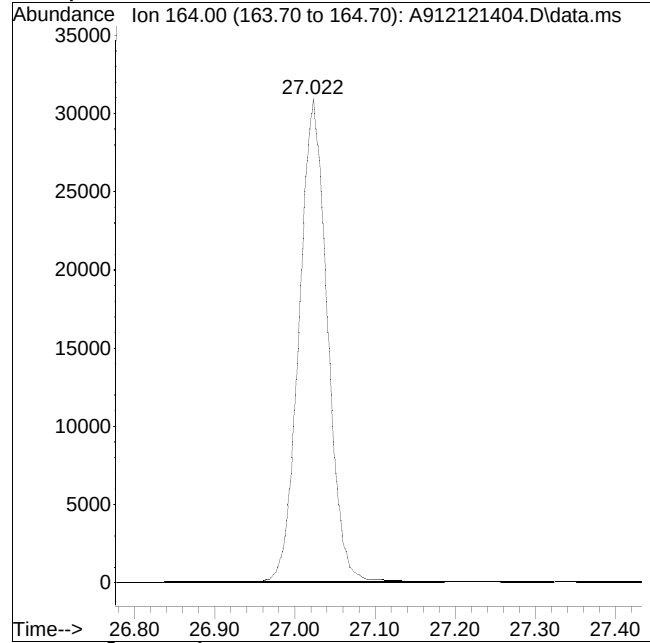
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121404.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 5:54 pm Instrument : PAH 9
Sample : i912121403 Quant Date : 12/15/2014 10:36 am

Compound #1: Acenaphthene-d10



Original Peak Response = 75955



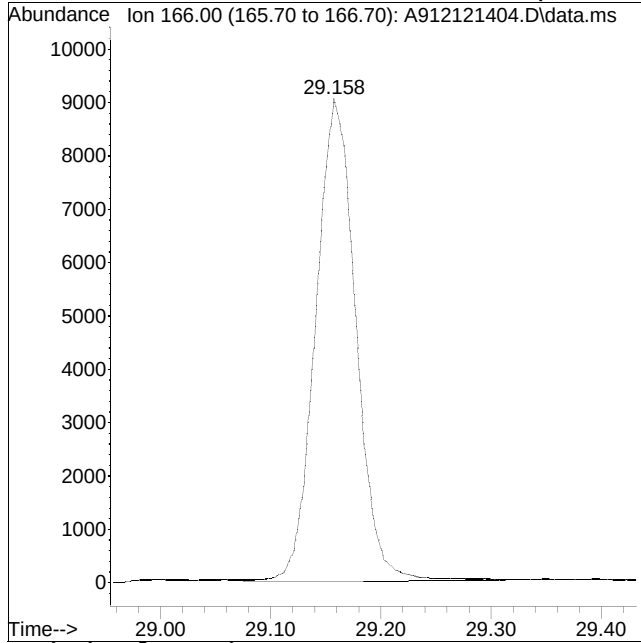
Manual Peak Response = 75620 M4

M4 = Poor automated baseline construction.

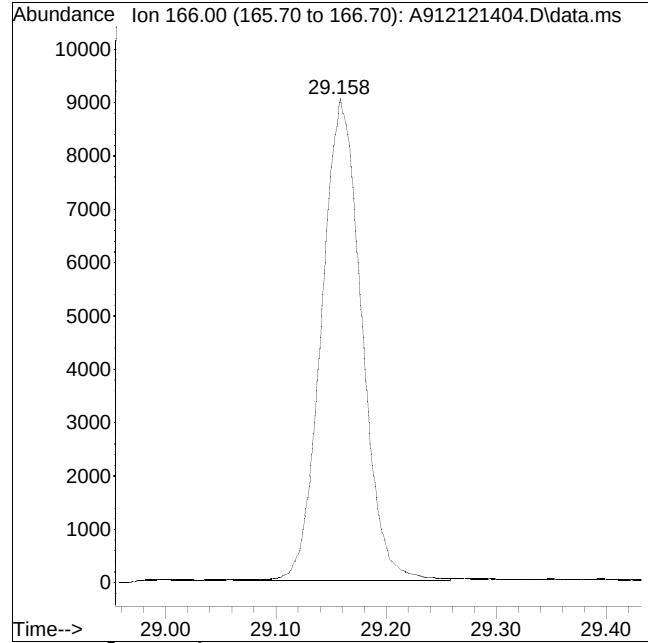
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121404.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 5:54 pm Instrument : PAH 9
Sample : i912121403 Quant Date : 12/15/2014 10:36 am

Compound #29: Fluorene



Original Peak Response = 22938



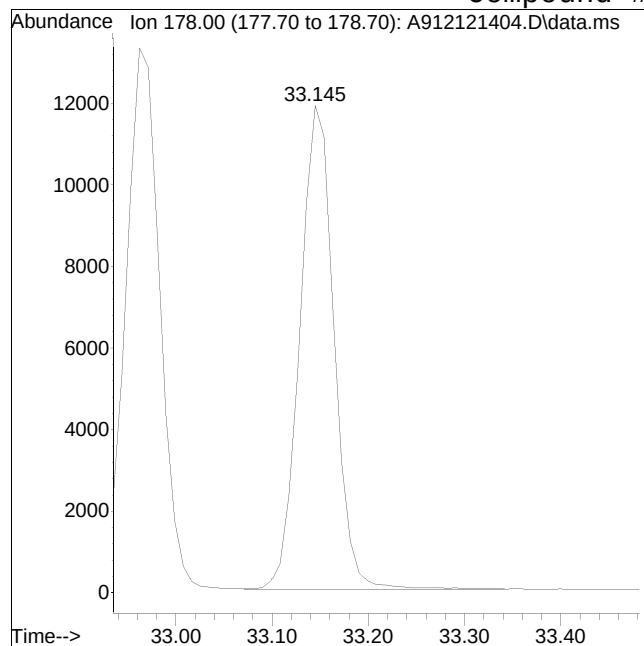
Manual Peak Response = 22699 M4

M4 = Poor automated baseline construction.

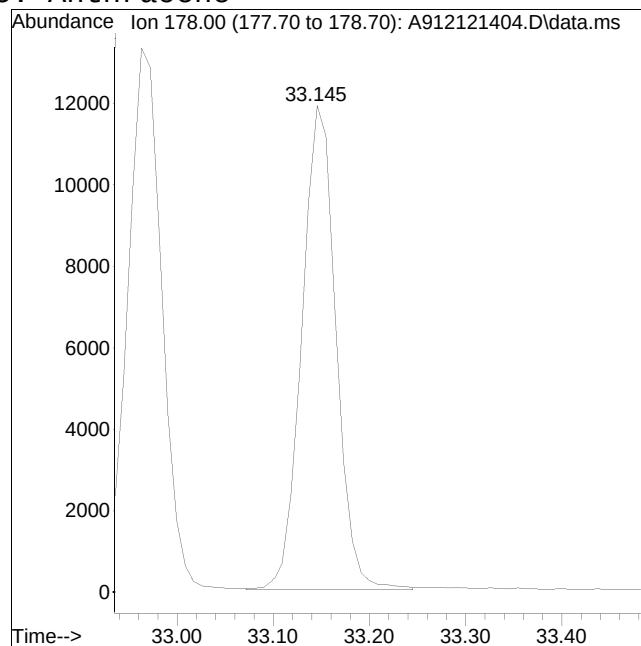
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121404.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 5:54 pm Instrument : PAH 9
Sample : i912121403 Quant Date : 12/15/2014 10:36 am

Compound #55: Anthracene



Original Peak Response = 29286



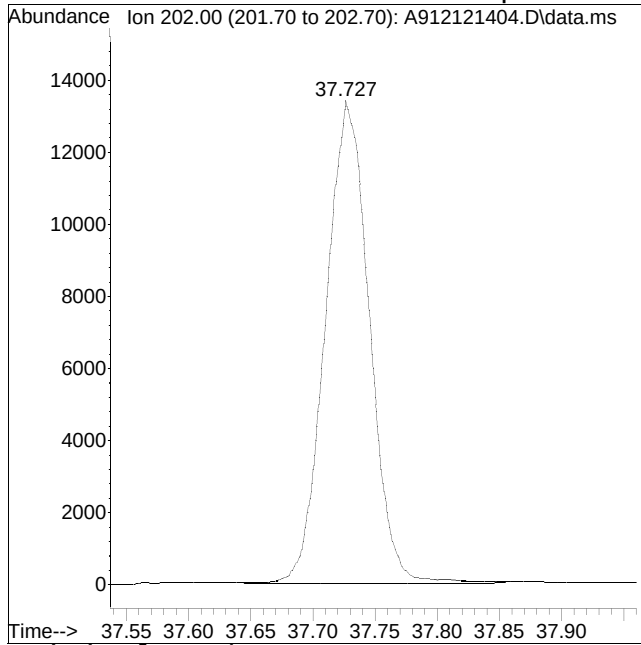
Manual Peak Response = 29308 M4

M4 = Poor automated baseline construction.

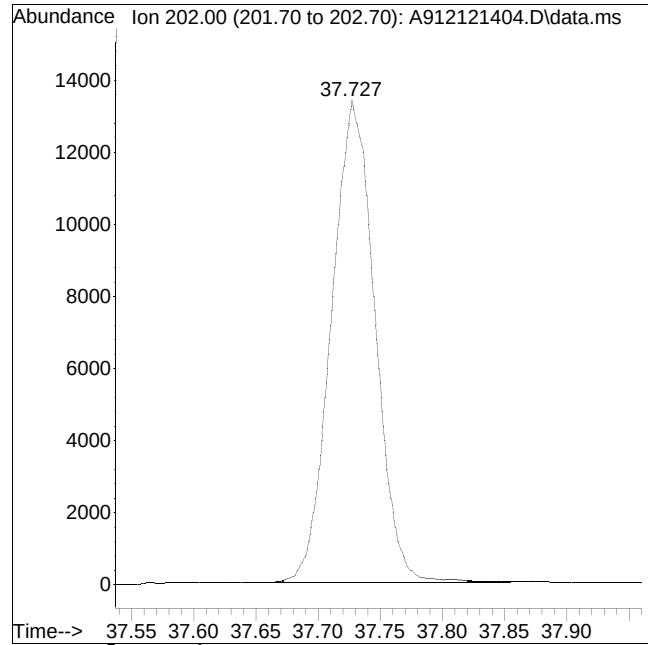
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121404.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 5:54 pm Instrument : PAH 9
Sample : i912121403 Quant Date : 12/15/2014 10:36 am

Compound #58: Fluoranthene



Original Peak Response = 32861



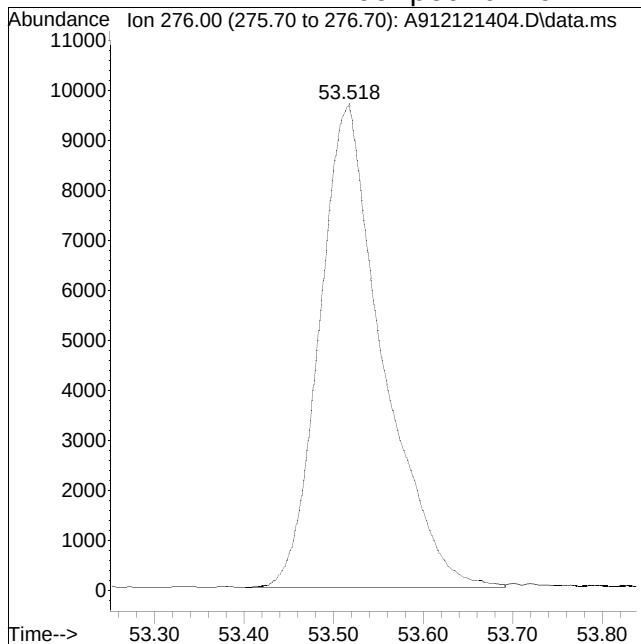
Manual Peak Response = 32716 M4

M4 = Poor automated baseline construction.

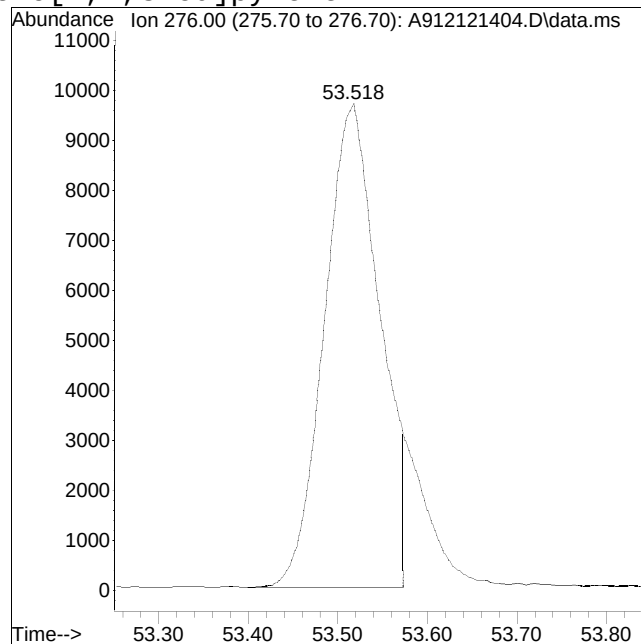
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121404.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 5:54 pm Instrument : PAH 9
Sample : i912121403 Quant Date : 12/15/2014 10:36 am

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 47388



Manual Peak Response = 42303 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Data File : A912121405.D
 Acq On : 12 Dec 2014 7:18 pm
 Operator : PAH9:SR
 Sample : i912121404
 Misc : WG749024,l4 frav19 500ng/ml
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 16 10:50:03 2014
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 10:35:44 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.023	164	82305	500.000	ng/mL	0.00
74) Chrysene-d12	43.433	240	166177	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	20.060	136	184265	562.654	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	56.27%		
42) Phenanthrene-d10	32.880	188	137591	543.297	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	54.33%		
83) Benzo[b]fluoranthene-d12	47.335	264	164740	508.122	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	50.81%		
88) Benzo[a]pyrene-d12	48.533	264	150205	503.559	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	50.36%		
129) 5B(H)Cholane - Surr	44.063	217	24849	454.965	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	45.50%#		
Target Compounds						
						Qvalue
3) trans-Decalin	16.720	138	18663	250.602	ng/mL	100
4) cis-Decalin	17.943	138	13749	237.989	ng/mL	100
10) Naphthalene	20.142	128	226777	645.395	ng/mL	100
16) 2-Methylnaphthalene	22.825	142	122960	564.837	ng/mL	100
17) 1-Methylnaphthalene	23.254	142	119676	564.595	ng/mL	100
18) Benzo[thiophene	20.361	134	206110	692.747	ng/mL	100
23) Biphenyl	24.705	154	153303	557.363	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.307	156	99360	521.706	ng/mL	100
25) Dibenzofuran	27.789	168	161791	570.379	ng/mL	99
26) Acenaphthylene	26.411	152	185555	555.437	ng/mL	100
27) Acenaphthene	27.141	153	115084	559.336	ng/mL	100
28) 2,3,5-Trimethylnaphthalen	28.692	170	94306	566.735	ng/mL	99
29) Fluorene	29.158	166	125037M4	548.231	ng/mL	
33) Dibenzothiophene	32.469	184	190884	641.599	ng/mL	99
43) Phenanthrene	32.962	178	182713	579.454	ng/mL	100
54) Retene	39.927	234	49602	598.357	ng/mL	98
55) Anthracene	33.145	178	167726M4	578.600	ng/mL	
56) Carbazole	33.802	167	161779M4	546.315	ng/mL	
57) 1-Methylphenanthrene	35.463	192	119313	551.864	ng/mL	99
58) Fluoranthene	37.727	202	182618M4	602.277	ng/mL	
59) Benzo(b)fluorene	40.238	216	110511	612.093	ng/mL	99
60) Pyrene	38.613	202	203273	629.124	ng/mL	100
66) Naphthobenzothiophene	42.447	234	194717	680.196	ng/ml	100
67) Naphthobenzothiophene-2,1	42.447	234	194717	680.196	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Data File : A912121405.D
 Acq On : 12 Dec 2014 7:18 pm
 Operator : PAH9:SR
 Sample : i912121404
 Misc : WG749024,l4 frav19 500ng/ml
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 16 10:50:03 2014
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 10:35:44 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.369	228	180003	595.379	ng/mL	99
76)	Chrysene	43.534	228	186632	627.278	ng/mL	100
77)	Chrysene/Triphenylene	43.534	228	186632	627.278	ng/mL	100
84)	Benzo[b]fluoranthene	47.418	252	211242	573.099	ng/mL	96
85)	Benzo[j]+[k]fluoranthene	47.500	252	202512	561.230	ng/mL	97
87)	Benzo[e]pyrene	48.433	252	207114	576.620	ng/mL	96
89)	Benzo[a]pyrene	48.625	252	204435	587.722	ng/mL	95
90)	Perylene	48.945	252	199861	564.007	ng/mL	96
91)	Indeno[1,2,3-cd]pyrene	53.509	276	242703M3	543.365	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.573	278	237175	566.184	ng/mL	99
93)	Benzo[g,h,i]perylene	54.843	276	227446	528.998	ng/mL	100
94)	Hopane (T19)	52.631	191	43701	372.059	ng/mL#	89
95)	17a(H),21B(H)-hopane - C3	52.631	191	43701	372.059	ng/mL#	89

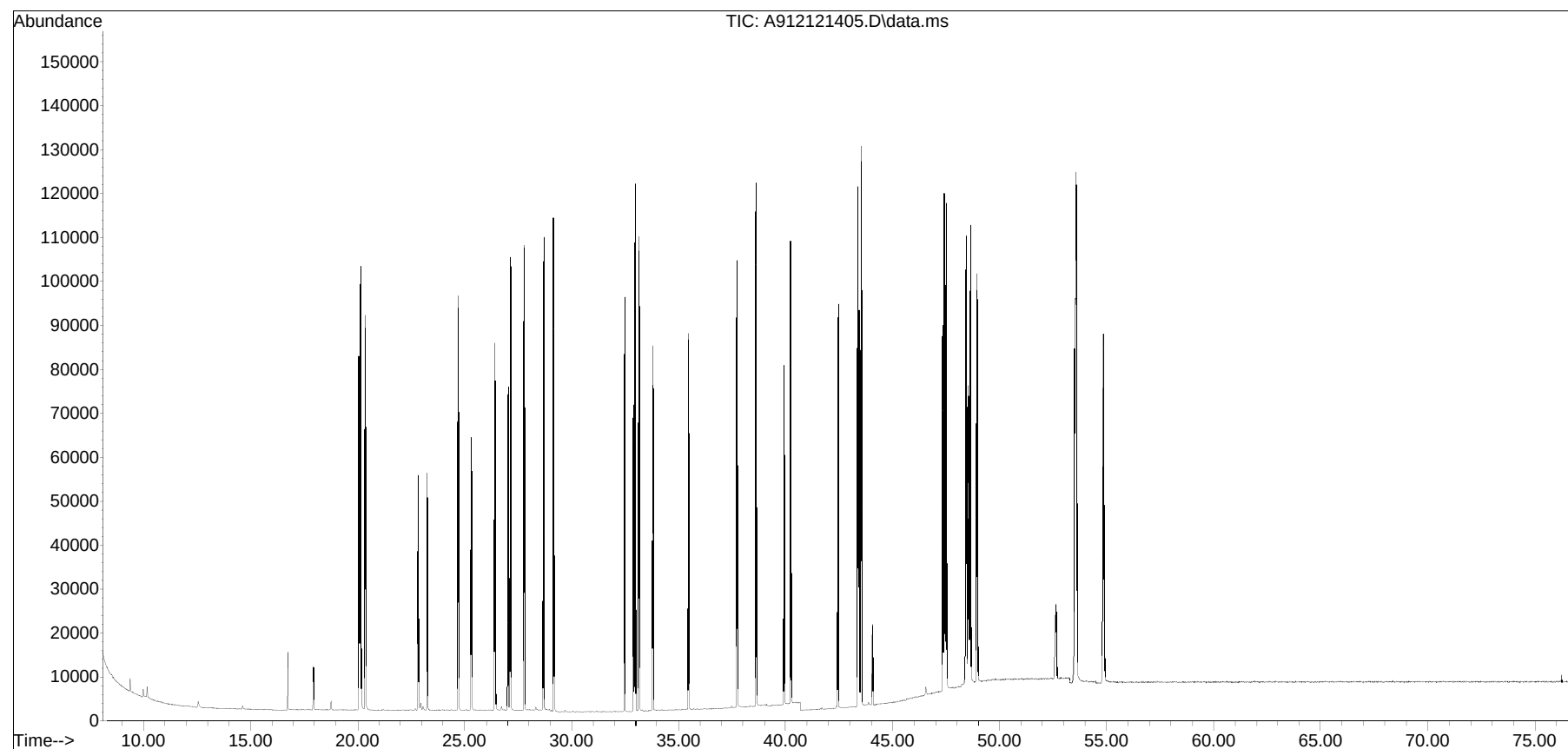
(#) = qualifier out of range (m) = manual integration (+) = signals summed

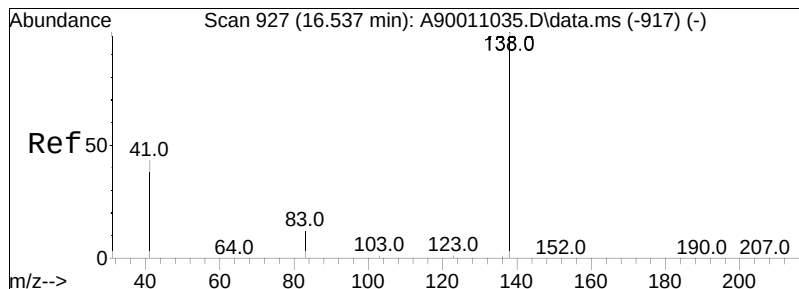
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC12\
Data File : A912121405.D
Acq On : 12 Dec 2014 7:18 pm
Operator : PAH9:SR
Sample : i912121404
Misc : WG749024,l4 frav19 500ng/ml
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 16 10:50:03 2014
Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 15 10:35:44 2014
Response via : Initial Calibration

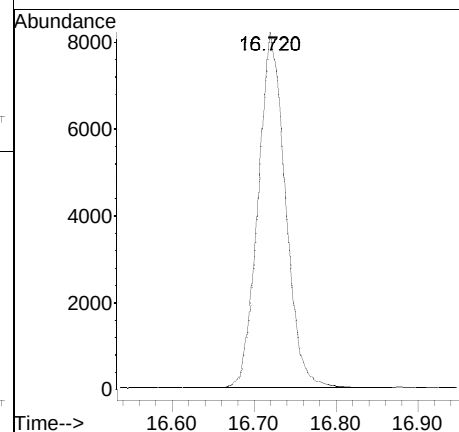
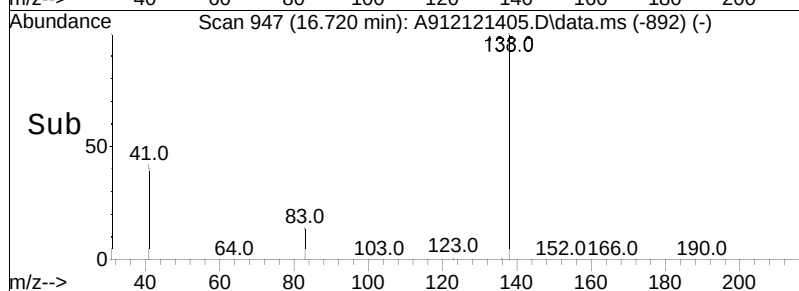
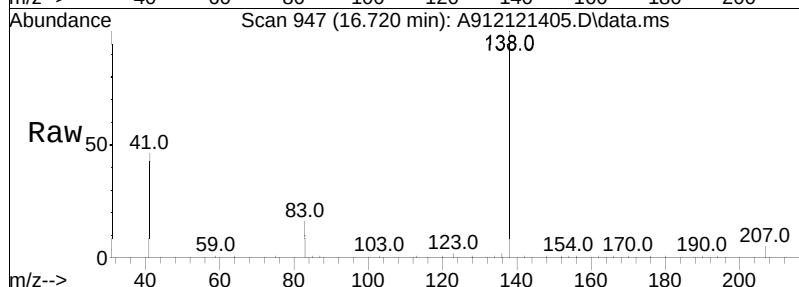
Sub List : ICAL_CCALT_REV2 - CC with five surrogates

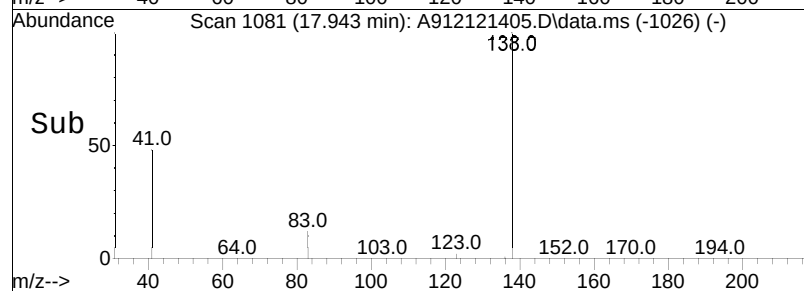
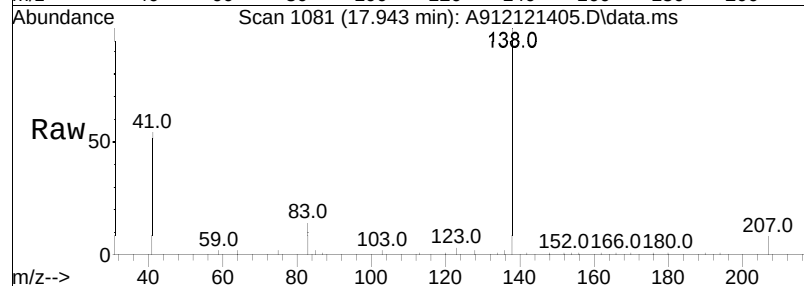
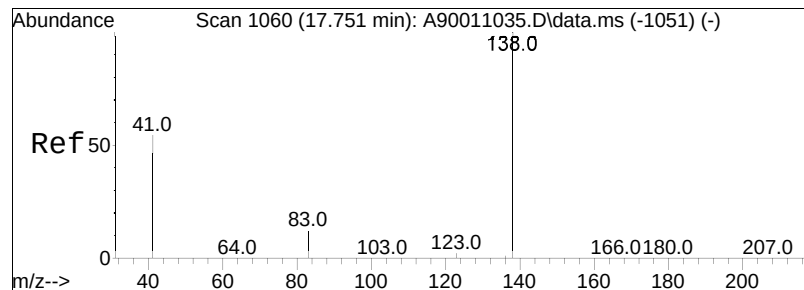




#3
trans-Decalin
Concen: 250.60 ng/mL
RT: 16.720 min Scan# 947
Delta R.T. 0.000 min
Lab File: A912121405.D
Acq: 12 Dec 2014 7:18 pm

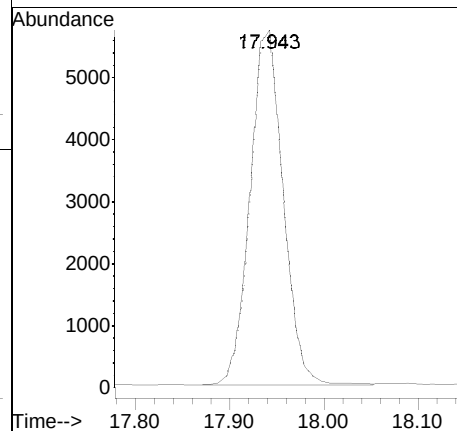
Tgt Ion:138 Resp: 18663

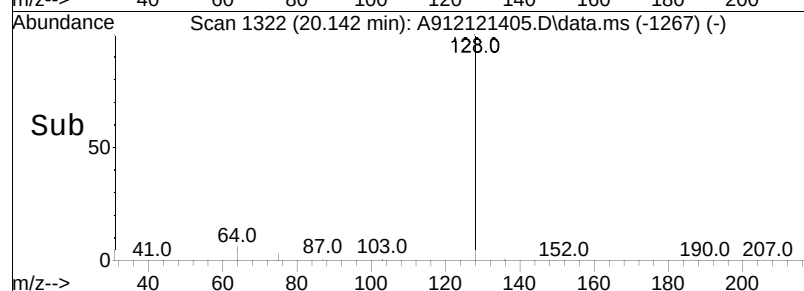
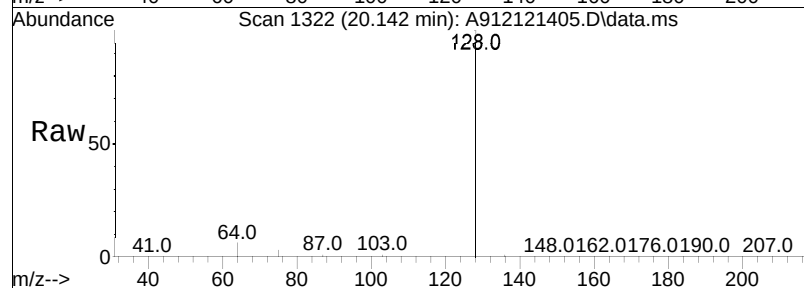
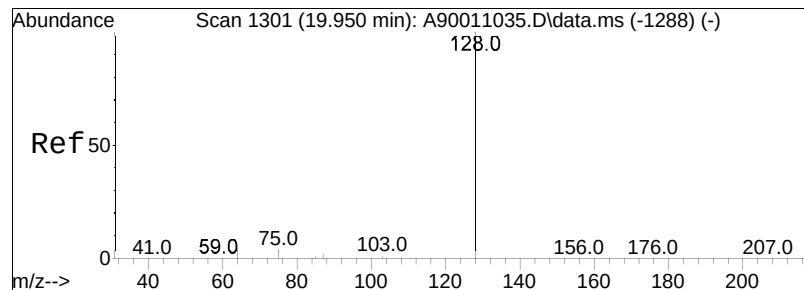




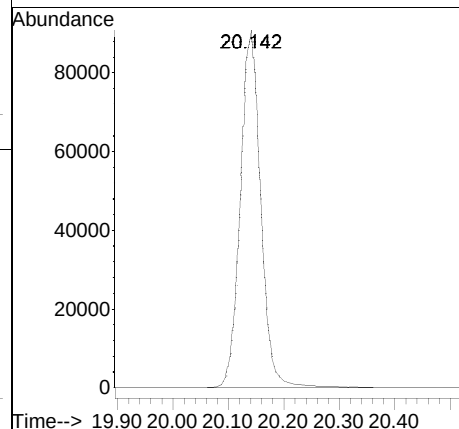
#4
 cis-Decalin
 Concen: 237.99 ng/mL
 RT: 17.943 min Scan# 1081
 Delta R.T. 0.000 min
 Lab File: A912121405.D
 Acq: 12 Dec 2014 7:18 pm

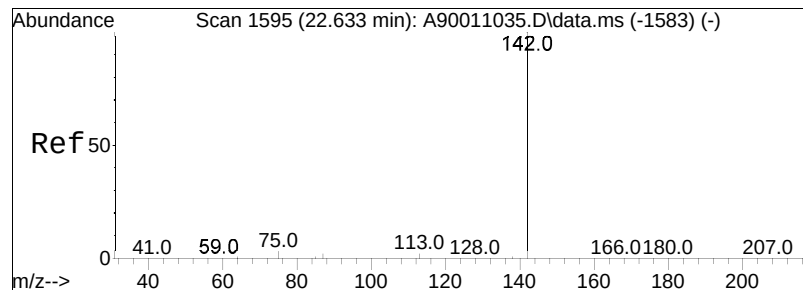
Tgt Ion:138 Resp: 13749





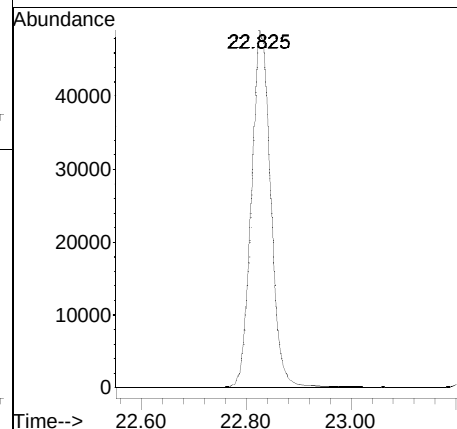
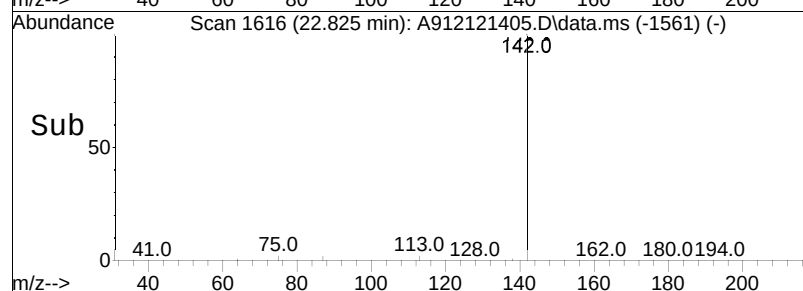
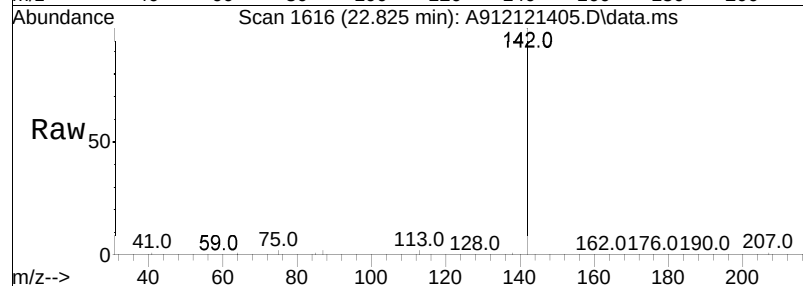
#10
Naphthalene
Concen: 645.39 ng/mL
RT: 20.142 min Scan# 1322
Delta R.T. 0.000 min
Lab File: A912121405.D
Acq: 12 Dec 2014 7:18 pm
Tgt Ion:128 Resp: 226777

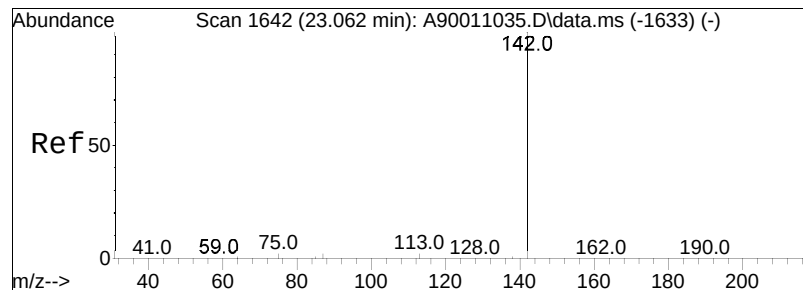




#16
2-Methylnaphthalene
Concen: 564.84 ng/mL
RT: 22.825 min Scan# 1616
Delta R.T. 0.000 min
Lab File: A912121405.D
Acq: 12 Dec 2014 7:18 pm

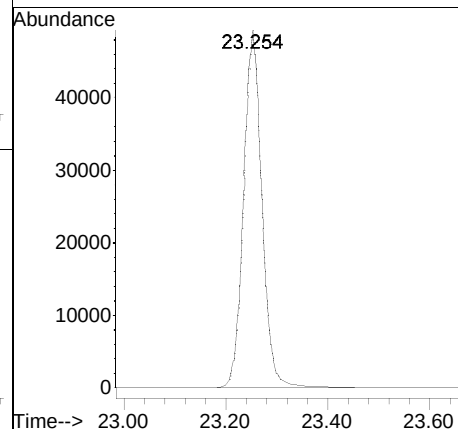
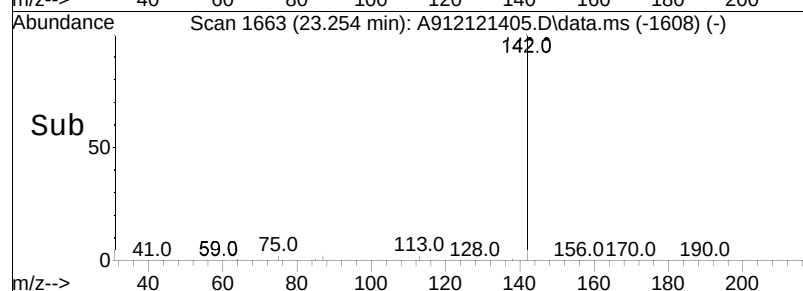
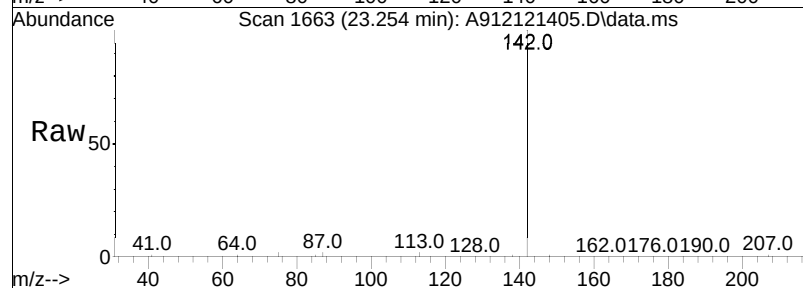
Tgt Ion:142 Resp: 122960

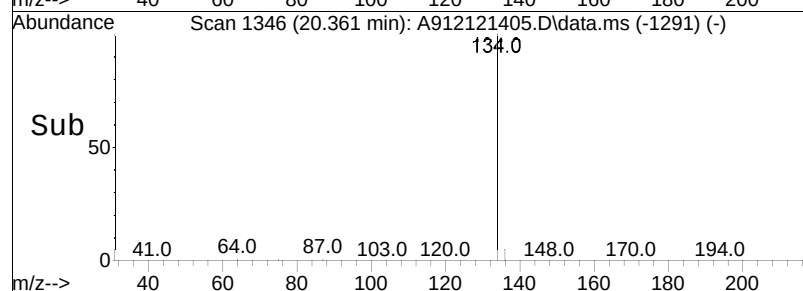
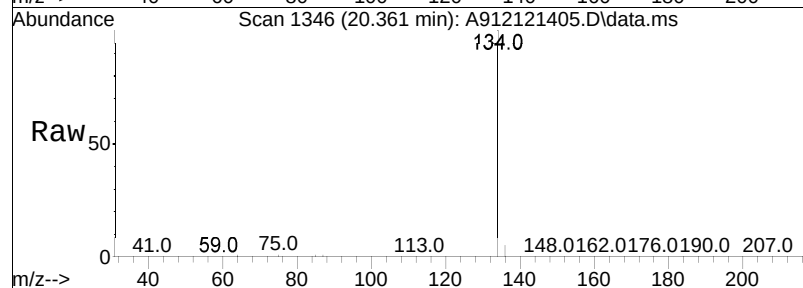
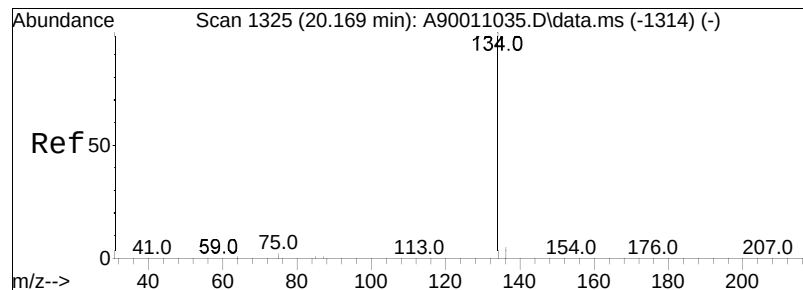




#17
 1-Methylnaphthalene
 Concen: 564.59 ng/mL
 RT: 23.254 min Scan# 1663
 Delta R.T. 0.000 min
 Lab File: A912121405.D
 Acq: 12 Dec 2014 7:18 pm

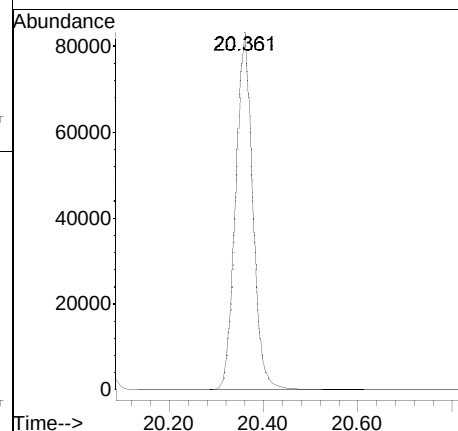
Tgt Ion:142 Resp: 119676

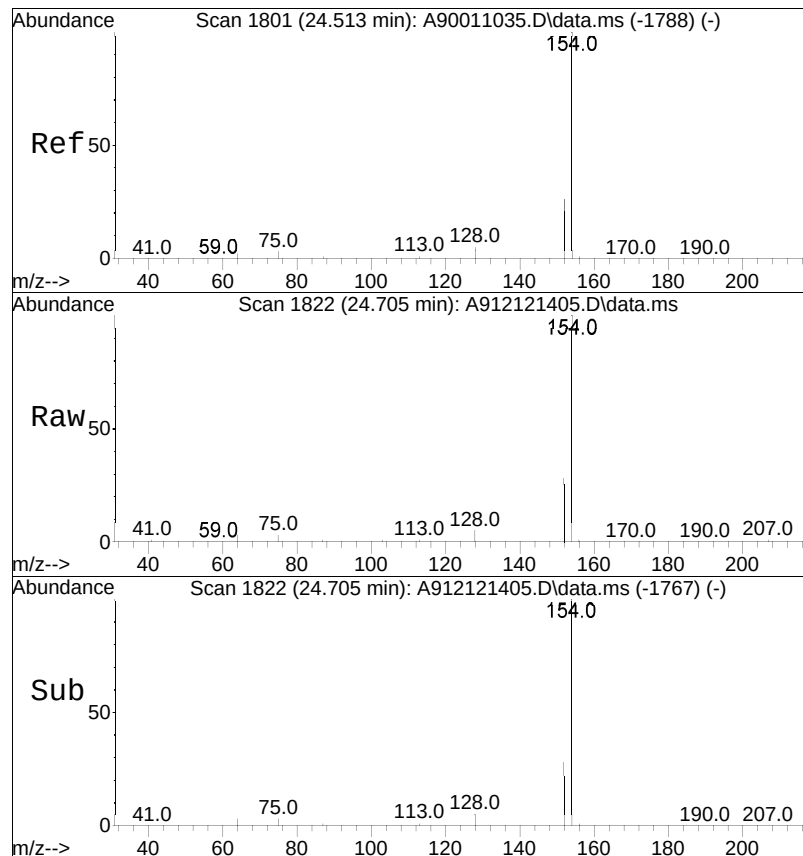




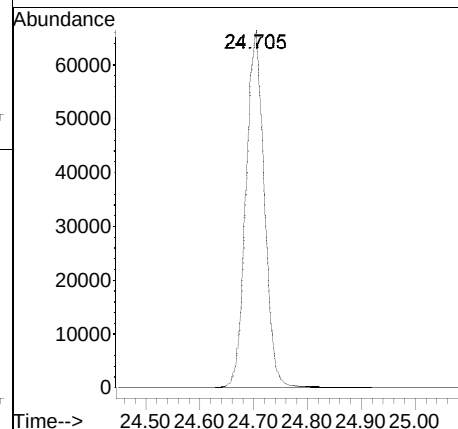
#18
Benzothiophene
Concen: 692.75 ng/mL
RT: 20.361 min Scan# 1346
Delta R.T. 0.000 min
Lab File: A912121405.D
Acq: 12 Dec 2014 7:18 pm

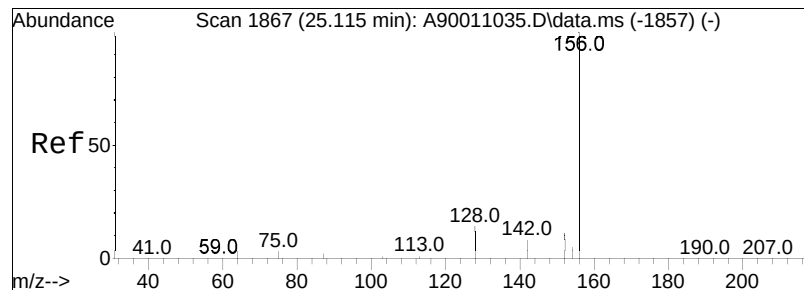
Tgt Ion:134 Resp: 206110





#23
 Biphenyl
 Concen: 557.36 ng/mL
 RT: 24.705 min Scan# 1822
 Delta R.T. 0.000 min
 Lab File: A912121405.D
 Acq: 12 Dec 2014 7:18 pm
 Tgt Ion:154 Resp: 153303





#24

2,6-Dimethylnaphthalene

Concen: 521.71 ng/mL

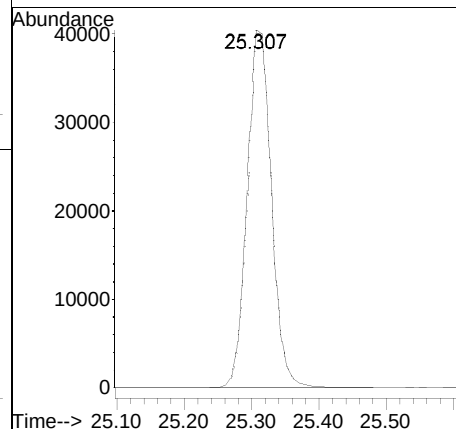
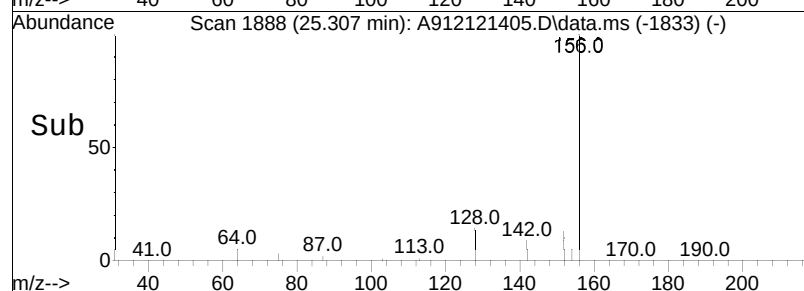
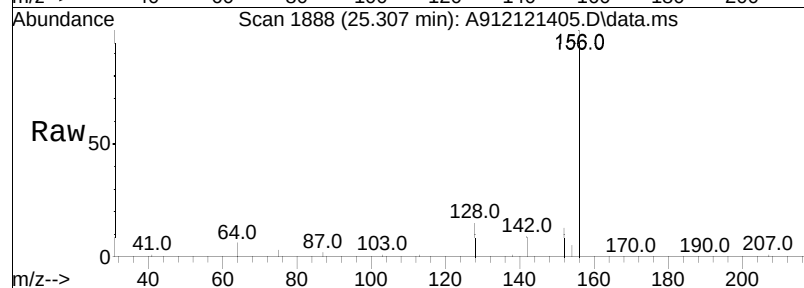
RT: 25.307 min Scan# 1888

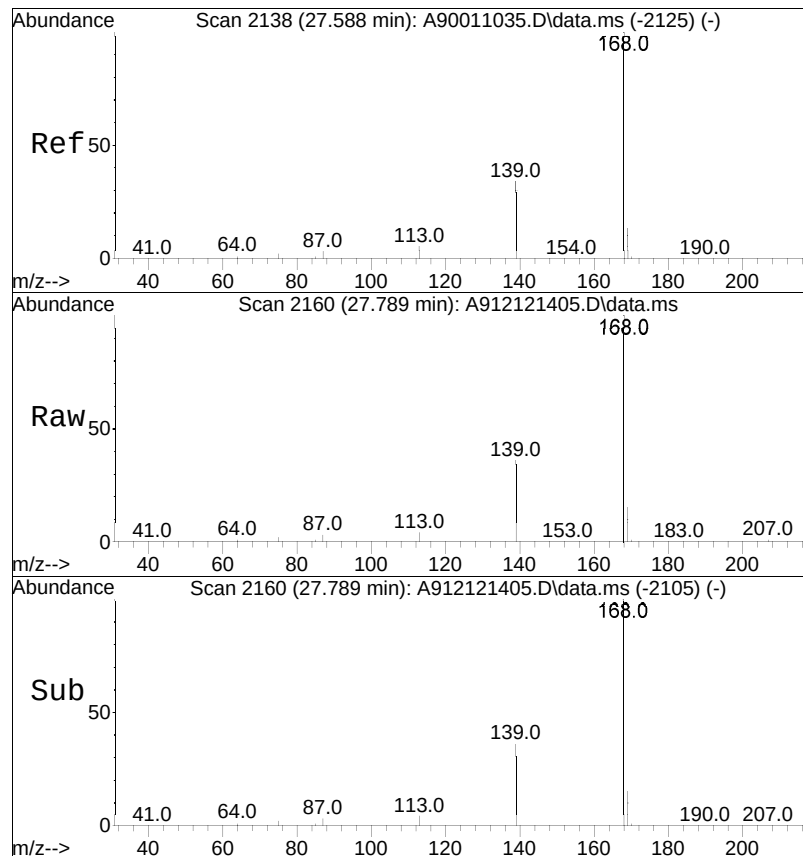
Delta R.T. 0.000 min

Lab File: A912121405.D

Acq: 12 Dec 2014 7:18 pm

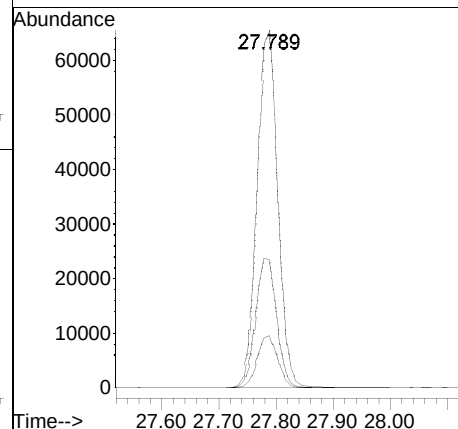
Tgt Ion:156 Resp: 99360

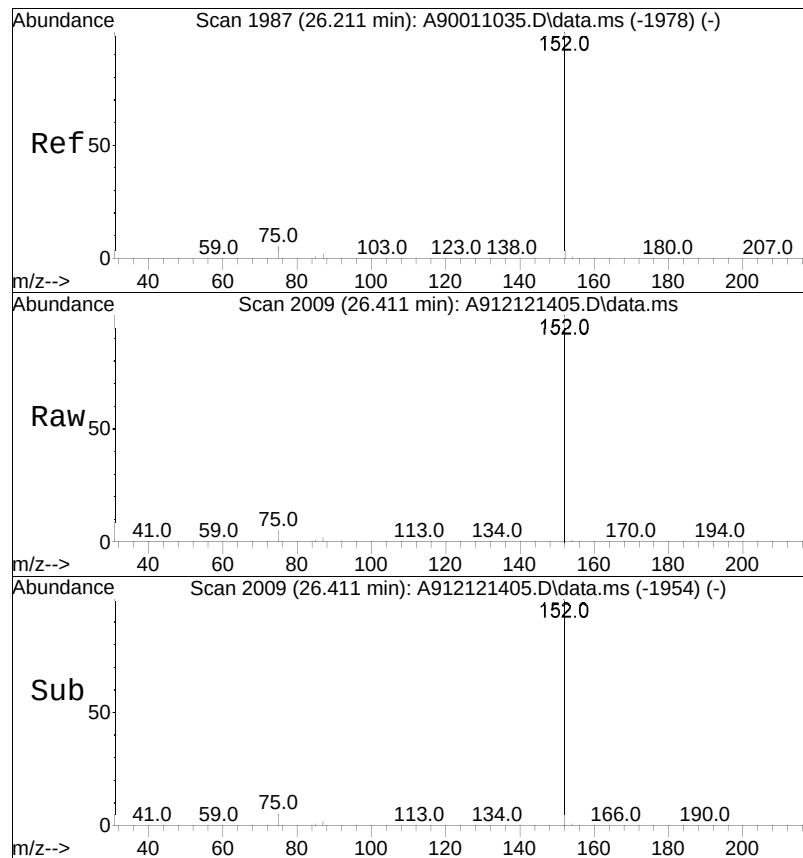




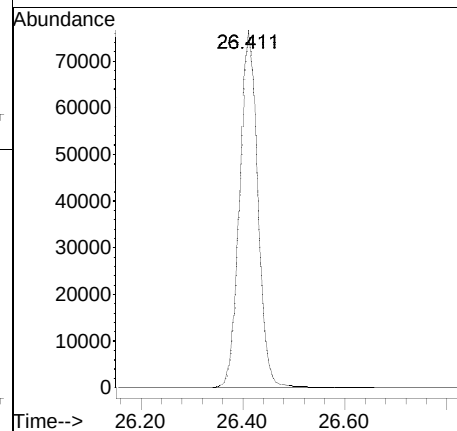
#25
 Dibenzofuran
 Concen: 570.38 ng/mL
 RT: 27.789 min Scan# 2160
 Delta R.T. 0.000 min
 Lab File: A912121405.D
 Acq: 12 Dec 2014 7:18 pm

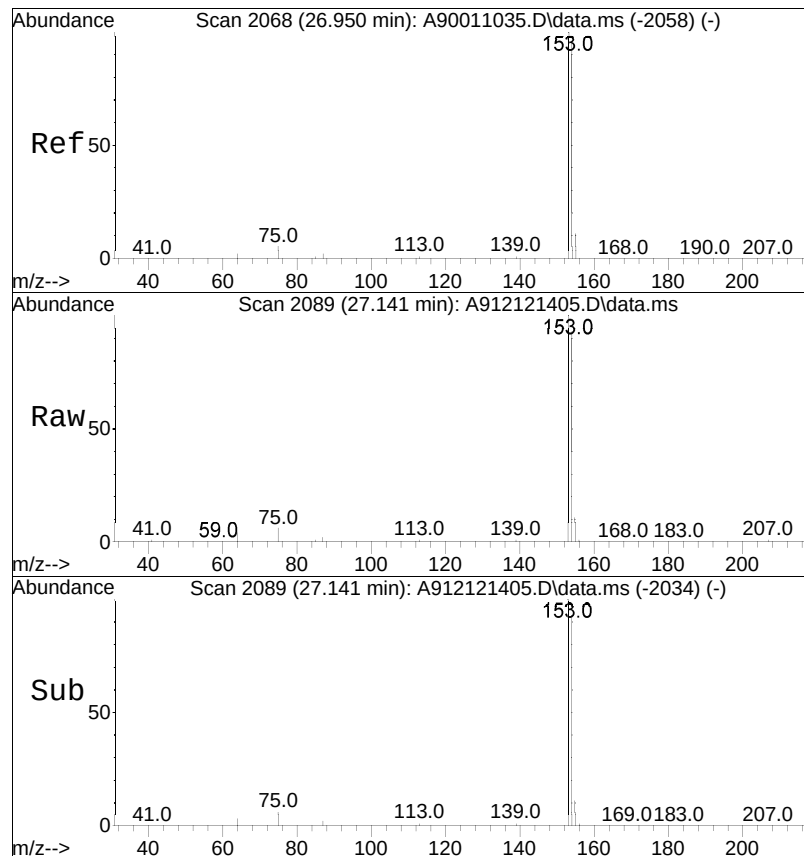
Tgt Ion	Ratio	Lower	Upper
168	100		
139	36.8	25.1	46.7
169	14.5	10.2	19.0





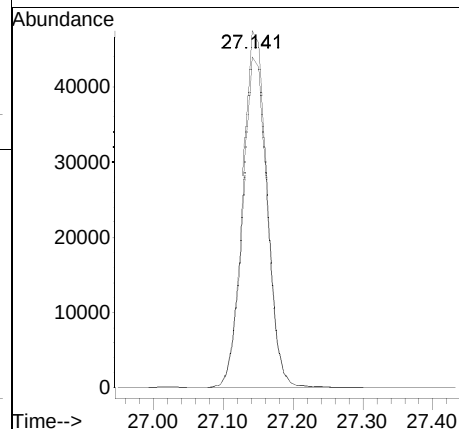
#26
Acenaphthylene
Concen: 555.44 ng/mL
RT: 26.411 min Scan# 2009
Delta R.T. 0.000 min
Lab File: A912121405.D
Acq: 12 Dec 2014 7:18 pm
Tgt Ion:152 Resp: 185555

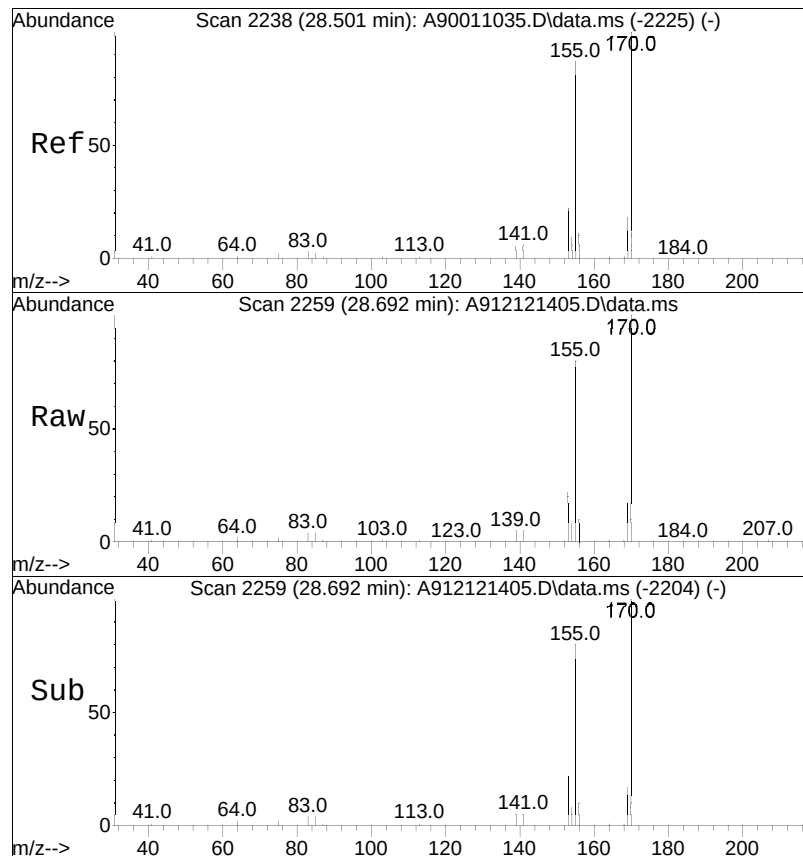




#27
 Acenaphthene
 Concen: 559.34 ng/mL
 RT: 27.141 min Scan# 2089
 Delta R.T. 0.000 min
 Lab File: A912121405.D
 Acq: 12 Dec 2014 7:18 pm

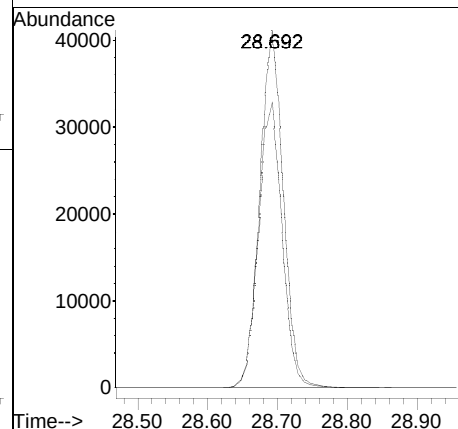
Tgt Ion	Ratio	Lower	Upper
153	100		
154	92.4	64.9	120.5

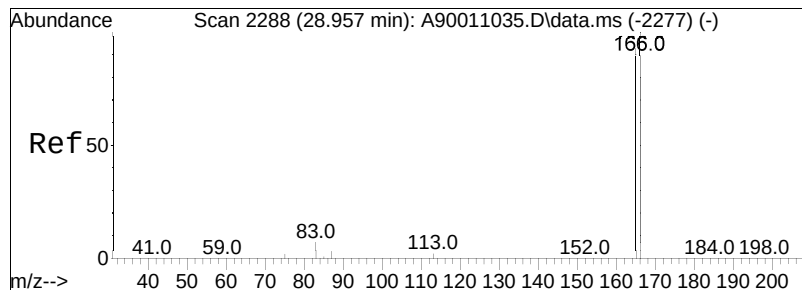




#28
 2,3,5-Trimethylnaphthalene
 Concen: 566.73 ng/mL
 RT: 28.692 min Scan# 2259
 Delta R.T. 0.000 min
 Lab File: A912121405.D
 Acq: 12 Dec 2014 7:18 pm

Tgt Ion	Ratio	Lower	Upper
170	100		
155	80.6	55.9	103.9





#29

Fluorene

Concen: 548.23 ng/mL M4

RT: 29.158 min Scan# 2310

Delta R.T. 0.000 min

Lab File: A912121405.D

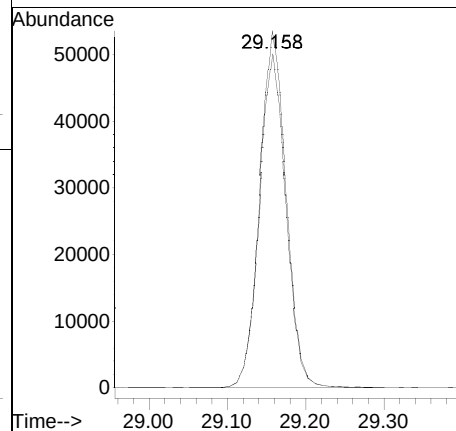
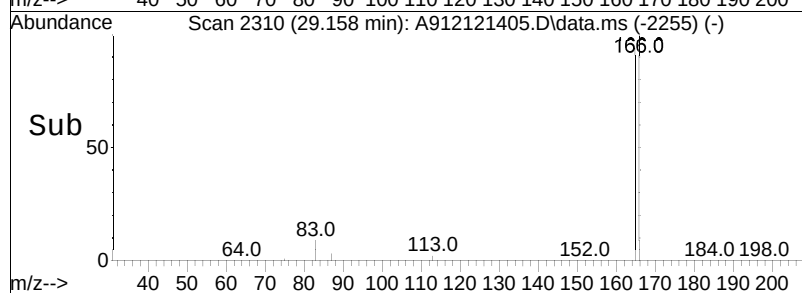
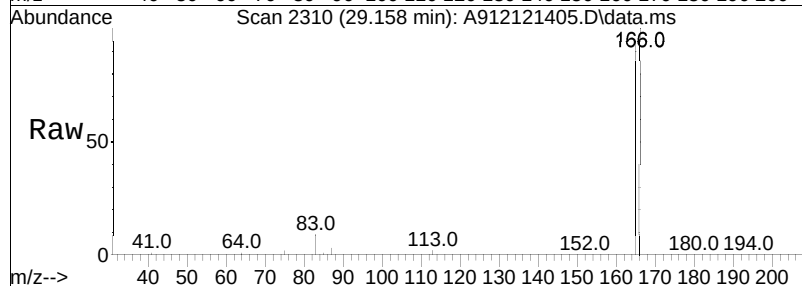
Acq: 12 Dec 2014 7:18 pm

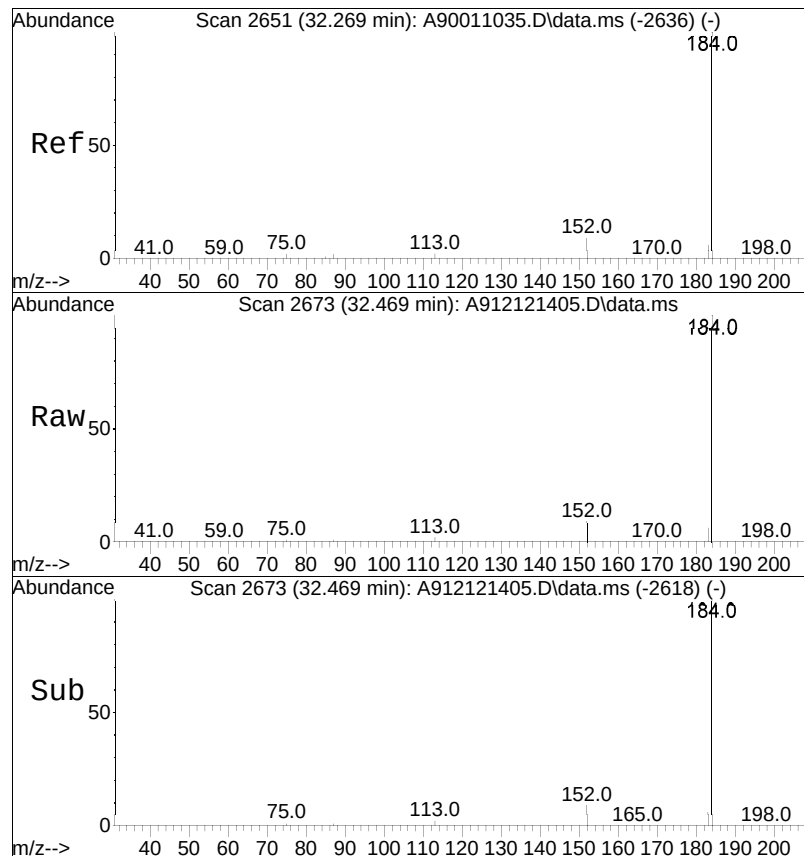
Tgt Ion:166 Resp: 125037

Ion Ratio Lower Upper

166 100

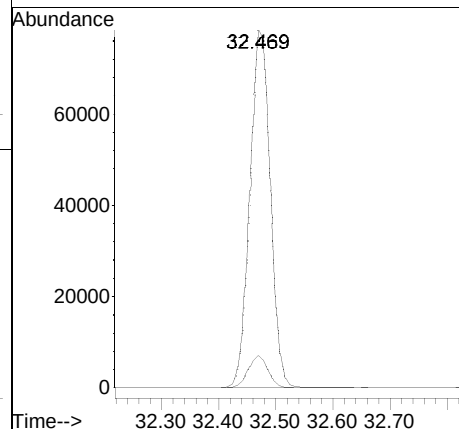
165 93.5 65.5 121.7

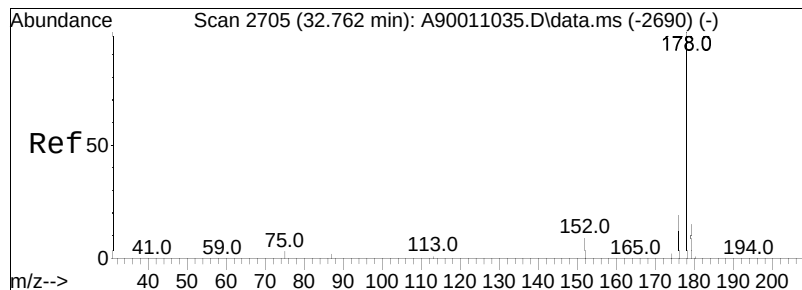




#33
 Dibenzothiophene
 Concen: 641.60 ng/mL
 RT: 32.469 min Scan# 2673
 Delta R.T. 0.000 min
 Lab File: A912121405.D
 Acq: 12 Dec 2014 7:18 pm

Tgt Ion	Ratio	Lower	Upper
184	100		
152	8.6	6.3	11.7





#43

Phenanthrene

Concen: 579.45 ng/mL

RT: 32.962 min Scan# 2727

Delta R.T. 0.000 min

Lab File: A912121405.D

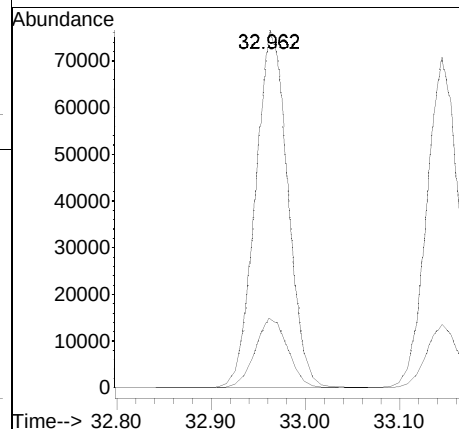
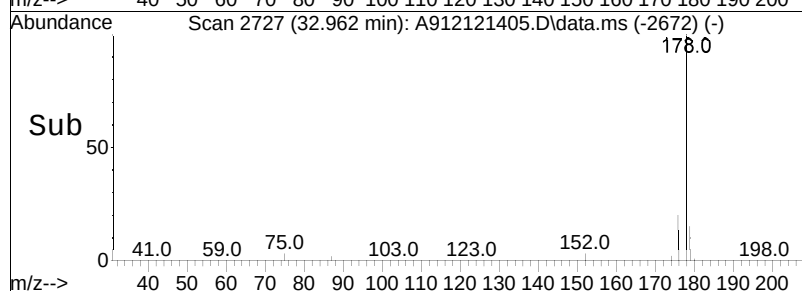
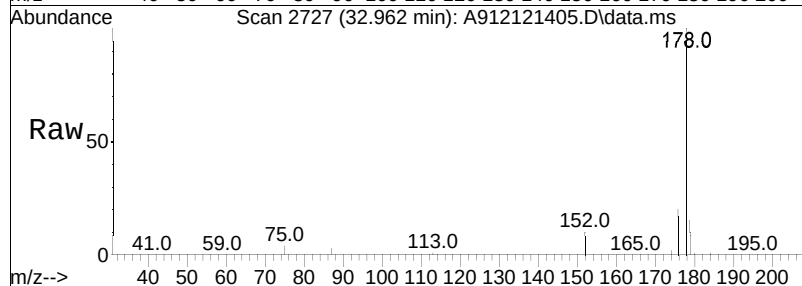
Acq: 12 Dec 2014 7:18 pm

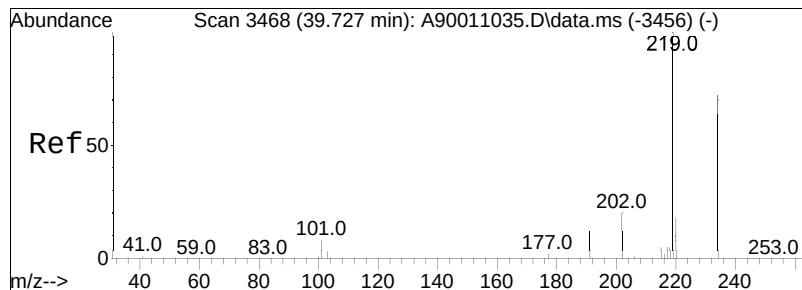
Tgt Ion:178 Resp: 182713

Ion Ratio Lower Upper

178 100

176 19.5 13.7 25.5





#54

Retene

Concen: 598.36 ng/mL

RT: 39.927 min Scan# 3490

Delta R.T. 0.000 min

Lab File: A912121405.D

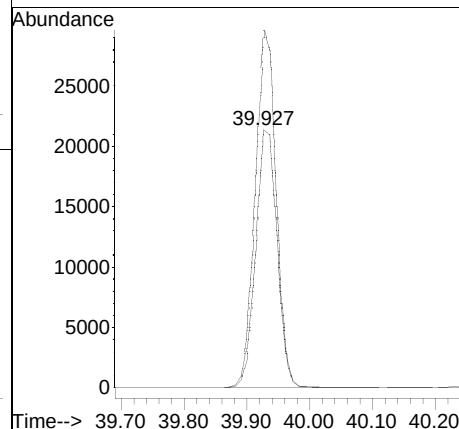
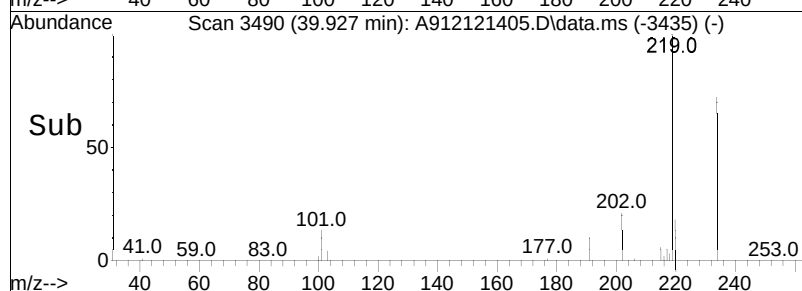
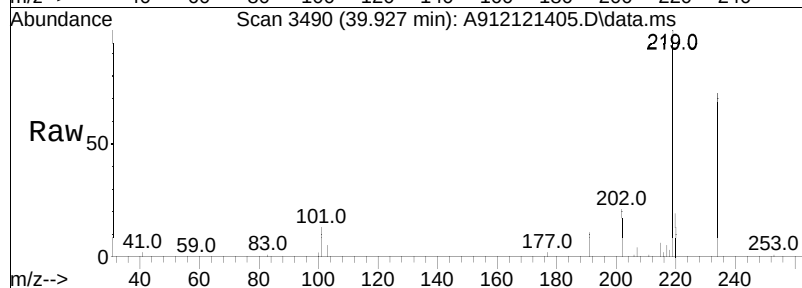
Acq: 12 Dec 2014 7:18 pm

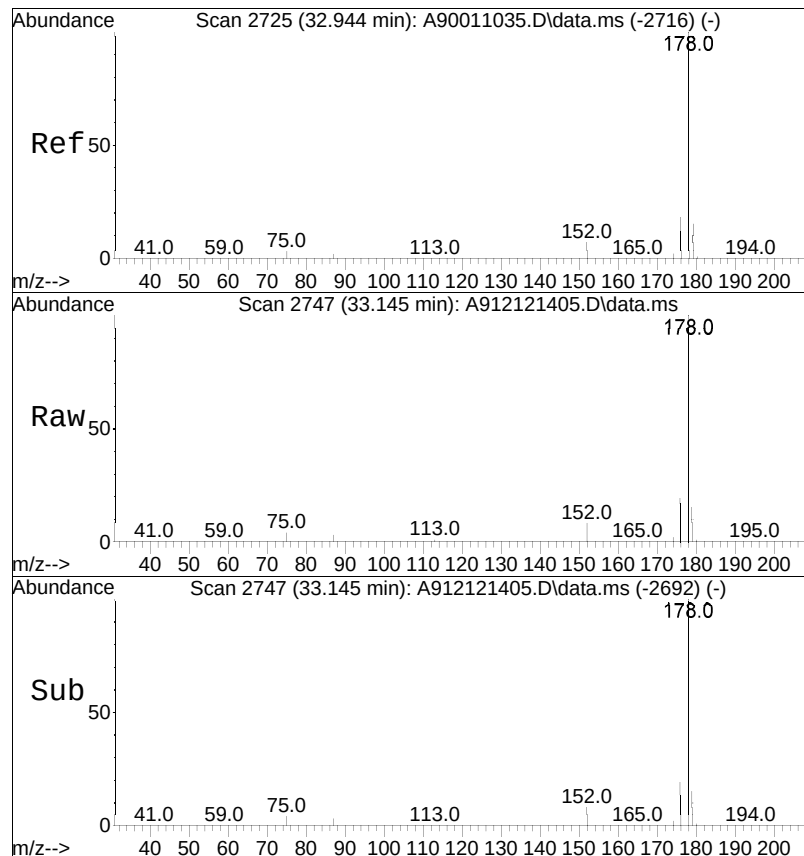
Tgt Ion: 234 Resp: 49602

Ion Ratio Lower Upper

234 100

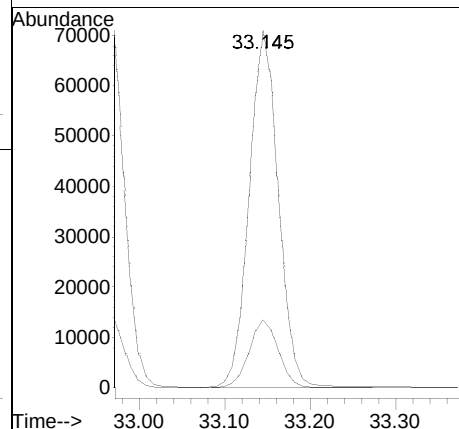
219 135.9 96.7 179.7

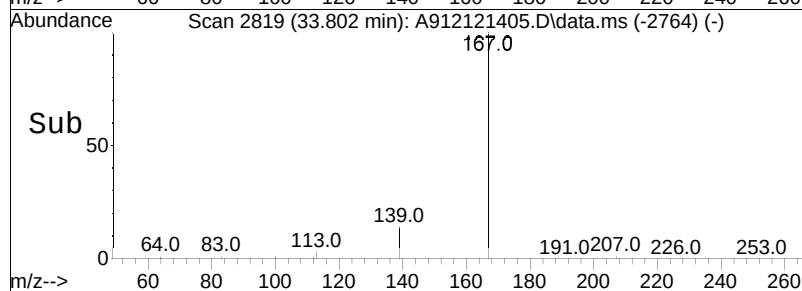
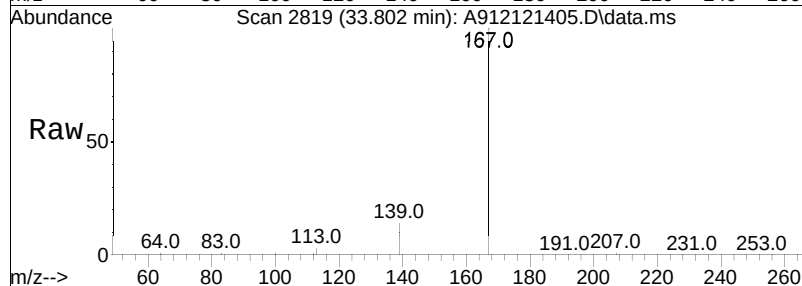
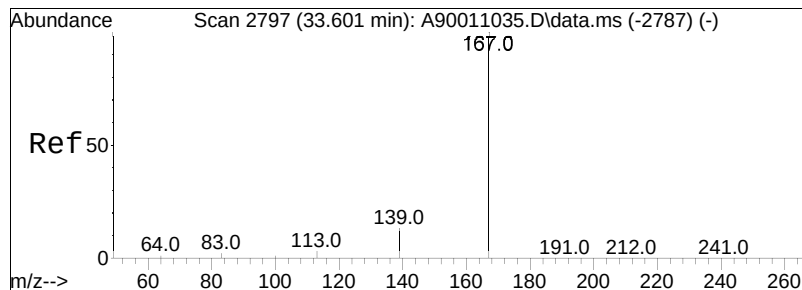




#55
 Anthracene
 Concen: 578.60 ng/mL M4
 RT: 33.145 min Scan# 2747
 Delta R.T. 0.000 min
 Lab File: A912121405.D
 Acq: 12 Dec 2014 7:18 pm

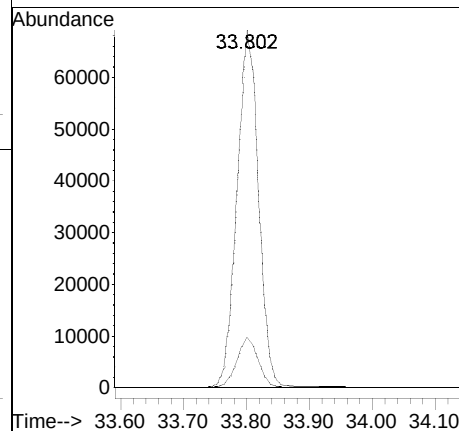
Tgt	Ion	Ratio	Lower	Upper
178	100			
176	19.0	13.4	24.8	

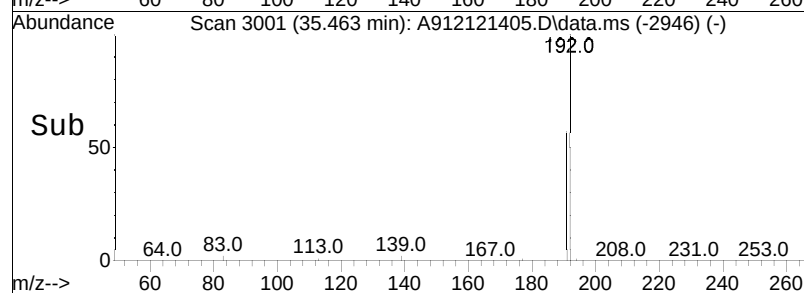
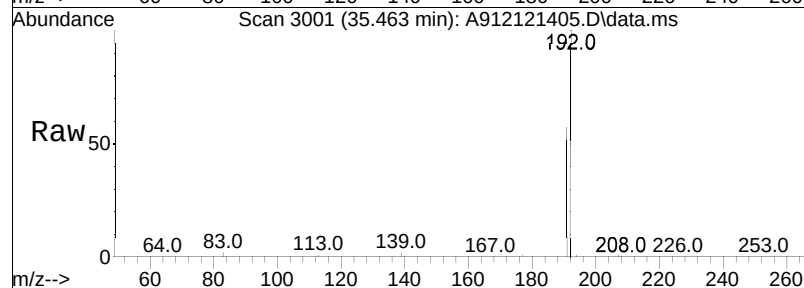
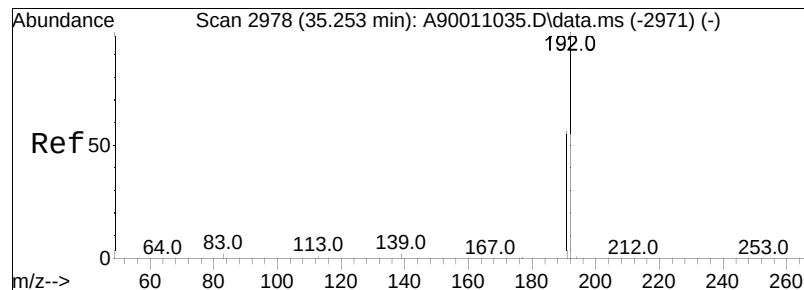




#56
 Carbazole
 Concen: 546.32 ng/mL M4
 RT: 33.802 min Scan# 2819
 Delta R.T. 0.000 min
 Lab File: A912121405.D
 Acq: 12 Dec 2014 7:18 pm

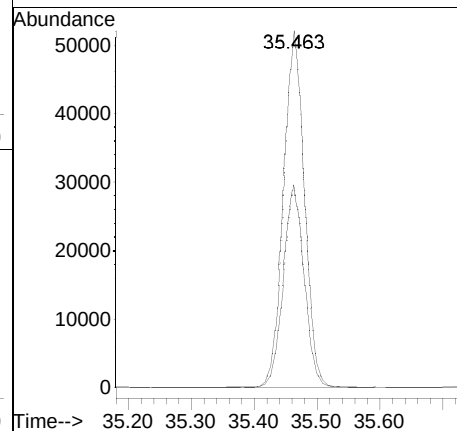
Tgt Ion	Ratio	Lower	Upper
167	100		
139	13.9	9.9	18.3

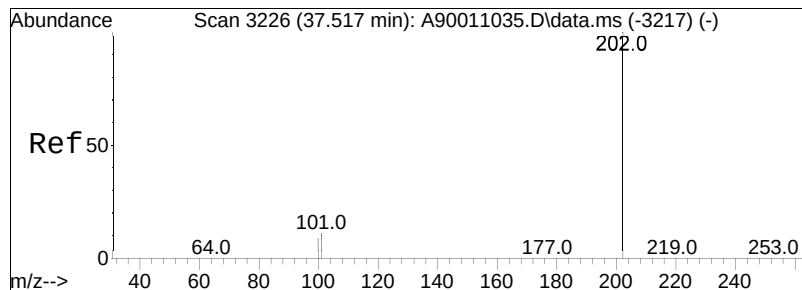




#57
 1-Methylphenanthrene
 Concen: 551.86 ng/mL
 RT: 35.463 min Scan# 3001
 Delta R.T. 0.000 min
 Lab File: A912121405.D
 Acq: 12 Dec 2014 7:18 pm

Tgt Ion	Ratio	Lower	Upper
192	100		
191	56.4	39.8	74.0





#58

Fluoranthene

Concen: 602.28 ng/mL M4

RT: 37.727 min Scan# 3249

Delta R.T. 0.000 min

Lab File: A912121405.D

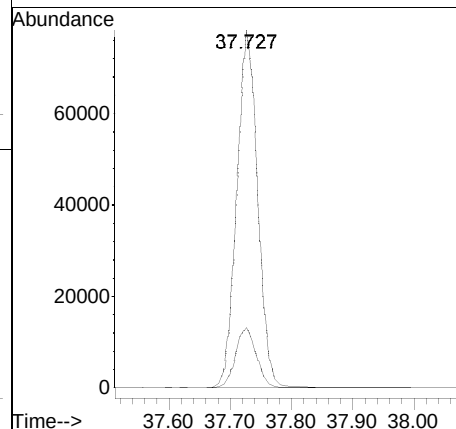
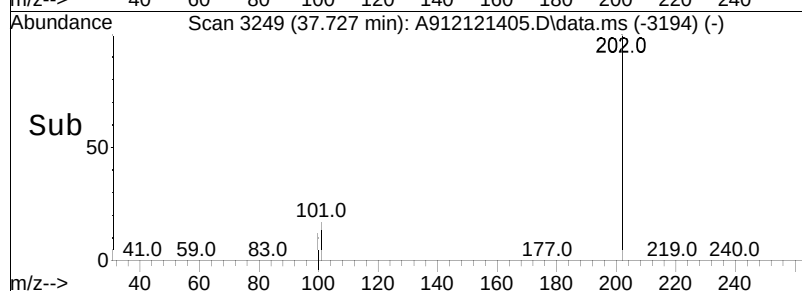
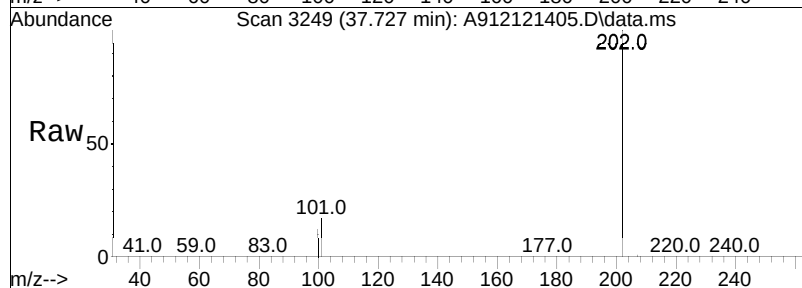
Acq: 12 Dec 2014 7:18 pm

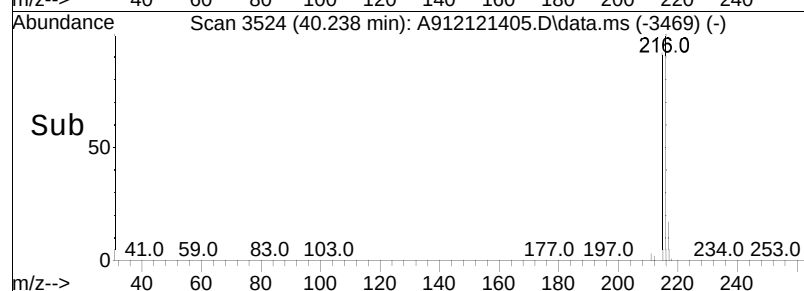
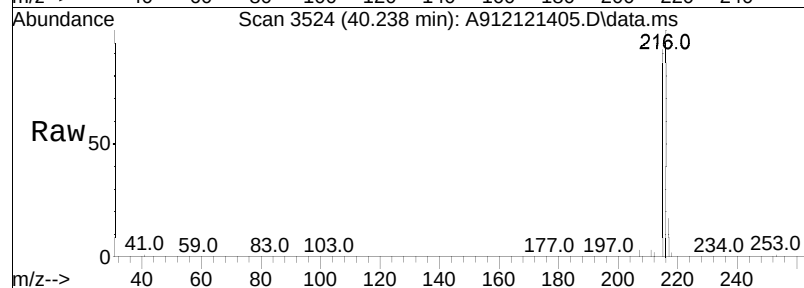
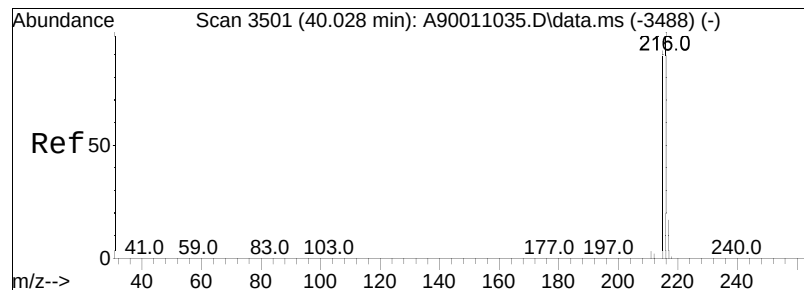
Tgt Ion: 202 Resp: 182618

Ion Ratio Lower Upper

202 100

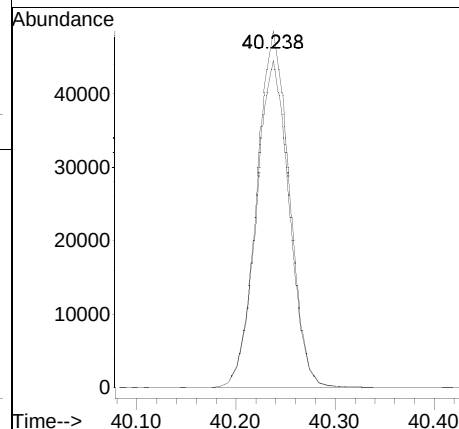
101 16.9 11.8 22.0

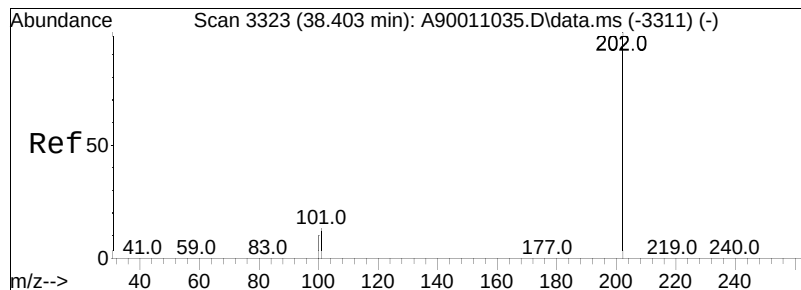




#59
Benzo(b)fluorene
Concen: 612.09 ng/mL
RT: 40.238 min Scan# 3524
Delta R.T. 0.000 min
Lab File: A912121405.D
Acq: 12 Dec 2014 7:18 pm

Tgt	Ion	Ratio	Lower	Upper
216	100			
215	92.4	64.3	119.3	





#60

Pyrene

Concen: 629.12 ng/mL

RT: 38.613 min Scan# 3346

Delta R.T. 0.000 min

Lab File: A912121405.D

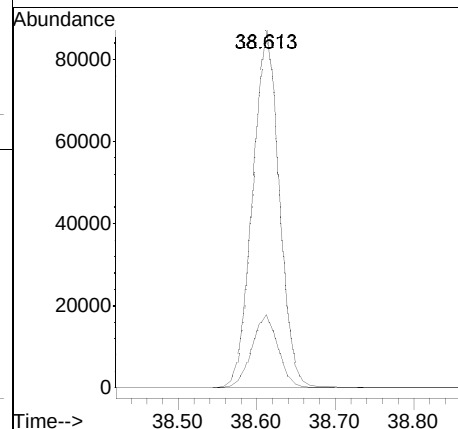
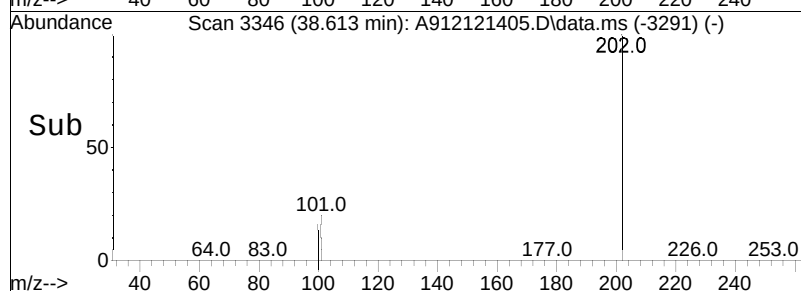
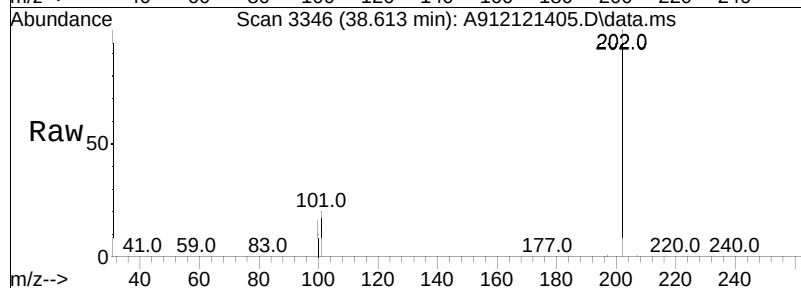
Acq: 12 Dec 2014 7:18 pm

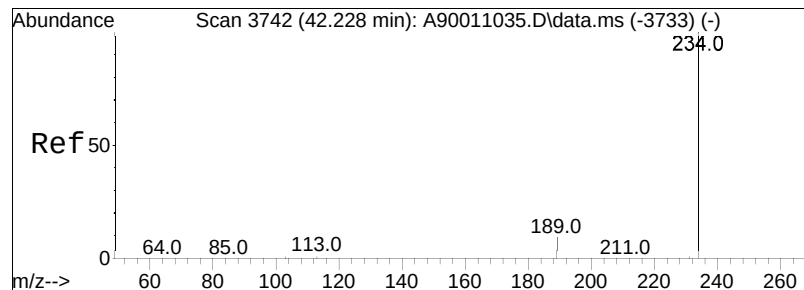
Tgt Ion: 202 Resp: 203273

Ion Ratio Lower Upper

202 100

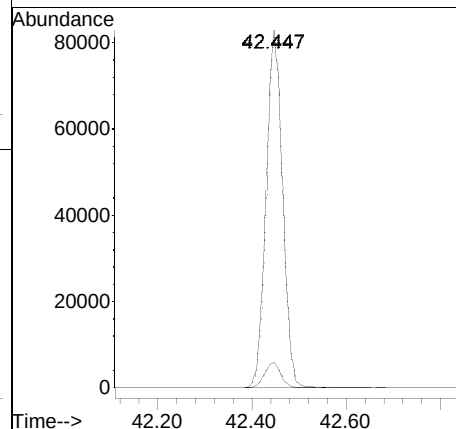
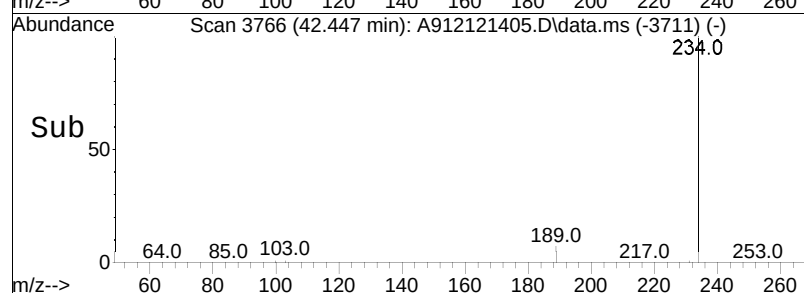
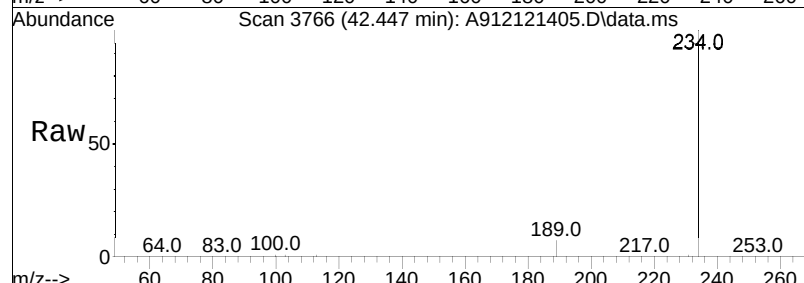
101 20.2 14.2 26.4

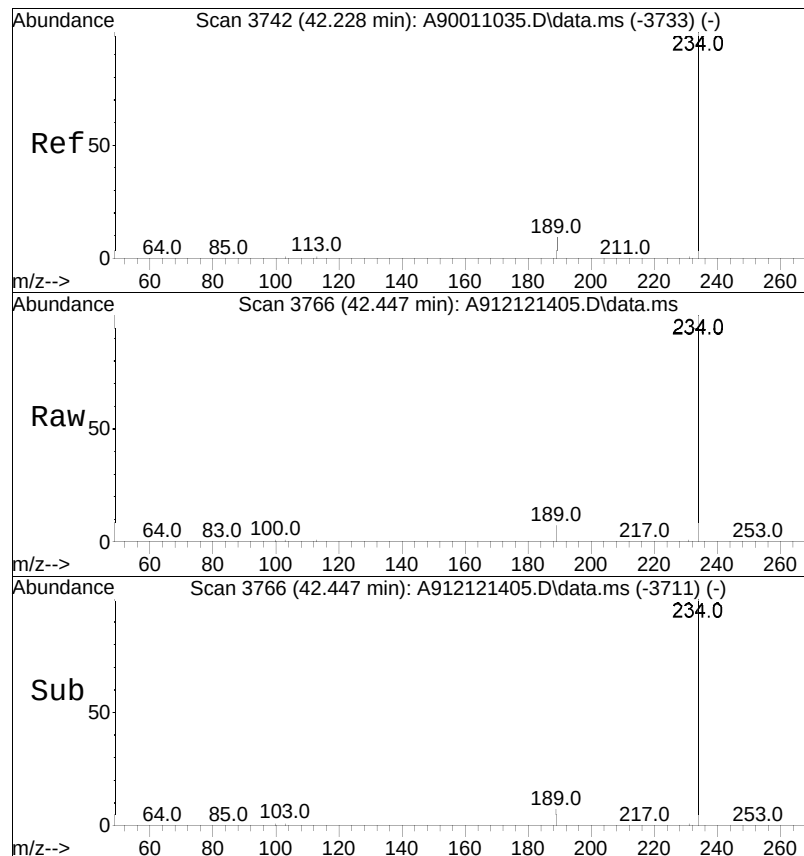




#66
 Naphthobenzothiophene
 Concen: 680.20 ng/ml
 RT: 42.447 min Scan# 3766
 Delta R.T. 0.000 min
 Lab File: A912121405.D
 Acq: 12 Dec 2014 7:18 pm

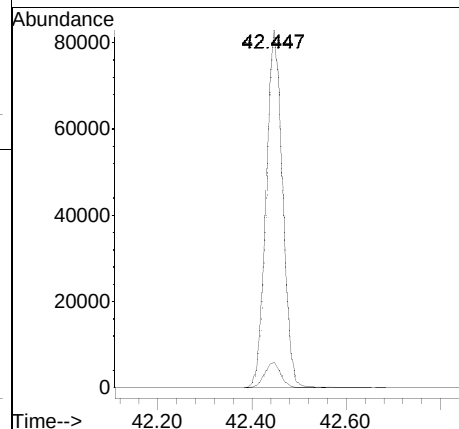
Tgt Ion	Ratio	Lower	Upper
234	100		
189	7.0	4.9	9.1

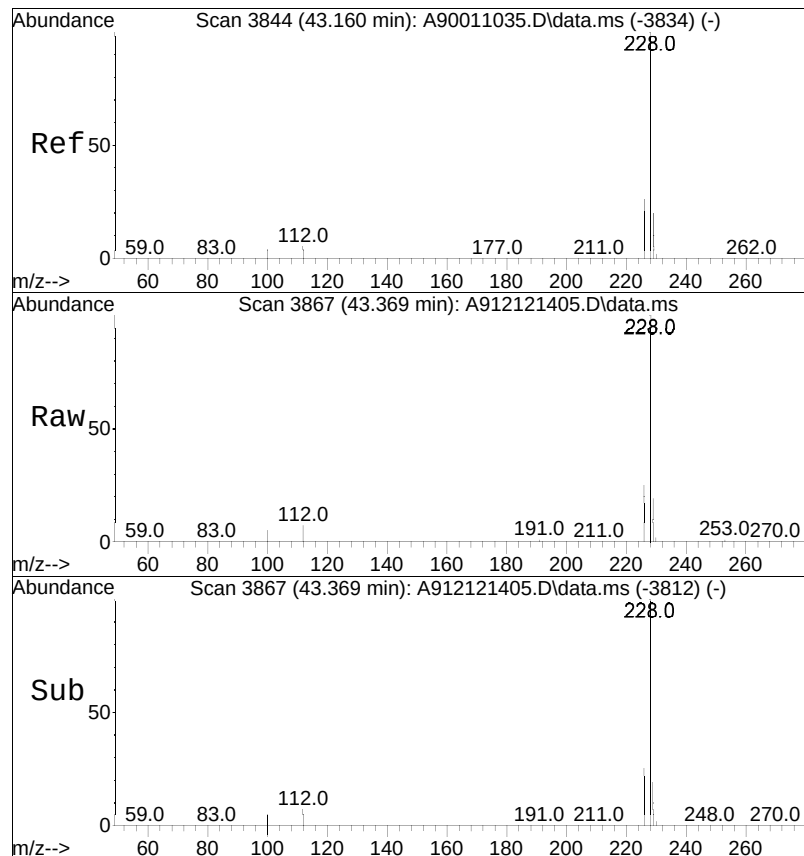




#67
 Naphthobenzothiophene-2,1-D
 Concen: 680.20 ng/mL
 RT: 42.447 min Scan# 3766
 Delta R.T. 0.000 min
 Lab File: A912121405.D
 Acq: 12 Dec 2014 7:18 pm

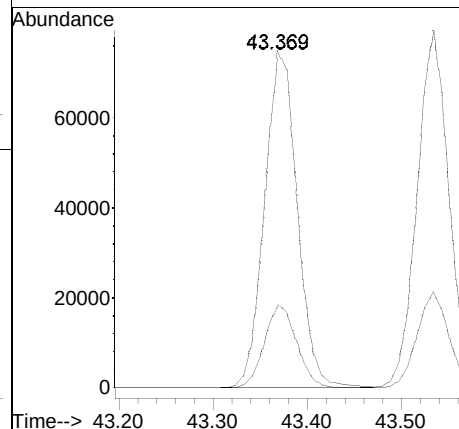
Tgt	Ion	Ratio	Resp	Lower	Upper
234	100		194717		
189	7.0		4.9		9.1

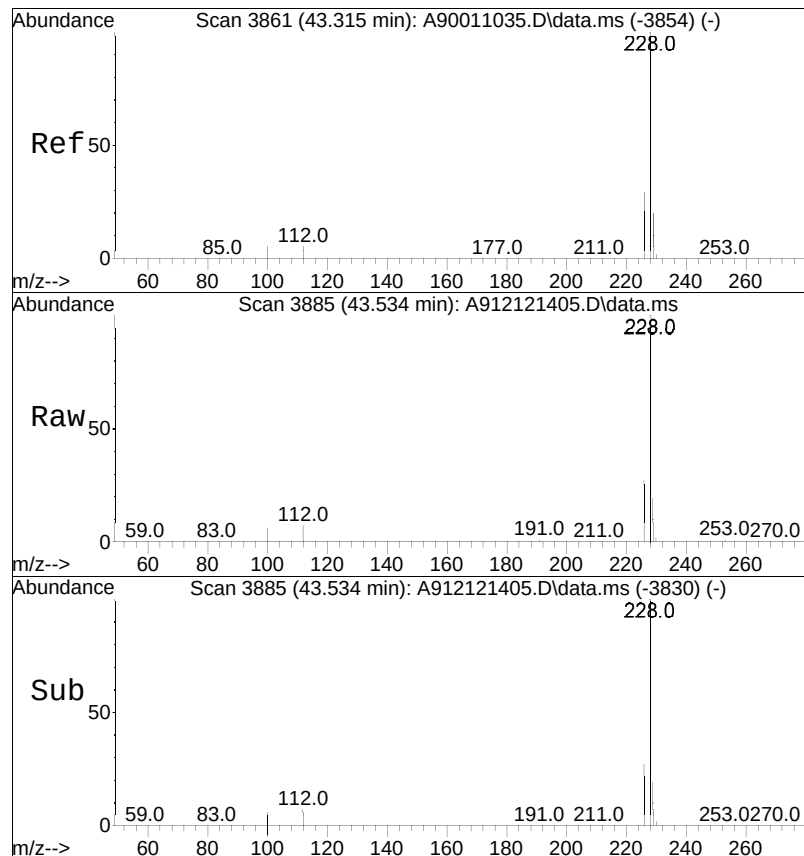




#75
Benz[a]anthracene
Concen: 595.38 ng/mL
RT: 43.369 min Scan# 3867
Delta R.T. 0.000 min
Lab File: A912121405.D
Acq: 12 Dec 2014 7:18 pm

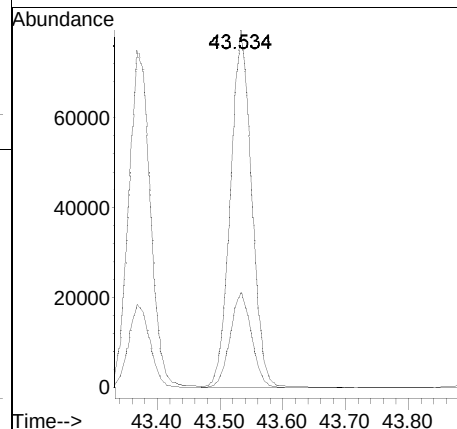
Tgt	Ion	Ratio	Lower	Upper
228	100			
226	24.3	17.3	32.1	

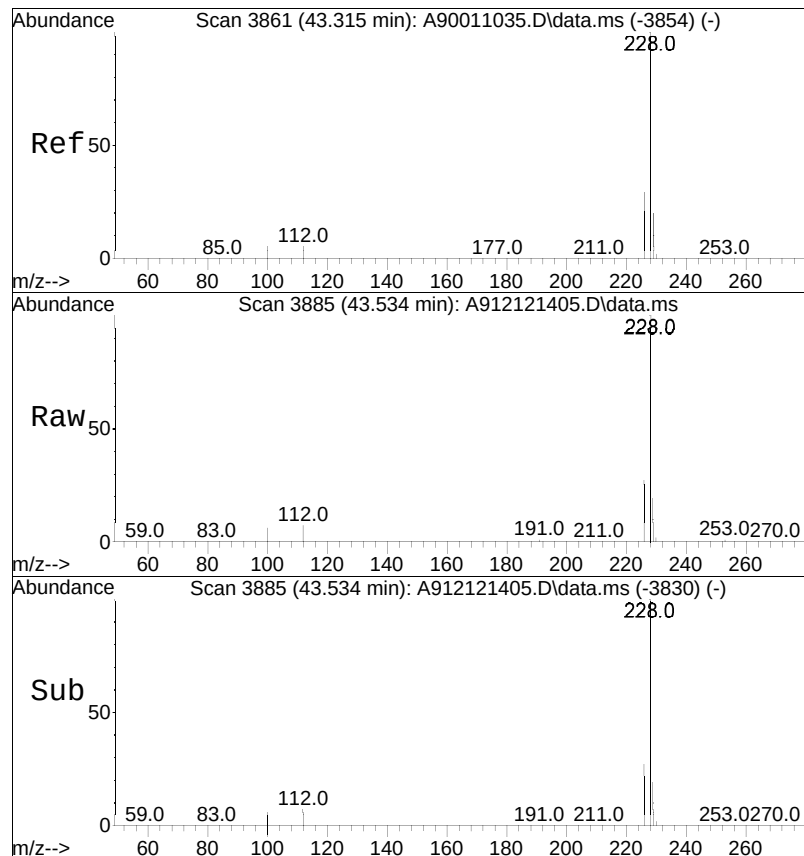




#76
 Chrysene
 Concen: 627.28 ng/mL
 RT: 43.534 min Scan# 3885
 Delta R.T. 0.000 min
 Lab File: A912121405.D
 Acq: 12 Dec 2014 7:18 pm

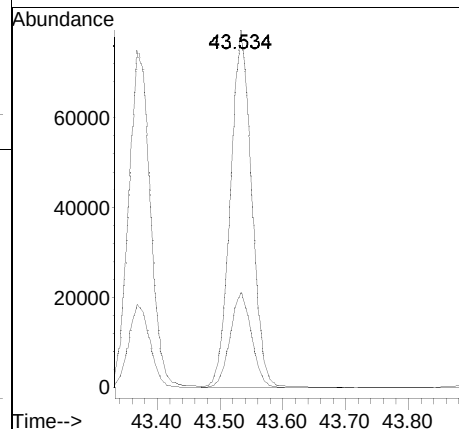
Tgt Ion	Ratio	Lower	Upper
228	100		
226	26.6	18.8	34.8

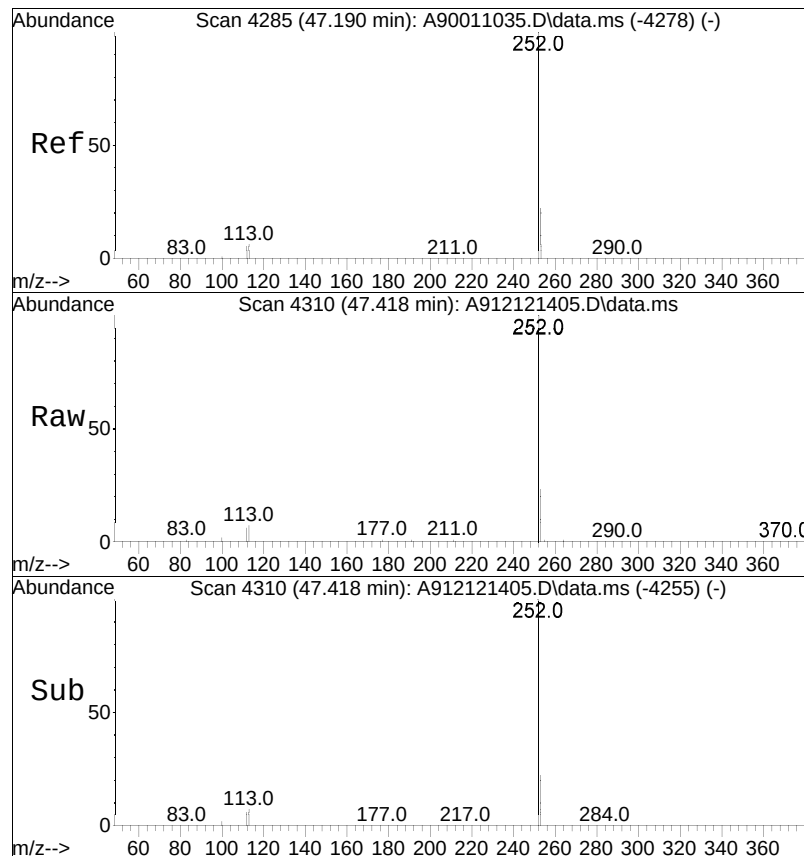




#77
 Chrysene/Triphenylene
 Concen: 627.28 ng/mL
 RT: 43.534 min Scan# 3885
 Delta R.T. 0.000 min
 Lab File: A912121405.D
 Acq: 12 Dec 2014 7:18 pm

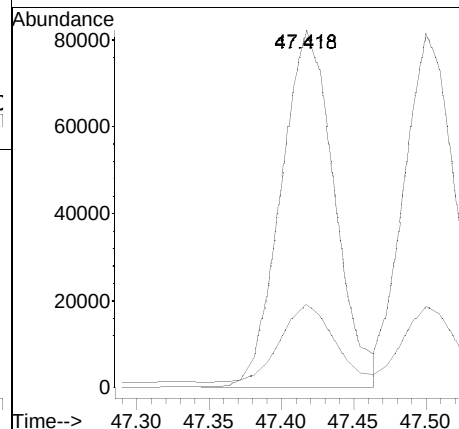
Tgt	Ion	Ratio	Lower	Upper
228	100			
226	26.6	18.8	34.8	

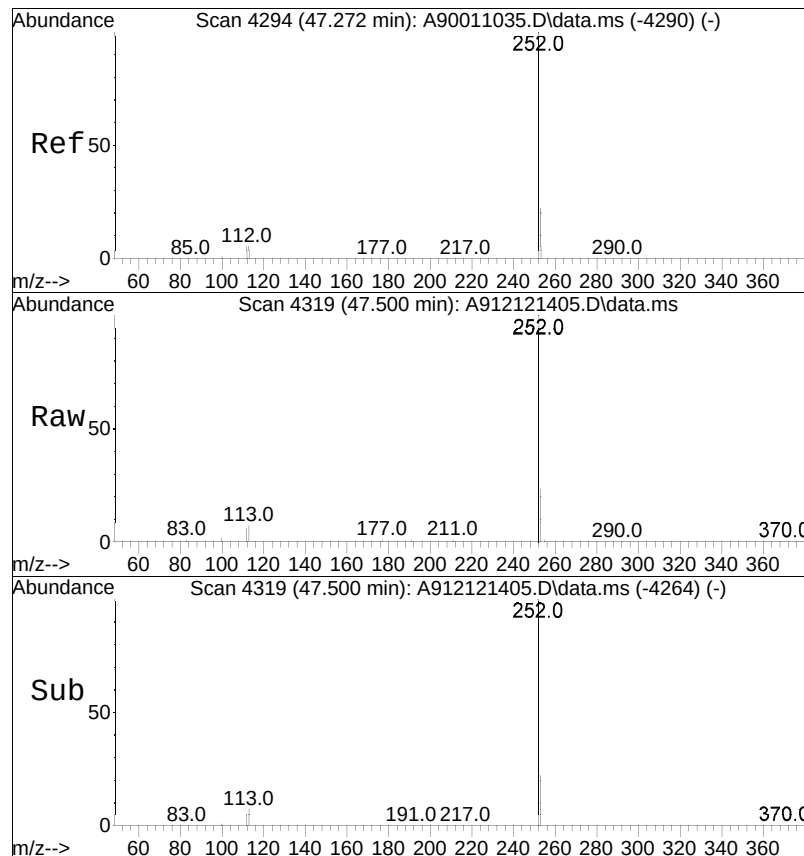




#84
Benzo[b]fluoranthene
Concen: 573.10 ng/mL
RT: 47.418 min Scan# 4310
Delta R.T. 0.000 min
Lab File: A912121405.D
Acq: 12 Dec 2014 7:18 pm

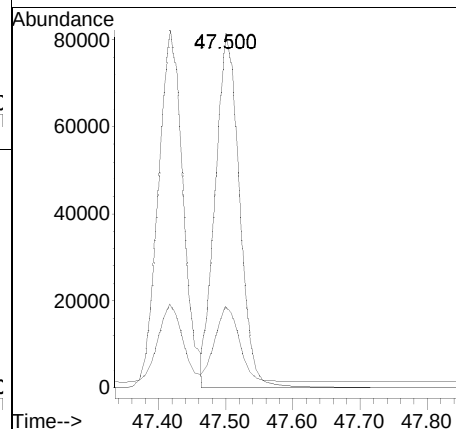
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.7	16.4	30.4	

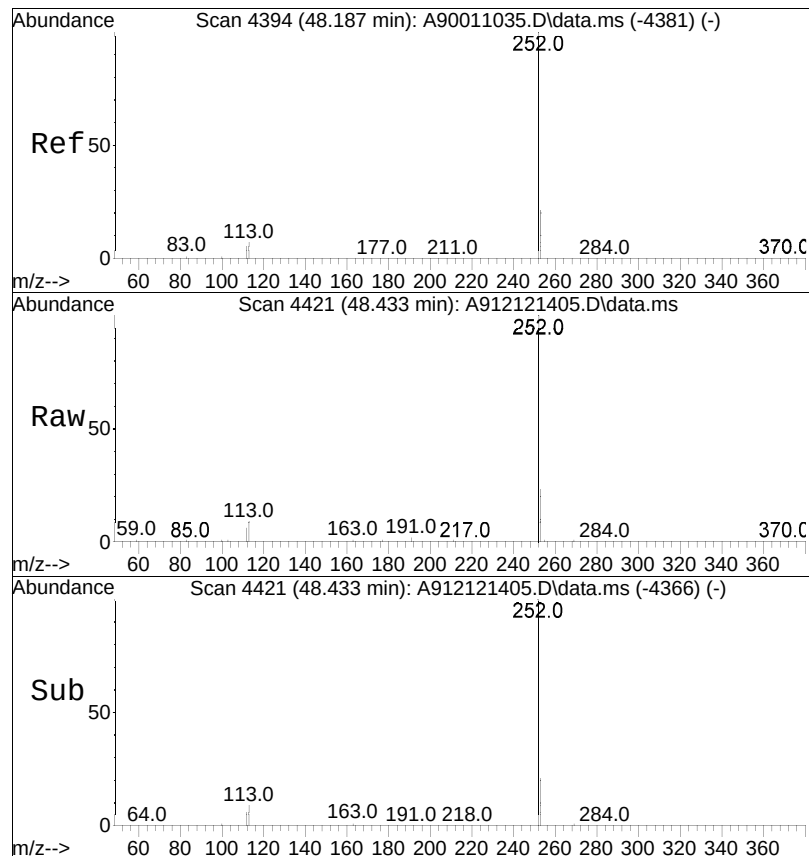




#85
 Benzo[j]+[k]fluoranthene
 Concen: 561.23 ng/mL
 RT: 47.500 min Scan# 4319
 Delta R.T. 0.000 min
 Lab File: A912121405.D
 Acq: 12 Dec 2014 7:18 pm

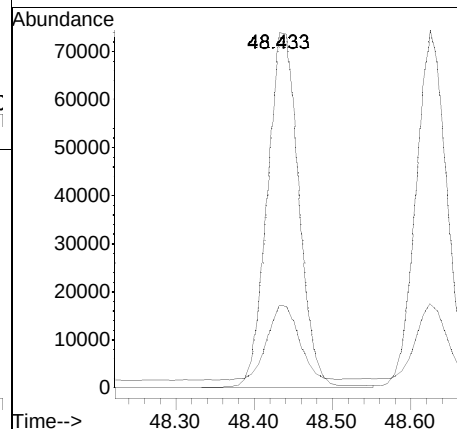
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.4	16.1	29.9	

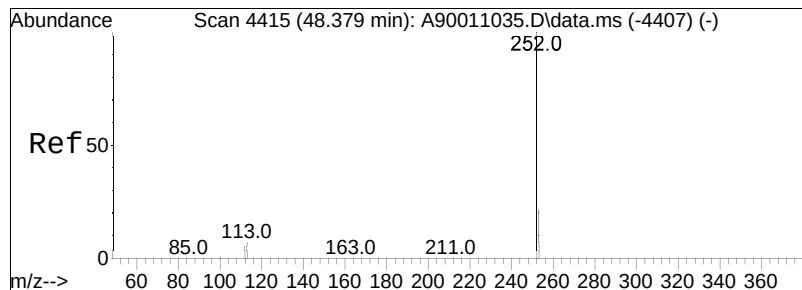




#87
 Benzo[e]pyrene
 Concen: 576.62 ng/mL
 RT: 48.433 min Scan# 4421
 Delta R.T. 0.000 min
 Lab File: A912121405.D
 Acq: 12 Dec 2014 7:18 pm

Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.3	16.2	30.0	





#89

Benzo[a]pyrene

Concen: 587.72 ng/mL

RT: 48.625 min Scan# 4442

Delta R.T. 0.000 min

Lab File: A912121405.D

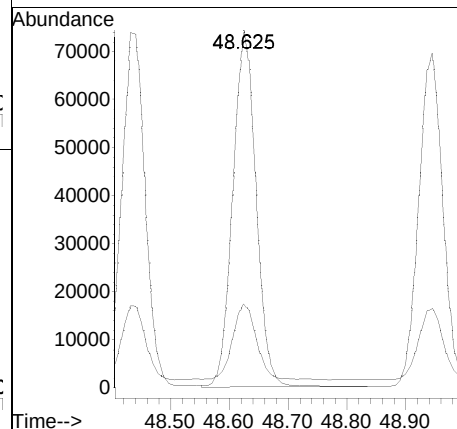
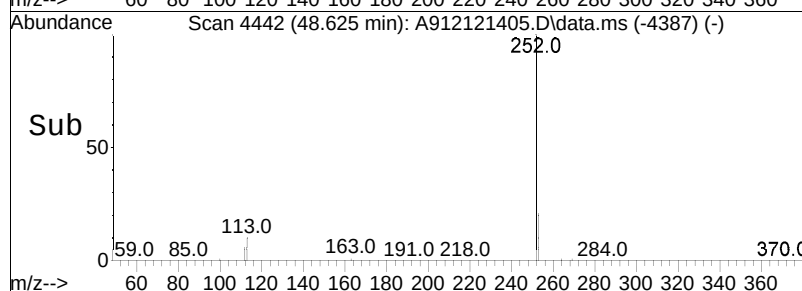
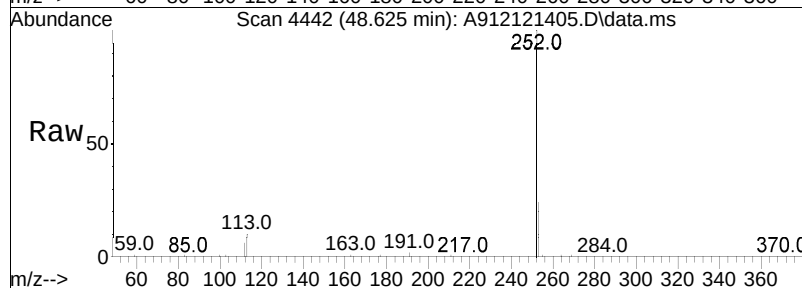
Acq: 12 Dec 2014 7:18 pm

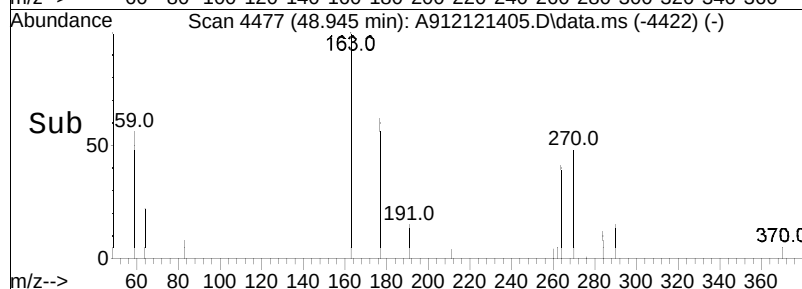
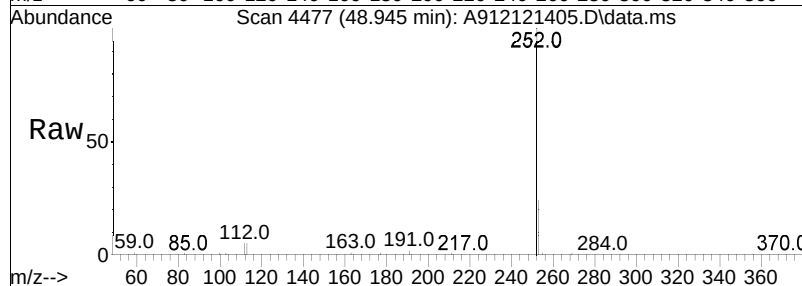
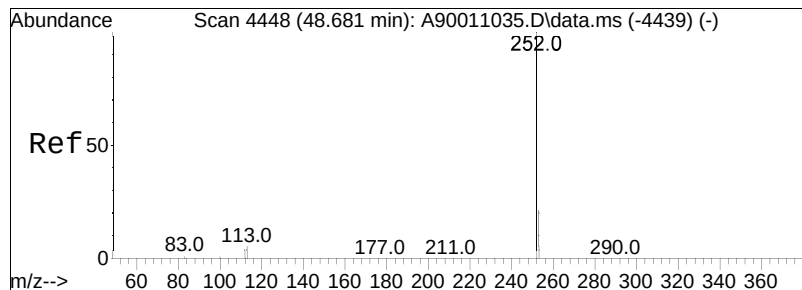
Tgt Ion: 252 Resp: 204435

Ion Ratio Lower Upper

252 100

253 21.1 16.4 30.6





#90

Perylene

Concen: 564.01 ng/mL

RT: 48.945 min Scan# 4477

Delta R.T. 0.000 min

Lab File: A912121405.D

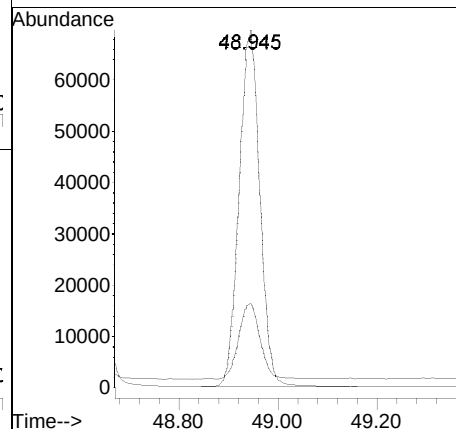
Acq: 12 Dec 2014 7:18 pm

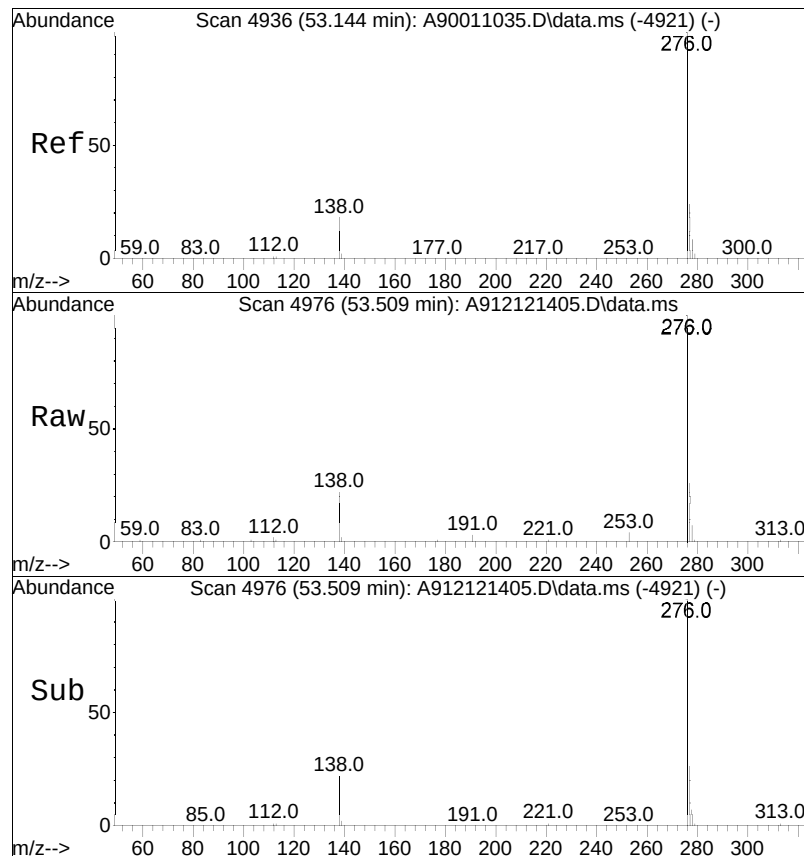
Tgt Ion: 252 Resp: 199861

Ion Ratio Lower Upper

252 100

253 21.8 16.6 30.8





#91

Indeno[1,2,3-cd]pyrene

Concen: 543.37 ng/mL M3

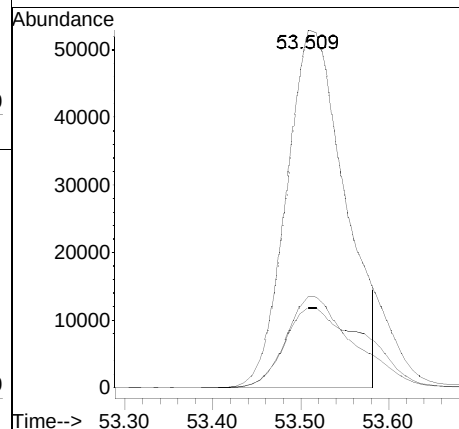
RT: 53.509 min Scan# 4976

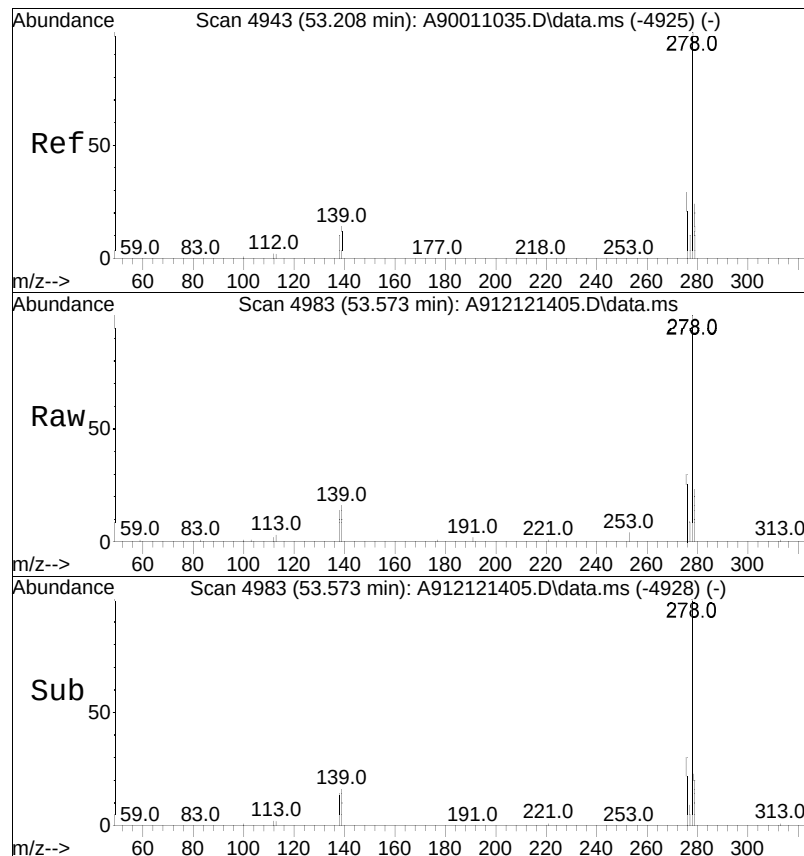
Delta R.T. 0.000 min

Lab File: A912121405.D

Acq: 12 Dec 2014 7:18 pm

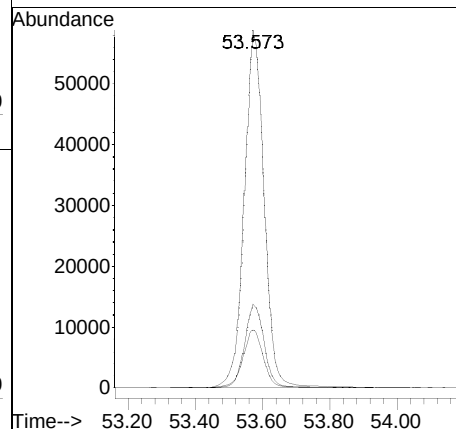
Tgt	Ion:276	Resp:	242703
Ion	Ratio	Lower	Upper
276	100		
138	30.6	15.7	29.1#
277	29.4	17.9	33.3

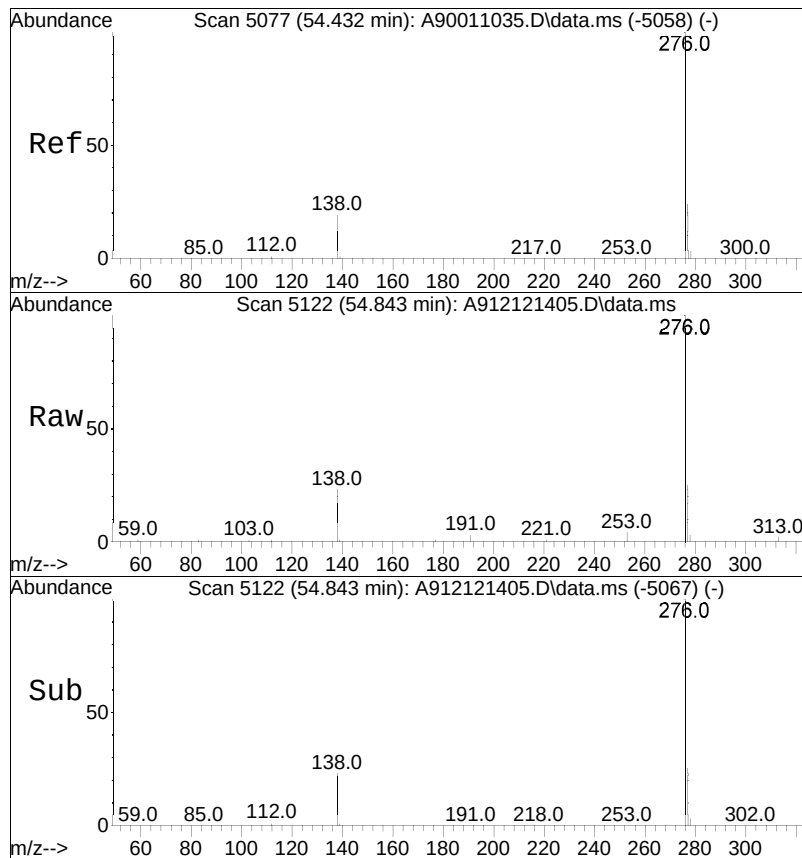




#92
 Dibenz[ah]+[ac]anthracene
 Concen: 566.18 ng/mL
 RT: 53.573 min Scan# 4983
 Delta R.T. 0.000 min
 Lab File: A912121405.D
 Acq: 12 Dec 2014 7:18 pm

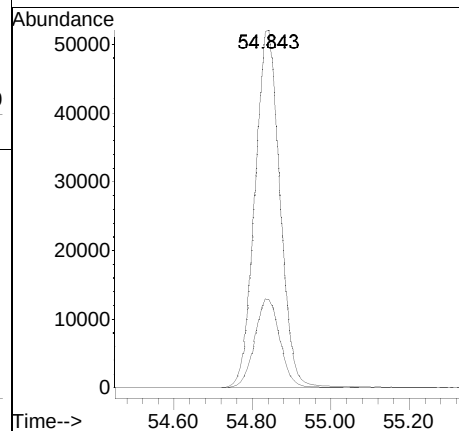
Tgt Ion	Ratio	Lower	Upper
278	100		
139	16.3	11.4	21.2
279	22.7	16.3	30.3

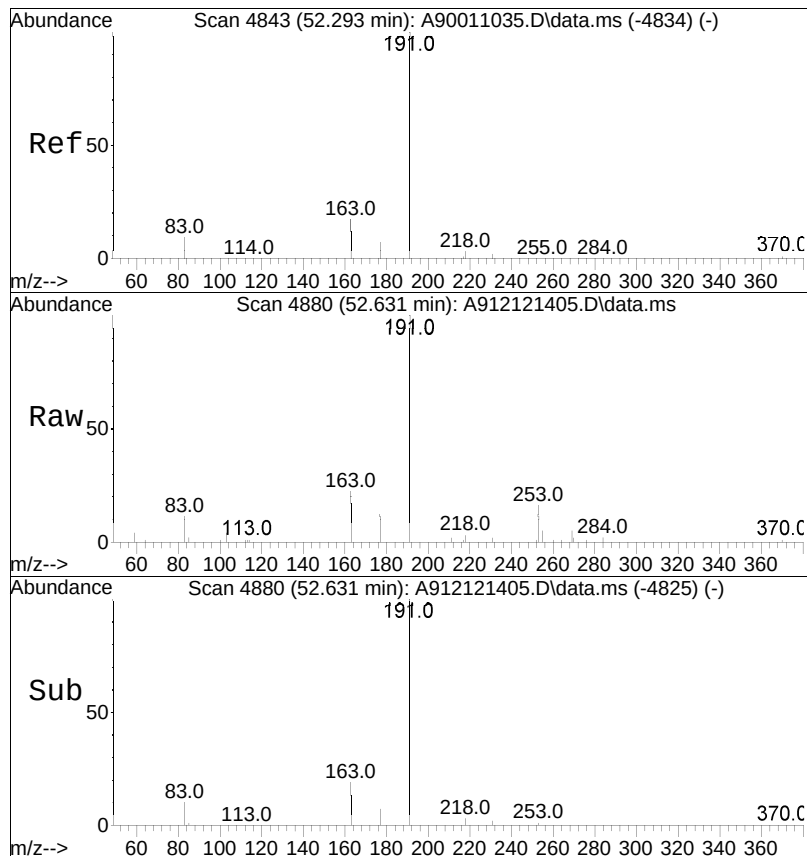




#93
 Benzo[g,h,i]perylene
 Concen: 529.00 ng/mL
 RT: 54.843 min Scan# 5122
 Delta R.T. 0.000 min
 Lab File: A912121405.D
 Acq: 12 Dec 2014 7:18 pm

Tgt	Ion	Ratio	Lower	Upper
276	100			
277	25.0	17.4	32.2	





#94

Hopane (T19)

Concen: 372.06 ng/mL

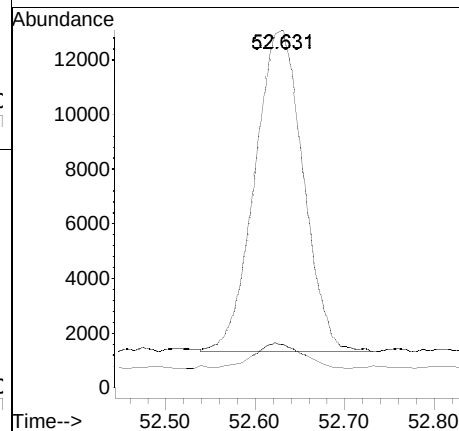
RT: 52.631 min Scan# 4880

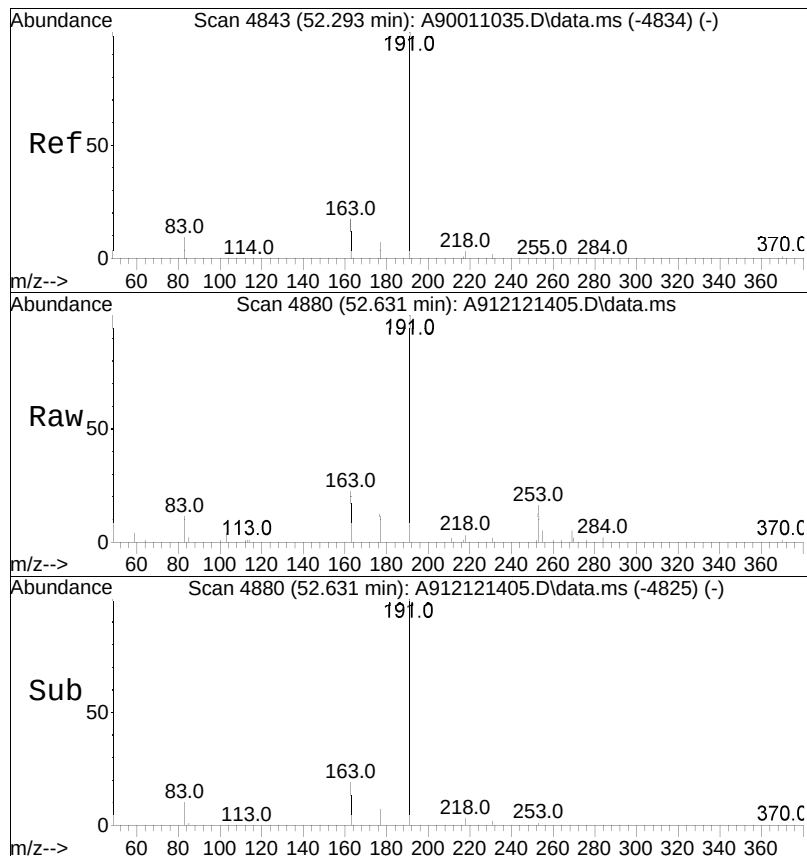
Delta R.T. 0.000 min

Lab File: A912121405.D

Acq: 12 Dec 2014 7:18 pm

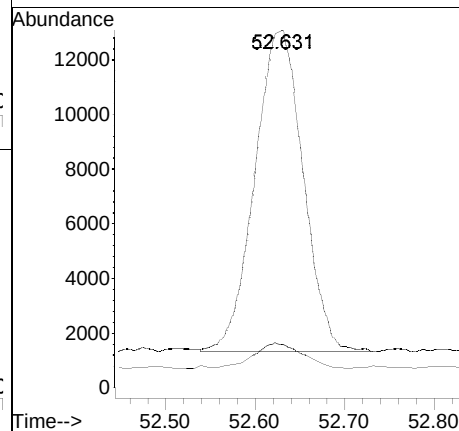
Tgt	Ion	Ratio	Resp	Lower	Upper
191	100		43701		
177	8.0		8.5	15.9#	





#95
 17a(H),21B(H)-hopane - C₃₀H₅₂
 Concen: 372.06 ng/mL
 RT: 52.631 min Scan# 4880
 Delta R.T. 0.000 min
 Lab File: A912121405.D
 Acq: 12 Dec 2014 7:18 pm

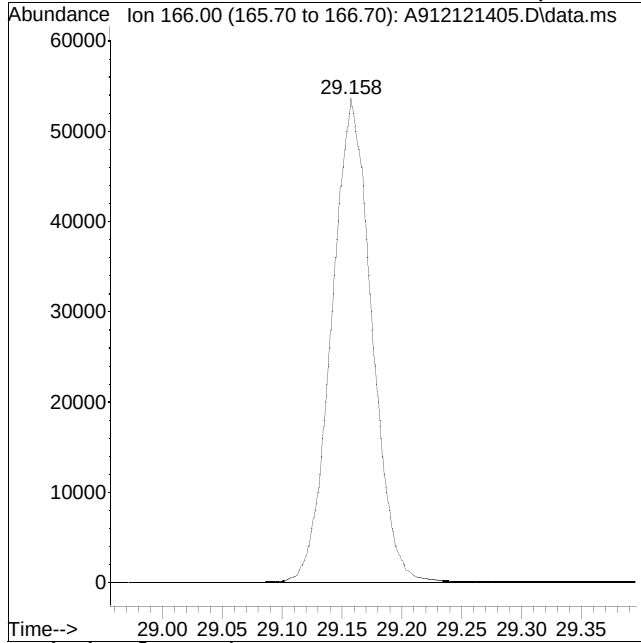
Tgt	Ion	Ratio	Lower	Upper
191	100			
177	8.0	8.5	15.9#	



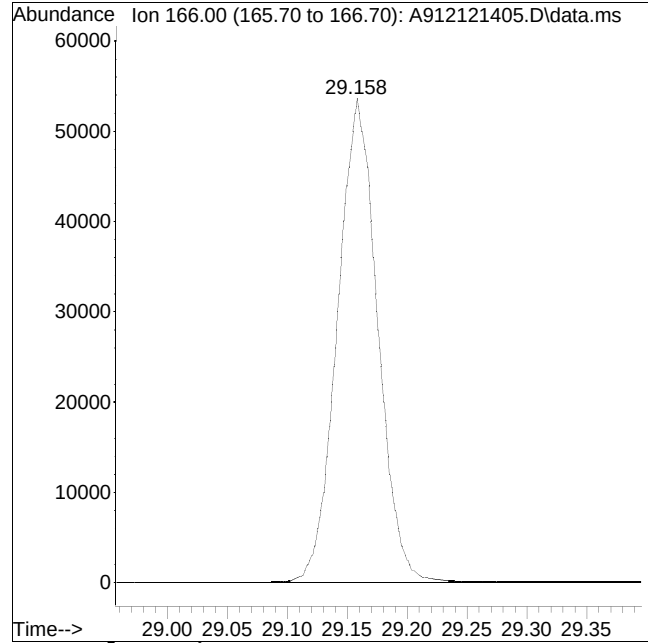
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121405.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 7:18 pm Instrument : PAH 9
Sample : i912121404 Quant Date : 12/15/2014 10:36 am

Compound #29: Fluorene



Original Peak Response = 125063



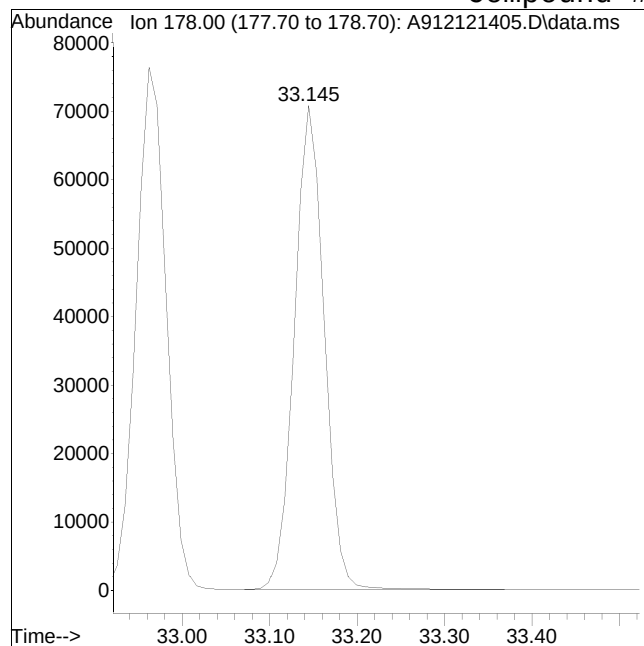
Manual Peak Response = 125037 M4

M4 = Poor automated baseline construction.

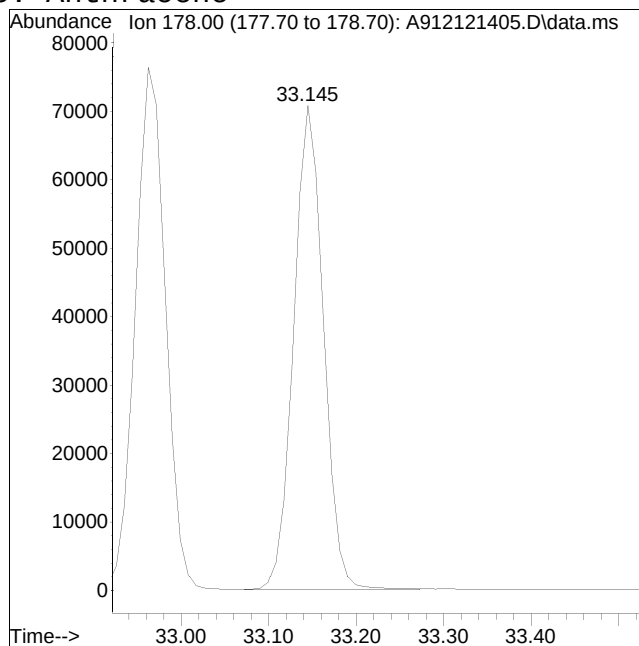
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121405.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 7:18 pm Instrument : PAH 9
Sample : i912121404 Quant Date : 12/15/2014 10:36 am

Compound #55: Anthracene



Original Peak Response = 167730



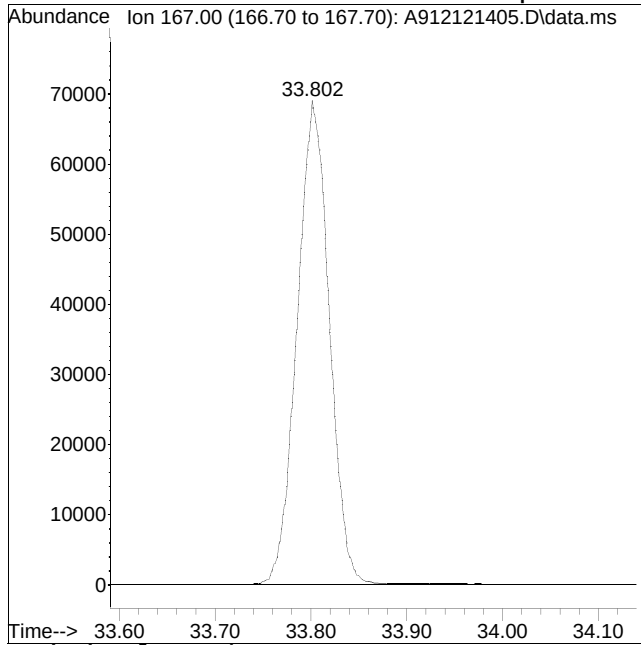
Manual Peak Response = 167726 M4

M4 = Poor automated baseline construction.

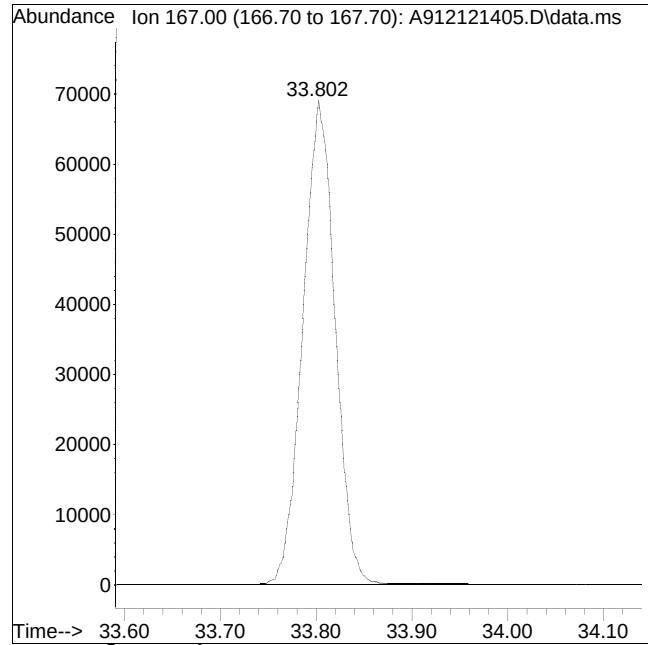
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121405.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 7:18 pm Instrument : PAH 9
Sample : i912121404 Quant Date : 12/15/2014 10:36 am

Compound #56: Carbazole



Original Peak Response = 161852



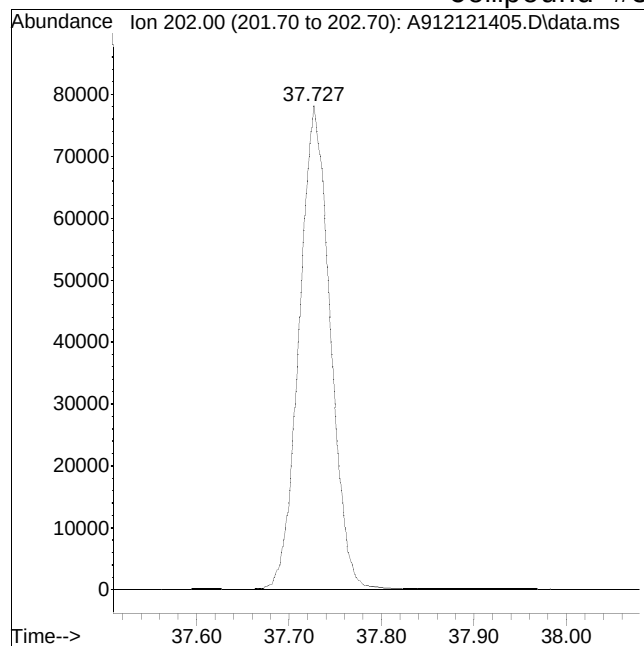
Manual Peak Response = 161779 M4

M4 = Poor automated baseline construction.

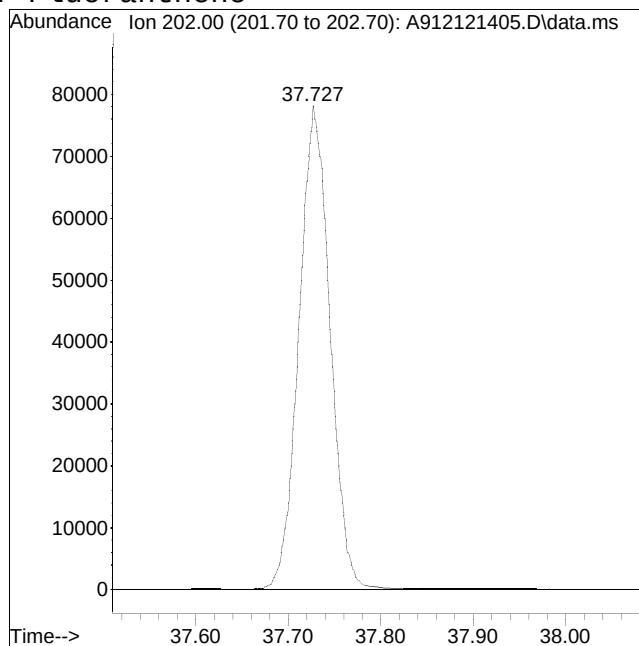
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121405.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 7:18 pm Instrument : PAH 9
Sample : i912121404 Quant Date : 12/15/2014 10:36 am

Compound #58: Fluoranthene



Original Peak Response = 182805



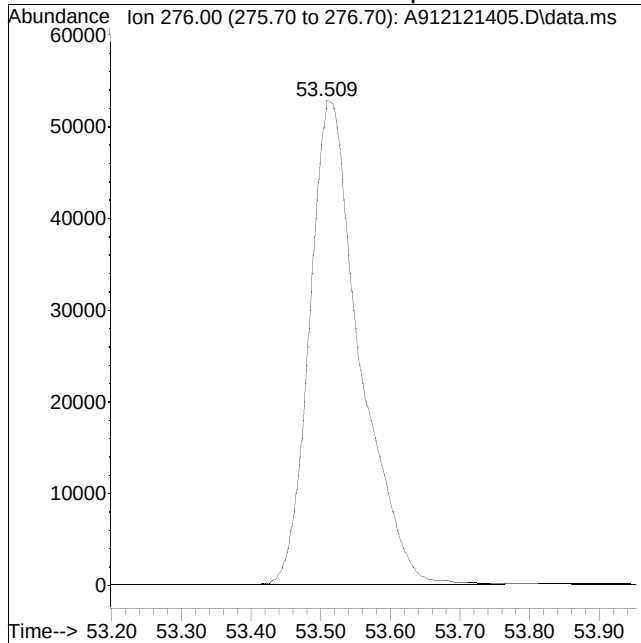
Manual Peak Response = 182618 M4

M4 = Poor automated baseline construction.

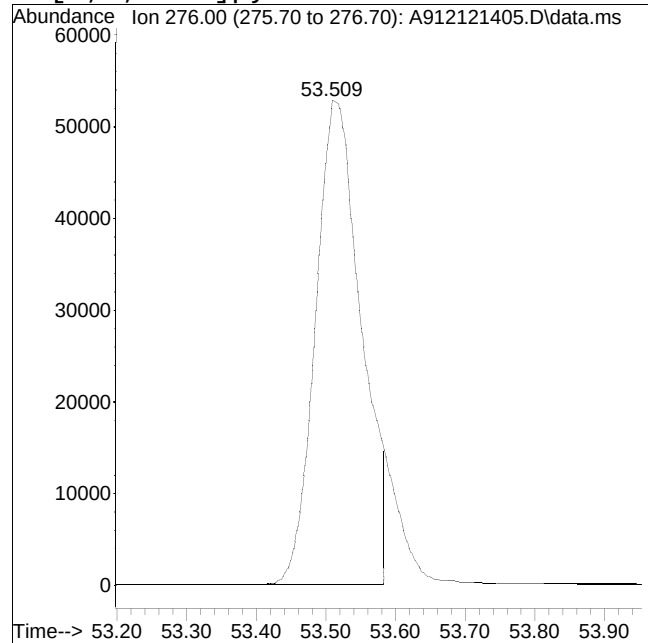
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121405.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 7:18 pm Instrument : PAH 9
Sample : i912121404 Quant Date : 12/15/2014 10:36 am

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 264969



Manual Peak Response = 242703 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Data File : A912121406.D
 Acq On : 12 Dec 2014 8:43 pm
 Operator : PAH9:SR
 Sample : i912121405
 Misc : WG749024,l5 frau81 5000 ng/mL
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 16 10:50:08 2014
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 10:35:44 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.023	164	92018	500.000	ng/mL	0.00
74) Chrysene-d12	43.442	240	183896	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	20.060	136	1934350	5283.080	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 528.31%#			
42) Phenanthrene-d10	32.880	188	1513094	5344.007	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 534.40%#			
83) Benzo[b]fluoranthene-d12	47.344	264	1840490	5129.805	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 512.98%#			
88) Benzo[a]pyrene-d12	48.552	264	1711124	5183.778	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 518.38%#			
129) 5B(H)Cholane - Surr	44.063	217	291252	4818.777	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 481.88%#			
Target Compounds						
					Qvalue	
3) trans-Decalin	16.720	138	200215	2404.660	ng/mL	100
4) cis-Decalin	17.943	138	150651	2332.445	ng/mL	100
10) Naphthalene	20.142	128	2380353	6059.283	ng/mL	100
16) 2-Methylnaphthalene	22.825	142	1320439	5425.389	ng/mL	100
17) 1-Methylnaphthalene	23.254	142	1275948	5384.137	ng/mL	100
18) Benzothiophene	20.361	134	2174905	6538.364	ng/mL	100
23) Biphenyl	24.705	154	1616298	5256.087	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.316	156	1099445	5163.462	ng/mL	100
25) Dibenzofuran	27.789	168	1724819	5438.841	ng/mL	98
26) Acenaphthylene	26.411	152	2121842	5681.052	ng/mL	100
27) Acenaphthene	27.150	153	1247277	5422.181	ng/mL	100
28) 2,3,5-Trimethylnaphthalen	28.692	170	1051798	5653.616	ng/mL	98
29) Fluorene	29.158	166	1370648	5375.324	ng/mL	100
33) Dibenzothiophene	32.479	184	2049070	6160.331	ng/mL	100
43) Phenanthrene	32.971	178	1969358	5586.340	ng/mL	100
54) Retene	39.937	234	583999	6301.248	ng/mL	100
55) Anthracene	33.154	178	1899838M4	5862.030	ng/mL	
56) Carbazole	33.811	167	1822786M4	5505.669	ng/mL	
57) 1-Methylphenanthrene	35.472	192	1343363	5557.649	ng/mL	99
58) Fluoranthene	37.736	202	2056106M4	6065.288	ng/mL	
59) Benzo(b)fluorene	40.247	216	1304448	6462.376	ng/mL	100
60) Pyrene	38.622	202	2287011	6331.089	ng/mL	98
66) Naphthobenzothiophene	42.456	234	2188139	6836.888	ng/mL	100
67) Naphthobenzothiophene-2,1	42.456	234	2188139	6836.888	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Data File : A912121406.D
 Acq On : 12 Dec 2014 8:43 pm
 Operator : PAH9:SR
 Sample : i912121405
 Misc : WG749024,l5 frau81 5000 ng/mL
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 16 10:50:08 2014
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 10:35:44 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.378	228	2089798M4	6246.213	ng/mL	
76)	Chrysene	43.543	228	2043550	6206.654	ng/mL	100
77)	Chrysene/Triphenylene	43.543	228	2043550	6206.654	ng/mL	100
84)	Benzo[b]fluoranthene	47.436	252	2379084	5832.537	ng/mL	96
85)	Benzo[j]+[k]fluoranthene	47.518	252	2268769	5681.708	ng/mL	97
87)	Benzo[e]pyrene	48.451	252	2282887	5743.328	ng/mL	96
89)	Benzo[a]pyrene	48.643	252	2278808	5920.019	ng/mL	96
90)	Perylene	48.954	252	2212166	5641.218	ng/mL	95
91)	Indeno[1,2,3-cd]pyrene	53.536	276	2646618M3	5354.346	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.600	278	2638116	5690.899	ng/mL	100
93)	Benzo[g,h,i]perylene	54.870	276	2514588	5284.951	ng/mL	99
94)	Hopane (T19)	52.631	191	511494M3	3935.138	ng/mL	
95)	17a(H),21B(H)-hopane - C3	52.631	191	511248M3	3933.245	ng/mL	

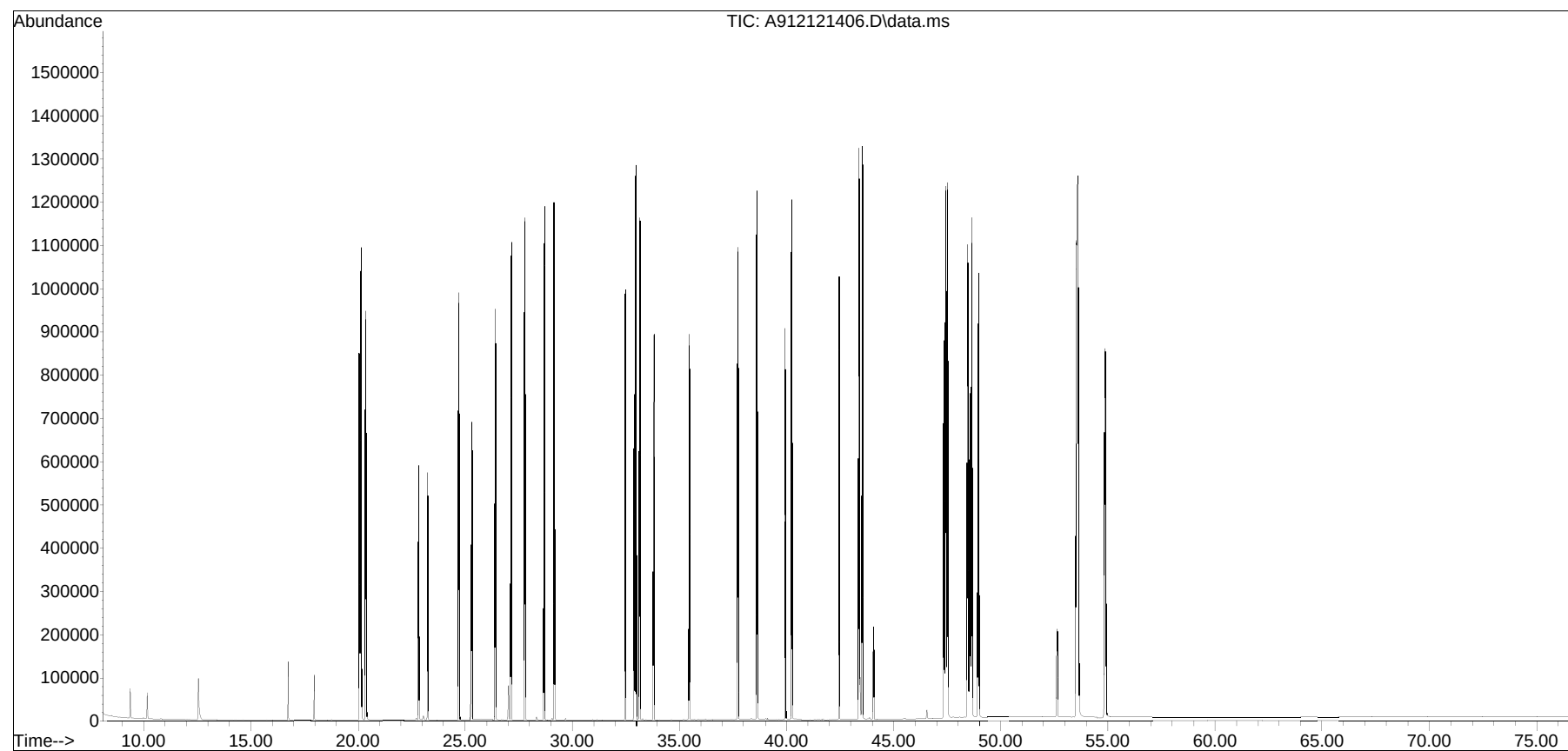
(#) = qualifier out of range (m) = manual integration (+) = signals summed

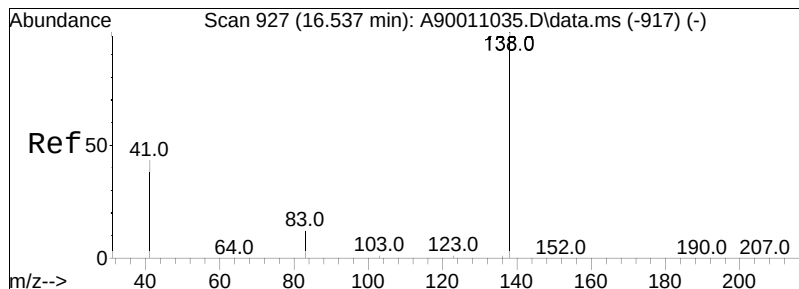
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC12\
Data File : A912121406.D
Acq On : 12 Dec 2014 8:43 pm
Operator : PAH9:SR
Sample : i912121405
Misc : WG749024,l5 frau81 5000 ng/mL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 16 10:50:08 2014
Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 15 10:35:44 2014
Response via : Initial Calibration

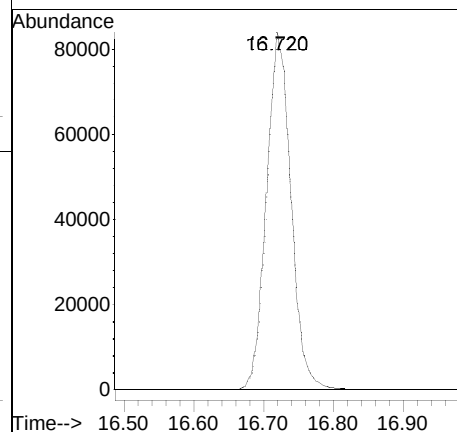
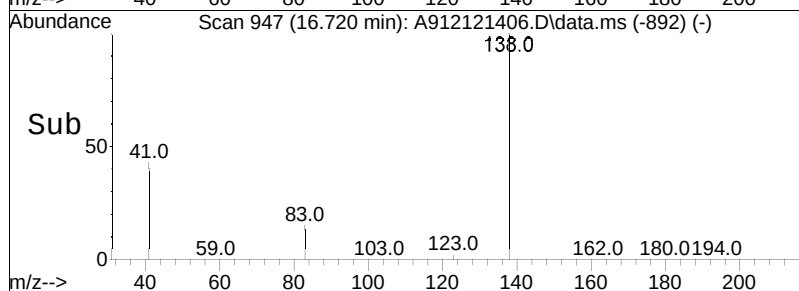
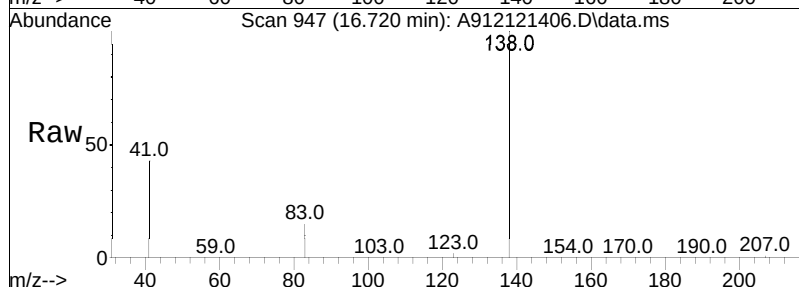
Sub List : ICAL_CCALT_REV2 - CC with five surrogates

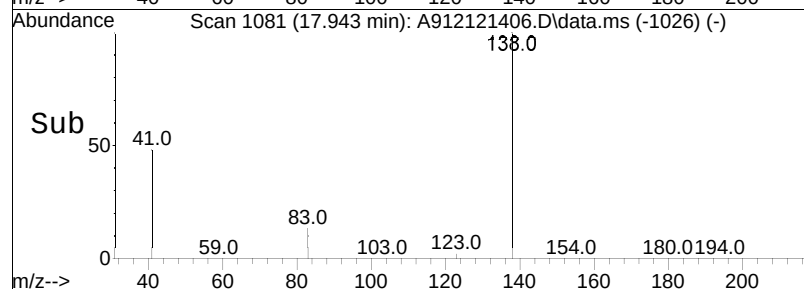
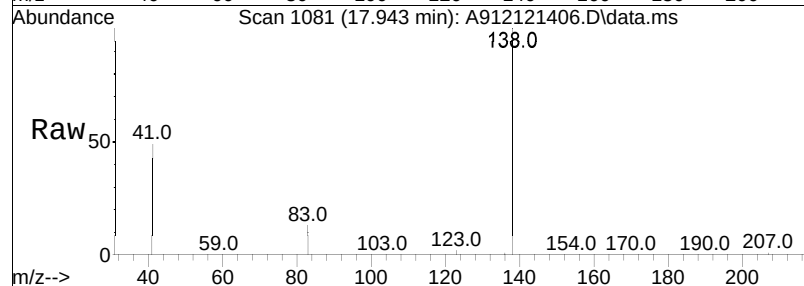
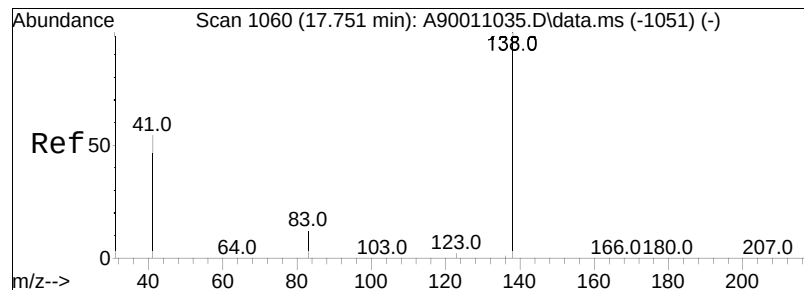




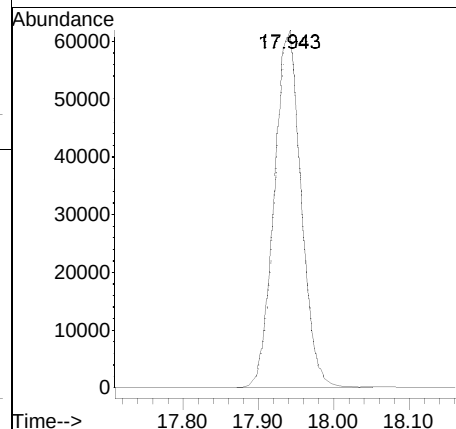
#3
trans-Decalin
Concen: 2404.66 ng/mL
RT: 16.720 min Scan# 947
Delta R.T. -0.000 min
Lab File: A912121406.D
Acq: 12 Dec 2014 8:43 pm

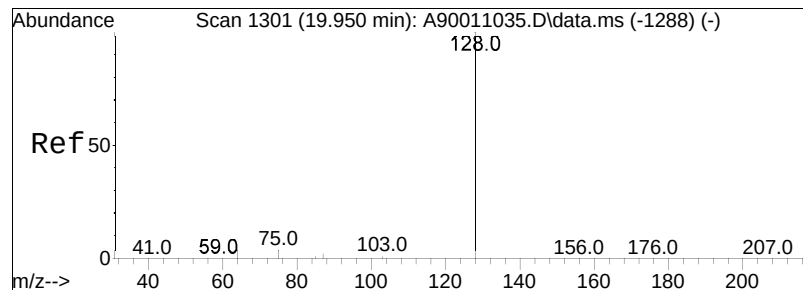
Tgt Ion:138 Resp: 200215





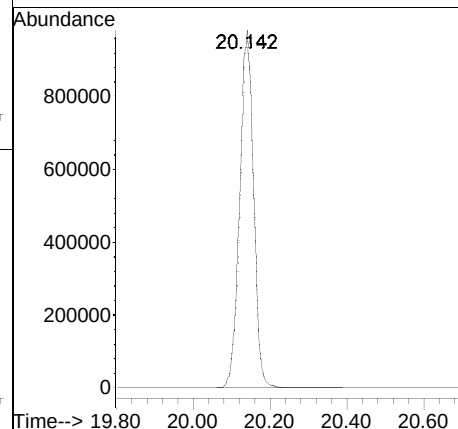
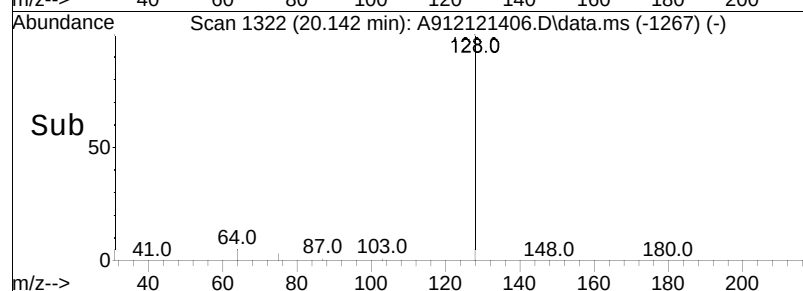
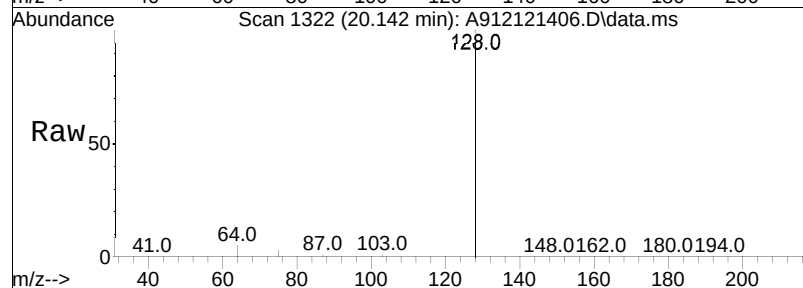
#4
 cis-Decalin
 Concen: 2332.44 ng/mL
 RT: 17.943 min Scan# 1081
 Delta R.T. -0.000 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm
 Tgt Ion:138 Resp: 150651

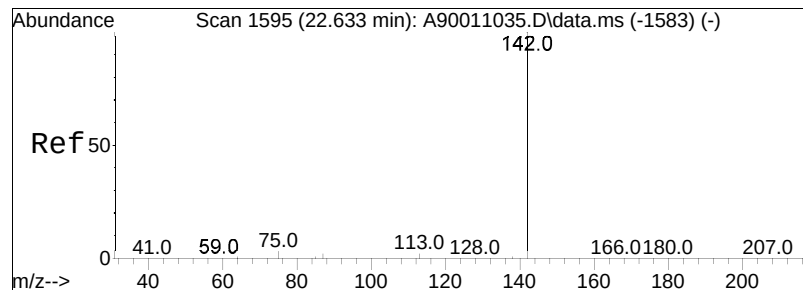




#10
Naphthalene
Concen: 6059.28 ng/mL
RT: 20.142 min Scan# 1322
Delta R.T. 0.000 min
Lab File: A912121406.D
Acq: 12 Dec 2014 8:43 pm

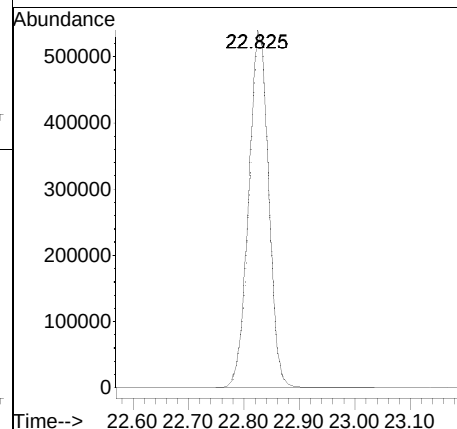
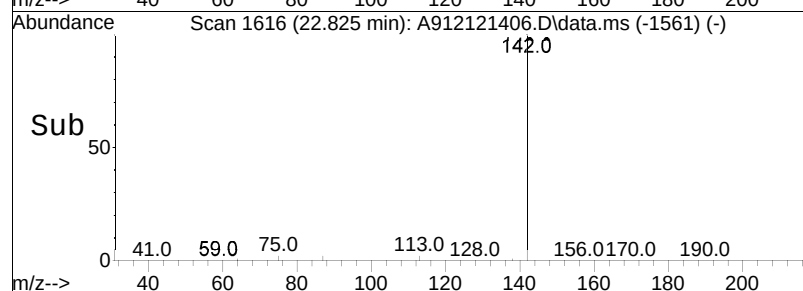
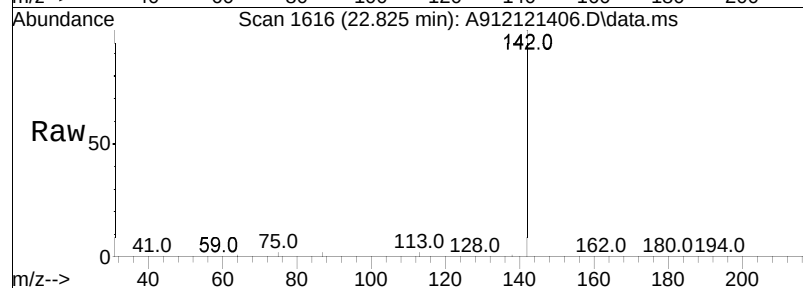
Tgt Ion:128 Resp: 2380353

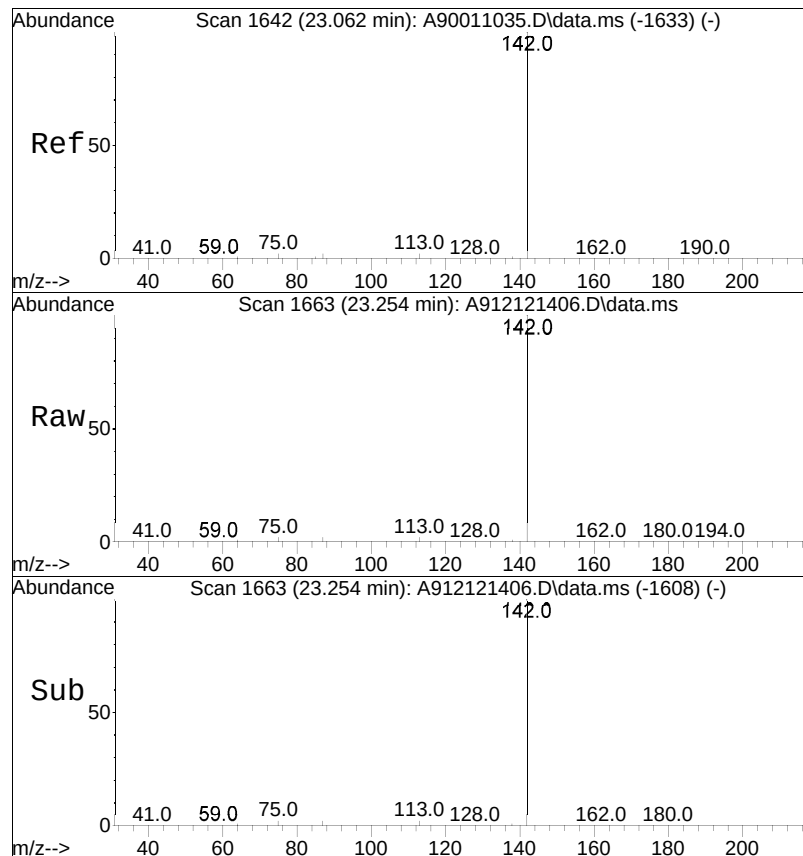




#16
 2-Methylnaphthalene
 Concen: 5425.39 ng/mL
 RT: 22.825 min Scan# 1616
 Delta R.T. -0.000 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm

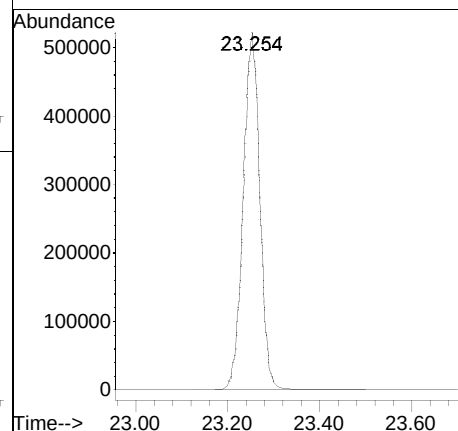
Tgt Ion:142 Resp: 1320439

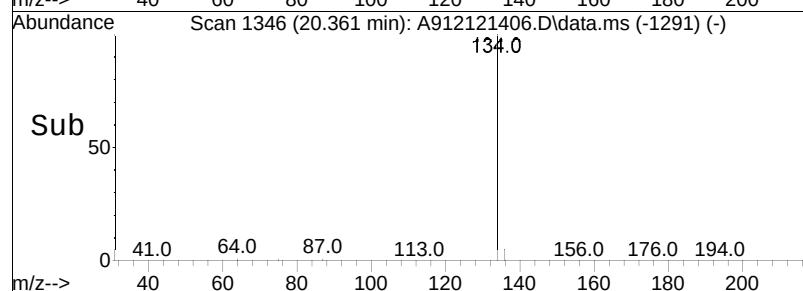
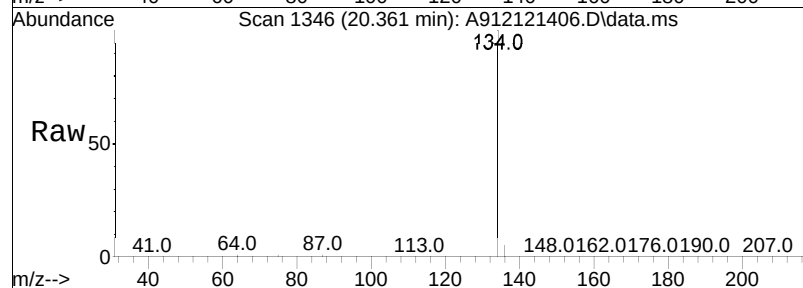
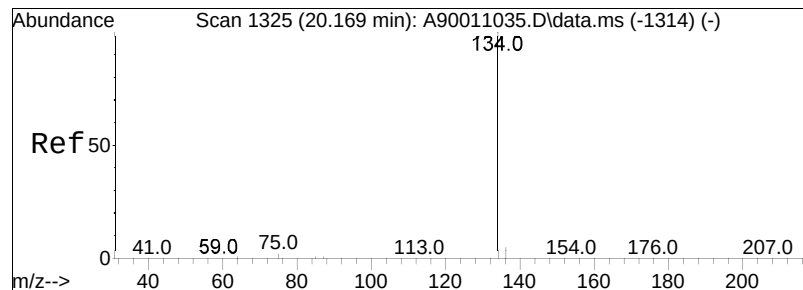




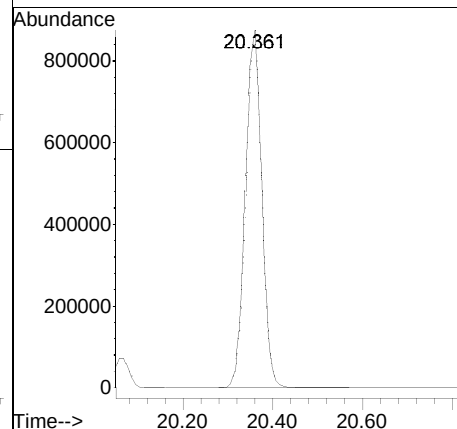
#17
1-Methylnaphthalene
Concen: 5384.14 ng/mL
RT: 23.254 min Scan# 1663
Delta R.T. -0.000 min
Lab File: A912121406.D
Acq: 12 Dec 2014 8:43 pm

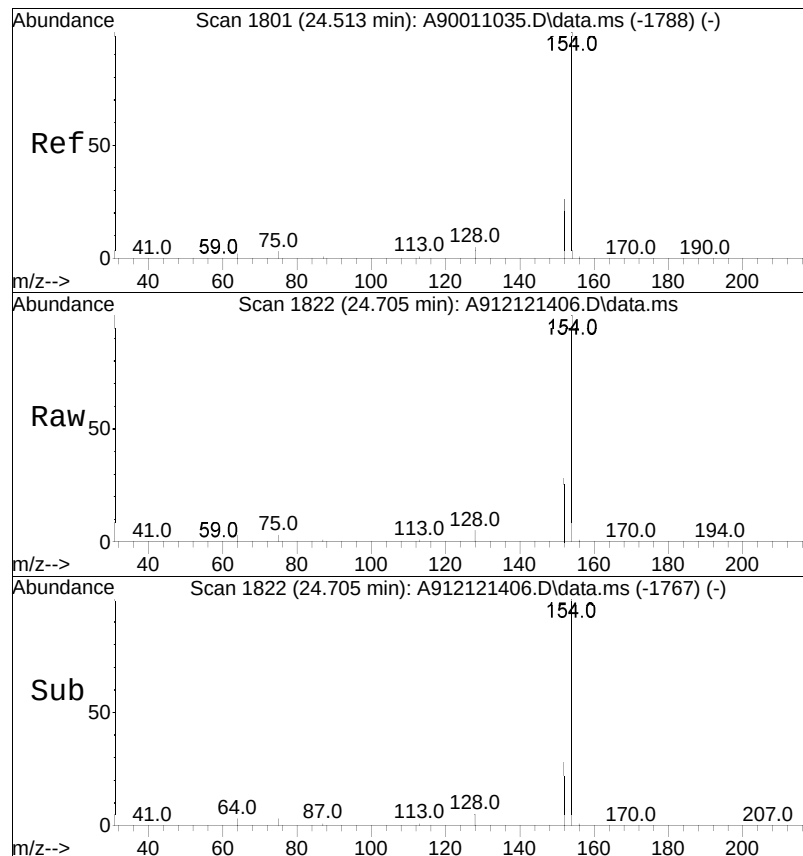
Tgt Ion:142 Resp: 1275948



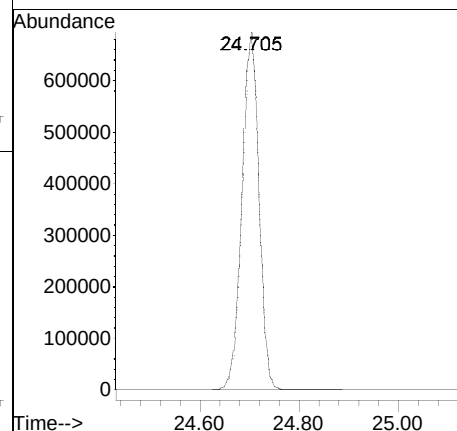


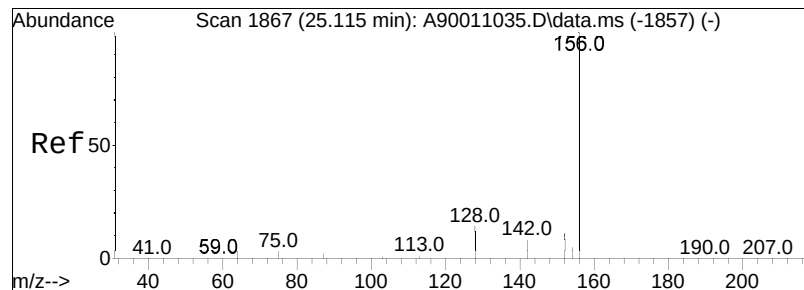
#18
Benzothiophene
Concen: 6538.36 ng/mL
RT: 20.361 min Scan# 1346
Delta R.T. -0.000 min
Lab File: A912121406.D
Acq: 12 Dec 2014 8:43 pm
Tgt Ion:134 Resp: 2174905





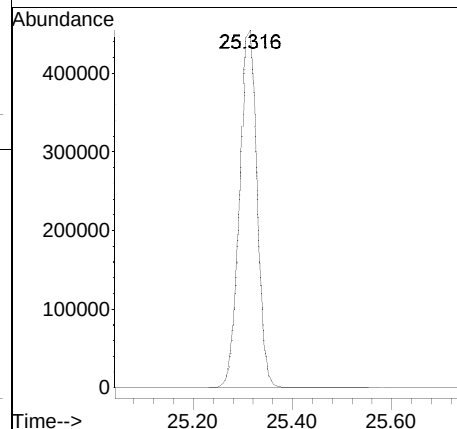
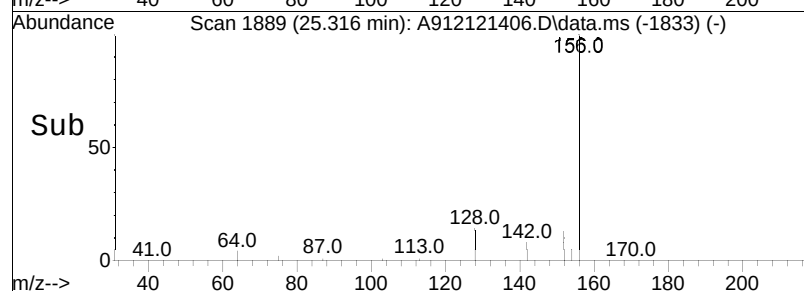
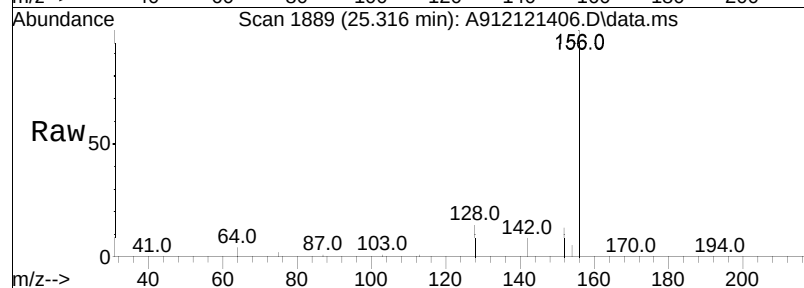
#23
 Biphenyl
 Concen: 5256.09 ng/mL
 RT: 24.705 min Scan# 1822
 Delta R.T. 0.000 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm
 Tgt Ion:154 Resp: 1616298

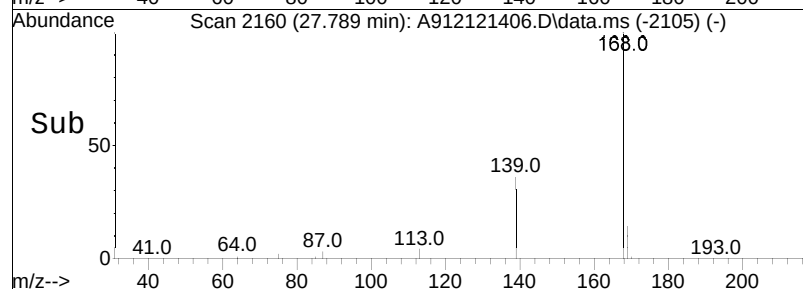
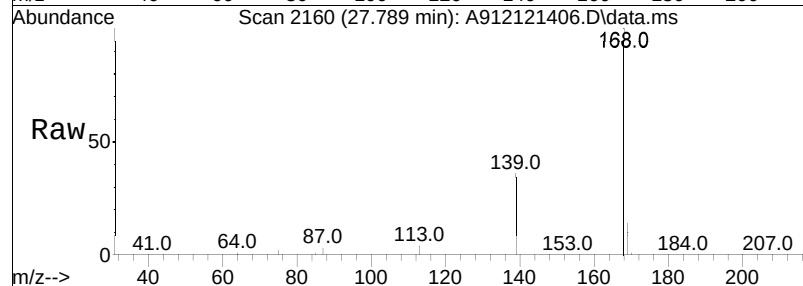
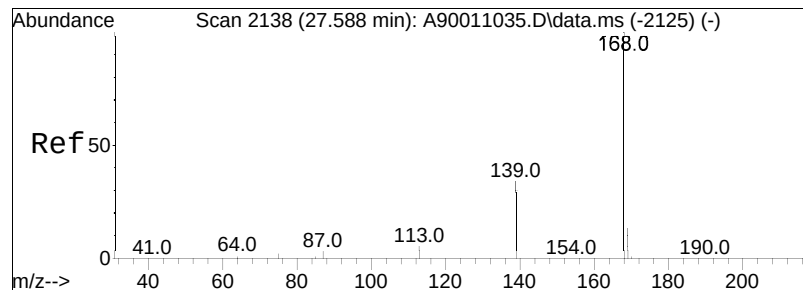




#24
2,6-Dimethylnaphthalene
Concen: 5163.46 ng/mL
RT: 25.316 min Scan# 1889
Delta R.T. 0.009 min
Lab File: A912121406.D
Acq: 12 Dec 2014 8:43 pm

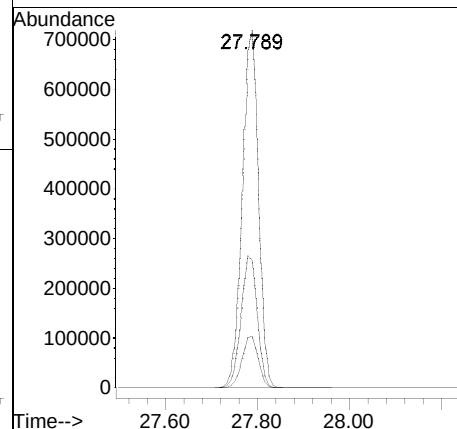
Tgt Ion:156 Resp: 1099445

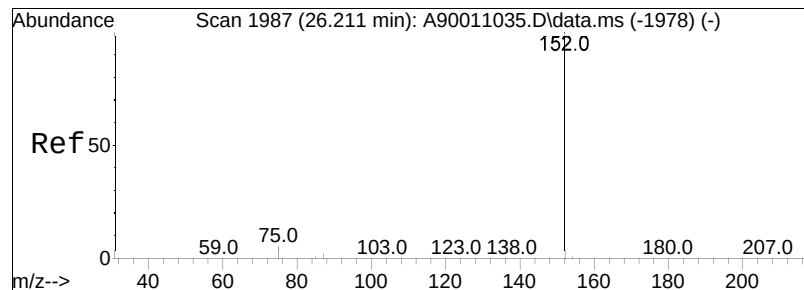




#25
 Dibenzofuran
 Concen: 5438.84 ng/mL
 RT: 27.789 min Scan# 2160
 Delta R.T. 0.000 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm

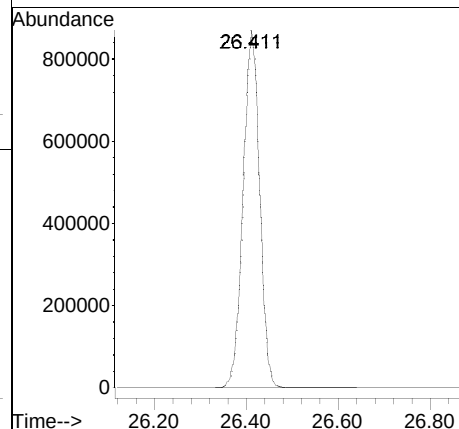
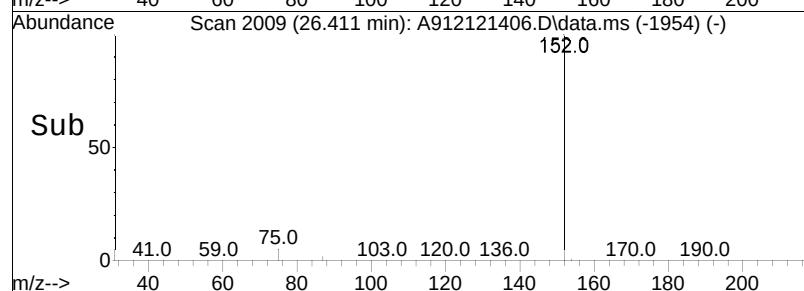
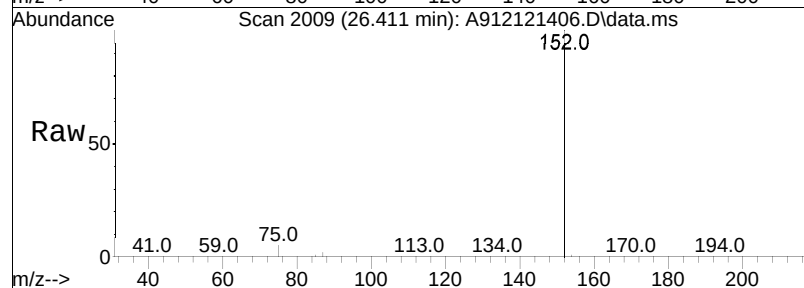
Tgt Ion	Ratio	Lower	Upper
168	100		
139	37.3	25.1	46.7
169	14.6	10.2	19.0

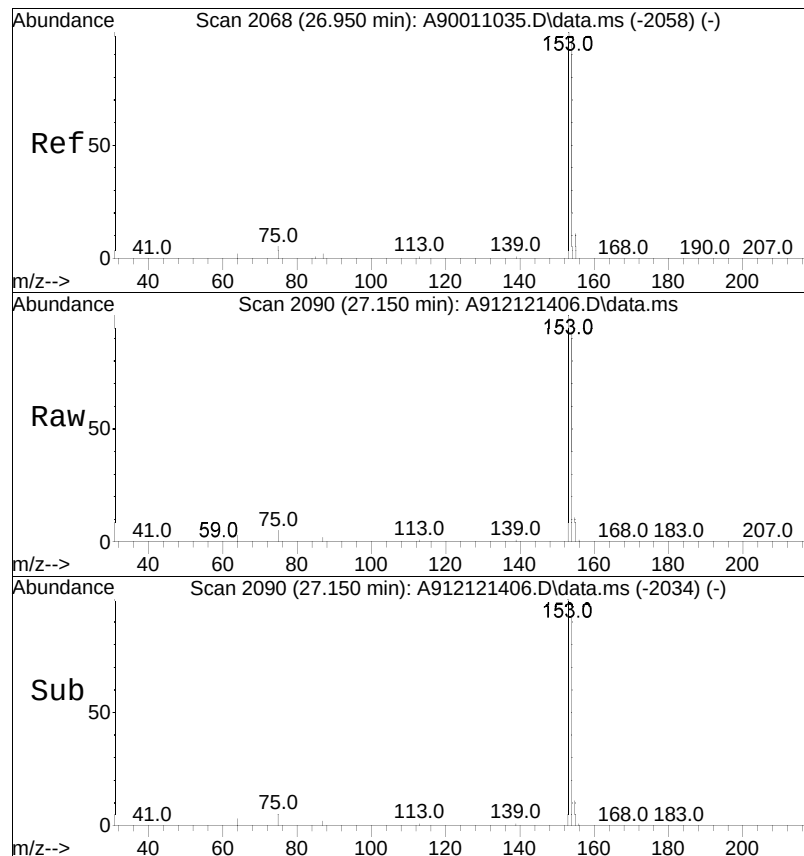




#26
Acenaphthylene
Concen: 5681.05 ng/mL
RT: 26.411 min Scan# 2009
Delta R.T. -0.000 min
Lab File: A912121406.D
Acq: 12 Dec 2014 8:43 pm

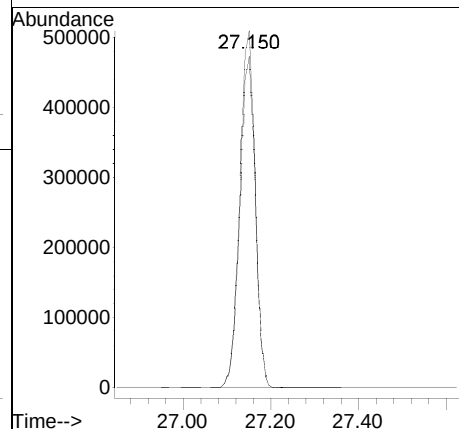
Tgt Ion:152 Resp: 2121842

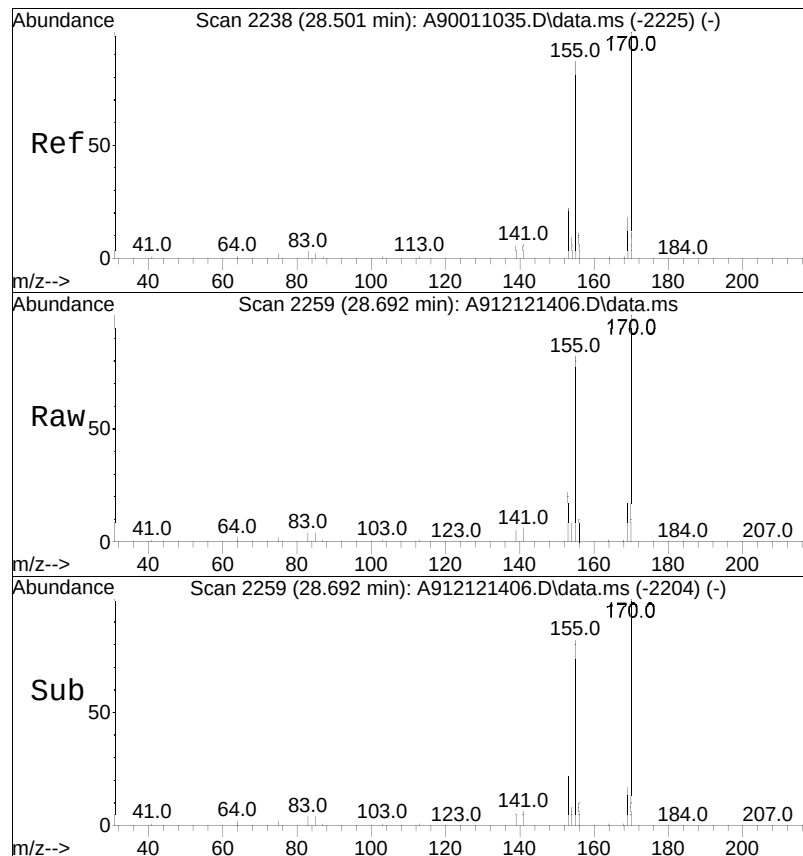




#27
 Acenaphthene
 Concen: 5422.18 ng/mL
 RT: 27.150 min Scan# 2090
 Delta R.T. 0.009 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm

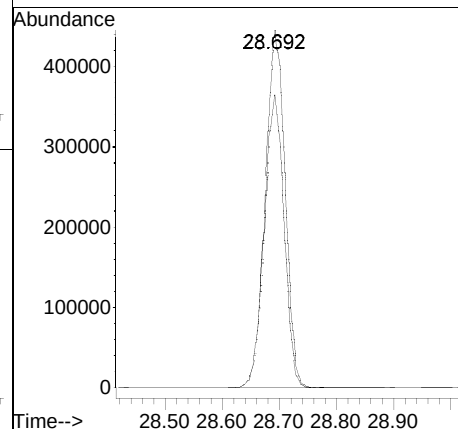
Tgt Ion	Ratio	Lower	Upper
153	100		
154	92.4	64.9	120.5

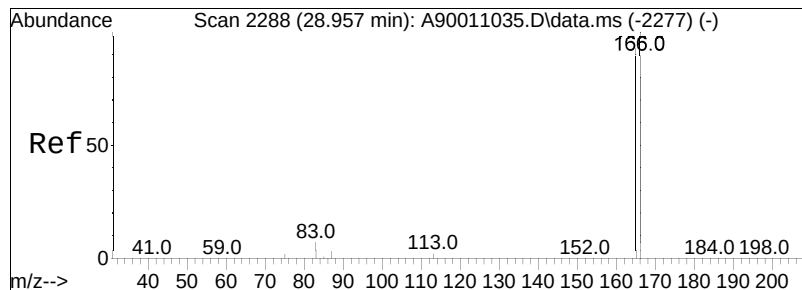




#28
 2,3,5-Trimethylnaphthalene
 Concen: 5653.62 ng/mL
 RT: 28.692 min Scan# 2259
 Delta R.T. -0.000 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm

Tgt Ion	Ratio	Lower	Upper
170	100		
155	81.7	55.9	103.9





#29

Fluorene

Concen: 5375.32 ng/mL

RT: 29.158 min Scan# 2310

Delta R.T. 0.000 min

Lab File: A912121406.D

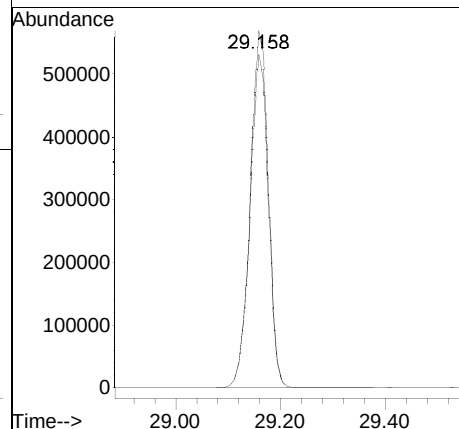
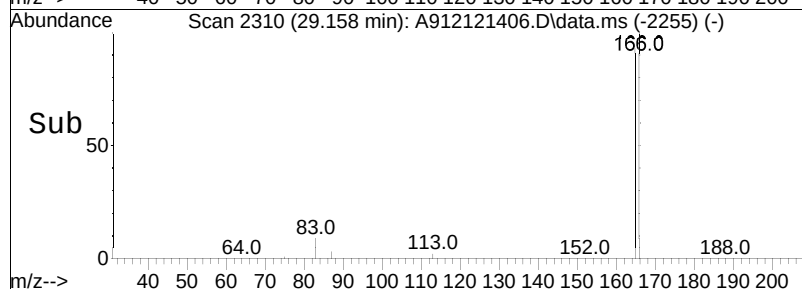
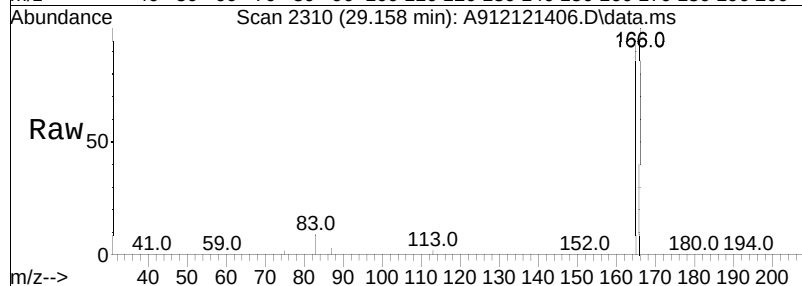
Acq: 12 Dec 2014 8:43 pm

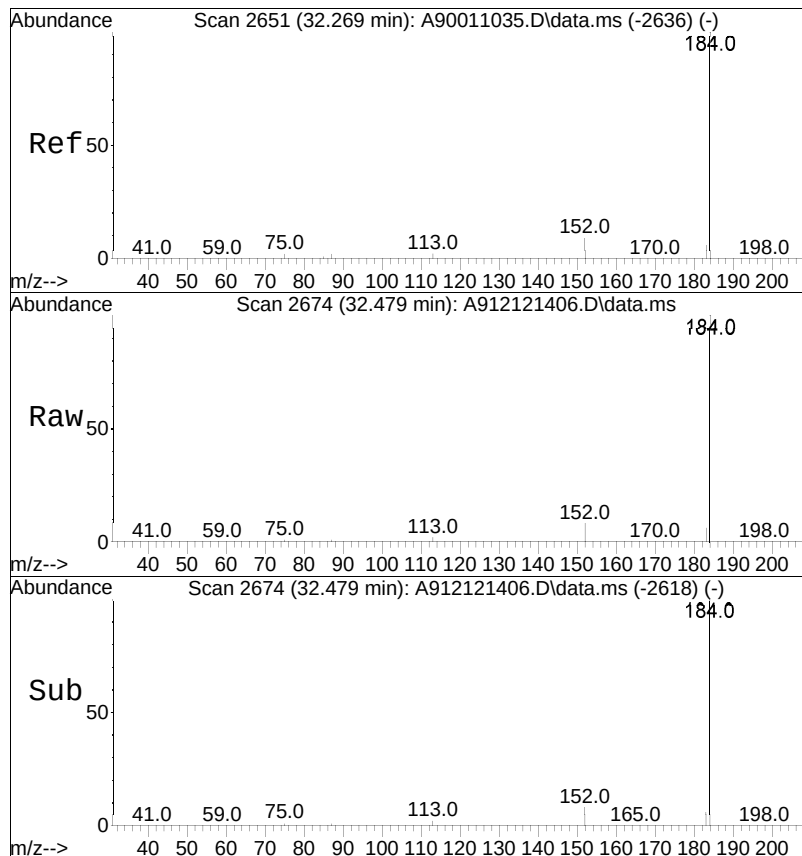
Tgt Ion:166 Resp: 1370648

Ion Ratio Lower Upper

166 100

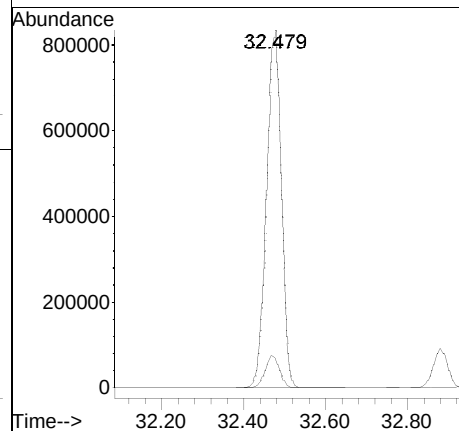
165 93.4 65.5 121.7

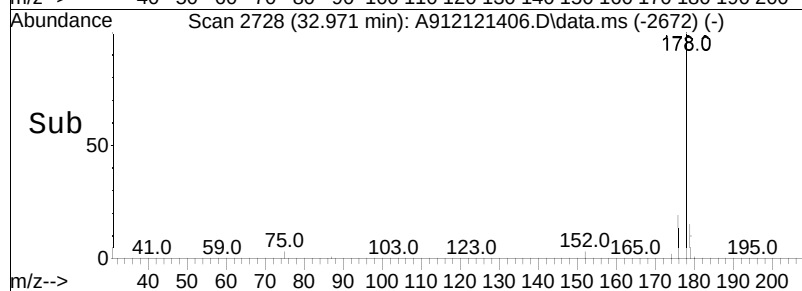
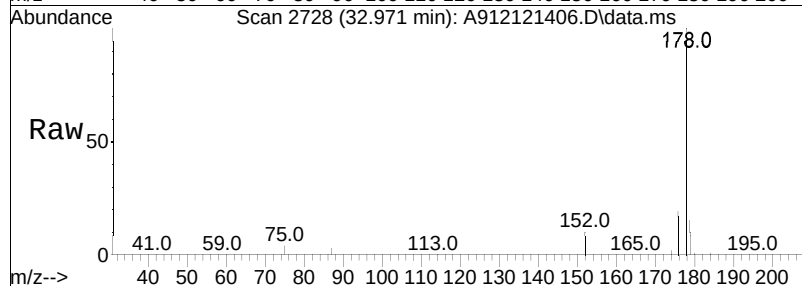
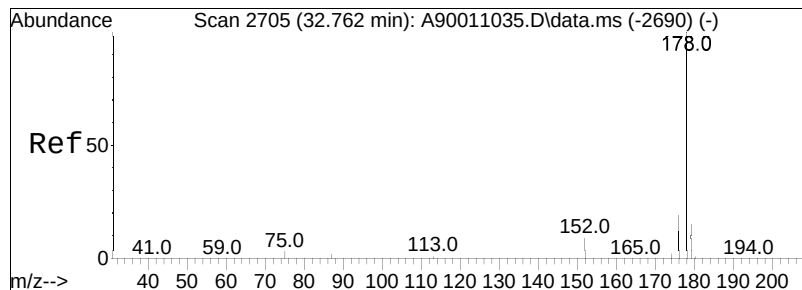




#33
 Dibenzothiophene
 Concen: 6160.33 ng/mL
 RT: 32.479 min Scan# 2674
 Delta R.T. 0.009 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm

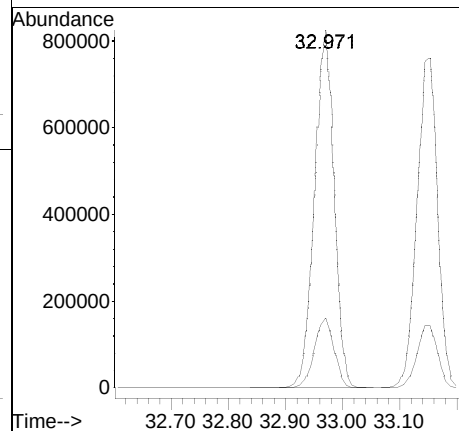
Tgt Ion	Ratio	Lower	Upper
184	100		
152	8.9	6.3	11.7

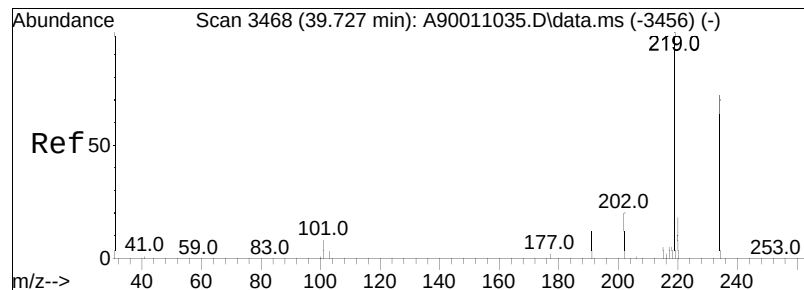




#43
 Phenanthrene
 Concen: 5586.34 ng/mL
 RT: 32.971 min Scan# 2728
 Delta R.T. 0.009 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
176	19.6	13.7	25.5





#54

Retene

Concen: 6301.25 ng/mL

RT: 39.937 min Scan# 3491

Delta R.T. 0.009 min

Lab File: A912121406.D

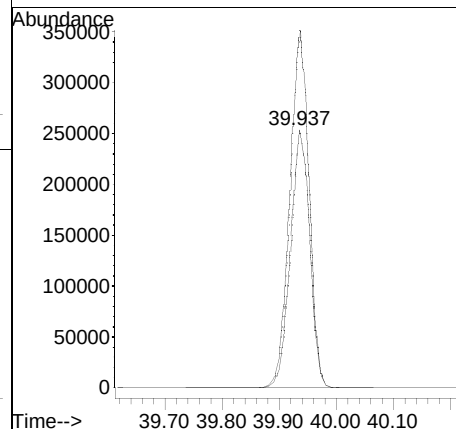
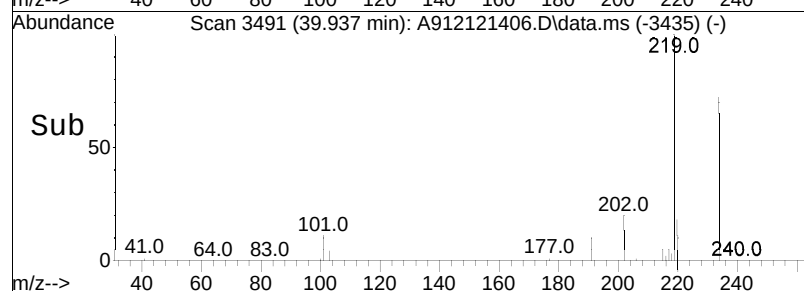
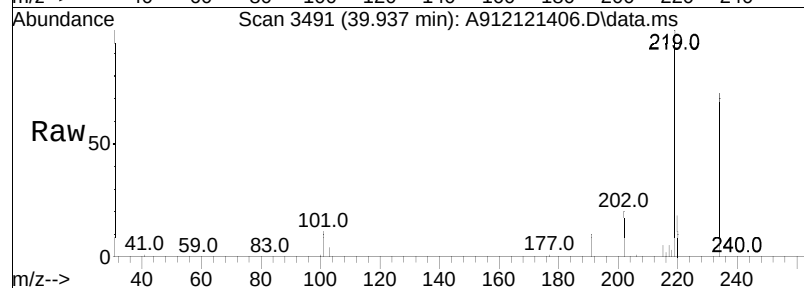
Acq: 12 Dec 2014 8:43 pm

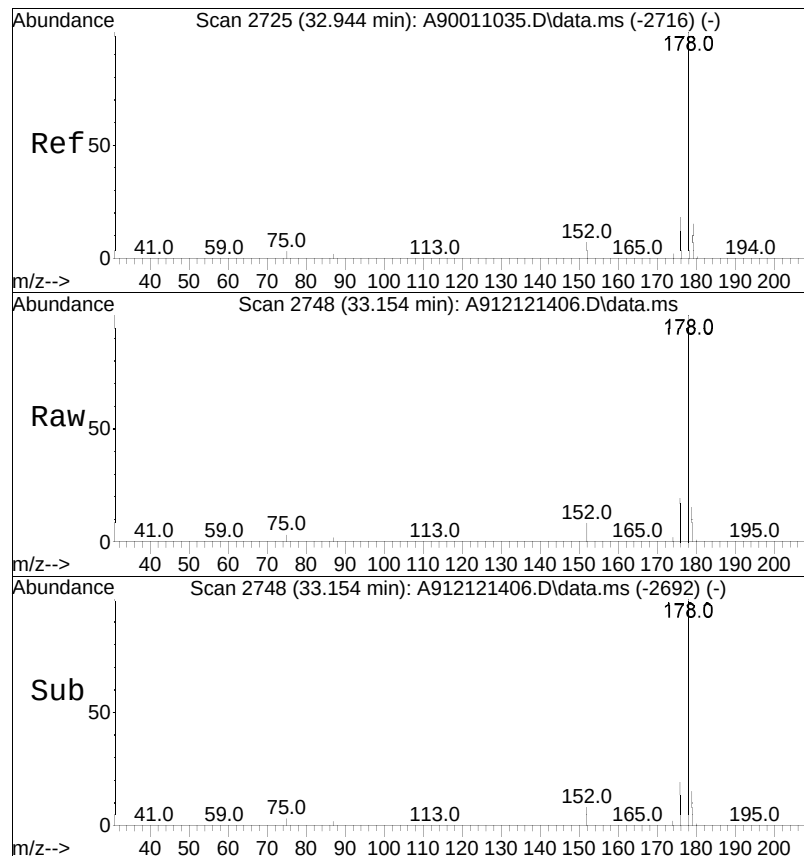
Tgt Ion: 234 Resp: 583999

Ion Ratio Lower Upper

234 100

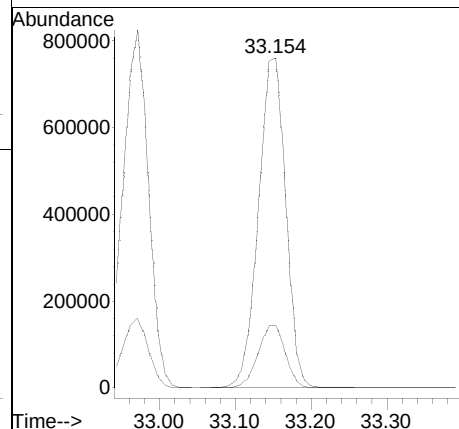
219 137.9 96.7 179.7

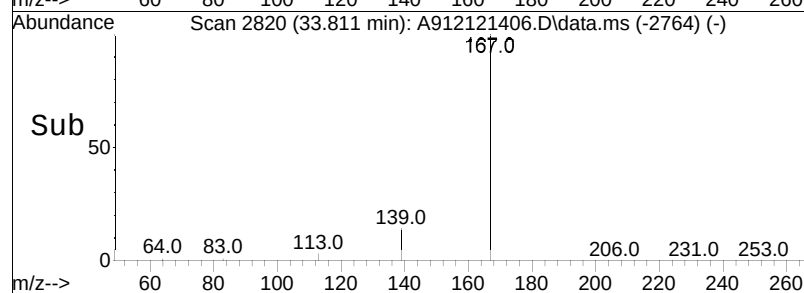
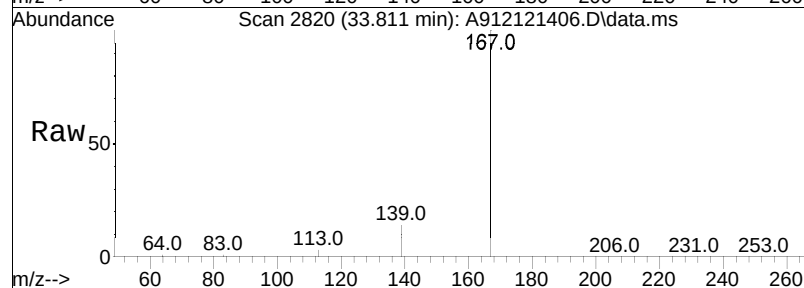
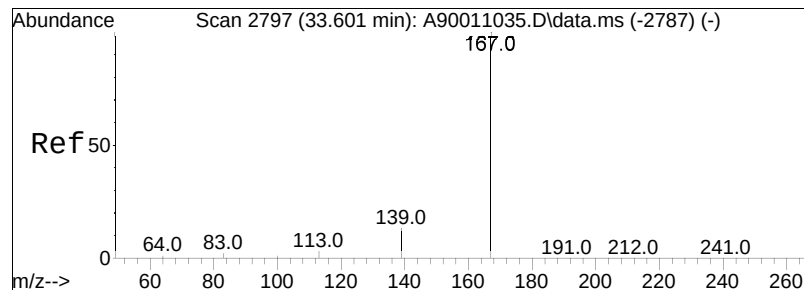




#55
 Anthracene
 Concen: 5862.03 ng/mL M4
 RT: 33.154 min Scan# 2748
 Delta R.T. 0.009 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm

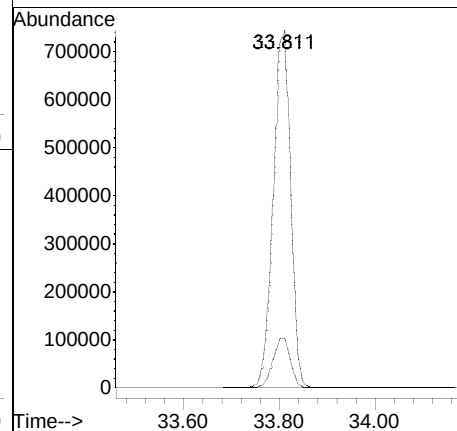
Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.9	13.4	24.8

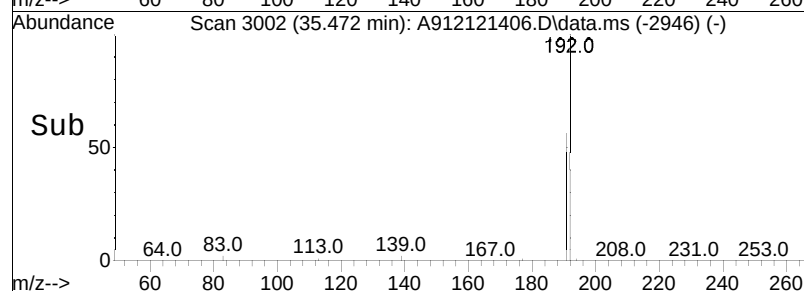
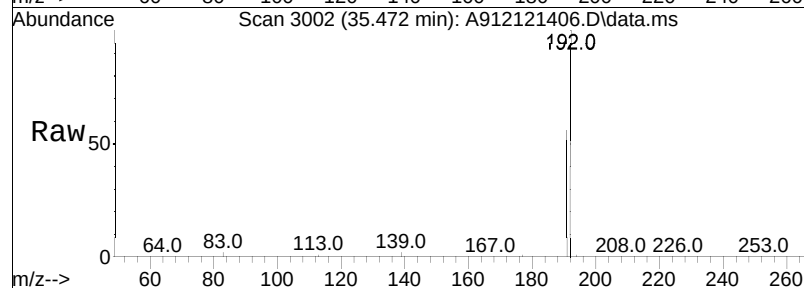
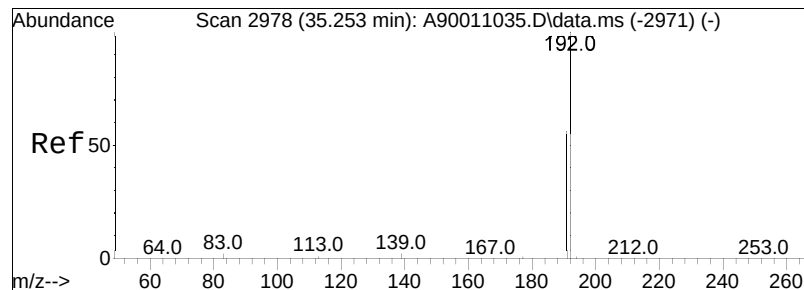




#56
 Carbazole
 Concen: 5505.67 ng/mL M4
 RT: 33.811 min Scan# 2820
 Delta R.T. 0.009 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm

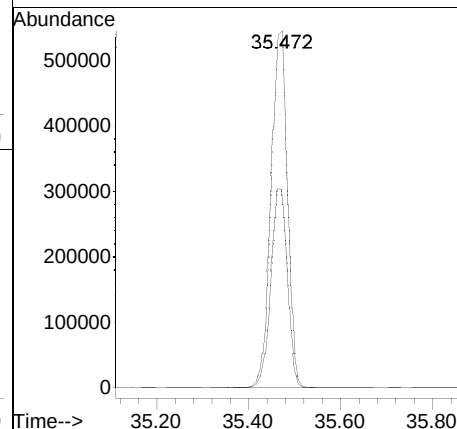
Tgt Ion:167 Resp: 1822786
 Ion Ratio Lower Upper
 167 100
 139 14.1 9.9 18.3

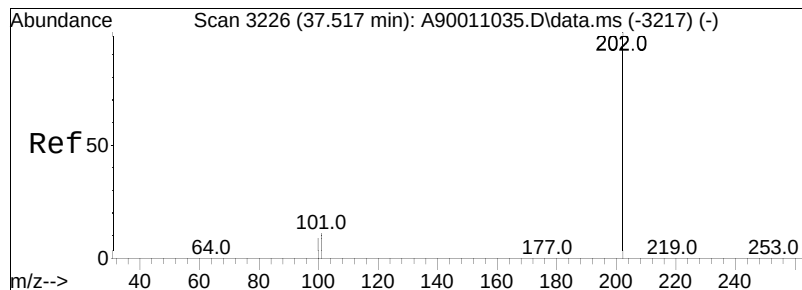




#57
 1-Methylphenanthrene
 Concen: 5557.65 ng/mL
 RT: 35.472 min Scan# 3002
 Delta R.T. 0.009 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm

Tgt Ion	Ratio	Lower	Upper
192	100		
191	56.2	39.8	74.0





#58

Fluoranthene

Concen: 6065.29 ng/mL M4

RT: 37.736 min Scan# 3250

Delta R.T. 0.009 min

Lab File: A912121406.D

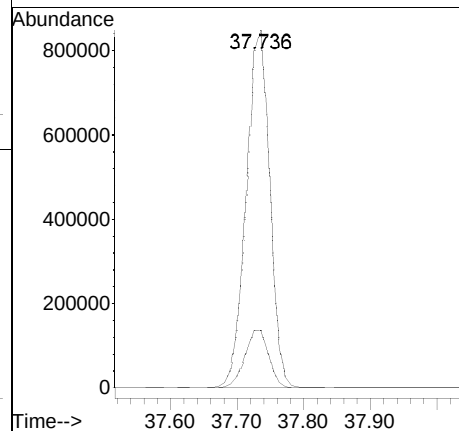
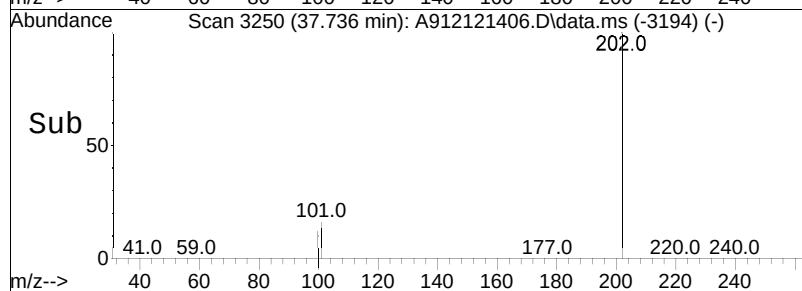
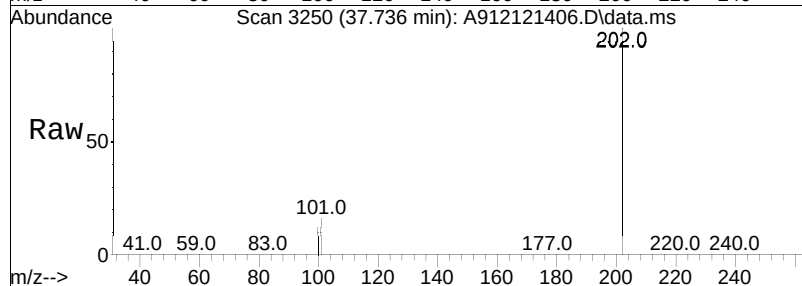
Acq: 12 Dec 2014 8:43 pm

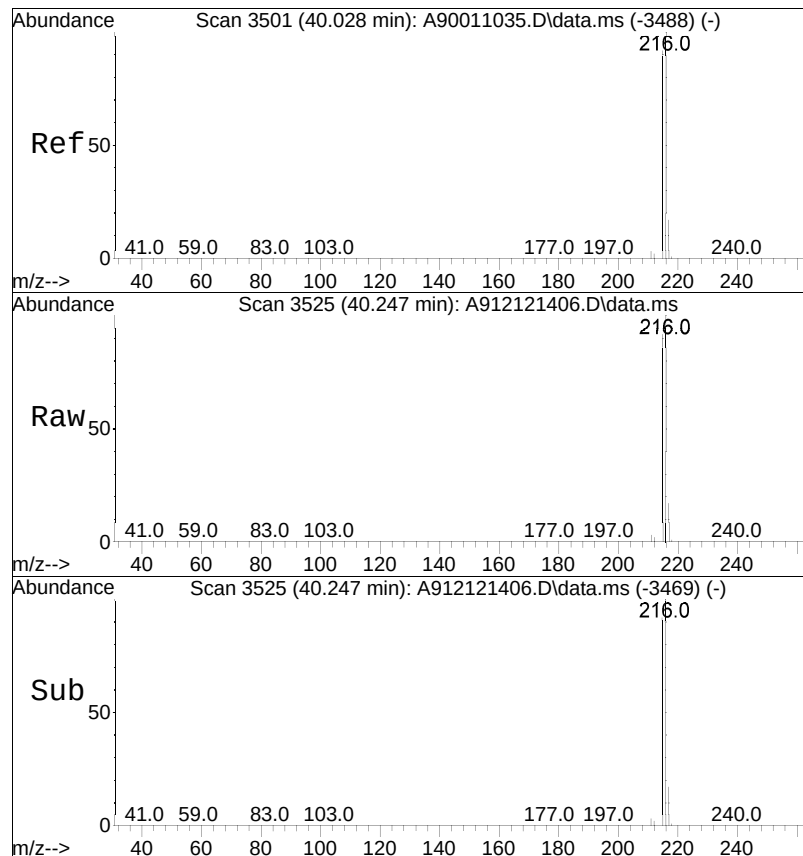
Tgt Ion:202 Resp: 2056106

Ion Ratio Lower Upper

202 100

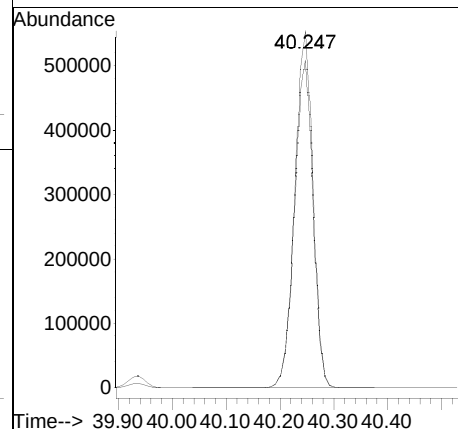
101 16.6 11.8 22.0

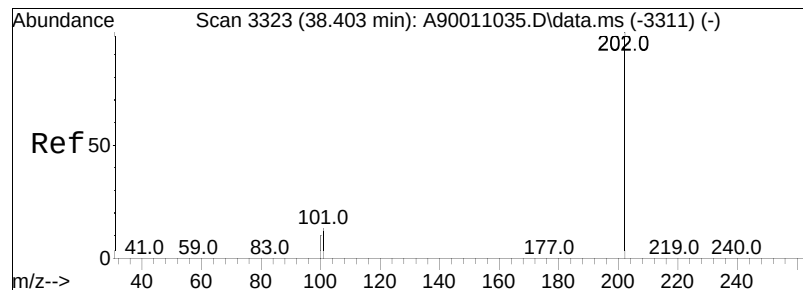




#59
 Benzo(b)fluorene
 Concen: 6462.38 ng/mL
 RT: 40.247 min Scan# 3525
 Delta R.T. 0.009 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm

Tgt Ion	Ratio	Lower	Upper
216	100		
215	92.2	64.3	119.3





#60

Pyrene

Concen: 6331.09 ng/mL

RT: 38.622 min Scan# 3347

Delta R.T. 0.009 min

Lab File: A912121406.D

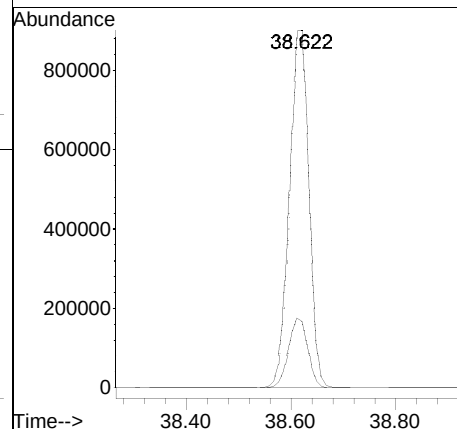
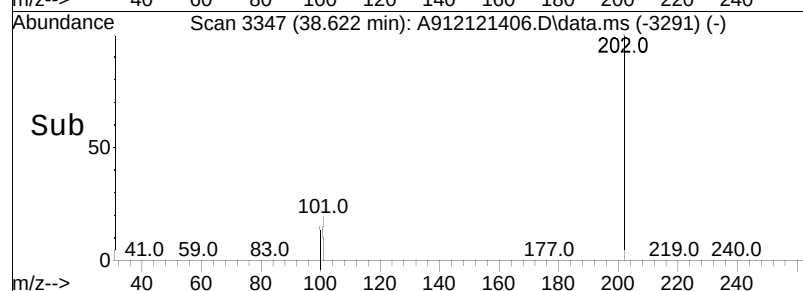
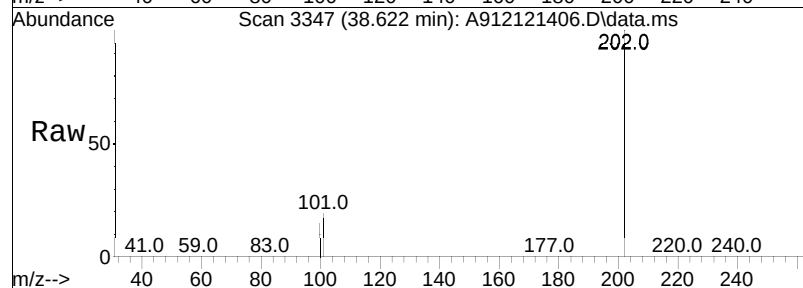
Acq: 12 Dec 2014 8:43 pm

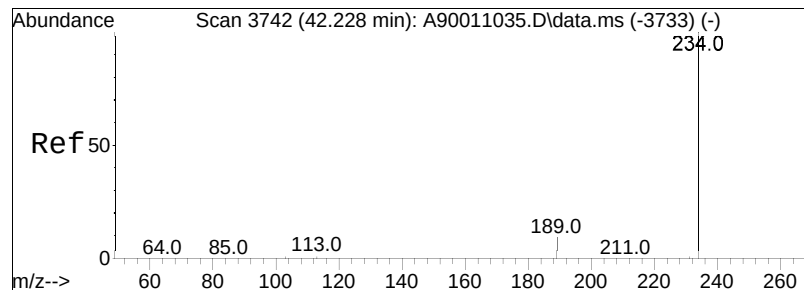
Tgt Ion:202 Resp: 2287011

Ion Ratio Lower Upper

202 100

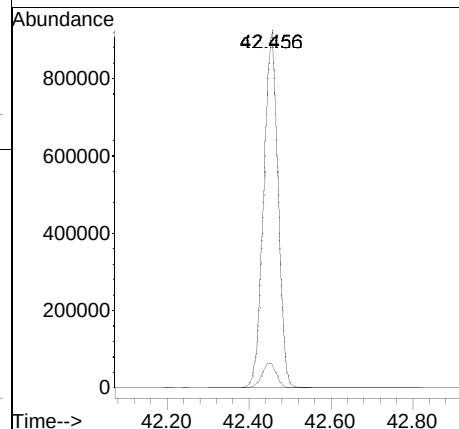
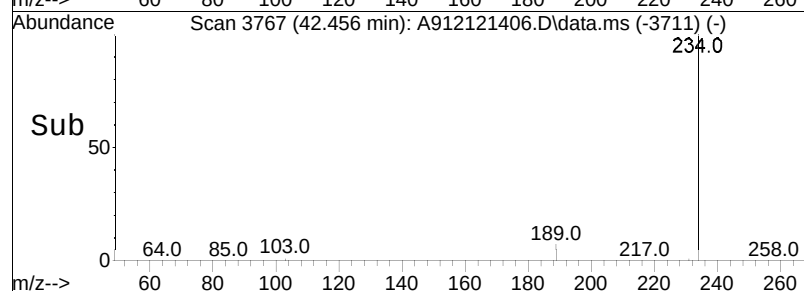
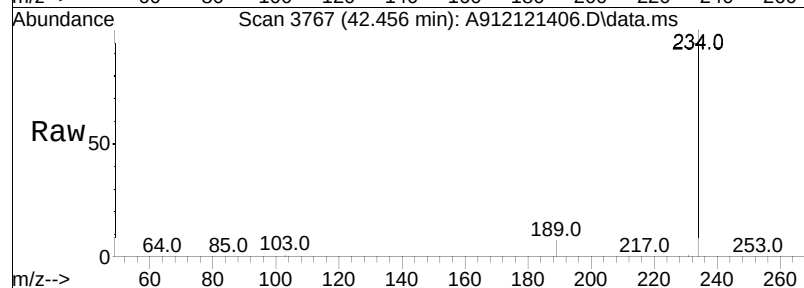
101 19.5 14.2 26.4

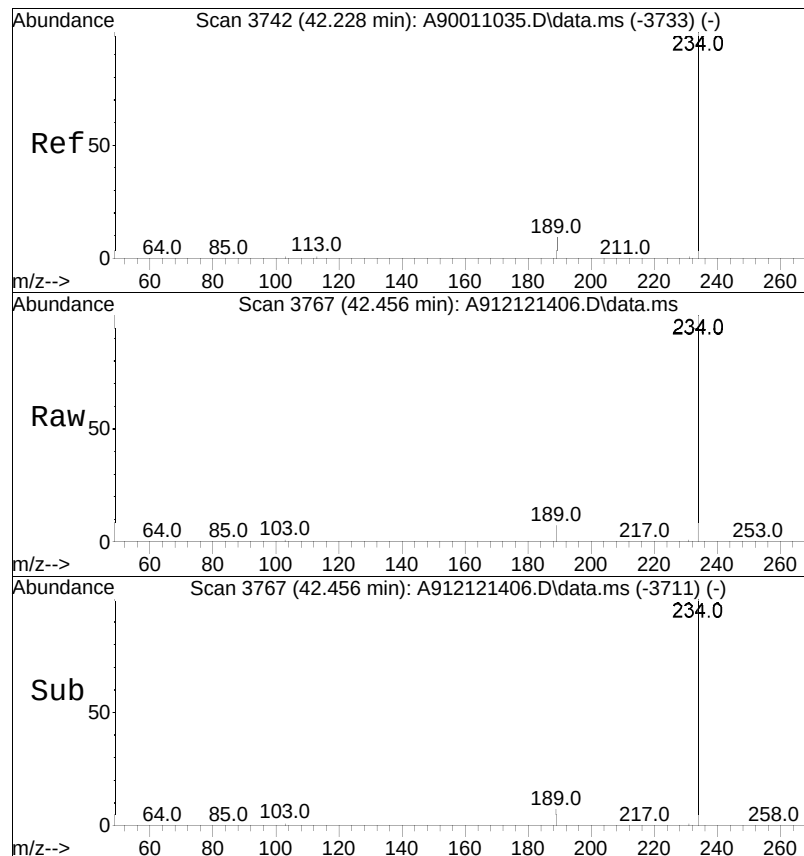




#66
 Naphthobenzothiophene
 Concen: 6836.89 ng/ml
 RT: 42.456 min Scan# 3767
 Delta R.T. 0.009 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm

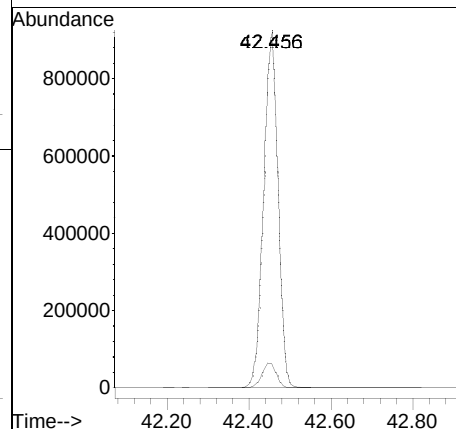
Tgt Ion: 234 Resp: 2188139
 Ion Ratio Lower Upper
 234 100
 189 7.2 4.9 9.1

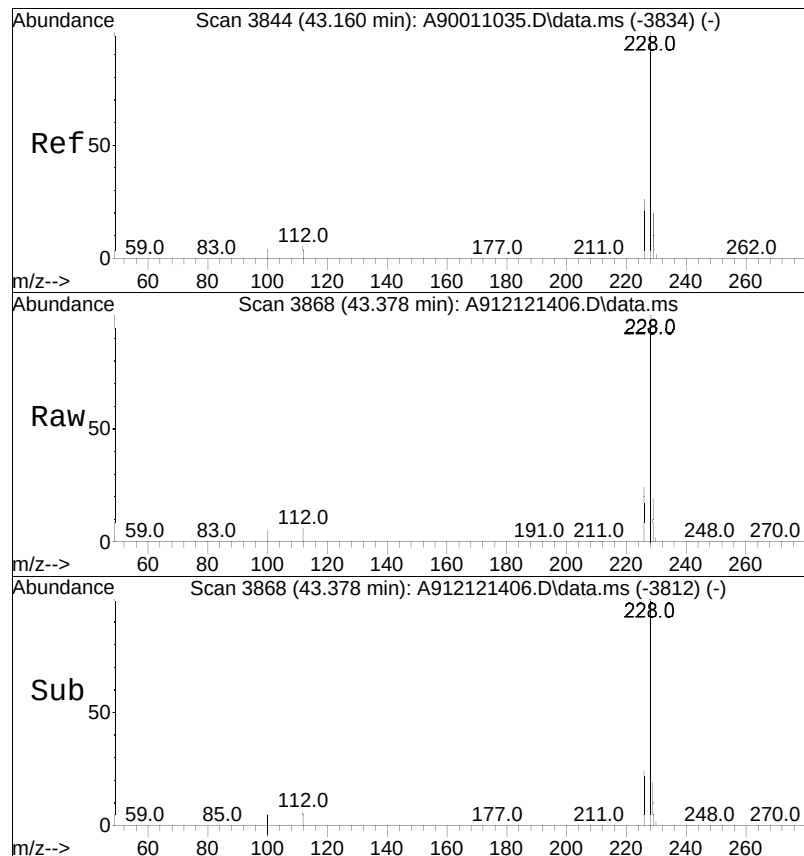




#67
 Naphthobenzothiophene-2,1-D
 Concen: 6836.89 ng/mL
 RT: 42.456 min Scan# 3767
 Delta R.T. 0.009 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm

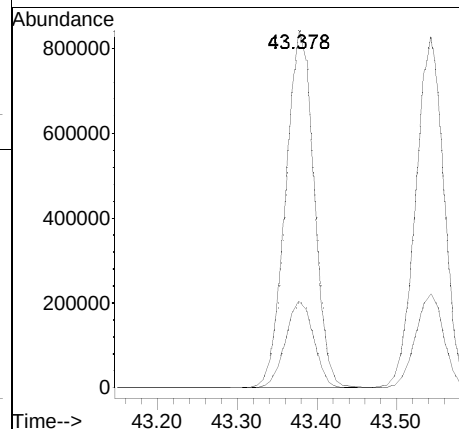
Tgt Ion: 234 Resp: 2188139
 Ion Ratio Lower Upper
 234 100
 189 7.2 4.9 9.1

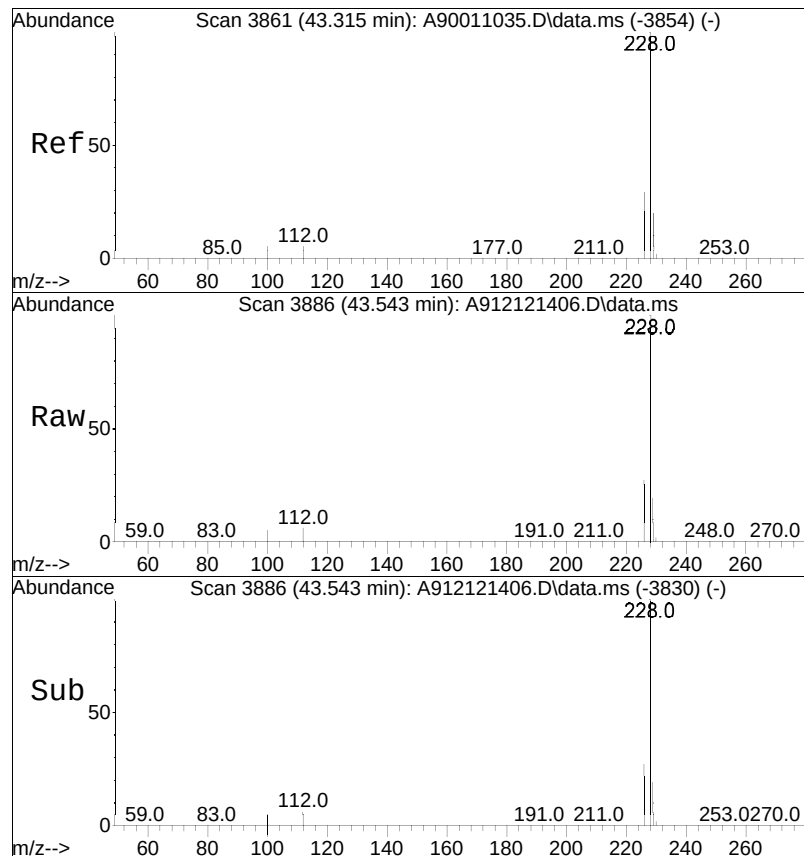




#75
 Benz[a]anthracene
 Concen: 6246.21 ng/mL M4
 RT: 43.378 min Scan# 3868
 Delta R.T. 0.009 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm

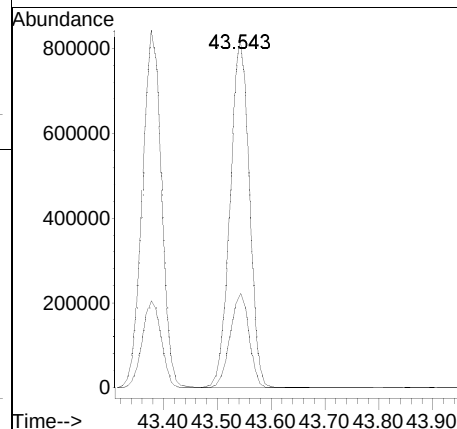
Tgt Ion:228 Resp: 2089798
 Ion Ratio Lower Upper
 228 100
 226 24.3 17.3 32.1

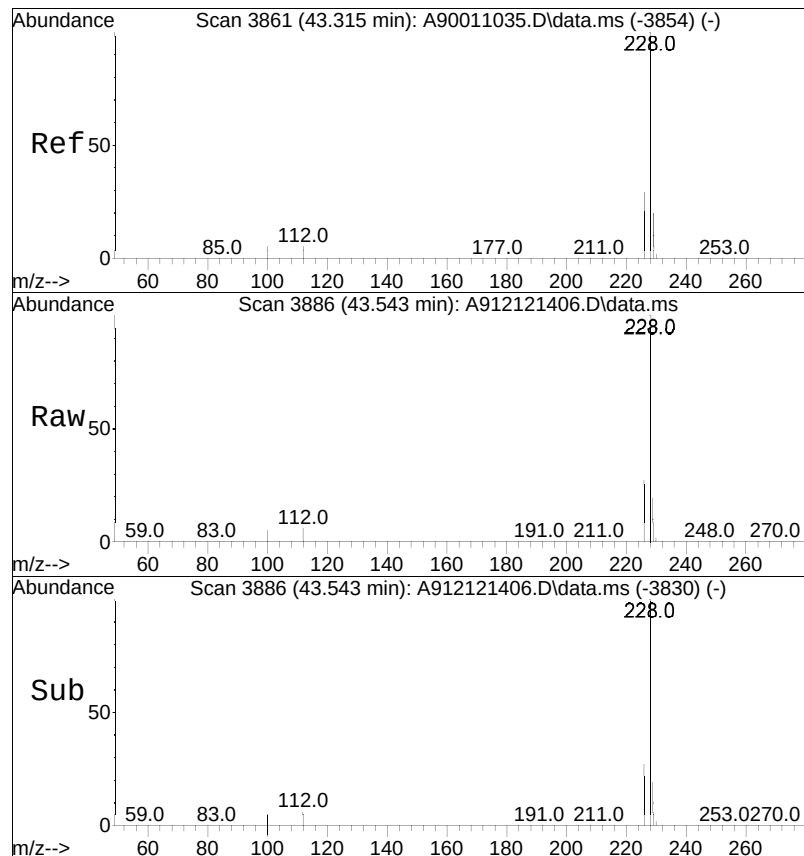




#76
 Chrysene
 Concen: 6206.65 ng/mL
 RT: 43.543 min Scan# 3886
 Delta R.T. 0.009 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm

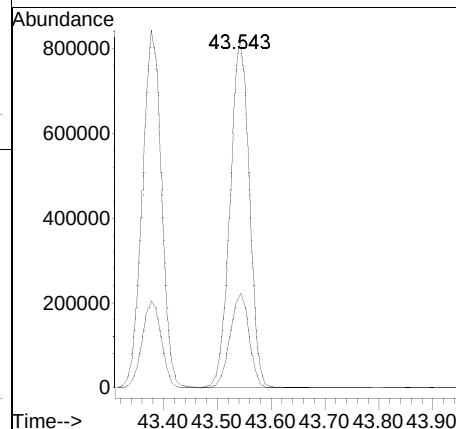
Tgt Ion	Ratio	Lower	Upper
228	100		
226	26.7	18.8	34.8

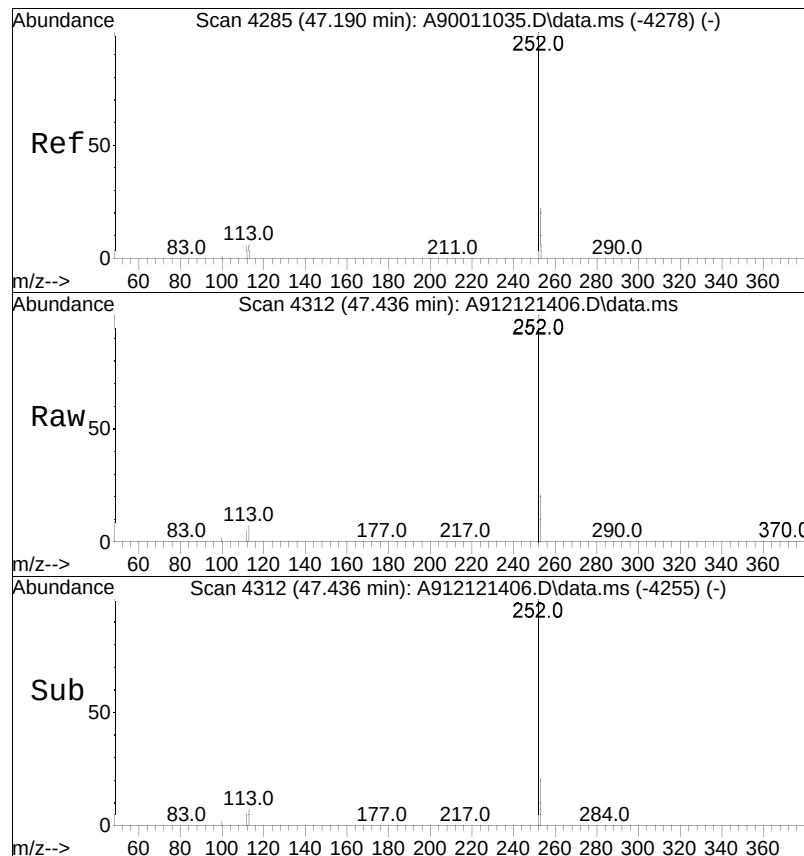




#77
 Chrysene/Triphenylene
 Concen: 6206.65 ng/mL
 RT: 43.543 min Scan# 3886
 Delta R.T. 0.009 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm

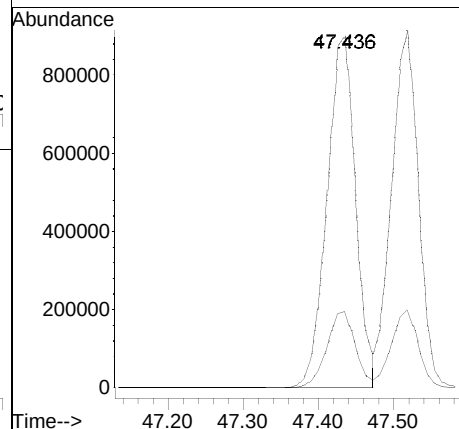
Tgt Ion:228 Resp: 2043550
 Ion Ratio Lower Upper
 228 100
 226 26.7 18.8 34.8

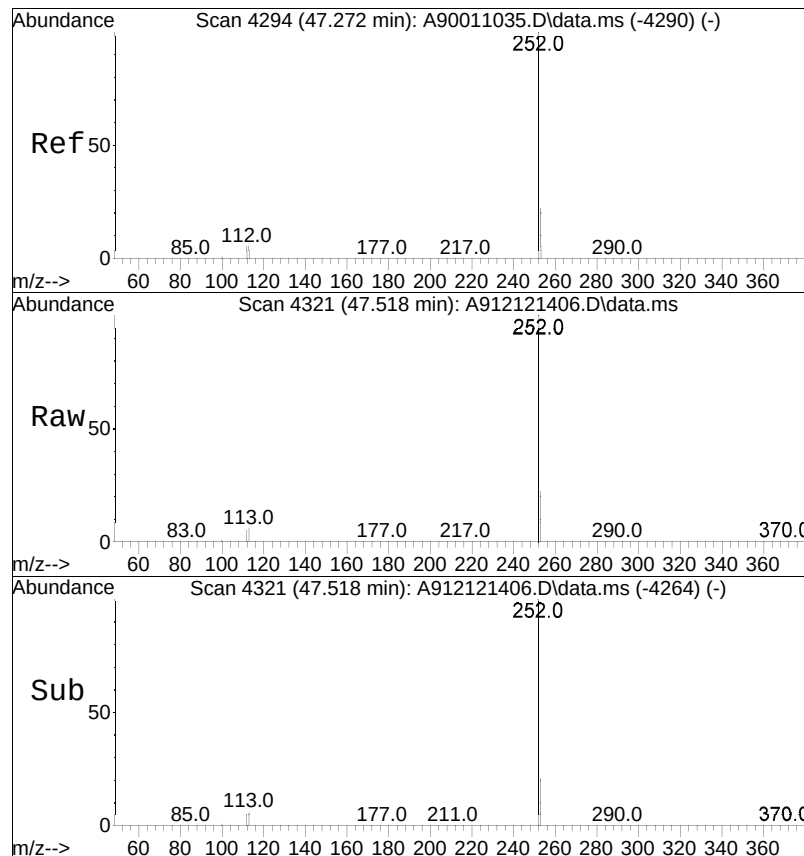




#84
 Benzo[b]fluoranthene
 Concen: 5832.54 ng/mL
 RT: 47.436 min Scan# 4312
 Delta R.T. 0.018 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm

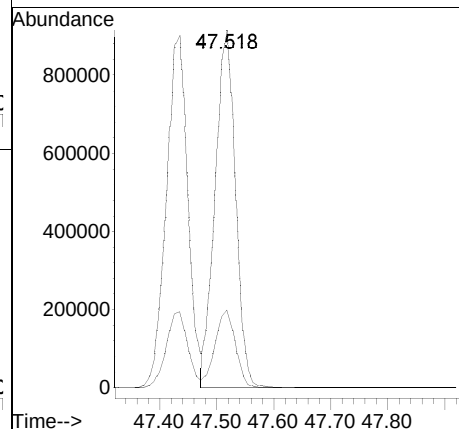
Tgt Ion:252 Resp: 2379084
 Ion Ratio Lower Upper
 252 100
 253 21.5 16.4 30.4

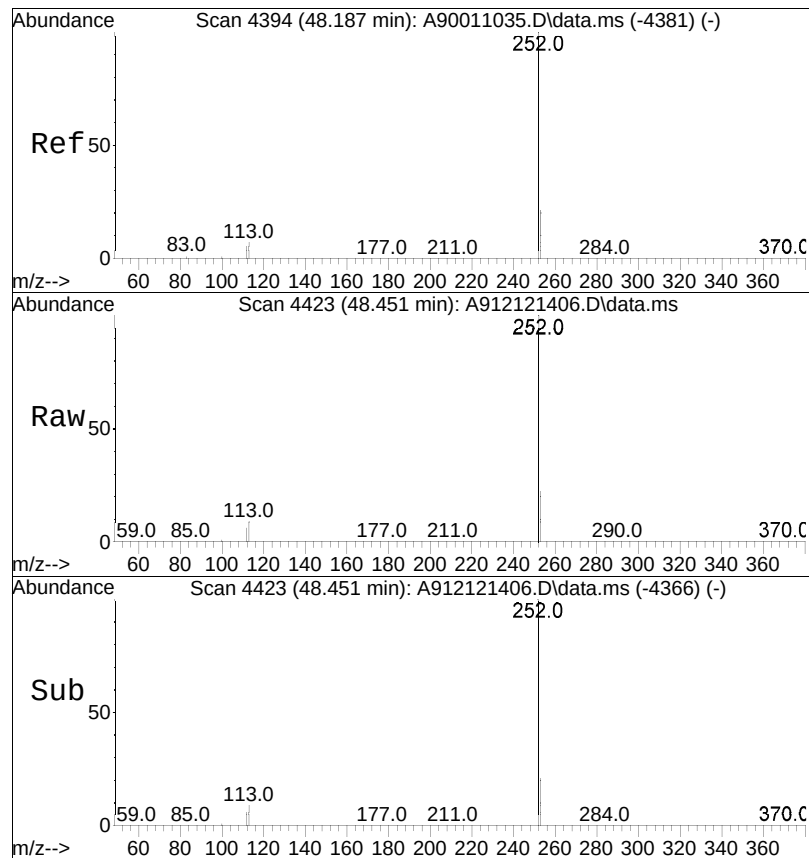




#85
 Benzo[j]+[k]fluoranthene
 Concen: 5681.71 ng/mL
 RT: 47.518 min Scan# 4321
 Delta R.T. 0.018 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm

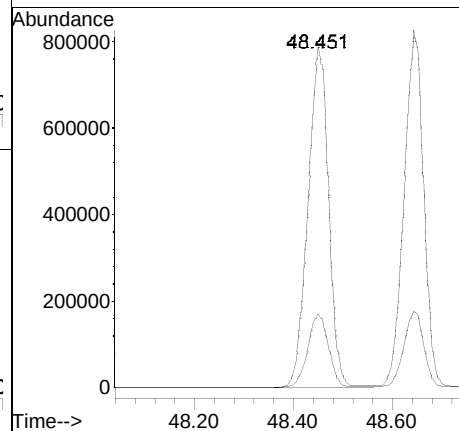
Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.5	16.1	29.9

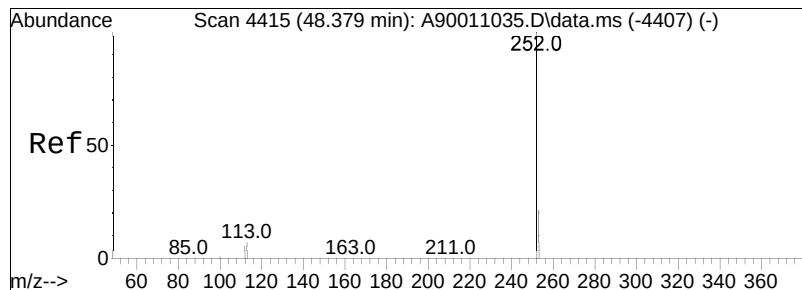




#87
 Benzo[e]pyrene
 Concen: 5743.33 ng/mL
 RT: 48.451 min Scan# 4423
 Delta R.T. 0.018 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm

Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.3	16.2	30.0	





#89

Benzo[a]pyrene

Concen: 5920.02 ng/mL

RT: 48.643 min Scan# 4444

Delta R.T. 0.018 min

Lab File: A912121406.D

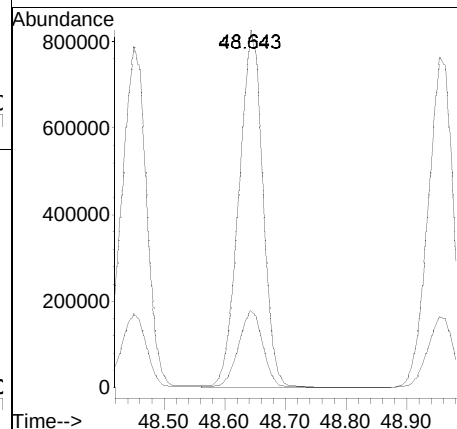
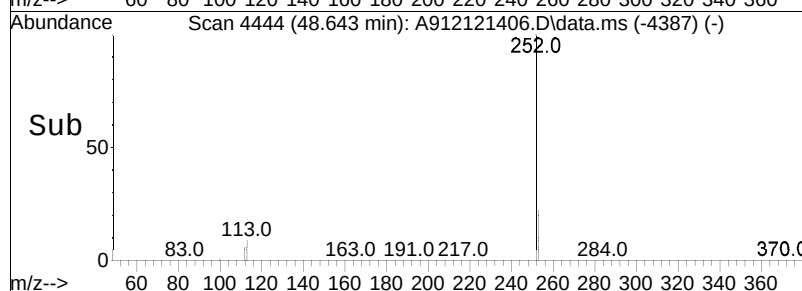
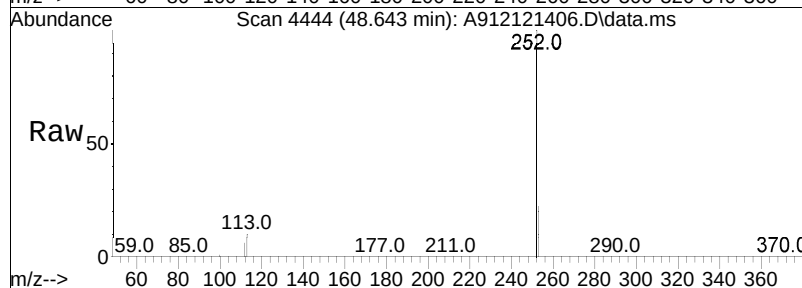
Acq: 12 Dec 2014 8:43 pm

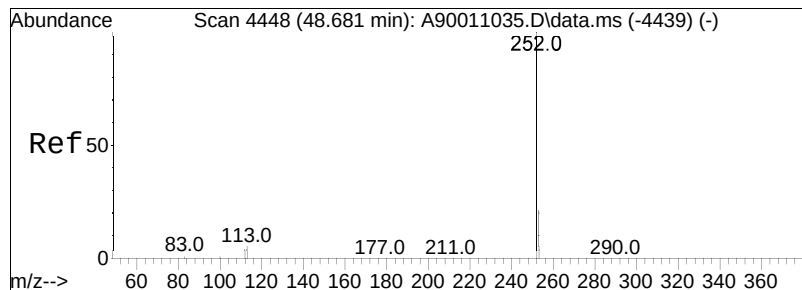
Tgt Ion: 252 Resp: 2278808

Ion Ratio Lower Upper

252 100

253 21.5 16.4 30.6





#90

Perylene

Concen: 5641.22 ng/mL

RT: 48.954 min Scan# 4478

Delta R.T. 0.009 min

Lab File: A912121406.D

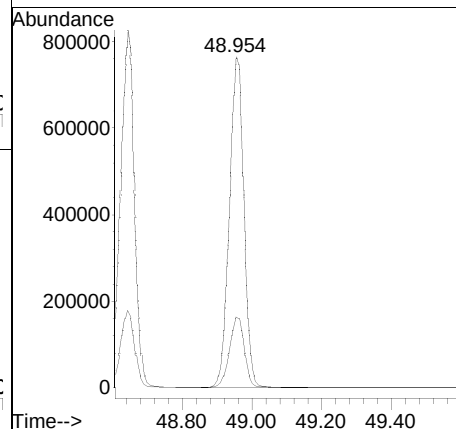
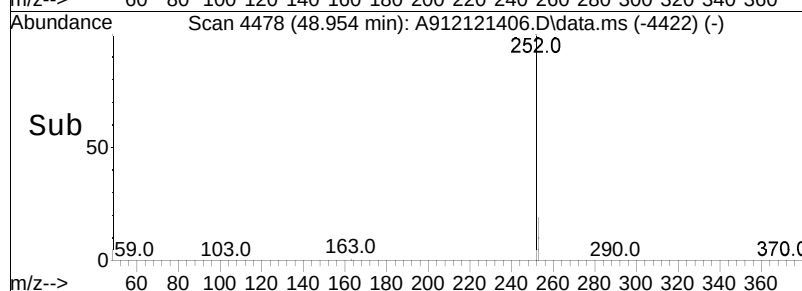
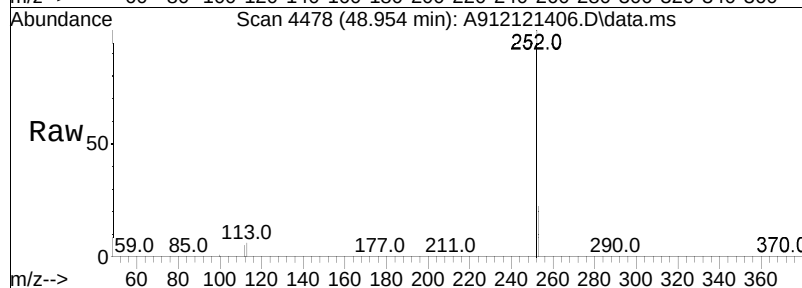
Acq: 12 Dec 2014 8:43 pm

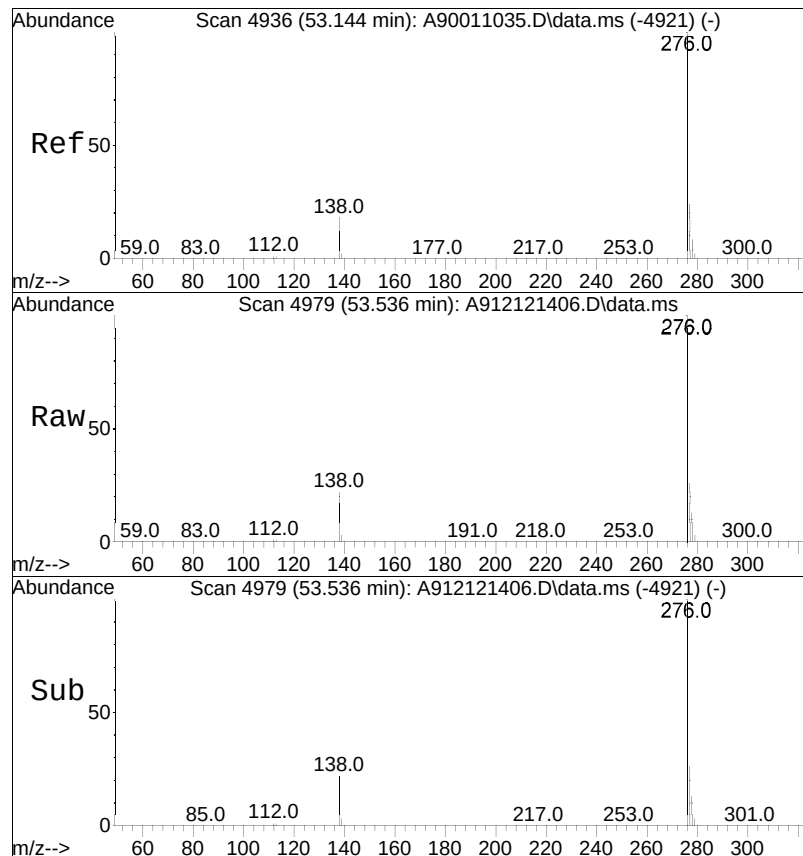
Tgt Ion: 252 Resp: 2212166

Ion Ratio Lower Upper

252 100

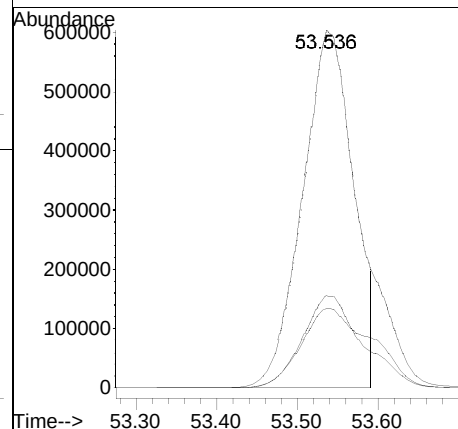
253 21.4 16.6 30.8

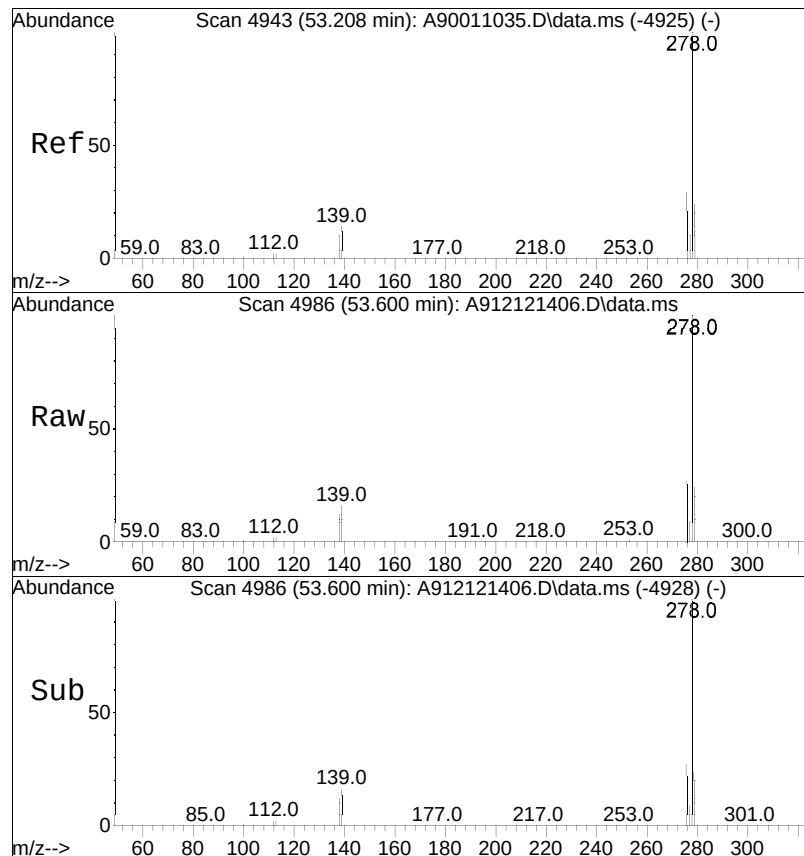




#91
 Indeno[1,2,3-cd]pyrene
 Concen: 5354.35 ng/mL M3
 RT: 53.536 min Scan# 4979
 Delta R.T. 0.027 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm

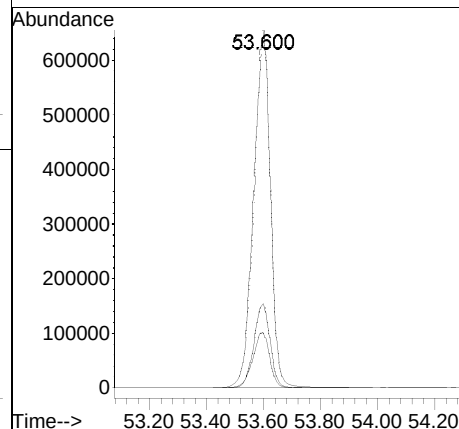
Tgt Ion:	276	Resp:	2646618
Ion Ratio	Lower	Upper	
276	100		
138	30.7	15.7	29.1#
277	30.5	17.9	33.3

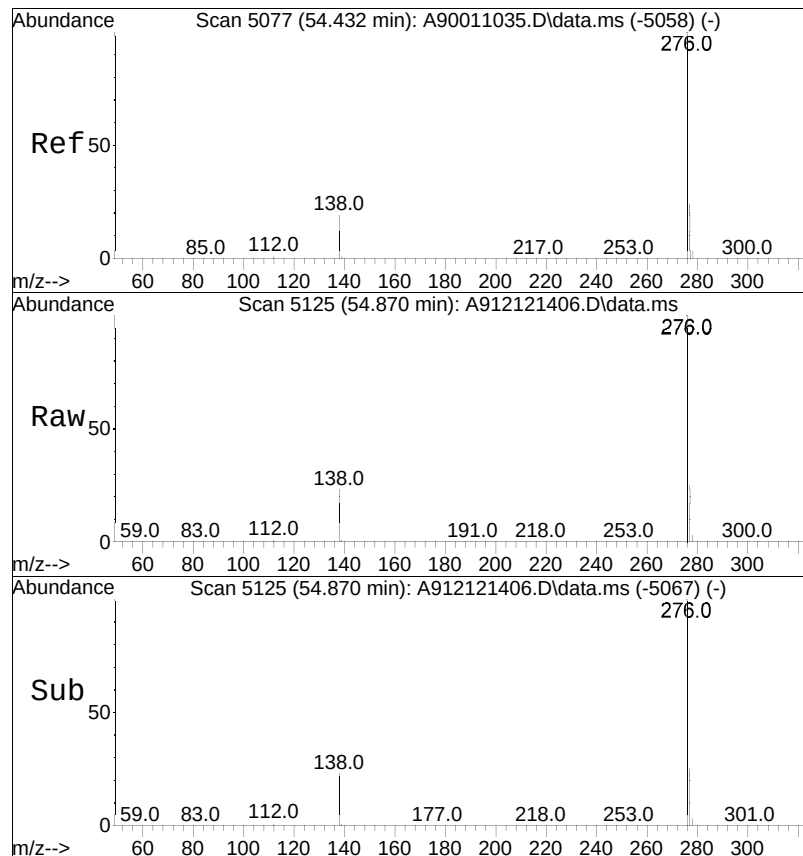




#92
 Dibenz[ah]+[ac]anthracene
 Concen: 5690.90 ng/mL
 RT: 53.600 min Scan# 4986
 Delta R.T. 0.027 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm

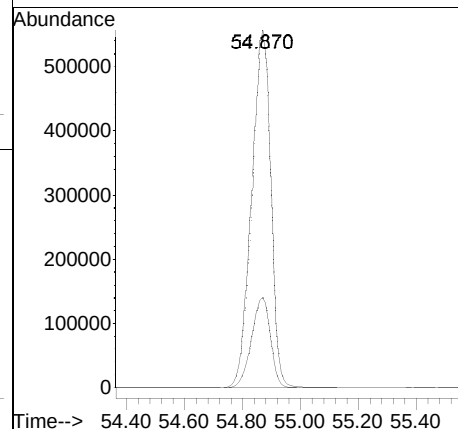
Tgt Ion:	278	Resp:	2638116
Ion Ratio	Lower	Upper	
278	100		
139	16.0	11.4	21.2
279	23.2	16.3	30.3

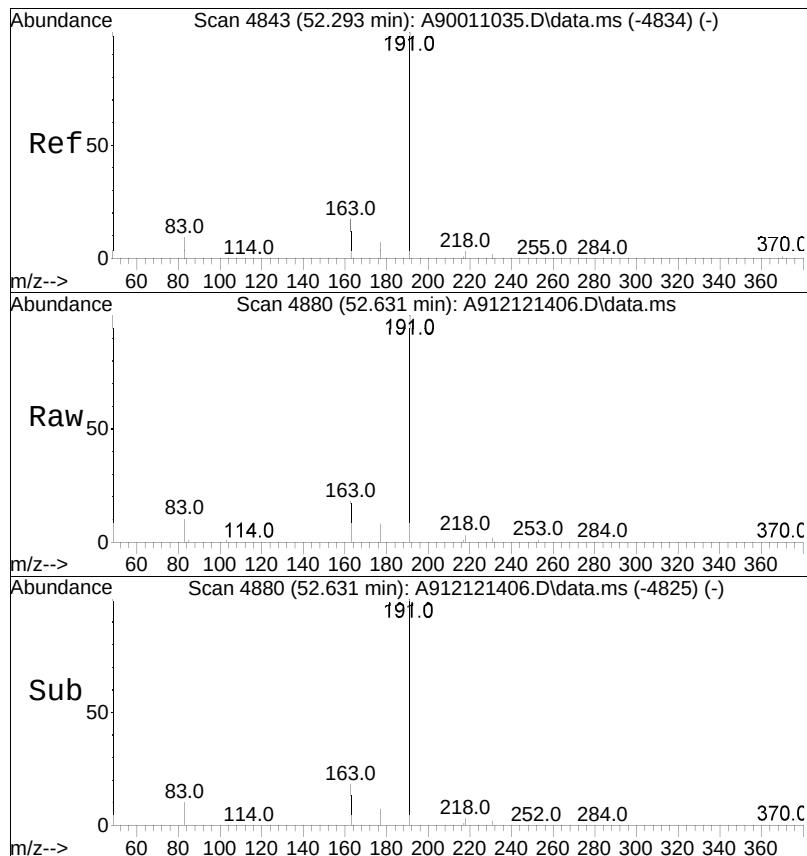




#93
 Benzo[g,h,i]perylene
 Concen: 5284.95 ng/mL
 RT: 54.870 min Scan# 5125
 Delta R.T. 0.027 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm

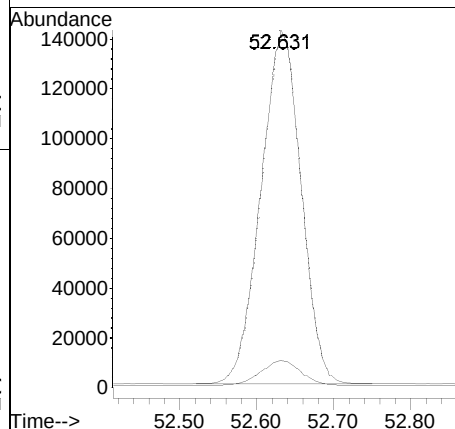
Tgt Ion	Ratio	Lower	Upper
276	100		
277	25.3	17.4	32.2

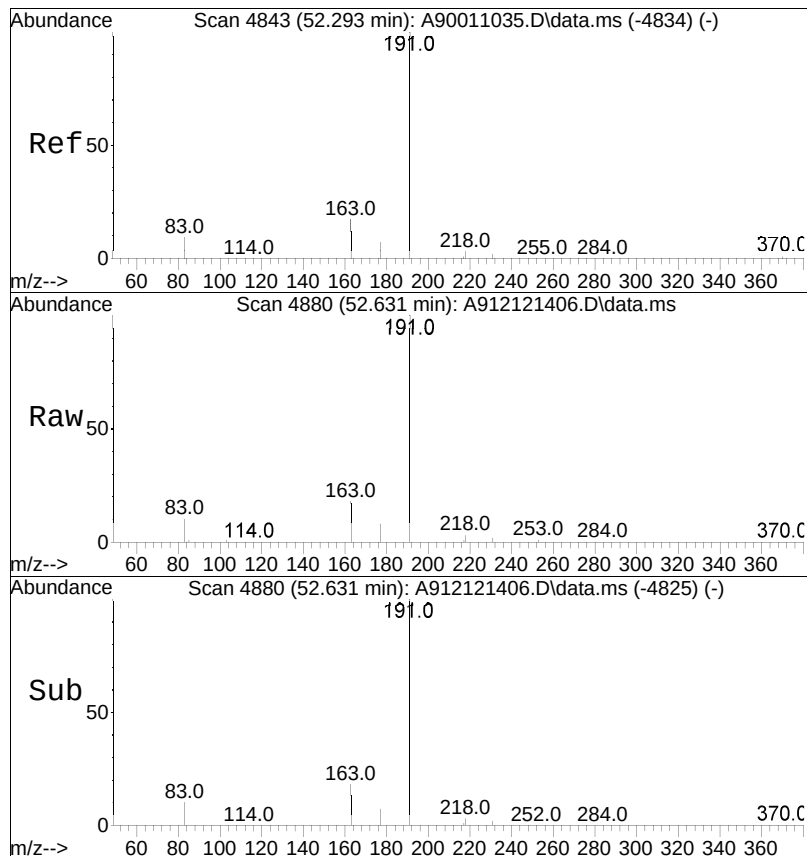




#94
 Hopane (T19)
 Concen: 3935.14 ng/mL M3
 RT: 52.631 min Scan# 4880
 Delta R.T. -0.000 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm

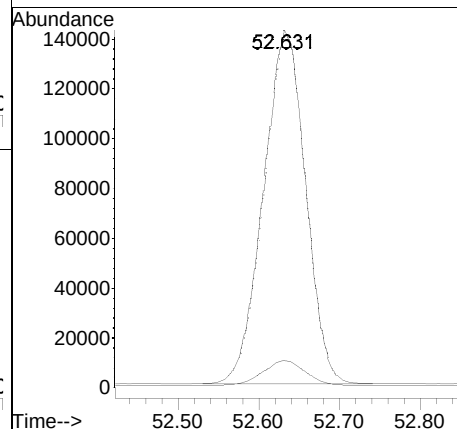
Tgt Ion	Ratio	Lower	Upper
191	100		
177	0.0	8.5	15.9#





#95
 17a(H),21B(H)-hopane - C₃₀H₅₂
 Concen: 3933.25 ng/mL M3
 RT: 52.631 min Scan# 4880
 Delta R.T. -0.000 min
 Lab File: A912121406.D
 Acq: 12 Dec 2014 8:43 pm

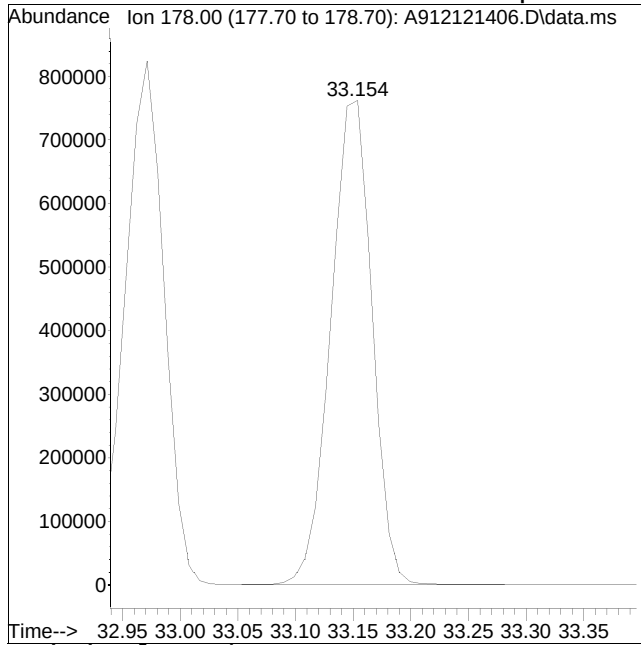
Tgt Ion	Ratio	Lower	Upper
191	100		
177	0.0	8.5	15.9#



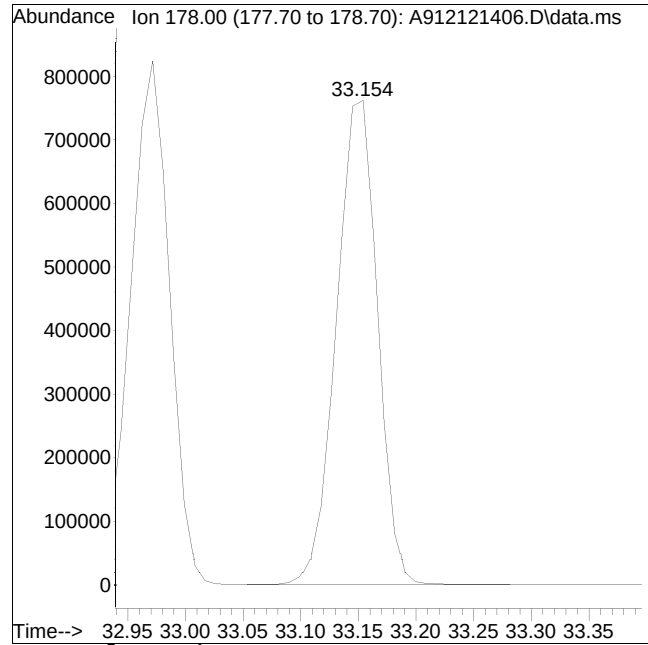
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121406.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 8:43 pm Instrument : PAH 9
Sample : i912121405 Quant Date : 12/15/2014 10:36 am

Compound #55: Anthracene



Original Peak Response = 1898531



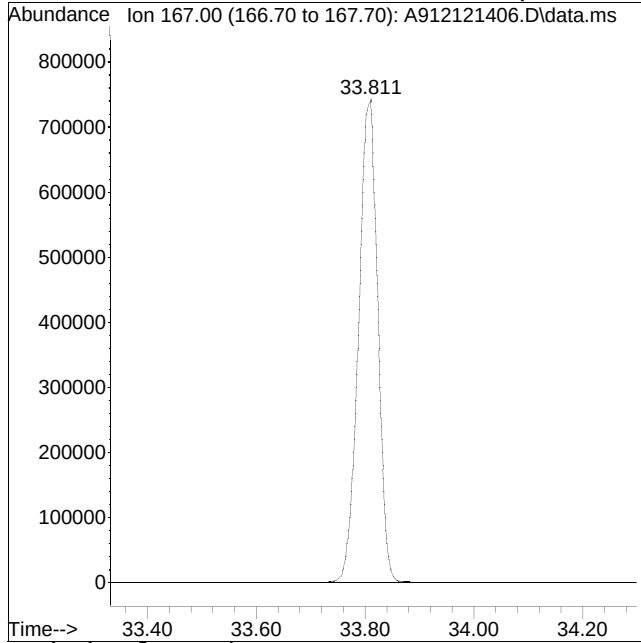
Manual Peak Response = 1899838 M4

M4 = Poor automated baseline construction.

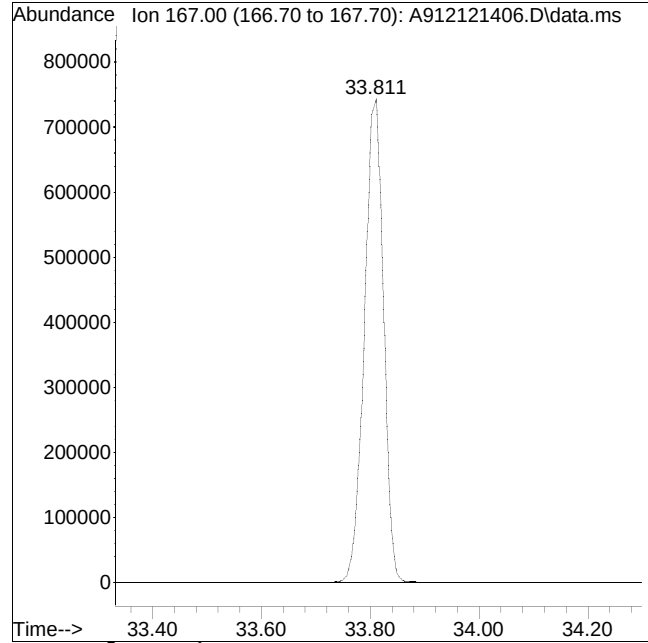
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121406.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 8:43 pm Instrument : PAH 9
Sample : i912121405 Quant Date : 12/15/2014 10:36 am

Compound #56: Carbazole



Original Peak Response = 1825630



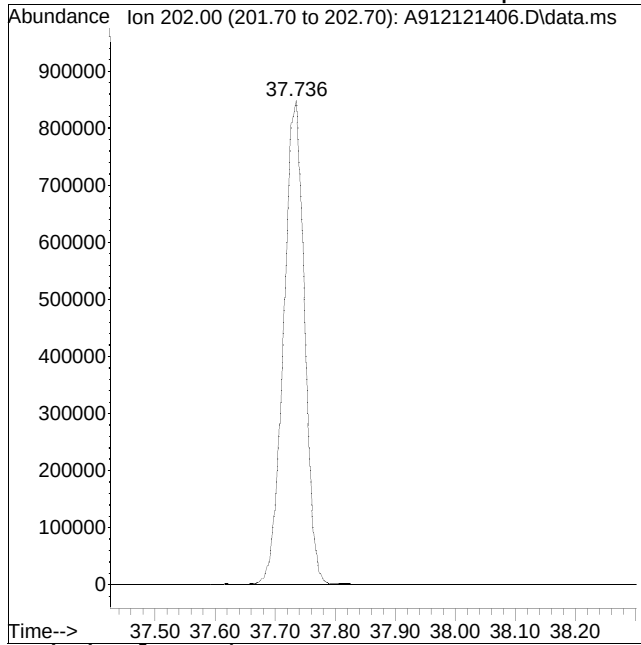
Manual Peak Response = 1822786 M4

M4 = Poor automated baseline construction.

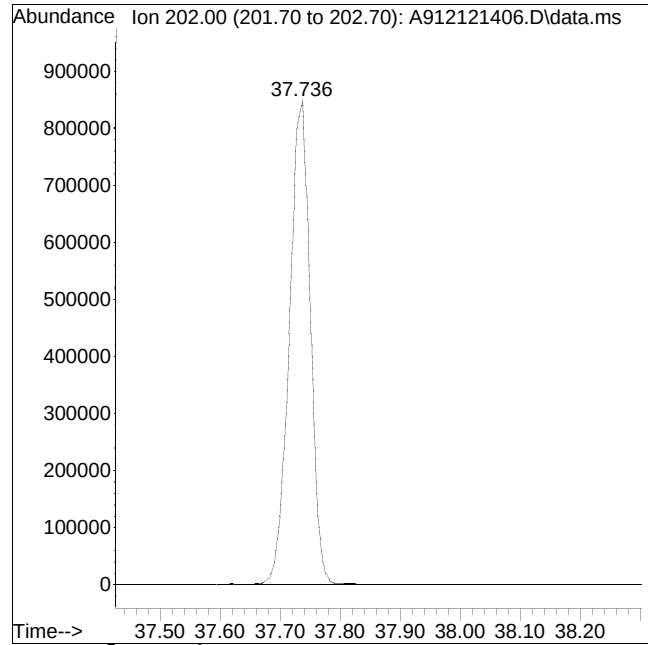
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121406.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 8:43 pm Instrument : PAH 9
Sample : i912121405 Quant Date : 12/15/2014 10:36 am

Compound #58: Fluoranthene



Original Peak Response = 2059425



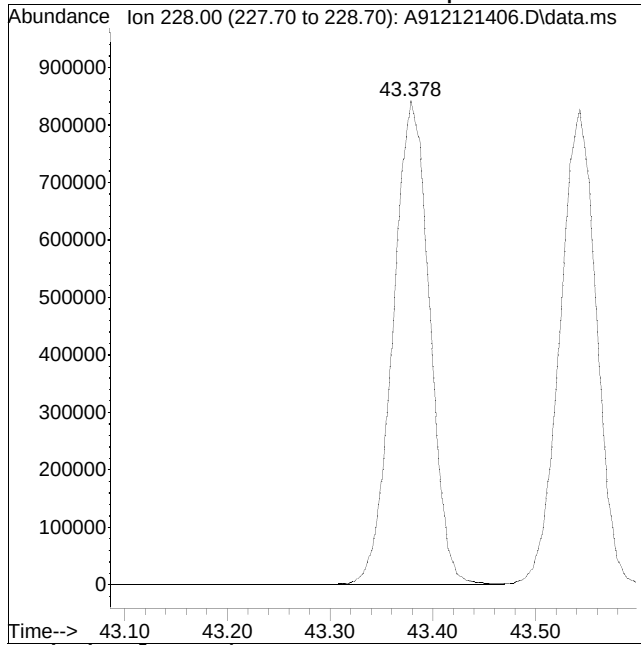
Manual Peak Response = 2056106 M4

M4 = Poor automated baseline construction.

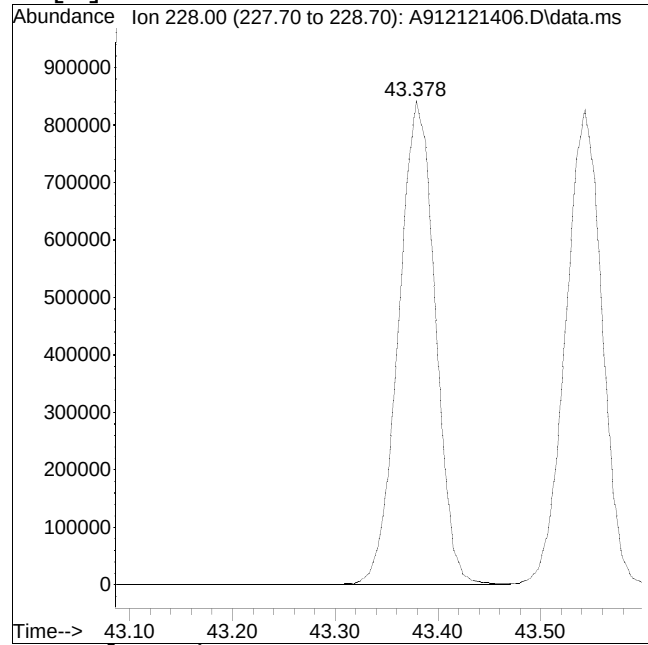
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121406.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 8:43 pm Instrument : PAH 9
Sample : i912121405 Quant Date : 12/15/2014 10:36 am

Compound #75: Benz[a]anthracene



Original Peak Response = 2090875



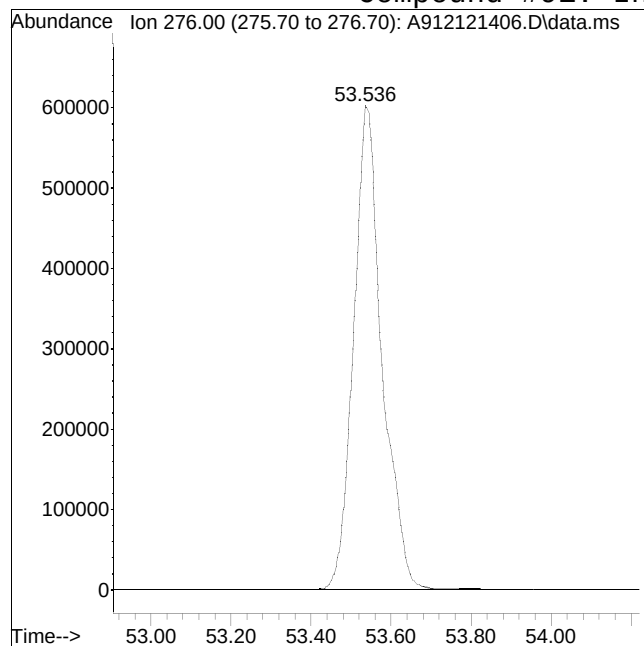
Manual Peak Response = 2089798 M4

M4 = Poor automated baseline construction.

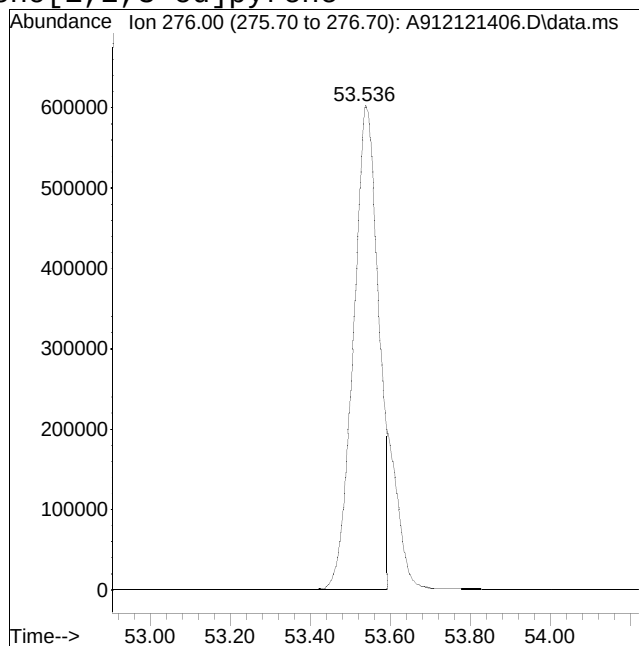
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912121406.D Operator : PAH9:SR
 Date Inj'd : 12/12/2014 8:43 pm Instrument : PAH 9
 Sample : i912121405 Quant Date : 12/15/2014 10:36 am

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 2981872



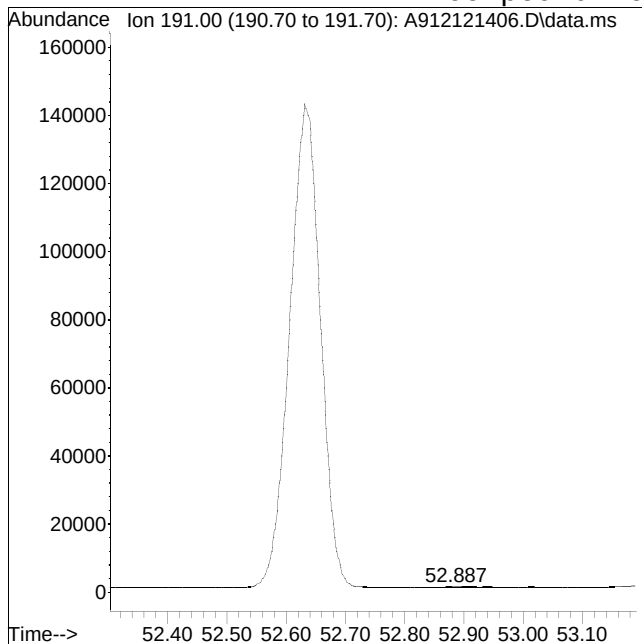
Manual Peak Response = 2646618 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

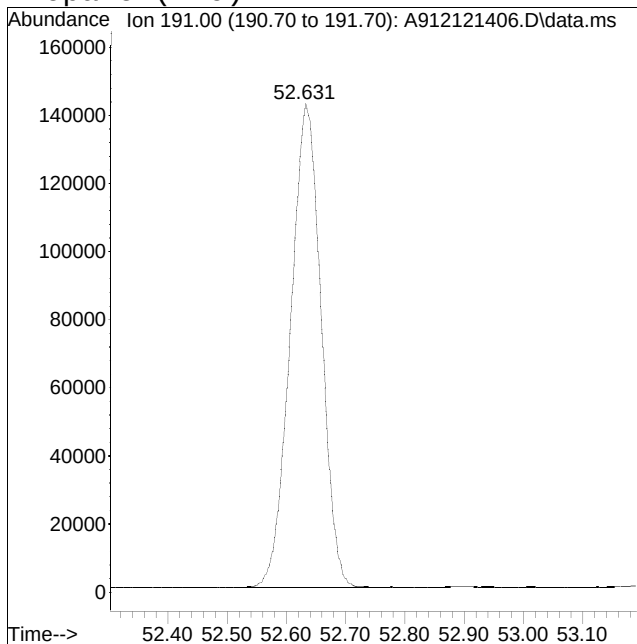
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912121406.D Operator : PAH9:SR
 Date Inj'd : 12/12/2014 8:43 pm Instrument : PAH 9
 Sample : i912121405 Quant Date : 12/15/2014 10:36 am

Compound #94: Hopane (T19)



Original Peak Response = 1338



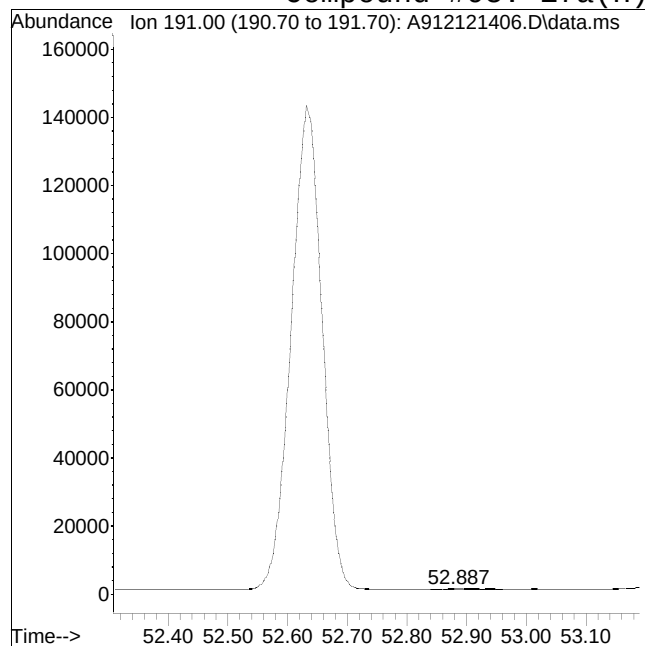
Manual Peak Response = 511494 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

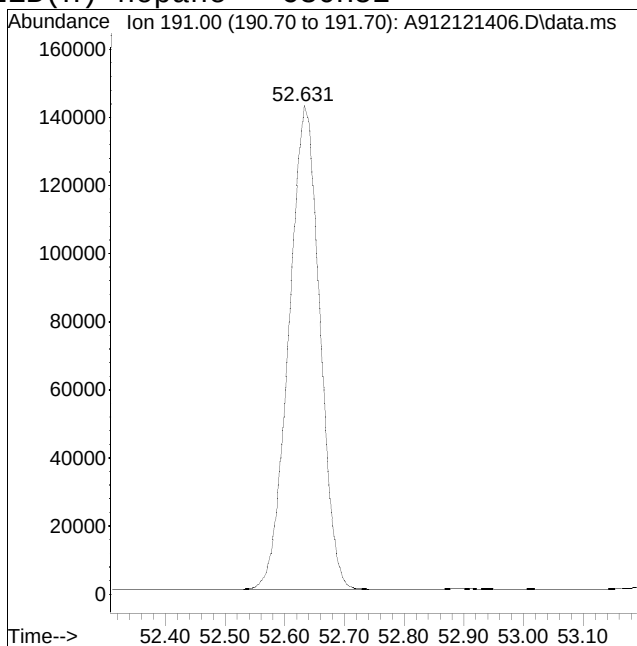
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912121406.D Operator : PAH9:SR
 Date Inj'd : 12/12/2014 8:43 pm Instrument : PAH 9
 Sample : i912121405 Quant Date : 12/15/2014 10:36 am

Compound #95: 17a(H),21B(H)-hopane - C₃₀H₅₂



Original Peak Response = 1338



Manual Peak Response = 511248 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Data File : A912121407.D
 Acq On : 12 Dec 2014 10:08 pm
 Operator : PAH9:SR
 Sample : i912121406
 Misc : WG749024,l6 frau82 10000 ng/mL
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 16 10:50:17 2014
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 10:35:44 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.022	164	85123	500.000	ng/mL	0.00
74) Chrysene-d12	43.442	240	176094	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	20.069	136	3659470	10804.289	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1080.43%#			
42) Phenanthrene-d10	32.889	188	2898676	11066.917	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1106.69%#			
83) Benzo[b]fluoranthene-d12	47.353	264	3609063	10504.844	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1050.48%#			
88) Benzo[a]pyrene-d12	48.570	264	3320914	10506.312	ng/mL	0.04
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1050.63%#			
129) 5B(H)Cholane - Surr	44.063	217	562117	9712.306	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 971.23%#			
Target Compounds						
					Qvalue	
3) trans-Decalin	16.720	138	384582	4993.119	ng/mL	100
4) cis-Decalin	17.943	138	358794	6004.963	ng/mL	100
10) Naphthalene	20.142	128	4495163	12369.473	ng/mL	100
16) 2-Methylnaphthalene	22.834	142	2487210	11047.167	ng/mL	100
17) 1-Methylnaphthalene	23.254	142	2409372	10990.383	ng/mL	100
18) Benzothiophene	20.361	134	4076322	13247.172	ng/mL	100
23) Biphenyl	24.705	154	3037960	10679.453	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.316	156	2061251	10464.638	ng/mL	100
25) Dibenzofuran	27.789	168	3235405	11028.524	ng/mL	97
26) Acenaphthylene	26.411	152	4042971	11701.519	ng/mL	100
27) Acenaphthene	27.150	153	2319639M4	10900.775	ng/mL	
28) 2,3,5-Trimethylnaphthalen	28.701	170	2197667	12769.730	ng/mL	97
29) Fluorene	29.167	166	3196206	13550.003	ng/mL	99
33) Dibenzothiophene	32.479	184	3908101	12701.029	ng/mL	100
43) Phenanthrene	32.980	178	3688713	11311.063	ng/mL	100
54) Retene	39.946	234	1121614	13082.289	ng/mL	100
55) Anthracene	33.154	178	3579908M4	11940.684	ng/mL	
56) Carbazole	33.811	167	3481379M4	11367.150	ng/mL	
57) 1-Methylphenanthrene	35.472	192	2570635	11496.456	ng/mL	99
58) Fluoranthene	37.736	202	3969460M4	12657.945	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Data File : A912121407.D
 Acq On : 12 Dec 2014 10:08 pm
 Operator : PAH9:SR
 Sample : i912121406
 Misc : WG749024,l6 frau82 10000 ng/mL
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 16 10:50:17 2014
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 10:35:44 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
59)	Benzo(b)fluorene	40.256	216	2496186	13368.055	ng/mL	100
60)	Pyrene	38.622	202	4372896	13085.949	ng/mL	97
66)	Naphthobenzothiophene	42.465	234	4191132	14156.008	ng/mL	99
67)	Naphthobenzothiophene-2,1	42.465	234	4191132	14156.008	ng/mL	99
75)	Benz[a]anthracene	43.388	228	4034086	12591.728	ng/mL	99
76)	Chrysene	43.552	228	3867054	12265.359	ng/mL	100
77)	Chrysene/Triphenylene	43.552	228	3867054	12265.359	ng/mL	100
84)	Benzo[b]fluoranthene	47.445	252	4543975	11633.526	ng/mL	96
85)	Benzo[j]+[k]fluoranthene	47.527	252	4359118	11400.266	ng/mL	97
87)	Benzo[e]pyrene	48.469	252	4399570	11558.918	ng/mL	97
89)	Benzo[a]pyrene	48.661	252	4398715	11933.530	ng/mL	96
90)	Perylene	48.972	252	4304451	11463.062	ng/mL	95
91)	Indeno[1,2,3-cd]pyrene	53.582	276	5683037M3	12006.693	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.618	278	6231334	14037.693	ng/mL	99
93)	Benzo[g,h,i]perylene	54.907	276	6094381	13376.159	ng/mL	98
94)	Hopane (T19)	52.640	191	1030382	8278.381	ng/mL#	87
95)	17a(H),21B(H)-hopane - C3	52.640	191	1030382	8278.381	ng/mL#	87

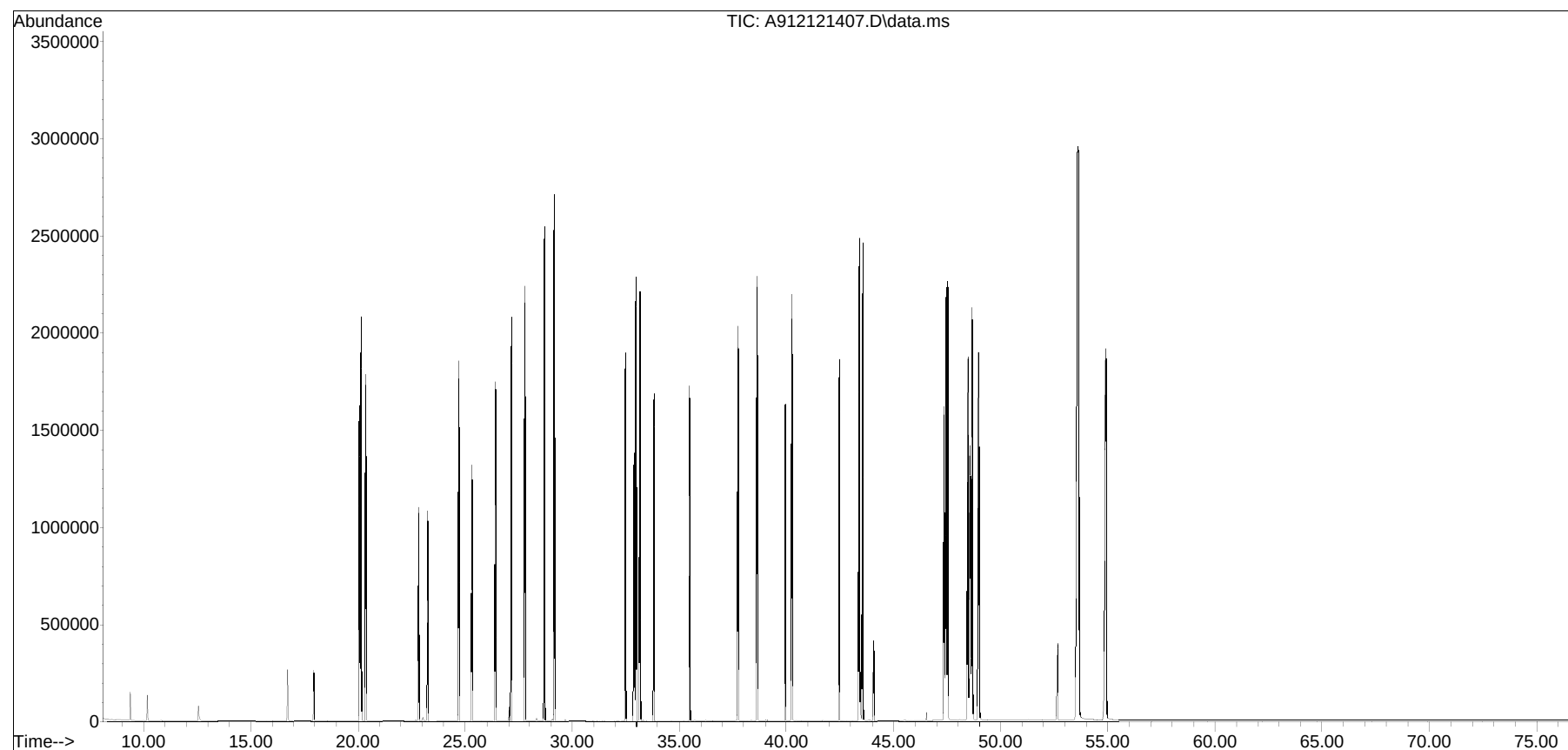
(#) = qualifier out of range (m) = manual integration (+) = signals summed

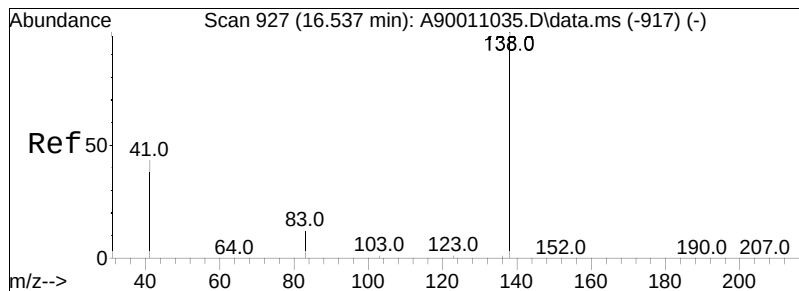
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC12\
Data File : A912121407.D
Acq On : 12 Dec 2014 10:08 pm
Operator : PAH9:SR
Sample : i912121406
Misc : WG749024,l6 frau82 10000 ng/mL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 16 10:50:17 2014
Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 15 10:35:44 2014
Response via : Initial Calibration

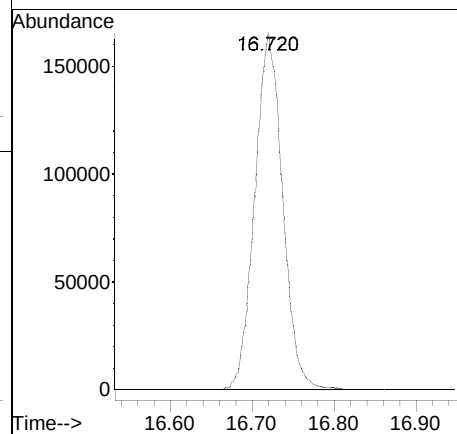
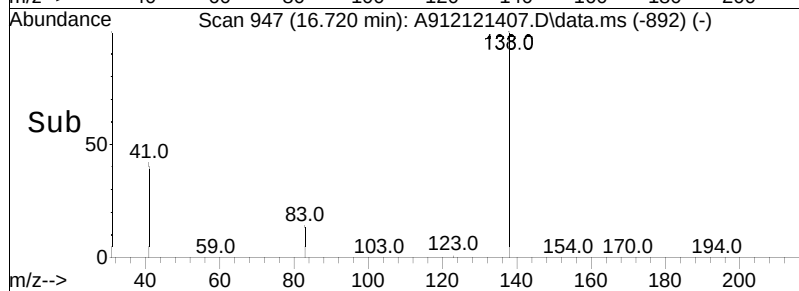
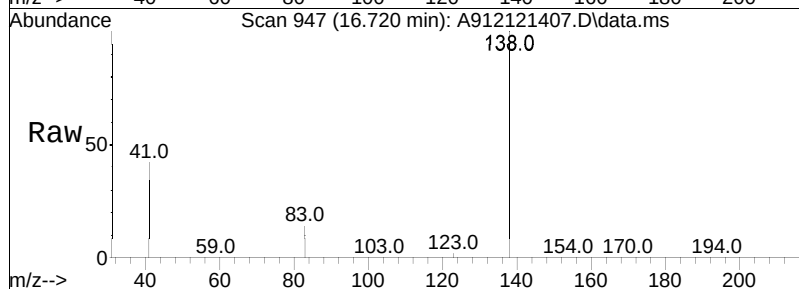
Sub List : ICAL_CCALT_REV2 - CC with five surrogates

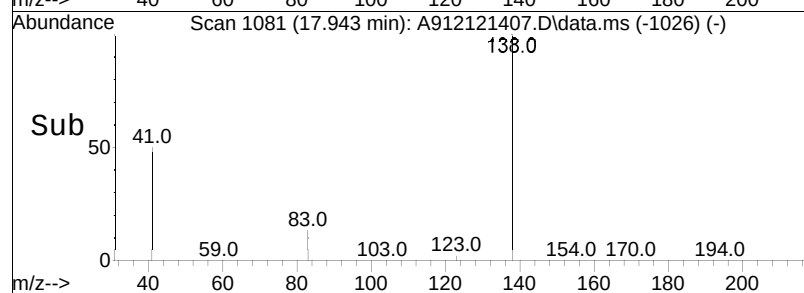
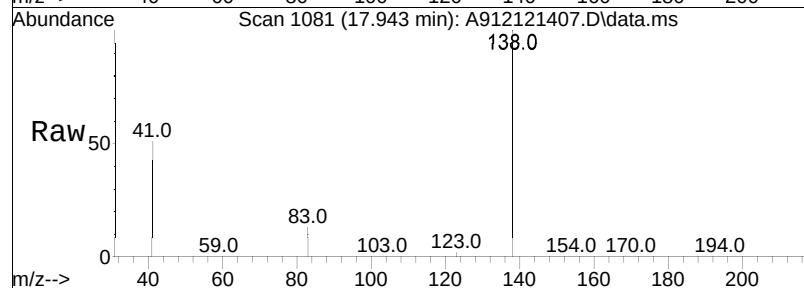
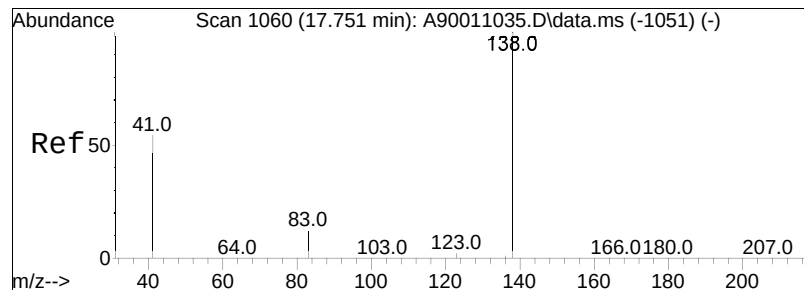




#3
trans-Decalin
Concen: 4993.12 ng/mL
RT: 16.720 min Scan# 947
Delta R.T. -0.000 min
Lab File: A912121407.D
Acq: 12 Dec 2014 10:08 pm

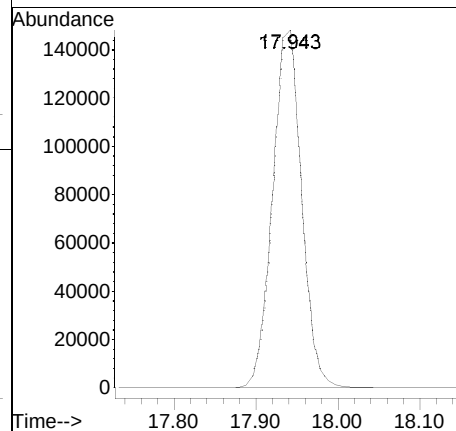
Tgt Ion:138 Resp: 384582

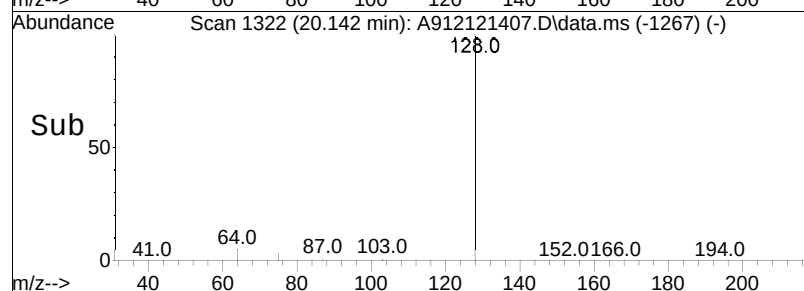
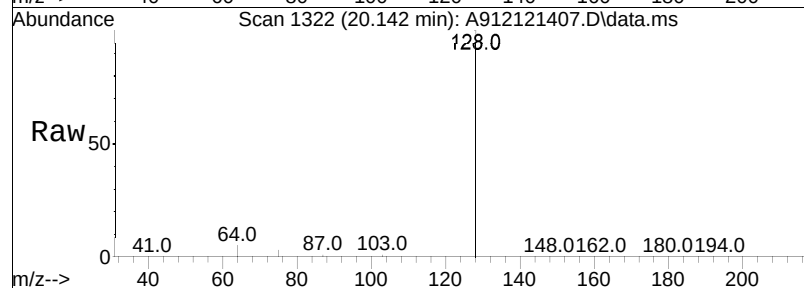
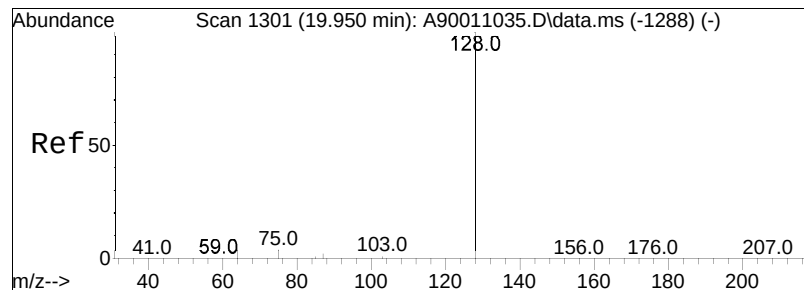




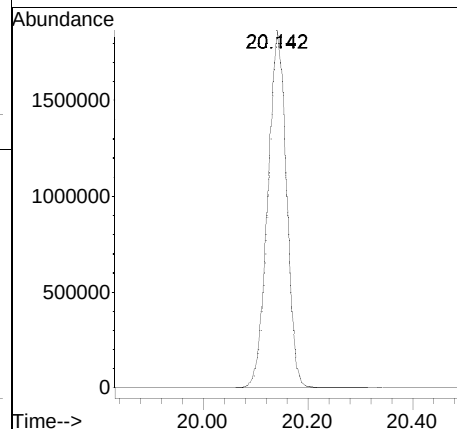
#4
 cis-Decalin
 Concen: 6004.96 ng/mL
 RT: 17.943 min Scan# 1081
 Delta R.T. -0.000 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm

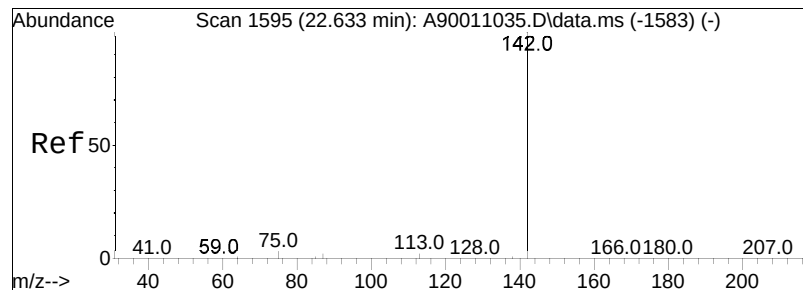
Tgt Ion:138 Resp: 358794





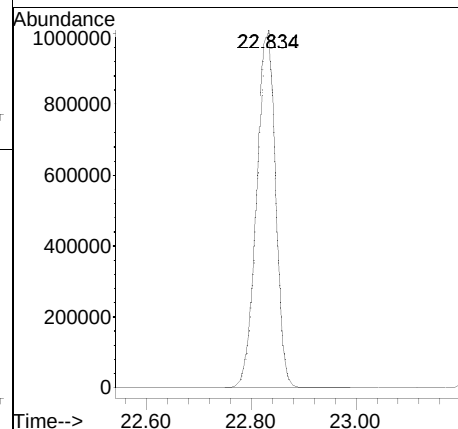
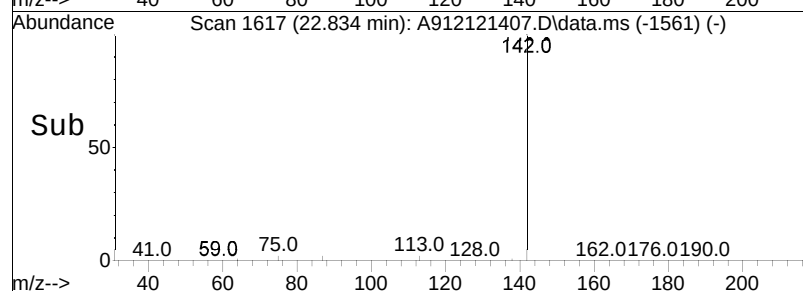
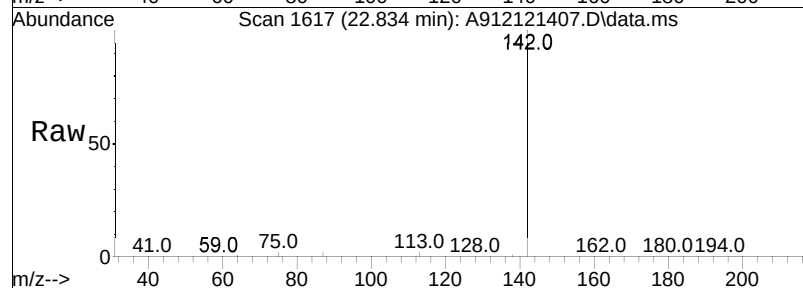
#10
Naphthalene
Concen: 12369.47 ng/mL
RT: 20.142 min Scan# 1322
Delta R.T. -0.000 min
Lab File: A912121407.D
Acq: 12 Dec 2014 10:08 pm
Tgt Ion:128 Resp: 4495163

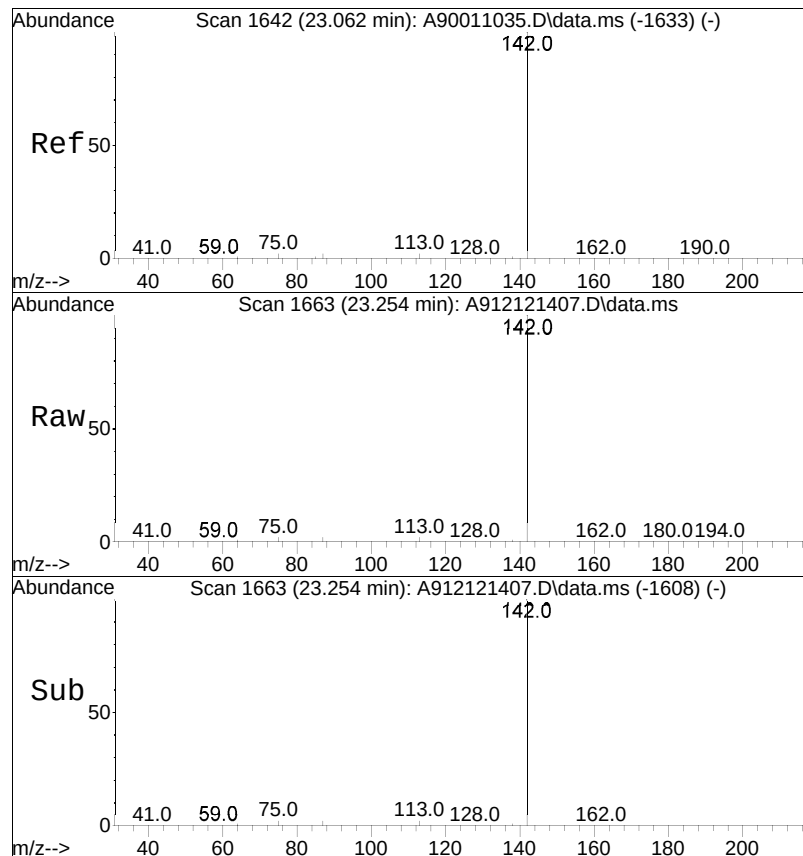




#16
 2-Methylnaphthalene
 Concen: 11047.17 ng/mL
 RT: 22.834 min Scan# 1617
 Delta R.T. 0.009 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm

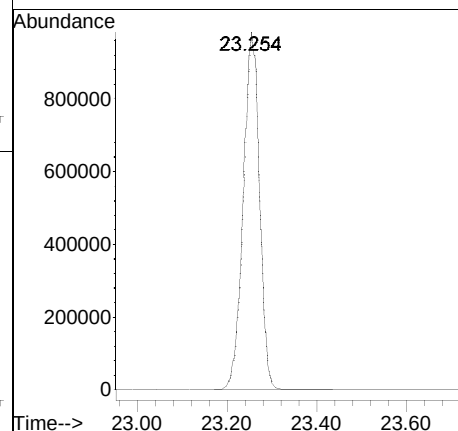
Tgt Ion:142 Resp: 2487210

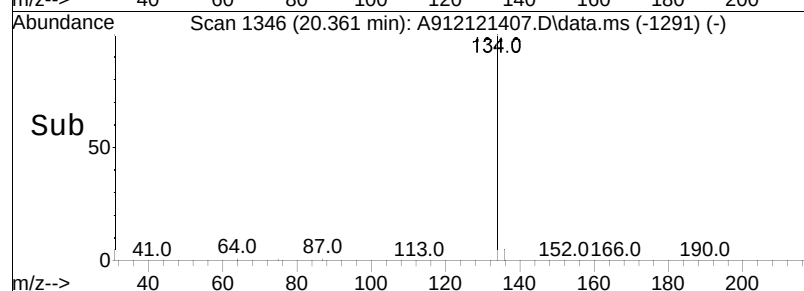
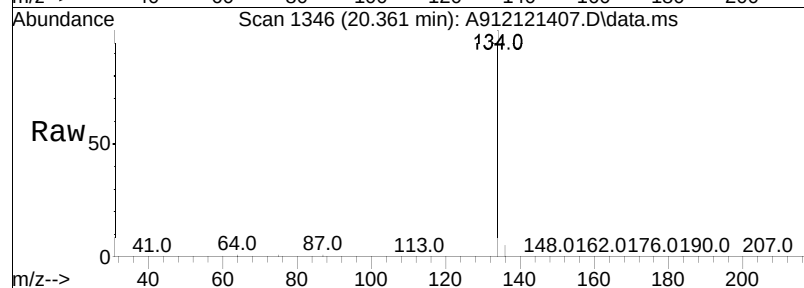
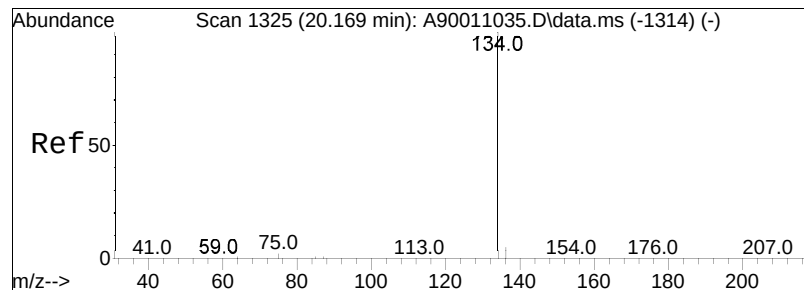




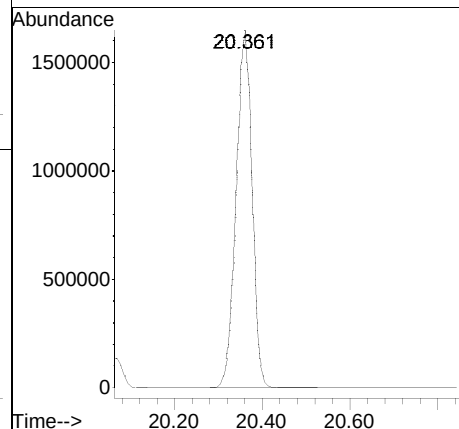
#17
1-Methylnaphthalene
Concen: 10990.38 ng/mL
RT: 23.254 min Scan# 1663
Delta R.T. -0.000 min
Lab File: A912121407.D
Acq: 12 Dec 2014 10:08 pm

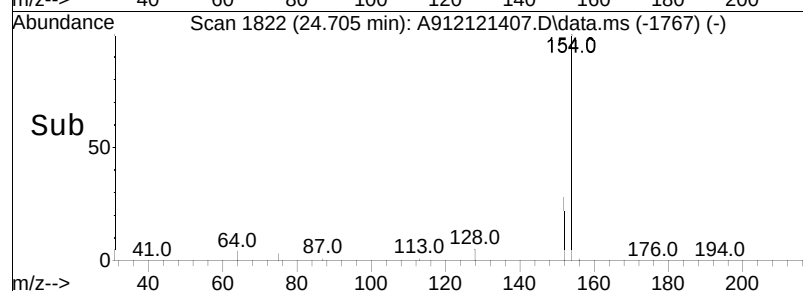
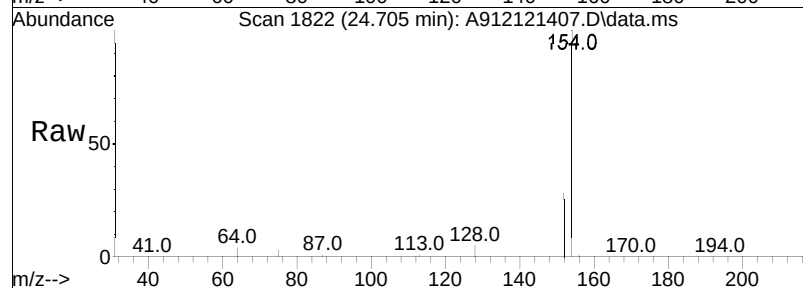
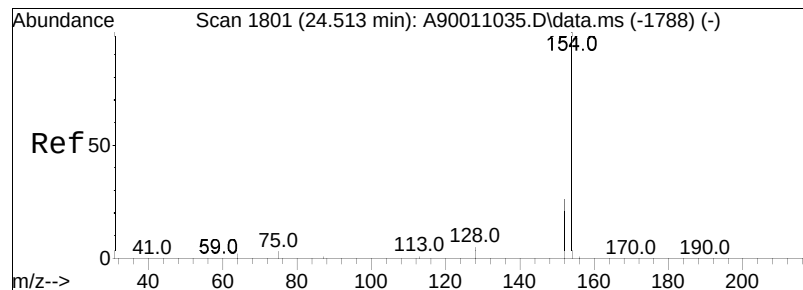
Tgt Ion:142 Resp: 2409372



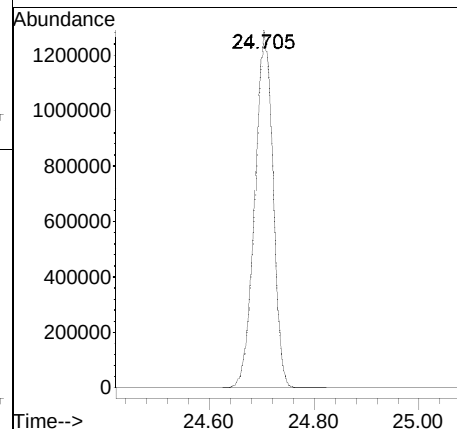


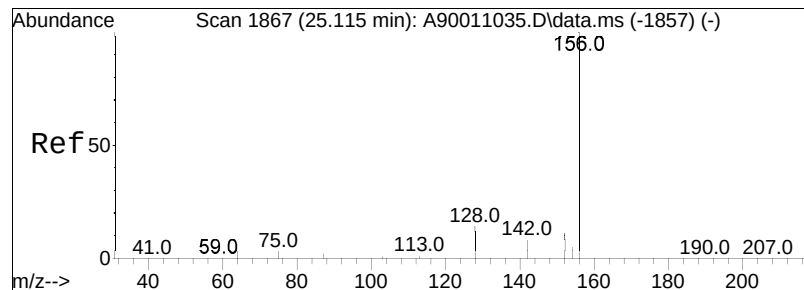
#18
 Benzothiophene
 Concen: 13247.17 ng/mL
 RT: 20.361 min Scan# 1346
 Delta R.T. -0.000 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm
 Tgt Ion:134 Resp: 4076322





#23
Biphenyl
Concen: 10679.45 ng/mL
RT: 24.705 min Scan# 1822
Delta R.T. -0.000 min
Lab File: A912121407.D
Acq: 12 Dec 2014 10:08 pm
Tgt Ion:154 Resp: 3037960





#24

2,6-Dimethylnaphthalene

Concen: 10464.64 ng/mL

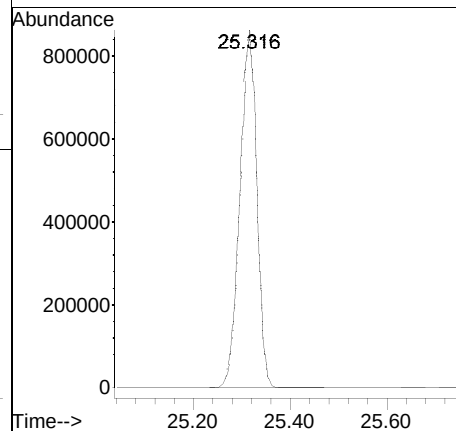
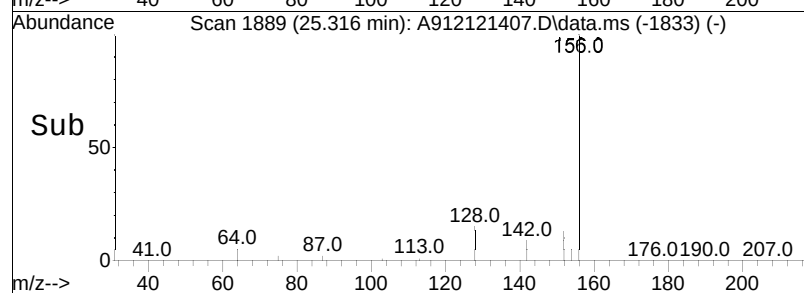
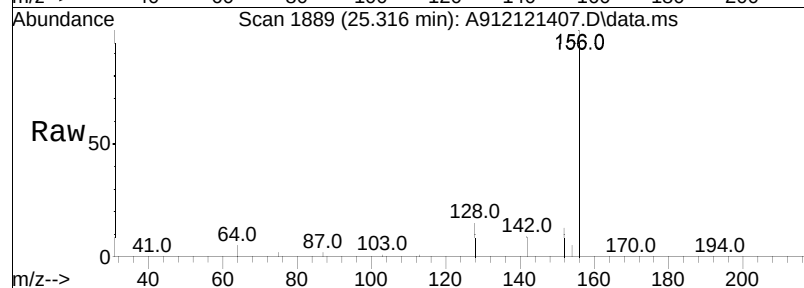
RT: 25.316 min Scan# 1889

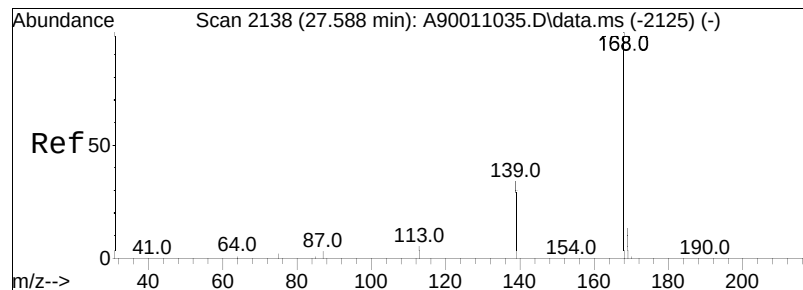
Delta R.T. 0.009 min

Lab File: A912121407.D

Acq: 12 Dec 2014 10:08 pm

Tgt Ion:156 Resp: 2061251





#25

Dibenzofuran

Concen: 11028.52 ng/mL

RT: 27.789 min Scan# 2160

Delta R.T. -0.000 min

Lab File: A912121407.D

Acq: 12 Dec 2014 10:08 pm

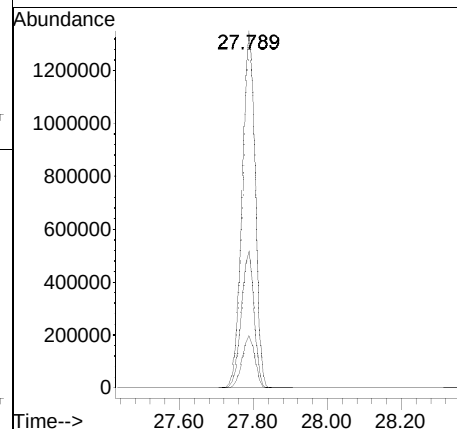
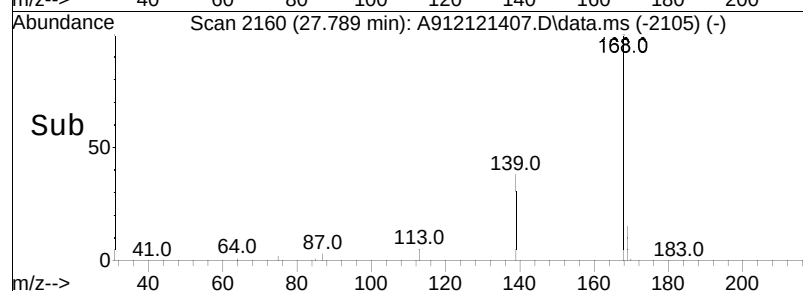
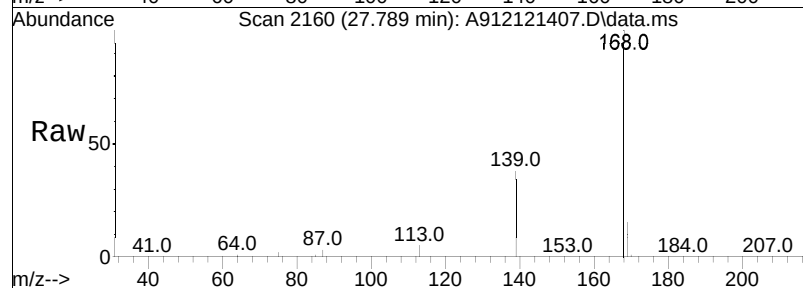
Tgt Ion:168 Resp: 3235405

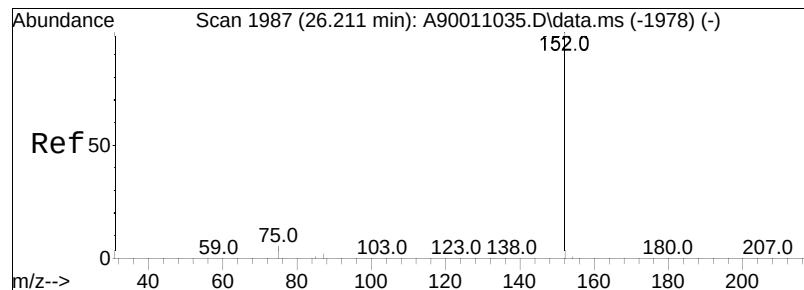
Ion Ratio Lower Upper

168 100

139 38.1 25.1 46.7

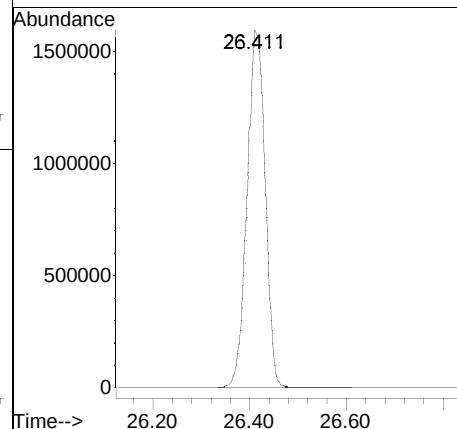
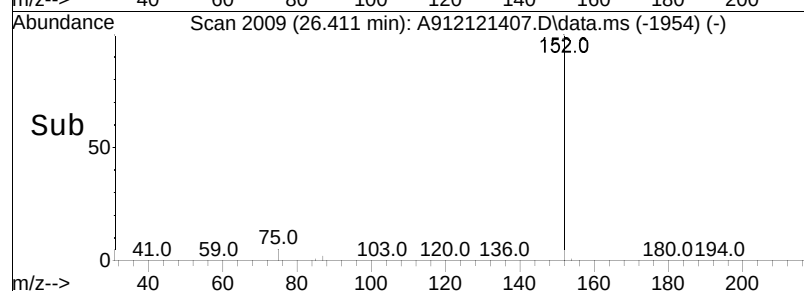
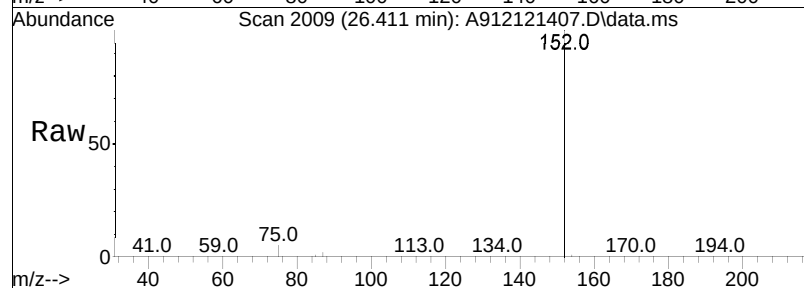
169 14.6 10.2 19.0

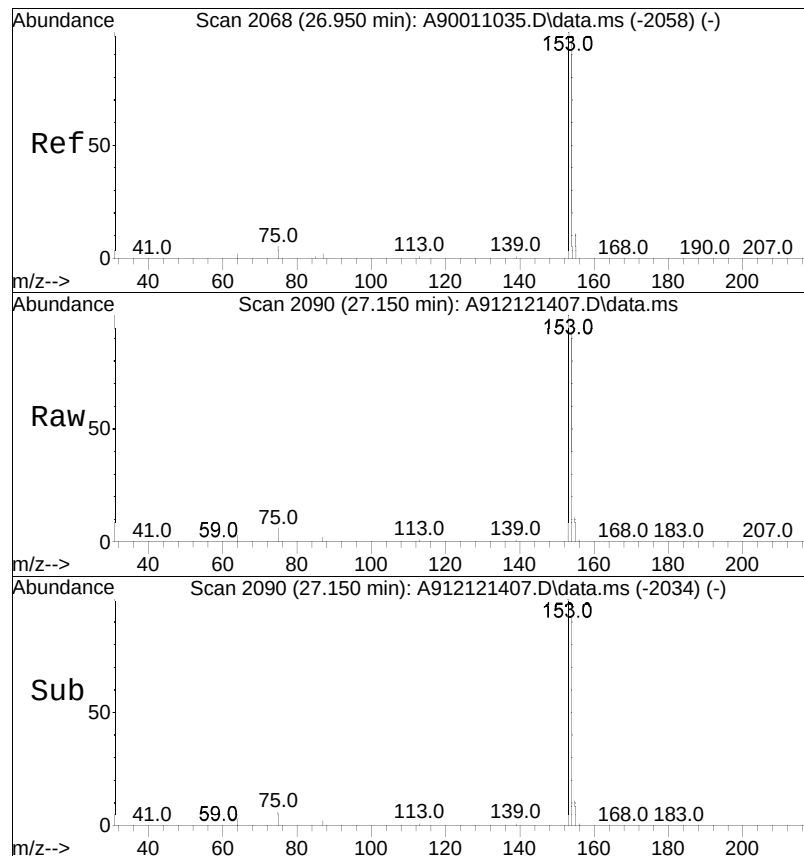




#26
Acenaphthylene
Concen: 11701.52 ng/mL
RT: 26.411 min Scan# 2009
Delta R.T. -0.000 min
Lab File: A912121407.D
Acq: 12 Dec 2014 10:08 pm

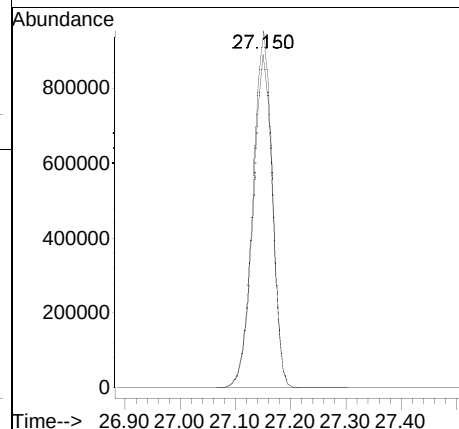
Tgt Ion:152 Resp: 4042971

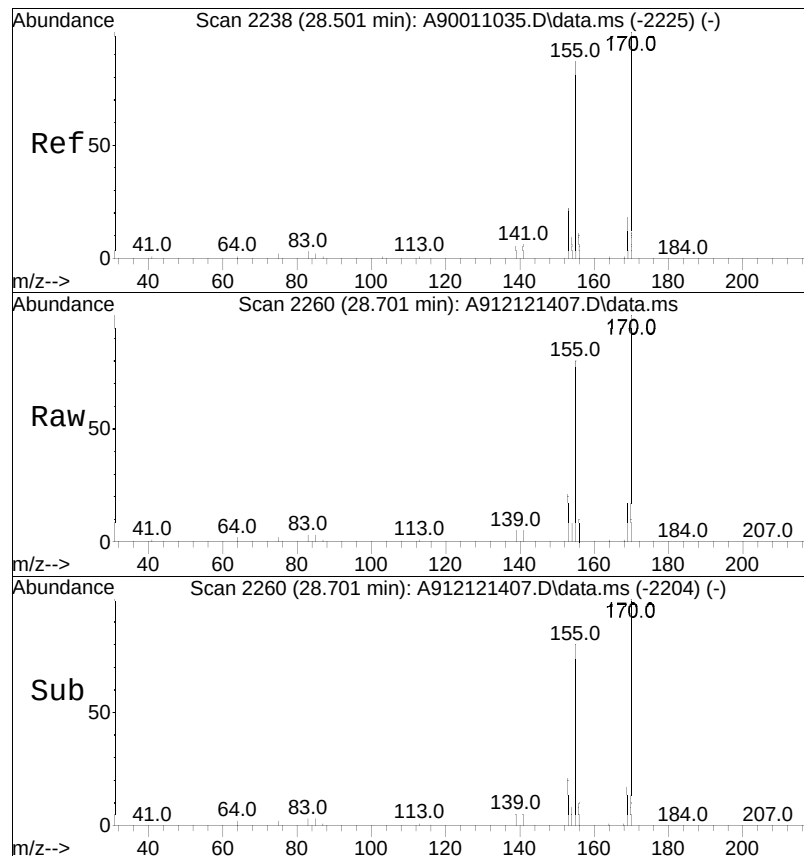




#27
 Acenaphthene
 Concen: 10900.77 ng/mL M4
 RT: 27.150 min Scan# 2090
 Delta R.T. 0.009 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm

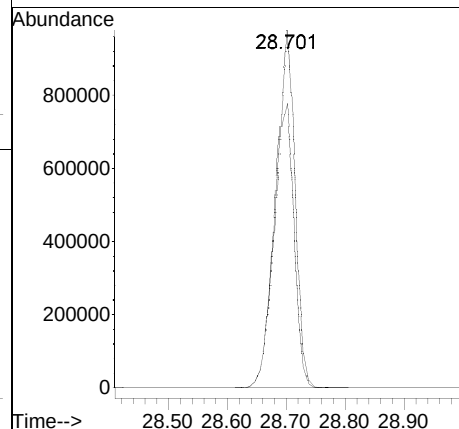
Tgt Ion	Ratio	Lower	Upper
153	100		
154	92.9	64.9	120.5

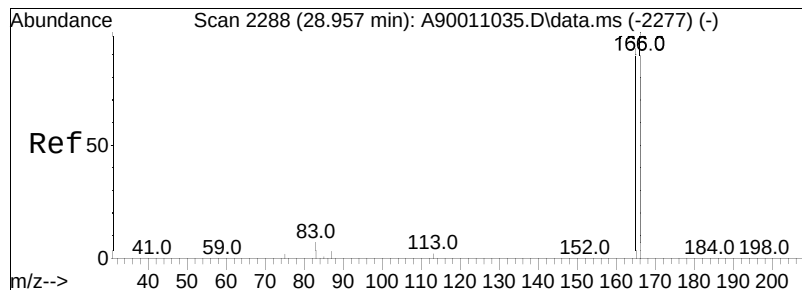




#28
 2,3,5-Trimethylnaphthalene
 Concen: 12769.73 ng/mL
 RT: 28.701 min Scan# 2260
 Delta R.T. 0.009 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm

Tgt Ion	Ratio	Lower	Upper
170	100		
155	82.8	55.9	103.9





#29

Fluorene

Concen: 13550.00 ng/mL

RT: 29.167 min Scan# 2311

Delta R.T. 0.009 min

Lab File: A912121407.D

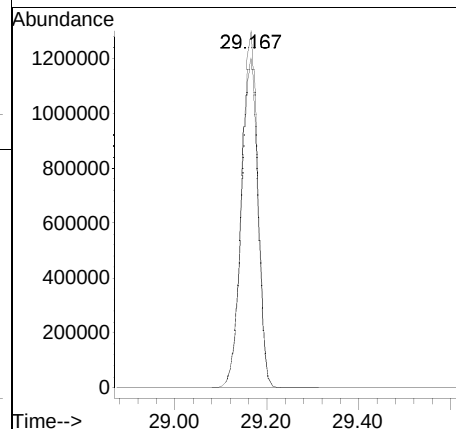
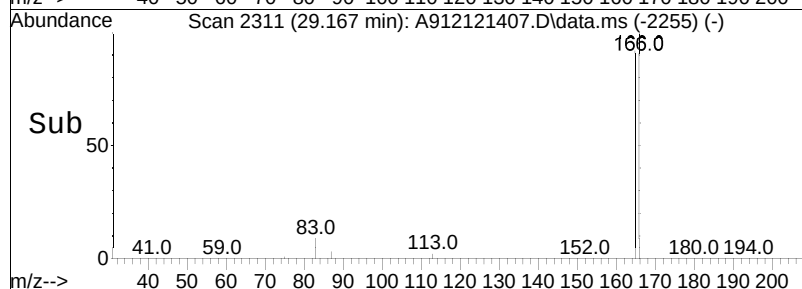
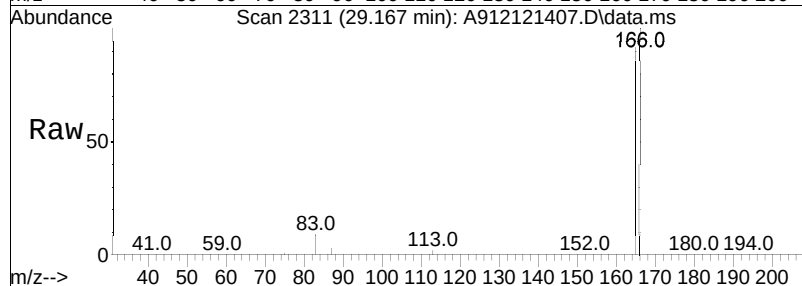
Acq: 12 Dec 2014 10:08 pm

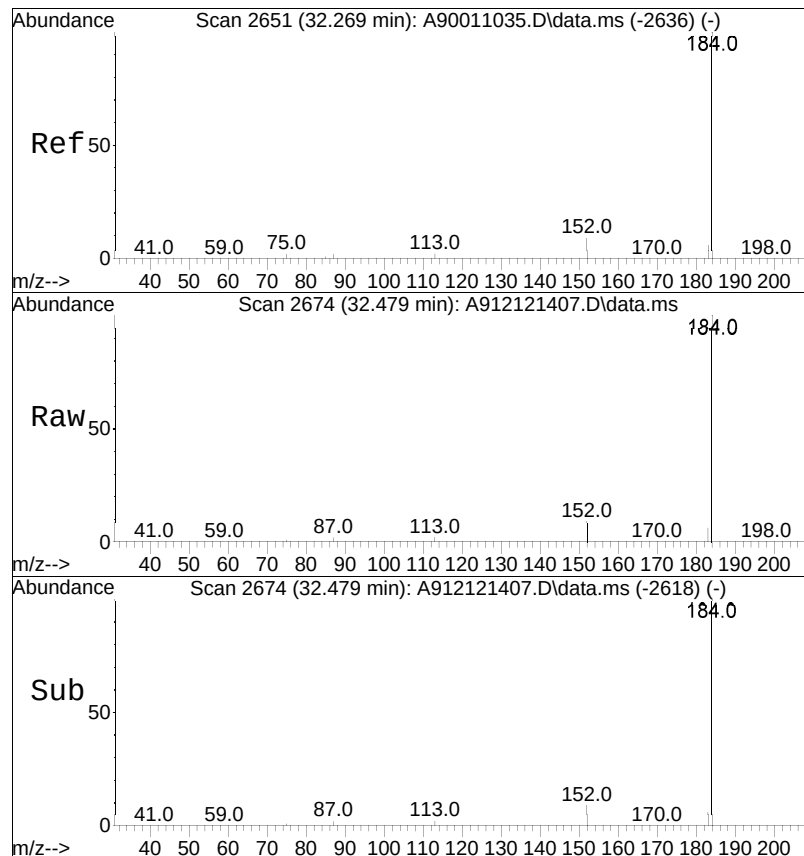
Tgt Ion:166 Resp: 3196206

Ion Ratio Lower Upper

166 100

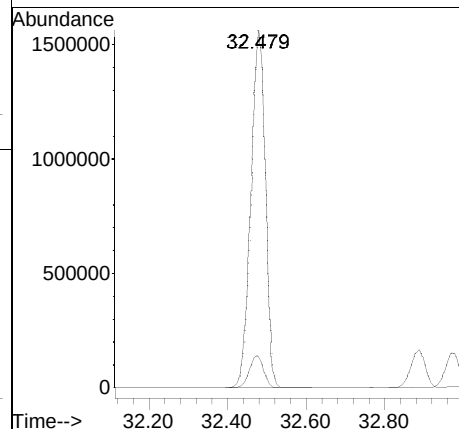
165 93.0 65.5 121.7

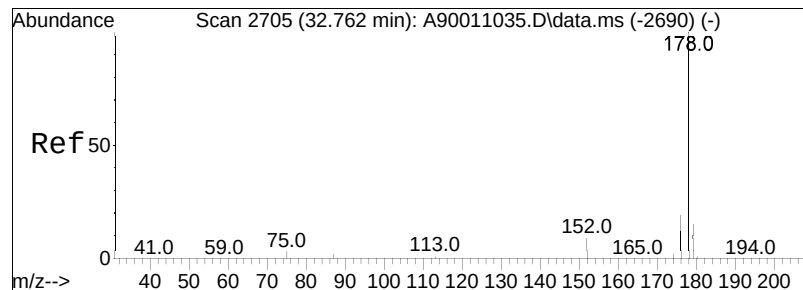




#33
 Dibenzothiophene
 Concen: 12701.03 ng/mL
 RT: 32.479 min Scan# 2674
 Delta R.T. 0.009 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm

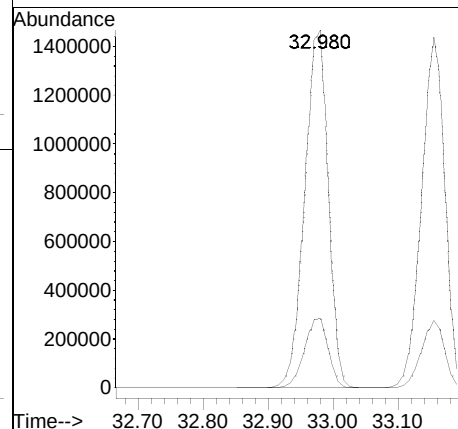
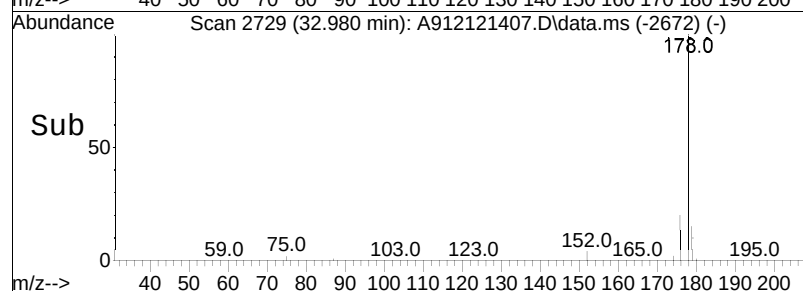
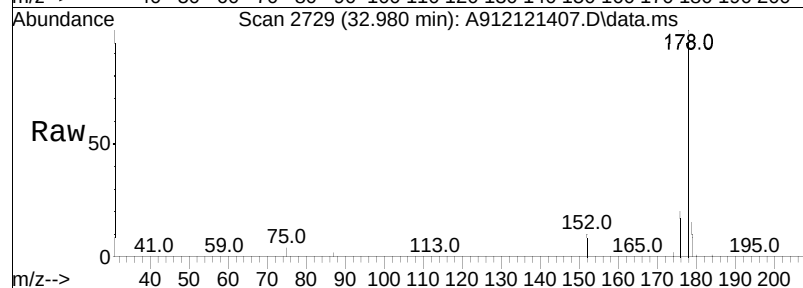
Tgt Ion	Ratio	Lower	Upper
184	100		
152	9.0	6.3	11.7

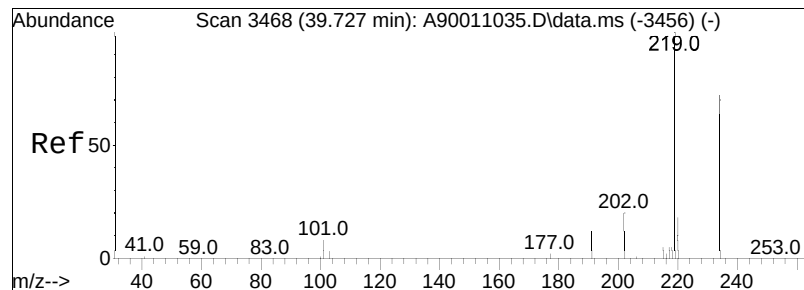




#43
 Phenanthrene
 Concen: 11311.06 ng/mL
 RT: 32.980 min Scan# 2729
 Delta R.T. 0.018 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
176	19.6	13.7	25.5





#54

Retene

Concen: 13082.29 ng/mL

RT: 39.946 min Scan# 3492

Delta R.T. 0.018 min

Lab File: A912121407.D

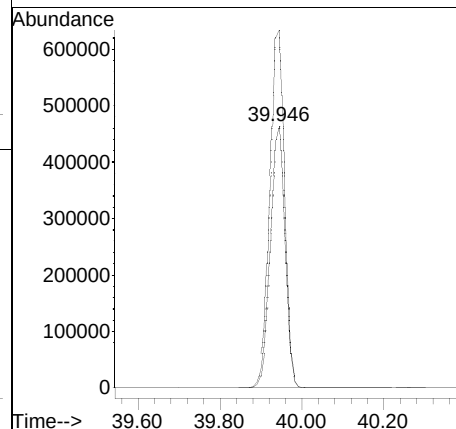
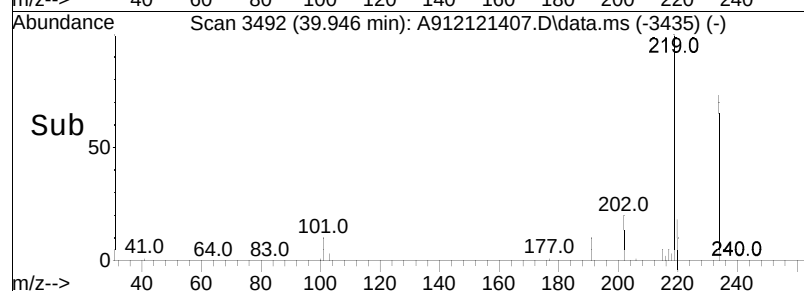
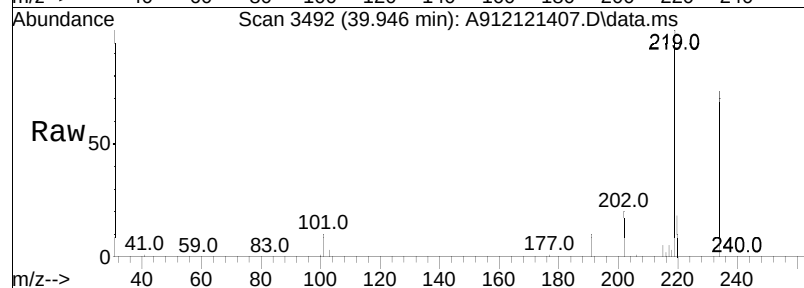
Acq: 12 Dec 2014 10:08 pm

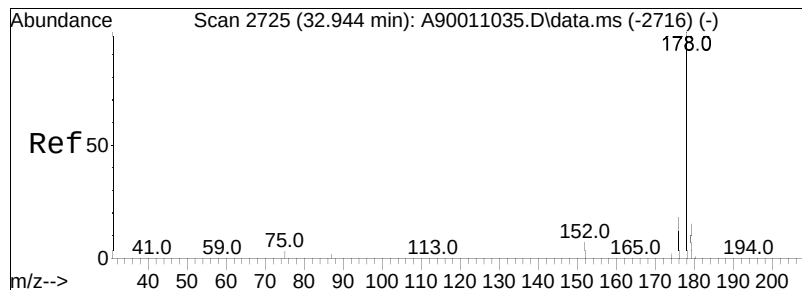
Tgt Ion: 234 Resp: 1121614

Ion Ratio Lower Upper

234 100

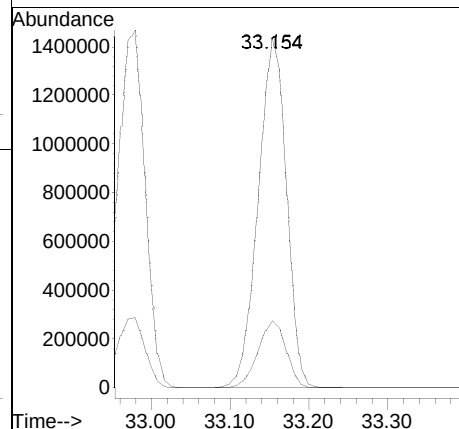
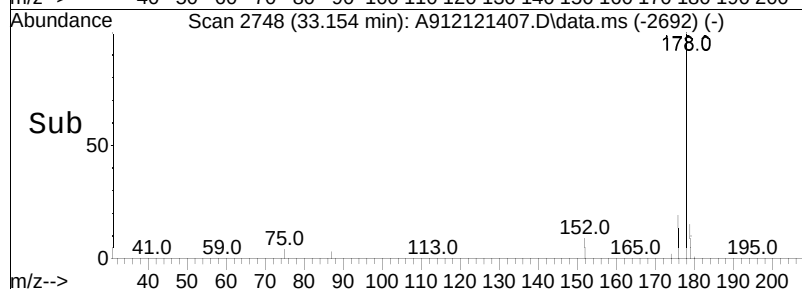
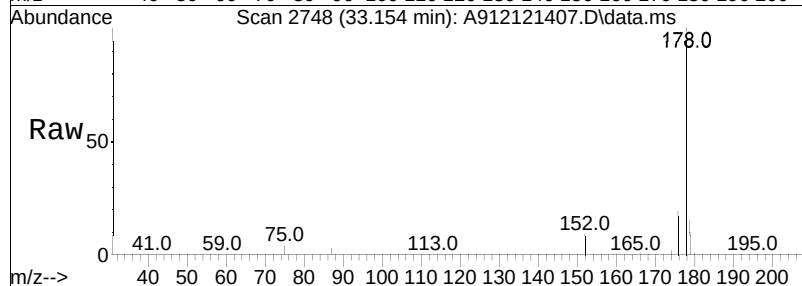
219 138.5 96.7 179.7

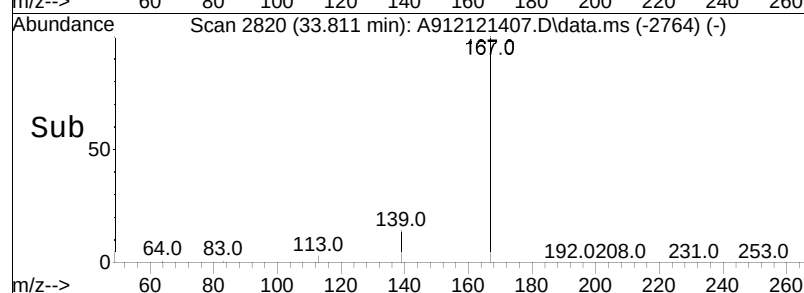
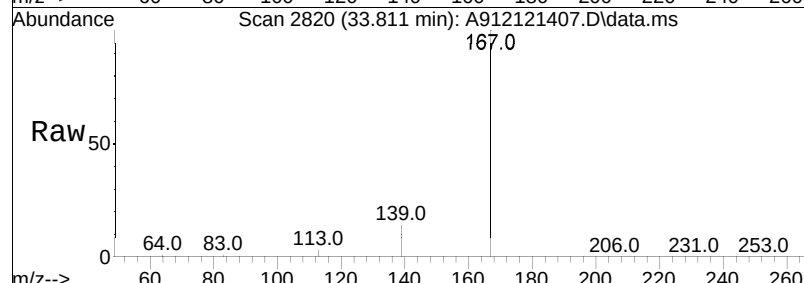
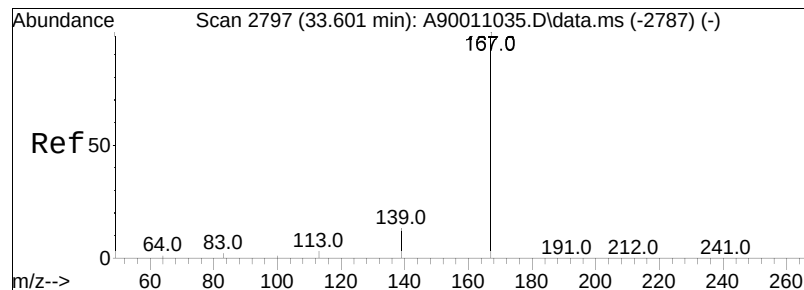




#55
 Anthracene
 Concen: 11940.68 ng/mL M4
 RT: 33.154 min Scan# 2748
 Delta R.T. 0.009 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm

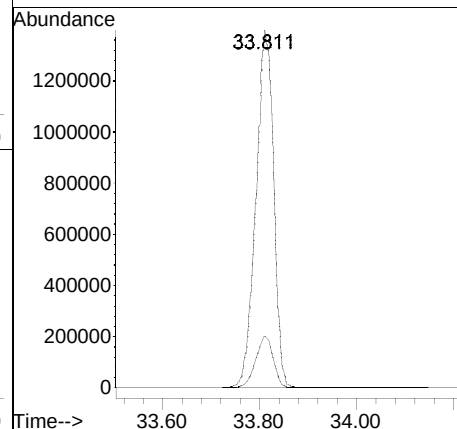
Tgt Ion	Ratio	Lower	Upper
178	100		
176	19.0	13.4	24.8

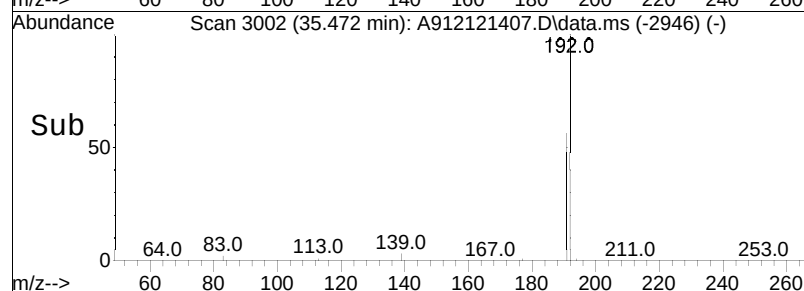
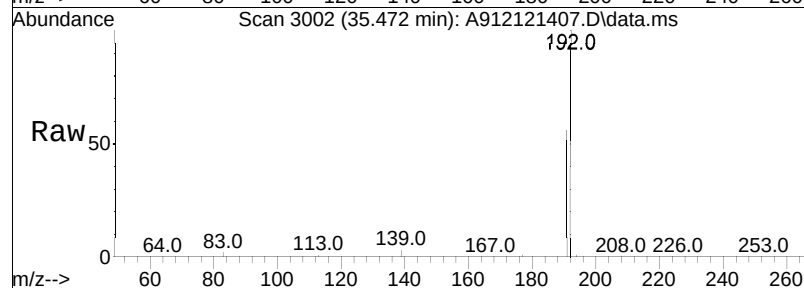
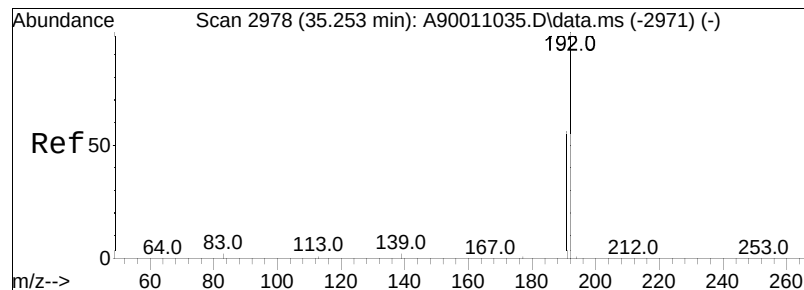




#56
 Carbazole
 Concen: 11367.15 ng/mL M4
 RT: 33.811 min Scan# 2820
 Delta R.T. 0.009 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm

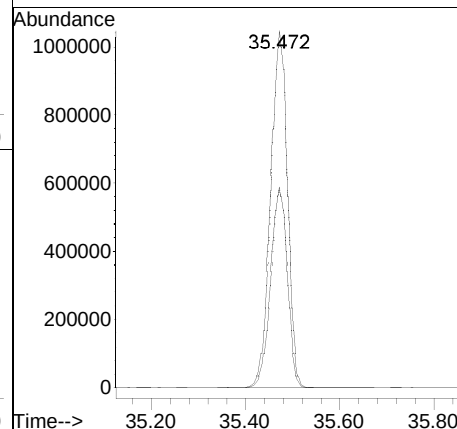
Tgt Ion:167 Resp: 3481379
 Ion Ratio Lower Upper
 167 100
 139 14.3 9.9 18.3

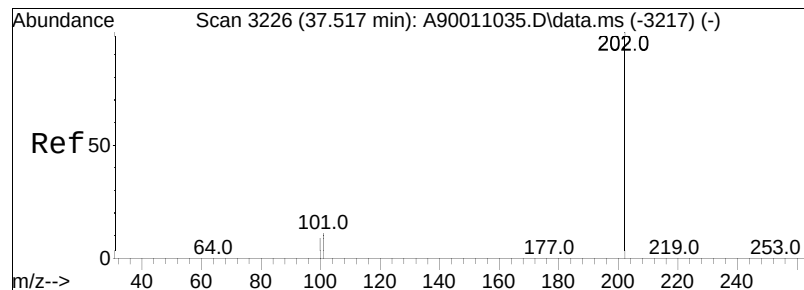




#57
 1-Methylphenanthrene
 Concen: 11496.46 ng/mL
 RT: 35.472 min Scan# 3002
 Delta R.T. 0.009 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm

Tgt Ion	Ratio	Lower	Upper
192	100		
191	56.2	39.8	74.0





#58

Fluoranthene

Concen: 12657.95 ng/mL M4

RT: 37.736 min Scan# 3250

Delta R.T. 0.009 min

Lab File: A912121407.D

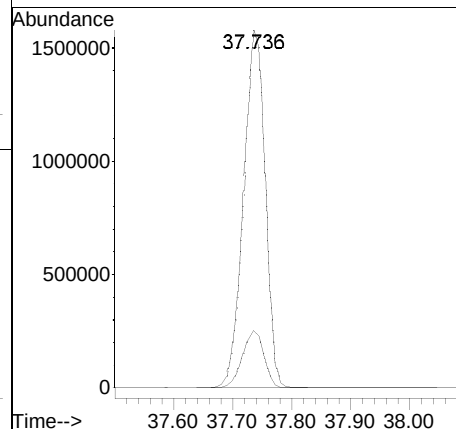
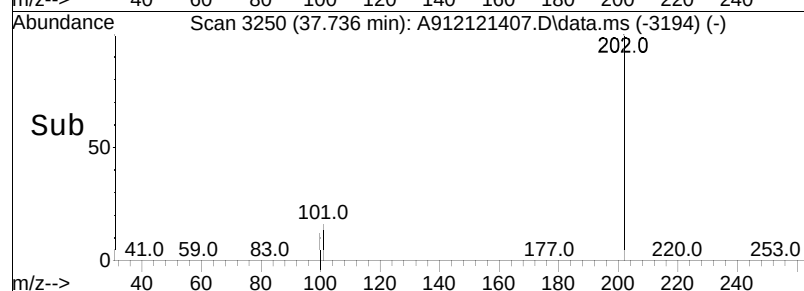
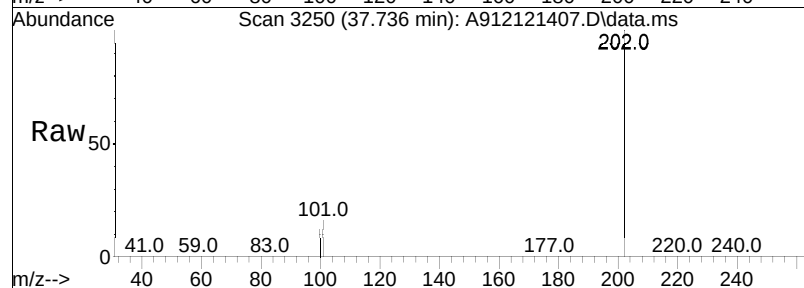
Acq: 12 Dec 2014 10:08 pm

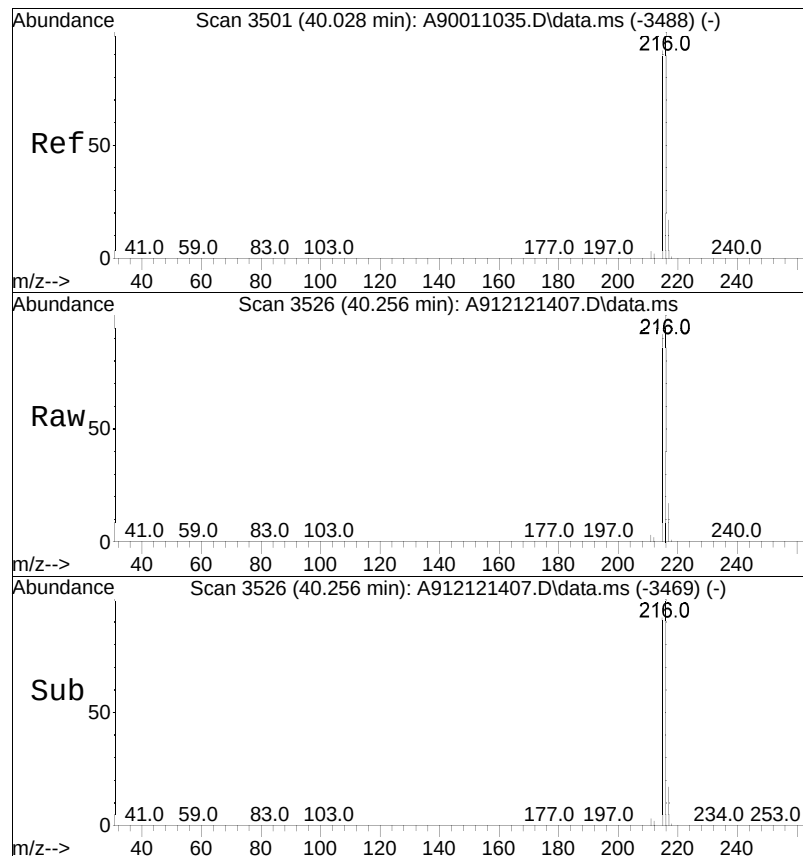
Tgt Ion: 202 Resp: 3969460

Ion Ratio Lower Upper

202 100

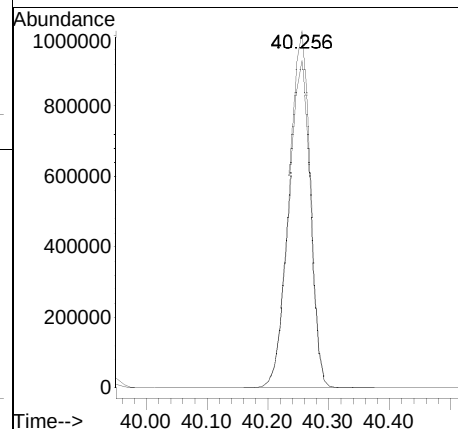
101 16.0 11.8 22.0

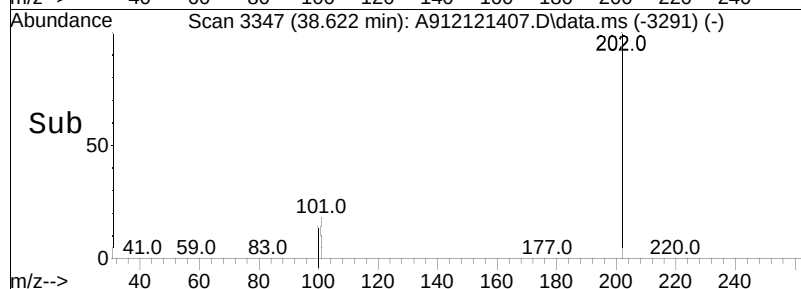
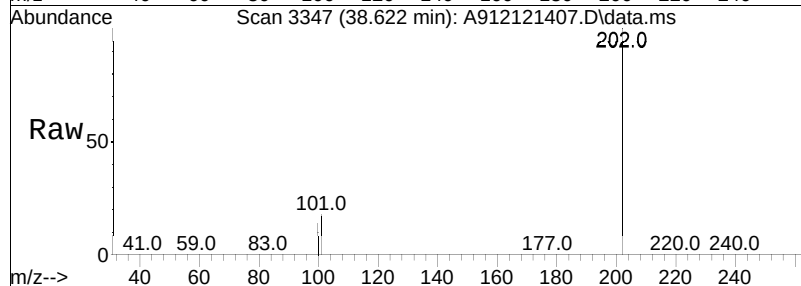
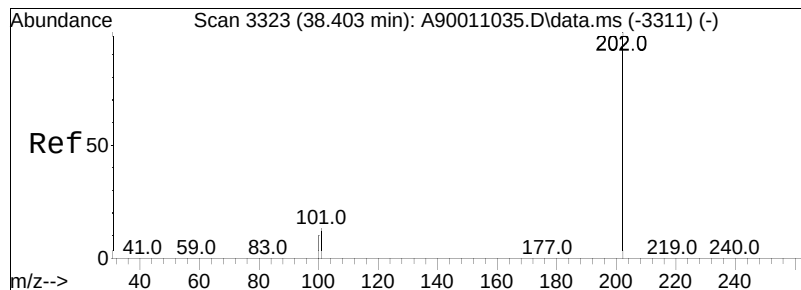




#59
 Benzo(b)fluorene
 Concen: 13368.06 ng/mL
 RT: 40.256 min Scan# 3526
 Delta R.T. 0.018 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm

Tgt Ion	Ratio	Lower	Upper
216	100		
215	92.1	64.3	119.3





#60

Pyrene

Concen: 13085.95 ng/mL

RT: 38.622 min Scan# 3347

Delta R.T. 0.009 min

Lab File: A912121407.D

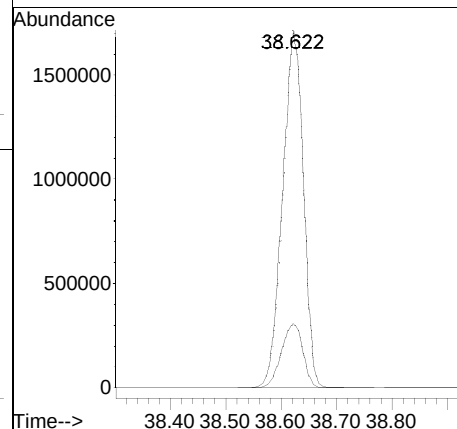
Acq: 12 Dec 2014 10:08 pm

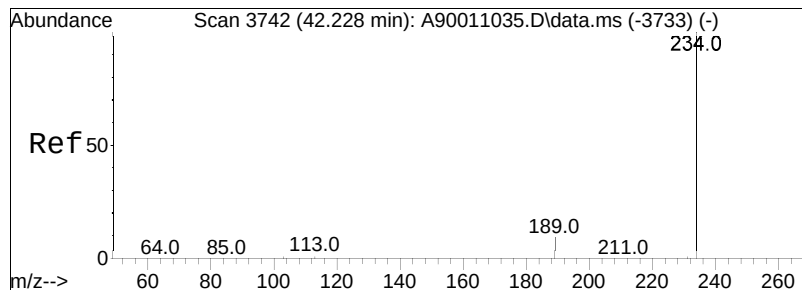
Tgt Ion: 202 Resp: 4372896

Ion Ratio Lower Upper

202 100

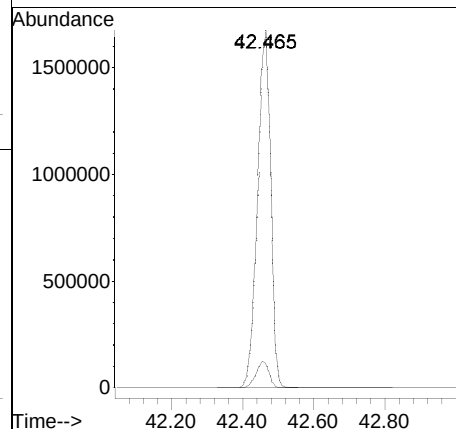
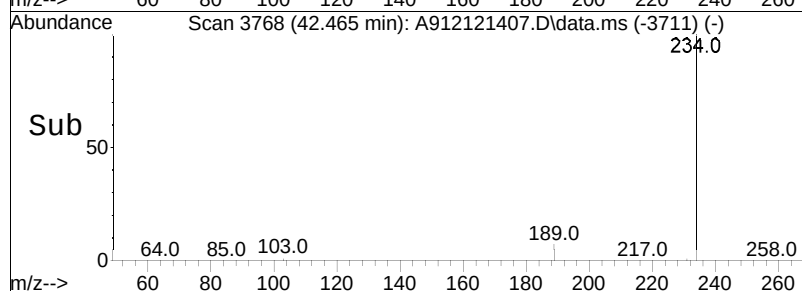
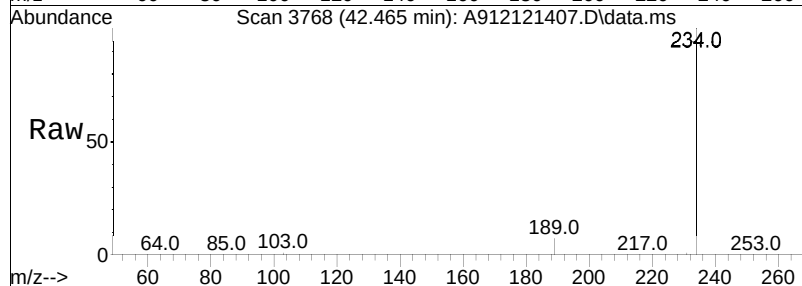
101 18.8 14.2 26.4

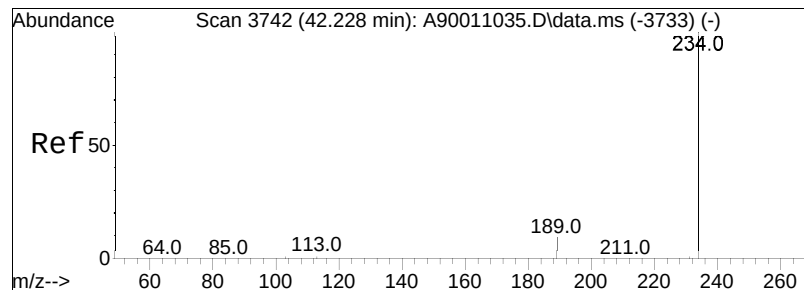




#66
 Naphthobenzothiophene
 Concen: 14156.01 ng/ml
 RT: 42.465 min Scan# 3768
 Delta R.T. 0.018 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm

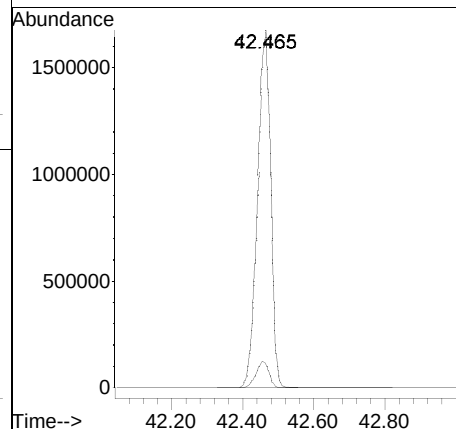
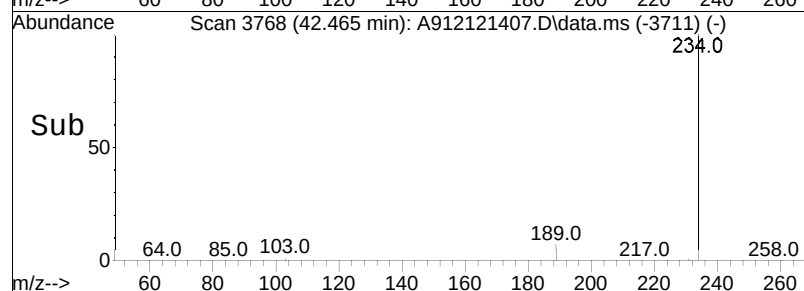
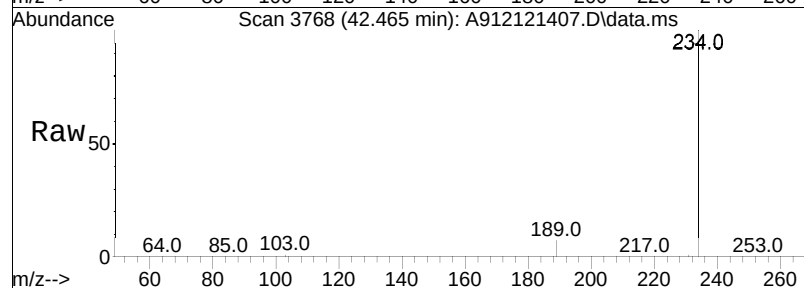
Tgt Ion: 234 Resp: 4191132
 Ion Ratio Lower Upper
 234 100
 189 7.4 4.9 9.1

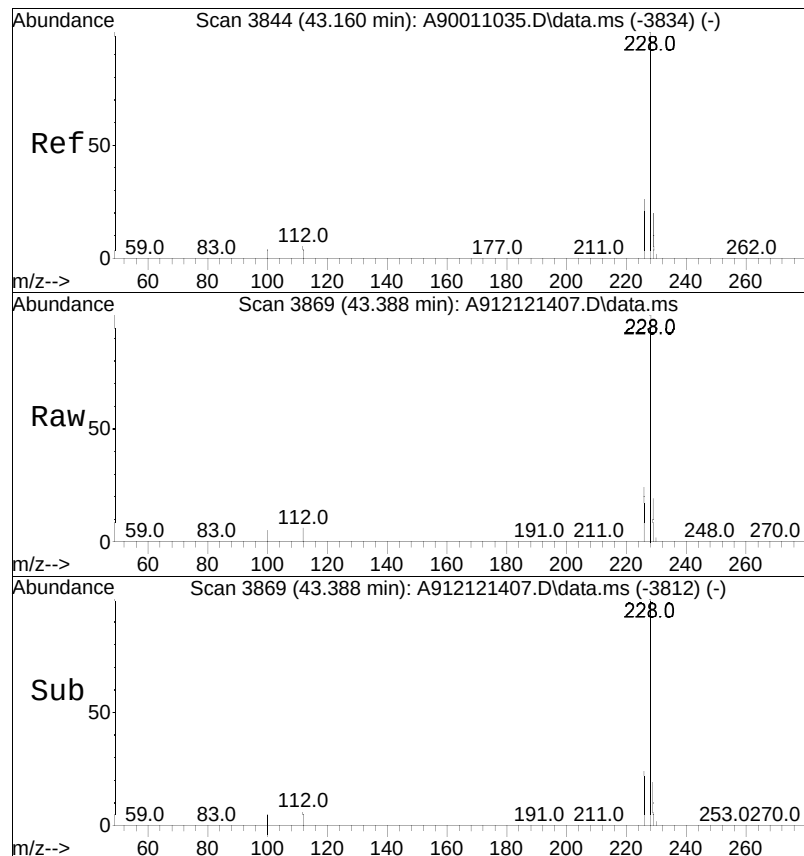




#67
 Naphthobenzothiophene-2,1-D
 Concen: 14156.01 ng/mL
 RT: 42.465 min Scan# 3768
 Delta R.T. 0.018 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm

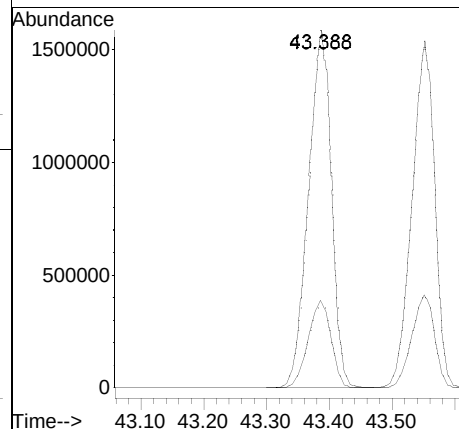
Tgt Ion: 234 Resp: 4191132
 Ion Ratio Lower Upper
 234 100
 189 7.4 4.9 9.1

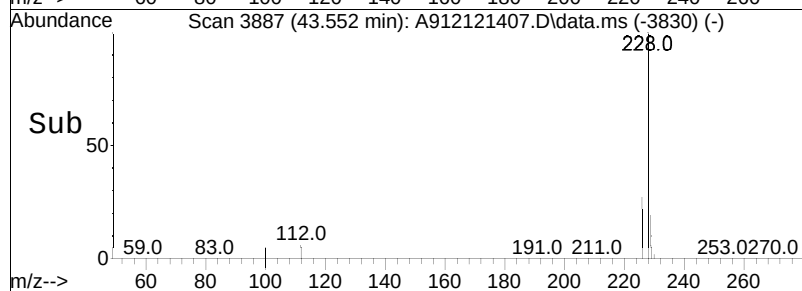
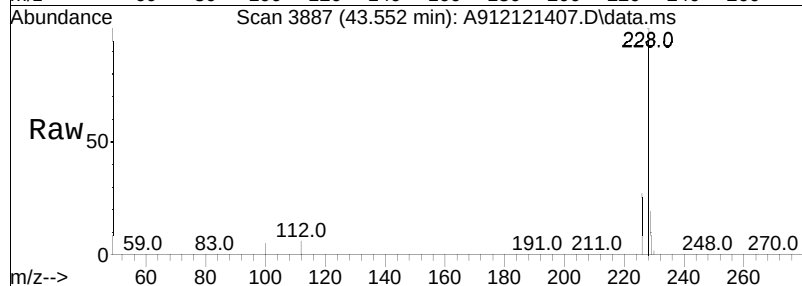
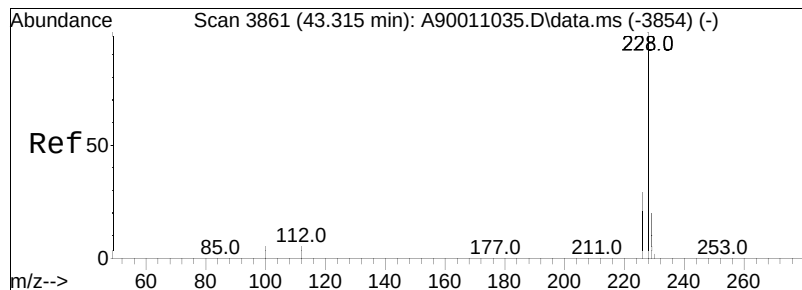




#75
 Benz[a]anthracene
 Concen: 12591.73 ng/mL
 RT: 43.388 min Scan# 3869
 Delta R.T. 0.018 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm

Tgt Ion:228 Resp: 4034086
 Ion Ratio Lower Upper
 228 100
 226 24.4 17.3 32.1





#76

Chrysene

Concen: 12265.36 ng/mL

RT: 43.552 min Scan# 3887

Delta R.T. 0.018 min

Lab File: A912121407.D

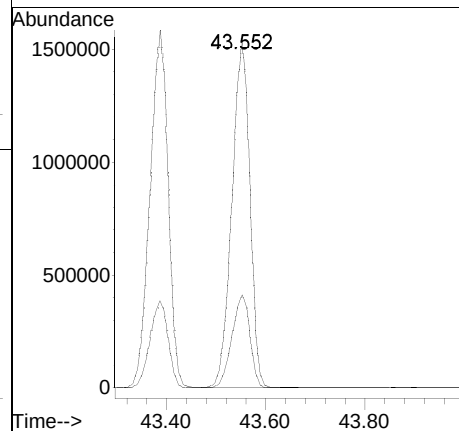
Acq: 12 Dec 2014 10:08 pm

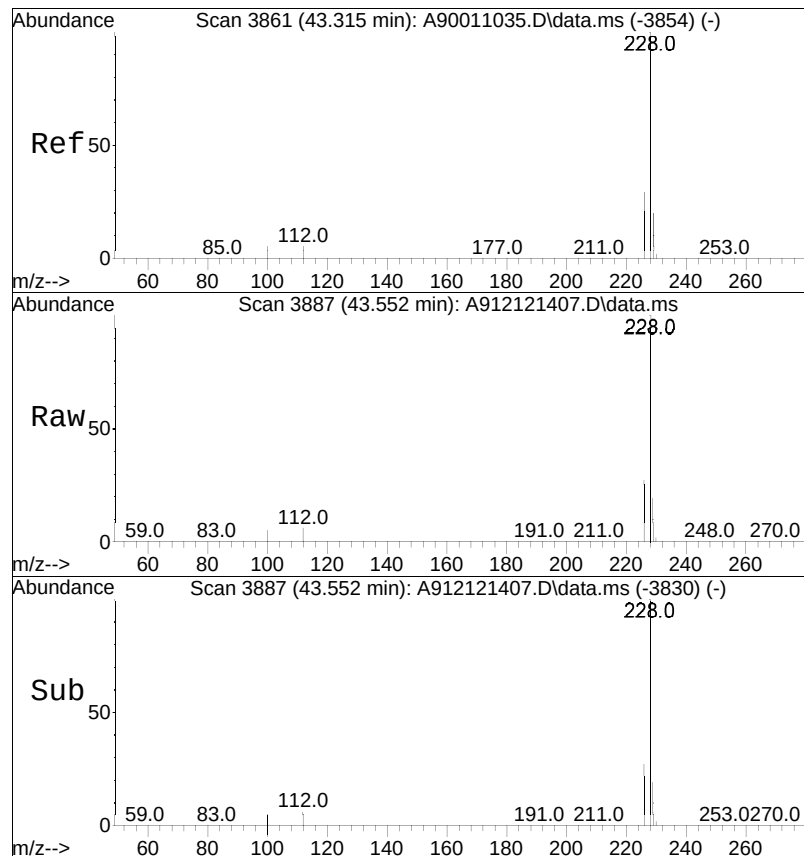
Tgt Ion: 228 Resp: 3867054

Ion Ratio Lower Upper

228 100

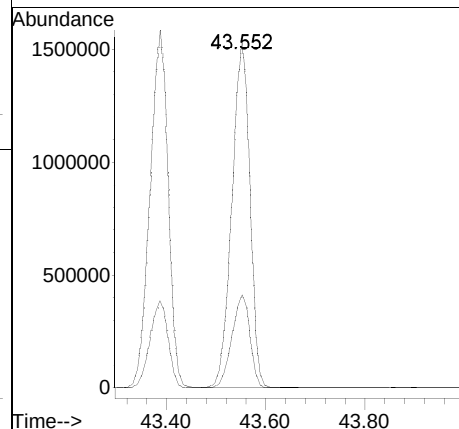
226 26.9 18.8 34.8

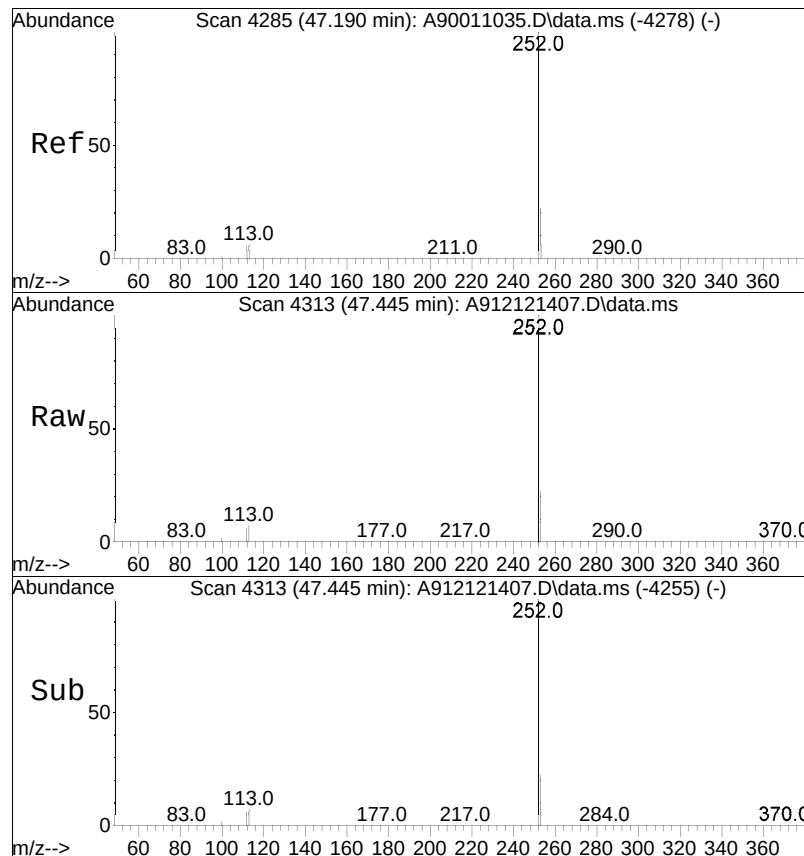




#77
 Chrysene/Triphenylene
 Concen: 12265.36 ng/mL
 RT: 43.552 min Scan# 3887
 Delta R.T. 0.018 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm

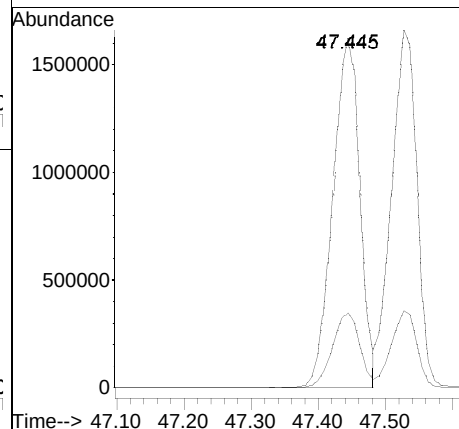
Tgt Ion: 228 Resp: 3867054
 Ion Ratio Lower Upper
 228 100
 226 26.9 18.8 34.8

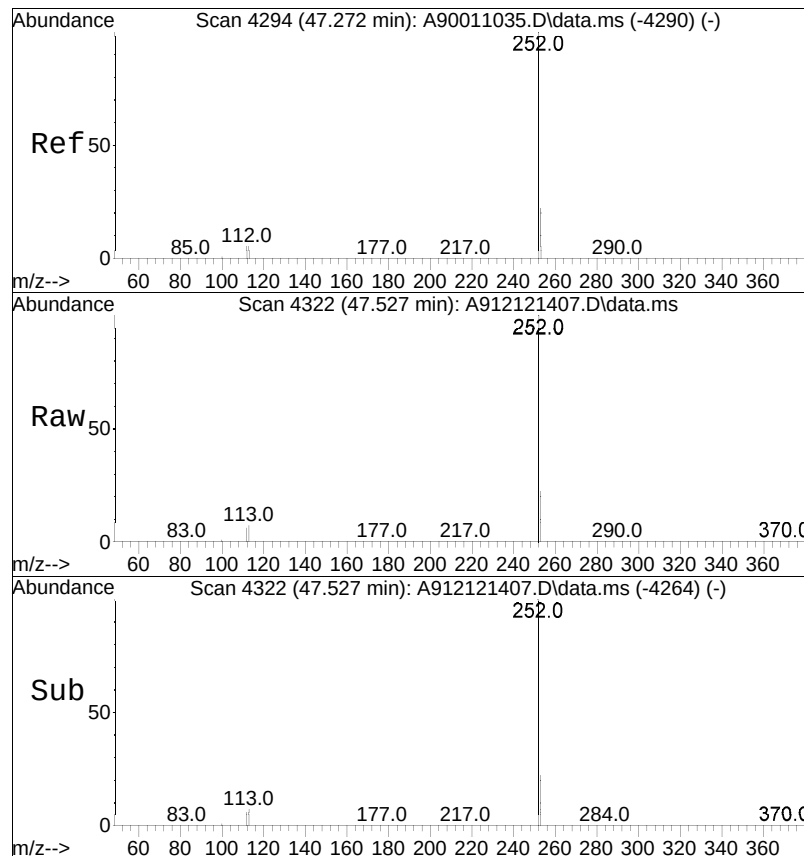




#84
 Benzo[b]fluoranthene
 Concen: 11633.53 ng/mL
 RT: 47.445 min Scan# 4313
 Delta R.T. 0.027 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm

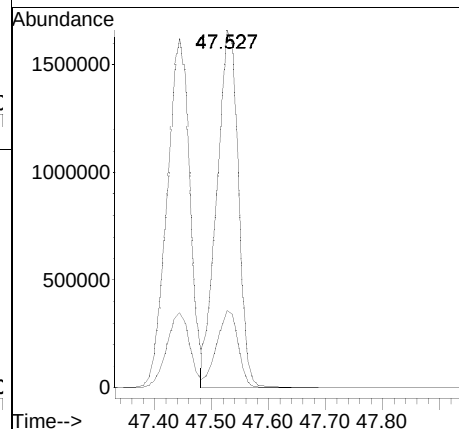
Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.6	16.4	30.4

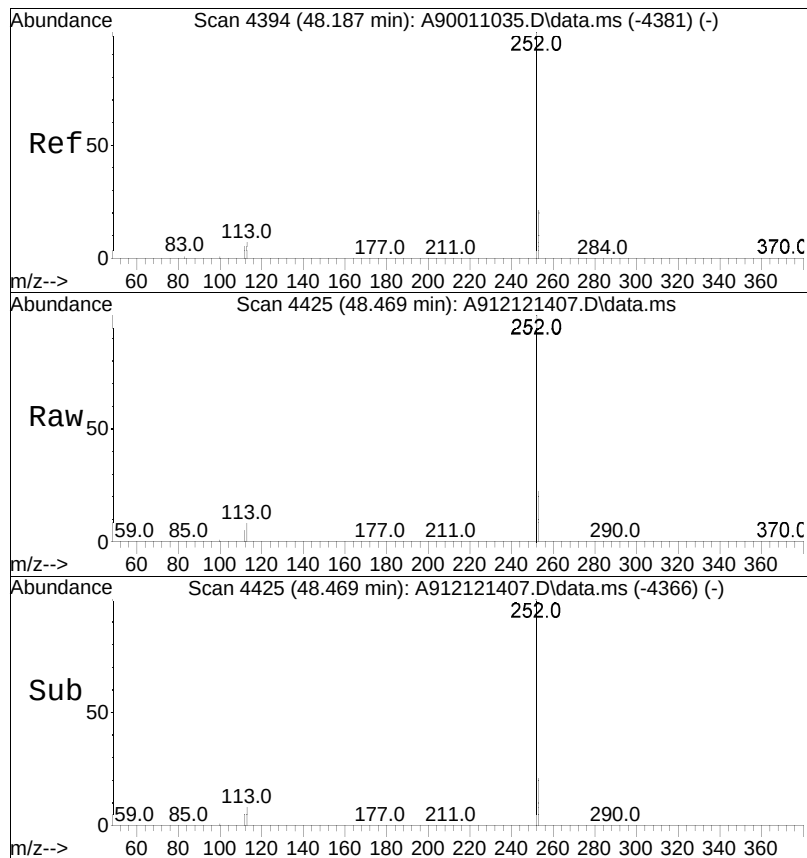




#85
 Benzo[j]+[k]fluoranthene
 Concen: 11400.27 ng/mL
 RT: 47.527 min Scan# 4322
 Delta R.T. 0.027 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm

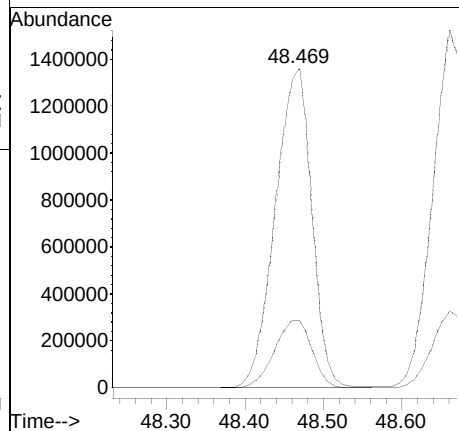
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.5	16.1	29.9	

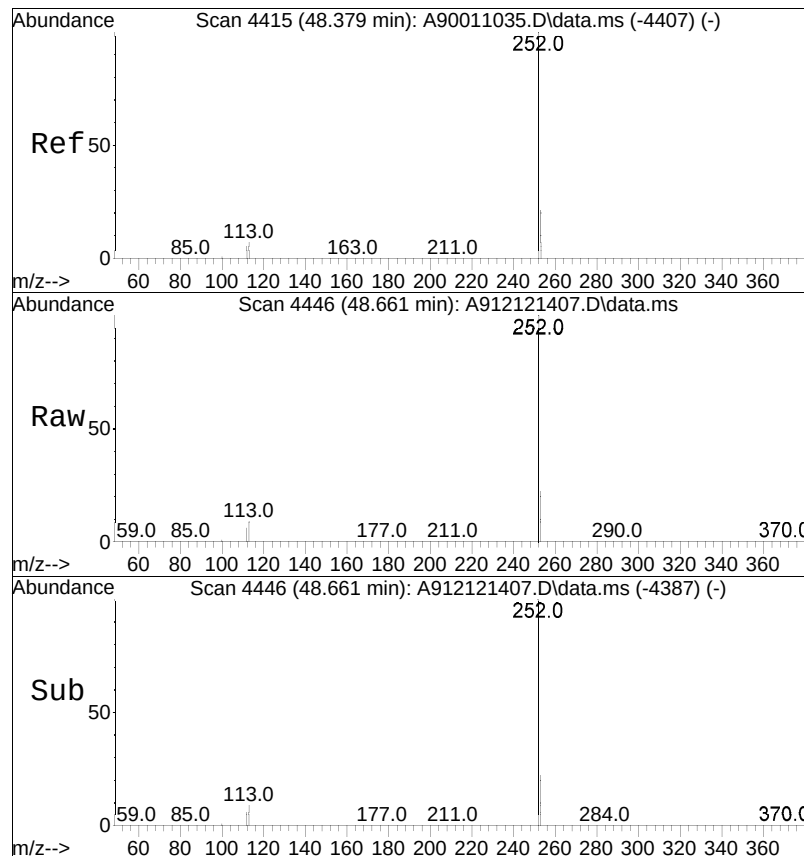




#87
 Benzo[e]pyrene
 Concen: 11558.92 ng/mL
 RT: 48.469 min Scan# 4425
 Delta R.T. 0.036 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm

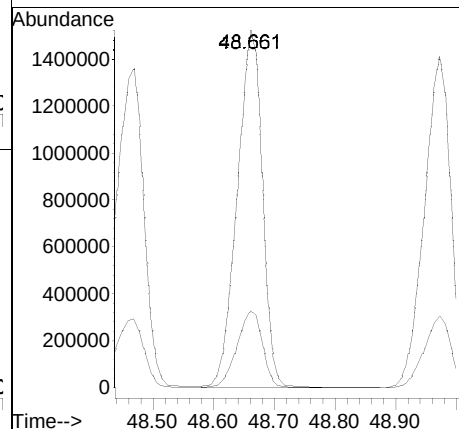
Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.5	16.2	30.0

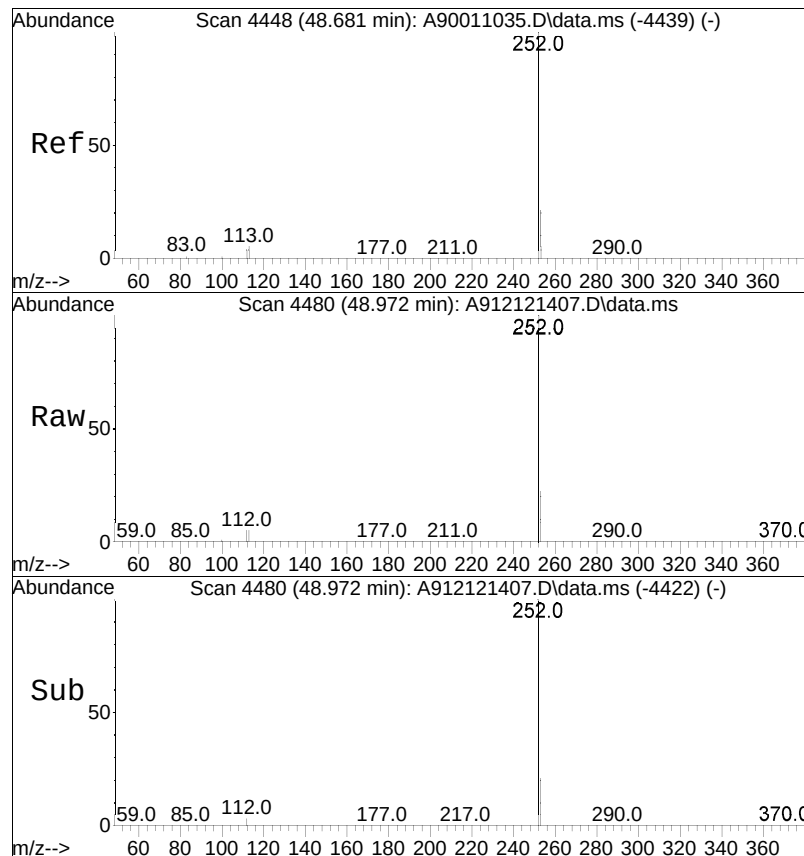




#89
 Benzo[a]pyrene
 Concen: 11933.53 ng/mL
 RT: 48.661 min Scan# 4446
 Delta R.T. 0.036 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm

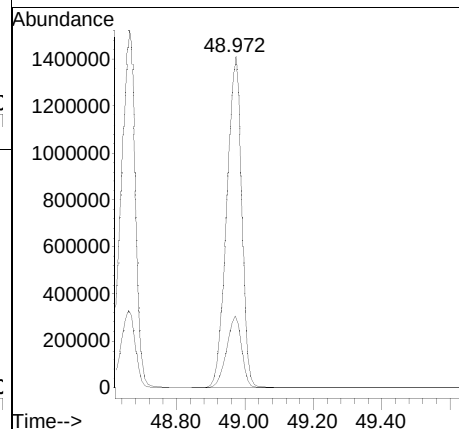
Tgt Ion: 252 Resp: 4398715
 Ion Ratio Lower Upper
 252 100
 253 21.6 16.4 30.6

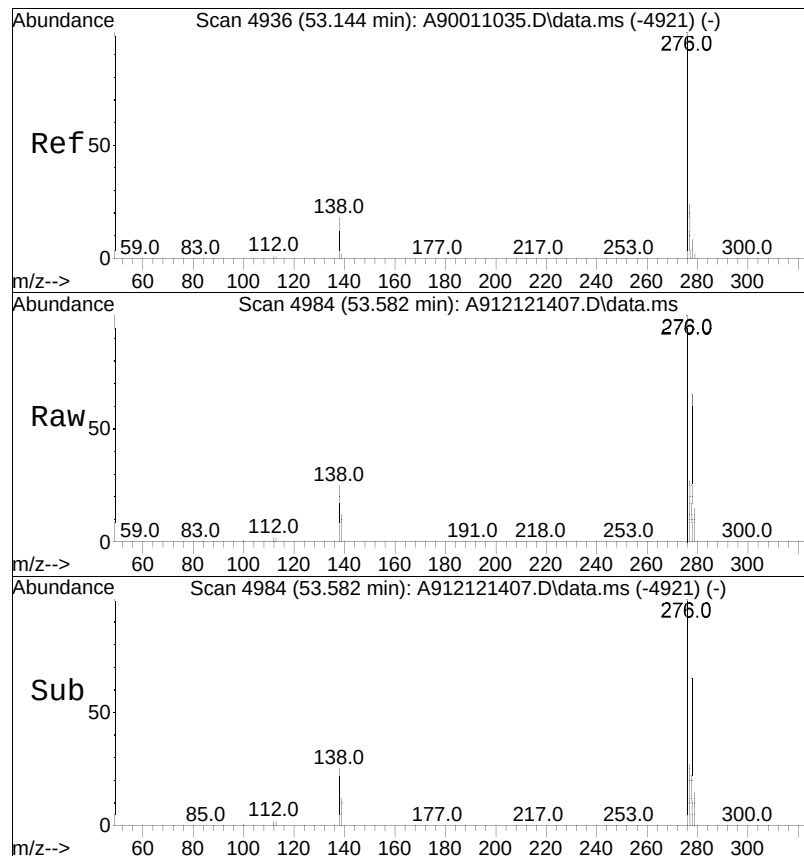




#90
 Perylene
 Concen: 11463.06 ng/mL
 RT: 48.972 min Scan# 4480
 Delta R.T. 0.027 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm

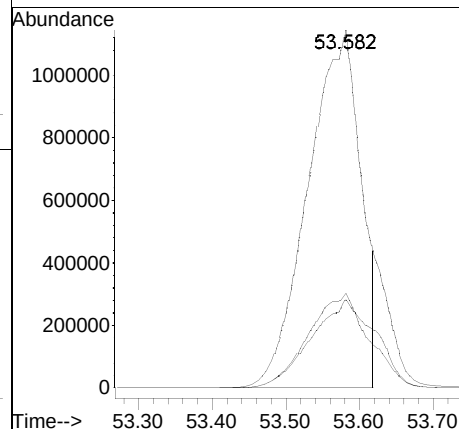
Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.4	16.6	30.8

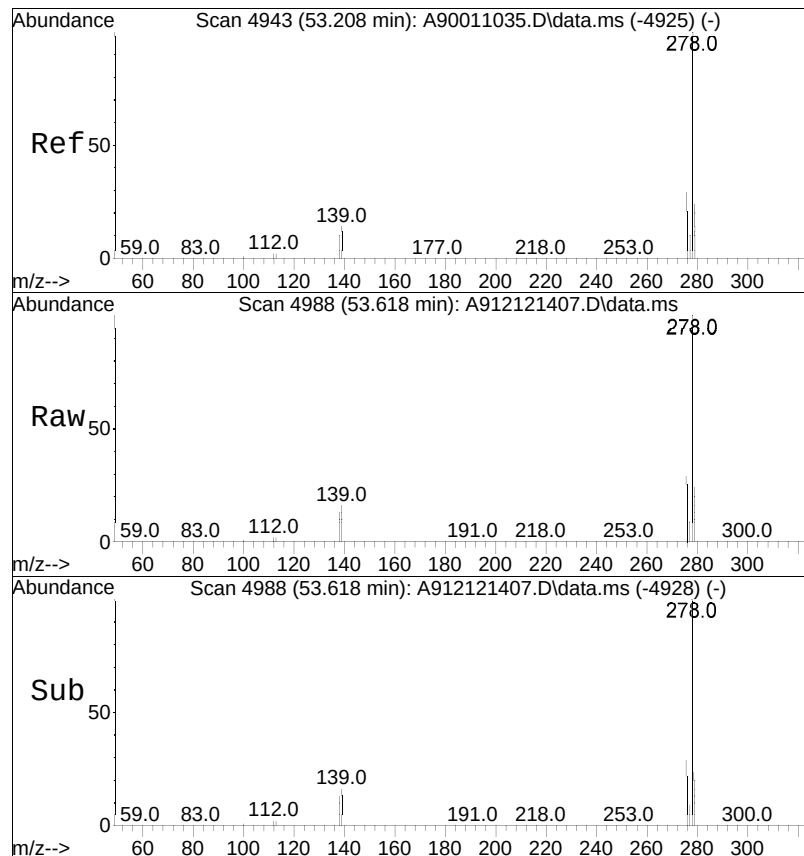




#91
 Indeno[1,2,3-cd]pyrene
 Concen: 12006.69 ng/mL M3
 RT: 53.582 min Scan# 4984
 Delta R.T. 0.073 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm

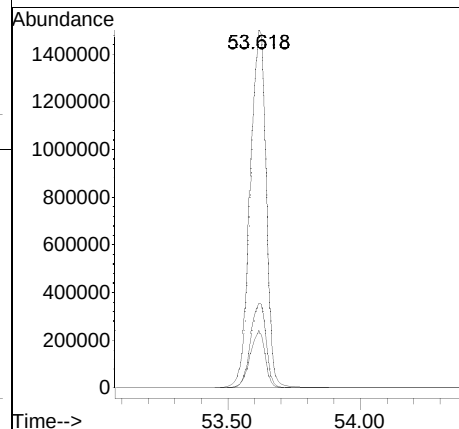
Tgt Ion	Ratio	Lower	Upper
276	100		
138	30.0	15.7	29.1#
277	30.3	17.9	33.3

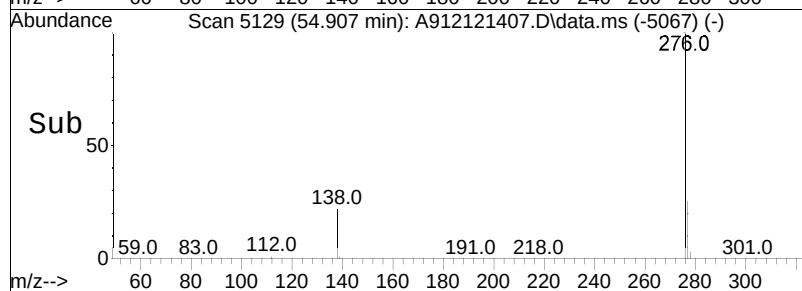
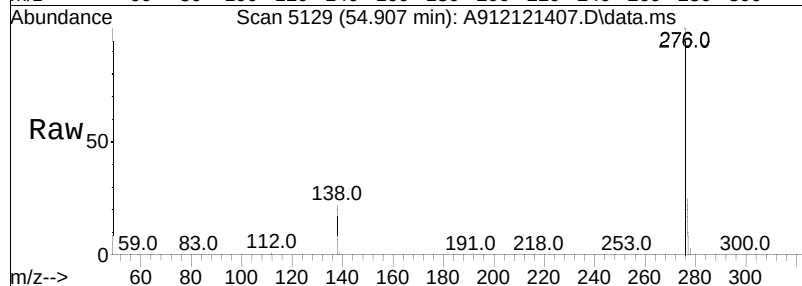
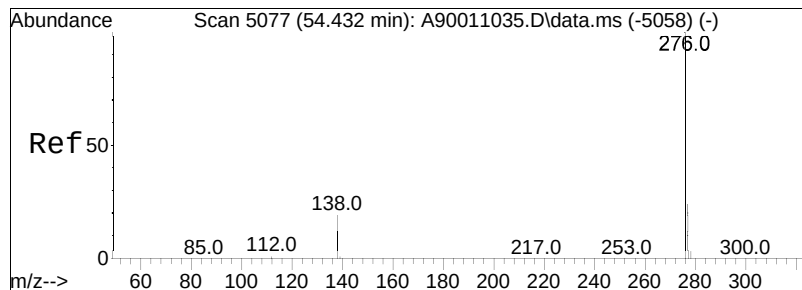




#92
 Dibenz[ah]+[ac]anthracene
 Concen: 14037.69 ng/mL
 RT: 53.618 min Scan# 4988
 Delta R.T. 0.046 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm

Tgt Ion:	278	Resp:	6231334
Ion Ratio	Lower	Upper	
278	100		
139	15.5	11.4	21.2
279	23.3	16.3	30.3





#93

Benzo[g,h,i]perylene

Concen: 13376.16 ng/mL

RT: 54.907 min Scan# 5129

Delta R.T. 0.064 min

Lab File: A912121407.D

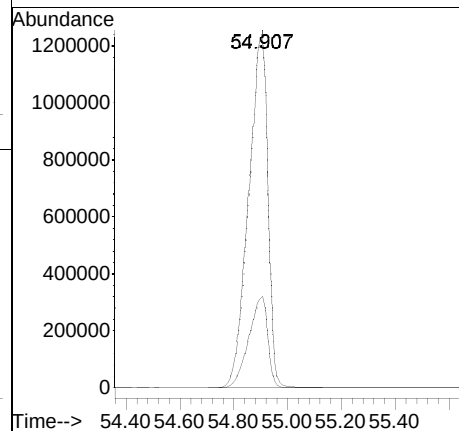
Acq: 12 Dec 2014 10:08 pm

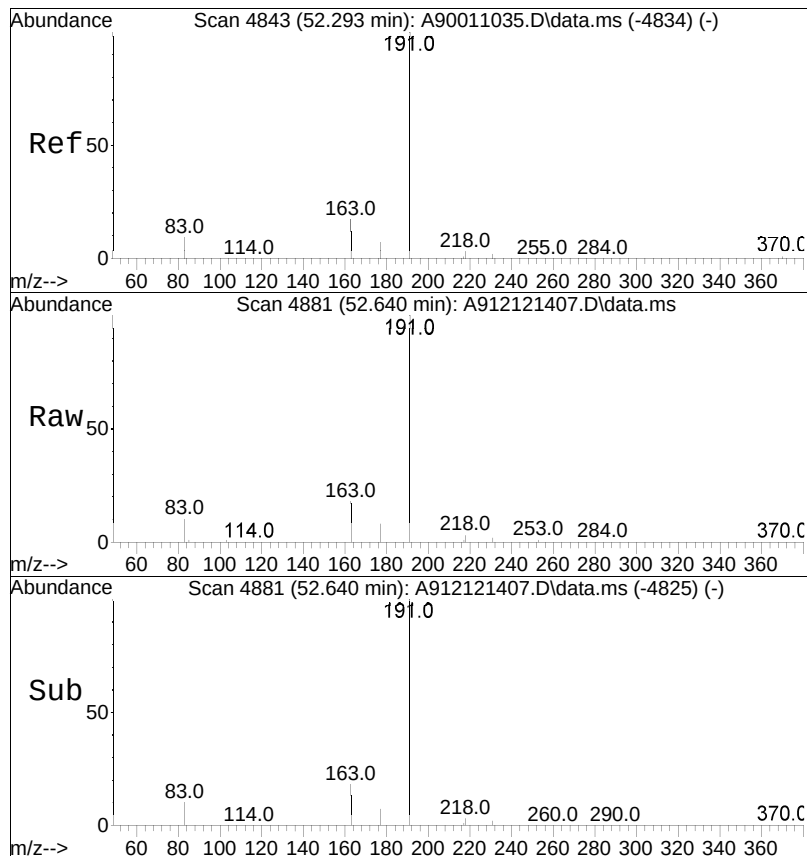
Tgt Ion: 276 Resp: 6094381

Ion Ratio Lower Upper

276 100

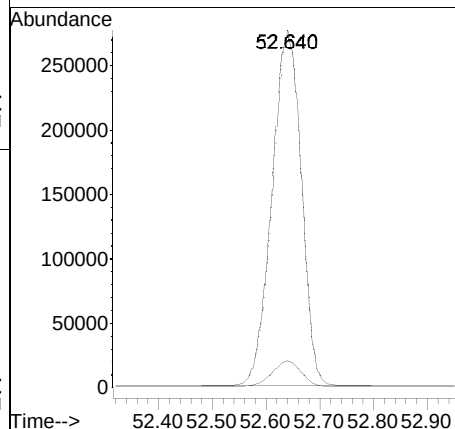
277 25.6 17.4 32.2

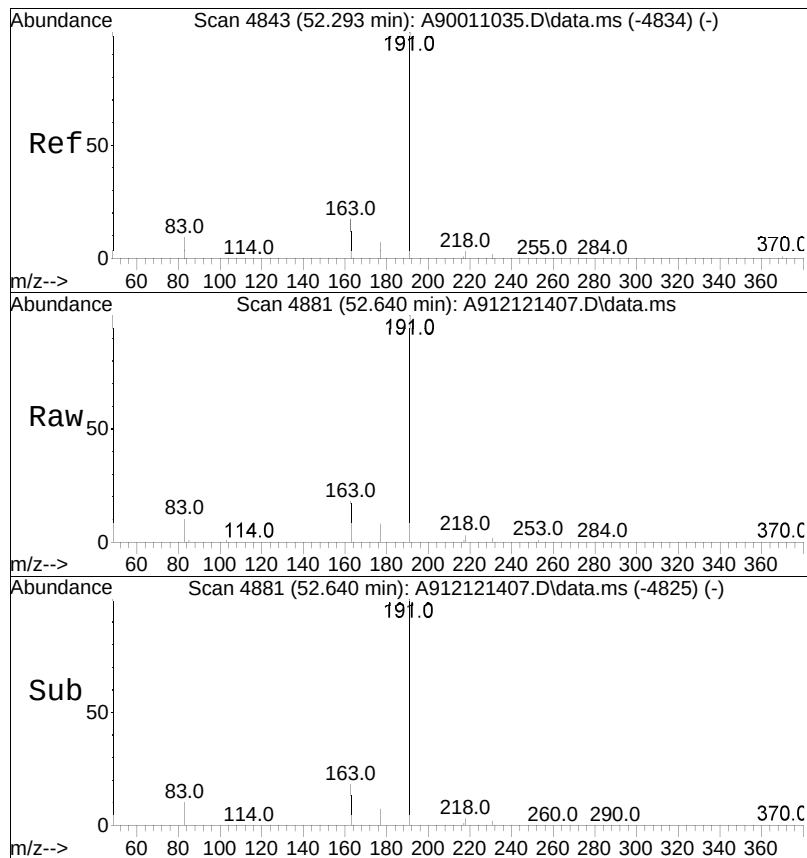




#94
 Hopane (T19)
 Concen: 8278.38 ng/mL
 RT: 52.640 min Scan# 4881
 Delta R.T. 0.009 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm

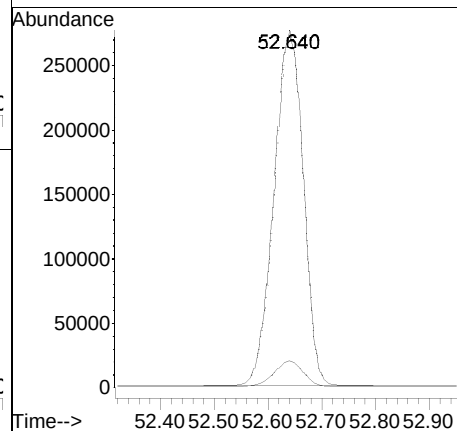
Tgt Ion	Ratio	Lower	Upper
191	100		
177	7.3	8.5	15.9#





#95
 17a(H),21B(H)-hopane - C₃₀H₅₂
 Concen: 8278.38 ng/mL
 RT: 52.640 min Scan# 4881
 Delta R.T. 0.009 min
 Lab File: A912121407.D
 Acq: 12 Dec 2014 10:08 pm

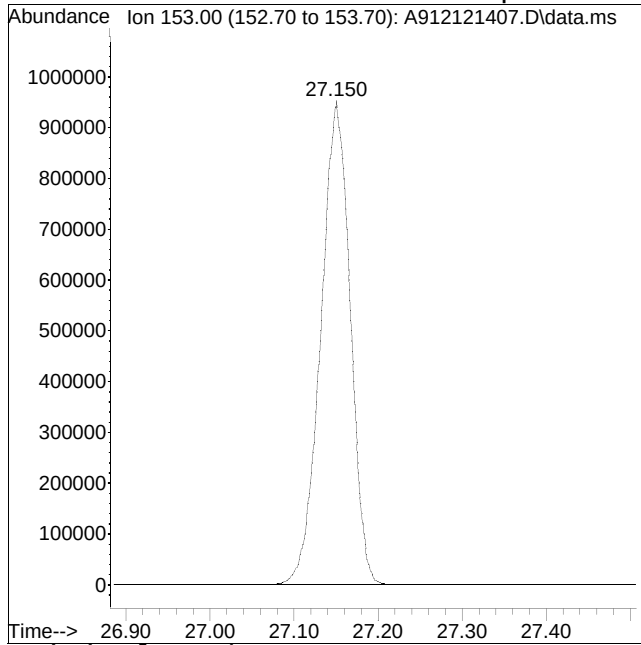
Tgt	Ion	Ratio	Lower	Upper
191	100			
177	7.3	8.5	15.9	



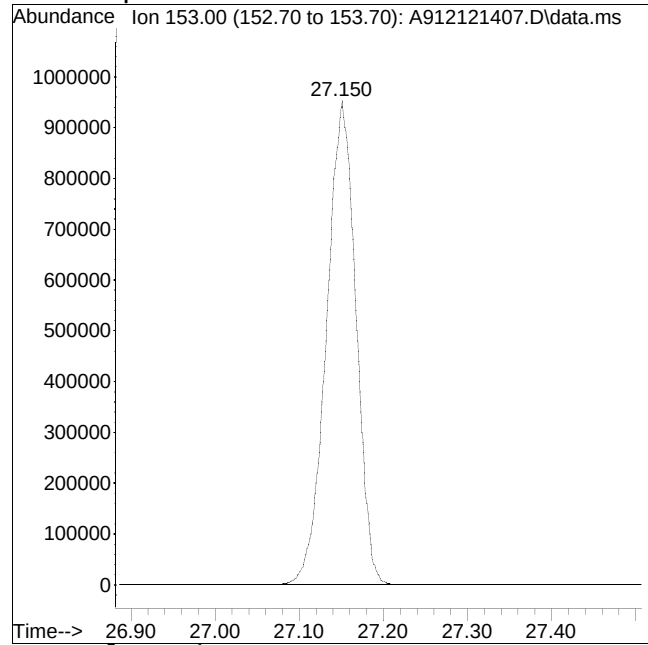
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121407.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 10:08 pm Instrument : PAH 9
Sample : i912121406 Quant Date : 12/15/2014 10:36 am

Compound #27: Acenaphthene



Original Peak Response = 2319648



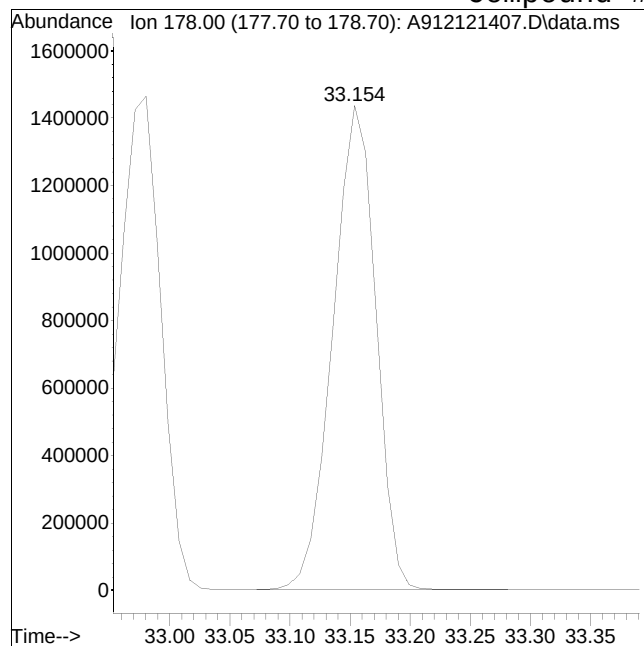
Manual Peak Response = 2319639 M4

M4 = Poor automated baseline construction.

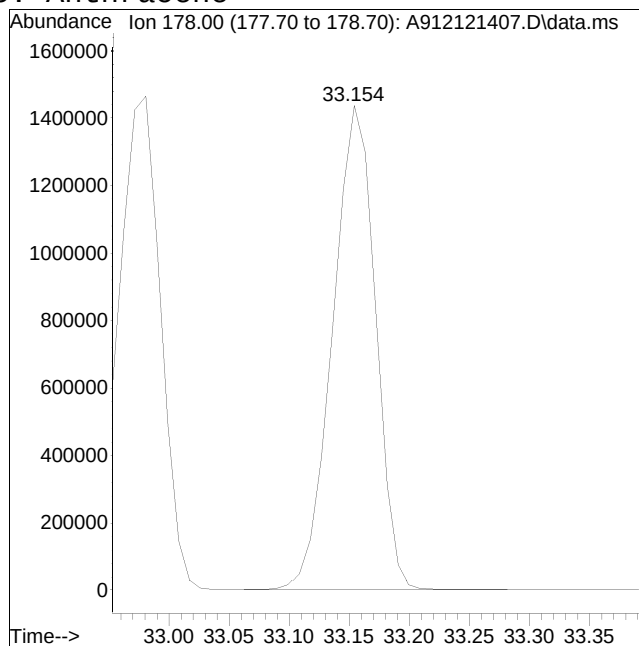
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121407.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 10:08 pm Instrument : PAH 9
Sample : i912121406 Quant Date : 12/15/2014 10:36 am

Compound #55: Anthracene



Original Peak Response = 3577734



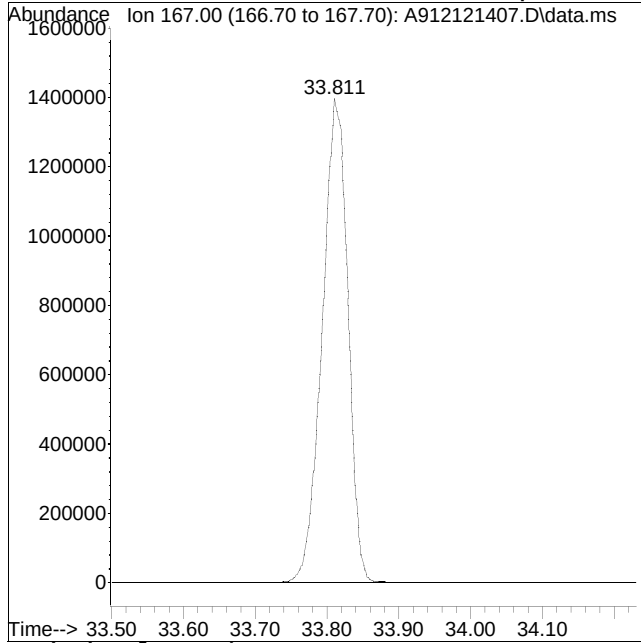
Manual Peak Response = 3579908 M4

M4 = Poor automated baseline construction.

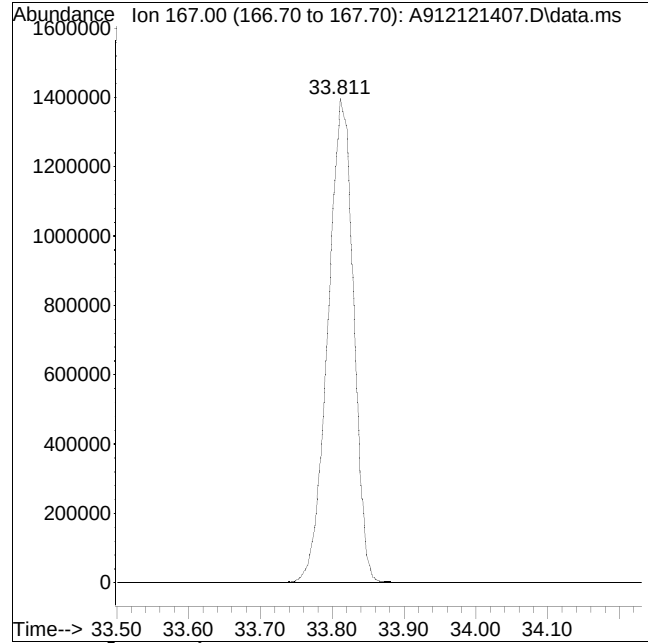
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121407.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 10:08 pm Instrument : PAH 9
Sample : i912121406 Quant Date : 12/15/2014 10:36 am

Compound #56: Carbazole



Original Peak Response = 3481716



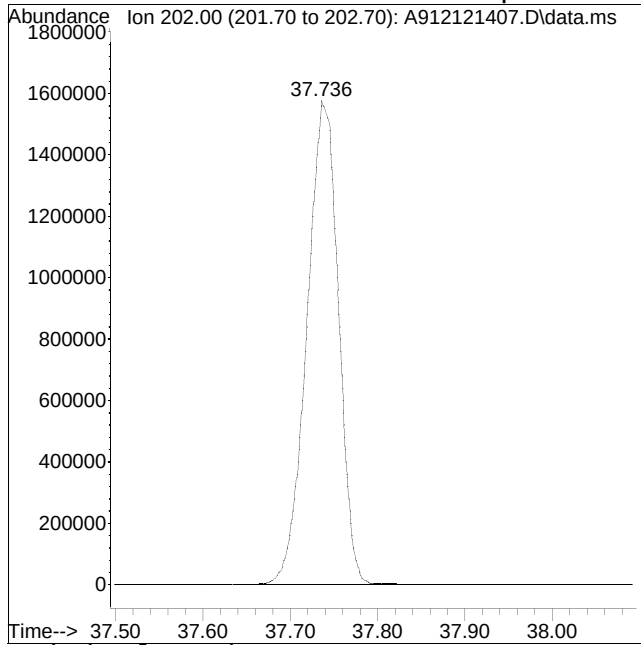
Manual Peak Response = 3481379 M4

M4 = Poor automated baseline construction.

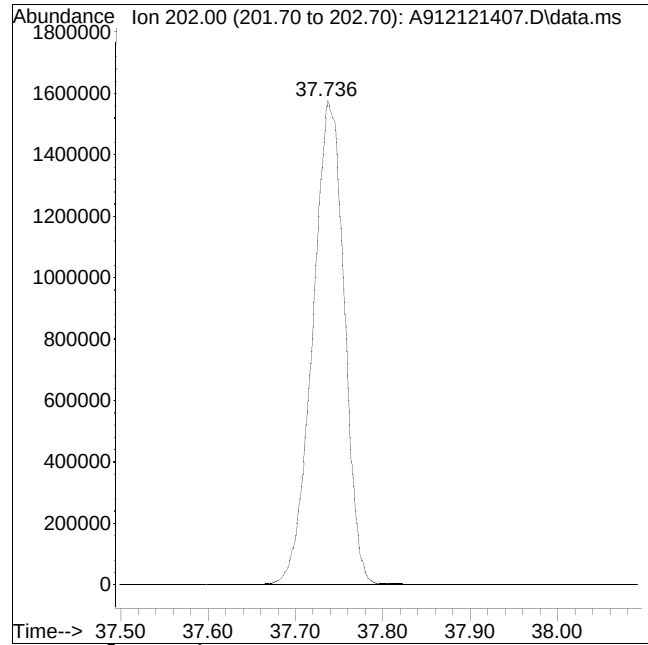
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121407.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 10:08 pm Instrument : PAH 9
Sample : i912121406 Quant Date : 12/15/2014 10:36 am

Compound #58: Fluoranthene



Original Peak Response = 3968561



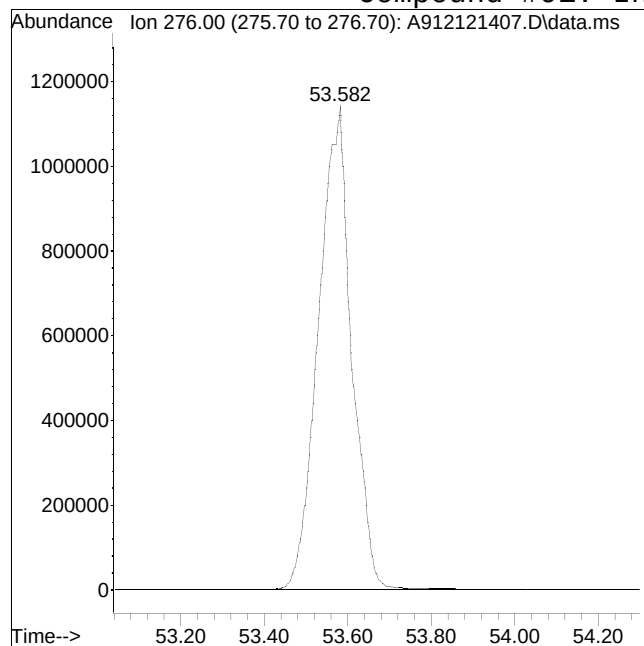
Manual Peak Response = 3969460 M4

M4 = Poor automated baseline construction.

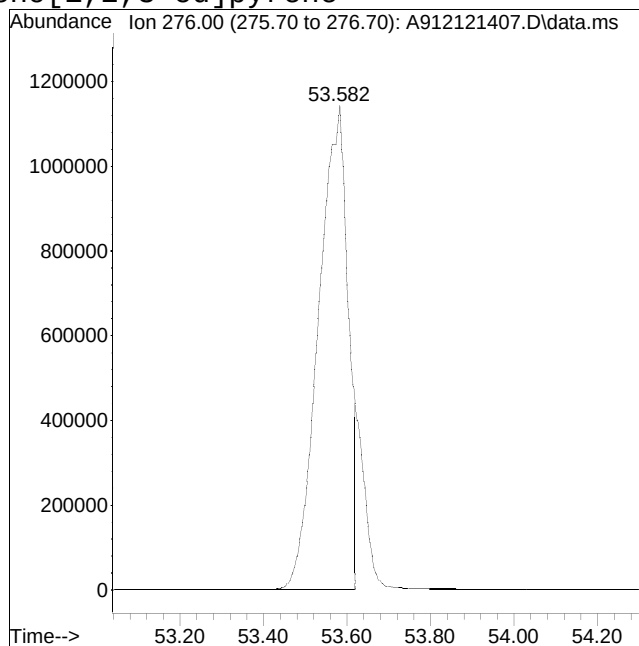
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912121407.D Operator : PAH9:SR
 Date Inj'd : 12/12/2014 10:08 pm Instrument : PAH 9
 Sample : i912121406 Quant Date : 12/15/2014 10:36 am

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 6293126



Manual Peak Response = 5683037 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Data File : A912121408.D
 Acq On : 12 Dec 2014 11:32 pm
 Operator : PAH9:SR
 Sample : i912121407
 Misc : WG749024,l7 frau83 20000 ng/mL
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 16 10:51:56 2014
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 10:35:44 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.023	164	93441M4	500.000	ng/mL	0.00
74) Chrysene-d12	43.452	240	185722	500.000	ng/mL	0.02
System Monitoring Compounds						
9) Naphthalene-d8	20.069	136	8577894	23071.090	ng/mL	0.00
Spiked Amount 1000.000	Range 50	- 130	Recovery	= 2307.11%#		
42) Phenanthrene-d10	32.898	188	6189028	21525.778	ng/mL	0.02
Spiked Amount 1000.000	Range 50	- 130	Recovery	= 2152.58%#		
83) Benzo[b]fluoranthene-d12	47.363	264	7401088	20425.464	ng/mL	0.03
Spiked Amount 1000.000	Range 50	- 130	Recovery	= 2042.55%#		
88) Benzo[a]pyrene-d12	48.588	264	7020284	21058.554	ng/mL	0.05
Spiked Amount 1000.000	Range 50	- 130	Recovery	= 2105.86%#		
129) 5B(H)Cholane - Surr	44.073	217	1148836	18820.661	ng/mL	0.00
Spiked Amount 1000.000	Range 50	- 130	Recovery	= 1882.07%#		
Target Compounds						Qvalue
3) trans-Decalin	16.720	138	906868	10725.967	ng/mL	100
4) cis-Decalin	17.943	138	675601	10300.657	ng/mL	100
10) Naphthalene	20.151	128	10417367	26113.985	ng/mL	100
16) 2-Methylnaphthalene	22.834	142	5723328	23157.759	ng/mL	100
17) 1-Methylnaphthalene	23.263	142	5504000	22871.616	ng/mL	100
18) Benzothiophene	20.361	134	9485899	28082.944	ng/mL	100
23) Biphenyl	24.714	154	6777855	21705.444	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.325	156	4588661	21222.120	ng/mL	100
25) Dibenzofuran	27.798	168	7141093	22174.961	ng/mL	97
26) Acenaphthylene	26.420	152	9025819	23797.847	ng/mL	100
27) Acenaphthene	27.159	153	5208321M4	22296.883	ng/mL	
28) 2,3,5-Trimethylnaphthalen	28.702	170	4347919	23014.987	ng/mL	97
29) Fluorene	29.176	166	5686089M4	21959.766	ng/mL	
33) Dibenzothiophene	32.488	184	8408504	24894.380	ng/mL	100
43) Phenanthrene	32.990	178	7949495	22206.368	ng/mL	100
54) Retene	39.955	234	2309216	24536.596	ng/mL	99
55) Anthracene	33.163	178	7775856M4	23627.348	ng/mL	
56) Carbazole	33.820	167	7569363M4	22514.851	ng/mL	
57) 1-Methylphenanthrene	35.481	192	5392937	21971.432	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Data File : A912121408.D
 Acq On : 12 Dec 2014 11:32 pm
 Operator : PAH9:SR
 Sample : i912121407
 Misc : WG749024,l7 frau83 20000 ng/mL
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 16 10:51:56 2014
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 10:35:44 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

58)	Fluoranthene	37.745	202	8168790M4	23730.067	ng/mL	
59)	Benzo(b)fluorene	40.265	216	5161194	25179.721	ng/mL	100
60)	Pyrene	38.631	202	8943648	24381.488	ng/mL	97
66)	Naphthobenzothiophene	42.475	234	8511698	26189.976	ng/mL	99
67)	Naphthobenzothiophene-2,1	42.475	234	8511698	26189.976	ng/mL	99
75)	Benz[a]anthracene	43.397	228	8161981M4	24155.552	ng/mL	
76)	Chrysene	43.570	228	7959949	23938.201	ng/mL	100
77)	Chrysene/Triphenylene	43.570	228	7959949	23938.201	ng/mL	100
84)	Benzo[b]fluoranthene	47.463	252	9566632	23222.859	ng/mL	97
85)	Benzo[j]+[k]fluoranthene	47.555	252	8976450	22258.822	ng/mL	97
87)	Benzo[e]pyrene	48.488	252	9142175	22773.914	ng/mL	97
89)	Benzo[a]pyrene	48.689	252	9336233	24015.742	ng/mL	96
90)	Perylene	48.991	252	9212406	23261.469	ng/mL	96
91)	Indeno[1,2,3-cd]pyrene	53.591	276	11373801M3	22783.989	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.646	278	11077306	23660.834	ng/mL	99
93)	Benzo[g,h,i]perylene	54.943	276	10743174	22357.109	ng/mL	98
94)	Hopane (T19)	0.000		0	N.D.	d	
95)	17a(H),21B(H)-hopane - C3	0.000		0	N.D.	d	

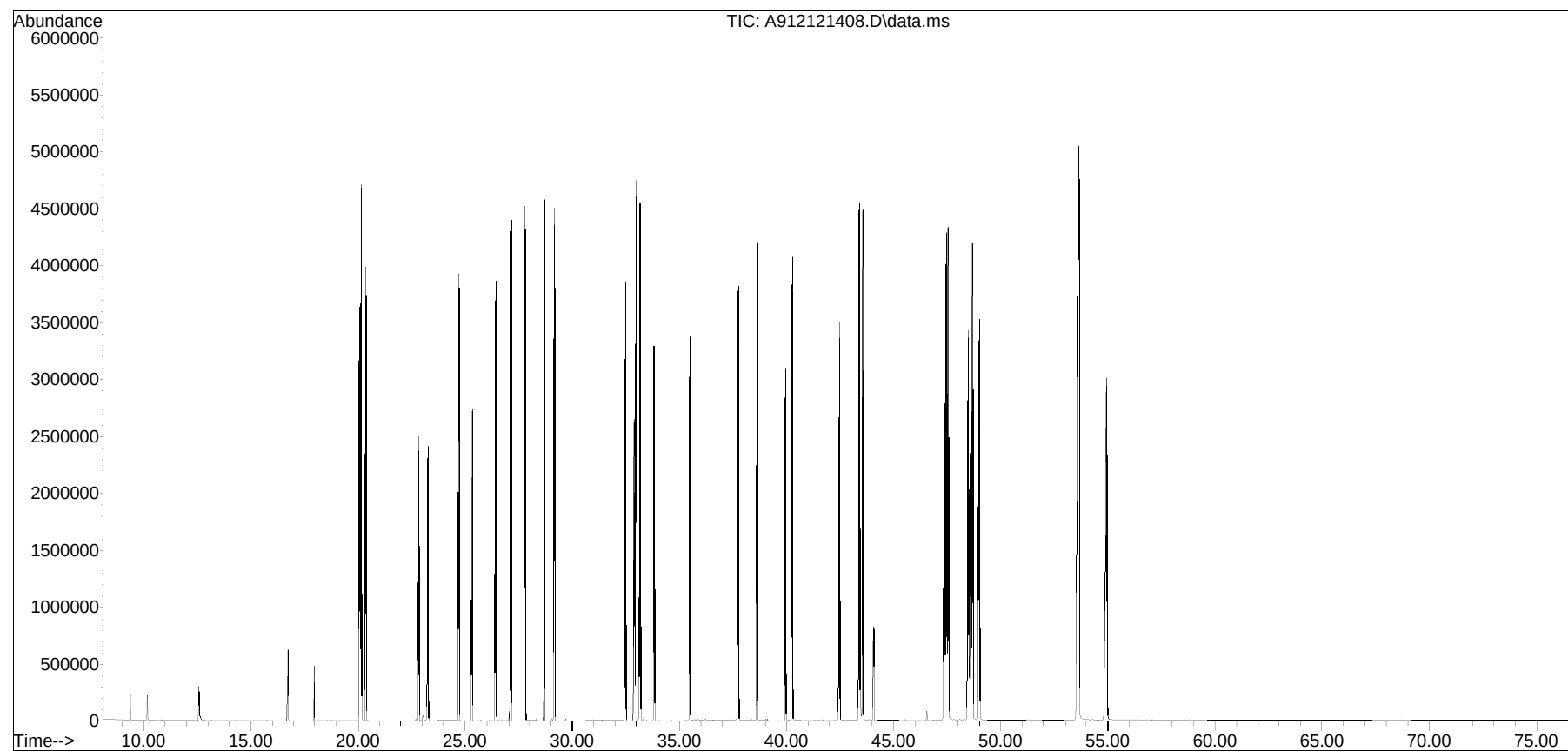
(#) = qualifier out of range (m) = manual integration (+) = signals summed

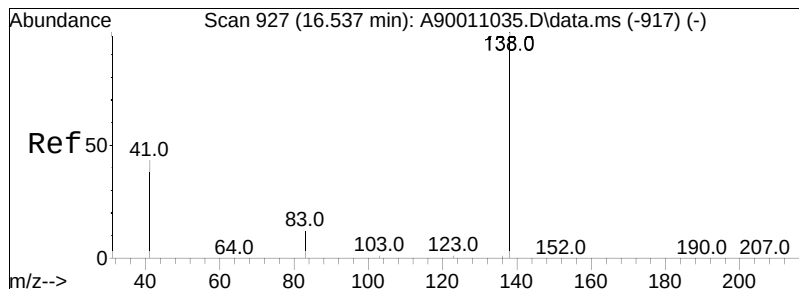
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC12\
Data File : A912121408.D
Acq On : 12 Dec 2014 11:32 pm
Operator : PAH9:SR
Sample : i912121407
Misc : WG749024,l7 frau83 20000 ng/mL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 16 10:51:56 2014
Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 15 10:35:44 2014
Response via : Initial Calibration

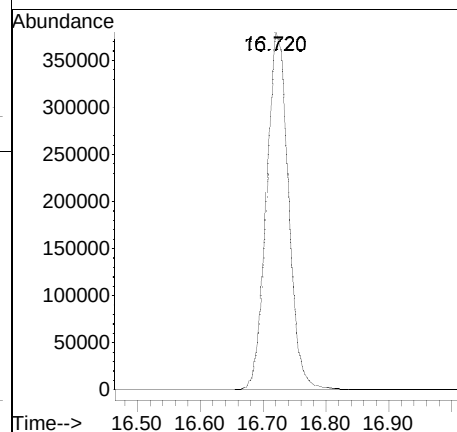
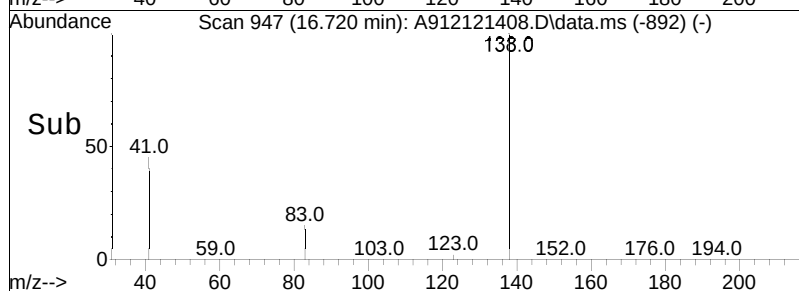
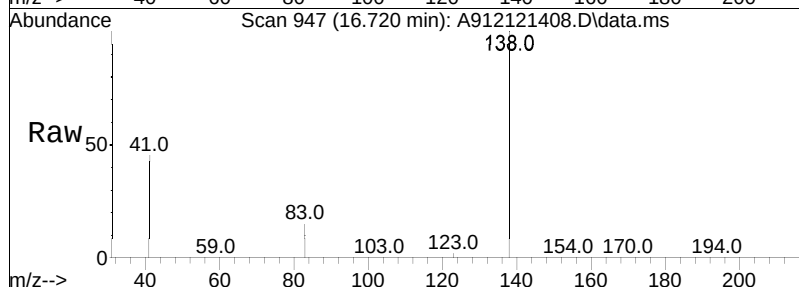
Sub List : ICAL_CCALT_REV2 - CC with five surrogates

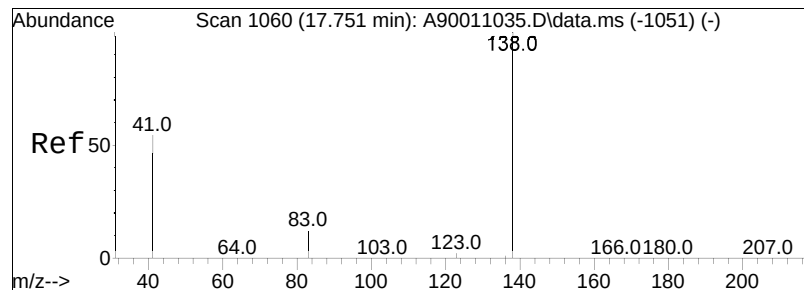




#3
trans-Decalin
Concen: 10725.97 ng/mL
RT: 16.720 min Scan# 947
Delta R.T. 0.000 min
Lab File: A912121408.D
Acq: 12 Dec 2014 11:32 pm

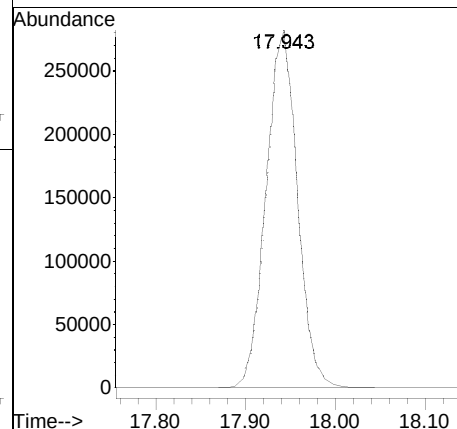
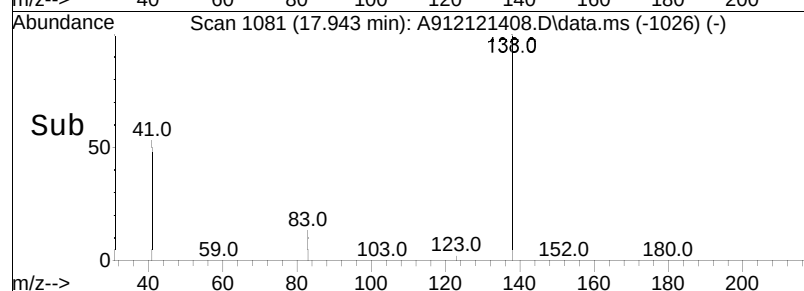
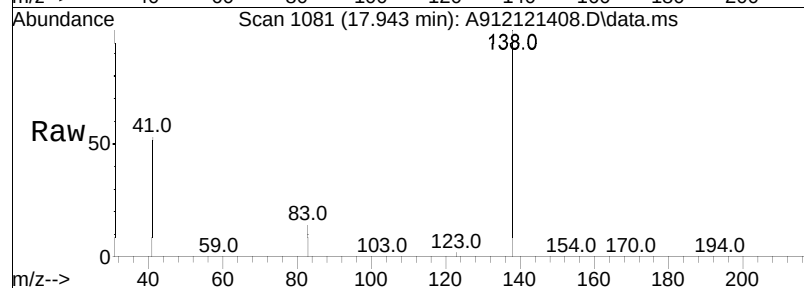
Tgt Ion:138 Resp: 906868

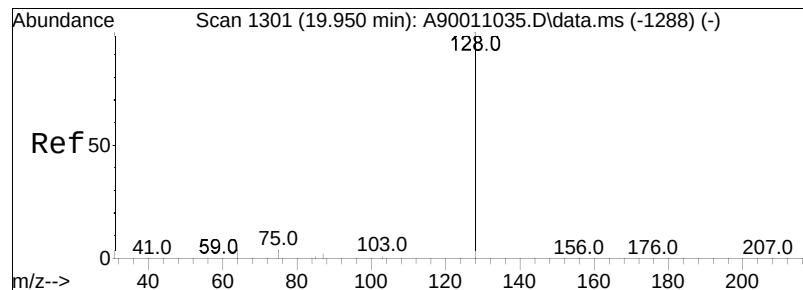




#4
 cis-Decalin
 Concen: 10300.66 ng/mL
 RT: 17.943 min Scan# 1081
 Delta R.T. 0.000 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

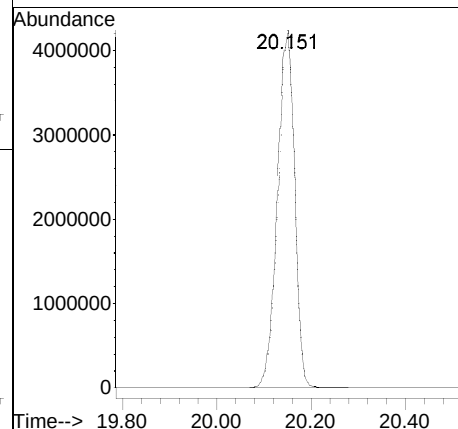
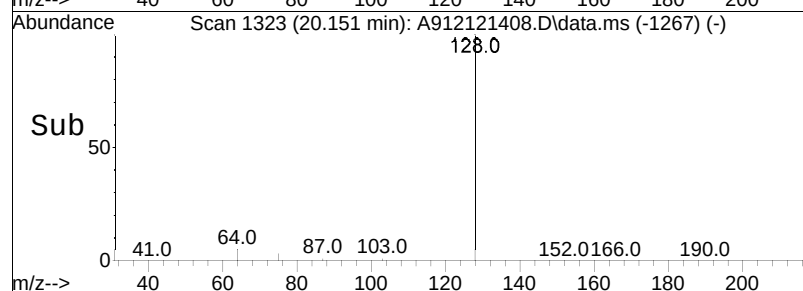
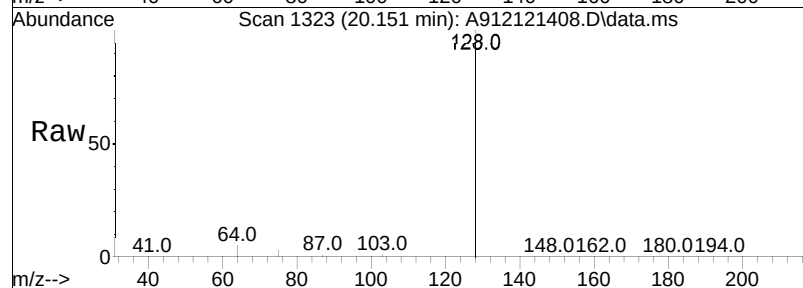
Tgt Ion:138 Resp: 675601

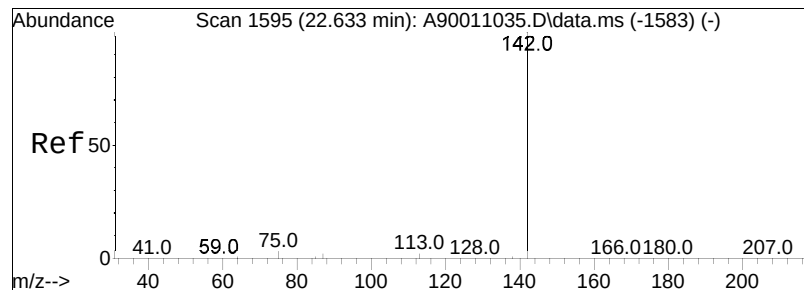




#10
Naphthalene
Concen: 26113.98 ng/mL
RT: 20.151 min Scan# 1323
Delta R.T. 0.009 min
Lab File: A912121408.D
Acq: 12 Dec 2014 11:32 pm

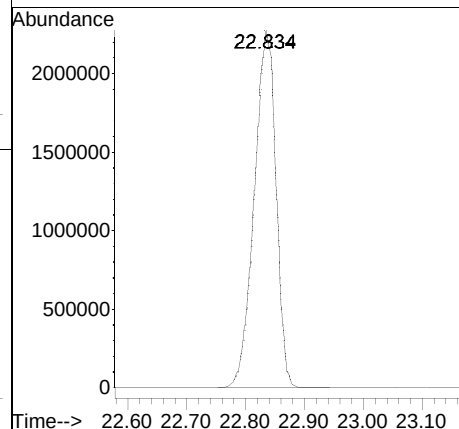
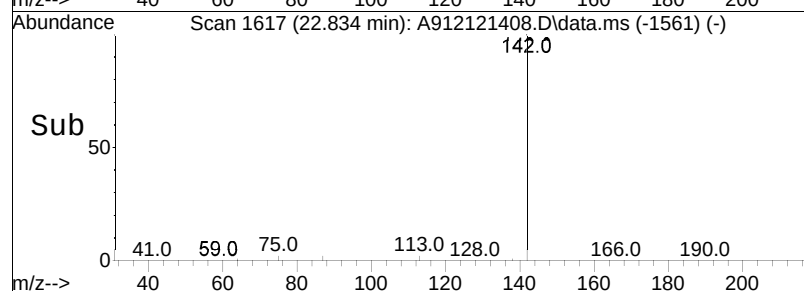
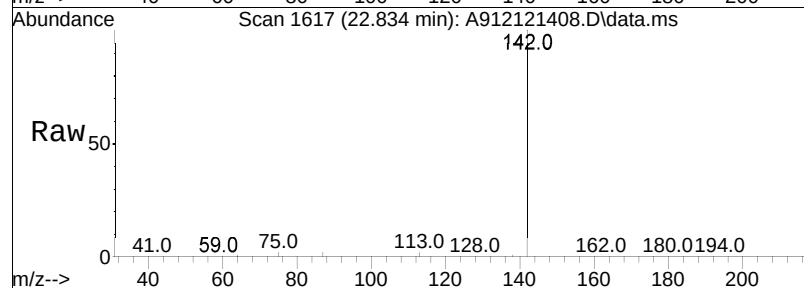
Tgt Ion:128 Resp:10417367

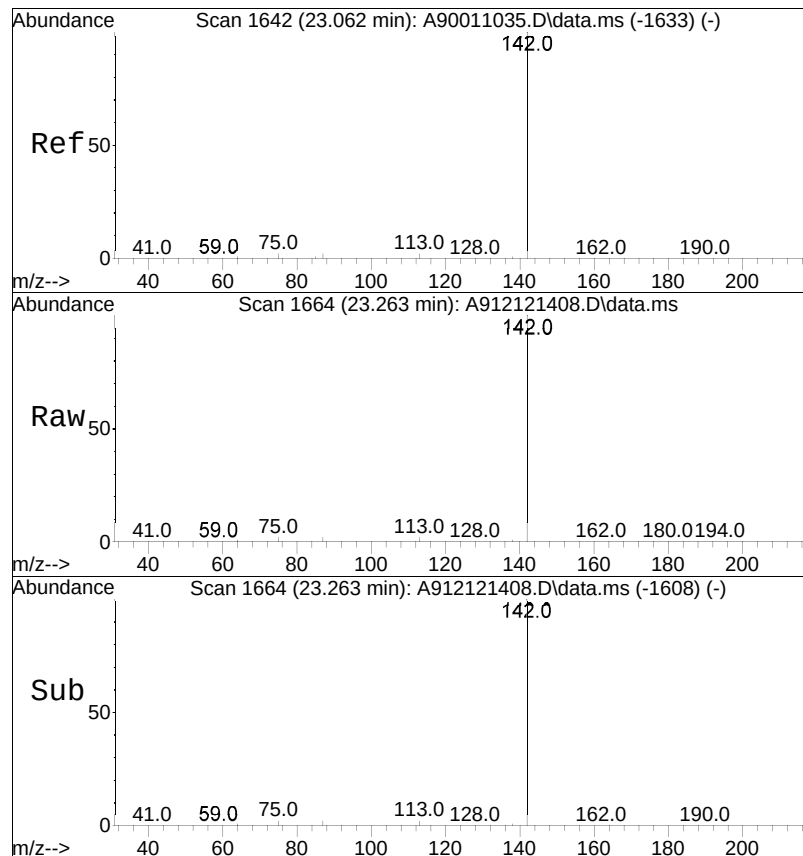




#16
 2-Methylnaphthalene
 Concen: 23157.76 ng/mL
 RT: 22.834 min Scan# 1617
 Delta R.T. 0.009 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

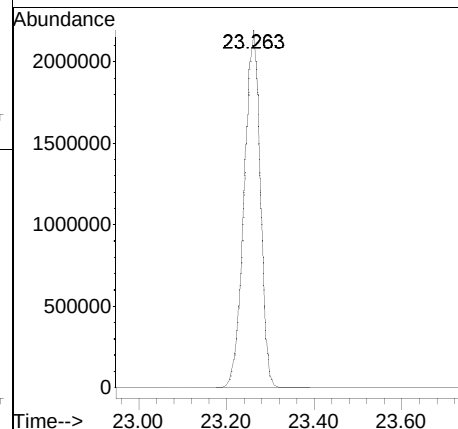
Tgt Ion:142 Resp: 5723328

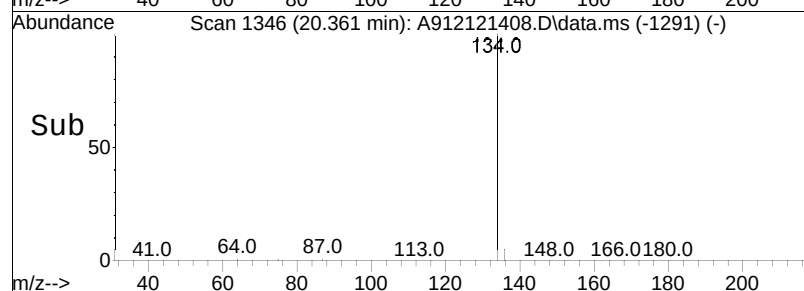
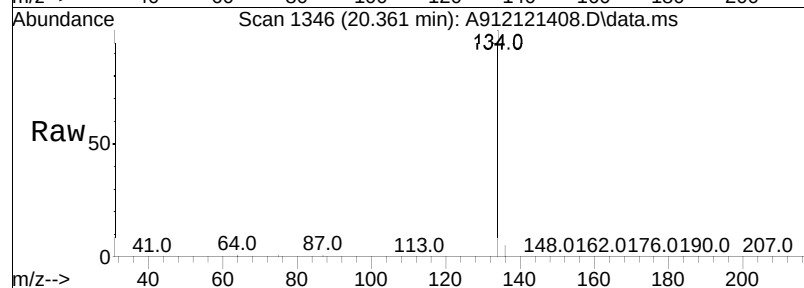
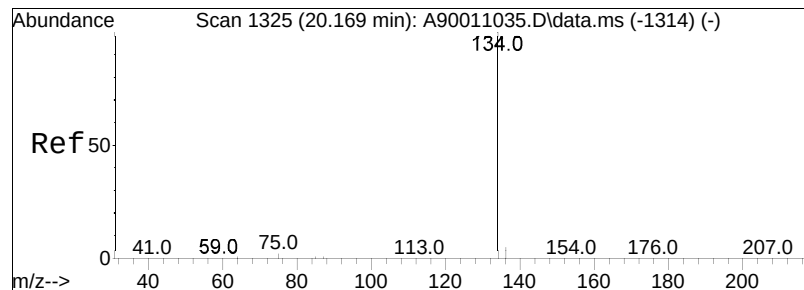




#17
 1-Methylnaphthalene
 Concen: 22871.62 ng/mL
 RT: 23.263 min Scan# 1664
 Delta R.T. 0.009 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

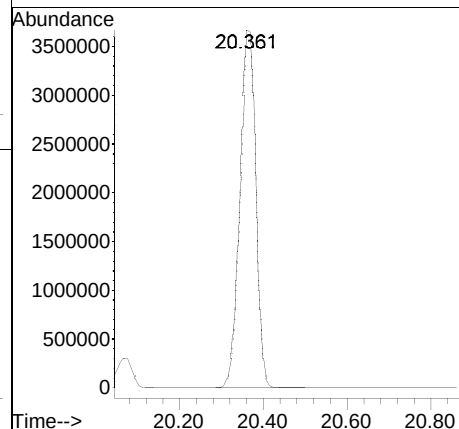
Tgt Ion:142 Resp: 5504000

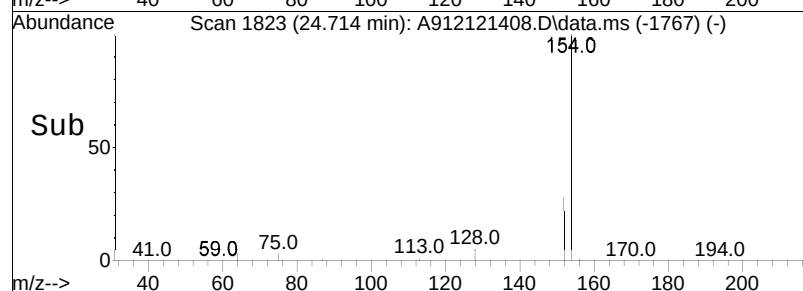
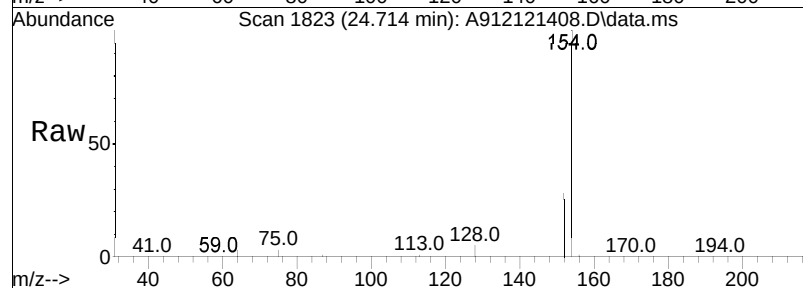
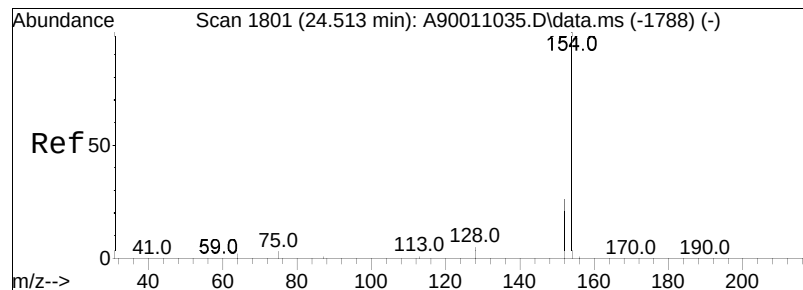




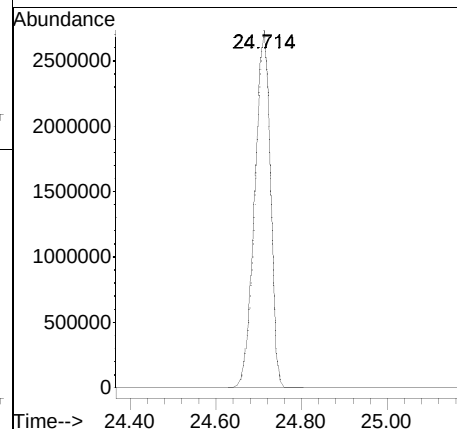
#18
Benzothiophene
Concen: 28082.94 ng/mL
RT: 20.361 min Scan# 1346
Delta R.T. 0.000 min
Lab File: A912121408.D
Acq: 12 Dec 2014 11:32 pm

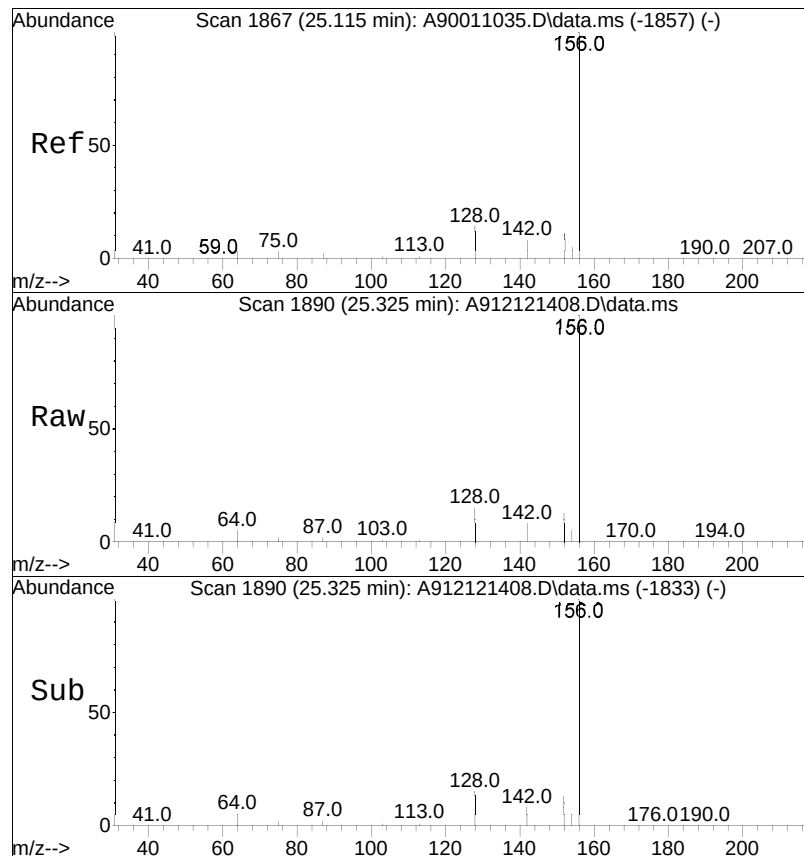
Tgt Ion:134 Resp: 9485899





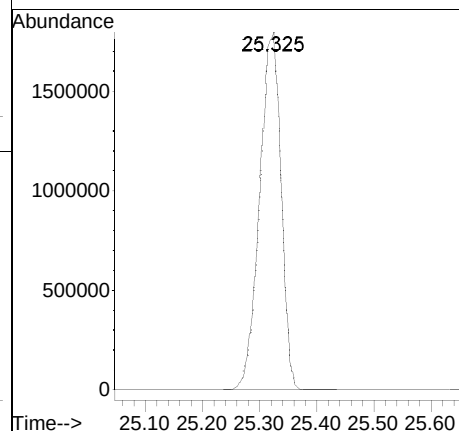
#23
 Biphenyl
 Concen: 21705.44 ng/mL
 RT: 24.714 min Scan# 1823
 Delta R.T. 0.009 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm
 Tgt Ion:154 Resp: 6777855

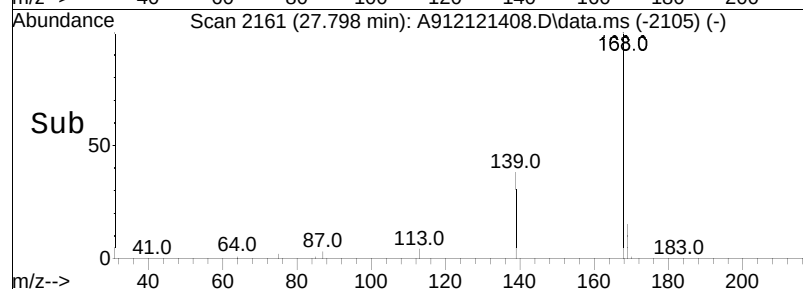
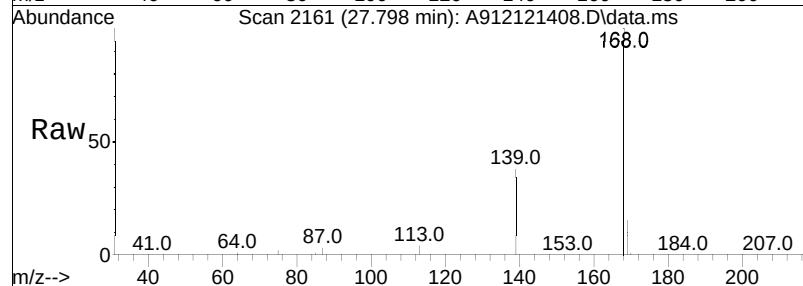
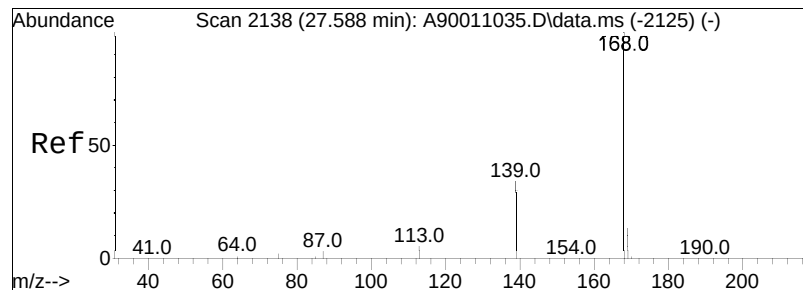




#24
 2,6-Dimethylnaphthalene
 Concen: 21222.12 ng/mL
 RT: 25.325 min Scan# 1890
 Delta R.T. 0.018 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

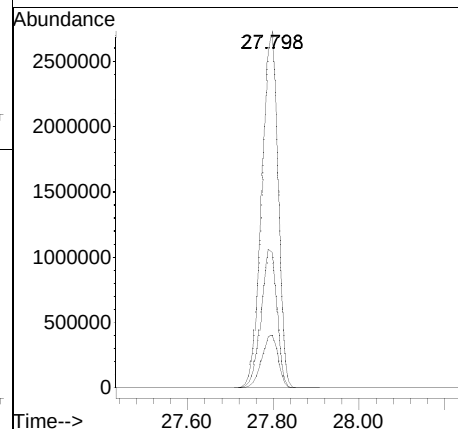
Tgt Ion:156 Resp: 4588661

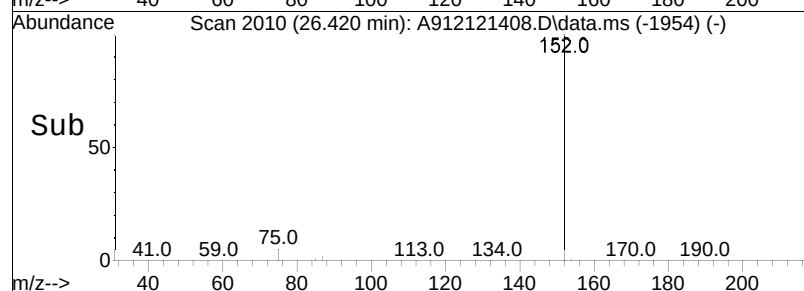
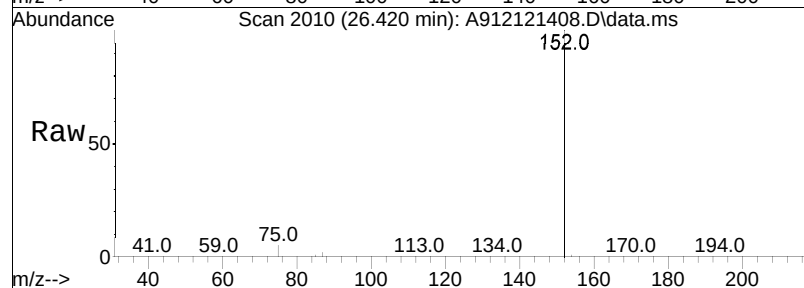
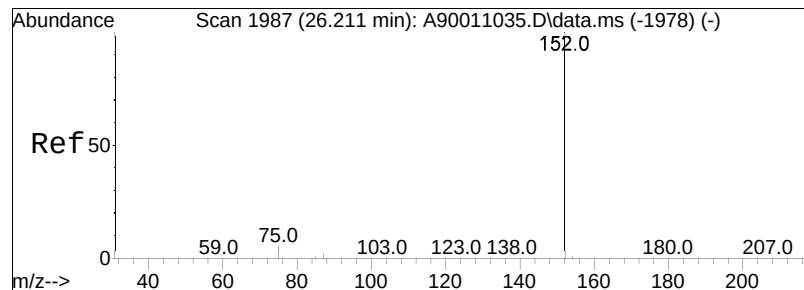




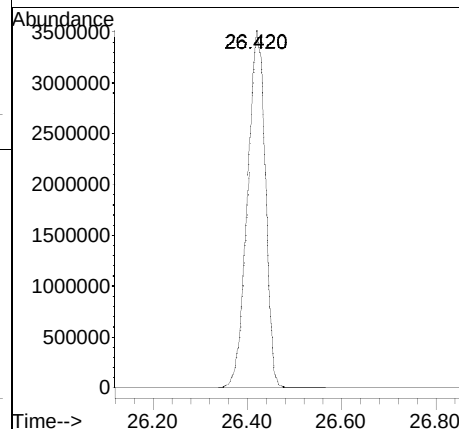
#25
 Dibenzofuran
 Concen: 22174.96 ng/mL
 RT: 27.798 min Scan# 2161
 Delta R.T. 0.009 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

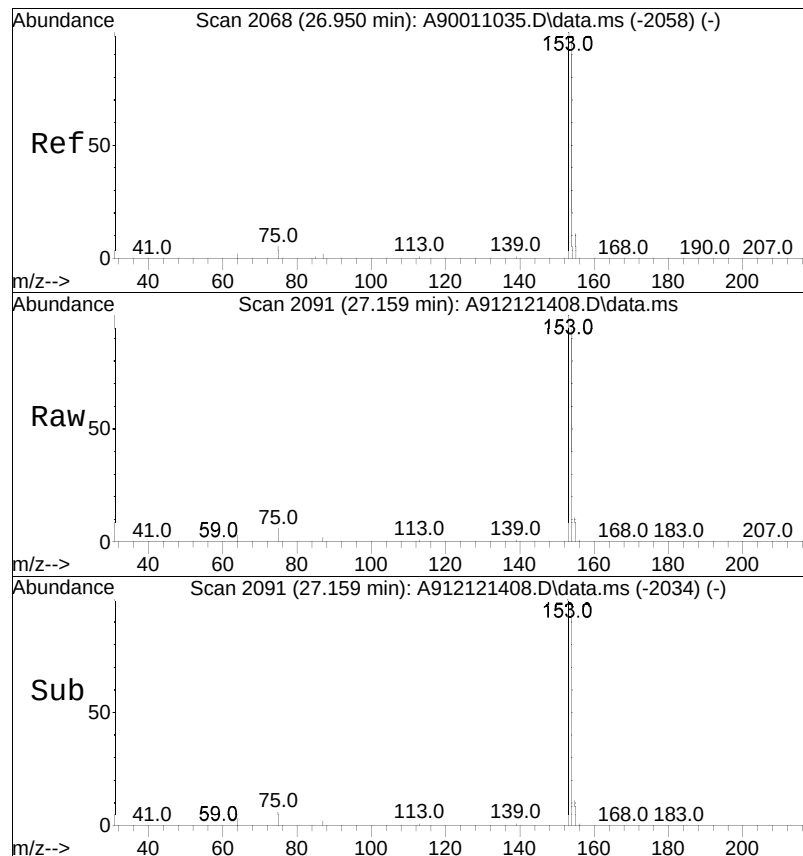
Tgt Ion	Ratio	Lower	Upper
168	100		
139	37.9	25.1	46.7
169	14.9	10.2	19.0





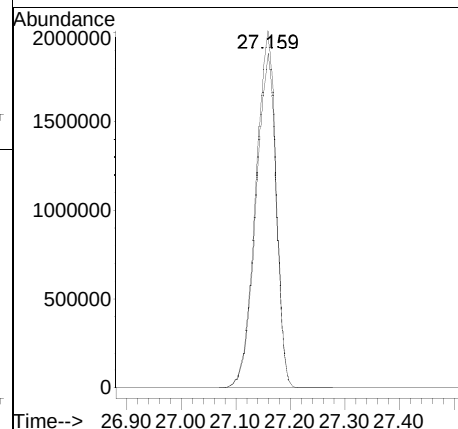
#26
 Acenaphthylene
 Concen: 23797.85 ng/mL
 RT: 26.420 min Scan# 2010
 Delta R.T. 0.009 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm
 Tgt Ion:152 Resp: 9025819

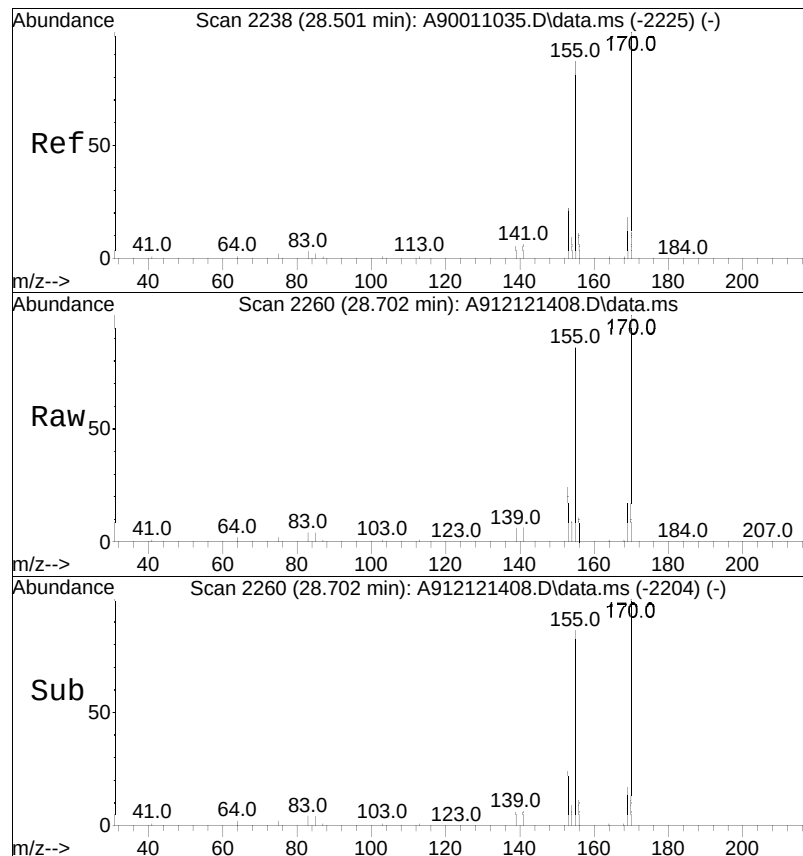




#27
 Acenaphthene
 Concen: 22296.88 ng/mL M4
 RT: 27.159 min Scan# 2091
 Delta R.T. 0.018 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

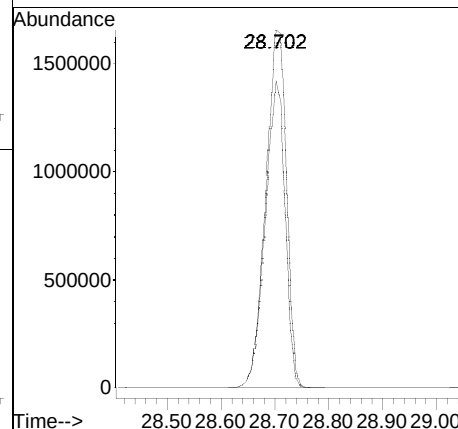
Tgt Ion:153 Resp: 5208321
 Ion Ratio Lower Upper
 153 100
 154 93.0 64.9 120.5

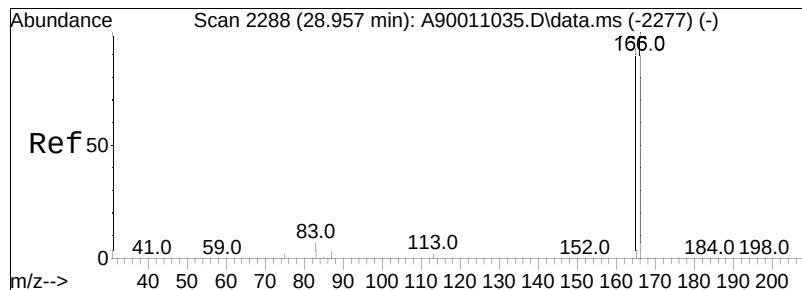




#28
 2,3,5-Trimethylnaphthalene
 Concen: 23014.99 ng/mL
 RT: 28.702 min Scan# 2260
 Delta R.T. 0.009 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

Tgt Ion	Ratio	Lower	Upper
170	100		
155	82.3	55.9	103.9





#29

Fluorene

Concen: 21959.77 ng/mL M4

RT: 29.176 min Scan# 2312

Delta R.T. 0.018 min

Lab File: A912121408.D

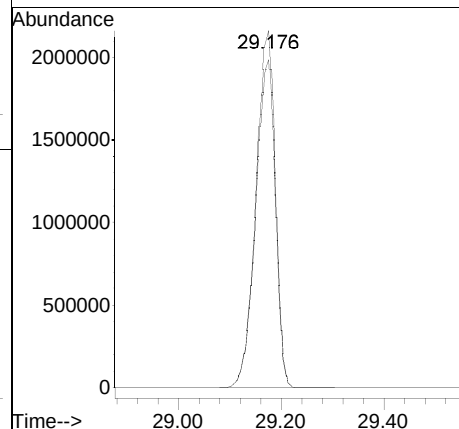
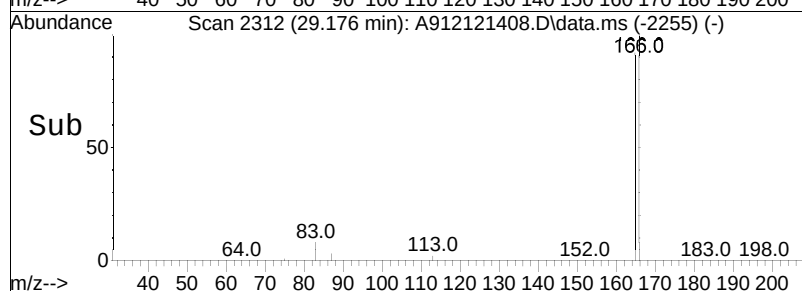
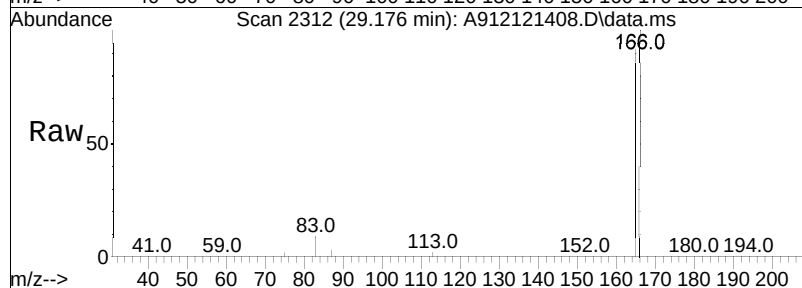
Acq: 12 Dec 2014 11:32 pm

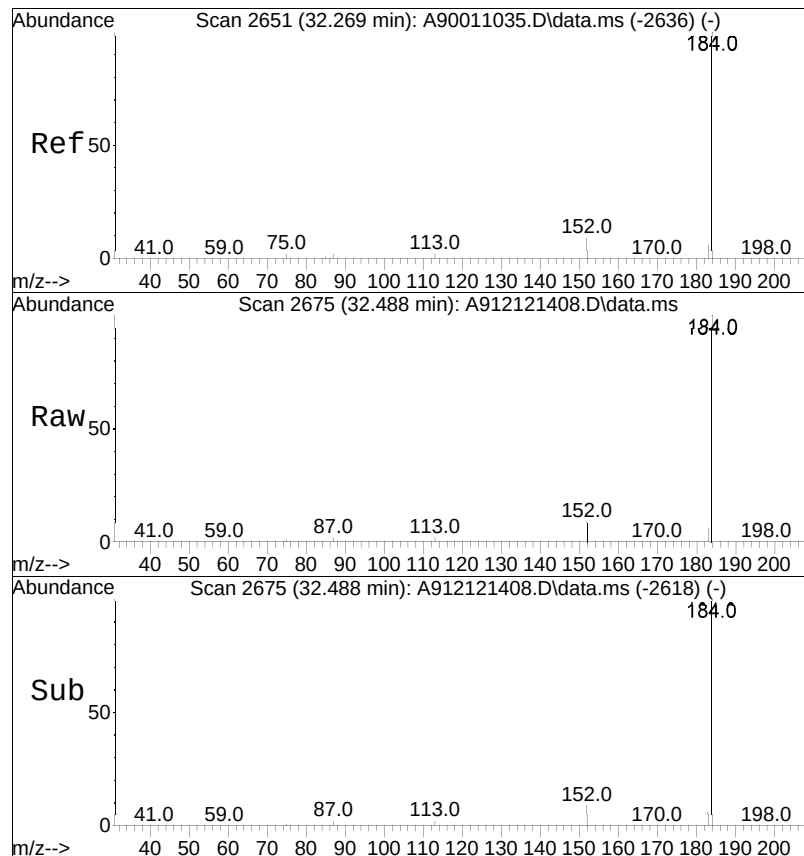
Tgt Ion:166 Resp: 5686089

Ion Ratio Lower Upper

166 100

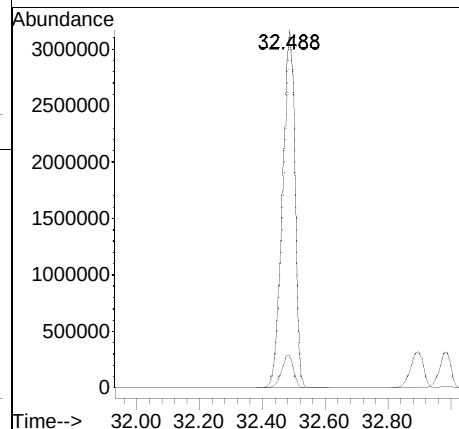
165 92.6 65.5 121.7

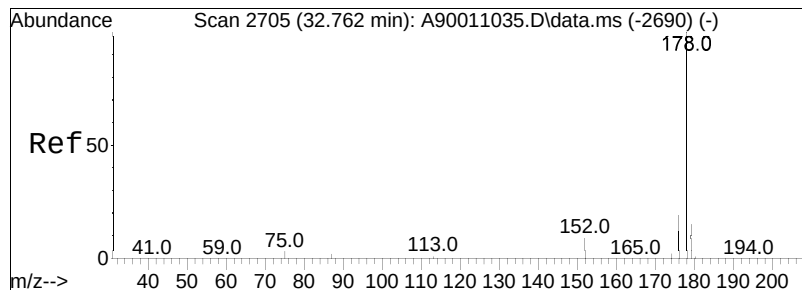




#33
 Dibenzothiophene
 Concen: 24894.38 ng/mL
 RT: 32.488 min Scan# 2675
 Delta R.T. 0.018 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

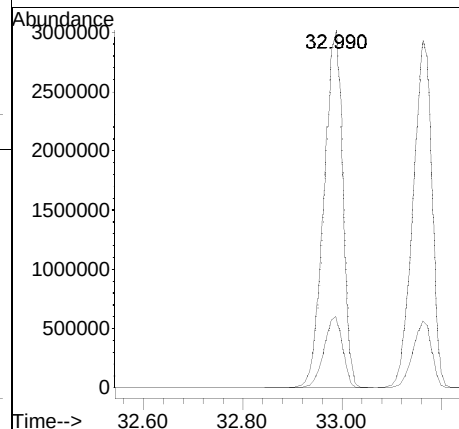
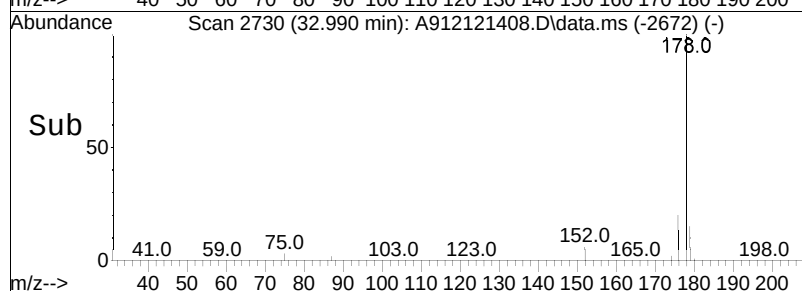
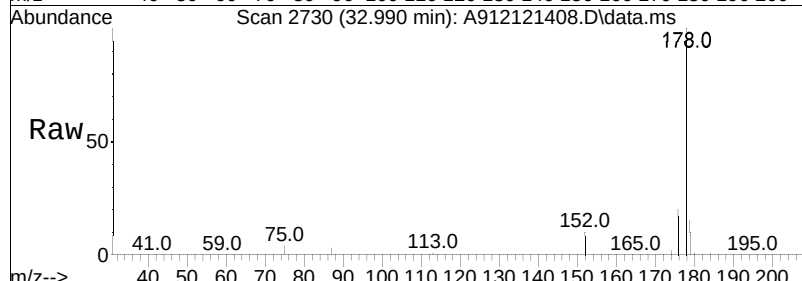
Tgt Ion	Ratio	Lower	Upper
184	100		
152	9.1	6.3	11.7

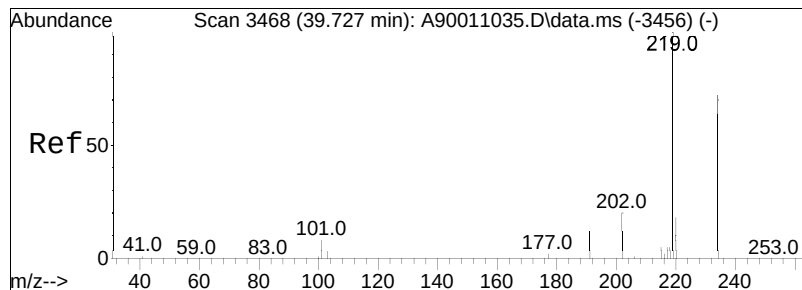




#43
 Phenanthrene
 Concen: 22206.37 ng/mL
 RT: 32.990 min Scan# 2730
 Delta R.T. 0.027 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

Tgt Ion:178 Resp: 7949495
 Ion Ratio Lower Upper
 178 100
 176 19.7 13.7 25.5





#54

Retene

Concen: 24536.60 ng/mL

RT: 39.955 min Scan# 3493

Delta R.T. 0.027 min

Lab File: A912121408.D

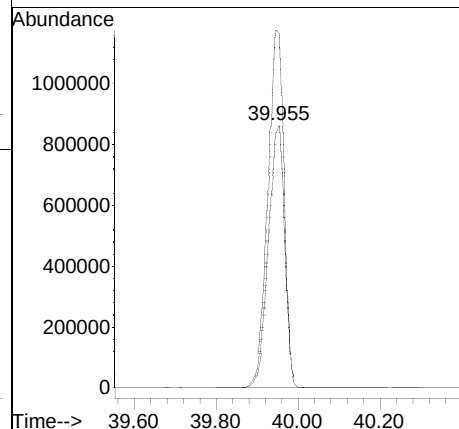
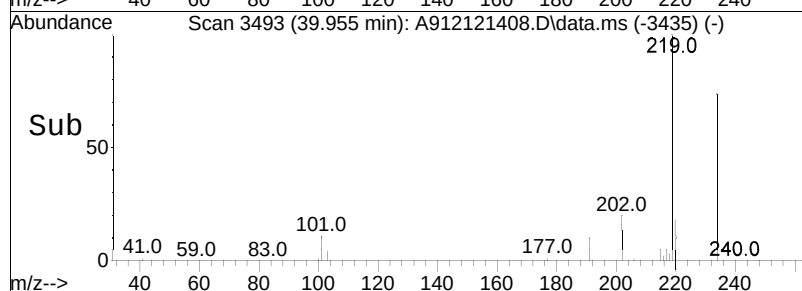
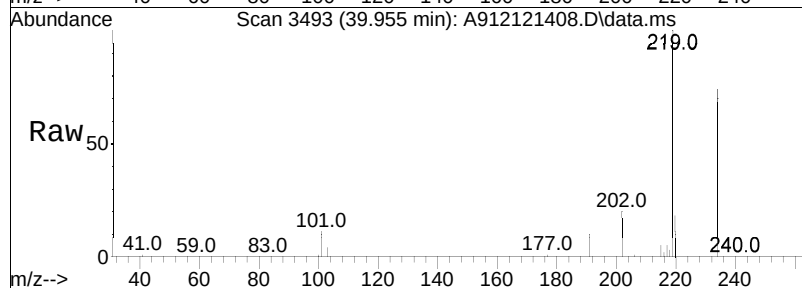
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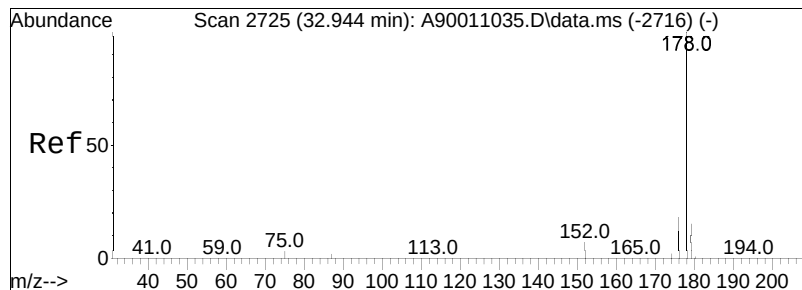
Tgt Ion: 234 Resp: 2309216

Ion Ratio Lower Upper

234 100

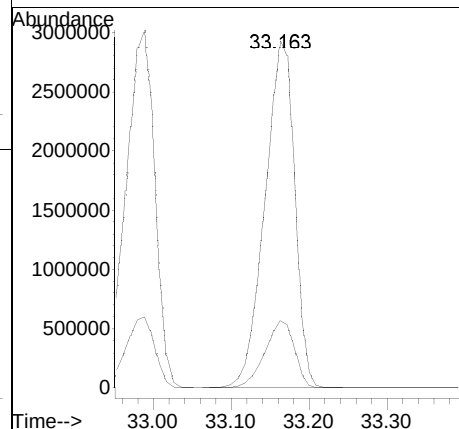
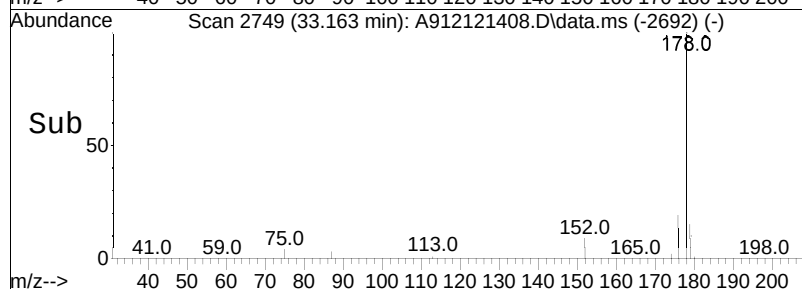
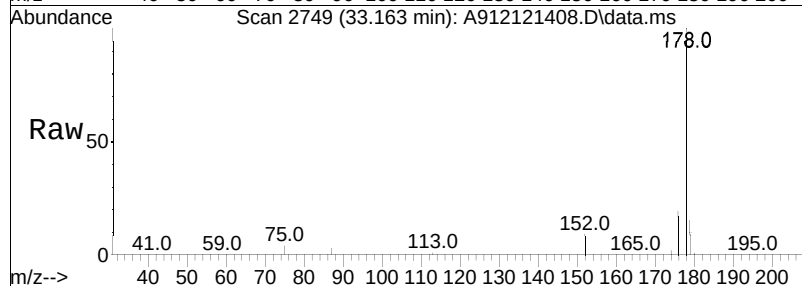
219 136.7 96.7 179.7

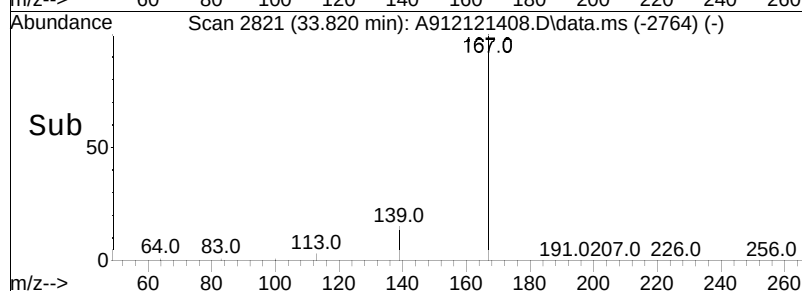
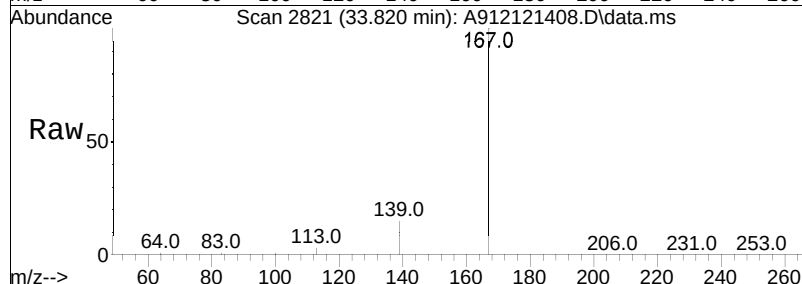
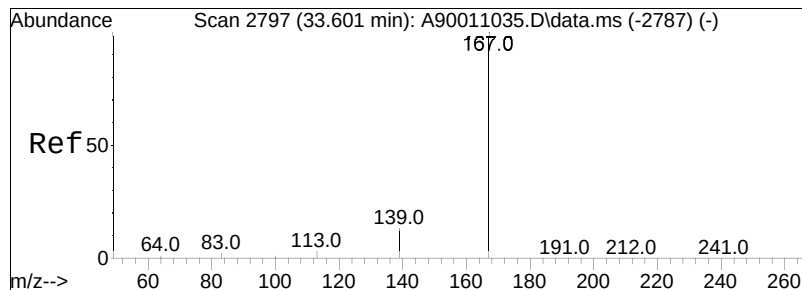




#55
 Anthracene
 Concen: 23627.35 ng/mL M4
 RT: 33.163 min Scan# 2749
 Delta R.T. 0.018 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

Tgt Ion:178 Resp: 7775856
 Ion Ratio Lower Upper
 178 100
 176 19.1 13.4 24.8





#56

Carbazole

Concen: 22514.85 ng/mL M4

RT: 33.820 min Scan# 2821

Delta R.T. 0.018 min

Lab File: A912121408.D

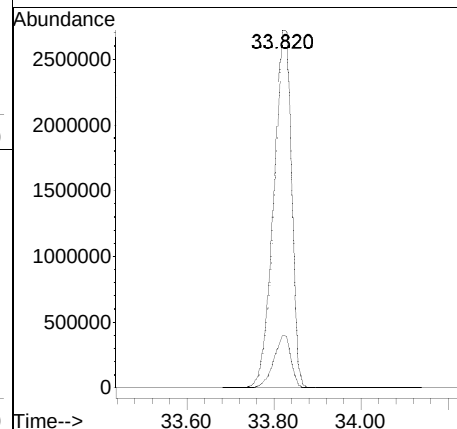
Acq: 12 Dec 2014 11:32 pm

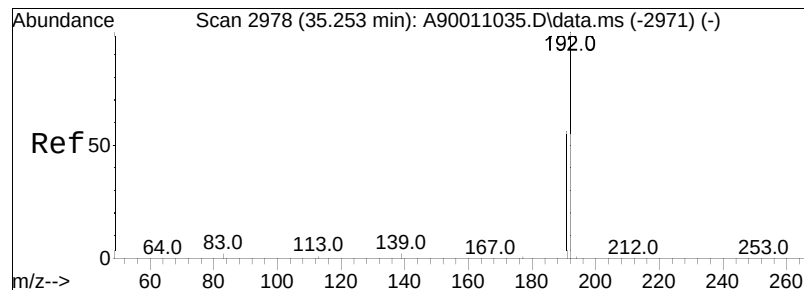
Tgt Ion:167 Resp: 7569363

Ion Ratio Lower Upper

167 100

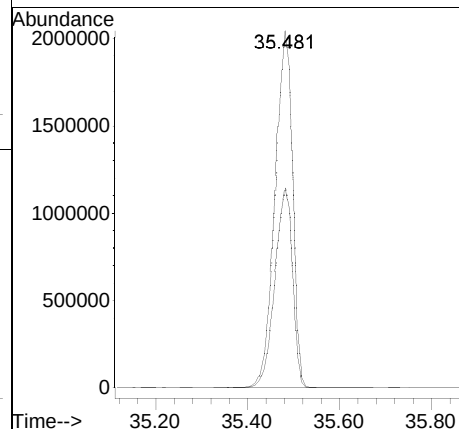
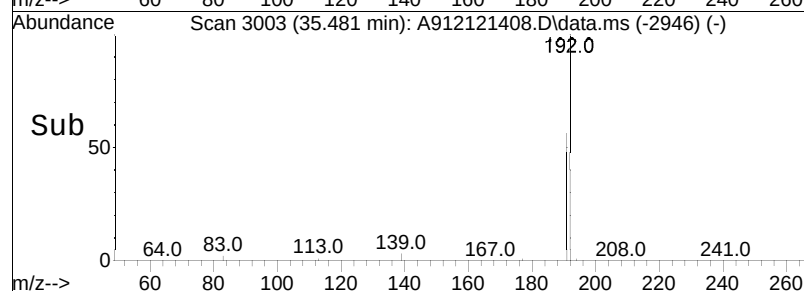
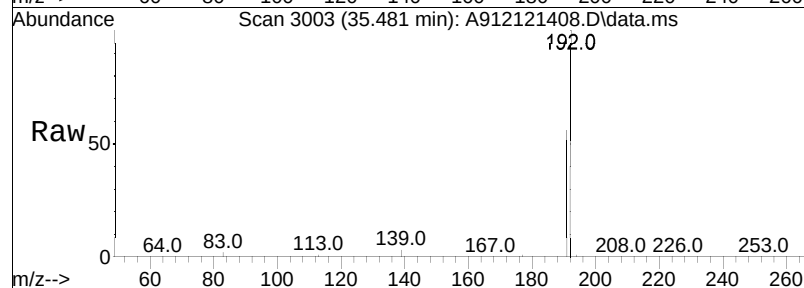
139 14.2 9.9 18.3

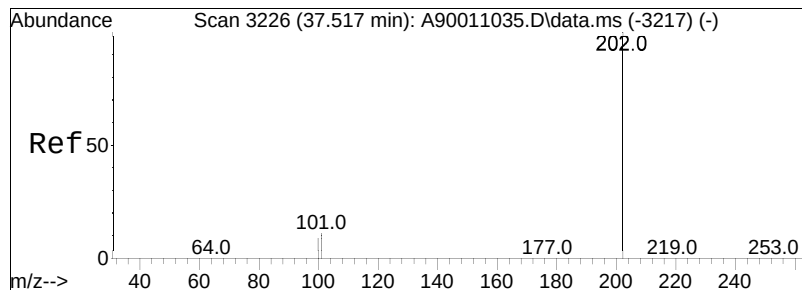




#57
 1-Methylphenanthrene
 Concen: 21971.43 ng/mL
 RT: 35.481 min Scan# 3003
 Delta R.T. 0.018 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

Tgt Ion	Ratio	Lower	Upper
192	100		
191	56.5	39.8	74.0





#58

Fluoranthene

Concen: 23730.07 ng/mL M4

RT: 37.745 min Scan# 3251

Delta R.T. 0.018 min

Lab File: A912121408.D

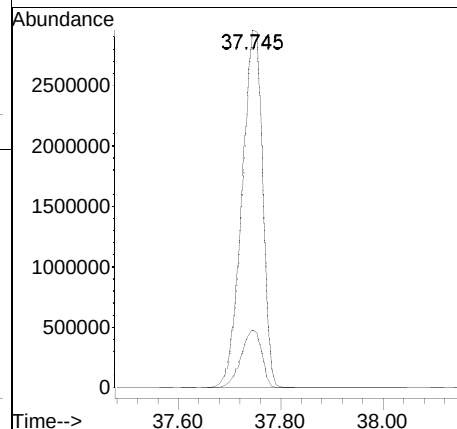
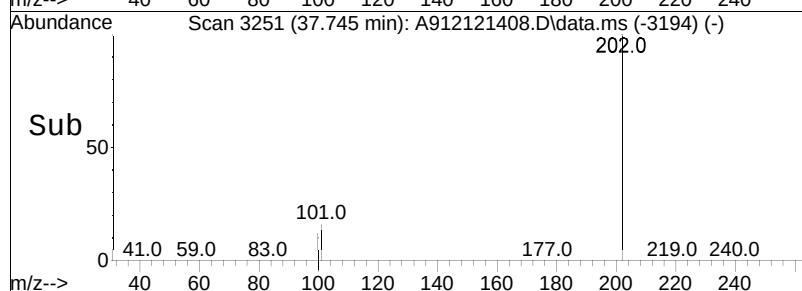
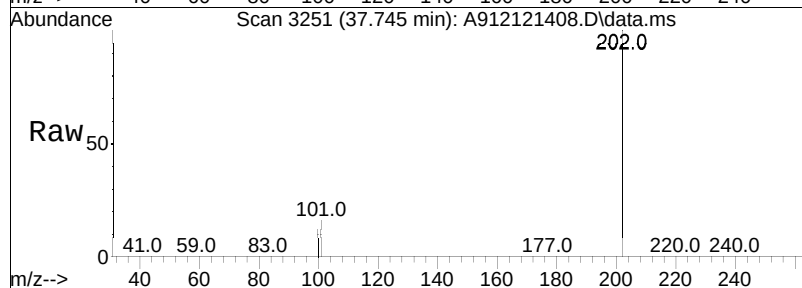
Acq: 12 Dec 2014 11:32 pm

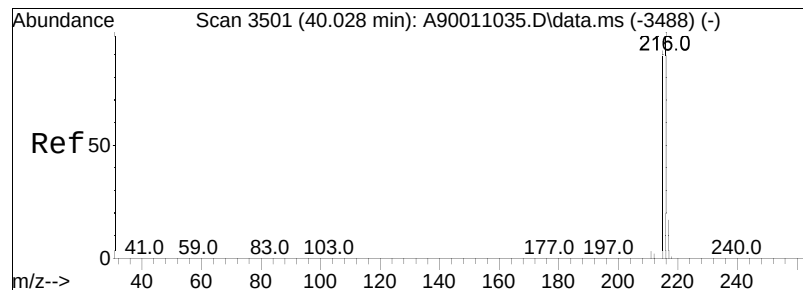
Tgt Ion:202 Resp: 8168790

Ion Ratio Lower Upper

202 100

101 16.3 11.8 22.0





#59

Benzo(b)fluorene

Concen: 25179.72 ng/mL

RT: 40.265 min Scan# 3527

Delta R.T. 0.027 min

Lab File: A912121408.D

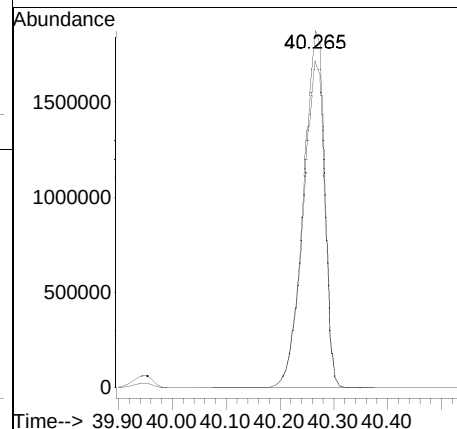
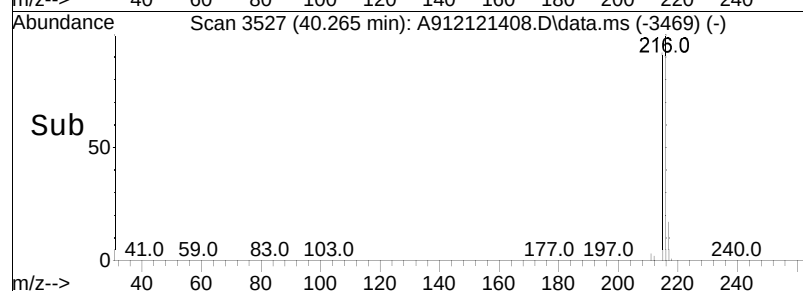
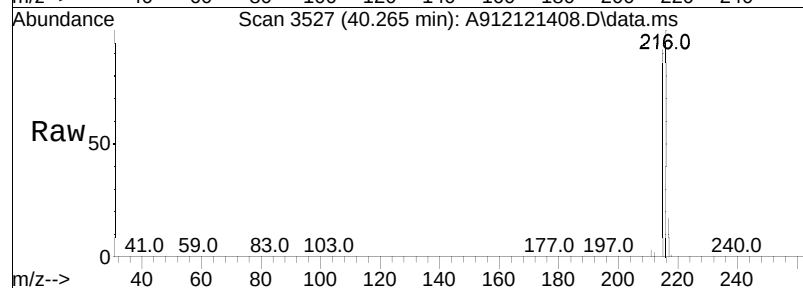
Acq: 12 Dec 2014 11:32 pm

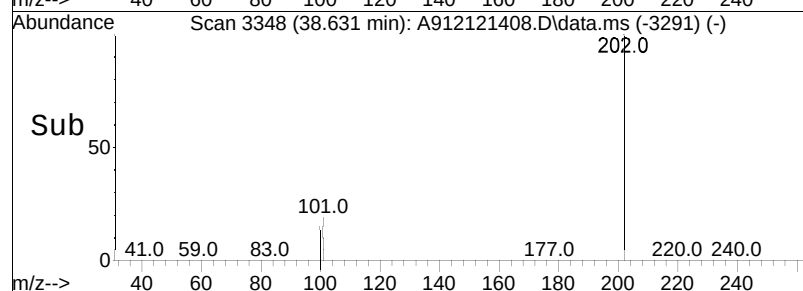
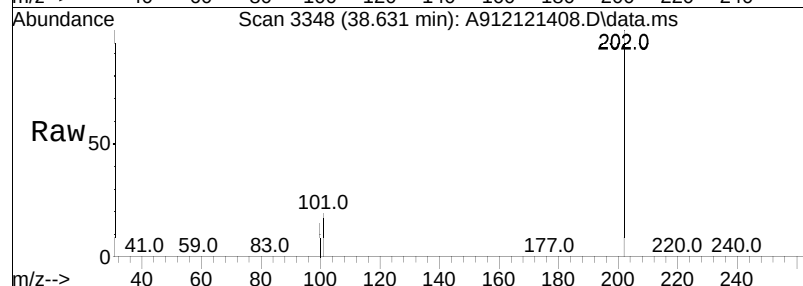
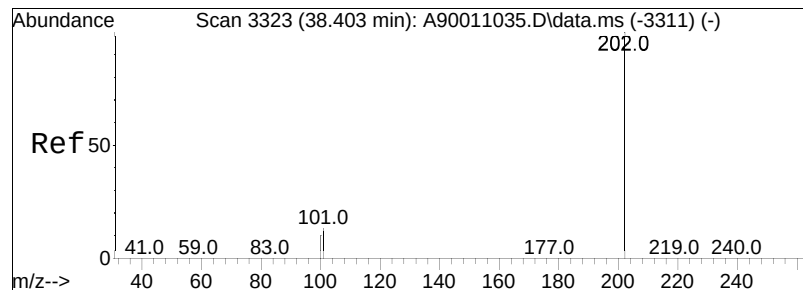
Tgt Ion: 216 Resp: 5161194

Ion Ratio Lower Upper

216 100

215 91.9 64.3 119.3





#60

Pyrene

Concen: 24381.49 ng/mL

RT: 38.631 min Scan# 3348

Delta R.T. 0.018 min

Lab File: A912121408.D

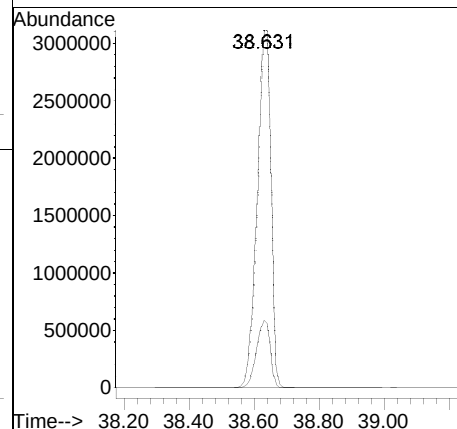
Acq: 12 Dec 2014 11:32 pm

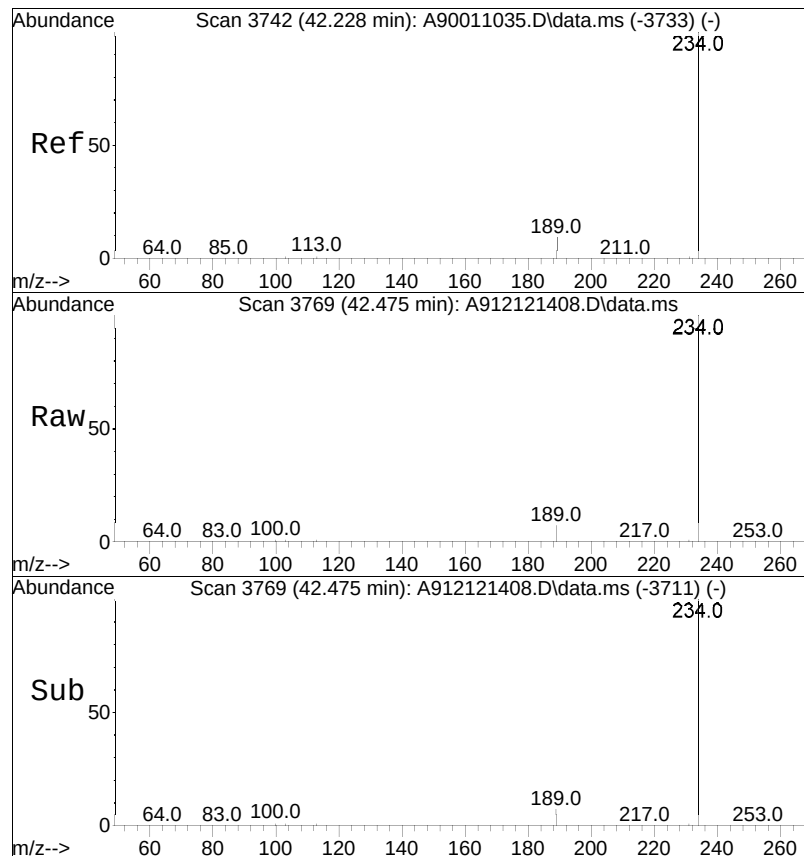
Tgt Ion: 202 Resp: 8943648

Ion Ratio Lower Upper

202 100

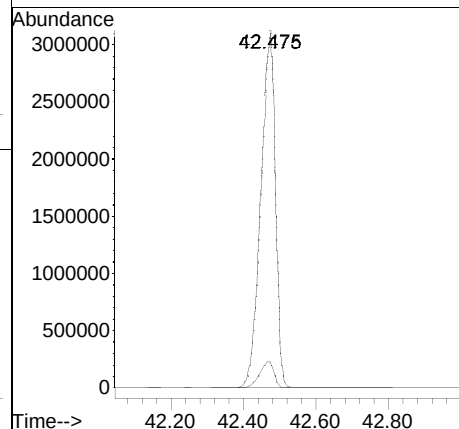
101 19.1 14.2 26.4

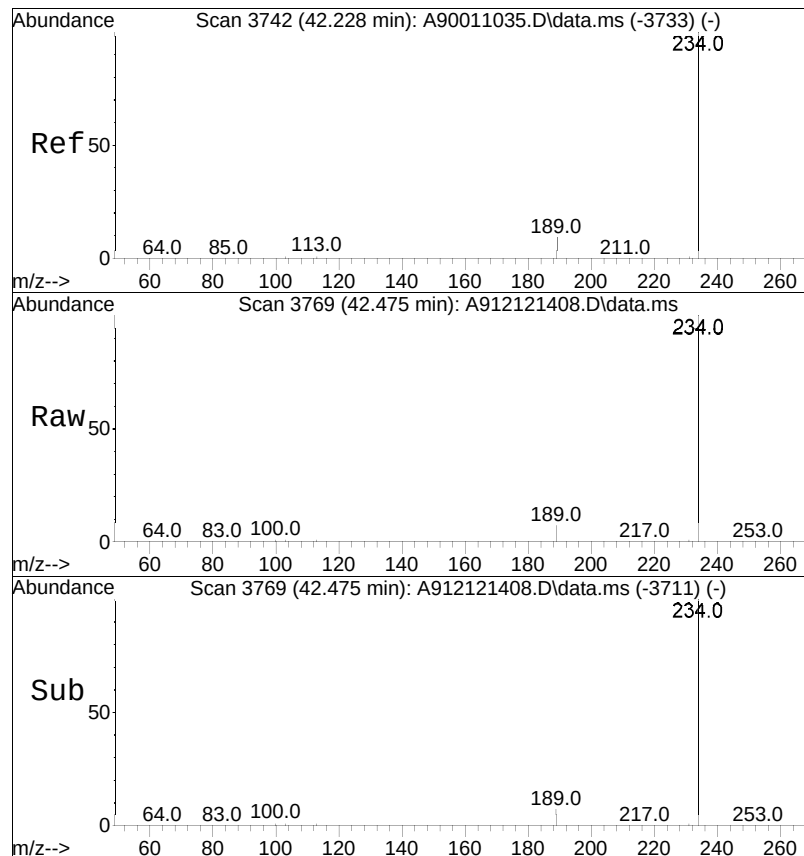




#66
 Naphthobenzothiophene
 Concen: 26189.98 ng/ml
 RT: 42.475 min Scan# 3769
 Delta R.T. 0.027 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

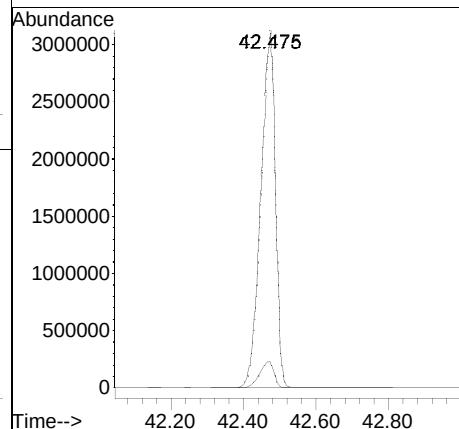
Tgt Ion: 234 Resp: 8511698
 Ion Ratio Lower Upper
 234 100
 189 7.4 4.9 9.1

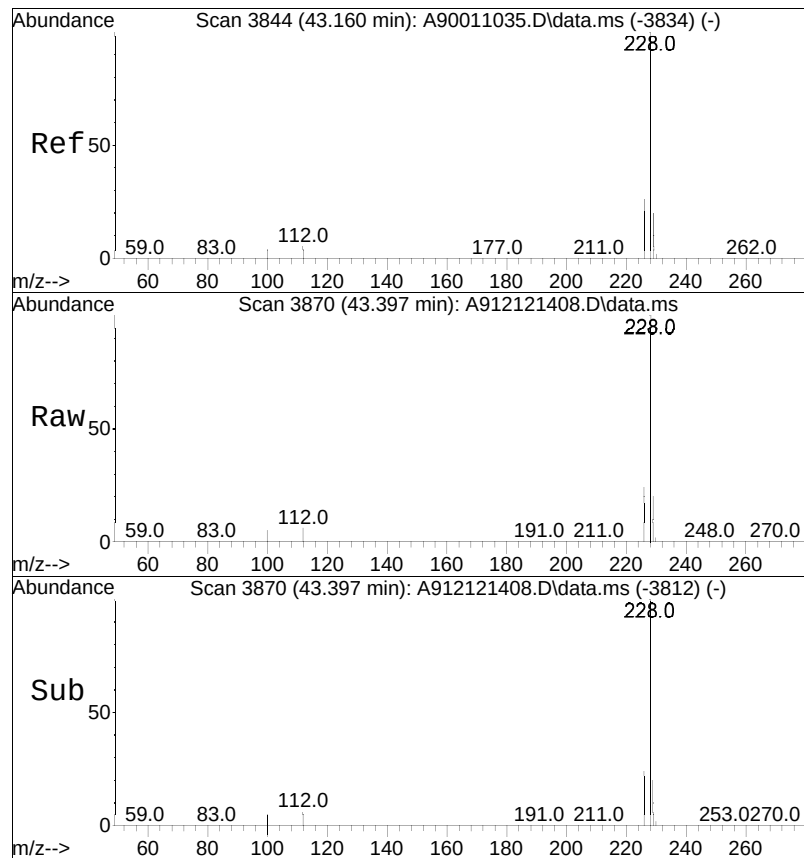




#67
 Naphthobenzothiophene-2,1-D
 Concen: 26189.98 ng/mL
 RT: 42.475 min Scan# 3769
 Delta R.T. 0.027 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

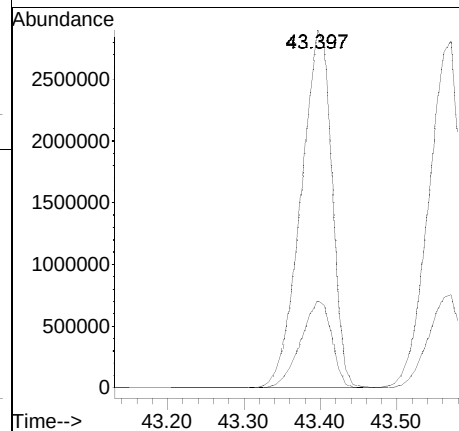
Tgt Ion: 234 Resp: 8511698
 Ion Ratio Lower Upper
 234 100
 189 7.4 4.9 9.1

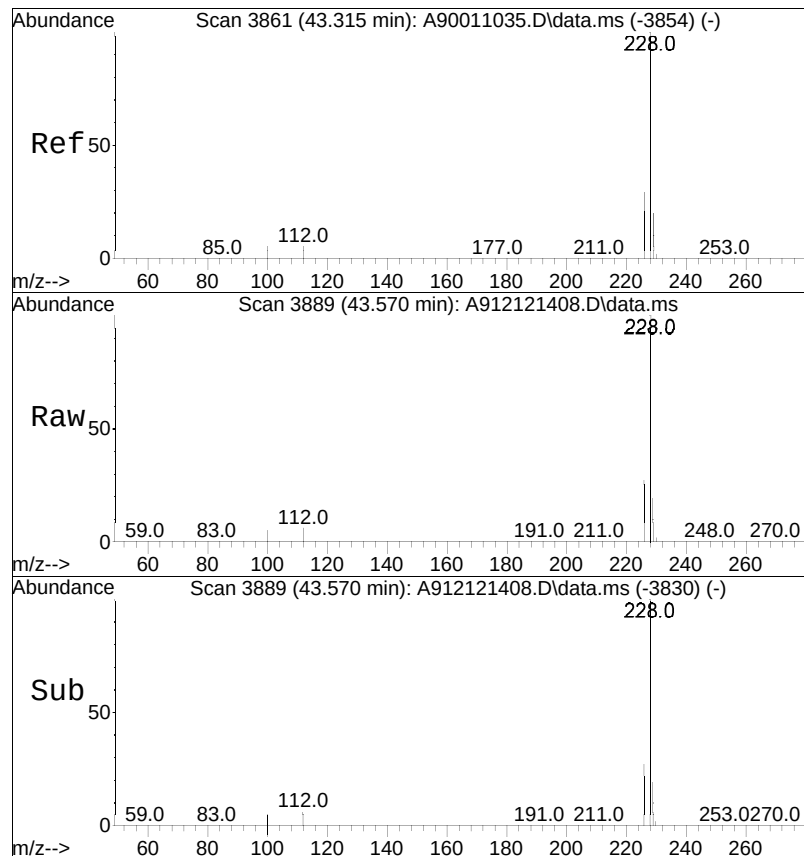




#75
 Benz[a]anthracene
 Concen: 24155.55 ng/mL M4
 RT: 43.397 min Scan# 3870
 Delta R.T. 0.027 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

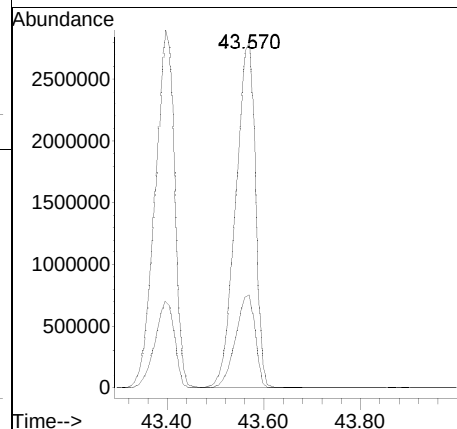
Tgt Ion:228 Resp: 8161981
 Ion Ratio Lower Upper
 228 100
 226 24.3 17.3 32.1

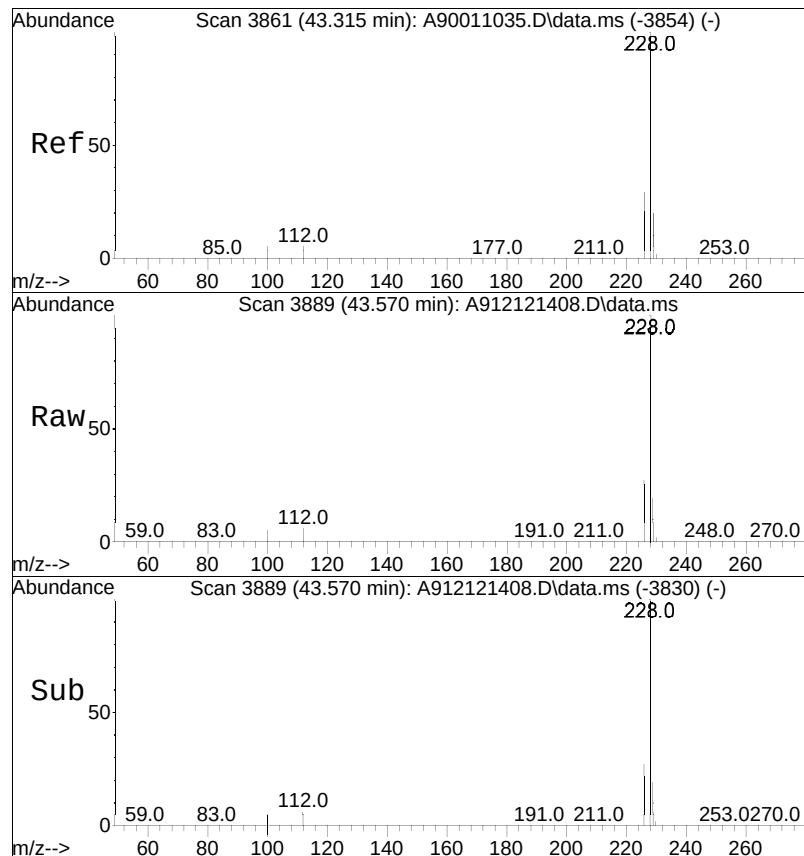




#76
Chrysene
 Concen: 23938.20 ng/mL
 RT: 43.570 min Scan# 3889
 Delta R.T. 0.037 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

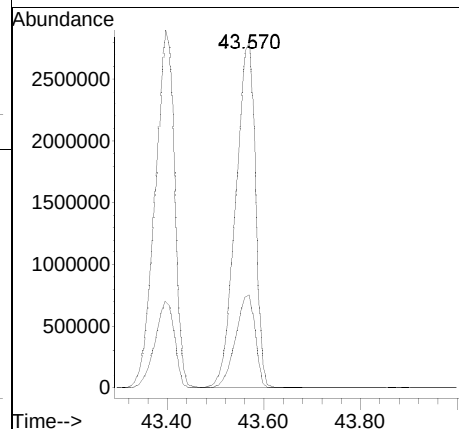
Tgt Ion	Ratio	Lower	Upper
228	100		
226	26.8	18.8	34.8

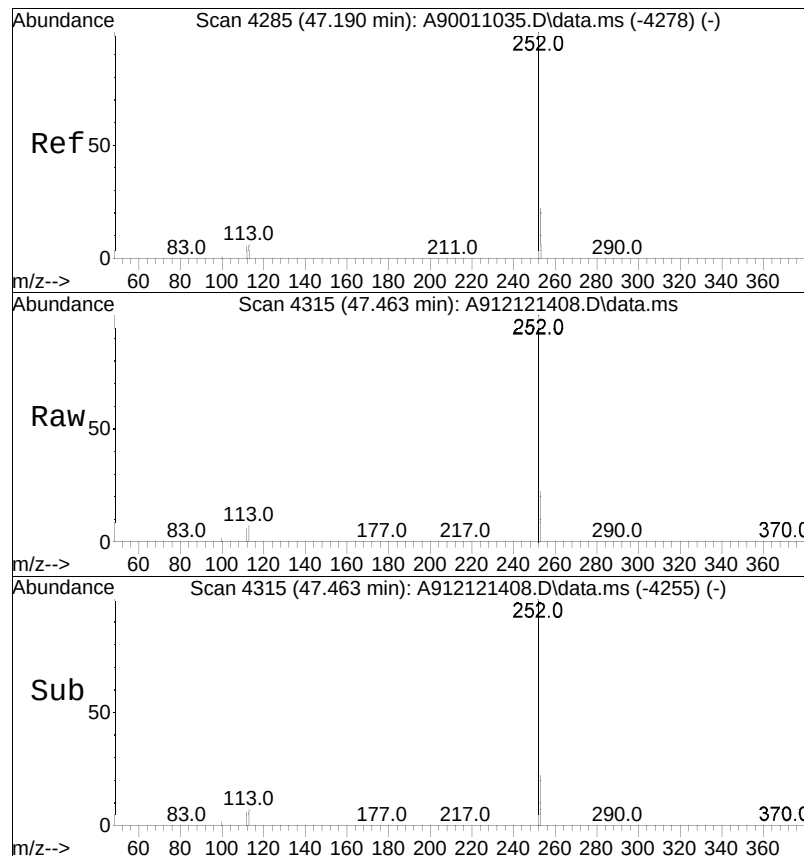




#77
 Chrysene/Triphenylene
 Concen: 23938.20 ng/mL
 RT: 43.570 min Scan# 3889
 Delta R.T. 0.037 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

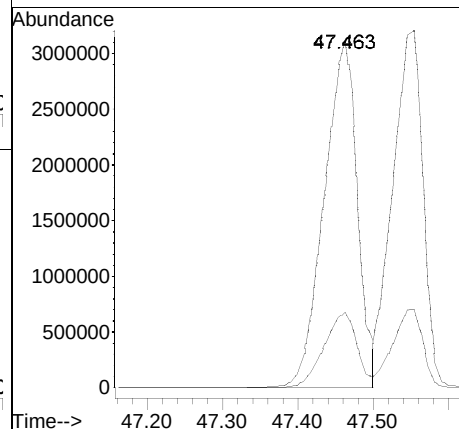
Tgt Ion: 228 Resp: 7959949
 Ion Ratio Lower Upper
 228 100
 226 26.8 18.8 34.8

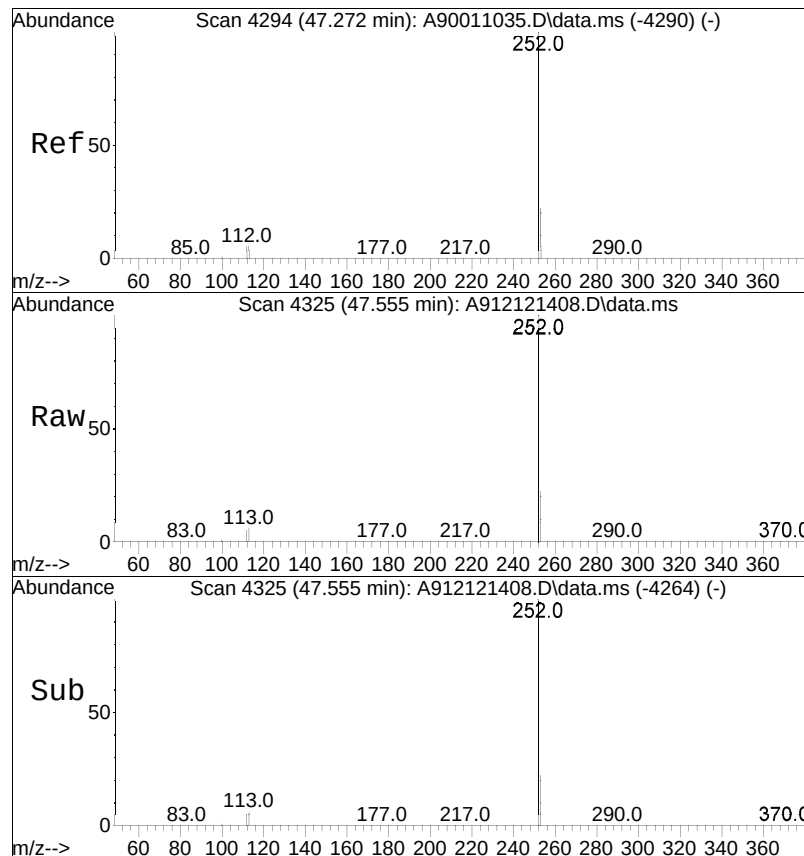




#84
 Benzo[b]fluoranthene
 Concen: 23222.86 ng/mL
 RT: 47.463 min Scan# 4315
 Delta R.T. 0.046 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

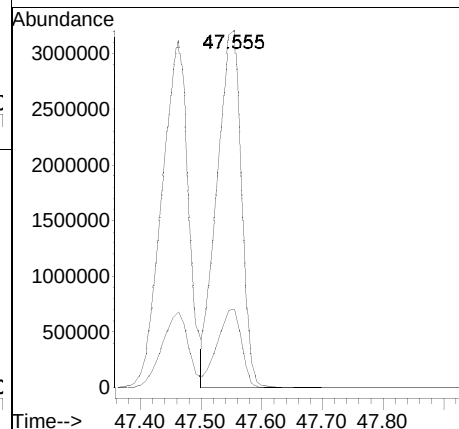
Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.7	16.4	30.4

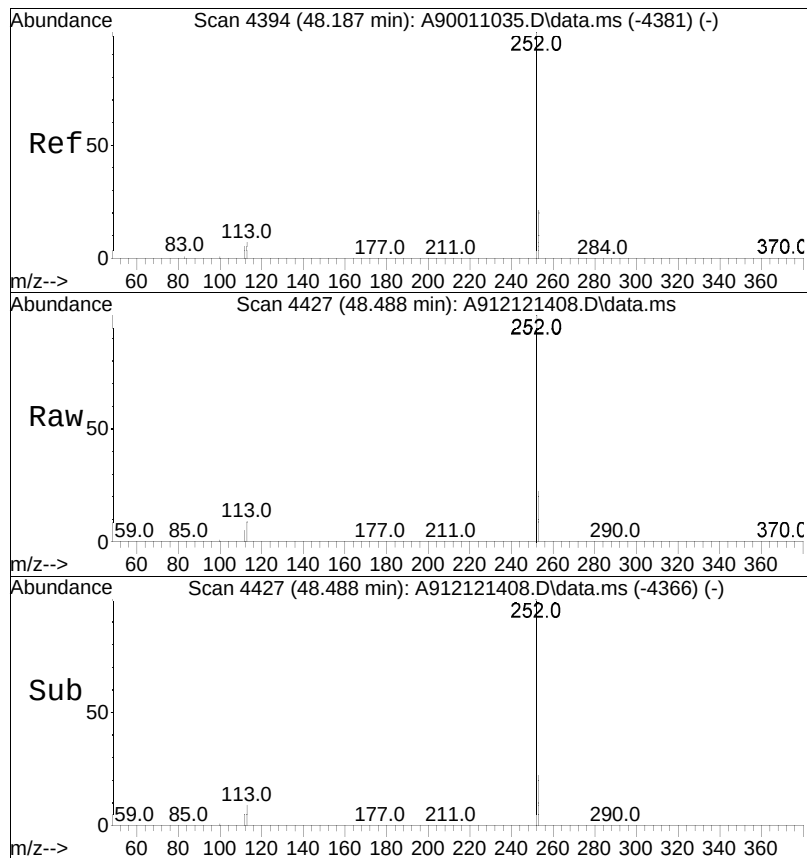




#85
 Benzo[j]+[k]fluoranthene
 Concen: 22258.82 ng/mL
 RT: 47.555 min Scan# 4325
 Delta R.T. 0.055 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

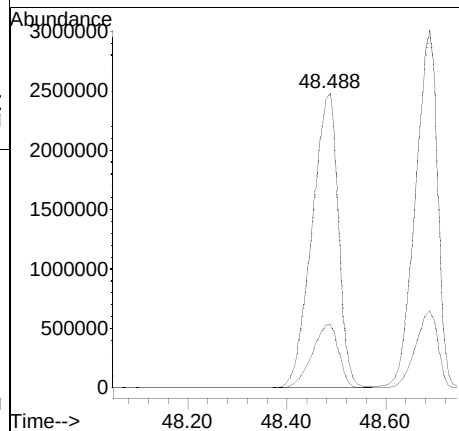
Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.7	16.1	29.9

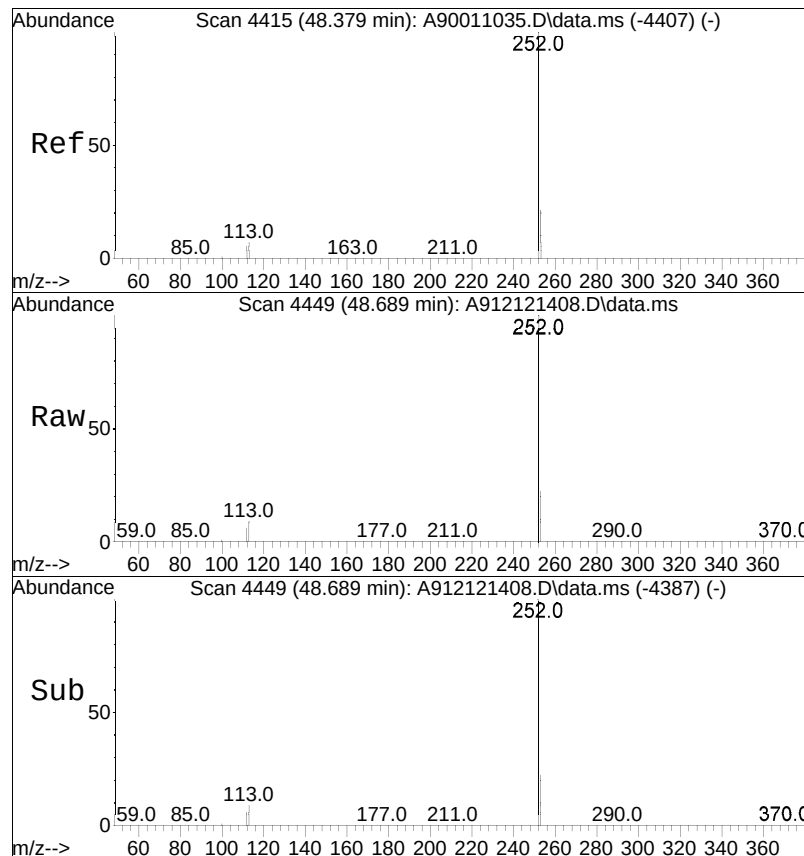




#87
 Benzo[e]pyrene
 Concen: 22773.91 ng/mL
 RT: 48.488 min Scan# 4427
 Delta R.T. 0.055 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

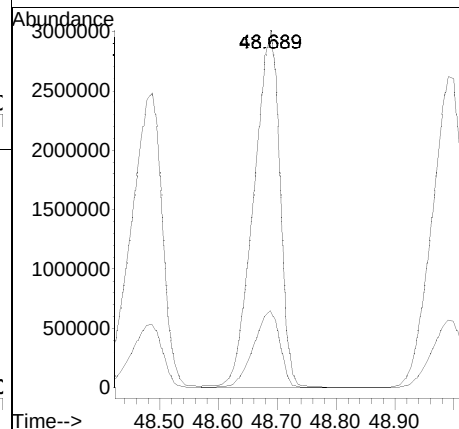
Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.6	16.2	30.0

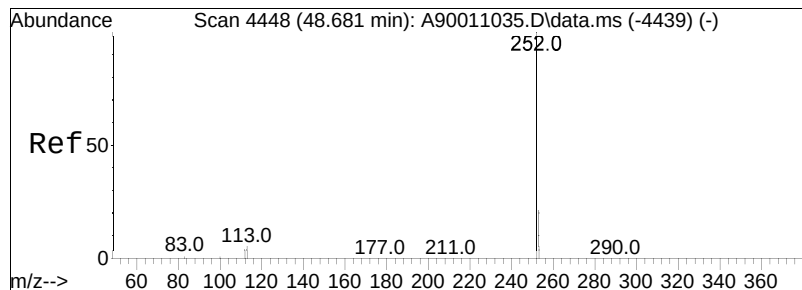




#89
 Benzo[a]pyrene
 Concen: 24015.74 ng/mL
 RT: 48.689 min Scan# 4449
 Delta R.T. 0.064 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

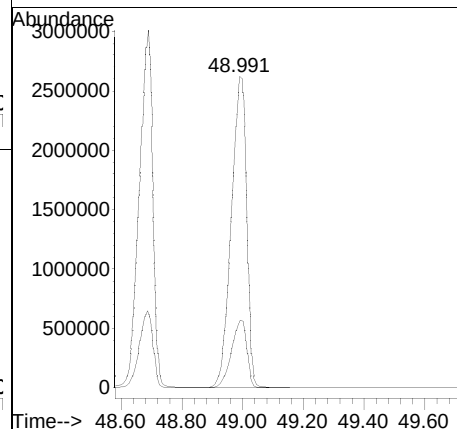
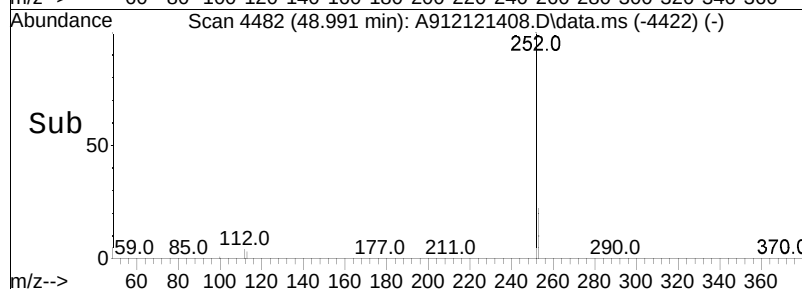
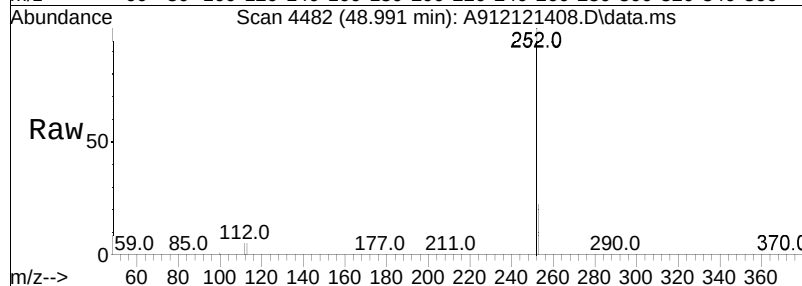
Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.7	16.4	30.6

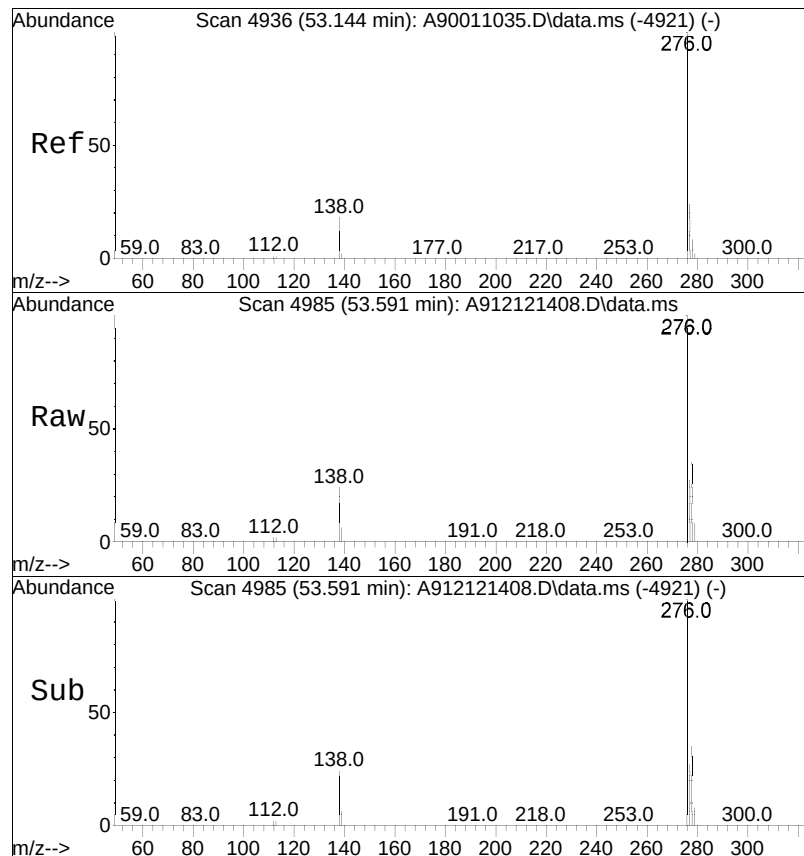




#90
 Perylene
 Concen: 23261.47 ng/mL
 RT: 48.991 min Scan# 4482
 Delta R.T. 0.046 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

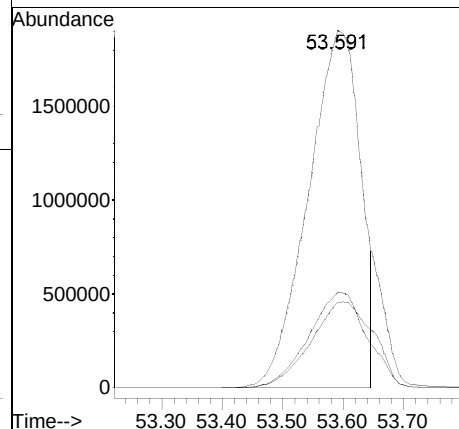
Tgt Ion: 252 Resp: 9212406
 Ion Ratio Lower Upper
 252 100
 253 21.5 16.6 30.8

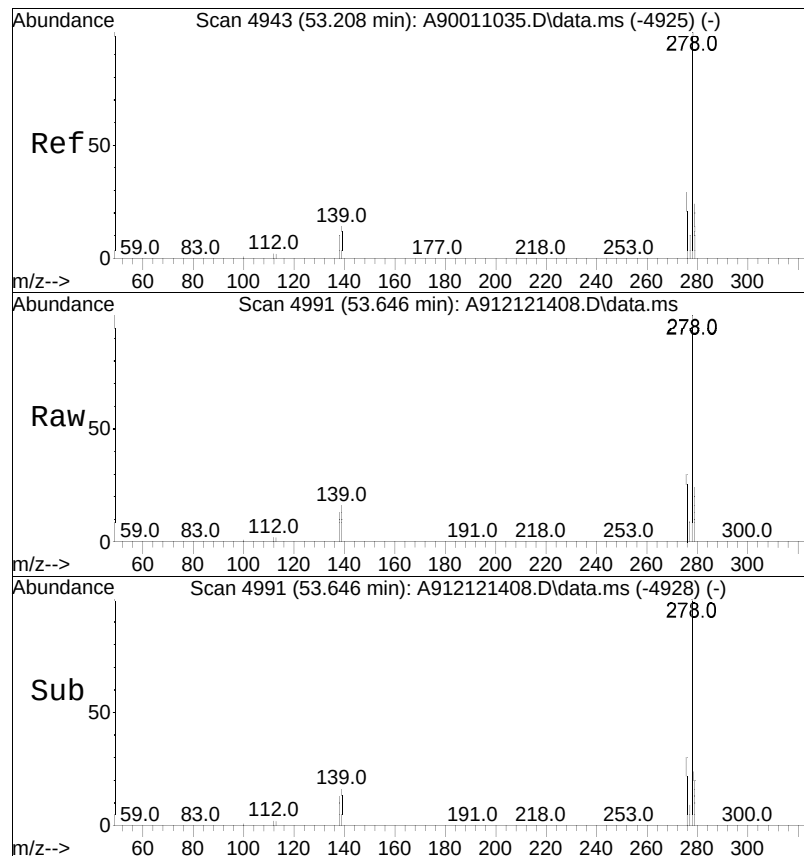




#91
 Indeno[1,2,3-cd]pyrene
 Concen: 22783.99 ng/mL M3
 RT: 53.591 min Scan# 4985
 Delta R.T. 0.082 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

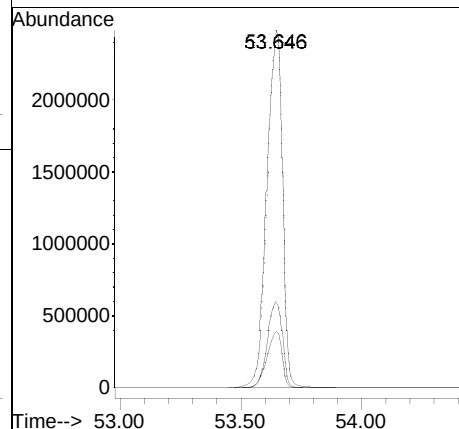
Tgt Ion:	276	Resp:	11373801
Ion Ratio	Lower	Upper	
276	100		
138	28.8	15.7	29.1
277	29.9	17.9	33.3

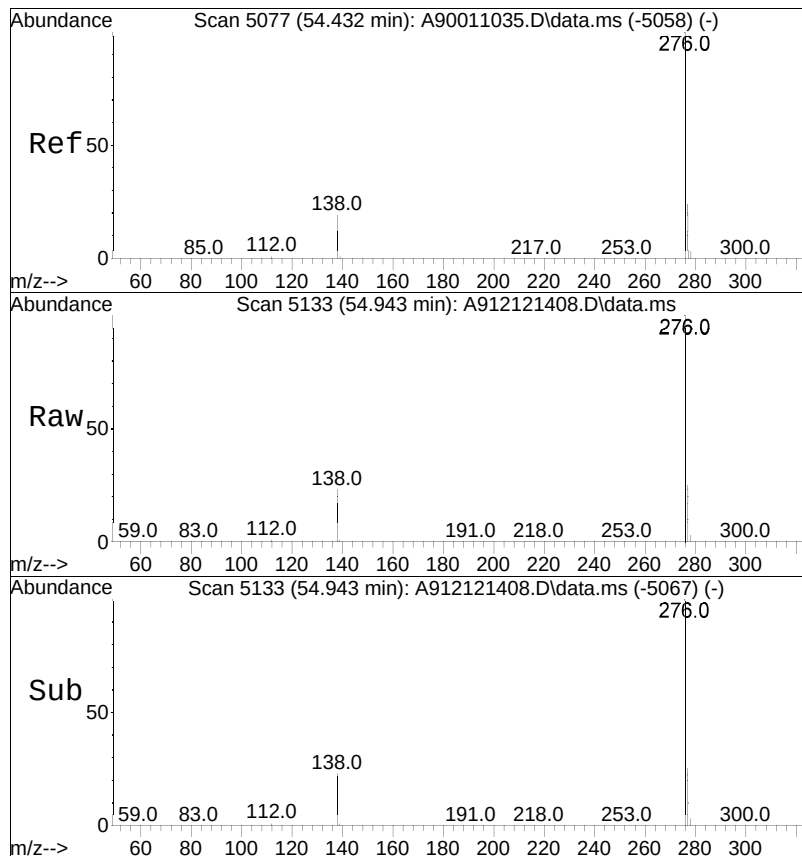




#92
 Dibenz[ah]+[ac]anthracene
 Concen: 23660.83 ng/mL
 RT: 53.646 min Scan# 4991
 Delta R.T. 0.073 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

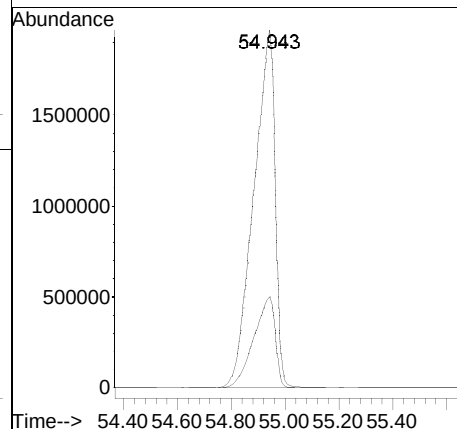
Tgt Ion	Ratio	Lower	Upper
278	100		
139	15.5	11.4	21.2
279	23.5	16.3	30.3





#93
 Benzo[g,h,i]perylene
 Concen: 22357.11 ng/mL
 RT: 54.943 min Scan# 5133
 Delta R.T. 0.101 min
 Lab File: A912121408.D
 Acq: 12 Dec 2014 11:32 pm

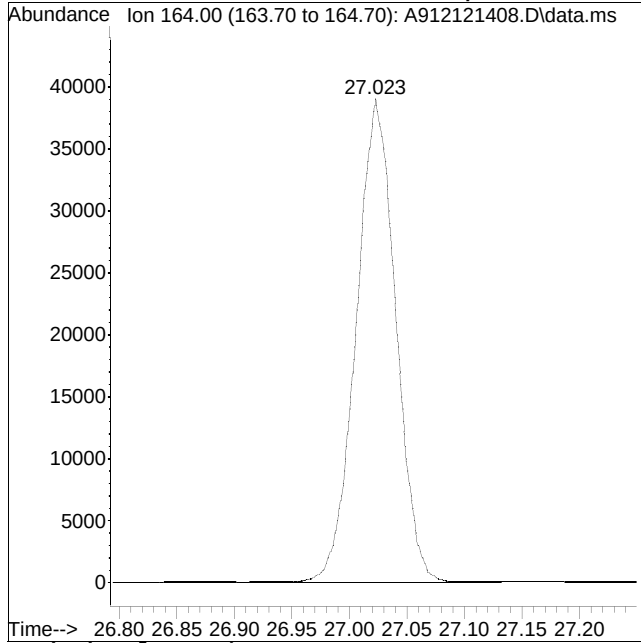
Tgt Ion	Ratio	Lower	Upper
276	100		
277	25.7	17.4	32.2



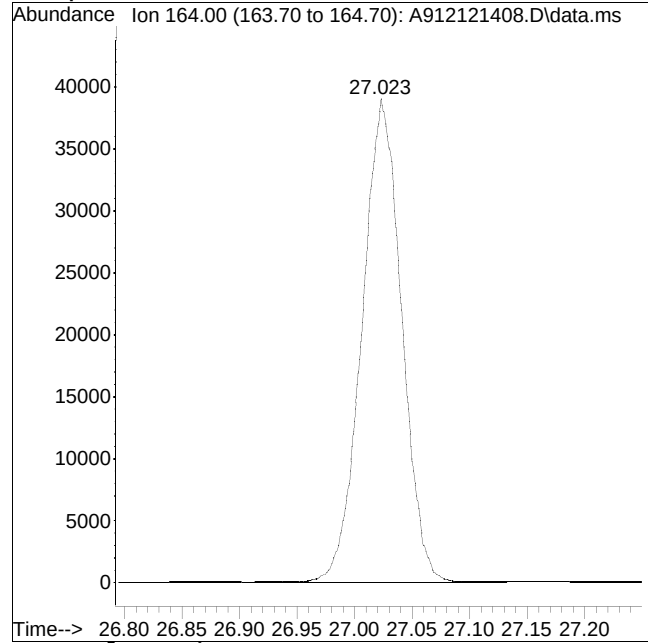
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121408.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 11:32 pm Instrument : PAH 9
Sample : i912121407 Quant Date : 12/15/2014 10:36 am

Compound #1: Acenaphthene-d10



Original Peak Response = 93505



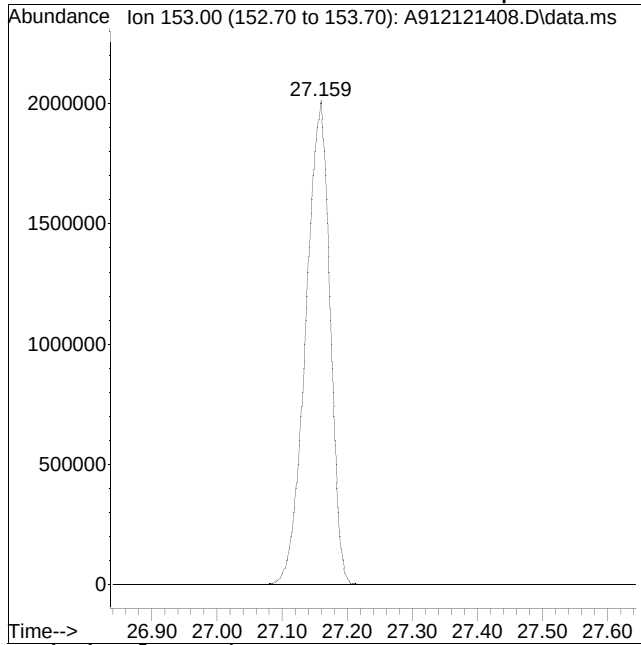
Manual Peak Response = 93441 M4

M4 = Poor automated baseline construction.

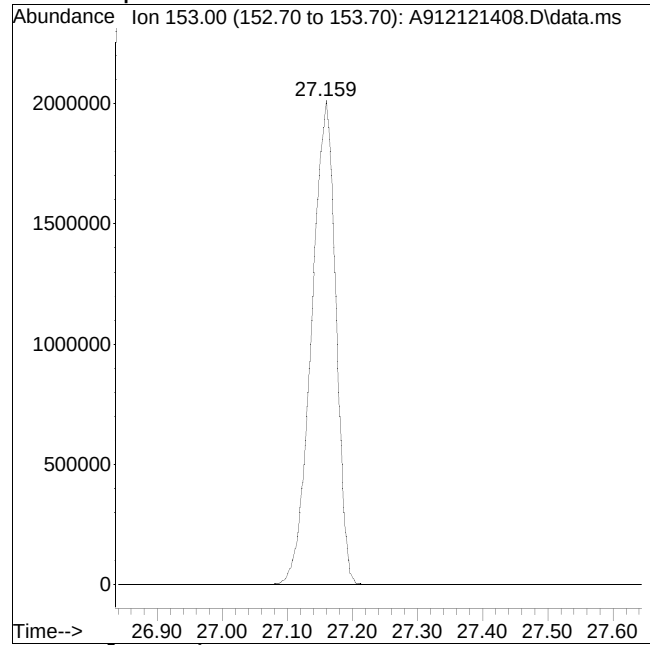
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121408.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 11:32 pm Instrument : PAH 9
Sample : i912121407 Quant Date : 12/15/2014 10:36 am

Compound #27: Acenaphthene



Original Peak Response = 5209031



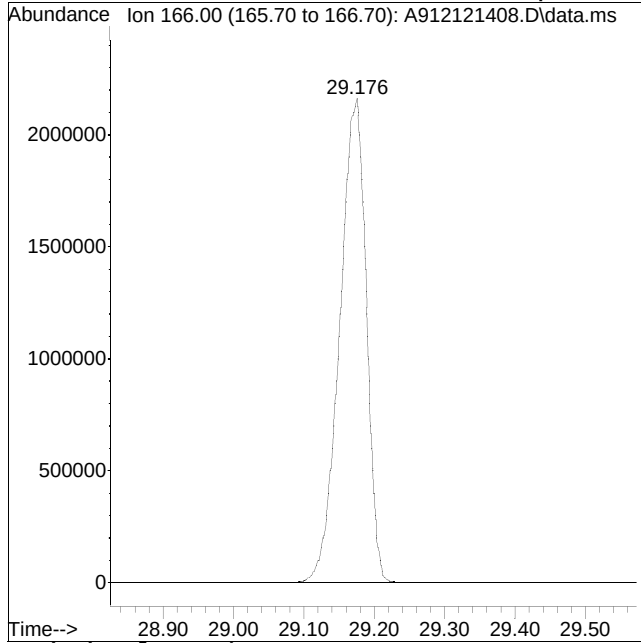
Manual Peak Response = 5208321 M4

M4 = Poor automated baseline construction.

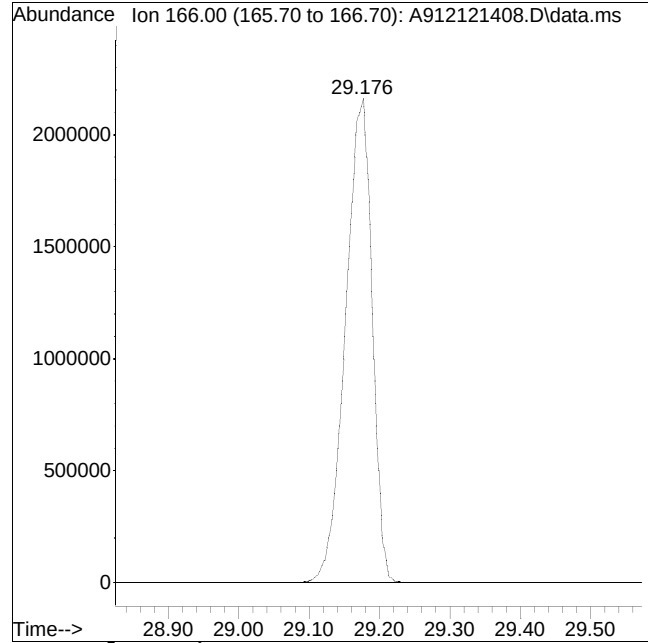
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121408.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 11:32 pm Instrument : PAH 9
Sample : i912121407 Quant Date : 12/15/2014 10:36 am

Compound #29: Fluorene



Original Peak Response = 5687176



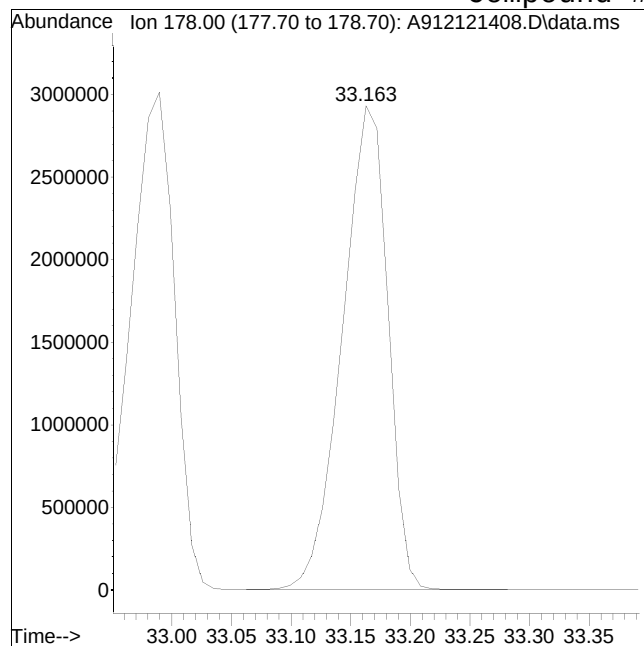
Manual Peak Response = 5686089 M4

M4 = Poor automated baseline construction.

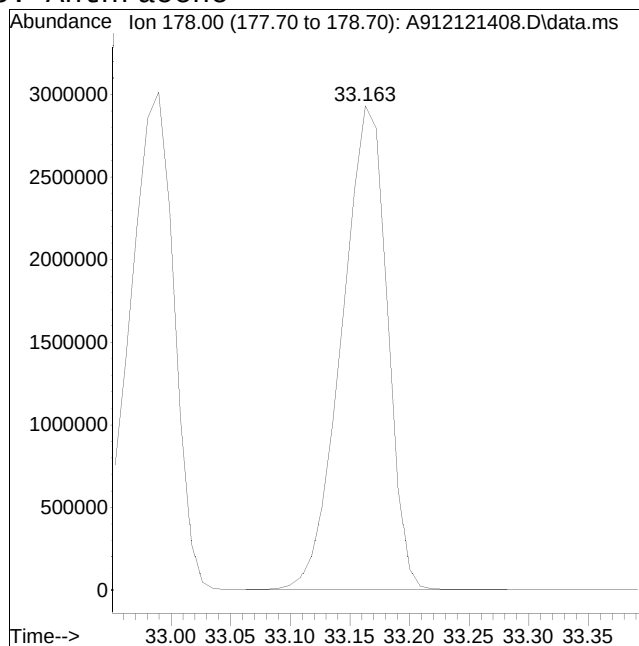
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121408.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 11:32 pm Instrument : PAH 9
Sample : i912121407 Quant Date : 12/15/2014 10:36 am

Compound #55: Anthracene



Original Peak Response = 7774358



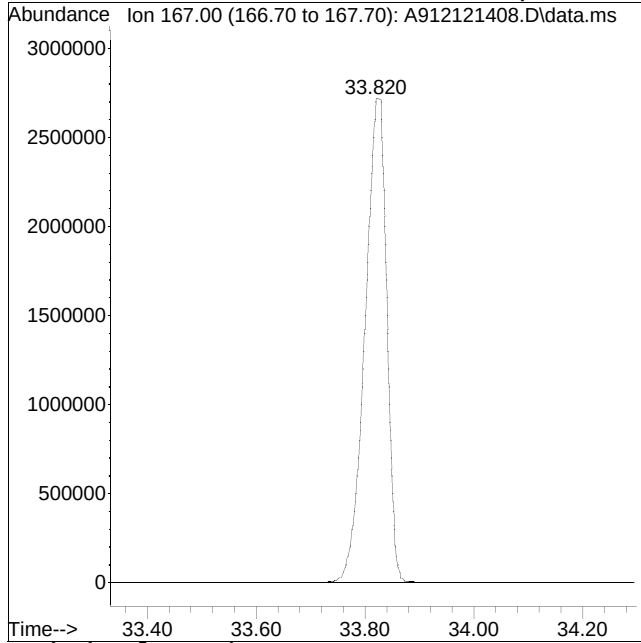
Manual Peak Response = 7775856 M4

M4 = Poor automated baseline construction.

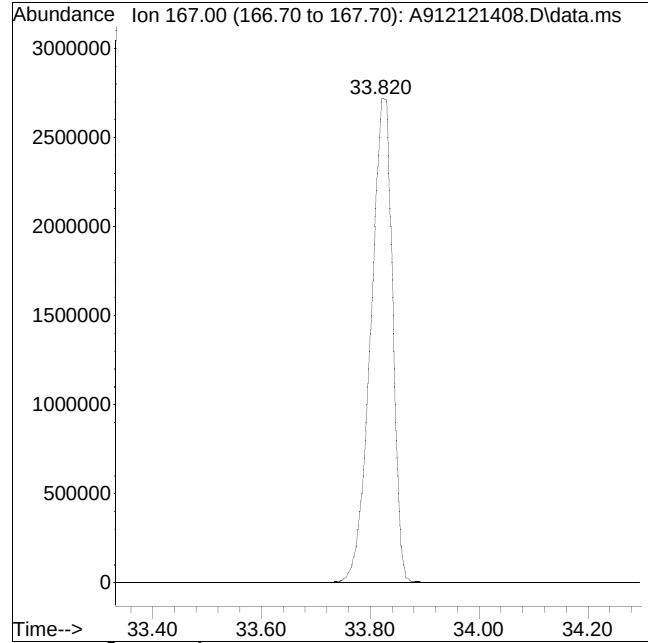
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121408.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 11:32 pm Instrument : PAH 9
Sample : i912121407 Quant Date : 12/15/2014 10:36 am

Compound #56: Carbazole



Original Peak Response = 7576979



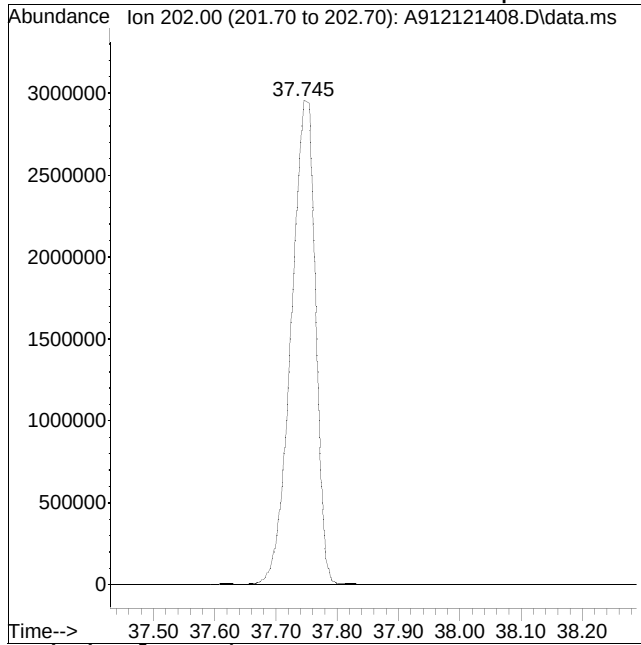
Manual Peak Response = 7569363 M4

M4 = Poor automated baseline construction.

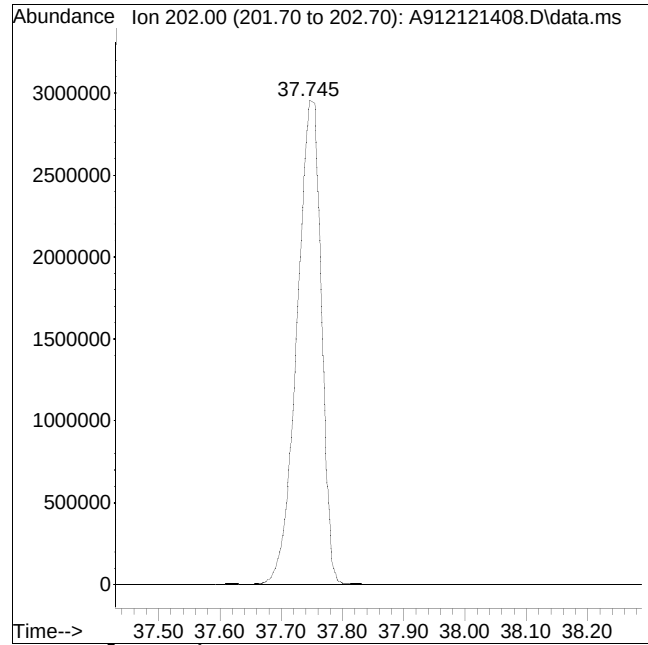
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121408.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 11:32 pm Instrument : PAH 9
Sample : i912121407 Quant Date : 12/15/2014 10:36 am

Compound #58: Fluoranthene



Original Peak Response = 8175858



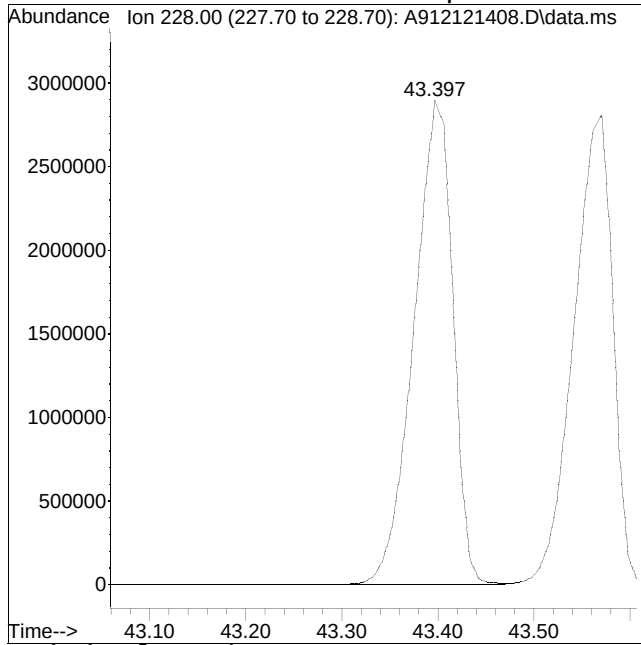
Manual Peak Response = 8168790 M4

M4 = Poor automated baseline construction.

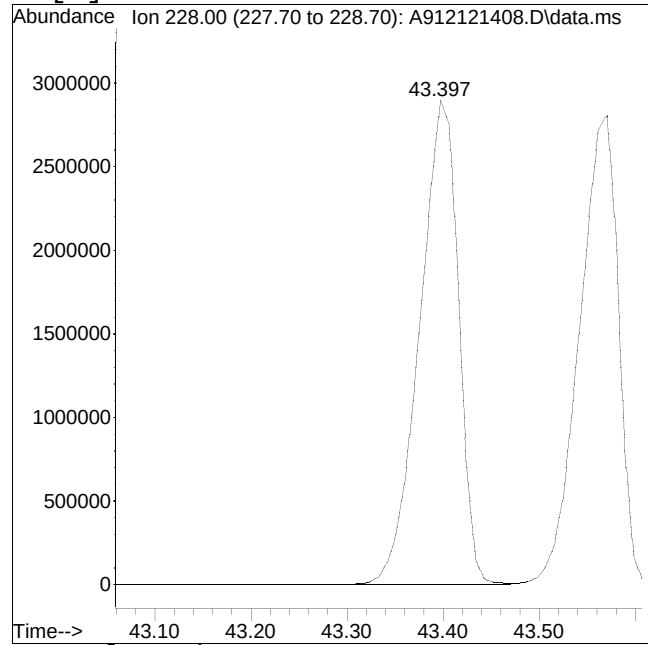
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121408.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 11:32 pm Instrument : PAH 9
Sample : i912121407 Quant Date : 12/15/2014 10:36 am

Compound #75: Benz[a]anthracene



Original Peak Response = 8168609



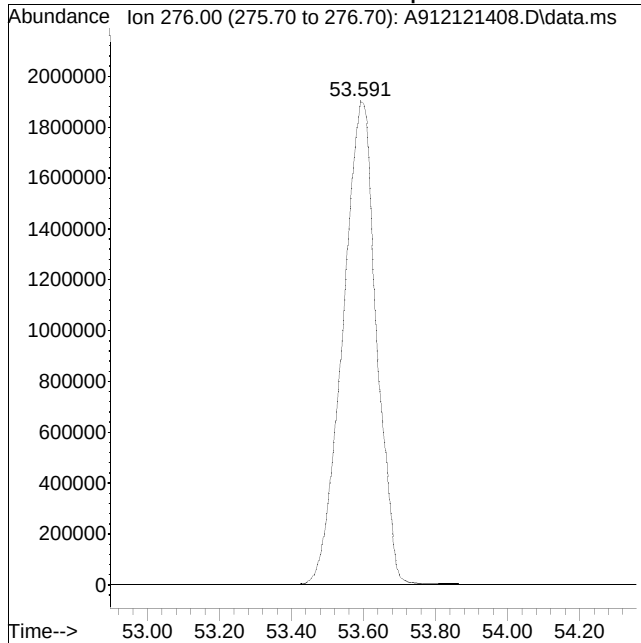
Manual Peak Response = 8161981 M4

M4 = Poor automated baseline construction.

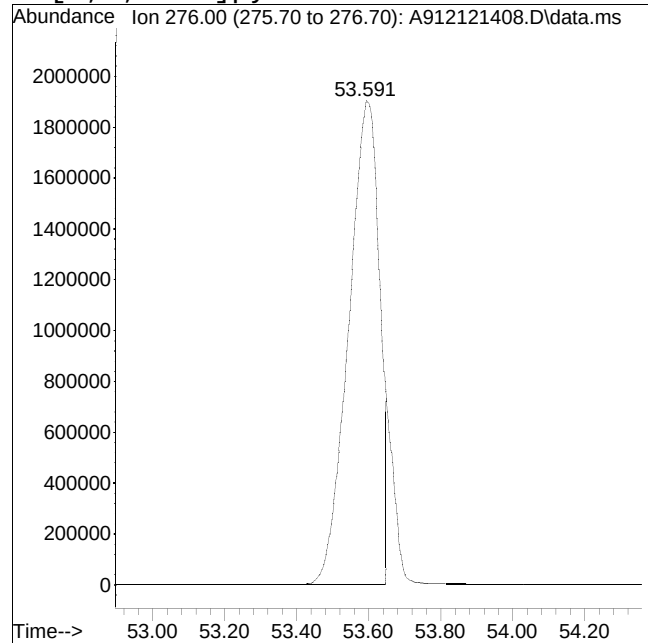
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121408.D Operator : PAH9:SR
Date Inj'd : 12/12/2014 11:32 pm Instrument : PAH 9
Sample : i912121407 Quant Date : 12/15/2014 10:36 am

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 12385555



Manual Peak Response = 11373801 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Initial Calibration Verification

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Data File : A912121410.D
 Acq On : 13 Dec 2014 2:21 am
 Operator : PAH9:SR
 Sample : Cq912121401
 Misc : WG749024,icc frau88 500 ng/mL
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 16 10:52:07 2014
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 12:33:18 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	98	0.00
3 A1	trans-Decalin	0.461	0.481	-4.3	104	0.00
4 t	cis-Decalin	0.362	0.356	1.7	104	0.00
9 s	Naphthalene-d8	2.264	2.329	-2.9	102	0.00
10 A1	Naphthalene	2.768	2.977	-7.6	106	0.00
16 t	2-Methylnaphthalene	1.502	1.609	-7.1	105	0.00
17 t	1-Methylnaphthalene	1.468	1.507	-2.7	101	0.00
18 A1	Benzothiophene	2.530	2.708	-7.0	106	0.00
23 t	Biphenyl	1.852	1.968	-6.3	103	0.00
24 t	2,6-Dimethylnaphthalene	1.221	1.251	-2.5	101	0.00
25 t	Dibenzofuran	1.944	2.043	-5.1	102	0.00
26 t	Acenaphthylene	2.298	2.199	4.3	95	0.00
27 t	Acenaphthene	1.385	1.444	-4.3	101	0.00
28 t	2,3,5-Trimethylnaphthalene	1.165	1.144	1.8	98	0.00
29 A1	Fluorene	1.558	1.506	3.3	97	0.00
33 A1	Dibenzothiophene	2.288	2.318	-1.3	98	0.00
42 s	Phenanthrene-d10	1.716	1.545	10.0	90	0.00
43 A1	Phenanthrene	2.174	2.164	0.5	95	0.00
54 t	Retene	0.598	0.582	2.7	94	0.00
55 t	Anthracene	2.007	1.902	5.2	91	0.00
56 t	Carbazole	1.932	1.802	6.7	90	0.00
57 t	1-Methylphenanthrene	1.439	1.330	7.6	90	0.00
58 A1	Fluoranthene	2.207	2.002	9.3	88	0.00
59 t	Benzo(b)fluorene	1.333	1.147	14.0	83	0.00
60 A1	Pyrene	2.347	2.248	4.2	89	0.00
66 A1	Naphthobenzothiophene	2.341	2.269	3.1	187	0.00
67 A2	Naphthobenzothiophene-2,1-D	2.341	2.269	3.1	187	0.00
74 i	Chrysene-d12	1.000	1.000	0.0	87	0.00
75 t	Benz[a]anthracene	1.108	1.053	5.0	85	0.00
76 A1	Chrysene	1.095	1.158	-5.8	90	0.00
77 A2	Chrysene/Triphenylene	1.095	1.158	-5.8	90	0.00
83 S	Benzo[b]fluoranthene-d12	1.034	0.957	7.4	84	0.00
84 t	Benzo[b]fluoranthene	1.311	1.281	2.3	88	0.00
85 A1	Benzo[j]+[k]fluoranthene	1.255	1.200	4.4	86	0.00
87 t	Benzo[e]pyrene	1.255	1.168	6.9	82	0.00
88 s	Benzo[a]pyrene-d12	0.949	0.871	8.2	84	0.00
89 t	Benzo[a]pyrene	1.230	1.224	0.5	87	0.00
90 t	Perylene	1.241	1.163	6.3	84	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Data File : A912121410.D
 Acq On : 13 Dec 2014 2:21 am
 Operator : PAH9:SR
 Sample : Cq912121401
 Misc : WG749024,icc frau88 500 ng/mL
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 16 10:52:07 2014
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 12:33:18 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.526	1.477	3.2	88	0.00
92 t	Dibenz[ah]+[ac]anthracene	1.506	1.456	3.3	89	0.00
93 t	Benzo[g,h,i]perylene	1.482	1.398	5.7	89	0.00
94 A1	Hopane (T19)	0.306	0.000#	100.0#	0#	-52.63#
95 A2	17a(H),21B(H)-hopane - C30H	0.306	0.000#	100.0#	0#	-52.63#
129 SA1	5B(H)Cholane - Surr	0.158	0.000#	100.0#	0#	-44.06#

* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Mass Discrimination (Concentration)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	0.95	0.70 - 1.30

Mass Discrimination (Response)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	1.16	0.70 - 2.00

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Data File : A912121410.D
 Acq On : 13 Dec 2014 2:21 am
 Operator : PAH9:SR
 Sample : Cq912121401
 Misc : WG749024,icc frau88 500 ng/mL
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 16 10:52:07 2014
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 12:33:18 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.023	164	80393M4	500.000	ng/mL	0.00
74) Chrysene-d12	43.433	240	144707	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	20.060	136	187224	514.358	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	51.44%		
42) Phenanthrene-d10	32.880	188	124178	450.038	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	45.00%#		
83) Benzo[b]fluoranthene-d12	47.335	264	138542	462.779	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	46.28%#		
88) Benzo[a]pyrene-d12	48.533	264	126006	458.647	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	45.86%#		
129) 5B(H)Cholane - Surr	0.000	217	0	0.000	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#		
Target Compounds						
						Qvalue
3) trans-Decalin	16.720	138	19330	261.003	ng/mL	100
4) cis-Decalin	17.943	138	14328	246.185	ng/mL	100
10) Naphthalene	20.142	128	239304	537.781	ng/mL	100
16) 2-Methylnaphthalene	22.825	142	129390	535.747	ng/mL	100
17) 1-Methylnaphthalene	23.254	142	121121	513.071	ng/mL	100
18) Benzo[thiophene	20.361	134	217693	535.176	ng/mL	100
23) Biphenyl	24.705	154	158188	531.281	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.307	156	100608	512.503	ng/mL	100
25) Dibenzofuran	27.789	168	164218	525.364	ng/mL	99
26) Acenaphthylene	26.411	152	176787	478.494	ng/mL	100
27) Acenaphthene	27.141	153	116053	520.998	ng/mL	100
28) 2,3,5-Trimethylnaphthalen	28.692	170	91957	490.865	ng/mL	98
29) Fluorene	29.158	166	121101	483.529	ng/mL	99
33) Dibenzothiophene	32.469	184	186329	506.593	ng/mL	98
43) Phenanthrene	32.962	178	173952	497.736	ng/mL	99
54) Retene	39.927	234	46754	486.479	ng/mL	95
55) Anthracene	33.145	178	152903M4	473.739	ng/mL	
56) Carbazole	33.802	167	144891	466.466	ng/mL	99
57) 1-Methylphenanthrene	35.463	192	106940	462.060	ng/mL	100
58) Fluoranthene	37.727	202	160953M4	453.608	ng/mL	
59) Benzo(b)fluorene	40.238	216	92234	430.350	ng/mL	99
60) Pyrene	38.612	202	180737	478.845	ng/mL	97
66) Naphthobenzothiophene	42.447	234	364775	968.992	ng/ml	98
67) Naphthobenzothiophene-2,1	42.447	234	364775	968.992	ng/mL	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Data File : A912121410.D
 Acq On : 13 Dec 2014 2:21 am
 Operator : PAH9:SR
 Sample : Cq912121401
 Misc : WG749024,icc frau88 500 ng/mL
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 16 10:52:07 2014
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 12:33:18 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.369	228	152410	475.344	ng/mL	99
76)	Chrysene	43.534	228	167549	528.557	ng/mL	99
77)	Chrysene/Triphenylene	43.534	228	167549	528.557	ng/mL	99
84)	Benzo[b]fluoranthene	47.418	252	185436	488.910	ng/mL	97
85)	Benzo[j]+[k]fluoranthene	47.500	252	173672	478.098	ng/mL	97
87)	Benzo[e]pyrene	48.433	252	168984	465.206	ng/mL	97
89)	Benzo[a]pyrene	48.625	252	177137	497.615	ng/mL	96
90)	Perylene	48.945	252	168274	468.334	ng/mL	96
91)	Indeno[1,2,3-cd]pyrene	53.509	276	213663M3	483.875	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.573	278	210681M4	483.450	ng/mL	
93)	Benzo[g,h,i]perylene	54.834	276	202247	471.507	ng/mL	99
94)	Hopane (T19)	0.000		0	N.D.	d	
95)	17a(H),21B(H)-hopane - C3	0.000		0	N.D.	d	

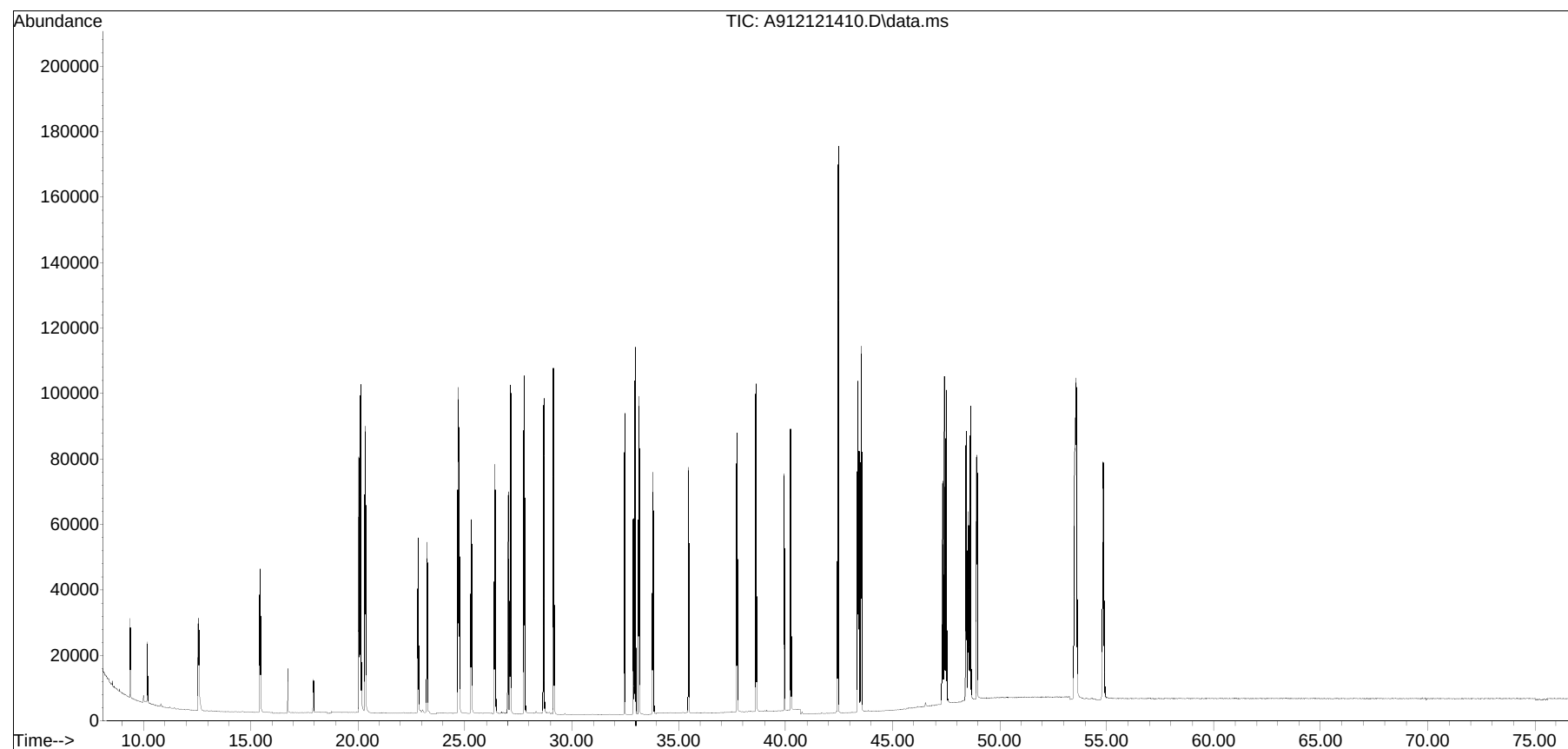
(#) = qualifier out of range (m) = manual integration (+) = signals summed

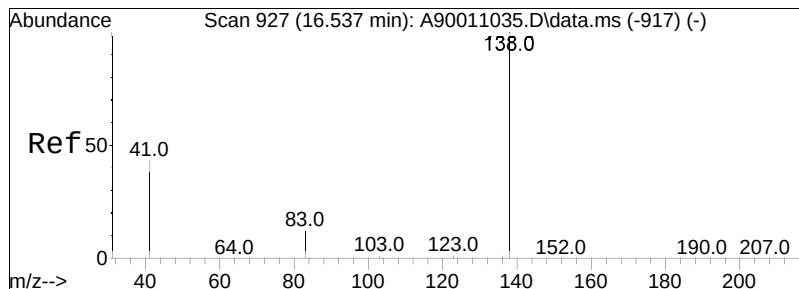
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC12\
Data File : A912121410.D
Acq On : 13 Dec 2014 2:21 am
Operator : PAH9:SR
Sample : Cq912121401
Misc : WG749024,icc frau88 500 ng/mL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 16 10:52:07 2014
Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 15 12:33:18 2014
Response via : Initial Calibration

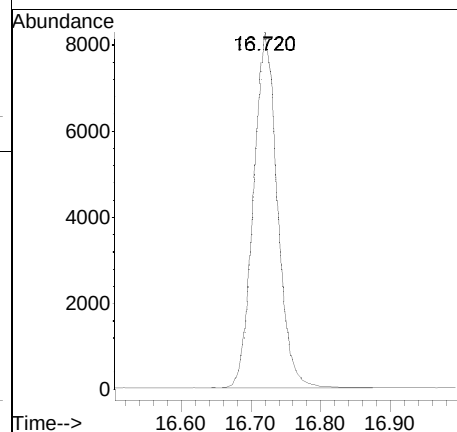
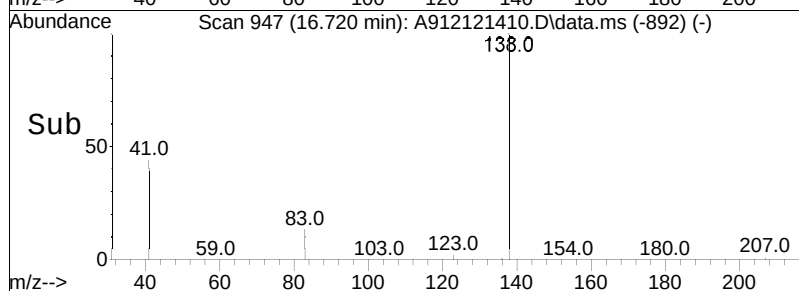
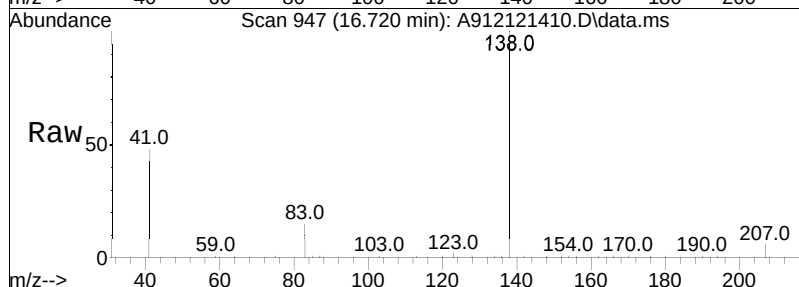
Sub List : ICAL_CCALT_REV2 - CC with five surrogates

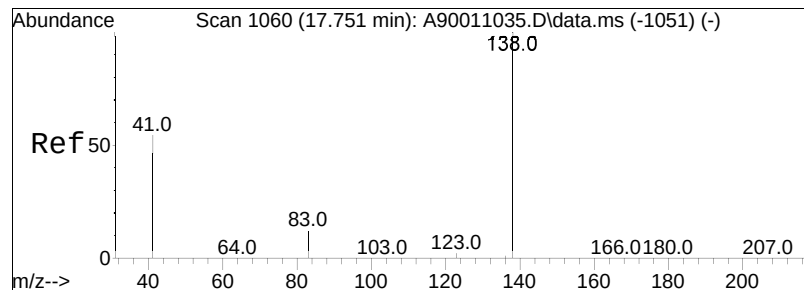




#3
trans-Decalin
Concen: 261.00 ng/mL
RT: 16.720 min Scan# 947
Delta R.T. -0.000 min
Lab File: A912121410.D
Acq: 13 Dec 2014 2:21 am

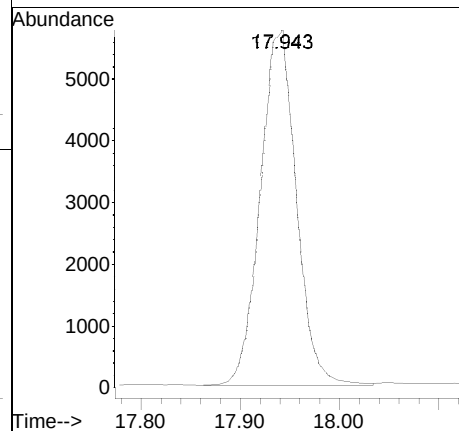
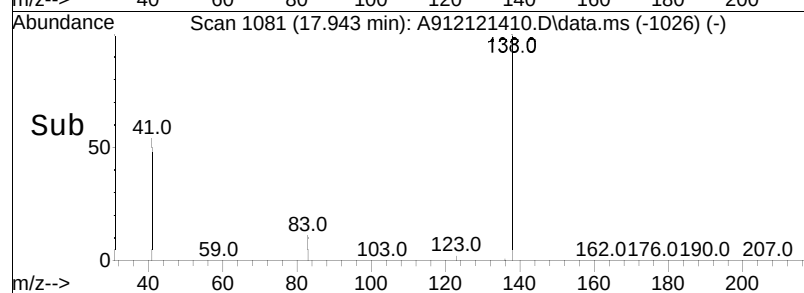
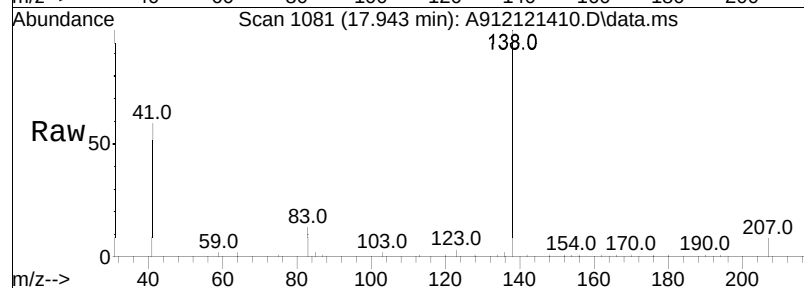
Tgt Ion:138 Resp: 19330

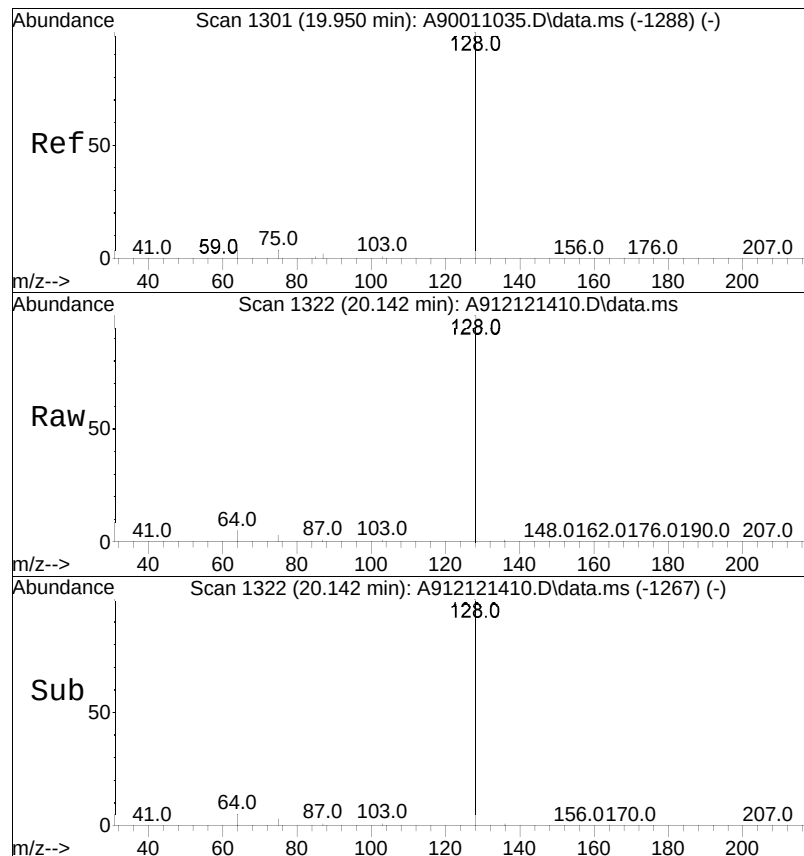




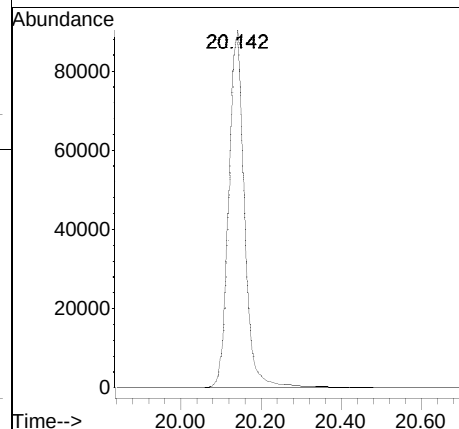
#4
cis-Decalin
Concen: 246.19 ng/mL
RT: 17.943 min Scan# 1081
Delta R.T. -0.000 min
Lab File: A912121410.D
Acq: 13 Dec 2014 2:21 am

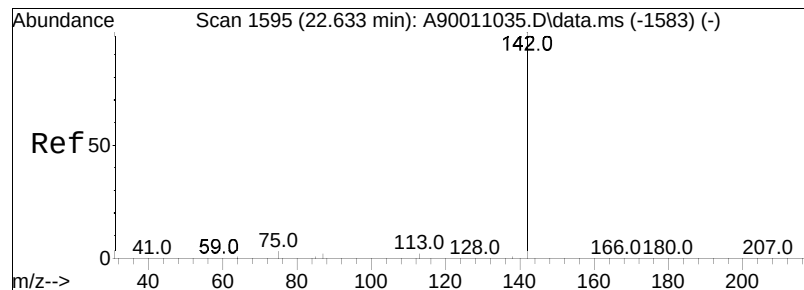
Tgt Ion:138 Resp: 14328





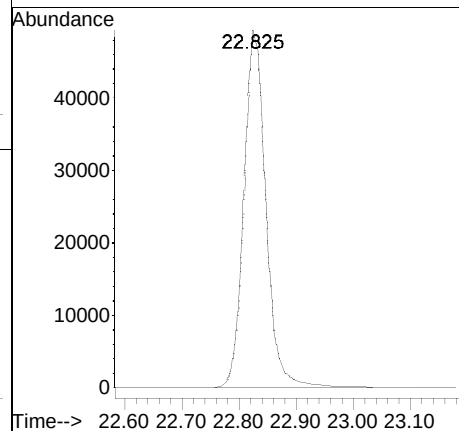
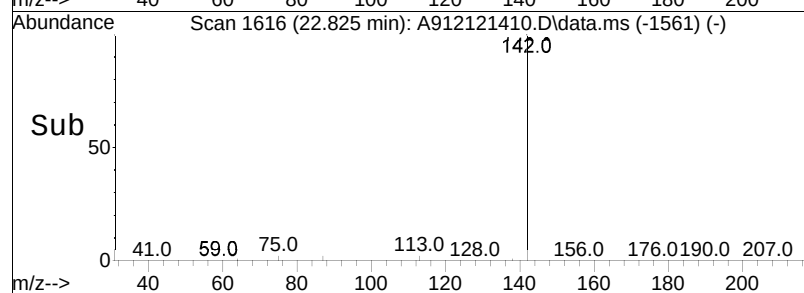
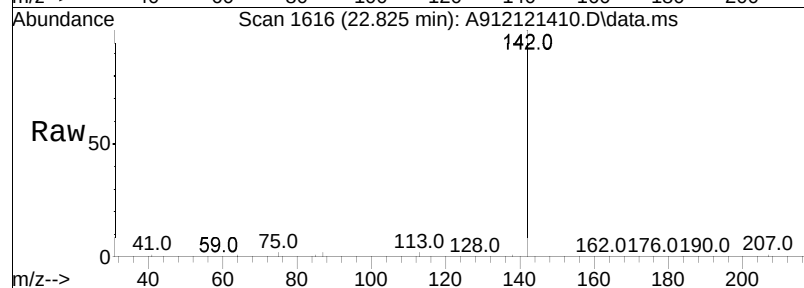
#10
 Naphthalene
 Concen: 537.78 ng/mL
 RT: 20.142 min Scan# 1322
 Delta R.T. -0.000 min
 Lab File: A912121410.D
 Acq: 13 Dec 2014 2:21 am
 Tgt Ion:128 Resp: 239304

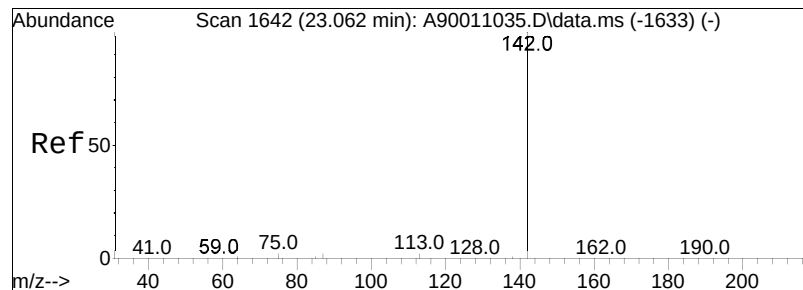




#16
2-Methylnaphthalene
Concen: 535.75 ng/mL
RT: 22.825 min Scan# 1616
Delta R.T. -0.000 min
Lab File: A912121410.D
Acq: 13 Dec 2014 2:21 am

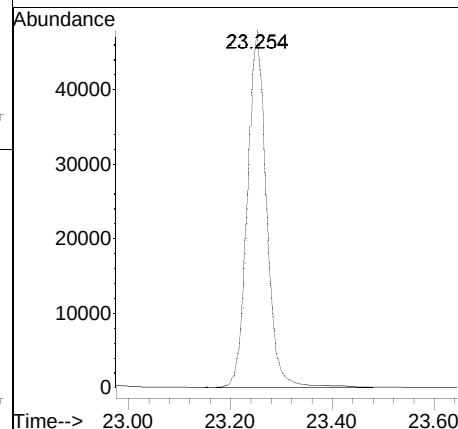
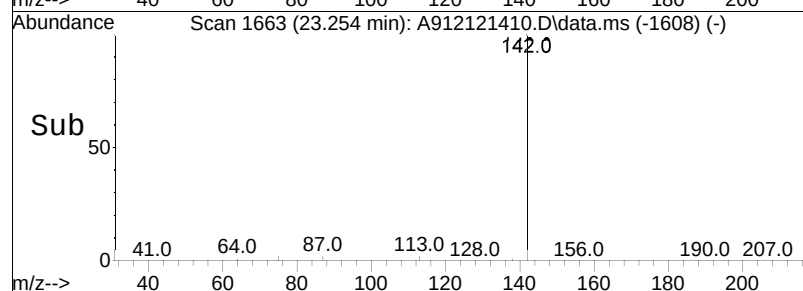
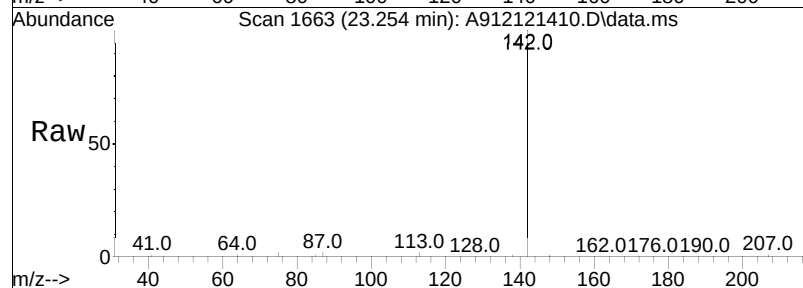
Tgt Ion:142 Resp: 129390

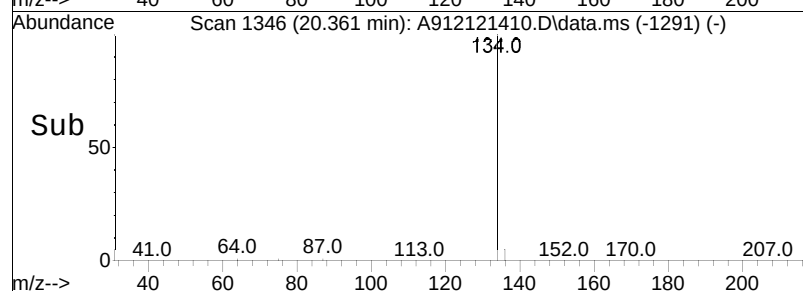
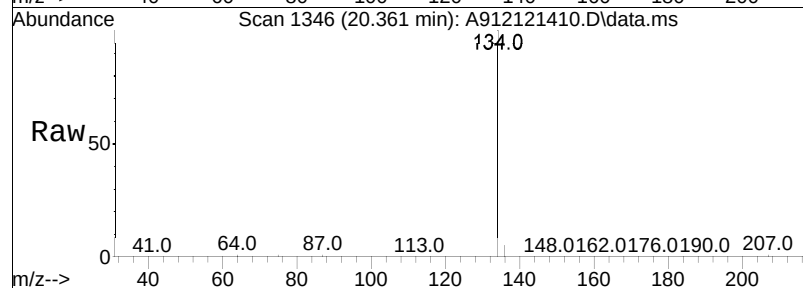
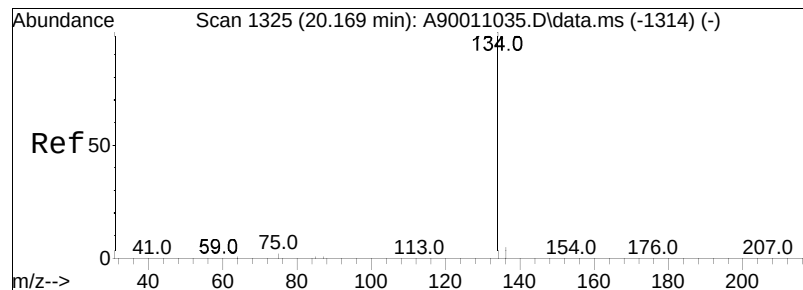




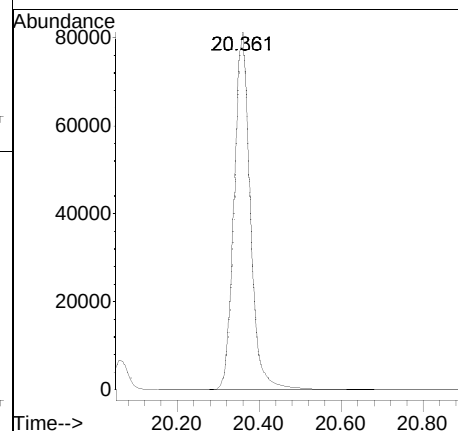
#17
 1-Methylnaphthalene
 Concen: 513.07 ng/mL
 RT: 23.254 min Scan# 1663
 Delta R.T. -0.000 min
 Lab File: A912121410.D
 Acq: 13 Dec 2014 2:21 am

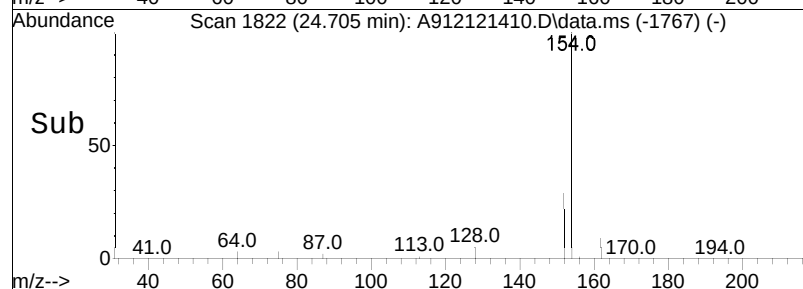
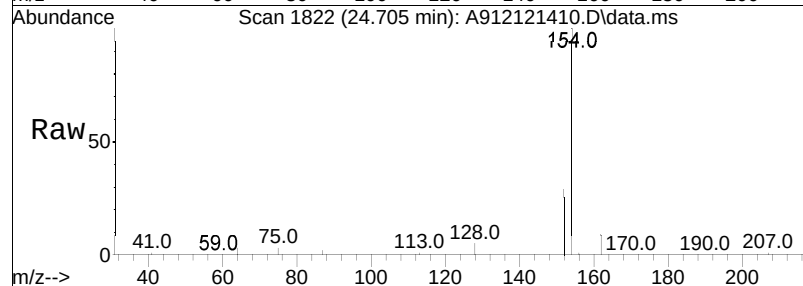
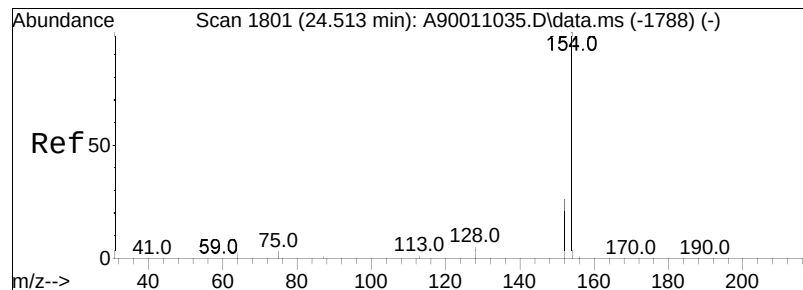
Tgt Ion:142 Resp: 121121



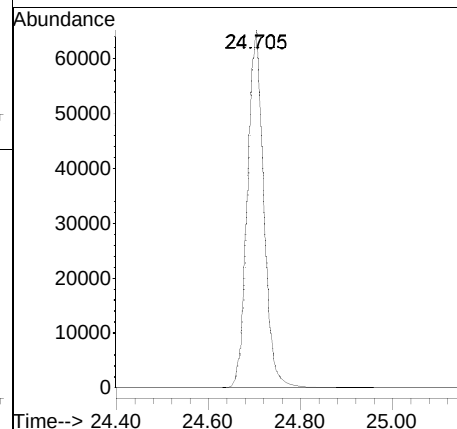


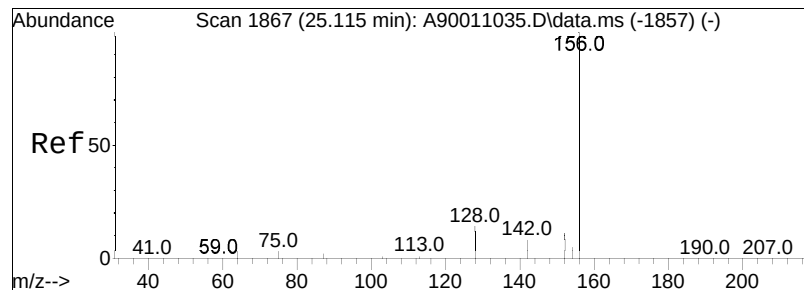
#18
 Benzo[thiophene]
 Concen: 535.18 ng/mL
 RT: 20.361 min Scan# 1346
 Delta R.T. -0.000 min
 Lab File: A912121410.D
 Acq: 13 Dec 2014 2:21 am
 Tgt Ion:134 Resp: 217693





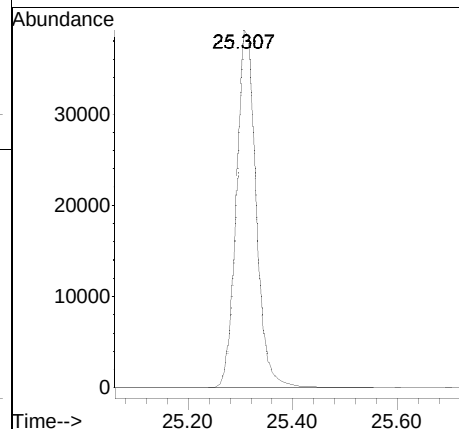
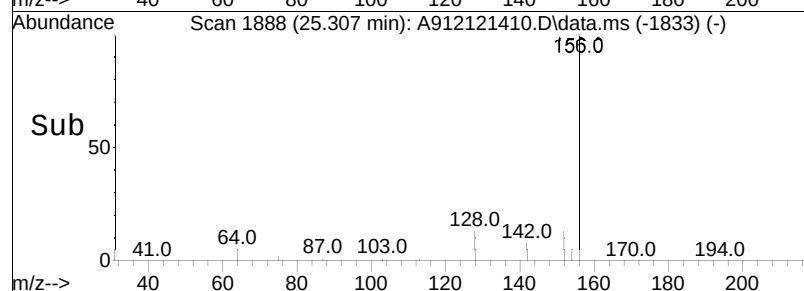
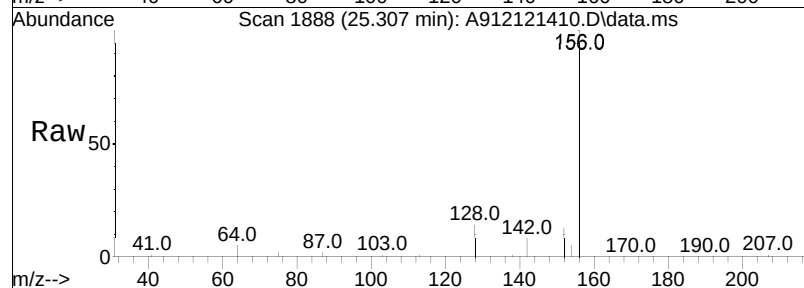
#23
Biphenyl
Concen: 531.28 ng/mL
RT: 24.705 min Scan# 1822
Delta R.T. -0.000 min
Lab File: A912121410.D
Acq: 13 Dec 2014 2:21 am
Tgt Ion:154 Resp: 158188

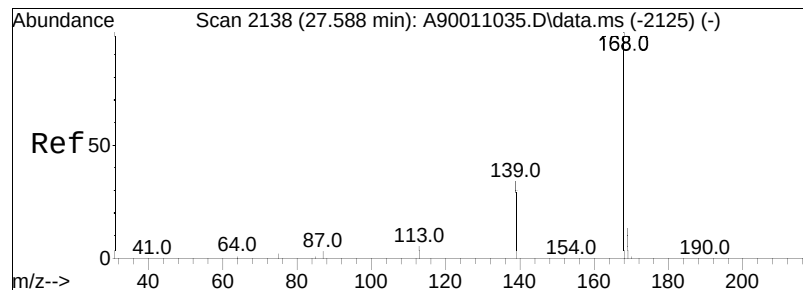




#24
2,6-Dimethylnaphthalene
Concen: 512.50 ng/mL
RT: 25.307 min Scan# 1888
Delta R.T. -0.000 min
Lab File: A912121410.D
Acq: 13 Dec 2014 2:21 am

Tgt Ion:156 Resp: 100608





#25

Dibenzofuran

Concen: 525.36 ng/mL

RT: 27.789 min Scan# 2160

Delta R.T. -0.000 min

Lab File: A912121410.D

Acq: 13 Dec 2014 2:21 am

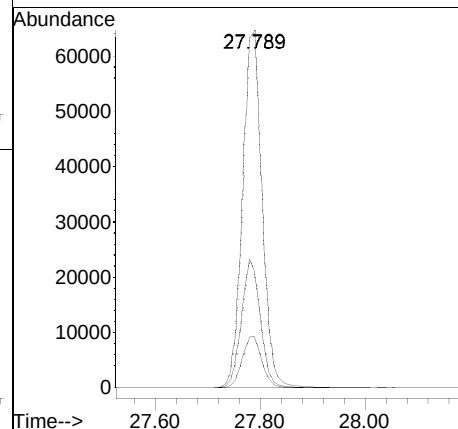
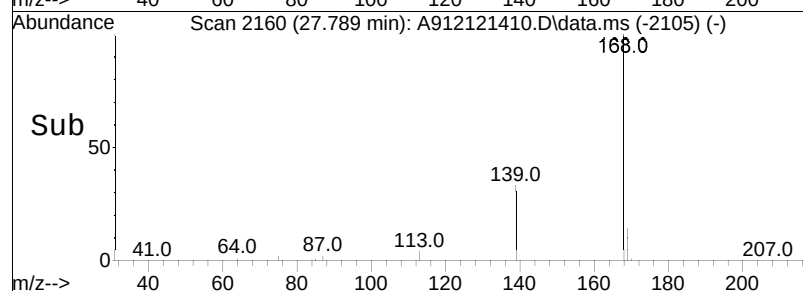
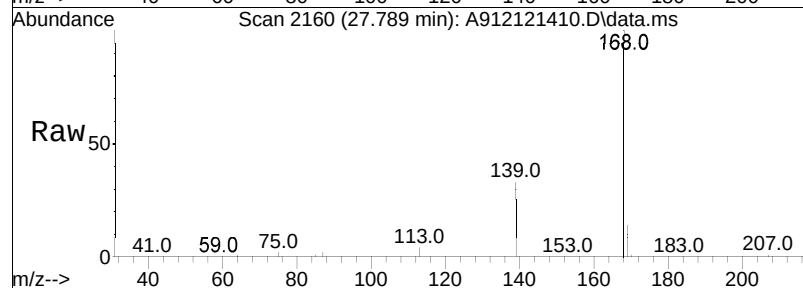
Tgt Ion:168 Resp: 164218

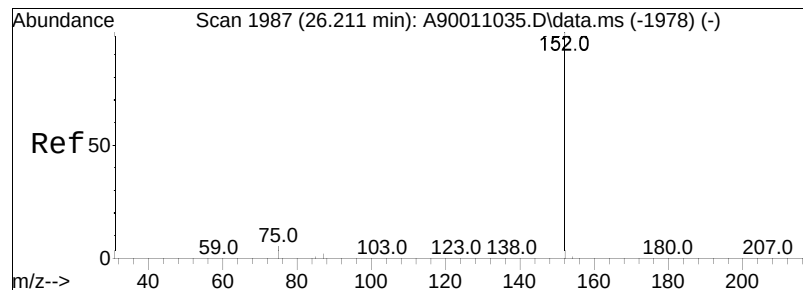
Ion Ratio Lower Upper

168 100

139 34.8 25.1 46.7

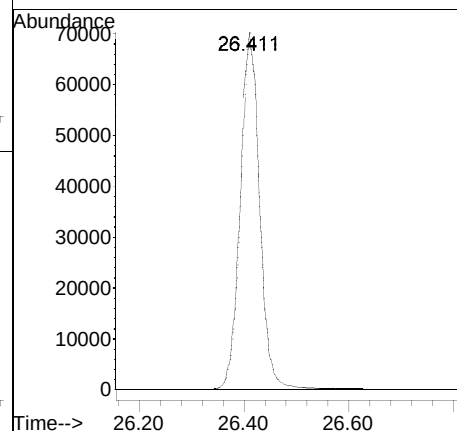
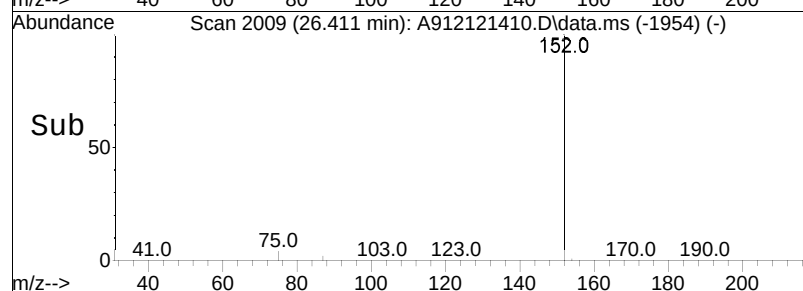
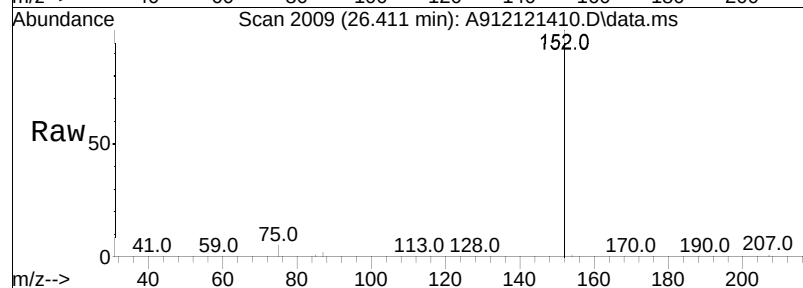
169 14.4 10.2 19.0

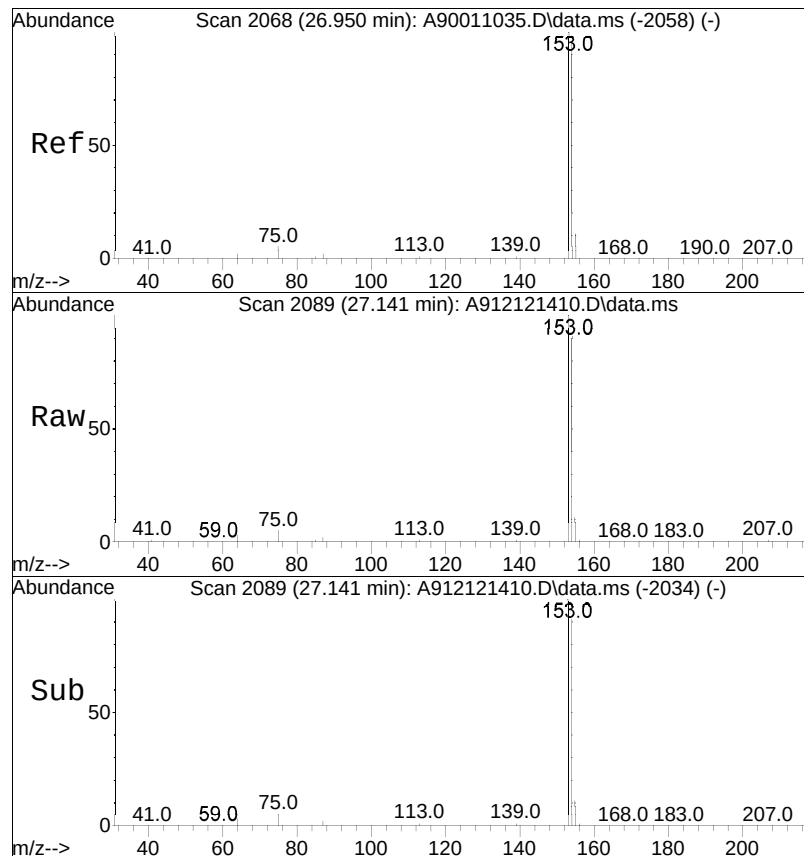




#26
Acenaphthylene
Concen: 478.49 ng/mL
RT: 26.411 min Scan# 2009
Delta R.T. 0.000 min
Lab File: A912121410.D
Acq: 13 Dec 2014 2:21 am

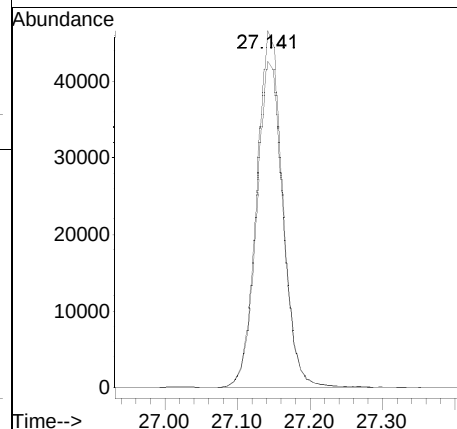
Tgt Ion:152 Resp: 176787

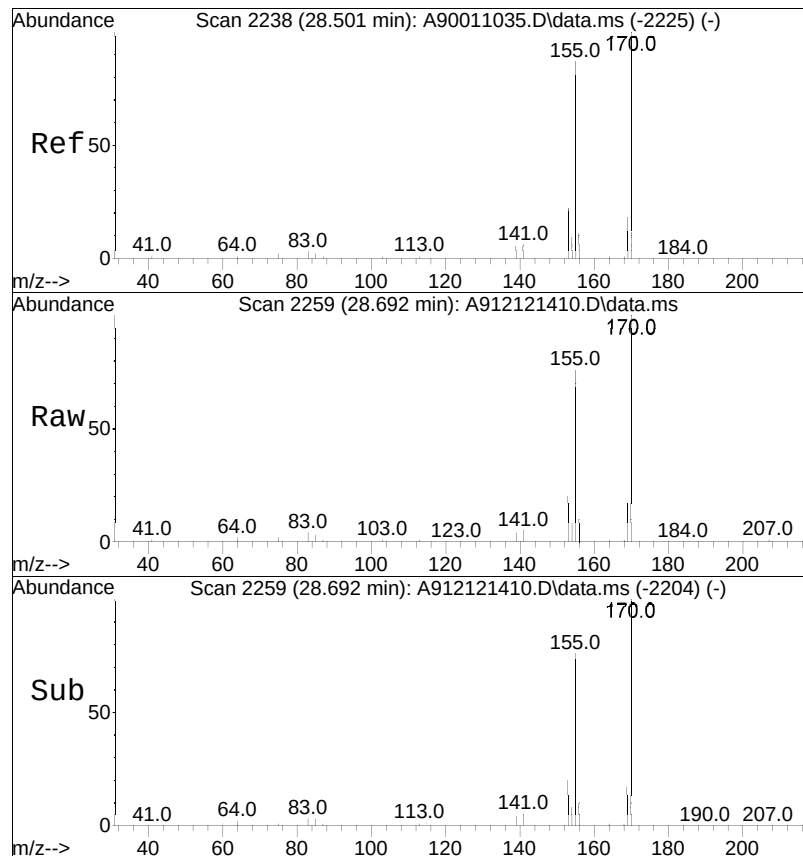




#27
 Acenaphthene
 Concen: 521.00 ng/mL
 RT: 27.141 min Scan# 2089
 Delta R.T. 0.000 min
 Lab File: A912121410.D
 Acq: 13 Dec 2014 2:21 am

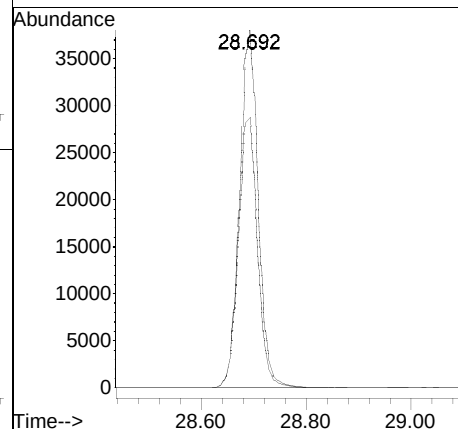
Tgt	Ion	Ratio	Lower	Upper
153	100			
154	92.3	64.9	120.5	

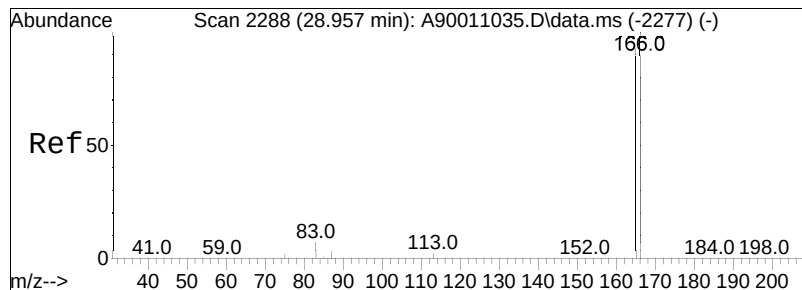




#28
 2,3,5-Trimethylnaphthalene
 Concen: 490.87 ng/mL
 RT: 28.692 min Scan# 2259
 Delta R.T. 0.000 min
 Lab File: A912121410.D
 Acq: 13 Dec 2014 2:21 am

Tgt Ion	Ratio	Lower	Upper
170	100		
155	78.0	55.9	103.9





#29

Fluorene

Concen: 483.53 ng/mL

RT: 29.158 min Scan# 2310

Delta R.T. -0.000 min

Lab File: A912121410.D

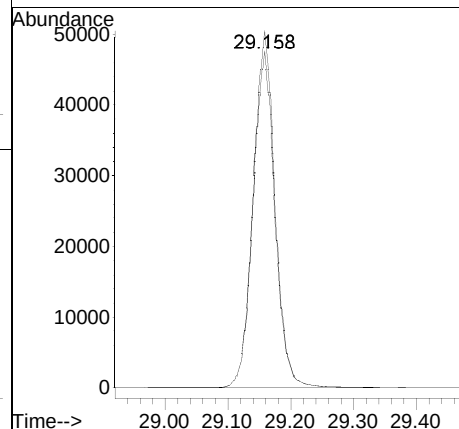
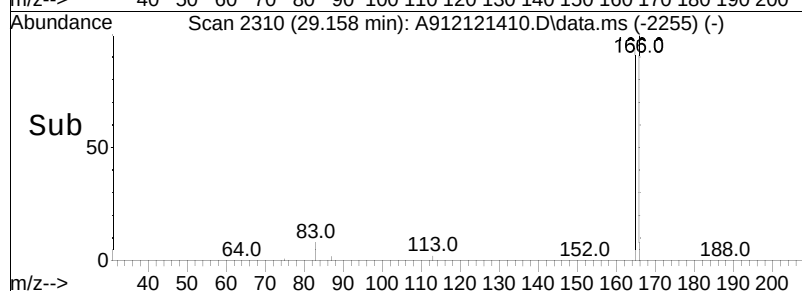
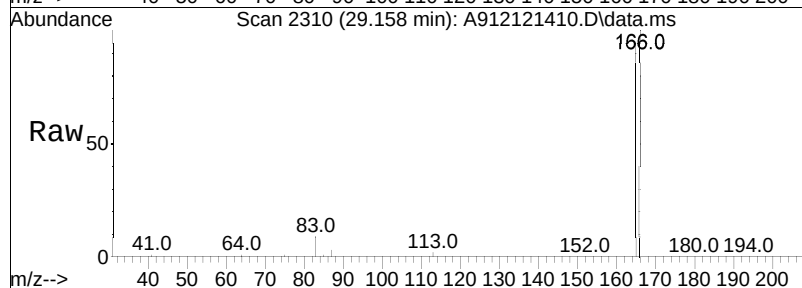
Acq: 13 Dec 2014 2:21 am

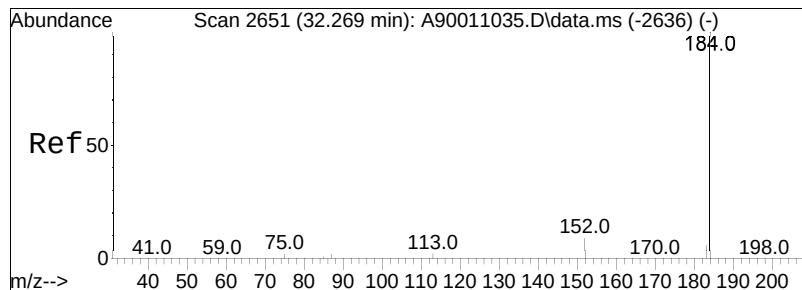
Tgt Ion:166 Resp: 121101

Ion Ratio Lower Upper

166 100

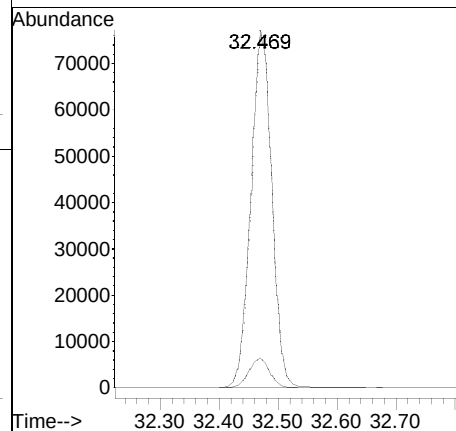
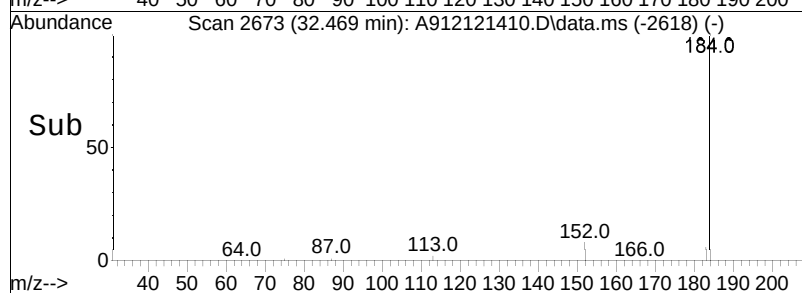
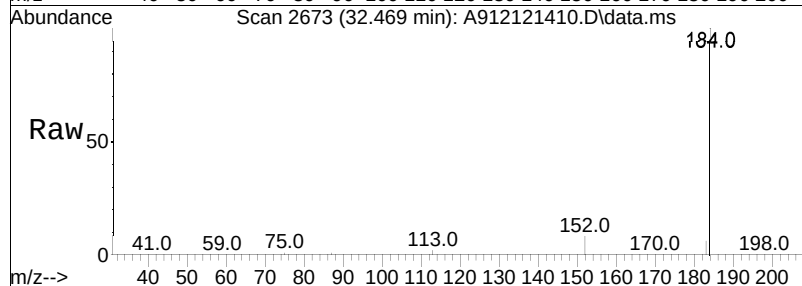
165 94.2 65.5 121.7

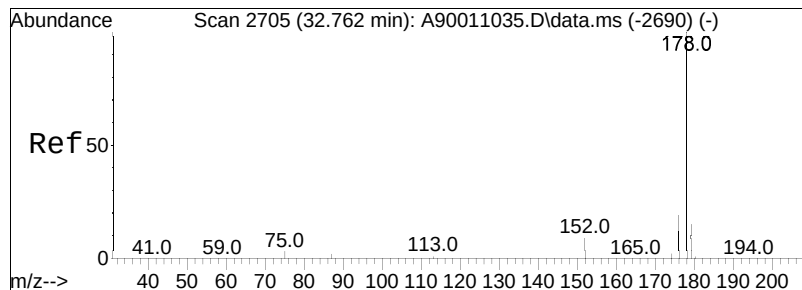




#33
Dibenzo[thiophene]
Concen: 506.59 ng/mL
RT: 32.469 min Scan# 2673
Delta R.T. 0.000 min
Lab File: A912121410.D
Acq: 13 Dec 2014 2:21 am

Tgt Ion	Ratio	Lower	Upper
184	100		
152	8.3	6.3	11.7





#43

Phenanthrene

Concen: 497.74 ng/mL

RT: 32.962 min Scan# 2727

Delta R.T. 0.000 min

Lab File: A912121410.D

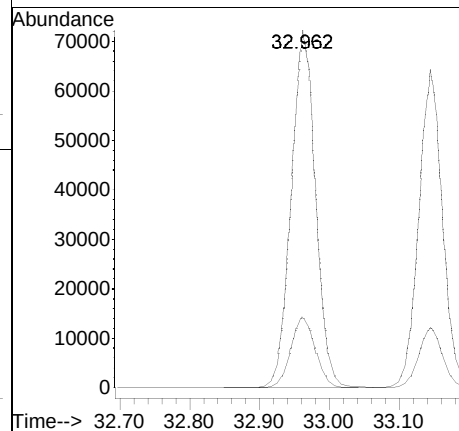
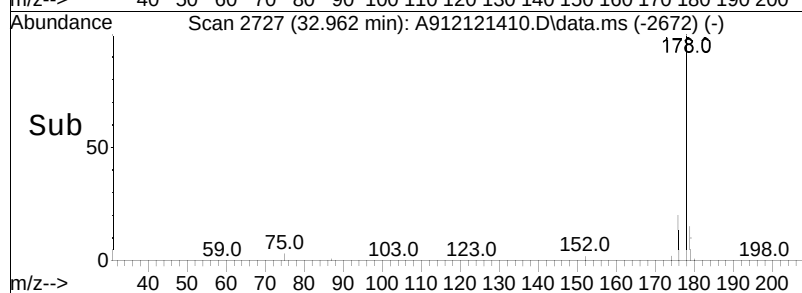
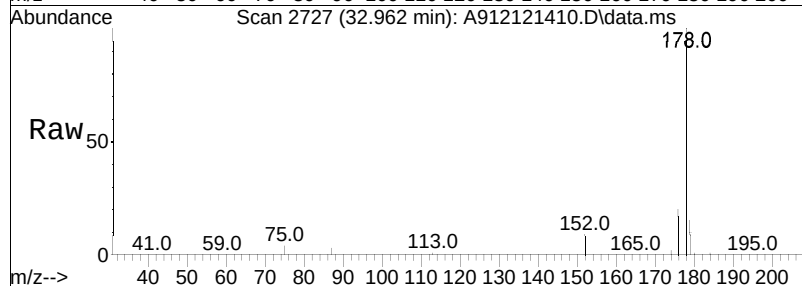
Acq: 13 Dec 2014 2:21 am

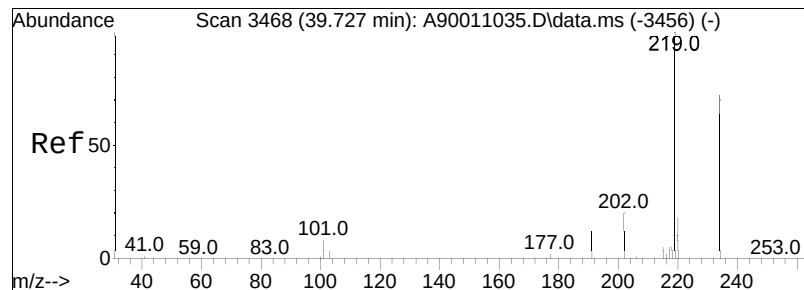
Tgt Ion:178 Resp: 173952

Ion Ratio Lower Upper

178 100

176 19.9 13.7 25.5





#54

Retene

Concen: 486.48 ng/mL

RT: 39.927 min Scan# 3490

Delta R.T. 0.000 min

Lab File: A912121410.D

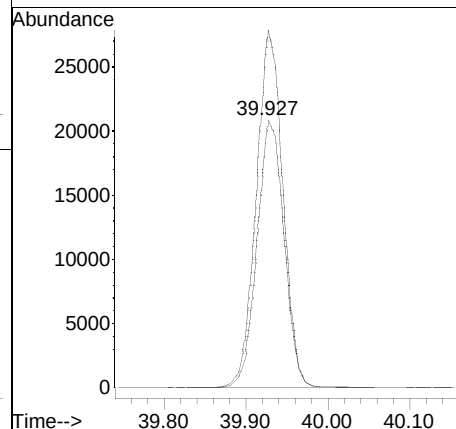
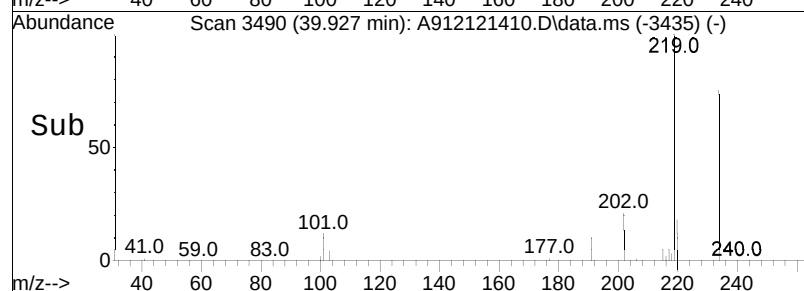
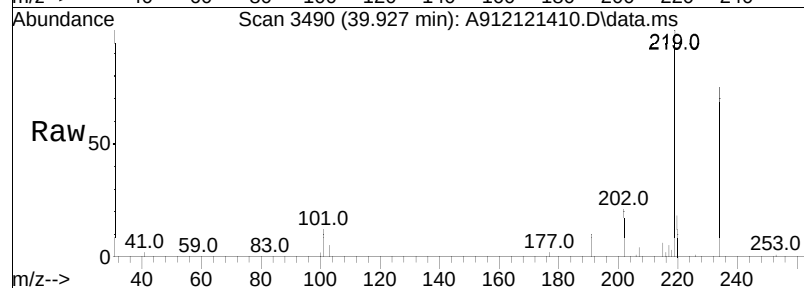
Acq: 13 Dec 2014 2:21 am

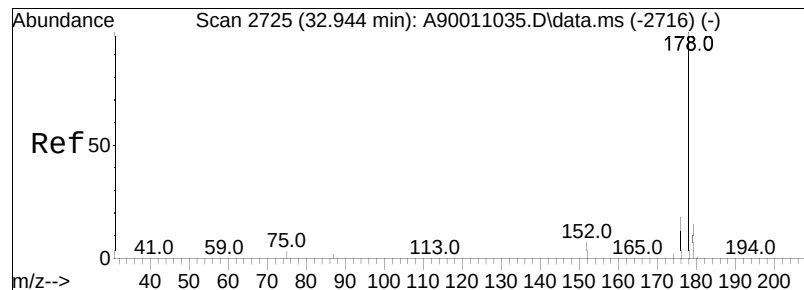
Tgt Ion: 234 Resp: 46754

Ion Ratio Lower Upper

234 100

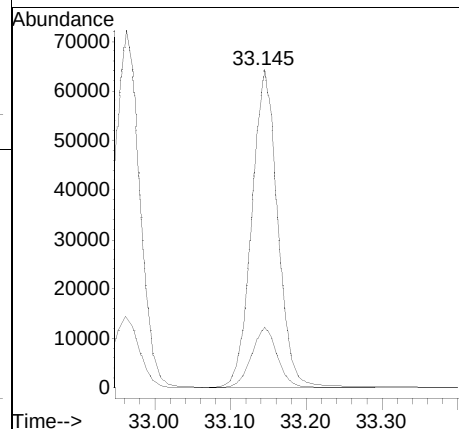
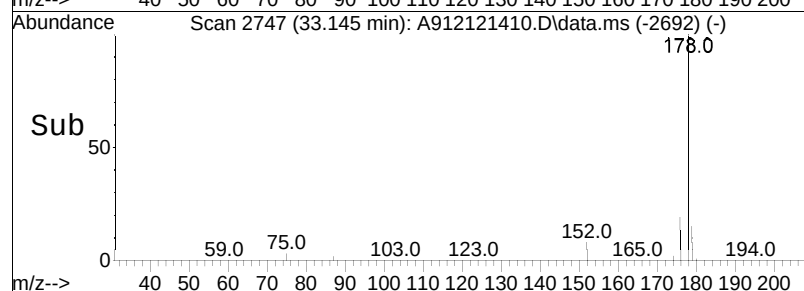
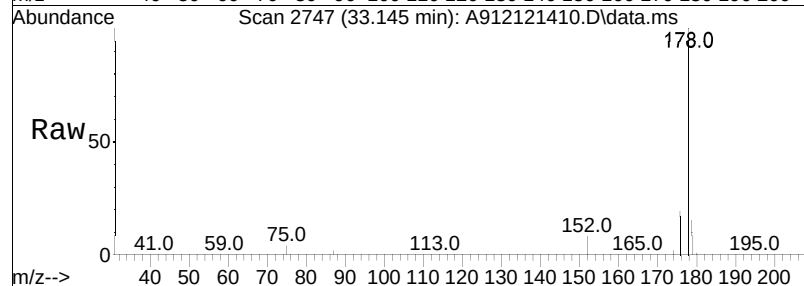
219 132.1 96.7 179.7

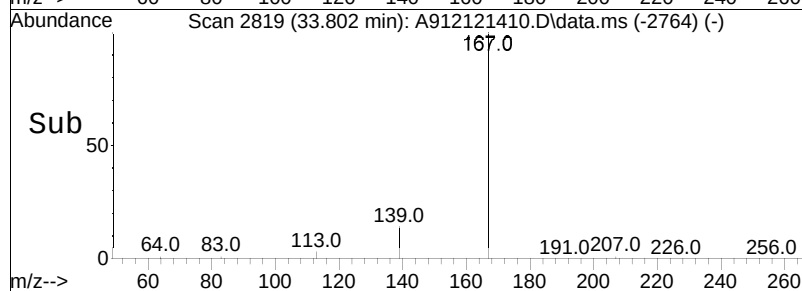
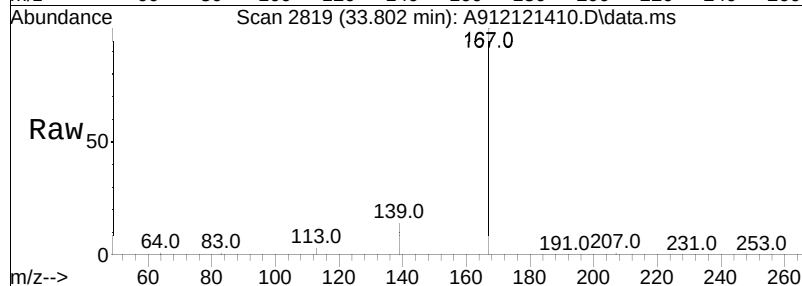
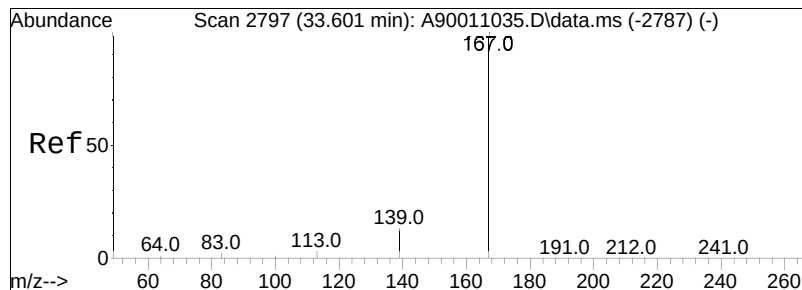




#55
 Anthracene
 Concen: 473.74 ng/mL M4
 RT: 33.145 min Scan# 2747
 Delta R.T. -0.000 min
 Lab File: A912121410.D
 Acq: 13 Dec 2014 2:21 am

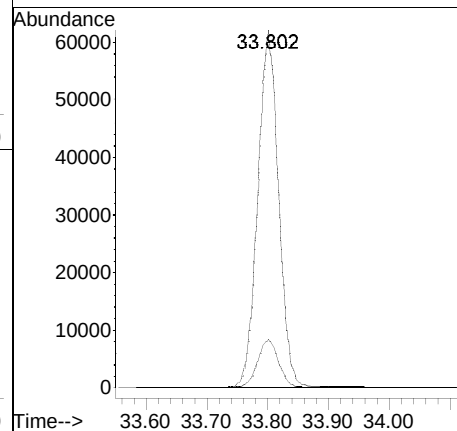
Tgt Ion:178 Resp: 152903
 Ion Ratio Lower Upper
 178 100
 176 18.7 13.4 24.8

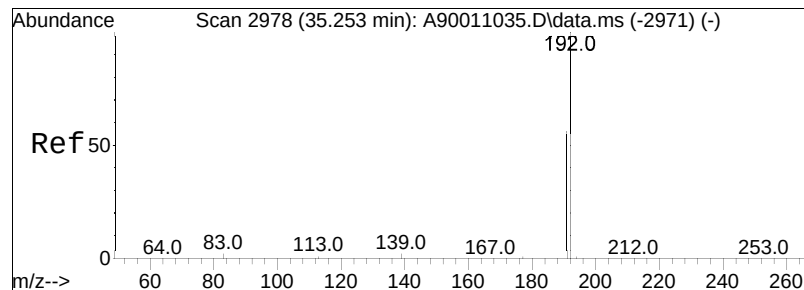




#56
 Carbazole
 Concen: 466.47 ng/mL
 RT: 33.802 min Scan# 2819
 Delta R.T. -0.000 min
 Lab File: A912121410.D
 Acq: 13 Dec 2014 2:21 am

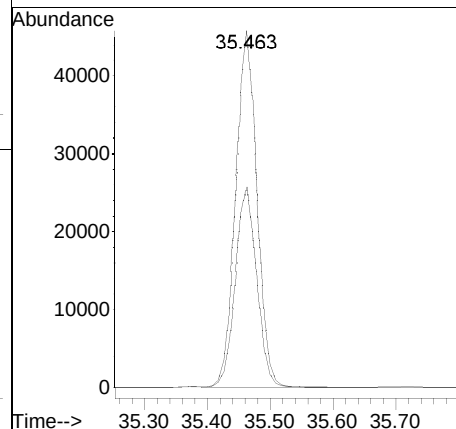
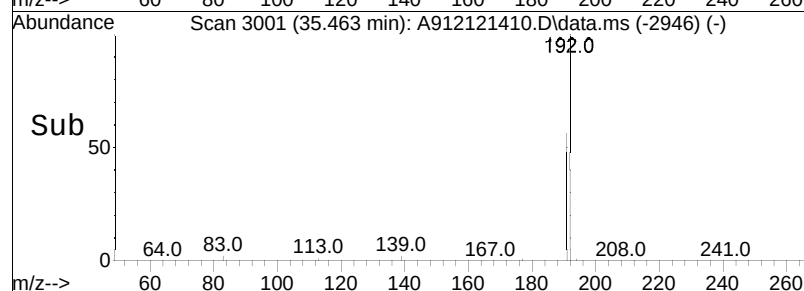
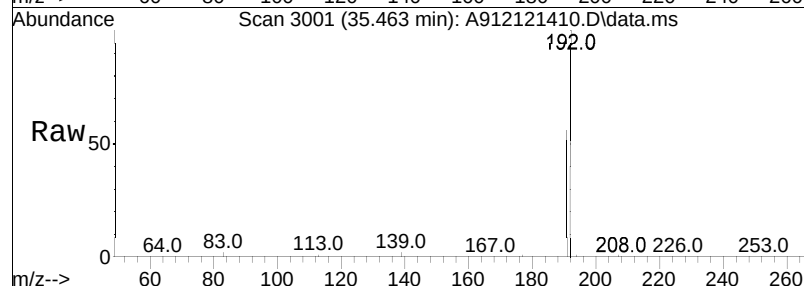
Tgt Ion	Ratio	Lower	Upper
167	100		
139	13.7	9.9	18.3

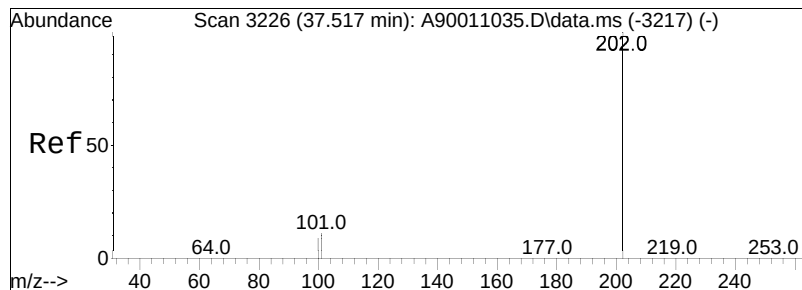




#57
 1-Methylphenanthrene
 Concen: 462.06 ng/mL
 RT: 35.463 min Scan# 3001
 Delta R.T. -0.000 min
 Lab File: A912121410.D
 Acq: 13 Dec 2014 2:21 am

Tgt Ion	Ratio	Lower	Upper
192	100		
191	56.6	39.8	74.0





#58

Fluoranthene

Concen: 453.61 ng/mL M4

RT: 37.727 min Scan# 3249

Delta R.T. -0.000 min

Lab File: A912121410.D

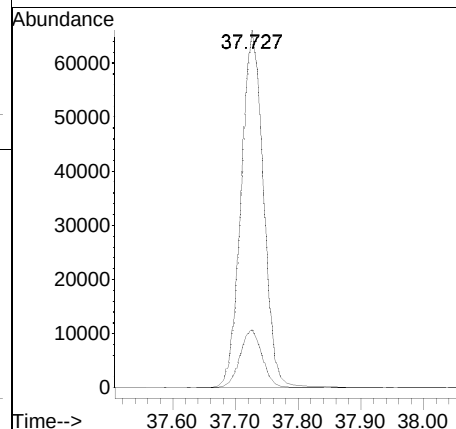
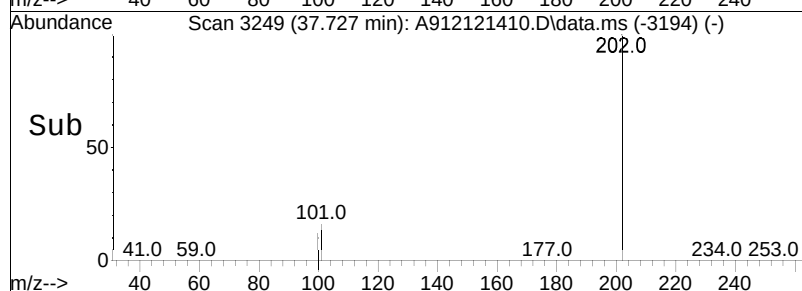
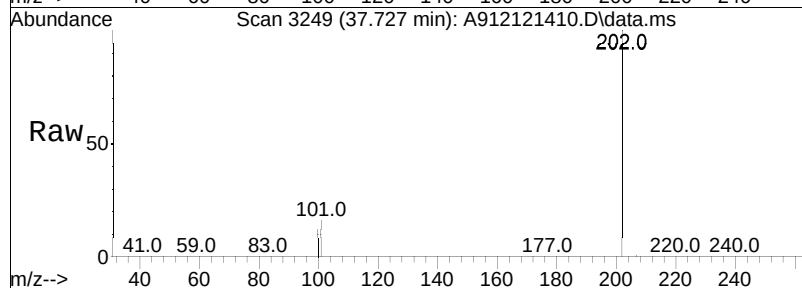
Acq: 13 Dec 2014 2:21 am

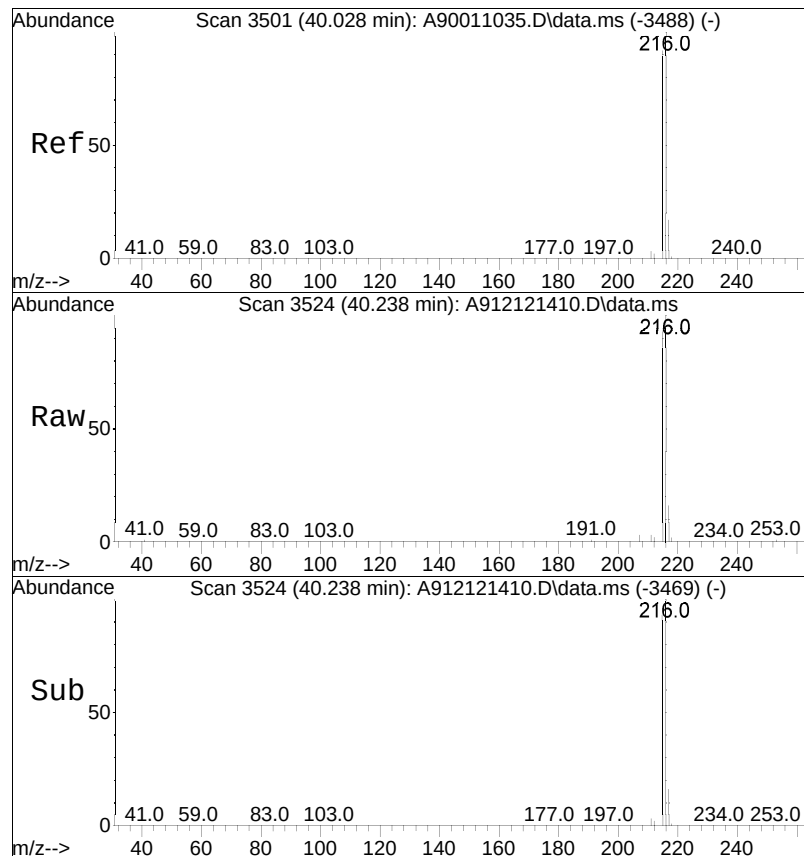
Tgt Ion: 202 Resp: 160953

Ion Ratio Lower Upper

202 100

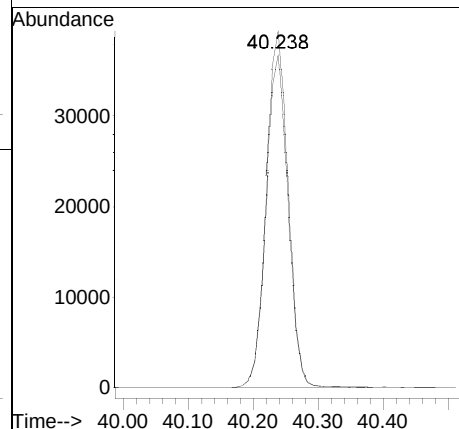
101 16.2 11.8 22.0

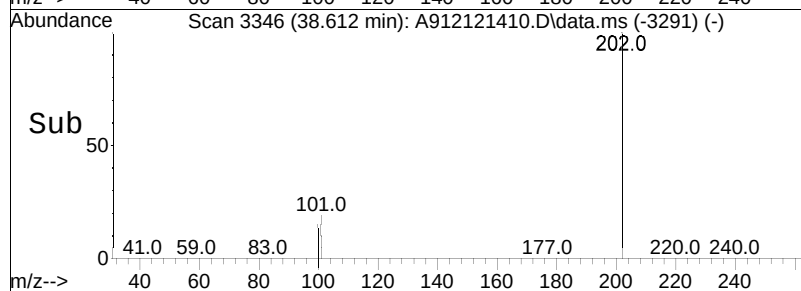
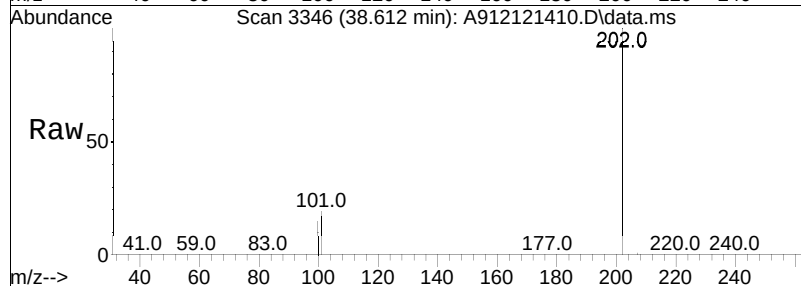
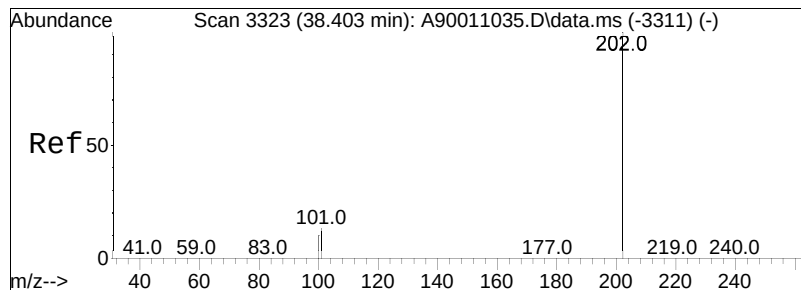




#59
 Benzo(b)fluorene
 Concen: 430.35 ng/mL
 RT: 40.238 min Scan# 3524
 Delta R.T. -0.000 min
 Lab File: A912121410.D
 Acq: 13 Dec 2014 2:21 am

Tgt	Ion	Ratio	Lower	Upper
216	100			
215	93.0	64.3	119.3	





#60

Pyrene

Concen: 478.84 ng/mL

RT: 38.612 min Scan# 3346

Delta R.T. -0.001 min

Lab File: A912121410.D

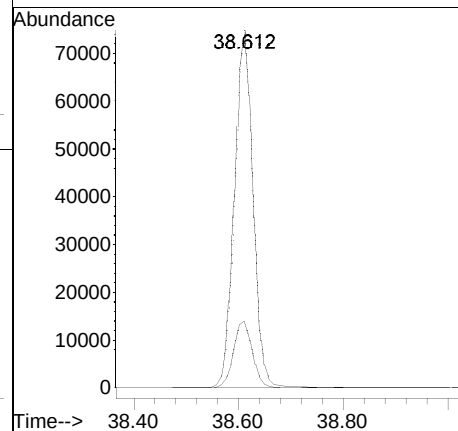
Acq: 13 Dec 2014 2:21 am

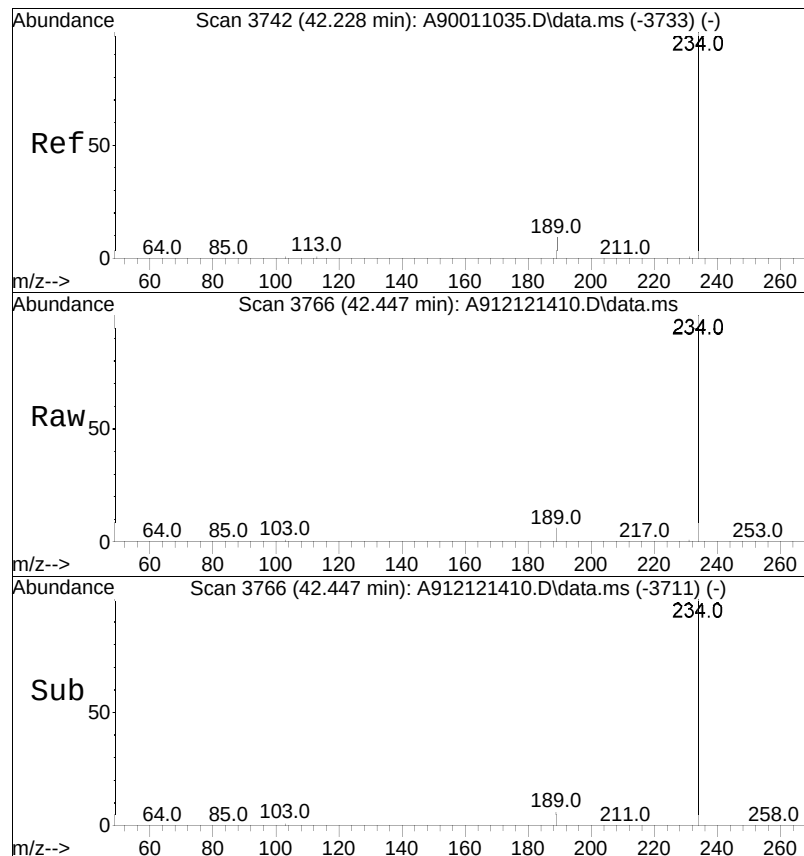
Tgt Ion: 202 Resp: 180737

Ion Ratio Lower Upper

202 100

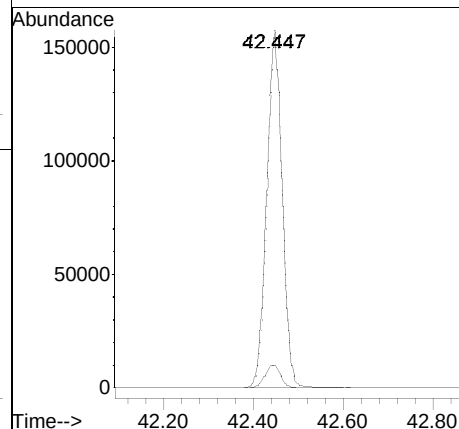
101 19.1 14.2 26.4

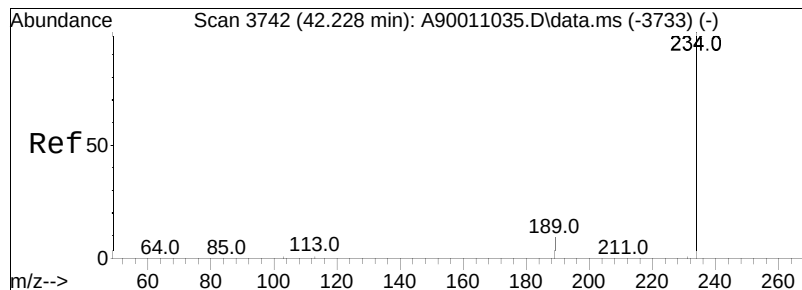




#66
 Naphthobenzothiophene
 Concen: 968.99 ng/ml
 RT: 42.447 min Scan# 3766
 Delta R.T. 0.000 min
 Lab File: A912121410.D
 Acq: 13 Dec 2014 2:21 am

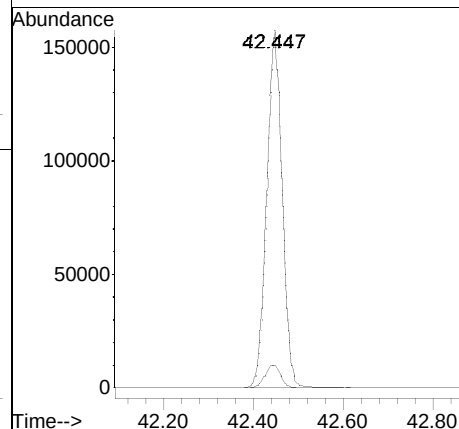
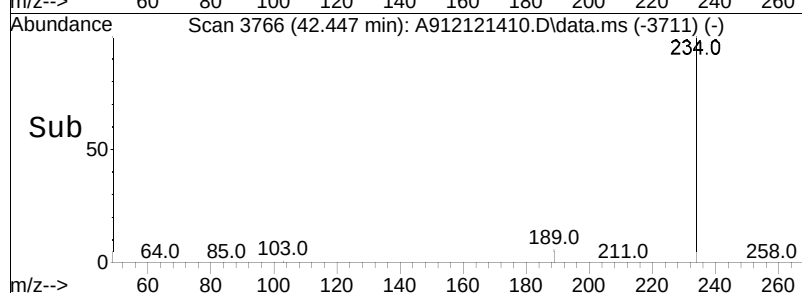
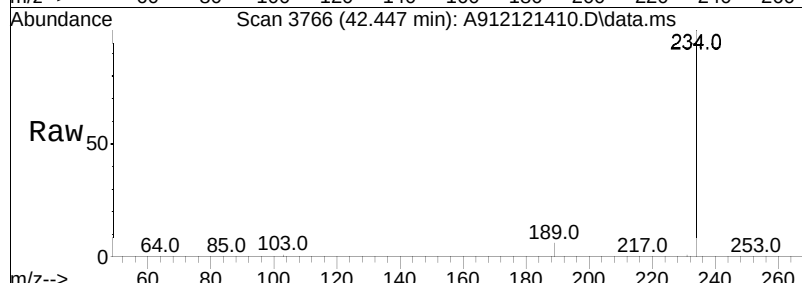
Tgt	Ion	Ratio	Resp	Lower	Upper
234	100		364775		
189	6.4		4.9		9.1

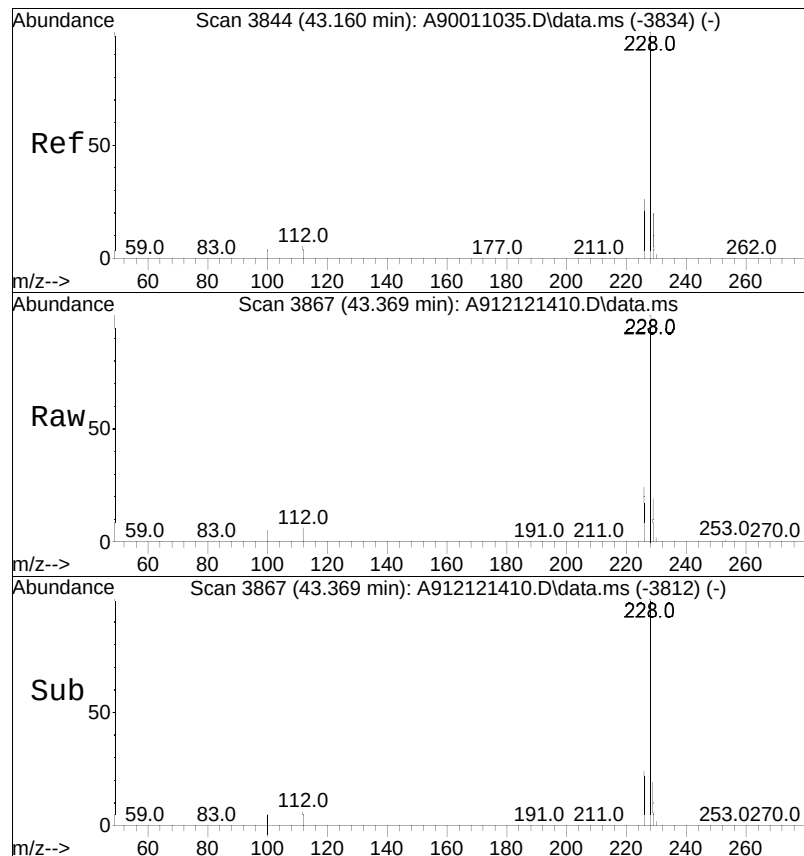




#67
 Naphthobenzothiophene-2,1-D
 Concen: 968.99 ng/mL
 RT: 42.447 min Scan# 3766
 Delta R.T. 0.000 min
 Lab File: A912121410.D
 Acq: 13 Dec 2014 2:21 am

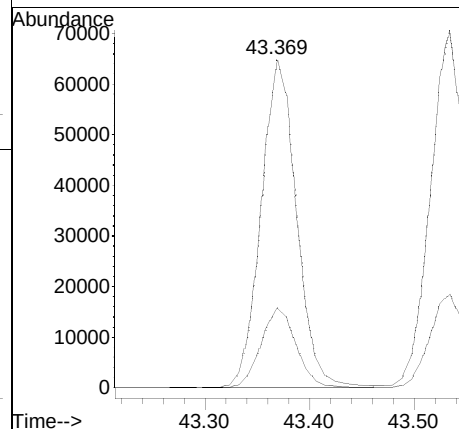
Tgt	Ion	Ratio	Resp	Lower	Upper
234	100		364775		
189	6.4		4.9		9.1

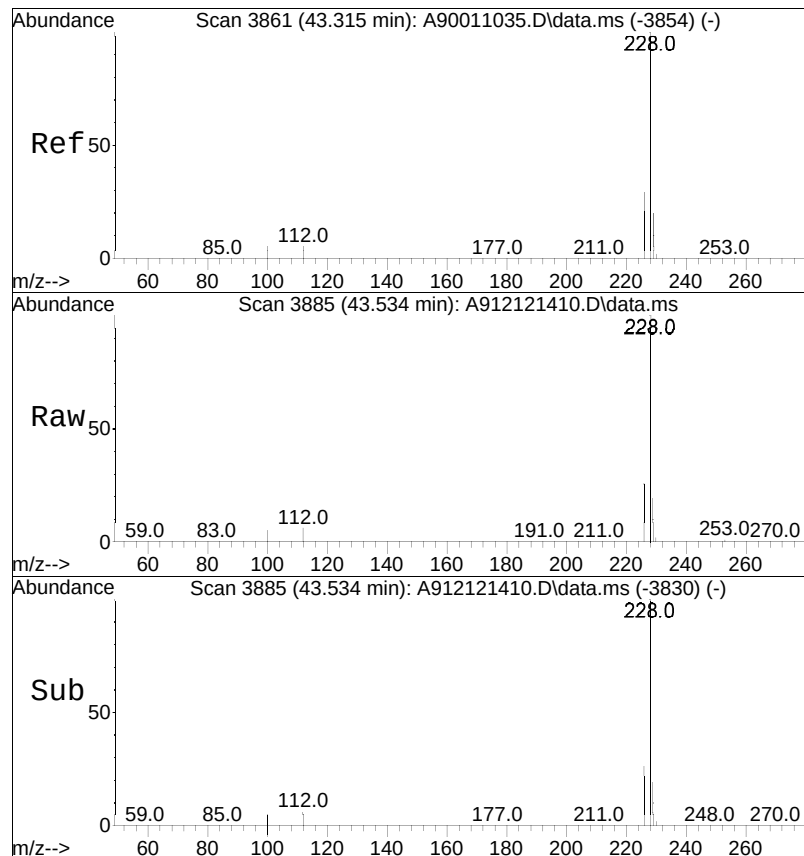




#75
 Benz[a]anthracene
 Concen: 475.34 ng/mL
 RT: 43.369 min Scan# 3867
 Delta R.T. 0.000 min
 Lab File: A912121410.D
 Acq: 13 Dec 2014 2:21 am

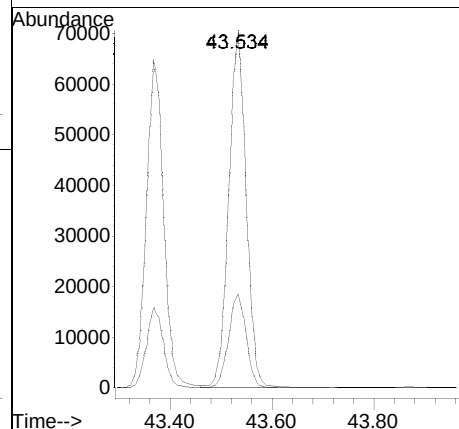
Tgt Ion	Ratio	Lower	Upper
228	100		
226	24.2	17.3	32.1

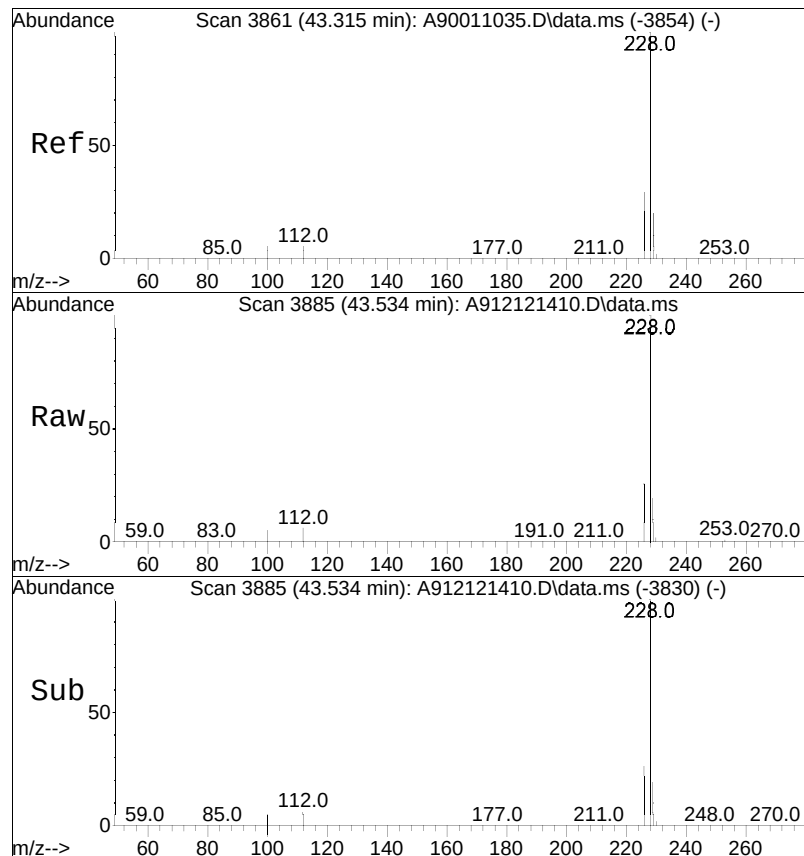




#76
 Chrysene
 Concen: 528.56 ng/mL
 RT: 43.534 min Scan# 3885
 Delta R.T. -0.000 min
 Lab File: A912121410.D
 Acq: 13 Dec 2014 2:21 am

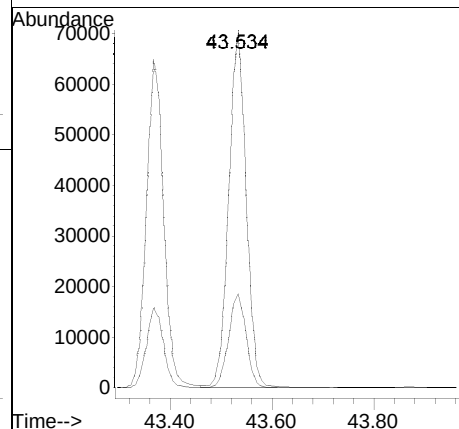
Tgt Ion: 228 Resp: 167549
 Ion Ratio Lower Upper
 228 100
 226 26.3 18.8 34.8

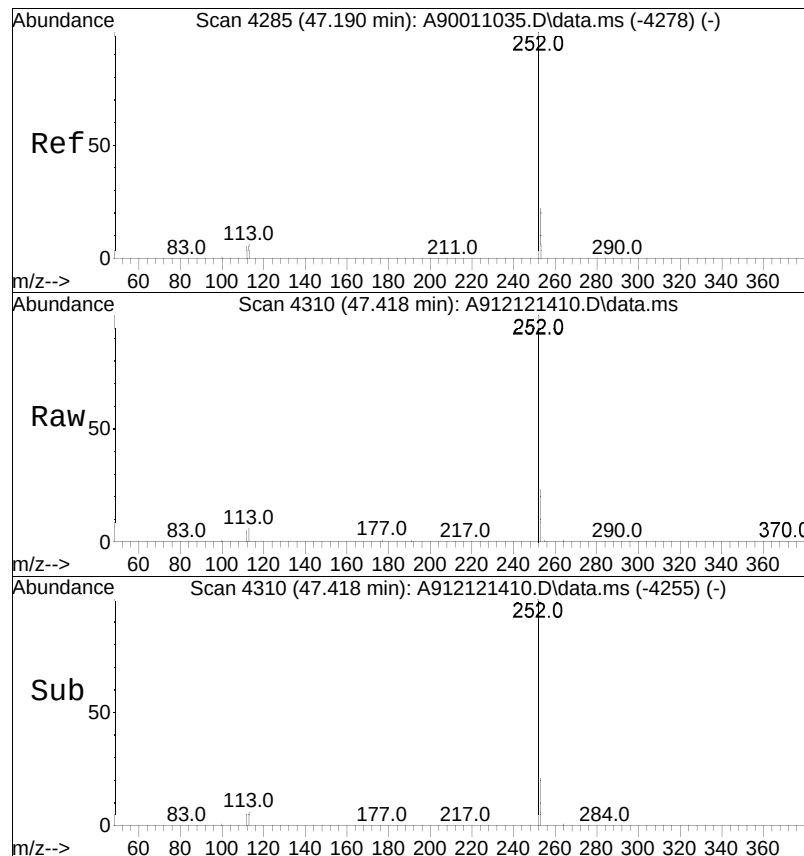




#77
 Chrysene/Triphenylene
 Concen: 528.56 ng/mL
 RT: 43.534 min Scan# 3885
 Delta R.T. -0.000 min
 Lab File: A912121410.D
 Acq: 13 Dec 2014 2:21 am

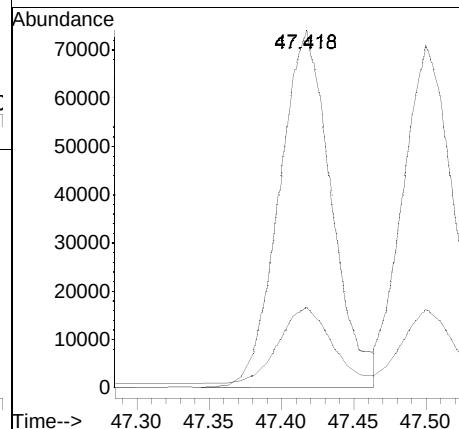
Tgt Ion	Ratio	Lower	Upper
228	100		
226	26.3	18.8	34.8

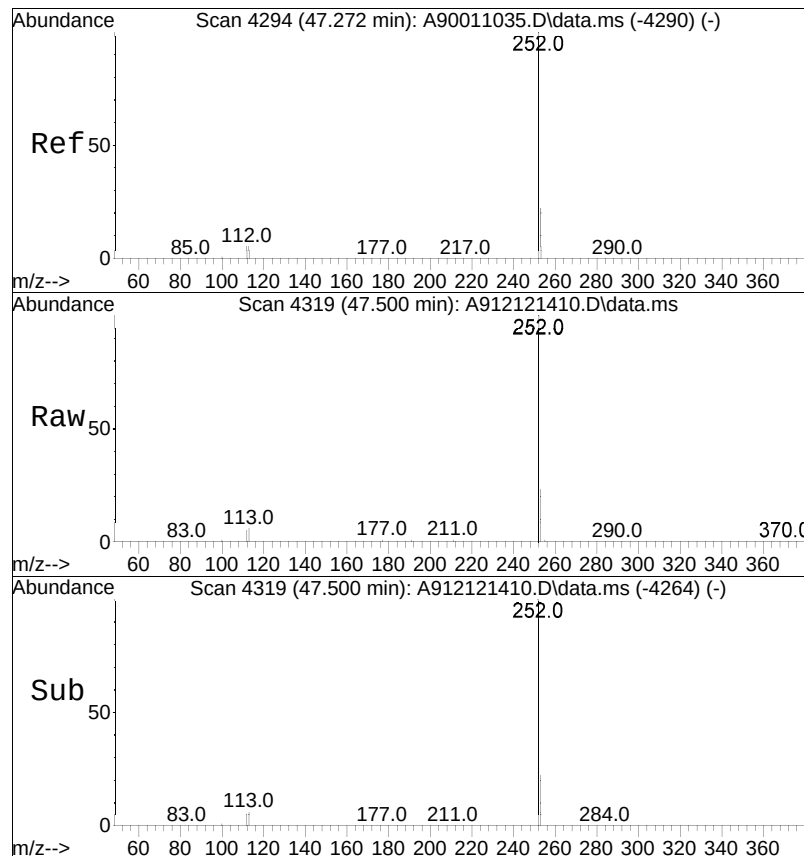




#84
 Benzo[b]fluoranthene
 Concen: 488.91 ng/mL
 RT: 47.418 min Scan# 4310
 Delta R.T. -0.000 min
 Lab File: A912121410.D
 Acq: 13 Dec 2014 2:21 am

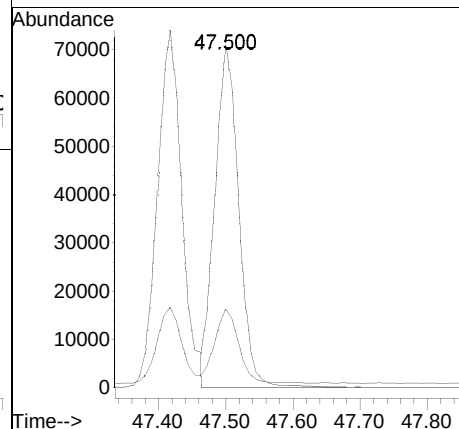
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.7	16.4	30.4	

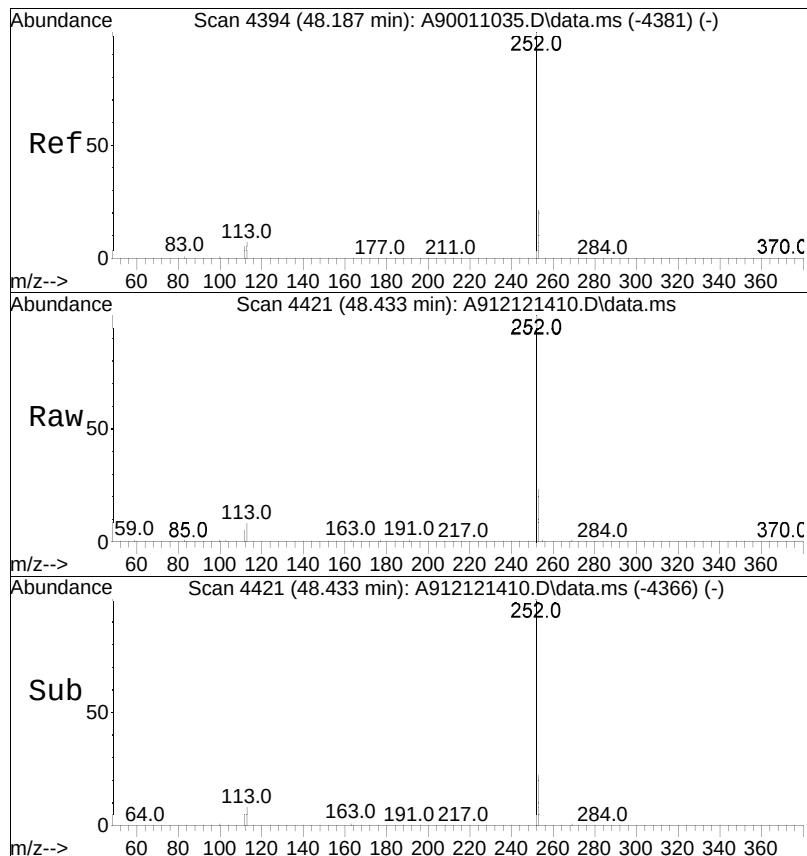




#85
 Benzo[j]+[k]fluoranthene
 Concen: 478.10 ng/mL
 RT: 47.500 min Scan# 4319
 Delta R.T. -0.000 min
 Lab File: A912121410.D
 Acq: 13 Dec 2014 2:21 am

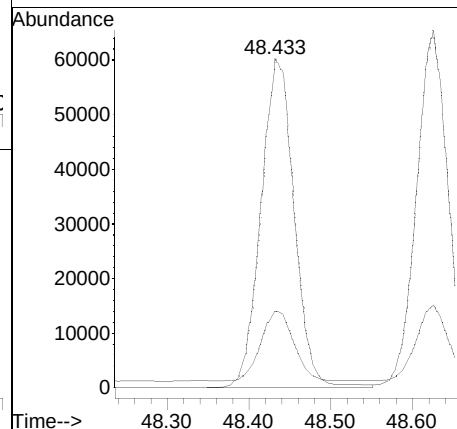
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.4	16.1	29.9	

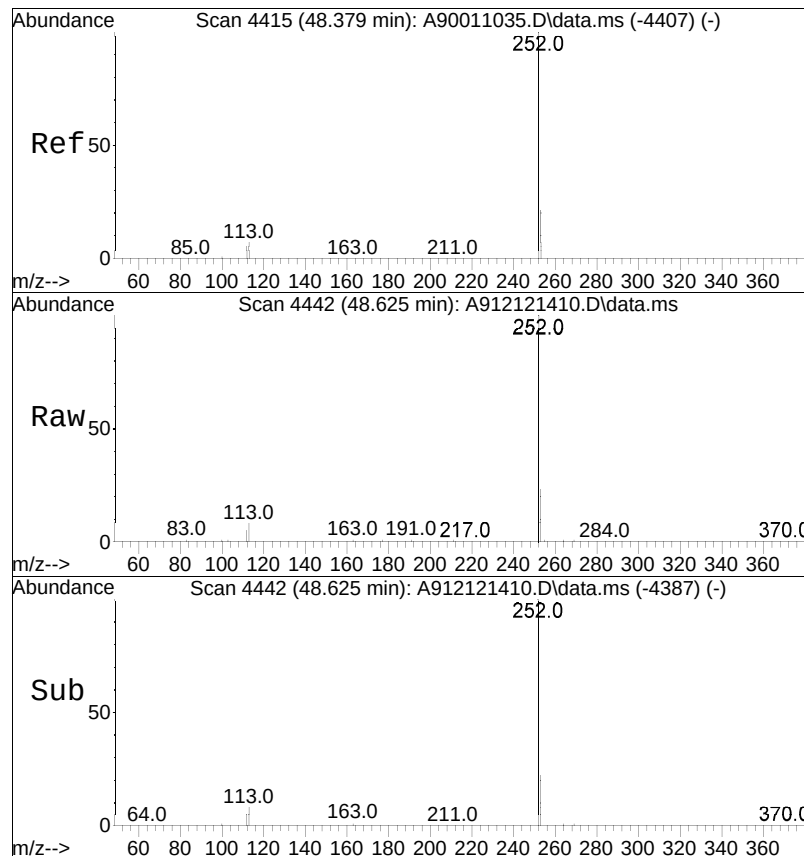




#87
 Benzo[e]pyrene
 Concen: 465.21 ng/mL
 RT: 48.433 min Scan# 4421
 Delta R.T. -0.000 min
 Lab File: A912121410.D
 Acq: 13 Dec 2014 2:21 am

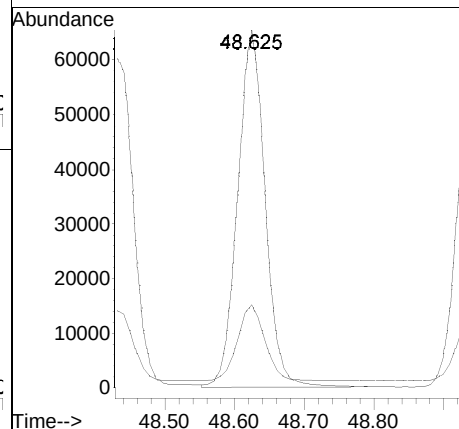
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.5	16.2	30.0	

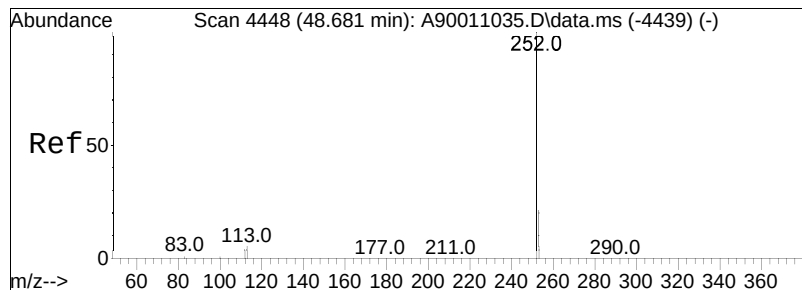




#89
 Benzo[a]pyrene
 Concen: 497.62 ng/mL
 RT: 48.625 min Scan# 4442
 Delta R.T. -0.000 min
 Lab File: A912121410.D
 Acq: 13 Dec 2014 2:21 am

Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.7	16.4	30.6	





#90

Perylene

Concen: 468.33 ng/mL

RT: 48.945 min Scan# 4477

Delta R.T. 0.000 min

Lab File: A912121410.D

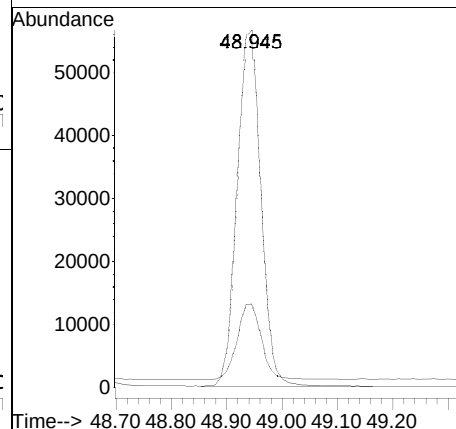
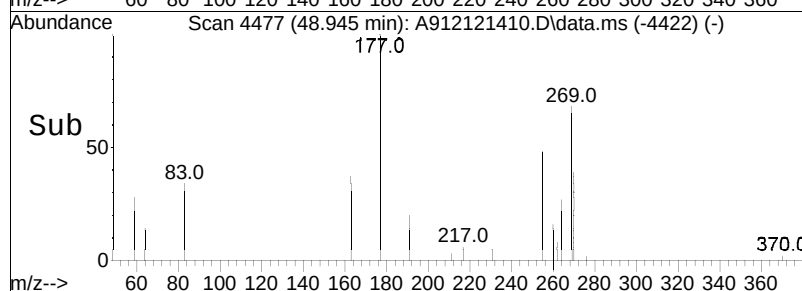
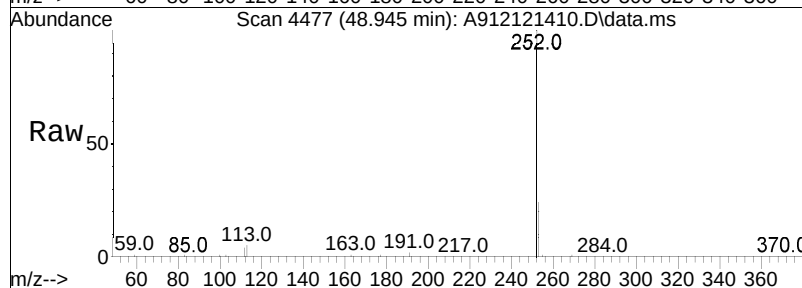
Acq: 13 Dec 2014 2:21 am

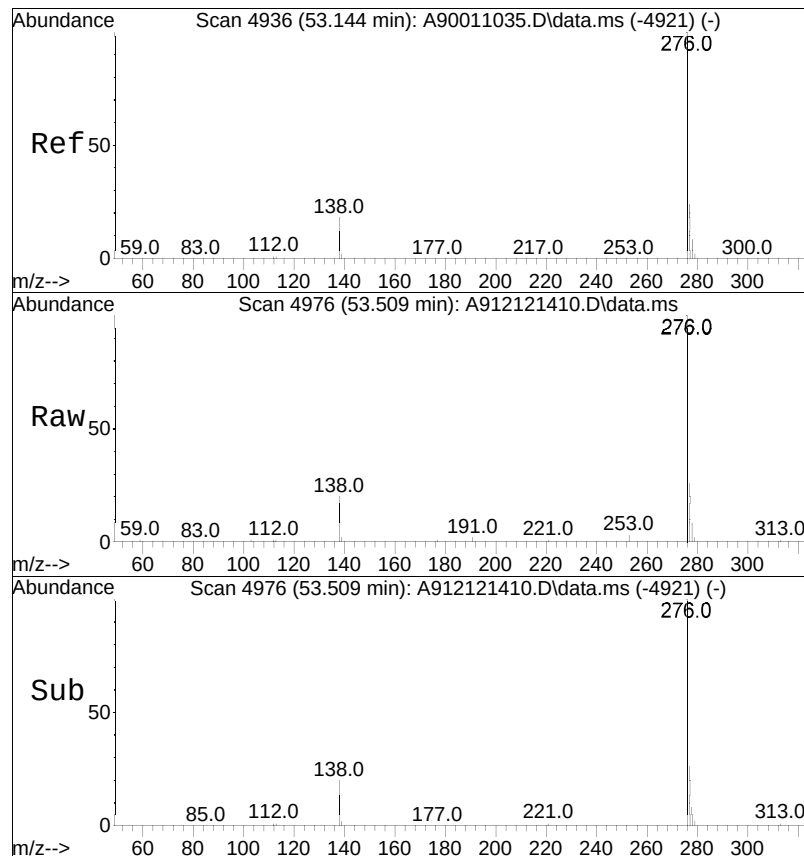
Tgt Ion: 252 Resp: 168274

Ion Ratio Lower Upper

252 100

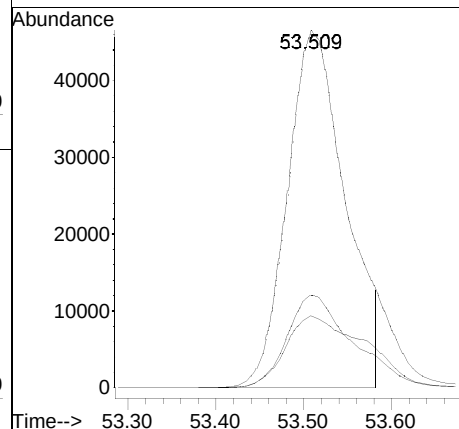
253 21.6 16.6 30.8

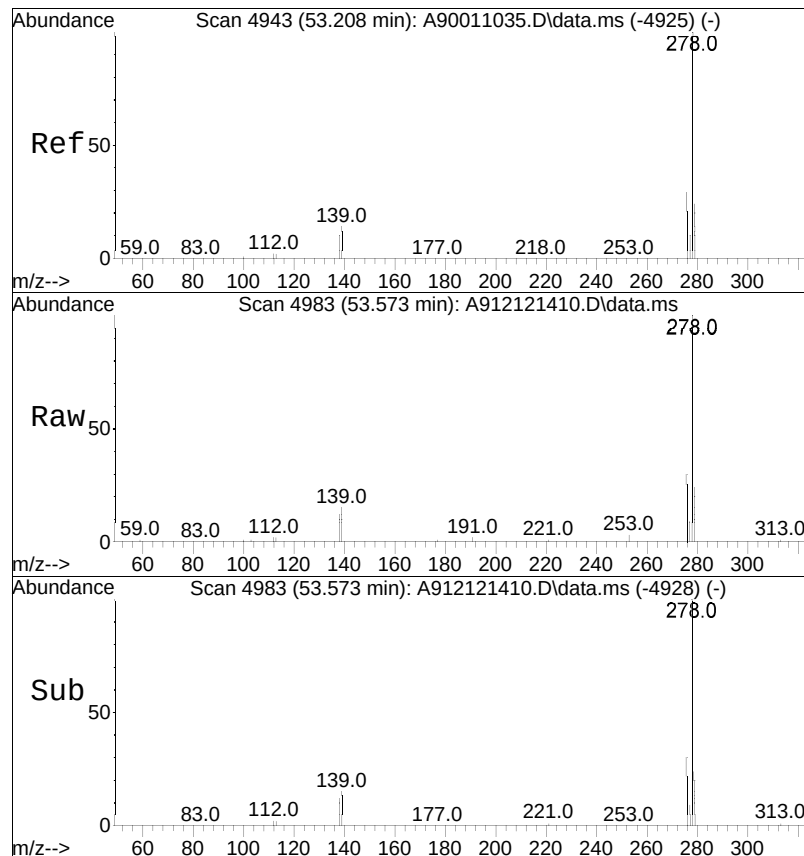




#91
 Indeno[1,2,3-cd]pyrene
 Concen: 483.87 ng/mL M3
 RT: 53.509 min Scan# 4976
 Delta R.T. -0.000 min
 Lab File: A912121410.D
 Acq: 13 Dec 2014 2:21 am

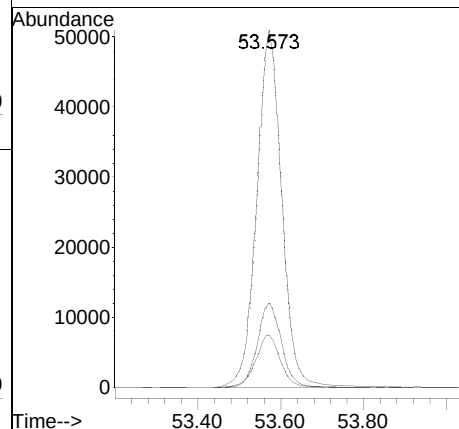
Tgt Ion:	276	Resp:	213663
Ion Ratio	Lower	Upper	
276	100		
138	27.6	15.7	29.1
277	29.4	17.9	33.3

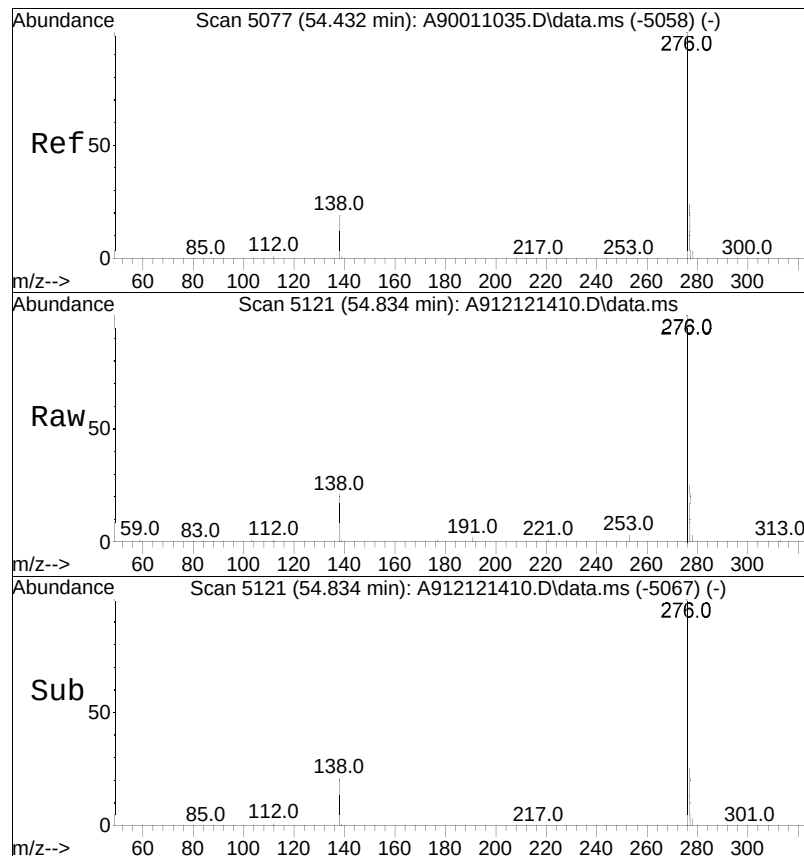




#92
 Dibenz[ah]+[ac]anthracene
 Concen: 483.45 ng/mL M4
 RT: 53.573 min Scan# 4983
 Delta R.T. -0.000 min
 Lab File: A912121410.D
 Acq: 13 Dec 2014 2:21 am

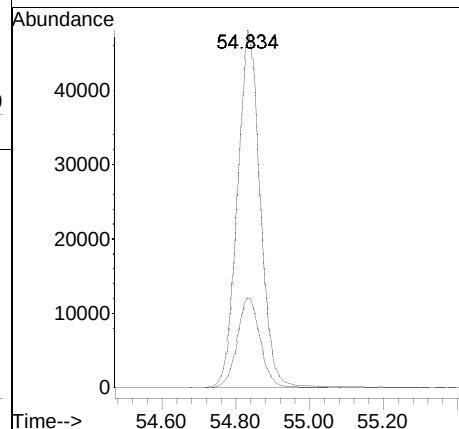
Tgt Ion	Ratio	Lower	Upper
278	100		
139	14.7	11.4	21.2
279	23.2	16.3	30.3





#93
 Benzo[g,h,i]perylene
 Concen: 471.51 ng/mL
 RT: 54.834 min Scan# 5121
 Delta R.T. -0.009 min
 Lab File: A912121410.D
 Acq: 13 Dec 2014 2:21 am

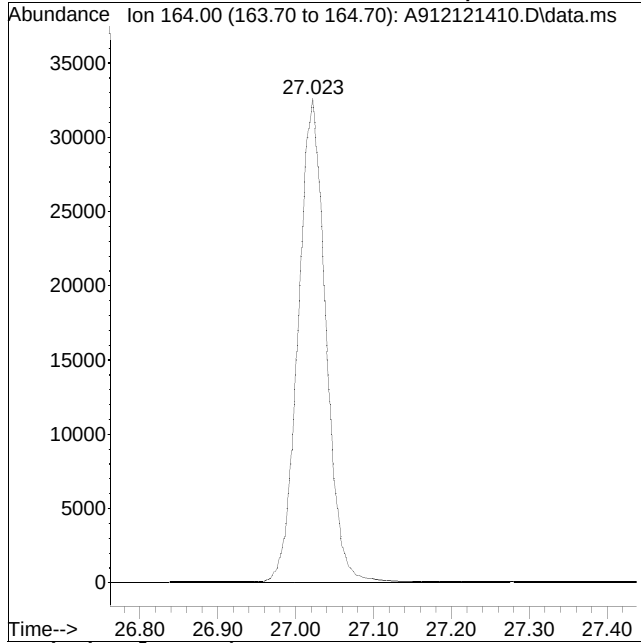
Tgt	Ion	Ratio	Lower	Upper
276	100			
277	25.4	17.4	32.2	



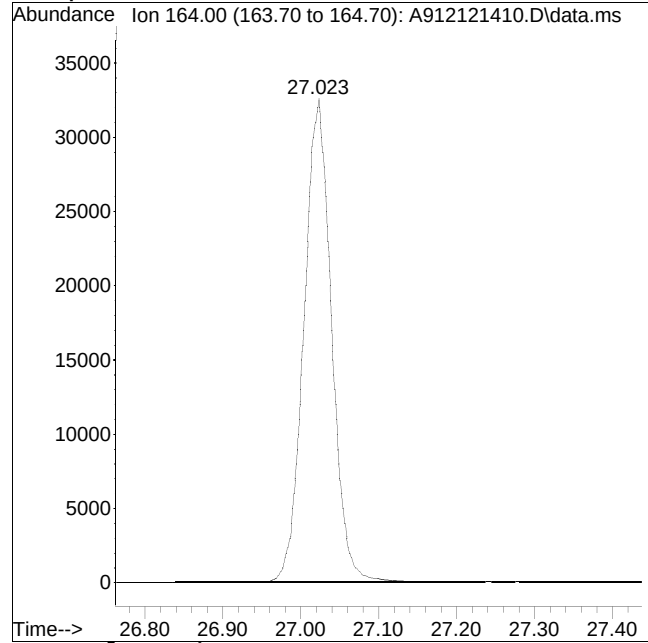
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121410.D Operator : PAH9:SR
Date Inj'd : 12/13/2014 2:21 am Instrument : PAH 9
Sample : Cq912121401 Quant Date : 12/15/2014 12:33 pm

Compound #1: Acenaphthene-d10



Original Peak Response = 80700



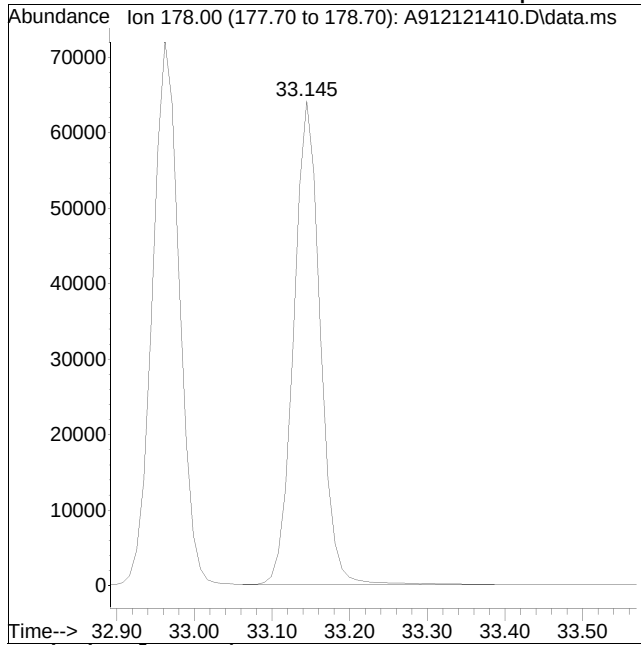
Manual Peak Response = 80393 M4

M4 = Poor automated baseline construction.

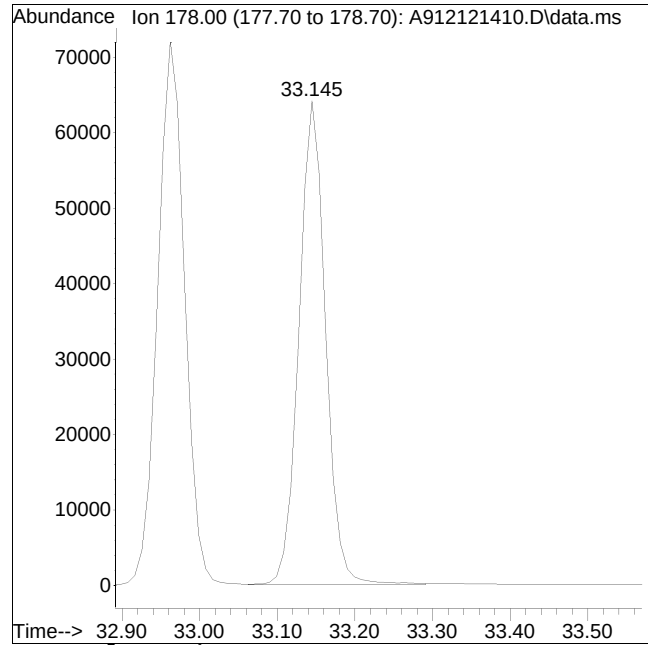
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121410.D Operator : PAH9:SR
Date Inj'd : 12/13/2014 2:21 am Instrument : PAH 9
Sample : Cq912121401 Quant Date : 12/15/2014 12:33 pm

Compound #55: Anthracene



Original Peak Response = 152825



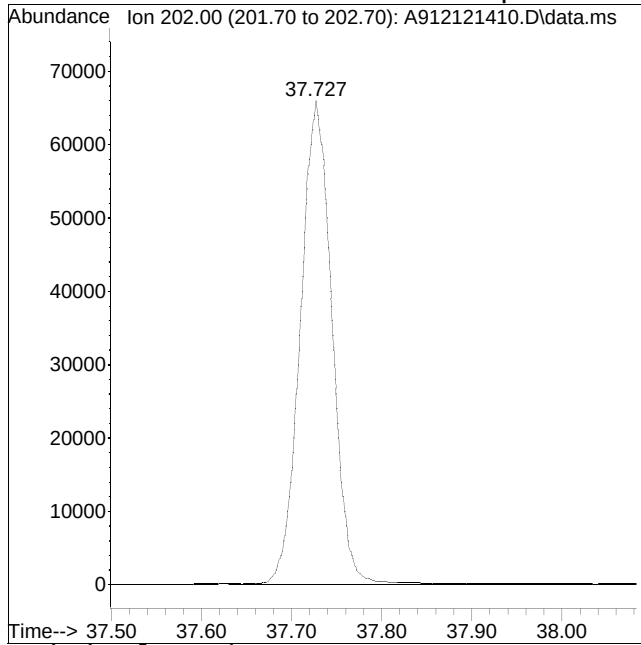
Manual Peak Response = 152903 M4

M4 = Poor automated baseline construction.

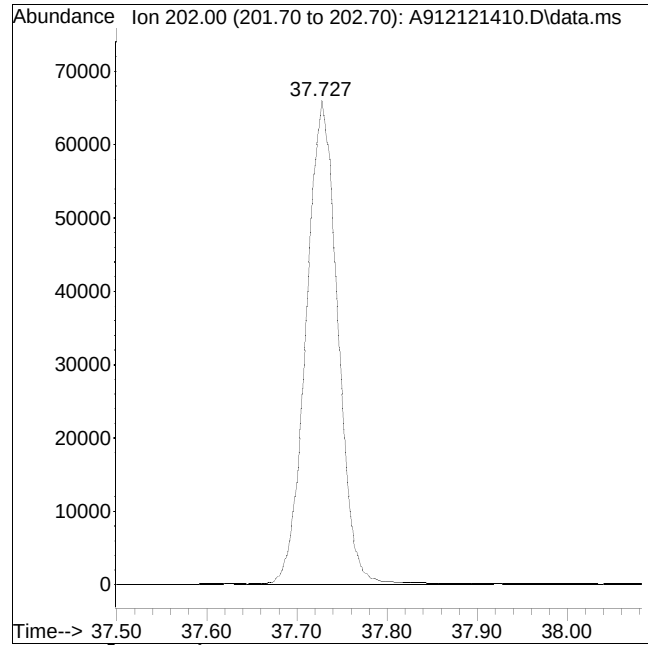
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121410.D Operator : PAH9:SR
Date Inj'd : 12/13/2014 2:21 am Instrument : PAH 9
Sample : Cq912121401 Quant Date : 12/15/2014 12:33 pm

Compound #58: Fluoranthene



Original Peak Response = 161219



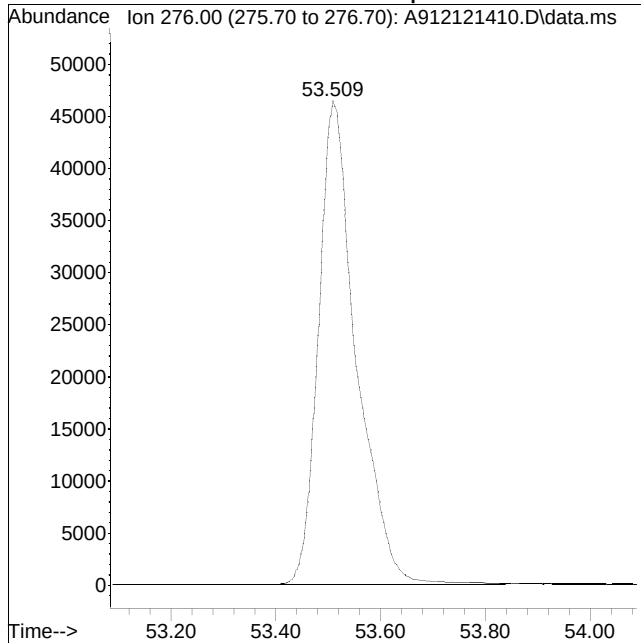
Manual Peak Response = 160953 M4

M4 = Poor automated baseline construction.

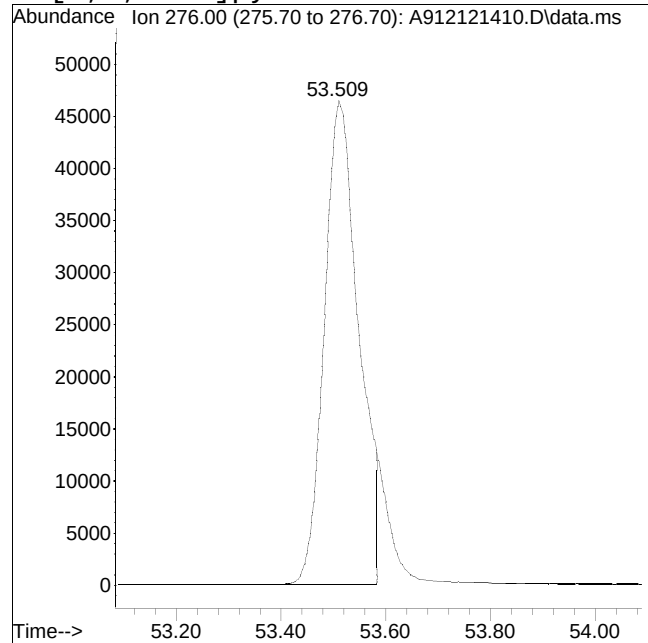
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121410.D Operator : PAH9:SR
Date Inj'd : 12/13/2014 2:21 am Instrument : PAH 9
Sample : Cq912121401 Quant Date : 12/15/2014 12:33 pm

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 233524



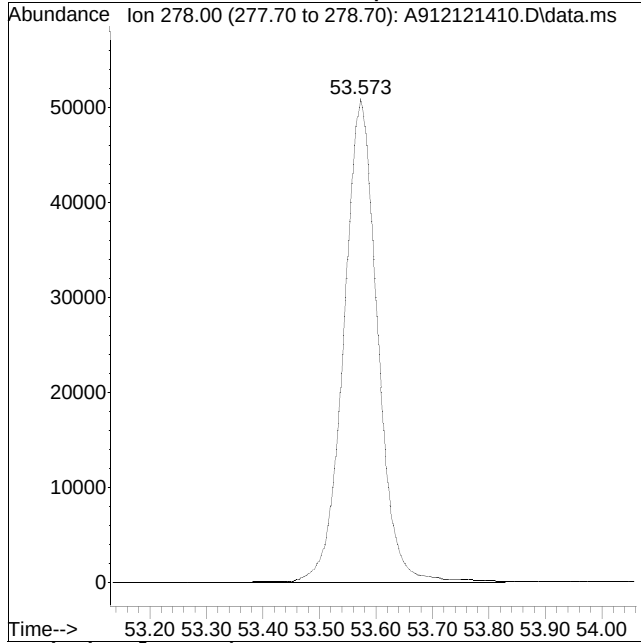
Manual Peak Response = 213663 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

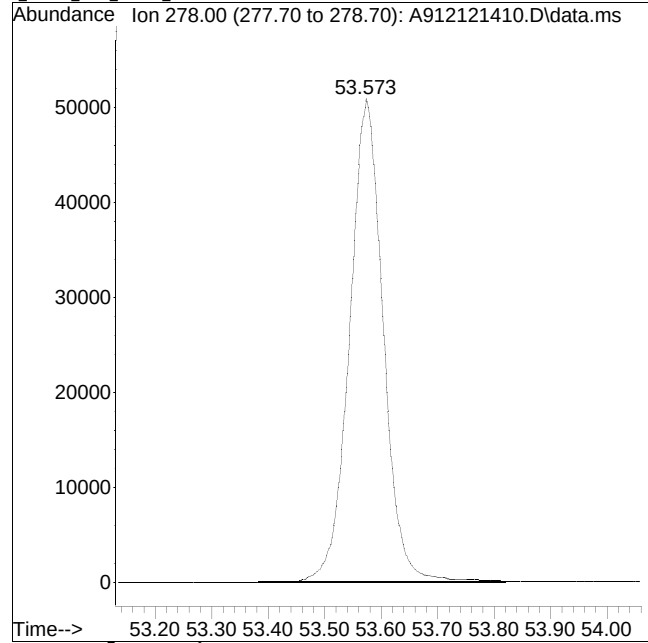
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121410.D Operator : PAH9:SR
Date Inj'd : 12/13/2014 2:21 am Instrument : PAH 9
Sample : Cq912121401 Quant Date : 12/15/2014 12:33 pm

Compound #92: Dibenz[ah]+[ac]anthracene



Original Peak Response = 211279



Manual Peak Response = 210681 M4

M4 = Poor automated baseline construction.

Alaska North Slope Crude (ANS)

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Data File : A912121432.D
 Acq On : 15 Dec 2014 7:57 pm
 Operator : PAH9:SR
 Sample : WG749024-1,0.05055
 Misc : WG749024,FRAU91 5.055 mg/Kg
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 16 10:52:31 2014
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.031	164	111969M4	500.000	ng/mL	0.00
74) Chrysene-d12	43.451	240	209518	500.000	ng/mL	0.02
System Monitoring Compounds						
9) Naphthalene-d8	20.069	136	478662	944.178	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	94.42%		
42) Phenanthrene-d10	32.889	188	370943	965.234	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	96.52%		
83) Benzo[b]fluoranthene-d12	47.353	264	446704	1030.577	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	103.06%		
88) Benzo[a]pyrene-d12	48.561	264	407288	1023.899	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	102.39%		
129) 5B(H)Cholane - Surr	44.072	217	71051	1073.670	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	107.37%		
Target Compounds						
						Qvalue
2) 2-butoxyethanol	0.000		0	N.D.	d	
3) trans-Decalin	16.729	138	251714	2440.290	ng/mL	100
4) cis-Decalin	17.942	138	9906M4	122.207	ng/mL	
5) C1-Decalins	18.663	152	393088M5	3810.867	ng/mL	
6) C2-Decalins	19.987	166	343527M5	3330.388	ng/mL	
7) C3-Decalins	22.450	180	182746M5	1771.666	ng/mL	
8) C4-Decalins	25.836	194	202893M5	1966.985	ng/mL	
10) Naphthalene	20.142	128	1837026	2964.087	ng/mL	100
11) C1-Naphthalenes	22.834	142	3372843M5	5442.166	ng/mL	
12) C2-Naphthalenes	25.672	156	3808528M5	6145.155	ng/mL	
13) C3-Naphthalenes	28.008	170	3055343M5	4929.872	ng/mL	
14) C4-Naphthalenes	30.763	184	1611641M5	2600.423	ng/mL	
15) Glycol Ether Isomers	0.000		0	N.D.	d	
16) 2-Methylnaphthalene	22.834	142	1984471	5899.627	ng/mL	100
17) 1-Methylnaphthalene	23.263	142	1388585	4223.291	ng/mL	100
18) Benzothiophene	20.352	134	14861M4	26.231	ng/mL	
19) C1-Benzo(b)thiophenes	22.396	148	78310M5	138.226	ng/mL	
20) C2-Benzo(b)thiophenes	25.863	162	124543M5	219.832	ng/mL	
21) C3-Benzo(b)thiophenes	27.844	176	233921M5	412.897	ng/mL	
22) C4-Benzo(b)thiophenes	29.577	190	204294M5	360.602	ng/mL	
23) Biphenyl	24.704	154	317467	765.544	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.334	156	950179	3475.281	ng/mL	100
25) Dibenzofuran	27.789	168	117353	269.559	ng/mL#	87
26) Acenaphthylene	26.411	152	14682	28.532	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Data File : A912121432.D
 Acq On : 15 Dec 2014 7:57 pm
 Operator : PAH9:SR
 Sample : WG749024-1,0.05055
 Misc : WG749024,FRAU91 5.055 mg/Kg
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 16 10:52:31 2014
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acenaphthene	27.159	153	32088M4	103.429	ng/mL	
28) 2,3,5-Trimethylnaphthalen	28.701	170	233838M3	896.217	ng/mL	
29) Fluorene	29.167	166	134020M4	384.207	ng/mL	
30) C1-Fluorenes	31.530	180	288364M5	826.678	ng/mL	
31) C2-Fluorenes	33.719	194	483390M5	1385.776	ng/mL	
32) C3-Fluorenes	35.536	208	450145M5	1290.470	ng/mL	
33) Dibenzothiophene	32.488	184	370390	723.033	ng/mL#	88
34) 4-Methyldibenzothiophene(	34.258	198	327197	638.717	ng/mL	100
35) 2/3-Methyldibenzothiophen	34.596	198	247773	483.674	ng/mL	100
36) 1-Methyldibenzothiophene(	35.025	198	111672	217.993	ng/mL	100
37) OTP	34.660	198	28243M3	55.133	ng/mL	
38) C1-Dibenzothiophenes	34.258	198	726280M5	1417.761	ng/mL	
38) C1-Dibenzothiophenes BS	34.258	198	698037M5	1362.628	ng/mL	
39) C2-Dibenzothiophenes	35.937	212	960187M5	1874.368	ng/mL	
40) C3-Dibenzothiophenes	37.727	226	836924M5	1633.748	ng/mL	
41) C4-Dibenzothiophenes	39.407	240	464586M5	906.912	ng/mL	
43) Phenanthrene	32.980	178	520346	1069.012	ng/mL	95
44) 3-Methylphenanthrene(3MP)	34.933	192	212369	436.296	ng/mL	99
45) 2-Methylphenanthrene(2MP)	35.043	192	235113	483.022	ng/mL	99
46) 2-Methylanthracene(2MA)	35.207	192	7805	16.035	ng/mL	88
47) 9/4-Methylphenanthrene(9M	35.390	192	332245	682.572	ng/mL	100
48) 1-Methylphenanthrene(1MP)	35.481	192	238767	490.529	ng/mL	98
49) C1-Phenanthrenes/Anthrace	35.390	192	1030203M5	2116.475	ng/mL	
50) C2-Phenanthrenes/Anthrace	37.197	206	1101113M5	2262.154	ng/mL	
50) C2-Phenanthrenes/Anthr BS	37.197	206	1101113M5	2262.154	ng/mL	
51) 5AA IS BKGD	0.000		0	N.D.	d	
52) C3-Phenanthrenes/Anthrace	39.023	220	861545M5	1769.980	ng/mL	
53) C4-Phenanthrenes/Anthrace	41.196	234	371474M5	763.165	ng/mL	
54) Retene	0.000		0	N.D.	d	
55) Anthracene	0.000		0	N.D.	d	
56) Carbazole	33.811	167	12219M4	28.245	ng/mL	
57) 1-Methylphenanthrene	35.481	192	235811M4	731.548	ng/mL	
58) Fluoranthene	37.745	202	10468M4	21.182	ng/mL	
59) Benzo(b)fluorene	40.256	216	9913	33.209	ng/mL	85
60) Pyrene	38.621	202	29384M3	55.896	ng/mL	
61) C1-Fluoranthenes/Pyrenes	40.009	216	151191M5	287.603	ng/mL	
62) C2-Fluoranthenes/Pyrenes	41.808	230	262785M5	499.883	ng/mL	
63) C3-Fluoranthenes/Pyrenes	43.817	244	334027M5	635.403	ng/mL	
64) C4-Fluoranthenes/Pyrenes	45.168	258	289706M5	551.094	ng/mL	
65) Bis-(2-ethylhexyl)fumarat	0.000		0	N.D.	d	
66) Naphthobenzothiophene	42.465	234	84179	160.553	ng/ml#	83

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Data File : A912121432.D
 Acq On : 15 Dec 2014 7:57 pm
 Operator : PAH9:SR
 Sample : WG749024-1,0.05055
 Misc : WG749024,FRAU91 5.055 mg/Kg
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 16 10:52:31 2014
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
67)	Naphthobenzothiophene-2,1	42.465	234	84179	160.553	ng/mL#	83
68)	Naphthobenzothiophene-1,2	42.803	234	19371M4	36.946	ng/mL	
69)	Naphthobenzothiophene-2,3	43.104	234	9968	19.012	ng/mL#	5
70)	C1-Naphthobenzothiophenes	43.853	248	313859M5	598.618	ng/mL	
71)	C2-Naphthobenzothiophenes	45.853	262	400151M5	763.202	ng/mL	
72)	C3-Naphthobenzothiophenes	47.454	276	332031M5	633.277	ng/mL	
73)	C4-Naphthobenzothiophenes	48.542	290	227898M5	434.666	ng/mL	
75)	Benz[a]anthracene	43.387	228	5717M3	12.315	ng/mL	
76)	Chrysene	43.524	228	88173M4	192.112	ng/mL	
77)	Chrysene/Triphenylene	43.524	228	87590M4	190.841	ng/mL	
78)	C1-Chrysenes	45.013	242	167883M5	365.784	ng/mL	
79)	C2-Chrysenes	47.088	256	252325M5	549.767	ng/mL	
79)	C2-Chrysenes BS	47.088	256	236059M5	514.326	ng/mL	
80)	BBF-d12 Surr BKGD	47.353	256	16266	35.440	ng/mL	100
81)	C3-Chrysenes	49.832	270	273241M5	595.338	ng/mL	
82)	C4-Chrysenes	49.832	284	167537M5	365.030	ng/mL	
84)	Benzo[b]fluoranthene	47.436	252	14160M4	25.785	ng/mL	
85)	Benzo[j]+[k]fluoranthene	47.509	252	1442M3	2.742	ng/mL	
86)	Benzo[a]fluoranthene	0.000		0	N.D.	d	
87)	Benzo[e]pyrene	48.460	252	26491	50.369	ng/mL	93
89)	Benzo[a]pyrene	48.652	252	5066M3	9.829	ng/mL	
90)	Perylene	48.963	252	7959	15.299	ng/mL#	15
91)	Indeno[1,2,3-cd]pyrene	53.554	276	1969M3	3.080	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.591	278	2819M4	4.468	ng/mL	
93)	Benzo[g,h,i]perylene	54.870	276	9975	16.062	ng/mL#	77
94)	Hopane (T19)	52.649	191	93536M3	728.612	ng/mL	
95)	17a(H),21B(H)-hopane - C3	52.649	191	93002M3	724.453	ng/mL	
96)	C23 Tricyclic Terpane (T4	41.096	191	42592	331.777	ng/mL	100
97)	C24 Tricyclic Terpane (T5	41.817	191	26651	207.602	ng/mL	100
98)	C25 Tricyclic Terpane (T6	43.342	191	25051M1	195.138	ng/mL	
99)	C24 Tetracyclic Terpane (	44.629	191	9981	77.748	ng/mL	100
100)	C26 Tricyclic Terpane-22S	44.355	191	10936M4	85.188	ng/mL	
101)	C26 Tricyclic Terpane-22R	44.447	191	9106M4	70.933	ng/mL	
102)	C28 Tricyclic Terpane-22S	46.722	191	9866M4	76.853	ng/mL	
103)	C28 Tricyclic Terpane-22R	46.887	191	9997	77.873	ng/mL	100
104)	C29 Tricyclic Terpane-22S	47.417	191	11748	91.513	ng/mL	100
105)	C29 Tricyclic Terpane-22R	47.619	191	13329M4	103.828	ng/mL	
106)	18a-22,29,30-Trisnorneoho	48.789	191	16601	129.316	ng/mL	100
107)	C30 Tricyclic Terpane-22S	48.853	191	7589M4	59.116	ng/mL	
108)	C30 Tricyclic Terpane-22R	49.100	191	8448M4	65.807	ng/mL	
109)	17a(H)-22,29,30-Trisnorho	49.347	191	20417	159.041	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Data File : A912121432.D
 Acq On : 15 Dec 2014 7:57 pm
 Operator : PAH9:SR
 Sample : WG749024-1,0.05055
 Misc : WG749024,FRAU91 5.055 mg/Kg
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 16 10:52:31 2014
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110)	17a/b,21b/a 28,30-Bisnorh	50.555	191	4318	33.636	ng/ml	100
111)	17a(H),21b(H)-25-Norhopan	50.317	191	4700	36.611	ng/ml	100
112)	30-Norhopane (T15)	51.241	191	53505M4	416.785	ng/ml	
113)	18a(H)-30-Norneohopane-C2	51.350	191	13695M4	106.679	ng/ml	
114)	17a(H)-Diahopane (X)	51.469	191	7254M4	56.506	ng/ml	
115)	30-Normoretane (T17)	52.045	191	5827M4	45.390	ng/ml	
116)	18a(H)&18b(H)-Oleananes (	52.402	191	2044M4	15.922	ng/ml	
117)	Moretane (T20)	53.344	191	9107M4	70.940	ng/ml	
118)	30-Homohopane-22S (T21)	54.477	191	38678	301.288	ng/ml	100
119)	30-Homohopane-22R (T22)	54.706	191	33630	261.966	ng/ml	100
120)	Gammacerane/C32-diahopane	55.281	191	6625	51.606	ng/mL	100
121)	30,31-Bishomohopane-22S (	56.067	191	27749	216.155	ng/ml	100
122)	30,31-Bishomohopane-22R (	56.451	191	19353	150.753	ng/ml	100
123)	30,31-Trishomohopane-22S	58.251	191	21698	169.020	ng/ml	100
124)	30,31-Trishomohopane-22R	58.891	191	14007	109.110	ng/ml	100
125)	Tetrakishomohopane-22S (T	60.947	191	15291	119.111	ng/ml	100
126)	Tetrakishomohopane-22R (T	61.870	191	11461	89.277	ng/ml	100
127)	Pentakishomohopane-22S (T	64.163	191	14695	114.469	ng/ml	100
128)	Pentakishomohopane-22R (T	65.479	191	11725	91.334	ng/ml	100
130)	13b(H),17a(H)-20S-Diachol	45.570	217	16058M4	242.657	ng/ml	
131)	13b(H),17a(H)-20R-Diachol	45.990	217	8340	126.028	ng/ml	100
132)	13b,17a-20S-Methylidiachol	46.686	217	8083M4	122.144	ng/ml	
133)	14a,17a-20S-Chol/13b,17a-	47.564	217	19510	294.821	ng/ml	100
134)	14a,17a-20R-Chol/13b,17a-	48.094	217	23687	357.940	ng/ml	100
135)	Unknown Sterane (S18)	48.378	217	6620	100.037	ng/ml	100
136)	13a,17b-20S-Ethylidiachole	48.643	217	937M4	14.159	ng/ml	
137)	14a,17a-20S-Methylcholest	48.799	217	11228	169.669	ng/ml	100
138)	14a,17a-20R-Methylcholest	49.530	217	10756	162.537	ng/ml	100
139)	14a(H),17a(H)-20S-Ethylch	49.887	217	16721	252.675	ng/ml	100
140)	14a(H),17a(H)-20R-Ethylch	50.820	217	11852	179.099	ng/ml	100
141)	14b(H),17b(H)-20R-Cholest	47.655	218	12775M4	193.046	ng/ml	
142)	14b(H),17b(H)-20S-Cholest	47.738	218	12938M4	195.509	ng/ml	
143)	14b,17b-20R-Methylcholest	48.981	218	13384	202.249	ng/ml	100
144)	14b,17b-20S-Methylcholest	49.055	218	16523M4	249.683	ng/ml	
145)	14b(H),17b(H)-20R-Ethylch	50.143	218	16205	244.878	ng/ml	100
146)	14b(H),17b(H)-20S-Ethylch	50.189	218	13962M3	210.983	ng/ml	
147)	C26,20R- +C27,20S- triaro	49.841	231	89322	1349.768	ng/mL	100
148)	C28,20S-triaromatic stero	50.728	231	56927	860.238	ng/mL	100
149)	C27,20R-triaromatic stero	51.186	231	54804	828.157	ng/mL	100
150)	C28,20R-triaromatic stero	52.411	231	45592	688.952	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC12\
 Data File : A912121432.D
 Acq On : 15 Dec 2014 7:57 pm
 Operator : PAH9:SR
 Sample : WG749024-1,0.05055
 Misc : WG749024,FRAU91 5.055 mg/Kg
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 16 10:52:31 2014
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

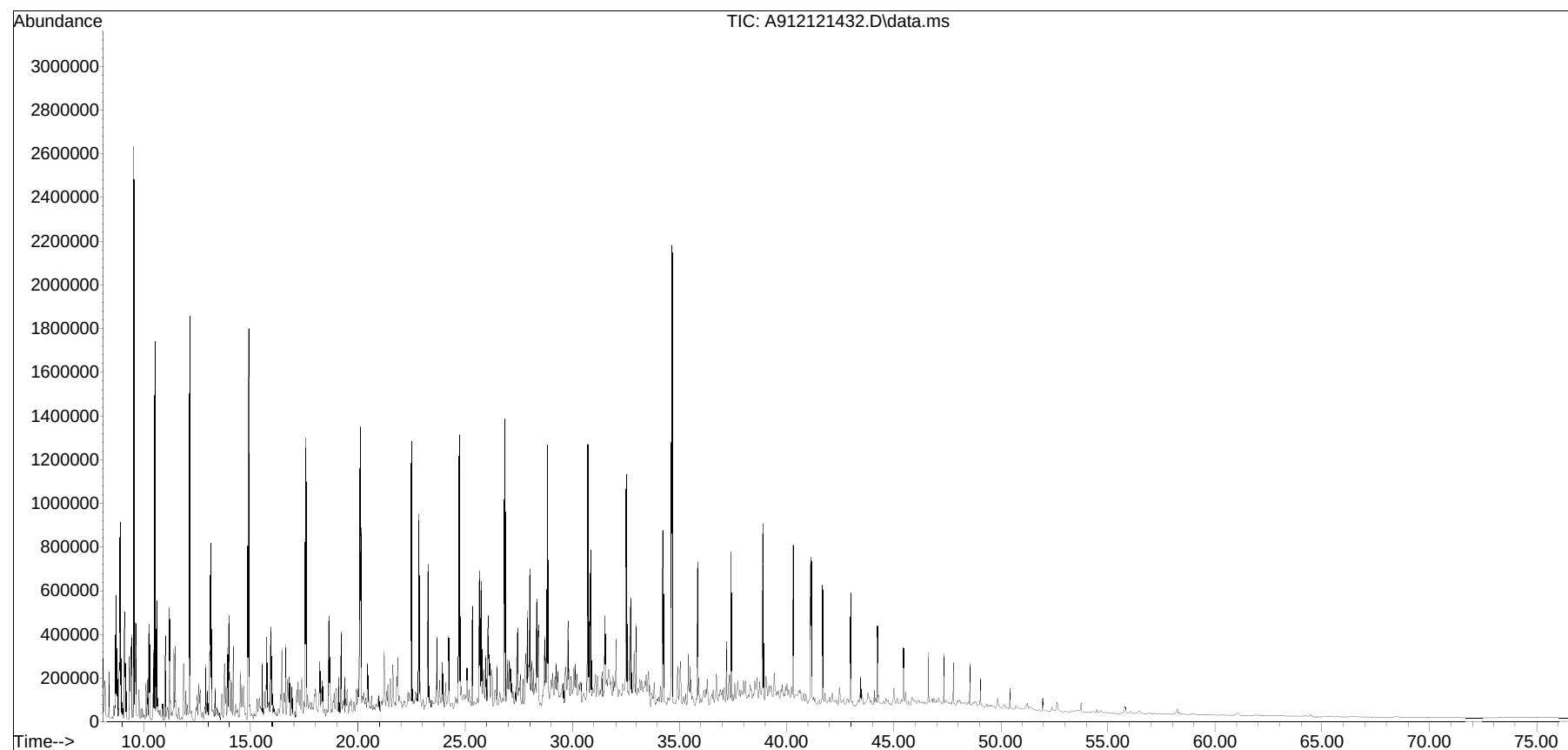
(#) = qualifier out of range (m) = manual integration (+) = signals summed						

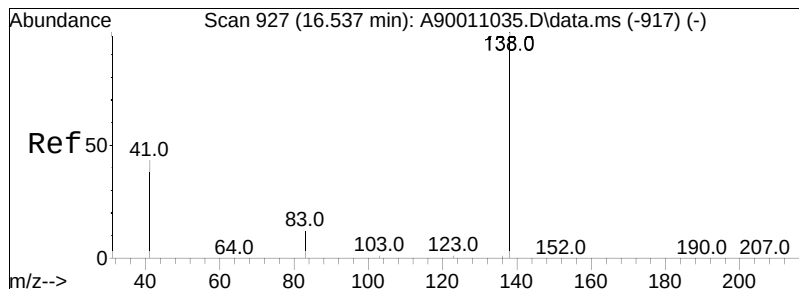
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC12\
Data File : A912121432.D
Acq On : 15 Dec 2014 7:57 pm
Operator : PAH9:SR
Sample : WG749024-1,0.05055
Misc : WG749024,FRAU91 5.055 mg/Kg
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 16 10:52:31 2014
Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 15 13:02:08 2014
Response via : Initial Calibration

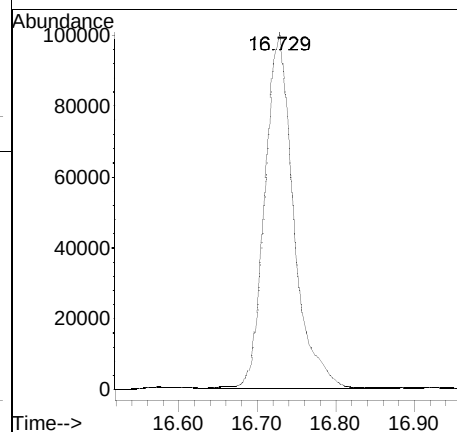
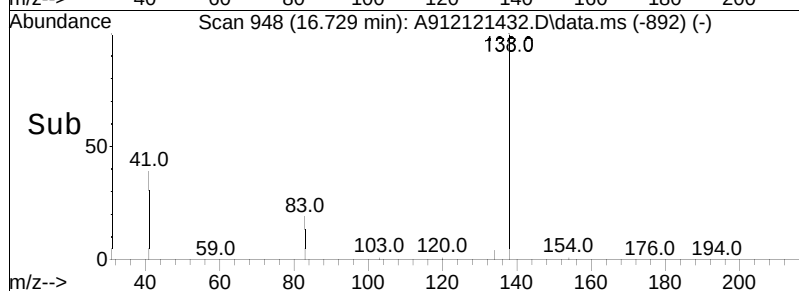
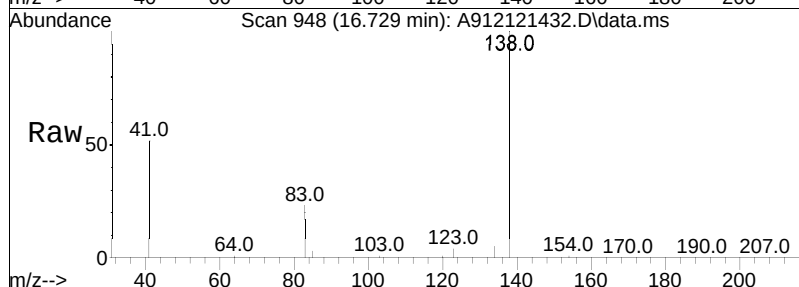
Sub List : Default - All compounds listed

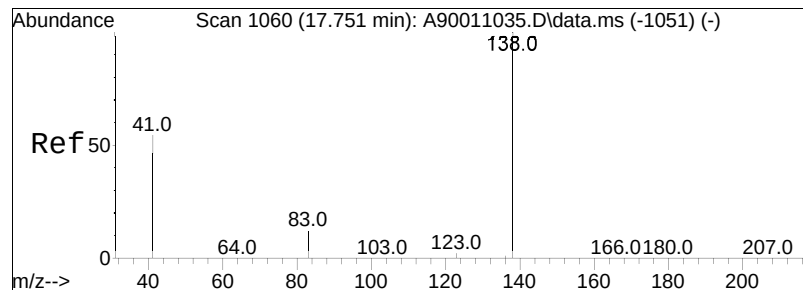




#3
trans-Decalin
Concen: 2440.29 ng/mL
RT: 16.729 min Scan# 948
Delta R.T. 0.009 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm

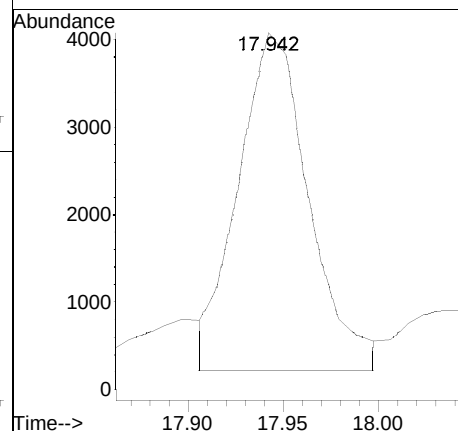
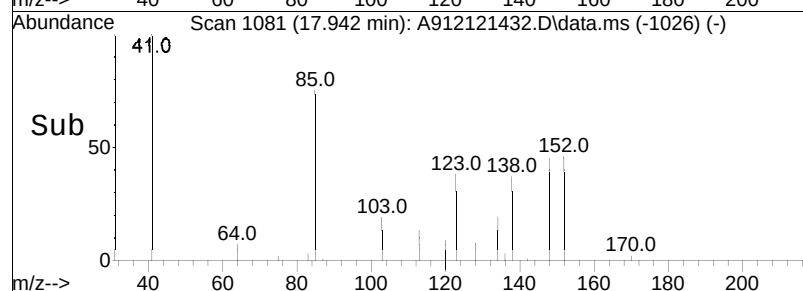
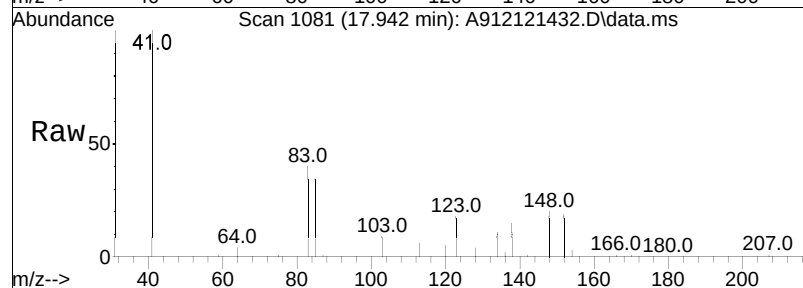
Tgt Ion:138 Resp: 251714

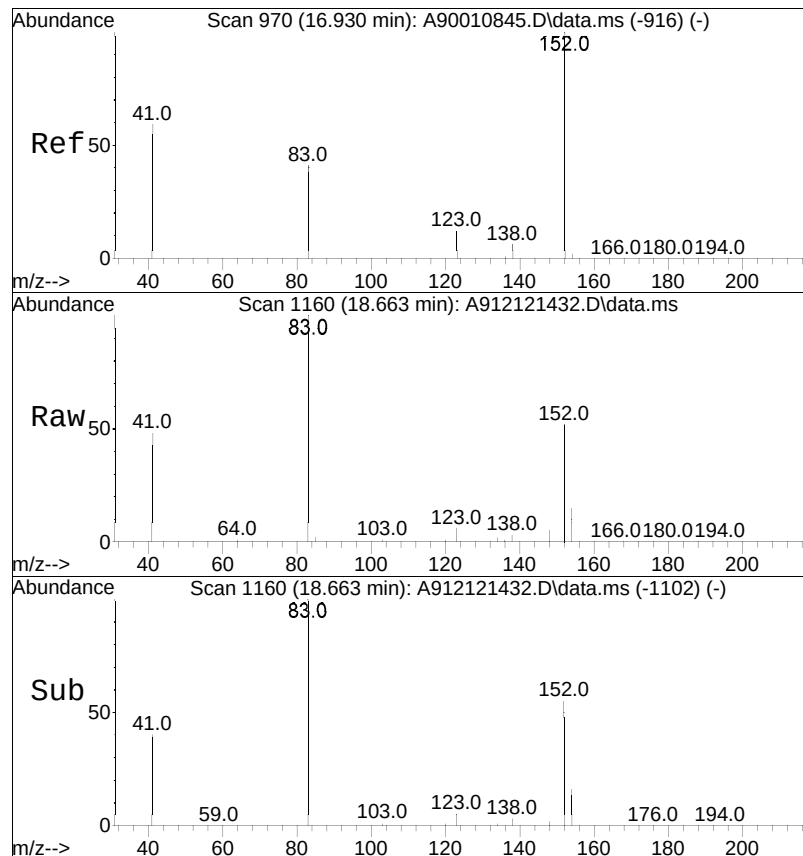




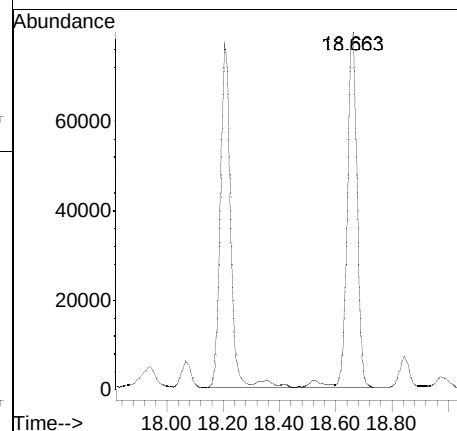
#4
 cis-Decalin
 Concen: 122.21 ng/mL M4
 RT: 17.942 min Scan# 1081
 Delta R.T. -0.001 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

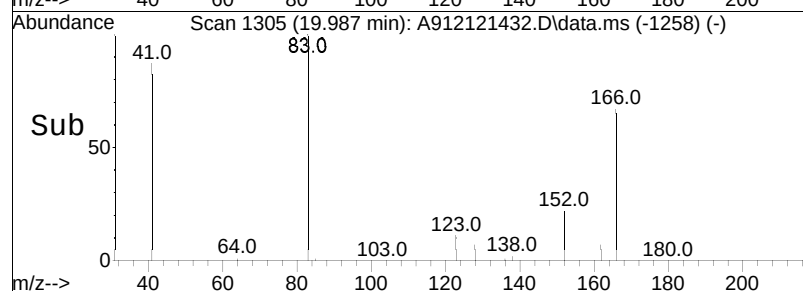
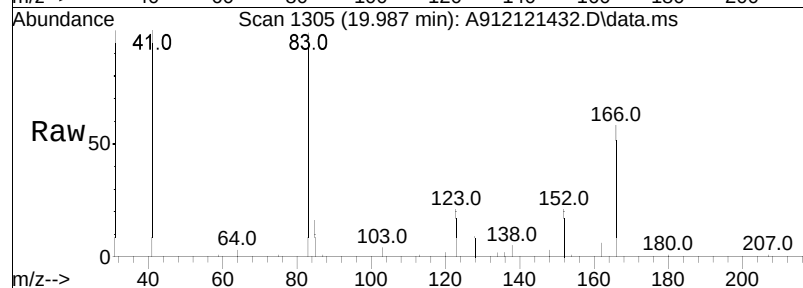
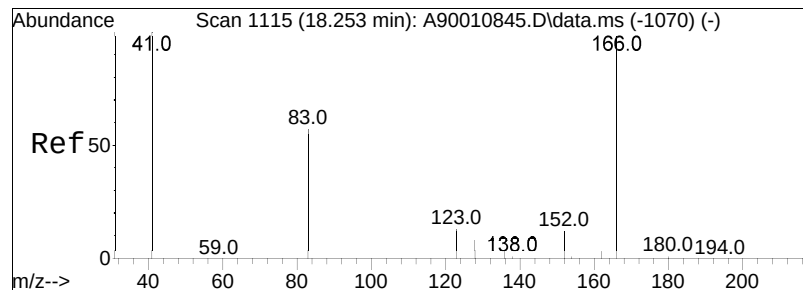
Tgt Ion:138 Resp: 9906



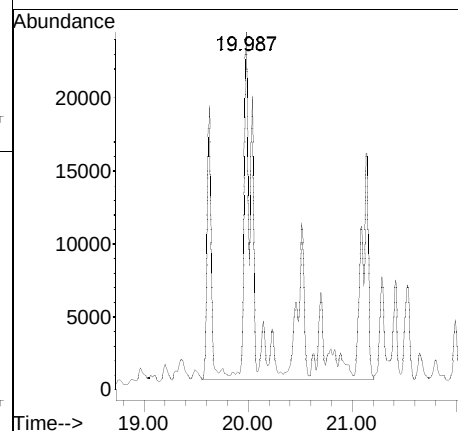


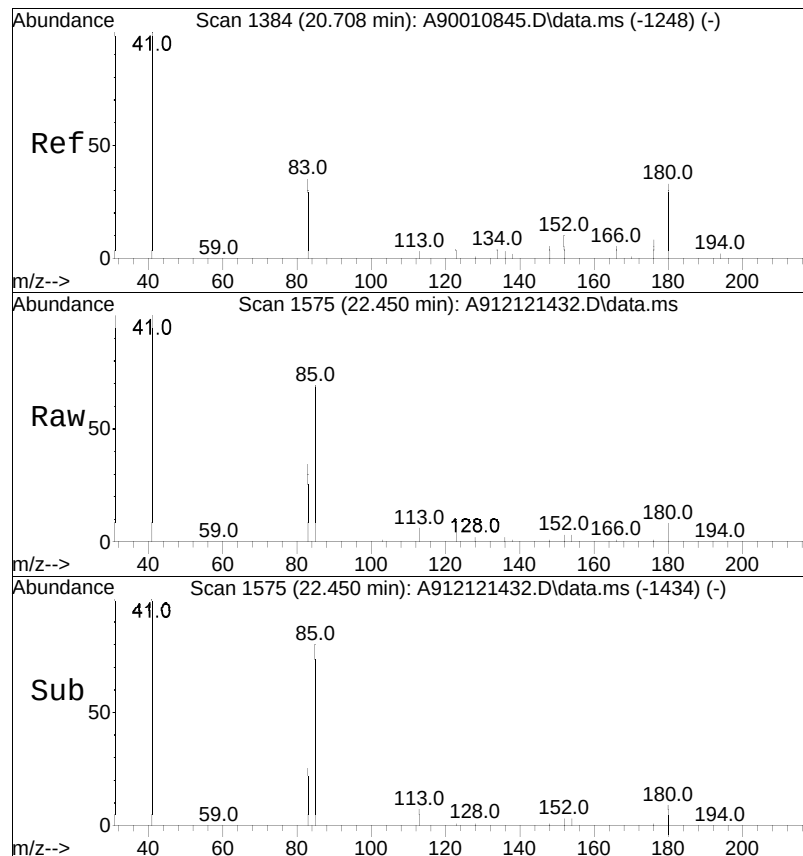
#5
 C1-Decalins
 Concen: 3810.87 ng/mL M5
 RT: 18.663 min Scan# 1160
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:152 Resp: 393088



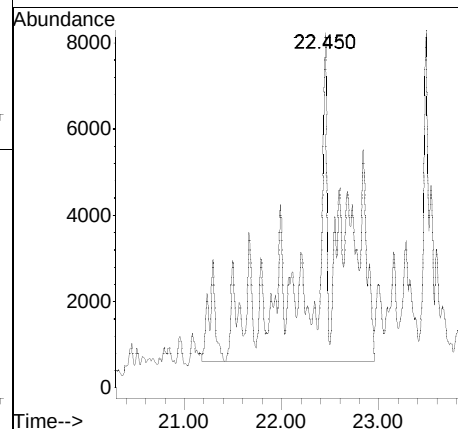


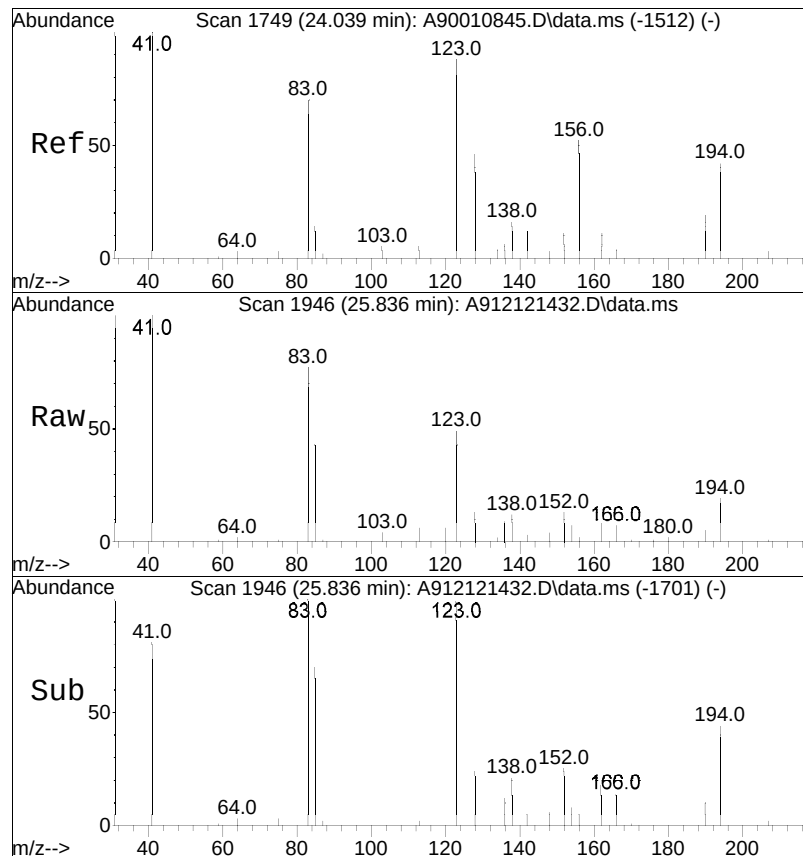
#6
 C2-Decalins
 Concen: 3330.39 ng/mL M5
 RT: 19.987 min Scan# 1305
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:166 Resp: 343527



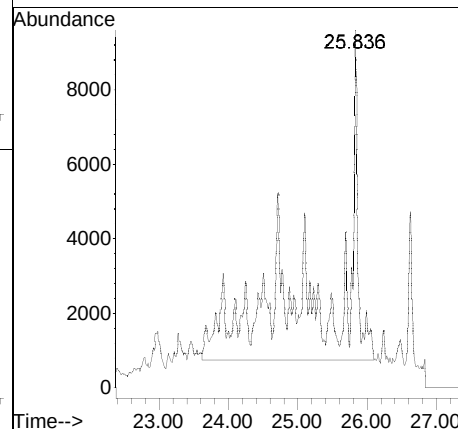


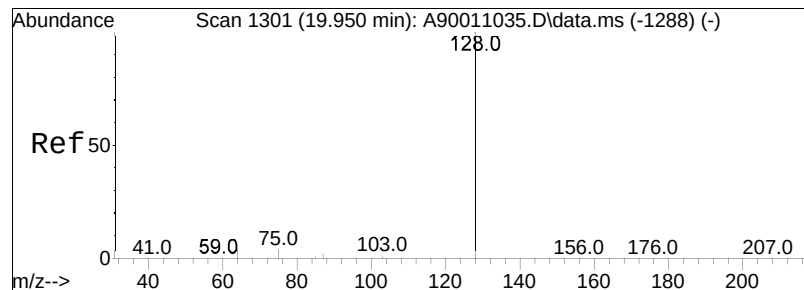
#7
 C3-Decalins
 Concen: 1771.67 ng/mL M5
 RT: 22.450 min Scan# 1575
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:180 Resp: 182746





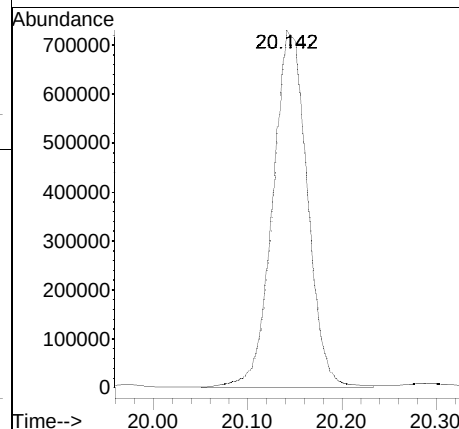
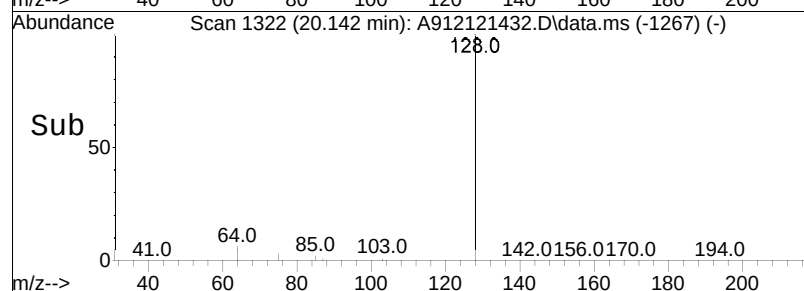
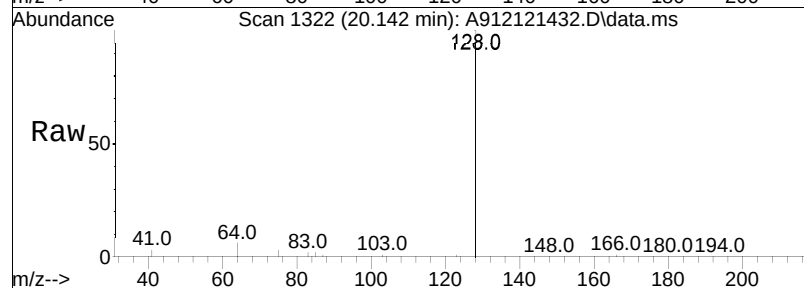
#8
 C4-Decalins
 Concen: 1966.99 ng/mL M5
 RT: 25.836 min Scan# 1946
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:194 Resp: 202893

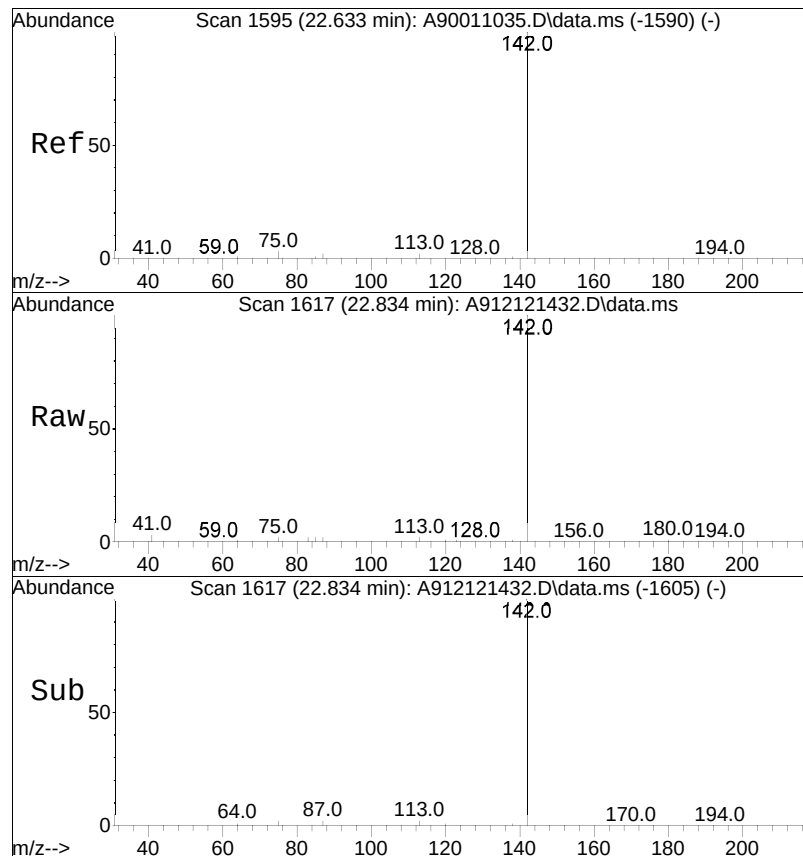




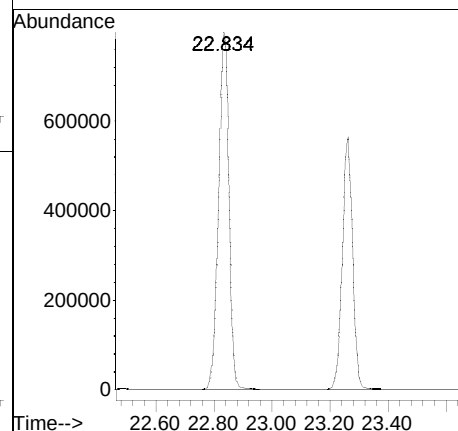
#10
Naphthalene
Concen: 2964.09 ng/mL
RT: 20.142 min Scan# 1322
Delta R.T. -0.000 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm

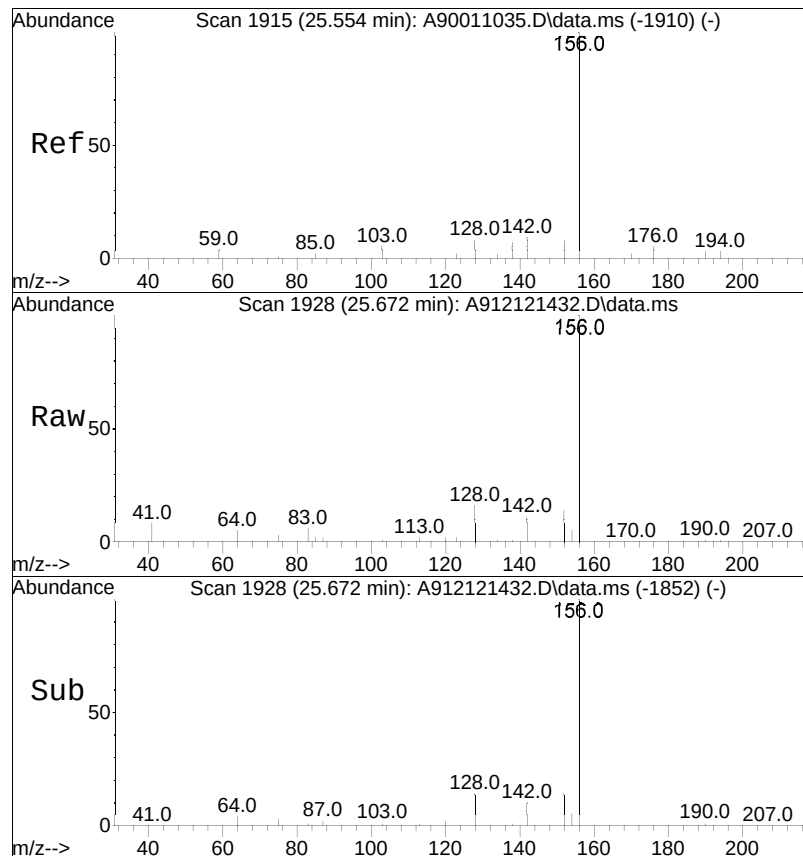
Tgt Ion:128 Resp: 1837026



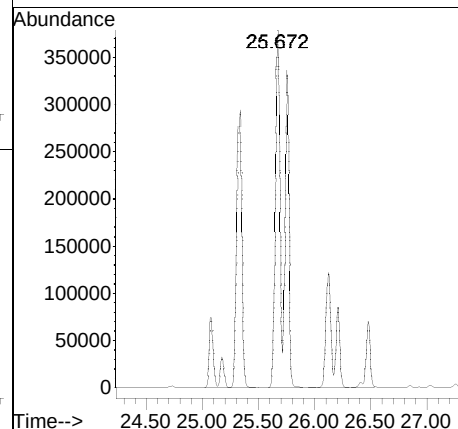


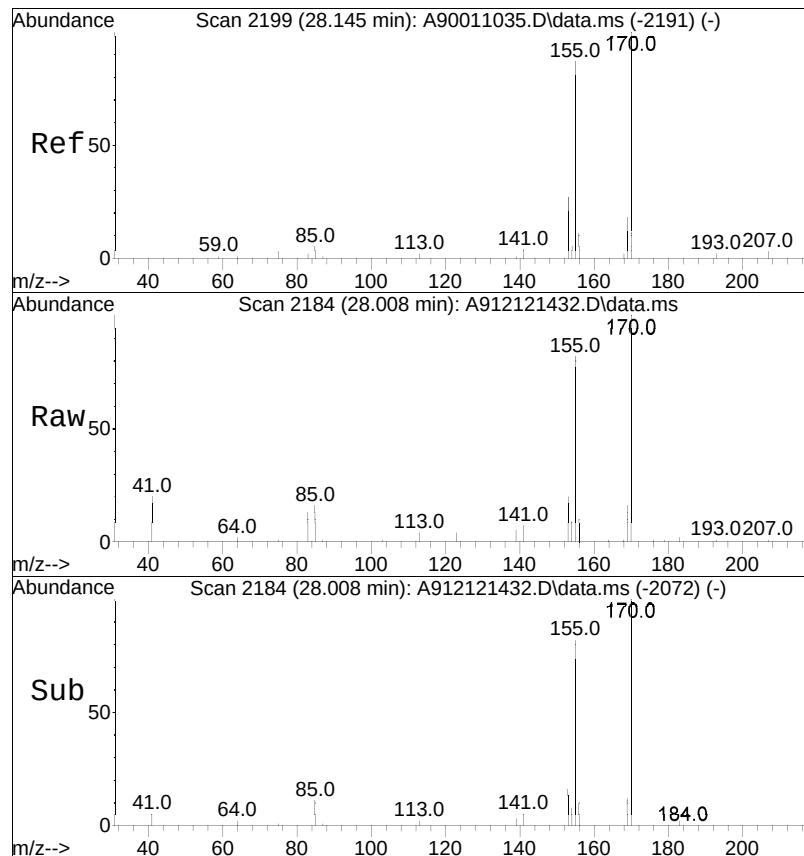
#11
 C1-Naphthalenes
 Concen: 5442.17 ng/mL M5
 RT: 22.834 min Scan# 1617
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:142 Resp: 3372843





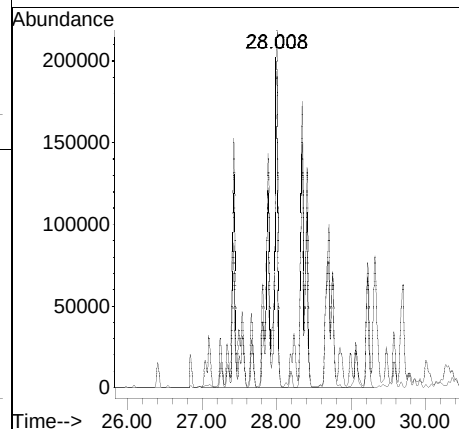
#12
 C2-Naphthalenes
 Concen: 6145.16 ng/mL M5
 RT: 25.672 min Scan# 1928
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:156 Resp: 3808528

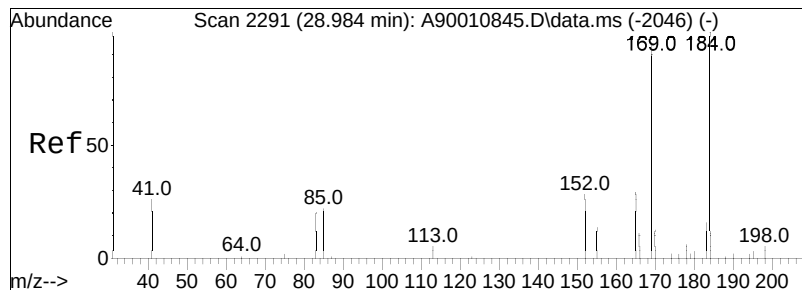




#13
 C3-Naphthalenes
 Concen: 4929.87 ng/mL M5
 RT: 28.008 min Scan# 2184
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

Tgt Ion	Ratio	Lower	Upper
170	100		
155	17.1	57.2	106.2#





#14

C4-Naphthalenes

Concen: 2600.42 ng/mL M5

RT: 30.763 min Scan# 2486

Delta R.T. 0.000 min

Lab File: A912121432.D

Acq: 15 Dec 2014 7:57 pm

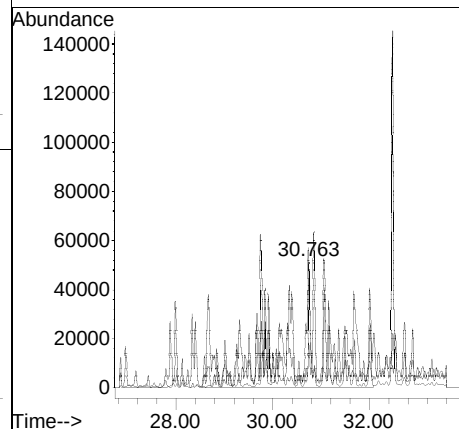
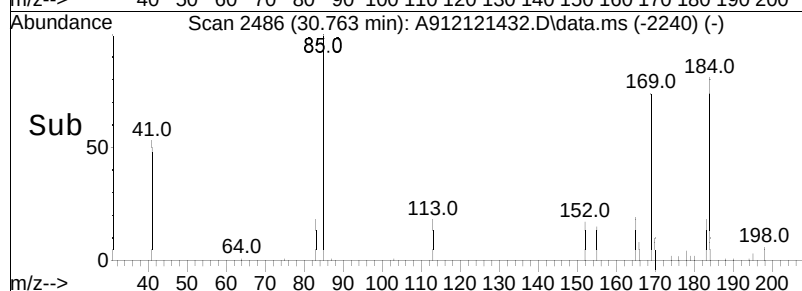
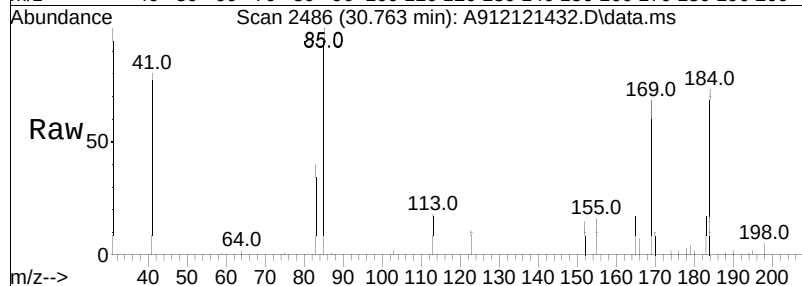
Tgt Ion:184 Resp: 1611641

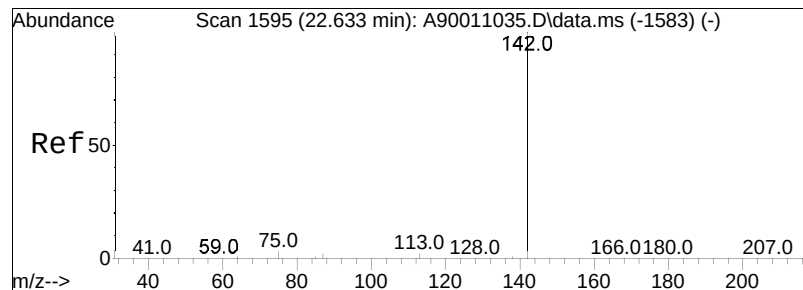
Ion Ratio Lower Upper

184 100

169 10.5 75.9 140.9#

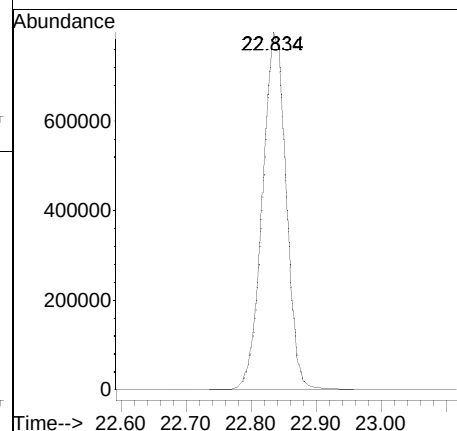
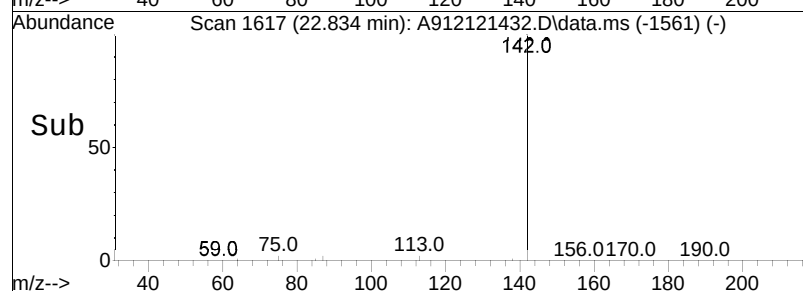
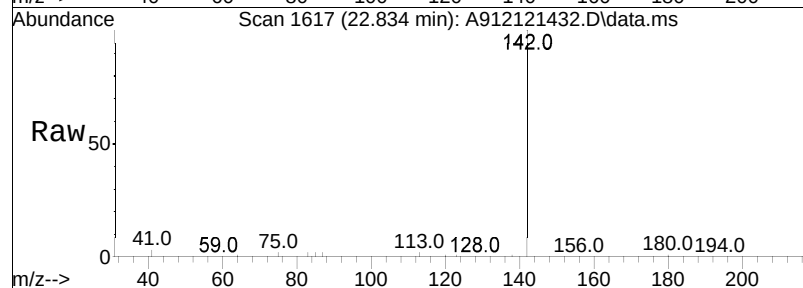
183 2.5 22.3 41.5#

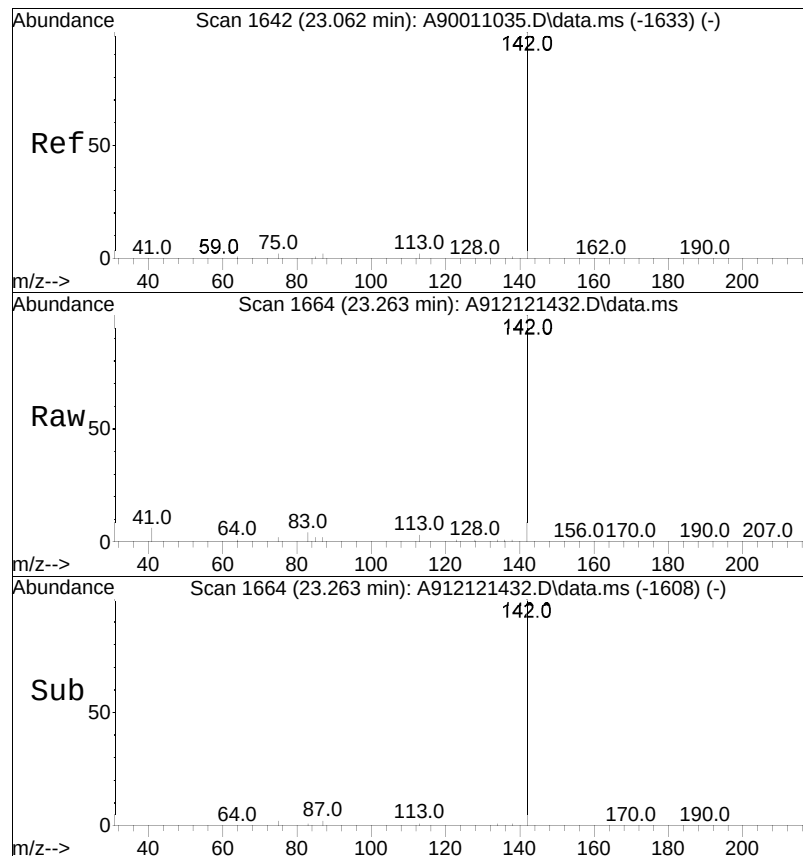




#16
2-Methylnaphthalene
Concen: 5899.63 ng/mL
RT: 22.834 min Scan# 1617
Delta R.T. 0.009 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm

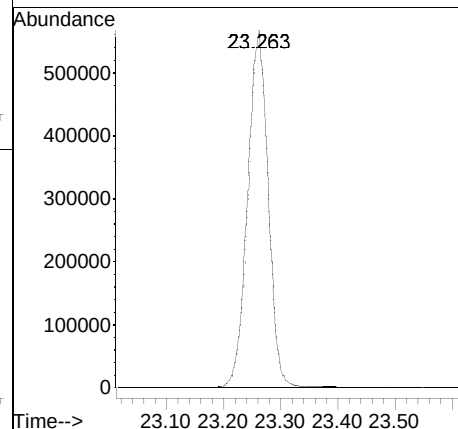
Tgt Ion:142 Resp: 1984471

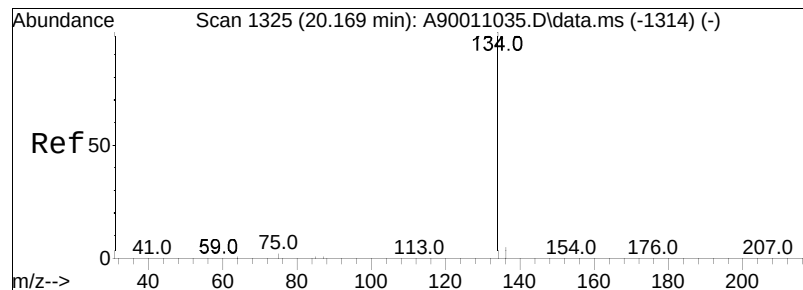




#17
1-Methylnaphthalene
Concen: 4223.29 ng/mL
RT: 23.263 min Scan# 1664
Delta R.T. 0.009 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm

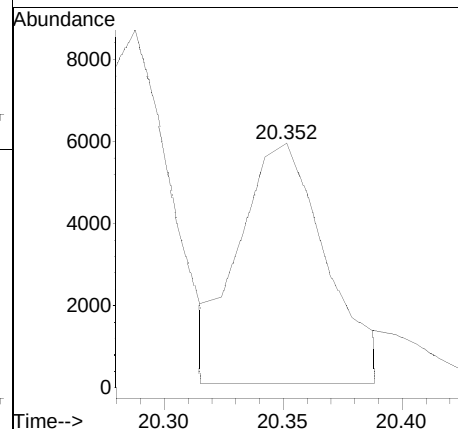
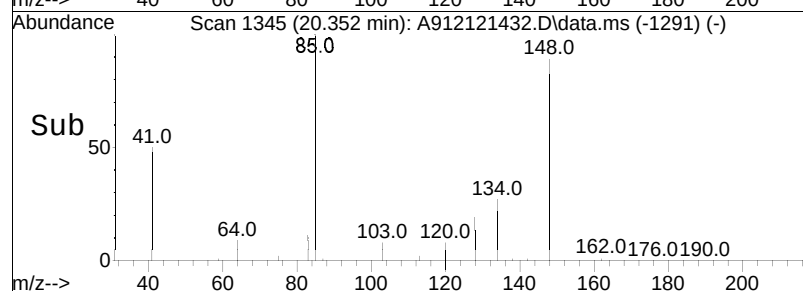
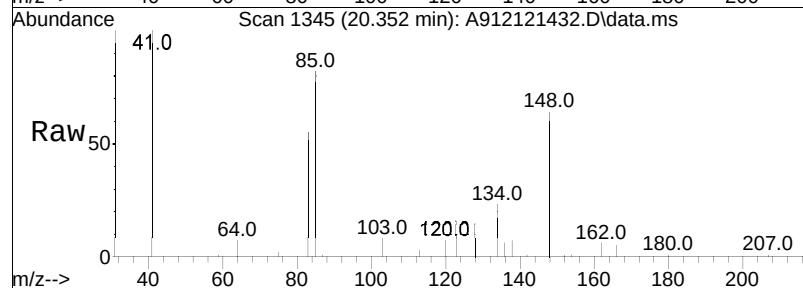
Tgt Ion:142 Resp: 1388585

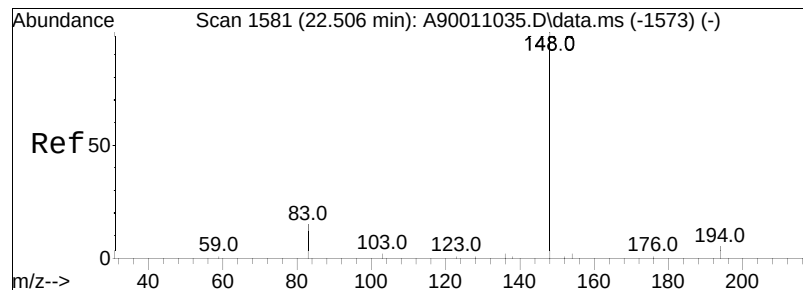




#18
Benzothiophene
Concen: 26.23 ng/mL M4
RT: 20.352 min Scan# 1345
Delta R.T. -0.009 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm

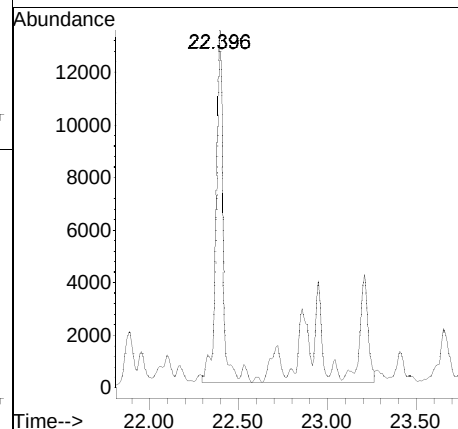
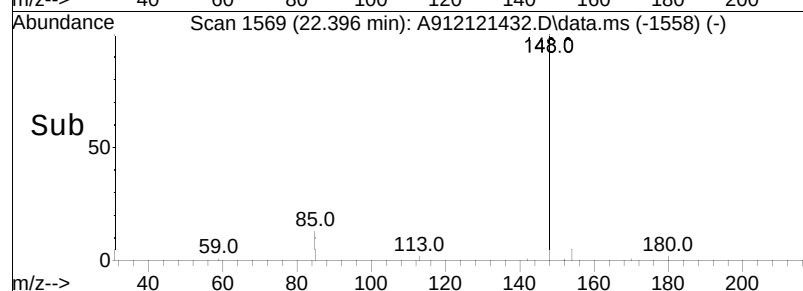
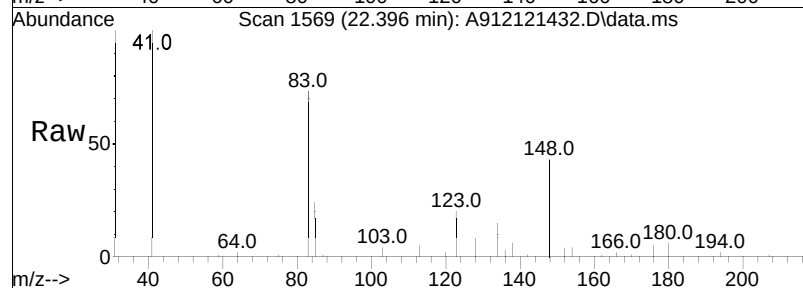
Tgt Ion:134 Resp: 14861

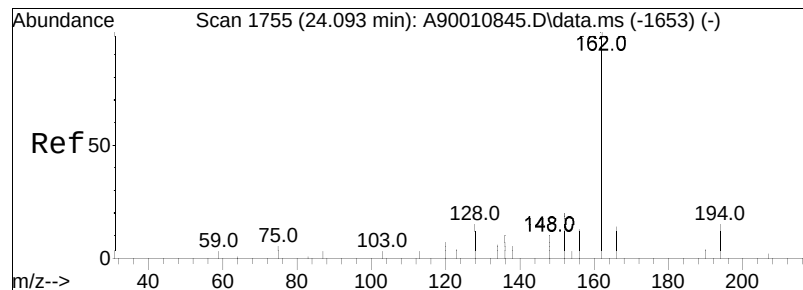




#19
 C1-Benzo(b)thiophenes
 Concen: 138.23 ng/mL M5
 RT: 22.396 min Scan# 1569
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

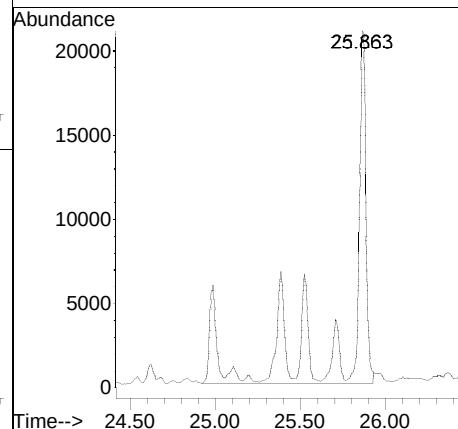
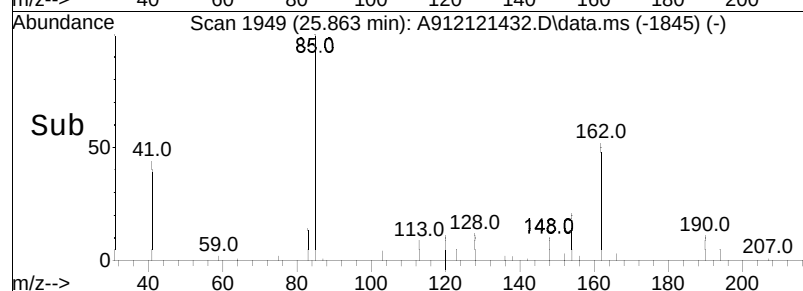
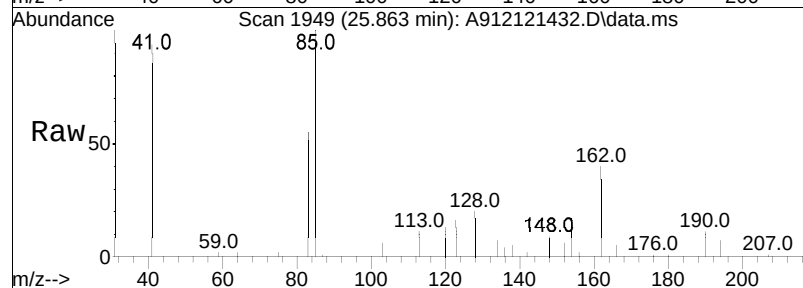
Tgt Ion:148 Resp: 78310

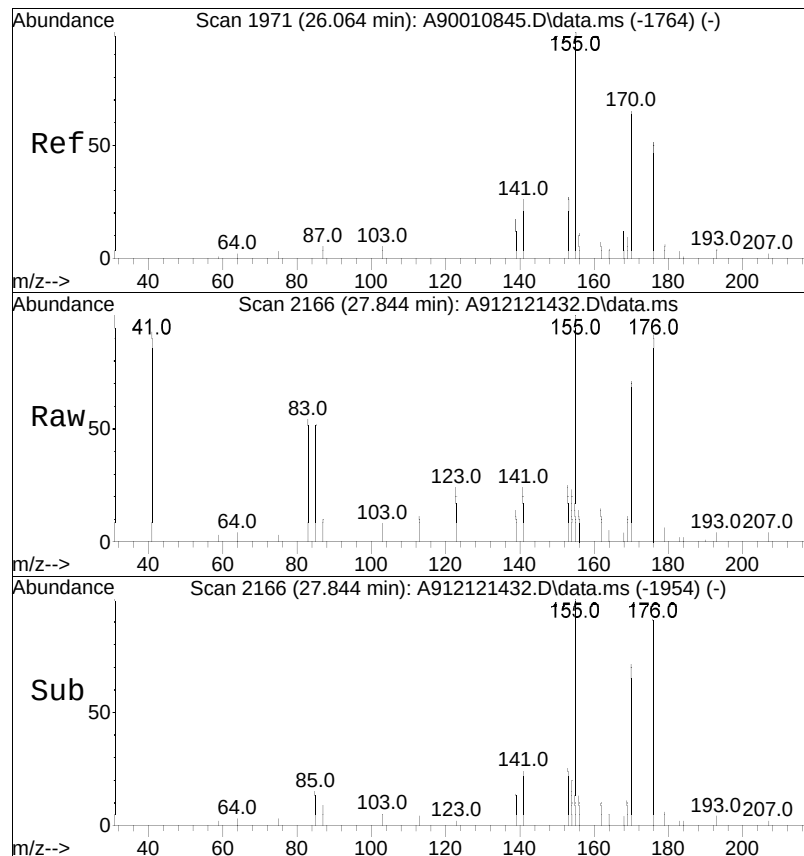




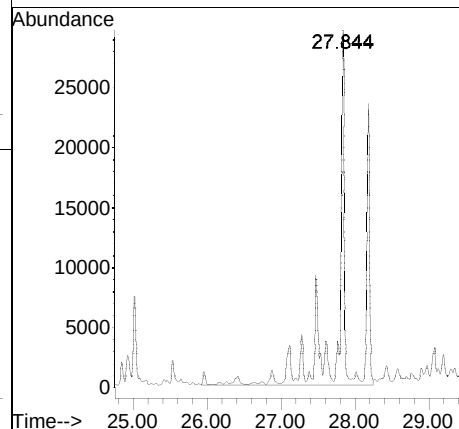
#20
 C2-Benzo(b)thiophenes
 Concen: 219.83 ng/mL M5
 RT: 25.863 min Scan# 1949
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

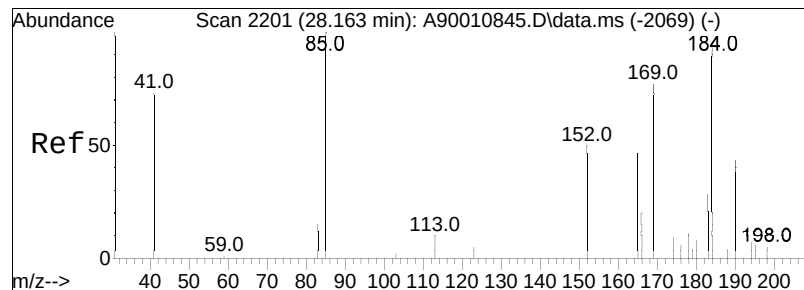
Tgt Ion:162 Resp: 124543





#21
 C3-Benzo(b)thiophenes
 Concen: 412.90 ng/mL M5
 RT: 27.844 min Scan# 2166
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:176 Resp: 233921





#22

C4-Benzo(b)thiophenes

Concen: 360.60 ng/mL M5

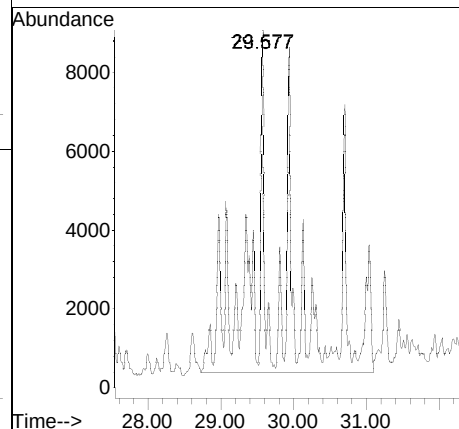
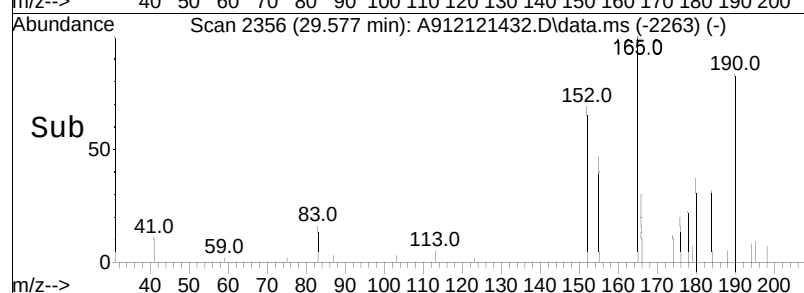
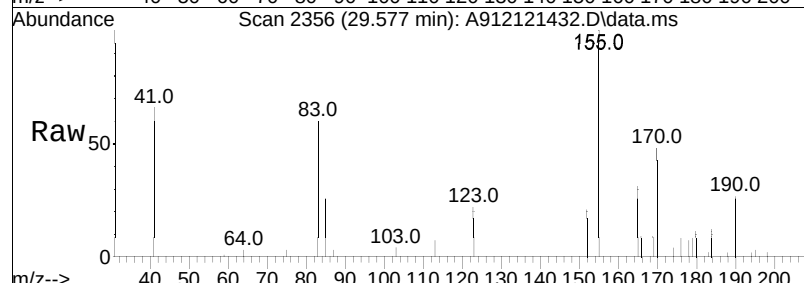
RT: 29.577 min Scan# 2356

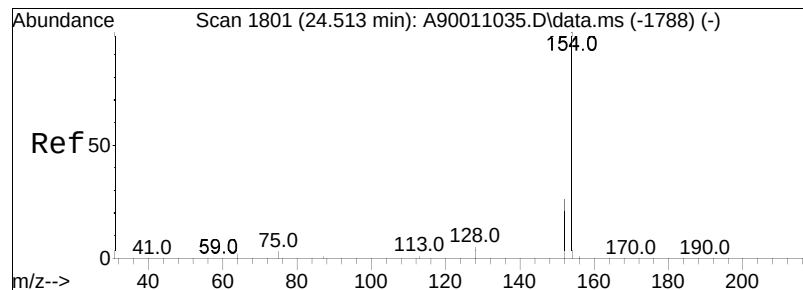
Delta R.T. 0.009 min

Lab File: A912121432.D

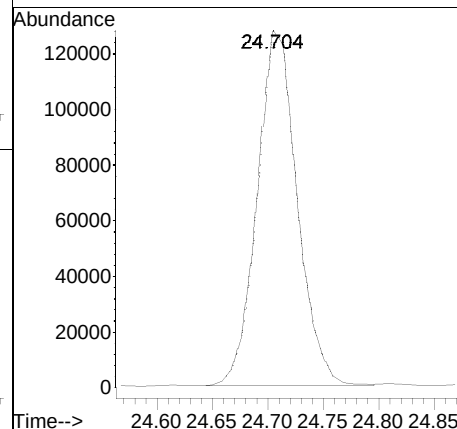
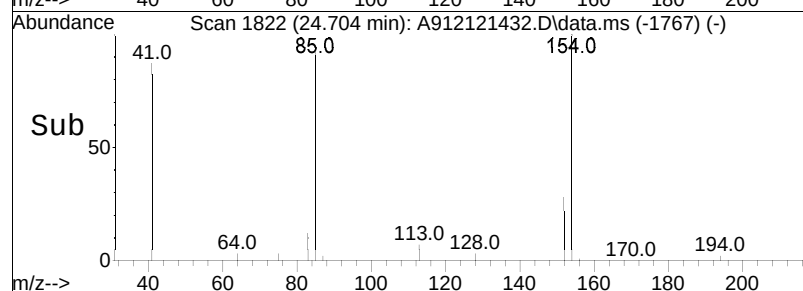
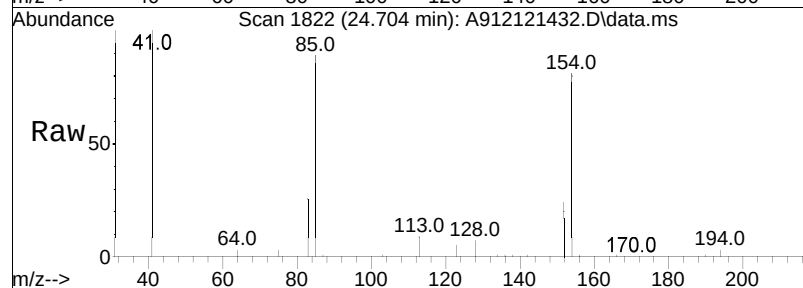
Acq: 15 Dec 2014 7:57 pm

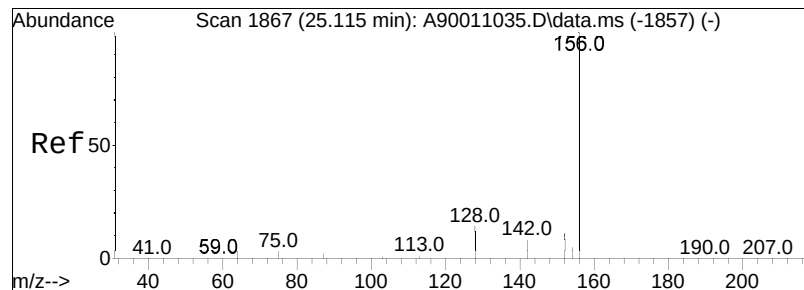
Tgt Ion:190 Resp: 204294





#23
Biphenyl
Concen: 765.54 ng/mL
RT: 24.704 min Scan# 1822
Delta R.T. -0.001 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm
Tgt Ion:154 Resp: 317467





#24

2,6-Dimethylnaphthalene

Concen: 3475.28 ng/mL

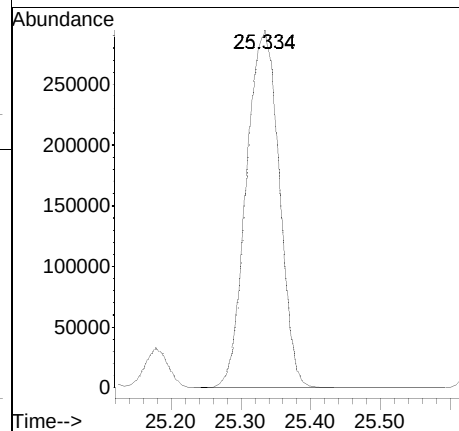
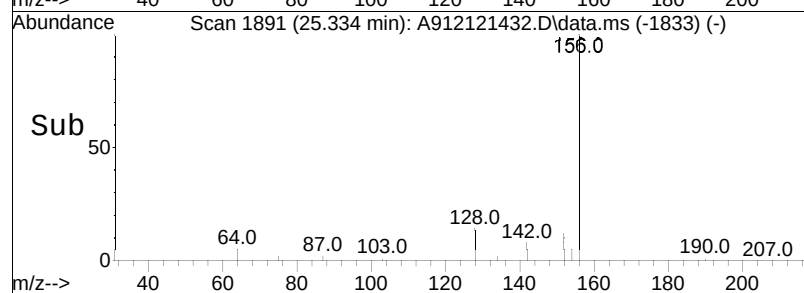
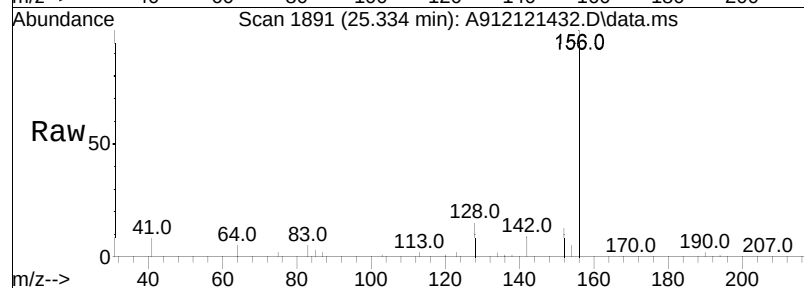
RT: 25.334 min Scan# 1891

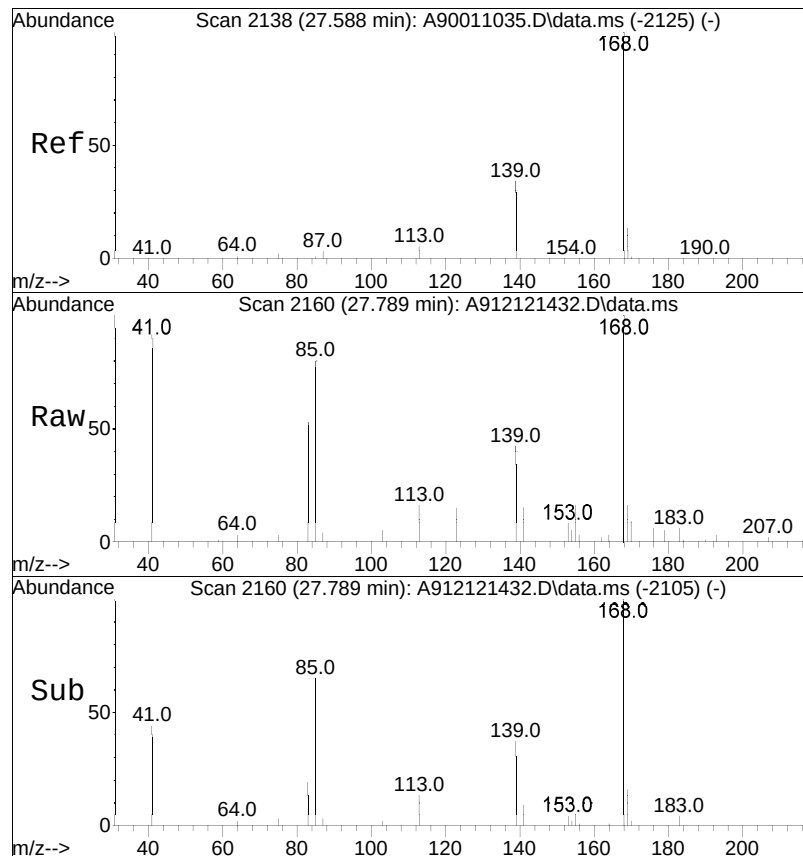
Delta R.T. 0.027 min

Lab File: A912121432.D

Acq: 15 Dec 2014 7:57 pm

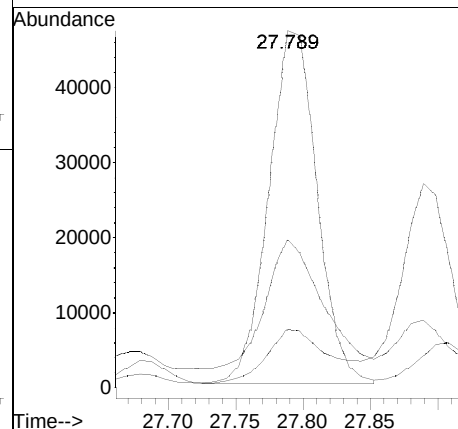
Tgt Ion:156 Resp: 950179

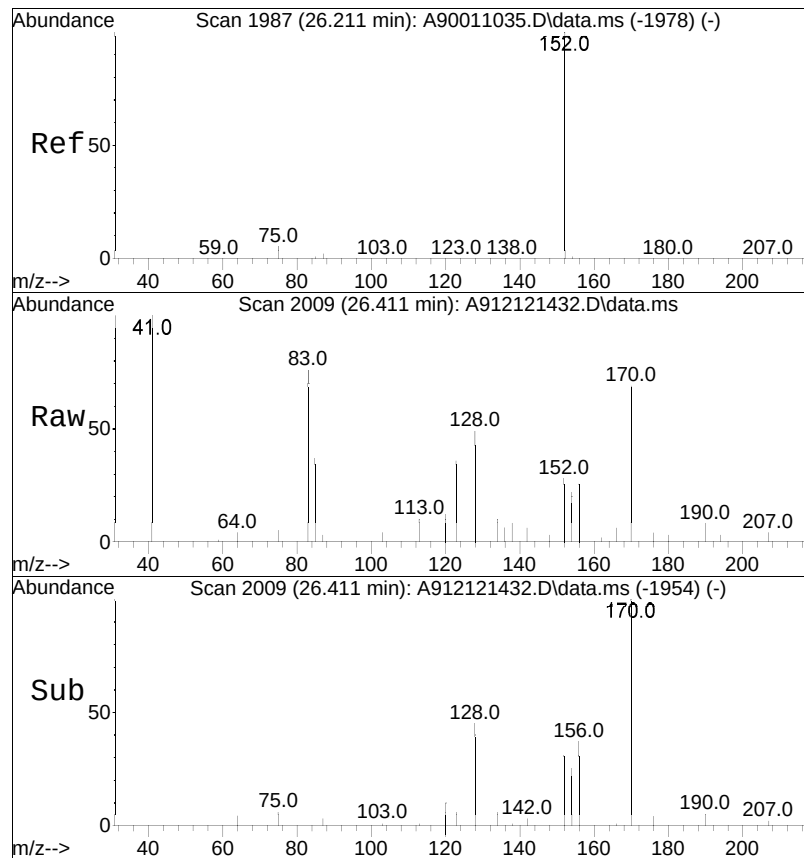




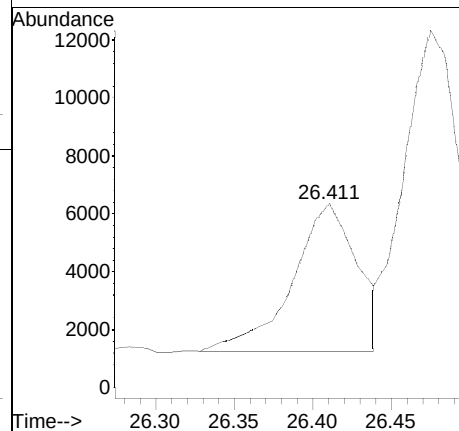
#25
 Dibenzofuran
 Concen: 269.56 ng/mL
 RT: 27.789 min Scan# 2160
 Delta R.T. -0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

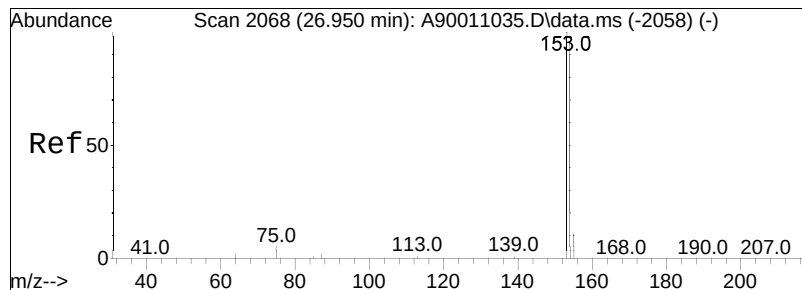
Tgt	Ion:168	Resp:	117353
Ion	Ratio	Lower	Upper
168	100		
139	43.2	25.1	46.7
169	20.3	10.2	19.0#





#26
Acenaphthylene
Concen: 28.53 ng/mL
RT: 26.411 min Scan# 2009
Delta R.T. -0.000 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm
Tgt Ion:152 Resp: 14682





#27

Acenaphthene

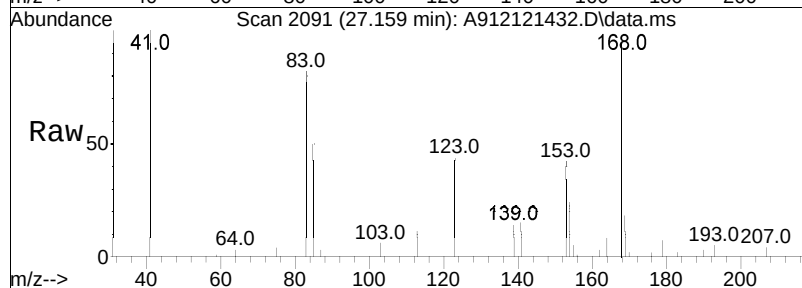
Concen: 103.43 ng/mL M4

RT: 27.159 min Scan# 2091

Delta R.T. 0.018 min

Lab File: A912121432.D

Acq: 15 Dec 2014 7:57 pm

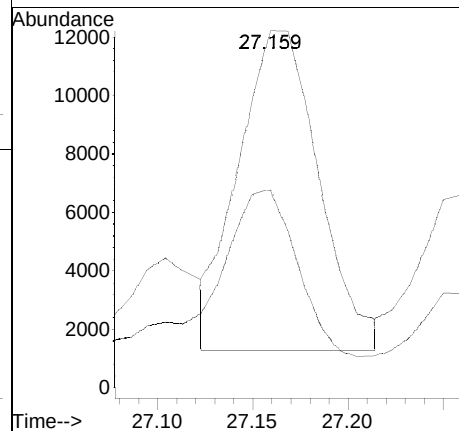
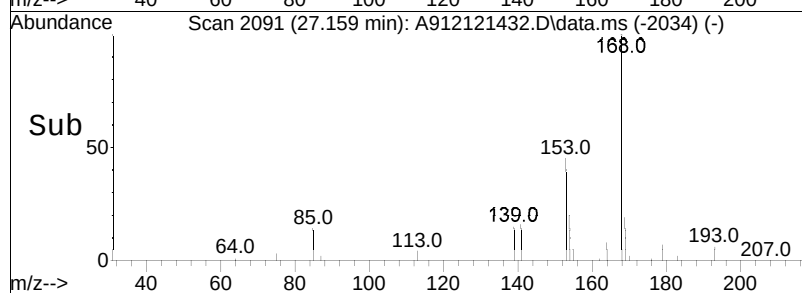


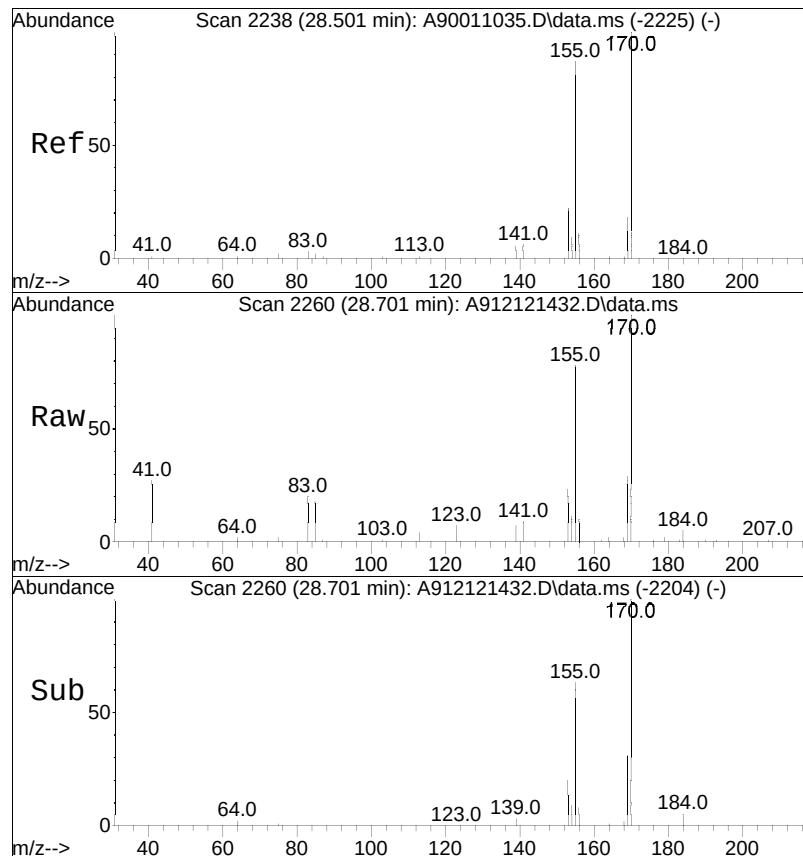
Tgt Ion:153 Resp: 32088

Ion Ratio Lower Upper

153 100

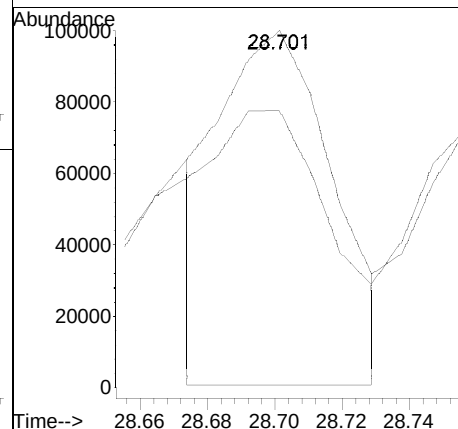
154 58.5 64.9 120.5#

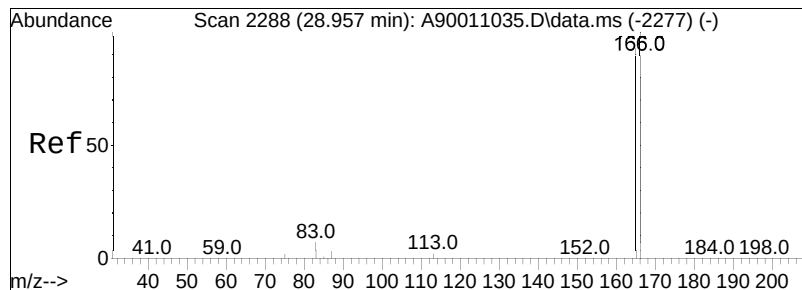




#28
 2,3,5-Trimethylnaphthalene
 Concen: 896.22 ng/mL M3
 RT: 28.701 min Scan# 2260
 Delta R.T. 0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

Tgt Ion	Ratio	Lower	Upper
170	100		
155	122.4	55.9	103.9#





#29

Fluorene

Concen: 384.21 ng/mL M4

RT: 29.167 min Scan# 2311

Delta R.T. 0.009 min

Lab File: A912121432.D

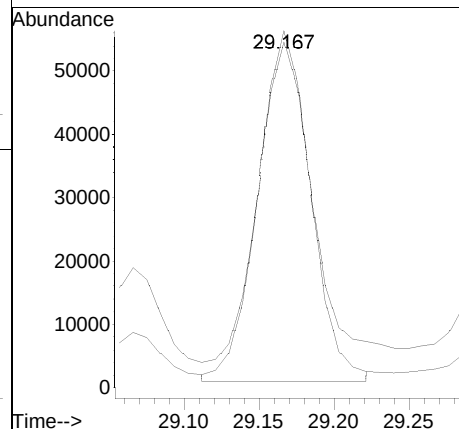
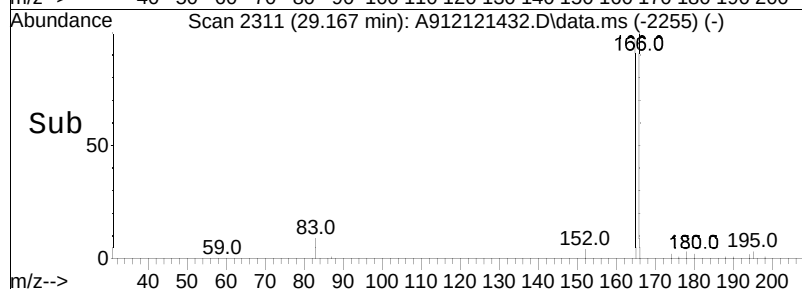
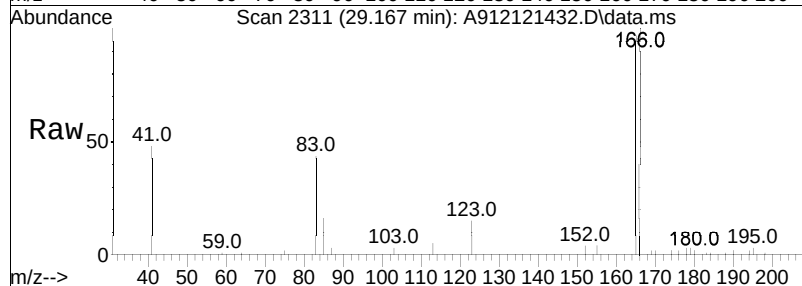
Acq: 15 Dec 2014 7:57 pm

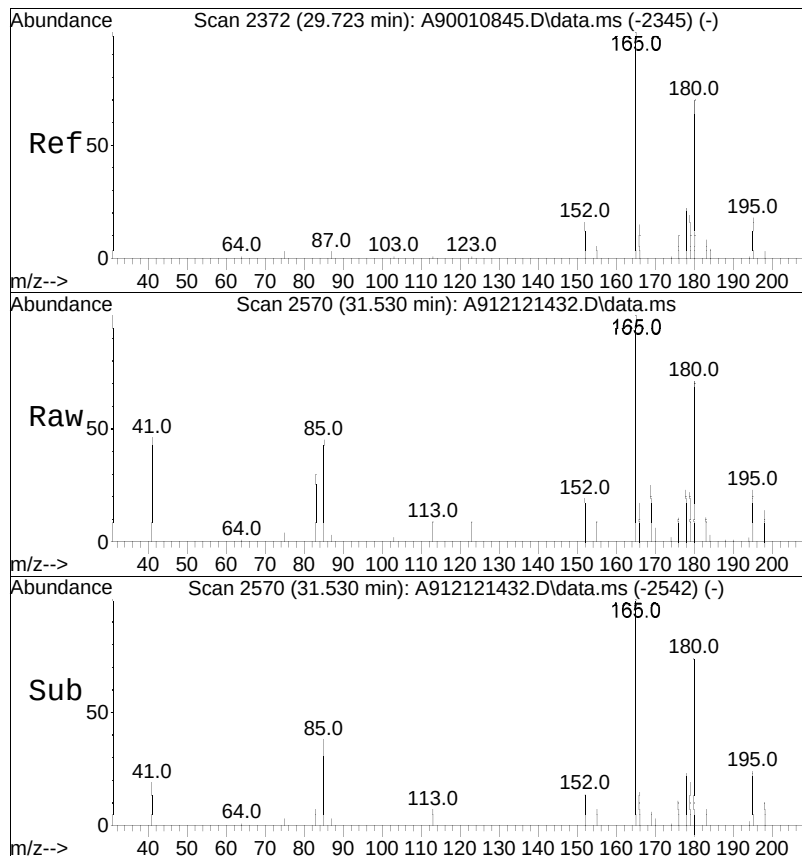
Tgt Ion:166 Resp: 134020

Ion Ratio Lower Upper

166 100

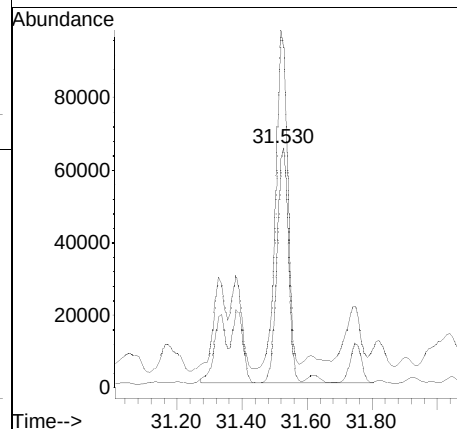
165 112.5 65.5 121.7

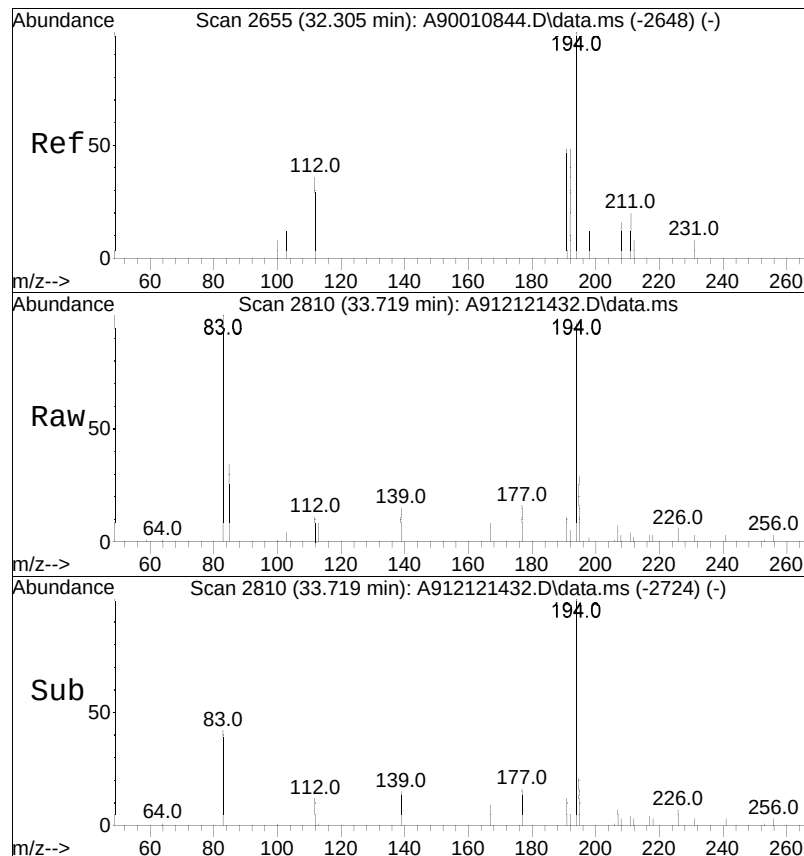




#30
 C1-Fluorenes
 Concen: 826.68 ng/mL M5
 RT: 31.530 min Scan# 2570
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

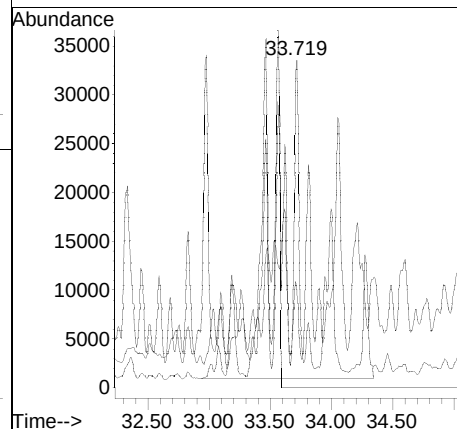
Tgt Ion	Ratio	Lower	Upper
180	100		
165	78.9	98.6	183.2#

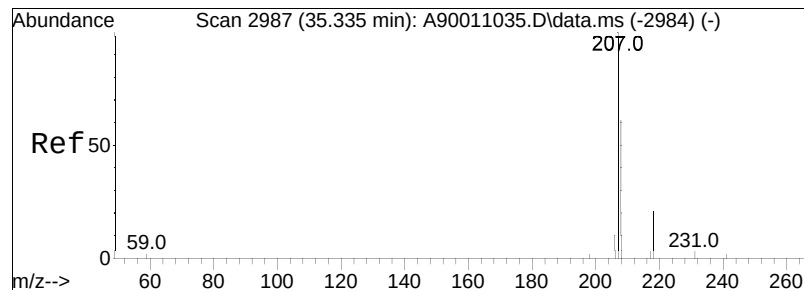




#31
 C2-Fluorenes
 Concen: 1385.78 ng/mL M5
 RT: 33.719 min Scan# 2810
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

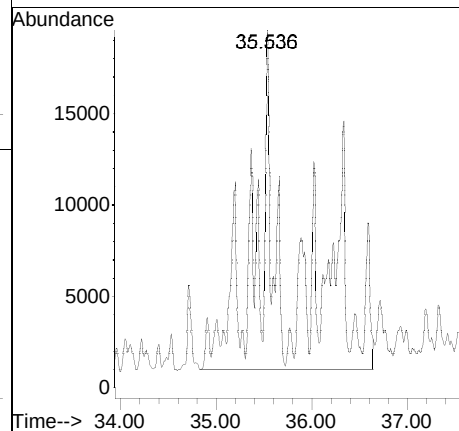
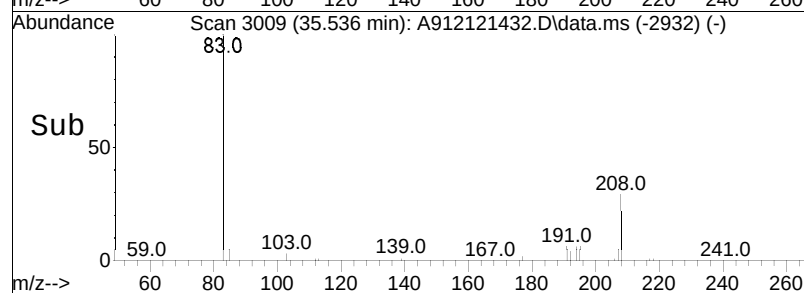
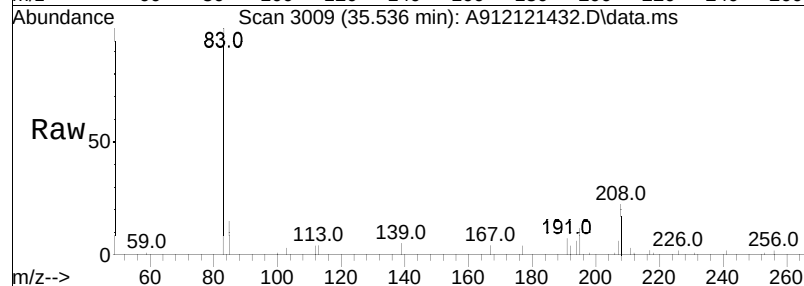
Tgt Ion:	194	Resp:	483390
Ion Ratio	Lower	Upper	
194	100		
179	0.0	0.0	0.0
195	4.3	21.5	39.9#

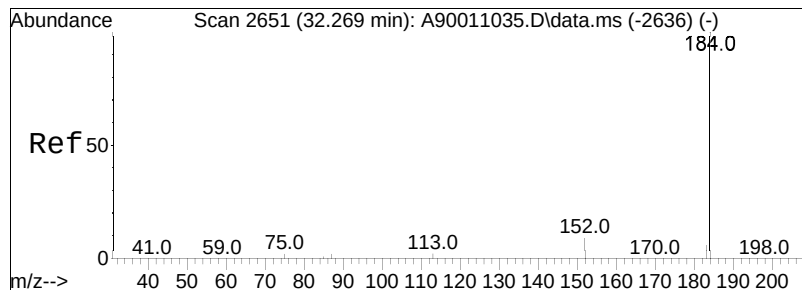




#32
 C3-Fluorenes
 Concen: 1290.47 ng/mL M5
 RT: 35.536 min Scan# 3009
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

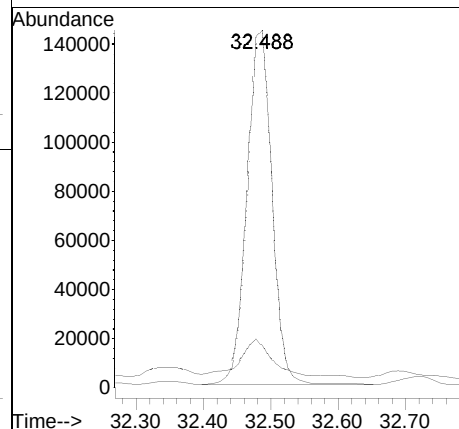
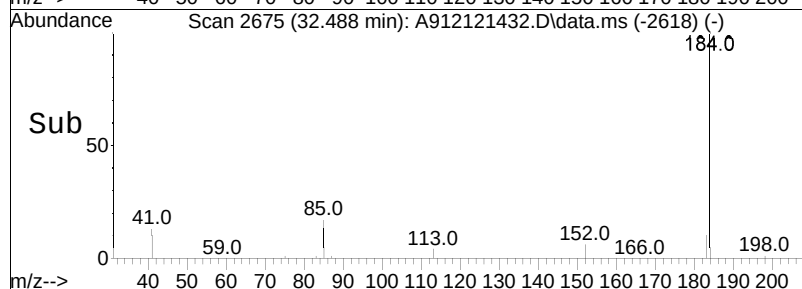
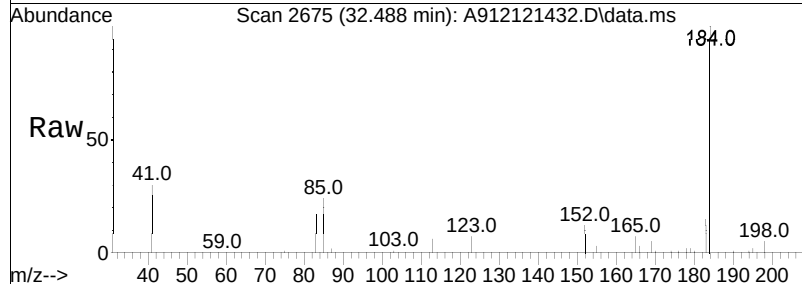
Tgt Ion:208 Resp: 450145

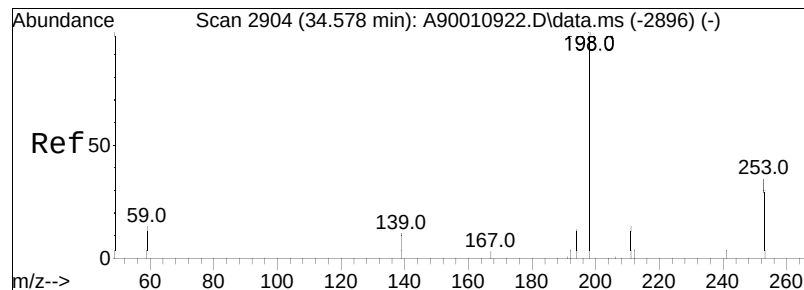




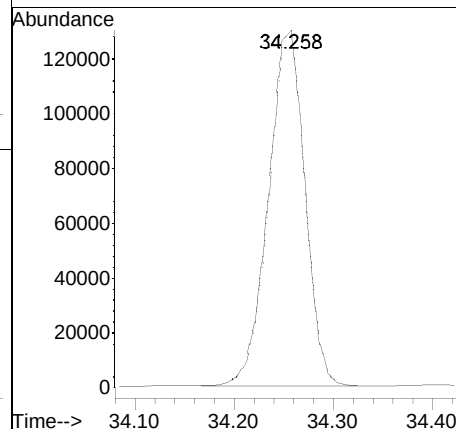
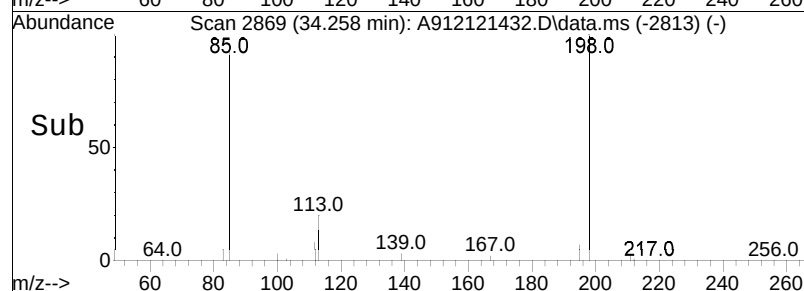
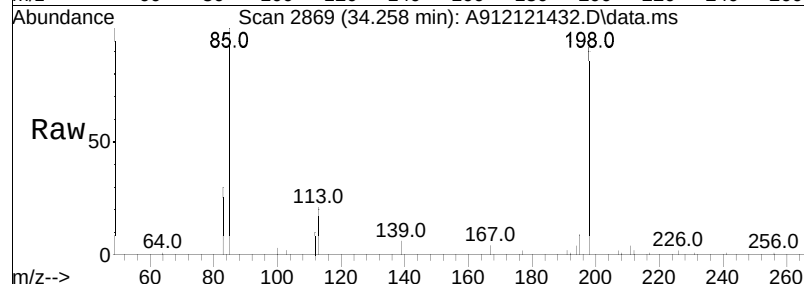
#33
 Dibenzothiophene
 Concen: 723.03 ng/mL
 RT: 32.488 min Scan# 2675
 Delta R.T. 0.019 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

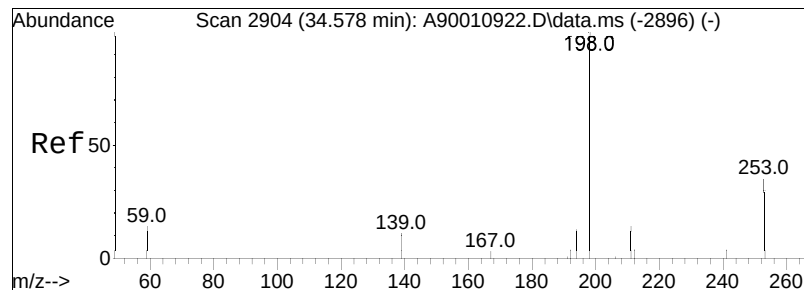
Tgt Ion	Ratio	Lower	Upper
184	100		
152	13.4	6.3	11.7#



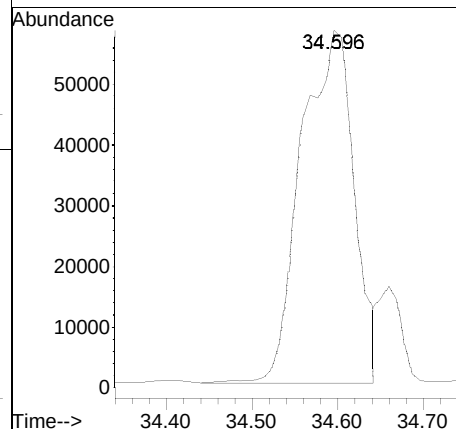
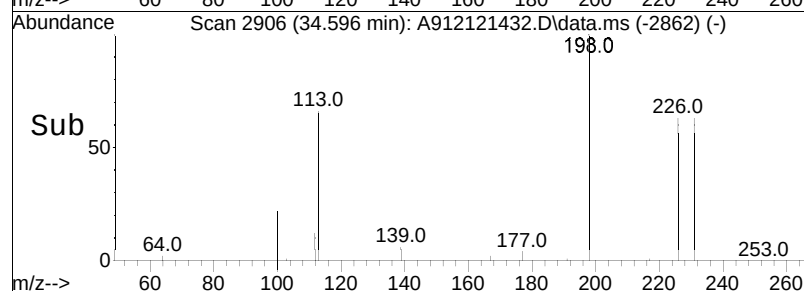
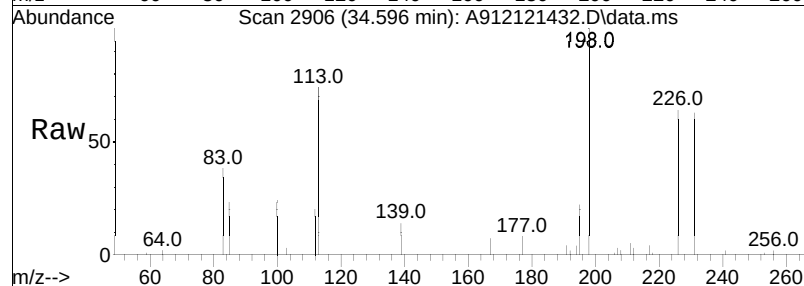


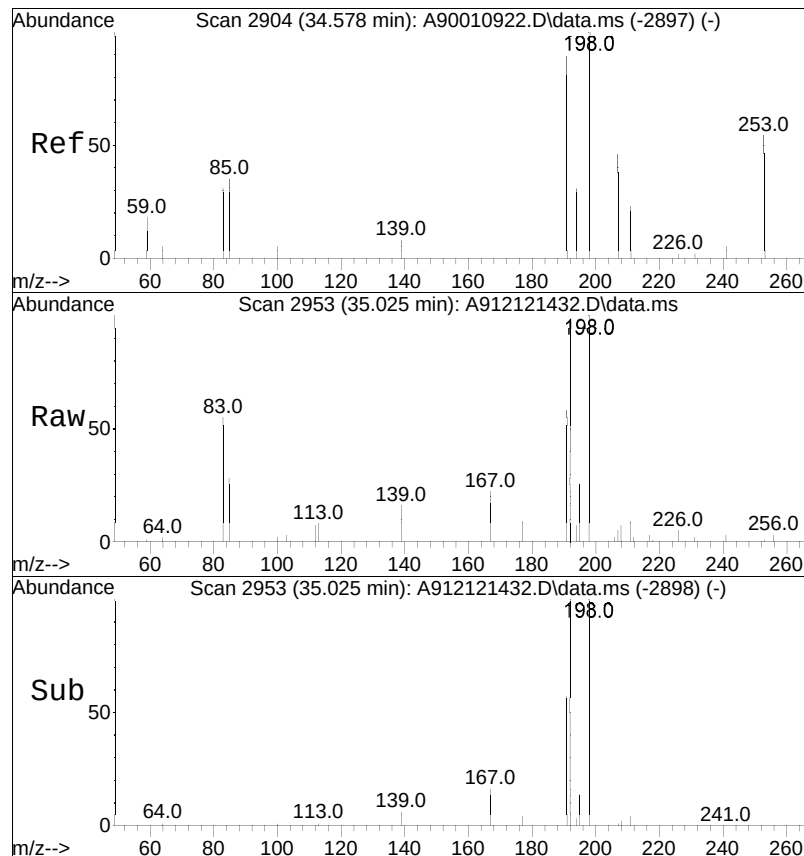
#34
 4-Methyldibenzothiophene(4MDT)
 Concen: 638.72 ng/mL
 RT: 34.258 min Scan# 2869
 Delta R.T. 0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:198 Resp: 327197



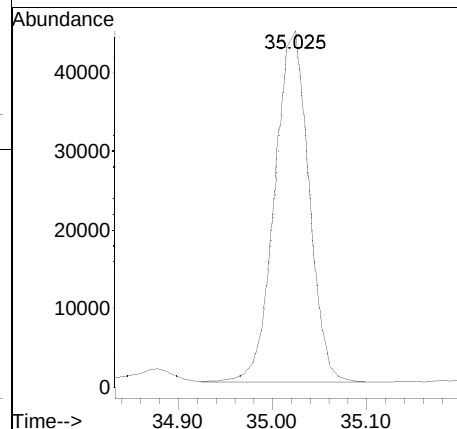


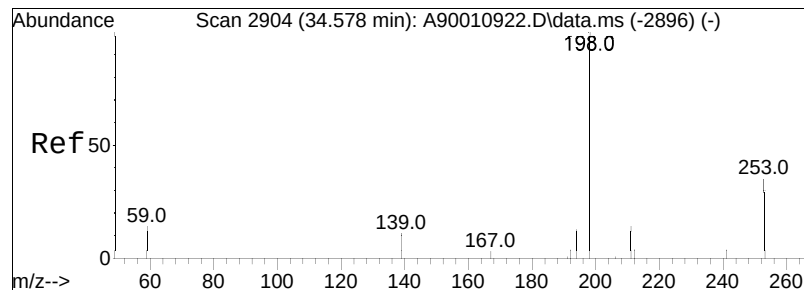
#35
2/3-Methyldibenzothiophene(2MD)
Concen: 483.67 ng/mL
RT: 34.596 min Scan# 2906
Delta R.T. 0.000 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm
Tgt Ion:198 Resp: 247773





#36
 1-Methyldibenzothiophene(1MDT)
 Concen: 217.99 ng/mL
 RT: 35.025 min Scan# 2953
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:198 Resp: 111672





#37

OTP

Concen: 55.13 ng/mL M3

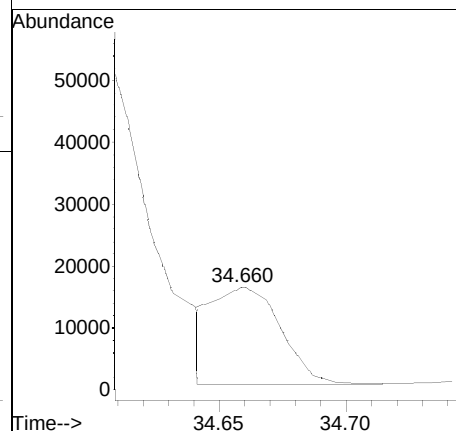
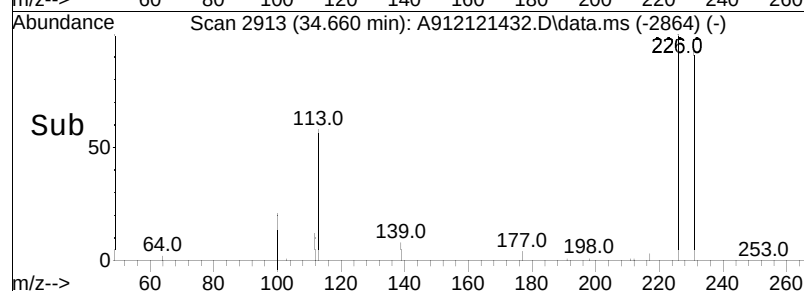
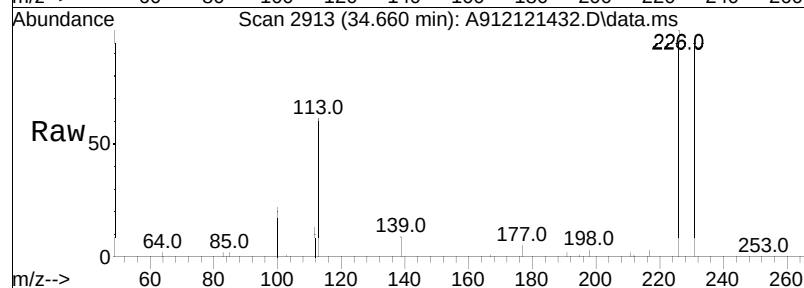
RT: 34.660 min Scan# 2913

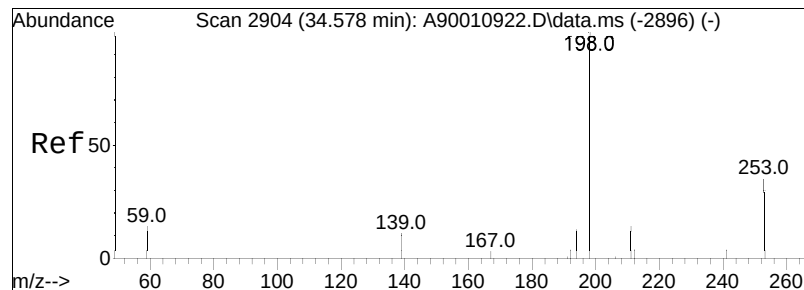
Delta R.T. 0.000 min

Lab File: A912121432.D

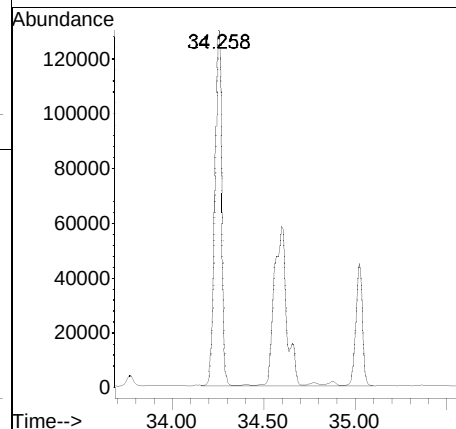
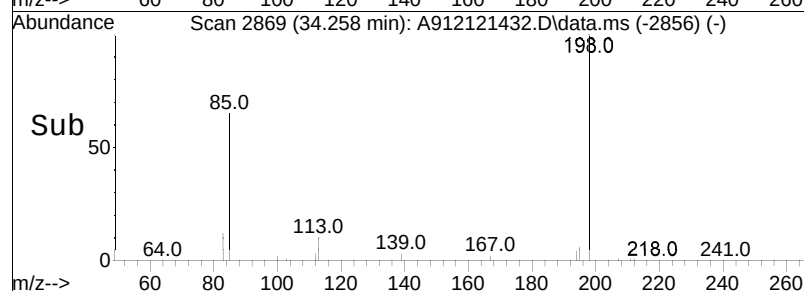
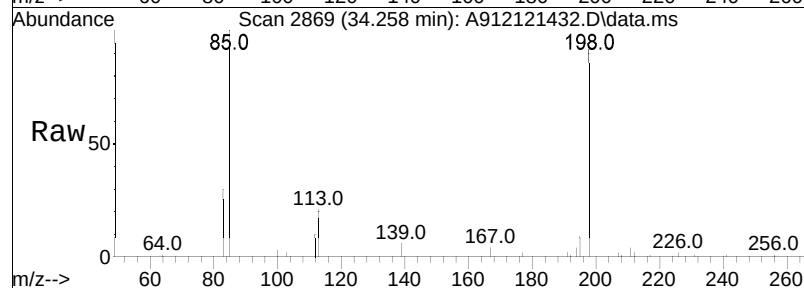
Acq: 15 Dec 2014 7:57 pm

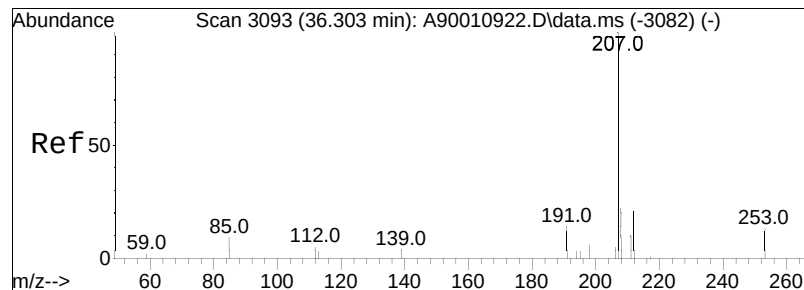
Tgt Ion:198 Resp: 28243





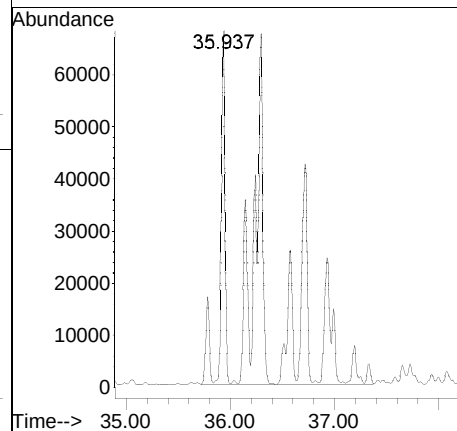
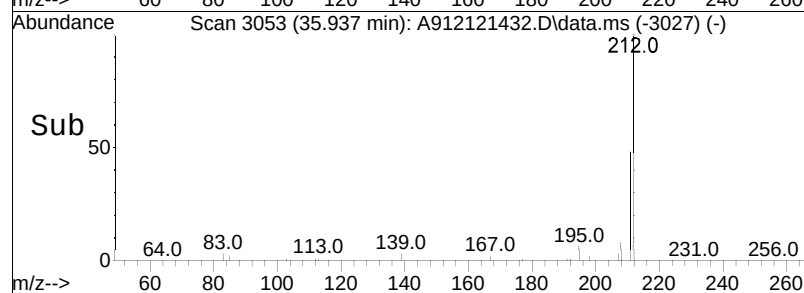
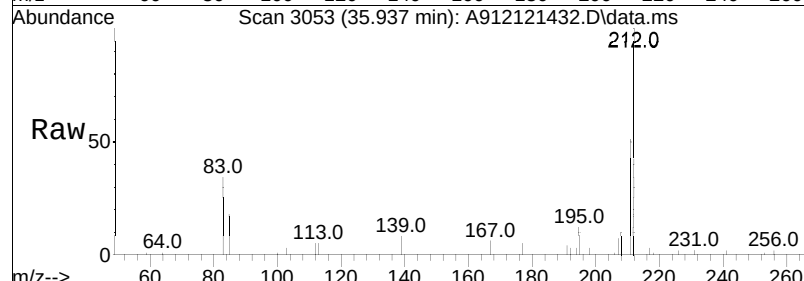
#38
C1-Dibenzothiophenes
Concen: 1417.76 ng/mL M5
RT: 34.258 min Scan# 2869
Delta R.T. 0.009 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm
Tgt Ion:198 Resp: 726280

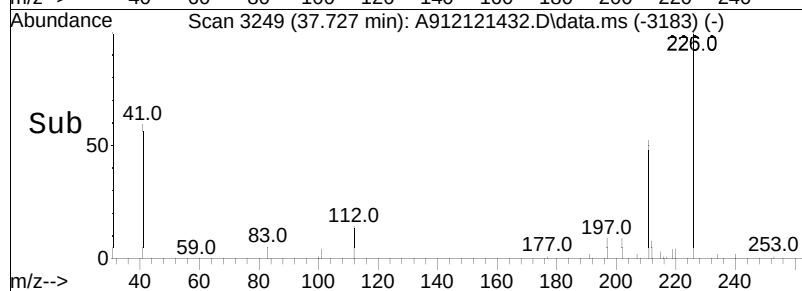
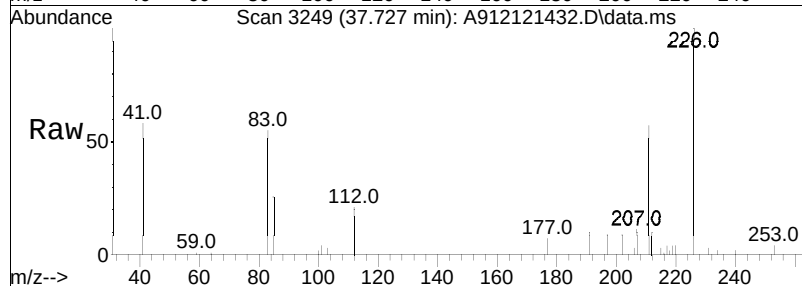
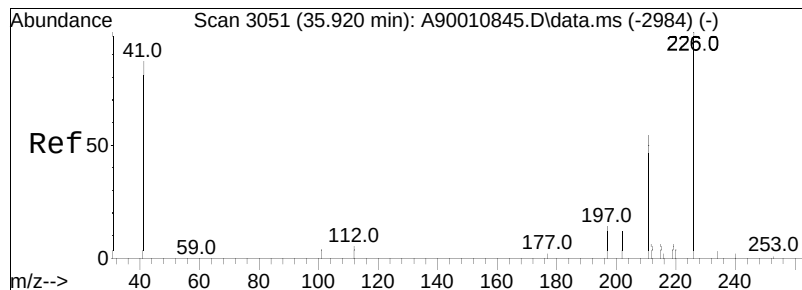




#39
C2-Dibenzothiophenes
Concen: 1874.37 ng/mL M5
RT: 35.937 min Scan# 3053
Delta R.T. 0.009 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm

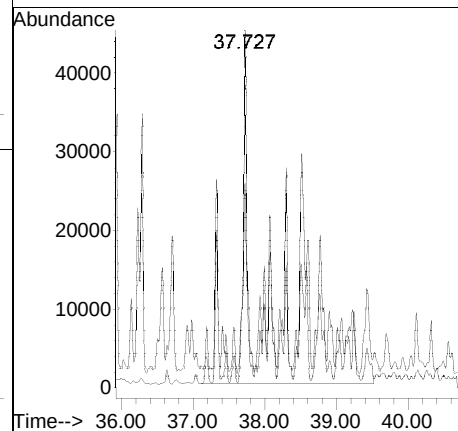
Tgt Ion:212 Resp: 960187

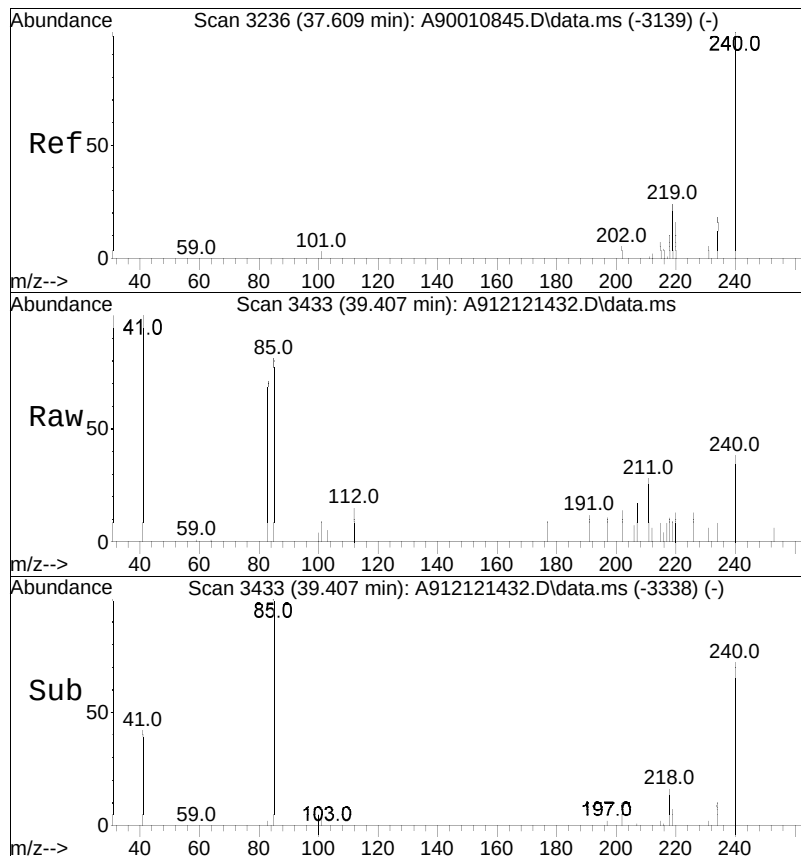




#40
 C3-Dibenzothiophenes
 Concen: 1633.75 ng/mL M5
 RT: 37.727 min Scan# 3249
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

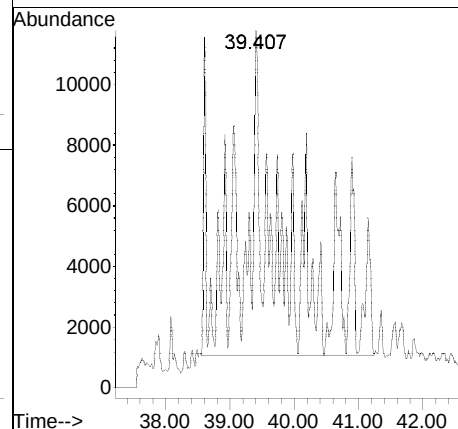
Tgt Ion	Ratio	Lower	Upper
226	100		
211	12.8	41.5	77.1#

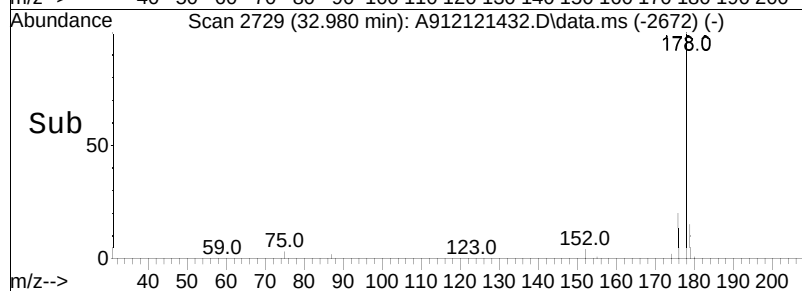
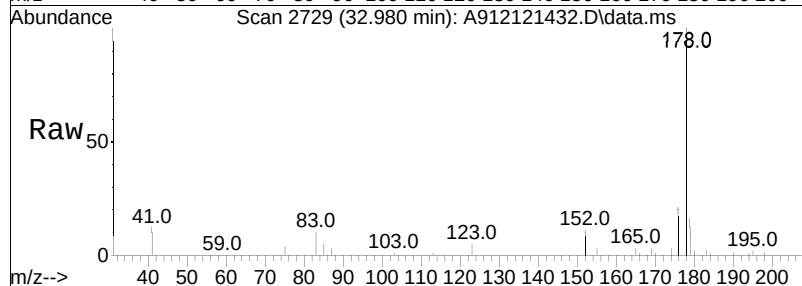
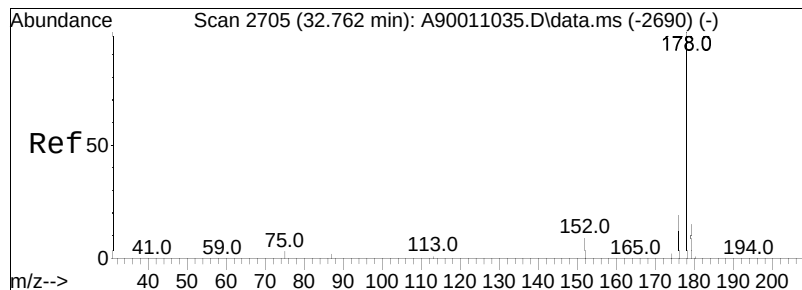




#41
 C4-Dibenzothiophenes
 Concen: 906.91 ng/mL M5
 RT: 39.407 min Scan# 3433
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

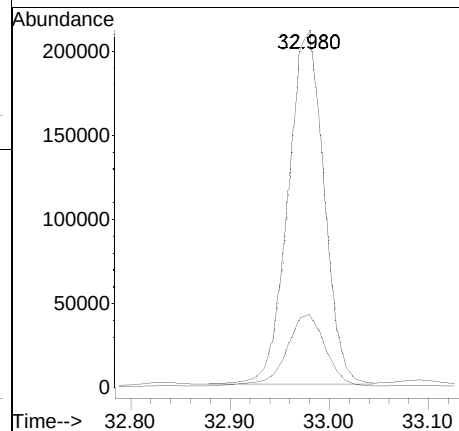
Tgt Ion:240 Resp: 464586

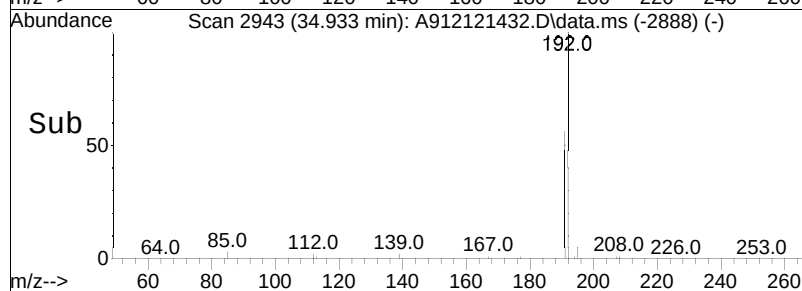
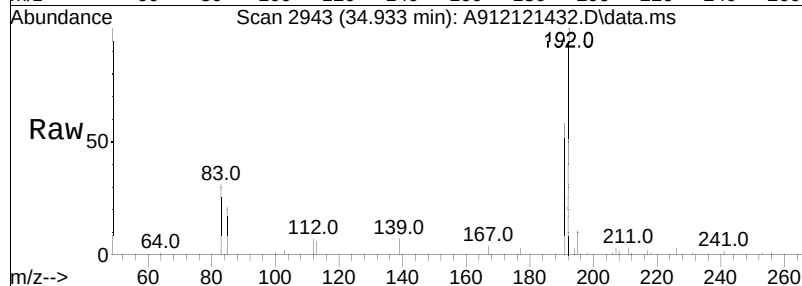
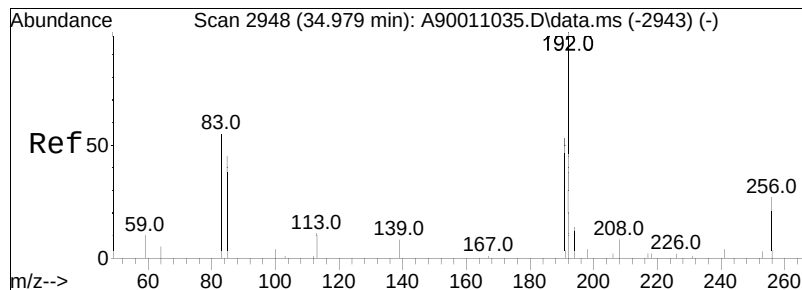




#43
 Phenanthrene
 Concen: 1069.01 ng/mL
 RT: 32.980 min Scan# 2729
 Delta R.T. 0.018 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
176	21.9	13.7	25.5





#44

3-Methylphenanthrene(3MP)

Concen: 436.30 ng/mL

RT: 34.933 min Scan# 2943

Delta R.T. 0.000 min

Lab File: A912121432.D

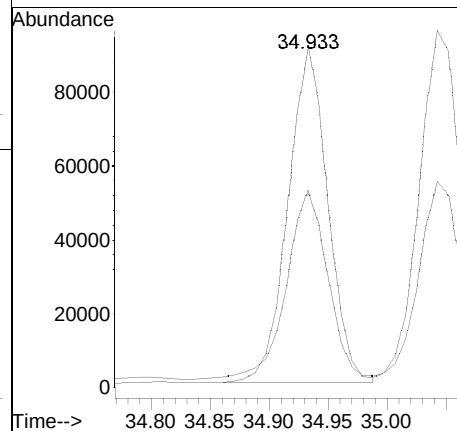
Acq: 15 Dec 2014 7:57 pm

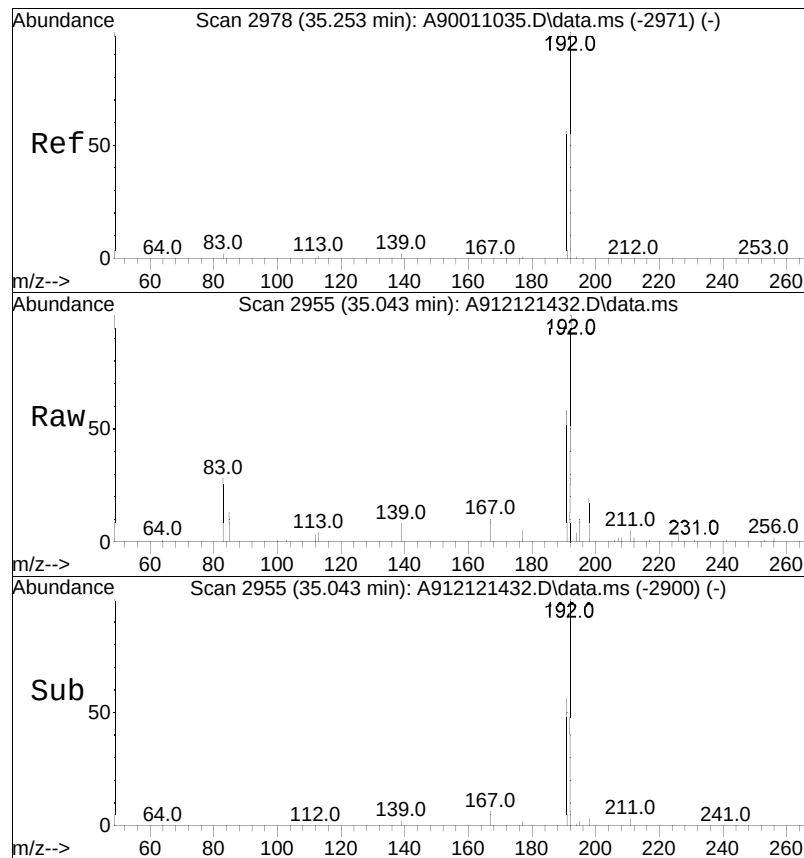
Tgt Ion:192 Resp: 212369

Ion Ratio Lower Upper

192 100

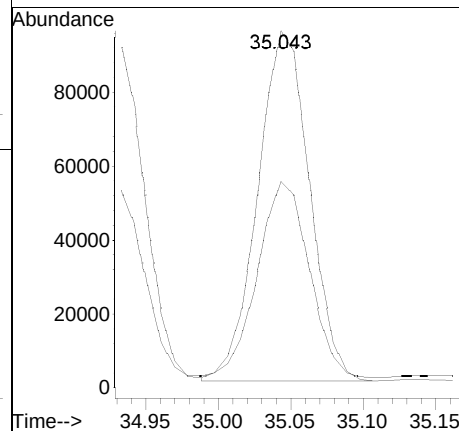
191 59.1 40.7 75.7

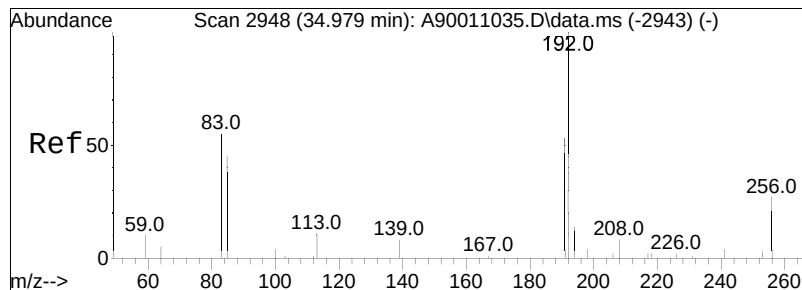




#45
 2-Methylphenanthrene(2MP)
 Concen: 483.02 ng/mL
 RT: 35.043 min Scan# 2955
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

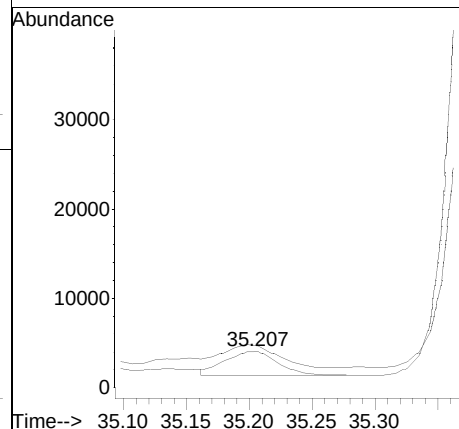
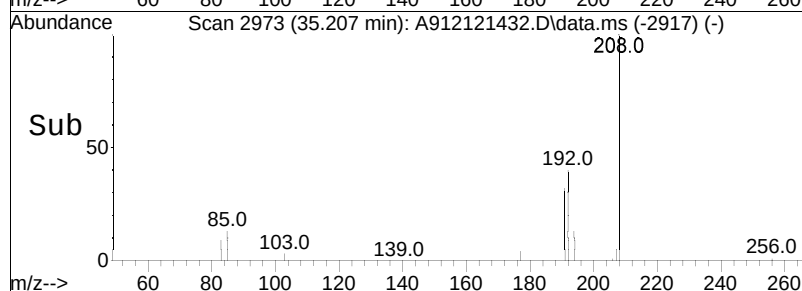
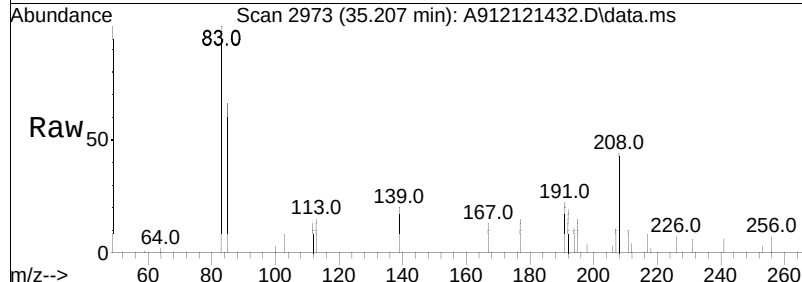
Tgt Ion	Ratio	Lower	Upper
192	100		
191	57.2	40.3	74.9

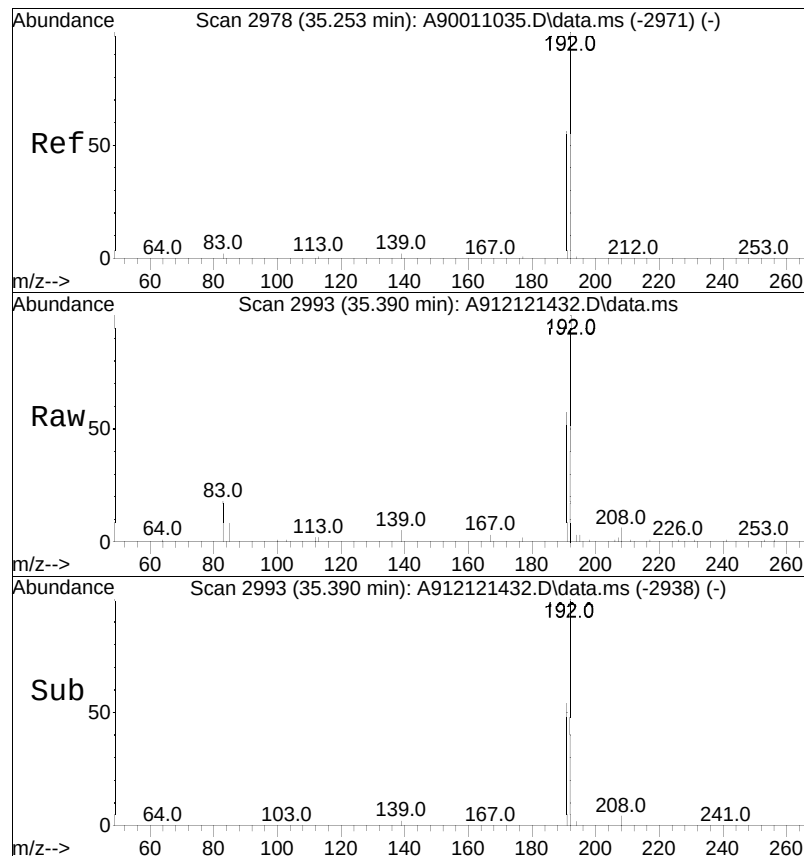




#46
 2-Methylantracene(2MA)
 Concen: 16.03 ng/mL
 RT: 35.207 min Scan# 2973
 Delta R.T. 0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

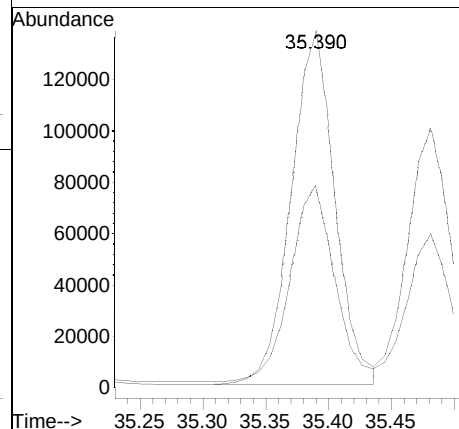
Tgt Ion	Ratio	Lower	Upper
192	100		
191	130.4	82.1	152.5

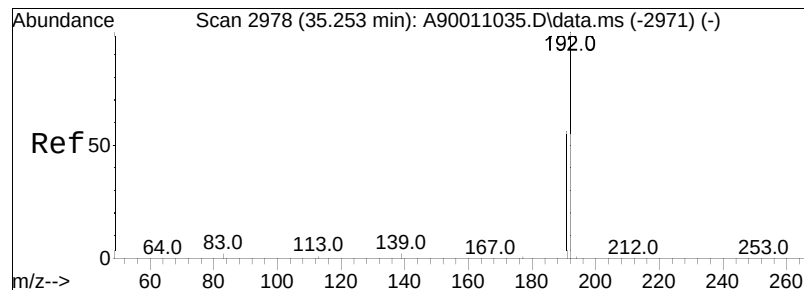




#47
 9/4-Methylphenanthrene(9MP)
 Concen: 682.57 ng/mL
 RT: 35.390 min Scan# 2993
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

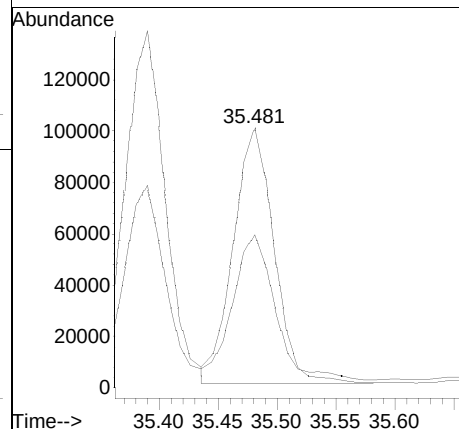
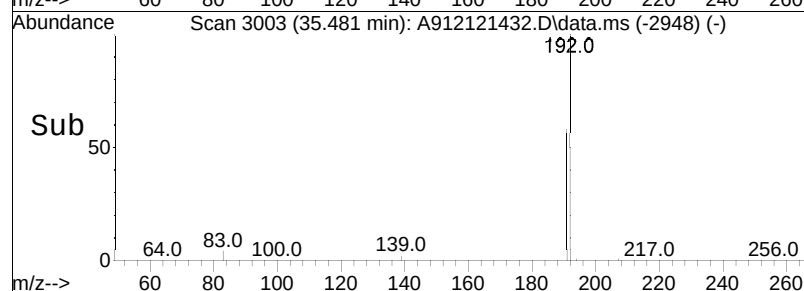
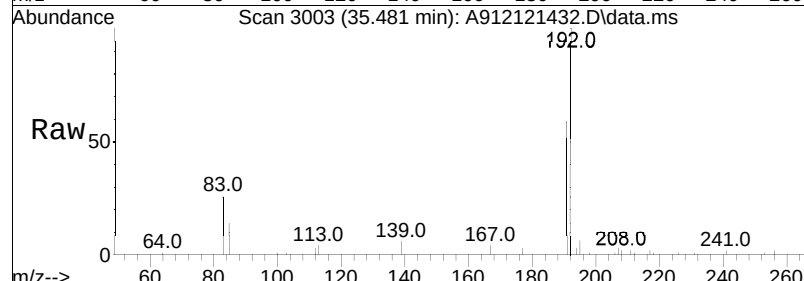
Tgt Ion	Ratio	Lower	Upper
192	100		
191	56.6	39.6	73.6

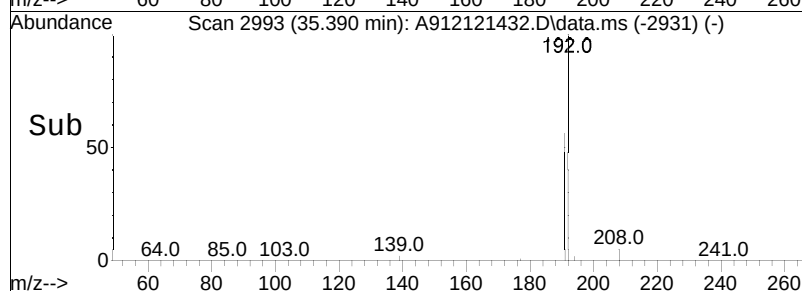
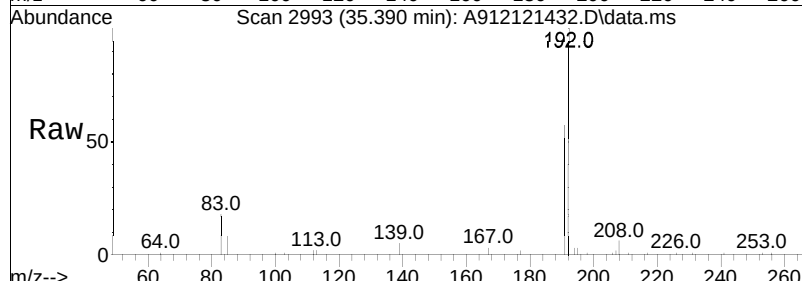
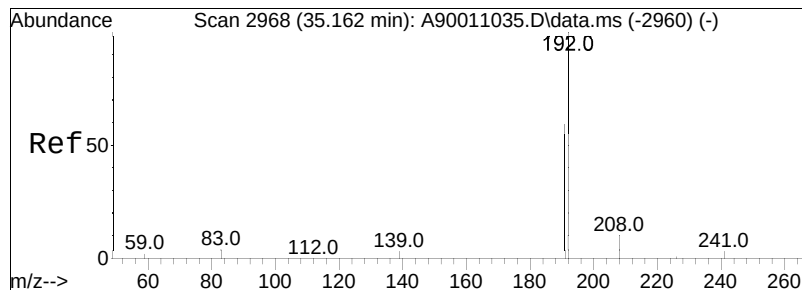




#48
 1-Methylphenanthrene(1MP)
 Concen: 490.53 ng/mL
 RT: 35.481 min Scan# 3003
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

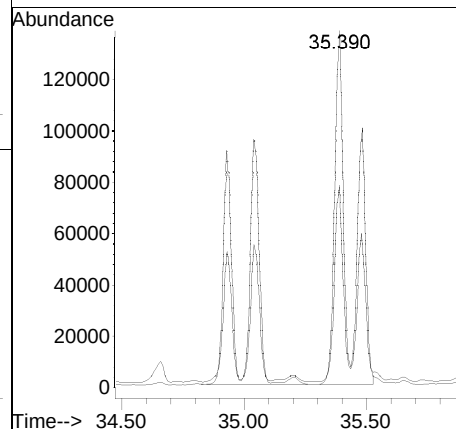
Tgt Ion	Ratio	Lower	Upper
192	100		
191	60.4	41.4	77.0

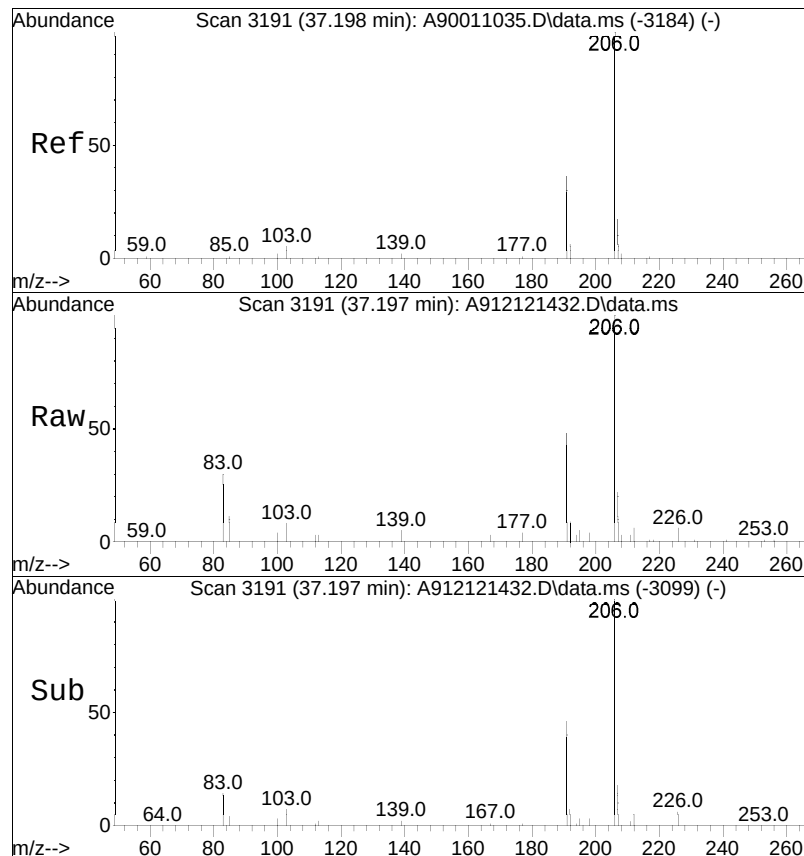




#49
 C1-Phenanthrenes/Anthracenes
 Concen: 2116.47 ng/mL M5
 RT: 35.390 min Scan# 2993
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

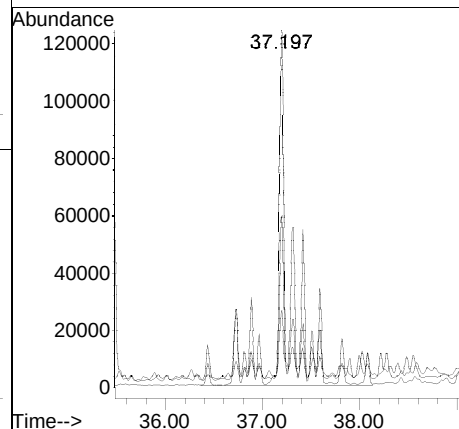
Tgt Ion:192 Resp: 1030203
 Ion Ratio Lower Upper
 192 100
 191 18.2 39.6 73.6#

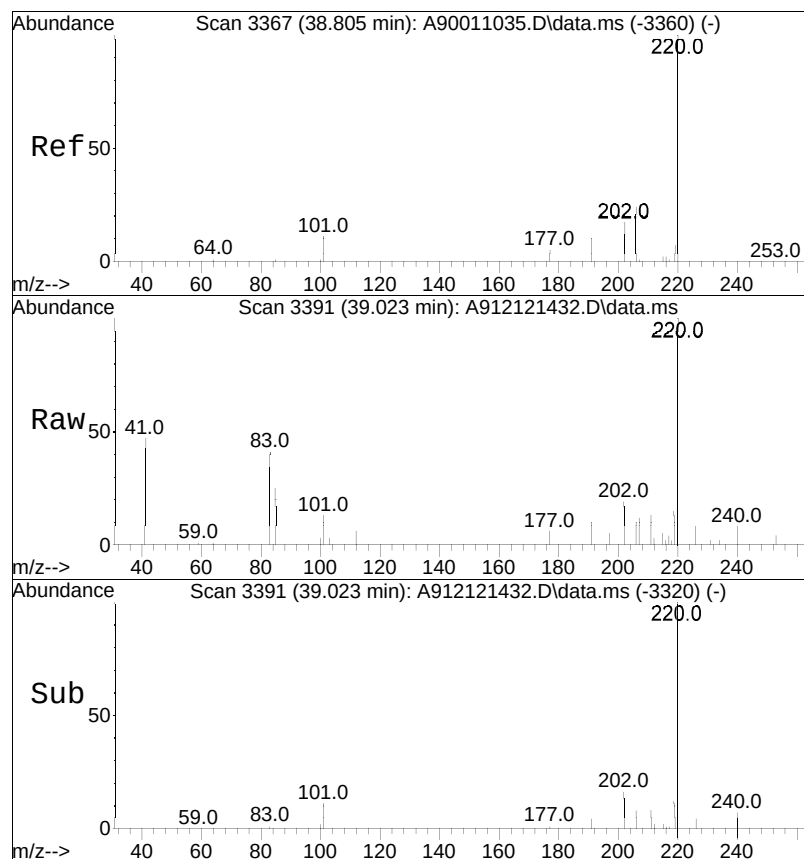




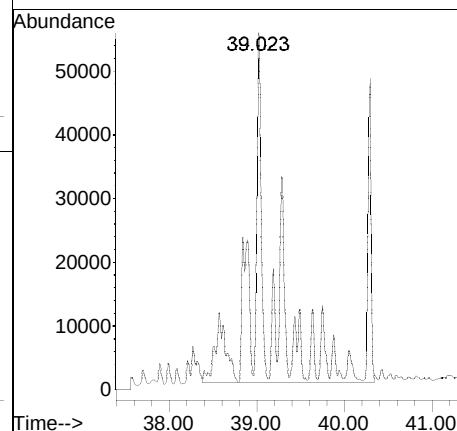
#50
 C2-Phenanthrenes/Anthracenes
 Concen: 2262.15 ng/mL M5
 RT: 37.197 min Scan# 3191
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

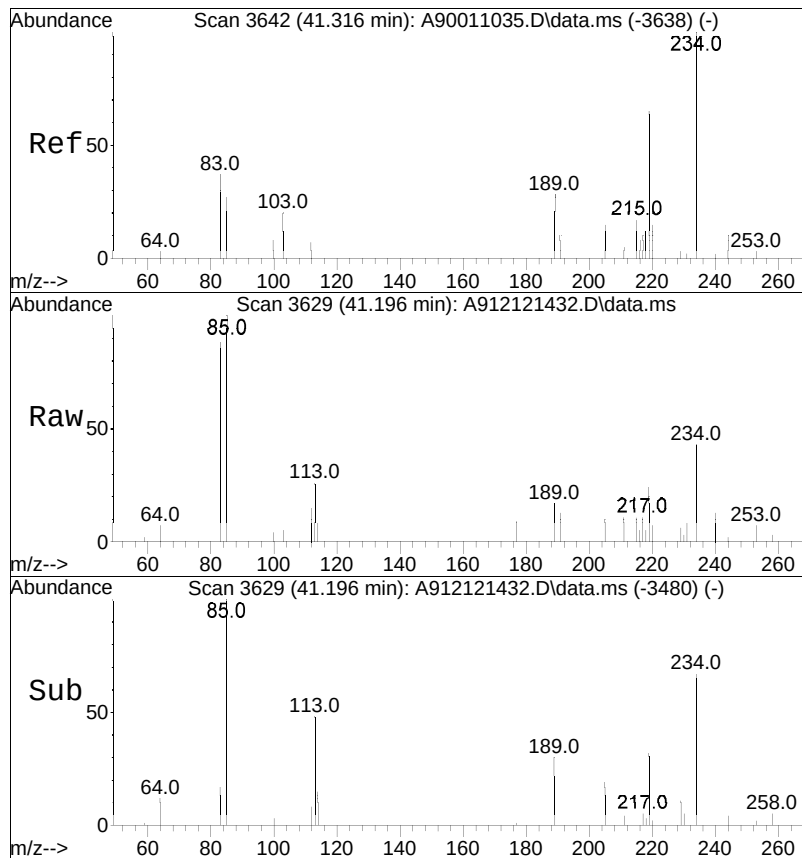
Tgt Ion	Ratio	Lower	Upper
206	100		
191	15.1	34.6	64.3#
207	6.7	15.2	28.2#





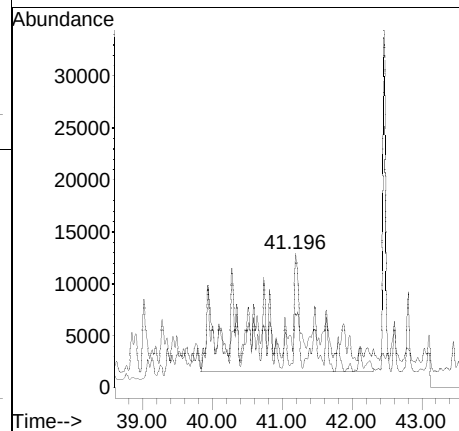
#52
C3-Phenanthrenes/Anthracenes
Concen: 1769.98 ng/mL M5
RT: 39.023 min Scan# 3391
Delta R.T. 0.000 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm
Tgt Ion:220 Resp: 861545

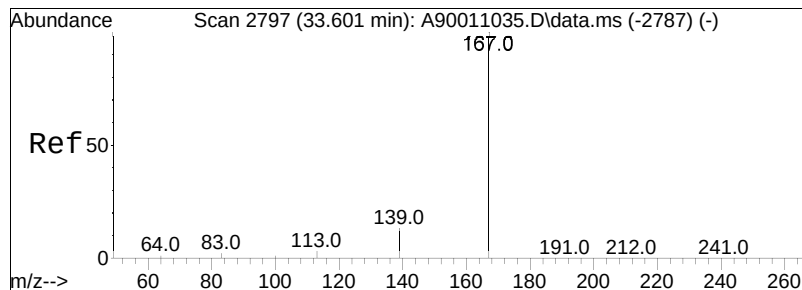




#53
 C4-Phenanthrenes/Anthracenes
 Concen: 763.17 ng/mL M5
 RT: 41.196 min Scan# 3629
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

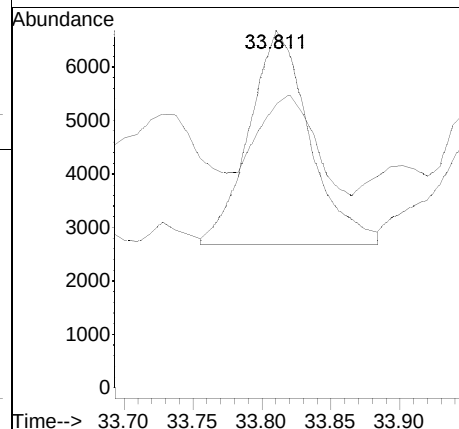
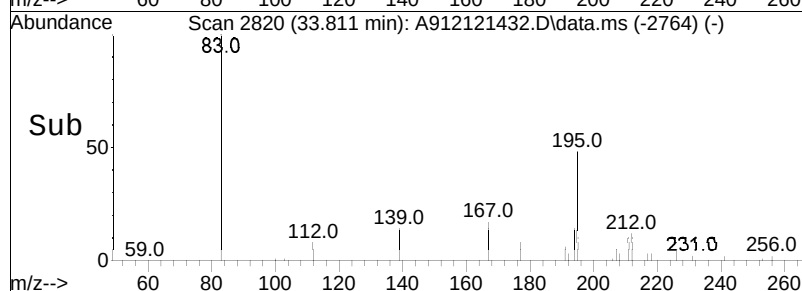
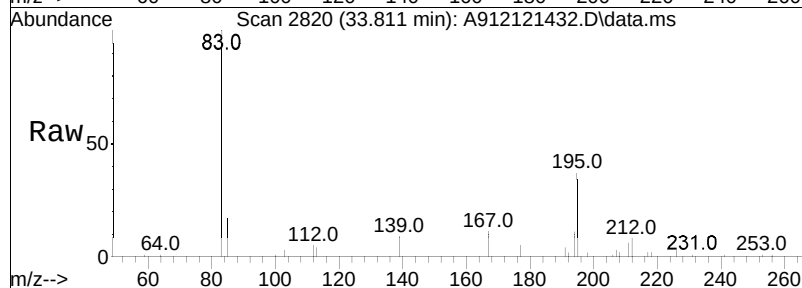
Tgt Ion	Ratio	Lower	Upper
234	100		
219	2.1	38.3	71.1#

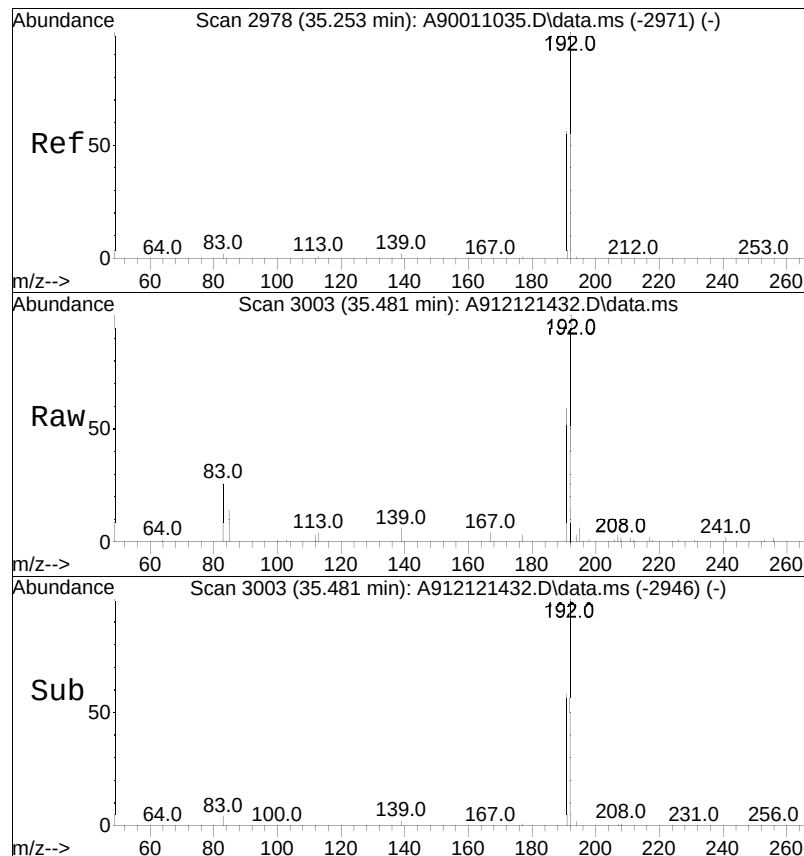




#56
 Carbazole
 Concen: 28.24 ng/mL M4
 RT: 33.811 min Scan# 2820
 Delta R.T. 0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

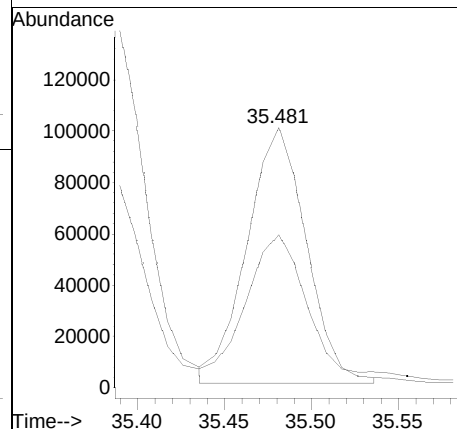
Tgt Ion:167 Resp: 12219
 Ion Ratio Lower Upper
 167 100
 139 40.8 9.9 18.3#

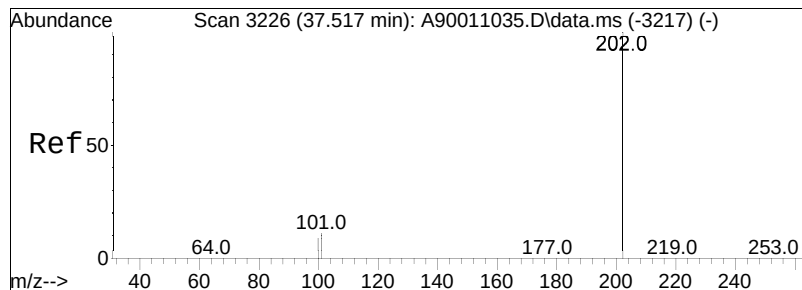




#57
 1-Methylphenanthrene
 Concen: 731.55 ng/mL M4
 RT: 35.481 min Scan# 3003
 Delta R.T. 0.018 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

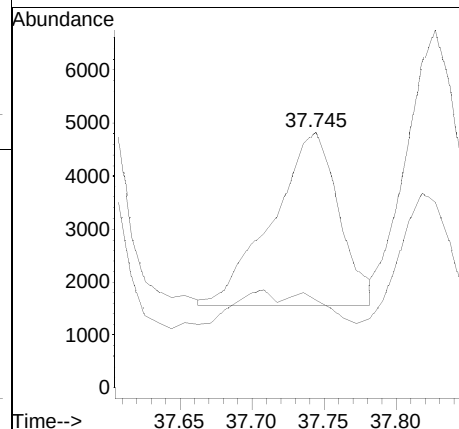
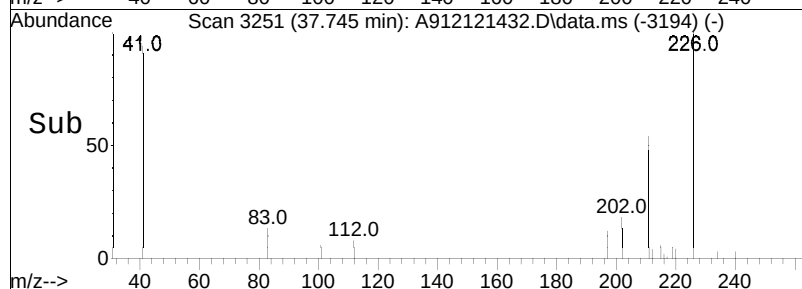
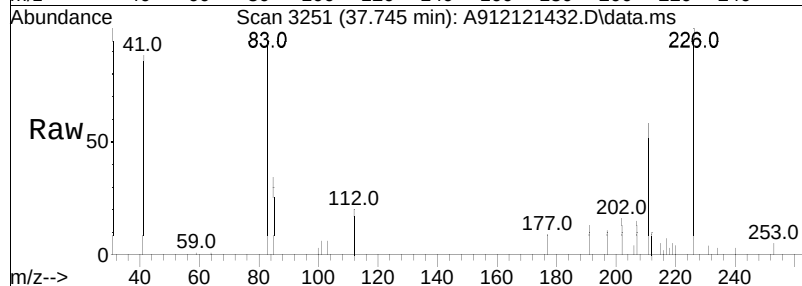
Tgt Ion	Ratio	Lower	Upper
192	100		
191	60.2	39.8	74.0

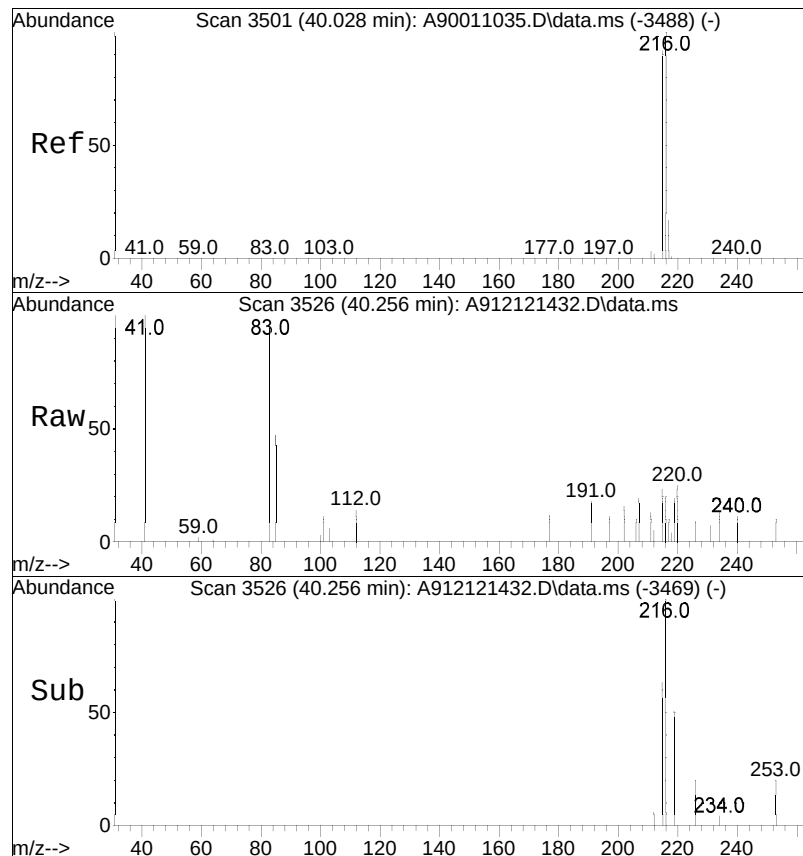




#58
 Fluoranthene
 Concen: 21.18 ng/mL M4
 RT: 37.745 min Scan# 3251
 Delta R.T. 0.018 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

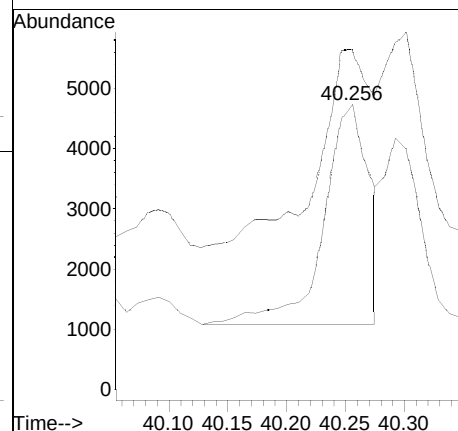
Tgt Ion	Ratio	Lower	Upper
202	100		
101	0.0	11.8	22.0#

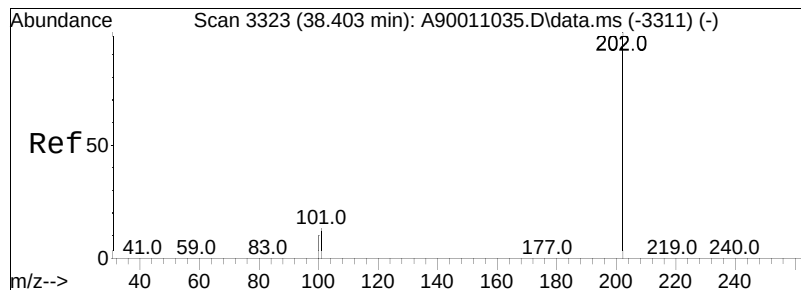




#59
 Benzo(b)fluorene
 Concen: 33.21 ng/mL
 RT: 40.256 min Scan# 3526
 Delta R.T. 0.018 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

Tgt Ion	Ratio	Lower	Upper
216	100		
215	105.7	64.3	119.3





#60

Pyrene

Concen: 55.90 ng/mL M3

RT: 38.621 min Scan# 3347

Delta R.T. 0.008 min

Lab File: A912121432.D

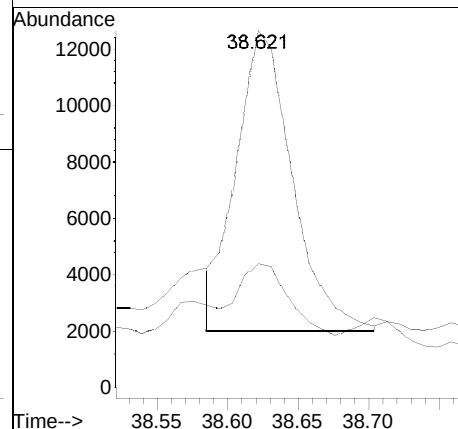
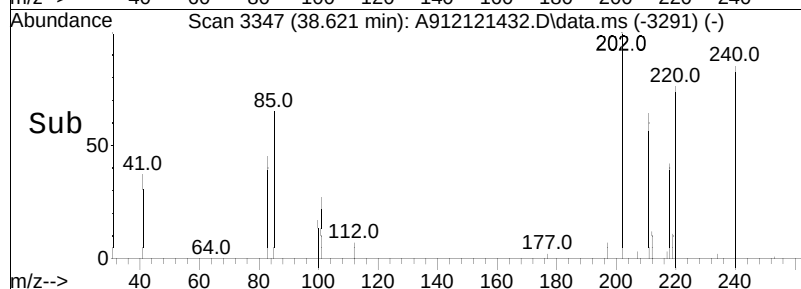
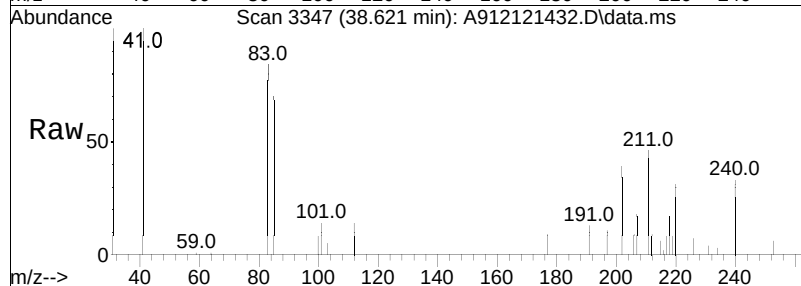
Acq: 15 Dec 2014 7:57 pm

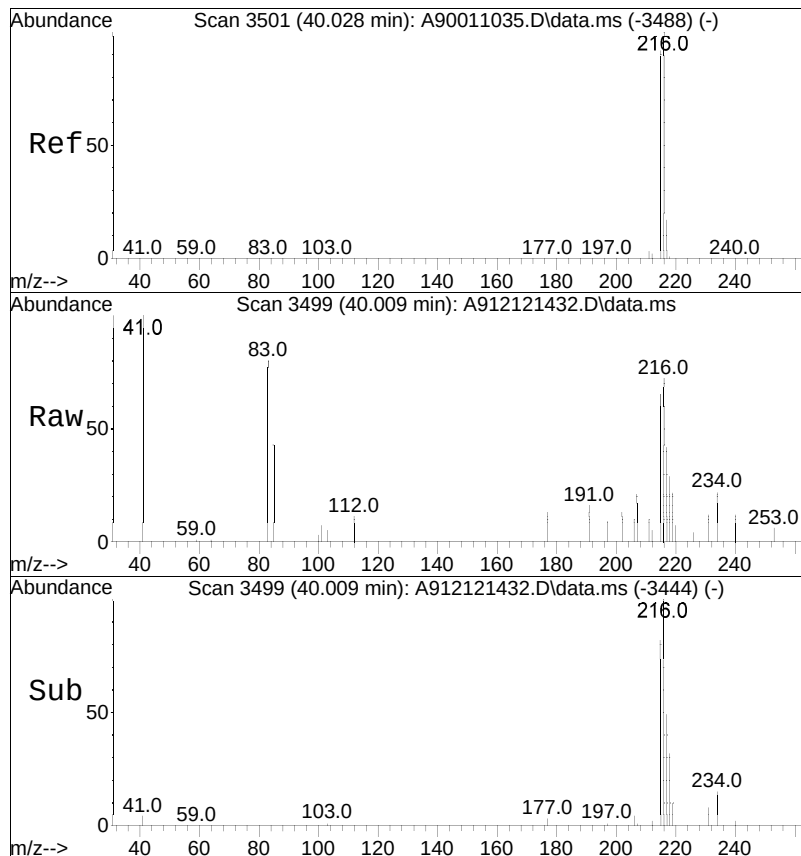
Tgt Ion: 202 Resp: 29384

Ion Ratio Lower Upper

202 100

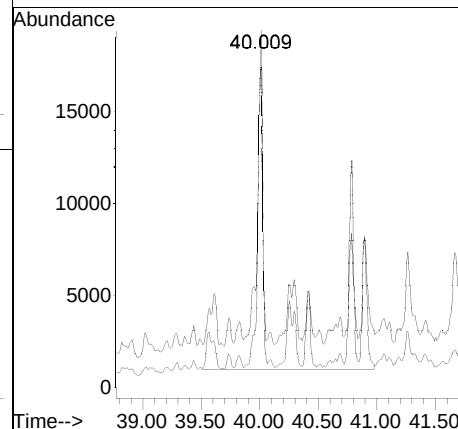
101 29.7 14.2 26.4#

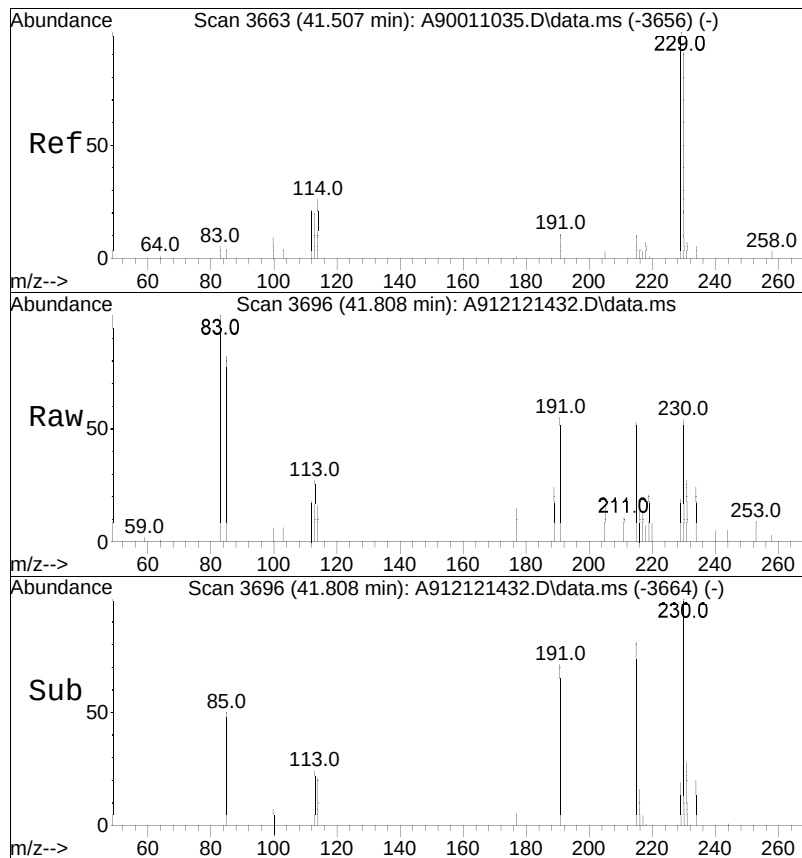




#61
 C1-Fluoranthenes/Pyrenes
 Concen: 287.60 ng/mL M5
 RT: 40.009 min Scan# 3499
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

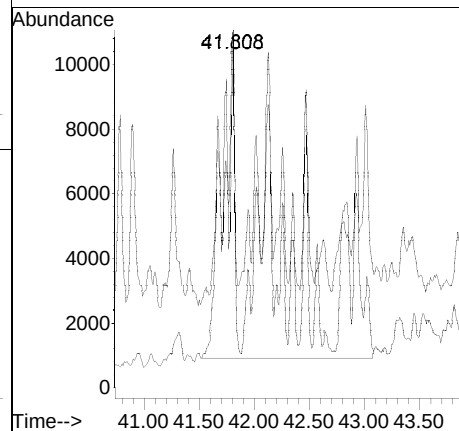
Tgt Ion	Ratio	Lower	Upper
216	100		
215	24.5	64.0	118.8#

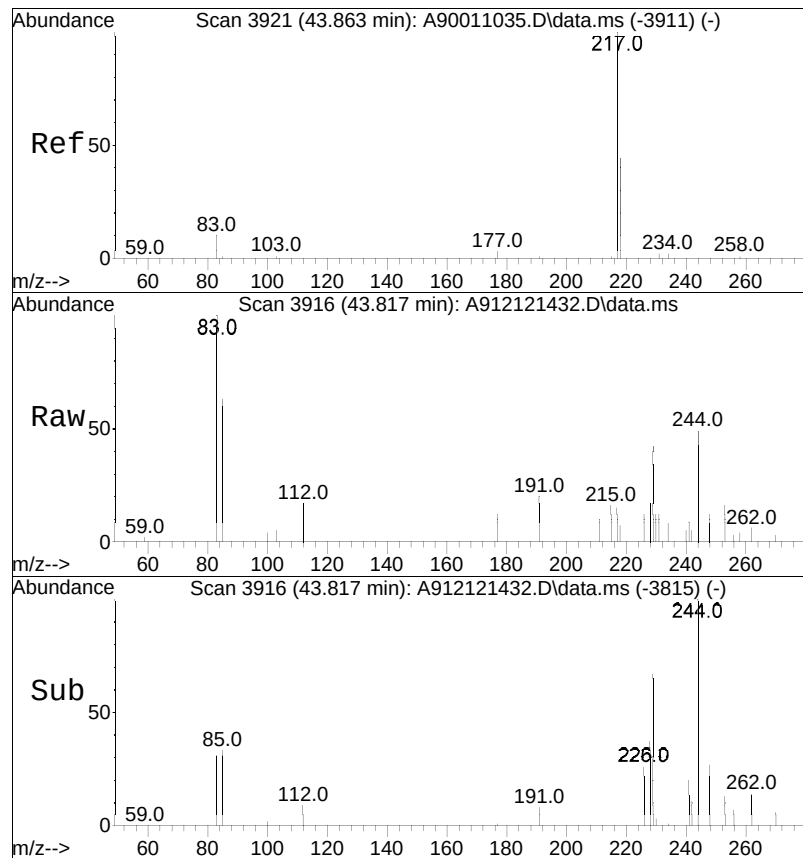




#62
 C2-Fluoranthenes/Pyrenes
 Concen: 499.88 ng/mL M5
 RT: 41.808 min Scan# 3696
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

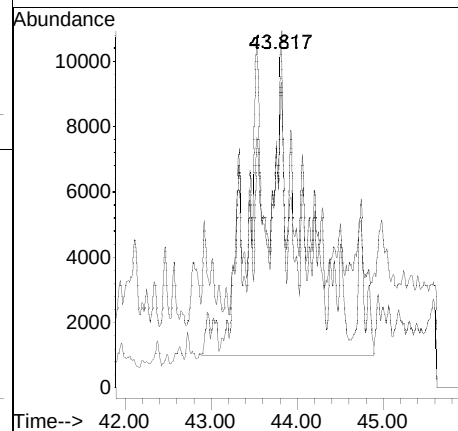
Tgt Ion	Ratio	Lower	Upper
230	100		
215	7.4	66.8	124.0#

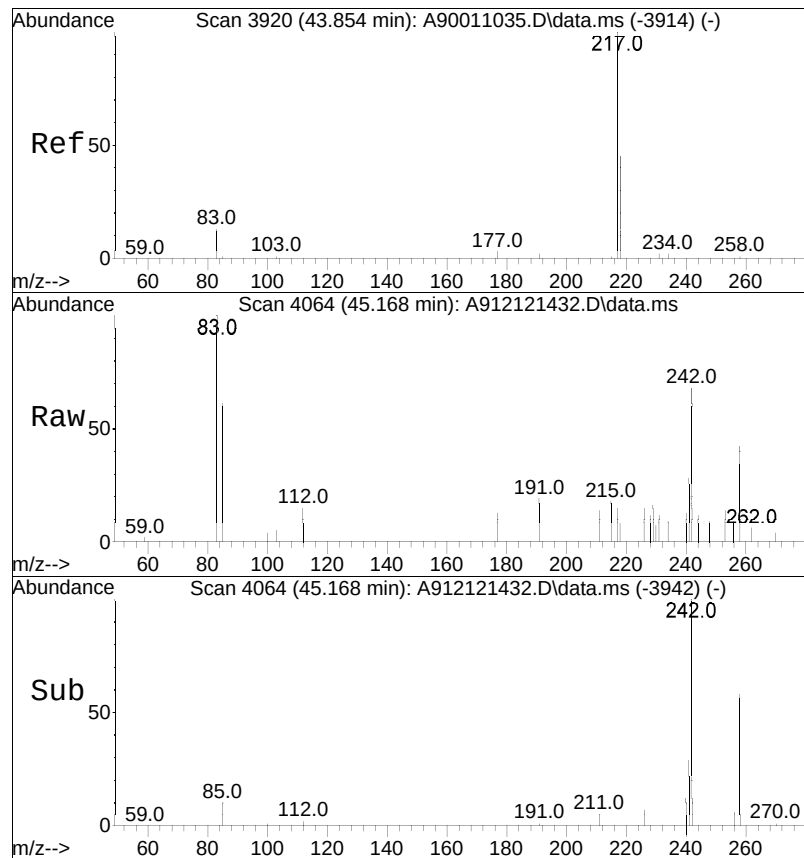




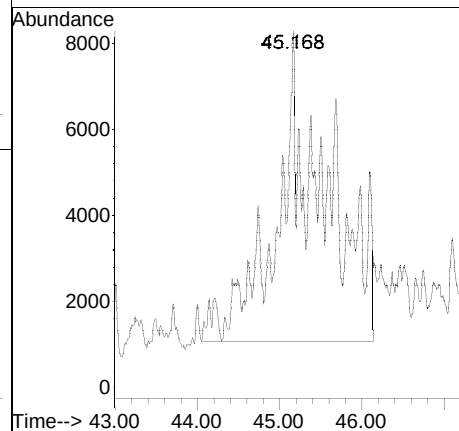
#63
 C3-Fluoranthenes/Pyrenes
 Concen: 635.40 ng/mL M5
 RT: 43.817 min Scan# 3916
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

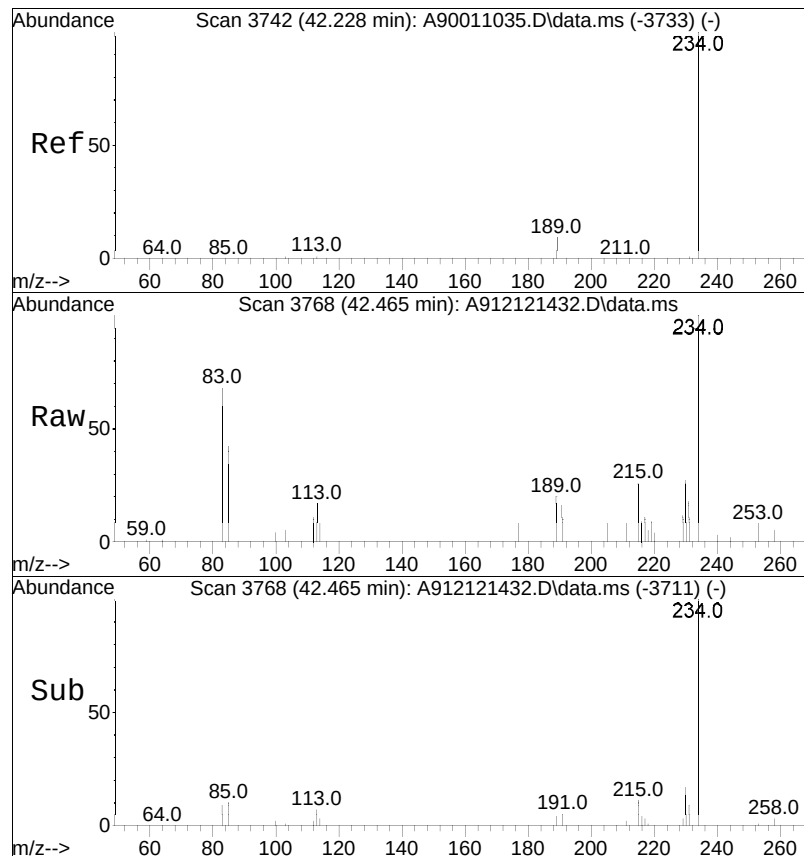
Tgt Ion:244 Resp: 334027
 Ion Ratio Lower Upper
 244 100
 229 4.5 60.7 112.7#





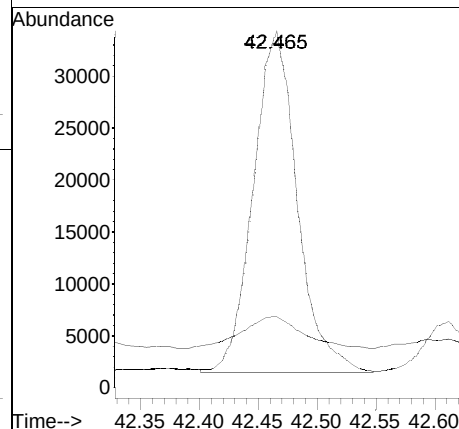
#64
 C4-Fluoranthenes/Pyrenes
 Concen: 551.09 ng/mL M5
 RT: 45.168 min Scan# 4064
 Delta R.T. 0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:258 Resp: 289706

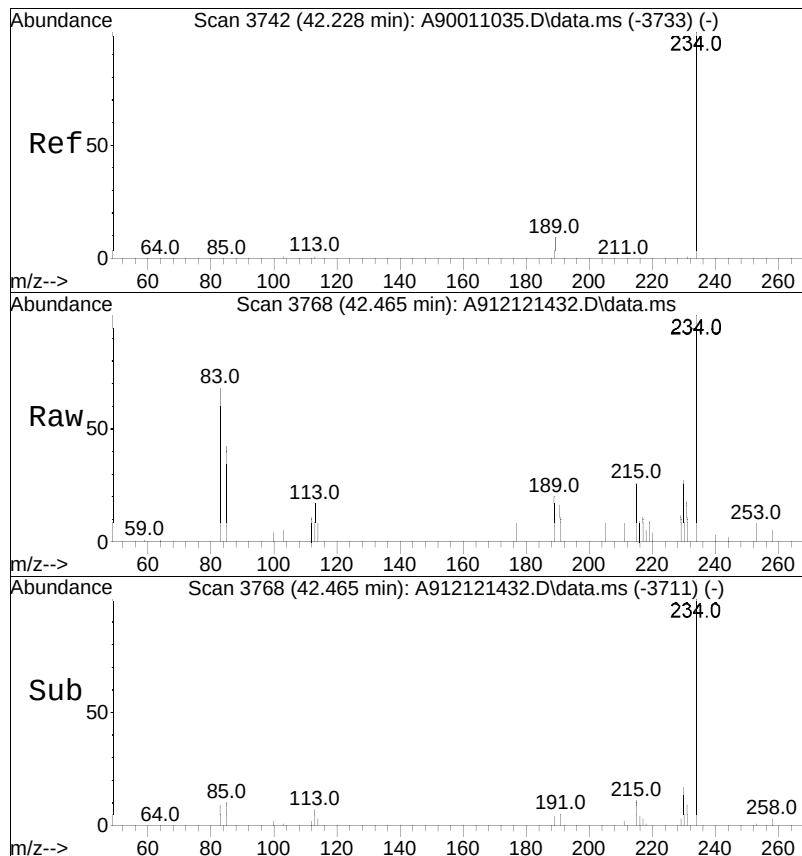




#66
 Naphthobenzothiophene
 Concen: 160.55 ng/ml
 RT: 42.465 min Scan# 3768
 Delta R.T. 0.018 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

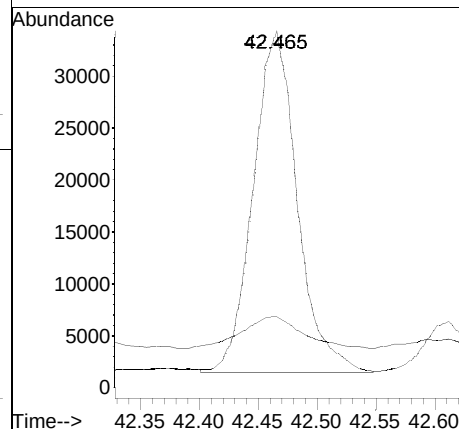
Tgt	Ion	Ratio	Resp	Lower	Upper
234	100		84179		
189	12.9		4.9		9.1#

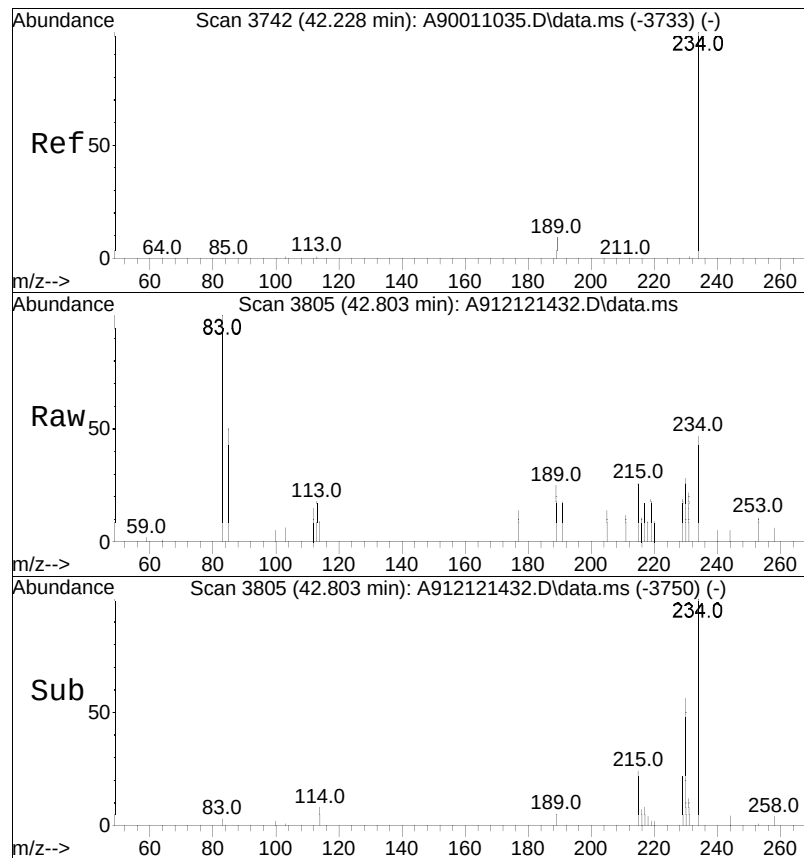




#67
 Naphthobenzothiophene-2,1-D
 Concen: 160.55 ng/mL
 RT: 42.465 min Scan# 3768
 Delta R.T. 0.018 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

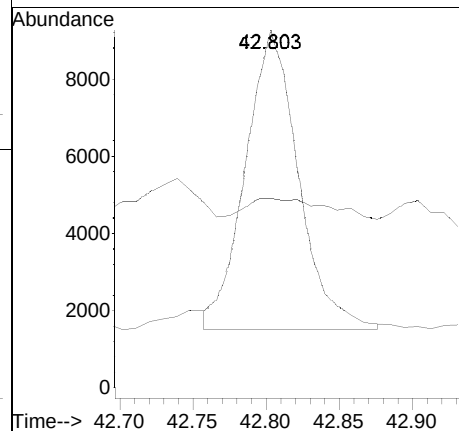
Tgt	Ion	Ratio	Resp	Lower	Upper
234	100		84179		
189	12.9		4.9		9.1#

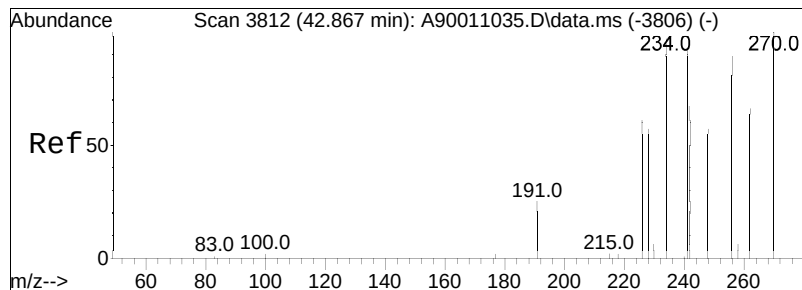




#68
 Naphthobenzothiophene-1,2-D
 Concen: 36.95 ng/mL M4
 RT: 42.803 min Scan# 3805
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

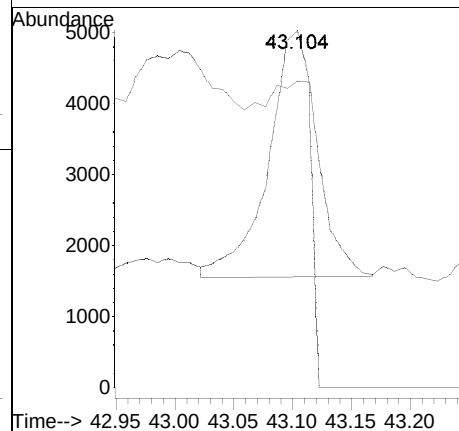
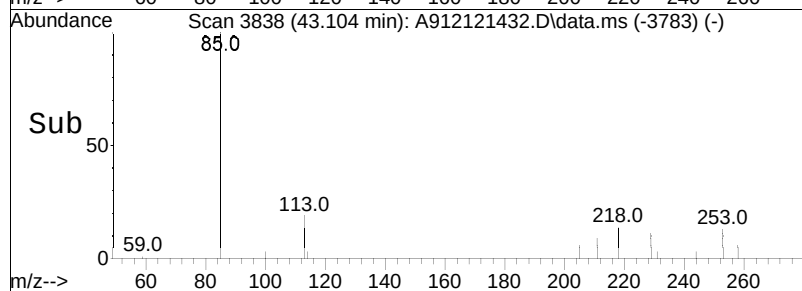
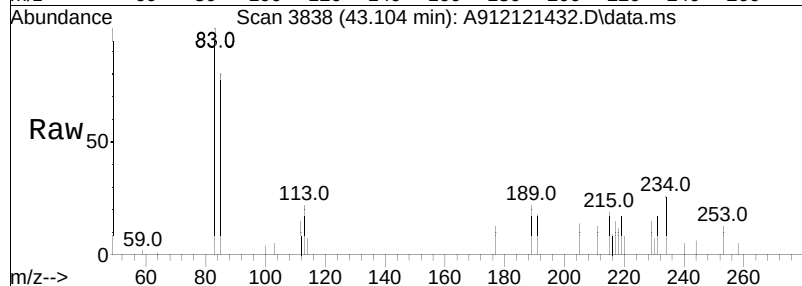
Tgt Ion:234 Resp: 19371
 Ion Ratio Lower Upper
 234 100
 189 0.0 37.9 70.5#

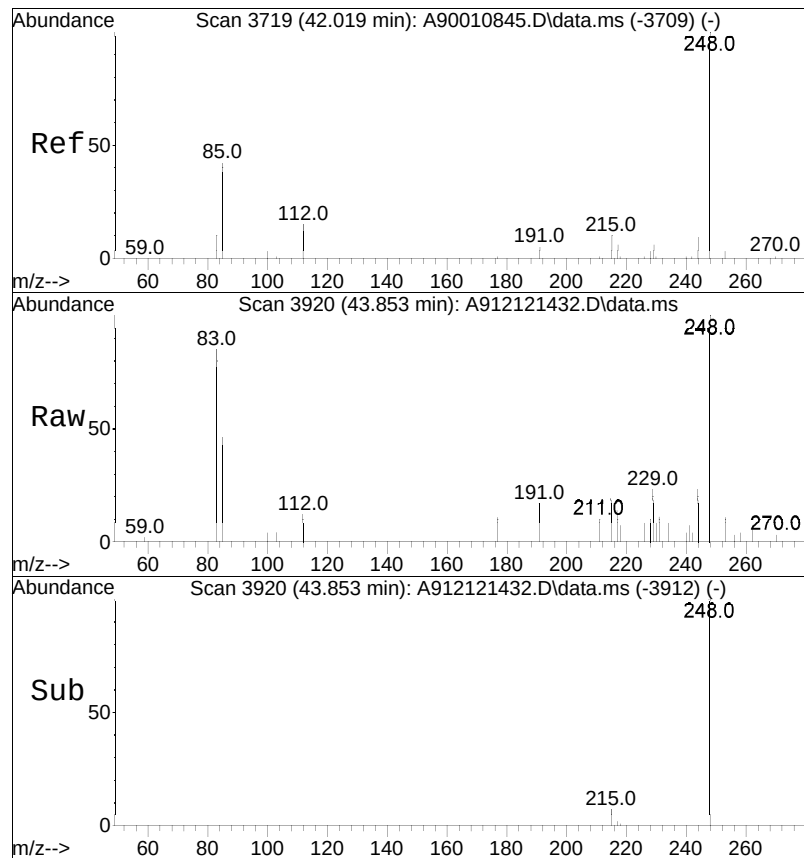




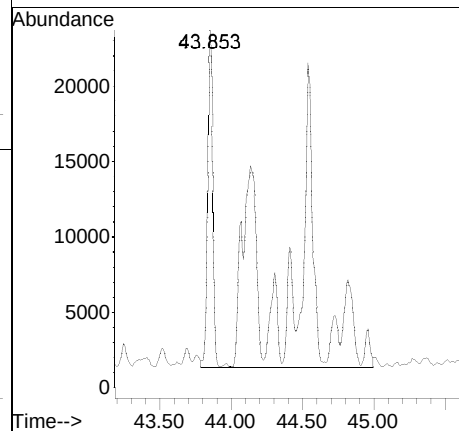
#69
 Naphthobenzothiophene-2,3-D
 Concen: 19.01 ng/mL
 RT: 43.104 min Scan# 3838
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

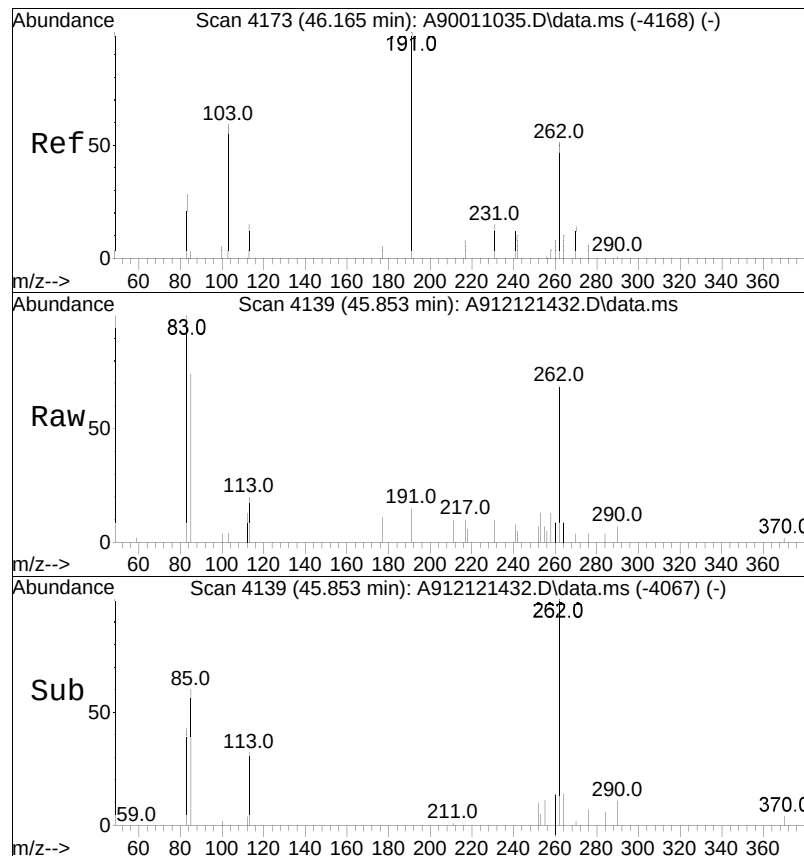
Tgt Ion: 234 Resp: 9968
 Ion Ratio Lower Upper
 234 100
 189 0.0 61.5 114.3#



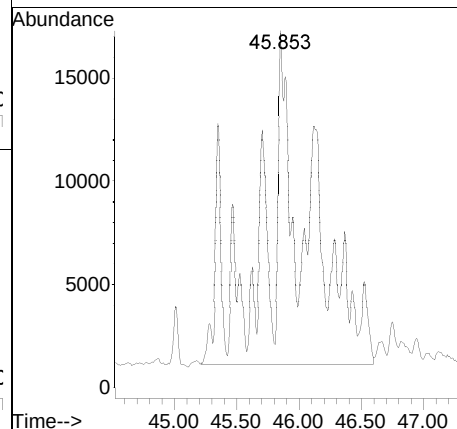


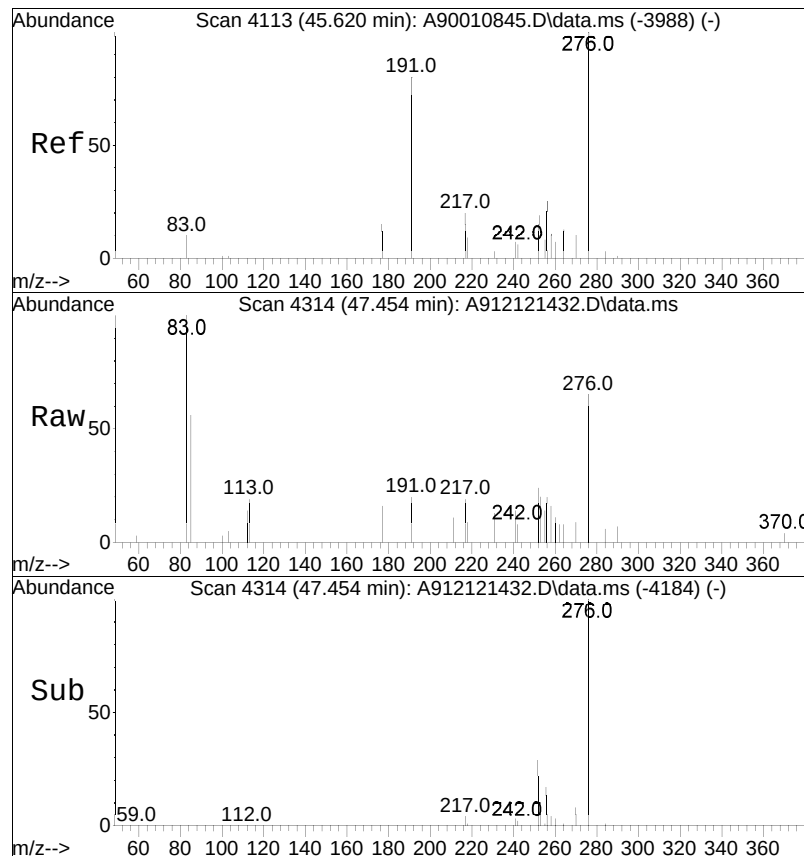
#70
 C1-Naphthobenzothiophenes
 Concen: 598.62 ng/ml M5
 RT: 43.853 min Scan# 3920
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:248 Resp: 313859



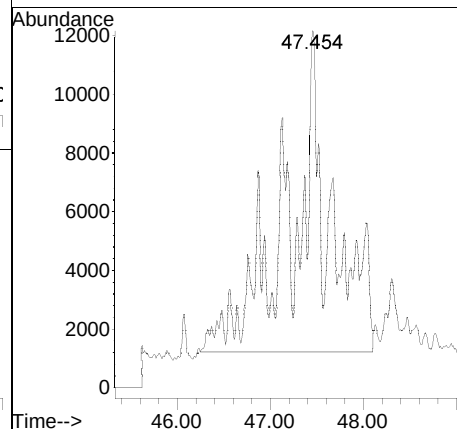


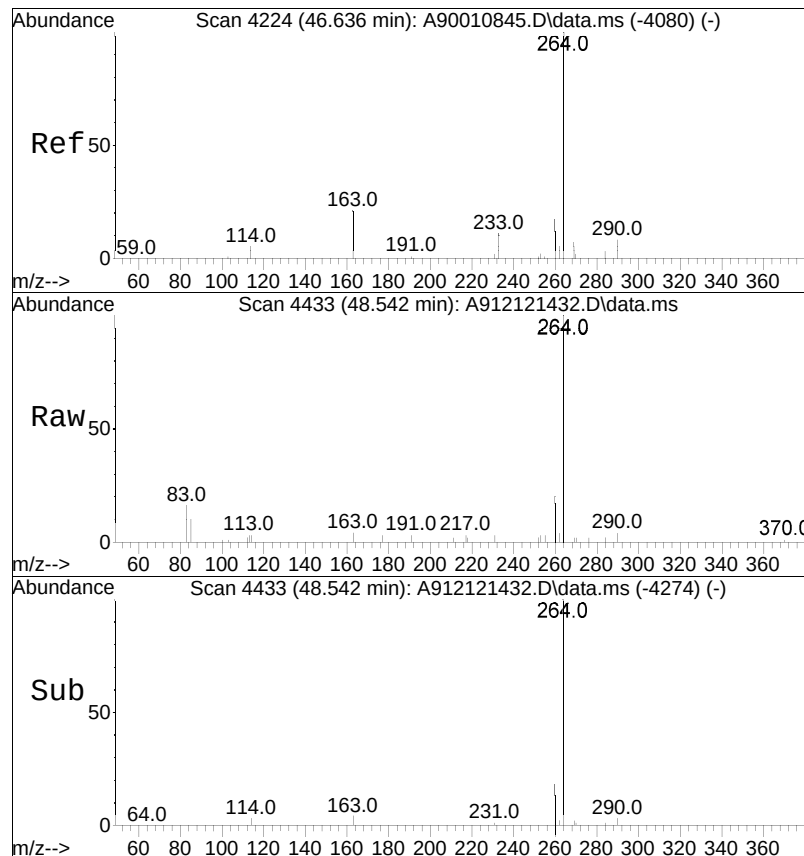
#71
 C2-Naphthobenzothiophenes
 Concen: 763.20 ng/ml M5
 RT: 45.853 min Scan# 4139
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:262 Resp: 400151



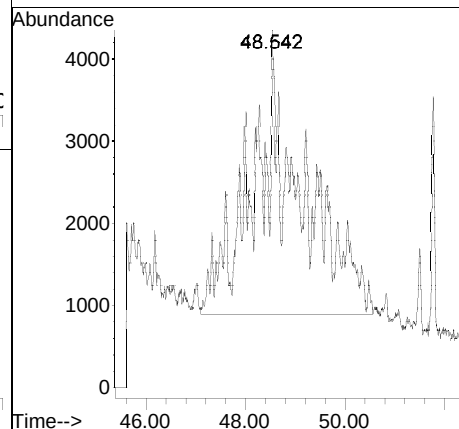


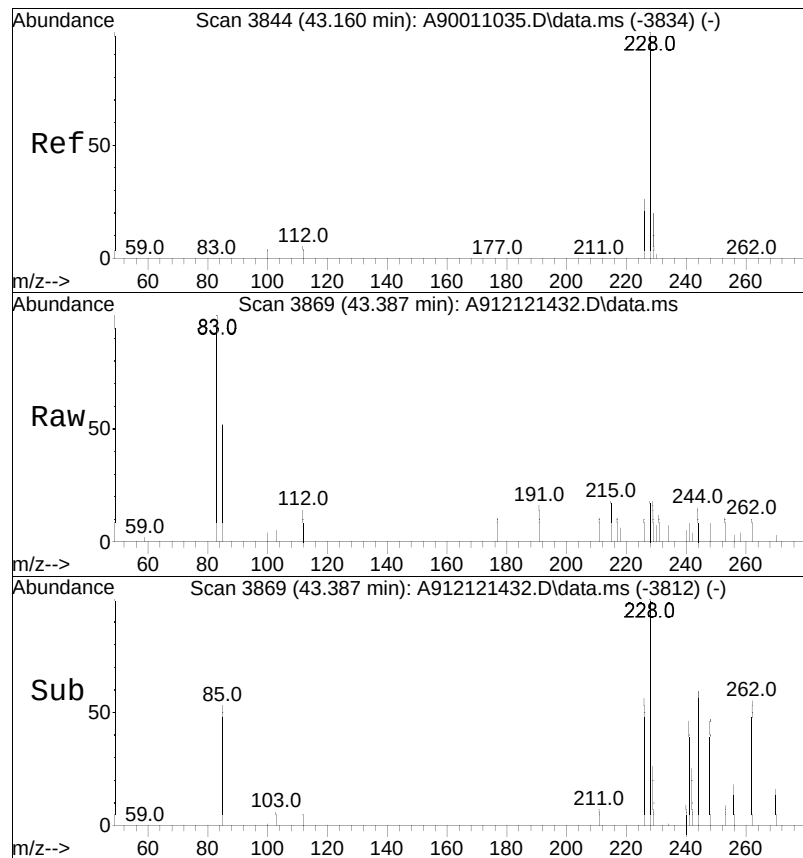
#72
 C3-Naphthobenzothiophenes
 Concen: 633.28 ng/ml M5
 RT: 47.454 min Scan# 4314
 Delta R.T. -0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:276 Resp: 332031





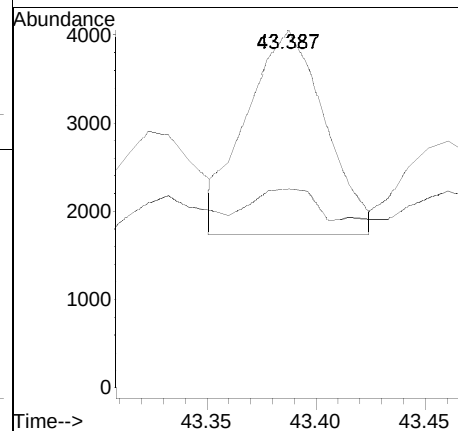
#73
C4-Naphthobenzothiophenes
Concen: 434.67 ng/mL M5
RT: 48.542 min Scan# 4433
Delta R.T. -0.009 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm
Tgt Ion:290 Resp: 227898

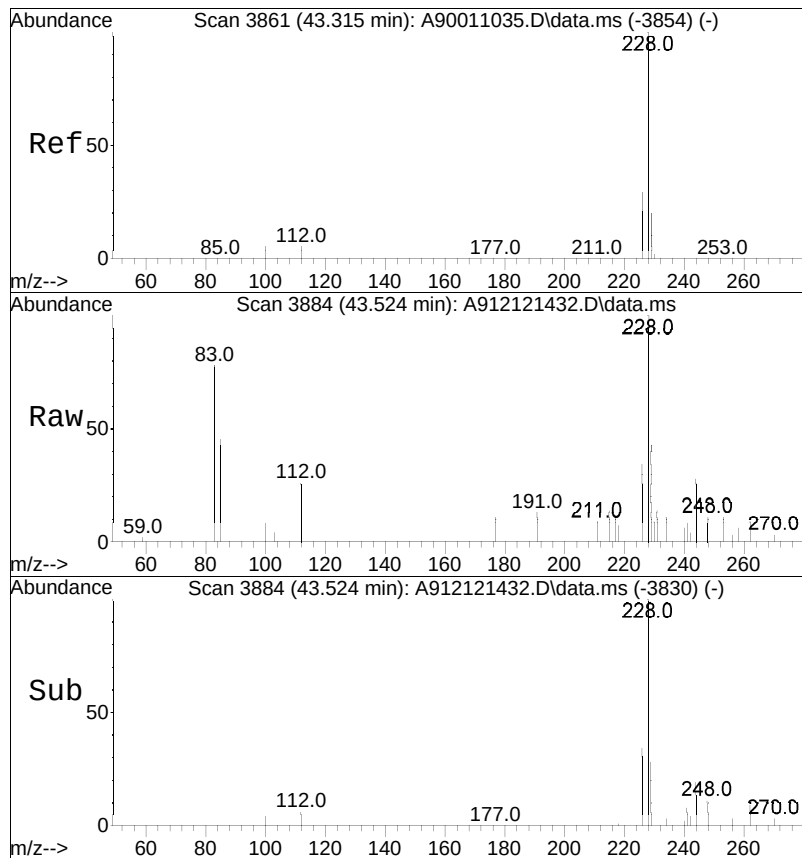




#75
 Benz[a]anthracene
 Concen: 12.31 ng/mL M3
 RT: 43.387 min Scan# 3869
 Delta R.T. 0.018 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

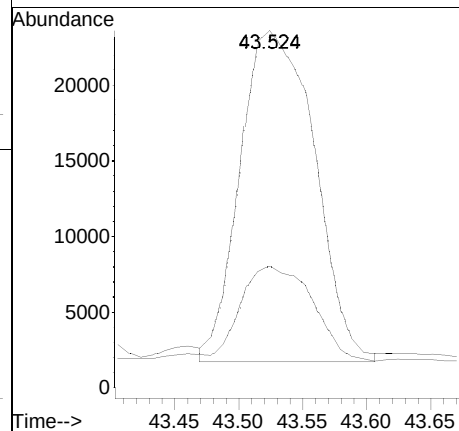
Tgt Ion	Ratio	Lower	Upper
228	100		
226	425.5	17.3	32.1#

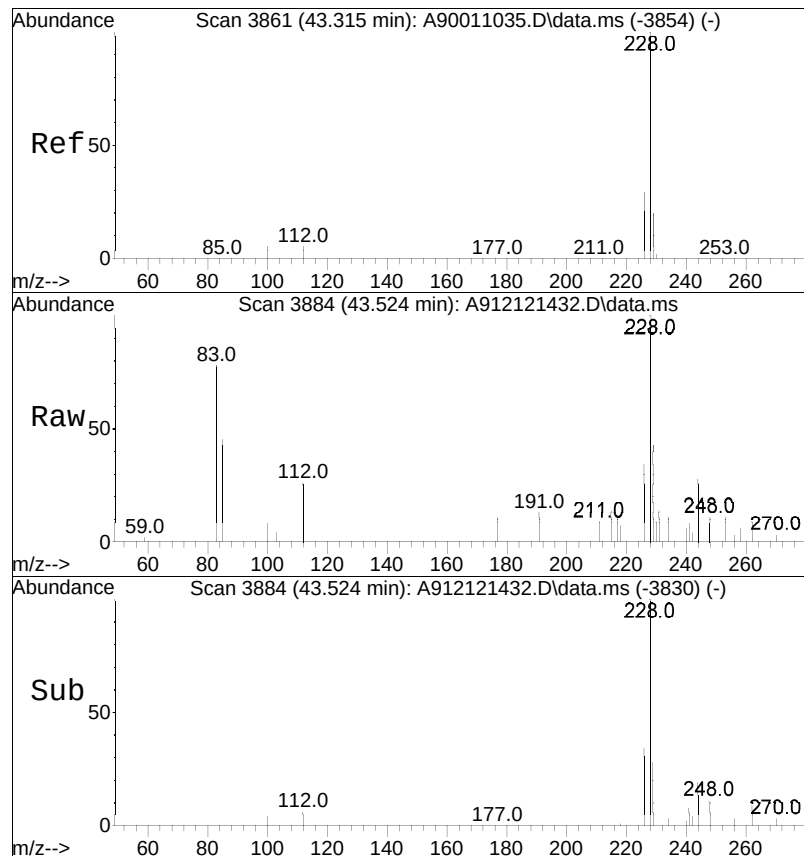




#76
 Chrysene
 Concen: 192.11 ng/mL M4
 RT: 43.524 min Scan# 3884
 Delta R.T. -0.010 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

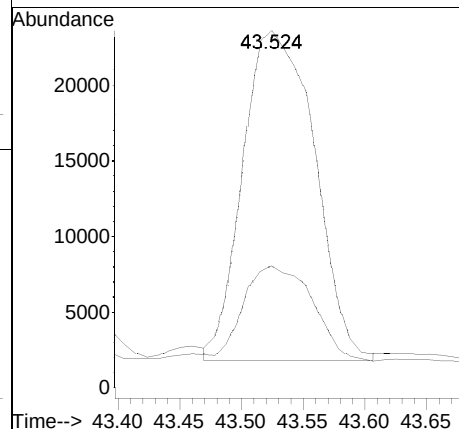
Tgt Ion	Ratio	Lower	Upper
228	100		
226	27.6	18.8	34.8

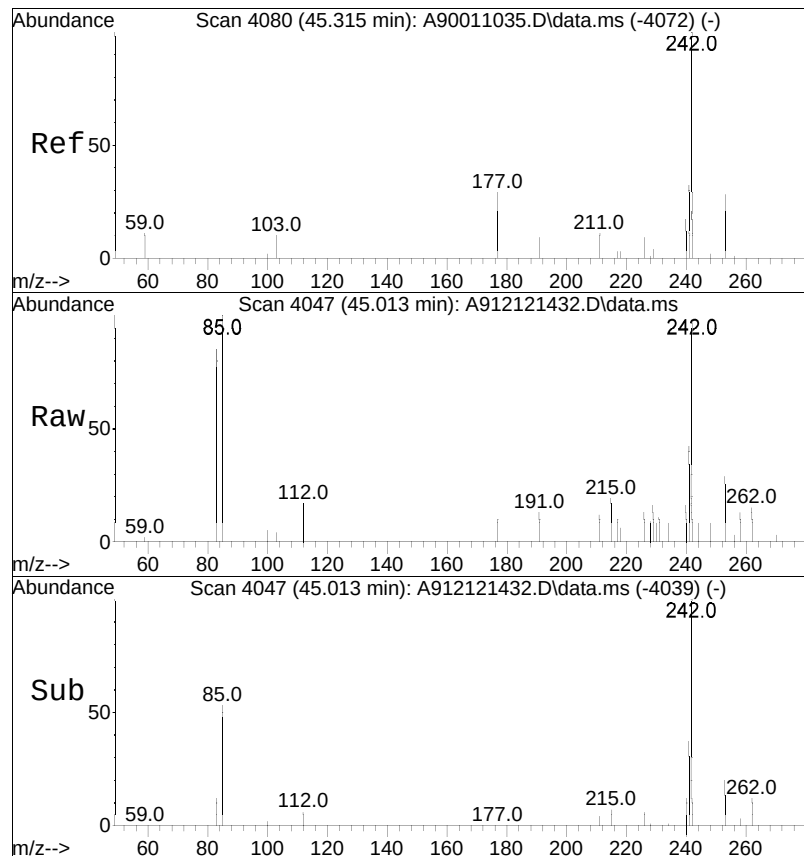




#77
 Chrysene/Triphenylene
 Concen: 190.84 ng/mL M4
 RT: 43.524 min Scan# 3884
 Delta R.T. -0.010 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

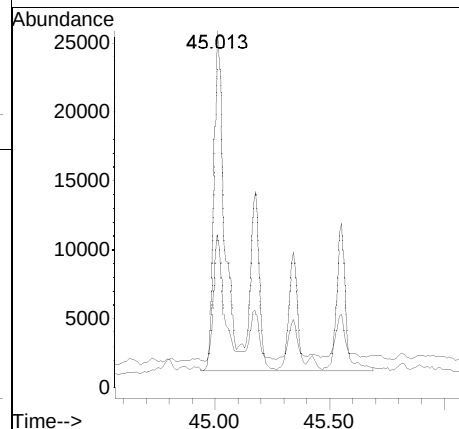
Tgt Ion	Ratio	Lower	Upper
228	100		
226	27.8	18.8	34.8

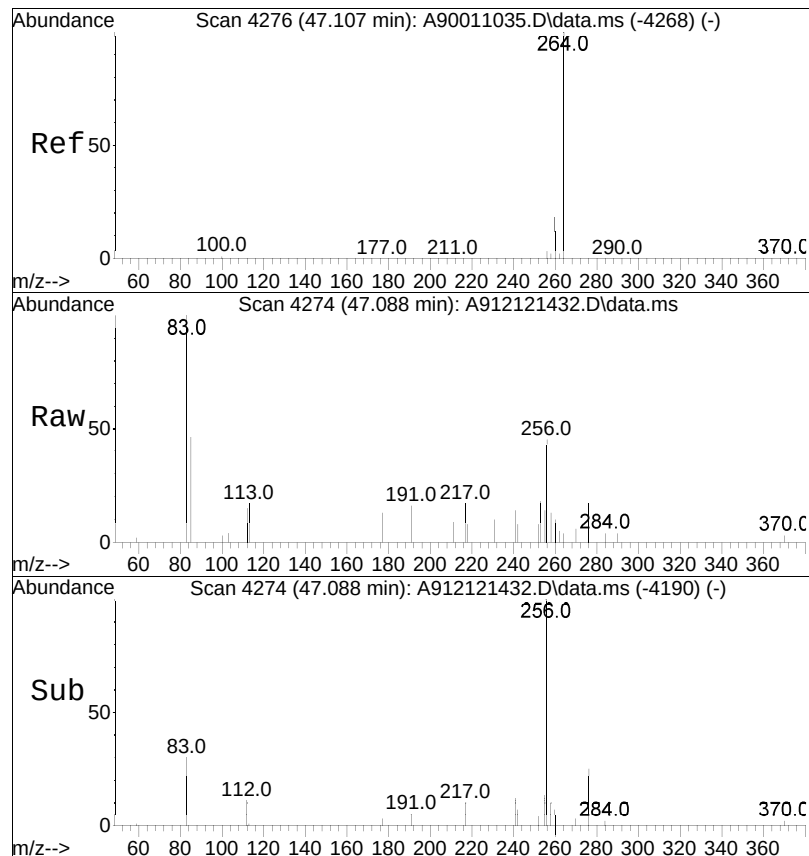




#78
 C1-Chrysenes
 Concen: 365.78 ng/mL M5
 RT: 45.013 min Scan# 4047
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

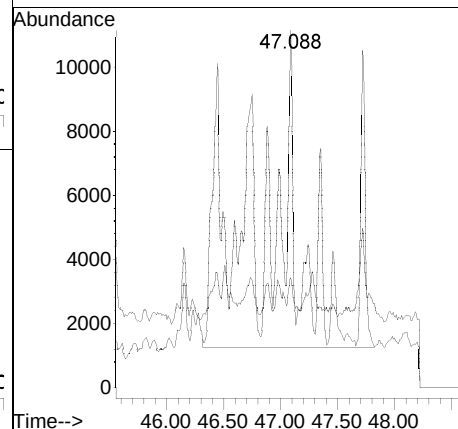
Tgt Ion	Ratio	Lower	Upper
242	100		
241	14.1	30.9	57.5#

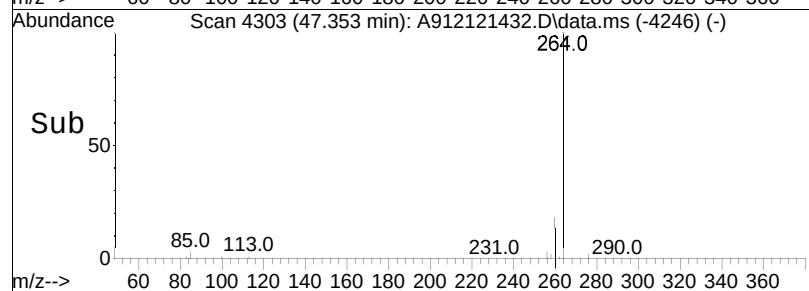
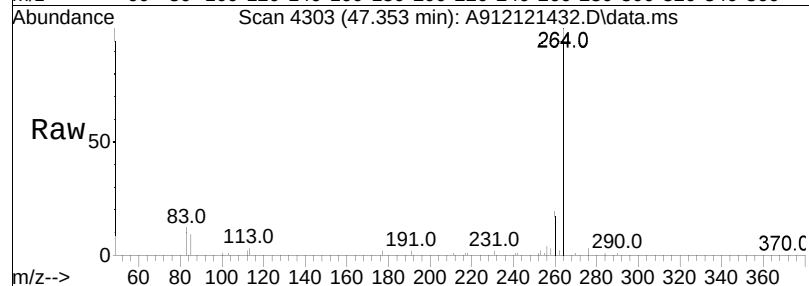
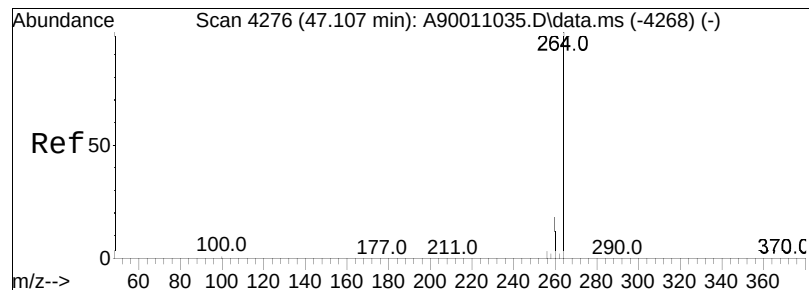




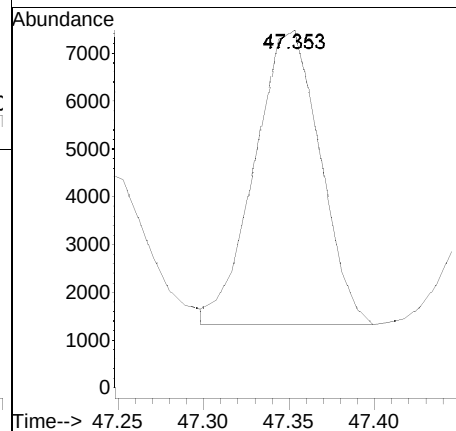
#79
 C2-Chrysenes
 Concen: 549.77 ng/mL M5
 RT: 47.088 min Scan# 4274
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

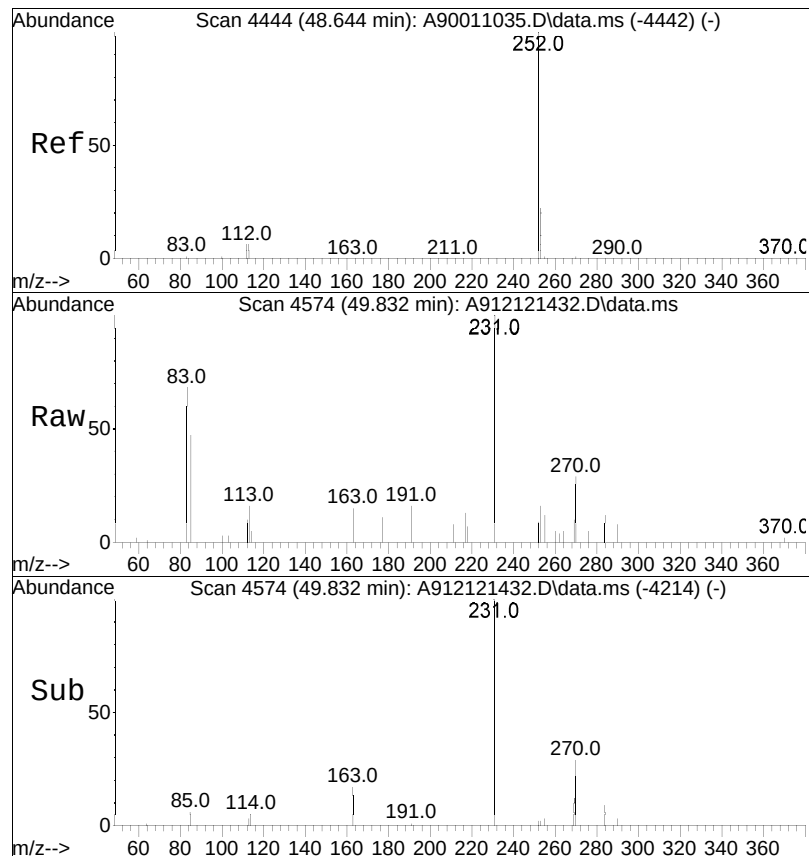
Tgt	Ion	Ratio	Resp	Lower	Upper
256	100		252325		
241	0.9		22.1	41.1#	





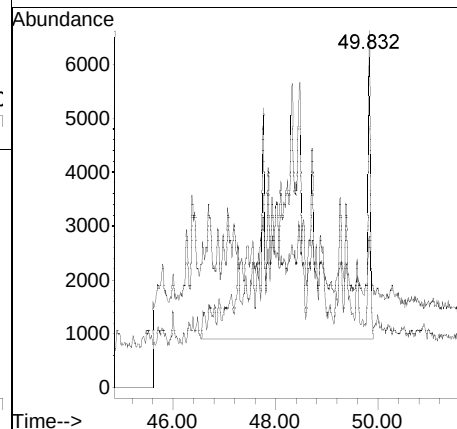
#80
 BBF-d12 Surr BKGD
 Concen: 35.44 ng/mL
 RT: 47.353 min Scan# 4303
 Delta R.T. 0.018 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:256 Resp: 16266

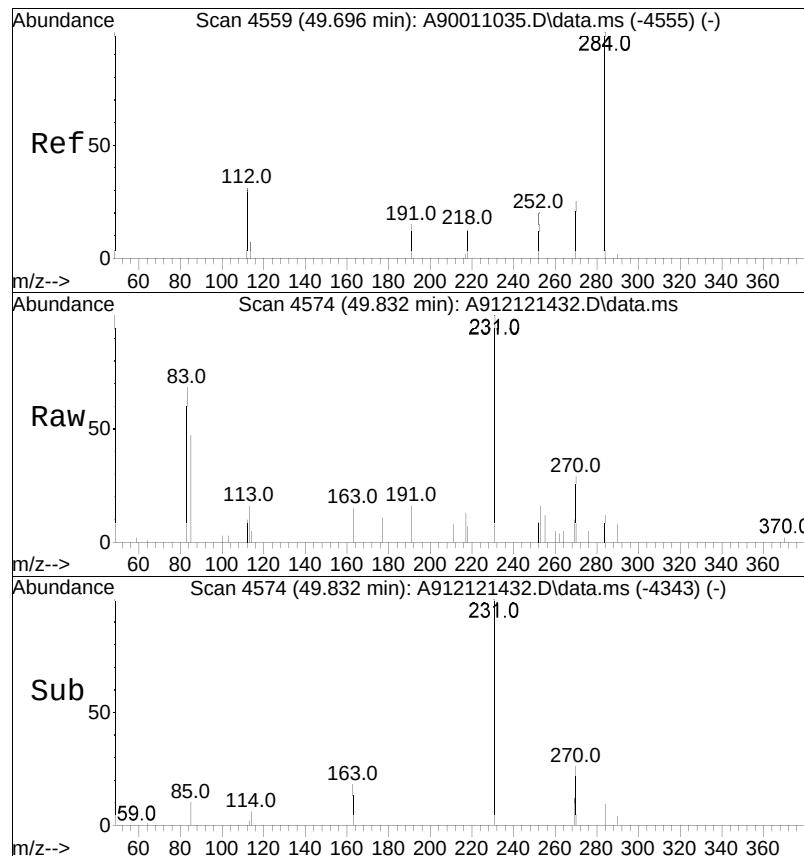




#81
 C3-Chrysenes
 Concen: 595.34 ng/mL M5
 RT: 49.832 min Scan# 4574
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

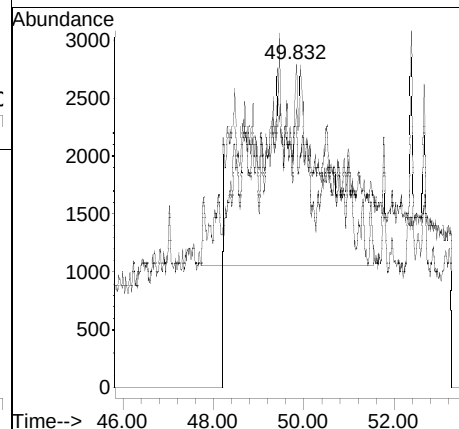
Tgt	Ion	Ratio	Lower	Upper
270	100			
255	0.7	26.8	49.8#	

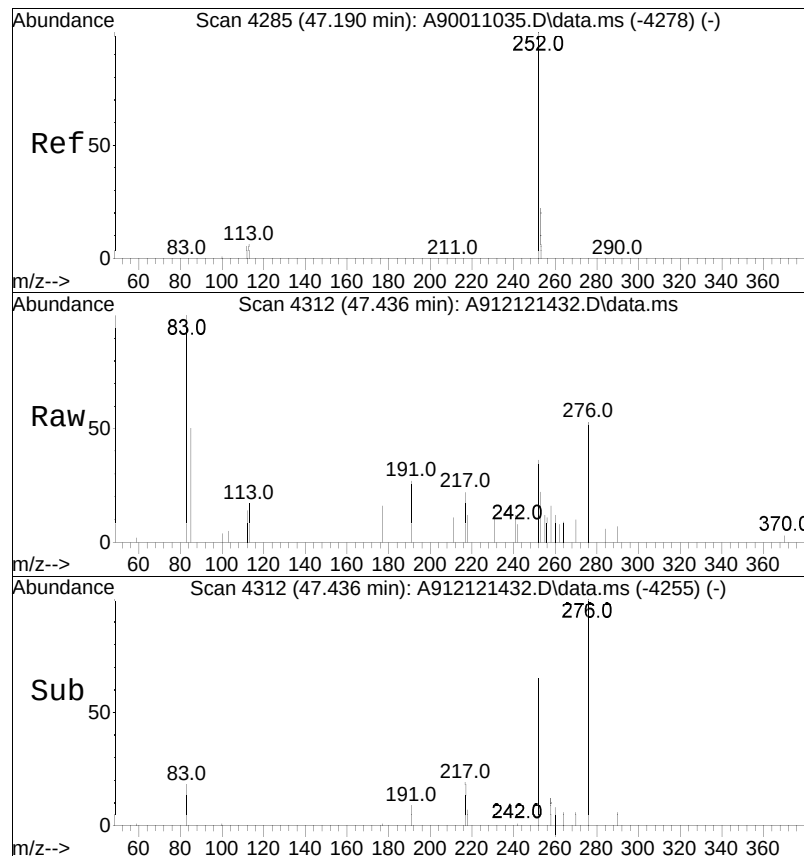




#82
 C4-Chrysenes
 Concen: 365.03 ng/mL M5
 RT: 49.832 min Scan# 4574
 Delta R.T. 0.412 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

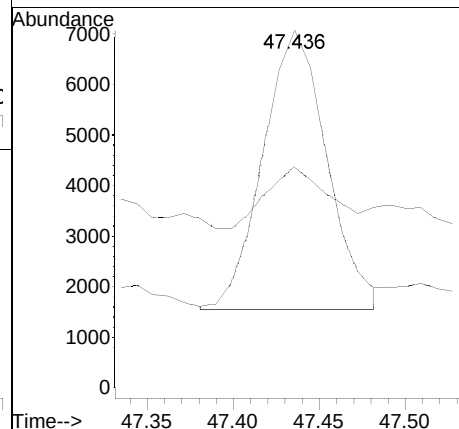
Tgt	Ion	Ratio	Lower	Upper
284	100			
269	0.0	54.7	101.5	

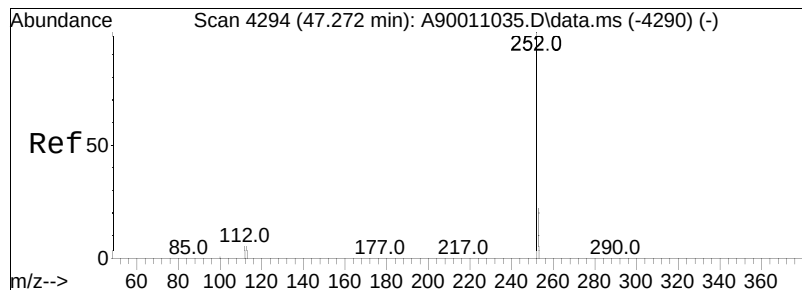




#84
Benzo[b]fluoranthene
Concen: 25.78 ng/mL M4
RT: 47.436 min Scan# 4312
Delta R.T. 0.018 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm

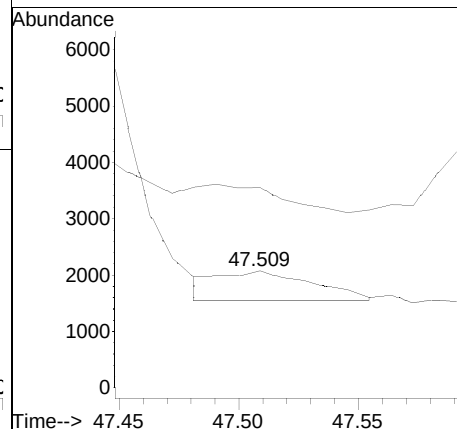
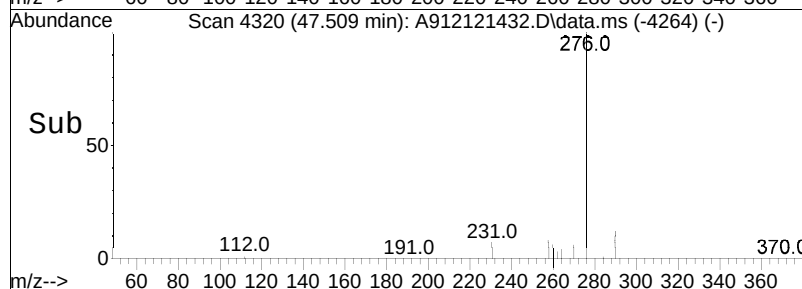
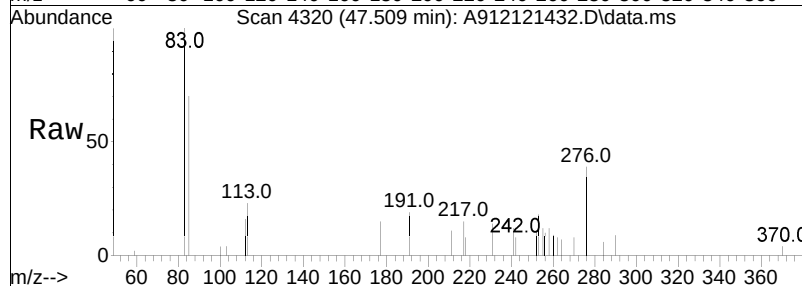
Tgt Ion: 252 Resp: 14160
Ion Ratio Lower Upper
252 100
253 21.2 16.4 30.4

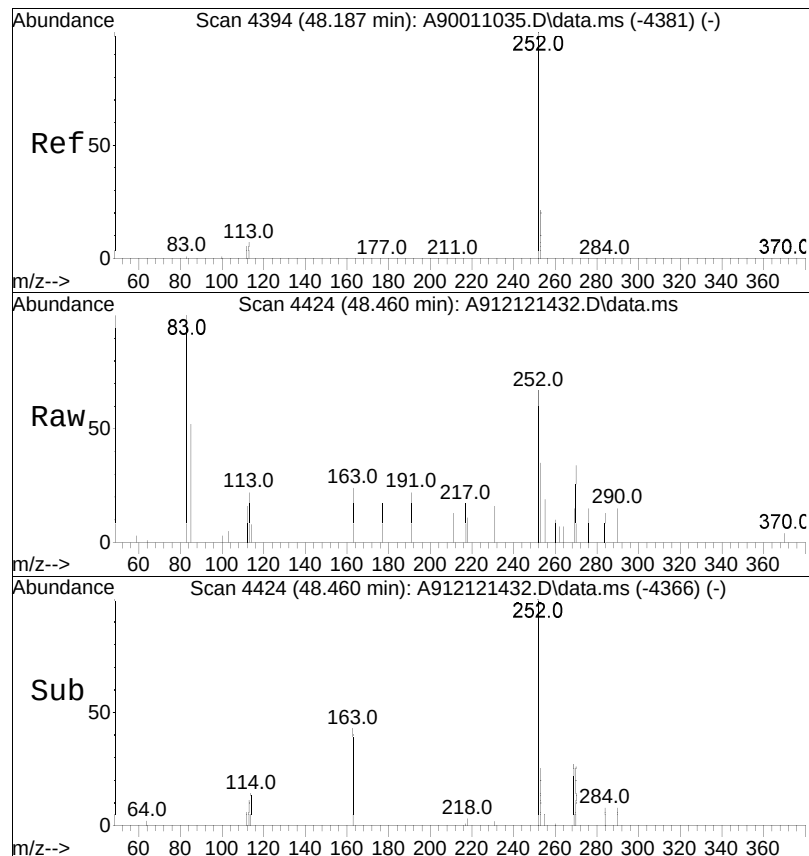




#85
 Benzo[j,k]fluoranthene
 Concen: 2.74 ng/mL M3
 RT: 47.509 min Scan# 4320
 Delta R.T. 0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	208.5	16.1	29.9#





#87

Benzo[e]pyrene

Concen: 50.37 ng/mL

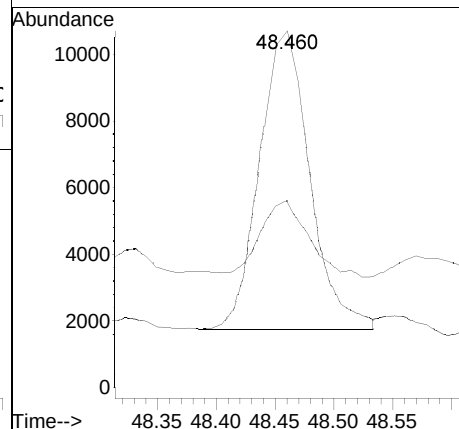
RT: 48.460 min Scan# 4424

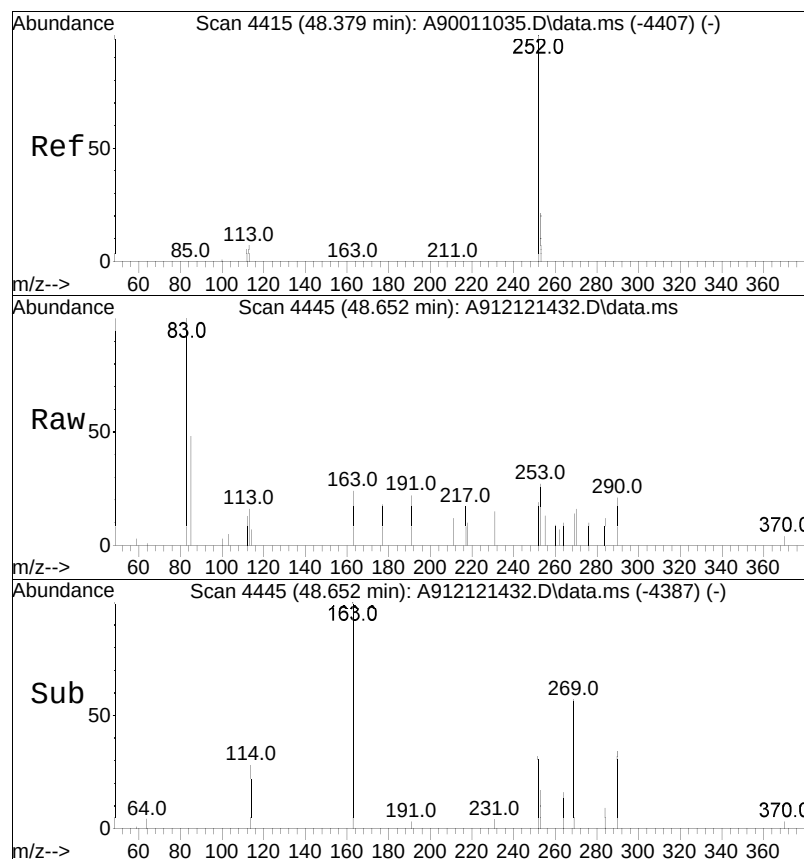
Delta R.T. 0.027 min

Lab File: A912121432.D

Acq: 15 Dec 2014 7:57 pm

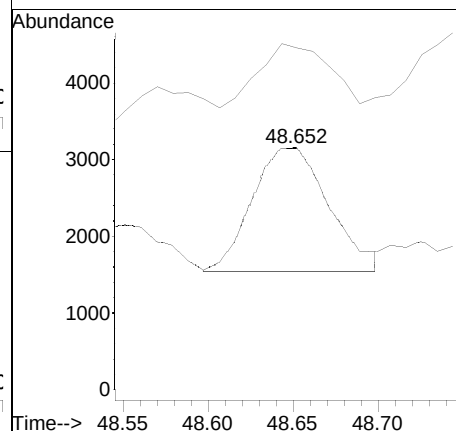
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	26.3	16.2	30.0	

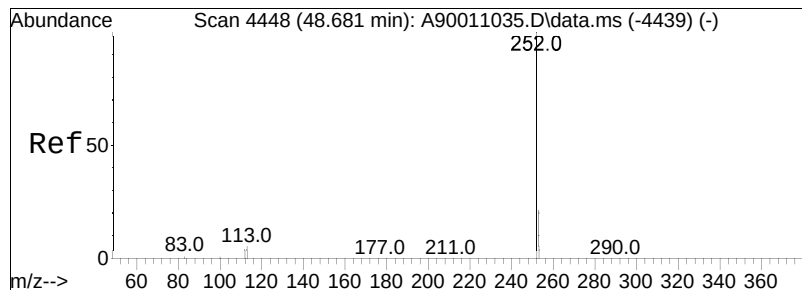




#89
Benzo[a]pyrene
Concen: 9.83 ng/mL M3
RT: 48.652 min Scan# 4445
Delta R.T. 0.027 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm

Tgt Ion: 252 Resp: 5066
Ion Ratio Lower Upper
252 100
253 129.9 16.4 30.6#





#90

Perylene

Concen: 15.30 ng/mL

RT: 48.963 min Scan# 4479

Delta R.T. 0.018 min

Lab File: A912121432.D

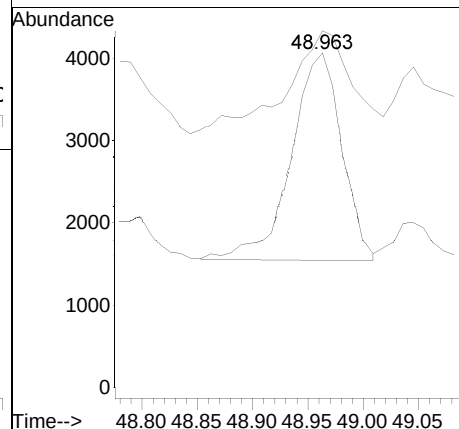
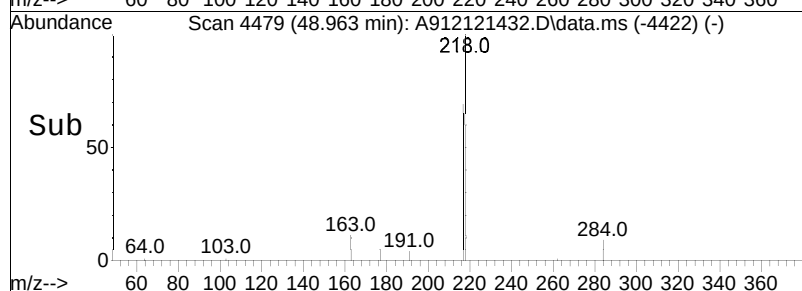
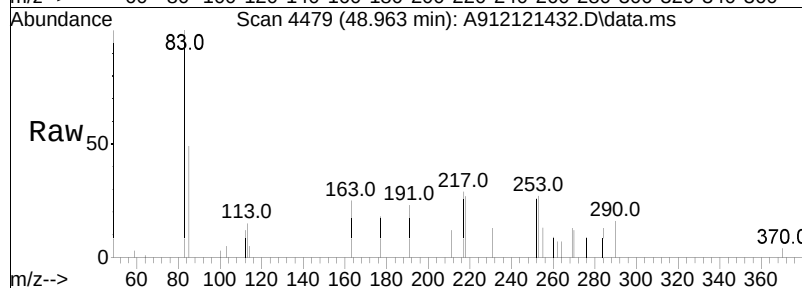
Acq: 15 Dec 2014 7:57 pm

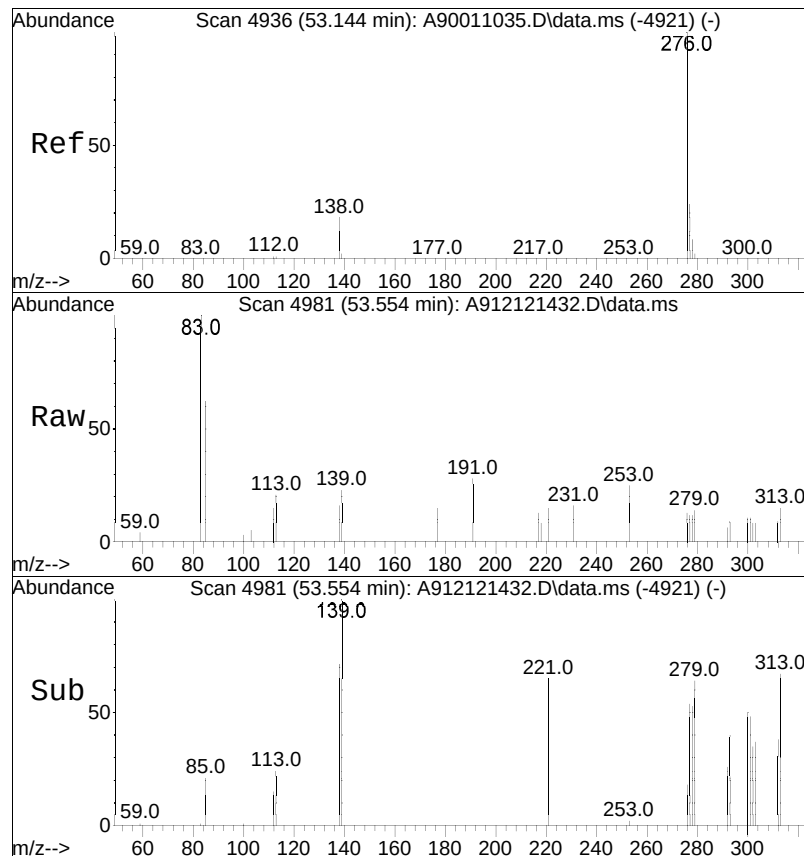
Tgt Ion: 252 Resp: 7959

Ion Ratio Lower Upper

252 100

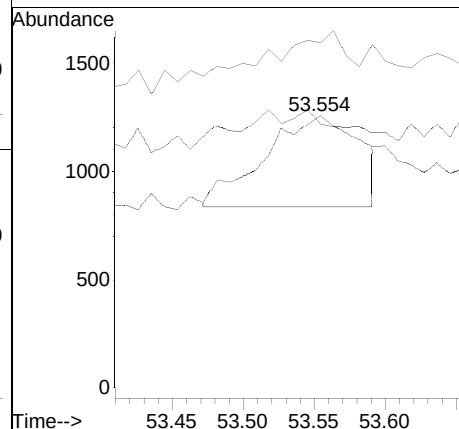
253 65.2 16.6 30.8#

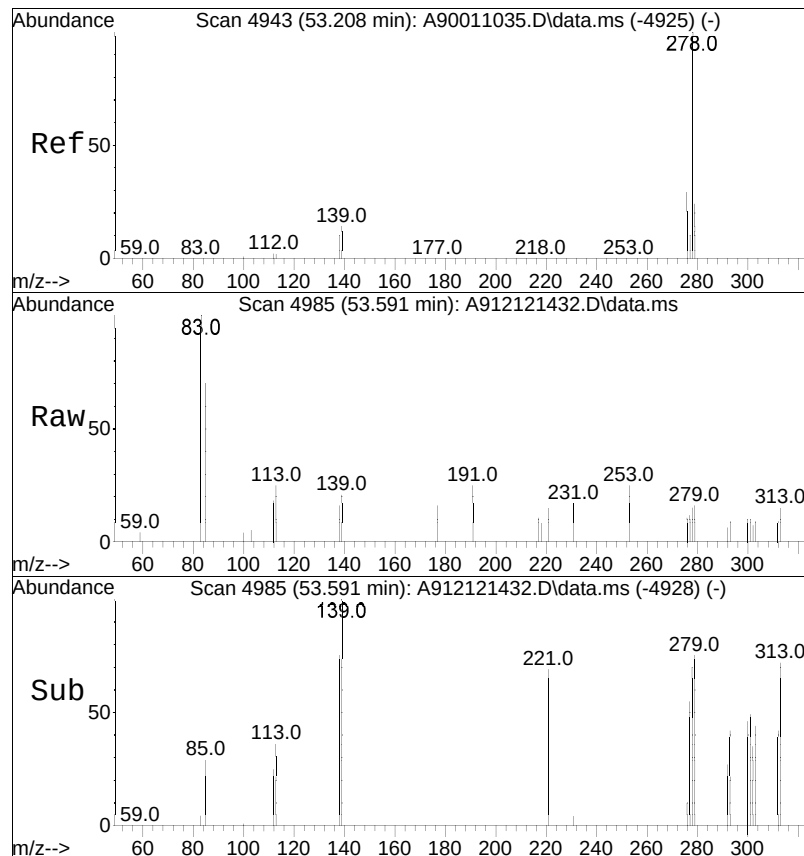




#91
 Indeno[1,2,3-cd]pyrene
 Concen: 3.08 ng/mL M3
 RT: 53.554 min Scan# 4981
 Delta R.T. 0.045 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

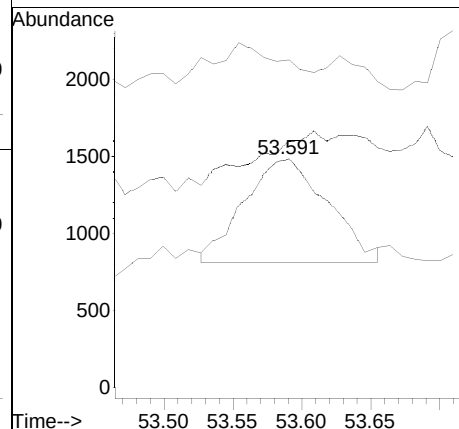
Tgt Ion:	276	Resp:	1969
Ion Ratio	Lower	Upper	
276	100		
138	0.0	15.7	29.1#
277	0.0	17.9	33.3#

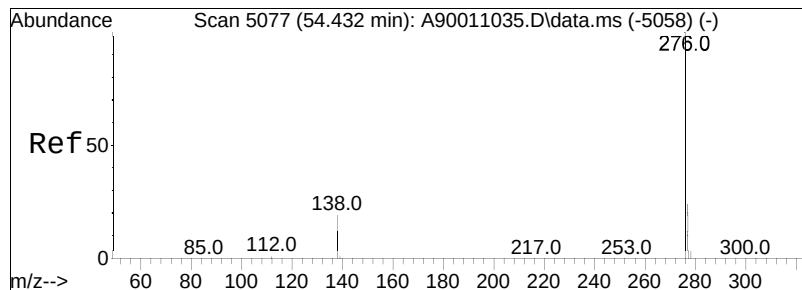




#92
 Dibenz[ah]+[ac]anthracene
 Concen: 4.47 ng/mL M4
 RT: 53.591 min Scan# 4985
 Delta R.T. 0.018 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

Tgt Ion:	278	Resp:	2819
Ion Ratio	Lower	Upper	
278	100		
139	0.0	11.4	21.2#
279	0.0	16.3	30.3#





#93

Benzo[g,h,i]perylene

Concen: 16.06 ng/mL

RT: 54.870 min Scan# 5125

Delta R.T. 0.027 min

Lab File: A912121432.D

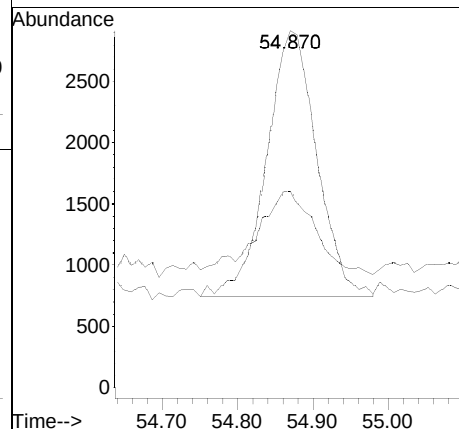
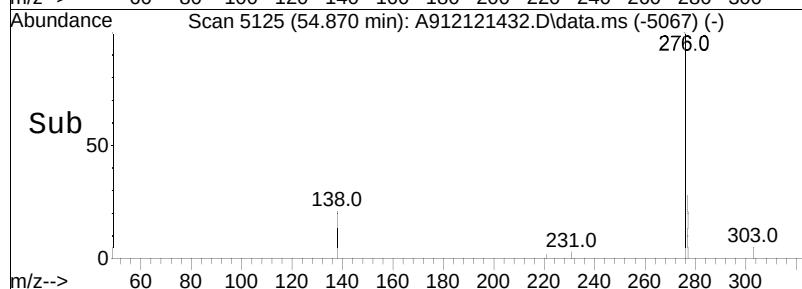
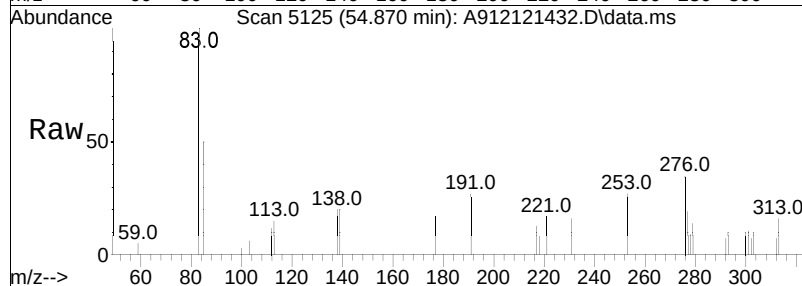
Acq: 15 Dec 2014 7:57 pm

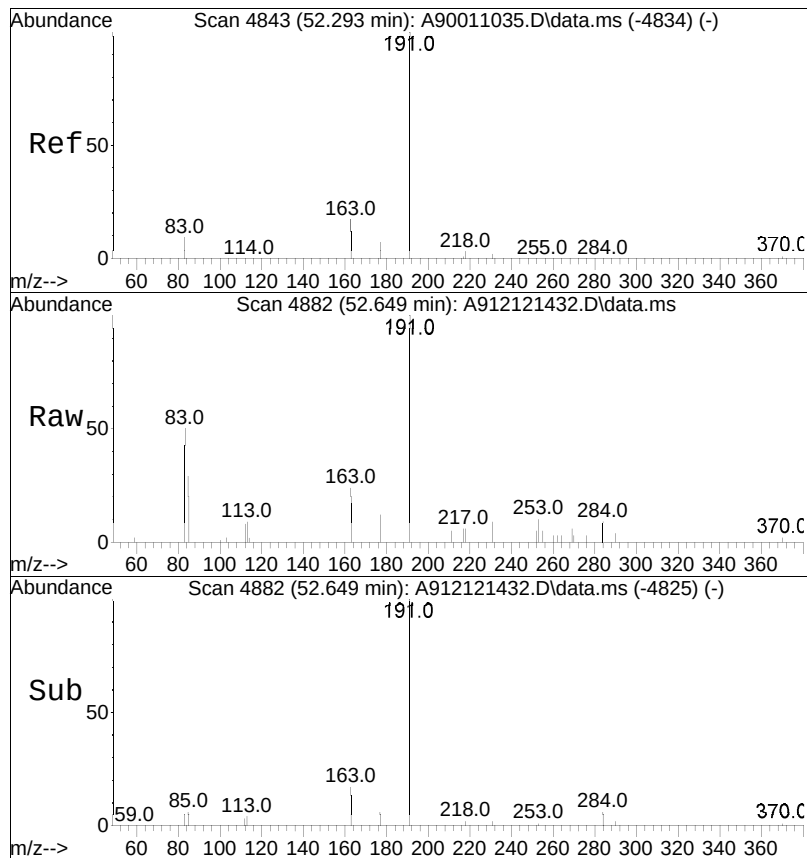
Tgt Ion: 276 Resp: 9975

Ion Ratio Lower Upper

276 100

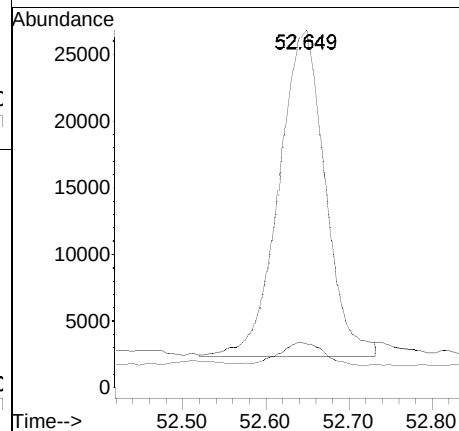
277 36.5 17.4 32.2#

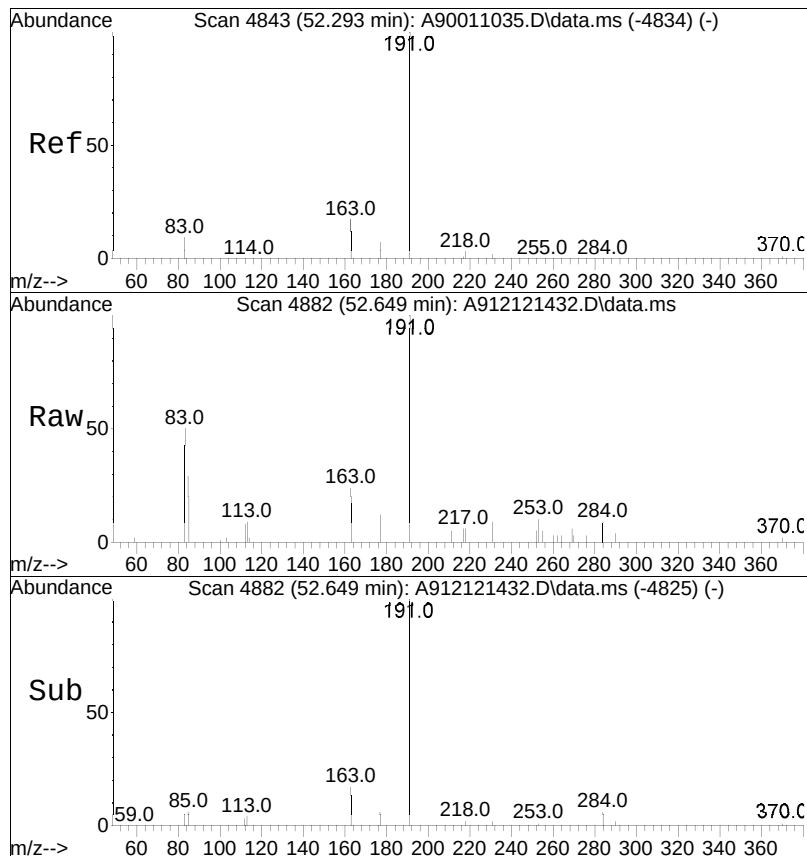




#94
Hopane (T19)
Concen: 728.61 ng/mL M3
RT: 52.649 min Scan# 4882
Delta R.T. 0.018 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm

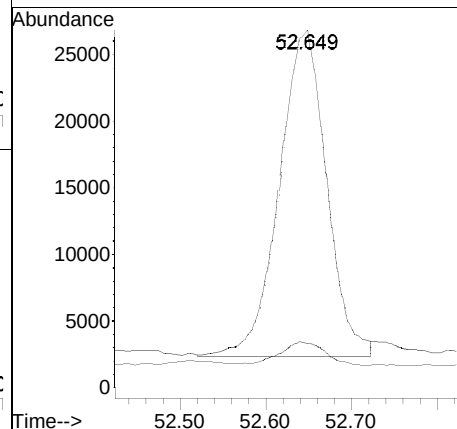
Tgt Ion	Ratio	Lower	Upper
191	100		
177	0.7	8.5	15.9#

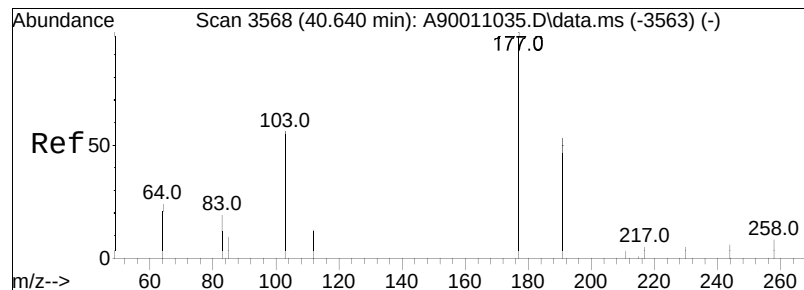




#95
 17a(H),21B(H)-hopane - C₃₀H₅₂
 Concen: 724.45 ng/mL M3
 RT: 52.649 min Scan# 4882
 Delta R.T. 0.018 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

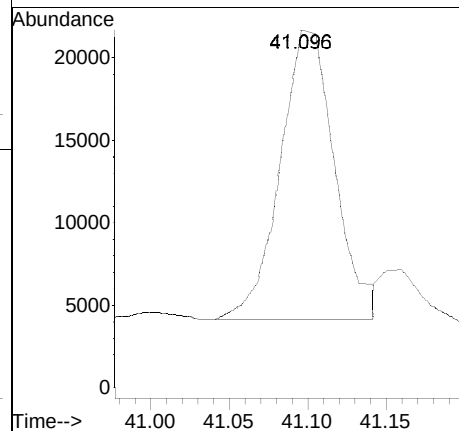
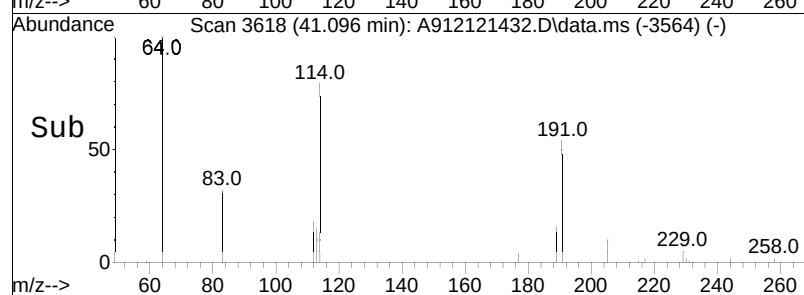
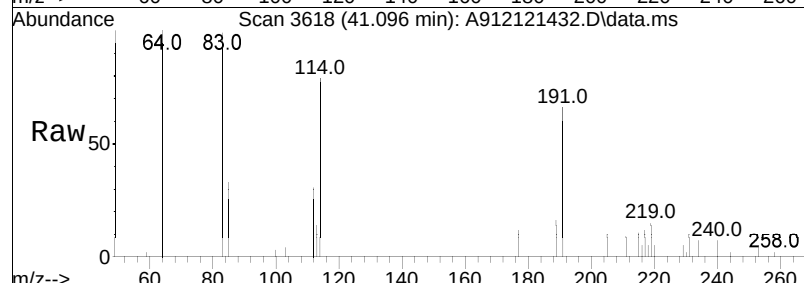
Tgt Ion	Ratio	Lower	Upper
191	100		
177	0.7	8.5	15.9#

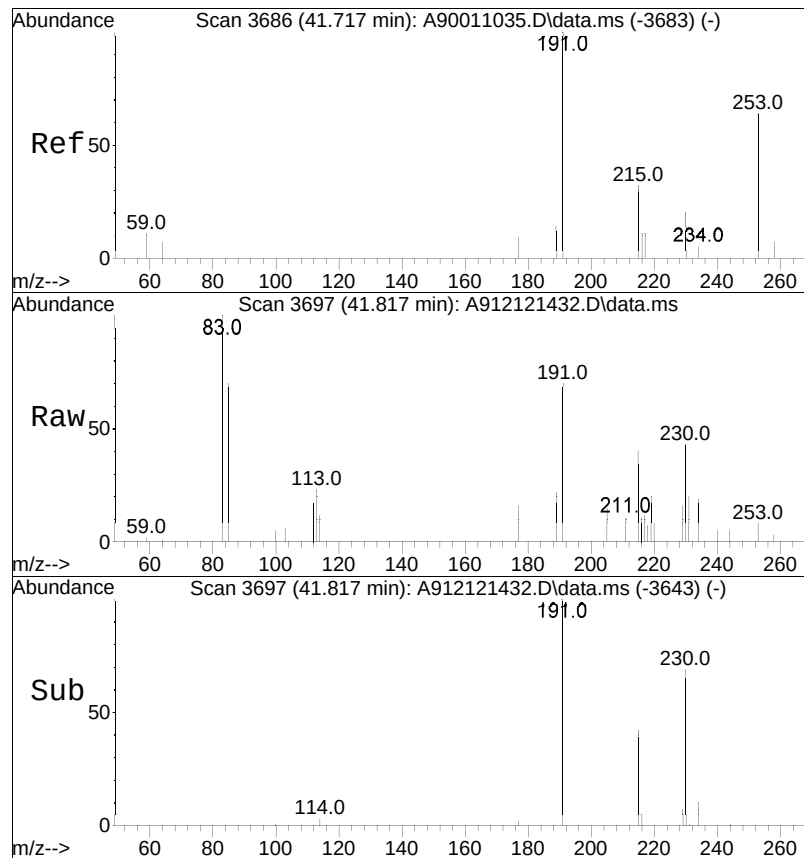




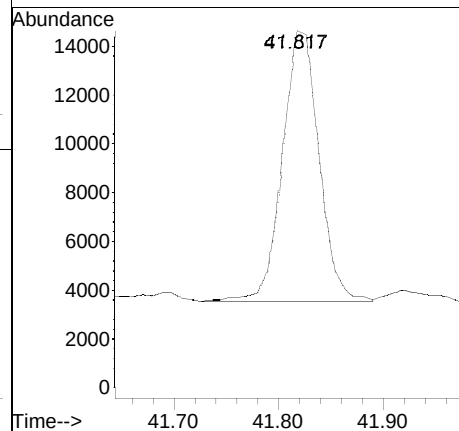
#96
 C23 Tricyclic Terpane (T4)
 Concen: 331.78 ng/ml
 RT: 41.096 min Scan# 3618
 Delta R.T. -0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

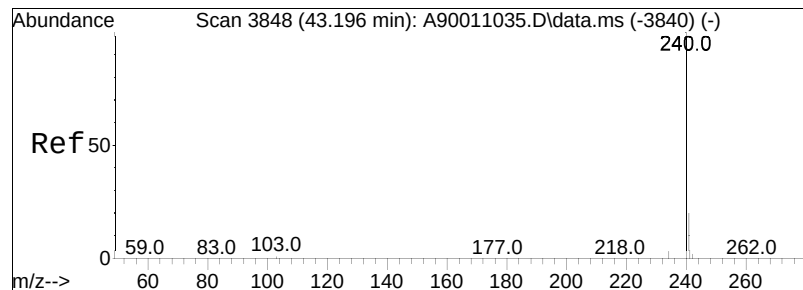
Tgt Ion:191 Resp: 42592





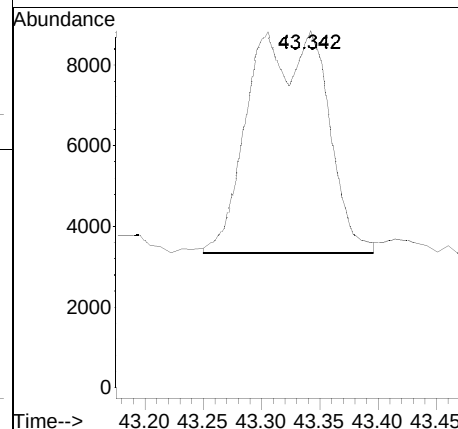
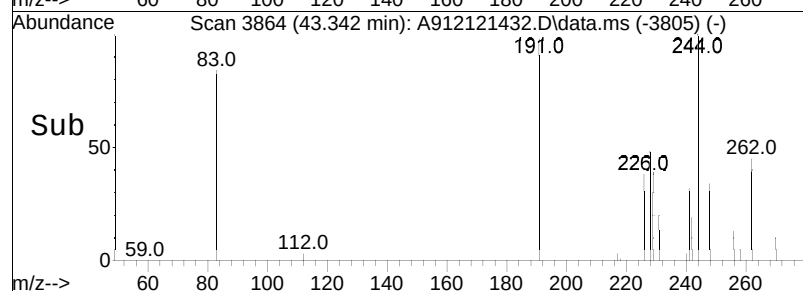
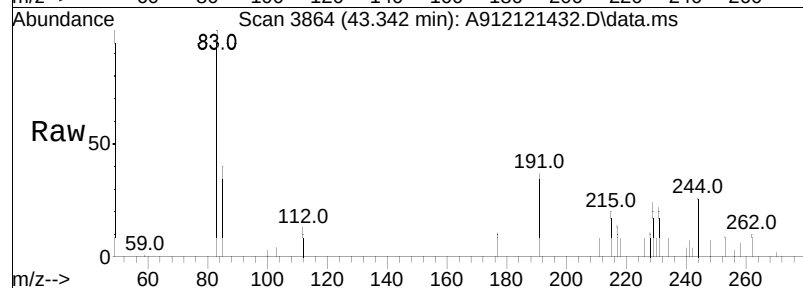
#97
 C24 Tricyclic Terpane (T5)
 Concen: 207.60 ng/ml
 RT: 41.817 min Scan# 3697
 Delta R.T. -0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:191 Resp: 26651

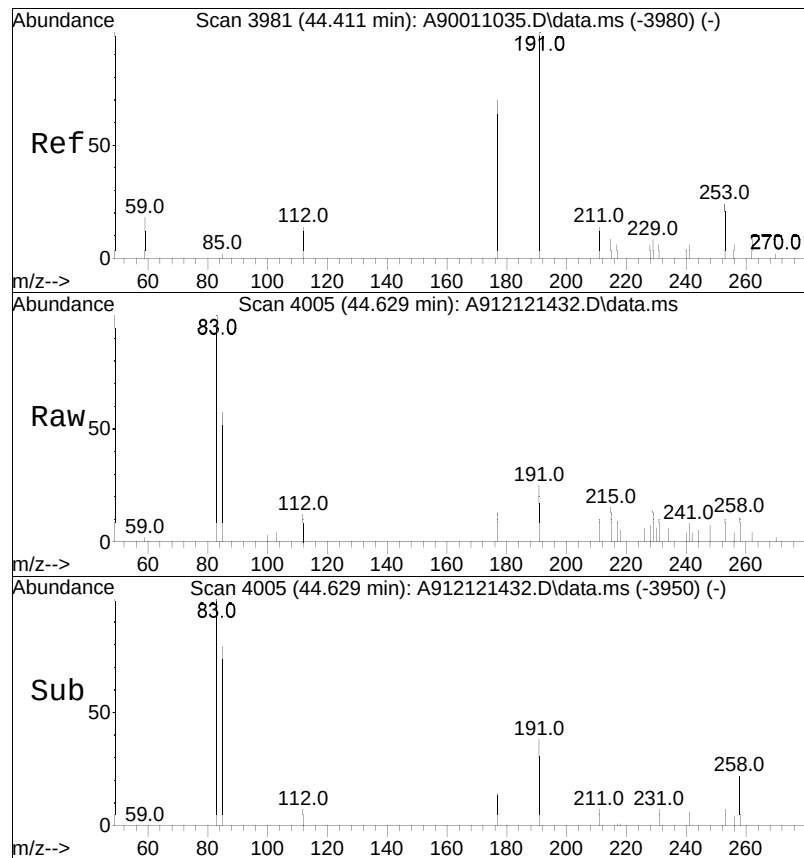




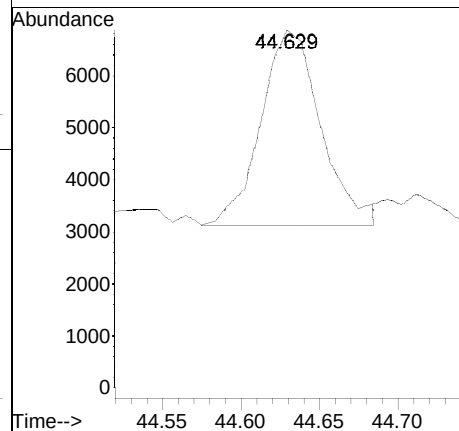
#98
 C25 Tricyclic Terpane (T6)
 Concen: 195.14 ng/ml M1
 RT: 43.342 min Scan# 3864
 Delta R.T. 0.037 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

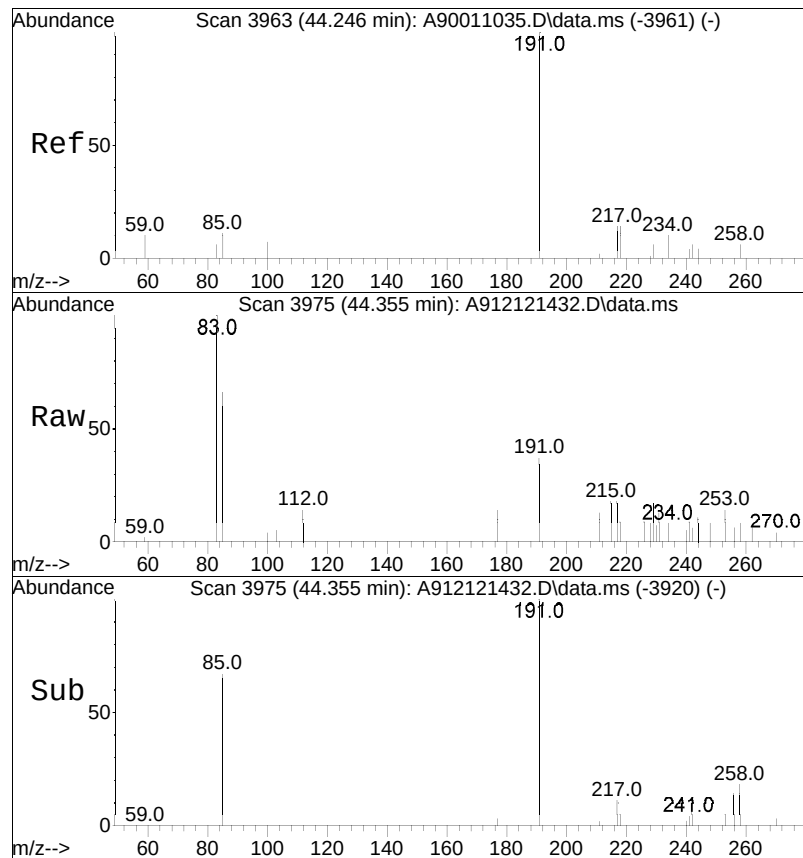
Tgt Ion:191 Resp: 25051



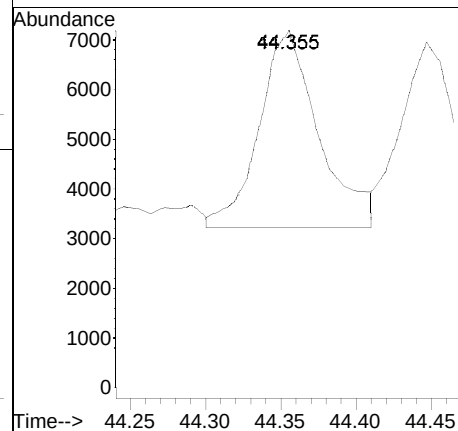


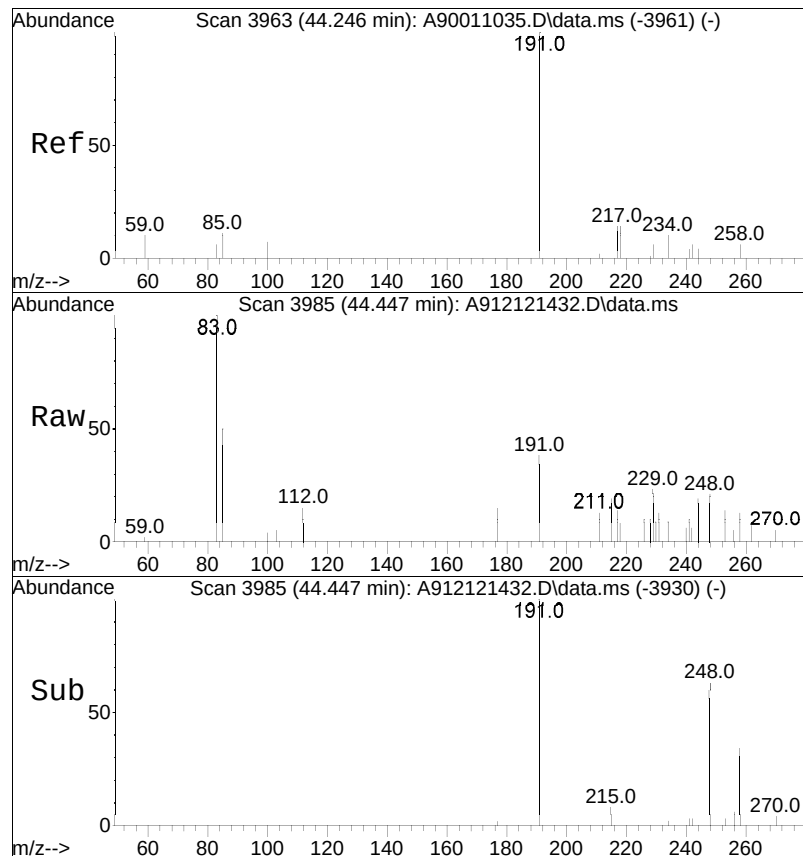
#99
 C24 Tetracyclic Terpane (T6a)
 Concen: 77.75 ng/ml
 RT: 44.629 min Scan# 4005
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:191 Resp: 9981



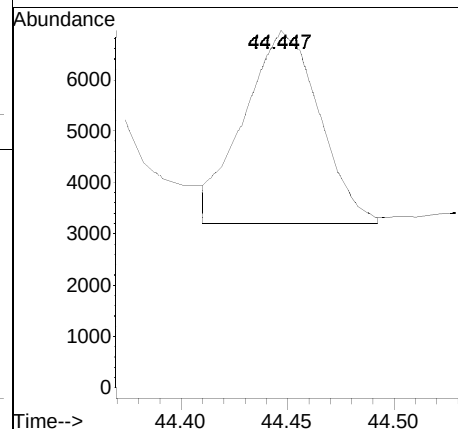


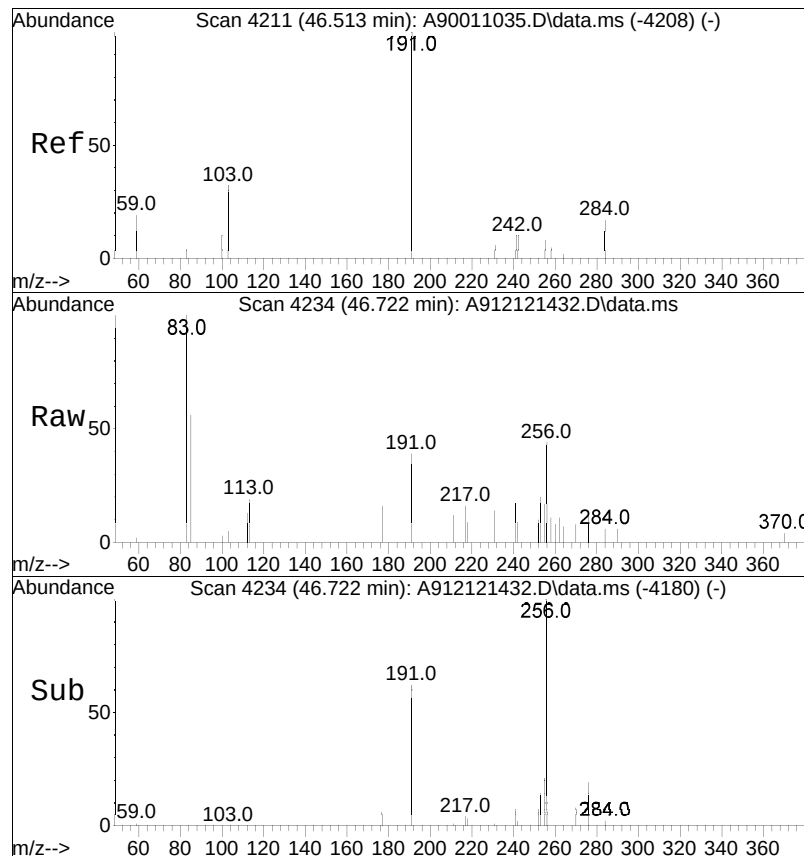
#100
C26 Tricyclic Terpane-22S (T6b)
Concen: 85.19 ng/ml M4
RT: 44.355 min Scan# 3975
Delta R.T. 0.000 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm
Tgt Ion:191 Resp: 10936





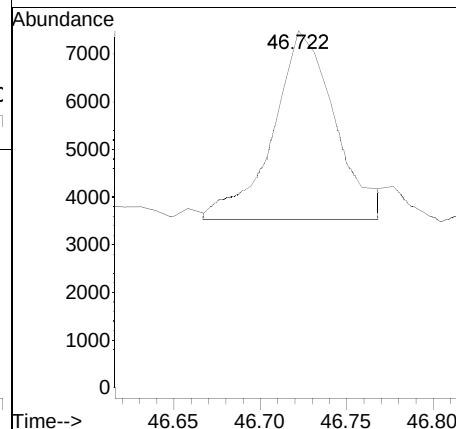
#101
 C26 Tricyclic Terpane-22R (T6c)
 Concen: 70.93 ng/ml M4
 RT: 44.447 min Scan# 3985
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:191 Resp: 9106

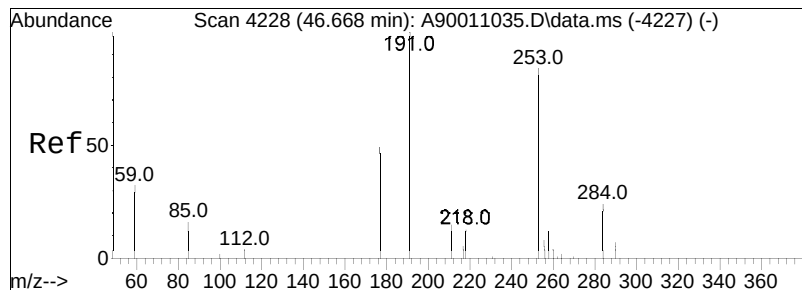




#102
 C28 Tricyclic Terpane-22S (T7)
 Concen: 76.85 ng/ml M4
 RT: 46.722 min Scan# 4234
 Delta R.T. -0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

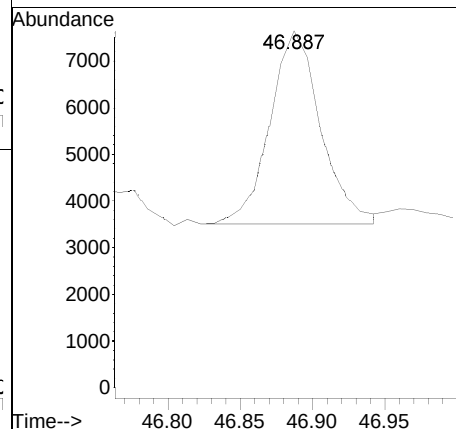
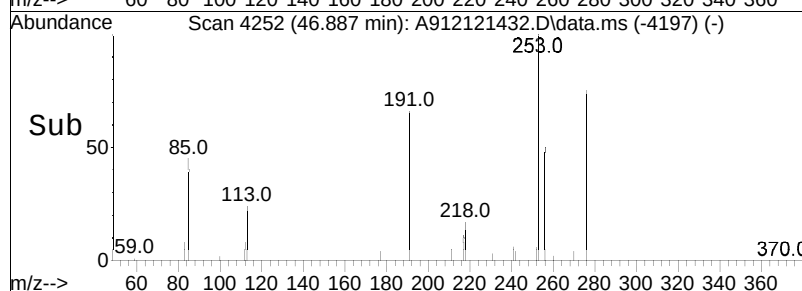
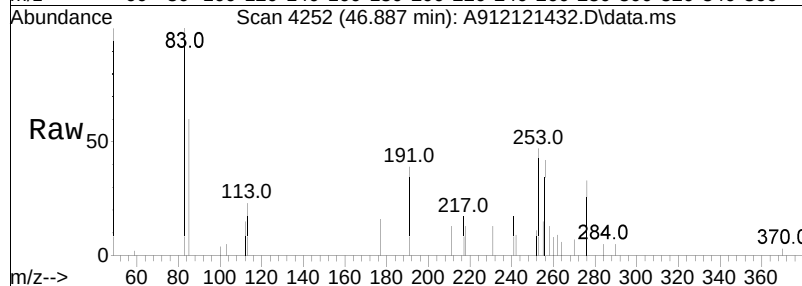
Tgt Ion:191 Resp: 9866

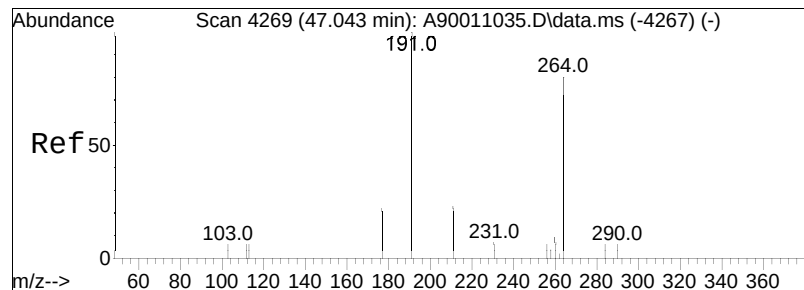




#103
C28 Tricyclic Terpane-22R (T8)
Concen: 77.87 ng/ml
RT: 46.887 min Scan# 4252
Delta R.T. 0.000 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm

Tgt Ion:191 Resp: 9997





#104

C29 Tricyclic Terpane-22S (T9)

Concen: 91.51 ng/ml

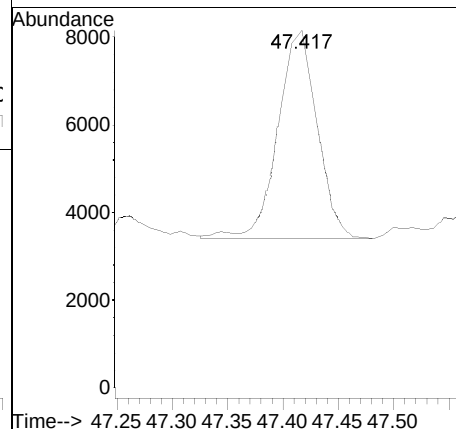
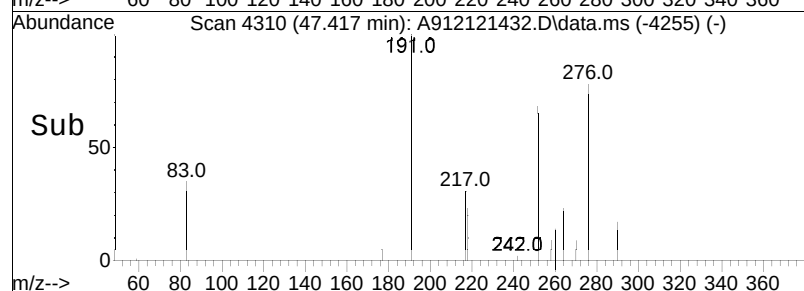
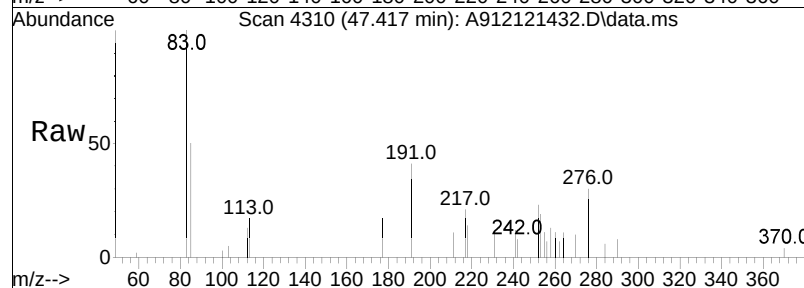
RT: 47.417 min Scan# 4310

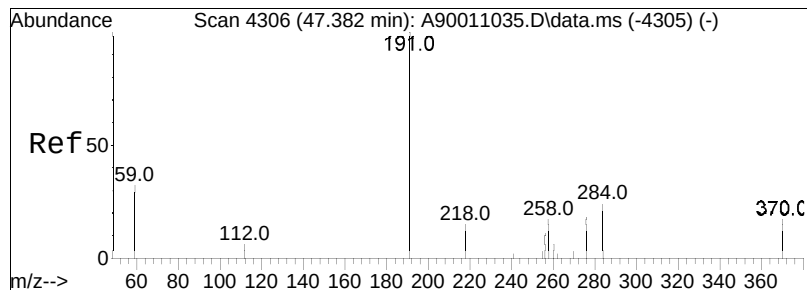
Delta R.T. 0.000 min

Lab File: A912121432.D

Acq: 15 Dec 2014 7:57 pm

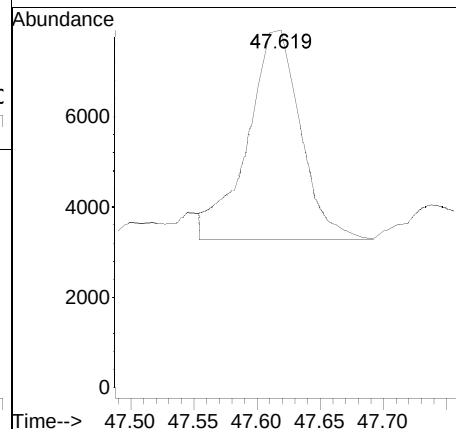
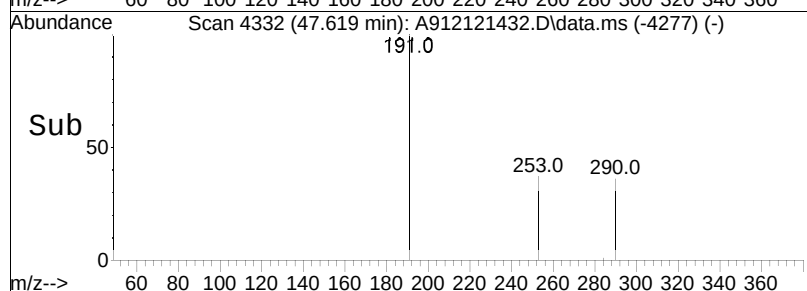
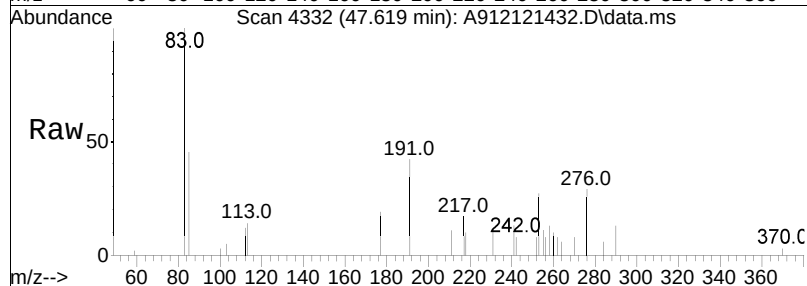
Tgt Ion:191 Resp: 11748

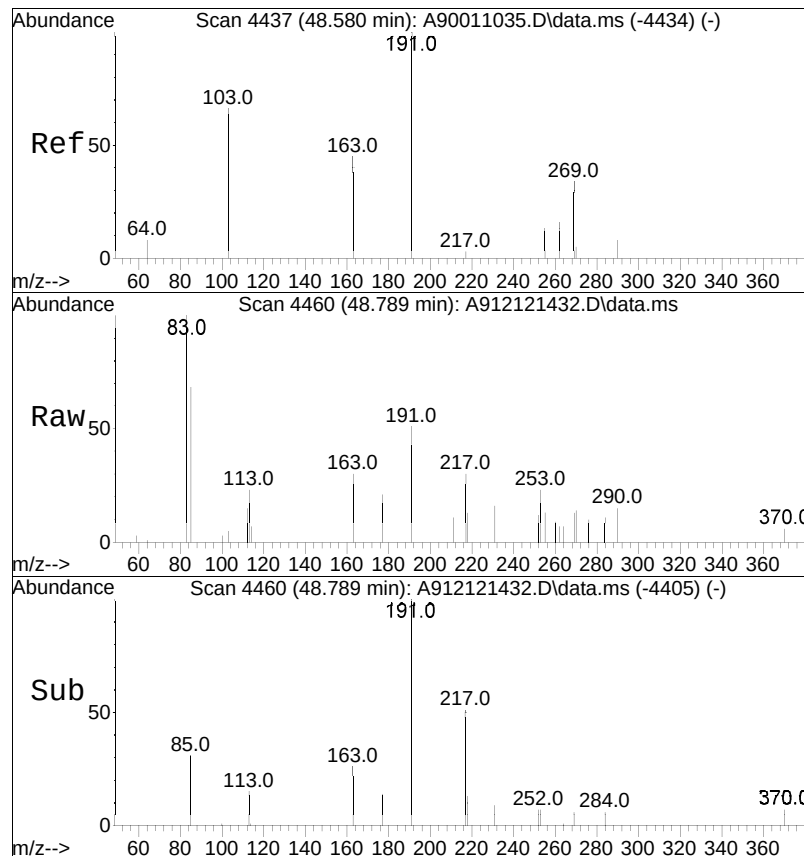




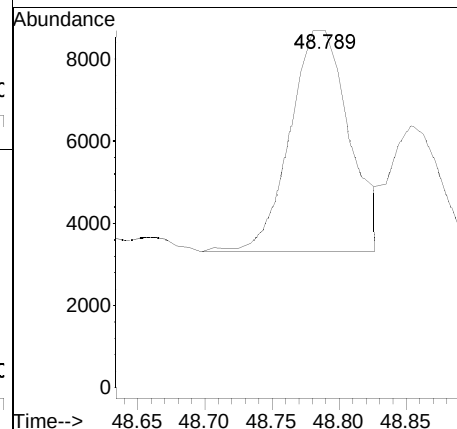
#105
C29 Tricyclic Terpane-22R (T10)
Concen: 103.83 ng/ml M4
RT: 47.619 min Scan# 4332
Delta R.T. 0.000 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm

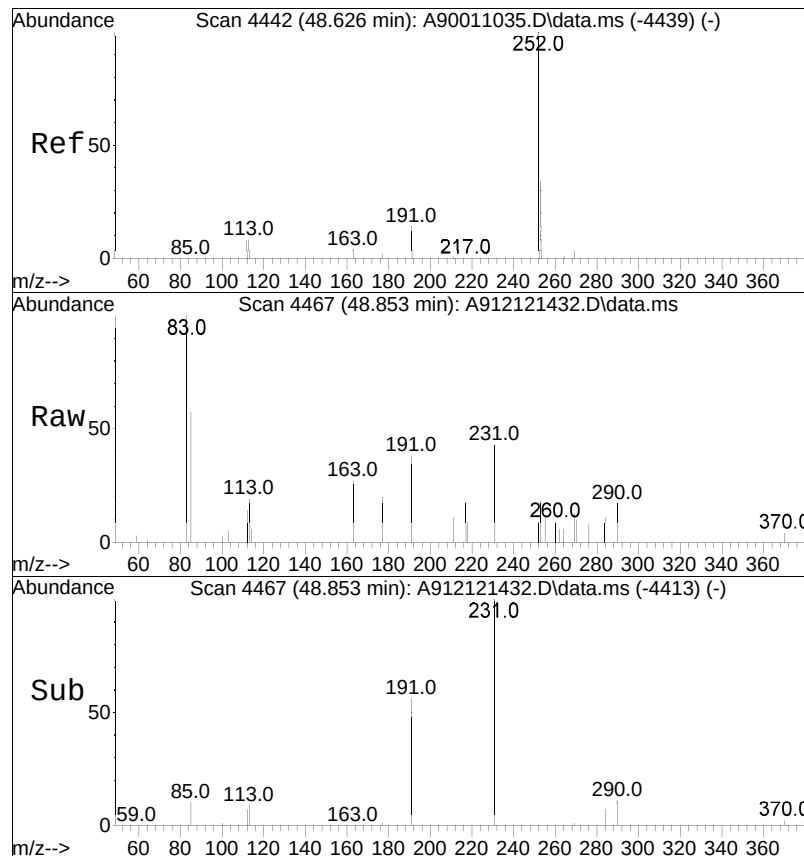
Tgt Ion:191 Resp: 13329





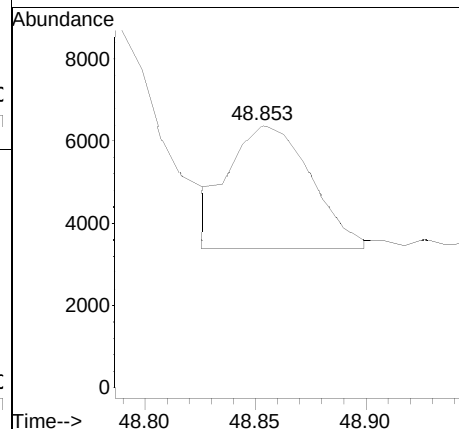
#106
 18a-22,29,30-Trisnorneohopane-
 Concen: 129.32 ng/ml
 RT: 48.789 min Scan# 4460
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:191 Resp: 16601

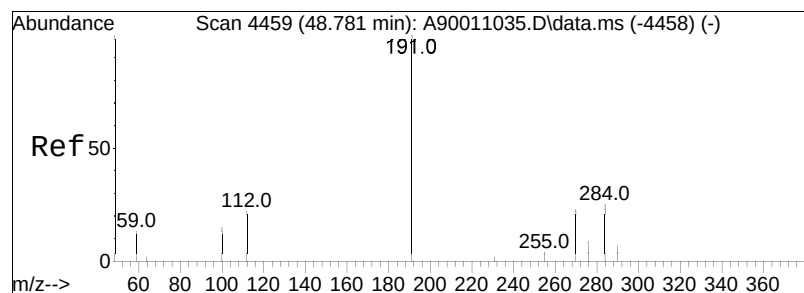




#107
C30 Tricyclic Terpane-22S
Concen: 59.12 ng/mL M4
RT: 48.853 min Scan# 4467
Delta R.T. -0.009 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm

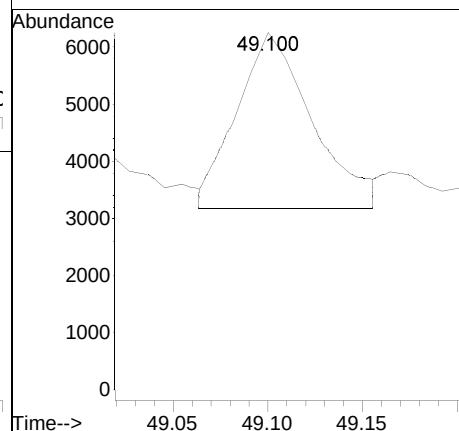
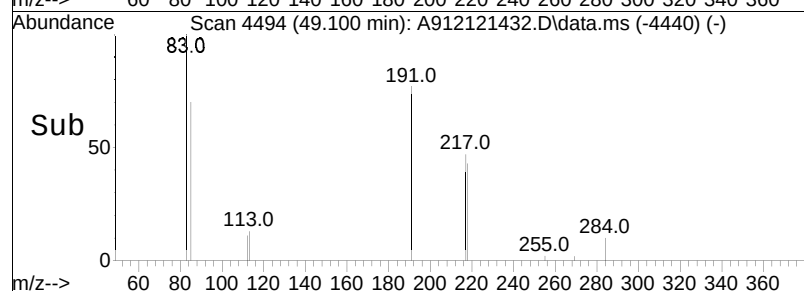
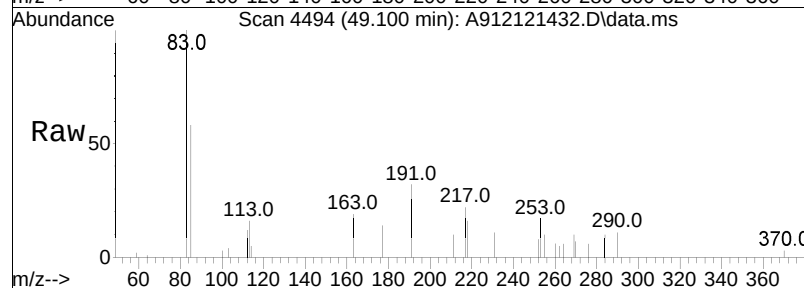
Tgt Ion:191 Resp: 7589

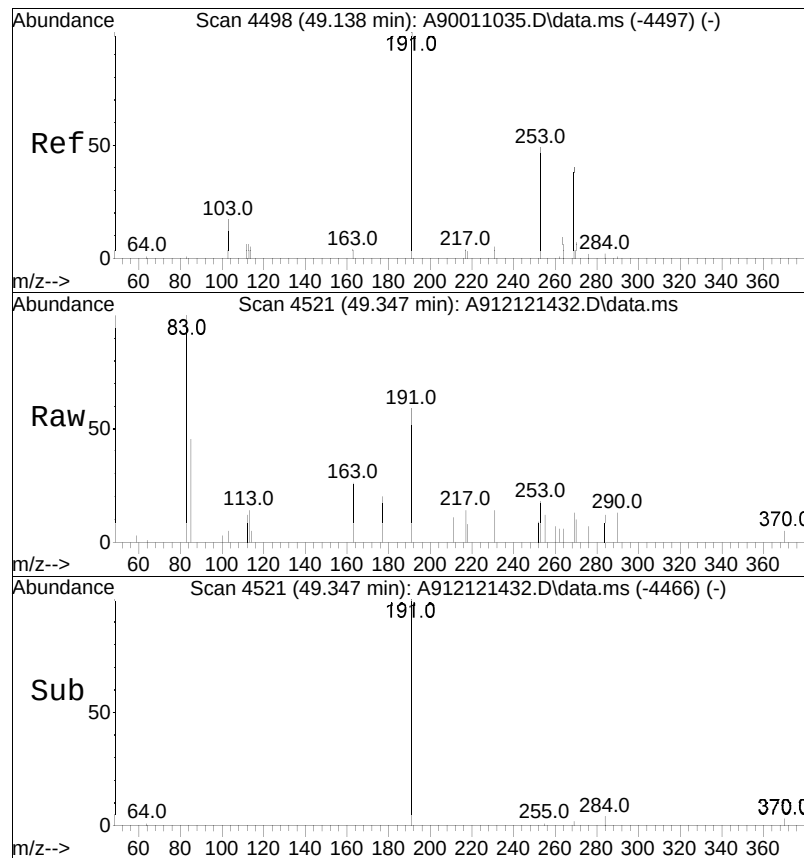




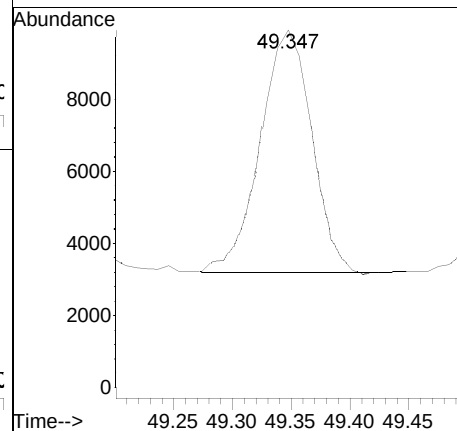
#108
 C30 Tricyclic Terpane-22R
 Concen: 65.81 ng/mL M4
 RT: 49.100 min Scan# 4494
 Delta R.T. -0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

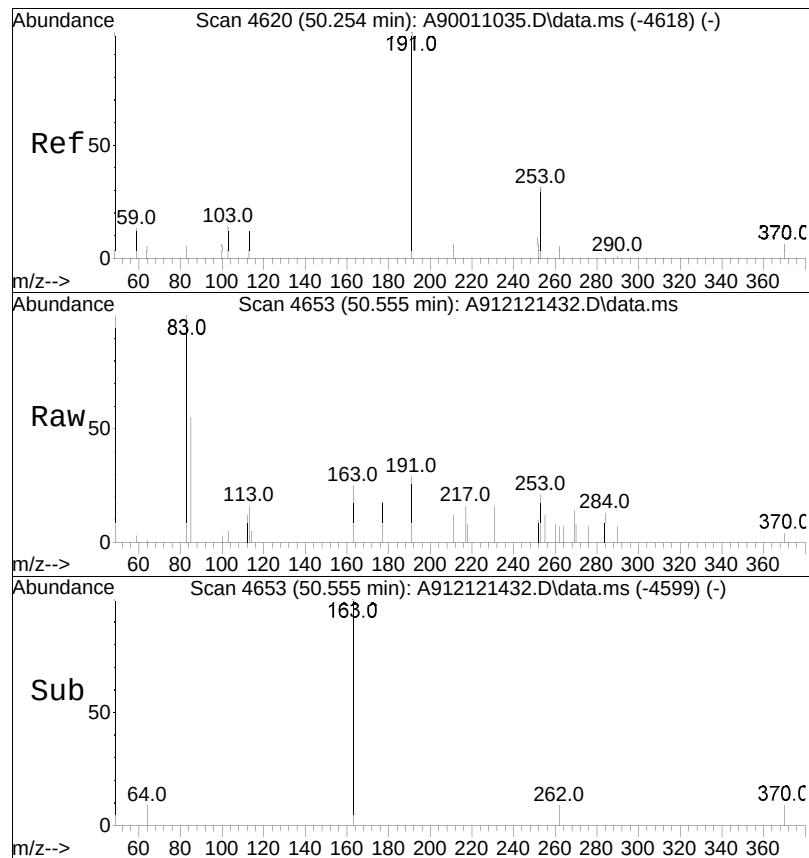
Tgt Ion:191 Resp: 8448



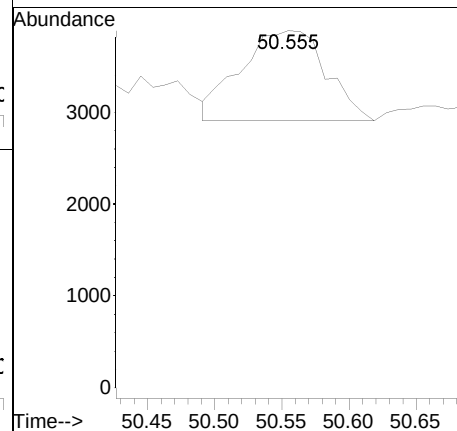


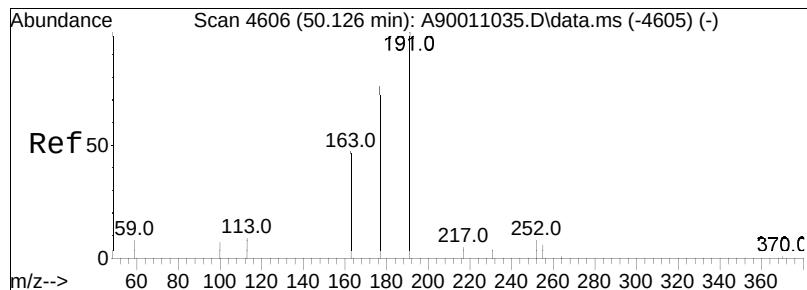
#109
 17a(H)-22,29,30-Trisnorhopane-
 Concen: 159.04 ng/ml
 RT: 49.347 min Scan# 4521
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:191 Resp: 20417





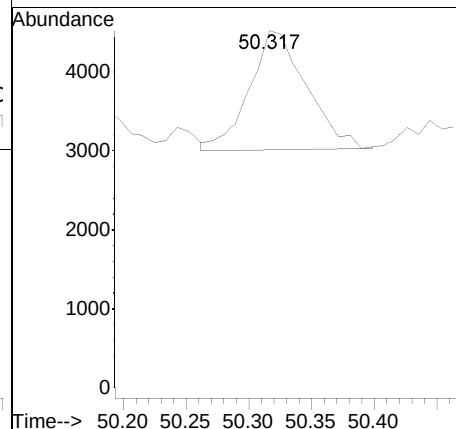
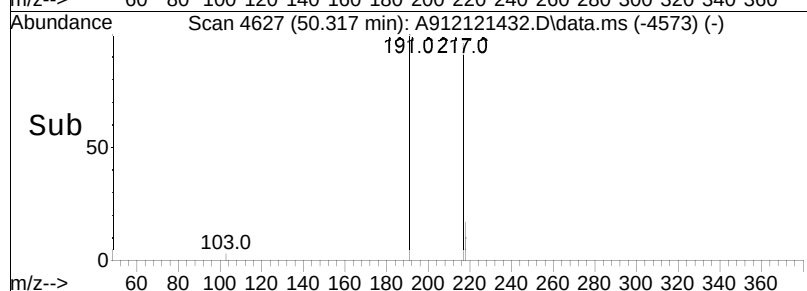
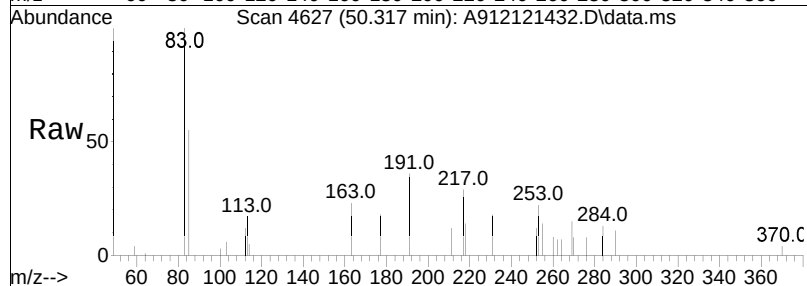
#110
 17a/b, 21b/a 28,30-Bisnorhopane
 Concen: 33.64 ng/ml
 RT: 50.555 min Scan# 4653
 Delta R.T. -0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:191 Resp: 4318

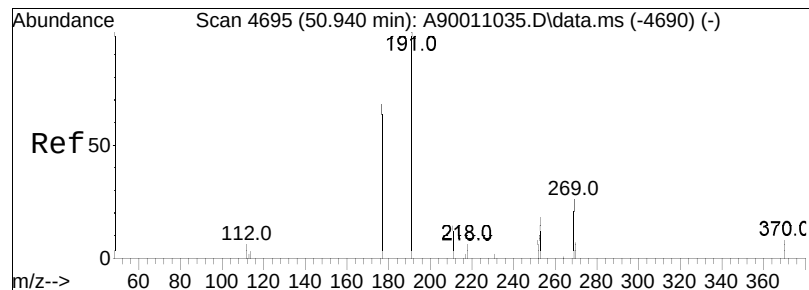




#111
 17a(H),21b(H)-25-Norhopane (T1
 Concen: 36.61 ng/ml
 RT: 50.317 min Scan# 4627
 Delta R.T. -0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

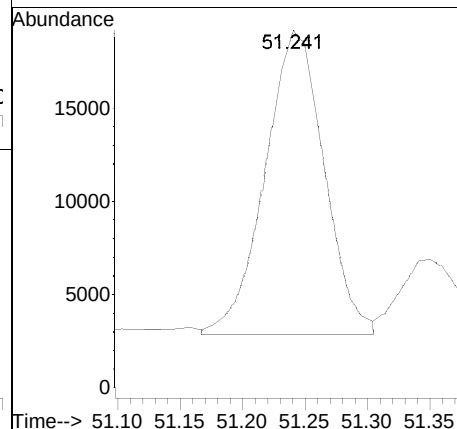
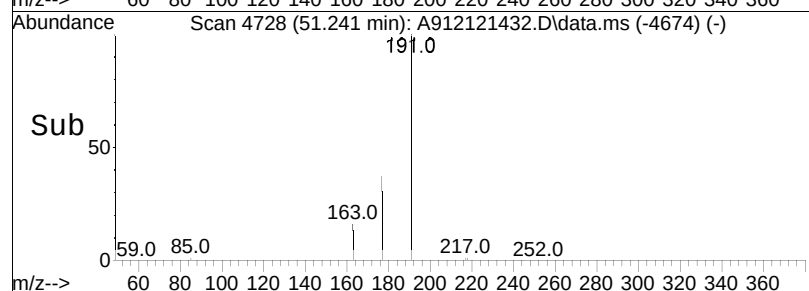
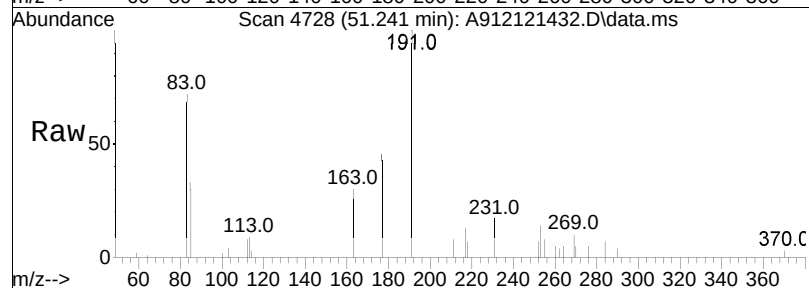
Tgt Ion:191 Resp: 4700

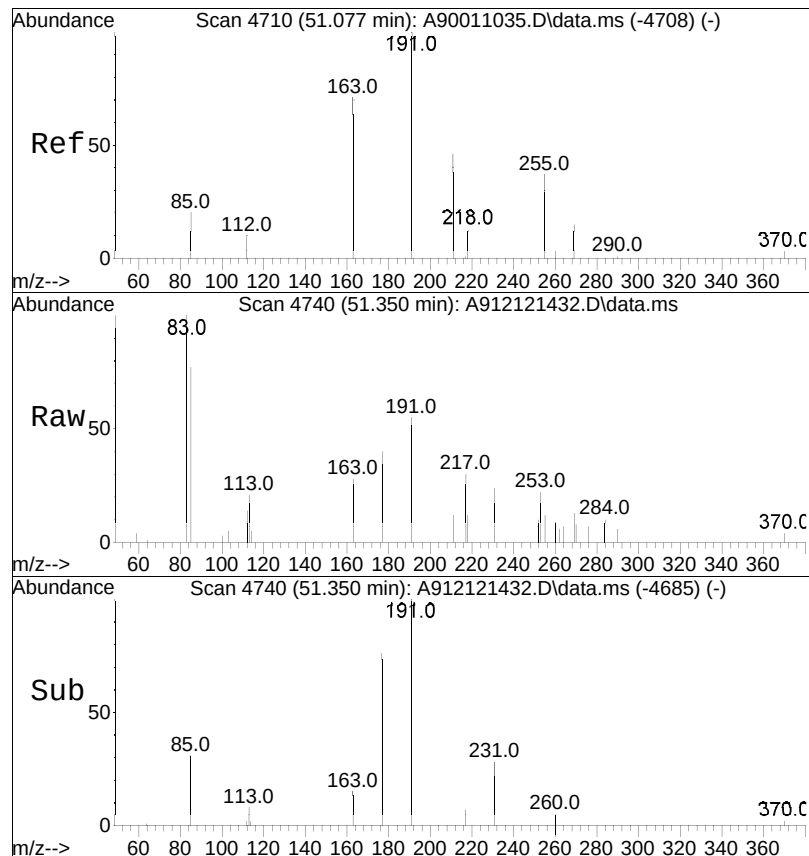




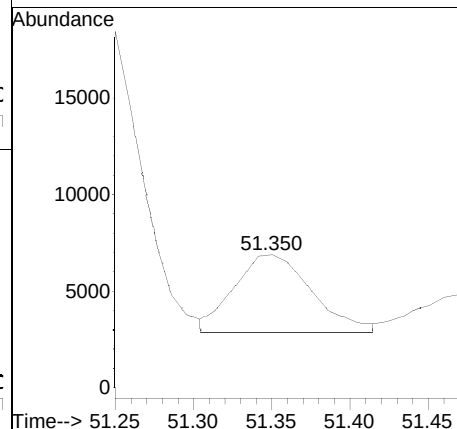
#112
 30-Norhopane (T15)
 Concen: 416.79 ng/ml M4
 RT: 51.241 min Scan# 4728
 Delta R.T. -0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

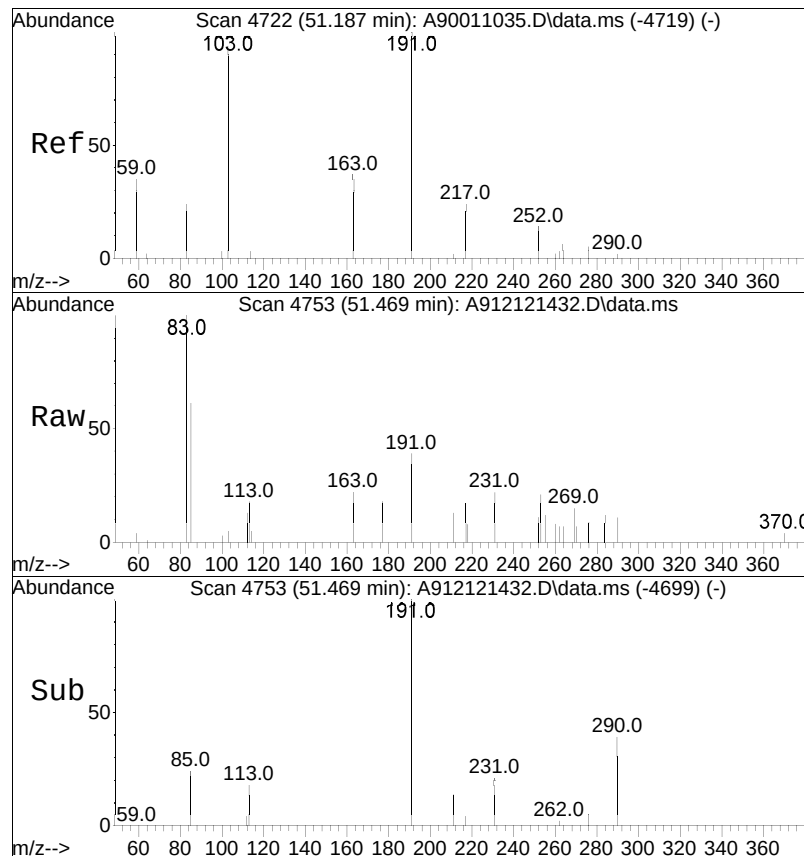
Tgt Ion:191 Resp: 53505





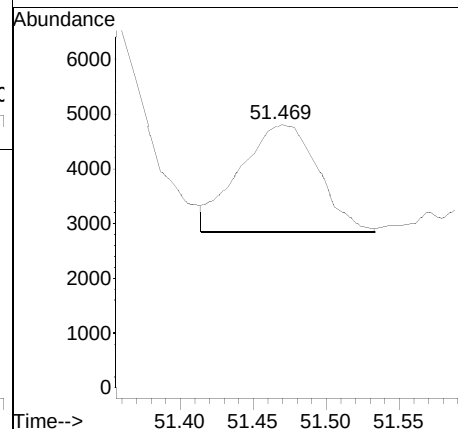
#113
 18a(H)-30-Norneohopane-C29Ts (
 Concen: 106.68 ng/ml M4
 RT: 51.350 min Scan# 4740
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:191 Resp: 13695

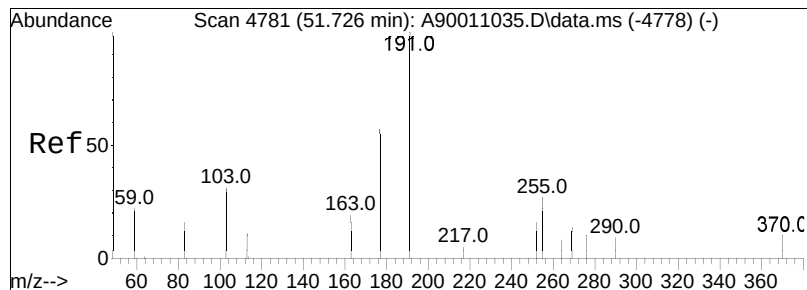




#114
 17a(H)-Diahopane (X)
 Concen: 56.51 ng/ml M4
 RT: 51.469 min Scan# 4753
 Delta R.T. -0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

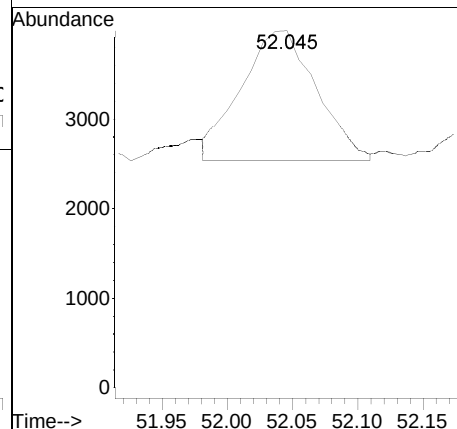
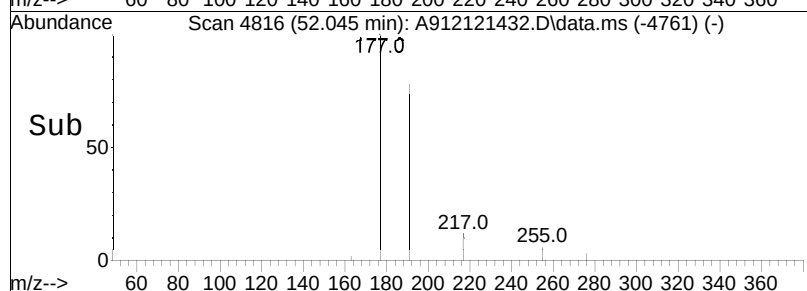
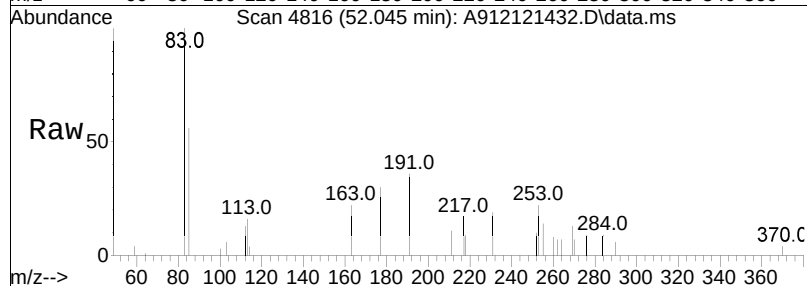
Tgt Ion:191 Resp: 7254

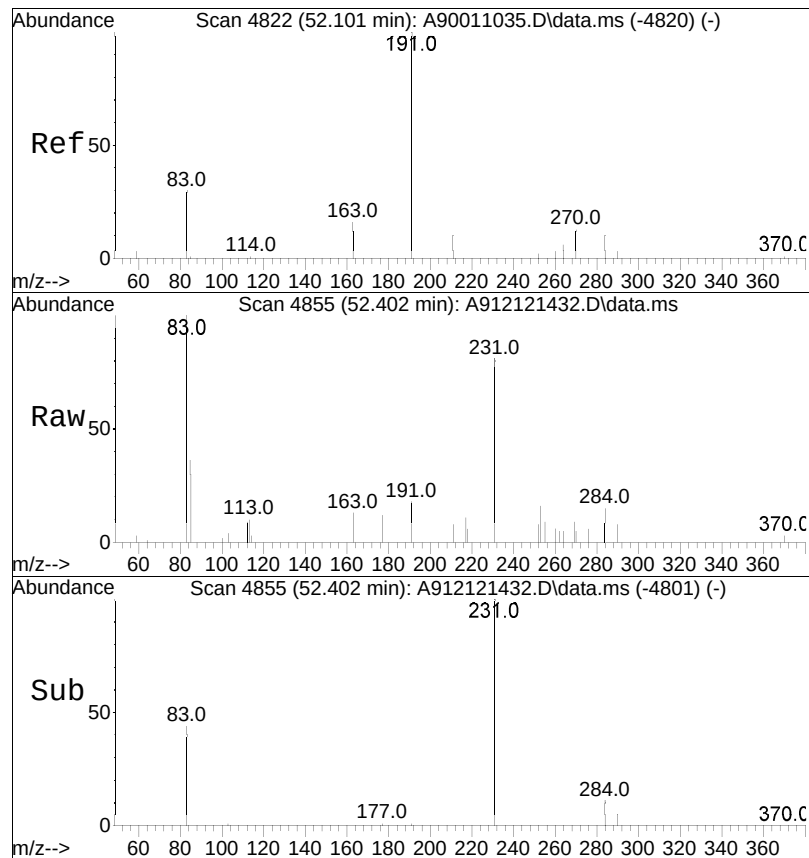




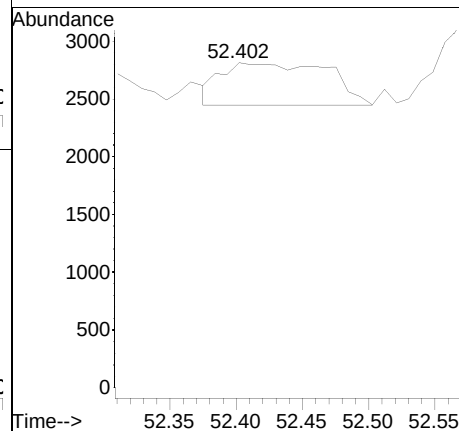
#115
 30-Normoretane (T17)
 Concen: 45.39 ng/ml M4
 RT: 52.045 min Scan# 4816
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

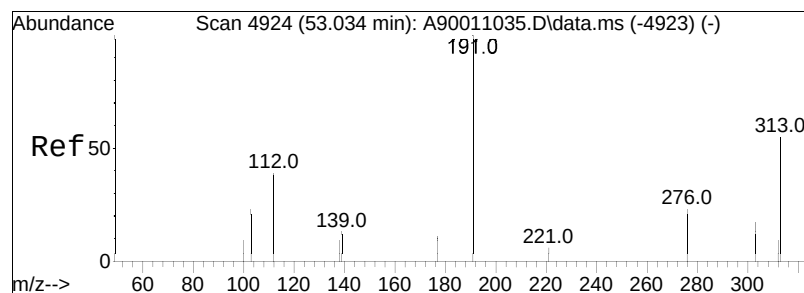
Tgt Ion:191 Resp: 5827





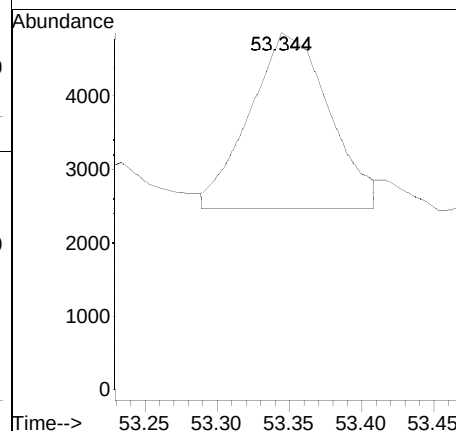
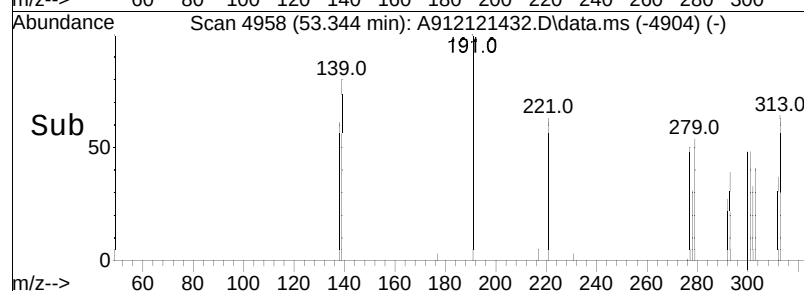
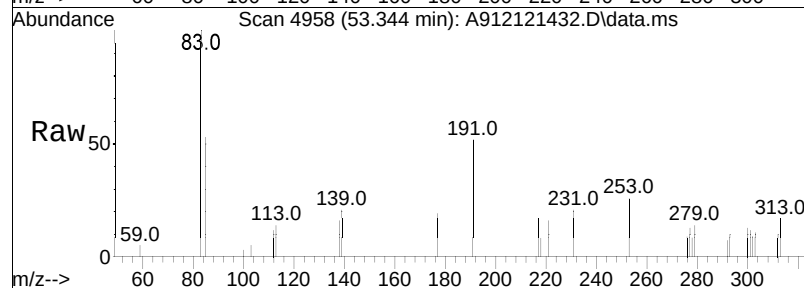
#116
 18a(H)&18b(H)-Oleananes (T18)
 Concen: 15.92 ng/ml M4
 RT: 52.402 min Scan# 4855
 Delta R.T. -0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:191 Resp: 2044

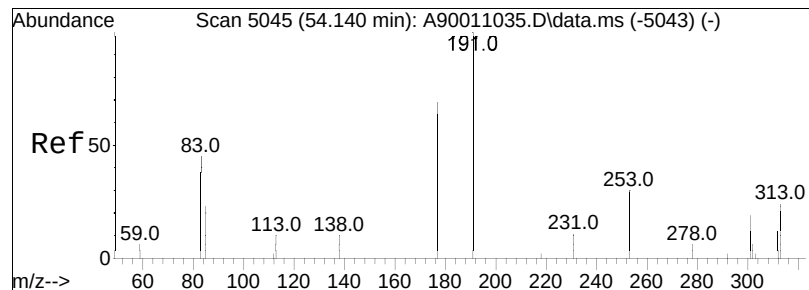




#117
 Moretane (T20)
 Concen: 70.94 ng/ml M4
 RT: 53.344 min Scan# 4958
 Delta R.T. -0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

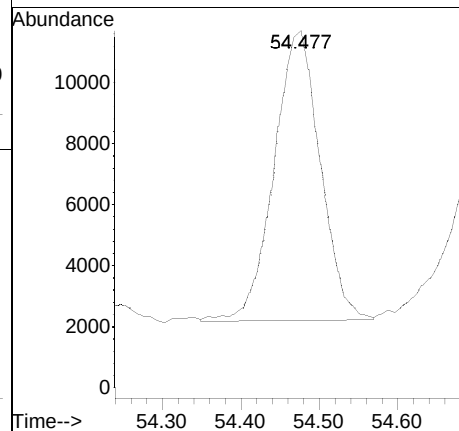
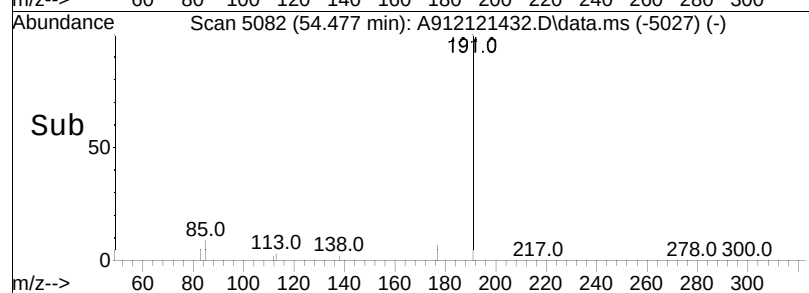
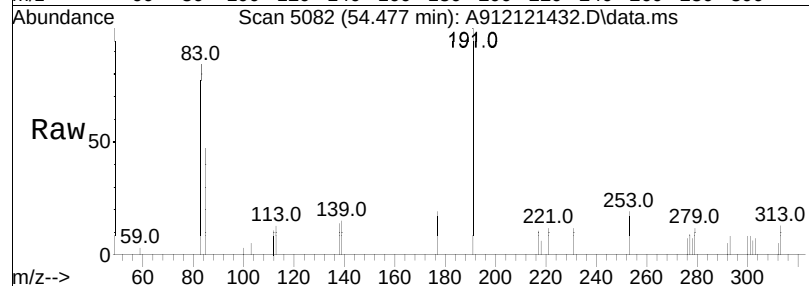
Tgt Ion:191 Resp: 9107

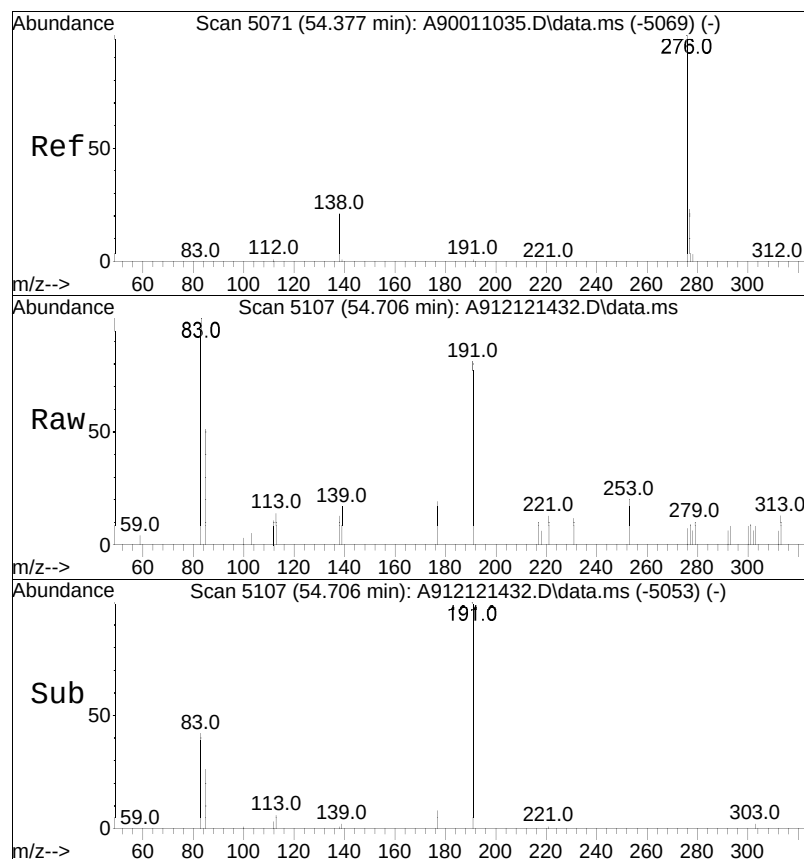




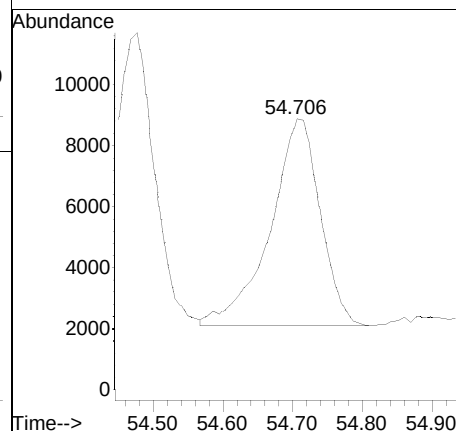
#118
 30-Homohopane-22S (T21)
 Concen: 301.29 ng/ml
 RT: 54.477 min Scan# 5082
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

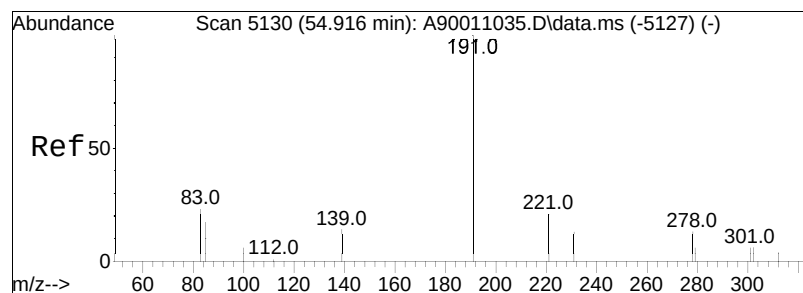
Tgt Ion:191 Resp: 38678





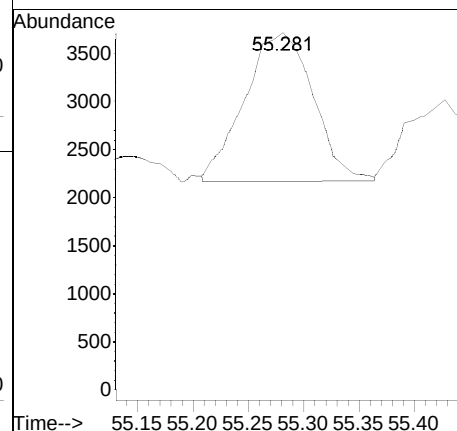
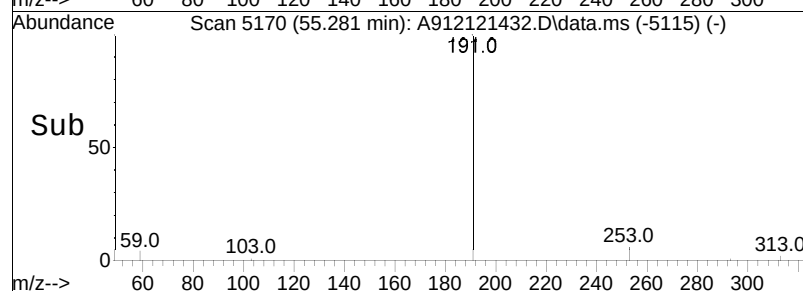
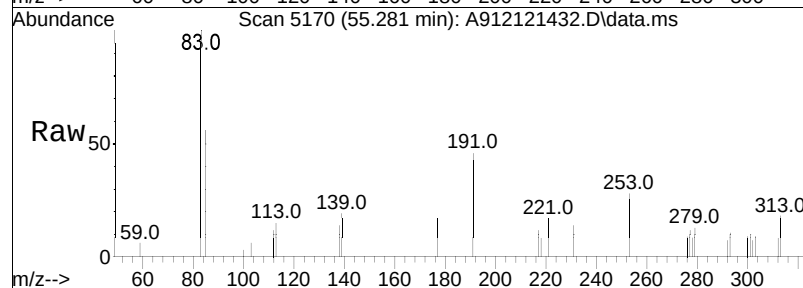
#119
30-Homohopane-22R (T22)
Concen: 261.97 ng/ml
RT: 54.706 min Scan# 5107
Delta R.T. -0.009 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm
Tgt Ion:191 Resp: 33630

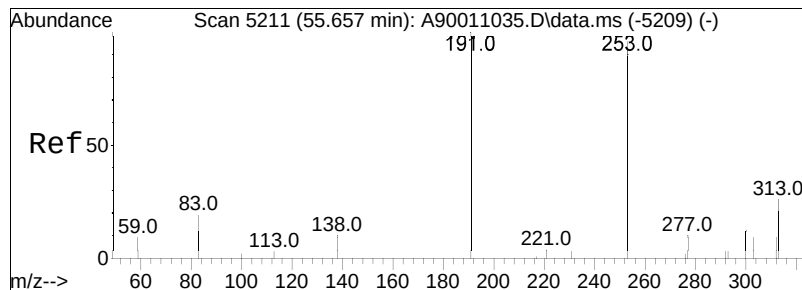




#120
 Gammacerane/C32-diahopane
 Concen: 51.61 ng/mL
 RT: 55.281 min Scan# 5170
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

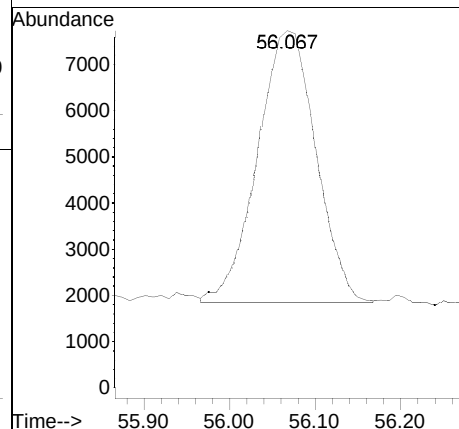
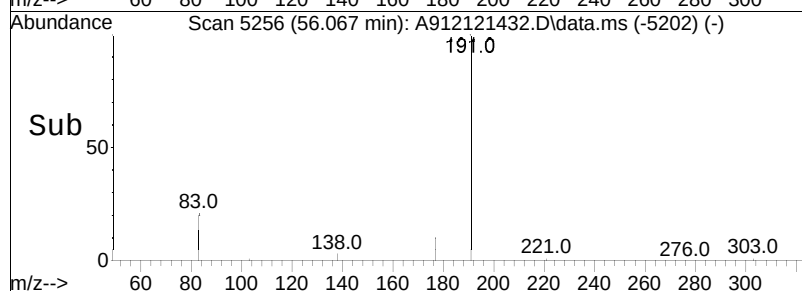
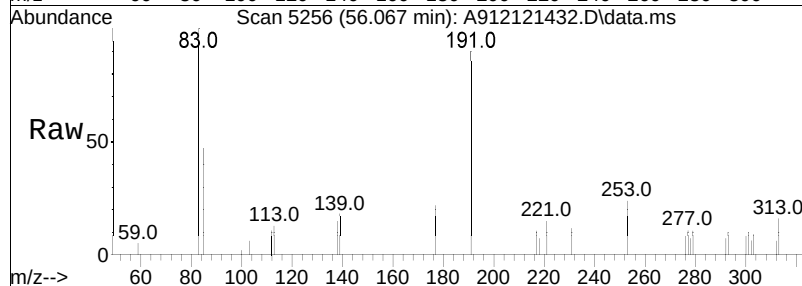
Tgt Ion:191 Resp: 6625

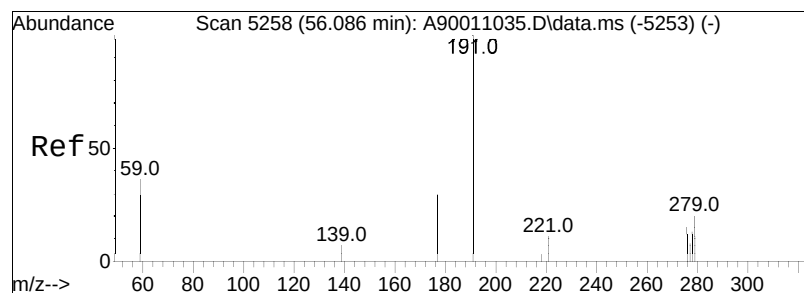




#121
 30,31-Bishomohopane-22S (T26)
 Concen: 216.15 ng/ml
 RT: 56.067 min Scan# 5256
 Delta R.T. -0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

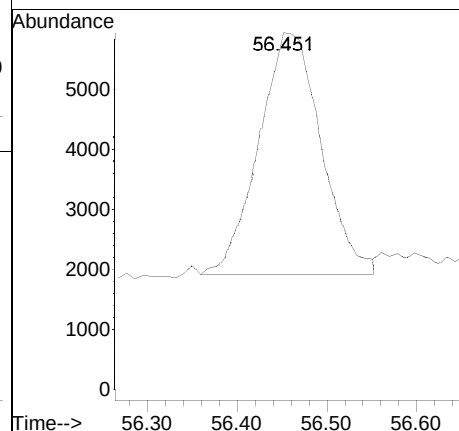
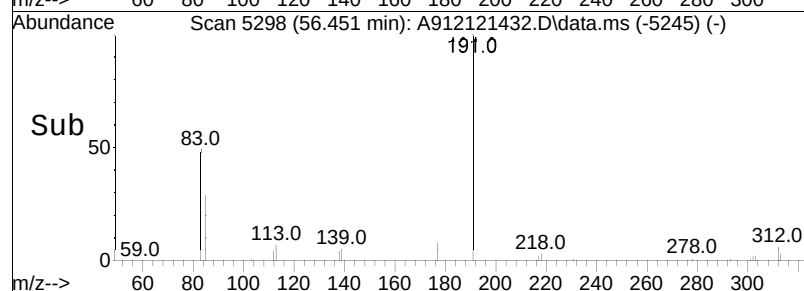
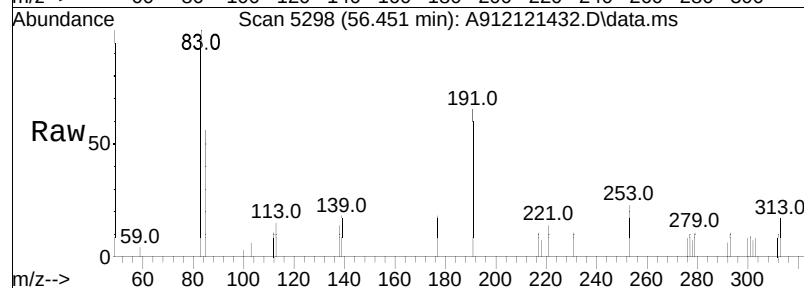
Tgt Ion:191 Resp: 27749

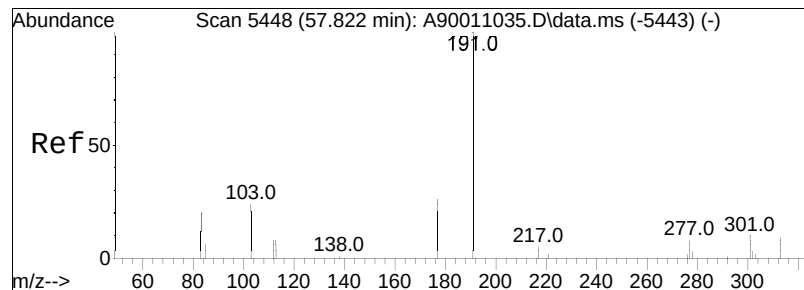




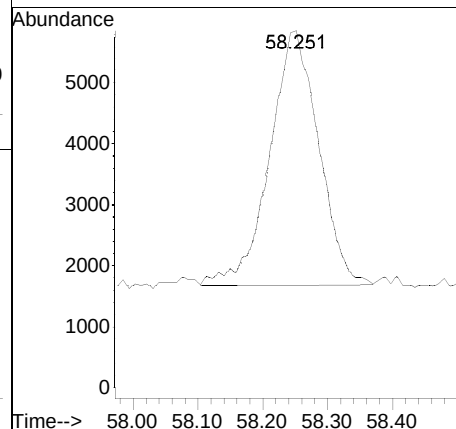
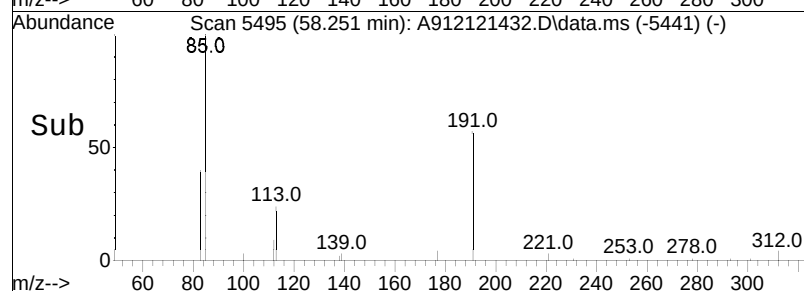
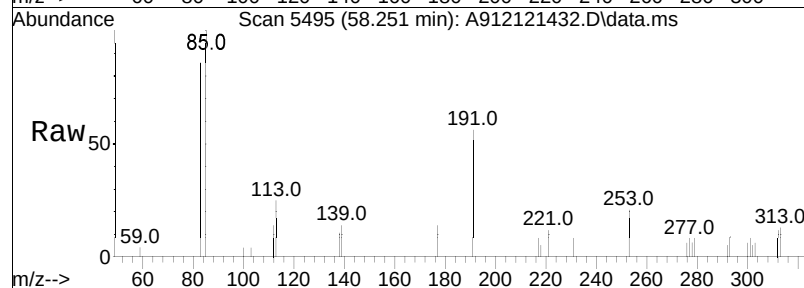
#122
 30,31-Bishomohopane-22R (T27)
 Concen: 150.75 ng/ml
 RT: 56.451 min Scan# 5298
 Delta R.T. -0.018 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

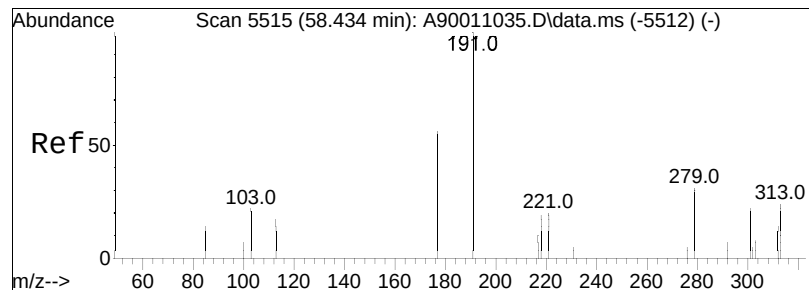
Tgt Ion:191 Resp: 19353





#123
30,31-Trishomohopane-22S (T30)
Concen: 169.02 ng/ml
RT: 58.251 min Scan# 5495
Delta R.T. -0.009 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm
Tgt Ion:191 Resp: 21698





#124

30,31-Trishomohopane-22R (T31)

Concen: 109.11 ng/ml

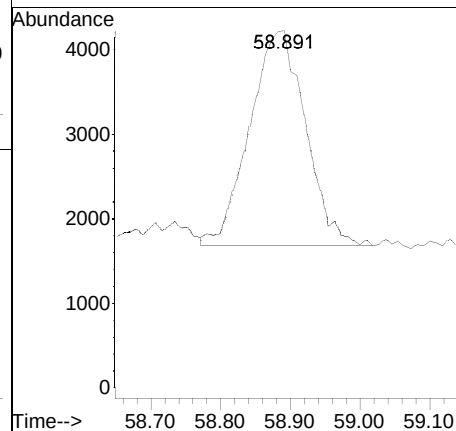
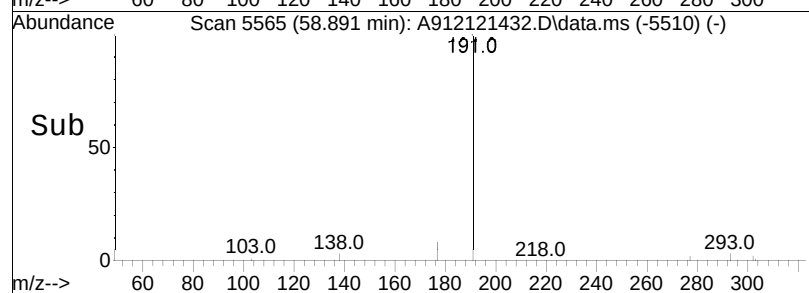
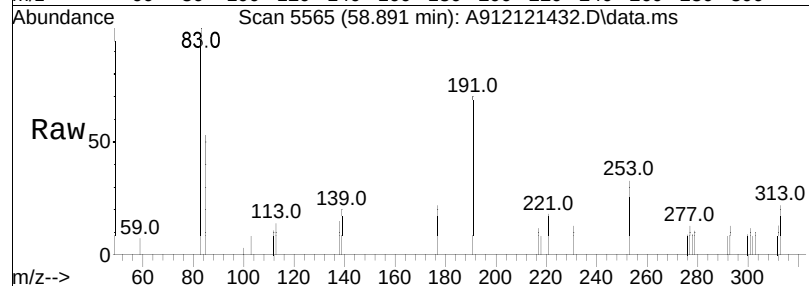
RT: 58.891 min Scan# 5565

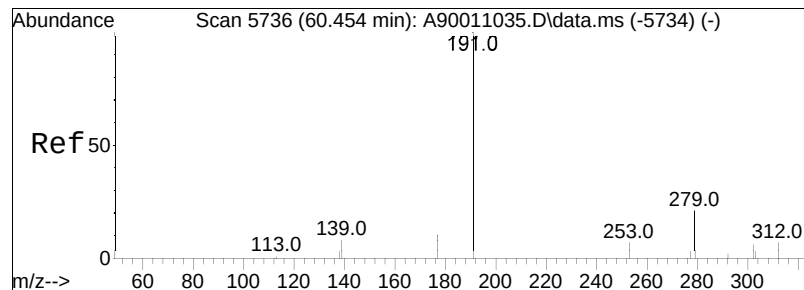
Delta R.T. 0.000 min

Lab File: A912121432.D

Acq: 15 Dec 2014 7:57 pm

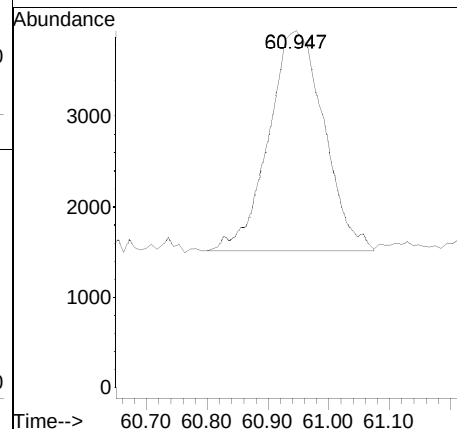
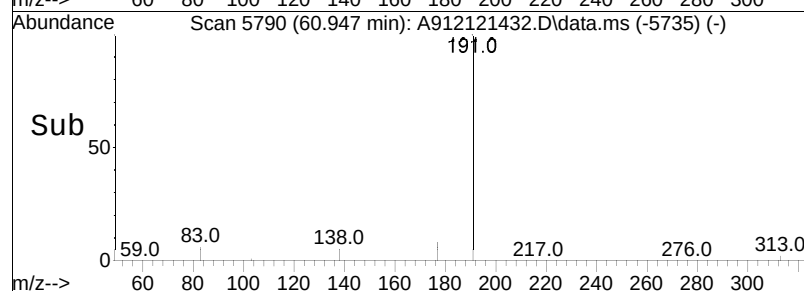
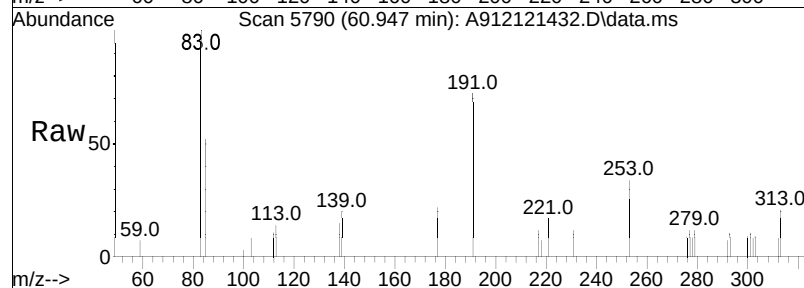
Tgt Ion:191 Resp: 14007

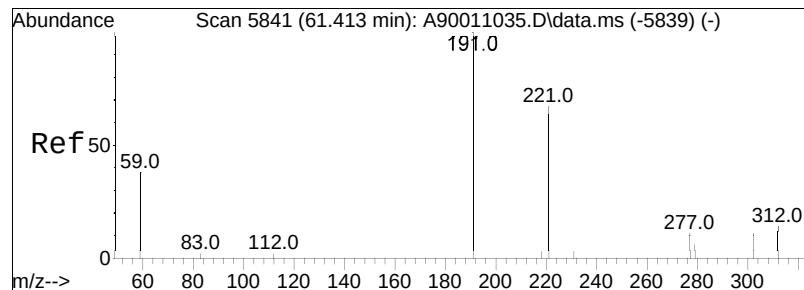




#125
Tetrakishomohopane-22S (T32)
Concen: 119.11 ng/ml
RT: 60.947 min Scan# 5790
Delta R.T. 0.000 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm

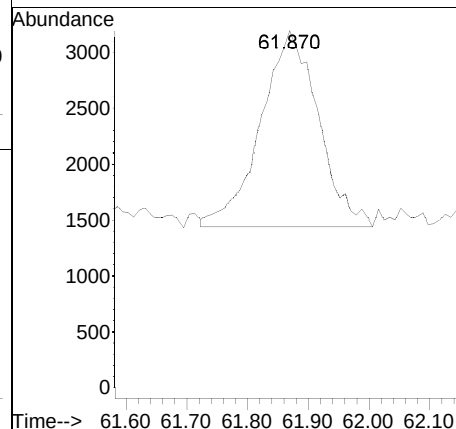
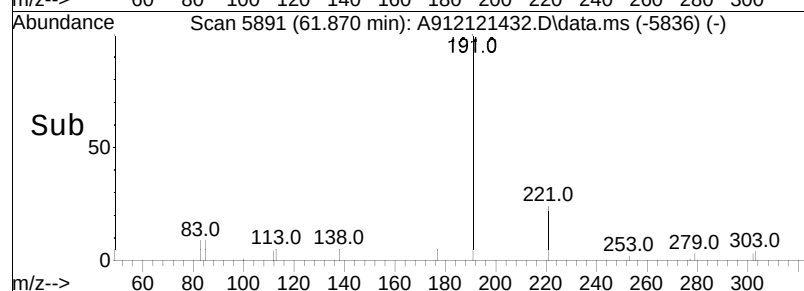
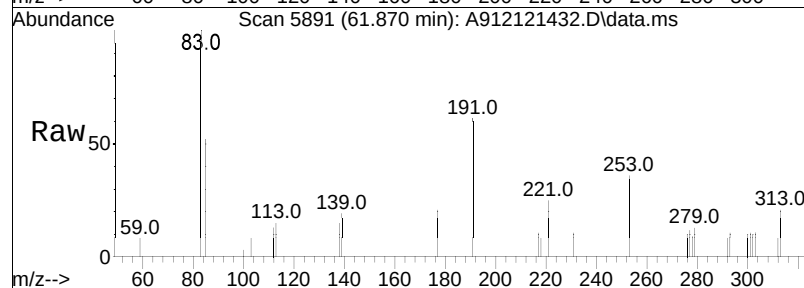
Tgt Ion:191 Resp: 15291

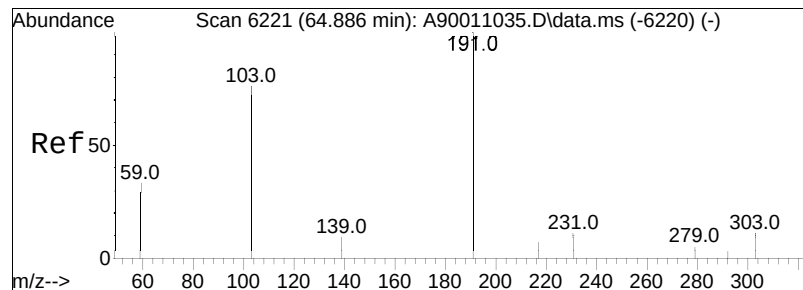




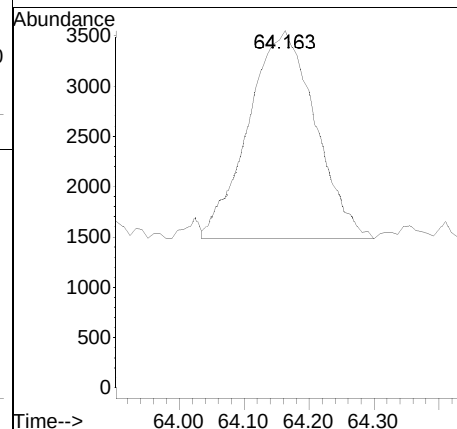
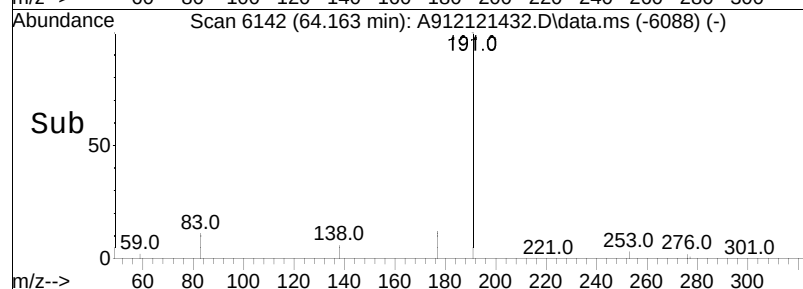
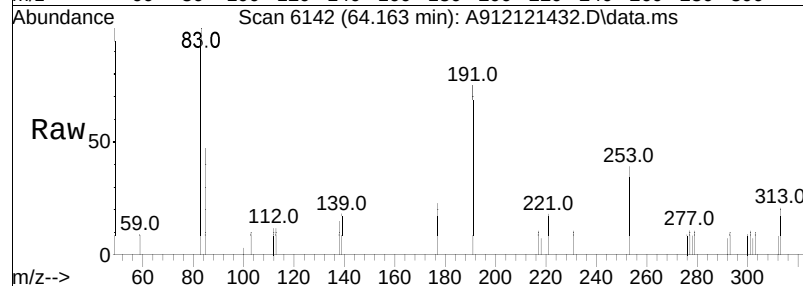
#126
 Tetrakishomohopane-22R (T33)
 Concen: 89.28 ng/ml
 RT: 61.870 min Scan# 5891
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

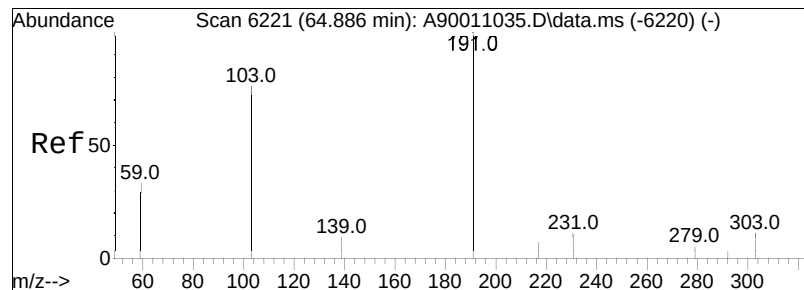
Tgt Ion:191 Resp: 11461





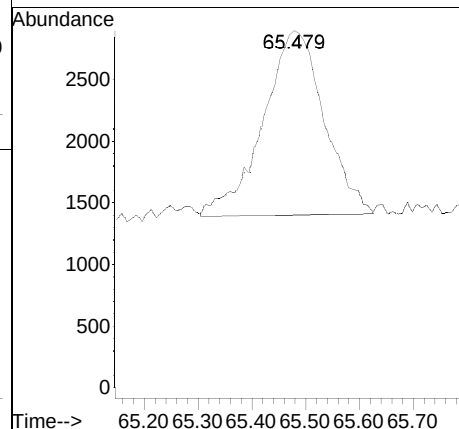
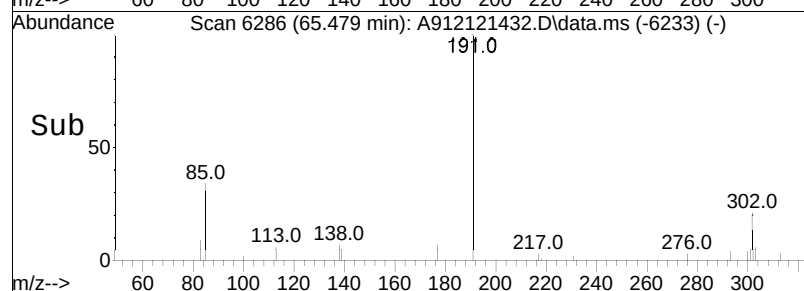
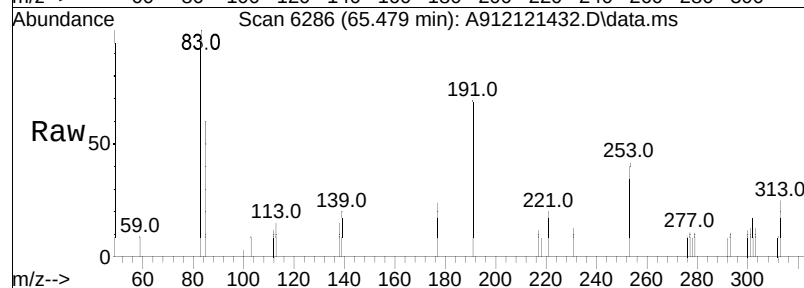
#127
 Pentakishomohopane-22S (T34)
 Concen: 114.47 ng/ml
 RT: 64.163 min Scan# 6142
 Delta R.T. -0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:191 Resp: 14695

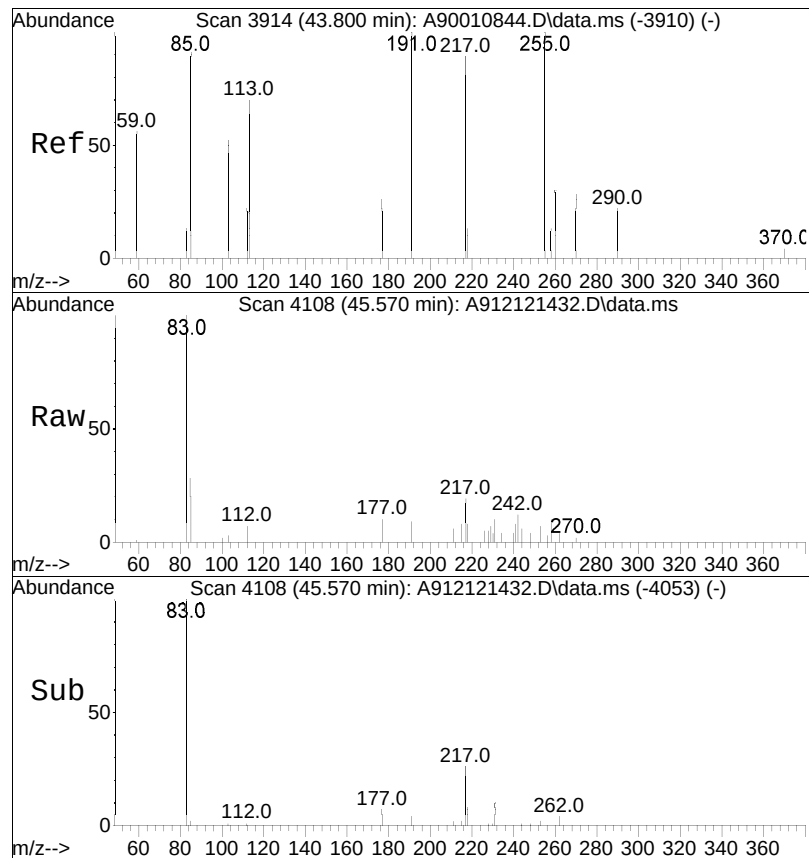




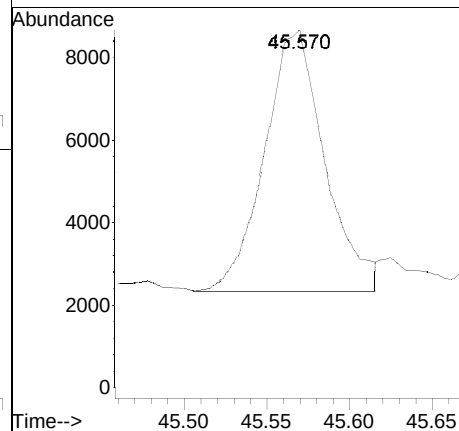
#128
 Pentakishomohopane-22R (T35)
 Concen: 91.33 ng/ml
 RT: 65.479 min Scan# 6286
 Delta R.T. -0.018 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

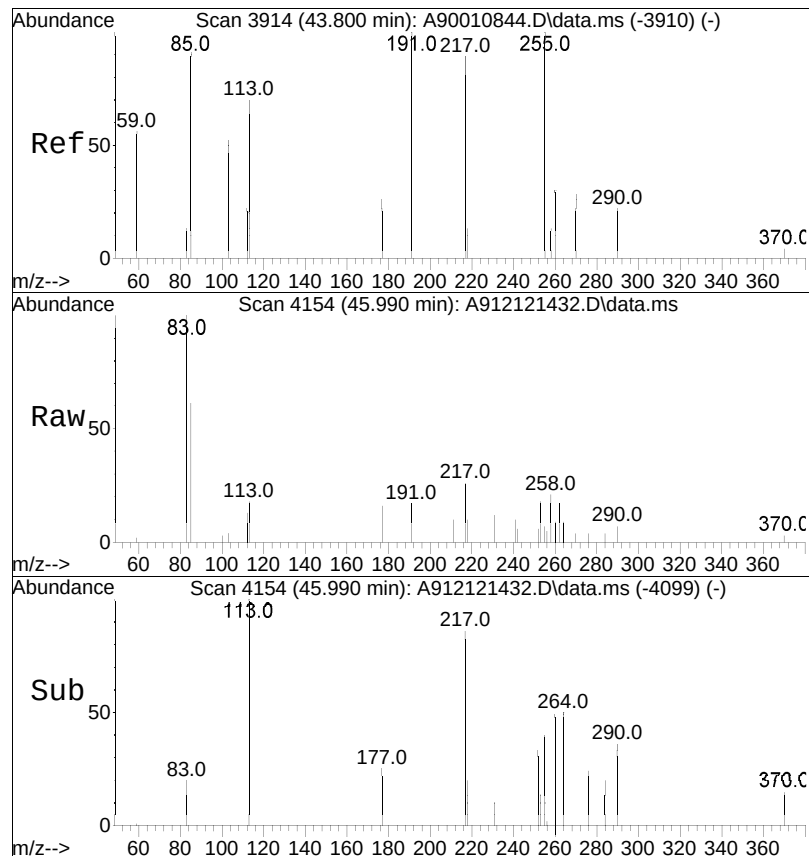
Tgt Ion:191 Resp: 11725



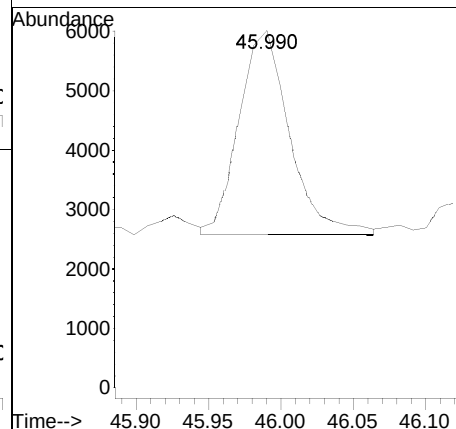


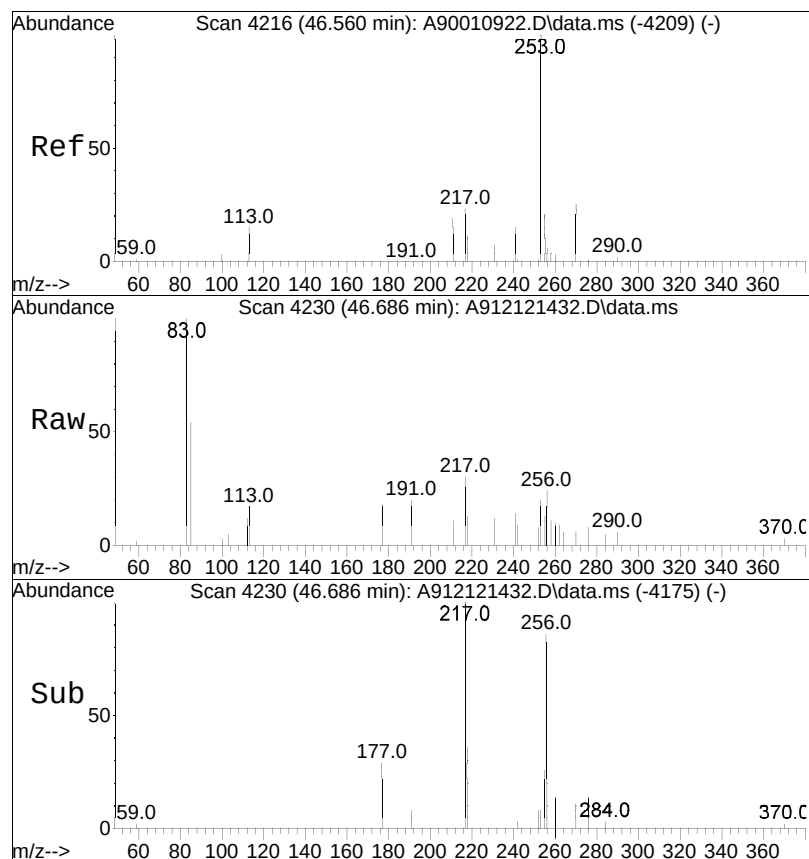
#130
 13b(H),17a(H)-20S-Diacholestane
 Concen: 242.66 ng/ml M4
 RT: 45.570 min Scan# 4108
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:217 Resp: 16058





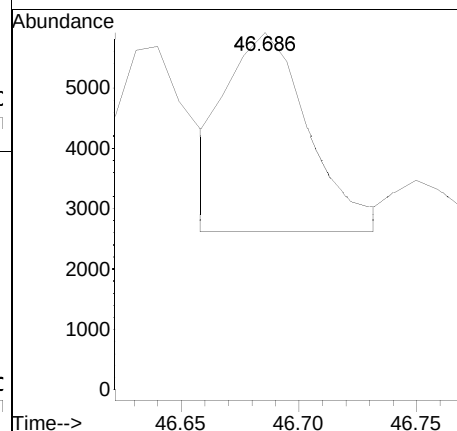
#131
13b(H),17a(H)-20R-Diacholestan
Concen: 126.03 ng/ml
RT: 45.990 min Scan# 4154
Delta R.T. 0.000 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm
Tgt Ion:217 Resp: 8340

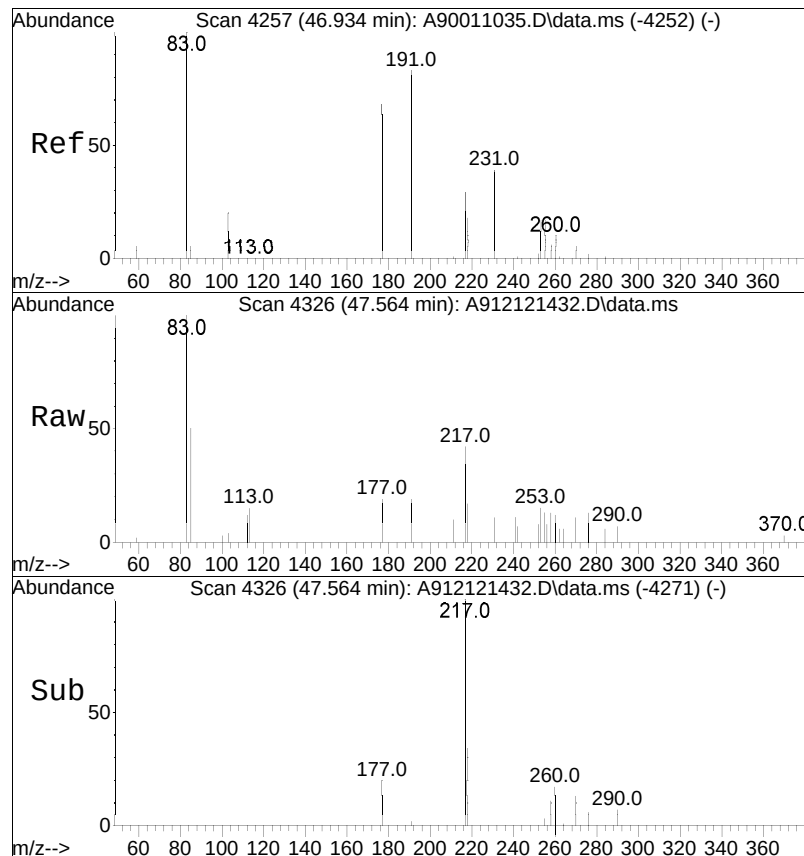




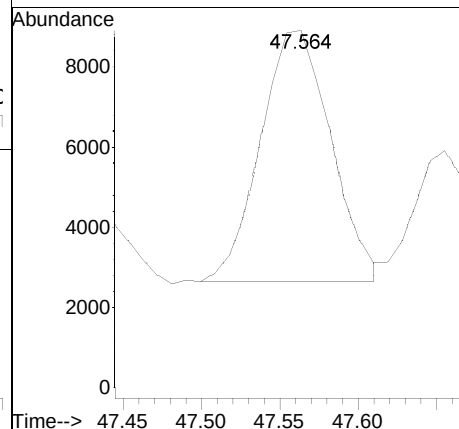
#132
13b,17a-20S-Methyldiacholestan
Concen: 122.14 ng/ml M4
RT: 46.686 min Scan# 4230
Delta R.T. 0.000 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm

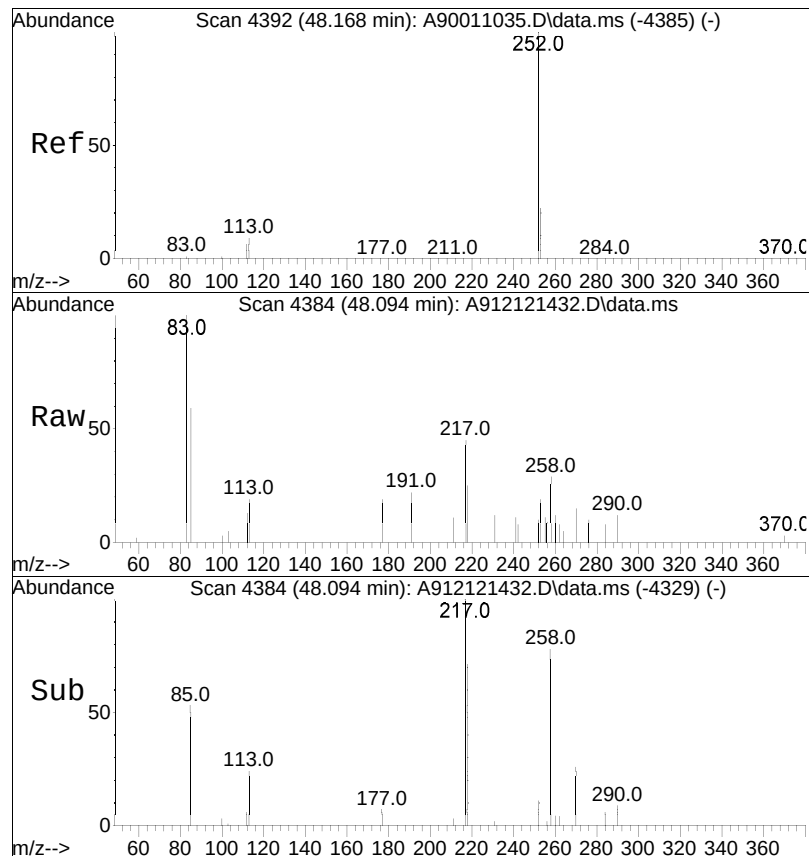
Tgt Ion:217 Resp: 8083



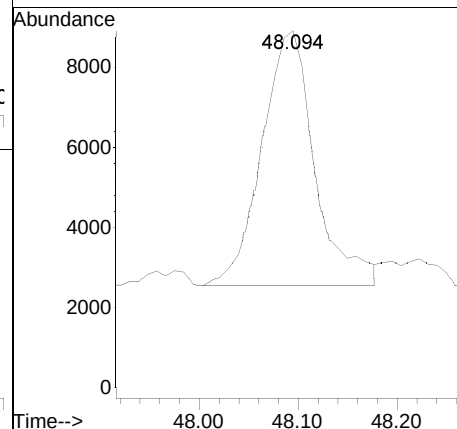


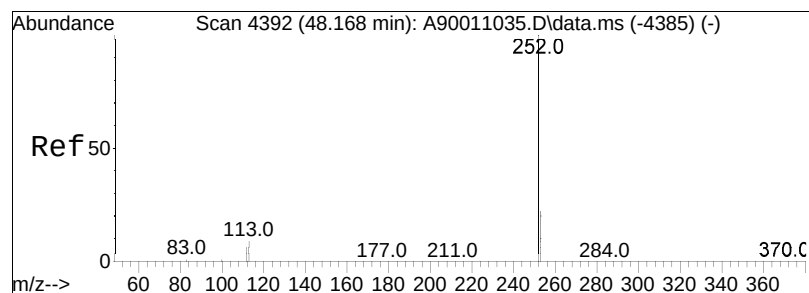
#133
 14a,17a-20S-Chol/13b,17a-20S-E
 Concen: 294.82 ng/ml
 RT: 47.564 min Scan# 4326
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:217 Resp: 19510





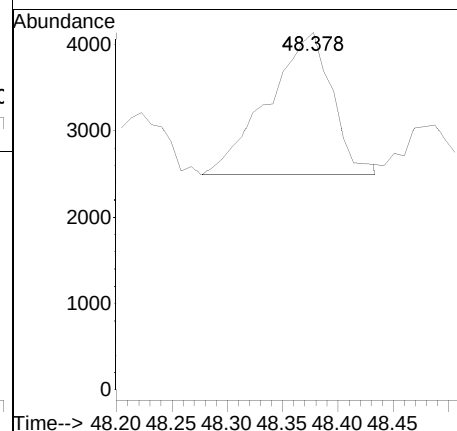
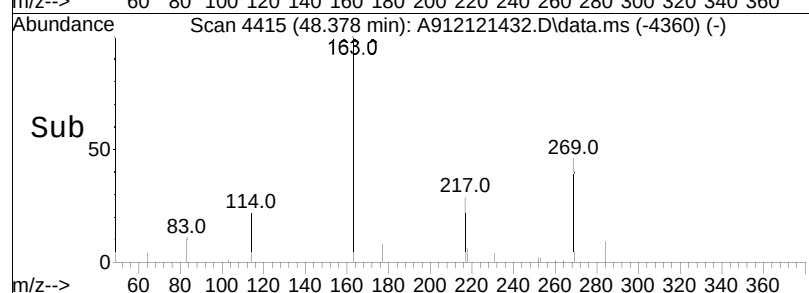
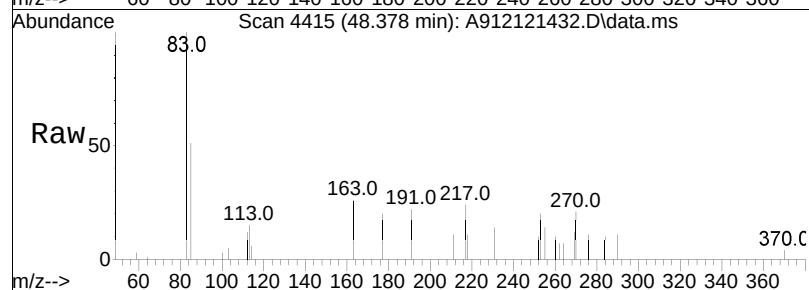
#134
 14a,17a-20R-Chol/13b,17a-20R-E
 Concen: 357.94 ng/ml
 RT: 48.094 min Scan# 4384
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:217 Resp: 23687

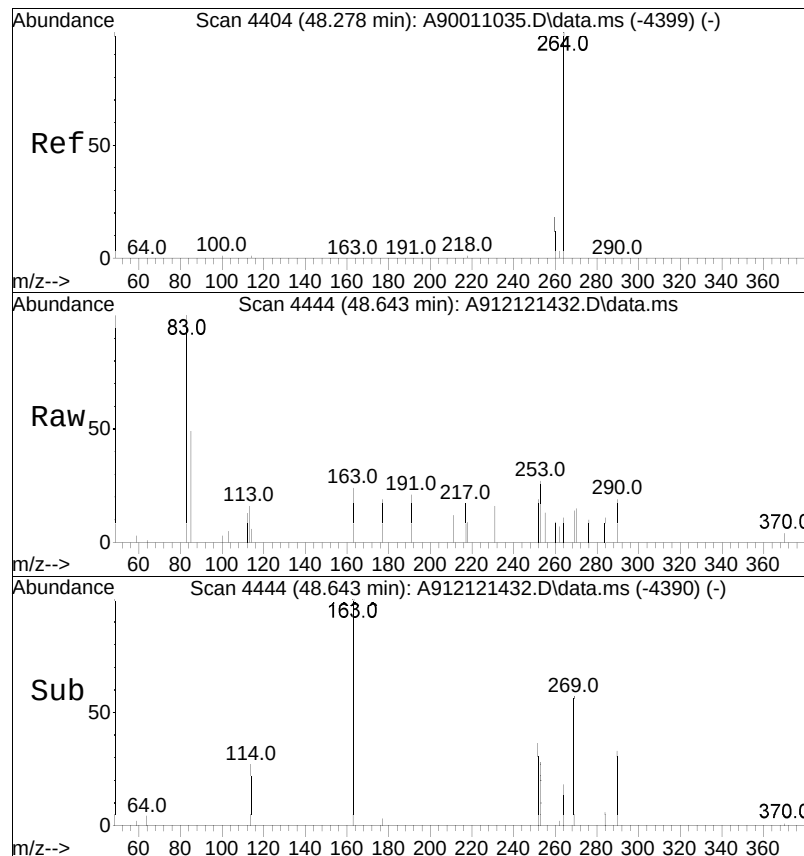




#135
 Unknown Sterane (S18)
 Concen: 100.04 ng/ml
 RT: 48.378 min Scan# 4415
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

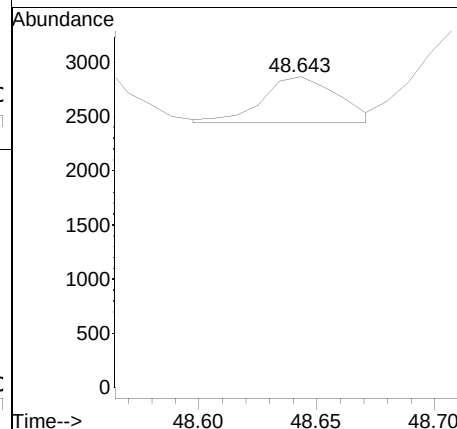
Tgt Ion:217 Resp: 6620

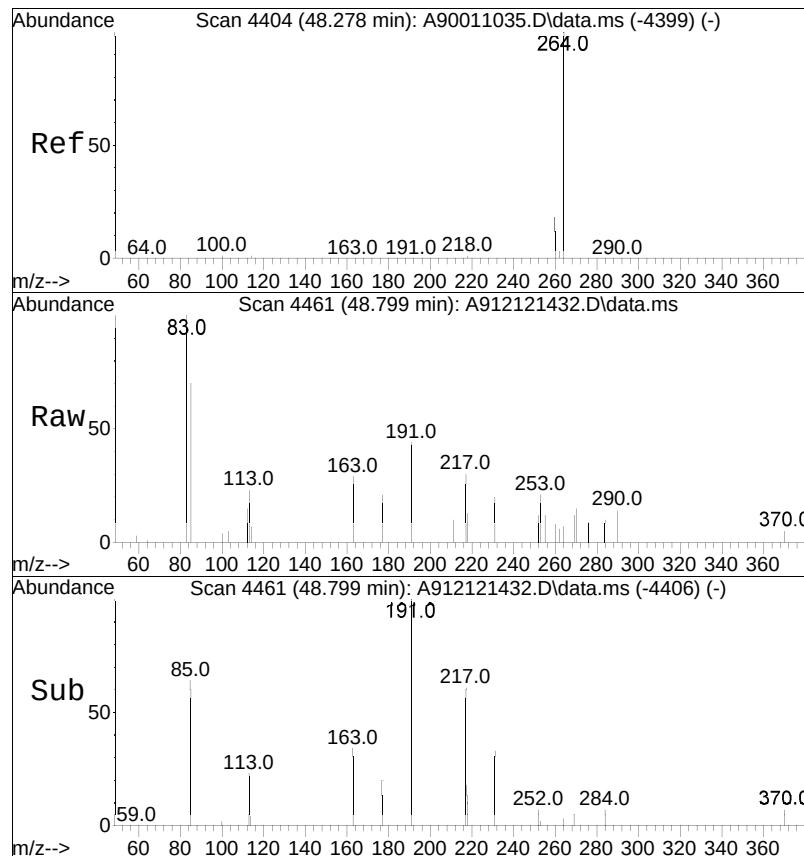




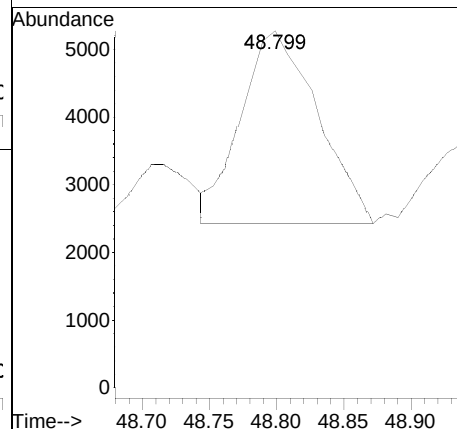
#136
 13a,17b-20S-Ethylcholesterol
 Concen: 14.16 ng/ml M4
 RT: 48.643 min Scan# 4444
 Delta R.T. -0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

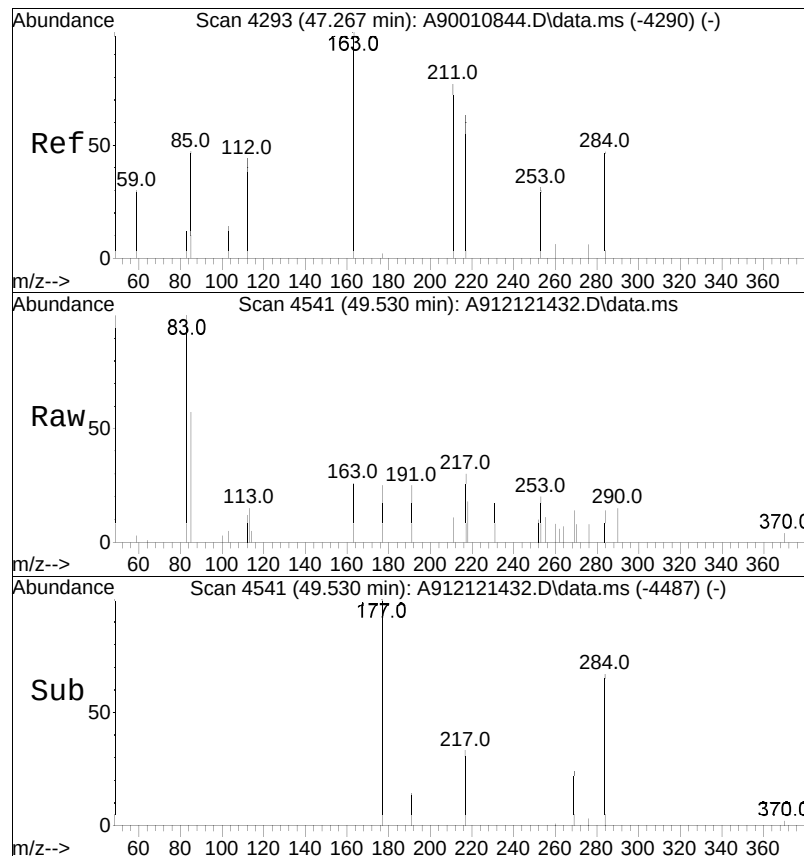
Tgt Ion:217 Resp: 937





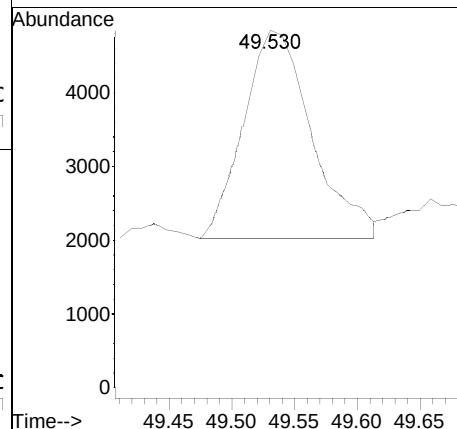
#137
 14a,17a-20S-Methylcholestane (
 Concen: 169.67 ng/ml
 RT: 48.799 min Scan# 4461
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:217 Resp: 11228

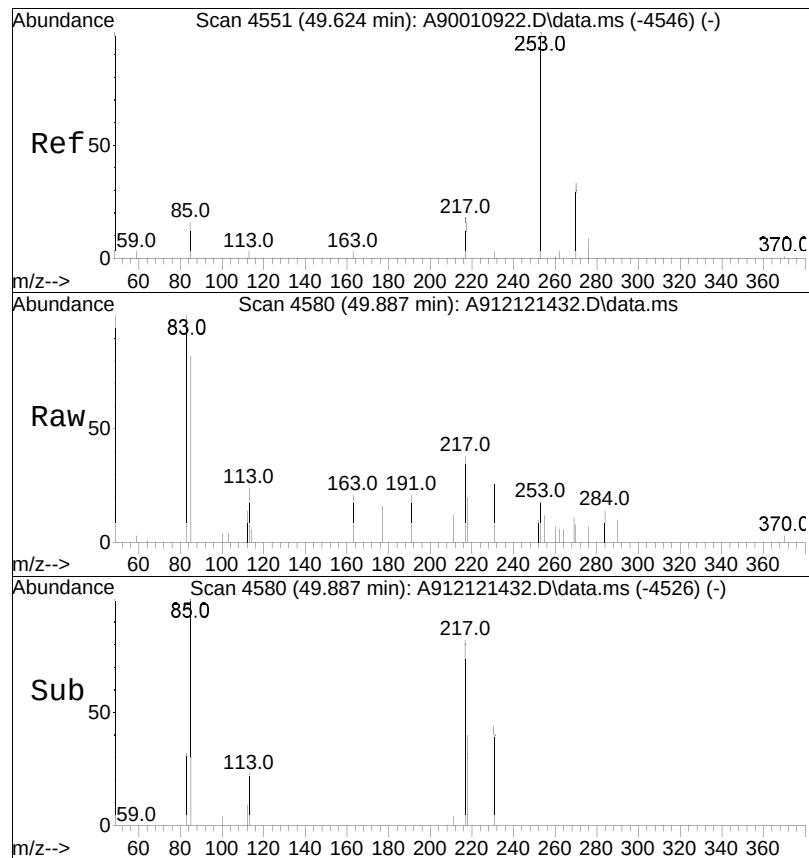




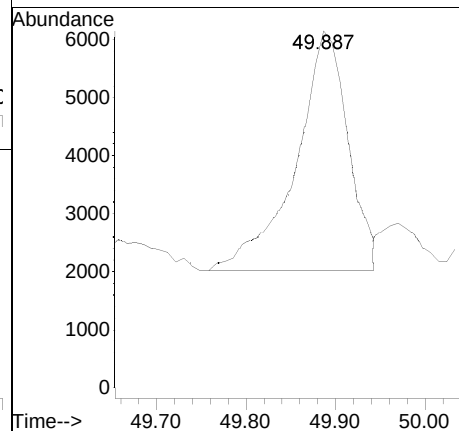
#138
 14a,17a-20R-Methylcholestane (
 Concen: 162.54 ng/ml
 RT: 49.530 min Scan# 4541
 Delta R.T. -0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

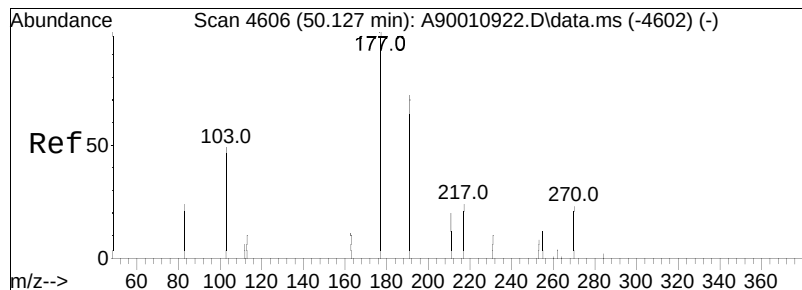
Tgt Ion:217 Resp: 10756





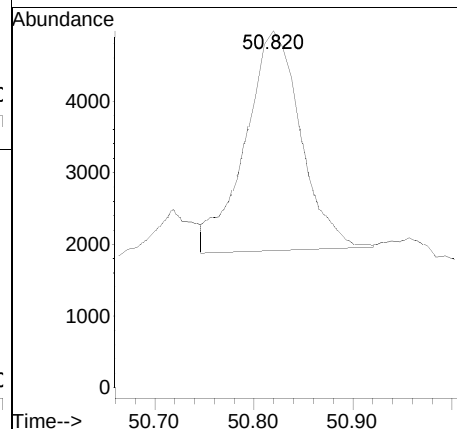
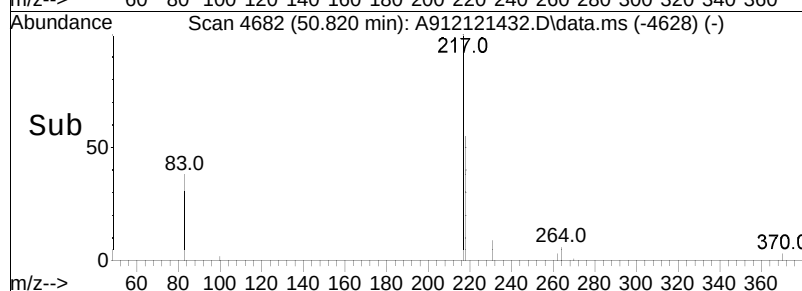
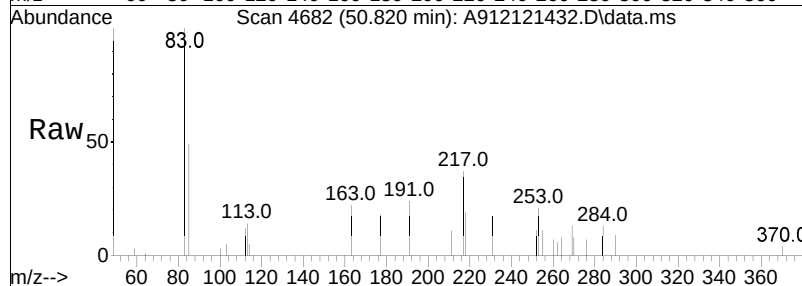
#139
 14a(H),17a(H)-20S-Ethylcholest
 Concen: 252.68 ng/ml
 RT: 49.887 min Scan# 4580
 Delta R.T. -0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:217 Resp: 16721

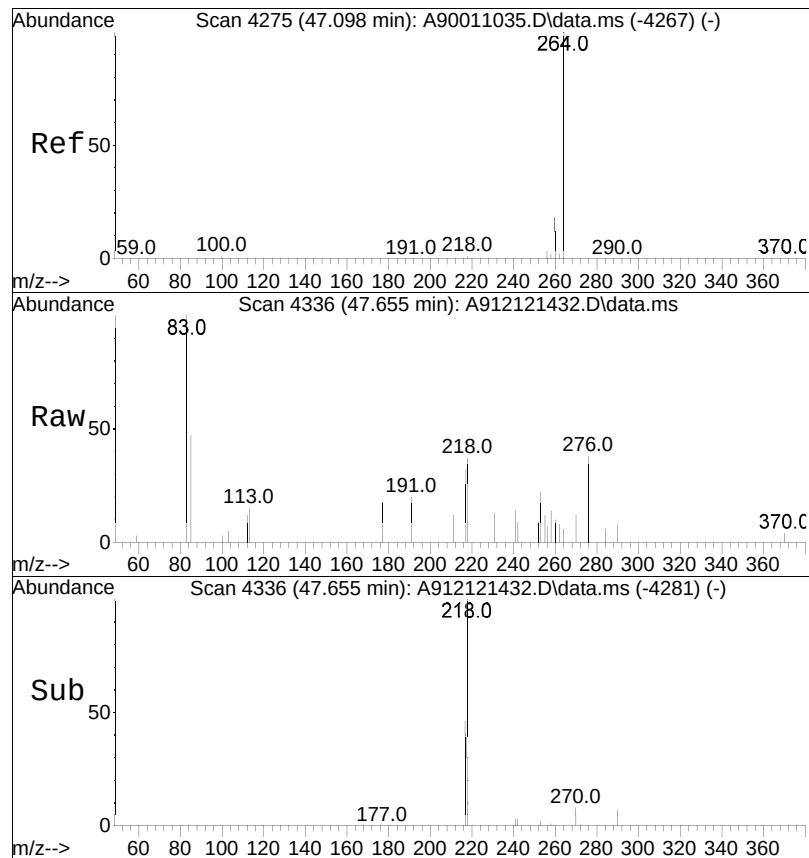




#140
14a(H),17a(H)-20R-Ethylcholest
Concen: 179.10 ng/ml
RT: 50.820 min Scan# 4682
Delta R.T. -0.009 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm

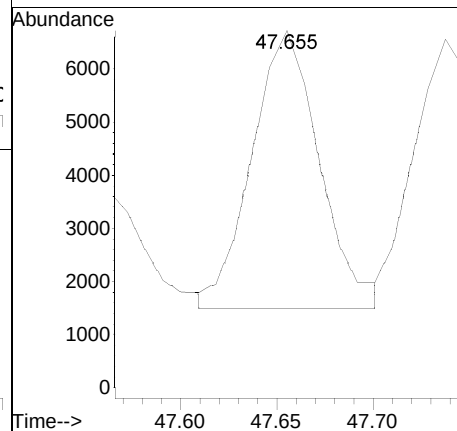
Tgt Ion:217 Resp: 11852

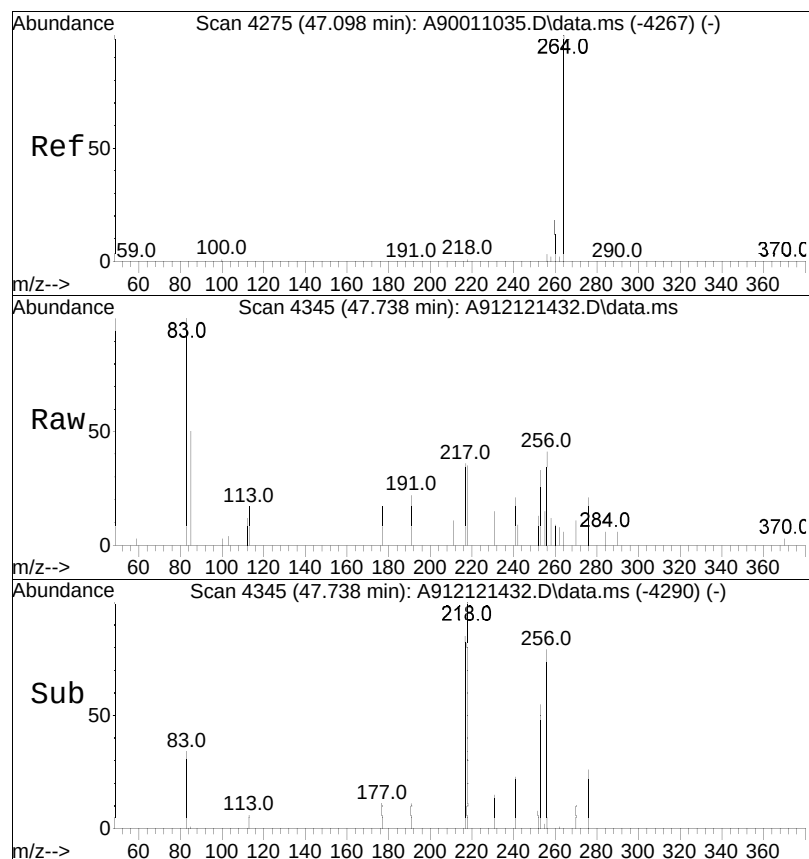




#141
 14b(H),17b(H)-20R-Cholestane (
 Concen: 193.05 ng/ml M4
 RT: 47.655 min Scan# 4336
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

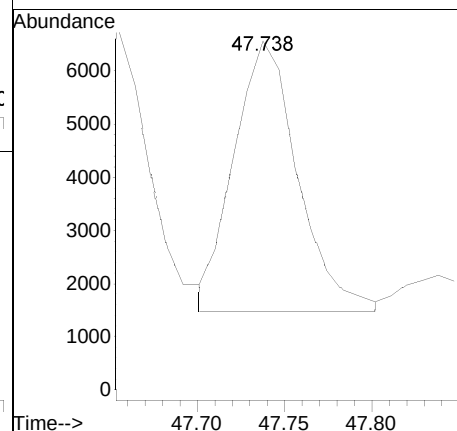
Tgt Ion:218 Resp: 12775

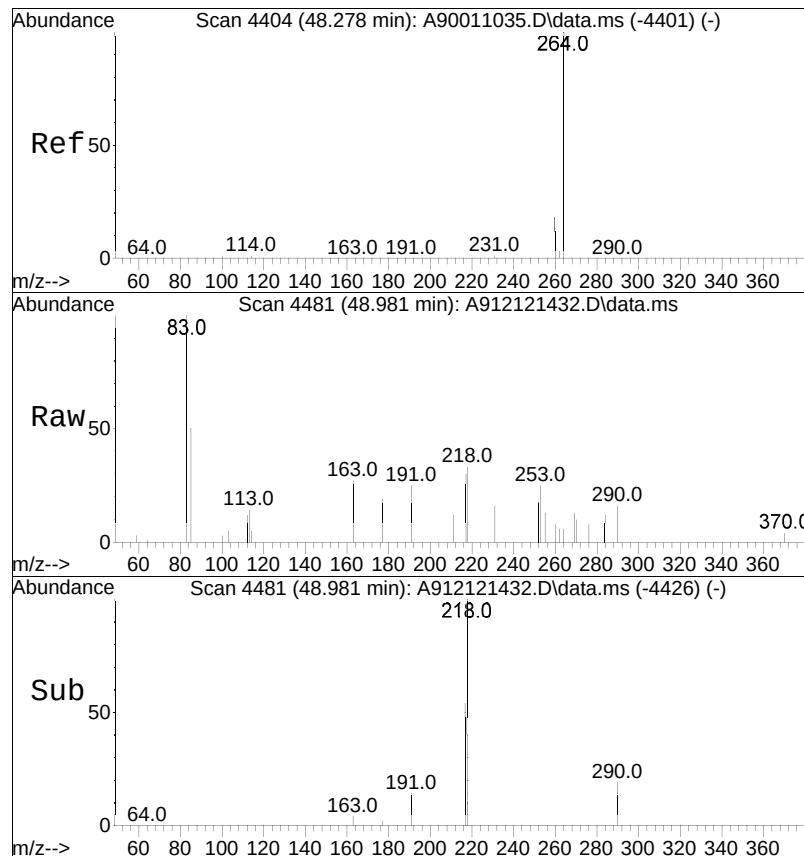




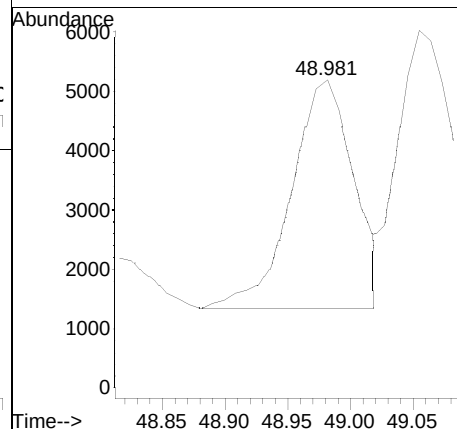
#142
 14b(H),17b(H)-20S-Cholestane (
 Concen: 195.51 ng/ml M4
 RT: 47.738 min Scan# 4345
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

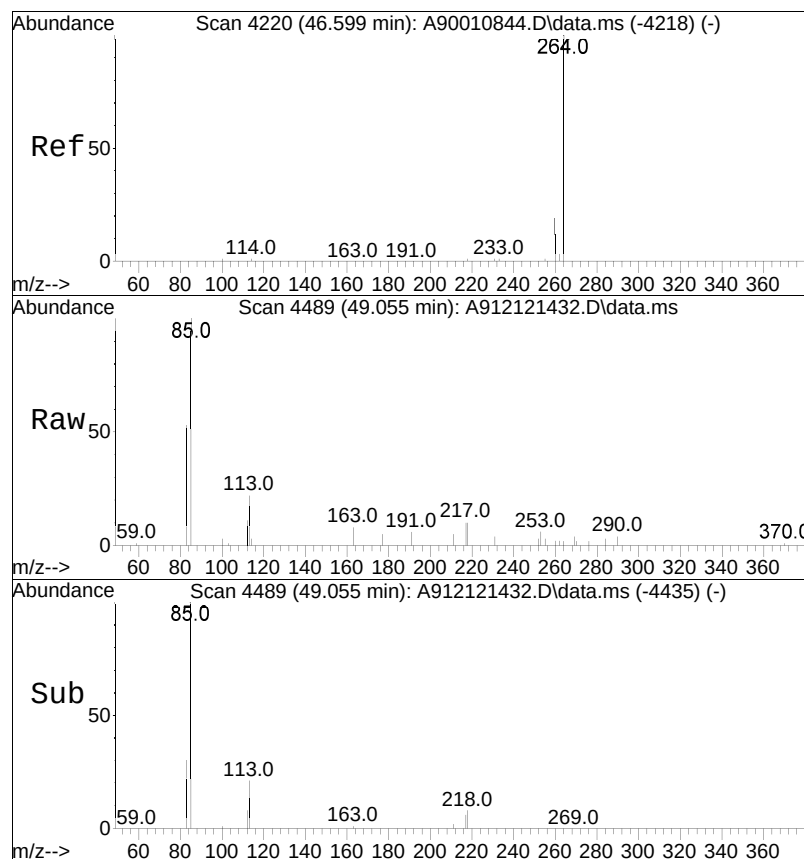
Tgt Ion:218 Resp: 12938



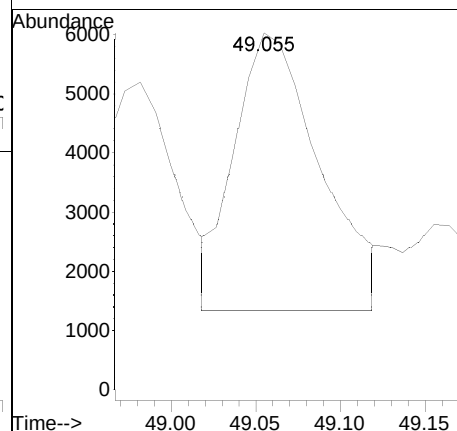


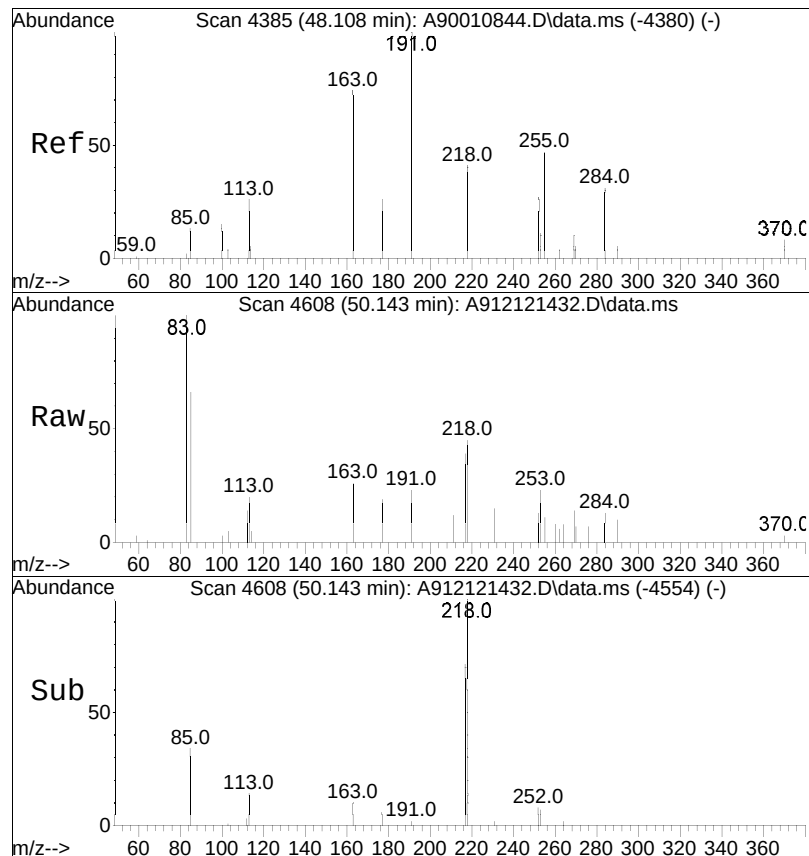
#143
 14b,17b-20R-Methylcholestane (
 Concen: 202.25 ng/ml
 RT: 48.981 min Scan# 4481
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:218 Resp: 13384



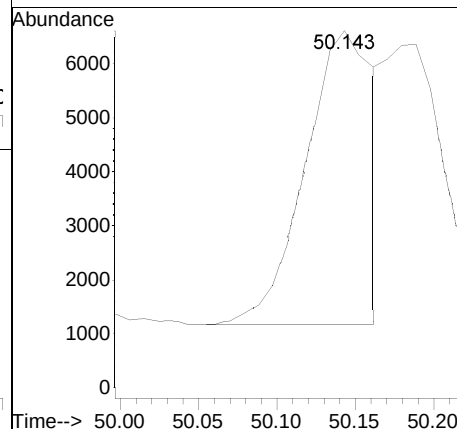


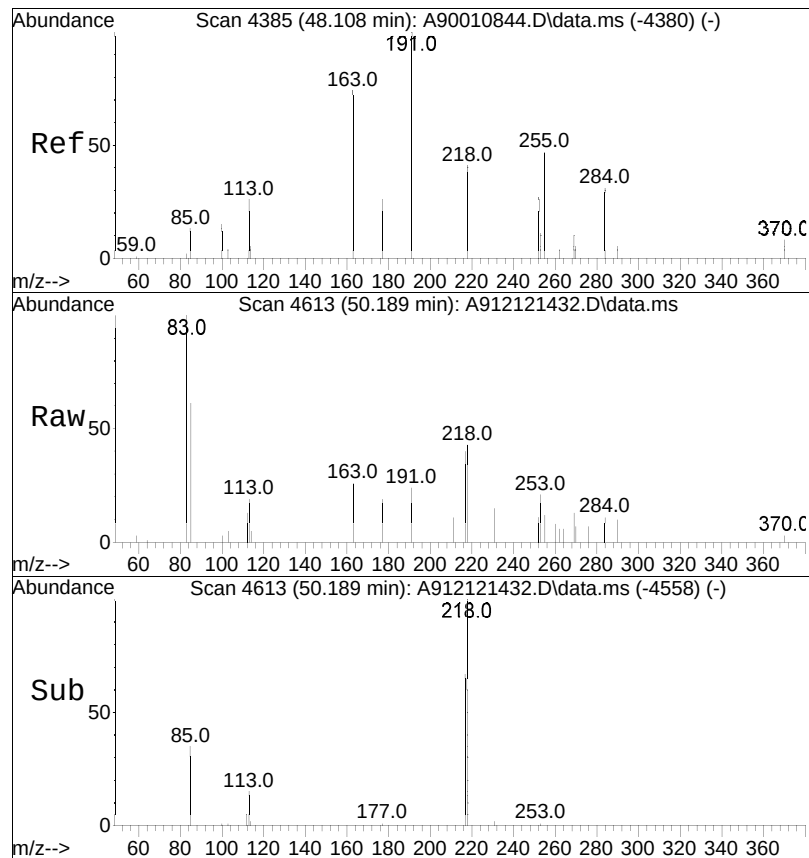
#144
 14b,17b-20S-Methylcholestane (
 Concen: 249.68 ng/ml M4
 RT: 49.055 min Scan# 4489
 Delta R.T. -0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:218 Resp: 16523



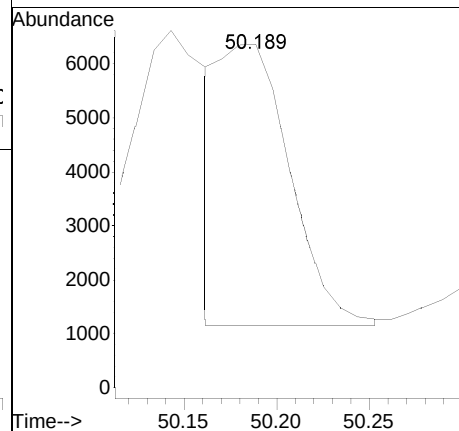


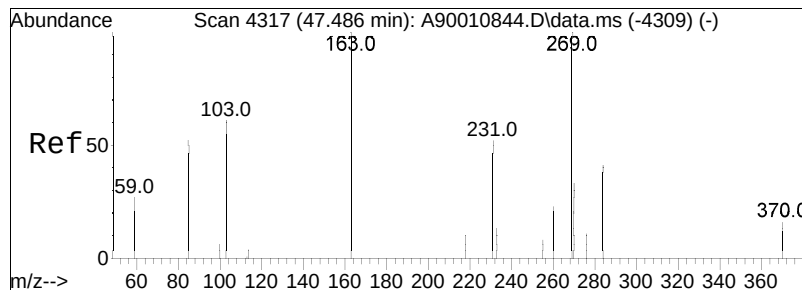
#145
 14b(H),17b(H)-20R-Ethylcholest
 Concen: 244.88 ng/ml
 RT: 50.143 min Scan# 4608
 Delta R.T. -0.009 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:218 Resp: 16205





#146
 14b(H),17b(H)-20S-Ethylcholest
 Concen: 210.98 ng/ml M3
 RT: 50.189 min Scan# 4613
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm
 Tgt Ion:218 Resp: 13962





#147

C26,20R- +C27,20S- triaromatic

Concen: 1349.77 ng/mL

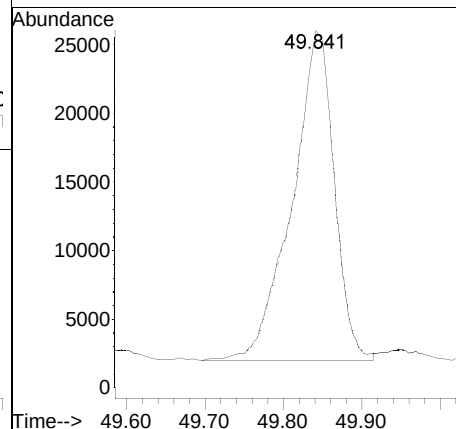
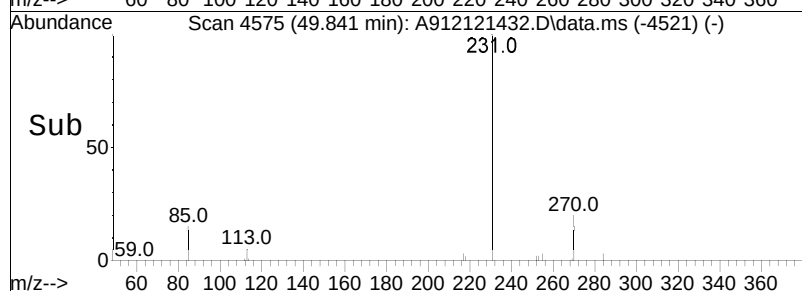
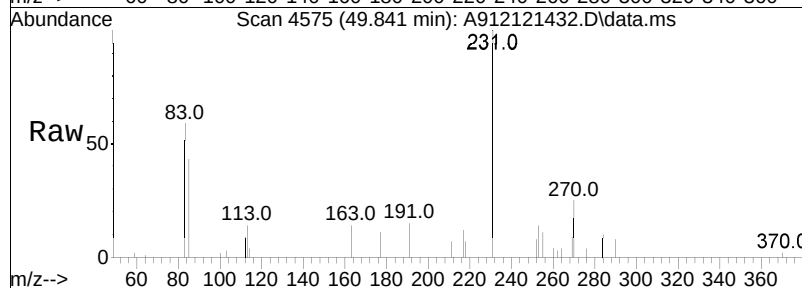
RT: 49.841 min Scan# 4575

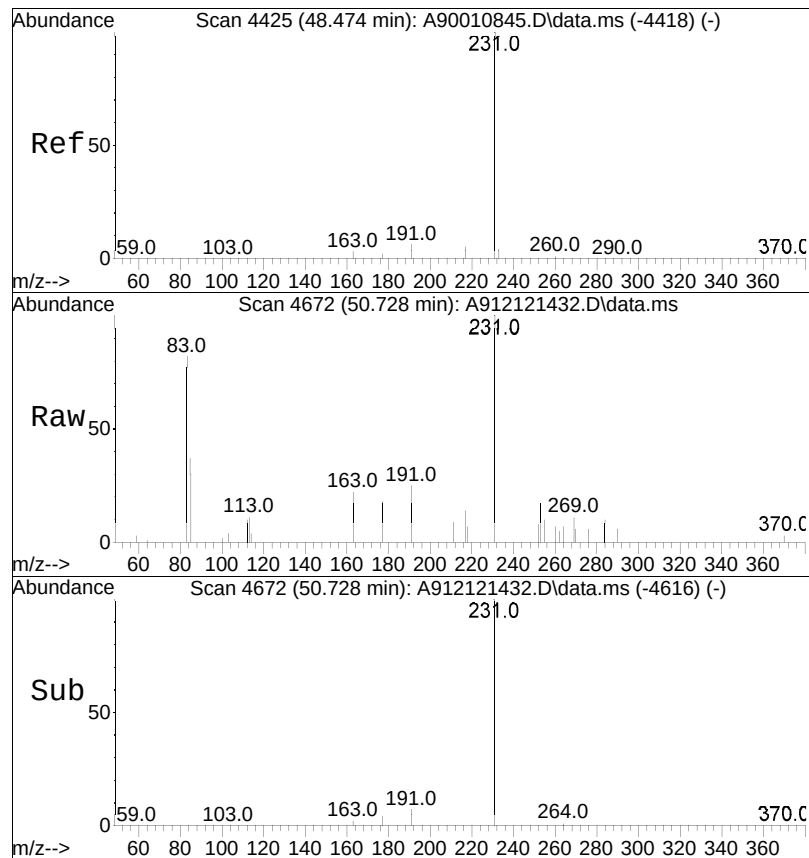
Delta R.T. -0.009 min

Lab File: A912121432.D

Acq: 15 Dec 2014 7:57 pm

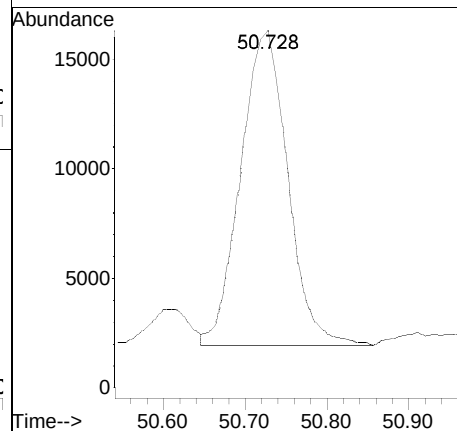
Tgt Ion:231 Resp: 89322

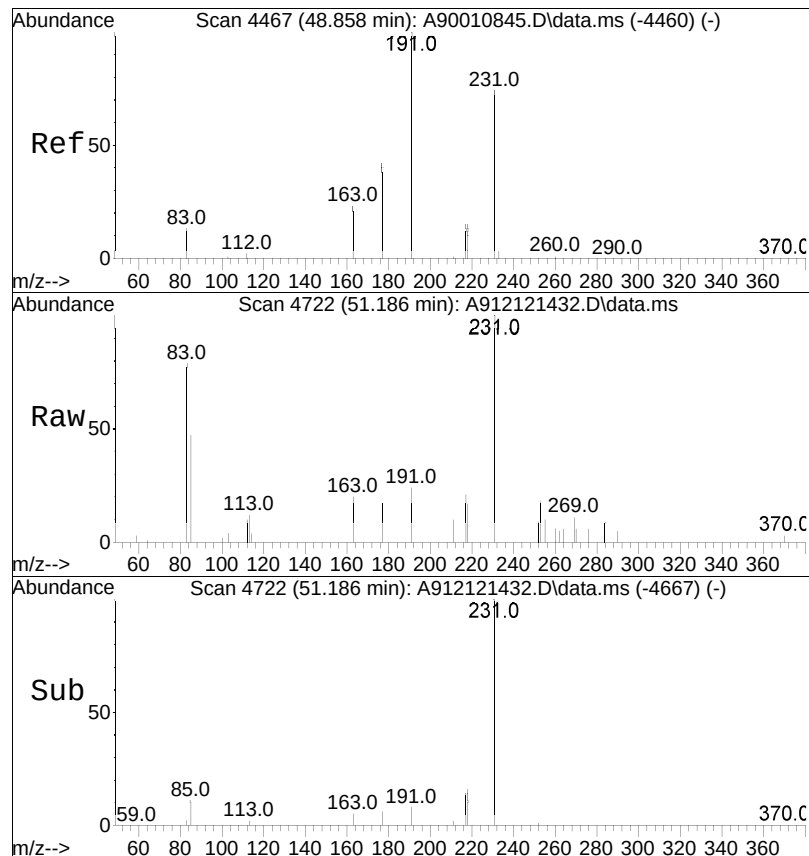




#148
C28,20S-triaromatic steroid
Concen: 860.24 ng/mL
RT: 50.728 min Scan# 4672
Delta R.T. 0.009 min
Lab File: A912121432.D
Acq: 15 Dec 2014 7:57 pm

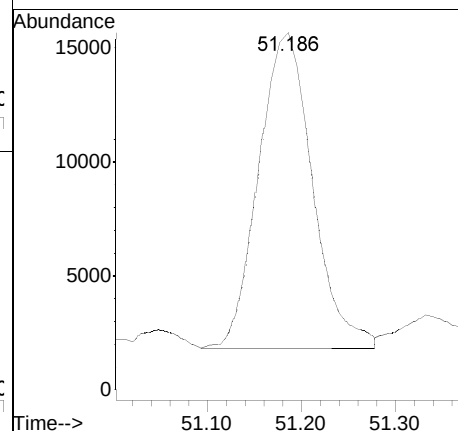
Tgt Ion:231 Resp: 56927

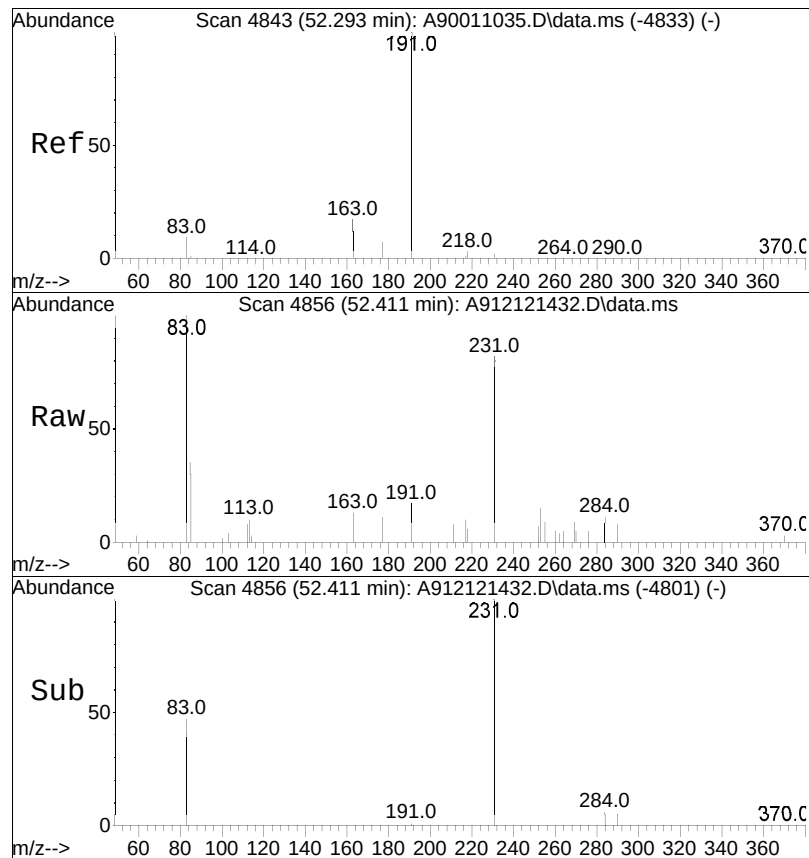




#149
 C27,20R-triaromatic steroid
 Concen: 828.16 ng/mL
 RT: 51.186 min Scan# 4722
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

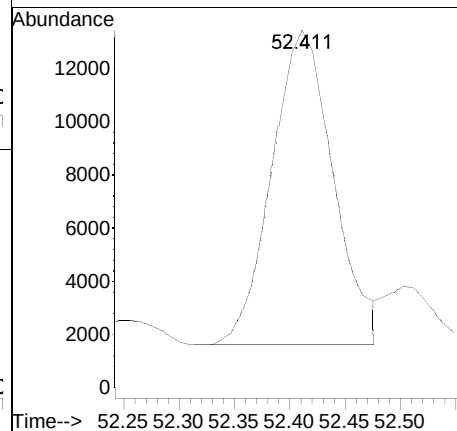
Tgt Ion:231 Resp: 54804





#150
 C28,20R-triaromatic steroid
 Concen: 688.95 ng/mL
 RT: 52.411 min Scan# 4856
 Delta R.T. 0.000 min
 Lab File: A912121432.D
 Acq: 15 Dec 2014 7:57 pm

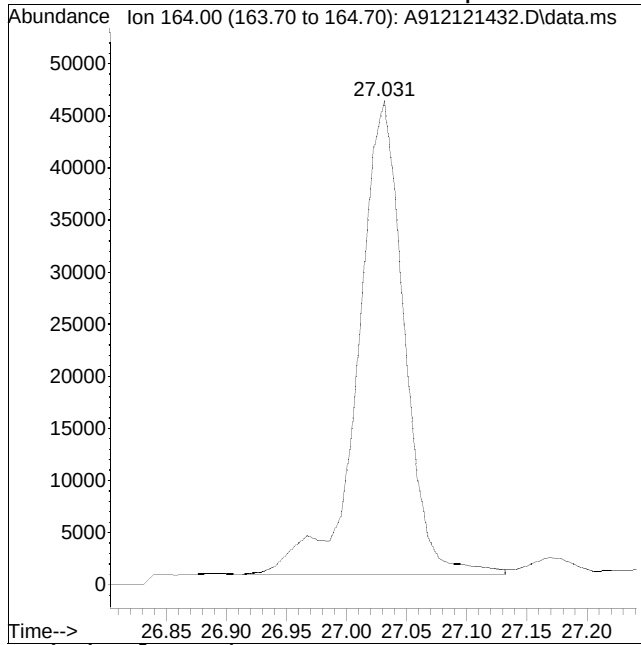
Tgt Ion:231 Resp: 45592



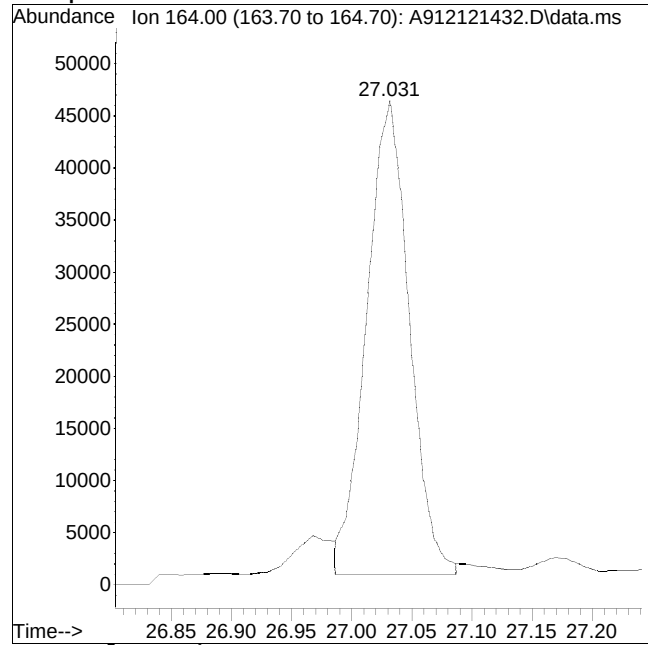
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #1: Acenaphthene-d10



Original Peak Response = 122588



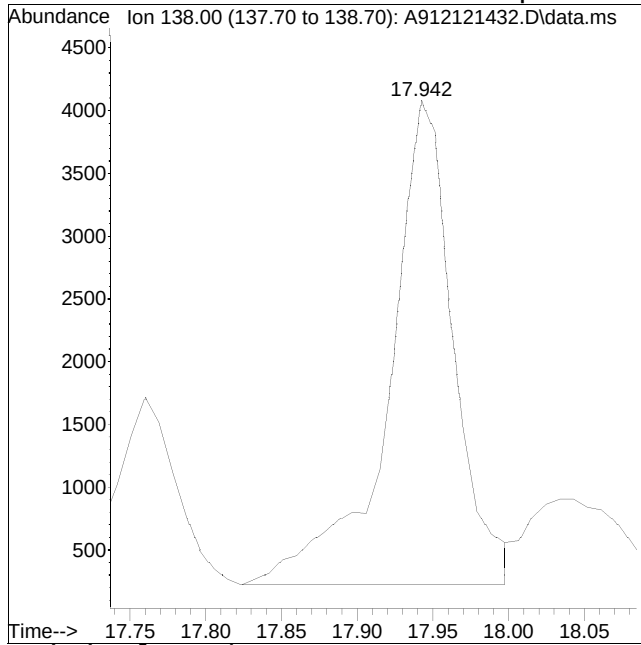
Manual Peak Response = 111969 M4

M4 = Poor automated baseline construction.

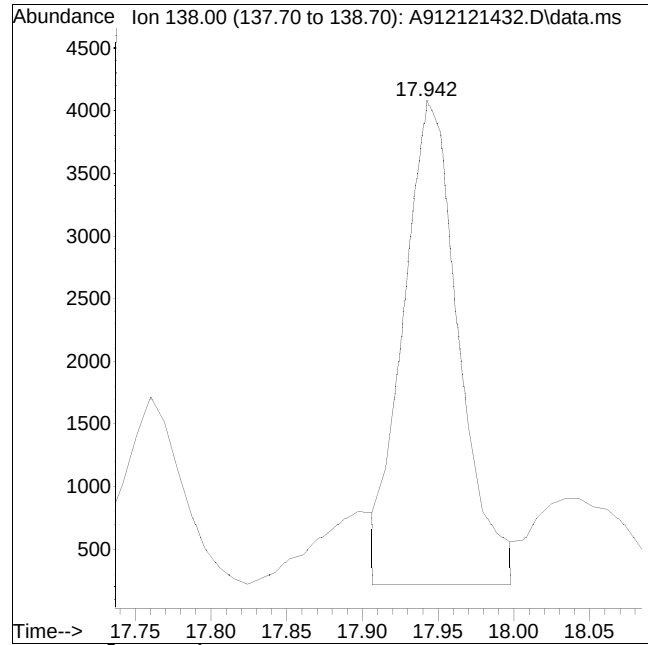
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #4: cis-Decalin



Original Peak Response = 11524



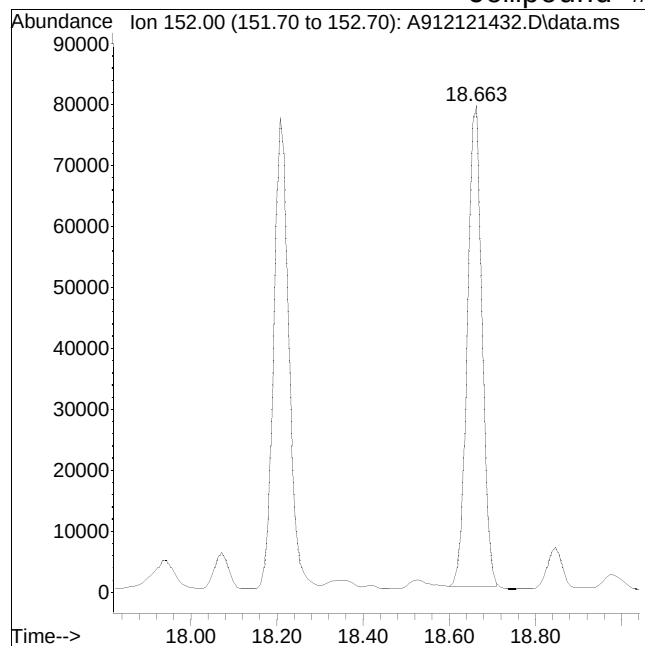
Manual Peak Response = 9906 M4

M4 = Poor automated baseline construction.

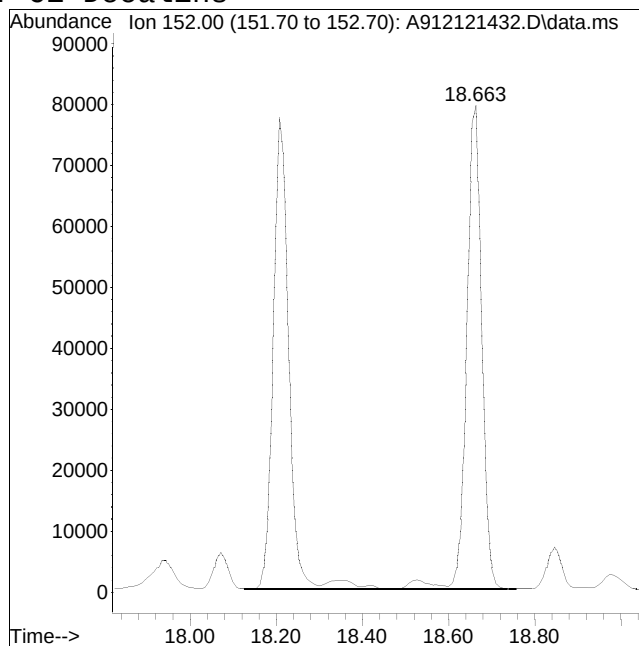
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912121432.D Operator : PAH9:SR
 Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
 Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #5: C1-Decalins



Original Peak Response = 185351



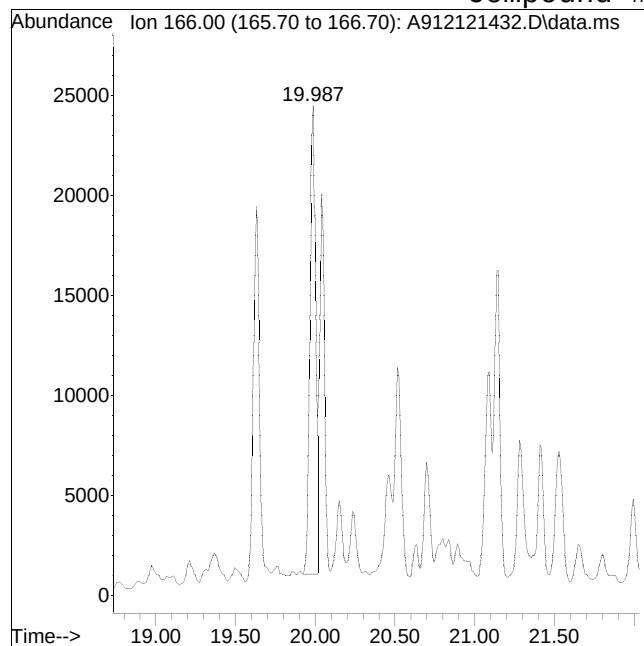
Manual Peak Response = 393088 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

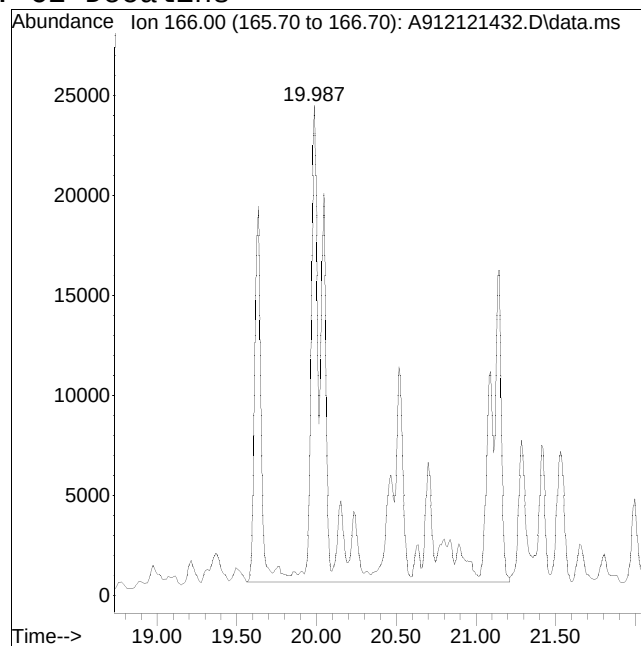
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #6: C2-Decalins



Original Peak Response = 59555

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

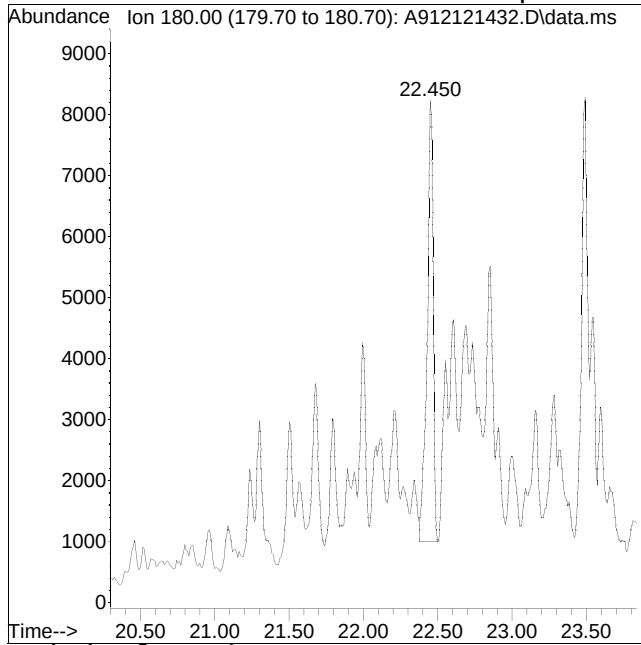


Manual Peak Response = 343527 M5

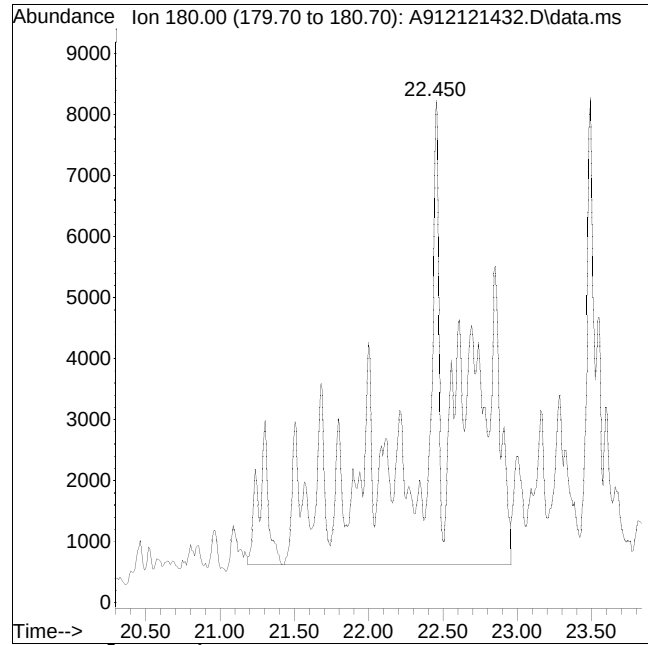
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #7: C3-Decalins



Original Peak Response = 20374



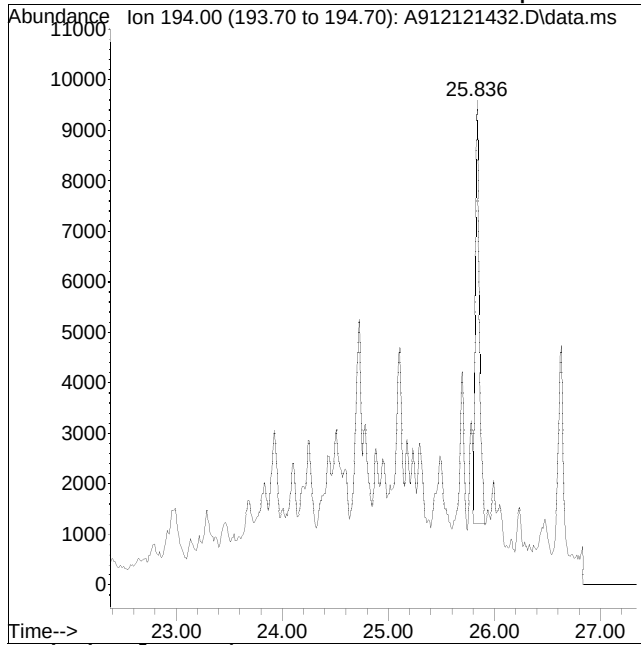
Manual Peak Response = 182746 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

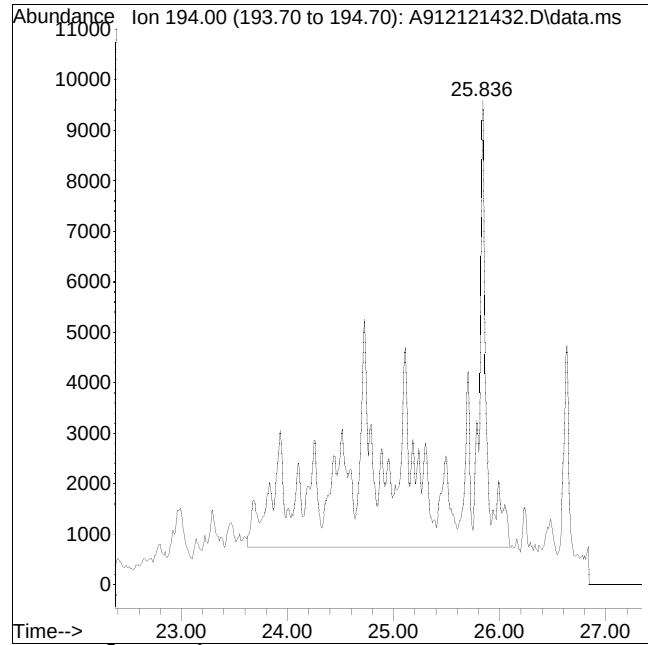
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #8: C4-Decalins



Original Peak Response = 21800



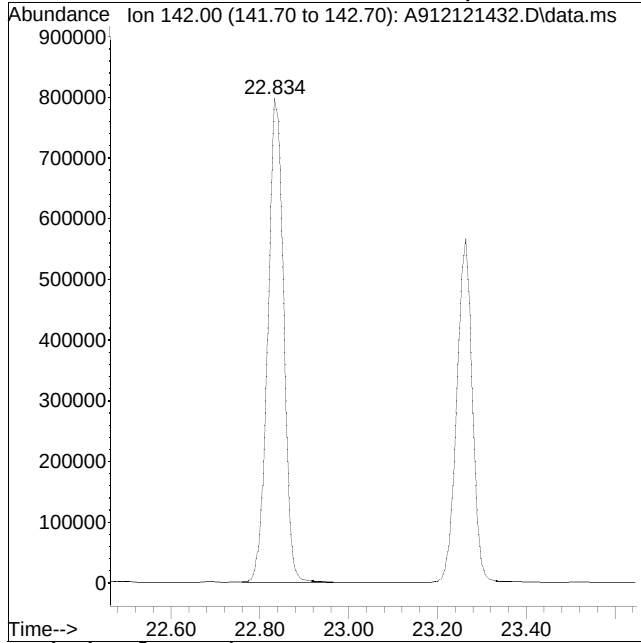
Manual Peak Response = 202893 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

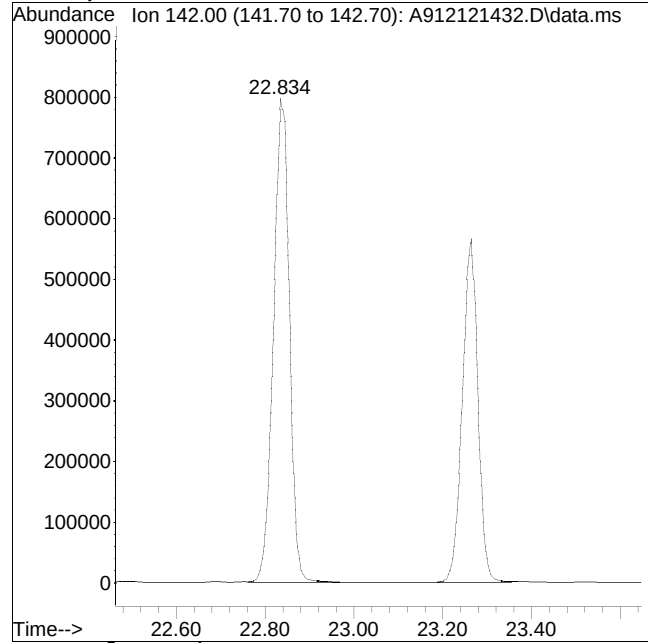
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #11: C1-Naphthalenes



Original Peak Response = 1982439



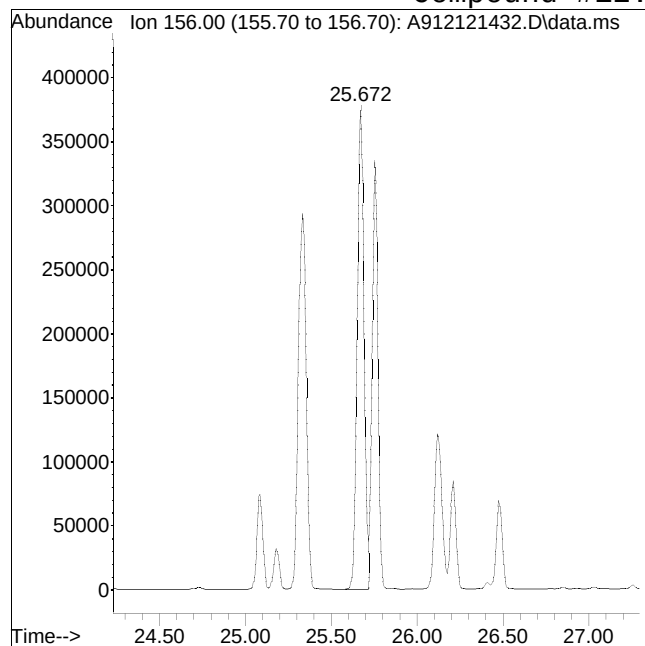
Manual Peak Response = 3372843 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

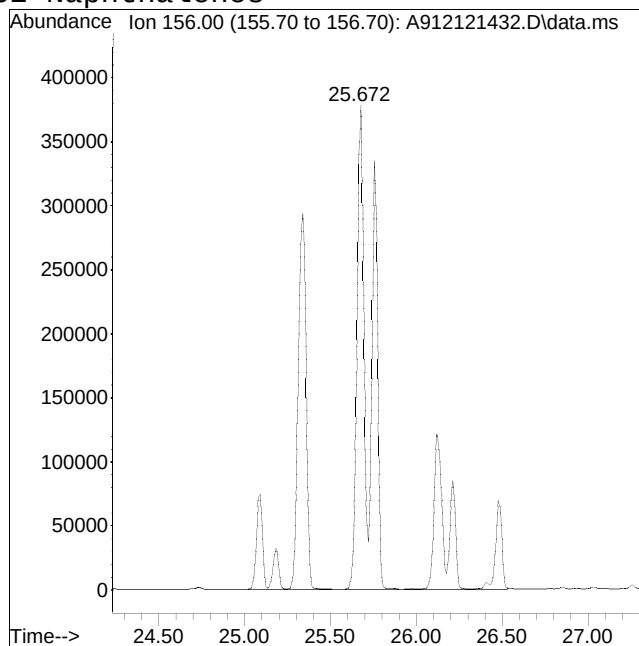
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912121432.D Operator : PAH9:SR
 Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
 Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #12: C2-Naphthalenes



Original Peak Response = 1058235



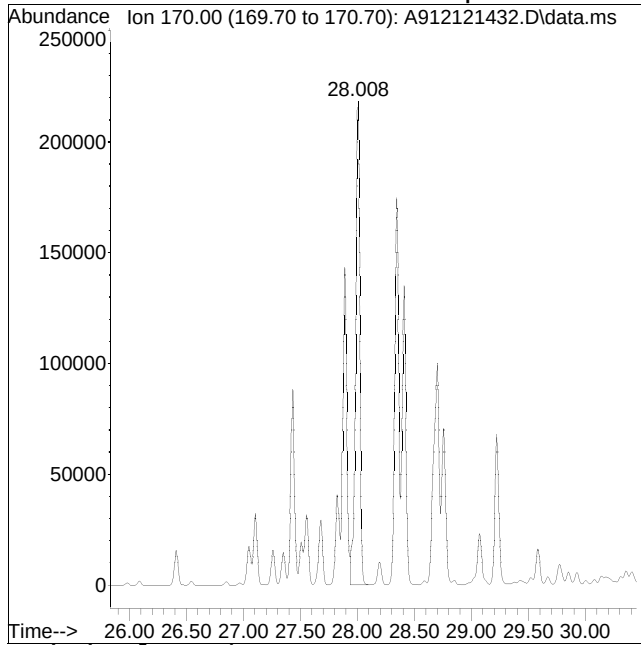
Manual Peak Response = 3808528 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

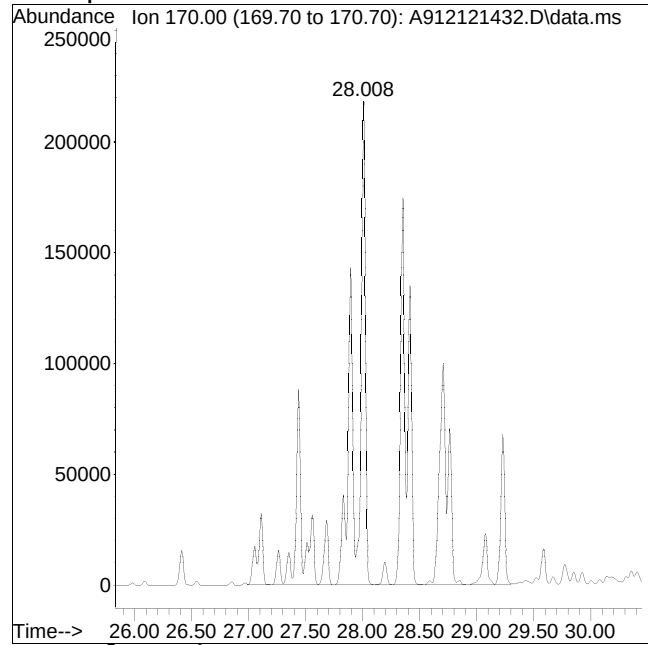
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #13: C3-Naphthalenes



Original Peak Response = 550308



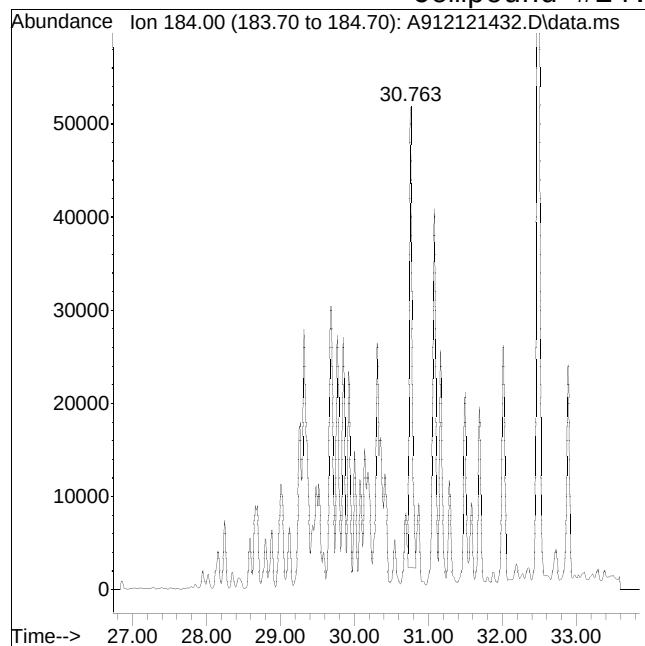
Manual Peak Response = 3055343 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

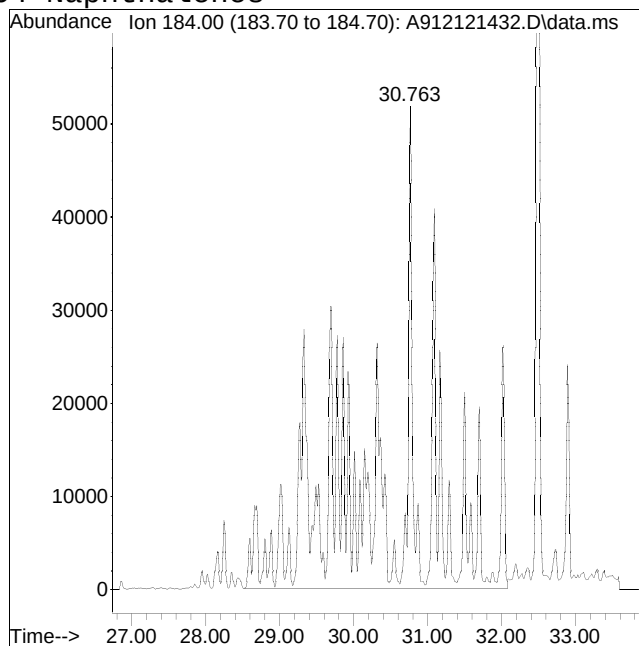
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #14: C4-Naphthalenes



Original Peak Response = 128317



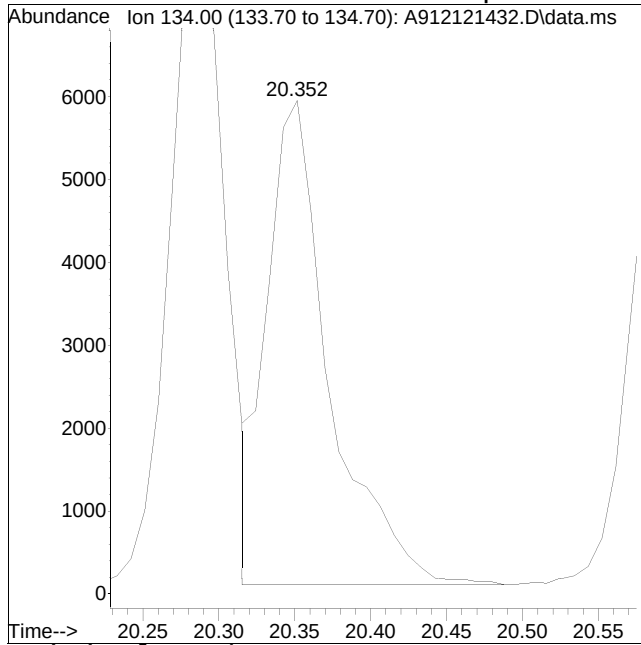
Manual Peak Response = 1611641 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

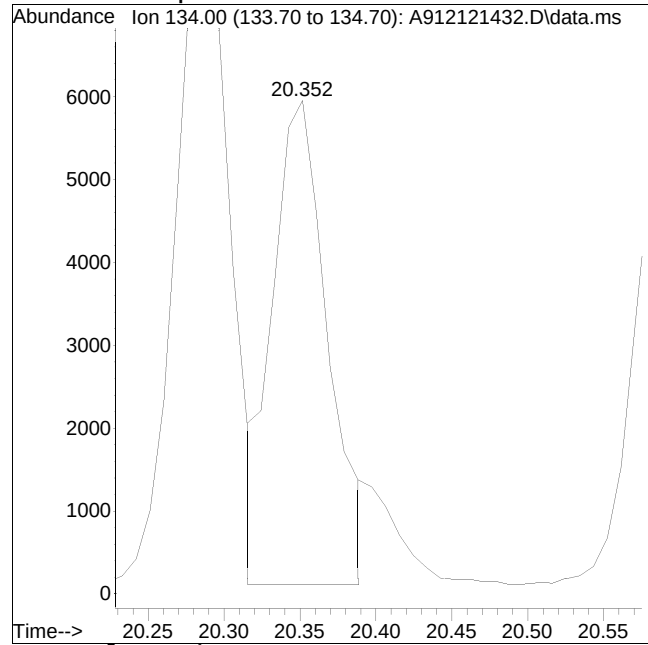
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #18: Benzothiophene



Original Peak Response = 16836



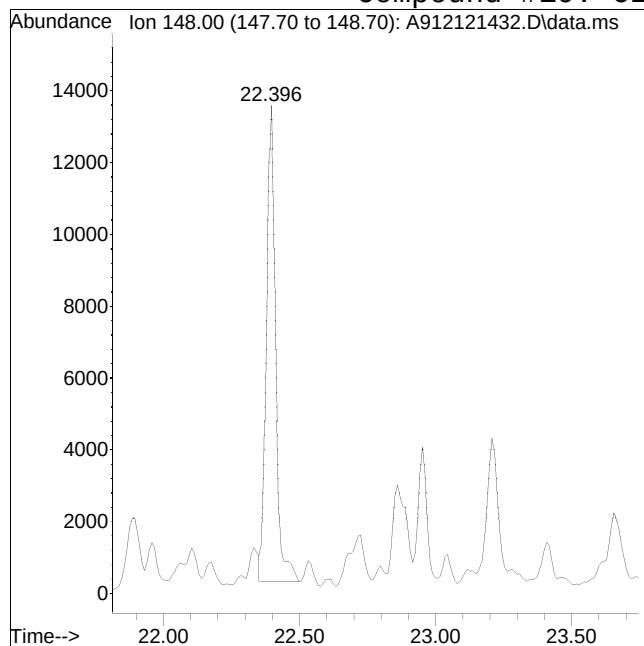
Manual Peak Response = 14861 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

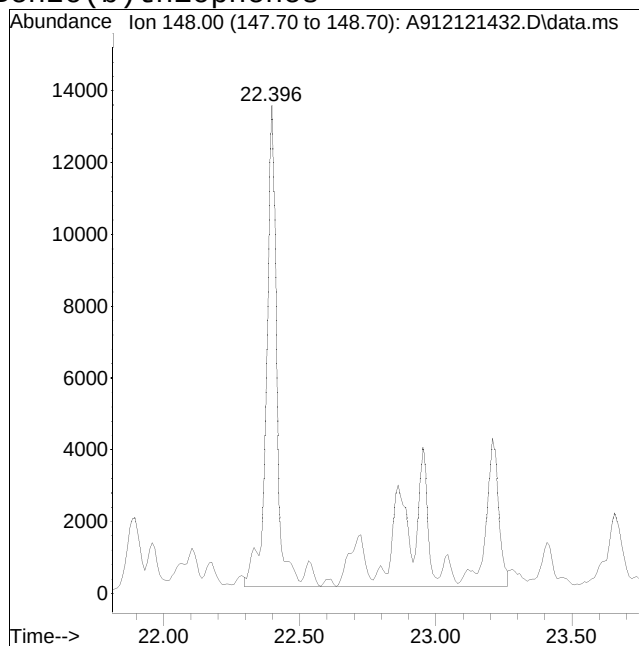
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #19: C1-Benzo(b)thiophenes



Original Peak Response = 31020

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

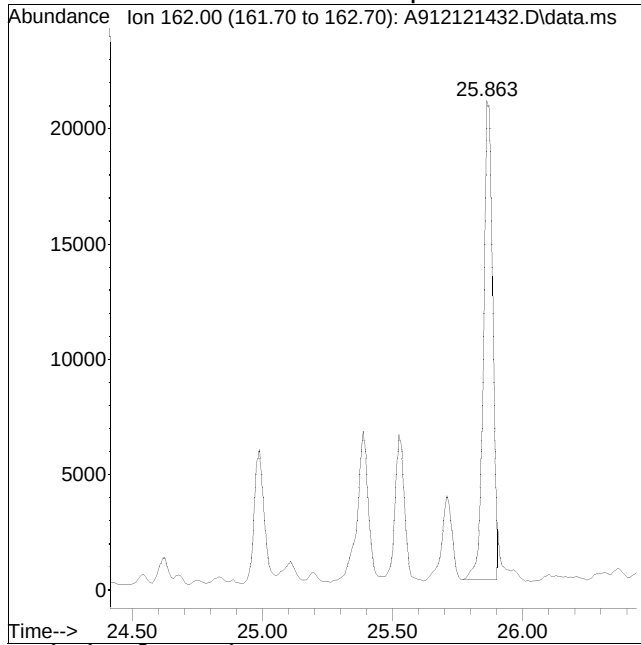


Manual Peak Response = 78310 M5

Manual Integration/Negative Proof Report

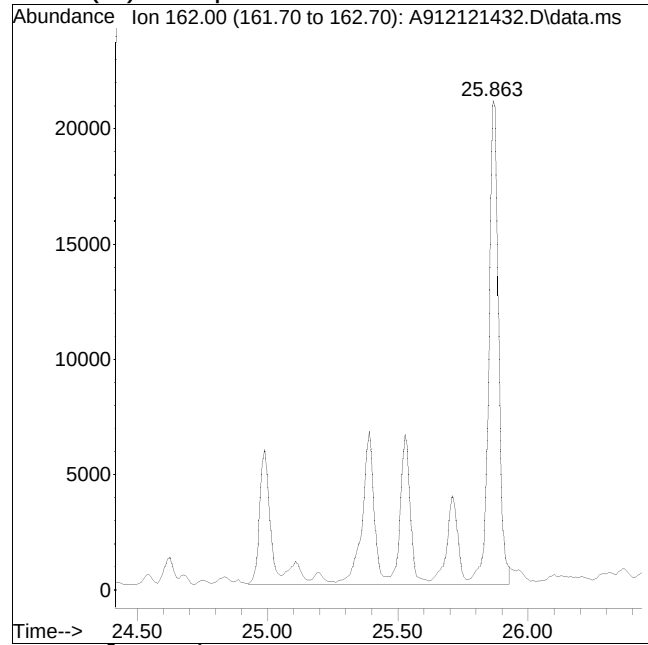
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #20: C2-Benzo(b)thiophenes



Original Peak Response = 51635

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

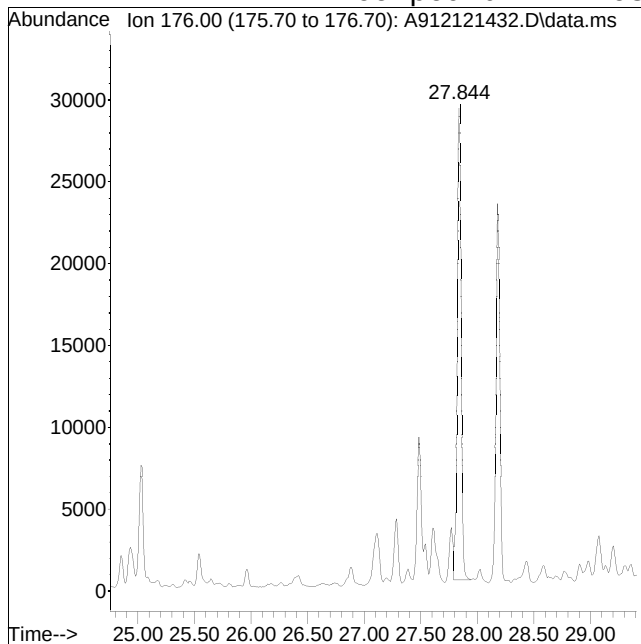


Manual Peak Response = 124543 M5

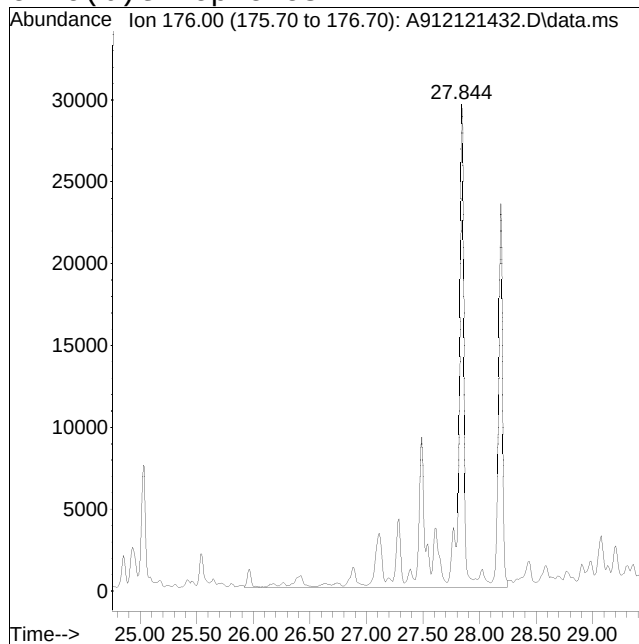
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912121432.D Operator : PAH9:SR
 Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
 Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #21: C3-Benzo(b)thiophenes



Original Peak Response = 68374



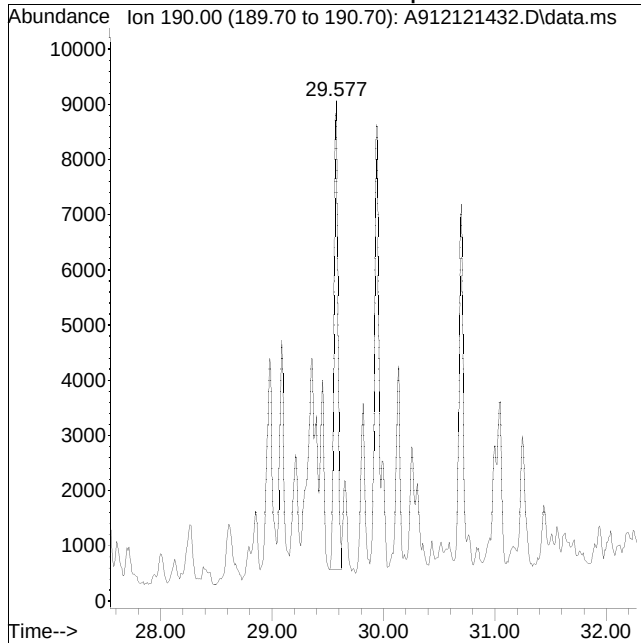
Manual Peak Response = 233921 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

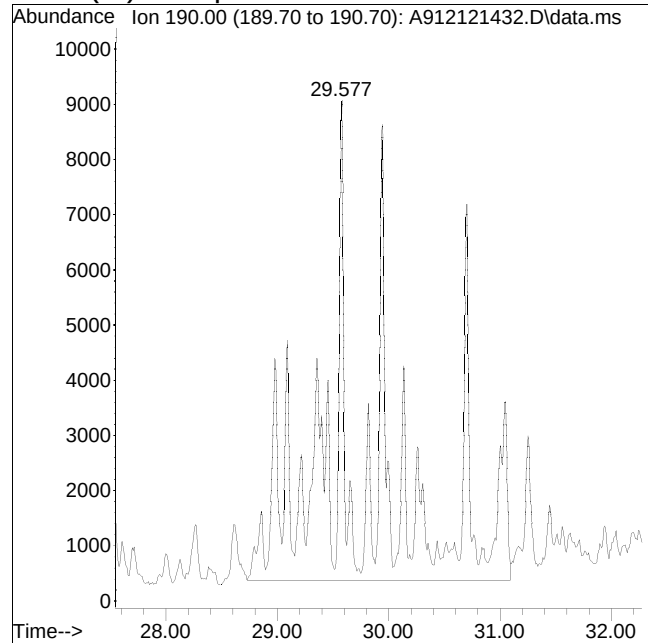
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #22: C4-Benzo(b)thiophenes



Original Peak Response = 20471



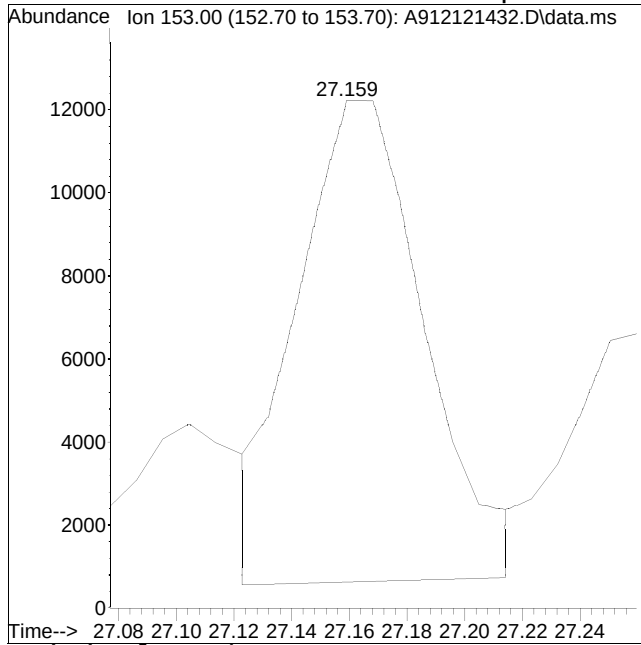
Manual Peak Response = 204294 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

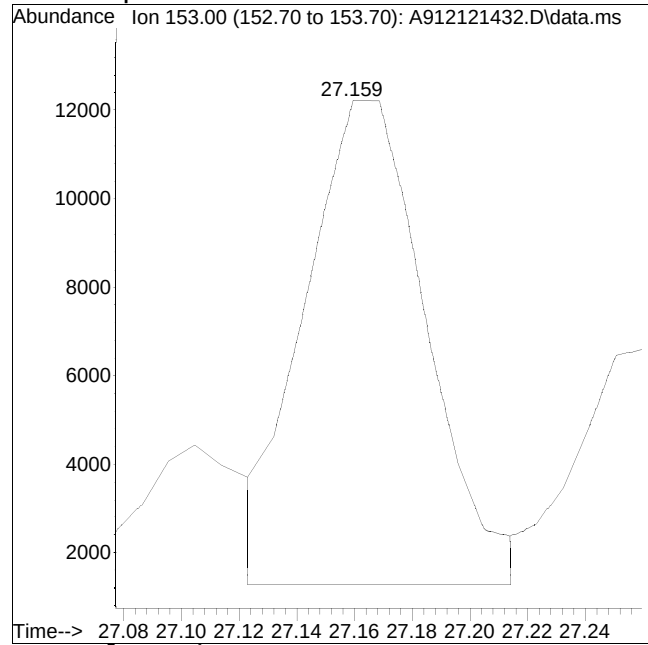
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #27: Acenaphthene



Original Peak Response = 35496



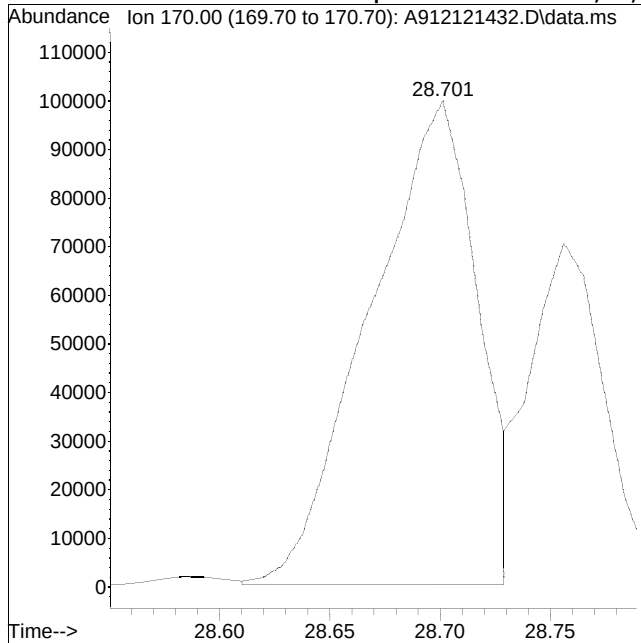
Manual Peak Response = 32088 M4

M4 = Poor automated baseline construction.

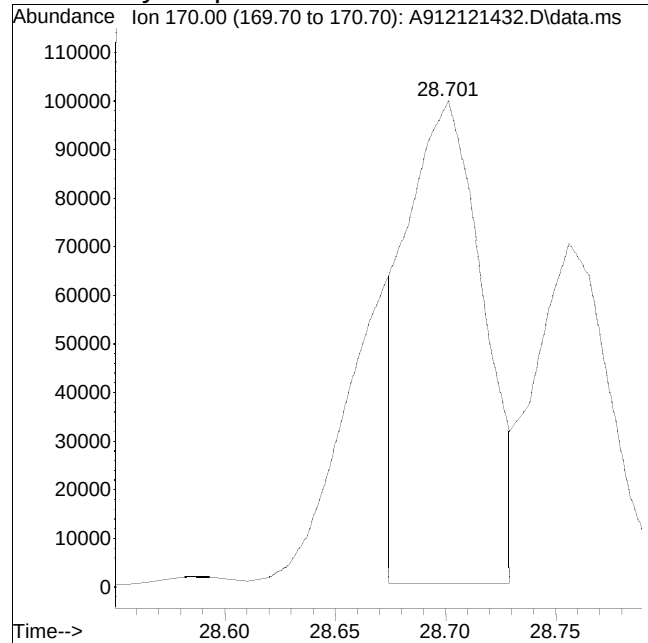
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #28: 2,3,5-Trimethylnaphthalene



Original Peak Response = 340713



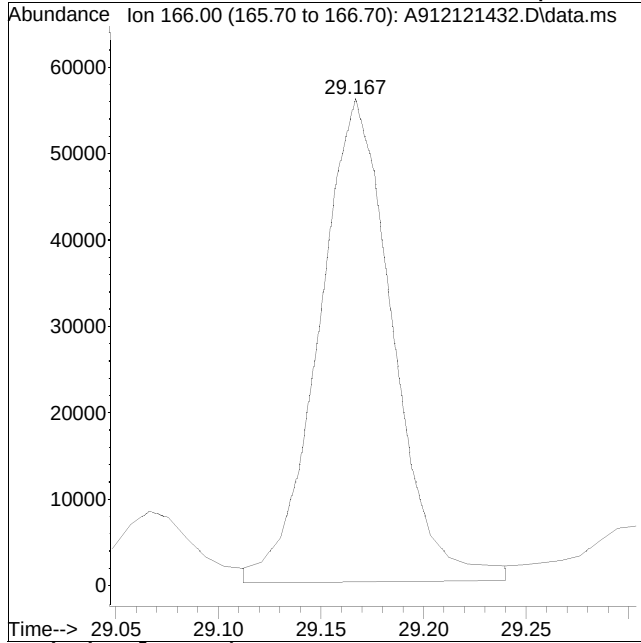
Manual Peak Response = 233838 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

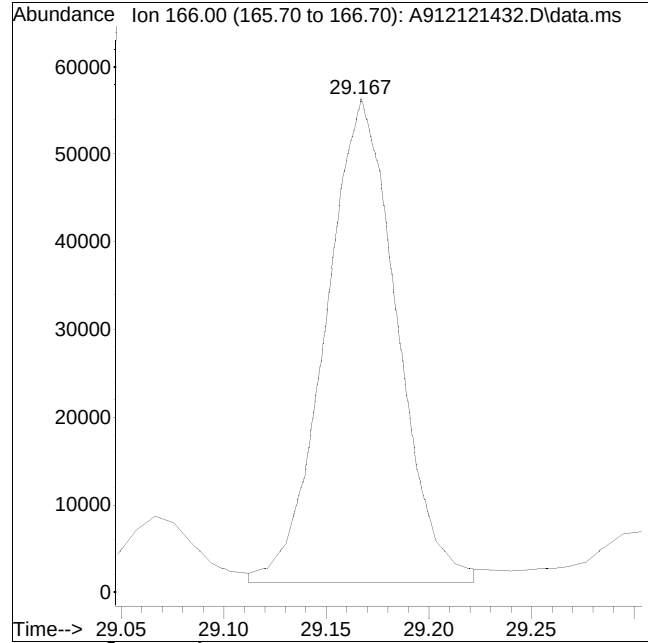
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #29: Fluorene



Original Peak Response = 139924



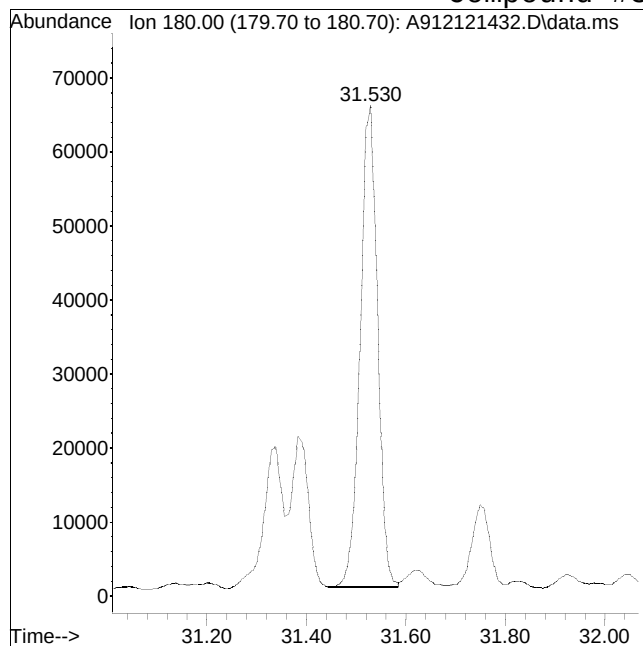
Manual Peak Response = 134020 M4

M4 = Poor automated baseline construction.

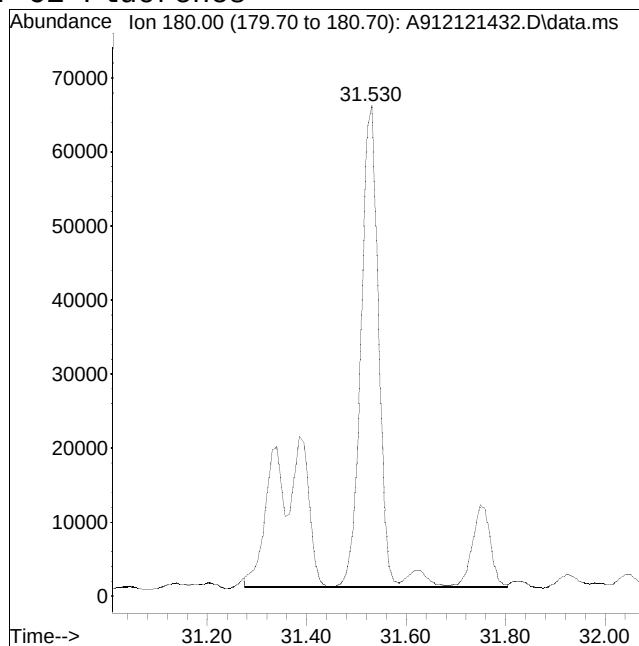
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #30: C1-Fluorenes



Original Peak Response = 157528



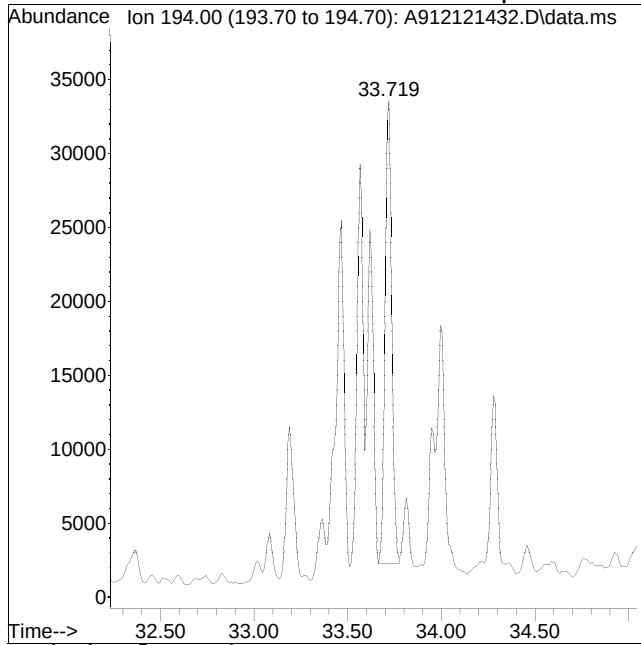
Manual Peak Response = 288364 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

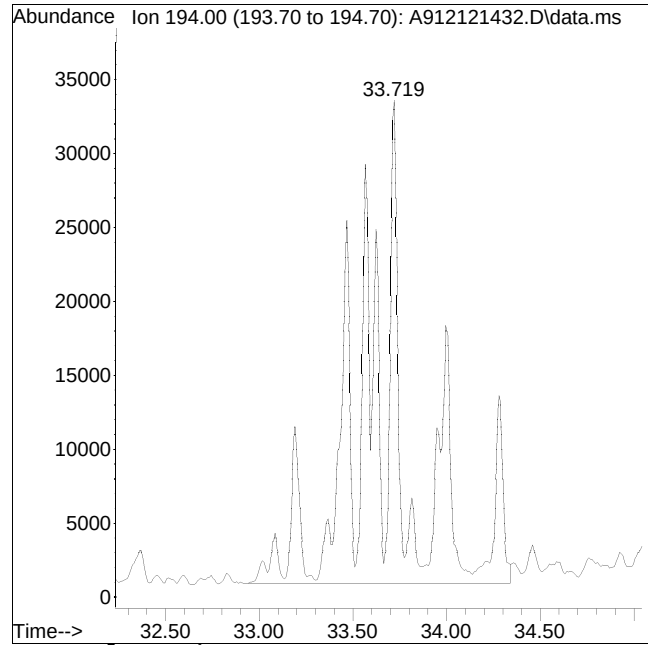
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #31: C2-Fluorenes



Original Peak Response = 77743

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

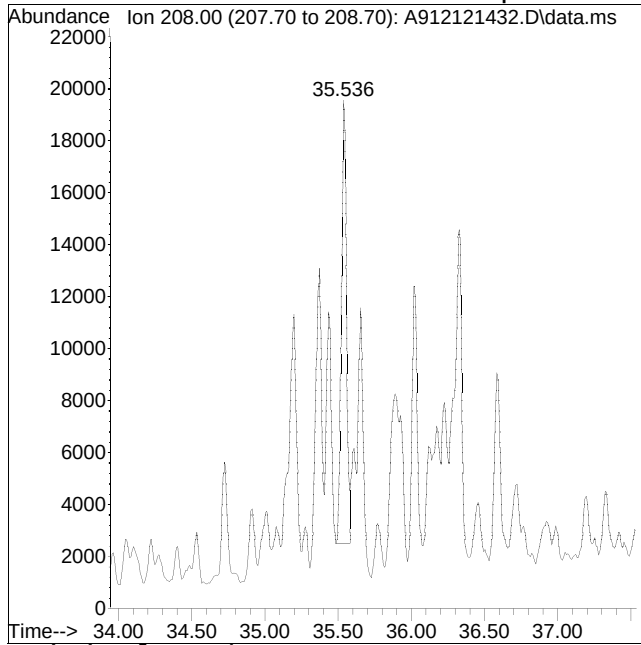


Manual Peak Response = 483390 M5

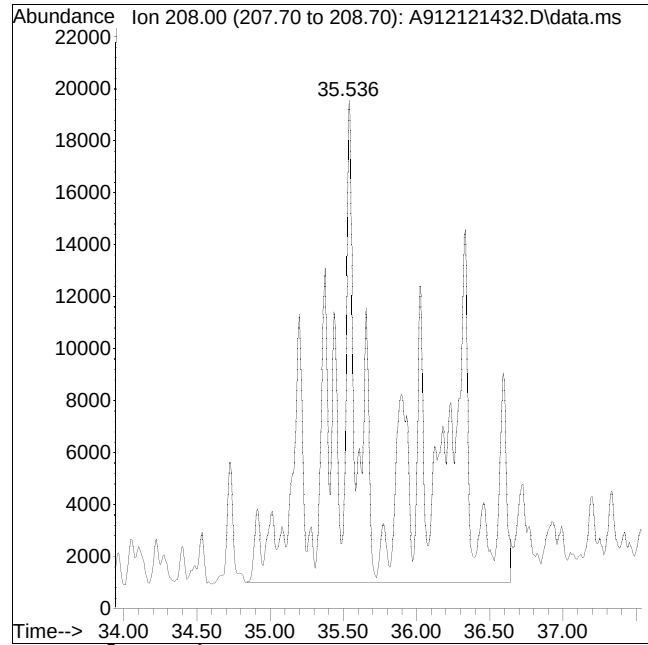
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #32: C3-Fluorenes



Original Peak Response = 42434



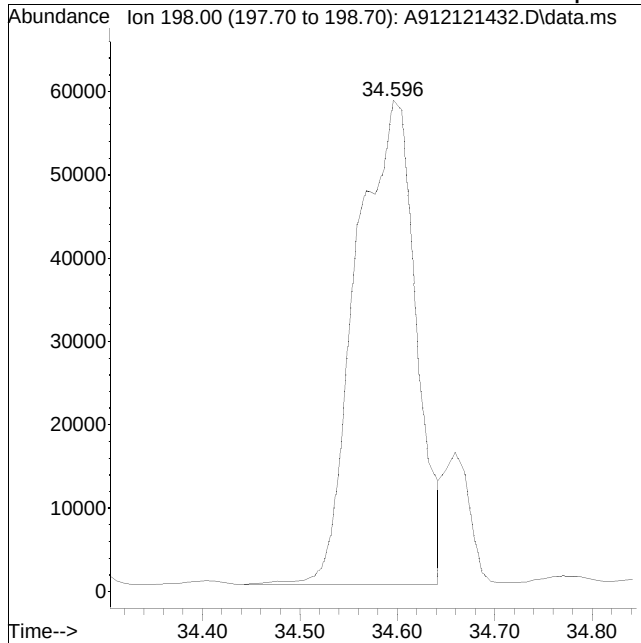
Manual Peak Response = 450145 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

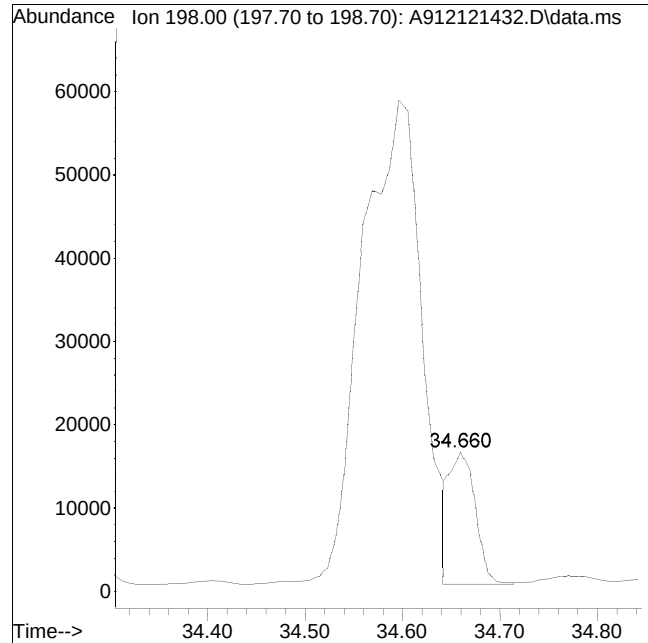
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #37: OTP



Original Peak Response = 247773



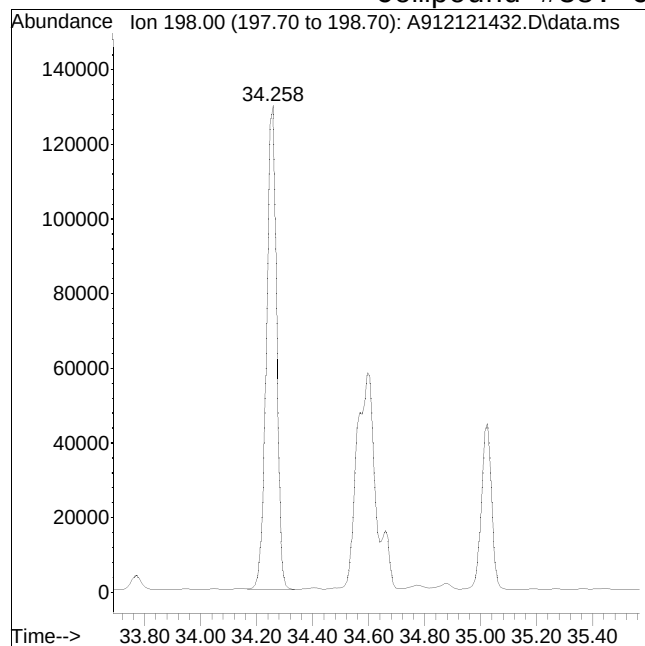
Manual Peak Response = 28243 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

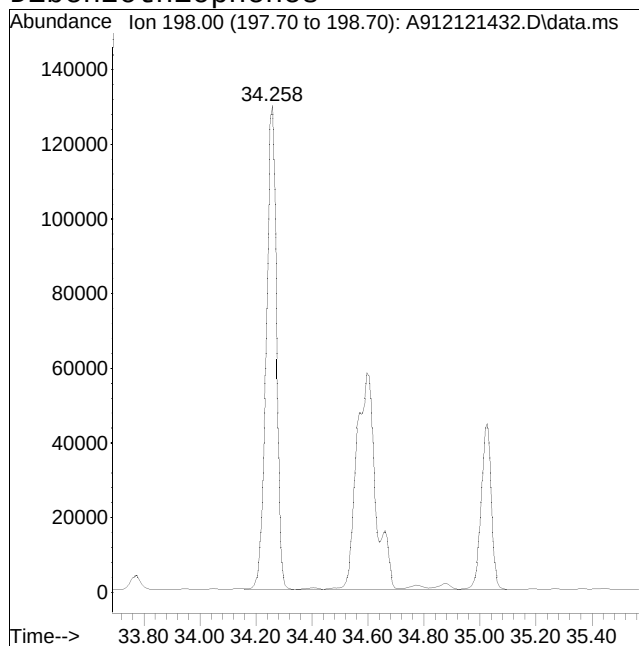
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912121432.D Operator : PAH9:SR
 Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
 Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #38: C1-Dibenzothiophenes



Original Peak Response = 327197



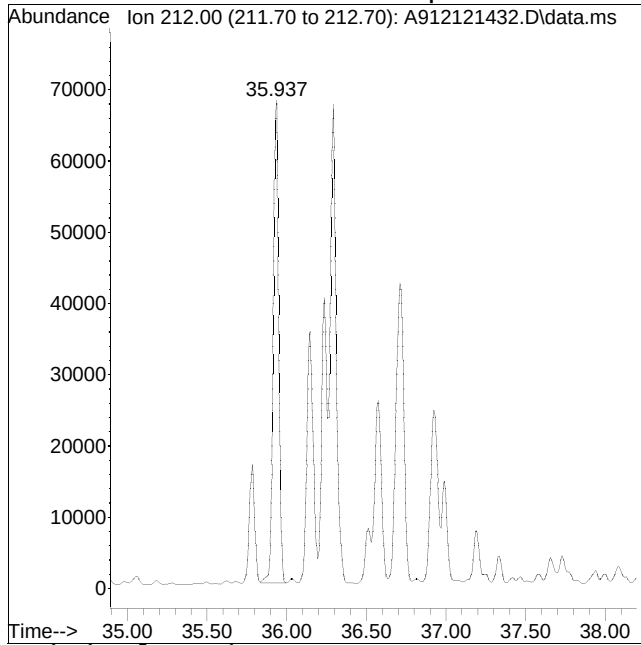
Manual Peak Response = 726280 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

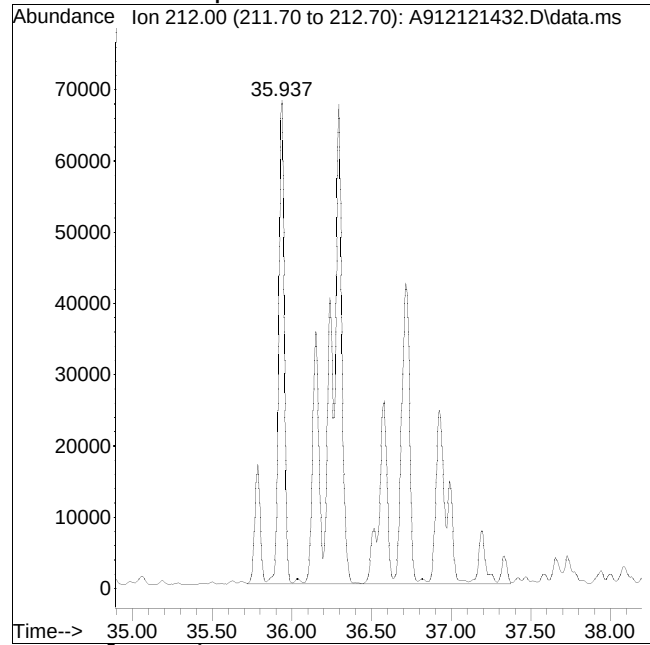
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #39: C2-Dibenzothiophenes



Original Peak Response = 162830



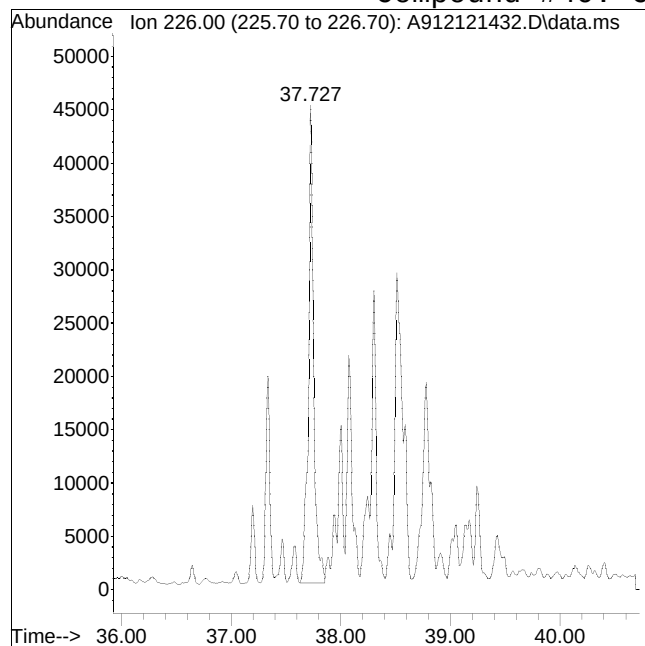
Manual Peak Response = 960187 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

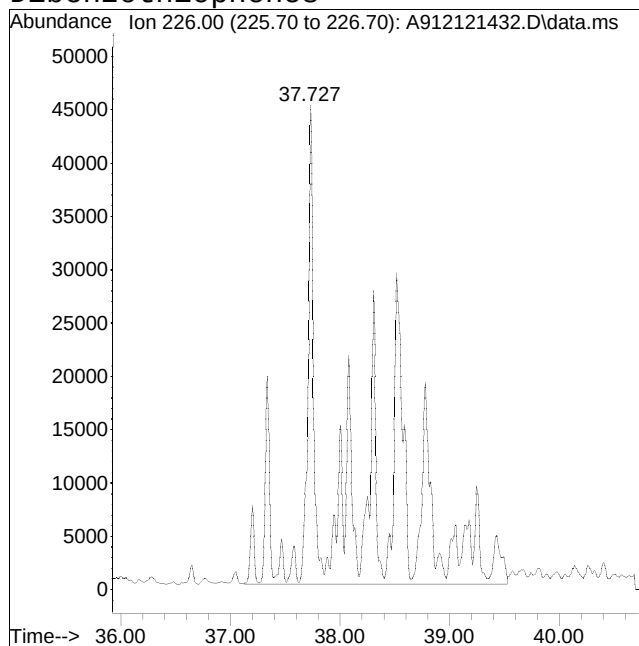
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912121432.D Operator : PAH9:SR
 Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
 Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #40: C3-Dibenzothiophenes



Original Peak Response = 147817



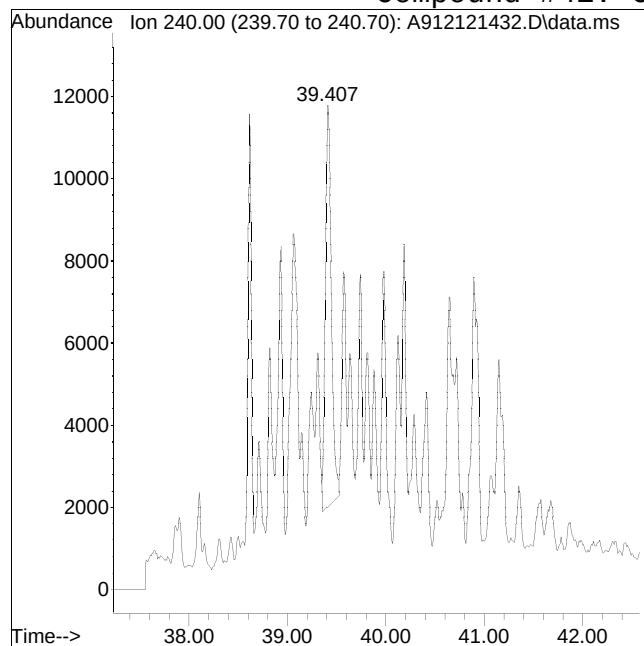
Manual Peak Response = 836924 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

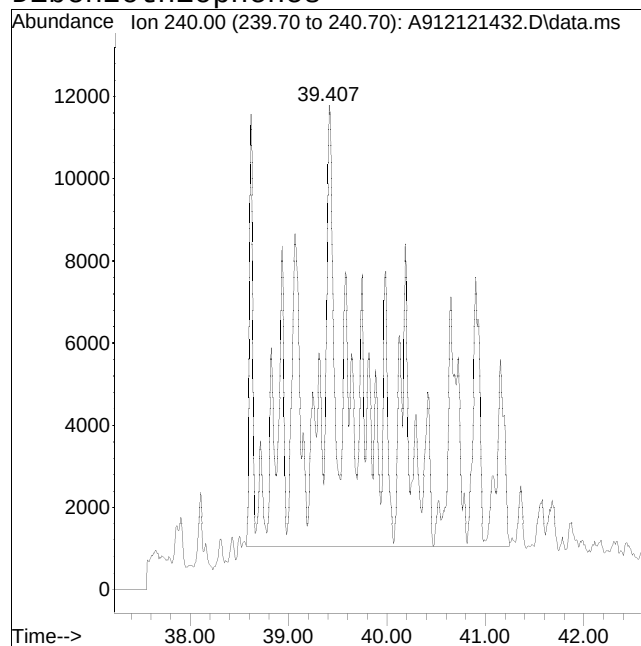
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #41: C4-Dibenzothiophenes



Original Peak Response = 41671



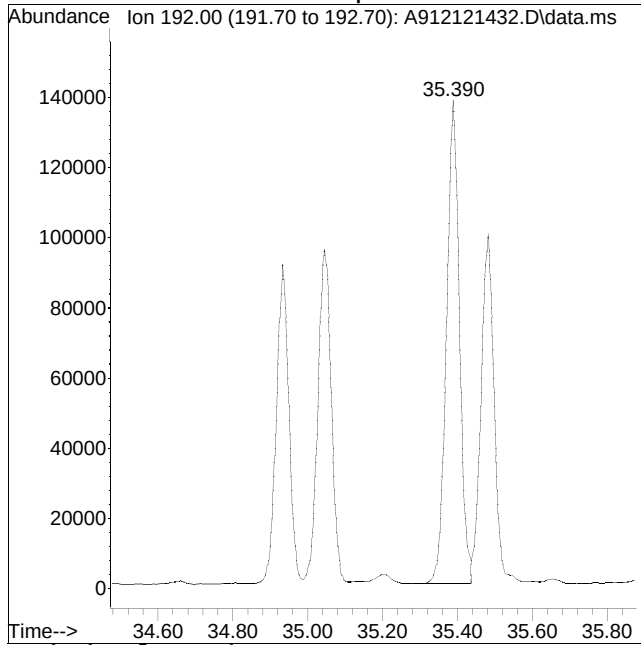
Manual Peak Response = 464586 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

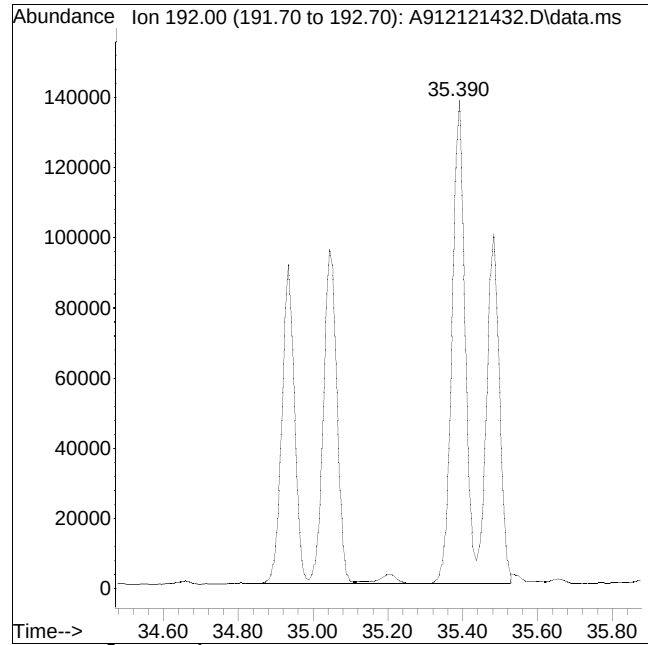
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #49: C1-Phenanthrenes/Anthracenes



Original Peak Response = 332245



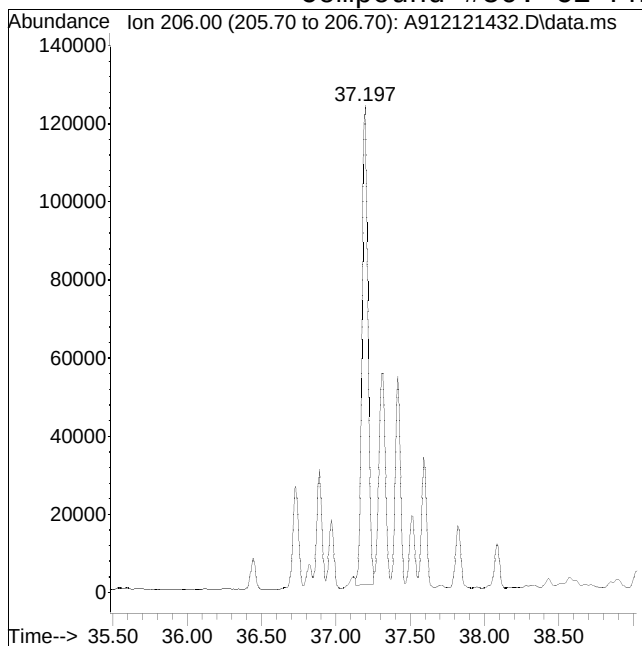
Manual Peak Response = 1030203 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

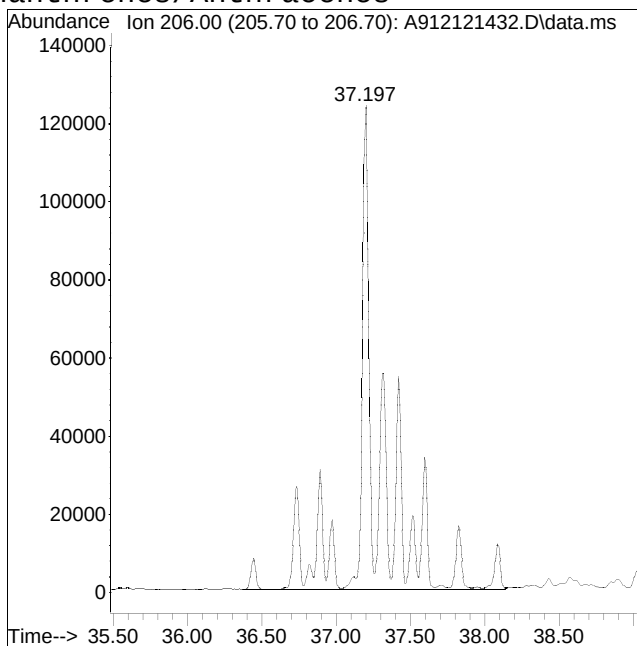
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912121432.D Operator : PAH9:SR
 Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
 Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #50: C2-Phenanthrenes/Anthracenes



Original Peak Response = 343634



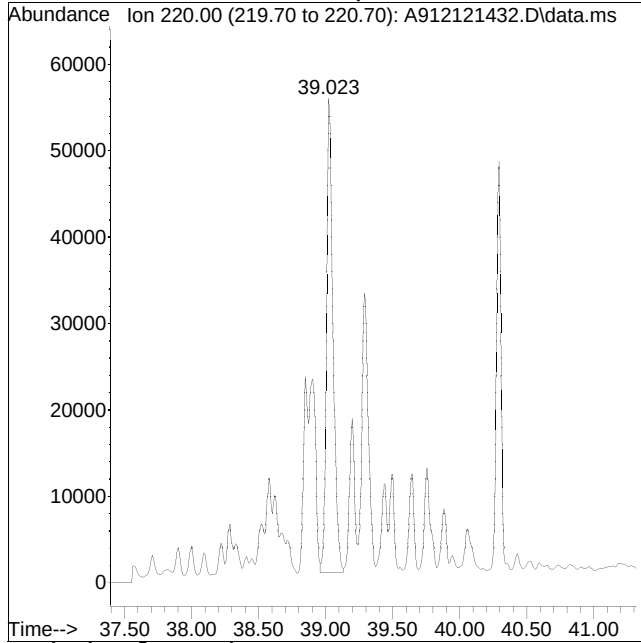
Manual Peak Response = 1101113 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

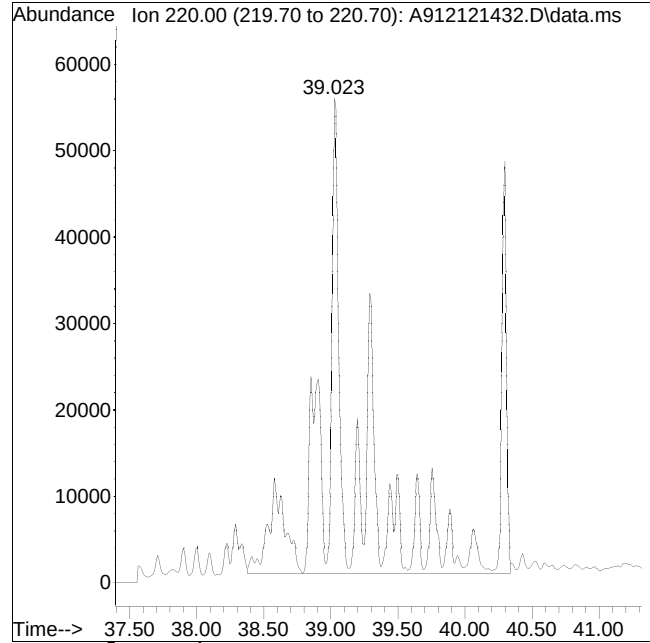
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #52: C3-Phenanthrenes/Anthracenes



Original Peak Response = 186521



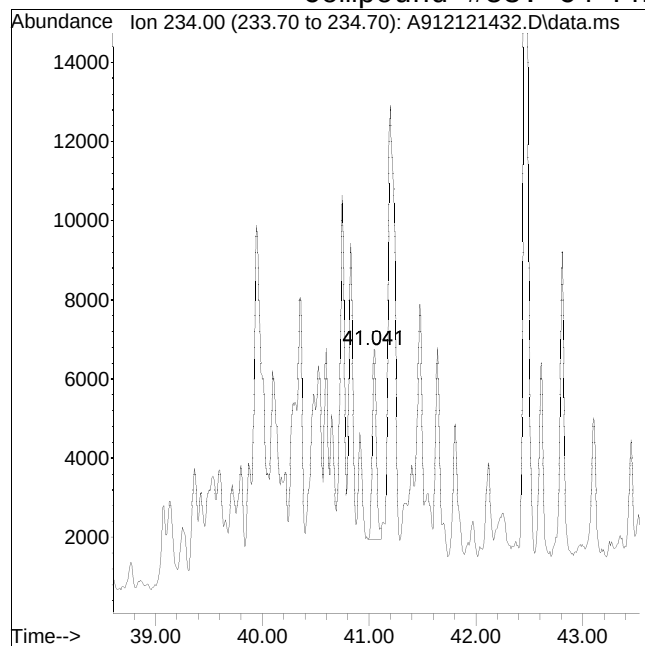
Manual Peak Response = 861545 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

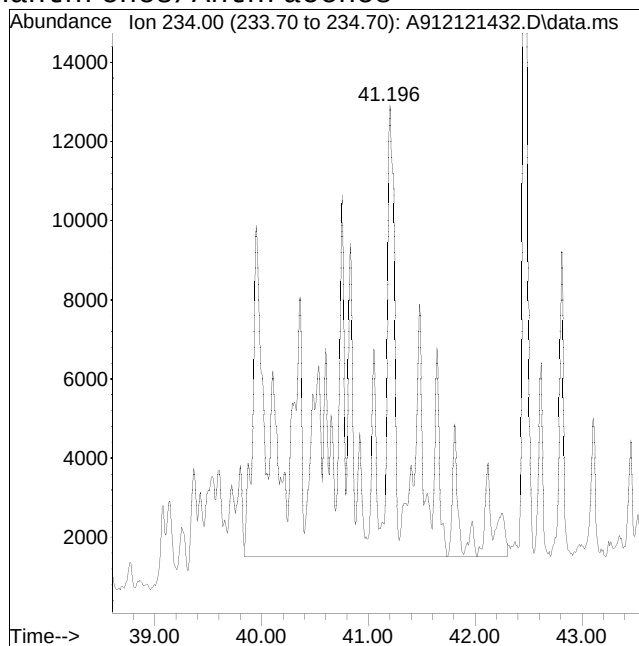
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #53: C4-Phenanthrenes/Anthracenes



Original Peak Response = 12663



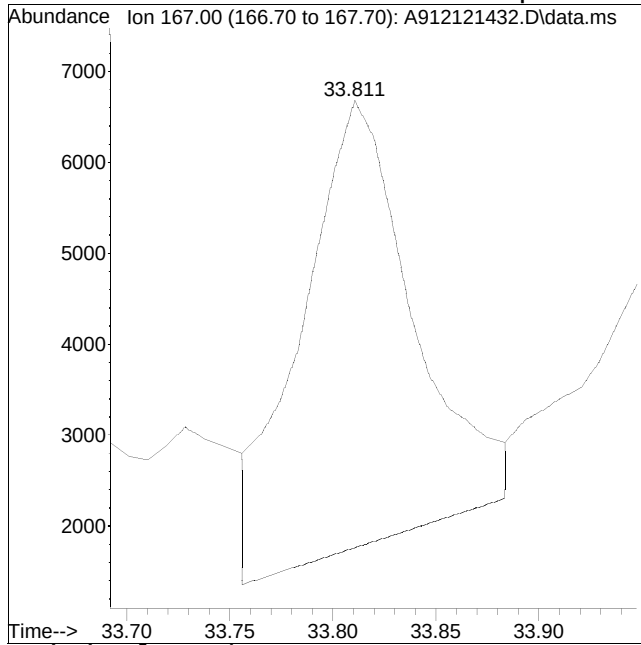
Manual Peak Response = 371474 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

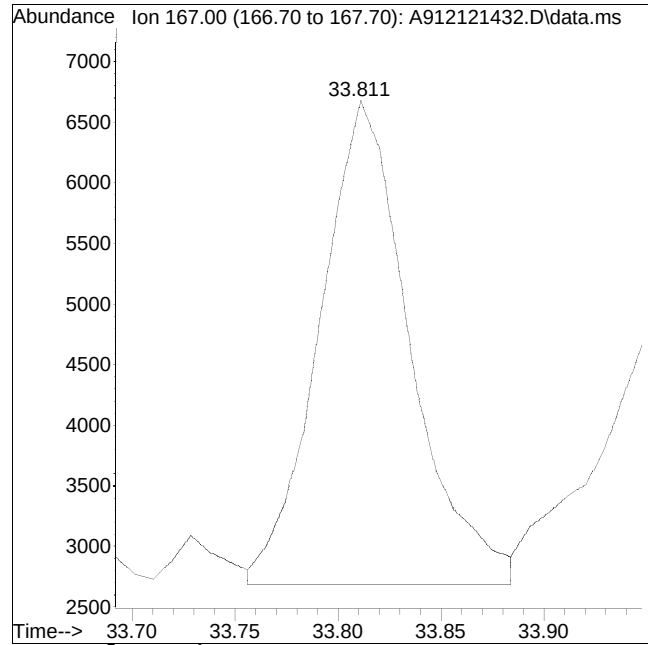
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #56: Carbazole



Original Peak Response = 18771



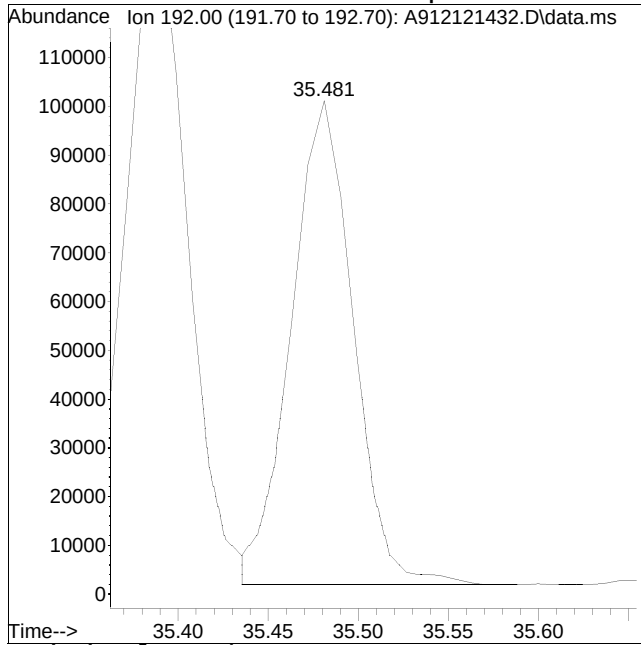
Manual Peak Response = 12219 M4

M4 = Poor automated baseline construction.

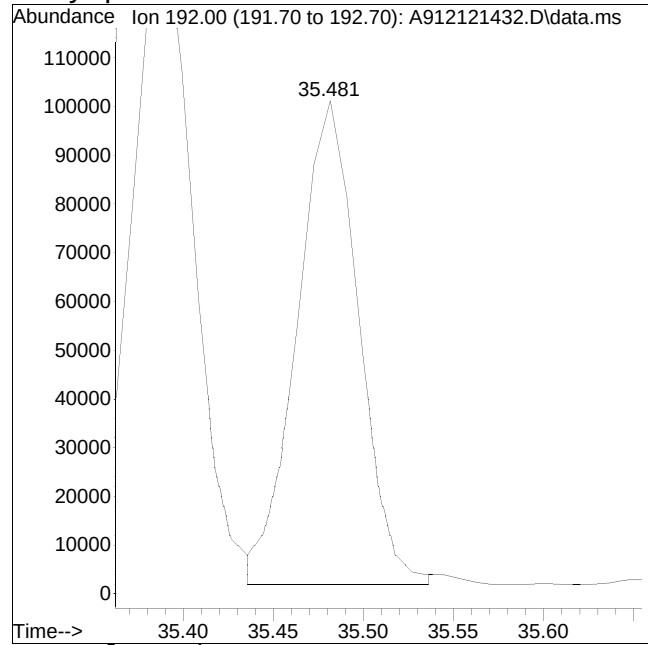
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #57: 1-Methylphenanthrene



Original Peak Response = 236953



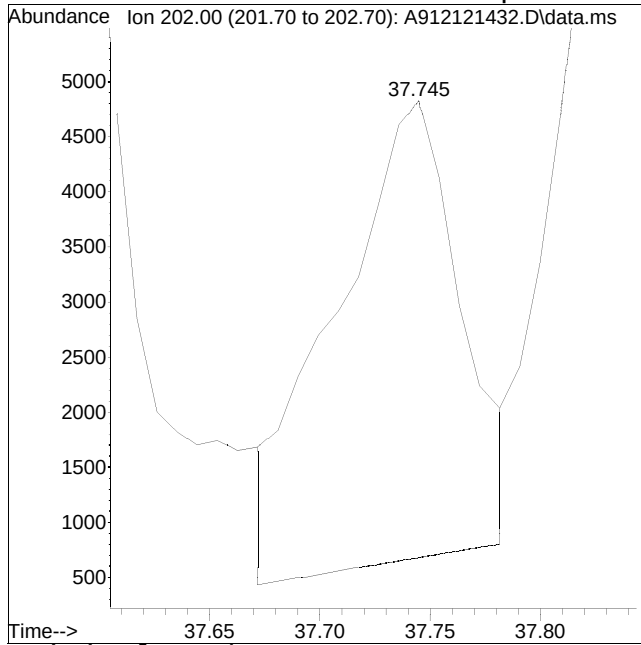
Manual Peak Response = 235811 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

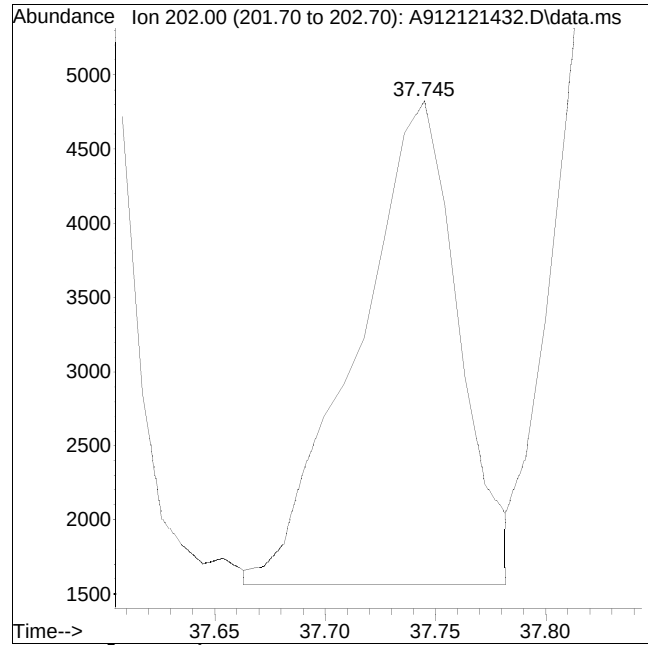
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #58: Fluoranthene



Original Peak Response = 16614

M4 = Poor automated baseline construction.

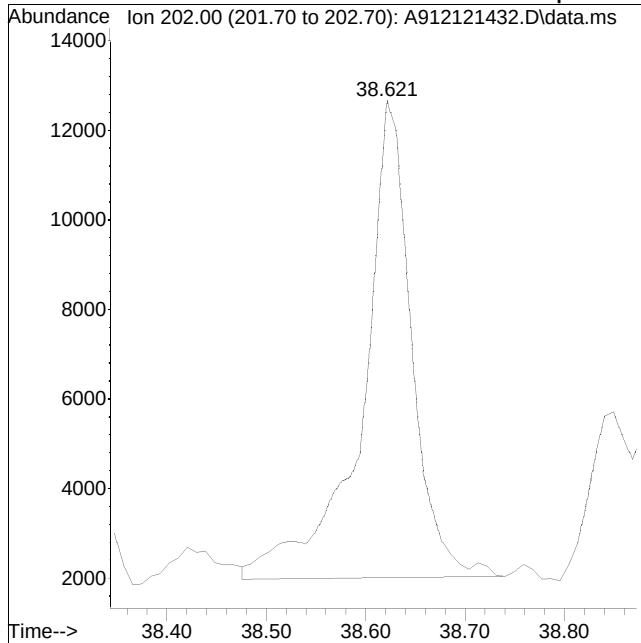


Manual Peak Response = 10468 M4

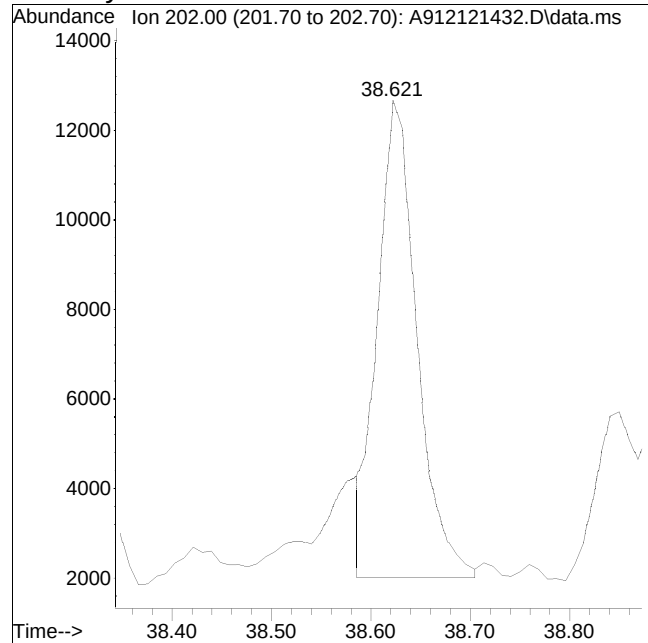
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #60: Pyrene



Original Peak Response = 36915



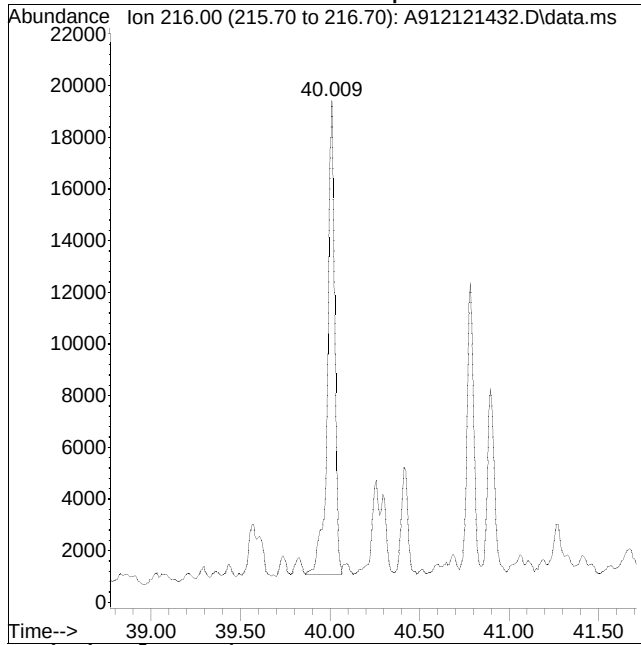
Manual Peak Response = 29384 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

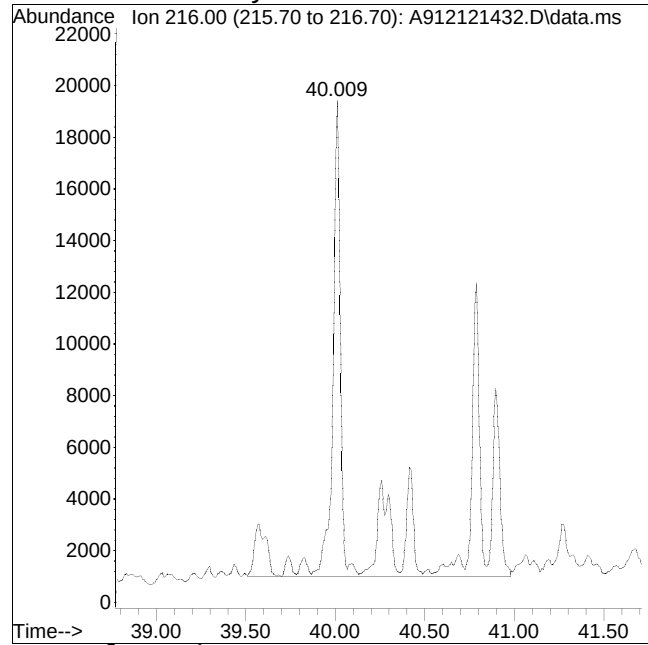
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #61: C1-Fluoranthenes/Pyrenes



Original Peak Response = 50930



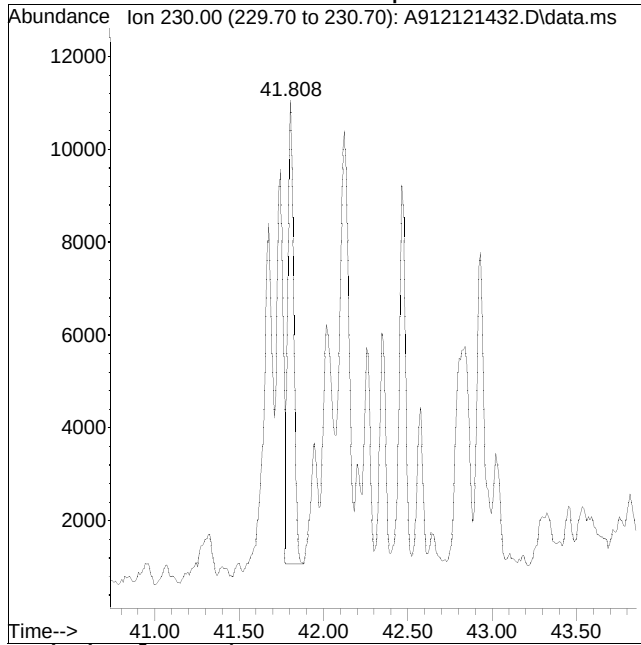
Manual Peak Response = 151191 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

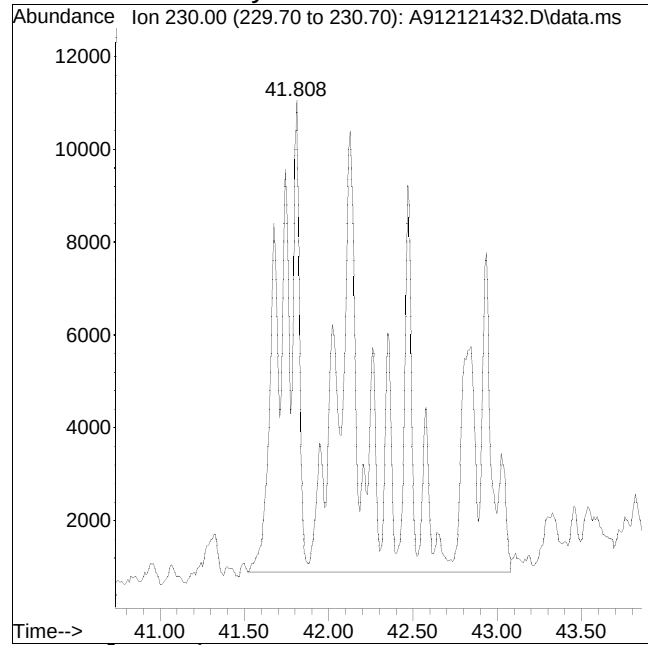
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #62: C2-Fluoranthenes/Pyrenes



Original Peak Response = 24614



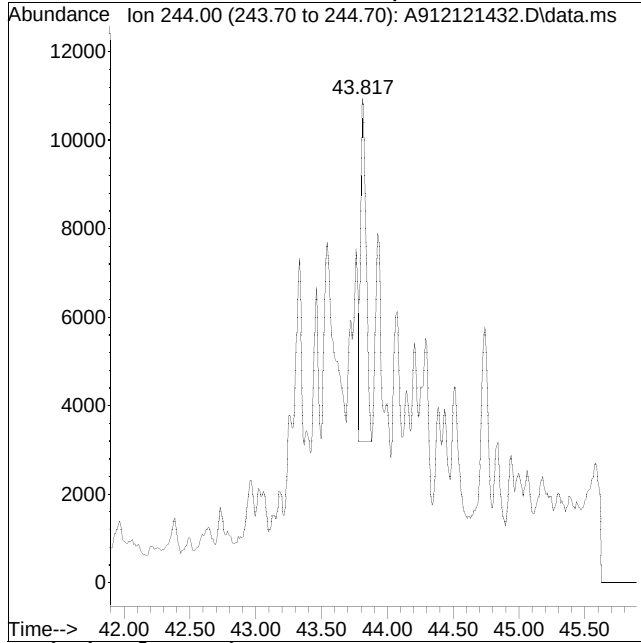
Manual Peak Response = 262785 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

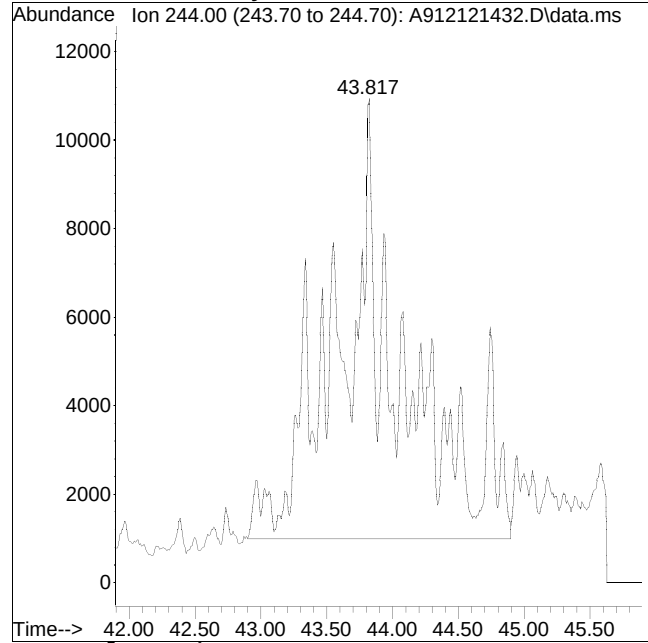
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #63: C3-Fluoranthenes/Pyrenes



Original Peak Response = 23271

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

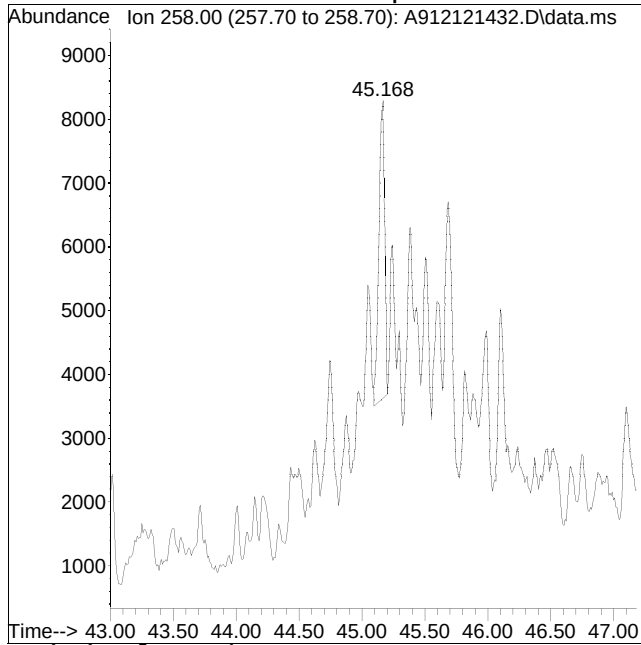


Manual Peak Response = 334027 M5

Manual Integration/Negative Proof Report

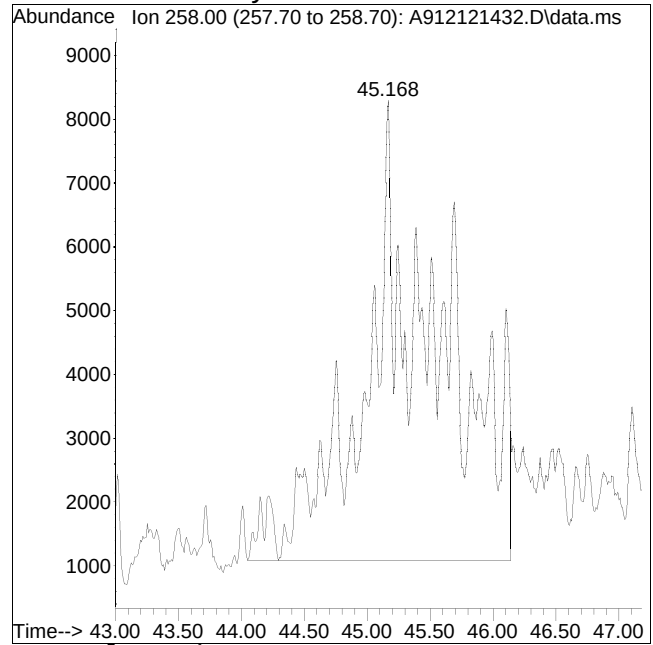
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #64: C4-Fluoranthenes/Pyrenes



Original Peak Response = 14934

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

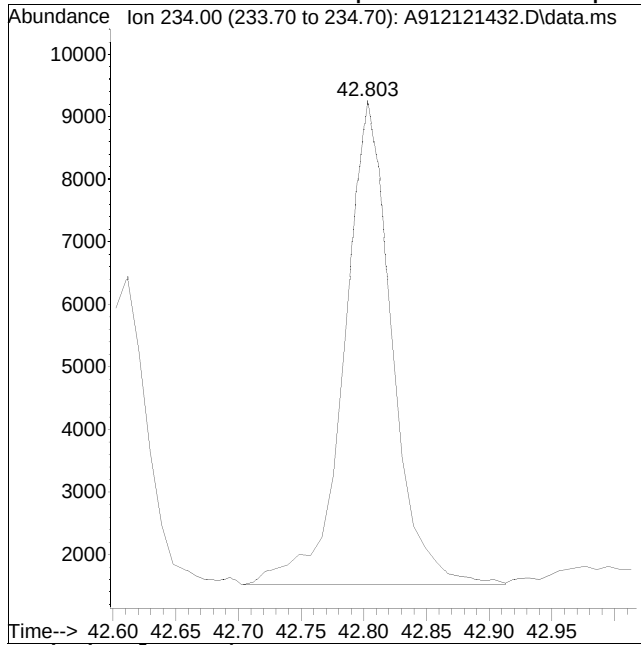


Manual Peak Response = 289706 M5

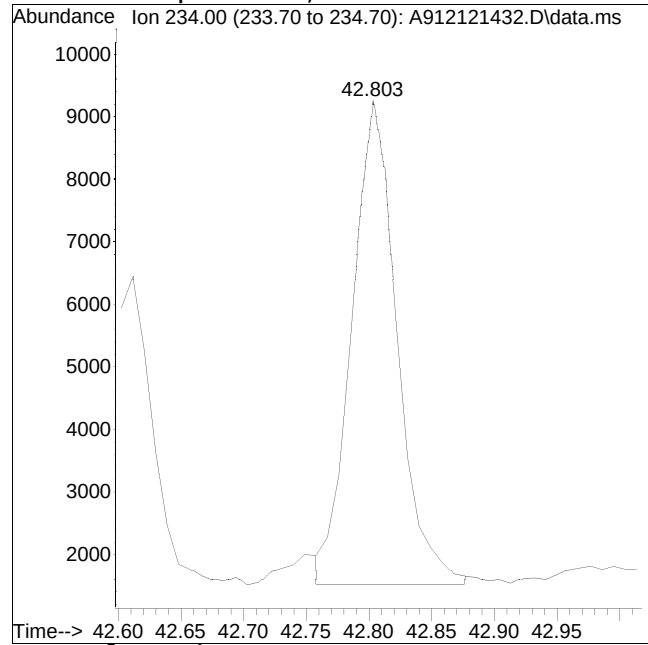
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #68: Naphthobenzothiophene-1,2-D



Original Peak Response = 20609



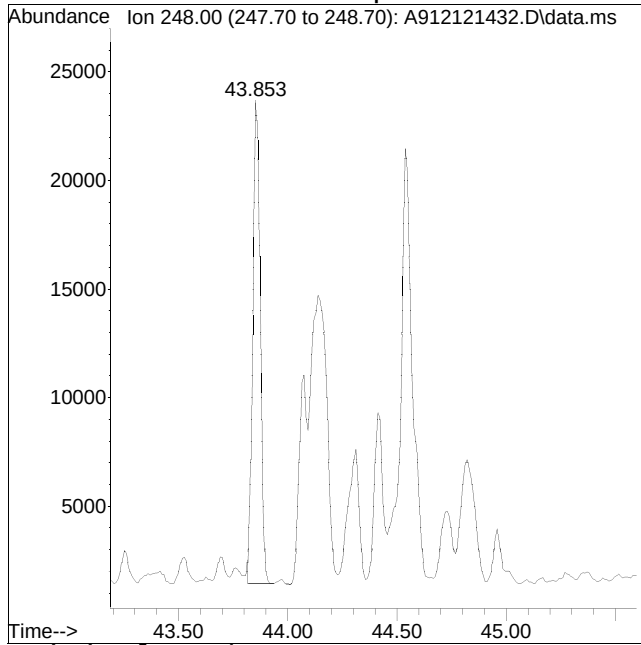
Manual Peak Response = 19371 M4

M4 = Poor automated baseline construction.

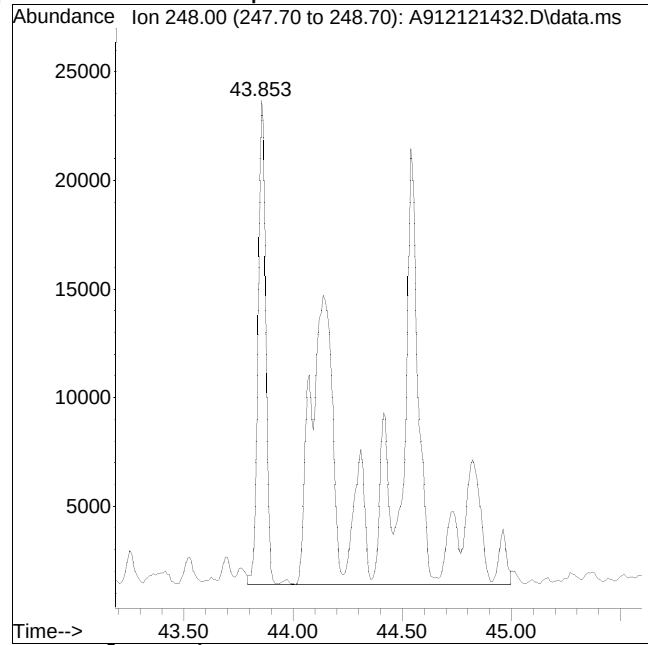
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #70: C1-Naphthobenzothiophenes



Original Peak Response = 52986



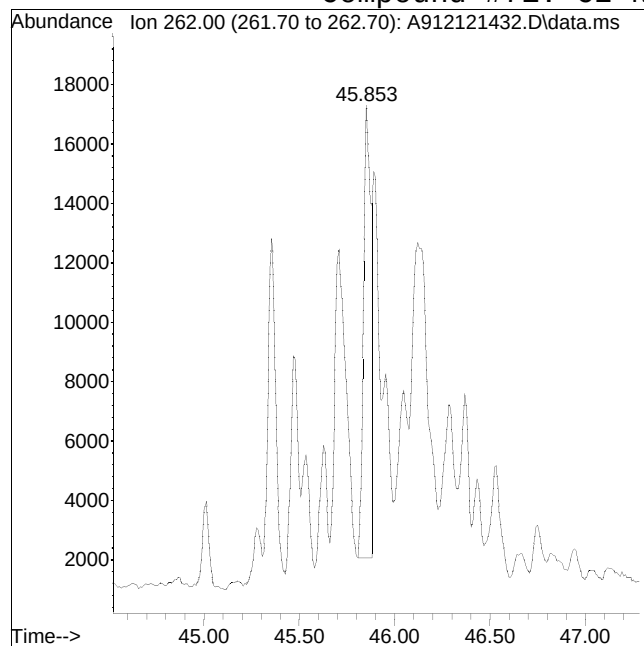
Manual Peak Response = 313859 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

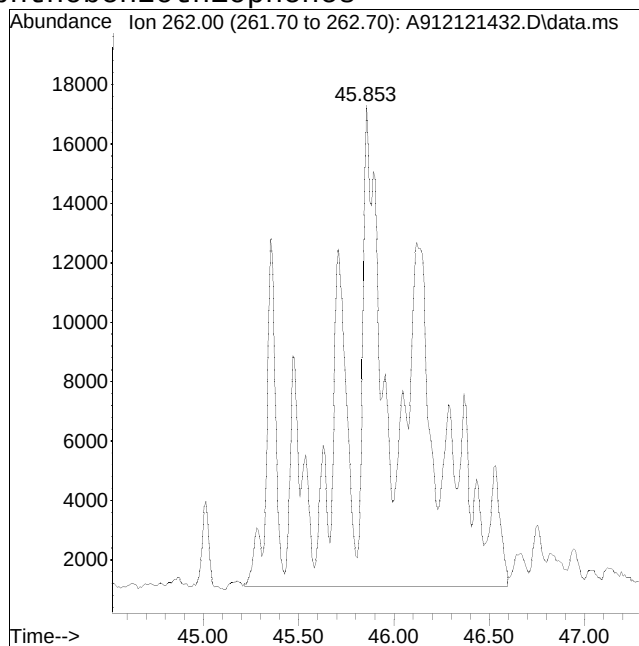
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #71: C2-Naphthobenzothiophenes



Original Peak Response = 43024



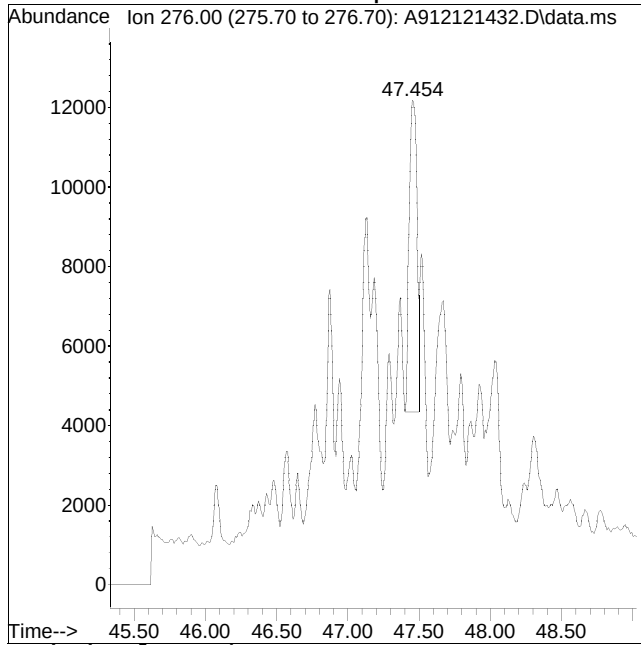
Manual Peak Response = 400151 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

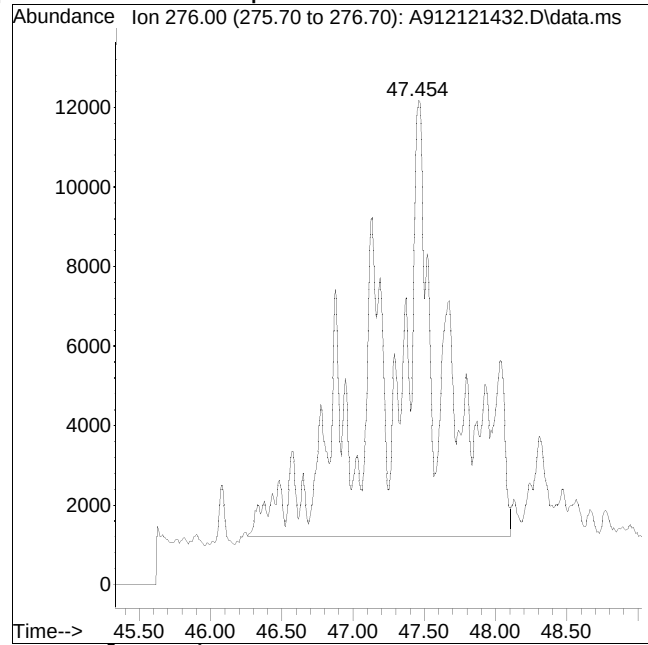
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #72: C3-Naphthobenzothiophenes



Original Peak Response = 30288

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

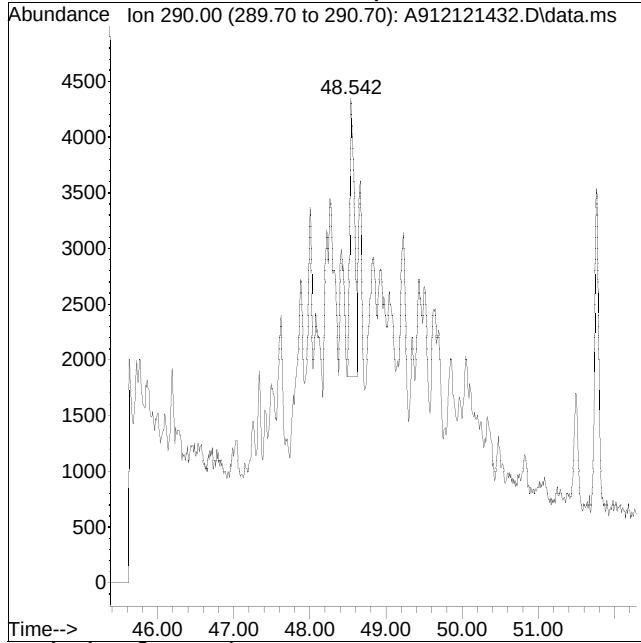


Manual Peak Response = 332031 M5

Manual Integration/Negative Proof Report

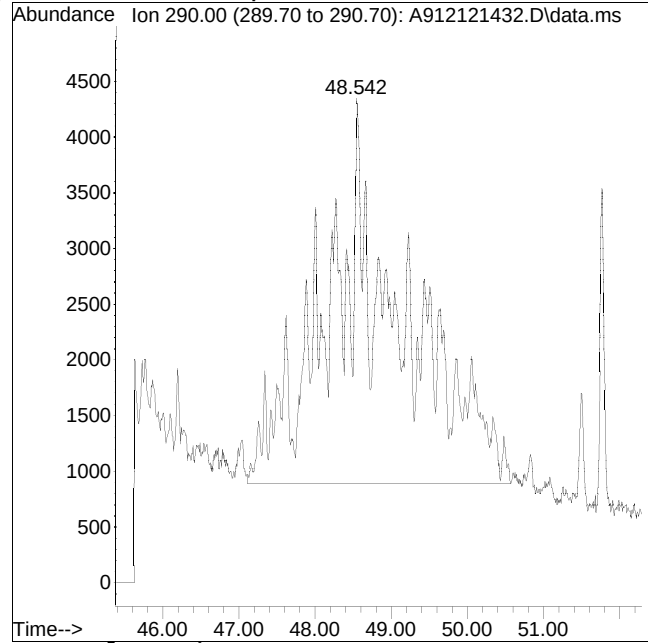
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #73: C4-Naphthobenzothiophenes



Original Peak Response = 11123

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

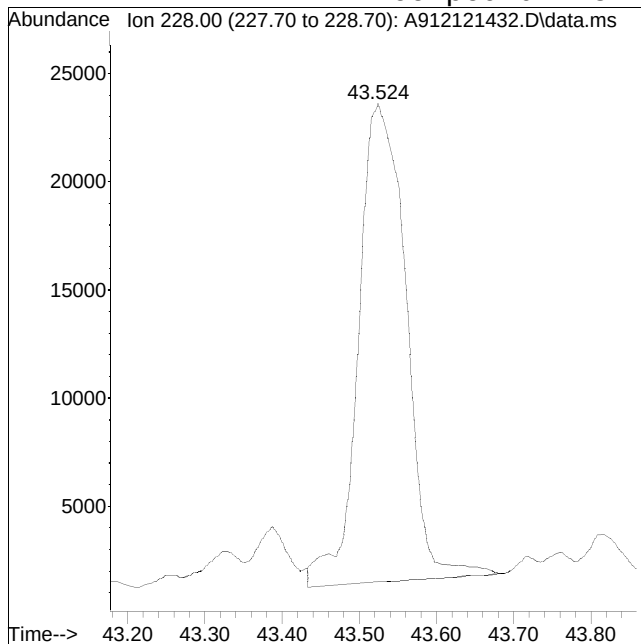


Manual Peak Response = 227898 M5

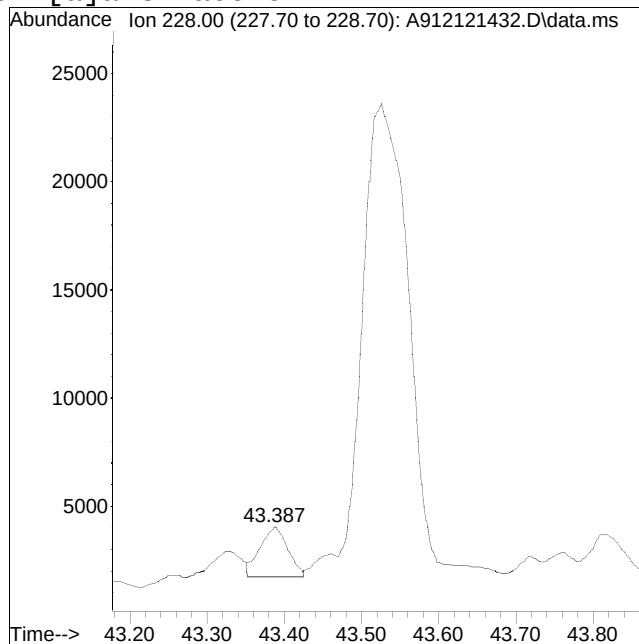
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #75: Benz[a]anthracene



Original Peak Response = 94395



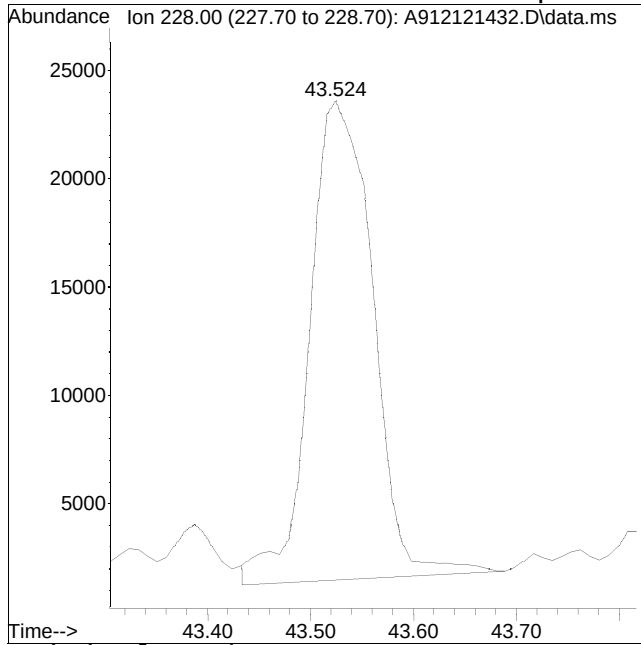
Manual Peak Response = 5717 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

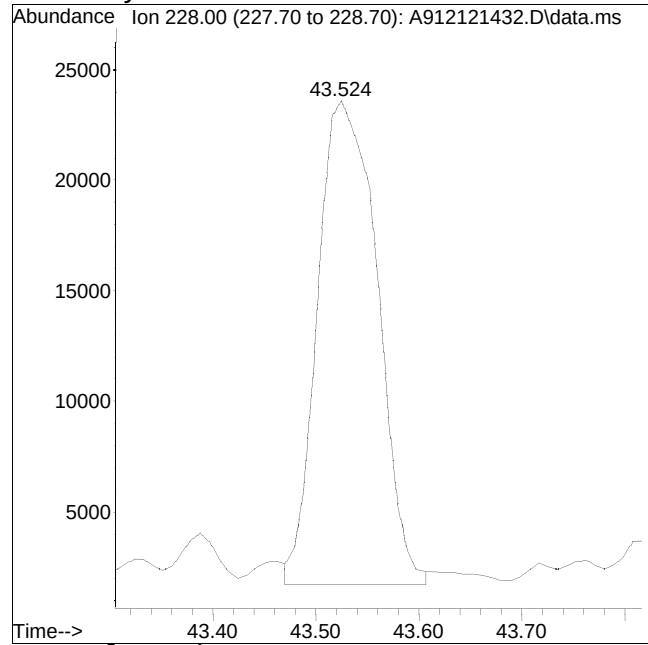
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #76: Chrysene



Original Peak Response = 94395



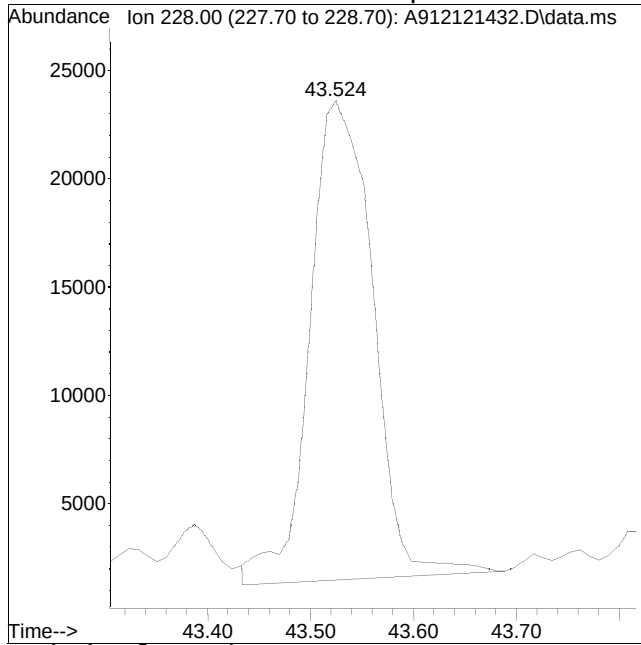
Manual Peak Response = 88173 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

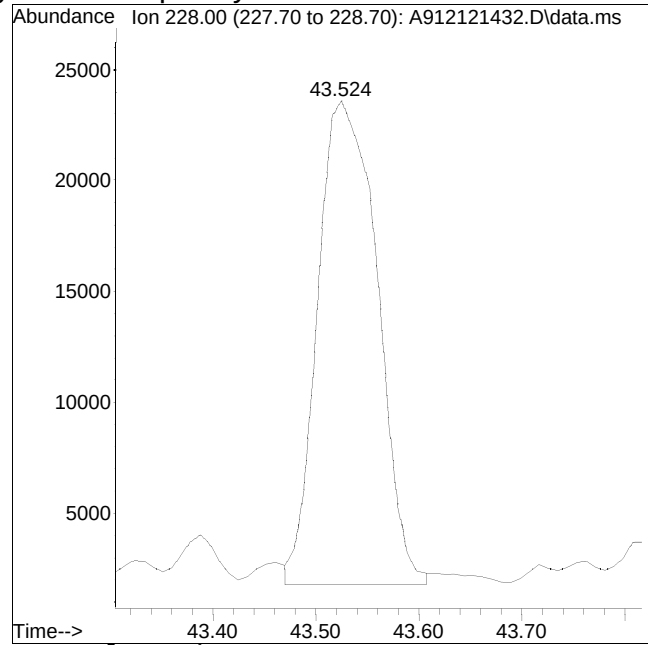
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #77: Chrysene/Triphenylene



Original Peak Response = 94395

M4 = Poor automated baseline construction.

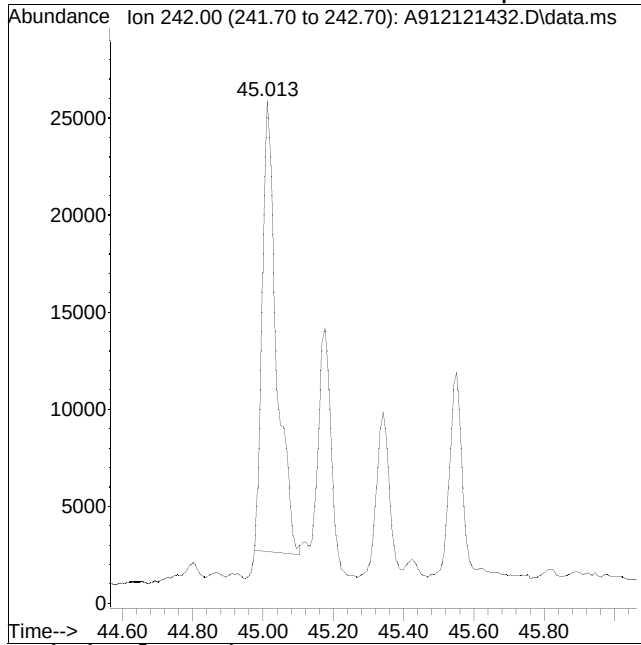


Manual Peak Response = 87590 M4

Manual Integration/Negative Proof Report

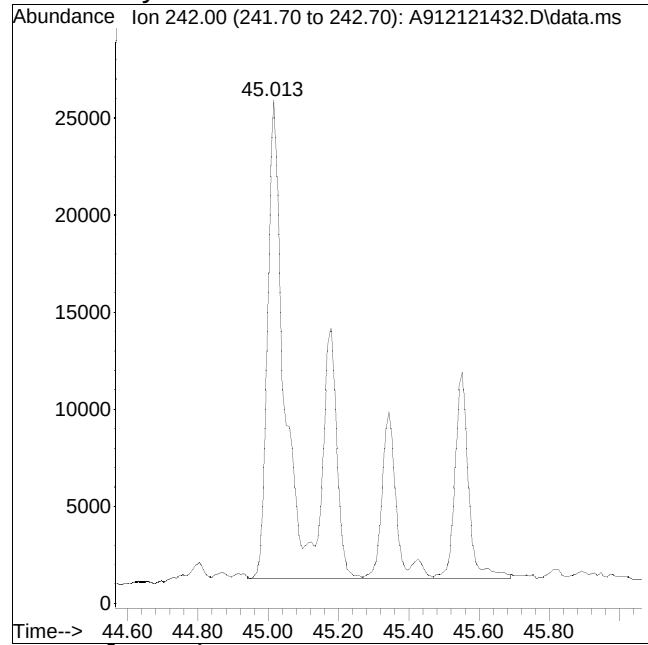
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #78: C1-Chrysenes



Original Peak Response = 65942

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

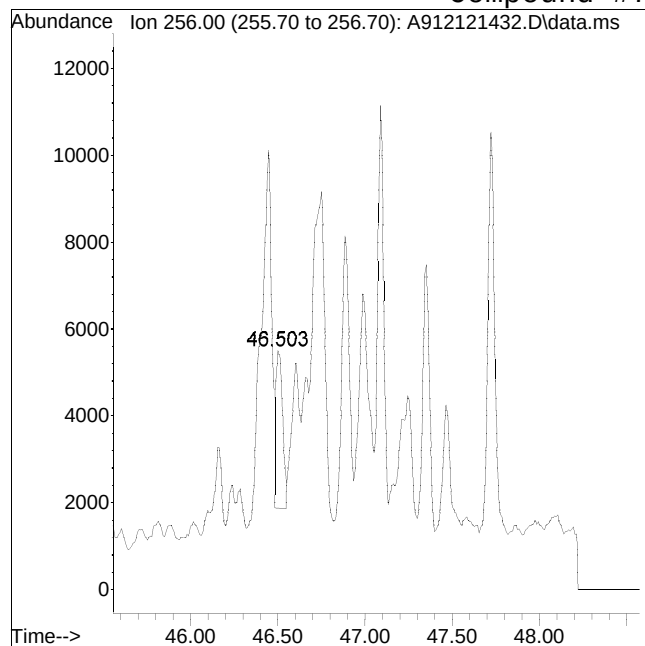


Manual Peak Response = 167883 M5

Manual Integration/Negative Proof Report

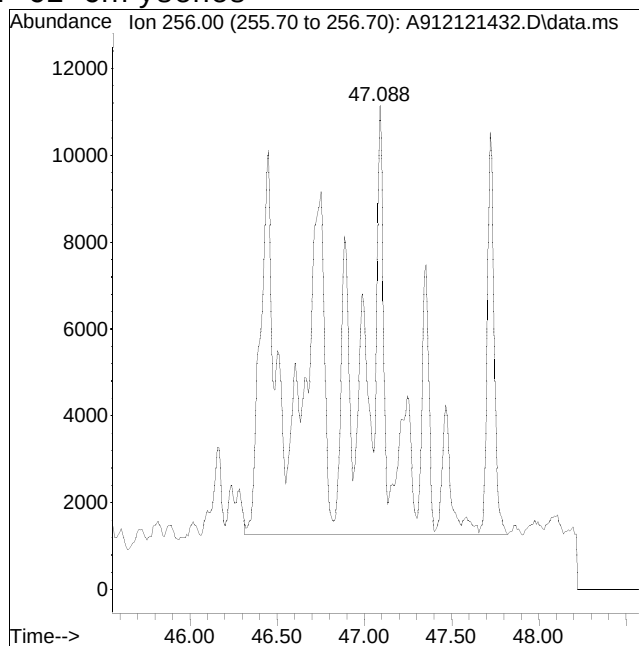
Data Path : 0:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912121432.D Operator : PAH9:SR
 Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
 Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #79: C2-Chrysenes



Original Peak Response = 8946

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

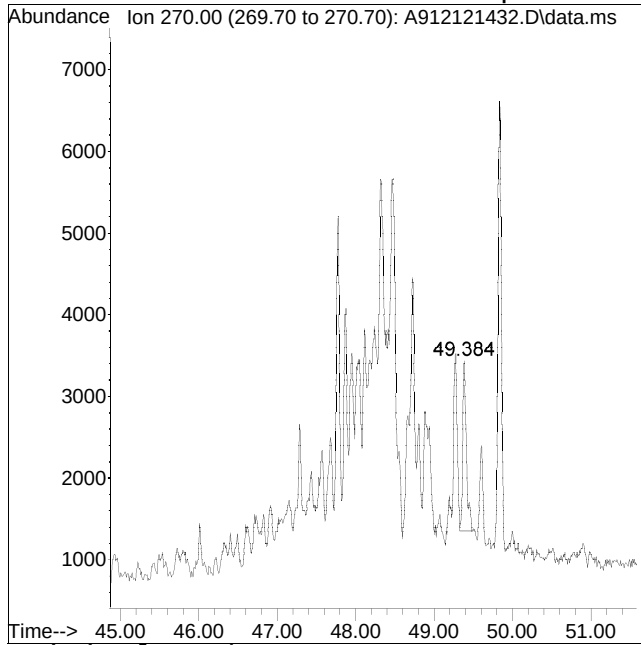


Manual Peak Response = 252325 M5

Manual Integration/Negative Proof Report

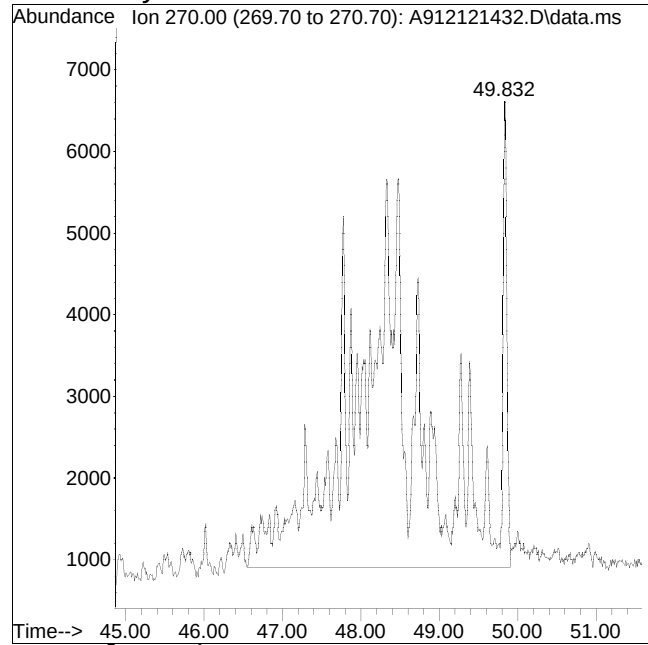
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #81: C3-Chrysenes



Original Peak Response = 6653

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

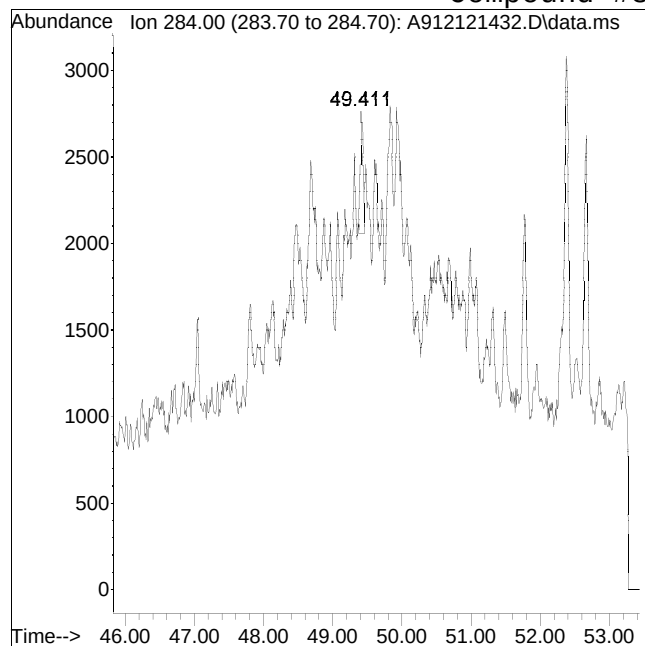


Manual Peak Response = 273241 M5

Manual Integration/Negative Proof Report

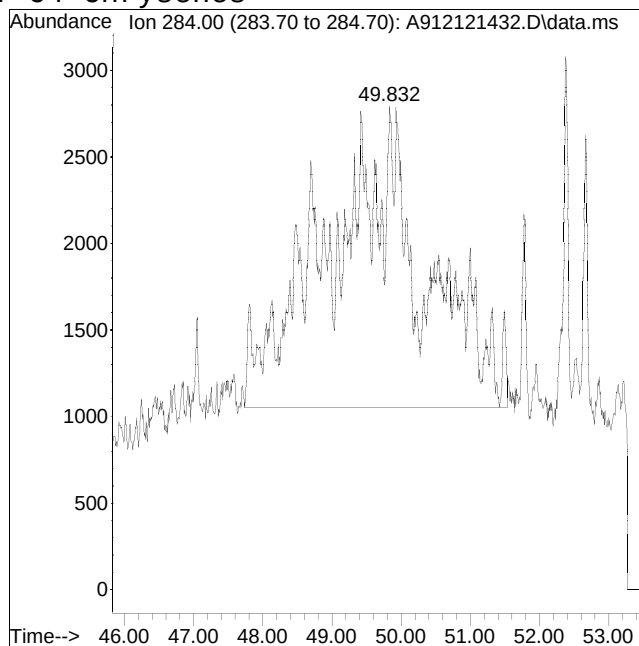
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #82: C4-Chrysenes



Original Peak Response = 2074

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

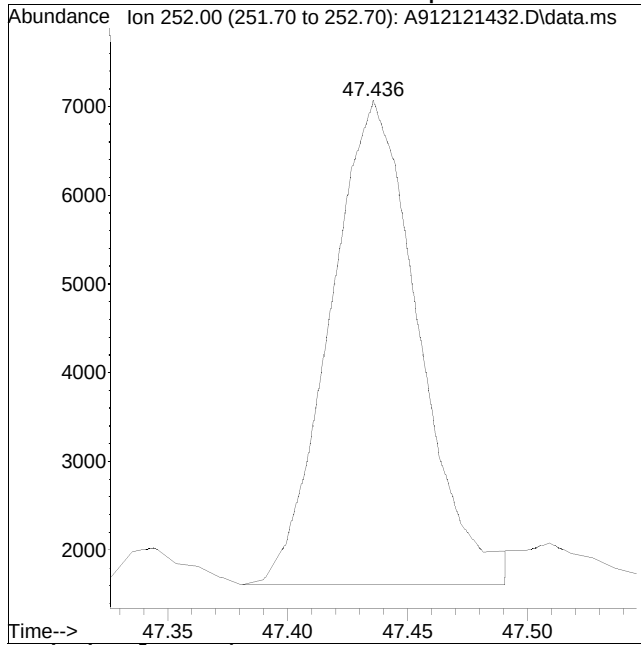


Manual Peak Response = 167537 M5

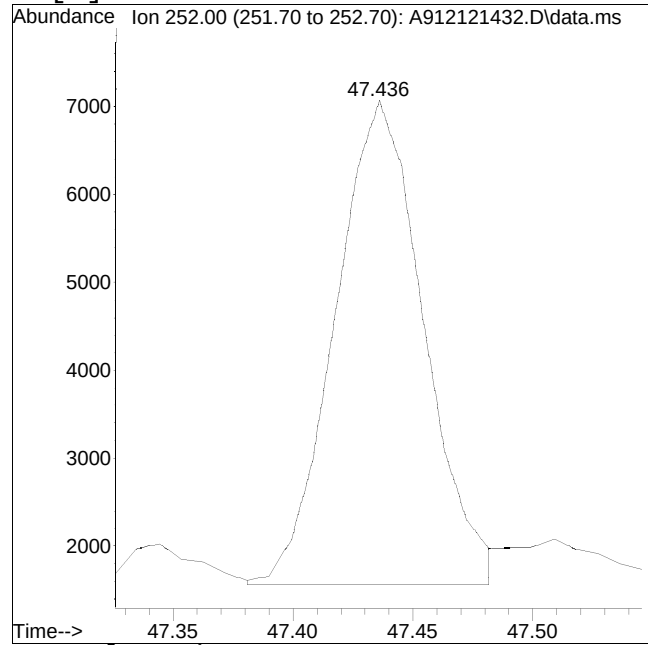
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #84: Benzo[b]fluoranthene



Original Peak Response = 14069



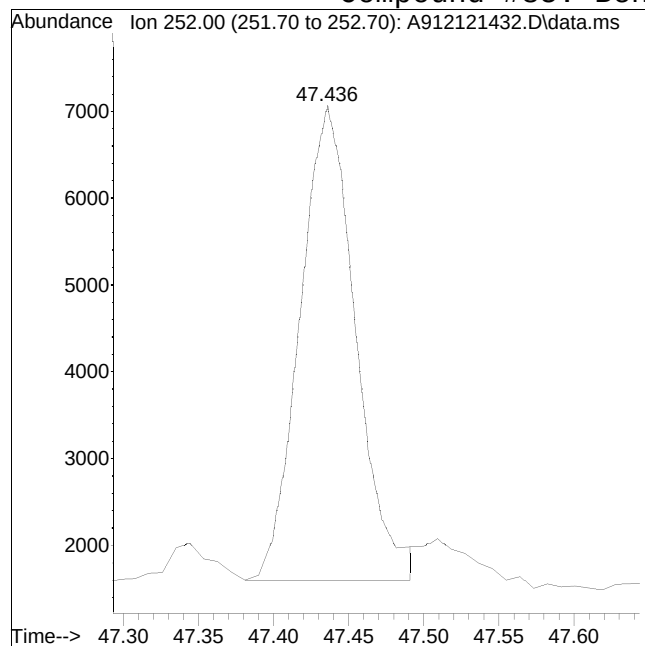
Manual Peak Response = 14160 M4

M4 = Poor automated baseline construction.

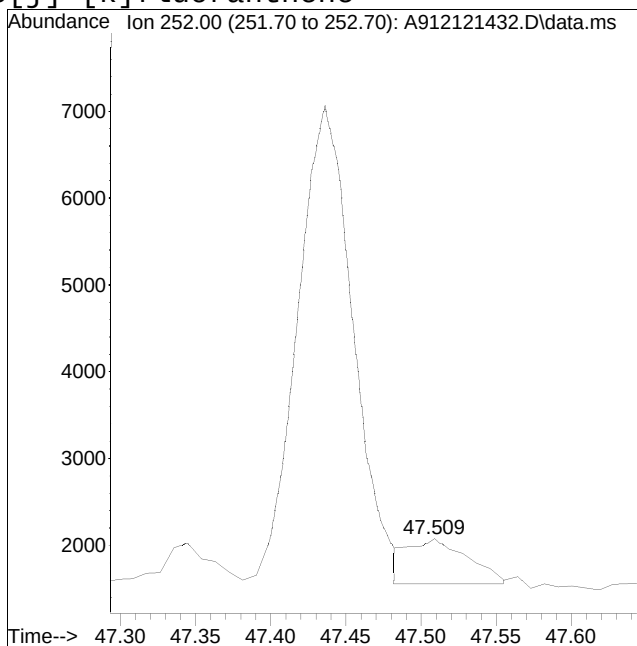
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912121432.D Operator : PAH9:SR
 Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
 Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #85: Benzo[j]+[k]fluoranthene



Original Peak Response = 14069



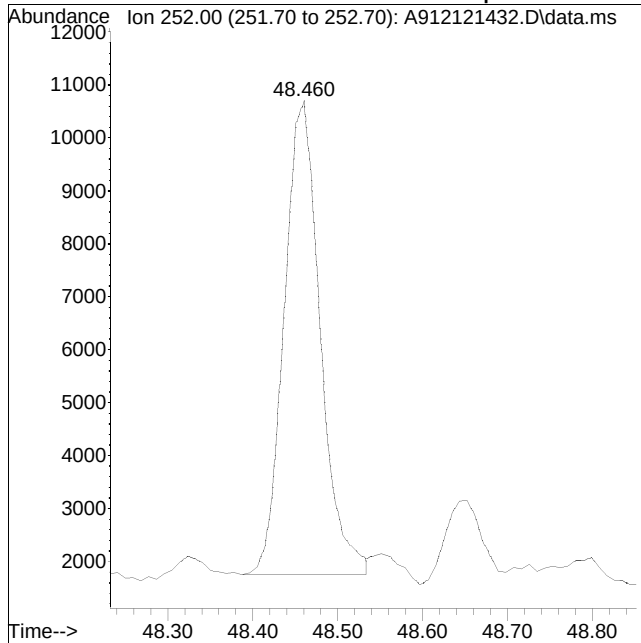
Manual Peak Response = 1442 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

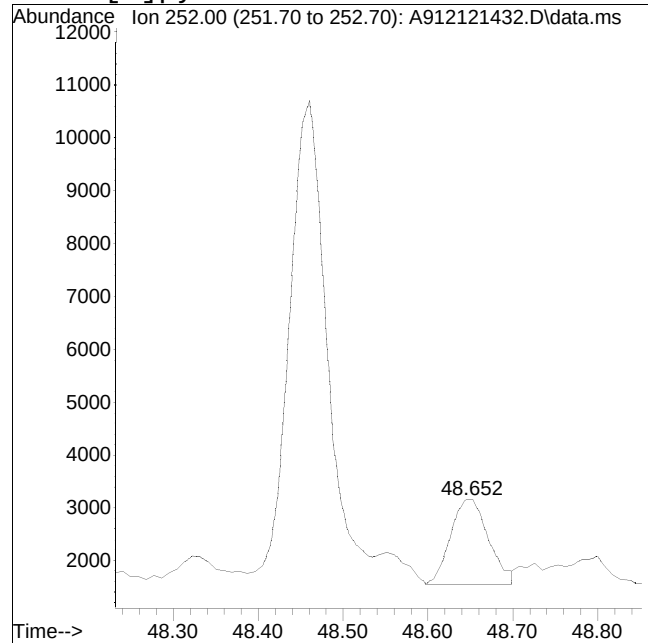
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #89: Benzo[a]pyrene



Original Peak Response = 26491



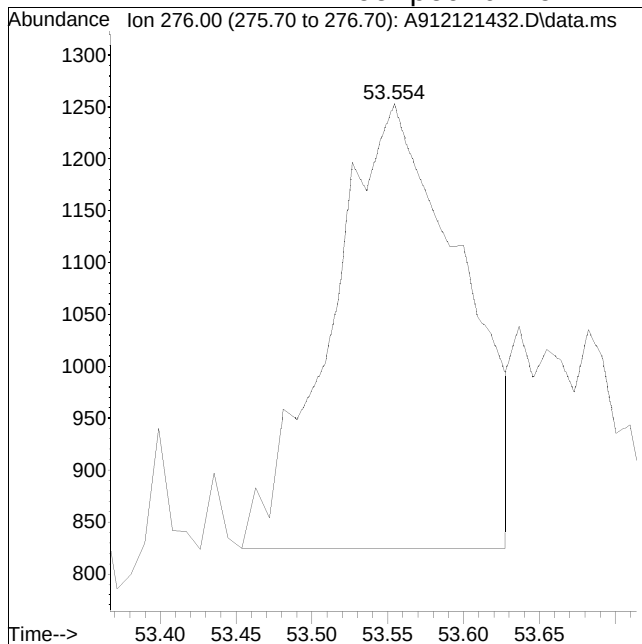
Manual Peak Response = 5066 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

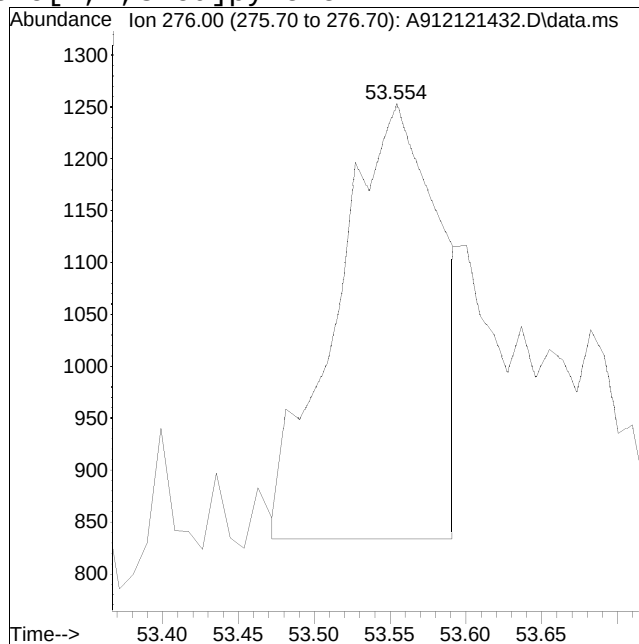
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912121432.D Operator : PAH9:SR
 Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
 Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 2568



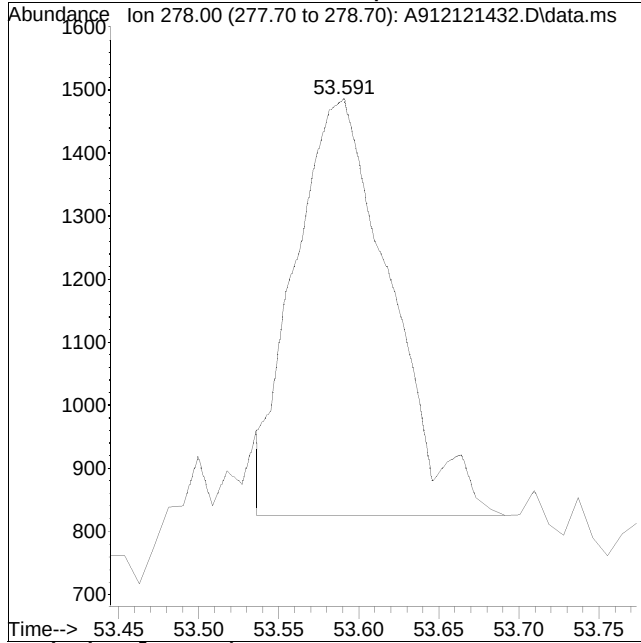
Manual Peak Response = 1969 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

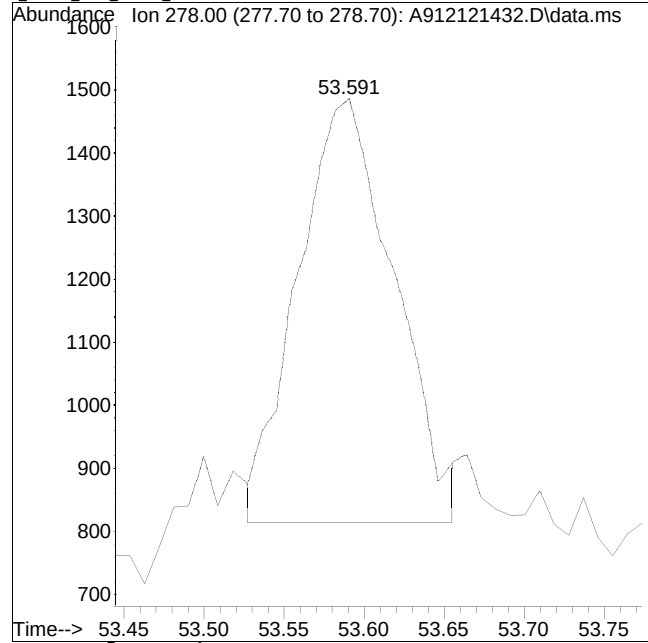
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #92: Dibenz[ah]+[ac]anthracene



Original Peak Response = 2735



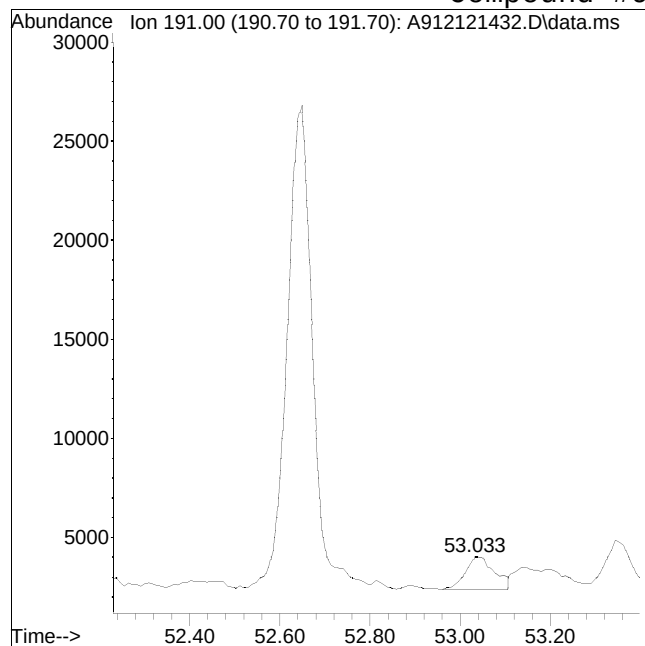
Manual Peak Response = 2819 M4

M4 = Poor automated baseline construction.

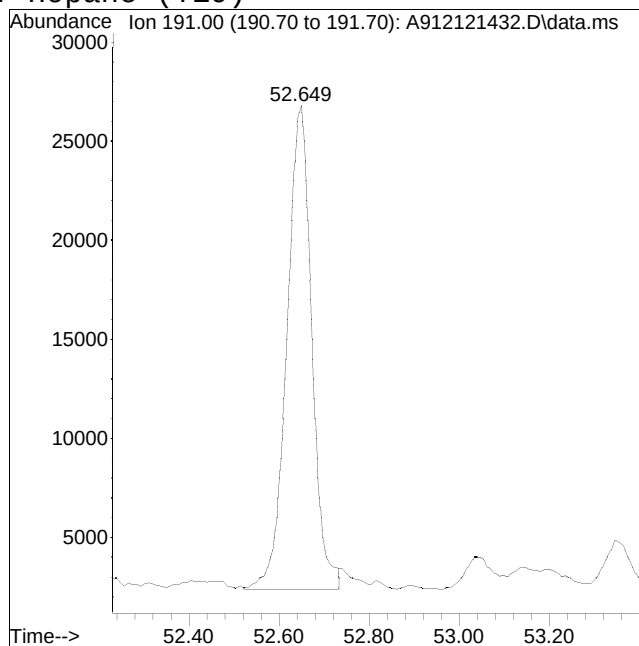
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912121432.D Operator : PAH9:SR
 Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
 Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #94: Hopane (T19)



Original Peak Response = 7683



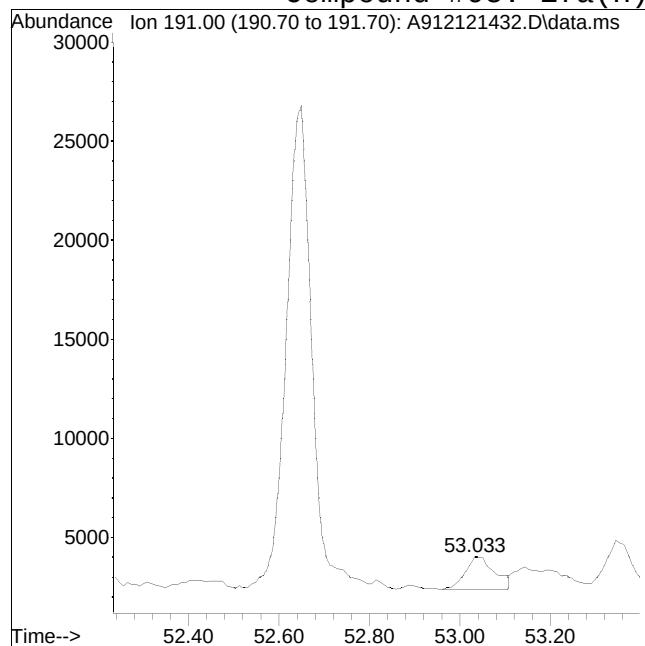
Manual Peak Response = 93536 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

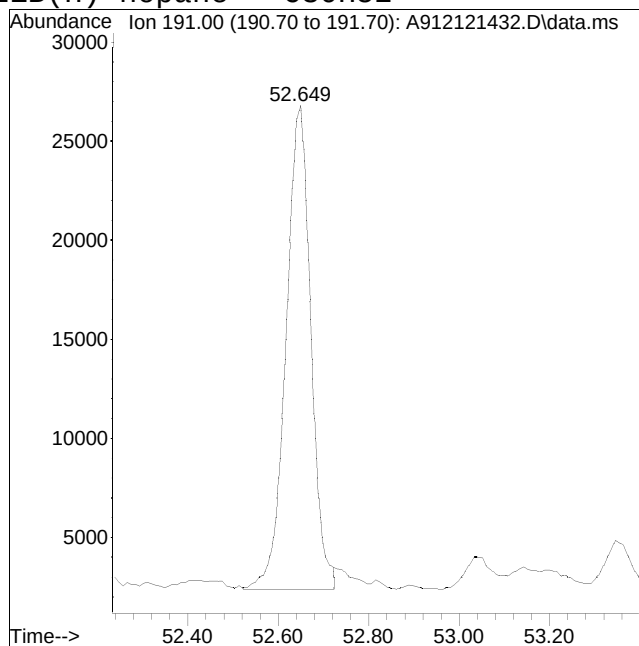
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912121432.D Operator : PAH9:SR
 Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
 Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #95: 17a(H),21B(H)-hopane - C₃₀H₅₂



Original Peak Response = 7683



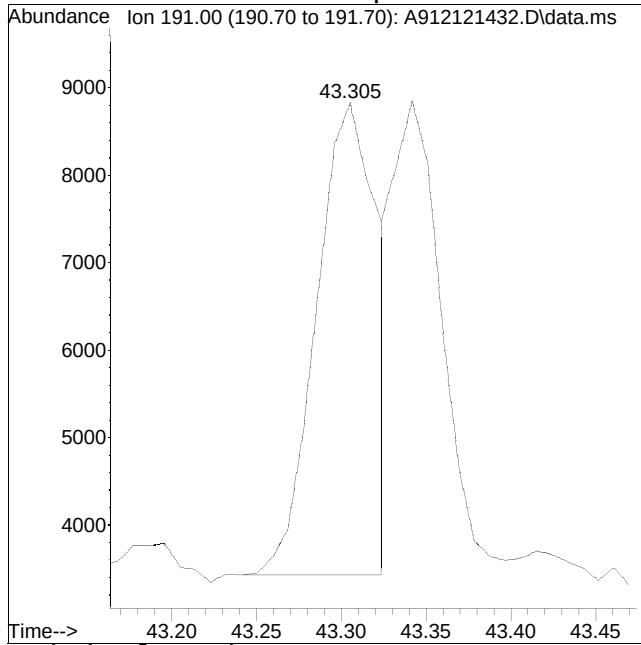
Manual Peak Response = 93002 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

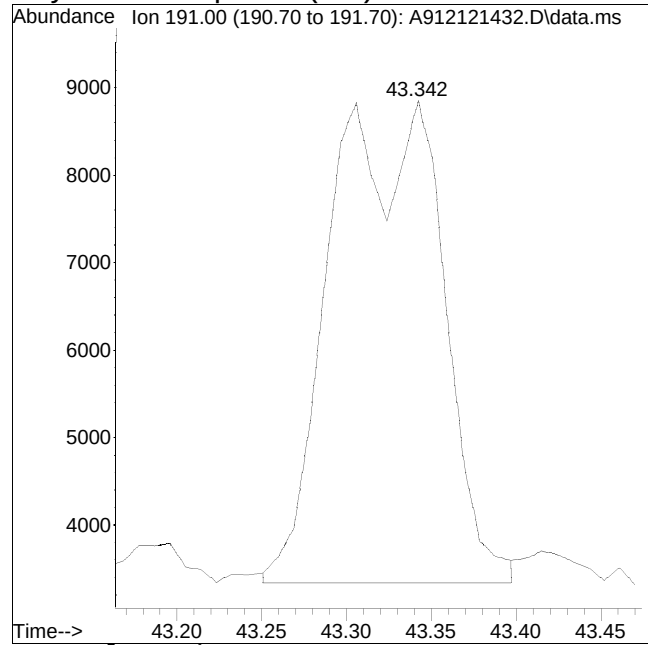
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #98: C25 Tricyclic Terpane (T6)



Original Peak Response = 13546

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

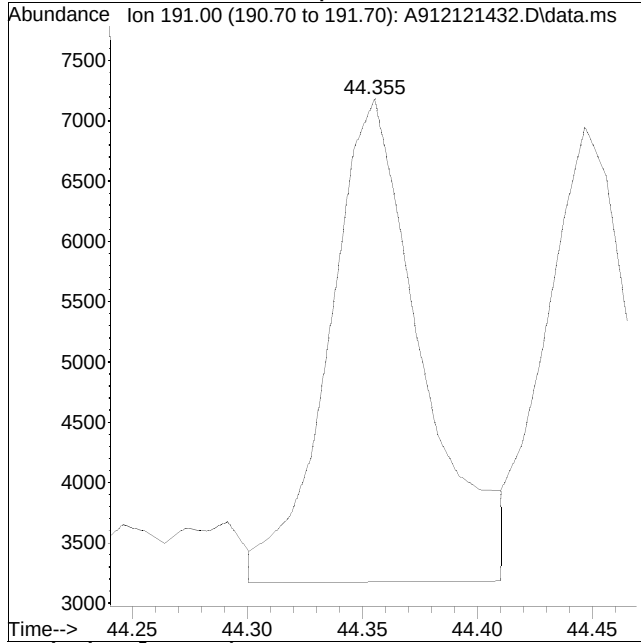


Manual Peak Response = 25051 M1

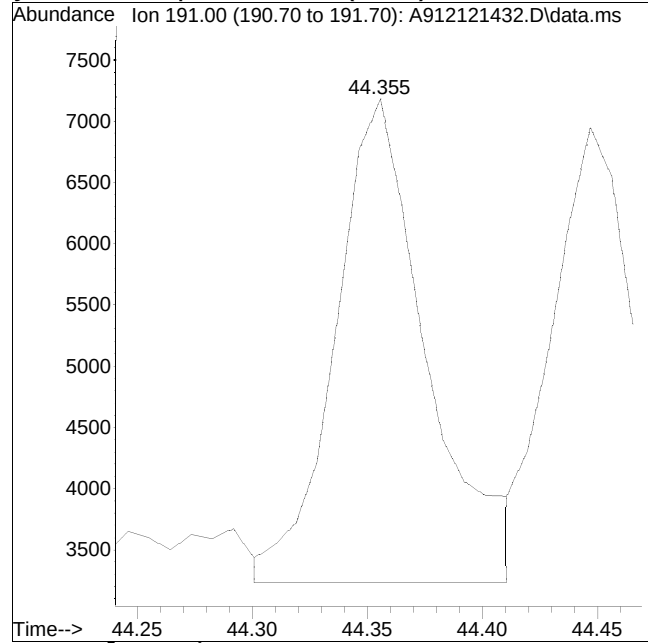
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #100: C26 Tricyclic Terpane-22S (T6b)



Original Peak Response = 11301



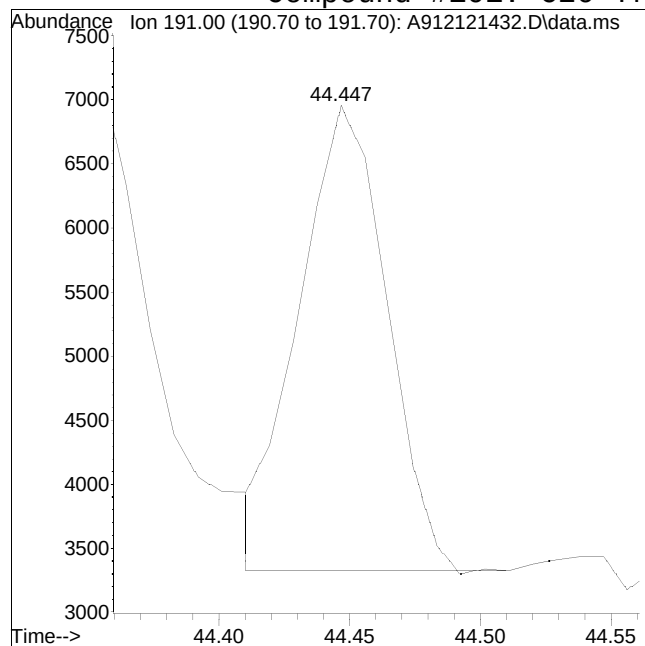
Manual Peak Response = 10936 M4

M4 = Poor automated baseline construction.

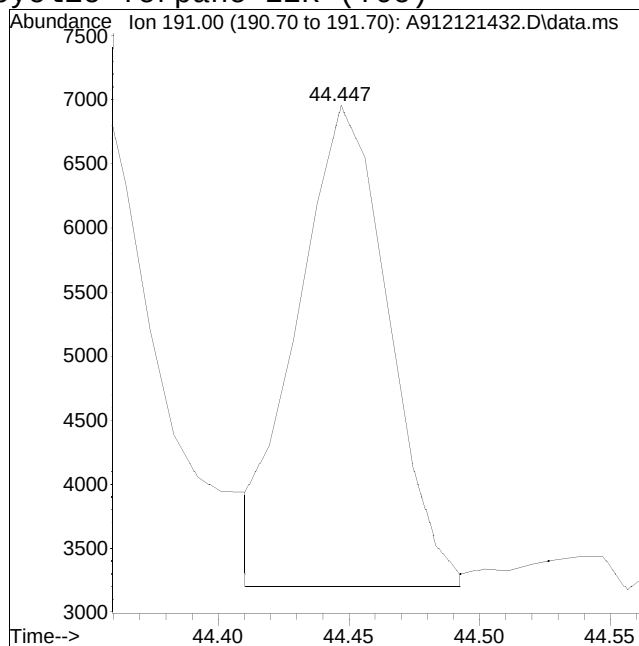
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #101: C26 Tricyclic Terpene-22R (T6c)



Original Peak Response = 8472



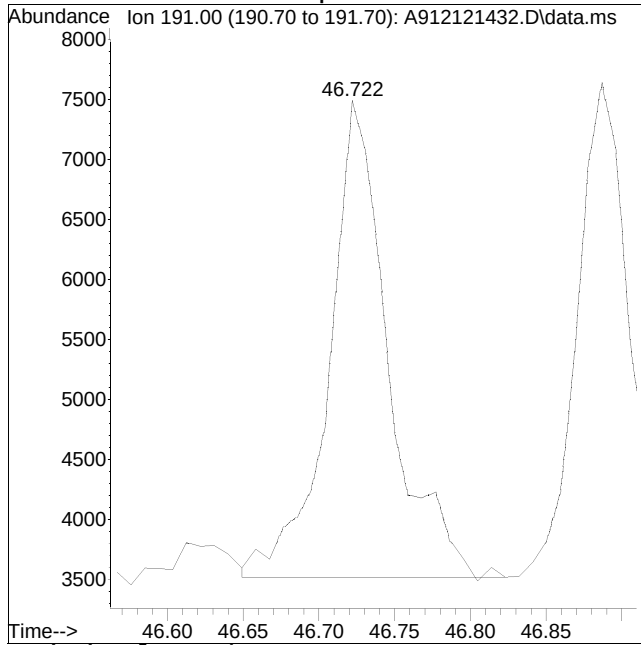
Manual Peak Response = 9106 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

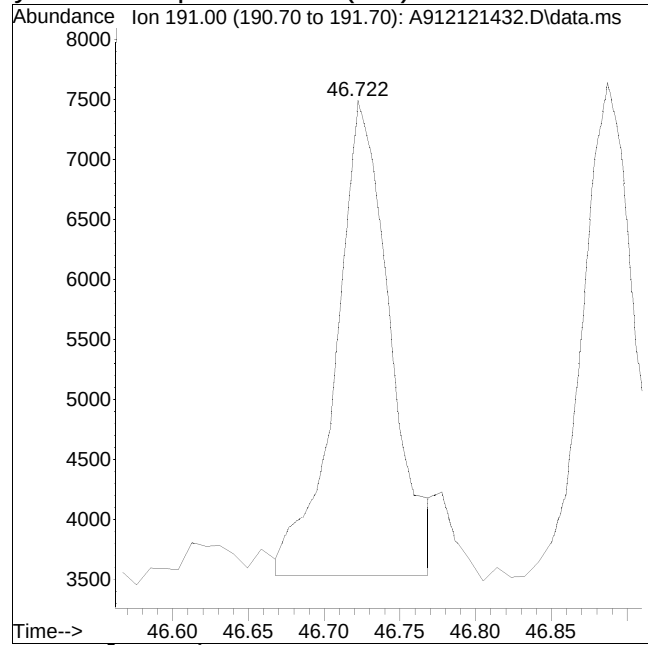
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #102: C28 Tricyclic Terpane-22S (T7)



Original Peak Response = 10837

M4 = Poor automated baseline construction.

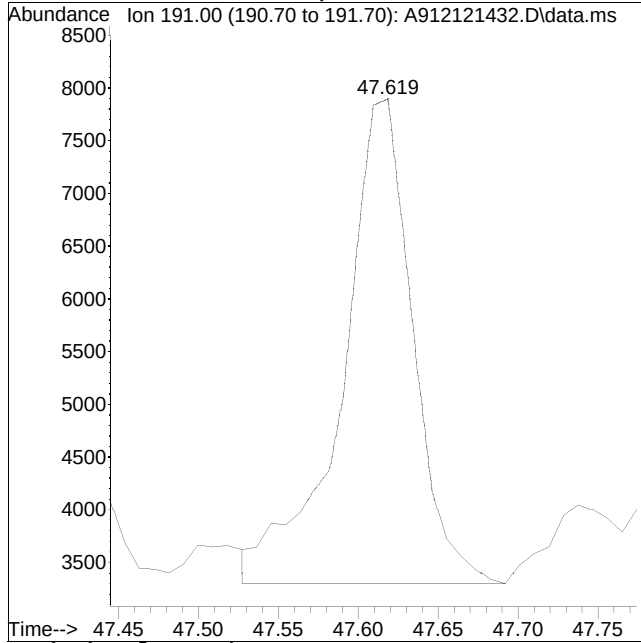


Manual Peak Response = 9866 M4

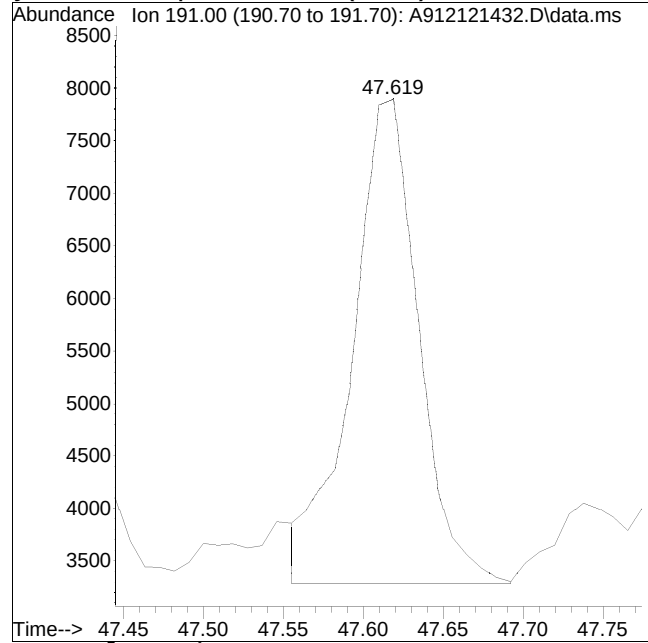
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #105: C29 Tricyclic Terpane-22R (T10)



Original Peak Response = 13980



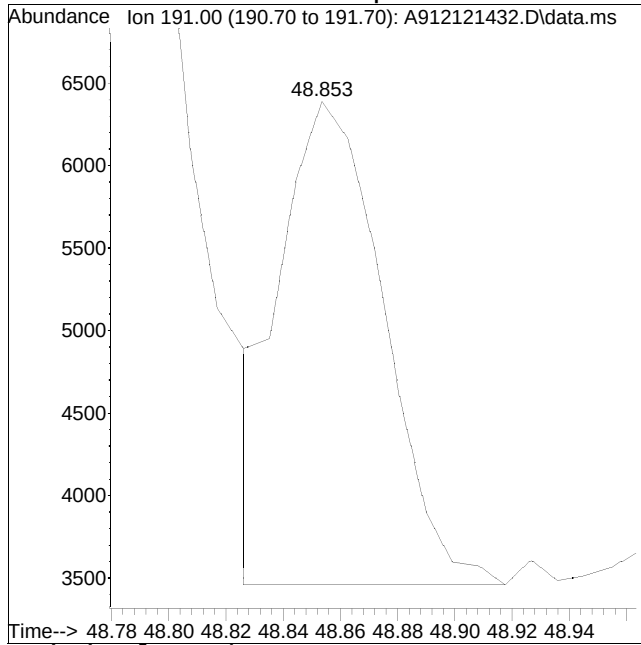
Manual Peak Response = 13329 M4

M4 = Poor automated baseline construction.

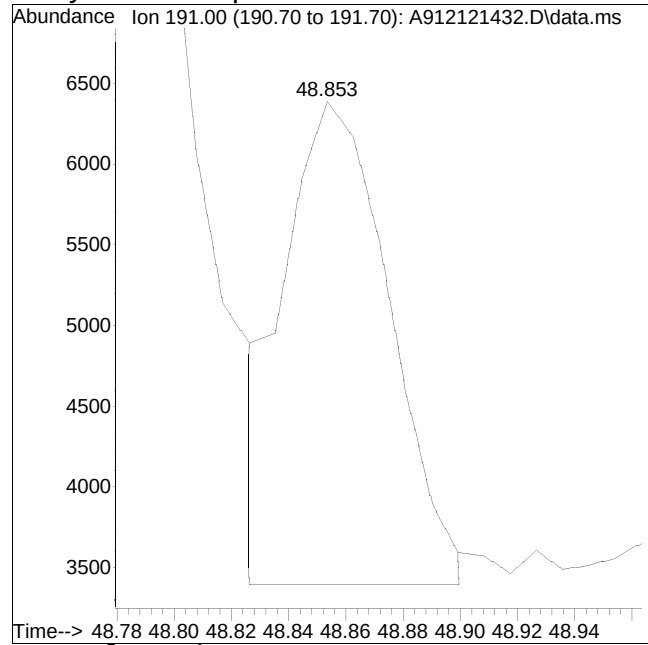
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #107: C30 Tricyclic Terpene-22S



Original Peak Response = 7358



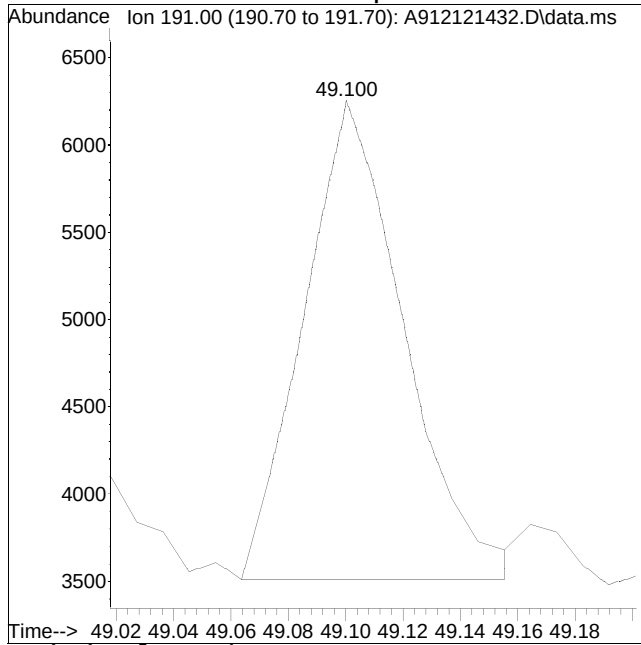
Manual Peak Response = 7589 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

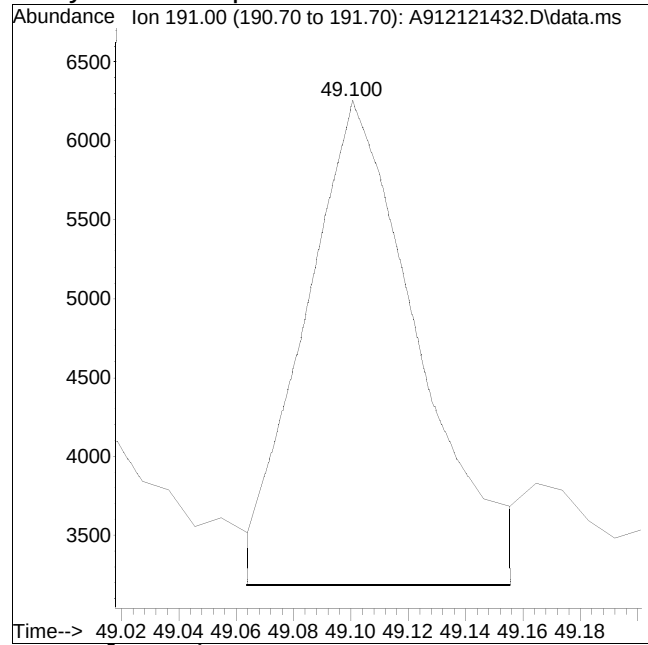
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #108: C30 Tricyclic Terpane-22R



Original Peak Response = 6637

M4 = Poor automated baseline construction.

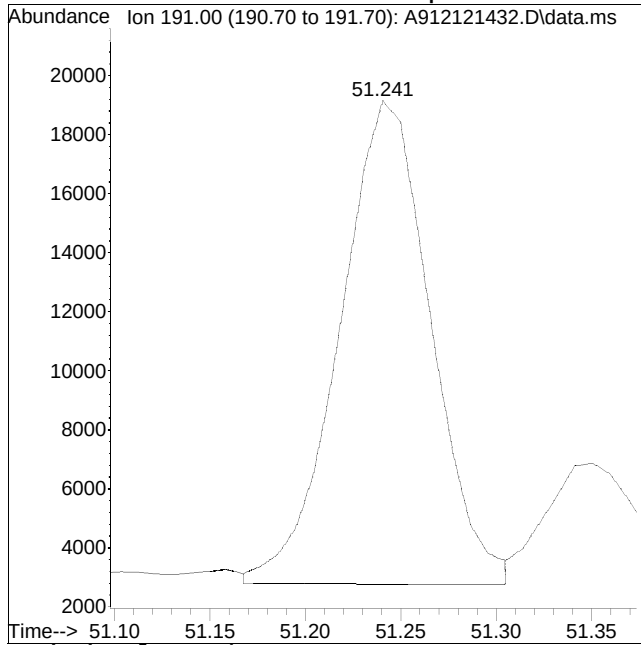


Manual Peak Response = 8448 M4

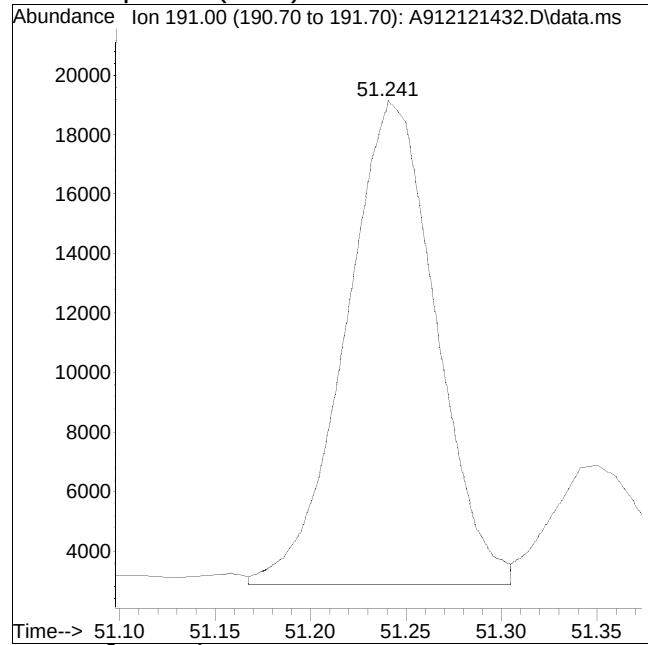
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #112: 30-Norhopane (T15)



Original Peak Response = 54254



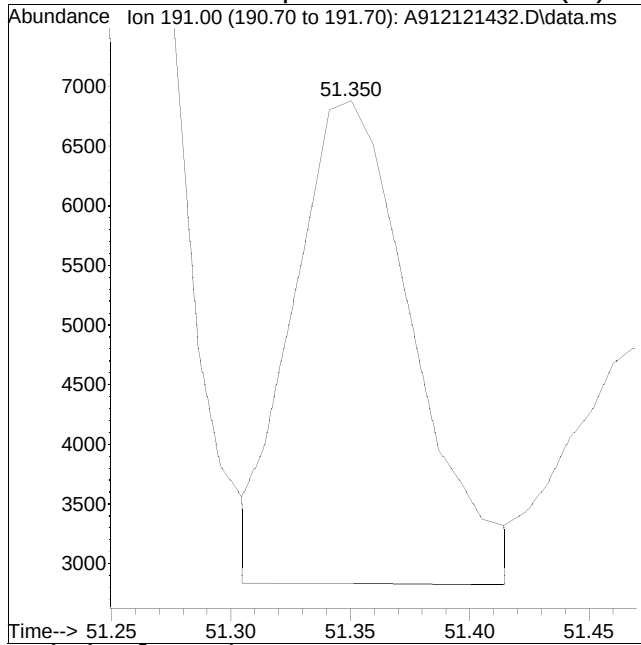
Manual Peak Response = 53505 M4

M4 = Poor automated baseline construction.

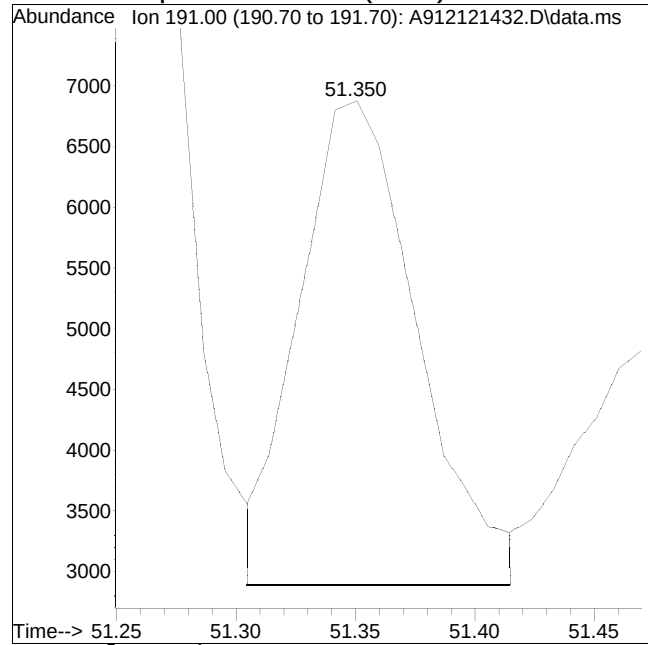
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #113: 18a(H)-30-Norneohopane-C29Ts (T16)



Original Peak Response = 14094



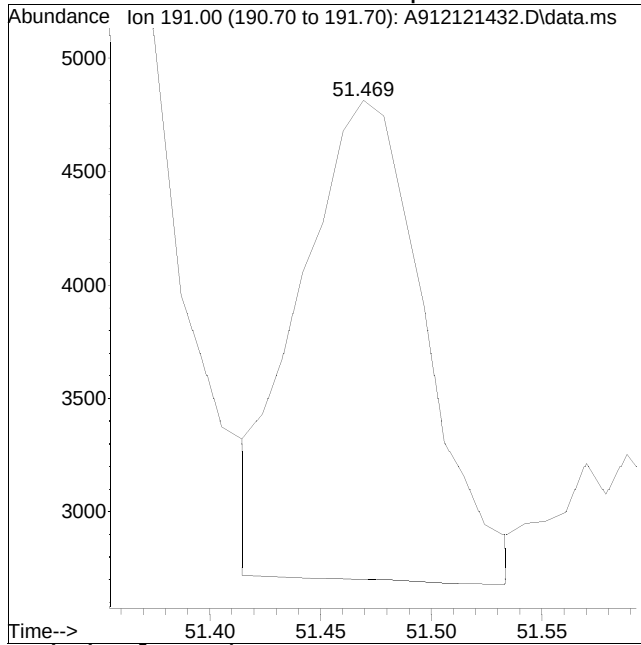
Manual Peak Response = 13695 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

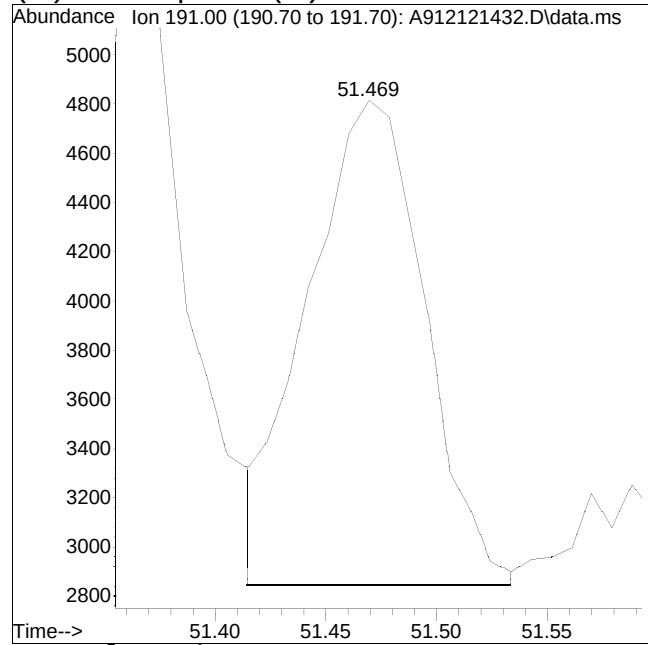
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #114: 17a(H)-Diahopane (X)



Original Peak Response = 8292

M4 = Poor automated baseline construction.

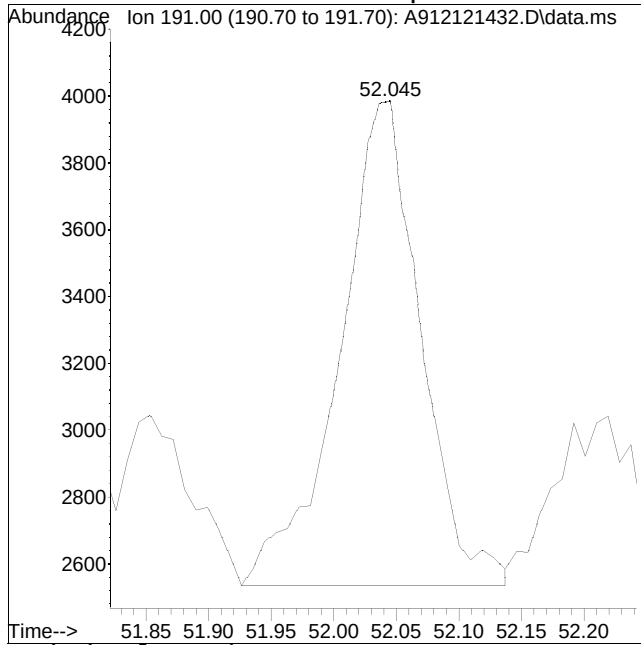


Manual Peak Response = 7254 M4

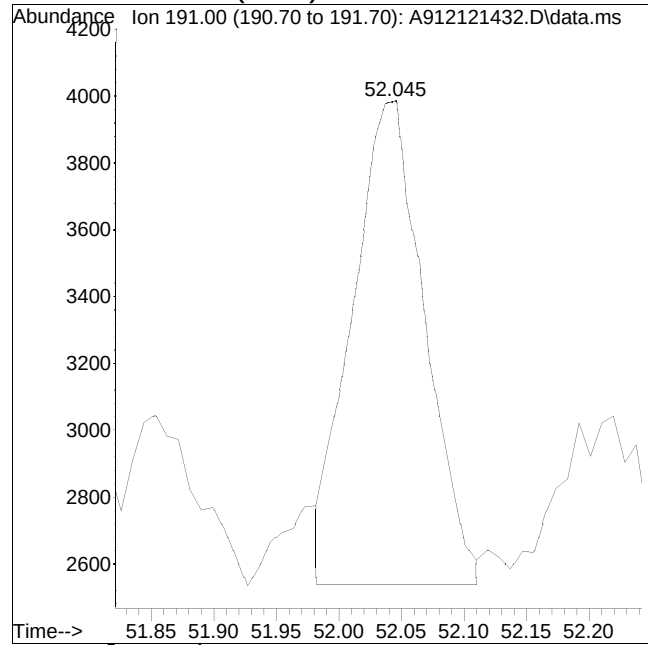
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #115: 30-Normoretane (T17)



Original Peak Response = 6515



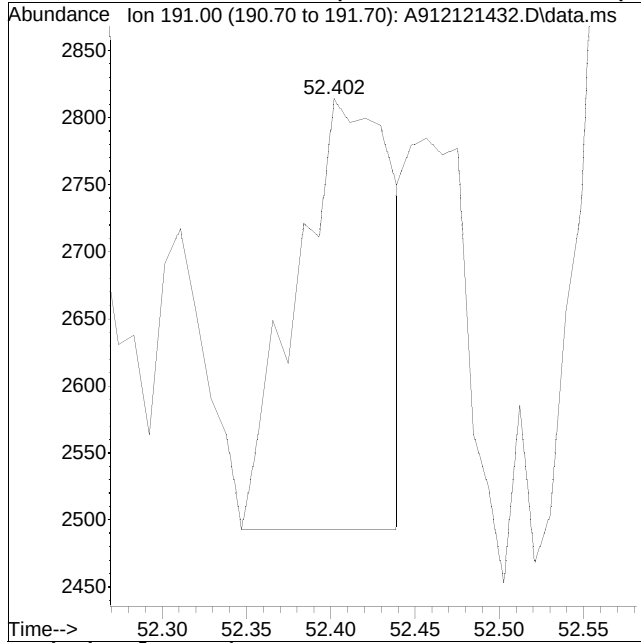
Manual Peak Response = 5827 M4

M4 = Poor automated baseline construction.

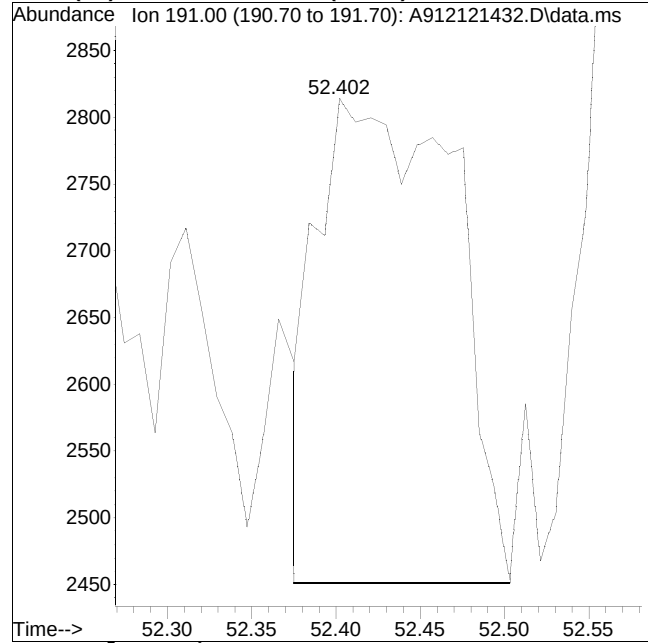
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #116: 18a(H)&18b(H)-Oleananes (T18)



Original Peak Response = 1251



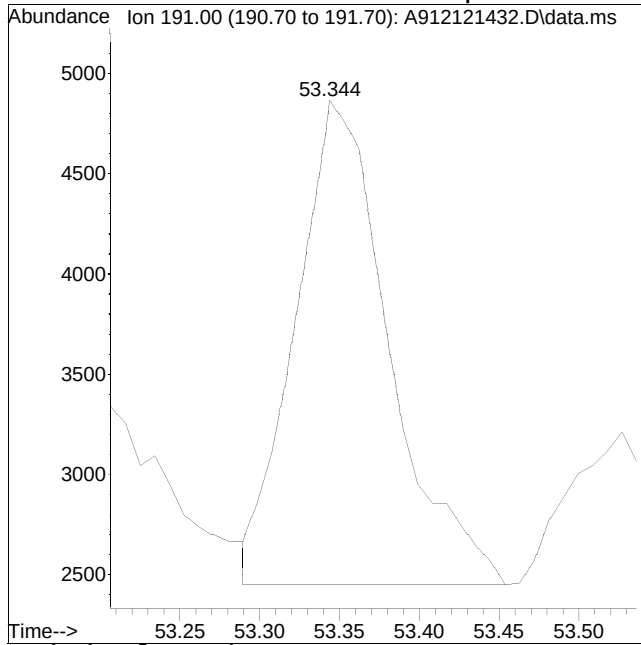
Manual Peak Response = 2044 M4

M4 = Poor automated baseline construction.

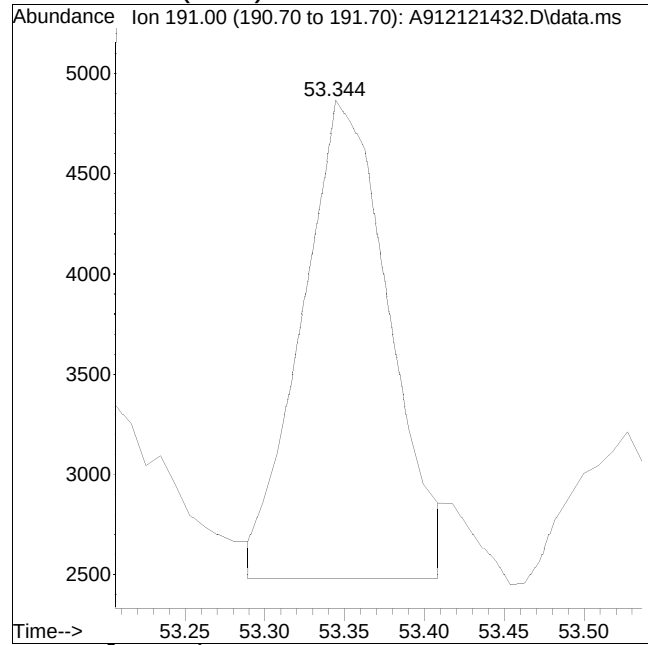
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #117: Moretane (T20)



Original Peak Response = 9862



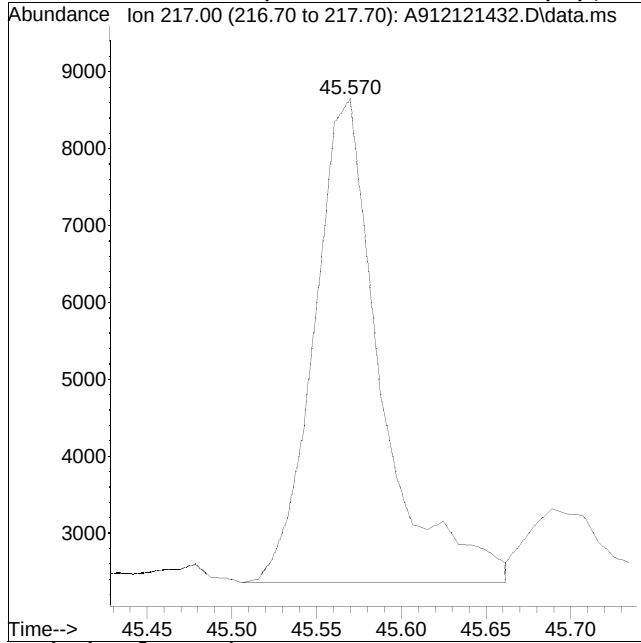
Manual Peak Response = 9107 M4

M4 = Poor automated baseline construction.

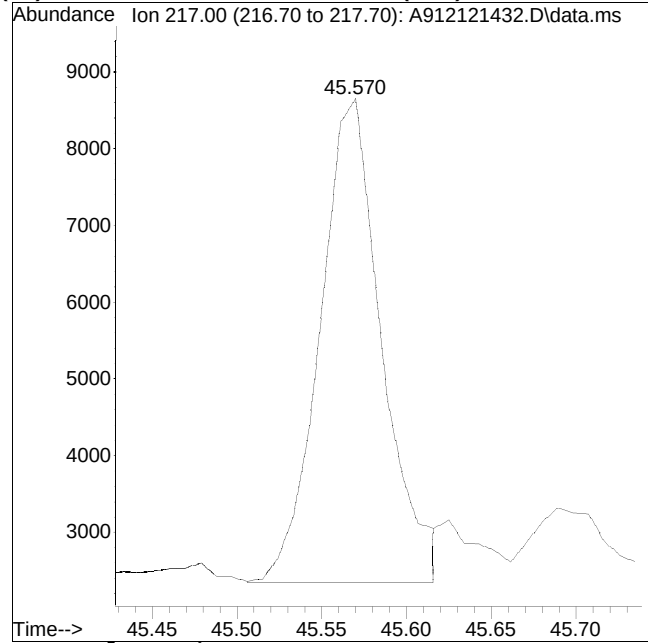
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #130: 13b(H),17a(H)-20S-Diacholestane (S4)



Original Peak Response = 17303



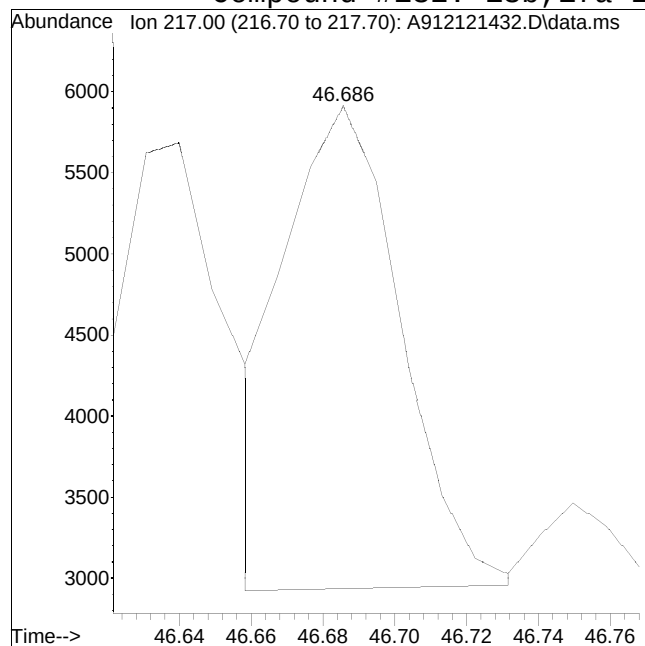
Manual Peak Response = 16058 M4

M4 = Poor automated baseline construction.

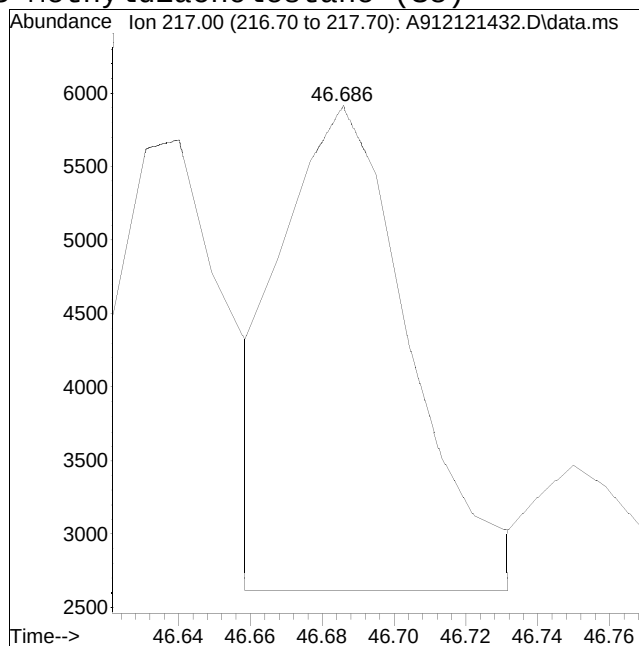
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #132: 13b,17a-20S-Methyldiacholestane (S8)



Original Peak Response = 6672



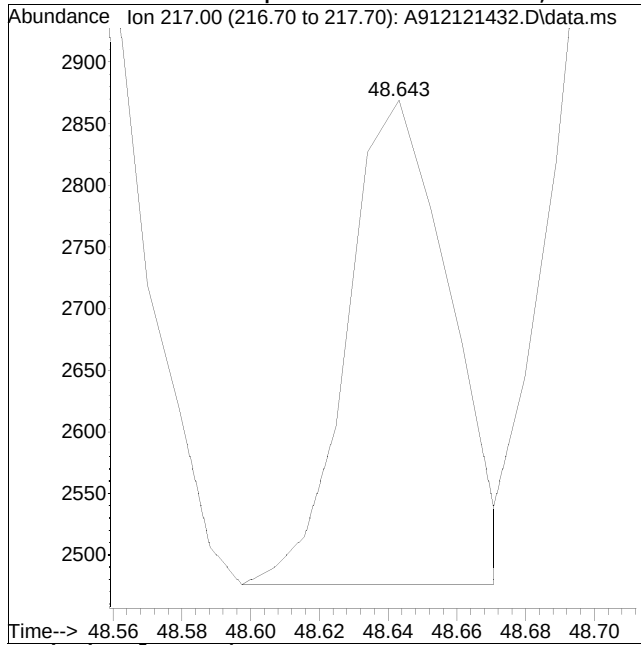
Manual Peak Response = 8083 M4

M4 = Poor automated baseline construction.

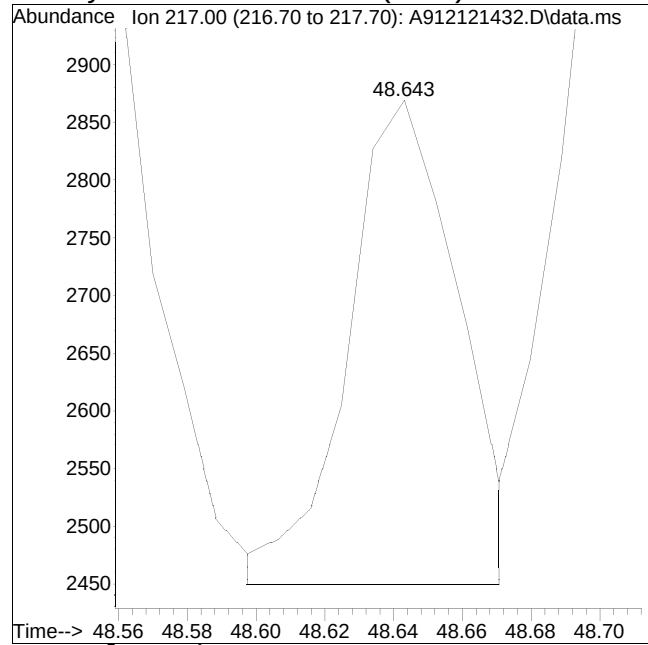
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #136: 13a,17b-20S-Ethyldiacholestane (S19)



Original Peak Response = 818



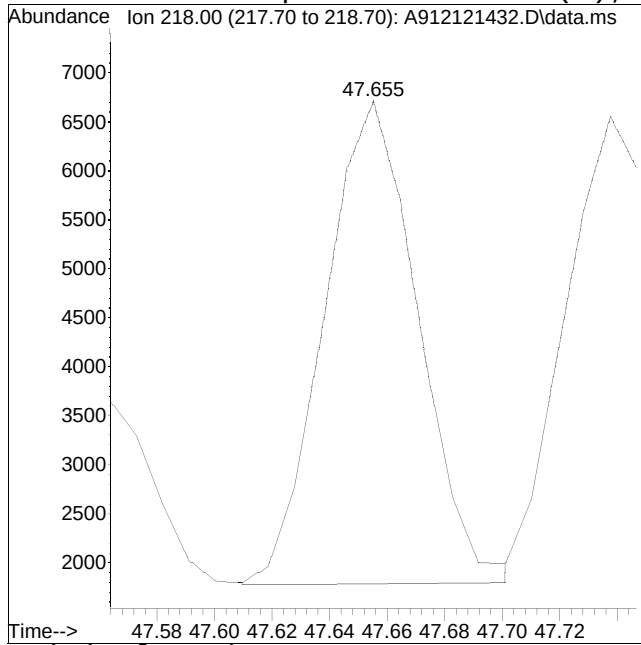
Manual Peak Response = 937 M4

M4 = Poor automated baseline construction.

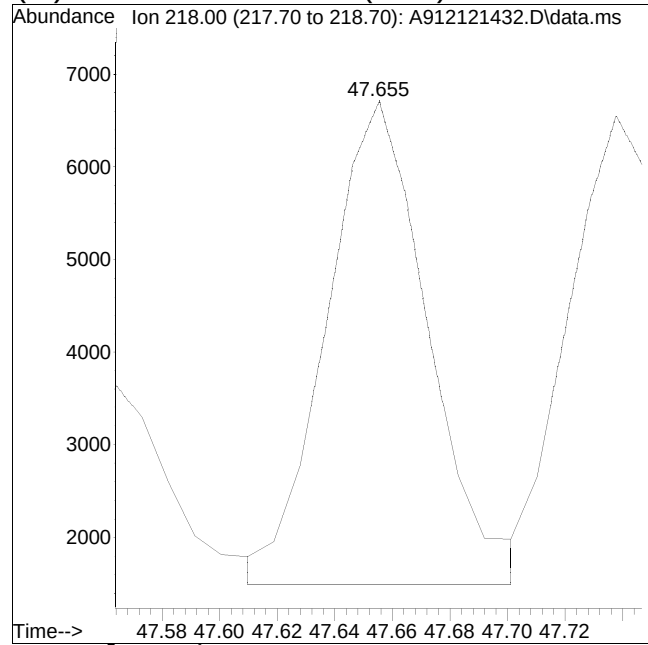
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #141: 14b(H),17b(H)-20R-Cholestane (S14)



Original Peak Response = 11156



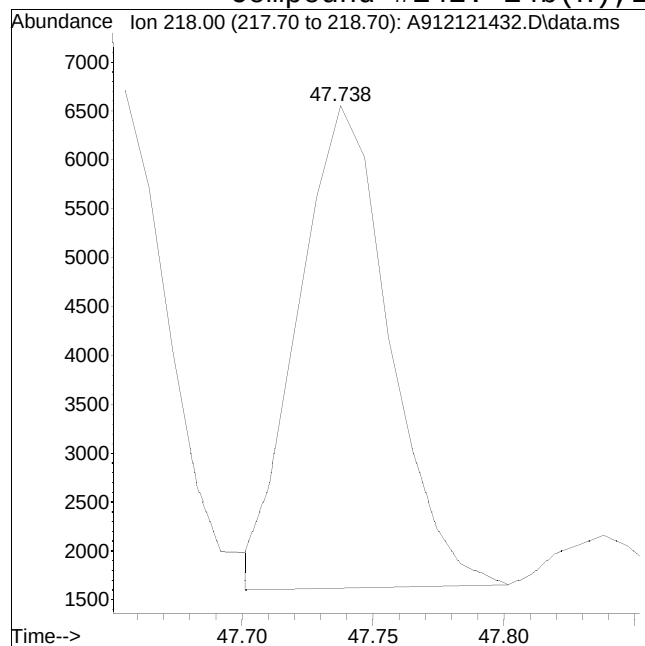
Manual Peak Response = 12775 M4

M4 = Poor automated baseline construction.

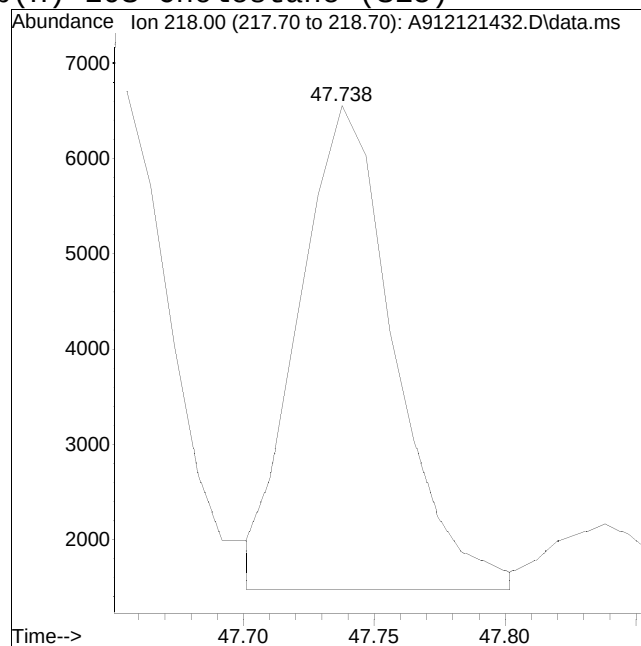
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #142: 14b(H),17b(H)-20S-Cholestane (S15)



Original Peak Response = 11990



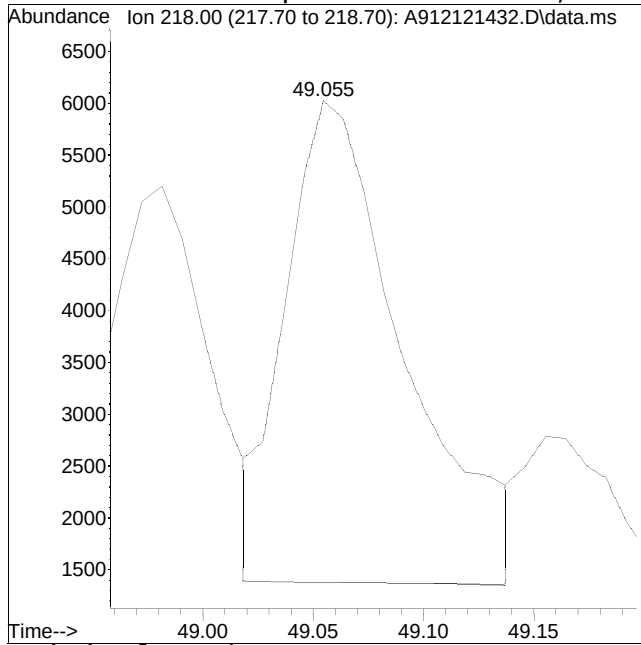
Manual Peak Response = 12938 M4

M4 = Poor automated baseline construction.

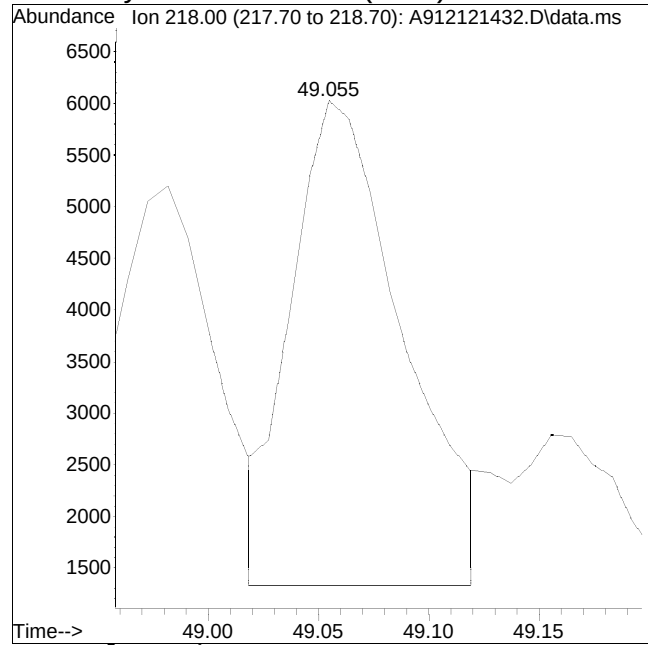
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #144: 14b,17b-20S-Methylcholestane (S23)



Original Peak Response = 17389



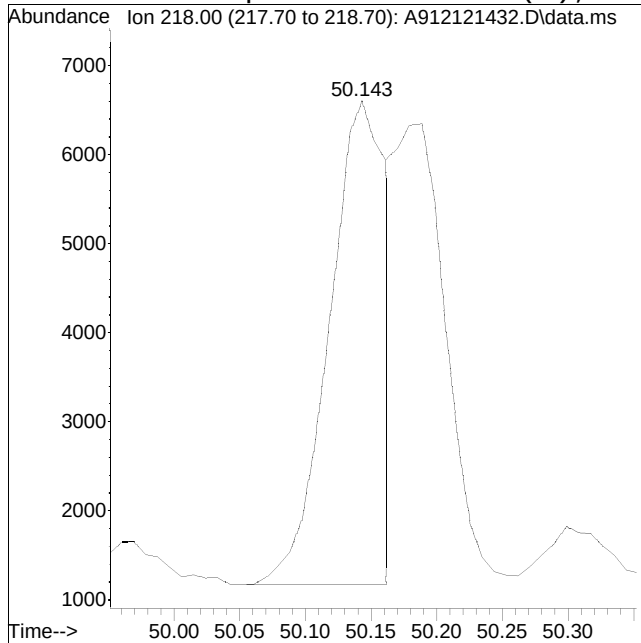
Manual Peak Response = 16523 M4

M4 = Poor automated baseline construction.

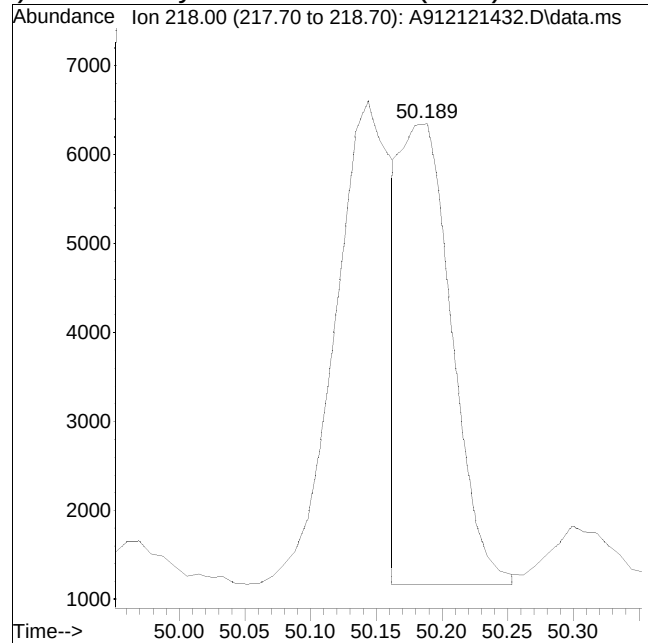
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912121432.D Operator : PAH9:SR
Date Inj'd : 12/15/2014 7:57 pm Instrument : PAH 9
Sample : WG749024-1,0.05055 Quant Date : 12/15/2014 7:45 pm

Compound #146: 14b(H),17b(H)-20S-Ethylcholestane (S27)



Original Peak Response = 16205



Manual Peak Response = 13962 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Continuing Calibration

7B
SemiVolatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1430198

Instrument ID: PAH9 Calibration Date: 12/19/2014 Time: 15:18

Lab File ID: A912191402 Init. Calib. Date(s): 12/12/14 12/12/14

Sample No: WG754959-1 Init. Calib. Times : 15:05 23:32

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	130	0.00
3 A1	trans-Decalin	0.461	0.442	4.1	127	0.00
4 t	cis-Decalin	0.362	0.324	10.5	126	0.00
9 s	Naphthalene-d8	2.264	2.224	1.8	129	0.00
10 A1	Naphthalene	2.768	2.746	0.8	130	0.00
16 t	2-Methylnaphthalene	1.502	1.510	-0.5	131	0.00
17 t	1-Methylnaphthalene	1.468	1.449	1.3	130	0.00
18 A1	Benzo[thiophene]	2.530	2.483	1.9	129	0.00
23 t	Biphenyl	1.852	1.856	-0.2	130	0.00
24 t	2,6-Dimethylnaphthalene	1.221	1.213	0.7	131	0.00
25 t	Dibenzofuran	1.944	1.967	-1.2	130	0.00
26 t	Acenaphthylene	2.298	2.306	-0.3	133	0.00
27 t	Acenaphthene	1.385	1.399	-1.0	130	0.00
28 t	2,3,5-Trimethylnaphthalene	1.165	1.159	0.5	132	0.00
29 A1	Fluorene	1.558	1.508	3.2	129	0.00
33 A1	Dibenzothiophene	2.288	2.309	-0.9	130	0.00
42 s	Phenanthrene-d10	1.716	1.625	5.3	126	0.00
43 A1	Phenanthrene	2.174	2.174	0.0	127	0.00
54 t	Retene	0.598	0.655	-9.5	141	0.00
55 t	Anthracene	2.007	2.079	-3.6	133	0.00
56 t	Carbazole	1.932	1.929	0.2	128	0.00
57 t	1-Methylphenanthrene	1.439	1.444	-0.3	130	0.00
58 A1	Fluoranthene	2.207	2.195	0.5	129	0.00
59 t	Benzo(b)fluorene	1.333	1.329	0.3	129	0.02
60 A1	Pyrene	2.347	2.444	-4.1	129	0.00
66 A1	Naphthobenzothiophene	2.341	2.346	-0.2	129	0.00
67 A2	Naphthobenzothiophene-2,1-D	2.341	2.346	-0.2	129	0.00
74 i	Chrysene-d12	1.000	1.000	0.0	125	0.00
75 t	Benz[a]anthracene	1.108	1.116	-0.7	129	0.00
76 A1	Chrysene	1.095	1.123	-2.6	125	0.00
77 A2	Chrysene/Triphenylene	1.095	1.123	-2.6	125	0.00
83 S	Benzo[b]fluoranthene-d12	1.034	1.034	0.0	130	0.00
84 t	Benzo[b]fluoranthene	1.311	1.292	1.4	127	0.00
85 A1	Benzo[j]+[k]fluoranthene	1.255	1.269	-1.1	130	0.00
87 t	Benzo[e]pyrene	1.255	1.280	-2.0	128	0.00
88 s	Benzo[a]pyrene-d12	0.949	0.955	-0.6	132	0.00
89 t	Benzo[a]pyrene	1.230	1.271	-3.3	129	0.00
90 t	Perylene	1.241	1.239	0.2	129	0.00

PAH9121214.M Mon Jan 12 09:20:41 2015

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Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191402.D
 Acq On : 19 Dec 2014 3:18 pm
 Operator : PAH9:SR
 Sample : WG754959-1
 Misc : WG754959, frav19 500ng/ml
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 12 09:02:05 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.526	1.593	-4.4	136	0.00
92 t	Dibenz[ah]+[ac]anthracene	1.506	1.496	0.7	131	0.00
93 t	Benzo[g,h,i]perylene	1.482	1.427	3.7	130	0.02
94 A1	Hopane (T19)	0.306	0.259	15.4	123	0.00
95 A2	17a(H),21B(H)-hopane - C30H	0.306	0.259	15.4	123	0.00
129 SA1	5B(H)Cholane - Surr	0.158	0.152	3.8	127	0.00

* Evaluation of CC level amount vs concentration.

FORM VII A2-ALKPAH/BIOMARKER

7B
SemiVolatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1430198

Instrument ID: PAH9 Calibration Date: 12/20/2014 Time: 02:32

Lab File ID: A912191410 Init. Calib. Date(s): 12/12/14 12/12/14

Sample No: WG754959-2 Init. Calib. Times : 15:05 23:32

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	122	0.00
3 A1	trans-Decalin	0.461	0.424	8.0	114	0.00
4 t	cis-Decalin	0.362	0.307	15.2	112	0.00
9 s	Naphthalene-d8	2.264	2.181	3.7	119	0.00
10 A1	Naphthalene	2.768	2.730	1.4	121	0.00
16 t	2-Methylnaphthalene	1.502	1.488	0.9	122	0.00
17 t	1-Methylnaphthalene	1.468	1.441	1.8	121	0.00
18 A1	Benzo[thiophene]	2.530	2.449	3.2	120	0.00
23 t	Biphenyl	1.852	1.831	1.1	120	0.00
24 t	2,6-Dimethylnaphthalene	1.221	1.192	2.4	121	0.00
25 t	Dibenzofuran	1.944	1.925	1.0	120	0.00
26 t	Acenaphthylene	2.298	2.343	-2.0	127	0.00
27 t	Acenaphthene	1.385	1.386	-0.1	121	0.00
28 t	2,3,5-Trimethylnaphthalene	1.165	1.132	2.8	121	0.00
29 A1	Fluorene	1.558	1.490	4.4	120	0.02
33 A1	Dibenzothiophene	2.288	2.277	0.5	120	0.00
42 s	Phenanthrene-d10	1.716	1.657	3.4	121	0.00
43 A1	Phenanthrene	2.174	2.140	1.6	118	0.00
54 t	Retene	0.598	0.668	-11.7	136	0.00
55 t	Anthracene	2.007	2.127	-6.0	128	0.00
56 t	Carbazole	1.932	1.978	-2.4	123	0.00
57 t	1-Methylphenanthrene	1.439	1.469	-2.1	124	0.00
58 A1	Fluoranthene	2.207	2.260	-2.4	125	0.00
59 t	Benzo(b)fluorene	1.333	1.423	-6.8	130	0.00
60 A1	Pyrene	2.347	2.523	-7.5	125	0.00
66 A1	Naphthobenzothiophene	2.341	2.484	-6.1	129	0.00
67 A2	Naphthobenzothiophene-2,1-D	2.341	2.484	-6.1	129	0.00
74 i	Chrysene-d12	1.000	1.000	0.0	123	0.00
75 t	Benz[a]anthracene	1.108	1.169	-5.5	133	0.00
76 A1	Chrysene	1.095	1.136	-3.7	125	0.00
77 A2	Chrysene/Triphenylene	1.095	1.136	-3.7	125	0.00
83 S	Benzo[b]fluoranthene-d12	1.034	1.058	-2.3	131	0.00
84 t	Benzo[b]fluoranthene	1.311	1.328	-1.3	129	0.00
85 A1	Benzo[j]+[k]fluoranthene	1.255	1.298	-3.4	131	0.00
87 t	Benzo[e]pyrene	1.255	1.310	-4.4	129	0.00
88 s	Benzo[a]pyrene-d12	0.949	0.988	-4.1	135	0.00
89 t	Benzo[a]pyrene	1.230	1.312	-6.7	131	0.00
90 t	Perylene	1.241	1.291	-4.0	132	0.00

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191410.D
 Acq On : 20 Dec 2014 2:32 am
 Operator : PAH9:SR
 Sample : WG754959-2
 Misc : WG754959, frav19 500ng/ml
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 12 09:02:29 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.526	1.643	-7.7	138	0.00
92 t	Dibenz[ah]+[ac]anthracene	1.506	1.555	-3.3	134	0.00
93 t	Benzo[g,h,i]perylene	1.482	1.476	0.4	133	0.00
94 A1	Hopane (T19)	0.306	0.280	8.5	131	0.00
95 A2	17a(H),21B(H)-hopane - C30H	0.306	0.280	8.5	131	0.00
129 SA1	5B(H)Cholane - Surr	0.158	0.161	-1.9	132	0.00

* Evaluation of CC level amount vs concentration.

FORM VII A2-ALKPAH/BIOMARKER

7B
SemiVolatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1430198

Instrument ID: PAH9 Calibration Date: 12/22/2014 Time: 17:54

Lab File ID: A912191412 Init. Calib. Date(s): 12/12/14 12/12/14

Sample No: WG754959-3 Init. Calib. Times : 15:05 23:32

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	128	0.00
3 A1	trans-Decalin	0.461	0.422	8.5	119	0.00
4 t	cis-Decalin	0.362	0.293	19.1	112	0.00
9 s	Naphthalene-d8	2.264	2.190	3.3	125	0.02
10 A1	Naphthalene	2.768	2.746	0.8	127	0.00
16 t	2-Methylnaphthalene	1.502	1.487	1.0	127	0.03
17 t	1-Methylnaphthalene	1.468	1.446	1.5	127	0.02
18 A1	Benzo[thiophene]	2.530	2.438	3.6	125	0.00
23 t	Biphenyl	1.852	1.854	-0.1	127	0.02
24 t	2,6-Dimethylnaphthalene	1.221	1.205	1.3	128	0.02
25 t	Dibenzofuran	1.944	1.953	-0.5	127	0.02
26 t	Acenaphthylene	2.298	2.329	-1.3	132	0.00
27 t	Acenaphthene	1.385	1.400	-1.1	128	0.00
28 t	2,3,5-Trimethylnaphthalene	1.165	1.144	1.8	128	0.00
29 A1	Fluorene	1.558	1.489	4.4	125	0.03
33 A1	Dibenzothiophene	2.288	2.302	-0.6	127	0.00
42 s	Phenanthrene-d10	1.716	1.635	4.7	125	0.00
43 A1	Phenanthrene	2.174	2.142	1.5	123	0.00
54 t	Retene	0.598	0.615	-2.8	131	0.00
55 t	Anthracene	2.007	2.119	-5.6	133	0.02
56 t	Carbazole	1.932	1.906	1.3	124	0.02
57 t	1-Methylphenanthrene	1.439	1.422	1.2	125	0.02
58 A1	Fluoranthene	2.207	2.177	1.4	125	0.00
59 t	Benzo(b)fluorene	1.333	1.244	6.7	118	0.02
60 A1	Pyrene	2.347	2.416	-2.9	125	0.02
66 A1	Naphthobenzothiophene	2.341	2.300	1.8	124	0.00
67 A2	Naphthobenzothiophene-2,1-D	2.341	2.300	1.8	124	0.00
74 i	Chrysene-d12	1.000	1.000	0.0	123	0.00
75 t	Benz[a]anthracene	1.108	1.096	1.1	125	0.00
76 A1	Chrysene	1.095	1.097	-0.2	121	0.00
77 A2	Chrysene/Triphenylene	1.095	1.097	-0.2	121	0.00
83 S	Benzo[b]fluoranthene-d12	1.034	1.015	1.8	126	0.00
84 t	Benzo[b]fluoranthene	1.311	1.263	3.7	123	0.00
85 A1	Benzo[j]+[k]fluoranthene	1.255	1.213	3.3	123	0.00
87 t	Benzo[e]pyrene	1.255	1.244	0.9	123	0.00
88 s	Benzo[a]pyrene-d12	0.949	0.922	2.8	126	0.00
89 t	Benzo[a]pyrene	1.230	1.203	2.2	121	0.00
90 t	Perylene	1.241	1.195	3.7	123	0.00

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Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191412.D
 Acq On : 22 Dec 2014 5:54 pm
 Operator : PAH9:SR
 Sample : WG754959-3
 Misc : WG754959,Frav19 500ng/ml
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 12 09:02:35 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.526	1.422	6.8	120	0.00
92 t	Dibenz[ah]+[ac]anthracene	1.506	1.328	11.8	115	0.00
93 t	Benzo[g,h,i]perylene	1.482	1.348	9.0	122	0.00
94 A1	Hopane (T19)	0.306	0.263	14.1	123	-0.02
95 A2	17a(H),21B(H)-hopane - C30H	0.306	0.263	14.1	123	-0.02
129 SA1	5B(H)Cholane - Surr	0.158	0.158	0.0	131	0.00

* Evaluation of CC level amount vs concentration.

FORM VII A2-ALKPAH/BIOMARKER

7B
SemiVolatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1430198

Instrument ID: PAH9 Calibration Date: 12/23/2014 Time: 00:56

Lab File ID: A912191417 Init. Calib. Date(s): 12/12/14 12/12/14

Sample No: WG754959-4 Init. Calib. Times : 15:05 23:32

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	151	0.00
3 A1	trans-Decalin	0.461	0.394	14.5	131	0.00
4 t	cis-Decalin	0.362	0.292	19.3	132	0.00
9 s	Naphthalene-d8	2.264	2.173	4.0	147	0.00
10 A1	Naphthalene	2.768	2.719	1.8	149	0.00
16 t	2-Methylnaphthalene	1.502	1.492	0.7	151	0.02
17 t	1-Methylnaphthalene	1.468	1.440	1.9	150	0.02
18 A1	Benzo[thiophene]	2.530	2.414	4.6	146	0.00
23 t	Biphenyl	1.852	1.843	0.5	150	0.02
24 t	2,6-Dimethylnaphthalene	1.221	1.206	1.2	151	0.02
25 t	Dibenzofuran	1.944	1.929	0.8	149	0.02
26 t	Acenaphthylene	2.298	2.304	-0.3	155	0.00
27 t	Acenaphthene	1.385	1.389	-0.3	150	0.00
28 t	2,3,5-Trimethylnaphthalene	1.165	1.134	2.7	150	0.00
29 A1	Fluorene	1.558	1.502	3.6	150	0.03
33 A1	Dibenzothiophene	2.288	2.284	0.2	149	0.00
42 s	Phenanthrene-d10	1.716	1.643	4.3	149	0.00
43 A1	Phenanthrene	2.174	2.138	1.7	146	0.00
54 t	Retene	0.598	0.668	-11.7	168	0.00
55 t	Anthracene	2.007	1.868	6.9	139	0.02
56 t	Carbazole	1.932	1.989	-3.0	153	0.02
57 t	1-Methylphenanthrene	1.439	1.460	-1.5	152	0.02
58 A1	Fluoranthene	2.207	2.280	-3.3	156	0.00
59 t	Benzo(b)fluorene	1.333	1.392	-4.4	157	0.02
60 A1	Pyrene	2.347	2.548	-8.6	156	0.00
66 A1	Naphthobenzothiophene	2.341	2.526	-7.9	162	0.00
67 A2	Naphthobenzothiophene-2,1-D	2.341	2.526	-7.9	162	0.00
74 i	Chrysene-d12	1.000	1.000	0.0	158	0.00
75 t	Benz[a]anthracene	1.108	1.128	-1.8	165	0.00
76 A1	Chrysene	1.095	1.110	-1.4	156	0.00
77 A2	Chrysene/Triphenylene	1.095	1.110	-1.4	156	0.00
83 S	Benzo[b]fluoranthene-d12	1.034	1.058	-2.3	169	0.00
84 t	Benzo[b]fluoranthene	1.311	1.307	0.3	162	0.00
85 A1	Benzo[j]+[k]fluoranthene	1.255	1.265	-0.8	164	0.00
87 t	Benzo[e]pyrene	1.255	1.289	-2.7	163	0.00
88 s	Benzo[a]pyrene-d12	0.949	0.967	-1.9	169	0.00
89 t	Benzo[a]pyrene	1.230	1.269	-3.2	163	0.00
90 t	Perylene	1.241	1.214	2.2	159	0.00

PAH9121214.M Mon Jan 12 09:20:53 2015

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Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191417.D
 Acq On : 23 Dec 2014 12:56 am
 Operator : PAH9:SR
 Sample : WG754959-4
 Misc : WG754959,frav19 500ng/ml
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 12 09:03:22 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.526	1.581	-3.6	171	0.00
92 t	Dibenz[ah]+[ac]anthracene	1.506	1.514	-0.5	168	0.00
93 t	Benzo[g,h,i]perylene	1.482	1.462	1.3	169	0.02
94 A1	Hopane (T19)	0.306	0.278	9.2	167	-0.02
95 A2	17a(H),21B(H)-hopane - C30H	0.306	0.278	9.2	167	-0.02
129 SA1	5B(H)Cholane - Surr	0.158	0.160	-1.3	170	0.00

* Evaluation of CC level amount vs concentration.

FORM VII A2-ALKPAH/BIOMARKER

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191402.D
 Acq On : 19 Dec 2014 3:18 pm
 Operator : PAH9:SR
 Sample : WG754959-1
 Misc : WG754959, frav19 500ng/ml
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 12 09:02:05 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	130	0.00
3 A1	trans-Decalin	0.461	0.442	4.1	127	0.00
4 t	cis-Decalin	0.362	0.324	10.5	126	0.00
9 s	Naphthalene-d8	2.264	2.224	1.8	129	0.00
10 A1	Naphthalene	2.768	2.746	0.8	130	0.00
16 t	2-Methylnaphthalene	1.502	1.510	-0.5	131	0.00
17 t	1-Methylnaphthalene	1.468	1.449	1.3	130	0.00
18 A1	Benzothiophene	2.530	2.483	1.9	129	0.00
23 t	Biphenyl	1.852	1.856	-0.2	130	0.00
24 t	2,6-Dimethylnaphthalene	1.221	1.213	0.7	131	0.00
25 t	Dibenzofuran	1.944	1.967	-1.2	130	0.00
26 t	Acenaphthylene	2.298	2.306	-0.3	133	0.00
27 t	Acenaphthene	1.385	1.399	-1.0	130	0.00
28 t	2,3,5-Trimethylnaphthalene	1.165	1.159	0.5	132	0.00
29 A1	Fluorene	1.558	1.508	3.2	129	0.00
33 A1	Dibenzothiophene	2.288	2.309	-0.9	130	0.00
42 s	Phenanthrene-d10	1.716	1.625	5.3	126	0.00
43 A1	Phenanthrene	2.174	2.174	0.0	127	0.00
54 t	Retene	0.598	0.655	-9.5	141	0.00
55 t	Anthracene	2.007	2.079	-3.6	133	0.00
56 t	Carbazole	1.932	1.929	0.2	128	0.00
57 t	1-Methylphenanthrene	1.439	1.444	-0.3	130	0.00
58 A1	Fluoranthene	2.207	2.195	0.5	129	0.00
59 t	Benzo(b)fluorene	1.333	1.329	0.3	129	0.02
60 A1	Pyrene	2.347	2.444	-4.1	129	0.00
66 A1	Naphthobenzothiophene	2.341	2.346	-0.2	129	0.00
67 A2	Naphthobenzothiophene-2,1-D	2.341	2.346	-0.2	129	0.00
74 i	Chrysene-d12	1.000	1.000	0.0	125	0.00
75 t	Benz[a]anthracene	1.108	1.116	-0.7	129	0.00
76 A1	Chrysene	1.095	1.123	-2.6	125	0.00
77 A2	Chrysene/Triphenylene	1.095	1.123	-2.6	125	0.00
83 S	Benzo[b]fluoranthene-d12	1.034	1.034	0.0	130	0.00
84 t	Benzo[b]fluoranthene	1.311	1.292	1.4	127	0.00
85 A1	Benzo[j]+[k]fluoranthene	1.255	1.269	-1.1	130	0.00
87 t	Benzo[e]pyrene	1.255	1.280	-2.0	128	0.00
88 s	Benzo[a]pyrene-d12	0.949	0.955	-0.6	132	0.00
89 t	Benzo[a]pyrene	1.230	1.271	-3.3	129	0.00
90 t	Perylene	1.241	1.239	0.2	129	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191402.D
 Acq On : 19 Dec 2014 3:18 pm
 Operator : PAH9:SR
 Sample : WG754959-1
 Misc : WG754959, frav19 500ng/ml
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 12 09:02:05 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.526	1.593	-4.4	136	0.00
92 t	Dibenz[ah]+[ac]anthracene	1.506	1.496	0.7	131	0.00
93 t	Benzo[g,h,i]perylene	1.482	1.427	3.7	130	0.02
94 A1	Hopane (T19)	0.306	0.259	15.4	123	0.00
95 A2	17a(H),21B(H)-hopane - C30H	0.306	0.259	15.4	123	0.00
129 SA1	5B(H)Cholane - Surr	0.158	0.152	3.8	127	0.00

* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Mass Discrimination (Concentration)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	0.96	0.70 - 1.30

Mass Discrimination (Response)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	1.27	0.70 - 2.00

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191402.D
 Acq On : 19 Dec 2014 3:18 pm
 Operator : PAH9:SR
 Sample : WG754959-1
 Misc : WG754959, frav19 500ng/ml
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 12 09:02:05 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.032	164	107057	500.000	ng/mL	0.00
74) Chrysene-d12	43.461	240	207399	500.000	ng/mL	0.03
System Monitoring Compounds						
9) Naphthalene-d8	20.069	136	238048	491.102	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	49.11%#		
42) Phenanthrene-d10	32.889	188	173988	473.508	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	47.35%#		
83) Benzo[b]fluoranthene-d12	47.353	264	214492	499.904	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	49.99%#		
88) Benzo[a]pyrene-d12	48.561	264	198048	502.968	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	50.30%		
129) 5B(H)Cholane - Surr	44.063	217	31552	481.662	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	48.17%#		
Target Compounds						
						Qvalue
3) trans-Decalin	16.720	138	23666	239.962	ng/mL	100
4) cis-Decalin	17.943	138	17323	223.513	ng/mL	100
10) Naphthalene	20.151	128	294017	496.170	ng/mL	100
16) 2-Methylnaphthalene	22.843	142	161641	502.590	ng/mL	100
17) 1-Methylnaphthalene	23.263	142	155082	493.313	ng/mL	100
18) Benzo[thiophene	20.370	134	265796	490.686	ng/mL	100
23) Biphenyl	24.714	154	198723	501.190	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.325	156	129825	496.622	ng/mL	100
25) Dibenzofuran	27.798	168	210604	505.952	ng/mL	98
26) Acenaphthylene	26.420	152	246851M4	501.724	ng/mL	
27) Acenaphthene	27.159	153	149816	505.058	ng/mL	99
28) 2,3,5-Trimethylnaphthalen	28.701	170	124116	497.518	ng/mL	99
29) Fluorene	29.176	166	161397	483.920	ng/mL	99
33) Dibenzothiophene	32.488	184	247208	504.713	ng/mL	98
43) Phenanthrene	32.980	178	232751	500.109	ng/mL	100
54) Retene	39.946	234	70132	547.980	ng/mL	97
55) Anthracene	33.172	178	222527	517.737	ng/mL	99
56) Carbazole	33.829	167	206486	499.197	ng/mL	98
57) 1-Methylphenanthrene	35.490	192	154591	501.586	ng/mL	99
58) Fluoranthene	37.745	202	234978	497.293	ng/mL	97
59) Benzo(b)fluorene	40.265	216	142311	498.623	ng/mL	99
60) Pyrene	38.631	202	261601	520.463	ng/mL	96
66) Naphthobenzothiophene	42.475	234	251143	500.979	ng/mL	99
67) Naphthobenzothiophene-2,1	42.475	234	251143	500.979	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191402.D
 Acq On : 19 Dec 2014 3:18 pm
 Operator : PAH9:SR
 Sample : WG754959-1
 Misc : WG754959, frav19 500ng/ml
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 12 09:02:05 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.388	228	231469	503.698	ng/mL	99
76)	Chrysene	43.552	228	232954	512.747	ng/mL	99
77)	Chrysene/Triphenylene	43.552	228	232954	512.747	ng/mL	99
84)	Benzo[b]fluoranthene	47.436	252	267947	492.909	ng/mL	96
85)	Benzo[j]+[k]fluoranthene	47.527	252	263200	505.541	ng/mL	96
87)	Benzo[e]pyrene	48.460	252	265447	509.871	ng/mL	98
89)	Benzo[a]pyrene	48.652	252	263638	516.744	ng/mL	96
90)	Perylene	48.972	252	257032	499.124	ng/mL	96
91)	Indeno[1,2,3-cd]pyrene	53.554	276	330355M3	521.996	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.609	278	310291	496.796	ng/mL	98
93)	Benzo[g,h,i]perylene	54.888	276	295907	481.331	ng/mL	99
94)	Hopane (T19)	52.631	191	53664	422.295	ng/mL#	89
95)	17a(H),21B(H)-hopane - C3	52.631	191	53664	422.295	ng/mL#	89

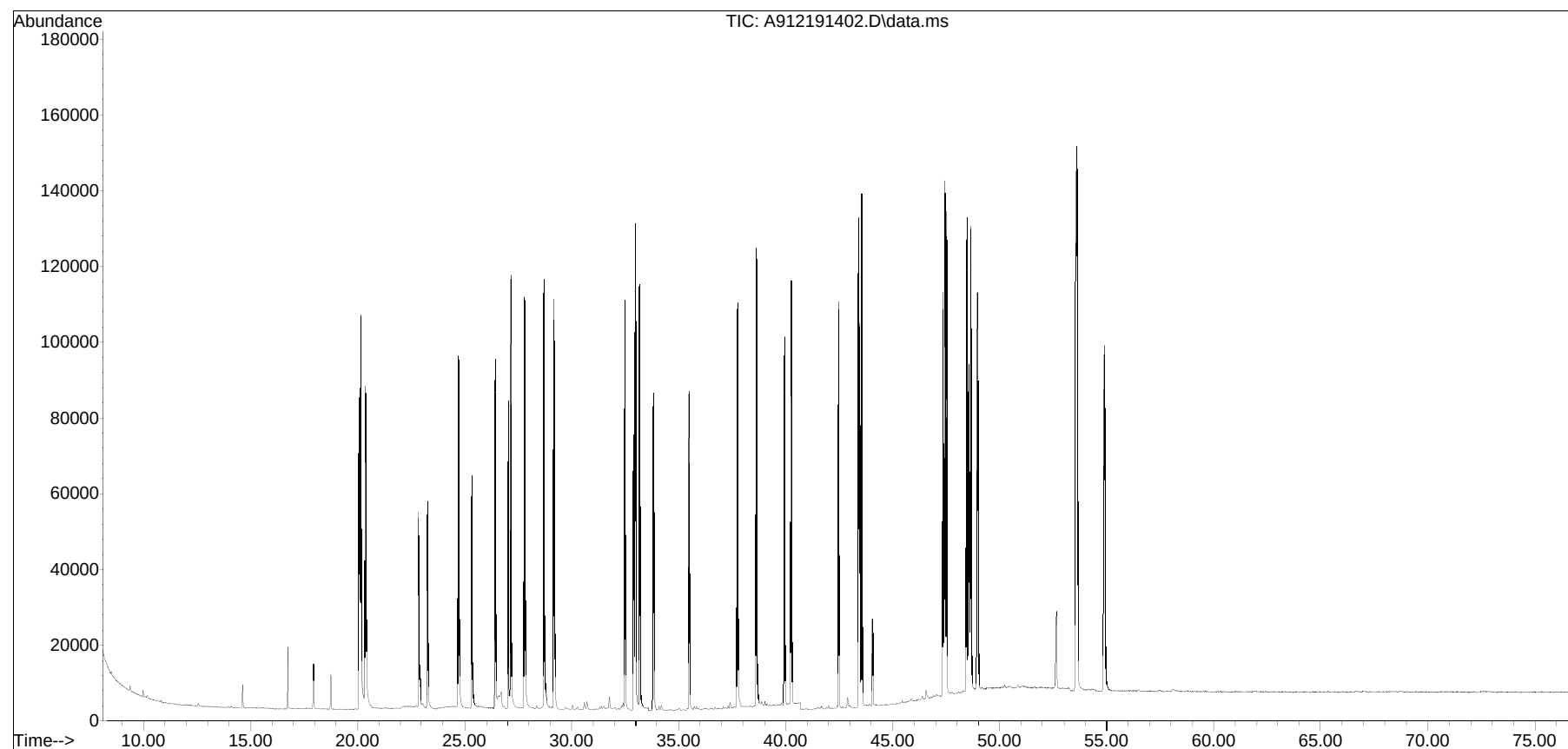
(#) = qualifier out of range (m) = manual integration (+) = signals summed

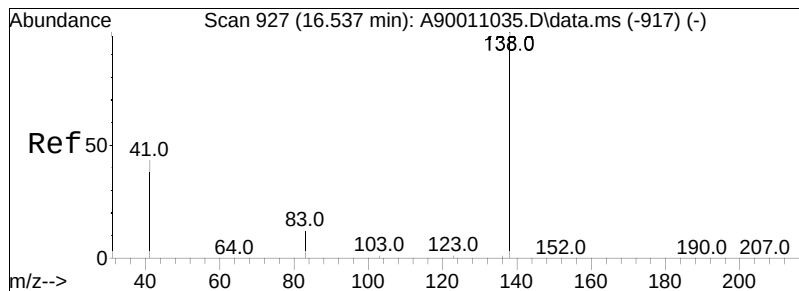
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC19\
Data File : A912191402.D
Acq On : 19 Dec 2014 3:18 pm
Operator : PAH9:SR
Sample : WG754959-1
Misc : WG754959, frav19 500ng/ml
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 12 09:02:05 2015
Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 15 13:02:08 2014
Response via : Initial Calibration

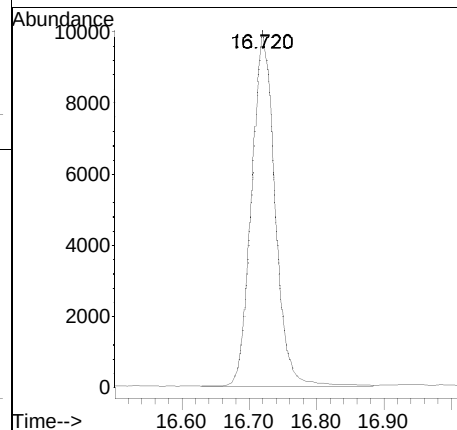
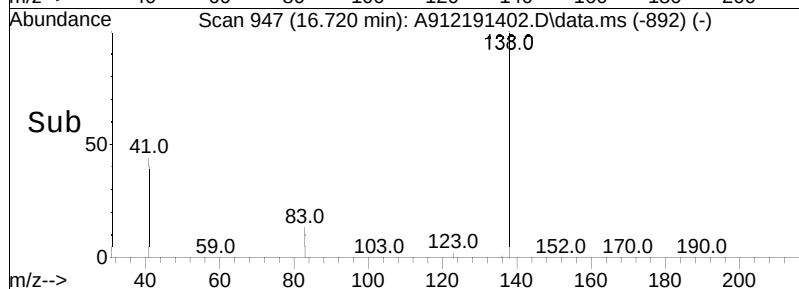
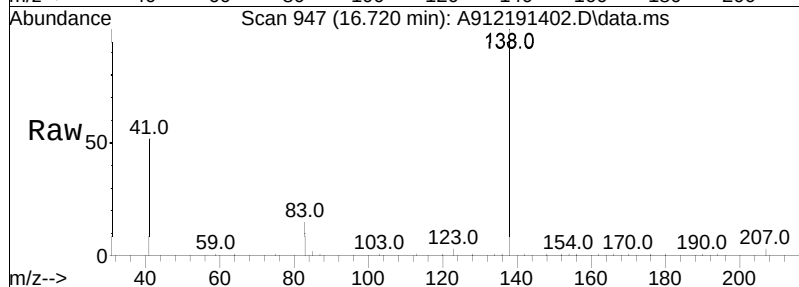
Sub List : ICAL_CCALT_REV2 - CC with five surrogates

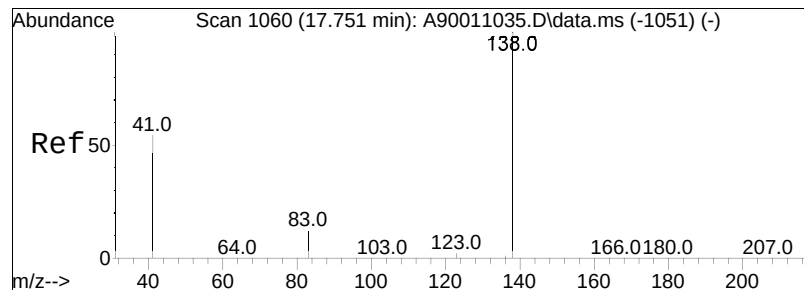




#3
trans-Decalin
Concen: 239.96 ng/mL
RT: 16.720 min Scan# 947
Delta R.T. -0.000 min
Lab File: A912191402.D
Acq: 19 Dec 2014 3:18 pm

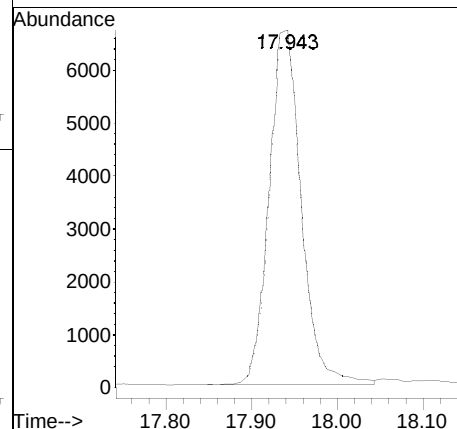
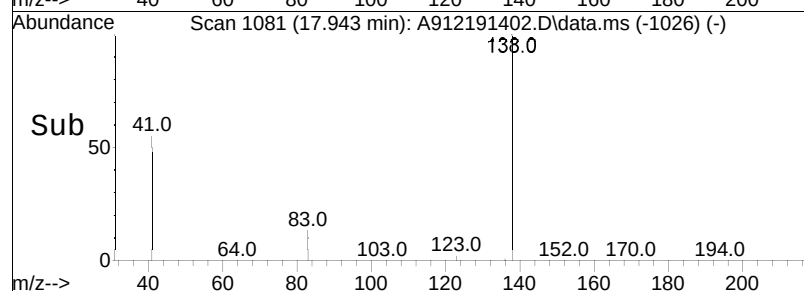
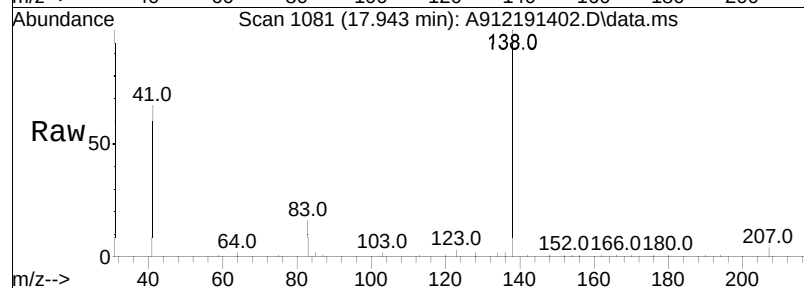
Tgt Ion:138 Resp: 23666

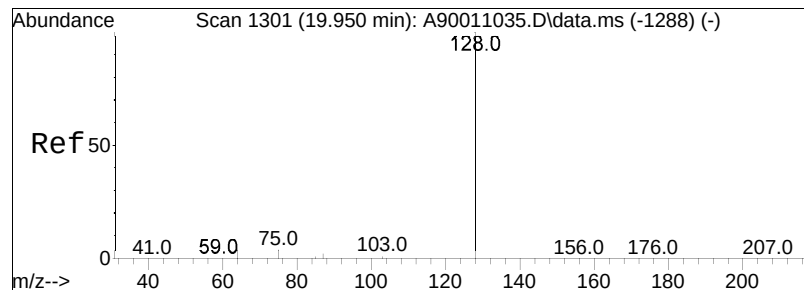




#4
cis-Decalin
Concen: 223.51 ng/mL
RT: 17.943 min Scan# 1081
Delta R.T. -0.000 min
Lab File: A912191402.D
Acq: 19 Dec 2014 3:18 pm

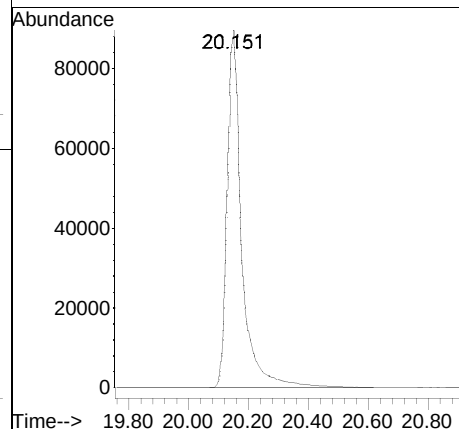
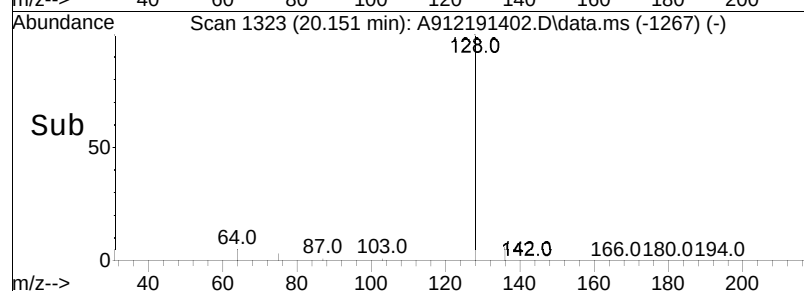
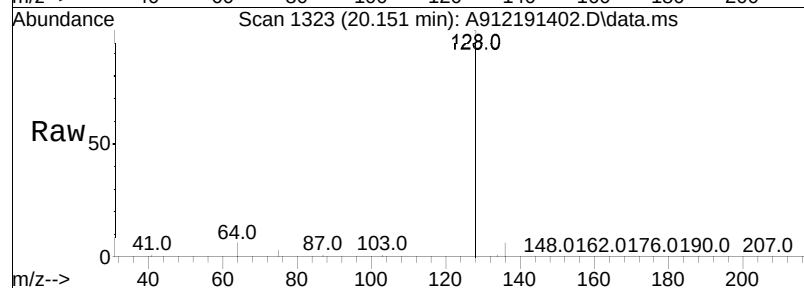
Tgt Ion:138 Resp: 17323

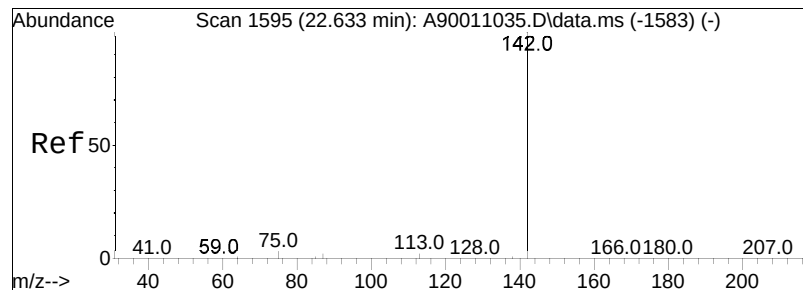




#10
Naphthalene
Concen: 496.17 ng/mL
RT: 20.151 min Scan# 1323
Delta R.T. 0.009 min
Lab File: A912191402.D
Acq: 19 Dec 2014 3:18 pm

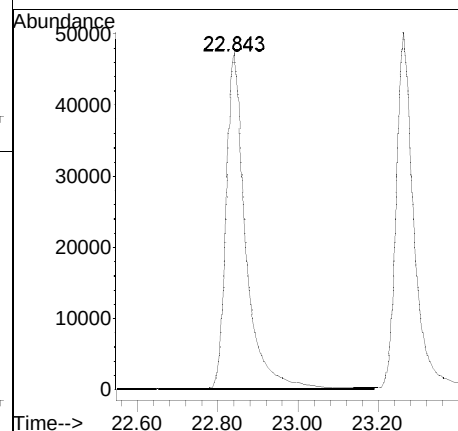
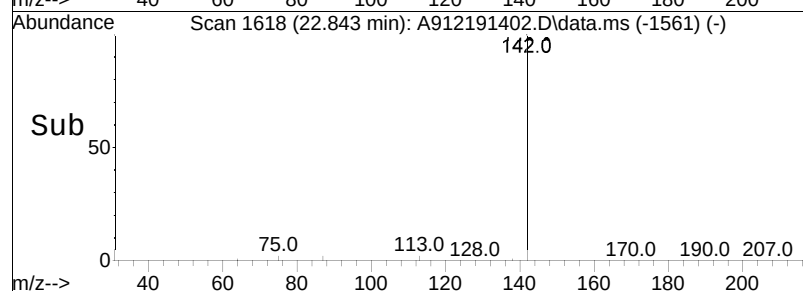
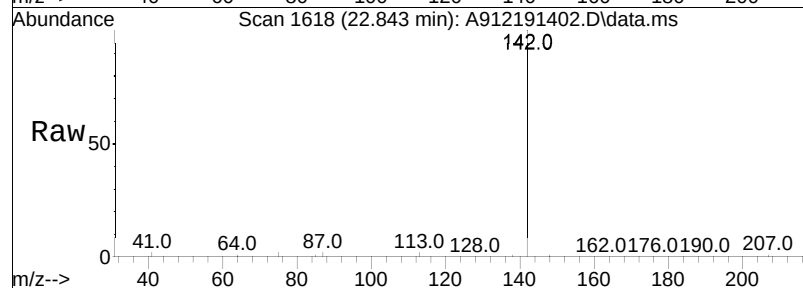
Tgt Ion:128 Resp: 294017

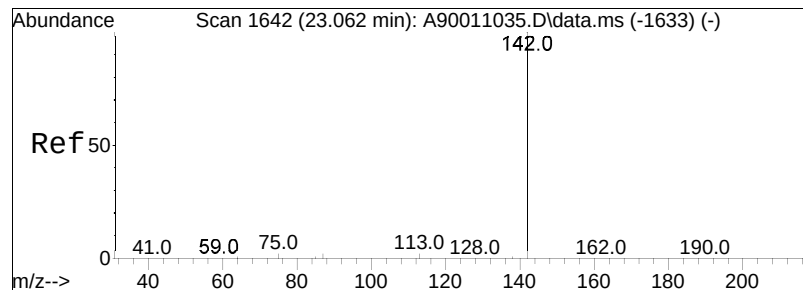




#16
 2-Methylnaphthalene
 Concen: 502.59 ng/mL
 RT: 22.843 min Scan# 1618
 Delta R.T. 0.018 min
 Lab File: A912191402.D
 Acq: 19 Dec 2014 3:18 pm

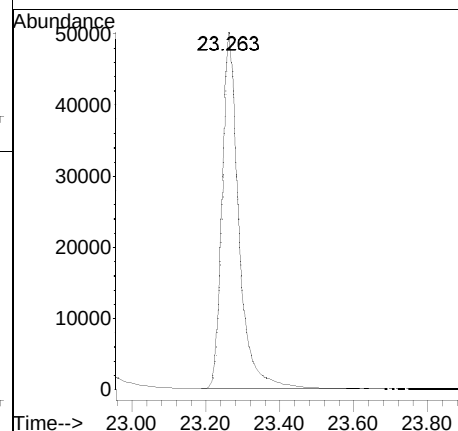
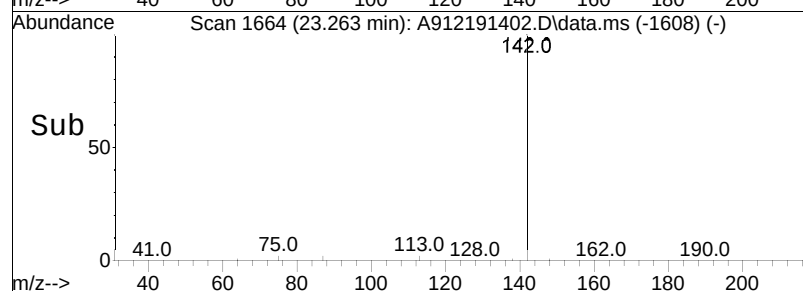
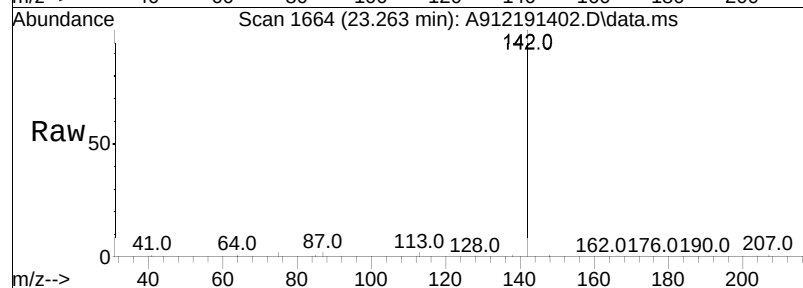
Tgt Ion:142 Resp: 161641

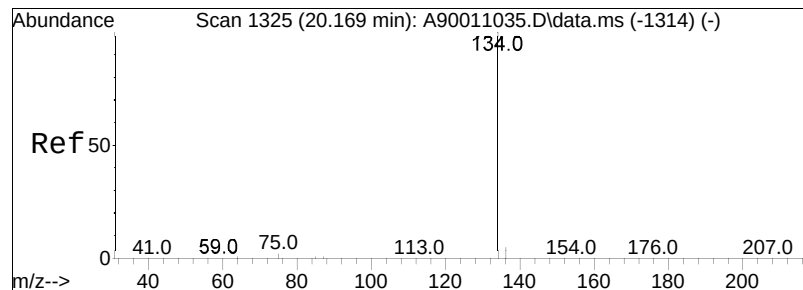




#17
 1-Methylnaphthalene
 Concen: 493.31 ng/mL
 RT: 23.263 min Scan# 1664
 Delta R.T. 0.009 min
 Lab File: A912191402.D
 Acq: 19 Dec 2014 3:18 pm

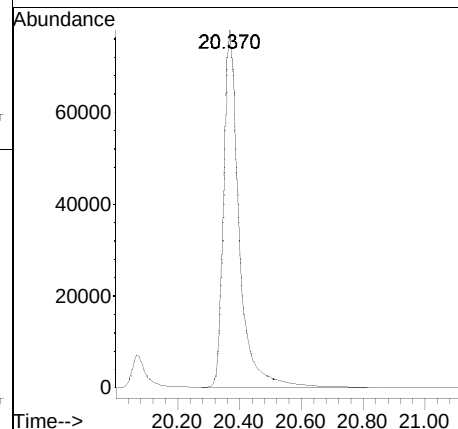
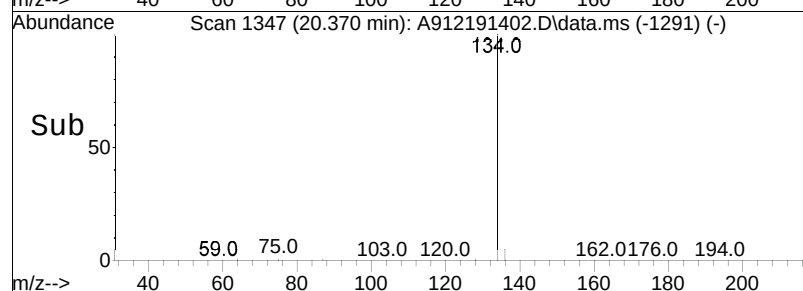
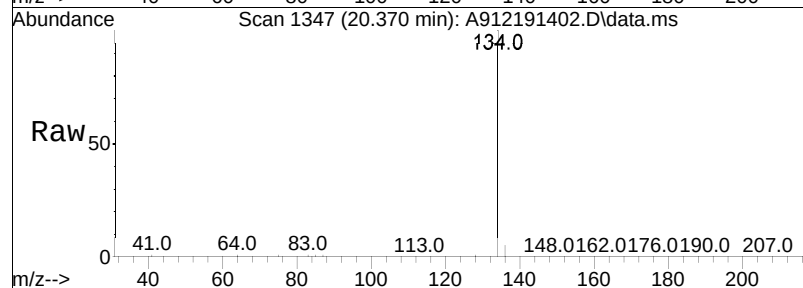
Tgt Ion:142 Resp: 155082

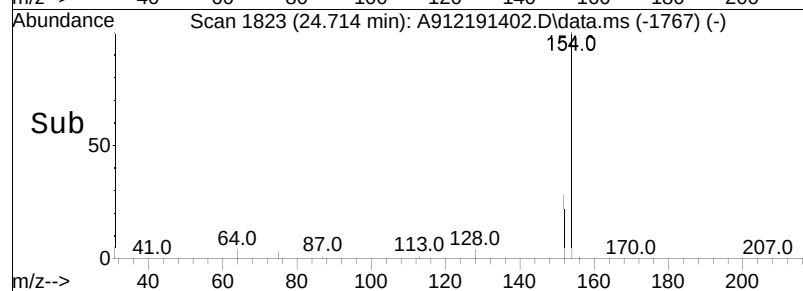
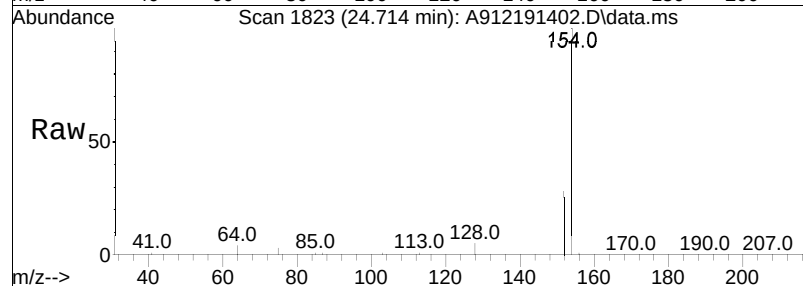
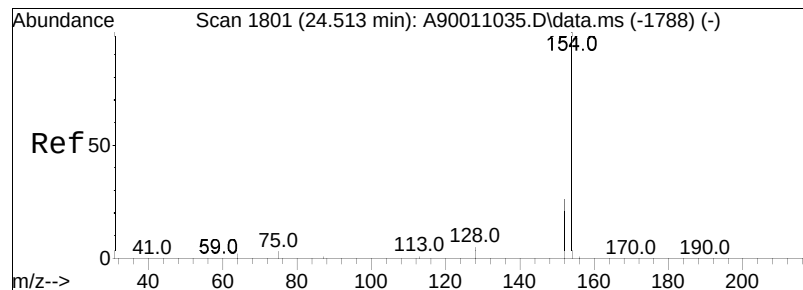




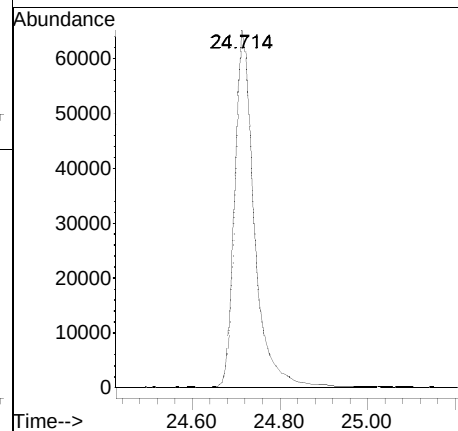
#18
Benzothiophene
Concen: 490.69 ng/mL
RT: 20.370 min Scan# 1347
Delta R.T. 0.009 min
Lab File: A912191402.D
Acq: 19 Dec 2014 3:18 pm

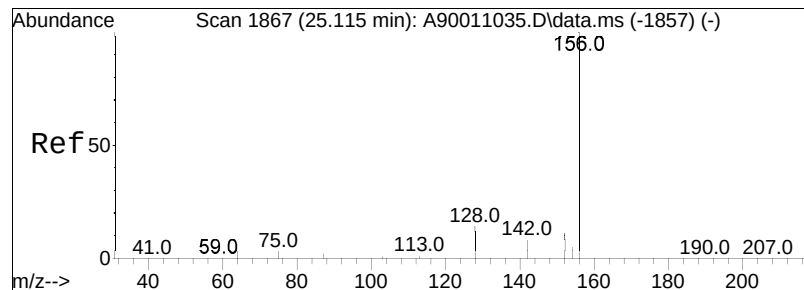
Tgt Ion:134 Resp: 265796





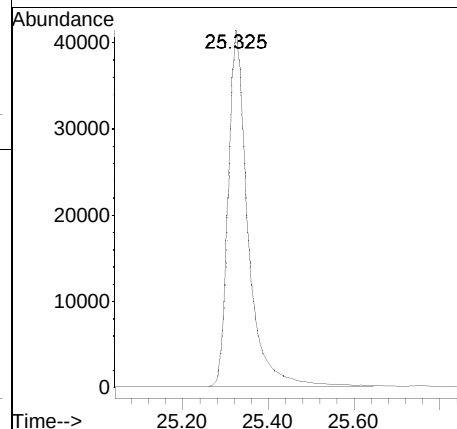
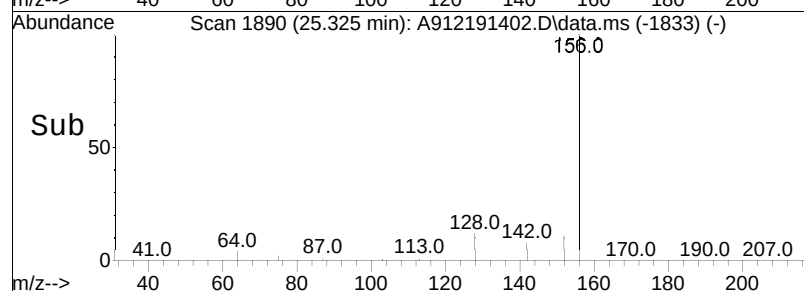
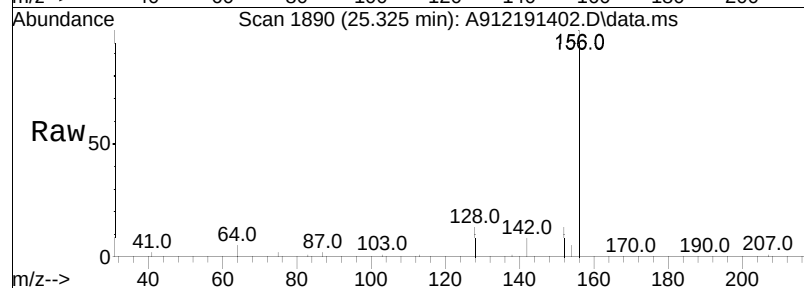
#23
 Biphenyl
 Concen: 501.19 ng/mL
 RT: 24.714 min Scan# 1823
 Delta R.T. 0.009 min
 Lab File: A912191402.D
 Acq: 19 Dec 2014 3:18 pm
 Tgt Ion:154 Resp: 198723

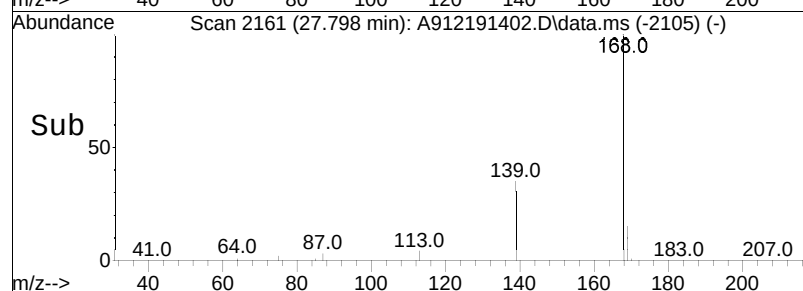
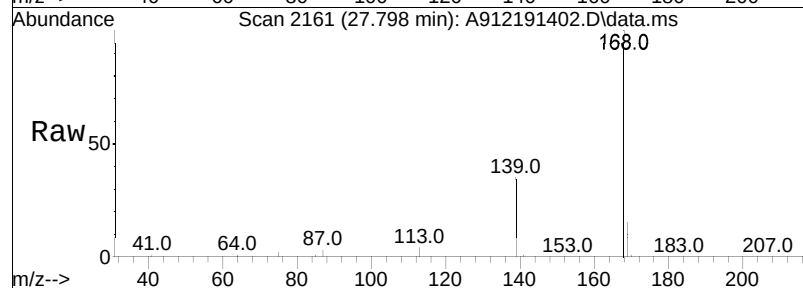
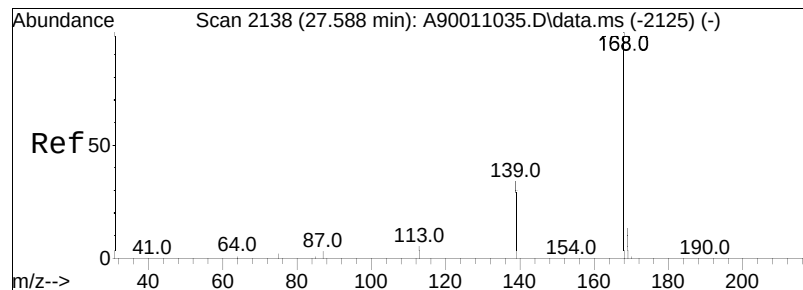




#24
2,6-Dimethylnaphthalene
Concen: 496.62 ng/mL
RT: 25.325 min Scan# 1890
Delta R.T. 0.018 min
Lab File: A912191402.D
Acq: 19 Dec 2014 3:18 pm

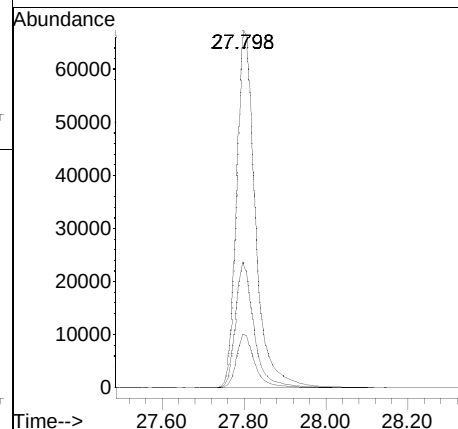
Tgt Ion:156 Resp: 129825

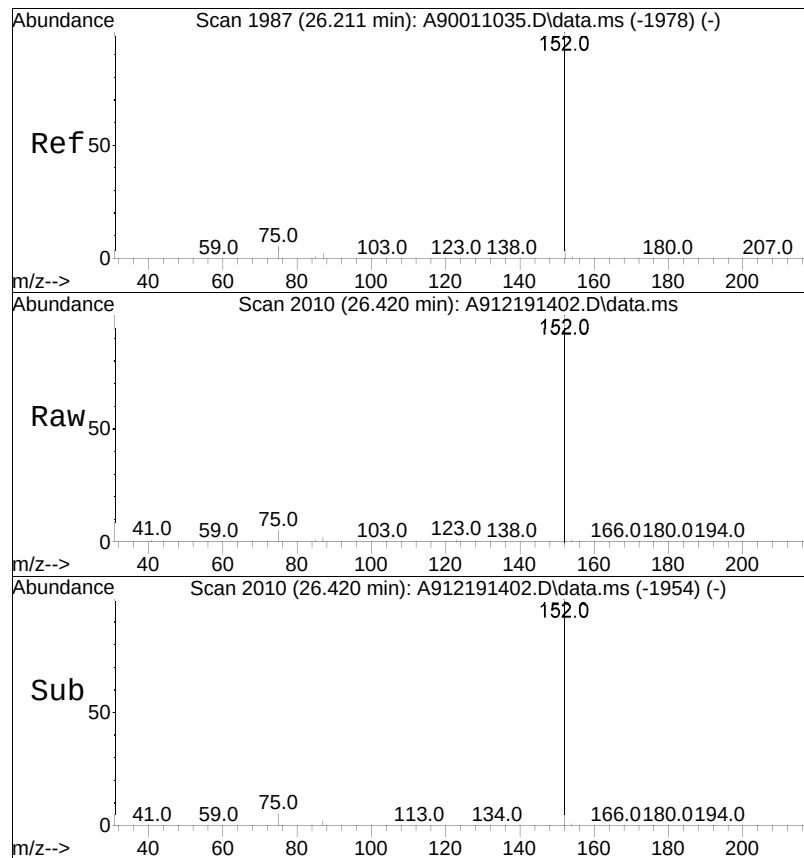




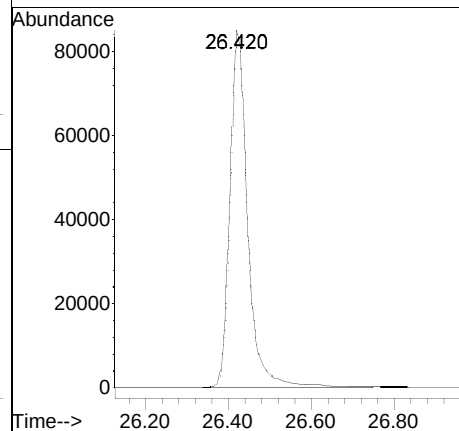
#25
 Dibenzofuran
 Concen: 505.95 ng/mL
 RT: 27.798 min Scan# 2161
 Delta R.T. 0.009 min
 Lab File: A912191402.D
 Acq: 19 Dec 2014 3:18 pm

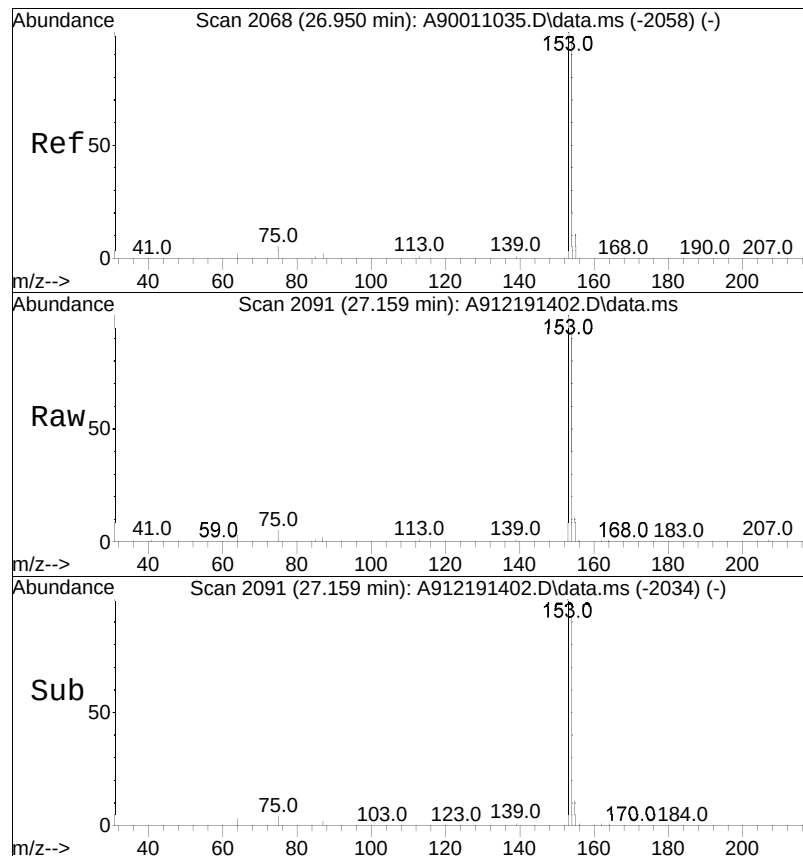
Tgt Ion	Ratio	Lower	Upper
168	100		
139	34.5	25.1	46.7
169	14.7	10.2	19.0





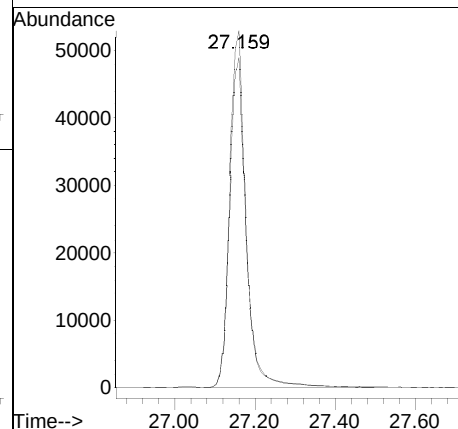
#26
Acenaphthylene
Concen: 501.72 ng/mL M4
RT: 26.420 min Scan# 2010
Delta R.T. 0.009 min
Lab File: A912191402.D
Acq: 19 Dec 2014 3:18 pm
Tgt Ion:152 Resp: 246851

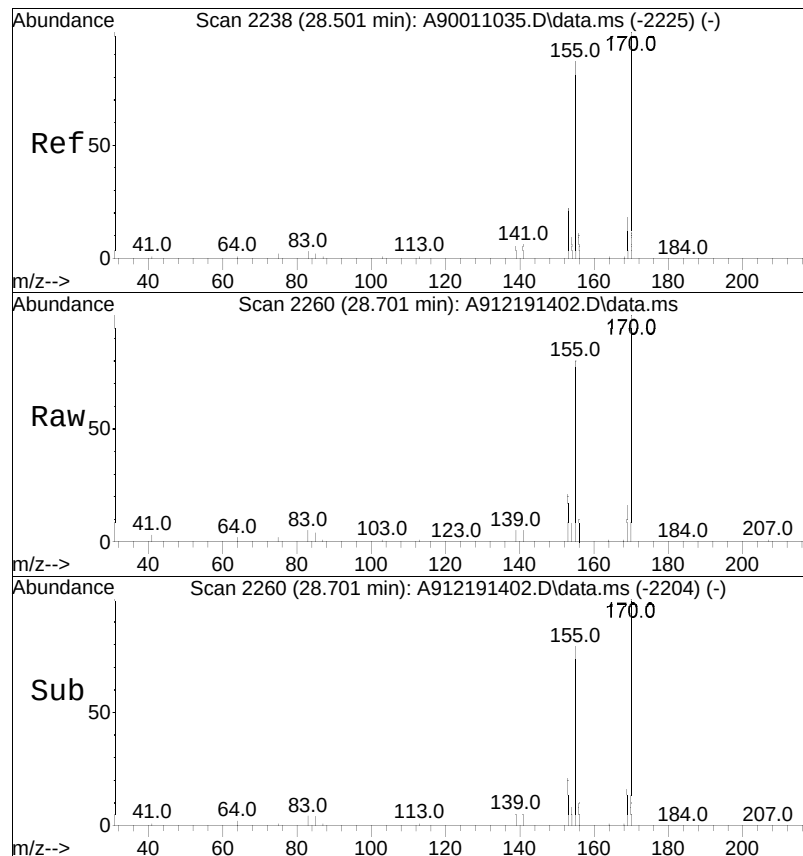




#27
 Acenaphthene
 Concen: 505.06 ng/mL
 RT: 27.159 min Scan# 2091
 Delta R.T. 0.018 min
 Lab File: A912191402.D
 Acq: 19 Dec 2014 3:18 pm

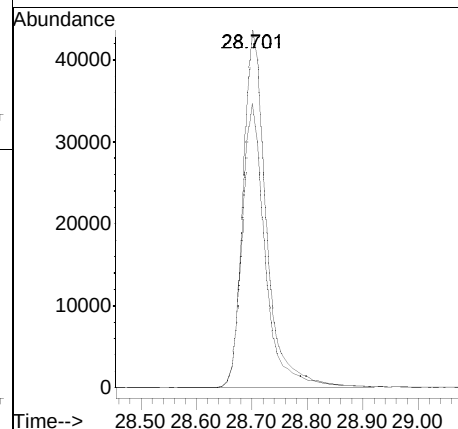
Tgt Ion	Ratio	Lower	Upper
153	100		
154	92.2	64.9	120.5

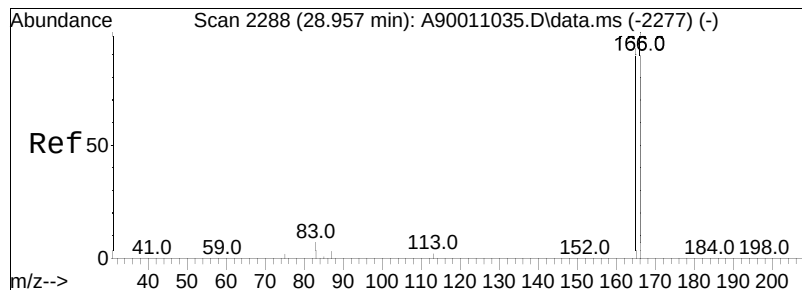




#28
 2,3,5-Trimethylnaphthalene
 Concen: 497.52 ng/mL
 RT: 28.701 min Scan# 2260
 Delta R.T. 0.009 min
 Lab File: A912191402.D
 Acq: 19 Dec 2014 3:18 pm

Tgt Ion	Ratio	Lower	Upper
170	100		
155	79.2	55.9	103.9





#29

Fluorene

Concen: 483.92 ng/mL

RT: 29.176 min Scan# 2312

Delta R.T. 0.018 min

Lab File: A912191402.D

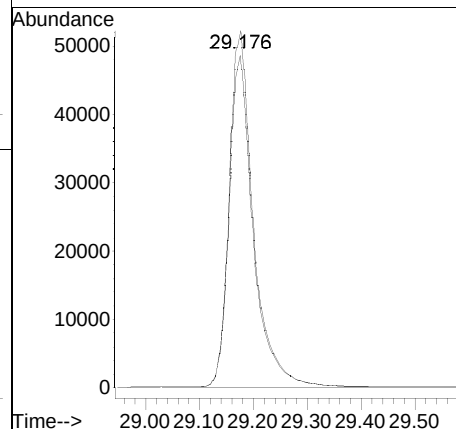
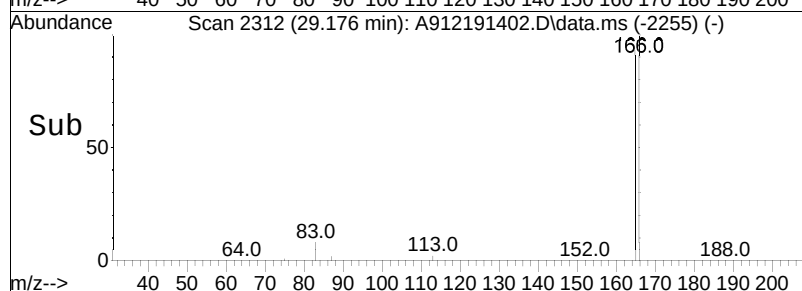
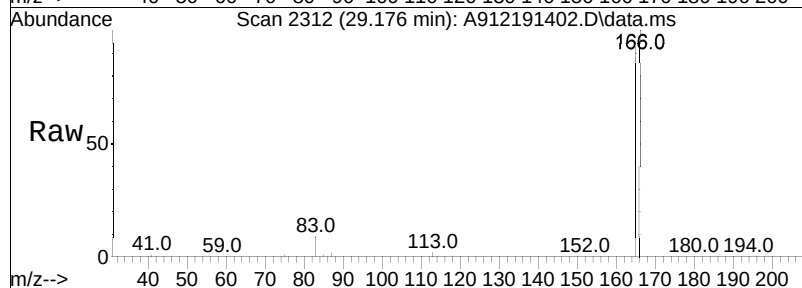
Acq: 19 Dec 2014 3:18 pm

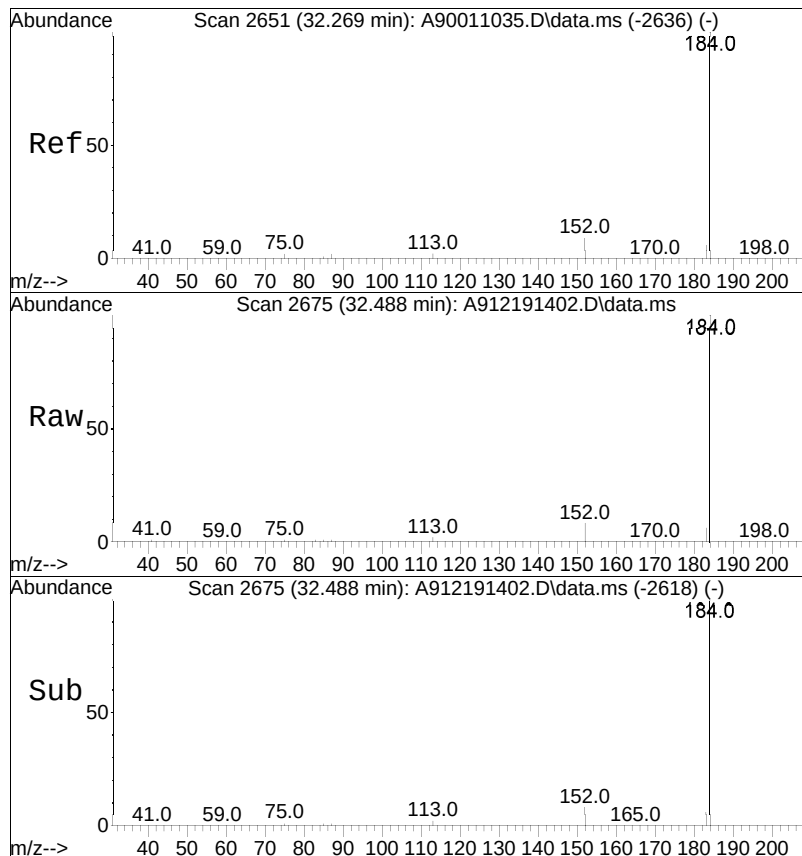
Tgt Ion: 166 Resp: 161397

Ion Ratio Lower Upper

166 100

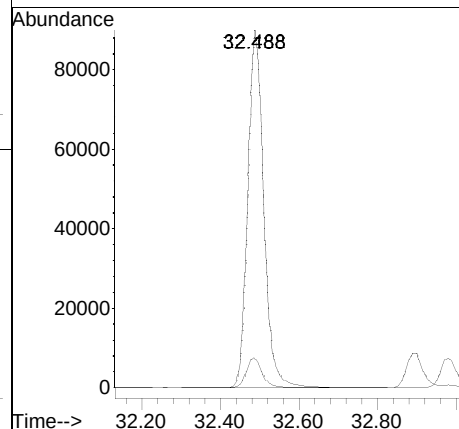
165 92.4 65.5 121.7

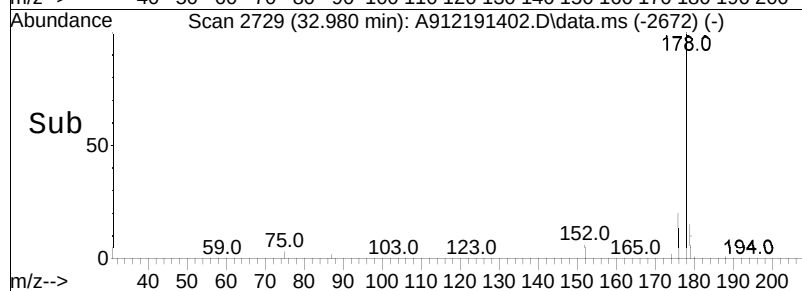
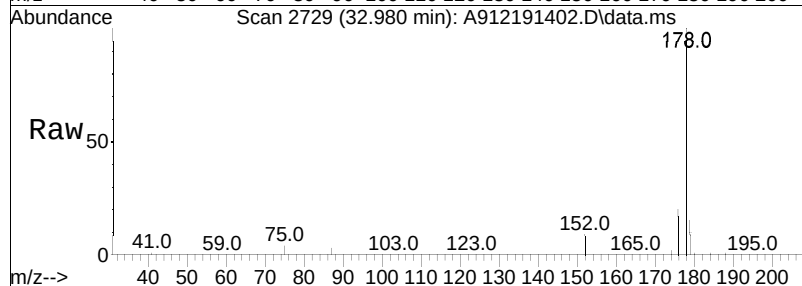
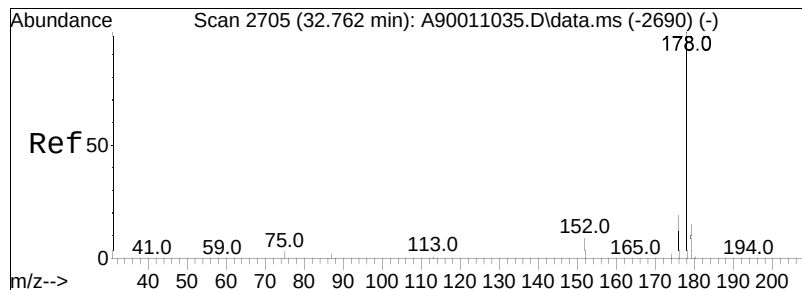




#33
 Dibenzothiophene
 Concen: 504.71 ng/mL
 RT: 32.488 min Scan# 2675
 Delta R.T. 0.019 min
 Lab File: A912191402.D
 Acq: 19 Dec 2014 3:18 pm

Tgt	Ion	Ratio	Lower	Upper
184	100			
152	8.3		6.3	11.7





#43

Phenanthrene

Concen: 500.11 ng/mL

RT: 32.980 min Scan# 2729

Delta R.T. 0.018 min

Lab File: A912191402.D

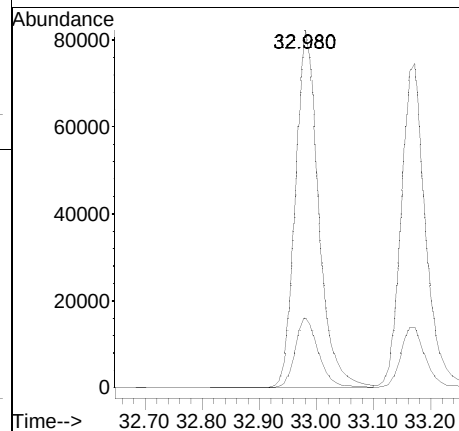
Acq: 19 Dec 2014 3:18 pm

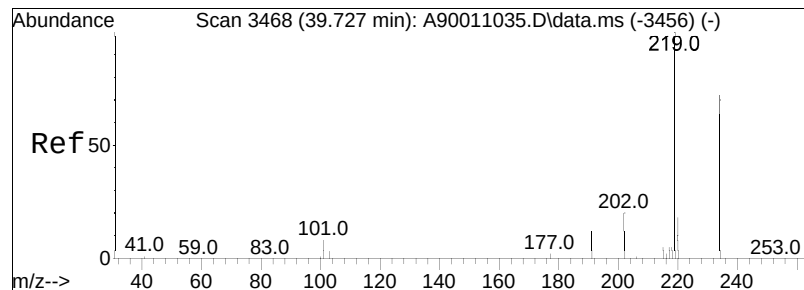
Tgt Ion:178 Resp: 232751

Ion Ratio Lower Upper

178 100

176 19.6 13.7 25.5





#54

Retene

Concen: 547.98 ng/mL

RT: 39.946 min Scan# 3492

Delta R.T. 0.019 min

Lab File: A912191402.D

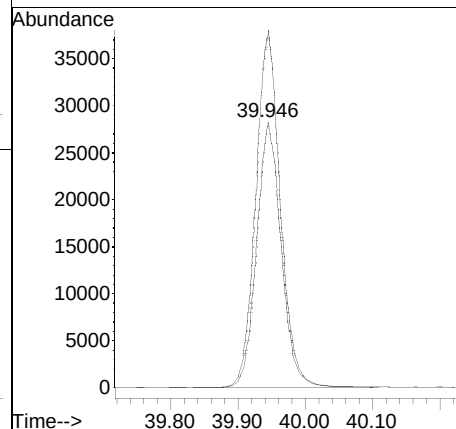
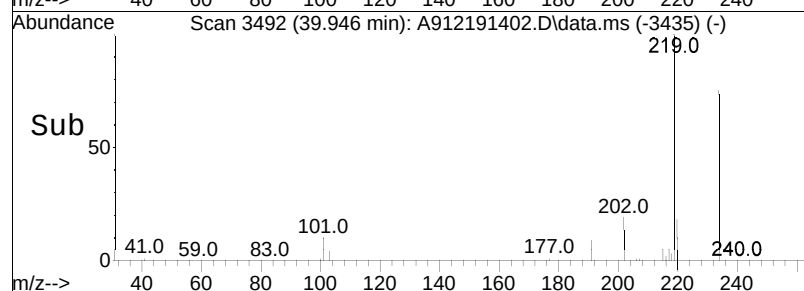
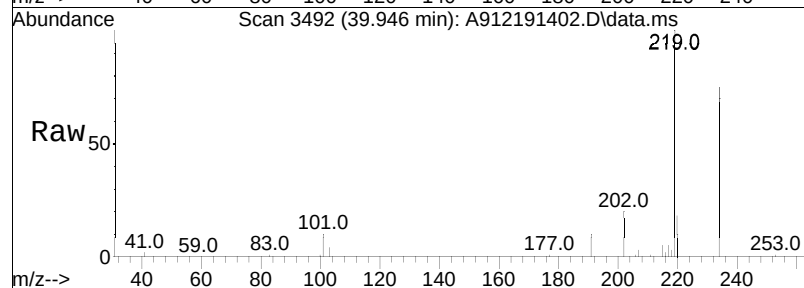
Acq: 19 Dec 2014 3:18 pm

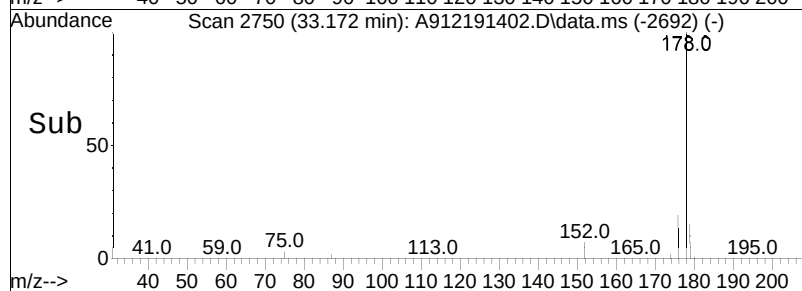
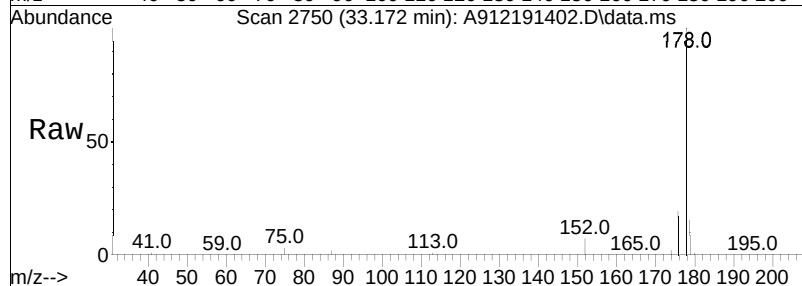
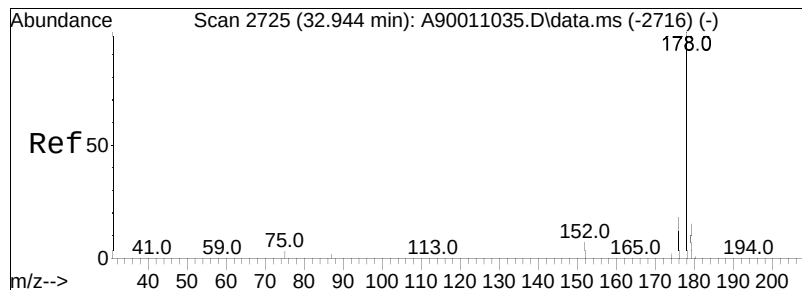
Tgt Ion: 234 Resp: 70132

Ion Ratio Lower Upper

234 100

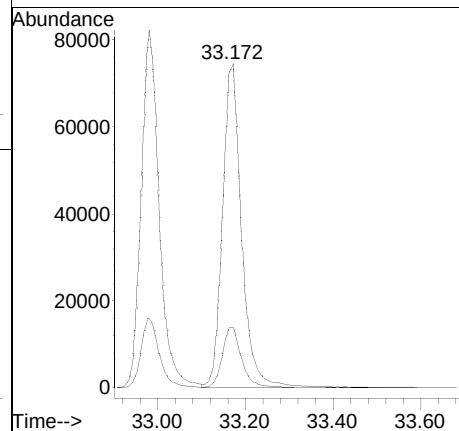
219 134.2 96.7 179.7

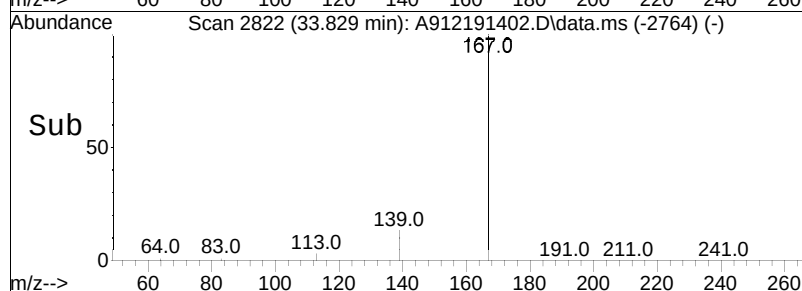
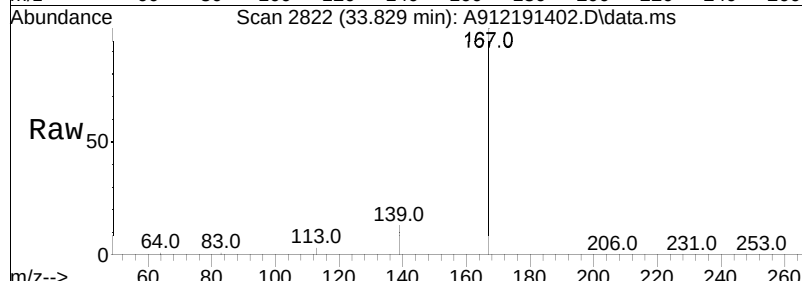
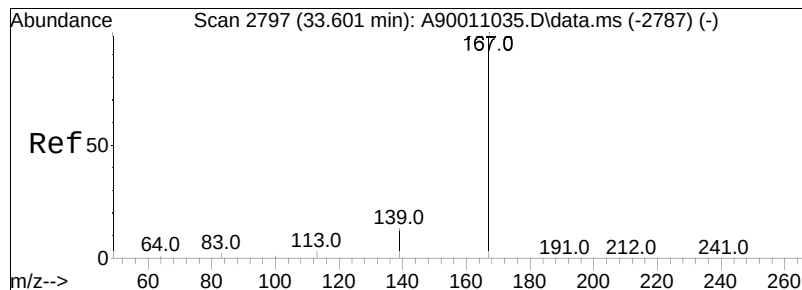




#55
 Anthracene
 Concen: 517.74 ng/mL
 RT: 33.172 min Scan# 2750
 Delta R.T. 0.027 min
 Lab File: A912191402.D
 Acq: 19 Dec 2014 3:18 pm

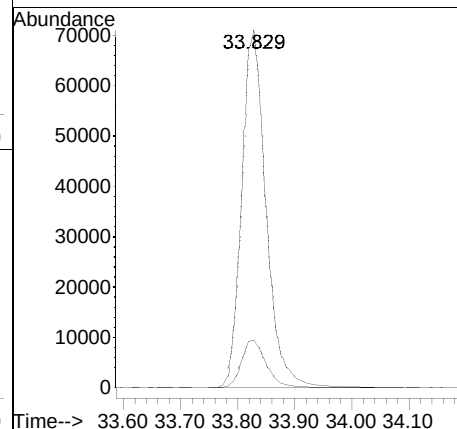
Tgt	Ion	Ratio	Lower	Upper
178	100			
176	18.7	13.4	24.8	

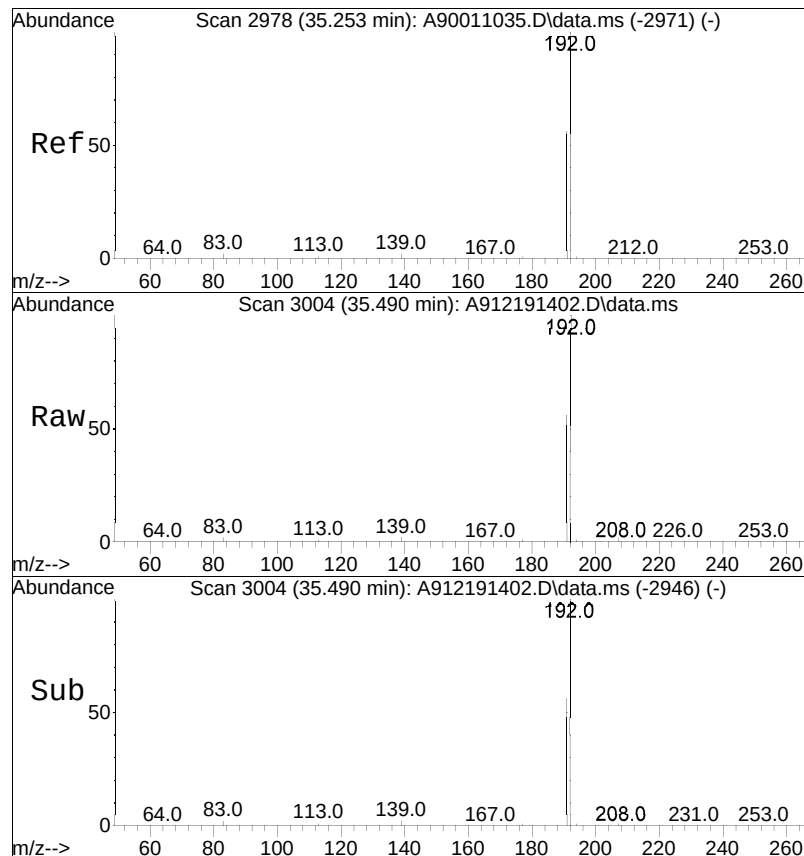




#56
 Carbazole
 Concen: 499.20 ng/mL
 RT: 33.829 min Scan# 2822
 Delta R.T. 0.027 min
 Lab File: A912191402.D
 Acq: 19 Dec 2014 3:18 pm

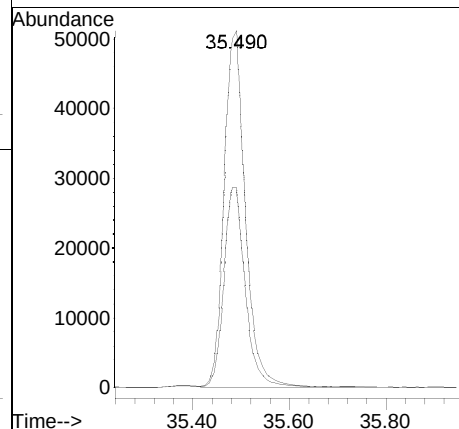
Tgt Ion	Ratio	Lower	Upper
167	100		
139	13.5	9.9	18.3

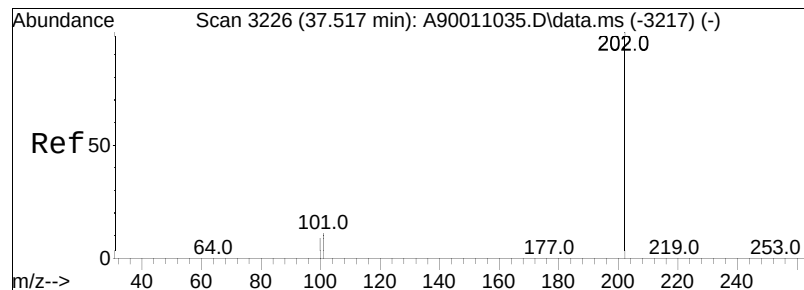




#57
 1-Methylphenanthrene
 Concen: 501.59 ng/mL
 RT: 35.490 min Scan# 3004
 Delta R.T. 0.027 min
 Lab File: A912191402.D
 Acq: 19 Dec 2014 3:18 pm

Tgt Ion	Ratio	Lower	Upper
192	100		
191	56.5	39.8	74.0





#58

Fluoranthene

Concen: 497.29 ng/mL

RT: 37.745 min Scan# 3251

Delta R.T. 0.018 min

Lab File: A912191402.D

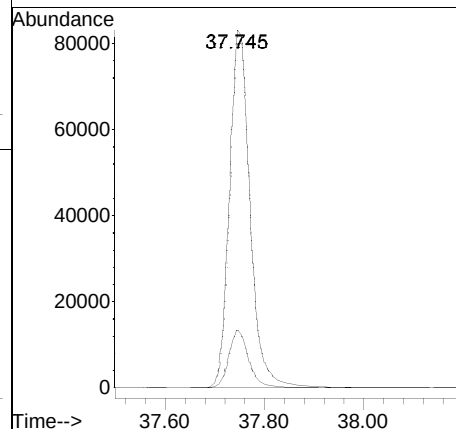
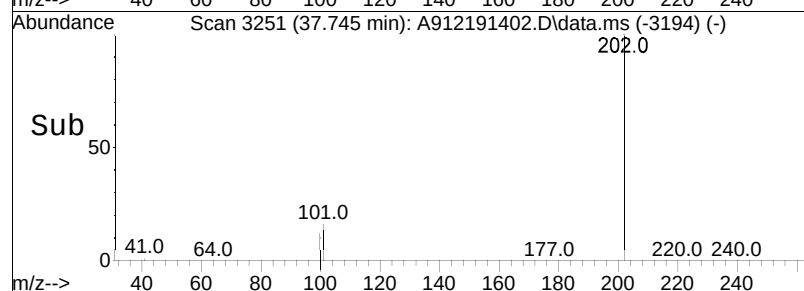
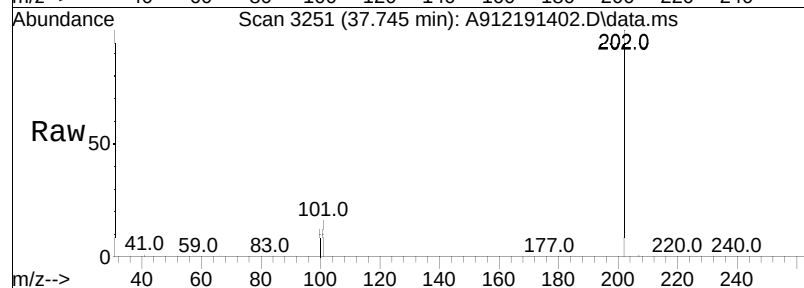
Acq: 19 Dec 2014 3:18 pm

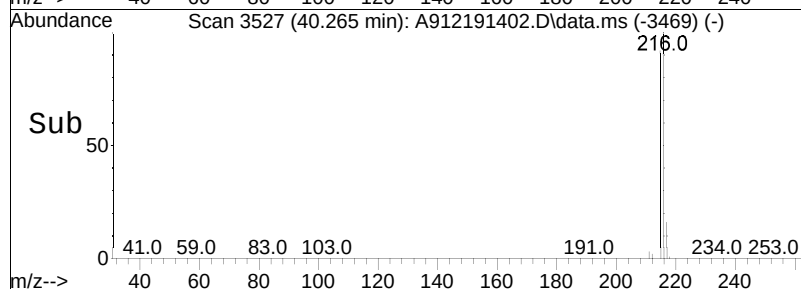
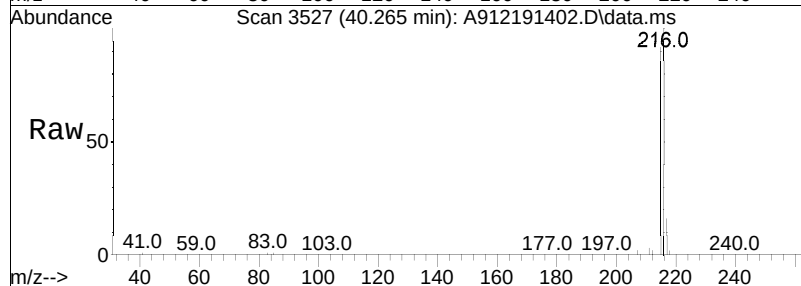
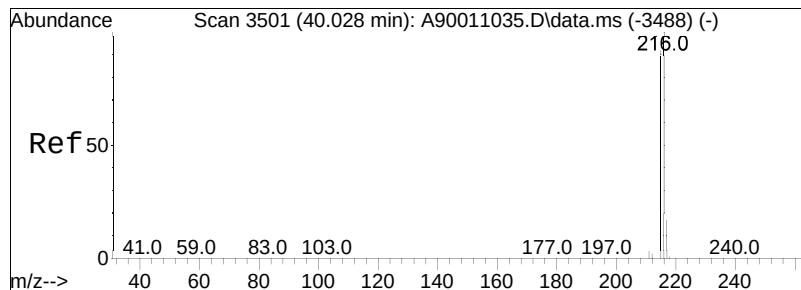
Tgt Ion: 202 Resp: 234978

Ion Ratio Lower Upper

202 100

101 15.7 11.8 22.0





#59

Benzo(b)fluorene

Concen: 498.62 ng/mL

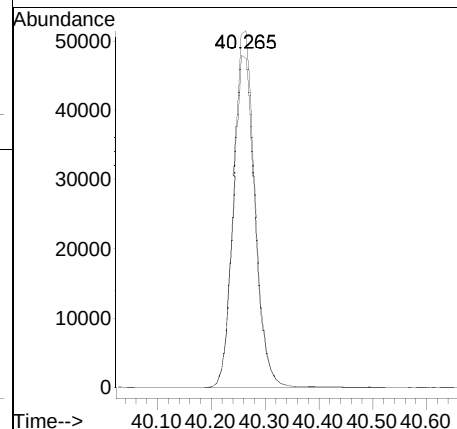
RT: 40.265 min Scan# 3527

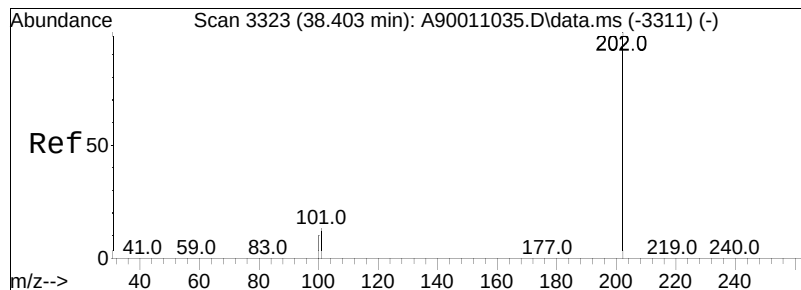
Delta R.T. 0.027 min

Lab File: A912191402.D

Acq: 19 Dec 2014 3:18 pm

Tgt	Ion	Ratio	Lower	Upper
216	100			
215	92.9	64.3	119.3	





#60

Pyrene

Concen: 520.46 ng/mL

RT: 38.631 min Scan# 3348

Delta R.T. 0.018 min

Lab File: A912191402.D

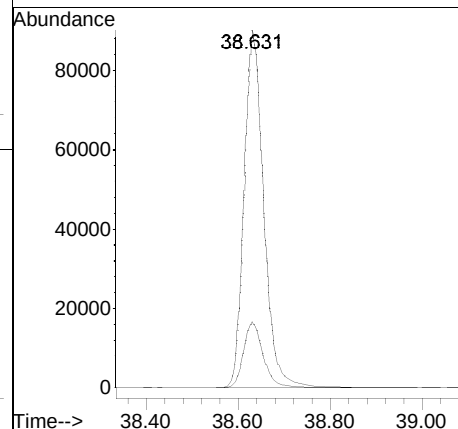
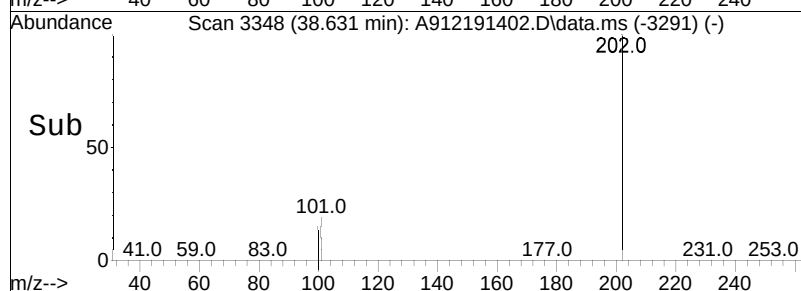
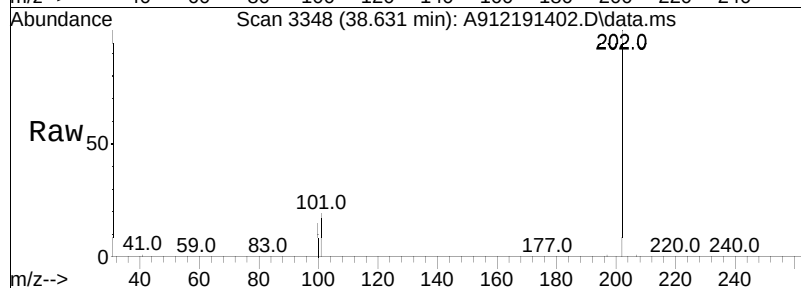
Acq: 19 Dec 2014 3:18 pm

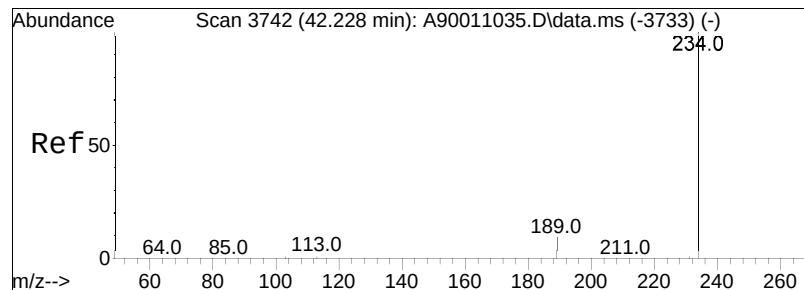
Tgt Ion: 202 Resp: 261601

Ion Ratio Lower Upper

202 100

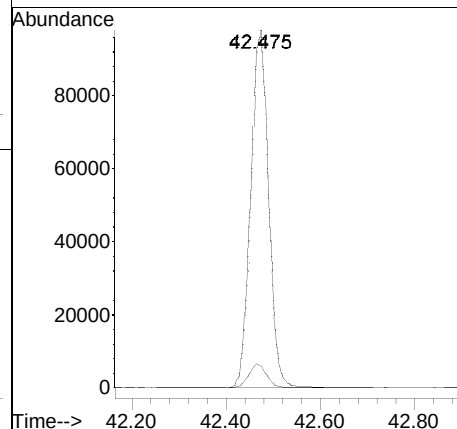
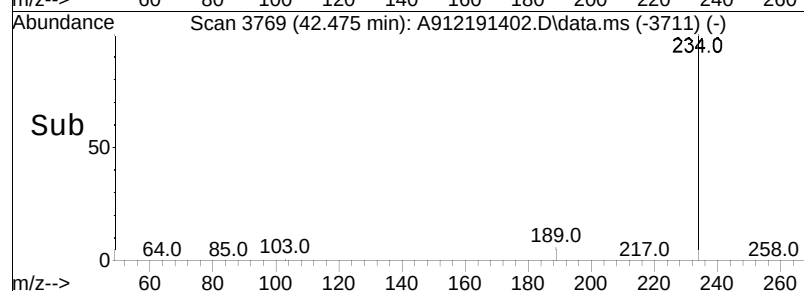
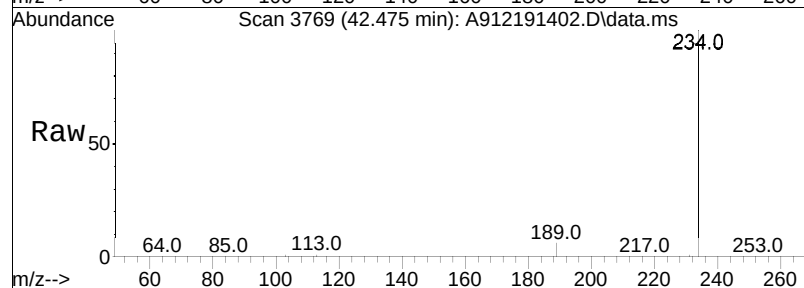
101 18.6 14.2 26.4

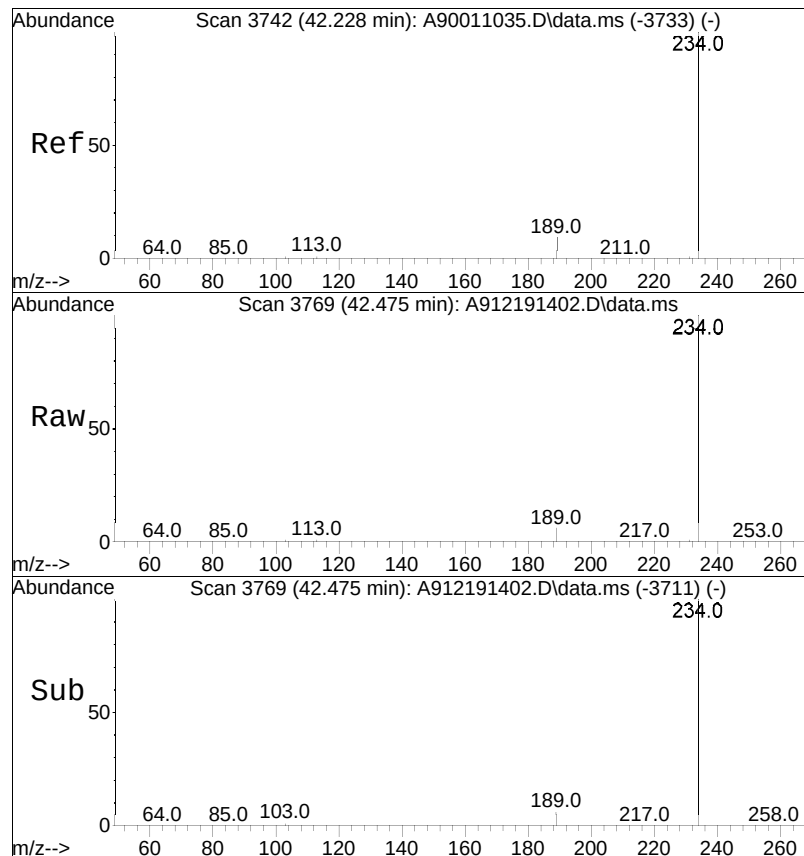




#66
 Naphthobenzothiophene
 Concen: 500.98 ng/ml
 RT: 42.475 min Scan# 3769
 Delta R.T. 0.028 min
 Lab File: A912191402.D
 Acq: 19 Dec 2014 3:18 pm

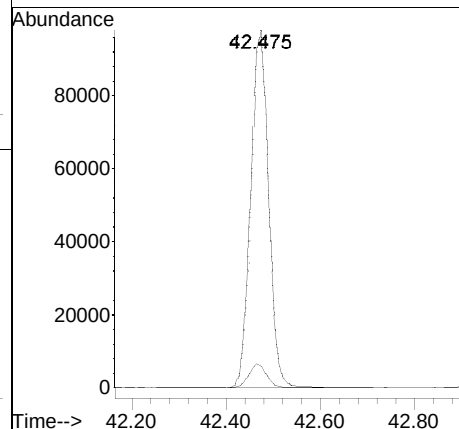
Tgt	Ion	Ratio	Lower	Upper
234	100			
189	6.6	4.9	9.1	

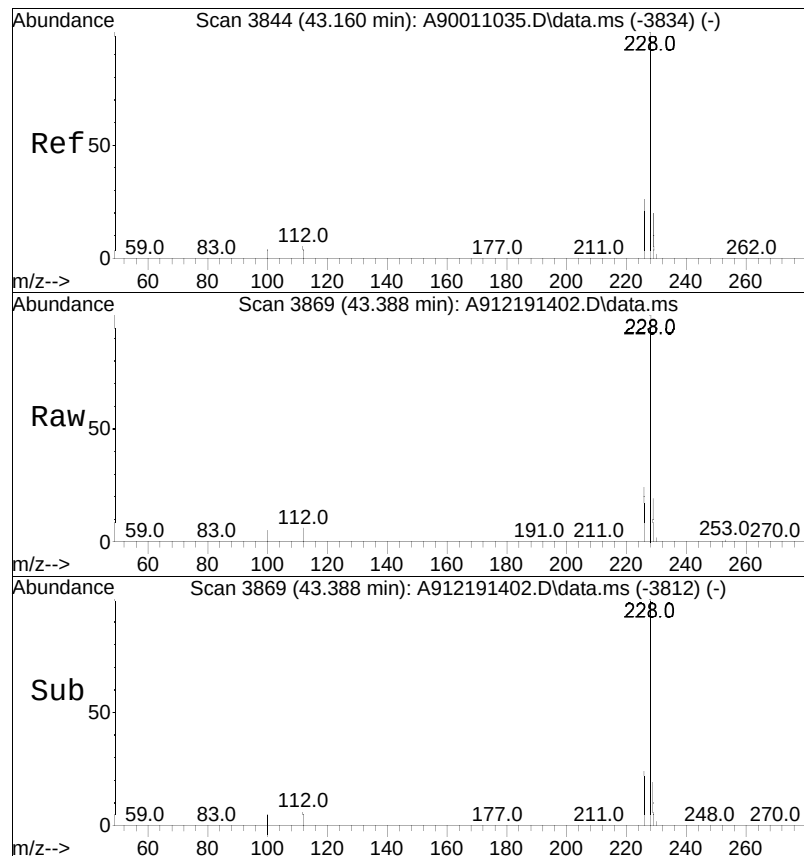




#67
 Naphthobenzothiophene-2,1-D
 Concen: 500.98 ng/mL
 RT: 42.475 min Scan# 3769
 Delta R.T. 0.028 min
 Lab File: A912191402.D
 Acq: 19 Dec 2014 3:18 pm

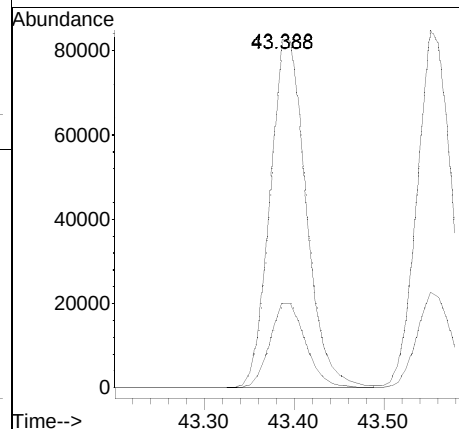
Tgt	Ion	Ratio	Lower	Upper
234	100			
189	6.6		4.9	9.1

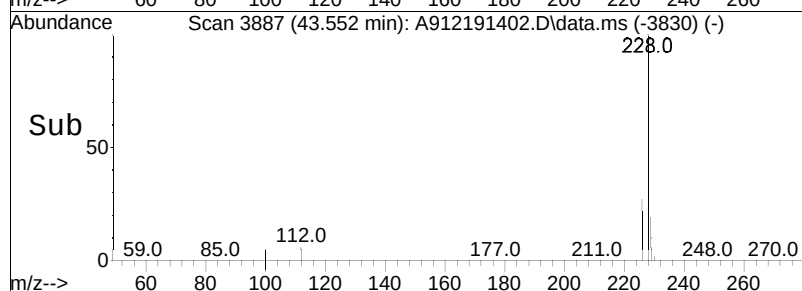
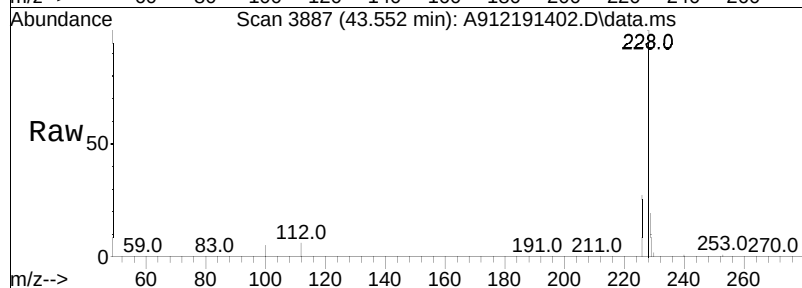
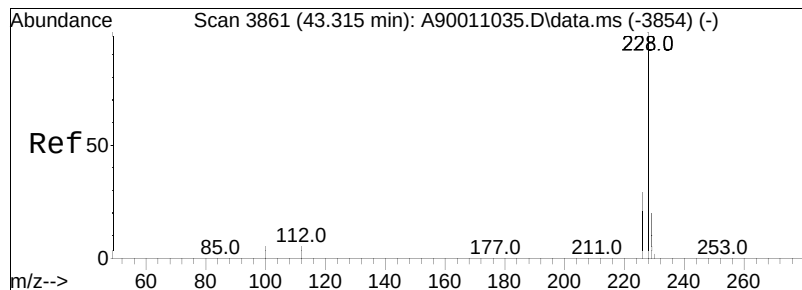




#75
 Benz[a]anthracene
 Concen: 503.70 ng/mL
 RT: 43.388 min Scan# 3869
 Delta R.T. 0.019 min
 Lab File: A912191402.D
 Acq: 19 Dec 2014 3:18 pm

Tgt	Ion	Ratio	Lower	Upper
228	228	100		
226	226	24.0	17.3	32.1





#76

Chrysene

Concen: 512.75 ng/mL

RT: 43.552 min Scan# 3887

Delta R.T. 0.018 min

Lab File: A912191402.D

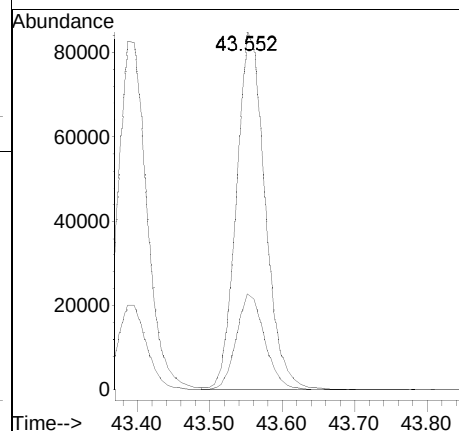
Acq: 19 Dec 2014 3:18 pm

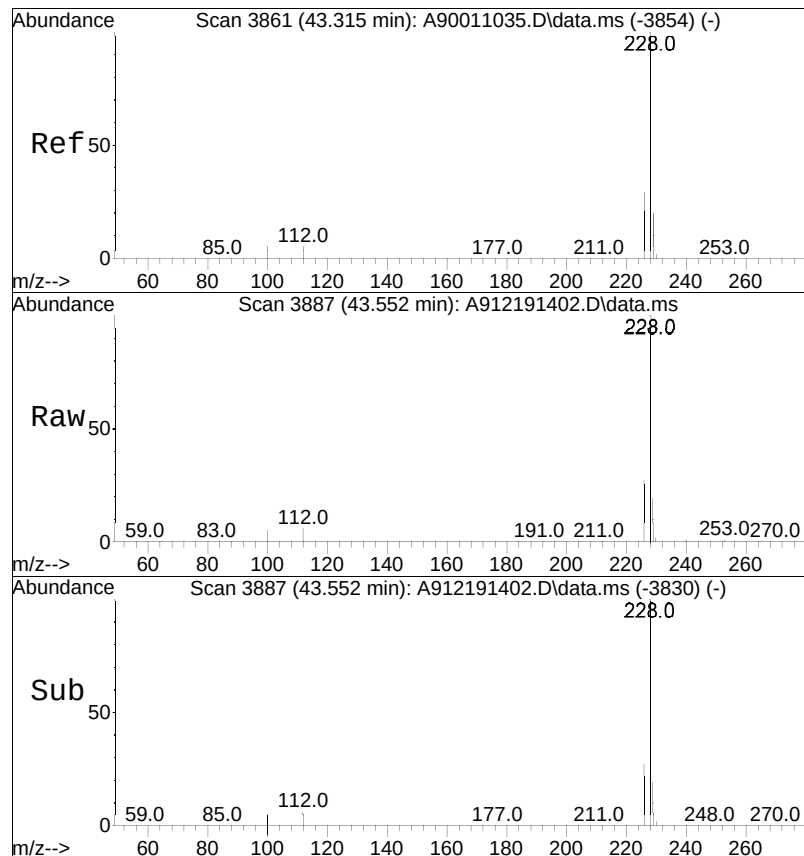
Tgt Ion: 228 Resp: 232954

Ion Ratio Lower Upper

228 100

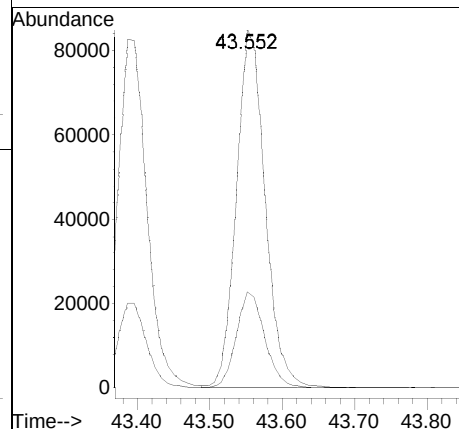
226 26.5 18.8 34.8

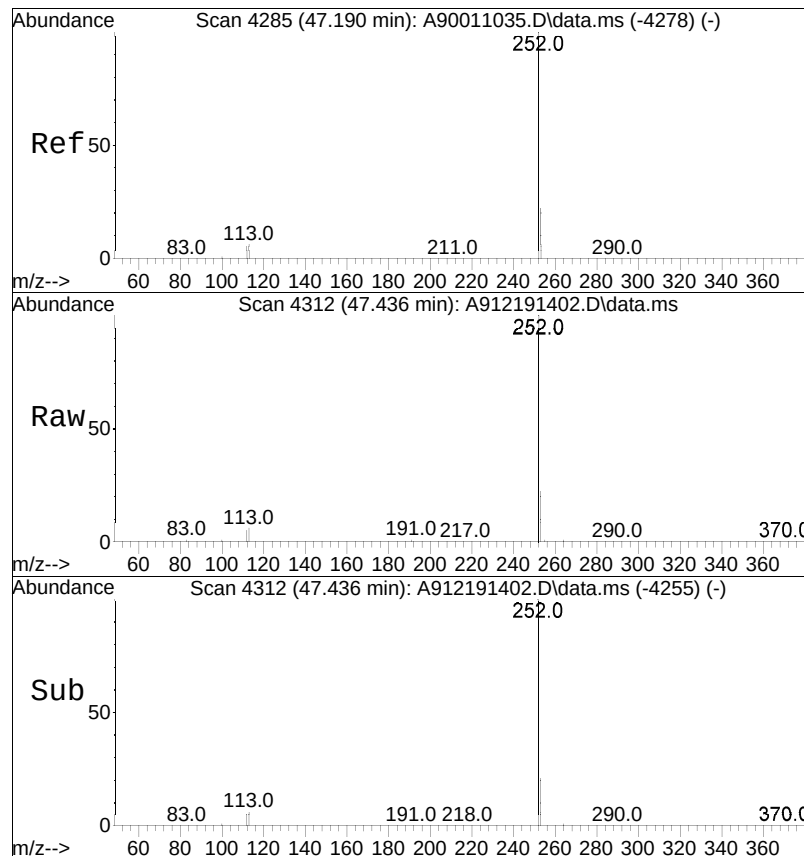




#77
 Chrysene/Triphenylene
 Concen: 512.75 ng/mL
 RT: 43.552 min Scan# 3887
 Delta R.T. 0.018 min
 Lab File: A912191402.D
 Acq: 19 Dec 2014 3:18 pm

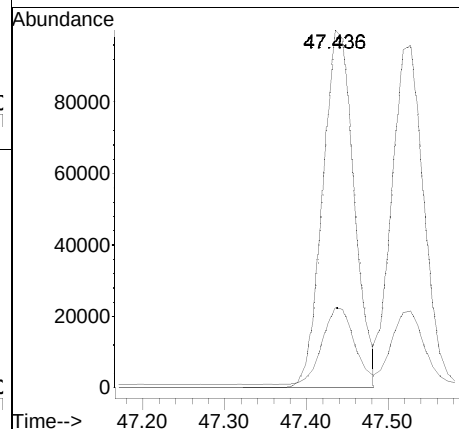
Tgt Ion:228 Resp: 232954
 Ion Ratio Lower Upper
 228 100
 226 26.5 18.8 34.8

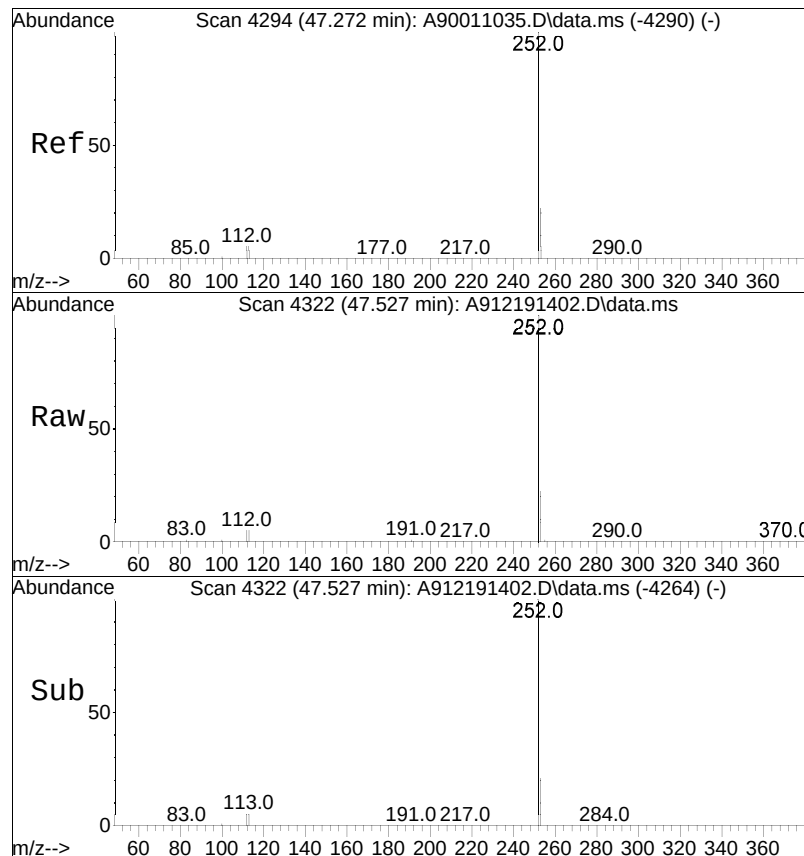




#84
 Benzo[b]fluoranthene
 Concen: 492.91 ng/mL
 RT: 47.436 min Scan# 4312
 Delta R.T. 0.018 min
 Lab File: A912191402.D
 Acq: 19 Dec 2014 3:18 pm

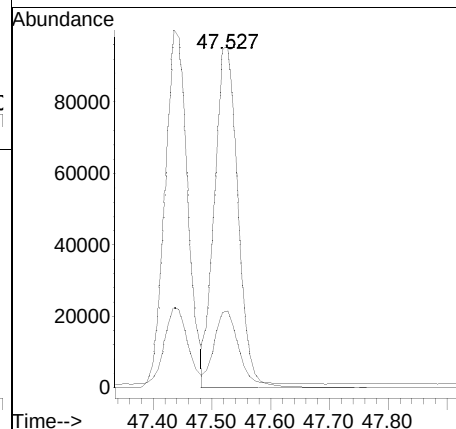
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.6	16.4	30.4	

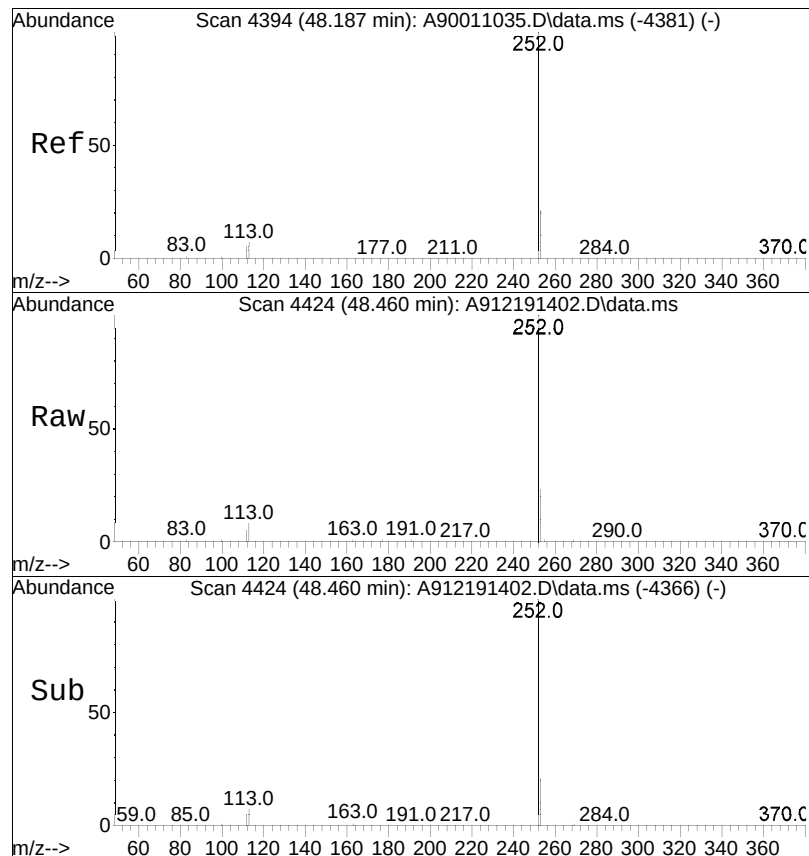




#85
 Benzo[j]+[k]fluoranthene
 Concen: 505.54 ng/mL
 RT: 47.527 min Scan# 4322
 Delta R.T. 0.027 min
 Lab File: A912191402.D
 Acq: 19 Dec 2014 3:18 pm

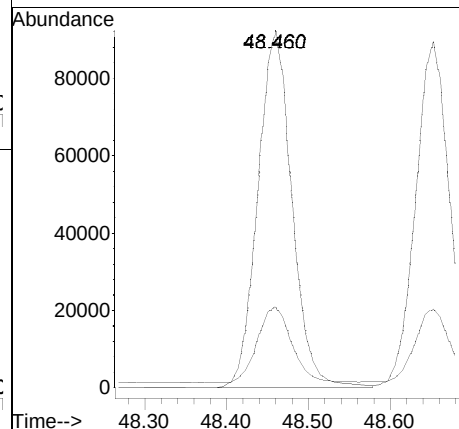
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.2	16.1	29.9	

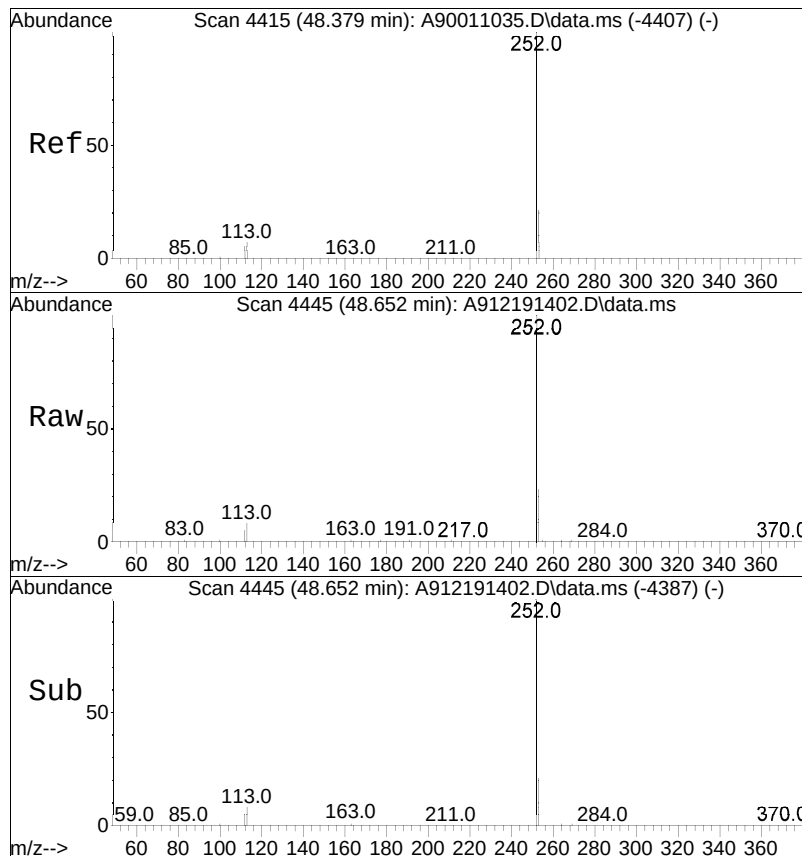




#87
 Benzo[e]pyrene
 Concen: 509.87 ng/mL
 RT: 48.460 min Scan# 4424
 Delta R.T. 0.027 min
 Lab File: A912191402.D
 Acq: 19 Dec 2014 3:18 pm

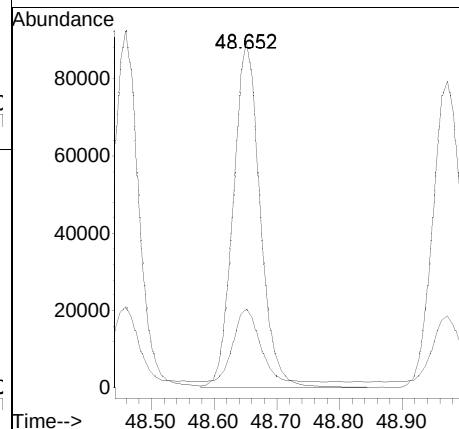
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.9	16.2	30.0	

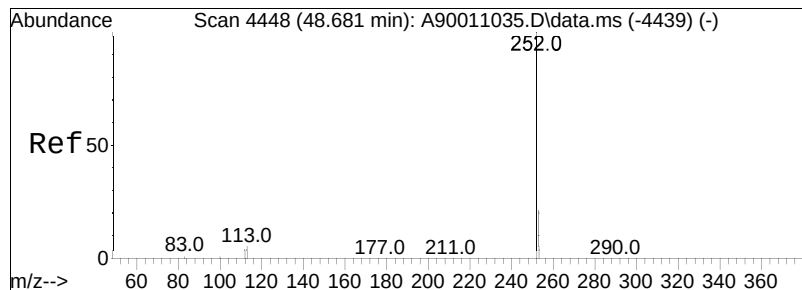




#89
 Benzo[a]pyrene
 Concen: 516.74 ng/mL
 RT: 48.652 min Scan# 4445
 Delta R.T. 0.027 min
 Lab File: A912191402.D
 Acq: 19 Dec 2014 3:18 pm

Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.5	16.4	30.6	





#90

Perylene

Concen: 499.12 ng/mL

RT: 48.972 min Scan# 4480

Delta R.T. 0.027 min

Lab File: A912191402.D

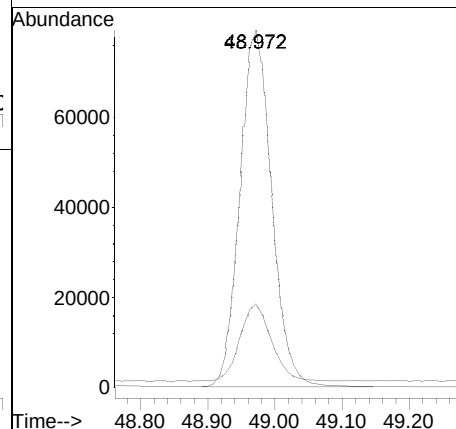
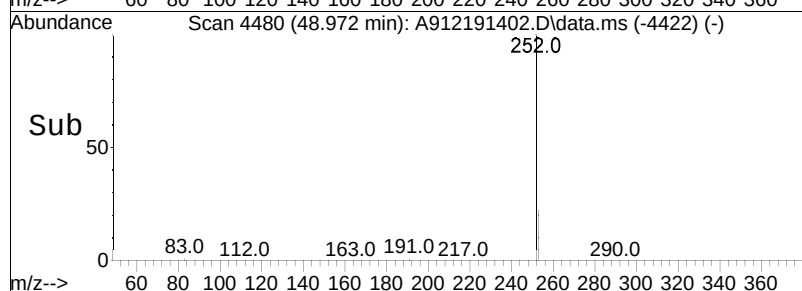
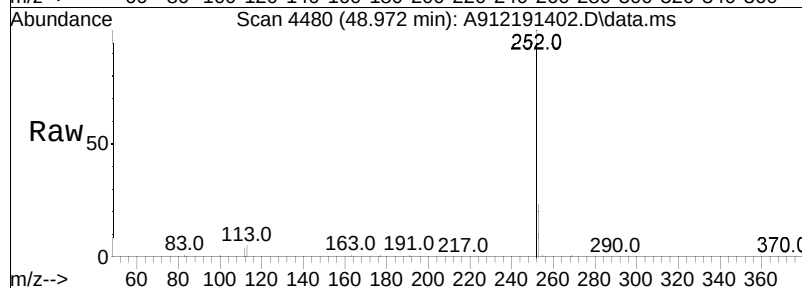
Acq: 19 Dec 2014 3:18 pm

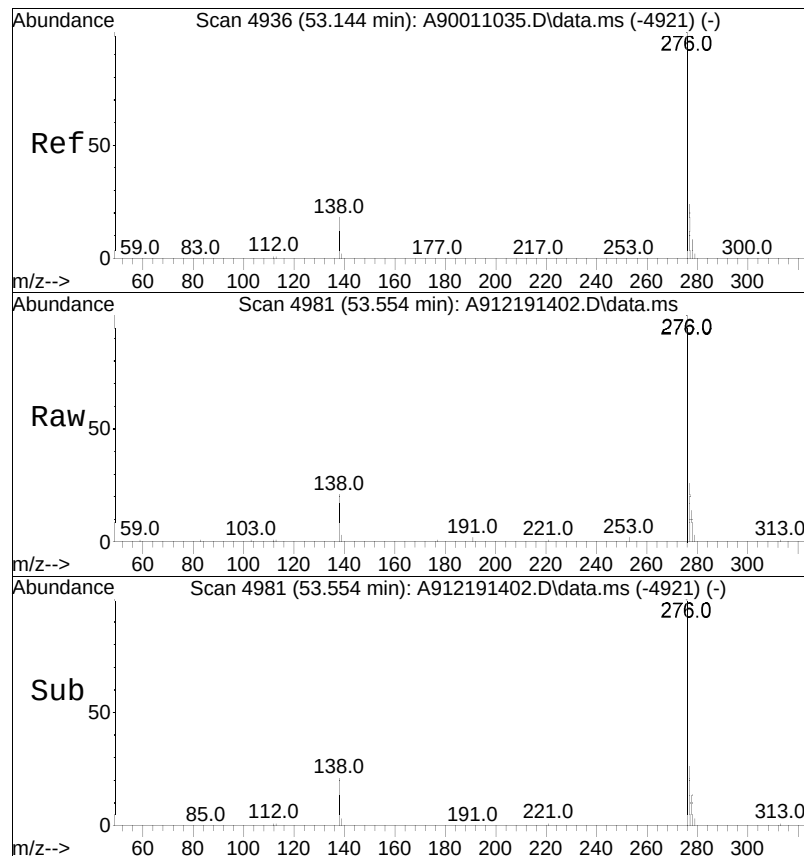
Tgt Ion: 252 Resp: 257032

Ion Ratio Lower Upper

252 100

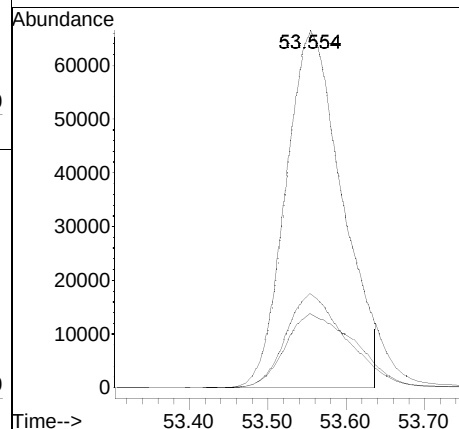
253 21.6 16.6 30.8

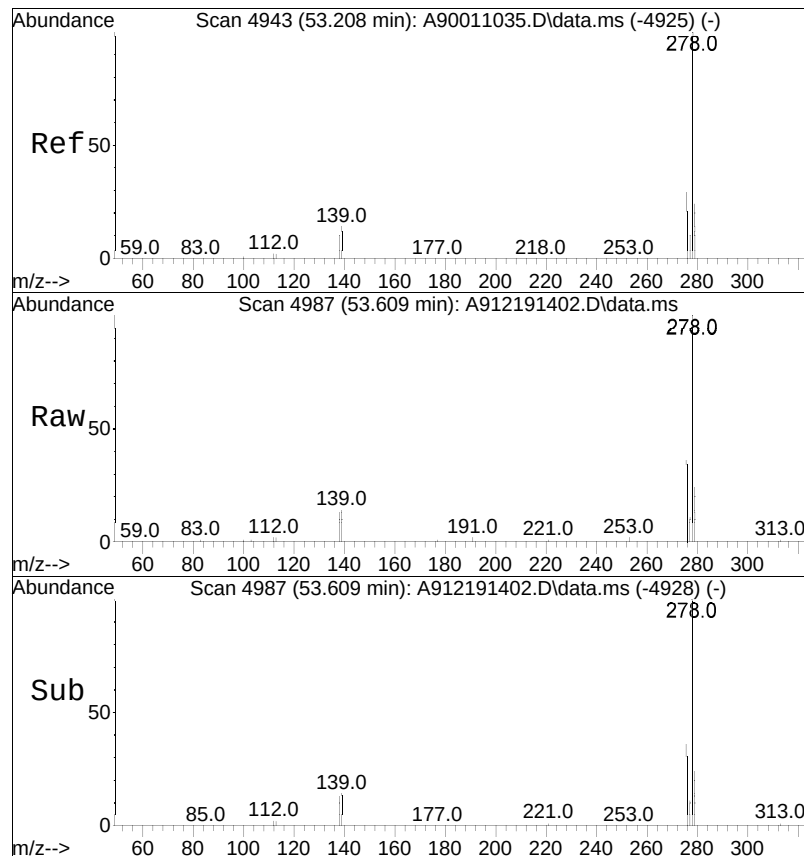




#91
 Indeno[1,2,3-cd]pyrene
 Concen: 522.00 ng/mL M3
 RT: 53.554 min Scan# 4981
 Delta R.T. 0.045 min
 Lab File: A912191402.D
 Acq: 19 Dec 2014 3:18 pm

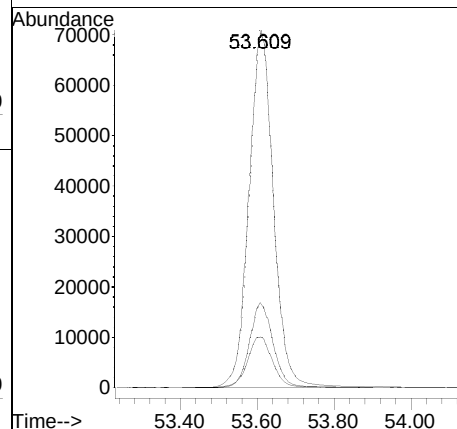
Tgt Ion:	276	Resp:	330355
Ion Ratio	Lower	Upper	
276	100		
138	25.7	15.7	29.1
277	28.5	17.9	33.3

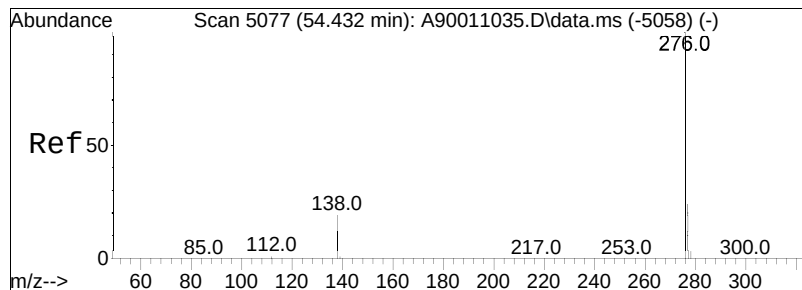




#92
 Dibenz[ah]+[ac]anthracene
 Concen: 496.80 ng/mL
 RT: 53.609 min Scan# 4987
 Delta R.T. 0.036 min
 Lab File: A912191402.D
 Acq: 19 Dec 2014 3:18 pm

Tgt Ion:	278	Resp:	310291
Ion Ratio	Lower	Upper	
278	100		
139	14.3	11.4	21.2
279	23.0	16.3	30.3





#93

Benzo[g,h,i]perylene

Concen: 481.33 ng/mL

RT: 54.888 min Scan# 5127

Delta R.T. 0.045 min

Lab File: A912191402.D

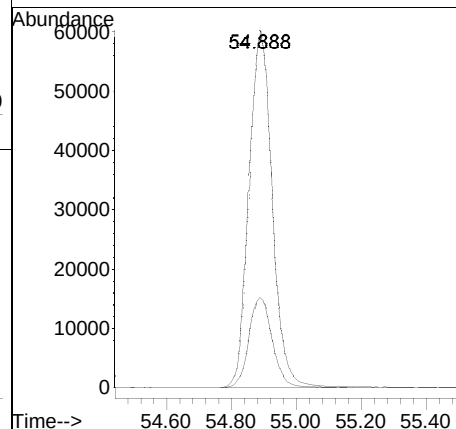
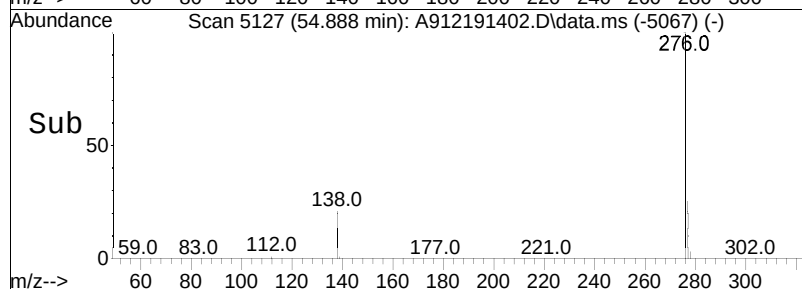
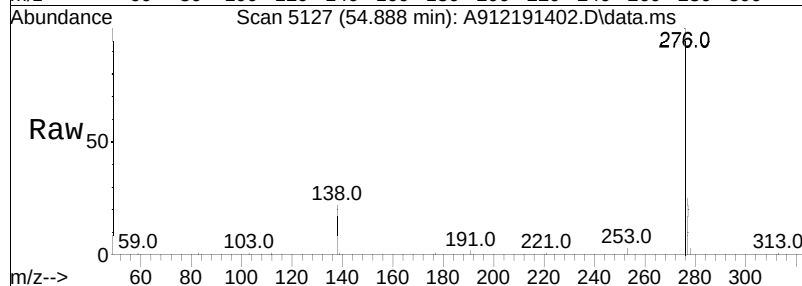
Acq: 19 Dec 2014 3:18 pm

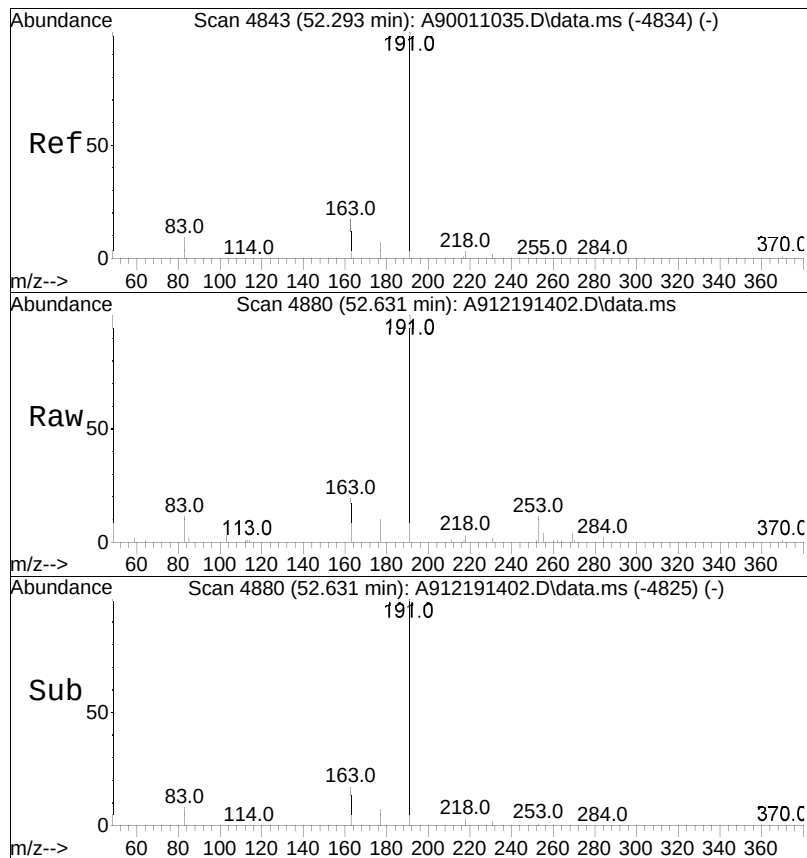
Tgt Ion: 276 Resp: 295907

Ion Ratio Lower Upper

276 100

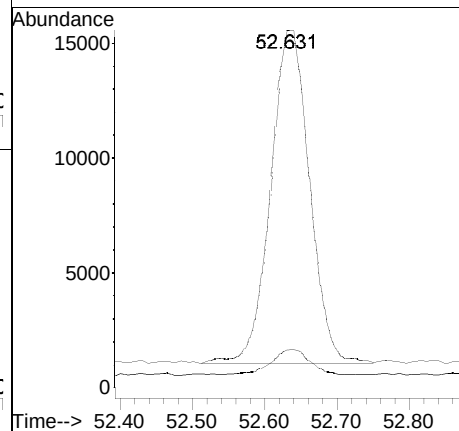
277 25.4 17.4 32.2

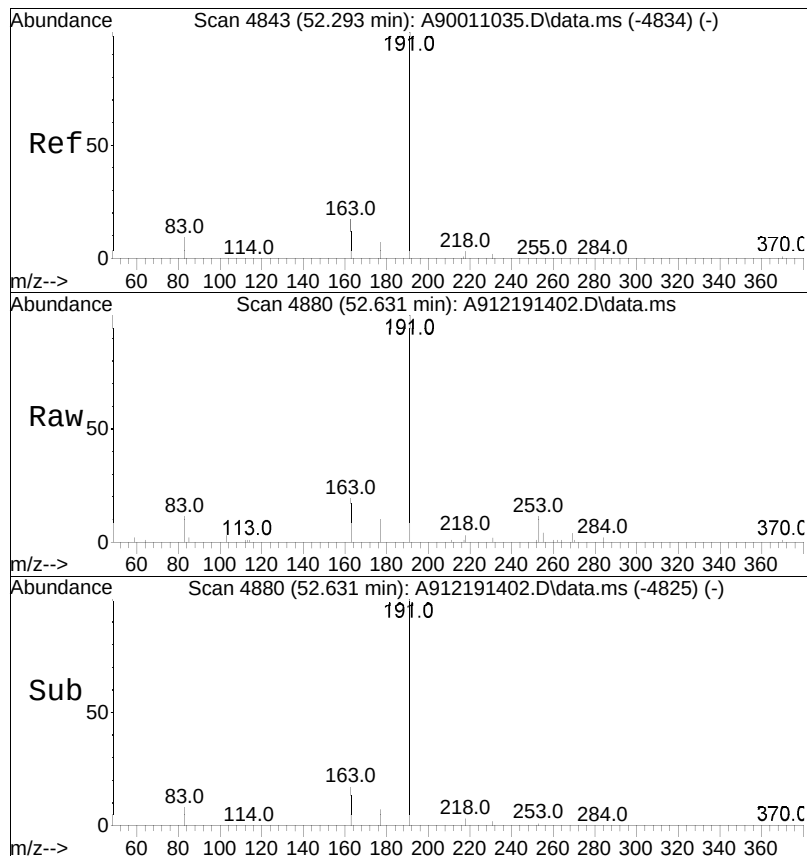




#94
Hopane (T19)
Concen: 422.29 ng/mL
RT: 52.631 min Scan# 4880
Delta R.T. -0.000 min
Lab File: A912191402.D
Acq: 19 Dec 2014 3:18 pm

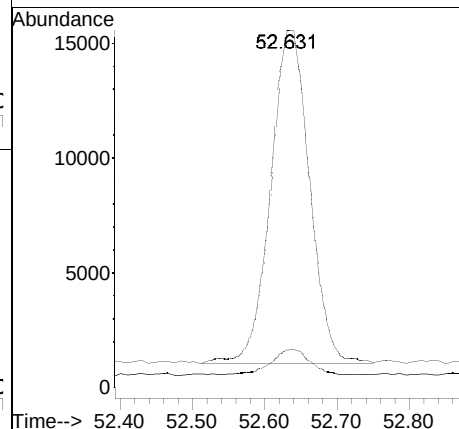
Tgt Ion	Ratio	Lower	Upper
191	100		
177	7.9	8.5	15.9#





#95
 17a(H),21B(H)-hopane - C₃₀H₅₂
 Concen: 422.29 ng/mL
 RT: 52.631 min Scan# 4880
 Delta R.T. -0.000 min
 Lab File: A912191402.D
 Acq: 19 Dec 2014 3:18 pm

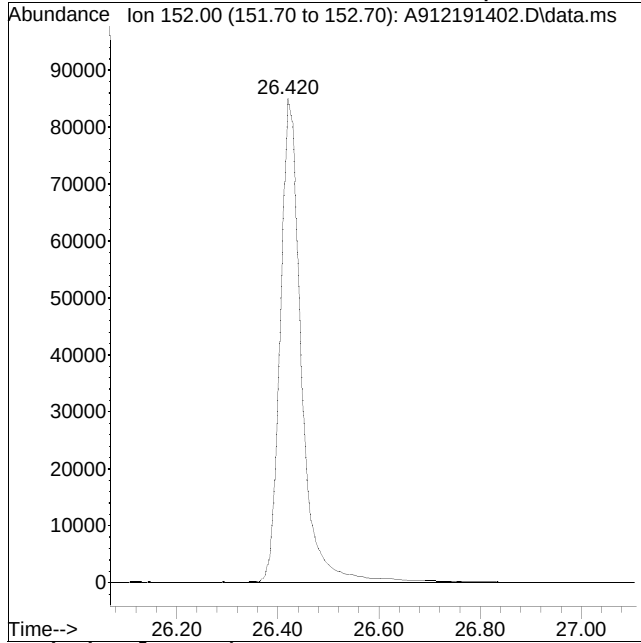
Tgt	Ion	Ratio	Resp	Lower	Upper
191	100		53664		
177	7.9		8.5	15.9#	



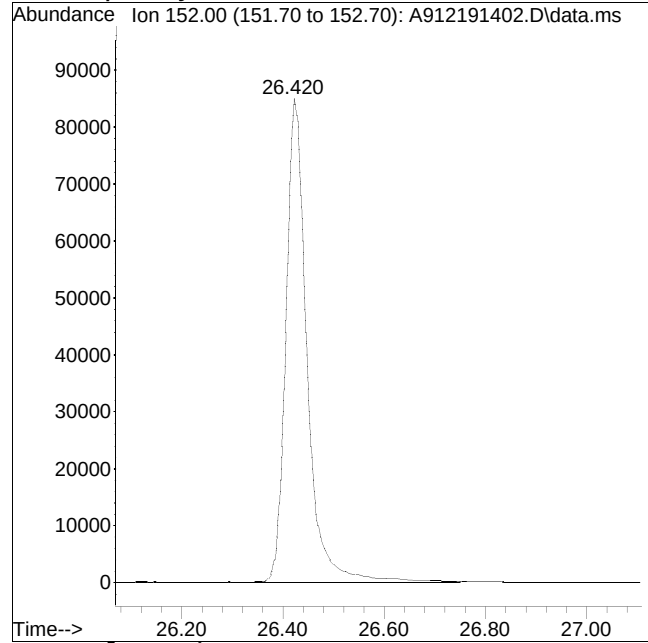
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191402.D Operator : PAH9:SR
Date Inj'd : 12/19/2014 3:18 pm Instrument : PAH 9
Sample : WG754959-1 Quant Date : 12/22/2014 2:17 pm

Compound #26: Acenaphthylene



Original Peak Response = 249867



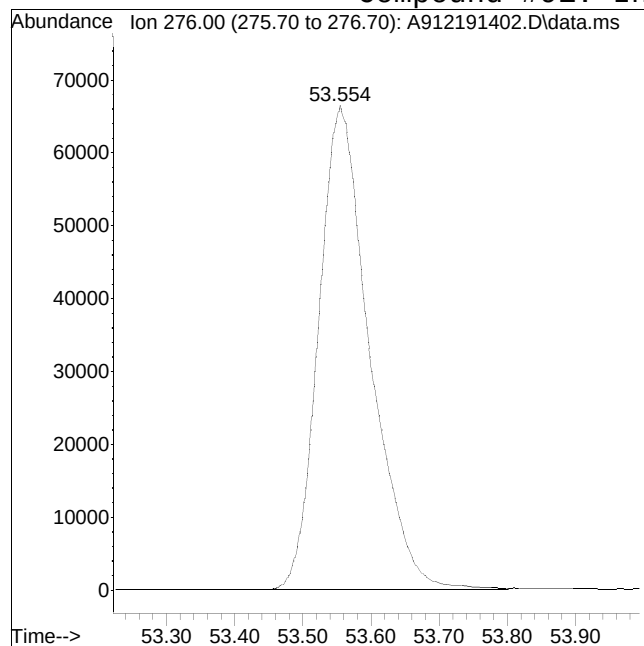
Manual Peak Response = 246851 M4

M4 = Poor automated baseline construction.

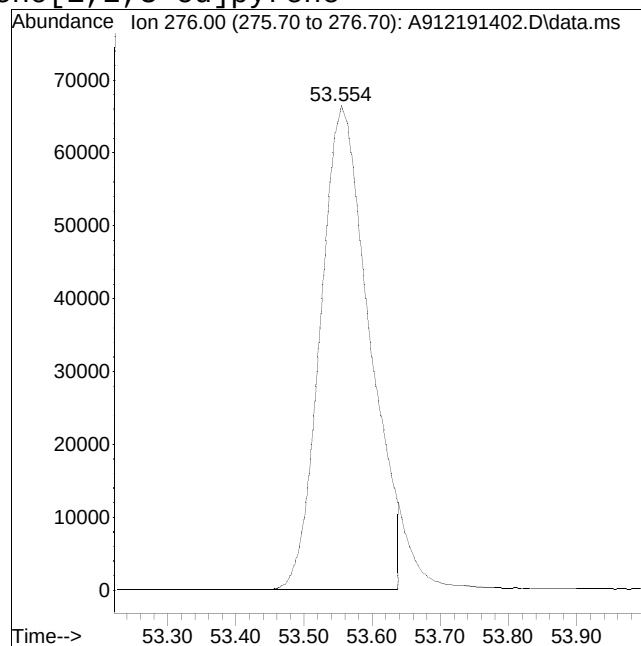
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912191402.D Operator : PAH9:SR
 Date Inj'd : 12/19/2014 3:18 pm Instrument : PAH 9
 Sample : WG754959-1 Quant Date : 12/22/2014 2:17 pm

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 345807



Manual Peak Response = 330355 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191410.D
 Acq On : 20 Dec 2014 2:32 am
 Operator : PAH9:SR
 Sample : WG754959-2
 Misc : WG754959, frav19 500ng/ml
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 12 09:02:29 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	122	0.00
3 A1	trans-Decalin	0.461	0.424	8.0	114	0.00
4 t	cis-Decalin	0.362	0.307	15.2	112	0.00
9 s	Naphthalene-d8	2.264	2.181	3.7	119	0.00
10 A1	Naphthalene	2.768	2.730	1.4	121	0.00
16 t	2-Methylnaphthalene	1.502	1.488	0.9	122	0.00
17 t	1-Methylnaphthalene	1.468	1.441	1.8	121	0.00
18 A1	Benzothiophene	2.530	2.449	3.2	120	0.00
23 t	Biphenyl	1.852	1.831	1.1	120	0.00
24 t	2,6-Dimethylnaphthalene	1.221	1.192	2.4	121	0.00
25 t	Dibenzofuran	1.944	1.925	1.0	120	0.00
26 t	Acenaphthylene	2.298	2.343	-2.0	127	0.00
27 t	Acenaphthene	1.385	1.386	-0.1	121	0.00
28 t	2,3,5-Trimethylnaphthalene	1.165	1.132	2.8	121	0.00
29 A1	Fluorene	1.558	1.490	4.4	120	0.02
33 A1	Dibenzothiophene	2.288	2.277	0.5	120	0.00
42 s	Phenanthrene-d10	1.716	1.657	3.4	121	0.00
43 A1	Phenanthrene	2.174	2.140	1.6	118	0.00
54 t	Retene	0.598	0.668	-11.7	136	0.00
55 t	Anthracene	2.007	2.127	-6.0	128	0.00
56 t	Carbazole	1.932	1.978	-2.4	123	0.00
57 t	1-Methylphenanthrene	1.439	1.469	-2.1	124	0.00
58 A1	Fluoranthene	2.207	2.260	-2.4	125	0.00
59 t	Benzo(b)fluorene	1.333	1.423	-6.8	130	0.00
60 A1	Pyrene	2.347	2.523	-7.5	125	0.00
66 A1	Naphthobenzothiophene	2.341	2.484	-6.1	129	0.00
67 A2	Naphthobenzothiophene-2,1-D	2.341	2.484	-6.1	129	0.00
74 i	Chrysene-d12	1.000	1.000	0.0	123	0.00
75 t	Benz[a]anthracene	1.108	1.169	-5.5	133	0.00
76 A1	Chrysene	1.095	1.136	-3.7	125	0.00
77 A2	Chrysene/Triphenylene	1.095	1.136	-3.7	125	0.00
83 S	Benzo[b]fluoranthene-d12	1.034	1.058	-2.3	131	0.00
84 t	Benzo[b]fluoranthene	1.311	1.328	-1.3	129	0.00
85 A1	Benzo[j]+[k]fluoranthene	1.255	1.298	-3.4	131	0.00
87 t	Benzo[e]pyrene	1.255	1.310	-4.4	129	0.00
88 s	Benzo[a]pyrene-d12	0.949	0.988	-4.1	135	0.00
89 t	Benzo[a]pyrene	1.230	1.312	-6.7	131	0.00
90 t	Perylene	1.241	1.291	-4.0	132	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191410.D
 Acq On : 20 Dec 2014 2:32 am
 Operator : PAH9:SR
 Sample : WG754959-2
 Misc : WG754959, frav19 500ng/ml
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 12 09:02:29 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.526	1.643	-7.7	138	0.00
92 t	Dibenz[ah]+[ac]anthracene	1.506	1.555	-3.3	134	0.00
93 t	Benzo[g,h,i]perylene	1.482	1.476	0.4	133	0.00
94 A1	Hopane (T19)	0.306	0.280	8.5	131	0.00
95 A2	17a(H),21B(H)-hopane - C30H	0.306	0.280	8.5	131	0.00
129 SA1	5B(H)Cholane - Surr	0.158	0.161	-1.9	132	0.00

* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Mass Discrimination (Concentration)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	1.01	0.70 - 1.30

Mass Discrimination (Response)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	1.40	0.70 - 2.00

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191410.D
 Acq On : 20 Dec 2014 2:32 am
 Operator : PAH9:SR
 Sample : WG754959-2
 Misc : WG754959, frav19 500ng/ml
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 12 09:02:29 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.032	164	100769M4	500.000	ng/mL	0.00
74) Chrysene-d12	43.451	240	204581	500.000	ng/mL	0.02
System Monitoring Compounds						
9) Naphthalene-d8	20.078	136	219811	481.776	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	48.18%#		
42) Phenanthrene-d10	32.898	188	166965	482.749	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	48.27%#		
83) Benzo[b]fluoranthene-d12	47.353	264	216347	511.173	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	51.12%		
88) Benzo[a]pyrene-d12	48.561	264	202132	520.411	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	52.04%		
129) 5B(H)Cholane - Surr	44.063	217	32896	509.096	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	50.91%		
Target Compounds						
						Qvalue
3) trans-Decalin	16.720	138	21346	229.944	ng/mL	100
4) cis-Decalin	17.943	138	15464	211.977	ng/mL	100
10) Naphthalene	20.151	128	275056	493.137	ng/mL	100
16) 2-Methylnaphthalene	22.852	142	149990	495.465	ng/mL	100
17) 1-Methylnaphthalene	23.272	142	145187	490.656	ng/mL	100
18) Benzo[thiophene]	20.379	134	246758	483.966	ng/mL	100
23) Biphenyl	24.723	154	184466	494.264	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.334	156	120153	488.304	ng/mL	100
25) Dibenzofuran	27.807	168	193954	495.028	ng/mL	99
26) Acenaphthylene	26.429	152	236104M4	509.825	ng/mL	
27) Acenaphthene	27.159	153	139712	500.386	ng/mL	99
28) 2,3,5-Trimethylnaphthalen	28.701	170	114091	485.870	ng/mL	99
29) Fluorene	29.185	166	150183	478.395	ng/mL	99
33) Dibenzothiophene	32.488	184	229461	497.713	ng/mL	99
43) Phenanthrene	32.989	178	215625	492.221	ng/mL	100
54) Retene	39.946	234	67328	558.898	ng/mL	96
55) Anthracene	33.172	178	214373	529.889	ng/mL	99
56) Carbazole	33.829	167	199348	512.013	ng/mL	99
57) 1-Methylphenanthrene	35.490	192	148075	510.424	ng/mL	99
58) Fluoranthene	37.745	202	227760M4	512.095	ng/mL	
59) Benzo(b)fluorene	40.256	216	143347	533.593	ng/mL	99
60) Pyrene	38.631	202	254269	537.443	ng/mL	98
66) Naphthobenzothiophene	42.465	234	250360	530.580	ng/ml	99
67) Naphthobenzothiophene-2,1	42.465	234	250360	530.580	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191410.D
 Acq On : 20 Dec 2014 2:32 am
 Operator : PAH9:SR
 Sample : WG754959-2
 Misc : WG754959, frav19 500ng/ml
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 12 09:02:29 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.388	228	239106	527.484	ng/mL	98
76)	Chrysene	43.552	228	232358	518.480	ng/mL	99
77)	Chrysene/Triphenylene	43.552	228	232358	518.480	ng/mL	99
84)	Benzo[b]fluoranthene	47.436	252	271592	506.496	ng/mL	96
85)	Benzo[j]+[k]fluoranthene	47.518	252	265447	516.879	ng/mL	96
87)	Benzo[e]pyrene	48.460	252	267972	521.811	ng/mL	97
89)	Benzo[a]pyrene	48.652	252	268389	533.302	ng/mL	95
90)	Perylene	48.963	252	264090	519.894	ng/mL	95
91)	Indeno[1,2,3-cd]pyrene	53.554	276	336096M3	538.383	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.600	278	318152	516.399	ng/mL	98
93)	Benzo[g,h,i]perylene	54.879	276	301974	497.966	ng/mL	99
94)	Hopane (T19)	52.631	191	57204	456.352	ng/mL#	88
95)	17a(H),21B(H)-hopane - C3	52.631	191	57204	456.352	ng/mL#	88

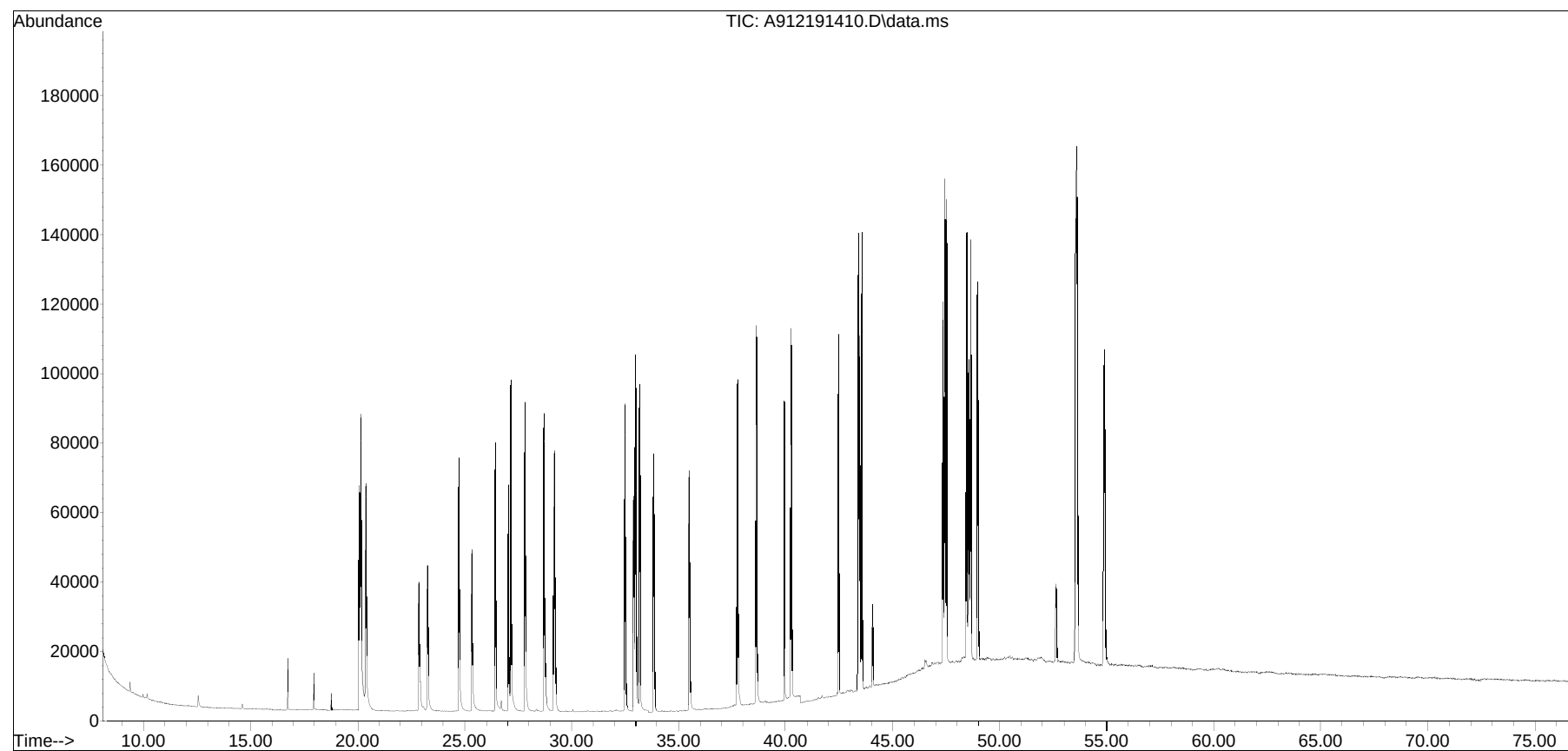
(#) = qualifier out of range (m) = manual integration (+) = signals summed

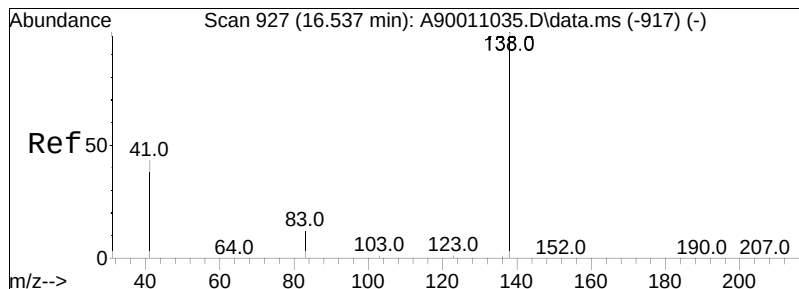
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC19\
Data File : A912191410.D
Acq On : 20 Dec 2014 2:32 am
Operator : PAH9:SR
Sample : WG754959-2
Misc : WG754959, frav19 500ng/ml
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 12 09:02:29 2015
Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 15 13:02:08 2014
Response via : Initial Calibration

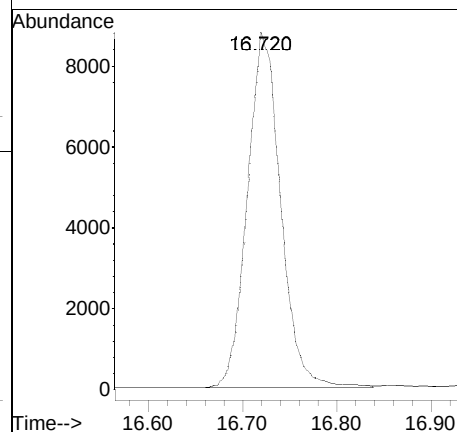
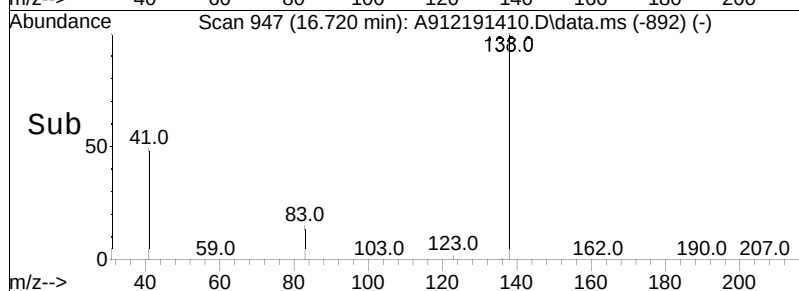
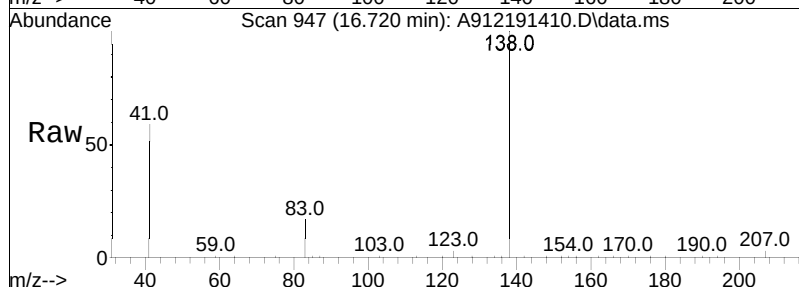
Sub List : ICAL_CCALT_REV2 - CC with five surrogates

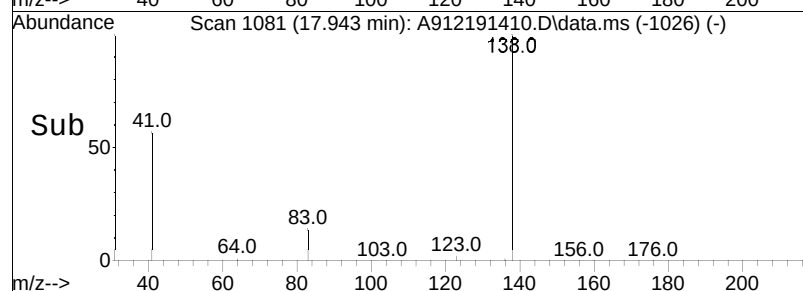
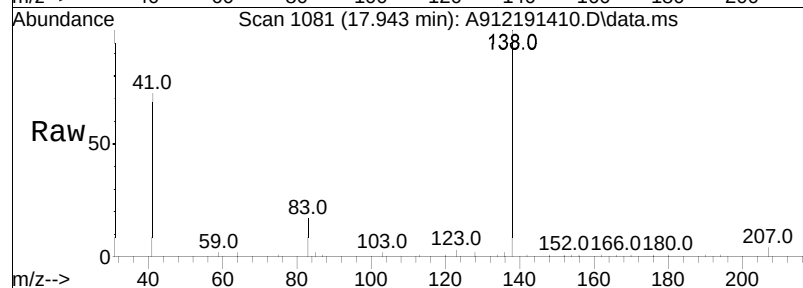
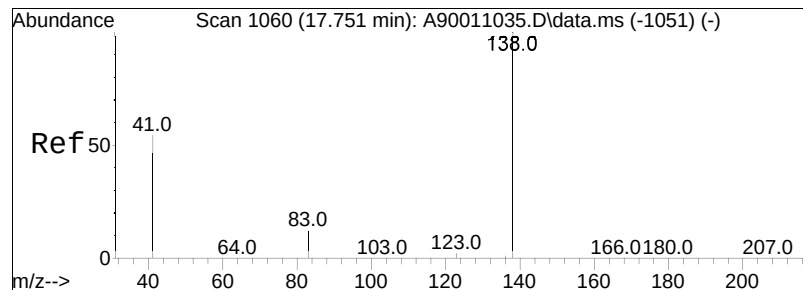




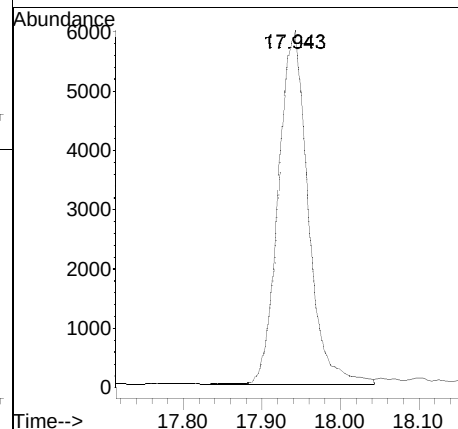
#3
trans-Decalin
Concen: 229.94 ng/mL
RT: 16.720 min Scan# 947
Delta R.T. -0.000 min
Lab File: A912191410.D
Acq: 20 Dec 2014 2:32 am

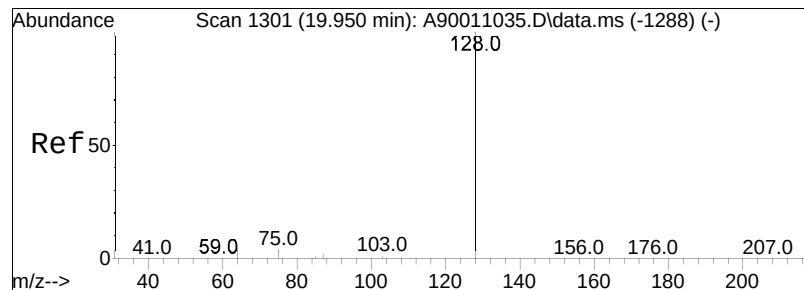
Tgt Ion:138 Resp: 21346





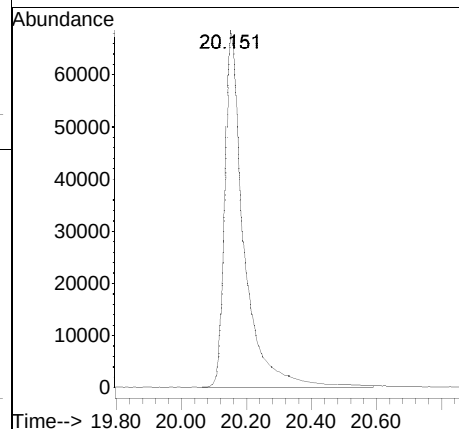
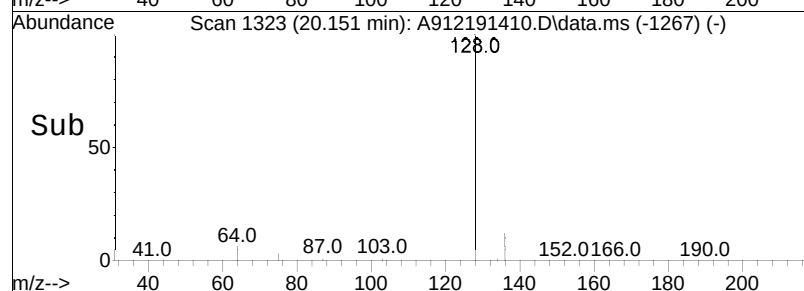
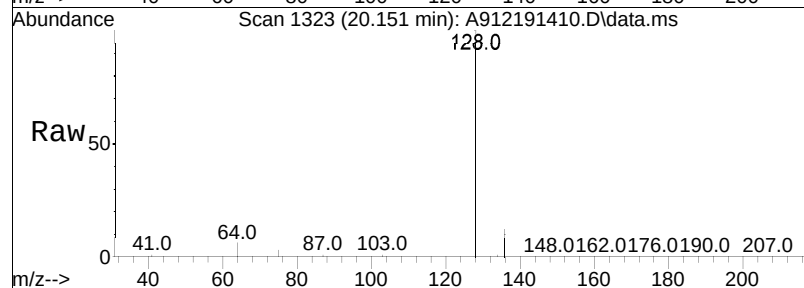
#4
 cis-Decalin
 Concen: 211.98 ng/mL
 RT: 17.943 min Scan# 1081
 Delta R.T. -0.000 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am
 Tgt Ion:138 Resp: 15464

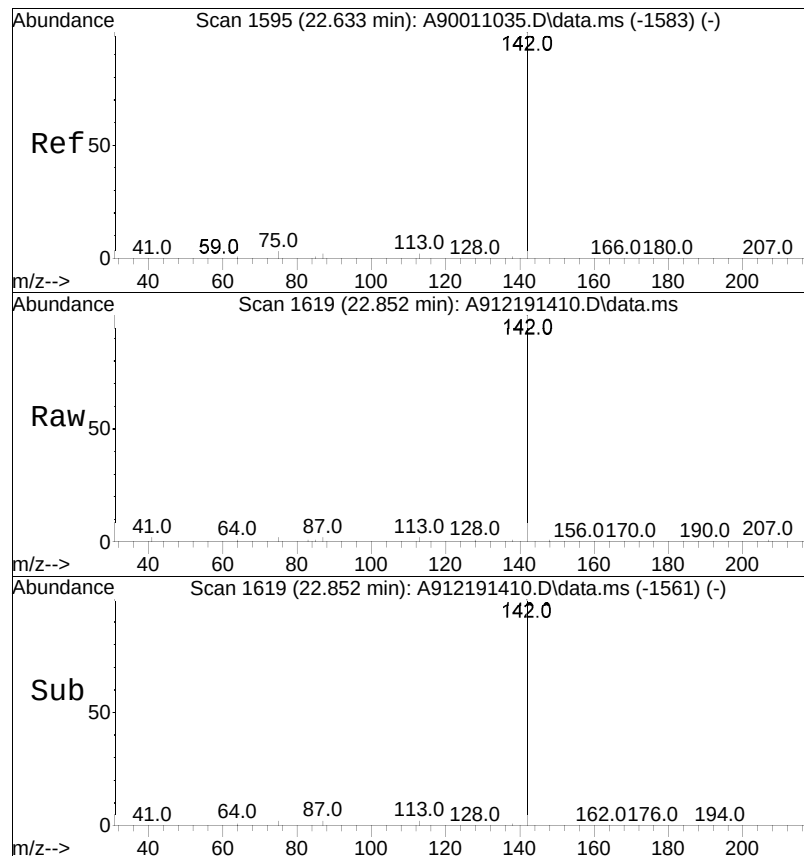




#10
Naphthalene
Concen: 493.14 ng/mL
RT: 20.151 min Scan# 1323
Delta R.T. 0.009 min
Lab File: A912191410.D
Acq: 20 Dec 2014 2:32 am

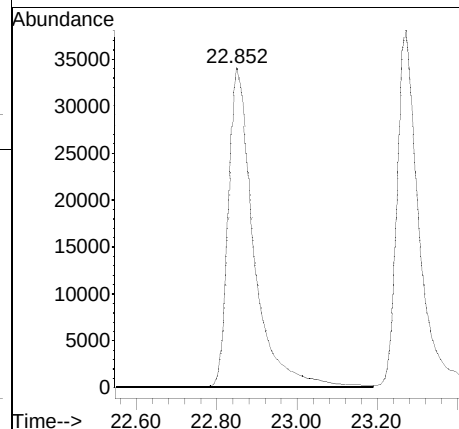
Tgt Ion:128 Resp: 275056

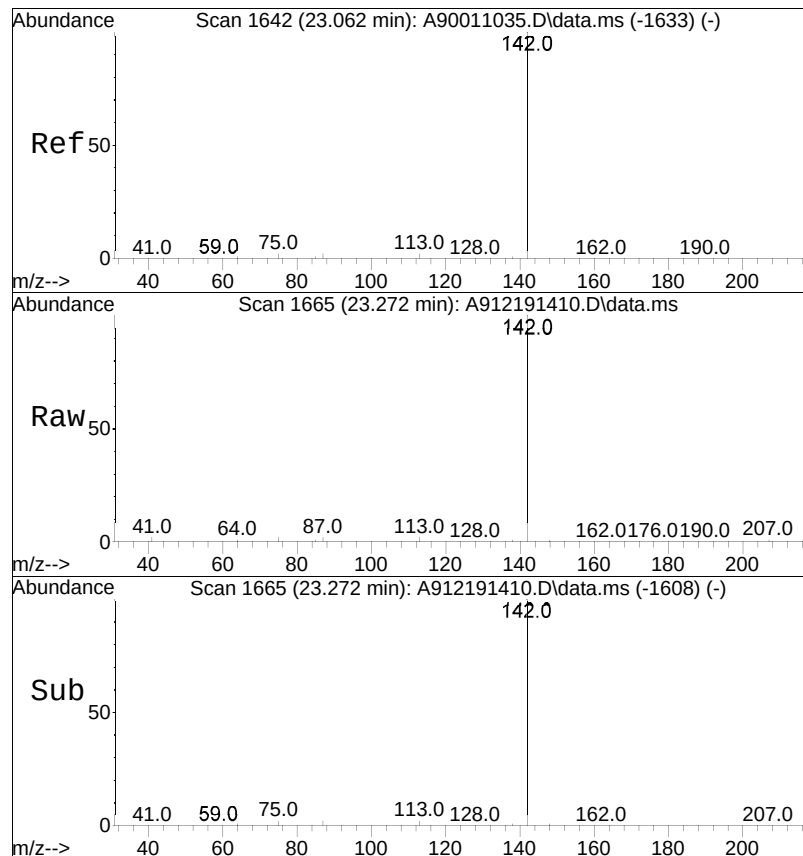




#16
 2-Methylnaphthalene
 Concen: 495.46 ng/mL
 RT: 22.852 min Scan# 1619
 Delta R.T. 0.027 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am

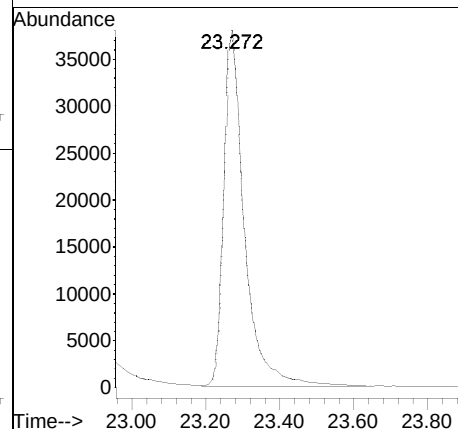
Tgt Ion:142 Resp: 149990

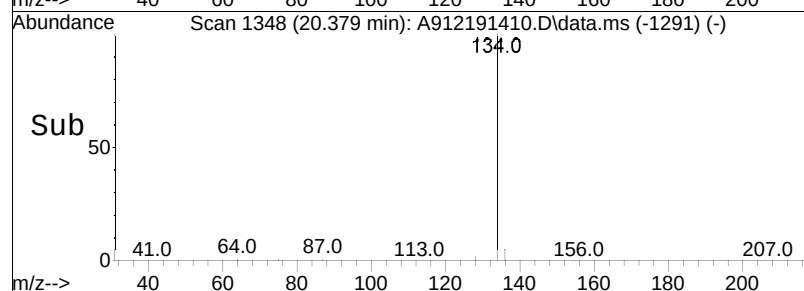
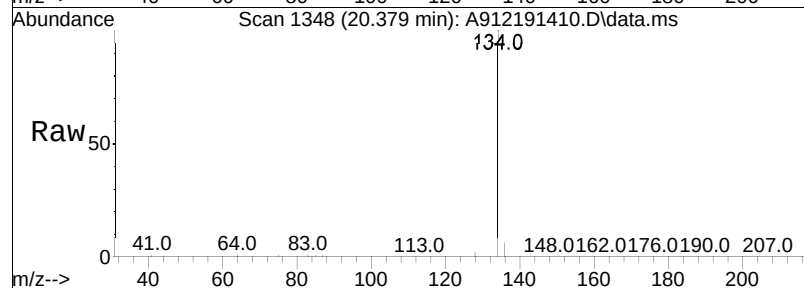
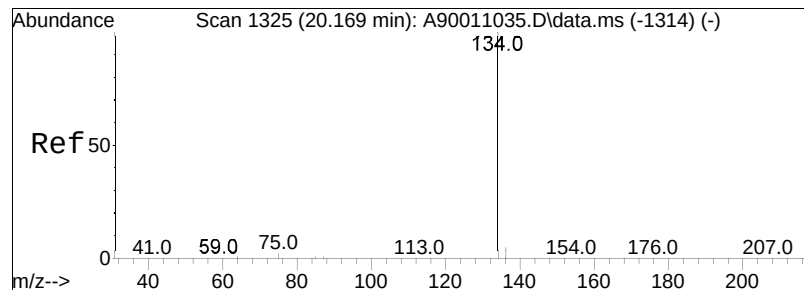




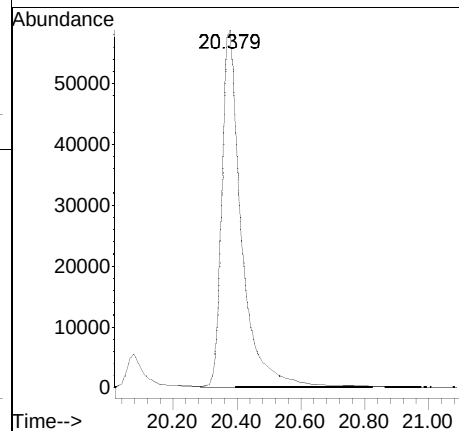
#17
 1-Methylnaphthalene
 Concen: 490.66 ng/mL
 RT: 23.272 min Scan# 1665
 Delta R.T. 0.018 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am

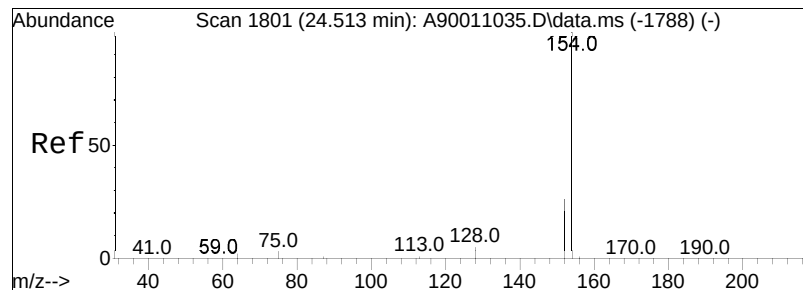
Tgt Ion:142 Resp: 145187



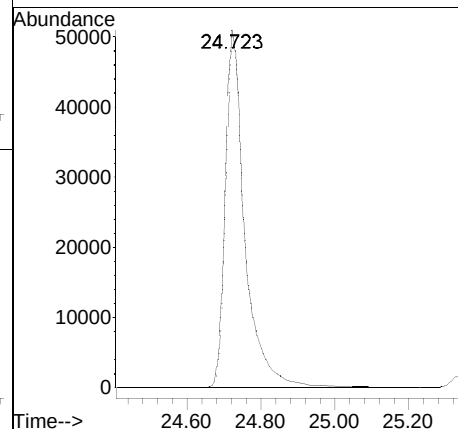
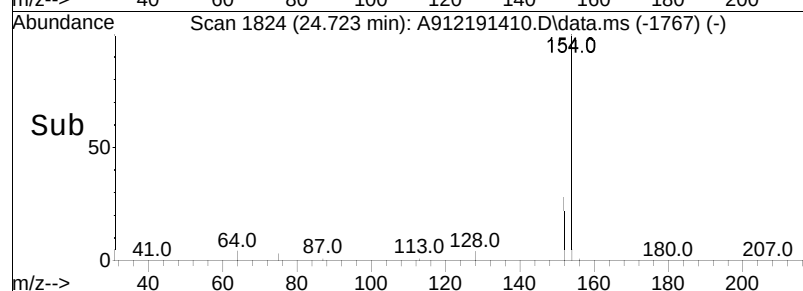
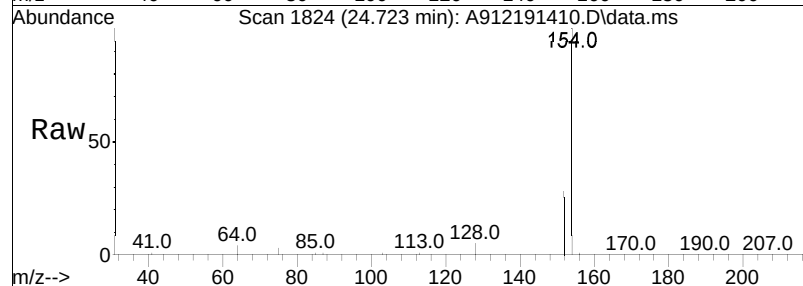


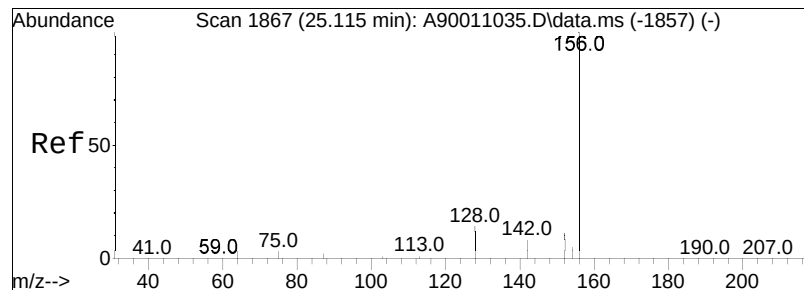
#18
 Benzothiophene
 Concen: 483.97 ng/mL
 RT: 20.379 min Scan# 1348
 Delta R.T. 0.018 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am
 Tgt Ion:134 Resp: 246758





#23
Biphenyl
Concen: 494.26 ng/mL
RT: 24.723 min Scan# 1824
Delta R.T. 0.018 min
Lab File: A912191410.D
Acq: 20 Dec 2014 2:32 am
Tgt Ion:154 Resp: 184466





#24

2,6-Dimethylnaphthalene

Concen: 488.30 ng/mL

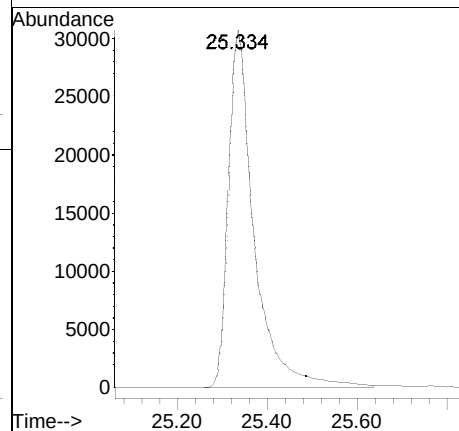
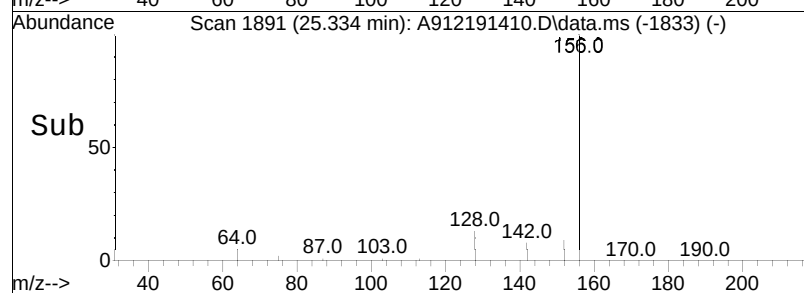
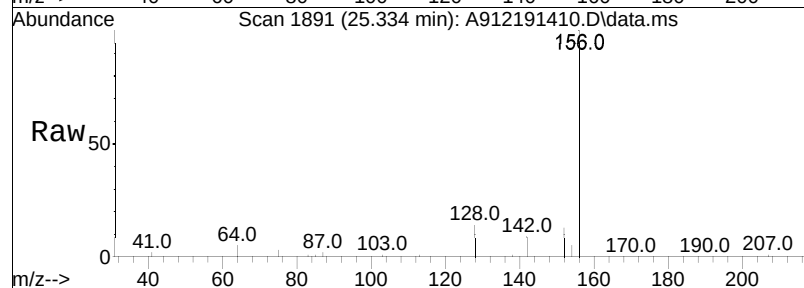
RT: 25.334 min Scan# 1891

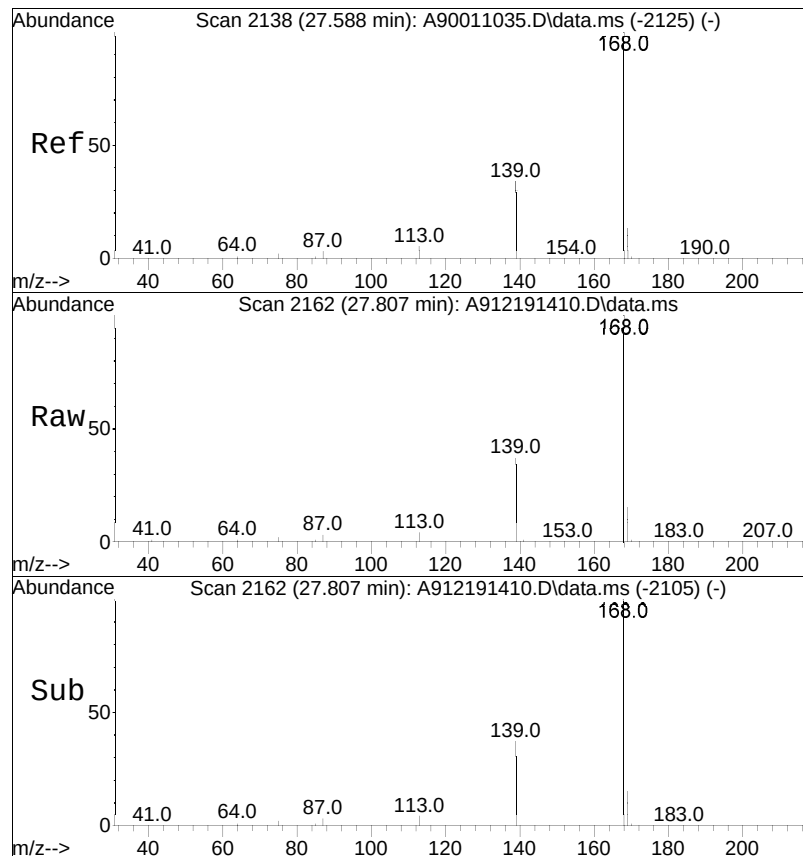
Delta R.T. 0.027 min

Lab File: A912191410.D

Acq: 20 Dec 2014 2:32 am

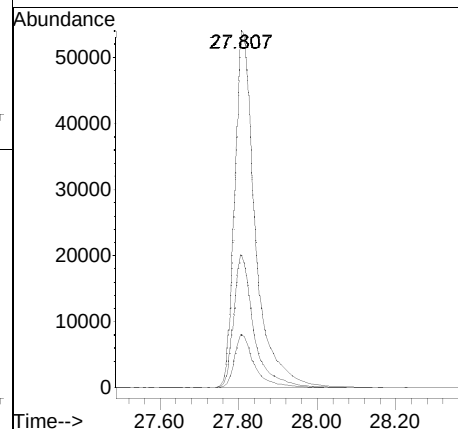
Tgt Ion:156 Resp: 120153

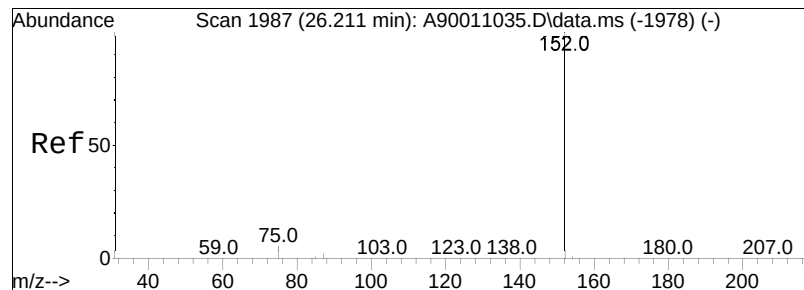




#25
 Dibenzofuran
 Concen: 495.03 ng/mL
 RT: 27.807 min Scan# 2162
 Delta R.T. 0.018 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am

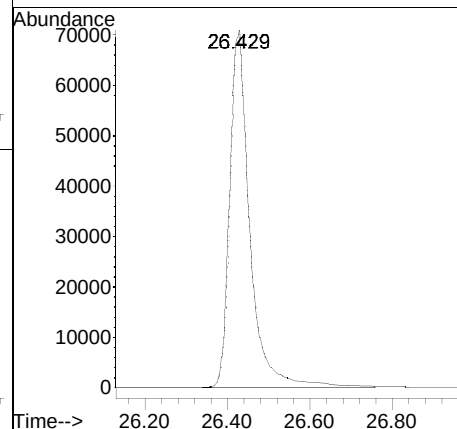
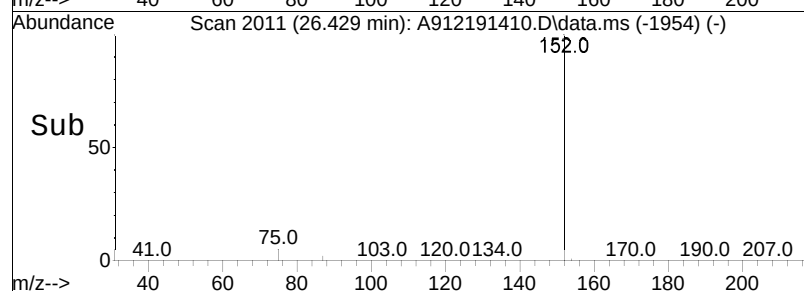
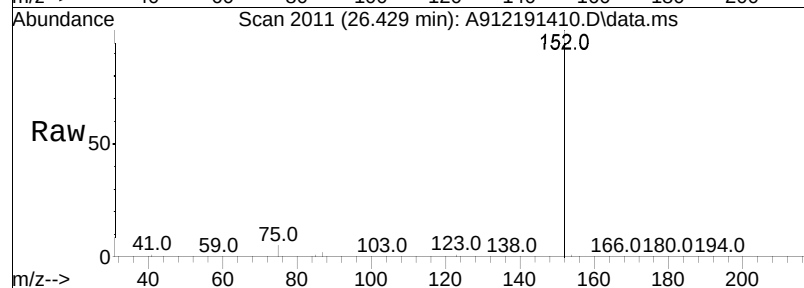
Tgt Ion:	168	Resp:	193954
Ion Ratio	Lower	Upper	
168	100		
139	36.7	25.1	46.7
169	14.7	10.2	19.0

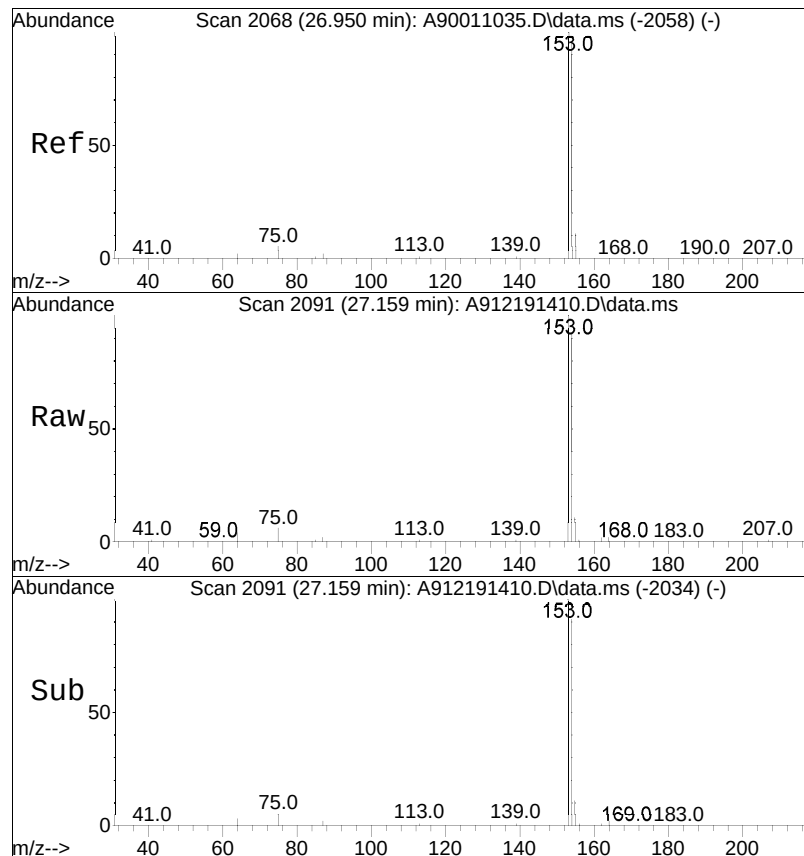




#26
Acenaphthylene
Concen: 509.82 ng/mL M4
RT: 26.429 min Scan# 2011
Delta R.T. 0.018 min
Lab File: A912191410.D
Acq: 20 Dec 2014 2:32 am

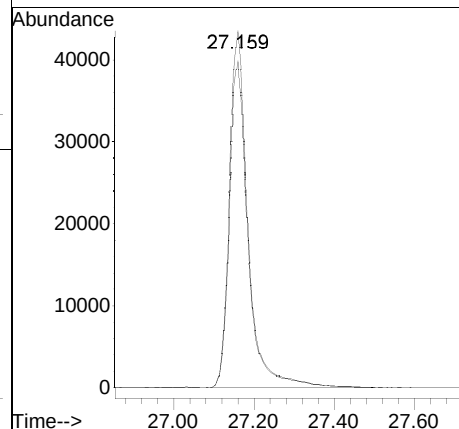
Tgt Ion:152 Resp: 236104

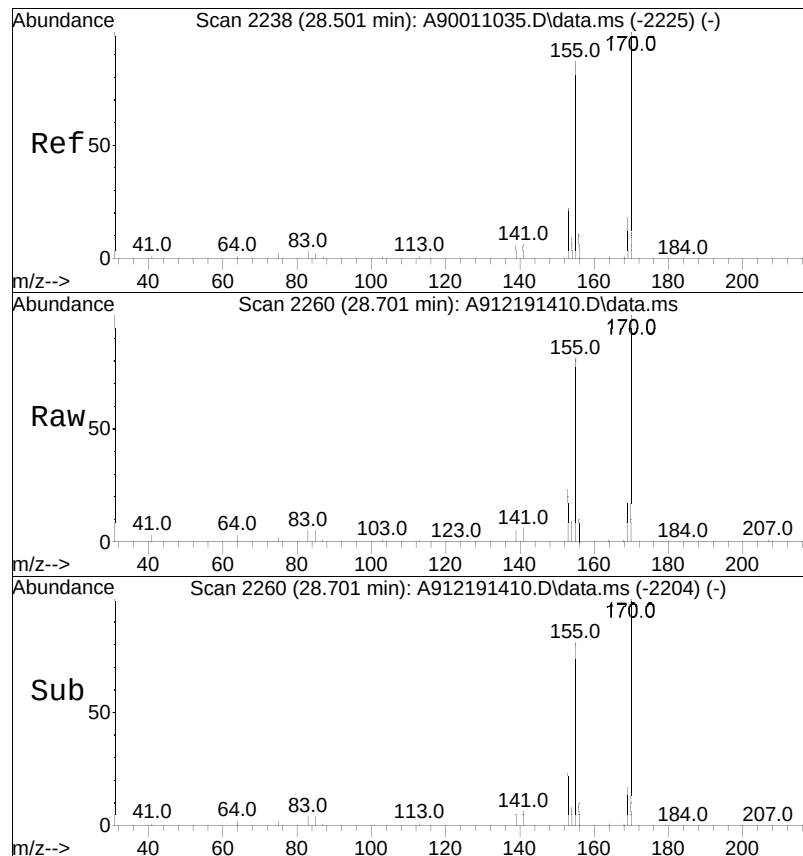




#27
 Acenaphthene
 Concen: 500.39 ng/mL
 RT: 27.159 min Scan# 2091
 Delta R.T. 0.018 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am

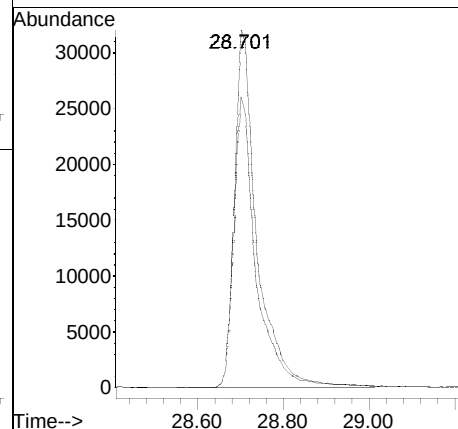
Tgt Ion	Ratio	Lower	Upper
153	100		
154	91.6	64.9	120.5

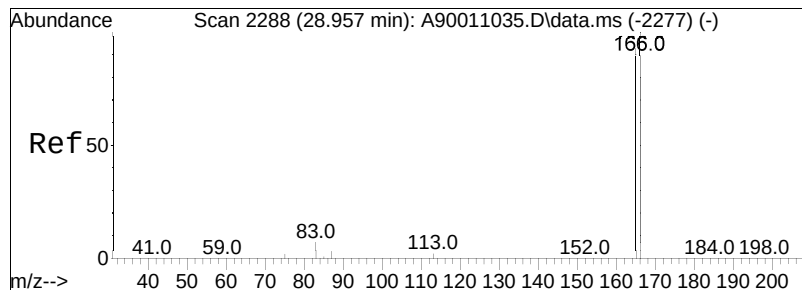




#28
 2,3,5-Trimethylnaphthalene
 Concen: 485.87 ng/mL
 RT: 28.701 min Scan# 2260
 Delta R.T. 0.009 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am

Tgt Ion	Ratio	Lower	Upper
170	100		
155	80.9	55.9	103.9





#29

Fluorene

Concen: 478.40 ng/mL

RT: 29.185 min Scan# 2313

Delta R.T. 0.027 min

Lab File: A912191410.D

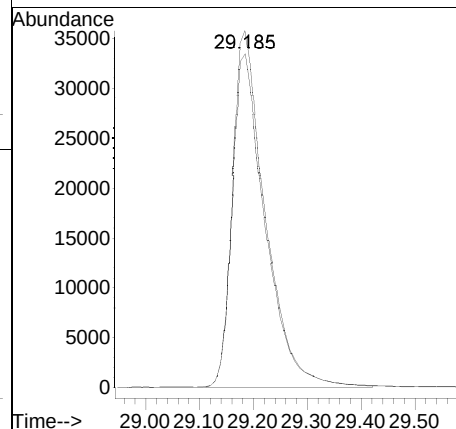
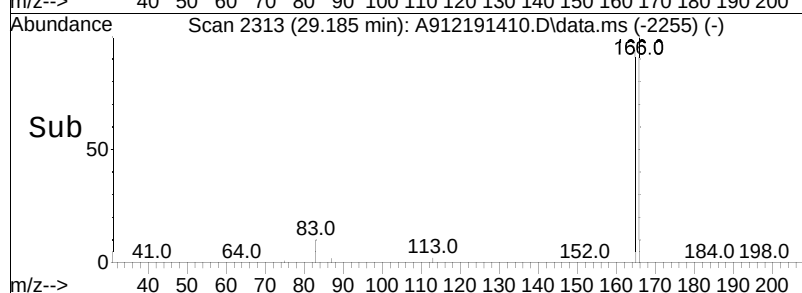
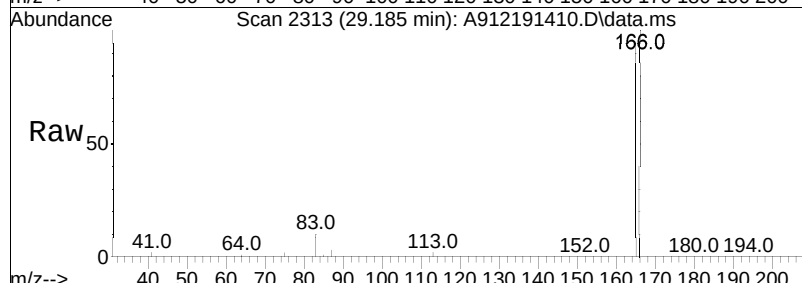
Acq: 20 Dec 2014 2:32 am

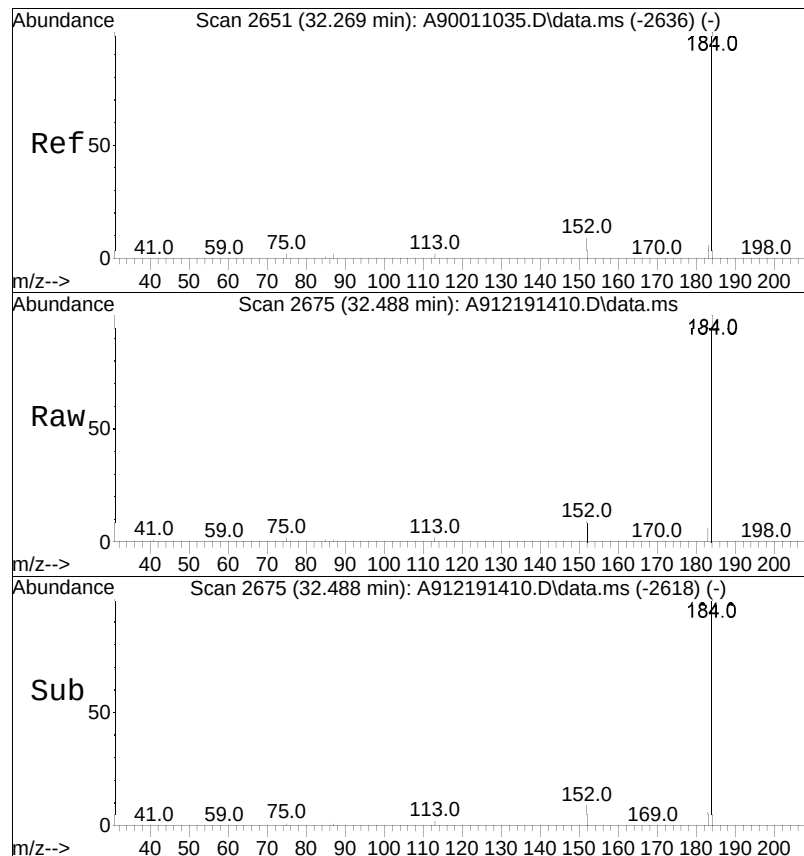
Tgt Ion:166 Resp: 150183

Ion Ratio Lower Upper

166 100

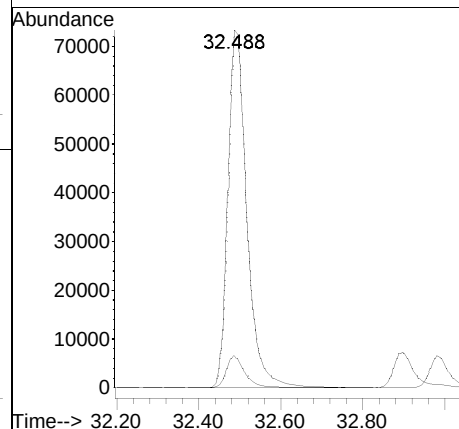
165 94.1 65.5 121.7

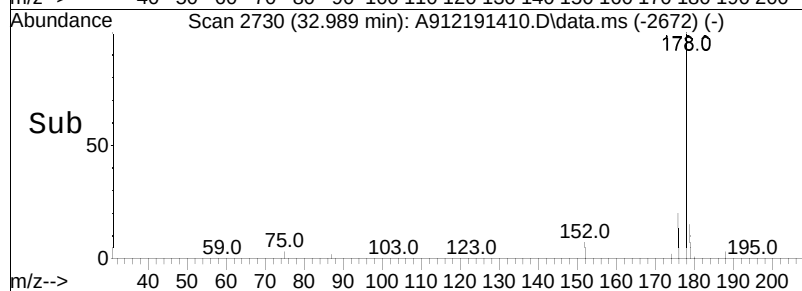
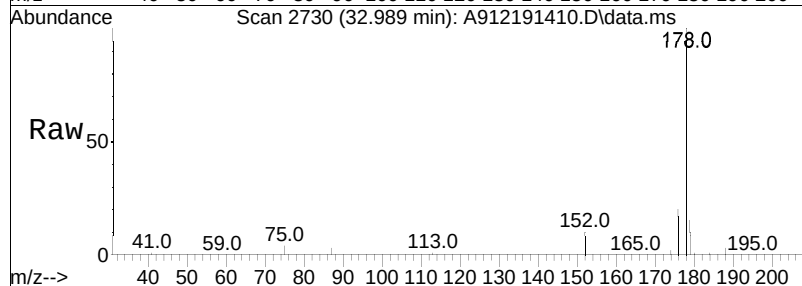
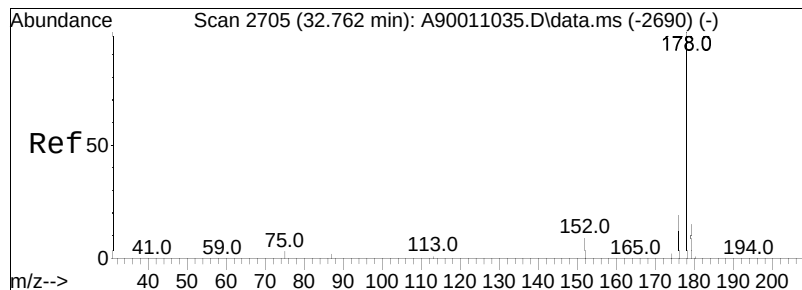




#33
 Dibenzothiophene
 Concen: 497.71 ng/mL
 RT: 32.488 min Scan# 2675
 Delta R.T. 0.019 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am

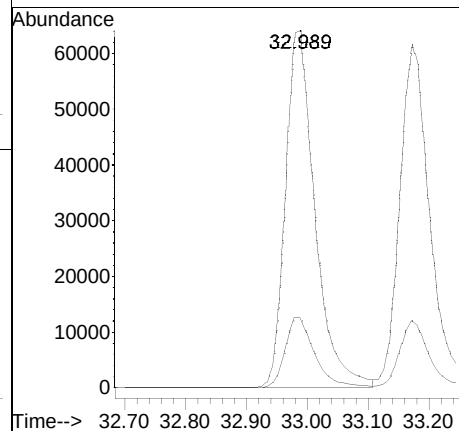
Tgt Ion	Ratio	Lower	Upper
184	100		
152	8.7	6.3	11.7

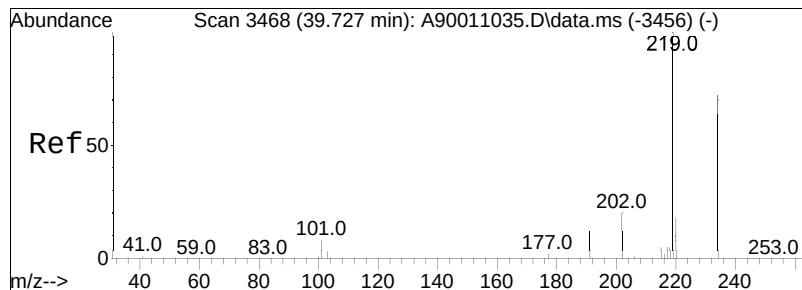




#43
 Phenanthrene
 Concen: 492.22 ng/mL
 RT: 32.989 min Scan# 2730
 Delta R.T. 0.027 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am

Tgt Ion	Ratio	Lower	Upper
178	100		
176	19.6	13.7	25.5





#54

Retene

Concen: 558.90 ng/mL

RT: 39.946 min Scan# 3492

Delta R.T. 0.019 min

Lab File: A912191410.D

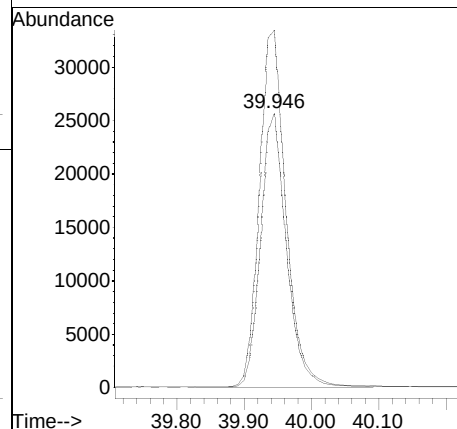
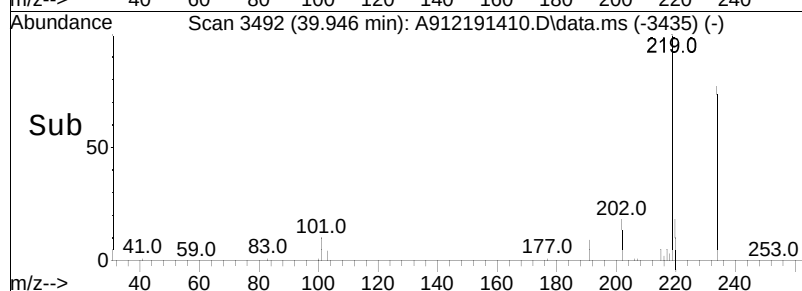
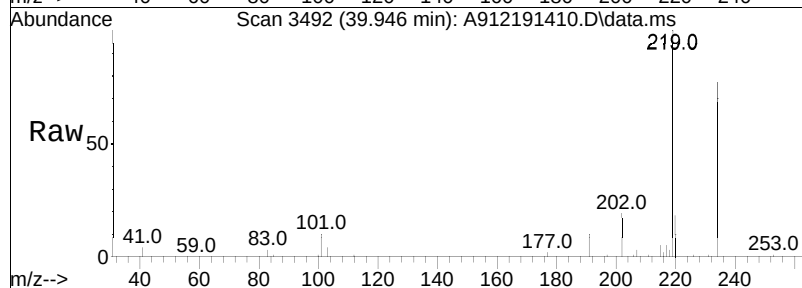
Acq: 20 Dec 2014 2:32 am

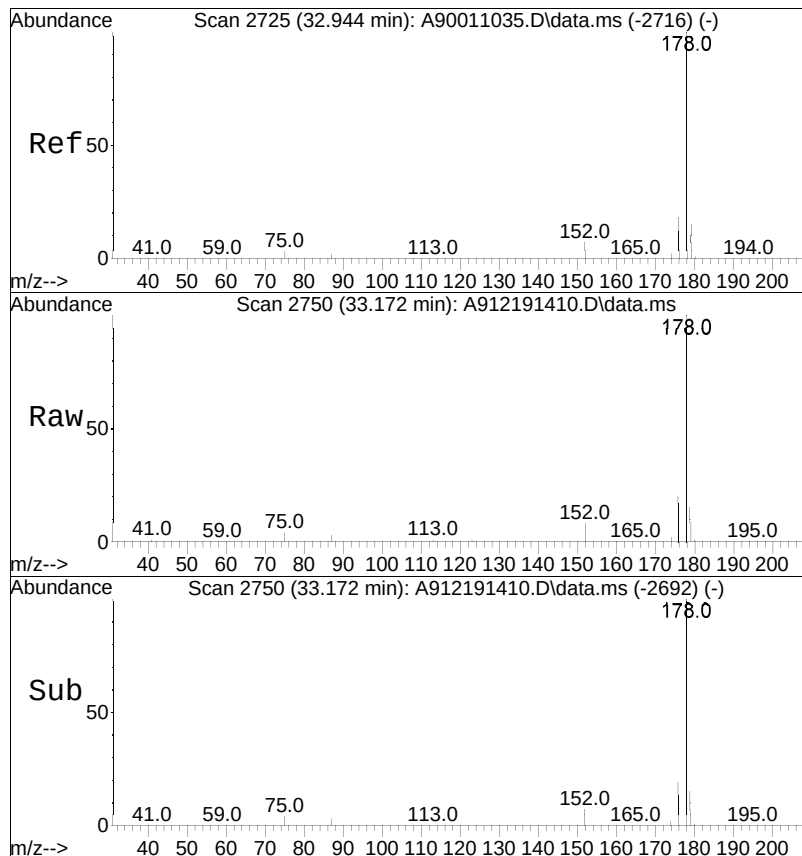
Tgt Ion: 234 Resp: 67328

Ion Ratio Lower Upper

234 100

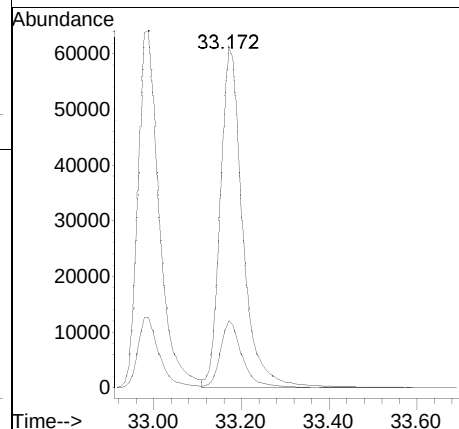
219 132.9 96.7 179.7

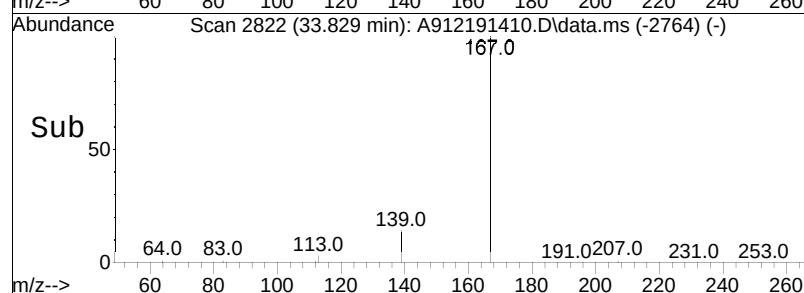
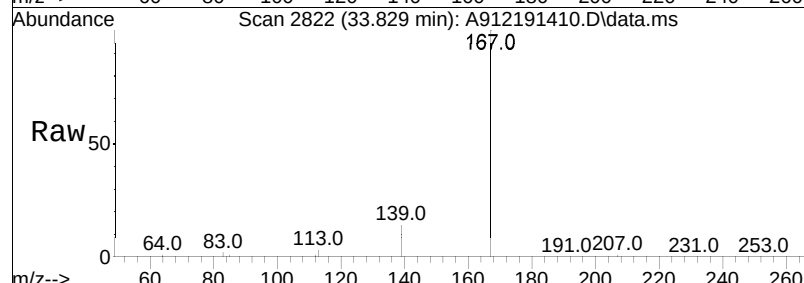
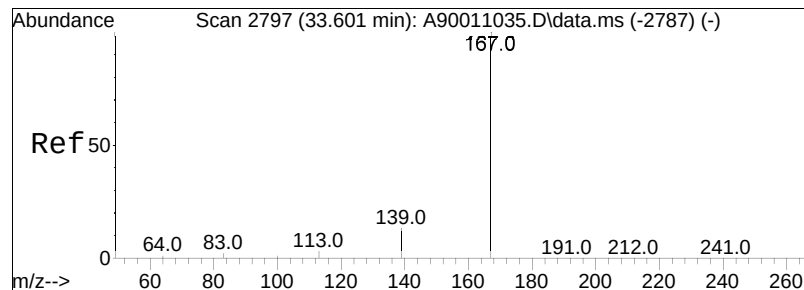




#55
 Anthracene
 Concen: 529.89 ng/mL
 RT: 33.172 min Scan# 2750
 Delta R.T. 0.027 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am

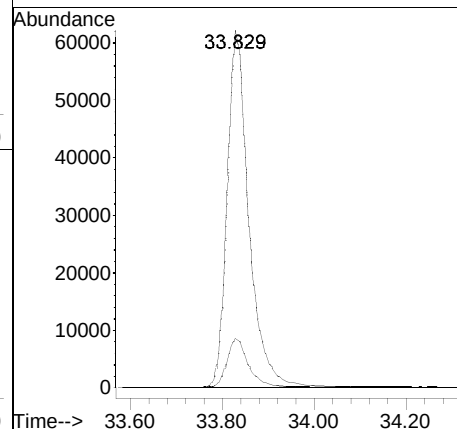
Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.8	13.4	24.8

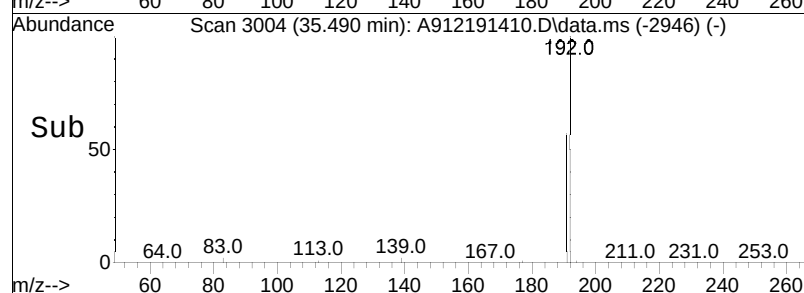
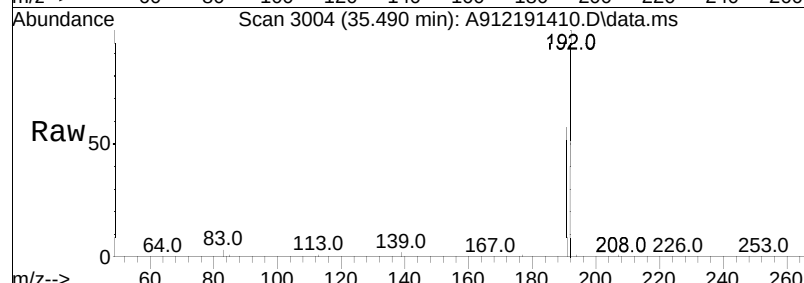
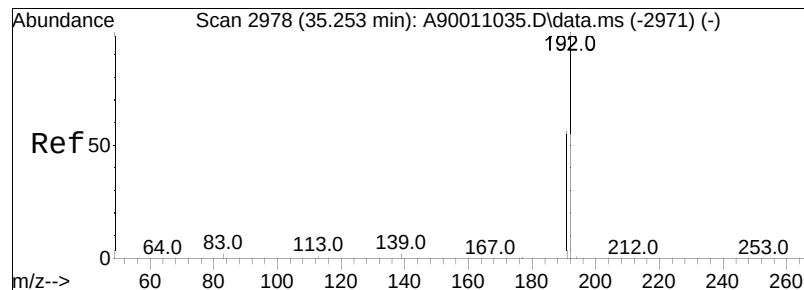




#56
 Carbazole
 Concen: 512.01 ng/mL
 RT: 33.829 min Scan# 2822
 Delta R.T. 0.027 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am

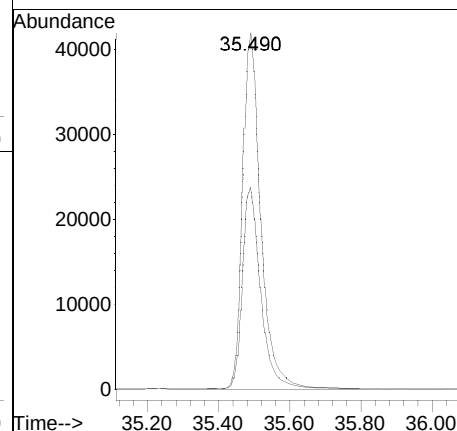
Tgt Ion	Ratio	Lower	Upper
167	100		
139	13.8	9.9	18.3

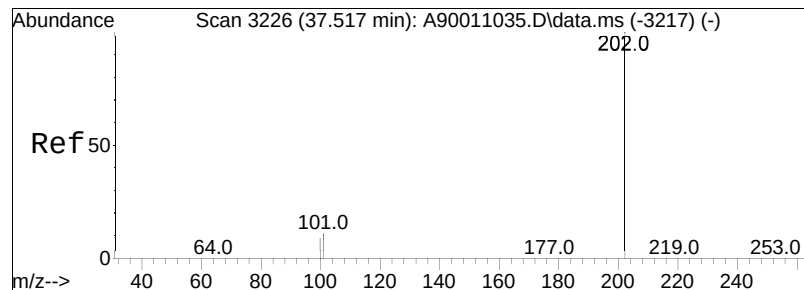




#57
 1-Methylphenanthrene
 Concen: 510.42 ng/mL
 RT: 35.490 min Scan# 3004
 Delta R.T. 0.027 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am

Tgt Ion	Ratio	Lower	Upper
192	100		
191	56.4	39.8	74.0





#58

Fluoranthene

Concen: 512.10 ng/mL M4

RT: 37.745 min Scan# 3251

Delta R.T. 0.018 min

Lab File: A912191410.D

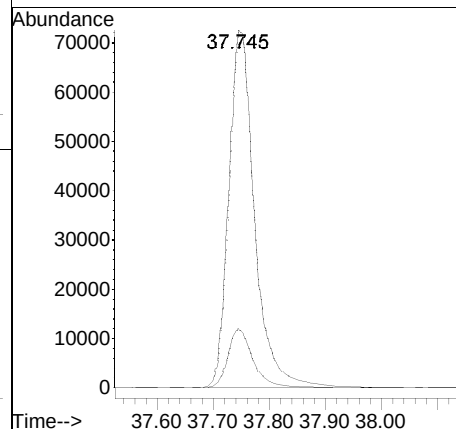
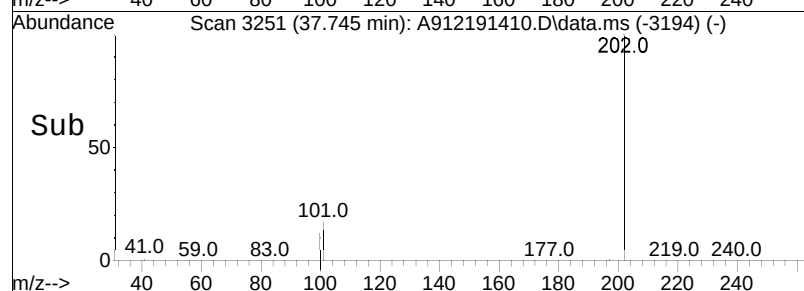
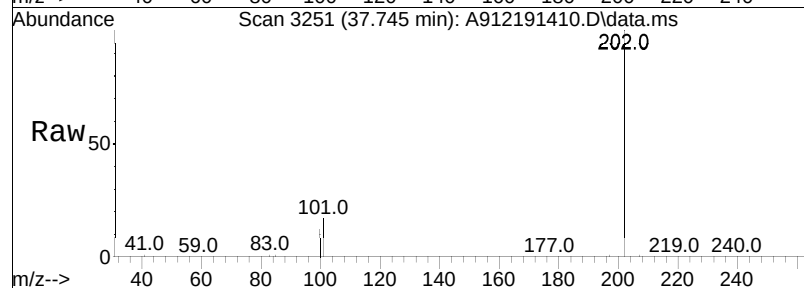
Acq: 20 Dec 2014 2:32 am

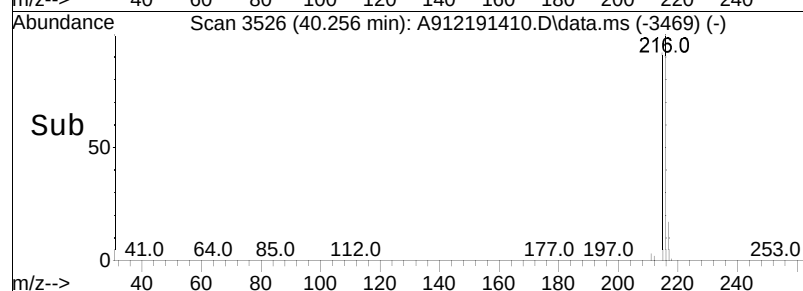
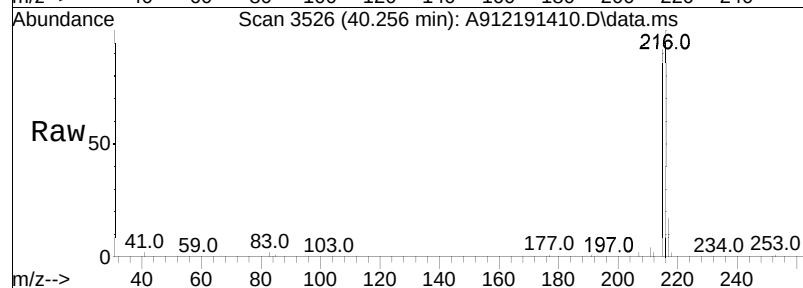
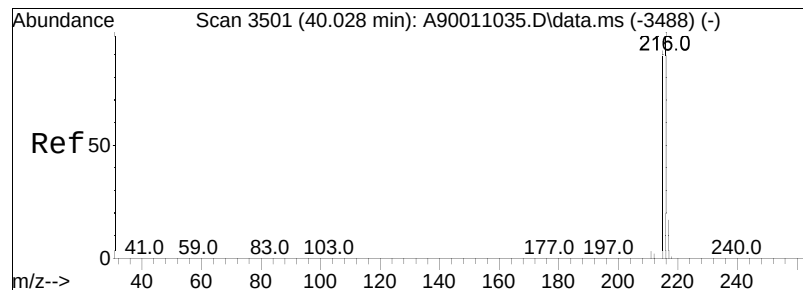
Tgt Ion: 202 Resp: 227760

Ion Ratio Lower Upper

202 100

101 16.4 11.8 22.0





#59

Benzo(b)fluorene

Concen: 533.59 ng/mL

RT: 40.256 min Scan# 3526

Delta R.T. 0.018 min

Lab File: A912191410.D

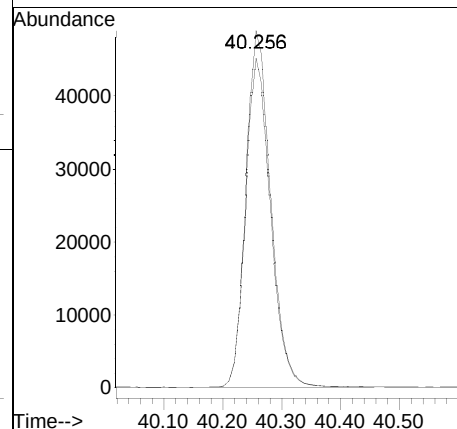
Acq: 20 Dec 2014 2:32 am

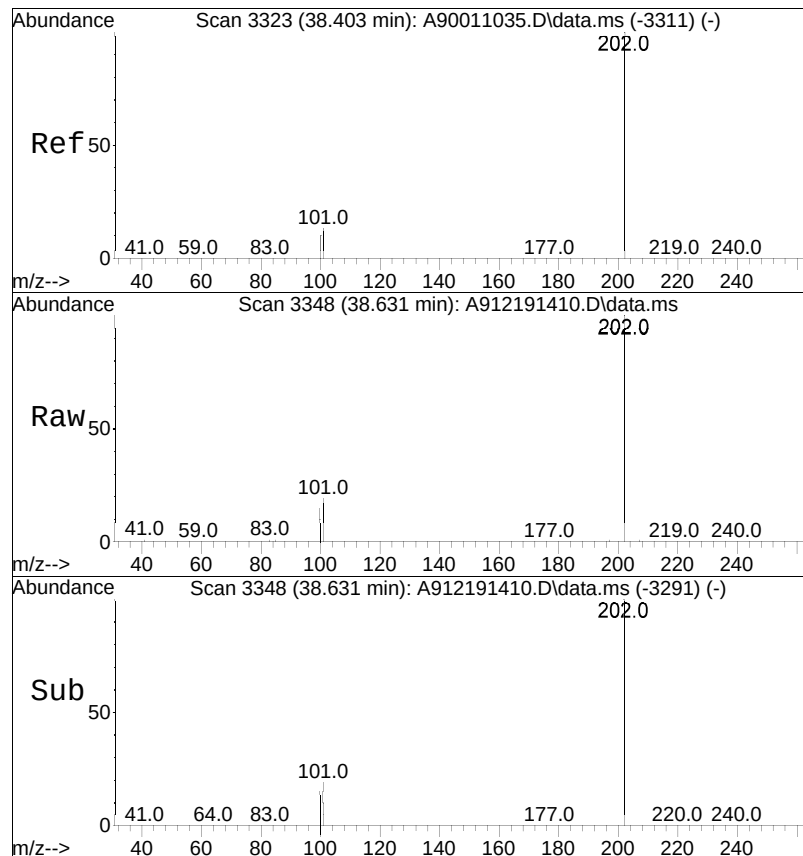
Tgt Ion:216 Resp: 143347

Ion Ratio Lower Upper

216 100

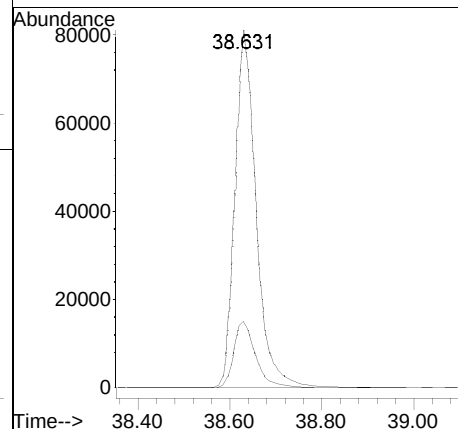
215 92.6 64.3 119.3

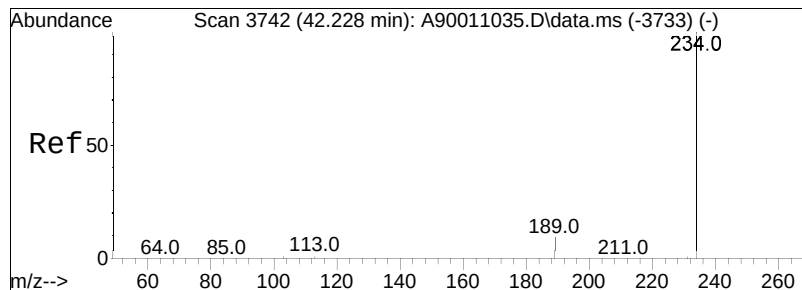




#60
 Pyrene
 Concen: 537.44 ng/mL
 RT: 38.631 min Scan# 3348
 Delta R.T. 0.018 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am

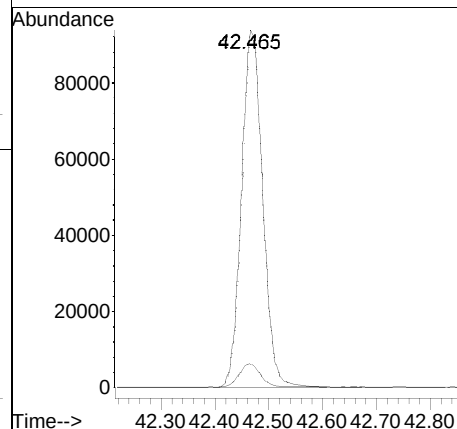
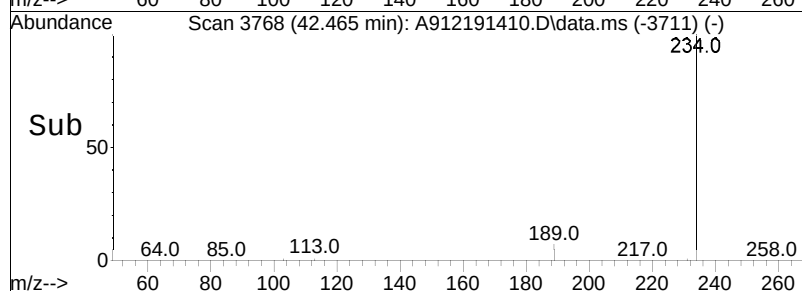
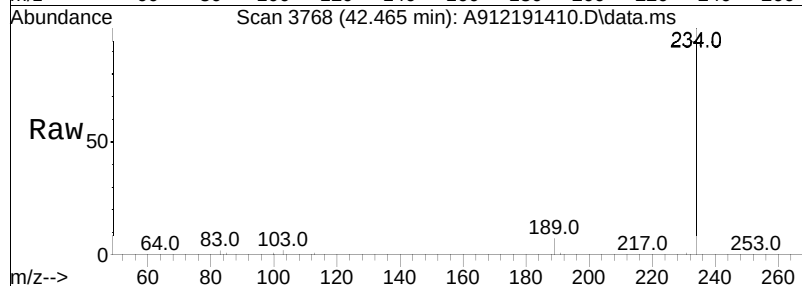
Tgt Ion	Ratio	Lower	Upper
202	100		
101	19.2	14.2	26.4

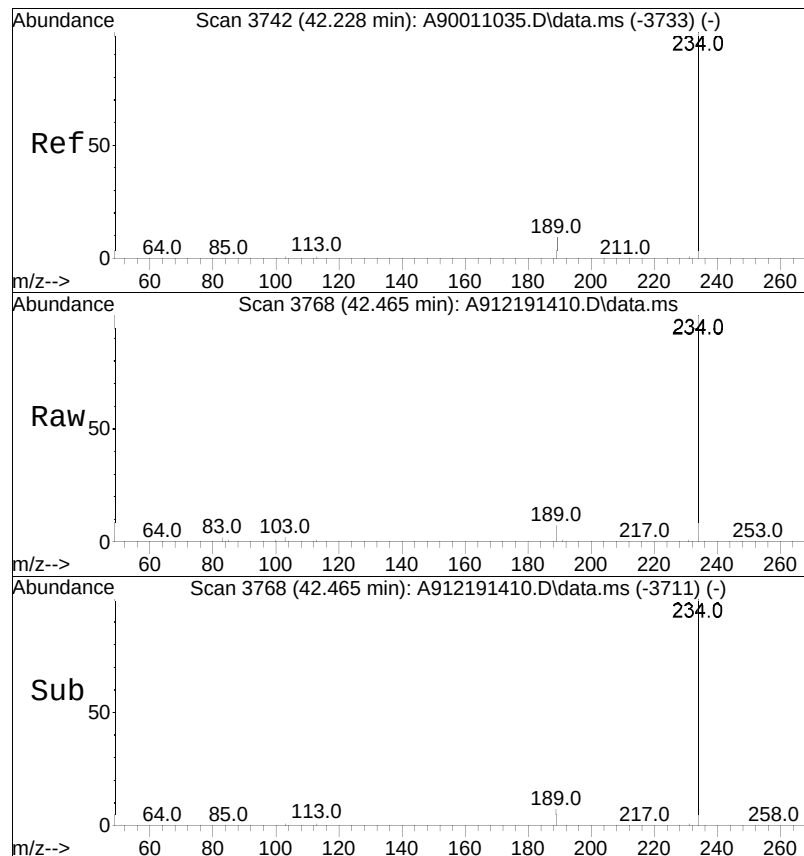




#66
 Naphthobenzothiophene
 Concen: 530.58 ng/ml
 RT: 42.465 min Scan# 3768
 Delta R.T. 0.018 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am

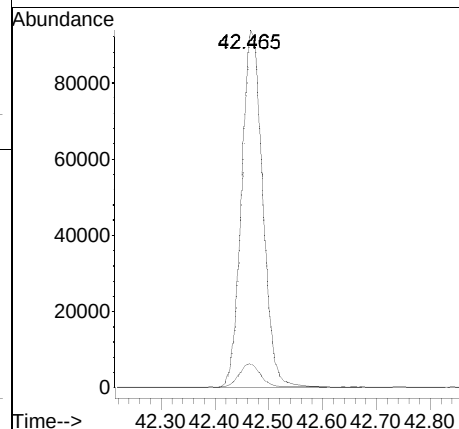
Tgt	Ion	Ratio	Resp	Lower	Upper
234	100		250360		
189	6.6		4.9		9.1

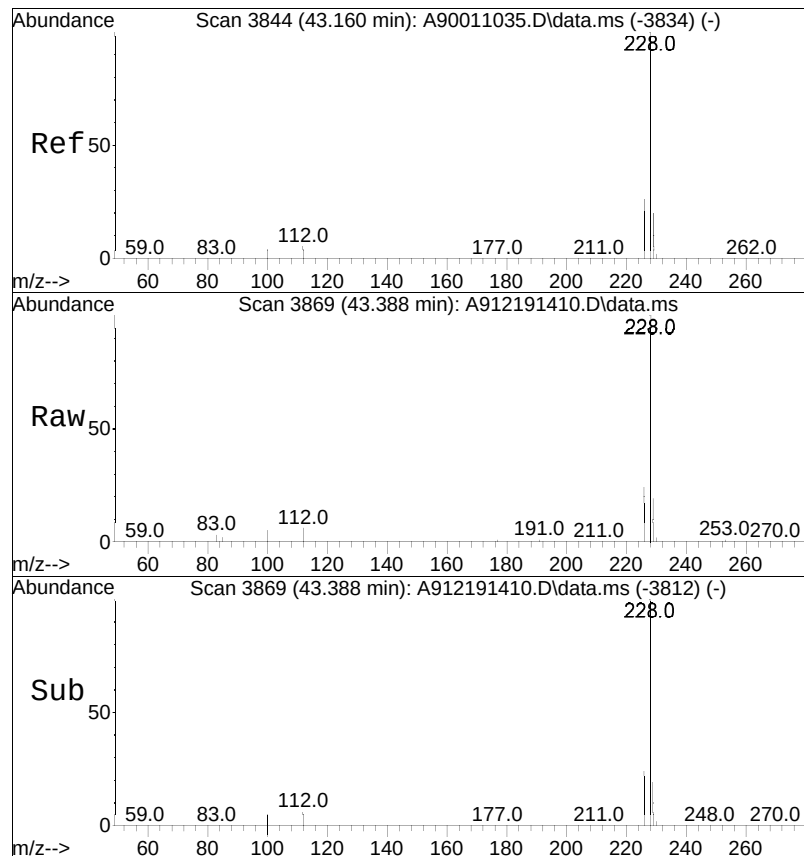




#67
 Naphthobenzothiophene-2,1-D
 Concen: 530.58 ng/mL
 RT: 42.465 min Scan# 3768
 Delta R.T. 0.018 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am

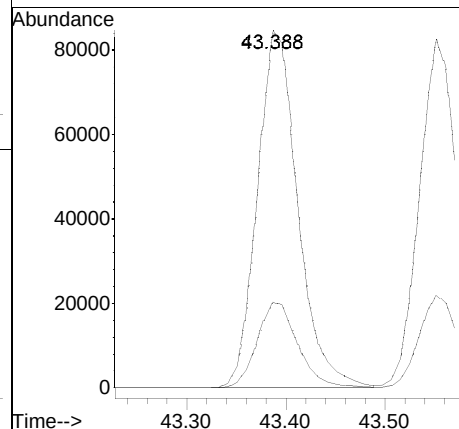
Tgt	Ion	Ratio	Resp	Lower	Upper
234	100		250360		
189	6.6		4.9		9.1

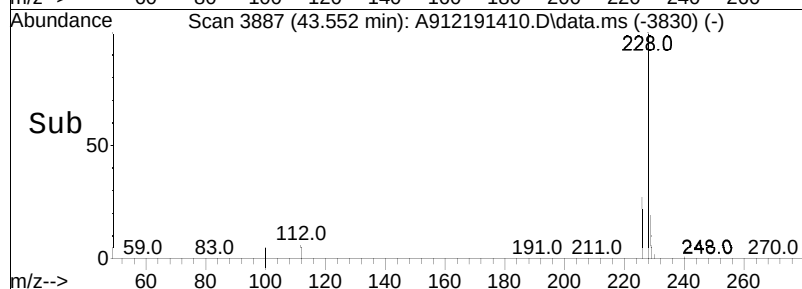
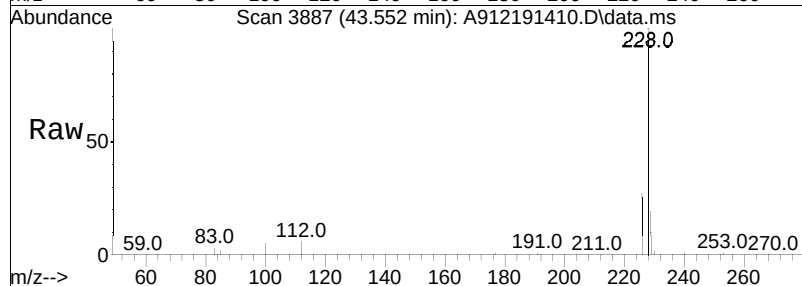
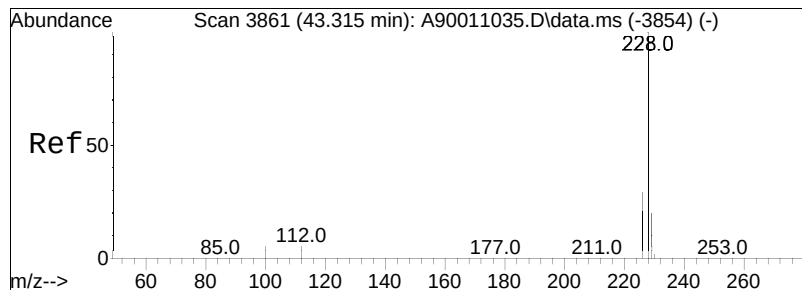




#75
 Benz[a]anthracene
 Concen: 527.48 ng/mL
 RT: 43.388 min Scan# 3869
 Delta R.T. 0.019 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am

Tgt	Ion	Ratio	Lower	Upper
228	100			
226	23.9	17.3	32.1	





#76

Chrysene

Concen: 518.48 ng/mL

RT: 43.552 min Scan# 3887

Delta R.T. 0.018 min

Lab File: A912191410.D

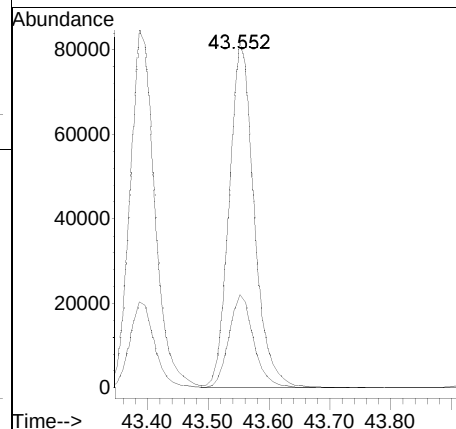
Acq: 20 Dec 2014 2:32 am

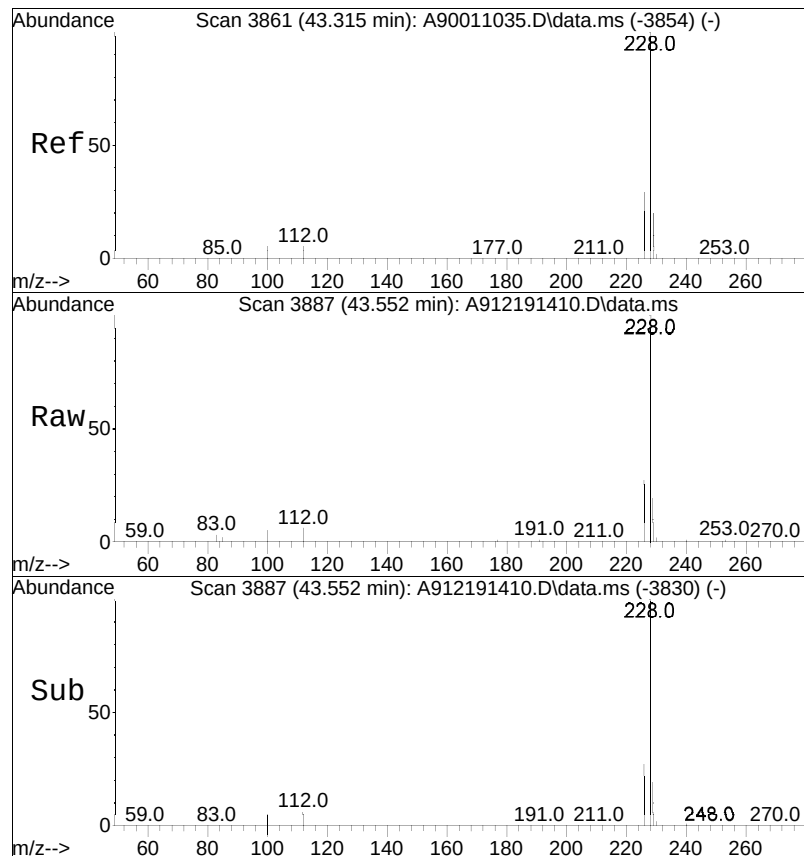
Tgt Ion: 228 Resp: 232358

Ion Ratio Lower Upper

228 100

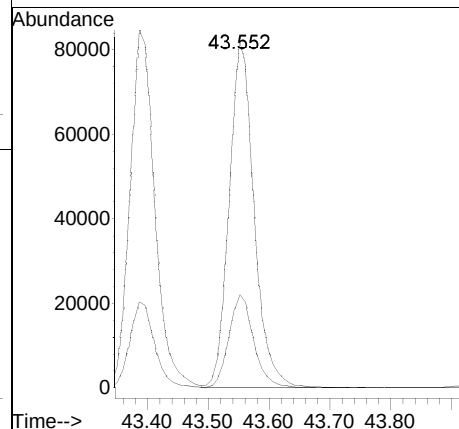
226 26.5 18.8 34.8

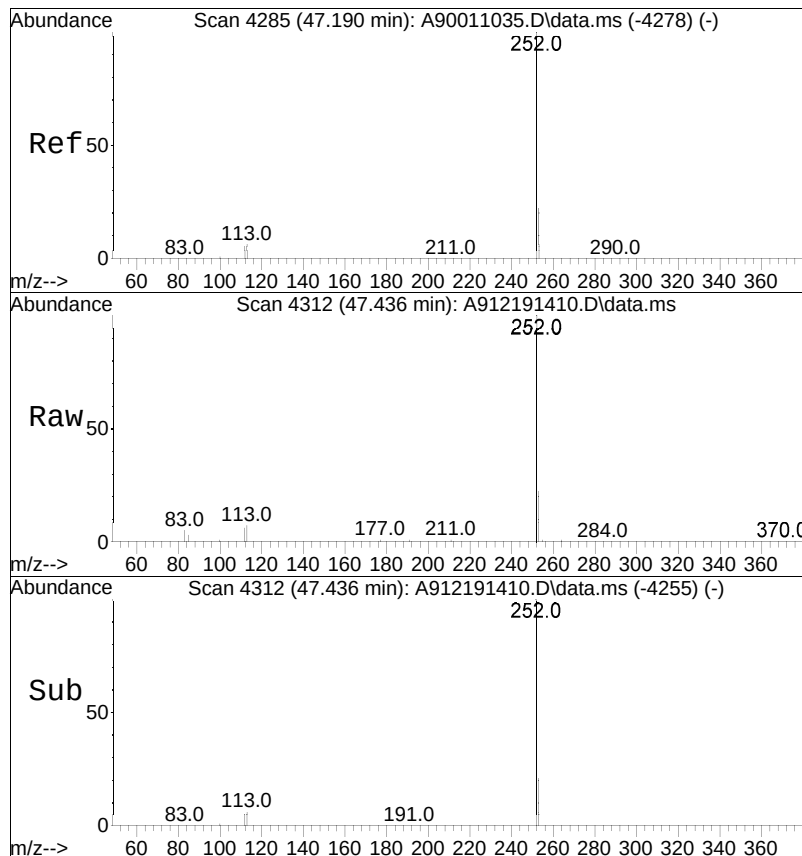




#77
 Chrysene/Triphenylene
 Concen: 518.48 ng/mL
 RT: 43.552 min Scan# 3887
 Delta R.T. 0.018 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am

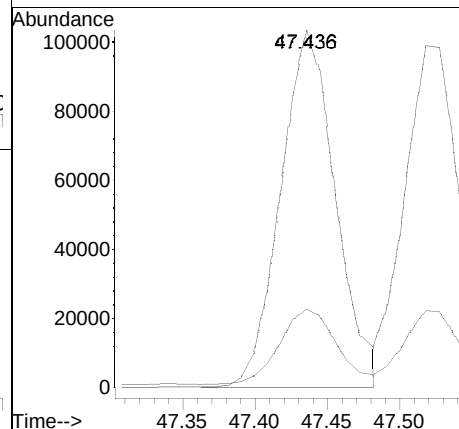
Tgt	Ion	Ratio	Lower	Upper
228	228	100		
226	226	26.5	18.8	34.8

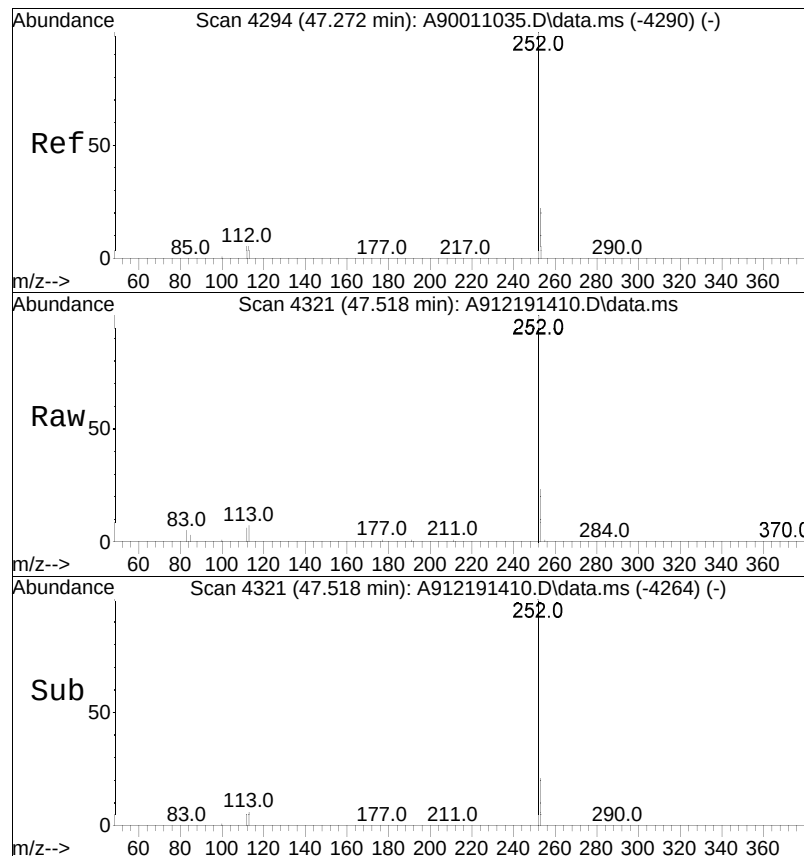




#84
 Benzo[b]fluoranthene
 Concen: 506.50 ng/mL
 RT: 47.436 min Scan# 4312
 Delta R.T. 0.018 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am

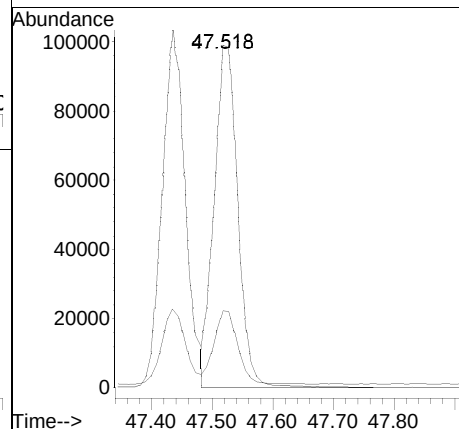
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.4	16.4	30.4	

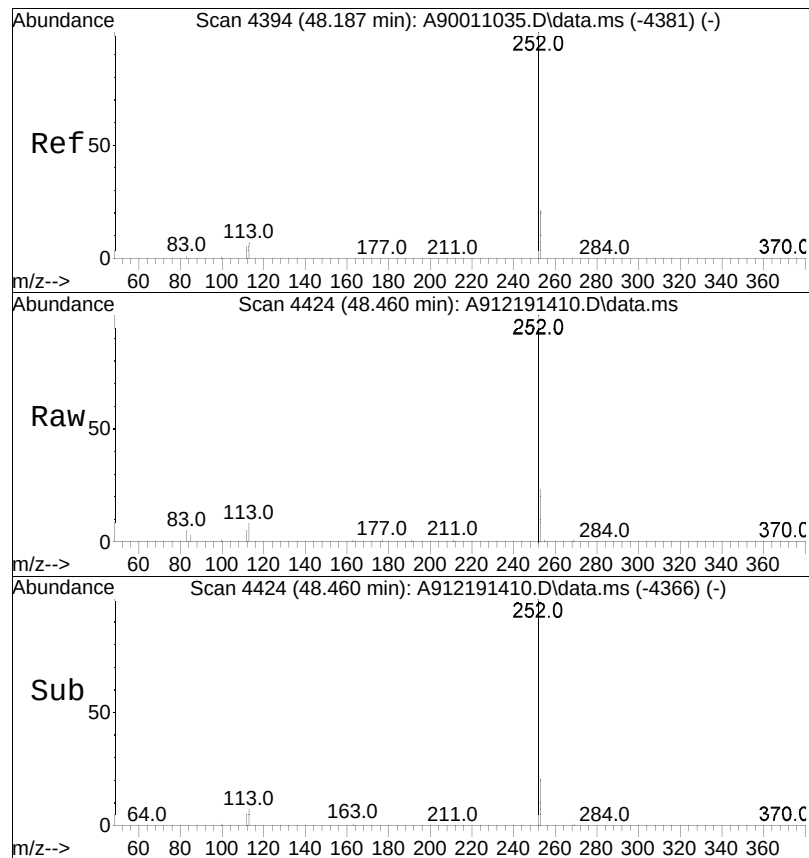




#85
 Benzo[j]+[k]fluoranthene
 Concen: 516.88 ng/mL
 RT: 47.518 min Scan# 4321
 Delta R.T. 0.018 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am

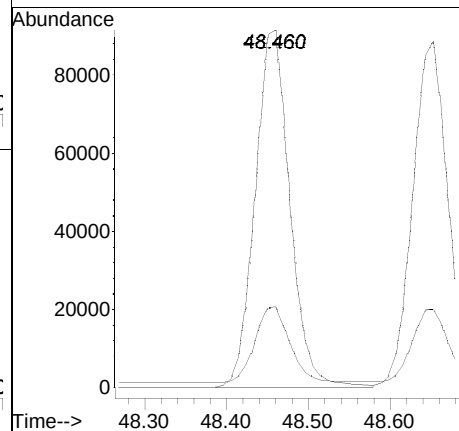
Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.3	16.1	29.9

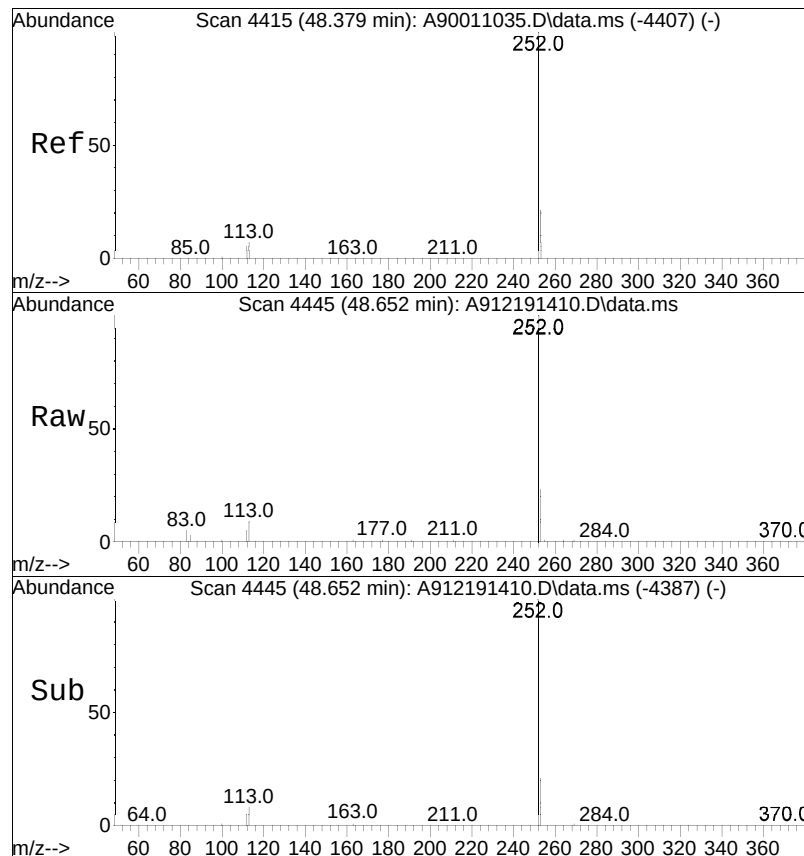




#87
 Benzo[e]pyrene
 Concen: 521.81 ng/mL
 RT: 48.460 min Scan# 4424
 Delta R.T. 0.027 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am

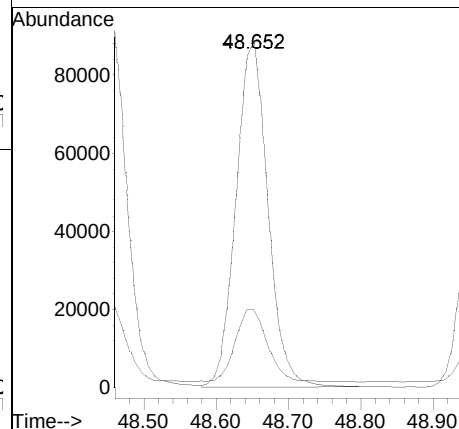
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.4	16.2	30.0	

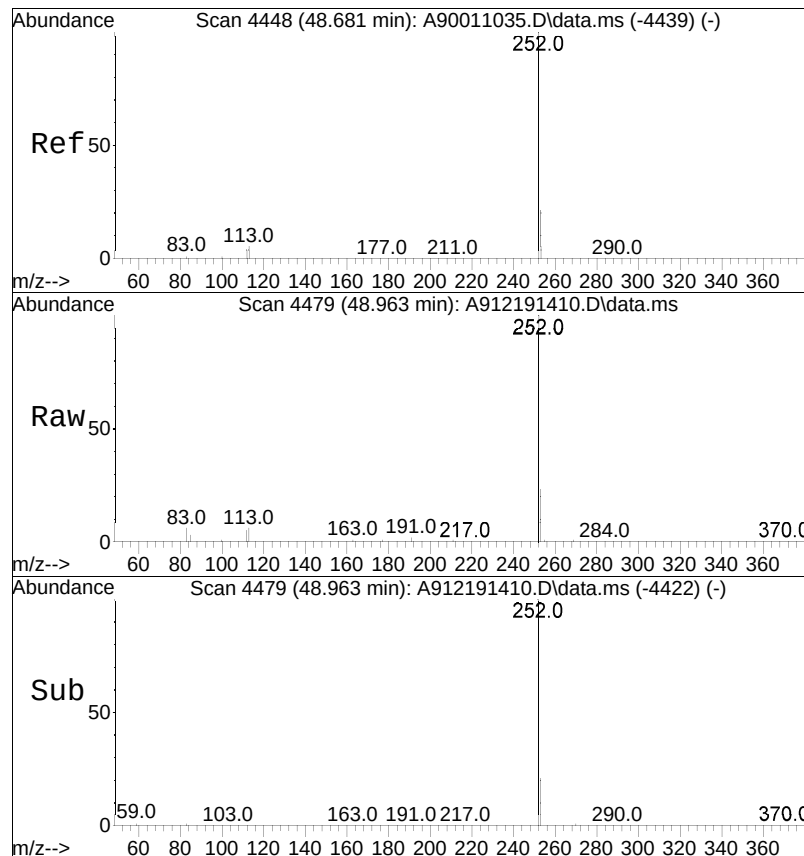




#89
 Benzo[a]pyrene
 Concen: 533.30 ng/mL
 RT: 48.652 min Scan# 4445
 Delta R.T. 0.027 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am

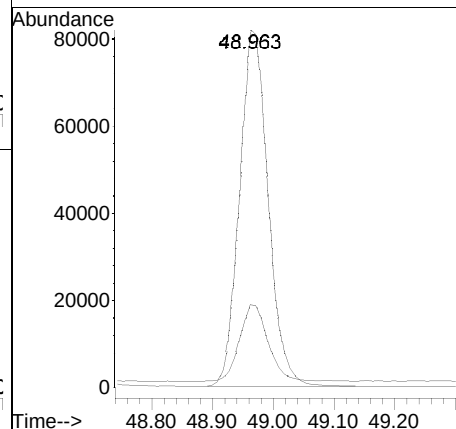
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.3	16.4	30.6	

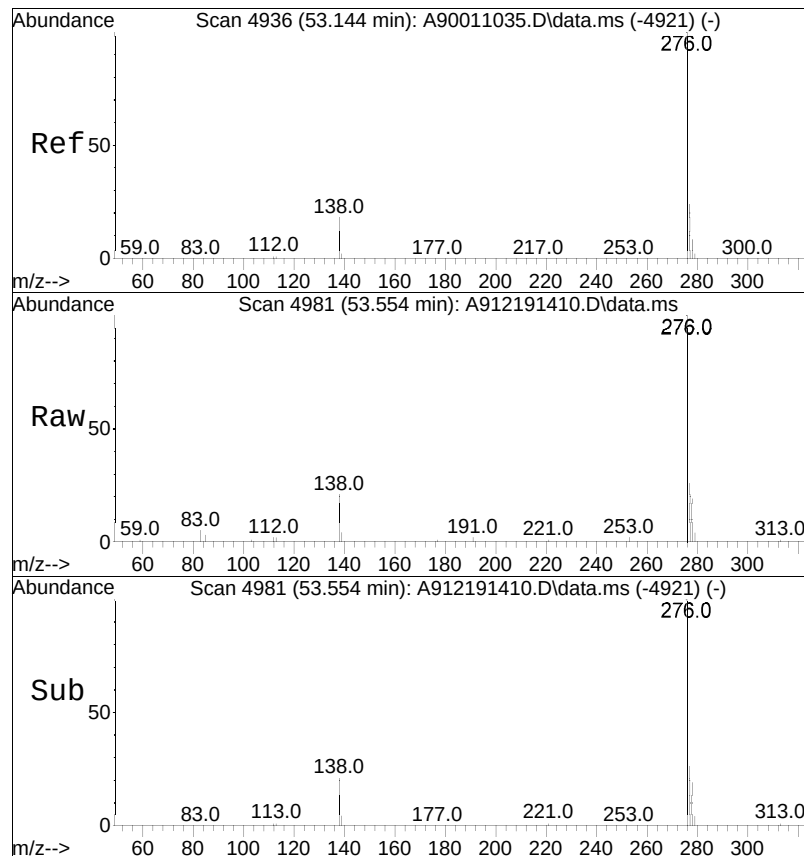




#90
 Perylene
 Concen: 519.89 ng/mL
 RT: 48.963 min Scan# 4479
 Delta R.T. 0.018 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am

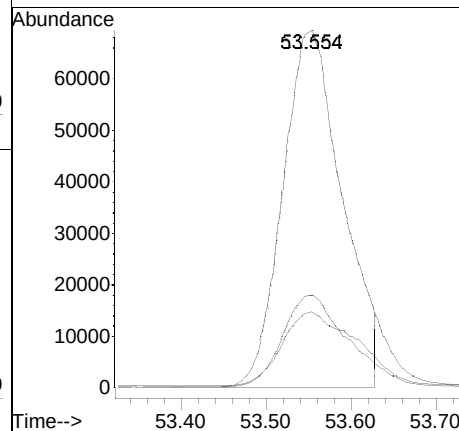
Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.5	16.6	30.8

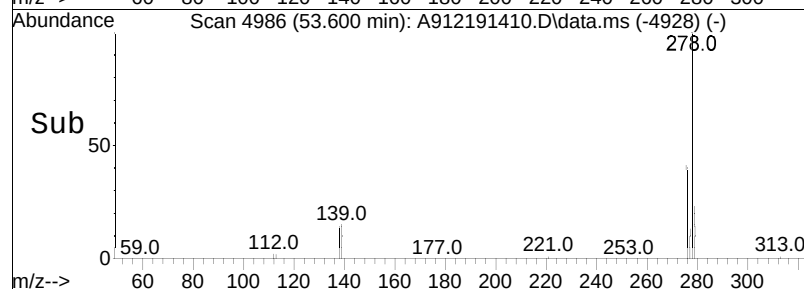
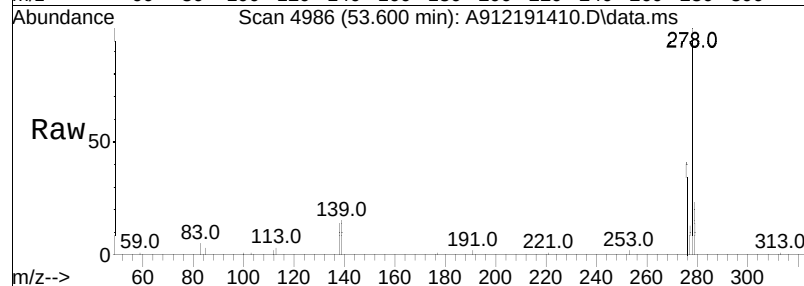
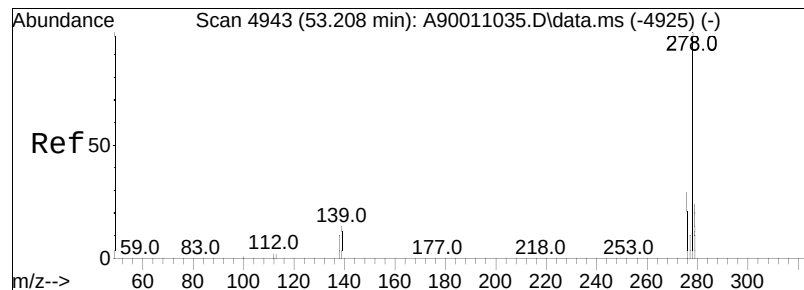




#91
 Indeno[1,2,3-cd]pyrene
 Concen: 538.38 ng/mL M3
 RT: 53.554 min Scan# 4981
 Delta R.T. 0.045 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am

Tgt Ion	Ratio	Resp	Lower	Upper
276	100	336096		
138	26.1		15.7	29.1
277	28.9		17.9	33.3





#92

Dibenz[ah]+[ac]anthracene

Concen: 516.40 ng/mL

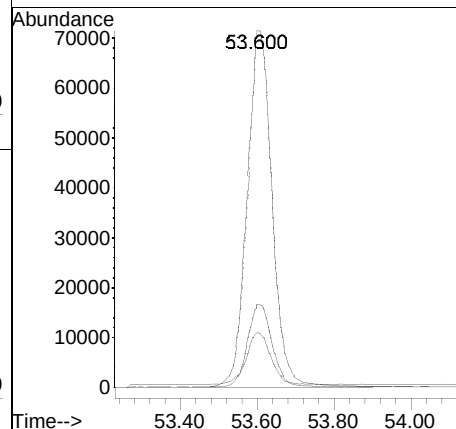
RT: 53.600 min Scan# 4986

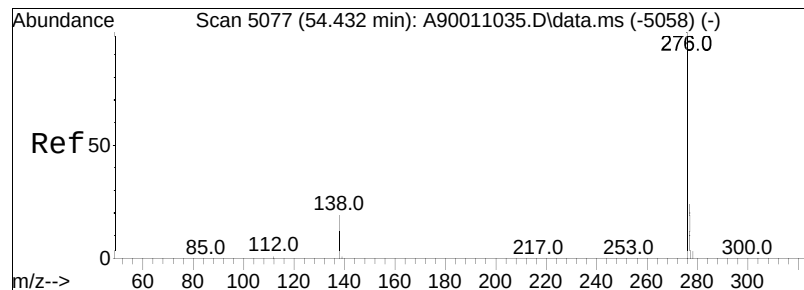
Delta R.T. 0.027 min

Lab File: A912191410.D

Acq: 20 Dec 2014 2:32 am

Tgt Ion:	278	Resp:	318152
Ion Ratio	Lower	Upper	
278	100		
139	14.5	11.4	21.2
279	22.8	16.3	30.3





#93

Benzo[g,h,i]perylene

Concen: 497.97 ng/mL

RT: 54.879 min Scan# 5126

Delta R.T. 0.036 min

Lab File: A912191410.D

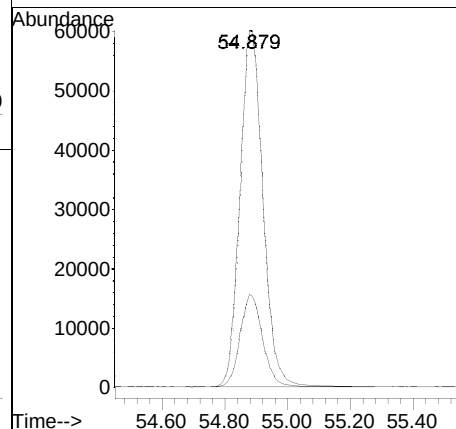
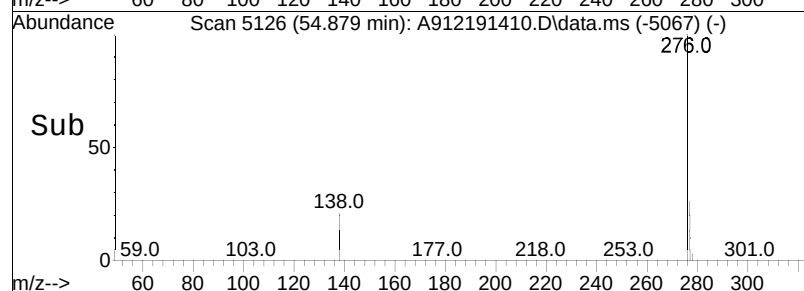
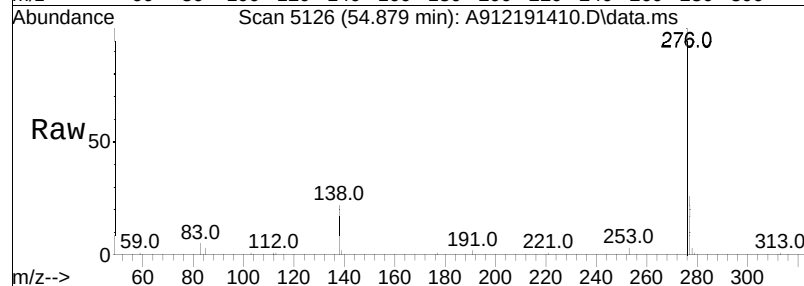
Acq: 20 Dec 2014 2:32 am

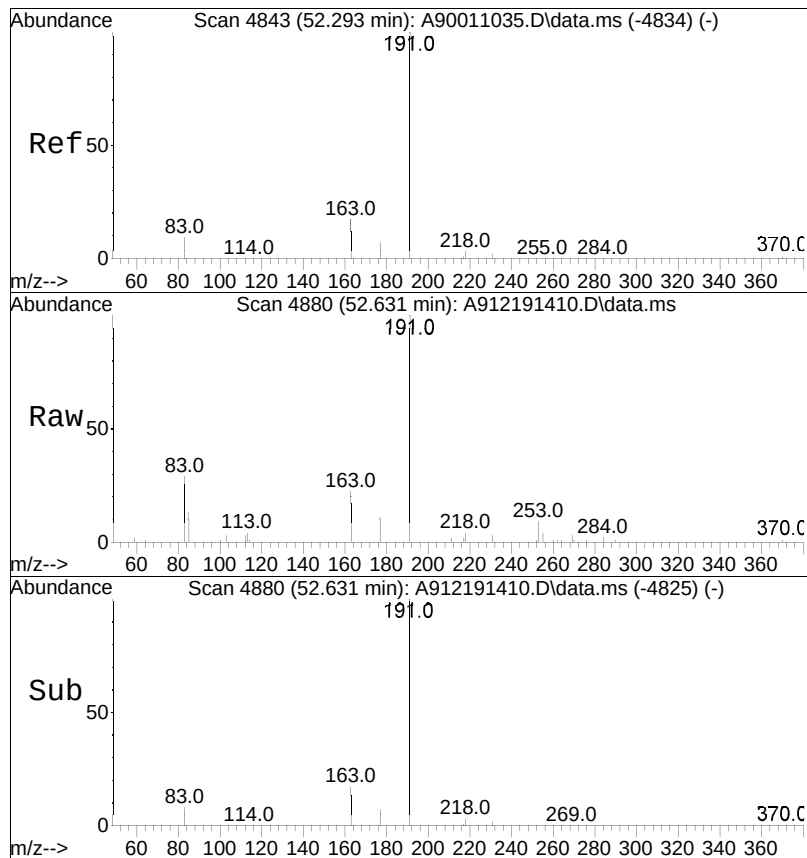
Tgt Ion: 276 Resp: 301974

Ion Ratio Lower Upper

276 100

277 25.2 17.4 32.2





#94

Hopane (T19)

Concen: 456.35 ng/mL

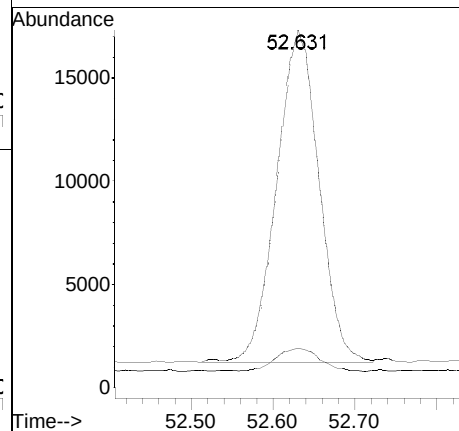
RT: 52.631 min Scan# 4880

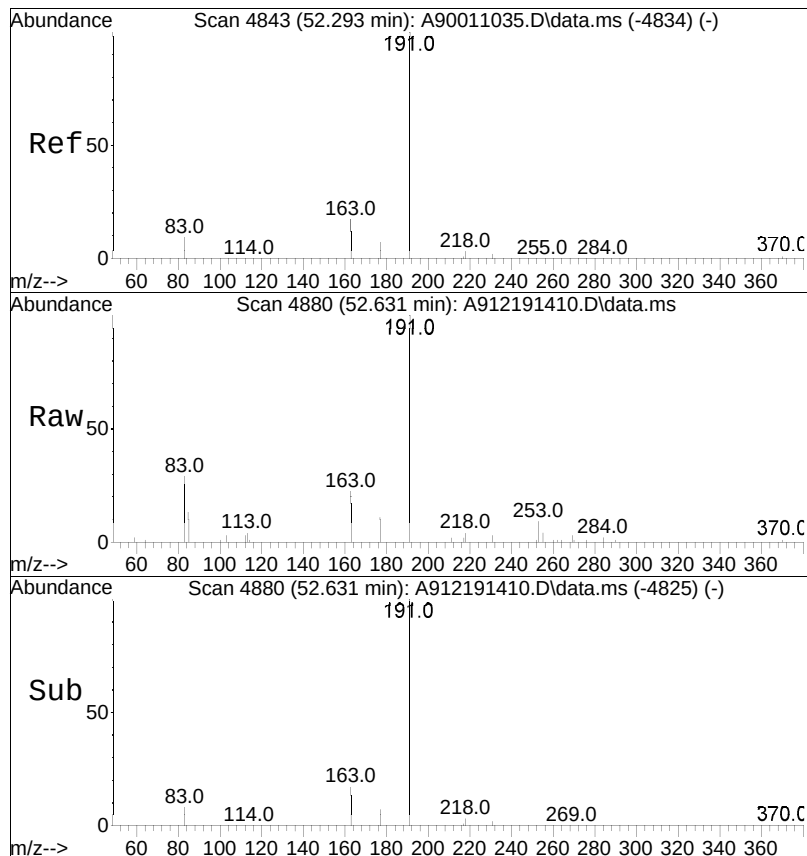
Delta R.T. -0.000 min

Lab File: A912191410.D

Acq: 20 Dec 2014 2:32 am

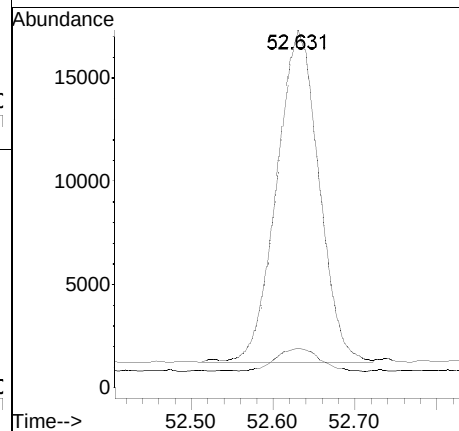
Tgt	Ion	Ratio	Resp	Lower	Upper
191	100		57204		
177	7.7		8.5	15.9	





#95
 17a(H),21B(H)-hopane - C₃₀H₅₂
 Concen: 456.35 ng/mL
 RT: 52.631 min Scan# 4880
 Delta R.T. -0.000 min
 Lab File: A912191410.D
 Acq: 20 Dec 2014 2:32 am

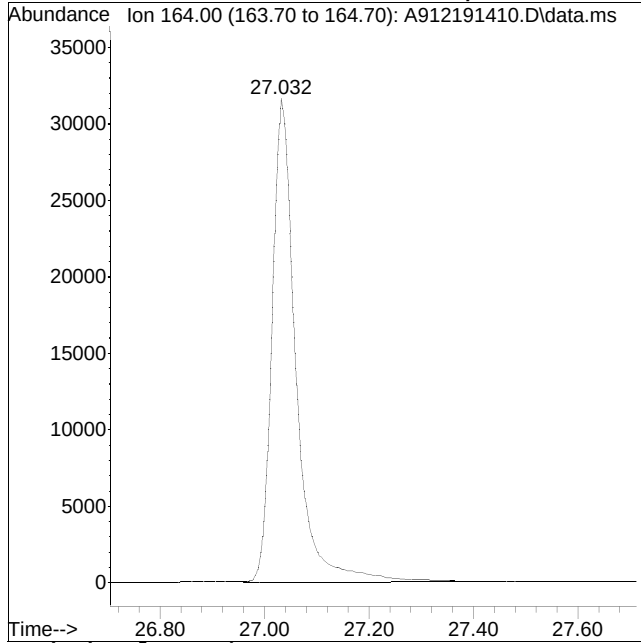
Tgt	Ion	Ratio	Lower	Upper
191	100			
177	7.7	8.5	15.9	



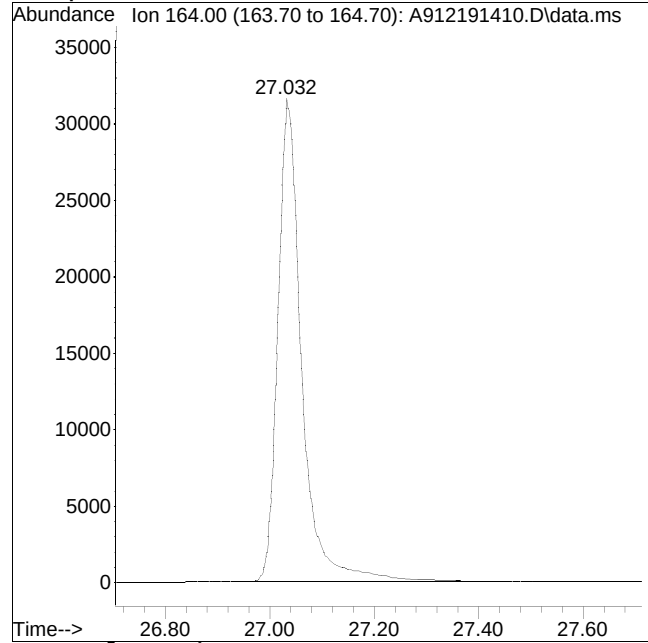
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191410.D Operator : PAH9:SR
Date Inj'd : 12/20/2014 2:32 am Instrument : PAH 9
Sample : WG754959-2 Quant Date : 12/22/2014 2:12 pm

Compound #1: Acenaphthene-d10



Original Peak Response = 101221



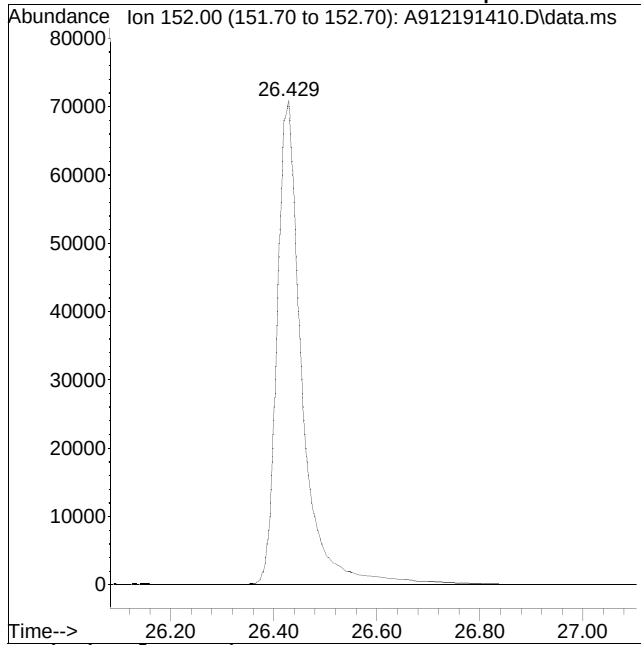
Manual Peak Response = 100769 M4

M4 = Poor automated baseline construction.

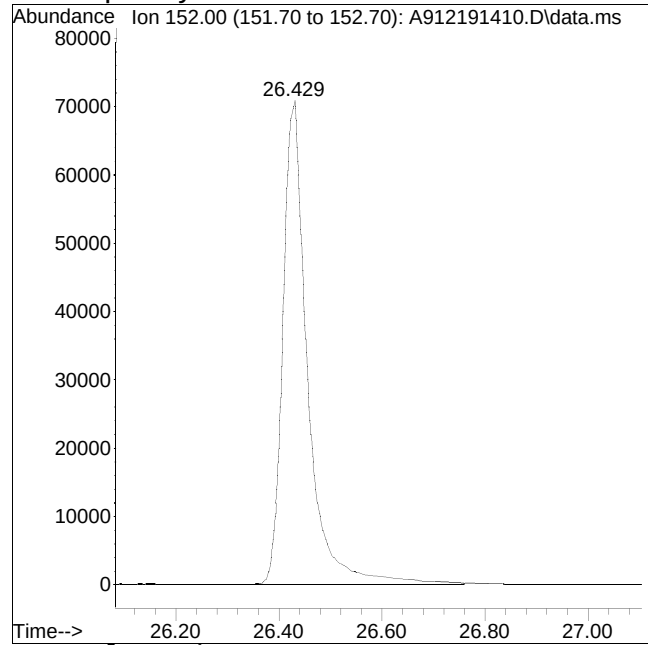
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191410.D Operator : PAH9:SR
Date Inj'd : 12/20/2014 2:32 am Instrument : PAH 9
Sample : WG754959-2 Quant Date : 12/22/2014 2:12 pm

Compound #26: Acenaphthylene



Original Peak Response = 238718



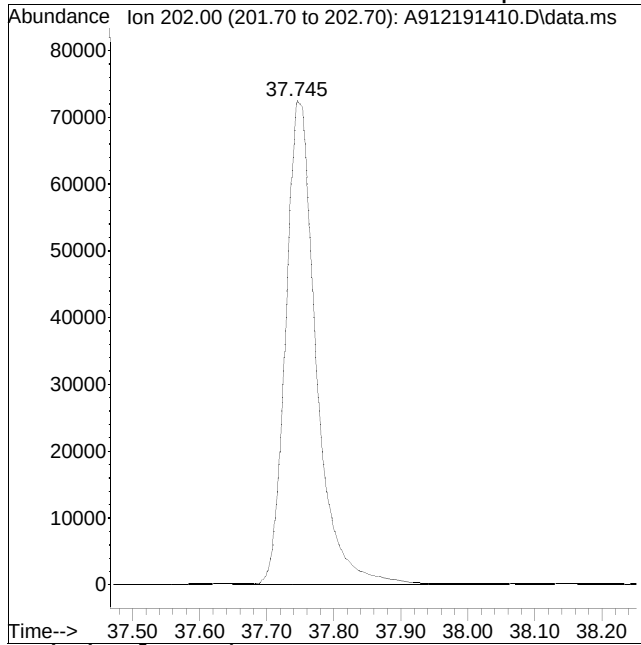
Manual Peak Response = 236104 M4

M4 = Poor automated baseline construction.

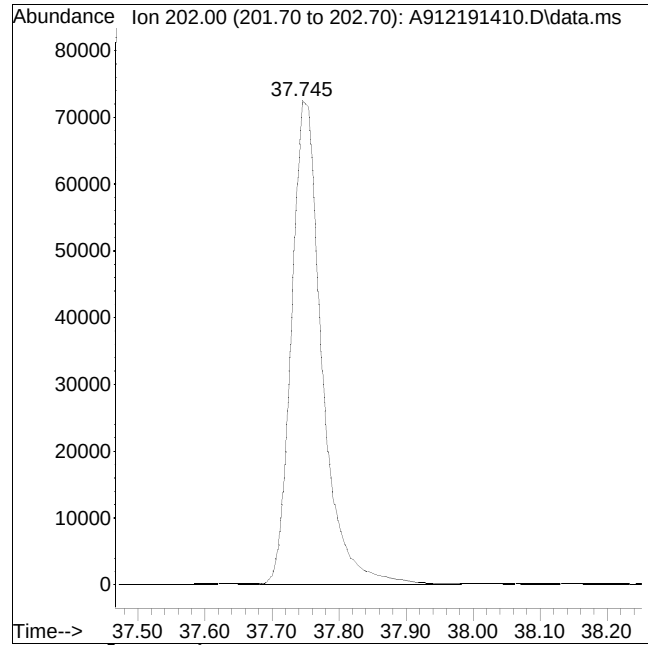
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191410.D Operator : PAH9:SR
Date Inj'd : 12/20/2014 2:32 am Instrument : PAH 9
Sample : WG754959-2 Quant Date : 12/22/2014 2:12 pm

Compound #58: Fluoranthene



Original Peak Response = 228423



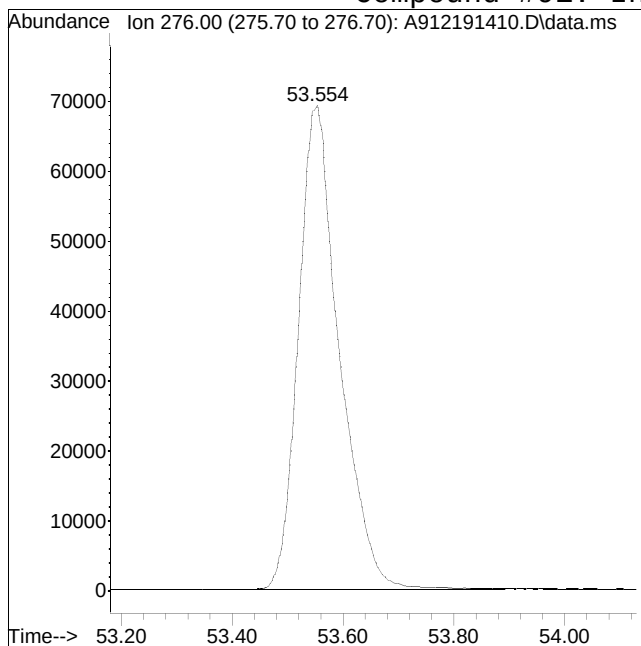
Manual Peak Response = 227760 M4

M4 = Poor automated baseline construction.

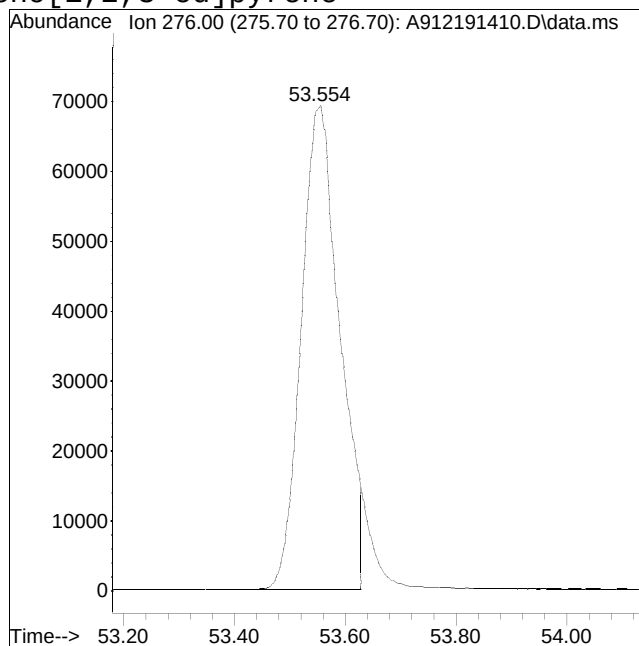
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191410.D Operator : PAH9:SR
Date Inj'd : 12/20/2014 2:32 am Instrument : PAH 9
Sample : WG754959-2 Quant Date : 12/22/2014 2:12 pm

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 356509



Manual Peak Response = 336096 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191412.D
 Acq On : 22 Dec 2014 5:54 pm
 Operator : PAH9:SR
 Sample : WG754959-3
 Misc : WG754959,Frav19 500ng/ml
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 12 09:02:35 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	128	0.00
3 A1	trans-Decalin	0.461	0.422	8.5	119	0.00
4 t	cis-Decalin	0.362	0.293	19.1	112	0.00
9 s	Naphthalene-d8	2.264	2.190	3.3	125	0.02
10 A1	Naphthalene	2.768	2.746	0.8	127	0.00
16 t	2-Methylnaphthalene	1.502	1.487	1.0	127	0.03
17 t	1-Methylnaphthalene	1.468	1.446	1.5	127	0.02
18 A1	Benzothiophene	2.530	2.438	3.6	125	0.00
23 t	Biphenyl	1.852	1.854	-0.1	127	0.02
24 t	2,6-Dimethylnaphthalene	1.221	1.205	1.3	128	0.02
25 t	Dibenzofuran	1.944	1.953	-0.5	127	0.02
26 t	Acenaphthylene	2.298	2.329	-1.3	132	0.00
27 t	Acenaphthene	1.385	1.400	-1.1	128	0.00
28 t	2,3,5-Trimethylnaphthalene	1.165	1.144	1.8	128	0.00
29 A1	Fluorene	1.558	1.489	4.4	125	0.03
33 A1	Dibenzothiophene	2.288	2.302	-0.6	127	0.00
42 s	Phenanthrene-d10	1.716	1.635	4.7	125	0.00
43 A1	Phenanthrene	2.174	2.142	1.5	123	0.00
54 t	Retene	0.598	0.615	-2.8	131	0.00
55 t	Anthracene	2.007	2.119	-5.6	133	0.02
56 t	Carbazole	1.932	1.906	1.3	124	0.02
57 t	1-Methylphenanthrene	1.439	1.422	1.2	125	0.02
58 A1	Fluoranthene	2.207	2.177	1.4	125	0.00
59 t	Benzo(b)fluorene	1.333	1.244	6.7	118	0.02
60 A1	Pyrene	2.347	2.416	-2.9	125	0.02
66 A1	Naphthobenzothiophene	2.341	2.300	1.8	124	0.00
67 A2	Naphthobenzothiophene-2,1-D	2.341	2.300	1.8	124	0.00
74 i	Chrysene-d12	1.000	1.000	0.0	123	0.00
75 t	Benz[a]anthracene	1.108	1.096	1.1	125	0.00
76 A1	Chrysene	1.095	1.097	-0.2	121	0.00
77 A2	Chrysene/Triphenylene	1.095	1.097	-0.2	121	0.00
83 S	Benzo[b]fluoranthene-d12	1.034	1.015	1.8	126	0.00
84 t	Benzo[b]fluoranthene	1.311	1.263	3.7	123	0.00
85 A1	Benzo[j]+[k]fluoranthene	1.255	1.213	3.3	123	0.00
87 t	Benzo[e]pyrene	1.255	1.244	0.9	123	0.00
88 s	Benzo[a]pyrene-d12	0.949	0.922	2.8	126	0.00
89 t	Benzo[a]pyrene	1.230	1.203	2.2	121	0.00
90 t	Perylene	1.241	1.195	3.7	123	0.00

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191412.D
 Acq On : 22 Dec 2014 5:54 pm
 Operator : PAH9:SR
 Sample : WG754959-3
 Misc : WG754959,Frav19 500ng/ml
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 12 09:02:35 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.526	1.422	6.8	120	0.00
92 t	Dibenz[ah]+[ac]anthracene	1.506	1.328	11.8	115	0.00
93 t	Benzo[g,h,i]perylene	1.482	1.348	9.0	122	0.00
94 A1	Hopane (T19)	0.306	0.263	14.1	123	-0.02
95 A2	17a(H),21B(H)-hopane - C30H	0.306	0.263	14.1	123	-0.02
129 SA1	5B(H)Cholane - Surr	0.158	0.158	0.0	131	0.00

* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Mass Discrimination (Concentration)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	0.92	0.70 - 1.30

Mass Discrimination (Response)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	1.23	0.70 - 2.00

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191412.D
 Acq On : 22 Dec 2014 5:54 pm
 Operator : PAH9:SR
 Sample : WG754959-3
 Misc : WG754959,Frav19 500ng/ml
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 12 09:02:35 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.041	164	105260M4	500.000	ng/mL	0.02
74) Chrysene-d12	43.452	240	205181	500.000	ng/mL	0.02
System Monitoring Compounds						
9) Naphthalene-d8	20.087	136	230502	483.653	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	48.37%#		
42) Phenanthrene-d10	32.898	188	172096	476.355	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	47.64%#		
83) Benzo[b]fluoranthene-d12	47.354	264	208258	490.621	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	49.06%#		
88) Benzo[a]pyrene-d12	48.561	264	189209	485.715	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	48.57%#		
129) 5B(H)Cholane - Surr	44.054	217	32489	501.327	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	50.13%		
Target Compounds						
					Qvalue	
3) trans-Decalin	16.720	138	22200	228.940	ng/mL	100
4) cis-Decalin	17.943	138	15428	202.461	ng/mL	100
10) Naphthalene	20.160	128	289011	496.049	ng/mL	100
16) 2-Methylnaphthalene	22.870	142	156515	494.960	ng/mL	100
17) 1-Methylnaphthalene	23.281	142	152185	492.362	ng/mL	100
18) Benzothiophene	20.379	134	256628	481.849	ng/mL	100
23) Biphenyl	24.732	154	195167	500.625	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.343	156	126866	493.587	ng/mL	100
25) Dibenzofuran	27.816	168	205624	502.421	ng/mL	100
26) Acenaphthylene	26.429	152	245153M4	506.779	ng/mL	
27) Acenaphthene	27.159	153	147390	505.362	ng/mL	99
28) 2,3,5-Trimethylnaphthalen	28.711	170	120384	490.796	ng/mL	100
29) Fluorene	29.194	166	156782	478.108	ng/mL	100
33) Dibenzothiophene	32.497	184	242335	503.210	ng/mL	98
43) Phenanthrene	32.990	178	225432	492.652	ng/mL	100
54) Retene	39.946	234	64752	514.581	ng/mL	96
55) Anthracene	33.181	178	223023	527.750	ng/mL	99
56) Carbazole	33.838	167	200641	493.347	ng/mL	98
57) 1-Methylphenanthrene	35.499	192	149676	493.930	ng/mL	98
58) Fluoranthene	37.754	202	229109M4	493.150	ng/mL	
59) Benzo(b)fluorene	40.265	216	130936	466.599	ng/mL	99
60) Pyrene	38.640	202	254360	514.696	ng/mL	96
66) Naphthobenzothiophene	42.475	234	242076	491.136	ng/ml	99
67) Naphthobenzothiophene-2,1	42.475	234	242076	491.136	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191412.D
 Acq On : 22 Dec 2014 5:54 pm
 Operator : PAH9:SR
 Sample : WG754959-3
 Misc : WG754959,Frav19 500ng/ml
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 12 09:02:35 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.388	228	224978	494.865	ng/mL	99
76)	Chrysene	43.552	228	225101	500.818	ng/mL	100
77)	Chrysene/Triphenylene	43.552	228	225101	500.818	ng/mL	100
84)	Benzo[b]fluoranthene	47.436	252	259196	481.965	ng/mL	96
85)	Benzo[j]+[k]fluoranthene	47.518	252	248790	483.028	ng/mL	96
87)	Benzo[e]pyrene	48.451	252	255153	495.396	ng/mL	97
89)	Benzo[a]pyrene	48.652	252	246859	489.086	ng/mL	96
90)	Perylene	48.963	252	245113	481.124	ng/mL	95
91)	Indeno[1,2,3-cd]pyrene	53.545	276	291727M3	465.943	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.609	278	272539	441.070	ng/mL	97
93)	Benzo[g,h,i]perylene	54.879	276	276570	454.740	ng/mL	99
94)	Hopane (T19)	52.622	191	53868	428.482	ng/mL#	89
95)	17a(H),21B(H)-hopane - C3	52.622	191	53868	428.482	ng/mL#	89

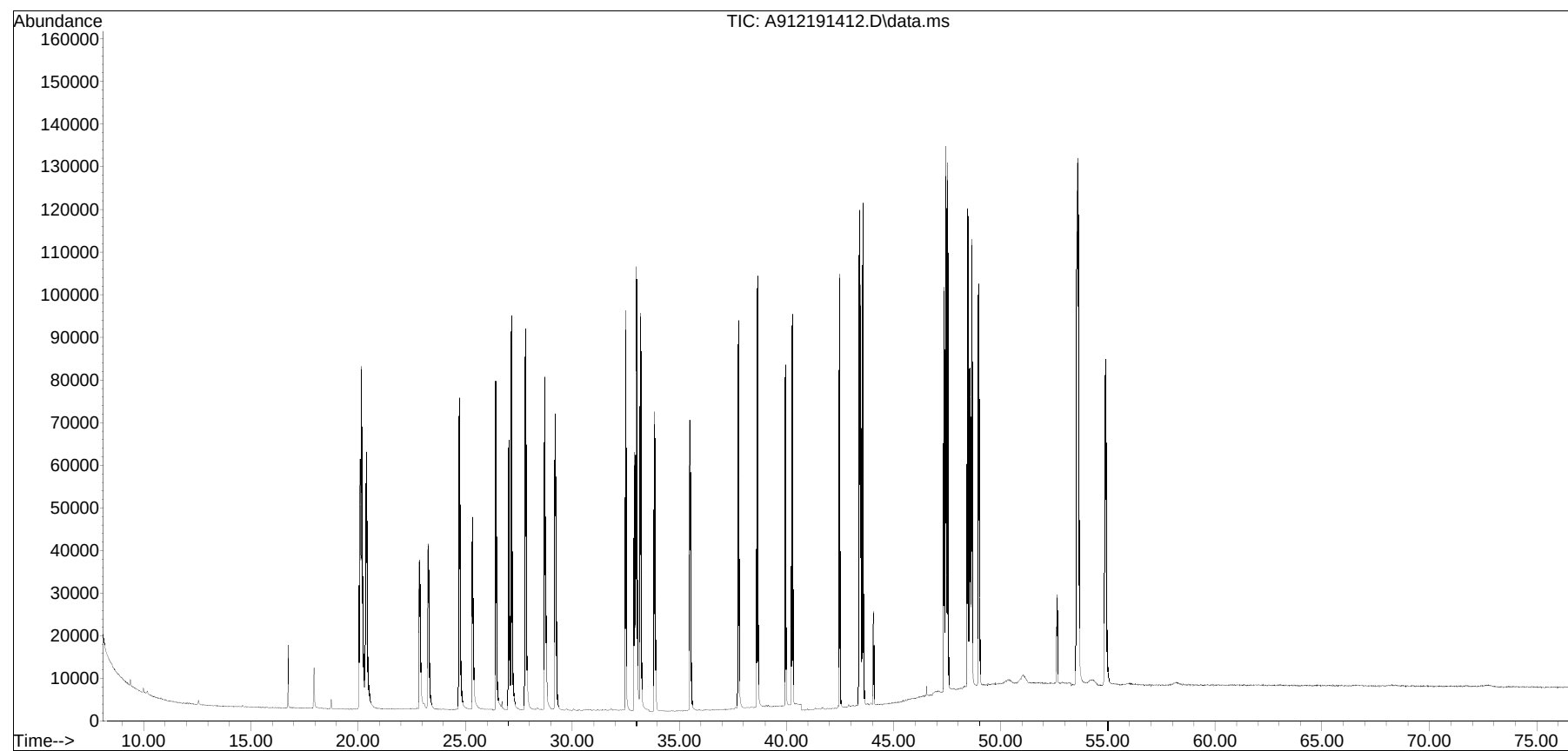
(#) = qualifier out of range (m) = manual integration (+) = signals summed

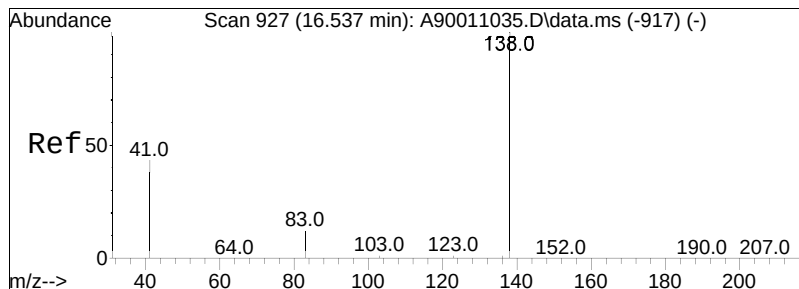
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC19\
Data File : A912191412.D
Acq On : 22 Dec 2014 5:54 pm
Operator : PAH9:SR
Sample : WG754959-3
Misc : WG754959,Frav19 500ng/ml
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 12 09:02:35 2015
Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 15 13:02:08 2014
Response via : Initial Calibration

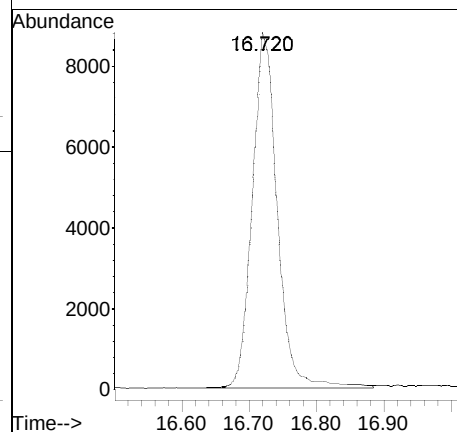
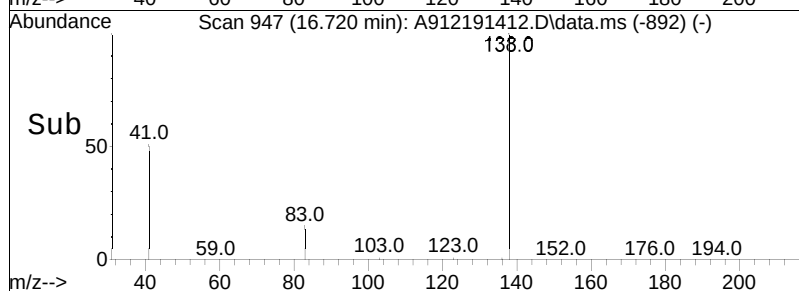
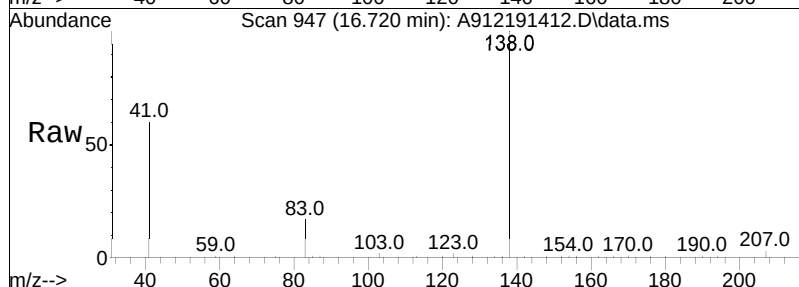
Sub List : ICAL_CCALT_REV2 - CC with five surrogates

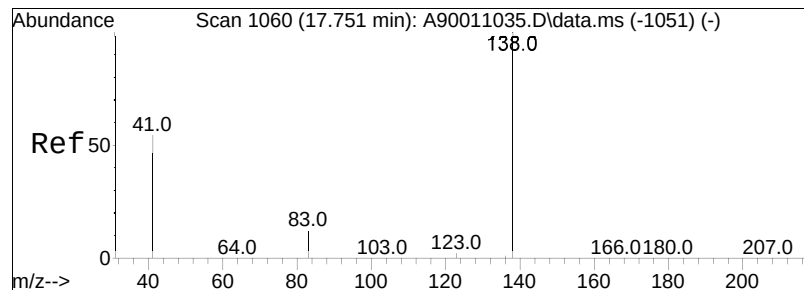




#3
trans-Decalin
Concen: 228.94 ng/mL
RT: 16.720 min Scan# 947
Delta R.T. -0.000 min
Lab File: A912191412.D
Acq: 22 Dec 2014 5:54 pm

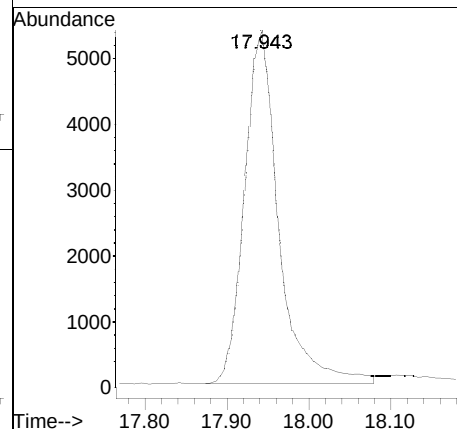
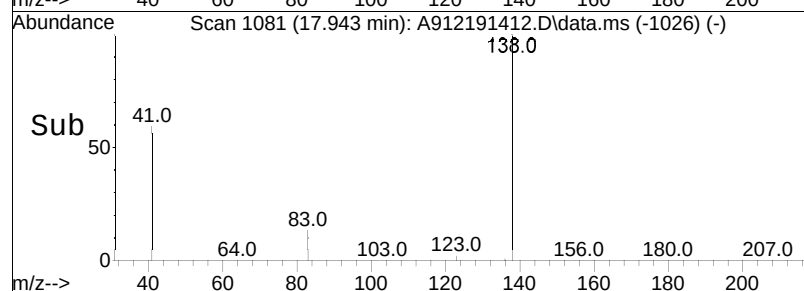
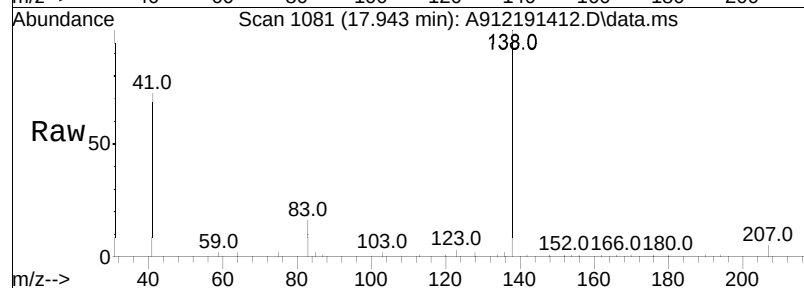
Tgt Ion:138 Resp: 22200

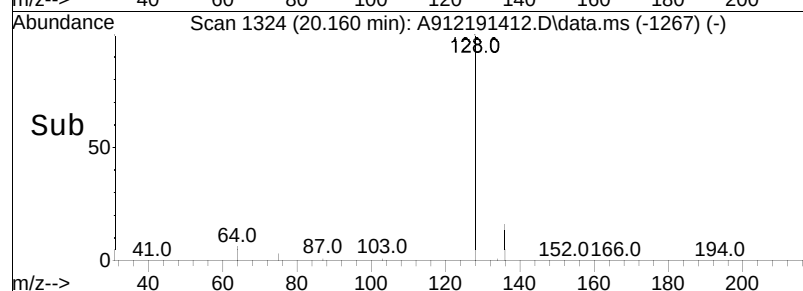
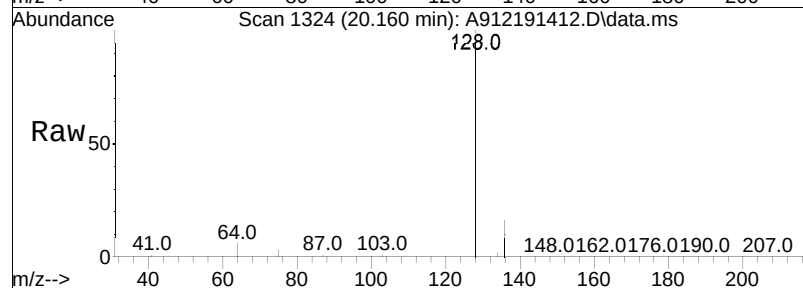
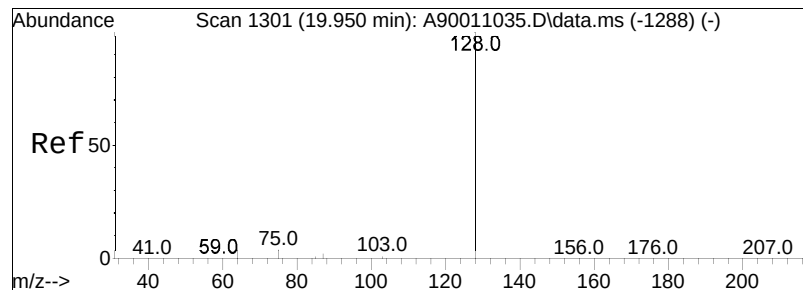




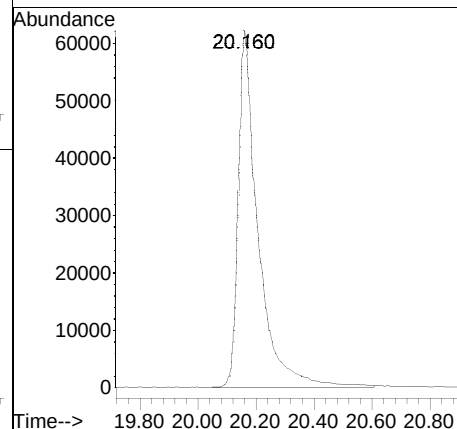
#4
 cis-Decalin
 Concen: 202.46 ng/mL
 RT: 17.943 min Scan# 1081
 Delta R.T. -0.000 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm

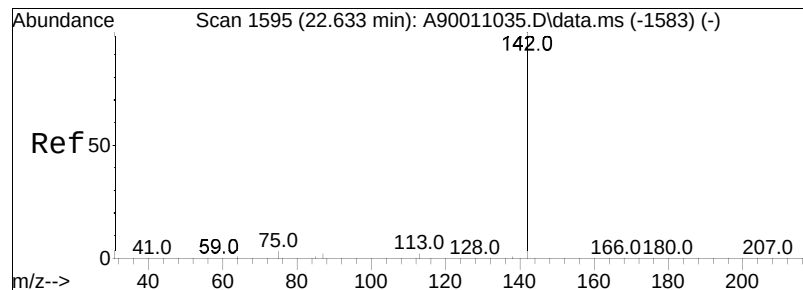
Tgt Ion:138 Resp: 15428





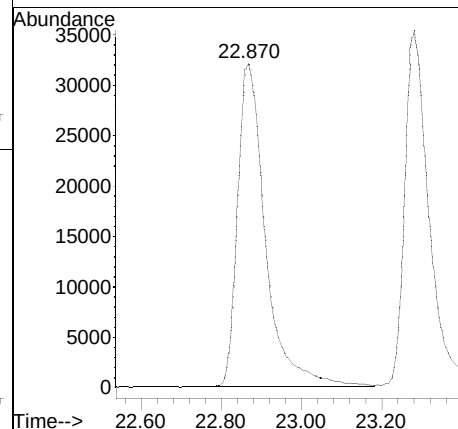
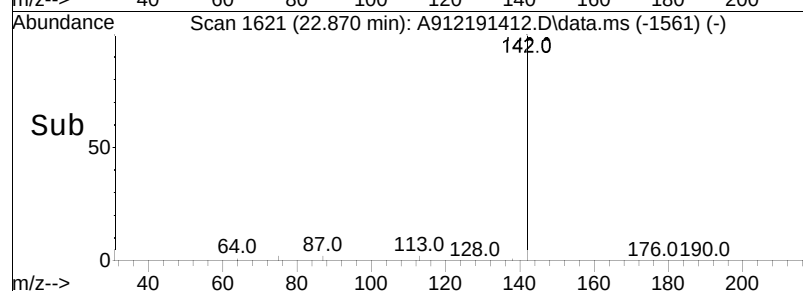
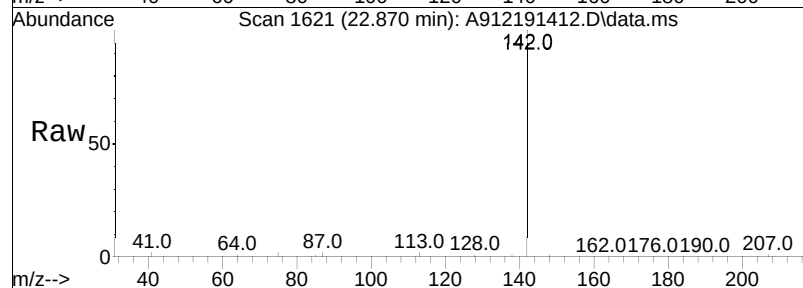
#10
 Naphthalene
 Concen: 496.05 ng/mL
 RT: 20.160 min Scan# 1324
 Delta R.T. 0.018 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm
 Tgt Ion:128 Resp: 289011

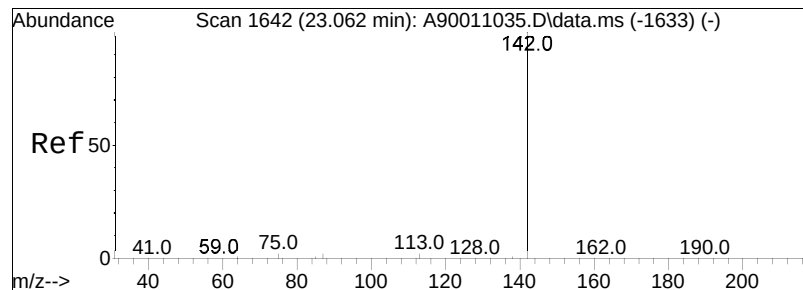




#16
2-Methylnaphthalene
Concen: 494.96 ng/mL
RT: 22.870 min Scan# 1621
Delta R.T. 0.045 min
Lab File: A912191412.D
Acq: 22 Dec 2014 5:54 pm

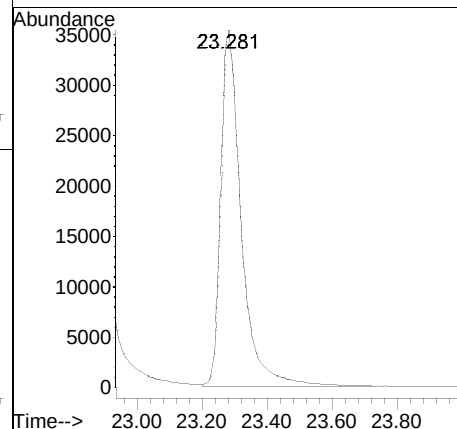
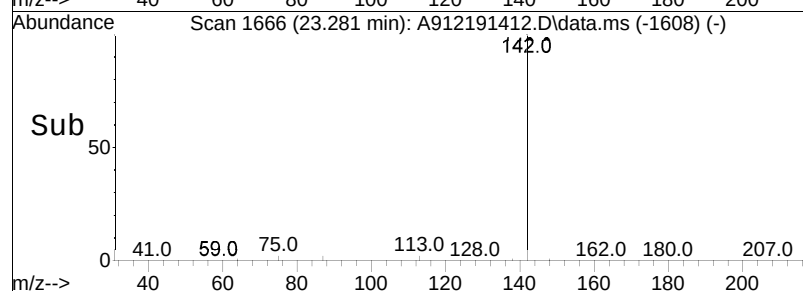
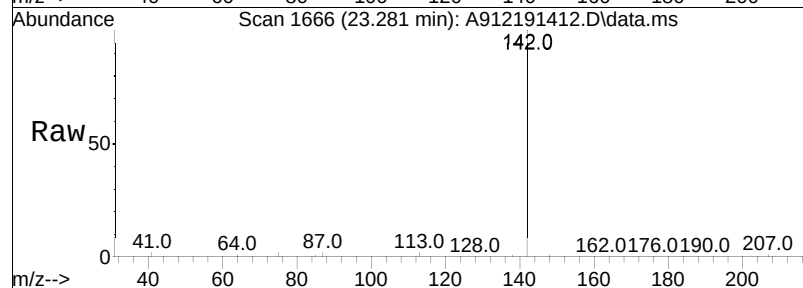
Tgt Ion:142 Resp: 156515

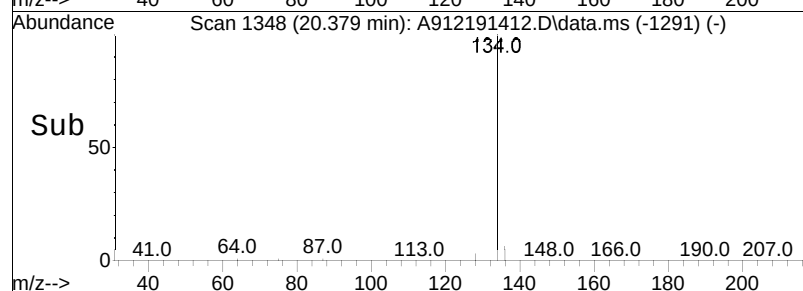
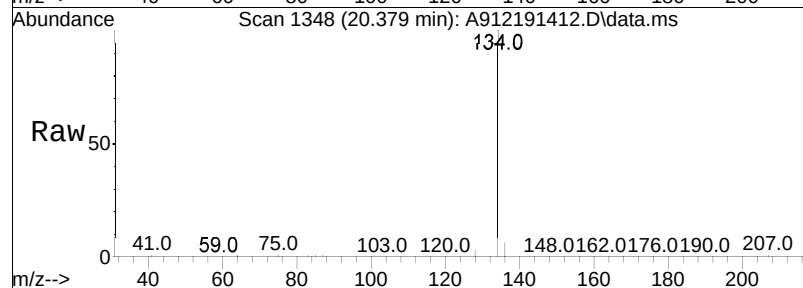
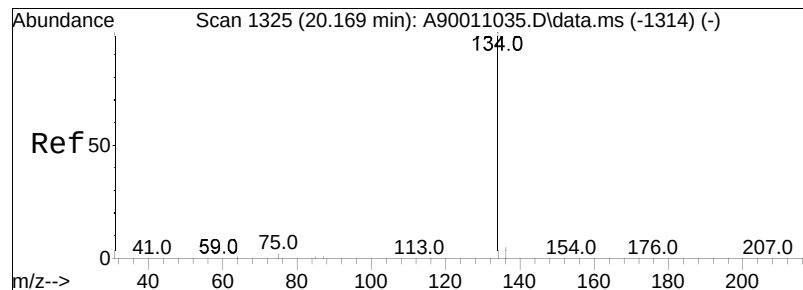




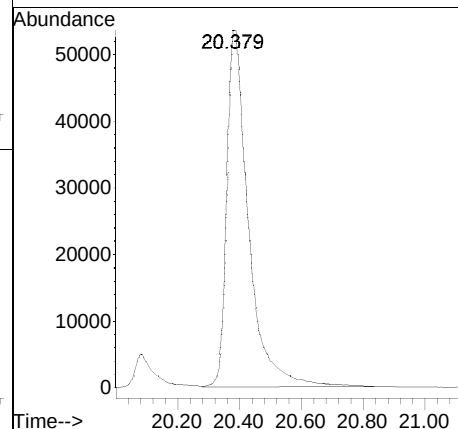
#17
 1-Methylnaphthalene
 Concen: 492.36 ng/mL
 RT: 23.281 min Scan# 1666
 Delta R.T. 0.027 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm

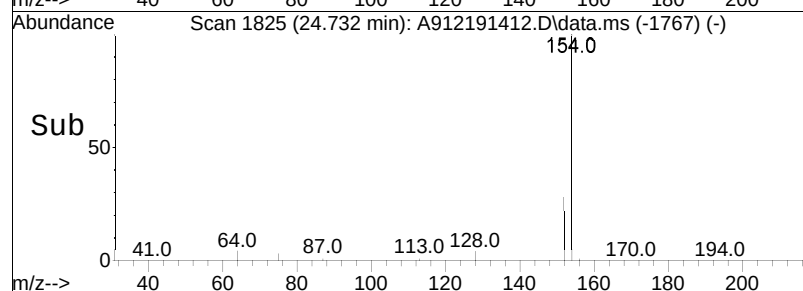
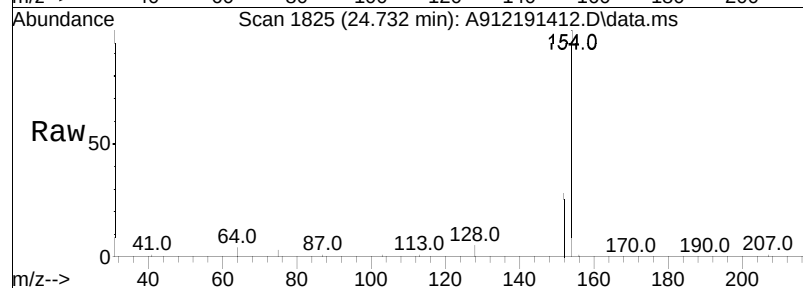
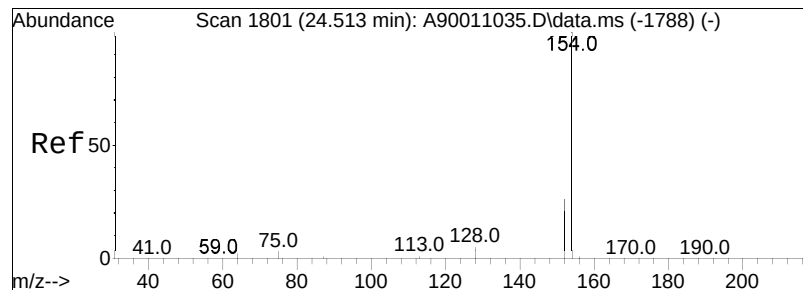
Tgt Ion:142 Resp: 152185



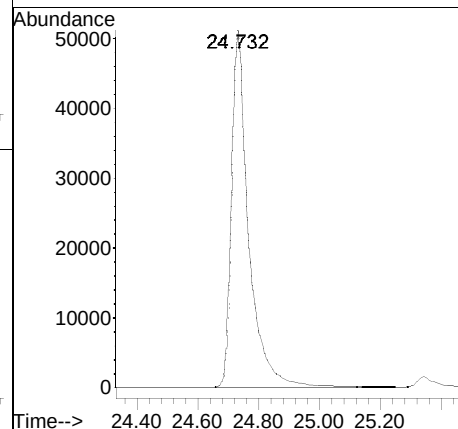


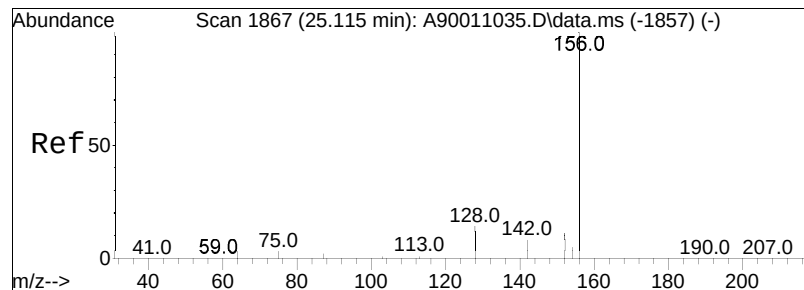
#18
 Benzothiophene
 Concen: 481.85 ng/mL
 RT: 20.379 min Scan# 1348
 Delta R.T. 0.018 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm
 Tgt Ion:134 Resp: 256628





#23
 Biphenyl
 Concen: 500.62 ng/mL
 RT: 24.732 min Scan# 1825
 Delta R.T. 0.027 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm
 Tgt Ion:154 Resp: 195167





#24

2,6-Dimethylnaphthalene

Concen: 493.59 ng/mL

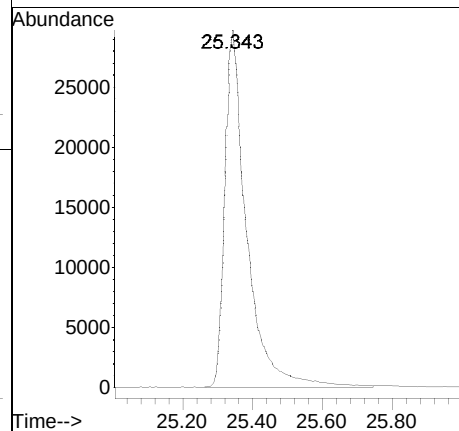
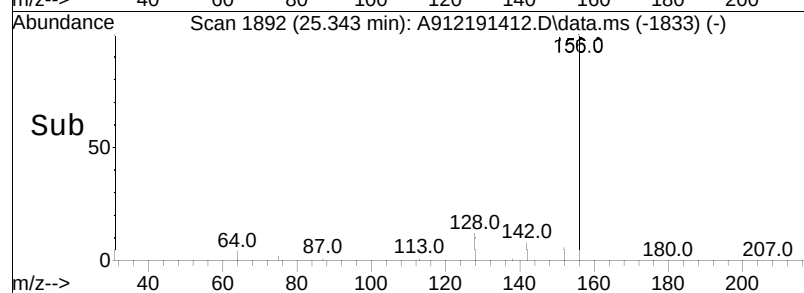
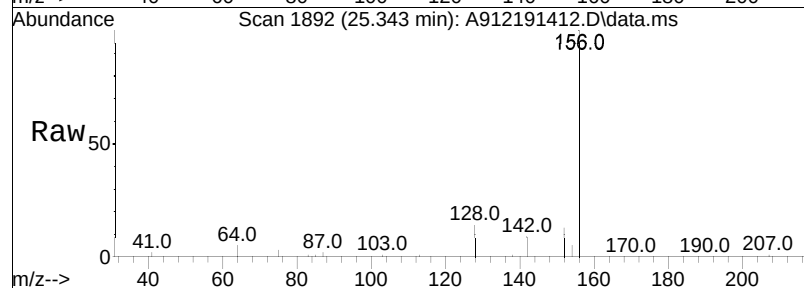
RT: 25.343 min Scan# 1892

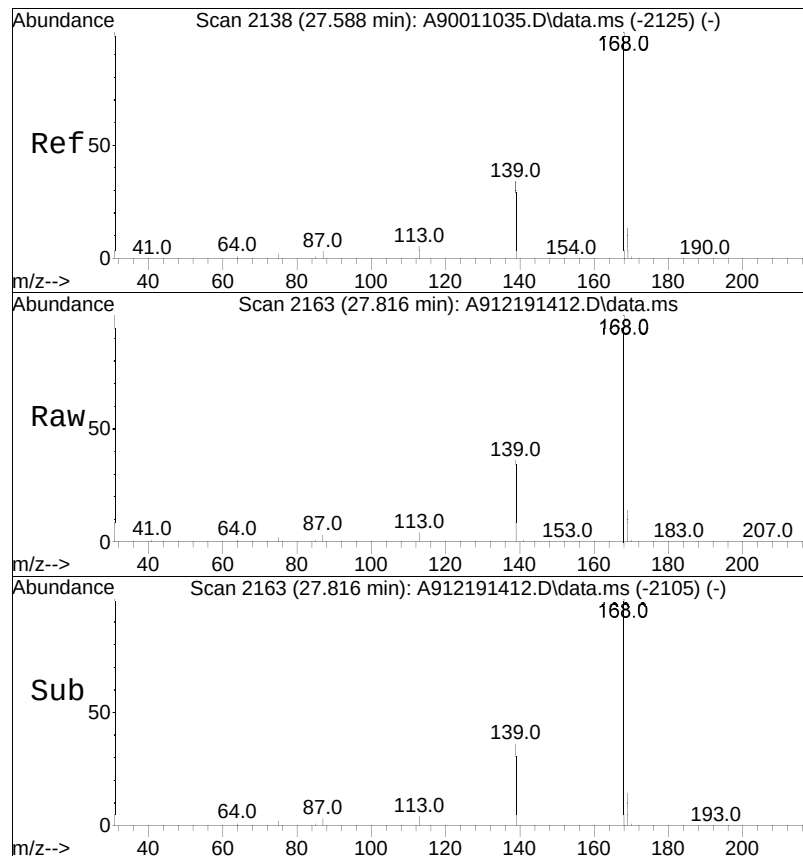
Delta R.T. 0.036 min

Lab File: A912191412.D

Acq: 22 Dec 2014 5:54 pm

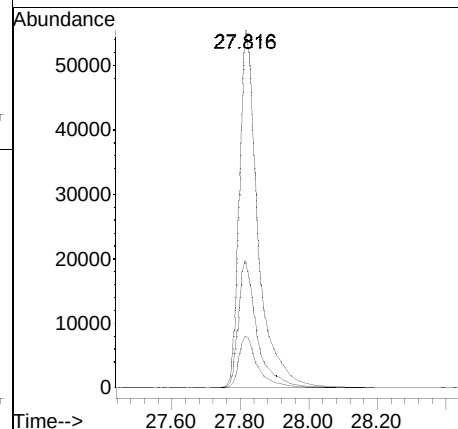
Tgt Ion:156 Resp: 126866

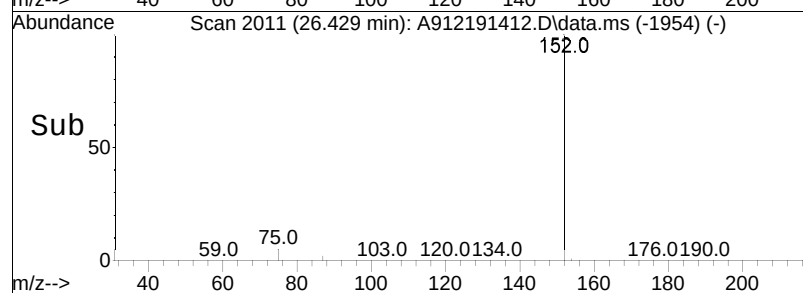
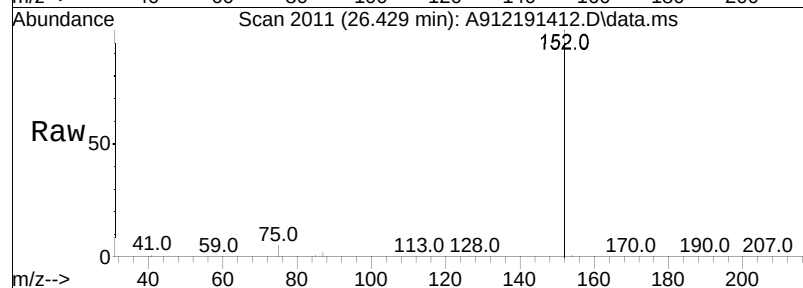
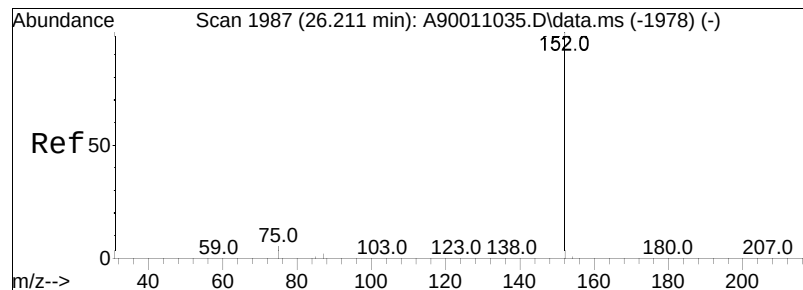




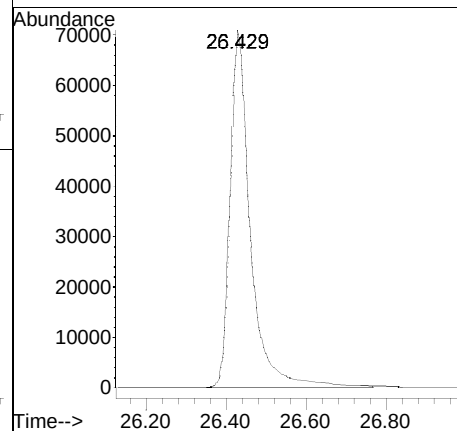
#25
 Dibenzofuran
 Concen: 502.42 ng/mL
 RT: 27.816 min Scan# 2163
 Delta R.T. 0.027 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm

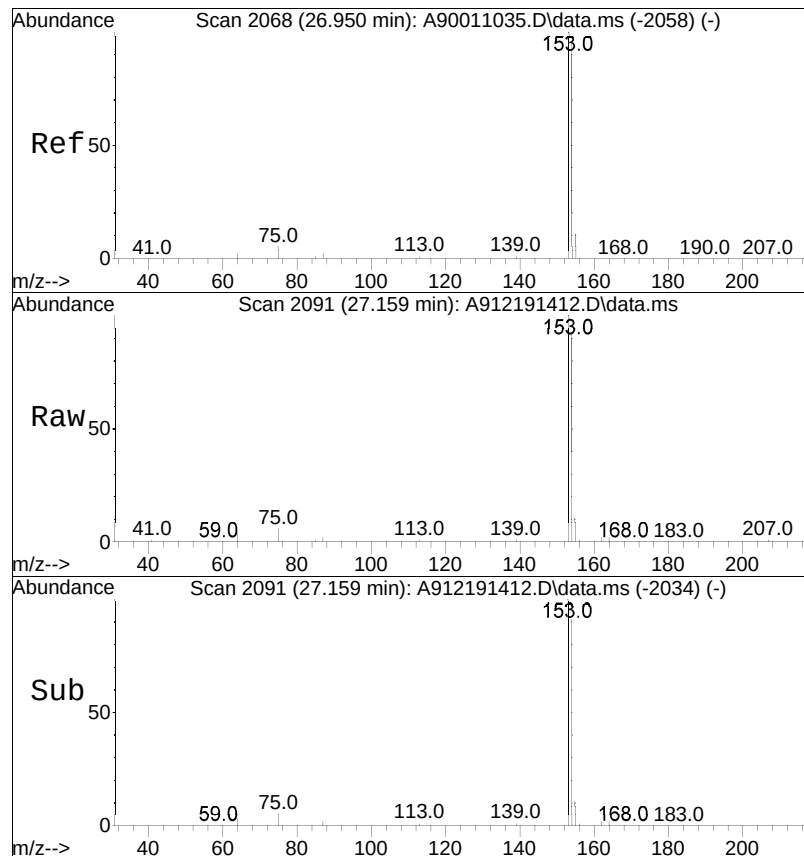
Tgt Ion:	168	Resp:	205624
Ion Ratio	Lower	Upper	
168	100		
139	35.8	25.1	46.7
169	14.5	10.2	19.0





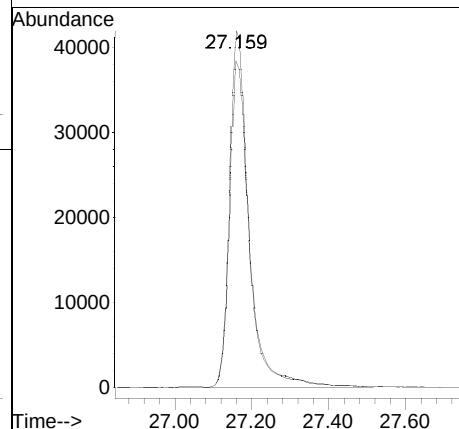
#26
 Acenaphthylene
 Concen: 506.78 ng/mL M4
 RT: 26.429 min Scan# 2011
 Delta R.T. 0.018 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm
 Tgt Ion:152 Resp: 245153

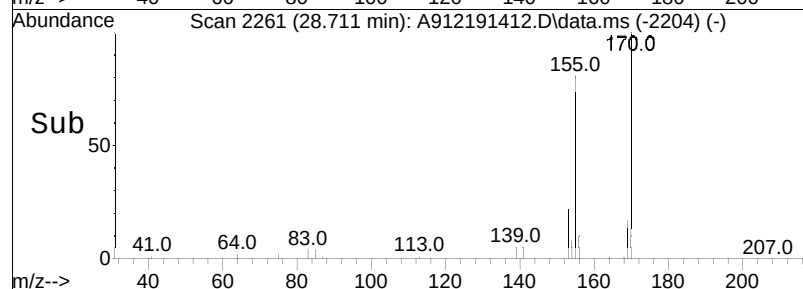
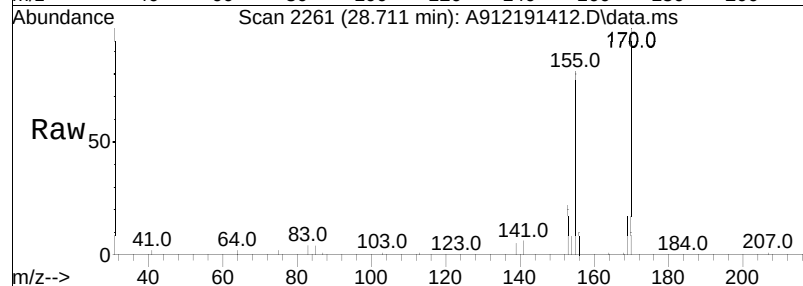
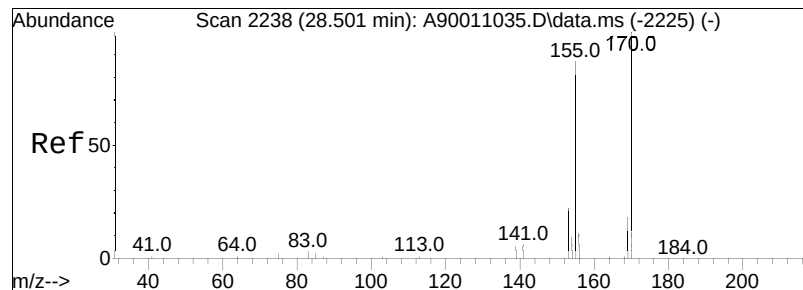




#27
 Acenaphthene
 Concen: 505.36 ng/mL
 RT: 27.159 min Scan# 2091
 Delta R.T. 0.018 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm

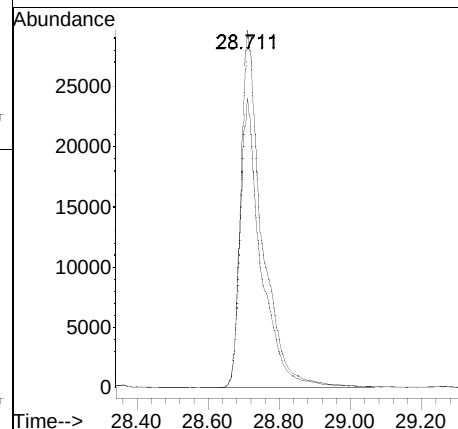
Tgt	Ion	Ratio	Lower	Upper
153	100			
154	91.6	64.9	120.5	

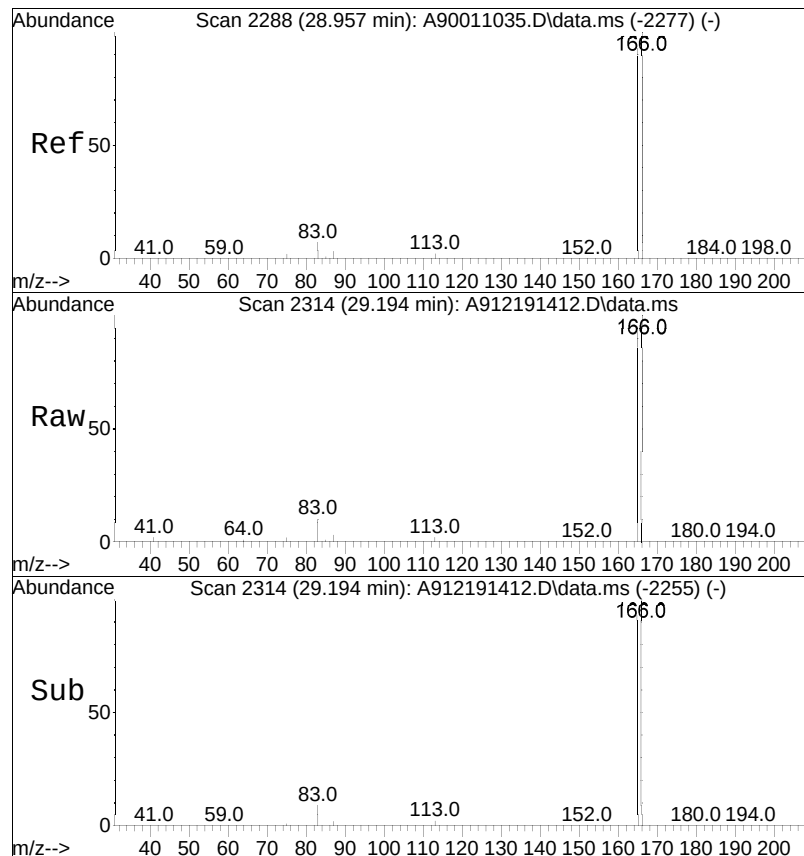




#28
 2,3,5-Trimethylnaphthalene
 Concen: 490.80 ng/mL
 RT: 28.711 min Scan# 2261
 Delta R.T. 0.019 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm

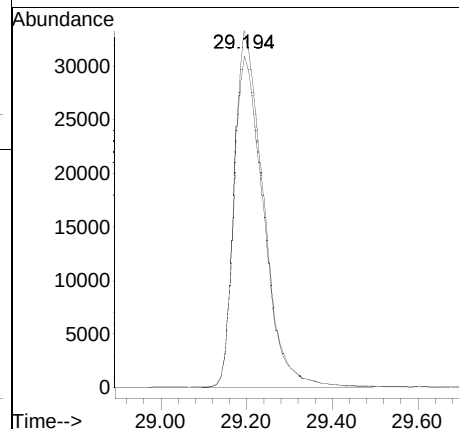
Tgt Ion:170 Resp: 120384
 Ion Ratio Lower Upper
 170 100
 155 79.6 55.9 103.9

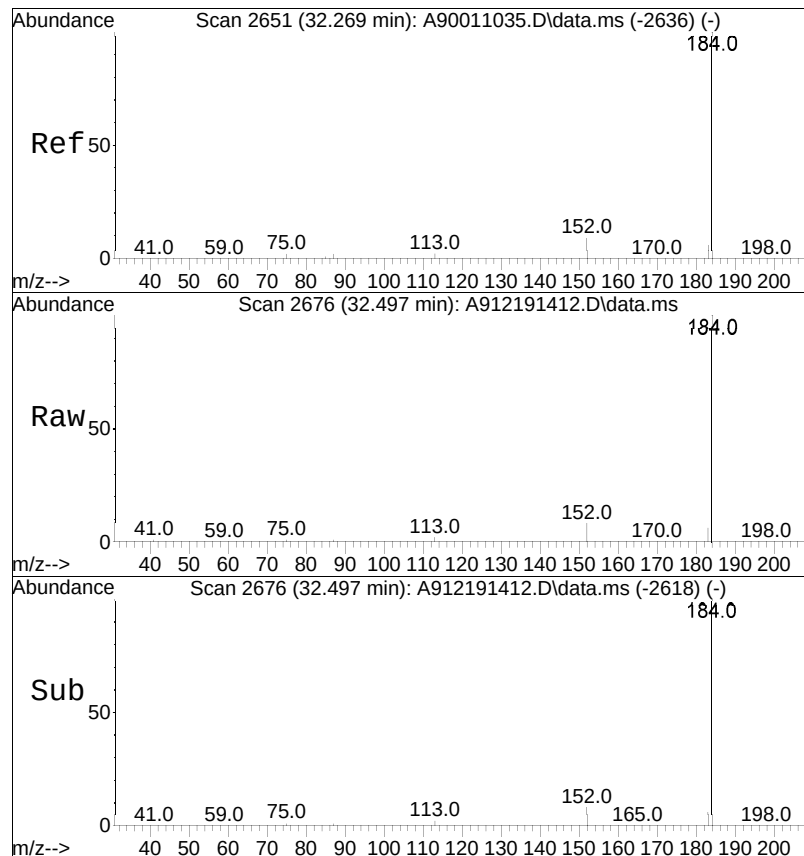




#29
 Fluorene
 Concen: 478.11 ng/mL
 RT: 29.194 min Scan# 2314
 Delta R.T. 0.036 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm

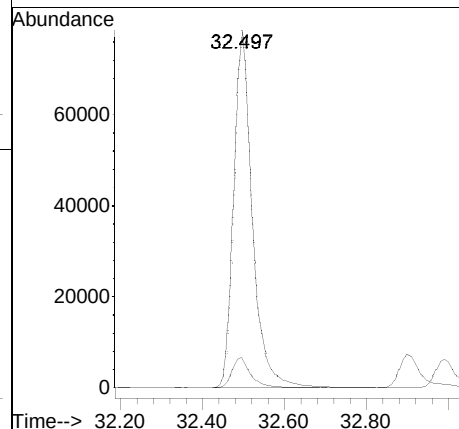
Tgt Ion	Ratio	Lower	Upper
166	100		
165	93.9	65.5	121.7

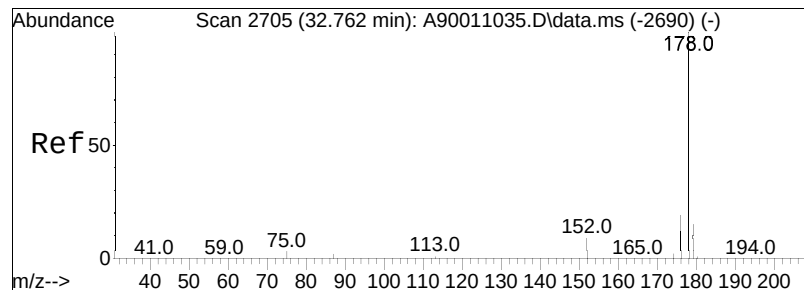




#33
 Dibenzothiophene
 Concen: 503.21 ng/mL
 RT: 32.497 min Scan# 2676
 Delta R.T. 0.028 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm

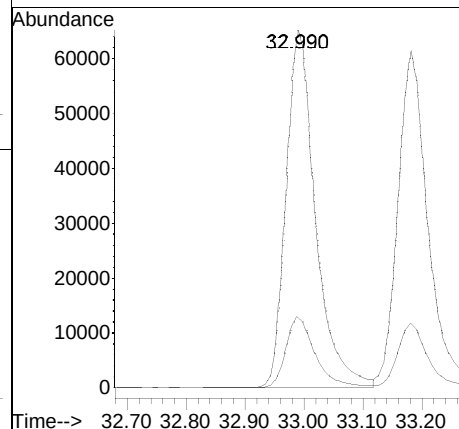
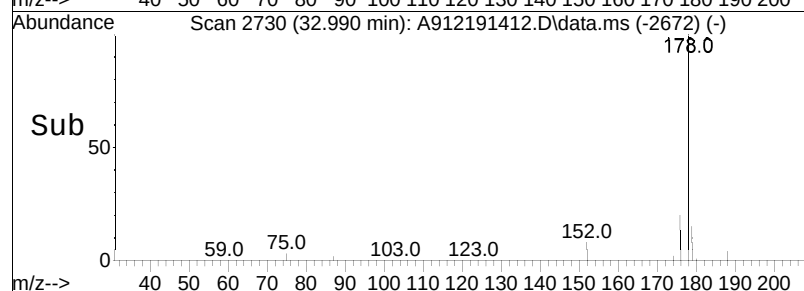
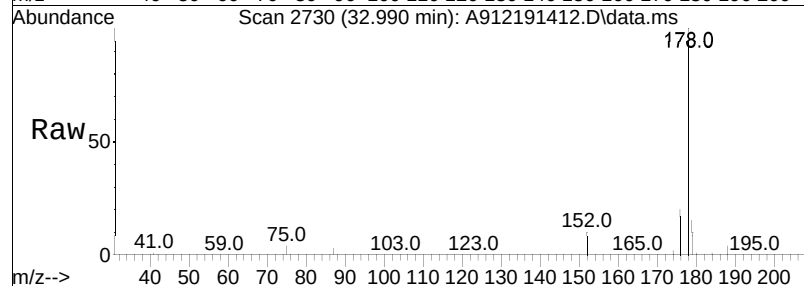
Tgt Ion	Ratio	Lower	Upper
184	100		
152	8.4	6.3	11.7

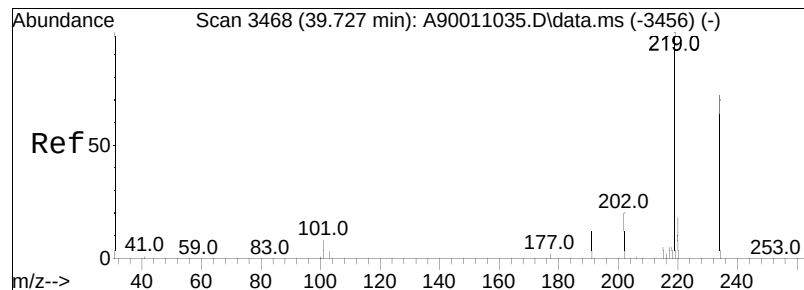




#43
 Phenanthrene
 Concen: 492.65 ng/mL
 RT: 32.990 min Scan# 2730
 Delta R.T. 0.027 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
176	19.7	13.7	25.5





#54

Retene

Concen: 514.58 ng/mL

RT: 39.946 min Scan# 3492

Delta R.T. 0.019 min

Lab File: A912191412.D

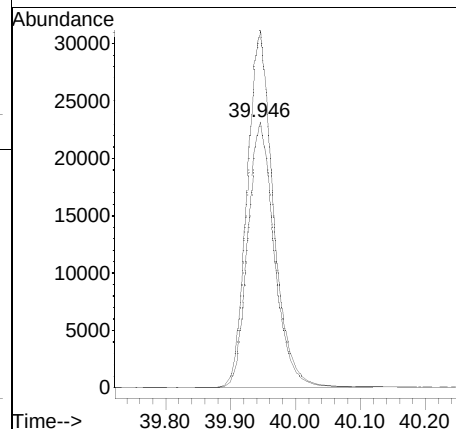
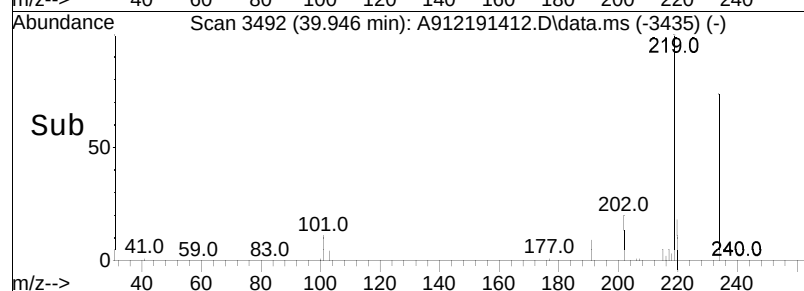
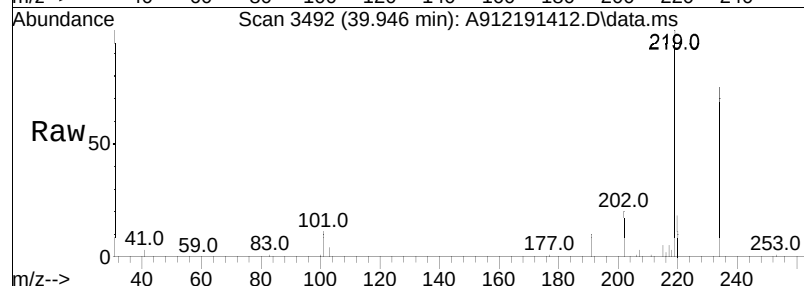
Acq: 22 Dec 2014 5:54 pm

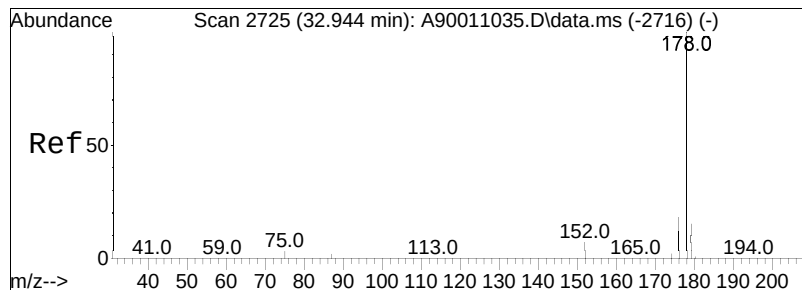
Tgt Ion: 234 Resp: 64752

Ion Ratio Lower Upper

234 100

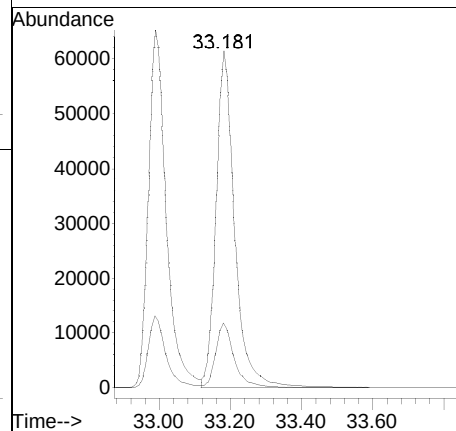
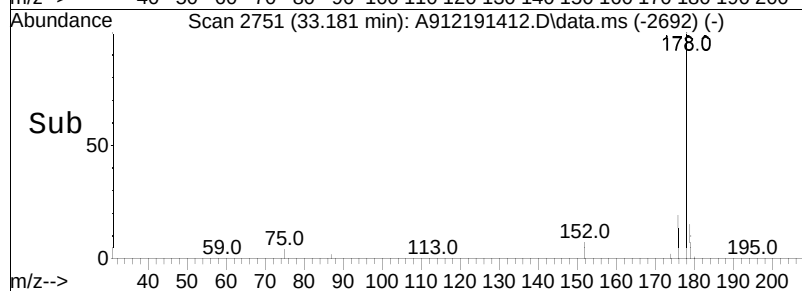
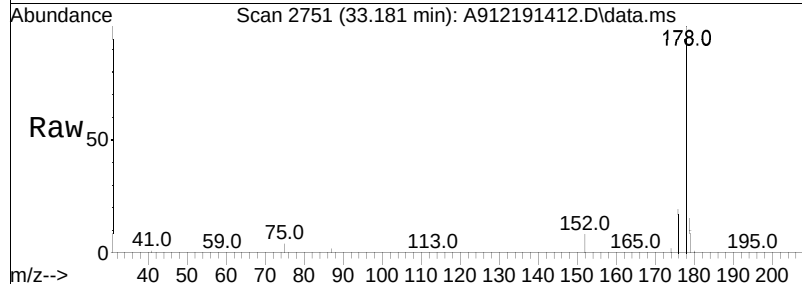
219 132.8 96.7 179.7

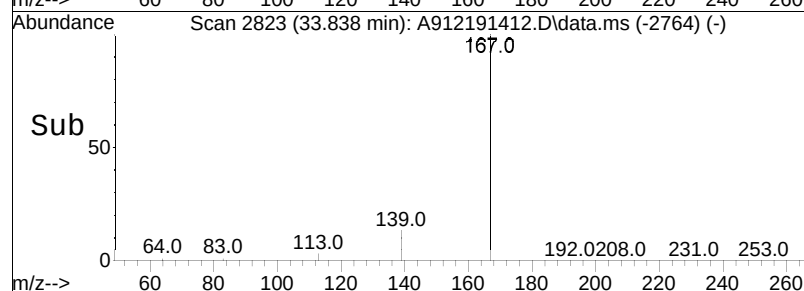
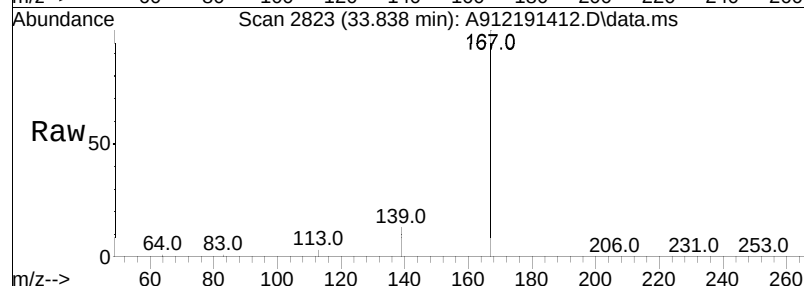
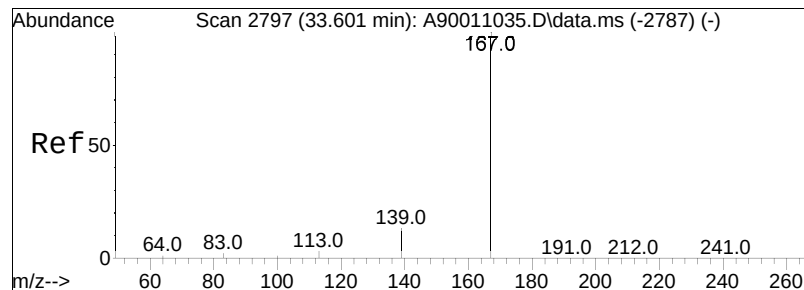




#55
 Anthracene
 Concen: 527.75 ng/mL
 RT: 33.181 min Scan# 2751
 Delta R.T. 0.036 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm

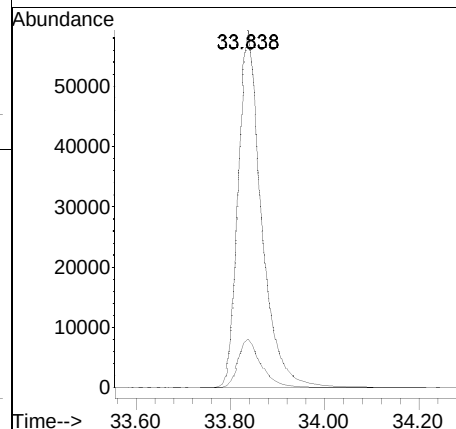
Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.6	13.4	24.8

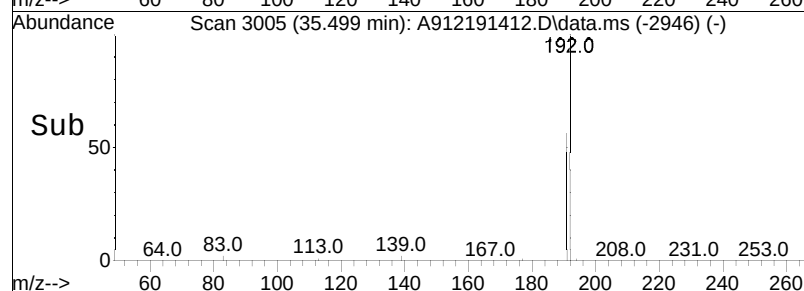
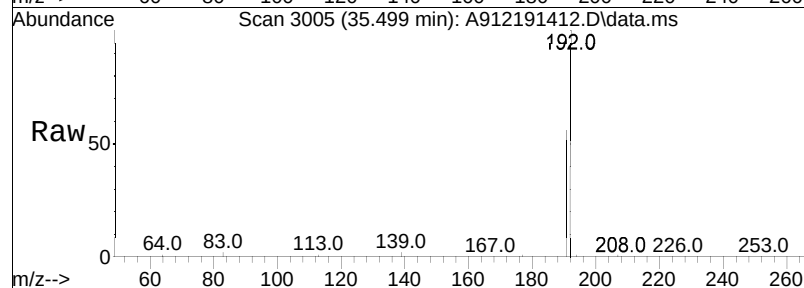
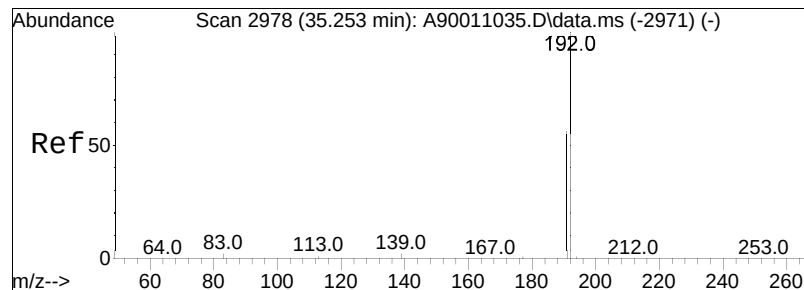




#56
 Carbazole
 Concen: 493.35 ng/mL
 RT: 33.838 min Scan# 2823
 Delta R.T. 0.036 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm

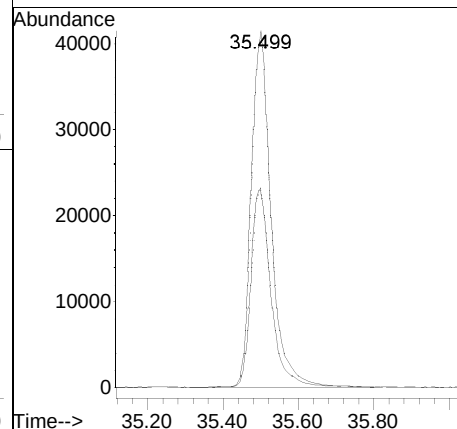
Tgt Ion	Ratio	Lower	Upper
167	100		
139	13.4	9.9	18.3

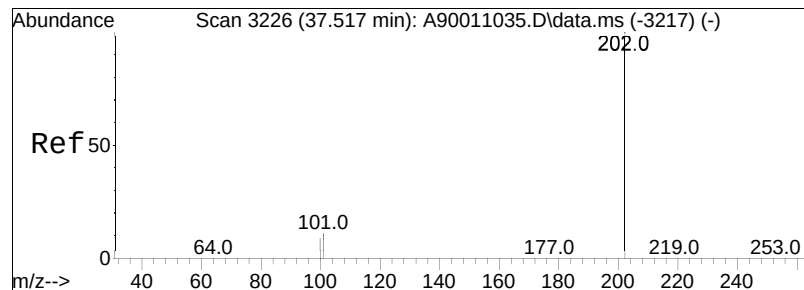




#57
 1-Methylphenanthrene
 Concen: 493.93 ng/mL
 RT: 35.499 min Scan# 3005
 Delta R.T. 0.036 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm

Tgt Ion	192	Ratio	100	Resp	149676
Ion	192	100			
Ratio	191	55.3	39.8	74.0	





#58

Fluoranthene

Concen: 493.15 ng/mL M4

RT: 37.754 min Scan# 3252

Delta R.T. 0.027 min

Lab File: A912191412.D

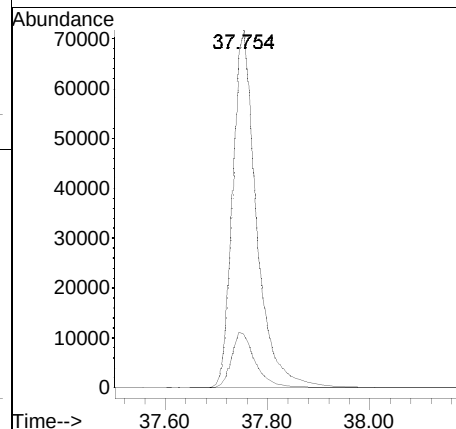
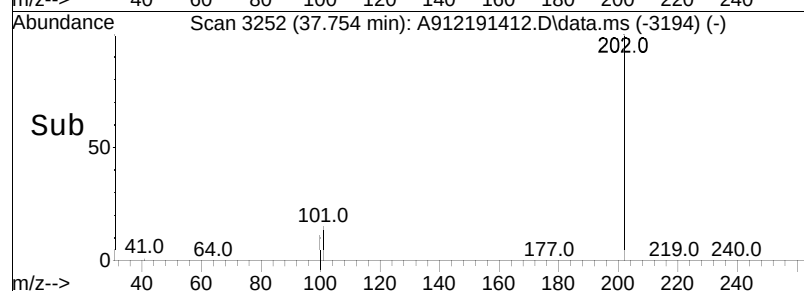
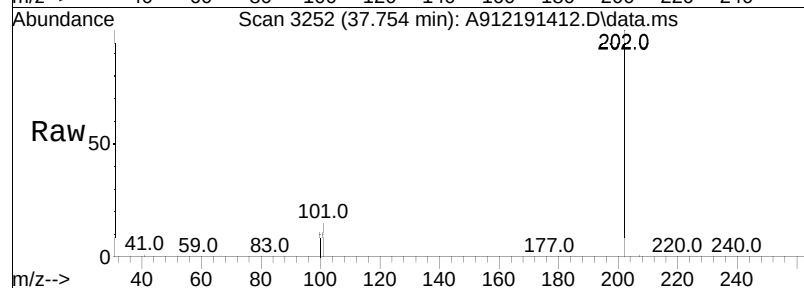
Acq: 22 Dec 2014 5:54 pm

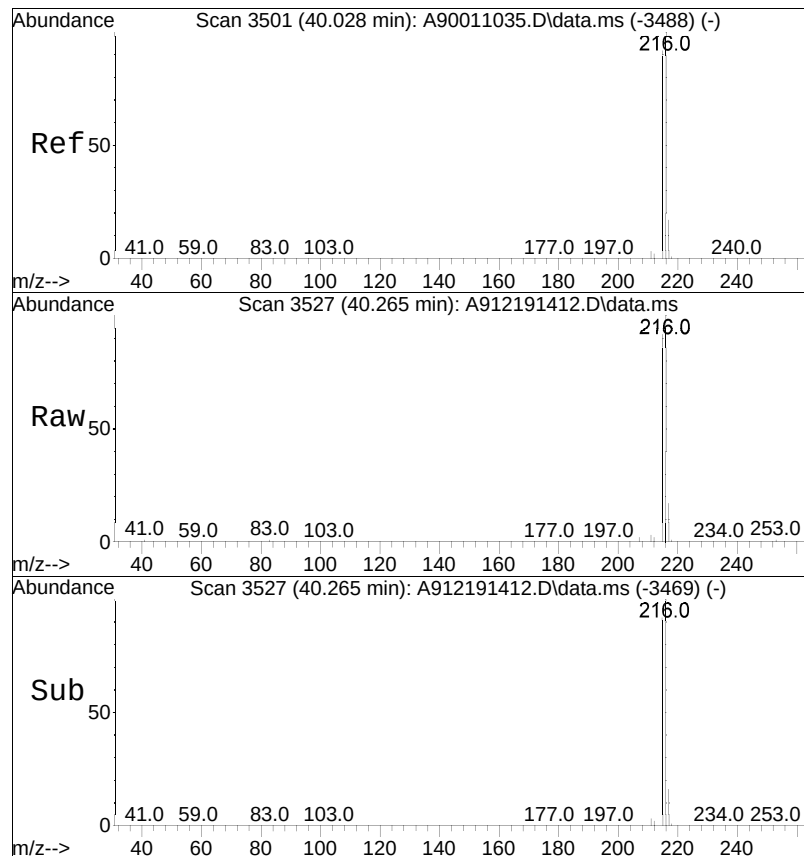
Tgt Ion: 202 Resp: 229109

Ion Ratio Lower Upper

202 100

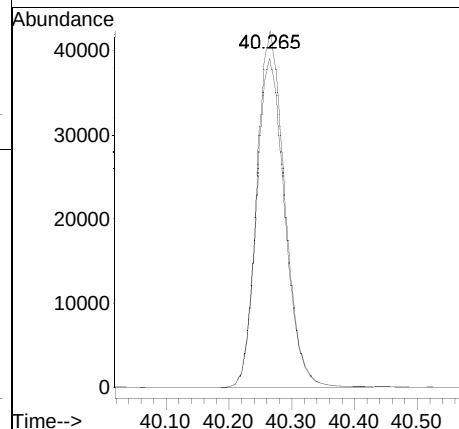
101 15.7 11.8 22.0

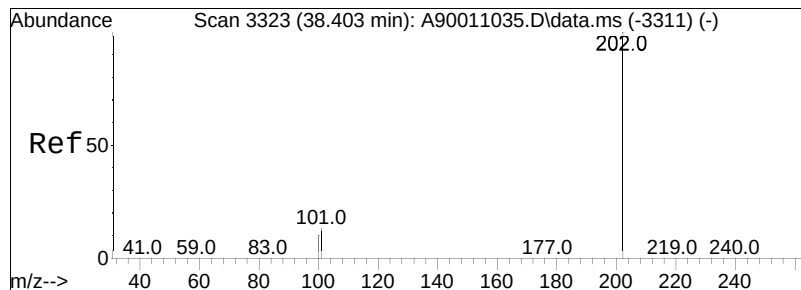




#59
 Benzo(b)fluorene
 Concen: 466.60 ng/mL
 RT: 40.265 min Scan# 3527
 Delta R.T. 0.027 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm

Tgt Ion	Ratio	Lower	Upper
216	100		
215	92.9	64.3	119.3





#60

Pyrene

Concen: 514.70 ng/mL

RT: 38.640 min Scan# 3349

Delta R.T. 0.027 min

Lab File: A912191412.D

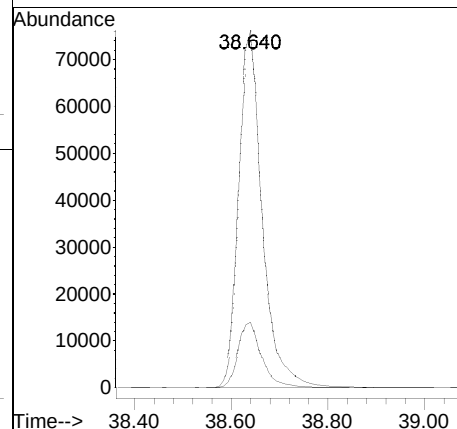
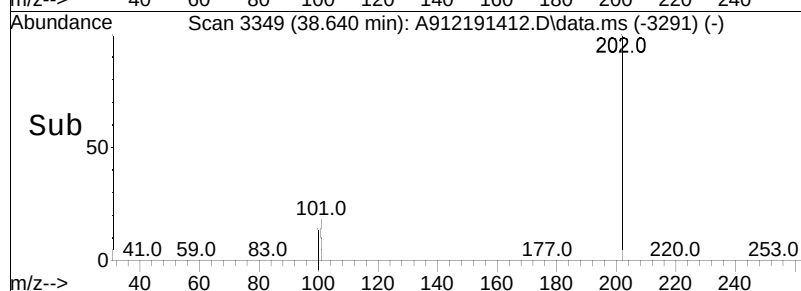
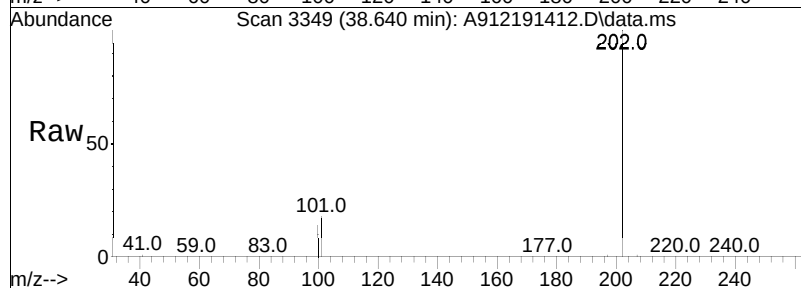
Acq: 22 Dec 2014 5:54 pm

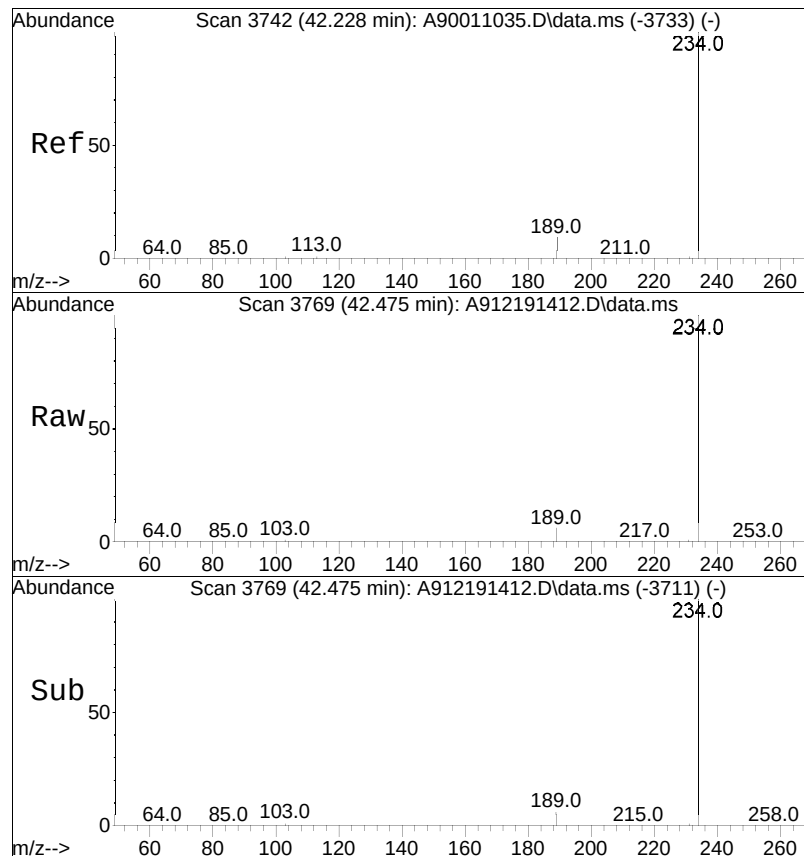
Tgt Ion: 202 Resp: 254360

Ion Ratio Lower Upper

202 100

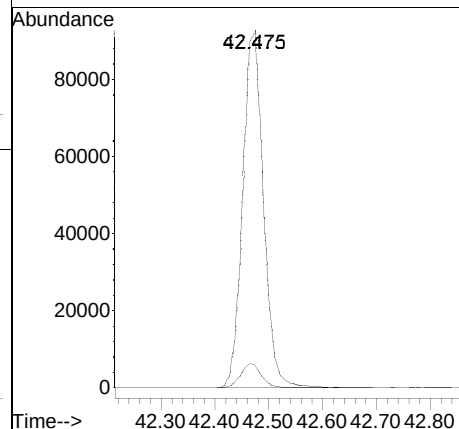
101 18.5 14.2 26.4

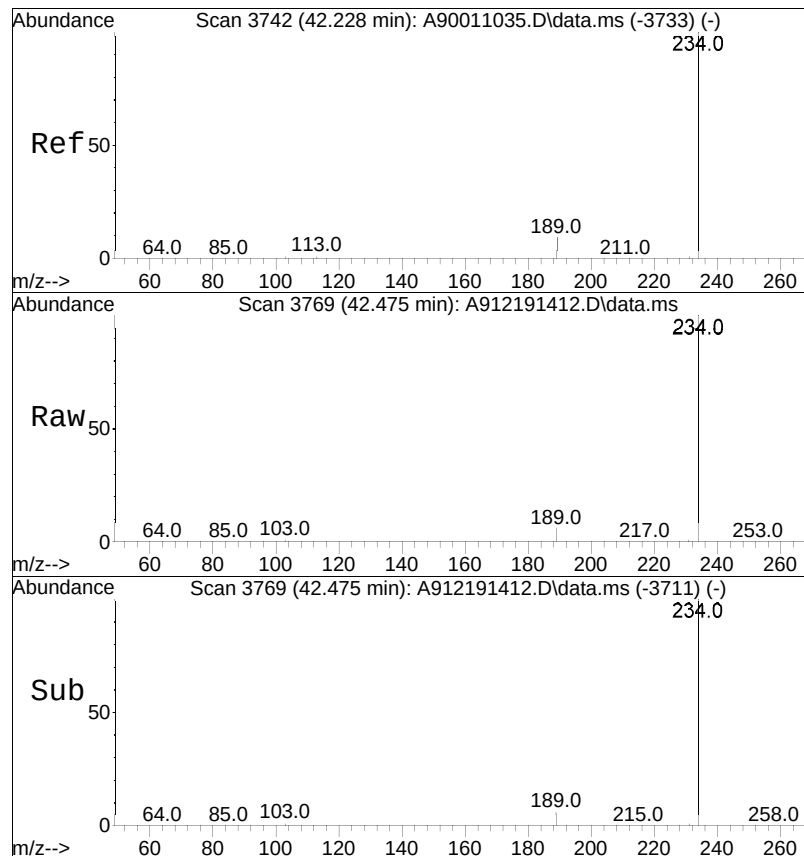




#66
 Naphthobenzothiophene
 Concen: 491.14 ng/ml
 RT: 42.475 min Scan# 3769
 Delta R.T. 0.028 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm

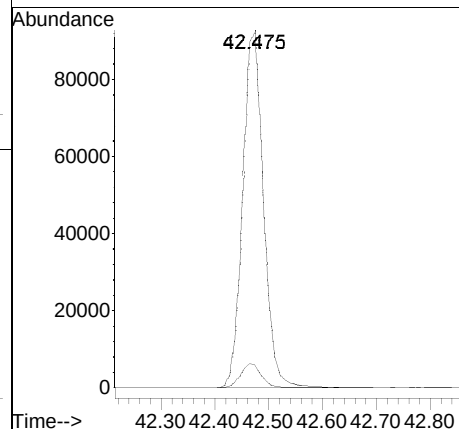
Tgt	Ion	Ratio	Lower	Upper
234	100			
189	6.8		4.9	9.1

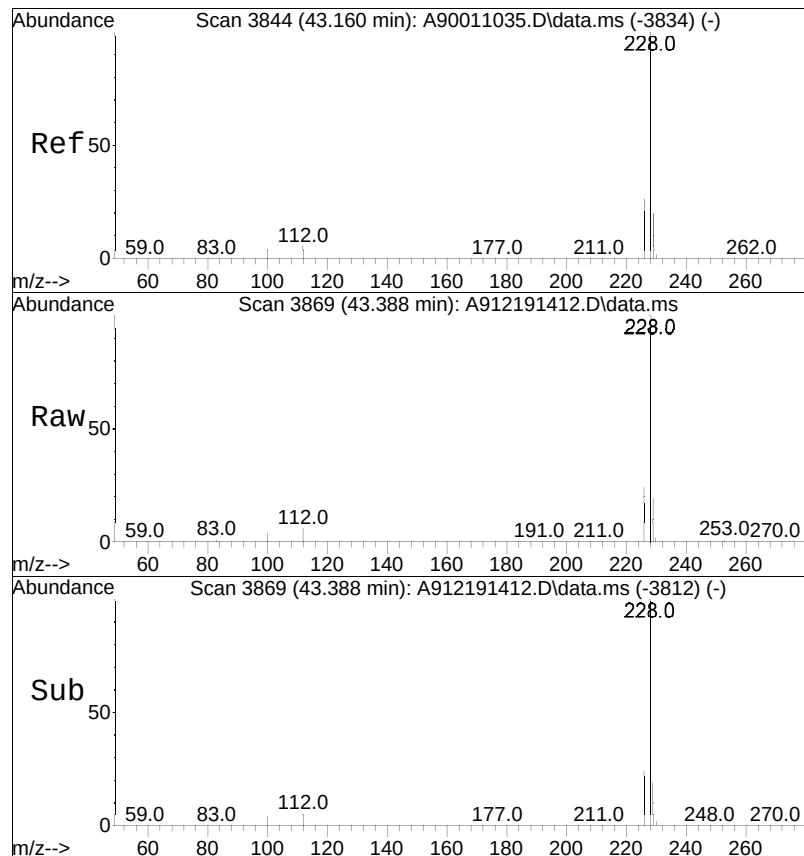




#67
 Naphthobenzothiophene-2,1-D
 Concen: 491.14 ng/mL
 RT: 42.475 min Scan# 3769
 Delta R.T. 0.028 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm

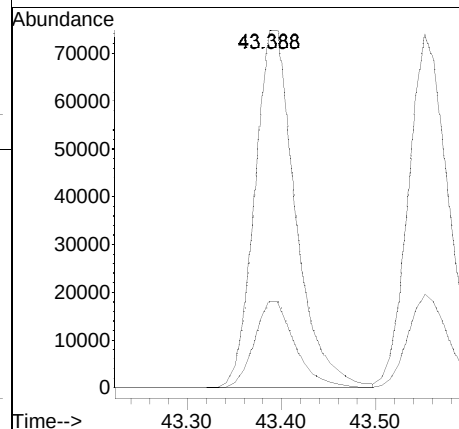
Tgt	Ion	Ratio	Lower	Upper
234	100			
189	6.8		4.9	9.1

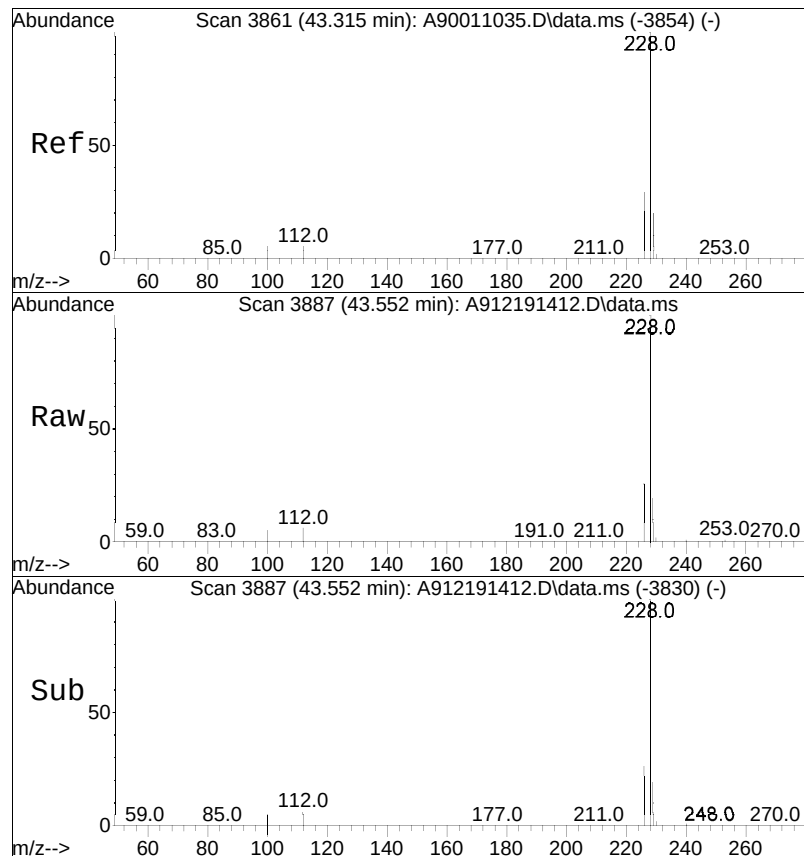




#75
 Benz[a]anthracene
 Concen: 494.87 ng/mL
 RT: 43.388 min Scan# 3869
 Delta R.T. 0.019 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm

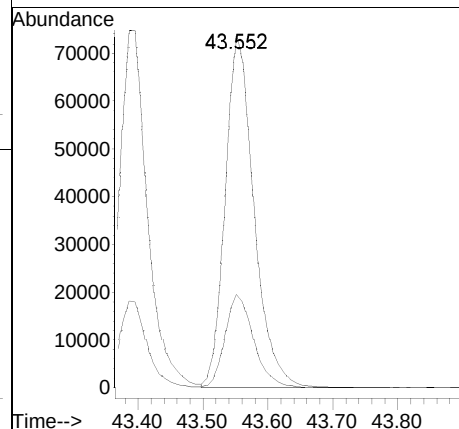
Tgt Ion	Ratio	Lower	Upper
228	100		
226	24.0	17.3	32.1

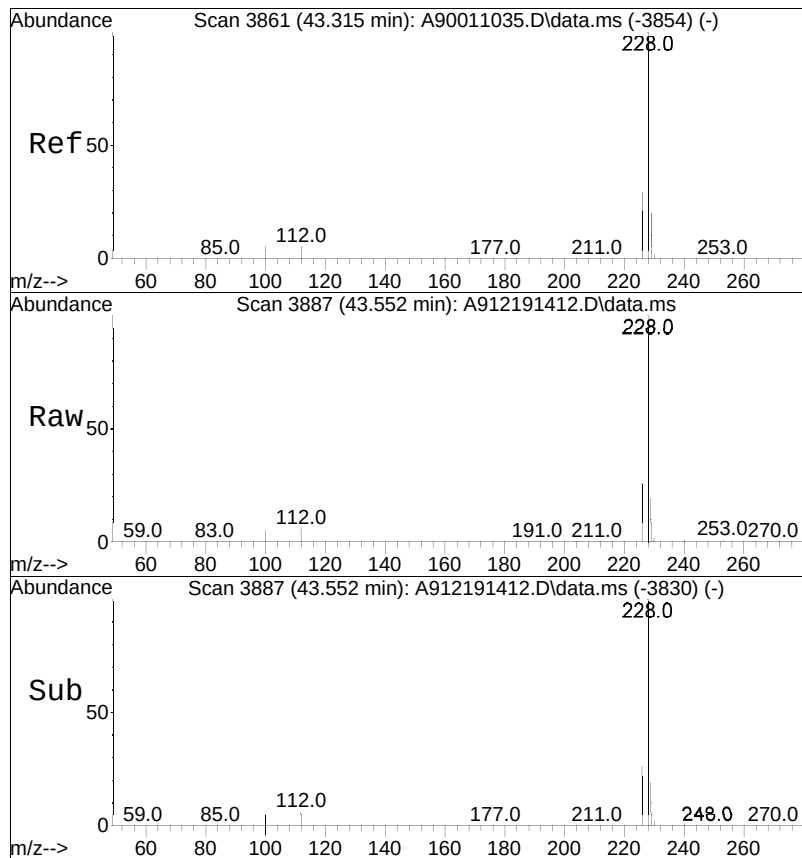




#76
 Chrysene
 Concen: 500.82 ng/mL
 RT: 43.552 min Scan# 3887
 Delta R.T. 0.018 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm

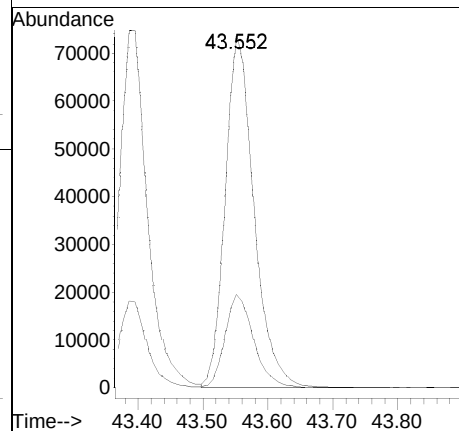
Tgt	Ion	Ratio	Lower	Upper
228	228	100		
226	226	26.5	18.8	34.8

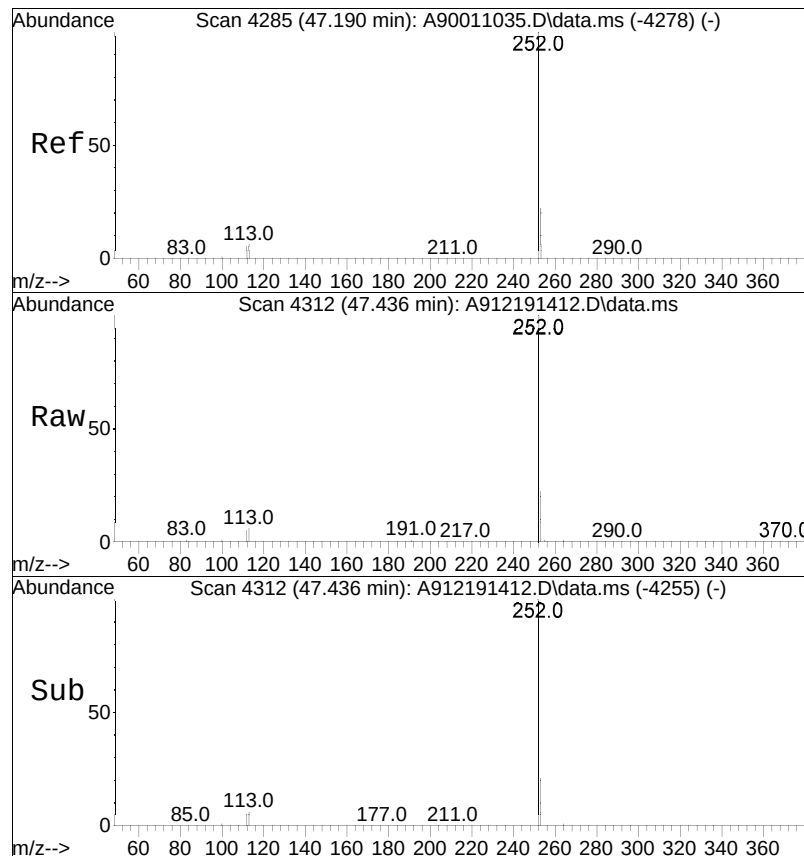




#77
 Chrysene/Triphenylene
 Concen: 500.82 ng/mL
 RT: 43.552 min Scan# 3887
 Delta R.T. 0.018 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm

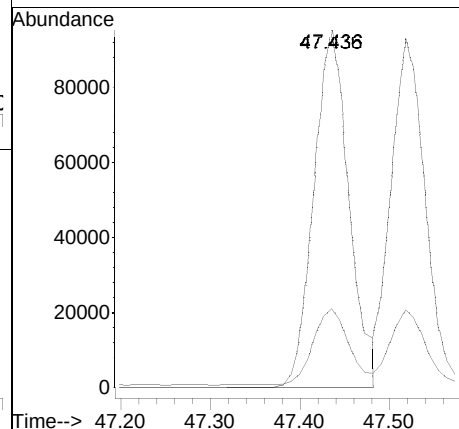
Tgt	Ion	Ratio	Lower	Upper
228	228	100		
226	226	26.5	18.8	34.8

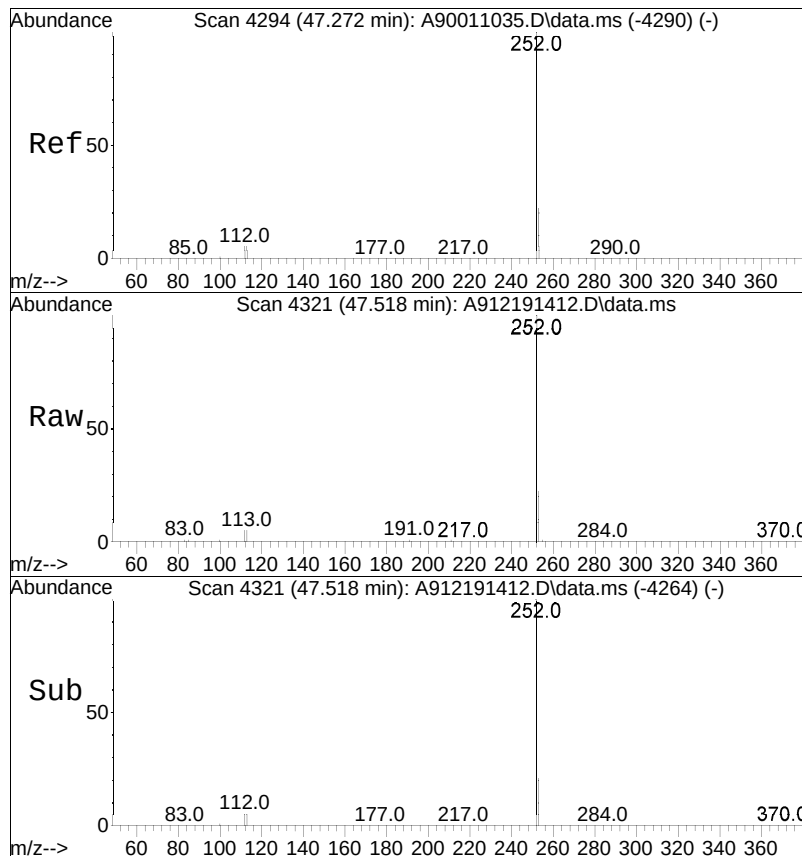




#84
Benzo[b]fluoranthene
Concen: 481.97 ng/mL
RT: 47.436 min Scan# 4312
Delta R.T. 0.018 min
Lab File: A912191412.D
Acq: 22 Dec 2014 5:54 pm

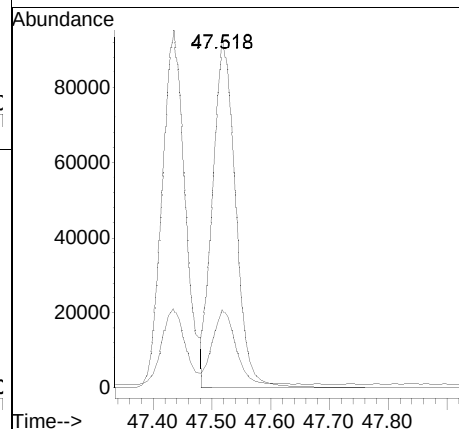
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.3	16.4	30.4	

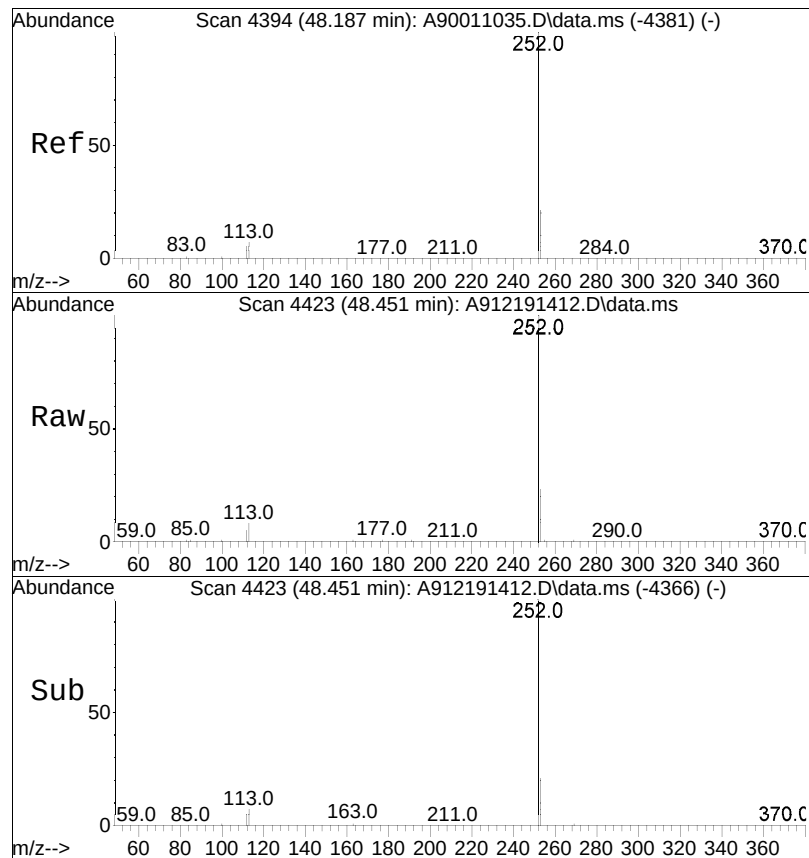




#85
 Benzo[j]+[k]fluoranthene
 Concen: 483.03 ng/mL
 RT: 47.518 min Scan# 4321
 Delta R.T. 0.018 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm

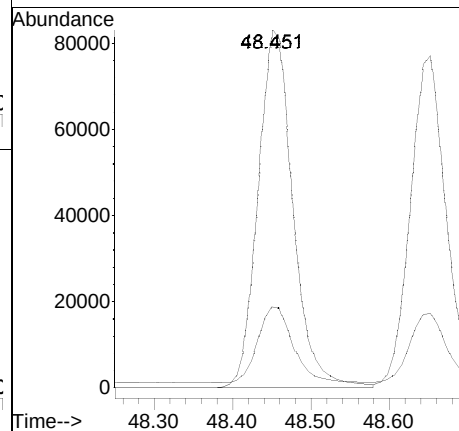
Tgt	Ion	Ratio	Lower	Upper
252	252	100		
253	253	21.3	16.1	29.9

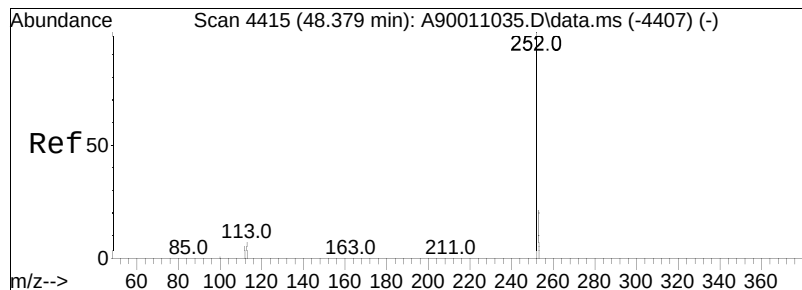




#87
 Benzo[e]pyrene
 Concen: 495.40 ng/mL
 RT: 48.451 min Scan# 4423
 Delta R.T. 0.018 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm

Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.7	16.2	30.0	





#89

Benzo[a]pyrene

Concen: 489.09 ng/mL

RT: 48.652 min Scan# 4445

Delta R.T. 0.027 min

Lab File: A912191412.D

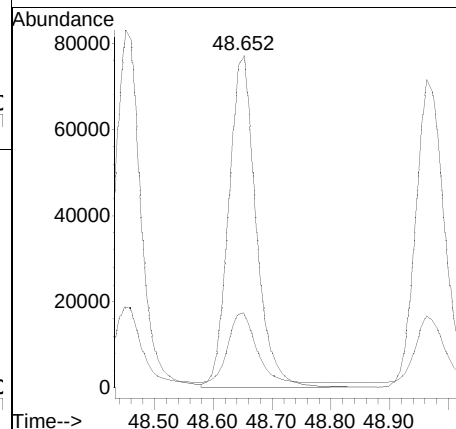
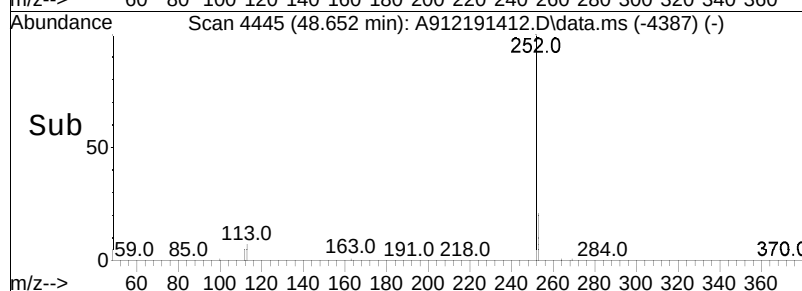
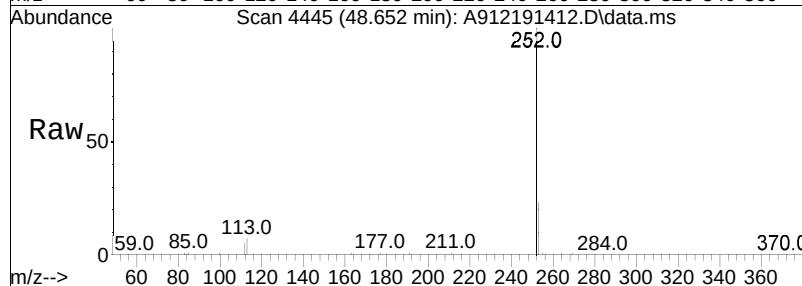
Acq: 22 Dec 2014 5:54 pm

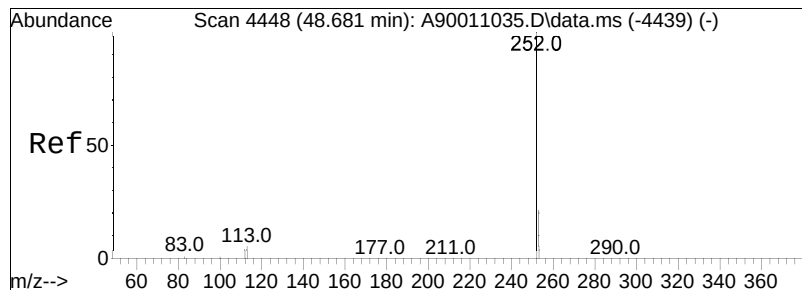
Tgt Ion: 252 Resp: 246859

Ion Ratio Lower Upper

252 100

253 21.7 16.4 30.6





#90

Perylene

Concen: 481.12 ng/mL

RT: 48.963 min Scan# 4479

Delta R.T. 0.018 min

Lab File: A912191412.D

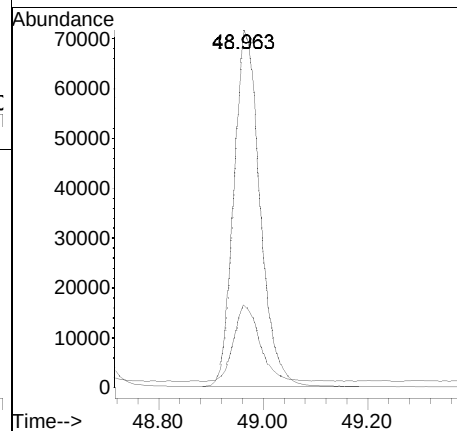
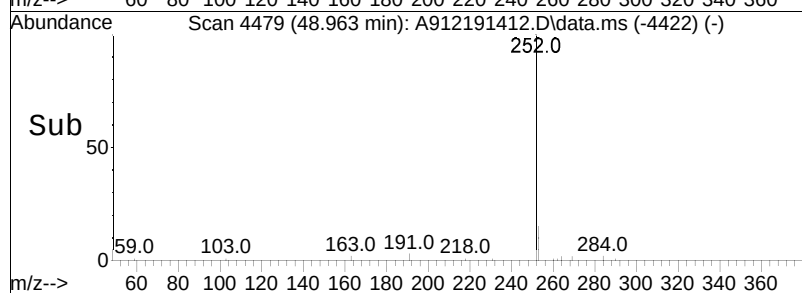
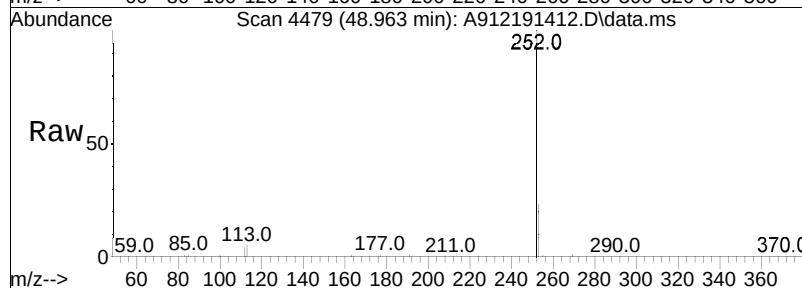
Acq: 22 Dec 2014 5:54 pm

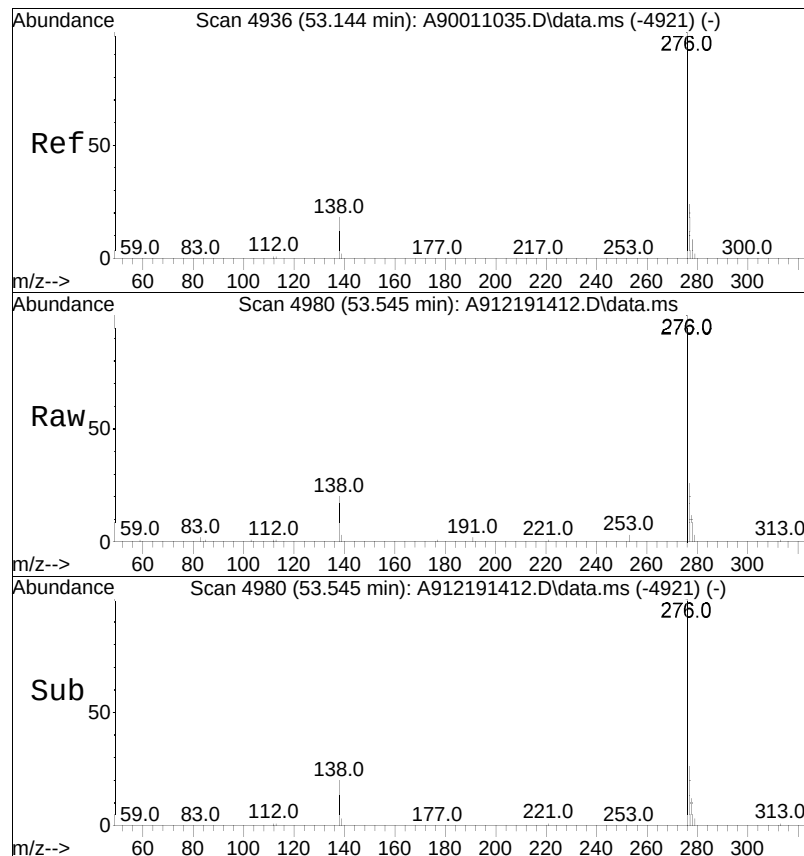
Tgt Ion: 252 Resp: 245113

Ion Ratio Lower Upper

252 100

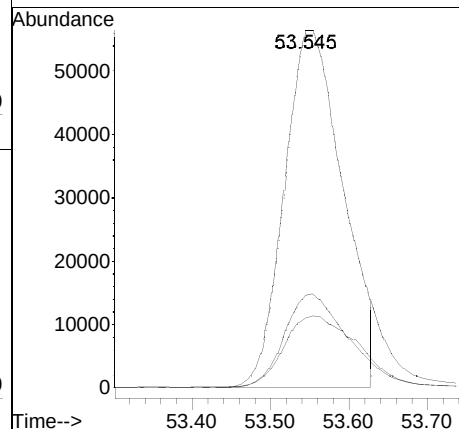
253 21.4 16.6 30.8

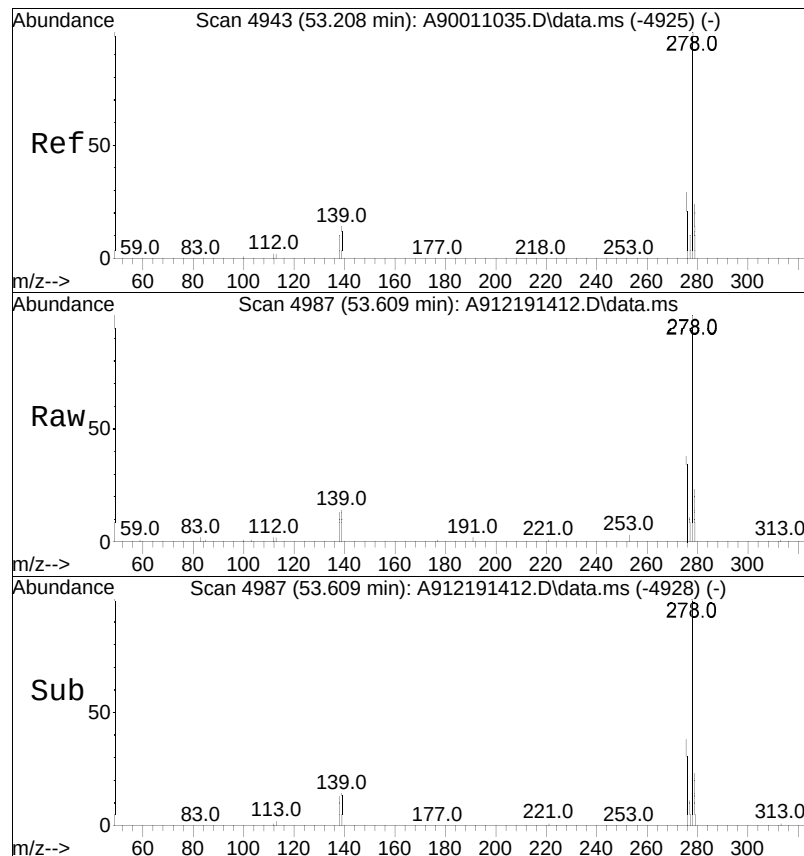




#91
 Indeno[1,2,3-cd]pyrene
 Concen: 465.94 ng/mL M3
 RT: 53.545 min Scan# 4980
 Delta R.T. 0.036 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm

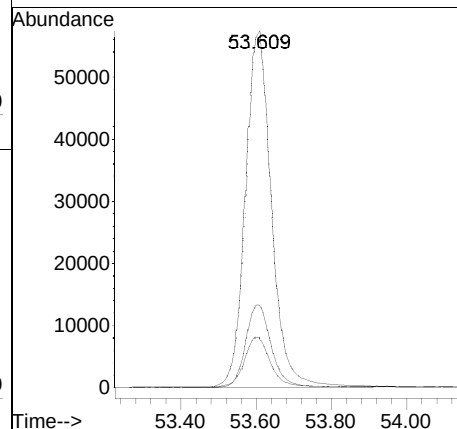
Tgt Ion:	276	Resp:	291727
Ion Ratio	Lower	Upper	
276	100		
138	25.7	15.7	29.1
277	29.1	17.9	33.3

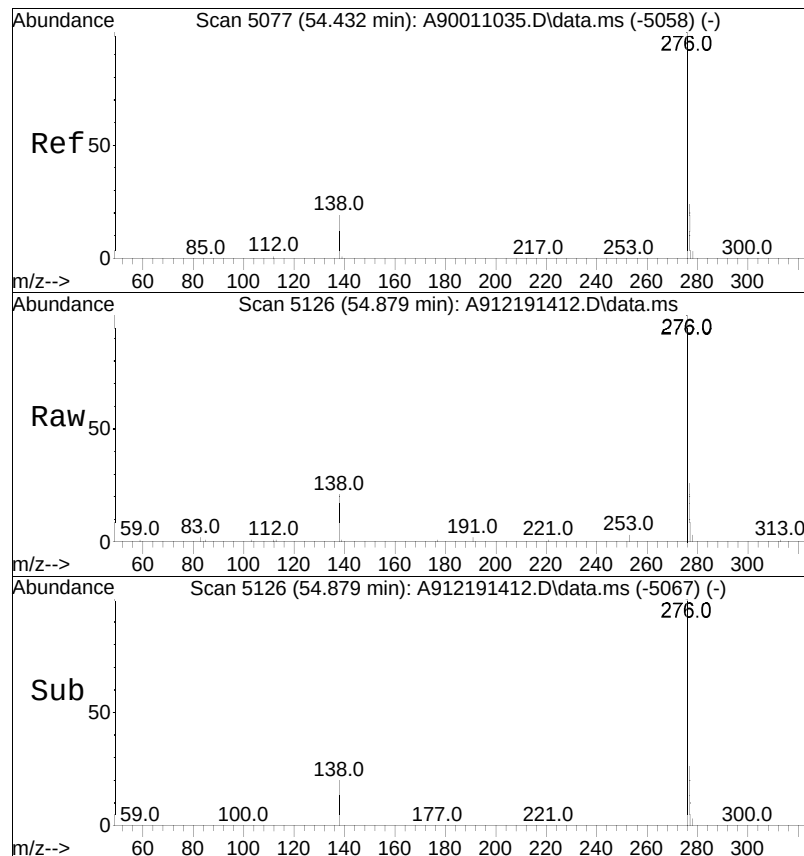




#92
 Dibenz[ah]+[ac]anthracene
 Concen: 441.07 ng/mL
 RT: 53.609 min Scan# 4987
 Delta R.T. 0.036 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm

Tgt Ion:	278	Resp:	272539
Ion Ratio	Lower	Upper	
278	100		
139	13.7	11.4	21.2
279	22.8	16.3	30.3





#93

Benzo[g,h,i]perylene

Concen: 454.74 ng/mL

RT: 54.879 min Scan# 5126

Delta R.T. 0.036 min

Lab File: A912191412.D

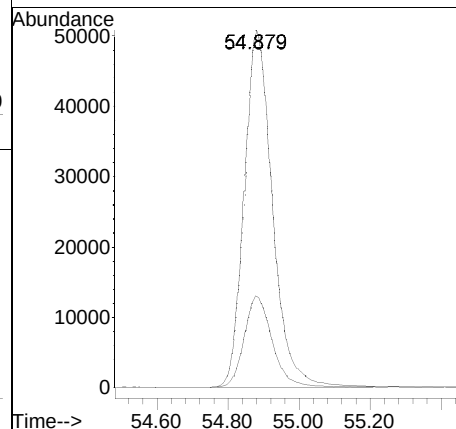
Acq: 22 Dec 2014 5:54 pm

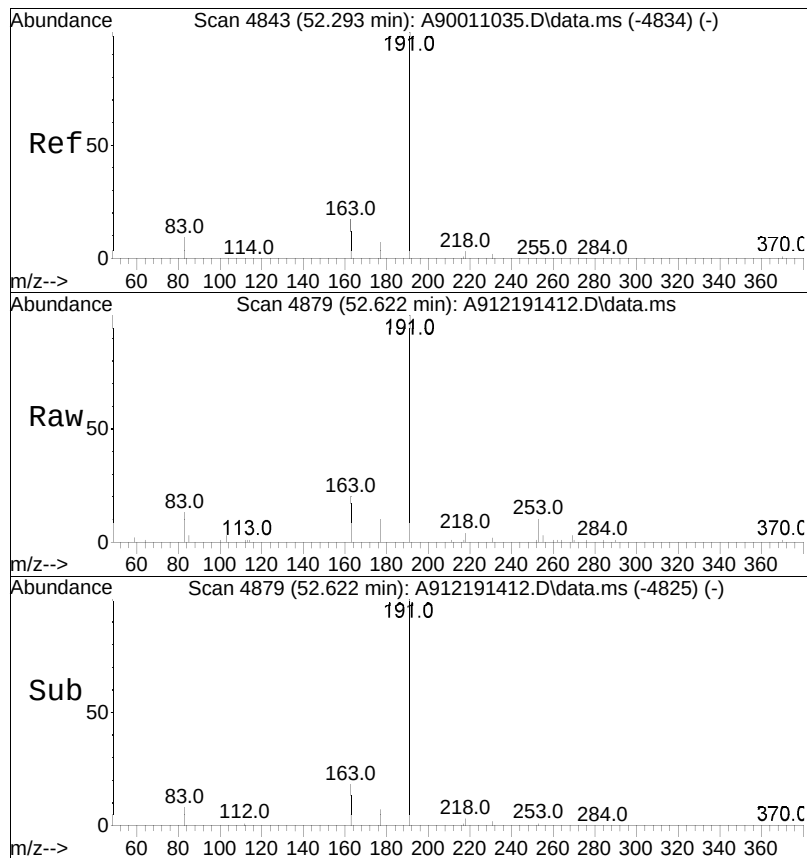
Tgt Ion:276 Resp: 276570

Ion Ratio Lower Upper

276 100

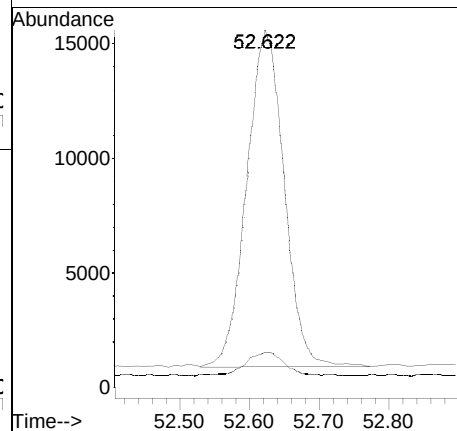
277 25.5 17.4 32.2

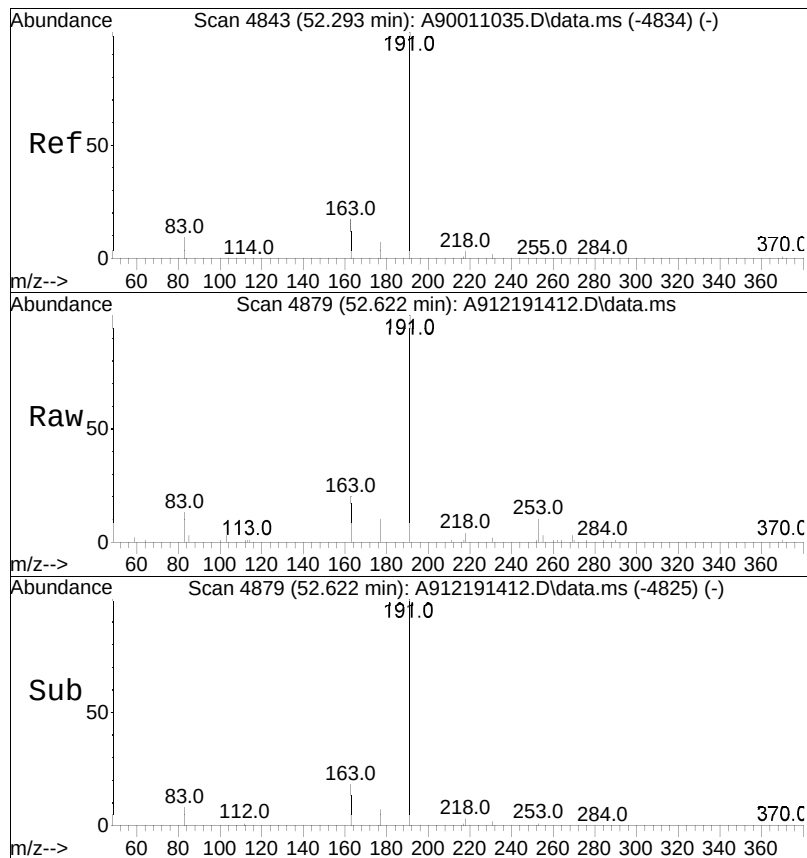




#94
 Hopane (T19)
 Concen: 428.48 ng/mL
 RT: 52.622 min Scan# 4879
 Delta R.T. -0.009 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm

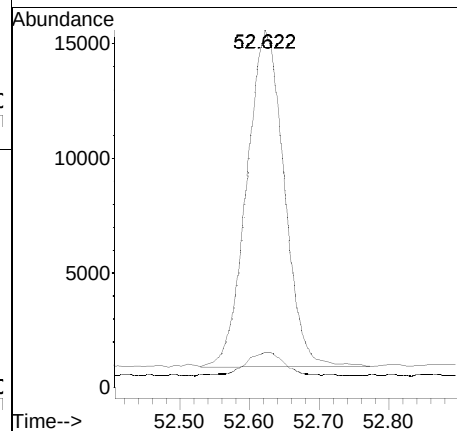
Tgt Ion	Ratio	Lower	Upper
191	100		
177	7.7	8.5	15.9#





#95
 17a(H),21B(H)-hopane - C₃₀H₅₂
 Concen: 428.48 ng/mL
 RT: 52.622 min Scan# 4879
 Delta R.T. -0.009 min
 Lab File: A912191412.D
 Acq: 22 Dec 2014 5:54 pm

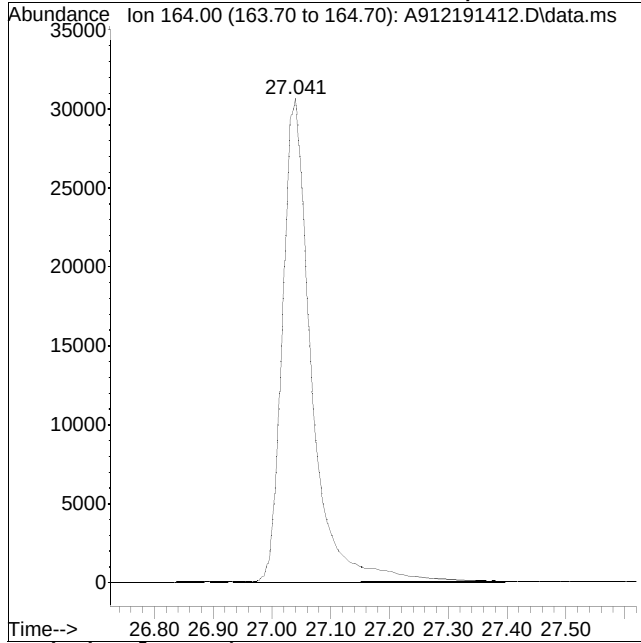
Tgt Ion	Ratio	Lower	Upper
191	100		
177	7.7	8.5	15.9#



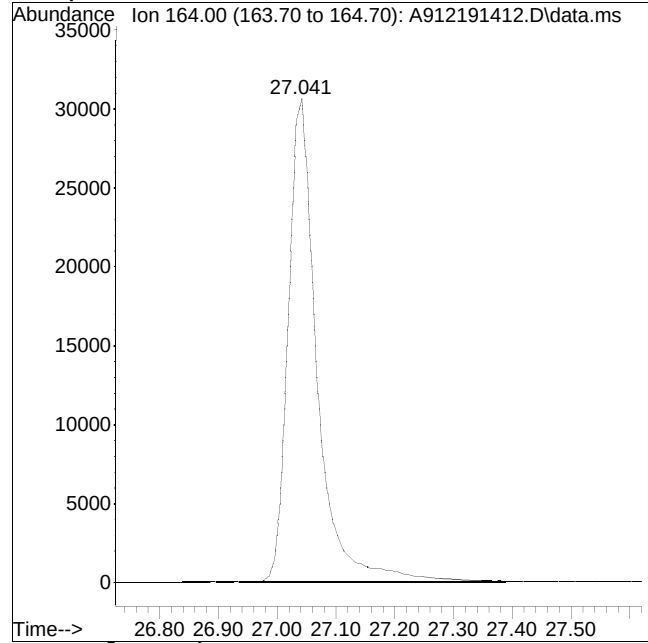
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191412.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 5:54 pm Instrument : PAH 9
Sample : WG754959-3 Quant Date : 12/23/2014 7:30 am

Compound #1: Acenaphthene-d10



Original Peak Response = 105386



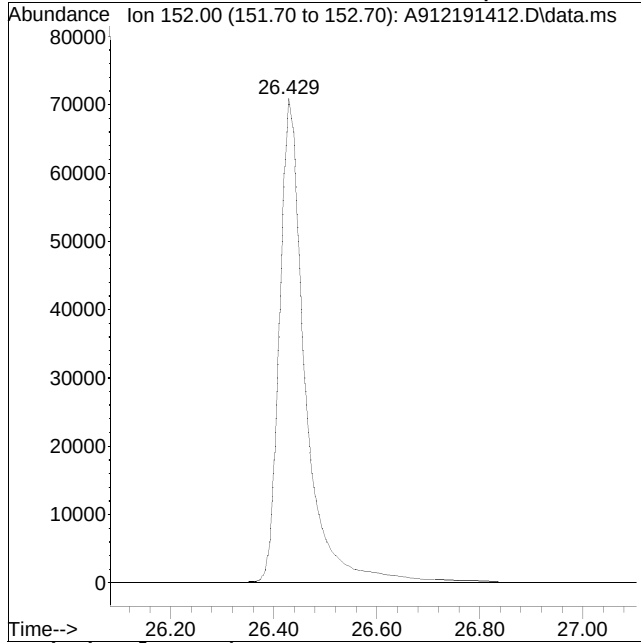
Manual Peak Response = 105260 M4

M4 = Poor automated baseline construction.

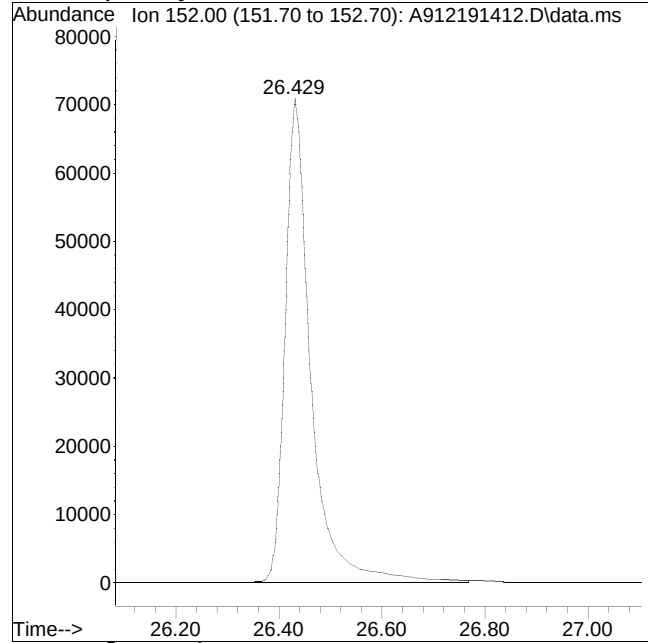
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191412.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 5:54 pm Instrument : PAH 9
Sample : WG754959-3 Quant Date : 12/23/2014 7:30 am

Compound #26: Acenaphthylene



Original Peak Response = 247573



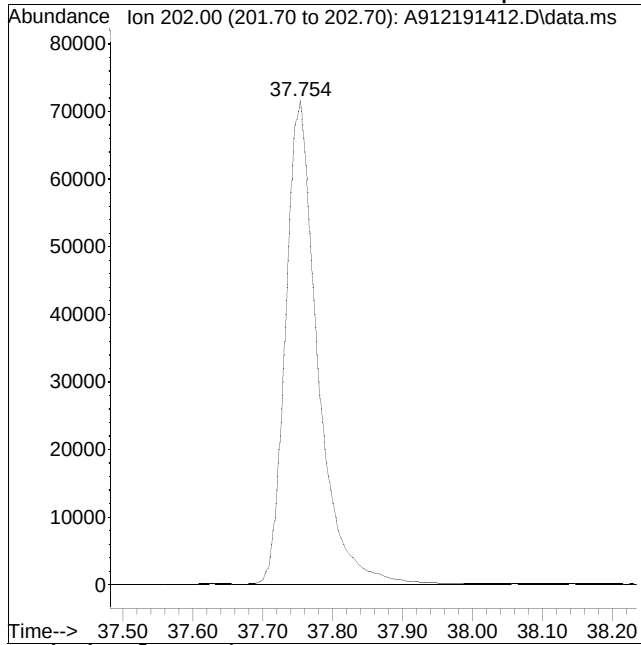
Manual Peak Response = 245153 M4

M4 = Poor automated baseline construction.

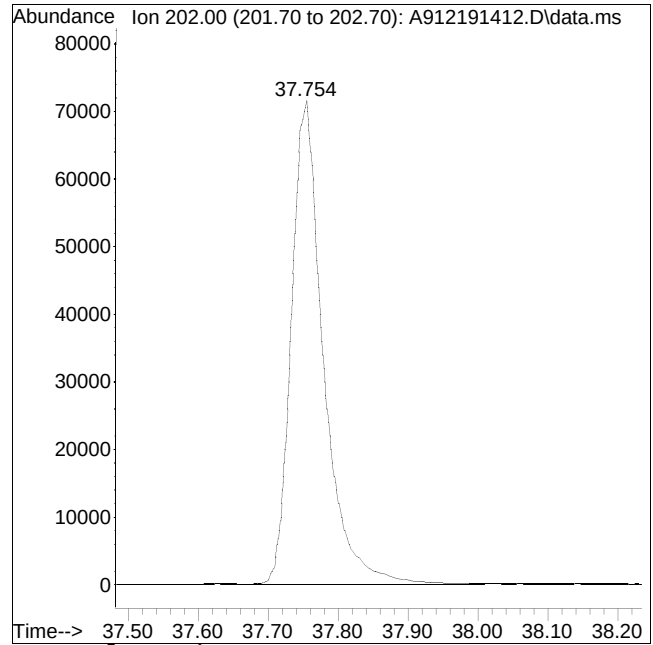
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191412.D Operator : PAH9:SR
Date Inj'd : 12/22/2014 5:54 pm Instrument : PAH 9
Sample : WG754959-3 Quant Date : 12/23/2014 7:30 am

Compound #58: Fluoranthene



Original Peak Response = 229142



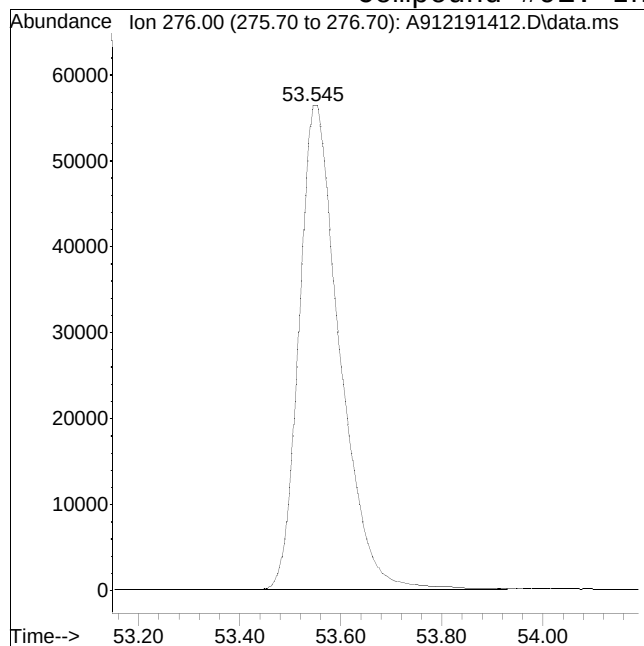
Manual Peak Response = 229109 M4

M4 = Poor automated baseline construction.

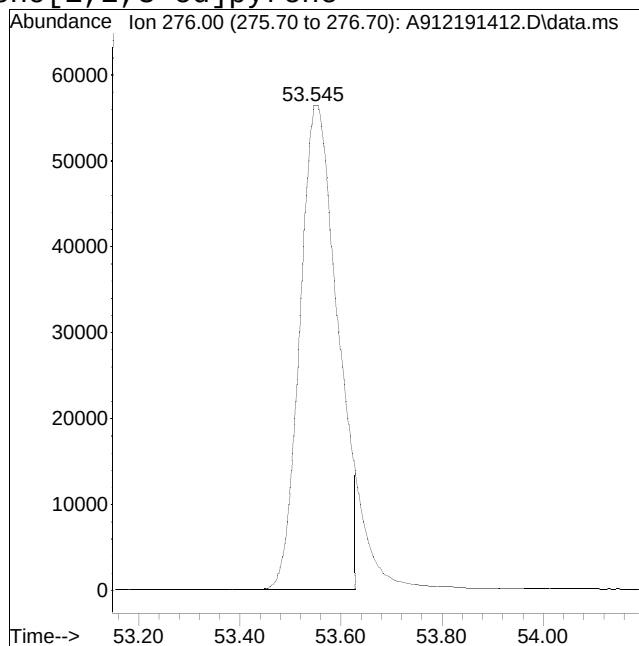
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912191412.D Operator : PAH9:SR
 Date Inj'd : 12/22/2014 5:54 pm Instrument : PAH 9
 Sample : WG754959-3 Quant Date : 12/23/2014 7:30 am

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 315135



Manual Peak Response = 291727 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191417.D
 Acq On : 23 Dec 2014 12:56 am
 Operator : PAH9:SR
 Sample : WG754959-4
 Misc : WG754959, frav19 500ng/ml
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 12 09:03:22 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	151	0.00
3 A1	trans-Decalin	0.461	0.394	14.5	131	0.00
4 t	cis-Decalin	0.362	0.292	19.3	132	0.00
9 s	Naphthalene-d8	2.264	2.173	4.0	147	0.00
10 A1	Naphthalene	2.768	2.719	1.8	149	0.00
16 t	2-Methylnaphthalene	1.502	1.492	0.7	151	0.02
17 t	1-Methylnaphthalene	1.468	1.440	1.9	150	0.02
18 A1	Benzothiophene	2.530	2.414	4.6	146	0.00
23 t	Biphenyl	1.852	1.843	0.5	150	0.02
24 t	2,6-Dimethylnaphthalene	1.221	1.206	1.2	151	0.02
25 t	Dibenzofuran	1.944	1.929	0.8	149	0.02
26 t	Acenaphthylene	2.298	2.304	-0.3	155	0.00
27 t	Acenaphthene	1.385	1.389	-0.3	150	0.00
28 t	2,3,5-Trimethylnaphthalene	1.165	1.134	2.7	150	0.00
29 A1	Fluorene	1.558	1.502	3.6	150	0.03
33 A1	Dibenzothiophene	2.288	2.284	0.2	149	0.00
42 s	Phenanthrene-d10	1.716	1.643	4.3	149	0.00
43 A1	Phenanthrene	2.174	2.138	1.7	146	0.00
54 t	Retene	0.598	0.668	-11.7	168	0.00
55 t	Anthracene	2.007	1.868	6.9	139	0.02
56 t	Carbazole	1.932	1.989	-3.0	153	0.02
57 t	1-Methylphenanthrene	1.439	1.460	-1.5	152	0.02
58 A1	Fluoranthene	2.207	2.280	-3.3	156	0.00
59 t	Benzo(b)fluorene	1.333	1.392	-4.4	157	0.02
60 A1	Pyrene	2.347	2.548	-8.6	156	0.00
66 A1	Naphthobenzothiophene	2.341	2.526	-7.9	162	0.00
67 A2	Naphthobenzothiophene-2,1-D	2.341	2.526	-7.9	162	0.00
74 i	Chrysene-d12	1.000	1.000	0.0	158	0.00
75 t	Benz[a]anthracene	1.108	1.128	-1.8	165	0.00
76 A1	Chrysene	1.095	1.110	-1.4	156	0.00
77 A2	Chrysene/Triphenylene	1.095	1.110	-1.4	156	0.00
83 S	Benzo[b]fluoranthene-d12	1.034	1.058	-2.3	169	0.00
84 t	Benzo[b]fluoranthene	1.311	1.307	0.3	162	0.00
85 A1	Benzo[j]+[k]fluoranthene	1.255	1.265	-0.8	164	0.00
87 t	Benzo[e]pyrene	1.255	1.289	-2.7	163	0.00
88 s	Benzo[a]pyrene-d12	0.949	0.967	-1.9	169	0.00
89 t	Benzo[a]pyrene	1.230	1.269	-3.2	163	0.00
90 t	Perylene	1.241	1.214	2.2	159	0.00

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191417.D
 Acq On : 23 Dec 2014 12:56 am
 Operator : PAH9:SR
 Sample : WG754959-4
 Misc : WG754959, frav19 500ng/ml
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 12 09:03:22 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.526	1.581	-3.6	171	0.00
92 t	Dibenz[ah]+[ac]anthracene	1.506	1.514	-0.5	168	0.00
93 t	Benzo[g,h,i]perylene	1.482	1.462	1.3	169	0.02
94 A1	Hopane (T19)	0.306	0.278	9.2	167	-0.02
95 A2	17a(H),21B(H)-hopane - C30H	0.306	0.278	9.2	167	-0.02
129 SA1	5B(H)Cholane - Surr	0.158	0.160	-1.3	170	0.00

* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Mass Discrimination (Concentration)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	1.00	0.70 - 1.30

Mass Discrimination (Response)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	1.44	0.70 - 2.00

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191417.D
 Acq On : 23 Dec 2014 12:56 am
 Operator : PAH9:SR
 Sample : WG754959-4
 Misc : WG754959, frav19 500ng/ml
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 12 09:03:22 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.032	164	124642	500.000	ng/mL	0.00
74) Chrysene-d12	43.452	240	262549	500.000	ng/mL	0.02
System Monitoring Compounds						
9) Naphthalene-d8	20.078	136	270850	479.940	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	47.99%#		
42) Phenanthrene-d10	32.898	188	204754	478.620	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	47.86%#		
83) Benzo[b]fluoranthene-d12	47.354	264	277796	511.443	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	51.14%		
88) Benzo[a]pyrene-d12	48.561	264	253958	509.482	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	50.95%		
129) 5B(H)Cholane - Surr	44.063	217	42139	508.154	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	50.82%		
Target Compounds						
						Qvalue
3) trans-Decalin	16.720	138	24528	213.614	ng/mL	100
4) cis-Decalin	17.943	138	18209	201.798	ng/mL	100
10) Naphthalene	20.160	128	338959	491.311	ng/mL	100
16) 2-Methylnaphthalene	22.861	142	186004	496.747	ng/mL	100
17) 1-Methylnaphthalene	23.281	142	179511	490.459	ng/mL	100
18) Benzothiophene	20.379	134	300928	477.165	ng/mL	100
23) Biphenyl	24.732	154	229717	497.620	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.343	156	150288	493.790	ng/mL	100
25) Dibenzofuran	27.816	168	240393	496.038	ng/mL	99
26) Acenaphthylene	26.429	152	287125M4	501.246	ng/mL	
27) Acenaphthene	27.159	153	173162	501.402	ng/mL	98
28) 2,3,5-Trimethylnaphthalen	28.711	170	141309	486.521	ng/mL	98
29) Fluorene	29.194	166	187170	482.020	ng/mL	100
33) Dibenzothiophene	32.497	184	284654	499.171	ng/mL	99
43) Phenanthrene	32.990	178	266546	491.922	ng/mL	100
54) Retene	39.946	234	83230	558.572	ng/mL	96
55) Anthracene	33.181	178	232788	465.198	ng/mL	100
56) Carbazole	33.838	167	247878	514.719	ng/mL	99
57) 1-Methylphenanthrene	35.499	192	181936	507.026	ng/mL	100
58) Fluoranthene	37.754	202	284188	516.585	ng/mL	99
59) Benzo(b)fluorene	40.265	216	173462	522.022	ng/mL	100
60) Pyrene	38.631	202	317607	542.739	ng/mL	98
66) Naphthobenzothiophene	42.475	234	314858	539.465	ng/ml	99
67) Naphthobenzothiophene-2,1	42.475	234	314858	539.465	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191417.D
 Acq On : 23 Dec 2014 12:56 am
 Operator : PAH9:SR
 Sample : WG754959-4
 Misc : WG754959, frav19 500ng/ml
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 12 09:03:22 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.388	228	296224	509.206	ng/mL	99
76)	Chrysene	43.552	228	291392	506.648	ng/mL	100
77)	Chrysene/Triphenylene	43.552	228	291392	506.648	ng/mL	100
84)	Benzo[b]fluoranthene	47.436	252	343106	498.589	ng/mL	96
85)	Benzo[j]+[k]fluoranthene	47.518	252	332216	504.065	ng/mL	97
87)	Benzo[e]pyrene	48.451	252	338387	513.443	ng/mL	97
89)	Benzo[a]pyrene	48.643	252	333169	515.855	ng/mL	96
90)	Perylene	48.973	252	318680	488.846	ng/mL	95
91)	Indeno[1,2,3-cd]pyrene	53.554	276	414989M3	517.988	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.609	278	397611	502.879	ng/mL	98
93)	Benzo[g,h,i]perylene	54.889	276	383768	493.121	ng/mL	99
94)	Hopane (T19)	52.622	191	73001	453.793	ng/mL#	88
95)	17a(H),21B(H)-hopane - C3	52.622	191	73001	453.793	ng/mL#	88

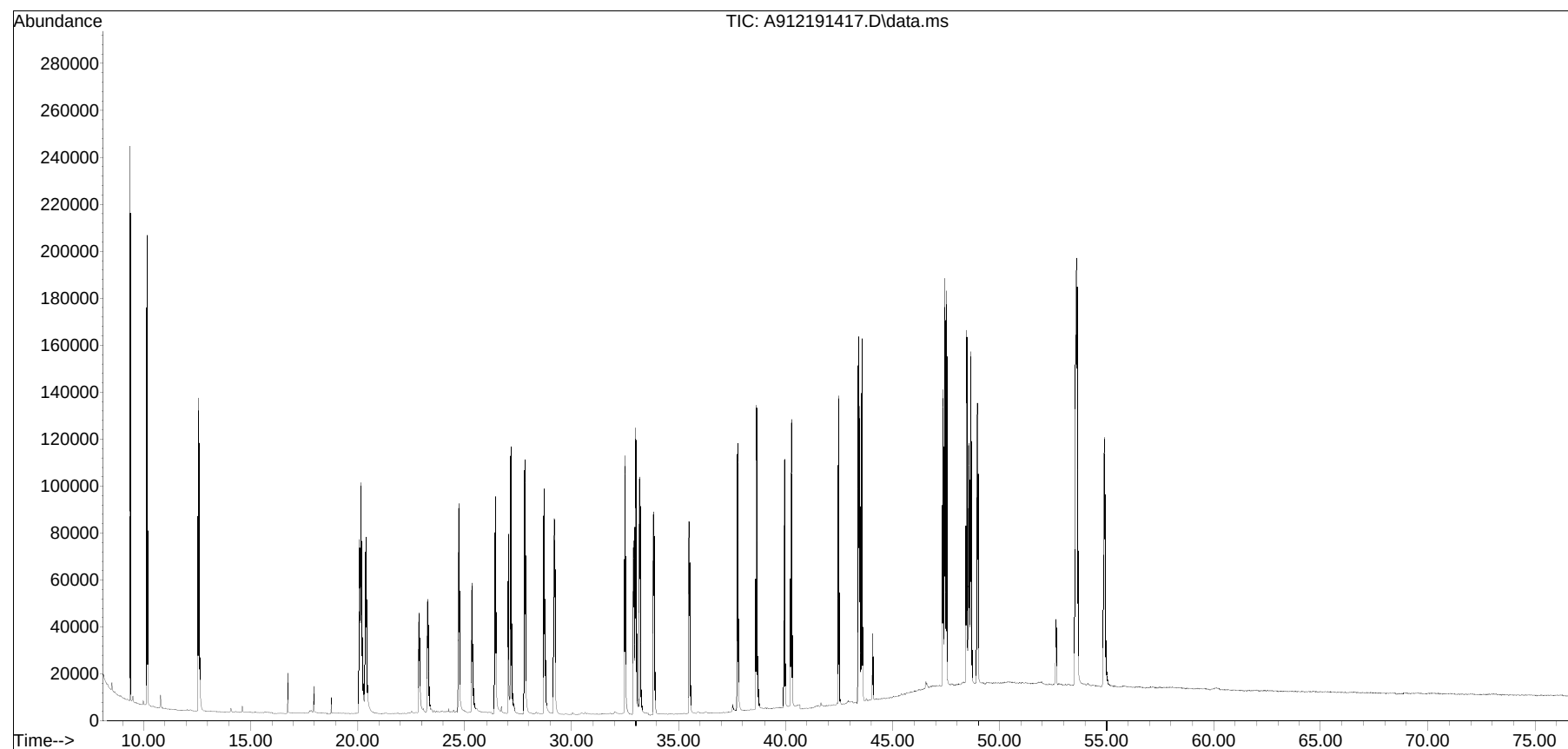
(#) = qualifier out of range (m) = manual integration (+) = signals summed

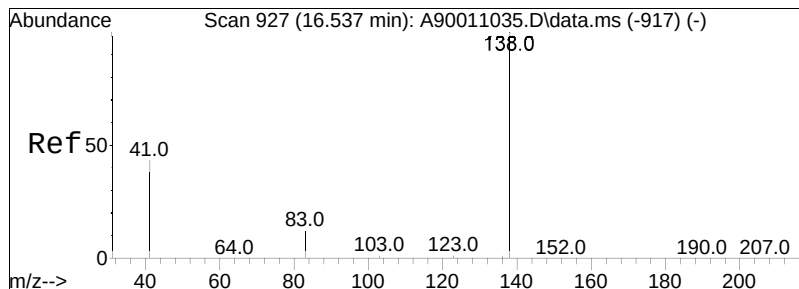
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC19\
Data File : A912191417.D
Acq On : 23 Dec 2014 12:56 am
Operator : PAH9:SR
Sample : WG754959-4
Misc : WG754959, frav19 500ng/ml
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 12 09:03:22 2015
Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 15 13:02:08 2014
Response via : Initial Calibration

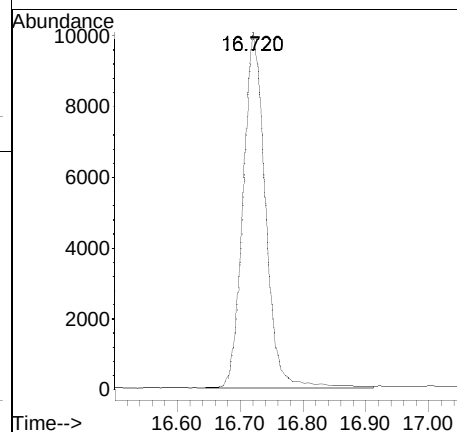
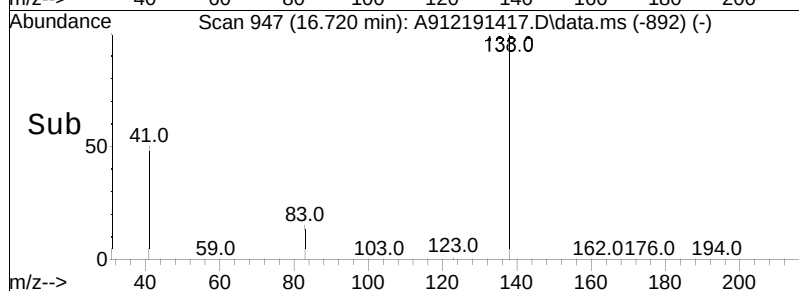
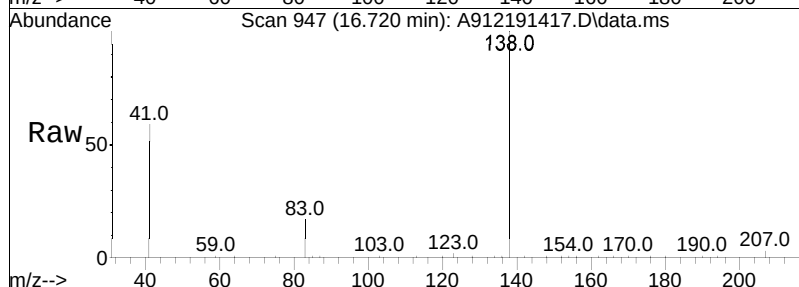
Sub List : ICAL_CCALT_REV2 - CC with five surrogates

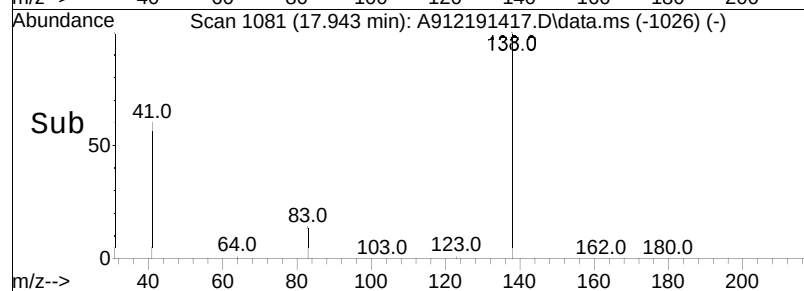
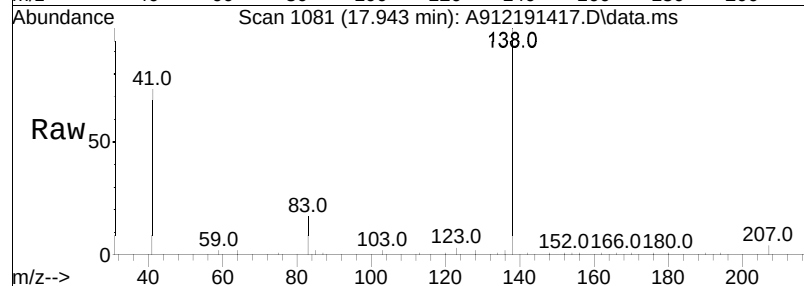
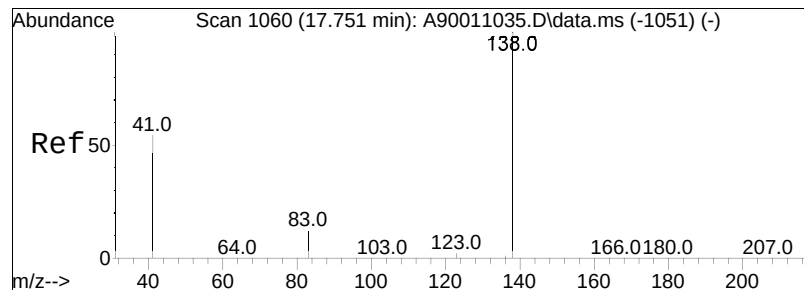




#3
trans-Decalin
Concen: 213.61 ng/mL
RT: 16.720 min Scan# 947
Delta R.T. -0.000 min
Lab File: A912191417.D
Acq: 23 Dec 2014 12:56 am

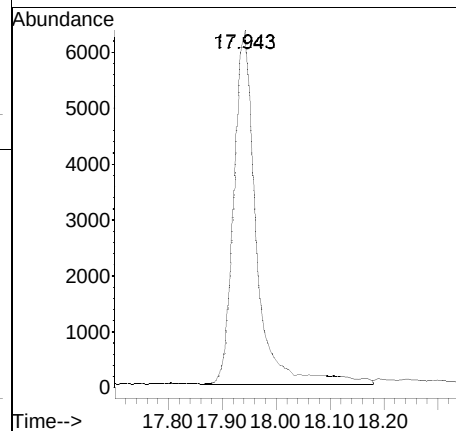
Tgt Ion:138 Resp: 24528

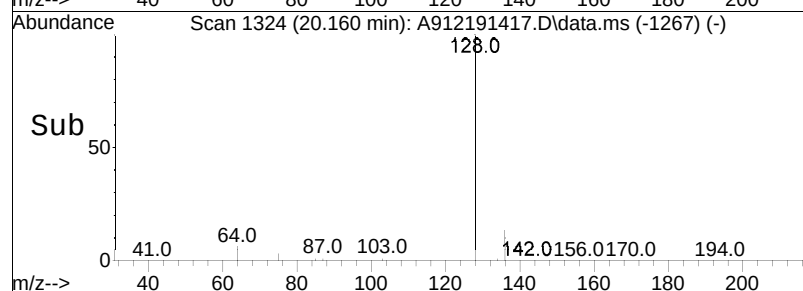
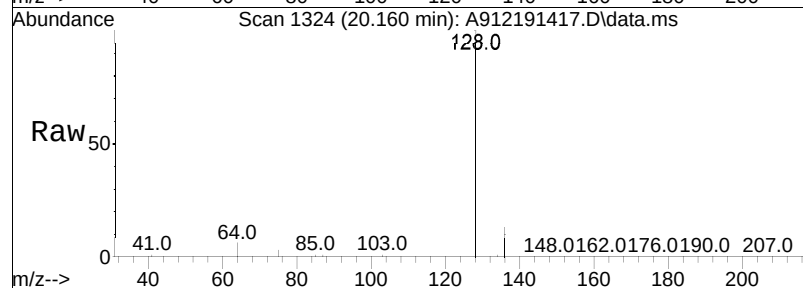
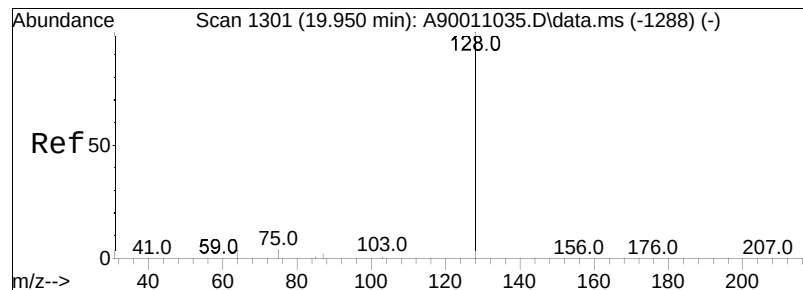




#4
 cis-Decalin
 Concen: 201.80 ng/mL
 RT: 17.943 min Scan# 1081
 Delta R.T. -0.000 min
 Lab File: A912191417.D
 Acq: 23 Dec 2014 12:56 am

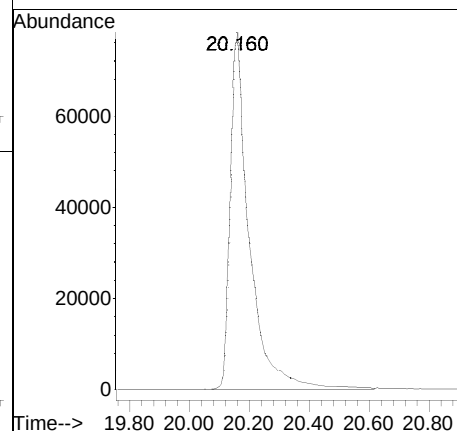
Tgt Ion:138 Resp: 18209

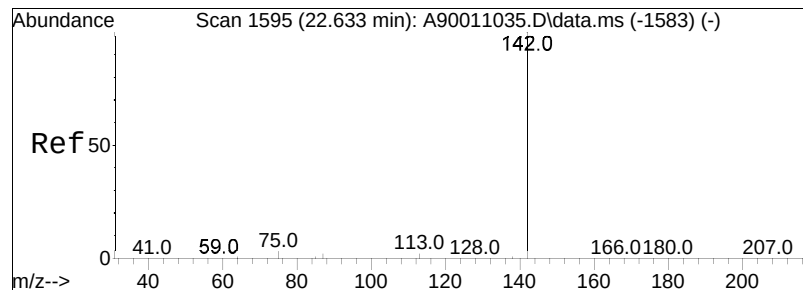




#10
Naphthalene
Concen: 491.31 ng/mL
RT: 20.160 min Scan# 1324
Delta R.T. 0.018 min
Lab File: A912191417.D
Acq: 23 Dec 2014 12:56 am

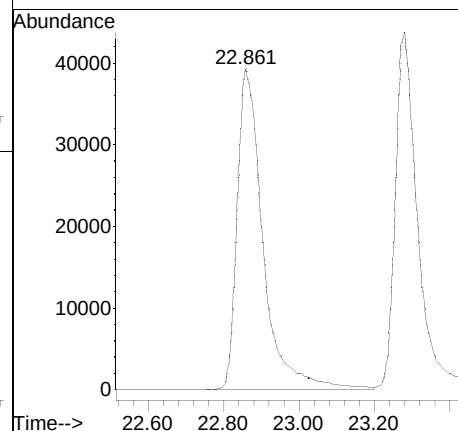
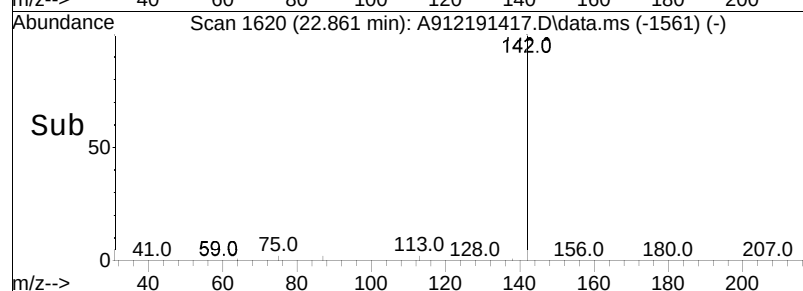
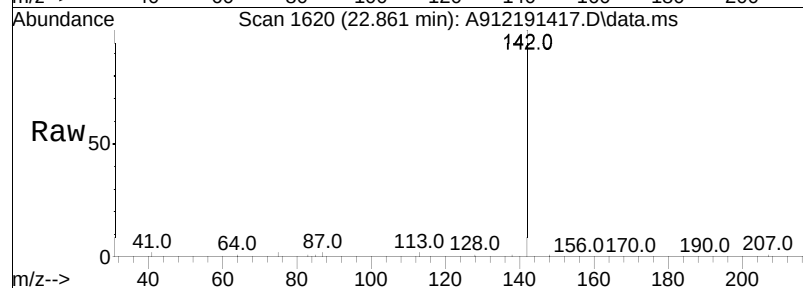
Tgt Ion:128 Resp: 338959

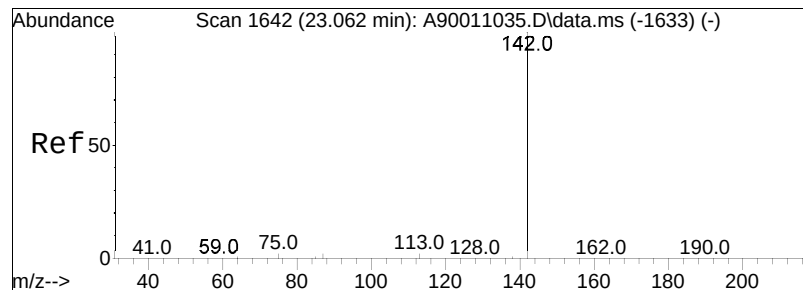




#16
2-Methylnaphthalene
Concen: 496.75 ng/mL
RT: 22.861 min Scan# 1620
Delta R.T. 0.036 min
Lab File: A912191417.D
Acq: 23 Dec 2014 12:56 am

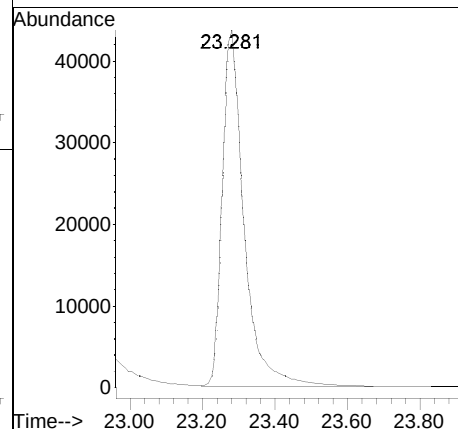
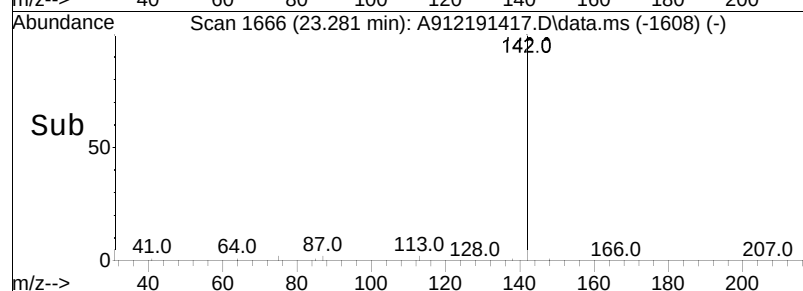
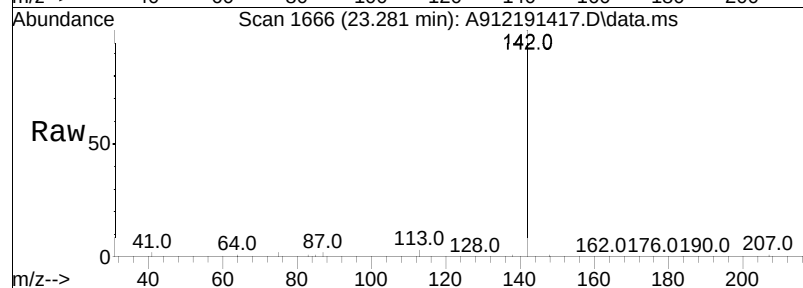
Tgt Ion:142 Resp: 186004

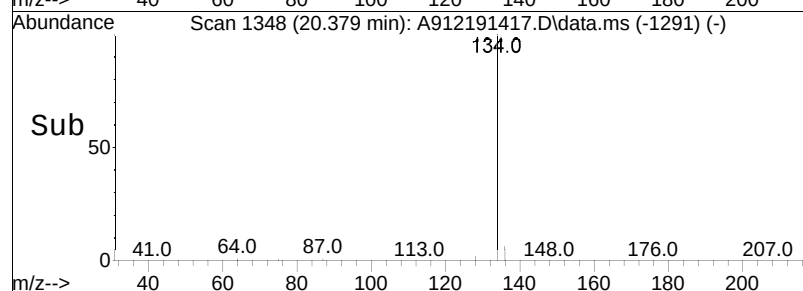
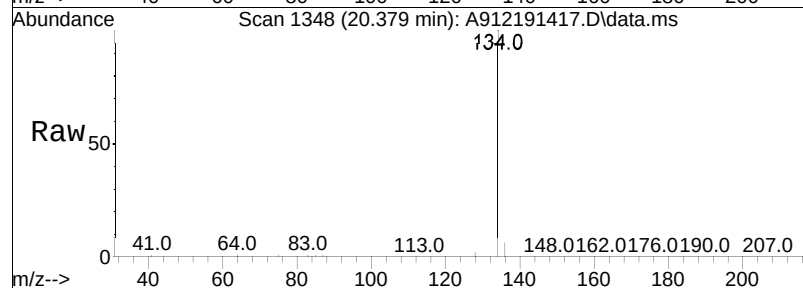
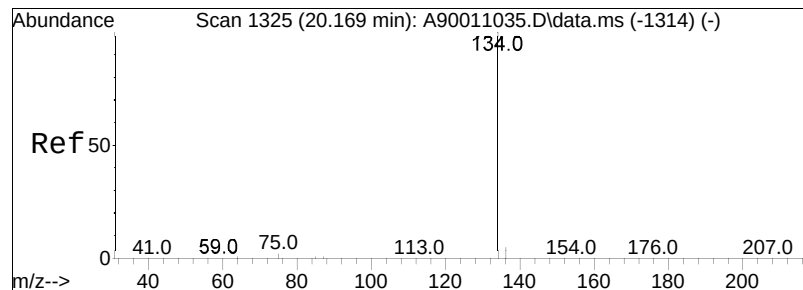




#17
 1-Methylnaphthalene
 Concen: 490.46 ng/mL
 RT: 23.281 min Scan# 1666
 Delta R.T. 0.027 min
 Lab File: A912191417.D
 Acq: 23 Dec 2014 12:56 am

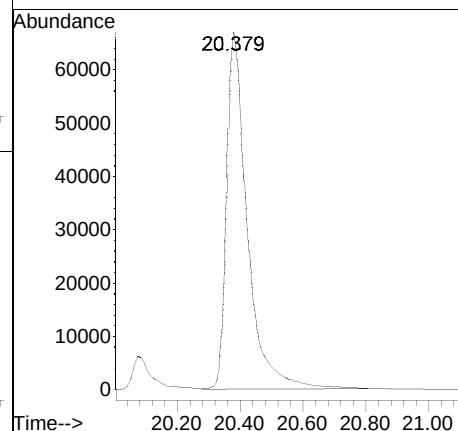
Tgt Ion:142 Resp: 179511

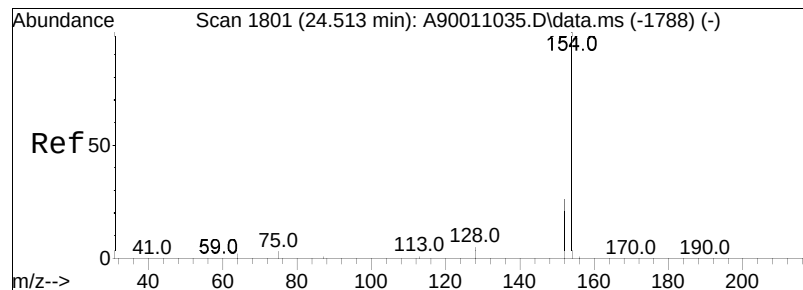




#18
Benzothiophene
Concen: 477.16 ng/mL
RT: 20.379 min Scan# 1348
Delta R.T. 0.018 min
Lab File: A912191417.D
Acq: 23 Dec 2014 12:56 am

Tgt Ion:134 Resp: 300928





#23

Biphenyl

Concen: 497.62 ng/mL

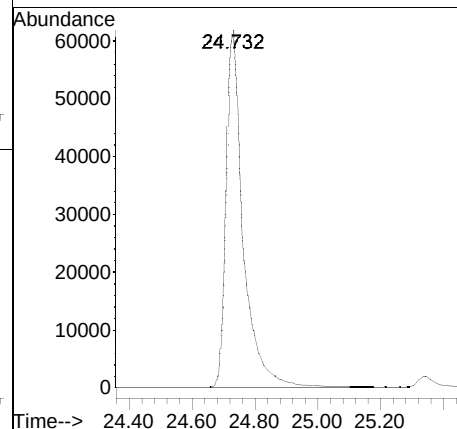
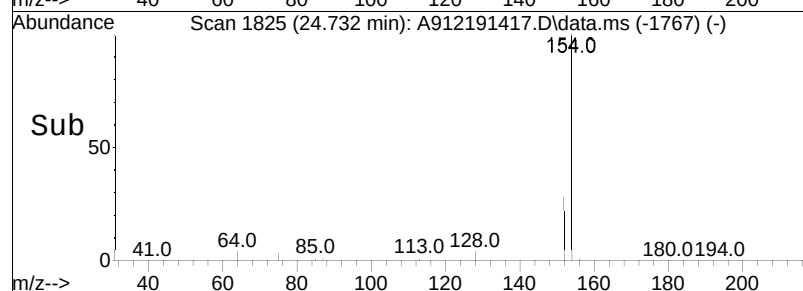
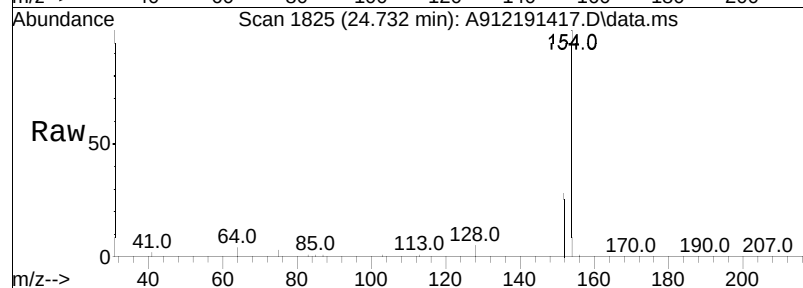
RT: 24.732 min Scan# 1825

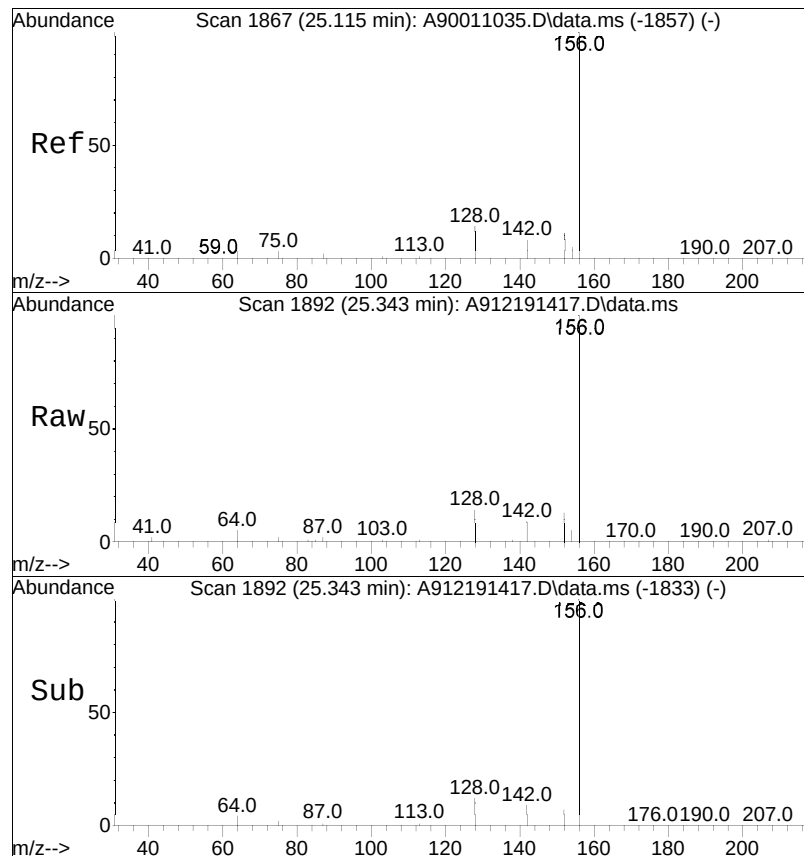
Delta R.T. 0.027 min

Lab File: A912191417.D

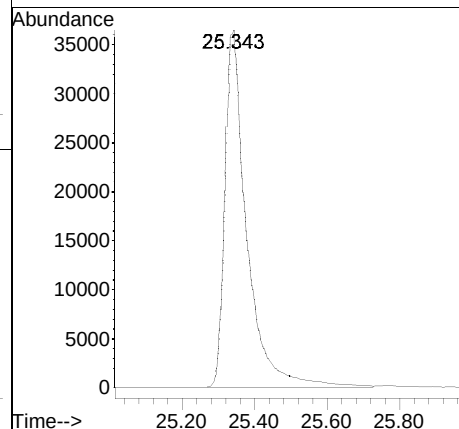
Acq: 23 Dec 2014 12:56 am

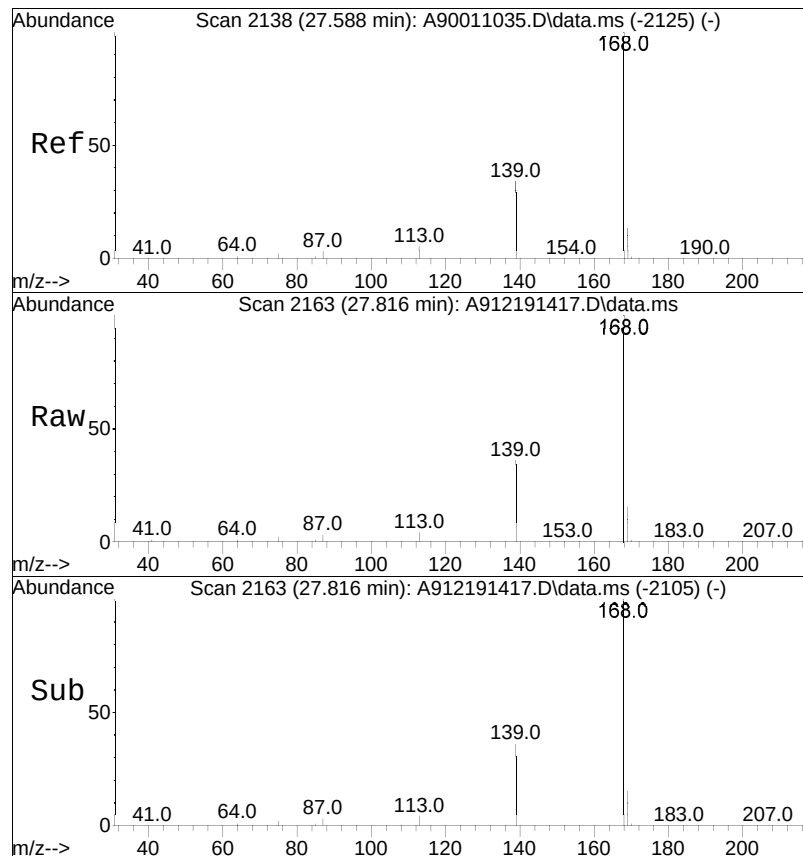
Tgt Ion:154 Resp: 229717





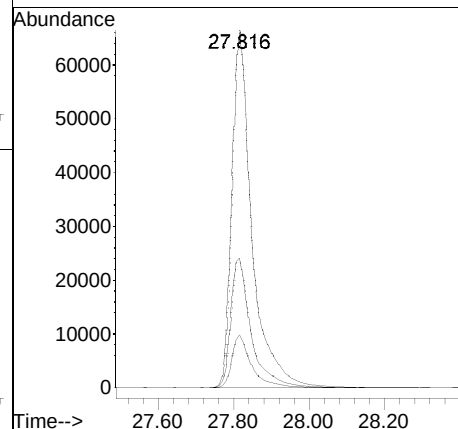
#24
 2,6-Dimethylnaphthalene
 Concen: 493.79 ng/mL
 RT: 25.343 min Scan# 1892
 Delta R.T. 0.036 min
 Lab File: A912191417.D
 Acq: 23 Dec 2014 12:56 am
 Tgt Ion:156 Resp: 150288

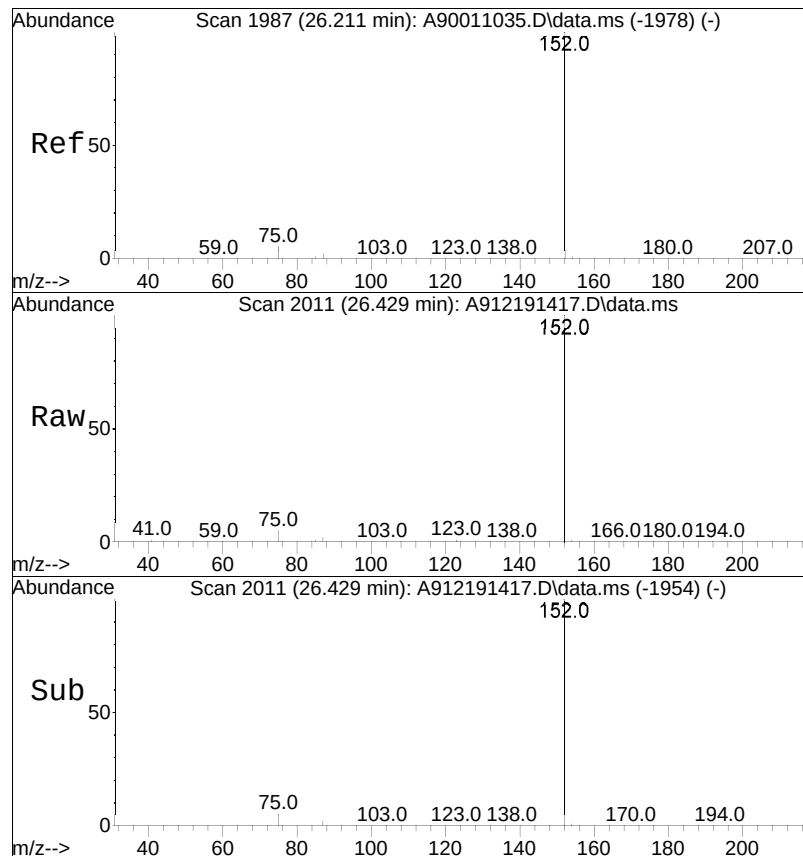




#25
 Dibenzofuran
 Concen: 496.04 ng/mL
 RT: 27.816 min Scan# 2163
 Delta R.T. 0.027 min
 Lab File: A912191417.D
 Acq: 23 Dec 2014 12:56 am

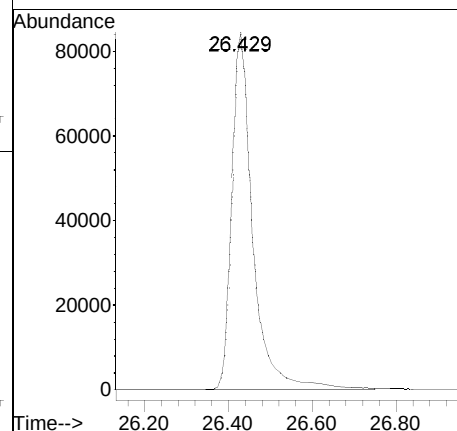
Tgt	Ion:168	Resp:	240393
Ion	Ratio	Lower	Upper
168	100		
139	36.8	25.1	46.7
169	14.7	10.2	19.0

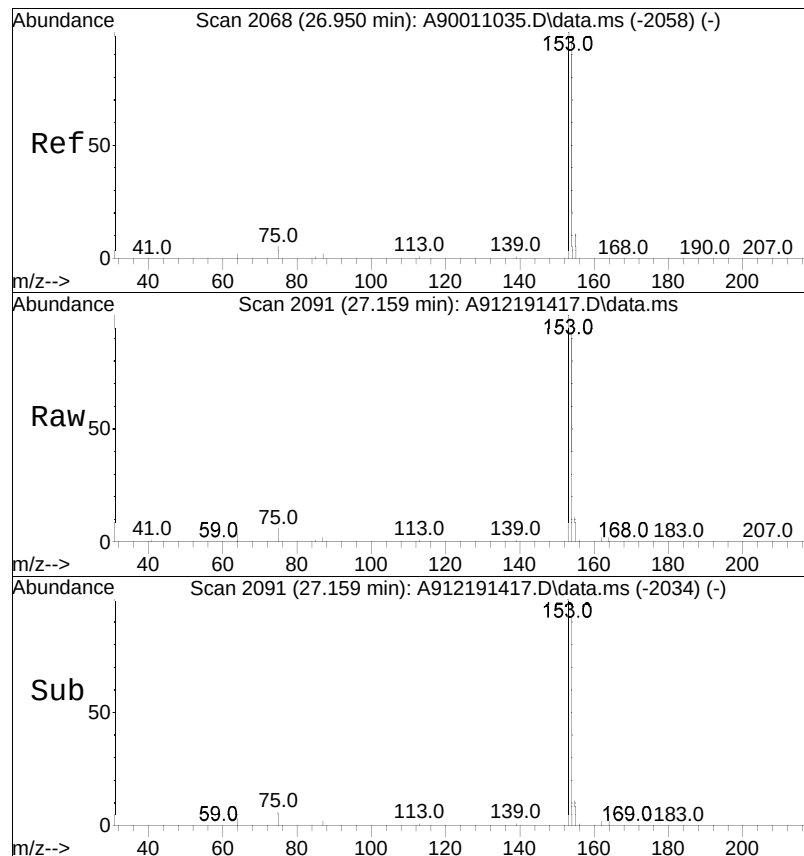




#26
Acenaphthylene
Concen: 501.25 ng/mL M4
RT: 26.429 min Scan# 2011
Delta R.T. 0.018 min
Lab File: A912191417.D
Acq: 23 Dec 2014 12:56 am

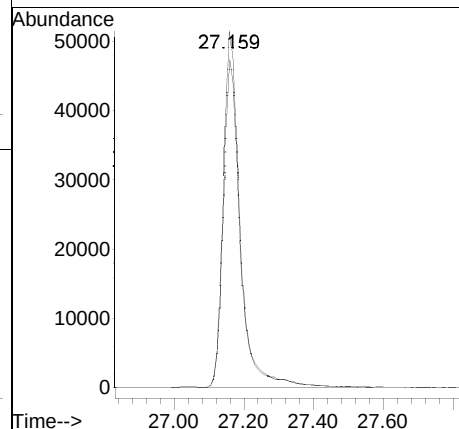
Tgt Ion:152 Resp: 287125

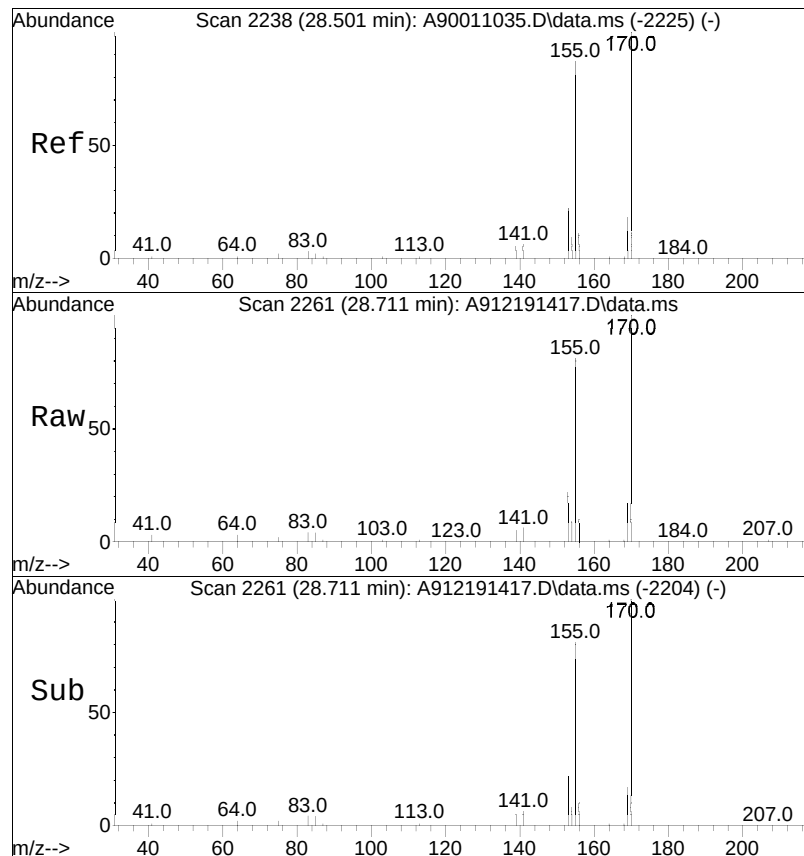




#27
 Acenaphthene
 Concen: 501.40 ng/mL
 RT: 27.159 min Scan# 2091
 Delta R.T. 0.018 min
 Lab File: A912191417.D
 Acq: 23 Dec 2014 12:56 am

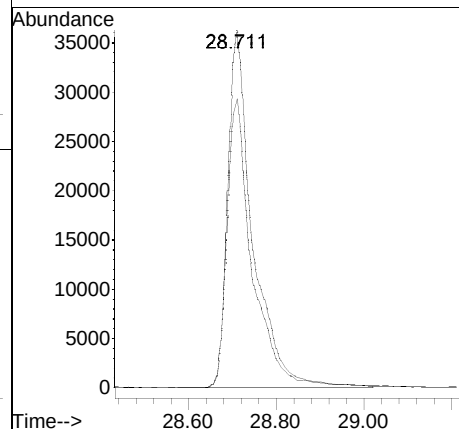
Tgt Ion	Ratio	Lower	Upper
153	100		
154	91.2	64.9	120.5

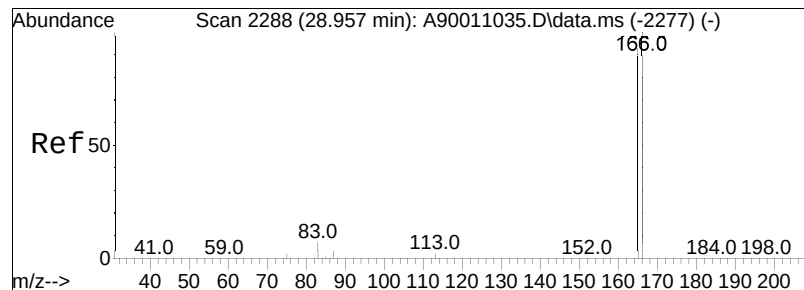




#28
 2,3,5-Trimethylnaphthalene
 Concen: 486.52 ng/mL
 RT: 28.711 min Scan# 2261
 Delta R.T. 0.019 min
 Lab File: A912191417.D
 Acq: 23 Dec 2014 12:56 am

Tgt Ion	Ratio	Lower	Upper
170	100		
155	81.7	55.9	103.9





#29

Fluorene

Concen: 482.02 ng/mL

RT: 29.194 min Scan# 2314

Delta R.T. 0.036 min

Lab File: A912191417.D

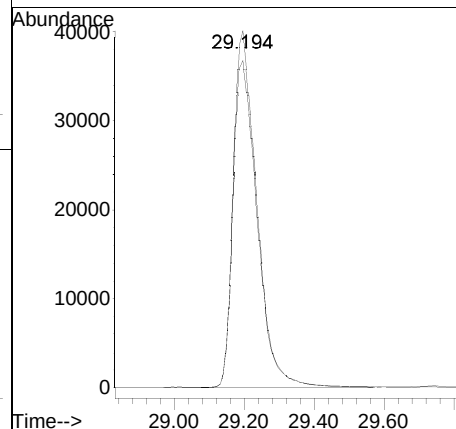
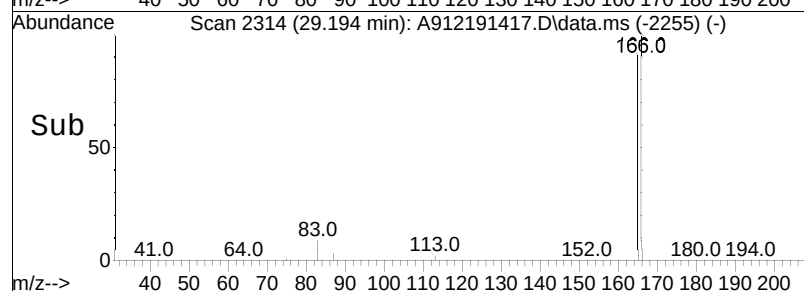
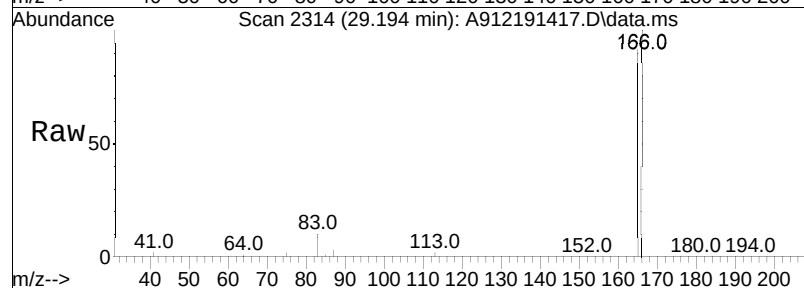
Acq: 23 Dec 2014 12:56 am

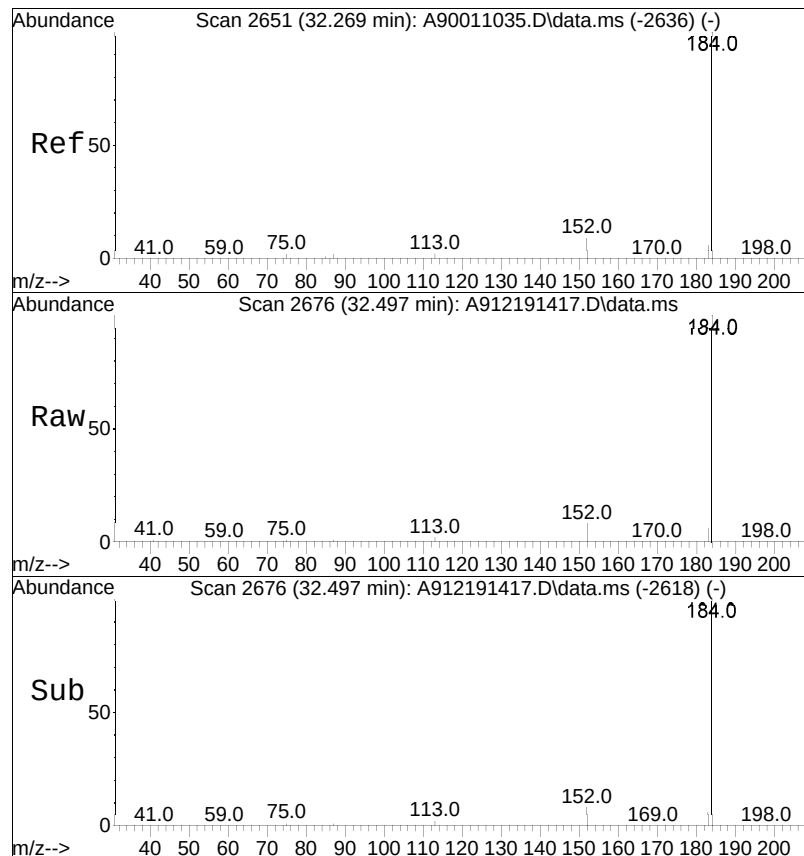
Tgt Ion:166 Resp: 187170

Ion Ratio Lower Upper

166 100

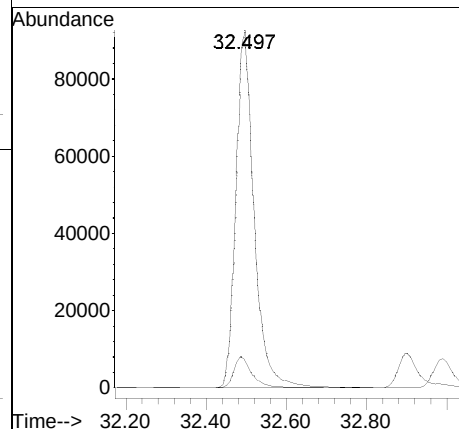
165 93.7 65.5 121.7

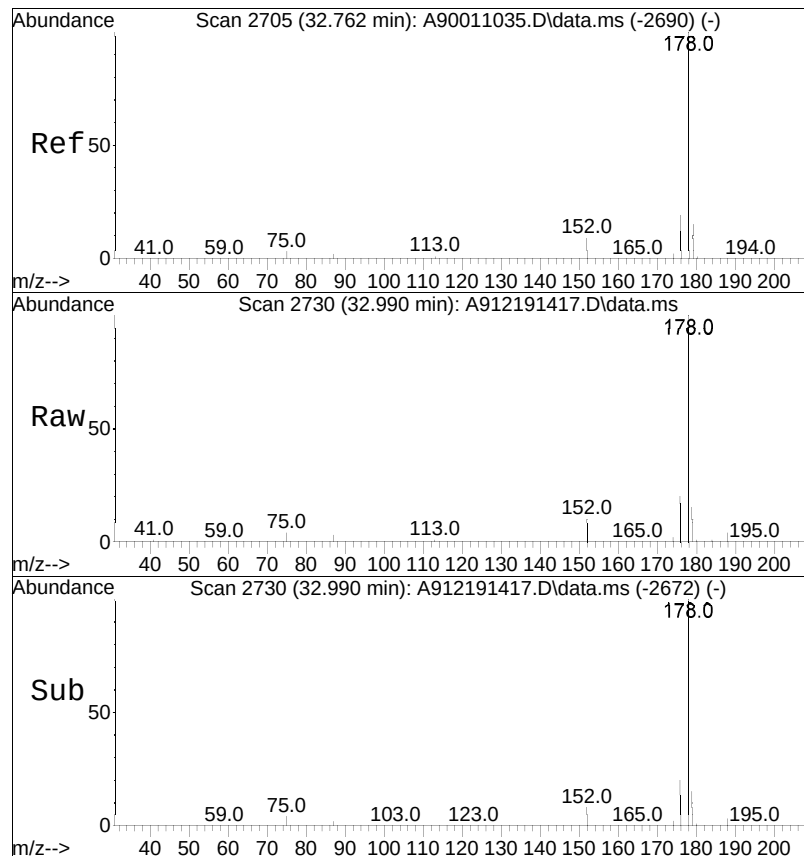




#33
 Dibenzothiophene
 Concen: 499.17 ng/mL
 RT: 32.497 min Scan# 2676
 Delta R.T. 0.028 min
 Lab File: A912191417.D
 Acq: 23 Dec 2014 12:56 am

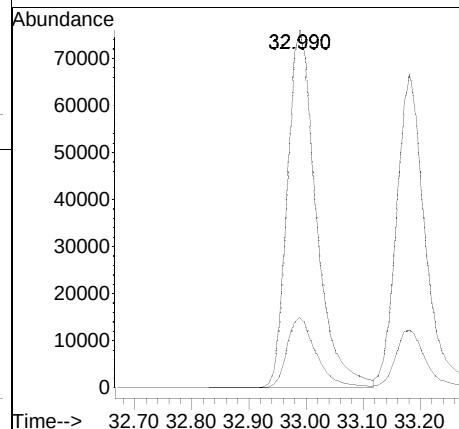
Tgt Ion	Ratio	Lower	Upper
184	100		
152	8.7	6.3	11.7

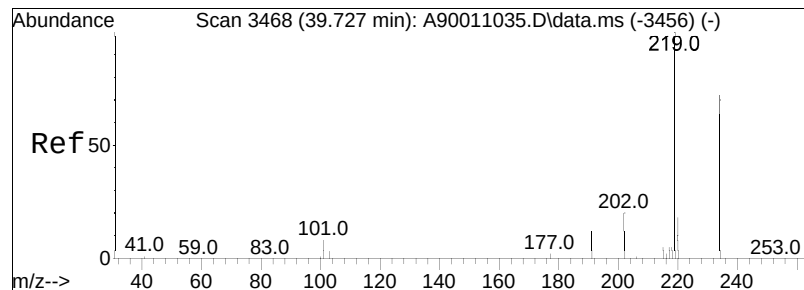




#43
 Phenanthrene
 Concen: 491.92 ng/mL
 RT: 32.990 min Scan# 2730
 Delta R.T. 0.028 min
 Lab File: A912191417.D
 Acq: 23 Dec 2014 12:56 am

Tgt Ion	Ratio	Lower	Upper
178	100		
176	19.6	13.7	25.5





#54

Retene

Concen: 558.57 ng/mL

RT: 39.946 min Scan# 3492

Delta R.T. 0.019 min

Lab File: A912191417.D

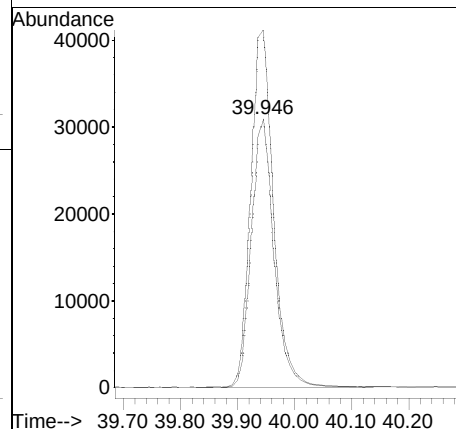
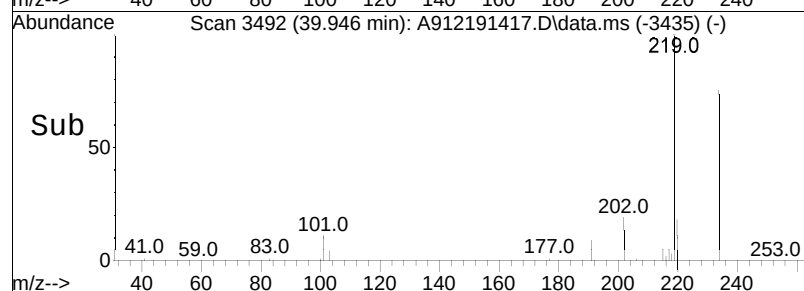
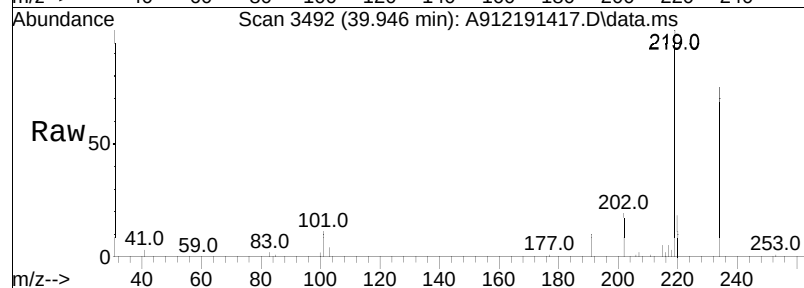
Acq: 23 Dec 2014 12:56 am

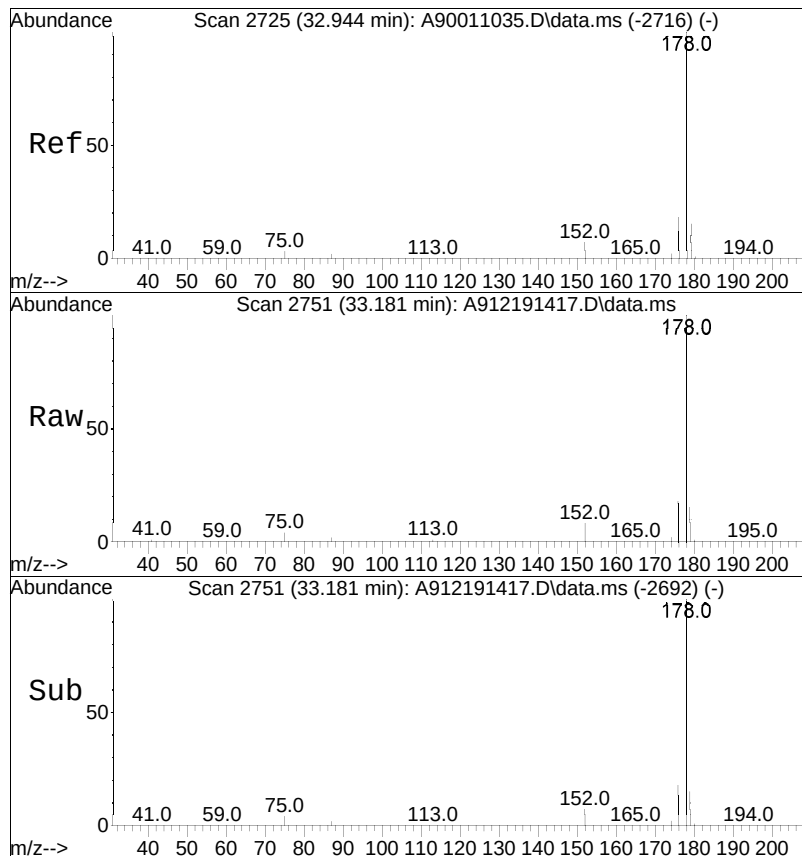
Tgt Ion: 234 Resp: 83230

Ion Ratio Lower Upper

234 100

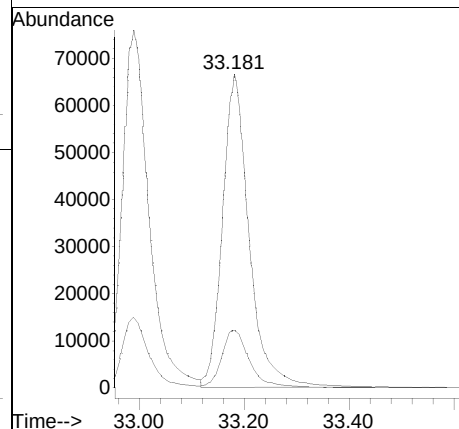
219 133.9 96.7 179.7

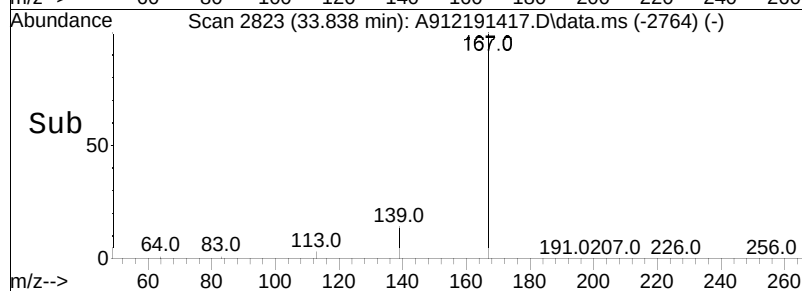
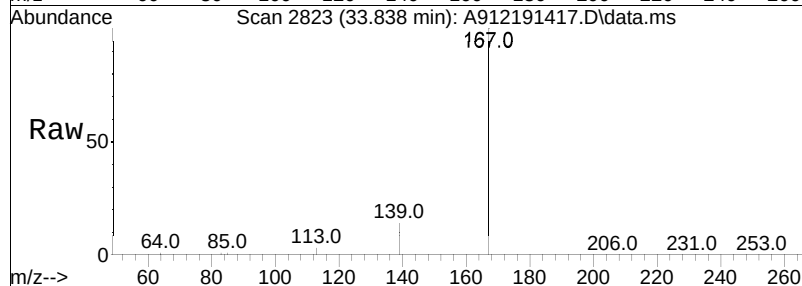
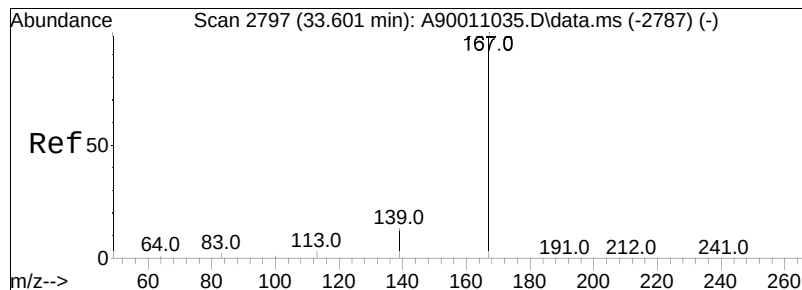




#55
 Anthracene
 Concen: 465.20 ng/mL
 RT: 33.181 min Scan# 2751
 Delta R.T. 0.036 min
 Lab File: A912191417.D
 Acq: 23 Dec 2014 12:56 am

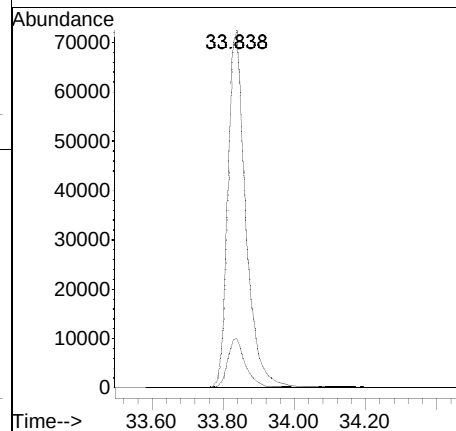
Tgt Ion	Ratio	Lower	Upper
178	100		
176	19.2	13.4	24.8

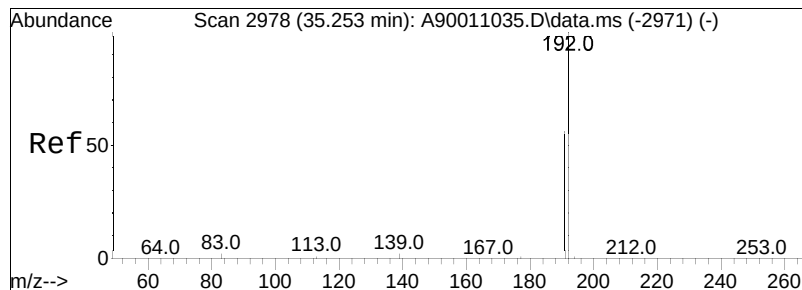




#56
 Carbazole
 Concen: 514.72 ng/mL
 RT: 33.838 min Scan# 2823
 Delta R.T. 0.036 min
 Lab File: A912191417.D
 Acq: 23 Dec 2014 12:56 am

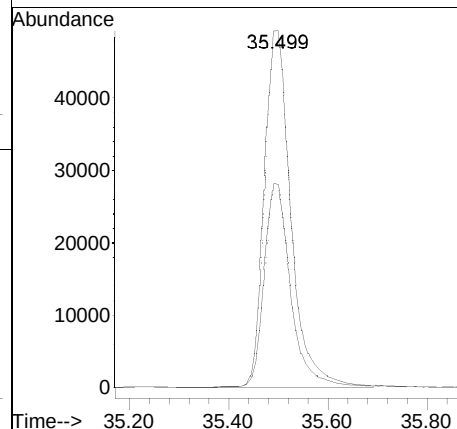
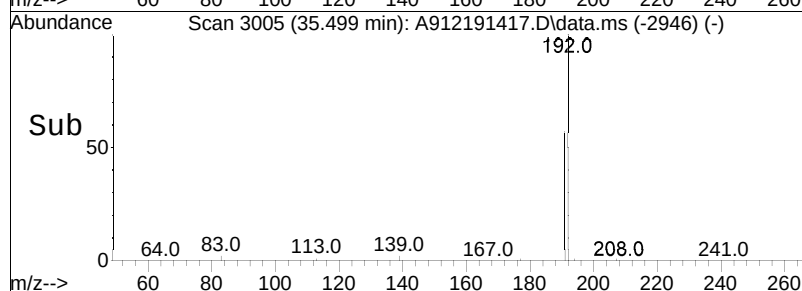
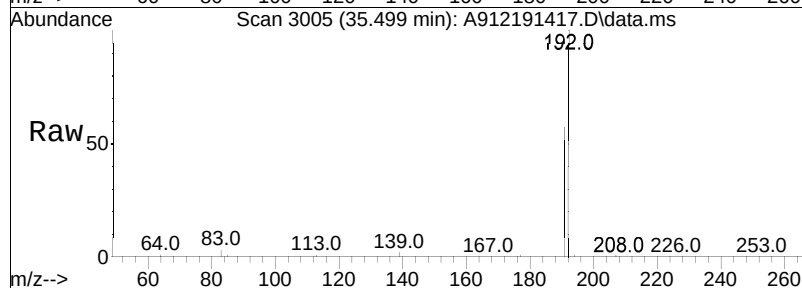
Tgt Ion	Ratio	Lower	Upper
167	100		
139	13.8	9.9	18.3

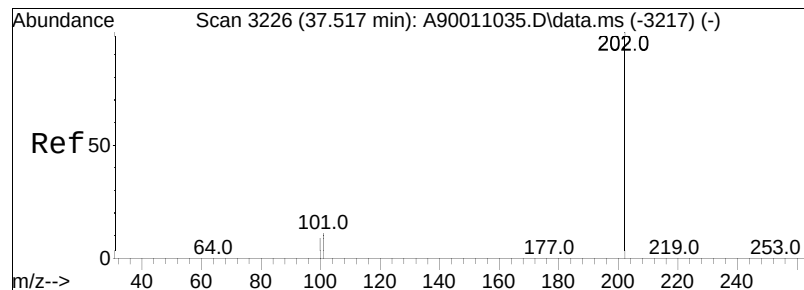




#57
 1-Methylphenanthrene
 Concen: 507.03 ng/mL
 RT: 35.499 min Scan# 3005
 Delta R.T. 0.036 min
 Lab File: A912191417.D
 Acq: 23 Dec 2014 12:56 am

Tgt Ion	Ratio	Lower	Upper
192	100		
191	56.9	39.8	74.0





#58

Fluoranthene

Concen: 516.58 ng/mL

RT: 37.754 min Scan# 3252

Delta R.T. 0.027 min

Lab File: A912191417.D

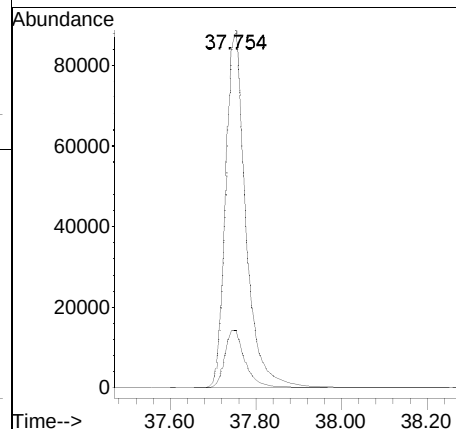
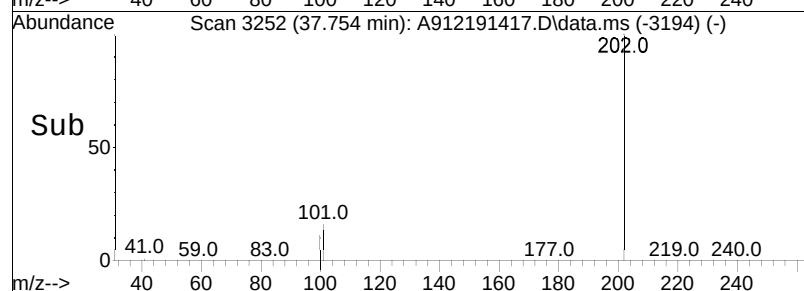
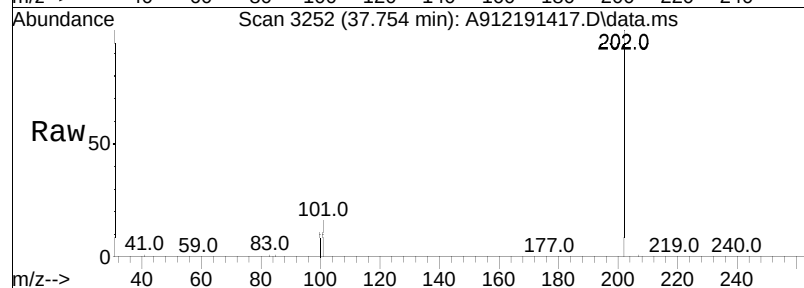
Acq: 23 Dec 2014 12:56 am

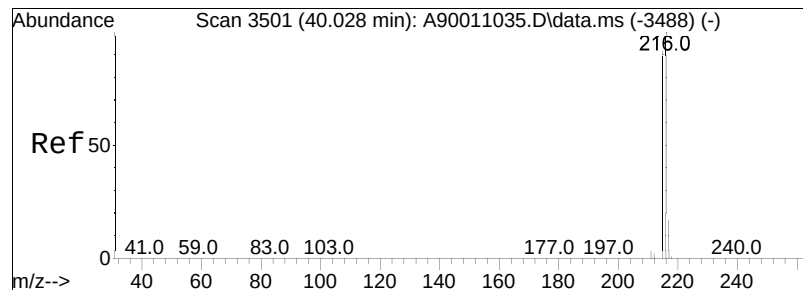
Tgt Ion: 202 Resp: 284188

Ion Ratio Lower Upper

202 100

101 16.6 11.8 22.0





#59

Benzo(b)fluorene

Concen: 522.02 ng/mL

RT: 40.265 min Scan# 3527

Delta R.T. 0.027 min

Lab File: A912191417.D

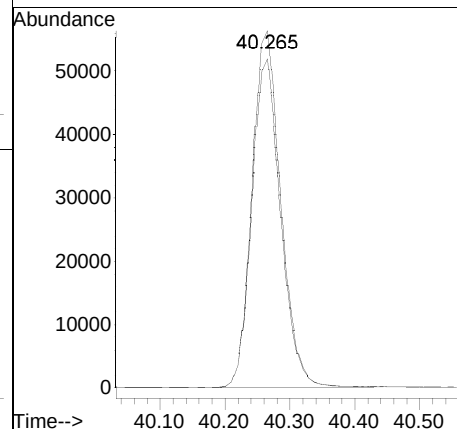
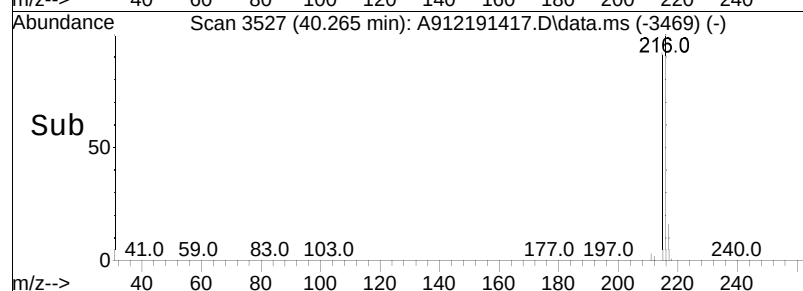
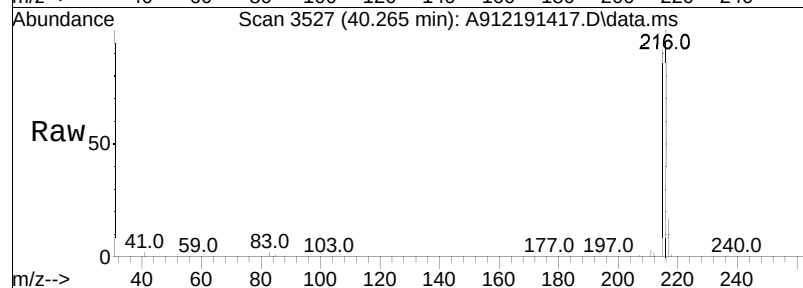
Acq: 23 Dec 2014 12:56 am

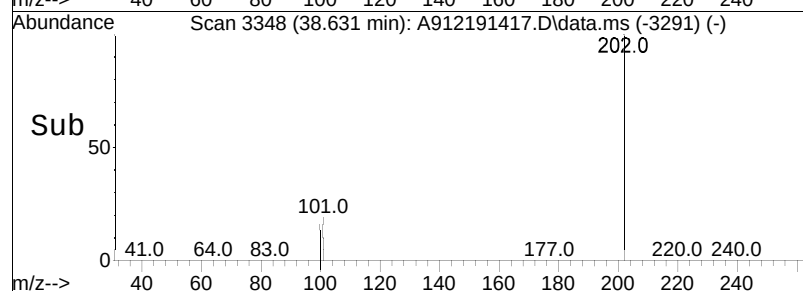
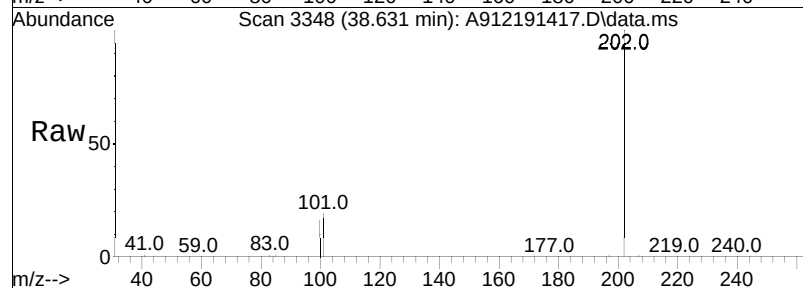
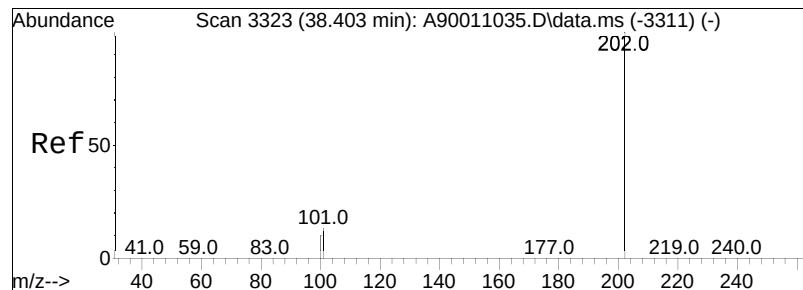
Tgt Ion:216 Resp: 173462

Ion Ratio Lower Upper

216 100

215 92.3 64.3 119.3





#60

Pyrene

Concen: 542.74 ng/mL

RT: 38.631 min Scan# 3348

Delta R.T. 0.018 min

Lab File: A912191417.D

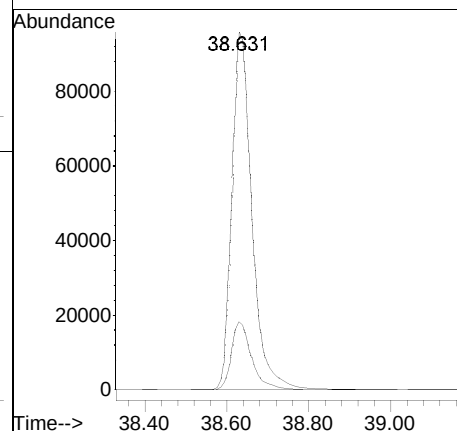
Acq: 23 Dec 2014 12:56 am

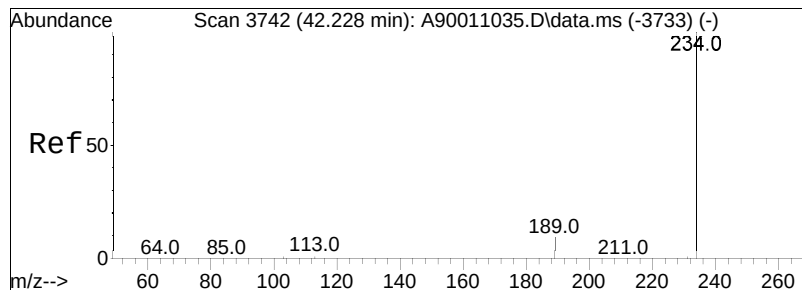
Tgt Ion: 202 Resp: 317607

Ion Ratio Lower Upper

202 100

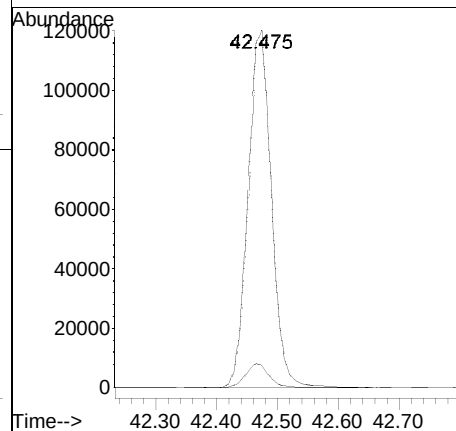
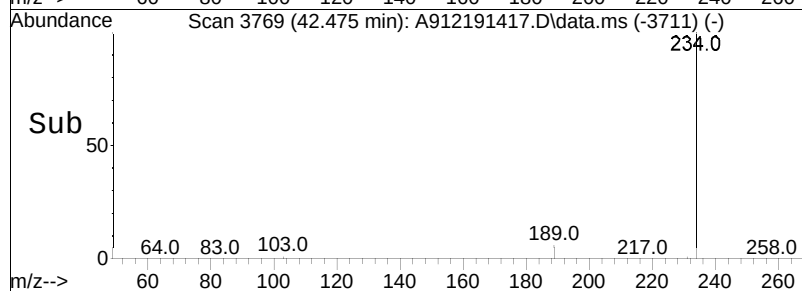
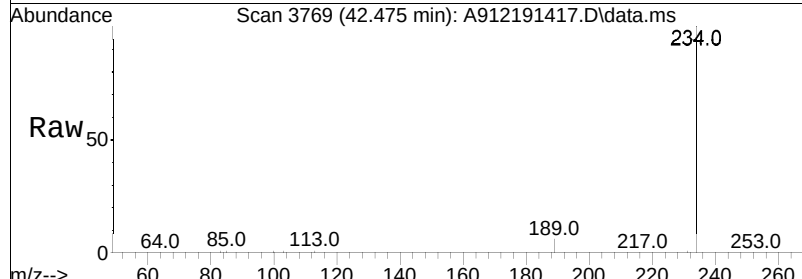
101 19.5 14.2 26.4

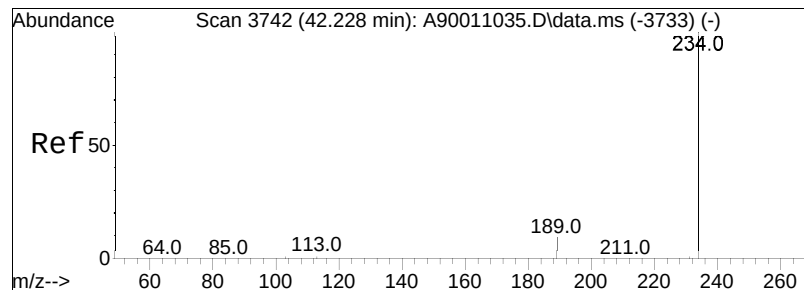




#66
 Naphthobenzothiophene
 Concen: 539.47 ng/ml
 RT: 42.475 min Scan# 3769
 Delta R.T. 0.028 min
 Lab File: A912191417.D
 Acq: 23 Dec 2014 12:56 am

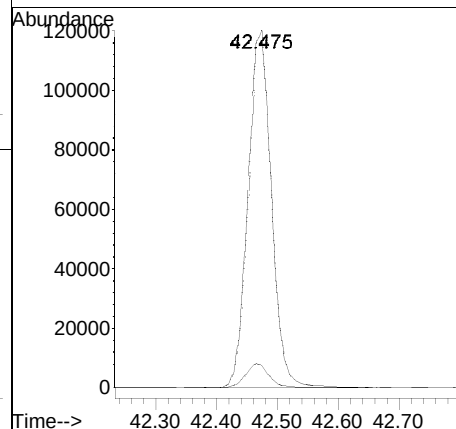
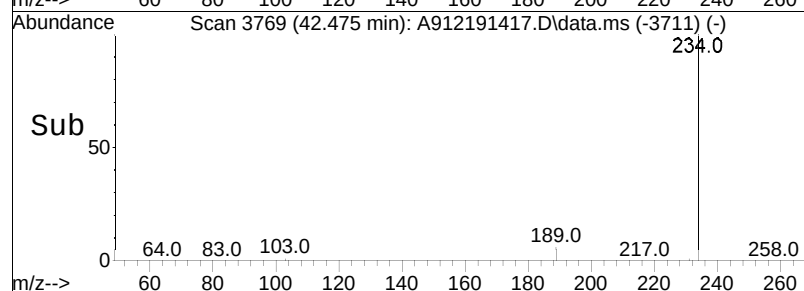
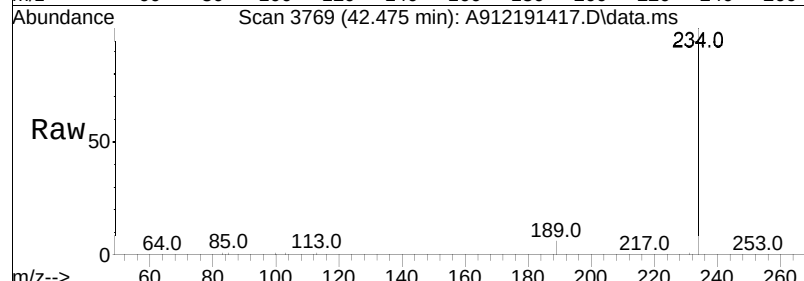
Tgt	Ion	Ratio	Lower	Upper
234	100			
189	6.6	4.9	9.1	

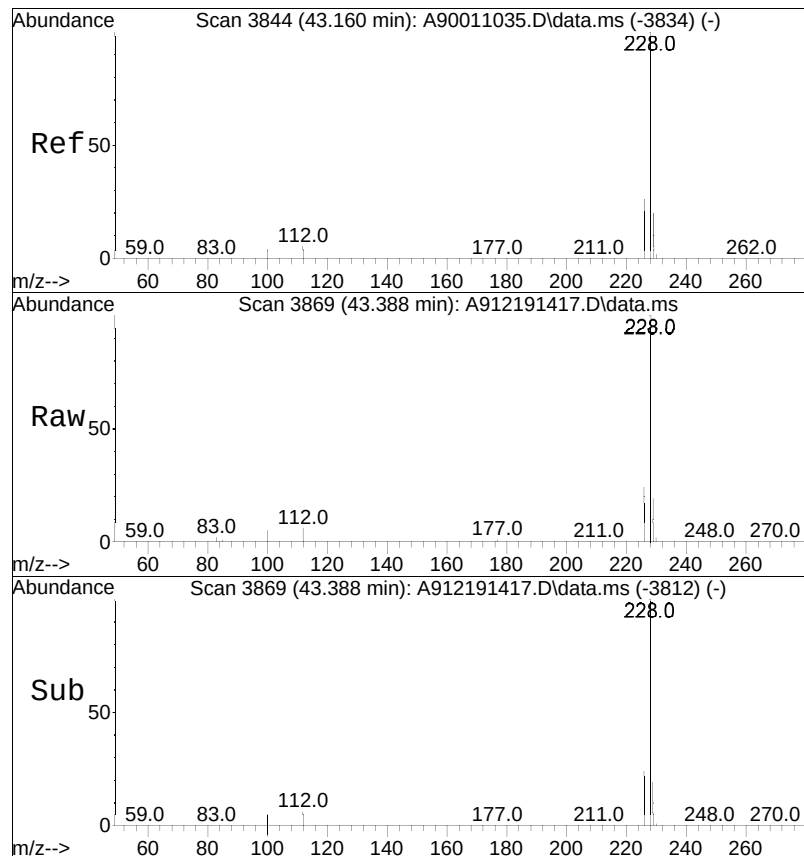




#67
 Naphthobenzothiophene-2,1-D
 Concen: 539.47 ng/mL
 RT: 42.475 min Scan# 3769
 Delta R.T. 0.028 min
 Lab File: A912191417.D
 Acq: 23 Dec 2014 12:56 am

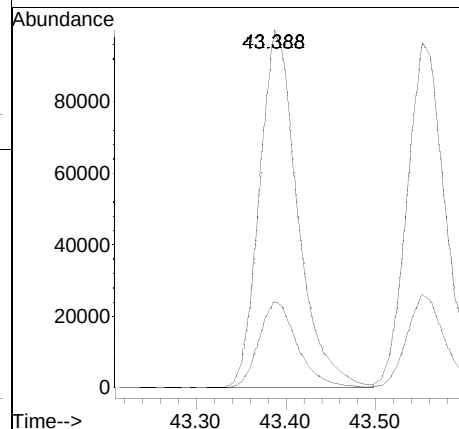
Tgt	Ion	Ratio	Lower	Upper
234	100			
189	6.6	4.9	9.1	

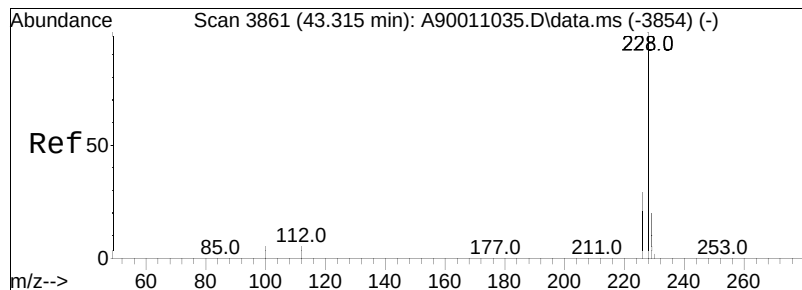




#75
 Benz[a]anthracene
 Concen: 509.21 ng/mL
 RT: 43.388 min Scan# 3869
 Delta R.T. 0.019 min
 Lab File: A912191417.D
 Acq: 23 Dec 2014 12:56 am

Tgt	Ion	Ratio	Lower	Upper
228	228	100		
226	226	24.1	17.3	32.1





#76

Chrysene

Concen: 506.65 ng/mL

RT: 43.552 min Scan# 3887

Delta R.T. 0.018 min

Lab File: A912191417.D

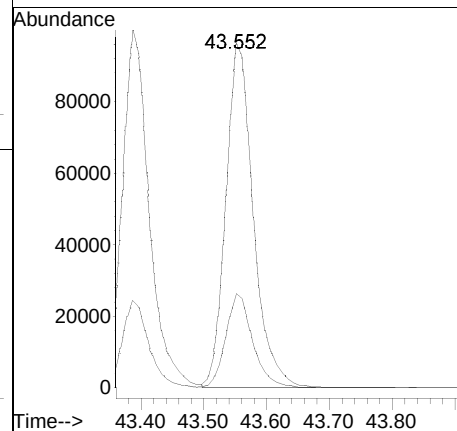
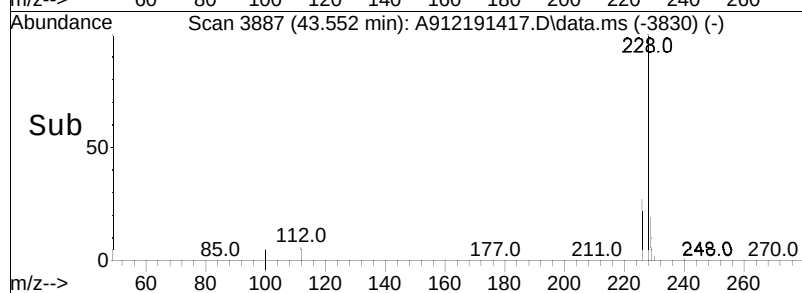
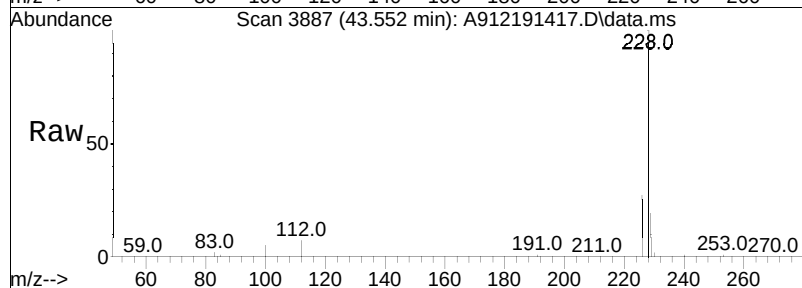
Acq: 23 Dec 2014 12:56 am

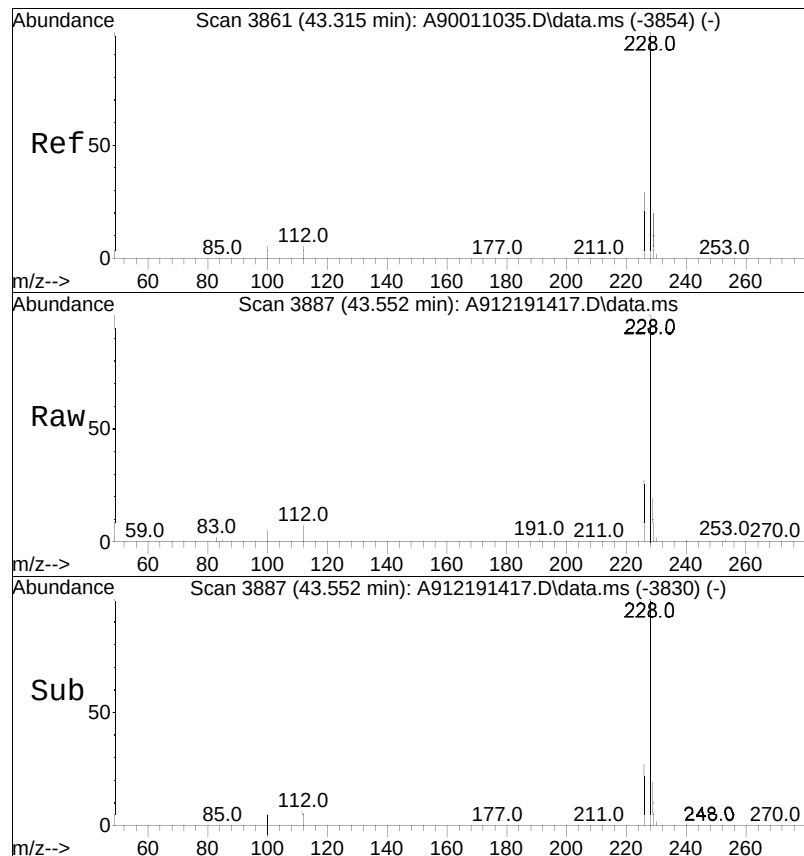
Tgt Ion:228 Resp: 291392

Ion Ratio Lower Upper

228 100

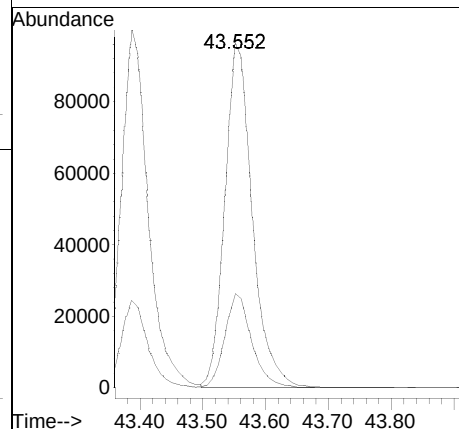
226 26.7 18.8 34.8

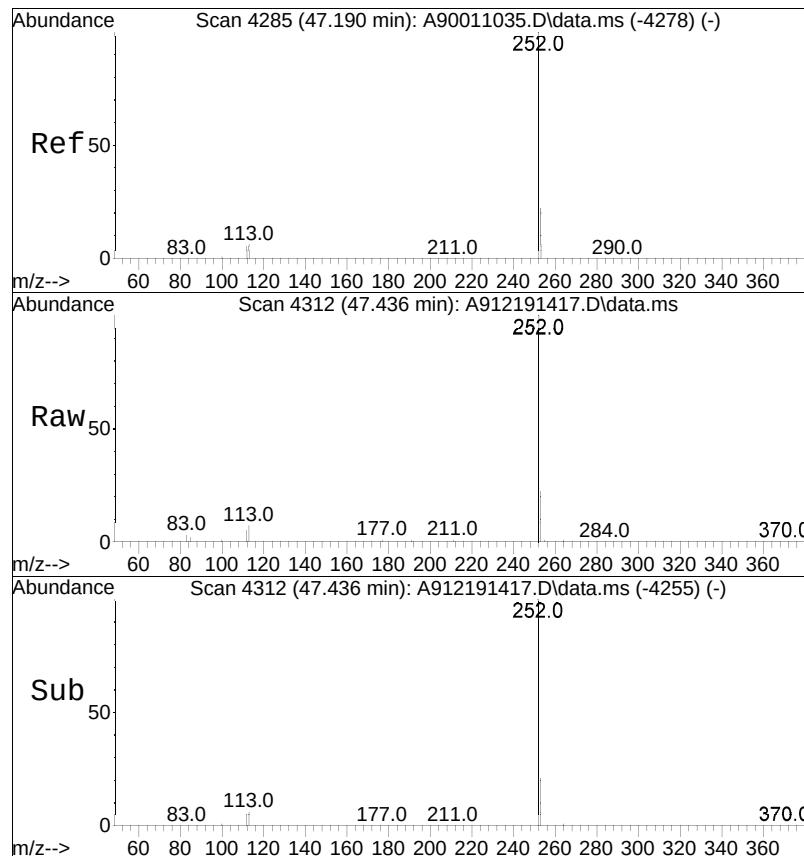




#77
 Chrysene/Triphenylene
 Concen: 506.65 ng/mL
 RT: 43.552 min Scan# 3887
 Delta R.T. 0.018 min
 Lab File: A912191417.D
 Acq: 23 Dec 2014 12:56 am

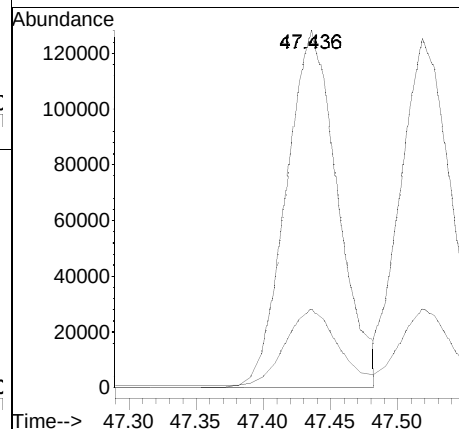
Tgt	Ion	Ratio	Lower	Upper
228	228	100		
226	226	26.7	18.8	34.8

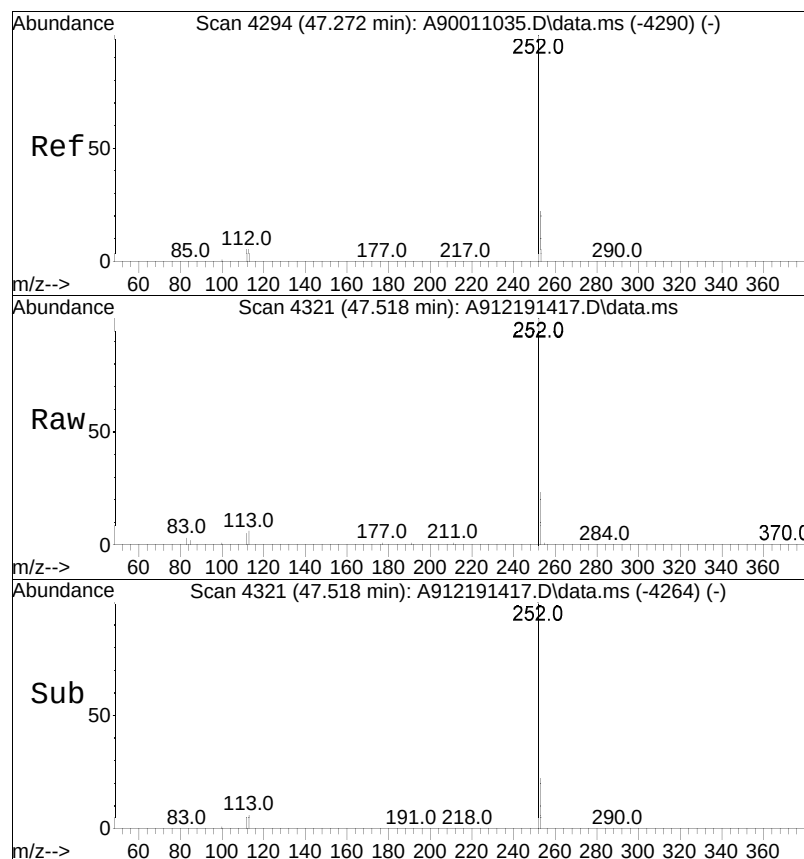




#84
Benzo[b]fluoranthene
Concen: 498.59 ng/mL
RT: 47.436 min Scan# 4312
Delta R.T. 0.018 min
Lab File: A912191417.D
Acq: 23 Dec 2014 12:56 am

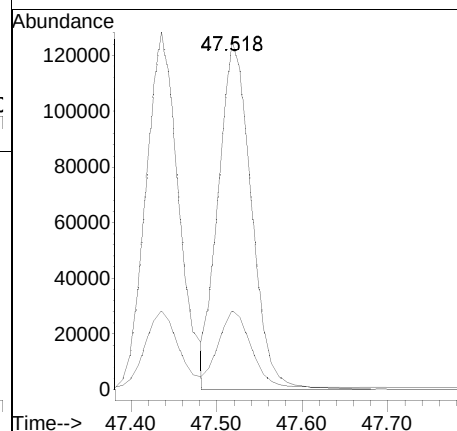
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.5	16.4	30.4	

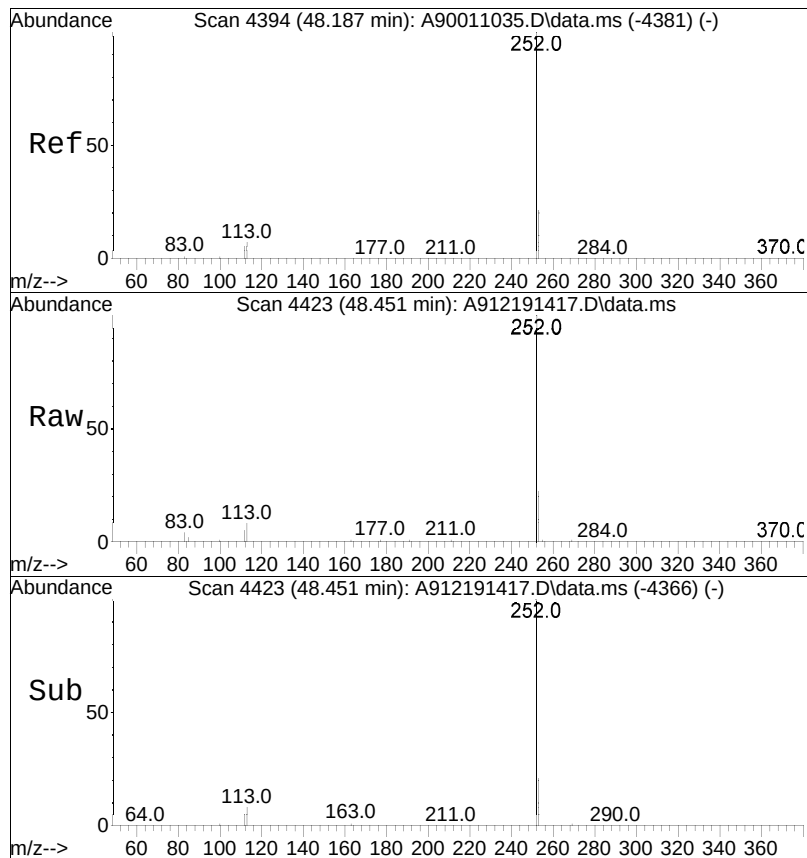




#85
 Benzo[j]+[k]fluoranthene
 Concen: 504.07 ng/mL
 RT: 47.518 min Scan# 4321
 Delta R.T. 0.018 min
 Lab File: A912191417.D
 Acq: 23 Dec 2014 12:56 am

Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.5	16.1	29.9





#87

Benzo[e]pyrene

Concen: 513.44 ng/mL

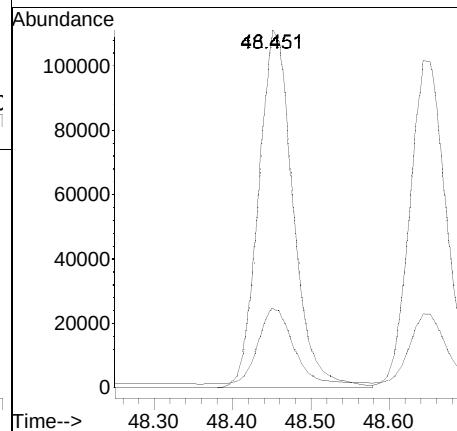
RT: 48.451 min Scan# 4423

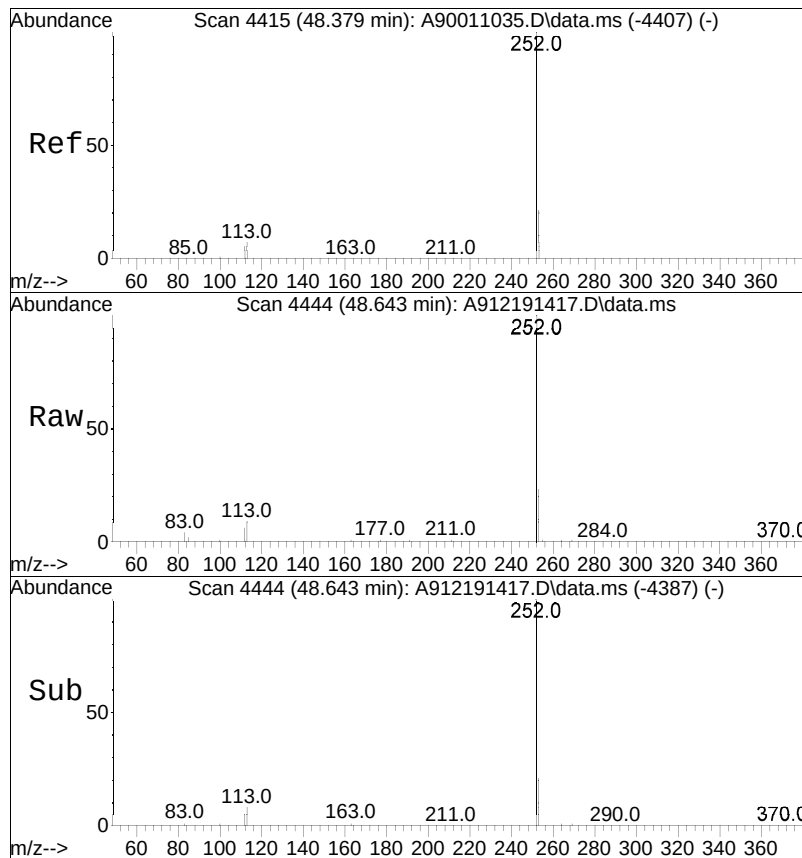
Delta R.T. 0.018 min

Lab File: A912191417.D

Acq: 23 Dec 2014 12:56 am

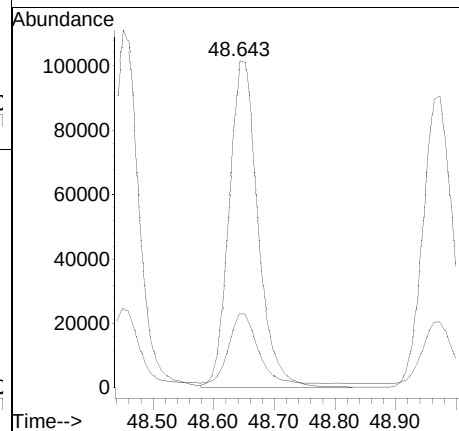
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.6	16.2	30.0	

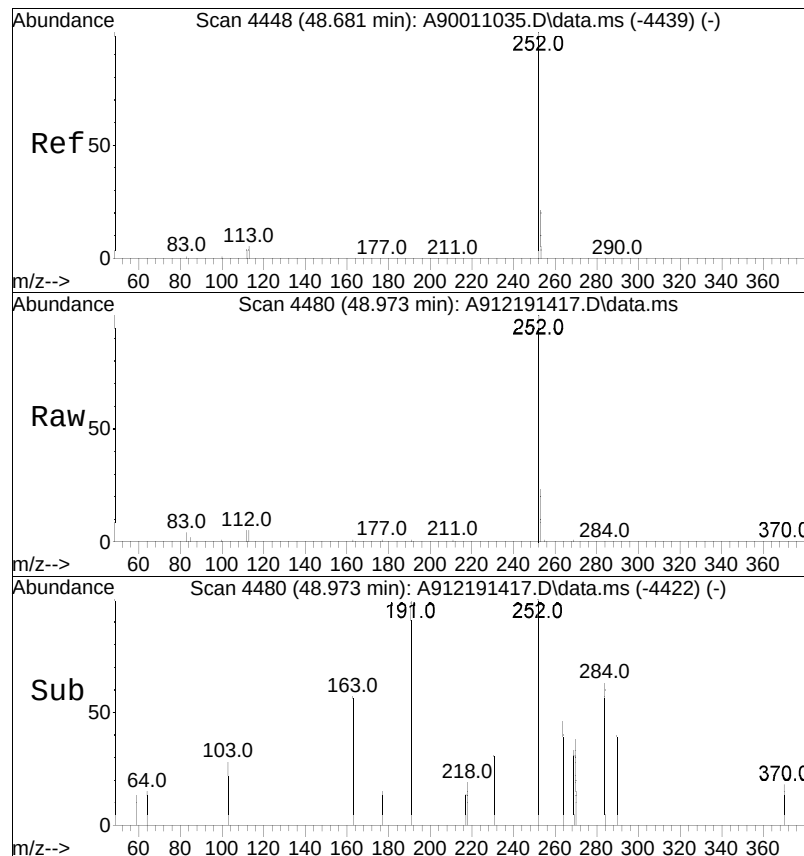




#89
 Benzo[a]pyrene
 Concen: 515.86 ng/mL
 RT: 48.643 min Scan# 4444
 Delta R.T. 0.018 min
 Lab File: A912191417.D
 Acq: 23 Dec 2014 12:56 am

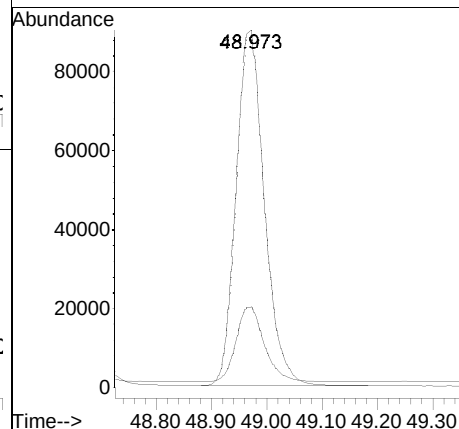
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.3	16.4	30.6	

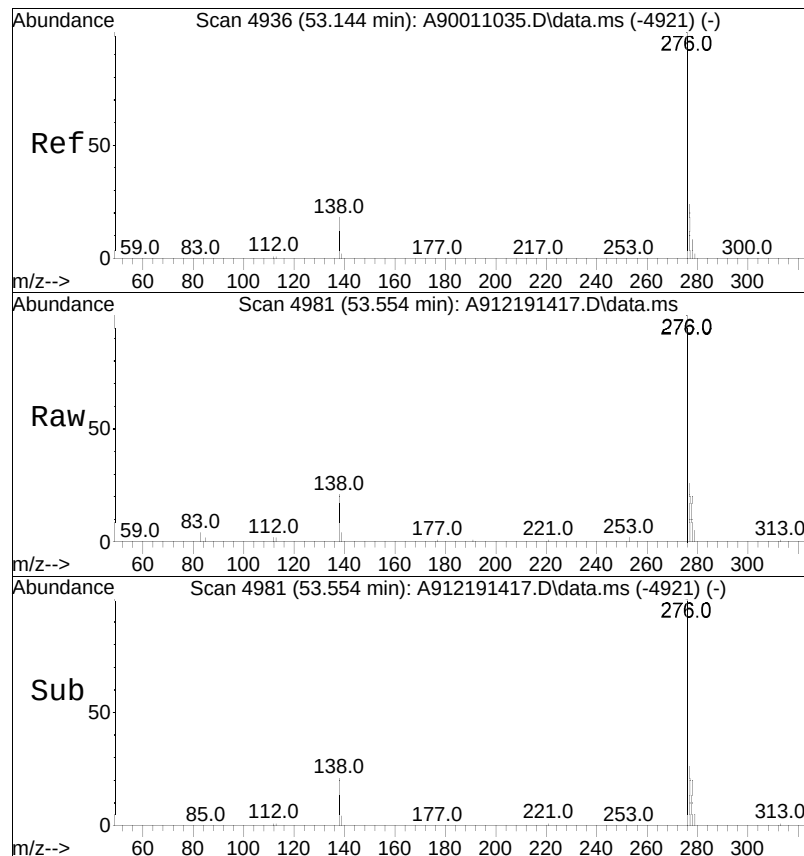




#90
 Perylene
 Concen: 488.85 ng/mL
 RT: 48.973 min Scan# 4480
 Delta R.T. 0.028 min
 Lab File: A912191417.D
 Acq: 23 Dec 2014 12:56 am

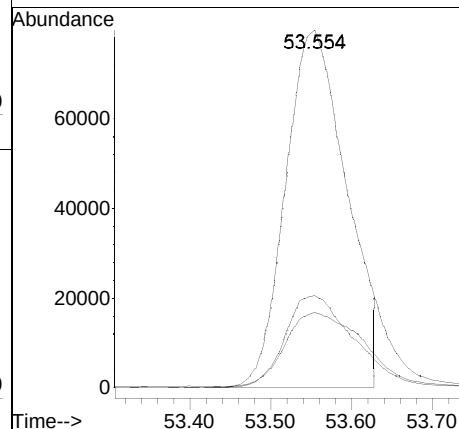
Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.5	16.6	30.8

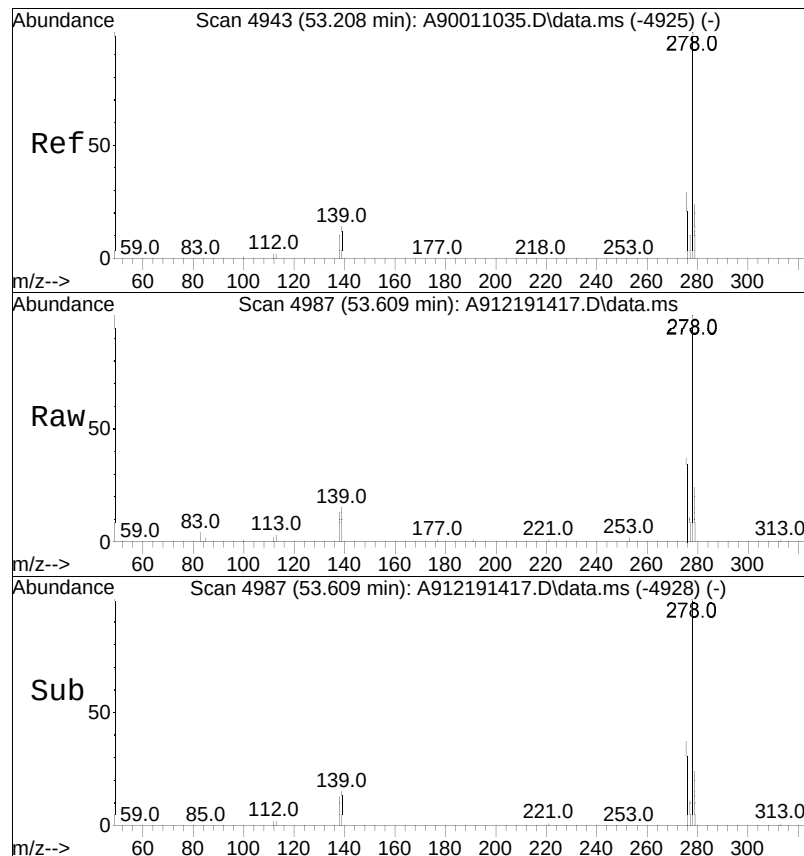




#91
 Indeno[1,2,3-cd]pyrene
 Concen: 517.99 ng/mL M3
 RT: 53.554 min Scan# 4981
 Delta R.T. 0.045 min
 Lab File: A912191417.D
 Acq: 23 Dec 2014 12:56 am

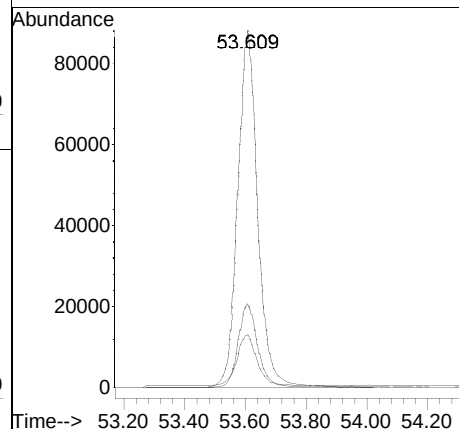
Tgt Ion:	276	Resp:	414989
Ion Ratio	Lower	Upper	
276	100		
138	26.7	15.7	29.1
277	29.1	17.9	33.3

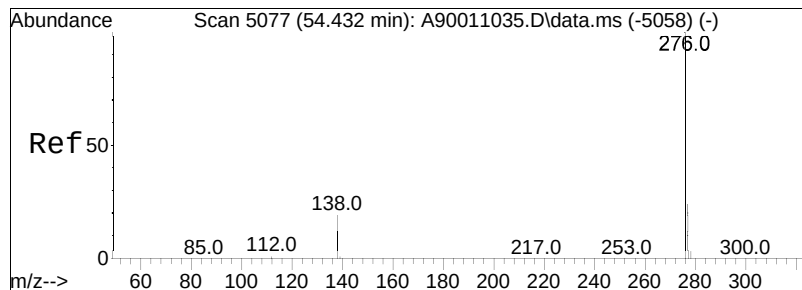




#92
 Dibenz[ah]+[ac]anthracene
 Concen: 502.88 ng/mL
 RT: 53.609 min Scan# 4987
 Delta R.T. 0.036 min
 Lab File: A912191417.D
 Acq: 23 Dec 2014 12:56 am

Tgt	Ion	Ratio	Lower	Upper
278	100			
139	14.2	11.4	21.2	
279	23.0	16.3	30.3	





#93

Benzo[g,h,i]perylene

Concen: 493.12 ng/mL

RT: 54.889 min Scan# 5127

Delta R.T. 0.046 min

Lab File: A912191417.D

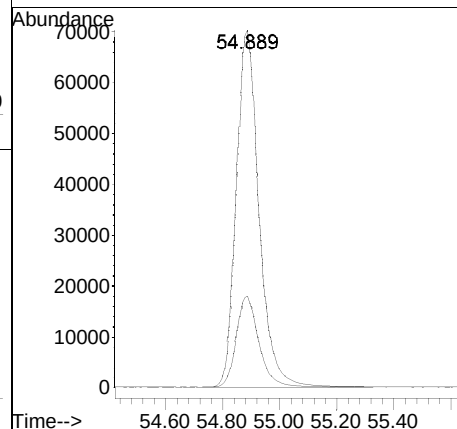
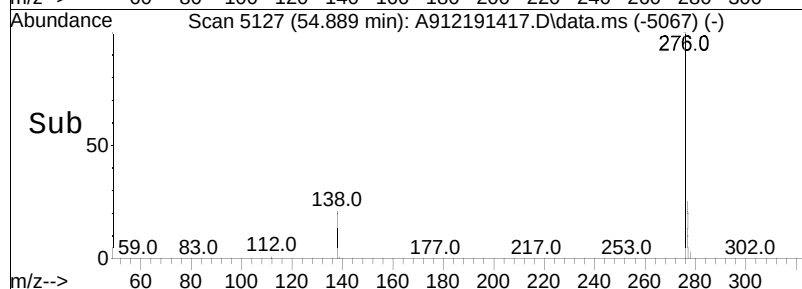
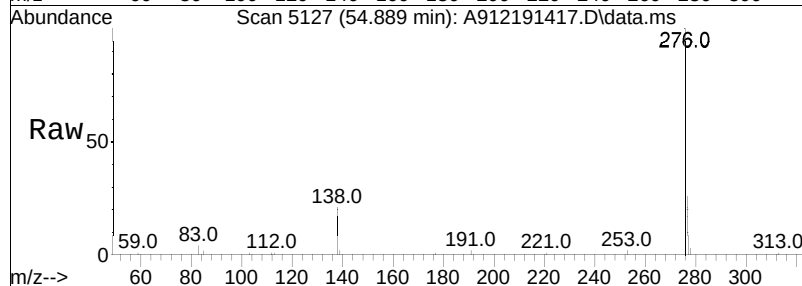
Acq: 23 Dec 2014 12:56 am

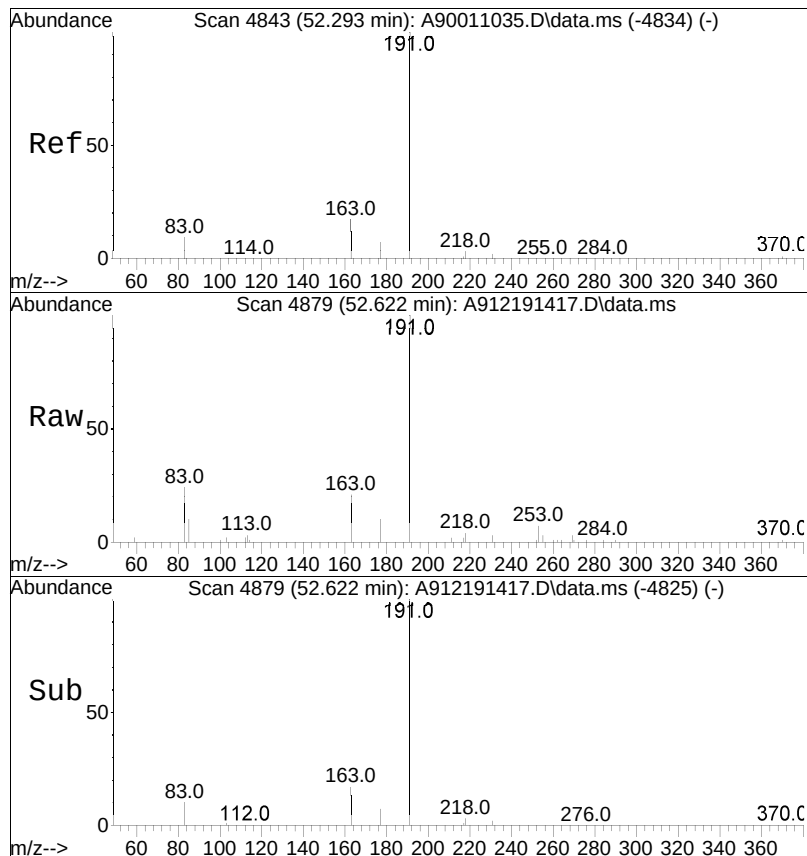
Tgt Ion: 276 Resp: 383768

Ion Ratio Lower Upper

276 100

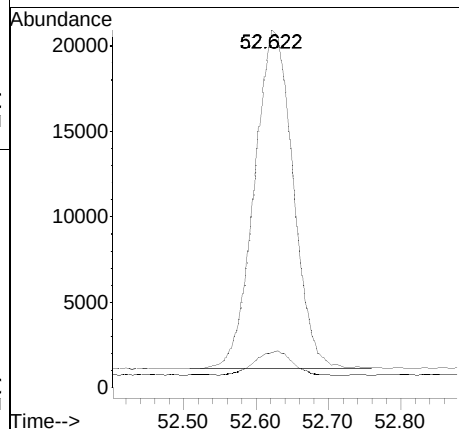
277 25.4 17.4 32.2

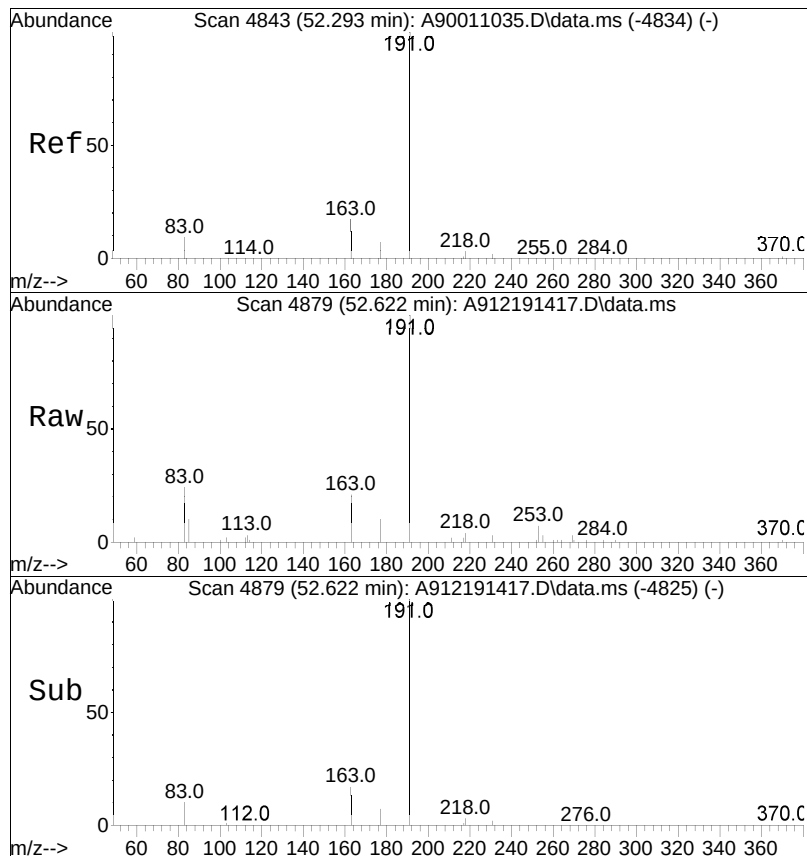




#94
 Hopane (T19)
 Concen: 453.79 ng/mL
 RT: 52.622 min Scan# 4879
 Delta R.T. -0.009 min
 Lab File: A912191417.D
 Acq: 23 Dec 2014 12:56 am

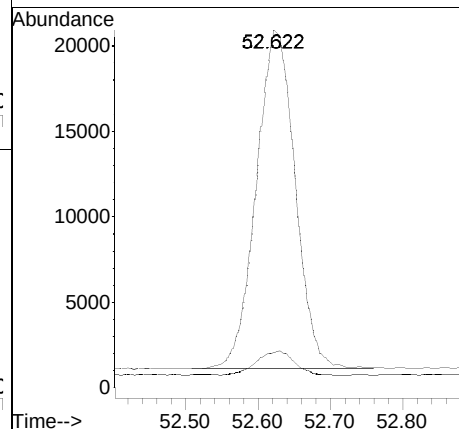
Tgt Ion	Ratio	Lower	Upper
191	100		
177	7.4	8.5	15.9#





#95
 17a(H),21B(H)-hopane - C₃₀H₅₂
 Concen: 453.79 ng/mL
 RT: 52.622 min Scan# 4879
 Delta R.T. -0.009 min
 Lab File: A912191417.D
 Acq: 23 Dec 2014 12:56 am

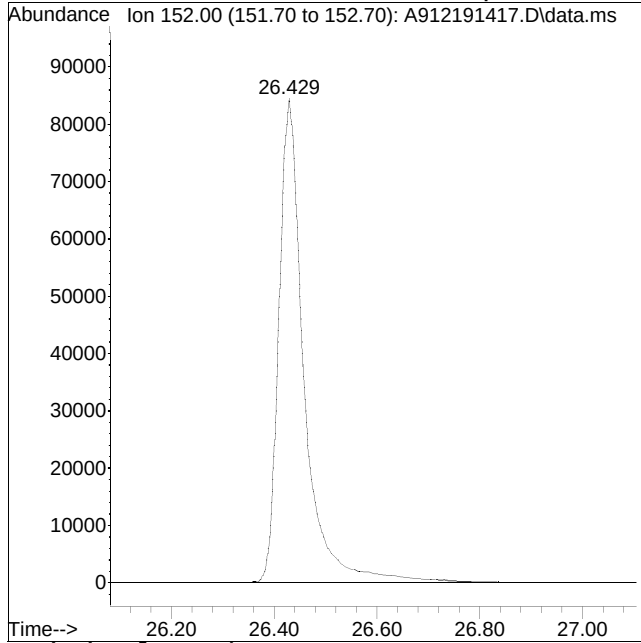
Tgt	Ion	Ratio	Lower	Upper
191	100			
177	7.4	8.5	15.9	



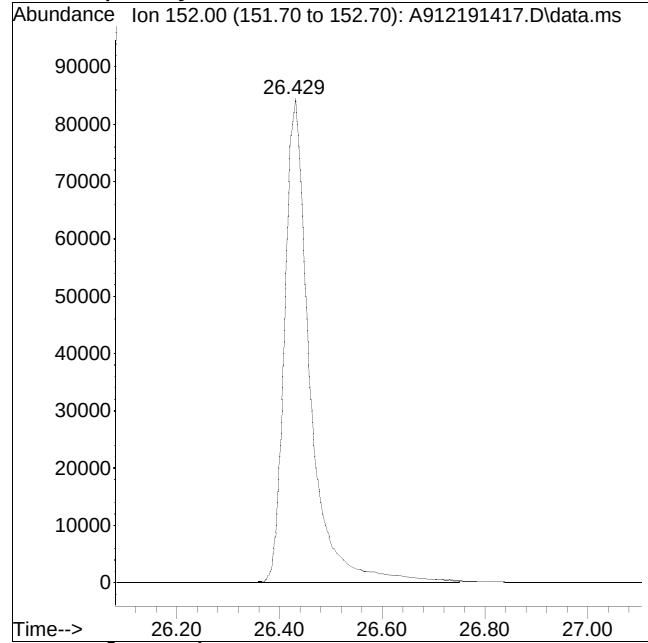
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191417.D Operator : PAH9:SR
Date Inj'd : 12/23/2014 12:56 am Instrument : PAH 9
Sample : WG754959-4 Quant Date : 12/23/2014 7:29 am

Compound #26: Acenaphthylene



Original Peak Response = 290271



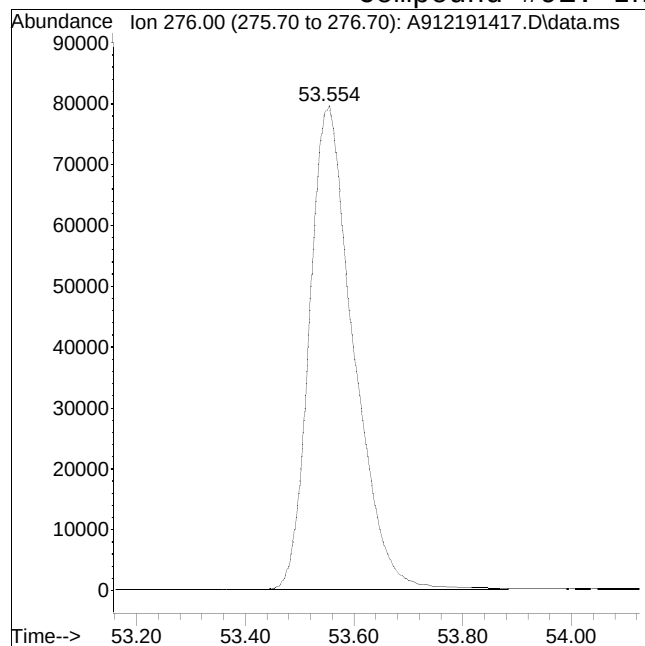
Manual Peak Response = 287125 M4

M4 = Poor automated baseline construction.

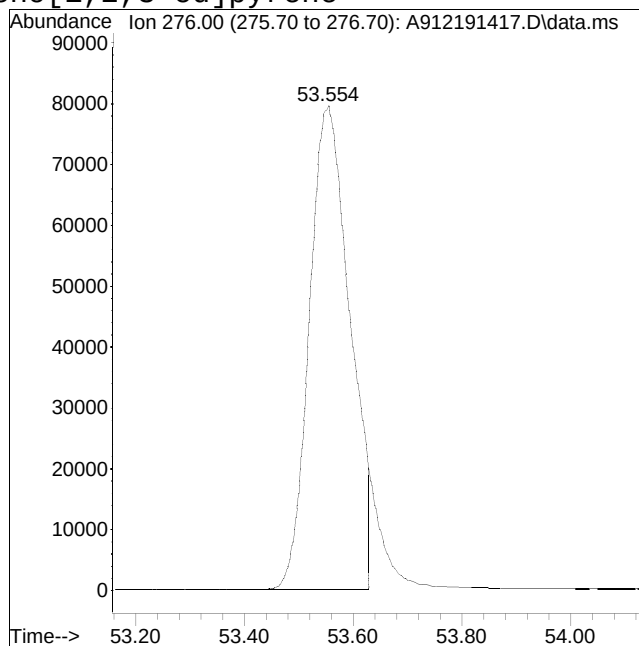
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912191417.D Operator : PAH9:SR
 Date Inj'd : 12/23/2014 12:56 am Instrument : PAH 9
 Sample : WG754959-4 Quant Date : 12/23/2014 7:29 am

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 447173



Manual Peak Response = 414989 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Semivolatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191406.D
 Acq On : 19 Dec 2014 8:55 pm
 Operator : PAH9:SR
 Sample : wg749631-1,32
 Misc : WG754959,WG749631,ICAL10505
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 12 09:13:48 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.032	164	101364M4	500.000	ng/mL	0.00
74) Chrysene-d12	43.452	240	191379	500.000	ng/mL	0.02
System Monitoring Compounds						
9) Naphthalene-d8	20.087	136	198310	432.099	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	43.21%#		
42) Phenanthrene-d10	32.898	188	164132	471.773	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	47.18%#		
83) Benzo[b]fluoranthene-d12	47.354	264	206706	522.085	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	52.21%		
88) Benzo[a]pyrene-d12	48.561	264	180801	497.604	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	49.76%#		
129) 5B(H)Cholane - Surr	44.063	217	29583	489.407	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	48.94%#		
Target Compounds						
10) Naphthalene	20.178	128	1397	2.490	ng/mL	100
11) C1-Naphthalenes	22.880	142	1229M5	2.190	ng/mL	
12) C2-Naphthalenes	0.000		0	N.D.	d	
13) C3-Naphthalenes	0.000		0	N.D.		
14) C4-Naphthalenes	0.000		0	N.D.		
23) Biphenyl	24.732	154	275M4	0.733	ng/mL	
25) Dibenzofuran	0.000		0	N.D.		
26) Acenaphthylene	26.439	152	1054	2.263	ng/mL	100
27) Acenaphthene	27.159	153	700	2.492	ng/mL	83
29) Fluorene	29.194	166	813	2.575	ng/mL	90
30) C1-Fluorenes	0.000		0	N.D.		
31) C2-Fluorenes	0.000		0	N.D.	d	
32) C3-Fluorenes	0.000		0	N.D.	d	
33) Dibenzothiophene	32.506	184	197	0.425	ng/mL#	75
38) C1-Dibenzothiophenes	34.641	198	24579M5	53.000	ng/mL	
38) C1-Dibenzothiophenes BS	34.641	198	816M5	1.760	ng/mL	
39) C2-Dibenzothiophenes	0.000		0	N.D.	d	
40) C3-Dibenzothiophenes	0.000		0	N.D.		
41) C4-Dibenzothiophenes	0.000		0	N.D.		
43) Phenanthrene	32.980	178	1425M4	3.234	ng/mL	
49) C1-Phenanthrenes/Anthrace	35.490	192	705M5	1.600	ng/mL	
50) C2-Phenanthrenes/Anthrace	0.000		0	N.D.	d	
50) C2-Phenanthrenes/Anthr BS	0.000		0d	0.000	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191406.D
 Acq On : 19 Dec 2014 8:55 pm
 Operator : PAH9:SR
 Sample : wg749631-1,32
 Misc : WG754959,WG749631,ICAL10505
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 12 09:13:48 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

52) C3-Phenanthrenes/Anthrace	0.000		0	N.D.	d	
53) C4-Phenanthrenes/Anthrace	39.946	234	414M2	0.940	ng/mL	
55) Anthracene	33.181	178	994M4	2.443	ng/mL	
56) Carbazole	0.000		0	N.D.	d	
58) Fluoranthene	37.763	202	1411	3.154	ng/mL	93
59) Benzo(b)fluorene	0.000		0	N.D.	d	
60) Pyrene	38.640	202	1688	3.547	ng/mL	98
61) C1-Fluoranthenes/Pyrenes	0.000		0	N.D.	d	
62) C2-Fluoranthenes/Pyrenes	0.000		0	N.D.	d	
63) C3-Fluoranthenes/Pyrenes	0.000		0	N.D.	d	
64) C4-Fluoranthenes/Pyrenes	0.000		0	N.D.	d	
66) Naphthobenzothiophene	0.000		0	N.D.	d	
70) C1-Naphthobenzothiophenes	0.000		0	N.D.	d	
71) C2-Naphthobenzothiophenes	0.000		0	N.D.	d	
72) C3-Naphthobenzothiophenes	0.000		0	N.D.	d	
73) C4-Naphthobenzothiophenes	0.000		0	N.D.	d	
75) Benz[a]anthracene	43.397	228	1156	2.726	ng/mL	95
77) Chrysene/Triphenylene	43.552	228	1352	3.225	ng/mL	96
78) C1-Chrysenes	0.000		0	N.D.	d	
79) C2-Chrysenes	0.000		0	N.D.	d	
79) C2-Chrysenes BS	0.000		0d	0.000	ng/mL	
81) C3-Chrysenes	0.000		0	N.D.	d	
82) C4-Chrysenes	0.000		0	N.D.	d	
84) Benzo[b]fluoranthene	47.436	252	1482M3	2.954	ng/mL	
85) Benzo[j]+[k]fluoranthene	47.527	252	1391	2.895	ng/mL	86
86) Benzo[a]fluoranthene	0.000		0	N.D.	d	
87) Benzo[e]pyrene	0.000		0	N.D.	d	
89) Benzo[a]pyrene	48.652	252	1443	3.065	ng/mL	86
90) Perylene	49.000	252	327	0.688	ng/mL#	3
91) Indeno[1,2,3-cd]pyrene	53.591	276	1732	2.966	ng/mL#	75
92) Dibenz[ah]+[ac]anthracene	53.628	278	1356	2.353	ng/mL#	82
93) Benzo[g,h,i]perylene	54.898	276	1560	2.750	ng/mL	94
94) Hopane (T19)	0.000		0	N.D.	d	
100) C26 Tricyclic Terpane-22S	0.000		0	N.D.	d	
101) C26 Tricyclic Terpane-22R	0.000		0	N.D.	d	
102) C28 Tricyclic Terpane-22S	0.000		0	N.D.	d	
103) C28 Tricyclic Terpane-22R	0.000		0	N.D.	d	
104) C29 Tricyclic Terpane-22S	0.000		0	N.D.	d	
105) C29 Tricyclic Terpane-22R	0.000		0	N.D.	d	
106) 18a-22,29,30-Trisnorneoho	0.000		0	N.D.	d	
107) C30 Tricyclic Terpane-22S	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191406.D
 Acq On : 19 Dec 2014 8:55 pm
 Operator : PAH9:SR
 Sample : wg749631-1,32
 Misc : WG754959,WG749631,ICAL10505
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 12 09:13:48 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) C30 Tricyclic Terpane-22R	0.000		0	N.D.	d	
109) 17a(H)-22,29,30-Trisnorho	0.000		0	N.D.	d	
110) 17a/b,21b/a 28,30-Bisnorh	0.000		0	N.D.	d	
111) 17a(H),21b(H)-25-Norhopan	0.000		0	N.D.	d	
112) 30-Norhopane (T15)	0.000		0	N.D.	d	
113) 18a(H)-30-Norneohopane-C2	0.000		0	N.D.	d	
114) 17a(H)-Diahopane (X)	0.000		0	N.D.	d	
115) 30-Normoretane (T17)	0.000		0	N.D.	d	
116) 18a(H)&18b(H)-Oleananes (	0.000		0	N.D.	d	
117) Moretane (T20)	0.000		0	N.D.	d	
118) 30-Homohopane-22S (T21)	0.000		0	N.D.	d	
119) 30-Homohopane-22R (T22)	0.000		0	N.D.	d	
120) Gammacerane/C32-diahopane	0.000		0	N.D.	d	
121) 30,31-Bishomohopane-22S (	0.000		0	N.D.	d	
122) 30,31-Bishomohopane-22R (	0.000		0	N.D.	d	
123) 30,31-Trishomohopane-22S	0.000		0	N.D.	d	
124) 30,31-Trishomohopane-22R	0.000		0	N.D.	d	
125) Tetrakishomohopane-22S (T	0.000		0	N.D.	d	
126) Tetrakishomohopane-22R (T	0.000		0	N.D.	d	
127) Pentakishomohopane-22S (T	0.000		0	N.D.	d	
128) Pentakishomohopane-22R (T	0.000		0	N.D.	d	
130) 13b(H),17a(H)-20S-Diachol	0.000		0	N.D.		
131) 13b(H),17a(H)-20R-Diachol	0.000		0	N.D.		
132) 13b,17a-20S-Methylidiachol	0.000		0	N.D.		
133) 14a,17a-20S-Chol/13b,17a-	0.000		0	N.D.		
134) 14a,17a-20R-Chol/13b,17a-	0.000		0	N.D.		
135) Unknown Sterane (S18)	0.000		0	N.D.	d	
136) 13a,17b-20S-Ethylidiachole	0.000		0	N.D.	d	
137) 14a,17a-20S-Methylcholest	0.000		0	N.D.	d	
138) 14a,17a-20R-Methylcholest	0.000		0	N.D.		
139) 14a(H),17a(H)-20S-Ethylch	0.000		0	N.D.	d	
140) 14a(H),17a(H)-20R-Ethylch	0.000		0	N.D.	d	
141) 14b(H),17b(H)-20R-Cholest	0.000		0	N.D.	d	
142) 14b(H),17b(H)-20S-Cholest	0.000		0	N.D.	d	
143) 14b,17b-20R-Methylcholest	0.000		0	N.D.	d	
144) 14b,17b-20S-Methylcholest	0.000		0	N.D.		
145) 14b(H),17b(H)-20R-Ethylch	0.000		0	N.D.		
146) 14b(H),17b(H)-20S-Ethylch	0.000		0	N.D.		
147) C26,20R- +C27,20S- triaro	49.841	231	669M4	11.068	ng/mL	
148) C28,20S-triaromatic stero	0.000		0	N.D.	d	
149) C27,20R-triaromatic stero	51.168	231	439	7.263	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191406.D
 Acq On : 19 Dec 2014 8:55 pm
 Operator : PAH9:SR
 Sample : wg749631-1,32
 Misc : WG754959,WG749631,ICAL10505
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 12 09:13:48 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
150)	C28,20R-triaromatic stero	52.411	231	206M4	3.408	ng/mL	

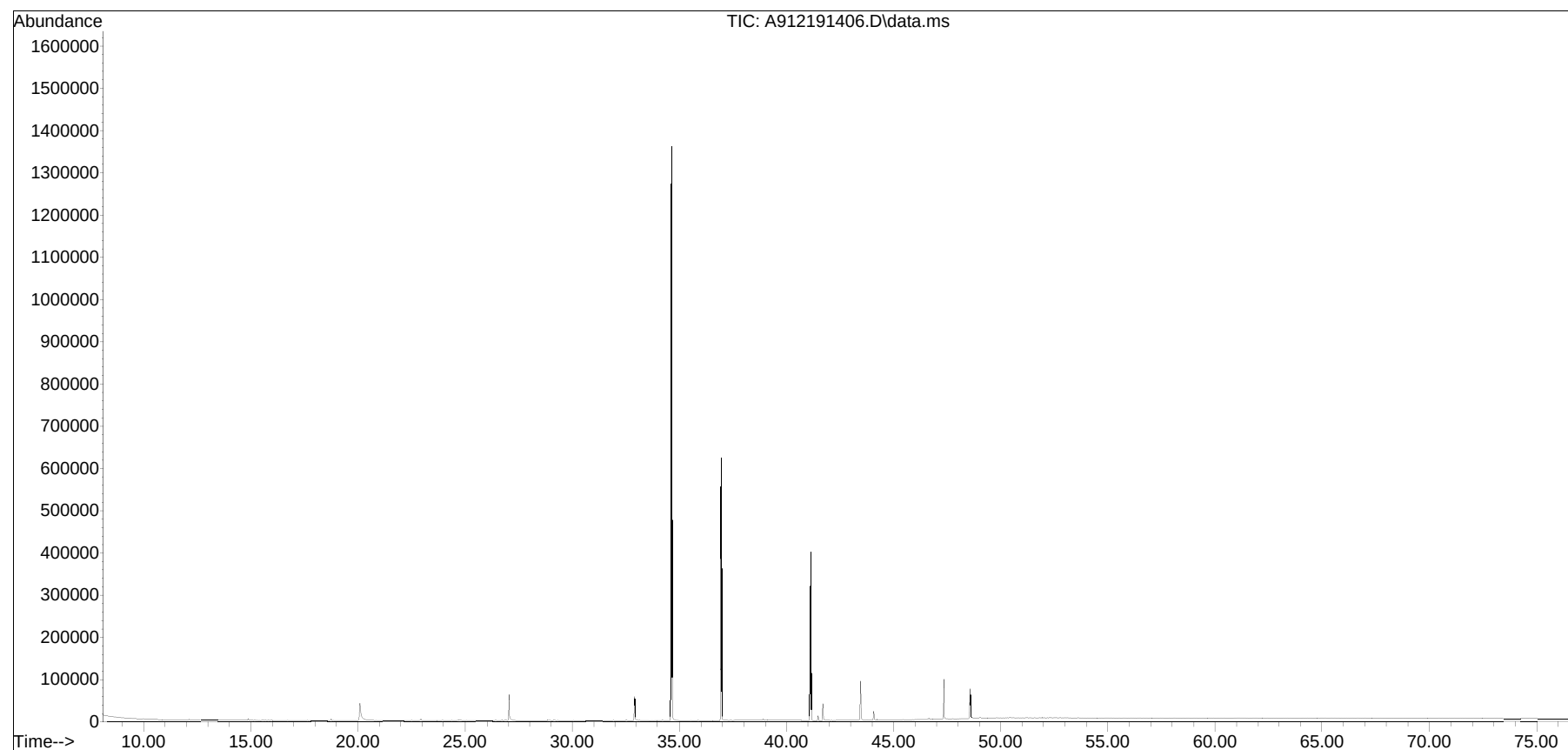
(#) = qualifier out of range (m) = manual integration (+) = signals summed

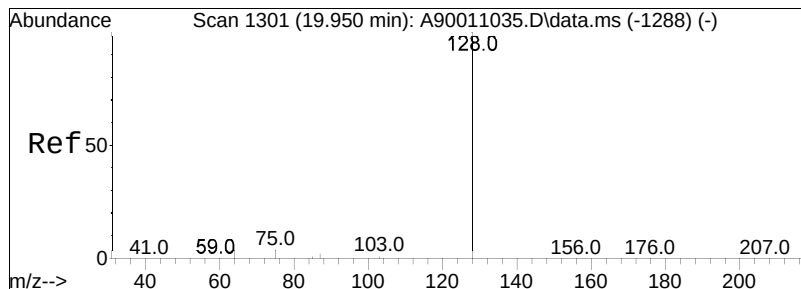
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC19\
Data File : A912191406.D
Acq On : 19 Dec 2014 8:55 pm
Operator : PAH9:SR
Sample : wg749631-1,32
Misc : WG754959,WG749631,ICAL10505
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 12 09:13:48 2015
Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 15 13:02:08 2014
Response via : Initial Calibration

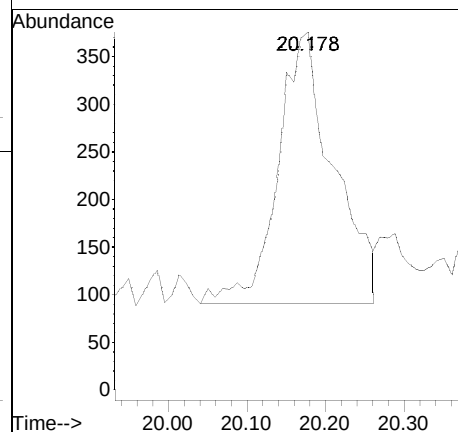
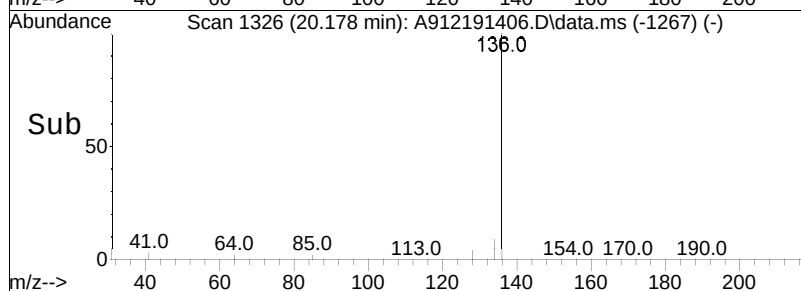
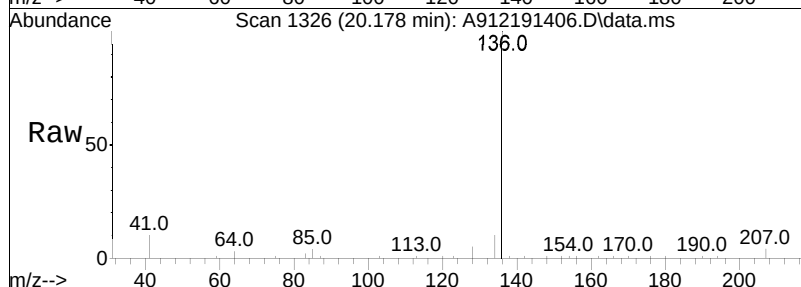
Sub List : ALKPAHURS - ALKPAH and BIO

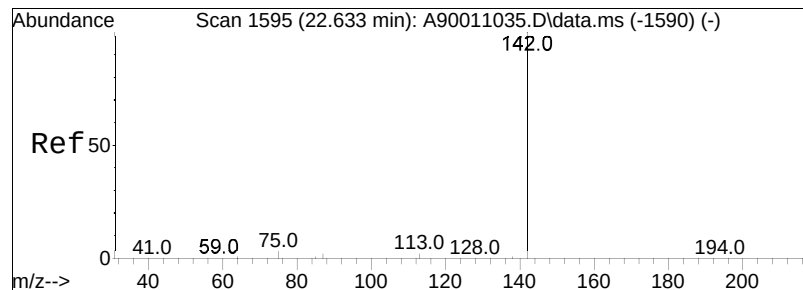




#10
Naphthalene
Concen: 2.49 ng/mL
RT: 20.178 min Scan# 1326
Delta R.T. 0.036 min
Lab File: A912191406.D
Acq: 19 Dec 2014 8:55 pm

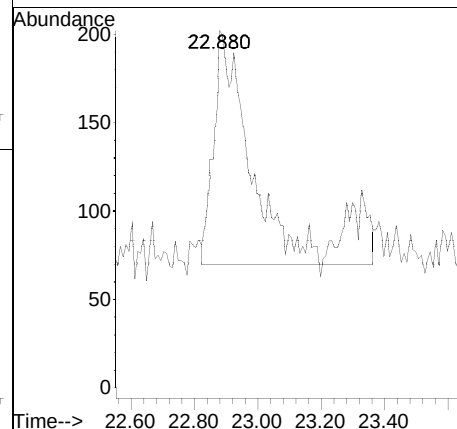
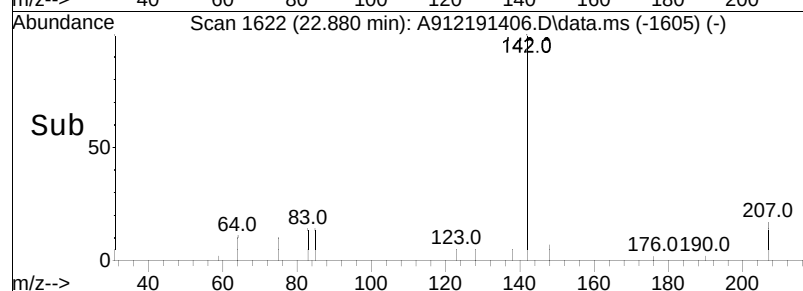
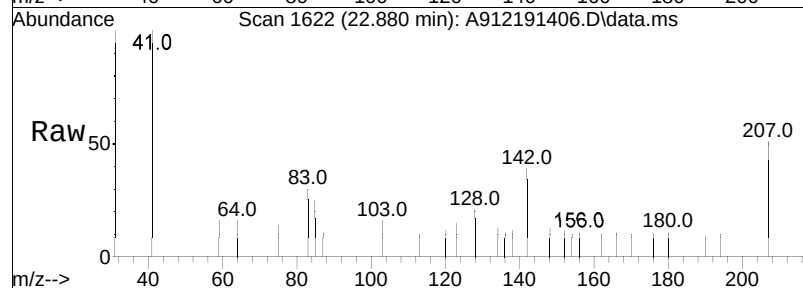
Tgt Ion:128 Resp: 1397

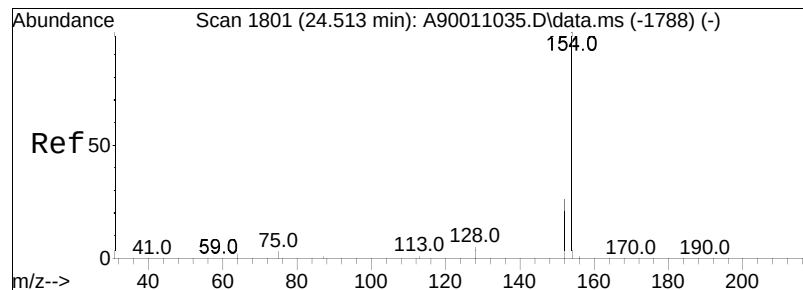




#11
 C1-Naphthalenes
 Concen: 2.19 ng/mL M5
 RT: 22.880 min Scan# 1622
 Delta R.T. 0.046 min
 Lab File: A912191406.D
 Acq: 19 Dec 2014 8:55 pm

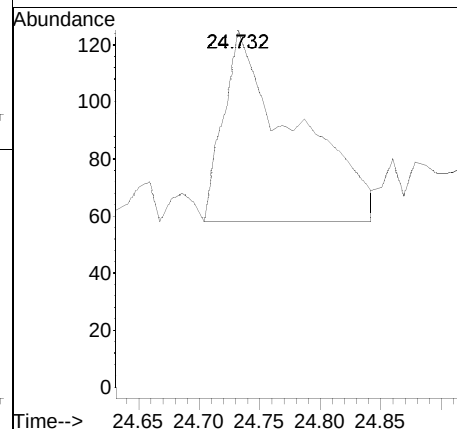
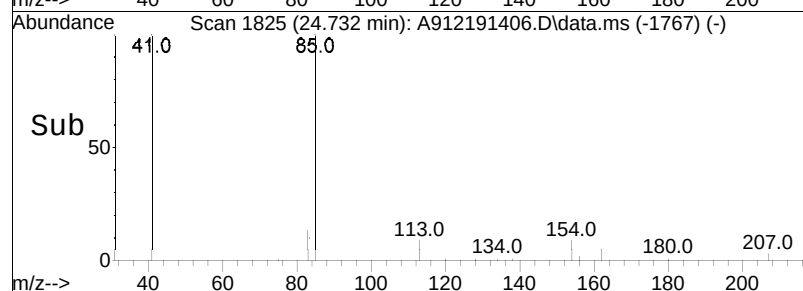
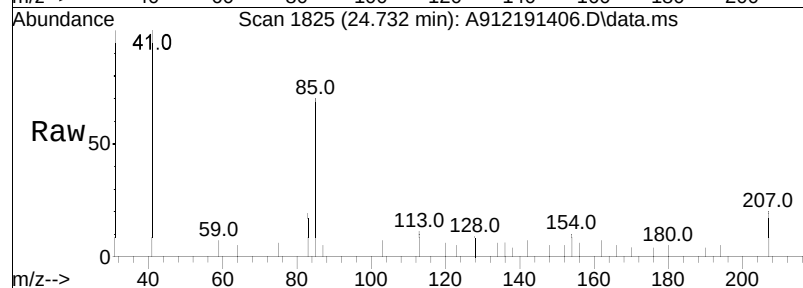
Tgt Ion:142 Resp: 1229

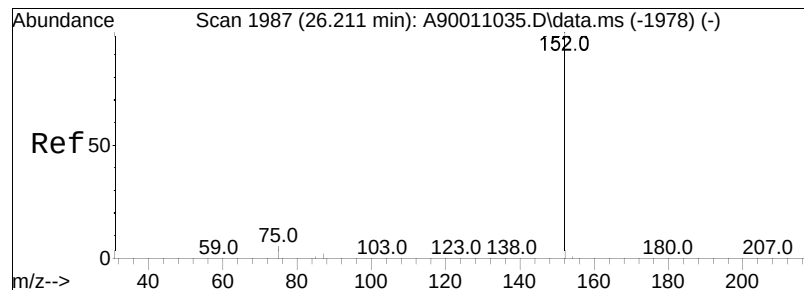




#23
 Biphenyl
 Concen: 0.73 ng/mL M4
 RT: 24.732 min Scan# 1825
 Delta R.T. 0.027 min
 Lab File: A912191406.D
 Acq: 19 Dec 2014 8:55 pm

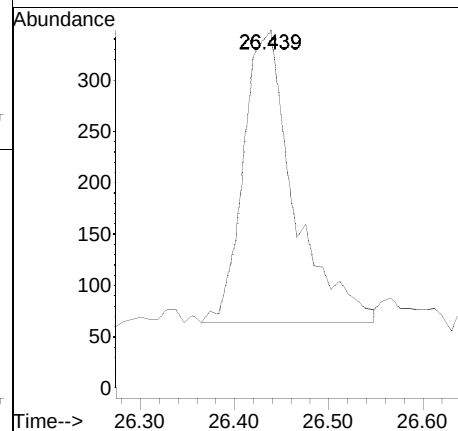
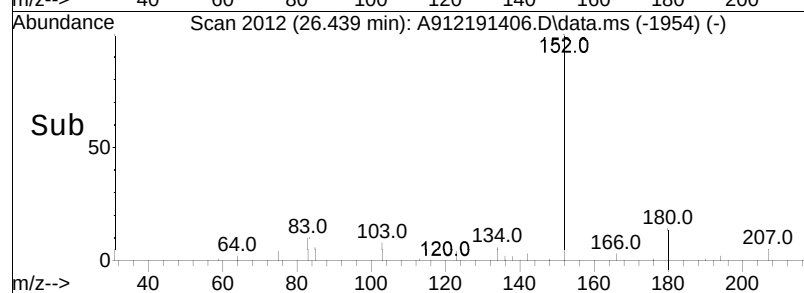
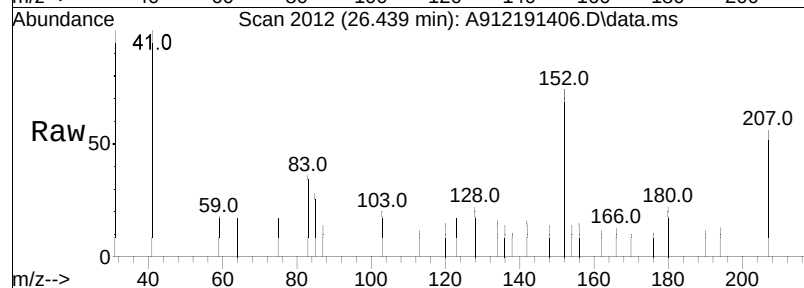
Tgt Ion:154 Resp: 275

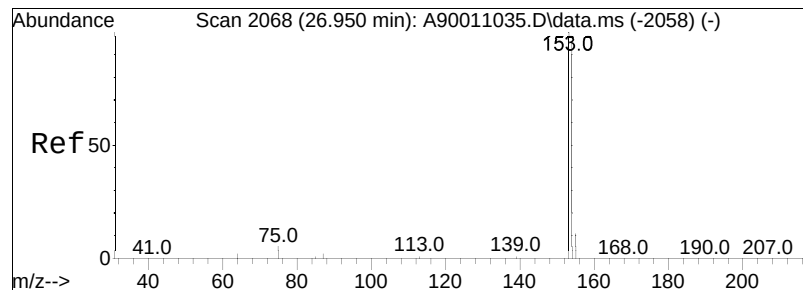




#26
 Acenaphthylene
 Concen: 2.26 ng/mL
 RT: 26.439 min Scan# 2012
 Delta R.T. 0.028 min
 Lab File: A912191406.D
 Acq: 19 Dec 2014 8:55 pm

Tgt Ion:152 Resp: 1054





#27

Acenaphthene

Concen: 2.49 ng/mL

RT: 27.159 min Scan# 2091

Delta R.T. 0.018 min

Lab File: A912191406.D

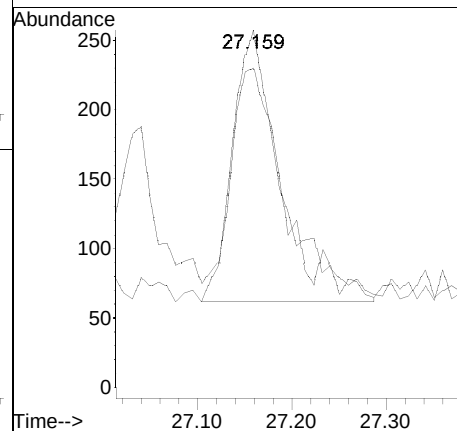
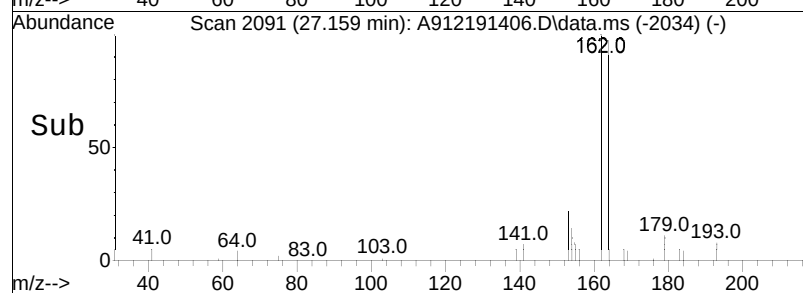
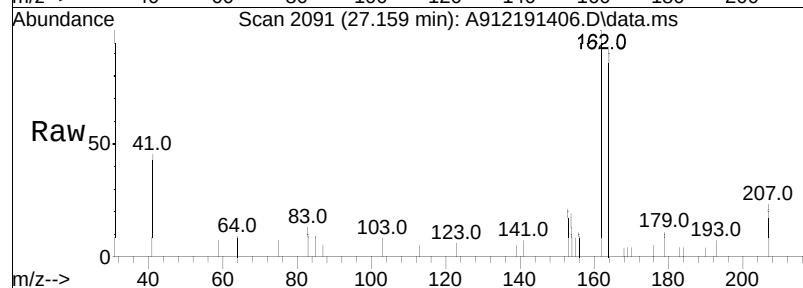
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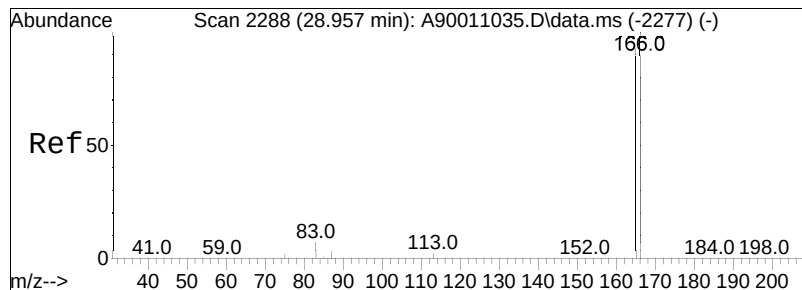
Tgt Ion:153 Resp: 700

Ion Ratio Lower Upper

153 100

154 76.9 64.9 120.5





#29

Fluorene

Concen: 2.57 ng/mL

RT: 29.194 min Scan# 2314

Delta R.T. 0.036 min

Lab File: A912191406.D

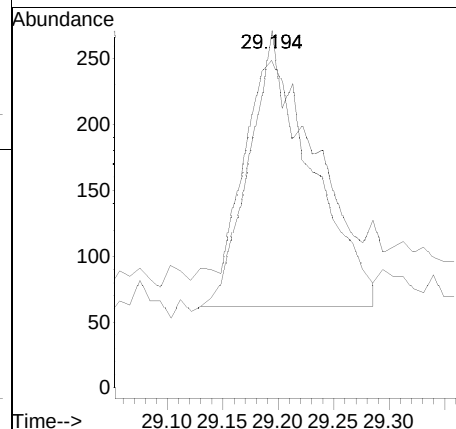
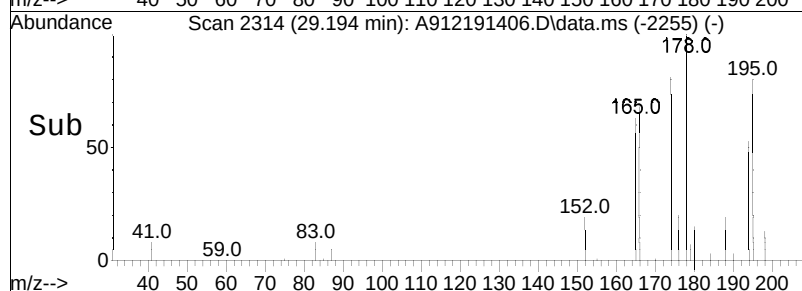
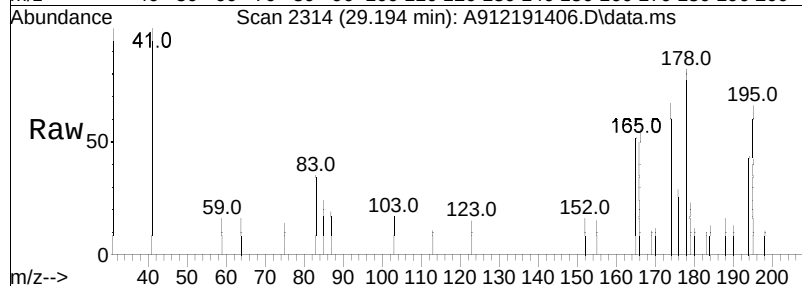
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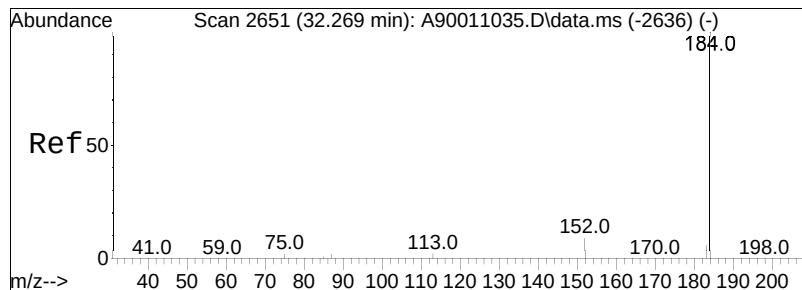
Tgt Ion:166 Resp: 813

Ion Ratio Lower Upper

166 100

165 84.1 65.5 121.7





#33

Dibenzothiophene

Concen: 0.42 ng/mL

RT: 32.506 min Scan# 2677

Delta R.T. 0.037 min

Lab File: A912191406.D

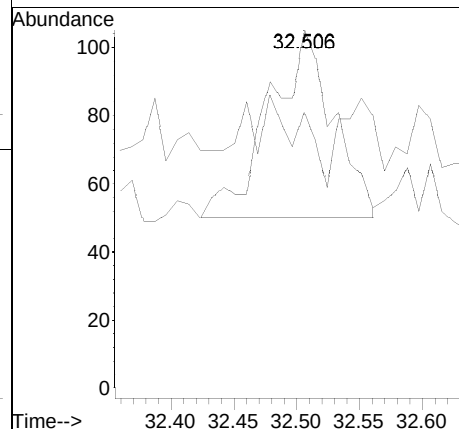
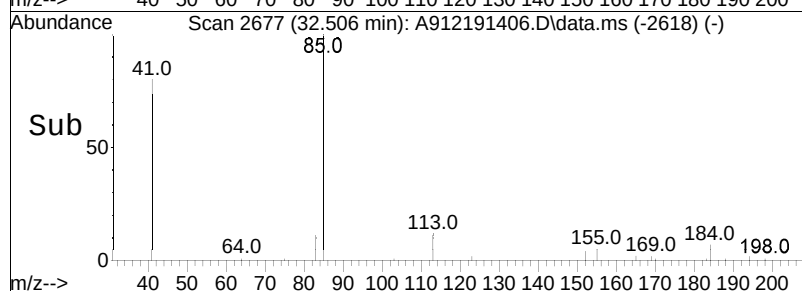
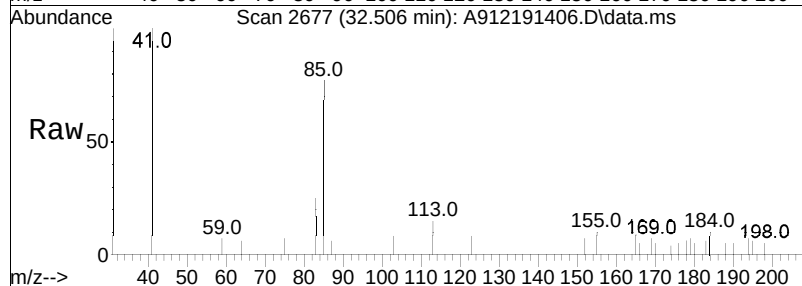
Acq: 19 Dec 2014 8:55 pm

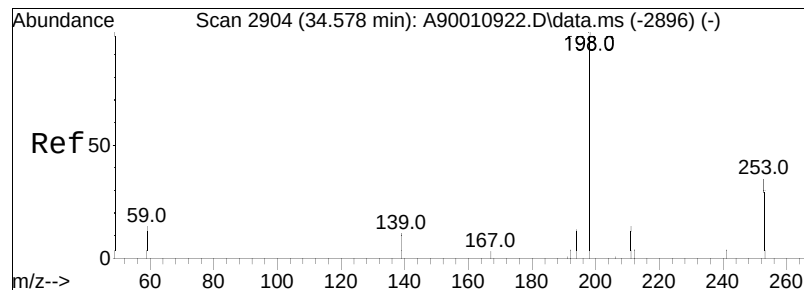
Tgt Ion: 184 Resp: 197

Ion Ratio Lower Upper

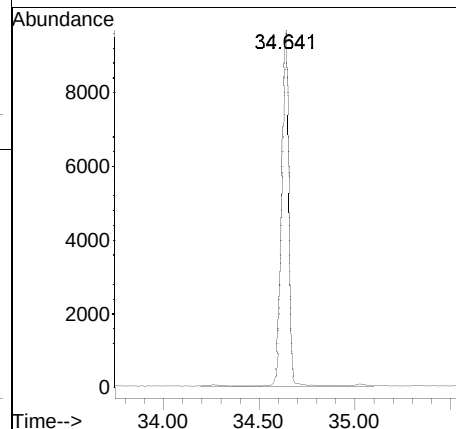
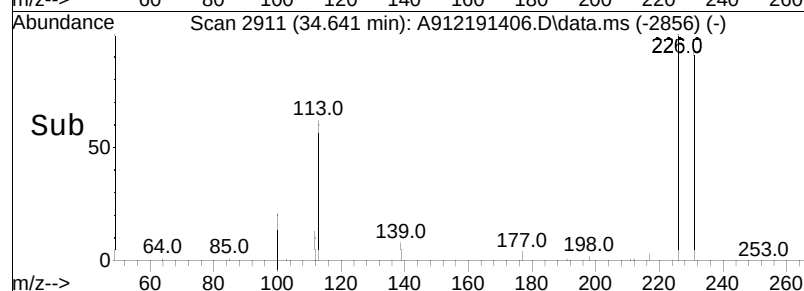
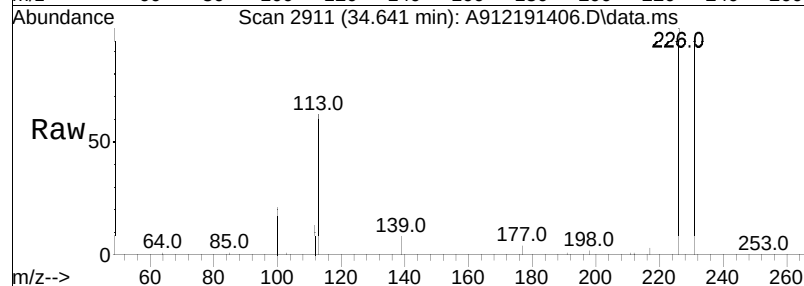
184 100

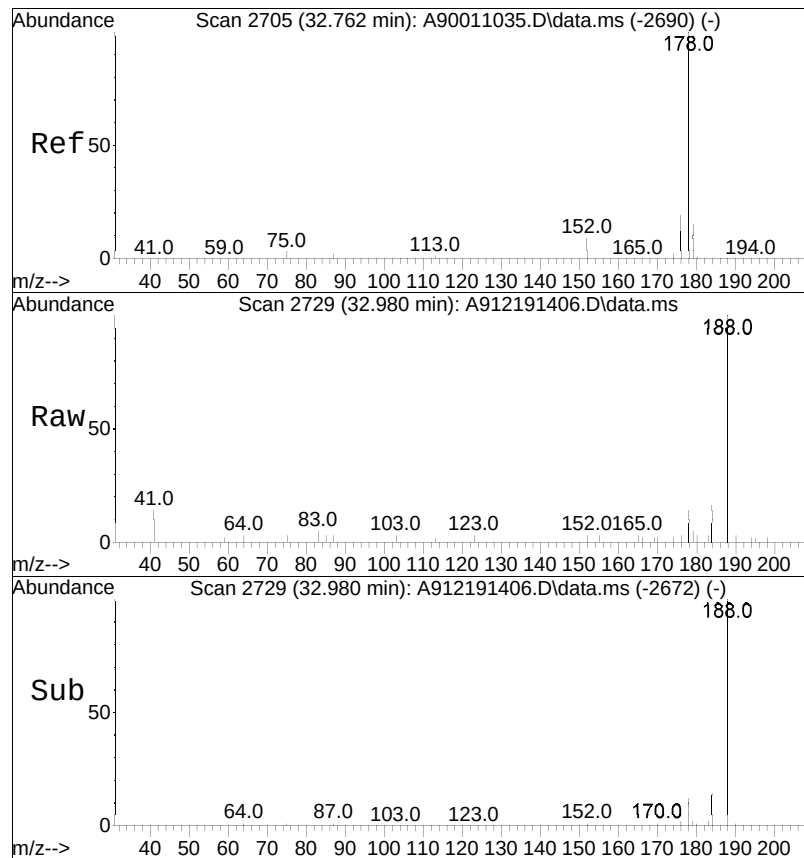
152 0.0 6.3 11.7#





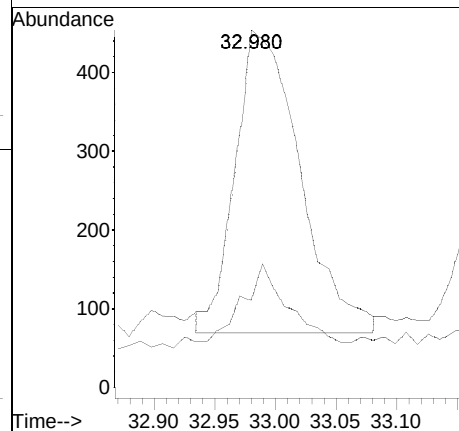
#38
 C1-Dibenzothiophenes
 Concen: 53.00 ng/mL M5
 RT: 34.641 min Scan# 2911
 Delta R.T. 0.393 min
 Lab File: A912191406.D
 Acq: 19 Dec 2014 8:55 pm
 Tgt Ion:198 Resp: 24579

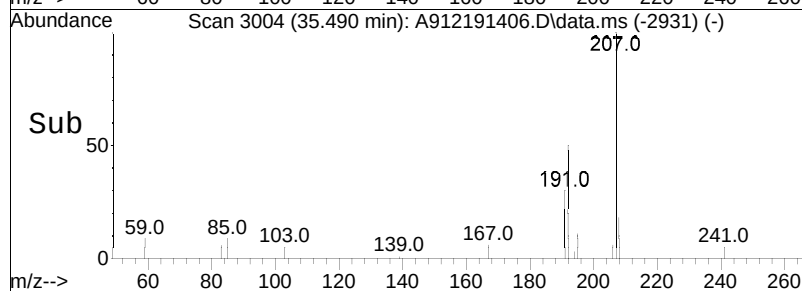
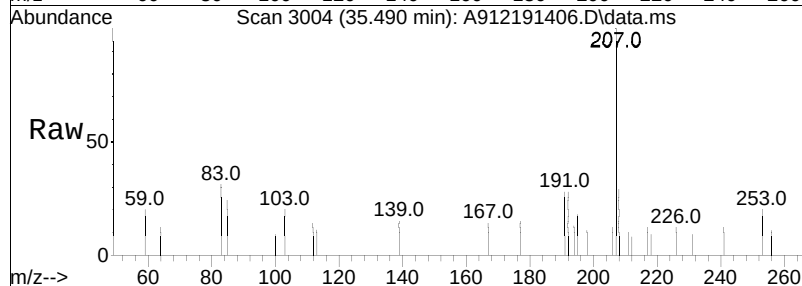
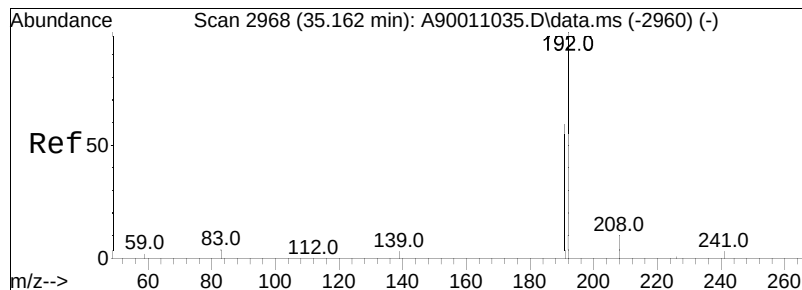




#43
 Phenanthrene
 Concen: 3.23 ng/mL M4
 RT: 32.980 min Scan# 2729
 Delta R.T. 0.018 min
 Lab File: A912191406.D
 Acq: 19 Dec 2014 8:55 pm

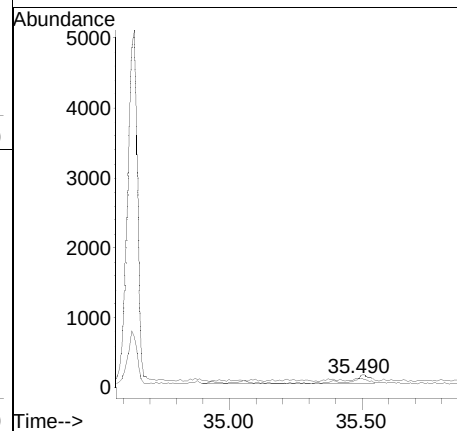
Tgt Ion:178 Resp: 1425
 Ion Ratio Lower Upper
 178 100
 176 21.7 13.7 25.5

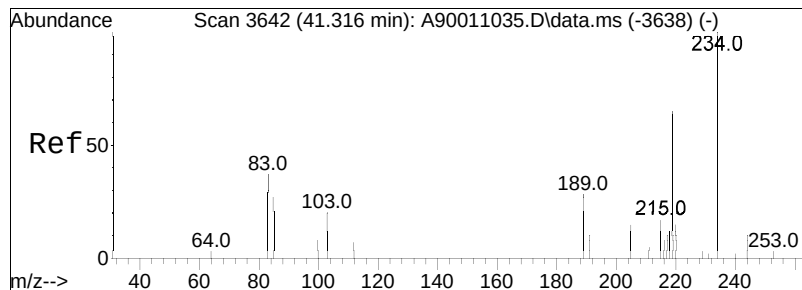




#49
C1-Phenanthrenes/Anthracenes
Concen: 1.60 ng/mL M5
RT: 35.490 min Scan# 3004
Delta R.T. 0.101 min
Lab File: A912191406.D
Acq: 19 Dec 2014 8:55 pm

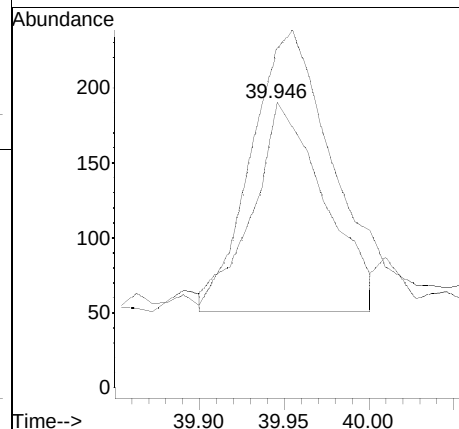
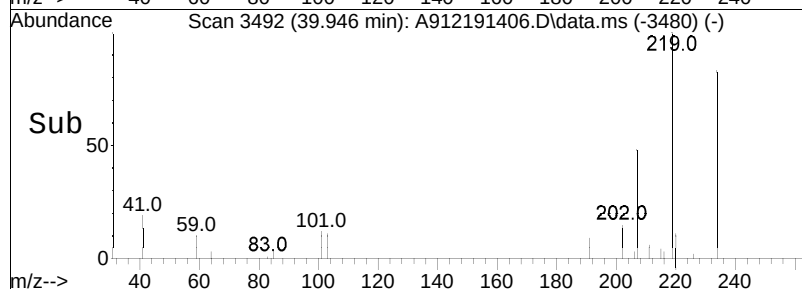
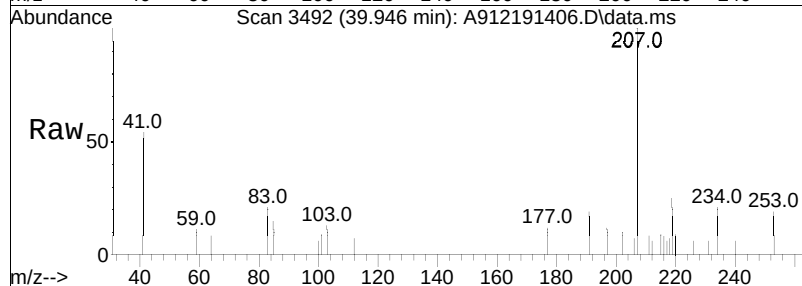
Tgt Ion:192 Resp: 705
Ion Ratio Lower Upper
192 100
191 24.5 39.6 73.6#

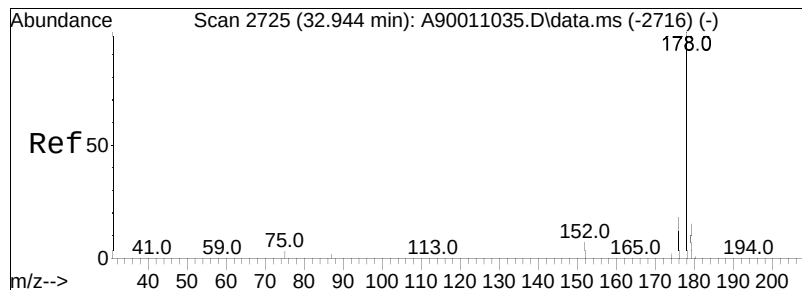




#53
 C4-Phenanthrenes/Anthracenes
 Concen: 0.94 ng/mL M2
 RT: 39.946 min Scan# 3492
 Delta R.T. -1.251 min
 Lab File: A912191406.D
 Acq: 19 Dec 2014 8:55 pm

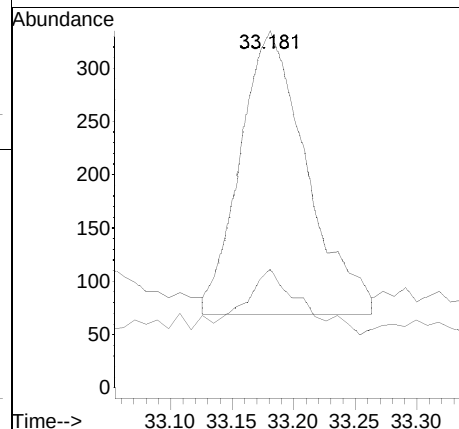
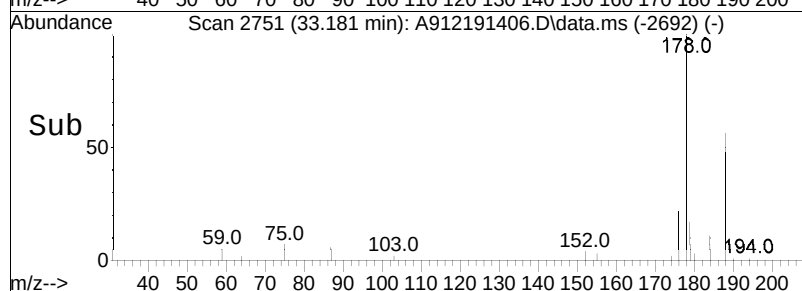
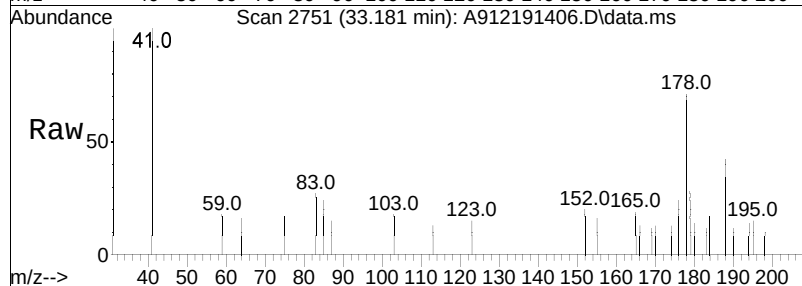
Tgt Ion	Ratio	Lower	Upper
234	100		
219	0.0	38.3	71.1#

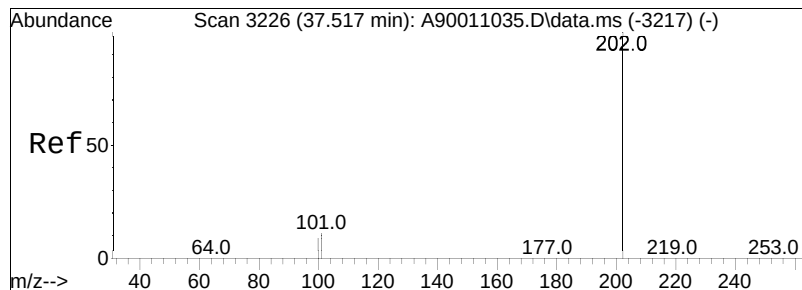




#55
 Anthracene
 Concen: 2.44 ng/mL M4
 RT: 33.181 min Scan# 2751
 Delta R.T. 0.036 min
 Lab File: A912191406.D
 Acq: 19 Dec 2014 8:55 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.6	13.4	24.8





#58

Fluoranthene

Concen: 3.15 ng/mL

RT: 37.763 min Scan# 3253

Delta R.T. 0.036 min

Lab File: A912191406.D

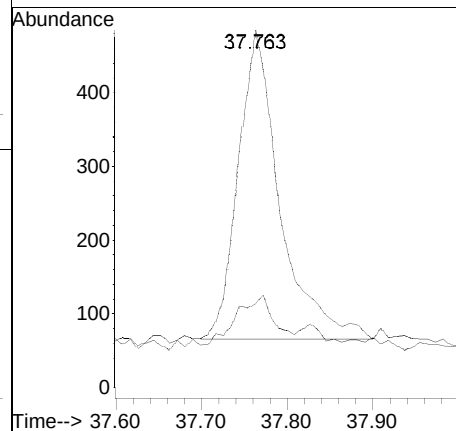
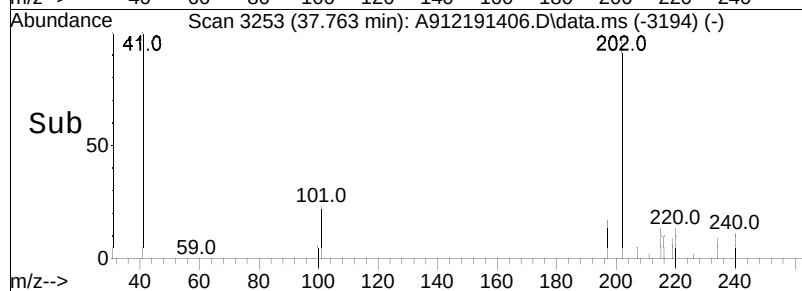
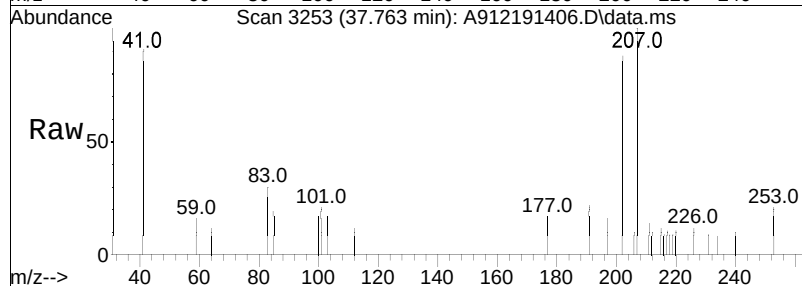
Acq: 19 Dec 2014 8:55 pm

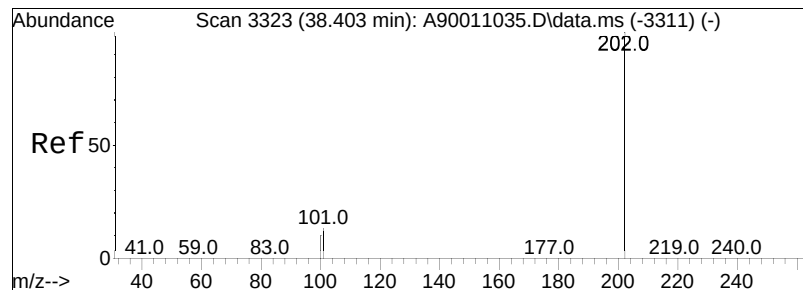
Tgt Ion: 202 Resp: 1411

Ion Ratio Lower Upper

202 100

101 14.0 11.8 22.0





#60

Pyrene

Concen: 3.55 ng/mL

RT: 38.640 min Scan# 3349

Delta R.T. 0.027 min

Lab File: A912191406.D

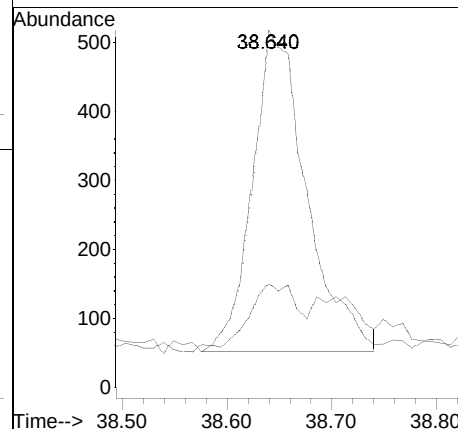
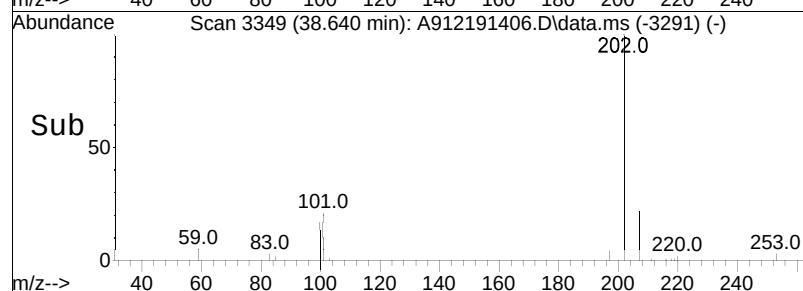
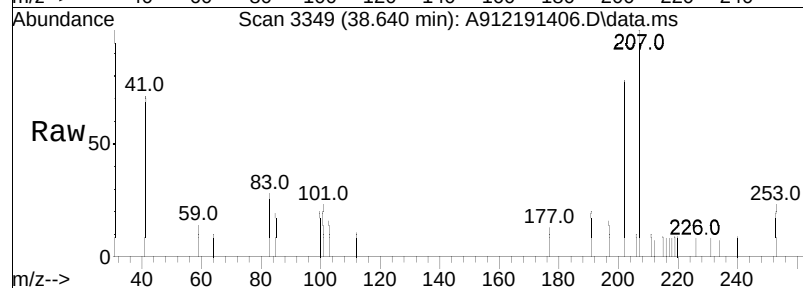
Acq: 19 Dec 2014 8:55 pm

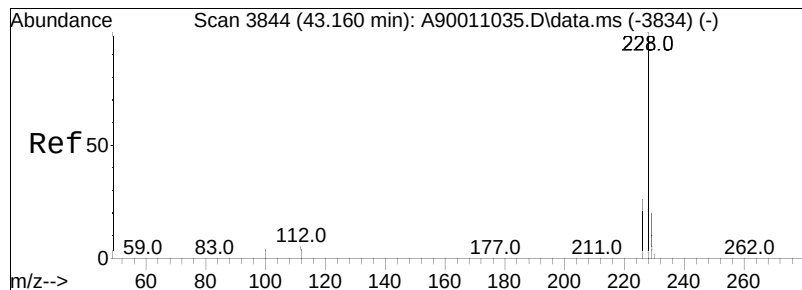
Tgt Ion: 202 Resp: 1688

Ion Ratio Lower Upper

202 100

101 19.4 14.2 26.4





#75

Benz[a]anthracene

Concen: 2.73 ng/mL

RT: 43.397 min Scan# 3870

Delta R.T. 0.028 min

Lab File: A912191406.D

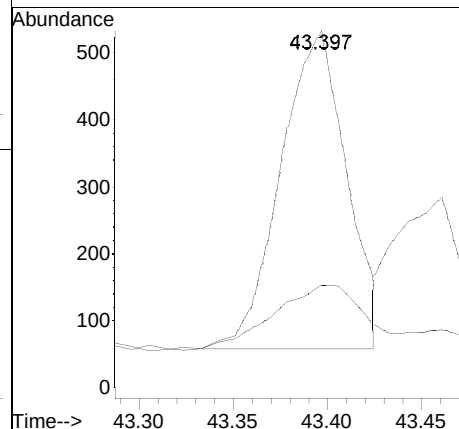
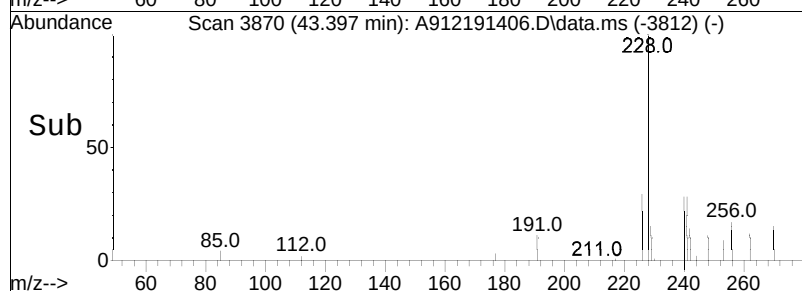
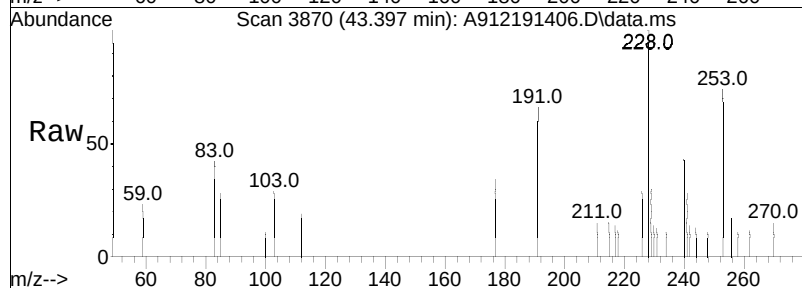
Acq: 19 Dec 2014 8:55 pm

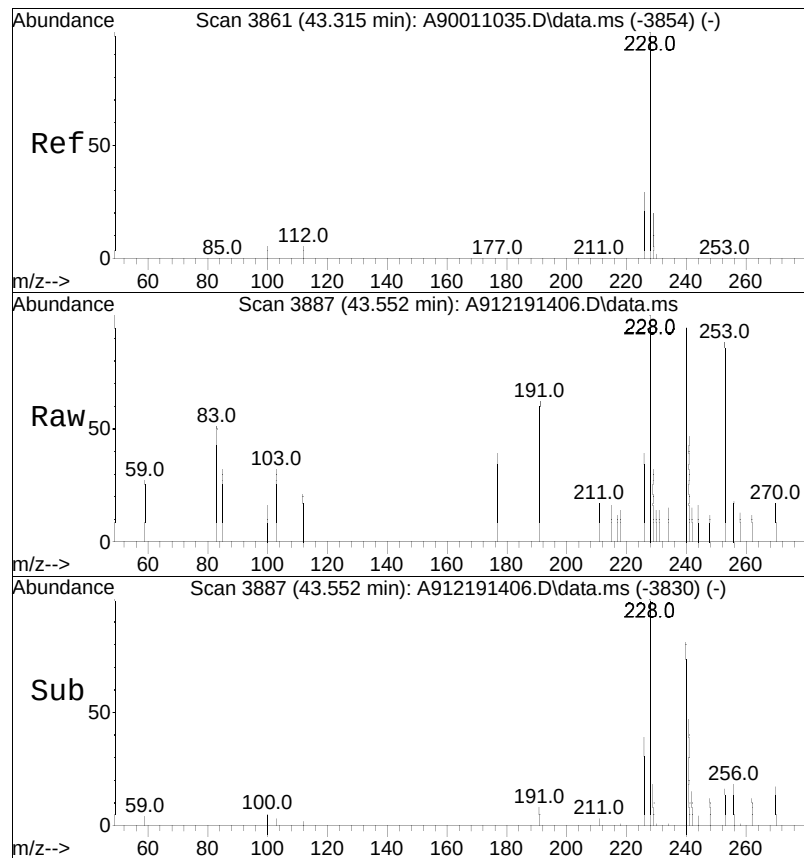
Tgt Ion: 228 Resp: 1156

Ion Ratio Lower Upper

228 100

226 27.3 17.3 32.1





#77

Chrysene/Triphenylene

Concen: 3.22 ng/mL

RT: 43.552 min Scan# 3887

Delta R.T. 0.018 min

Lab File: A912191406.D

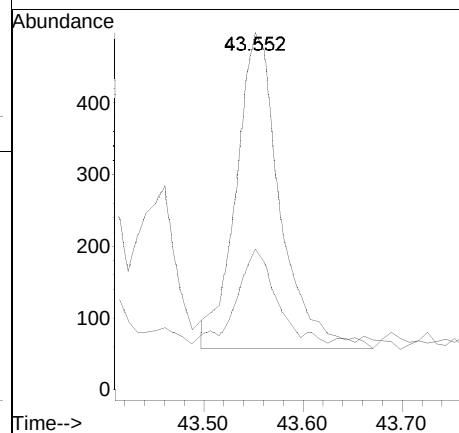
Acq: 19 Dec 2014 8:55 pm

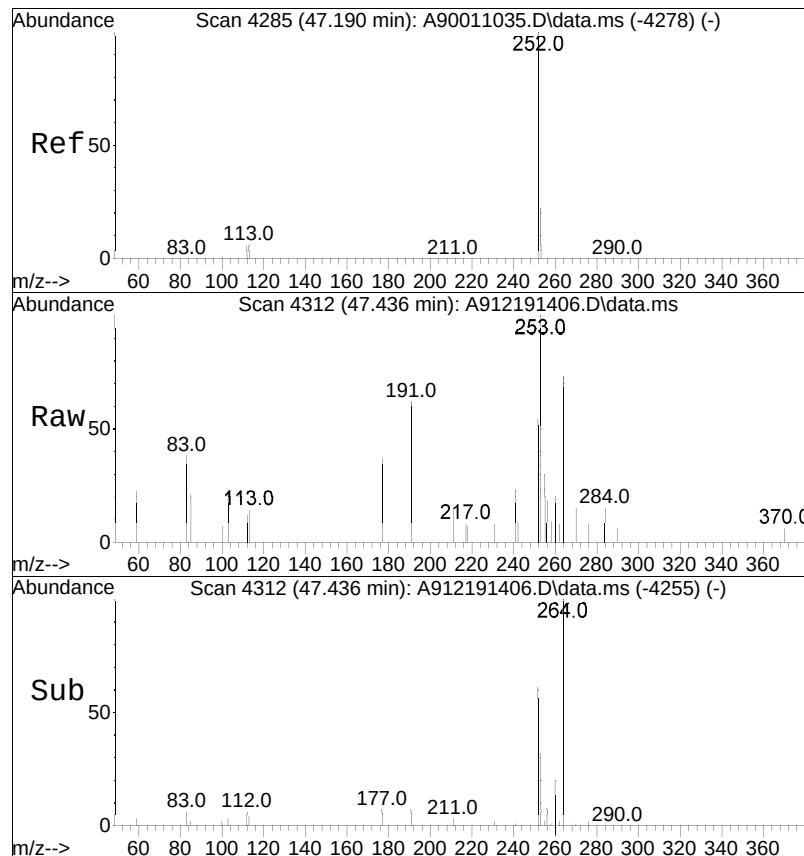
Tgt Ion:228 Resp: 1352

Ion Ratio Lower Upper

228 100

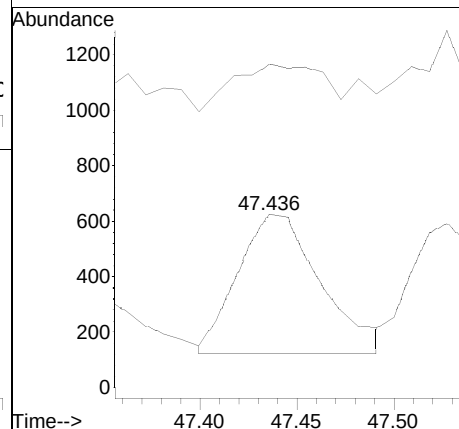
226 24.7 18.8 34.8

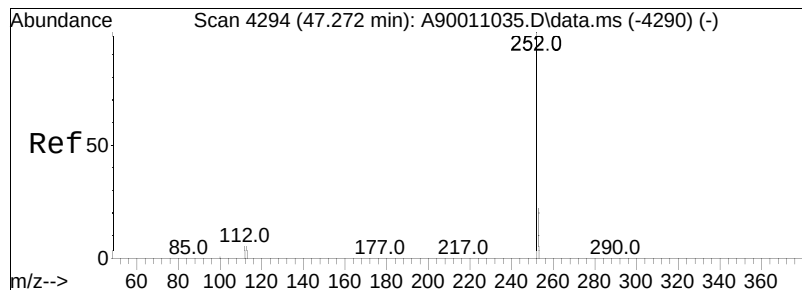




#84
Benzo[b]fluoranthene
Concen: 2.95 ng/mL M3
RT: 47.436 min Scan# 4312
Delta R.T. 0.018 min
Lab File: A912191406.D
Acq: 19 Dec 2014 8:55 pm

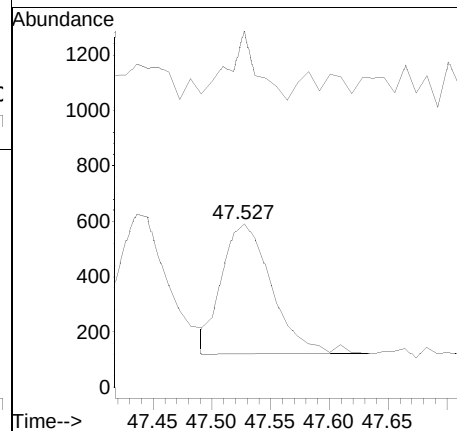
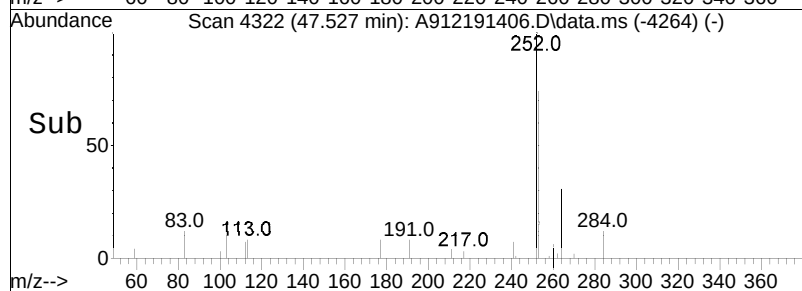
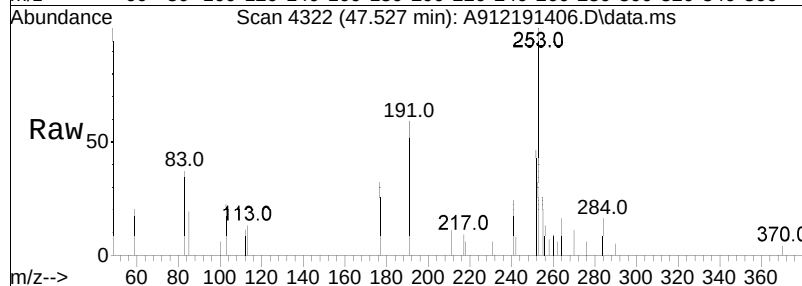
Tgt Ion	Ratio	Lower	Upper
252	100		
253	27.8	16.4	30.4

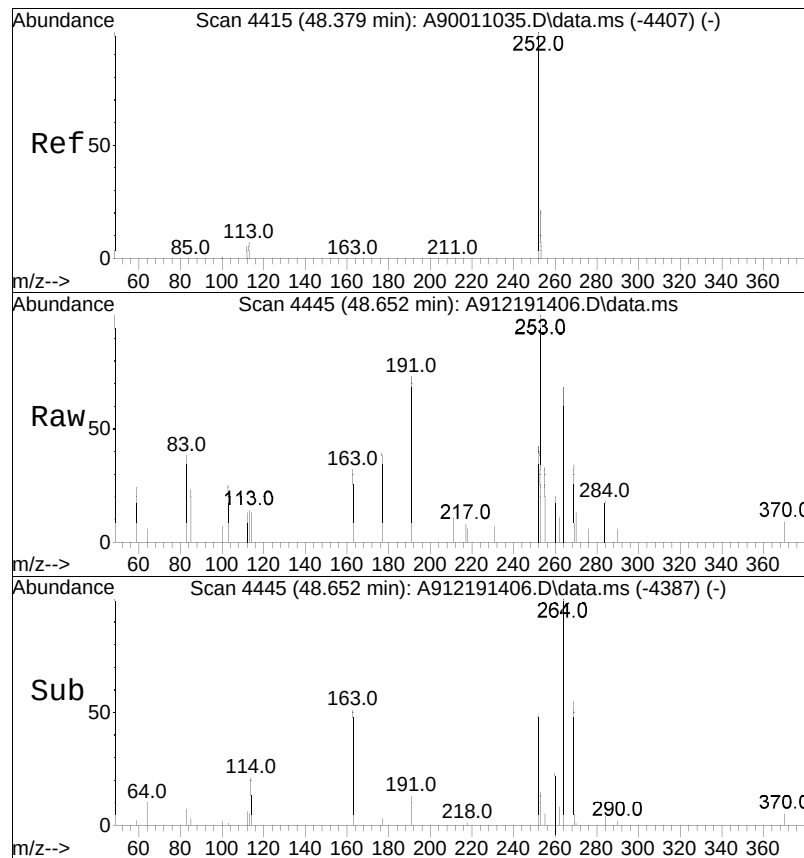




#85
 Benzo[j]+[k]fluoranthene
 Concen: 2.90 ng/mL
 RT: 47.527 min Scan# 4322
 Delta R.T. 0.027 min
 Lab File: A912191406.D
 Acq: 19 Dec 2014 8:55 pm

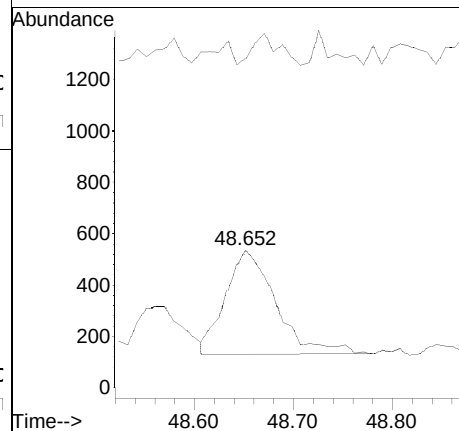
Tgt Ion	Ratio	Lower	Upper
252	100		
253	29.6	16.1	29.9

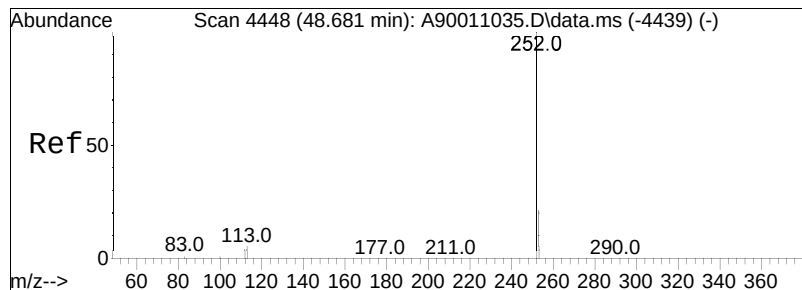




#89
 Benzo[a]pyrene
 Concen: 3.07 ng/mL
 RT: 48.652 min Scan# 4445
 Delta R.T. 0.027 min
 Lab File: A912191406.D
 Acq: 19 Dec 2014 8:55 pm

Tgt Ion: 252 Resp: 1443
 Ion Ratio Lower Upper
 252 100
 253 16.6 16.4 30.6





#90

Perylene

Concen: 0.69 ng/mL

RT: 49.000 min Scan# 4483

Delta R.T. 0.055 min

Lab File: A912191406.D

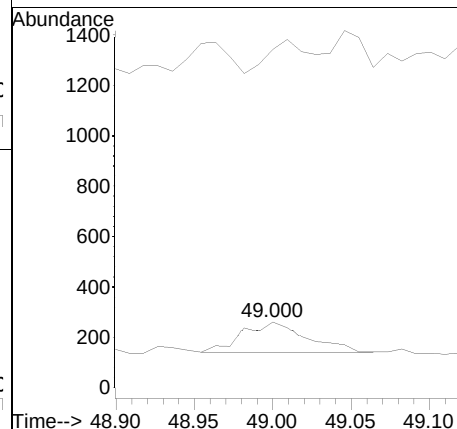
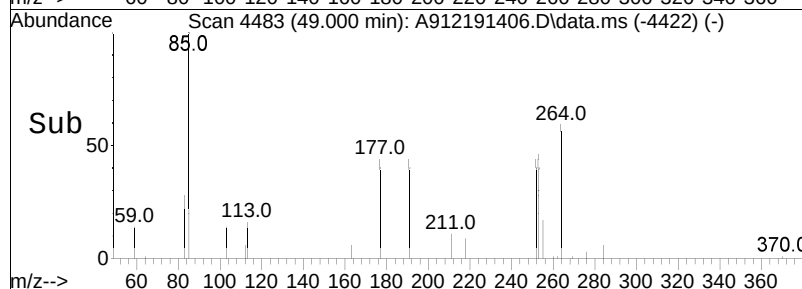
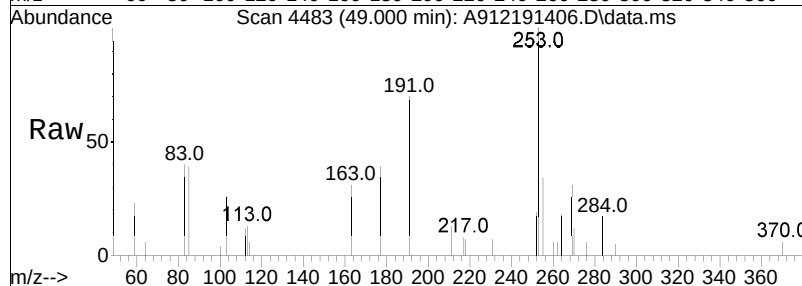
Acq: 19 Dec 2014 8:55 pm

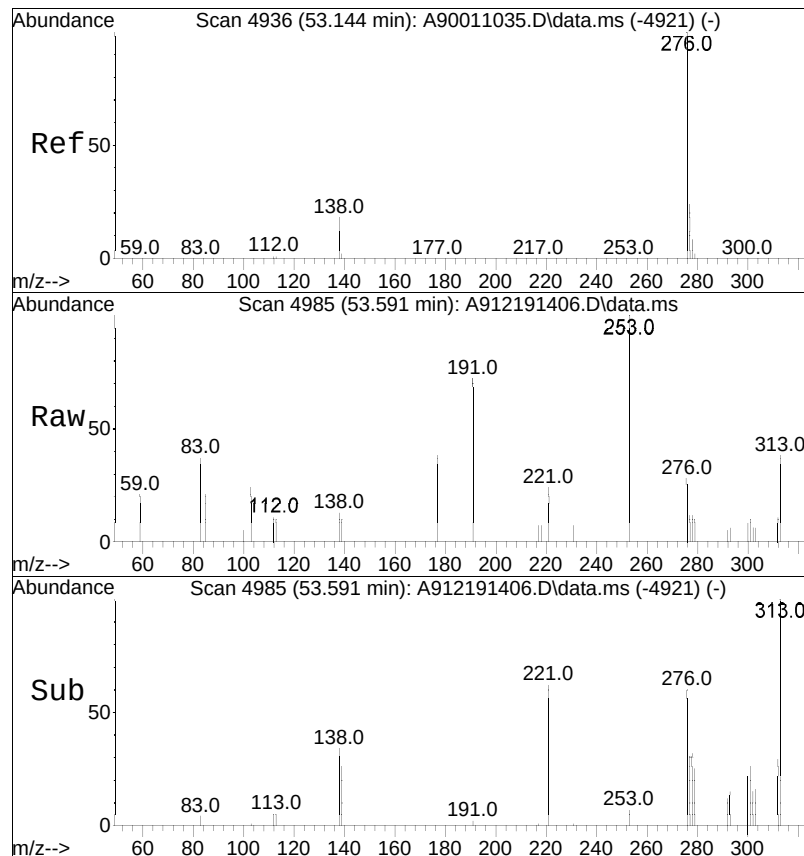
Tgt Ion: 252 Resp: 327

Ion Ratio Lower Upper

252 100

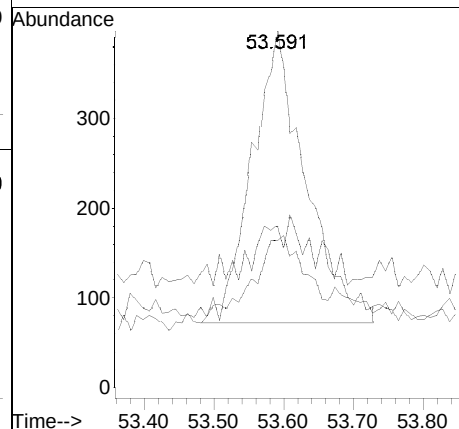
253 71.3 16.6 30.8#

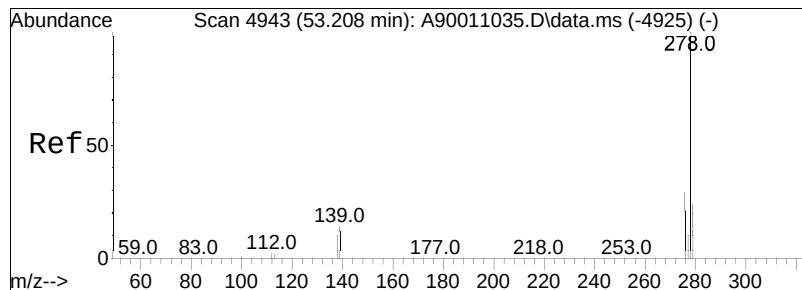




#91
 Indeno[1,2,3-cd]pyrene
 Concen: 2.97 ng/mL
 RT: 53.591 min Scan# 4985
 Delta R.T. 0.082 min
 Lab File: A912191406.D
 Acq: 19 Dec 2014 8:55 pm

Tgt	Ion	Ratio	Lower	Upper
276	100			
138	6.4	15.7	29.1#	
277	16.6	17.9	33.3#	





#92

Dibenz[ah]+[ac]anthracene

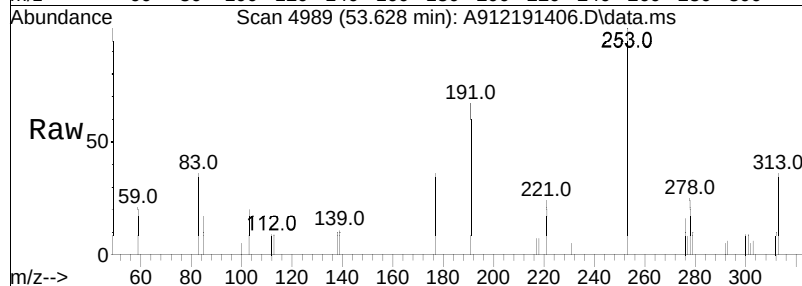
Concen: 2.35 ng/mL

RT: 53.628 min Scan# 4989

Delta R.T. 0.055 min

Lab File: A912191406.D

Acq: 19 Dec 2014 8:55 pm



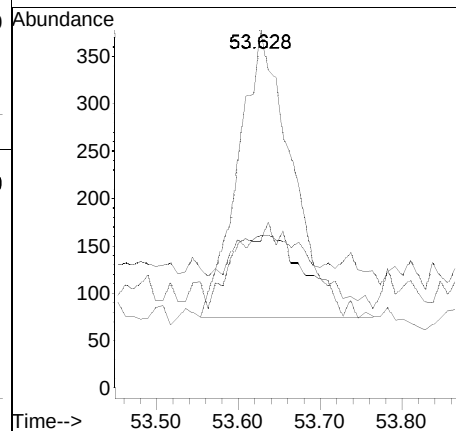
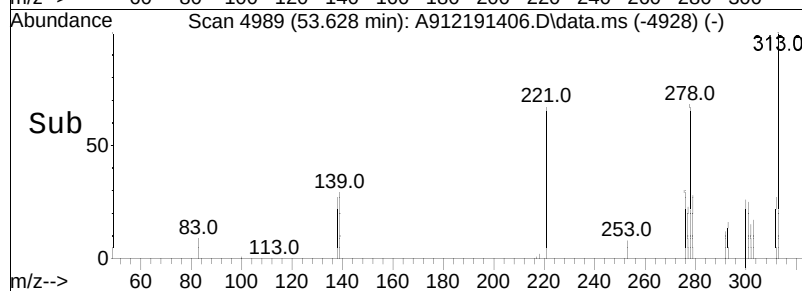
Tgt Ion: 278 Resp: 1356

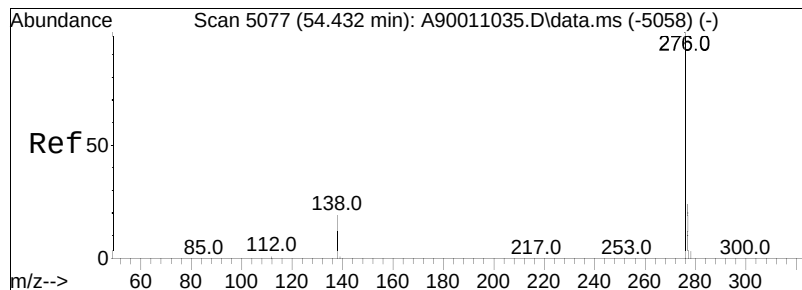
Ion Ratio Lower Upper

278 100

139 15.4 11.4 21.2

279 37.4 16.3 30.3#





#93

Benzo[g,h,i]perylene

Concen: 2.75 ng/mL

RT: 54.898 min Scan# 5128

Delta R.T. 0.055 min

Lab File: A912191406.D

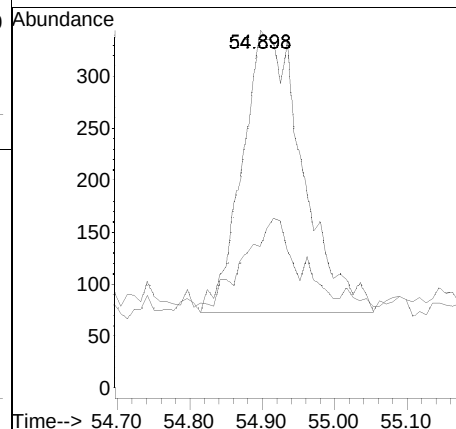
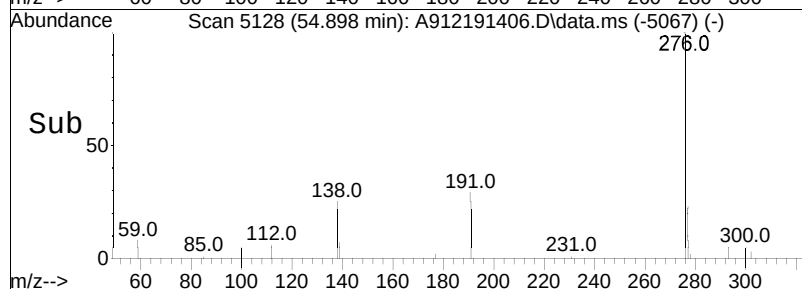
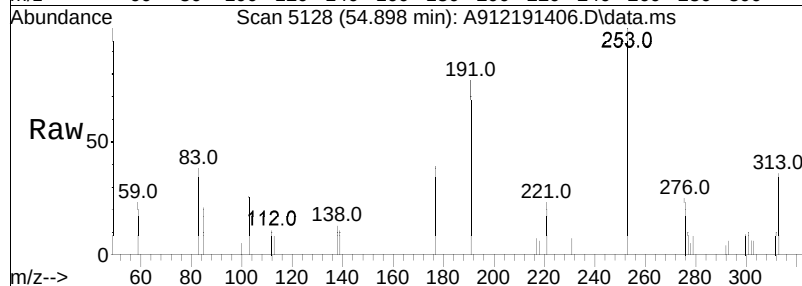
Acq: 19 Dec 2014 8:55 pm

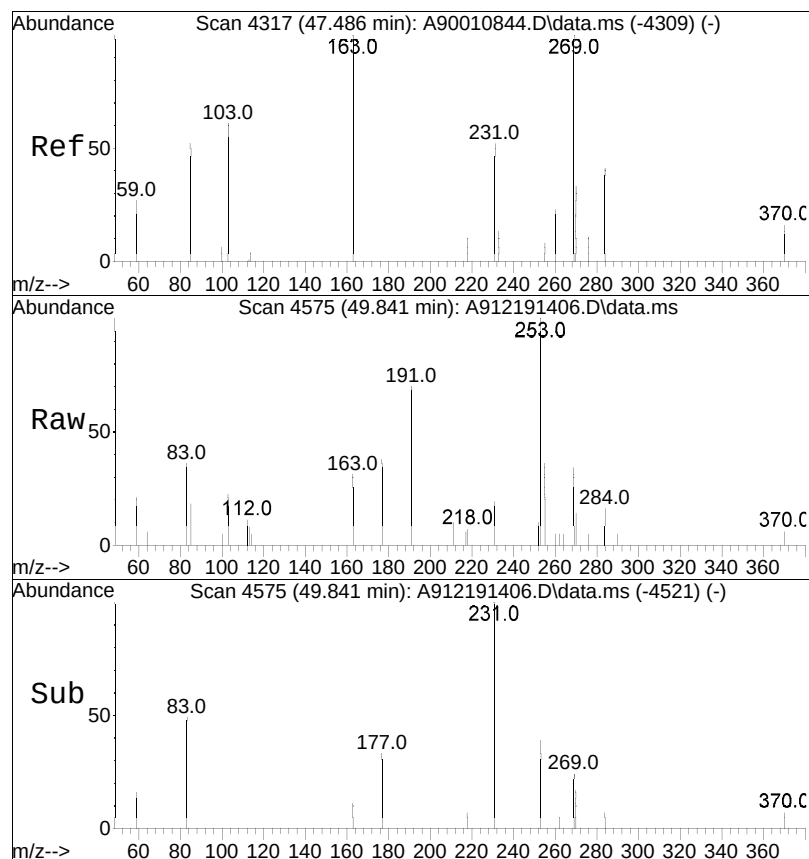
Tgt Ion: 276 Resp: 1560

Ion Ratio Lower Upper

276 100

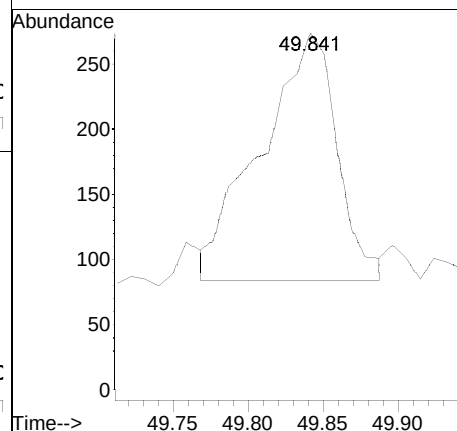
277 21.6 17.4 32.2

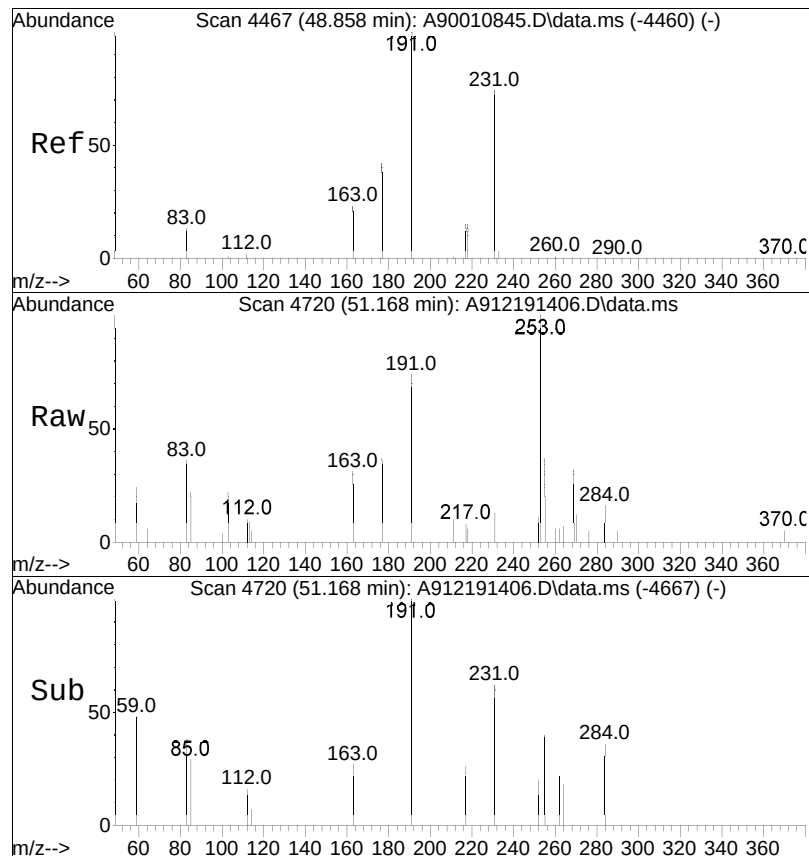




#147
 C26,20R- +C27,20S- triaromatic
 Concen: 11.07 ng/mL M4
 RT: 49.841 min Scan# 4575
 Delta R.T. -0.009 min
 Lab File: A912191406.D
 Acq: 19 Dec 2014 8:55 pm

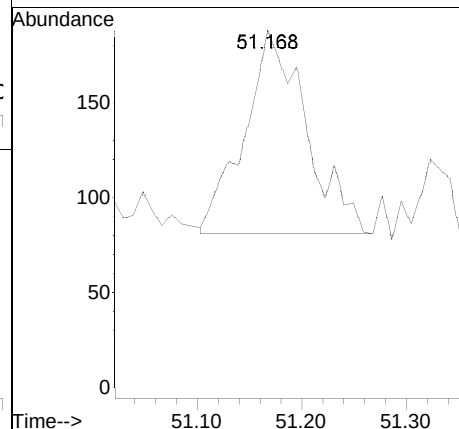
Tgt Ion:231 Resp: 669

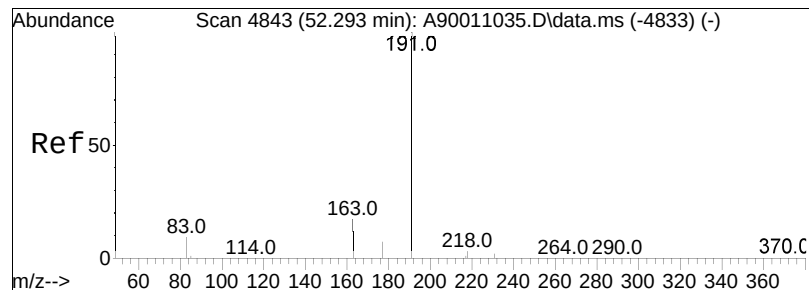




#149
 C27,20R-triaromatic steroid
 Concen: 7.26 ng/mL
 RT: 51.168 min Scan# 4720
 Delta R.T. -0.018 min
 Lab File: A912191406.D
 Acq: 19 Dec 2014 8:55 pm

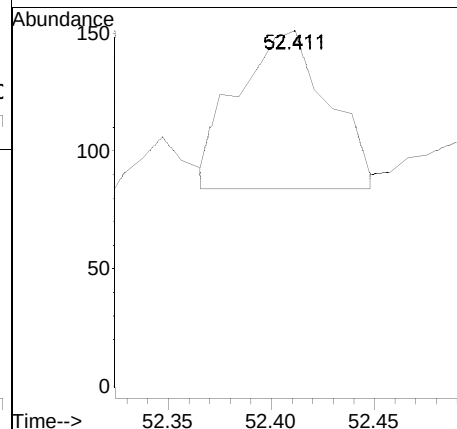
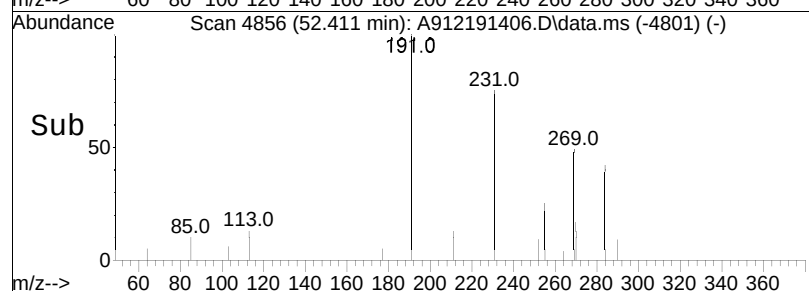
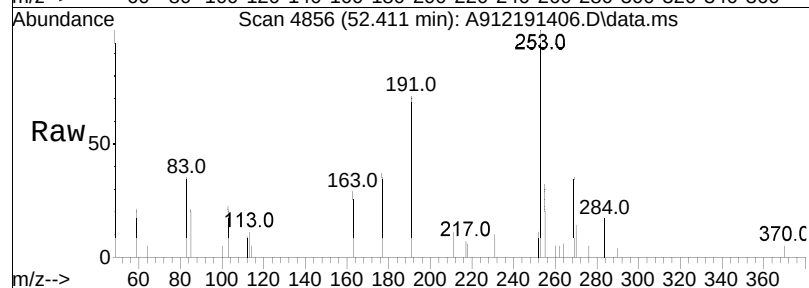
Tgt Ion:231 Resp: 439





#150
 C28,20R-triaromatic steroid
 Concen: 3.41 ng/mL M4
 RT: 52.411 min Scan# 4856
 Delta R.T. 0.000 min
 Lab File: A912191406.D
 Acq: 19 Dec 2014 8:55 pm

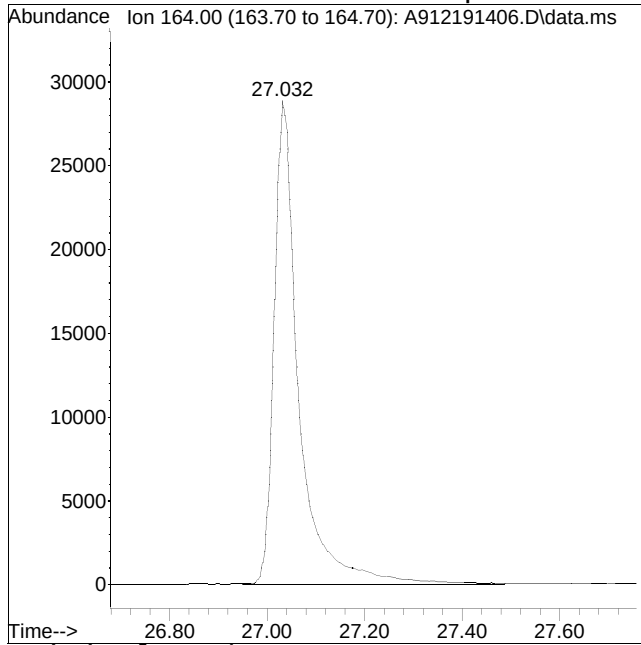
Tgt Ion:231 Resp: 206



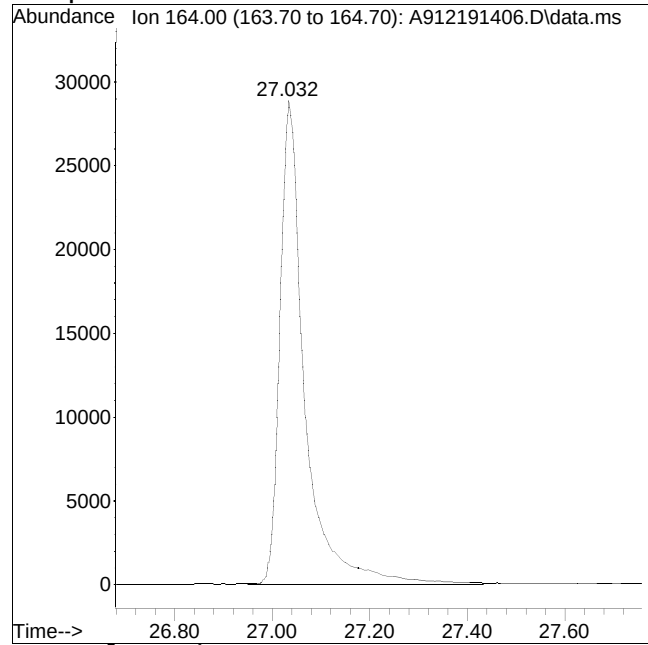
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191406.D Operator : PAH9:SR
Date Inj'd : 12/19/2014 8:55 pm Instrument : PAH 9
Sample : wg749631-1,32 Quant Date : 12/22/2014 2:12 pm

Compound #1: Acenaphthene-d10



Original Peak Response = 101960



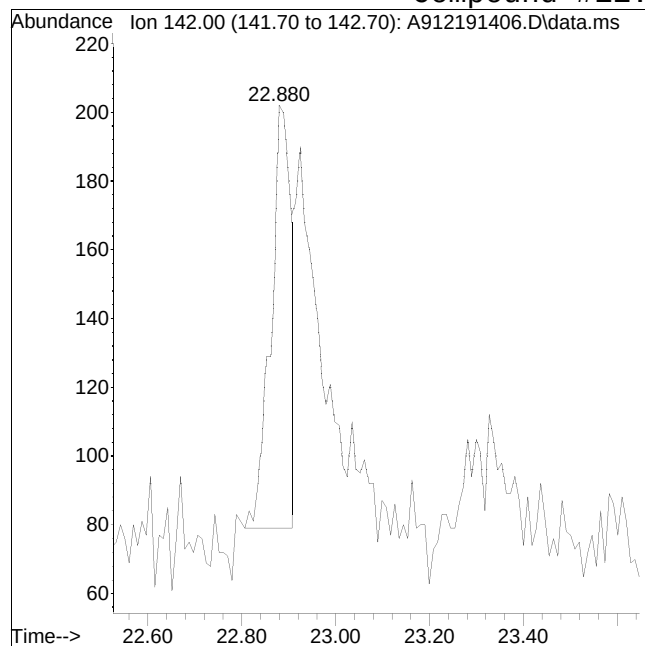
Manual Peak Response = 101364 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

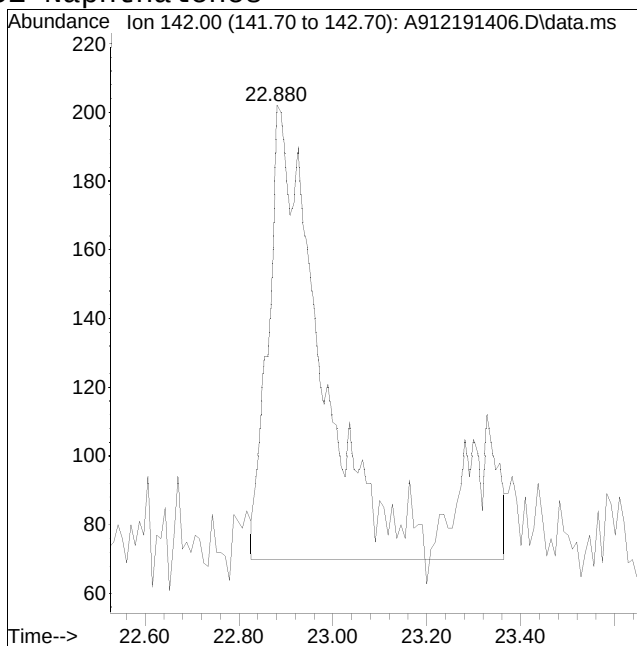
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
 Data File : A912191406.D Operator : PAH9:SR
 Date Inj'd : 12/19/2014 8:55 pm Instrument : PAH 9
 Sample : wg749631-1,32 Quant Date : 12/22/2014 2:12 pm

Compound #11: C1-Naphthalenes



Original Peak Response = 361

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

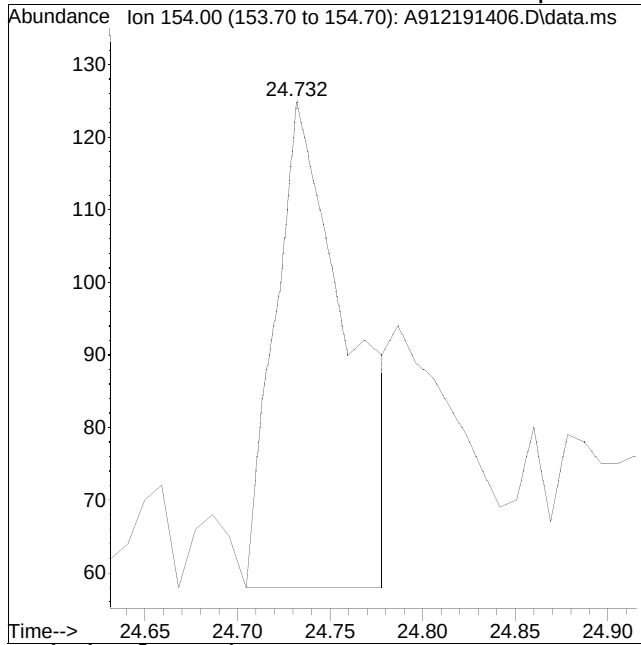


Manual Peak Response = 1229 M5

Manual Integration/Negative Proof Report

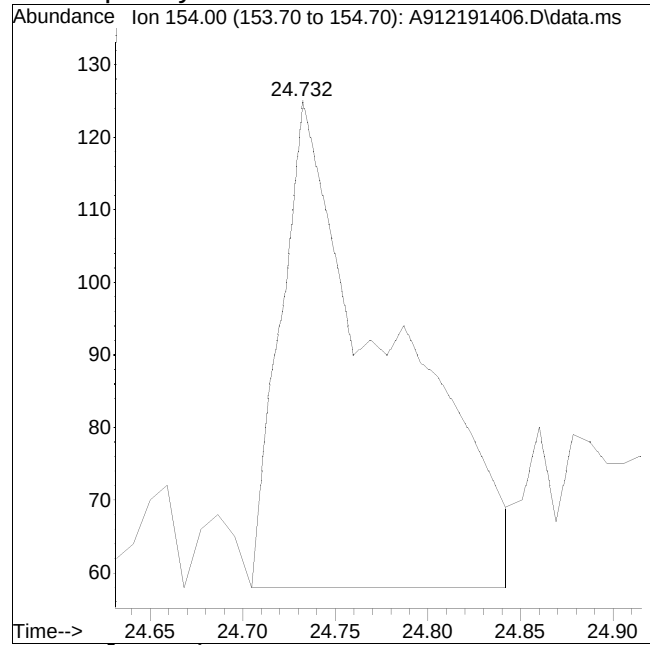
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191406.D Operator : PAH9:SR
Date Inj'd : 12/19/2014 8:55 pm Instrument : PAH 9
Sample : wg749631-1,32 Quant Date : 12/22/2014 2:12 pm

Compound #23: Biphenyl



Original Peak Response = 183

M4 = Poor automated baseline construction.

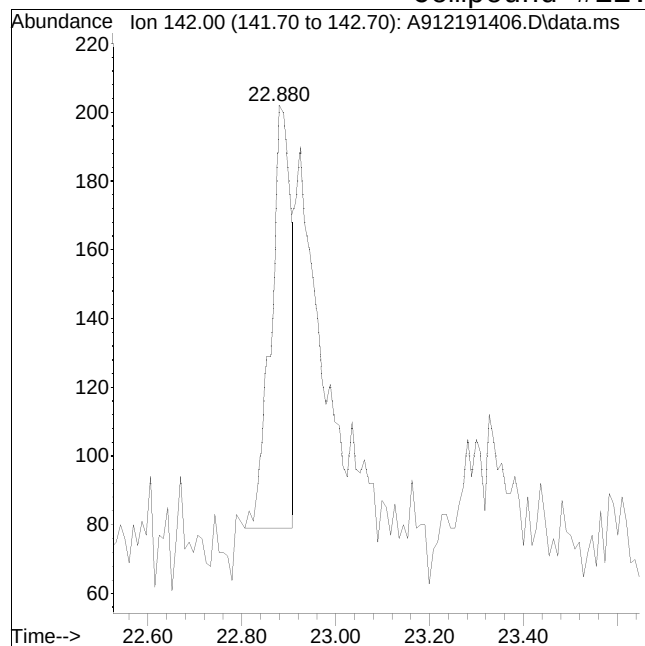


Manual Peak Response = 275 M4

Manual Integration/Negative Proof Report

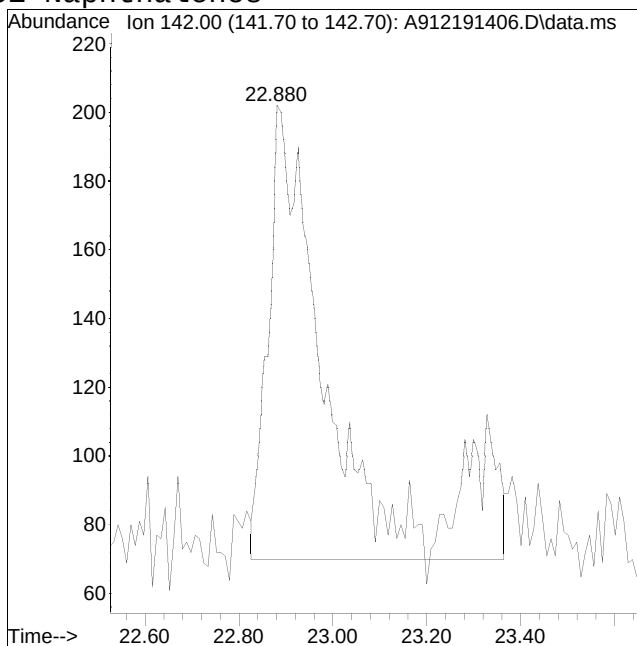
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191406.D Operator : PAH9:SR
Date Inj'd : 12/19/2014 8:55 pm Instrument : PAH 9
Sample : wg749631-1,32 Quant Date : 12/22/2014 2:12 pm

Compound #11: C1-Naphthalenes



Original Peak Response = 361

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

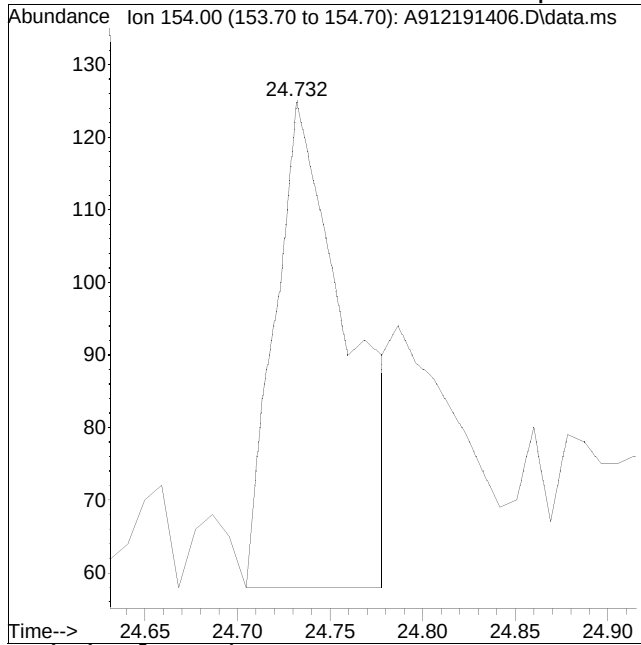


Manual Peak Response = 1229 M5

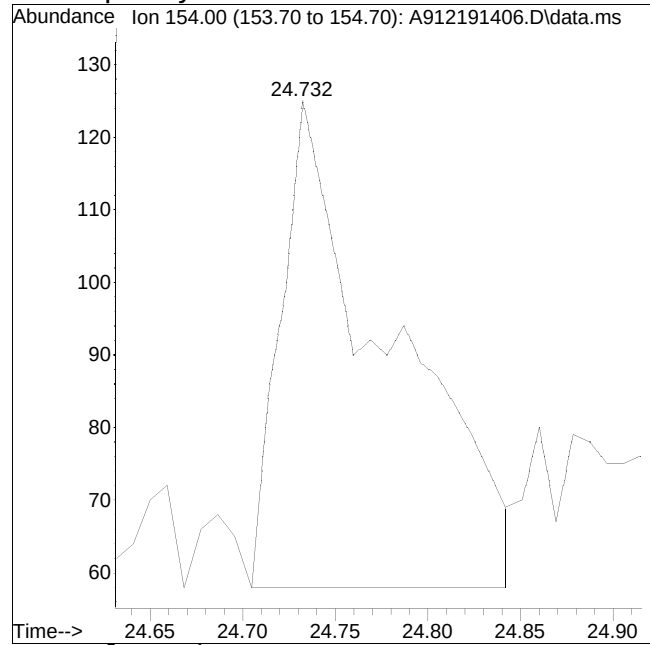
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191406.D Operator : PAH9:SR
Date Inj'd : 12/19/2014 8:55 pm Instrument : PAH 9
Sample : wg749631-1,32 Quant Date : 12/22/2014 2:12 pm

Compound #23: Biphenyl



Original Peak Response = 183



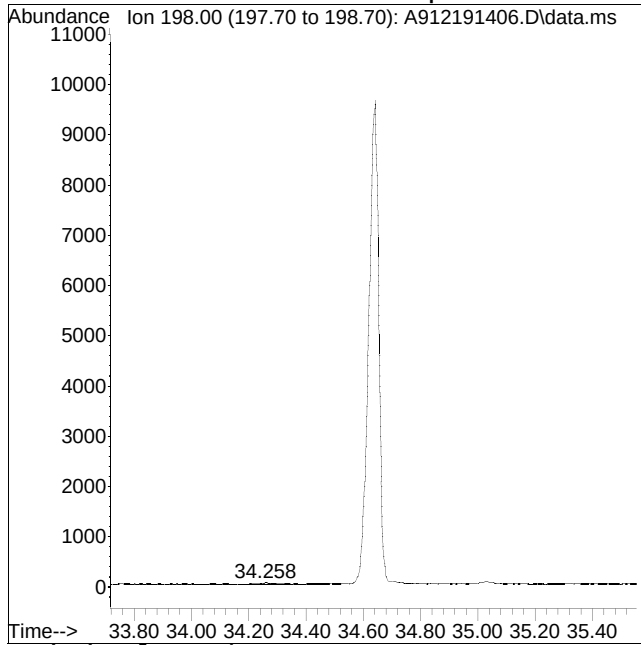
Manual Peak Response = 275 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

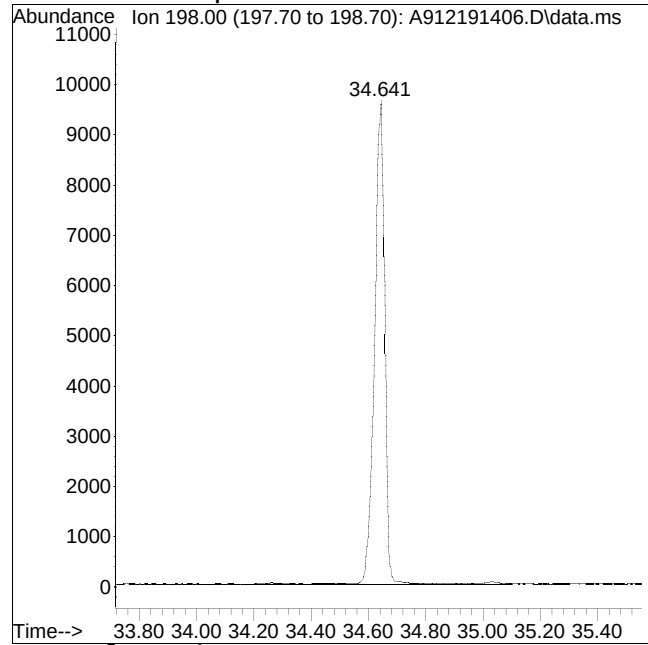
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191406.D Operator : PAH9:SR
Date Inj'd : 12/19/2014 8:55 pm Instrument : PAH 9
Sample : wg749631-1,32 Quant Date : 12/22/2014 2:12 pm

Compound #38: C1-Dibenzothiophenes



Original Peak Response = 189

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

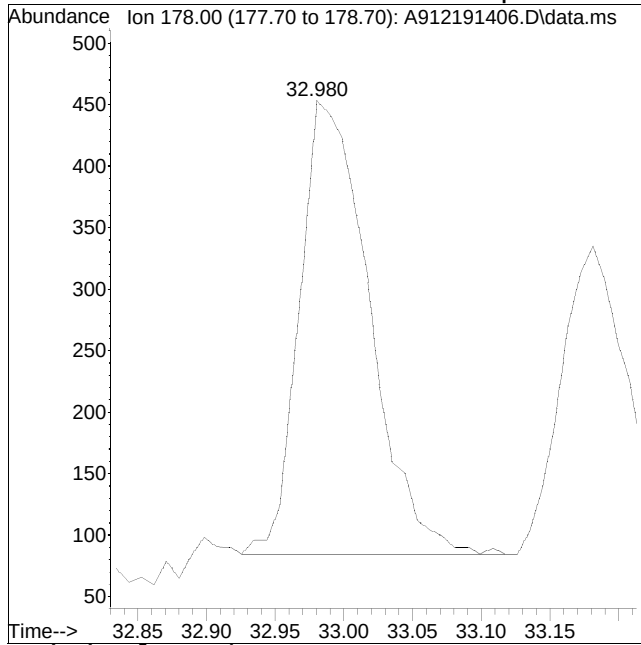


Manual Peak Response = 24579 M5

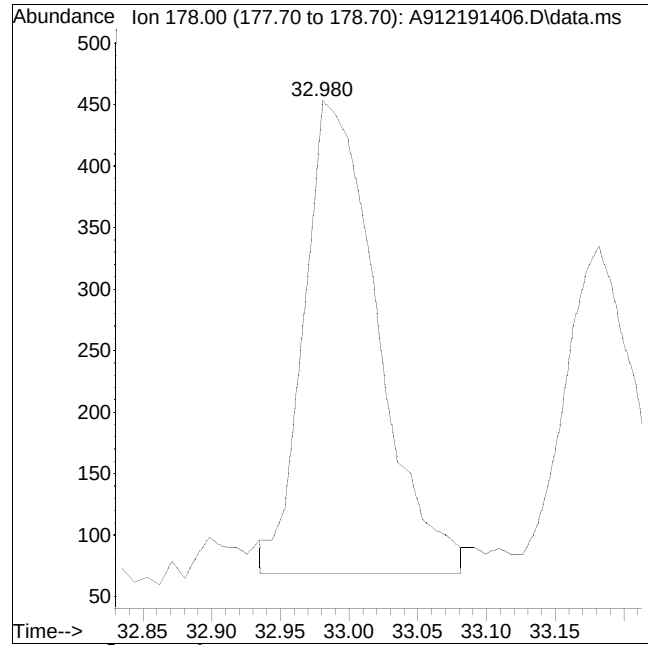
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191406.D Operator : PAH9:SR
Date Inj'd : 12/19/2014 8:55 pm Instrument : PAH 9
Sample : wg749631-1,32 Quant Date : 12/22/2014 2:12 pm

Compound #43: Phenanthrene



Original Peak Response = 1296



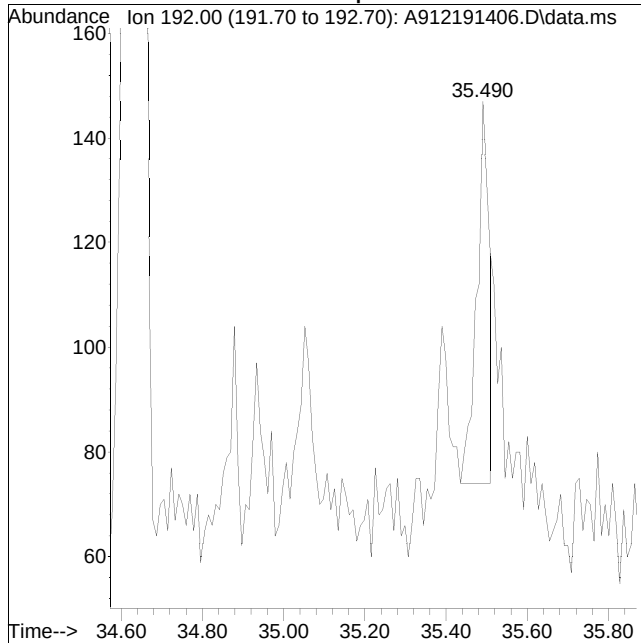
Manual Peak Response = 1425 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

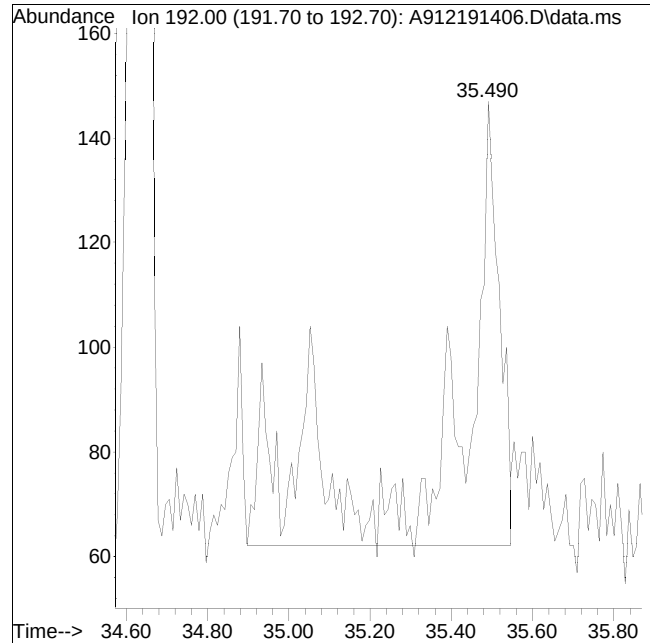
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191406.D Operator : PAH9:SR
Date Inj'd : 12/19/2014 8:55 pm Instrument : PAH 9
Sample : wg749631-1,32 Quant Date : 12/22/2014 2:12 pm

Compound #49: C1-Phenanthrenes/Anthracenes



Original Peak Response = 152

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

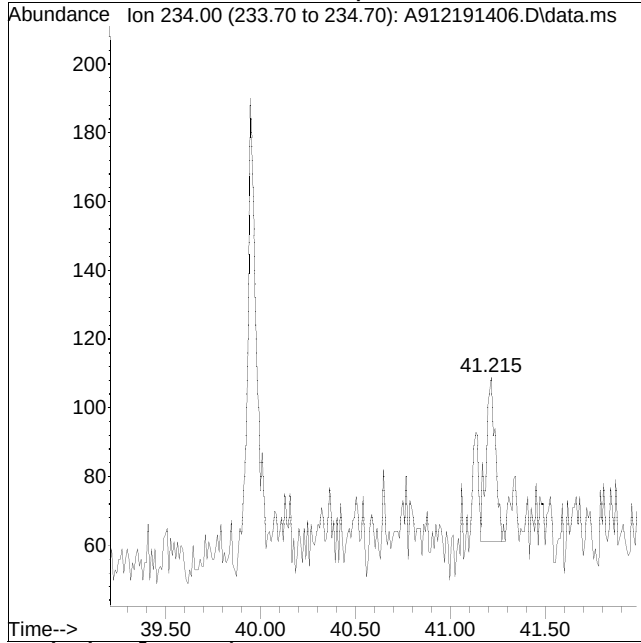


Manual Peak Response = 705 M5

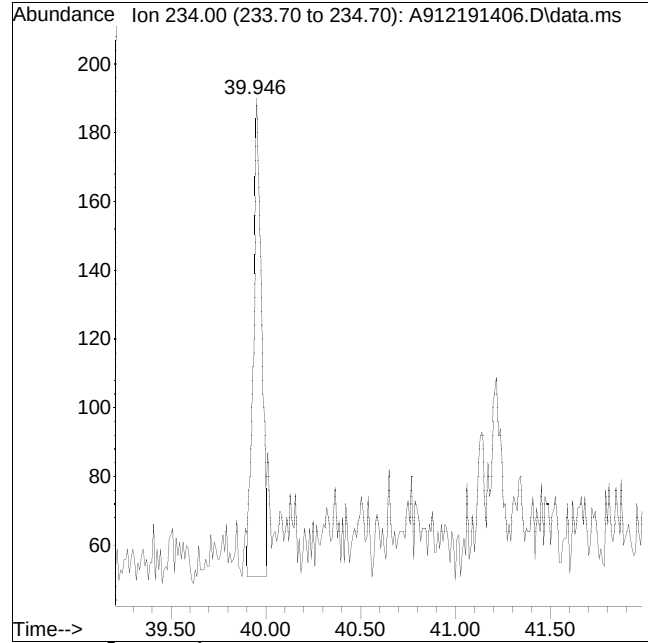
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191406.D Operator : PAH9:SR
Date Inj'd : 12/19/2014 8:55 pm Instrument : PAH 9
Sample : wg749631-1,32 Quant Date : 12/22/2014 2:12 pm

Compound #53: C4-Phenanthrenes/Anthracenes



Original Peak Response = 164



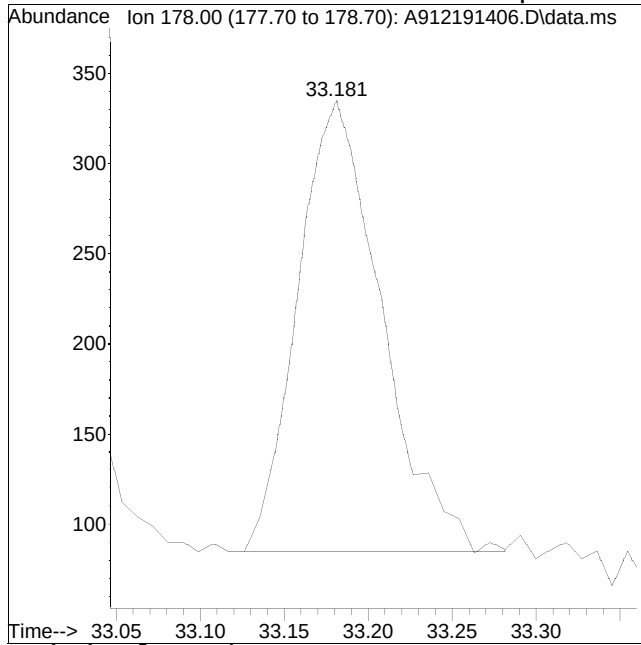
Manual Peak Response = 414 M2

M2 = Peak not found by automatic integration algorithm.

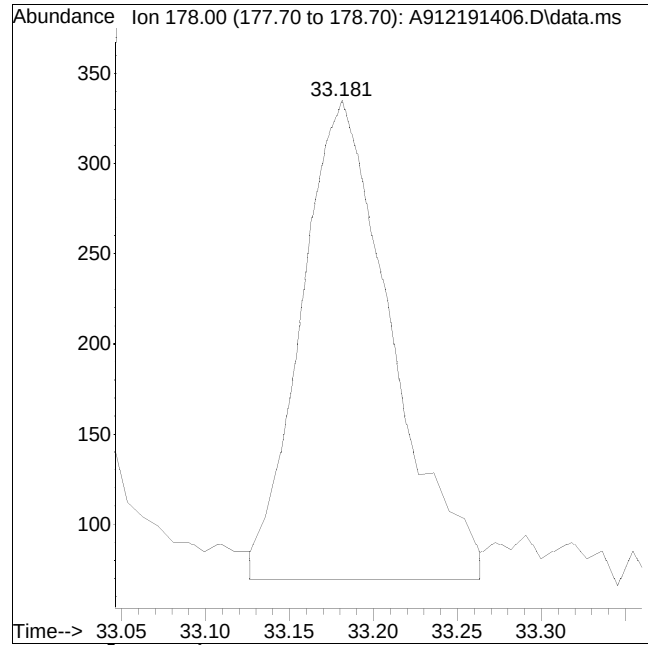
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191406.D Operator : PAH9:SR
Date Inj'd : 12/19/2014 8:55 pm Instrument : PAH 9
Sample : wg749631-1,32 Quant Date : 12/22/2014 2:12 pm

Compound #55: Anthracene



Original Peak Response = 866



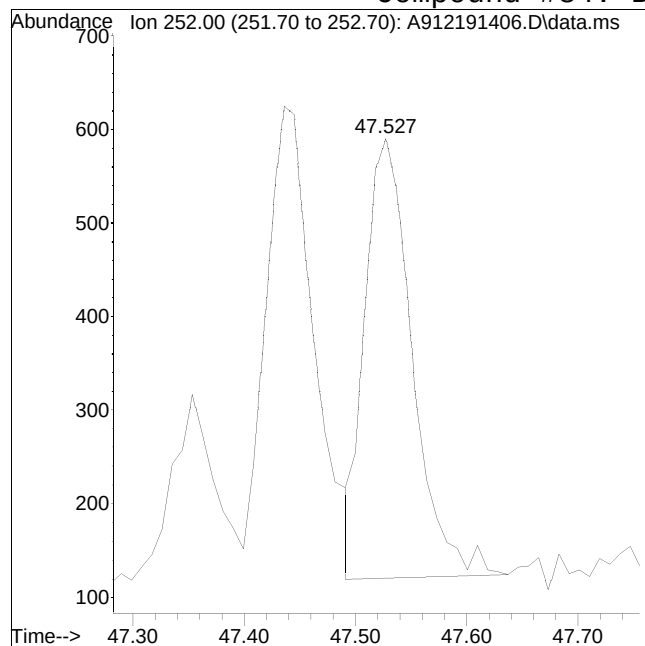
Manual Peak Response = 994 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

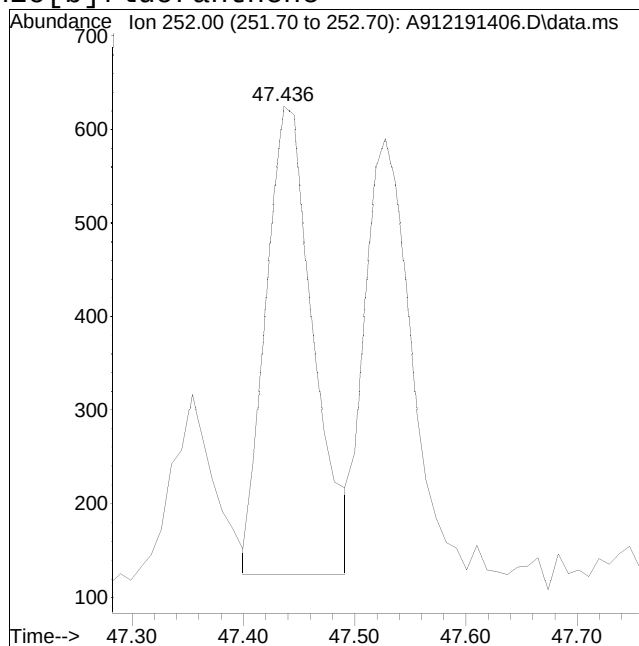
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191406.D Operator : PAH9:SR
Date Inj'd : 12/19/2014 8:55 pm Instrument : PAH 9
Sample : wg749631-1,32 Quant Date : 12/22/2014 2:12 pm

Compound #84: Benzo[b]fluoranthene



Original Peak Response = 1391

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

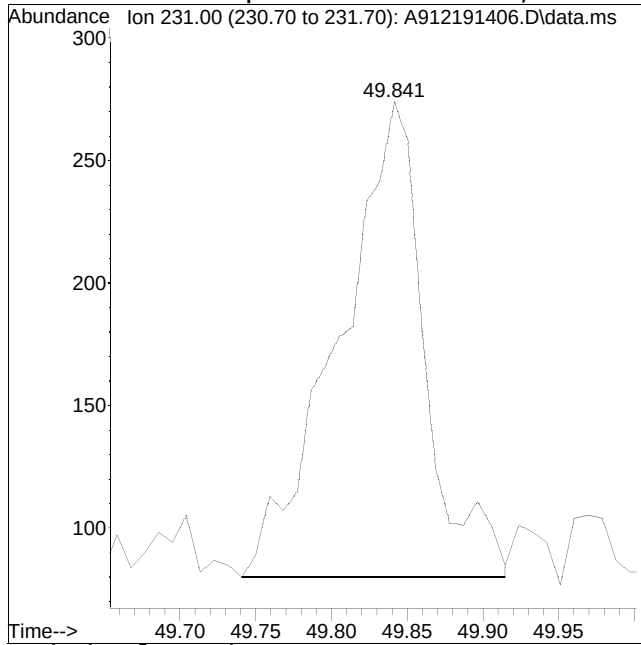


Manual Peak Response = 1482 M3

Manual Integration/Negative Proof Report

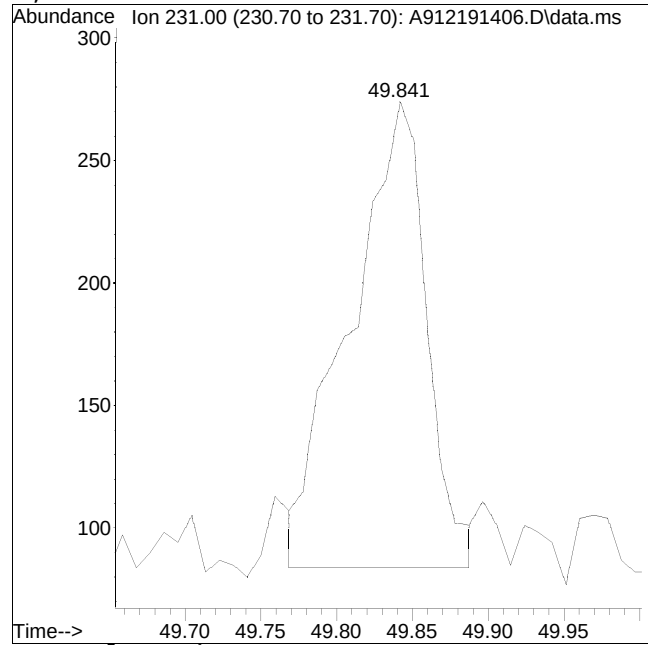
Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191406.D Operator : PAH9:SR
Date Inj'd : 12/19/2014 8:55 pm Instrument : PAH 9
Sample : wg749631-1,32 Quant Date : 12/22/2014 2:12 pm

Compound #147: C26,20R- +C27,20S- triaromatic steroid



Original Peak Response = 767

M4 = Poor automated baseline construction.

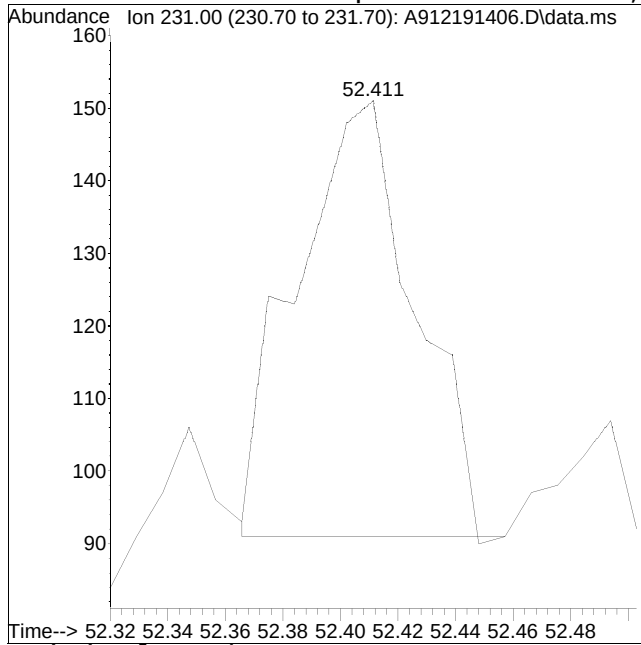


Manual Peak Response = 669 M4

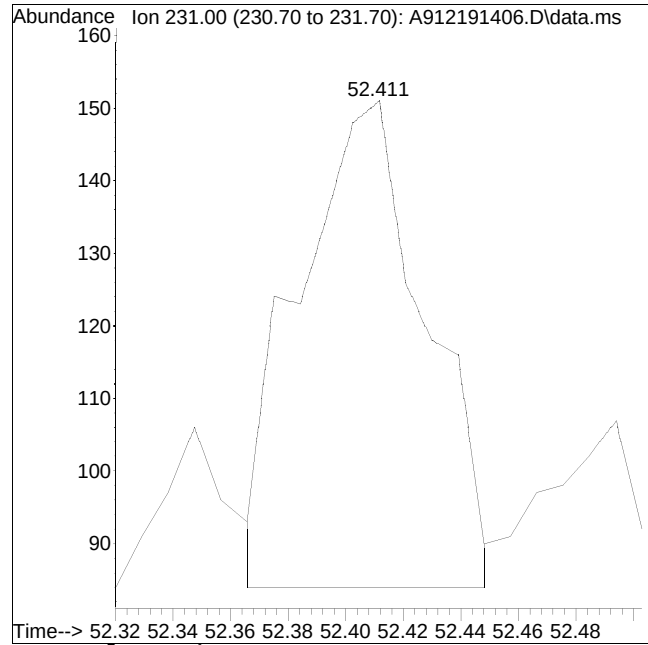
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191406.D Operator : PAH9:SR
Date Inj'd : 12/19/2014 8:55 pm Instrument : PAH 9
Sample : wg749631-1,32 Quant Date : 12/22/2014 2:12 pm

Compound #150: C28,20R-triaromatic steroid



Original Peak Response = 171



Manual Peak Response = 206 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191407.D
 Acq On : 19 Dec 2014 10:20 pm
 Operator : PAH9:SR
 Sample : wg749631-2,32
 Misc : WG754959,WG749631,ICAL10505
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 12 09:02:16 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.031	164	101631	500.000	ng/mL	0.00
74) Chrysene-d12	43.451	240	200384	500.000	ng/mL	0.02
System Monitoring Compounds						
9) Naphthalene-d8	20.078	136	212848	462.558	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	46.26%#		
42) Phenanthrene-d10	32.898	188	173843	498.373	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	49.84%#		
83) Benzo[b]fluoranthene-d12	47.353	264	225702	544.445	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	54.44%		
88) Benzo[a]pyrene-d12	48.561	264	196116	515.498	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	51.55%		
129) 5B(H)Cholane - Surr	44.063	217	31379	495.790	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	49.58%#		
Target Compounds						
10) Naphthalene	20.151	128	242619	431.293	ng/mL	100
11) C1-Naphthalenes	0.000		0	N.D.	d	
12) C2-Naphthalenes	0.000		0	N.D.	d	
13) C3-Naphthalenes	0.000		0	N.D.		
14) C4-Naphthalenes	0.000		0	N.D.		
23) Biphenyl	0.000		0	N.D.	d	
25) Dibenzofuran	0.000		0	N.D.	d	
26) Acenaphthylene	26.420	152	203428M4	435.541	ng/mL	
27) Acenaphthene	27.159	153	127037	451.130	ng/mL	99
29) Fluorene	29.185	166	141450	446.756	ng/mL	100
30) C1-Fluorenes	0.000		0	N.D.		
31) C2-Fluorenes	0.000		0	N.D.	d	
32) C3-Fluorenes	0.000		0	N.D.	d	
33) Dibenzothiophene	0.000		0	N.D.	d	
37) OTP	0.000		0	N.D.	d	
38) C1-Dibenzothiophenes	0.000		0	N.D.	d	
38) C1-Dibenzothiophenes BS	0.000		0d	0.000	ng/mL	
39) C2-Dibenzothiophenes	0.000		0	N.D.	d	
40) C3-Dibenzothiophenes	0.000		0	N.D.	d	
41) C4-Dibenzothiophenes	0.000		0	N.D.	d	
43) Phenanthrene	32.980	178	207596	469.873	ng/mL	100
49) C1-Phenanthrenes/Anthrace	0.000		0	N.D.	d	
50) C2-Phenanthrenes/Anthrace	0.000		0	N.D.	d	
50) C2-Phenanthrenes/Anthr BS	0.000		0d	0.000	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191407.D
 Acq On : 19 Dec 2014 10:20 pm
 Operator : PAH9:SR
 Sample : wg749631-2,32
 Misc : WG754959,WG749631,ICAL10505
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 12 09:02:16 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) 5AA IS BKGD	0.000		0	N.D.	d	
52) C3-Phenanthrenes/Anthrace	0.000		0	N.D.	d	
53) C4-Phenanthrenes/Anthrace	0.000		0	N.D.	d	
55) Anthracene	33.172	178	199224	488.267	ng/mL	99
56) Carbazole	0.000		0	N.D.	d	
58) Fluoranthene	37.745	202	217246M4	484.313	ng/mL	
59) Benzo(b)fluorene	0.000		0	N.D.	d	
60) Pyrene	38.631	202	221433	464.068	ng/mL	97
61) C1-Fluoranthenes/Pyrenes	0.000		0	N.D.	d	
62) C2-Fluoranthenes/Pyrenes	0.000		0	N.D.	d	
63) C3-Fluoranthenes/Pyrenes	0.000		0	N.D.	d	
64) C4-Fluoranthenes/Pyrenes	0.000		0	N.D.	d	
66) Naphthobenzothiophene	0.000		0	N.D.	d	
67) Naphthobenzothiophene-2,1	0.000		0	N.D.	d	
68) Naphthobenzothiophene-1,2	0.000		0	N.D.	d	
69) Naphthobenzothiophene-2,3	0.000		0	N.D.	d	
70) C1-Naphthobenzothiophenes	0.000		0	N.D.	d	
71) C2-Naphthobenzothiophenes	0.000		0	N.D.	d	
72) C3-Naphthobenzothiophenes	0.000		0	N.D.	d	
73) C4-Naphthobenzothiophenes	0.000		0	N.D.	d	
75) Benz[a]anthracene	43.387	228	220385	496.367	ng/mL	99
77) Chrysene/Triphenylene	43.552	228	213306	485.936	ng/mL	99
78) C1-Chrysenes	0.000		0	N.D.	d	
79) C2-Chrysenes	0.000		0	N.D.	d	
79) C2-Chrysenes BS	0.000		0d	0.000	ng/mL	
80) BBF-d12 Surr BKGD	0.000		0	N.D.	d	
81) C3-Chrysenes	0.000		0	N.D.	d	
82) C4-Chrysenes	0.000		0	N.D.	d	
84) Benzo[b]fluoranthene	47.436	252	267102	508.556	ng/mL	96
85) Benzo[j]+[k]fluoranthene	47.518	252	260216	517.306	ng/mL	97
86) Benzo[a]fluoranthene	0.000		0	N.D.	d	
87) Benzo[e]pyrene	0.000		0	N.D.	d	
89) Benzo[a]pyrene	48.652	252	244672	496.358	ng/mL	97
90) Perylene	0.000		0	N.D.	d	
91) Indeno[1,2,3-cd]pyrene	53.554	276	307293M3	502.554	ng/mL	
92) Dibenz[ah]+[ac]anthracene	53.609	278	290719	481.755	ng/mL	98
93) Benzo[g,h,i]perylene	54.879	276	274519	462.173	ng/mL	99
94) Hopane (T19)	0.000		0	N.D.	d	
96) C23 Tricyclic Terpane (T4	0.000		0	N.D.	d	
97) C24 Tricyclic Terpane (T5	0.000		0	N.D.	d	
98) C25 Tricyclic Terpane (T6	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191407.D
 Acq On : 19 Dec 2014 10:20 pm
 Operator : PAH9:SR
 Sample : wg749631-2,32
 Misc : WG754959,WG749631,ICAL10505
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 12 09:02:16 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99) C24 Tetracyclic Terpane (	0.000		0	N.D.	d	
100) C26 Tricyclic Terpane-22S	0.000		0	N.D.	d	
101) C26 Tricyclic Terpane-22R	0.000		0	N.D.	d	
102) C28 Tricyclic Terpane-22S	0.000		0	N.D.	d	
103) C28 Tricyclic Terpane-22R	0.000		0	N.D.	d	
104) C29 Tricyclic Terpane-22S	0.000		0	N.D.	d	
105) C29 Tricyclic Terpane-22R	0.000		0	N.D.	d	
106) 18a-22,29,30-Trisnorneocho	0.000		0	N.D.	d	
107) C30 Tricyclic Terpane-22S	0.000		0	N.D.	d	
108) C30 Tricyclic Terpane-22R	0.000		0	N.D.	d	
109) 17a(H)-22,29,30-Trisnorho	0.000		0	N.D.	d	
110) 17a/b,21b/a 28,30-Bisnorh	0.000		0	N.D.	d	
111) 17a(H),21b(H)-25-Norhopan	0.000		0	N.D.	d	
112) 30-Norhopane (T15)	0.000		0	N.D.	d	
113) 18a(H)-30-Norneohopane-C2	0.000		0	N.D.	d	
114) 17a(H)-Diahopane (X)	0.000		0	N.D.	d	
115) 30-Normoretane (T17)	0.000		0	N.D.	d	
116) 18a(H)&18b(H)-Oleananes (	0.000		0	N.D.	d	
117) Moretane (T20)	0.000		0	N.D.	d	
118) 30-Homohopane-22S (T21)	0.000		0	N.D.	d	
119) 30-Homohopane-22R (T22)	0.000		0	N.D.	d	
120) Gammacerane/C32-diahopane	0.000		0	N.D.	d	
121) 30,31-Bishomohopane-22S (	0.000		0	N.D.	d	
122) 30,31-Bishomohopane-22R (	0.000		0	N.D.	d	
123) 30,31-Trishomohopane-22S	0.000		0	N.D.	d	
124) 30,31-Trishomohopane-22R	0.000		0	N.D.	d	
125) Tetrakishomohopane-22S (T	0.000		0	N.D.	d	
126) Tetrakishomohopane-22R (T	0.000		0	N.D.	d	
127) Pentakishomohopane-22S (T	0.000		0	N.D.	d	
128) Pentakishomohopane-22R (T	0.000		0	N.D.	d	
130) 13b(H),17a(H)-20S-Diachol	0.000		0	N.D.		
131) 13b(H),17a(H)-20R-Diachol	0.000		0	N.D.		
132) 13b,17a-20S-Methyl diachol	0.000		0	N.D.	d	
133) 14a,17a-20S-Chol/13b,17a-	0.000		0	N.D.	d	
134) 14a,17a-20R-Chol/13b,17a-	0.000		0	N.D.	d	
135) Unknown Sterane (S18)	0.000		0	N.D.	d	
136) 13a,17b-20S-Ethyl diachole	0.000		0	N.D.	d	
137) 14a,17a-20S-Methylcholest	0.000		0	N.D.	d	
138) 14a,17a-20R-Methylcholest	0.000		0	N.D.		
139) 14a(H),17a(H)-20S-Ethylch	0.000		0	N.D.		
140) 14a(H),17a(H)-20R-Ethylch	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191407.D
 Acq On : 19 Dec 2014 10:20 pm
 Operator : PAH9:SR
 Sample : wg749631-2,32
 Misc : WG754959,WG749631,ICAL10505
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 12 09:02:16 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

	Compound	R.T. QIon	Response	Conc	Units	Dev(Min)
141)	14b(H),17b(H)-20R-Cholest	0.000	0	N.D.	d	
142)	14b(H),17b(H)-20S-Cholest	0.000	0	N.D.	d	
143)	14b,17b-20R-Methylcholest	0.000	0	N.D.	d	
144)	14b,17b-20S-Methylcholest	0.000	0	N.D.		
145)	14b(H),17b(H)-20R-Ethylch	0.000	0	N.D.		
146)	14b(H),17b(H)-20S-Ethylch	0.000	0	N.D.		
147)	C26,20R- +C27,20S- triaro	0.000	0	N.D.	d	
148)	C28,20S-triaromatic stero	0.000	0	N.D.	d	
149)	C27,20R-triaromatic stero	0.000	0	N.D.	d	
150)	C28,20R-triaromatic stero	0.000	0	N.D.	d	

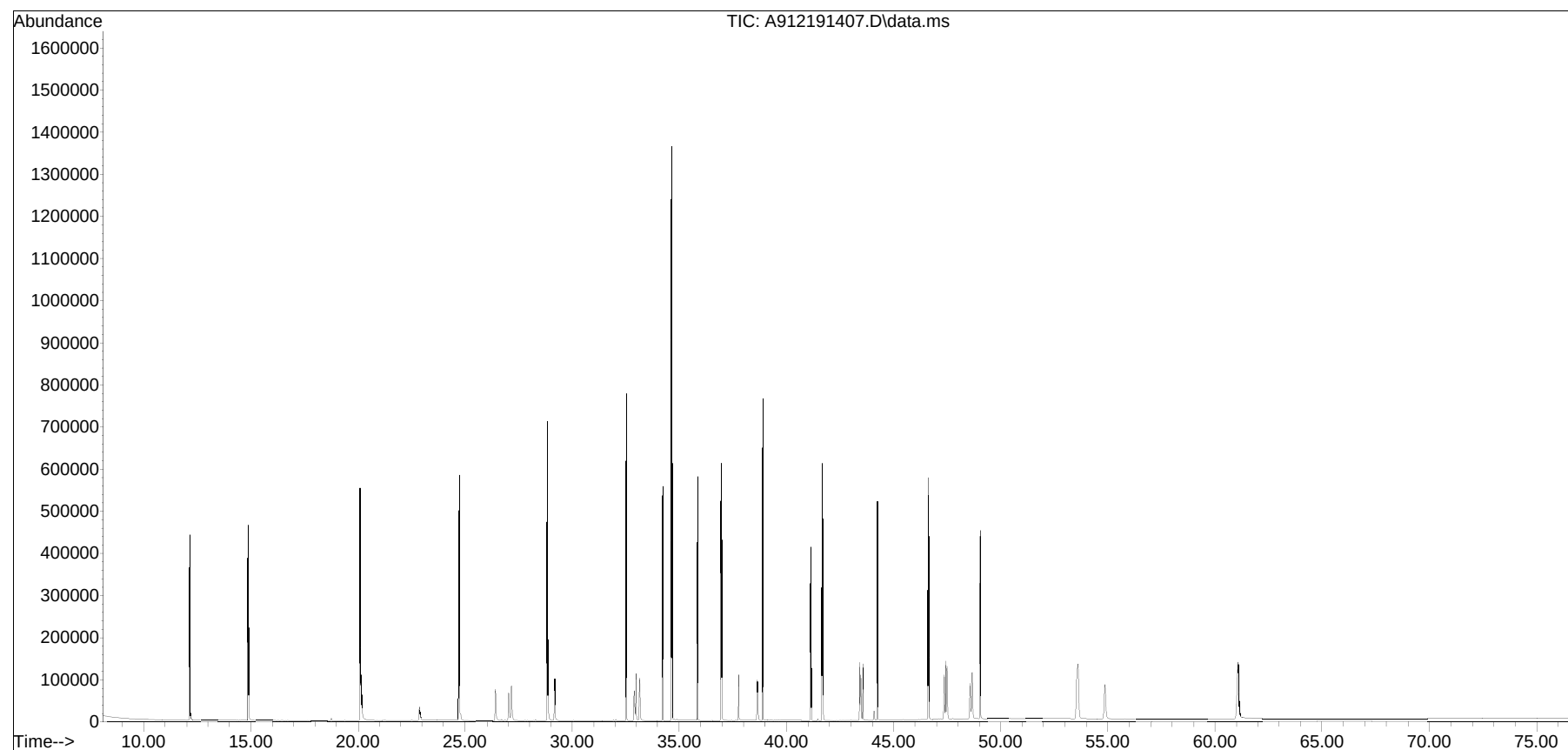
(#) = qualifier out of range (m) = manual integration (+) = signals summed

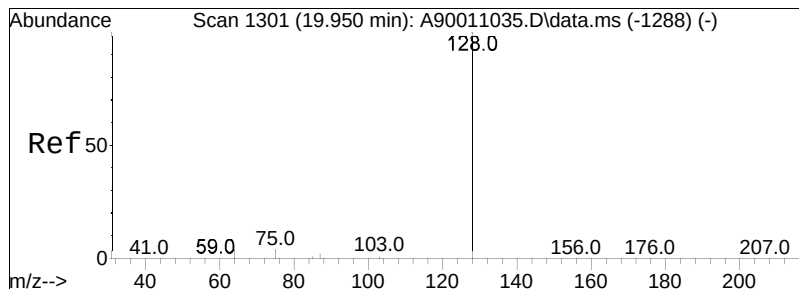
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC19\
Data File : A912191407.D
Acq On : 19 Dec 2014 10:20 pm
Operator : PAH9:SR
Sample : wg749631-2,32
Misc : WG754959,WG749631,ICAL10505
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 12 09:02:16 2015
Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 15 13:02:08 2014
Response via : Initial Calibration

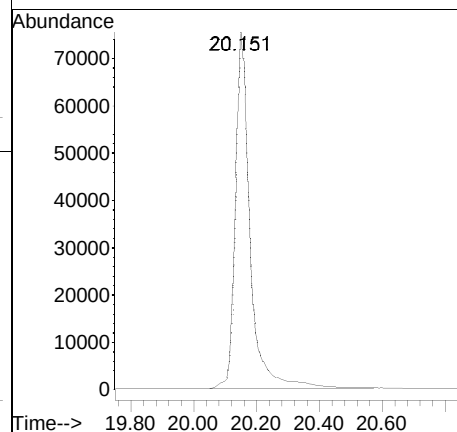
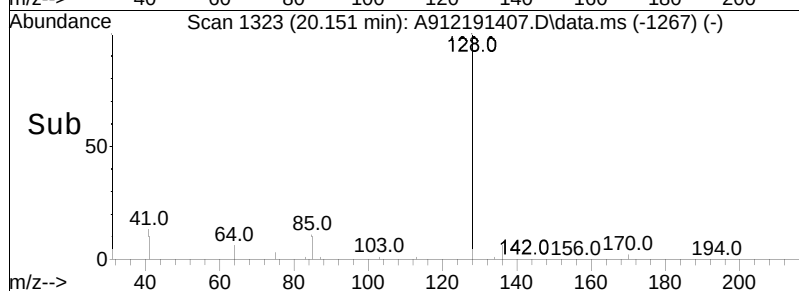
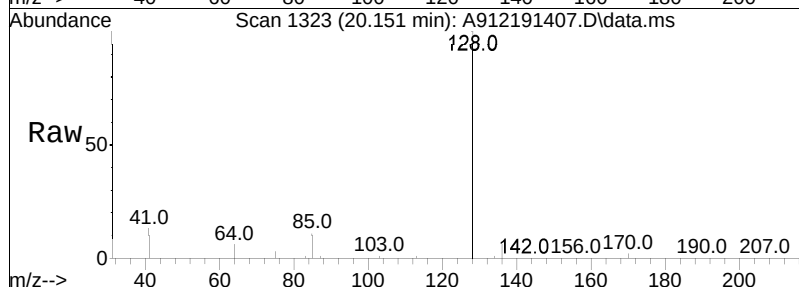
Sub List : ALKPAHURS - ALKPAH and BIO

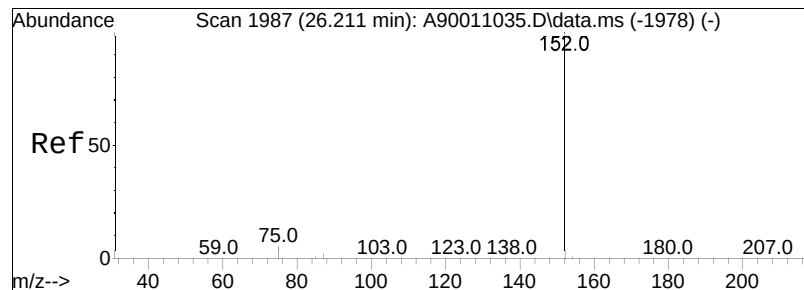




#10
Naphthalene
Concen: 431.29 ng/mL
RT: 20.151 min Scan# 1323
Delta R.T. 0.009 min
Lab File: A912191407.D
Acq: 19 Dec 2014 10:20 pm

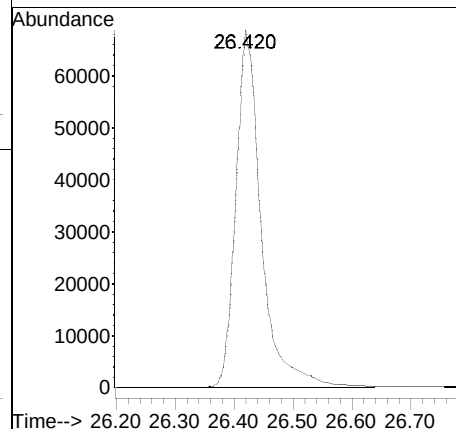
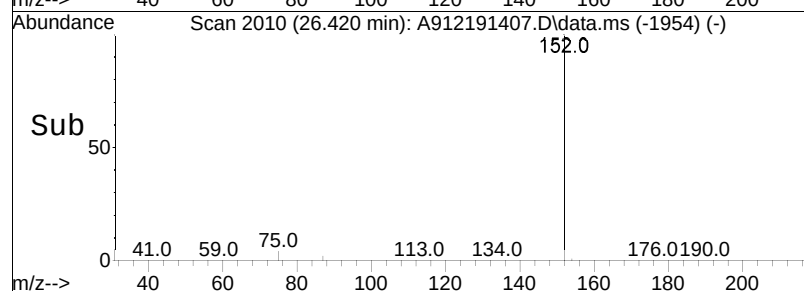
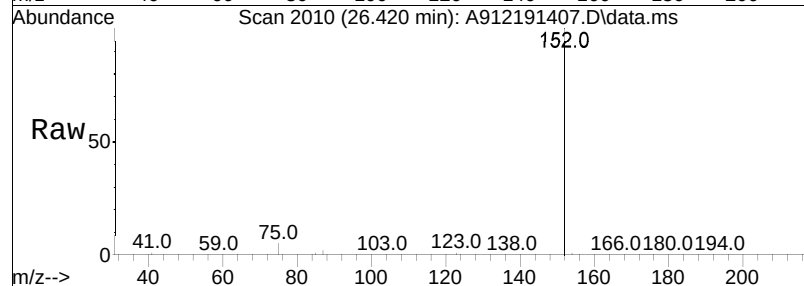
Tgt Ion:128 Resp: 242619

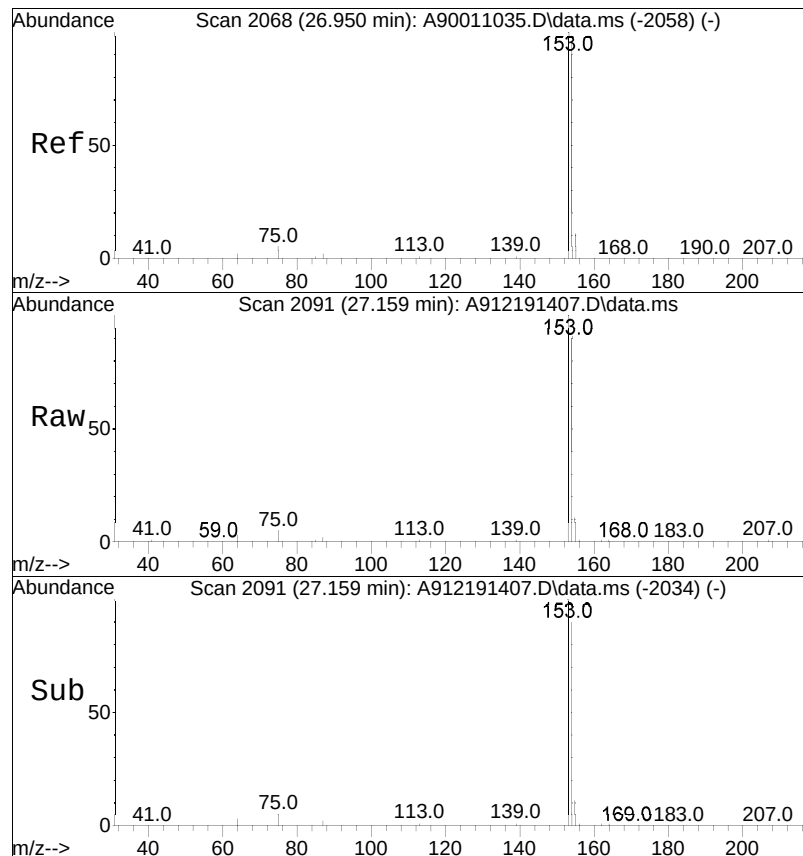




#26
Acenaphthylene
Concen: 435.54 ng/mL M4
RT: 26.420 min Scan# 2010
Delta R.T. 0.009 min
Lab File: A912191407.D
Acq: 19 Dec 2014 10:20 pm

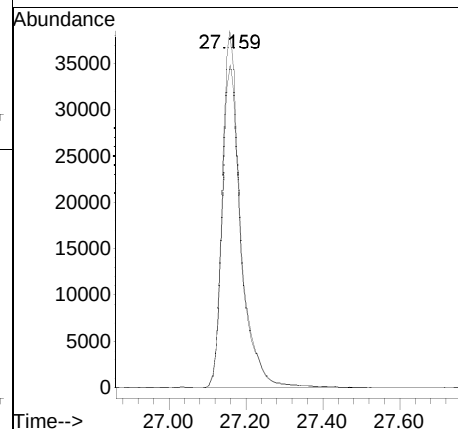
Tgt Ion:152 Resp: 203428

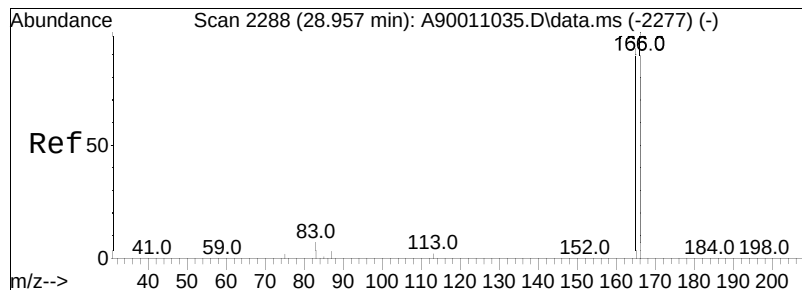




#27
 Acenaphthene
 Concen: 451.13 ng/mL
 RT: 27.159 min Scan# 2091
 Delta R.T. 0.018 min
 Lab File: A912191407.D
 Acq: 19 Dec 2014 10:20 pm

Tgt Ion	Ratio	Lower	Upper
153	100		
154	91.5	64.9	120.5





#29

Fluorene

Concen: 446.76 ng/mL

RT: 29.185 min Scan# 2313

Delta R.T. 0.027 min

Lab File: A912191407.D

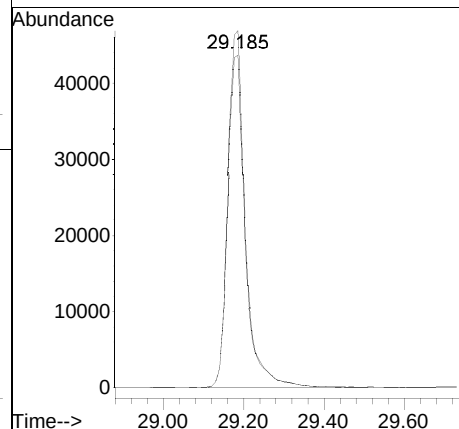
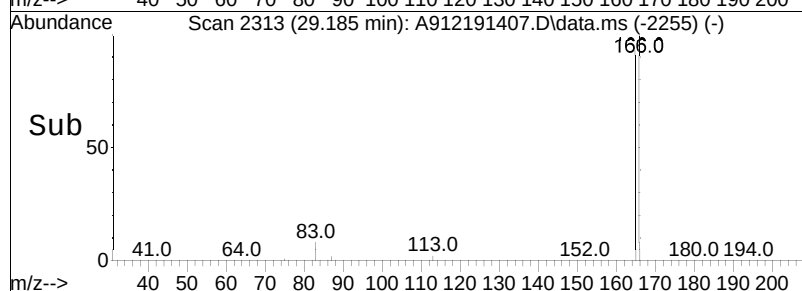
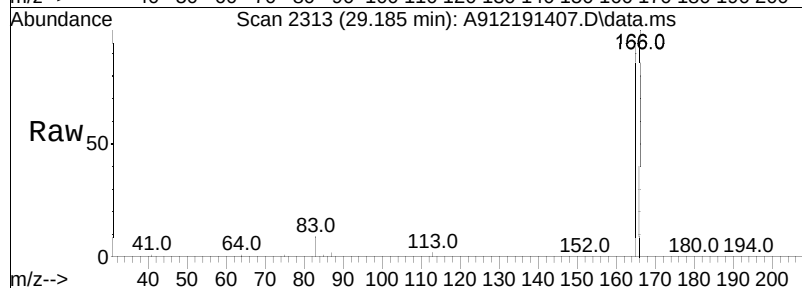
Acq: 19 Dec 2014 10:20 pm

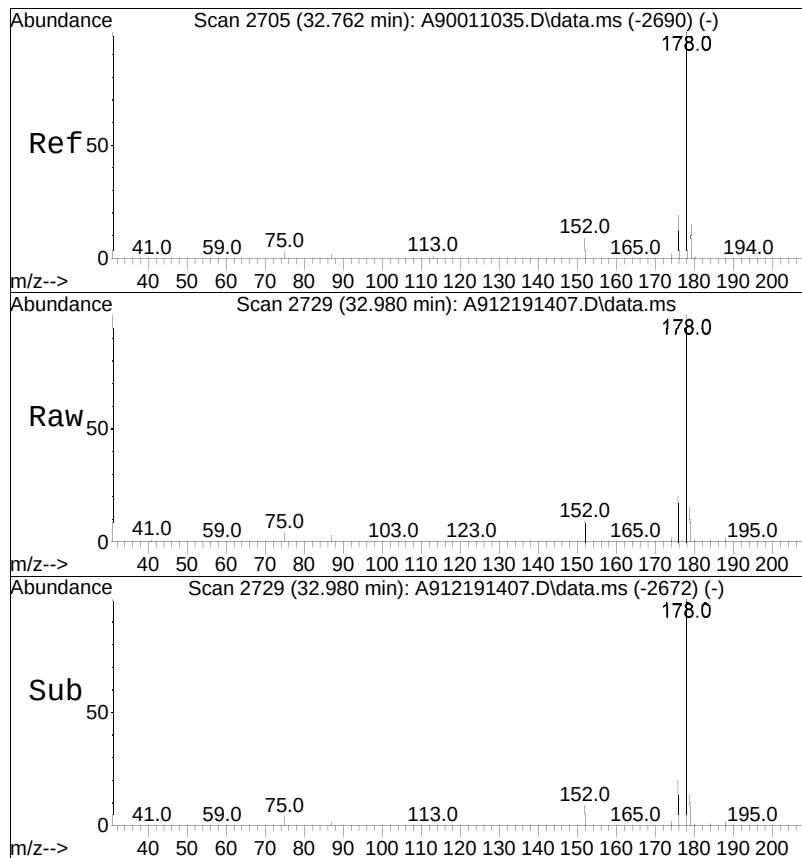
Tgt Ion:166 Resp: 141450

Ion Ratio Lower Upper

166 100

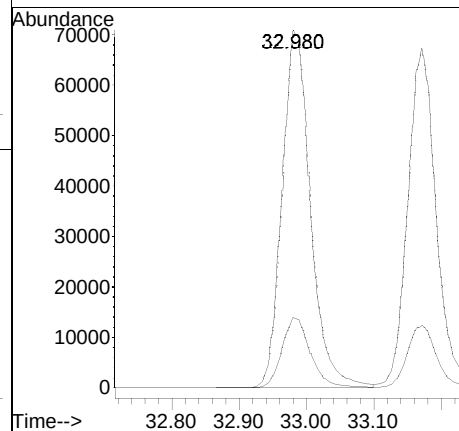
165 93.7 65.5 121.7

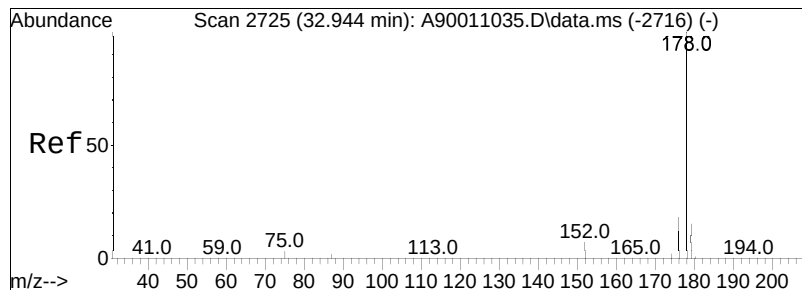




#43
 Phenanthrene
 Concen: 469.87 ng/mL
 RT: 32.980 min Scan# 2729
 Delta R.T. 0.018 min
 Lab File: A912191407.D
 Acq: 19 Dec 2014 10:20 pm

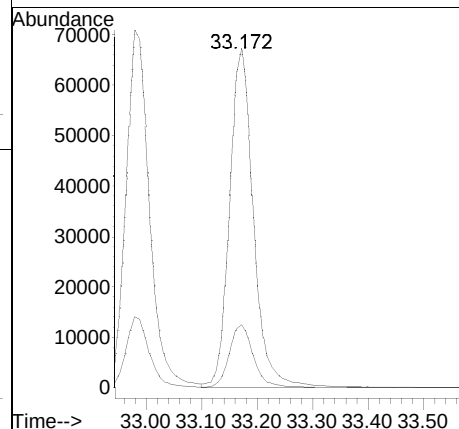
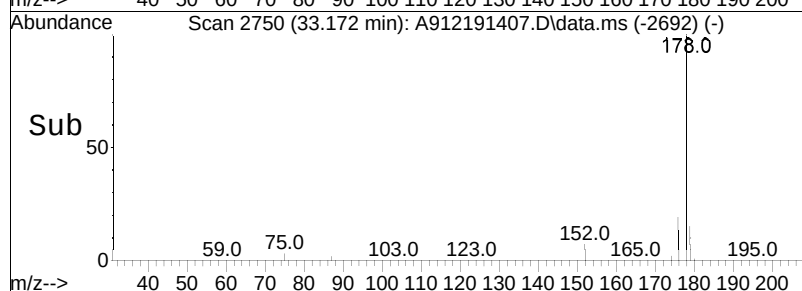
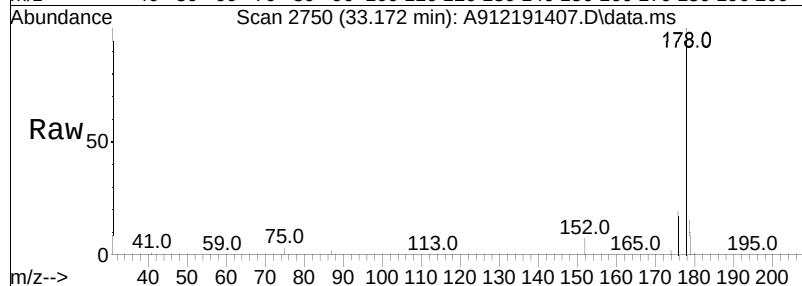
Tgt Ion	Ratio	Lower	Upper
178	100		
176	19.6	13.7	25.5

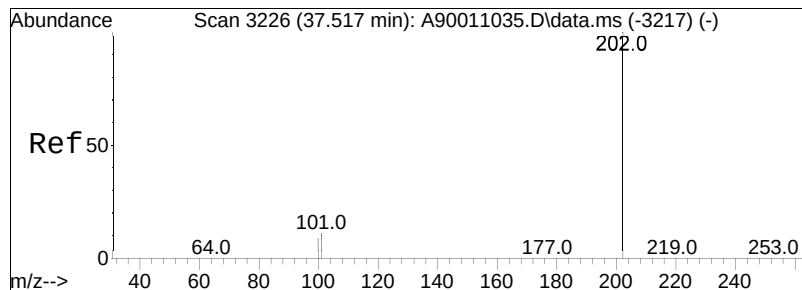




#55
 Anthracene
 Concen: 488.27 ng/mL
 RT: 33.172 min Scan# 2750
 Delta R.T. 0.027 min
 Lab File: A912191407.D
 Acq: 19 Dec 2014 10:20 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.8	13.4	24.8





#58

Fluoranthene

Concen: 484.31 ng/mL M4

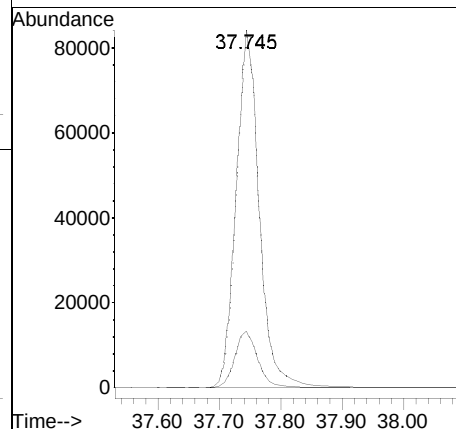
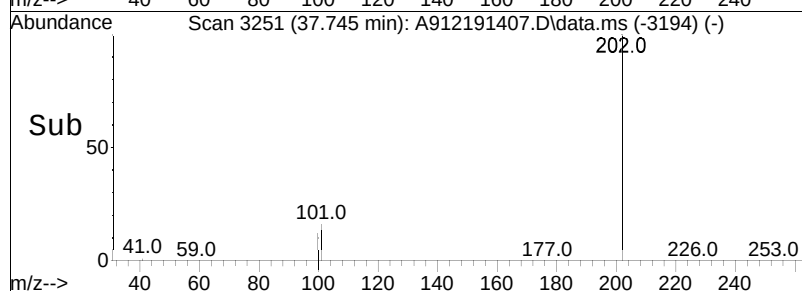
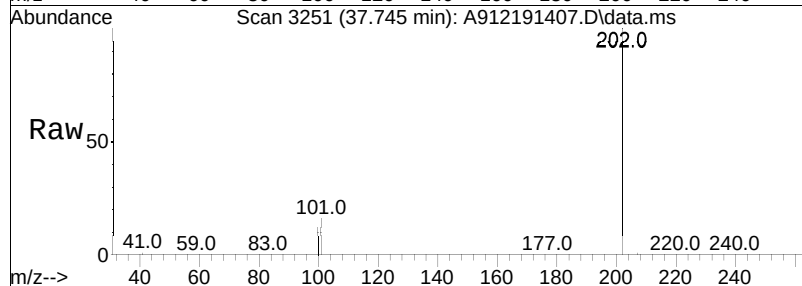
RT: 37.745 min Scan# 3251

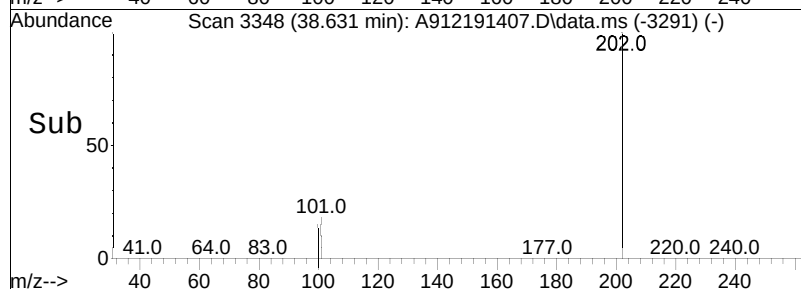
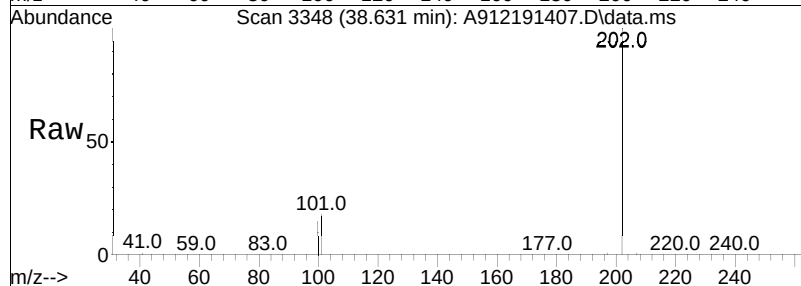
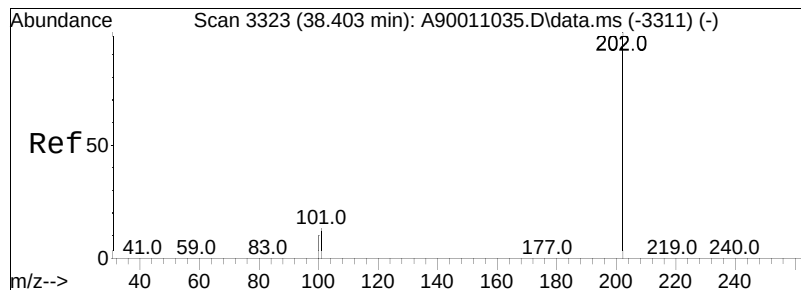
Delta R.T. 0.018 min

Lab File: A912191407.D

Acq: 19 Dec 2014 10:20 pm

Tgt	Ion	Ratio	Lower	Upper
202	100			
101	16.0	11.8	22.0	





#60

Pyrene

Concen: 464.07 ng/mL

RT: 38.631 min Scan# 3348

Delta R.T. 0.018 min

Lab File: A912191407.D

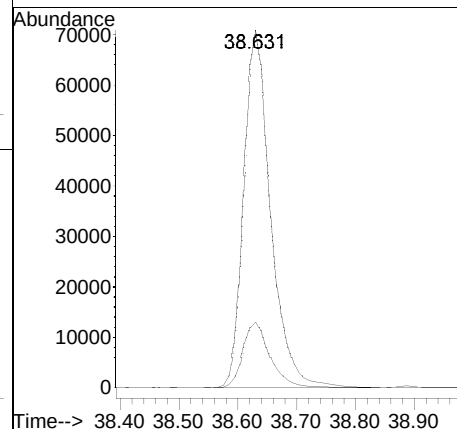
Acq: 19 Dec 2014 10:20 pm

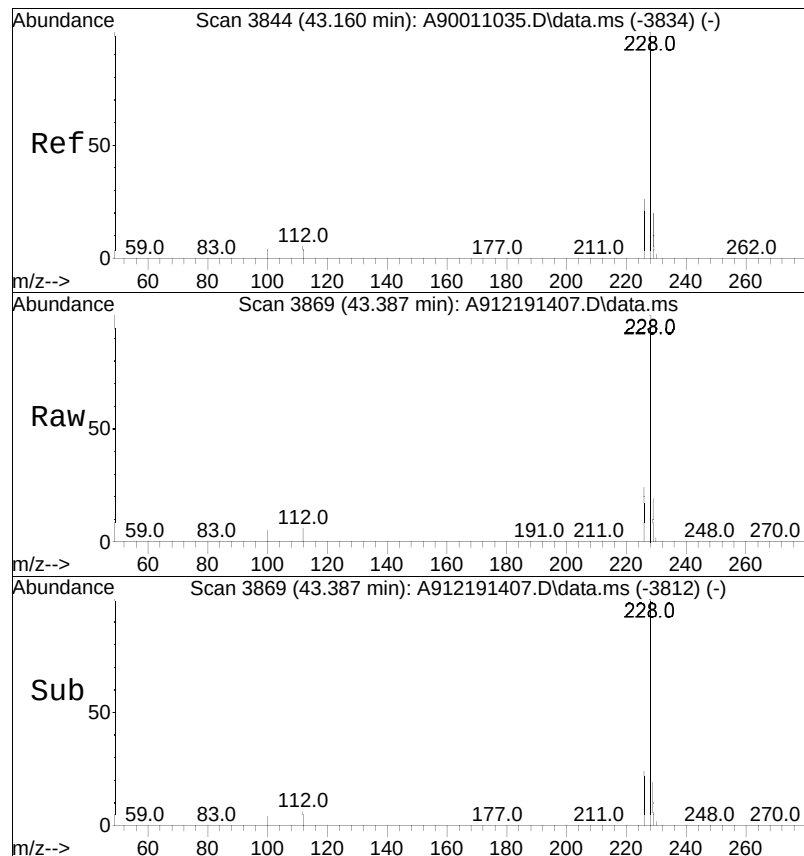
Tgt Ion: 202 Resp: 221433

Ion Ratio Lower Upper

202 100

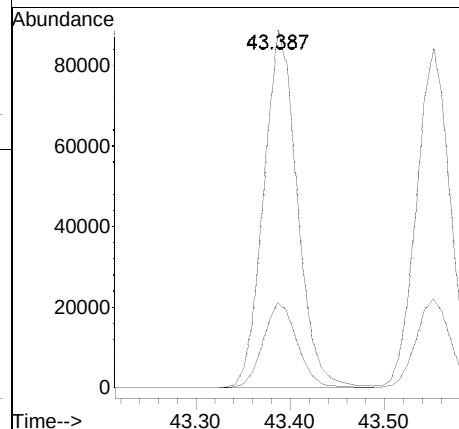
101 18.8 14.2 26.4

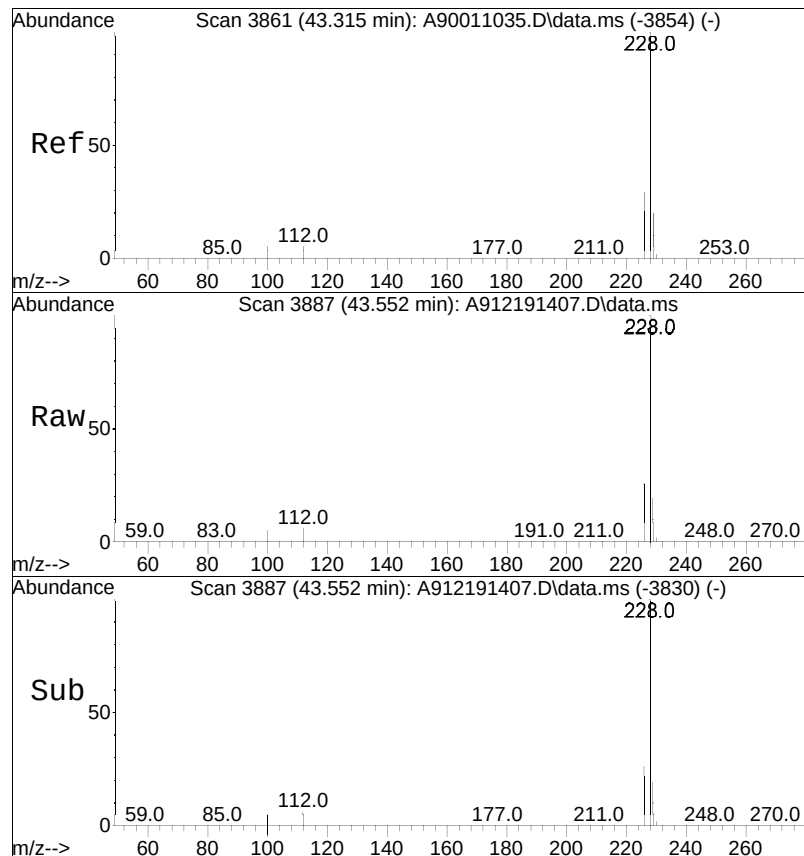




#75
Benz[a]anthracene
Concen: 496.37 ng/mL
RT: 43.387 min Scan# 3869
Delta R.T. 0.018 min
Lab File: A912191407.D
Acq: 19 Dec 2014 10:20 pm

Tgt	Ion	Ratio	Lower	Upper
228	228	100		
226	226	24.0	17.3	32.1





#77

Chrysene/Triphenylene

Concen: 485.94 ng/mL

RT: 43.552 min Scan# 3887

Delta R.T. 0.018 min

Lab File: A912191407.D

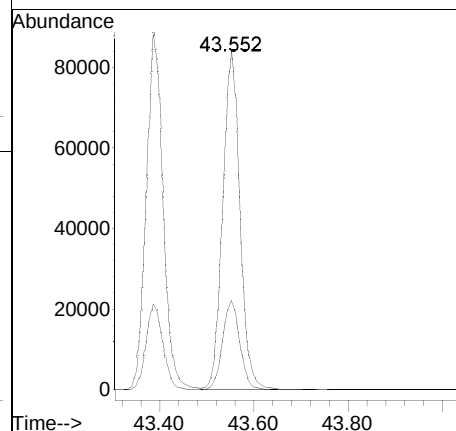
Acq: 19 Dec 2014 10:20 pm

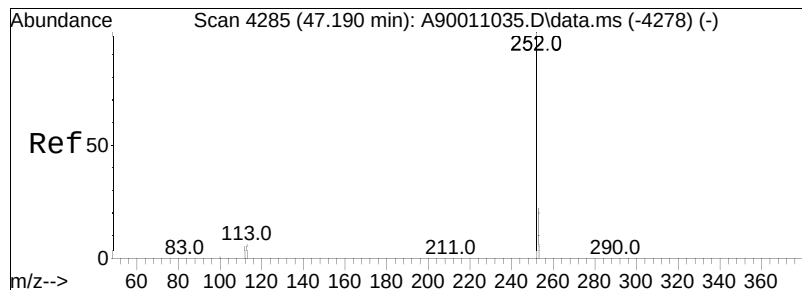
Tgt Ion:228 Resp: 213306

Ion Ratio Lower Upper

228 100

226 26.3 18.8 34.8





#84

Benzo[b]fluoranthene

Concen: 508.56 ng/mL

RT: 47.436 min Scan# 4312

Delta R.T. 0.018 min

Lab File: A912191407.D

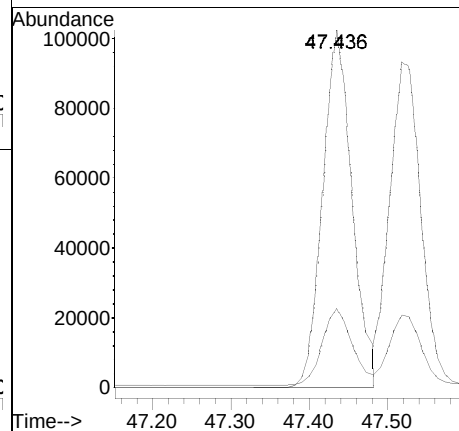
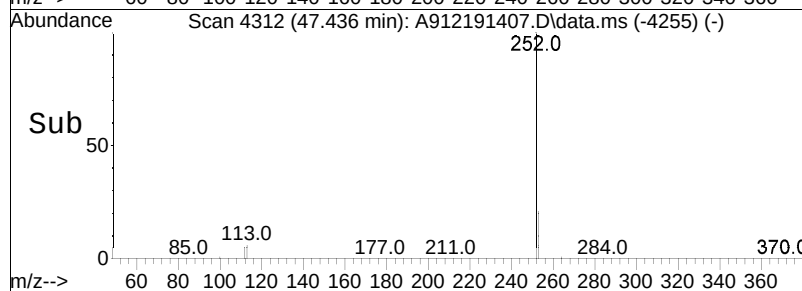
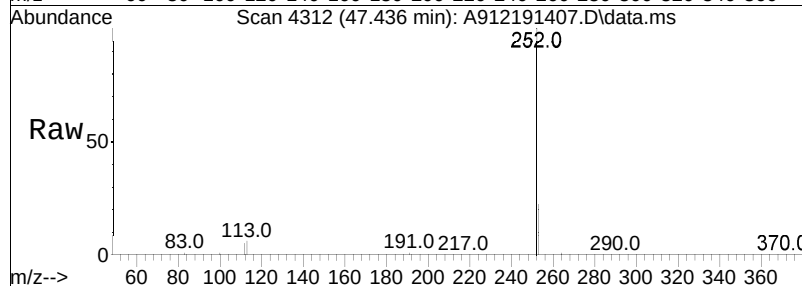
Acq: 19 Dec 2014 10:20 pm

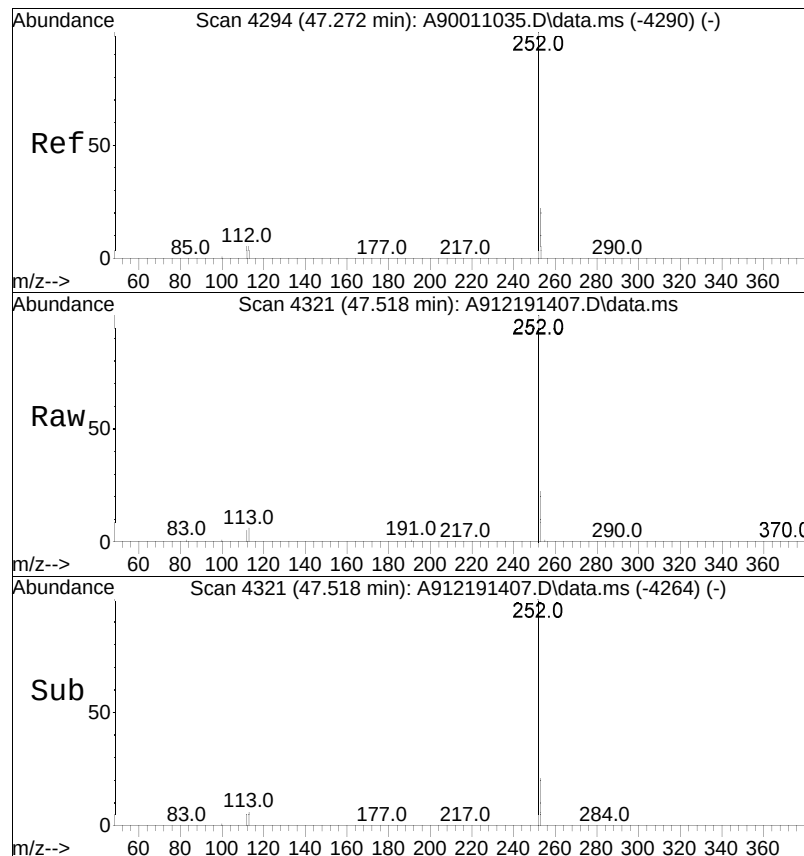
Tgt Ion: 252 Resp: 267102

Ion Ratio Lower Upper

252 100

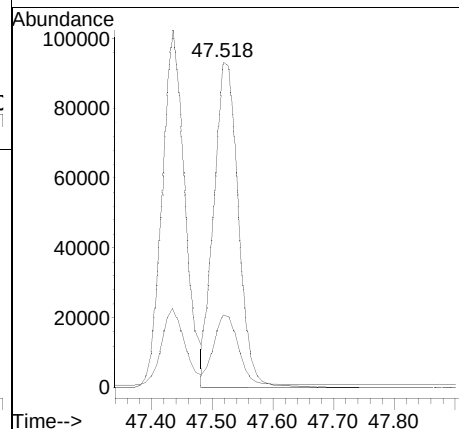
253 21.5 16.4 30.4

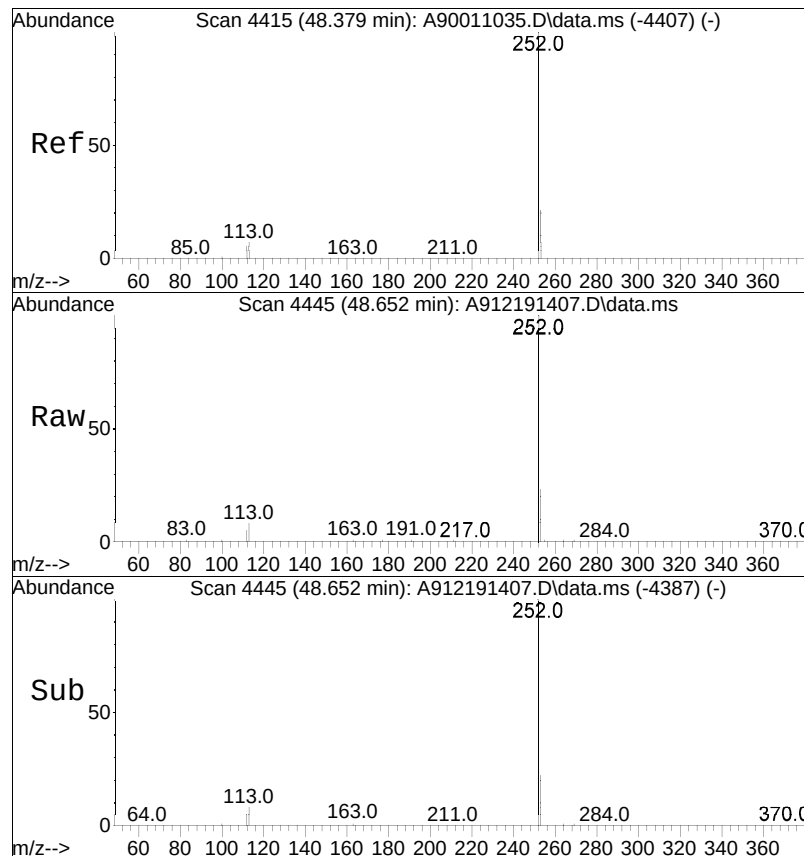




#85
 Benzo[j]+[k]fluoranthene
 Concen: 517.31 ng/mL
 RT: 47.518 min Scan# 4321
 Delta R.T. 0.018 min
 Lab File: A912191407.D
 Acq: 19 Dec 2014 10:20 pm

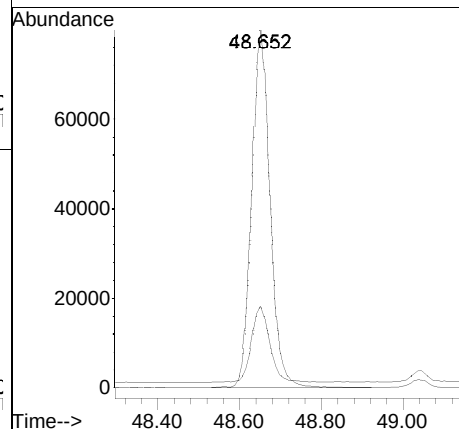
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.5	16.1	29.9	

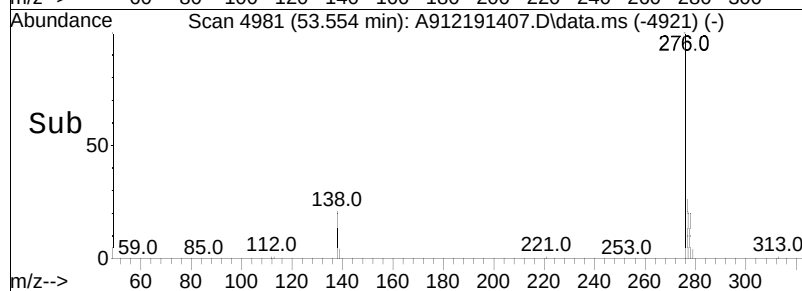
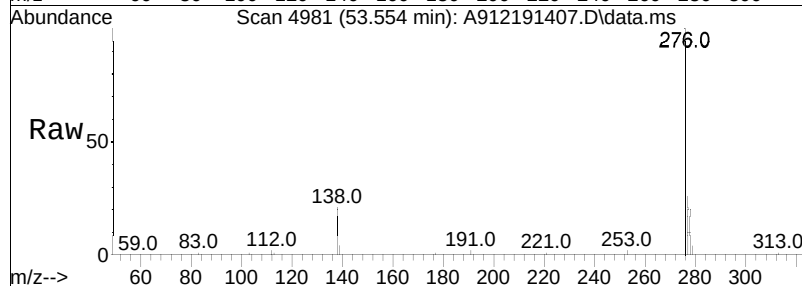
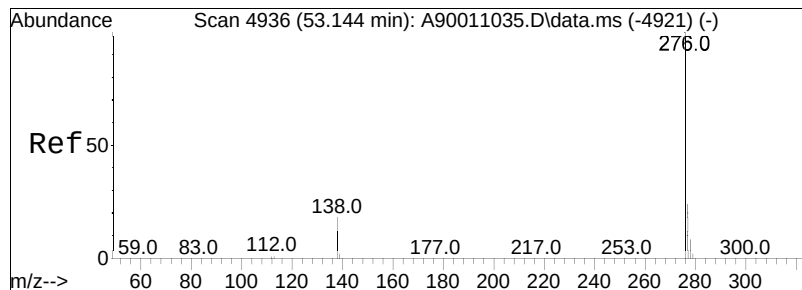




#89
 Benzo[a]pyrene
 Concen: 496.36 ng/mL
 RT: 48.652 min Scan# 4445
 Delta R.T. 0.027 min
 Lab File: A912191407.D
 Acq: 19 Dec 2014 10:20 pm

Tgt	Ion	Ratio	Lower	Upper
252	252	100		
253	253	21.9	16.4	30.6





#91

Indeno[1,2,3-cd]pyrene

Concen: 502.55 ng/mL M3

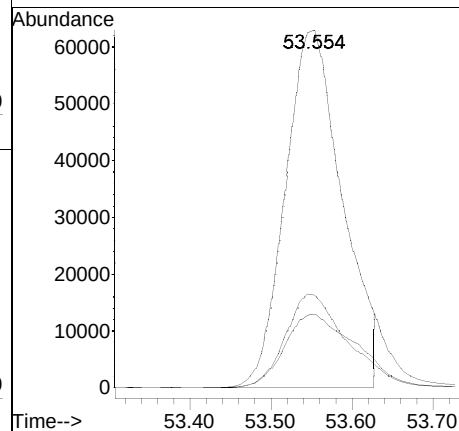
RT: 53.554 min Scan# 4981

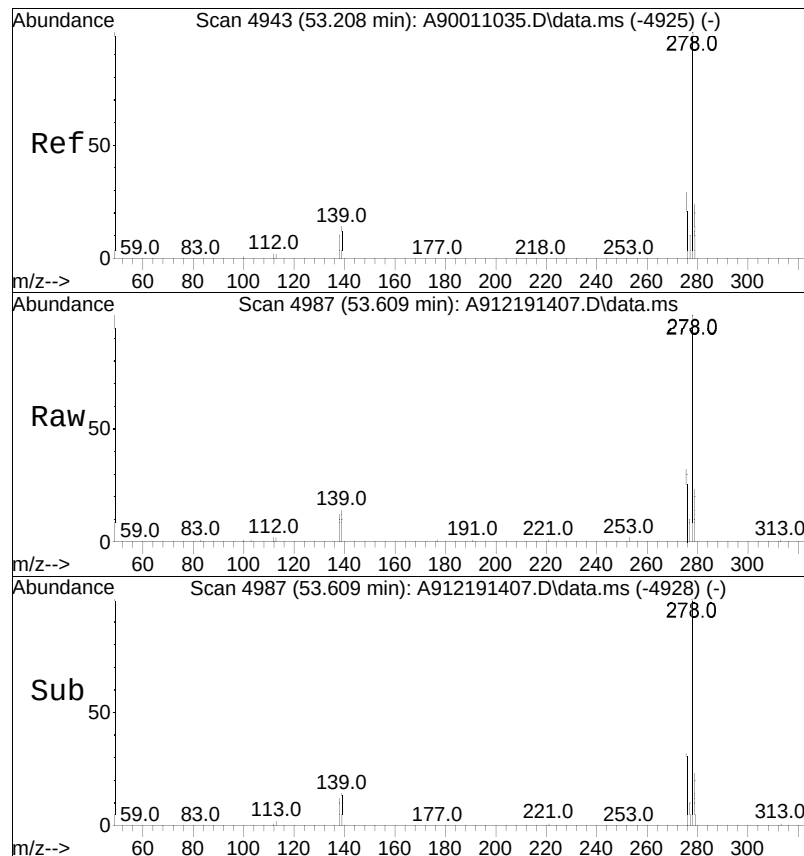
Delta R.T. 0.045 min

Lab File: A912191407.D

Acq: 19 Dec 2014 10:20 pm

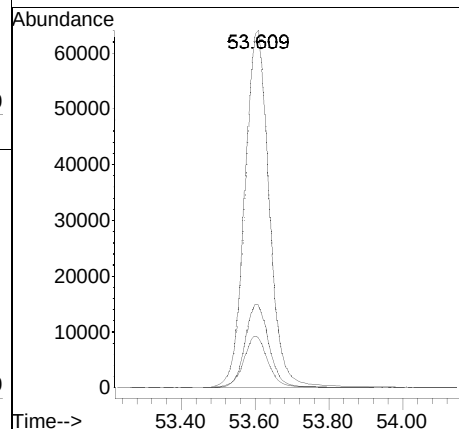
Tgt Ion:	276	Resp:	307293
Ion Ratio	Lower	Upper	
276	100		
138	25.8	15.7	29.1
277	28.6	17.9	33.3

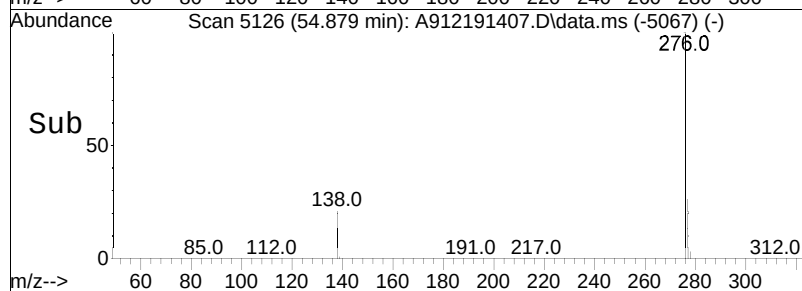
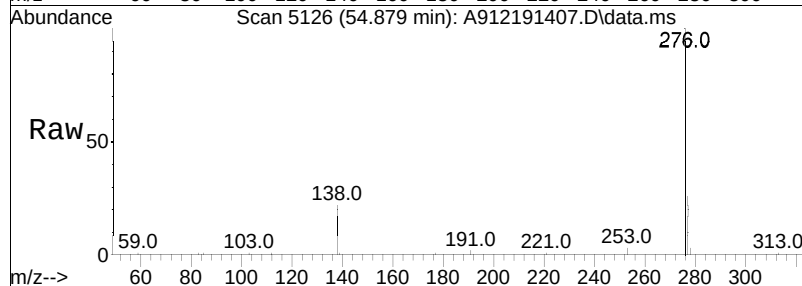
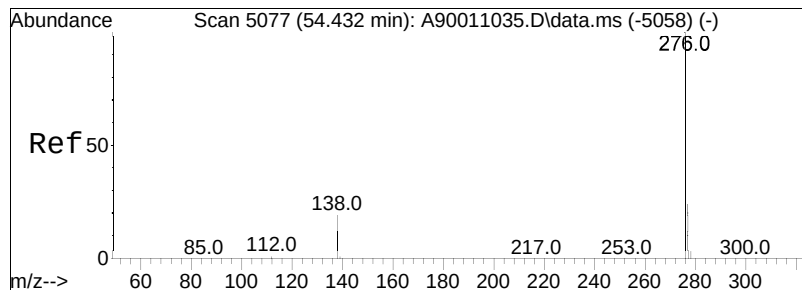




#92
 Dibenz[ah]+[ac]anthracene
 Concen: 481.75 ng/mL
 RT: 53.609 min Scan# 4987
 Delta R.T. 0.036 min
 Lab File: A912191407.D
 Acq: 19 Dec 2014 10:20 pm

Tgt	Ion	Ratio	Lower	Upper
278	100			
139	14.1	11.4	21.2	
279	23.0	16.3	30.3	





#93

Benzo[g,h,i]perylene

Concen: 462.17 ng/mL

RT: 54.879 min Scan# 5126

Delta R.T. 0.036 min

Lab File: A912191407.D

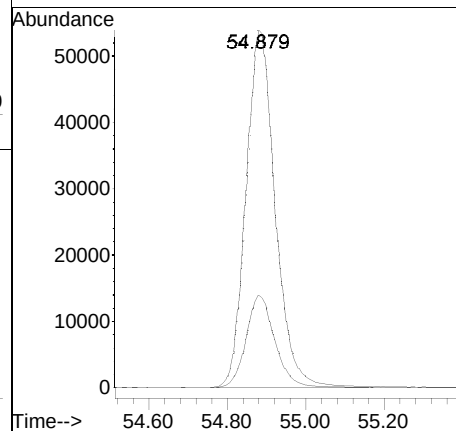
Acq: 19 Dec 2014 10:20 pm

Tgt Ion: 276 Resp: 274519

Ion Ratio Lower Upper

276 100

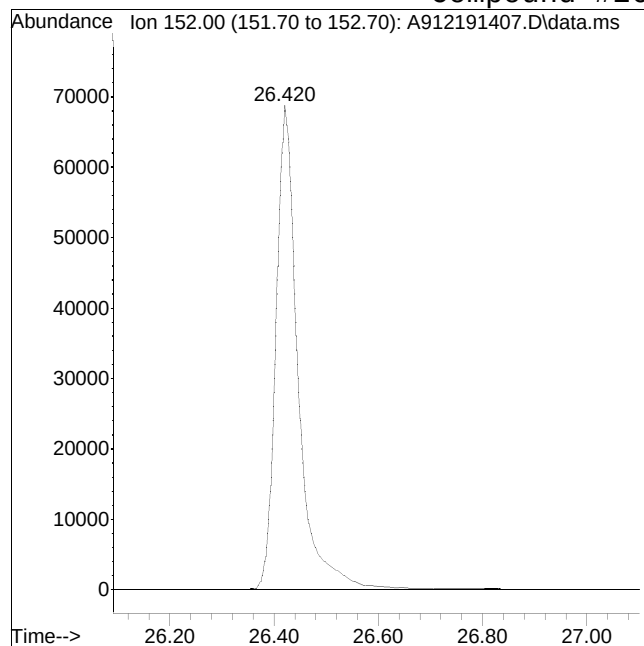
277 25.5 17.4 32.2



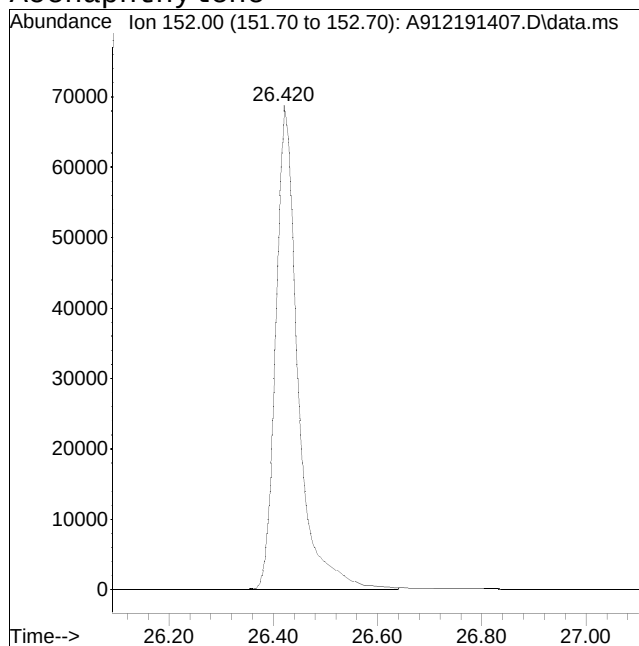
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191407.D Operator : PAH9:SR
Date Inj'd : 12/19/2014 10:20 pm Instrument : PAH 9
Sample : wg749631-2,32 Quant Date : 12/22/2014 2:12 pm

Compound #26: Acenaphthylene



Original Peak Response = 206687



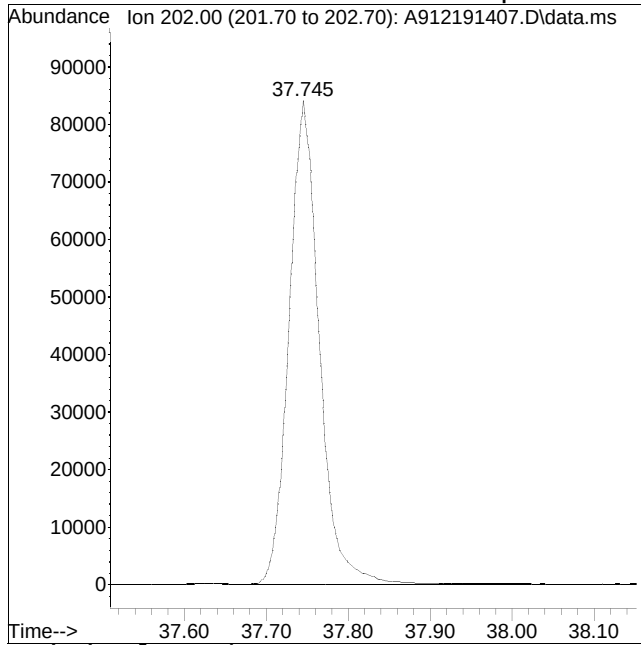
Manual Peak Response = 203428 M4

M4 = Poor automated baseline construction.

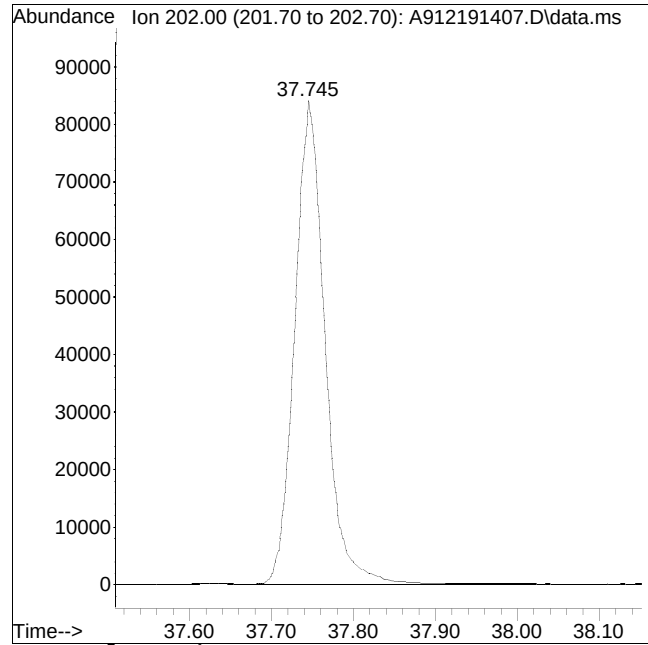
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191407.D Operator : PAH9:SR
Date Inj'd : 12/19/2014 10:20 pm Instrument : PAH 9
Sample : wg749631-2,32 Quant Date : 12/22/2014 2:12 pm

Compound #58: Fluoranthene



Original Peak Response = 216779



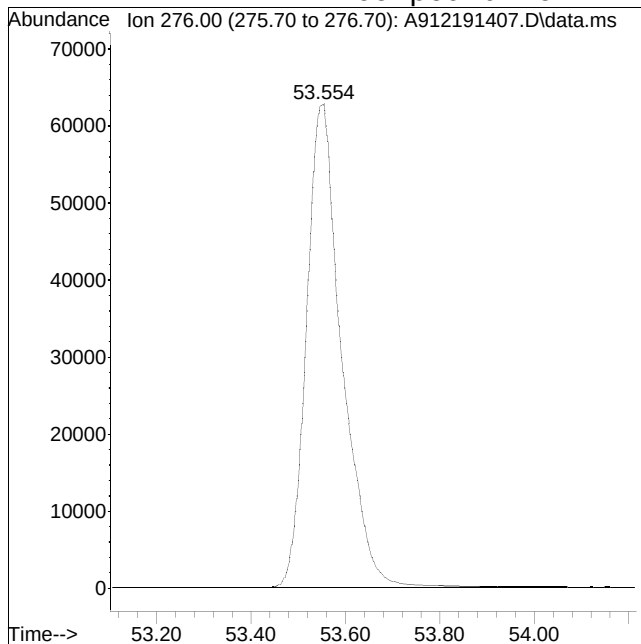
Manual Peak Response = 217246 M4

M4 = Poor automated baseline construction.

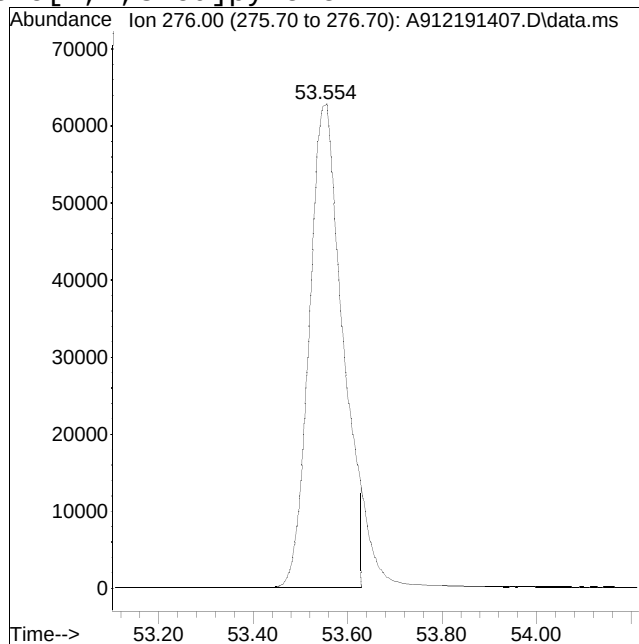
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191407.D Operator : PAH9:SR
Date Inj'd : 12/19/2014 10:20 pm Instrument : PAH 9
Sample : wg749631-2,32 Quant Date : 12/22/2014 2:12 pm

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 326695



Manual Peak Response = 307293 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191408.D
 Acq On : 19 Dec 2014 11:44 pm
 Operator : PAH9:SR
 Sample : wg749631-3,32
 Misc : WG754959,WG749631,ICAL10505
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 12 09:02:22 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.032	164	102737	500.000	ng/mL	0.00
74) Chrysene-d12	43.451	240	202199	500.000	ng/mL	0.02
System Monitoring Compounds						
9) Naphthalene-d8	20.078	136	210688	452.935	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	45.29%#		
42) Phenanthrene-d10	32.889	188	174624	495.222	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	49.52%#		
83) Benzo[b]fluoranthene-d12	47.353	264	220257	526.542	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	52.65%		
88) Benzo[a]pyrene-d12	48.561	264	193492	504.035	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	50.40%		
129) 5B(H)Cholane - Surr	44.063	217	30493	477.467	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	47.75%#		
Target Compounds						
10) Naphthalene	20.151	128	249533	438.808	ng/mL	100
11) C1-Naphthalenes	0.000		0	N.D.	d	
12) C2-Naphthalenes	0.000		0	N.D.	d	
13) C3-Naphthalenes	0.000		0	N.D.		
14) C4-Naphthalenes	0.000		0	N.D.		
23) Biphenyl	0.000		0	N.D.	d	
25) Dibenzofuran	0.000		0	N.D.	d	
26) Acenaphthylene	26.420	152	211598	448.156	ng/mL	100
27) Acenaphthene	27.159	153	130963	460.066	ng/mL	99
29) Fluorene	29.176	166	144692	452.075	ng/mL	99
30) C1-Fluorenes	0.000		0	N.D.	d	
31) C2-Fluorenes	0.000		0	N.D.	d	
32) C3-Fluorenes	0.000		0	N.D.	d	
33) Dibenzothiophene	0.000		0	N.D.	d	
37) OTP	0.000		0	N.D.	d	
38) C1-Dibenzothiophenes	0.000		0	N.D.	d	
38) C1-Dibenzothiophenes BS	0.000		0d	0.000	ng/mL	
39) C2-Dibenzothiophenes	0.000		0	N.D.	d	
40) C3-Dibenzothiophenes	0.000		0	N.D.		
41) C4-Dibenzothiophenes	0.000		0	N.D.	d	
43) Phenanthrene	32.980	178	209233	468.480	ng/mL	100
49) C1-Phenanthrenes/Anthrace	0.000		0	N.D.	d	
50) C2-Phenanthrenes/Anthrace	0.000		0	N.D.	d	
50) C2-Phenanthrenes/Anthr BS	0.000		0d	0.000	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191408.D
 Acq On : 19 Dec 2014 11:44 pm
 Operator : PAH9:SR
 Sample : wg749631-3,32
 Misc : WG754959,WG749631,ICAL10505
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 12 09:02:22 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) 5AA IS BKGD	0.000		0	N.D.	d	
52) C3-Phenanthrenes/Anthrace	0.000		0	N.D.	d	
53) C4-Phenanthrenes/Anthrace	0.000		0	N.D.	d	
55) Anthracene	33.163	178	200778	486.778	ng/mL	100
56) Carbazole	0.000		0	N.D.	d	
58) Fluoranthene	37.745	202	216470	477.388	ng/mL	98
59) Benzo(b)fluorene	0.000		0	N.D.	d	
60) Pyrene	38.631	202	221732	459.692	ng/mL	96
61) C1-Fluoranthenes/Pyrenes	0.000		0	N.D.	d	
62) C2-Fluoranthenes/Pyrenes	0.000		0	N.D.	d	
63) C3-Fluoranthenes/Pyrenes	0.000		0	N.D.	d	
64) C4-Fluoranthenes/Pyrenes	0.000		0	N.D.	d	
66) Naphthobenzothiophene	0.000		0	N.D.	d	
67) Naphthobenzothiophene-2,1	0.000		0	N.D.	d	
68) Naphthobenzothiophene-1,2	0.000		0	N.D.	d	
69) Naphthobenzothiophene-2,3	0.000		0	N.D.	d	
70) C1-Naphthobenzothiophenes	0.000		0	N.D.	d	
71) C2-Naphthobenzothiophenes	0.000		0	N.D.	d	
72) C3-Naphthobenzothiophenes	0.000		0	N.D.	d	
73) C4-Naphthobenzothiophenes	0.000		0	N.D.	d	
75) Benz[a]anthracene	43.387	228	216579	483.416	ng/mL	99
77) Chrysene/Triphenylene	43.552	228	209787	473.630	ng/mL	99
78) C1-Chrysenes	0.000		0	N.D.	d	
79) C2-Chrysenes	0.000		0	N.D.	d	
79) C2-Chrysenes BS	0.000		0d	0.000	ng/mL	
80) BBF-d12 Surr BKGD	0.000		0	N.D.	d	
81) C3-Chrysenes	0.000		0	N.D.	d	
82) C4-Chrysenes	0.000		0	N.D.	d	
84) Benzo[b]fluoranthene	47.436	252	262305	494.939	ng/mL	96
85) Benzo[j]+[k]fluoranthene	47.518	252	254585	501.569	ng/mL	96
86) Benzo[a]fluoranthene	0.000		0	N.D.	d	
87) Benzo[e]pyrene	0.000		0	N.D.	d	
89) Benzo[a]pyrene	48.652	252	241566	485.658	ng/mL	97
90) Perylene	0.000		0	N.D.	d	
91) Indeno[1,2,3-cd]pyrene	53.545	276	292550M3	474.148	ng/mL	
92) Dibenzo[ah]+[ac]anthracene	53.609	278	276664	454.349	ng/mL	98
93) Benzo[g,h,i]perylene	54.888	276	264797	441.804	ng/mL	99
94) Hopane (T19)	0.000		0	N.D.	d	
96) C23 Tricyclic Terpane (T4	0.000		0	N.D.	d	
97) C24 Tricyclic Terpane (T5	0.000		0	N.D.	d	
98) C25 Tricyclic Terpane (T6	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191408.D
 Acq On : 19 Dec 2014 11:44 pm
 Operator : PAH9:SR
 Sample : wg749631-3,32
 Misc : WG754959,WG749631,ICAL10505
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 12 09:02:22 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99)	C24 Tetracyclic Terpane (	0.000		0	N.D.	d	
100)	C26 Tricyclic Terpane-22S	0.000		0	N.D.	d	
101)	C26 Tricyclic Terpane-22R	0.000		0	N.D.	d	
102)	C28 Tricyclic Terpane-22S	0.000		0	N.D.	d	
103)	C28 Tricyclic Terpane-22R	0.000		0	N.D.	d	
104)	C29 Tricyclic Terpane-22S	0.000		0	N.D.	d	
105)	C29 Tricyclic Terpane-22R	0.000		0	N.D.	d	
106)	18a-22,29,30-Trisnorneocho	0.000		0	N.D.	d	
107)	C30 Tricyclic Terpane-22S	0.000		0	N.D.	d	
108)	C30 Tricyclic Terpane-22R	0.000		0	N.D.	d	
109)	17a(H)-22,29,30-Trisnorho	0.000		0	N.D.	d	
110)	17a/b,21b/a 28,30-Bisnorh	0.000		0	N.D.	d	
111)	17a(H),21b(H)-25-Norhopan	0.000		0	N.D.	d	
112)	30-Norhopane (T15)	0.000		0	N.D.	d	
113)	18a(H)-30-Norneohopane-C2	0.000		0	N.D.	d	
114)	17a(H)-Diahopane (X)	0.000		0	N.D.	d	
115)	30-Normoretane (T17)	0.000		0	N.D.	d	
116)	18a(H)&18b(H)-Oleananes (	0.000		0	N.D.	d	
117)	Moretane (T20)	0.000		0	N.D.	d	
118)	30-Homohopane-22S (T21)	0.000		0	N.D.	d	
119)	30-Homohopane-22R (T22)	0.000		0	N.D.	d	
120)	Gammacerane/C32-diahopane	0.000		0	N.D.	d	
121)	30,31-Bishomohopane-22S (	0.000		0	N.D.	d	
122)	30,31-Bishomohopane-22R (	0.000		0	N.D.	d	
123)	30,31-Trishomohopane-22S	0.000		0	N.D.	d	
124)	30,31-Trishomohopane-22R	0.000		0	N.D.	d	
125)	Tetrakishomohopane-22S (T	0.000		0	N.D.	d	
126)	Tetrakishomohopane-22R (T	0.000		0	N.D.	d	
127)	Pentakishomohopane-22S (T	0.000		0	N.D.	d	
128)	Pentakishomohopane-22R (T	0.000		0	N.D.	d	
130)	13b(H),17a(H)-20S-Diachol	0.000		0	N.D.		
131)	13b(H),17a(H)-20R-Diachol	0.000		0	N.D.		
132)	13b,17a-20S-Methyl diachol	0.000		0	N.D.	d	
133)	14a,17a-20S-Chol/13b,17a-	0.000		0	N.D.	d	
134)	14a,17a-20R-Chol/13b,17a-	0.000		0	N.D.	d	
135)	Unknown Sterane (S18)	0.000		0	N.D.	d	
136)	13a,17b-20S-Ethyl diachole	0.000		0	N.D.	d	
137)	14a,17a-20S-Methylcholest	0.000		0	N.D.	d	
138)	14a,17a-20R-Methylcholest	0.000		0	N.D.		
139)	14a(H),17a(H)-20S-Ethylch	0.000		0	N.D.		
140)	14a(H),17a(H)-20R-Ethylch	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC19\
 Data File : A912191408.D
 Acq On : 19 Dec 2014 11:44 pm
 Operator : PAH9:SR
 Sample : wg749631-3,32
 Misc : WG754959,WG749631,ICAL10505
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 12 09:02:22 2015
 Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Mon Dec 15 13:02:08 2014
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
141)	14b(H),17b(H)-20R-Cholest	0.000		0		N.D.	d
142)	14b(H),17b(H)-20S-Cholest	0.000		0		N.D.	d
143)	14b,17b-20R-Methylcholest	0.000		0		N.D.	d
144)	14b,17b-20S-Methylcholest	0.000		0		N.D.	
145)	14b(H),17b(H)-20R-Ethylch	0.000		0		N.D.	
146)	14b(H),17b(H)-20S-Ethylch	0.000		0		N.D.	
147)	C26,20R- +C27,20S- triaro	0.000		0		N.D.	d
148)	C28,20S-triaromatic stero	0.000		0		N.D.	d
149)	C27,20R-triaromatic stero	0.000		0		N.D.	d
150)	C28,20R-triaromatic stero	0.000		0		N.D.	d

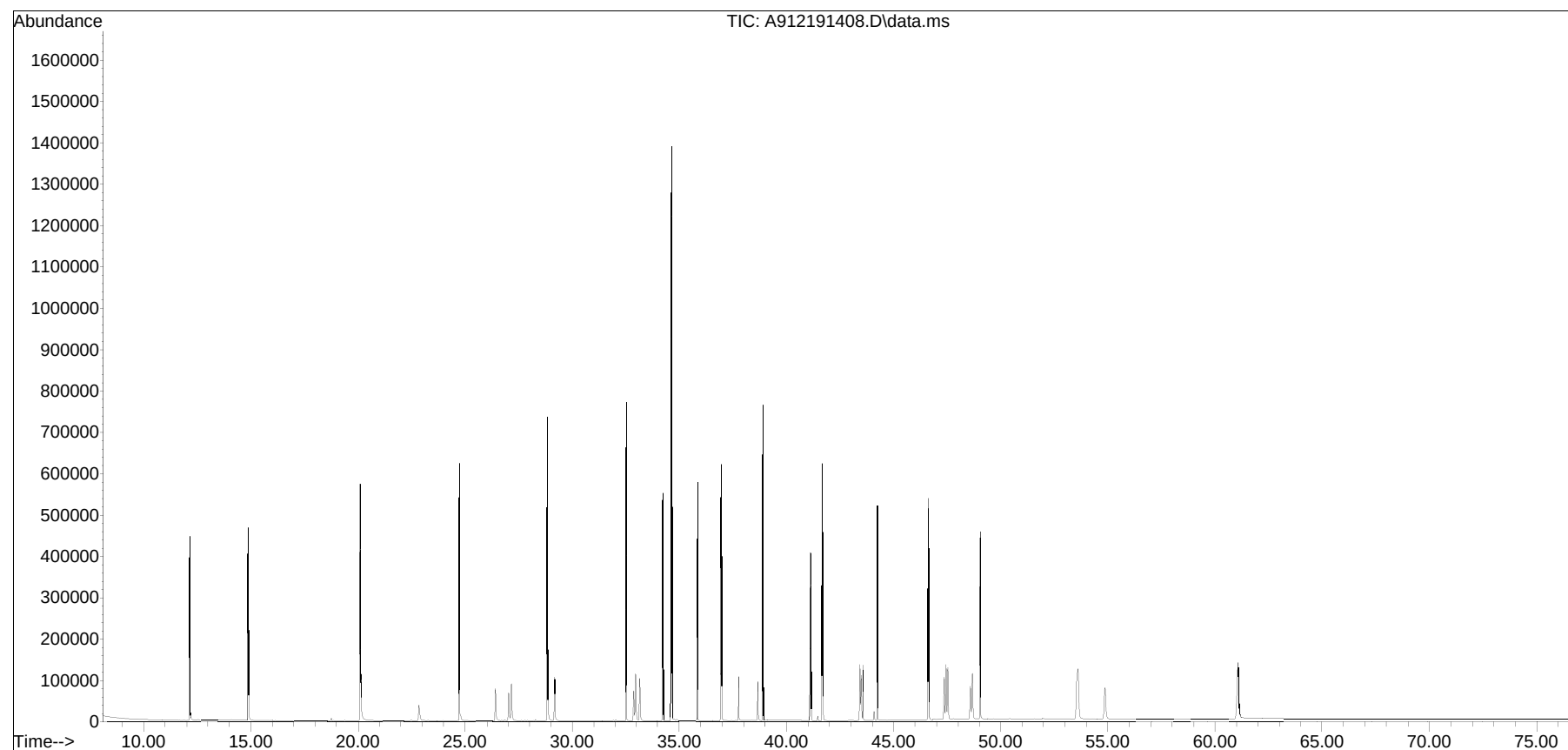
(#) = qualifier out of range (m) = manual integration (+) = signals summed

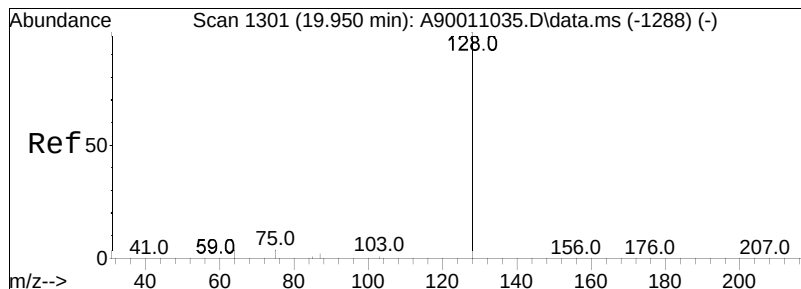
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH9\2014\DEC14\DEC19\
Data File : A912191408.D
Acq On : 19 Dec 2014 11:44 pm
Operator : PAH9:SR
Sample : wg749631-3,32
Misc : WG754959,WG749631,ICAL10505
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 12 09:02:22 2015
Quant Method : C:\msdchem\1\METHODS\PAH9\PAH9121214.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Mon Dec 15 13:02:08 2014
Response via : Initial Calibration

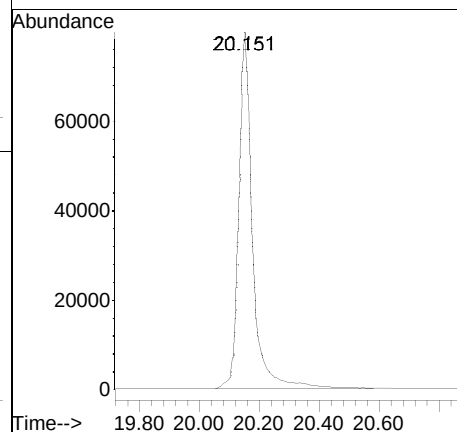
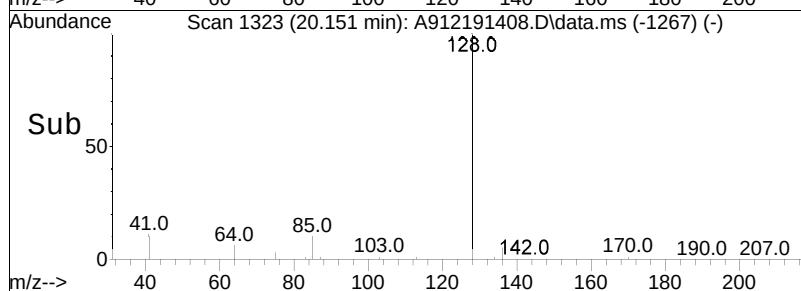
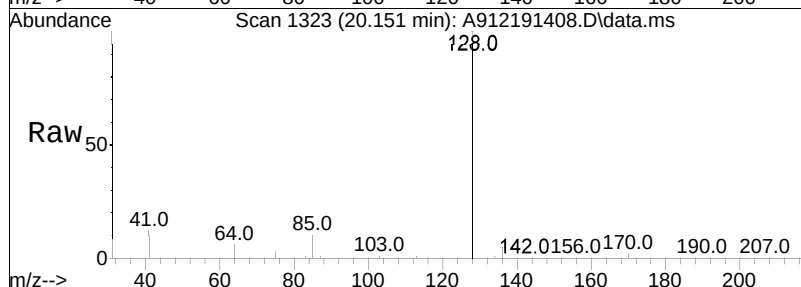
Sub List : ALKPAHURS - ALKPAH and BIO

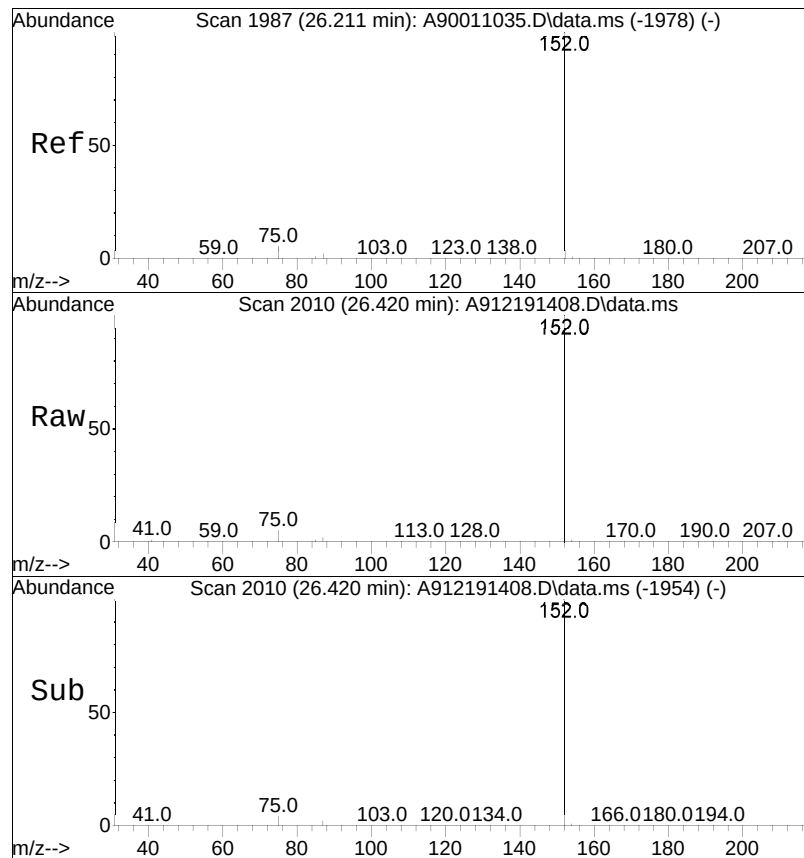




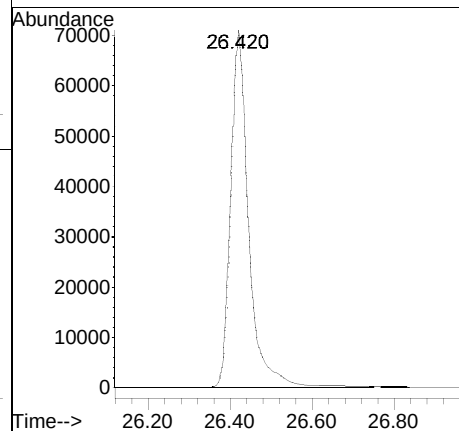
#10
Naphthalene
Concen: 438.81 ng/mL
RT: 20.151 min Scan# 1323
Delta R.T. 0.009 min
Lab File: A912191408.D
Acq: 19 Dec 2014 11:44 pm

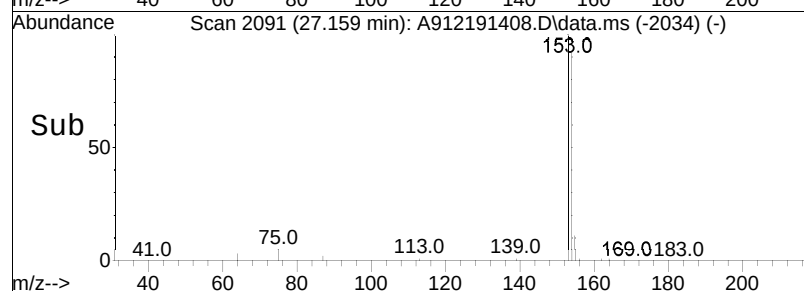
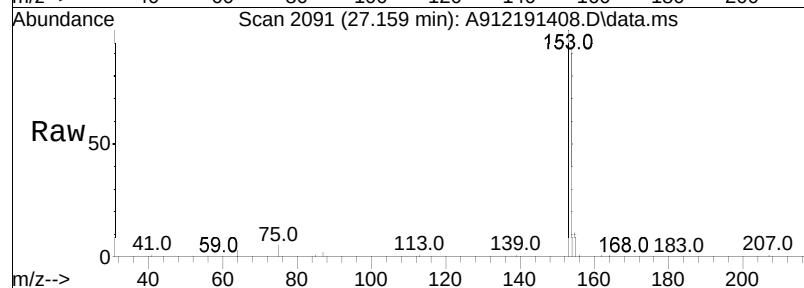
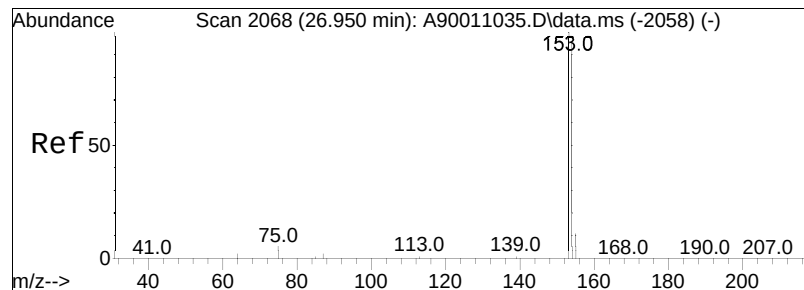
Tgt Ion:128 Resp: 249533





#26
Acenaphthylene
Concen: 448.16 ng/mL
RT: 26.420 min Scan# 2010
Delta R.T. 0.009 min
Lab File: A912191408.D
Acq: 19 Dec 2014 11:44 pm
Tgt Ion:152 Resp: 211598





#27

Acenaphthene

Concen: 460.07 ng/mL

RT: 27.159 min Scan# 2091

Delta R.T. 0.018 min

Lab File: A912191408.D

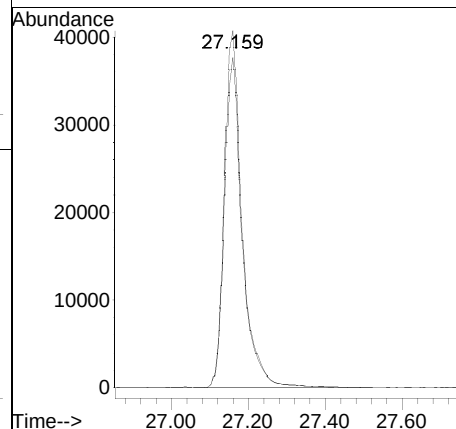
Acq: 19 Dec 2014 11:44 pm

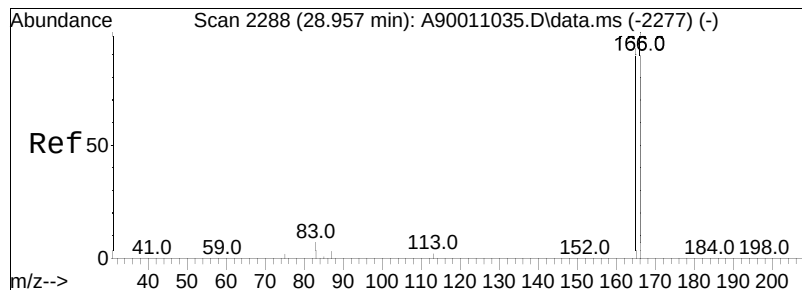
Tgt Ion:153 Resp: 130963

Ion Ratio Lower Upper

153 100

154 91.3 64.9 120.5





#29

Fluorene

Concen: 452.08 ng/mL

RT: 29.176 min Scan# 2312

Delta R.T. 0.018 min

Lab File: A912191408.D

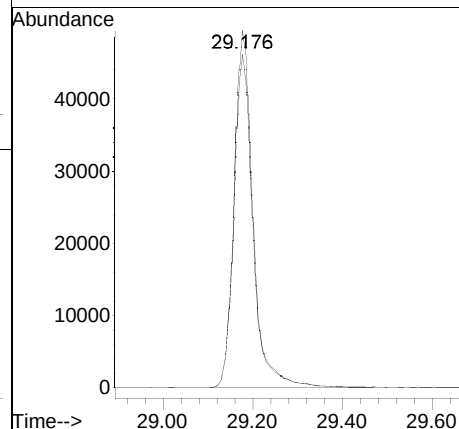
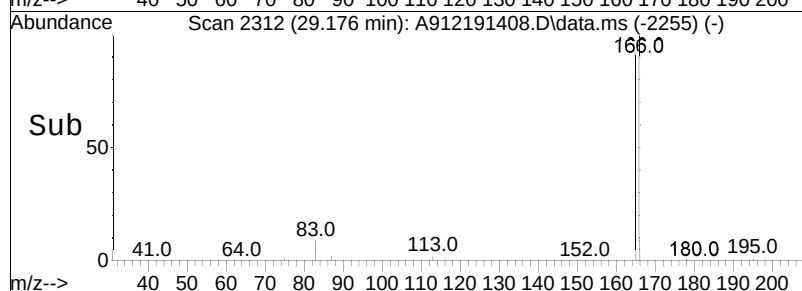
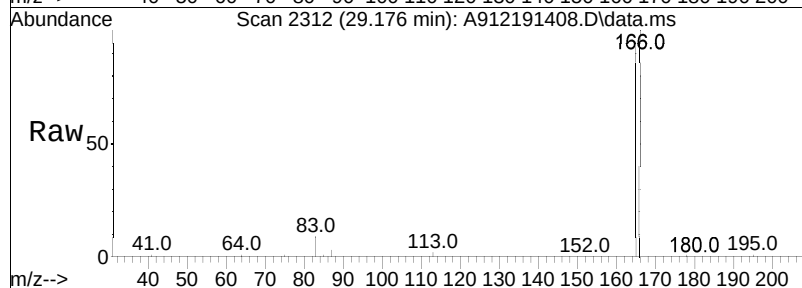
Acq: 19 Dec 2014 11:44 pm

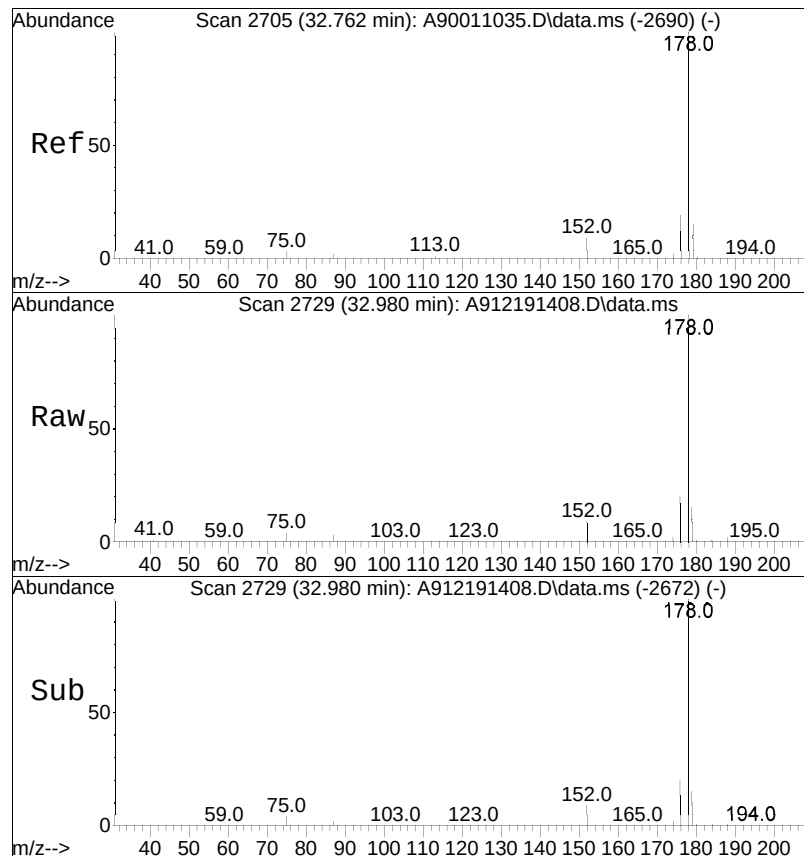
Tgt Ion:166 Resp: 144692

Ion Ratio Lower Upper

166 100

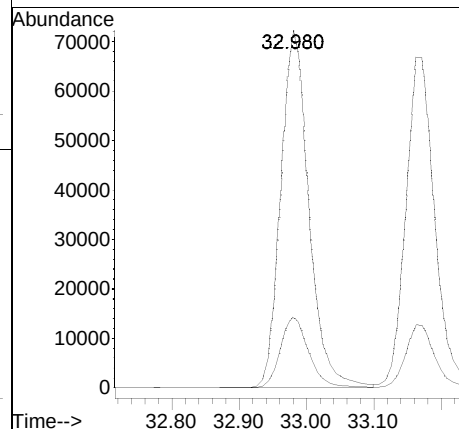
165 93.1 65.5 121.7

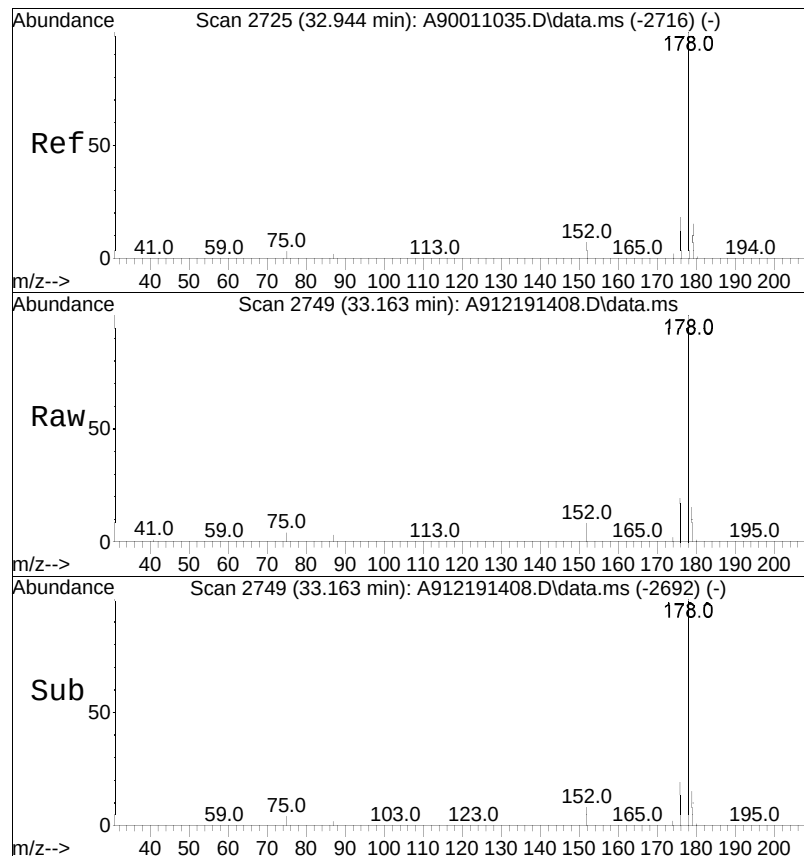




#43
 Phenanthrene
 Concen: 468.48 ng/mL
 RT: 32.980 min Scan# 2729
 Delta R.T. 0.018 min
 Lab File: A912191408.D
 Acq: 19 Dec 2014 11:44 pm

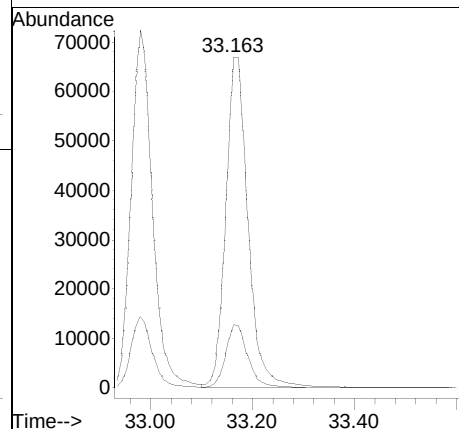
Tgt Ion	Ratio	Lower	Upper
178	100		
176	19.7	13.7	25.5

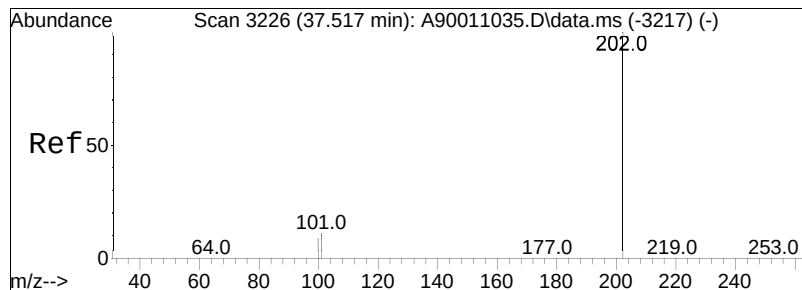




#55
 Anthracene
 Concen: 486.78 ng/mL
 RT: 33.163 min Scan# 2749
 Delta R.T. 0.018 min
 Lab File: A912191408.D
 Acq: 19 Dec 2014 11:44 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.9	13.4	24.8





#58

Fluoranthene

Concen: 477.39 ng/mL

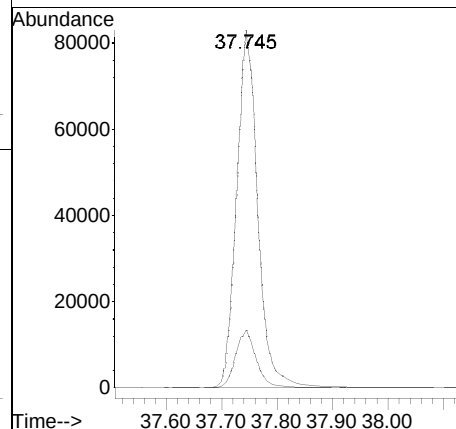
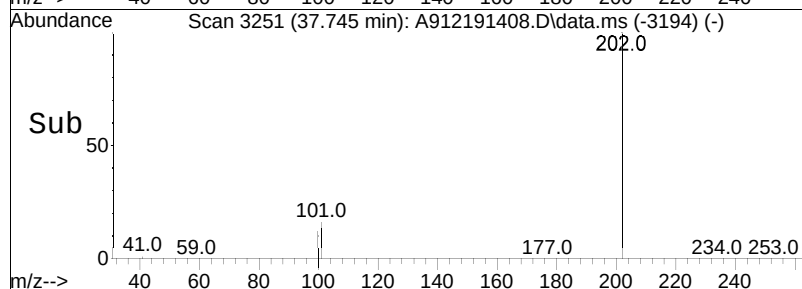
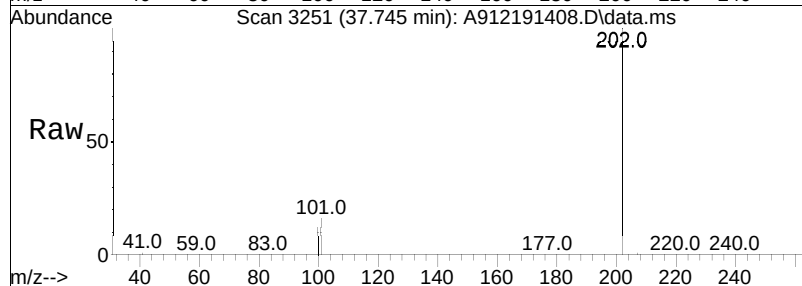
RT: 37.745 min Scan# 3251

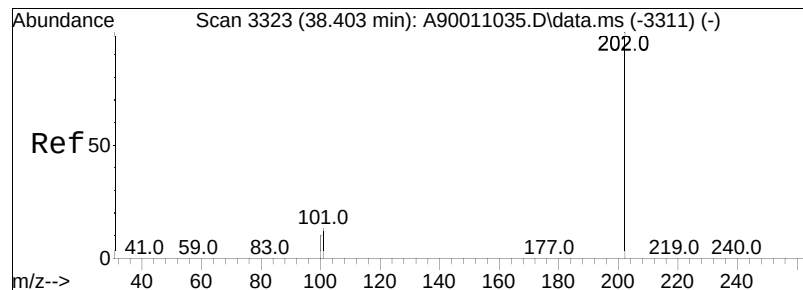
Delta R.T. 0.018 min

Lab File: A912191408.D

Acq: 19 Dec 2014 11:44 pm

Tgt	Ion	Ratio	Lower	Upper
202	100			
101	15.9	11.8	22.0	





#60

Pyrene

Concen: 459.69 ng/mL

RT: 38.631 min Scan# 3348

Delta R.T. 0.018 min

Lab File: A912191408.D

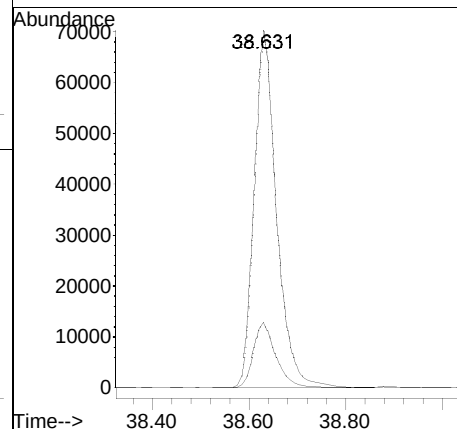
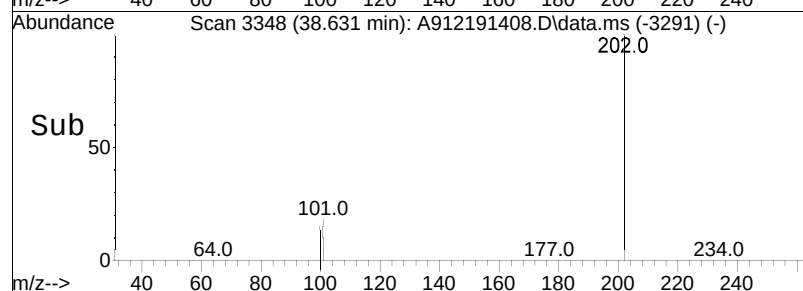
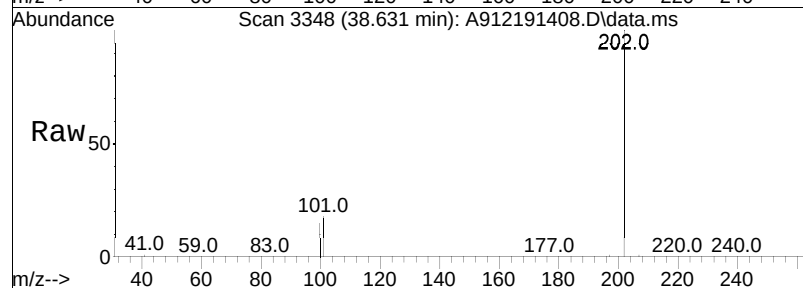
Acq: 19 Dec 2014 11:44 pm

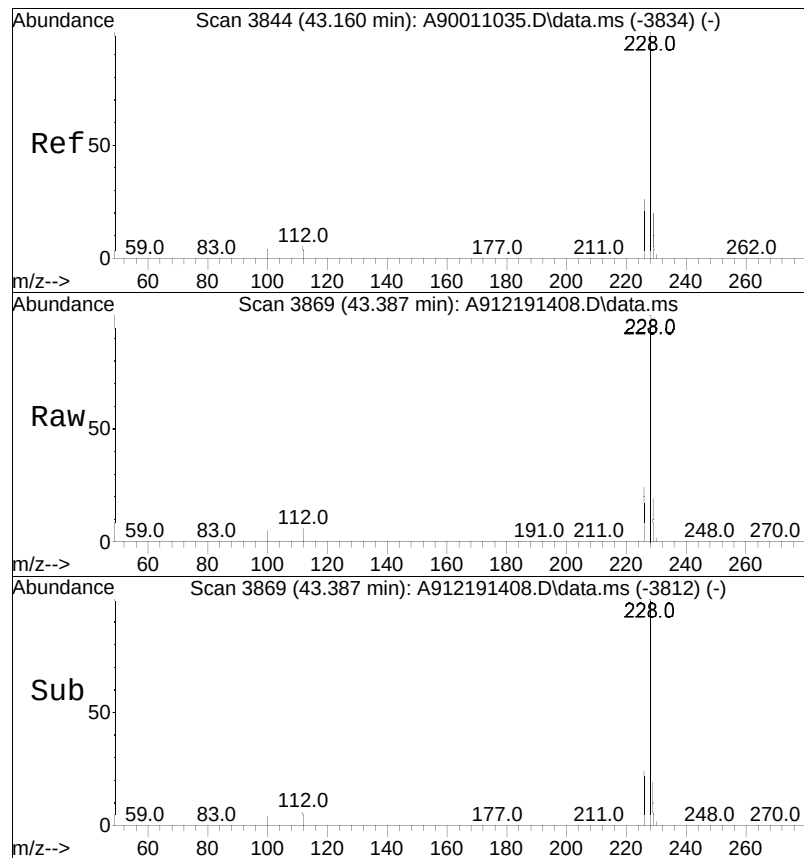
Tgt Ion: 202 Resp: 221732

Ion Ratio Lower Upper

202 100

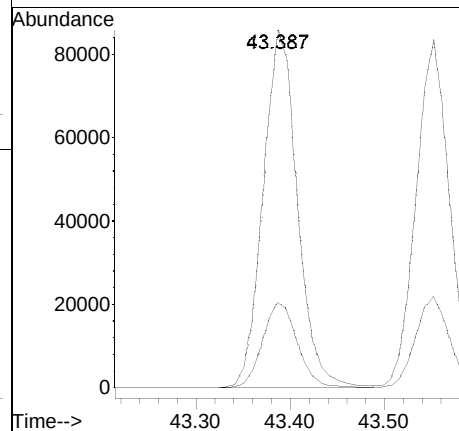
101 18.4 14.2 26.4

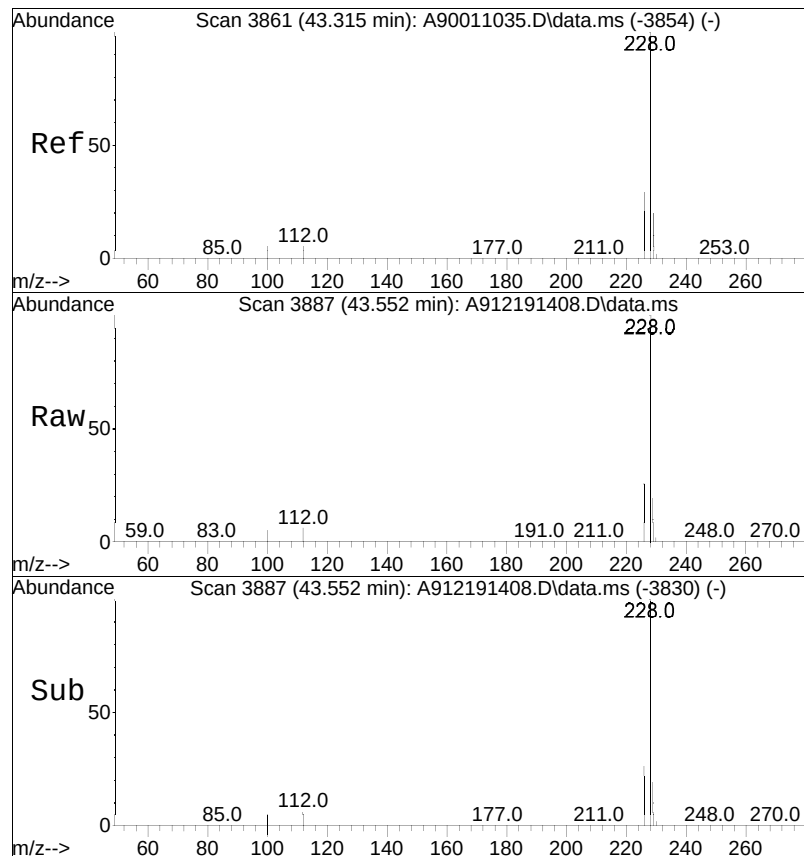




#75
 Benz[a]anthracene
 Concen: 483.42 ng/mL
 RT: 43.387 min Scan# 3869
 Delta R.T. 0.018 min
 Lab File: A912191408.D
 Acq: 19 Dec 2014 11:44 pm

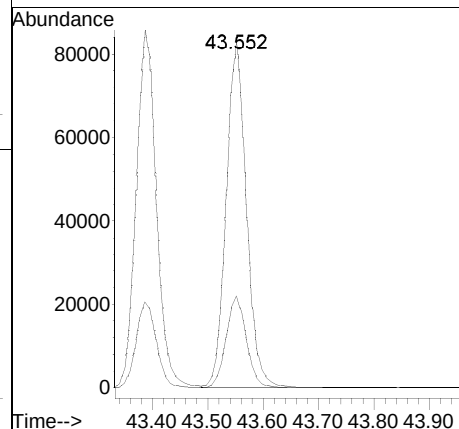
Tgt Ion	Ratio	Lower	Upper
228	100		
226	24.1	17.3	32.1

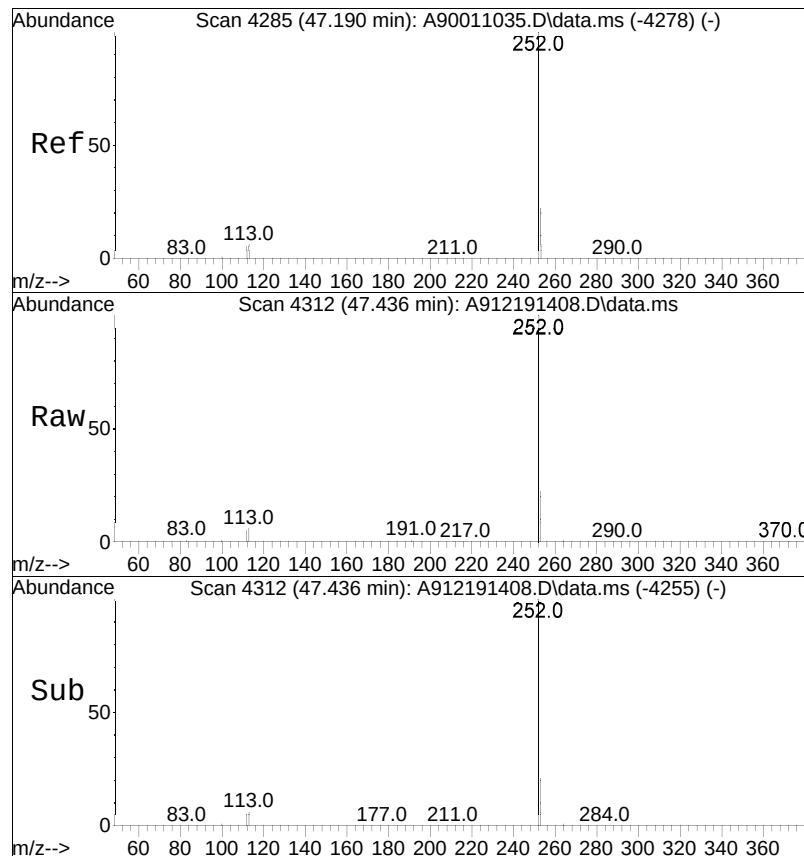




#77
 Chrysene/Triphenylene
 Concen: 473.63 ng/mL
 RT: 43.552 min Scan# 3887
 Delta R.T. 0.018 min
 Lab File: A912191408.D
 Acq: 19 Dec 2014 11:44 pm

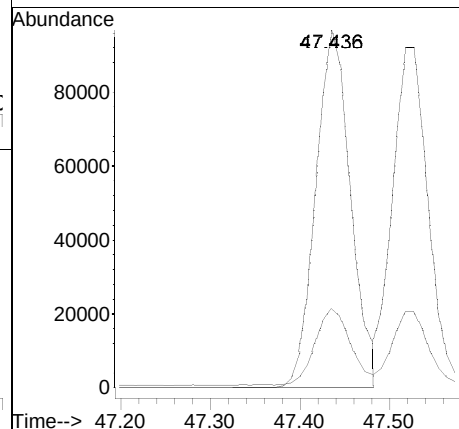
Tgt	Ion	Ratio	Lower	Upper
228	100			
226	26.5	18.8	34.8	

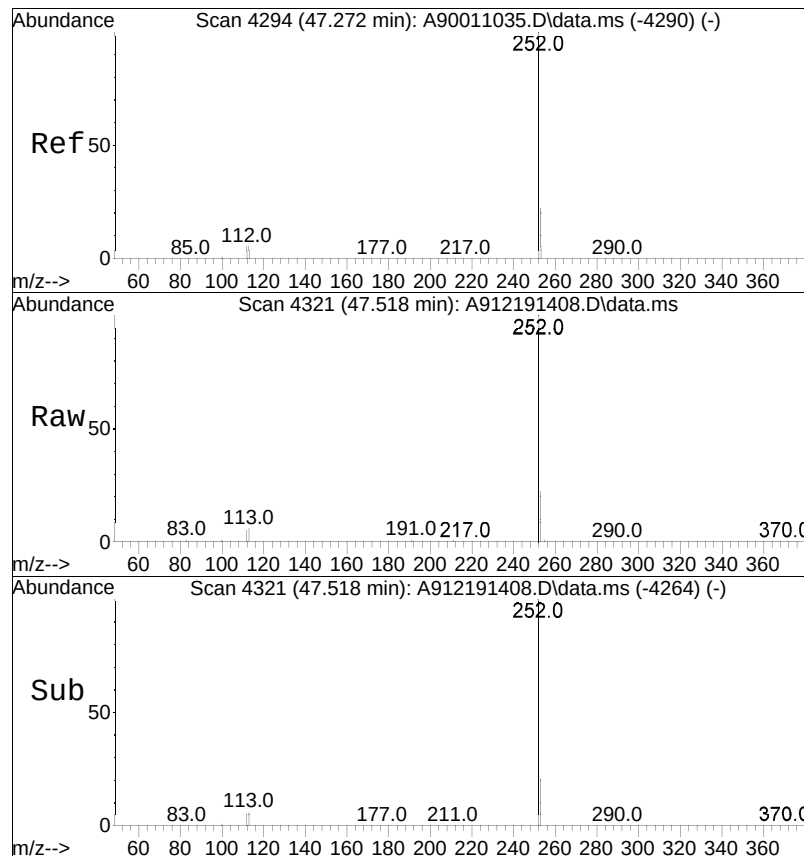




#84
 Benzo[b]fluoranthene
 Concen: 494.94 ng/mL
 RT: 47.436 min Scan# 4312
 Delta R.T. 0.018 min
 Lab File: A912191408.D
 Acq: 19 Dec 2014 11:44 pm

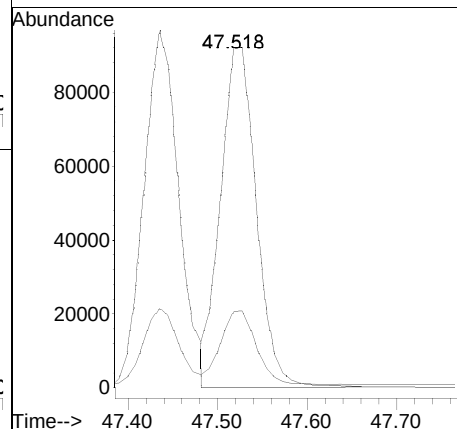
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.3	16.4	30.4	

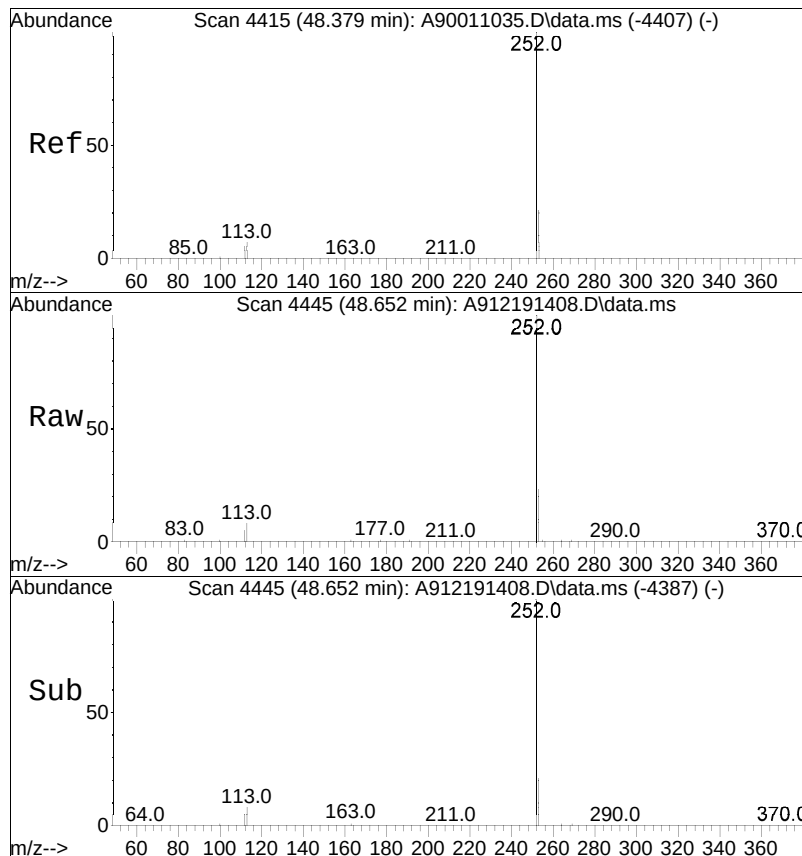




#85
 Benzo[j]+[k]fluoranthene
 Concen: 501.57 ng/mL
 RT: 47.518 min Scan# 4321
 Delta R.T. 0.018 min
 Lab File: A912191408.D
 Acq: 19 Dec 2014 11:44 pm

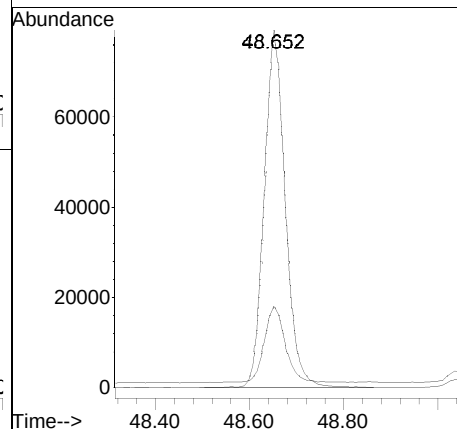
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.1	16.1	29.9	

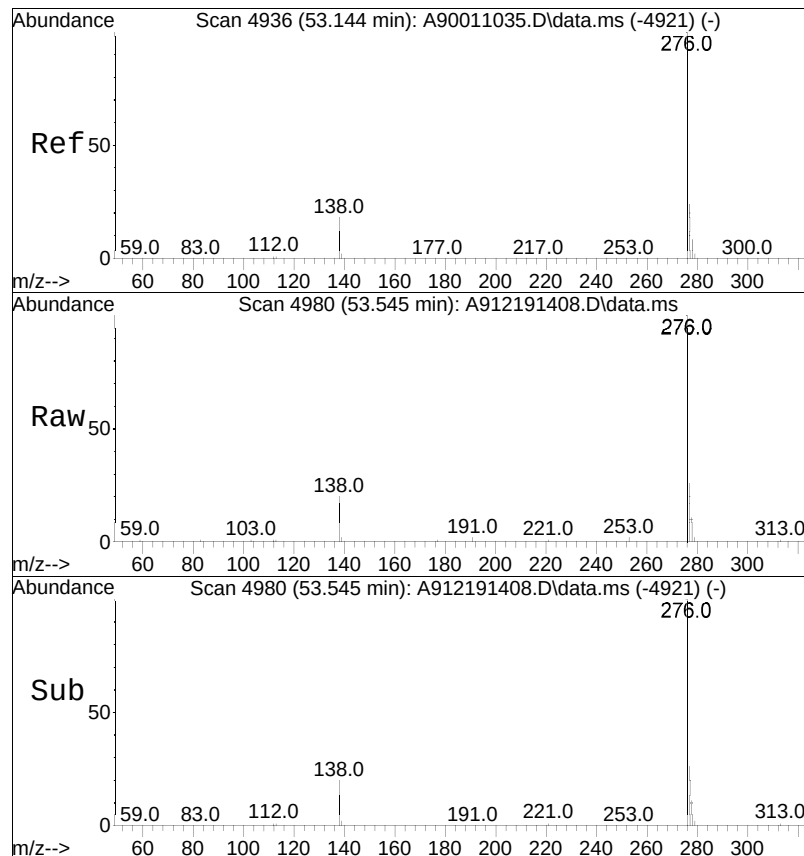




#89
 Benzo[a]pyrene
 Concen: 485.66 ng/mL
 RT: 48.652 min Scan# 4445
 Delta R.T. 0.027 min
 Lab File: A912191408.D
 Acq: 19 Dec 2014 11:44 pm

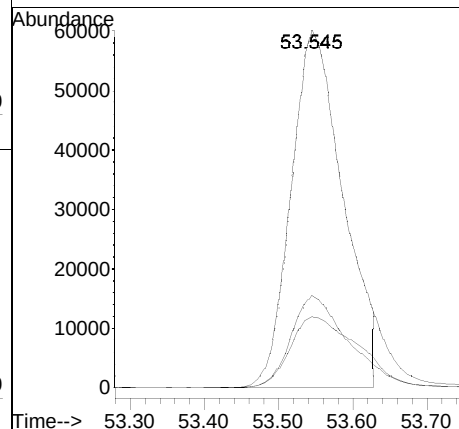
Tgt	Ion	Ratio	Lower	Upper
252	252	100		
253	253	21.9	16.4	30.6

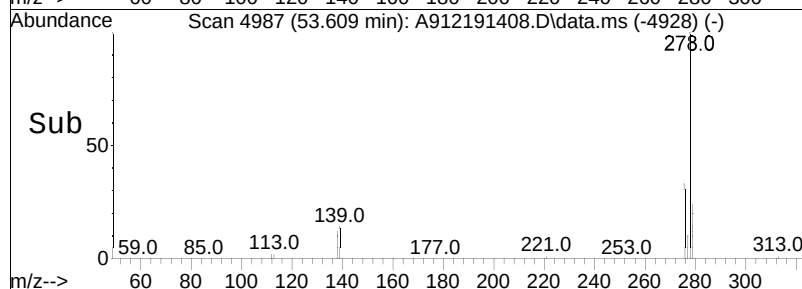
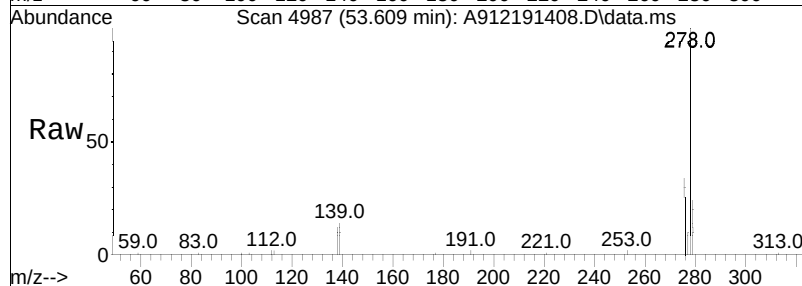
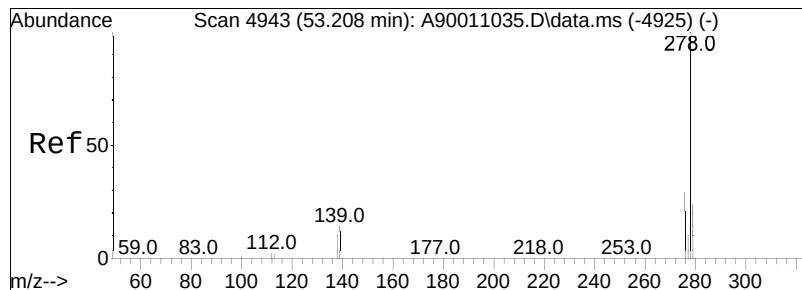




#91
 Indeno[1,2,3-cd]pyrene
 Concen: 474.15 ng/mL M3
 RT: 53.545 min Scan# 4980
 Delta R.T. 0.036 min
 Lab File: A912191408.D
 Acq: 19 Dec 2014 11:44 pm

Tgt Ion:	276	Resp:	292550
Ion Ratio	Lower	Upper	
276	100		
138	25.8	15.7	29.1
277	28.6	17.9	33.3





#92

Dibenz[ah]+[ac]anthracene

Concen: 454.35 ng/mL

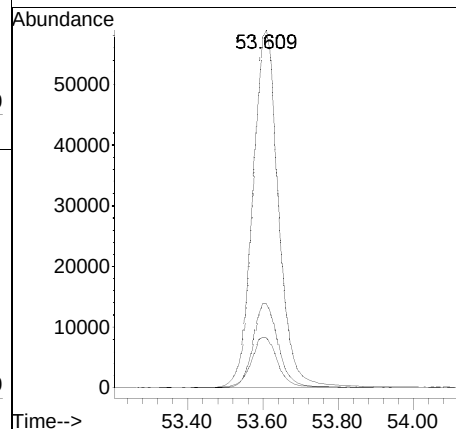
RT: 53.609 min Scan# 4987

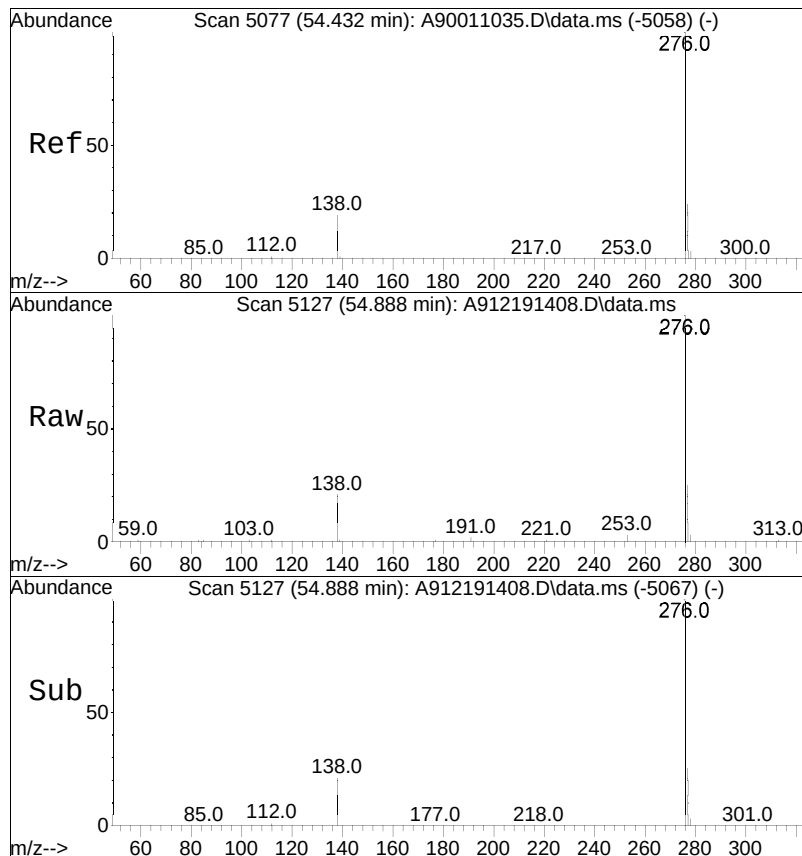
Delta R.T. 0.036 min

Lab File: A912191408.D

Acq: 19 Dec 2014 11:44 pm

Tgt Ion:	278	Resp:	276664
Ion Ratio	Lower	Upper	
278	100		
139	14.3	11.4	21.2
279	22.9	16.3	30.3





#93

Benzo[g,h,i]perylene

Concen: 441.80 ng/mL

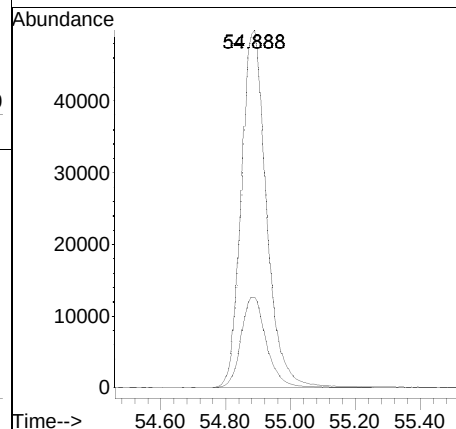
RT: 54.888 min Scan# 5127

Delta R.T. 0.045 min

Lab File: A912191408.D

Acq: 19 Dec 2014 11:44 pm

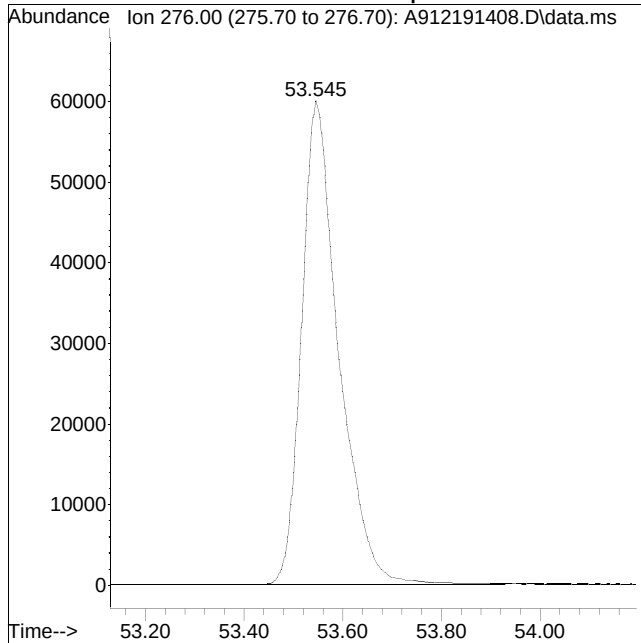
Tgt	Ion	Ratio	Lower	Upper
276	100			
277	25.4	17.4	32.2	



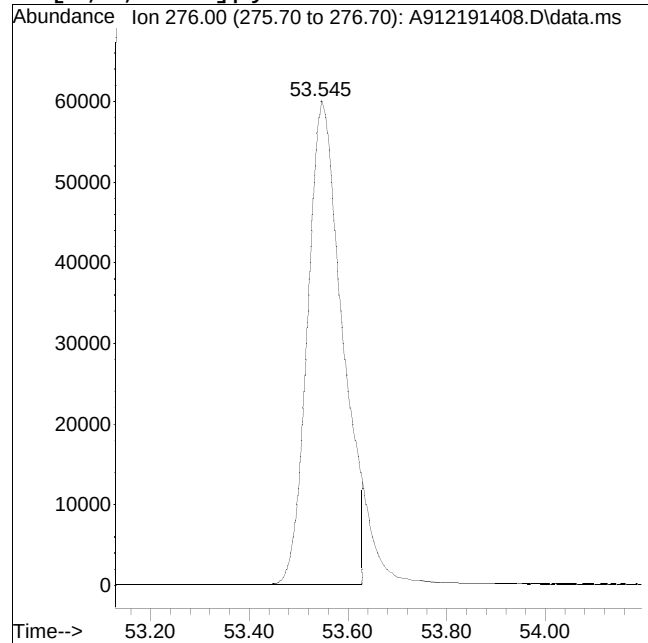
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH9\2014QMethod : PAH9121214.M
Data File : A912191408.D Operator : PAH9:SR
Date Inj'd : 12/19/2014 11:44 pm Instrument : PAH 9
Sample : wg749631-3,32 Quant Date : 12/22/2014 2:12 pm

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 313188



Manual Peak Response = 292550 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Calculation of Semi Volatile Organic Compounds

Results of Water Analysis- calculation as performed in report form:

$$\text{Concentration (ug/L)} = \frac{(\text{Conc}) (\text{Vf}) (\text{DF})}{(\text{Vi})} \times 1000$$

where:

Conc =Raw on-column concentration obtained from the quantitation report using Initial Calibration results.

Vf = Final volume of extract (mL)

Vi= Volume of sample extracted (mL)

DF= Dilution factor

Results of Sediment/Soil Analysis- calculation as performed in report form:

$$\text{Concentration (ug/Kg)} = \frac{(\text{Conc}) (\text{Vf}) (\text{DF})}{(\text{W}) (\%S)}$$

where:

Conc =Raw on-column concentration obtained from the quantitation report using Initial Calibration results.

Vf = Final volume of extract (mL)

W= Aliquot of sample (wet), g

DF= Dilution factor

%S= Sample %solid (in decimal form)

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Jan 12 2015, 01:26 pm

Work Group: WG749631 for Department: 2 Organic Preparation

Created: 17-DEC-14 Due: Operator: db

Sample	Client ID	C Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1430198-01	GTP-07-3'	S A2-ALKPAH/BIOMARKER	SOIL	DONE	U	1229	0112	S0	Glass-A.1
L1430198-01	GTP-07-3'	S A2-TPH	SOIL	DONE	U	1229	0112	S0	Glass-A.1
WG749631-1	Laboratory Method Bl	S A2-TPH	SOIL	DONE	U				
WG749631-1	Laboratory Method Bl	S A2-ALKPAH/BIOMARKER	SOIL	DONE	U				
WG749631-2	Laboratory Control S	S A2-TPH	SOIL	DONE	U				
WG749631-2	Laboratory Control S	S A2-ALKPAH/BIOMARKER	SOIL	DONE	U				
WG749631-3	LCS Duplicate	S A2-TPH	SOIL	DONE	U				
WG749631-3	LCS Duplicate	S A2-ALKPAH/BIOMARKER	SOIL	DONE	U				
Comments:									
WG749631-3	WG749631-2								

Analysis log File

Total Files Reported in Log : 32

Log Generated From Directory: O:\Forensics\Data\PAH9\2014\DEC14\DEC12\

No.	DATA FILE	INJ METH	SAMPLE NAME	MISC	DATE	INJ'D
1	A912121401.D	FRNC9ALT.M	✓ll		12/12/2014	1:40 pm
2	A912121402.D	FRNC9ALT.M	✓i912121401	l1 frau66 10 ng/mL	12/12/2014	3:05
3	A912121403.D	FRNC9ALT.M	✓i912121402	l2 frau67 25 ng/mL	12/12/2014	4:29
4	A912121404.D	FRNC9ALT.M	✓i912121403	l3 frau68 100 ng/mL	12/12/2014	5:54 pm
5	A912121405.D	FRNC9ALT.M	✓i912121404	l4 frav19 500ng/ml	12/12/2014	7:18 pm
6	A912121406.D	FRNC9ALT.M	✓i912121405	l5 frau81 5000 ng/mL	12/12/2014	8:43 pm
7	A912121407.D	FRNC9ALT.M	✓i912121406	l6 frau82 10000 ng/m..	12/12/2014	10:08 pm
8	A912121408.D	FRNC9ALT.M	✓i912121407	l7 frau83 20000 ng/m..	12/12/2014	11:32 pm
9	A912121409.D	FRNC9ALT.M	dcm	dcm	12/13/2014	12:57 am
10	A912121410.D	FRNC9ALT.M	✓cq912121401	icc frau88 500 ng/mL	12/13/2014	2:21 am
11	A912121411.D	FRNC9ALT.M	dcm	dcm	12/13/2014	3:46 am
12	A912121412.D	FRNC9ALT.M	ans912121401	ans frau91 5.055	12/13/2014	5:11 am
13	A912121413.D	FRNC9ALT.M	dcm	dcm	12/13/2014	6:35 am
14	A912121414.D	FRNC9ALT.M	mc252912121401	mc252	12/13/2014	7:59 am
15	A912121415.D	FRNC9ALT.M	c912121401	cc	12/13/2014	9:24 am
16	A912121416.D	FRBIO9.M	dcm	cc	12/14/2014	12:06 pm
17	A912121417.D	FRBIO9.M	i912131401	l1	12/14/2014	1:30 pm
18	A912121418.D	FRBIO9.M	i912131402	l2	12/14/2014	2:55 pm
19	A912121419.D	FRBIO9.M	i912131403	l3 frau68	12/14/2014	4:19 pm
20	A912121420.D	FRBIO9.M	i912131404	l4 frav19 500ng/ml	12/14/2014	5:44 pm
21	A912121421.D	FRBIO9.M	i912131405	l5 frau81	12/14/2014	7:08 pm
22	A912121422.D	FRBIO9.M	i912131406	l6 frau82	12/14/2014	8:33 pm
23	A912121423.D	FRBIO9.M	dcm	dcm	12/14/2014	9:57 pm
24	A912121424.D	FRBIO9.M	ans913131401	ans frau91 5.055	12/14/2014	11:22 pm
25	A912121425.D	FRBIO9.M	c912131401	cc	12/15/2014	12:46 am
26	A912121427.D	FRBIO9.M	ans913131402	ans frau91 5.055	12/15/2014	12:54 pm
27	A912121428.D	FRBIO9.M	mc252913131403		12/15/2014	2:19 pm
28	A912121429.D	FRNC9ALT.M	dcm		12/15/2014	3:43 pm
29	A912121430.D	FRBIO9.M	mc252912131403	frav12 10.29	12/15/2014	5:08 pm
30	A912121431.D	FRNC9ALT.M	dcm	dcm	12/15/2014	6:33 pm
31	A912121432.D	FRNC9ALT.M	✓WG749024-1	FRAU91 5.055 mg/Kg	12/15/2014	7:57 pm
32	A912121433.D	FRBIO9.M	mc252913131404	frav12 10.29	12/16/2014	8:45 am

PAH9121214.M & FRAV19 500 ng/mL

SLR
12/16/14

Analysis log File

Total Files Reported in Log : 16

Log Generated From Directory: 0:\Forensics\Data\PAH9\2014\DEC14\DEC19\

No.	DATA FILE	INJ METH	SAMPLE NAME	MISC	DATE INJ'D	
1	A912191402.D	FRNC9ALT.M	WG754959-1	WG754959, frav19 500n..	12/19/2014	3:18 pm
2	A912191403.D	FRNC9ALT.M	ans912191401	ans frau91 5.055	12/19/2014	4:42 pm
3	A912191404.D	FRNC9ALT.M	dcm	dcm	12/19/2014	6:07 pm
4	A912191405.D	FRNC9ALT.M	dcm	dcm	12/19/2014	7:31 pm
5	A912191406.D	FRNC9ALT.M	wg749631-1, 32	WG754959, WG749631, IC..	12/19/2014	8:55 pm
6	A912191407.D	FRNC9ALT.M	wg749631-2, 32	WG754959, WG749631, IC..	12/19/2014	10:20 pm
7	A912191408.D	FRNC9ALT.M	wg749631-3, 32	WG754959, WG749631, IC..	12/19/2014	11:44 pm
8	A912191409.D	FRNC9ALT.M	l1430198-01, 32	WG754959, WG749631, IC..	12/20/2014	1:08 am
9	A912191410.D	FRNC9ALT.M	WG754959-2	WG754959, frav19 500n..	12/20/2014	2:32 am
10	A912191411.D	FRNC9ALT.M	c912191403	cc frav19 500ng/ml	12/22/2014	4:30 pm
11	A912191412.D	FRNC9ALT.M	WG754959-3	WG754959, Frav19 500n..	12/22/2014	5:54 pm
12	A912191413.D	FRNC9ALT.M	dcm	dcm	12/22/2014	7:19 pm
13	A912191414.D	FRNC9ALT.M	dcm	dcm	12/22/2014	8:43 pm
14	A912191415.D	FRNC9ALT.M	wg749631-1, 32	WG754959, WG749631, IC..	12/22/2014	10:07 pm
15	A912191416.D	FRNC9ALT.M	l1430198-01, 32	WG754959, WG749631, IC..	12/22/2014	11:32 pm
16	A912191417.D	FRNC9ALT.M	WG754959-4	WG754959, frav19 500n..	12/23/2014	12:56 am



ORGANIC ELN REPORT

Workgroup: WG749631

Prep Method: ALPHA OP-013 Solvent Type: DCM Surrogate Type: A2-PAH/SHC Spike Type: A2-PAH/SHC Spike Verify by: DB Lims Spikelot: A2-PAH/SHC Additional Reagents/Stdts <table><tr><td>Na2SO4</td><td>0000088929</td></tr><tr><td>BIOMARKER</td><td>frav09</td></tr><tr><td></td><td></td></tr></table>	Na2SO4	0000088929	BIOMARKER	frav09			Conc.Method: S-EVAP/N-EVAP Solvent Type: DCM Lot #: 0000085201 Additional Reagents/Stdts <table><tr><td>Na2SO4</td><td>0000088929</td></tr><tr><td>Glass Wool</td><td>03413999</td></tr><tr><td>Copper</td><td>owr121814a</td></tr></table>	Na2SO4	0000088929	Glass Wool	03413999	Copper	owr121814a	Cleanup 1 Cleanup Method 1: EPA 3611B Cleanup Method 2: Solvent Type: DCM Lot #: 0000085201 Additional Reagents/Stdts <table><tr><td>Alumina</td><td>84</td></tr><tr><td>Glass Wool</td><td>03413999</td></tr><tr><td>Na2SO4</td><td>0000088929</td></tr><tr><td>Copper</td><td>owr121814a</td></tr><tr><td>RIS</td><td>frav06</td></tr></table>	Alumina	84	Glass Wool	03413999	Na2SO4	0000088929	Copper	owr121814a	RIS	frav06
Na2SO4	0000088929																							
BIOMARKER	frav09																							
Na2SO4	0000088929																							
Glass Wool	03413999																							
Copper	owr121814a																							
Alumina	84																							
Glass Wool	03413999																							
Na2SO4	0000088929																							
Copper	owr121814a																							
RIS	frav06																							

Sample/ Type	Extraction						Concentration			
	Extract Date	Analyst	Sample Weight g	Balanc e Id	Surr Amt ml	Spike Amt ml	Conc Date	Analyst	Final Vol ml	Conc Unit
WG749631-1 BLANK	12/17/14 21:27	Daniel Bopp	30	146825 73	.1		12/18/14 20:47	Daniel Bopp	4	SEVAP 5
	.1ul bio									
WG749631-2 LCS	12/17/14 21:27	Daniel Bopp	30	146825 73	.1	.1	12/18/14 20:47	Daniel Bopp	4	SEVAP 5
	.1ul bio									
WG749631-3 LCSD	12/17/14 21:27	Daniel Bopp	30	146825 73	.1	.1	12/18/14 20:47	Daniel Bopp	4	SEVAP 5
	.1ul bio									
L1430198-01 SOIL	12/17/14 21:27	Daniel Bopp	12.31	146825 73	.5		12/18/14 20:47	Daniel Bopp	10	SEVAP 5
	.5ul bio									



ORGANIC ELN REPORT

Workgroup: WG749631

Sample/ Type	Cleanup 1						Cleanup 2					
	Cleanup Date	Cleanup Vol ml	Conc Date	Analyst	Conc Method	Final Cleanup Vol	Cleanup Date	Frac Cleanup Vol	Conc Date	Analyst	Conc Method	Final Frac Cleanup Vol
WG749631-1 BLANK	12/18/14 23:00	2	12/19/14 00:20	DANIEL BOPP	KD SEVAP5	1						
WG749631-2 LCS	12/18/14 23:00	2	12/19/14 00:20	DANIEL BOPP	DANIEL BOPP	1						
WG749631-3 LCSD	12/18/14 23:00	2	12/19/14 00:20	DANIEL BOPP	DANIEL BOPP	1						
L1430198-01 SOIL	12/18/14 23:00	.25	12/19/14 00:20	DANIEL BOPP	DANIEL BOPP	1						

Supporting Documentation

L1430198

☐ Pre-Alumina

☐ Post-Alumina

☐ Pre-Silica

☐ Oily Material Prep.

☒ Other

DB

12/18/2014

Note:
Total Extract Weight (mg) = (Extract Volume ÷ Aliquot Removed) (Aliquot Weight)
Gravimetric Standard = 5 mg/mL
LCS Acceptance Criteria: 95% - 105%

Verified by: db
Date: 12/18/2014

Petroleum Hydrocarbon Identification TPH-PHI

Petroleum QC Summary

Form 2

Surrogate Recovery

FID FORENSICS

Client: URS Corporation
Project Name: WILLIAMSBURG

Lab Number: L1430198
Project Number: 11176638
Matrix: Soil

GC Column 1: RTX-5

CLIENT ID (LAB SAMPLE NO.)	d50 %REC	OTP %REC	%REC	%REC	OTHER (1)	OTHER (2)	TOT OUT
GTP-07-3' (L1430198-01)	118	98	--	--			0
WG749631-3LCSD	98	97	--	--			0
WG749631-2LCS	99	98	--	--			0
WG749631-1BLANK	95	94	--	--			0

d50- = D50-TETRACOSANE
OTP = O-TERPHENYL

QC LIMITS
(50-130)
(50-130)

* Values outside of QC limits

FORM II A2-TPH



3F
LAB CONTROL/LAB CONTROL DUPLICATE SAMPLE RECOVERY
SOIL FID FORENSICS

Lab Name: Alpha Analytical Labs

SDG No.: L1430198

Lab Control Sample: WG749631-2LCS

Lab Control Dup : WG749631-3LCSD

Matrix: Soil

Injected: 12/23/14 10:04

Injected: 12/23/14 11:34

Lab File ID: F17122214030

Lab File ID: F17122214032

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONC mg/kg	LCS CONC mg/kg	LCS % REC	LCSD CONC mg/kg	LCSD % REC	% RPD	QC LIMITS RPD REC.
n-Nonane (C9)	0.667	NA	0.425	64	0.431	65	2	30 50-130
n-Decane (C10)	0.667	NA	0.483	72	0.493	74	3	30 50-130
n-Dodecane (C12)	0.667	NA	0.532	80	0.552	83	4	30 50-130
n-Tetradecane (C14)	0.667	NA	0.557	84	0.573	86	2	30 50-130
n-Hexadecane (C16)	0.667	NA	0.611	92	0.617	92	0	30 50-130
n-Octadecane (C18)	0.667	NA	0.639	96	0.637	96	0	30 50-130
n-Nonadecane (C19)	0.667	NA	0.586	88	0.581	87	1	30 50-130
n-Eicosane (C20)	0.667	NA	0.609	91	0.602	90	1	30 50-130
n-Docosane (C22)	0.667	NA	0.614	92	0.604	91	1	30 50-130
n-Tetracosane (C24)	0.667	NA	0.648	97	0.638	96	1	30 50-130
n-Hexacosane (C26)	0.667	NA	0.605	91	0.596	89	2	30 50-130
n-Octacosane (C28)	0.667	NA	0.623	93	0.622	93	0	30 50-130
n-Triacontane (C30)	0.667	NA	0.612	92	0.596	89	3	30 50-130
n-Hexatriacontane (C36)	0.667	NA	0.591	89	0.579	87	2	30 50-130

* Values outside of QC limits.

COMMENTS: _____

FORM III A2-TPH

8B

Lab Name: Alpha Analytical Labs

SDG No. : L1430198

Lab File ID (Standard): F17122214022

Date Analyzed: 12/23/14

Instrument ID : FID17

Time Analyzed: 04:07

[illegible]

IS1(5-A) = 5-ALPHA ANDROSTANE

$$\text{IS2}(\quad) =$$
$$\text{IS3}(\quad) =$$

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50 % of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

* Values outside of QC limits.

Determination of Method Detection Limits

Alpha Analytical Inc.
Mansfield, MA

Approved

Page 1 of 1
Analyst: JT
Date: 4/13, 4/20, 4/23-24/2012
Instrument ID: PAH3, FID6R, FID9F, FID17R, FID16F
Column ID: Phenomenex ZB-5
Prep Method: SOP OP-013
Prep Chemist: CS, DB

Method: EPA 8015D(M)

2012

GC/FID Saturated Hydrocarbons Soil

Table (MDL)		Instrument ID	PAH 3	PAH 3	FID 6R	FID 6R	FID 9F	FID 9F	FID 17R	FID 17R	FID 16F	FID 16F	T value used for calculating MDL: 2.821					
		Data File	MDL 01	MDL 02	MDL 03	MDL 04	MDL 05	MDL 06	MDL 07	MDL 08	MDL 09	MDL 10						
		Date Analyzed	4/13/2012	4/13/2012	4/20/2012	4/20/2012	4/23/2012	4/23/2012	4/23/2012	4/23/2012	4/23/2012	4/24/2012	4/24/2012	Mean (mg/Kg)	Mean Accuracy	Standard Deviation	Calc. MDL (mg/Kg)	Current RL (mg/Kg)
No.	Analytes	Target conc. (mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)						
1	n-Octane (C8)	0.0667	0.0260	0.0197	0.0189	0.0223	0.0223	0.0212	0.0271	0.0266	0.0275	0.0219	0.0234	35%	0.0032	0.0090	0.0667	
2	n-Nonane (C9)	0.0667	0.0466	0.0398	0.0414	0.0457	0.0409	0.0419	0.0478	0.0476	0.0489	0.0417	0.0442	66%	0.0034	0.0096	0.0667	
3	n-Decane (C10)	0.0667	0.0546	0.0509	0.0527	0.0557	0.0445	0.0468	0.0507	0.0510	0.0497	0.0438	0.0500	75%	0.0040	0.0112	0.0667	
4	n-Undecane (C11)	0.0667	0.0575	0.0540	0.0544	0.0571	0.0462	0.0437	0.0484	0.0491	0.0491	0.0444	0.0504	76%	0.0050	0.0142	0.0667	
5	n-Dodecane (C12)	0.0667	0.0607	0.0560	0.0554	0.0577	0.0456	0.0505	0.0457	0.0497	0.0524	0.0480	0.0522	78%	0.0052	0.0145	0.0667	
6	n-Tridecane (C13)	0.0667	0.0591	0.0570	0.0567	0.0590	0.0404	0.0434	0.0487	0.0529	0.0533	0.0487	0.0519	78%	0.0065	0.0183	0.0667	
7	n-Tetradecane (C14)	0.0667	0.0589	0.0571	0.0573	0.0602	0.0514	0.0557	0.0515	0.0521	0.0586	0.0545	0.0557	84%	0.0032	0.0091	0.0667	
8	n-Pentadecane (C15)	0.0667	0.0622	0.0601	0.0603	0.0613	0.0613	0.0643	0.0559	0.0594	0.0655	0.0604	0.0611	92%	0.0027	0.0075	0.0667	
9	n-Hexadecane (C16)	0.0667	0.0617	0.0590	0.0586	0.0691	0.0612	0.0625	0.0570	0.0574	0.0631	0.0596	0.0609	91%	0.0036	0.0100	0.0667	
10	n-Heptadecane (C17)	0.0667	0.0621	0.0599	0.0591	0.0611	0.0513	0.0527	0.0503	0.0498	0.0583	0.0537	0.0558	84%	0.0047	0.0134	0.0667	
11	Pristane	0.0667	0.0617	0.0595	0.0623	0.0645	0.0673	0.0700	0.0673	0.0659	0.0699	0.0637	0.0652	98%	0.0035	0.0098	0.0667	
12	n-Octadecane (C18) *	0.0667	0.0629	0.0611	0.0641	0.0662	0.0729	0.0743	0.0620	0.0623	0.0688	0.0627	0.0657	99%	0.0047	0.0134	0.0667	
13	Phytane	0.0667	0.0625	0.0602	0.0631	0.0648	0.0689	0.0687	0.0666	0.0651	0.0676	0.0622	0.0650	97%	0.0030	0.0084	0.0667	
14	n-Nonadecane (C19)	0.0667	0.0636	0.0616	0.0622	0.0633	0.0590	0.0611	0.0571	0.0573	0.0627	0.0567	0.0605	91%	0.0027	0.0076	0.0667	
15	n-Eicosane (C20)	0.0667	0.0635	0.0616	0.0629	0.0638	0.0613	0.0639	0.0579	0.0583	0.0663	0.0599	0.0619	93%	0.0027	0.0075	0.0667	
16	n-Heneicosane (C21)	0.0667	0.0643	0.0622	0.0635	0.0646	0.0644	0.0658	0.0601	0.0604	0.0665	0.0601	0.0632	95%	0.0024	0.0067	0.0667	
17	n-Docosane (C22)	0.0667	0.0639	0.0615	0.0640	0.0652	0.0658	0.0649	0.0609	0.0615	0.0676	0.0604	0.0636	95%	0.0024	0.0068	0.0667	
18	n-Tricosane (C23)	0.0667	0.0641	0.0630	0.0667	0.0677	0.0653	0.0694	0.0633	0.0634	0.0688	0.0629	0.0655	98%	0.0025	0.0071	0.0667	
19	n-Tetracosane (C24)	0.0667	0.0641	0.0640	0.0663	0.0671	0.0622	0.0655	0.0611	0.0615	0.0666	0.0601	0.0639	96%	0.0025	0.0070	0.0667	
20	n-Pentacosane (C25) *	0.0667	0.0693	0.0657	0.0689	0.0687	0.0957	0.1005	0.0713	0.0715	0.0705	0.0657	0.0748	112%	0.0125	0.0353	0.0667	
21	n-Hexacosane (C26)	0.0667	0.0634	0.0625	0.0646	0.0655	0.0666	0.0694	0.0610	0.0610	0.0662	0.0608	0.0641	96%	0.0029	0.0081	0.0667	
22	n-Heptacosane (C27)	0.0667	0.0653	0.0642	0.0666	0.0685	0.0643	0.0695	0.0639	0.0633	0.0689	0.0621	0.0657	99%	0.0026	0.0072	0.0667	
23	n-Octacosane (C28)	0.0667	0.0642	0.0631	0.0742	0.0698	0.0662	0.0673	0.0621	0.0621	0.0674	0.0630	0.0660	99%	0.0039	0.0110	0.0667	
24	n-Nonacosane (C29) *	0.0667	0.0634	0.0621	0.0652	0.0657	0.0631	0.0648	0.0601	0.0595	0.0933	0.0862	0.0683	103%	0.0116	0.0327	0.0667	
25	n-Triacontane (C30)	0.0667	0.0657	0.0648	0.0669	0.0679	0.0686	0.0685	0.0635	0.0628	0.0670	0.0615	0.0657	99%	0.0025	0.0070	0.0667	
26	n-Hentriacontane (C31)	0.0667	0.0649	0.0637	0.0665	0.0677	0.0658	0.0680	0.0623	0.0607	0.0657	0.0599	0.0645	97%	0.0028	0.0079	0.0667	
27	n-Dotriacontane (C32)	0.0667	0.0637	0.0625	0.0655	0.0669	0.0639	0.0654	0.0615	0.0591	0.0629	0.0586	0.0630	95%	0.0027	0.0076	0.0667	
28	n-Tritriacontane (C33)	0.0667	0.0675	0.0663	0.0675	0.0701	0.0679	0.0694	0.0639	0.0601	0.0655	0.0613	0.0660	99%	0.0033	0.0093	0.0667	
29	n-tetratriacontane (C34)	0.0667	0.0645	0.0637	0.0656	0.0678	0.0634	0.0670	0.0613	0.0573	0.0600	0.0571	0.0628	94%	0.0038	0.0106	0.0667	
30	n-Pentatriacontane (C35)	0.0667	0.0655	0.0633	0.0655	0.0683	0.0618	0.0658	0.0605	0.0566	0.0598	0.0559	0.0623	93%	0.0041	0.0116	0.0667	
31	n-Hexatriacontane (C36)	0.0667	0.0647	0.0637	0.0661	0.0685	0.0643	0.0655	0.0596	0.0555	0.0579	0.0551	0.0621	93%	0.0047	0.0133	0.0667	
32	n-Heptatriacontane (C37)	0.0667	0.0641	0.0629	0.0657	0.0686	0.0615	0.0646	0.0585	0.0543	0.0556	0.0531	0.0609	91%	0.0052	0.0148	0.0667	
33	n-Octatriacontane (C38)	0.0667	0.0643	0.0631	0.0649	0.0671	0.0601	0.0635	0.0590	0.0545	0.0541	0.0505	0.0601	90%	0.0055	0.0155	0.0667	
34	n-Tetracontane (C40)	0.0667	0.0635	0.0617	0.0671	0.0670	0.0613	0.0615	0.0560	0.0515	0.0476	0.0459	0.0583	87%	0.0077	0.0216	0.0667	
Surrogates																		
1	ortho-terphenyl	1.6667	1.6365	1.5881	1.6001	1.6119	1.6243	1.6699	1.5931	1.5903	1.7721	1.6406	1.633	98%				
2	d50-Tetracosane	1.6667	1.6039	1.5647	1.6025	1.6249	1.5925	1.6319	1.5581	1.5591	1.6562	1.5391	1.593	96%				

Comments:

* Targets C18, C25, C29 are C qualified.

C= Coelution: Targets co-elute with MS surrogates

Client-specific MDL

Determination of Method Detection Limits

Alpha Analytical Inc.
Mansfield, MA

Approved

Page 1 of 1
Analyst: JT
Date: 4/9/12 - 4/12/12
Instrument ID: FID9F, 16R, 17F, 2R, 6F
Column ID: Phenomenex ZB-5
Prep Method: SOP OP-013
Prep Chemist: CS

Method: EPA 8015D(M)

2012

GC/FID Saturated Hydrocarbons Soil

Table (MDL)		Data File	A917413	A917415	A1610097	A1610099	A003174	A003176	C692936	C692938	E24723	E24725	T value used for calculating MDL: 2.821					
No.	Analytes	Inst/Date Analyzed	FID9R 4/9/12	FID9R 4/9/12	FID16R 4/9/12	FID16R 4/9/12	FID17F 4/10/12	FID17F 4/10/12	FID6F 4/12/12	FID6F 4/12/12	FID2 4/12/12	FID2 4/12/12	Mean (mg/Kg)	Mean Accuracy	Standard Deviation	Calc. MDL (mg/Kg)	Current RL (mg/Kg)	Comment
1	n-Octane (C8)	0.0667	0.0241	0.0234	0.0269	0.0229	0.0260	0.0245	0.0241	0.0217	0.0217	0.0254	0.0241	36%	0.0017	0.0049	0.0667	
2	n-Nonane (C9)	0.0667	0.0455	0.0466	0.0476	0.0418	0.0509	0.0505	0.0445	0.0437	0.0569	0.0650	0.0493	74%	0.0070	0.0198	0.0667	
3	n-Decane (C10)	0.0667	0.0501	0.0522	0.0485	0.0420	0.0541	0.0542	0.0481	0.0459	0.0609	0.0680	0.0524	79%	0.0075	0.0213	0.0667	
4	n-Undecane (C11)	0.0667	0.0507	0.0529	0.0500	0.0465	0.0390	0.0389	0.0463	0.0443	0.0563	0.0609	0.0486	73%	0.0071	0.0199	0.0667	
5	n-Dodecane (C12)	0.0667	0.0518	0.0541	0.0520	0.0495	0.0469	0.0467	0.0568	0.0532	0.0554	0.0583	0.0525	79%	0.0039	0.0110	0.0667	
6	n-Tridecane (C13)	0.0667	0.0527	0.0562	0.0501	0.0483	0.0466	0.0469	0.0523	0.0507	0.0556	0.0603	0.0520	78%	0.0044	0.0124	0.0667	
7	n-Tetradecane (C14)	0.0667	0.0541	0.0587	0.0569	0.0547	0.0494	0.0505	0.0527	0.0504	0.0568	0.0593	0.0543	82%	0.0036	0.0100	0.0667	
8	n-Pentadecane (C15)	0.0667	0.0627	0.0645	0.0640	0.0617	0.0564	0.0567	0.0609	0.0587	0.0593	0.0614	0.0606	91%	0.0028	0.0080	0.0667	
9	n-Hexadecane (C16)	0.0667	0.0649	0.0659	0.0687	0.0651	0.0622	0.0623	0.0633	0.0602	0.0602	0.0618	0.0635	95%	0.0027	0.0076	0.0667	
10	n-Heptadecane (C17)	0.0667	0.0587	0.0607	0.0550	0.0518	0.0421	0.0410	0.0507	0.0481	0.0609	0.0629	0.0532	80%	0.0078	0.0220	0.0667	
11	Pristane	0.0667	0.0637	0.0667	0.0724	0.0679	0.0738	0.0782	0.0674	0.0651	0.0621	0.0649	0.0682	102%	0.0050	0.0142	0.0667	
12	n-Octadecane (C18) *	0.0667	0.0656	0.0682	0.0684	0.0672	0.0610	0.0616	0.0655	0.0622	0.0631	0.0650	0.0648	97%	0.0027	0.0076	0.0667	
13	Phytane	0.0667	0.0621	0.0672	0.0705	0.0655	0.0680	0.0677	0.0681	0.0630	0.0635	0.0655	0.0661	99%	0.0027	0.0075	0.0667	
14	n-Nonadecane (C19)	0.0667	0.0619	0.0639	0.0569	0.0559	0.0487	0.0487	0.0556	0.0539	0.0634	0.0654	0.0574	86%	0.0061	0.0171	0.0667	
15	n-Eicosane (C20)	0.0667	0.0631	0.0655	0.0621	0.0604	0.0579	0.0580	0.0585	0.0565	0.0640	0.0655	0.0611	92%	0.0033	0.0094	0.0667	
16	n-Heneicosane (C21)	0.0667	0.0647	0.0673	0.0649	0.0631	0.0607	0.0611	0.0604	0.0587	0.0642	0.0664	0.0631	95%	0.0028	0.0080	0.0667	
17	n-Docosane (C22)	0.0667	0.0645	0.0669	0.0640	0.0627	0.0603	0.0600	0.0648	0.0605	0.0645	0.0662	0.0634	95%	0.0025	0.0070	0.0667	
18	n-Tricosane (C23)	0.0667	0.0676	0.0704	0.0661	0.0644	0.0621	0.0623	0.0639	0.0616	0.0667	0.0687	0.0654	98%	0.0030	0.0085	0.0667	
19	n-Tetracosane (C24)	0.0667	0.0652	0.0679	0.0638	0.0622	0.0668	0.0723	0.0613	0.0585	0.0660	0.0681	0.0652	98%	0.0040	0.0112	0.0667	
20	n-Pentacosane (C25) *	0.0667	0.0679	0.0699	0.0752	0.0735	0.0751	0.0696	0.0761	0.0748	0.0659	0.0681	0.0716	107%	0.0037	0.0105	0.0667	
21	n-Hexacosane (C26)	0.0667	0.0647	0.0673	0.0641	0.0626	0.0608	0.0605	0.0599	0.0577	0.0663	0.0683	0.0632	95%	0.0035	0.0098	0.0667	
22	n-Heptacosane (C27)	0.0667	0.0660	0.0691	0.0664	0.0648	0.0631	0.0633	0.0640	0.0613	0.0681	0.0700	0.0656	98%	0.0028	0.0080	0.0667	
23	n-Octacosane (C28)	0.0667	0.0655	0.0677	0.0671	0.0638	0.0746	0.0790	0.0656	0.0623	0.0689	0.0701	0.0685	103%	0.0051	0.0143	0.0667	
24	n-Nonacosane (C29) *	0.0667	0.0979	0.0986	0.0663	0.0640	0.0877	0.0887	0.0601	0.0573	0.0676	0.0701	0.0758	114%	0.0157	0.0444	0.0667	
25	n-Triacontane (C30)	0.0667	0.0667	0.0691	0.0670	0.0651	0.0640	0.0672	0.0651	0.0621	0.0693	0.0711	0.0667	100%	0.0027	0.0076	0.0667	
26	n-Hentriacontane (C31)	0.0667	0.0659	0.0684	0.0662	0.0647	0.0611	0.0623	0.0630	0.0603	0.0685	0.0701	0.0651	98%	0.0033	0.0094	0.0667	
27	n-Dotriacontane (C32)	0.0667	0.0649	0.0667	0.0651	0.0636	0.0613	0.0612	0.0627	0.0603	0.0677	0.0692	0.0643	96%	0.0030	0.0084	0.0667	
28	n-Tritriacontane (C33)	0.0667	0.0676	0.0698	0.0698	0.0679	0.0626	0.0638	0.0661	0.0644	0.0710	0.0727	0.0676	101%	0.0033	0.0094	0.0667	
29	n-tetratriacontane (C34)	0.0667	0.0657	0.0676	0.0667	0.0653	0.0603	0.0612	0.0643	0.0606	0.0684	0.0698	0.0650	97%	0.0033	0.0094	0.0667	
30	n-Pentatriacontane (C35)	0.0667	0.0650	0.0673	0.0661	0.0644	0.0591	0.0583	0.0629	0.0617	0.0681	0.0693	0.0642	96%	0.0037	0.0104	0.0667	
31	n-Hexatriacontane (C36)	0.0667	0.0652	0.0673	0.0670	0.0654	0.0581	0.0585	0.0632	0.0597	0.0687	0.0701	0.0643	96%	0.0043	0.0121	0.0667	
32	n-Heptatriacontane (C37)	0.0667	0.0647	0.0661	0.0663	0.0650	0.0572	0.0576	0.0617	0.0595	0.0683	0.0696	0.0636	95%	0.0044	0.0123	0.0667	
33	n-Octatriacontane (C38)	0.0667	0.0649	0.0665	0.0666	0.0651	0.0563	0.0566	0.0649	0.0603	0.0682	0.0691	0.0638	96%	0.0046	0.0129	0.0667	
34	n-Tetracontane (C40)	0.0667	0.0622	0.0637	0.0656	0.0626	0.0524	0.0536	0.0605	0.0571	0.0667	0.0677	0.0612	92%	0.0053	0.0150	0.0667	
Surrogates																		
1	ortho-terphenyl	1.670	1.602	1.642	1.669	1.626	1.613	1.612	1.593	1.589	1.617	1.657	1.622	97%				
2	d50-Tetracosane	1.670	1.558	1.602	1.612	1.571	1.534	1.538	1.523	1.525	1.626	1.659	1.575	94%				

Comments:

MDL for FID 9F, 16R, 17F, 2R, 6F

* Targets C18, C25, C29 are C qualified. C= Coelution: Targets co-elute with MS surrogates

Client-specific MDL

Petroleum Data

Form 1

FID FORENSICS

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1430198-01
 Client ID : GTP-07-3'
 Sample Location : BROOKLYN
 Sample Matrix : SOIL
 Analytical Method : 1,8015D(M)
 Lab File ID : F17122214034
 Sample Amount : 12.31 g
 Extraction Method : ALPHA OP-013
 Extract Volume : 10000 uL
 GPC Cleanup : N
 Sulfur Cleanup : N

Lab Number : L1430198
 Project Number : 11176638
 Date Collected : 12/15/14 11:00
 Date Received : 12/16/14
 Date Analyzed : 12/23/14 13:04
 Date Extracted : 12/17/14
 Dilution Factor : 1
 Analyst : NL
 Instrument ID : FID17
 GC Column : RTX-5
 %Solids : 56
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
NONE	Total Petroleum Hydrocarbons (C9-C44)	45900	192	96.1	



Form 1

FID FORENSICS

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : WG749631-1
 Client ID : WG749631-1BLANK
 Sample Location :
 Sample Matrix : SOIL
 Analytical Method : 1,8015D(M)
 Lab File ID : F17122214028
 Sample Amount : 30 g
 Extraction Method : ALPHA OP-013
 Extract Volume : 4000 uL
 GPC Cleanup : N
 Sulfur Cleanup : N

Lab Number : L1430198
 Project Number : 11176638
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 12/23/14 08:35
 Date Extracted : 12/17/14
 Dilution Factor : 1
 Analyst : NL
 Instrument ID : FID17
 GC Column : RTX-5
 %Solids : NA
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
NONE	Total Petroleum Hydrocarbons (C9-C44)	ND	2.20	1.10	U



Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\FID17\2014\DEC2014\DEC22\
 Data File : F17122214034.d
 Signal(s) : FID1A.CH
 Acq On : 23 Dec 2014 1:04 pm
 Operator : FID17:NL
 Sample : L1430198-01,42
 Misc : WG750850,WG749631
 ALS Vial : 17 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 12 10:21:42 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\DECEMBER\DEC22\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Tue Dec 23 06:59:16 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Blank Name : IB1712221402F
 Blank File : F17122214026.D

Sub List : TPH - TPH

Compound	R.T.	Response	Conc Units

Internal Standards			
1) I 5-alpha-androstane	31.153	61259285	50.000 ug/mL M4
System Monitoring Compounds			
19) s ortho-terphenyl	29.115	8248464	6.118 ug/mL M4
Spiked Amount 50.000	Range 50 - 130	Recovery =	12.24%#
24) s d50-Tetracosane	35.821	8063990	7.365 ug/mL M4
Spiked Amount 50.000	Range 50 - 130	Recovery =	14.73%#
Target Compounds			
42) h C9-C44 Total Petroleu...	40.275	10225948709	8504.387 ug/mL m
42) h C9-C44 Total Petroleu BS	40.275	9470719658	7876.303 ug/mLm
45) h Total Resolved Hydroc...	40.731	1295550308	1077.442 ug/mL m

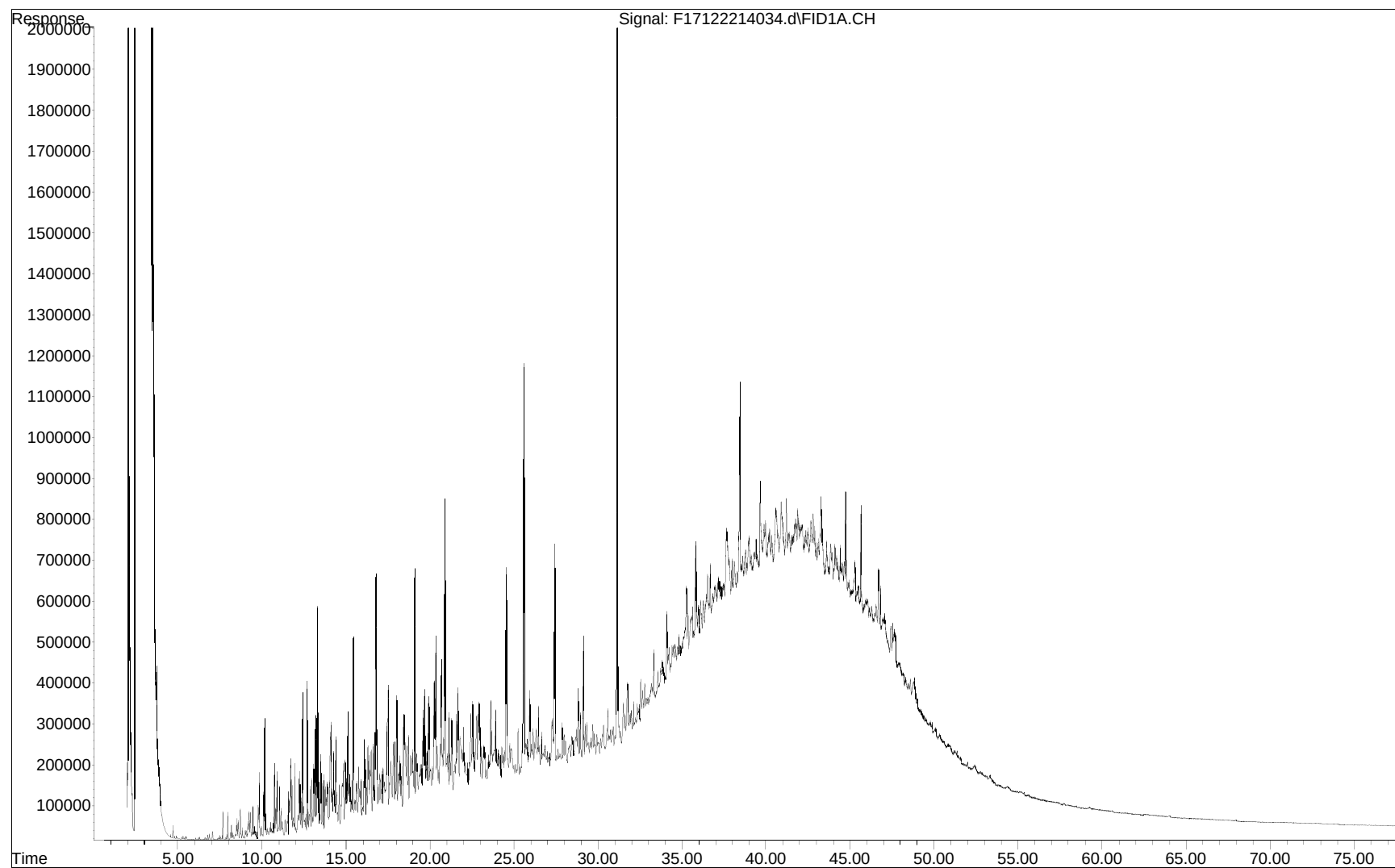
SemiQuant Compounds - Not Calibrated on this Instrument

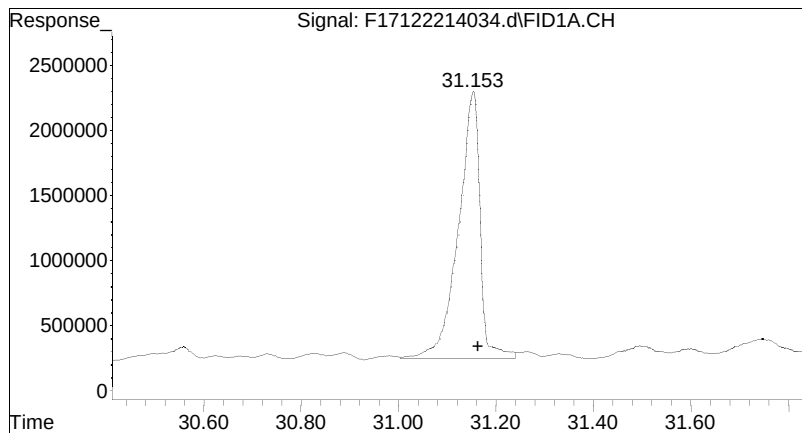
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

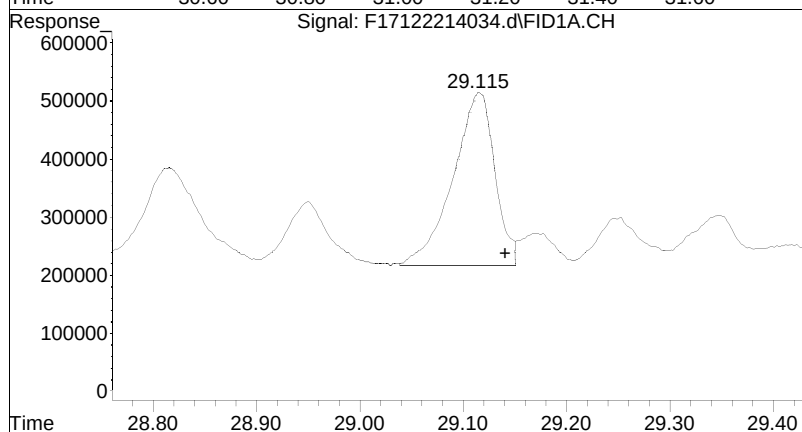
File : 0:\Forensics\Data\FID17\2014\DEC2014\DEC22\F17122214034.d
Operator : FID17:NL
Acquired : 23 Dec 2014 1:04 pm using AcqMethod FID17.M
Sample Name: L1430198-01,42
Instrument: FID17
Misc Info : WG750850, WG749631
Vial Number: 17
CurrentMeth: 0:\Forensics\Data\FID17\2014\DEC2014\DEC22\HC17111014F.M





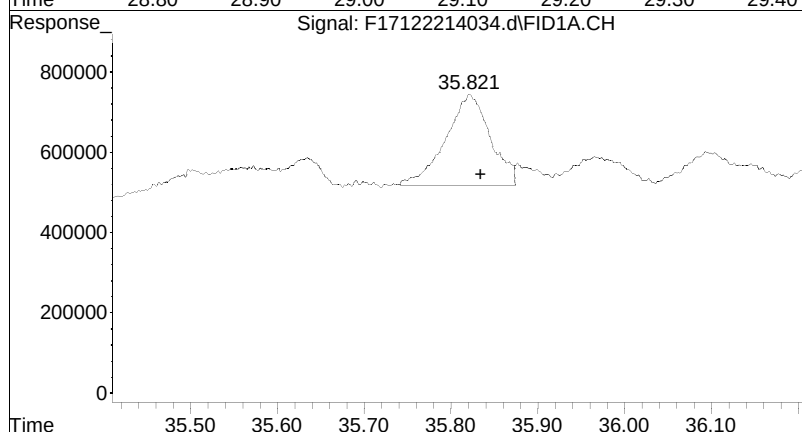
#1 5-alpha-androstane

R.T.: 31.153 min
Delta R.T.: -0.010 min
Response: 61259285
Conc: 50.00 ug/mL M4



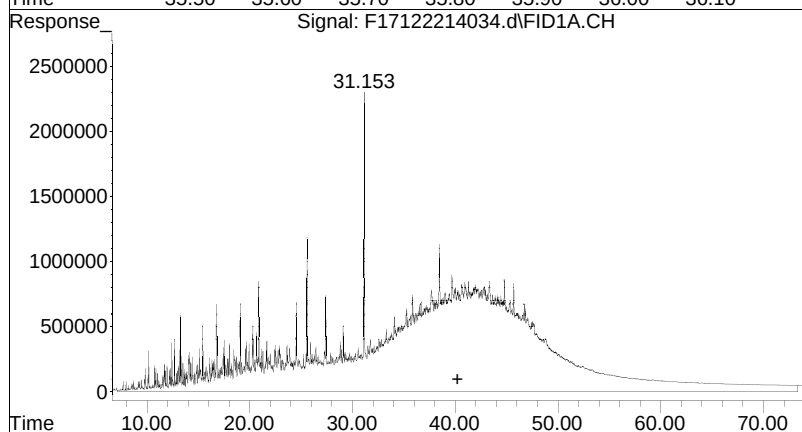
#19 ortho-terphenyl

R.T.: 29.115 min
Delta R.T.: -0.026 min
Response: 8248464
Conc: 6.12 ug/mL M4



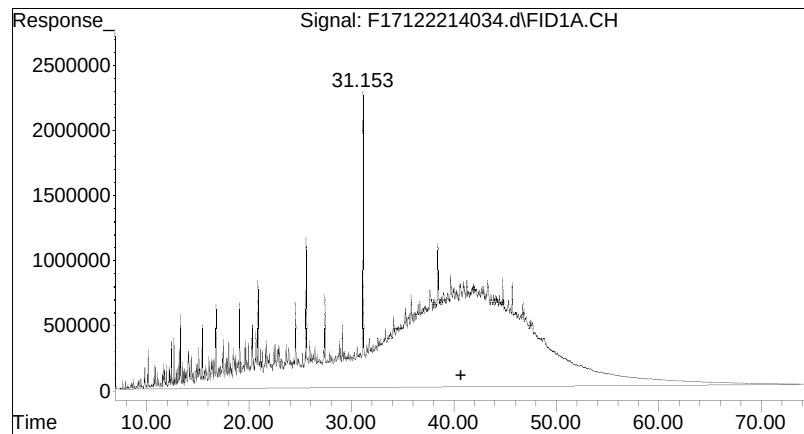
#24 d50-Tetracosane

R.T.: 35.821 min
Delta R.T.: -0.013 min
Response: 8063990
Conc: 7.36 ug/mL M4



#42 C9-C44 Total Petroleum Hy

R.T.: 40.275 min
Delta R.T.: 0.000 min
Response: 10225948709
Conc: 8504.39 ug/mL m



#45 Total Resolved Hydrocarbo

R.T.: 40.731 min
Delta R.T.: 0.000 min
Response: 1295550308
Conc: 1077.44 ug/mL m

Petroleum Standards Data

Initial Calibration

6B
FID FORENSICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1430198

Instrument ID: FID17

Calibration Date(s): 11/10/14

11/11/14

Calibration Times: 19:02

02:29

Calibration Files

1 =F17111014012.d 10 =F17111014014.d 50 =F17111014016.d 100 =F17111014018.d 200 =F17111014020.d
500 =F17111014022.d

Compound	1	10	50	100	200	500	Avg	%RSD
1) I 5-alpha-androstane	-----ISTD-----							
2) t n-Octane (C8)	0.858	0.822	0.839	0.861	0.855		0.847	1.94
3) t n-Nonane (C9)	0.883	0.849	0.862	0.888	0.874		0.871	1.81
4) t n-Decane (C10)	0.892	0.867	0.891	0.913	0.906		0.894	1.96
5) t n-Undecane (C11)	0.873	0.886	0.914	0.926	0.917		0.903	2.47
6) t n-Dodecane (C12)	0.883	0.905	0.933	0.938	0.930		0.918	2.55
7) t n-Tridecane (C13)	0.894	0.914	0.941	0.941	0.934		0.925	2.19
8) t 1380	0.908	0.928	0.953	0.950	0.943		0.936	2.00
9) t n-Tetradecane (C14)	0.908	0.928	0.953	0.950	0.943		0.936	2.00
10) t 1470	0.927	0.946	0.971	0.968	0.960		0.954	1.90
11) t n-Pentadecane (C15)	0.927	0.946	0.971	0.968	0.960		0.954	1.90
12) t n-Hexadecane (C16)	0.958	0.954	0.969	0.964	0.957		0.960	0.65
13) t 1650	0.910	0.946	0.975	0.971	0.966		0.953	2.81
14) t n-Heptadecane (C17)	0.910	0.946	0.975	0.971	0.966		0.953	2.81
15) t Pristane	1.010	0.976	0.989	0.982	0.968		0.985	1.63
16) t n-Octadecane (C18)	0.959	0.973	0.994	0.993	0.981		0.980	1.47
17) t Phytane	0.875	0.859	0.870	0.864	0.856		0.865	0.88
18) t n-Nonadecane (C19)	0.968	0.970	0.987	0.985	0.975		0.977	0.88
19) s ortho-terphenyl	1.173	1.089	1.093	1.096	1.076	1.076	1.100	3.34
20) t n-Eicosane (C20)	0.970	0.968	0.983	0.982	0.974		0.975	0.67
21) t n-Heneicosane (C21)	0.972	0.976	0.989	0.993	0.983		0.983	0.91
22) t n-Docosane (C22)	0.986	0.984	0.996	1.003	0.994		0.993	0.81
23) t n-Tricosane (C23)	1.001	0.992	1.003	1.013	1.003		1.002	0.77
24) s d50-Tetracosane	0.950	0.876	0.877	0.900	0.883	0.876	0.894	3.25
25) t n-Tetracosane (C24)	0.994	0.992	1.005	1.020	1.010		1.004	1.13
26) t n-Pentacosane (C25)	0.994	0.987	0.997	1.013	1.004		0.999	0.99
27) t n-Hexacosane (C26)	1.012	1.010	1.017	1.037	1.031		1.021	1.18
28) t n-Heptacosane (C27)	1.023	1.000	1.005	1.029	1.024		1.016	1.28
29) t n-Octacosane (C28)	1.031	0.992	0.999	1.027	1.024		1.015	1.76
30) t n-Nonacosane (C29)	1.009	0.999	1.002	1.038	1.037		1.017	1.86
31) t n-Triacontane (C30)	1.021	1.000	1.002	1.043	1.044		1.022	2.09
32) t n-Hentriacontane (C31)	1.016	1.000	0.999	1.048	1.049		1.023	2.42
33) t n-Dotriacontane (C32)	1.015	1.008	1.005	1.060	1.063		1.030	2.81
34) t n-Tritriacontane (C33)	0.965	0.948	0.948	1.006	1.009		0.975	3.11
35) t n-tetratriacontane (C34)	1.000	0.984	0.987	1.055	1.058		1.017	3.63
36) t n-Pentatriacontane (C35)	0.997	0.990	0.992	1.066	1.070		1.023	4.04
37) t n-Hexatriacontane (C36)	1.025	1.013	1.019	1.099	1.101		1.052	4.26
38) t n-Heptatriacontane (C37)	1.012	0.986	0.997	1.079	1.079		1.031	4.36
39) t n-Octatriacontane (C38)	0.984	0.968	0.982	1.062	1.060		1.011	4.55
40) t n-Nonatriacontane	1.028	1.004	1.033	1.114	1.105		1.057	4.66
41) t n-Tetracontane (C40)	1.028	1.004	1.033	1.114	1.105		1.057	4.66
42) h C9-C44 Total	0.970	0.963	0.976	1.002	0.997		0.981	1.75
43) h C9-C40 Total	0.970	0.963	0.976	1.002	0.997		0.981	1.75

6B
FID FORENSICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1430198

Instrument ID: FID17 Calibration Date(s): 11/10/14 11/11/14

Calibration Times: 19:02 02:29

Compound		1	10	50	100	200	500	Avg	%RSD
44) h	C10-C28 DRO	0.970	0.963	0.976	1.002	0.997		0.981	1.75
45) h	Total Resolve	0.970	0.963	0.976	1.002	0.997		0.981	1.75

FORM VI-A2-TPH

Response Factor Report FID17

Method Path : 0:\Forensics\Data\FID17\2014\NOV\NOV10\
 Method File : HC17111014F.M
 Title : FID Forensics
 Last Update : Mon Nov 17 14:46:09 2014
 Response Via : Initial Calibration

Calibration Files

1 =F17111014012.d 10 =F17111014014.d 50 =F17111014016.d 100 =F17111014018.d 200 =F17111014020.d
 500 =F17111014022.d

Compound		1	10	50	100	200	500	Avg	%RSD

1) I	5-alpha-androstane	-----ISTD-----							
2) t	n-Octane (C8)	0.858	0.822	0.839	0.861	0.855		0.847	1.94
3) t	n-Nonane (C9)	0.883	0.849	0.862	0.888	0.874		0.871	1.81
4) t	n-Decane (C10)	0.892	0.867	0.891	0.913	0.906		0.894	1.96
5) t	n-Undecane (C11)	0.873	0.886	0.914	0.926	0.917		0.903	2.47
6) t	n-Dodecane (C12)	0.883	0.905	0.933	0.938	0.930		0.918	2.55
7) t	n-Tridecane (...)	0.894	0.914	0.941	0.941	0.934		0.925	2.19
8) t	1380	0.908	0.928	0.953	0.950	0.943		0.936	2.00
9) t	n-Tetradecane...	0.908	0.928	0.953	0.950	0.943		0.936	2.00
10) t	1470	0.927	0.946	0.971	0.968	0.960		0.954	1.90
11) t	n-Pentadecane...	0.927	0.946	0.971	0.968	0.960		0.954	1.90
12) t	n-Hexadecane ...	0.958	0.954	0.969	0.964	0.957		0.960	0.65
13) t	1650	0.910	0.946	0.975	0.971	0.966		0.953	2.81
14) t	n-Heptadecane...	0.910	0.946	0.975	0.971	0.966		0.953	2.81
15) t	Pristane	1.010	0.976	0.989	0.982	0.968		0.985	1.63
16) t	n-Octadecane ...	0.959	0.973	0.994	0.993	0.981		0.980	1.47
17) t	Phytane	0.875	0.859	0.870	0.864	0.856		0.865	0.88
18) t	n-Nonadecane ...	0.968	0.970	0.987	0.985	0.975		0.977	0.88
19) s	ortho-terphenyl	1.173	1.089	1.093	1.096	1.076	1.076	1.100	3.34
20) t	n-Eicosane (C20)	0.970	0.968	0.983	0.982	0.974		0.975	0.67
21) t	n-Heneicosane...	0.972	0.976	0.989	0.993	0.983		0.983	0.91
22) t	n-Docosane (C22)	0.986	0.984	0.996	1.003	0.994		0.993	0.81
23) t	n-Tricosane (...)	1.001	0.992	1.003	1.013	1.003		1.002	0.77
24) s	d50-Tetracosane	0.950	0.876	0.877	0.900	0.883	0.876	0.894	3.25
25) t	n-Tetracosane...	0.994	0.992	1.005	1.020	1.010		1.004	1.13
26) t	n-Pentacosane...	0.994	0.987	0.997	1.013	1.004		0.999	0.99
27) t	n-Hexacosane ...	1.012	1.010	1.017	1.037	1.031		1.021	1.18
28) t	n-Heptacosane...	1.023	1.000	1.005	1.029	1.024		1.016	1.28
29) t	n-Octacosane ...	1.031	0.992	0.999	1.027	1.024		1.015	1.76
30) t	n-Nonacosane ...	1.009	0.999	1.002	1.038	1.037		1.017	1.86
31) t	n-Triacontane...	1.021	1.000	1.002	1.043	1.044		1.022	2.09

Response Factor Report FID17

Method Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
Method File : HC17111014F.M
Title : FID Forensics
Last Update : Mon Nov 17 14:46:09 2014
Response Via : Initial Calibration

Calibration Files

1 =F17111014012.d 10 =F17111014014.d 50 =F17111014016.d 100 =F17111014018.d 200 =F17111014020.d
500 =F17111014022.d

	Compound	1	10	50	100	200	500	Avg	%RSD
32) t	n-Hentriacont...	1.016	1.000	0.999	1.048	1.049		1.023	2.42
33) t	n-Dotriaconta...	1.015	1.008	1.005	1.060	1.063		1.030	2.81
34) t	n-Tritriacont...	0.965	0.948	0.948	1.006	1.009		0.975	3.11
35) t	n-tetratriaco...	1.000	0.984	0.987	1.055	1.058		1.017	3.63
36) t	n-Pentatriaco...	0.997	0.990	0.992	1.066	1.070		1.023	4.04
37) t	n-Hexatriacon...	1.025	1.013	1.019	1.099	1.101		1.052	4.26
38) t	n-Heptatriaco...	1.012	0.986	0.997	1.079	1.079		1.031	4.36
39) t	n-Octatriacon...	0.984	0.968	0.982	1.062	1.060		1.011	4.55
40) t	n-Nonatriacon...	1.028	1.004	1.033	1.114	1.105		1.057	4.66
41) t	n-Tetracontan...	1.028	1.004	1.033	1.114	1.105		1.057	4.66
42) h	C9-C44 Total ...	0.970	0.963	0.976	1.002	0.997		0.981	1.75
43) h	C9-C40 Total ...	0.970	0.963	0.976	1.002	0.997		0.981	1.75
44) h	C10-C28 DRO	0.970	0.963	0.976	1.002	0.997		0.981	1.75
45) h	Total Resolve...	0.970	0.963	0.976	1.002	0.997		0.981	1.75

(#) = Out of Range

RSF Update Summary Report

Method Path.....: O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Method File.....: HC17111014F.M
 Method Title.....: FID Forensics
 Last Update.....: Mon Nov 17 14:44:21 2014

Generating Average Response Factor For: C9-C44 Total Petroleum Hydrocarbons

No	Compound	Level	Conc	Response

1	n-Nonane (C9)	1	1.00000	956166.850
2	n-Decane (C10)	1	1.00000	965575.156
3	n-Undecane (C11)	1	1.00000	945978.032
4	n-Dodecane (C12)	1	1.00000	956040.780
5	n-Tridecane (C13)	1	1.00000	968666.065
6	n-Tetradecane (C14)	1	1.00000	982914.837
7	n-Pentadecane (C15)	1	1.00000	1003729.234
8	n-Hexadecane (C16)	1	1.00000	1037076.323
9	n-Heptadecane (C17)	1	1.00000	985154.446
10	Pristane	1	1.00000	1093918.178
11	n-Octadecane (C18)	1	1.00000	1038773.184
12	Phytane	1	1.00000	947367.010
13	n-Nonadecane (C19)	1	1.00000	1048873.675
14	n-Eicosane (C20)	1	1.00000	1050923.185
15	n-Heneicosane (C21)	1	1.00000	1052164.354
16	n-Docosane (C22)	1	1.00000	1067395.148
17	n-Tricosane (C23)	1	1.00000	1084446.063
18	n-Tetracosane (C24)	1	1.00000	1076773.677
19	n-Pentacosane (C25)	1	1.00000	1076154.642
20	n-Hexacosane (C26)	1	1.00000	1095972.739
21	n-Heptacosane (C27)	1	1.00000	1108389.553
22	n-Octacosane (C28)	1	1.00000	1117077.100
23	n-Nonacosane (C29)	1	1.00000	1093208.318
24	n-Triacontane (C30)	1	1.00000	1105800.579
25	n-Hentriacontane (C31)	1	1.00000	1100716.731
26	n-Dotriacontane (C32)	1	1.00000	1099085.755
27	n-Tritriacontane (C33)	1	1.00000	1045498.580
28	n-tetratriacontane (C34)	1	1.00000	1083357.182
29	n-Pentatriacontane (C35)	1	1.00000	1079522.254
30	n-Hexatriacontane (C36)	1	1.00000	1109798.951
31	n-Heptatriacontane (C37)	1	1.00000	1096538.366
32	n-Octatriacontane (C38)	1	1.00000	1065698.162
33	n-Tetracontane (C40)	1	1.00000	1113747.106

Avg RSF For: C9-C44 Total Petroleum			1.00000	1050075.825

1	n-Nonane (C9)	2	10.00000	9571218.032
2	n-Decane (C10)	2	10.00000	9773459.692
3	n-Undecane (C11)	2	10.00000	9991961.996
4	n-Dodecane (C12)	2	10.00000	10206110.806
5	n-Tridecane (C13)	2	10.00000	10303226.050
6	n-Tetradecane (C14)	2	10.00000	10460708.697
7	n-Pentadecane (C15)	2	10.00000	10664004.171
8	n-Hexadecane (C16)	2	10.00000	10751385.225
9	n-Heptadecane (C17)	2	10.00000	10666998.447
10	Pristane	2	10.00000	10997838.390
11	n-Octadecane (C18)	2	10.00000	10973499.727
12	Phytane	2	10.00000	9686819.949
13	n-Nonadecane (C19)	2	10.00000	10933111.412
14	n-Eicosane (C20)	2	10.00000	10914757.626

rfupdate.txt				
15	n-Heneicosane (C21)	2	10.00000	11005550.647
16	n-Docosane (C22)	2	10.00000	11090258.377
17	n-Tricosane (C23)	2	10.00000	11177596.766
18	n-Tetracosane (C24)	2	10.00000	11187494.340
19	n-Pentacosane (C25)	2	10.00000	11131468.403
20	n-Hexacosane (C26)	2	10.00000	11381761.427
21	n-Heptacosane (C27)	2	10.00000	11270080.304
22	n-Octacosane (C28)	2	10.00000	11186318.226
23	n-Nonacosane (C29)	2	10.00000	11258816.490
24	n-Triacontane (C30)	2	10.00000	11268522.448
25	n-Hentriacontane (C31)	2	10.00000	11275401.001
26	n-Dotriacontane (C32)	2	10.00000	11359576.684
27	n-Tritriacontane (C33)	2	10.00000	10681175.532
28	n-tetratriacontane (C34)	2	10.00000	11092909.132
29	n-Pentatriacontane (C35)	2	10.00000	11156812.789
30	n-Hexatriacontane (C36)	2	10.00000	11422542.616
31	n-Heptatriacontane (C37)	2	10.00000	11112602.223
32	n-Octatriacontane (C38)	2	10.00000	10908503.254
33	n-Tetracontane (C40)	2	10.00000	11317317.803

Avg RSF For: C9-C44 Total Petroleum			10.00000	10853933.596
1	n-Nonane (C9)	3	50.00000	46801134.640
2	n-Decane (C10)	3	50.00000	48405866.302
3	n-Undecane (C11)	3	50.00000	49661379.227
4	n-Dodecane (C12)	3	50.00000	50686941.286
5	n-Tridecane (C13)	3	50.00000	51093773.490
6	n-Tetradecane (C14)	3	50.00000	51735305.888
7	n-Pentadecane (C15)	3	50.00000	52726106.277
8	n-Hexadecane (C16)	3	50.00000	52629891.295
9	n-Heptadecane (C17)	3	50.00000	52933667.657
10	Pristane	3	50.00000	53728133.846
11	n-Octadecane (C18)	3	50.00000	53966088.468
12	Phytane	3	50.00000	47224331.509
13	n-Nonadecane (C19)	3	50.00000	53604297.258
14	n-Eicosane (C20)	3	50.00000	53373894.140
15	n-Heneicosane (C21)	3	50.00000	53706674.897
16	n-Docosane (C22)	3	50.00000	54114794.335
17	n-Tricosane (C23)	3	50.00000	54468080.152
18	n-Tetracosane (C24)	3	50.00000	54558609.238
19	n-Pentacosane (C25)	3	50.00000	54123508.809
20	n-Hexacosane (C26)	3	50.00000	55246629.154
21	n-Heptacosane (C27)	3	50.00000	54568290.738
22	n-Octacosane (C28)	3	50.00000	54246379.777
23	n-Nonacosane (C29)	3	50.00000	54437873.339
24	n-Triacontane (C30)	3	50.00000	54410127.134
25	n-Hentriacontane (C31)	3	50.00000	54264859.615
26	n-Dotriacontane (C32)	3	50.00000	54592430.086
27	n-Tritriacontane (C33)	3	50.00000	51478791.228
28	n-tetratriacontane (C34)	3	50.00000	53603676.807
29	n-Pentatriacontane (C35)	3	50.00000	53899156.017
30	n-Hexatriacontane (C36)	3	50.00000	55334260.358
31	n-Heptatriacontane (C37)	3	50.00000	54162137.881
32	n-Octatriacontane (C38)	3	50.00000	53323713.930
33	n-Tetracontane (C40)	3	50.00000	56122385.531

Avg RSF For: C9-C44 Total Petroleum			50.00000	53007066.373
1	n-Nonane (C9)	4	100.00000	92546861.192
2	n-Decane (C10)	4	100.00000	95150145.551
3	n-Undecane (C11)	4	100.00000	96504886.549
4	n-Dodecane (C12)	4	100.00000	97813354.954
5	n-Tridecane (C13)	4	100.00000	98128724.750
6	n-Tetradecane (C14)	4	100.00000	99098349.370
7	n-Pentadecane (C15)	4	100.00000	100894959.280
8	n-Hexadecane (C16)	4	100.00000	100542165.042

rfupdate.txt			
9 n-Heptadecane (C17)	4	100.00000	101195746.220
10 Pristane	4	100.00000	102363704.392
11 n-Octadecane (C18)	4	100.00000	103494807.730
12 Phytane	4	100.00000	90107645.961
13 n-Nonadecane (C19)	4	100.00000	102722661.551
14 n-Eicosane (C20)	4	100.00000	102338718.868
15 n-Heneicosane (C21)	4	100.00000	103561695.242
16 n-Docosane (C22)	4	100.00000	104611286.417
17 n-Tricosane (C23)	4	100.00000	105634839.540
18 n-Tetracosane (C24)	4	100.00000	106336756.883
19 n-Pentacosane (C25)	4	100.00000	105611101.081
20 n-Hexacosane (C26)	4	100.00000	108152181.990
21 n-Heptacosane (C27)	4	100.00000	107262727.666
22 n-Octacosane (C28)	4	100.00000	107073578.813
23 n-Nonacosane (C29)	4	100.00000	108209907.372
24 n-Triacontane (C30)	4	100.00000	108739389.295
25 n-Hentriacontane (C31)	4	100.00000	109245612.750
26 n-Dotriacontane (C32)	4	100.00000	110550981.571
27 n-Tritriacontane (C33)	4	100.00000	104844271.241
28 n-tetratriacontane (C34)	4	100.00000	110027218.622
29 n-Pentatriacontane (C35)	4	100.00000	111133176.317
30 n-Hexatriacontane (C36)	4	100.00000	114629087.490
31 n-Heptatriacontane (C37)	4	100.00000	112472231.403
32 n-Octatriacontane (C38)	4	100.00000	110748872.947
33 n-Tetracontane (C40)	4	100.00000	116119008.402

Avg RSF For: C9-C44 Total Petroleum		100.00000	104480807.771
1 n-Nonane (C9)	5	200.00000	183994497.292
2 n-Decane (C10)	5	200.00000	190630603.670
3 n-Undecane (C11)	5	200.00000	192977775.796
4 n-Dodecane (C12)	5	200.00000	195722039.931
5 n-Tridecane (C13)	5	200.00000	196451380.600
6 n-Tetradecane (C14)	5	200.00000	198370822.567
7 n-Pentadecane (C15)	5	200.00000	201966601.052
8 n-Hexadecane (C16)	5	200.00000	201302145.051
9 n-Heptadecane (C17)	5	200.00000	203355194.176
10 Pristane	5	200.00000	203706839.250
11 n-Octadecane (C18)	5	200.00000	206512059.176
12 Phytane	5	200.00000	180095178.986
13 n-Nonadecane (C19)	5	200.00000	205137349.145
14 n-Eicosane (C20)	5	200.00000	204858566.695
15 n-Heneicosane (C21)	5	200.00000	206881189.955
16 n-Docosane (C22)	5	200.00000	209103777.146
17 n-Tricosane (C23)	5	200.00000	211118913.202
18 n-Tetracosane (C24)	5	200.00000	212476277.808
19 n-Pentacosane (C25)	5	200.00000	211377509.264
20 n-Hexacosane (C26)	5	200.00000	216859002.454
21 n-Heptacosane (C27)	5	200.00000	215525450.662
22 n-Octacosane (C28)	5	200.00000	215543841.344
23 n-Nonacosane (C29)	5	200.00000	218200394.427
24 n-Triacontane (C30)	5	200.00000	219666382.510
25 n-Hentriacontane (C31)	5	200.00000	220837165.611
26 n-Dotriacontane (C32)	5	200.00000	223659666.599
27 n-Tritriacontane (C33)	5	200.00000	212305009.296
28 n-tetratriacontane (C34)	5	200.00000	222719307.925
29 n-Pentatriacontane (C35)	5	200.00000	225244105.605
30 n-Hexatriacontane (C36)	5	200.00000	231762250.063
31 n-Heptatriacontane (C37)	5	200.00000	226986887.768
32 n-Octatriacontane (C38)	5	200.00000	222999978.711
33 n-Tetracontane (C40)	5	200.00000	232479116.576

Avg RSF For: C9-C44 Total Petroleum		200.00000	209722038.797

Generating Reference Response Factors

		rfupdate.txt	
No	Compound	No	Reference Compound

8	1380	9	n-Tetradecane (C14)
10	1470	11	n-Pentadecane (C15)
13	1650	14	n-Heptadecane (C17)
40	n-Nonatriacontane (C39)	41	n-Tetracontane (C40)
43	C9-C40 Total Petroleum Hydrocarbons	42	C9-C44 Total Petroleum
44	C10-C28 DRO	42	C9-C44 Total Petroleum
45	Total Resolved Hydrocarbons	42	C9-C44 Total Petroleum

Abacus Response Factor Update Macro Ver. 1.0			

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014012.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 7:02 pm
 Operator : FID17:NL
 Sample : I1711011401R
 Misc : WG743851, FRAV23 1ug/mL
 ALS Vial : 6 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:28:33 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Tue Nov 05 21:46:11 2013
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.266	54151158	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.225	1270913	1.047	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 2.09%#
24) s	d50-Tetracosane	35.902	1028871	1.075	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 2.15%#
Target Compounds					
2) t	n-Octane (C8)	5.546	928802	0.968	ug/mL M4
3) t	n-Nonane (C9)	7.756	956167	0.949	ug/mL M4
4) t	n-Decane (C10)	10.249	965575	0.913	ug/mL M4
5) t	n-Undecane (C11)	12.766	945978	0.912	ug/mL M4
6) t	n-Dodecane (C12)	15.196	956041	0.915	ug/mL M4
7) t	n-Tridecane (C13)	17.506	968666	0.928	ug/mL M4
9) t	n-Tetradecane (C14)	19.691	982915	0.909	ug/mL M4
11) t	n-Pentadecane (C15)	21.760	1003729	0.940	ug/mL M4
12) t	n-Hexadecane (C16)	23.721	1037076	0.964	ug/mL M4
14) t	n-Heptadecane (C17)	25.581	985154	0.911	ug/mL M4
15) t	Pristane	25.691	1093918	1.009	ug/mL M4
16) t	n-Octadecane (C18)	27.353	1038773	0.966	ug/mL M4
17) t	Phytane	27.514	947367	0.867	ug/mL M4
18) t	n-Nonadecane (C19)	29.039	1048874	0.981	ug/mL M4
20) t	n-Eicosane (C20)	30.652	1050923	0.978	ug/mL M4
21) t	n-Heneicosane (C21)	32.194	1052164	0.968	ug/mL M4
22) t	n-Docosane (C22)	33.669	1067395	0.977	ug/mL M4
23) t	n-Tricosane (C23)	35.087	1084446	0.987	ug/mL M4
25) t	n-Tetracosane (C24)	36.448	1076774	0.979	ug/mL M4
26) t	n-Pentacosane (C25)	37.758	1076155	0.975	ug/mL M4
27) t	n-Hexacosane (C26)	39.019	1095973	0.973	ug/mL M4
28) t	n-Heptacosane (C27)	40.236	1108390	0.991	ug/mL M4
29) t	n-Octacosane (C28)	41.409	1117077	0.996	ug/mL M4
30) t	n-Nonacosane (C29)	42.544	1093208	0.966	ug/mL M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014012.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 7:02 pm
 Operator : FID17:NL
 Sample : I1711011401R
 Misc : WG743851, FRAV23 1ug/mL
 ALS Vial : 6 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:28:33 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Tue Nov 05 21:46:11 2013
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc Units
31) t	n-Triacontane (C30)	43.643	1105801	0.973 ug/mL M4
32) t	n-Hentriacontane (C31)	44.706	1100717	0.962 ug/mL M4
33) t	n-Dotriacontane (C32)	45.736	1099086	0.966 ug/mL M4
34) t	n-Tritriacontane (C33)	46.734	1045499	0.946 ug/mL M4
35) t	n-tetratriacontane (C34)	47.754	1083357	0.923 ug/mL M4
36) t	n-Pentatriacontane (C35)	48.902	1079522	0.925 ug/mL M4
37) t	n-Hexatriacontane (C36)	50.206	1109799	0.878 ug/mL M4
38) t	n-Heptatriacontane (C37)	51.723	1096538	0.930 ug/mL M4
39) t	n-Octatriacontane (C38)	53.487	1065698	0.904 ug/mL M4
41) t	n-Tetracontane (C40)	58.012	1113747	0.982 ug/mL M4

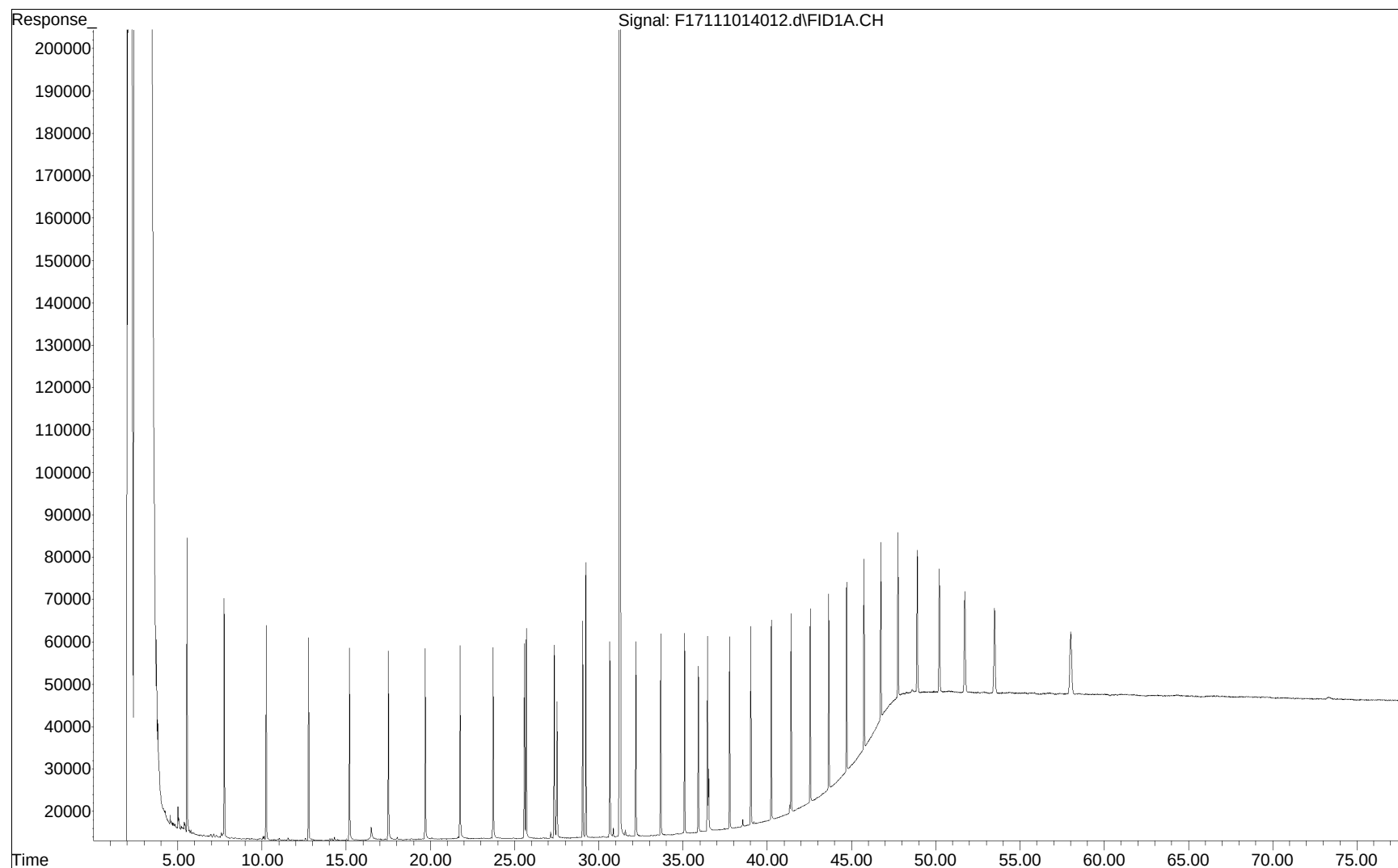
SemiQuant Compounds - Not Calibrated on this Instrument

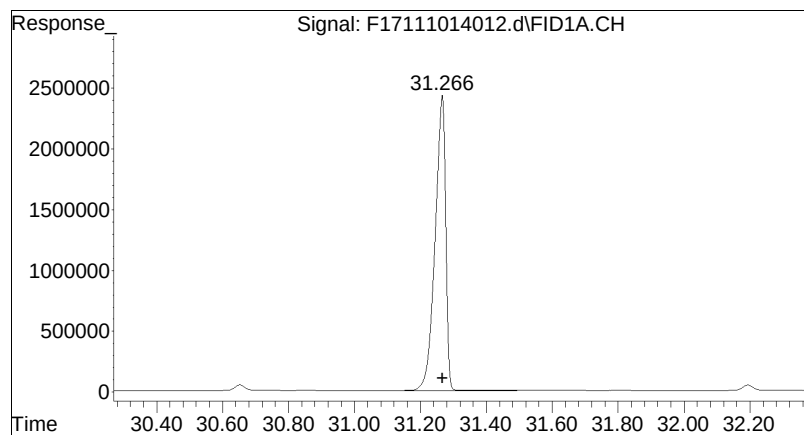
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

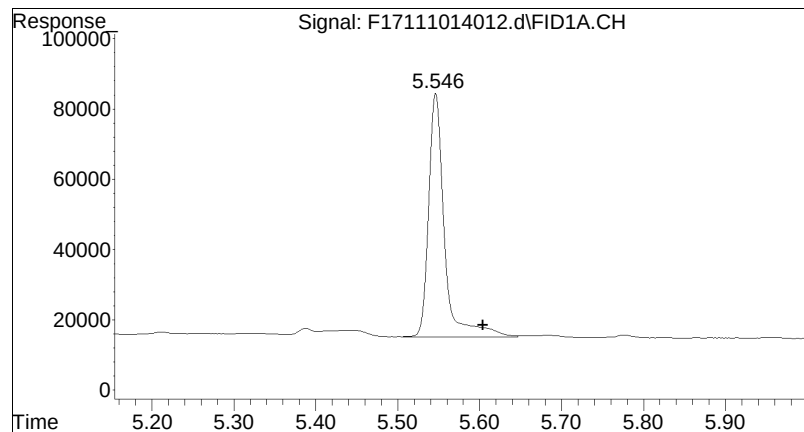
File : 0:\Forensics\Data\FID17\2014\NOV\NOV10\F17111014012.d
 Operator : FID17:NL
 Acquired : 10 Nov 2014 7:02 pm using AcqMethod FID17.M
 Sample Name: I1711011401R
 Instrument: FID17
 Misc Info : WG743851, FRAV23 1ug/mL
 Vial Number: 6
 CurrentMeth: 0:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M





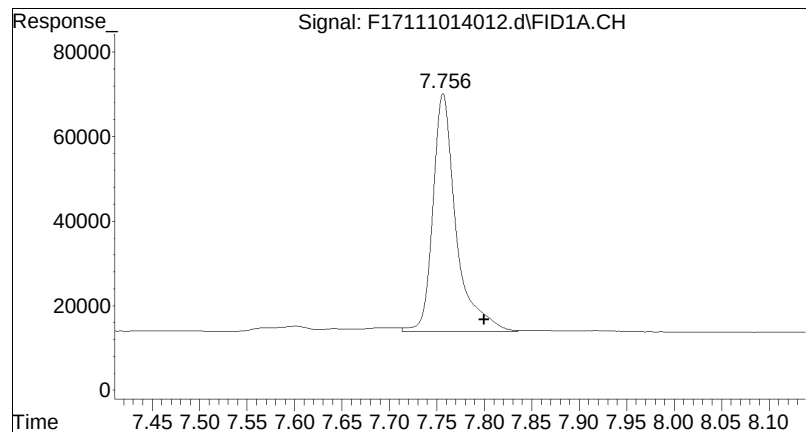
#1 5-alpha-androstane

R.T.: 31.266 min
Delta R.T.: -0.003 min
Response: 54151158
Conc: 50.00 ug/mL M4



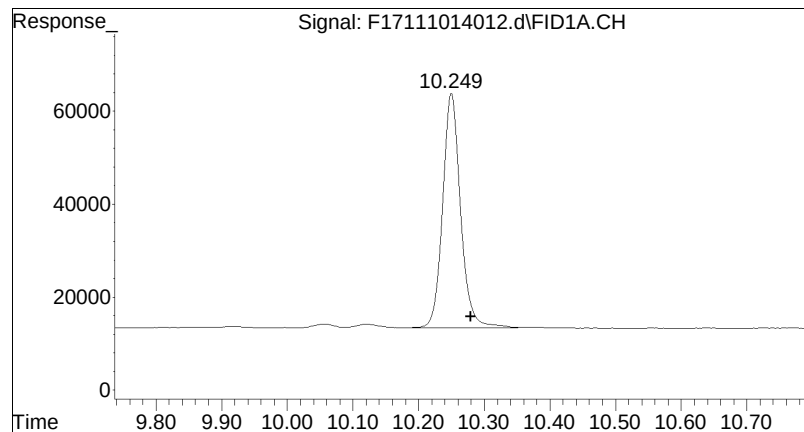
#2 n-Octane (C8)

R.T.: 5.546 min
Delta R.T.: -0.058 min
Response: 928802
Conc: 0.97 ug/mL M4



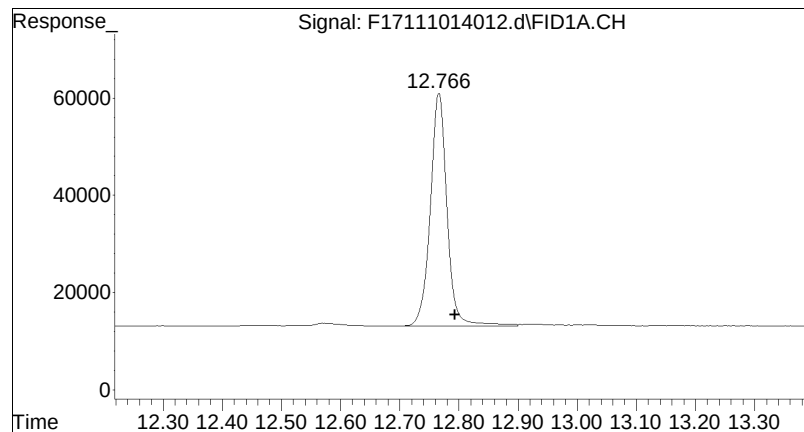
#3 n-Nonane (C9)

R.T.: 7.756 min
Delta R.T.: -0.044 min
Response: 956167
Conc: 0.95 ug/mL M4



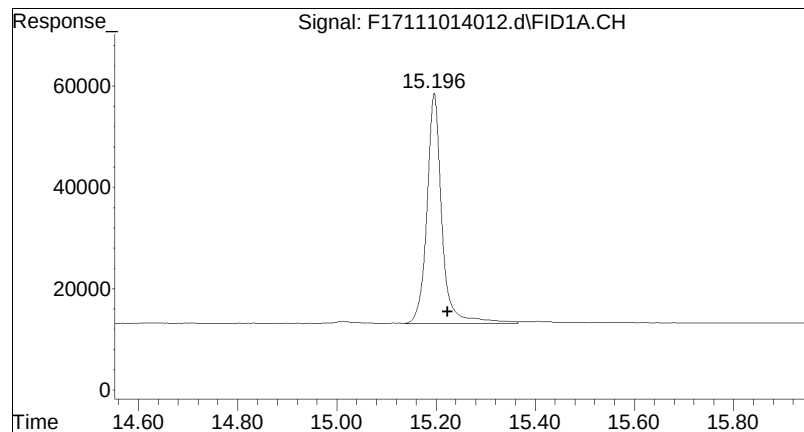
#4 n-Decane (C10)

R.T.: 10.249 min
Delta R.T.: -0.030 min
Response: 965575
Conc: 0.91 ug/mL M4



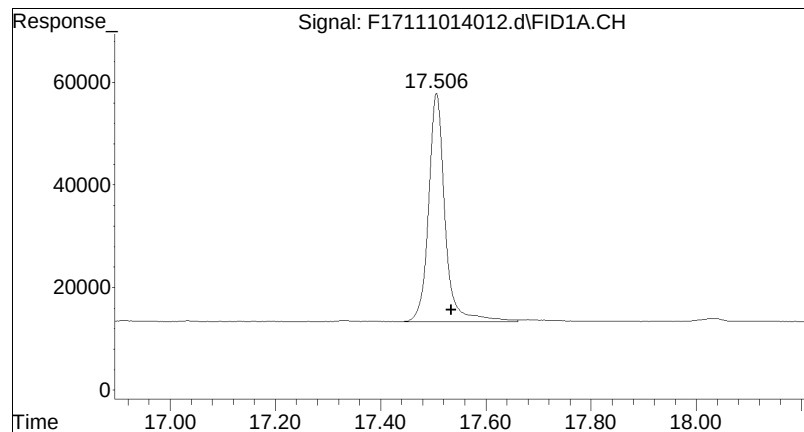
#5 n-Undecane (C11)

R.T.: 12.766 min
Delta R.T.: -0.027 min
Response: 945978
Conc: 0.91 ug/mL M4



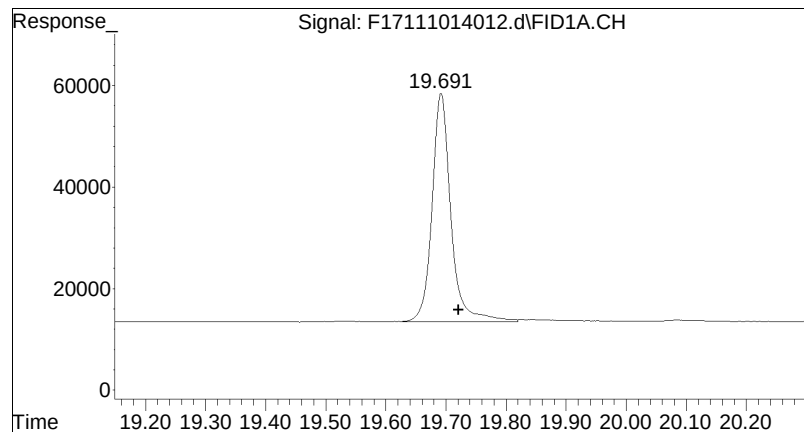
#6 n-Dodecane (C12)

R.T.: 15.196 min
Delta R.T.: -0.027 min
Response: 956041
Conc: 0.91 ug/mL M4



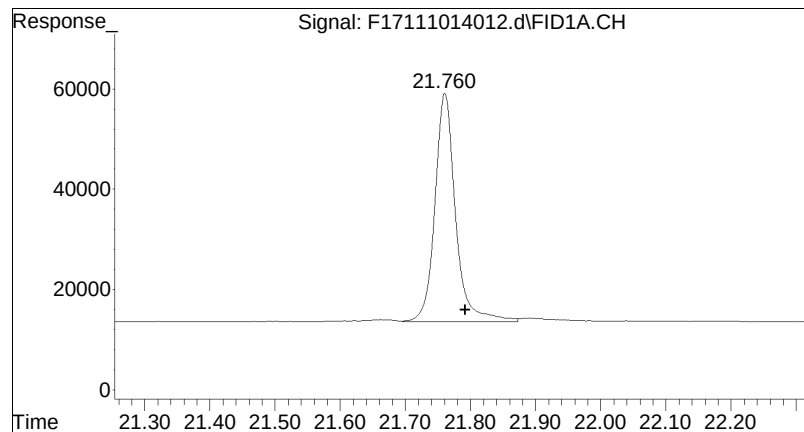
#7 n-Tridecane (C13)

R.T.: 17.506 min
Delta R.T.: -0.028 min
Response: 968666
Conc: 0.93 ug/mL M4



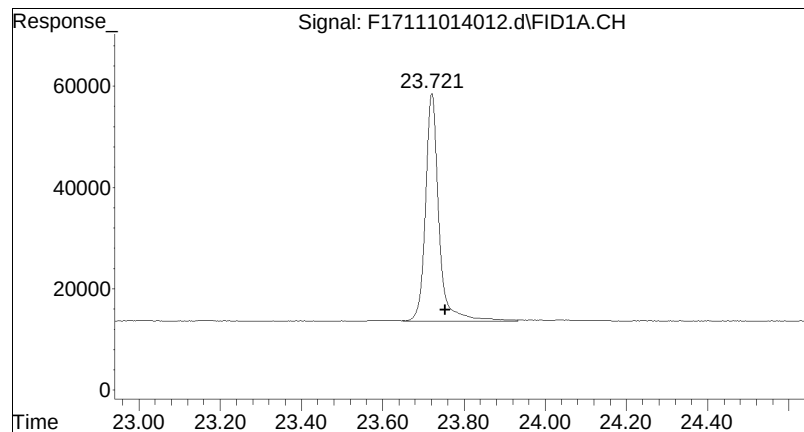
#9 n-Tetradecane (C14)

R.T.: 19.691 min
Delta R.T.: -0.030 min
Response: 982915
Conc: 0.91 ug/mL M4



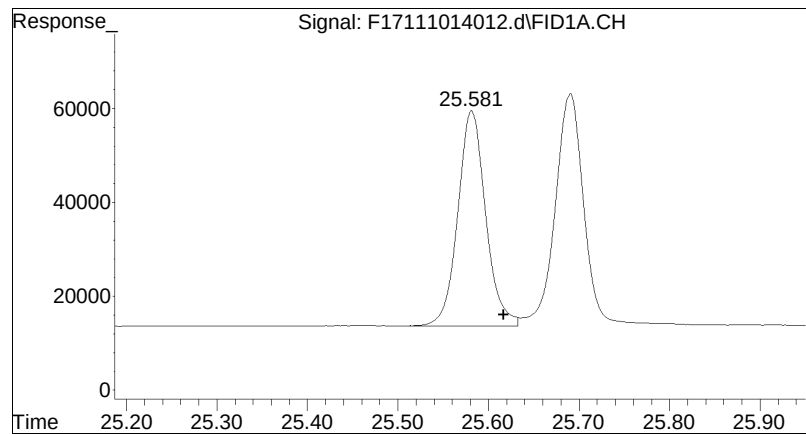
#11 n-Pentadecane (C15)

R.T.: 21.760 min
Delta R.T.: -0.032 min
Response: 1003729
Conc: 0.94 ug/mL M4



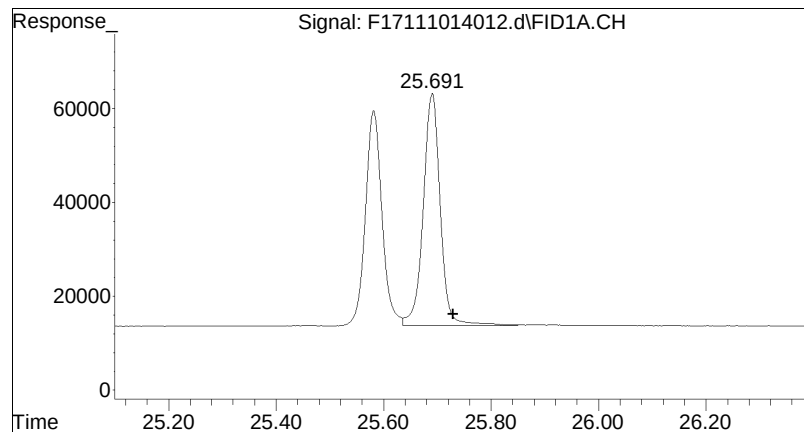
#12 n-Hexadecane (C16)

R.T.: 23.721 min
Delta R.T.: -0.032 min
Response: 1037076
Conc: 0.96 ug/mL M4



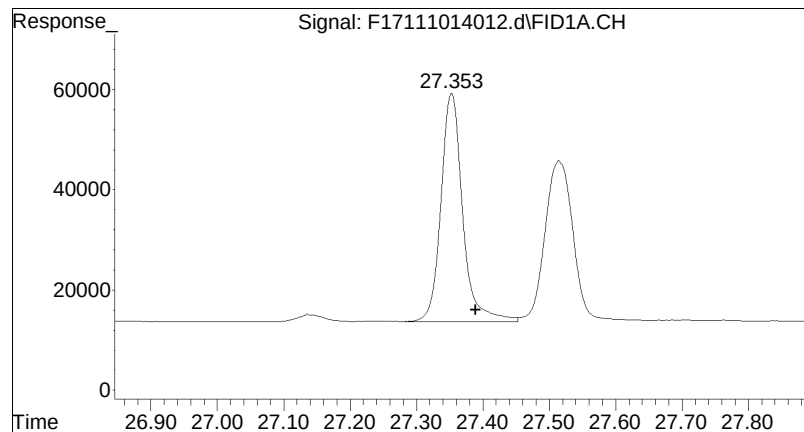
#14 n-Heptadecane (C17)

R.T.: 25.581 min
Delta R.T.: -0.036 min
Response: 985154
Conc: 0.91 ug/mL M4



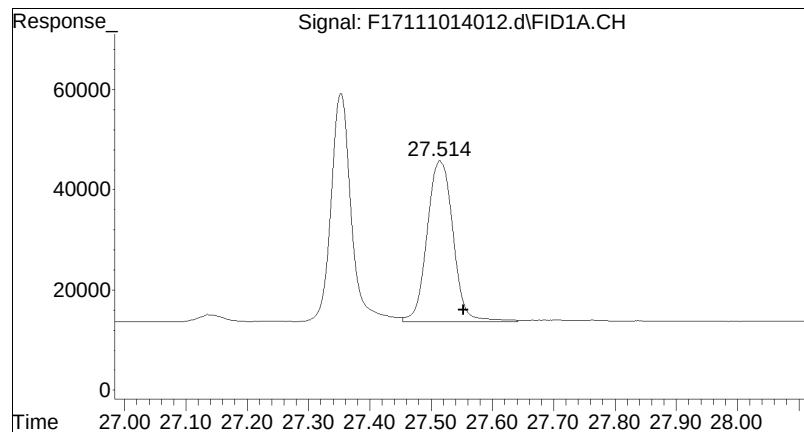
#15 Pristane

R.T.: 25.691 min
Delta R.T.: -0.039 min
Response: 1093918
Conc: 1.01 ug/mL M4



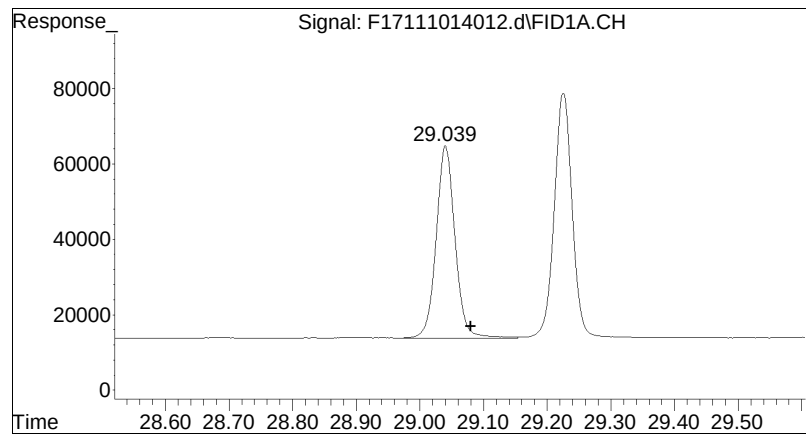
#16 n-Octadecane (C18)

R.T.: 27.353 min
Delta R.T.: -0.037 min
Response: 1038773
Conc: 0.97 ug/mL M4



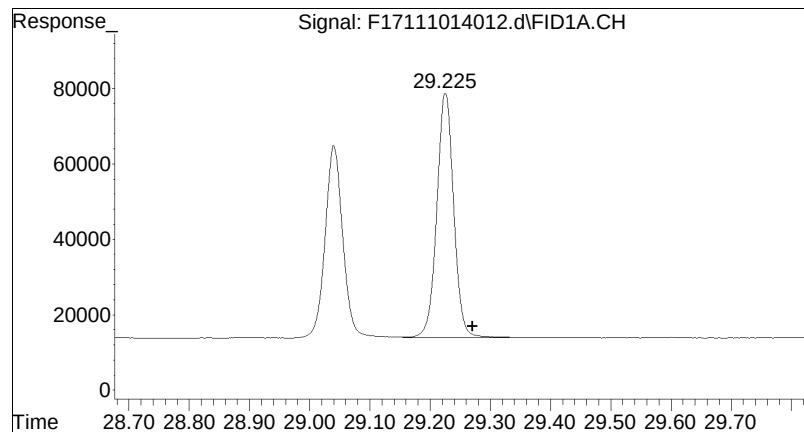
#17 Phytane

R.T.: 27.514 min
Delta R.T.: -0.039 min
Response: 947367
Conc: 0.87 ug/mL M4



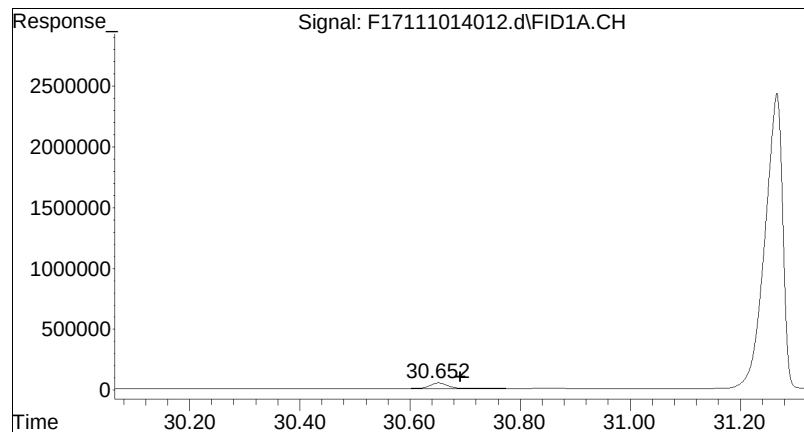
#18 n-Nonadecane (C19)

R.T.: 29.039 min
Delta R.T.: -0.041 min
Response: 1048874
Conc: 0.98 ug/mL M4



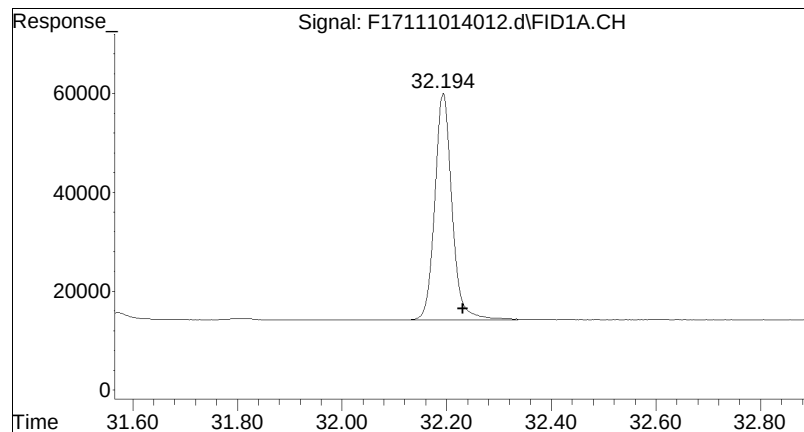
#19 ortho-terphenyl

R.T.: 29.225 min
Delta R.T.: -0.046 min
Response: 1270913
Conc: 1.05 ug/mL M4



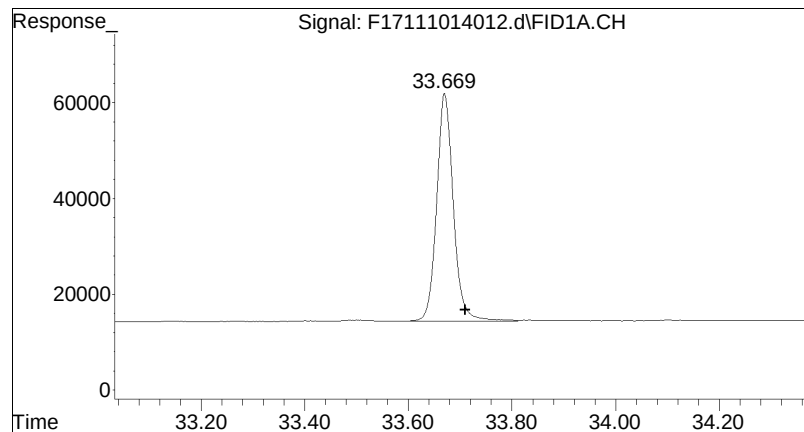
#20 n-Eicosane (C20)

R.T.: 30.652 min
Delta R.T.: -0.039 min
Response: 1050923
Conc: 0.98 ug/mL M4



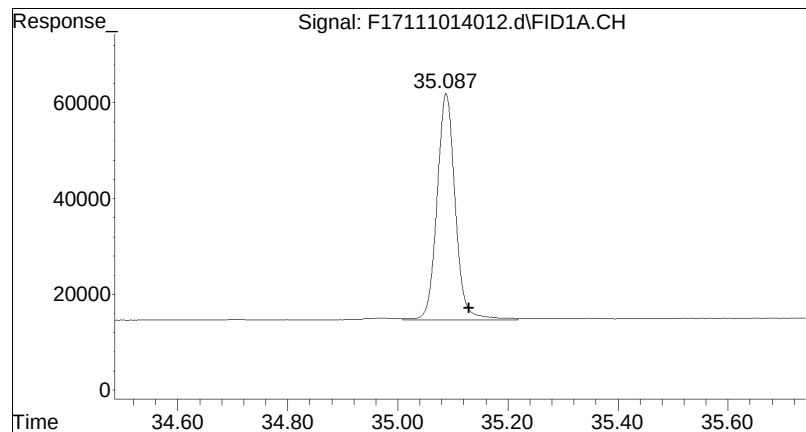
#21 n-Heneicosane (C21)

R.T.: 32.194 min
Delta R.T.: -0.037 min
Response: 1052164
Conc: 0.97 ug/mL M4



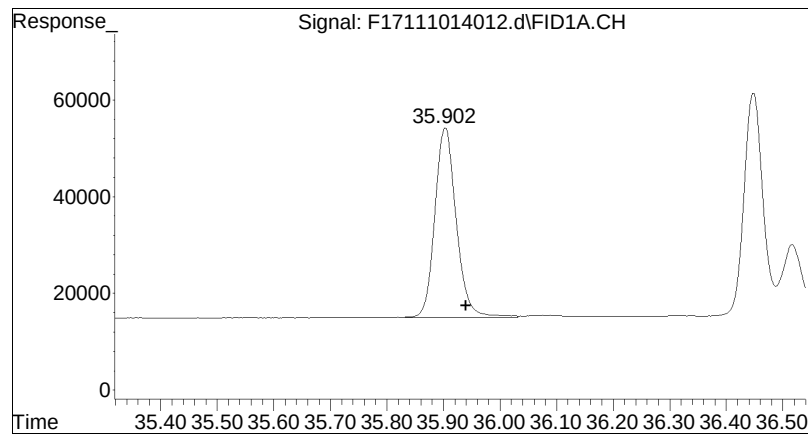
#22 n-Docosane (C22)

R.T.: 33.669 min
Delta R.T.: -0.040 min
Response: 1067395
Conc: 0.98 ug/mL M4



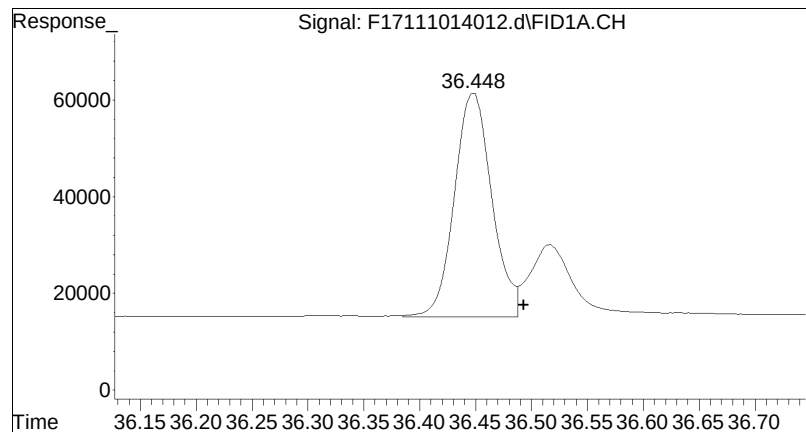
#23 n-Tricosane (C23)

R.T.: 35.087 min
Delta R.T.: -0.041 min
Response: 1084446
Conc: 0.99 ug/mL M4



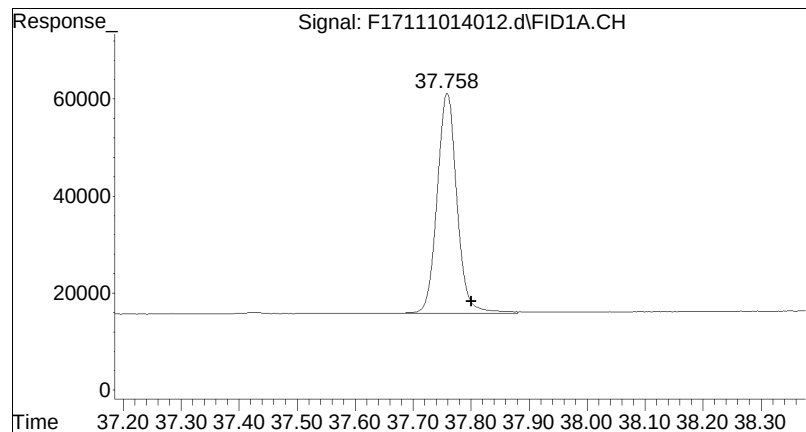
#24 d50-Tetracosane

R.T.: 35.902 min
Delta R.T.: -0.038 min
Response: 1028871
Conc: 1.07 ug/mL M4



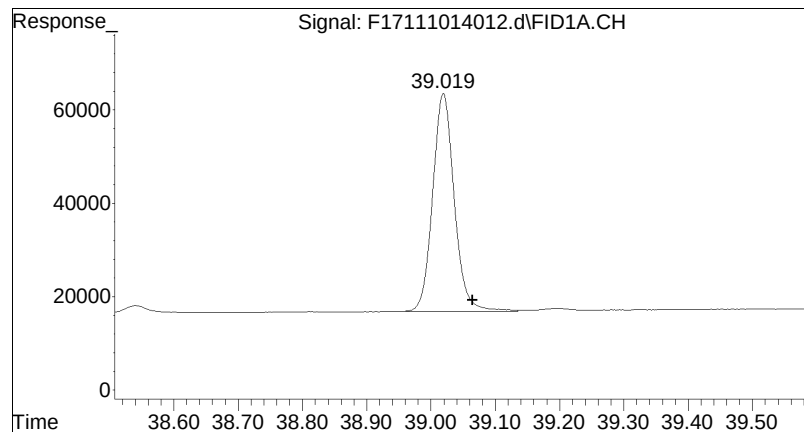
#25 n-Tetracosane (C24)

R.T.: 36.448 min
Delta R.T.: -0.045 min
Response: 1076774
Conc: 0.98 ug/mL M4



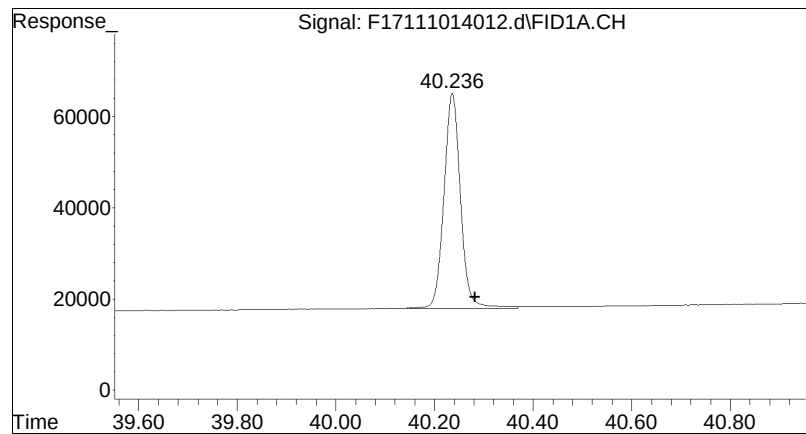
#26 n-Pentacosane (C25)

R.T.: 37.758 min
Delta R.T.: -0.041 min
Response: 1076155
Conc: 0.97 ug/mL M4



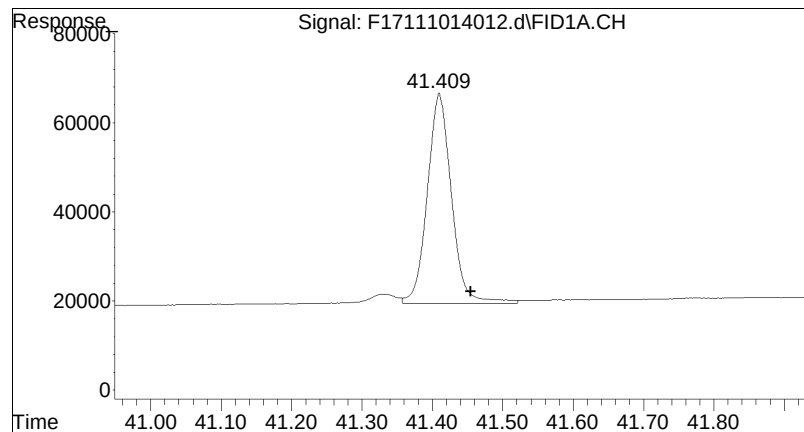
#27 n-Hexacosane (C26)

R.T.: 39.019 min
Delta R.T.: -0.045 min
Response: 1095973
Conc: 0.97 ug/mL M4



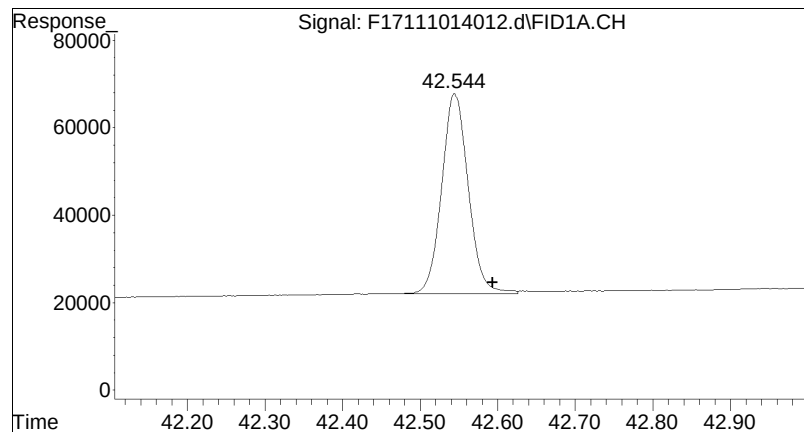
#28 n-Heptacosane (C27)

R.T.: 40.236 min
Delta R.T.: -0.046 min
Response: 1108390
Conc: 0.99 ug/mL M4



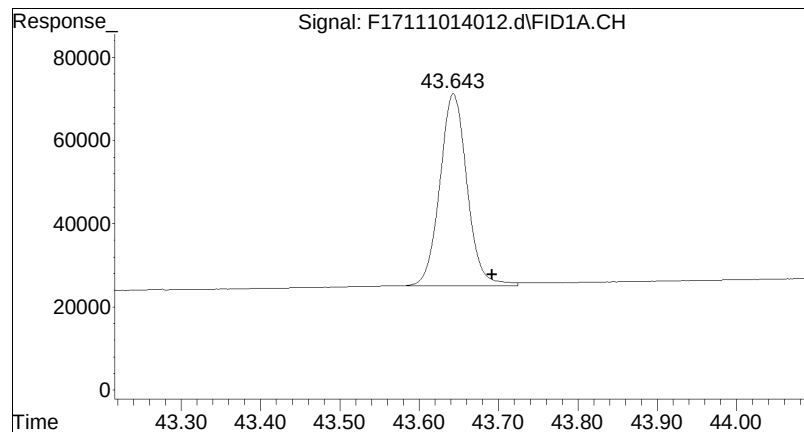
#29 n-Octacosane (C28)

R.T.: 41.409 min
Delta R.T.: -0.045 min
Response: 1117077
Conc: 1.00 ug/mL M4



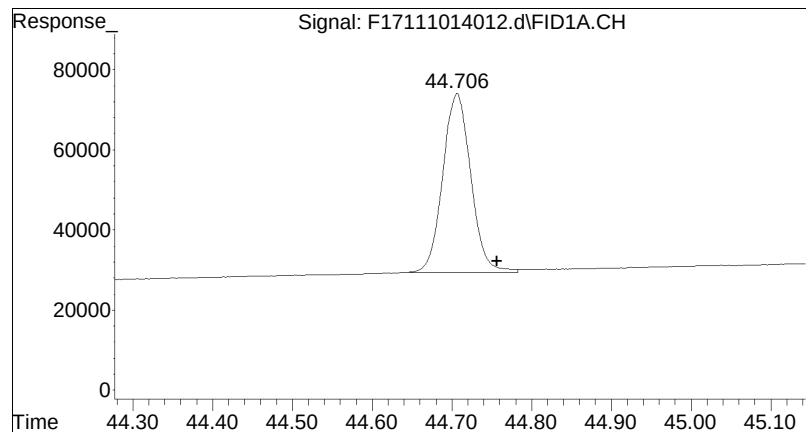
#30 n-Nonacosane (C29)

R.T.: 42.544 min
Delta R.T.: -0.049 min
Response: 1093208
Conc: 0.97 ug/mL M4



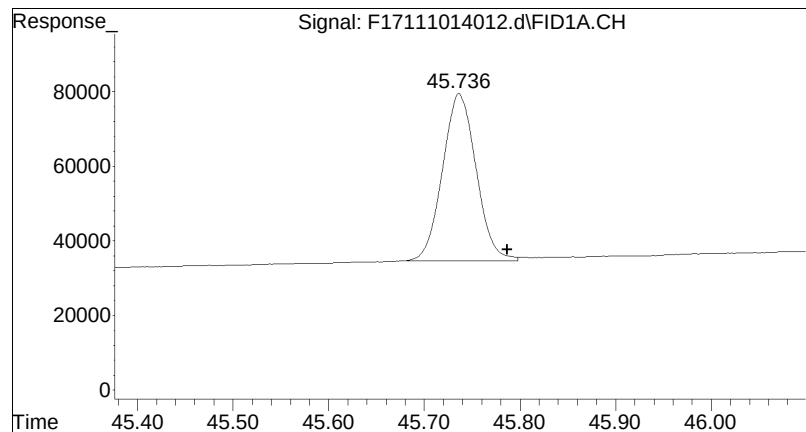
#31 n-Triacontane (C30)

R.T.: 43.643 min
Delta R.T.: -0.049 min
Response: 1105801
Conc: 0.97 ug/mL M4



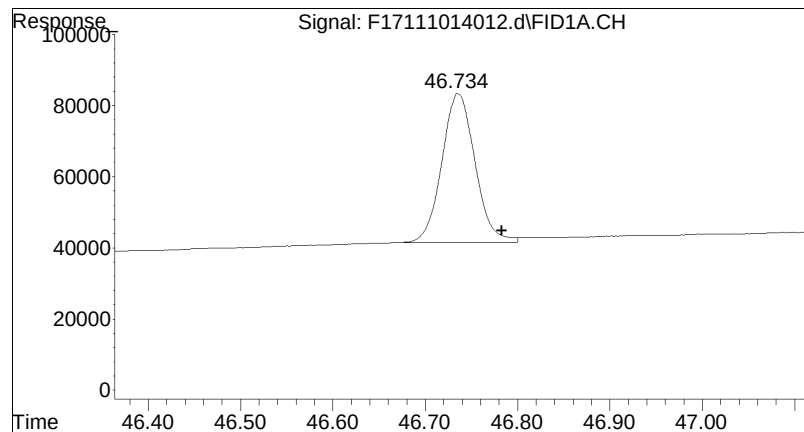
#32 n-Hentriacontane (C31)

R.T.: 44.706 min
Delta R.T.: -0.050 min
Response: 1100717
Conc: 0.96 ug/mL M4



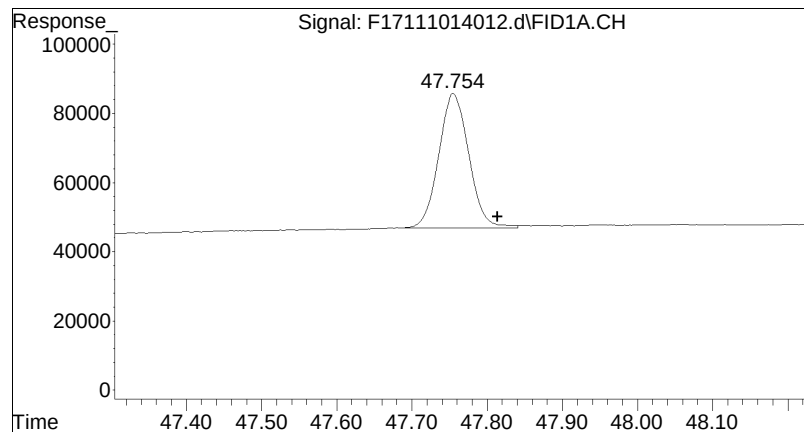
#33 n-Dotriacontane (C32)

R.T.: 45.736 min
Delta R.T.: -0.050 min
Response: 1099086
Conc: 0.97 ug/mL M4



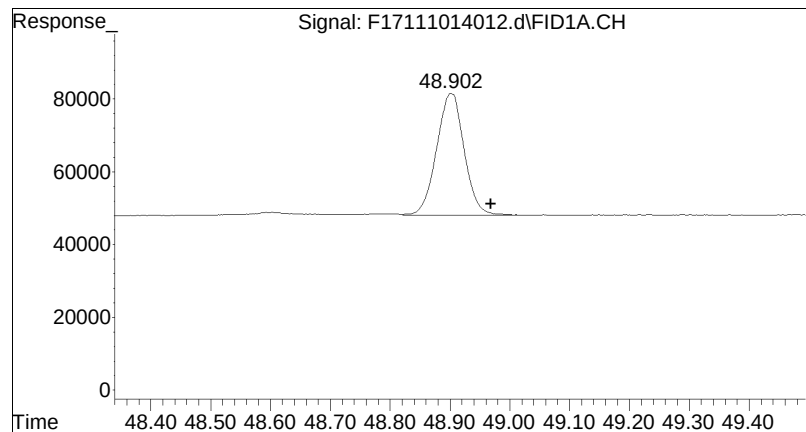
#34 n-Tritriacontane (C33)

R.T.: 46.734 min
Delta R.T.: -0.049 min
Response: 1045499
Conc: 0.95 ug/mL M4



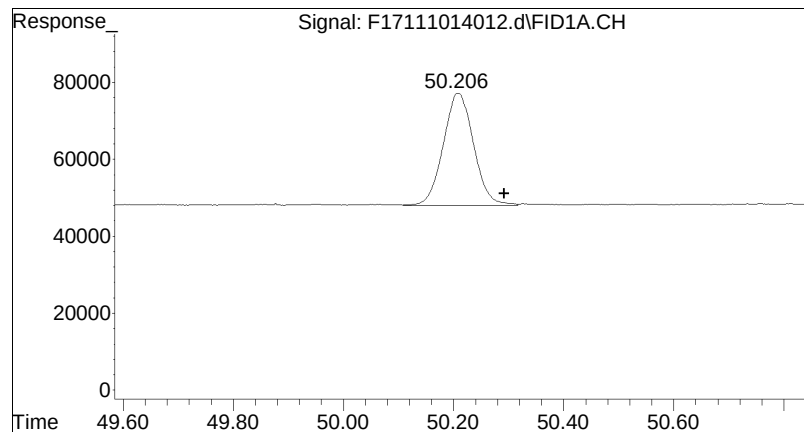
#35 n-tetratriacontane (C34)

R.T.: 47.754 min
Delta R.T.: -0.059 min
Response: 1083357
Conc: 0.92 ug/mL M4



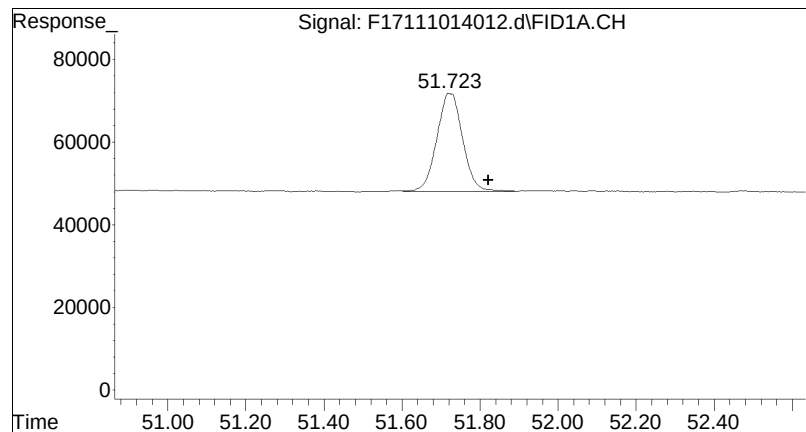
#36 n-Pentatriacontane (C35)

R.T.: 48.902 min
Delta R.T.: -0.066 min
Response: 1079522
Conc: 0.92 ug/mL M4



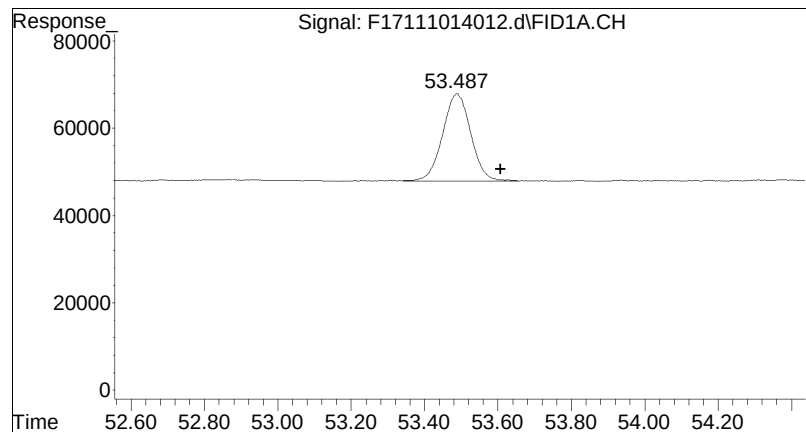
#37 n-Hexatriacontane (C36)

R.T.: 50.206 min
Delta R.T.: -0.086 min
Response: 1109799
Conc: 0.88 ug/mL M4



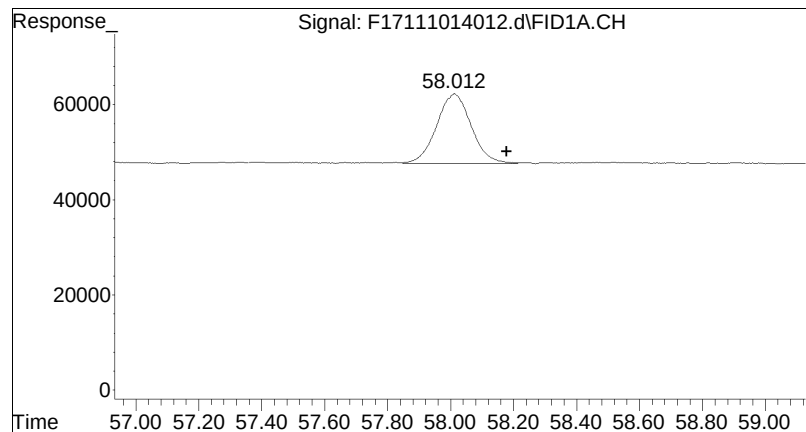
#38 n-Heptatriacontane (C37)

R.T.: 51.723 min
Delta R.T.: -0.099 min
Response: 1096538
Conc: 0.93 ug/mL M4



#39 n-Octatriacontane (C38)

R.T.: 53.487 min
Delta R.T.: -0.120 min
Response: 1065698
Conc: 0.90 ug/mL M4



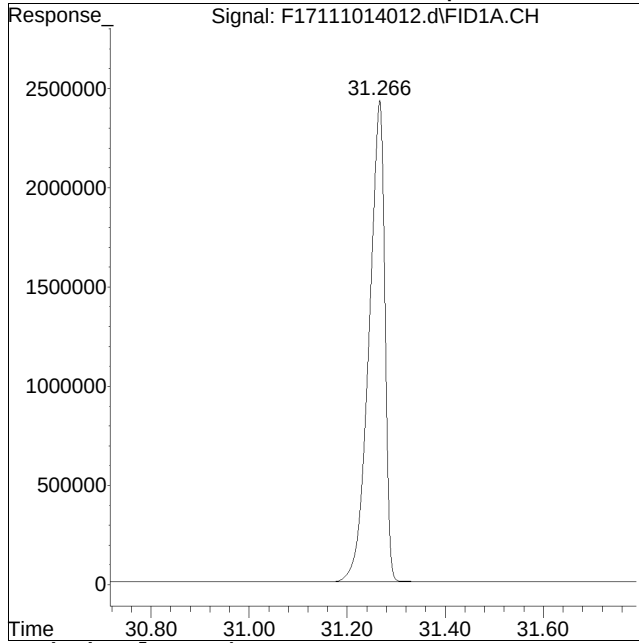
#41 n-Tetracontane (C40)

R.T.: 58.012 min
Delta R.T.: -0.166 min
Response: 1113747
Conc: 0.98 ug/mL M4

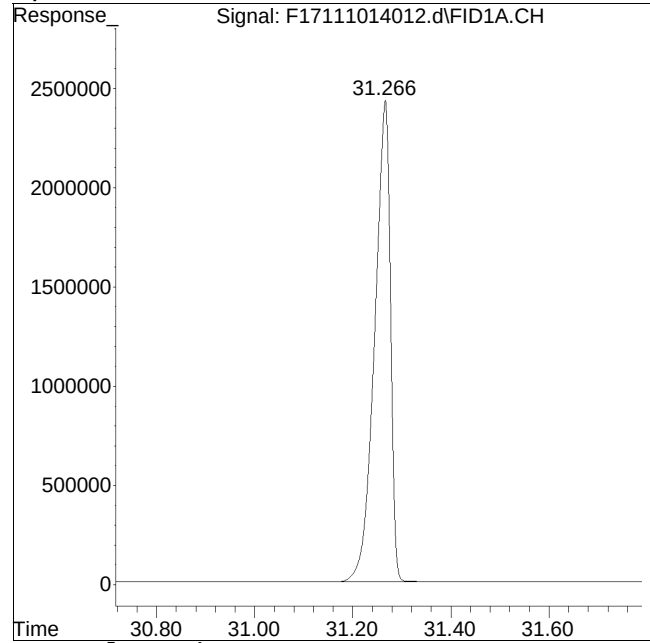
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #1: 5-alpha-androstane



Original Peak Response = 54120435



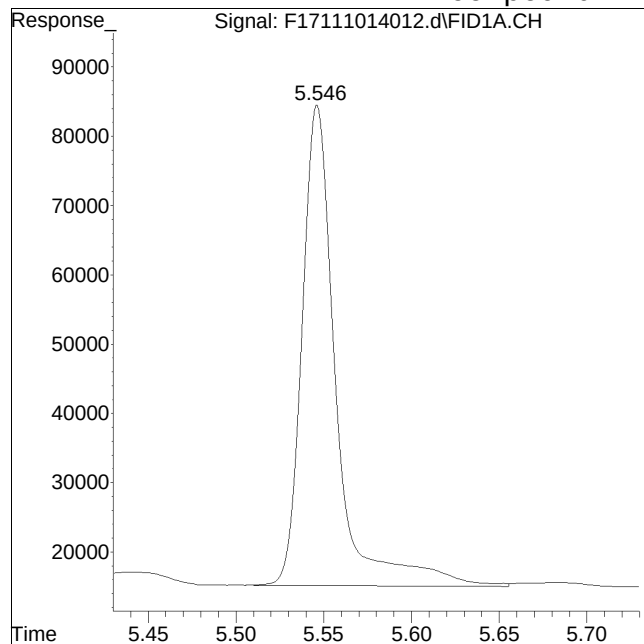
Manual Peak Response = 54151158 M4

M4 = Poor automated baseline construction.

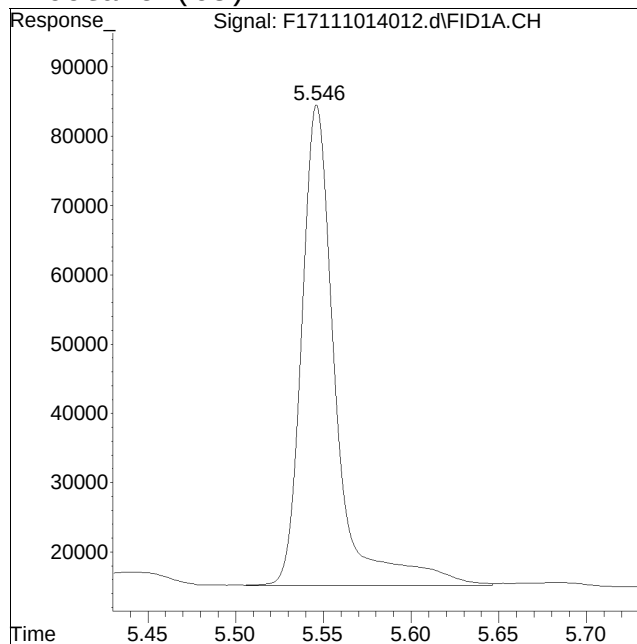
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #2: n-Octane (C8)



Original Peak Response = 936326



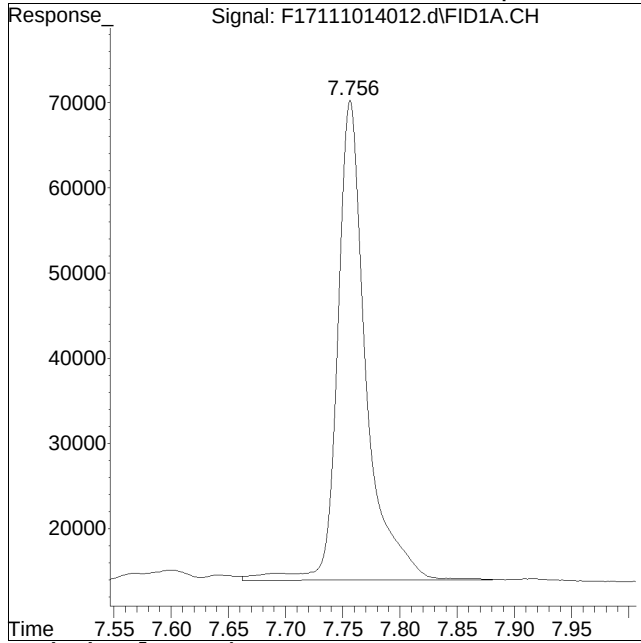
Manual Peak Response = 928802 M4

M4 = Poor automated baseline construction.

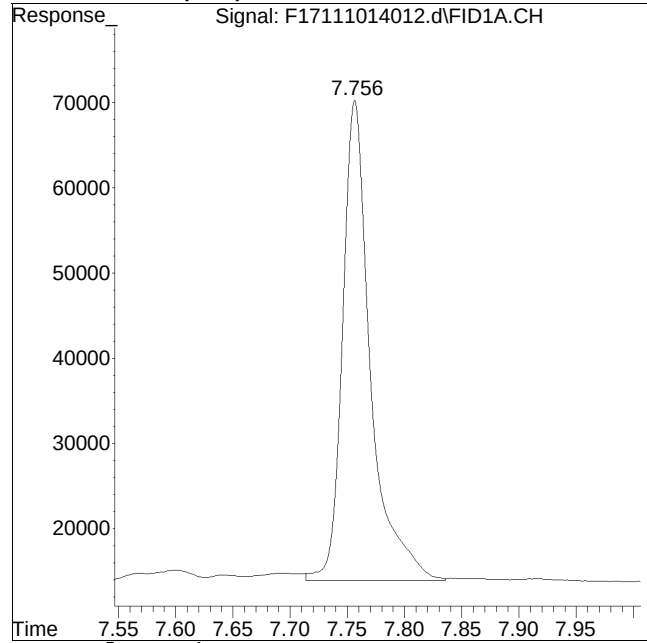
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #3: n-Nonane (C9)



Original Peak Response = 976987

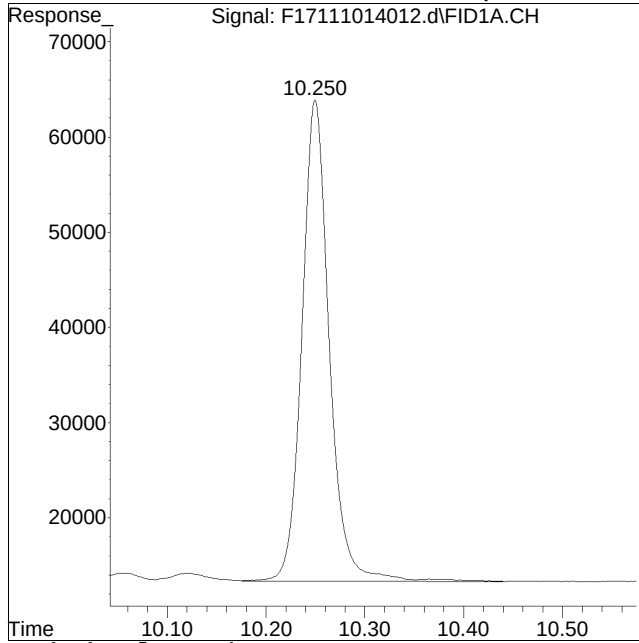


Manual Peak Response = 956167 M4

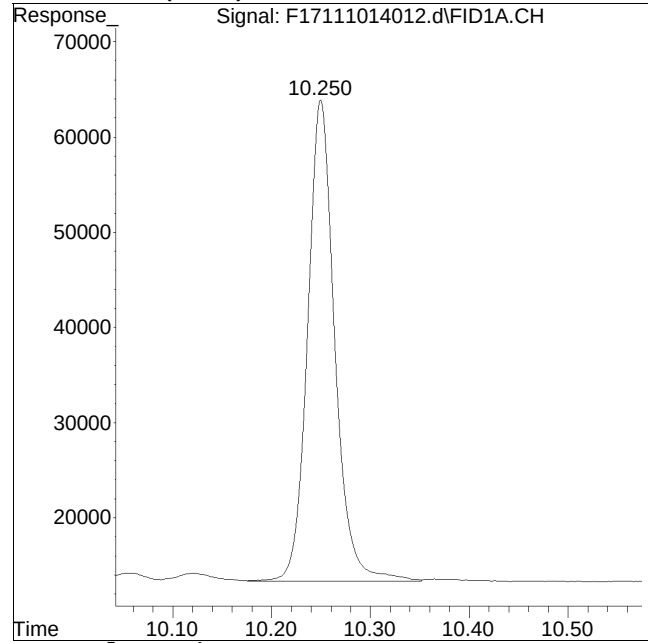
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #4: n-Decane (C10)



Original Peak Response = 974074



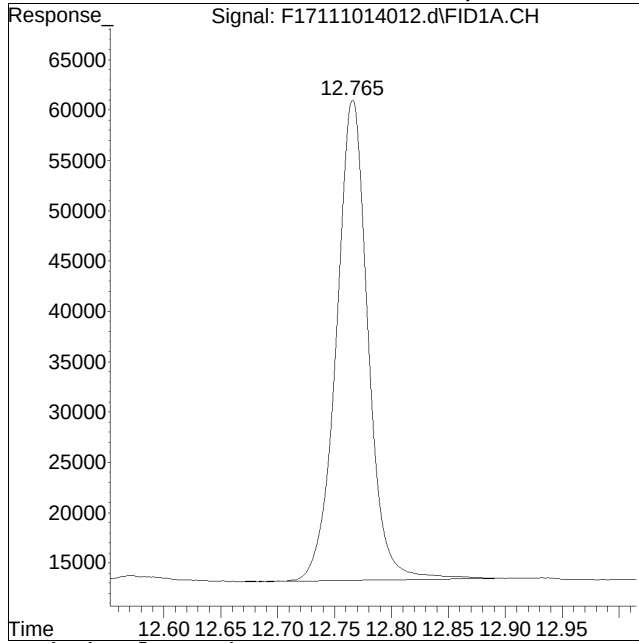
Manual Peak Response = 965575 M4

M4 = Poor automated baseline construction.

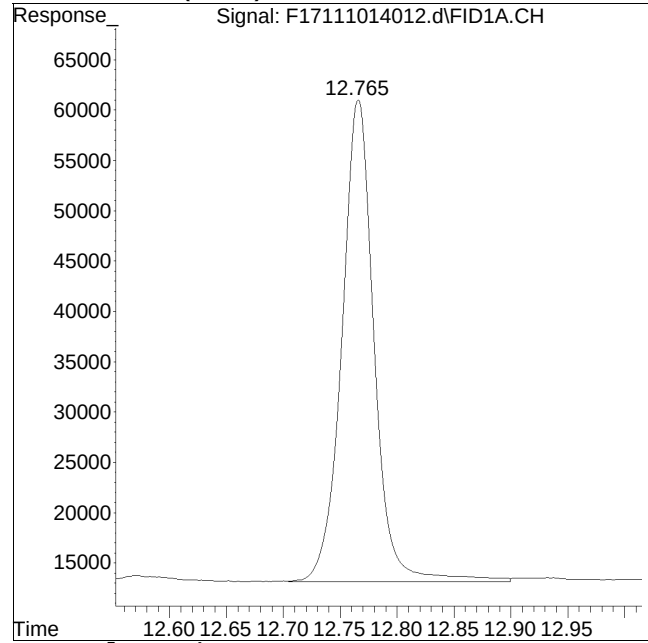
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #5: n-Undecane (C11)



Original Peak Response = 923969



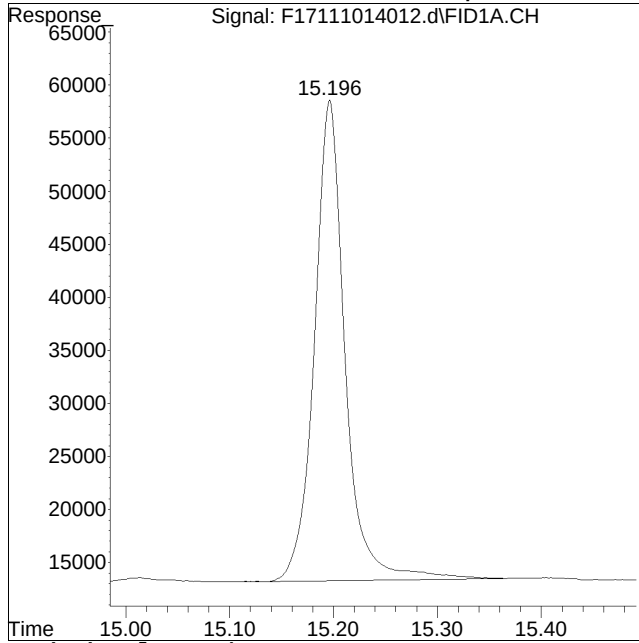
Manual Peak Response = 945978 M4

M4 = Poor automated baseline construction.

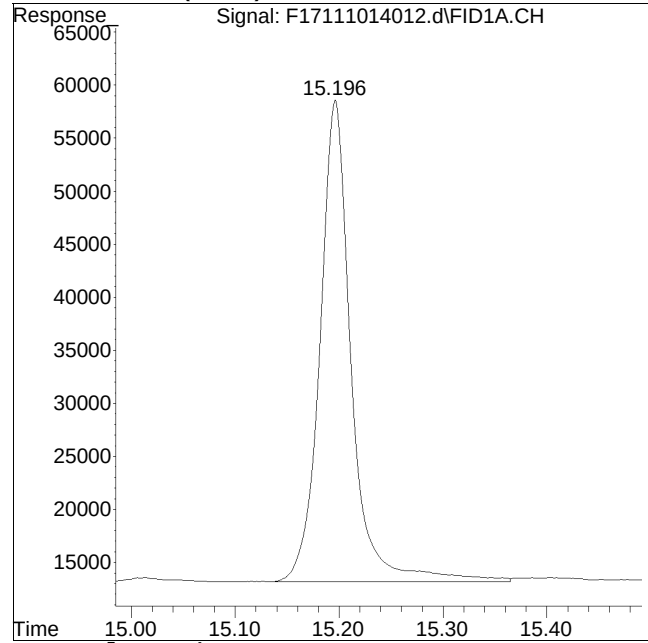
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #6: n-Dodecane (C12)



Original Peak Response = 930089



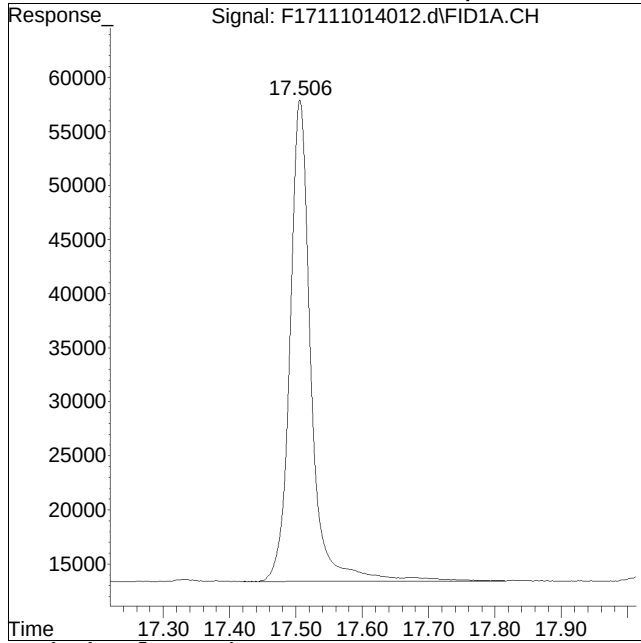
Manual Peak Response = 956041 M4

M4 = Poor automated baseline construction.

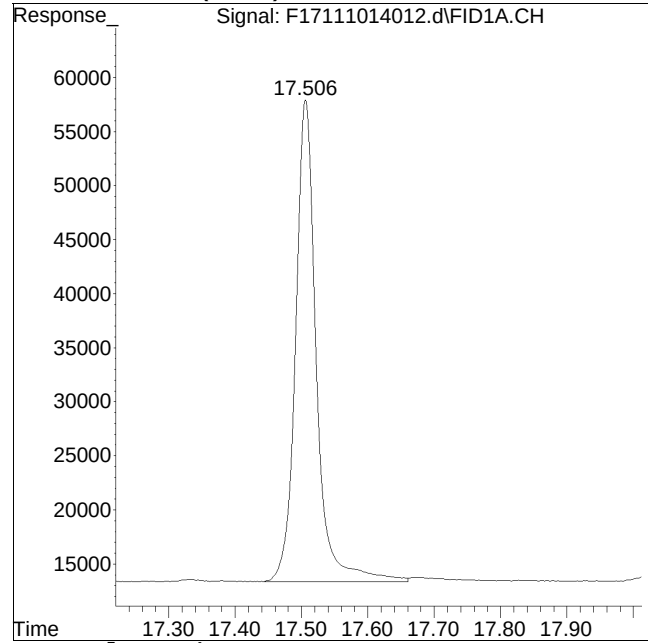
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #7: n-Tridecane (C13)



Original Peak Response = 977898



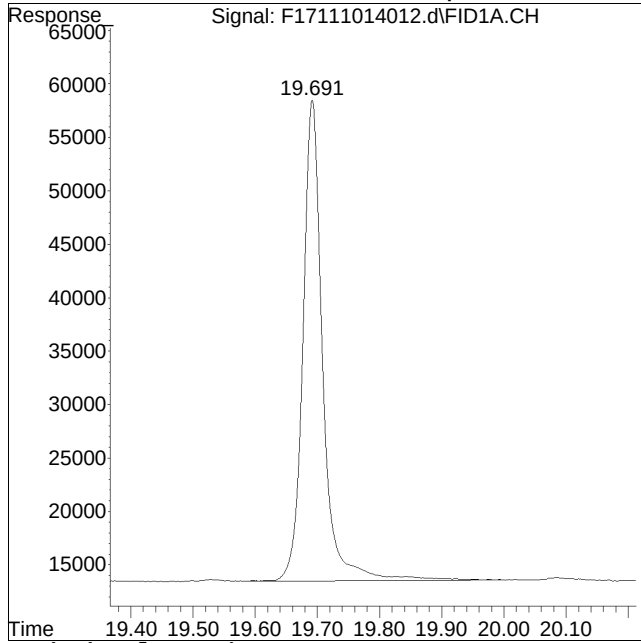
Manual Peak Response = 968666 M4

M4 = Poor automated baseline construction.

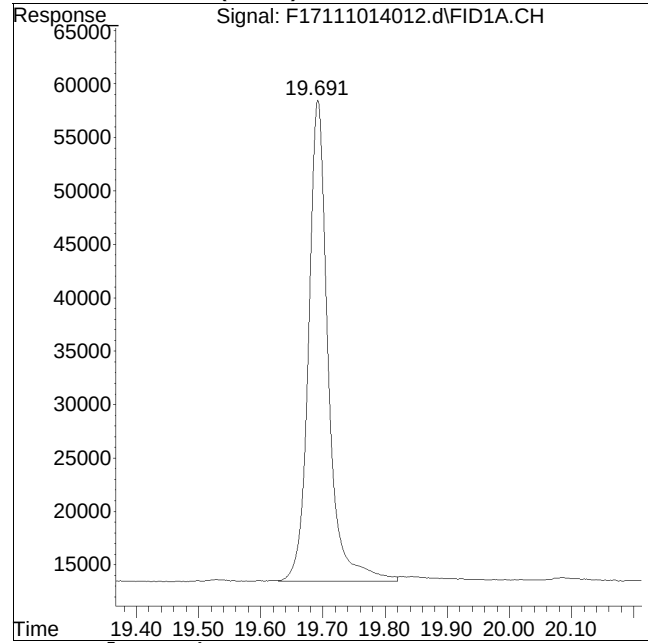
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #9: n-Tetradecane (C14)



Original Peak Response = 998749



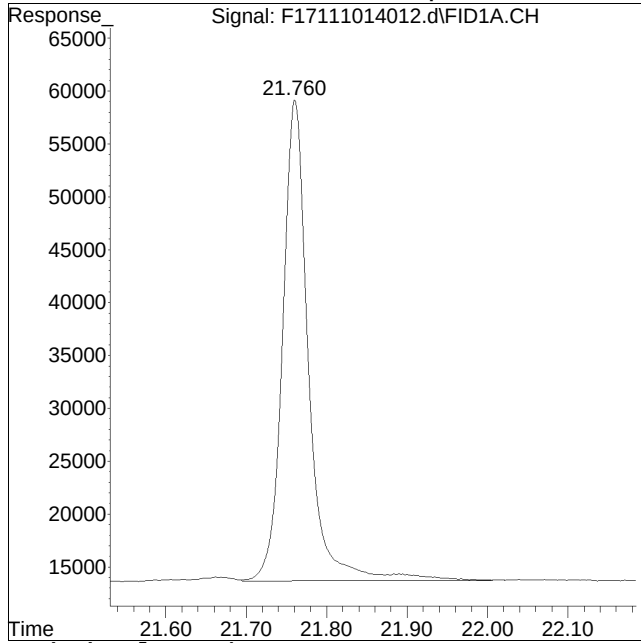
Manual Peak Response = 982915 M4

M4 = Poor automated baseline construction.

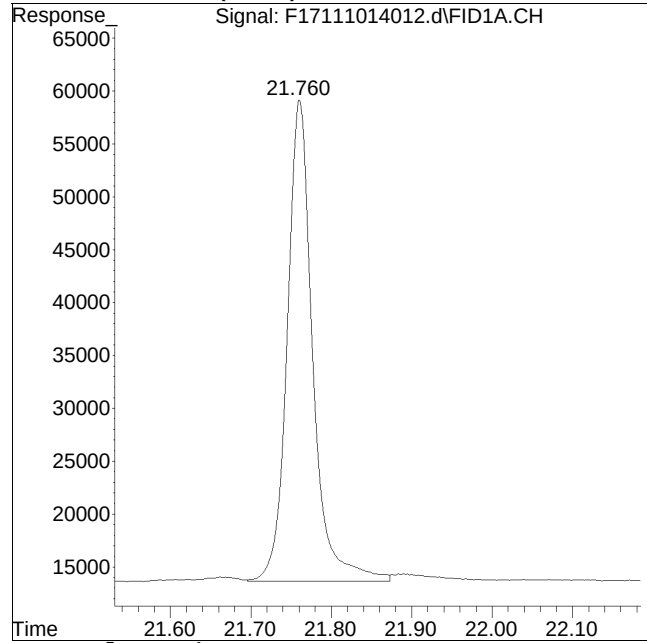
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #11: n-Pentadecane (C15)



Original Peak Response = 1021111



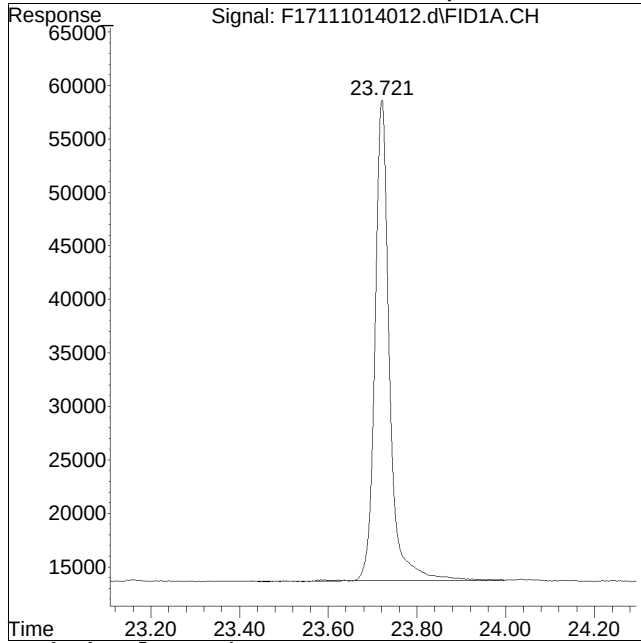
Manual Peak Response = 1003729 M4

M4 = Poor automated baseline construction.

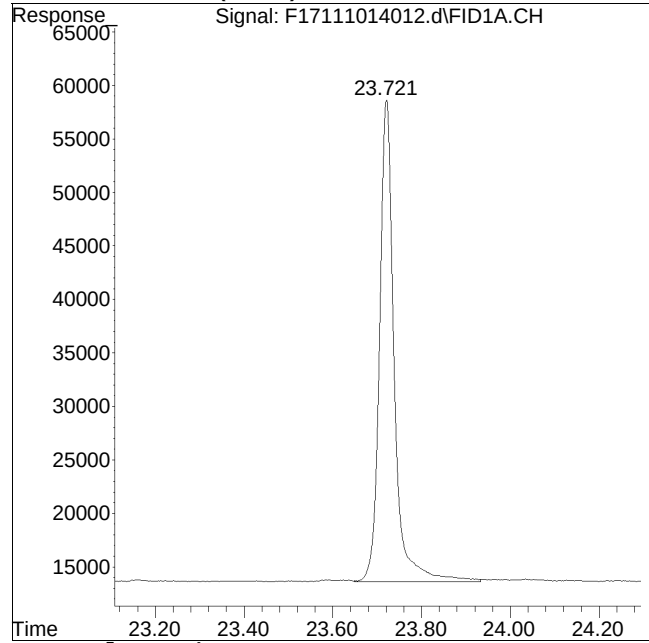
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #12: n-Hexadecane (C16)



Original Peak Response = 1020711



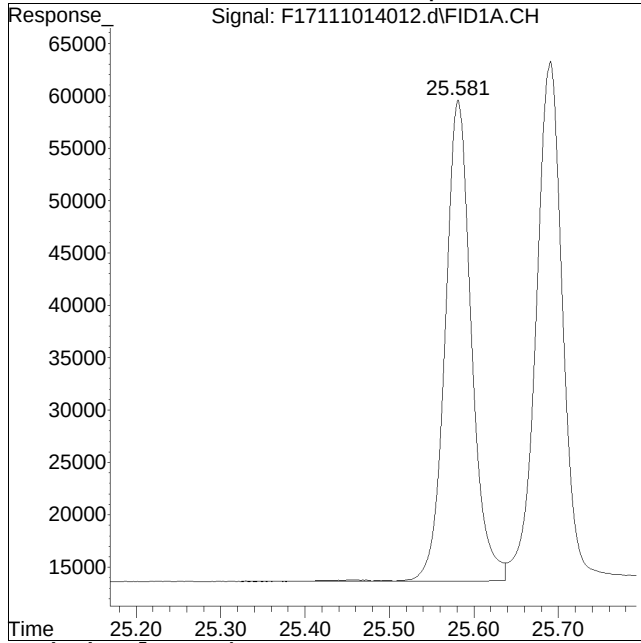
Manual Peak Response = 1037076 M4

M4 = Poor automated baseline construction.

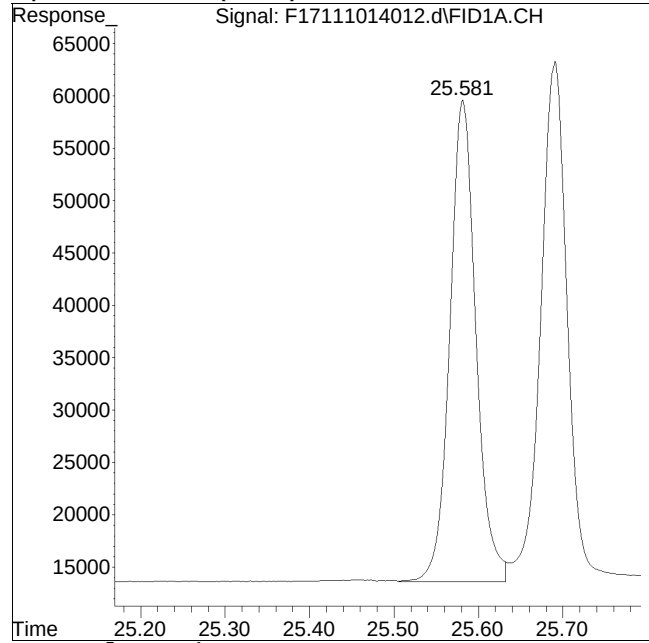
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #14: n-Heptadecane (C17)



Original Peak Response = 988250



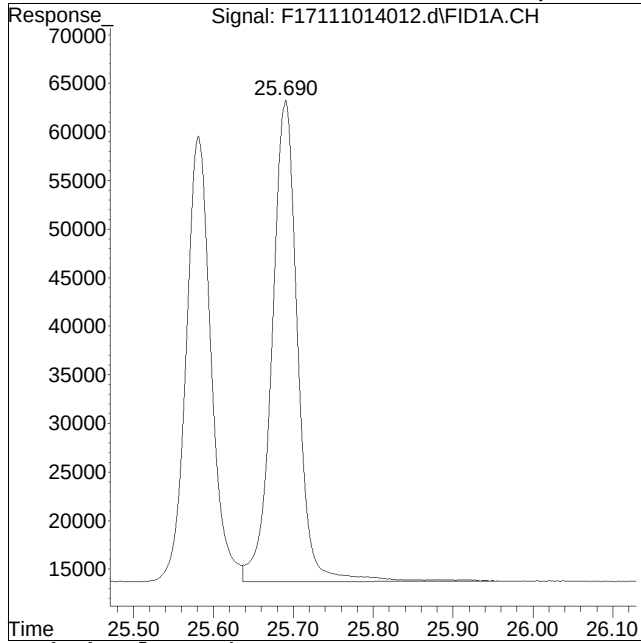
Manual Peak Response = 985154 M4

M4 = Poor automated baseline construction.

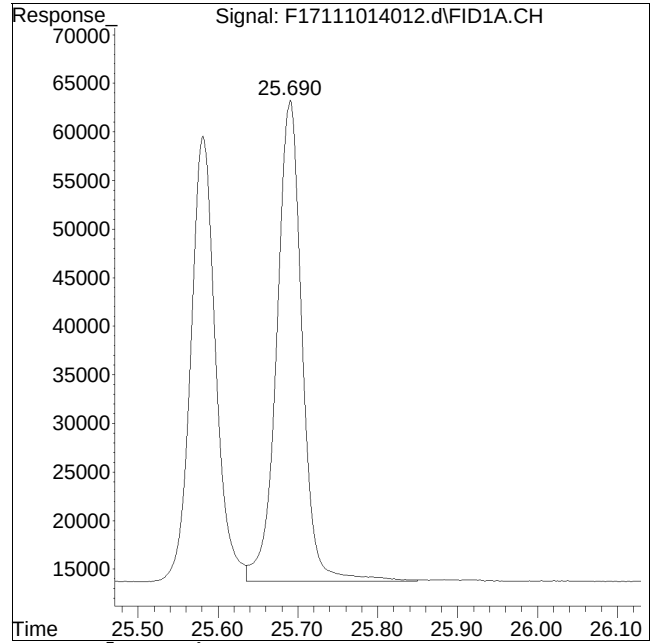
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #15: Pristane



Original Peak Response = 1102023



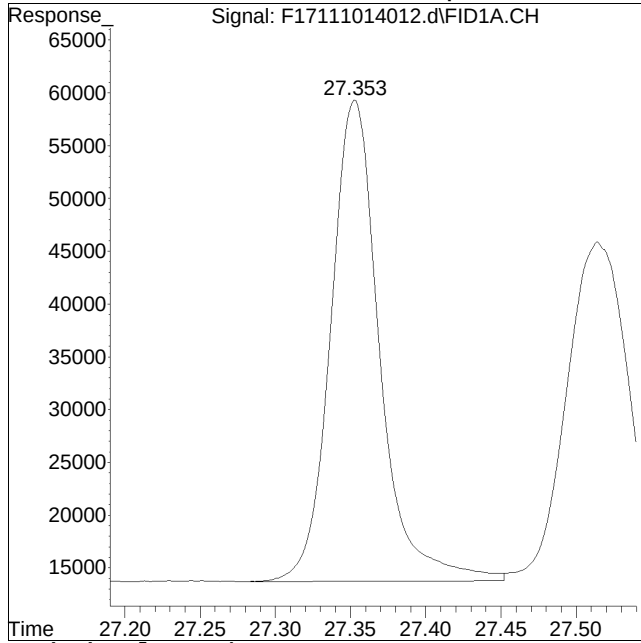
Manual Peak Response = 1093918 M4

M4 = Poor automated baseline construction.

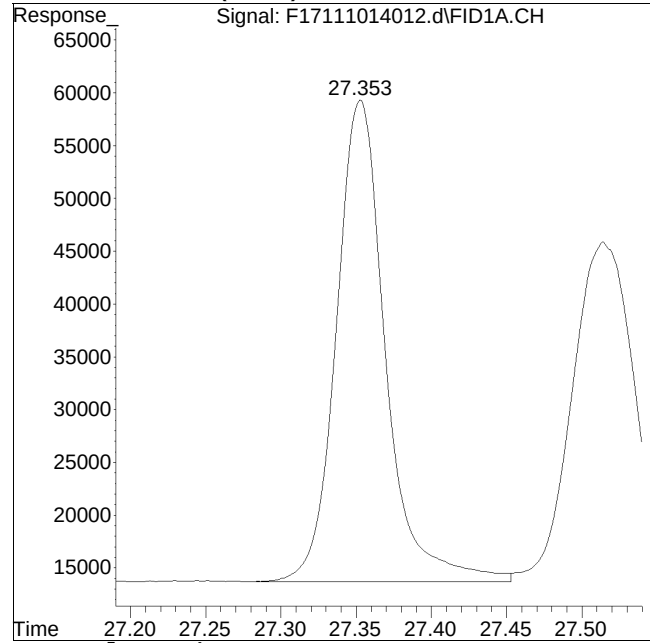
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #16: n-Octadecane (C18)



Original Peak Response = 1032053



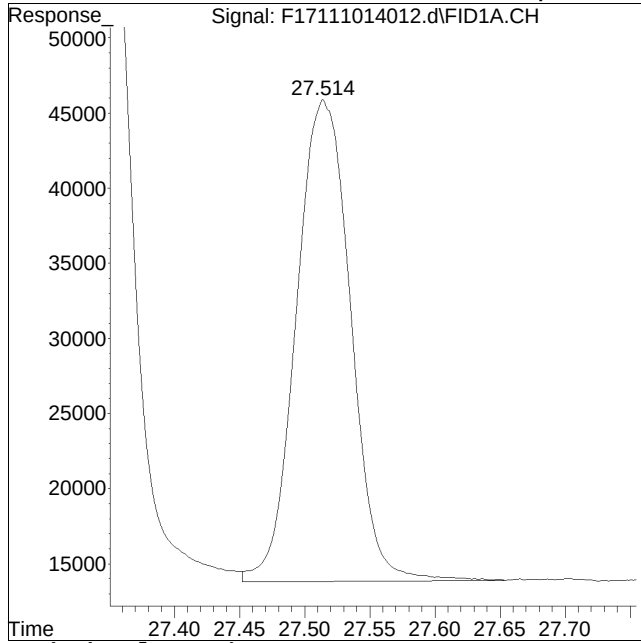
Manual Peak Response = 1038773 M4

M4 = Poor automated baseline construction.

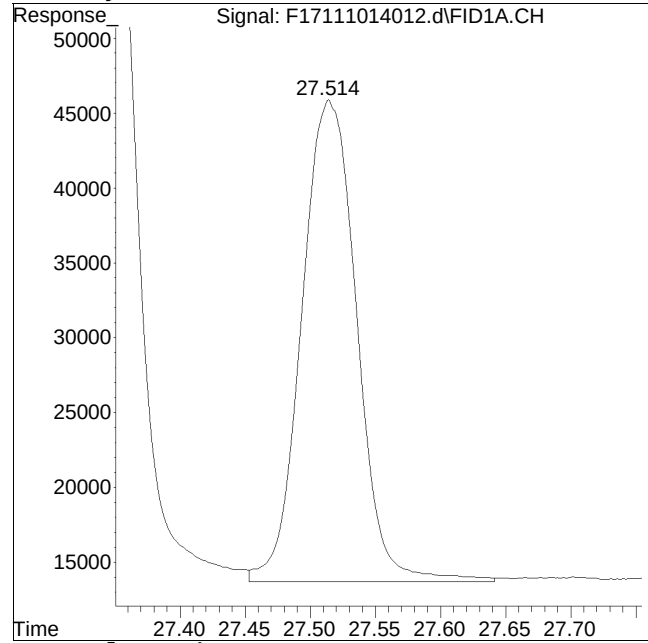
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #17: Phytane



Original Peak Response = 931411



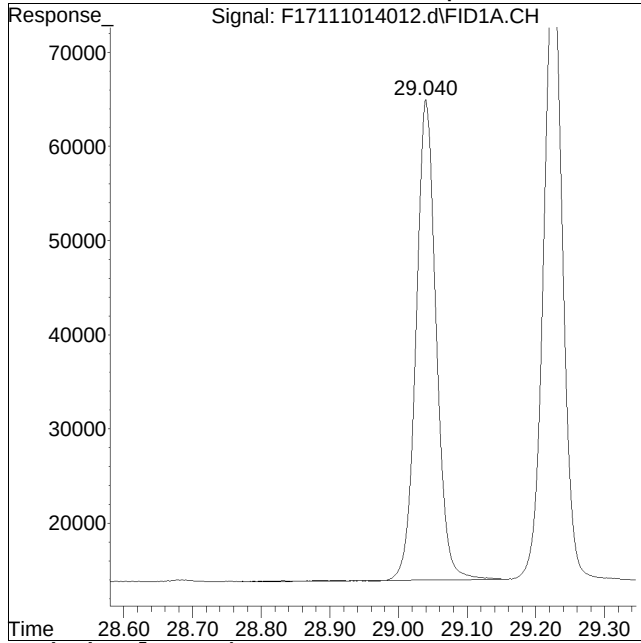
Manual Peak Response = 947367 M4

M4 = Poor automated baseline construction.

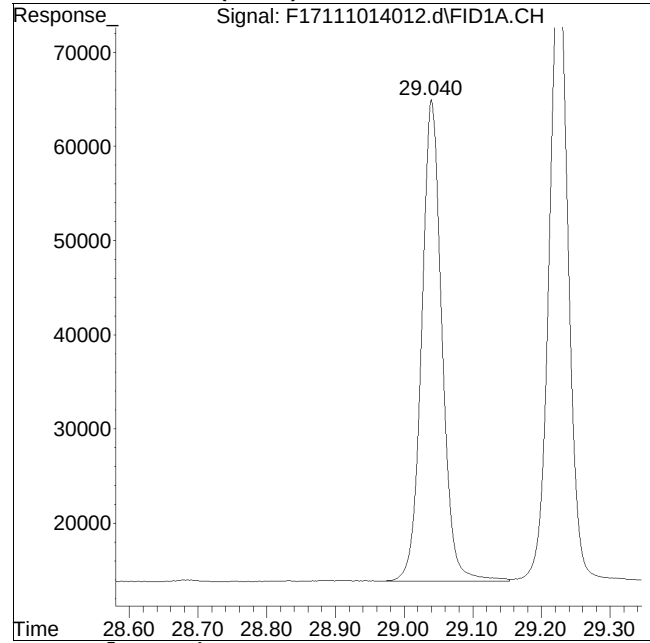
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #18: n-Nonadecane (C19)



Original Peak Response = 1036098



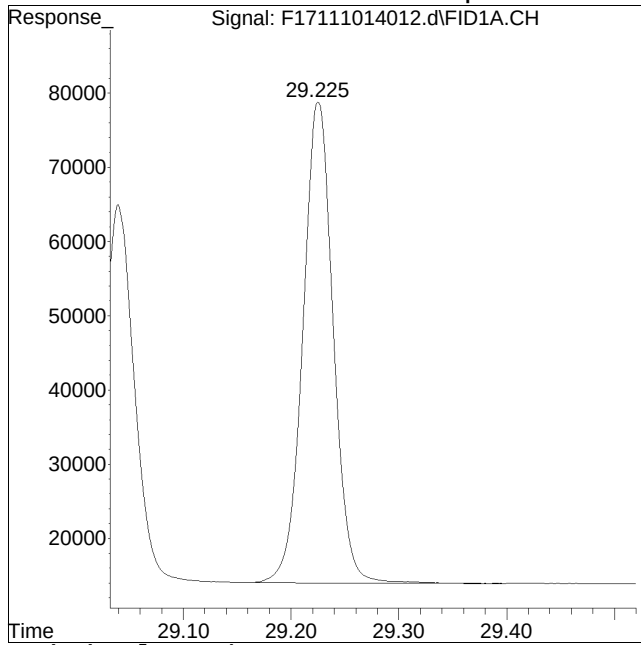
Manual Peak Response = 1048874 M4

M4 = Poor automated baseline construction.

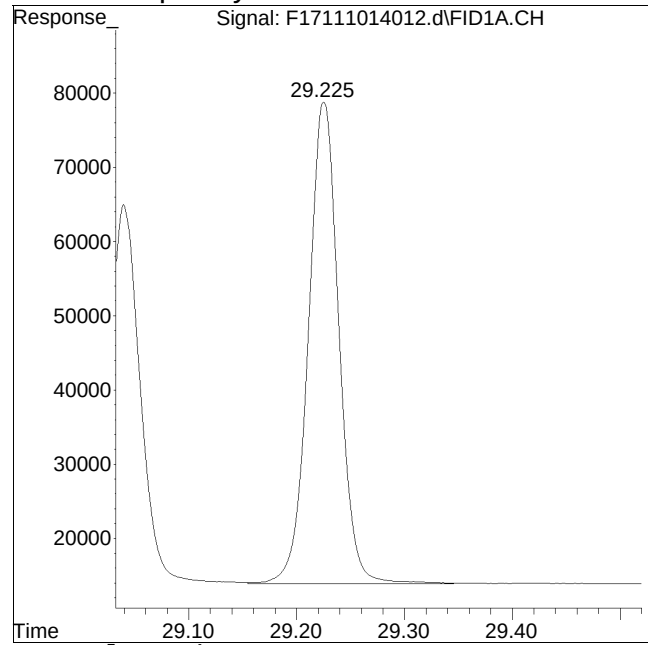
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #19: ortho-terphenyl



Original Peak Response = 1264243



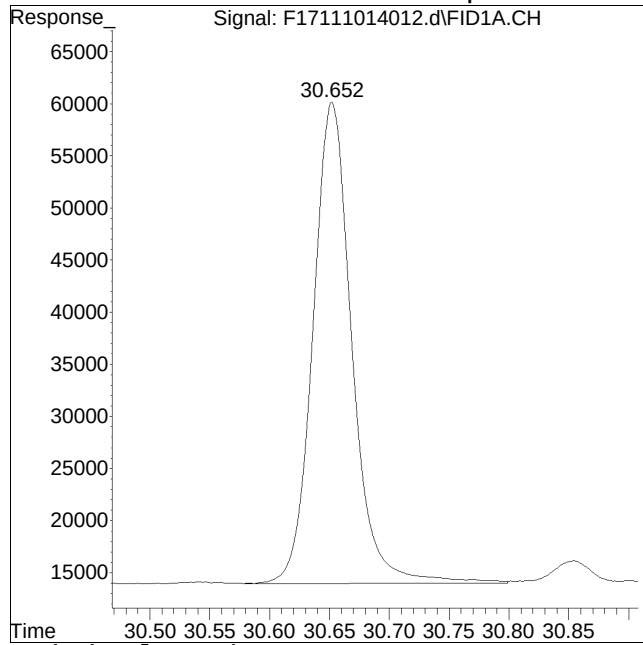
Manual Peak Response = 1270913 M4

M4 = Poor automated baseline construction.

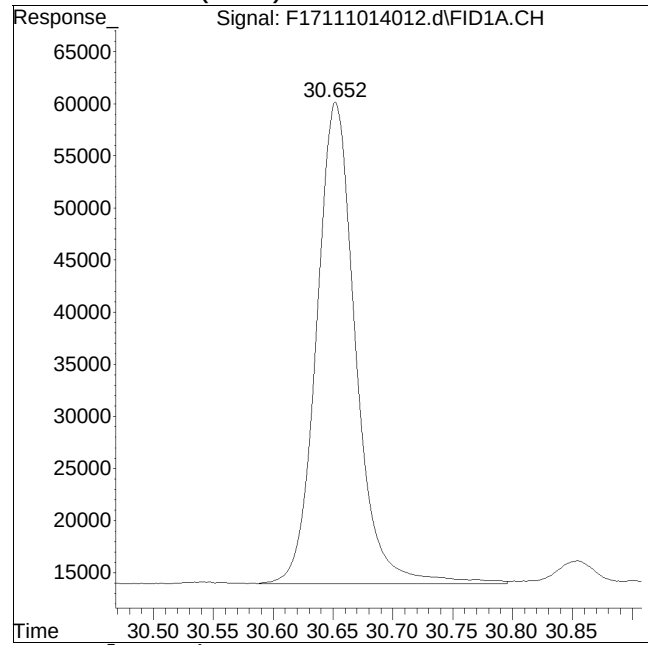
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #20: n-Eicosane (C20)



Original Peak Response = 1045495



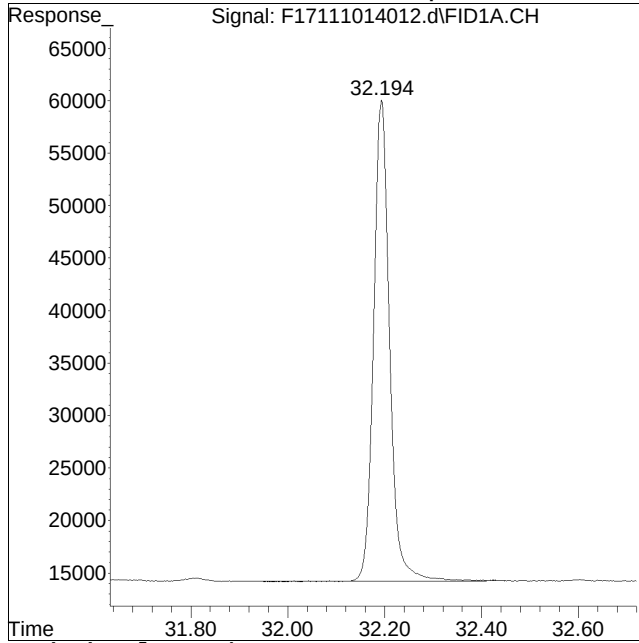
Manual Peak Response = 1050923 M4

M4 = Poor automated baseline construction.

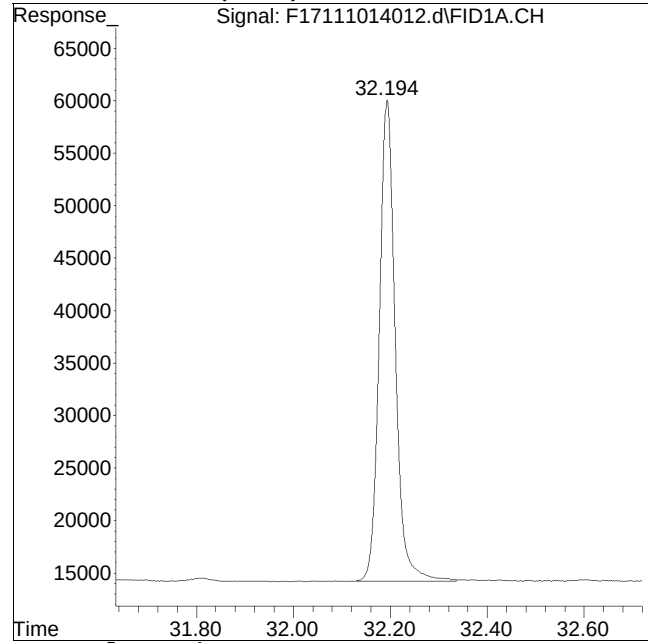
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #21: n-Heneicosane (C21)



Original Peak Response = 1049843



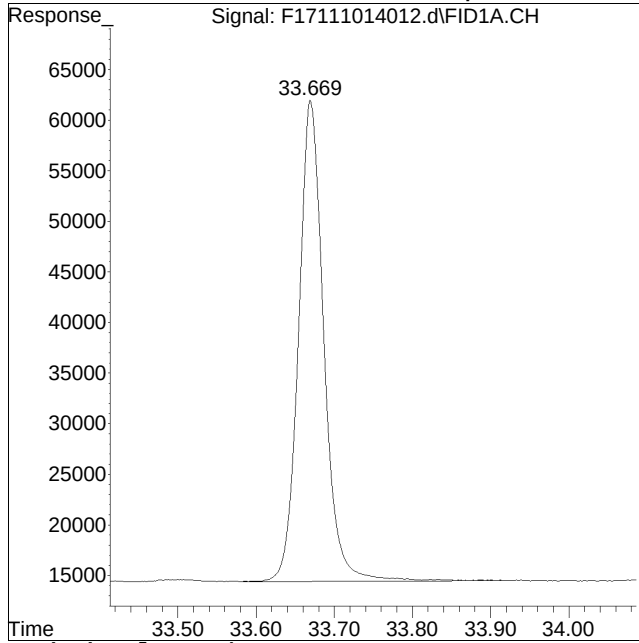
Manual Peak Response = 1052164 M4

M4 = Poor automated baseline construction.

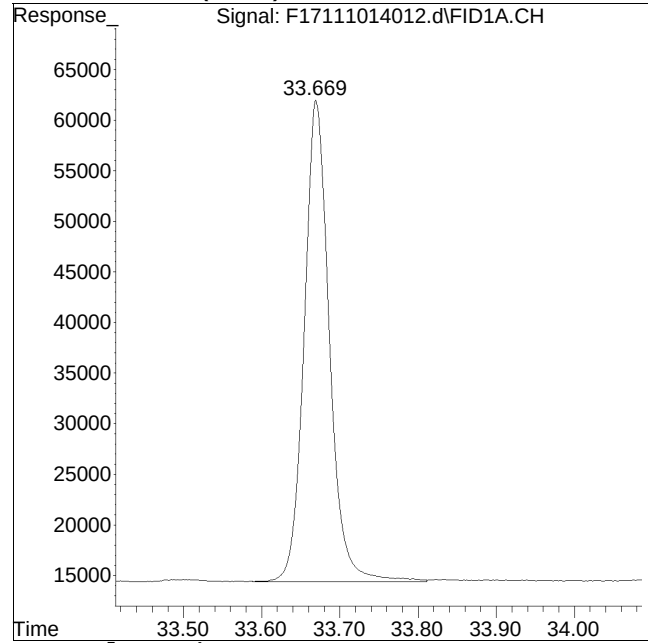
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #22: n-Docosane (C22)



Original Peak Response = 1066831



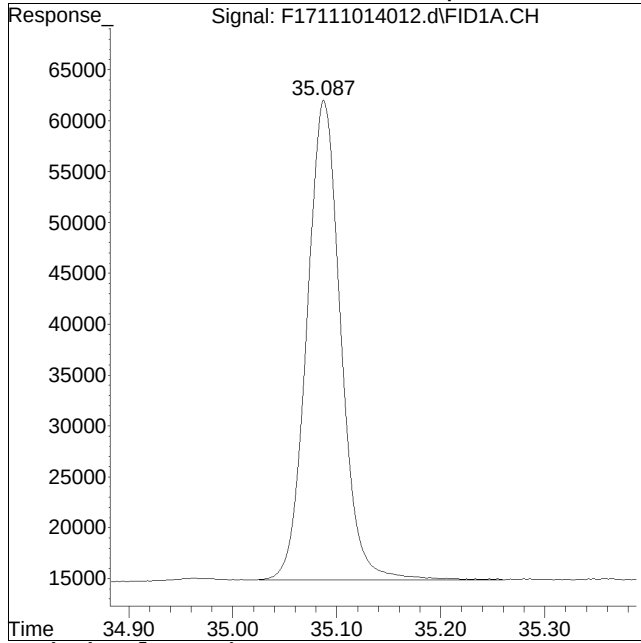
Manual Peak Response = 1067395 M4

M4 = Poor automated baseline construction.

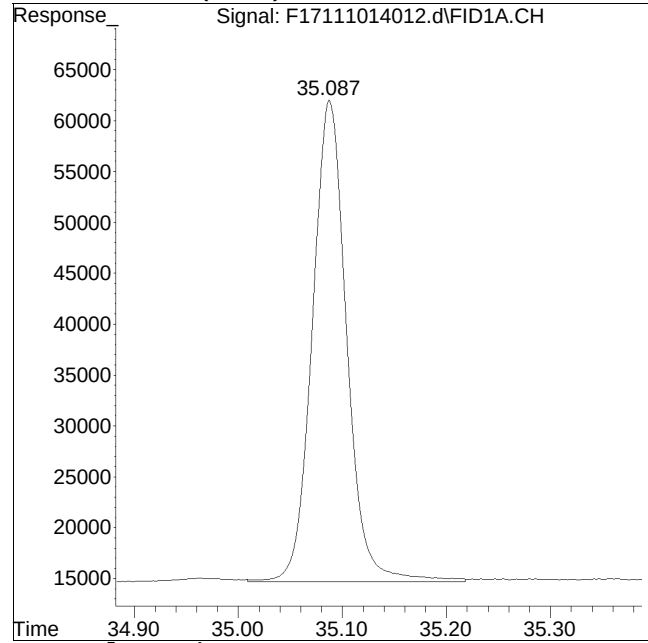
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #23: n-Tricosane (C23)



Original Peak Response = 1064606



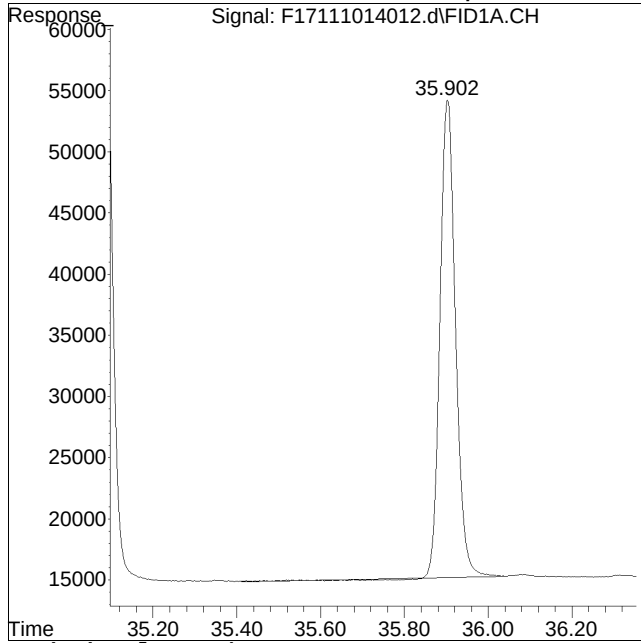
Manual Peak Response = 1084446 M4

M4 = Poor automated baseline construction.

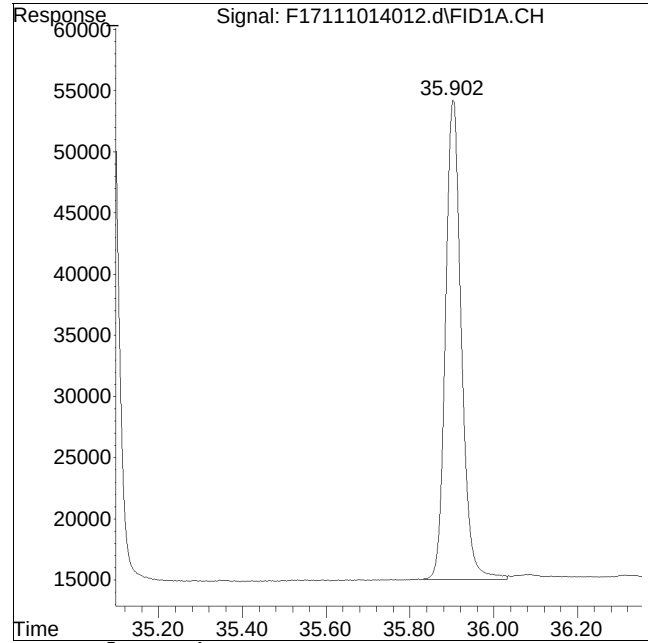
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #24: d50-Tetracosane



Original Peak Response = 1002696



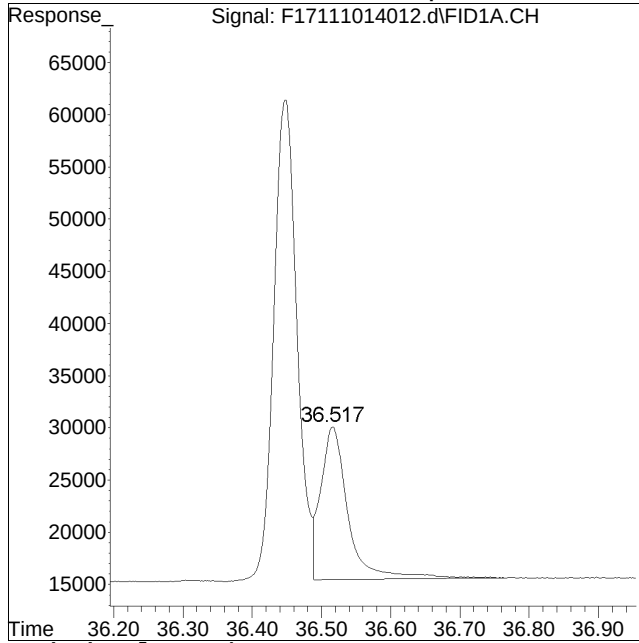
Manual Peak Response = 1028871 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

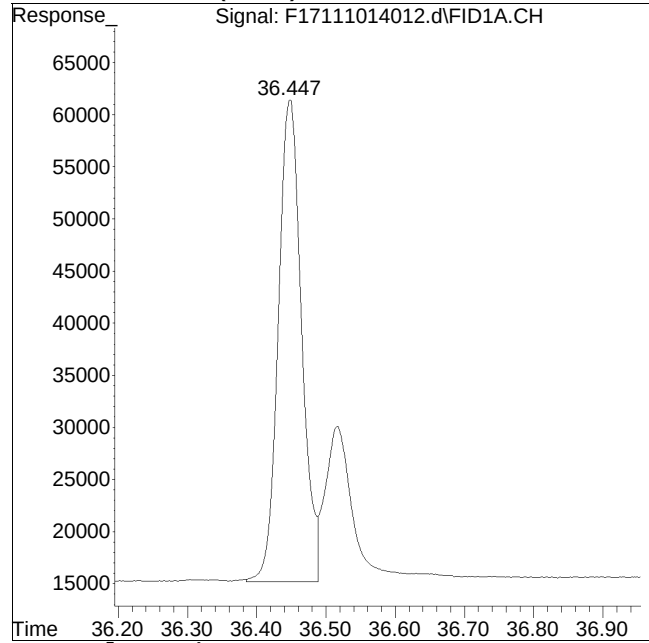
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #25: n-Tetracosane (C24)



Original Peak Response = 406392

M4 = Poor automated baseline construction.

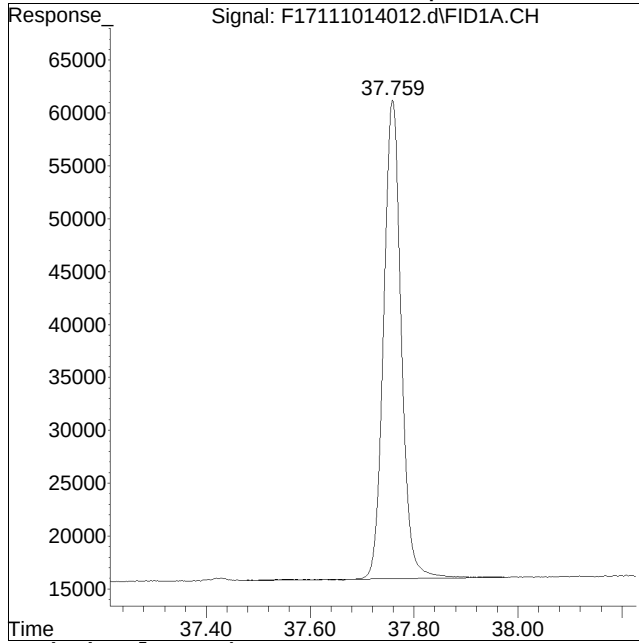


Manual Peak Response = 1076774 M4

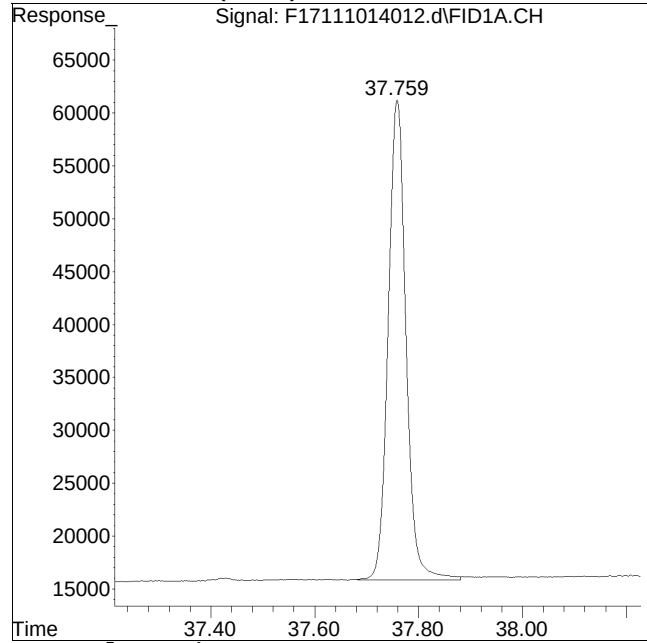
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #26: n-Pentacosane (C25)



Original Peak Response = 1068066



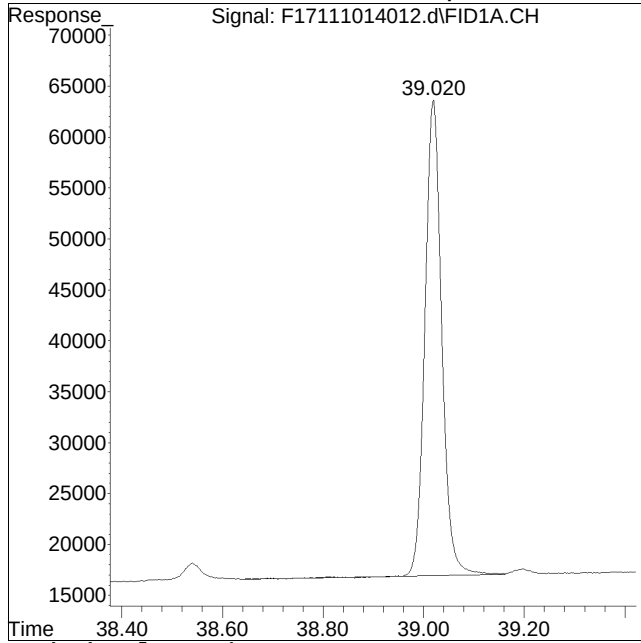
Manual Peak Response = 1076155 M4

M4 = Poor automated baseline construction.

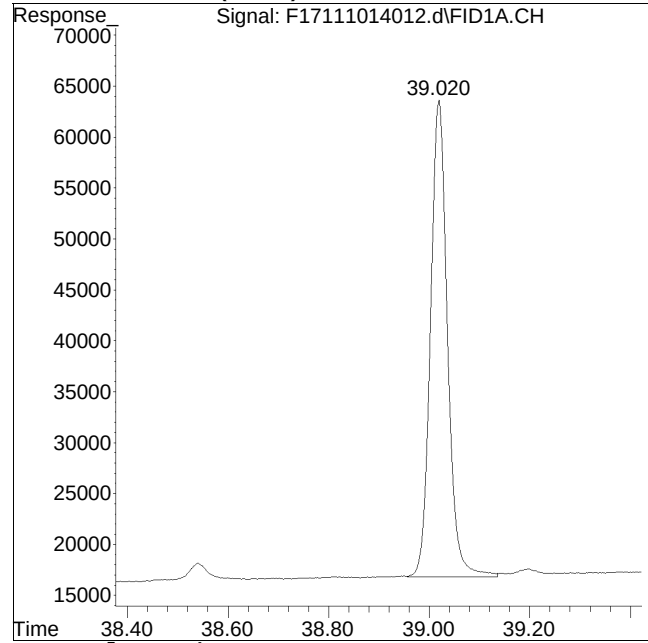
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #27: n-Hexacosane (C26)



Original Peak Response = 1084867



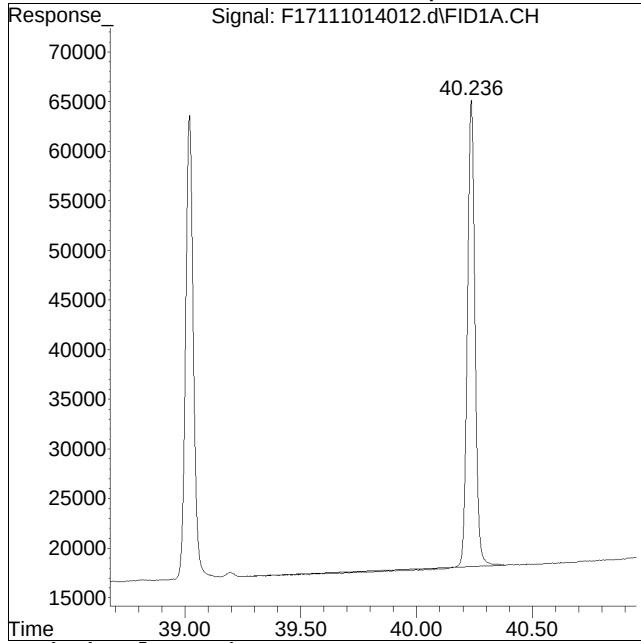
Manual Peak Response = 1095973 M4

M4 = Poor automated baseline construction.

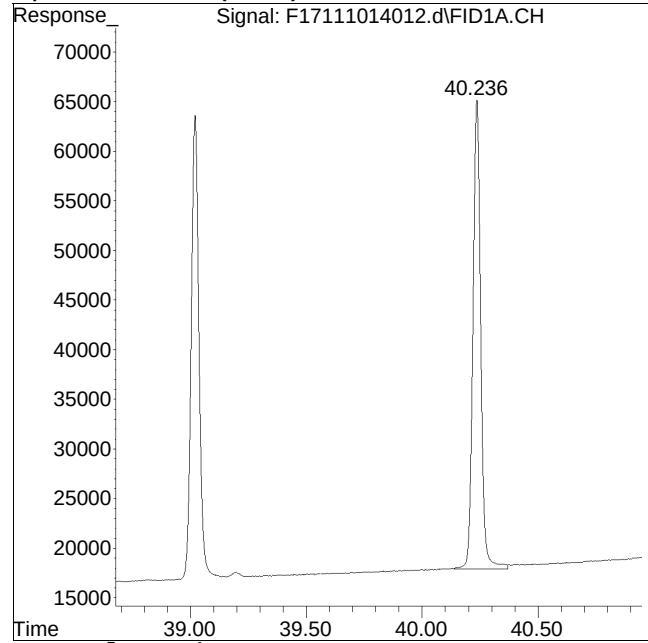
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #28: n-Heptacosane (C27)



Original Peak Response = 1035449



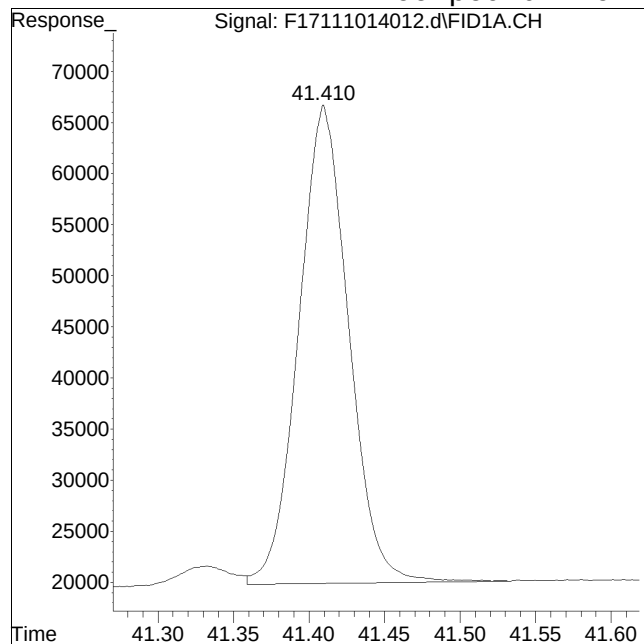
Manual Peak Response = 1108390 M4

M4 = Poor automated baseline construction.

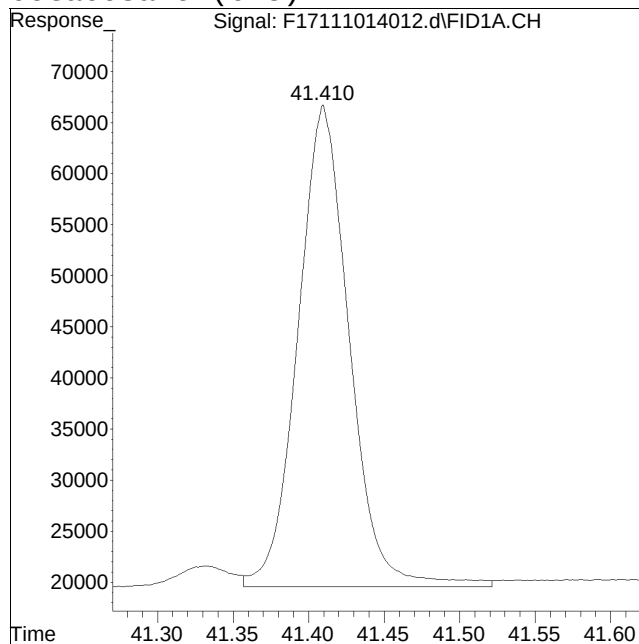
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #29: n-Octacosane (C28)



Original Peak Response = 1075963



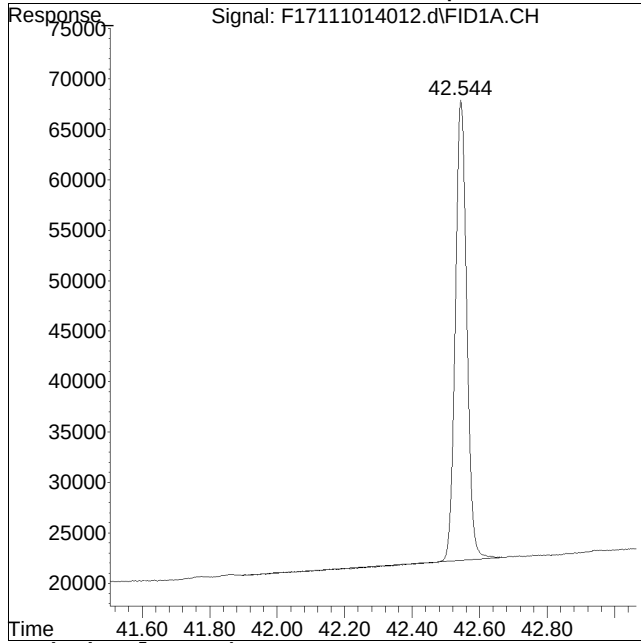
Manual Peak Response = 1117077 M4

M4 = Poor automated baseline construction.

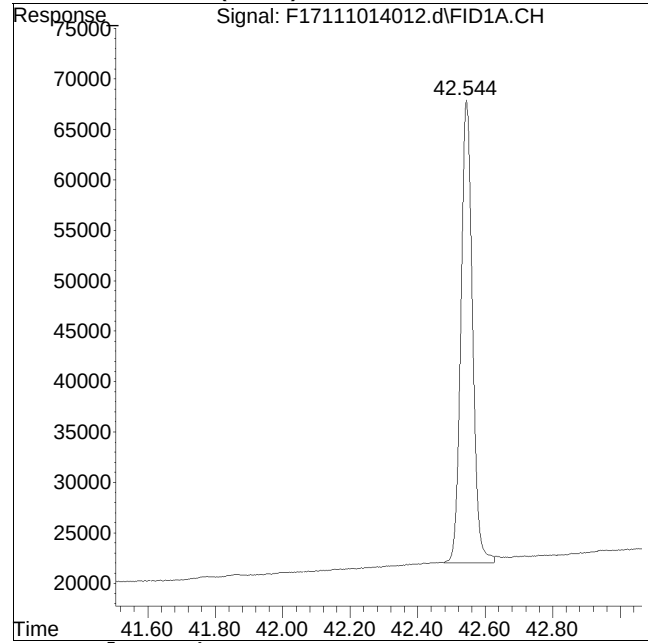
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #30: n-Nonacosane (C29)



Original Peak Response = 1066445



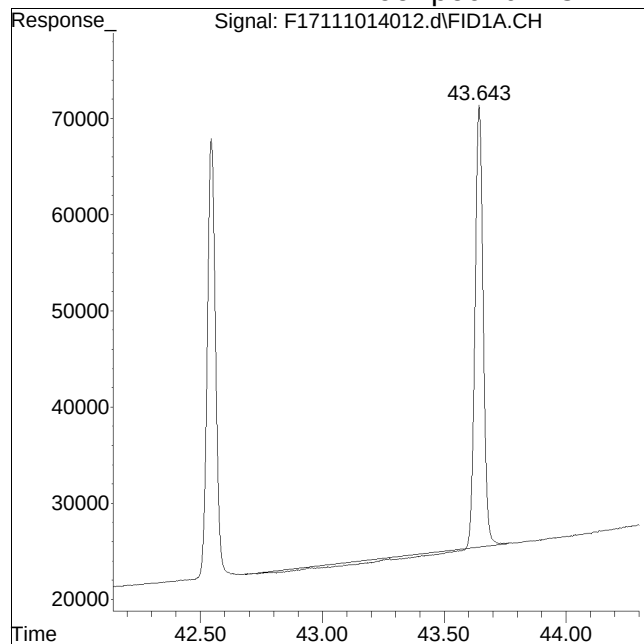
Manual Peak Response = 1093208 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

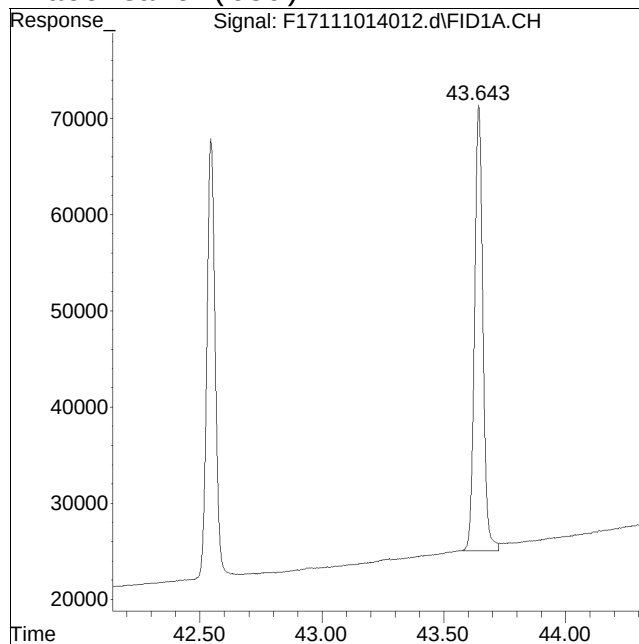
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #31: n-Triacontane (C30)



Original Peak Response = 958793

M4 = Poor automated baseline construction.

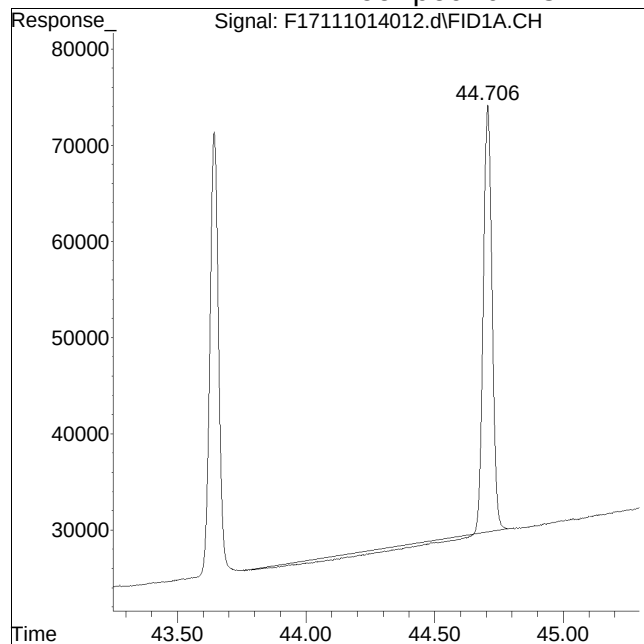


Manual Peak Response = 1105801 M4

Manual Integration/Negative Proof Report

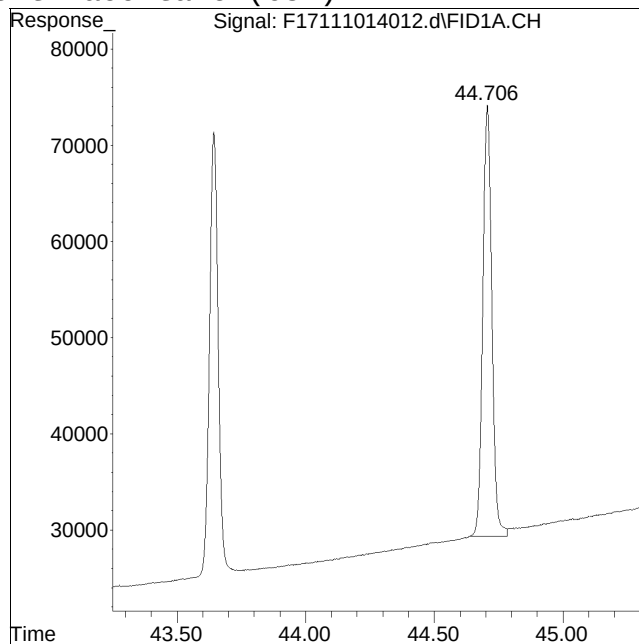
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #32: n-Hentriacontane (C31)



Original Peak Response = 915445

M4 = Poor automated baseline construction.

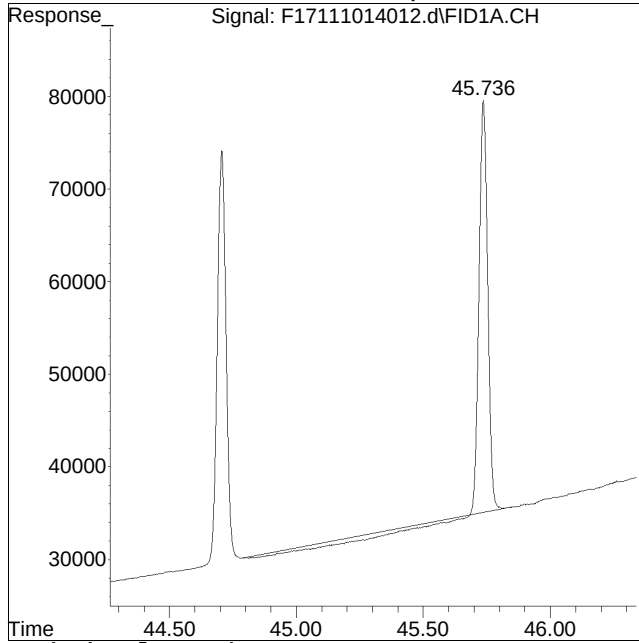


Manual Peak Response = 1100717 M4

Manual Integration/Negative Proof Report

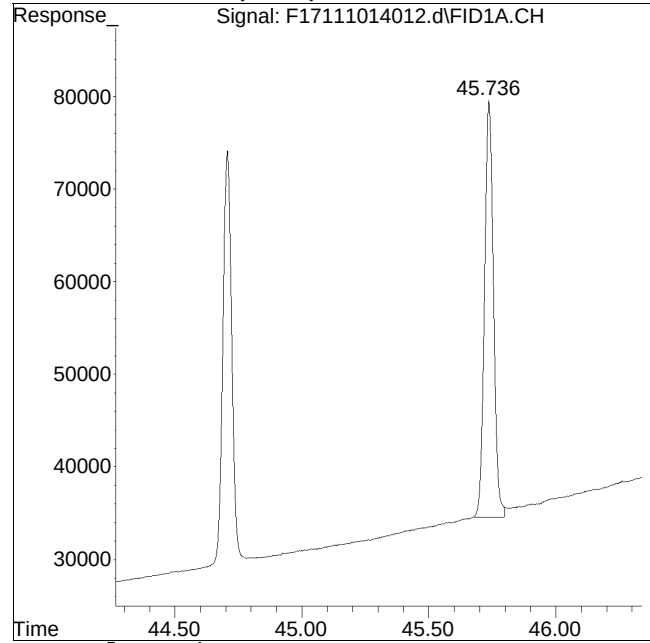
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #33: n-Dotriacontane (C32)



Original Peak Response = 878165

M4 = Poor automated baseline construction.

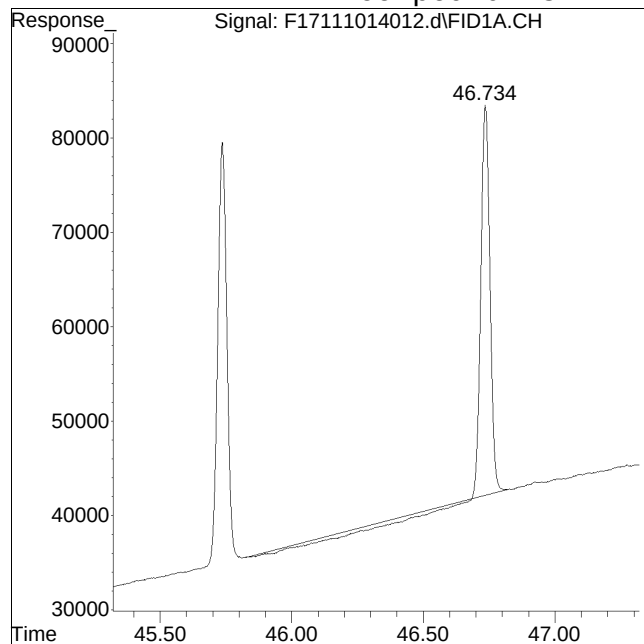


Manual Peak Response = 1099086 M4

Manual Integration/Negative Proof Report

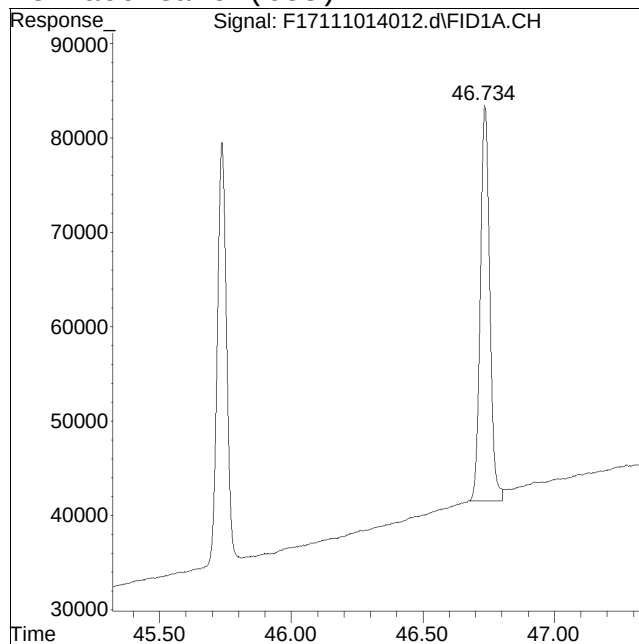
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #34: n-Tritriacontane (C33)



Original Peak Response = 829578

M4 = Poor automated baseline construction.

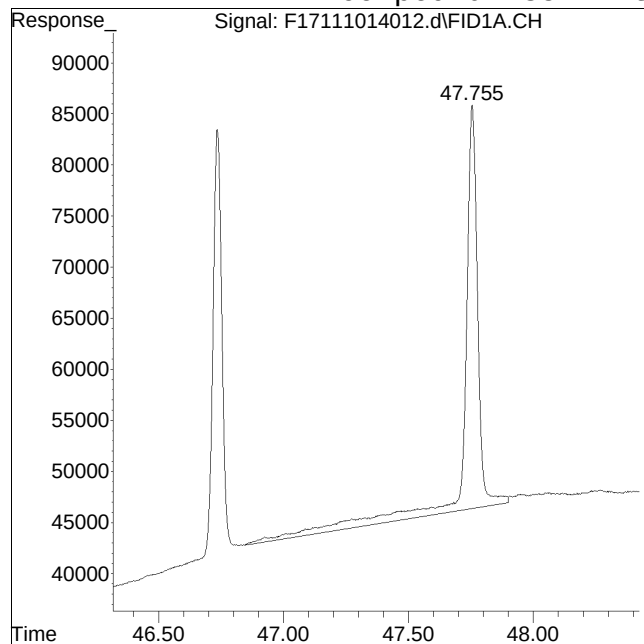


Manual Peak Response = 1045499 M4

Manual Integration/Negative Proof Report

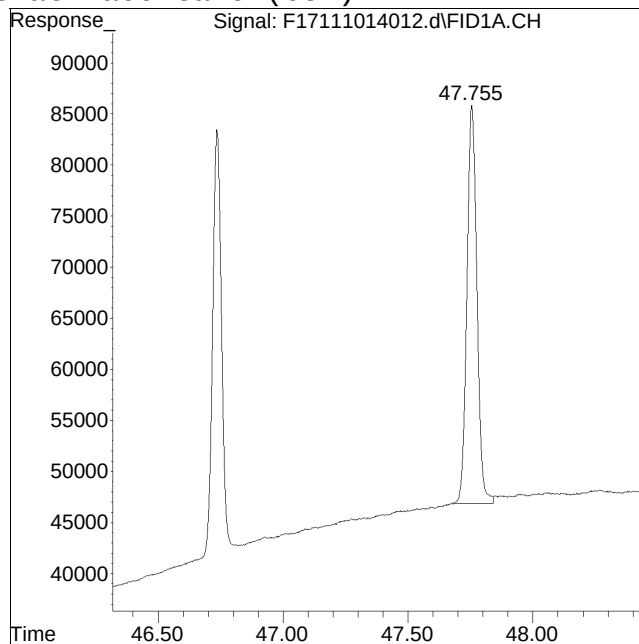
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #35: n-tetratriacontane (C34)



Original Peak Response = 1455441

M4 = Poor automated baseline construction.

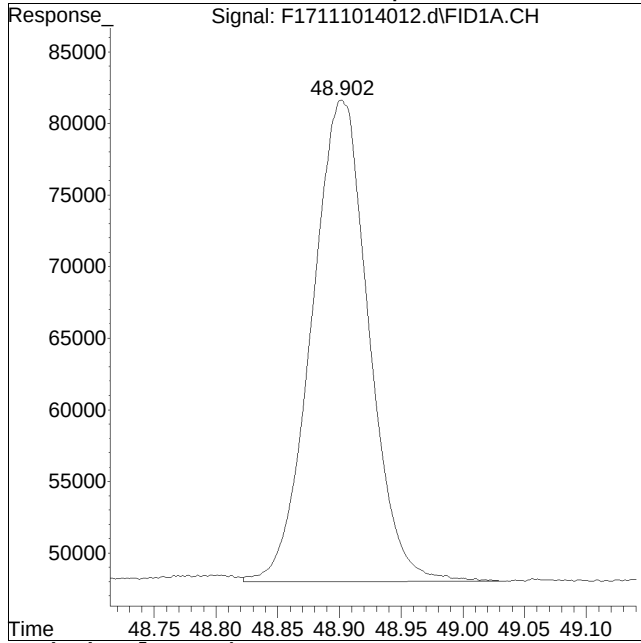


Manual Peak Response = 1083357 M4

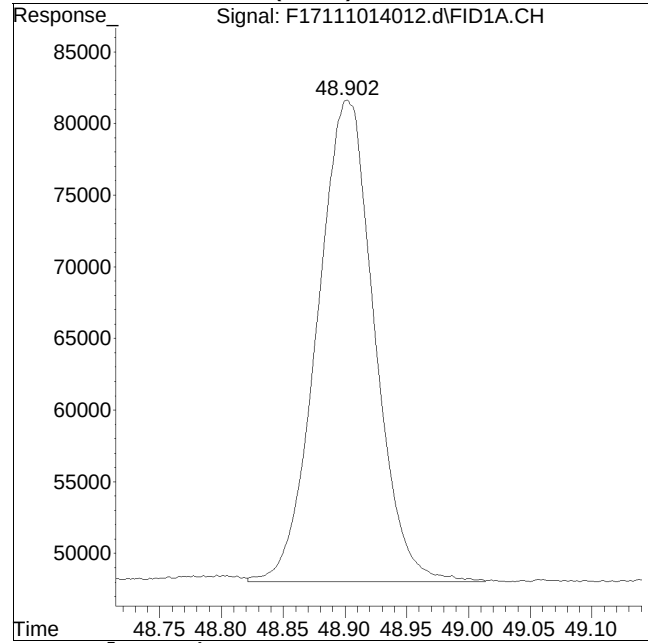
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #36: n-Pentatriacontane (C35)



Original Peak Response = 1082549



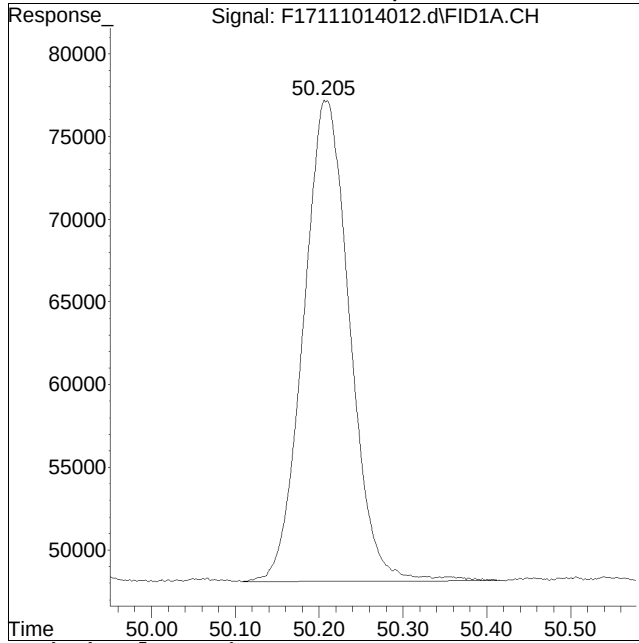
Manual Peak Response = 1079522 M4

M4 = Poor automated baseline construction.

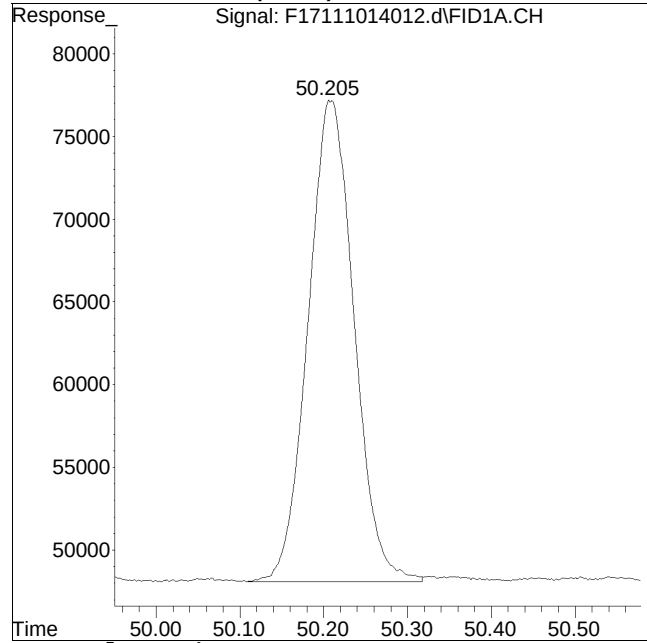
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #37: n-Hexatriacontane (C36)



Original Peak Response = 1115286



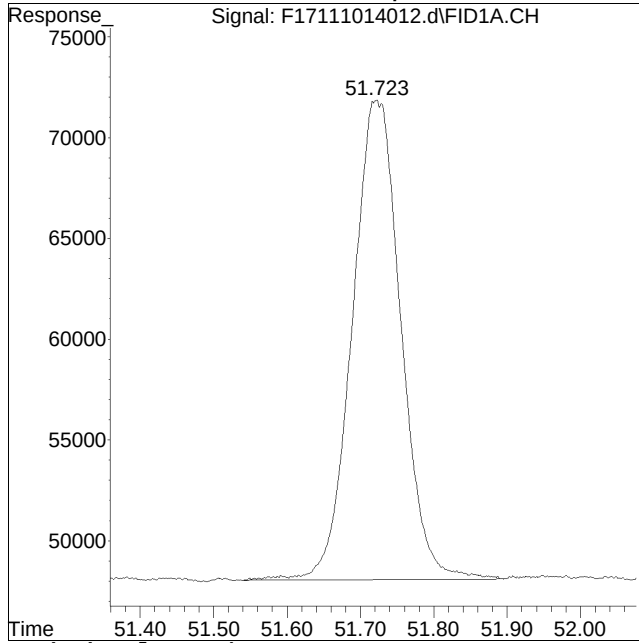
Manual Peak Response = 1109799 M4

M4 = Poor automated baseline construction.

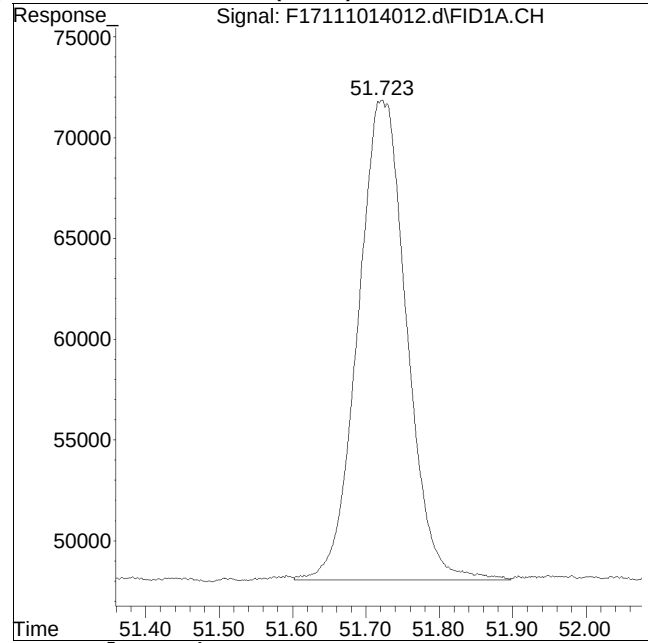
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #38: n-Heptatriacontane (C37)



Original Peak Response = 1095611



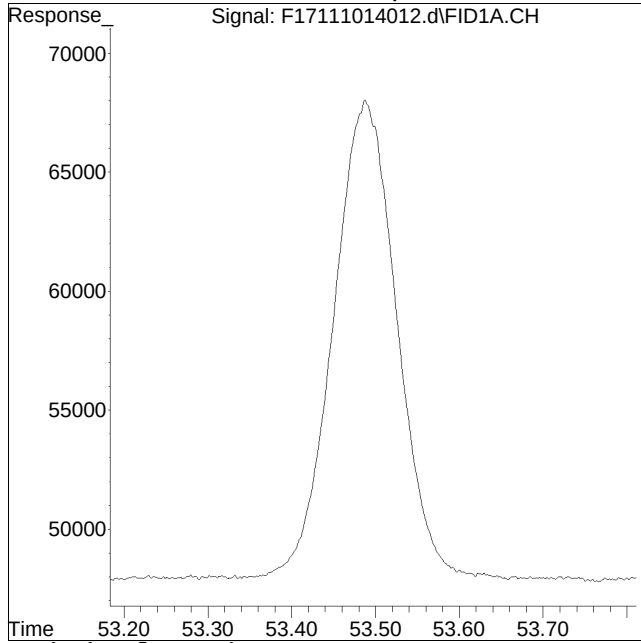
Manual Peak Response = 1096538 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

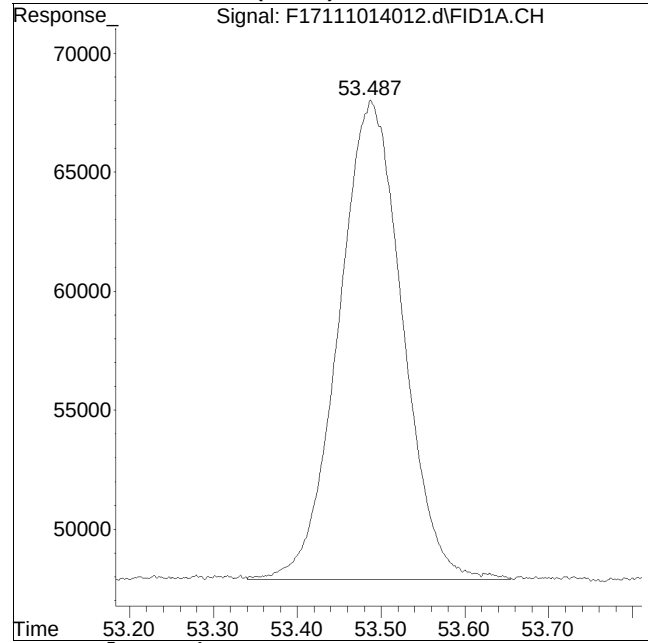
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #39: n-Octatriacontane (C38)



Original Peak Response = 0

M4 = Poor automated baseline construction.

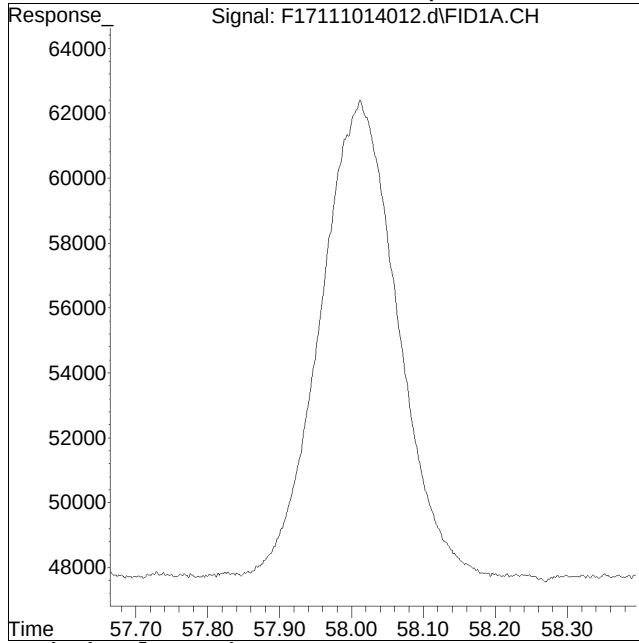


Manual Peak Response = 1065698 M4

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

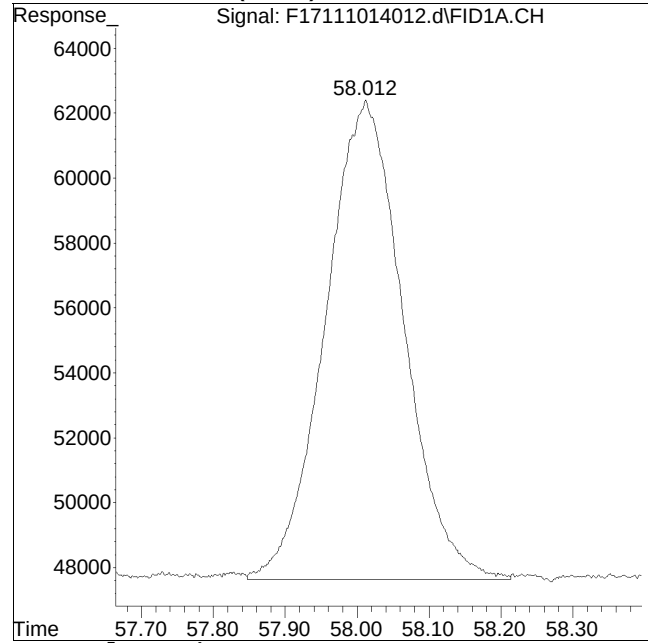
Compound #41: n-Tetracontane (C40)



Original Peak Response = 0

Manual Peak Response = 1113747 M4

M4 = Poor automated baseline construction.



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014014.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 8:31 pm
 Operator : FID17:NL
 Sample : I1711011402R
 Misc : WG743851, FRAV24 10ug/mL
 ALS Vial : 7 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:33:35 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.266	56364062	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.228	12275311	9.720	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 19.44%#
24) s	d50-Tetracosane	35.904	9879621	9.913	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 19.83%#
Target Compounds					
2) t	n-Octane (C8)	5.553	9260703	9.273	ug/mL M4
3) t	n-Nonane (C9)	7.759	9571218	9.122	ug/mL M4
4) t	n-Decane (C10)	10.251	9773460	8.876	ug/mL M4
5) t	n-Undecane (C11)	12.766	9991962	9.250	ug/mL M4
6) t	n-Dodecane (C12)	15.197	10206111	9.384	ug/mL M4
7) t	n-Tridecane (C13)	17.507	10303226	9.485	ug/mL M4
9) t	n-Tetradecane (C14)	19.693	10460709	9.290	ug/mL M4
11) t	n-Pentadecane (C15)	21.762	10664004	9.593	ug/mL M4
12) t	n-Hexadecane (C16)	23.722	10751385	9.597	ug/mL M4
14) t	n-Heptadecane (C17)	25.582	10666998	9.472	ug/mL M4
15) t	Pristane	25.693	10997838	9.743	ug/mL M4
16) t	n-Octadecane (C18)	27.354	10973500	9.804	ug/mL M4
17) t	Phytane	27.517	9686820	8.518	ug/mL M4
18) t	n-Nonadecane (C19)	29.043	10933111	9.823	ug/mL M4
20) t	n-Eicosane (C20)	30.655	10914758	9.761	ug/mL M4
21) t	n-Heneicosane (C21)	32.195	11005551	9.731	ug/mL M4
22) t	n-Docosane (C22)	33.673	11090258	9.751	ug/mL M4
23) t	n-Tricosane (C23)	35.090	11177597	9.772	ug/mL M4
25) t	n-Tetracosane (C24)	36.450	11187494	9.770	ug/mL M4
26) t	n-Pentacosane (C25)	37.758	11131468	9.688	ug/mL M4
27) t	n-Hexacosane (C26)	39.021	11381761	9.704	ug/mL M4
28) t	n-Heptacosane (C27)	40.239	11270080	9.681	ug/mL M4
29) t	n-Octacosane (C28)	41.414	11186318	9.579	ug/mL M4
30) t	n-Nonacosane (C29)	42.547	11258816	9.554	ug/mL M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014014.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 8:31 pm
 Operator : FID17:NL
 Sample : I1711011402R
 Misc : WG743851, FRAV24 10ug/mL
 ALS Vial : 7 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:33:35 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc Units
31) t	n-Triacontane (C30)	43.644	11268522	9.530 ug/mL M4
32) t	n-Hentriacontane (C31)	44.709	11275401	9.464 ug/mL M4
33) t	n-Dotriacontane (C32)	45.737	11359577	9.590 ug/mL M4
34) t	n-Tritriacontane (C33)	46.738	10681176	9.283 ug/mL M4
35) t	n-tetratriacontane (C34)	47.758	11092909	9.084 ug/mL M4
36) t	n-Pentatriacontane (C35)	48.907	11156813	9.183 ug/mL M4
37) t	n-Hexatriacontane (C36)	50.215	11422543	8.683 ug/mL M4
38) t	n-Heptatriacontane (C37)	51.728	11112602	9.054 ug/mL M4
39) t	n-Octatriacontane (C38)	53.487	10908503	8.894 ug/mL M4
41) t	n-Tetracontane (C40)	58.025	11317318	9.591 ug/mL M4

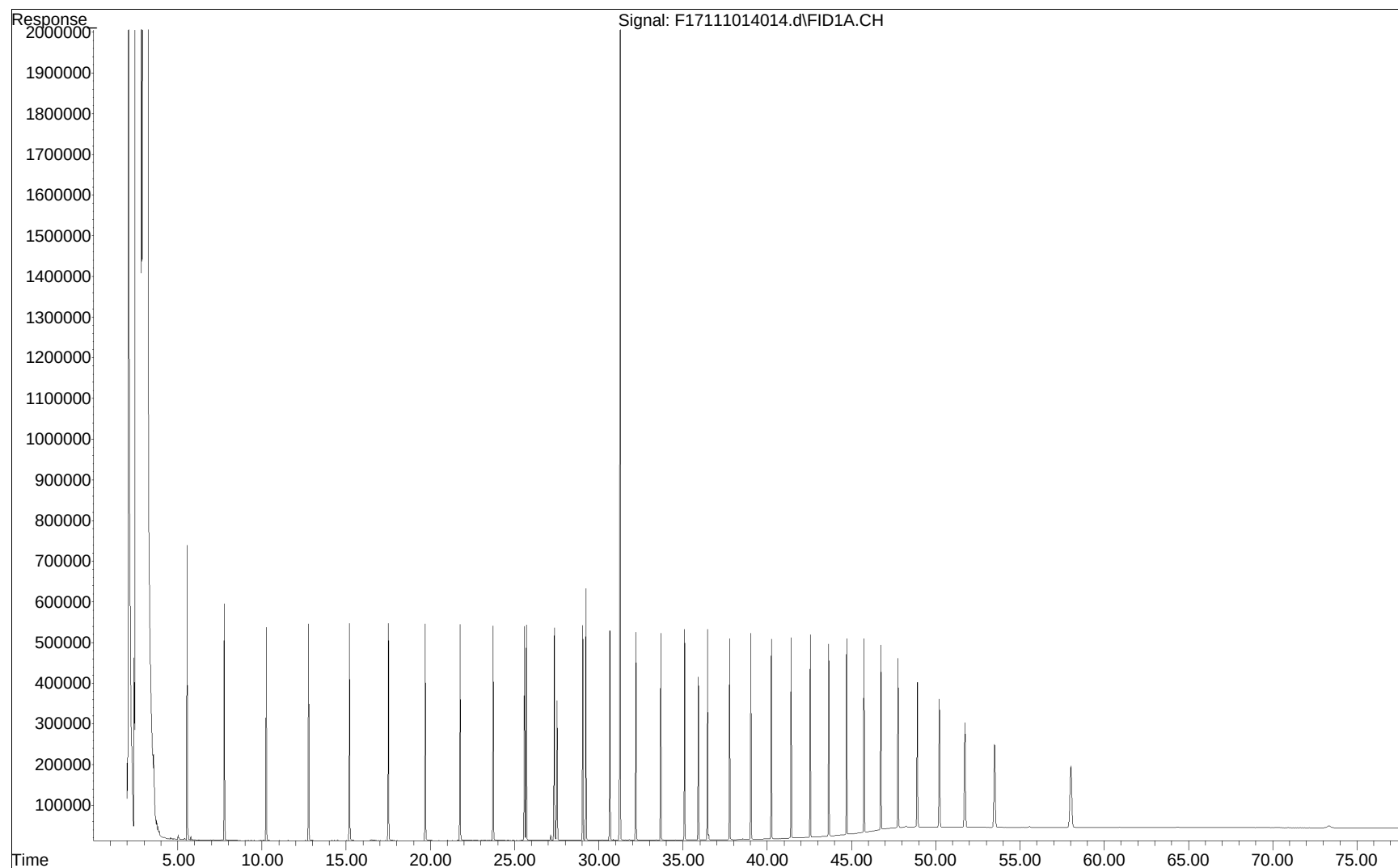
SemiQuant Compounds - Not Calibrated on this Instrument

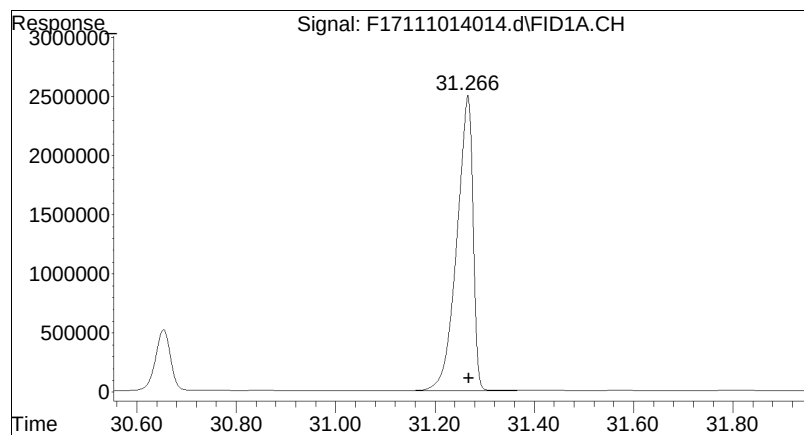
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

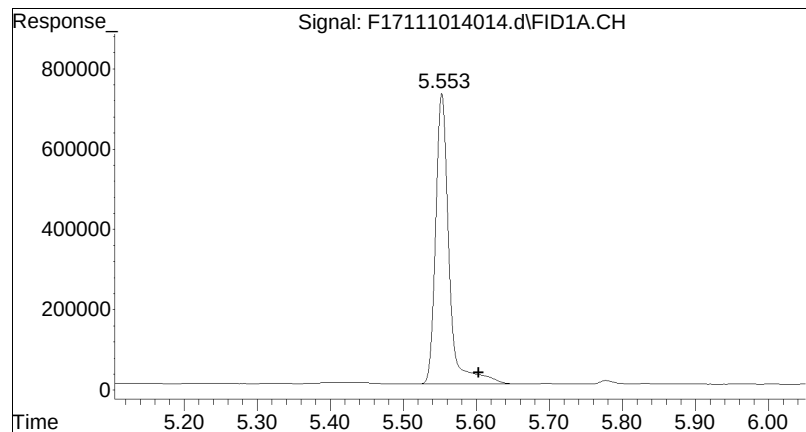
File : 0:\Forensics\Data\FID17\2014\NOV\NOV10\F17111014014.d
Operator : FID17:NL
Acquired : 10 Nov 2014 8:31 pm using AcqMethod FID17.M
Sample Name: I1711011402R
Instrument: FID17
Misc Info : WG743851, FRAV24 10ug/mL
Vial Number: 7
CurrentMeth: 0:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M





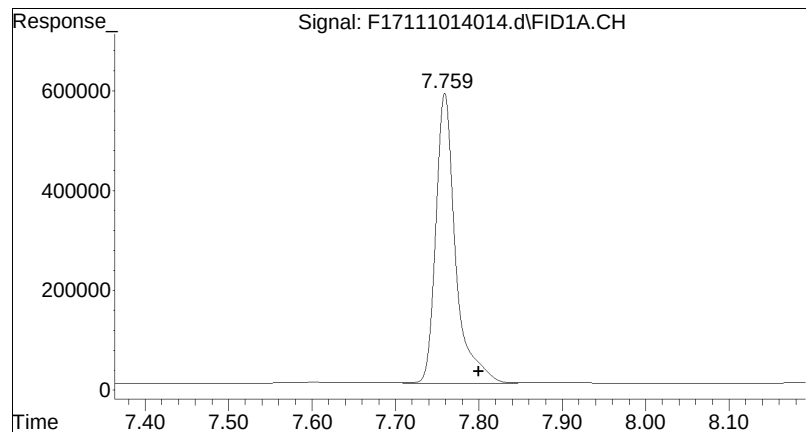
#1 5-alpha-androstane

R.T.: 31.266 min
Delta R.T.: -0.003 min
Response: 56364062
Conc: 50.00 ug/mL M4



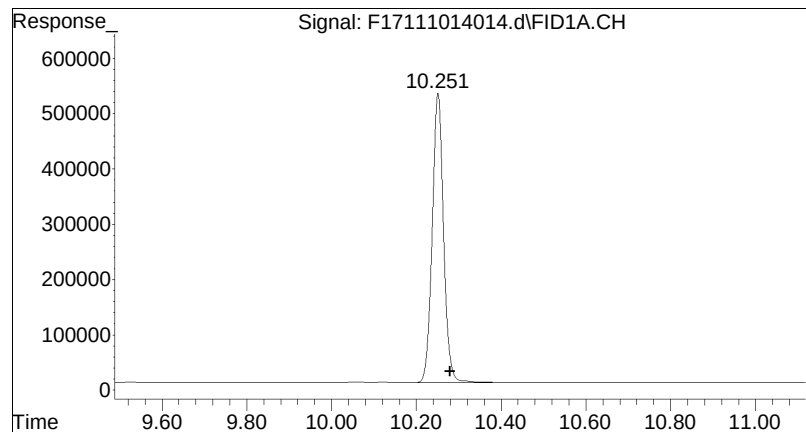
#2 n-Octane (C8)

R.T.: 5.553 min
Delta R.T.: -0.051 min
Response: 9260703
Conc: 9.27 ug/mL M4



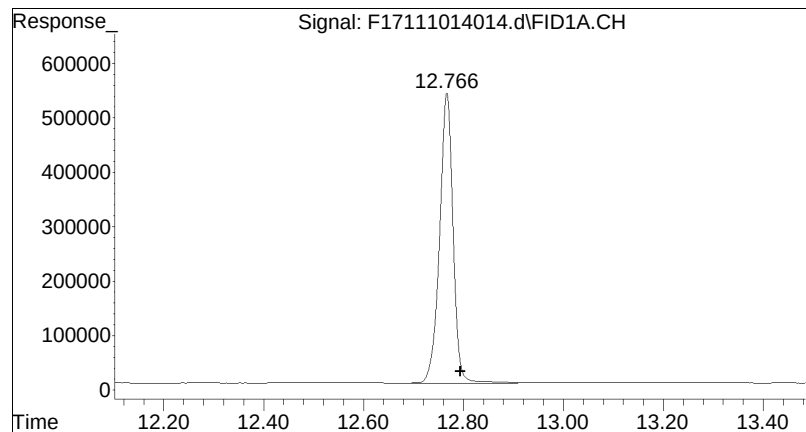
#3 n-Nonane (C9)

R.T.: 7.759 min
Delta R.T.: -0.041 min
Response: 9571218
Conc: 9.12 ug/mL M4



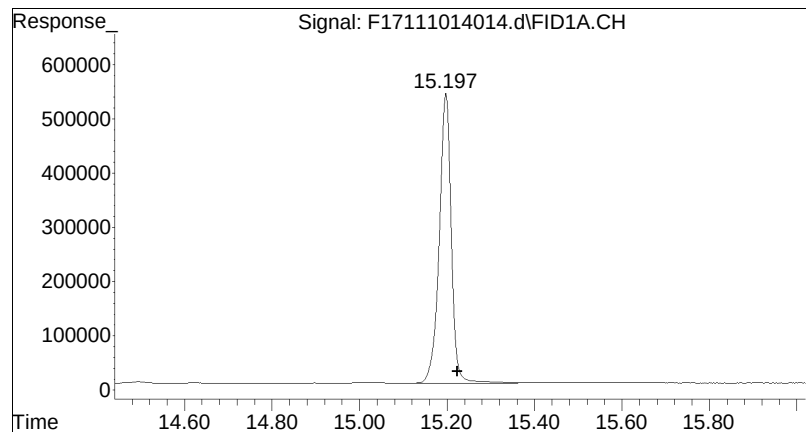
#4 n-Decane (C10)

R.T.: 10.251 min
Delta R.T.: -0.028 min
Response: 9773460
Conc: 8.88 ug/mL M4



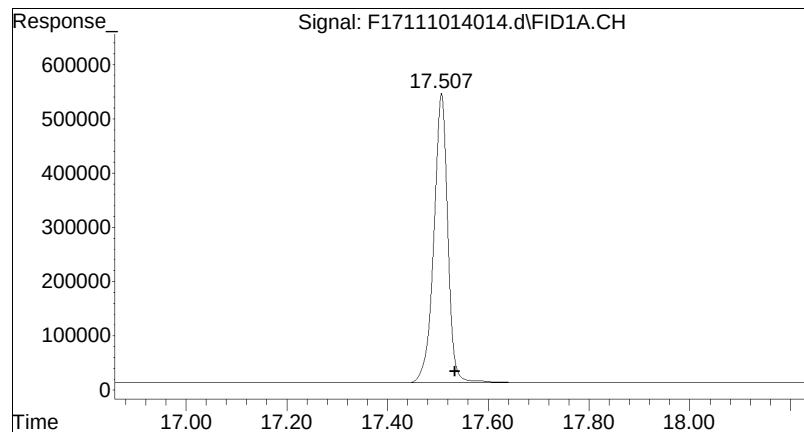
#5 n-Undecane (C11)

R.T.: 12.766 min
Delta R.T.: -0.027 min
Response: 9991962
Conc: 9.25 ug/mL M4



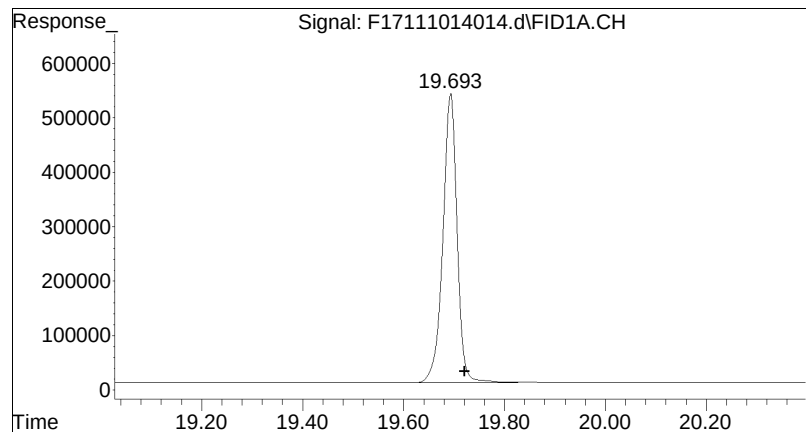
#6 n-Dodecane (C12)

R.T.: 15.197 min
Delta R.T.: -0.027 min
Response: 10206111
Conc: 9.38 ug/mL M4



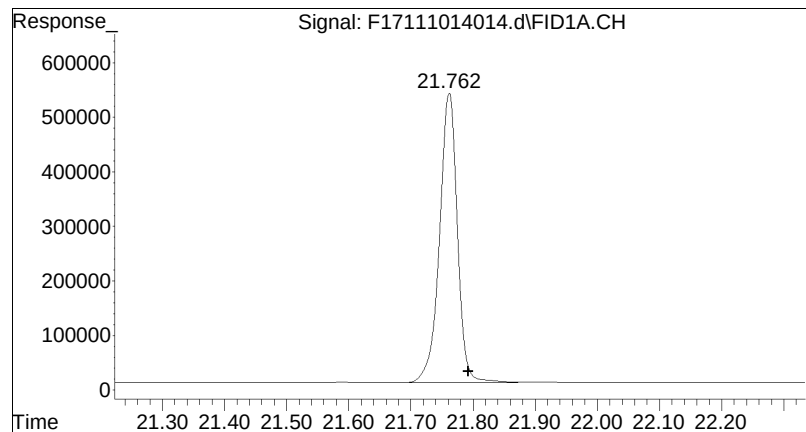
#7 n-Tridecane (C13)

R.T.: 17.507 min
Delta R.T.: -0.027 min
Response: 10303226
Conc: 9.48 ug/mL M4



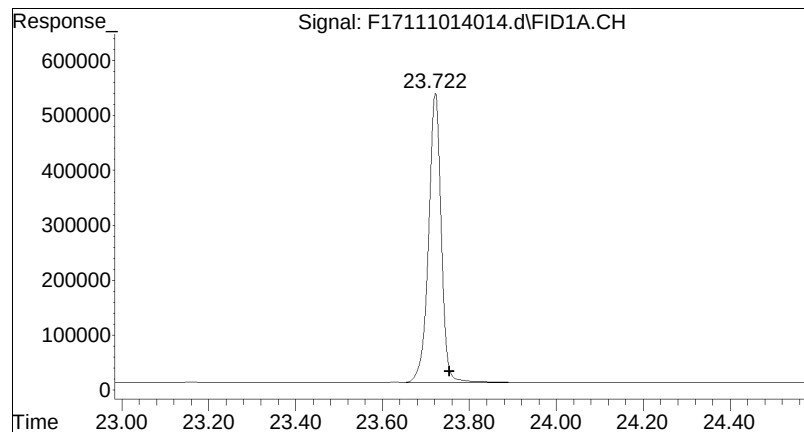
#9 n-Tetradecane (C14)

R.T.: 19.693 min
Delta R.T.: -0.028 min
Response: 10460709
Conc: 9.29 ug/mL M4



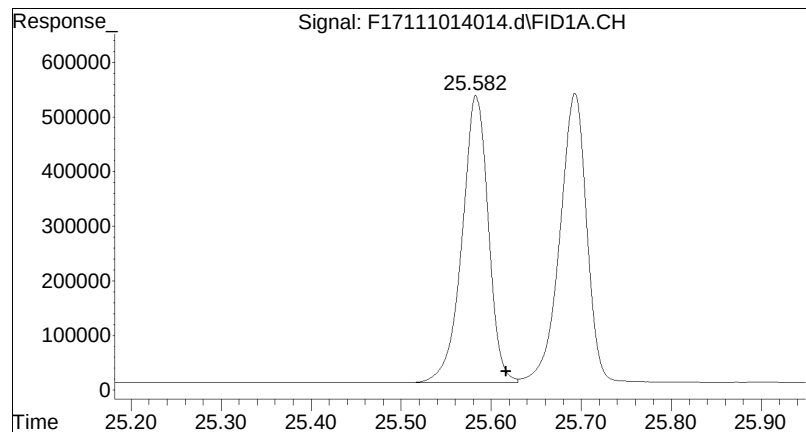
#11 n-Pentadecane (C15)

R.T.: 21.762 min
Delta R.T.: -0.030 min
Response: 10664004
Conc: 9.59 ug/mL M4



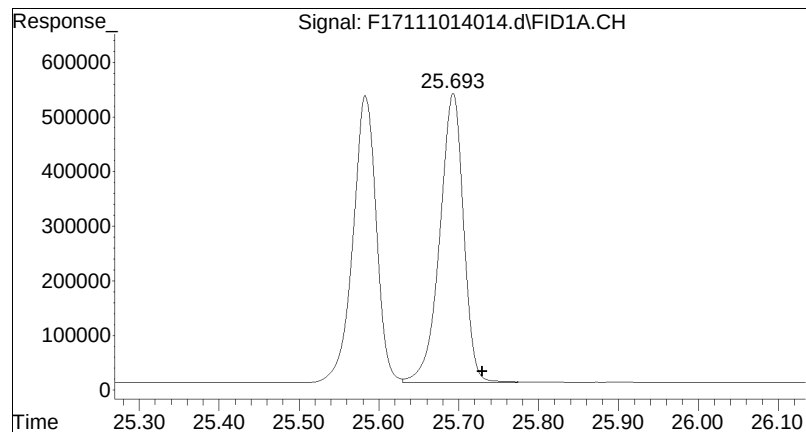
#12 n-Hexadecane (C16)

R.T.: 23.722 min
Delta R.T.: -0.031 min
Response: 10751385
Conc: 9.60 ug/mL M4



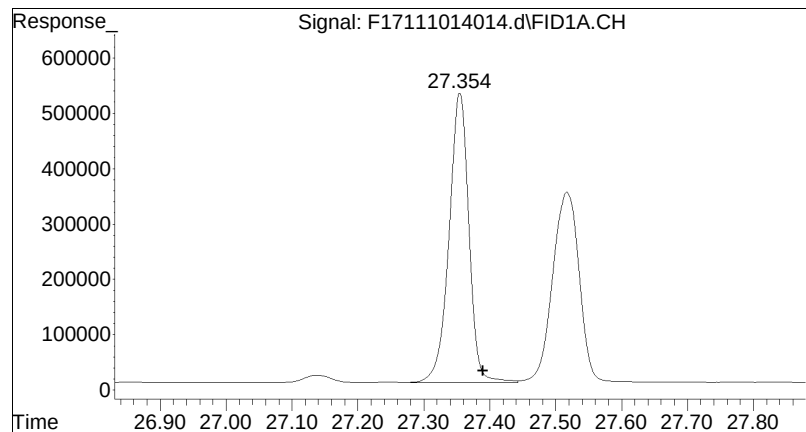
#14 n-Heptadecane (C17)

R.T.: 25.582 min
Delta R.T.: -0.034 min
Response: 10666998
Conc: 9.47 ug/mL M4



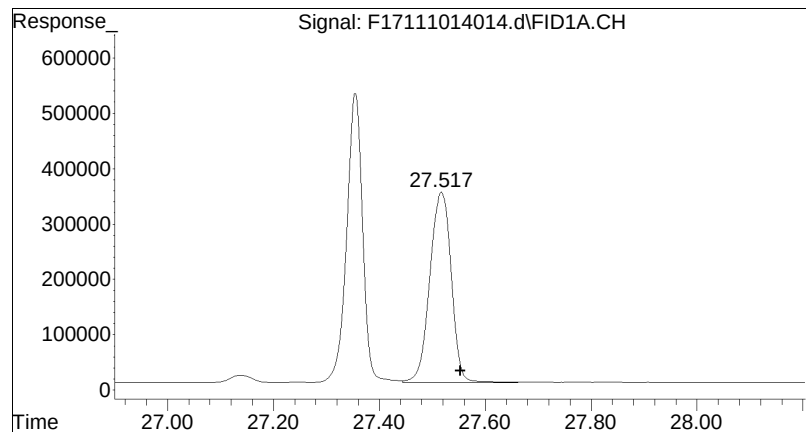
#15 Pristane

R.T.: 25.693 min
Delta R.T.: -0.037 min
Response: 10997838
Conc: 9.74 ug/mL M4



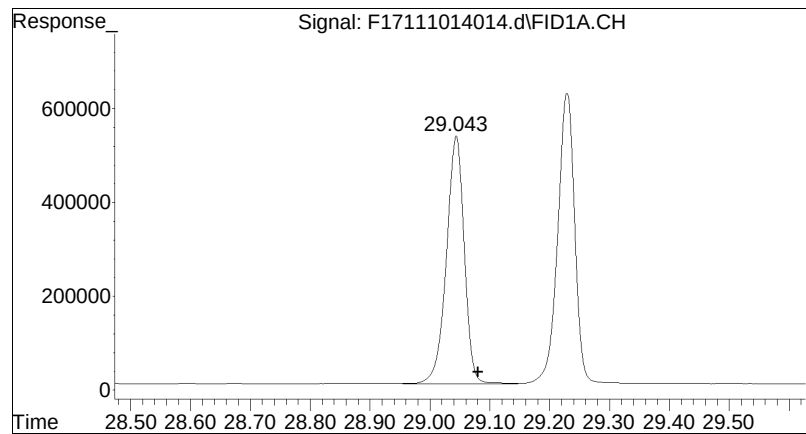
#16 n-Octadecane (C18)

R.T.: 27.354 min
Delta R.T.: -0.035 min
Response: 10973500
Conc: 9.80 ug/mL M4



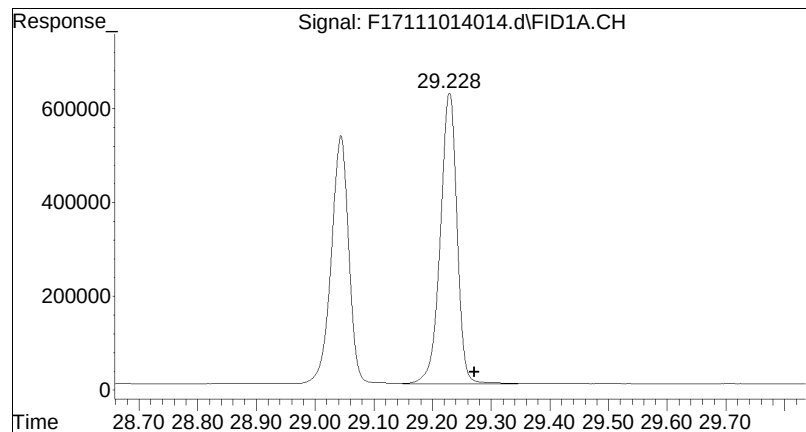
#17 Phytane

R.T.: 27.517 min
Delta R.T.: -0.036 min
Response: 9686820
Conc: 8.52 ug/mL M4



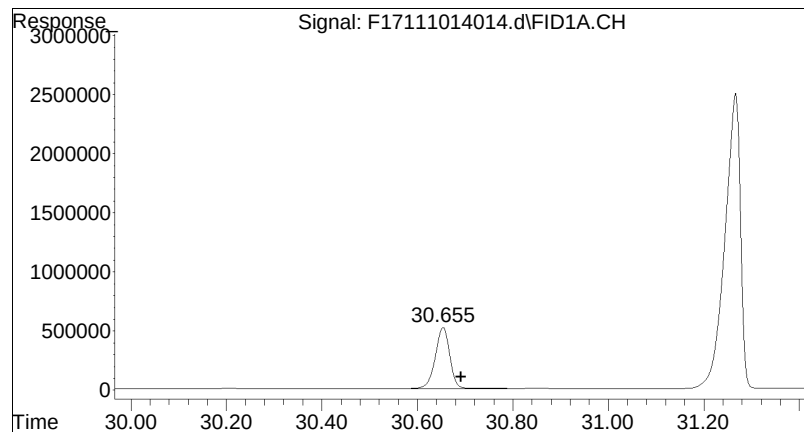
#18 n-Nonadecane (C19)

R.T.: 29.043 min
Delta R.T.: -0.036 min
Response: 10933111
Conc: 9.82 ug/mL M4



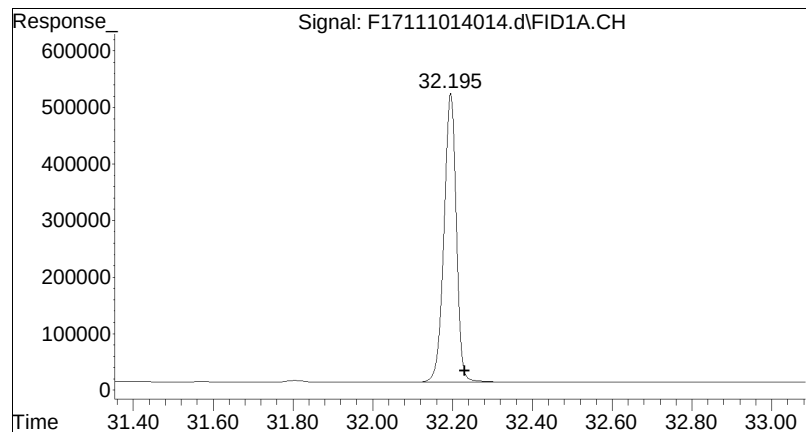
#19 ortho-terphenyl

R.T.: 29.228 min
Delta R.T.: -0.042 min
Response: 12275311
Conc: 9.72 ug/mL M4



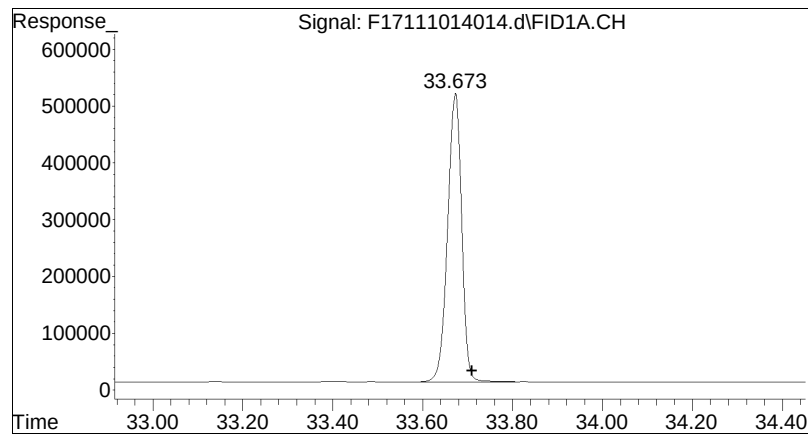
#20 n-Eicosane (C20)

R.T.: 30.655 min
Delta R.T.: -0.037 min
Response: 10914758
Conc: 9.76 ug/mL M4



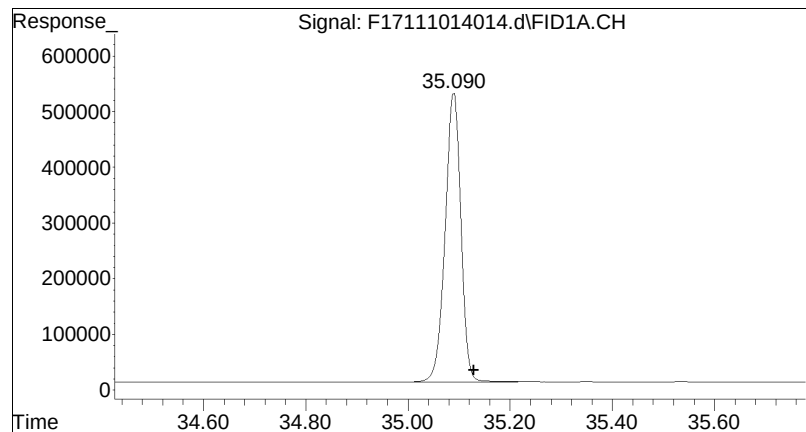
#21 n-Heneicosane (C21)

R.T.: 32.195 min
Delta R.T.: -0.036 min
Response: 11005551
Conc: 9.73 ug/mL M4



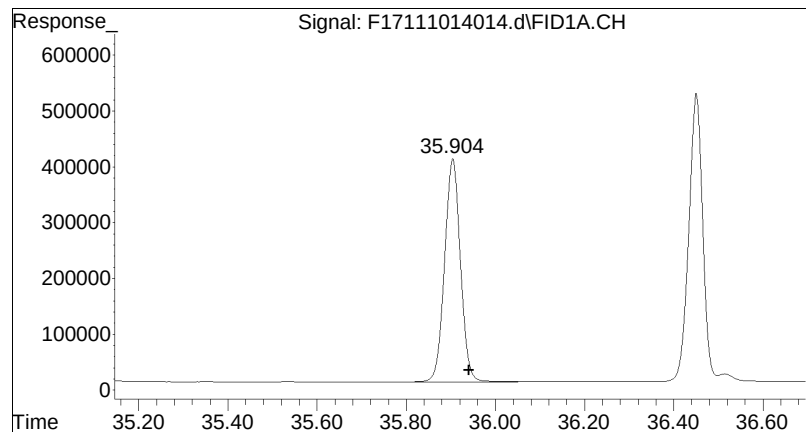
#22 n-Docosane (C22)

R.T.: 33.673 min
Delta R.T.: -0.036 min
Response: 11090258
Conc: 9.75 ug/mL M4



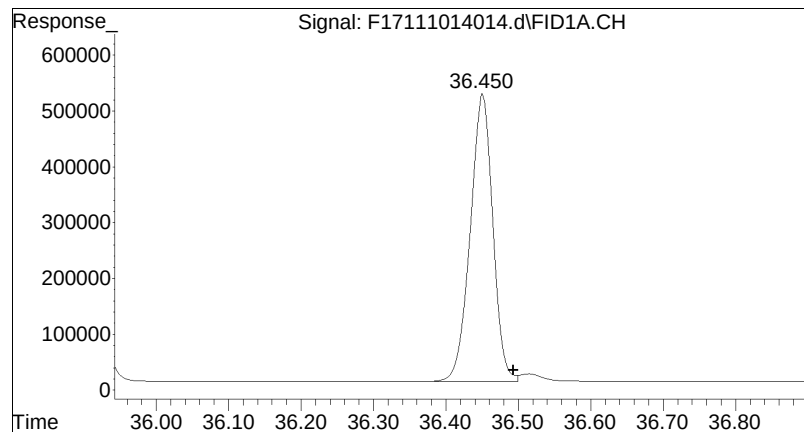
#23 n-Tricosane (C23)

R.T.: 35.090 min
Delta R.T.: -0.039 min
Response: 11177597
Conc: 9.77 ug/mL M4



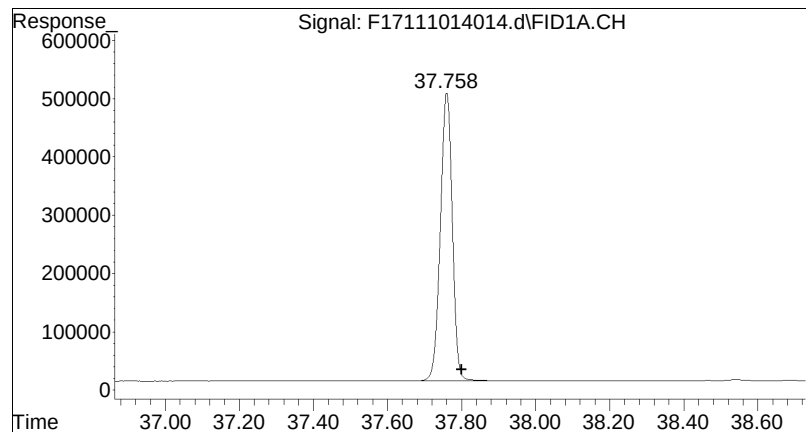
#24 d50-Tetracosane

R.T.: 35.904 min
Delta R.T.: -0.036 min
Response: 9879621
Conc: 9.91 ug/mL M4



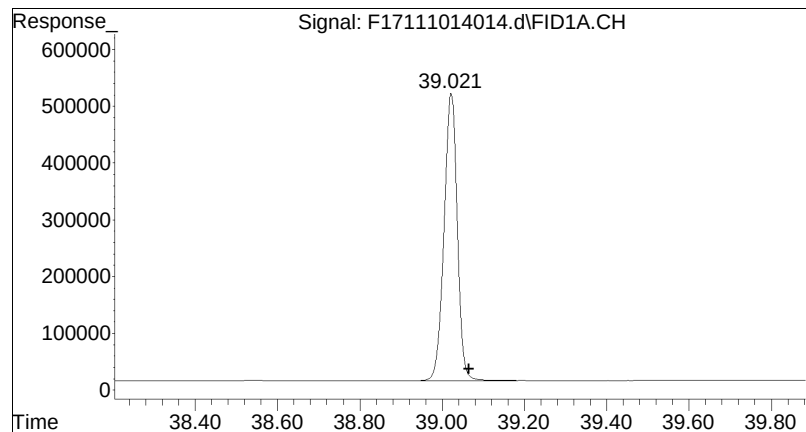
#25 n-Tetracosane (C24)

R.T.: 36.450 min
Delta R.T.: -0.044 min
Response: 11187494
Conc: 9.77 ug/mL M4



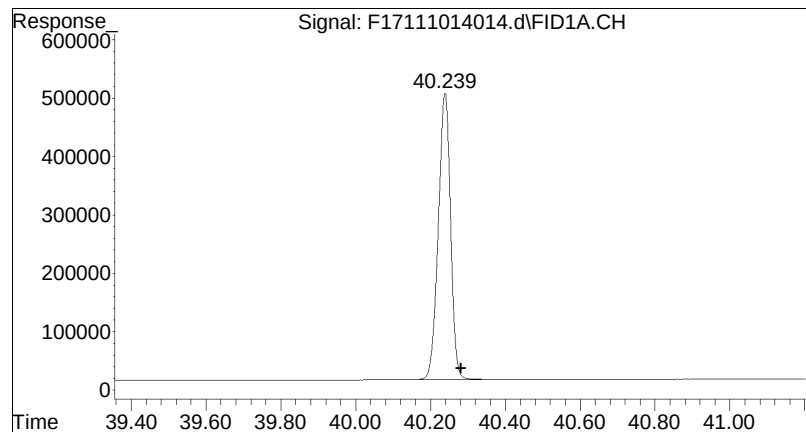
#26 n-Pentacosane (C25)

R.T.: 37.758 min
Delta R.T.: -0.042 min
Response: 11131468
Conc: 9.69 ug/mL M4



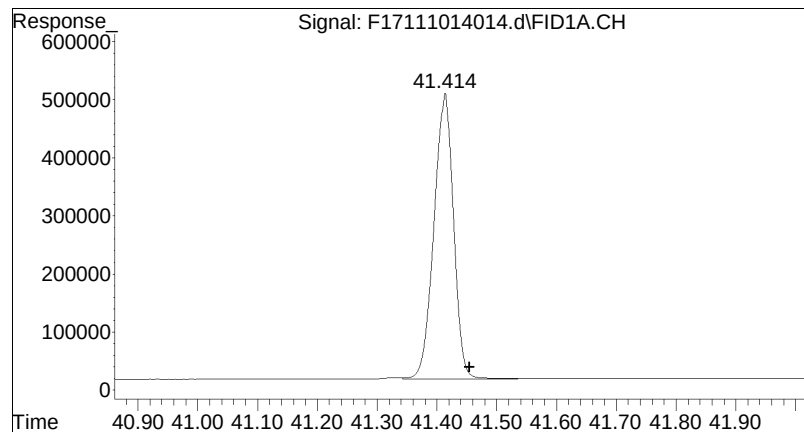
#27 n-Hexacosane (C26)

R.T.: 39.021 min
Delta R.T.: -0.044 min
Response: 11381761
Conc: 9.70 ug/mL M4



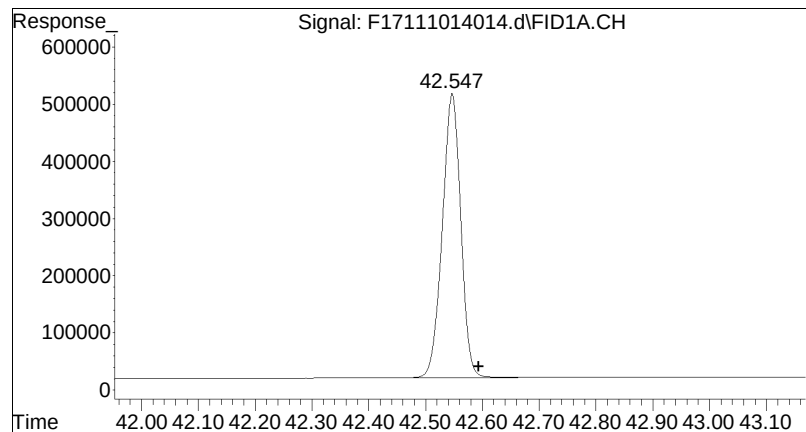
#28 n-Heptacosane (C27)

R.T.: 40.239 min
Delta R.T.: -0.042 min
Response: 11270080
Conc: 9.68 ug/mL M4



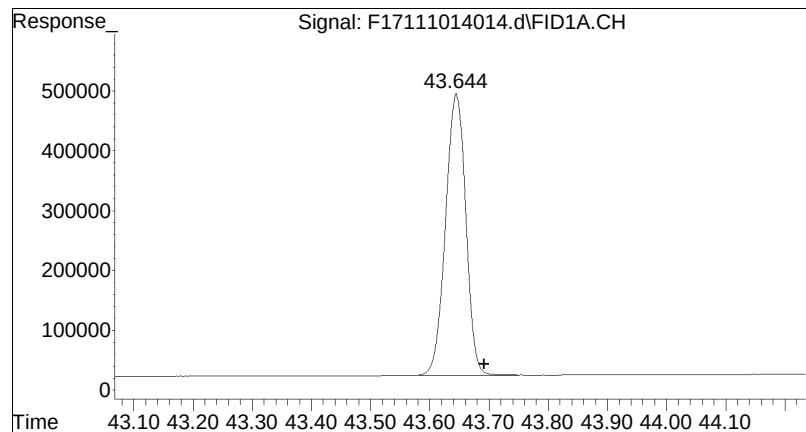
#29 n-Octacosane (C28)

R.T.: 41.414 min
Delta R.T.: -0.041 min
Response: 11186318
Conc: 9.58 ug/mL M4



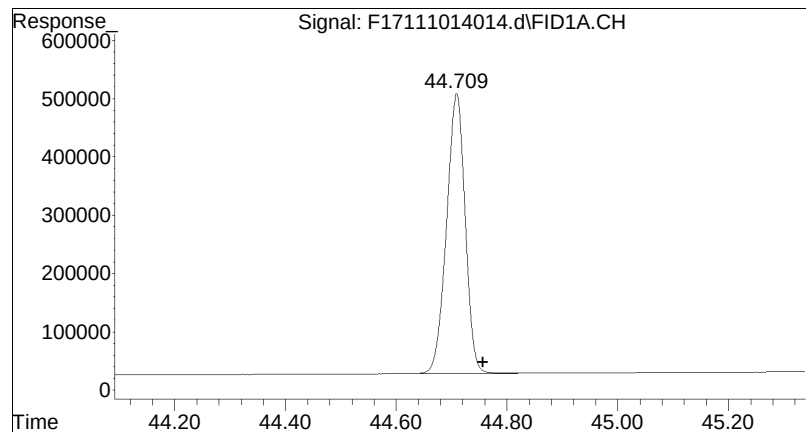
#30 n-Nonacosane (C29)

R.T.: 42.547 min
Delta R.T.: -0.047 min
Response: 11258816
Conc: 9.55 ug/mL M4



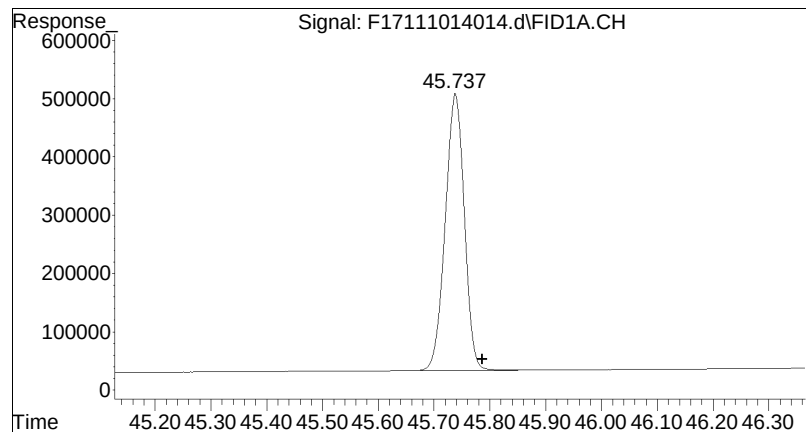
#31 n-Triacontane (C30)

R.T.: 43.644 min
Delta R.T.: -0.048 min
Response: 11268522
Conc: 9.53 ug/mL M4



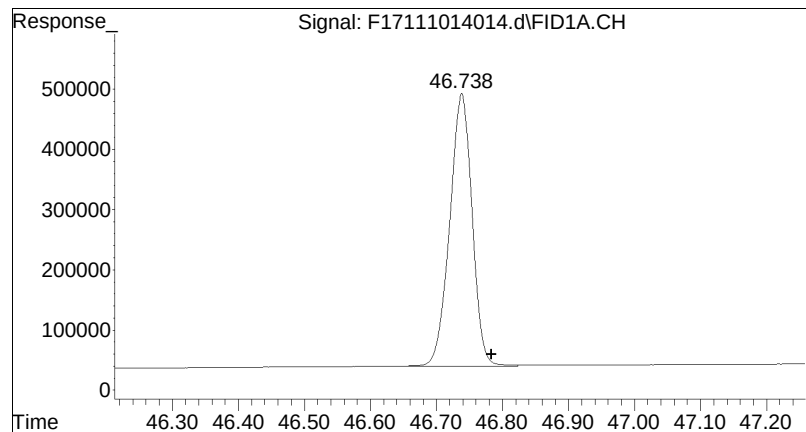
#32 n-Hentriacontane (C31)

R.T.: 44.709 min
Delta R.T.: -0.048 min
Response: 11275401
Conc: 9.46 ug/mL M4



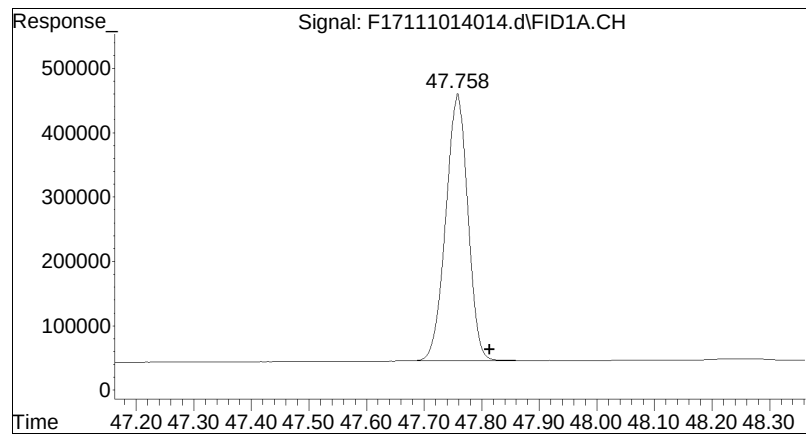
#33 n-Dotriacontane (C32)

R.T.: 45.737 min
Delta R.T.: -0.049 min
Response: 11359577
Conc: 9.59 ug/mL M4



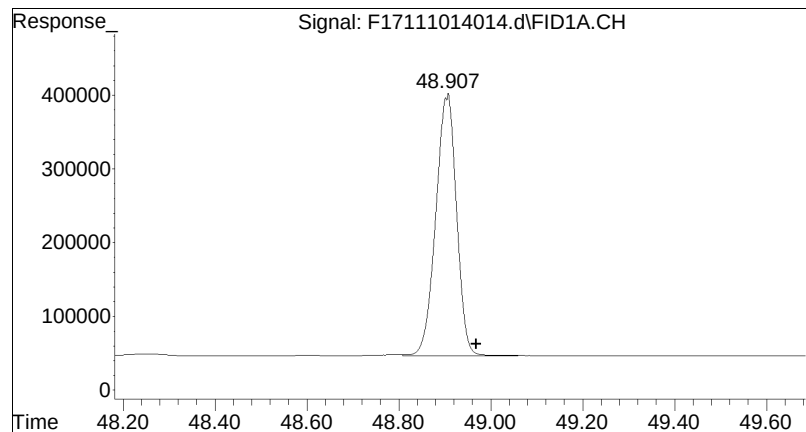
#34 n-Tritriacontane (C33)

R.T.: 46.738 min
Delta R.T.: -0.045 min
Response: 10681176
Conc: 9.28 ug/mL M4



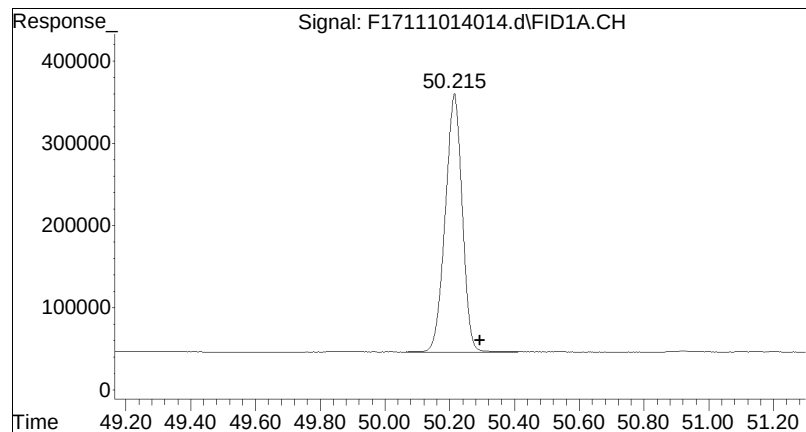
#35 n-tetratriacontane (C34)

R.T.: 47.758 min
Delta R.T.: -0.056 min
Response: 11092909
Conc: 9.08 ug/mL M4



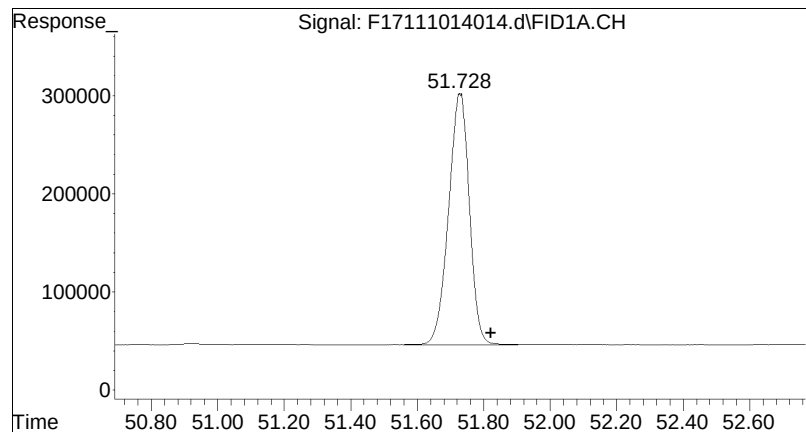
#36 n-Pentatriacontane (C35)

R.T.: 48.907 min
Delta R.T.: -0.060 min
Response: 11156813
Conc: 9.18 ug/mL M4



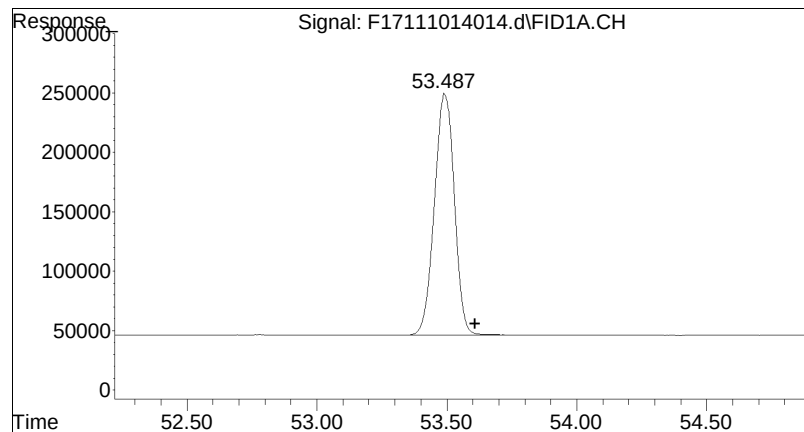
#37 n-Hexatriacontane (C36)

R.T.: 50.215 min
Delta R.T.: -0.078 min
Response: 11422543
Conc: 8.68 ug/mL M4



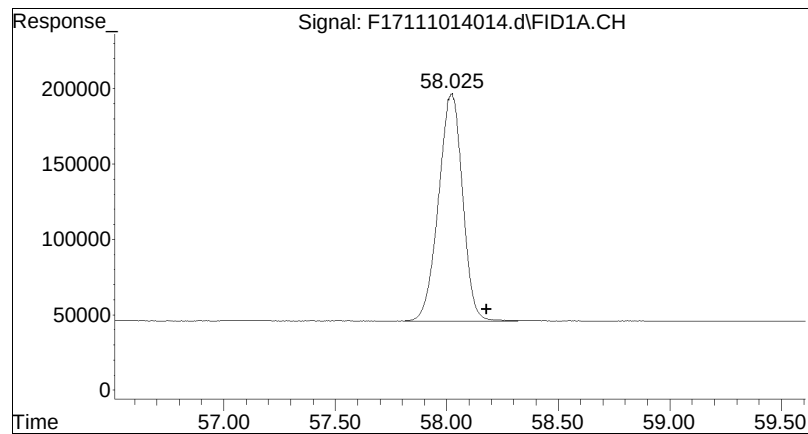
#38 n-Heptatriacontane (C37)

R.T.: 51.728 min
Delta R.T.: -0.094 min
Response: 11112602
Conc: 9.05 ug/mL M4



#39 n-Octatriacontane (C38)

R.T.: 53.487 min
Delta R.T.: -0.120 min
Response: 10908503
Conc: 8.89 ug/mL M4



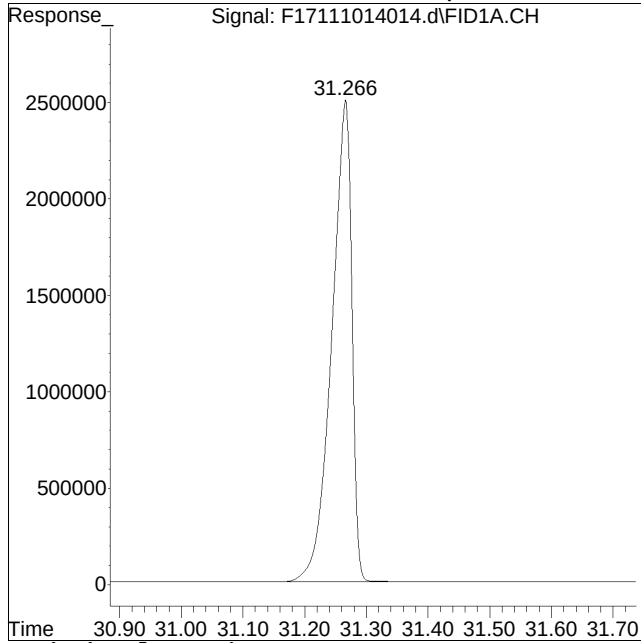
#41 n-Tetracontane (C40)

R.T.: 58.025 min
Delta R.T.: -0.153 min
Response: 11317318
Conc: 9.59 ug/mL M4

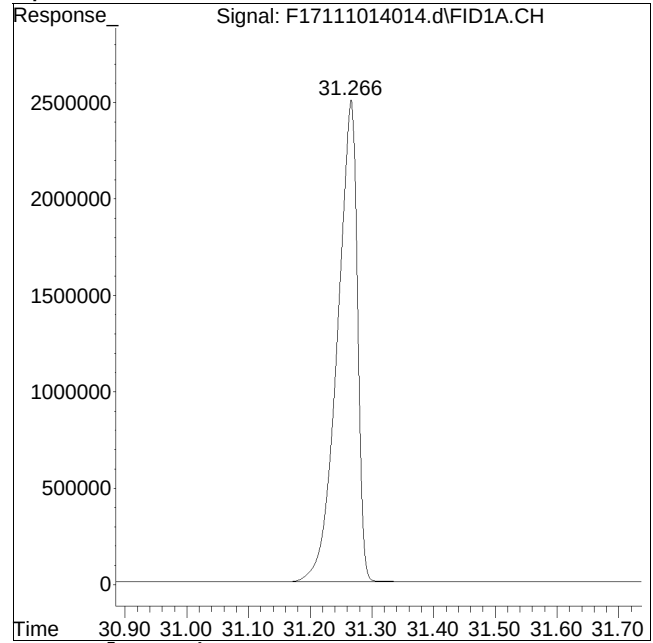
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #1: 5-alpha-androstane



Original Peak Response = 56431452



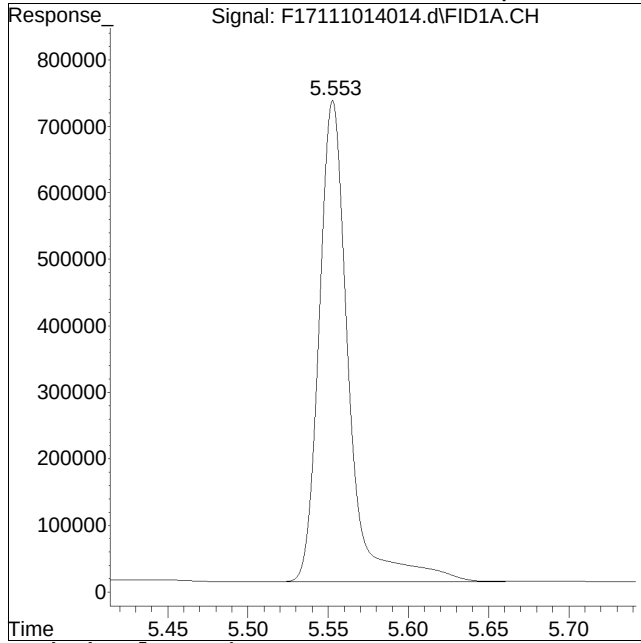
Manual Peak Response = 56364062 M4

M4 = Poor automated baseline construction.

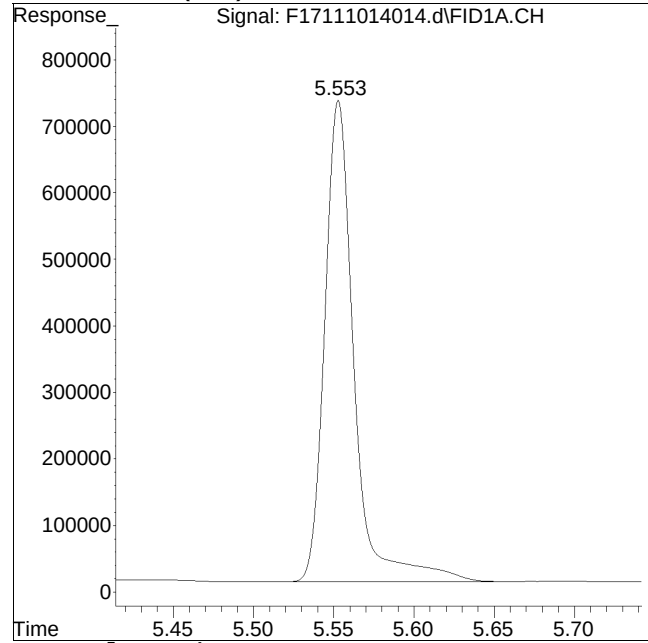
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #2: n-Octane (C8)



Original Peak Response = 9269586



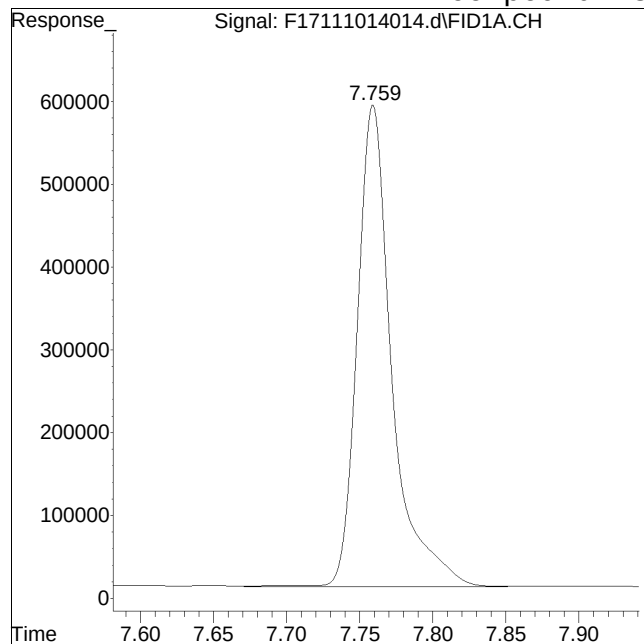
Manual Peak Response = 9260703 M4

M4 = Poor automated baseline construction.

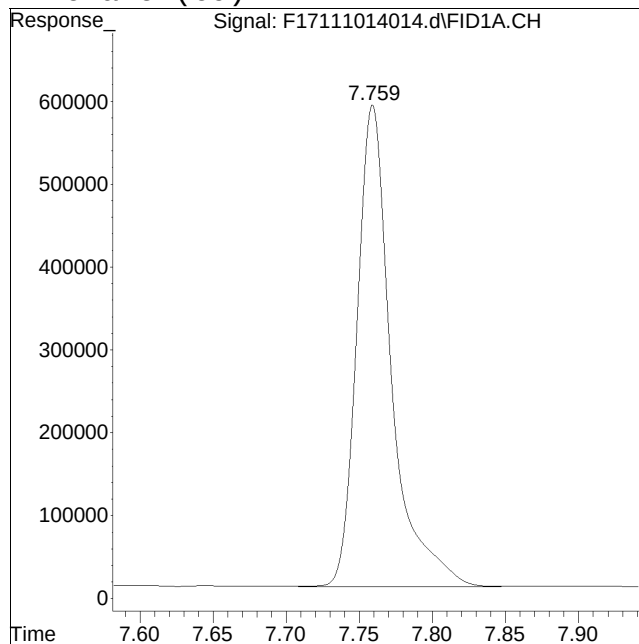
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
 Data File : F17111014014.d Operator : FID17:NL
 Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
 Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #3: n-Nonane (C9)



Original Peak Response = 9627044



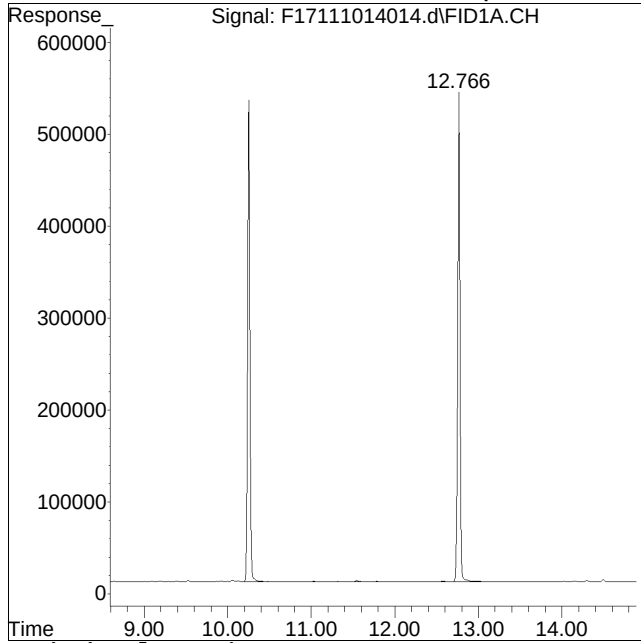
Manual Peak Response = 9571218 M4

M4 = Poor automated baseline construction.

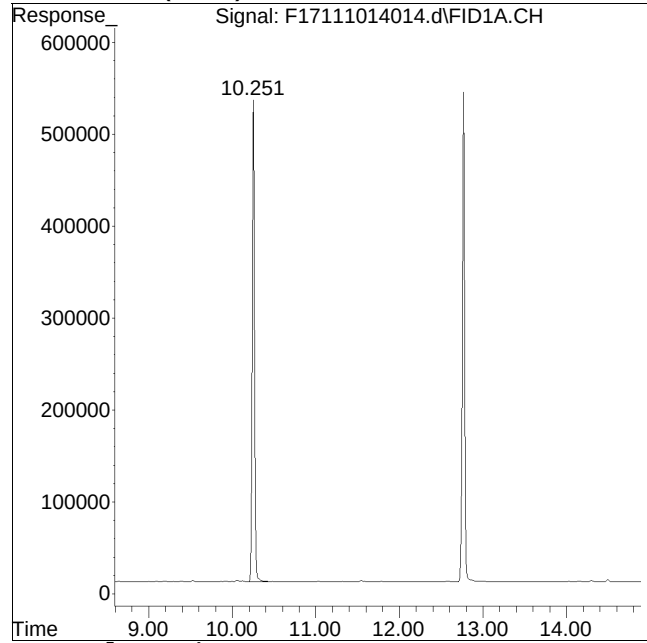
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #4: n-Decane (C10)



Original Peak Response = 9796895



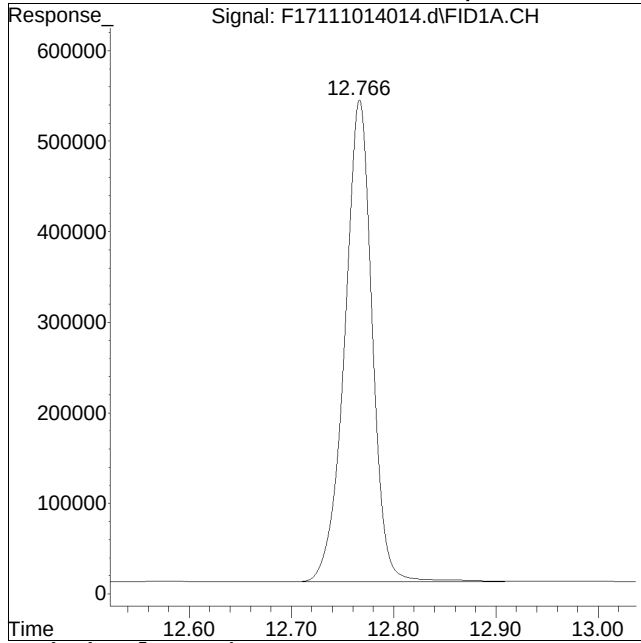
Manual Peak Response = 9773460 M4

M4 = Poor automated baseline construction.

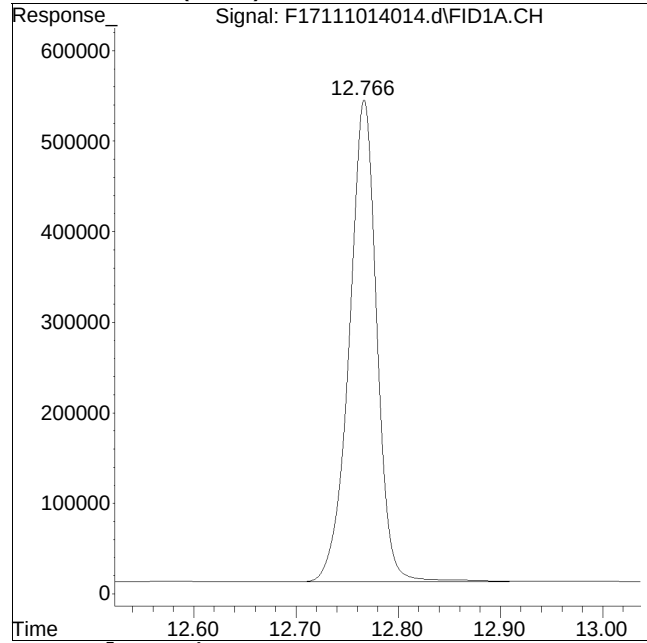
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #5: n-Undecane (C11)



Original Peak Response = 9949432



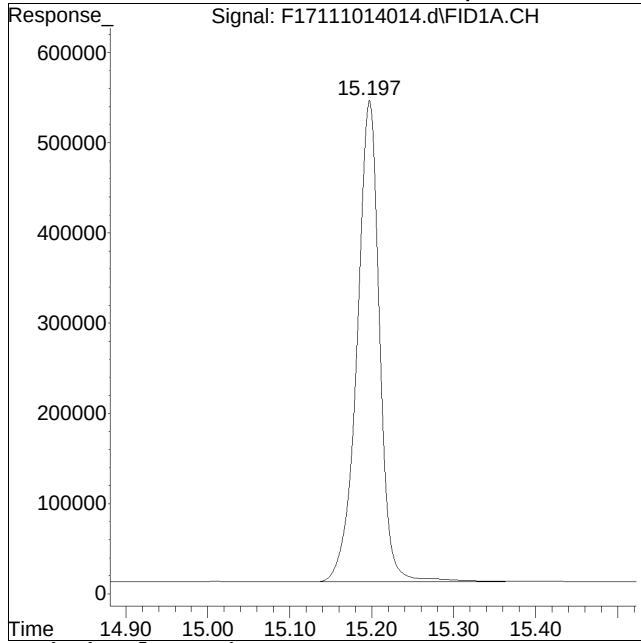
Manual Peak Response = 9991962 M4

M4 = Poor automated baseline construction.

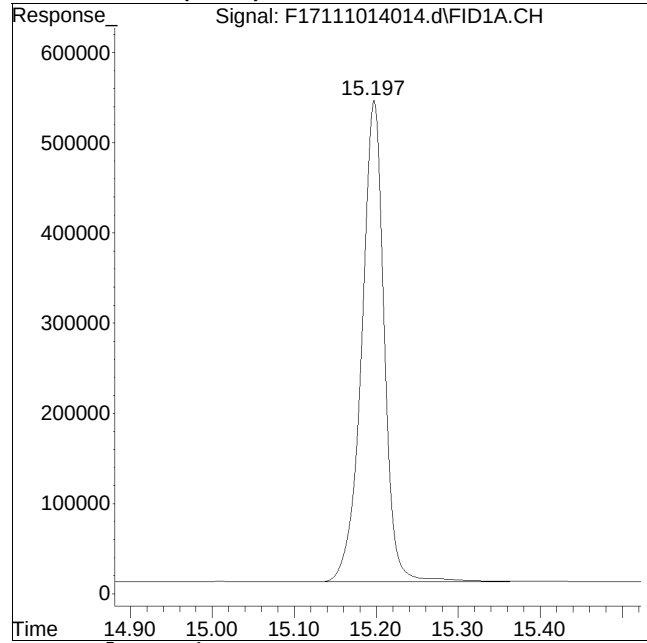
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #6: n-Dodecane (C12)



Original Peak Response = 10163447



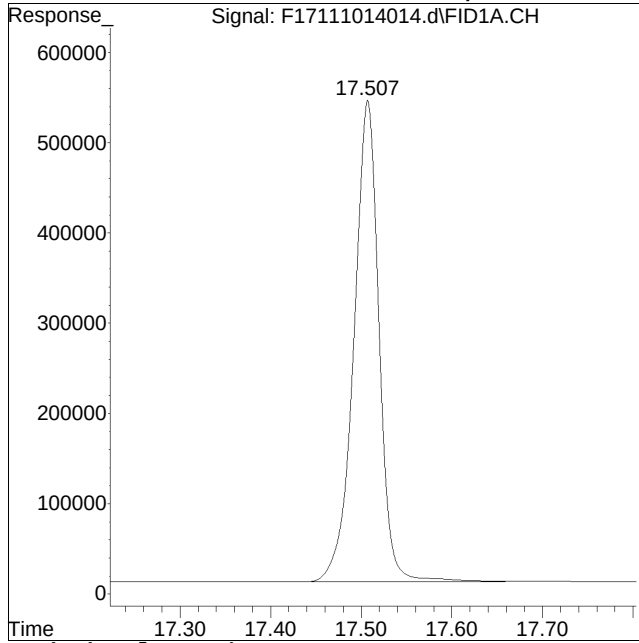
Manual Peak Response = 10206111 M4

M4 = Poor automated baseline construction.

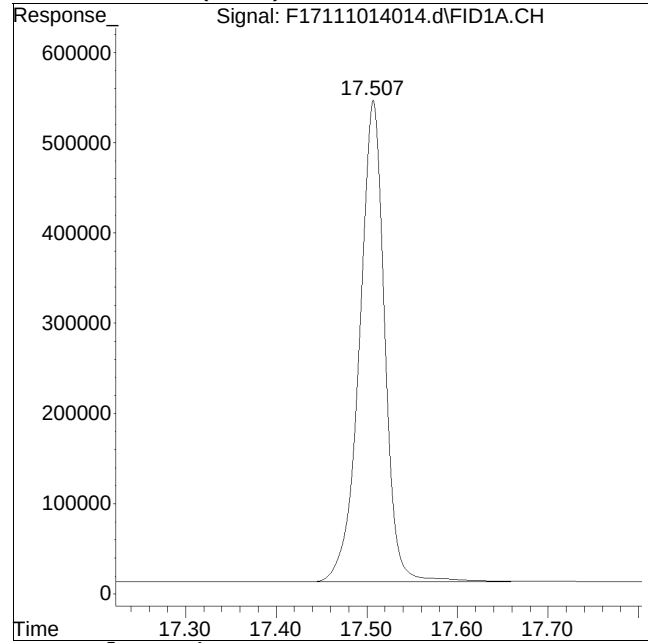
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #7: n-Tridecane (C13)



Original Peak Response = 10296893



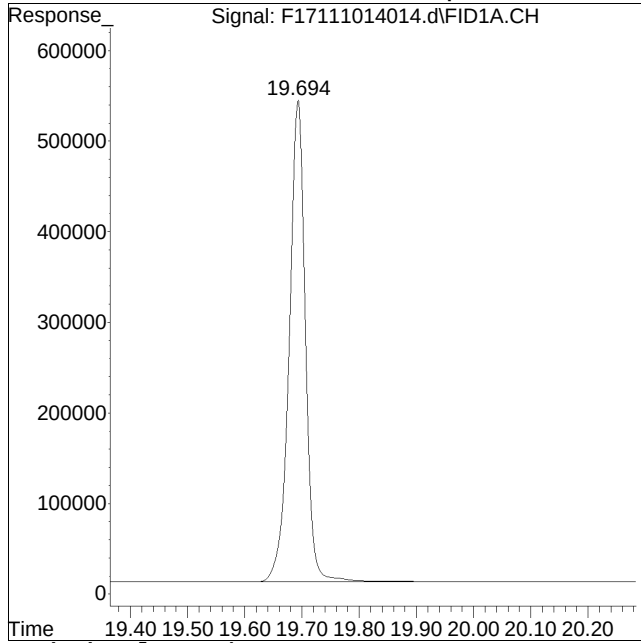
Manual Peak Response = 10303226 M4

M4 = Poor automated baseline construction.

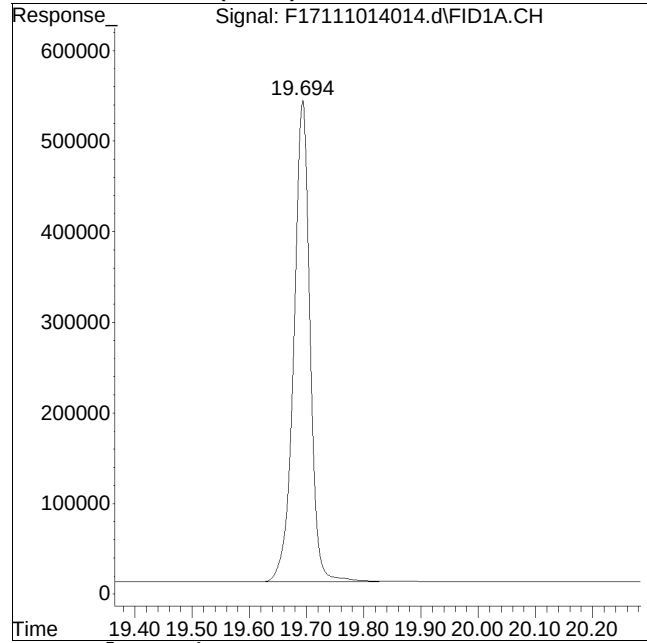
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #9: n-Tetradecane (C14)



Original Peak Response = 10501203



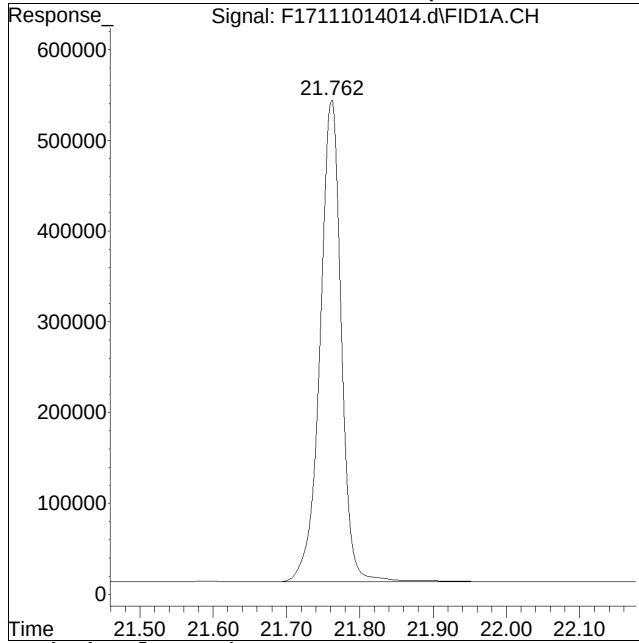
Manual Peak Response = 10460709 M4

M4 = Poor automated baseline construction.

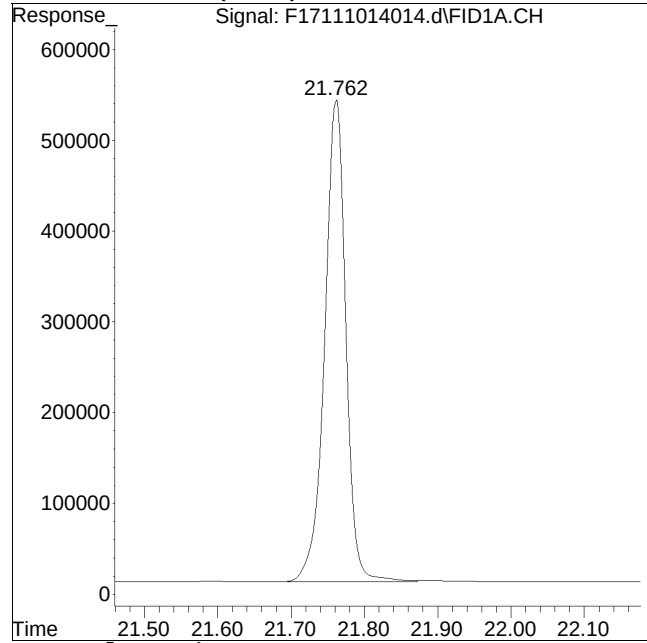
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #11: n-Pentadecane (C15)



Original Peak Response = 10692994



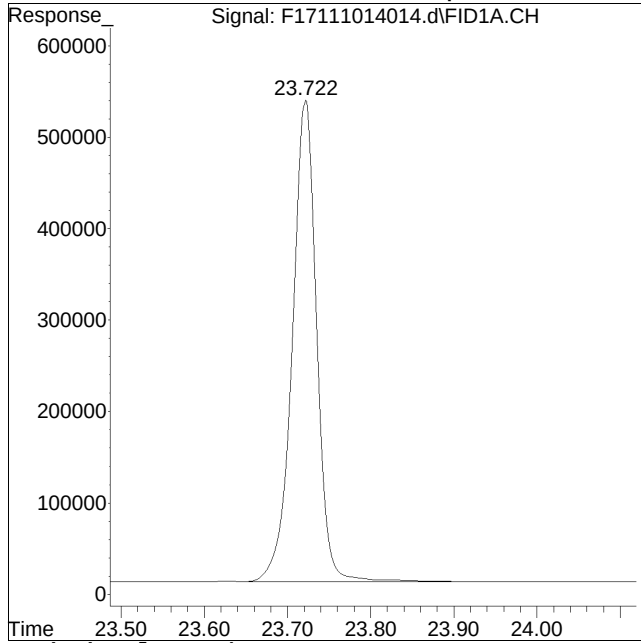
Manual Peak Response = 10664004 M4

M4 = Poor automated baseline construction.

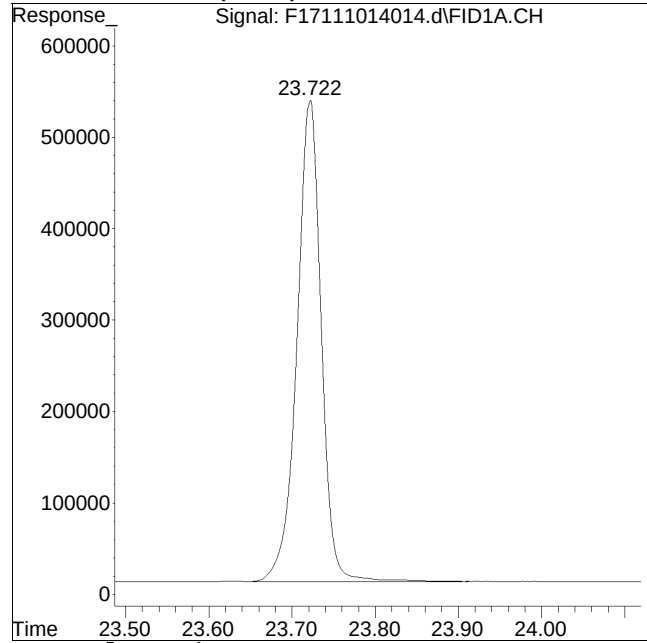
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #12: n-Hexadecane (C16)



Original Peak Response = 10702073



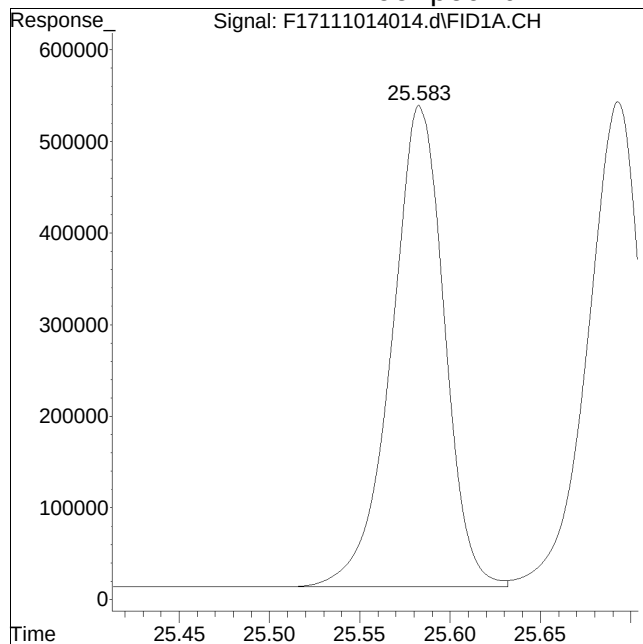
Manual Peak Response = 10751385 M4

M4 = Poor automated baseline construction.

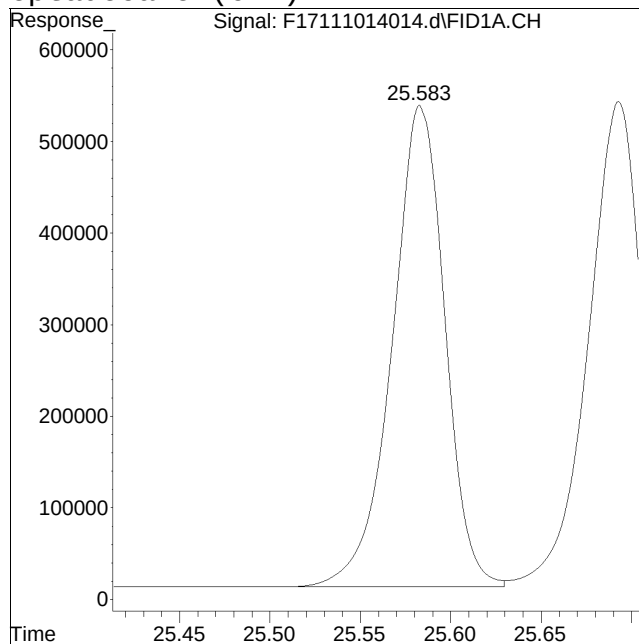
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #14: n-Heptadecane (C17)



Original Peak Response = 10660305



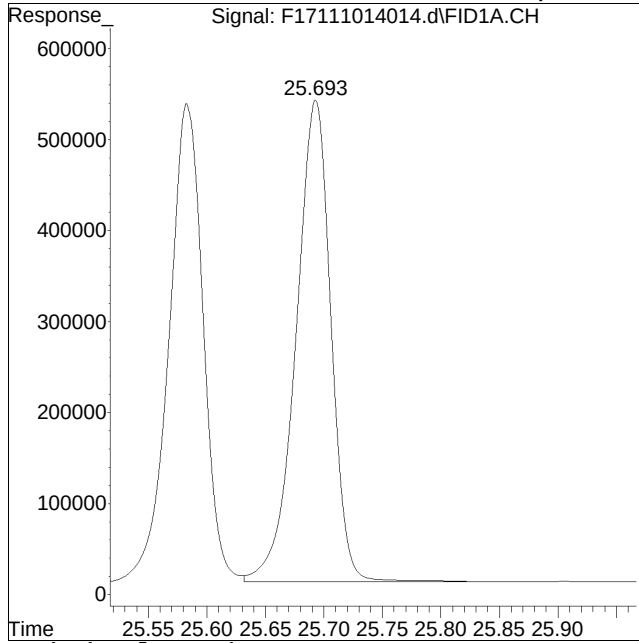
Manual Peak Response = 10666998 M4

M4 = Poor automated baseline construction.

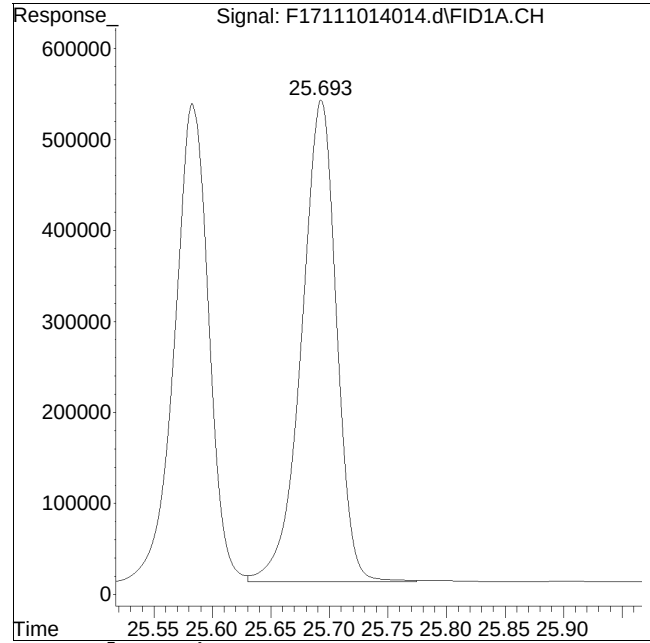
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #15: Pristane



Original Peak Response = 11004569



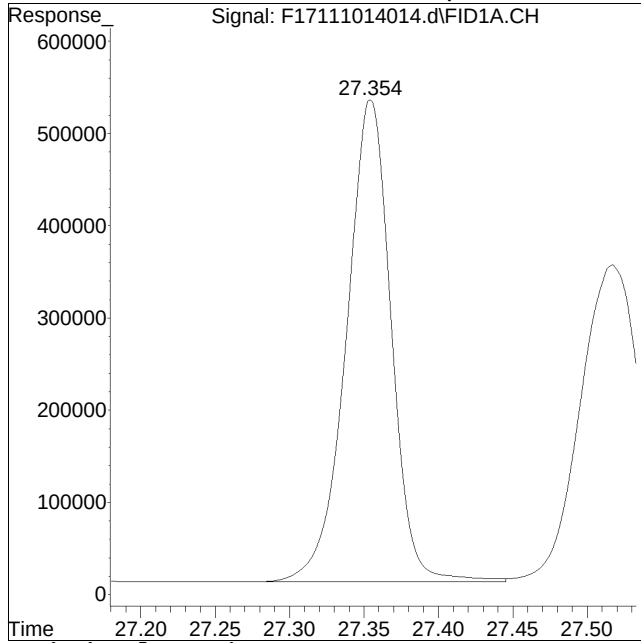
Manual Peak Response = 10997838 M4

M4 = Poor automated baseline construction.

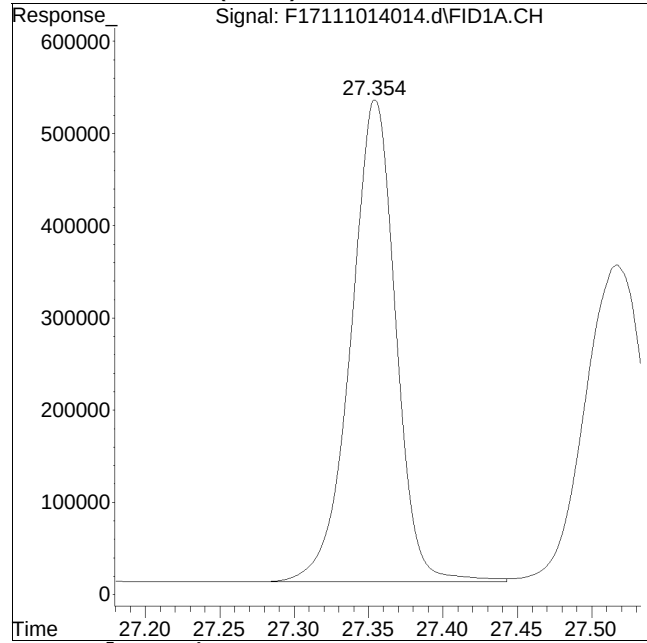
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #16: n-Octadecane (C18)



Original Peak Response = 10969424



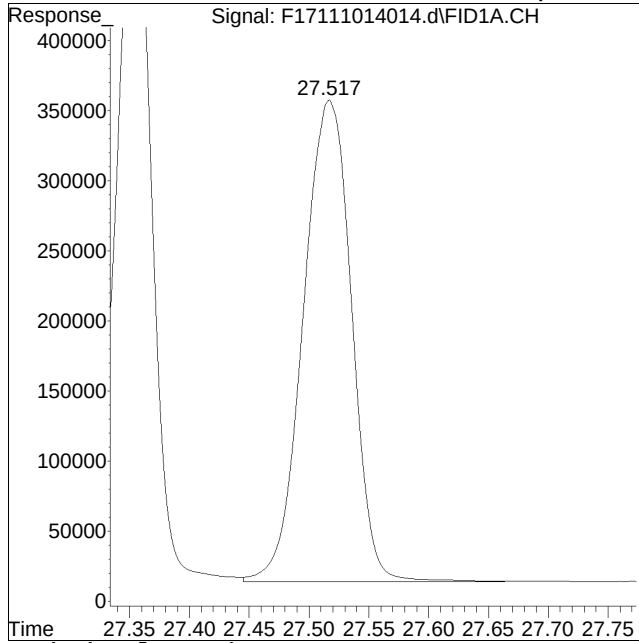
Manual Peak Response = 10973500 M4

M4 = Poor automated baseline construction.

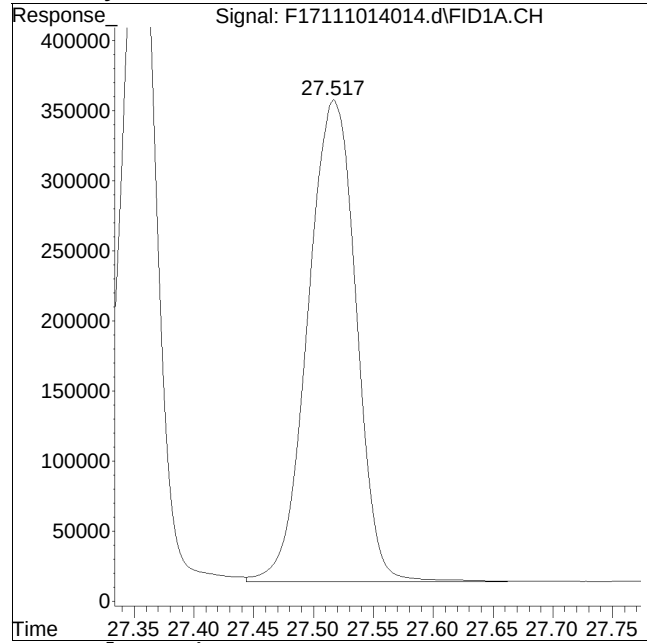
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #17: Phytane



Original Peak Response = 9671524



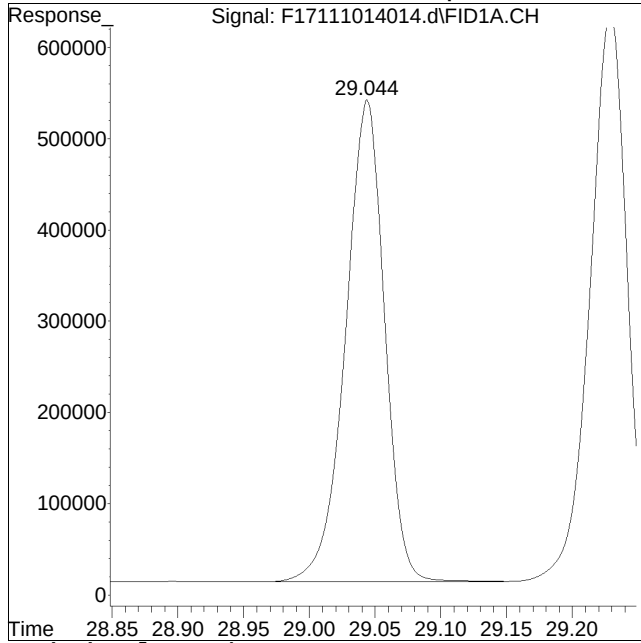
Manual Peak Response = 9686820 M4

M4 = Poor automated baseline construction.

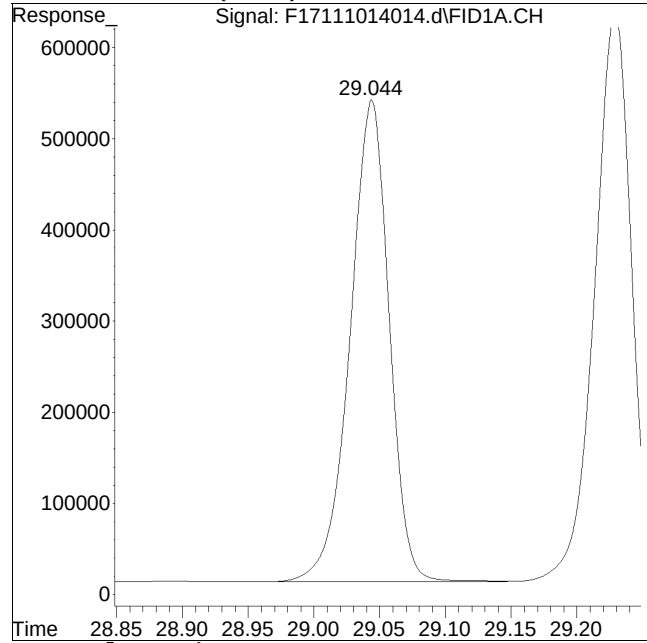
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #18: n-Nonadecane (C19)



Original Peak Response = 10892410



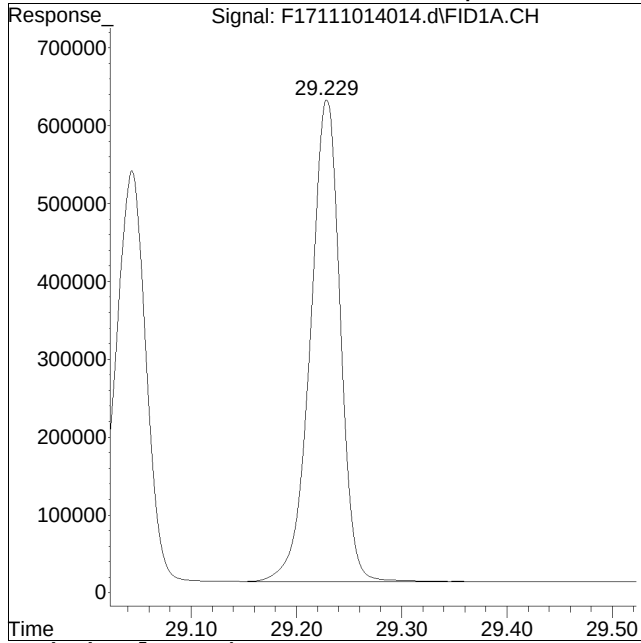
Manual Peak Response = 10933111 M4

M4 = Poor automated baseline construction.

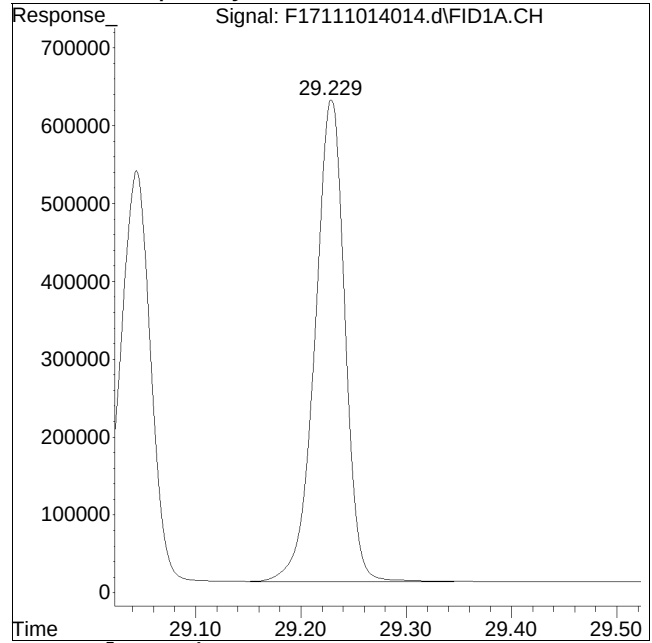
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #19: ortho-terphenyl



Original Peak Response = 12213350



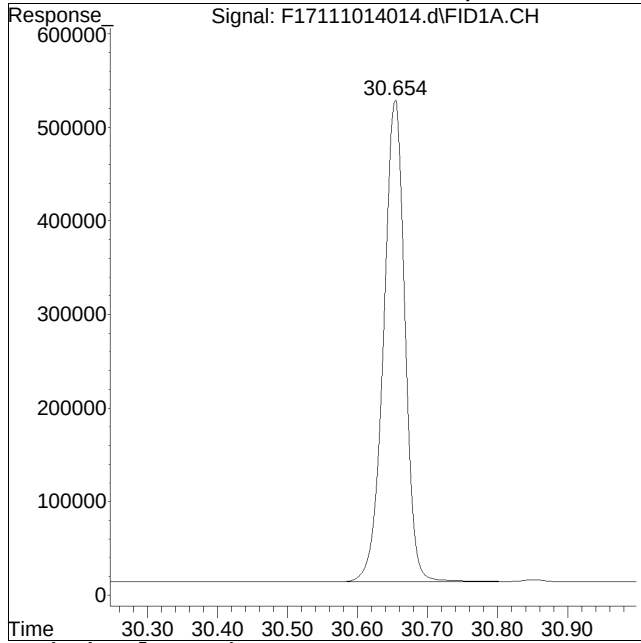
Manual Peak Response = 12275311 M4

M4 = Poor automated baseline construction.

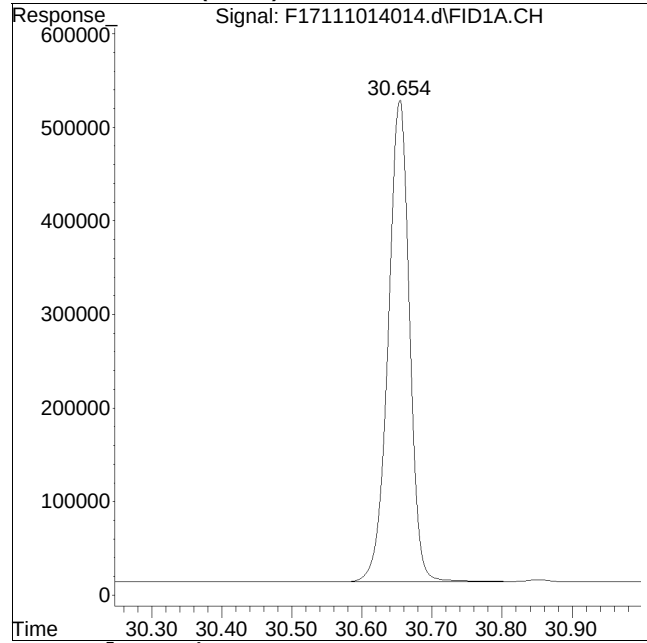
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #20: n-Eicosane (C20)



Original Peak Response = 10911685



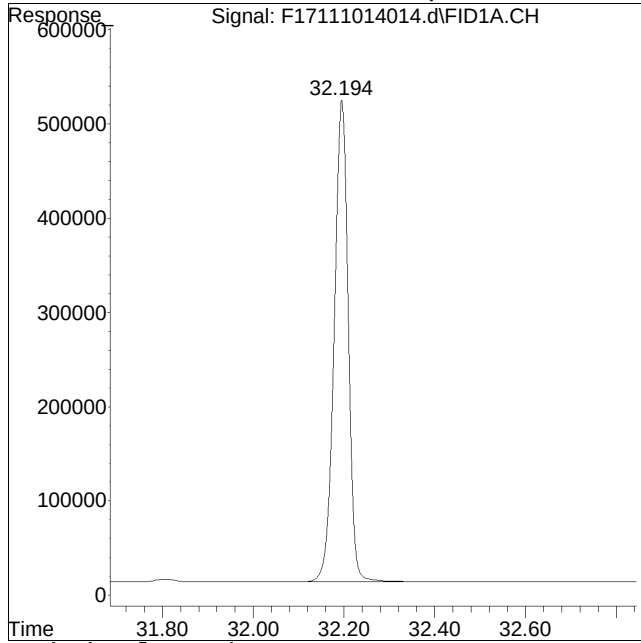
Manual Peak Response = 10914758 M4

M4 = Poor automated baseline construction.

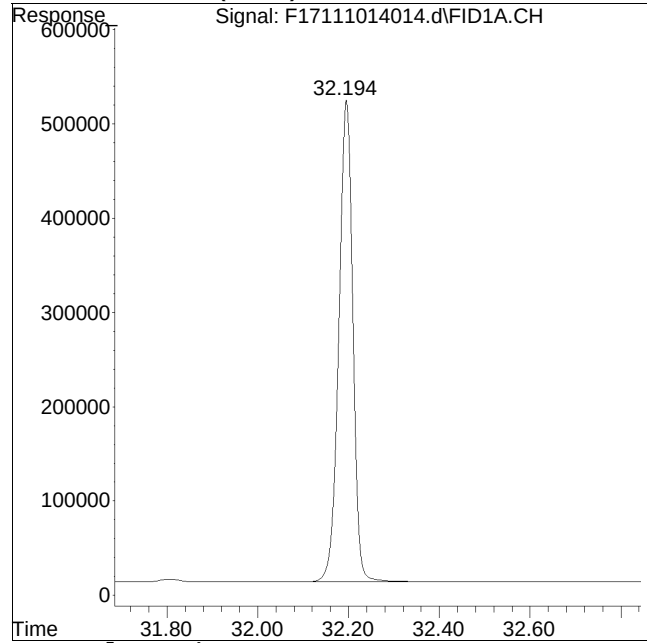
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\20140114
Data File : F17111014014.d
Date Inj'd : 11/10/2014 8:31 pm
Sample : I1711011402R
Method : HC17111014F.M
Operator : FID17:NL
Instrument : FID17
Quant Date : 11/14/2014 12:19 pm

Compound #21: n-Heneicosane (C21)



Original Peak Response = 11020565



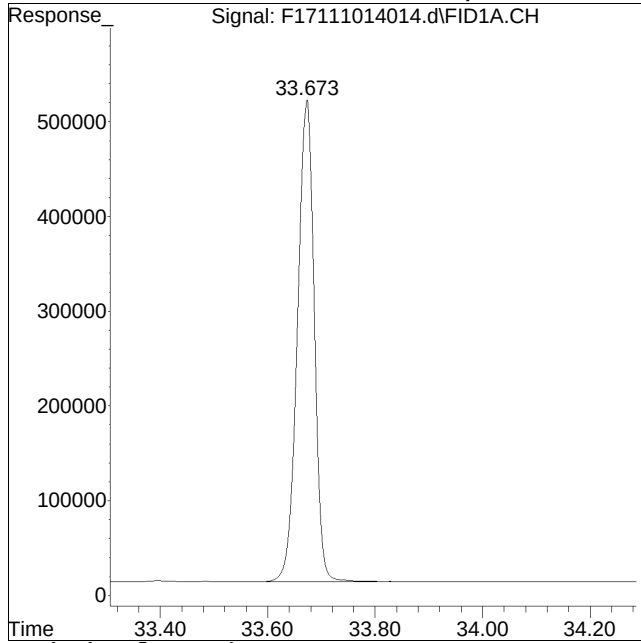
Manual Peak Response = 11005551 M4

M4 = Poor automated baseline construction.

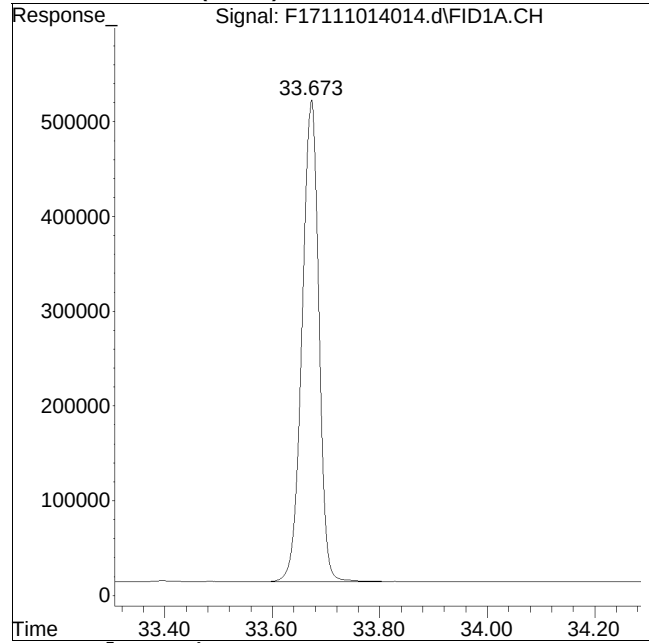
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #22: n-Docosane (C22)



Original Peak Response = 11113275



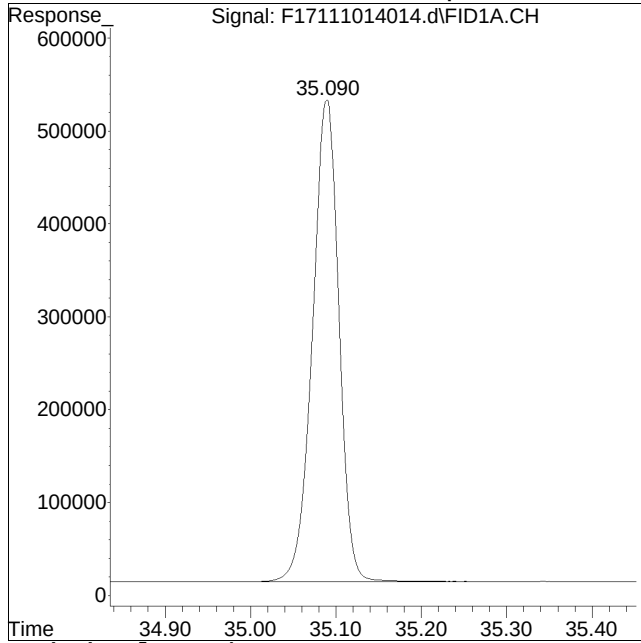
Manual Peak Response = 11090258 M4

M4 = Poor automated baseline construction.

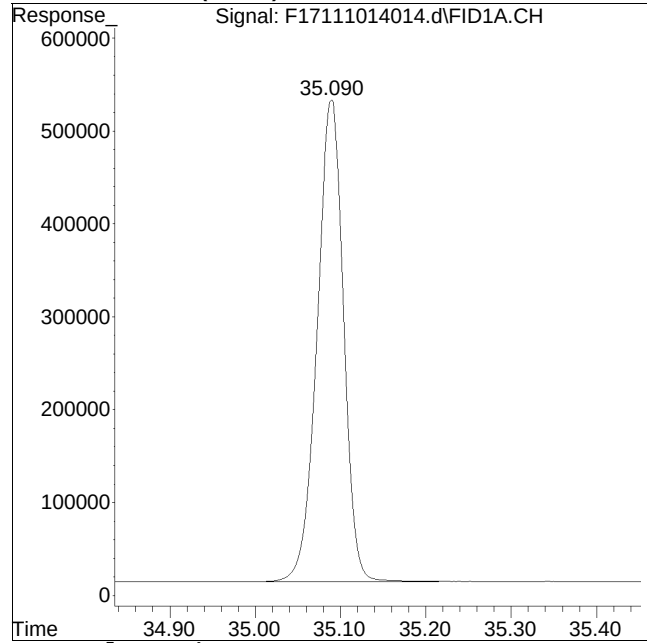
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #23: n-Tricosane (C23)



Original Peak Response = 11154956



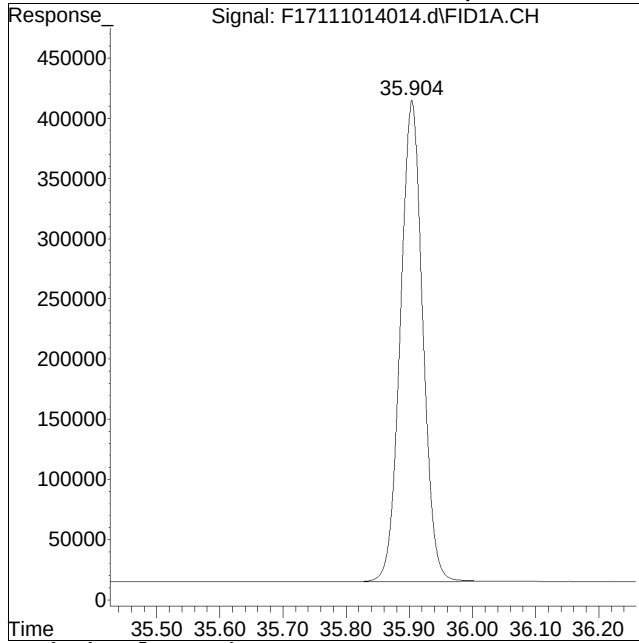
Manual Peak Response = 11177597 M4

M4 = Poor automated baseline construction.

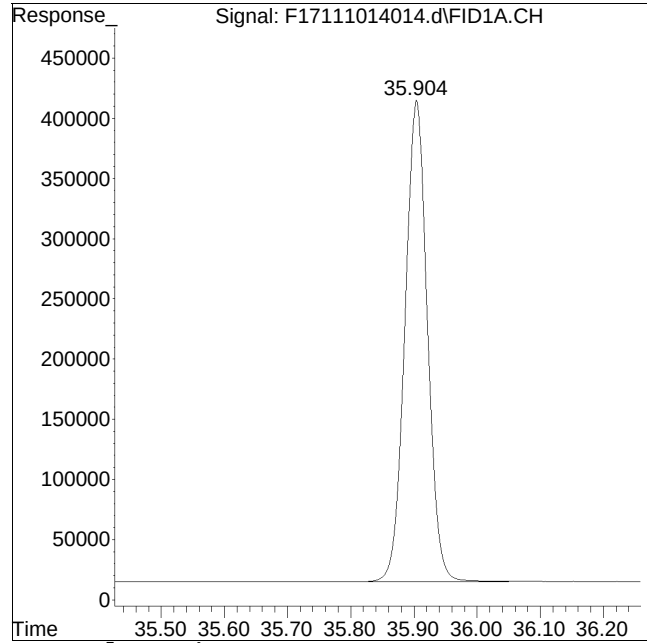
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #24: d50-Tetracosane



Original Peak Response = 9822957



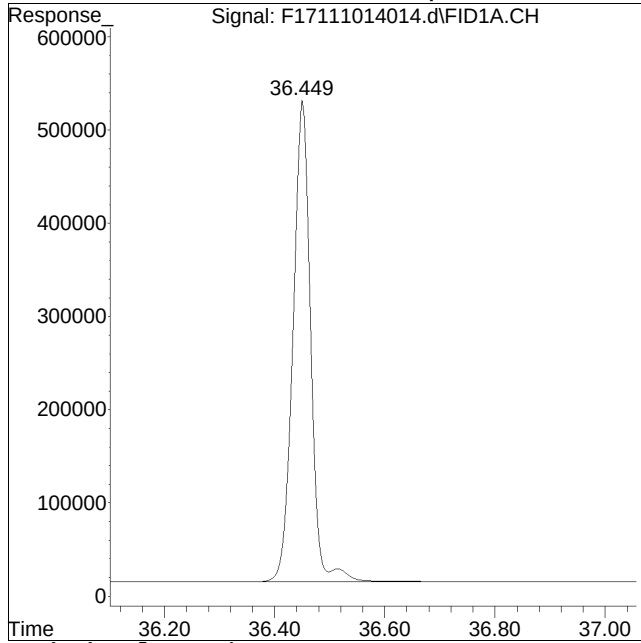
Manual Peak Response = 9879621 M4

M4 = Poor automated baseline construction.

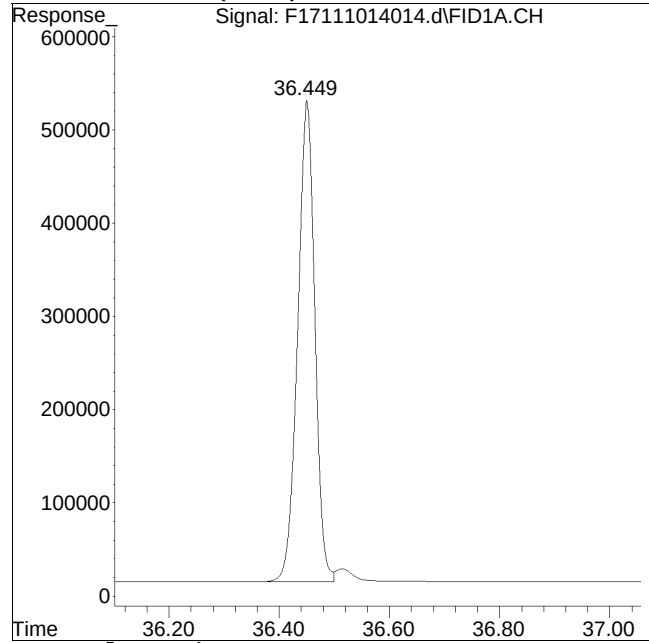
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #25: n-Tetracosane (C24)



Original Peak Response = 11541322



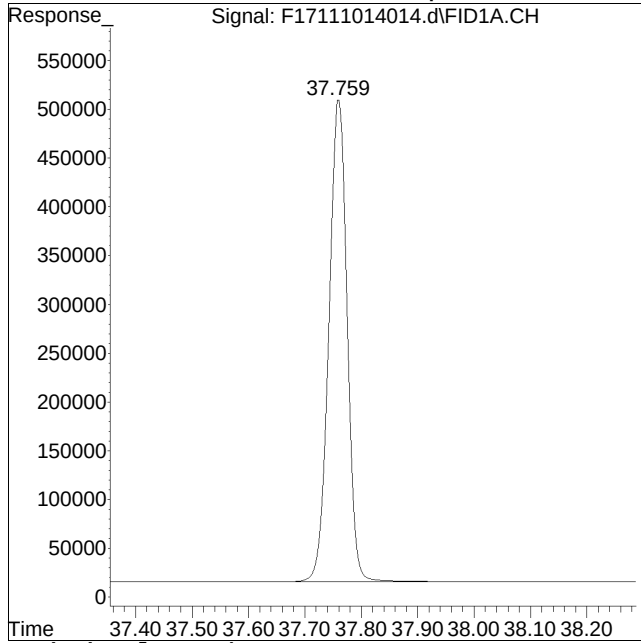
Manual Peak Response = 11187494 M4

M4 = Poor automated baseline construction.

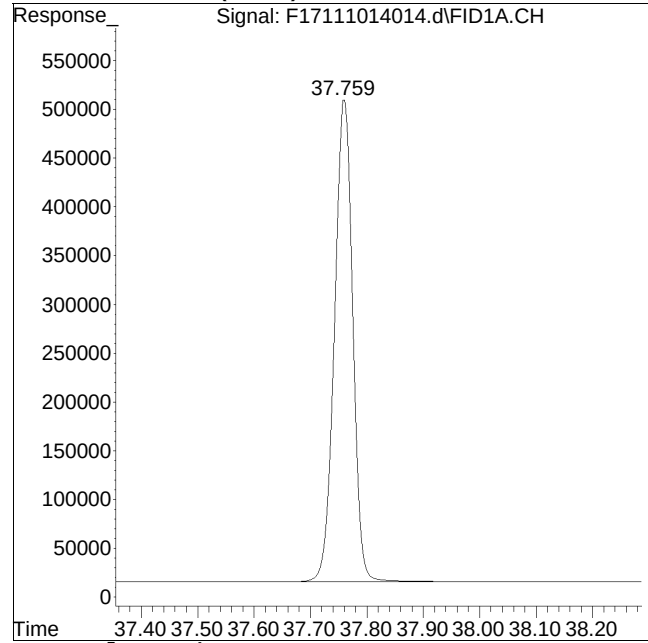
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #26: n-Pentacosane (C25)



Original Peak Response = 11133186



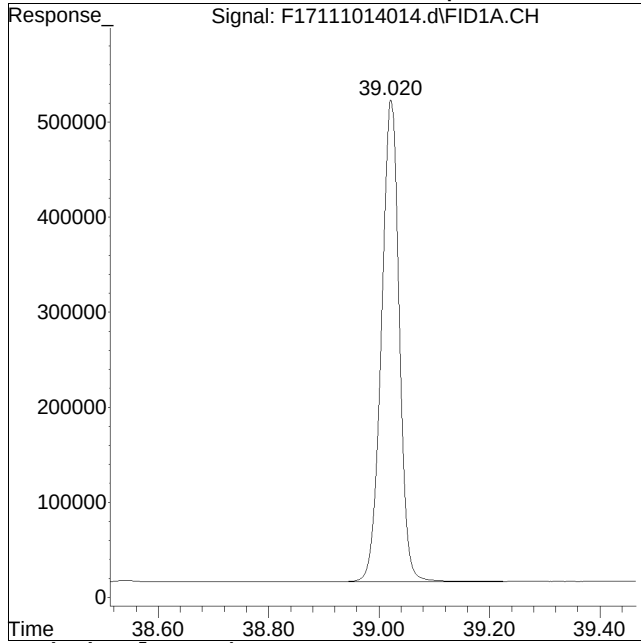
Manual Peak Response = 11131468 M4

M4 = Poor automated baseline construction.

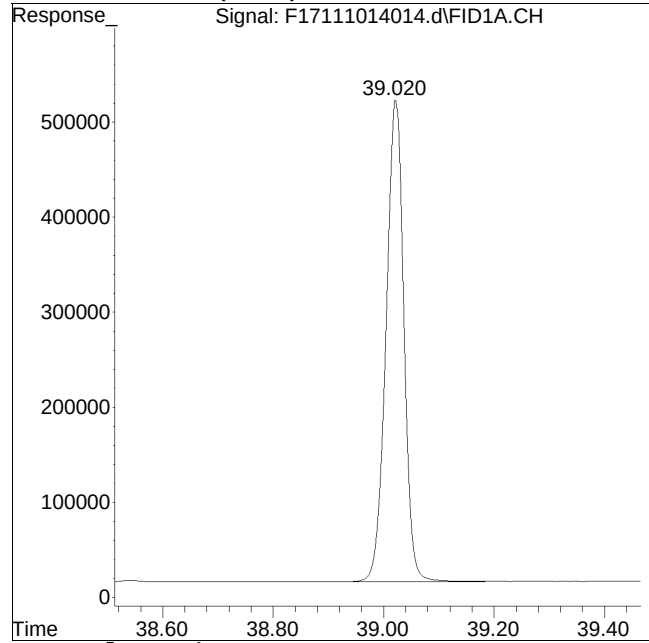
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #27: n-Hexacosane (C26)



Original Peak Response = 11373844



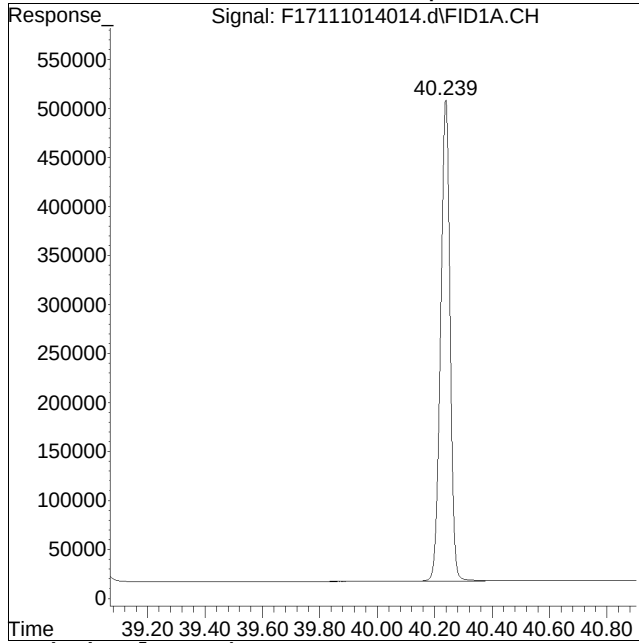
Manual Peak Response = 11381761 M4

M4 = Poor automated baseline construction.

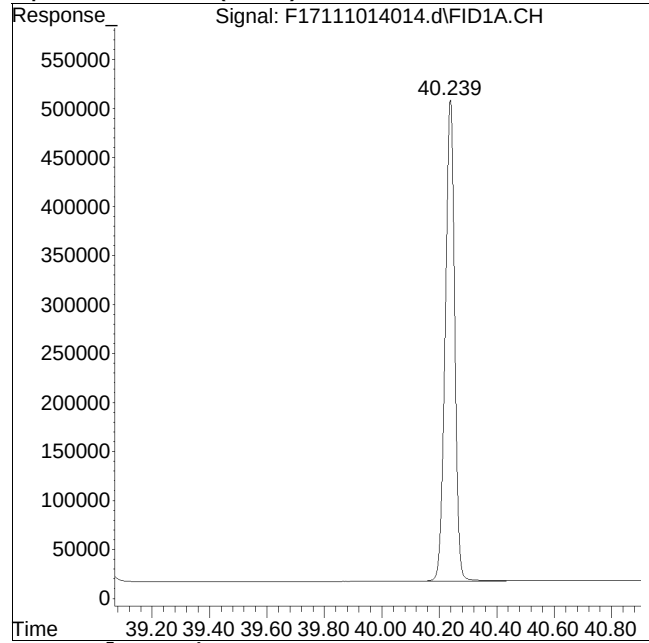
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #28: n-Heptacosane (C27)



Original Peak Response = 11228137



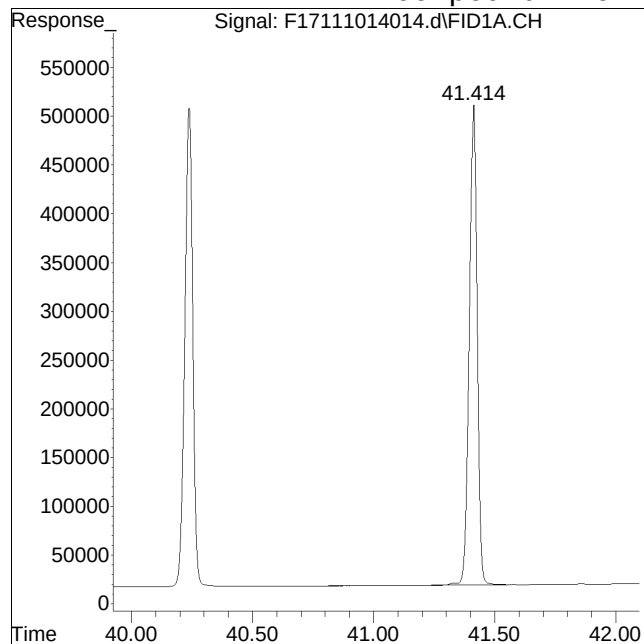
Manual Peak Response = 11270080 M4

M4 = Poor automated baseline construction.

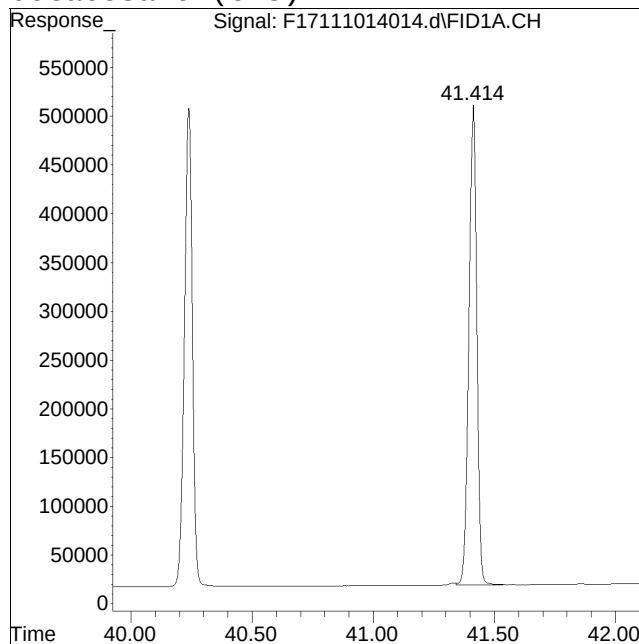
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #29: n-Octacosane (C28)



Original Peak Response = 11168974



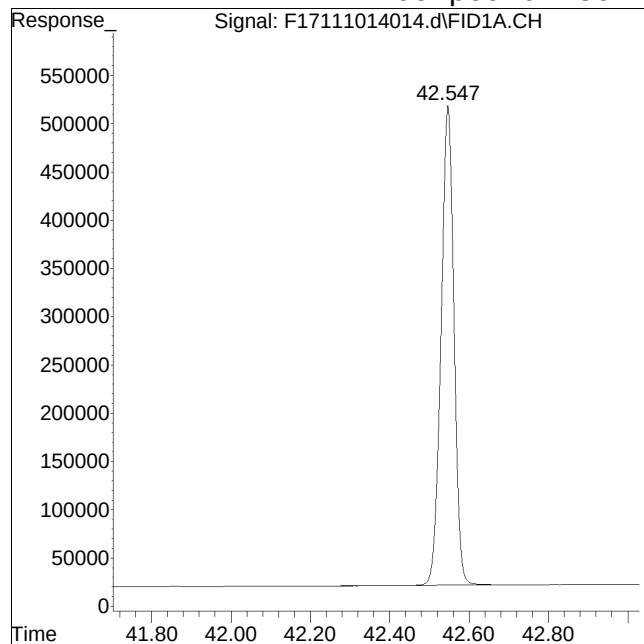
Manual Peak Response = 11186318 M4

M4 = Poor automated baseline construction.

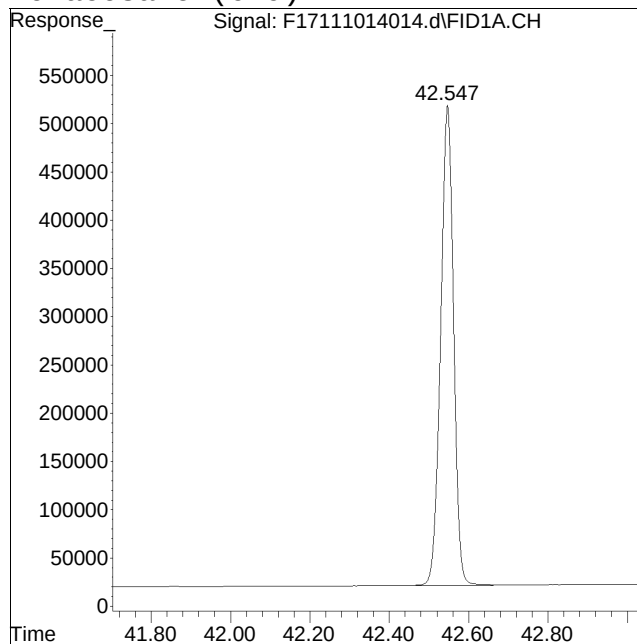
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #30: n-Nonacosane (C29)



Original Peak Response = 11206927



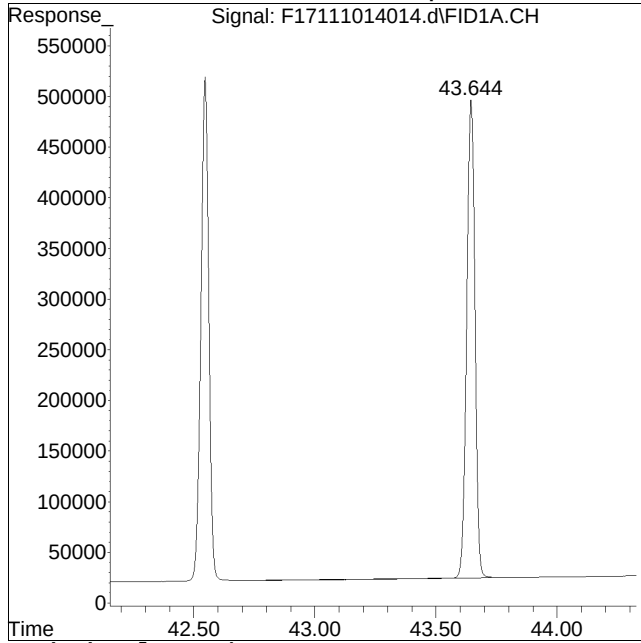
Manual Peak Response = 11258816 M4

M4 = Poor automated baseline construction.

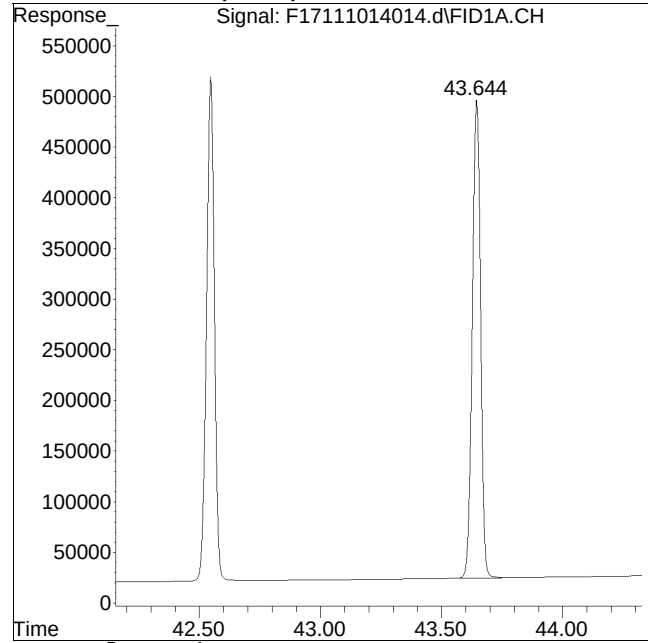
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #31: n-Triacontane (C30)



Original Peak Response = 11102349



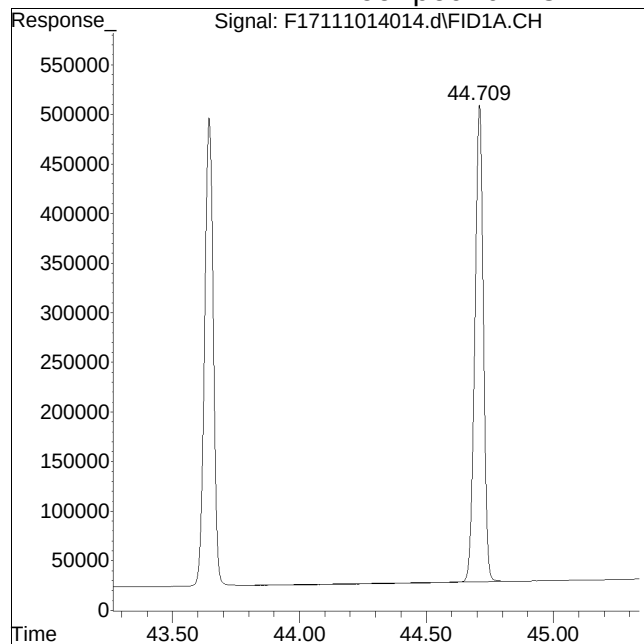
Manual Peak Response = 11268522 M4

M4 = Poor automated baseline construction.

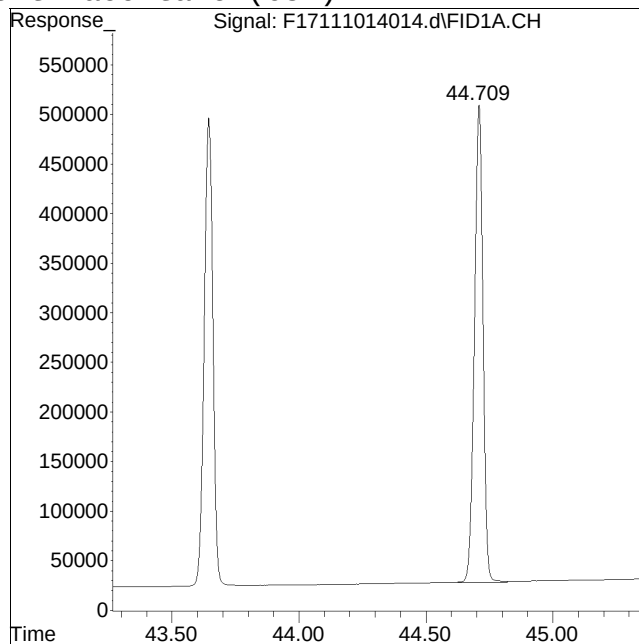
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #32: n-Hentriacontane (C31)



Original Peak Response = 11022452



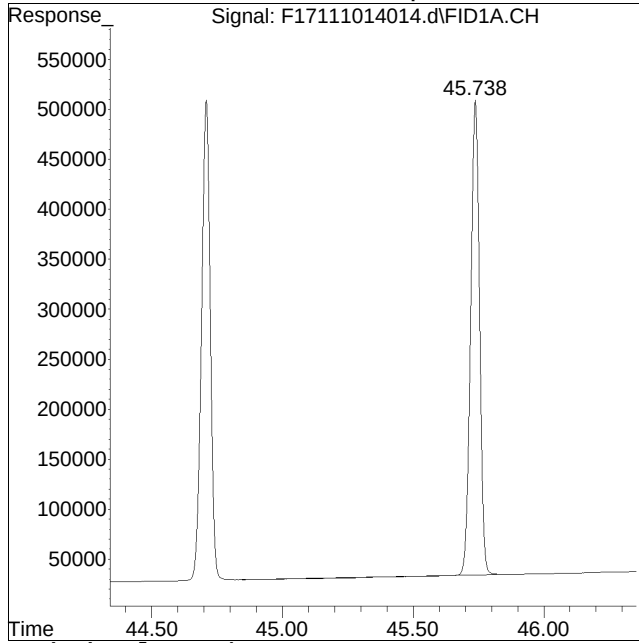
Manual Peak Response = 11275401 M4

M4 = Poor automated baseline construction.

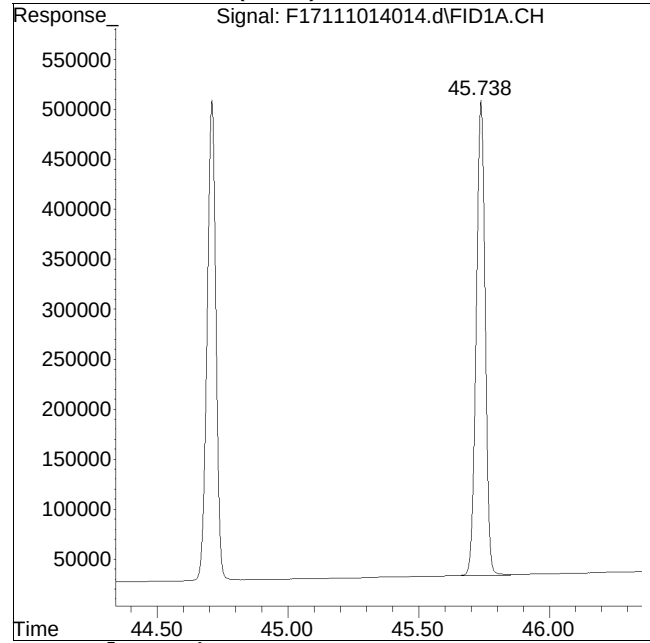
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #33: n-Dotriacontane (C32)



Original Peak Response = 11127782



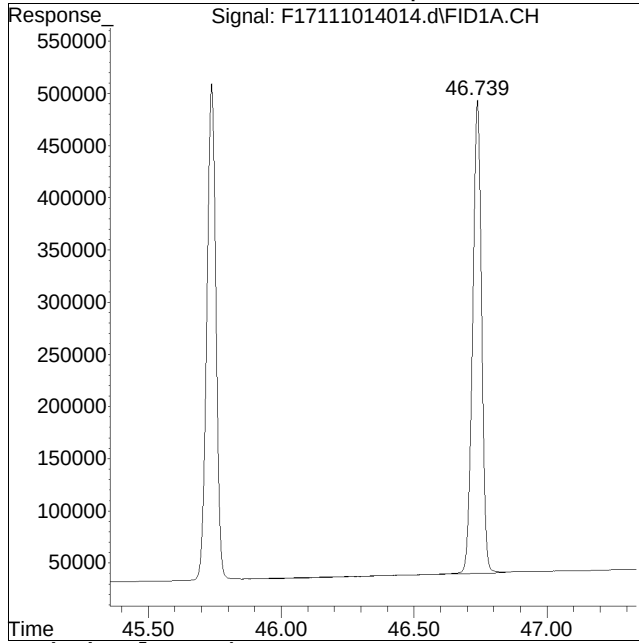
Manual Peak Response = 11359577 M4

M4 = Poor automated baseline construction.

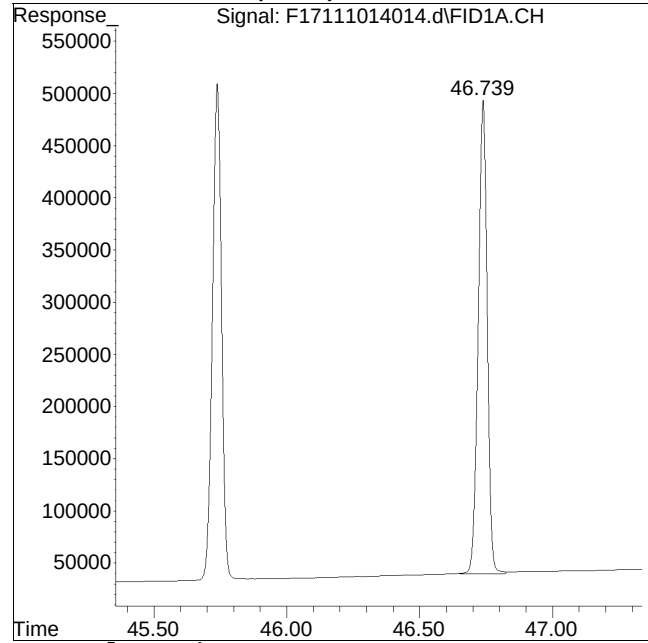
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #34: n-Tritriacontane (C33)



Original Peak Response = 10599200



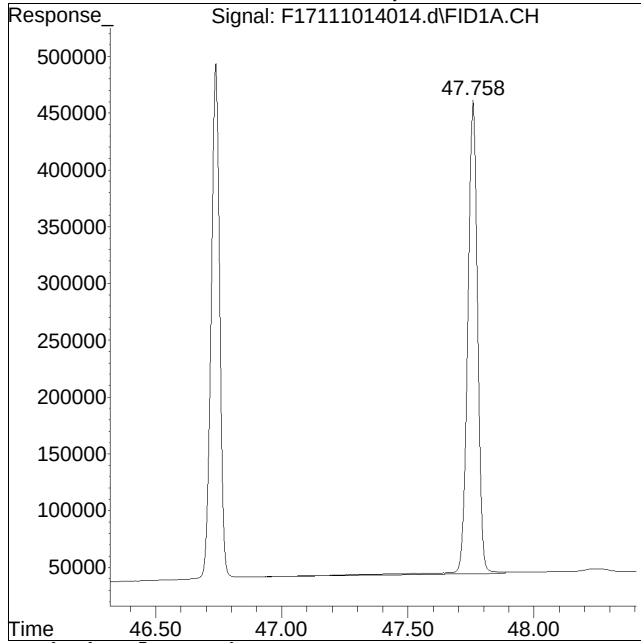
Manual Peak Response = 10681176 M4

M4 = Poor automated baseline construction.

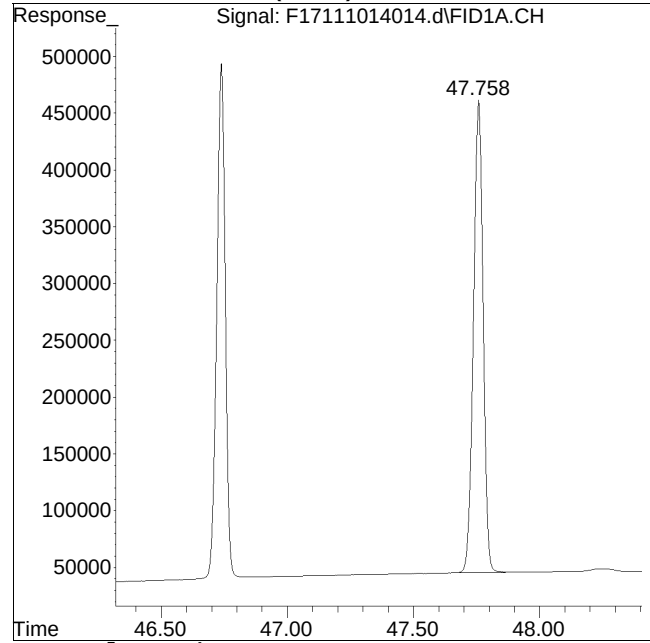
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #35: n-tetratriacontane (C34)



Original Peak Response = 11467704



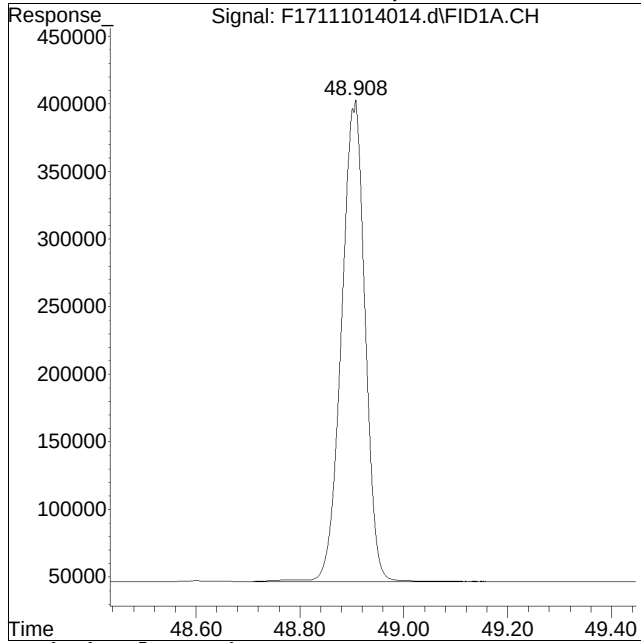
Manual Peak Response = 11092909 M4

M4 = Poor automated baseline construction.

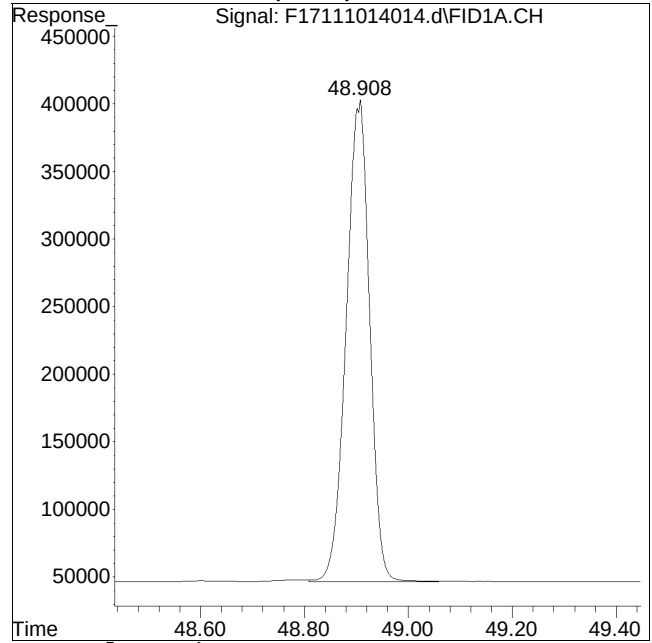
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #36: n-Pentatriacontane (C35)



Original Peak Response = 11244205



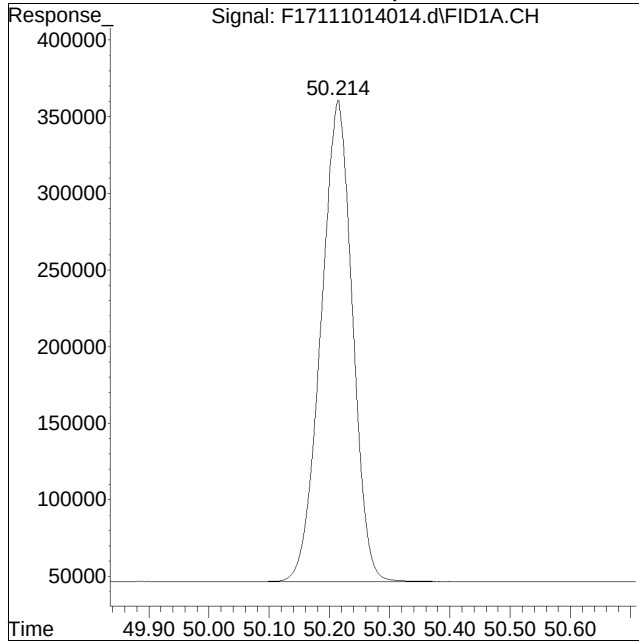
Manual Peak Response = 11156813 M4

M4 = Poor automated baseline construction.

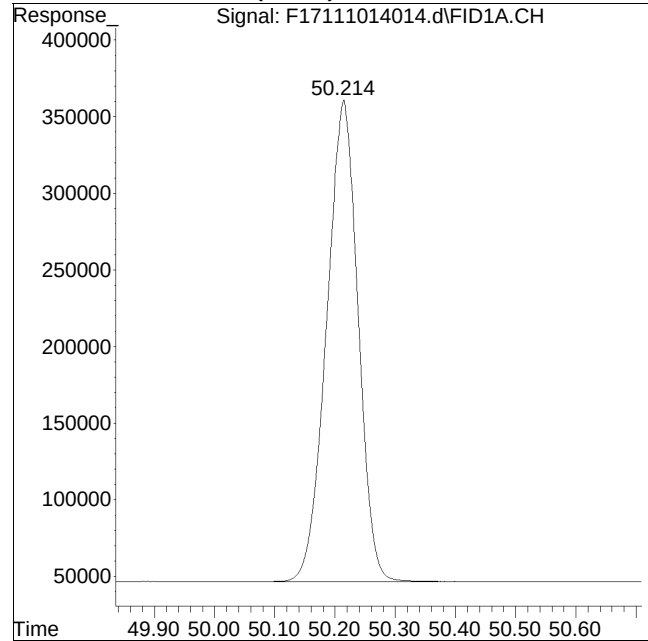
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #37: n-Hexatriacontane (C36)



Original Peak Response = 11421282



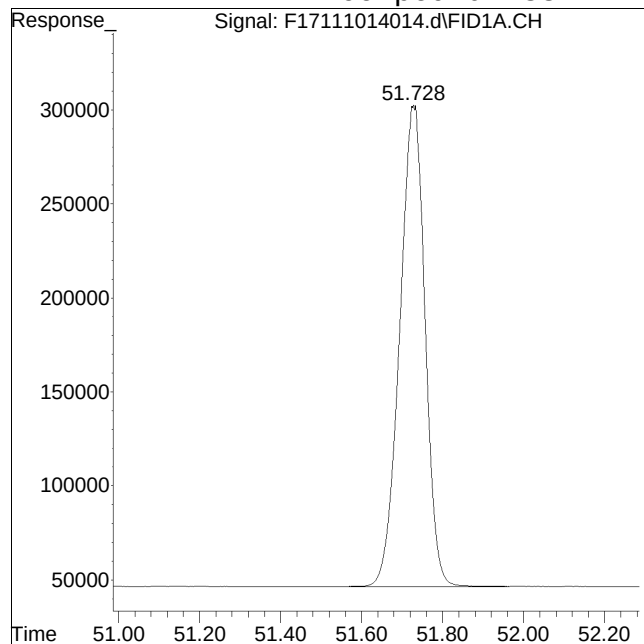
Manual Peak Response = 11422543 M4

M4 = Poor automated baseline construction.

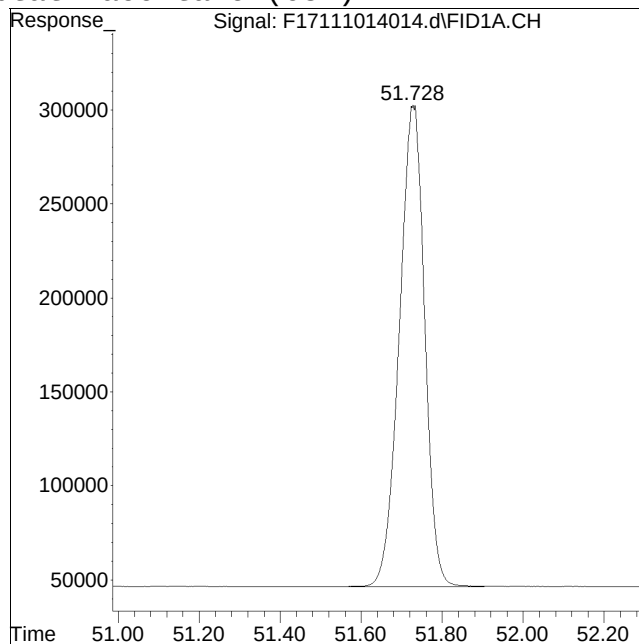
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #38: n-Heptatriacontane (C37)



Original Peak Response = 11116197



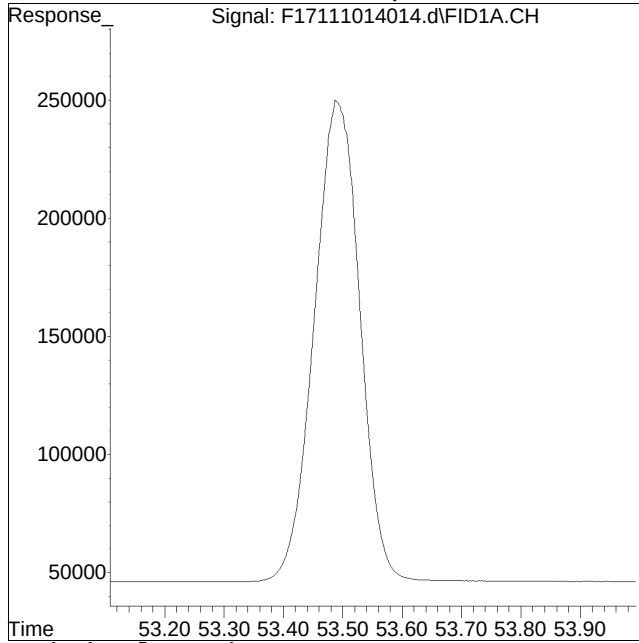
Manual Peak Response = 11112602 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

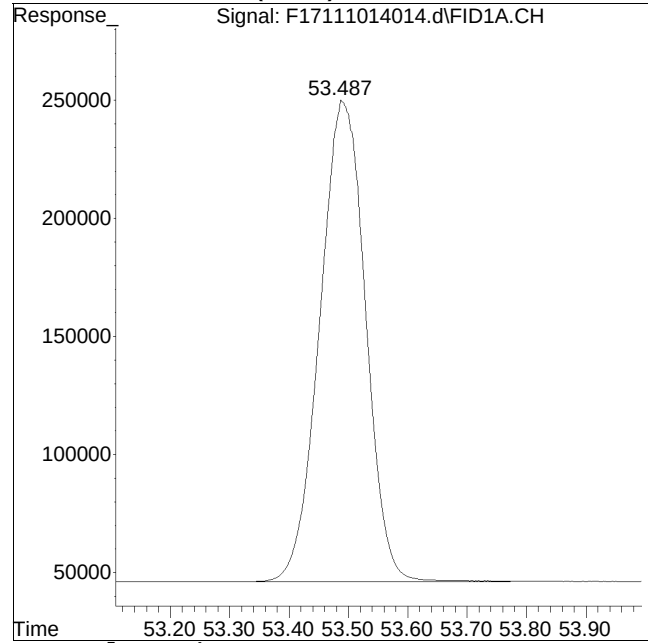
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #39: n-Octatriacontane (C38)



Original Peak Response = 0

M4 = Poor automated baseline construction.

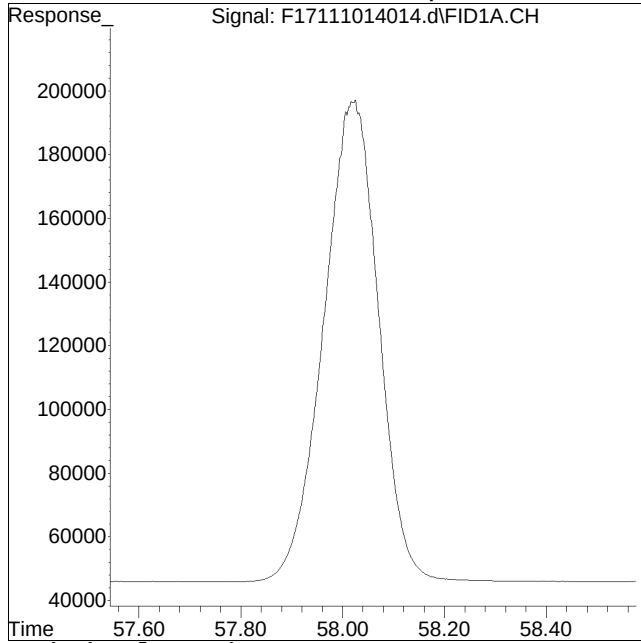


Manual Peak Response = 10908503 M4

Manual Integration/Negative Proof Report

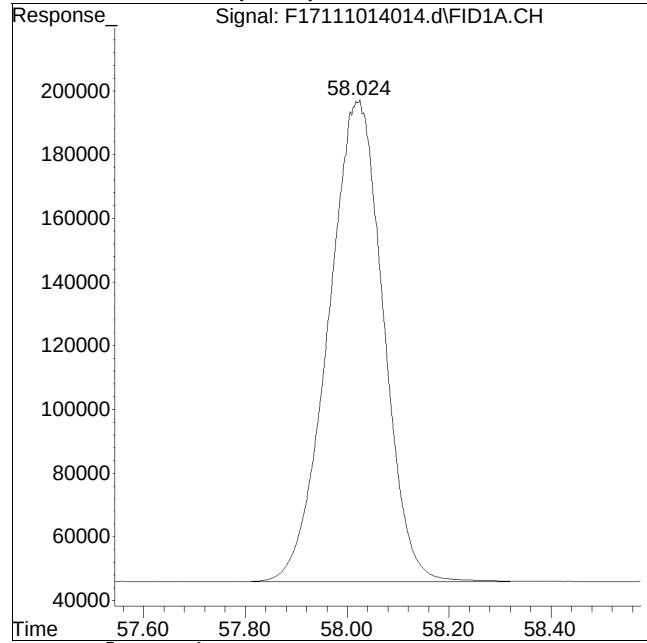
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I17111011402R Quant Date : 11/14/2014 12:19 pm

Compound #41: n-Tetracontane (C40)



Original Peak Response = 0

M4 = Poor automated baseline construction.



Manual Peak Response = 11317318 M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014016.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 10:01 pm
 Operator : FID17:NL
 Sample : I1711011403R
 Misc : WG743851, FRAV14 50ug/mL
 ALS Vial : 8 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:36:11 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound			R.T.	Response	Conc Units	

Internal Standards						
1) I	5-alpha-androstane		31.266	54310906	50.000 ug/mL	M4
System Monitoring Compounds						
19) s	ortho-terphenyl		29.249	59342026	48.765 ug/mL	M4
Spiked	Amount	50.000	Range 50 - 130	Recovery =	97.53%	
24) s	d50-Tetracosane		35.922	47616898	49.586 ug/mL	M4
Spiked	Amount	50.000	Range 50 - 130	Recovery =	99.17%	
Target Compounds						
2) t	n-Octane (C8)		5.578	45560434	47.344 ug/mL	M4
3) t	n-Nonane (C9)		7.777	46801135	46.290 ug/mL	M4
4) t	n-Decane (C10)		10.264	48405866	45.622 ug/mL	M4
5) t	n-Undecane (C11)		12.780	49661379	47.712 ug/mL	M4
6) t	n-Dodecane (C12)		15.210	50686941	48.367 ug/mL	M4
7) t	n-Tridecane (C13)		17.521	51093773	48.813 ug/mL	M4
9) t	n-Tetradecane (C14)		19.708	51735306	47.681 ug/mL	M4
11) t	n-Pentadecane (C15)		21.777	52726106	49.224 ug/mL	M4
12) t	n-Hexadecane (C16)		23.737	52629891	48.757 ug/mL	M4
14) t	n-Heptadecane (C17)		25.600	52933668	48.780 ug/mL	M4
15) t	Pristane		25.711	53728134	49.395 ug/mL	M4
16) t	n-Octadecane (C18)		27.372	53966088	50.035 ug/mL	M4
17) t	Phytane		27.535	47224332	43.098 ug/mL	M4
18) t	n-Nonadecane (C19)		29.062	53604297	49.982 ug/mL	M4
20) t	n-Eicosane (C20)		30.671	53373894	49.539 ug/mL	M4
21) t	n-Heneicosane (C21)		32.211	53706675	49.283 ug/mL	M4
22) t	n-Docosane (C22)		33.690	54114794	49.379 ug/mL	M4
23) t	n-Tricosane (C23)		35.108	54468080	49.419 ug/mL	M4
25) t	n-Tetracosane (C24)		36.471	54558609	49.445 ug/mL	M4
26) t	n-Pentacosane (C25)		37.781	54123509	48.884 ug/mL	M4
27) t	n-Hexacosane (C26)		39.042	55246629	48.884 ug/mL	M4
28) t	n-Heptacosane (C27)		40.259	54568291	48.648 ug/mL	M4
29) t	n-Octacosane (C28)		41.432	54246380	48.210 ug/mL	M4
30) t	n-Nonacosane (C29)		42.568	54437873	47.942 ug/mL	M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014016.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 10:01 pm
 Operator : FID17:NL
 Sample : I1711011403R
 Misc : WG743851, FRAV14 50ug/mL
 ALS Vial : 8 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:36:11 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc Units
31) t	n-Triacontane (C30)	43.665	54410127	47.757 ug/mL M4
32) t	n-Hentriacontane (C31)	44.729	54264860	47.267 ug/mL M4
33) t	n-Dotriacontane (C32)	45.760	54592430	47.831 ug/mL M4
34) t	n-Tritriacontane (C33)	46.757	51478791	46.432 ug/mL M4
35) t	n-tetratriacontane (C34)	47.782	53603677	45.555 ug/mL M4
36) t	n-Pentatriacontane (C35)	48.929	53899156	46.041 ug/mL M4
37) t	n-Hexatriacontane (C36)	50.247	55334260	43.654 ug/mL M4
38) t	n-Heptatriacontane (C37)	51.769	54162138	45.796 ug/mL M4
39) t	n-Octatriacontane (C38)	53.546	53323714	45.119 ug/mL M4
41) t	n-Tetracontane (C40)	58.094	56122386	49.359 ug/mL M4

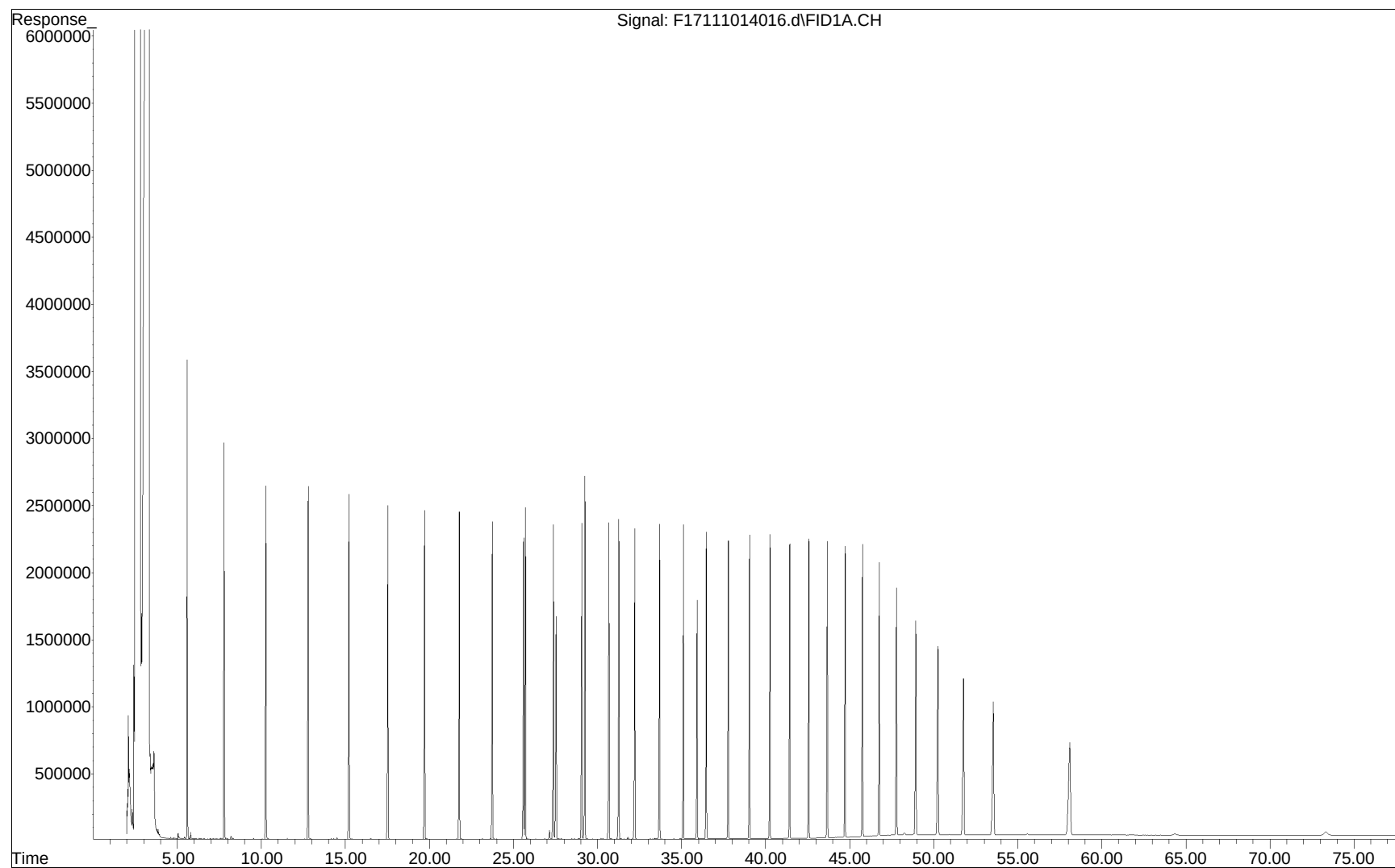
SemiQuant Compounds - Not Calibrated on this Instrument

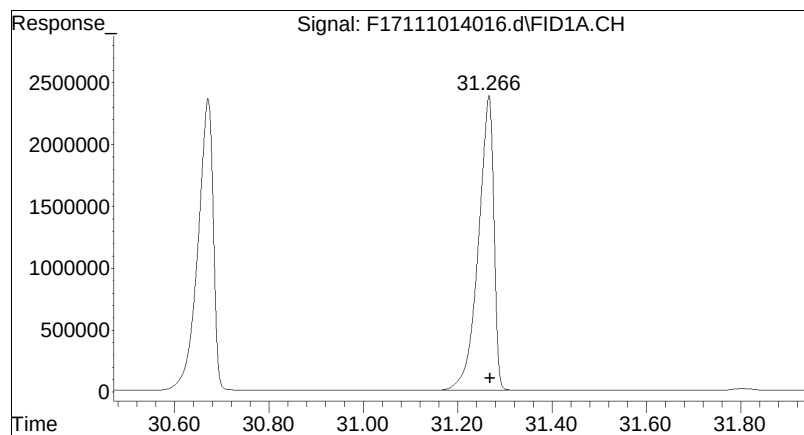
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

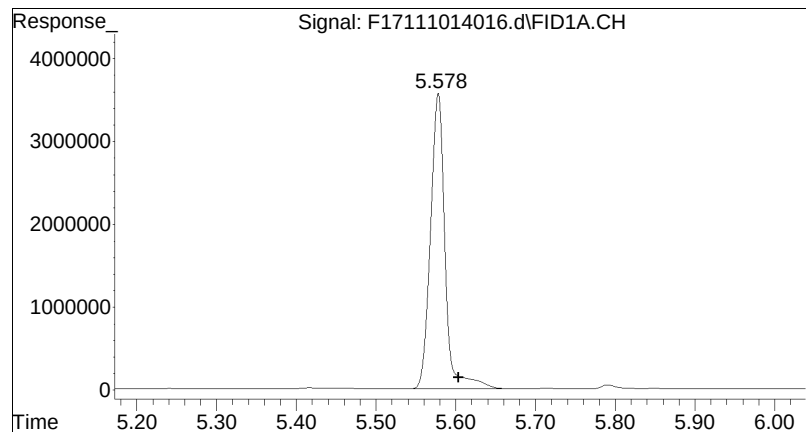
File : 0:\Forensics\Data\FID17\2014\NOV\NOV10\F17111014016.d
Operator : FID17:NL
Acquired : 10 Nov 2014 10:01 pm using AcqMethod FID17.M
Sample Name: I1711011403R
Instrument: FID17
Misc Info : WG743851, FRAV14 50ug/mL
Vial Number: 8
CurrentMeth: 0:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M





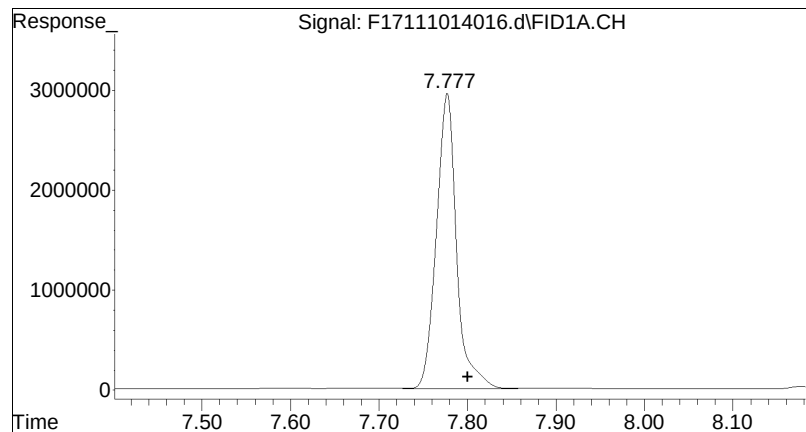
#1 5- α -androsterone

R.T.: 31.266 min
Delta R.T.: -0.003 min
Response: 54310906
Conc: 50.00 ug/mL M4



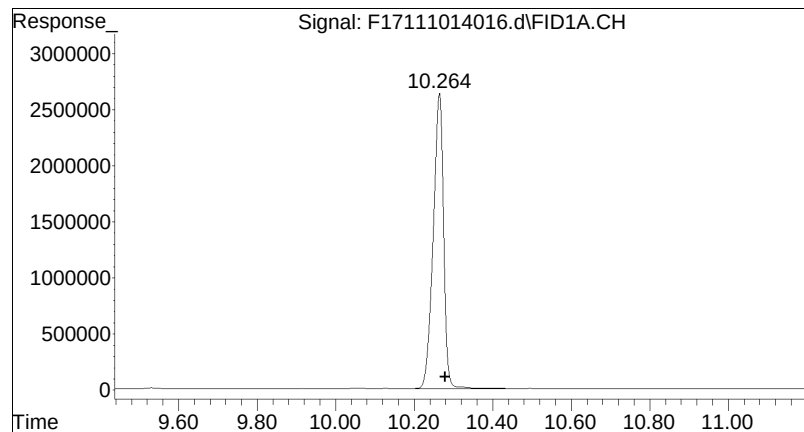
#2 n-Octane (C8)

R.T.: 5.578 min
Delta R.T.: -0.026 min
Response: 45560434
Conc: 47.34 ug/mL M4



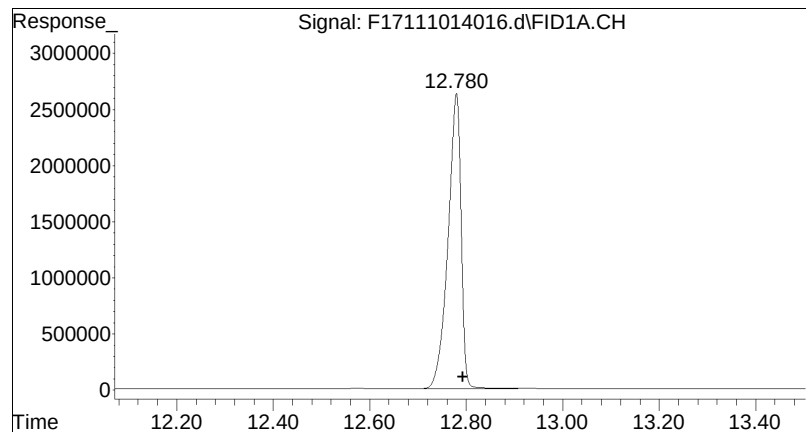
#3 n-Nonane (C9)

R.T.: 7.777 min
Delta R.T.: -0.023 min
Response: 46801135
Conc: 46.29 ug/mL M4



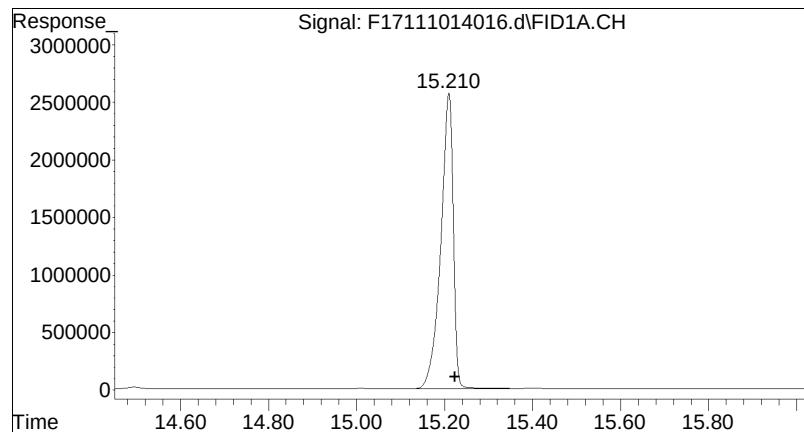
#4 n-Decane (C10)

R.T.: 10.264 min
Delta R.T.: -0.015 min
Response: 48405866
Conc: 45.62 ug/mL M4



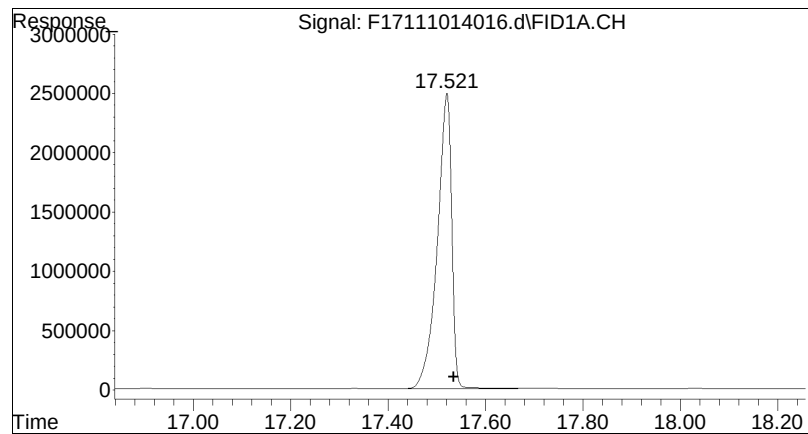
#5 n-Undecane (C11)

R.T.: 12.780 min
Delta R.T.: -0.013 min
Response: 49661379
Conc: 47.71 ug/mL M4



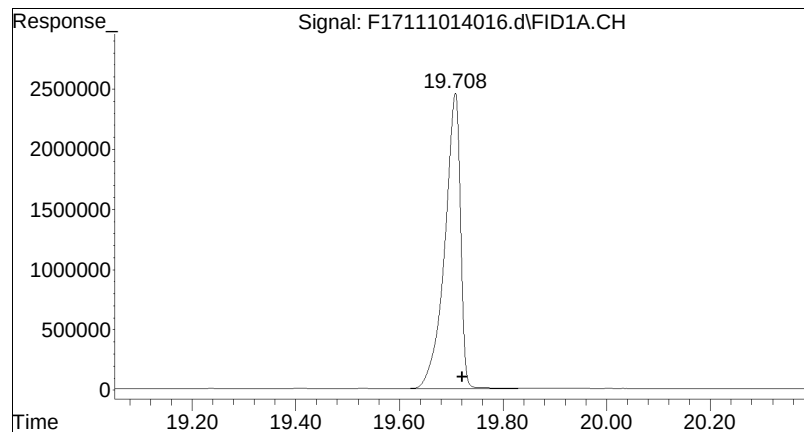
#6 n-Dodecane (C12)

R.T.: 15.210 min
Delta R.T.: -0.014 min
Response: 50686941
Conc: 48.37 ug/mL M4



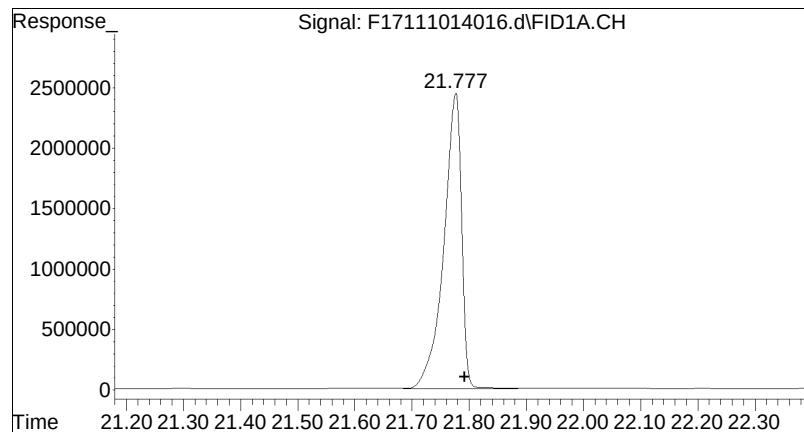
#7 n-Tridecane (C13)

R.T.: 17.521 min
Delta R.T.: -0.013 min
Response: 51093773
Conc: 48.81 ug/mL M4



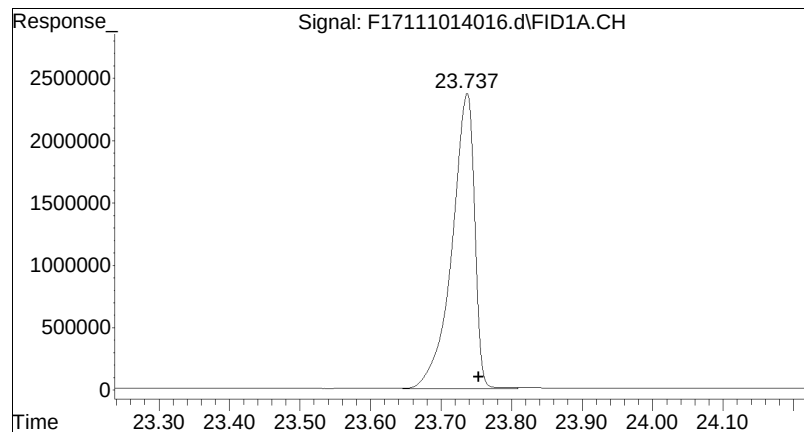
#9 n-Tetradecane (C14)

R.T.: 19.708 min
Delta R.T.: -0.014 min
Response: 51735306
Conc: 47.68 ug/mL M4



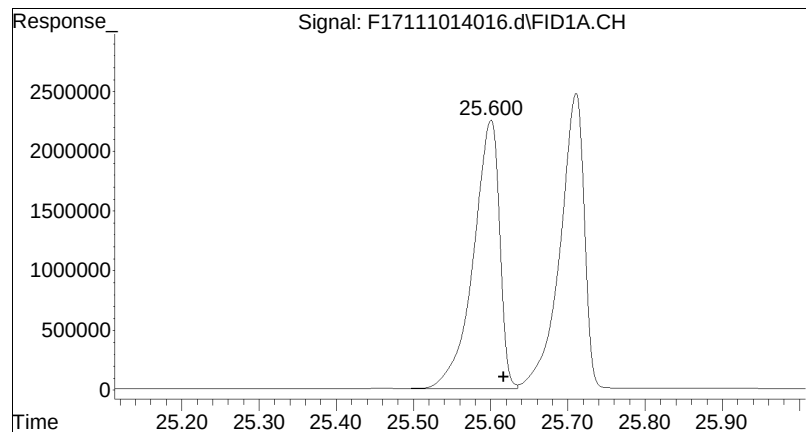
#11 n-Pentadecane (C15)

R.T.: 21.777 min
Delta R.T.: -0.015 min
Response: 52726106
Conc: 49.22 ug/mL M4



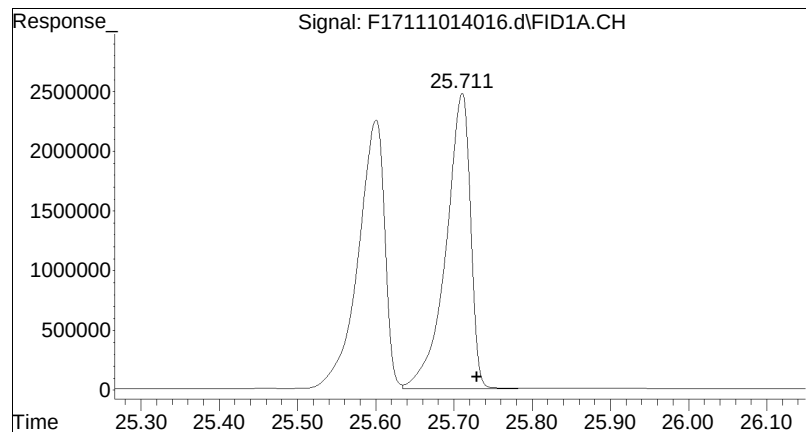
#12 n-Hexadecane (C16)

R.T.: 23.737 min
Delta R.T.: -0.016 min
Response: 52629891
Conc: 48.76 ug/mL M4



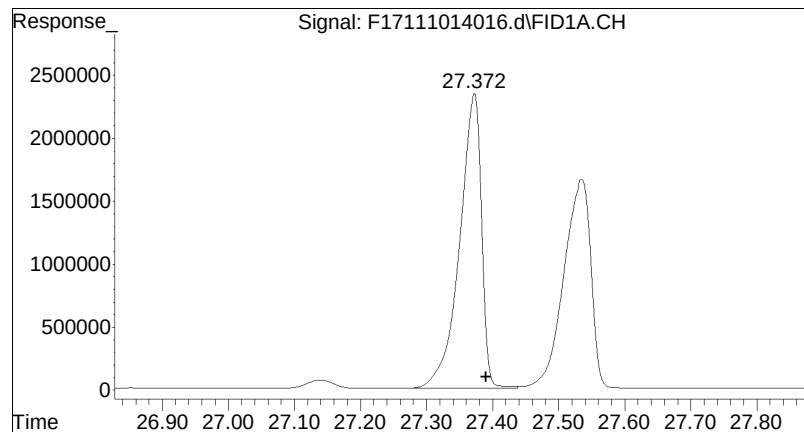
#14 n-Heptadecane (C17)

R.T.: 25.600 min
Delta R.T.: -0.016 min
Response: 52933668
Conc: 48.78 ug/mL M4



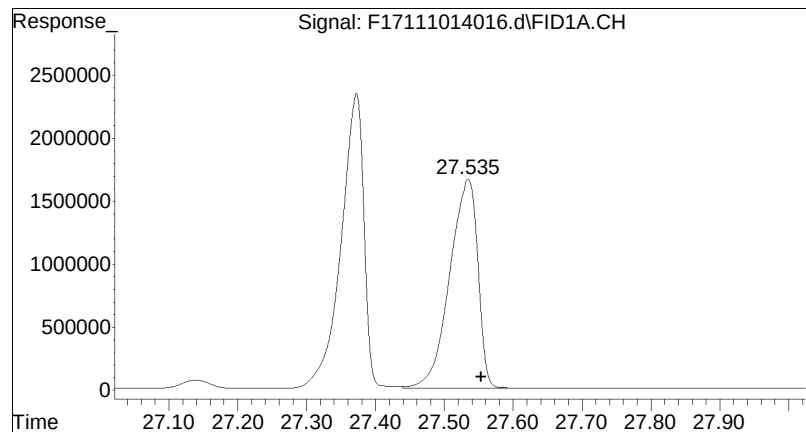
#15 Pristane

R.T.: 25.711 min
Delta R.T.: -0.019 min
Response: 53728134
Conc: 49.40 ug/mL M4



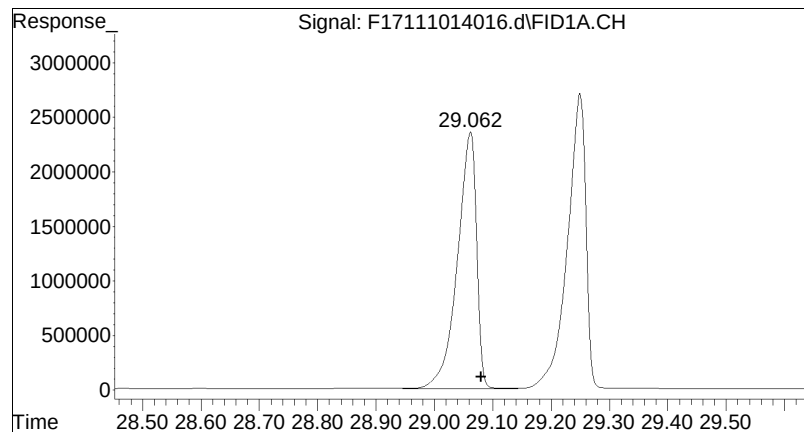
#16 n-Octadecane (C18)

R.T.: 27.372 min
Delta R.T.: -0.017 min
Response: 53966088
Conc: 50.04 ug/mL M4



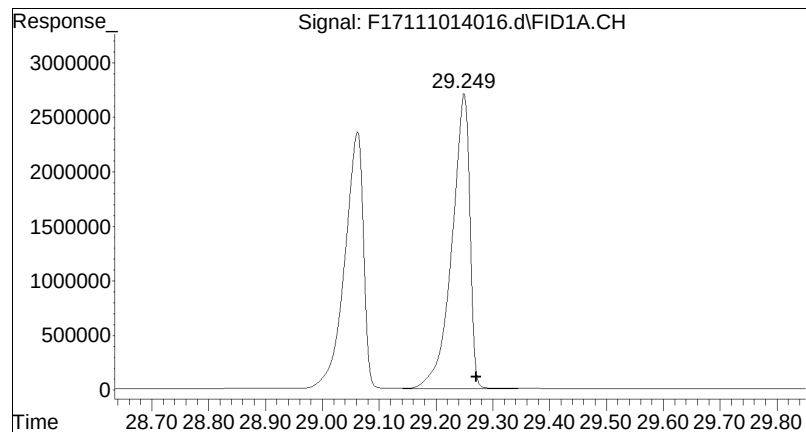
#17 Phytane

R.T.: 27.535 min
Delta R.T.: -0.018 min
Response: 47224332
Conc: 43.10 ug/mL M4



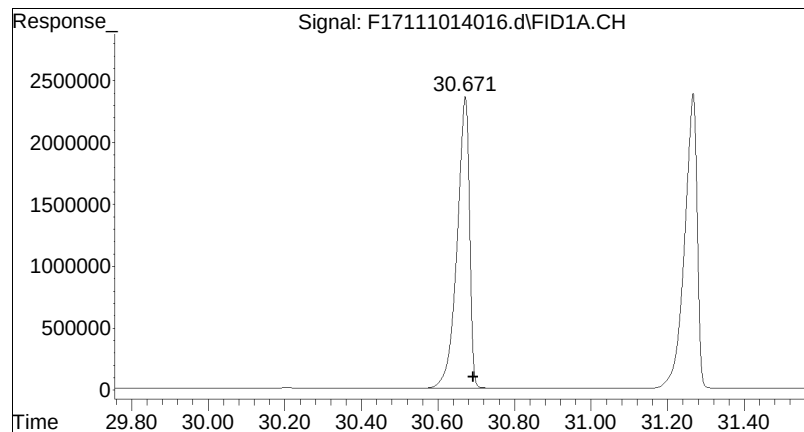
#18 n-Nonadecane (C19)

R.T.: 29.062 min
Delta R.T.: -0.018 min
Response: 53604297
Conc: 49.98 ug/mL M4



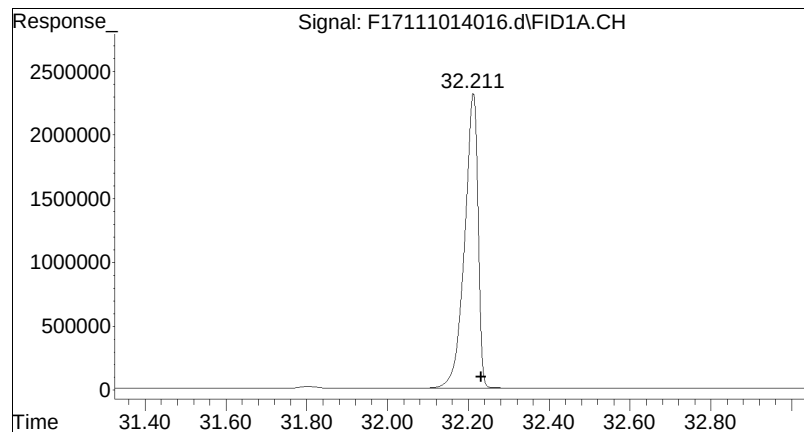
#19 ortho-terphenyl

R.T.: 29.249 min
Delta R.T.: -0.022 min
Response: 59342026
Conc: 48.76 ug/mL M4



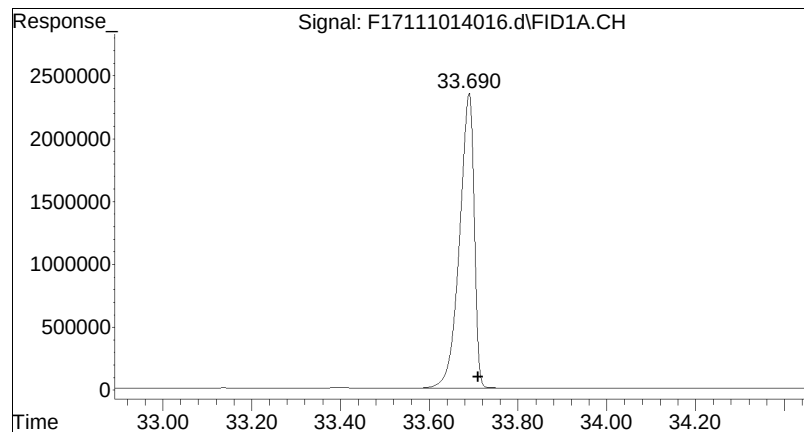
#20 n-Eicosane (C20)

R.T.: 30.671 min
Delta R.T.: -0.020 min
Response: 53373894
Conc: 49.54 ug/mL M4



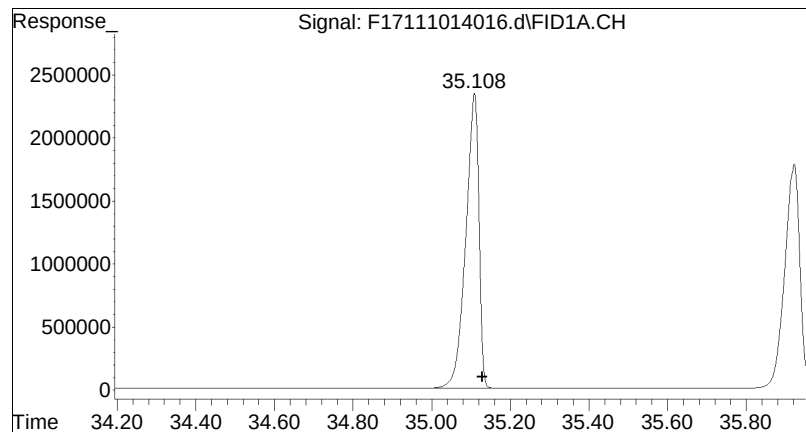
#21 n-Heneicosane (C21)

R.T.: 32.211 min
Delta R.T.: -0.020 min
Response: 53706675
Conc: 49.28 ug/mL M4



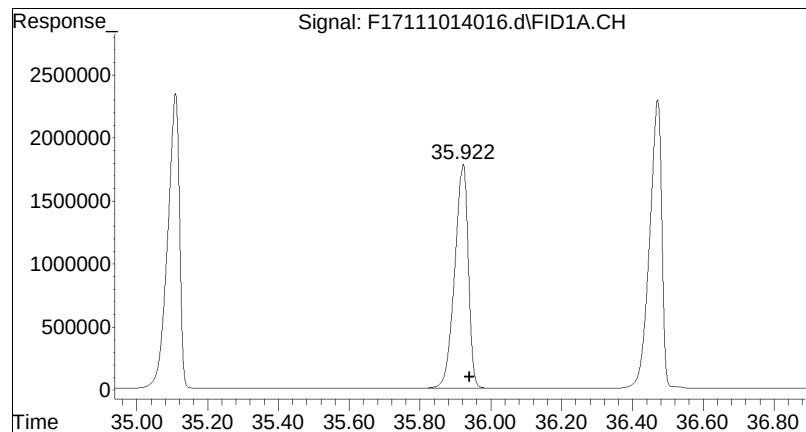
#22 n-Docosane (C22)

R.T.: 33.690 min
Delta R.T.: -0.020 min
Response: 54114794
Conc: 49.38 ug/mL M4



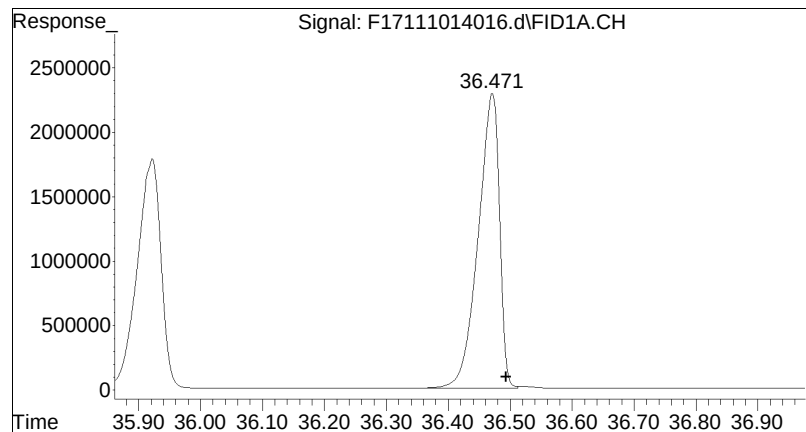
#23 n-Tricosane (C23)

R.T.: 35.108 min
Delta R.T.: -0.021 min
Response: 54468080
Conc: 49.42 ug/mL M4



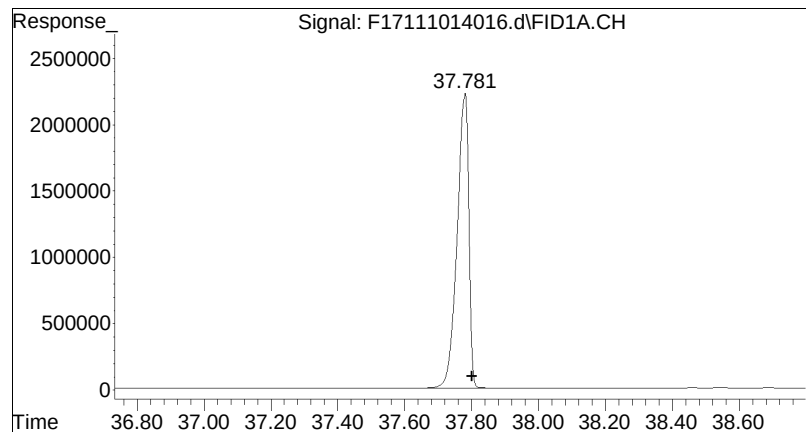
#24 d50-Tetracosane

R.T.: 35.922 min
Delta R.T.: -0.018 min
Response: 47616898
Conc: 49.59 ug/mL M4



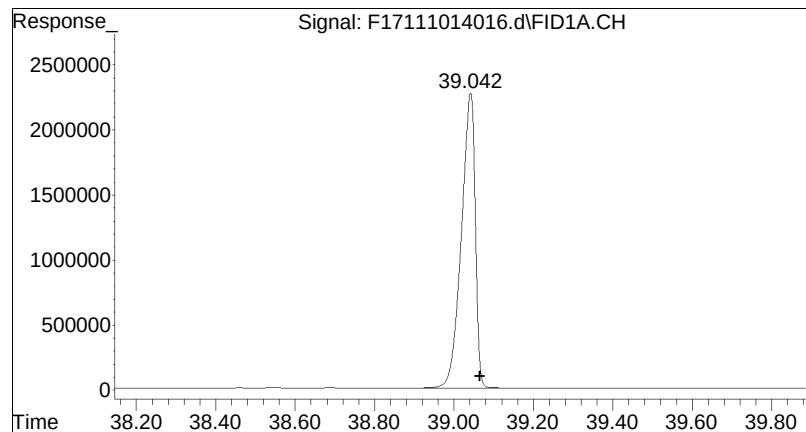
#25 n-Tetracosane (C24)

R.T.: 36.471 min
Delta R.T.: -0.023 min
Response: 54558609
Conc: 49.44 ug/mL M4



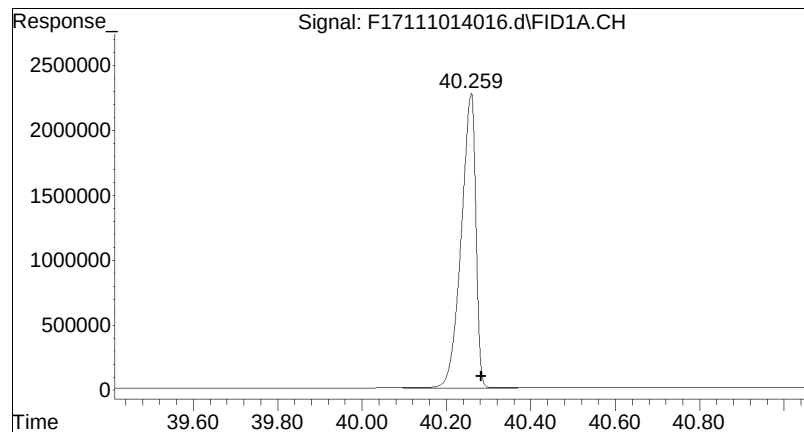
#26 n-Pentacosane (C25)

R.T.: 37.781 min
Delta R.T.: -0.019 min
Response: 54123509
Conc: 48.88 ug/mL M4



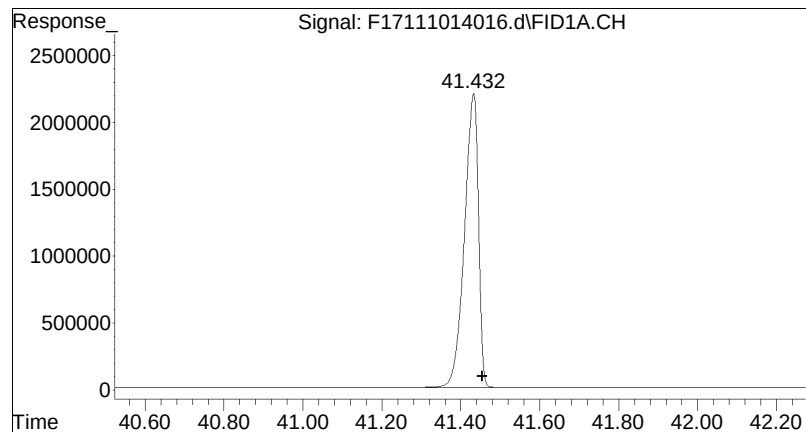
#27 n-Hexacosane (C26)

R.T.: 39.042 min
Delta R.T.: -0.022 min
Response: 55246629
Conc: 48.88 ug/mL M4



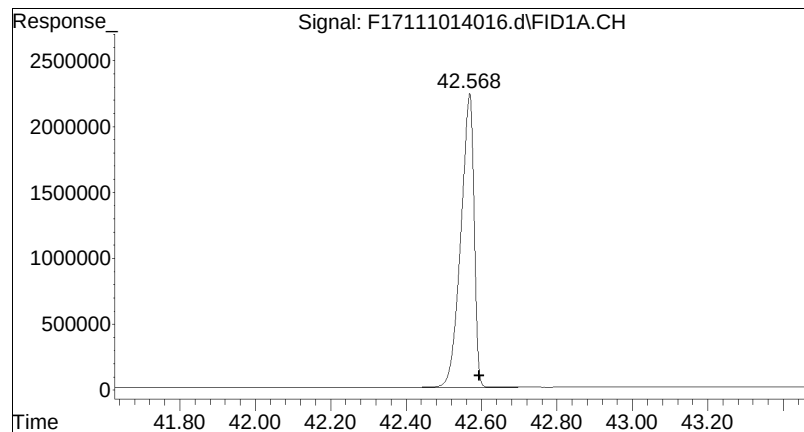
#28 n-Heptacosane (C27)

R.T.: 40.259 min
Delta R.T.: -0.022 min
Response: 54568291
Conc: 48.65 ug/mL M4



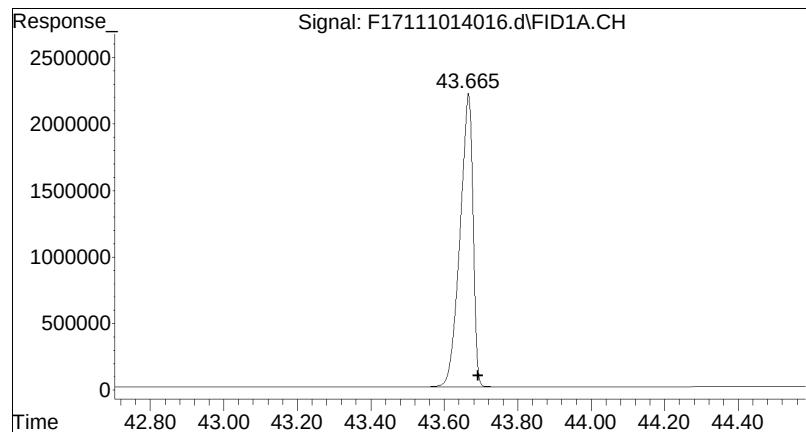
#29 n-Octacosane (C28)

R.T.: 41.432 min
Delta R.T.: -0.022 min
Response: 54246380
Conc: 48.21 ug/mL M4



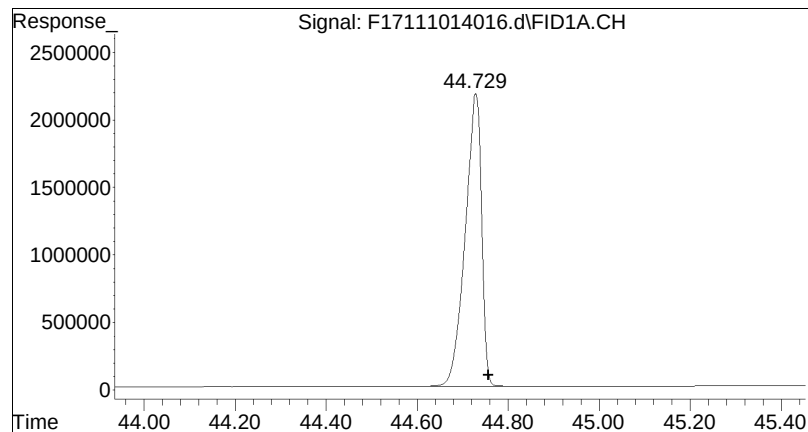
#30 n-Nonacosane (C29)

R.T.: 42.568 min
Delta R.T.: -0.025 min
Response: 54437873
Conc: 47.94 ug/mL M4



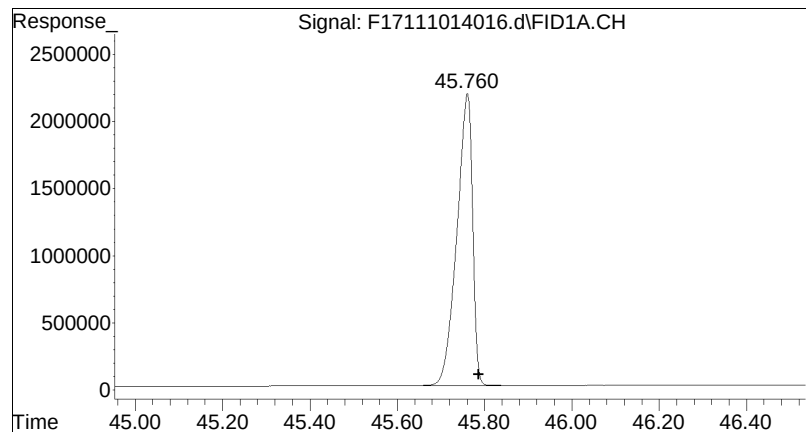
#31 n-Triacontane (C30)

R.T.: 43.665 min
Delta R.T.: -0.027 min
Response: 54410127
Conc: 47.76 ug/mL M4



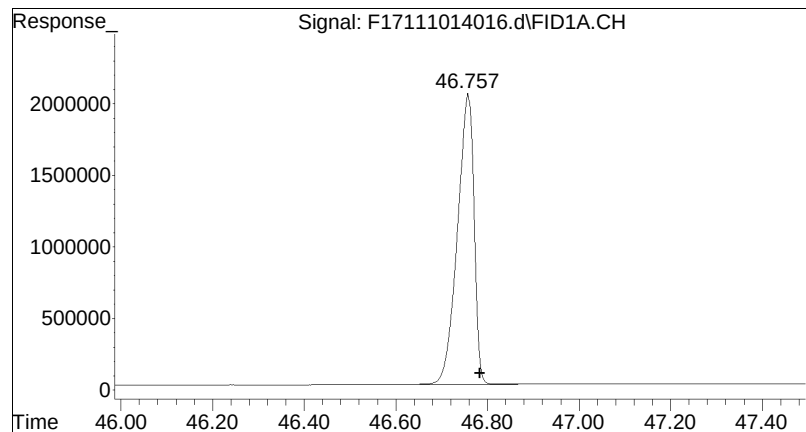
#32 n-Hentriacontane (C31)

R.T.: 44.729 min
Delta R.T.: -0.028 min
Response: 54264860
Conc: 47.27 ug/mL M4



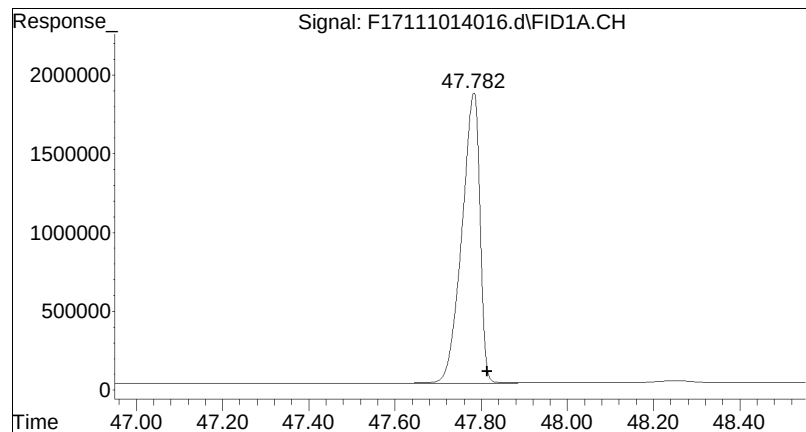
#33 n-Dotriacontane (C32)

R.T.: 45.760 min
Delta R.T.: -0.026 min
Response: 54592430
Conc: 47.83 ug/mL M4



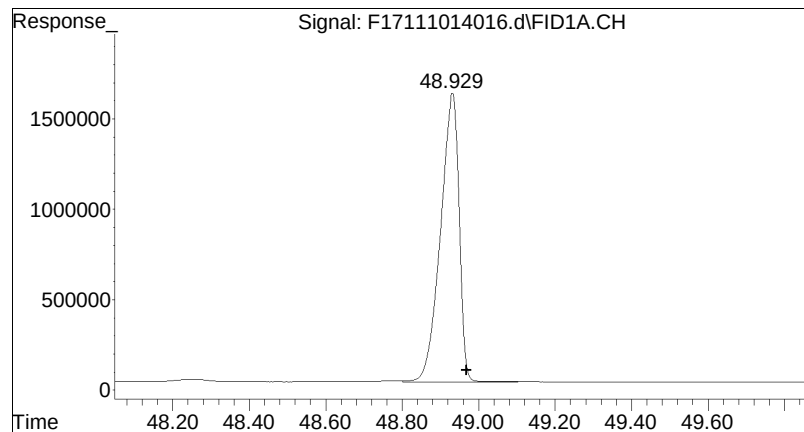
#34 n-Tritriacontane (C33)

R.T.: 46.757 min
Delta R.T.: -0.026 min
Response: 51478791
Conc: 46.43 ug/mL M4



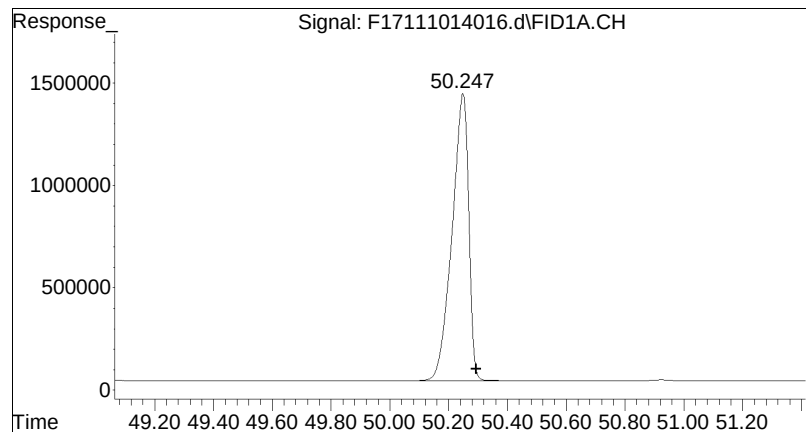
#35 n-tetratriacontane (C34)

R.T.: 47.782 min
Delta R.T.: -0.031 min
Response: 53603677
Conc: 45.56 ug/mL M4



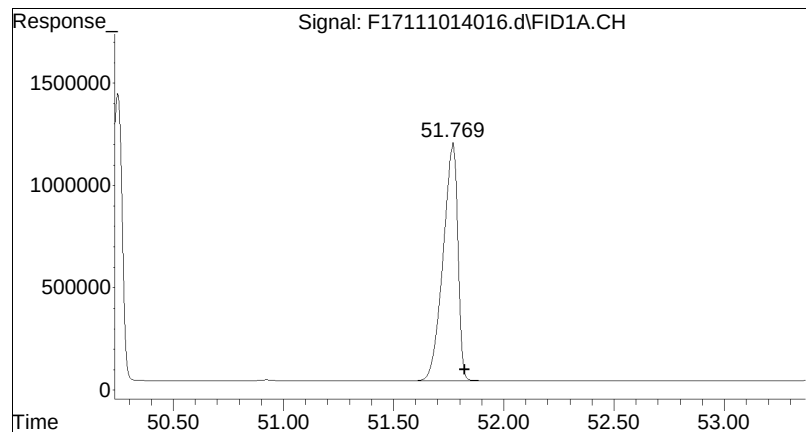
#36 n-Pentatriacontane (C35)

R.T.: 48.929 min
Delta R.T.: -0.038 min
Response: 53899156
Conc: 46.04 ug/mL M4



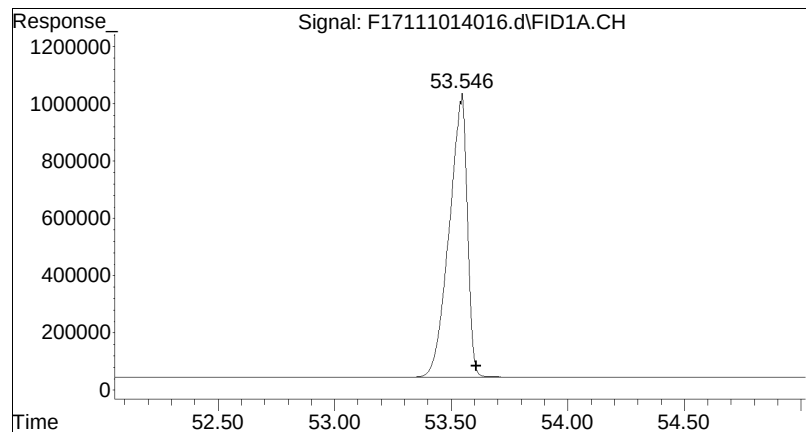
#37 n-Hexatriacontane (C36)

R.T.: 50.247 min
Delta R.T.: -0.046 min
Response: 55334260
Conc: 43.65 ug/mL M4



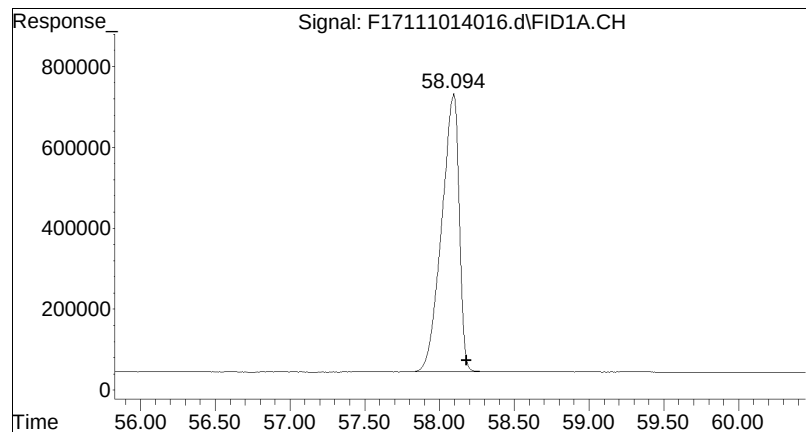
#38 n-Heptatriacontane (C37)

R.T.: 51.769 min
Delta R.T.: -0.053 min
Response: 54162138
Conc: 45.80 ug/mL M4



#39 n-Octatriacontane (C38)

R.T.: 53.546 min
Delta R.T.: -0.061 min
Response: 53323714
Conc: 45.12 ug/mL M4



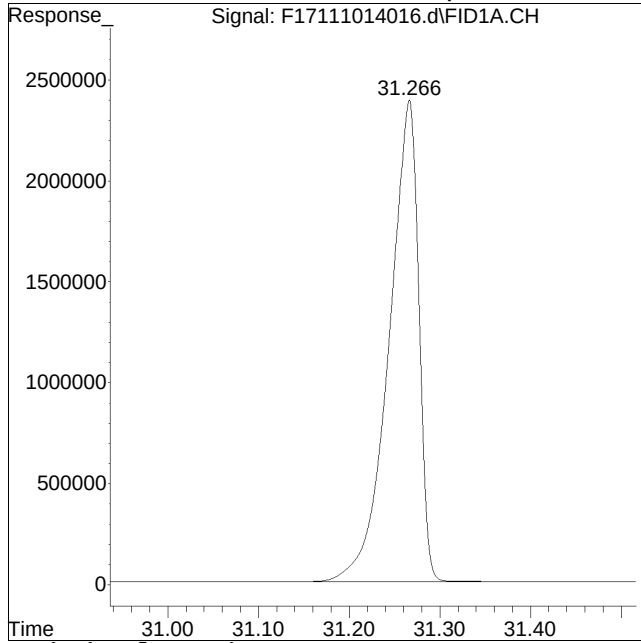
#41 n-Tetracontane (C40)

R.T.: 58.094 min
Delta R.T.: -0.084 min
Response: 56122386
Conc: 49.36 ug/mL M4

Manual Integration/Negative Proof Report

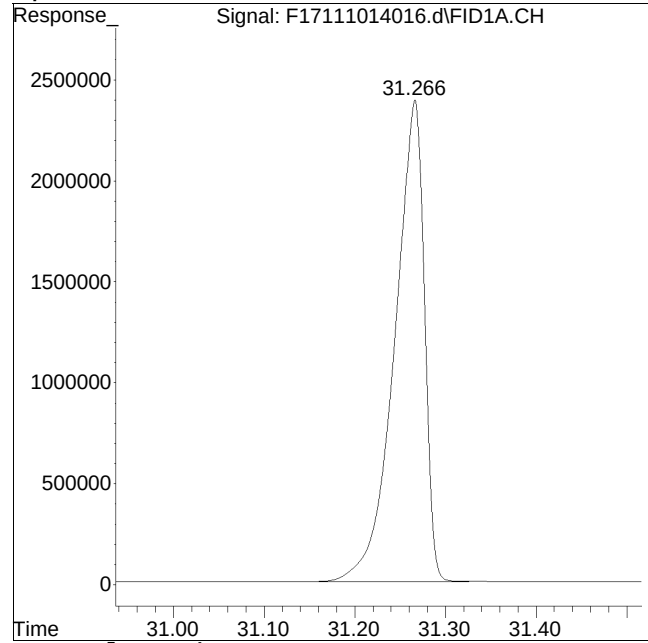
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #1: 5-alpha-androstane



Original Peak Response = 54311912

M4 = Poor automated baseline construction.

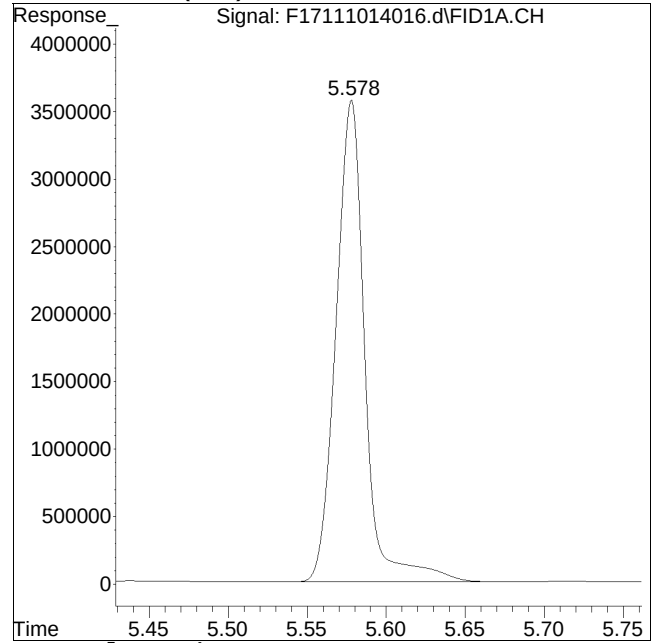
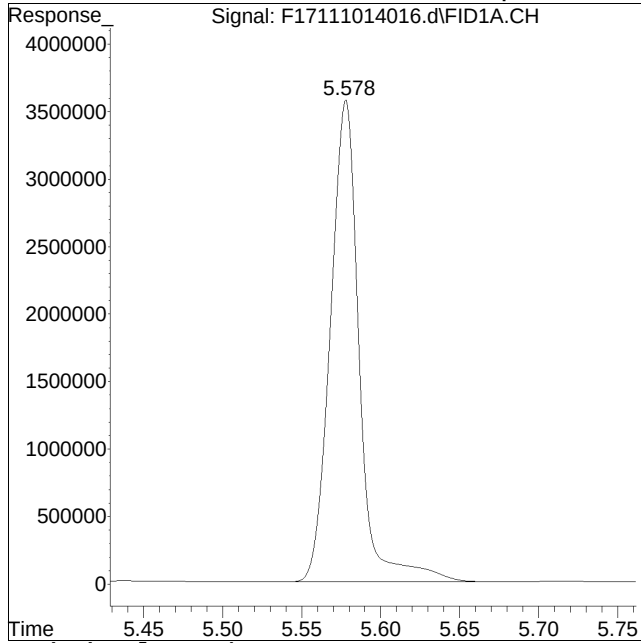


Manual Peak Response = 54310906 M4

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #2: n-Octane (C8)



Original Peak Response = 45579669

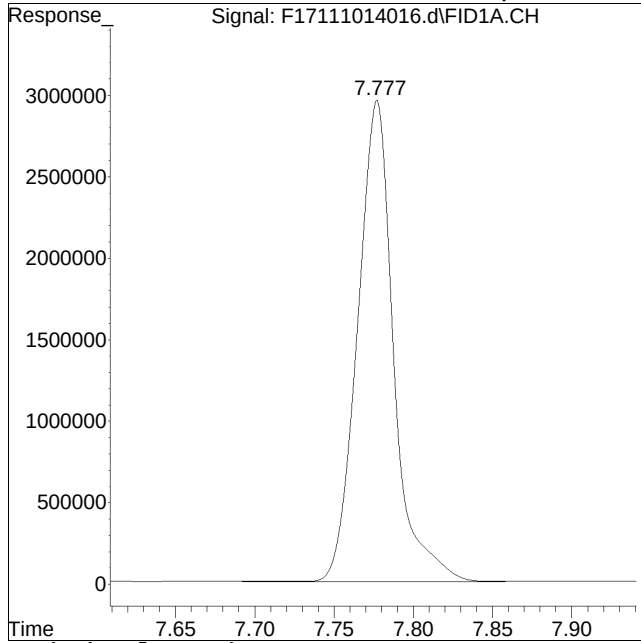
Manual Peak Response = 45560434 M4

M4 = Poor automated baseline construction.

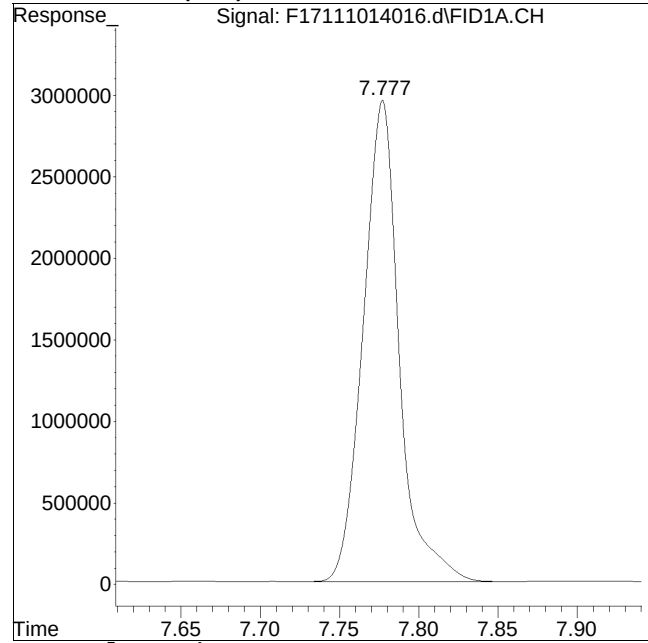
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #3: n-Nonane (C9)



Original Peak Response = 46953698



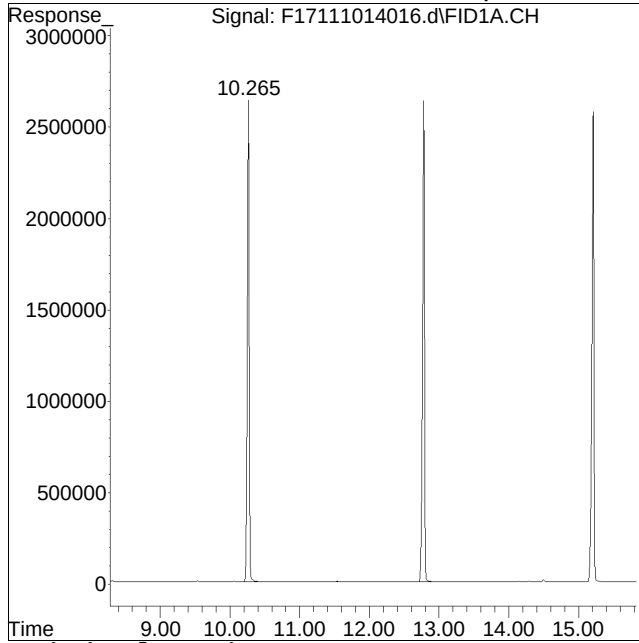
Manual Peak Response = 46801135 M4

M4 = Poor automated baseline construction.

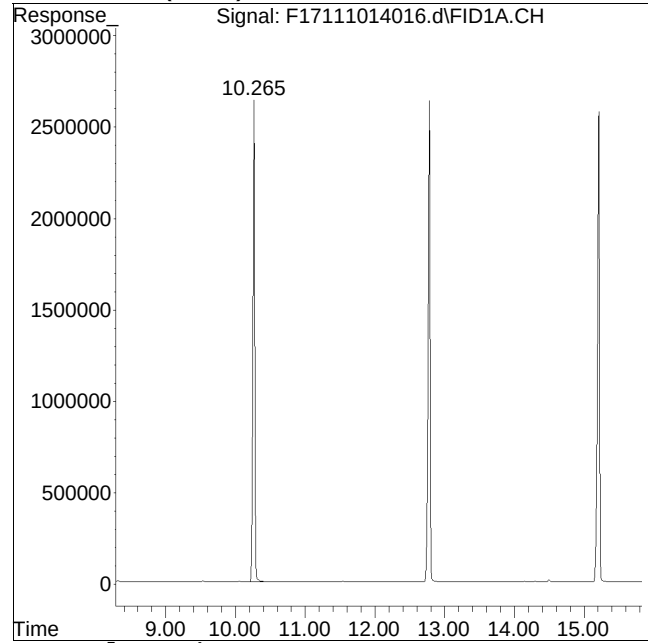
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #4: n-Decane (C10)



Original Peak Response = 47925067



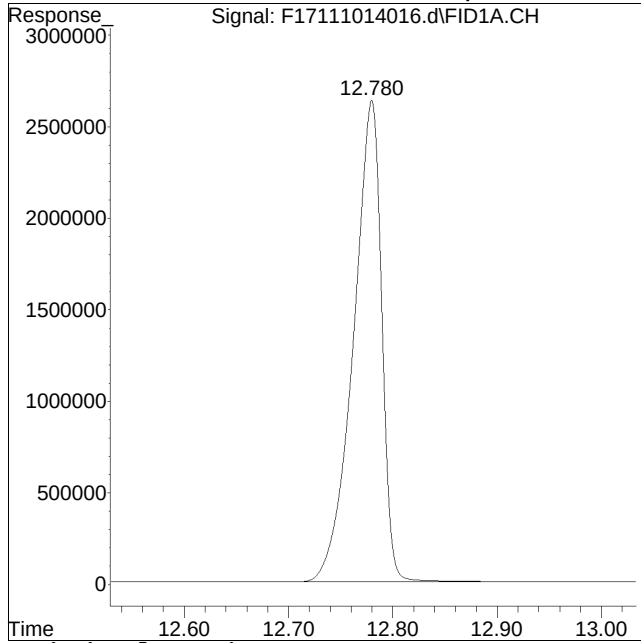
Manual Peak Response = 48405866 M4

M4 = Poor automated baseline construction.

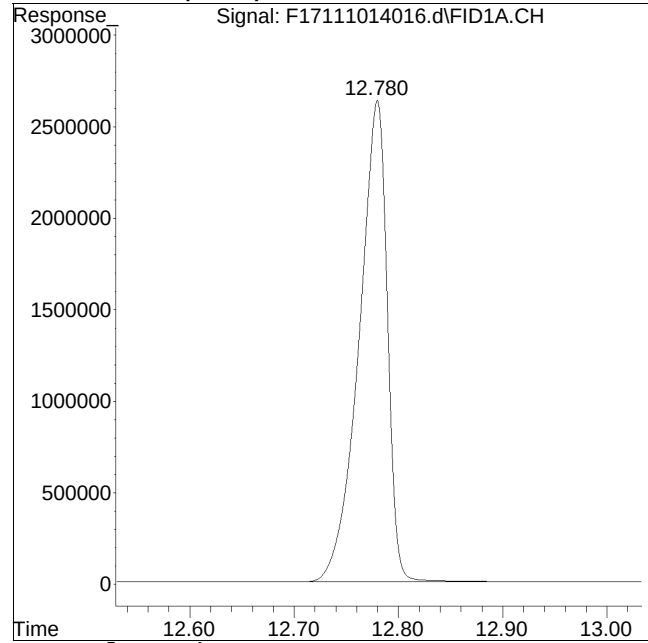
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #5: n-Undecane (C11)



Original Peak Response = 49639595



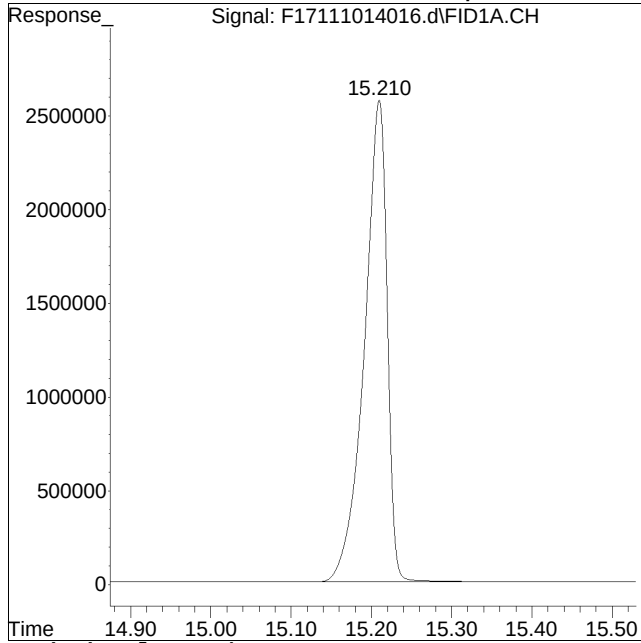
Manual Peak Response = 49661379 M4

M4 = Poor automated baseline construction.

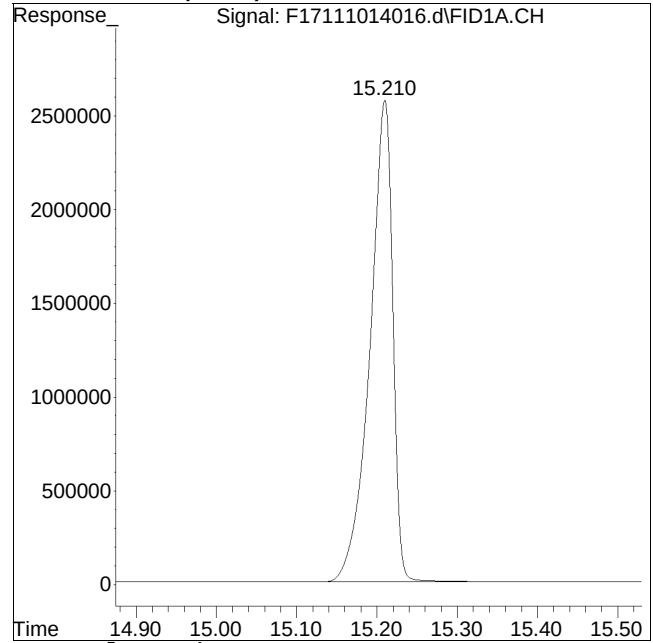
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #6: n-Dodecane (C12)



Original Peak Response = 50582409



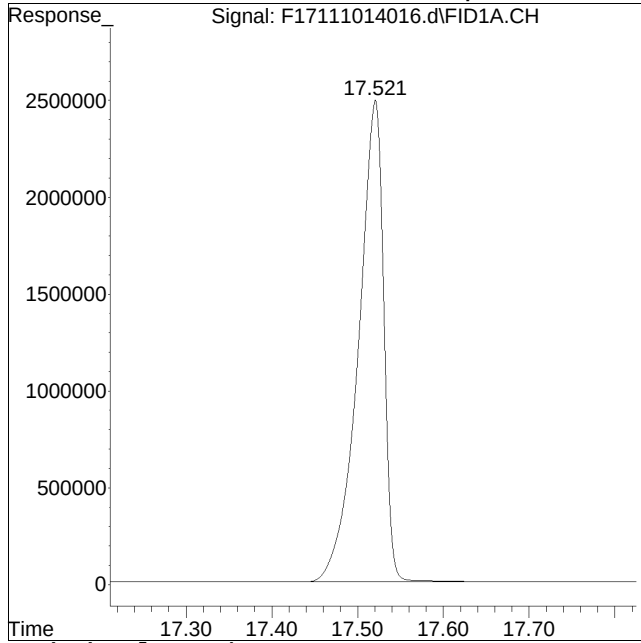
Manual Peak Response = 50686941 M4

M4 = Poor automated baseline construction.

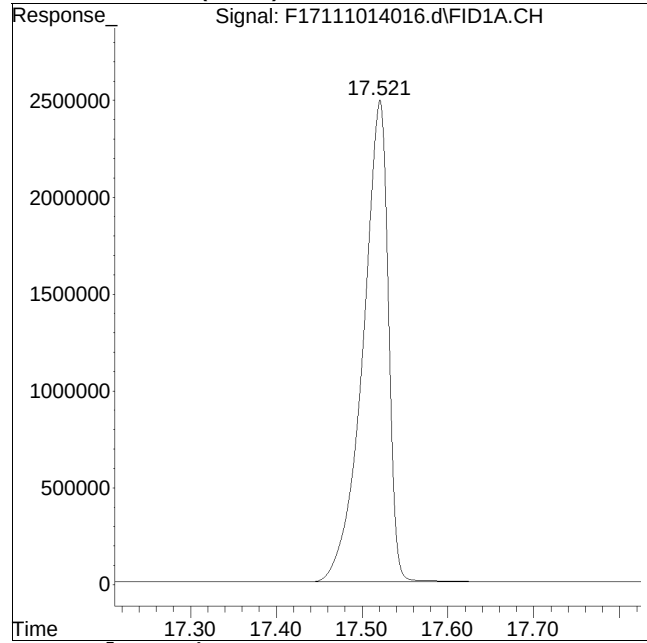
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #7: n-Tridecane (C13)



Original Peak Response = 51111533



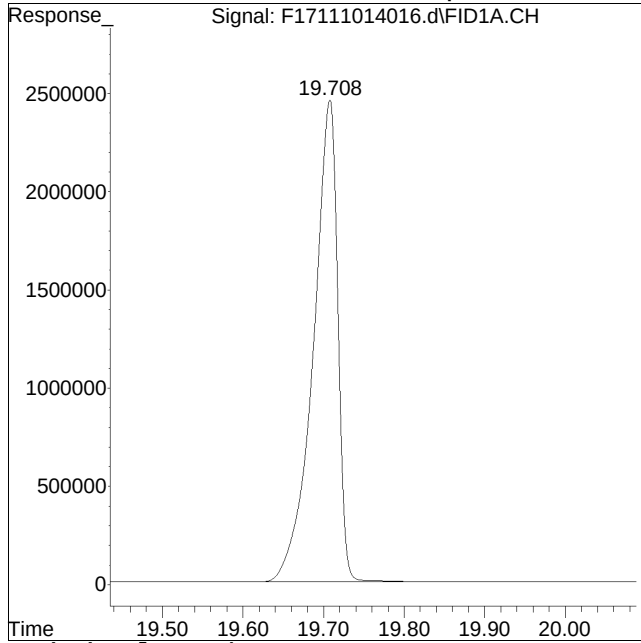
Manual Peak Response = 51093773 M4

M4 = Poor automated baseline construction.

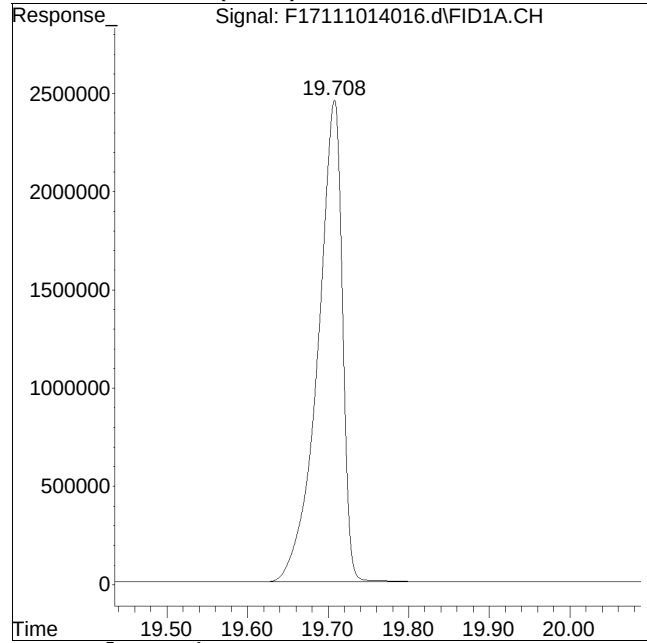
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #9: n-Tetradecane (C14)



Original Peak Response = 51786344



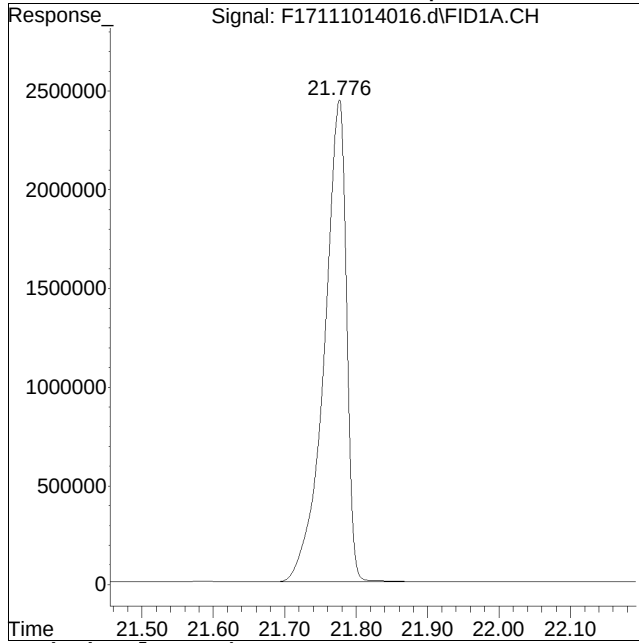
Manual Peak Response = 51735306 M4

M4 = Poor automated baseline construction.

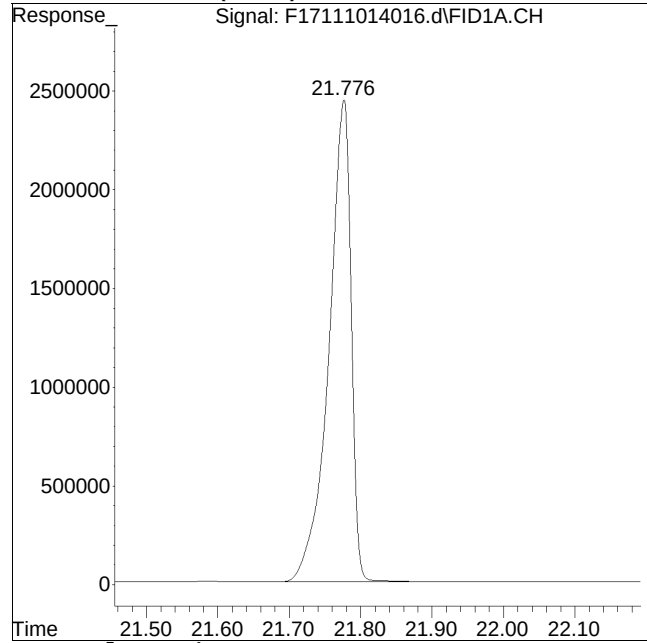
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #11: n-Pentadecane (C15)



Original Peak Response = 52765931



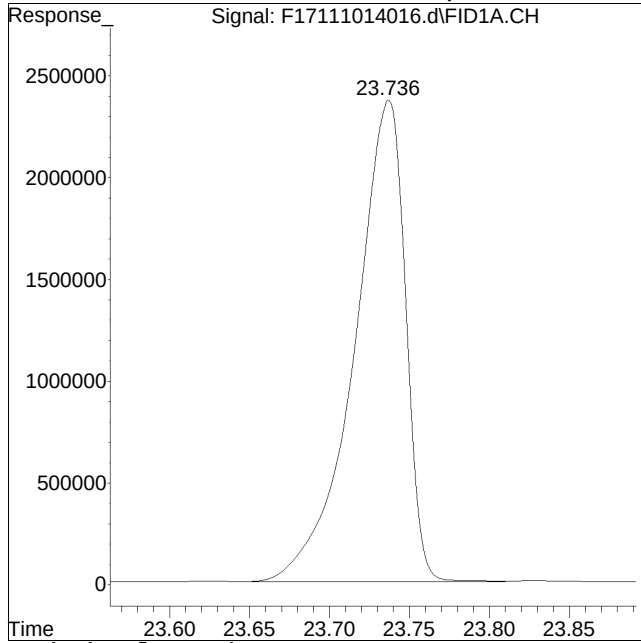
Manual Peak Response = 52726106 M4

M4 = Poor automated baseline construction.

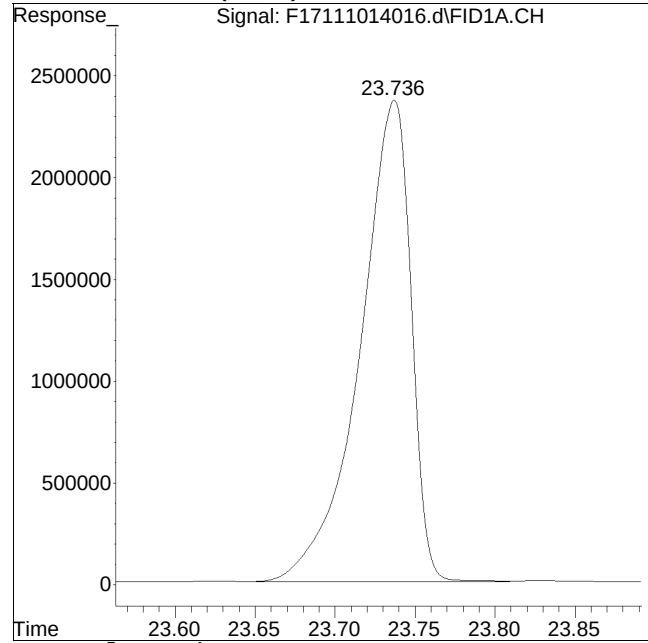
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #12: n-Hexadecane (C16)



Original Peak Response = 52595491



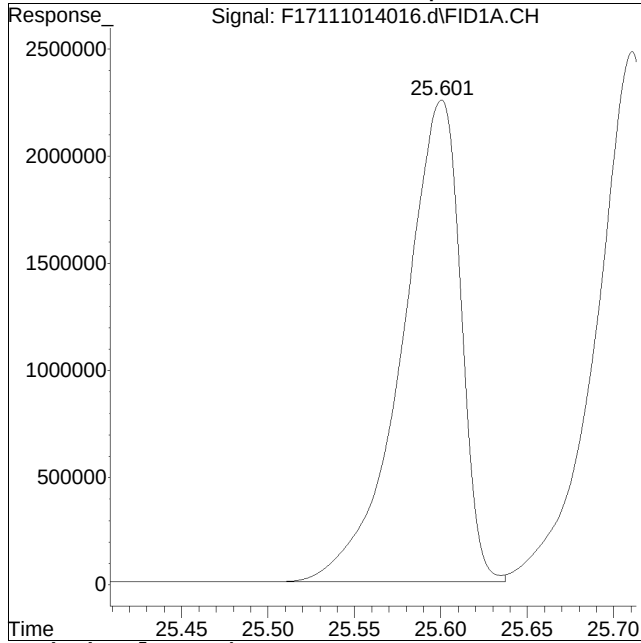
Manual Peak Response = 52629891 M4

M4 = Poor automated baseline construction.

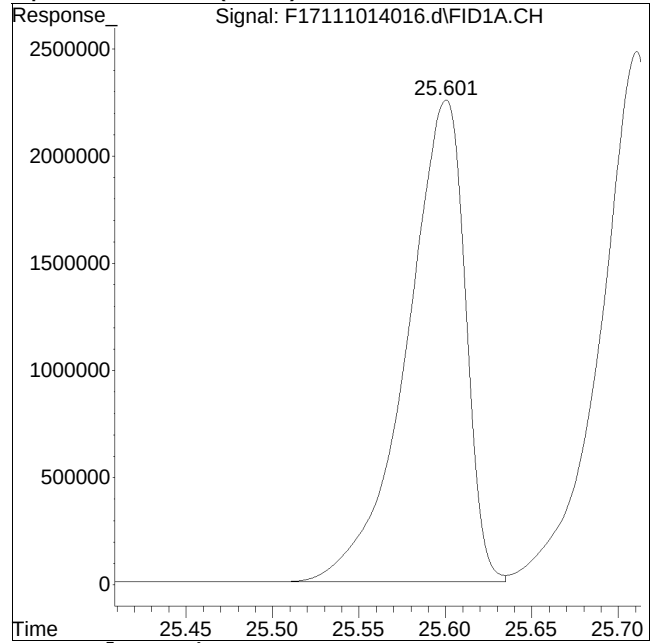
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #14: n-Heptadecane (C17)



Original Peak Response = 52949269



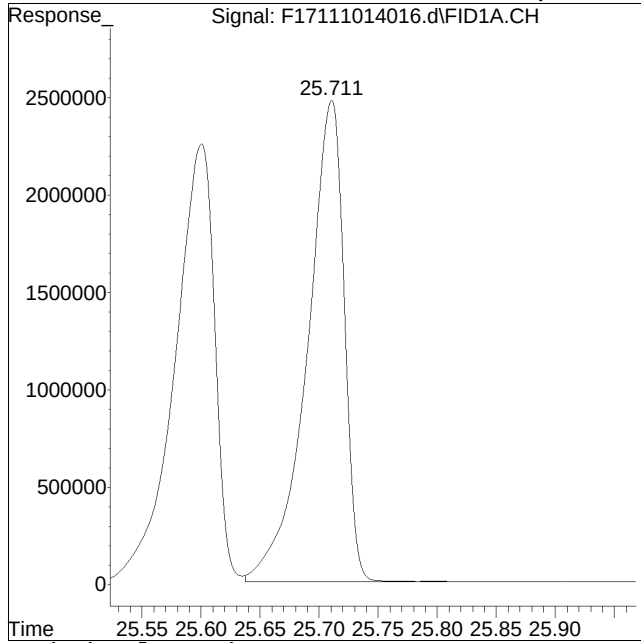
Manual Peak Response = 52933668 M4

M4 = Poor automated baseline construction.

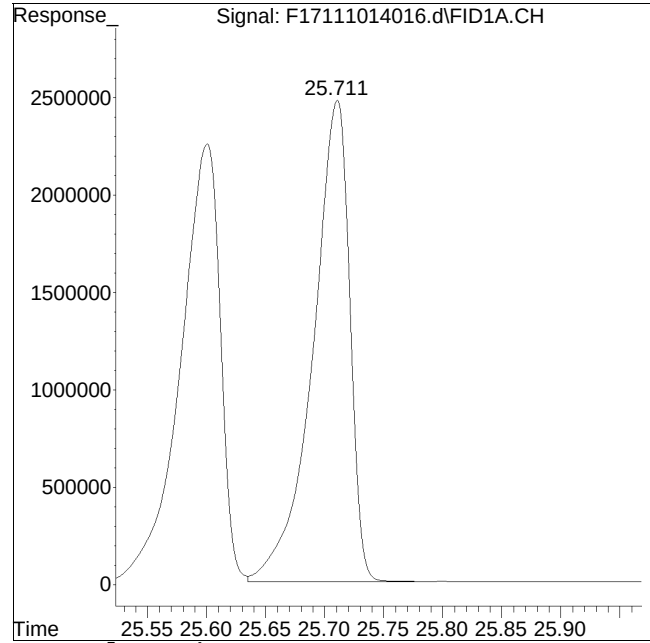
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #15: Pristane



Original Peak Response = 53810894



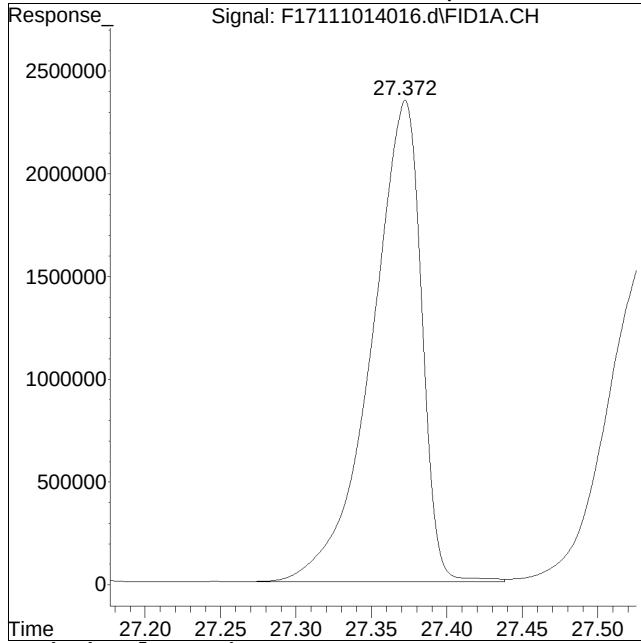
Manual Peak Response = 53728134 M4

M4 = Poor automated baseline construction.

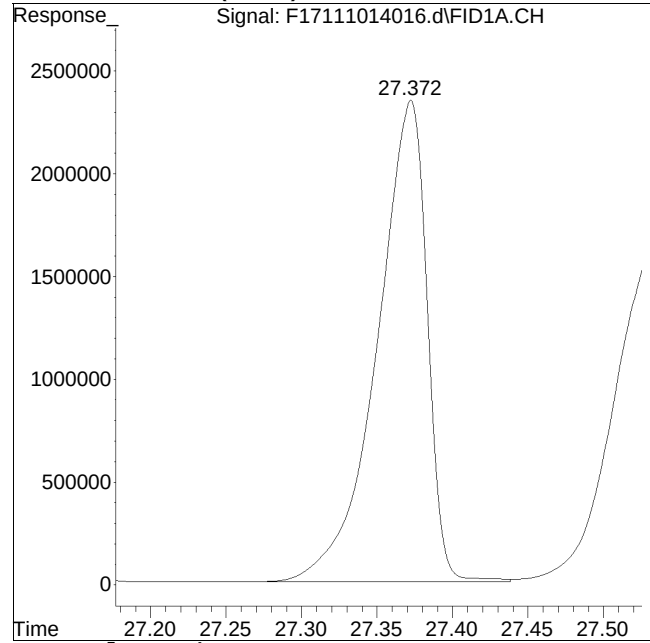
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #16: n-Octadecane (C18)



Original Peak Response = 54018157



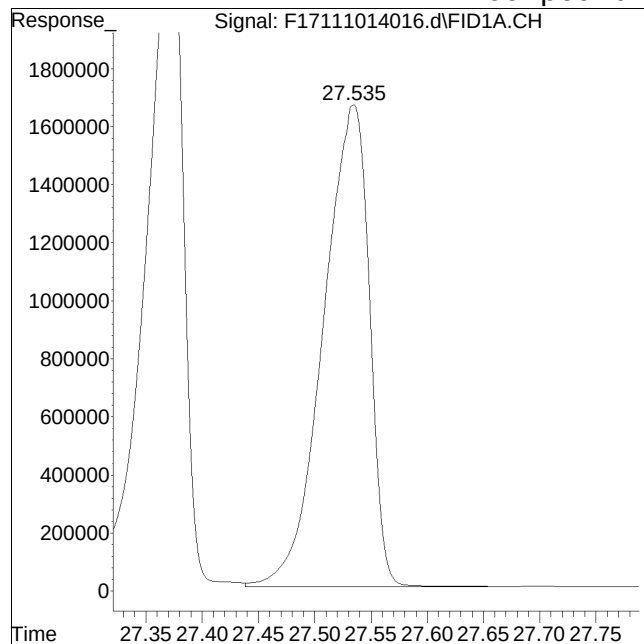
Manual Peak Response = 53966088 M4

M4 = Poor automated baseline construction.

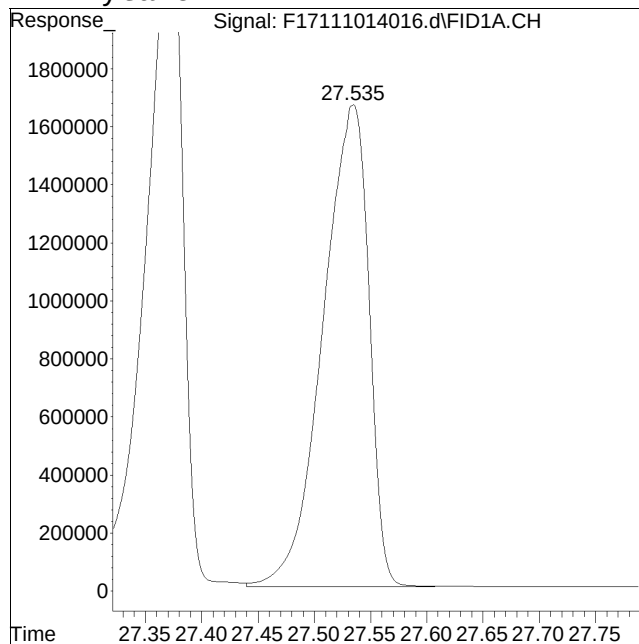
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
 Data File : F17111014016.d Operator : FID17:NL
 Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
 Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #17: Phytane



Original Peak Response = 47399106



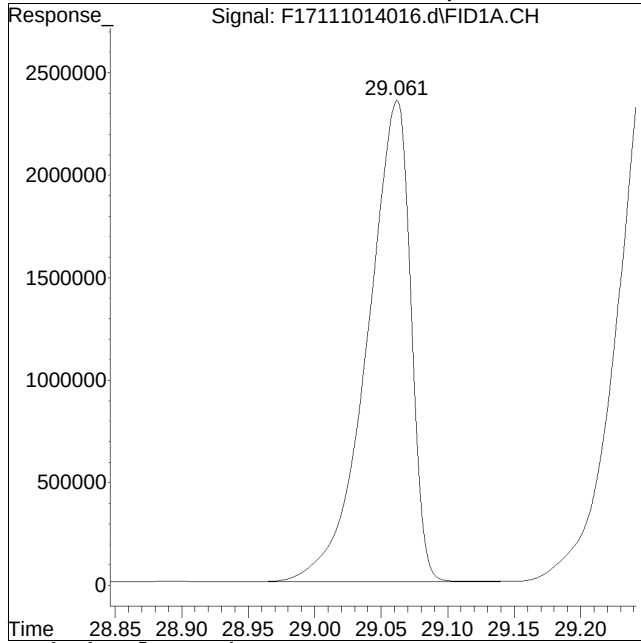
Manual Peak Response = 47224332 M4

M4 = Poor automated baseline construction.

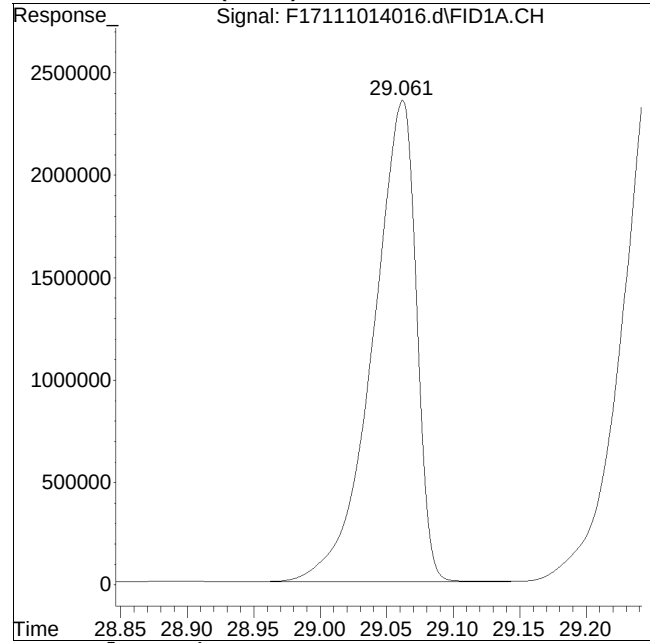
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #18: n-Nonadecane (C19)



Original Peak Response = 53485106



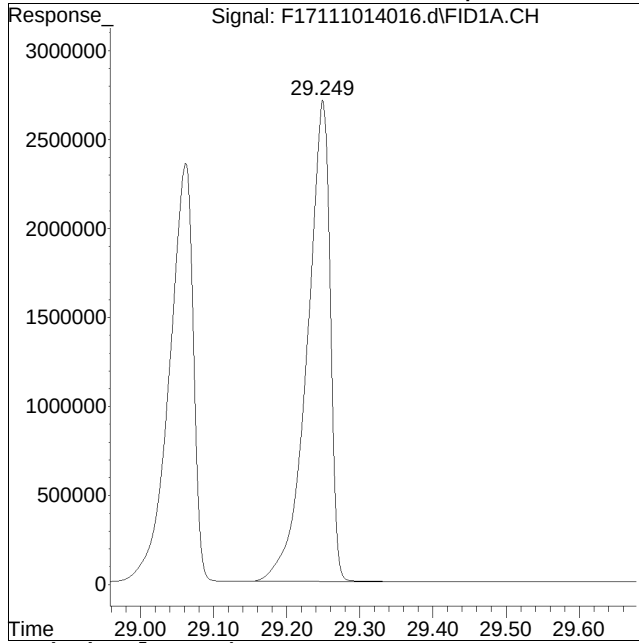
Manual Peak Response = 53604297 M4

M4 = Poor automated baseline construction.

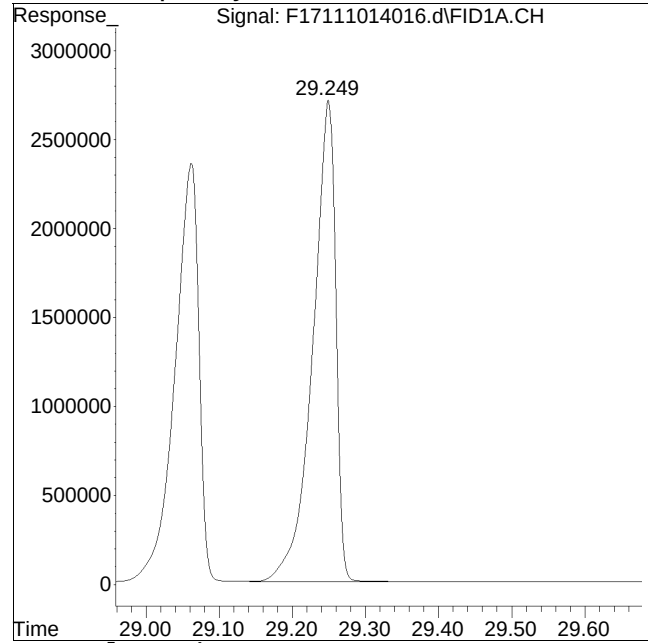
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #19: ortho-terphenyl



Original Peak Response = 58985869



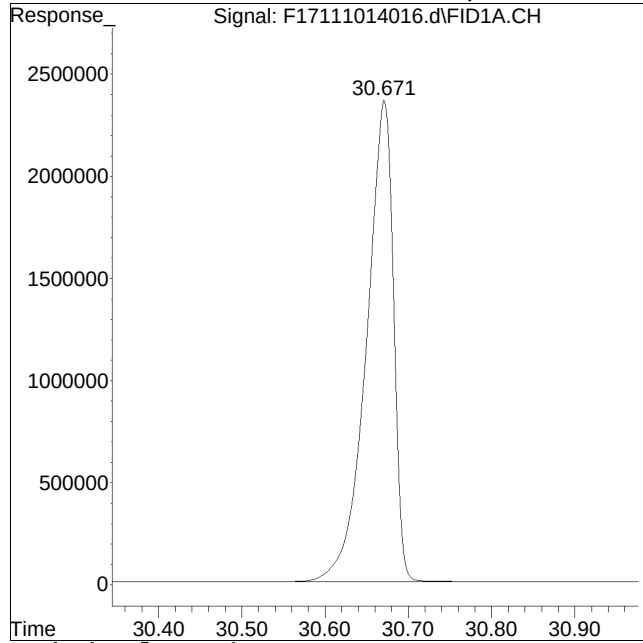
Manual Peak Response = 59342026 M4

M4 = Poor automated baseline construction.

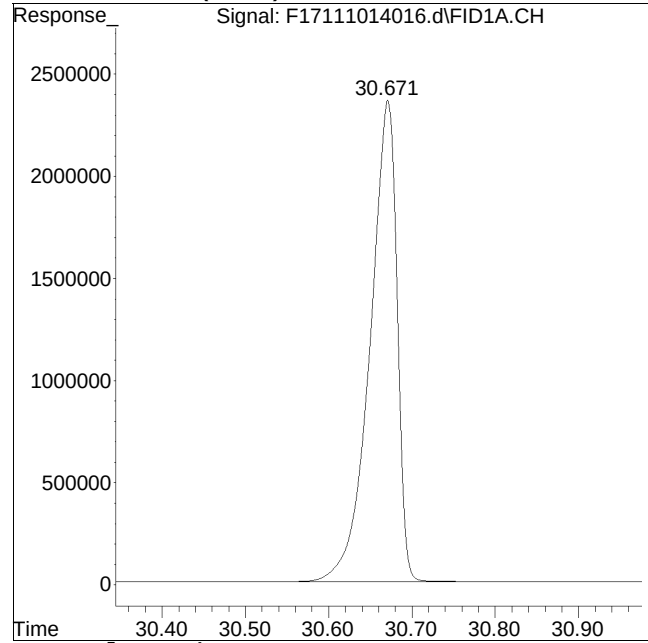
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #20: n-Eicosane (C20)



Original Peak Response = 53435368



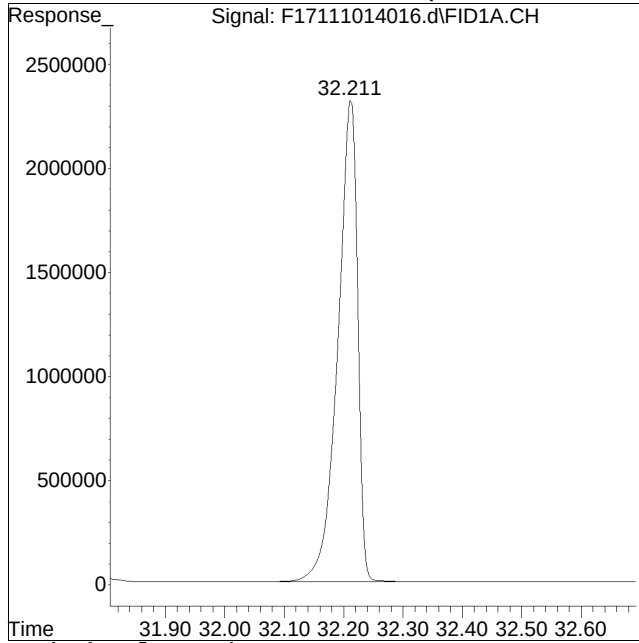
Manual Peak Response = 53373894 M4

M4 = Poor automated baseline construction.

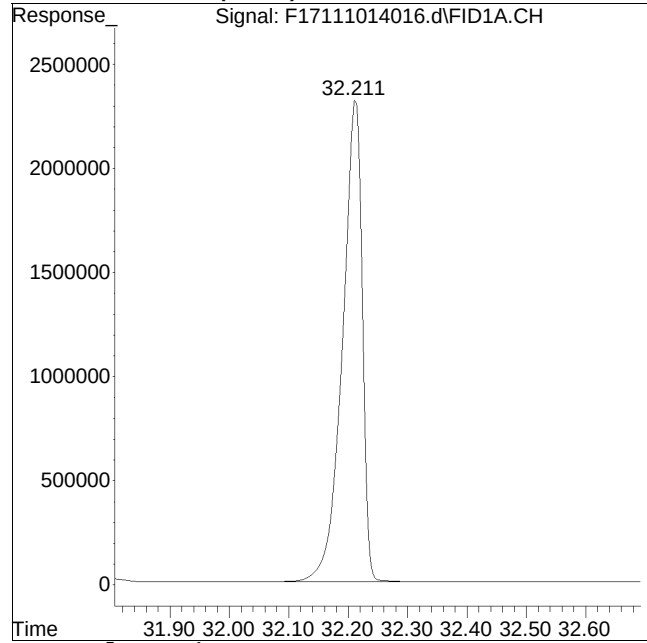
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I17111011403R Quant Date : 11/14/2014 12:19 pm

Compound #21: n-Heneicosane (C21)



Original Peak Response = 53650385



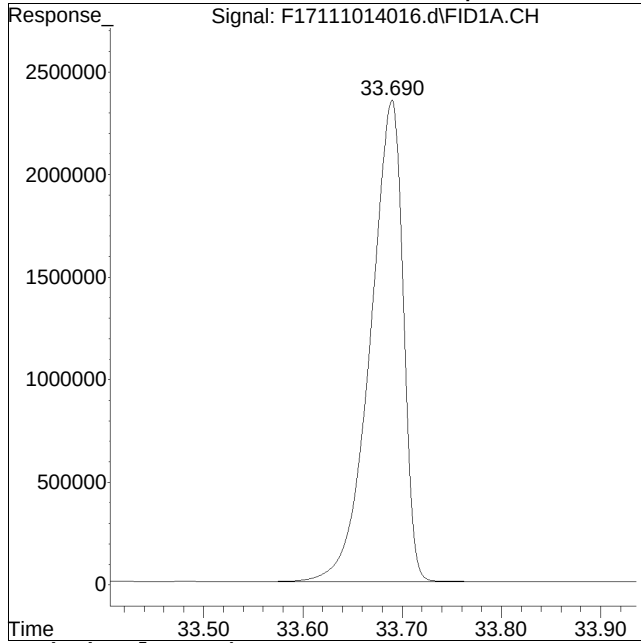
Manual Peak Response = 53706675 M4

M4 = Poor automated baseline construction.

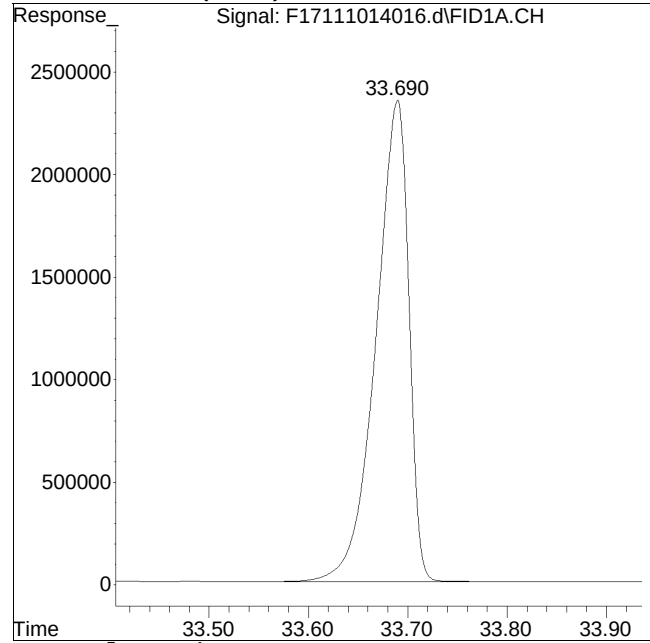
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #22: n-Docosane (C22)



Original Peak Response = 54124083



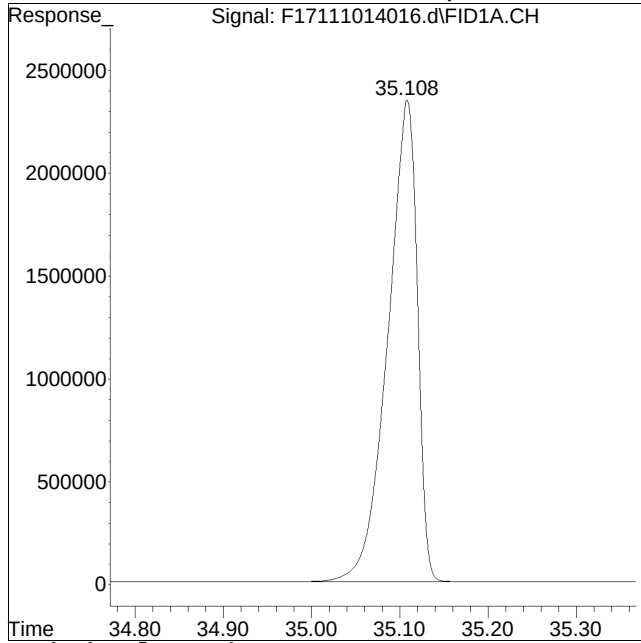
Manual Peak Response = 54114794 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

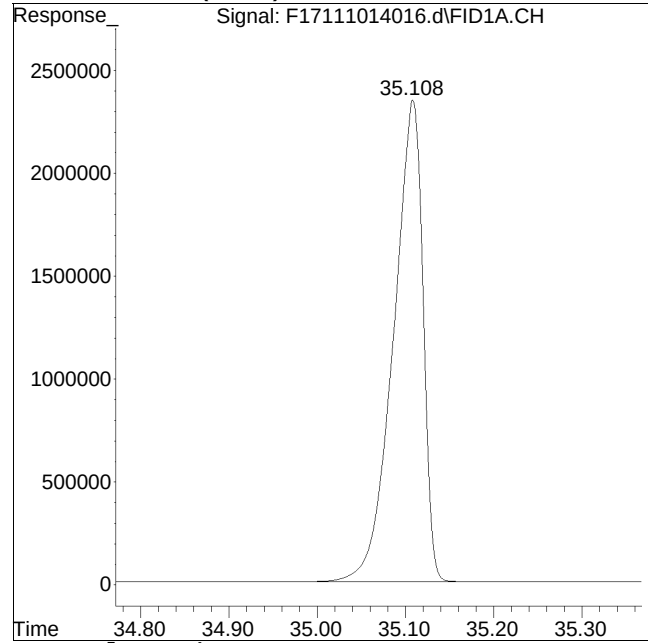
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #23: n-Tricosane (C23)



Original Peak Response = 54452941

M4 = Poor automated baseline construction.

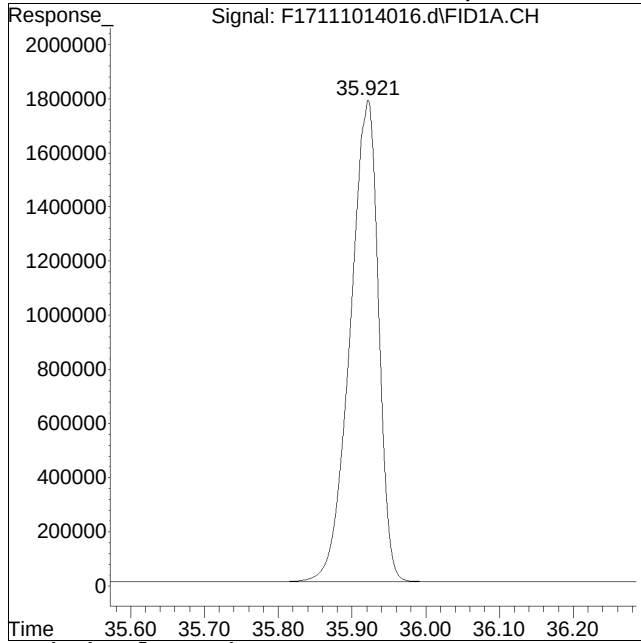


Manual Peak Response = 54468080 M4

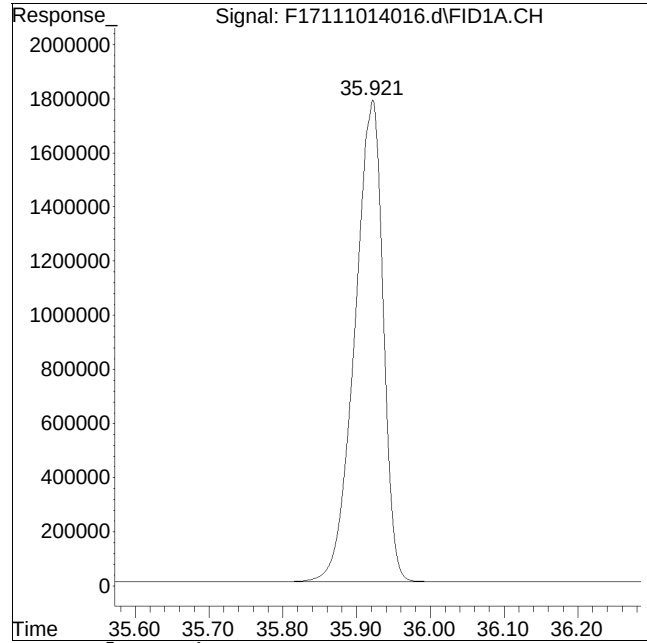
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #24: d50-Tetracosane



Original Peak Response = 47597293



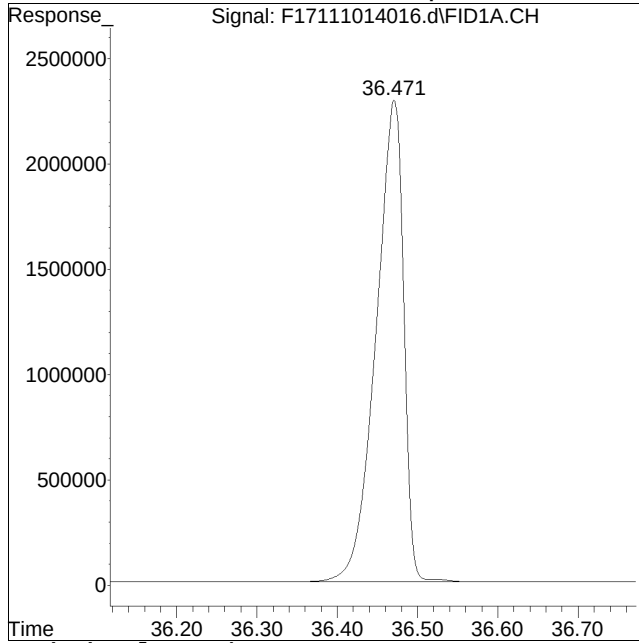
Manual Peak Response = 47616898 M4

M4 = Poor automated baseline construction.

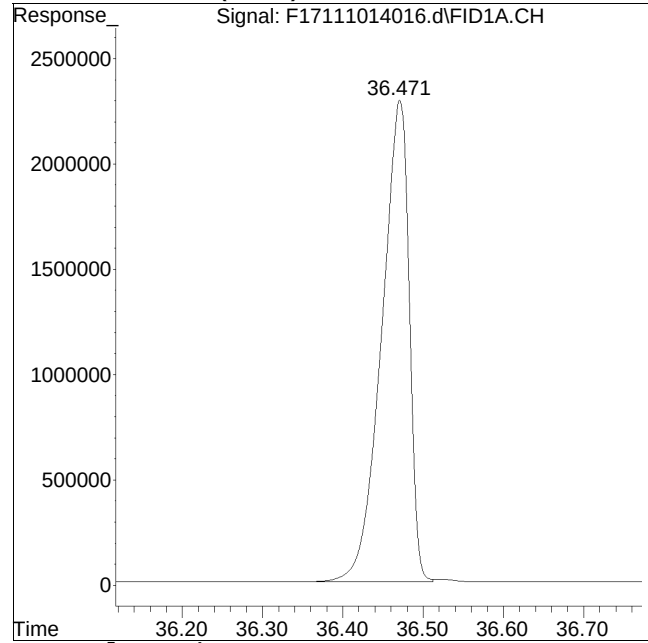
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #25: n-Tetracosane (C24)



Original Peak Response = 54837400



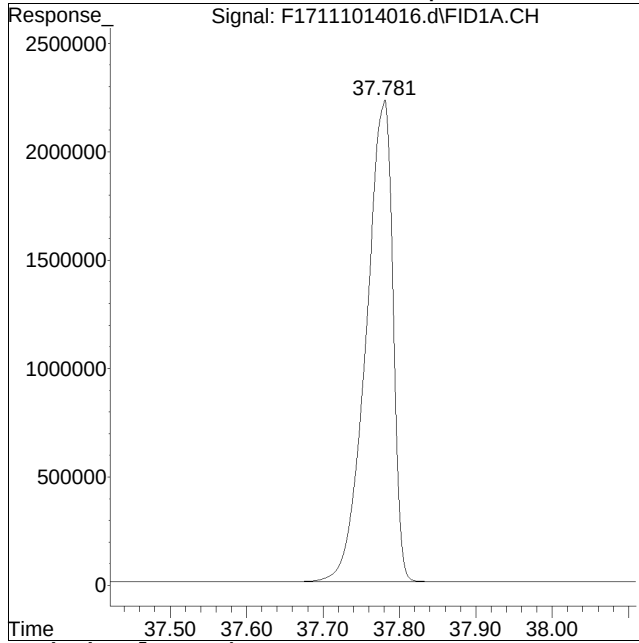
Manual Peak Response = 54558609 M4

M4 = Poor automated baseline construction.

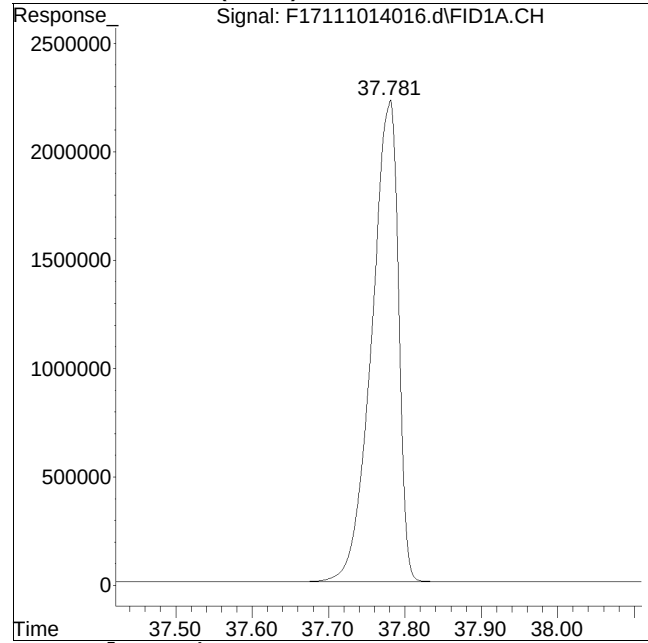
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #26: n-Pentacosane (C25)



Original Peak Response = 54103546



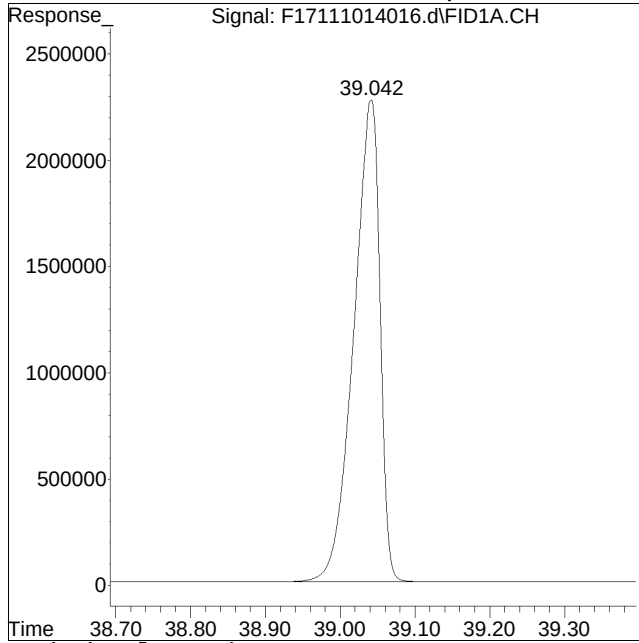
Manual Peak Response = 54123509 M4

M4 = Poor automated baseline construction.

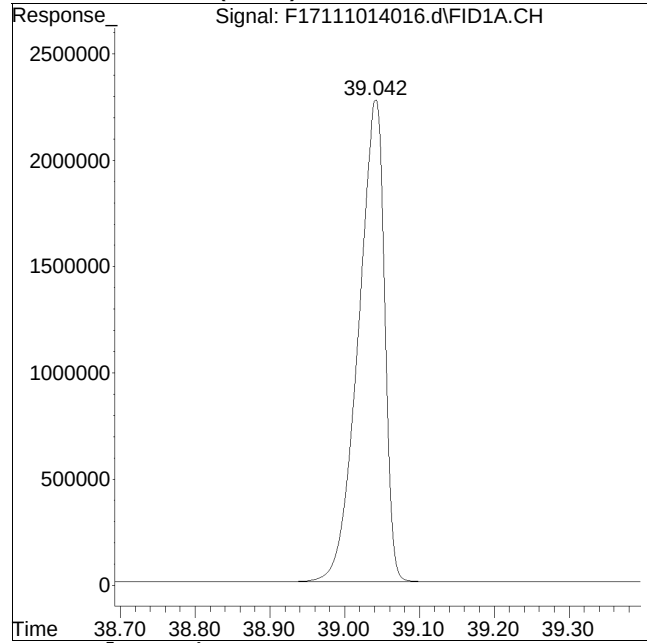
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #27: n-Hexacosane (C26)



Original Peak Response = 55232892



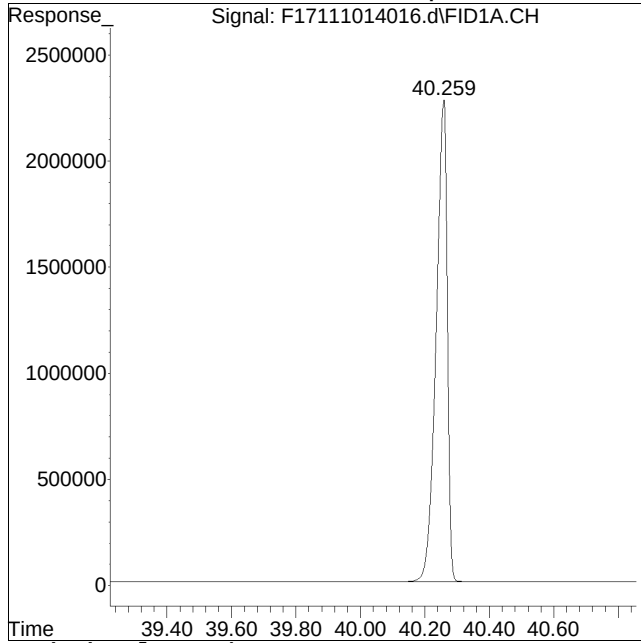
Manual Peak Response = 55246629 M4

M4 = Poor automated baseline construction.

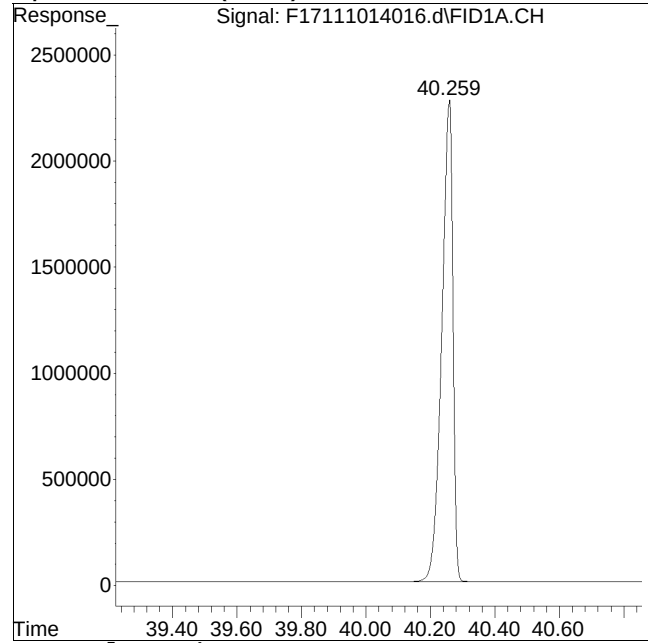
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #28: n-Heptacosane (C27)



Original Peak Response = 54542318



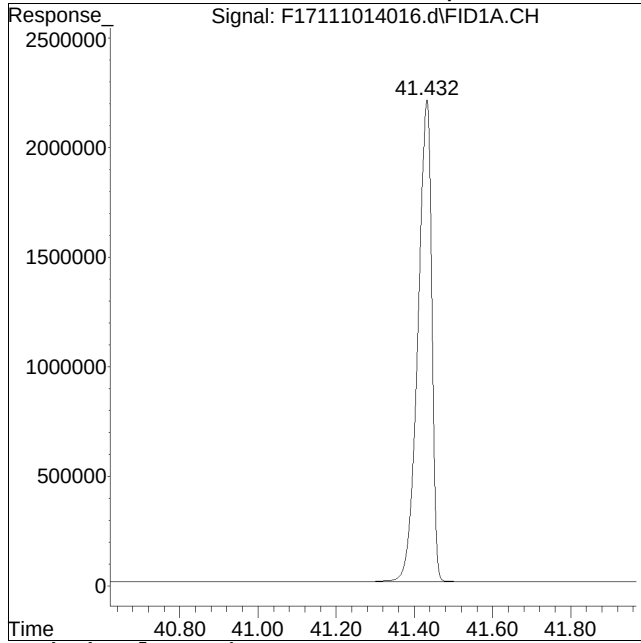
Manual Peak Response = 54568291 M4

M4 = Poor automated baseline construction.

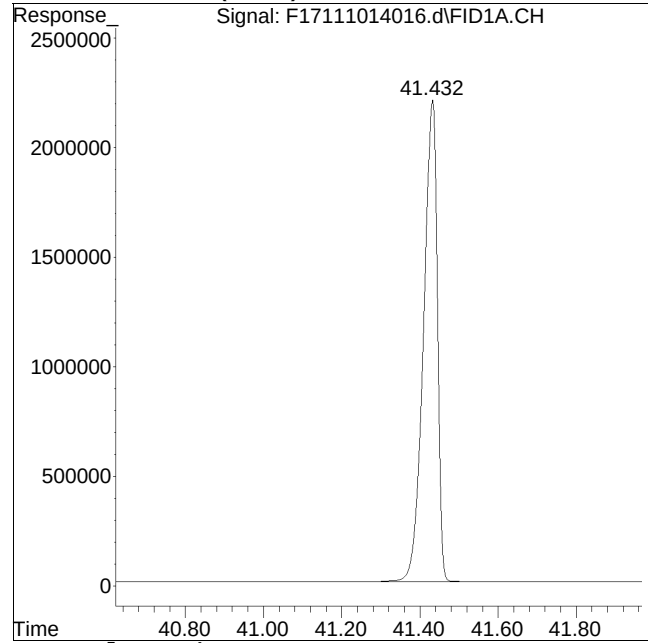
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #29: n-Octacosane (C28)



Original Peak Response = 54299410



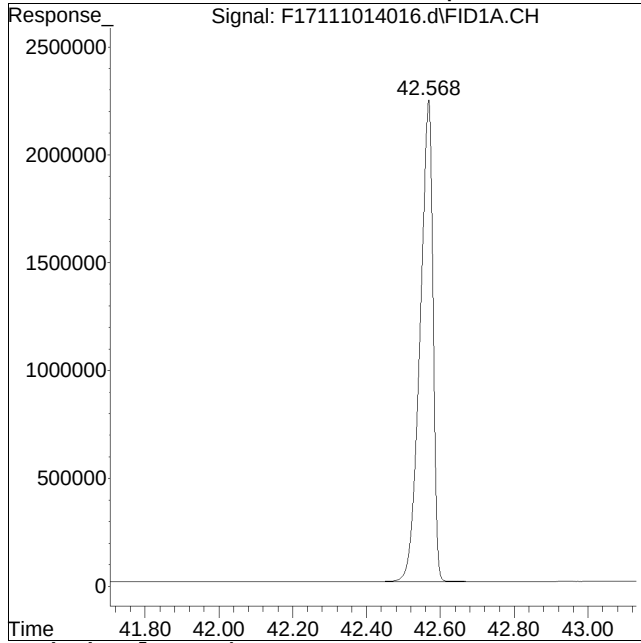
Manual Peak Response = 54246380 M4

M4 = Poor automated baseline construction.

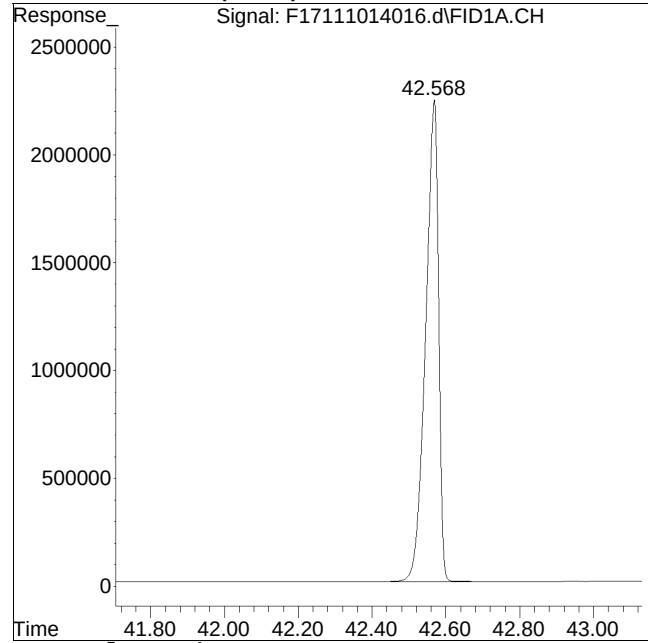
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #30: n-Nonacosane (C29)



Original Peak Response = 54457850



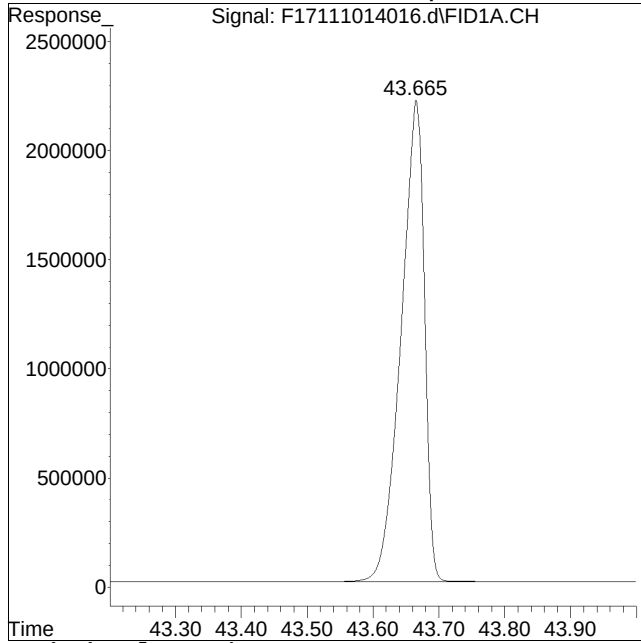
Manual Peak Response = 54437873 M4

M4 = Poor automated baseline construction.

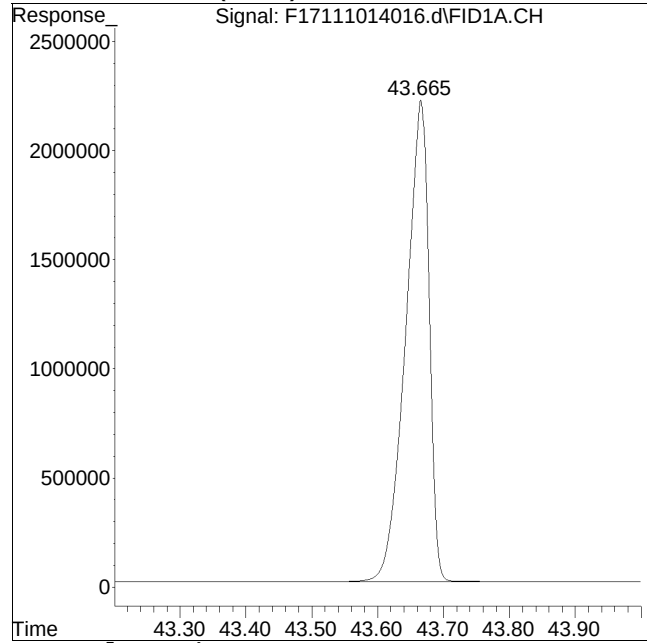
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #31: n-Triacontane (C30)



Original Peak Response = 54374506



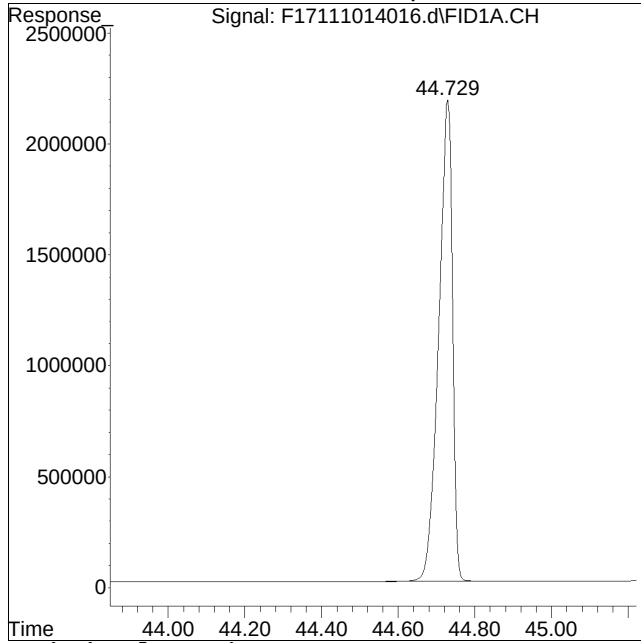
Manual Peak Response = 54410127 M4

M4 = Poor automated baseline construction.

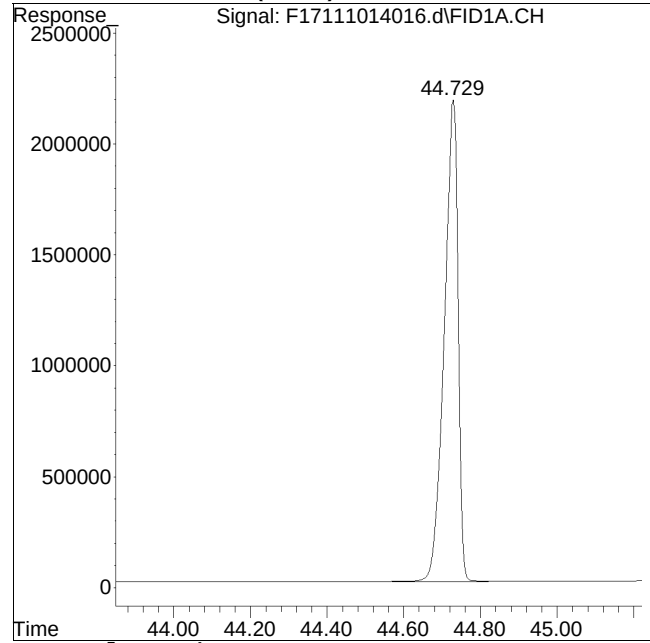
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #32: n-Hentriacontane (C31)



Original Peak Response = 54198024



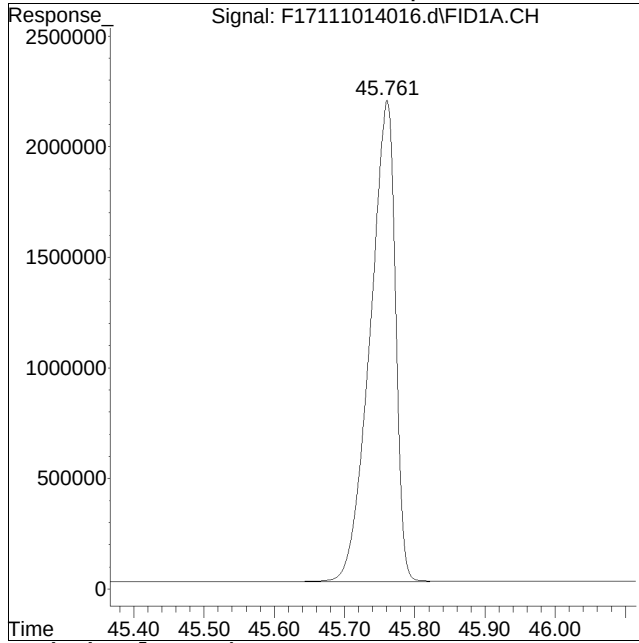
Manual Peak Response = 54264860 M4

M4 = Poor automated baseline construction.

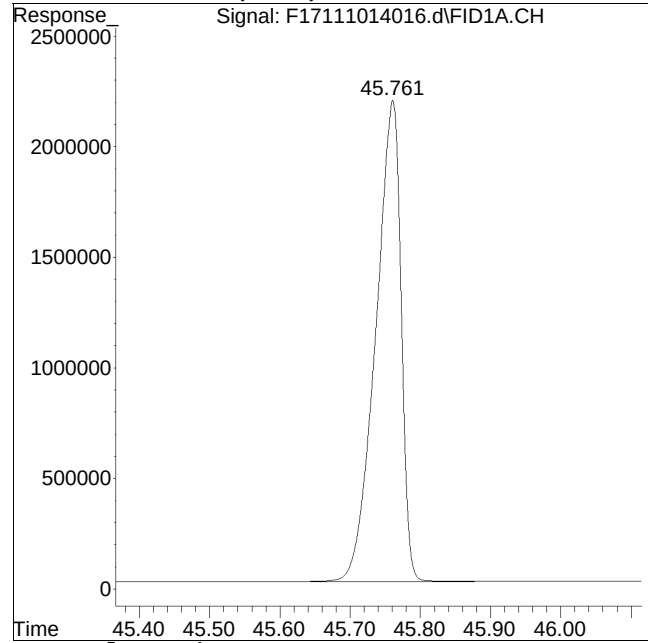
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #33: n-Dotriacontane (C32)



Original Peak Response = 54497181



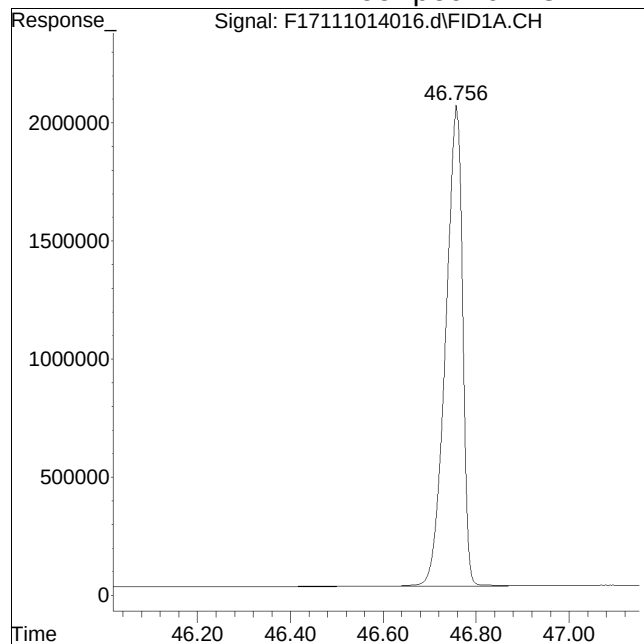
Manual Peak Response = 54592430 M4

M4 = Poor automated baseline construction.

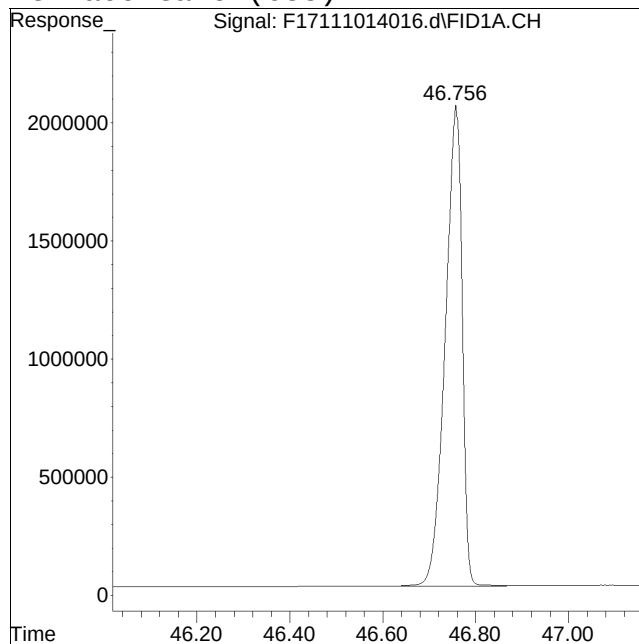
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #34: n-Tritriacontane (C33)



Original Peak Response = 51546038



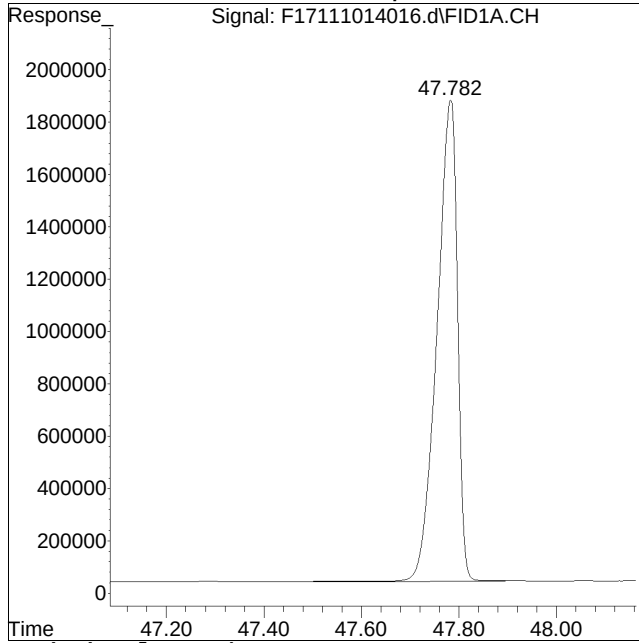
Manual Peak Response = 51478791 M4

M4 = Poor automated baseline construction.

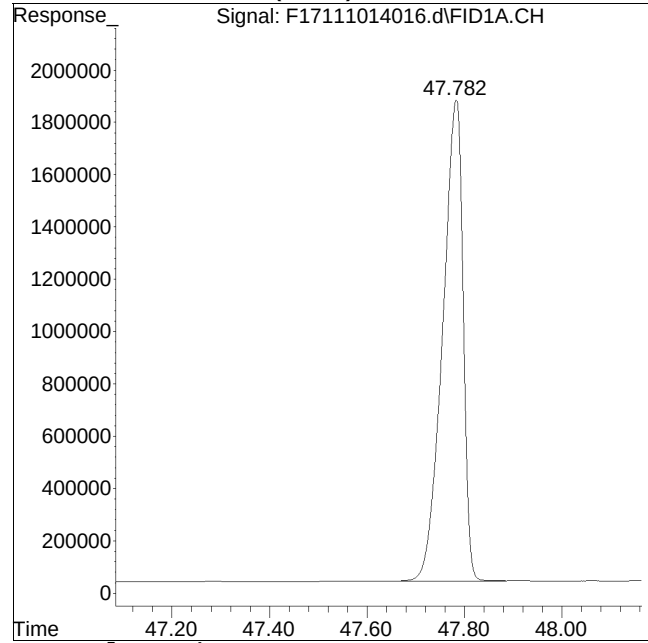
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #35: n-tetratriacontane (C34)



Original Peak Response = 53847701



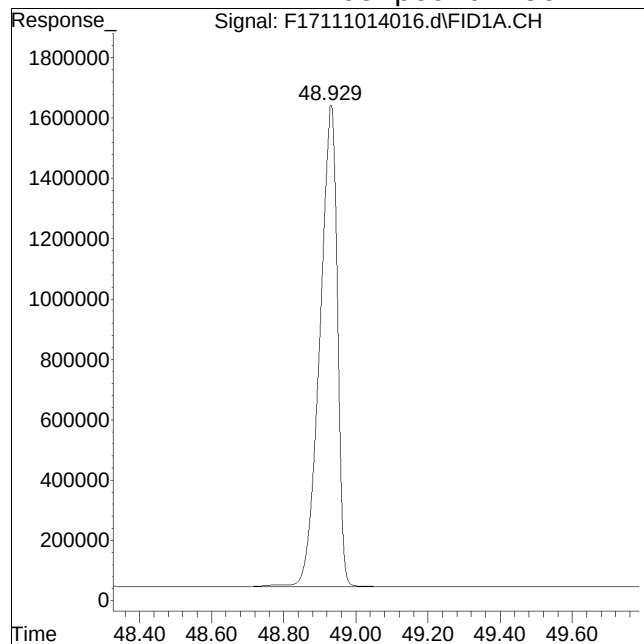
Manual Peak Response = 53603677 M4

M4 = Poor automated baseline construction.

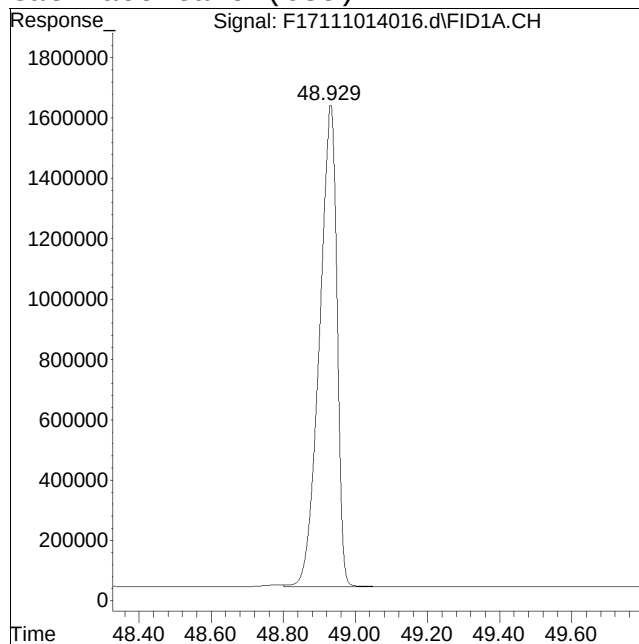
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #36: n-Pentatriacontane (C35)



Original Peak Response = 54222504



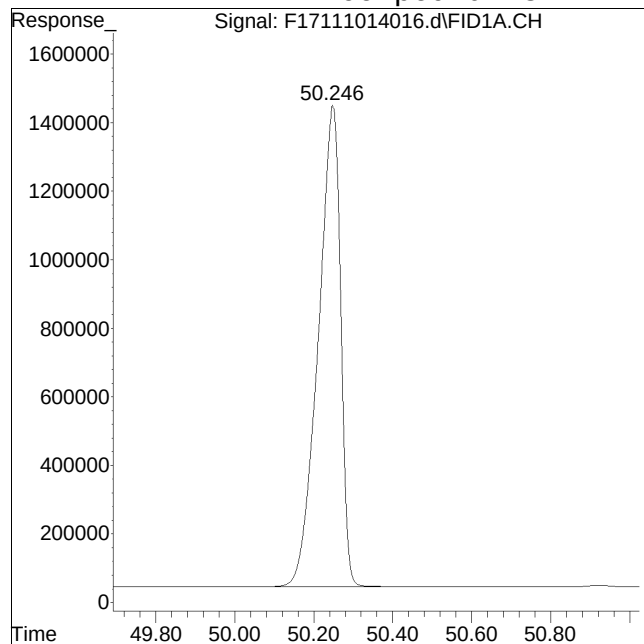
Manual Peak Response = 53899156 M4

M4 = Poor automated baseline construction.

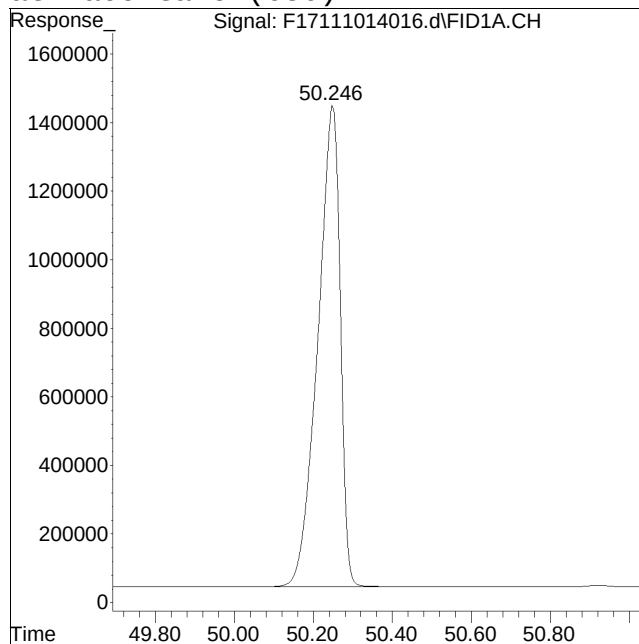
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #37: n-Hexatriacontane (C36)



Original Peak Response = 55467605



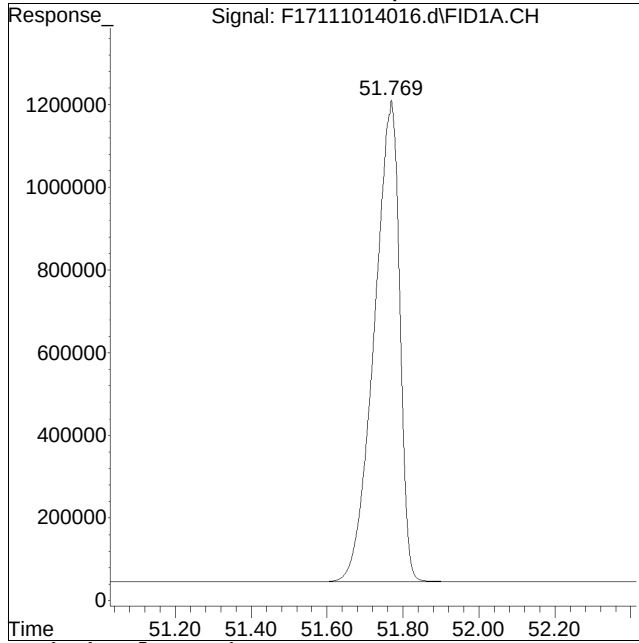
Manual Peak Response = 55334260 M4

M4 = Poor automated baseline construction.

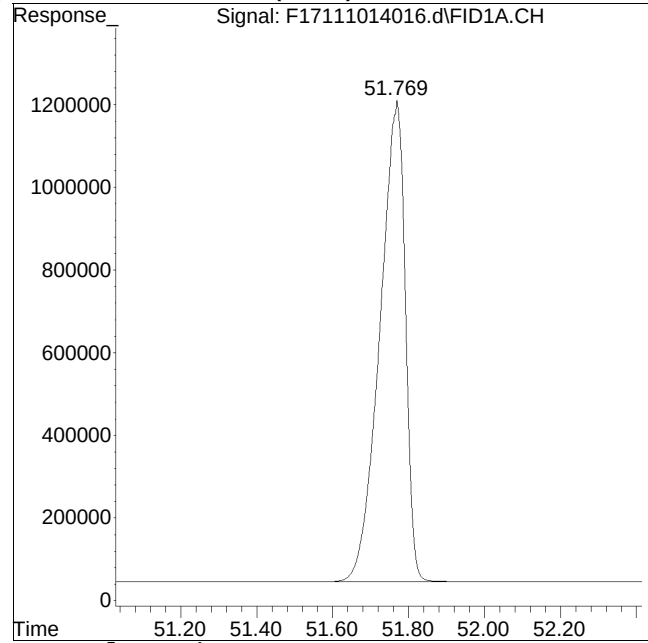
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #38: n-Heptatriacontane (C37)



Original Peak Response = 54107794



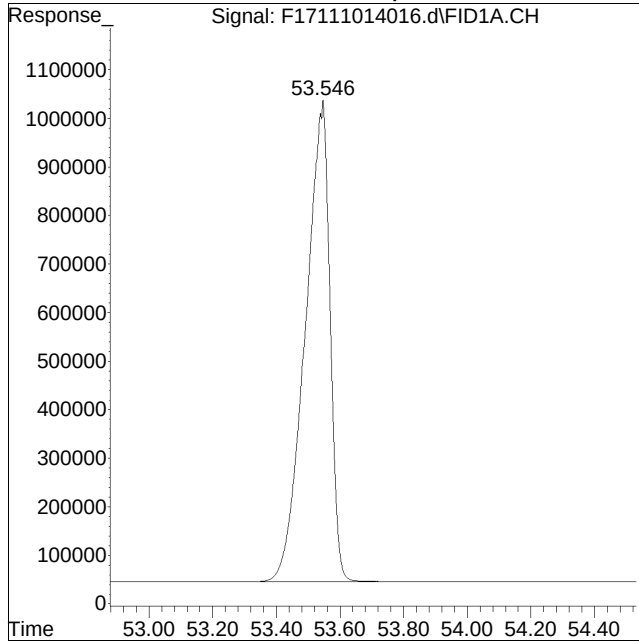
Manual Peak Response = 54162138 M4

M4 = Poor automated baseline construction.

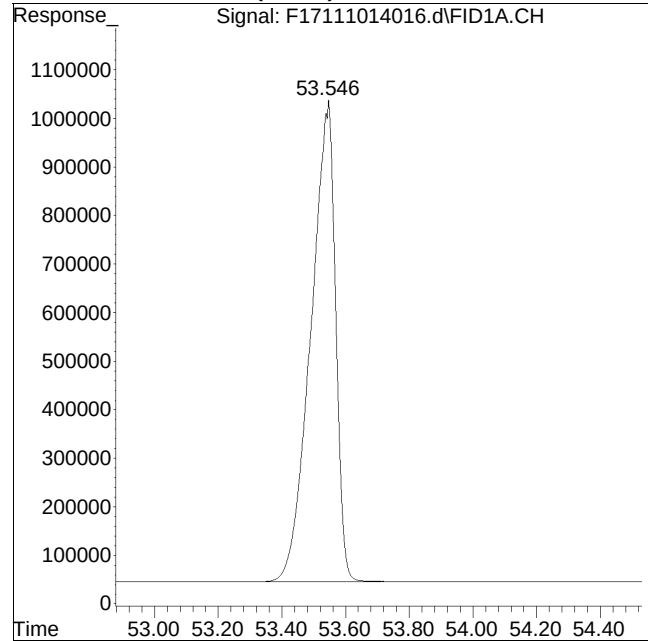
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I17111011403R Quant Date : 11/14/2014 12:19 pm

Compound #39: n-Octatriacontane (C38)



Original Peak Response = 53371314



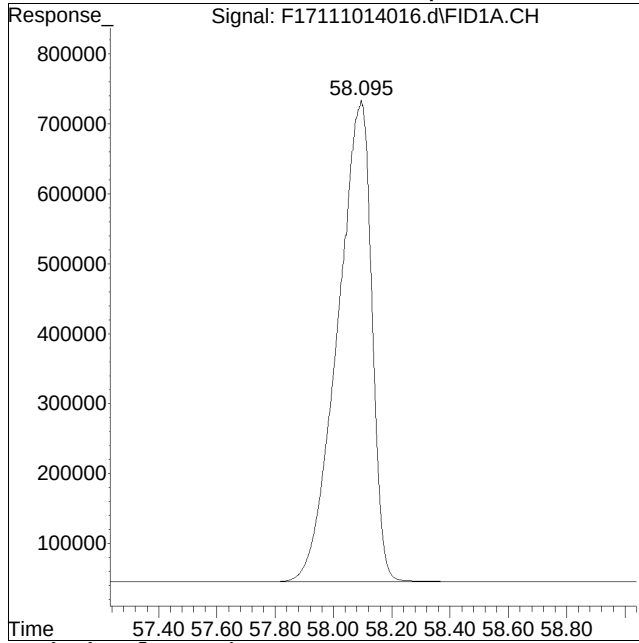
Manual Peak Response = 53323714 M4

M4 = Poor automated baseline construction.

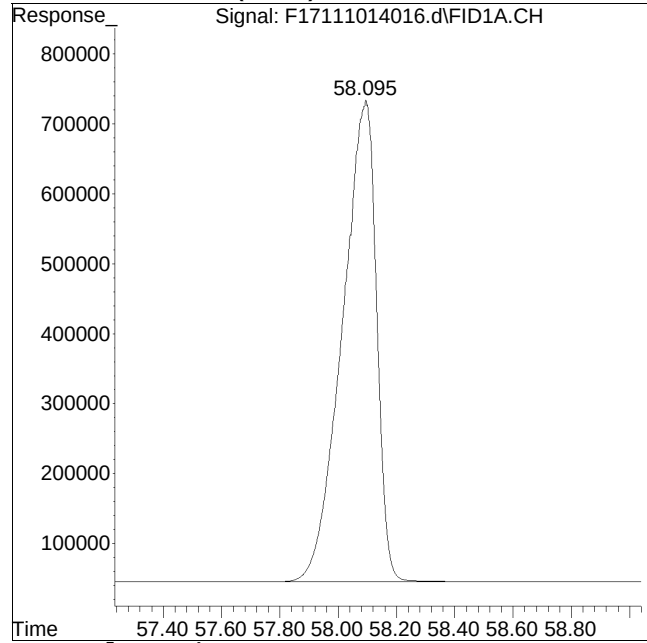
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #41: n-Tetracontane (C40)



Original Peak Response = 56078526



Manual Peak Response = 56122386 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014018.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 11:30 pm
 Operator : FID17:NL
 Sample : I1711011404R
 Misc : WG743851, FRAV25 100ug/mL
 ALS Vial : 9 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:40:38 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.269	52130313	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.271	114237478	97.803	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 195.61%#
24) s	d50-Tetracosane	35.940	93830621	101.798	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 203.60%#
Target Compounds					
2) t	n-Octane (C8)	5.604	89742592	97.156	ug/mL M4
3) t	n-Nonane (C9)	7.800	92546861	95.364	ug/mL M4
4) t	n-Decane (C10)	10.279	95150146	93.429	ug/mL M4
5) t	n-Undecane (C11)	12.793	96504887	96.595	ug/mL M4
6) t	n-Dodecane (C12)	15.224	97813355	97.240	ug/mL M4
7) t	n-Tridecane (C13)	17.534	98128725	97.669	ug/mL M4
9) t	n-Tetradecane (C14)	19.721	99098349	95.153	ug/mL M4
11) t	n-Pentadecane (C15)	21.792	100894959	98.133	ug/mL M4
12) t	n-Hexadecane (C16)	23.753	100542165	97.040	ug/mL M4
14) t	n-Heptadecane (C17)	25.617	101195746	97.156	ug/mL M4
15) t	Pristane	25.729	102363704	98.045	ug/mL M4
16) t	n-Octadecane (C18)	27.389	103494808	99.970	ug/mL M4
17) t	Phytane	27.553	90107646	85.674	ug/mL M4
18) t	n-Nonadecane (C19)	29.080	102722662	99.788	ug/mL M4
20) t	n-Eicosane (C20)	30.691	102338719	98.958	ug/mL M4
21) t	n-Heneicosane (C21)	32.231	103561695	99.007	ug/mL M4
22) t	n-Docosane (C22)	33.709	104611286	99.449	ug/mL M4
23) t	n-Tricosane (C23)	35.129	105634840	99.851	ug/mL M4
25) t	n-Tetracosane (C24)	36.493	106336757	100.401	ug/mL M4
26) t	n-Pentacosane (C25)	37.800	105611101	99.378	ug/mL M4
27) t	n-Hexacosane (C26)	39.064	108152182	99.699	ug/mL M4
28) t	n-Heptacosane (C27)	40.282	107262728	99.625	ug/mL M4
29) t	n-Octacosane (C28)	41.454	107073579	99.140	ug/mL M4
30) t	n-Nonacosane (C29)	42.593	108209907	99.283	ug/mL M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014018.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 11:30 pm
 Operator : FID17:NL
 Sample : I1711011404R
 Misc : WG743851, FRAV25 100ug/mL
 ALS Vial : 9 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:40:38 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc Units
31) t	n-Triacontane (C30)	43.692	108739389	99.436 ug/mL M4
32) t	n-Hentriacontane (C31)	44.756	109245613	99.137 ug/mL M4
33) t	n-Dotriacontane (C32)	45.786	110550982	100.911 ug/mL M4
34) t	n-Tritriacontane (C33)	46.783	104844271	98.522 ug/mL M4
35) t	n-tetratriacontane (C34)	47.813	110027219	97.418 ug/mL M4
36) t	n-Pentatriacontane (C35)	48.968	111133176	98.902 ug/mL M4
37) t	n-Hexatriacontane (C36)	50.292	114629087	94.216 ug/mL M4
38) t	n-Heptatriacontane (C37)	51.822	112472231	99.077 ug/mL M4
39) t	n-Octatriacontane (C38)	53.607	110748873	97.628 ug/mL M4
41) t	n-Tetracontane (C40)	58.178	116119008	106.397 ug/mL M4

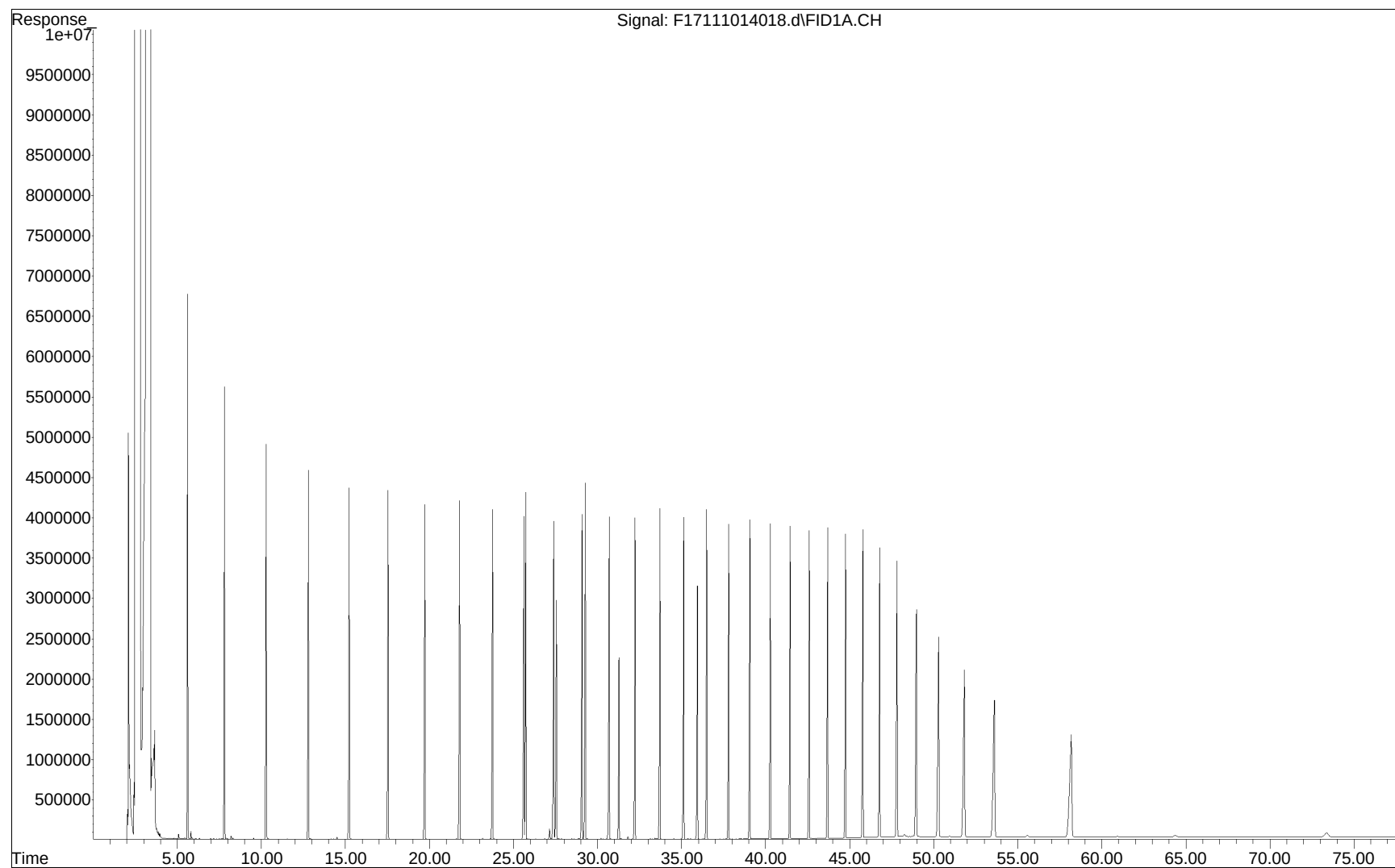
SemiQuant Compounds - Not Calibrated on this Instrument

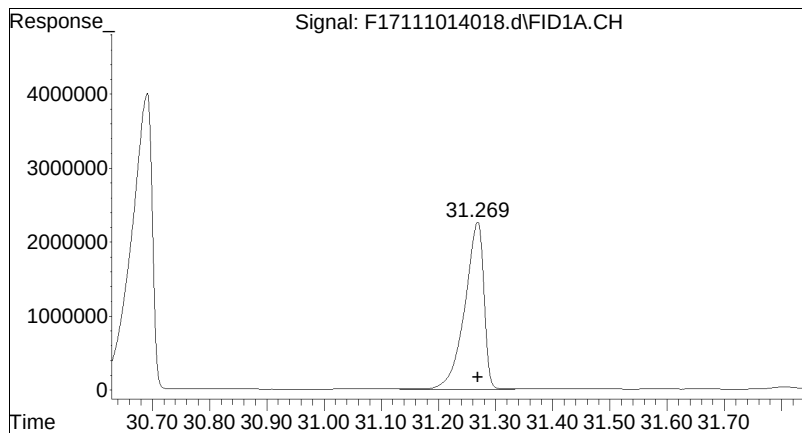
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

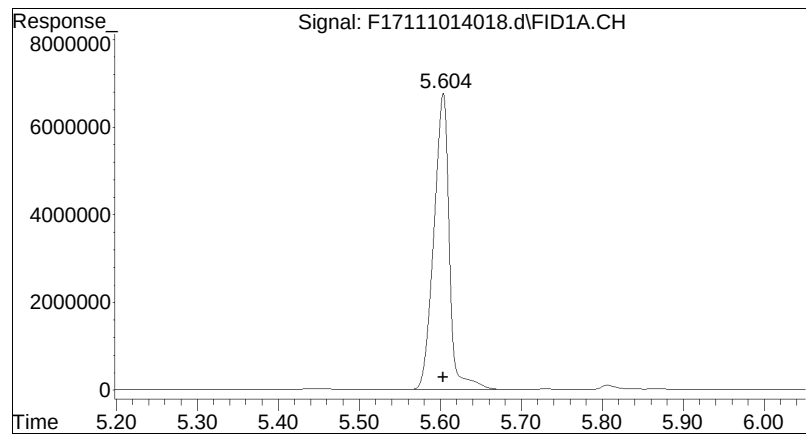
File : 0:\Forensics\Data\FID17\2014\NOV\NOV10\F17111014018.d
Operator : FID17:NL
Acquired : 10 Nov 2014 11:30 pm using AcqMethod FID17.M
Sample Name: I1711011404R
Instrument: FID17
Misc Info : WG743851, FRAV25 100ug/mL
Vial Number: 9
CurrentMeth: 0:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M





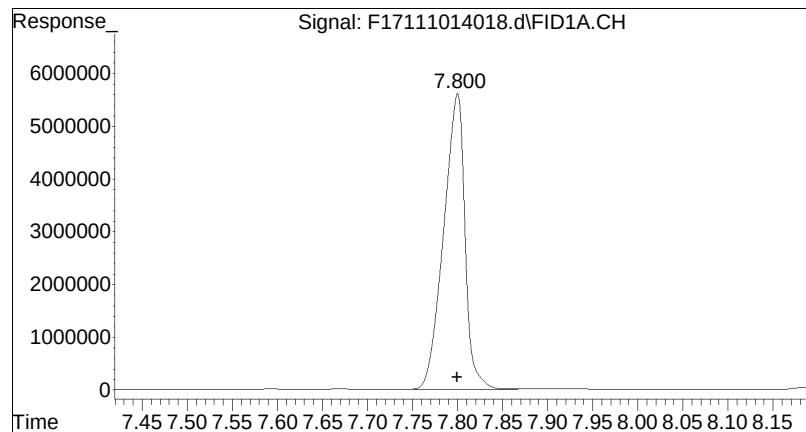
#1 5-alpha-androstane

R.T.: 31.269 min
Delta R.T.: 0.000 min
Response: 52130313
Conc: 50.00 ug/mL M4



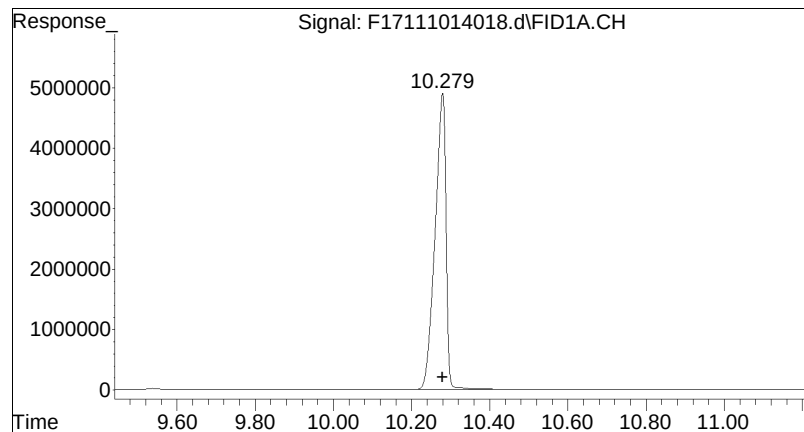
#2 n-Octane (C8)

R.T.: 5.604 min
Delta R.T.: 0.000 min
Response: 89742592
Conc: 97.16 ug/mL M4



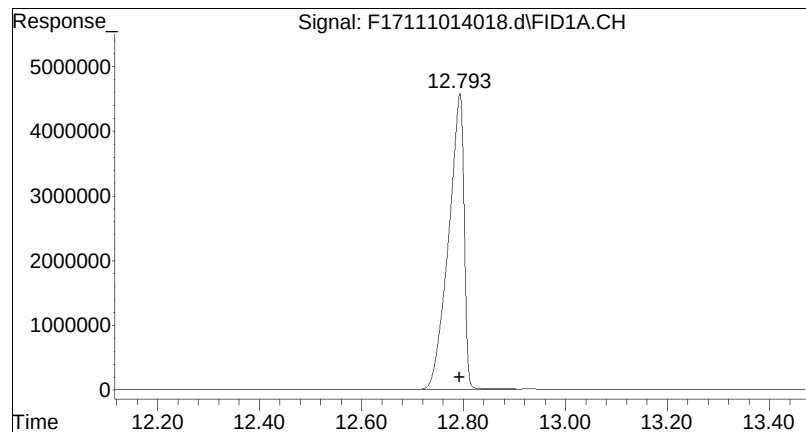
#3 n-Nonane (C9)

R.T.: 7.800 min
Delta R.T.: 0.000 min
Response: 92546861
Conc: 95.36 ug/mL M4



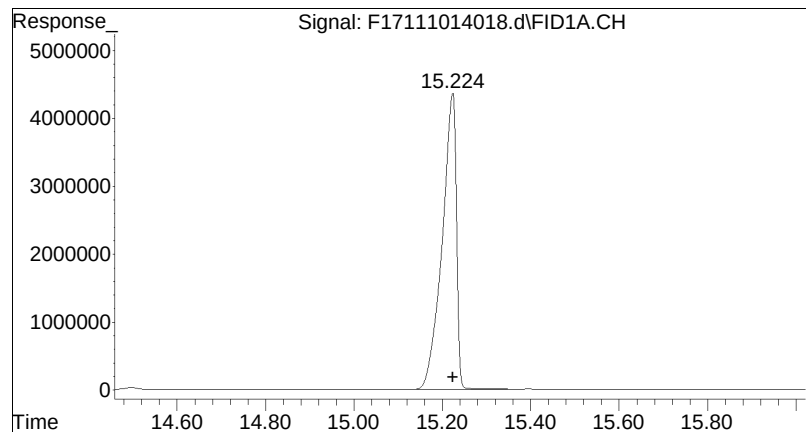
#4 n-Decane (C10)

R.T.: 10.279 min
Delta R.T.: 0.000 min
Response: 95150146
Conc: 93.43 ug/mL M4



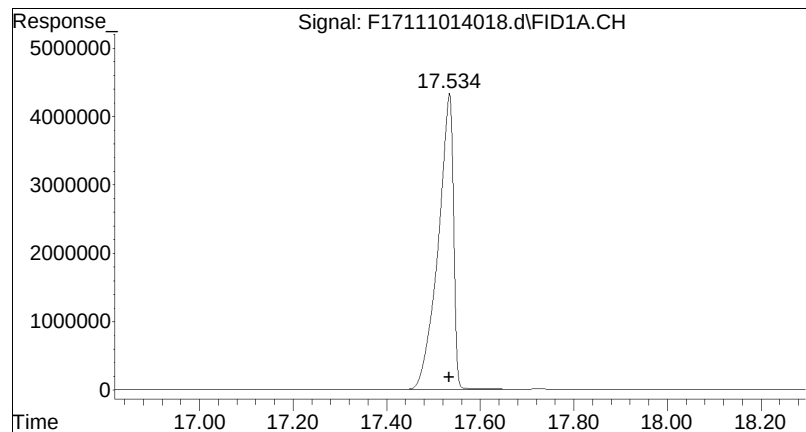
#5 n-Undecane (C11)

R.T.: 12.793 min
Delta R.T.: 0.000 min
Response: 96504887
Conc: 96.59 ug/mL M4



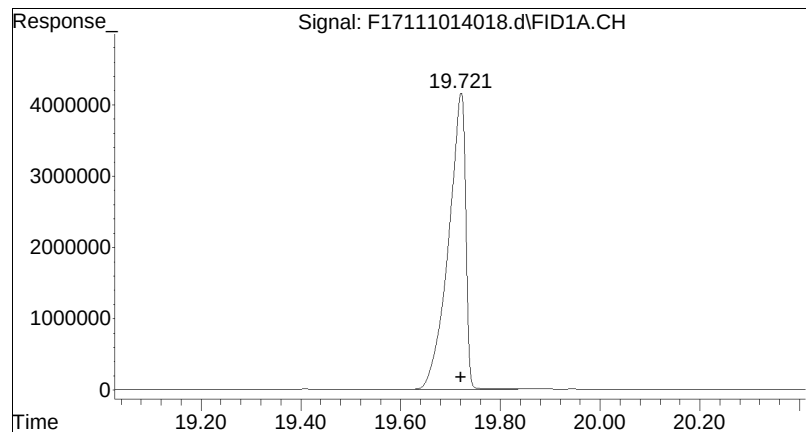
#6 n-Dodecane (C12)

R.T.: 15.224 min
Delta R.T.: 0.000 min
Response: 97813355
Conc: 97.24 ug/mL M4



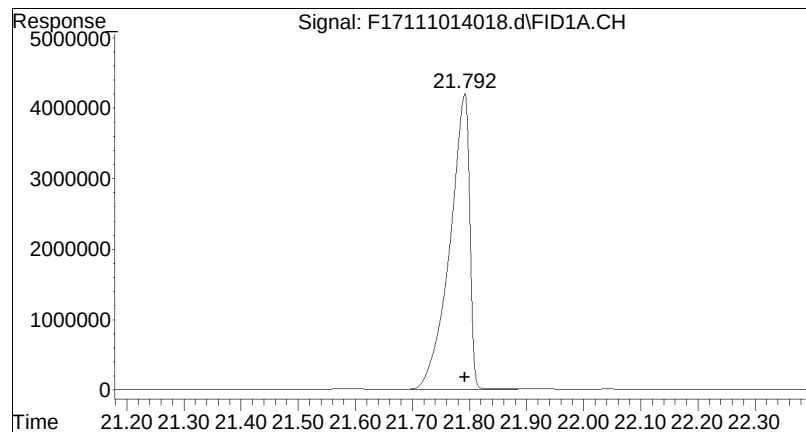
#7 n-Tridecane (C13)

R.T.: 17.534 min
Delta R.T.: 0.000 min
Response: 98128725
Conc: 97.67 ug/mL M4



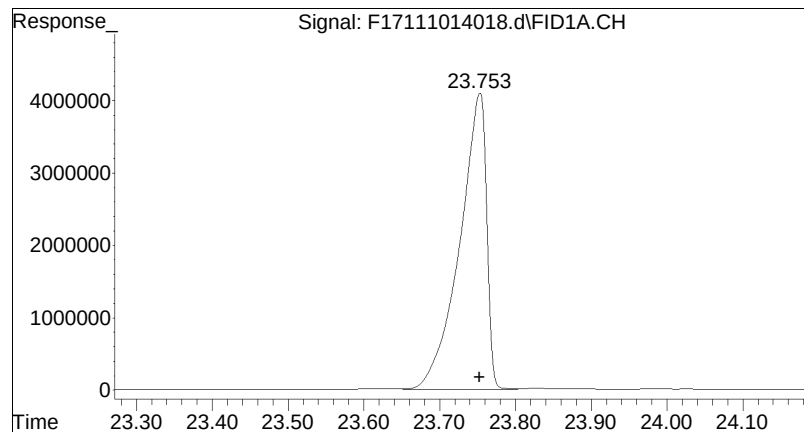
#9 n-Tetradecane (C14)

R.T.: 19.721 min
Delta R.T.: 0.000 min
Response: 99098349
Conc: 95.15 ug/mL M4



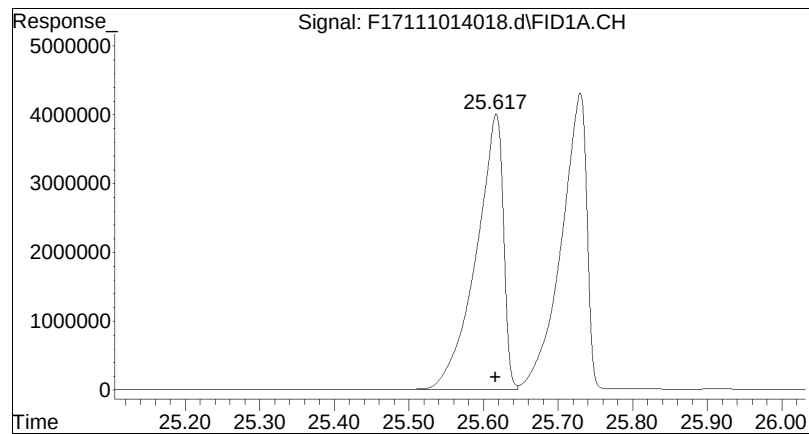
#11 n-Pentadecane (C15)

R.T.: 21.792 min
Delta R.T.: 0.000 min
Response: 100894959
Conc: 98.13 ug/mL M4



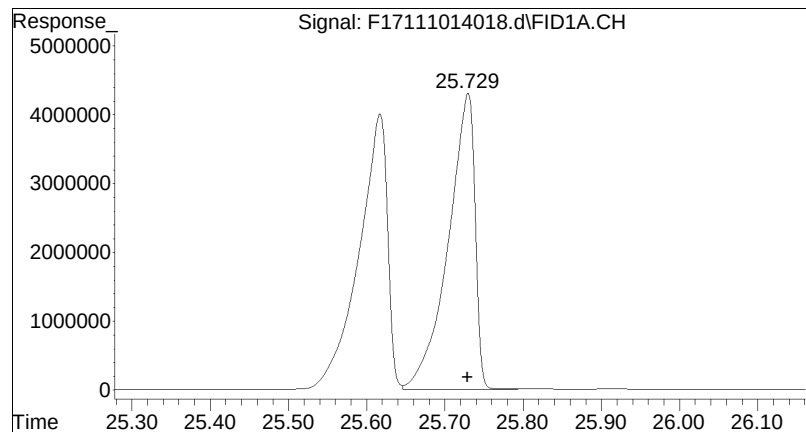
#12 n-Hexadecane (C16)

R.T.: 23.753 min
Delta R.T.: 0.000 min
Response: 100542165
Conc: 97.04 ug/mL M4



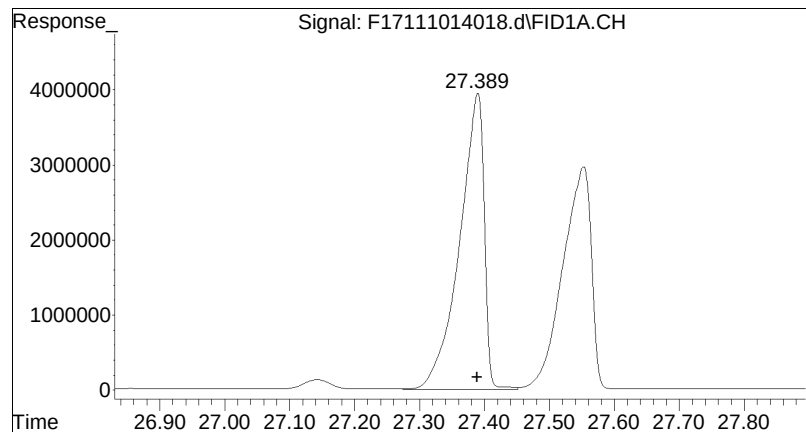
#14 n-Heptadecane (C17)

R.T.: 25.617 min
Delta R.T.: 0.000 min
Response: 101195746
Conc: 97.16 ug/mL M4



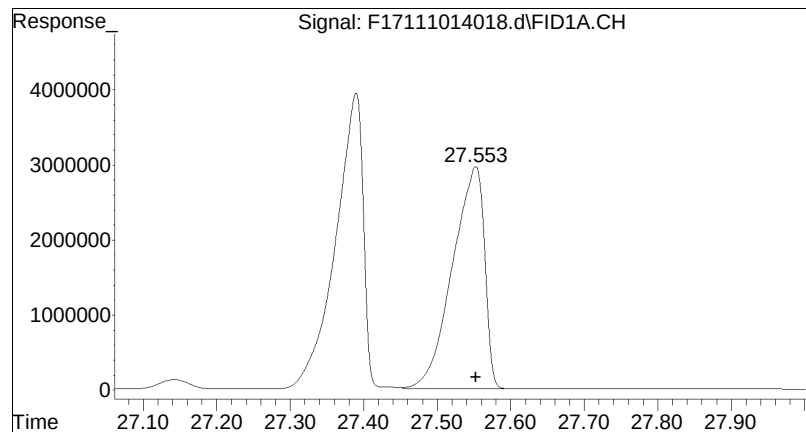
#15 Pristane

R.T.: 25.729 min
Delta R.T.: 0.000 min
Response: 102363704
Conc: 98.05 ug/mL M4



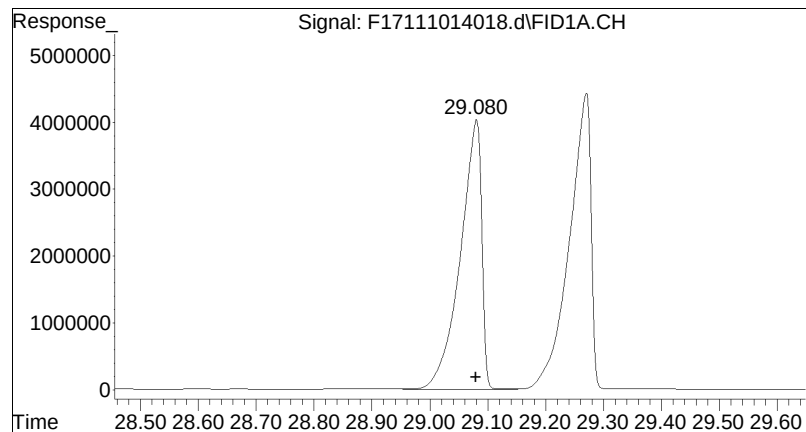
#16 n-Octadecane (C18)

R.T.: 27.389 min
Delta R.T.: 0.000 min
Response: 103494808
Conc: 99.97 ug/mL M4



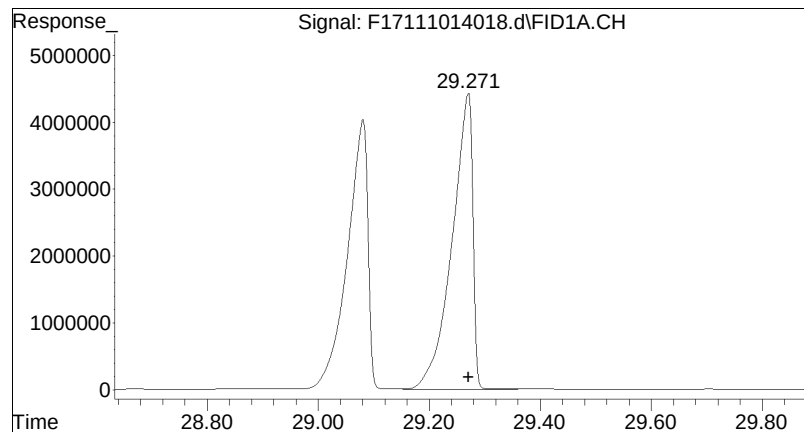
#17 Phytane

R.T.: 27.553 min
Delta R.T.: 0.000 min
Response: 90107646
Conc: 85.67 ug/mL M4



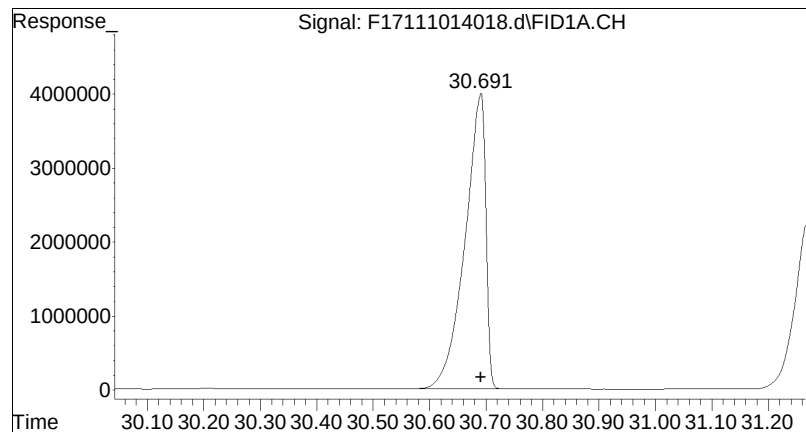
#18 n-Nonadecane (C19)

R.T.: 29.080 min
Delta R.T.: 0.000 min
Response: 102722662
Conc: 99.79 ug/mL M4



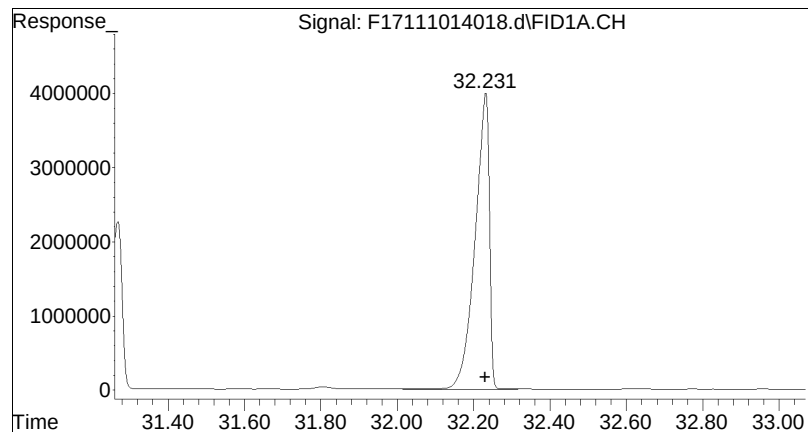
#19 ortho-terphenyl

R.T.: 29.271 min
Delta R.T.: 0.000 min
Response: 114237478
Conc: 97.80 ug/mL M4



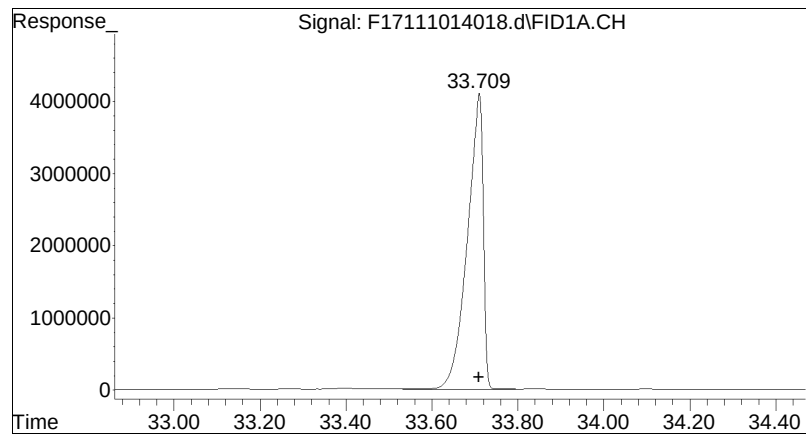
#20 n-Eicosane (C20)

R.T.: 30.691 min
Delta R.T.: 0.000 min
Response: 102338719
Conc: 98.96 ug/mL M4



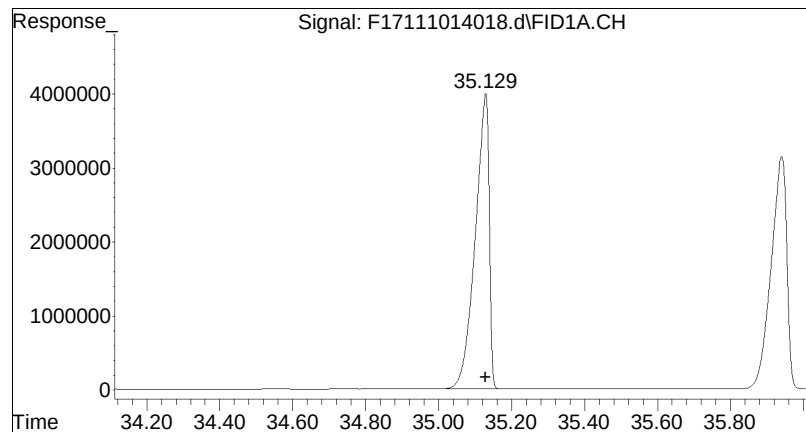
#21 n-Heneicosane (C21)

R.T.: 32.231 min
Delta R.T.: 0.000 min
Response: 103561695
Conc: 99.01 ug/mL M4



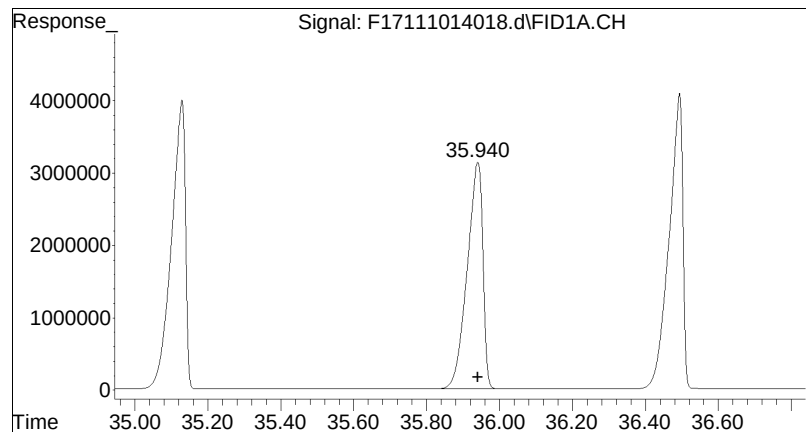
#22 n-Docosane (C22)

R.T.: 33.709 min
Delta R.T.: 0.000 min
Response: 104611286
Conc: 99.45 ug/mL M4



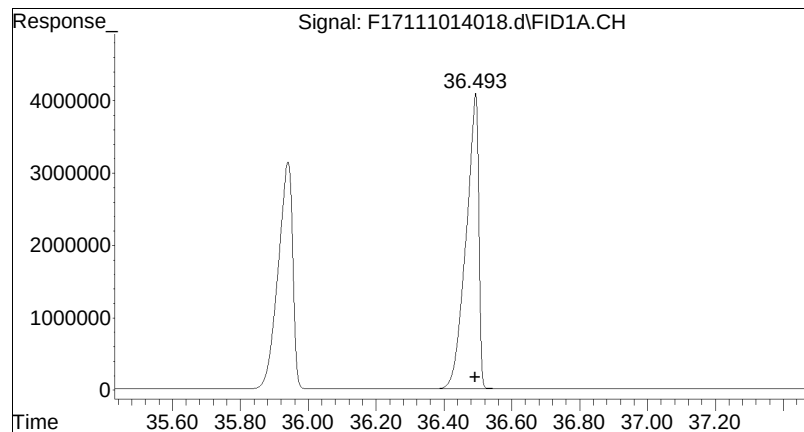
#23 n-Tricosane (C23)

R.T.: 35.129 min
Delta R.T.: 0.000 min
Response: 105634840
Conc: 99.85 ug/mL M4



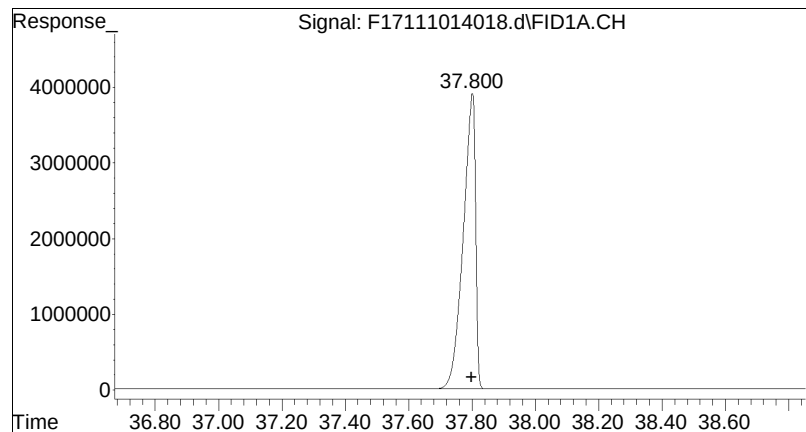
#24 d50-Tetracosane

R.T.: 35.940 min
Delta R.T.: 0.000 min
Response: 93830621
Conc: 101.80 ug/mL M4



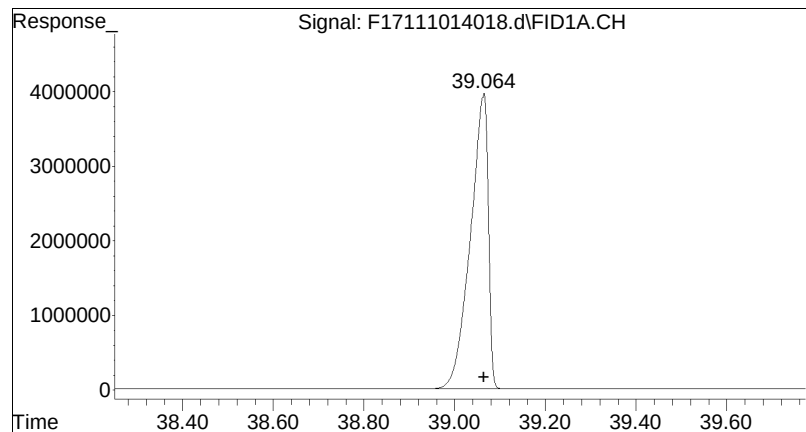
#25 n-Tetracosane (C24)

R.T.: 36.493 min
Delta R.T.: 0.000 min
Response: 106336757
Conc: 100.40 ug/mL M4



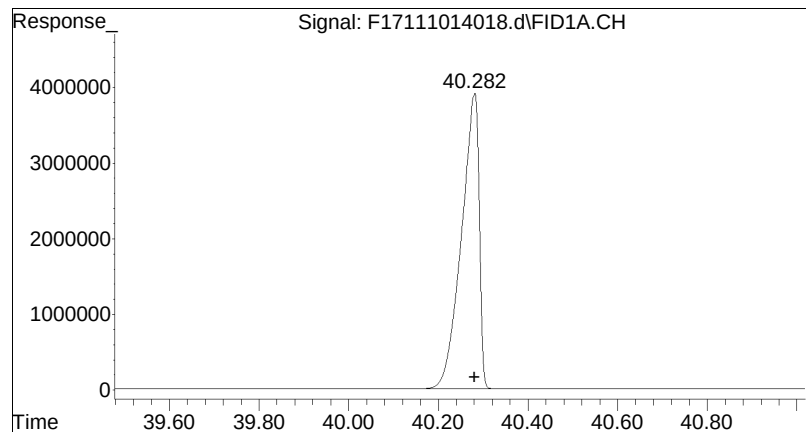
#26 n-Pentacosane (C25)

R.T.: 37.800 min
Delta R.T.: 0.000 min
Response: 105611101
Conc: 99.38 ug/mL M4



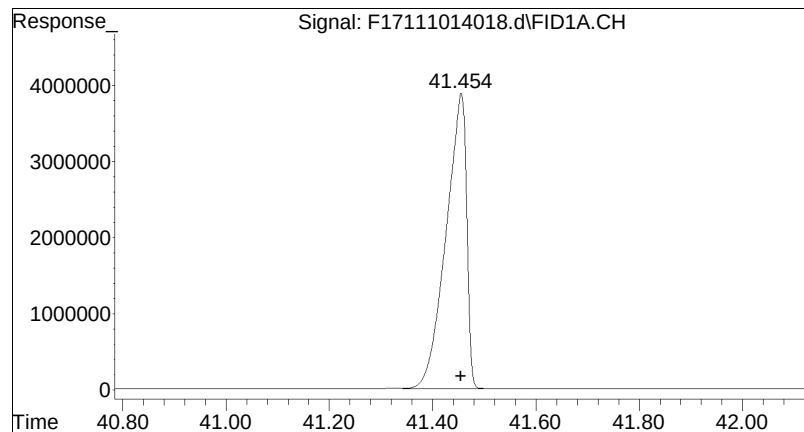
#27 n-Hexacosane (C26)

R.T.: 39.064 min
Delta R.T.: 0.000 min
Response: 108152182
Conc: 99.70 ug/mL M4



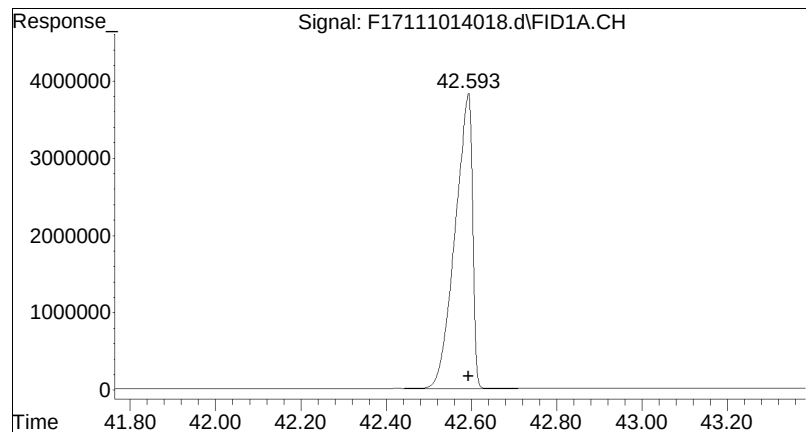
#28 n-Heptacosane (C27)

R.T.: 40.282 min
Delta R.T.: 0.000 min
Response: 107262728
Conc: 99.62 ug/mL M4



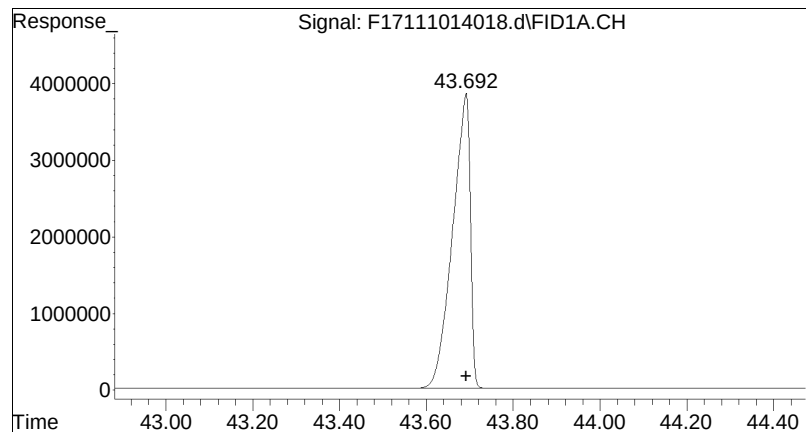
#29 n-Octacosane (C28)

R.T.: 41.454 min
Delta R.T.: 0.000 min
Response: 107073579
Conc: 99.14 ug/mL M4



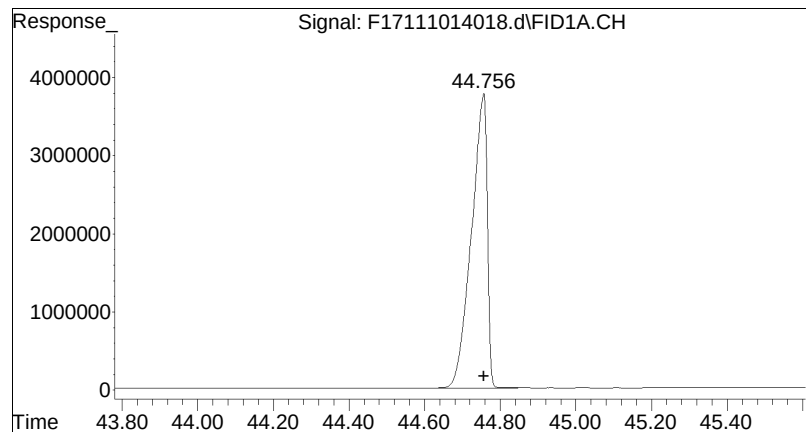
#30 n-Nonacosane (C29)

R.T.: 42.593 min
Delta R.T.: 0.000 min
Response: 108209907
Conc: 99.28 ug/mL M4



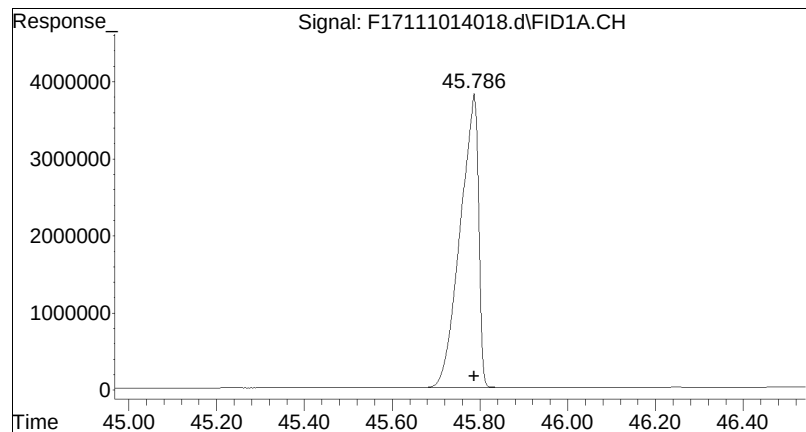
#31 n-Triacontane (C30)

R.T.: 43.692 min
Delta R.T.: 0.000 min
Response: 108739389
Conc: 99.44 ug/mL M4



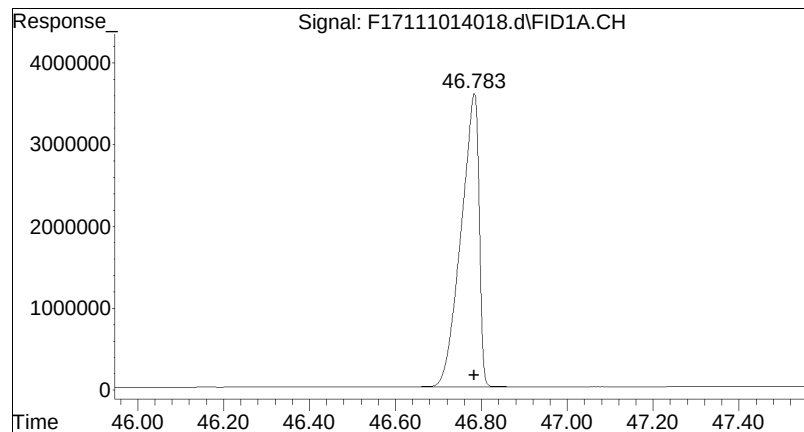
#32 n-Hentriacontane (C31)

R.T.: 44.756 min
Delta R.T.: 0.000 min
Response: 109245613
Conc: 99.14 ug/mL M4



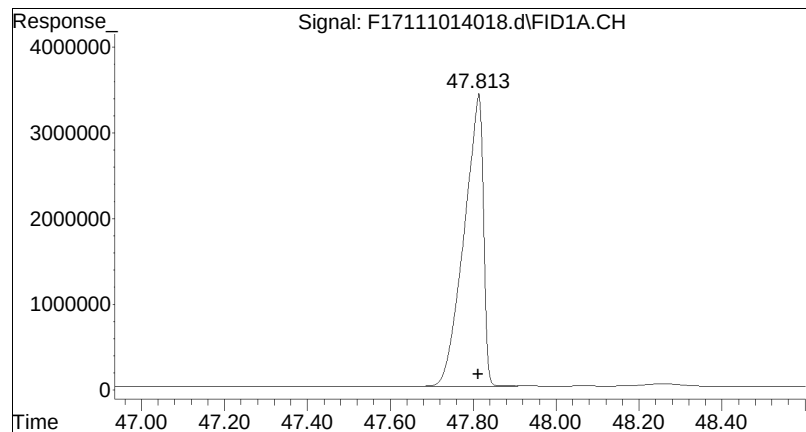
#33 n-Dotriacontane (C32)

R.T.: 45.786 min
Delta R.T.: 0.000 min
Response: 110550982
Conc: 100.91 ug/mL M4



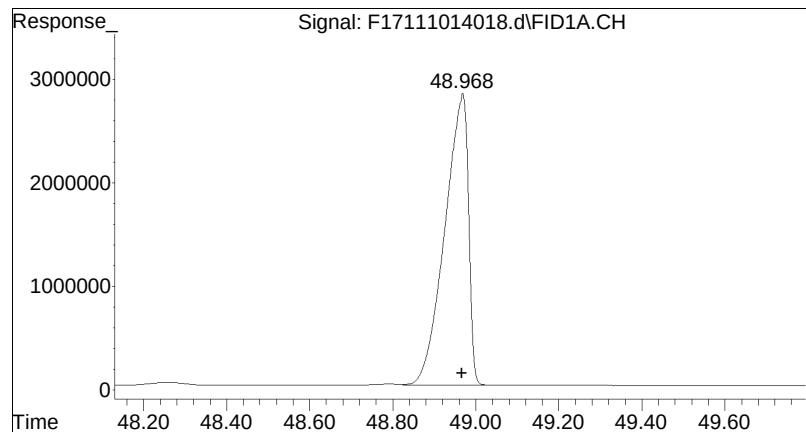
#34 n-Tritriacontane (C33)

R.T.: 46.783 min
Delta R.T.: 0.000 min
Response: 104844271
Conc: 98.52 ug/mL M4



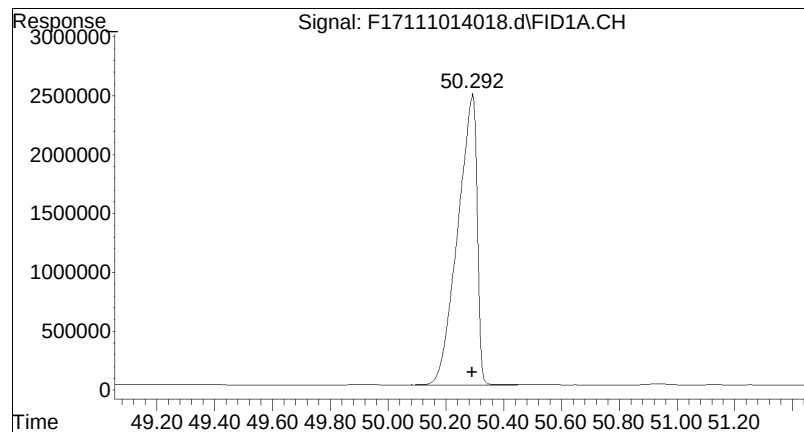
#35 n-tetratriacontane (C34)

R.T.: 47.813 min
Delta R.T.: 0.000 min
Response: 110027219
Conc: 97.42 ug/mL M4



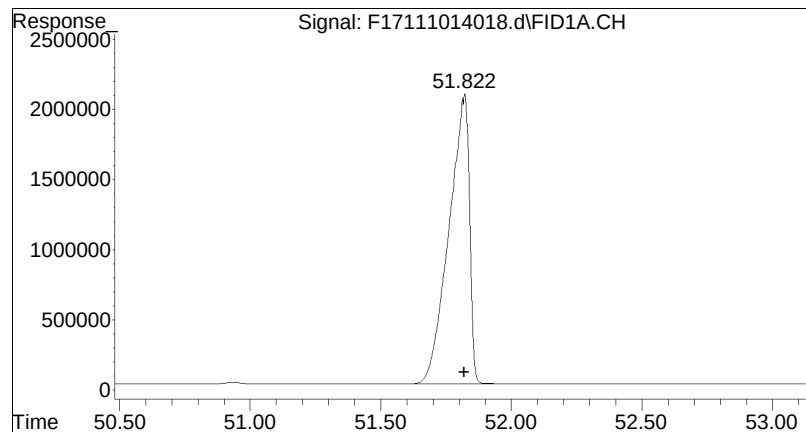
#36 n-Pentatriacontane (C35)

R.T.: 48.968 min
Delta R.T.: 0.000 min
Response: 111133176
Conc: 98.90 ug/mL M4



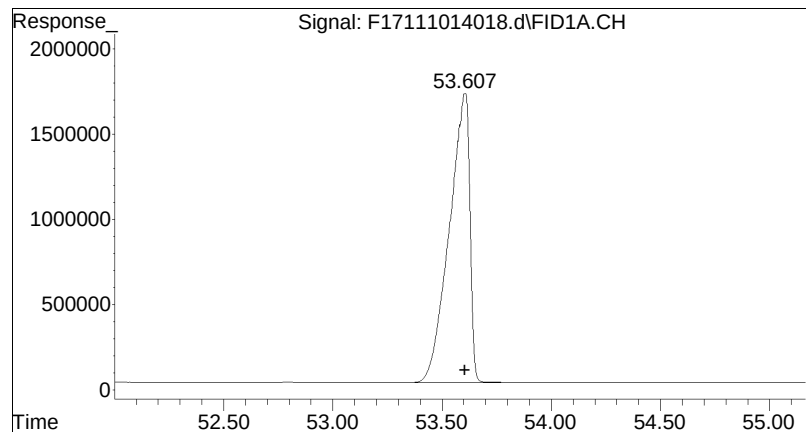
#37 n-Hexatriacontane (C36)

R.T.: 50.292 min
Delta R.T.: 0.000 min
Response: 114629087
Conc: 94.22 ug/mL M4



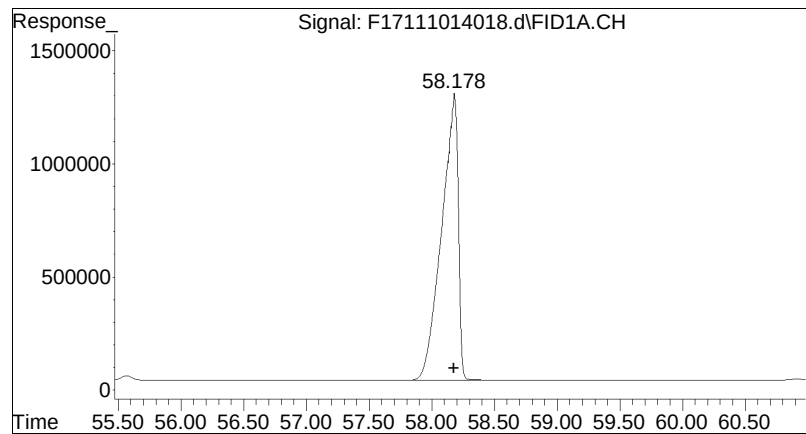
#38 n-Heptatriacontane (C37)

R.T.: 51.822 min
Delta R.T.: 0.000 min
Response: 112472231
Conc: 99.08 ug/mL M4



#39 n-Octatriacontane (C38)

R.T.: 53.607 min
Delta R.T.: 0.000 min
Response: 110748873
Conc: 97.63 ug/mL M4



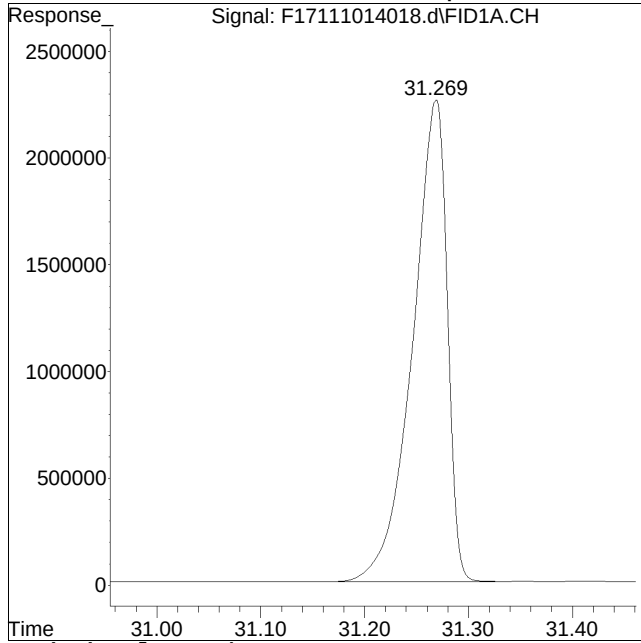
#41 n-Tetracontane (C40)

R.T.: 58.178 min
Delta R.T.: 0.000 min
Response: 116119008
Conc: 106.40 ug/mL M4

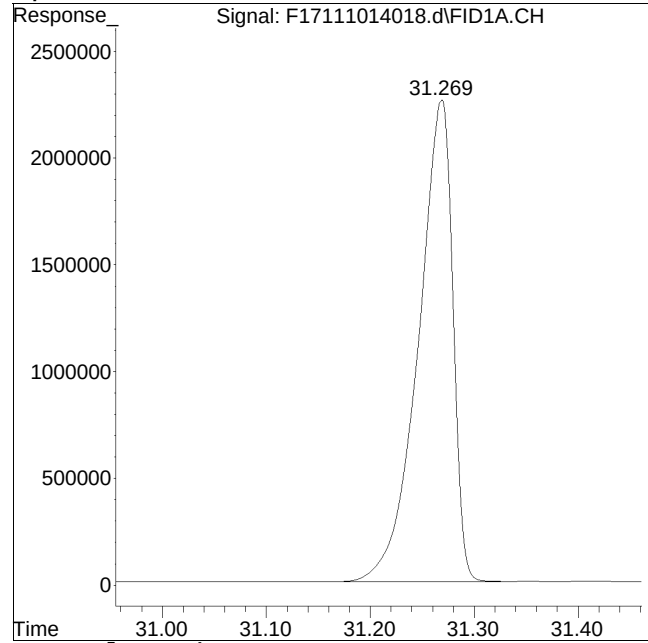
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #1: 5-alpha-androstane



Original Peak Response = 52114626



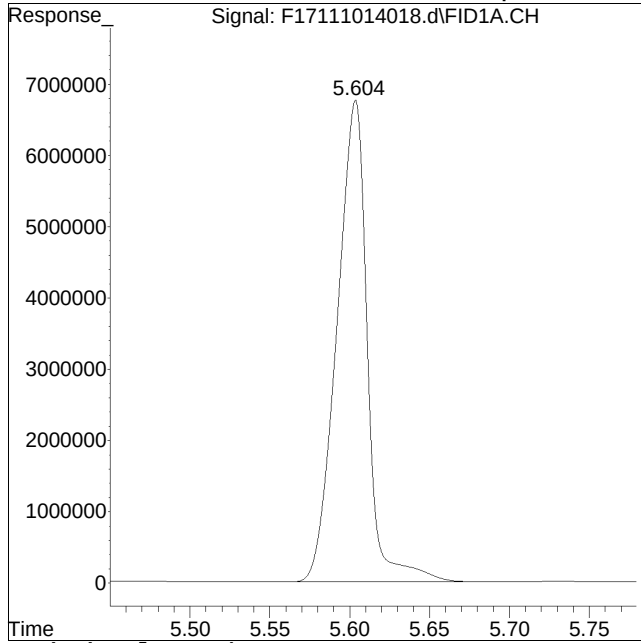
Manual Peak Response = 52130313 M4

M4 = Poor automated baseline construction.

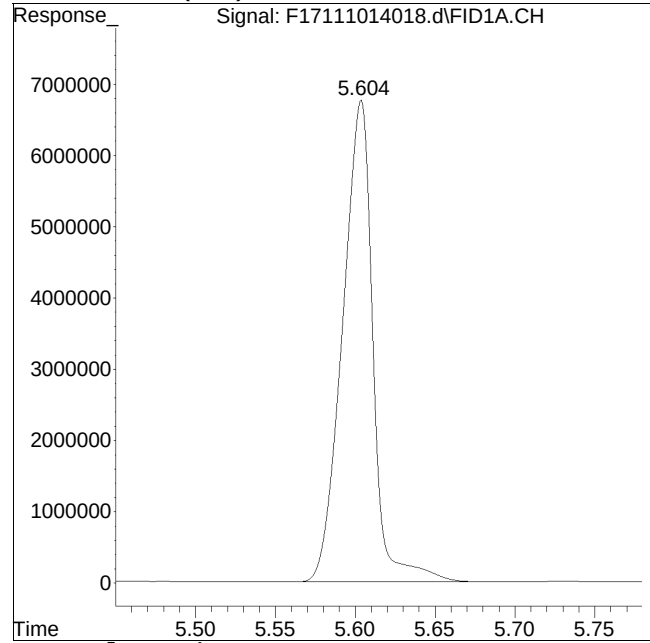
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #2: n-Octane (C8)



Original Peak Response = 89761593



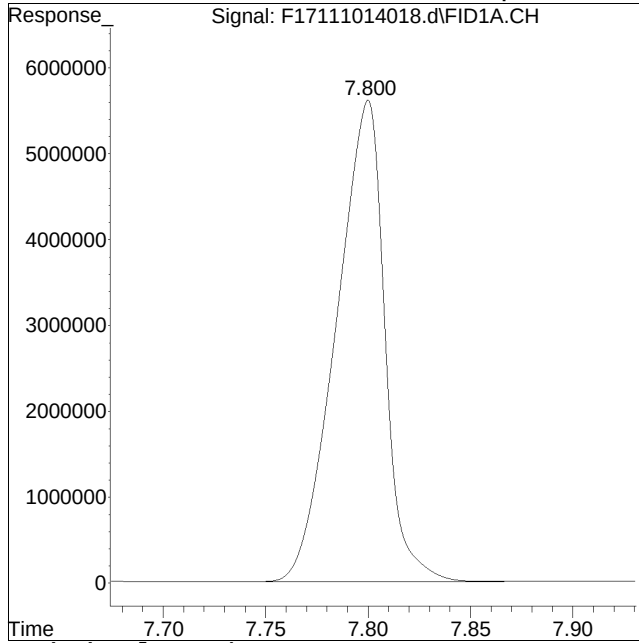
Manual Peak Response = 89742592 M4

M4 = Poor automated baseline construction.

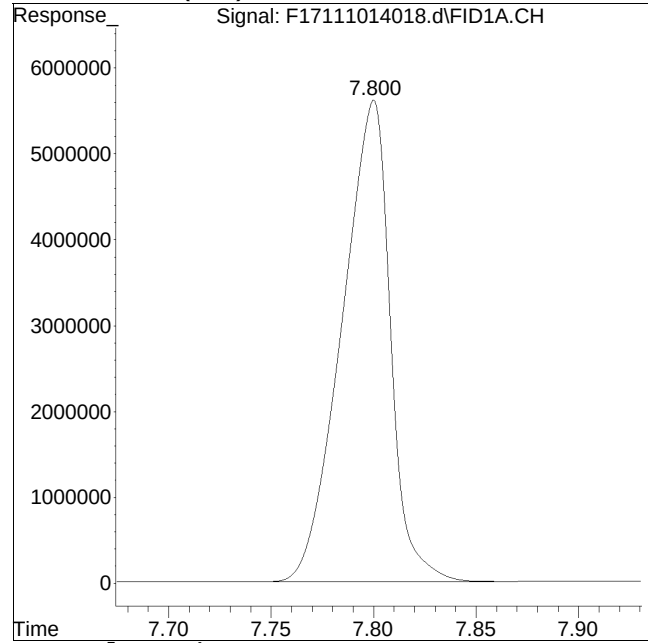
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #3: n-Nonane (C9)



Original Peak Response = 92650241



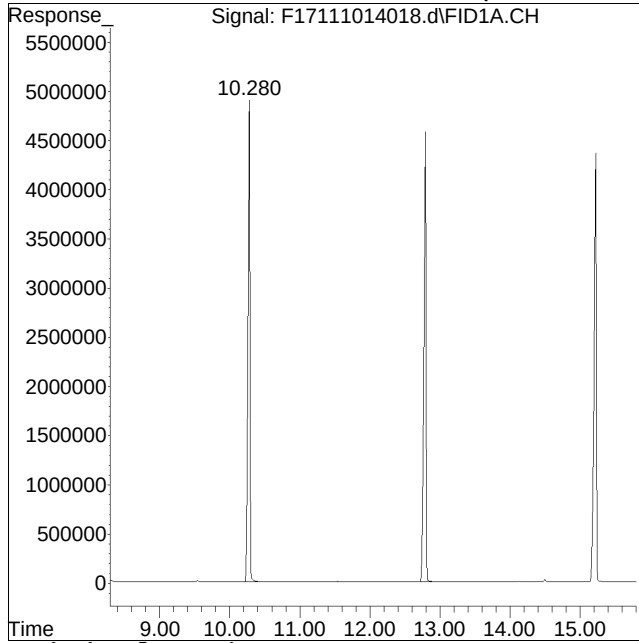
Manual Peak Response = 92546861 M4

M4 = Poor automated baseline construction.

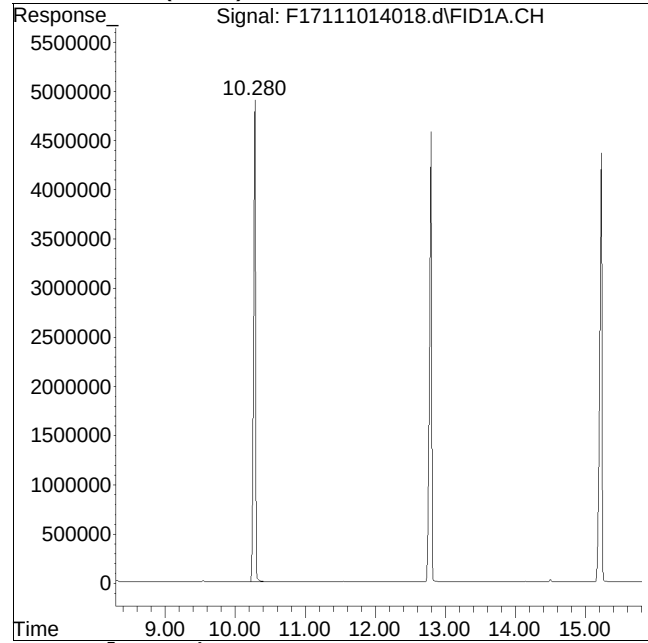
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #4: n-Decane (C10)



Original Peak Response = 94438265



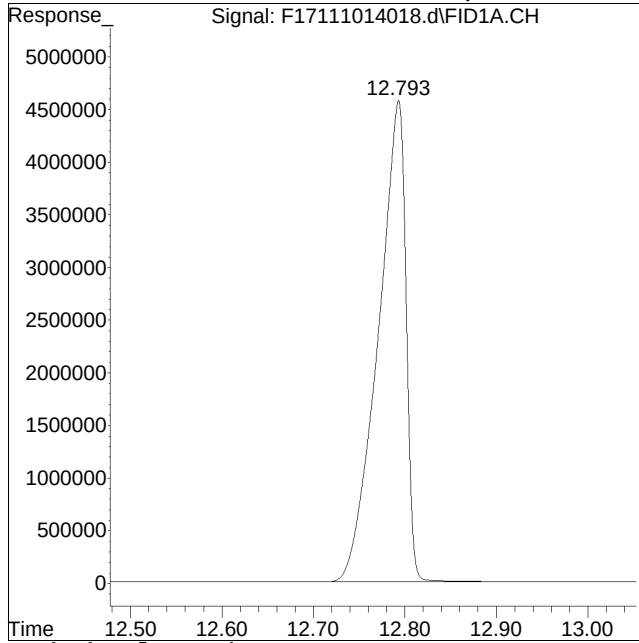
Manual Peak Response = 95150146 M4

M4 = Poor automated baseline construction.

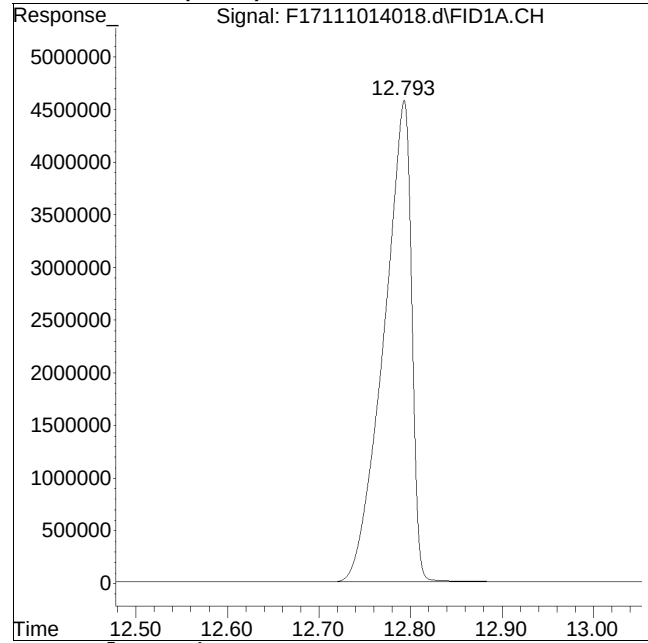
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #5: n-Undecane (C11)



Original Peak Response = 96522128



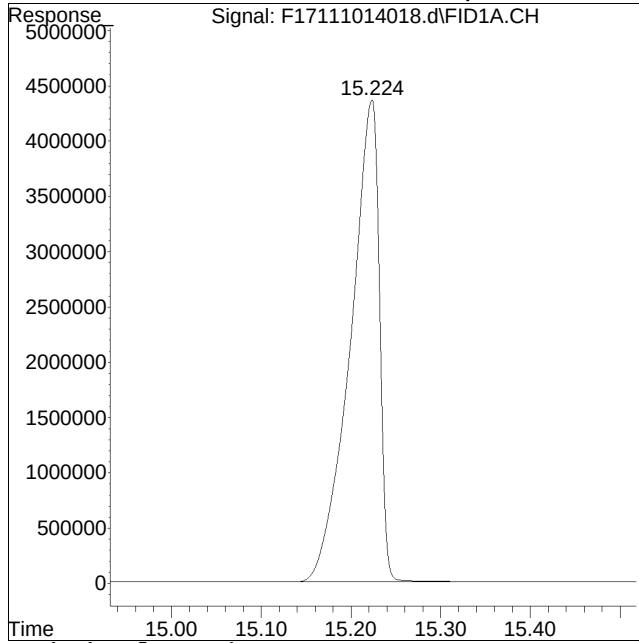
Manual Peak Response = 96504887 M4

M4 = Poor automated baseline construction.

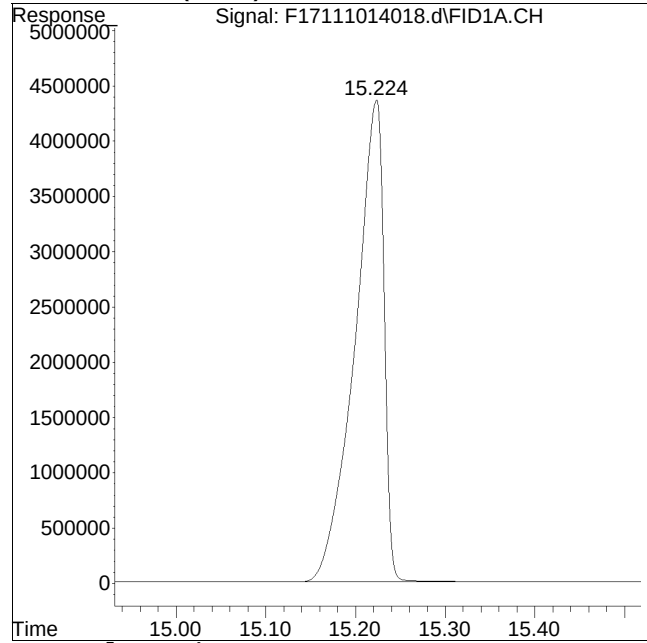
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #6: n-Dodecane (C12)



Original Peak Response = 97736580



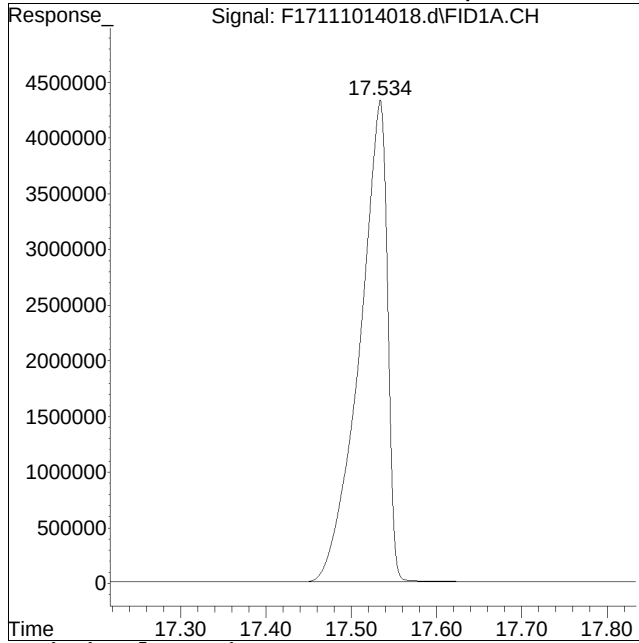
Manual Peak Response = 97813355 M4

M4 = Poor automated baseline construction.

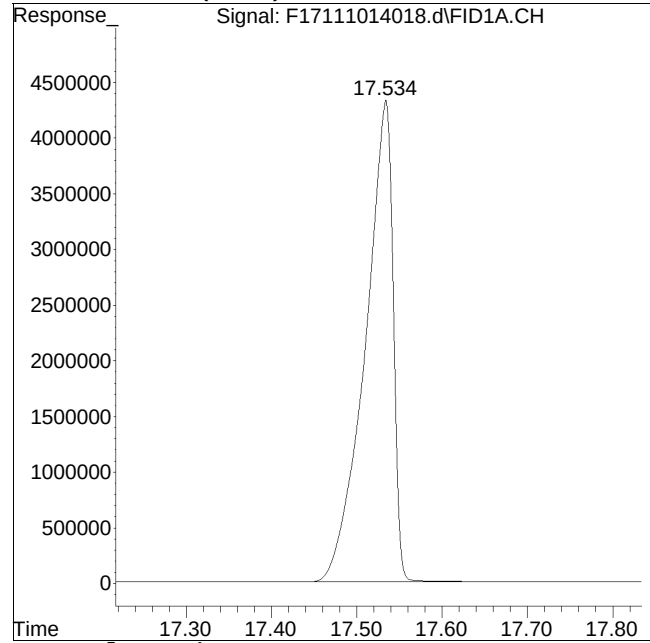
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #7: n-Tridecane (C13)



Original Peak Response = 98144870



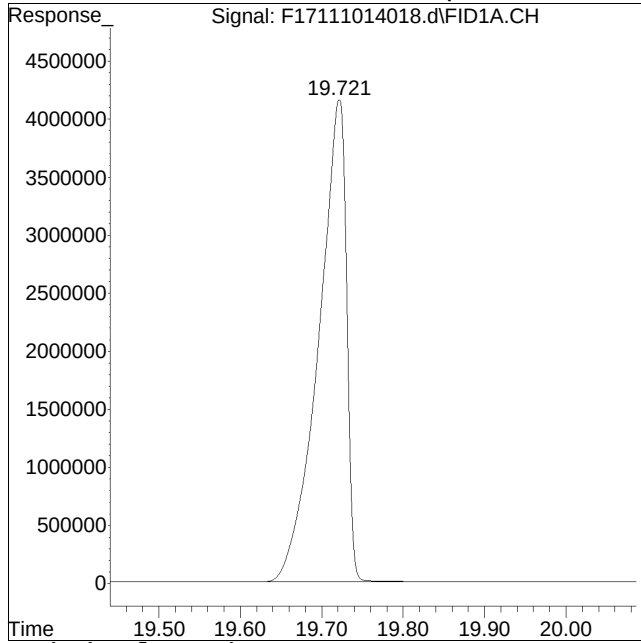
Manual Peak Response = 98128725 M4

M4 = Poor automated baseline construction.

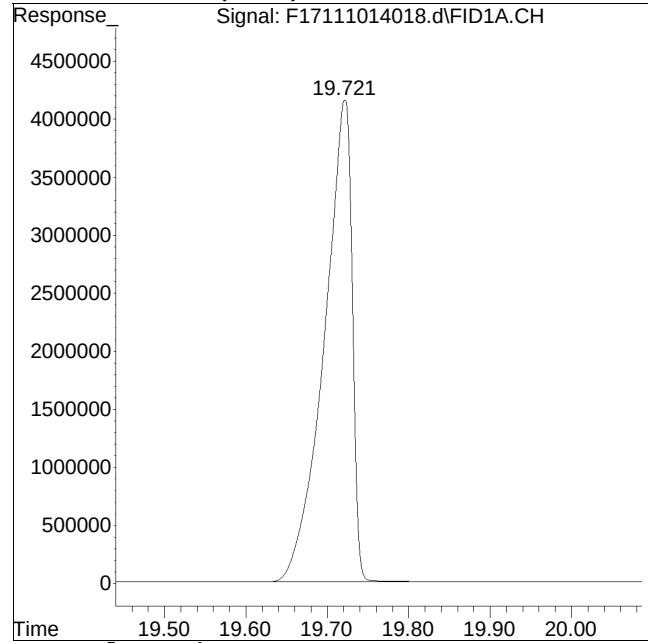
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #9: n-Tetradecane (C14)



Original Peak Response = 99196181



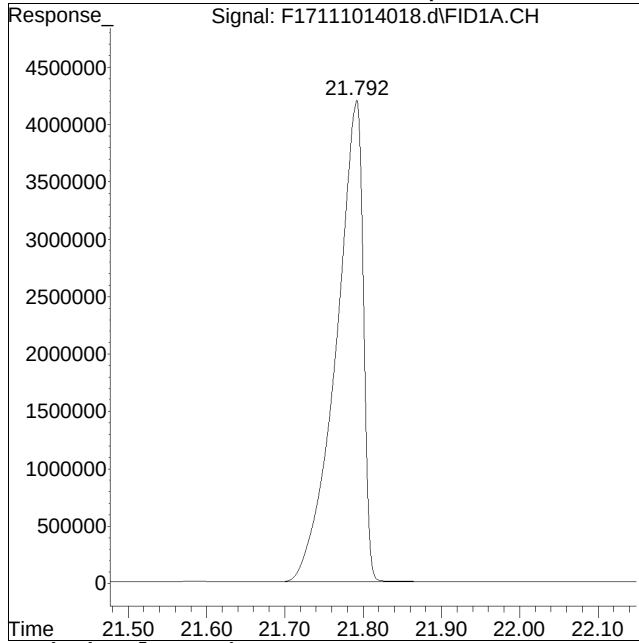
Manual Peak Response = 99098349 M4

M4 = Poor automated baseline construction.

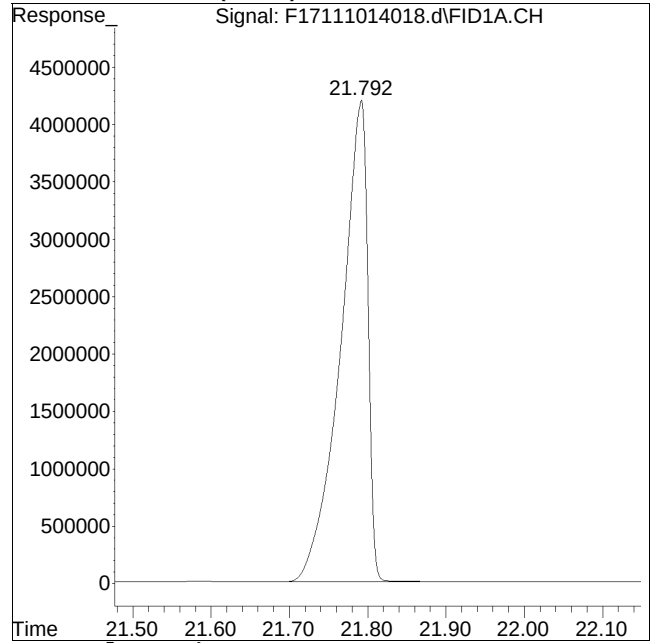
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #11: n-Pentadecane (C15)



Original Peak Response = 100967552



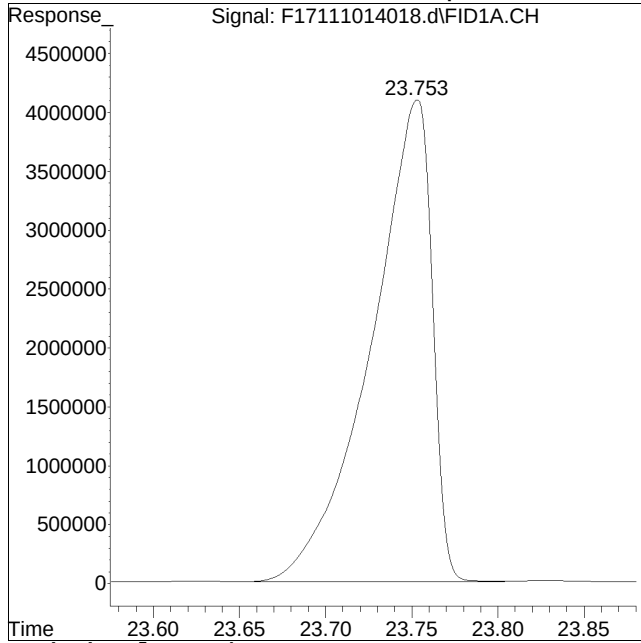
Manual Peak Response = 100894959 M4

M4 = Poor automated baseline construction.

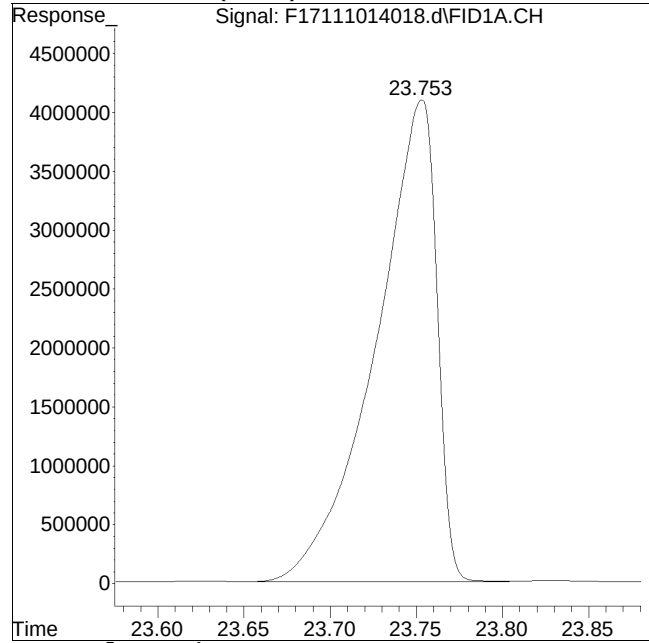
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #12: n-Hexadecane (C16)



Original Peak Response = 100502501



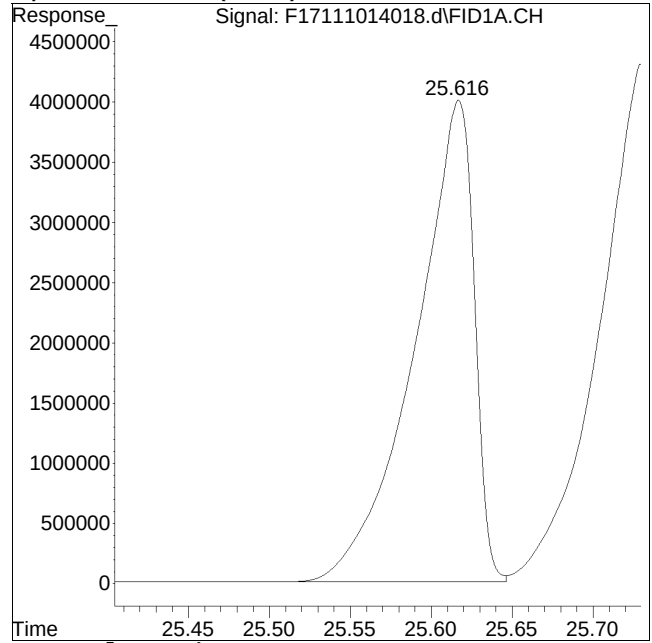
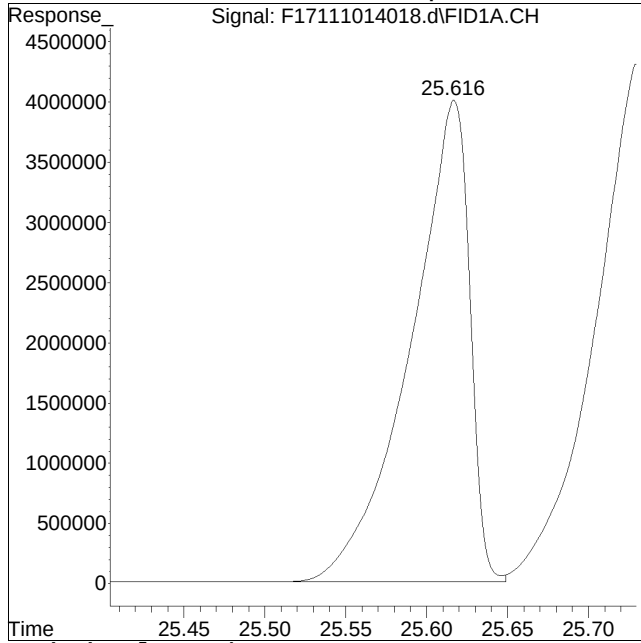
Manual Peak Response = 100542165 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #14: n-Heptadecane (C17)



Original Peak Response = 101308168

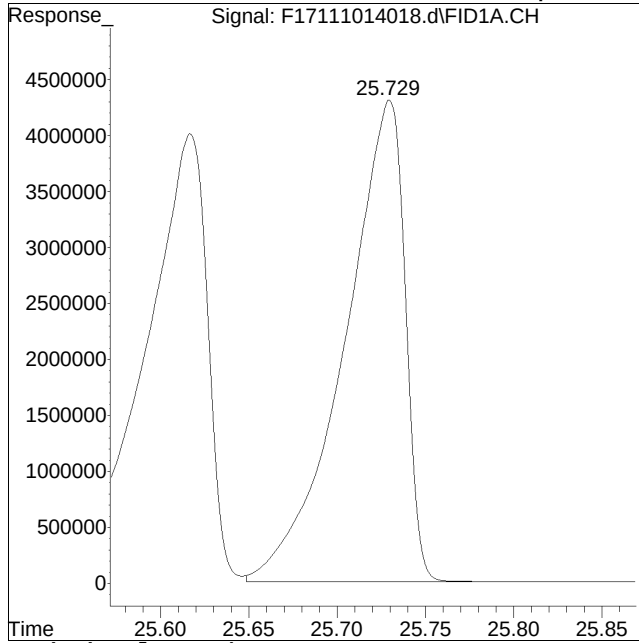
Manual Peak Response = 101195746 M4

M4 = Poor automated baseline construction.

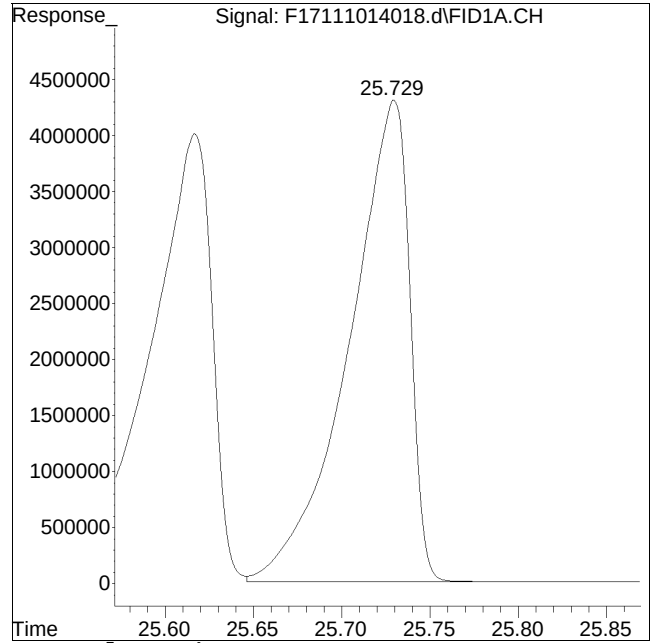
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #15: Pristane



Original Peak Response = 102335862



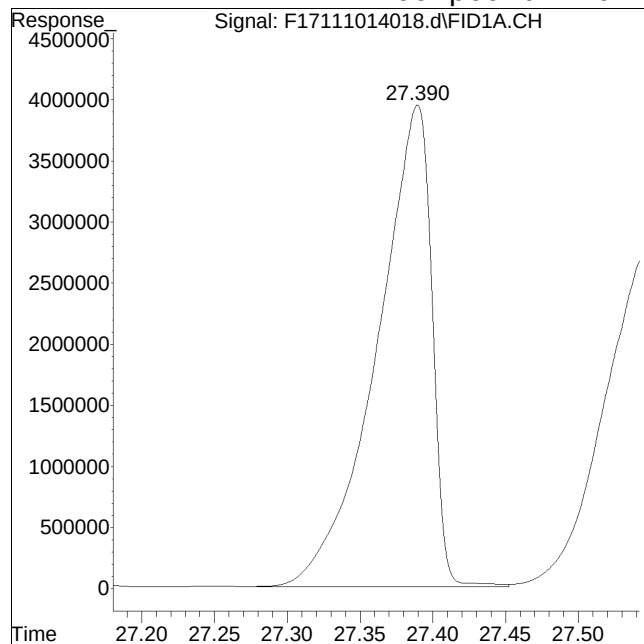
Manual Peak Response = 102363704 M4

M4 = Poor automated baseline construction.

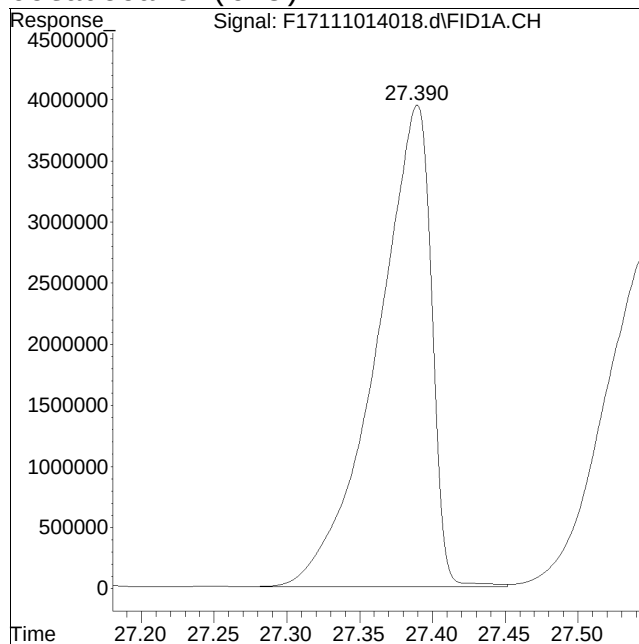
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #16: n-Octadecane (C18)



Original Peak Response = 103518717



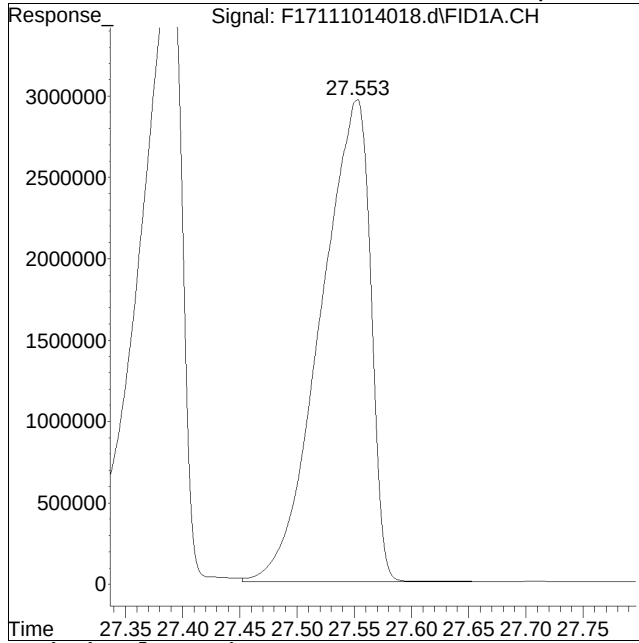
Manual Peak Response = 103494808 M4

M4 = Poor automated baseline construction.

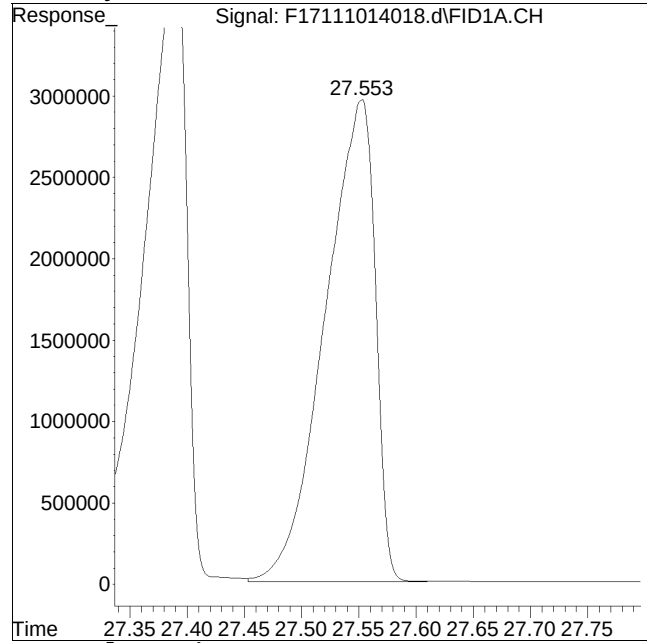
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #17: Phytane



Original Peak Response = 90336279



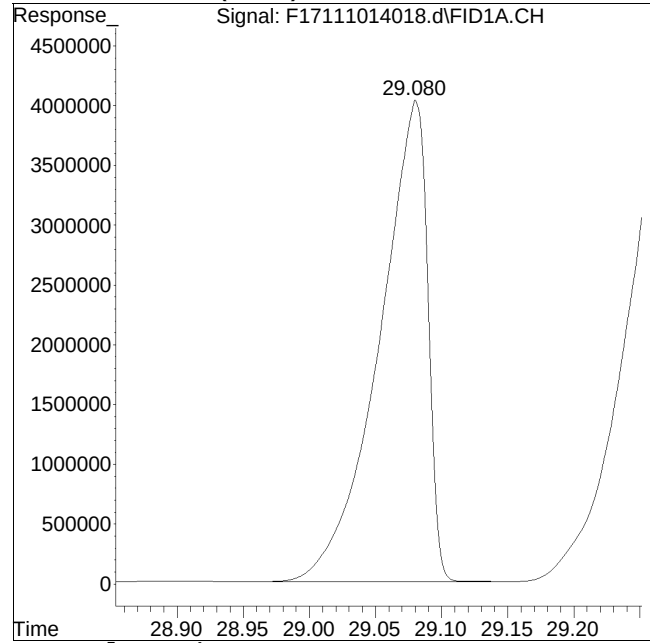
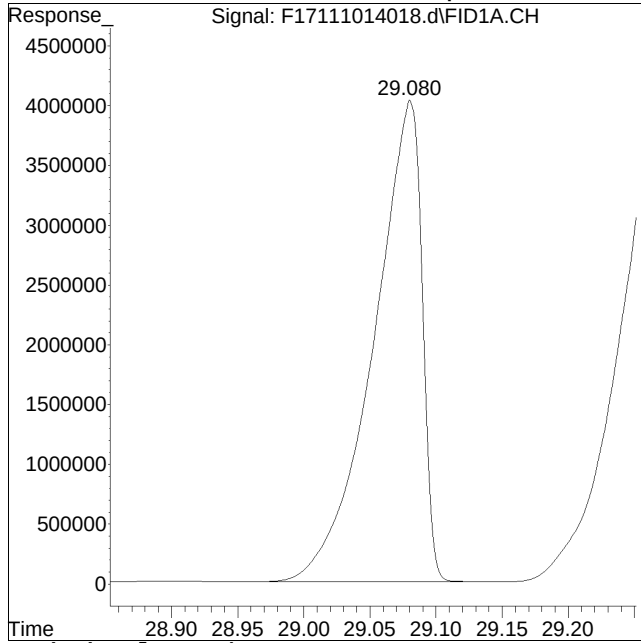
Manual Peak Response = 90107646 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #18: n-Nonadecane (C19)



Original Peak Response = 102556916

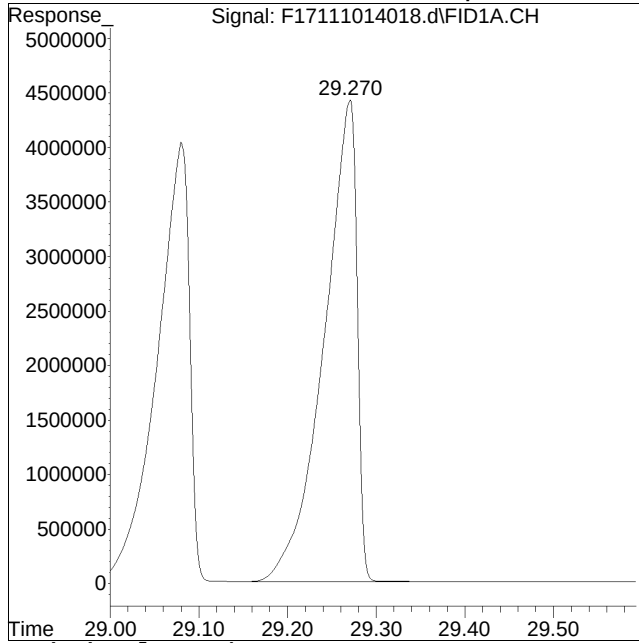
Manual Peak Response = 102722662 M4

M4 = Poor automated baseline construction.

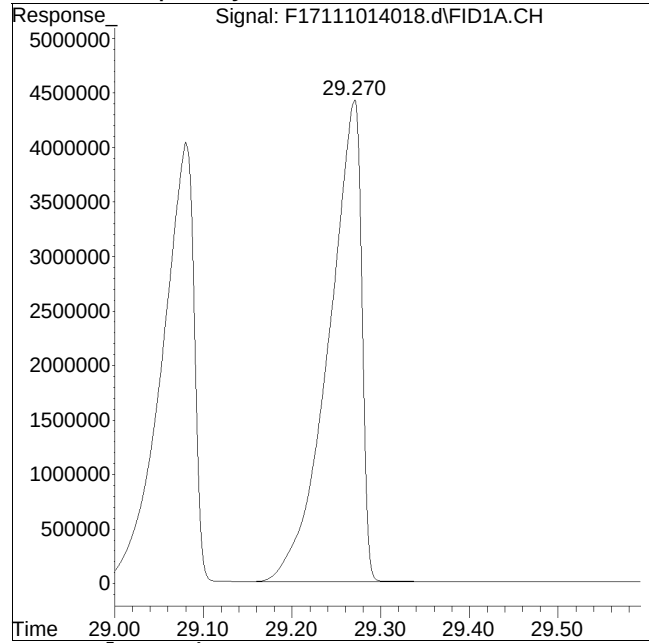
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #19: ortho-terphenyl



Original Peak Response = 113986234



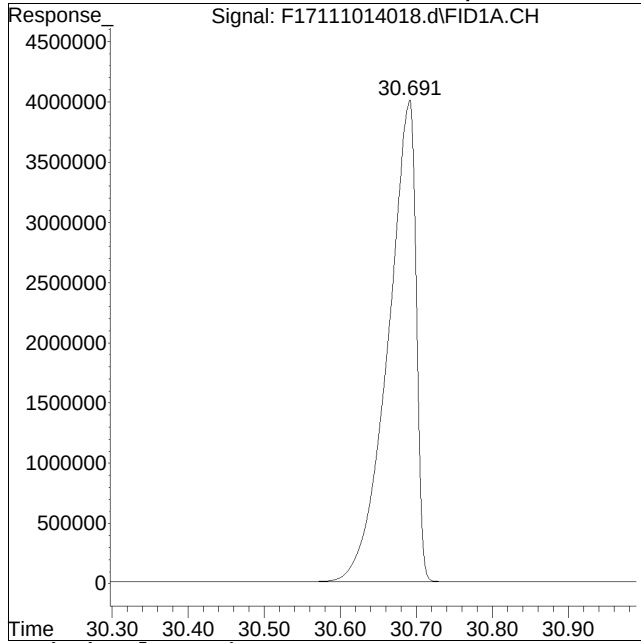
Manual Peak Response = 114237478 M4

M4 = Poor automated baseline construction.

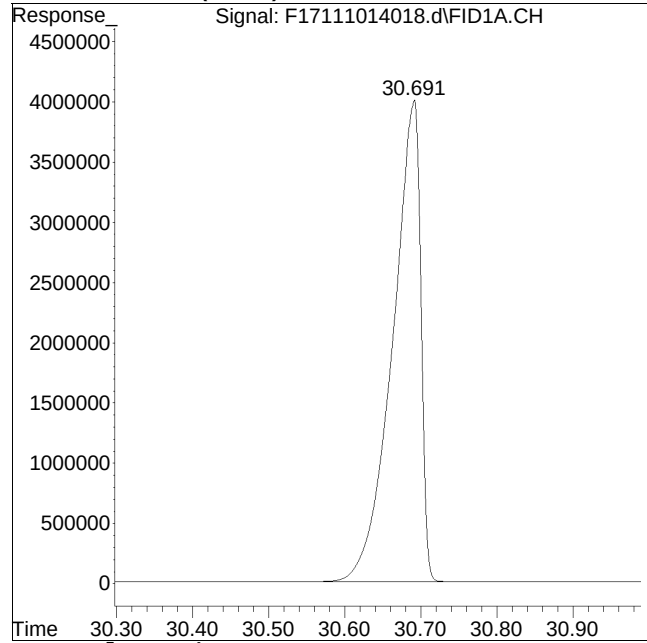
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #20: n-Eicosane (C20)



Original Peak Response = 102593918



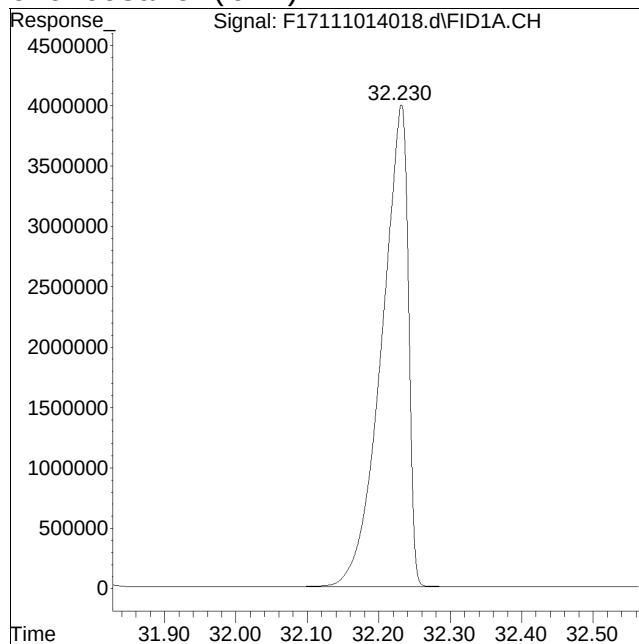
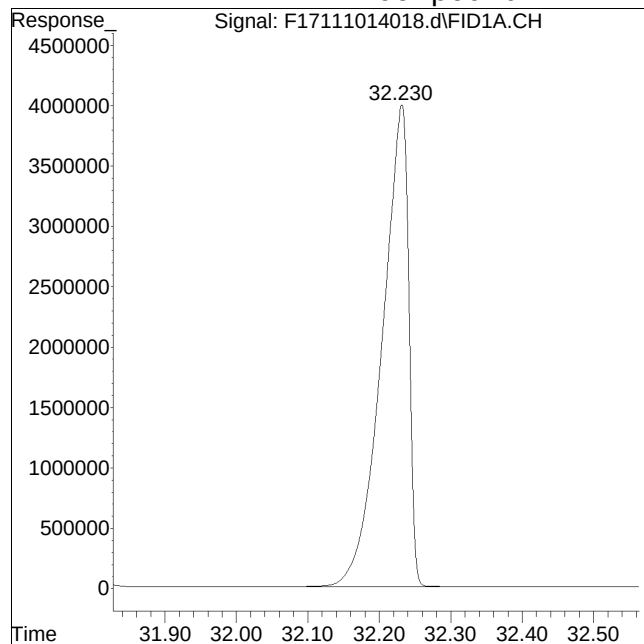
Manual Peak Response = 102338719 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
 Data File : F17111014018.d Operator : FID17:NL
 Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
 Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #21: n-Heneicosane (C21)



Original Peak Response = 103486675

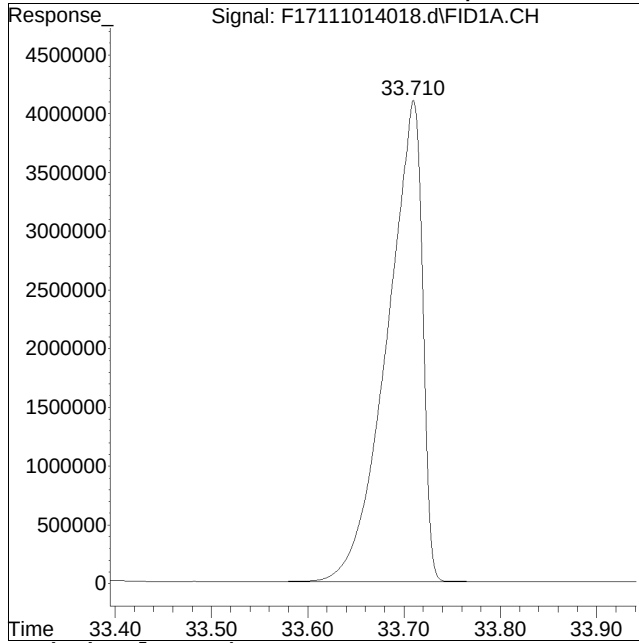
Manual Peak Response = 103561695 M4

M4 = Poor automated baseline construction.

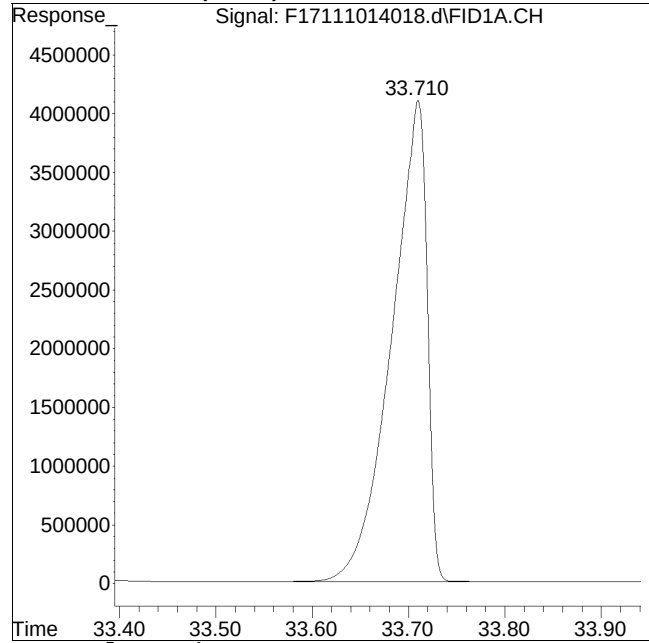
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #22: n-Docosane (C22)



Original Peak Response = 104629133



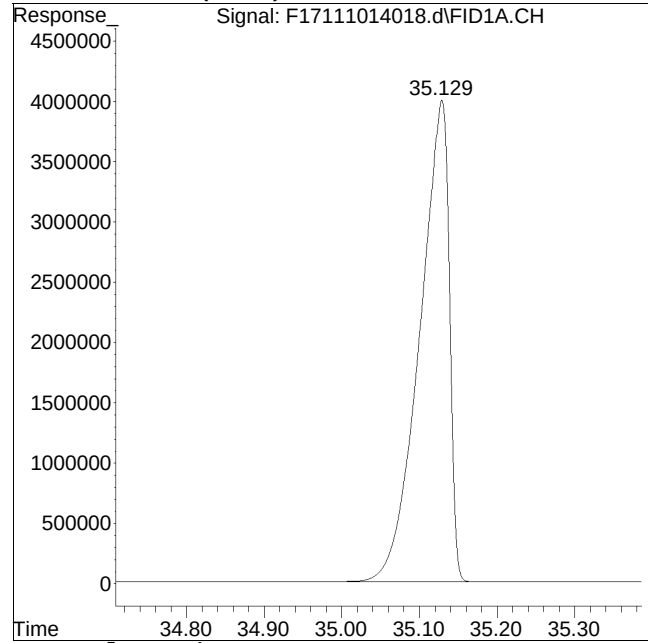
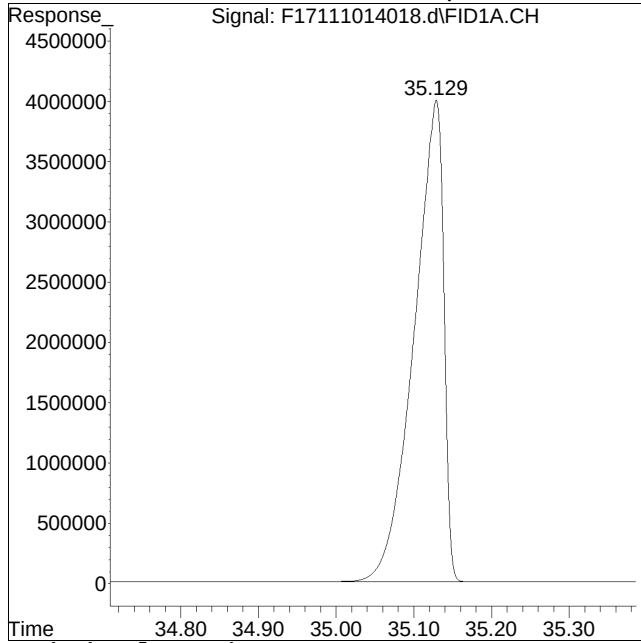
Manual Peak Response = 104611286 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #23: n-Tricosane (C23)



Original Peak Response = 105638678

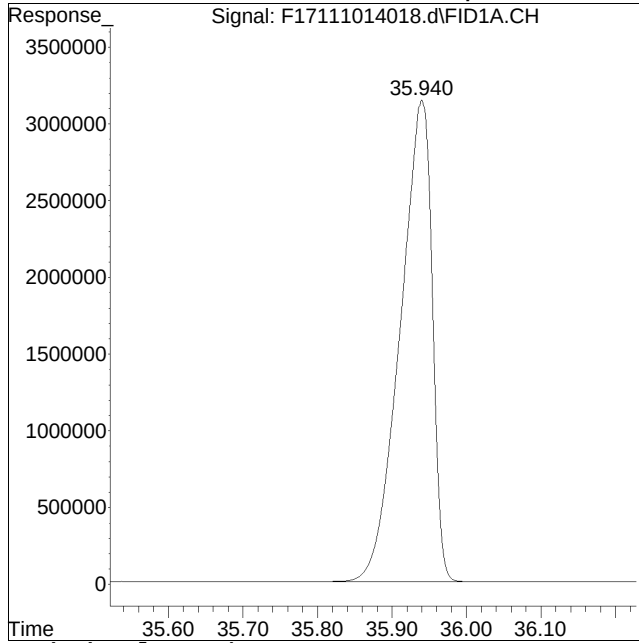
Manual Peak Response = 105634840 M4

M4 = Poor automated baseline construction.

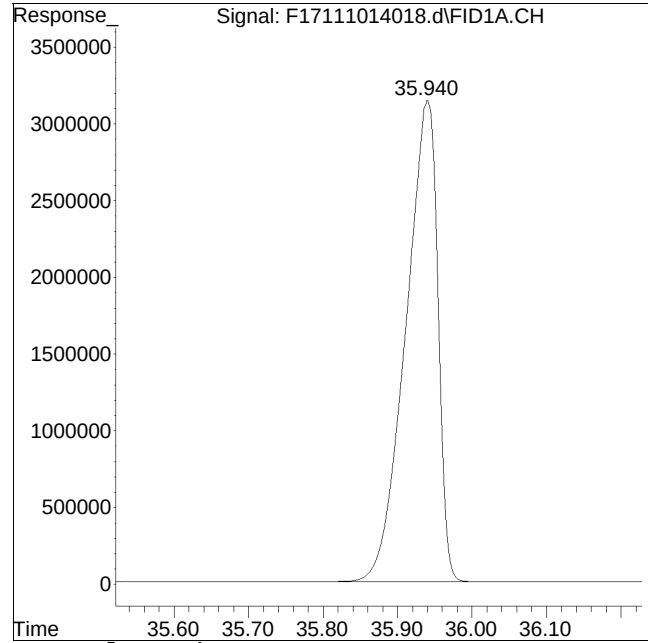
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #24: d50-Tetracosane



Original Peak Response = 93757081



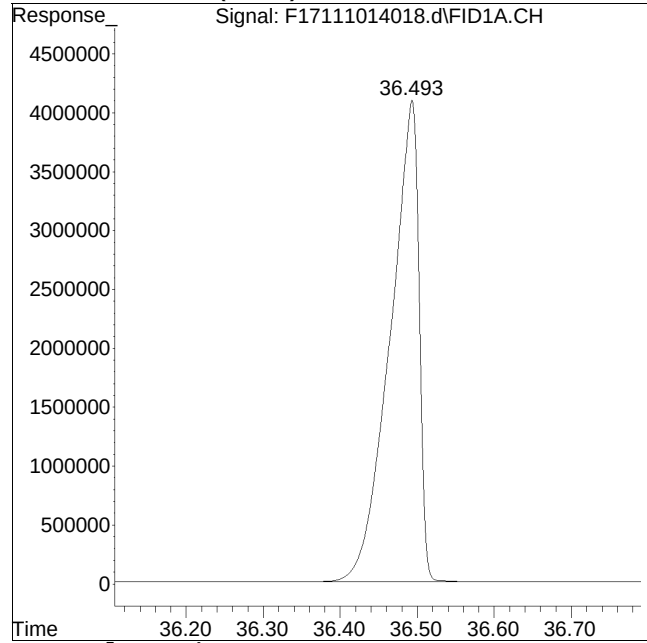
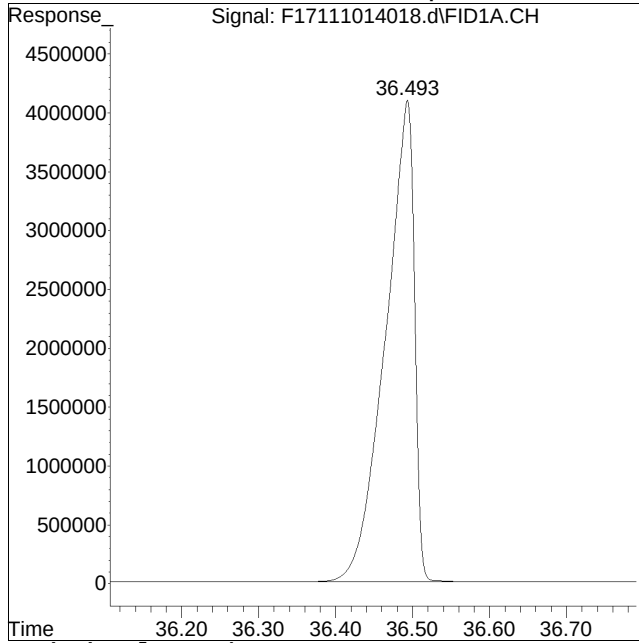
Manual Peak Response = 93830621 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #25: n-Tetracosane (C24)



Original Peak Response = 106346818

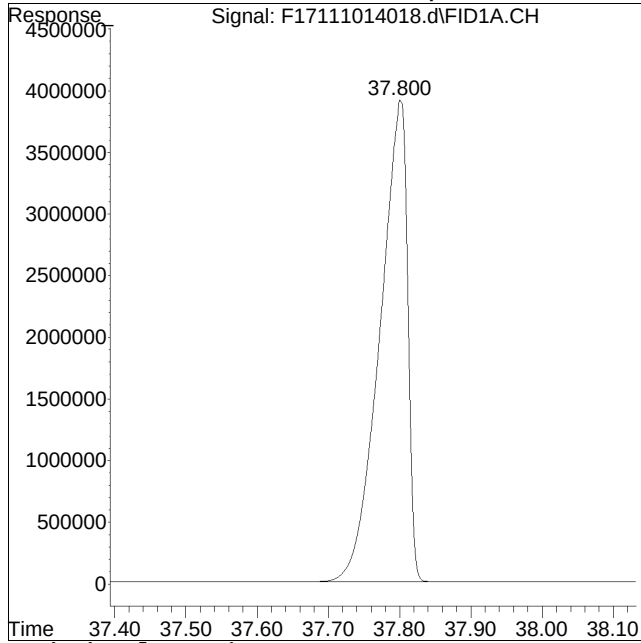
Manual Peak Response = 106336757 M4

M4 = Poor automated baseline construction.

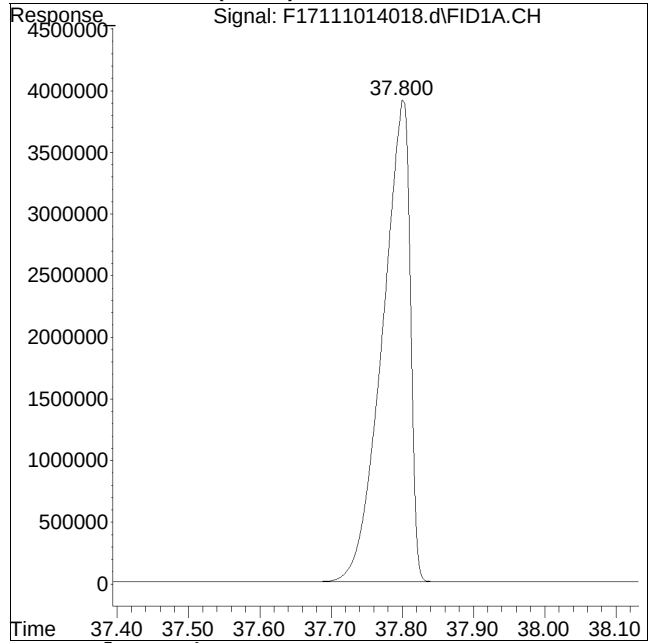
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #26: n-Pentacosane (C25)



Original Peak Response = 105582349



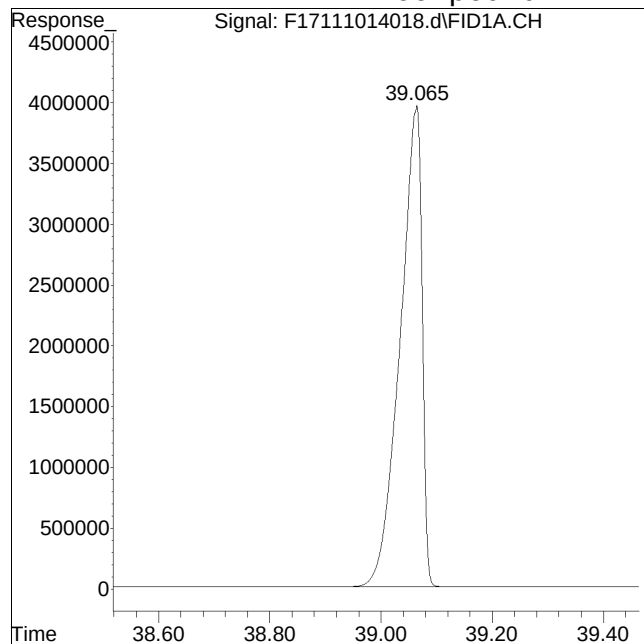
Manual Peak Response = 105611101 M4

M4 = Poor automated baseline construction.

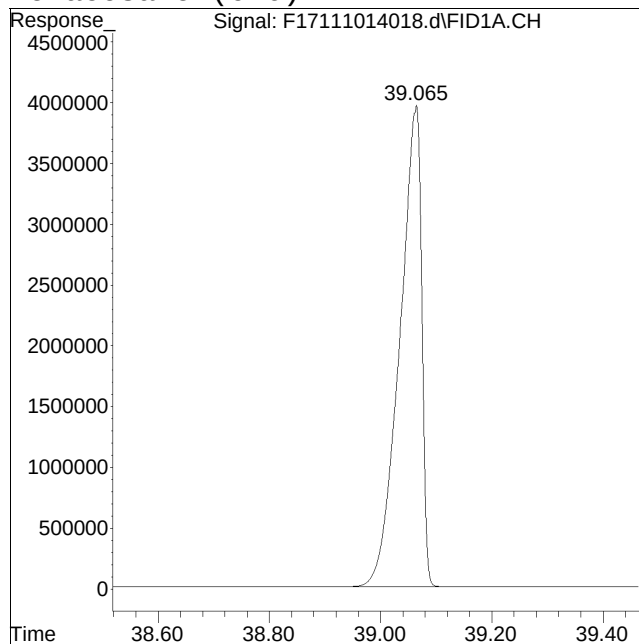
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #27: n-Hexacosane (C26)



Original Peak Response = 108274841



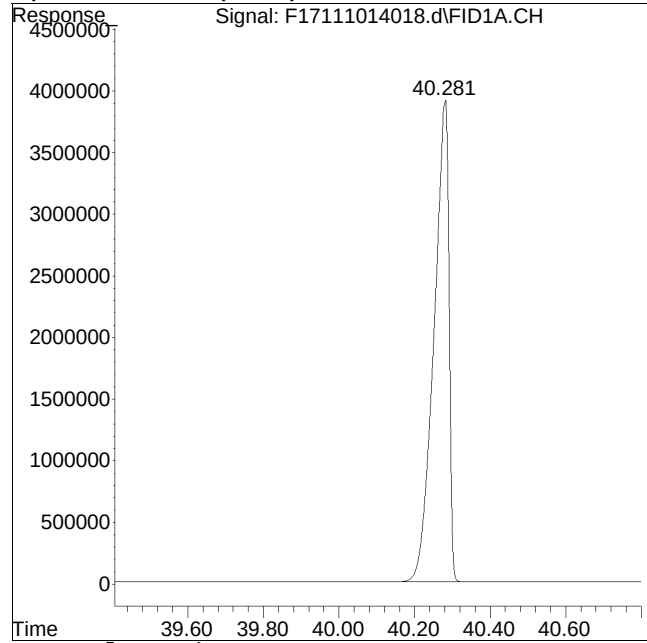
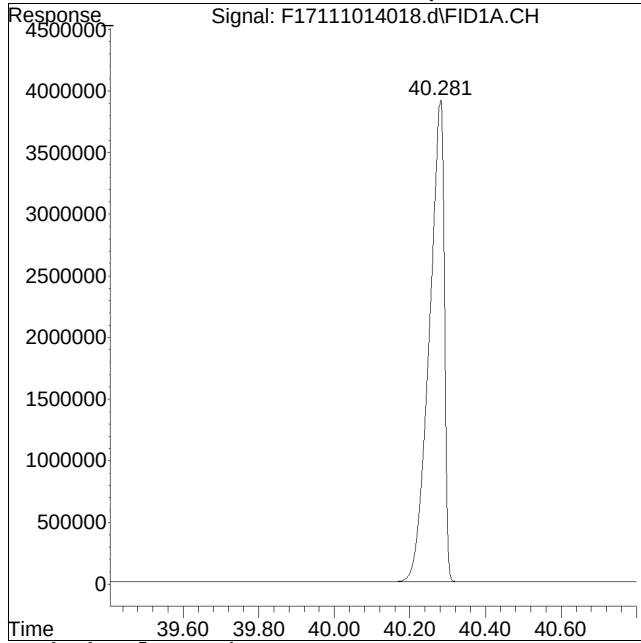
Manual Peak Response = 108152182 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #28: n-Heptacosane (C27)



Original Peak Response = 107291291

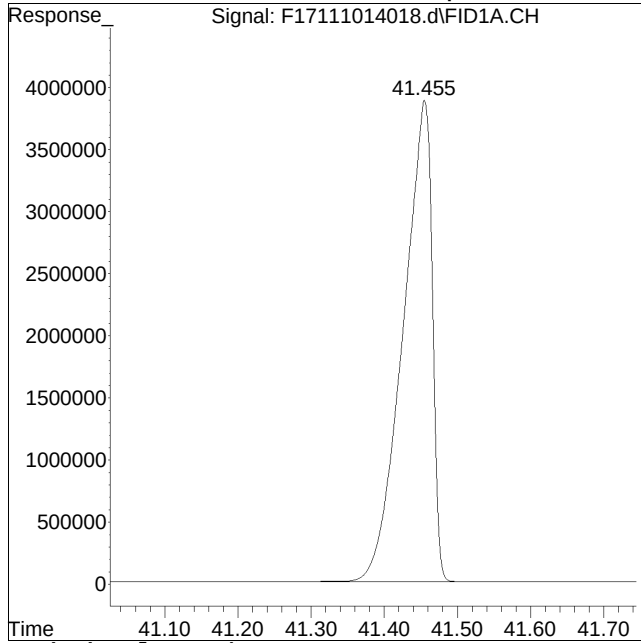
Manual Peak Response = 107262728 M4

M4 = Poor automated baseline construction.

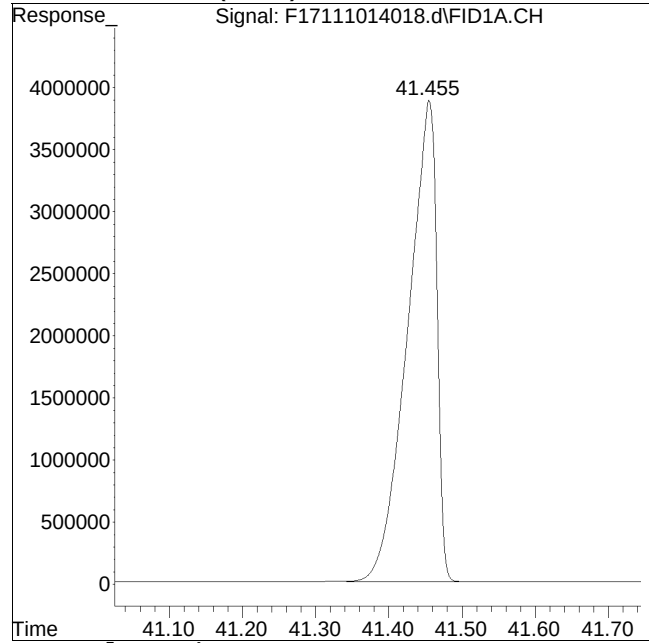
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #29: n-Octacosane (C28)



Original Peak Response = 107315946



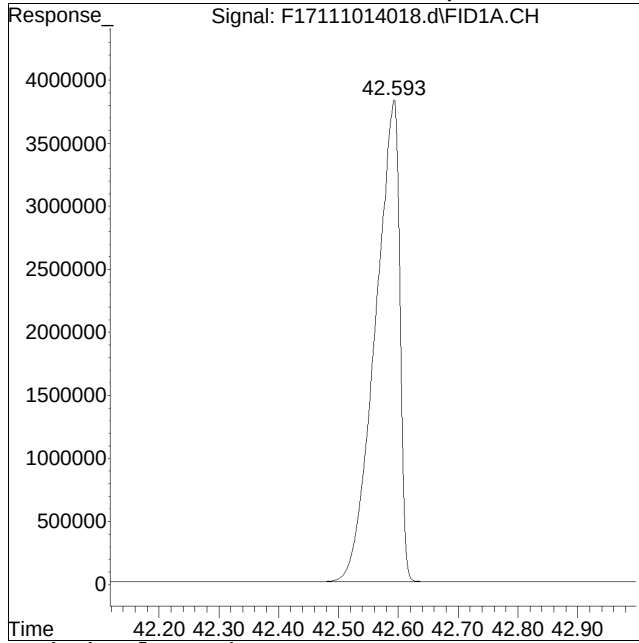
Manual Peak Response = 107073579 M4

M4 = Poor automated baseline construction.

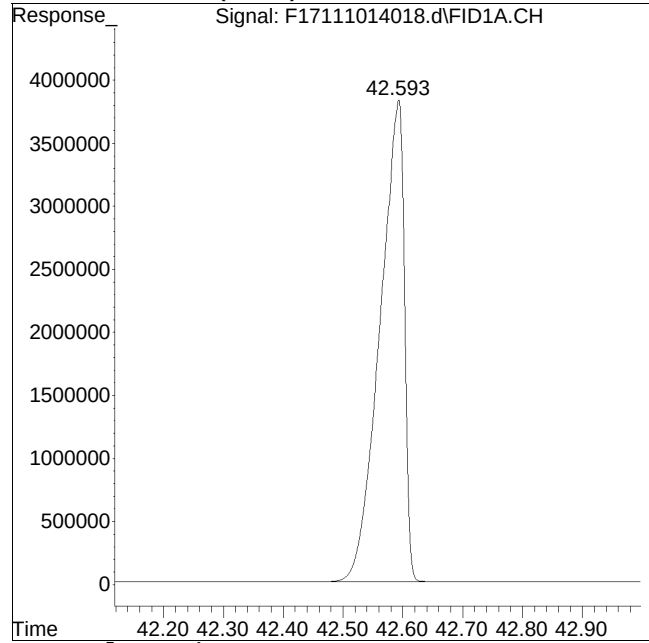
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #30: n-Nonacosane (C29)



Original Peak Response = 108225490



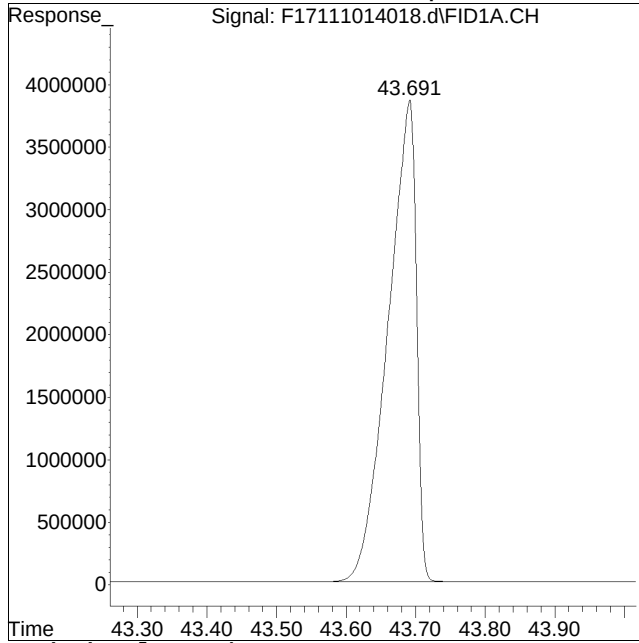
Manual Peak Response = 108209907 M4

M4 = Poor automated baseline construction.

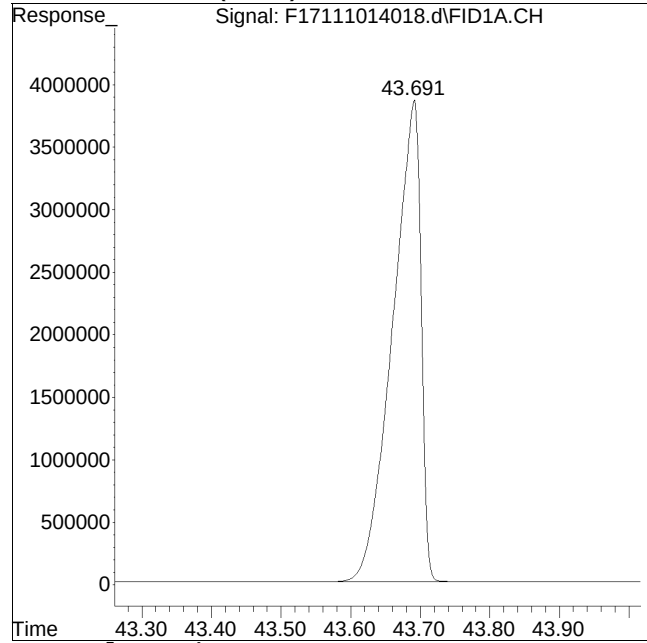
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #31: n-Triacontane (C30)



Original Peak Response = 108696266



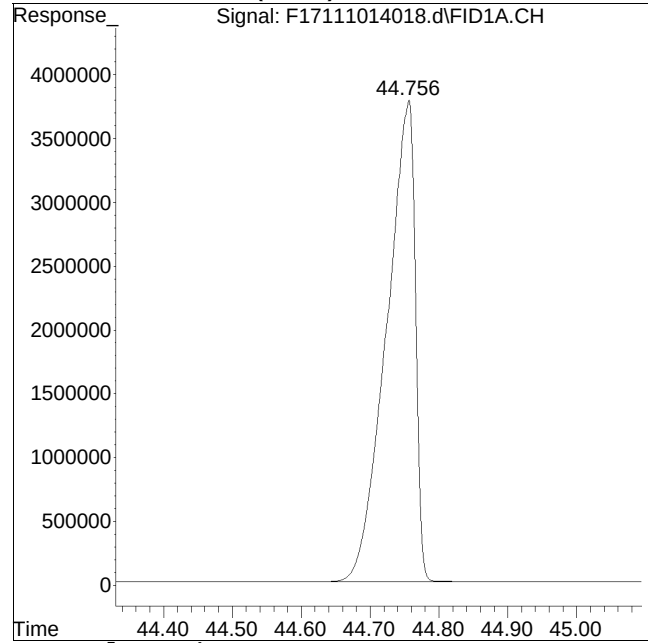
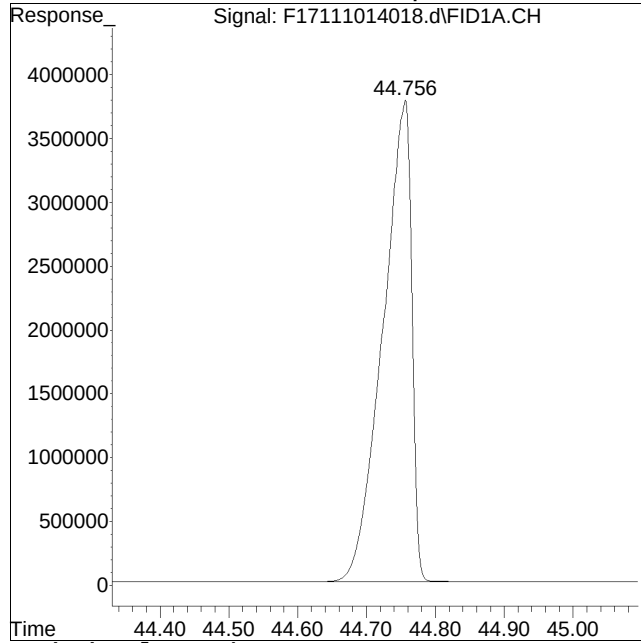
Manual Peak Response = 108739389 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #32: n-Hentriacontane (C31)



Original Peak Response = 109205352

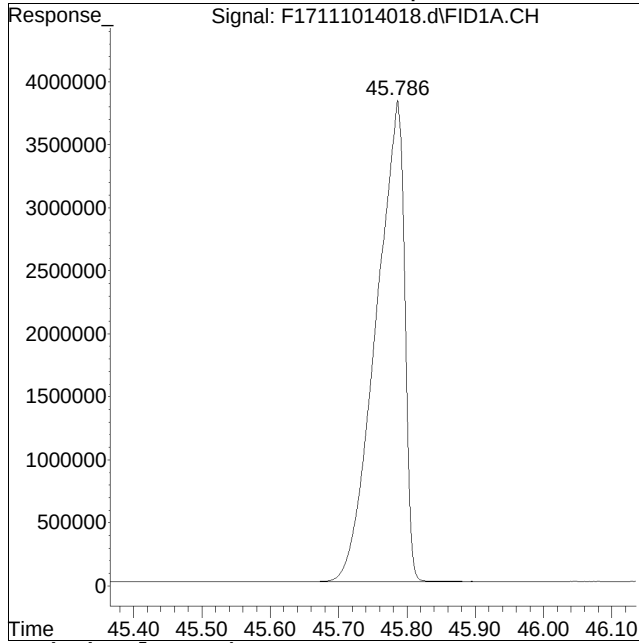
Manual Peak Response = 109245613 M4

M4 = Poor automated baseline construction.

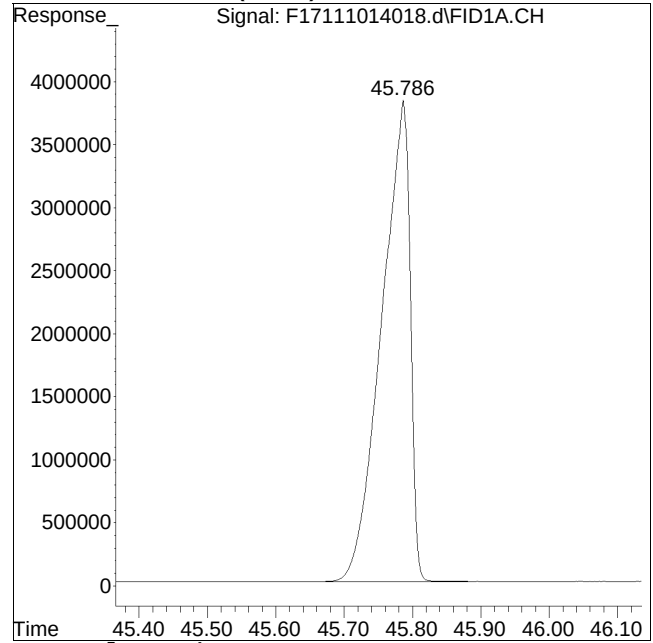
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I17111011404R Quant Date : 11/14/2014 12:19 pm

Compound #33: n-Dotriacontane (C32)



Original Peak Response = 110467144



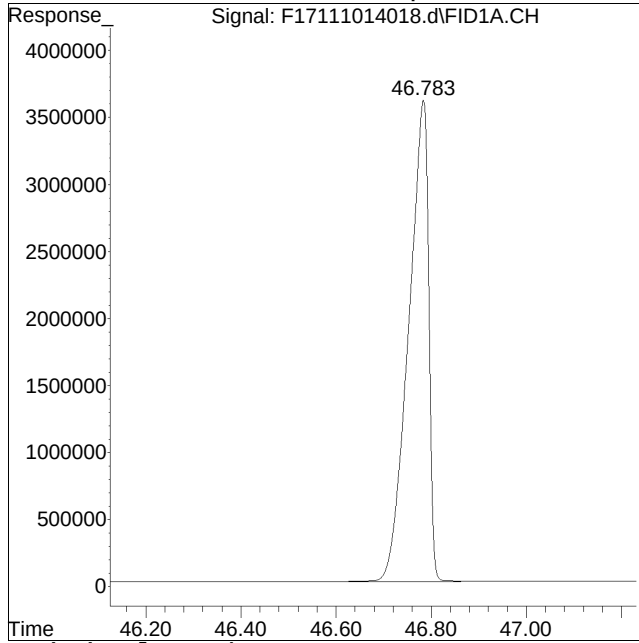
Manual Peak Response = 110550982 M4

M4 = Poor automated baseline construction.

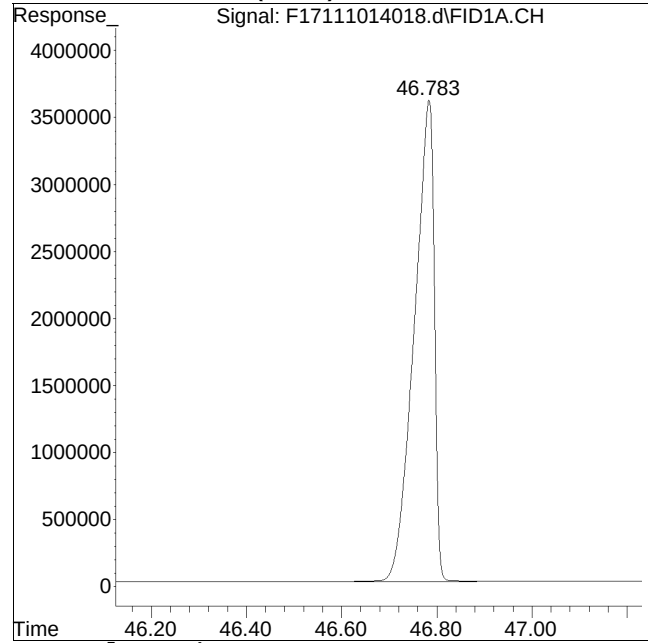
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #34: n-Tritriacontane (C33)



Original Peak Response = 105080883



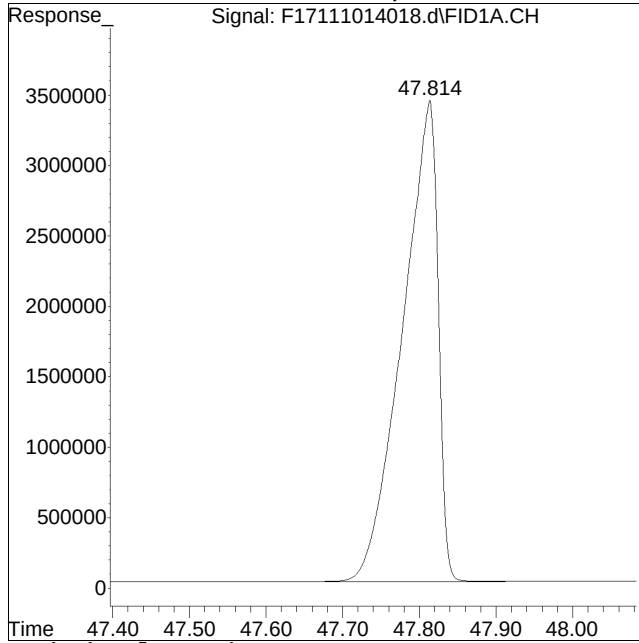
Manual Peak Response = 104844271 M4

M4 = Poor automated baseline construction.

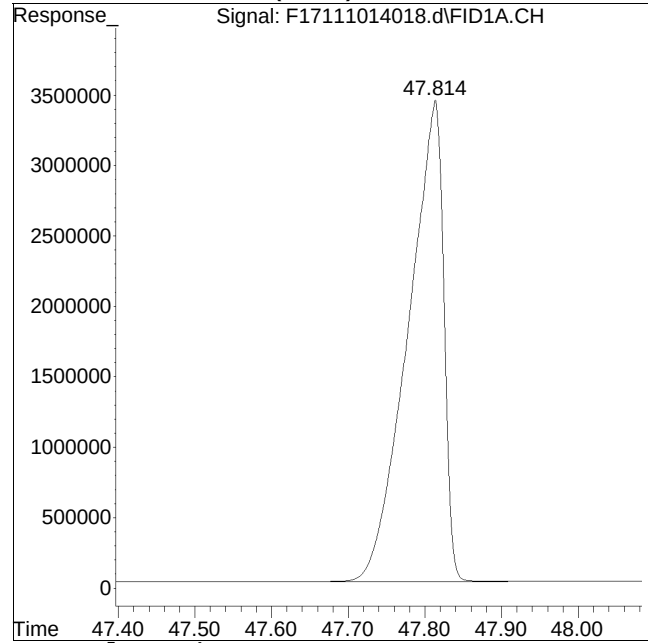
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #35: n-tetratriacontane (C34)



Original Peak Response = 110113503



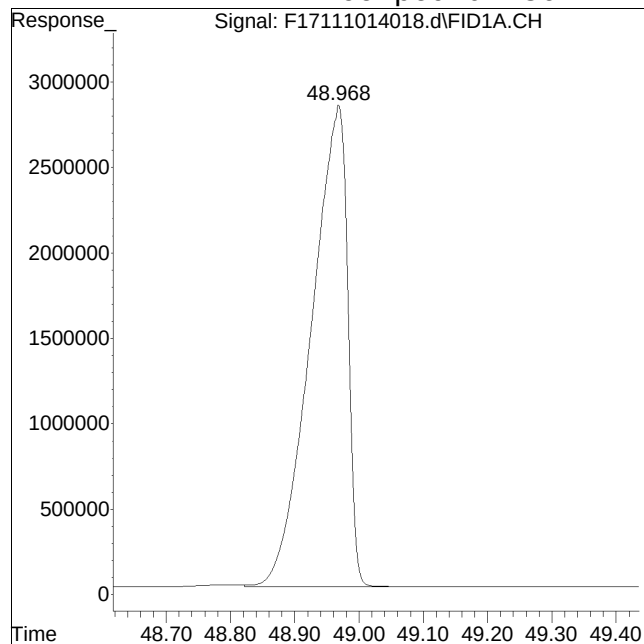
Manual Peak Response = 110027219 M4

M4 = Poor automated baseline construction.

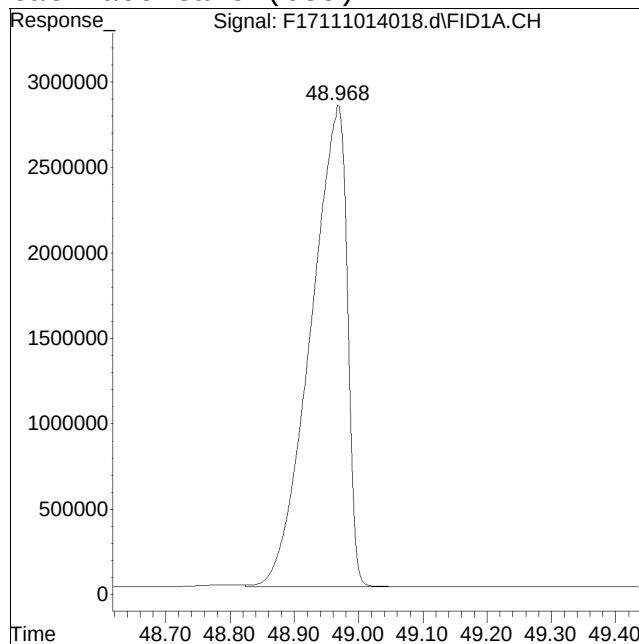
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #36: n-Pentatriacontane (C35)



Original Peak Response = 111213257



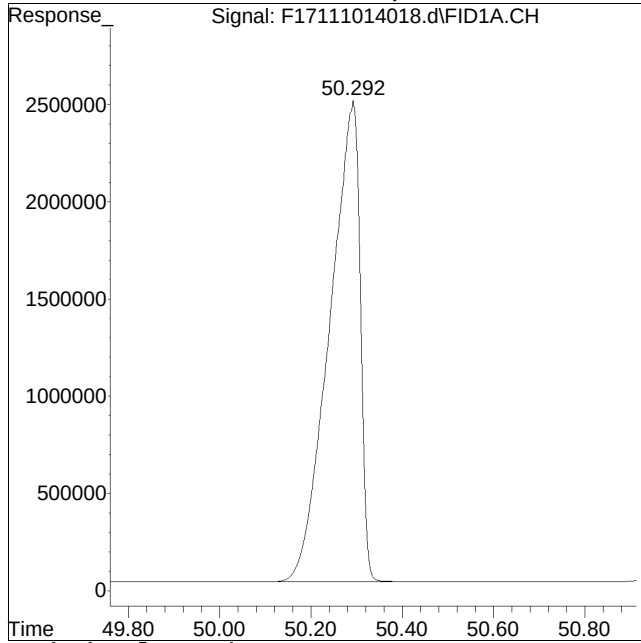
Manual Peak Response = 111133176 M4

M4 = Poor automated baseline construction.

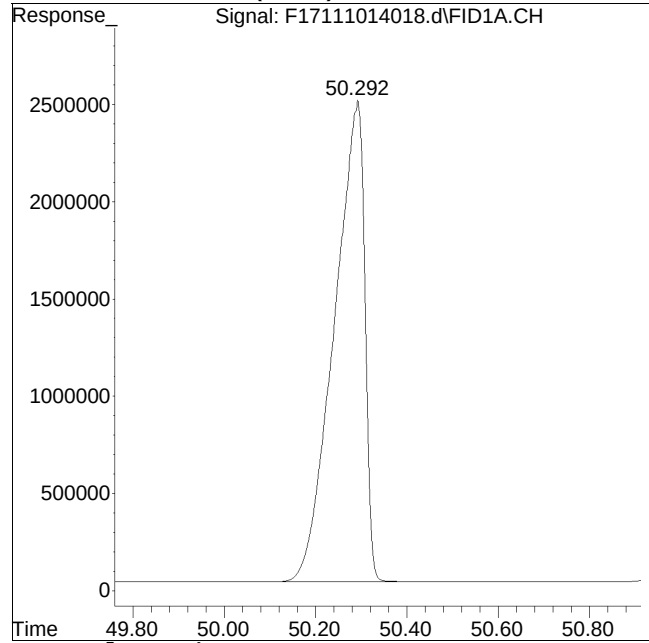
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #37: n-Hexatriacontane (C36)



Original Peak Response = 114718885



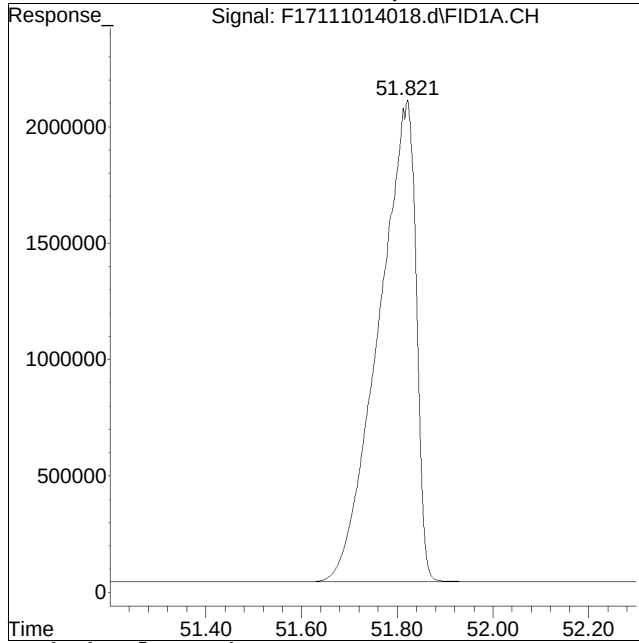
Manual Peak Response = 114629087 M4

M4 = Poor automated baseline construction.

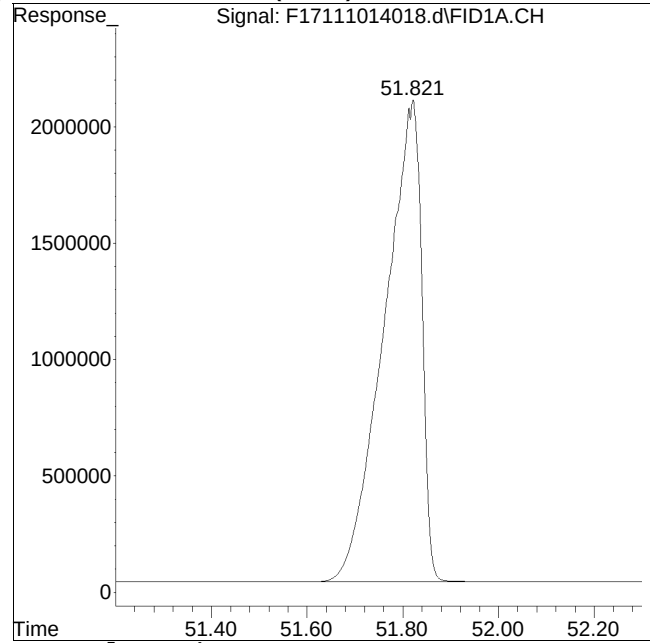
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #38: n-Heptatriacontane (C37)



Original Peak Response = 112287059



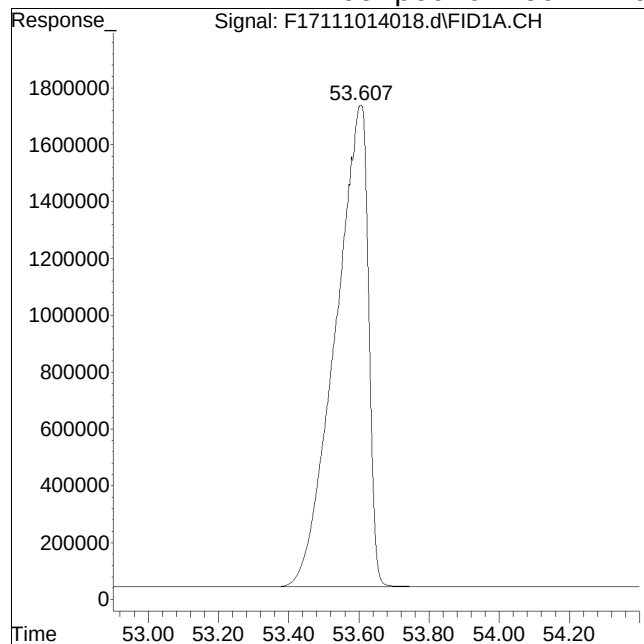
Manual Peak Response = 112472231 M4

M4 = Poor automated baseline construction.

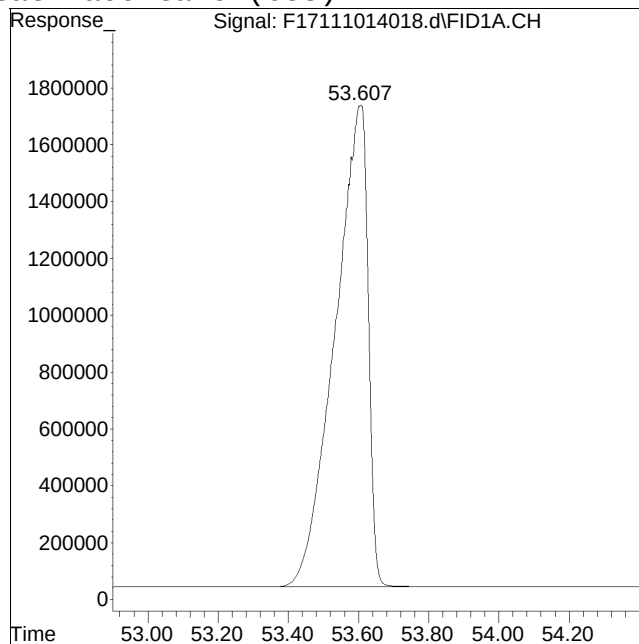
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #39: n-Octatriacontane (C38)



Original Peak Response = 110736741



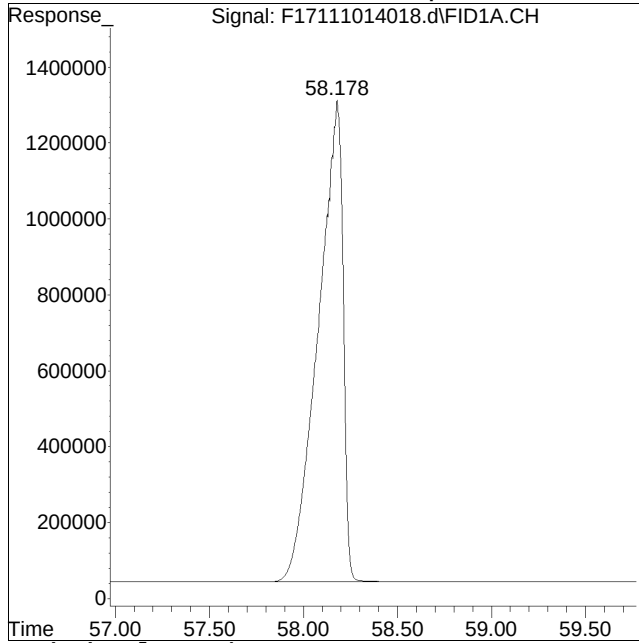
Manual Peak Response = 110748873 M4

M4 = Poor automated baseline construction.

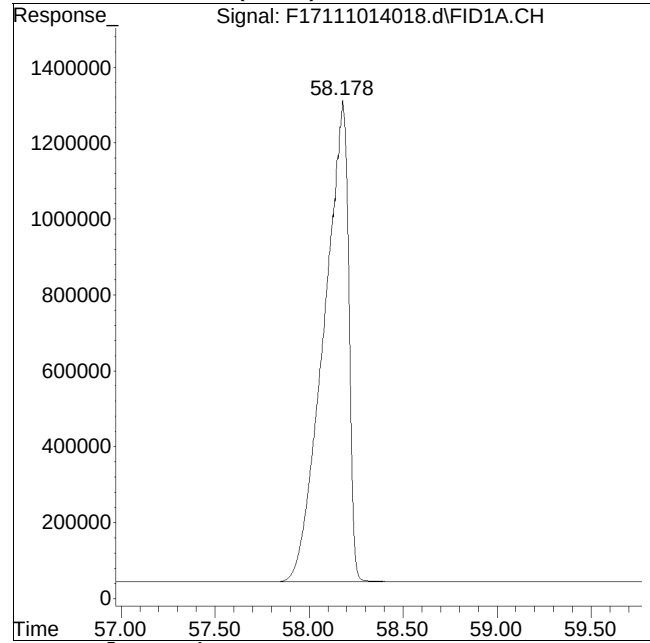
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #41: n-Tetracontane (C40)



Original Peak Response = 116134055



Manual Peak Response = 116119008 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014020.d
 Signal(s) : FID1A.CH
 Acq On : 11 Nov 2014 1:00 am
 Operator : FID17:NL
 Sample : I1711011405R
 Misc : WG743851, FRAV26 200ug/mL
 ALS Vial : 10 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:07:26 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.269	52608463	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.292	226451625	192.111	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 384.22%#
24) s	d50-Tetracosane	35.964	185908620	199.861	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 399.72%#
Target Compounds					
2) t	n-Octane (C8)	5.665	179952168	193.046	ug/mL M4
3) t	n-Nonane (C9)	7.843	183994497	187.873	ug/mL M4
4) t	n-Decane (C10)	10.307	190630604	185.480	ug/mL M4
5) t	n-Undecane (C11)	12.813	192977776	191.401	ug/mL M4
6) t	n-Dodecane (C12)	15.241	195722040	192.807	ug/mL M4
7) t	n-Tridecane (C13)	17.550	196451381	193.754	ug/mL M4
9) t	n-Tetradecane (C14)	19.740	198370823	188.742	ug/mL M4
11) t	n-Pentadecane (C15)	21.809	201966601	194.653	ug/mL M4
12) t	n-Hexadecane (C16)	23.770	201302145	192.523	ug/mL M4
14) t	n-Heptadecane (C17)	25.638	203355194	193.463	ug/mL M4
15) t	Pristane	25.751	203706839	193.339	ug/mL M4
16) t	n-Octadecane (C18)	27.411	206512059	197.666	ug/mL M4
17) t	Phytane	27.573	180095179	169.678	ug/mL M4
18) t	n-Nonadecane (C19)	29.100	205137349	197.465	ug/mL M4
20) t	n-Eicosane (C20)	30.711	204858567	196.291	ug/mL M4
21) t	n-Heneicosane (C21)	32.254	206881190	195.985	ug/mL M4
22) t	n-Docosane (C22)	33.732	209103777	196.978	ug/mL M4
23) t	n-Tricosane (C23)	35.154	211118913	197.747	ug/mL M4
25) t	n-Tetracosane (C24)	36.519	212476278	198.792	ug/mL M4
26) t	n-Pentacosane (C25)	37.828	211377509	197.094	ug/mL M4
27) t	n-Hexacosane (C26)	39.092	216859002	198.092	ug/mL M4
28) t	n-Heptacosane (C27)	40.309	215525451	198.359	ug/mL M4
29) t	n-Octacosane (C28)	41.485	215543841	197.759	ug/mL M4
30) t	n-Nonacosane (C29)	42.622	218200394	198.381	ug/mL M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014020.d
 Signal(s) : FID1A.CH
 Acq On : 11 Nov 2014 1:00 am
 Operator : FID17:NL
 Sample : I1711011405R
 Misc : WG743851, FRAV26 200ug/mL
 ALS Vial : 10 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:07:26 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc	Units	
31) t	n-Triacontane (C30)	43.722	219666383	199.046	ug/mL	M4
32) t	n-Hentriacontane (C31)	44.787	220837166	198.582	ug/mL	M4
33) t	n-Dotriacontane (C32)	45.818	223659667	202.301	ug/mL	M4
34) t	n-Tritriacontane (C33)	46.817	212305009	197.690	ug/mL	M4
35) t	n-tetratriacontane (C34)	47.853	222719308	195.403	ug/mL	M4
36) t	n-Pentatriacontane (C35)	49.015	225244106	198.632	ug/mL	M4
37) t	n-Hexatriacontane (C36)	50.347	231762250	188.759	ug/mL	M4
38) t	n-Heptatriacontane (C37)	51.885	226986888	198.137	ug/mL	M4
39) t	n-Octatriacontane (C38)	53.685	222999979	194.794	ug/mL	M4
41) t	n-Tetracontane (C40)	58.296	232479117	211.078	ug/mL	M4

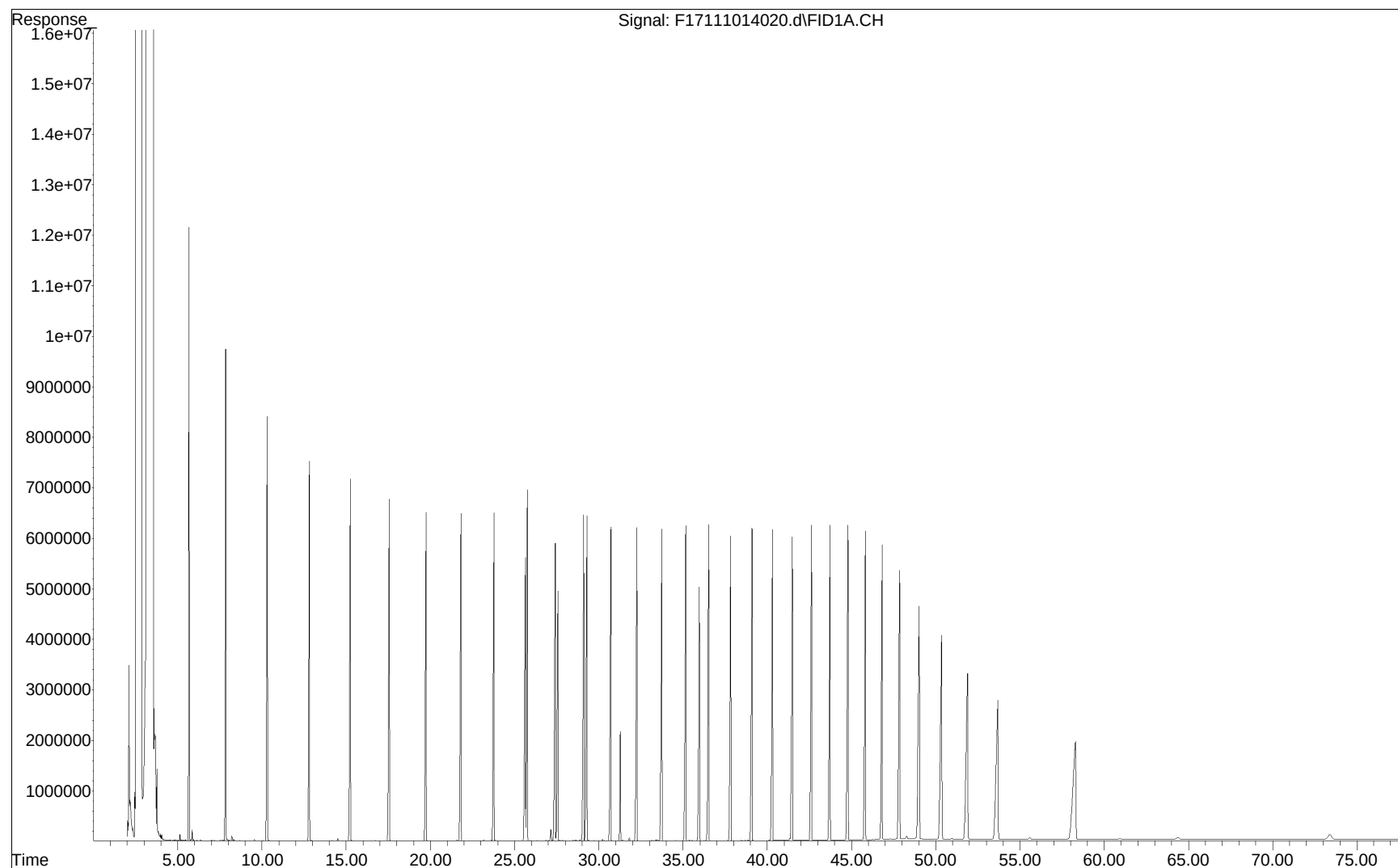
SemiQuant Compounds - Not Calibrated on this Instrument

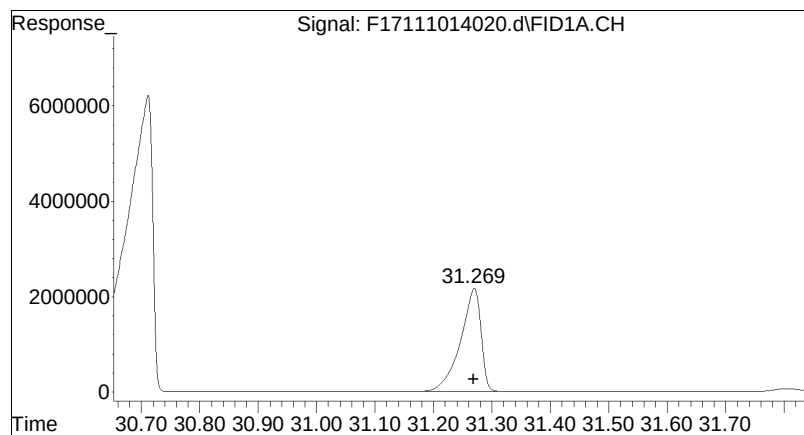
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

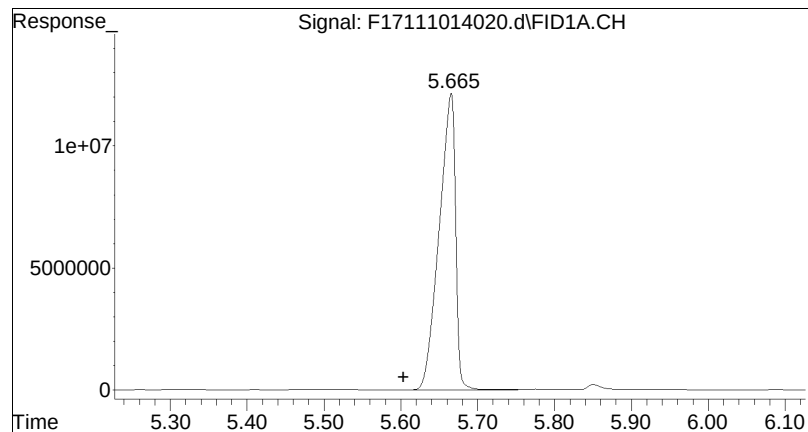
File : 0:\Forensics\Data\FID17\2014\NOV\NOV10\F17111014020.d
Operator : FID17:NL
Acquired : 11 Nov 2014 1:00 am using AcqMethod FID17.M
Sample Name: I1711011405R
Instrument: FID17
Misc Info : WG743851, FRAV26 200ug/mL
Vial Number: 10
CurrentMeth: 0:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M





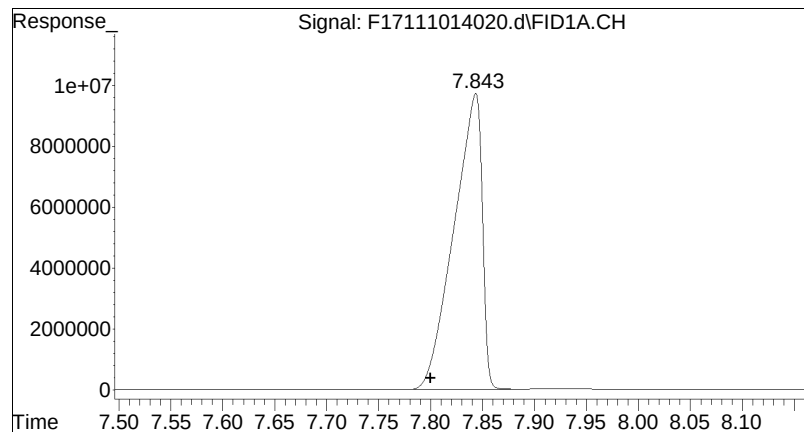
#1 5-alpha-androstane

R.T.: 31.269 min
Delta R.T.: 0.000 min
Response: 52608463
Conc: 50.00 ug/mL M4



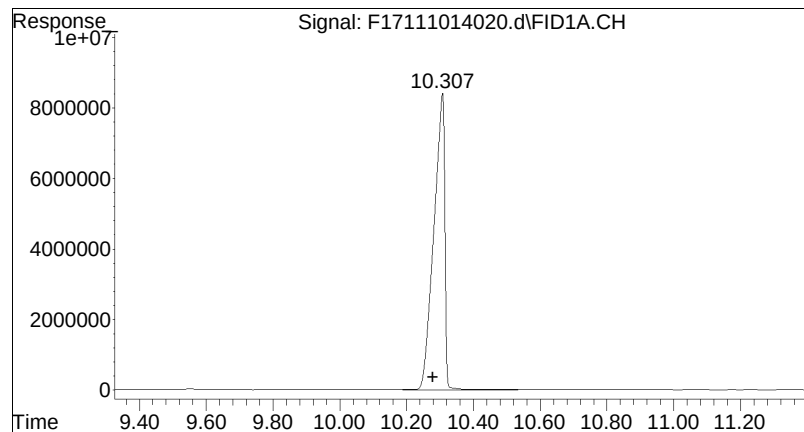
#2 n-Octane (C8)

R.T.: 5.665 min
Delta R.T.: 0.062 min
Response: 179952168
Conc: 193.05 ug/mL M4



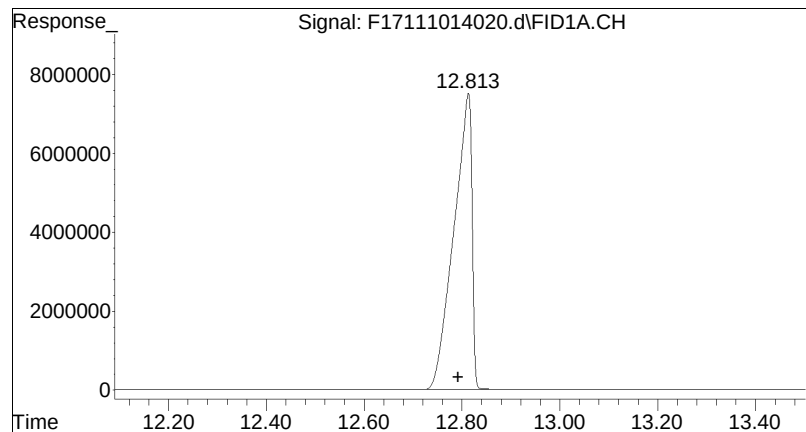
#3 n-Nonane (C9)

R.T.: 7.843 min
Delta R.T.: 0.043 min
Response: 183994497
Conc: 187.87 ug/mL M4



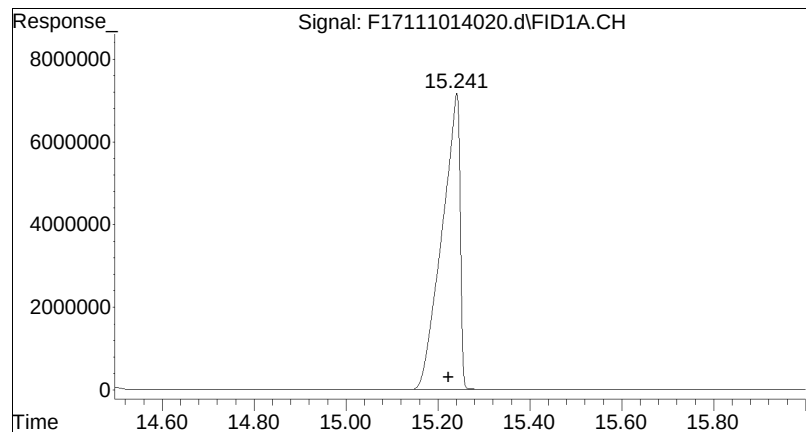
#4 n-Decane (C10)

R.T.: 10.307 min
Delta R.T.: 0.028 min
Response: 190630604
Conc: 185.48 ug/mL M4



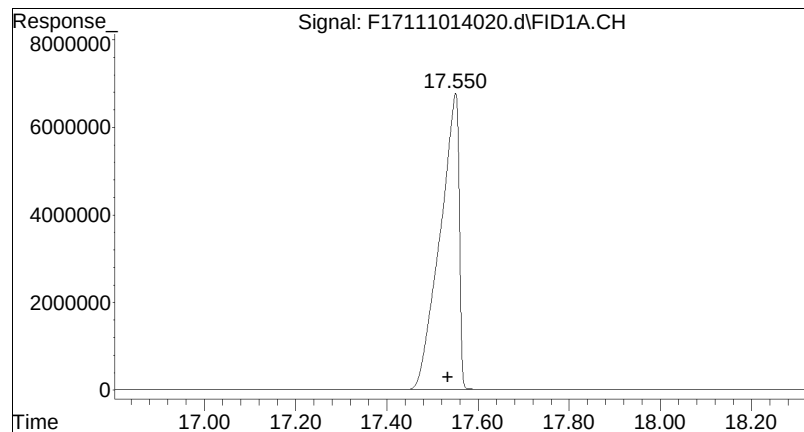
#5 n-Undecane (C11)

R.T.: 12.813 min
Delta R.T.: 0.020 min
Response: 192977776
Conc: 191.40 ug/mL M4



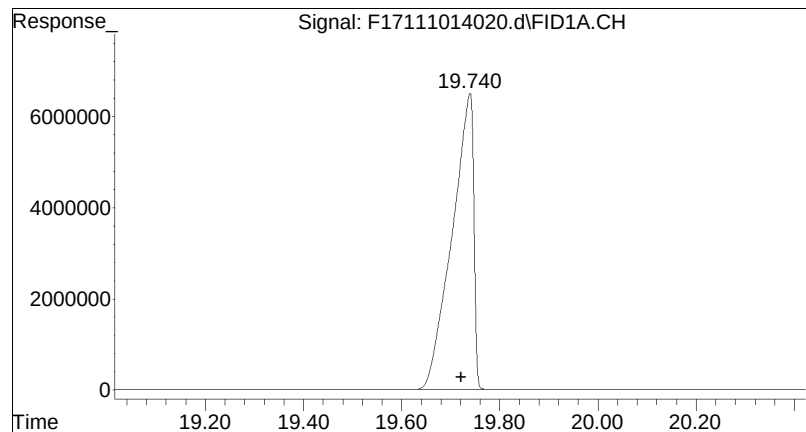
#6 n-Dodecane (C12)

R.T.: 15.241 min
Delta R.T.: 0.017 min
Response: 195722040
Conc: 192.81 ug/mL M4



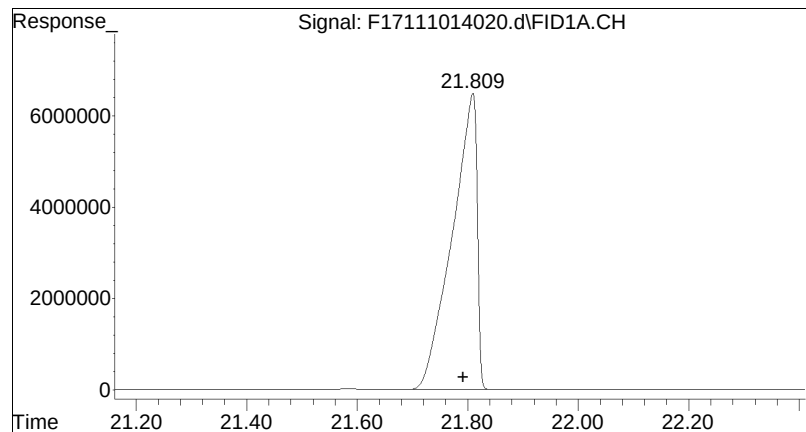
#7 n-Tridecane (C13)

R.T.: 17.550 min
Delta R.T.: 0.016 min
Response: 196451381
Conc: 193.75 ug/mL M4



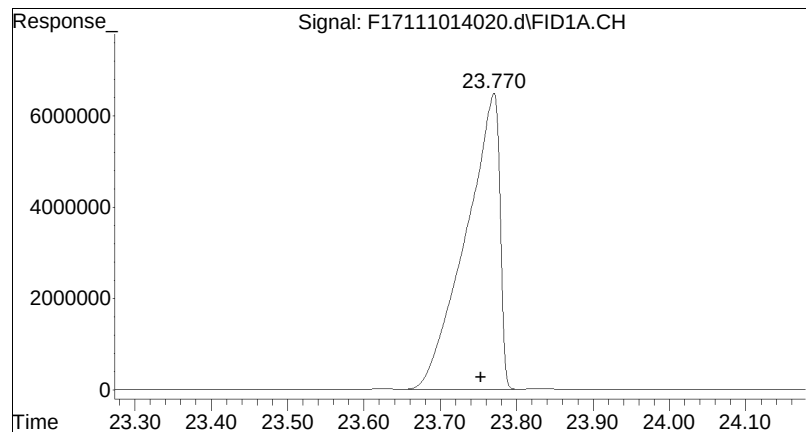
#9 n-Tetradecane (C14)

R.T.: 19.740 min
Delta R.T.: 0.018 min
Response: 198370823
Conc: 188.74 ug/mL M4



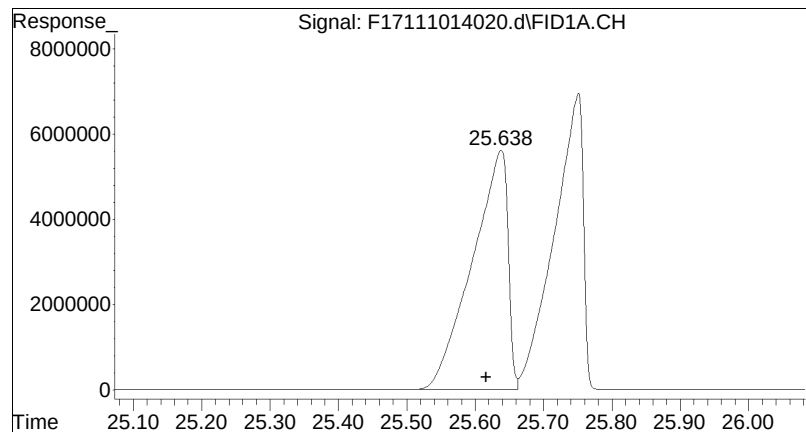
#11 n-Pentadecane (C15)

R.T.: 21.809 min
Delta R.T.: 0.017 min
Response: 201966601
Conc: 194.65 ug/mL M4



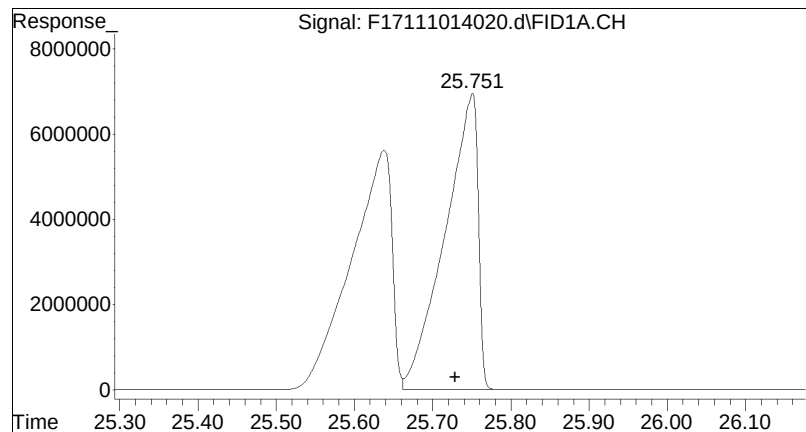
#12 n-Hexadecane (C16)

R.T.: 23.770 min
Delta R.T.: 0.017 min
Response: 201302145
Conc: 192.52 ug/mL M4



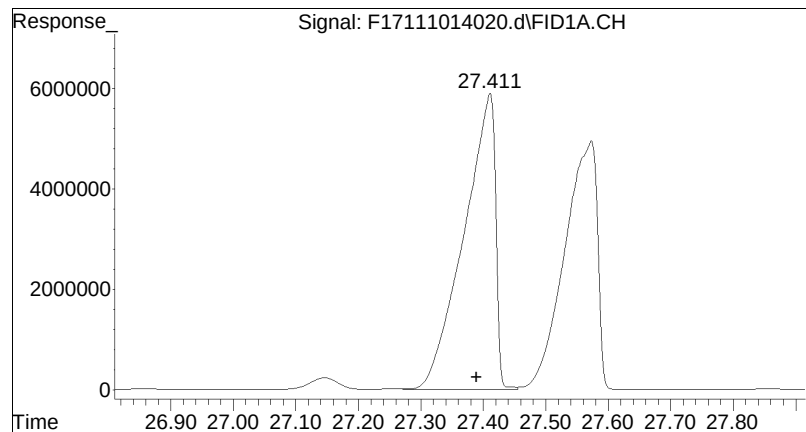
#14 n-Heptadecane (C17)

R.T.: 25.638 min
Delta R.T.: 0.021 min
Response: 203355194
Conc: 193.46 ug/mL M4



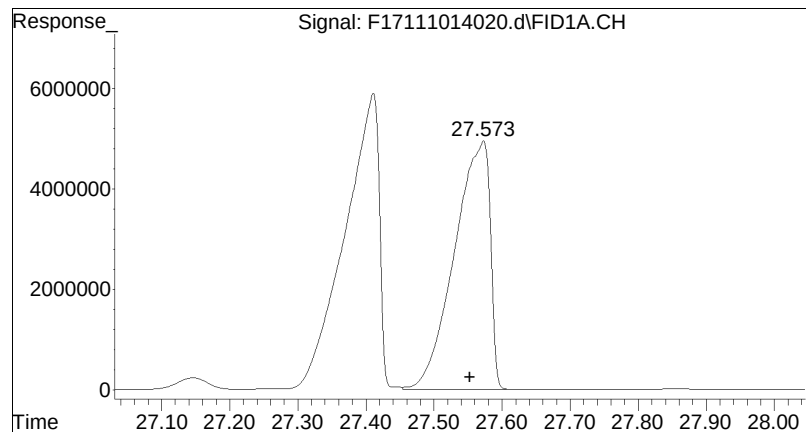
#15 Pristane

R.T.: 25.751 min
Delta R.T.: 0.022 min
Response: 203706839
Conc: 193.34 ug/mL M4



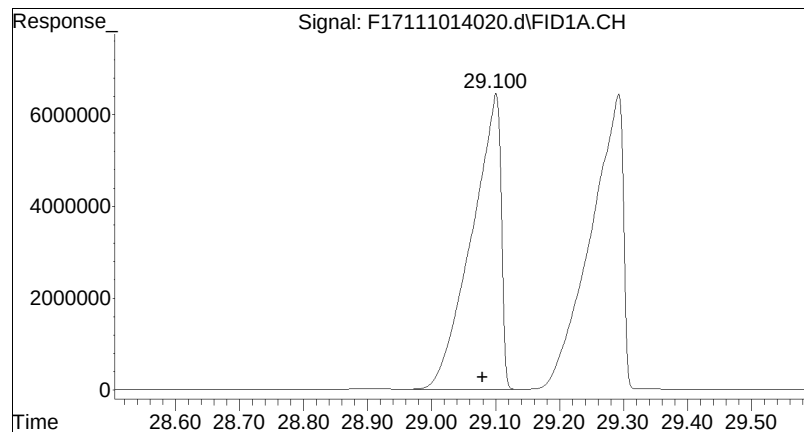
#16 n-Octadecane (C18)

R.T.: 27.411 min
Delta R.T.: 0.021 min
Response: 206512059
Conc: 197.67 ug/mL M4



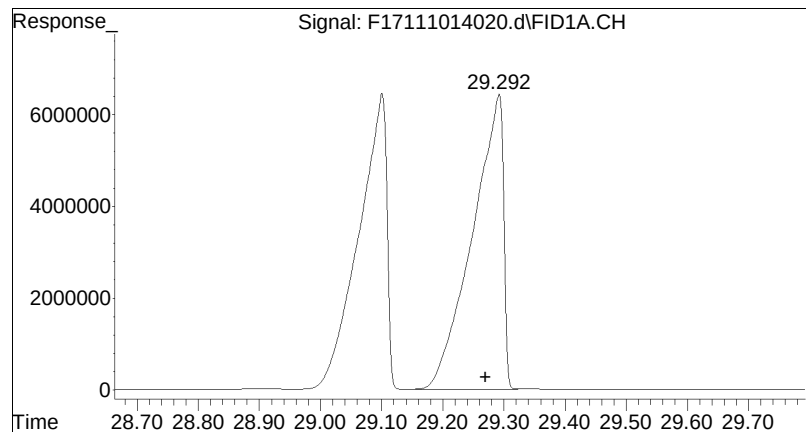
#17 Phytane

R.T.: 27.573 min
Delta R.T.: 0.020 min
Response: 180095179
Conc: 169.68 ug/mL M4



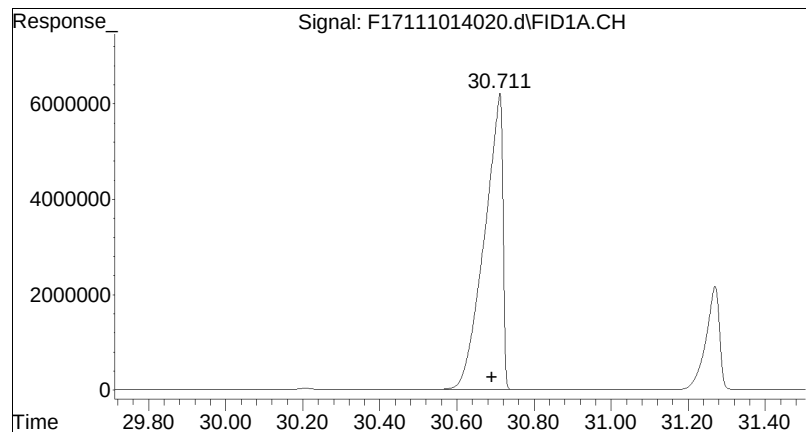
#18 n-Nonadecane (C19)

R.T.: 29.100 min
Delta R.T.: 0.020 min
Response: 205137349
Conc: 197.47 ug/mL M4



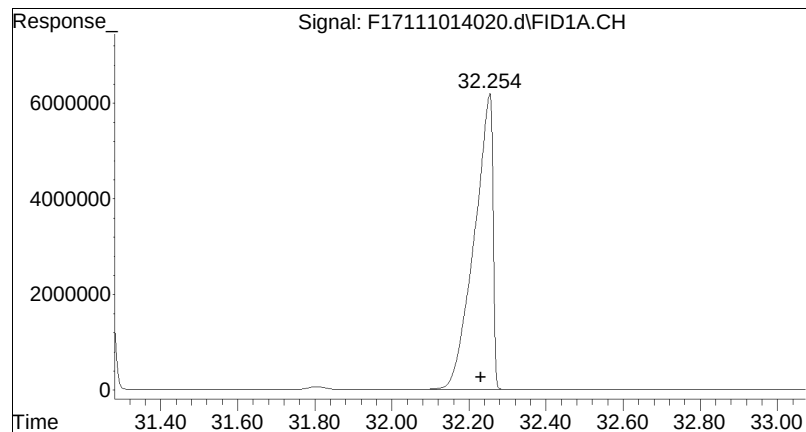
#19 ortho-terphenyl

R.T.: 29.292 min
Delta R.T.: 0.021 min
Response: 226451625
Conc: 192.11 ug/mL M4



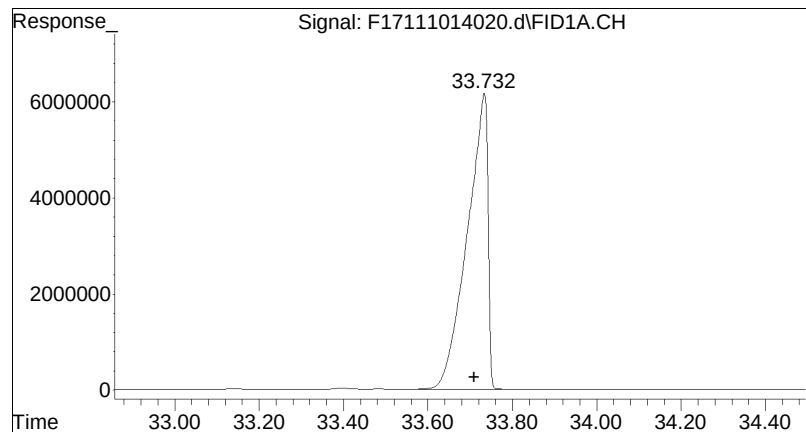
#20 n-Eicosane (C20)

R.T.: 30.711 min
Delta R.T.: 0.020 min
Response: 204858567
Conc: 196.29 ug/mL M4



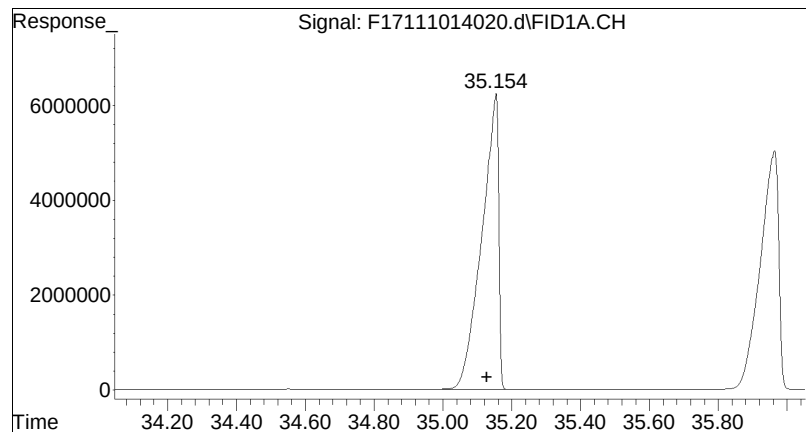
#21 n-Heneicosane (C21)

R.T.: 32.254 min
Delta R.T.: 0.024 min
Response: 206881190
Conc: 195.99 ug/mL M4



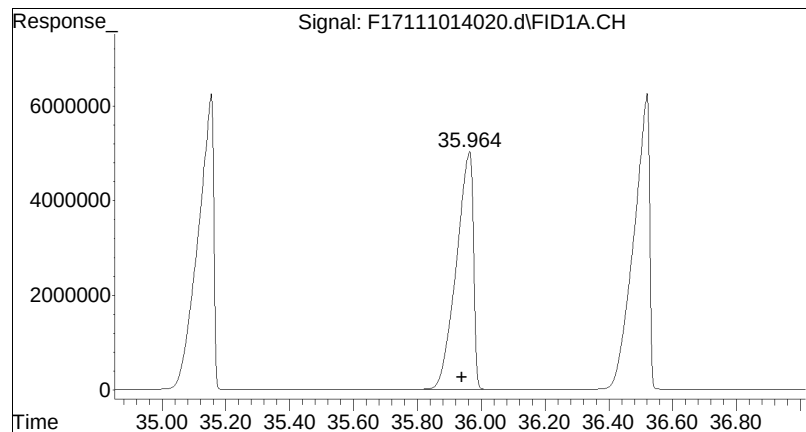
#22 n-Docosane (C22)

R.T.: 33.732 min
Delta R.T.: 0.023 min
Response: 209103777
Conc: 196.98 ug/mL M4



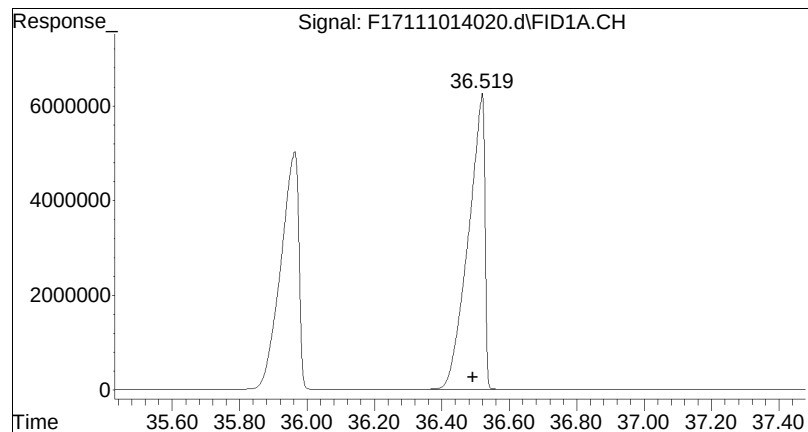
#23 n-Tricosane (C23)

R.T.: 35.154 min
Delta R.T.: 0.026 min
Response: 21118913
Conc: 197.75 ug/mL M4



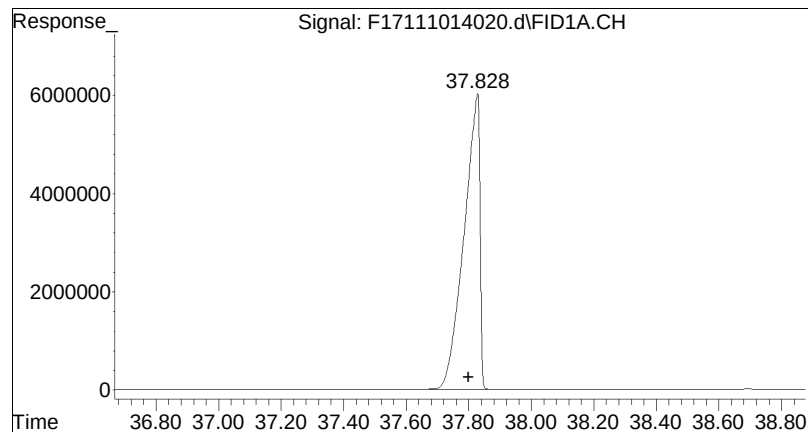
#24 d50-Tetracosane

R.T.: 35.964 min
Delta R.T.: 0.024 min
Response: 185908620
Conc: 199.86 ug/mL M4



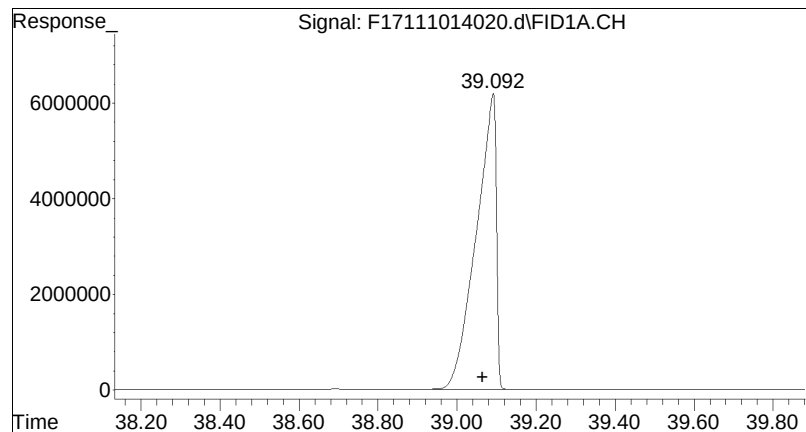
#25 n-Tetracosane (C24)

R.T.: 36.519 min
Delta R.T.: 0.026 min
Response: 212476278
Conc: 198.79 ug/mL M4



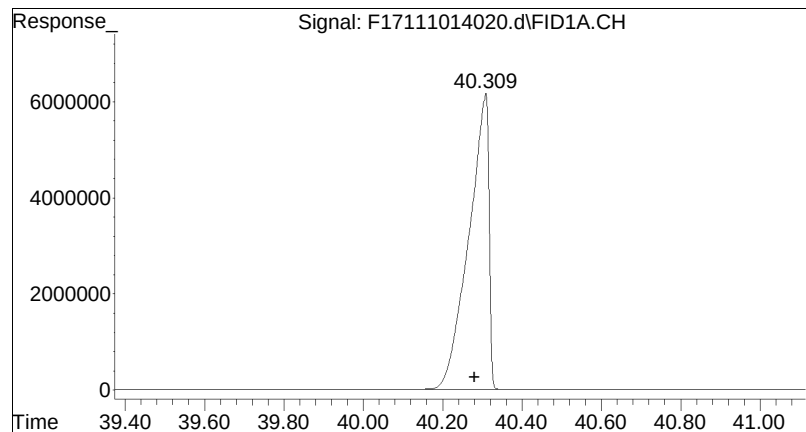
#26 n-Pentacosane (C25)

R.T.: 37.828 min
Delta R.T.: 0.028 min
Response: 211377509
Conc: 197.09 ug/mL M4



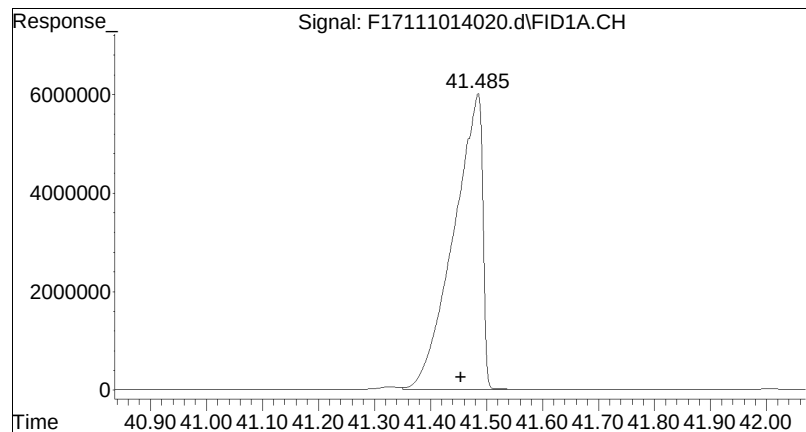
#27 n-Hexacosane (C26)

R.T.: 39.092 min
Delta R.T.: 0.027 min
Response: 216859002
Conc: 198.09 ug/mL M4



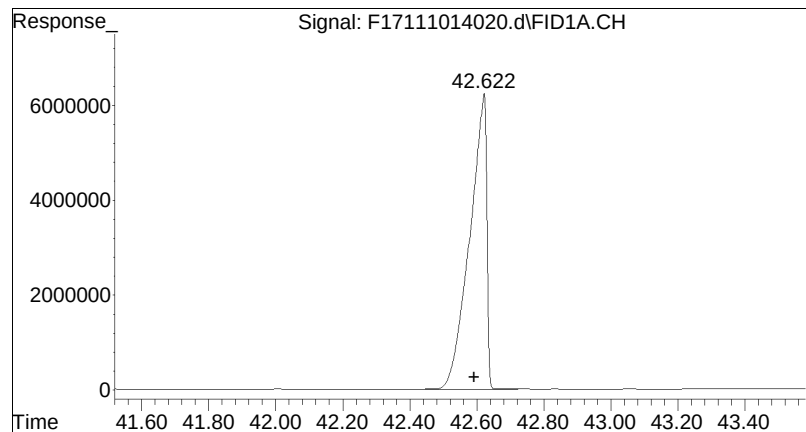
#28 n-Heptacosane (C27)

R.T.: 40.309 min
Delta R.T.: 0.027 min
Response: 215525451
Conc: 198.36 ug/mL M4



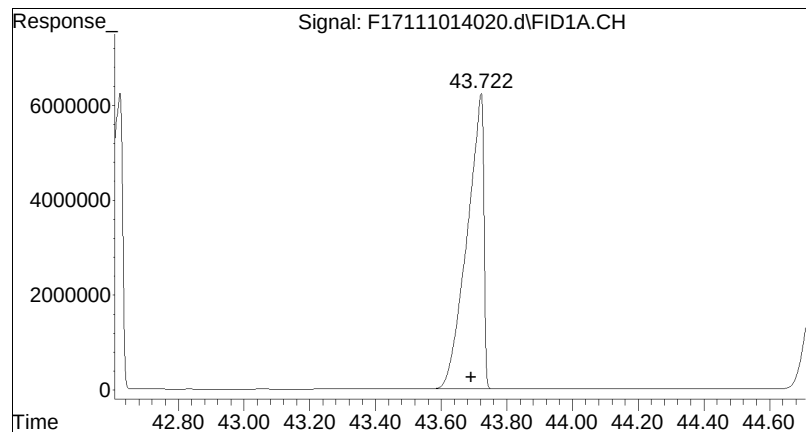
#29 n-Octacosane (C28)

R.T.: 41.485 min
Delta R.T.: 0.031 min
Response: 215543841
Conc: 197.76 ug/mL M4



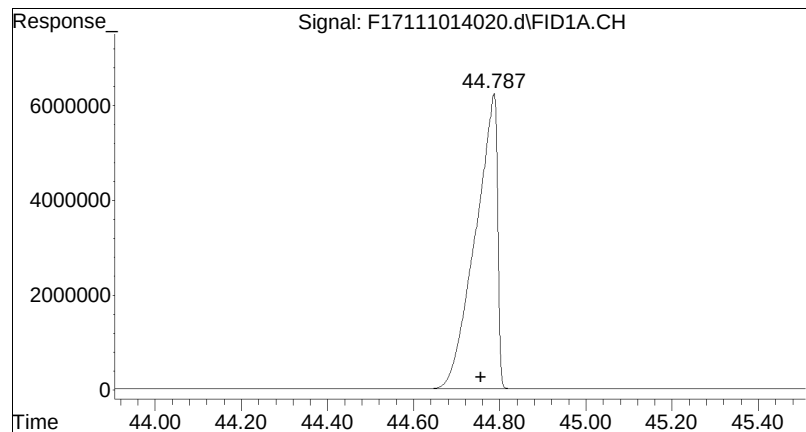
#30 n-Nonacosane (C29)

R.T.: 42.622 min
Delta R.T.: 0.029 min
Response: 218200394
Conc: 198.38 ug/mL M4



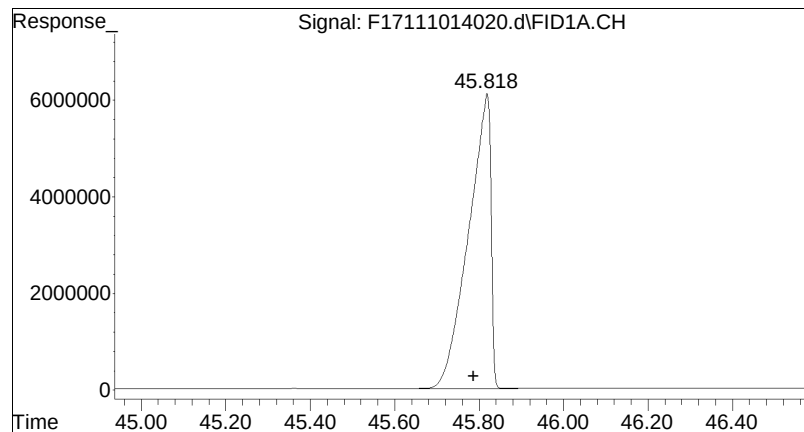
#31 n-Triacontane (C30)

R.T.: 43.722 min
Delta R.T.: 0.031 min
Response: 219666383
Conc: 199.05 ug/mL M4



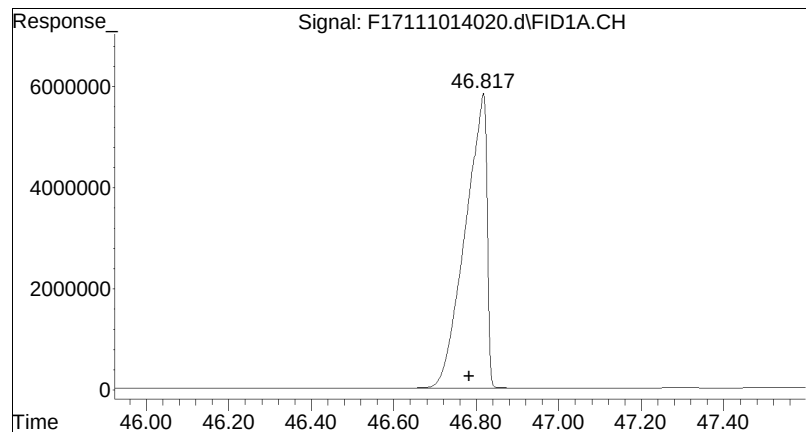
#32 n-Hentriacontane (C31)

R.T.: 44.787 min
Delta R.T.: 0.030 min
Response: 220837166
Conc: 198.58 ug/mL M4



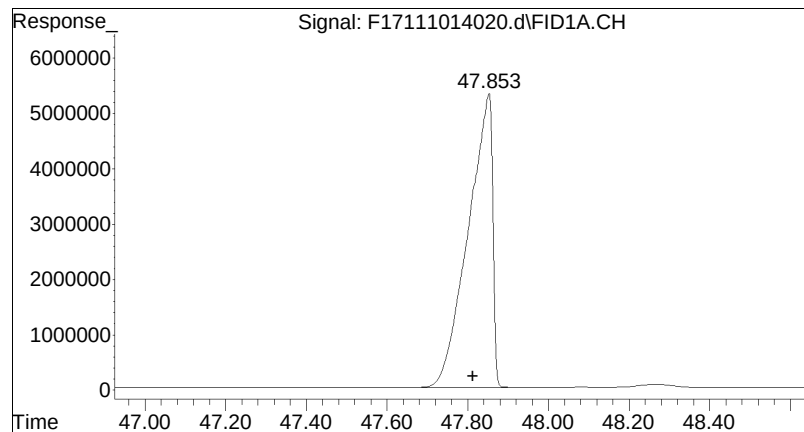
#33 n-Dotriacontane (C32)

R.T.: 45.818 min
Delta R.T.: 0.032 min
Response: 223659667
Conc: 202.30 ug/mL M4



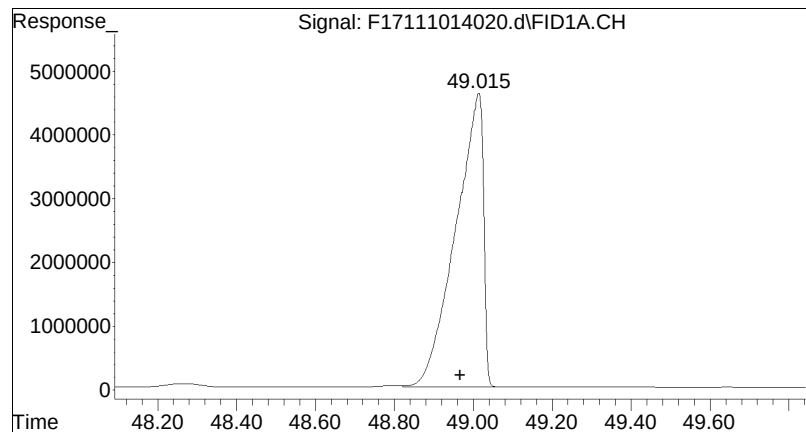
#34 n-Tritriacontane (C33)

R.T.: 46.817 min
Delta R.T.: 0.034 min
Response: 212305009
Conc: 197.69 ug/mL M4



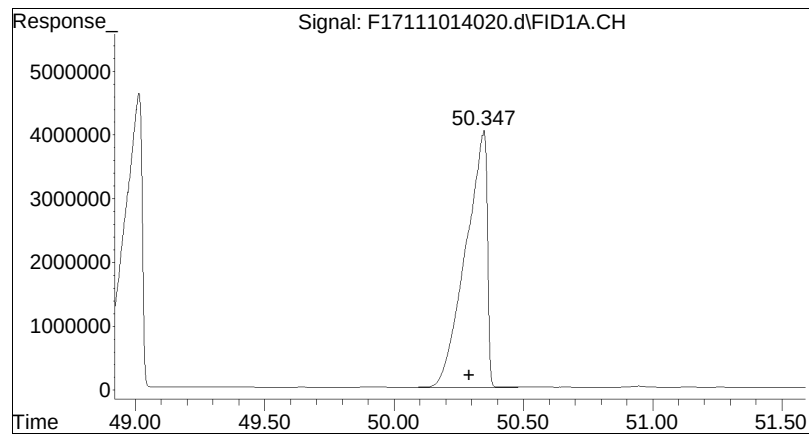
#35 n-tetratriacontane (C34)

R.T.: 47.853 min
Delta R.T.: 0.040 min
Response: 222719308
Conc: 195.40 ug/mL M4



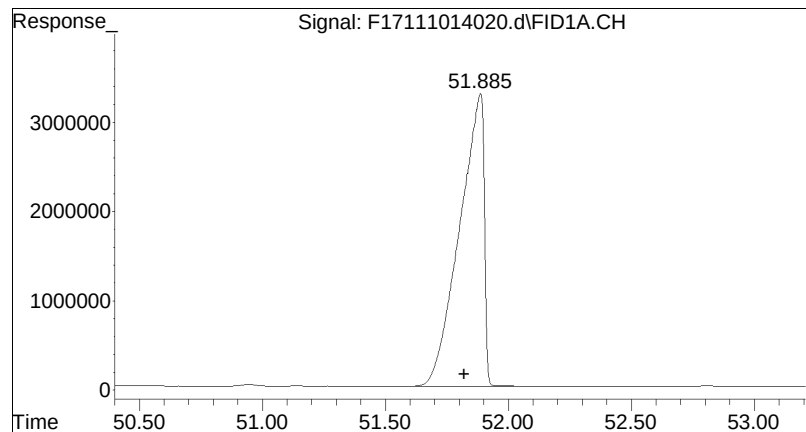
#36 n-Pentatriacontane (C35)

R.T.: 49.015 min
Delta R.T.: 0.047 min
Response: 225244106
Conc: 198.63 ug/mL M4



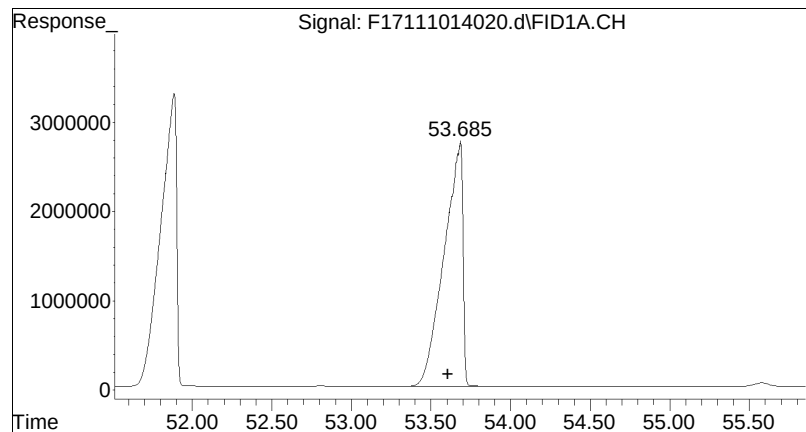
#37 n-Hexatriacontane (C36)

R.T.: 50.347 min
Delta R.T.: 0.055 min
Response: 231762250
Conc: 188.76 ug/mL M4



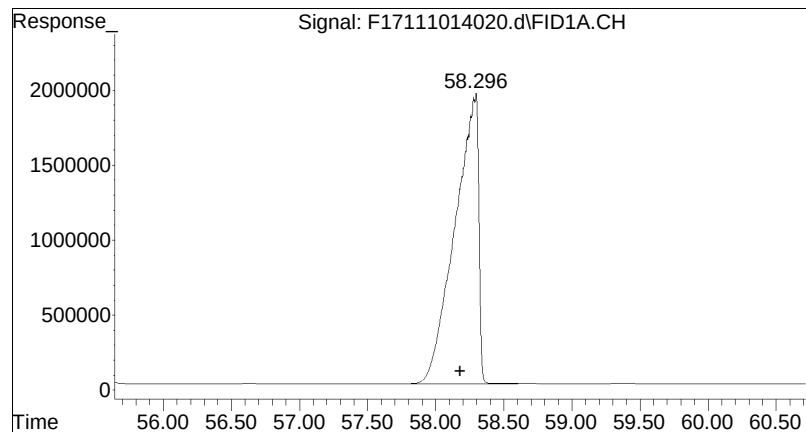
#38 n-Heptatriacontane (C37)

R.T.: 51.885 min
Delta R.T.: 0.063 min
Response: 226986888
Conc: 198.14 ug/mL M4



#39 n-Octatriacontane (C38)

R.T.: 53.685 min
Delta R.T.: 0.078 min
Response: 222999979
Conc: 194.79 ug/mL M4



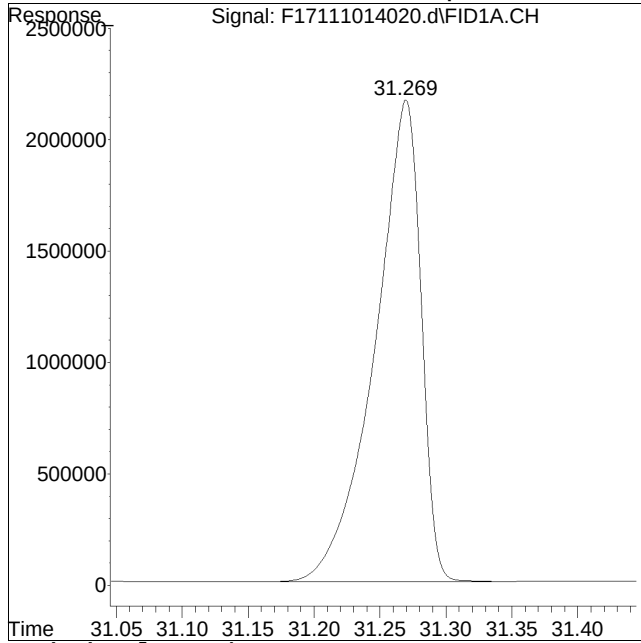
#41 n-Tetracontane (C40)

R.T.: 58.296 min
Delta R.T.: 0.118 min
Response: 232479117
Conc: 211.08 ug/mL M4

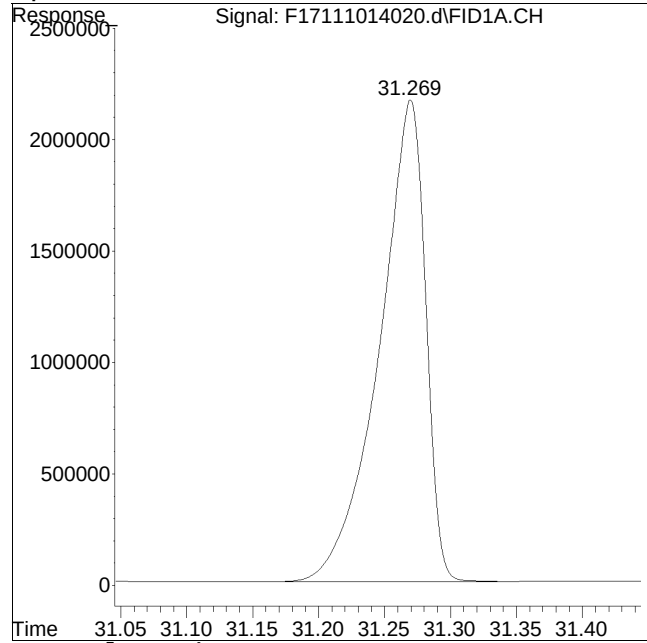
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #1: 5-alpha-androstane



Original Peak Response = 52594049



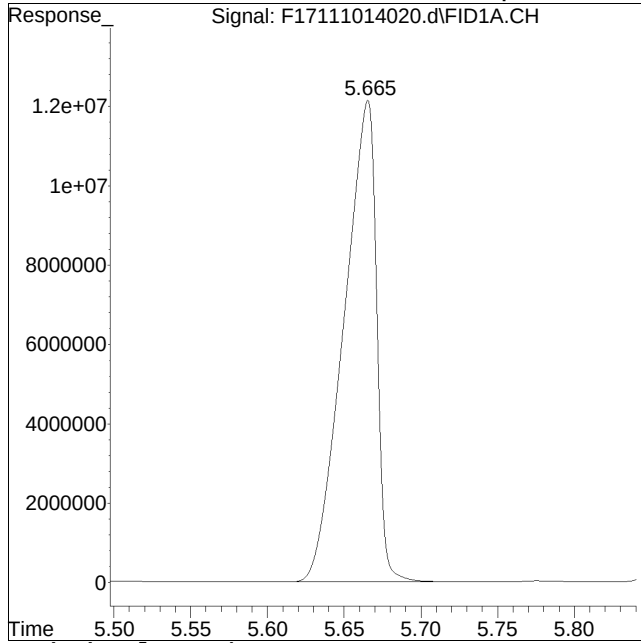
Manual Peak Response = 52608463 M4

M4 = Poor automated baseline construction.

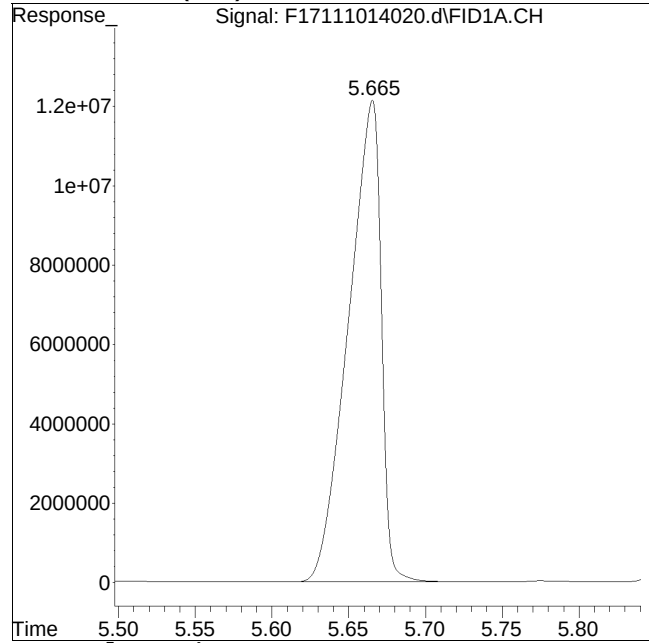
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #2: n-Octane (C8)



Original Peak Response = 179947142



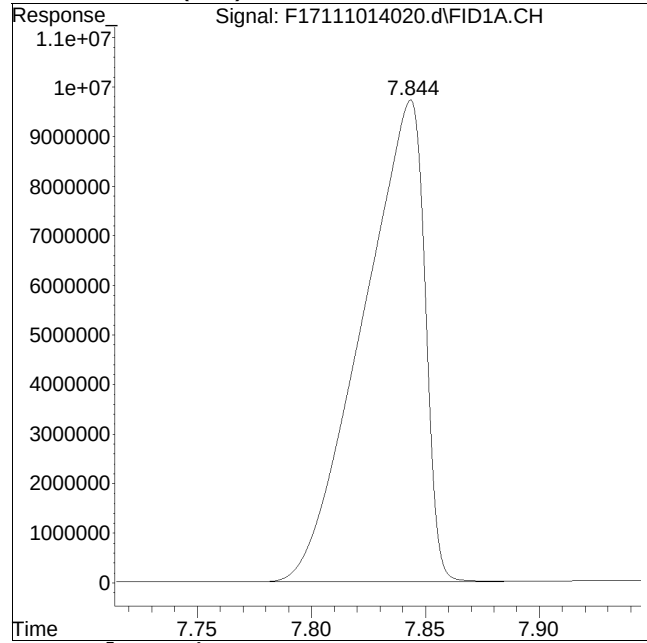
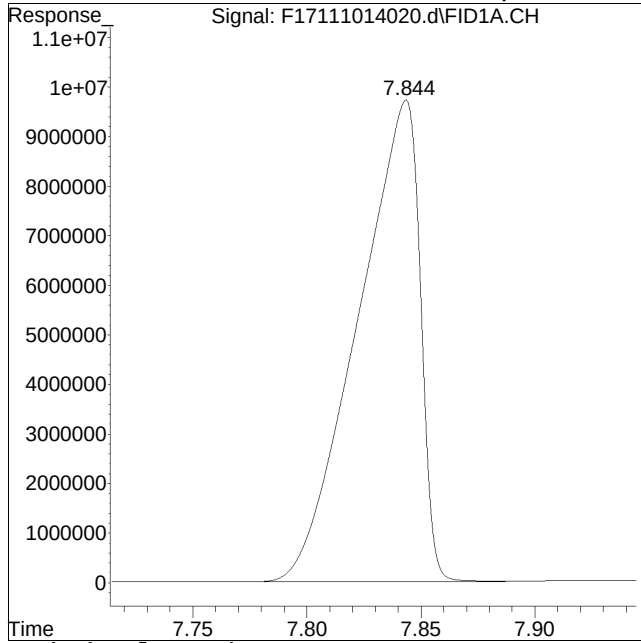
Manual Peak Response = 179952168 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #3: n-Nonane (C9)



Original Peak Response = 184176484

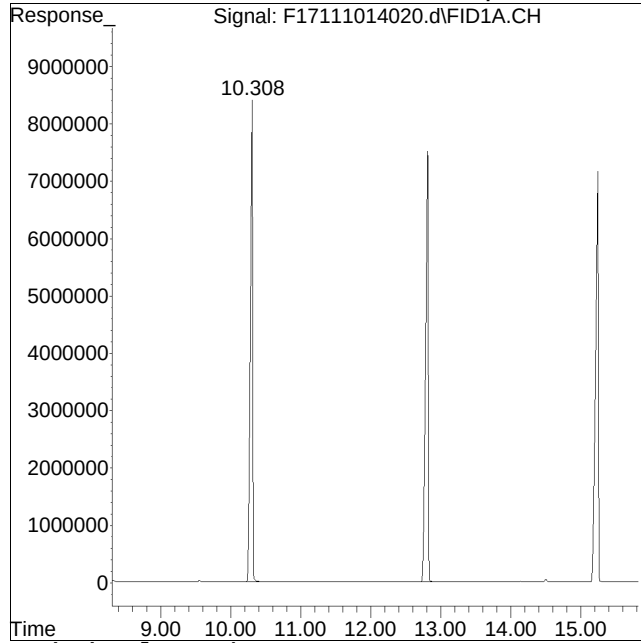
Manual Peak Response = 183994497 M4

M4 = Poor automated baseline construction.

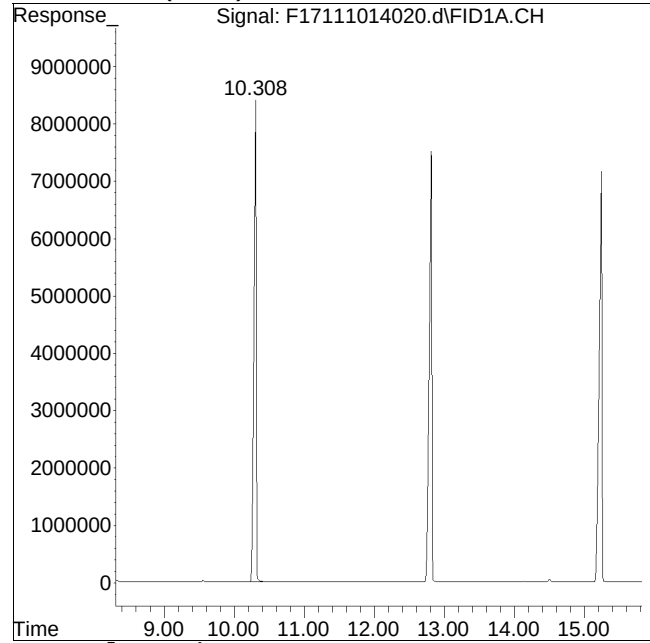
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #4: n-Decane (C10)



Original Peak Response = 188681070



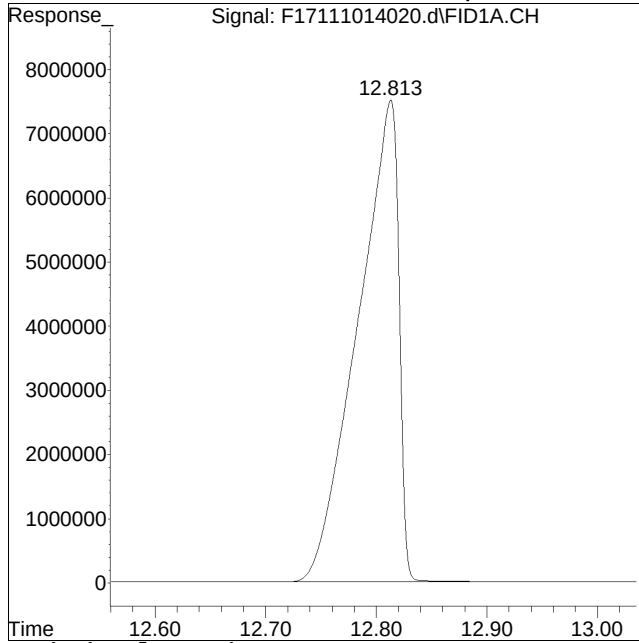
Manual Peak Response = 190630604 M4

M4 = Poor automated baseline construction.

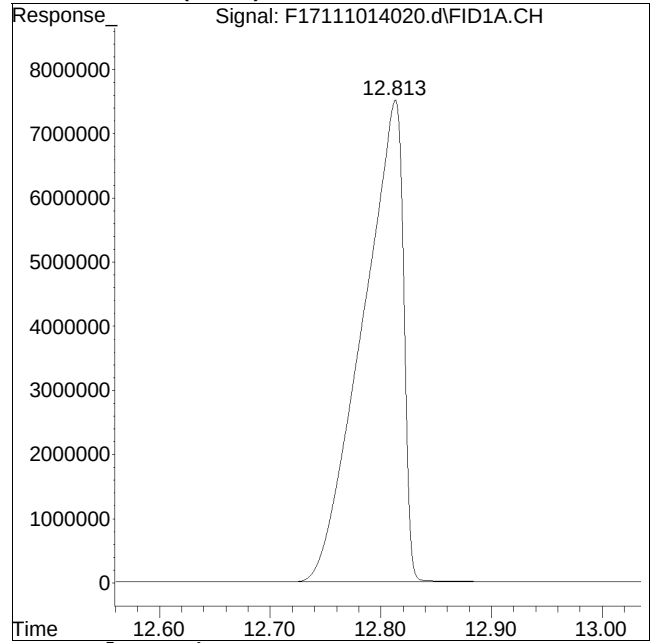
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #5: n-Undecane (C11)



Original Peak Response = 192984123



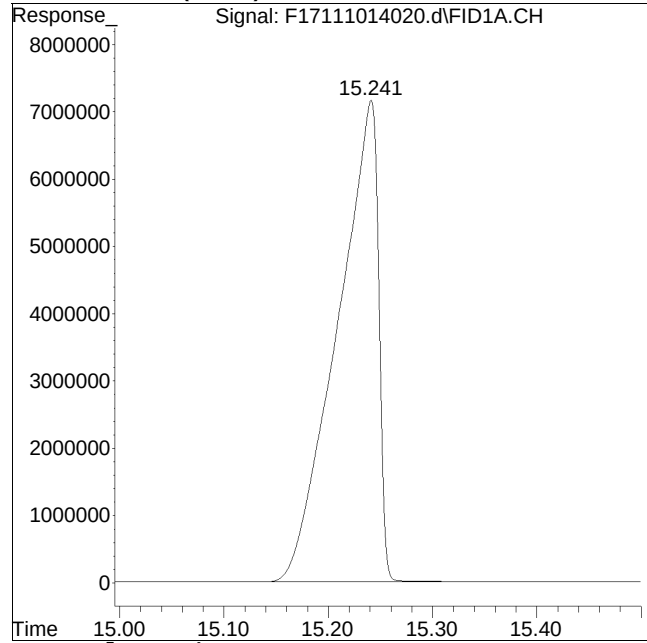
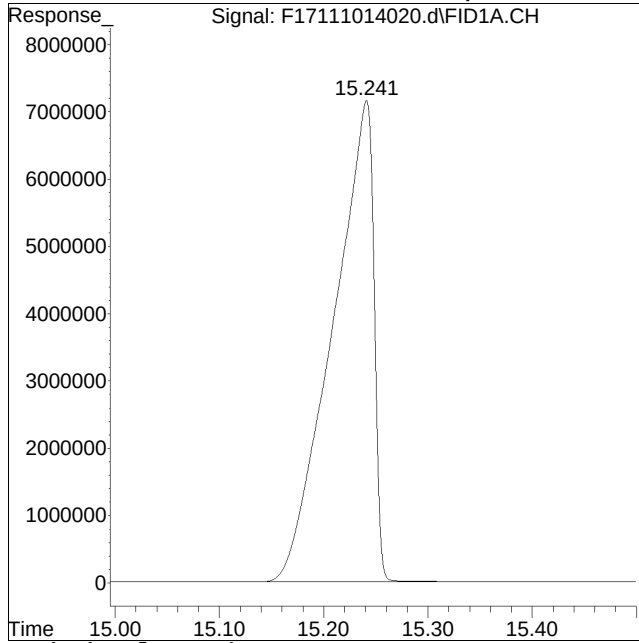
Manual Peak Response = 192977776 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #6: n-Dodecane (C12)



Original Peak Response = 195713454

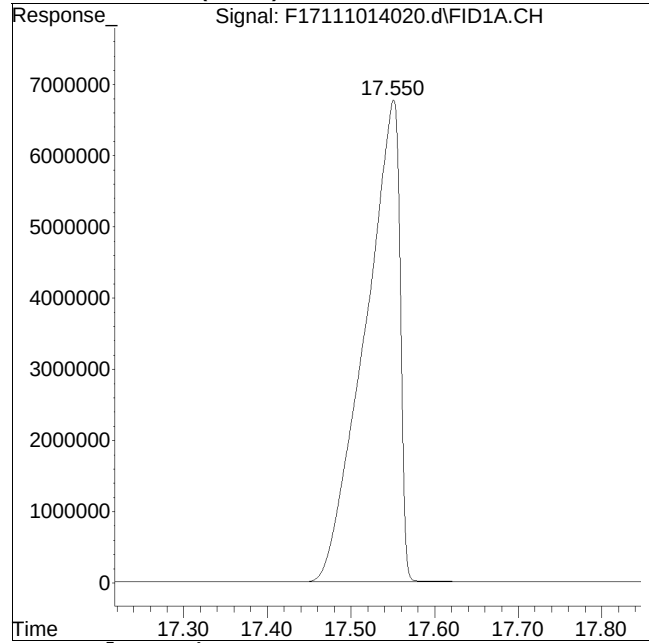
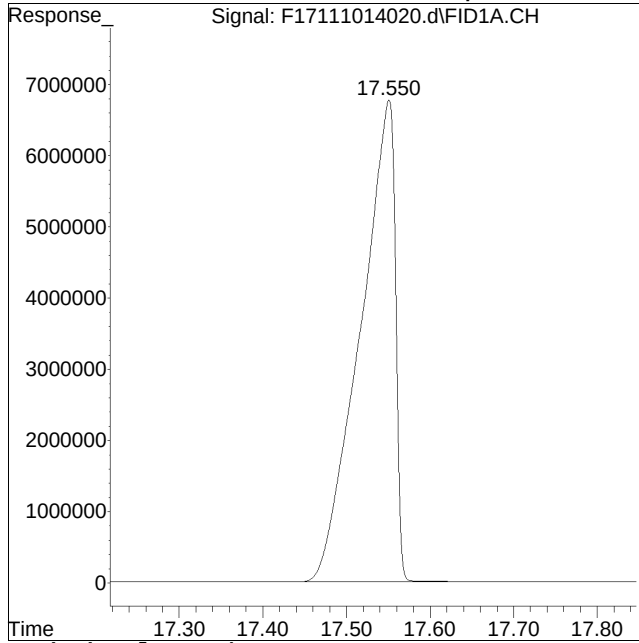
Manual Peak Response = 195722040 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #7: n-Tridecane (C13)



Original Peak Response = 196477164

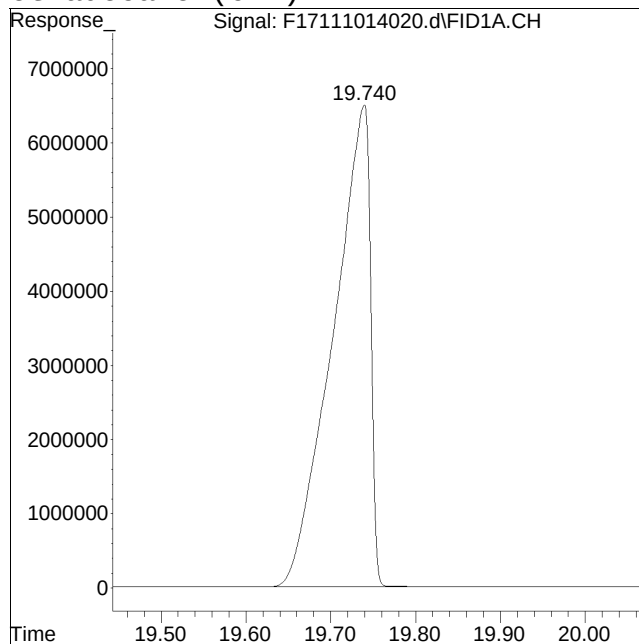
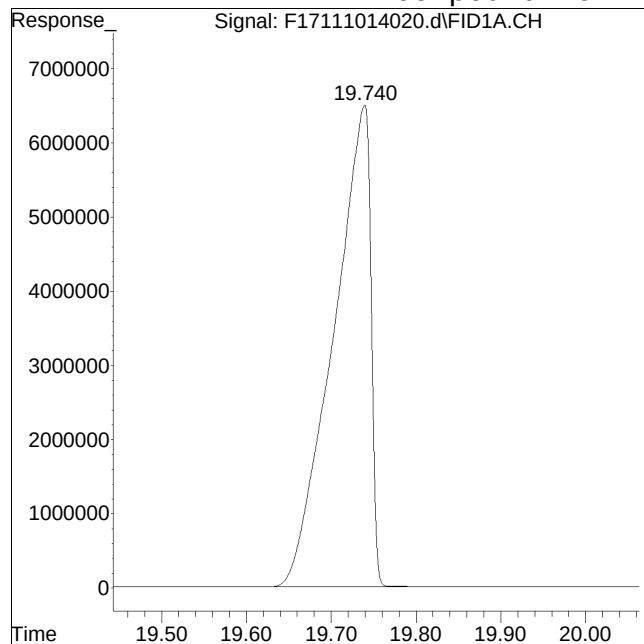
Manual Peak Response = 196451381 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
 Data File : F17111014020.d Operator : FID17:NL
 Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
 Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #9: n-Tetradecane (C14)



Original Peak Response = 198425471

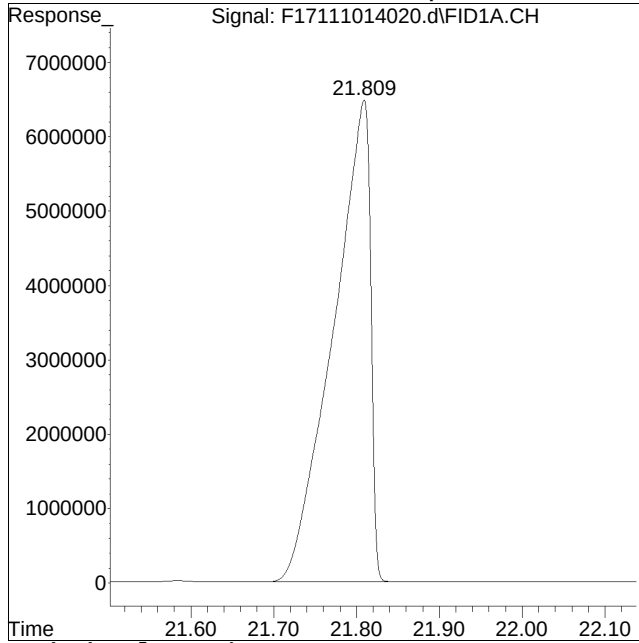
Manual Peak Response = 198370823 M4

M4 = Poor automated baseline construction.

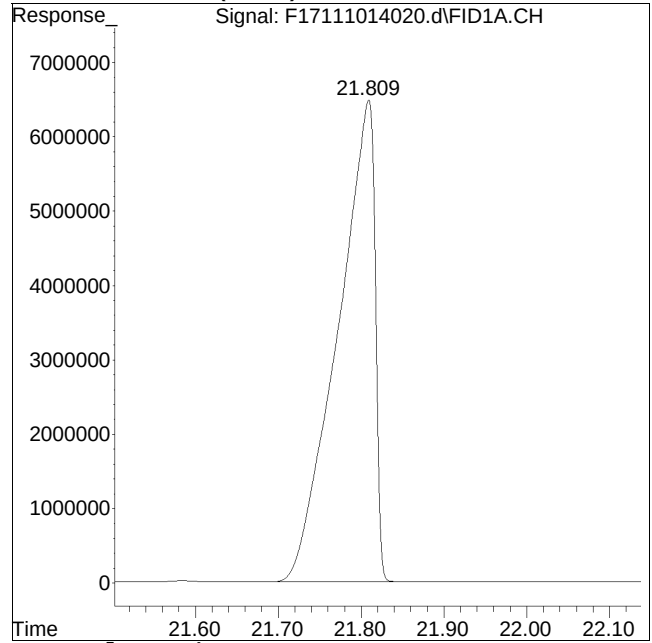
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #11: n-Pentadecane (C15)



Original Peak Response = 202043606



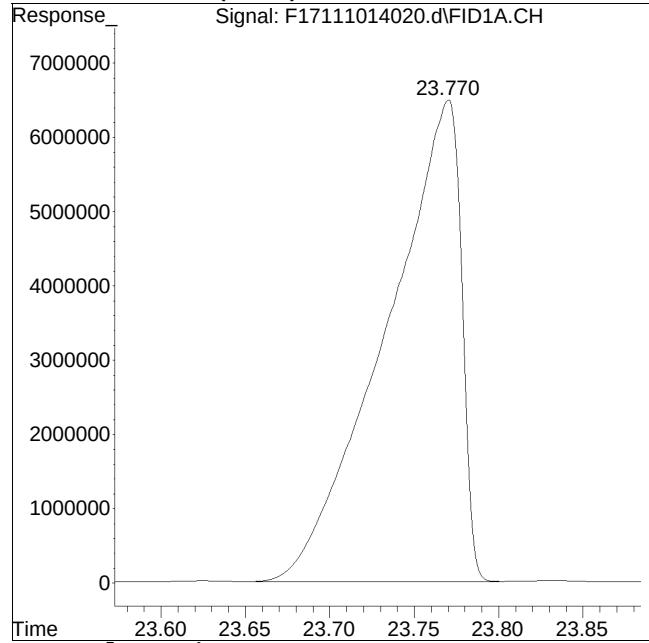
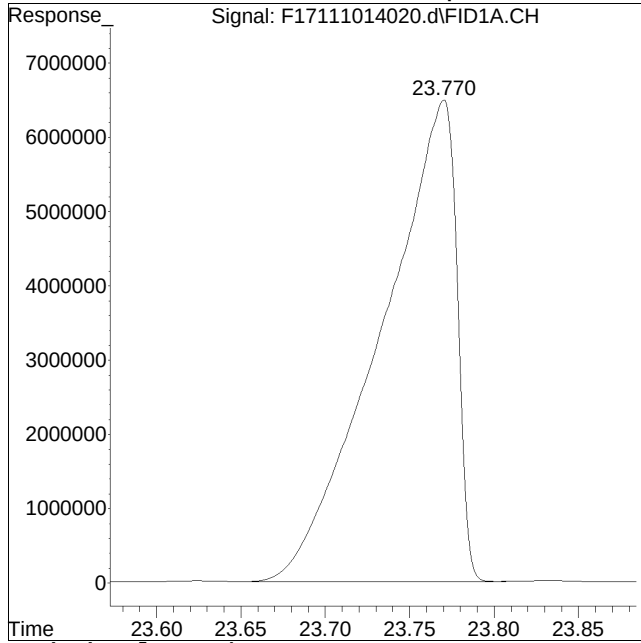
Manual Peak Response = 201966601 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #12: n-Hexadecane (C16)



Original Peak Response = 201304134

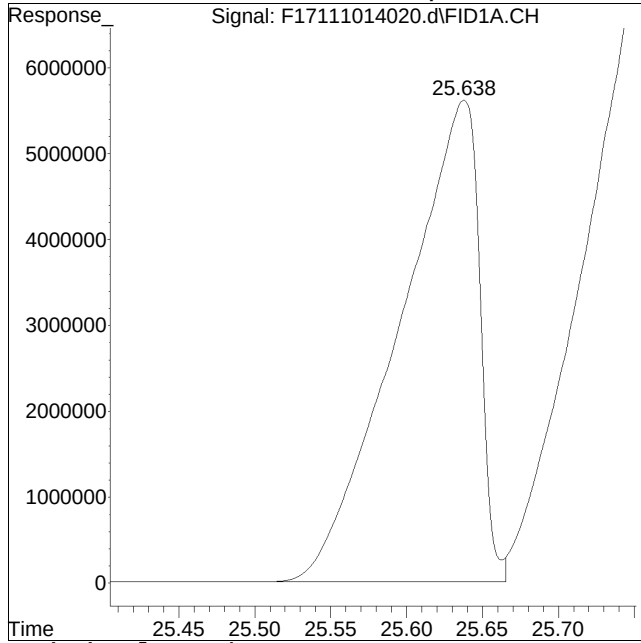
Manual Peak Response = 201302145 M4

M4 = Poor automated baseline construction.

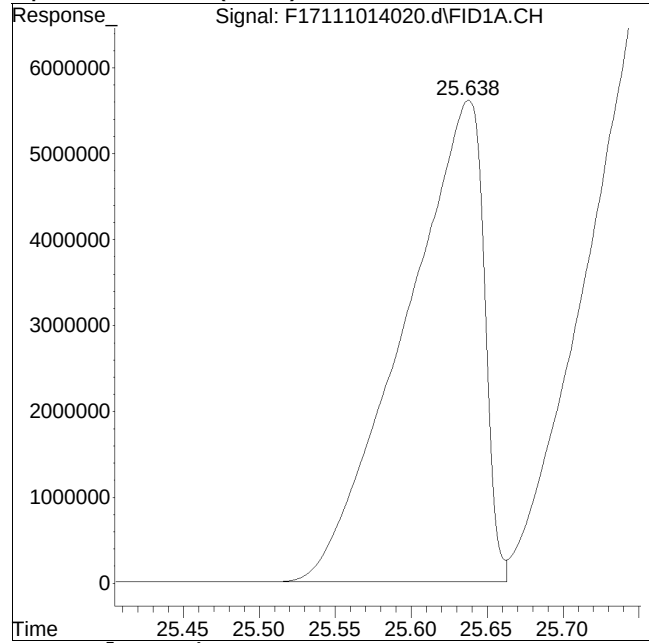
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #14: n-Heptadecane (C17)



Original Peak Response = 203853308



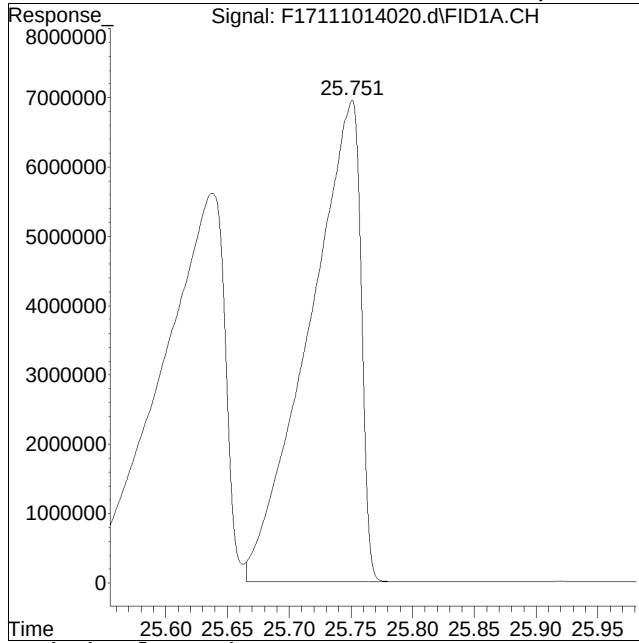
Manual Peak Response = 203355194 M4

M4 = Poor automated baseline construction.

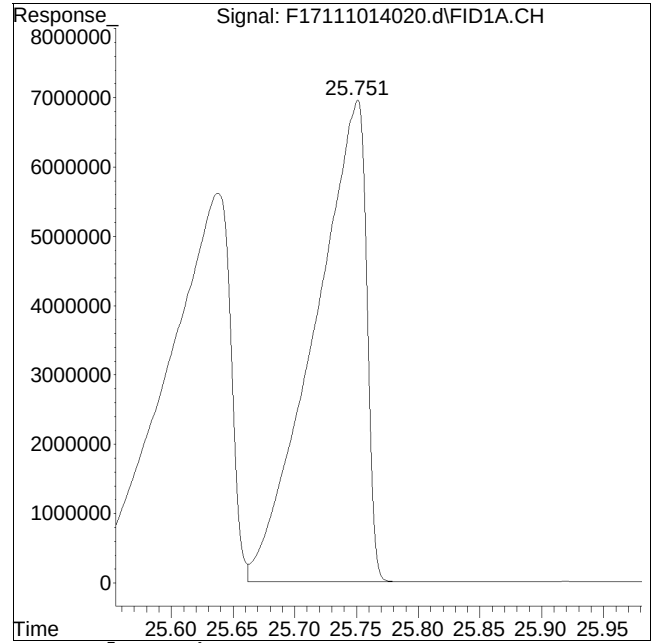
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #15: Pristane



Original Peak Response = 203372327



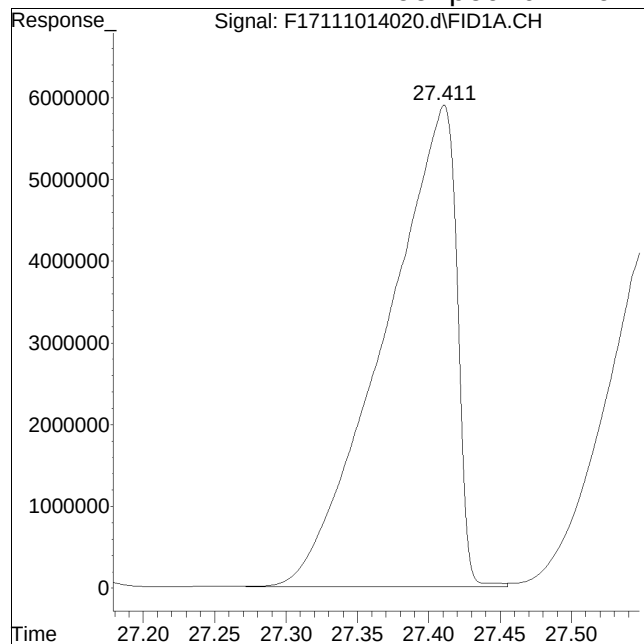
Manual Peak Response = 203706839 M4

M4 = Poor automated baseline construction.

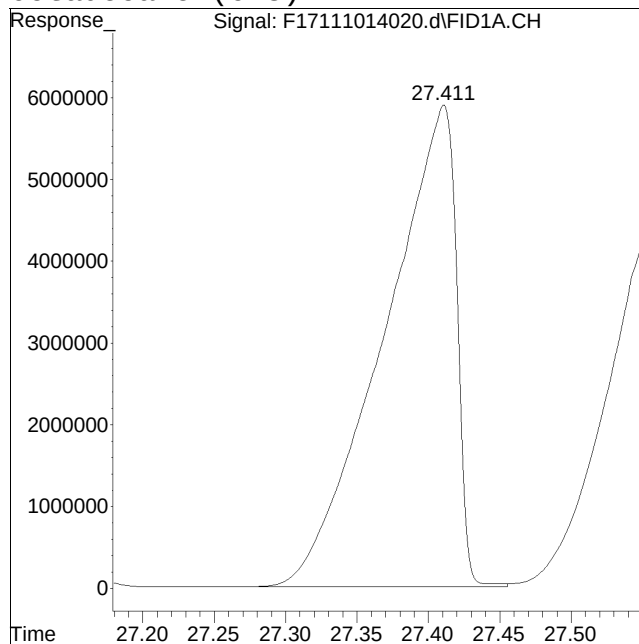
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
 Data File : F17111014020.d Operator : FID17:NL
 Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
 Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #16: n-Octadecane (C18)



Original Peak Response = 206820252



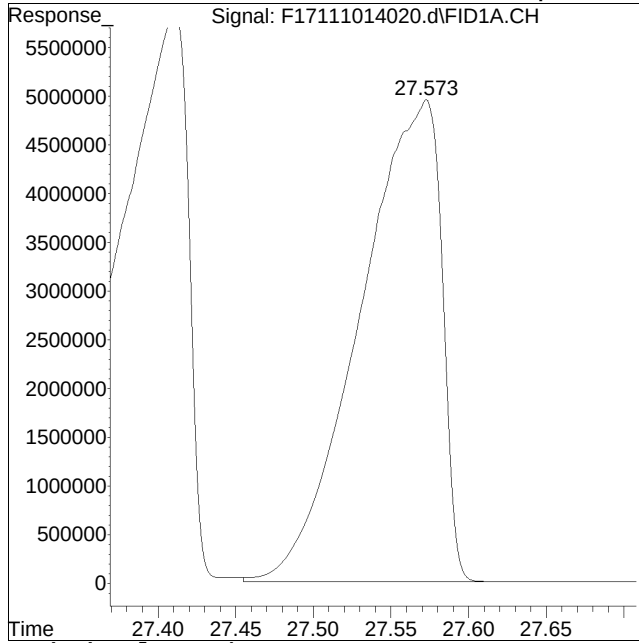
Manual Peak Response = 206512059 M4

M4 = Poor automated baseline construction.

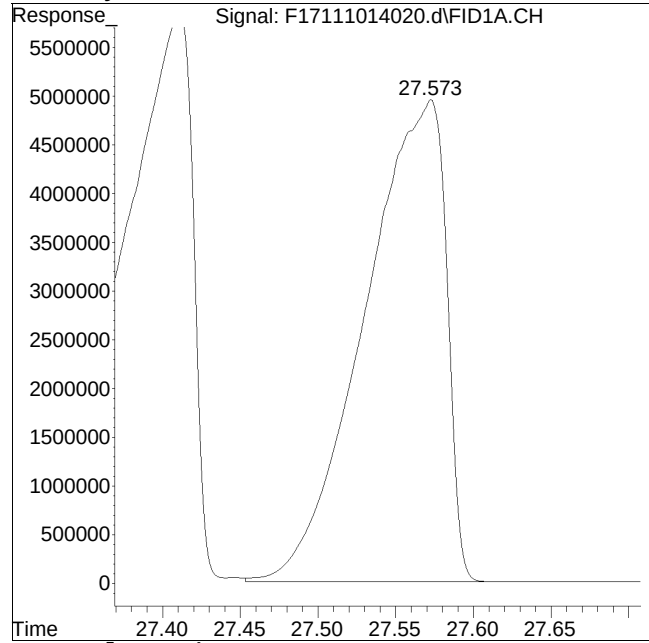
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #17: Phytane



Original Peak Response = 180203530



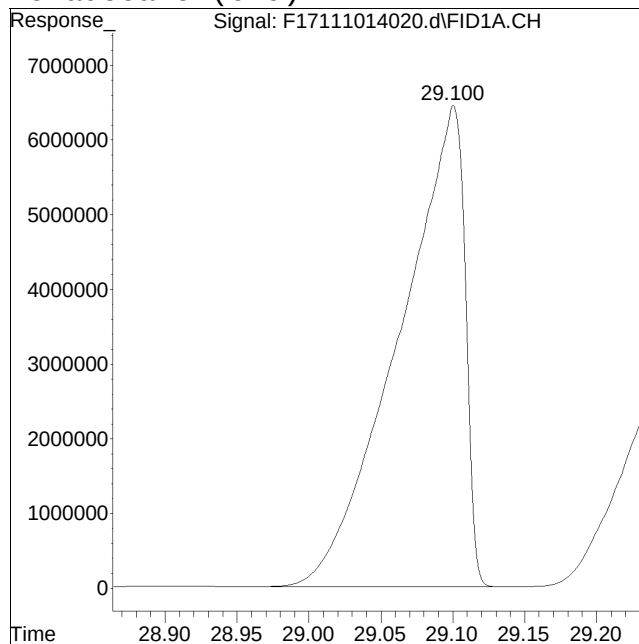
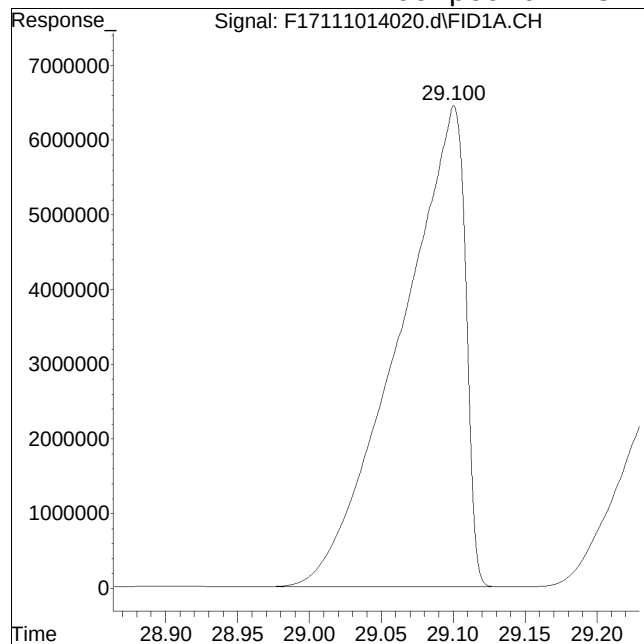
Manual Peak Response = 180095179 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
 Data File : F17111014020.d Operator : FID17:NL
 Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
 Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #18: n-Nonadecane (C19)



Original Peak Response = 204759429

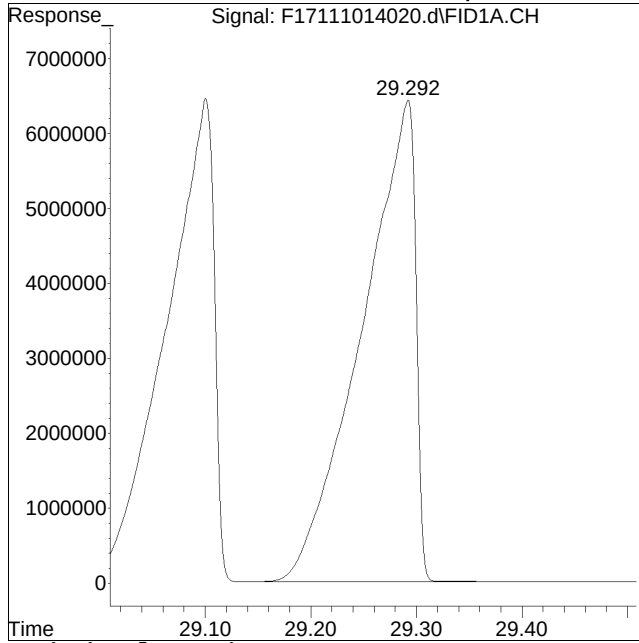
Manual Peak Response = 205137349 M4

M4 = Poor automated baseline construction.

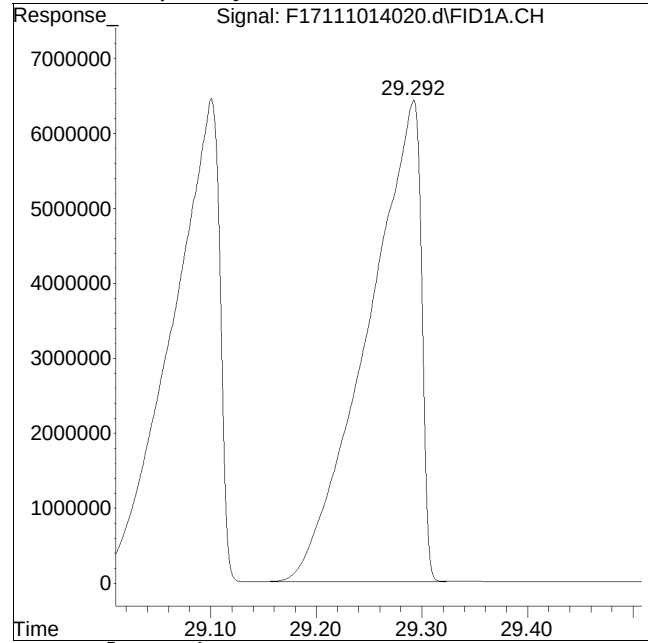
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #19: ortho-terphenyl



Original Peak Response = 226252762



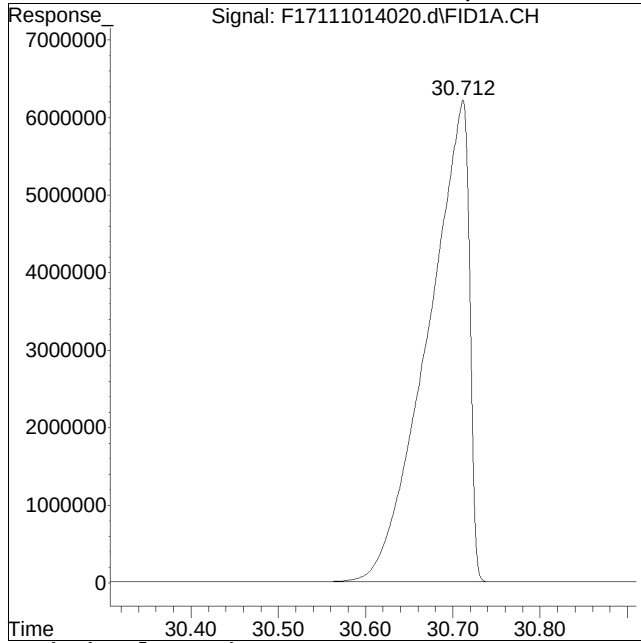
Manual Peak Response = 226451625 M4

M4 = Poor automated baseline construction.

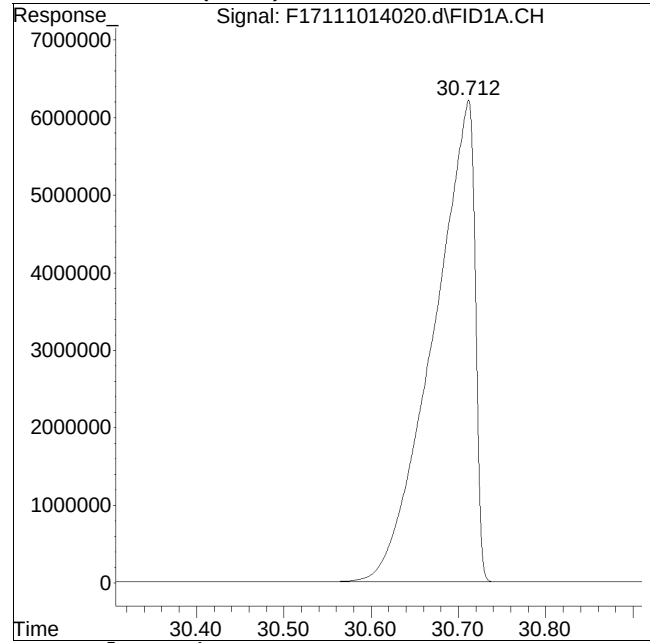
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #20: n-Eicosane (C20)



Original Peak Response = 204977130



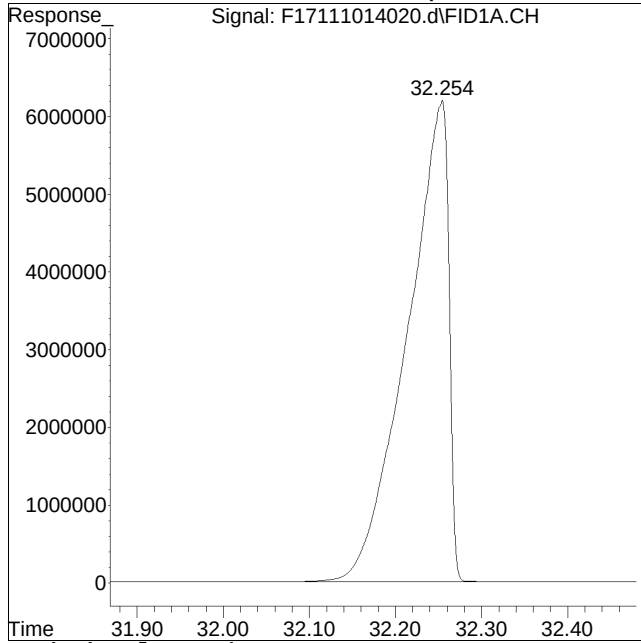
Manual Peak Response = 204858567 M4

M4 = Poor automated baseline construction.

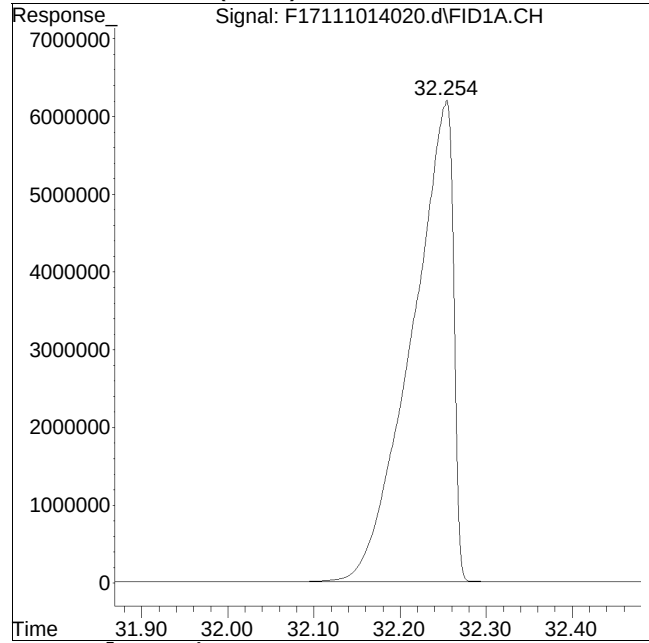
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #21: n-Heneicosane (C21)



Original Peak Response = 206843558



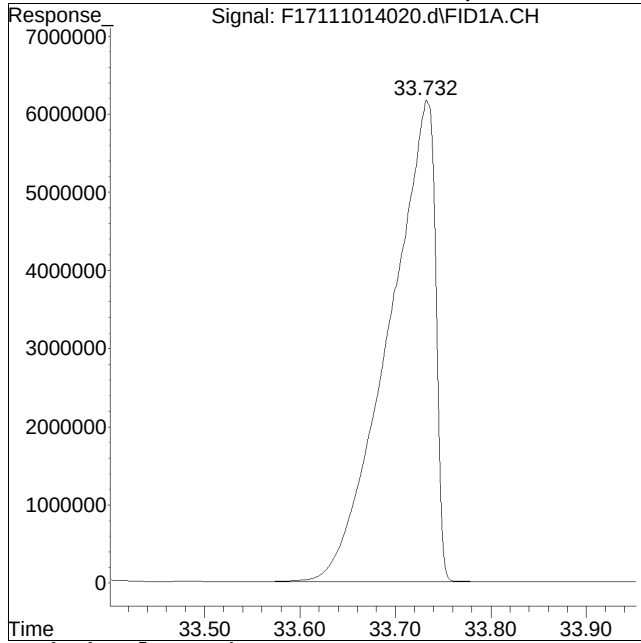
Manual Peak Response = 206881190 M4

M4 = Poor automated baseline construction.

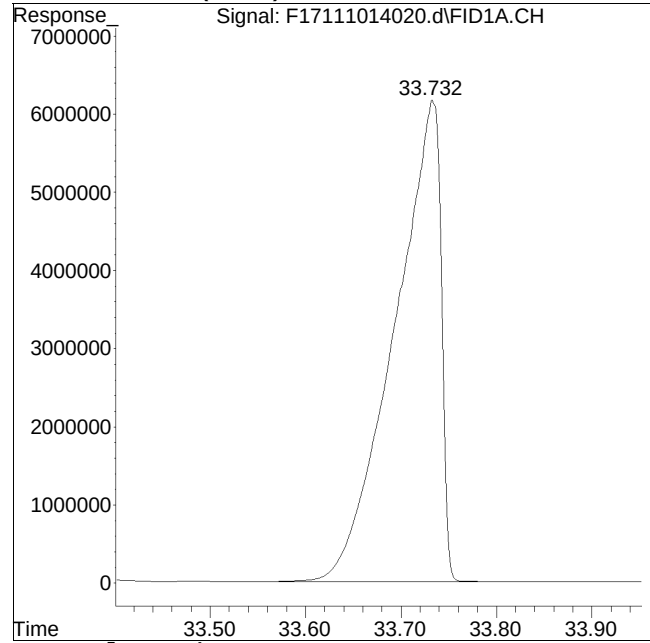
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #22: n-Docosane (C22)



Original Peak Response = 209031287



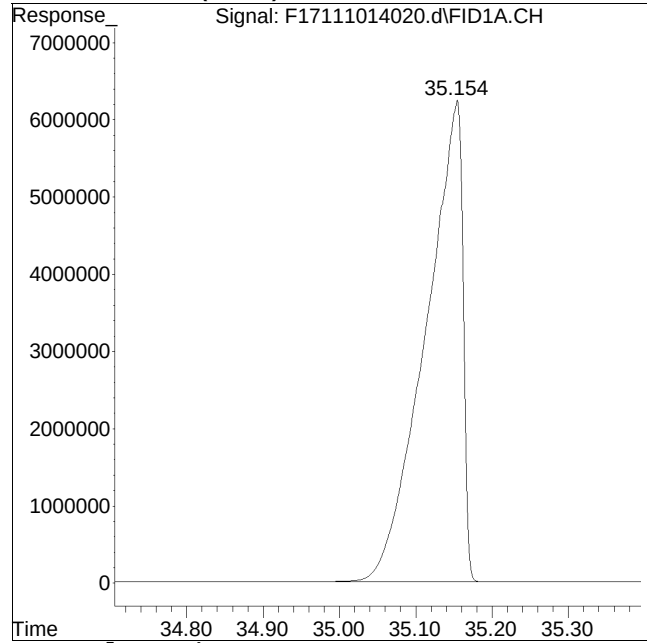
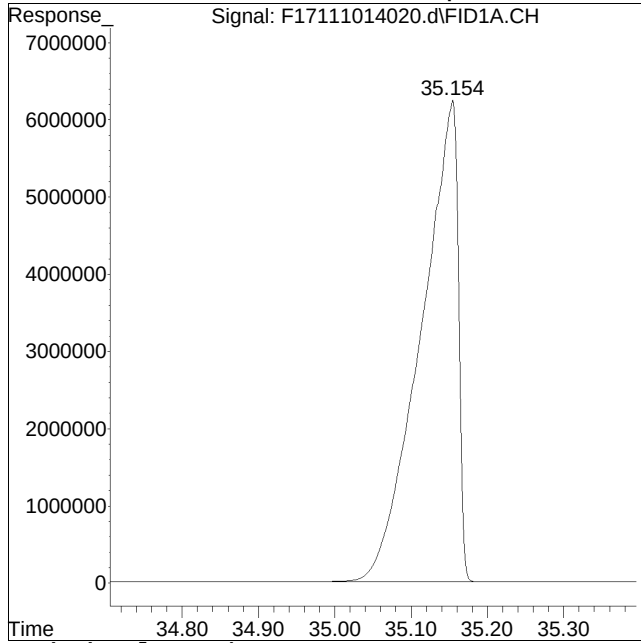
Manual Peak Response = 209103777 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #23: n-Tricosane (C23)



Original Peak Response = 211022944

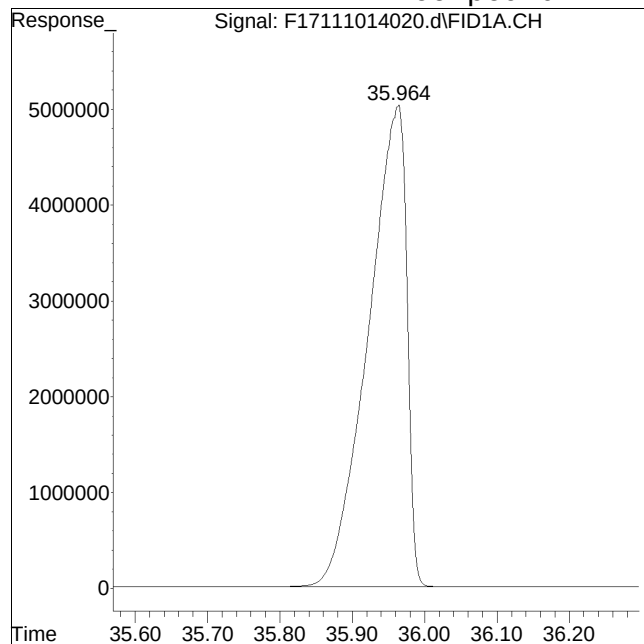
Manual Peak Response = 211118913 M4

M4 = Poor automated baseline construction.

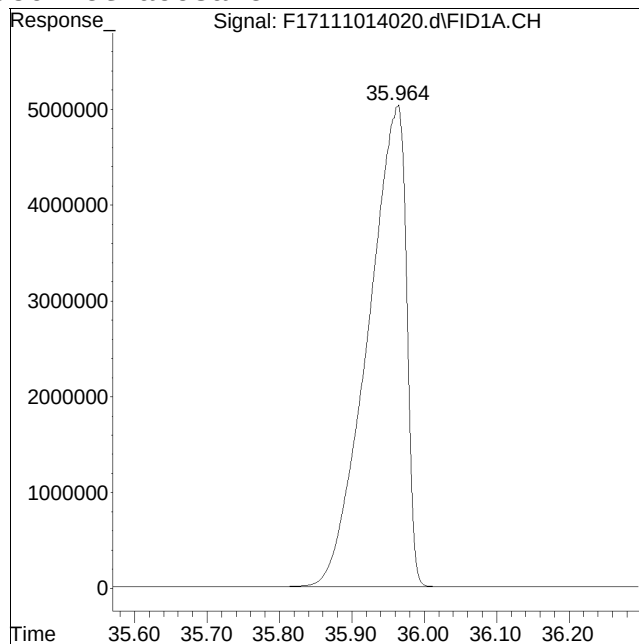
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #24: d50-Tetracosane



Original Peak Response = 185910734



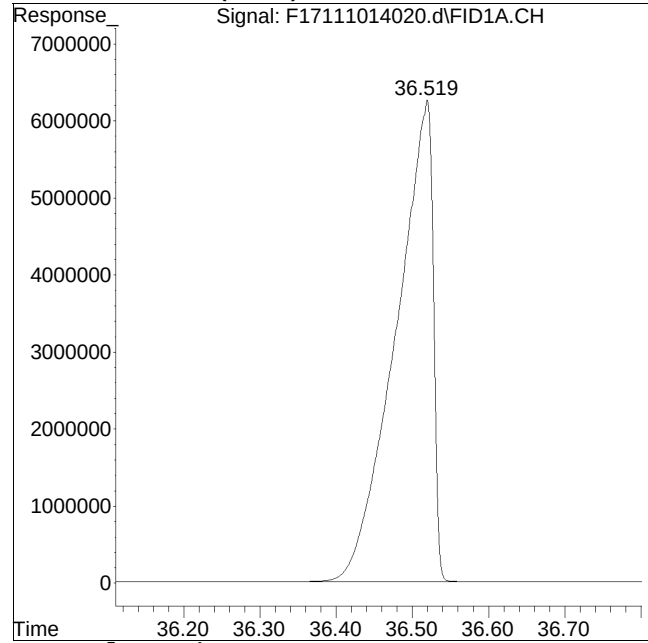
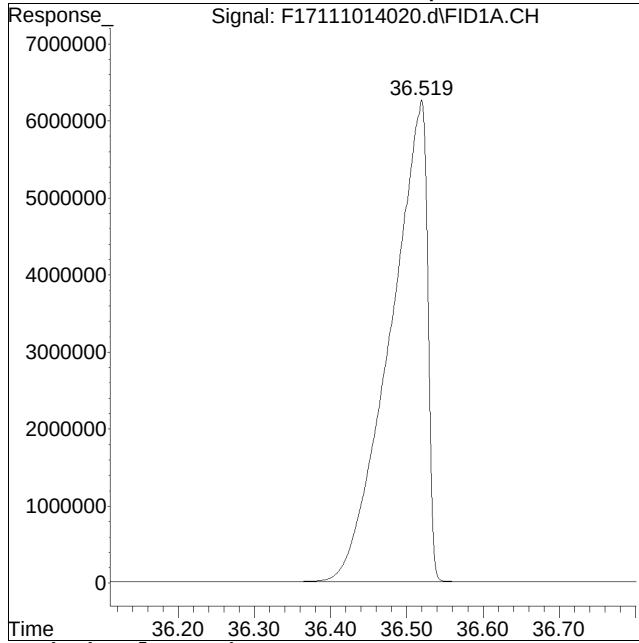
Manual Peak Response = 185908620 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #25: n-Tetracosane (C24)



Original Peak Response = 212528079

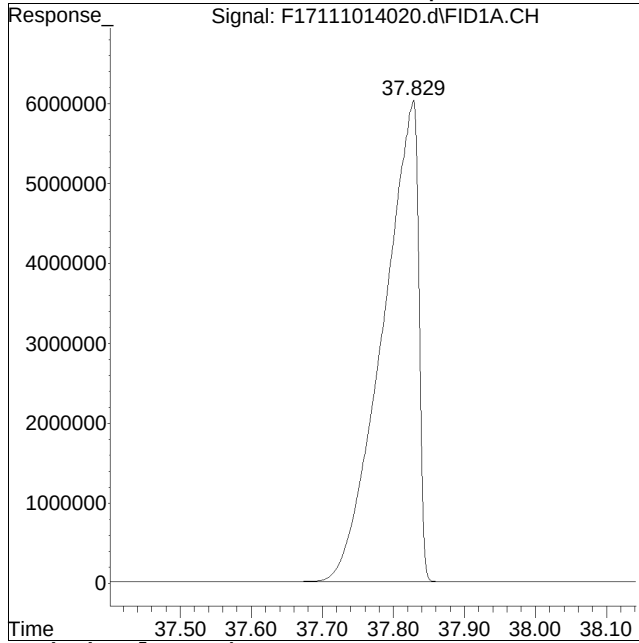
Manual Peak Response = 212476278 M4

M4 = Poor automated baseline construction.

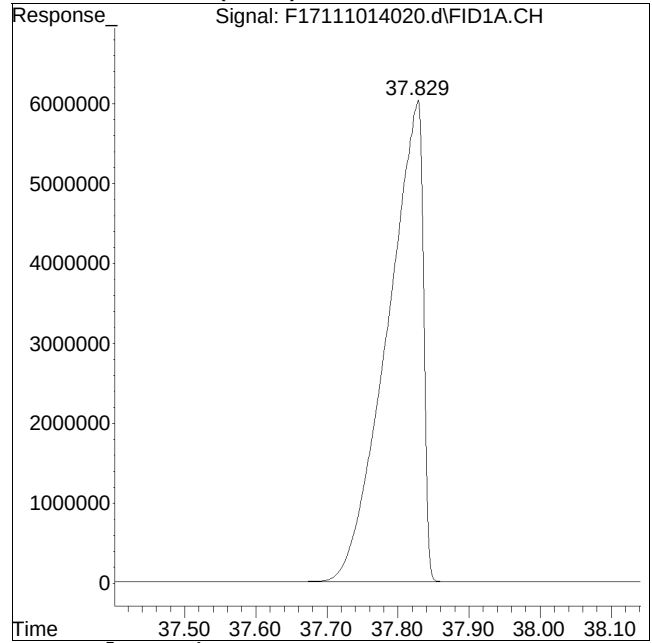
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #26: n-Pentacosane (C25)



Original Peak Response = 211323670



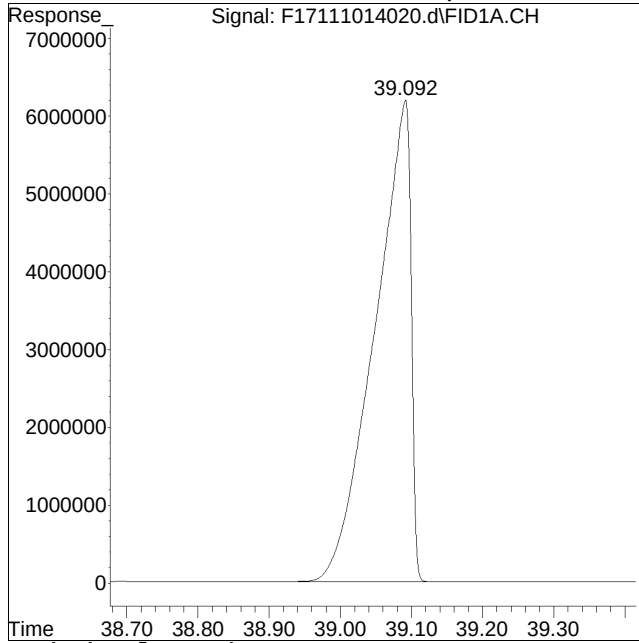
Manual Peak Response = 211377509 M4

M4 = Poor automated baseline construction.

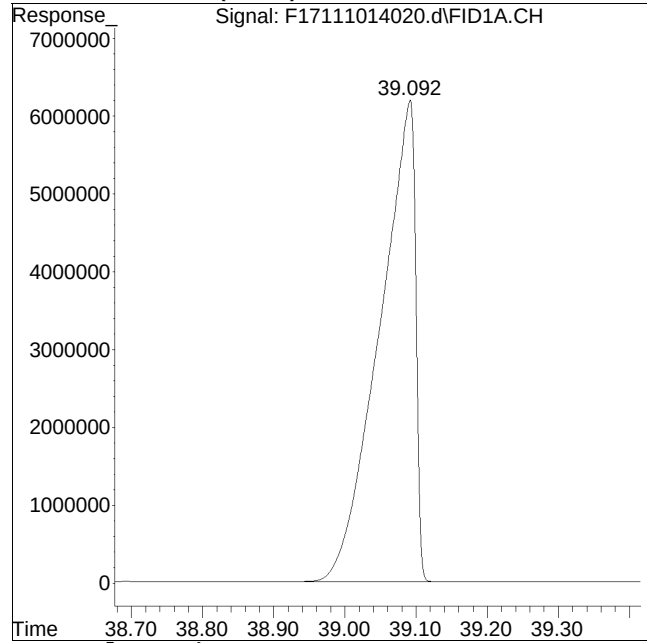
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #27: n-Hexacosane (C26)



Original Peak Response = 217009710



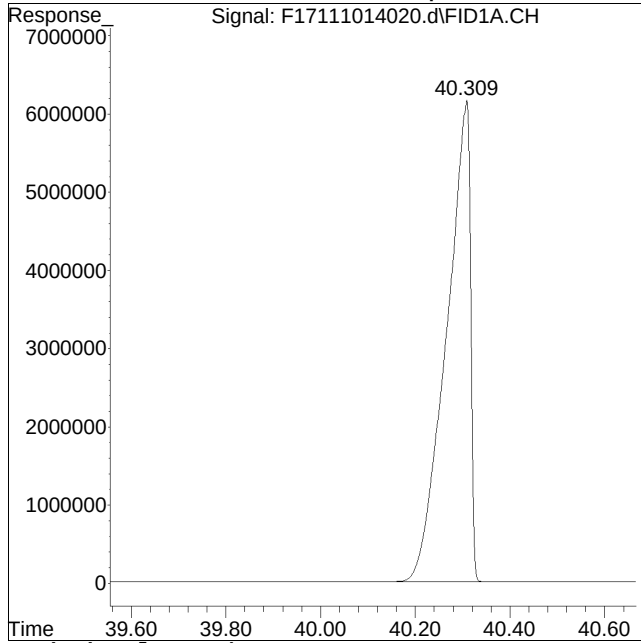
Manual Peak Response = 216859002 M4

M4 = Poor automated baseline construction.

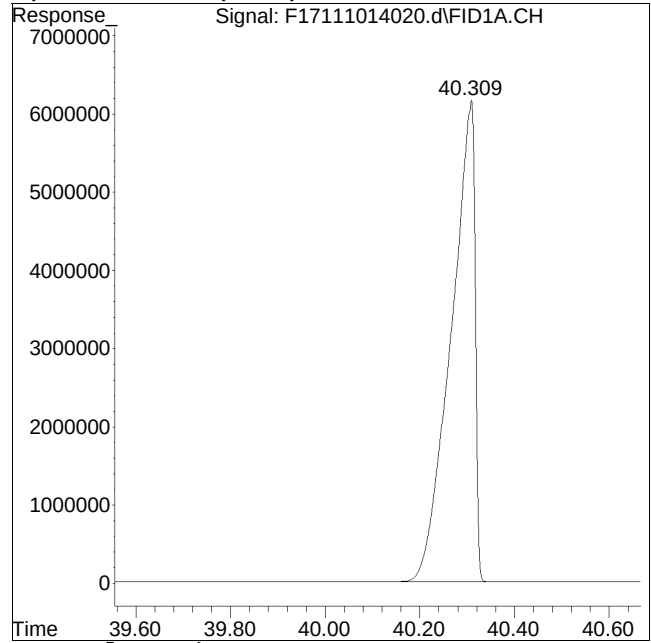
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #28: n-Heptacosane (C27)



Original Peak Response = 215224352



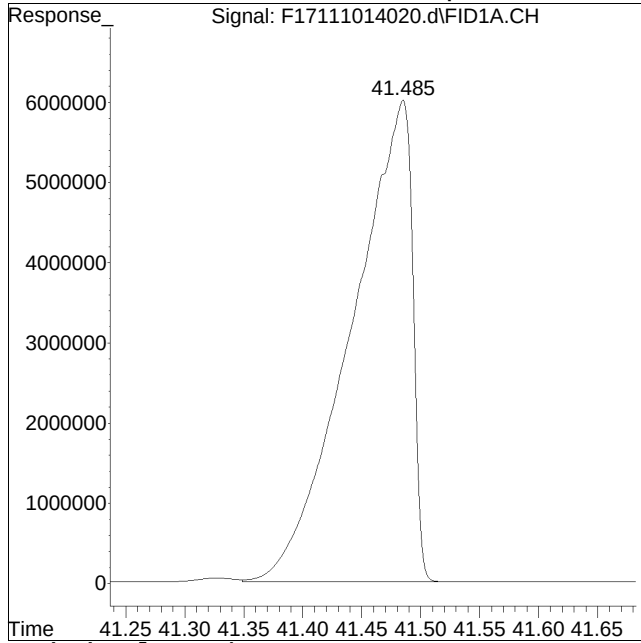
Manual Peak Response = 215525451 M4

M4 = Poor automated baseline construction.

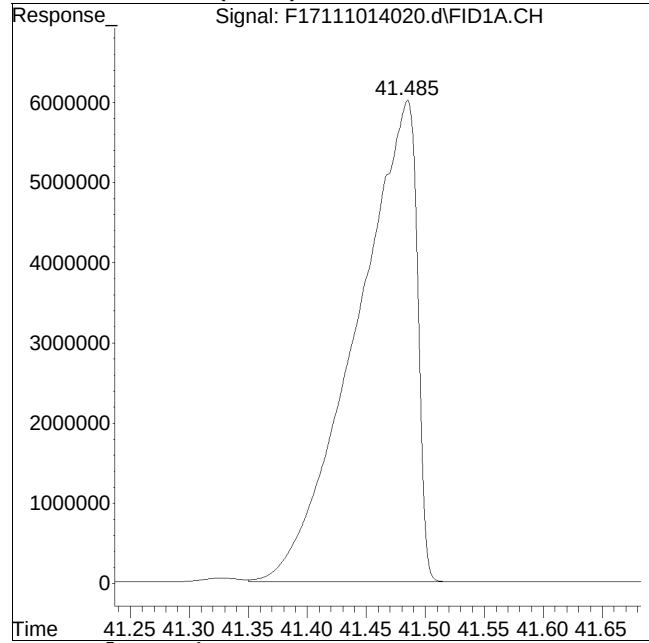
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #29: n-Octacosane (C28)



Original Peak Response = 215638183



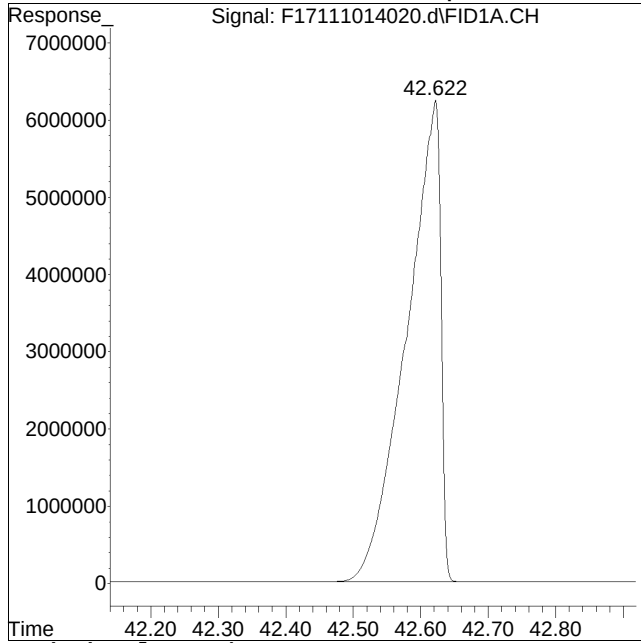
Manual Peak Response = 215543841 M4

M4 = Poor automated baseline construction.

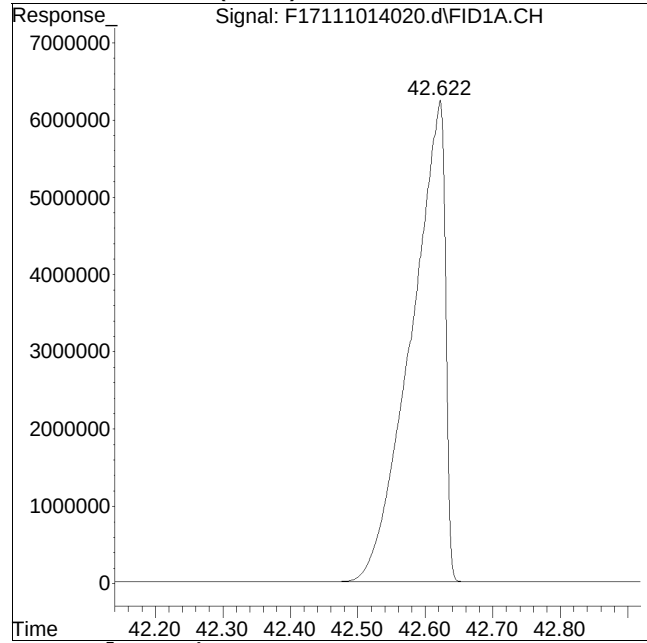
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #30: n-Nonacosane (C29)



Original Peak Response = 218189618



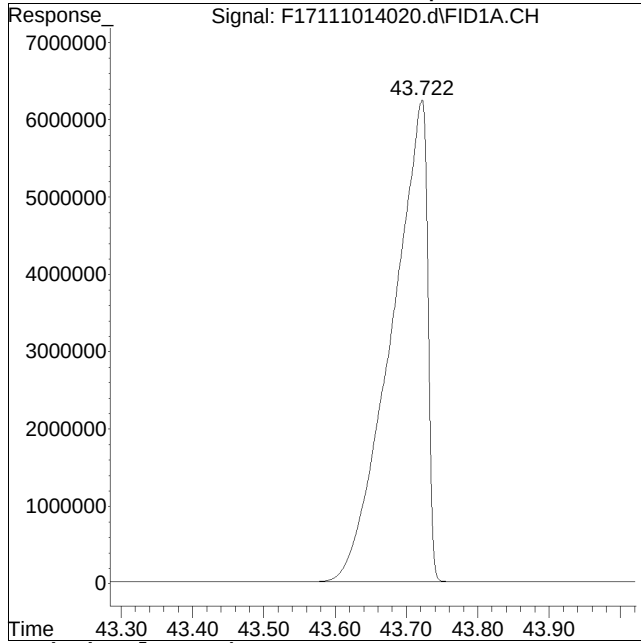
Manual Peak Response = 218200394 M4

M4 = Poor automated baseline construction.

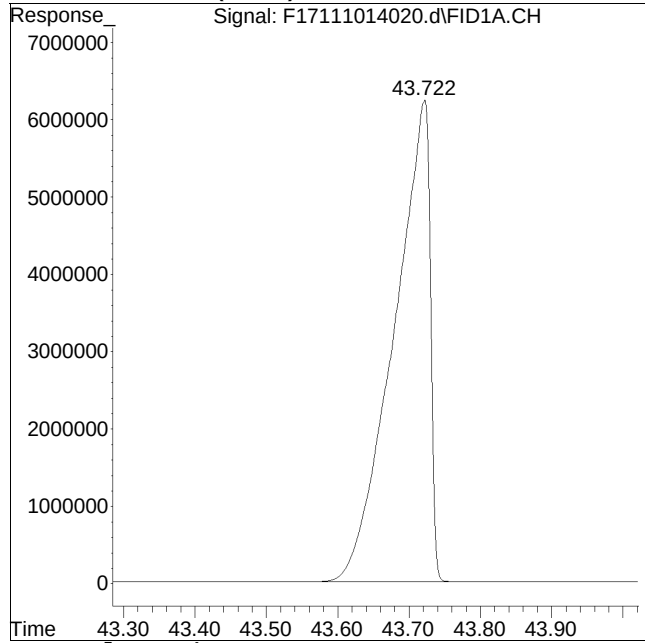
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #31: n-Triacontane (C30)



Original Peak Response = 219499838



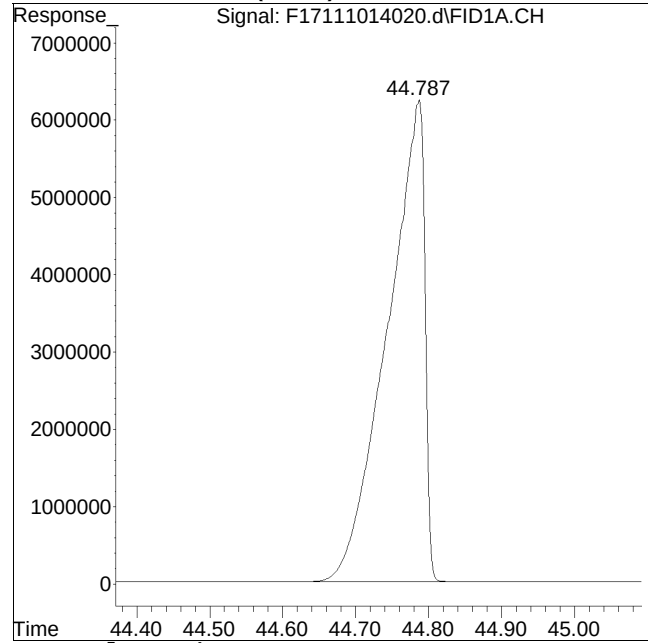
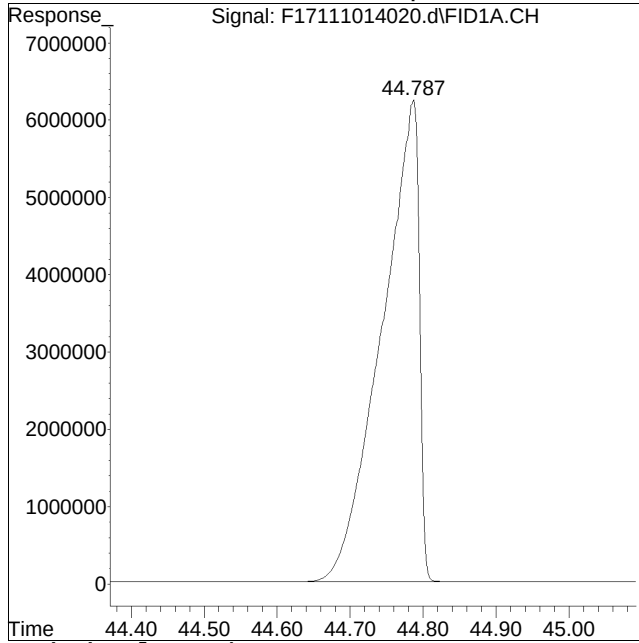
Manual Peak Response = 219666383 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #32: n-Hentriacontane (C31)



Original Peak Response = 220878986

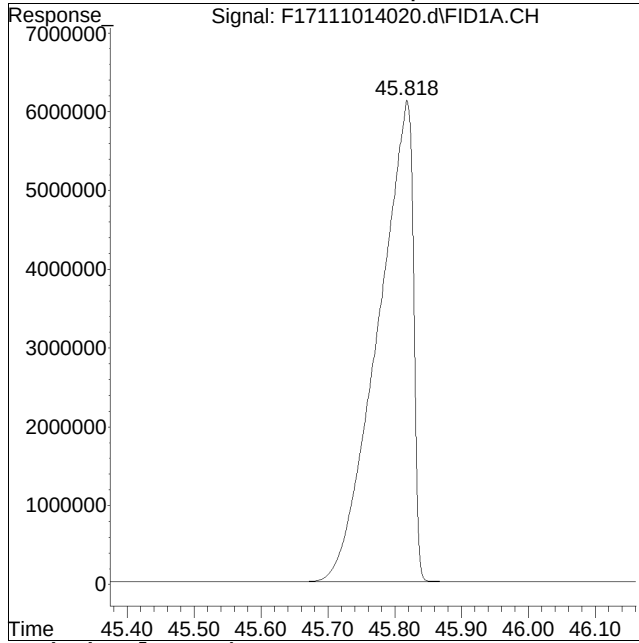
Manual Peak Response = 220837166 M4

M4 = Poor automated baseline construction.

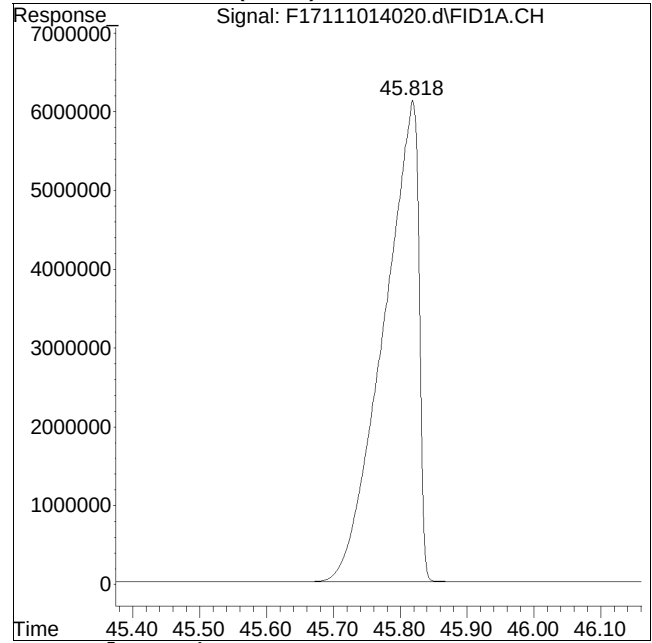
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #33: n-Dotriacontane (C32)



Original Peak Response = 223585637



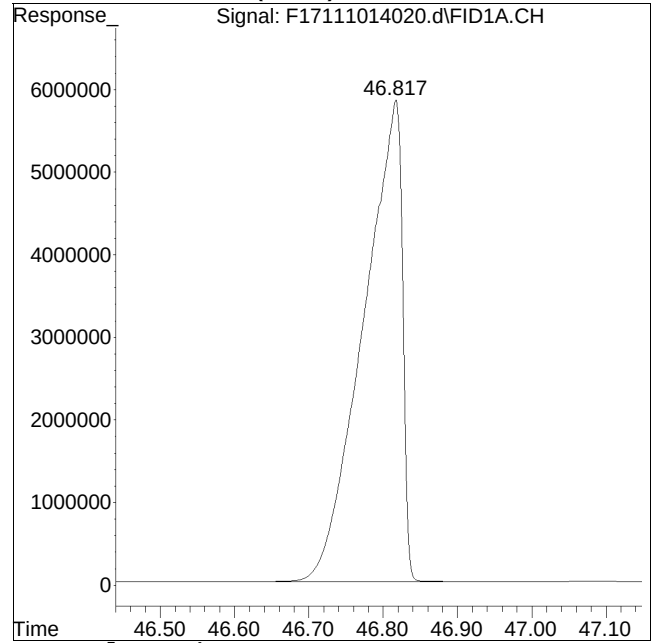
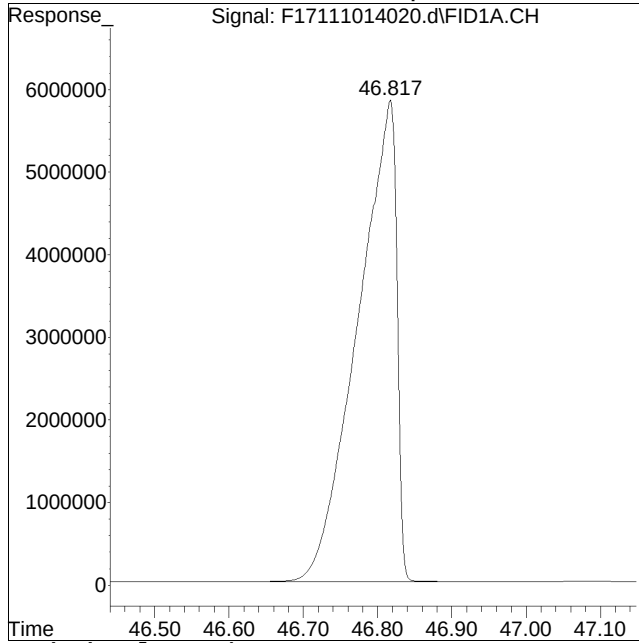
Manual Peak Response = 223659667 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #34: n-Tritriacontane (C33)



Original Peak Response = 212455471

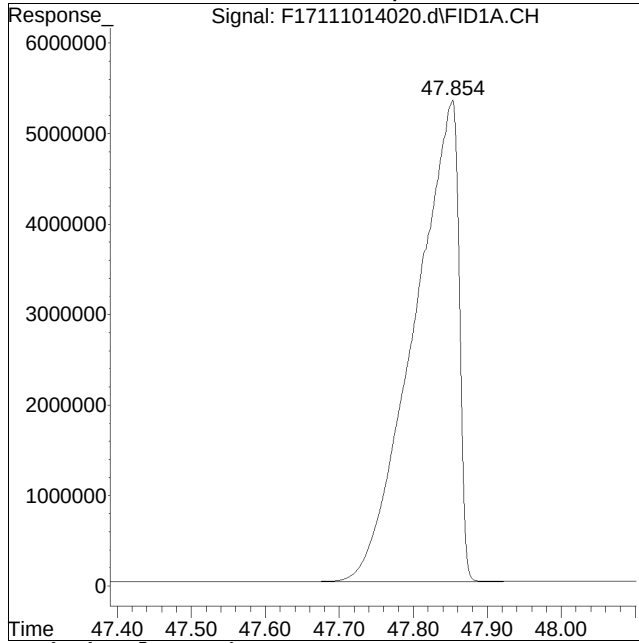
Manual Peak Response = 212305009 M4

M4 = Poor automated baseline construction.

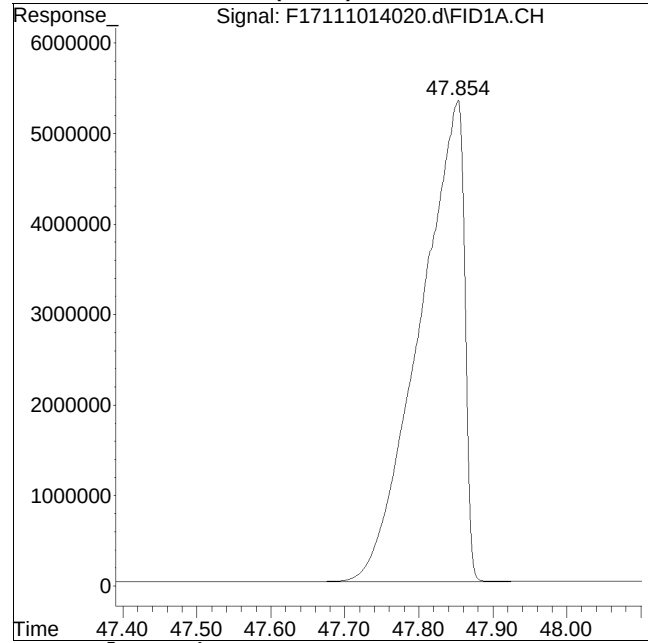
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #35: n-tetratriacontane (C34)



Original Peak Response = 222609394



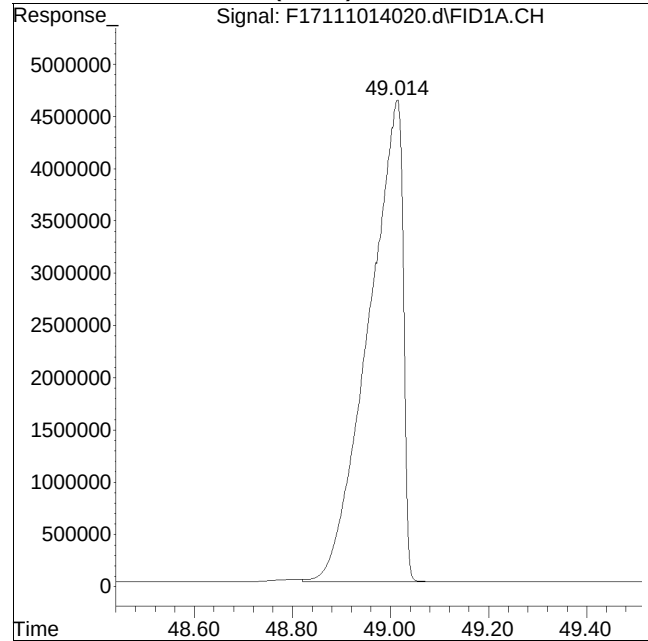
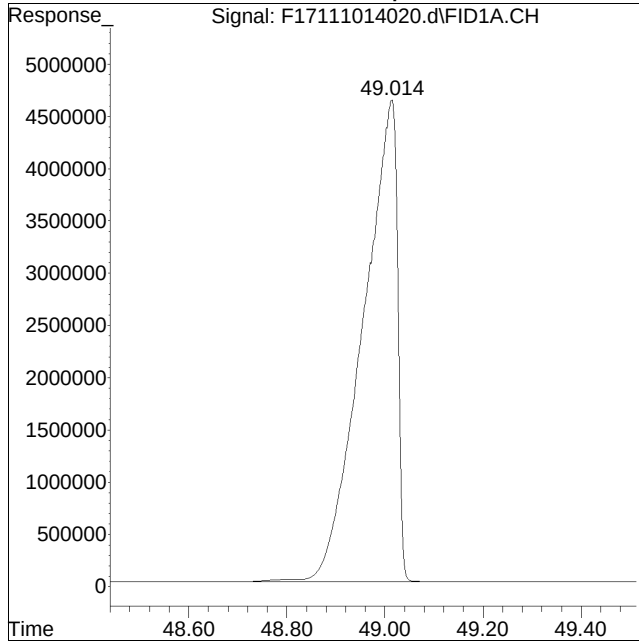
Manual Peak Response = 222719308 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #36: n-Pentatriacontane (C35)



Original Peak Response = 226214044

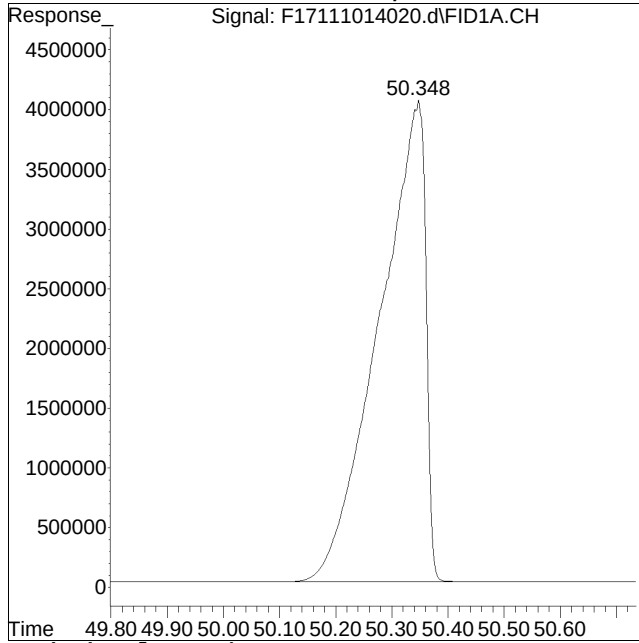
Manual Peak Response = 225244106 M4

M4 = Poor automated baseline construction.

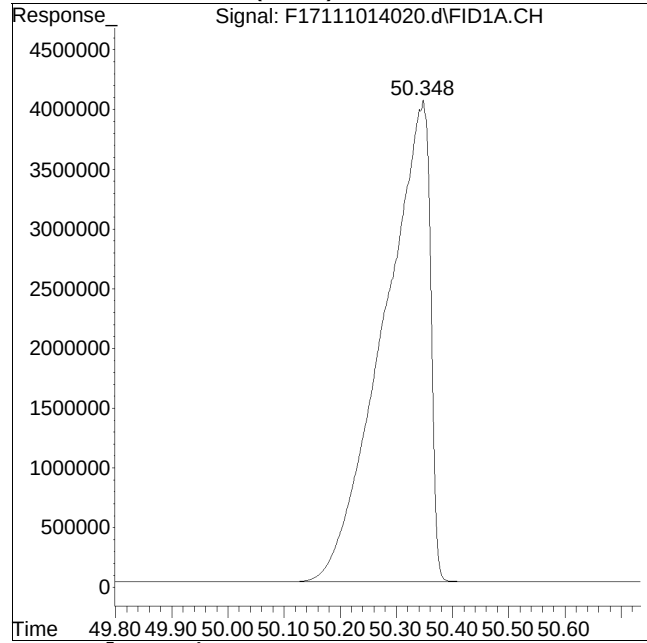
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #37: n-Hexatriacontane (C36)



Original Peak Response = 231785406



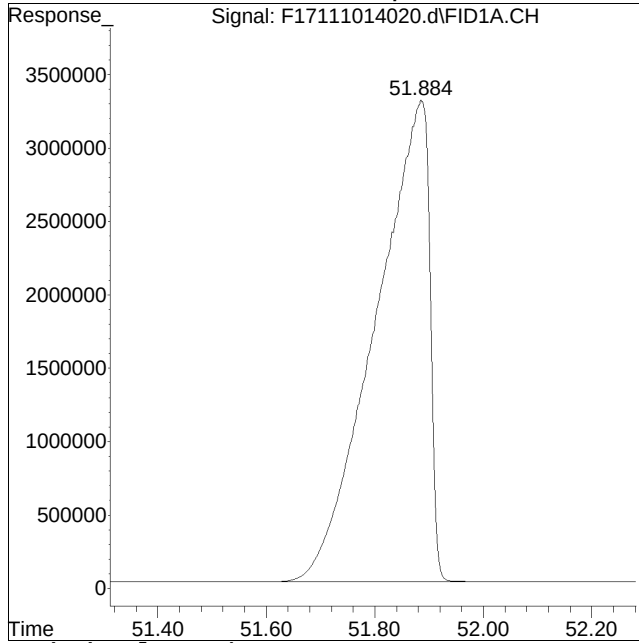
Manual Peak Response = 231762250 M4

M4 = Poor automated baseline construction.

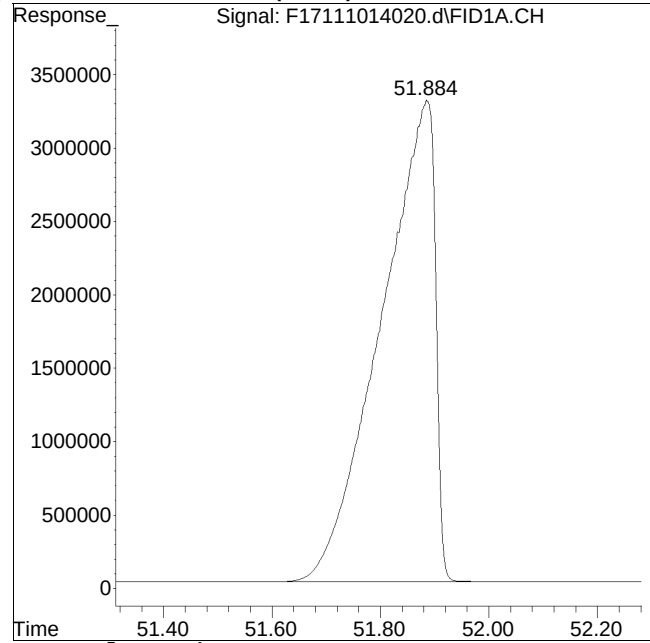
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #38: n-Heptatriacontane (C37)



Original Peak Response = 226689941



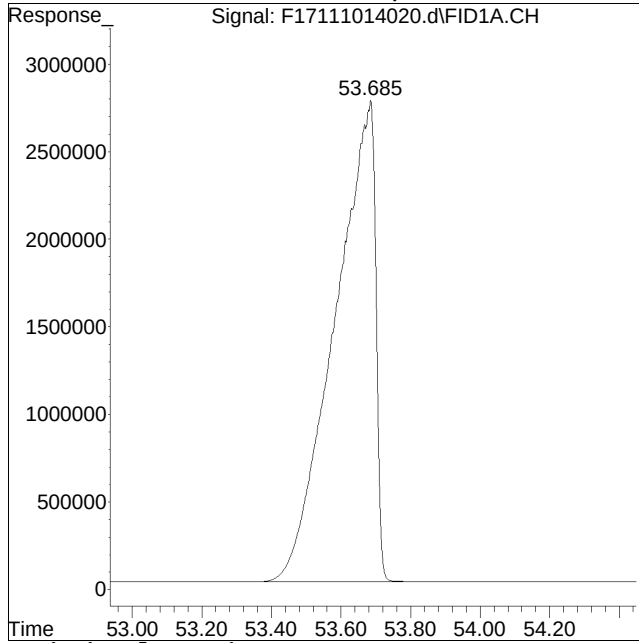
Manual Peak Response = 226986888 M4

M4 = Poor automated baseline construction.

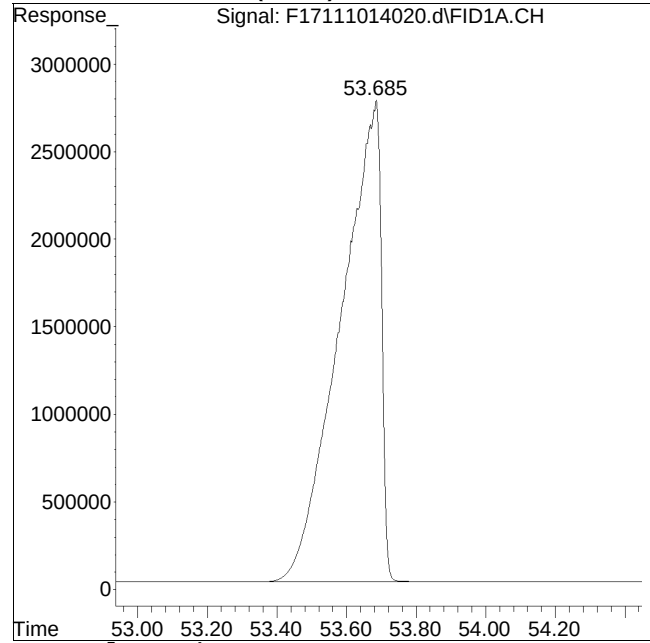
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #39: n-Octatriacontane (C38)



Original Peak Response = 222912539



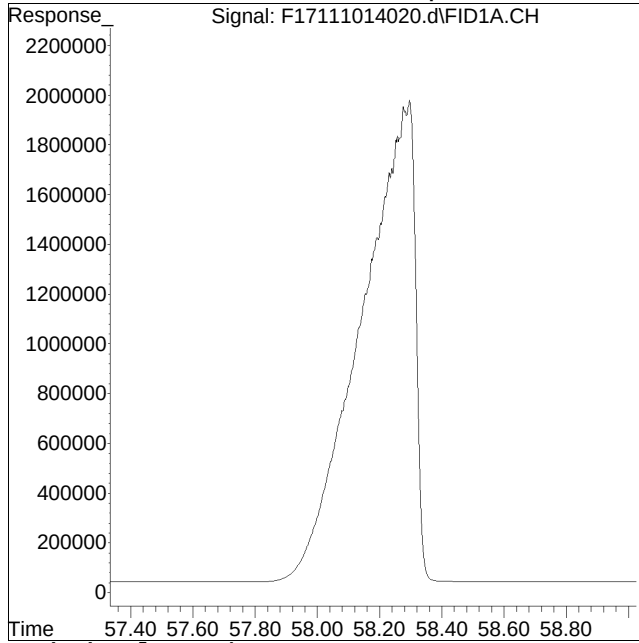
Manual Peak Response = 222999979 M4

M4 = Poor automated baseline construction.

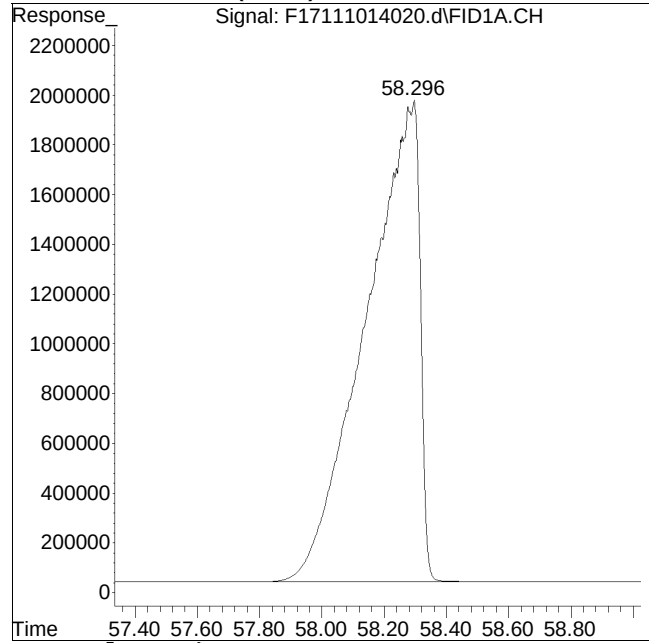
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #41: n-Tetracontane (C40)



Original Peak Response = 0



Manual Peak Response = 232479117 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014022.d
 Signal(s) : FID1A.CH
 Acq On : 11 Nov 2014 2:29 am
 Operator : FID17:NL
 Sample : I1711011406R
 Misc : WG743851, FRAV27 500ug/mL
 ALS Vial : 11 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:07:31 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound	R.T.	Response	Conc Units

Internal Standards			
1) I 5-alpha-androstane	31.267	53637140	50.000 ug/mL M4
System Monitoring Compounds			
19) s ortho-terphenyl	29.347	576911715	480.039 ug/mL M4
Spiked Amount 50.000	Range 50 - 130	Recovery = 960.08%#	
24) s d50-Tetracosane	36.014	469670030	495.236 ug/mL M4
Spiked Amount 50.000	Range 50 - 130	Recovery = 990.47%#	

Target Compounds

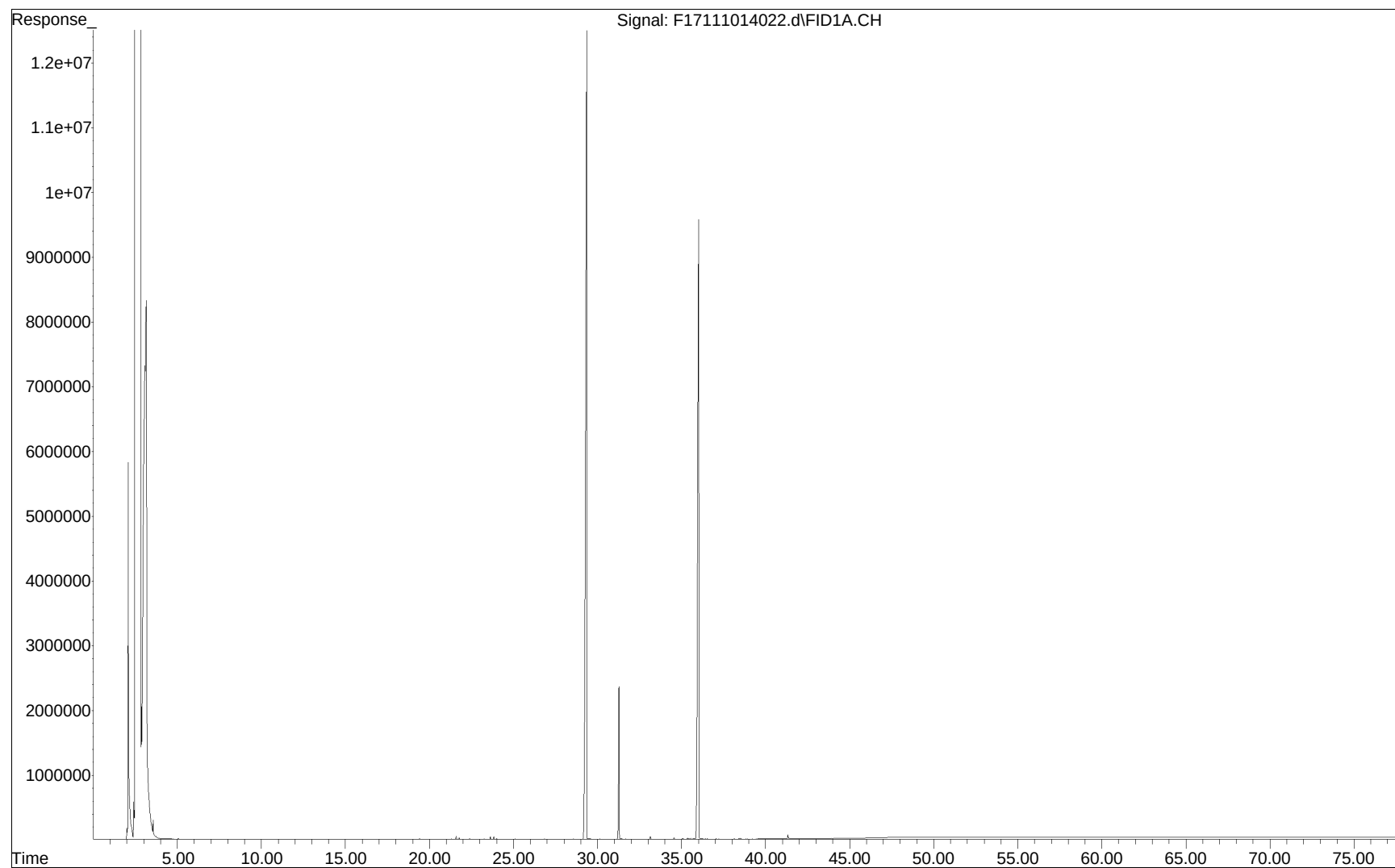
SemiQuant Compounds - Not Calibrated on this Instrument

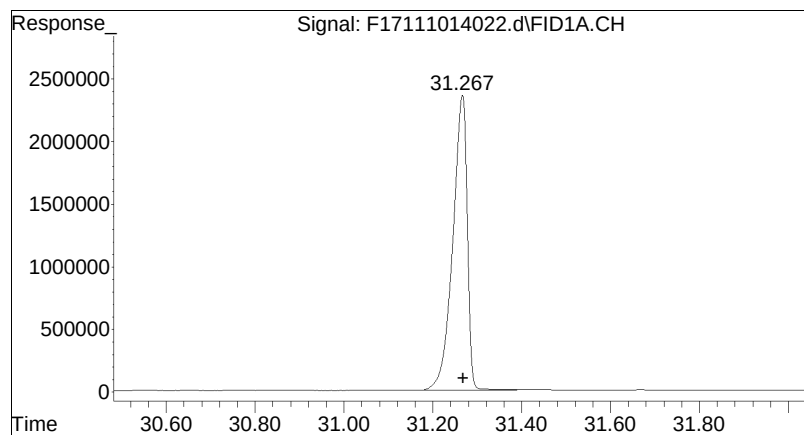
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

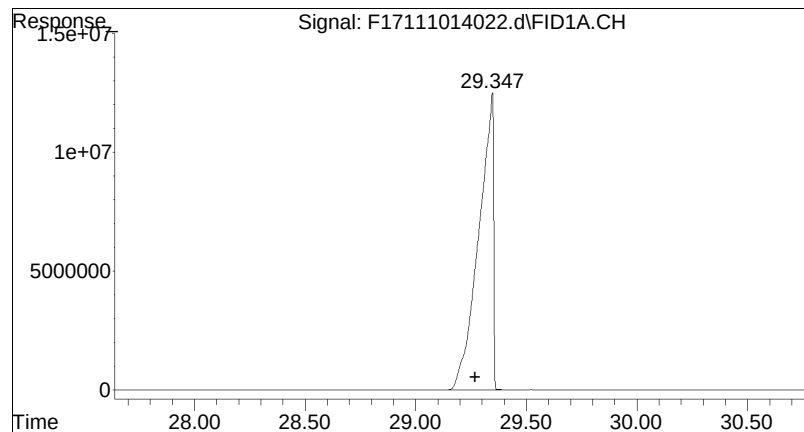
File : 0:\Forensics\Data\FID17\2014\NOV\NOV10\F17111014022.d
Operator : FID17:NL
Acquired : 11 Nov 2014 2:29 am using AcqMethod FID17.M
Sample Name: I1711011406R
Instrument: FID17
Misc Info : WG743851, FRAV27 500ug/mL
Vial Number: 11
CurrentMeth: 0:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M





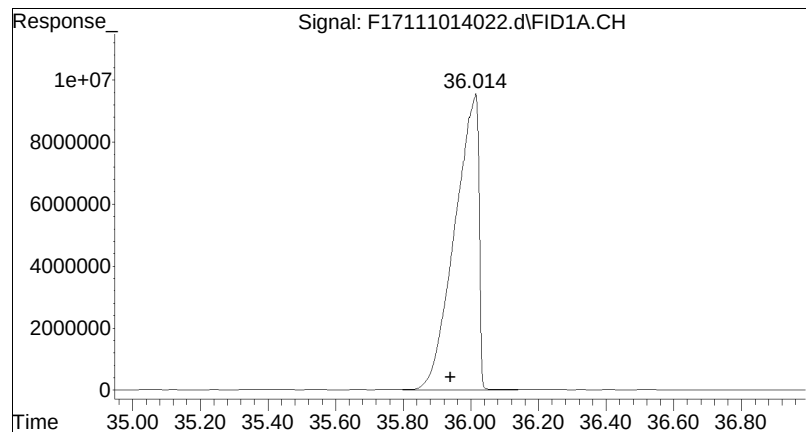
#1 5-alpha-androstane

R.T.: 31.267 min
Delta R.T.: -0.002 min
Response: 53637140
Conc: 50.00 ug/mL M4



#19 ortho-terphenyl

R.T.: 29.347 min
Delta R.T.: 0.076 min
Response: 576911715
Conc: 480.04 ug/mL M4



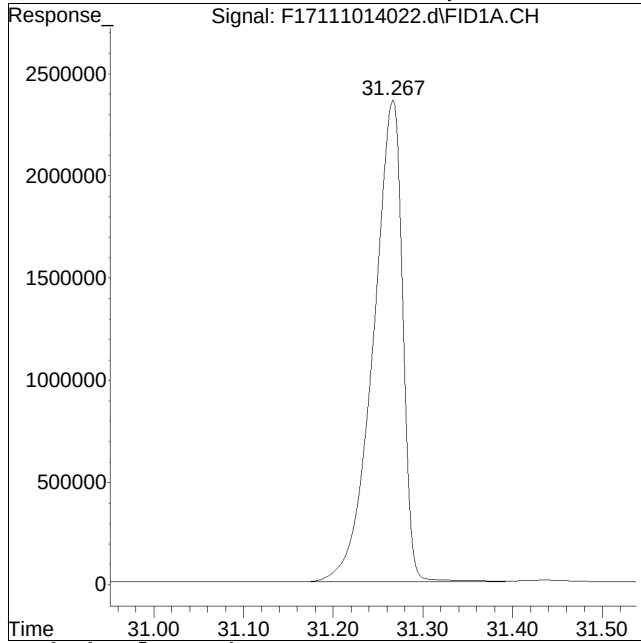
#24 d50-Tetracosane

R.T.: 36.014 min
Delta R.T.: 0.074 min
Response: 469670030
Conc: 495.24 ug/mL M4

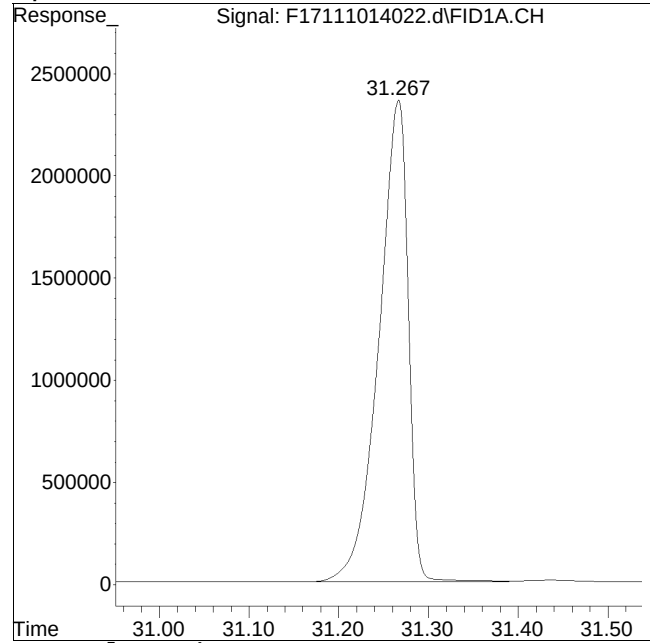
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014022.d Operator : FID17:NL
Date Inj'd : 11/11/2014 2:29 am Instrument : FID17
Sample : I1711011406R Quant Date : 11/14/2014 12:19 pm

Compound #1: 5-alpha-androstane



Original Peak Response = 53644600



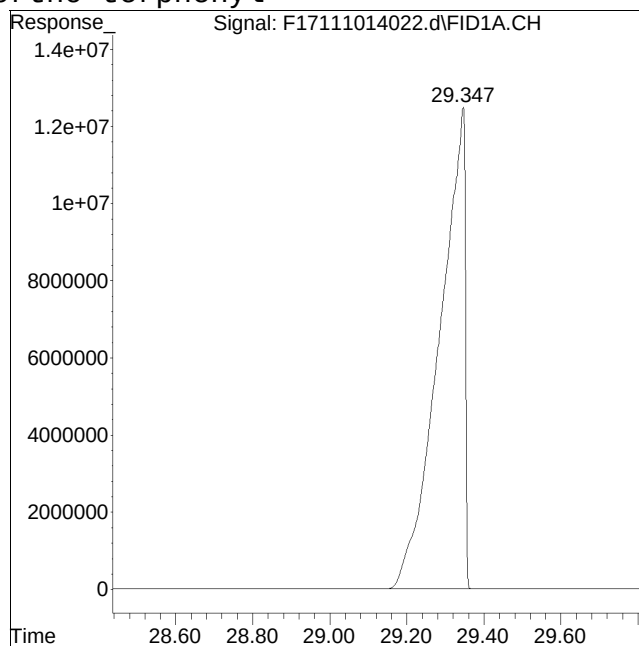
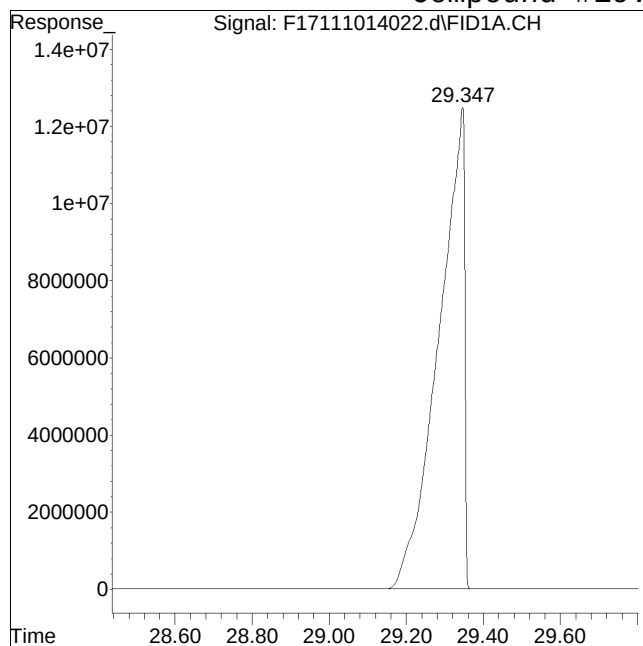
Manual Peak Response = 53637140 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014022.d Operator : FID17:NL
Date Inj'd : 11/11/2014 2:29 am Instrument : FID17
Sample : I1711011406R Quant Date : 11/14/2014 12:19 pm

Compound #19: ortho-terphenyl



Original Peak Response = 575997155

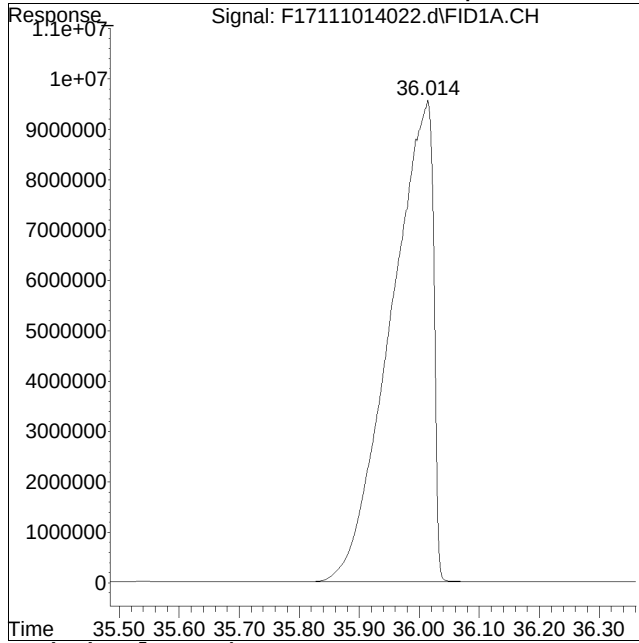
Manual Peak Response = 576911715 M4

M4 = Poor automated baseline construction.

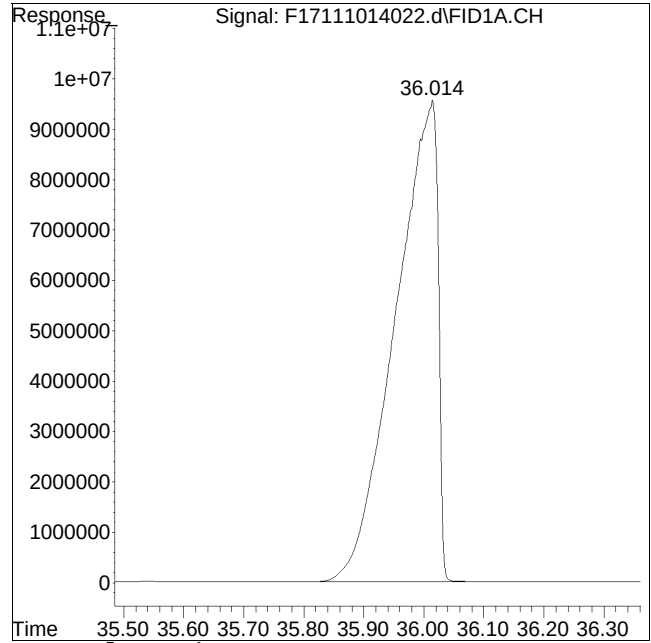
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014022.d Operator : FID17:NL
Date Inj'd : 11/11/2014 2:29 am Instrument : FID17
Sample : I1711011406R Quant Date : 11/14/2014 12:19 pm

Compound #24: d50-Tetracosane



Original Peak Response = 469841556



Manual Peak Response = 469670030 M4

M4 = Poor automated baseline construction.

Initial Calibration Verification

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014028.d
 Signal(s) : FID1A.CH
 Acq On : 11 Nov 2014 6:58 am
 Operator : FID17:NL
 Sample : WG743851-7,42
 Misc : WG743851,FRAV28 50ug/mL
 ALS Vial : 14 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 15:07:10 2014
 Quant Method : O:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Mon Nov 17 15:07:02 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 I	5-alpha-androstane	50.000	50.000	0.0	106	0.00
2 t	n-Octane (C8)	50.000	46.946	6.1	101	-0.03
3 t	n-Nonane (C9)	50.000	48.656	2.7	105	-0.02
4 t	n-Decane (C10)	50.000	50.645	-1.3	108	-0.01
5 t	n-Undecane (C11)	50.000	49.632	0.7	104	-0.01
6 t	n-Dodecane (C12)	50.000	49.480	1.0	104	-0.02
7 t	n-Tridecane (C13)	50.000	49.285	1.4	103	-0.02
9 t	n-Tetradecane (C14)	50.000	50.581	-1.2	106	-0.01
11 t	n-Pentadecane (C15)	50.000	49.125	1.8	103	-0.02
12 t	n-Hexadecane (C16)	50.000	49.127	1.7	104	-0.02
14 t	n-Heptadecane (C17)	50.000	49.744	0.5	104	-0.02
15 t	Pristane	50.000	48.613	2.8	103	-0.02
16 t	n-Octadecane (C18)	50.000	48.217	3.6	101	-0.02
17 t	Phytane	50.000	55.695	-11.4	118	-0.02
18 t	n-Nonadecane (C19)	50.000	48.179	3.6	101	-0.02
19 s	ortho-terphenyl	50.000	49.050	1.9	105	-0.02
20 t	n-Eicosane (C20)	50.000	48.449	3.1	102	-0.02
21 t	n-Heneicosane (C21)	50.000	48.514	3.0	103	-0.02
22 t	n-Docosane (C22)	50.000	48.284	3.4	102	-0.02
23 t	n-Tricosane (C23)	50.000	47.984	4.0	102	-0.02
24 s	d50-Tetracosane	50.000	48.399	3.2	105	-0.02
25 t	n-Tetracosane (C24)	50.000	47.916	4.2	102	-0.02
26 t	n-Pentacosane (C25)	50.000	48.148	3.7	103	-0.02
27 t	n-Hexacosane (C26)	50.000	47.888	4.2	102	-0.02
28 t	n-Heptacosane (C27)	50.000	47.537	4.9	102	-0.03
29 t	n-Octacosane (C28)	50.000	47.578	4.8	103	-0.02
30 t	n-Nonacosane (C29)	50.000	47.654	4.7	103	-0.03
31 t	n-Triacontane (C30)	50.000	47.330	5.3	103	-0.03
32 t	n-Hentriacontane (C31)	50.000	47.247	5.5	103	-0.03
33 t	n-Dotriacontane (C32)	50.000	46.266	7.5	101	-0.03
34 t	n-Tritriacontane (C33)	50.000	47.131	5.7	103	-0.03
35 t	n-tetratriacontane (C34)	50.000	47.532	4.9	104	-0.03
36 t	n-Pentatriacontane (C35)	50.000	47.134	5.7	103	-0.04
37 t	n-Hexatriacontane (C36)	50.000	49.057	1.9	108	-0.04
38 t	n-Heptatriacontane (C37)	50.000	46.715	6.6	103	-0.06
39 t	n-Octatriacontane (C38)	50.000	47.501	5.0	104	-0.06
41 t	n-Tetracontane (C40)	50.000	43.639	12.7	95	-0.09

Evaluate Continuing Calibration Report - Not Found

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Mass Discrimination (Response)	Ratio	Range Limits
n-Hexatriacontane (C36) to n-Eicosane (C20)	1.09	0.85 - 1.15

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014028.d
 Signal(s) : FID1A.CH
 Acq On : 11 Nov 2014 6:58 am
 Operator : FID17:NL
 Sample : WG743851-7,42
 Misc : WG743851, FRAV28 50ug/mL
 ALS Vial : 14 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 15:07:10 2014
 Quant Method : O:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Mon Nov 17 15:07:02 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 I	5-alpha-androstane	50.000	50.000	0.0	106	0.00
2 t	n-Octane (C8)	50.000	46.946	6.1	101	-0.03
3 t	n-Nonane (C9)	50.000	48.656	2.7	105	-0.02
4 t	n-Decane (C10)	50.000	50.645	-1.3	108	-0.01
5 t	n-Undecane (C11)	50.000	49.632	0.7	104	-0.01
6 t	n-Dodecane (C12)	50.000	49.480	1.0	104	-0.02
7 t	n-Tridecane (C13)	50.000	49.285	1.4	103	-0.02
9 t	n-Tetradecane (C14)	50.000	50.581	-1.2	106	-0.01
11 t	n-Pentadecane (C15)	50.000	49.125	1.8	103	-0.02
12 t	n-Hexadecane (C16)	50.000	49.127	1.7	104	-0.02
14 t	n-Heptadecane (C17)	50.000	49.744	0.5	104	-0.02
15 t	Pristane	50.000	48.613	2.8	103	-0.02
16 t	n-Octadecane (C18)	50.000	48.217	3.6	101	-0.02
17 t	Phytane	50.000	55.695	-11.4	118	-0.02
18 t	n-Nonadecane (C19)	50.000	48.179	3.6	101	-0.02
19 s	ortho-terphenyl	50.000	49.050	1.9	105	-0.02
20 t	n-Eicosane (C20)	50.000	48.449	3.1	102	-0.02
21 t	n-Heneicosane (C21)	50.000	48.514	3.0	103	-0.02
22 t	n-Docosane (C22)	50.000	48.284	3.4	102	-0.02
23 t	n-Tricosane (C23)	50.000	47.984	4.0	102	-0.02
24 s	d50-Tetracosane	50.000	48.399	3.2	105	-0.02
25 t	n-Tetracosane (C24)	50.000	47.916	4.2	102	-0.02
26 t	n-Pentacosane (C25)	50.000	48.148	3.7	103	-0.02
27 t	n-Hexacosane (C26)	50.000	47.888	4.2	102	-0.02
28 t	n-Heptacosane (C27)	50.000	47.537	4.9	102	-0.03
29 t	n-Octacosane (C28)	50.000	47.578	4.8	103	-0.02
30 t	n-Nonacosane (C29)	50.000	47.654	4.7	103	-0.03
31 t	n-Triacontane (C30)	50.000	47.330	5.3	103	-0.03
32 t	n-Hentriacontane (C31)	50.000	47.247	5.5	103	-0.03
33 t	n-Dotriacontane (C32)	50.000	46.266	7.5	101	-0.03
34 t	n-Tritriacontane (C33)	50.000	47.131	5.7	103	-0.03
35 t	n-tetratriacontane (C34)	50.000	47.532	4.9	104	-0.03
36 t	n-Pentatriacontane (C35)	50.000	47.134	5.7	103	-0.04
37 t	n-Hexatriacontane (C36)	50.000	49.057	1.9	108	-0.04
38 t	n-Heptatriacontane (C37)	50.000	46.715	6.6	103	-0.06
39 t	n-Octatriacontane (C38)	50.000	47.501	5.0	104	-0.06
41 t	n-Tetracontane (C40)	50.000	43.639	12.7	95	-0.09

Evaluate Continuing Calibration Report - Not Found

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Mass Discrimination (Response)	Ratio	Range Limits
n-Hexatriacontane (C36) to n-Eicosane (C20)	1.09	0.85 - 1.15

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014028.d
 Signal(s) : FID1A.CH
 Acq On : 11 Nov 2014 6:58 am
 Operator : FID17:NL
 Sample : WG743851-7,42
 Misc : WG743851,FRAV28 50ug/mL
 ALS Vial : 14 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 15:07:10 2014
 Quant Method : O:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Mon Nov 17 15:07:02 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.264	57779435	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.248	62373197	49.050	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 98.10%
24) s	d50-Tetracosane	35.919	49983701	48.399	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 96.80%
Target Compounds					
2) t	n-Octane (C8)	5.574	45937686	46.946	ug/mL M4
3) t	n-Nonane (C9)	7.775	48980250	48.656	ug/mL M4
4) t	n-Decane (C10)	10.264	52302066	50.645	ug/mL M4
5) t	n-Undecane (C11)	12.778	51812091	49.632	ug/mL M4
6) t	n-Dodecane (C12)	15.208	52486341	49.480	ug/mL M4
7) t	n-Tridecane (C13)	17.519	52668836	49.285	ug/mL M4
9) t	n-Tetradecane (C14)	19.707	54725250	50.581	ug/mL M4
11) t	n-Pentadecane (C15)	21.775	54168850	49.125	ug/mL M4
12) t	n-Hexadecane (C16)	23.736	54515136	49.127	ug/mL M4
14) t	n-Heptadecane (C17)	25.599	54810624	49.744	ug/mL M4
15) t	Pristane	25.710	55331736	48.613	ug/mL M4
16) t	n-Octadecane (C18)	27.371	54607398	48.217	ug/mL M4
17) t	Phytane	27.534	55654924	55.695	ug/mL M4
18) t	n-Nonadecane (C19)	29.061	54399183	48.179	ug/mL M4
20) t	n-Eicosane (C20)	30.670	54603600	48.449	ug/mL M4
21) t	n-Heneicosane (C21)	32.211	55087763	48.514	ug/mL M4
22) t	n-Docosane (C22)	33.691	55381679	48.284	ug/mL M4
23) t	n-Tricosane (C23)	35.108	55584473	47.984	ug/mL M4
25) t	n-Tetracosane (C24)	36.470	55601443	47.916	ug/mL M4
26) t	n-Pentacosane (C25)	37.779	55584700	48.148	ug/mL M4
27) t	n-Hexacosane (C26)	39.039	56520227	47.888	ug/mL M4
28) t	n-Heptacosane (C27)	40.257	55822334	47.537	ug/mL M4
29) t	n-Octacosane (C28)	41.429	55792477	47.578	ug/mL M4
30) t	n-Nonacosane (C29)	42.567	56007887	47.654	ug/mL M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014028.d
 Signal(s) : FID1A.CH
 Acq On : 11 Nov 2014 6:58 am
 Operator : FID17:NL
 Sample : WG743851-7,42
 Misc : WG743851,FRAV28 50ug/mL
 ALS Vial : 14 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 15:07:10 2014
 Quant Method : O:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Mon Nov 17 15:07:02 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc Units
31) t	n-Triacontane (C30)	43.664	55890152	47.330 ug/mL M4
32) t	n-Hentriacontane (C31)	44.729	55831872	47.247 ug/mL M4
33) t	n-Dotriacontane (C32)	45.759	55077837	46.266 ug/mL M4
34) t	n-Tritriacontane (C33)	46.757	53104426	47.131 ug/mL M4
35) t	n-tetratriacontane (C34)	47.781	55861107	47.532 ug/mL M4
36) t	n-Pentatriacontane (C35)	48.932	55722183	47.134 ug/mL M4
37) t	n-Hexatriacontane (C36)	50.249	59610361	49.057 ug/mL M4
38) t	n-Heptatriacontane (C37)	51.766	55634288	46.715 ug/mL M4
39) t	n-Octatriacontane (C38)	53.545	55500204	47.501 ug/mL M4
41) t	n-Tetracontane (C40)	58.090	53295101	43.639 ug/mL M4

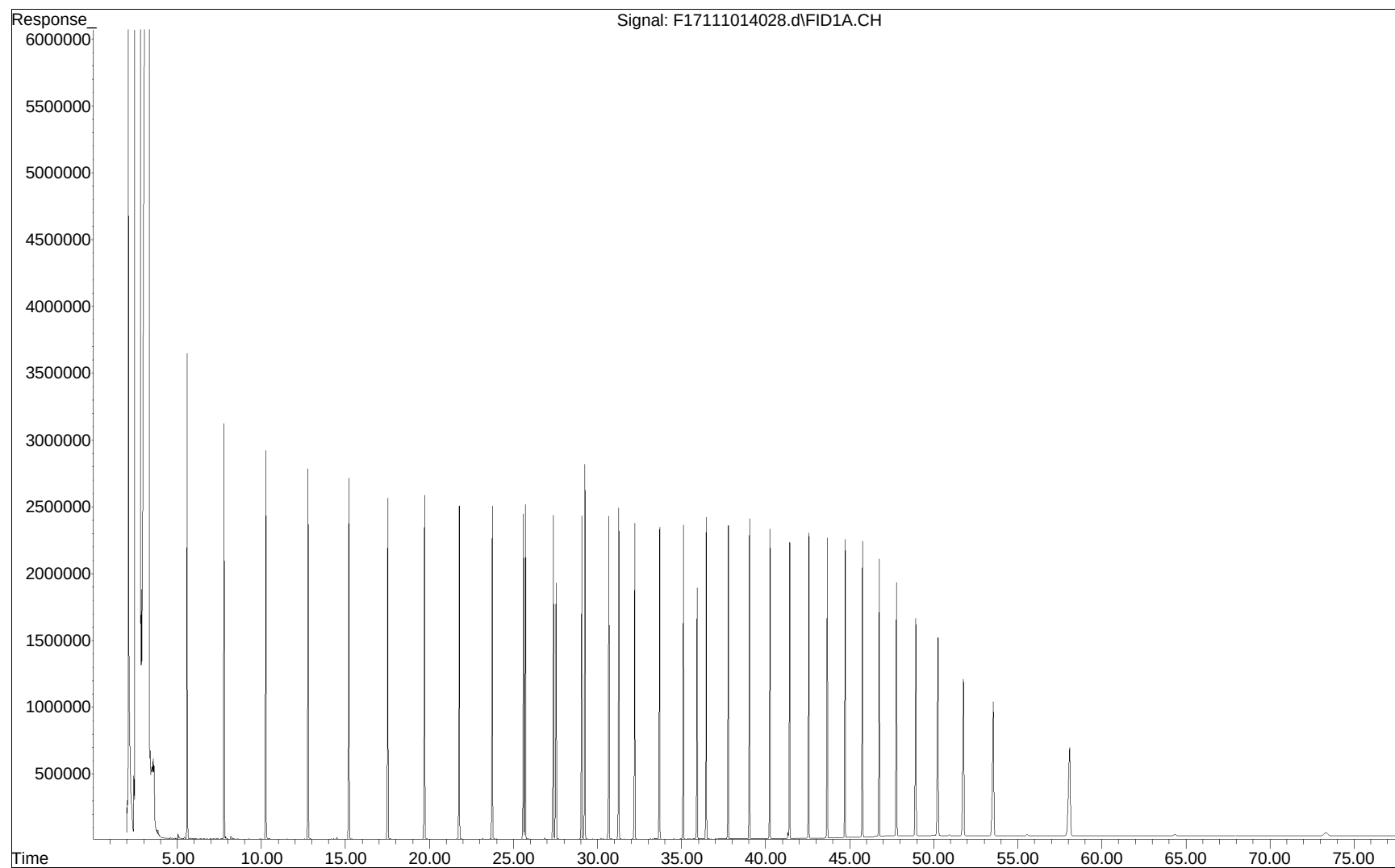
SemiQuant Compounds - Not Calibrated on this Instrument

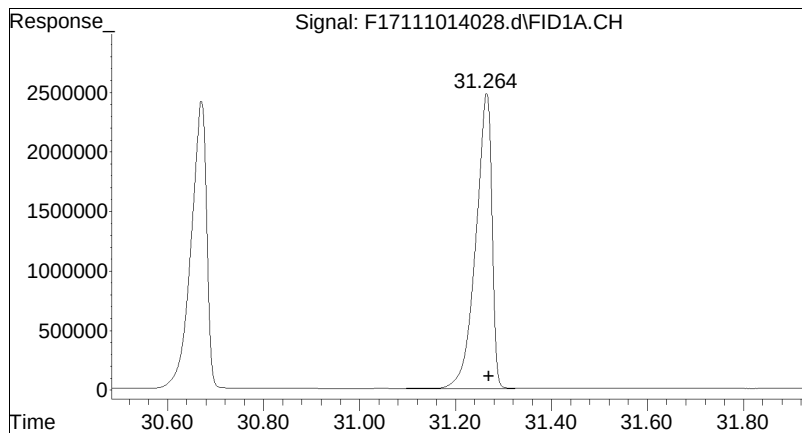
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

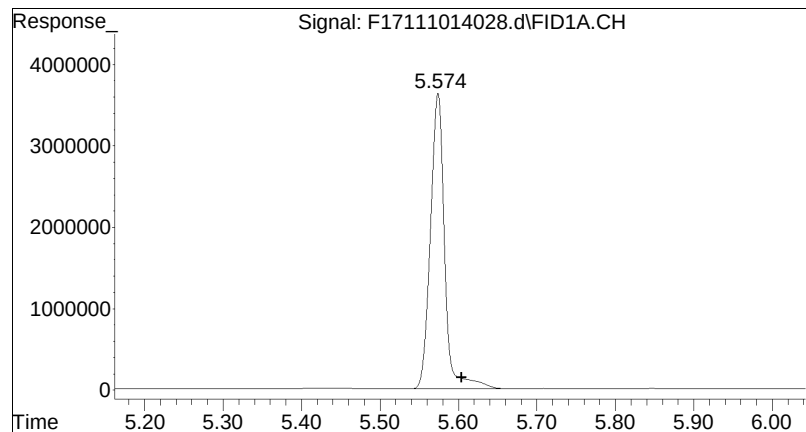
File : 0:\Forensics\Data\FID17\2014\NOV\NOV10\F17111014028.d
Operator : FID17:NL
Acquired : 11 Nov 2014 6:58 am using AcqMethod FID17.M
Sample Name: WG743851-7,42
Instrument: FID17
Misc Info : WG743851,FRAV28 50ug/mL
Vial Number: 14
CurrentMeth: 0:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M





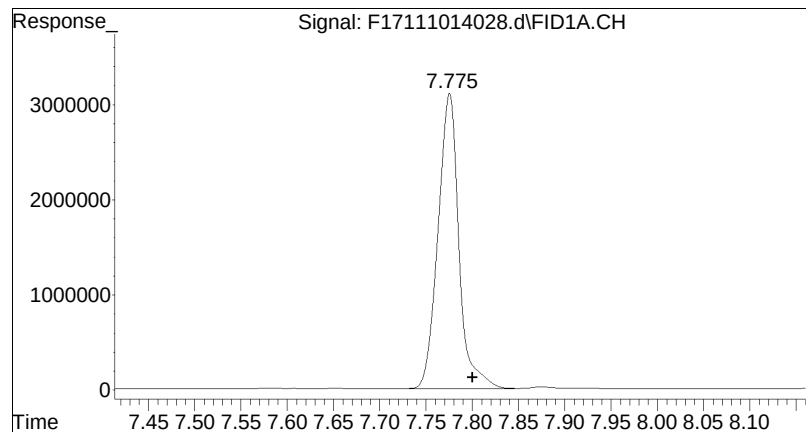
#1 5-alpha-androstane

R.T.: 31.264 min
Delta R.T.: -0.005 min
Response: 57779435
Conc: 50.00 ug/mL M4



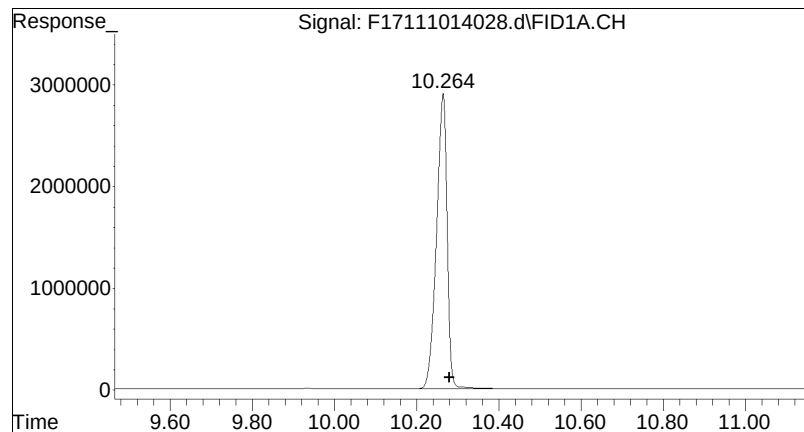
#2 n-Octane (C8)

R.T.: 5.574 min
Delta R.T.: -0.030 min
Response: 45937686
Conc: 46.95 ug/mL M4



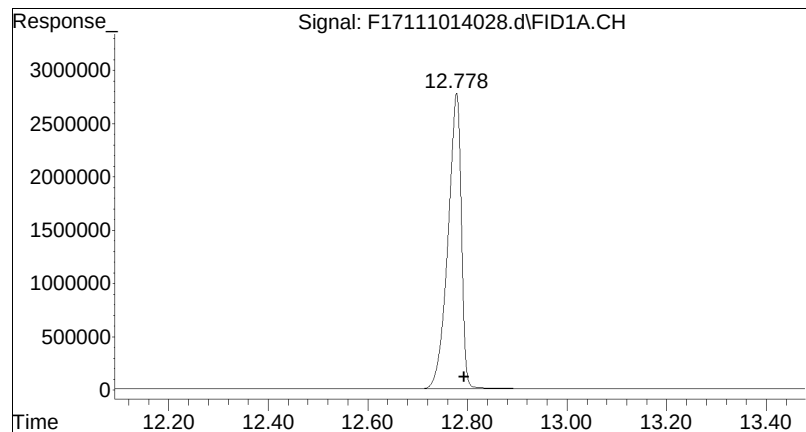
#3 n-Nonane (C9)

R.T.: 7.775 min
Delta R.T.: -0.025 min
Response: 48980250
Conc: 48.66 ug/mL M4



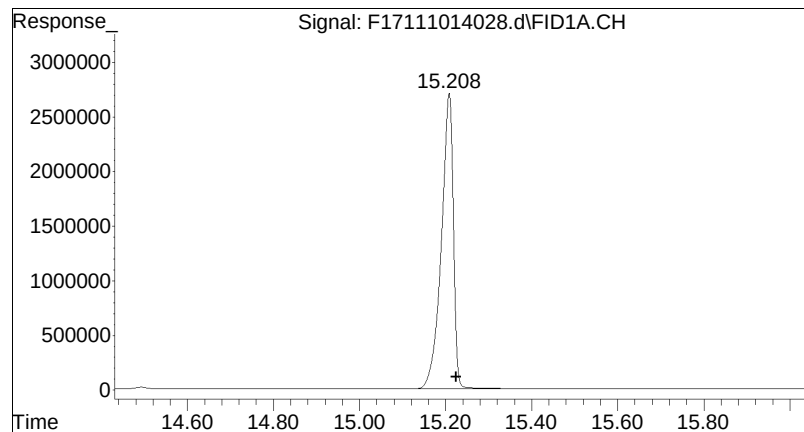
#4 n-Decane (C10)

R.T.: 10.264 min
Delta R.T.: -0.015 min
Response: 52302066
Conc: 50.65 ug/mL M4



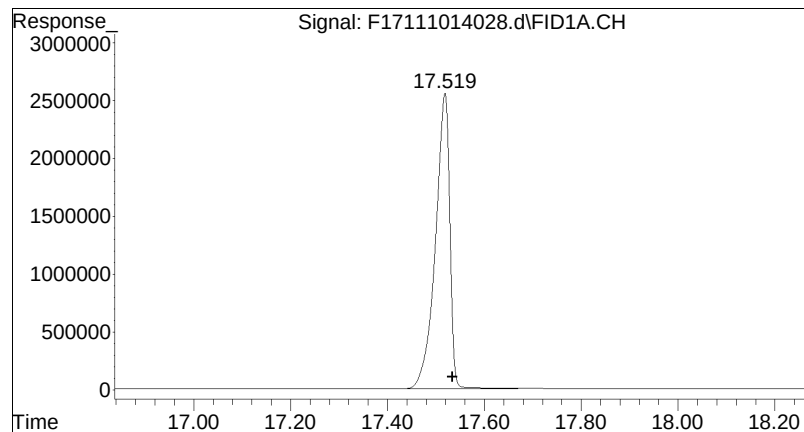
#5 n-Undecane (C11)

R.T.: 12.778 min
Delta R.T.: -0.015 min
Response: 51812091
Conc: 49.63 ug/mL M4



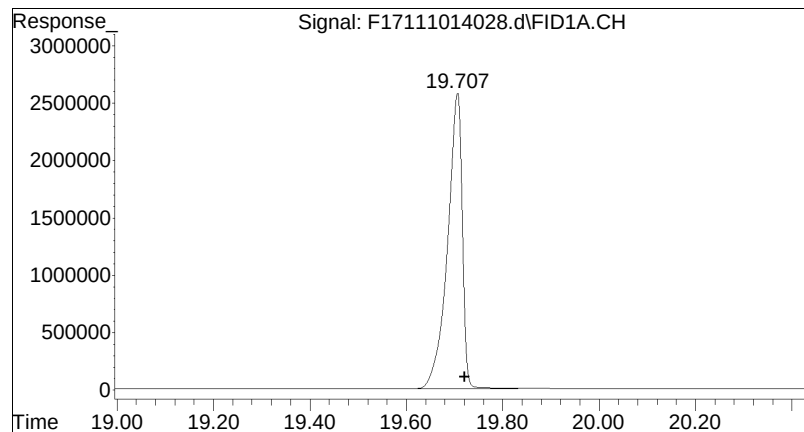
#6 n-Dodecane (C12)

R.T.: 15.208 min
Delta R.T.: -0.016 min
Response: 52486341
Conc: 49.48 ug/mL M4



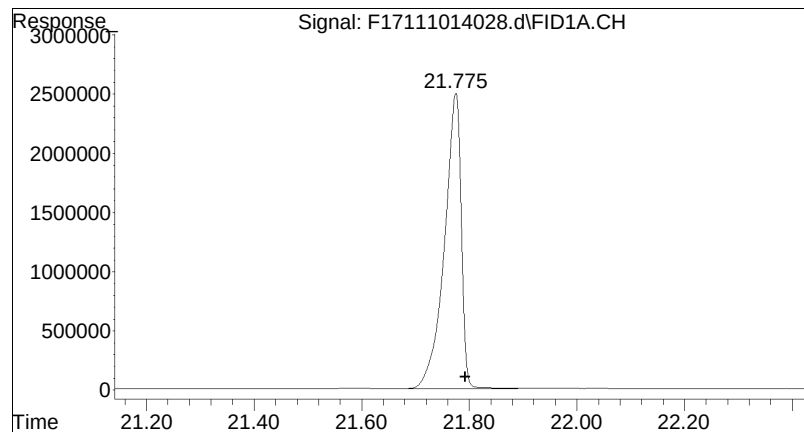
#7 n-Tridecane (C13)

R.T.: 17.519 min
Delta R.T.: -0.015 min
Response: 52668836
Conc: 49.28 ug/mL M4



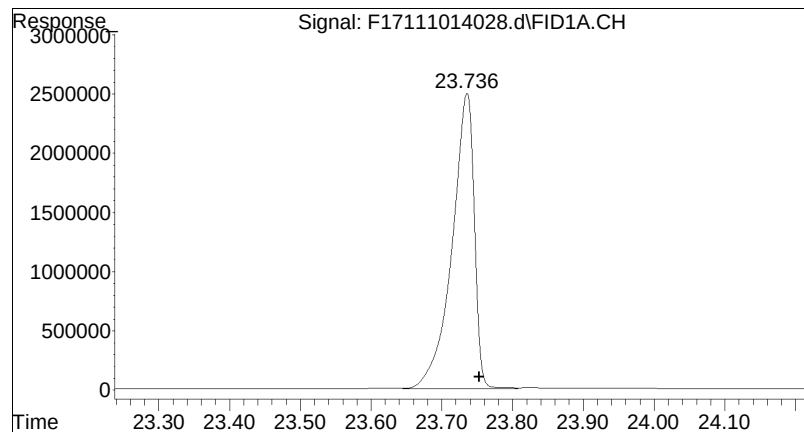
#9 n-Tetradecane (C14)

R.T.: 19.707 min
Delta R.T.: -0.014 min
Response: 54725250
Conc: 50.58 ug/mL M4



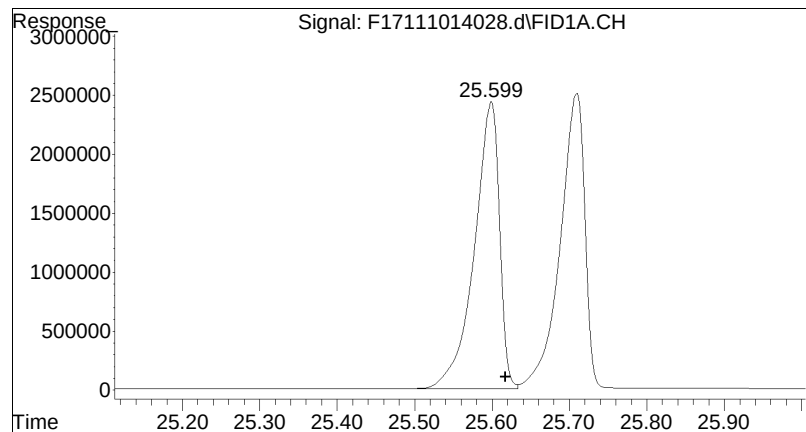
#11 n-Pentadecane (C15)

R.T.: 21.775 min
Delta R.T.: -0.017 min
Response: 54168850
Conc: 49.12 ug/mL M4



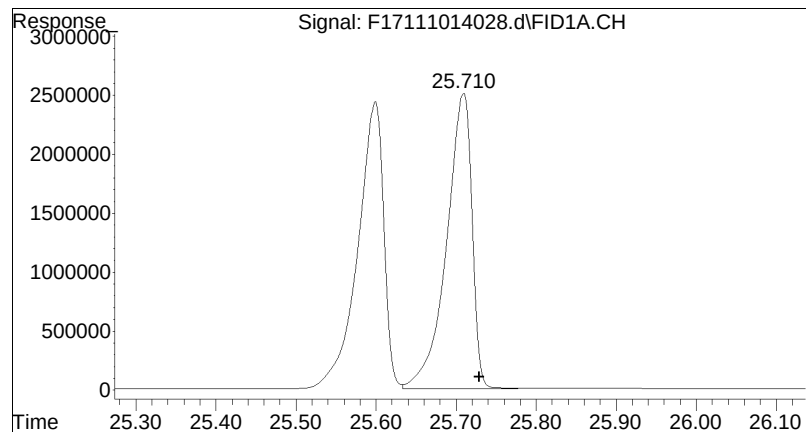
#12 n-Hexadecane (C16)

R.T.: 23.736 min
Delta R.T.: -0.017 min
Response: 54515136
Conc: 49.13 ug/mL M4



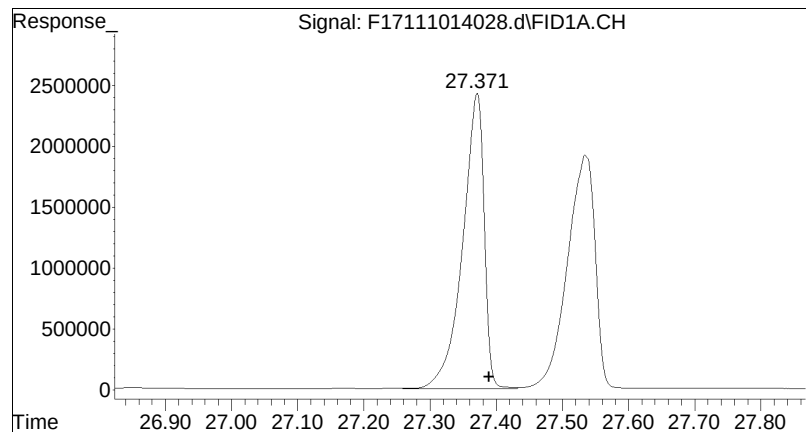
#14 n-Heptadecane (C17)

R.T.: 25.599 min
Delta R.T.: -0.018 min
Response: 54810624
Conc: 49.74 ug/mL M4



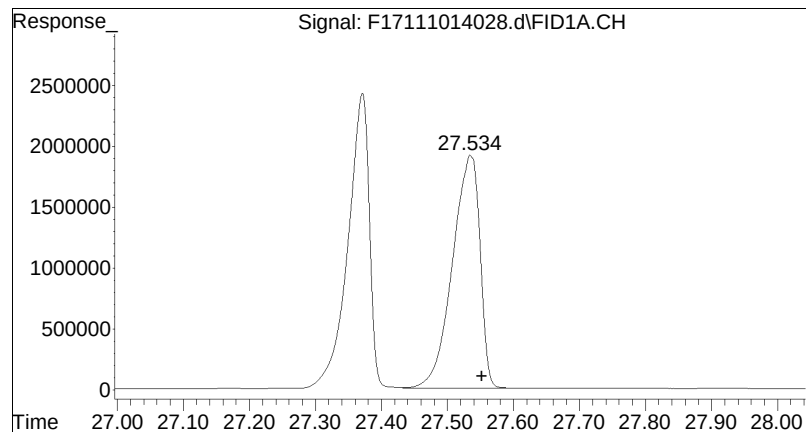
#15 Pristane

R.T.: 25.710 min
Delta R.T.: -0.019 min
Response: 55331736
Conc: 48.61 ug/mL M4



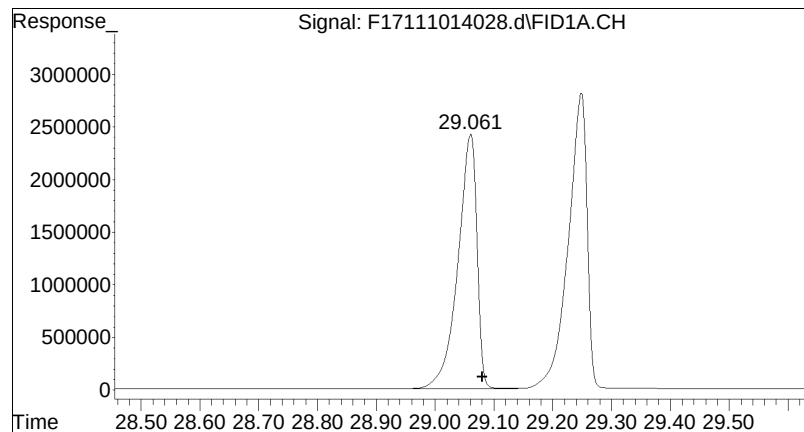
#16 n-Octadecane (C18)

R.T.: 27.371 min
Delta R.T.: -0.018 min
Response: 54607398
Conc: 48.22 ug/mL M4



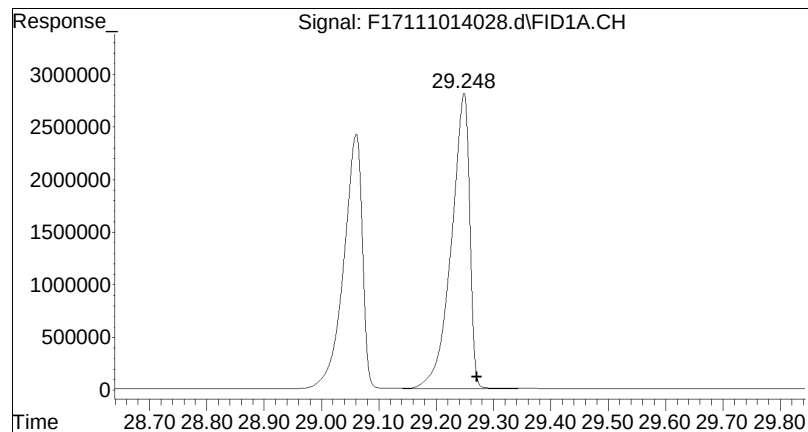
#17 Phytane

R.T.: 27.534 min
Delta R.T.: -0.019 min
Response: 55654924
Conc: 55.70 ug/mL M4



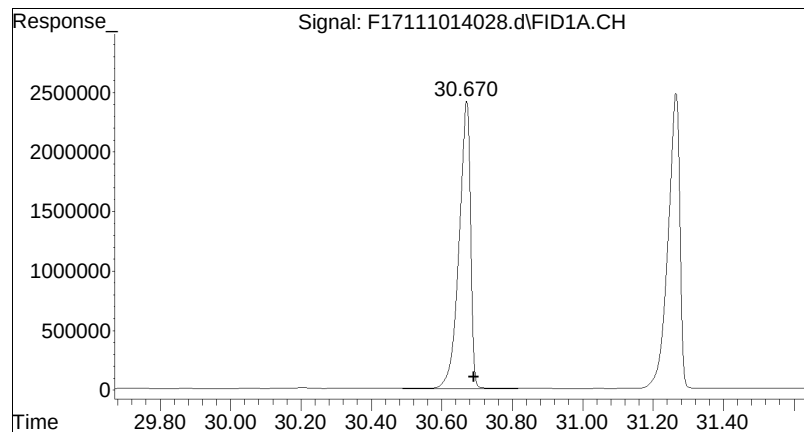
#18 n-Nonadecane (C19)

R.T.: 29.061 min
Delta R.T.: -0.019 min
Response: 54399183
Conc: 48.18 ug/mL M4



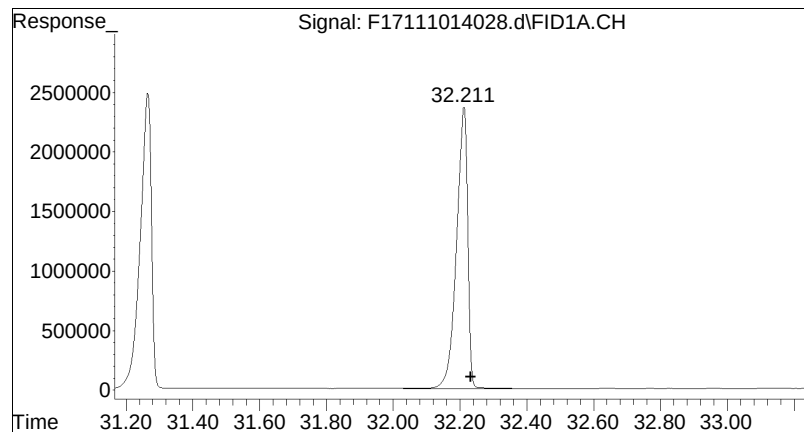
#19 ortho-terphenyl

R.T.: 29.248 min
Delta R.T.: -0.023 min
Response: 62373197
Conc: 49.05 ug/mL M4



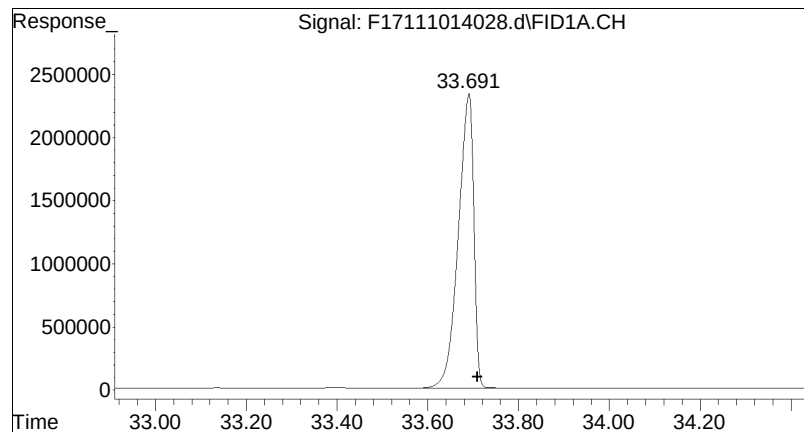
#20 n-Eicosane (C20)

R.T.: 30.670 min
Delta R.T.: -0.021 min
Response: 54603600
Conc: 48.45 ug/mL M4



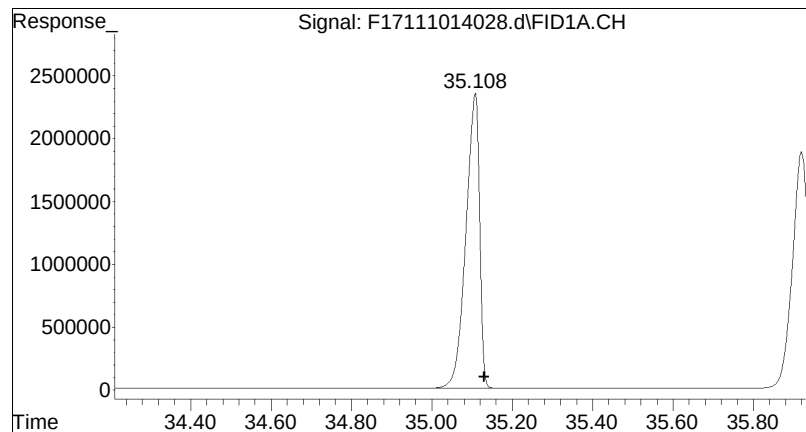
#21 n-Heneicosane (C21)

R.T.: 32.211 min
Delta R.T.: -0.020 min
Response: 55087763
Conc: 48.51 ug/mL M4



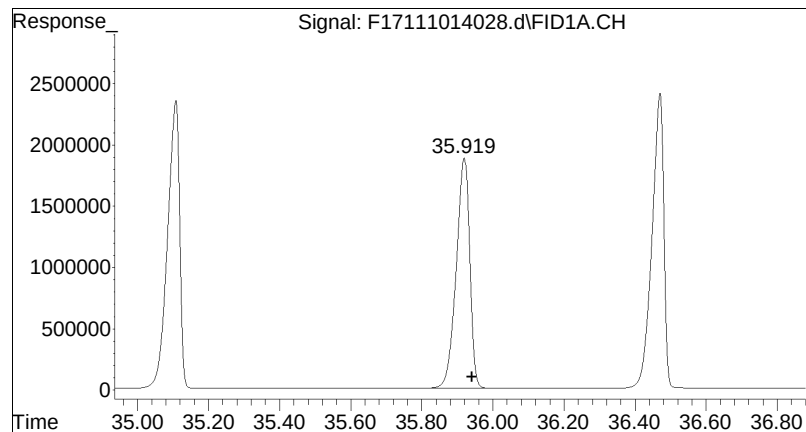
#22 n-Docosane (C22)

R.T.: 33.691 min
Delta R.T.: -0.018 min
Response: 55381679
Conc: 48.28 ug/mL M4



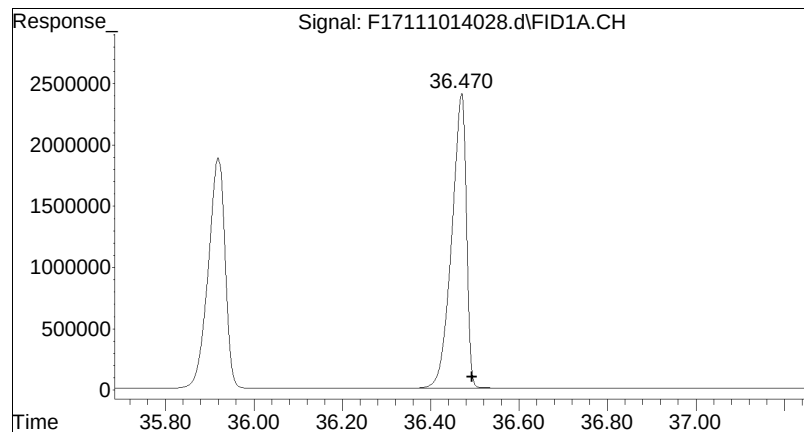
#23 n-Tricosane (C23)

R.T.: 35.108 min
Delta R.T.: -0.021 min
Response: 55584473
Conc: 47.98 ug/mL M4



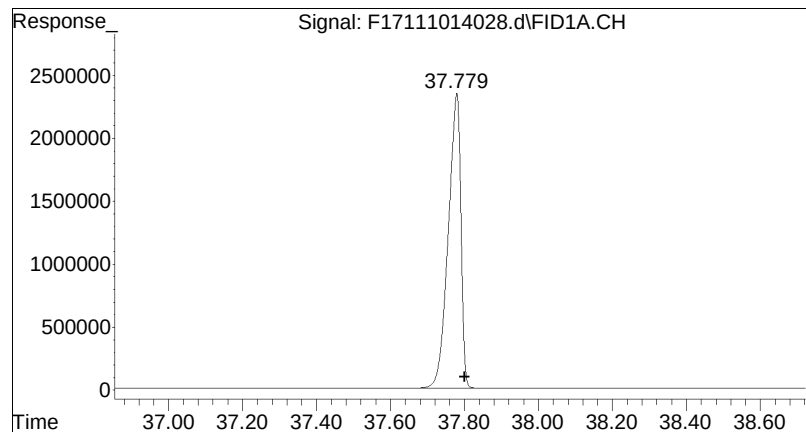
#24 d50-Tetracosane

R.T.: 35.919 min
Delta R.T.: -0.021 min
Response: 49983701
Conc: 48.40 ug/mL M4



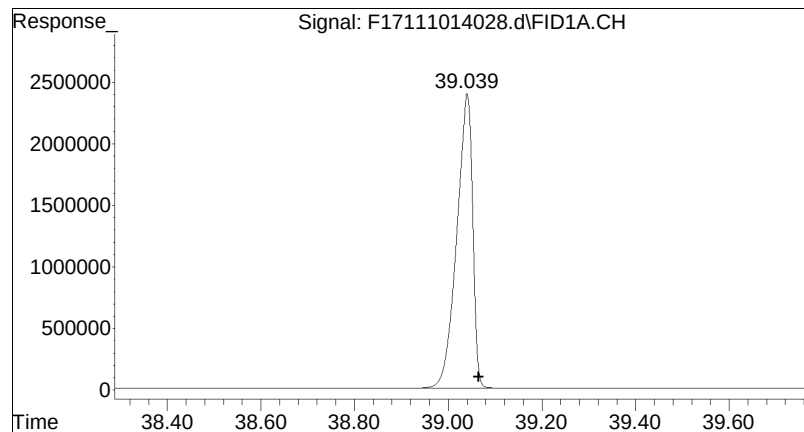
#25 n-Tetracosane (C24)

R.T.: 36.470 min
Delta R.T.: -0.023 min
Response: 55601443
Conc: 47.92 ug/mL M4



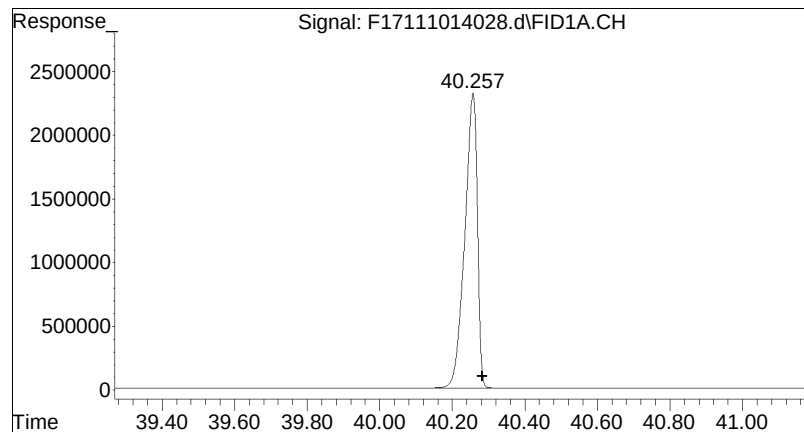
#26 n-Pentacosane (C25)

R.T.: 37.779 min
Delta R.T.: -0.021 min
Response: 55584700
Conc: 48.15 ug/mL M4



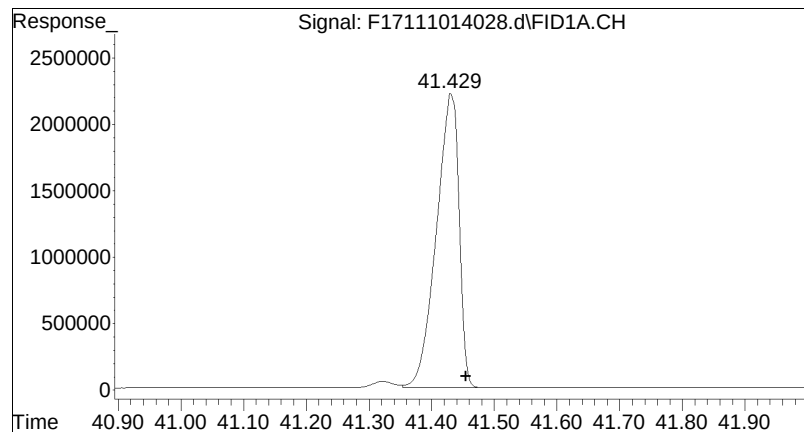
#27 n-Hexacosane (C26)

R.T.: 39.039 min
Delta R.T.: -0.025 min
Response: 56520227
Conc: 47.89 ug/mL M4



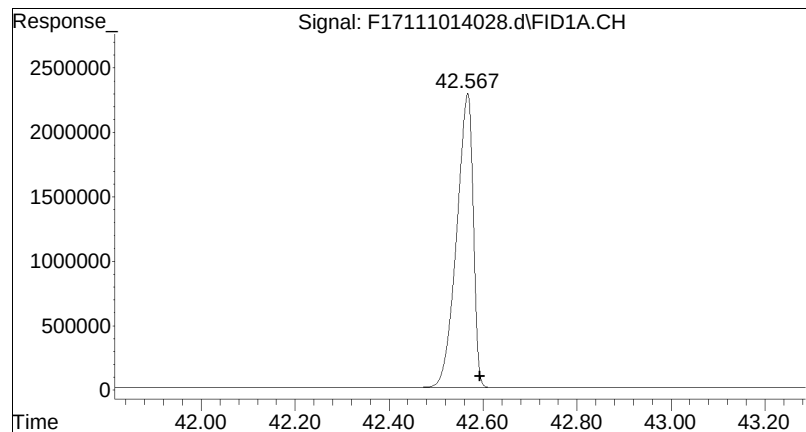
#28 n-Heptacosane (C27)

R.T.: 40.257 min
Delta R.T.: -0.025 min
Response: 55822334
Conc: 47.54 ug/mL M4



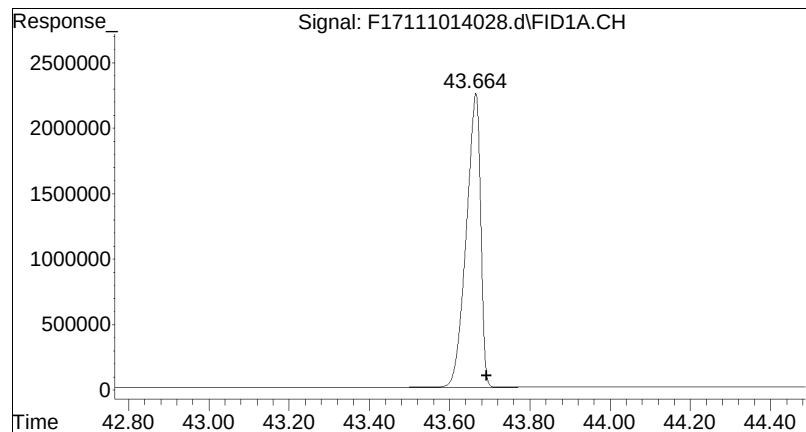
#29 n-Octacosane (C28)

R.T.: 41.429 min
Delta R.T.: -0.025 min
Response: 55792477
Conc: 47.58 ug/mL M4



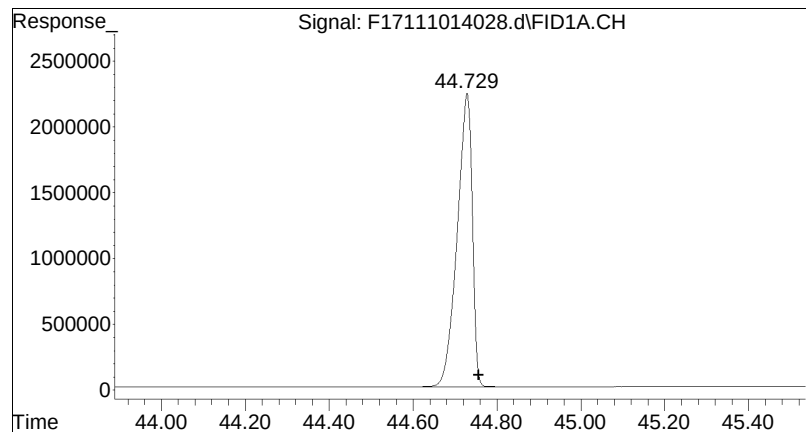
#30 n-Nonacosane (C29)

R.T.: 42.567 min
Delta R.T.: -0.026 min
Response: 56007887
Conc: 47.65 ug/mL M4



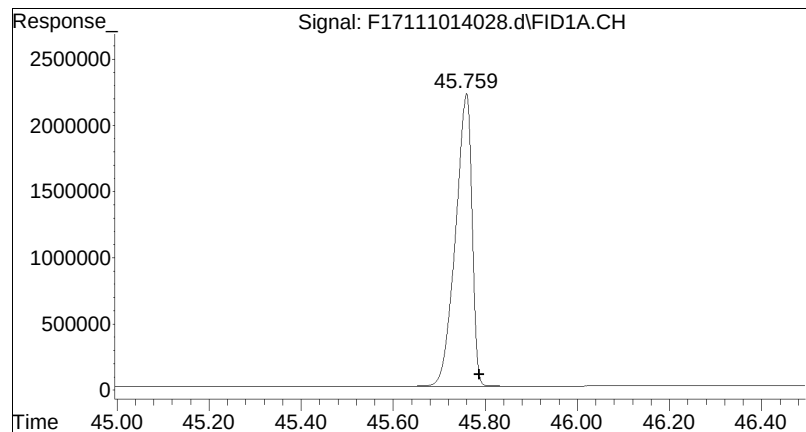
#31 n-Triacontane (C30)

R.T.: 43.664 min
Delta R.T.: -0.028 min
Response: 55890152
Conc: 47.33 ug/mL M4



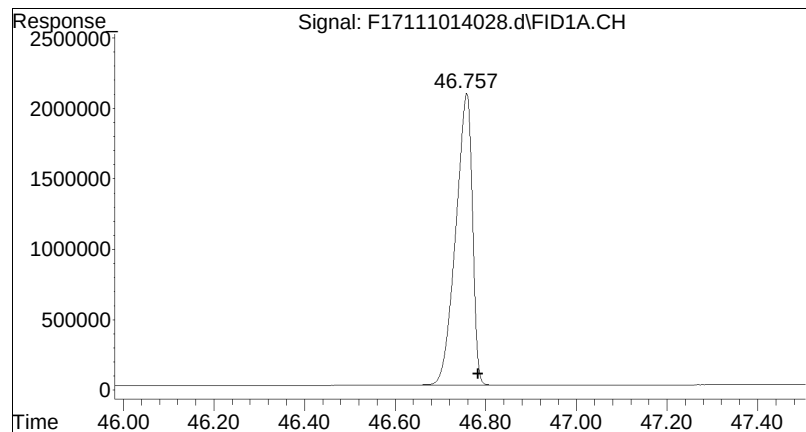
#32 n-Hentriacontane (C31)

R.T.: 44.729 min
Delta R.T.: -0.027 min
Response: 55831872
Conc: 47.25 ug/mL M4



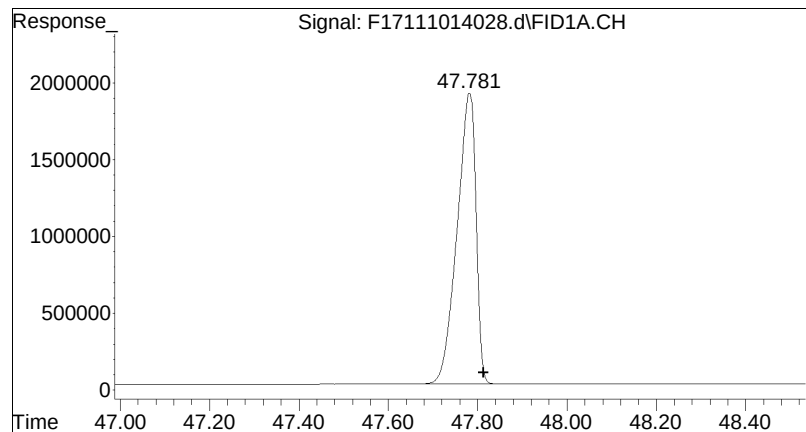
#33 n-Dotriacontane (C32)

R.T.: 45.759 min
Delta R.T.: -0.027 min
Response: 55077837
Conc: 46.27 ug/mL M4



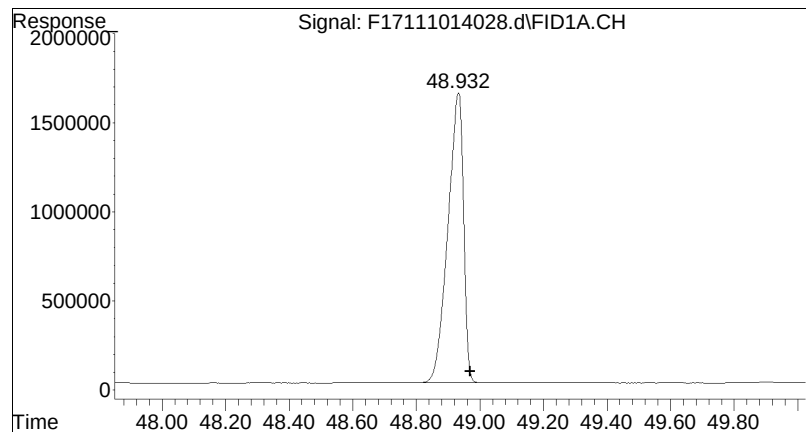
#34 n-Tritriacontane (C33)

R.T.: 46.757 min
Delta R.T.: -0.026 min
Response: 53104426
Conc: 47.13 ug/mL M4



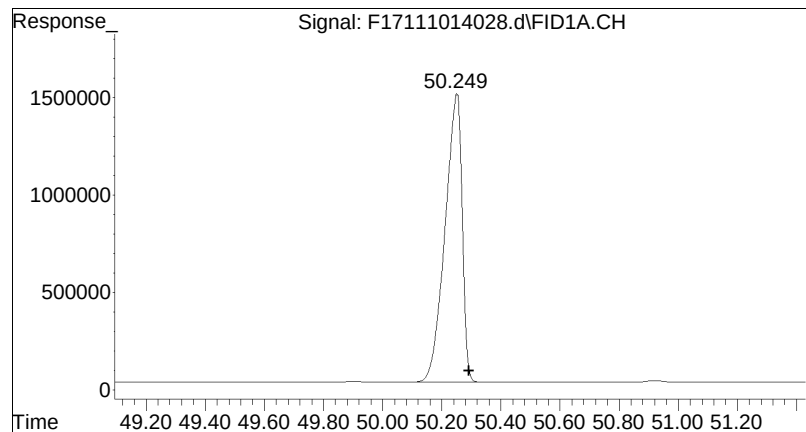
#35 n-tetratriacontane (C34)

R.T.: 47.781 min
Delta R.T.: -0.032 min
Response: 55861107
Conc: 47.53 ug/mL M4



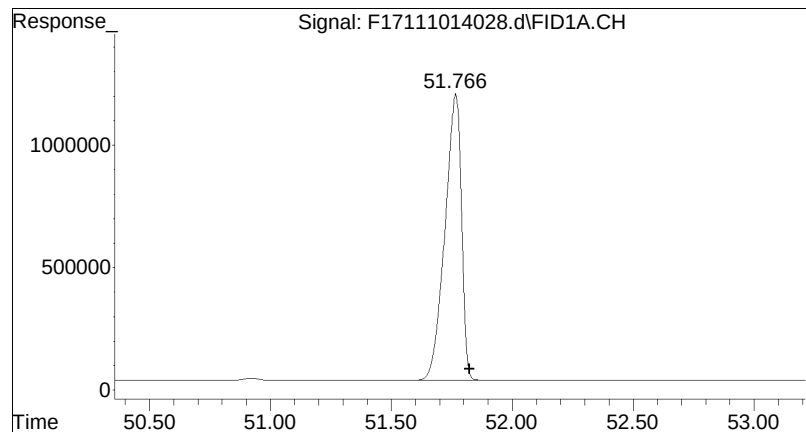
#36 n-Pentatriacontane (C35)

R.T.: 48.932 min
Delta R.T.: -0.036 min
Response: 55722183
Conc: 47.13 ug/mL M4



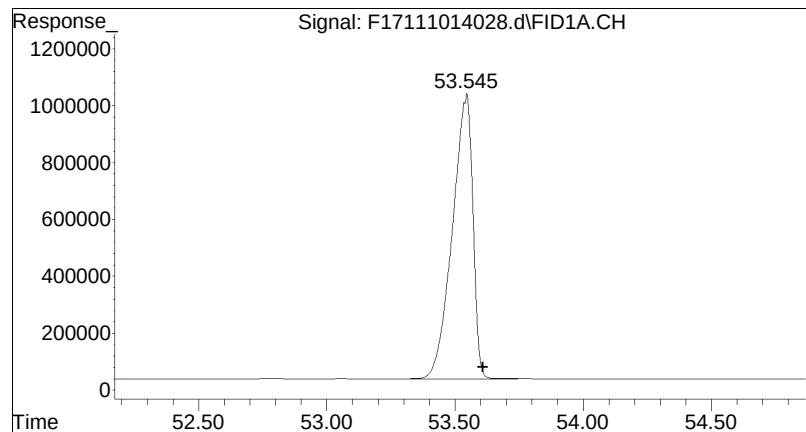
#37 n-Hexatriacontane (C36)

R.T.: 50.249 min
Delta R.T.: -0.043 min
Response: 59610361
Conc: 49.06 ug/mL M4



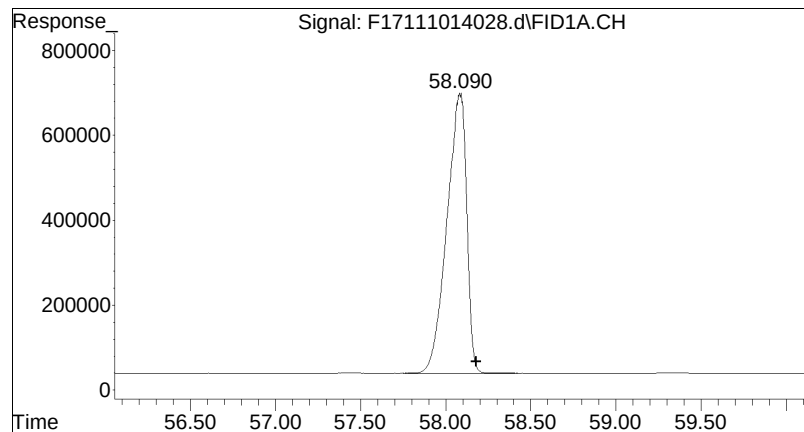
#38 n-Heptatriacontane (C37)

R.T.: 51.766 min
Delta R.T.: -0.056 min
Response: 55634288
Conc: 46.71 ug/mL M4



#39 n-Octatriacontane (C38)

R.T.: 53.545 min
Delta R.T.: -0.062 min
Response: 55500204
Conc: 47.50 ug/mL M4



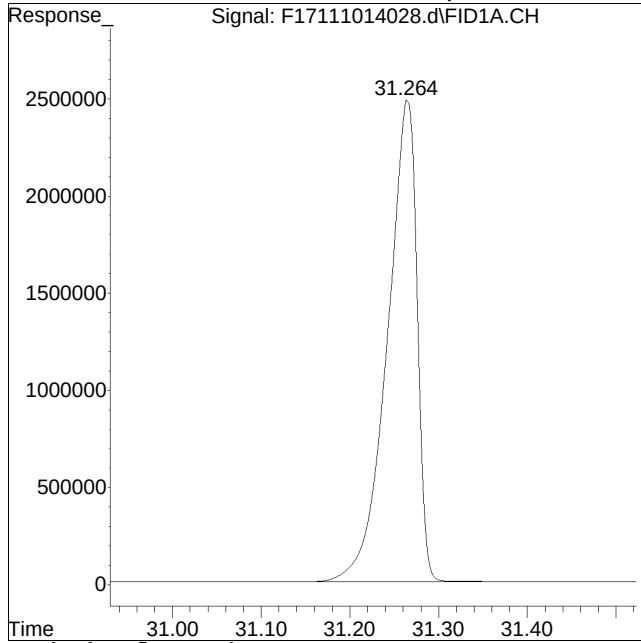
#41 n-Tetracontane (C40)

R.T.: 58.090 min
Delta R.T.: -0.088 min
Response: 53295101
Conc: 43.64 ug/mL M4

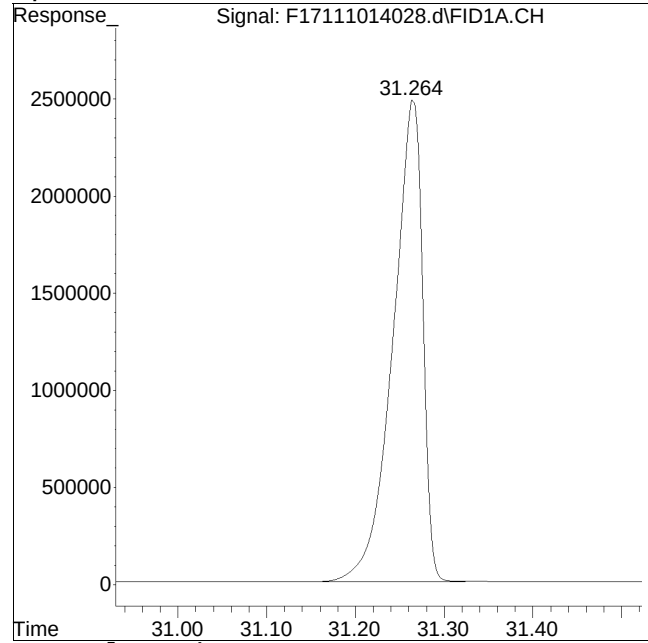
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #1: 5-alpha-androstane



Original Peak Response = 57810641



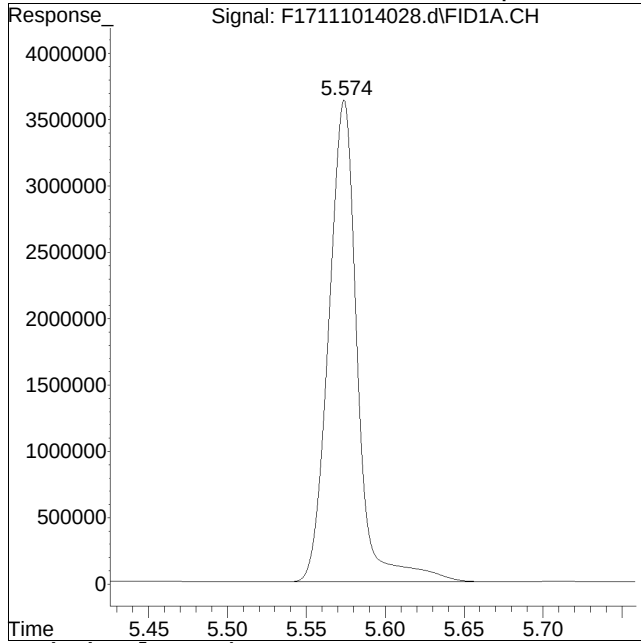
Manual Peak Response = 57779435 M4

M4 = Poor automated baseline construction.

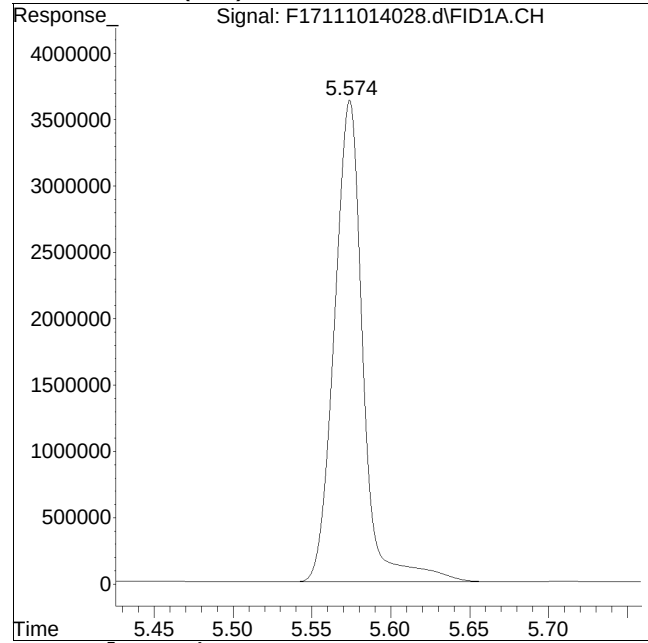
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #2: n-Octane (C8)



Original Peak Response = 45955159



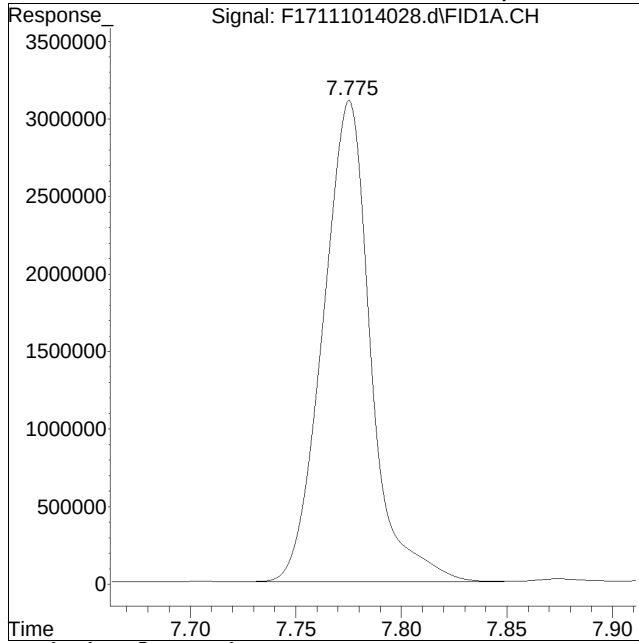
Manual Peak Response = 45937686 M4

M4 = Poor automated baseline construction.

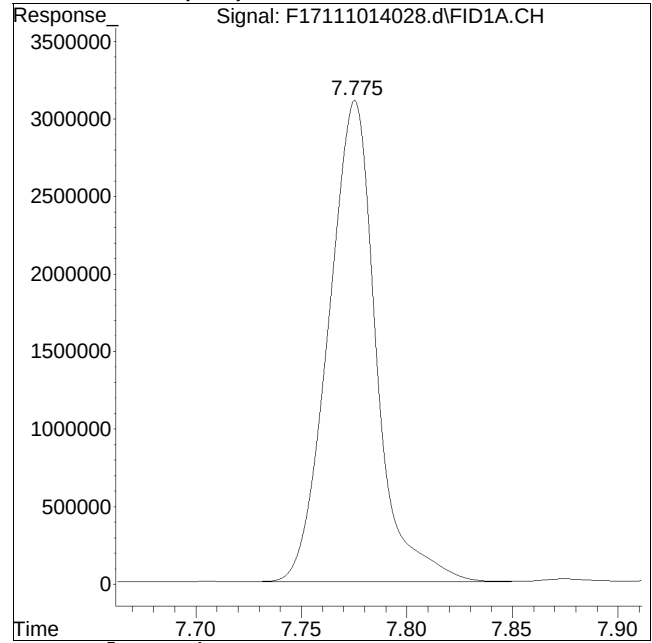
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #3: n-Nonane (C9)



Original Peak Response = 48984915



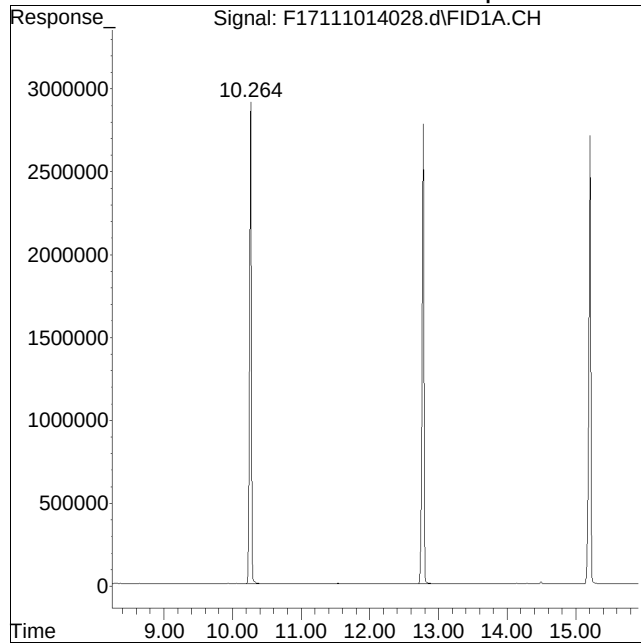
Manual Peak Response = 48980250 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

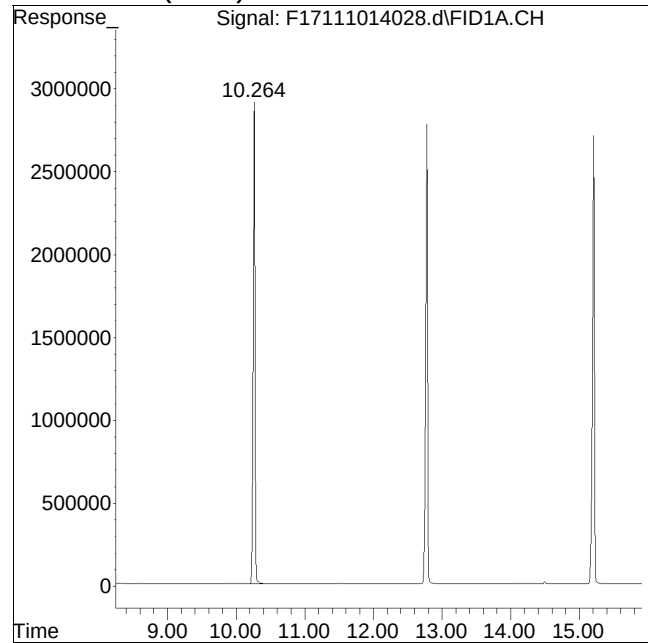
Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #4: n-Decane (C10)



Original Peak Response = 51656043

M4 = Poor automated baseline construction.

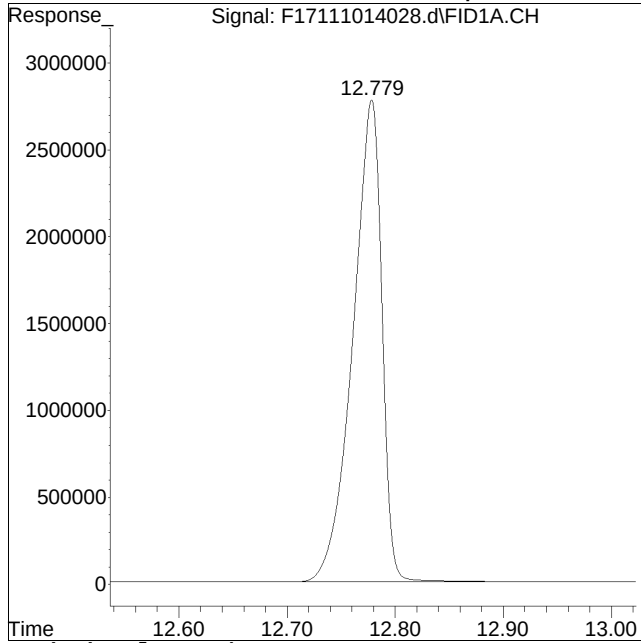


Manual Peak Response = 52302066 M4

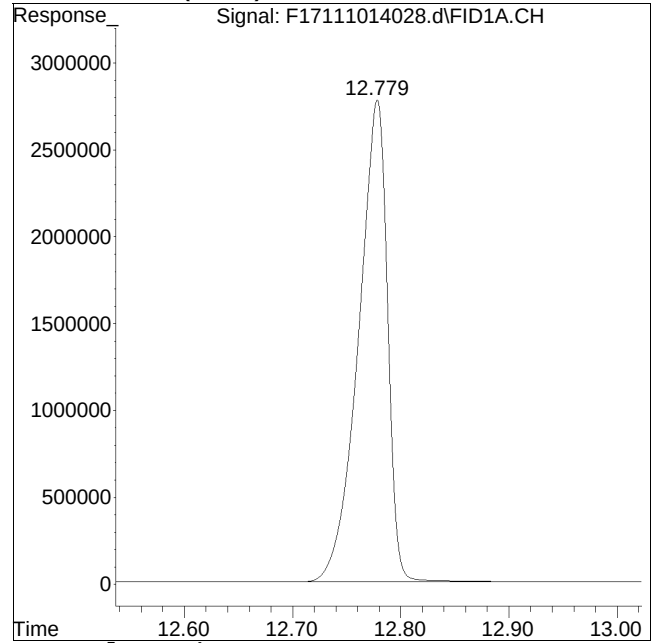
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #5: n-Undecane (C11)



Original Peak Response = 51789676



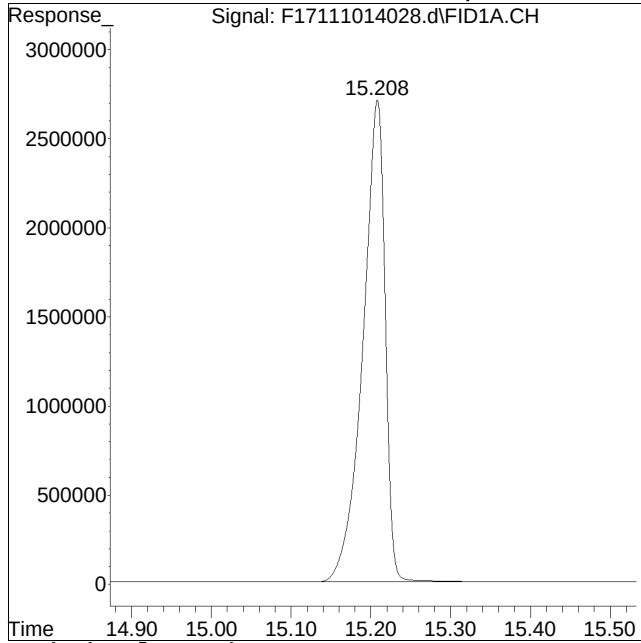
Manual Peak Response = 51812091 M4

M4 = Poor automated baseline construction.

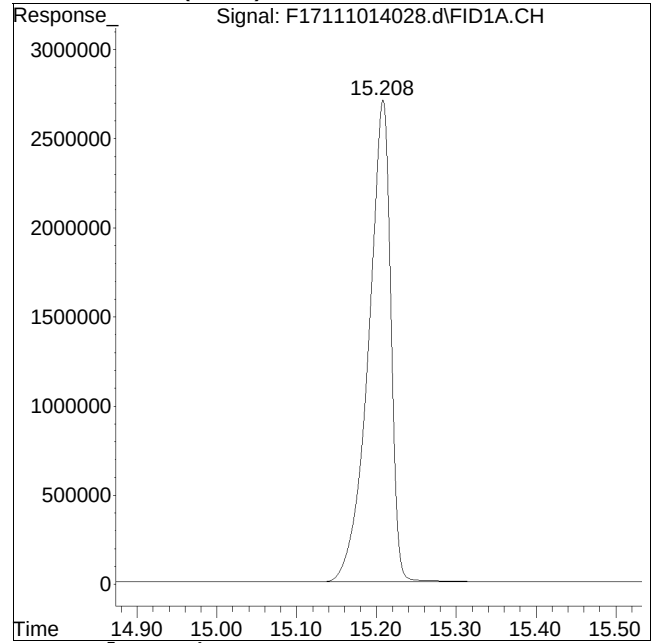
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #6: n-Dodecane (C12)



Original Peak Response = 52373765



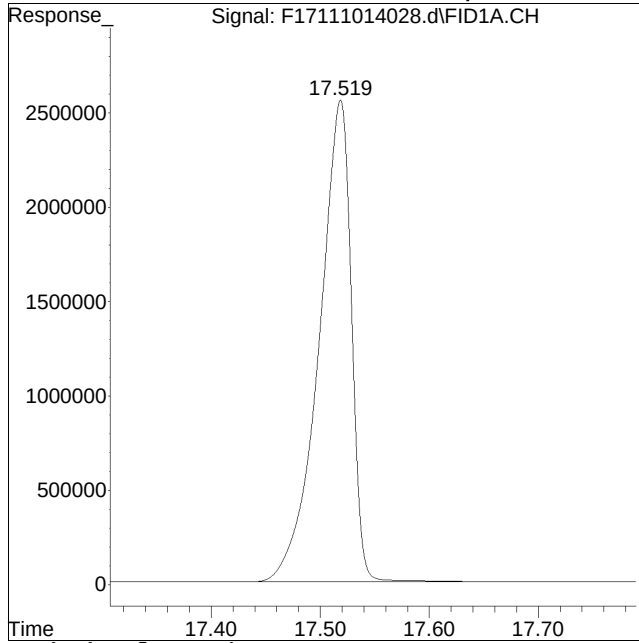
Manual Peak Response = 52486341 M4

M4 = Poor automated baseline construction.

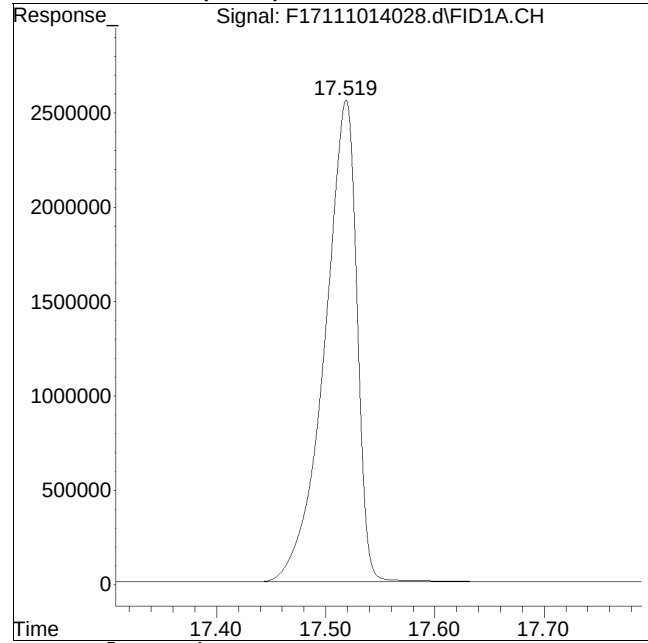
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #7: n-Tridecane (C13)



Original Peak Response = 52650885



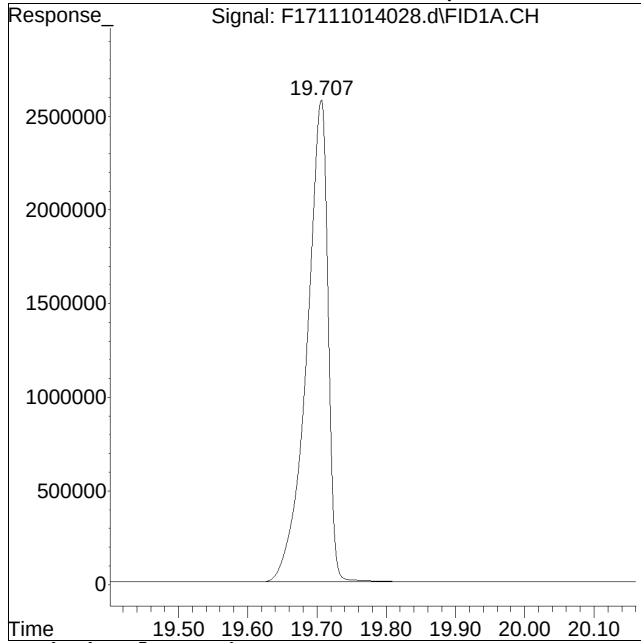
Manual Peak Response = 52668836 M4

M4 = Poor automated baseline construction.

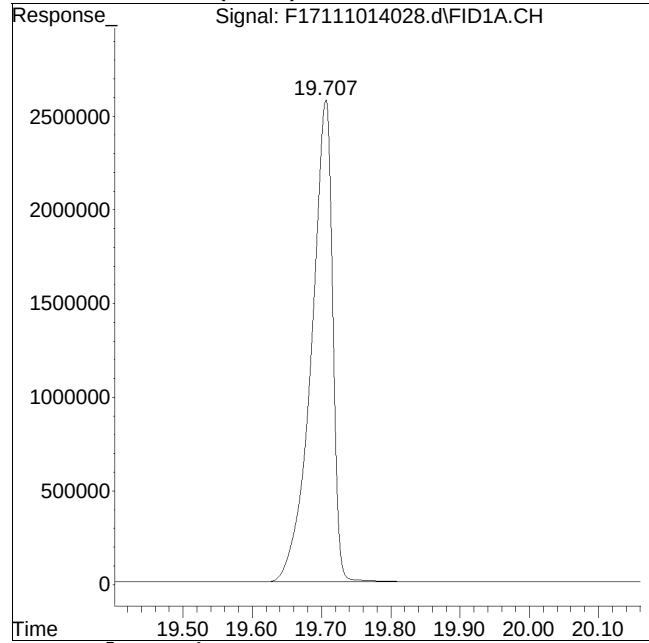
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #9: n-Tetradecane (C14)



Original Peak Response = 54838832



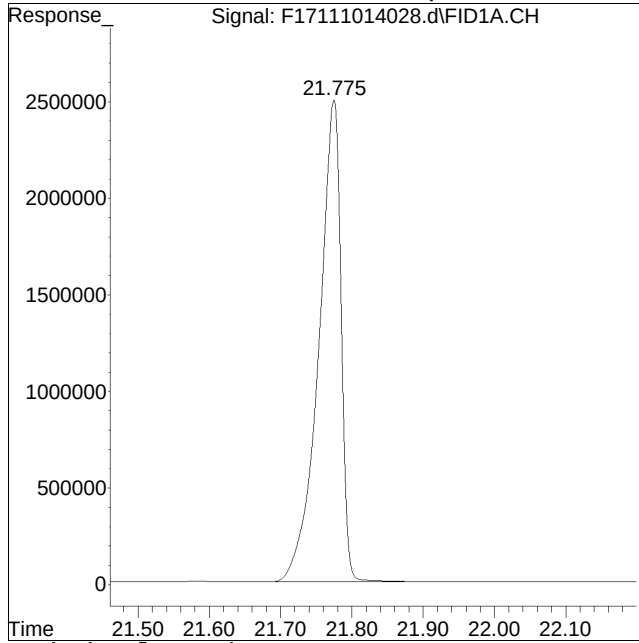
Manual Peak Response = 54725250 M4

M4 = Poor automated baseline construction.

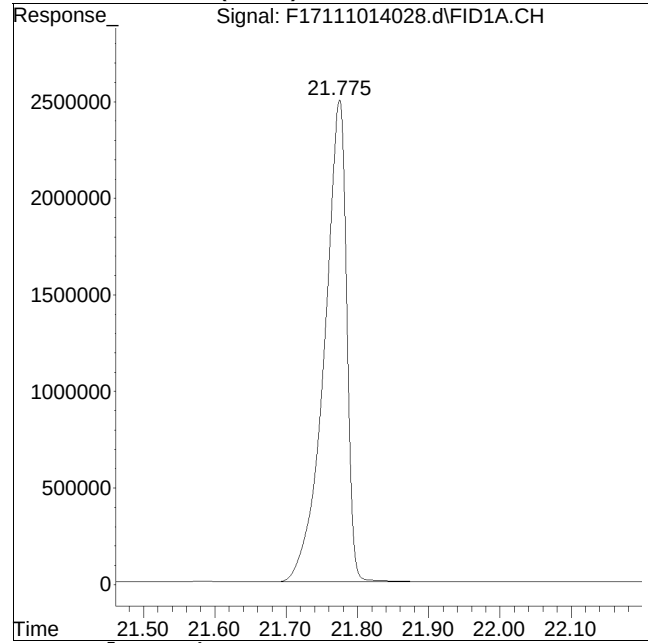
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #11: n-Pentadecane (C15)



Original Peak Response = 54161252



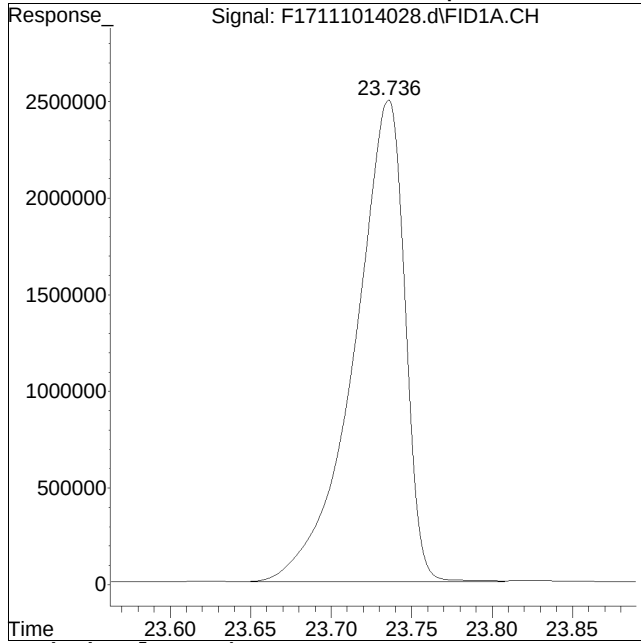
Manual Peak Response = 54168850 M4

M4 = Poor automated baseline construction.

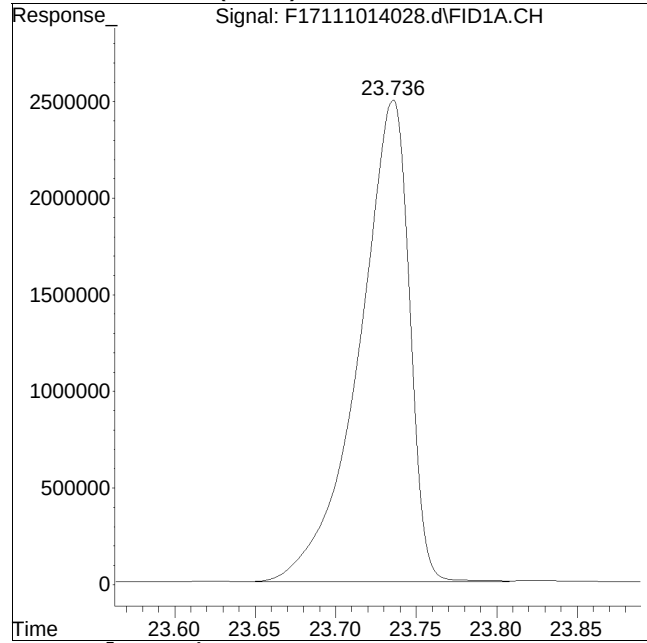
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #12: n-Hexadecane (C16)



Original Peak Response = 54520372



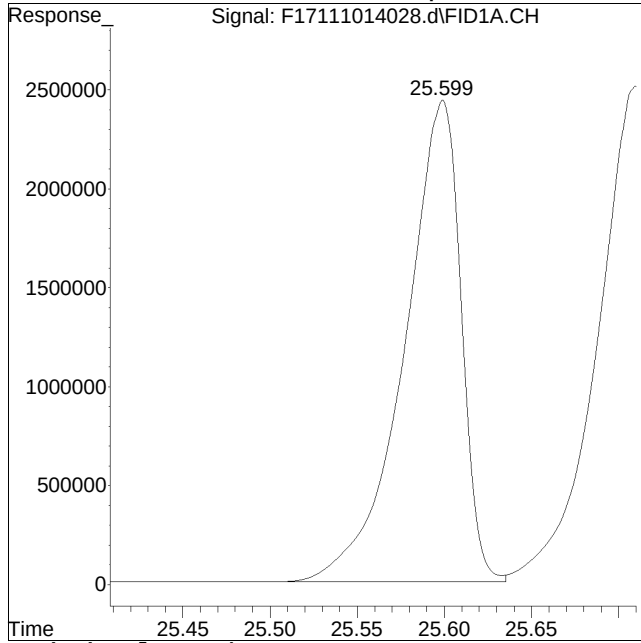
Manual Peak Response = 54515136 M4

M4 = Poor automated baseline construction.

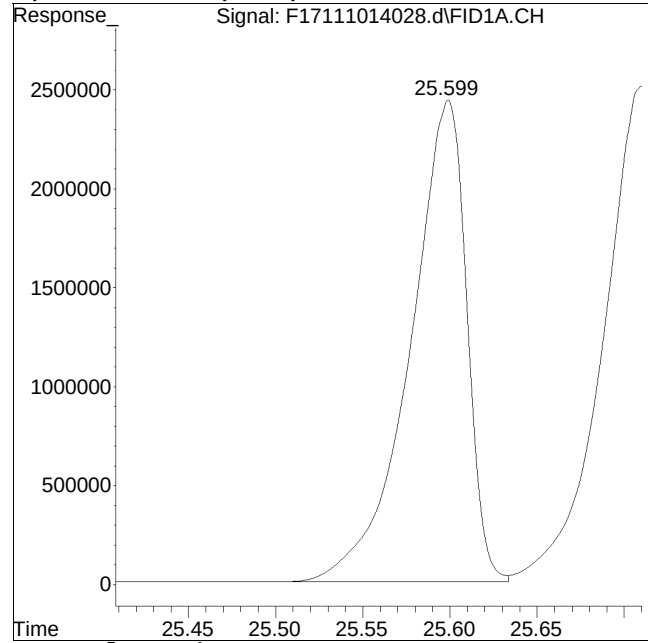
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #14: n-Heptadecane (C17)



Original Peak Response = 54807903



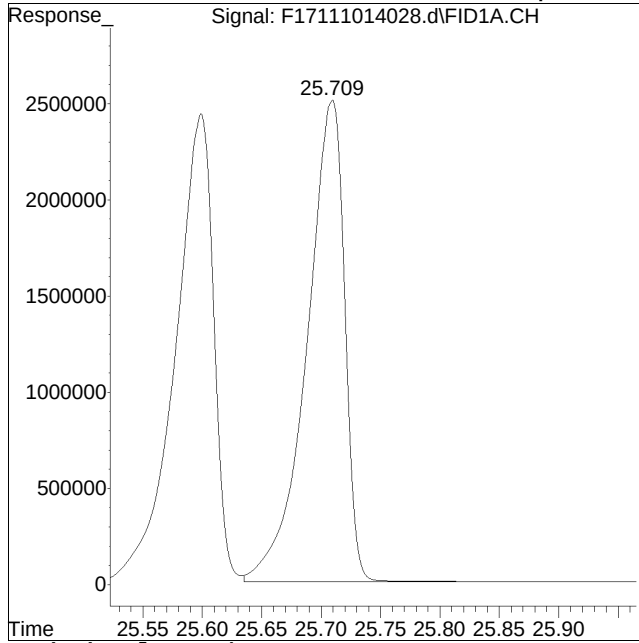
Manual Peak Response = 54810624 M4

M4 = Poor automated baseline construction.

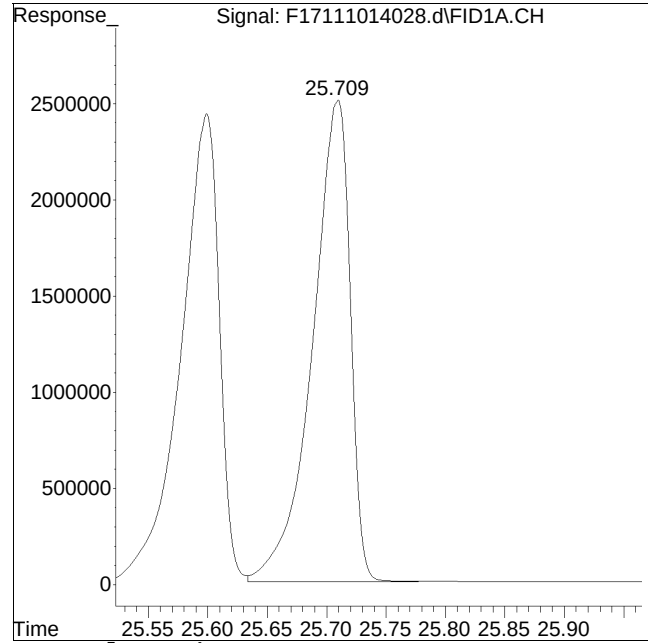
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #15: Pristane



Original Peak Response = 55462518



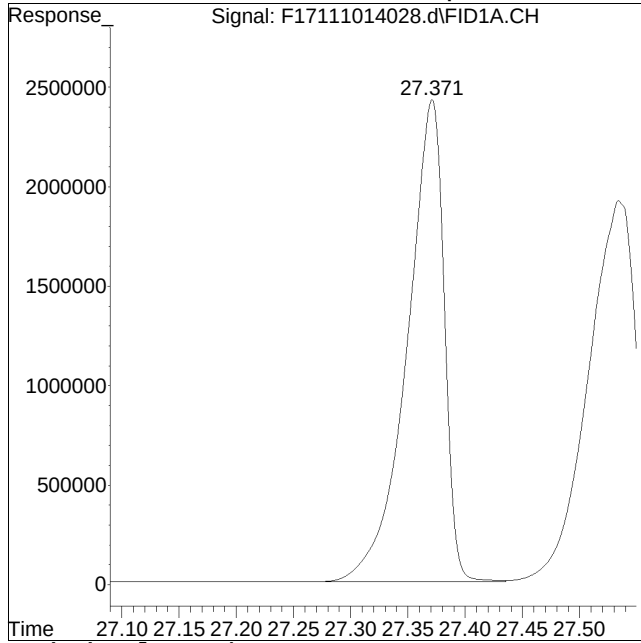
Manual Peak Response = 55331736 M4

M4 = Poor automated baseline construction.

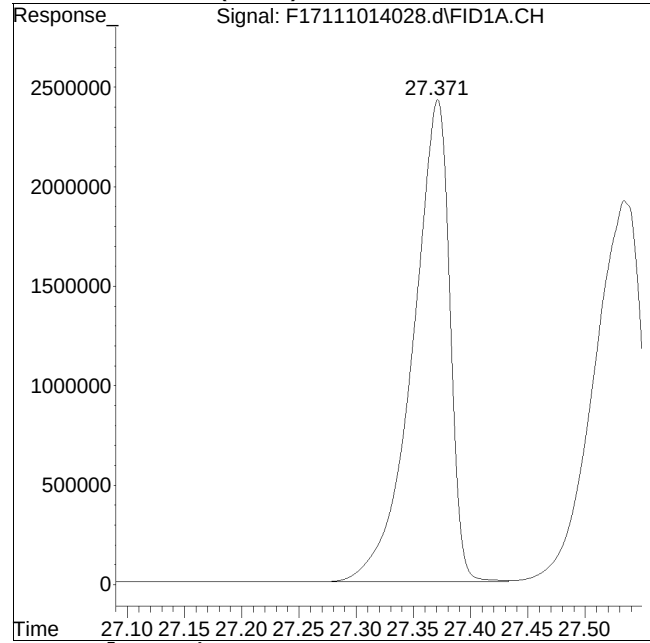
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #16: n-Octadecane (C18)



Original Peak Response = 54661867



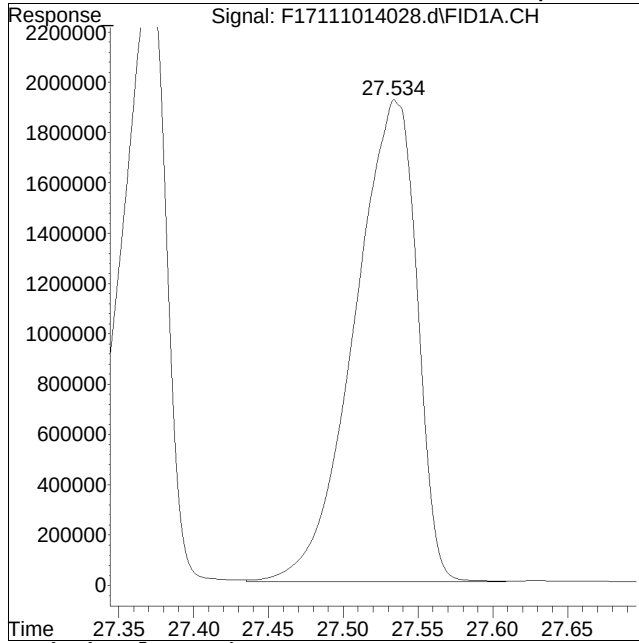
Manual Peak Response = 54607398 M4

M4 = Poor automated baseline construction.

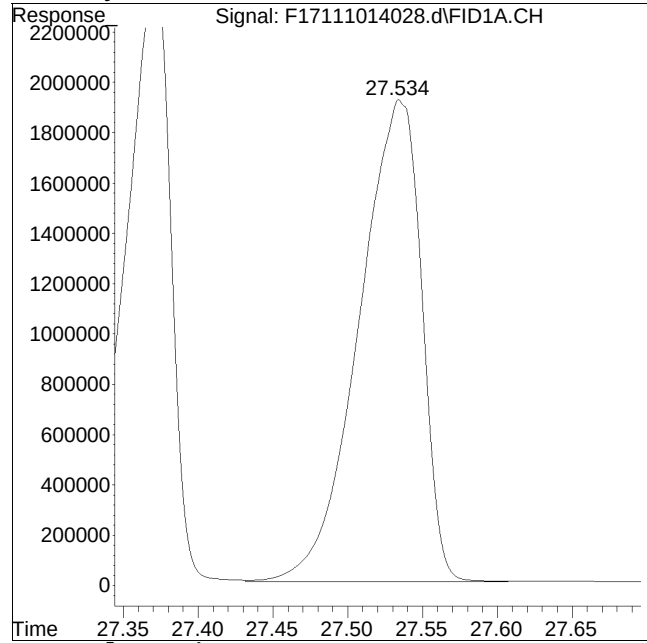
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #17: Phytane



Original Peak Response = 55708840



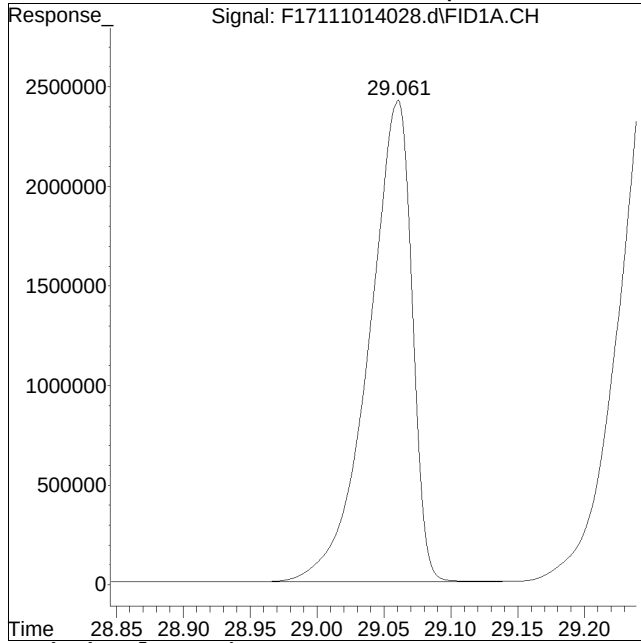
Manual Peak Response = 55654924 M4

M4 = Poor automated baseline construction.

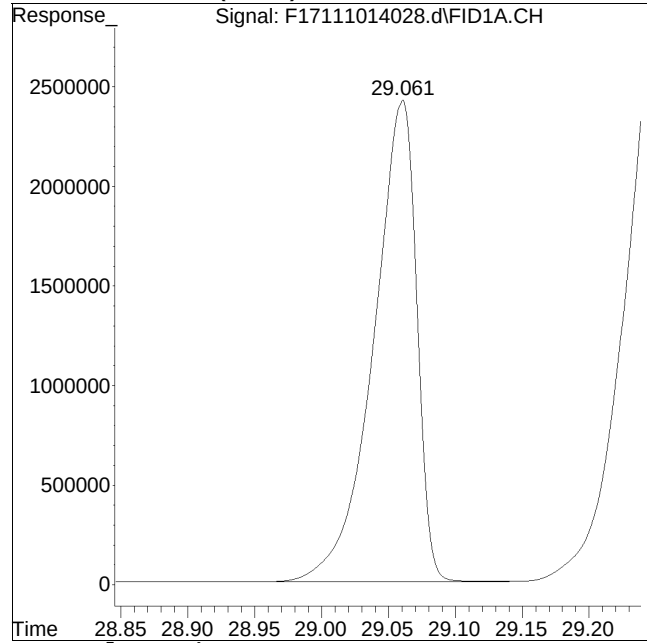
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #18: n-Nonadecane (C19)



Original Peak Response = 54256496



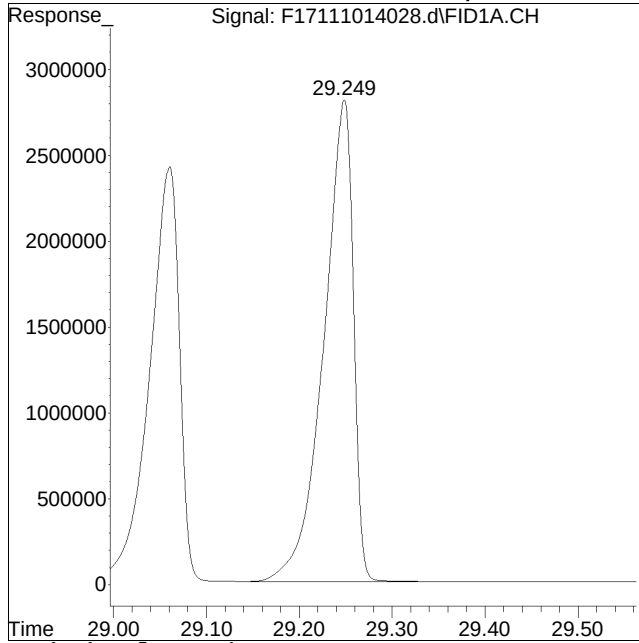
Manual Peak Response = 54399183 M4

M4 = Poor automated baseline construction.

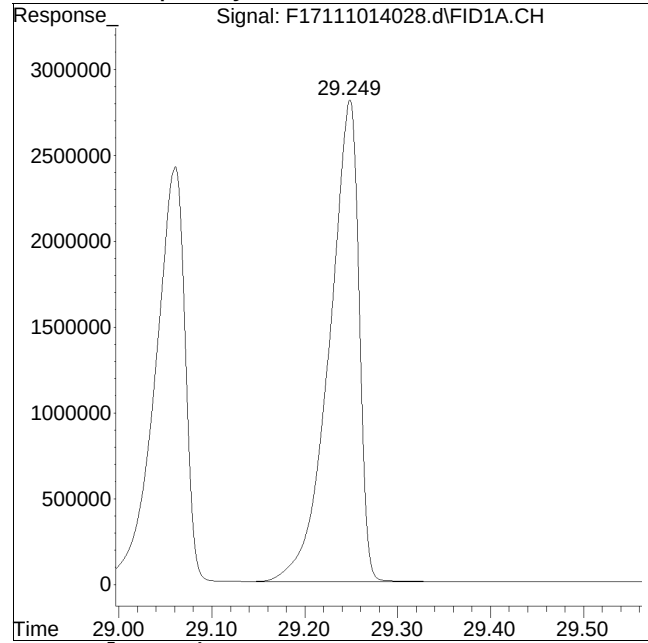
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #19: ortho-terphenyl



Original Peak Response = 62183463



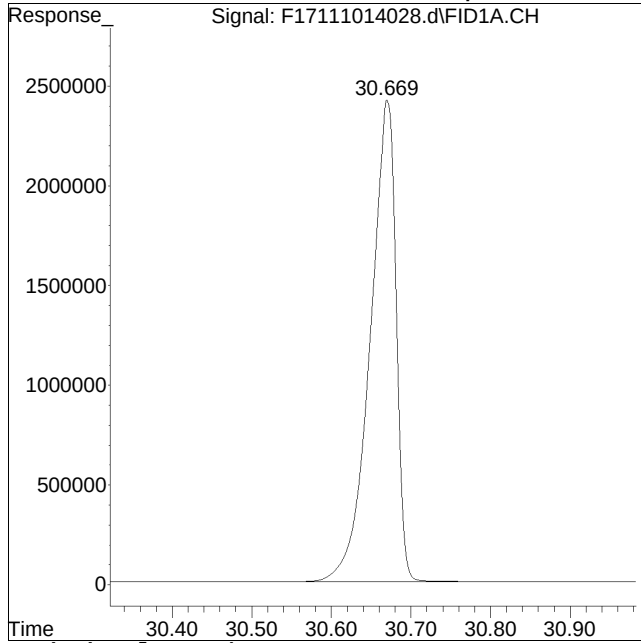
Manual Peak Response = 62373197 M4

M4 = Poor automated baseline construction.

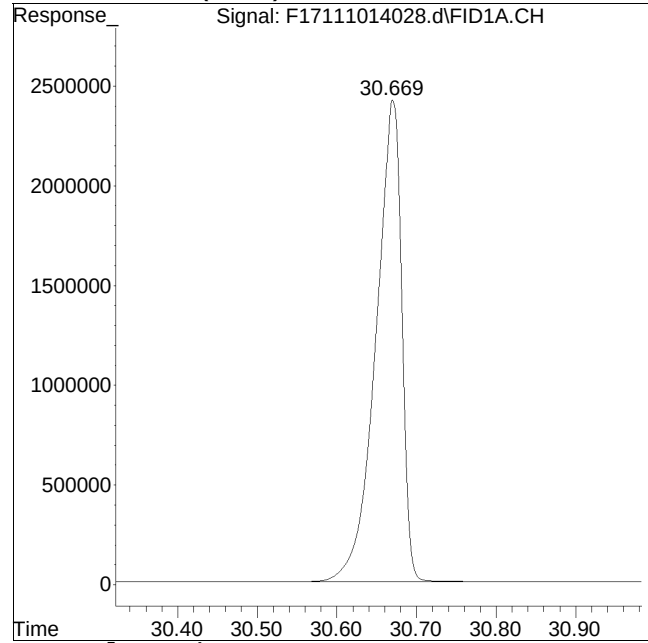
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #20: n-Eicosane (C20)



Original Peak Response = 54662198



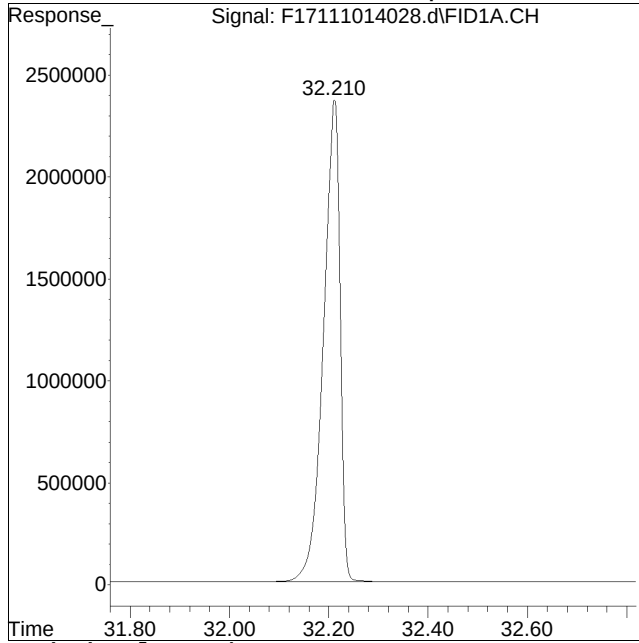
Manual Peak Response = 54603600 M4

M4 = Poor automated baseline construction.

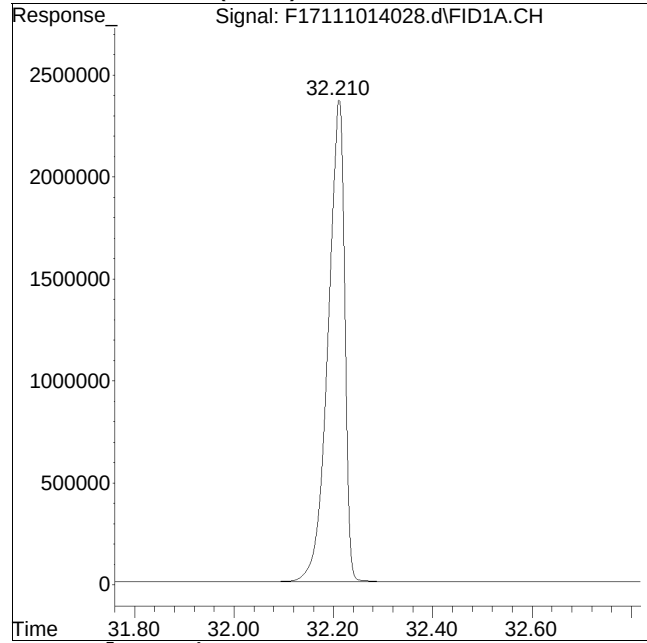
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #21: n-Heneicosane (C21)



Original Peak Response = 54970870



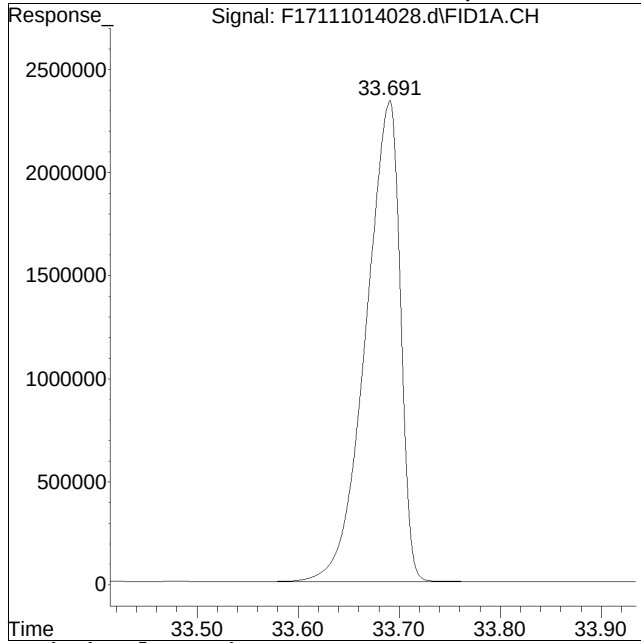
Manual Peak Response = 55087763 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

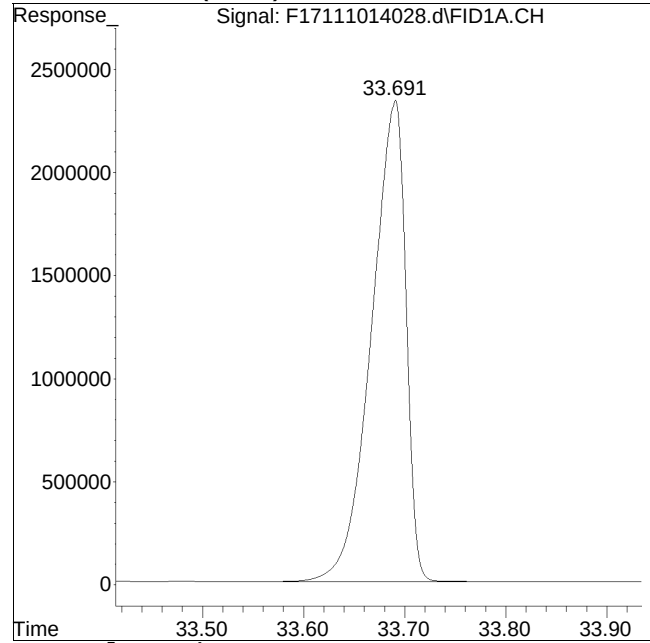
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #22: n-Docosane (C22)



Original Peak Response = 55330223

M4 = Poor automated baseline construction.

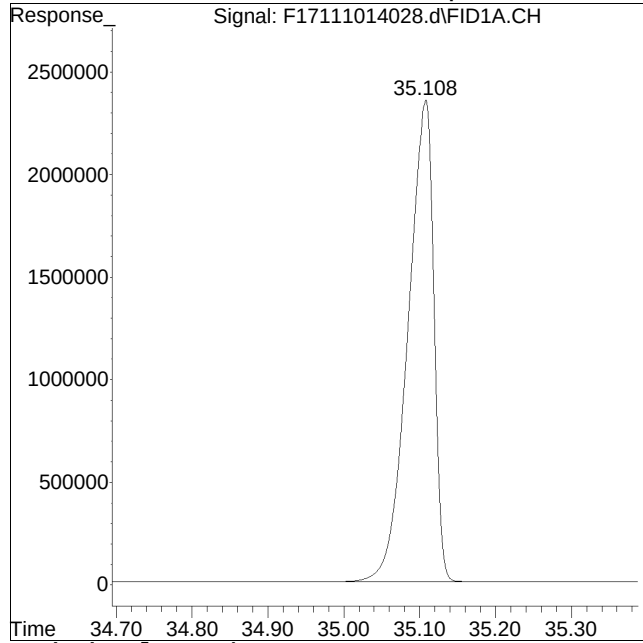


Manual Peak Response = 55381679 M4

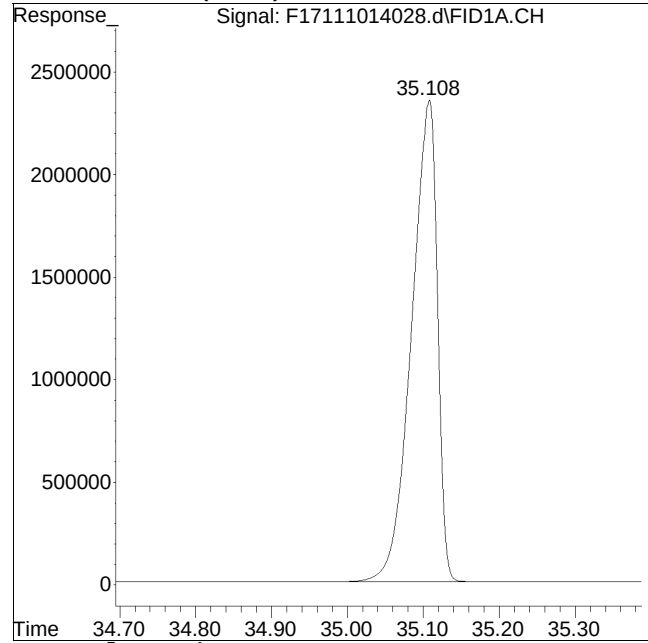
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #23: n-Tricosane (C23)



Original Peak Response = 55580721



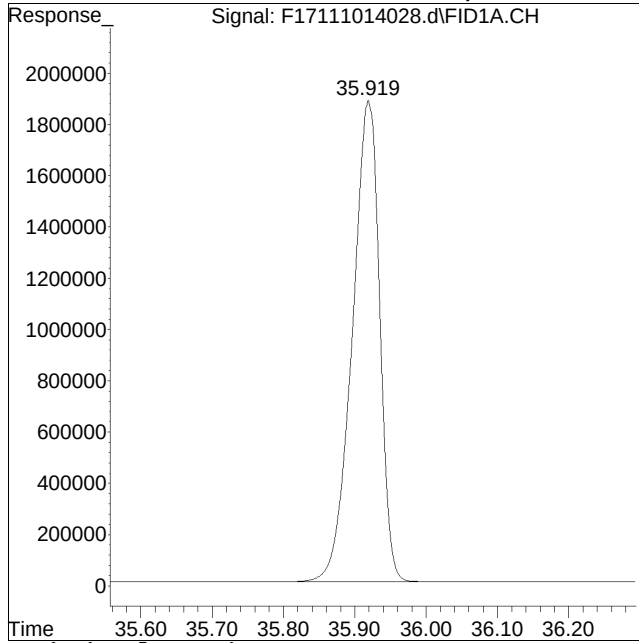
Manual Peak Response = 55584473 M4

M4 = Poor automated baseline construction.

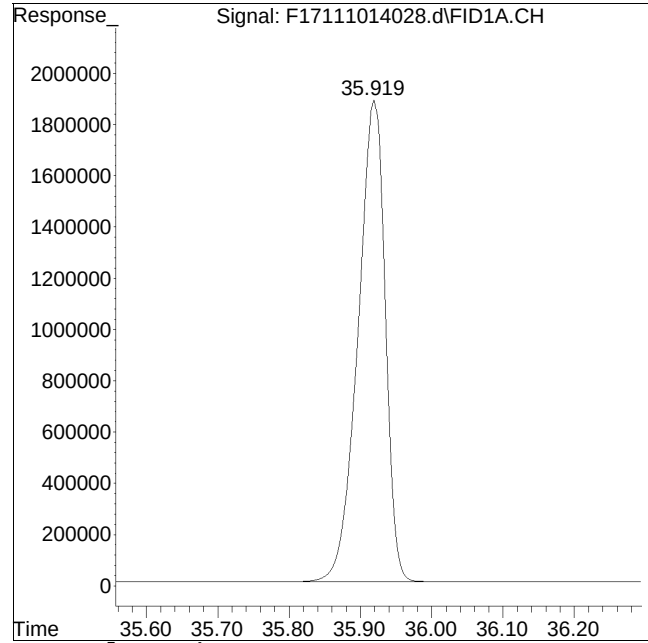
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #24: d50-Tetracosane



Original Peak Response = 49999498



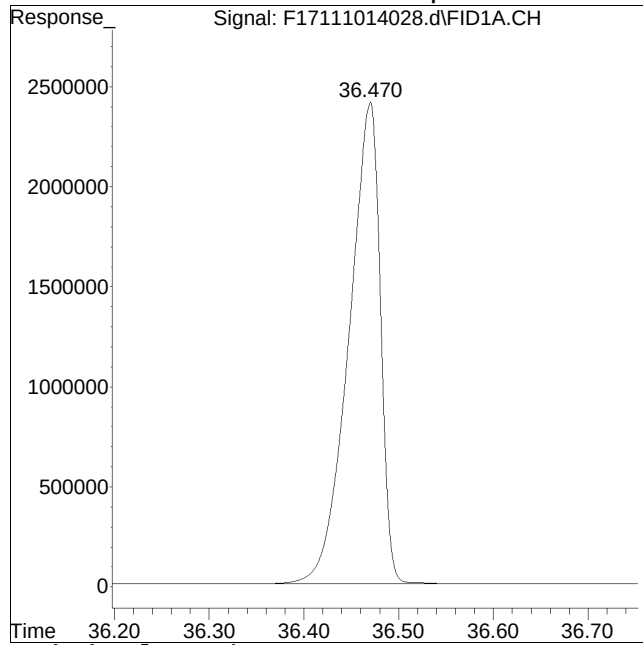
Manual Peak Response = 49983701 M4

M4 = Poor automated baseline construction.

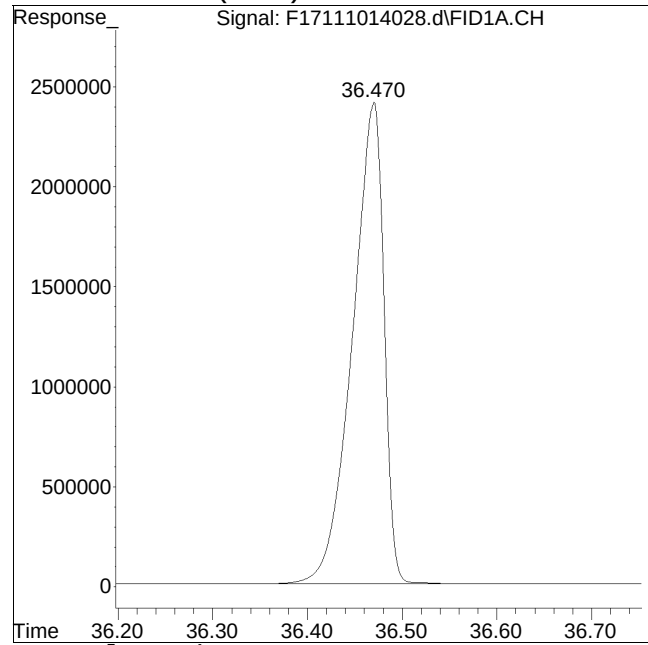
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #25: n-Tetracosane (C24)



Original Peak Response = 55592063



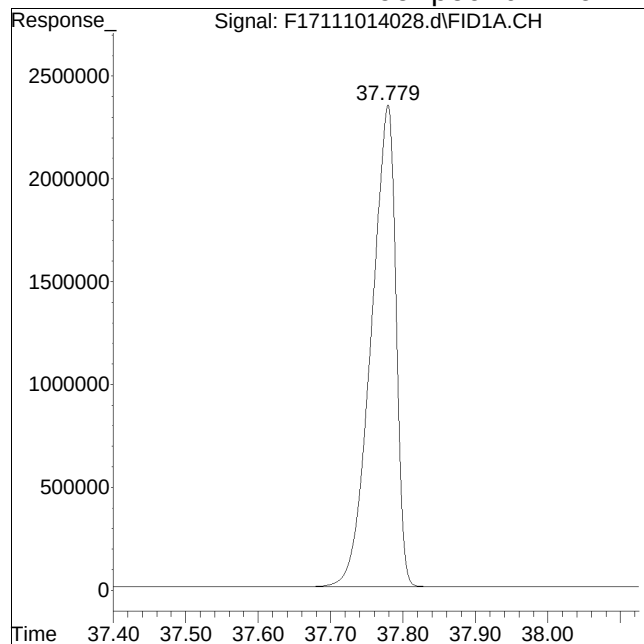
Manual Peak Response = 55601443 M4

M4 = Poor automated baseline construction.

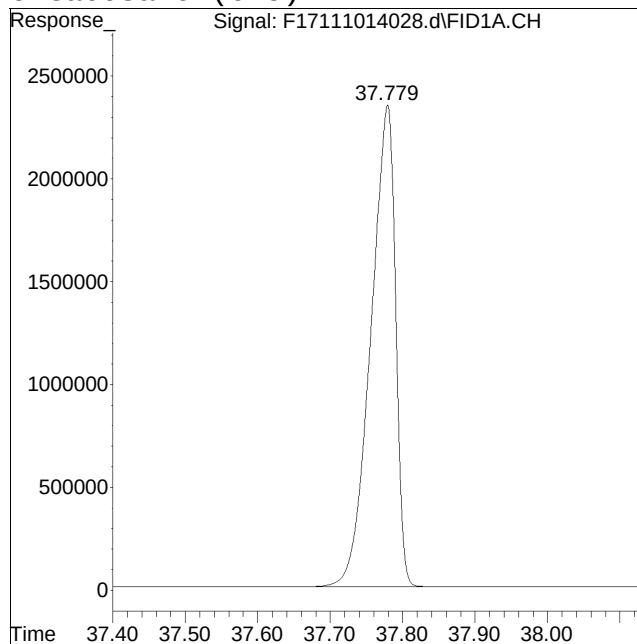
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #26: n-Pentacosane (C25)



Original Peak Response = 55605391



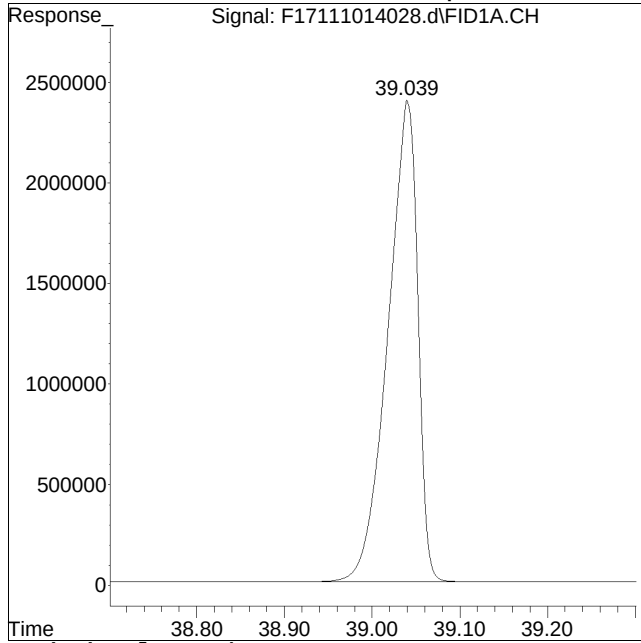
Manual Peak Response = 55584700 M4

M4 = Poor automated baseline construction.

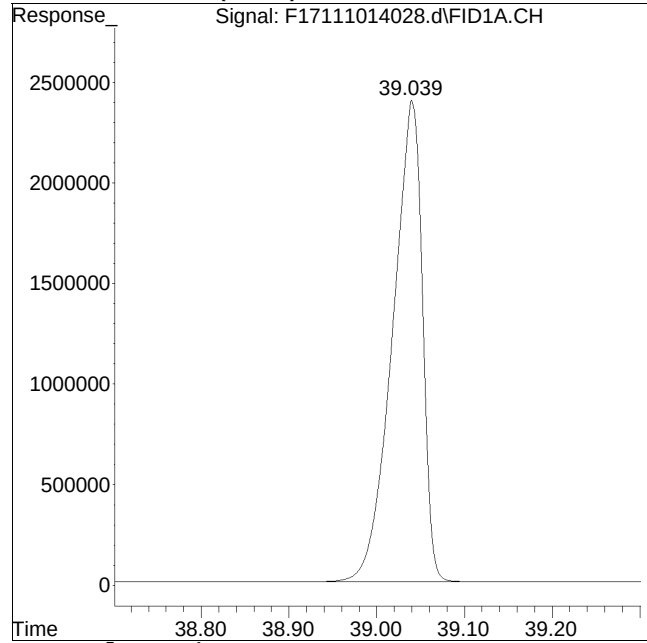
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #27: n-Hexacosane (C26)



Original Peak Response = 56554758



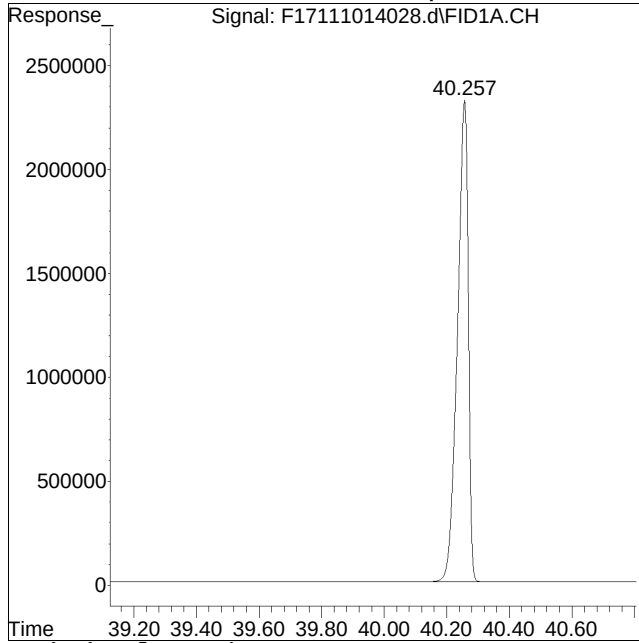
Manual Peak Response = 56520227 M4

M4 = Poor automated baseline construction.

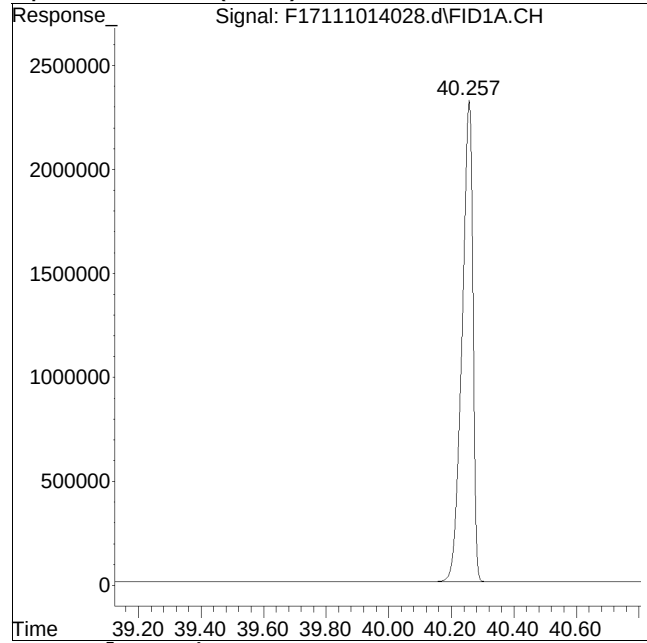
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #28: n-Heptacosane (C27)



Original Peak Response = 55844588



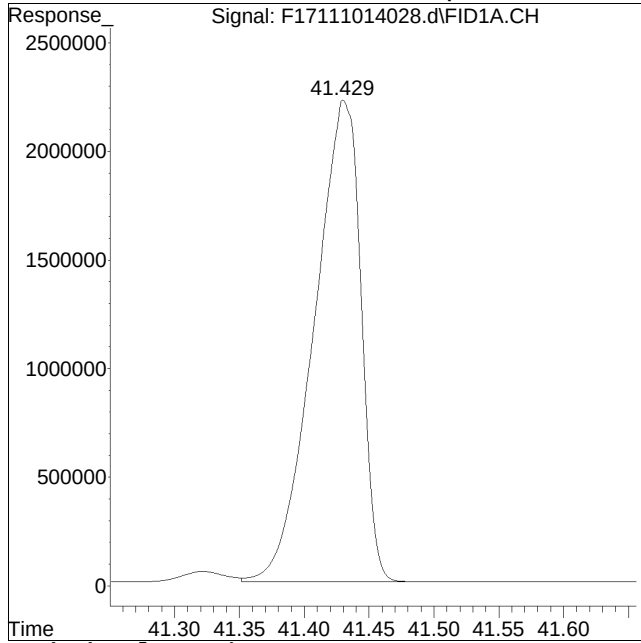
Manual Peak Response = 55822334 M4

M4 = Poor automated baseline construction.

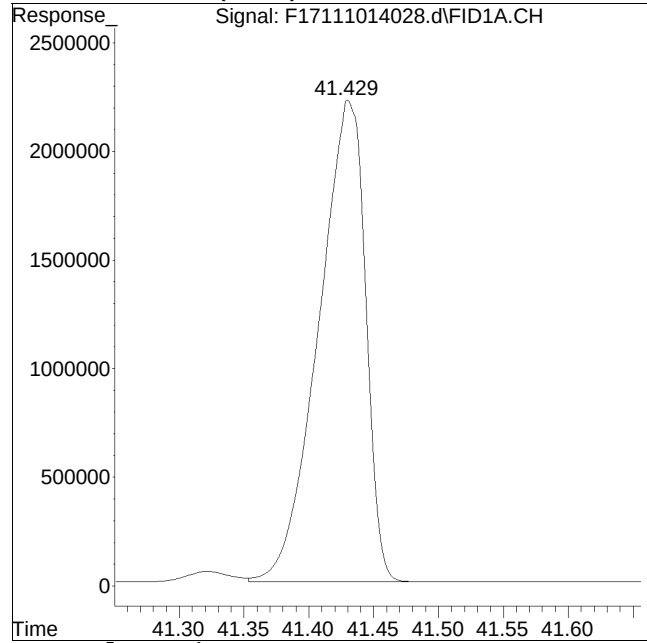
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #29: n-Octacosane (C28)



Original Peak Response = 55854682



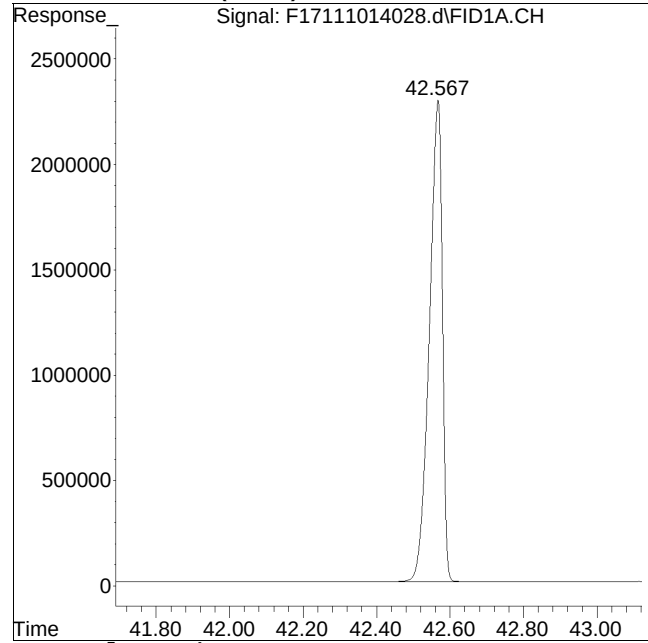
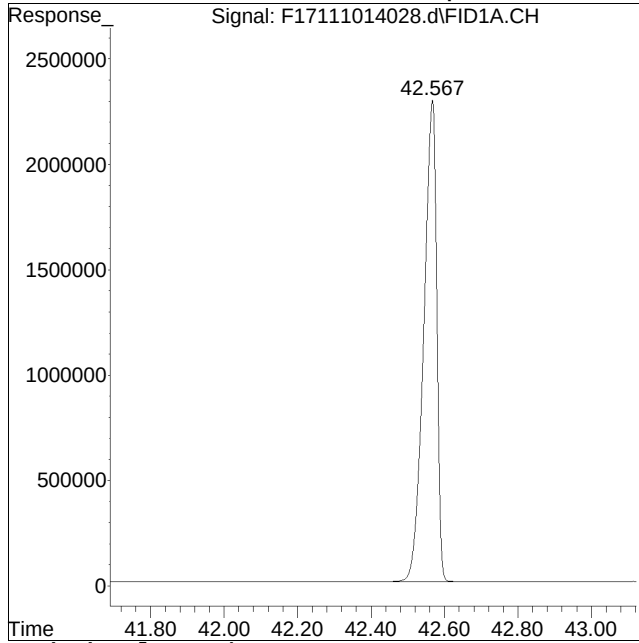
Manual Peak Response = 55792477 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #30: n-Nonacosane (C29)



Original Peak Response = 56030723

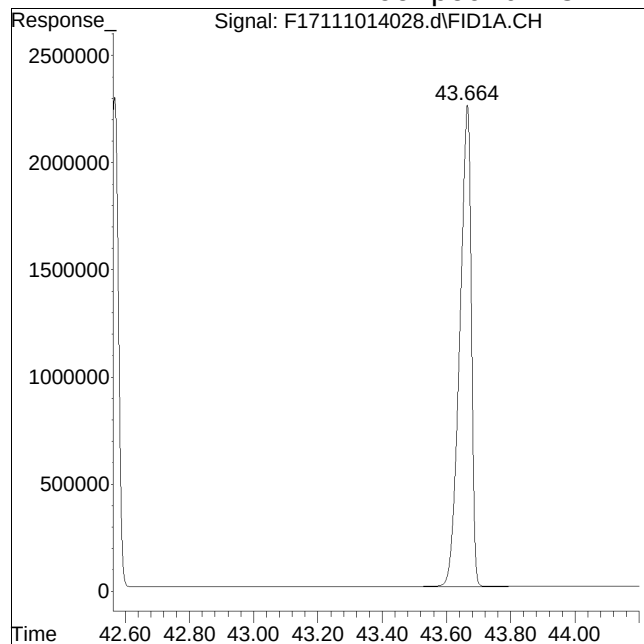
Manual Peak Response = 56007887 M4

M4 = Poor automated baseline construction.

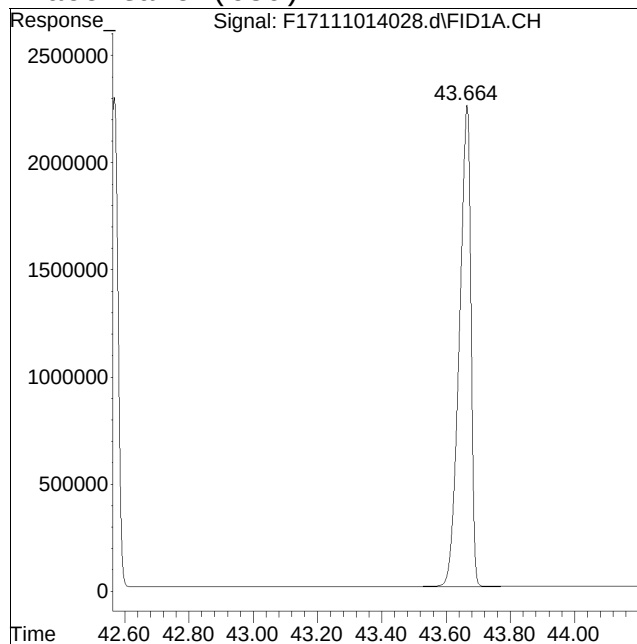
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #31: n-Triacontane (C30)



Original Peak Response = 55875908



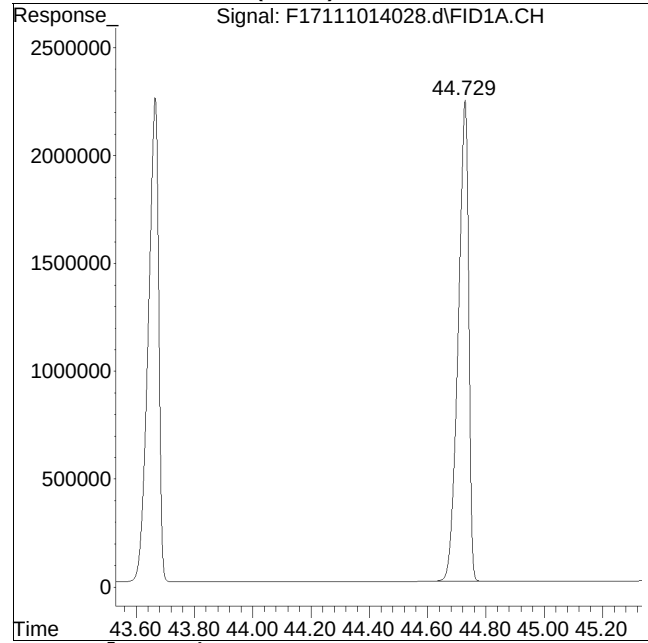
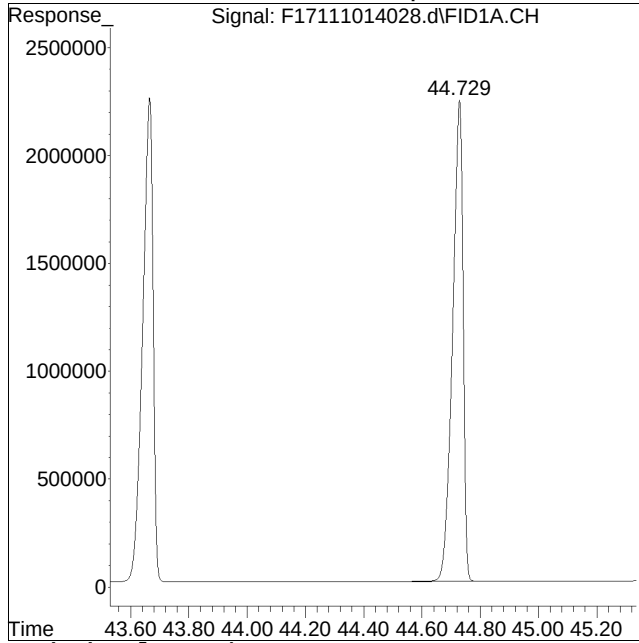
Manual Peak Response = 55890152 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #32: n-Hentriacontane (C31)



Original Peak Response = 55776747

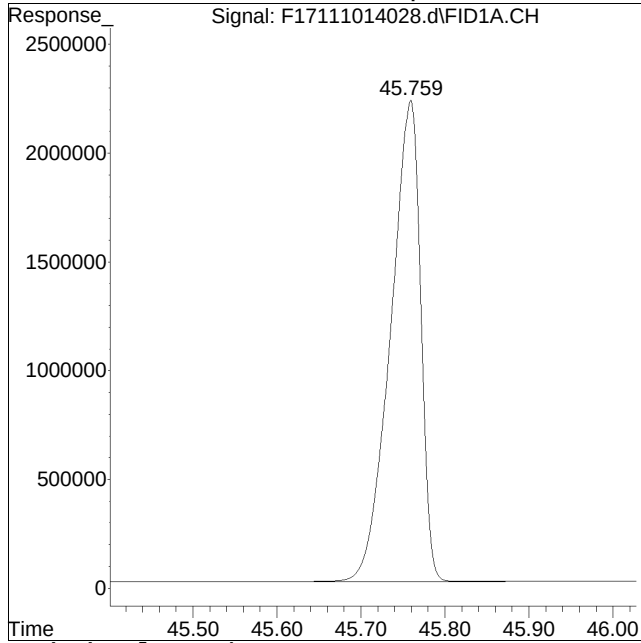
Manual Peak Response = 55831872 M4

M4 = Poor automated baseline construction.

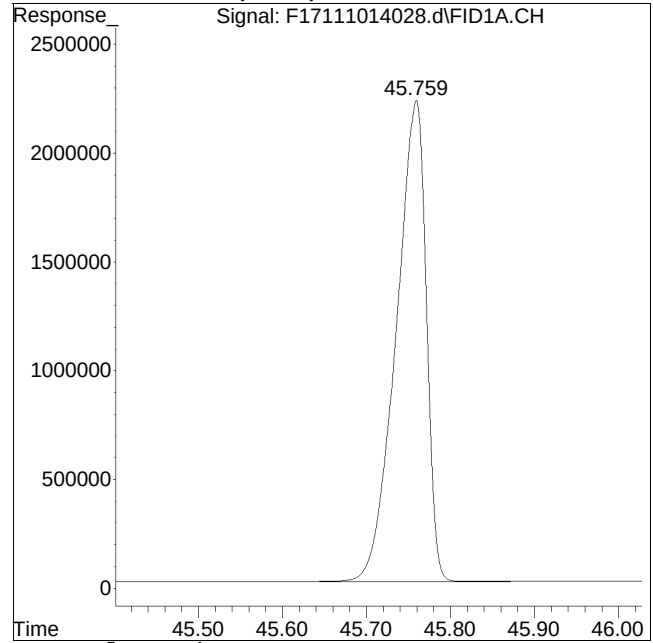
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #33: n-Dotriacontane (C32)



Original Peak Response = 55094420



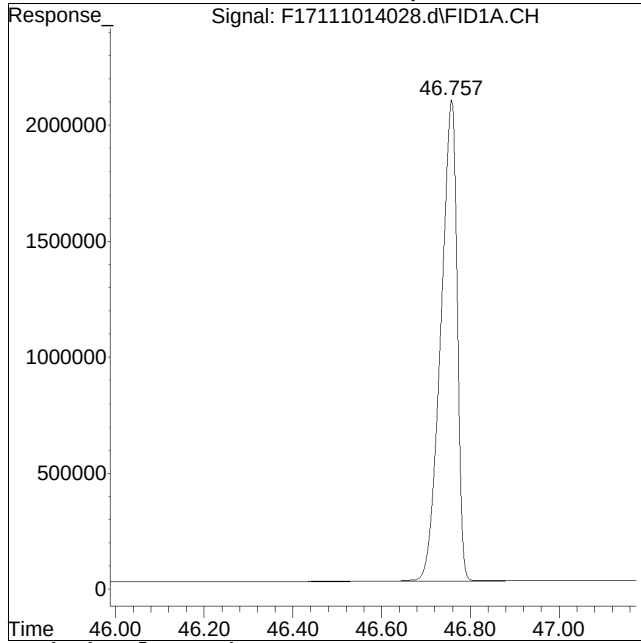
Manual Peak Response = 55077837 M4

M4 = Poor automated baseline construction.

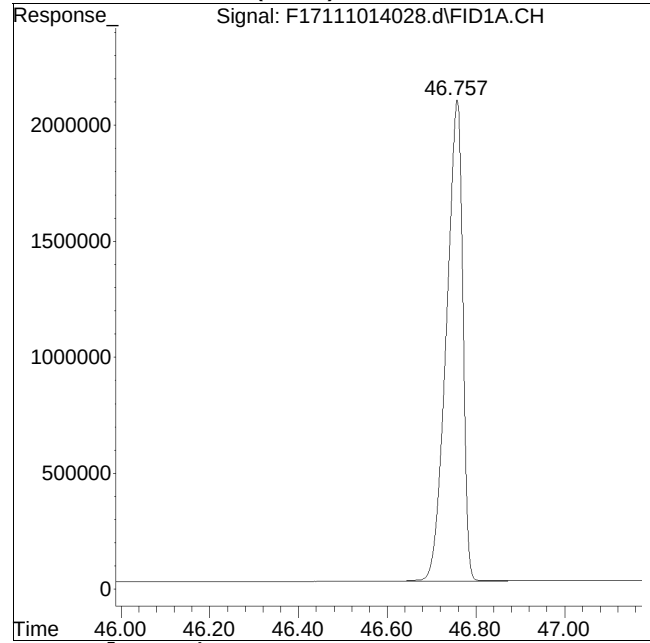
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #34: n-Tritriacontane (C33)



Original Peak Response = 53224242



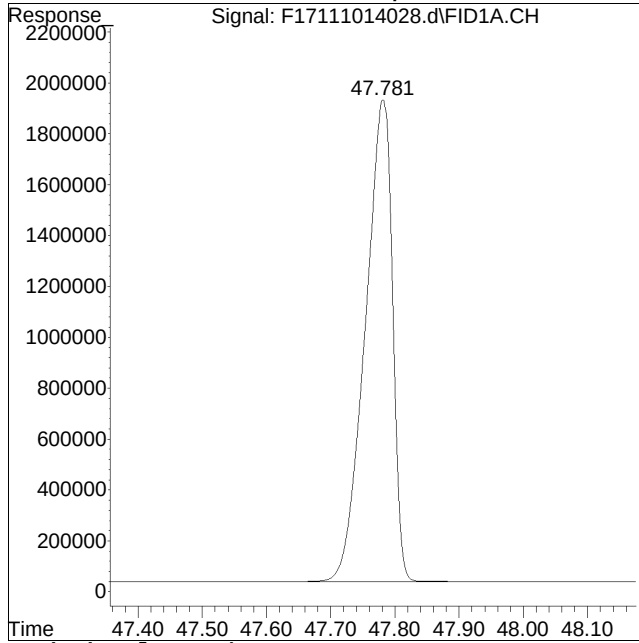
Manual Peak Response = 53104426 M4

M4 = Poor automated baseline construction.

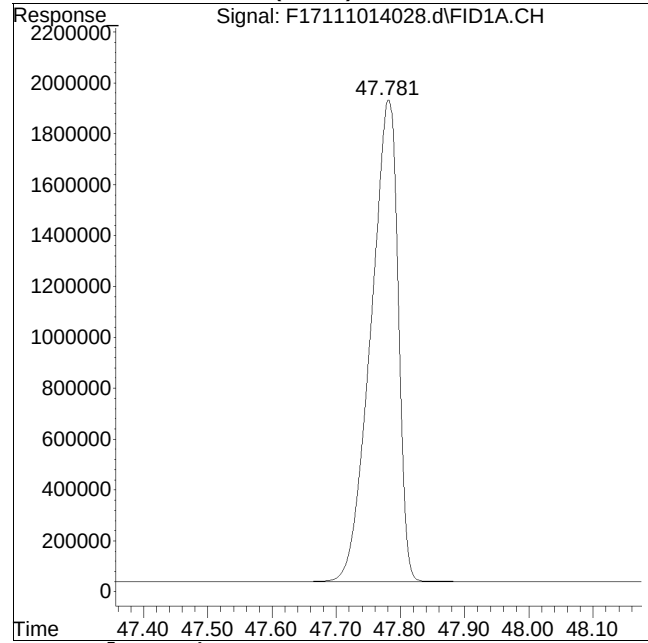
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #35: n-tetratriacontane (C34)



Original Peak Response = 55947322



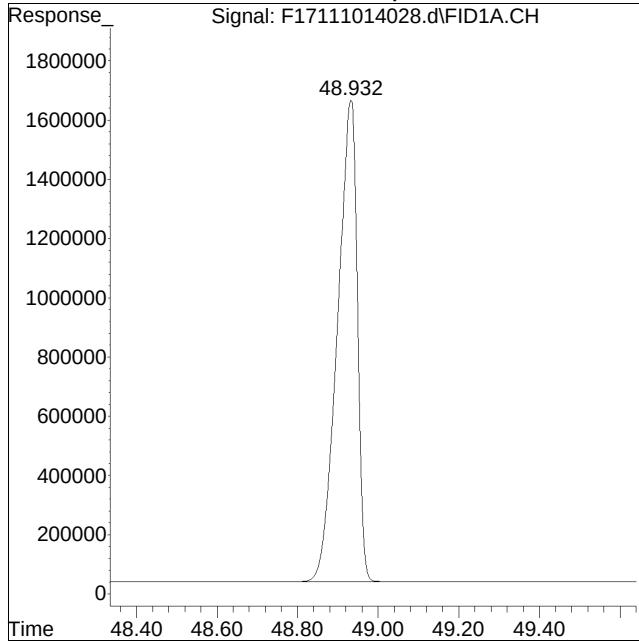
Manual Peak Response = 55861107 M4

M4 = Poor automated baseline construction.

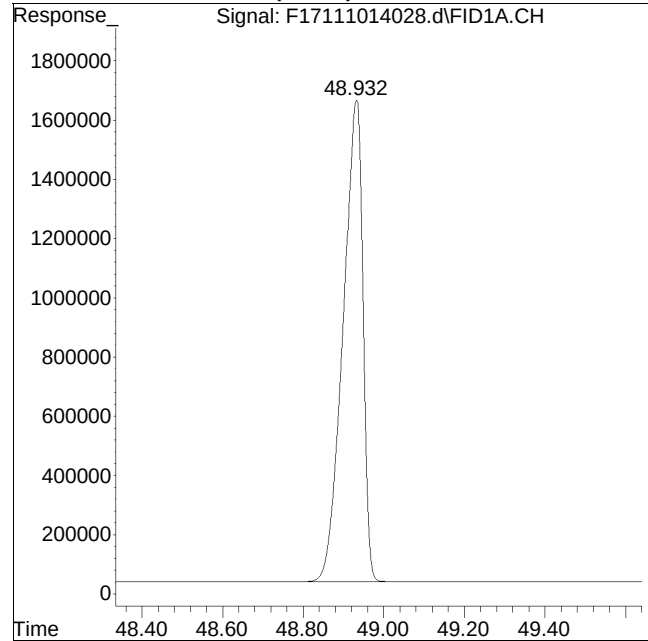
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #36: n-Pentatriacontane (C35)



Original Peak Response = 55771209



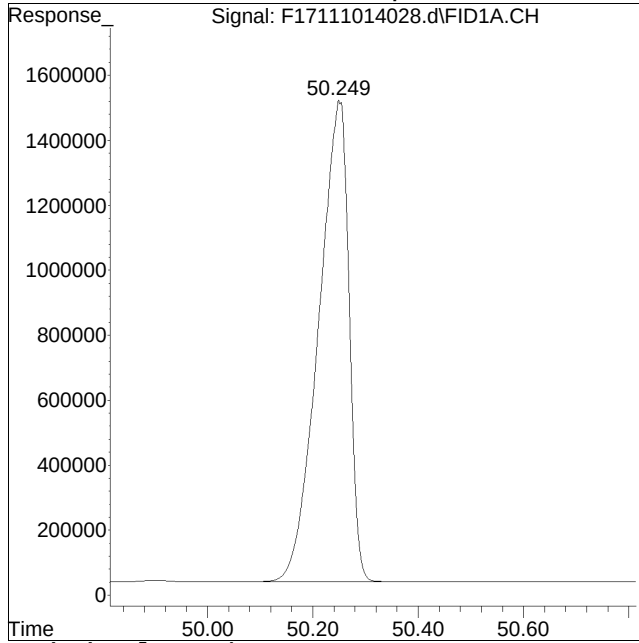
Manual Peak Response = 55722183 M4

M4 = Poor automated baseline construction.

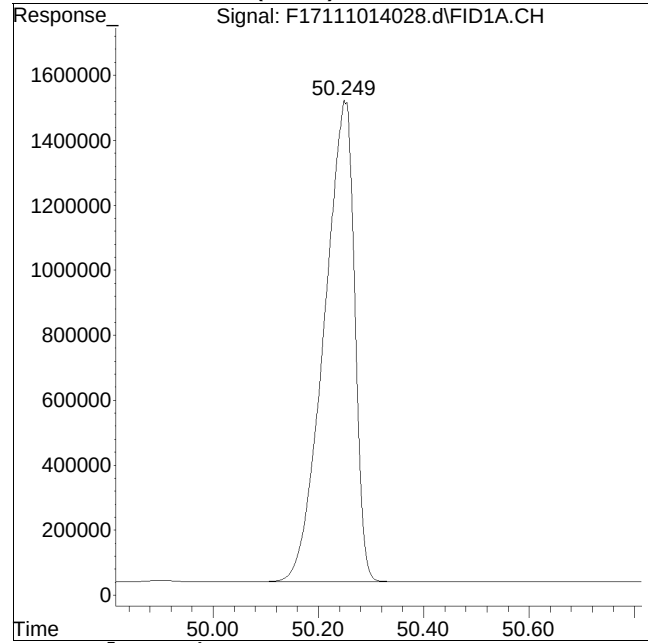
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #37: n-Hexatriacontane (C36)



Original Peak Response = 59638827



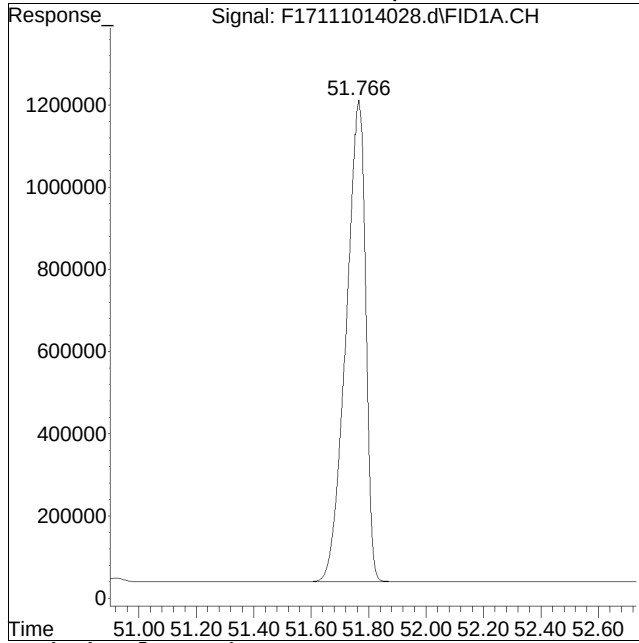
Manual Peak Response = 59610361 M4

M4 = Poor automated baseline construction.

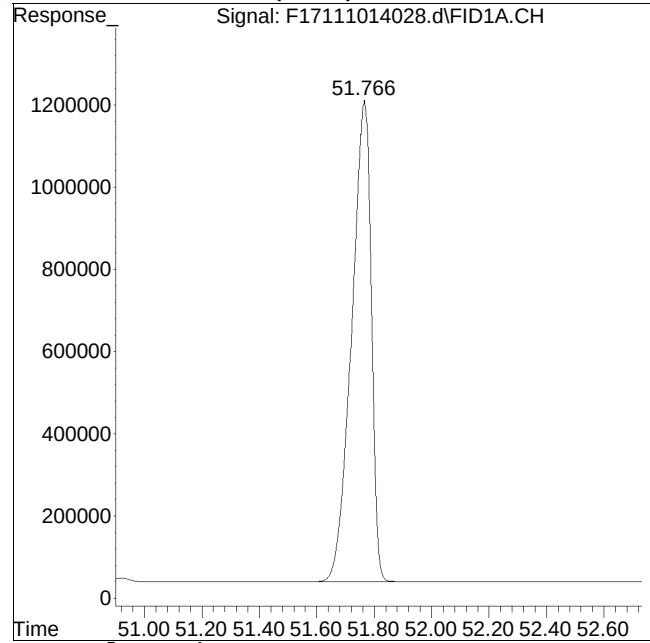
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #38: n-Heptatriacontane (C37)



Original Peak Response = 55660971



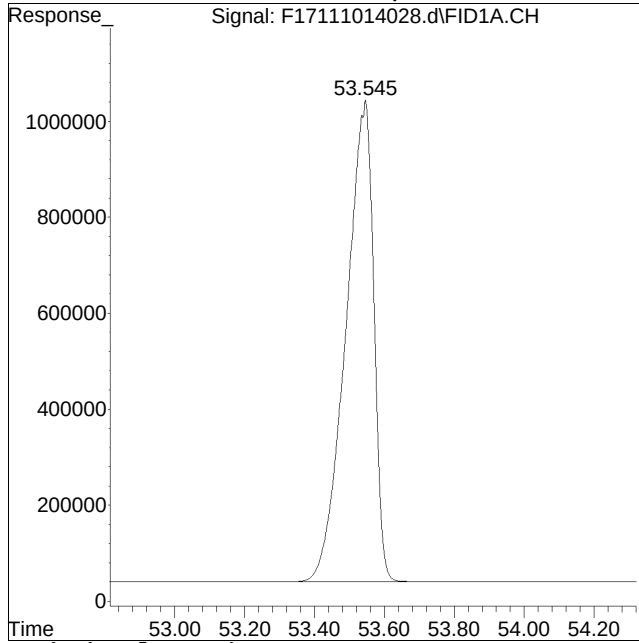
Manual Peak Response = 55634288 M4

M4 = Poor automated baseline construction.

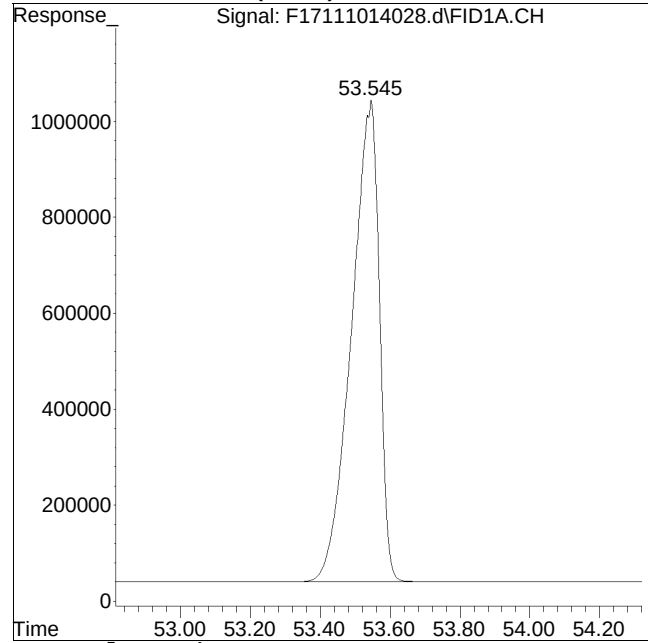
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #39: n-Octatriacontane (C38)



Original Peak Response = 55516242



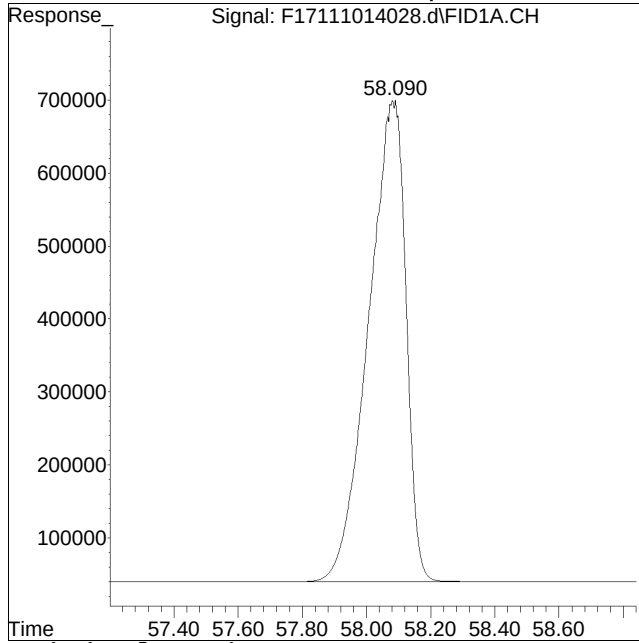
Manual Peak Response = 55500204 M4

M4 = Poor automated baseline construction.

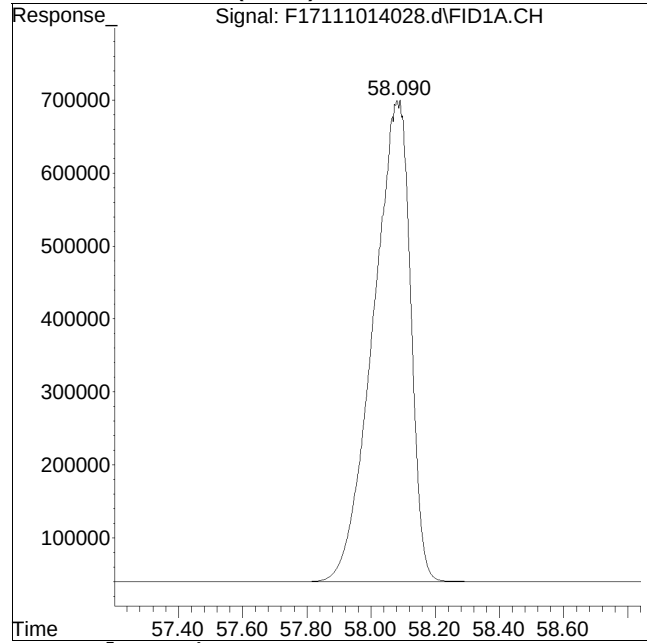
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #41: n-Tetracontane (C40)



Original Peak Response = 53279992



Manual Peak Response = 53295101 M4

M4 = Poor automated baseline construction.

Continuing Calibration

7
FID FORENSICS CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1430198

Instrument ID: FID17 Calibration Date: 12/23/2014 Time: 04:07

Lab File ID: F17122214022 Init. Calib. Date(s): 11/10/14 11/11/14

Sample No: WG750850-1 Init. Calib. Times : 19:02 02:29

Injection Time: 12/23/2014 04:07

Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 I	5-alpha-androstane	50.000	50.000	0.0	114	0.00
2 t	n-Octane (C8)	50.000	47.636	4.7	110	0.00
3 t	n-Nonane (C9)	50.000	49.092	1.8	114	0.00
4 t	n-Decane (C10)	50.000	49.842	0.3	114	0.00
5 t	n-Undecane (C11)	50.000	48.923	2.2	111	0.00
6 t	n-Dodecane (C12)	50.000	50.440	-0.9	114	0.00
7 t	n-Tridecane (C13)	50.000	50.504	-1.0	114	0.00
9 t	n-Tetradecane (C14)	50.000	50.583	-1.2	114	0.00
11 t	n-Pentadecane (C15)	50.000	50.553	-1.1	114	0.00
12 t	n-Hexadecane (C16)	50.000	50.181	-0.4	114	0.00
14 t	n-Heptadecane (C17)	50.000	49.851	0.3	112	0.00
15 t	Pristane	50.000	50.449	-0.9	115	0.00
16 t	n-Octadecane (C18)	50.000	50.163	-0.3	113	0.00
17 t	Phytane	50.000	49.759	0.5	113	0.00
18 t	n-Nonadecane (C19)	50.000	49.892	0.2	113	0.00
19 s	ortho-terphenyl	50.000	49.685	0.6	115	0.00
20 t	n-Eicosane (C20)	50.000	49.897	0.2	113	0.00
21 t	n-Heneicosane (C21)	50.000	49.884	0.2	113	0.00
22 t	n-Docosane (C22)	50.000	49.725	0.5	113	0.00
23 t	n-Tricosane (C23)	50.000	49.594	0.8	113	0.00
24 s	d50-Tetracosane	50.000	48.569	2.9	113	0.00
25 t	n-Tetracosane (C24)	50.000	49.724	0.6	114	0.00
26 t	n-Pentacosane (C25)	50.000	49.539	0.9	114	0.00
27 t	n-Hexacosane (C26)	50.000	49.482	1.0	114	0.00
28 t	n-Heptacosane (C27)	50.000	49.185	1.6	114	0.00
29 t	n-Octacosane (C28)	50.000	49.418	1.2	115	0.00
30 t	n-Nonacosane (C29)	50.000	49.207	1.6	114	0.00
31 t	n-Triacontane (C30)	50.000	48.896	2.2	114	0.00
32 t	n-Hentriacontane (C31)	50.000	48.865	2.3	114	0.00
33 t	n-Dotriacontane (C32)	50.000	48.911	2.2	115	0.00
34 t	n-Tritriacontane (C33)	50.000	48.951	2.1	115	0.00
35 t	n-tetratriacontane (C34)	50.000	48.942	2.1	115	0.00

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\FID17\2014\DEC2014\DEC22\
 Data File : F17122214022.d
 Signal(s) : FID1A.CH
 Acq On : 23 Dec 2014 4:07 am
 Operator : FID17:NL
 Sample : WG750850-1
 Misc : WG750850, FRAV14 50ug/mL
 ALS Vial : 11 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Dec 30 09:36:12 2014
 Quant Method : C:\msdchem\1\DATA\FID17\December\DEC22\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Tue Dec 23 06:59:16 2014
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
36 t	n-Pentatriacontane (C35)	50.000	49.124	1.8	116	0.00
37 t	n-Hexatriacontane (C36)	50.000	49.052	1.9	116	0.00
38 t	n-Heptatriacontane (C37)	50.000	48.840	2.3	116	0.00
39 t	n-Octatriacontane (C38)	50.000	48.792	2.4	115	0.00
41 t	n-Tetracontane (C40)	50.000	48.261	3.5	113	0.00

Evaluate Continuing Calibration Report - Not Founds

FORM VII A2-TPH

7
FID FORENSICS CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1430198

Instrument ID: FID17 Calibration Date: 12/23/2014 Time: 14:34

Lab File ID: F17122214036 Init. Calib. Date(s): 11/10/14 11/11/14

Sample No: WG750850-2 Init. Calib. Times : 19:02 02:29

Injection Time: 12/23/2014 14:34

Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 I	5-alpha-androstane	50.000	50.000	0.0	113	0.00
2 t	n-Octane (C8)	50.000	47.416	5.2	108	0.00
3 t	n-Nonane (C9)	50.000	48.710	2.6	112	0.00
4 t	n-Decane (C10)	50.000	49.445	1.1	112	0.00
5 t	n-Undecane (C11)	50.000	49.282	1.4	110	0.00
6 t	n-Dodecane (C12)	50.000	50.407	-0.8	112	0.00
7 t	n-Tridecane (C13)	50.000	50.516	-1.0	113	0.00
9 t	n-Tetradecane (C14)	50.000	50.626	-1.3	113	0.00
11 t	n-Pentadecane (C15)	50.000	50.635	-1.3	113	0.00
12 t	n-Hexadecane (C16)	50.000	50.423	-0.8	113	0.00
14 t	n-Heptadecane (C17)	50.000	49.895	0.2	111	0.00
15 t	Pristane	50.000	50.843	-1.7	115	0.00
16 t	n-Octadecane (C18)	50.000	50.123	-0.2	112	0.00
17 t	Phytane	50.000	50.157	-0.3	113	0.00
18 t	n-Nonadecane (C19)	50.000	50.015	-0.0	112	0.00
19 s	ortho-terphenyl	50.000	49.671	0.7	113	0.00
20 t	n-Eicosane (C20)	50.000	49.951	0.1	112	0.00
21 t	n-Heneicosane (C21)	50.000	49.971	0.1	113	0.00
22 t	n-Docosane (C22)	50.000	49.768	0.5	112	0.00
23 t	n-Tricosane (C23)	50.000	49.655	0.7	112	0.00
24 s	d50-Tetracosane	50.000	48.626	2.7	112	0.00
25 t	n-Tetracosane (C24)	50.000	49.821	0.4	113	0.00
26 t	n-Pentacosane (C25)	50.000	49.652	0.7	113	0.00
27 t	n-Hexacosane (C26)	50.000	49.558	0.9	113	0.00
28 t	n-Heptacosane (C27)	50.000	49.315	1.4	113	0.00
29 t	n-Octacosane (C28)	50.000	49.647	0.7	114	0.00
30 t	n-Nonacosane (C29)	50.000	49.352	1.3	113	0.00
31 t	n-Triacontane (C30)	50.000	49.075	1.8	113	0.00
32 t	n-Hentriacontane (C31)	50.000	49.046	1.9	114	0.00
33 t	n-Dotriacontane (C32)	50.000	49.058	1.9	114	0.00
34 t	n-Tritriacontane (C33)	50.000	49.142	1.7	115	0.00
35 t	n-tetratriacontane (C34)	50.000	49.211	1.6	115	0.00

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\FID17\2014\DEC2014\DEC22\
 Data File : F17122214036.d
 Signal(s) : FID1A.CH
 Acq On : 23 Dec 2014 2:34 pm
 Operator : FID17:NL
 Sample : WG750850-2
 Misc : WG750850, FRAV14 50ug/mL
 ALS Vial : 18 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 12 10:21:50 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\DECEMBER\DEC22\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Tue Dec 23 06:59:16 2014
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
36 t	n-Pentatriacontane (C35)	50.000	49.417	1.2	115	0.00
37 t	n-Hexatriacontane (C36)	50.000	49.416	1.2	116	0.00
38 t	n-Heptatriacontane (C37)	50.000	49.123	1.8	115	0.00
39 t	n-Octatriacontane (C38)	50.000	49.030	1.9	114	0.00
41 t	n-Tetracontane (C40)	50.000	48.526	2.9	112	0.00

Evaluate Continuing Calibration Report - Not Founds

FORM VII A2-TPH

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC22\
 Data File : F17122214022.d
 Signal(s) : FID1A.CH
 Acq On : 23 Dec 2014 4:07 am
 Operator : FID17:NL
 Sample : WG750850-1
 Misc : WG750850, FRAV14 50ug/mL
 ALS Vial : 11 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Dec 30 09:36:12 2014
 Quant Method : C:\msdchem\1\DATA\FID17\December\DEC22\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Tue Dec 23 06:59:16 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 I	5-alpha-androstane	50.000	50.000	0.0	114	0.00
2 t	n-Octane (C8)	50.000	47.636	4.7	110	0.00
3 t	n-Nonane (C9)	50.000	49.092	1.8	114	0.00
4 t	n-Decane (C10)	50.000	49.842	0.3	114	0.00
5 t	n-Undecane (C11)	50.000	48.923	2.2	111	0.00
6 t	n-Dodecane (C12)	50.000	50.440	-0.9	114	0.00
7 t	n-Tridecane (C13)	50.000	50.504	-1.0	114	0.00
9 t	n-Tetradecane (C14)	50.000	50.583	-1.2	114	0.00
11 t	n-Pentadecane (C15)	50.000	50.553	-1.1	114	0.00
12 t	n-Hexadecane (C16)	50.000	50.181	-0.4	114	0.00
14 t	n-Heptadecane (C17)	50.000	49.851	0.3	112	0.00
15 t	Pristane	50.000	50.449	-0.9	115	0.00
16 t	n-Octadecane (C18)	50.000	50.163	-0.3	113	0.00
17 t	Phytane	50.000	49.759	0.5	113	0.00
18 t	n-Nonadecane (C19)	50.000	49.892	0.2	113	0.00
19 s	ortho-terphenyl	50.000	49.685	0.6	115	0.00
20 t	n-Eicosane (C20)	50.000	49.897	0.2	113	0.00
21 t	n-Heneicosane (C21)	50.000	49.884	0.2	113	0.00
22 t	n-Docosane (C22)	50.000	49.725	0.5	113	0.00
23 t	n-Tricosane (C23)	50.000	49.594	0.8	113	0.00
24 s	d50-Tetracosane	50.000	48.569	2.9	113	0.00
25 t	n-Tetracosane (C24)	50.000	49.724	0.6	114	0.00
26 t	n-Pentacosane (C25)	50.000	49.539	0.9	114	0.00
27 t	n-Hexacosane (C26)	50.000	49.482	1.0	114	0.00
28 t	n-Heptacosane (C27)	50.000	49.185	1.6	114	0.00
29 t	n-Octacosane (C28)	50.000	49.418	1.2	115	0.00
30 t	n-Nonacosane (C29)	50.000	49.207	1.6	114	0.00
31 t	n-Triacontane (C30)	50.000	48.896	2.2	114	0.00
32 t	n-Hentriacontane (C31)	50.000	48.865	2.3	114	0.00
33 t	n-Dotriacontane (C32)	50.000	48.911	2.2	115	0.00
34 t	n-Tritriacontane (C33)	50.000	48.951	2.1	115	0.00
35 t	n-tetratriacontane (C34)	50.000	48.942	2.1	115	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC22\
 Data File : F17122214022.d
 Signal(s) : FID1A.CH
 Acq On : 23 Dec 2014 4:07 am
 Operator : FID17:NL
 Sample : WG750850-1
 Misc : WG750850, FRAV14 50ug/mL
 ALS Vial : 11 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Dec 30 09:36:12 2014
 Quant Method : C:\msdchem\1\DATA\FID17\December\DEC22\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Tue Dec 23 06:59:16 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
36 t	n-Pentatriacontane (C35)	50.000	49.124	1.8	116	0.00
37 t	n-Hexatriacontane (C36)	50.000	49.052	1.9	116	0.00
38 t	n-Heptatriacontane (C37)	50.000	48.840	2.3	116	0.00
39 t	n-Octatriacontane (C38)	50.000	48.792	2.4	115	0.00
41 t	n-Tetracontane (C40)	50.000	48.261	3.5	113	0.00

Evaluate Continuing Calibration Report - Not Found

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Mass Discrimination (Response)	Ratio	Range Limits
n-Hexatriacontane (C36) to n-Eicosane (C20)	1.06	0.85 - 1.15

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC22\
 Data File : F17122214022.d
 Signal(s) : FID1A.CH
 Acq On : 23 Dec 2014 4:07 am
 Operator : FID17:NL
 Sample : WG750850-1
 Misc : WG750850, FRAV14 50ug/mL
 ALS Vial : 11 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Dec 30 09:36:12 2014
 Quant Method : C:\msdchem\1\DATA\FID17\December\DEC22\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Tue Dec 23 06:59:16 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc Units	

Internal Standards					
1) I	5-alpha-androstane	31.156	62159916	50.000 ug/mL	M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.137	67970398	49.685 ug/mL	M4
Spiked Amount 50.000		Range 50 - 130	Recovery =	99.37%	
24) s	d50-Tetracosane	35.829	53962237	48.569 ug/mL	M4
Spiked Amount 50.000		Range 50 - 130	Recovery =	97.14%	
Target Compounds					
2) t	n-Octane (C8)	5.513	50147096	47.636 ug/mL	M4
3) t	n-Nonane (C9)	7.701	53165853	49.092 ug/mL	M4
4) t	n-Decane (C10)	10.177	55374681	49.842 ug/mL	M4
5) t	n-Undecane (C11)	12.688	54944639	48.923 ug/mL	M4
6) t	n-Dodecane (C12)	15.117	57560936	50.440 ug/mL	M4
7) t	n-Tridecane (C13)	17.426	58064098	50.504 ug/mL	M4
9) t	n-Tetradecane (C14)	19.610	58875574	50.583 ug/mL	M4
11) t	n-Pentadecane (C15)	21.680	59969661	50.553 ug/mL	M4
12) t	n-Hexadecane (C16)	23.642	59906273	50.181 ug/mL	M4
14) t	n-Heptadecane (C17)	25.506	59092754	49.851 ug/mL	M4
15) t	Pristane	25.614	61774487	50.449 ug/mL	M4
16) t	n-Octadecane (C18)	27.277	61118149	50.163 ug/mL	M4
17) t	Phytane	27.437	53492947	49.759 ug/mL	M4
18) t	n-Nonadecane (C19)	28.965	60604569	49.892 ug/mL	M4
20) t	n-Eicosane (C20)	30.578	60498085	49.897 ug/mL	M4
21) t	n-Heneicosane (C21)	32.120	60937665	49.884 ug/mL	M4
22) t	n-Docosane (C22)	33.596	61357859	49.725 ug/mL	M4
23) t	n-Tricosane (C23)	35.015	61805067	49.594 ug/mL	M4
25) t	n-Tetracosane (C24)	36.379	62074663	49.724 ug/mL	M4
26) t	n-Pentacosane (C25)	37.687	61526612	49.539 ug/mL	M4
27) t	n-Hexacosane (C26)	38.950	62828268	49.482 ug/mL	M4
28) t	n-Heptacosane (C27)	40.167	62136623	49.185 ug/mL	M4
29) t	n-Octacosane (C28)	41.342	62343342	49.418 ug/mL	M4
30) t	n-Nonacosane (C29)	42.478	62217132	49.207 ug/mL	M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC22\
 Data File : F17122214022.d
 Signal(s) : FID1A.CH
 Acq On : 23 Dec 2014 4:07 am
 Operator : FID17:NL
 Sample : WG750850-1
 Misc : WG750850, FRAV14 50ug/mL
 ALS Vial : 11 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Dec 30 09:36:12 2014
 Quant Method : C:\msdchem\1\DATA\FID17\December\DEC22\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Tue Dec 23 06:59:16 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc Units
31) t	n-Triacontane (C30)	43.576	62116588	48.896 ug/mL M4
32) t	n-Hentriacontane (C31)	44.641	62121229	48.865 ug/mL M4
33) t	n-Dotriacontane (C32)	45.673	62641701	48.911 ug/mL M4
34) t	n-Tritriacontane (C33)	46.671	59337538	48.951 ug/mL M4
35) t	n-tetratriacontane (C34)	47.684	61879460	48.942 ug/mL M4
36) t	n-Pentatriacontane (C35)	48.822	62477588	49.124 ug/mL M4
37) t	n-Hexatriacontane (C36)	50.121	64123207	49.052 ug/mL M4
38) t	n-Heptatriacontane (C37)	51.619	62574718	48.840 ug/mL M4
39) t	n-Octatriacontane (C38)	53.365	61331184	48.792 ug/mL M4
41) t	n-Tetracontane (C40)	57.845	63408106	48.261 ug/mL M4

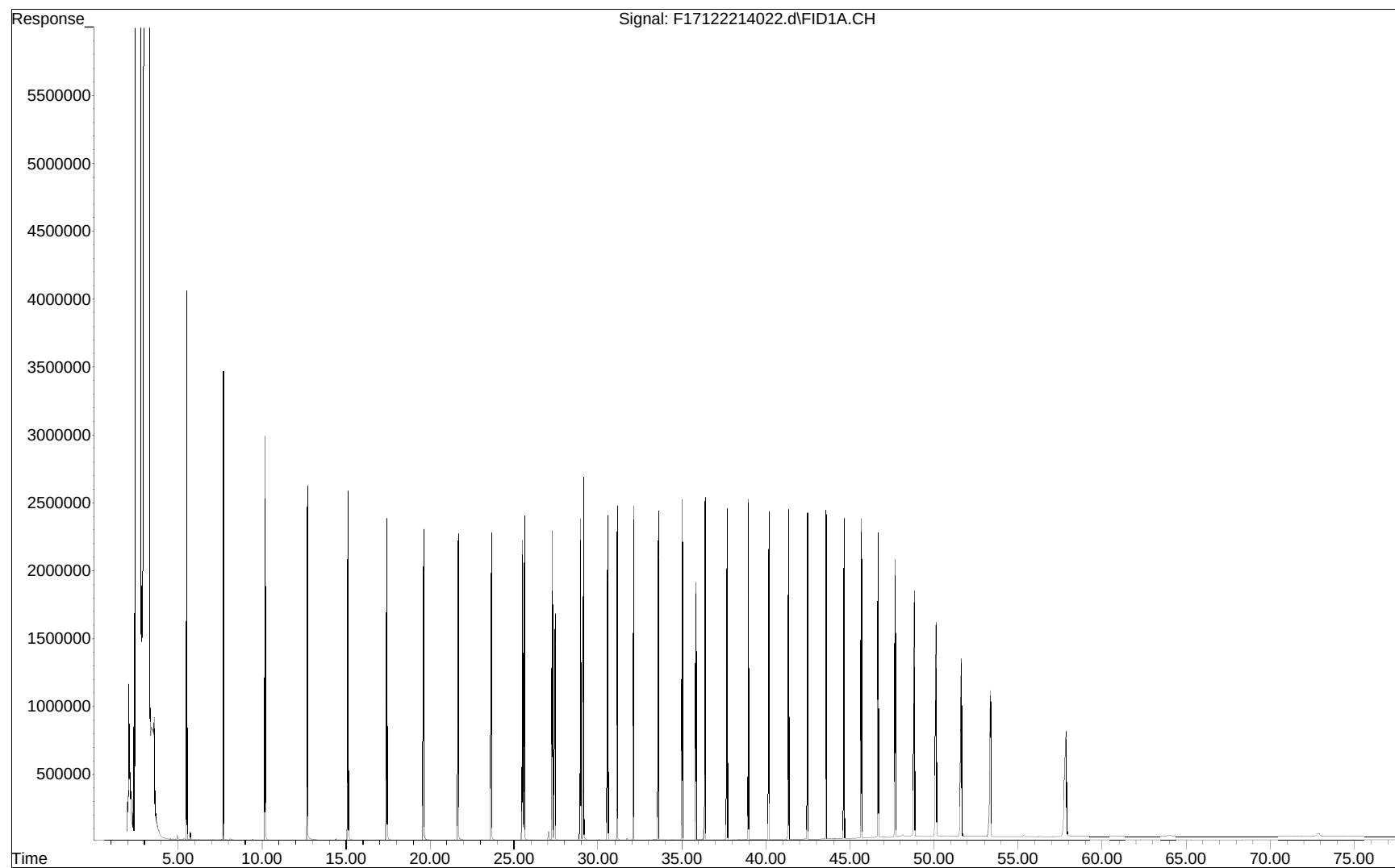
SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

File : 0:\Forensics\Data\FID17\2014\DEC2014\DEC22\F17122214022.d
Operator : FID17:NL
Acquired : 23 Dec 2014 4:07 am using AcqMethod FID17.M
Sample Name: WG750850-1
Instrument: FID17
Misc Info : WG750850, FRAV14 50ug/mL
Vial Number: 11
CurrentMeth: 0:\Forensics\Data\FID17\2014\DEC2014\DEC22\HC17111014F.M



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC22\
 Data File : F17122214036.d
 Signal(s) : FID1A.CH
 Acq On : 23 Dec 2014 2:34 pm
 Operator : FID17:NL
 Sample : WG750850-2
 Misc : WG750850, FRAV14 50ug/mL
 ALS Vial : 18 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 12 10:21:50 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\DECEMBER\DEC22\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Tue Dec 23 06:59:16 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 I	5-alpha-androstane	50.000	50.000	0.0	113	0.00
2 t	n-Octane (C8)	50.000	47.416	5.2	108	0.00
3 t	n-Nonane (C9)	50.000	48.710	2.6	112	0.00
4 t	n-Decane (C10)	50.000	49.445	1.1	112	0.00
5 t	n-Undecane (C11)	50.000	49.282	1.4	110	0.00
6 t	n-Dodecane (C12)	50.000	50.407	-0.8	112	0.00
7 t	n-Tridecane (C13)	50.000	50.516	-1.0	113	0.00
9 t	n-Tetradecane (C14)	50.000	50.626	-1.3	113	0.00
11 t	n-Pentadecane (C15)	50.000	50.635	-1.3	113	0.00
12 t	n-Hexadecane (C16)	50.000	50.423	-0.8	113	0.00
14 t	n-Heptadecane (C17)	50.000	49.895	0.2	111	0.00
15 t	Pristane	50.000	50.843	-1.7	115	0.00
16 t	n-Octadecane (C18)	50.000	50.123	-0.2	112	0.00
17 t	Phytane	50.000	50.157	-0.3	113	0.00
18 t	n-Nonadecane (C19)	50.000	50.015	-0.0	112	0.00
19 s	ortho-terphenyl	50.000	49.671	0.7	113	0.00
20 t	n-Eicosane (C20)	50.000	49.951	0.1	112	0.00
21 t	n-Heneicosane (C21)	50.000	49.971	0.1	113	0.00
22 t	n-Docosane (C22)	50.000	49.768	0.5	112	0.00
23 t	n-Tricosane (C23)	50.000	49.655	0.7	112	0.00
24 s	d50-Tetracosane	50.000	48.626	2.7	112	0.00
25 t	n-Tetracosane (C24)	50.000	49.821	0.4	113	0.00
26 t	n-Pentacosane (C25)	50.000	49.652	0.7	113	0.00
27 t	n-Hexacosane (C26)	50.000	49.558	0.9	113	0.00
28 t	n-Heptacosane (C27)	50.000	49.315	1.4	113	0.00
29 t	n-Octacosane (C28)	50.000	49.647	0.7	114	0.00
30 t	n-Nonacosane (C29)	50.000	49.352	1.3	113	0.00
31 t	n-Triacontane (C30)	50.000	49.075	1.8	113	0.00
32 t	n-Hentriacontane (C31)	50.000	49.046	1.9	114	0.00
33 t	n-Dotriacontane (C32)	50.000	49.058	1.9	114	0.00
34 t	n-Tritriacontane (C33)	50.000	49.142	1.7	115	0.00
35 t	n-tetratriacontane (C34)	50.000	49.211	1.6	115	0.00

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\FID17\2014\DEC2014\DEC22\
 Data File : F17122214036.d
 Signal(s) : FID1A.CH
 Acq On : 23 Dec 2014 2:34 pm
 Operator : FID17:NL
 Sample : WG750850-2
 Misc : WG750850, FRAV14 50ug/mL
 ALS Vial : 18 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 12 10:21:50 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\DECEMBER\DEC22\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Tue Dec 23 06:59:16 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
36 t	n-Pentatriacontane (C35)	50.000	49.417	1.2	115	0.00
37 t	n-Hexatriacontane (C36)	50.000	49.416	1.2	116	0.00
38 t	n-Heptatriacontane (C37)	50.000	49.123	1.8	115	0.00
39 t	n-Octatriacontane (C38)	50.000	49.030	1.9	114	0.00
41 t	n-Tetracontane (C40)	50.000	48.526	2.9	112	0.00

Evaluate Continuing Calibration Report - Not Found

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Mass Discrimination (Response)	Ratio	Range Limits
n-Hexatriacontane (C36) to n-Eicosane (C20)	1.07	0.85 - 1.15

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC22\
 Data File : F17122214036.d
 Signal(s) : FID1A.CH
 Acq On : 23 Dec 2014 2:34 pm
 Operator : FID17:NL
 Sample : WG750850-2
 Misc : WG750850, FRAV14 50ug/mL
 ALS Vial : 18 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 12 10:21:50 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\DECEMBER\DEC22\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Tue Dec 23 06:59:16 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.153	61548084	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.135	67282867	49.671	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 99.34%
24) s	d50-Tetracosane	35.828	53494637	48.626	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 97.25%
Target Compounds					
2) t	n-Octane (C8)	5.512	49424370	47.416	ug/mL M4
3) t	n-Nonane (C9)	7.700	52233632	48.710	ug/mL M4
4) t	n-Decane (C10)	10.175	54393453	49.445	ug/mL M4
5) t	n-Undecane (C11)	12.685	54802407	49.282	ug/mL M4
6) t	n-Dodecane (C12)	15.115	56956374	50.407	ug/mL M4
7) t	n-Tridecane (C13)	17.425	57506396	50.516	ug/mL M4
9) t	n-Tetradecane (C14)	19.611	58345541	50.626	ug/mL M4
11) t	n-Pentadecane (C15)	21.679	59475525	50.635	ug/mL M4
12) t	n-Hexadecane (C16)	23.640	59601846	50.423	ug/mL M4
14) t	n-Heptadecane (C17)	25.504	58562997	49.895	ug/mL M4
15) t	Pristane	25.614	61644303	50.843	ug/mL M4
16) t	n-Octadecane (C18)	27.275	60468944	50.123	ug/mL M4
17) t	Phytane	27.433	53389159	50.157	ug/mL M4
18) t	n-Nonadecane (C19)	28.964	60155337	50.015	ug/mL M4
20) t	n-Eicosane (C20)	30.575	59968261	49.951	ug/mL M4
21) t	n-Heneicosane (C21)	32.117	60442549	49.971	ug/mL M4
22) t	n-Docosane (C22)	33.594	60806752	49.768	ug/mL M4
23) t	n-Tricosane (C23)	35.013	61272643	49.655	ug/mL M4
25) t	n-Tetracosane (C24)	36.374	61582793	49.821	ug/mL M4
26) t	n-Pentacosane (C25)	37.684	61060185	49.652	ug/mL M4
27) t	n-Hexacosane (C26)	38.948	62305423	49.558	ug/mL M4
28) t	n-Heptacosane (C27)	40.163	61687498	49.315	ug/mL M4
29) t	n-Octacosane (C28)	41.338	62016611	49.647	ug/mL M4
30) t	n-Nonacosane (C29)	42.475	61786698	49.352	ug/mL M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC22\
 Data File : F17122214036.d
 Signal(s) : FID1A.CH
 Acq On : 23 Dec 2014 2:34 pm
 Operator : FID17:NL
 Sample : WG750850-2
 Misc : WG750850, FRAV14 50ug/mL
 ALS Vial : 18 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 12 10:21:50 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\DECEMBER\DEC22\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Tue Dec 23 06:59:16 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc Units
31) t	n-Triacontane (C30)	43.576	61729807	49.075 ug/mL M4
32) t	n-Hentriacontane (C31)	44.639	61738080	49.046 ug/mL M4
33) t	n-Dotriacontane (C32)	45.668	62210392	49.058 ug/mL M4
34) t	n-Tritriacontane (C33)	46.669	58982762	49.142 ug/mL M4
35) t	n-tetratriacontane (C34)	47.684	61606539	49.211 ug/mL M4
36) t	n-Pentatriacontane (C35)	48.819	62232029	49.417 ug/mL M4
37) t	n-Hexatriacontane (C36)	50.118	63963203	49.416 ug/mL M4
38) t	n-Heptatriacontane (C37)	51.613	62318746	49.123 ug/mL M4
39) t	n-Octatriacontane (C38)	53.358	61022928	49.030 ug/mL M4
41) t	n-Tetracontane (C40)	57.843	63128380	48.526 ug/mL M4

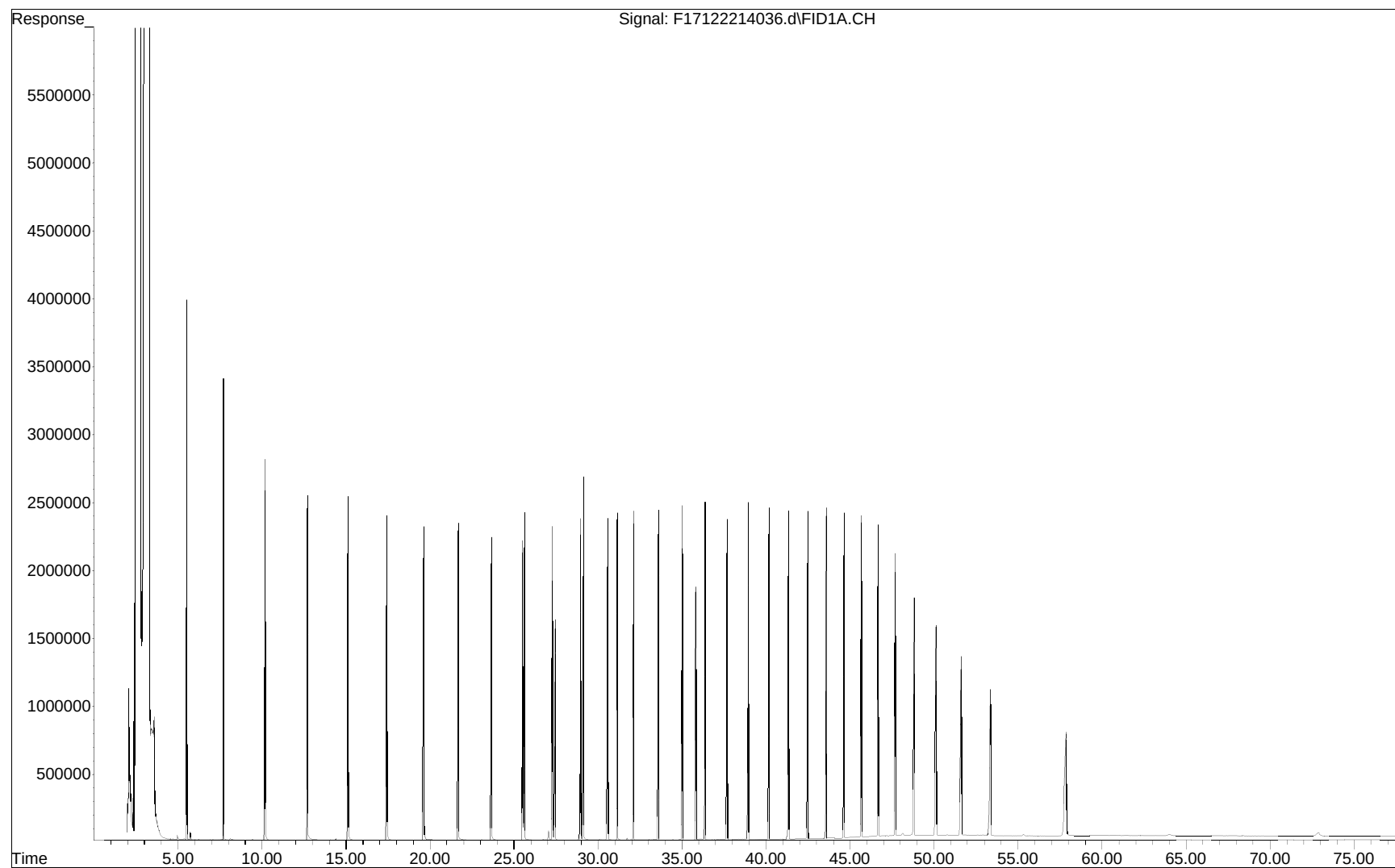
SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

File : 0:\Forensics\Data\FID17\2014\DEC2014\DEC22\F17122214036.d
Operator : FID17:NL
Acquired : 23 Dec 2014 2:34 pm using AcqMethod FID17.M
Sample Name: WG750850-2
Instrument: FID17
Misc Info : WG750850, FRAV14 50ug/mL
Vial Number: 18
CurrentMeth: 0:\Forensics\Data\FID17\2014\DEC2014\DEC22\HC17111014F.M



Petroleum Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\FID17\2014\DEC2014\DEC22\
 Data File : F17122214028.d
 Signal(s) : FID1A.CH
 Acq On : 23 Dec 2014 8:35 am
 Operator : FID17:NL
 Sample : WG749631-1,42
 Misc : WG750850,WG749631
 ALS Vial : 14 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 12 10:21:26 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\DECEMBER\DEC22\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Tue Dec 23 06:59:16 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Blank Name : IB1712221402F
 Blank File : F17122214026.D

Sub List : TPH - TPH

Compound	R.T.	Response	Conc Units

Internal Standards			
1) I 5-alpha-androstane	31.146	57871315	50.000 ug/mL M4
System Monitoring Compounds			
19) s ortho-terphenyl	29.119	29985432	23.543 ug/mL M4
Spiked Amount 50.000	Range 50 - 130	Recovery =	47.09%#
24) s d50-Tetracosane	35.813	24572781	23.756 ug/mL M4
Spiked Amount 50.000	Range 50 - 130	Recovery =	47.51%#
Target Compounds			
42) h C9-C44 Total Petroleu...	40.275	759241098	668.387 ug/mL m
42) h C9-C44 Total Petroleu BS	40.275	4012047	3.532 ug/mLm
45) h Total Resolved Hydroc...	40.731	7385500	6.502 ug/mL m

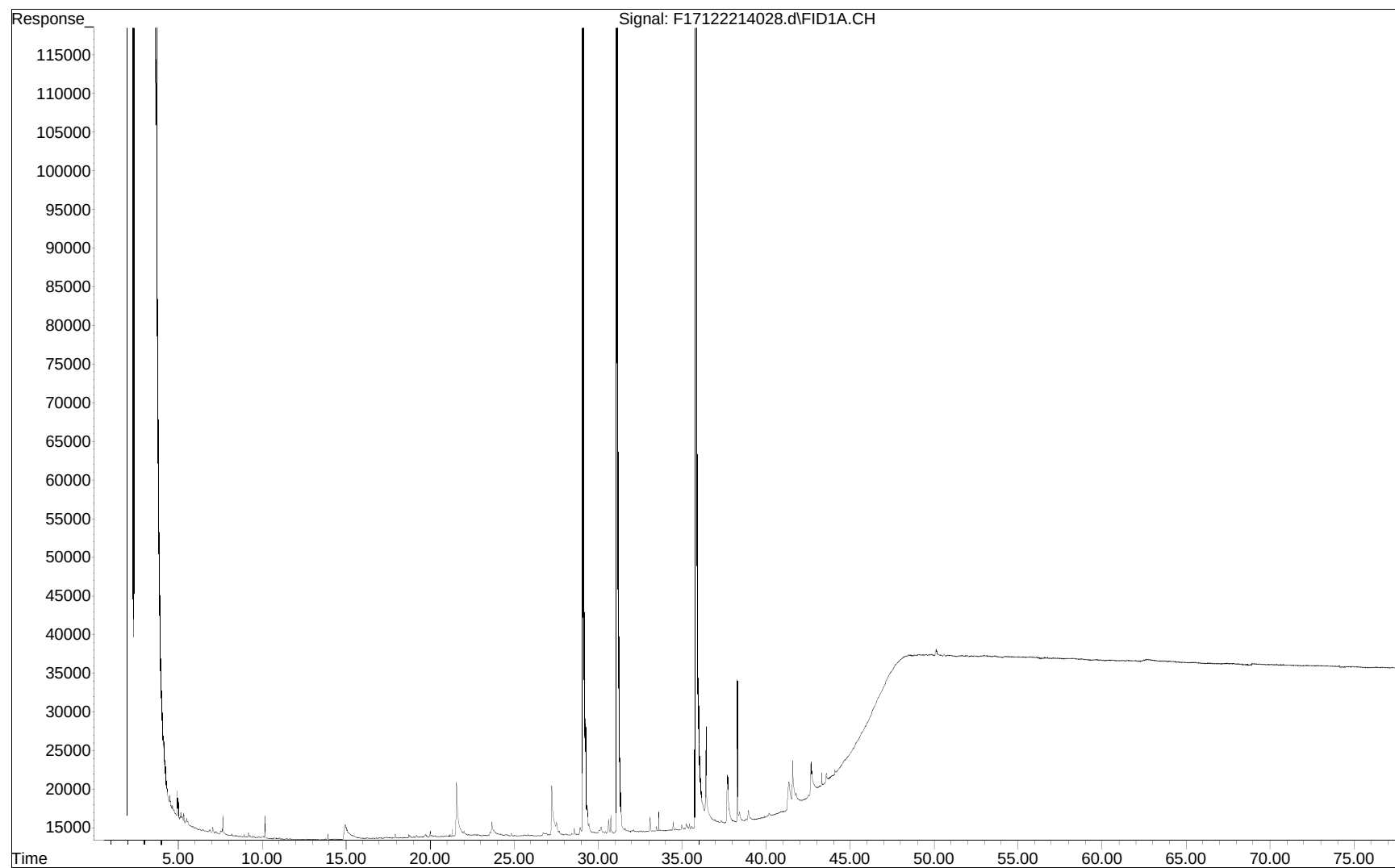
SemiQuant Compounds - Not Calibrated on this Instrument

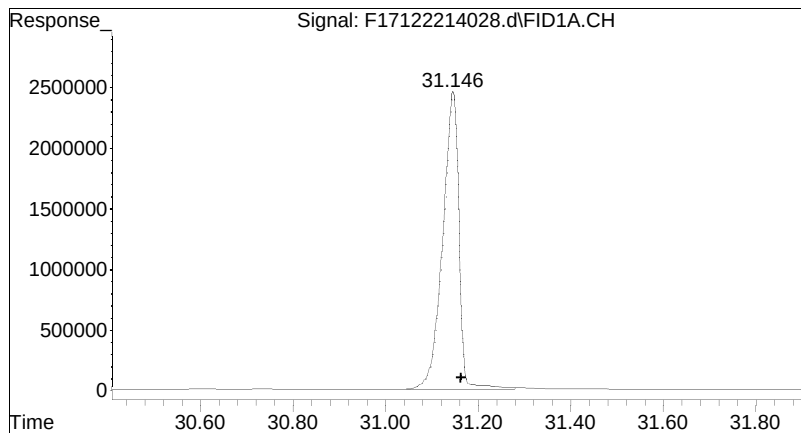
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

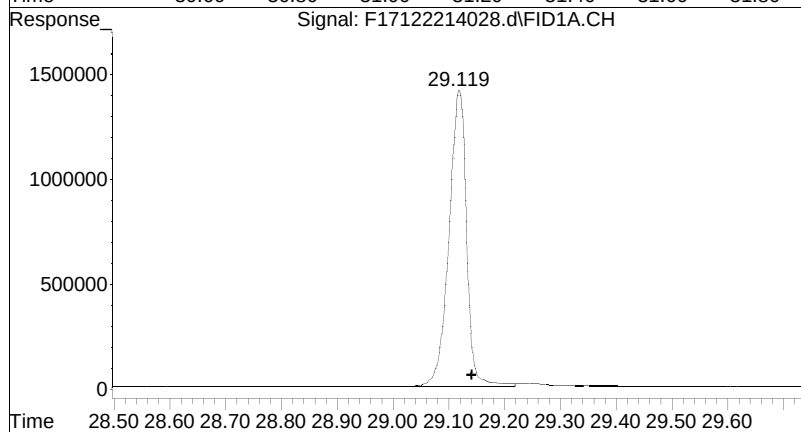
File :0:\Forensics\Data\FID17\2014\DEC2014\DEC22\F17122214028.d
Operator : FID17:NL
Acquired : 23 Dec 2014 8:35 am using AcqMethod FID17.M
Sample Name: WG749631-1,42
Instrument: FID17
Misc Info : WG750850,WG749631
Vial Number: 14
CurrentMeth: 0:\Forensics\Data\FID17\2014\DEC2014\DEC22\HC17111014F.M





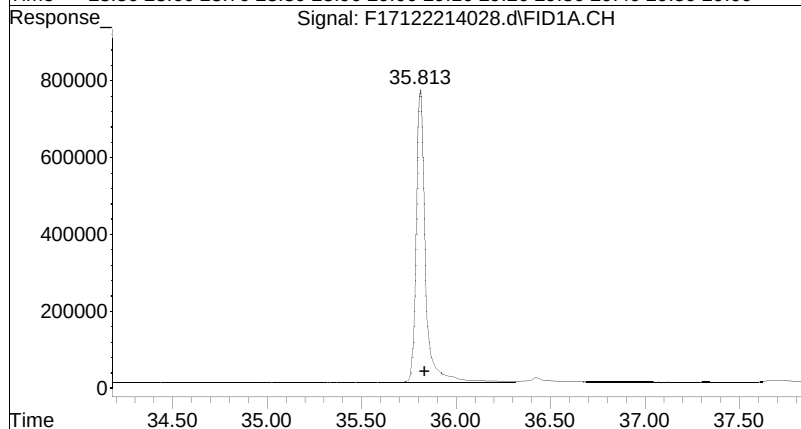
#1 5-alpha-androstane

R.T.: 31.146 min
Delta R.T.: -0.017 min
Response: 57871315
Conc: 50.00 ug/mL M4



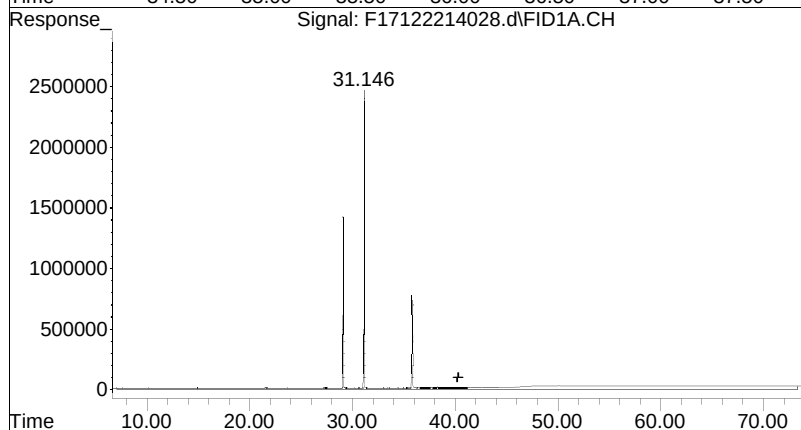
#19 ortho-terphenyl

R.T.: 29.119 min
Delta R.T.: -0.022 min
Response: 29985432
Conc: 23.54 ug/mL M4



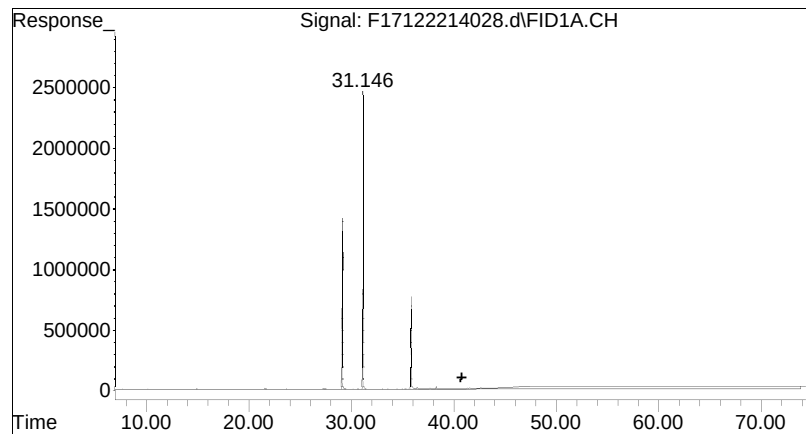
#24 d50-Tetracosane

R.T.: 35.813 min
Delta R.T.: -0.021 min
Response: 24572781
Conc: 23.76 ug/mL M4



#42 C9-C44 Total Petroleum Hy

R.T.: 40.275 min
Delta R.T.: 0.000 min
Response: 759241098
Conc: 668.39 ug/mL m



#45 Total Resolved Hydrocarbo

R.T.: 40.731 min
Delta R.T.: 0.000 min
Response: 7385500
Conc: 6.50 ug/mL m

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC22\
 Data File : F17122214030.d
 Signal(s) : FID1A.CH
 Acq On : 23 Dec 2014 10:04 am
 Operator : FID17:NL
 Sample : WG749631-2,42
 Misc : WG750850,WG749631
 ALS Vial : 15 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 12 11:00:18 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\DECEMBER\DEC22\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Tue Dec 23 06:59:16 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Blank Name : IB1712221402F
 Blank File : F17122214026.D

Sub List : SHC_QC_Samples -

Compound	R.T.	Response	Conc Units

Internal Standards			
1) I 5-alpha-androstane	31.148	57136011	50.000 ug/mL M4
System Monitoring Compounds			
19) s ortho-terphenyl	29.119	30913317	24.584 ug/mL M4
Spiked Amount 50.000 Range	50 - 130	Recovery =	49.17%#
24) s d50-Tetracosane	35.812	25400303	24.872 ug/mL M4
Spiked Amount 50.000 Range	50 - 130	Recovery =	49.74%#
Target Compounds			
3) t n-Nonane (C9)	7.675	6352345	6.381 ug/mL M4
4) t n-Decane (C10)	10.158	7400050	7.246 ug/mL M4
6) t n-Dodecane (C12)	15.102	8366424	7.976 ug/mL M4
9) t n-Tetradecane (C14)	19.598	8934138	8.351 ug/mL M4
12) t n-Hexadecane (C16)	23.630	10054701	9.163 ug/mL M4
16) t n-Octadecane (C18)	27.257	10738194	9.588 ug/mL M4
18) t n-Nonadecane (C19)	28.944	9816901	8.792 ug/mL M4
20) t n-Eicosane (C20)	30.561	10188442	9.142 ug/mL M3
22) t n-Docosane (C22)	33.580	10455756	9.218 ug/mL M4
25) t n-Tetracosane (C24)	36.356	11157031	9.723 ug/mL M4
27) t n-Hexacosane (C26)	38.928	10584306	9.069 ug/mL M4
29) t n-Octacosane (C28)	41.318	10841015	9.349 ug/mL M4
31) t n-Triacontane (C30)	43.549	10724444	9.184 ug/mL M4
37) t n-Hexatriacontane (C36)	50.072	10660569	8.872 ug/mL M4
42) h C9-C44 Total Petroleu...	40.275	895452056	798.443 ug/mL m
42) h C9-C44 Total Petroleu BS	40.275	140223005	125.032 ug/mLm
45) h Total Resolved Hydroc...	40.731	146596834	130.715 ug/mL m

SemiQuant Compounds - Not Calibrated on this Instrument

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC22\
 Data File : F17122214030.d
 Signal(s) : FID1A.CH
 Acq On : 23 Dec 2014 10:04 am
 Operator : FID17:NL
 Sample : WG749631-2,42
 Misc : WG750850,WG749631
 ALS Vial : 15 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 12 11:00:18 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\DECEMBER\DEC22\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Tue Dec 23 06:59:16 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Blank Name : IB1712221402F
 Blank File : F17122214026.D

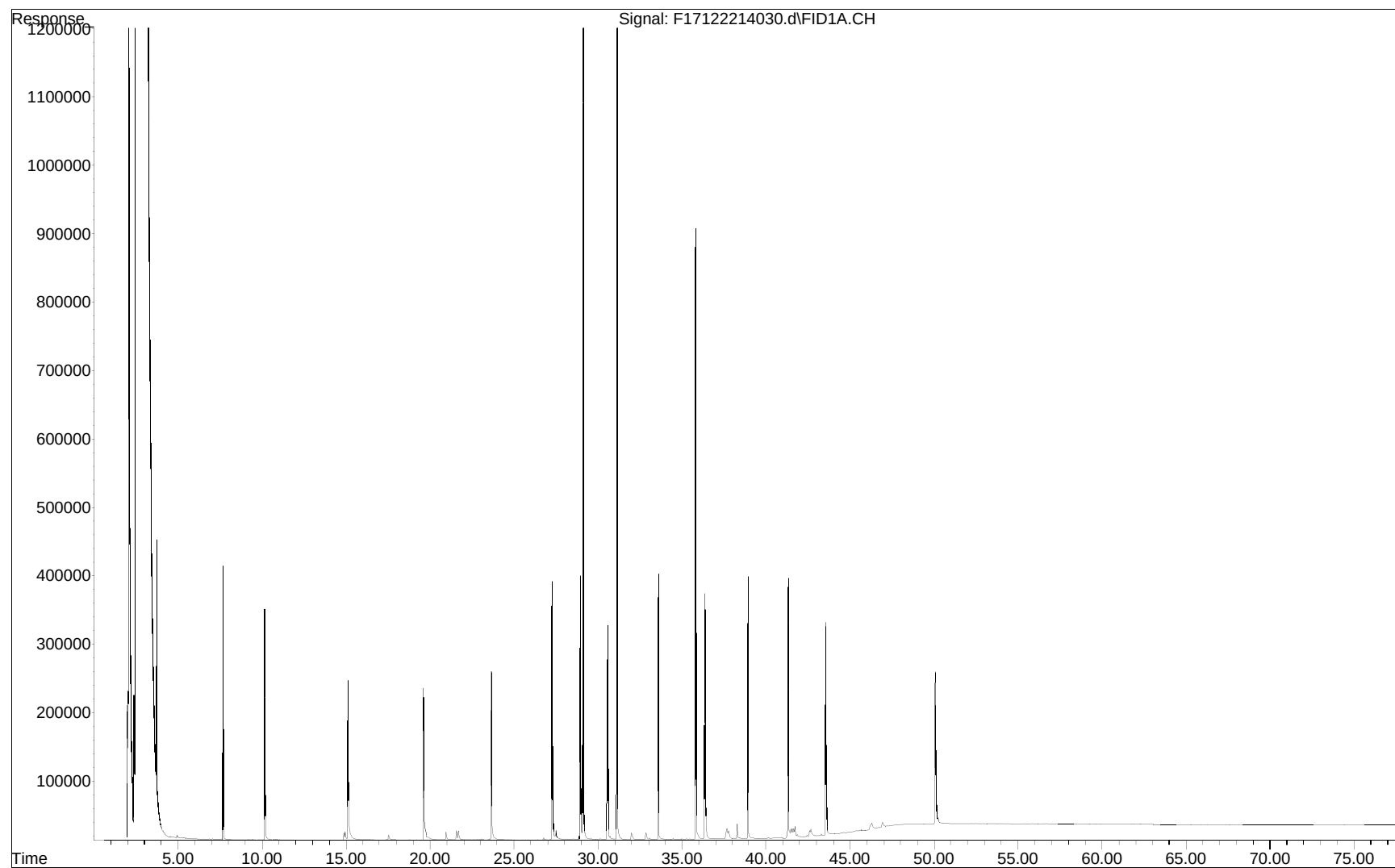
Sub List : SHC_QC_Samples -

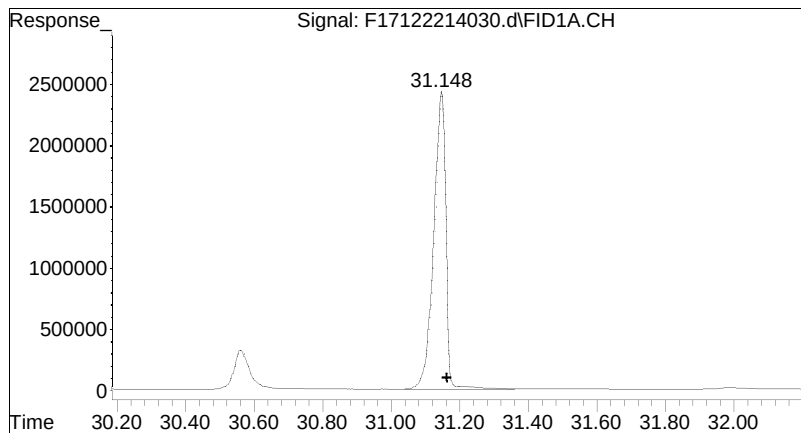
Compound	R.T.	Response	Conc Units

(f)=RT Delta > 1/2 Window			(m)=manual int.

Quantitation Report (QT Reviewed)

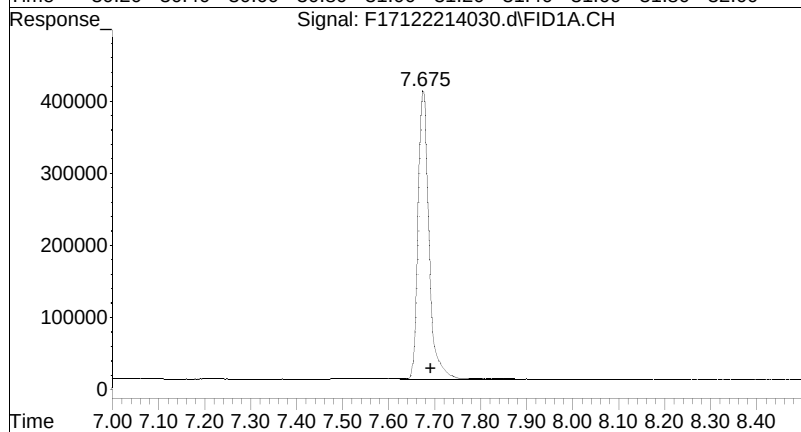
File : 0:\Forensics\Data\FID17\2014\DEC2014\DEC22\F17122214030.d
Operator : FID17:NL
Acquired : 23 Dec 2014 10:04 am using AcqMethod FID17.M
Sample Name: WG749631-2,42
Instrument: FID17
Misc Info : WG750850, WG749631
Vial Number: 15
CurrentMeth: 0:\Forensics\Data\FID17\2014\DEC2014\DEC22\HC17111014F.M





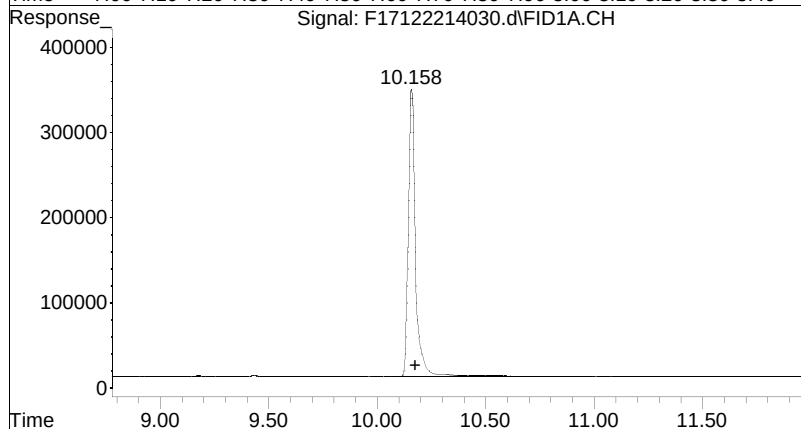
#1 5-alpha-androstane

R.T.: 31.148 min
Delta R.T.: -0.015 min
Response: 57136011
Conc: 50.00 ug/mL M4



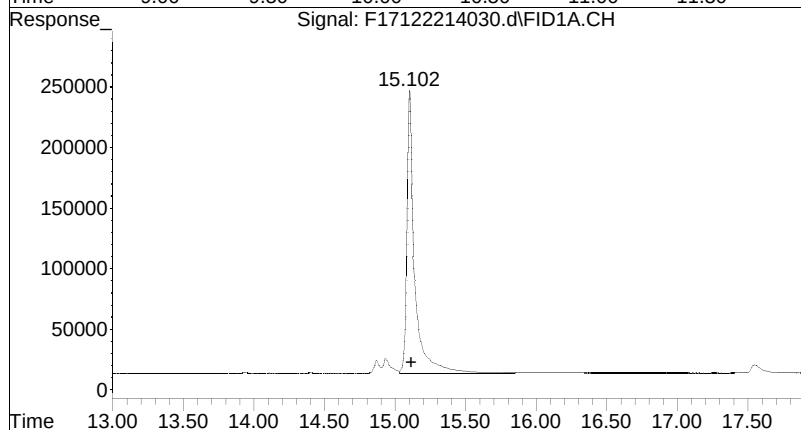
#3 n-Nonane (C9)

R.T.: 7.675 min
Delta R.T.: -0.017 min
Response: 6352345
Conc: 6.38 ug/mL M4



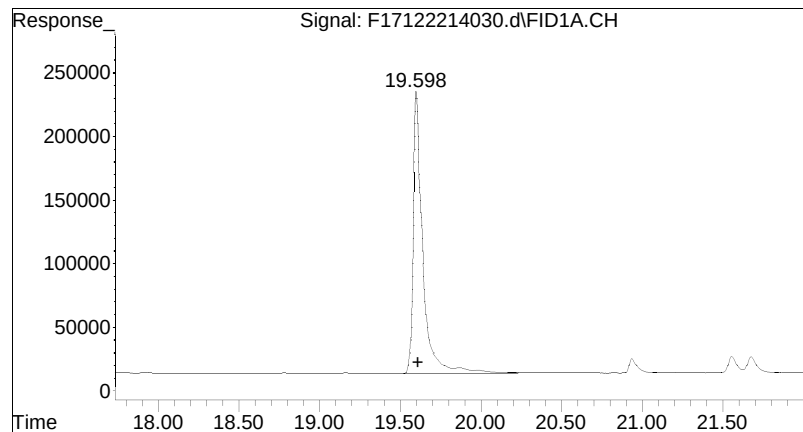
#4 n-Decane (C10)

R.T.: 10.158 min
Delta R.T.: -0.018 min
Response: 7400050
Conc: 7.25 ug/mL M4



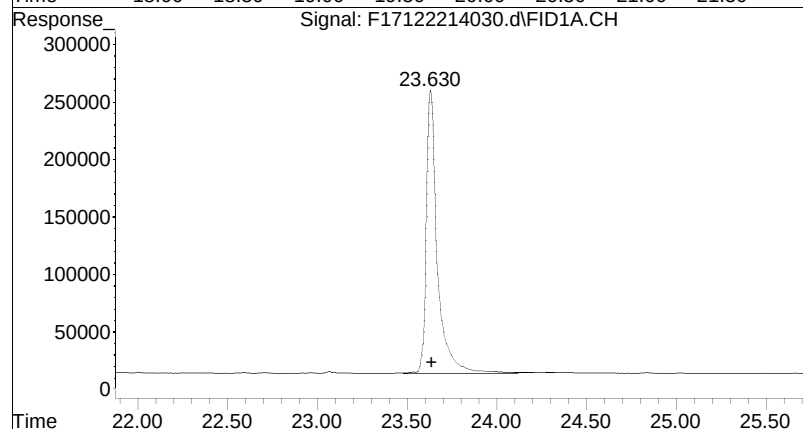
#6 n-Dodecane (C12)

R.T.: 15.102 min
Delta R.T.: -0.014 min
Response: 8366424
Conc: 7.98 ug/mL M4



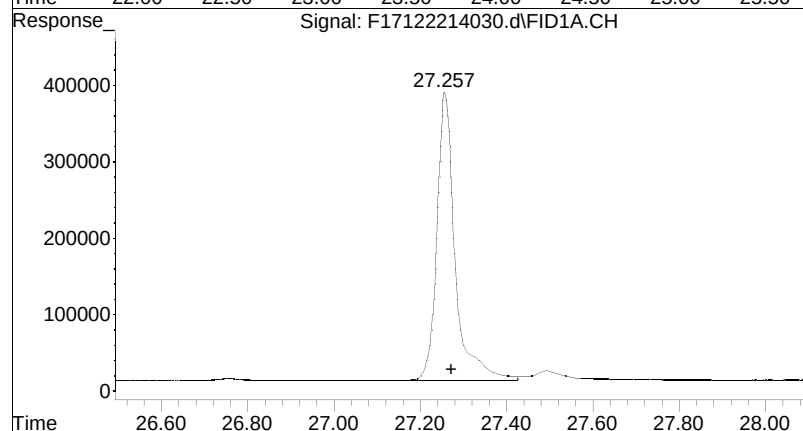
#9 n-Tetradecane (C14)

R.T.: 19.598 min
Delta R.T.: -0.013 min
Response: 8934138
Conc: 8.35 ug/mL M4



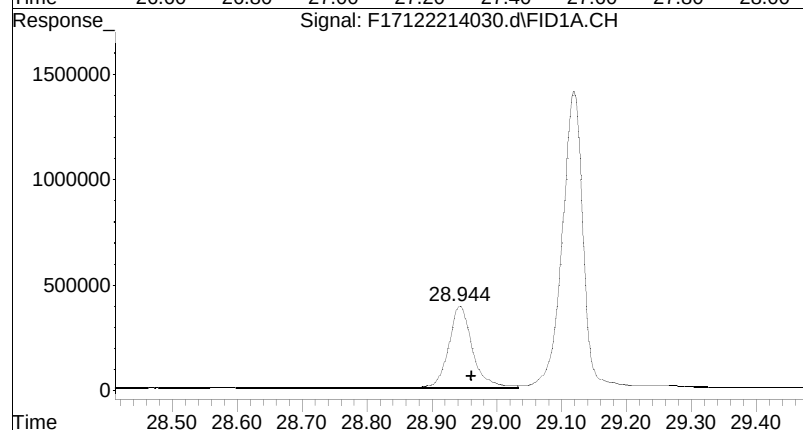
#12 n-Hexadecane (C16)

R.T.: 23.630 min
Delta R.T.: -0.008 min
Response: 10054701
Conc: 9.16 ug/mL M4



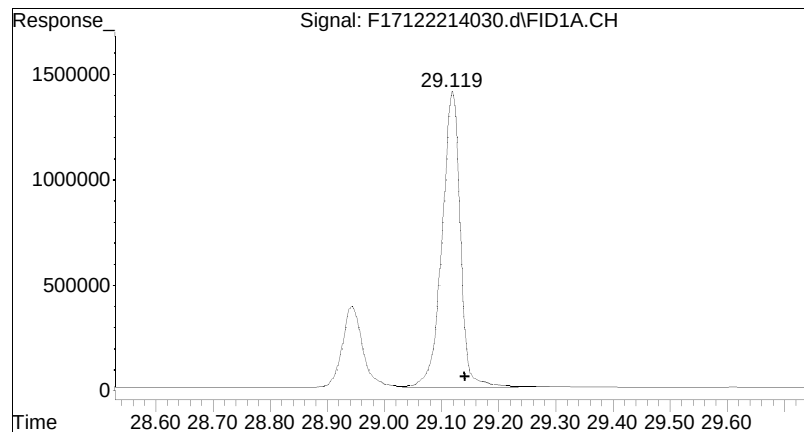
#16 n-Octadecane (C18)

R.T.: 27.257 min
Delta R.T.: -0.016 min
Response: 10738194
Conc: 9.59 ug/mL M4



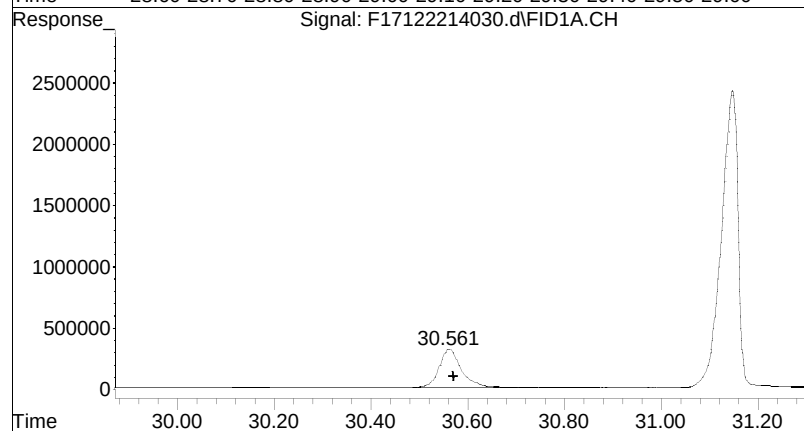
#18 n-Nonadecane (C19)

R.T.: 28.944 min
Delta R.T.: -0.018 min
Response: 9816901
Conc: 8.79 ug/mL M4



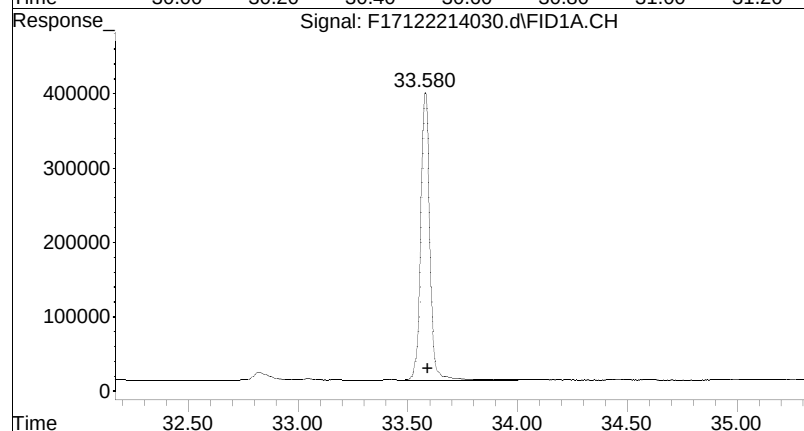
#19 ortho-terphenyl

R.T.: 29.119 min
Delta R.T.: -0.022 min
Response: 30913317
Conc: 24.58 ug/mL M4



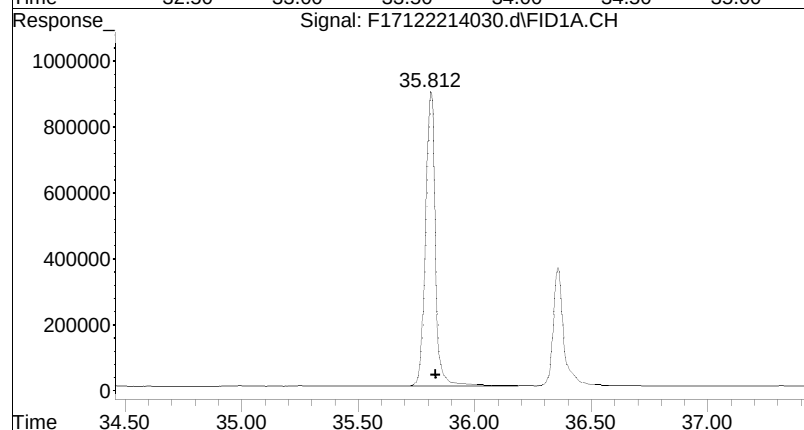
#20 n-Eicosane (C20)

R.T.: 30.561 min
Delta R.T.: -0.010 min
Response: 10188442
Conc: 9.14 ug/mL M3



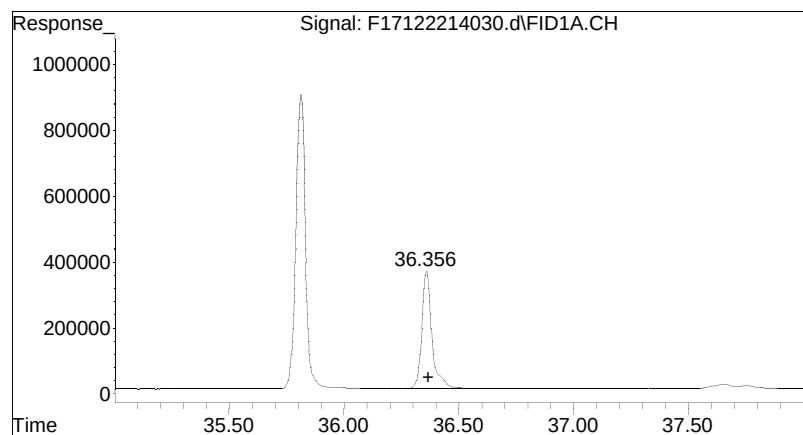
#22 n-Docosane (C22)

R.T.: 33.580 min
Delta R.T.: -0.012 min
Response: 10455756
Conc: 9.22 ug/mL M4



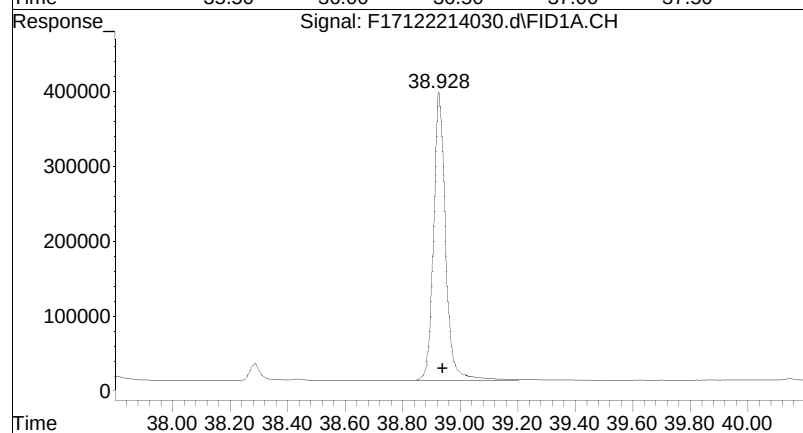
#24 d50-Tetracosane

R.T.: 35.812 min
Delta R.T.: -0.023 min
Response: 25400303
Conc: 24.87 ug/mL M4



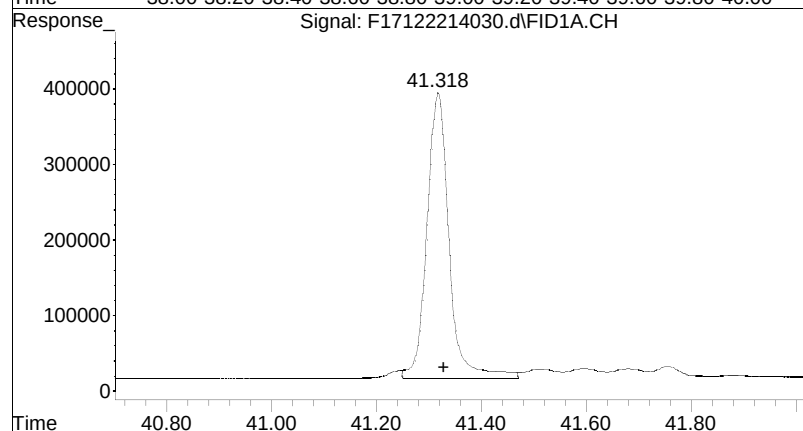
#25 n-Tetracosane (C24)

R.T.: 36.356 min
 Delta R.T.: -0.013 min
 Response: 11157031
 Conc: 9.72 ug/mL M4



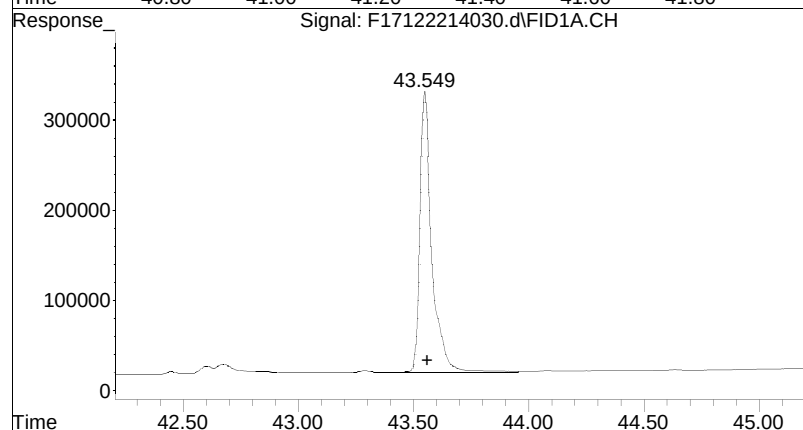
#27 n-Hexacosane (C26)

R.T.: 38.928 min
 Delta R.T.: -0.012 min
 Response: 10584306
 Conc: 9.07 ug/mL M4



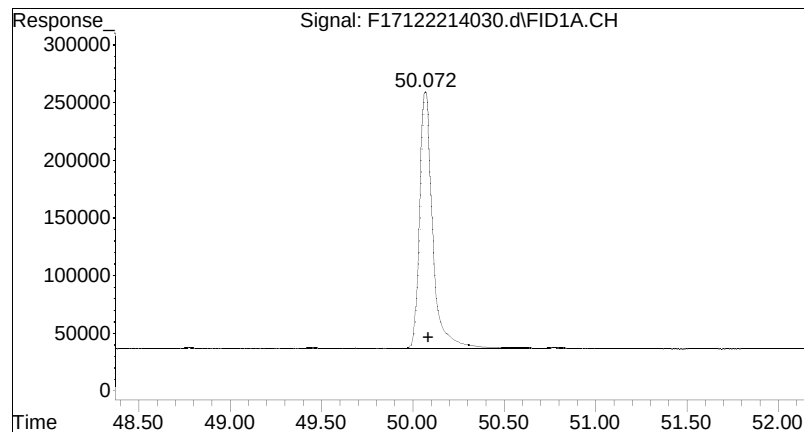
#29 n-Octacosane (C28)

R.T.: 41.318 min
 Delta R.T.: -0.011 min
 Response: 10841015
 Conc: 9.35 ug/mL M4



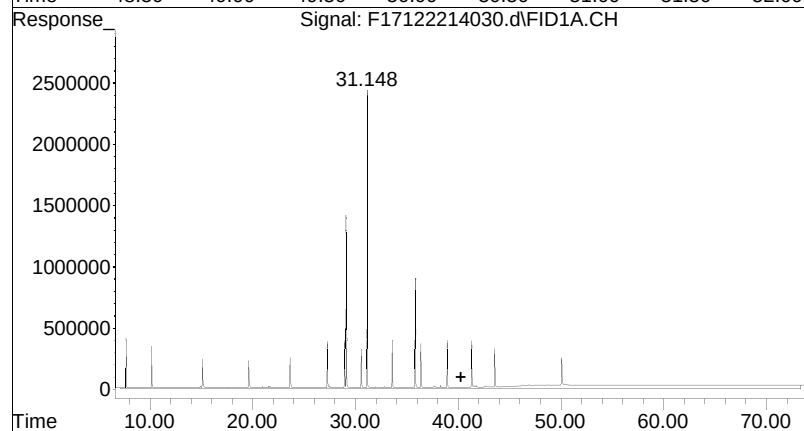
#31 n-Triacontane (C30)

R.T.: 43.549 min
 Delta R.T.: -0.013 min
 Response: 10724444
 Conc: 9.18 ug/mL M4



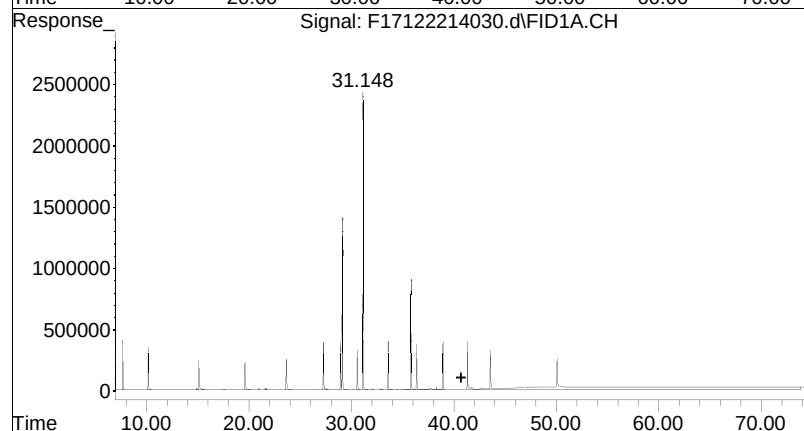
#37 n-Hexatriacontane (C36)

R.T.: 50.072 min
Delta R.T.: -0.013 min
Response: 10660569
Conc: 8.87 ug/mL M4



#42 C9-C44 Total Petroleum Hy

R.T.: 40.275 min
Delta R.T.: 0.000 min
Response: 895452056
Conc: 798.44 ug/mL m



#45 Total Resolved Hydrocarbo

R.T.: 40.731 min
Delta R.T.: 0.000 min
Response: 146596834
Conc: 130.72 ug/mL m

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC22\
 Data File : F17122214032.d
 Signal(s) : FID1A.CH
 Acq On : 23 Dec 2014 11:34 am
 Operator : FID17:NL
 Sample : WG749631-3,42
 Misc : WG750850,WG749631
 ALS Vial : 16 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 12 11:01:29 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\DECEMBER\DEC22\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Tue Dec 23 06:59:16 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Blank Name : IB1712221402F
 Blank File : F17122214026.D

Sub List : SHC_QC_Samples -

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.149	61128564	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.121	32706356	24.311	ug/mL M4
Spiked Amount 50.000		Range 50 - 130	Recovery =	48.62%#	
24) s	d50-Tetracosane	35.812	26666576	24.406	ug/mL M4
Spiked Amount 50.000		Range 50 - 130	Recovery =	48.81%#	
Target Compounds					
3) t	n-Nonane (C9)	7.675	6884387	6.464	ug/mL M4
4) t	n-Decane (C10)	10.159	8074299	7.390	ug/mL M4
6) t	n-Dodecane (C12)	15.102	9286318	8.275	ug/mL M4
9) t	n-Tetradecane (C14)	19.600	9838389	8.595	ug/mL M4
12) t	n-Hexadecane (C16)	23.631	10868465	9.258	ug/mL M4
16) t	n-Octadecane (C18)	27.258	11453781	9.559	ug/mL M4
18) t	n-Nonadecane (C19)	28.945	10405065	8.710	ug/mL M4
20) t	n-Eicosane (C20)	30.563	10762857	9.027	ug/mL M4
22) t	n-Docosane (C22)	33.581	10994552	9.060	ug/mL M4
25) t	n-Tetracosane (C24)	36.357	11756174	9.576	ug/mL M4
27) t	n-Hexacosane (C26)	38.927	11165917	8.942	ug/mL M4
29) t	n-Octacosane (C28)	41.316	11579488	9.334	ug/mL M4
31) t	n-Triacontane (C30)	43.548	11177678	8.947	ug/mL M4
37) t	n-Hexatriacontane (C36)	50.076	11159467	8.681	ug/mL M4
42) h	C9-C44 Total Petroleu...	40.275	897578915	748.066	ug/mL m
42) h	C9-C44 Total Petroleu BS	40.275	142349864	118.638	ug/mLm
45) h	Total Resolved Hydroc...	40.731	157941667	131.633	ug/mL m

SemiQuant Compounds - Not Calibrated on this Instrument

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC22\
 Data File : F17122214032.d
 Signal(s) : FID1A.CH
 Acq On : 23 Dec 2014 11:34 am
 Operator : FID17:NL
 Sample : WG749631-3,42
 Misc : WG750850,WG749631
 ALS Vial : 16 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 12 11:01:29 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\DECEMBER\DEC22\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Tue Dec 23 06:59:16 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Blank Name : IB1712221402F
 Blank File : F17122214026.D

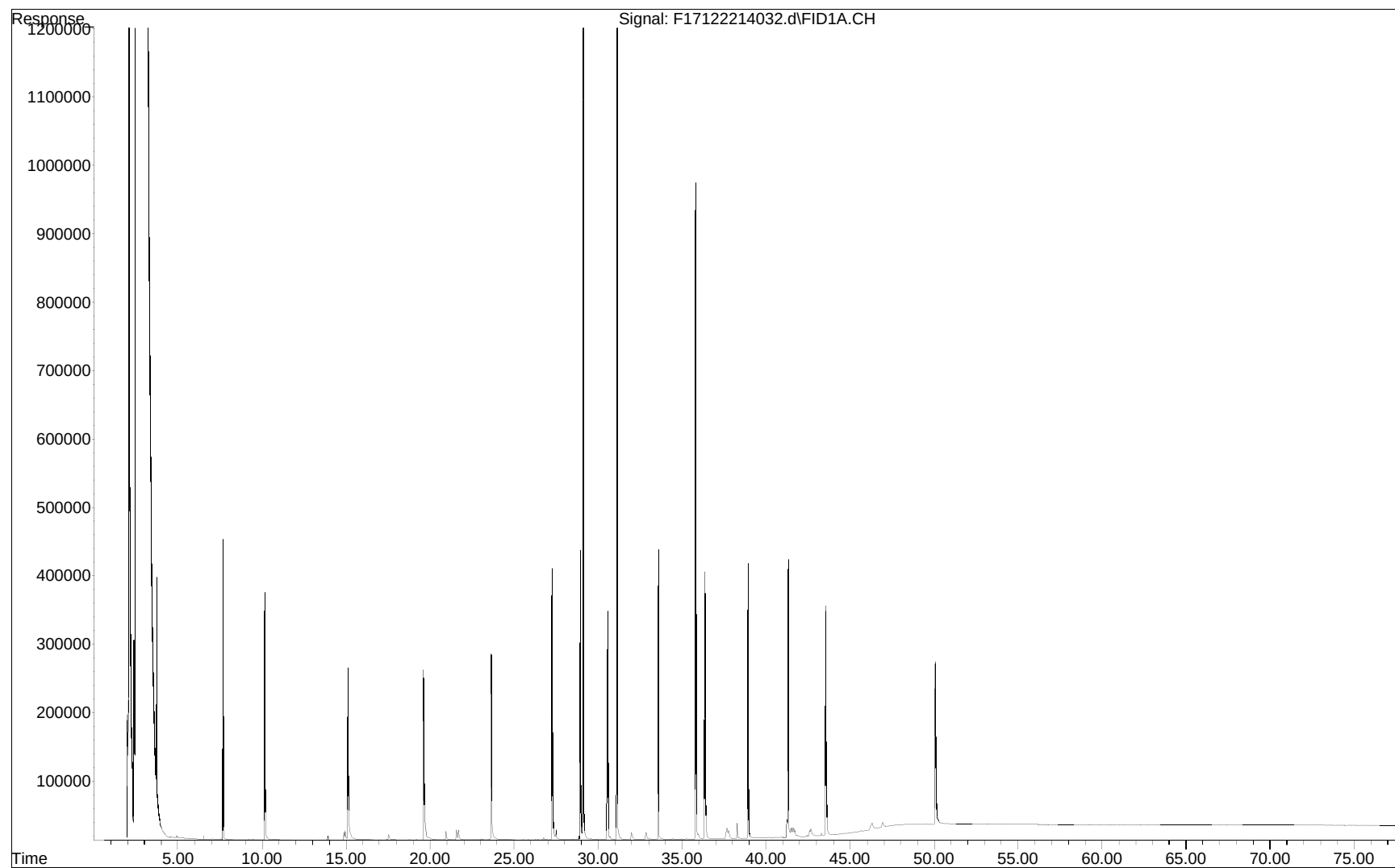
Sub List : SHC_QC_Samples -

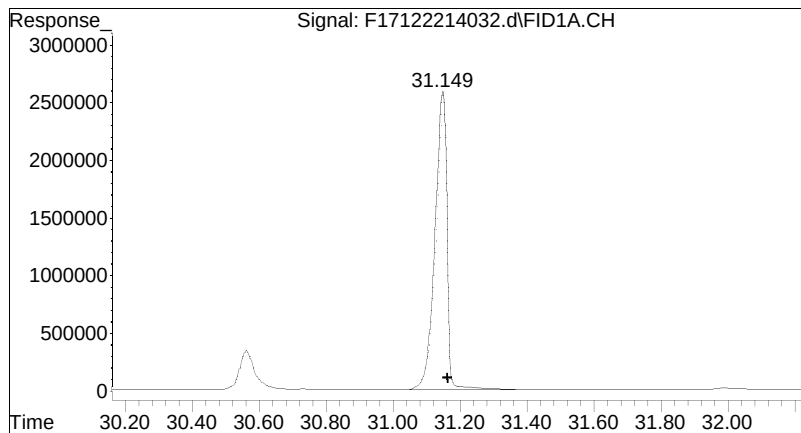
Compound	R.T.	Response	Conc Units

(f)=RT Delta > 1/2 Window			(m)=manual int.

Quantitation Report (QT Reviewed)

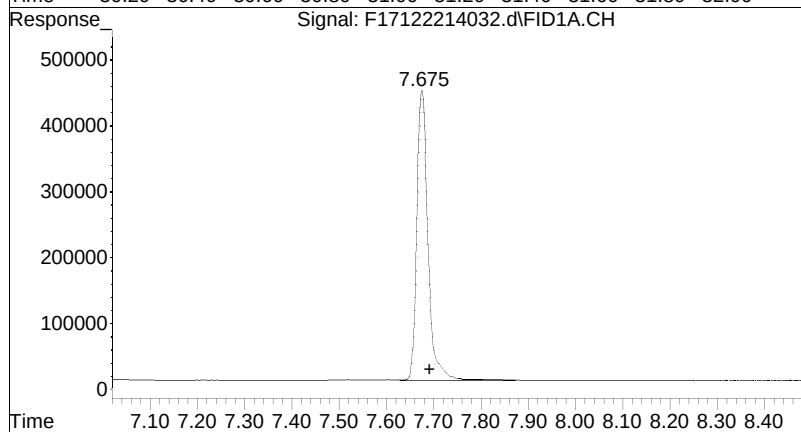
File : 0:\Forensics\Data\FID17\2014\DEC2014\DEC22\F17122214032.d
Operator : FID17:NL
Acquired : 23 Dec 2014 11:34 am using AcqMethod FID17.M
Sample Name: WG749631-3,42
Instrument: FID17
Misc Info : WG750850,WG749631
Vial Number: 16
CurrentMeth: 0:\Forensics\Data\FID17\2014\DEC2014\DEC22\HC17111014F.M





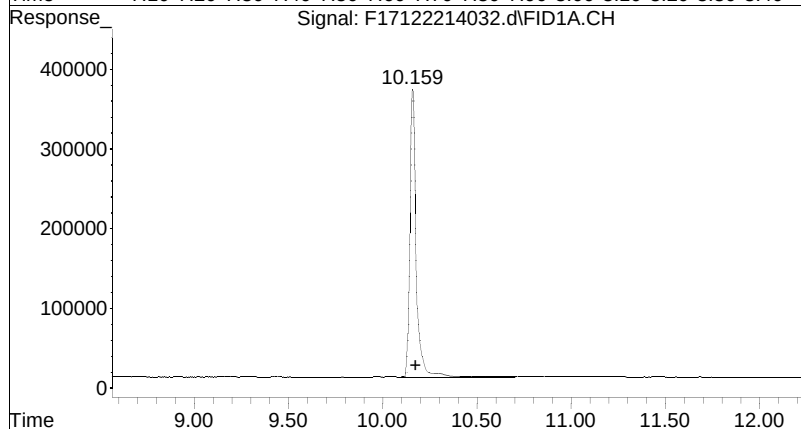
#1 5-alpha-androstane

R.T.: 31.149 min
Delta R.T.: -0.014 min
Response: 61128564
Conc: 50.00 ug/mL M4



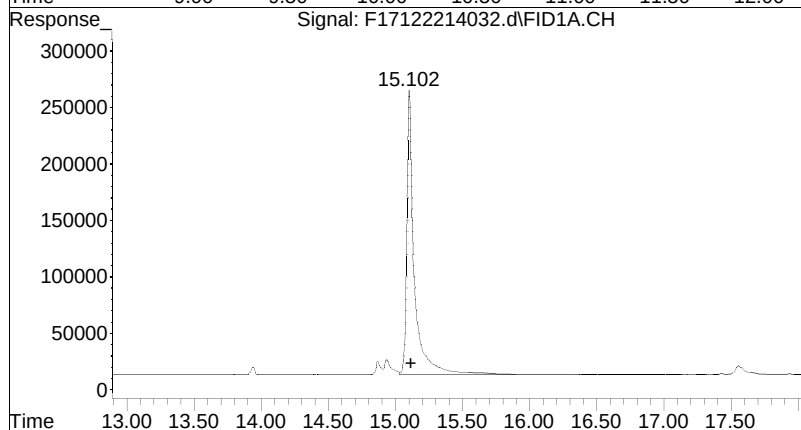
#3 n-Nonane (C9)

R.T.: 7.675 min
Delta R.T.: -0.017 min
Response: 6884387
Conc: 6.46 ug/mL M4



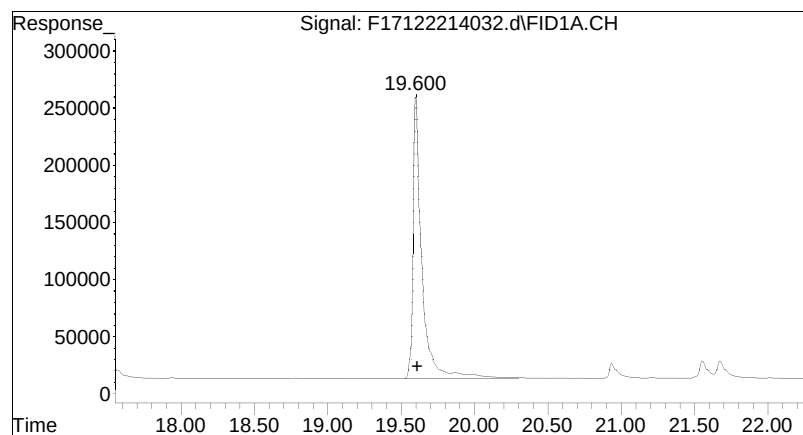
#4 n-Decane (C10)

R.T.: 10.159 min
Delta R.T.: -0.016 min
Response: 8074299
Conc: 7.39 ug/mL M4



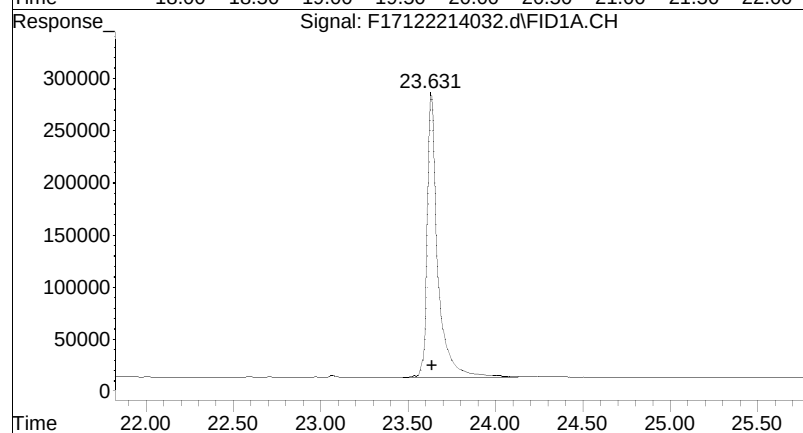
#6 n-Dodecane (C12)

R.T.: 15.102 min
Delta R.T.: -0.015 min
Response: 9286318
Conc: 8.27 ug/mL M4



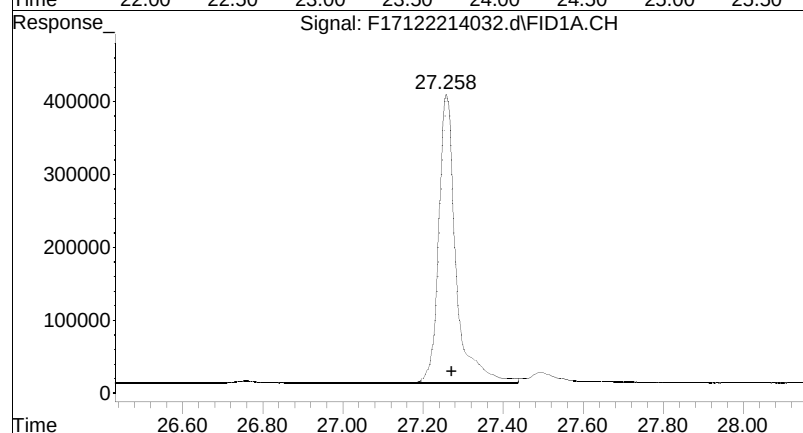
#9 n-Tetradecane (C14)

R.T.: 19.600 min
 Delta R.T.: -0.012 min
 Response: 9838389
 Conc: 8.60 ug/mL M4



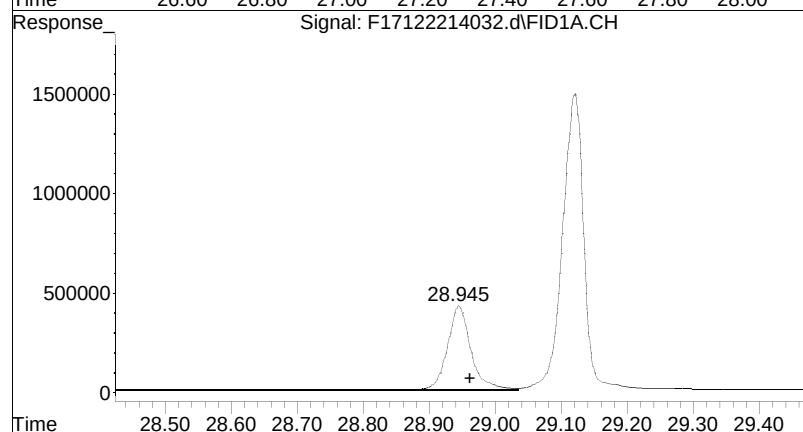
#12 n-Hexadecane (C16)

R.T.: 23.631 min
 Delta R.T.: -0.007 min
 Response: 10868465
 Conc: 9.26 ug/mL M4



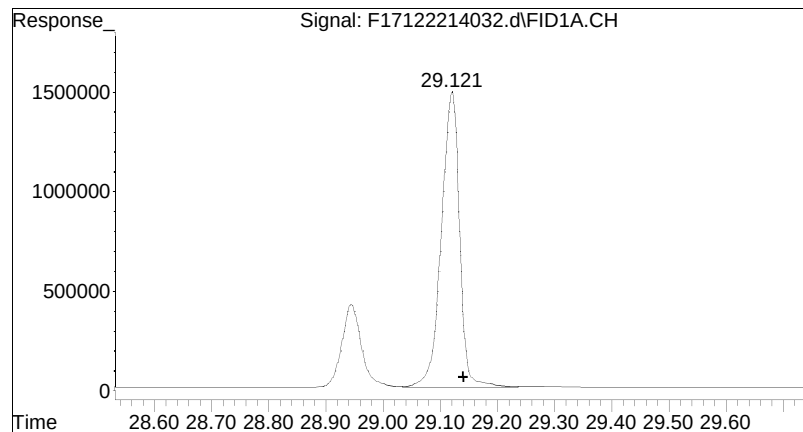
#16 n-Octadecane (C18)

R.T.: 27.258 min
 Delta R.T.: -0.014 min
 Response: 11453781
 Conc: 9.56 ug/mL M4



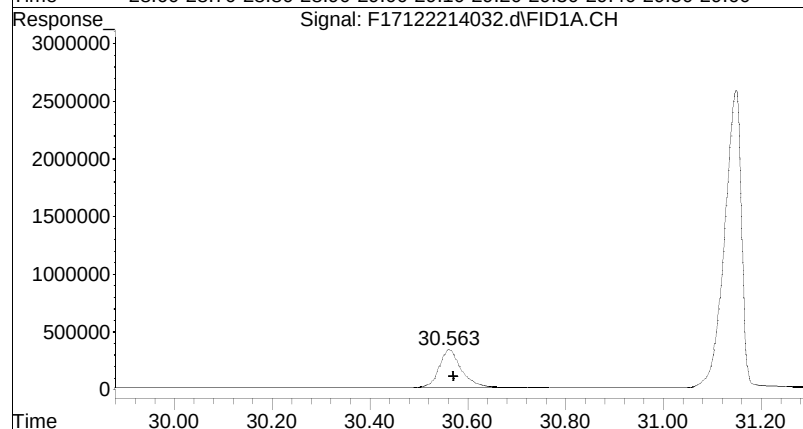
#18 n-Nonadecane (C19)

R.T.: 28.945 min
 Delta R.T.: -0.017 min
 Response: 10405065
 Conc: 8.71 ug/mL M4



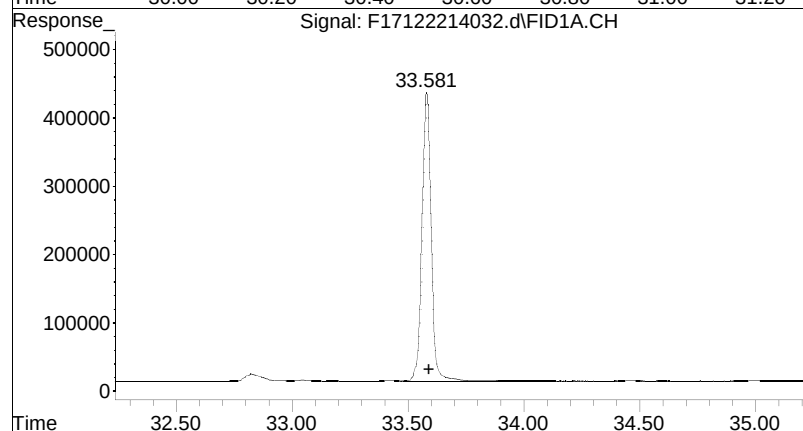
#19 ortho-terphenyl

R.T.: 29.121 min
Delta R.T.: -0.020 min
Response: 32706356
Conc: 24.31 ug/mL M4



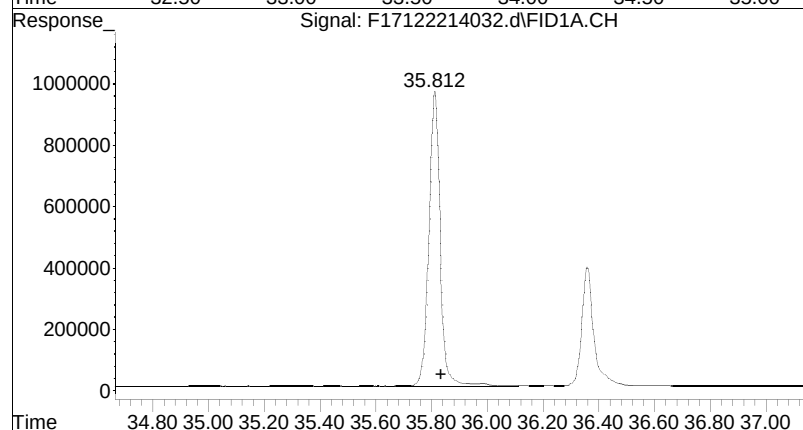
#20 n-Eicosane (C20)

R.T.: 30.563 min
Delta R.T.: -0.009 min
Response: 10762857
Conc: 9.03 ug/mL M4



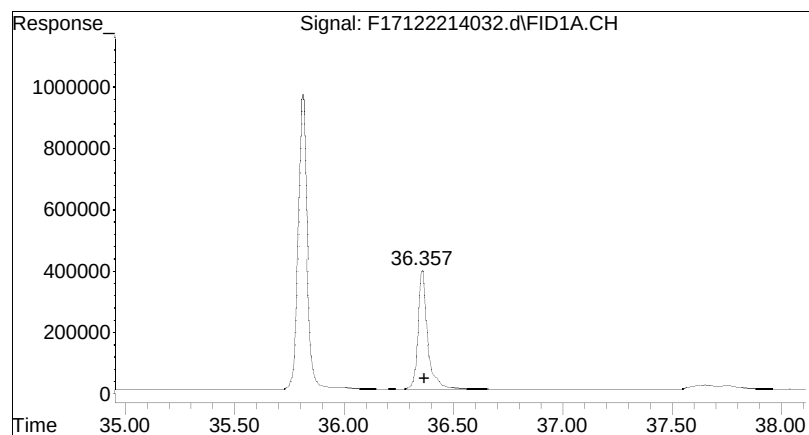
#22 n-Docosane (C22)

R.T.: 33.581 min
Delta R.T.: -0.011 min
Response: 10994552
Conc: 9.06 ug/mL M4



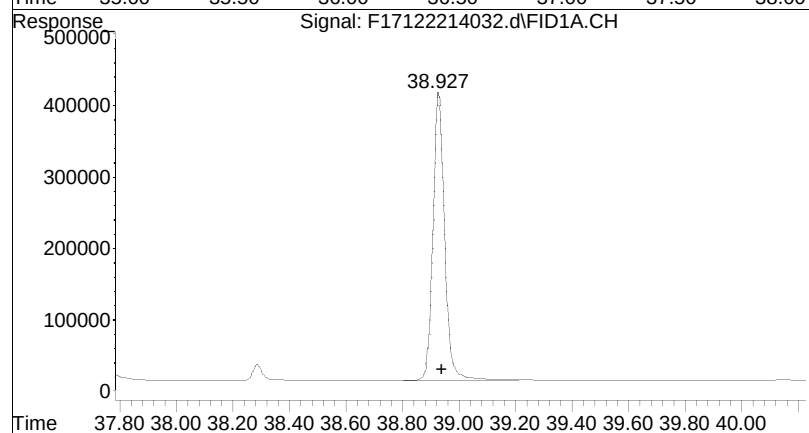
#24 d50-Tetracosane

R.T.: 35.812 min
Delta R.T.: -0.022 min
Response: 26666576
Conc: 24.41 ug/mL M4



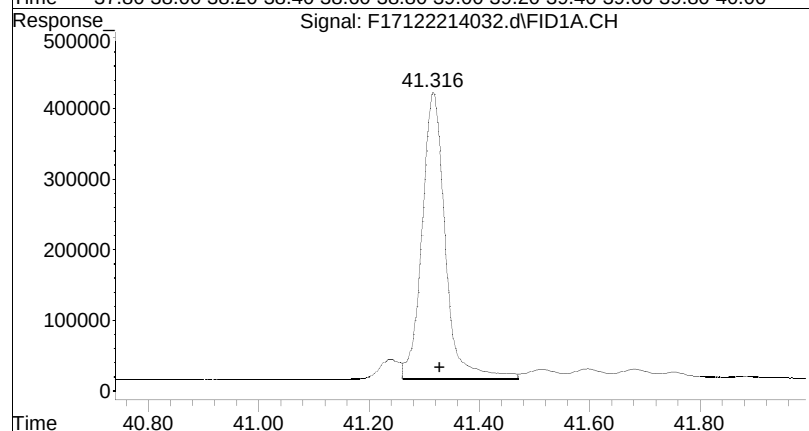
#25 n-Tetracosane (C24)

R.T.: 36.357 min
Delta R.T.: -0.011 min
Response: 11756174
Conc: 9.58 ug/mL M4



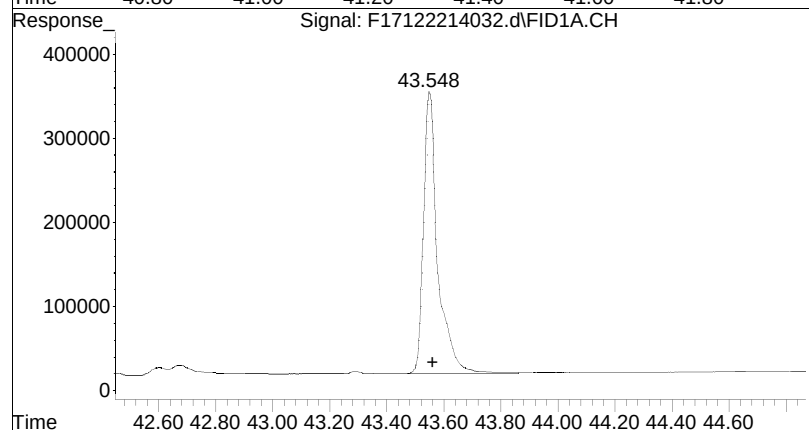
#27 n-Hexacosane (C26)

R.T.: 38.927 min
Delta R.T.: -0.012 min
Response: 11165917
Conc: 8.94 ug/mL M4



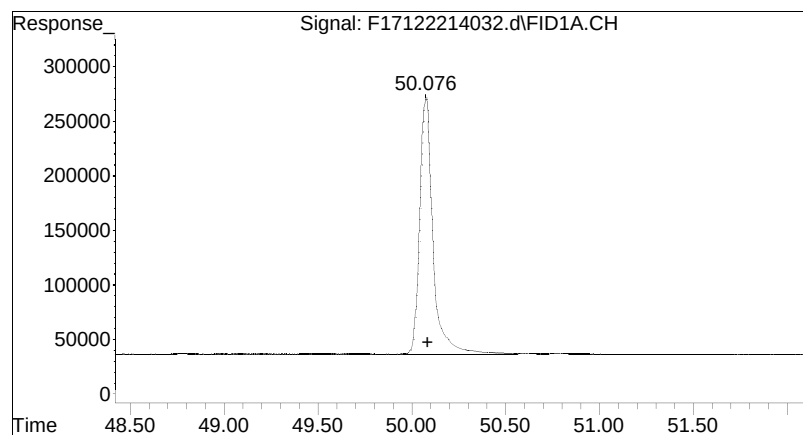
#29 n-Octacosane (C28)

R.T.: 41.316 min
Delta R.T.: -0.012 min
Response: 11579488
Conc: 9.33 ug/mL M4



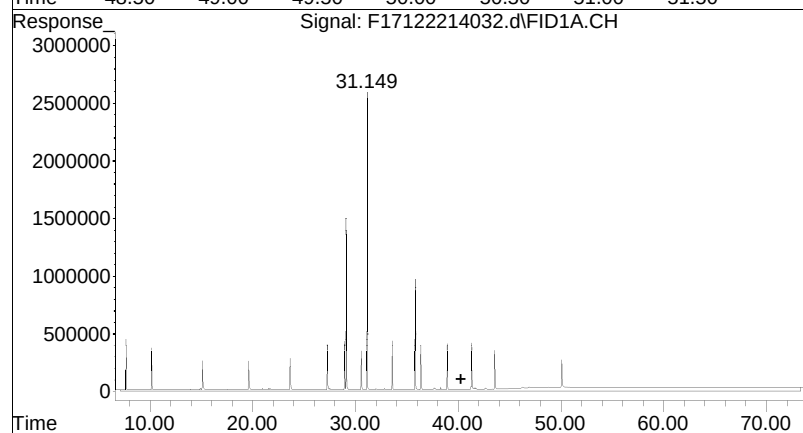
#31 n-Triacontane (C30)

R.T.: 43.548 min
Delta R.T.: -0.014 min
Response: 11177678
Conc: 8.95 ug/mL M4



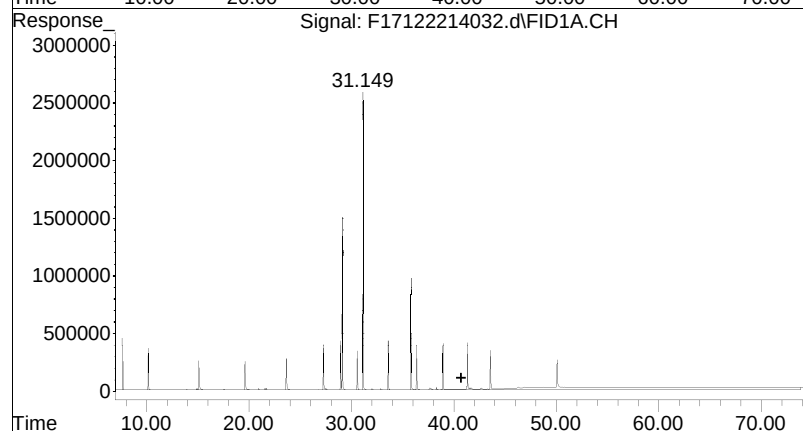
#37 n-Hexatriacontane (C36)

R.T.: 50.076 min
Delta R.T.: -0.009 min
Response: 11159467
Conc: 8.68 ug/mL M4



#42 C9-C44 Total Petroleum Hy

R.T.: 40.275 min
Delta R.T.: 0.000 min
Response: 897578915
Conc: 748.07 ug/mL m



#45 Total Resolved Hydrocarbo

R.T.: 40.731 min
Delta R.T.: 0.000 min
Response: 157941667
Conc: 131.63 ug/mL m

Data Path : O:\Forensics\Data\FID17\2014\DEC2014\DEC22\
 Data File : F17122214026.d
 Signal(s) : FID1A.CH
 Acq On : 23 Dec 2014 7:05 am
 Operator : FID17:NL
 Sample : IB1712221402F
 Misc : DCM
 ALS Vial : 13 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 12 10:56:43 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\DECEMBER\DEC22\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Tue Dec 23 06:59:16 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Blank Name : IB1712221401F
 Blank File : F17122214010.D

Sub List : TPH - TPH

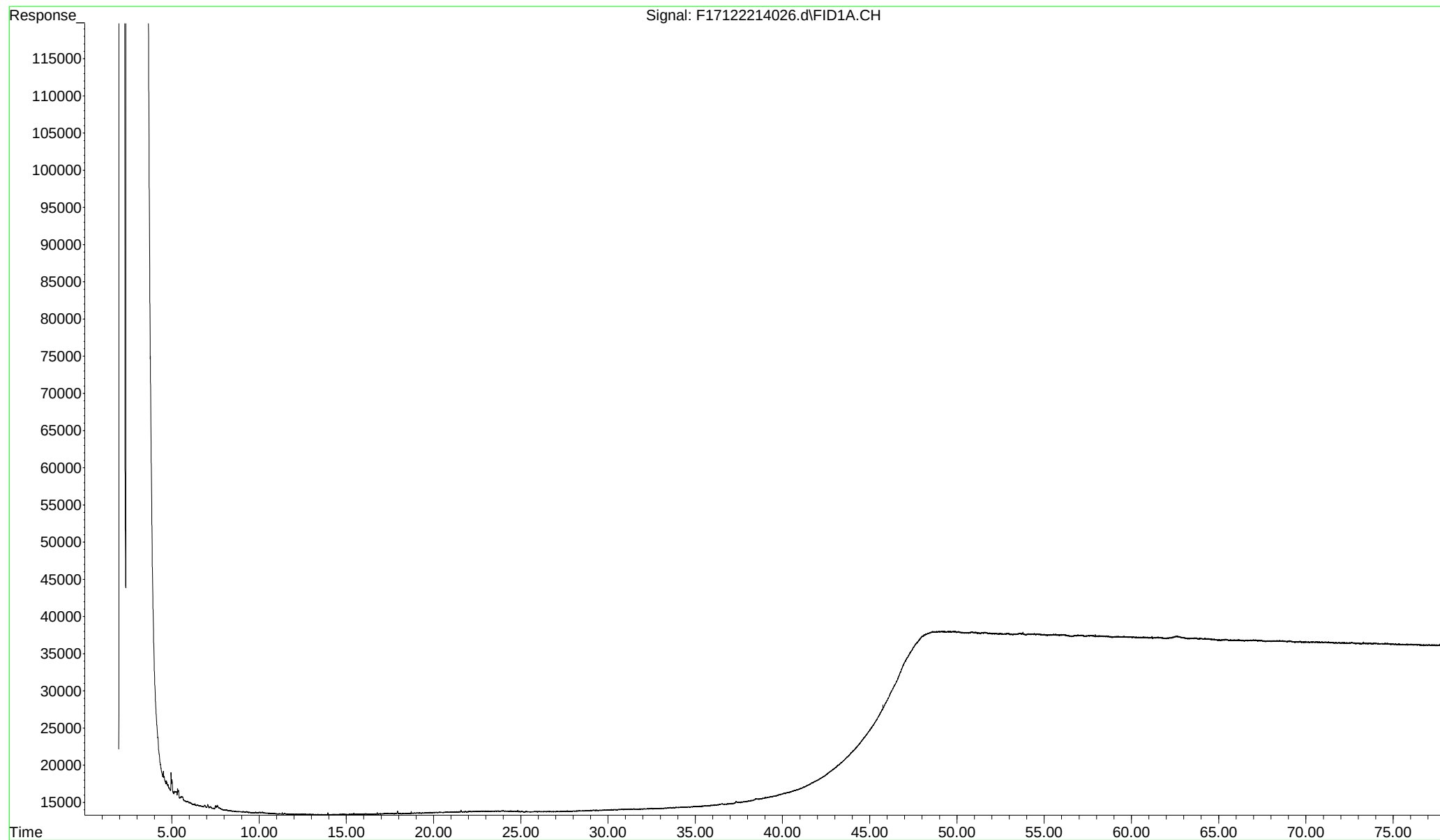
Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5-alpha-androstane	31.152	1232	50.000 ug/mL M4
System Monitoring Compounds			
19) s ortho-terphenyl	0.000	0	N.D. ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery =	0.00%#
24) s d50-Tetracosane	0.000	0	N.D. ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery =	0.00%#
Target Compounds			
42) h C9-C44 Total Petroleu...	40.275	755229051	31234492.697 ug/mL m
42) h C9-C44 Total Petroleu BS	40.275	156192270	6459743.976 ug/mLm
45) h Total Resolved Hydroc...	0.000	0	N.D. ug/mL d

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window

(m)=manual int.

File : 0:\Forensics\Data\FID17\2014\DEC2014\DEC22\F17122214026.d
Operator : FID17:NL
Acquired : 23 Dec 2014 7:05 am using AcqMethod FID17.M
Sample Name: IB1712221402F
Instrument: FID17
Misc Info : DCM
Vial Number: 13
CurrentMeth: 0:\Forensics\Data\FID17\2014\DEC2014\DEC22\HC17111014F.M





Calculation of GC Organic Compounds

Aqueous Concentration Formula: $\text{Amt} * \text{DF} * 1000 * (1/\text{Vo}) * \text{Vf}$

Where:

DF = Dilution Factor

Vo = Volume of Sample (mL)

Vf = Extraction Lab Final Volume (mL)

Soil Concentration Formula: $\text{Amt} * \text{DF} * 1000 * (1/\text{Wt}) * \text{Vf} * (100/\text{TS})$

Where:

DF = Dilution Factor

Wt = Weight of Sample (g)

Vf = Extraction Lab Final Volume (mL)

TS = Total Solids

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Jan 12 2015, 12:57 pm

Work Group: WG749631 for Department: 2 Organic Preparation

Created: 17-DEC-14 Due: Operator: db

Sample	Client ID	C Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1430198-01	GTP-07-3'	S A2-ALKPAH/BIOMARKER	SOIL	DONE	U	1229	0112	S0	Glass-A.1
L1430198-01	GTP-07-3'	S A2-TPH	SOIL	DONE	U	1229	0112	S0	Glass-A.1
WG749631-1	Laboratory Method Bl	S A2-TPH	SOIL	DONE	U				
WG749631-1	Laboratory Method Bl	S A2-ALKPAH/BIOMARKER	SOIL	DONE	U				
WG749631-2	Laboratory Control S	S A2-TPH	SOIL	DONE	U				
WG749631-2	Laboratory Control S	S A2-ALKPAH/BIOMARKER	SOIL	DONE	U				
WG749631-3	LCS Duplicate	S A2-TPH	SOIL	DONE	U				
WG749631-3	LCS Duplicate	S A2-ALKPAH/BIOMARKER	SOIL	DONE	U				
Comments:									
WG749631-3	WG749631-2								

Analysis log File

Total Files Reported in Log : 16

Log Generated From Directory: O:\Forensics\Data\FID17\2014\NOV\NOV10\

11/20/14

No.	DATA FILE	INJ METH	SAMPLE NAME	MISC	DATE INJ'D
1	F17111014002.d	FID17.M	Primer	Primer	11/10/2014 11:38 a
2	F17111014004.d	FID17.M	ANS	FRAU76	11/10/2014 1:06 p
3	F17111014006.d	FID17.M	DCM	DCM	11/10/2014 2:35 p
4	F17111014008.d	FID17.M	IB1711101401F	DCM	11/10/2014 4:04 p
5	F17111014010.d	FID17.M	Primer	Primer	11/10/2014 5:32 p
6	F17111014012.d	FID17.M	I1711101401R	FRAV23 1ug/mL	11/10/2014 7:02 p
7	F17111014014.d	FID17.M	I1711101402R	FRAV24 10ug/mL	11/10/2014 8:31 p
8	F17111014016.d	FID17.M	I1711101403R	FRAV14 50ug/mL	11/10/2014 10:01 p
9	F17111014018.d	FID17.M	I1711101404R	FRAV25 100ug/mL	11/10/2014 11:30 p
10	F17111014020.d	FID17.M	I1711101405R	FRAV26 200ug/mL	11/11/2014 1:00 a
11	F17111014022.d	FID17.M	I1711101406R	FRAV27 500ug/mL	11/11/2014 2:29 a
12	F17111014024.d	FID17.M	DCM	DCM	11/11/2014 3:59 a
13	F17111014026.d	FID17.M	IB1711101402F	DCM	11/11/2014 5:28 a
14	F17111014028.d	FID17.M	CQ1711101401R ✓ PASS	FRAV28 50ug/mL	11/11/2014 6:58 a
15	F17111014030.d	FID17.M	TO111714ANC01 ✓ PASS	1X FRAU76 10.045mg/mL	11/11/2014 8:27 a
16	F17111014032.d	FID17.M	TO111714MC201	1X FRAU77 5.227mg/mL	11/11/2014 9:56 a

ICAL
S-103

Processing Method: HC17111014F.M

Printed: 11/17/14

Page: 1

Analysis log File

Total Files Reported in Log : 25

Log Generated From Directory: 0:\Forensics\Data\FID17\2014\DEC2014\DEC22\

No.	DATA FILE	INJ METH	SAMPLE NAME	MISC	DATE	INJ'D
1	F17122214002.d	FID17.M	Spike Check	Spike Check	12/22/2014	1:12 p
2	F17122214004.d	FID17.M	ANS	FRAU76 10.045mg/mL	12/22/2014	2:41 p
3	F17122214006.d	FID17.M	C1712221401F	FRAV14 50ug/mL	12/22/2014	4:10 p
4	F17122214008.d	FID17.M	DCM	DCM	12/22/2014	5:40 p
5	F17122214010.d	FID17.M	IB1712221401F	DCM	12/22/2014	7:10 p
6	F17122214012.d	FID17.M	S0122214B01	1X ETR 1412009	12/22/2014	8:39 p
7	F17122214014.d	FID17.M	S0122214LCS01	1X ETR 1412009	12/22/2014	10:09 p
8	F17122214016.d	FID17.M	S0122214LCSD01	1X ETR 1412009	12/22/2014	11:38 p
9	F17122214018.d	FID17.M	1412009-01	1X	12/23/2014	1:08 a
10	F17122214020.d	FID17.M	1412009-01D	1X	12/23/2014	2:37 a
11	F17122214022.d	FID17.M	WG750850-1	WG750850, FRAV14 50u..	12/23/2014	4:07 a
12	F17122214024.d	FID17.M	DCM	DCM	12/23/2014	5:36 a
13	F17122214026.d	FID17.M	IB1712221402F	DCM	12/23/2014	7:05 a
14	F17122214028.d	FID17.M	WG749631-1,42	WG750850, WG749631	12/23/2014	8:35 a
15	F17122214030.d	FID17.M	WG749631-2,42	WG750850, WG749631	12/23/2014	10:04 a
16	F17122214032.d	FID17.M	WG749631-3,42	WG750850, WG749631	12/23/2014	11:34 a
17	F17122214034.d	FID17.M	L1430198-01,42	WG750850, WG749631	12/23/2014	1:04 p
18	F17122214036.d	FID17.M	WG750850-2	WG750850, FRAV14 50ug..	12/23/2014	2:34 p
19	F17122214038.d	FID17.M	DCM	DCM	12/23/2014	4:03 p
20	F17122214040.d	FID17.M	IB1712221404F	DCM	12/23/2014	5:33 p
21	F17122214042.d	FID17.M	Q1712221401F	122214A-01 DCM Lot: ..	12/23/2014	7:03 p
22	F17122214044.d	FID17.M	Q1712221402F	122214A-02 DCM Lot: ..	12/23/2014	8:33 p
23	F17122214046.d	FID17.M	DCM		12/24/2014	11:10 a
24	F17122214048.d	FID17.M	RIS CHECK 1223		12/24/2014	12:39 p
25	F17122214050.d	FID17.M	SURR CHK 1223		12/24/2014	2:09 p



ORGANIC ELN REPORT

Workgroup: WG749631

Prep Method: ALPHA OP-013 Solvent Type: DCM Surrogate Type: A2-PAH/SHC Spike Type: A2-PAH/SHC Spike Verify by: DB Lims Spikelot: A2-PAH/SHC Additional Reagents/Stdts <table><tr><td>Na2SO4</td><td>0000088929</td></tr><tr><td>BIOMARKER</td><td>frav09</td></tr><tr><td></td><td></td></tr></table>	Na2SO4	0000088929	BIOMARKER	frav09			Conc.Method: S-EVAP/N-EVAP Solvent Type: DCM Lot #: 0000085201 Additional Reagents/Stdts <table><tr><td>Na2SO4</td><td>0000088929</td></tr><tr><td>Glass Wool</td><td>03413999</td></tr><tr><td>Copper</td><td>owr121814a</td></tr></table>	Na2SO4	0000088929	Glass Wool	03413999	Copper	owr121814a	Cleanup 1 Cleanup Method 1: EPA 3611B Cleanup Method 2: Solvent Type: DCM Lot #: 0000085201 Additional Reagents/Stdts <table><tr><td>Alumina</td><td>84</td></tr><tr><td>Glass Wool</td><td>03413999</td></tr><tr><td>Na2SO4</td><td>0000088929</td></tr><tr><td>Copper</td><td>owr121814a</td></tr><tr><td>RIS</td><td>frav06</td></tr></table>	Alumina	84	Glass Wool	03413999	Na2SO4	0000088929	Copper	owr121814a	RIS	frav06
Na2SO4	0000088929																							
BIOMARKER	frav09																							
Na2SO4	0000088929																							
Glass Wool	03413999																							
Copper	owr121814a																							
Alumina	84																							
Glass Wool	03413999																							
Na2SO4	0000088929																							
Copper	owr121814a																							
RIS	frav06																							

Sample/ Type	Extraction						Concentration			
	Extract Date	Analyst	Sample Weight g	Balanc e Id	Surr Amt ml	Spike Amt ml	Conc Date	Analyst	Final Vol ml	Conc Unit
WG749631-1 BLANK	12/17/14 21:27	Daniel Bopp	30	146825 73	.1		12/18/14 20:47	Daniel Bopp	4	SEVAP 5
	.1ul bio									
WG749631-2 LCS	12/17/14 21:27	Daniel Bopp	30	146825 73	.1	.1	12/18/14 20:47	Daniel Bopp	4	SEVAP 5
	.1ul bio									
WG749631-3 LCSD	12/17/14 21:27	Daniel Bopp	30	146825 73	.1	.1	12/18/14 20:47	Daniel Bopp	4	SEVAP 5
	.1ul bio									
L1430198-01 SOIL	12/17/14 21:27	Daniel Bopp	12.31	146825 73	.5		12/18/14 20:47	Daniel Bopp	10	SEVAP 5
	.5ul bio									



ORGANIC ELN REPORT

Workgroup: WG749631

Sample/ Type	Cleanup 1						Cleanup 2					
	Cleanup Date	Cleanup Vol ml	Conc Date	Analyst	Conc Method	Final Cleanup Vol	Cleanup Date	Frac Cleanup Vol	Conc Date	Analyst	Conc Method	Final Frac Cleanup Vol
WG749631-1 BLANK	12/18/14 23:00	2	12/19/14 00:20	DANIEL BOPP	KD SEVAP5	1						
WG749631-2 LCS	12/18/14 23:00	2	12/19/14 00:20	DANIEL BOPP	DANIEL BOPP	1						
WG749631-3 LCSD	12/18/14 23:00	2	12/19/14 00:20	DANIEL BOPP	DANIEL BOPP	1						
L1430198-01 SOIL	12/18/14 23:00	.25	12/19/14 00:20	DANIEL BOPP	DANIEL BOPP	1						

Supporting Documentation

L1430198

☐ Pre-Alumina

☐ Post-Alumina

☐ Pre-Silica

☐ Oily Material Prep.

☒ Other

DB

12/18/2014

Note:
Total Extract Weight (mg) = (Extract Volume ÷ Aliquot Removed) (Aliquot Weight)
Gravimetric Standard = 5 mg/mL
LCS Acceptance Criteria: 95% - 105%

Verified by: db
Date: 12/18/2014

Wet Chemistry

Total Solids / Percent Moisture Analysis

Results

Form 1

WETCHEM

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1430198-01
 Client ID : GTP-07-3'
 Sample Location : BROOKLYN
 Sample Matrix : SOIL
 Analytical Method : 30,2540G
 Lab File ID : WG750492.csv
 Sample Amount :
 Digestion Method :

Lab Number : L1430198
 Project Number : 11176638
 Date Collected : 12/15/14 11:00
 Date Received : 12/16/14
 Date Analyzed : 12/19/14 22:30
 Dilution Factor : 1
 Analyst : LC
 Instrument ID :
 %Solids : 56
 Date Digested :

CAS NO.	Parameter	%			Qualifier
		Results	RL	MDL	
NONE	Solids, Total	55.8	0.100	0.100	



Form 1

WETCHEM

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : WG750492-1
 Client ID : GTP-07-3'DUP
 Sample Location :
 Sample Matrix : SOIL
 Analytical Method : 30,2540G
 Lab File ID : WG750492.csv
 Sample Amount :
 Digestion Method :

Lab Number : L1430198
 Project Number : 11176638
 Date Collected : 12/15/14 11:00
 Date Received : 12/16/14
 Date Analyzed : 12/19/14 22:30
 Dilution Factor : 1
 Analyst : LC
 Instrument ID :
 %Solids : 56
 Date Digested :

CAS NO.	Parameter	%			Qualifier
		Results	RL	MDL	
NONE	Solids, Total	55.6	0.100	0.100	



Sample Raw Data

Last Change 3/26/13
File A2-TS_S.xlt

Product: A2-TS
Analyte: Solids, Total
Analysis Date: 12/19/2014 22:30
Technician: LC
Work group: WG750492
MDL: 0.10%
Scale Serial#: 14621307

[illegible]

Comments:

Form 6 Lab Duplicates

Client : URS Corporation
Project Name : WILLIAMSBURG
Client Sample ID : GTP-07-3'
Lab Sample ID : L1430198-01
Dup Sample ID : WG750492-1

Lab Number : L1430198
Project Number : 11176638
Matrix : SOIL
Analysis Date : 12/19/14 22:30
DUP Analysis Date : 12/19/14 22:30

Parameter	Sample Concentration (%)	Duplicate Concentration (%)	RPD	RPD Limit
Solids, Total	55.8	55.6	0	10



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Alpha Analytical

Laboratory Code: 11148

SDG Number: L1500432

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Project Name: WILLIAMSBURG
Project Number: 11176638

Lab Number: L1500432
Report Date: 01/16/15

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1500432-01	NRW-02	OIL	BROOKLYN	01/09/15 09:45	01/09/15
L1500432-02	NRW-07	OIL	BROOKLYN	01/09/15 10:50	01/09/15
L1500432-03	NRW-09	OIL	BROOKLYN	01/09/15 07:30	01/09/15
L1500432-04	NRW-10	OIL	BROOKLYN	01/09/15 08:35	01/09/15

Project Name: WILLIAMSBURG
Project Number: 11176638

Lab Number: L1500432
Report Date: 01/15/15

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: WILLIAMSBURG
Project Number: 11176638

Lab Number: L1500432
Report Date: 01/15/15

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Semivolatile Organics

Samples L1500432-01 through -04 were re-analyzed on dilution in order to quantify the sample within the calibration range. The result(s) should be considered estimated, and are qualified with an E flag, for any compound(s) that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound(s) that exceeded the calibration range.

The continuing calibration verification (CCV) standard, associated with WG755949-2, has the response for Anthracene at (28.8%D) and Pyrene (26.1%D), greater than 25%D, but below 35%D. Since this represents less than 10% of the total compounds evaluated, the calibration was accepted.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: 

Report Date: 01/15/15

Title: Technical Director/Representative



List of Organic Method Qualifiers

Table 1

Qualifier (Q)	Description
B	Entered if the analyte is found in the associated blank as well as the sample.
C	Applied to pesticide results when the identification has been confirmed by GC/MS.
D	Included when the all identified compounds in the analysis are at the secondary dilution factor.
E	Identified compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
J	Indicates an estimated value, may indicate one of the following, depending on the situation: (1) The reported value is estimated and below the MDL. (2) Used when estimating a concentration for TIC where a 1:1 response is assumed or when the result indicates the presence of a compound that meets the identification criteria, but the results is less than the quantitation limit, but greater than zero. (3) QC associated with this analyte is within warning limits.
N	Included for TIC that indicate presumptive evidence of a compound.
U	Entered if the analyte was analyzed for, but not detected.
P	Used for a pesticide/Aroclor target analyte when the concentration difference between 2 GC columns is greater than 25%; the lower value is flagged with a "P".
EMPC	"Estimated Maximum Possible Concentration" – The amount of analyte cannot be accurately quantified, so a maximum concentration has been estimated for the compound.
"XYZ"	"Wildcard" or Laboratory defined qualifier.

Note: Form I allows only one character in each qualifier column. If multiple qualifiers are applicable, please assess qualifier priority in the following order: U, E, J, B, D, C, P, N. Reporting done in the EDD may include multiple qualifiers when applicable, separated by a single space.

(Information obtained from NYSDEC ASP Exhibit B, 7/2005, page 64)

List of Inorganic Method Qualifiers

Table 2

Qualifier	Column (1)	Description
Concentration qualifiers		
B	C	Entered if the reported value was less than the CRDL, but greater than the IDL.
U	C	Entered if the analyte was analyzed for, but not detected.
J	C	Entered if the reported value is estimated and below the MDL.
*	C	Duplicate precision exceeds RPD limit.
M	C	Replicate precision exceeds RPD limit.
"XYZ"	C	"Wildcard" or Laboratory defined qualifier.
Qualifier specific entries		
E	Q	Entered if the reported value is estimated because of the presence of interferences.
Method qualifiers		
A	M	Flame atomic absorption
AS	M	Semi-automated spectrophotometric
AV	M	Automated cold vapor atomic absorption
C	M	Manual spectrophotometric
F	M	Furnace atomic absorption
MS	M	Mass spectrometry (ICP-MS)
NR	M	Analyte is not required to be analyzed
P	M	Inductively coupled plasma (ICP)
" "	M	No data have been entered

(1) The term "Column" is used to indicate under which column heading in the reporting forms that the qualifier will be found under.

Note: Form I allows only one character in each qualifier column. If multiple qualifiers are applicable to column C, please assess qualifier priority in the following order: U, J, B. Reporting done in the EDD may include multiple qualifiers when applicable, separated by a single space.

(Information obtained from NYSDEC ASP Exhibit B, 7/2005, page 65)

Volatile Organics Instruments

Volatile Organics: Jack

Instrument: Agilent 5975MSD
Trap: Supelco K Trap (VOACARB 3000)
Concentrator: EST Encon
Autosampler: EST Centurion
Purge time: 11 min

Column Type: RTX-VMS
Column Length: 20 Meters
df: 1.00um
ID: 0.18mm
Desorb: 2 min

Volatile Organics: Quimby

Instrument: Agilent 5973MSD
Trap: Supelco K Trap (VOACARB 3000)
Concentrator: EST Encon
Autosampler: EST Centurion
Purge time: 11 min

Column Type: RTX-VMS
Column Length: 20 Meters
df: 1.00um
ID: 0.18mm
Desorb: 2 min

Volatile Organics: Curly

Instrument: Agilent 5972 MSD
Trap: Supelco K Trap (VOACARB 3000)
Concentrator: Tekmar 3000
Autosampler: Archon
Purge time: 11 min

Column Type: Restek RTX-502.2
Column Length: 40 Meters
df: 1.00 um
ID: 0.18 mm
Desorb: 2 min

Volatile Organics: Elaine

Instrument: Agilent 5973 MSD
Trap: Supelco K Trap (VOACARB 3000)
Concentrator: Teledyne Velocity
Autosampler: Teledyne Solatek
Purge time: 11 min

Column Type: Restek RTX-502.2
Column Length: 40 Meters
df: 1.00 um
ID: 0.18 mm
Desorb: 2 min



Volatile Organics: Gonzo

Instrument: Agilent 5973 MSD
Trap: Supelco K Trap (VOACARB 3000)
Concentrator: Teledyne Velocity
Autosampler: Teledyne Solatek
Purge time: 11 min

Column Type: Restek RTX-502.2
Column Length: 40 Meters
df: 1.00 μ m
ID: 0.18 mm
Desorb: 2 min

Volatile Organics: VOA101

Instrument: Agilent 5975C inert XL MSD
Trap: EST K Trap (VOACARB 3000)
Concentrator: Encon Evolution
Autosampler: EST Centurion
Purge time: 11 min

Column Type: Restek RTX-VMS
Column Length: 30 Meters
df: 1.40 μ m
ID: 0.25 mm
Desorb: 1 min

Volatile Organics: Charlie/Voa100/Voa104

Instrument: Agilent 5975C MSD
Trap: Supelco K Trap (VOACARB 3000)
Concentrator: Encon Evolution
Autosampler: EST Centurion
Purge time: 11 min

Column Type: Agilent DB-624
Column Length: 25 Meters
df: 1.12 μ m
ID: 0.20 mm
Desorb: 2 min

Volatile Organics: M

Instrument: Agilent 6890

Concentrator: Tekmar 2016
Autosampler: Tekmar 3100

Column Type: Restek RTX 502.2
Column Length: 105 Meters
df: 3.00 μ m
ID: 0.53 mm

Volatile Organics: L/N

Instrument: Agilent 6890

Concentrator: Encon Evolution
Autosampler: EST Centurion

Column Type: Restek RTX 502.2
Column Length: 105 Meters
df: 3.00 μ m
ID: 0.53 mm

Volatile Organics: O/P

Instrument: Agilent 7890A

Concentrator: Encon Evolution
Autosampler: EST Centurion

Column Type: Restek RTX 502.2
Column Length: 105 Meters
df: 3.00 μ m
ID: 0.53 mm

Volatile Organics in Air Instruments

Volatile Organics in Air:

Instrument: Agilent 6890 GC / 5975 MSD	Column Type: Restek RTX-1
	Column Length: 60 Meters
Concentrator: Entech 7100A	df: 1.00 um
Autosampler: Entech 7016CA	ID: 0.52 mm
Trap 1: Glass Bead: manufacturer-Entech: 20 cm packing material	
Trap 2: Tenax: manufacturer-Entech: 20 cm packing material	

Semivolatile Organics Instruments

Semivolatile Organics (Acid/Base/Neutral Extractables): Buffy

Instrument: Agilent 5973N MSD	Injection volume: 1 ul
Column Type: Restek RTX-5MS	df: 0.25 um
Column Length: 30 Meters	ID: 0.32 mm

Semivolatile Organics (Acid/Base/Neutral Extractables): Juliet/GCMS5/GCMS7

Instrument: Agilent 5973N MSD	Injection volume: 1 ul
Column Type: Restek RXI-5SIL MS	df: 0.25 um
Column Length: 30 Meters	ID: 0.32 mm

Polynuclear Aromatic Hydrocarbons by 8270 SIM: Dakota/Mork

Instrument: Agilent 5973 MSD	Injection volume: 1 ul
Column Type: Restek RTX-5MS	df: 0.25 um
Column Length: 30 Meters	ID: 0.32 mm

Polynuclear Aromatic Hydrocarbons by 8270 SIM: Mindy

Instrument: Agilent 5973N MSD	Injection volume: 1 ul
Column Type: Restek RXI-5SIL MS	df: 0.25 um
Column Length: 30 Meters	ID: 0.32 mm

Pesticides/PCB : Pest 11/Pest2/Pest7/Pest12

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1uL
Column Type: Restek RTX-CLP (Channel A)	df: 0.32 um
Column: Restek RTX-CLPPesticide II (Channel B)	df: 0.25 um
Column Length: 30 Meters (Both)	ID: 0.32 mm (Both)

Pesticides/PCB: Pest 10/ Pest9

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1uL
Column Type: Restek STX-CLP (Channel A)	df: 0.32 um
Column: Restek STX-CLPPesticide II (Channel B)	df: 0.25 um
Column Length: 30 Meters (Both)	ID: 0.32 mm (Both)

Herbicides

Instrument: Agilent 6890 w/Dual Micro ECDs
Column Type: Restek RTX-1701 (Channel A)
Column Type: Restek RTX-5 (Channel B)
Column Length: 30 Meters (Both)

Injection Volume: 1uL
df: 0.25 um
df: 0.25 um
ID: 0.32 mm (Both)

Petro9

Instrument: Agilent 6890 w/FID
Column: Restek RTX-5
Column Length: 30 Meters

Injection Volume: 1uL
df: 0.25 um
ID: 0.32 mm

EPH Petro10/ Petro11

Instrument: Agilent 6890N w/FID
Column: Restek RTX-5-MS
Column Length: 30 Meters

Injection Volume: 1uL
df: 0.25um
ID: 0.32 mm

Explosives

Instrument: Dionex ICS-3000, AS50 Autosampler and PDA-100 detectors.
Injection Volume: 100uL
Column: Phenomenex Synergi 4u Hydro-RP and Luna 5u Phenyl-Hexyl.

GC/MS Forensic Semivolatile Organic Instruments

Semivolatile Organics (ALK-PAH extractables): PAH1/PAH2/PAH3/PAH4

Instrument: Agilent 5973C MSD
Column Type: Phenomenex ZB-5
Column Length: 60 Meters

Injection volume: 1 ul
df: 0.25 um
ID: 0.25 mm

Semivolatile Organics (ALK-PAH extractables): PAH8/PAH9/PAH10/PAH11/PAH12/PAH13/PAH14

Instrument: Agilent 5975C MSD
Column Type: Phenomenex ZB-5
Column Length: 60 Meters

Injection volume: 1 ul
df: 0.25 um
ID: 0.25 mm

Semivolatile Organics (ALK-PAH extractables): PAH17/PAH18/PAH19

Instrument: Agilent 5975C MSD
Column Type: Phenomenex ZB-5
Column Length: 60 Meters

Injection volume: 1 ul
df: 0.25 um
ID: 0.25 mm

GC/FID Forensic Semivolatile Organic Instruments

Semivolatile Organics (SHC extractables):PAH1/PAH2/PAH3/PAH4/PAH8

Instrument: Agilent 6890N w/FID
Column: Restek RTX-5
Column Length: 60 Meters

Injection Volume: 1uL
df: 0.25um
ID: 0.25 mm

Semivolatile Organics (SHC extractables): FID6 (dual column)/ FID9 (dual column)/ FID17 (dual column)

Instrument: Agilent 6890N w/FID
Column: Restek RTX-5
Column Length: 60 Meters

Injection Volume: 1uL
df: 0.25um
ID: 0.25 mm

Semivolatile Organics (SHC extractables):FID7 (dual column)

Instrument: Agilent 7890N w/FID
Column: Restek RTX-5
Column Length: 60 Meters

Injection Volume: 1uL
df: 0.25um
ID: 0.25 mm



Sample Delivery Group Form

Laboratory Job number: L1500432

Project Number: 11176638

Project Name: WILLIAMSBURG

Received: 01/09/2015 11:30

Client Account: URS Corporation

Received by: GP/SH

Samples Delivered by: COURIER

Call Tracker #

Bill Of Laden N/A

Trackingnum

Coc Present Present

Container Status Broken

Sample IDs Sample -03 "NRW-09" one vial was received broken. Entire contents of the vial were lost.

All Containers Accounted For? Yes

Samples Rec'd in MF 1/10/15 0400 at 4.8C (09849)

Were Extra Samples Received? No

Do Sample Labels and COC agree? Yes

Are Samples in Appropriate Containers? Yes

Are Samples Received within Holding time? Yes

pH of Samples upon Receipt N/A

Are samples Properly Preserved? Yes

Initial pH preserved in house with

Final pH

Other Issues

Chlorine Check N/A

Are VOA/VPV Vials Present? Yes

Aqueous: Do Vials Contain Head Space? No

Soils: Is MeOH Covering the Soil? N/A

Reagent H2O Preserved vials Frozen on N/A

Frozen by Client N/A

Cooler	Seal	Ice Present	Blue Ice Present	Temp. (Celsius)	Frozen upon Receipt	Delivered Direct from Site
A	Absent	Yes	No	2.7 - IR Gun	No	No

Project Manager: Gina Bartolomeo

Review Date: 01/15/2015

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Jan 16 2015, 04:17 pm

Login Number: L1500432

Account: URS-BUFFALO URS Corporation Project: 11176638

Received: 09JAN15 Due Date: 16JAN15
Mat PR Collected Container

Sample #	Client ID	
L1500432-01	NRW-02	6 S0 09JAN15 09:45 2-Vial-A-20 samples to be sent to Mansfield for analysis- ALk/PAH: reporting list built, see scanned info Hard TAT must go 30-JAN-15 (wanted RUSH and 15 day is fastest TAT) ASP-B Package Due Date: 01/16/15 A2-ALKPAH/BIOMARKER, A2-TPH, ASP-B, TS100
L1500432-02	NRW-07	6 S0 09JAN15 10:50 2-Vial-A-20 samples to be sent to Mansfield for analysis- ALk/PAH: reporting list built, see scanned info Hard TAT must go 30-JAN-15 (wanted RUSH and 15 day is fastest TAT) Package Due Date: 01/16/15 A2-ALKPAH/BIOMARKER, A2-TPH, TS100
L1500432-03	NRW-09	6 S0 09JAN15 07:30 2-Vial-A-20 samples to be sent to Mansfield for analysis- ALk/PAH: reporting list built, see scanned info Hard TAT must go 30-JAN-15 (wanted RUSH and 15 day is fastest TAT) Package Due Date: 01/16/15 A2-ALKPAH/BIOMARKER, A2-TPH, TS100
L1500432-04	NRW-10	6 S0 09JAN15 08:35 2-Vial-A-20 samples to be sent to Mansfield for analysis- ALk/PAH: reporting list built, see scanned info Hard TAT must go 30-JAN-15 (wanted RUSH and 15 day is fastest TAT) Package Due Date: 01/16/15 A2-ALKPAH/BIOMARKER, A2-TPH, TS100

Organics

Semivolatiles Data- Method 8270C-SIM

Semivolatiles QC Summary

Form 2

Surrogate Recovery

SemiVolatile Organics

Client: URS Corporation
Project Name: WILLIAMSBURG

Lab Number: L1500432
Project Number: 11176638
Matrix: Oil

CLIENT ID (LAB SAMPLE NO.)	S1 (ND8)	S2 (PHE)	S3 (BAP)	S4 (5HC)	S5 ()	S6 ()	TOT OUT
WG755041-3LCSD	93	100	96	96	--	--	0
WG755041-2LCS	90	98	94	94	--	--	0
WG755041-1BLANK	94	109	93	92	--	--	0
NRW-02 (L1500432-01)	96	98	115	114	--	--	0
NRW-02 (L1500432-01D)	105	107	89	112	--	--	0
NRW-07 (L1500432-02)	109	107	120	118	--	--	0
NRW-07 (L1500432-02D)	108	104	104	126	--	--	0
NRW-09 (L1500432-03)	107	103	117	119	--	--	0
NRW-09 (L1500432-03D)	103	101	97	100	--	--	0
NRW-10 (L1500432-04)	104	103	109	114	--	--	0
NRW-10 (L1500432-04D)	109	97	88	87	--	--	0

ND8 = NAPHTHALENE-D8
PHE = PHENANTHRENE-D10
BAP = BENZO(A)PYRENE-D12
5HC = 5B(H)CHOLANE)

QC LIMITS
(50-130)
(50-130)
(50-130)
(50-130)

* Values outside of QC limits

FORM II A2-ALKPAH/BIOMARKER



3
LAB CONTROL/LAB CONTROL DUPLICATE SAMPLE RECOVERY
OIL SEMIVOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1500432

Lab Control Sample: WG755041-2LCS

Lab Control Dup : WG755041-3LCSD

Matrix: Oil

Injected: 01/12/15 20:07

Injected: 01/12/15 21:32

Lab File ID: F801121508

Lab File ID: F801121509

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONC mg/kg	LCS CONC mg/kg	LCS % REC	LCSD CONC mg/kg	LCSD % REC	% RPD	QC LIMITS RPD REC.
Naphthalene	50000	NA	47.0	94	49.3	99	5	30 50-130
Acenaphthylene	50000	NA	51.8	104	53.2	106	2	30 50-130
Acenaphthene	50000	NA	52.8	106	54.5	109	3	30 50-130
Fluorene	50000	NA	51.7	103	53.6	107	4	30 50-130
Phenanthrene	50000	NA	51.0	102	52.3	105	3	30 50-130
Anthracene	50000	NA	56.6	113	58.3	116	3	30 50-130
Fluoranthene	50000	NA	53.9	108	55.8	112	4	30 50-130
Pyrene	50000	NA	53.9	108	55.7	111	3	30 50-130
Benz(a)anthracene	50000	NA	49.6	99	50.7	101	2	30 50-130
Chrysene/Triphenylene	50000	NA	50.3	100	51.5	103	3	30 50-130
Benzo(b)fluoranthene	50000	NA	49.9	100	51.1	102	2	30 50-130
Benzo(j)+(k)Fluoranthene	50000	NA	54.0	108	54.2	108	0	30 50-130
Benzo(a)pyrene	50000	NA	53.6	107	55.0	110	3	30 50-130
Indeno(1,2,3-cd)Pyrene	50000	NA	45.8	92	47.3	95	3	30 50-130
Dibenz(a,h)+(a,c)anthrac	50000	NA	48.8	98	49.8	100	2	30 50-130
Benzo(g,h,i)perylene	50000	NA	46.4	93	48.0	96	3	30 50-130

* Values outside of QC limits.

COMMENTS: _____

FORM III A2-ALKPAH/BIOMARKER

4B

WG755041-1BLANK

Time Analyzed: 18:41

[illegible]

COMMENTS: _____

8B

Lab Name: Alpha Analytical Labs

SDG No. : L1500432

Lab File ID (Standard): F801121502

Date Analyzed: 01/12/15

Instrument ID : PAH8

Time Analyzed: 11:33

[illegible]

IS1(ANT) = ACENAPHTHENE-D10
IS2(CRY) = CHRYSENE-D12
IS3() =

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50 % of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

* Values outside of QC limits.

8B

Lab Name: Alpha Analytical Labs

SDG No. : L1500432

Lab File ID (Standard): F801131502

Date Analyzed: 01/13/15

Instrument ID : PAH8

Time Analyzed: 16:45

[illegible]

IS1(ANT) = ACENAPHTHENE-D10
IS2(CRY) = CHRYSENE-D12
IS3() =

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50 % of internal standard area
 RT UPPER LIMIT = +0.50 minutes of internal standard RT
 RT LOWER LIMIT = -0.50 minutes of internal standard RT

* Values outside of QC limits.

Determination of Method Detection Limits

Alpha Analytical Inc.
Westborough, MA

Approved

Page 1 of 1
Analyst: MS
Date: 11/9-10/2009
Instrument ID: PAH 8
Column ID: Z-B5
Prep Method: Shaker Table
Prep Chemist: MA, BA

Method: EPA 8270C

2009

GC/MS Alkylated PAH Soil

Table (MDL)		Data File	mdl01	mdl02	mdl03	mdl04	mdl05	mdl06	mdl07	mdl08	T value used for calculating MDL: 2.998					
No.	Analytes	Target conc. (ug/Kg)	Rep-1 (ug/Kg)	Rep-2 (ug/Kg)	Rep-3 (ug/Kg)	Rep-4 (ug/Kg)	Rep-5 (ug/Kg)	Rep-6 (ug/Kg)	Rep-7 (ug/Kg)	Rep-8 (ug/Kg)	Mean (ug/Kg)	Mean Accuracy	Standard Deviation	Calc.MDL (ug/Kg)	Current RL (ug/Kg)	Comment
1	trans-Decalin	0.267	0.220	0.279	0.213	0.260	0.269	0.224	0.241	0.201	0.24	89%	0.028	0.085	1.000	
2	cis-Decalin	0.267	0.209	0.268	0.287	0.262	0.323	0.212	0.284	0.271	0.26	99%	0.038	0.115	1.000	
3	Naphthalene	0.533	0.439	0.443	0.413	0.443	0.420	0.422	0.385	0.429	0.42	80%	0.019	0.058	1.000	
4	2-Methylnaphthalene	0.533	0.437	0.455	0.458	0.558	0.453	0.401	0.441	0.448	0.46	86%	0.045	0.135	1.000	
5	1-Methylnaphthalene	0.533	0.437	0.473	0.435	0.453	0.480	0.416	0.420	0.444	0.44	83%	0.023	0.069	1.000	
6	Benzothiophene	0.533	0.414	0.380	0.373	0.421	0.410	0.385	0.381	0.333	0.39	73%	0.028	0.085	1.000	
7	Biphenyl	0.533	0.453	0.449	0.443	0.509	0.449	0.433	0.444	0.326	0.44	82%	0.051	0.153	1.000	
8	2,6-Dimethylnaphthalene	0.533	0.455	0.446	0.477	0.455	0.375	0.450	0.435	0.410	0.44	82%	0.032	0.096	1.000	
9	Dibenzofuran	0.533	0.429	0.419	0.451	0.452	0.407	0.405	0.397	0.437	0.42	80%	0.021	0.063	1.000	
10	Acenaphthylene	0.533	0.446	0.445	0.442	0.447	0.458	0.447	0.473	0.393	0.44	83%	0.023	0.069	1.000	
11	Acenaphthene	0.533	0.417	0.447	0.469	0.444	0.461	0.423	0.441	0.460	0.45	83%	0.018	0.055	1.000	
12	2,3,5-Trimethylnaphthalene	0.533	0.456	0.510	0.465	0.479	0.482	0.451	0.477	0.461	0.47	89%	0.019	0.056	1.000	
13	Fluorene	0.533	0.452	0.456	0.455	0.557	0.433	0.453	0.458	0.459	0.47	87%	0.038	0.113	1.000	
14	Dibenzothiophene	0.533	0.443	0.428	0.423	0.439	0.413	0.331	0.372	0.428	0.41	77%	0.039	0.116	1.000	
15	Phenanthrene	0.533	0.469	0.493	0.468	0.473	0.447	0.473	0.428	0.454	0.46	87%	0.020	0.059	1.000	
16	Retene	0.533	0.551	0.664	0.576	0.549	0.580	0.511	0.521	0.603	0.57	107%	0.049	0.147	1.000	
17	Anthracene	0.533	0.403	0.417	0.404	0.411	0.387	0.367	0.373	0.388	0.39	74%	0.018	0.054	1.000	
18	Carbazole	0.533	0.376	0.371	0.353	0.382	0.302	0.317	0.317	0.315	0.34	64%	0.032	0.097	1.000	
19	1-Methylphenanthrene	0.533	0.501	0.505	0.459	0.496	0.483	0.457	0.437	0.469	0.48	89%	0.024	0.073	1.000	
20	Fluoranthene	0.533	0.469	0.555	0.490	0.499	0.472	0.480	0.476	0.441	0.49	91%	0.033	0.099	1.000	
21	Benzo(b)fluorene	0.533	0.474	0.498	0.460	0.465	0.441	0.469	0.447	0.481	0.47	88%	0.018	0.055	1.000	
22	Pyrene	0.533	0.519	0.517	0.493	0.610	0.523	0.511	0.466	0.531	0.52	98%	0.041	0.124	1.000	
23	Naphthobenzothiophene	0.533	0.471	0.485	0.469	0.485	0.470	0.414	0.477	0.517	0.47	89%	0.029	0.086	1.000	
24	Benz(a)anthracene	0.533	0.479	0.473	0.448	0.449	0.483	0.439	0.412	0.451	0.45	85%	0.023	0.070	1.000	
25	Chrysene/Triphenylene	0.533	0.448	0.503	0.465	0.449	0.441	0.458	0.432	0.456	0.46	86%	0.021	0.064	1.000	
26	Benzo(b)fluoranthene	0.533	0.487	0.563	0.507	0.488	0.487	0.467	0.440	0.455	0.49	91%	0.038	0.113	1.000	
27	Benzo(k)fluoranthene	0.533	0.415	0.547	0.417	0.417	0.453	0.443	0.463	0.449	0.45	84%	0.043	0.129	1.000	
28	Benzo(e)pyrene	0.533	0.514	0.526	0.488	0.482	0.480	0.465	0.441	0.526	0.49	92%	0.030	0.091	1.000	
29	Benzo(a)pyrene	0.533	0.489	0.487	0.419	0.445	0.431	0.432	0.393	0.458	0.44	83%	0.033	0.098	1.000	
30	Perylene	0.533	0.517	0.475	0.475	0.467	0.433	0.467	0.422	0.468	0.47	87%	0.029	0.087	1.000	
31	Indeno[1,2,3-cd]pyrene	0.533	0.533	0.561	0.520	0.523	0.497	0.436	0.464	0.465	0.50	94%	0.042	0.126	1.000	
32	Dibenz(a,h)anthracene	0.533	0.439	0.451	0.387	0.361	0.402	0.439	0.363	0.390	0.40	76%	0.035	0.105	1.000	
33	Benzo(g,h,i)perylene	0.533	0.468	0.522	0.459	0.481	0.472	0.428	0.486	0.457	0.47	88%	0.027	0.081	1.000	
Surrogates																
1	2-Methylnaphthalene-d10	66.667	28.587	29.411	29.231	29.435	29.808	29.376	29.923	30.027	29.47	44%				
2	Pyrene-d10	66.667	36.463	36.500	36.013	37.905	37.036	36.565	36.519	37.080	36.76	55%				
3	Benzo(b)fluoranthene-d12	66.667	35.599	35.967	35.562	36.889	35.903	36.137	35.739	36.082	35.98	54%				
4	5B(H)Cholane	0.533	0.503	0.531	0.498	0.599	0.493	0.552	0.487	0.535	0.52	98%				

Comments:

Semivolatile Sample Data

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-01
 Client ID : NRW-02
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121511
 Sample Amount : 0.1002 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 09:45
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 00:23
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
91-20-3	Naphthalene	44000	2.99	0.860	E
91-20-3C1	C1-Naphthalenes	26000	2.99	0.860	E
91-20-3C2	C2-Naphthalenes	11600	2.99	0.860	E
91-20-3C3	C3-Naphthalenes	3470	2.99	0.860	
91-20-3C4	C4-Naphthalenes	767	2.99	0.860	
92-52-4	Biphenyl	2700	2.99	0.925	
132-64-9	Dibenzofuran	1030	2.99	0.943	
208-96-8	Acenaphthylene	11800	2.99	0.571	E
83-32-9	Acenaphthene	1450	2.99	0.528	
86-73-7	Fluorene	6070	2.99	0.799	E
86-73-7C1	C1-Fluorenes	2720	2.99	0.799	
86-73-7C2	C2-Fluorenes	1430	2.99	0.799	
86-73-7C3	C3-Fluorenes	478	2.99	0.799	
132-65-0	Dibenzothiophene	1920	2.99	0.826	
132-65-0C1	C1-Dibenzothiophenes BS	1830	2.99	0.826	
132-65-0C2	C2-Dibenzothiophenes	1010	2.99	0.826	
132-65-0C3	C3-Dibenzothiophenes	361	2.99	0.826	
132-65-0C4	C4-Dibenzothiophenes	93.6	2.99	0.826	
85-01-8	Phenanthrene	13500	2.99	0.992	E
PHENANTHC1	C1-Phenanthrenes/Anthracenes	8940	2.99	0.992	
PHENANTHC2	C2-Phenanthrenes/Anthr BS	2970	2.99	0.992	
PHENANTHC3	C3-Phenanthrenes/Anthracenes	715	2.99	0.992	
PHENANTHC4	C4-Phenanthrenes/Anthracenes	131	2.99	0.992	
120-12-7	Anthracene	5020	2.99	0.617	E



Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-01
 Client ID : NRW-02
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121511
 Sample Amount : 0.1002 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 09:45
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 00:23
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
86-74-8	Carbazole	278	2.99	0.979	
206-44-0	Fluoranthene	4240	2.99	0.951	E
243-17-4	Benzo(b)fluorene	1240	2.99	0.867	
129-00-0	Pyrene	5740	2.99	0.787	E
FLUORPYRC1	C1-Fluoranthenes/Pyrenes	5750	2.99	0.787	
FLUORPYRC2	C2-Fluoranthenes/Pyrenes	1530	2.99	0.787	
FLUORPYRC3	C3-Fluoranthenes/Pyrenes	424	2.99	0.787	
FLUORPYRC4	C4-Fluoranthenes/Pyrenes	137	2.99	0.787	
61523-34-0	Naphthobenzothiophenes	670	2.99	0.838	
NAPBENZOTHIOPC1	C1-Naphthobenzothiophenes	547	2.99	0.838	
NAPBENZOTHIOPC2	C2-Naphthobenzothiophenes	237	2.99	0.838	
NAPBENZOTHIOPC3	C3-Naphthobenzothiophenes	91.9	2.99	0.838	
NAPBENZOTHIOPC4	C4-Naphthobenzothiophenes	44.2	2.99	0.838	
56-55-3	Benz(a)anthracene	2680	2.99	0.610	
218-01-9/217-59-4	Chrysene/Triphenylene	2520	2.99	0.605	
218-01-9C1	C1-Chrysenes	2060	2.99	0.605	
218-01-9C2	C2-Chrysenes BS	904	2.99	0.605	
218-01-9C3	C3-Chrysenes	358	2.99	0.605	
218-01-9C4	C4-Chrysenes	86.0	2.99	0.605	
205-99-2	Benzo(b)fluoranthene	960	2.99	0.779	
205-82-3/207-08-9	Benzo(j)+(k)fluoranthene	1380	2.99	0.594	
203-33-8	Benzo(a)fluoranthene	724	2.99	0.594	
192-97-2	Benzo(e)pyrene	966	2.99	0.618	
50-32-8	Benzo(a)pyrene	2180	2.99	0.855	

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-01
 Client ID : NRW-02
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121511
 Sample Amount : 0.1002 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 09:45
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 00:23
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
198-55-0	Perylene	321	2.99	0.578	
193-39-5	Indeno(1,2,3-cd)pyrene	723	2.99	0.812	
215-58-7/53-70-3	Dibenz(a,h)+(a,c)anthracene	283	2.99	0.809	
191-24-2	Benzo(g,h,i)perylene	711	2.99	0.795	
NONE	Hopane (T19)	ND	2.99	0.852	U
NONE	C23 Tricyclic Terpane (T4)	ND	2.99	0.852	U
NONE	C24 Tricyclic Terpane (T5)	ND	2.99	0.852	U
NONE	C25 Tricyclic Terpane (T6)	ND	2.99	0.852	U
NONE	C24 Tetracyclic Terpane (T6a)	ND	2.99	0.852	U
NONE	C26 Tricyclic Terpane-22S (T6b)	2.86	2.99	0.852	J
NONE	C26 Tricyclic Terpane-22R (T6c)	ND	2.99	0.852	U
NONE	C28 Tricyclic Terpane-22S (T7)	ND	2.99	0.852	U
NONE	C28 Tricyclic Terpane-22R (T8)	2.77	2.99	0.852	J
NONE	C29 Tricyclic Terpane-22S (T9)	ND	2.99	0.852	U
NONE	C29 Tricyclic Terpane-22R (T10)	ND	2.99	0.852	U
NONE	18a-22,29,30-Trisnorhopane-TS (T11)	ND	2.99	0.852	U
NONE	C30 Tricyclic Terpane-22S	ND	2.99	0.852	U
NONE	C30 Tricyclic Terpane-22R	ND	2.99	0.852	U
53584-59-1	17a(H)-22,29,30-Trisnorhopane-TM (T12)	ND	2.99	0.852	U
NONE	17a/b,21b/a 28,30-Bisnorhopane (T14a)	ND	2.99	0.852	U
NONE	17a(H),21b(H)-25-Norhopane (T14b)	ND	2.99	0.852	U
NONE	30-Norhopane (T15)	ND	2.99	0.852	U
NONE	18a(H)-30-Norneohopane-C29Ts (T16)	ND	2.99	0.852	U
NONE	17a(H)-Diahopane (X)	ND	2.99	0.852	U

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-01
 Client ID : NRW-02
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121511
 Sample Amount : 0.1002 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 09:45
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 00:23
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
NONE	30-Normoretane (T17)	ND	2.99	0.852	U
NONE	18a(H)&18b(H)-Oleananes (T18)	ND	2.99	0.852	U
1176-44-9	Moretane (T20)	ND	2.99	0.852	U
NONE	30-Homohopane-22S (T21)	ND	2.99	0.852	U
NONE	30-Homohopane-22R (T22)	ND	2.99	0.852	U
NONE	Gammacerane/C32-Diahopane	ND	2.99	0.852	U
NONE	30,31-Bishomohopane-22S (T26)	ND	2.99	0.852	U
NONE	30,31-Bishomohopane-22R (T27)	ND	2.99	0.852	U
NONE	30,31-Trishomohopane-22S (T30)	ND	2.99	0.852	U
NONE	30,31-Trishomohopane-22R (T31)	ND	2.99	0.852	U
NONE	Tetrakishomohopane-22S (T32)	ND	2.99	0.852	U
NONE	Tetrakishomohopane-22R (T33)	ND	2.99	0.852	U
NONE	Pentakishomohopane-22S (T34)	ND	2.99	0.852	U
NONE	Pentakishomohopane-22R (T35)	ND	2.99	0.852	U
NONE	13b(H),17a(H)-20S-Diacholestane (S4)	3.73	2.99	0.665	
82079-08-1	13b(H),17a(H)-20R-Diacholestane (S5)	ND	2.99	0.665	U
NONE	13b,17a-20S-Methyldiacholestane (S8)	ND	2.99	0.665	U
NONE	17a(H)20SC27/C29dia	ND	2.99	0.665	U
NONE	17a(H)20RC27/C29dia	3.35	2.99	0.665	
NONE	Unknown Sterane (S18)	ND	2.99	0.665	U
NONE	13a,17b-20S-Ethylidiacholestane (S19)	ND	2.99	0.665	U
NONE	14a,17a-20S-Methylcholestane (S20)	ND	2.99	0.665	U
NONE	14a,17a-20R-Methylcholestane (S24)	ND	2.99	0.665	U
NONE	14a(H),17a(H)-20S-Ethylcholestane (S25)	ND	2.99	0.665	U

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-01
 Client ID : NRW-02
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121511
 Sample Amount : 0.1002 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 09:45
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 00:23
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
NONE	14a(H),17a(H)-20R-Ethylcholestane (S28)	ND	2.99	0.665	U
NONE	14b(H),17b(H)-20R-Cholestane (S14)	ND	2.99	0.665	U
NONE	14b(H),17b(H)-20S-Cholestane (S15)	ND	2.99	0.665	U
NONE	14b,17b-20R-Methylcholestane (S22)	ND	2.99	0.665	U
NONE	14b,17b-20S-Methylcholestane (S23)	ND	2.99	0.665	U
NONE	14b(H),17b(H)-20R-Ethylcholestane (S26)	ND	2.99	0.665	U
NONE	14b(H),17b(H)-20S-Ethylcholestane (S27)	ND	2.99	0.665	U
NONE	C26,20R- +C27,20S- Triaromatic Steroid	2.38	2.99	0.665	J
NONE	C28,20S-Triaromatic Steroid	ND	2.99	0.665	U
NONE	C27,20R-Triaromatic Steroid	1.70	2.99	0.665	J
NONE	C28,20R-Triaromatic Steroid	ND	2.99	0.665	U

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-01D
 Client ID : NRW-02
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801131504
 Sample Amount : 0.1002 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 09:45
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 19:37
 Date Extracted : 01/12/15
 Dilution Factor : 50
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
91-20-3	Naphthalene	86000	150	43.0	
91-20-3C1	C1-Naphthalenes	39600	150	43.0	
91-20-3C2	C2-Naphthalenes	13300	150	43.0	
208-96-8	Acenaphthylene	16900	150	28.6	
86-73-7	Fluorene	7600	150	39.9	
85-01-8	Phenanthrene	20400	150	49.6	
120-12-7	Anthracene	6390	150	30.8	
206-44-0	Fluoranthene	5480	150	47.6	
129-00-0	Pyrene	7820	150	39.4	

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-02
 Client ID : NRW-07
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121512
 Sample Amount : 0.1045 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 10:50
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 01:48
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
91-20-3	Naphthalene	53100	2.87	0.825	E
91-20-3C1	C1-Naphthalenes	30200	2.87	0.825	E
91-20-3C2	C2-Naphthalenes	14400	2.87	0.825	E
91-20-3C3	C3-Naphthalenes	4590	2.87	0.825	
91-20-3C4	C4-Naphthalenes	1180	2.87	0.825	
92-52-4	Biphenyl	2940	2.87	0.887	
132-64-9	Dibenzofuran	1070	2.87	0.904	
208-96-8	Acenaphthylene	13000	2.87	0.548	E
83-32-9	Acenaphthene	1620	2.87	0.506	
86-73-7	Fluorene	6190	2.87	0.766	E
86-73-7C1	C1-Fluorenes	3290	2.87	0.766	
86-73-7C2	C2-Fluorenes	2100	2.87	0.766	
86-73-7C3	C3-Fluorenes	756	2.87	0.766	
132-65-0	Dibenzothiophene	1990	2.87	0.792	
132-65-0C1	C1-Dibenzothiophenes BS	2090	2.87	0.792	
132-65-0C2	C2-Dibenzothiophenes	1310	2.87	0.792	
132-65-0C3	C3-Dibenzothiophenes	525	2.87	0.792	
132-65-0C4	C4-Dibenzothiophenes	147	2.87	0.792	
85-01-8	Phenanthrene	15400	2.87	0.951	E
PHENANTHC1	C1-Phenanthrenes/Anthracenes	11200	2.87	0.951	
PHENANTHC2	C2-Phenanthrenes/Anthr BS	4270	2.87	0.951	
PHENANTHC3	C3-Phenanthrenes/Anthracenes	1140	2.87	0.951	
PHENANTHC4	C4-Phenanthrenes/Anthracenes	243	2.87	0.951	
120-12-7	Anthracene	5740	2.87	0.592	E



Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-02
 Client ID : NRW-07
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121512
 Sample Amount : 0.1045 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 10:50
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 01:48
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
86-74-8	Carbazole	292	2.87	0.939	
206-44-0	Fluoranthene	4700	2.87	0.912	E
243-17-4	Benzo(b)fluorene	1320	2.87	0.832	
129-00-0	Pyrene	6580	2.87	0.755	E
FLUORPYRC1	C1-Fluoranthenes/Pyrenes	6970	2.87	0.755	
FLUORPYRC2	C2-Fluoranthenes/Pyrenes	2100	2.87	0.755	
FLUORPYRC3	C3-Fluoranthenes/Pyrenes	663	2.87	0.755	
FLUORPYRC4	C4-Fluoranthenes/Pyrenes	221	2.87	0.755	
61523-34-0	Naphthobenzothiophenes	816	2.87	0.803	
NAPBENZOTHIOPC1	C1-Naphthobenzothiophenes	709	2.87	0.803	
NAPBENZOTHIOPC2	C2-Naphthobenzothiophenes	349	2.87	0.803	
NAPBENZOTHIOPC3	C3-Naphthobenzothiophenes	138	2.87	0.803	
NAPBENZOTHIOPC4	C4-Naphthobenzothiophenes	64.8	2.87	0.803	
56-55-3	Benz(a)anthracene	2970	2.87	0.585	
218-01-9/217-59-4	Chrysene/Triphenylene	2830	2.87	0.580	
218-01-9C1	C1-Chrysenes	2530	2.87	0.580	
218-01-9C2	C2-Chrysenes BS	1210	2.87	0.580	
218-01-9C3	C3-Chrysenes	512	2.87	0.580	
218-01-9C4	C4-Chrysenes	123	2.87	0.580	
205-99-2	Benzo(b)fluoranthene	983	2.87	0.747	
205-82-3/207-08-9	Benzo(j)+(k)fluoranthene	1480	2.87	0.570	
203-33-8	Benzo(a)fluoranthene	772	2.87	0.570	
192-97-2	Benzo(e)pyrene	1060	2.87	0.592	
50-32-8	Benzo(a)pyrene	2370	2.87	0.820	



Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-02
 Client ID : NRW-07
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121512
 Sample Amount : 0.1045 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 10:50
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 01:48
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
198-55-0	Perylene	350	2.87	0.554	
193-39-5	Indeno(1,2,3-cd)pyrene	741	2.87	0.779	
215-58-7/53-70-3	Dibenz(a,h)+(a,c)anthracene	308	2.87	0.776	
191-24-2	Benzo(g,h,i)perylene	767	2.87	0.763	
NONE	Hopane (T19)	ND	2.87	0.817	U
NONE	C23 Tricyclic Terpane (T4)	ND	2.87	0.817	U
NONE	C24 Tricyclic Terpane (T5)	ND	2.87	0.817	U
NONE	C25 Tricyclic Terpane (T6)	ND	2.87	0.817	U
NONE	C24 Tetracyclic Terpane (T6a)	ND	2.87	0.817	U
NONE	C26 Tricyclic Terpane-22S (T6b)	ND	2.87	0.817	U
NONE	C26 Tricyclic Terpane-22R (T6c)	ND	2.87	0.817	U
NONE	C28 Tricyclic Terpane-22S (T7)	ND	2.87	0.817	U
NONE	C28 Tricyclic Terpane-22R (T8)	4.24	2.87	0.817	
NONE	C29 Tricyclic Terpane-22S (T9)	ND	2.87	0.817	U
NONE	C29 Tricyclic Terpane-22R (T10)	ND	2.87	0.817	U
NONE	18a-22,29,30-Trisnorhopane-TS (T11)	ND	2.87	0.817	U
NONE	C30 Tricyclic Terpane-22S	ND	2.87	0.817	U
NONE	C30 Tricyclic Terpane-22R	ND	2.87	0.817	U
53584-59-1	17a(H)-22,29,30-Trisnorhopane-TM (T12)	ND	2.87	0.817	U
NONE	17a/b,21b/a 28,30-Bisnorhopane (T14a)	ND	2.87	0.817	U
NONE	17a(H),21b(H)-25-Norhopane (T14b)	ND	2.87	0.817	U
NONE	30-Norhopane (T15)	ND	2.87	0.817	U
NONE	18a(H)-30-Norneohopane-C29Ts (T16)	ND	2.87	0.817	U
NONE	17a(H)-Diahopane (X)	ND	2.87	0.817	U



Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-02
 Client ID : NRW-07
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121512
 Sample Amount : 0.1045 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 10:50
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 01:48
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
NONE	30-Normoretane (T17)	ND	2.87	0.817	U
NONE	18a(H)&18b(H)-Oleananes (T18)	ND	2.87	0.817	U
1176-44-9	Moretane (T20)	ND	2.87	0.817	U
NONE	30-Homohopane-22S (T21)	ND	2.87	0.817	U
NONE	30-Homohopane-22R (T22)	ND	2.87	0.817	U
NONE	Gammacerane/C32-Diahopane	ND	2.87	0.817	U
NONE	30,31-Bishomohopane-22S (T26)	ND	2.87	0.817	U
NONE	30,31-Bishomohopane-22R (T27)	ND	2.87	0.817	U
NONE	30,31-Trishomohopane-22S (T30)	ND	2.87	0.817	U
NONE	30,31-Trishomohopane-22R (T31)	ND	2.87	0.817	U
NONE	Tetrakishomohopane-22S (T32)	ND	2.87	0.817	U
NONE	Tetrakishomohopane-22R (T33)	ND	2.87	0.817	U
NONE	Pentakishomohopane-22S (T34)	ND	2.87	0.817	U
NONE	Pentakishomohopane-22R (T35)	ND	2.87	0.817	U
NONE	13b(H),17a(H)-20S-Diacholestane (S4)	6.93	2.87	0.638	
82079-08-1	13b(H),17a(H)-20R-Diacholestane (S5)	ND	2.87	0.638	U
NONE	13b,17a-20S-Methyldiacholestane (S8)	ND	2.87	0.638	U
NONE	17a(H)20SC27/C29dia	ND	2.87	0.638	U
NONE	17a(H)20RC27/C29dia	ND	2.87	0.638	U
NONE	Unknown Sterane (S18)	ND	2.87	0.638	U
NONE	13a,17b-20S-Ethylidiacholestane (S19)	ND	2.87	0.638	U
NONE	14a,17a-20S-Methylcholestane (S20)	ND	2.87	0.638	U
NONE	14a,17a-20R-Methylcholestane (S24)	ND	2.87	0.638	U
NONE	14a(H),17a(H)-20S-Ethylcholestane (S25)	ND	2.87	0.638	U

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-02
 Client ID : NRW-07
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121512
 Sample Amount : 0.1045 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 10:50
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 01:48
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
NONE	14a(H),17a(H)-20R-Ethylcholestane (S28)	ND	2.87	0.638	U
NONE	14b(H),17b(H)-20R-Cholestane (S14)	ND	2.87	0.638	U
NONE	14b(H),17b(H)-20S-Cholestane (S15)	ND	2.87	0.638	U
NONE	14b,17b-20R-Methylcholestane (S22)	ND	2.87	0.638	U
NONE	14b,17b-20S-Methylcholestane (S23)	ND	2.87	0.638	U
NONE	14b(H),17b(H)-20R-Ethylcholestane (S26)	ND	2.87	0.638	U
NONE	14b(H),17b(H)-20S-Ethylcholestane (S27)	ND	2.87	0.638	U
NONE	C26,20R- +C27,20S- Triaromatic Steroid	ND	2.87	0.638	U
NONE	C28,20S-Triaromatic Steroid	ND	2.87	0.638	U
NONE	C27,20R-Triaromatic Steroid	ND	2.87	0.638	U
NONE	C28,20R-Triaromatic Steroid	ND	2.87	0.638	U

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-02D
 Client ID : NRW-07
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801131505
 Sample Amount : 0.1045 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 10:50
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 21:03
 Date Extracted : 01/12/15
 Dilution Factor : 50
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
91-20-3	Naphthalene	87100	144	41.2	
91-20-3C1	C1-Naphthalenes	38500	144	41.2	
91-20-3C2	C2-Naphthalenes	14300	144	41.2	
208-96-8	Acenaphthylene	16000	144	27.4	
86-73-7	Fluorene	7100	144	38.3	
85-01-8	Phenanthrene	20400	144	47.6	
120-12-7	Anthracene	6430	144	29.6	
206-44-0	Fluoranthene	5500	144	45.6	
129-00-0	Pyrene	8020	144	37.8	

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-03
 Client ID : NRW-09
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121513
 Sample Amount : 0.1012 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 07:30
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 03:14
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
91-20-3	Naphthalene	50200	2.96	0.852	E
91-20-3C1	C1-Naphthalenes	27700	2.96	0.852	E
91-20-3C2	C2-Naphthalenes	13100	2.96	0.852	E
91-20-3C3	C3-Naphthalenes	4330	2.96	0.852	
91-20-3C4	C4-Naphthalenes	1080	2.96	0.852	
92-52-4	Biphenyl	2650	2.96	0.916	
132-64-9	Dibenzofuran	993	2.96	0.934	
208-96-8	Acenaphthylene	12200	2.96	0.566	E
83-32-9	Acenaphthene	1500	2.96	0.522	
86-73-7	Fluorene	5680	2.96	0.791	E
86-73-7C1	C1-Fluorenes	2940	2.96	0.791	
86-73-7C2	C2-Fluorenes	1880	2.96	0.791	
86-73-7C3	C3-Fluorenes	691	2.96	0.791	
132-65-0	Dibenzothiophene	1770	2.96	0.817	
132-65-0C1	C1-Dibenzothiophenes BS	1870	2.96	0.817	
132-65-0C2	C2-Dibenzothiophenes	1180	2.96	0.817	
132-65-0C3	C3-Dibenzothiophenes	477	2.96	0.817	
132-65-0C4	C4-Dibenzothiophenes	134	2.96	0.817	
85-01-8	Phenanthrene	13800	2.96	0.982	E
PHENANTHC1	C1-Phenanthrenes/Anthracenes	10100	2.96	0.982	
PHENANTHC2	C2-Phenanthrenes/Anthr BS	3880	2.96	0.982	
PHENANTHC3	C3-Phenanthrenes/Anthracenes	1040	2.96	0.982	
PHENANTHC4	C4-Phenanthrenes/Anthracenes	233	2.96	0.982	
120-12-7	Anthracene	5060	2.96	0.611	E



Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-03
 Client ID : NRW-09
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121513
 Sample Amount : 0.1012 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 07:30
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 03:14
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
86-74-8	Carbazole	264	2.96	0.970	
206-44-0	Fluoranthene	4250	2.96	0.942	E
243-17-4	Benzo(b)fluorene	1230	2.96	0.859	
129-00-0	Pyrene	5920	2.96	0.780	E
FLUORPYRC1	C1-Fluoranthenes/Pyrenes	6340	2.96	0.780	
FLUORPYRC2	C2-Fluoranthenes/Pyrenes	1930	2.96	0.780	
FLUORPYRC3	C3-Fluoranthenes/Pyrenes	600	2.96	0.780	
FLUORPYRC4	C4-Fluoranthenes/Pyrenes	208	2.96	0.780	
61523-34-0	Naphthobenzothiophenes	743	2.96	0.829	
NAPBENZOTHIOPC1	C1-Naphthobenzothiophenes	662	2.96	0.829	
NAPBENZOTHIOPC2	C2-Naphthobenzothiophenes	324	2.96	0.829	
NAPBENZOTHIOPC3	C3-Naphthobenzothiophenes	131	2.96	0.829	
NAPBENZOTHIOPC4	C4-Naphthobenzothiophenes	62.4	2.96	0.829	
56-55-3	Benz(a)anthracene	2810	2.96	0.604	
218-01-9/217-59-4	Chrysene/Triphenylene	2670	2.96	0.599	
218-01-9C1	C1-Chrysenes	2420	2.96	0.599	
218-01-9C2	C2-Chrysenes BS	1160	2.96	0.599	
218-01-9C3	C3-Chrysenes	500	2.96	0.599	
218-01-9C4	C4-Chrysenes	121	2.96	0.599	
205-99-2	Benzo(b)fluoranthene	950	2.96	0.771	
205-82-3/207-08-9	Benzo(j)+(k)fluoranthene	1390	2.96	0.588	
203-33-8	Benzo(a)fluoranthene	736	2.96	0.588	
192-97-2	Benzo(e)pyrene	1020	2.96	0.612	
50-32-8	Benzo(a)pyrene	2260	2.96	0.846	

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-03
 Client ID : NRW-09
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121513
 Sample Amount : 0.1012 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 07:30
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 03:14
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
198-55-0	Perylene	331	2.96	0.572	
193-39-5	Indeno(1,2,3-cd)pyrene	760	2.96	0.804	
215-58-7/53-70-3	Dibenz(a,h)+(a,c)anthracene	313	2.96	0.801	
191-24-2	Benzo(g,h,i)perylene	778	2.96	0.788	
NONE	Hopane (T19)	ND	2.96	0.844	U
NONE	C23 Tricyclic Terpane (T4)	ND	2.96	0.844	U
NONE	C24 Tricyclic Terpane (T5)	3.95	2.96	0.844	
NONE	C25 Tricyclic Terpane (T6)	ND	2.96	0.844	U
NONE	C24 Tetracyclic Terpane (T6a)	ND	2.96	0.844	U
NONE	C26 Tricyclic Terpane-22S (T6b)	ND	2.96	0.844	U
NONE	C26 Tricyclic Terpane-22R (T6c)	ND	2.96	0.844	U
NONE	C28 Tricyclic Terpane-22S (T7)	ND	2.96	0.844	U
NONE	C28 Tricyclic Terpane-22R (T8)	3.49	2.96	0.844	
NONE	C29 Tricyclic Terpane-22S (T9)	ND	2.96	0.844	U
NONE	C29 Tricyclic Terpane-22R (T10)	ND	2.96	0.844	U
NONE	18a-22,29,30-Trisnorhopane-TS (T11)	ND	2.96	0.844	U
NONE	C30 Tricyclic Terpane-22S	ND	2.96	0.844	U
NONE	C30 Tricyclic Terpane-22R	ND	2.96	0.844	U
53584-59-1	17a(H)-22,29,30-Trisnorhopane-TM (T12)	ND	2.96	0.844	U
NONE	17a/b,21b/a 28,30-Bisnorhopane (T14a)	ND	2.96	0.844	U
NONE	17a(H),21b(H)-25-Norhopane (T14b)	ND	2.96	0.844	U
NONE	30-Norhopane (T15)	ND	2.96	0.844	U
NONE	18a(H)-30-Norneohopane-C29Ts (T16)	ND	2.96	0.844	U
NONE	17a(H)-Diahopane (X)	ND	2.96	0.844	U

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-03
 Client ID : NRW-09
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121513
 Sample Amount : 0.1012 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 07:30
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 03:14
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
NONE	30-Normoretane (T17)	ND	2.96	0.844	U
NONE	18a(H)&18b(H)-Oleananes (T18)	ND	2.96	0.844	U
1176-44-9	Moretane (T20)	ND	2.96	0.844	U
NONE	30-Homohopane-22S (T21)	ND	2.96	0.844	U
NONE	30-Homohopane-22R (T22)	ND	2.96	0.844	U
NONE	Gammacerane/C32-Diahopane	ND	2.96	0.844	U
NONE	30,31-Bishomohopane-22S (T26)	ND	2.96	0.844	U
NONE	30,31-Bishomohopane-22R (T27)	ND	2.96	0.844	U
NONE	30,31-Trishomohopane-22S (T30)	ND	2.96	0.844	U
NONE	30,31-Trishomohopane-22R (T31)	ND	2.96	0.844	U
NONE	Tetrakishomohopane-22S (T32)	ND	2.96	0.844	U
NONE	Tetrakishomohopane-22R (T33)	ND	2.96	0.844	U
NONE	Pentakishomohopane-22S (T34)	ND	2.96	0.844	U
NONE	Pentakishomohopane-22R (T35)	ND	2.96	0.844	U
NONE	13b(H),17a(H)-20S-Diacholestane (S4)	5.96	2.96	0.658	
82079-08-1	13b(H),17a(H)-20R-Diacholestane (S5)	ND	2.96	0.658	U
NONE	13b,17a-20S-Methyldiacholestane (S8)	ND	2.96	0.658	U
NONE	17a(H)20SC27/C29dia	ND	2.96	0.658	U
NONE	17a(H)20RC27/C29dia	ND	2.96	0.658	U
NONE	Unknown Sterane (S18)	ND	2.96	0.658	U
NONE	13a,17b-20S-Ethylidiacholestane (S19)	ND	2.96	0.658	U
NONE	14a,17a-20S-Methylcholestane (S20)	ND	2.96	0.658	U
NONE	14a,17a-20R-Methylcholestane (S24)	ND	2.96	0.658	U
NONE	14a(H),17a(H)-20S-Ethylcholestane (S25)	ND	2.96	0.658	U

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-03
 Client ID : NRW-09
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121513
 Sample Amount : 0.1012 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 07:30
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 03:14
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
NONE	14a(H),17a(H)-20R-Ethylcholestane (S28)	ND	2.96	0.658	U
NONE	14b(H),17b(H)-20R-Cholestane (S14)	ND	2.96	0.658	U
NONE	14b(H),17b(H)-20S-Cholestane (S15)	ND	2.96	0.658	U
NONE	14b,17b-20R-Methylcholestane (S22)	ND	2.96	0.658	U
NONE	14b,17b-20S-Methylcholestane (S23)	ND	2.96	0.658	U
NONE	14b(H),17b(H)-20R-Ethylcholestane (S26)	ND	2.96	0.658	U
NONE	14b(H),17b(H)-20S-Ethylcholestane (S27)	ND	2.96	0.658	U
NONE	C26,20R- +C27,20S- Triaromatic Steroid	ND	2.96	0.658	U
NONE	C28,20S-Triaromatic Steroid	ND	2.96	0.658	U
NONE	C27,20R-Triaromatic Steroid	ND	2.96	0.658	U
NONE	C28,20R-Triaromatic Steroid	ND	2.96	0.658	U

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-03D
 Client ID : NRW-09
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801131506
 Sample Amount : 0.1012 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 07:30
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 22:28
 Date Extracted : 01/12/15
 Dilution Factor : 50
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
91-20-3	Naphthalene	82900	148	42.6	
91-20-3C1	C1-Naphthalenes	36000	148	42.6	
91-20-3C2	C2-Naphthalenes	13200	148	42.6	
208-96-8	Acenaphthylene	14700	148	28.3	
86-73-7	Fluorene	6400	148	39.5	
85-01-8	Phenanthrene	18700	148	49.1	
120-12-7	Anthracene	5840	148	30.6	
206-44-0	Fluoranthene	5080	148	47.1	
129-00-0	Pyrene	7350	148	39.0	

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-04
 Client ID : NRW-10
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121514
 Sample Amount : 0.1016 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 08:35
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 04:39
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
91-20-3	Naphthalene	66900	2.95	0.849	E
91-20-3C1	C1-Naphthalenes	35500	2.95	0.849	E
91-20-3C2	C2-Naphthalenes	13900	2.95	0.849	E
91-20-3C3	C3-Naphthalenes	3610	2.95	0.849	
91-20-3C4	C4-Naphthalenes	748	2.95	0.849	
92-52-4	Biphenyl	3570	2.95	0.912	
132-64-9	Dibenzofuran	1150	2.95	0.930	
208-96-8	Acenaphthylene	15600	2.95	0.563	E
83-32-9	Acenaphthene	1770	2.95	0.520	
86-73-7	Fluorene	7320	2.95	0.788	E
86-73-7C1	C1-Fluorenes	2830	2.95	0.788	
86-73-7C2	C2-Fluorenes	1440	2.95	0.788	
86-73-7C3	C3-Fluorenes	492	2.95	0.788	
132-65-0	Dibenzothiophene	2180	2.95	0.814	
132-65-0C1	C1-Dibenzothiophenes BS	2040	2.95	0.814	
132-65-0C2	C2-Dibenzothiophenes	1110	2.95	0.814	
132-65-0C3	C3-Dibenzothiophenes	385	2.95	0.814	
132-65-0C4	C4-Dibenzothiophenes	100	2.95	0.814	
85-01-8	Phenanthrene	15800	2.95	0.978	E
PHENANTHC1	C1-Phenanthrenes/Anthracenes	9990	2.95	0.978	
PHENANTHC2	C2-Phenanthrenes/Anthr BS	3230	2.95	0.978	
PHENANTHC3	C3-Phenanthrenes/Anthracenes	747	2.95	0.978	
PHENANTHC4	C4-Phenanthrenes/Anthracenes	141	2.95	0.978	
120-12-7	Anthracene	6000	2.95	0.609	E



Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-04
 Client ID : NRW-10
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121514
 Sample Amount : 0.1016 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 08:35
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 04:39
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
86-74-8	Carbazole	301	2.95	0.966	
206-44-0	Fluoranthene	5130	2.95	0.938	E
243-17-4	Benzo(b)fluorene	1460	2.95	0.855	
129-00-0	Pyrene	6950	2.95	0.776	E
FLUORPYRC1	C1-Fluoranthenes/Pyrenes	6810	2.95	0.776	
FLUORPYRC2	C2-Fluoranthenes/Pyrenes	1730	2.95	0.776	
FLUORPYRC3	C3-Fluoranthenes/Pyrenes	461	2.95	0.776	
FLUORPYRC4	C4-Fluoranthenes/Pyrenes	152	2.95	0.776	
61523-34-0	Naphthobenzothiophenes	810	2.95	0.826	
NAPBENZOTHIOPC1	C1-Naphthobenzothiophenes	617	2.95	0.826	
NAPBENZOTHIOPC2	C2-Naphthobenzothiophenes	265	2.95	0.826	
NAPBENZOTHIOPC3	C3-Naphthobenzothiophenes	111	2.95	0.826	
NAPBENZOTHIOPC4	C4-Naphthobenzothiophenes	52.6	2.95	0.826	
56-55-3	Benz(a)anthracene	2880	2.95	0.602	
218-01-9/217-59-4	Chrysene/Triphenylene	2700	2.95	0.597	
218-01-9C1	C1-Chrysenes	2100	2.95	0.597	
218-01-9C2	C2-Chrysenes BS	916	2.95	0.597	
218-01-9C3	C3-Chrysenes	340	2.95	0.597	
218-01-9C4	C4-Chrysenes	106	2.95	0.597	
205-99-2	Benzo(b)fluoranthene	1110	2.95	0.768	
205-82-3/207-08-9	Benzo(j)+(k)fluoranthene	1460	2.95	0.586	
203-33-8	Benzo(a)fluoranthene	767	2.95	0.586	
192-97-2	Benzo(e)pyrene	1030	2.95	0.609	
50-32-8	Benzo(a)pyrene	2390	2.95	0.843	



Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-04
 Client ID : NRW-10
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121514
 Sample Amount : 0.1016 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 08:35
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 04:39
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
198-55-0	Perylene	350	2.95	0.570	
193-39-5	Indeno(1,2,3-cd)pyrene	788	2.95	0.801	
215-58-7/53-70-3	Dibenz(a,h)+(a,c)anthracene	298	2.95	0.798	
191-24-2	Benzo(g,h,i)perylene	772	2.95	0.784	
NONE	Hopane (T19)	3.15	2.95	0.840	
NONE	C23 Tricyclic Terpane (T4)	ND	2.95	0.840	U
NONE	C24 Tricyclic Terpane (T5)	ND	2.95	0.840	U
NONE	C25 Tricyclic Terpane (T6)	ND	2.95	0.840	U
NONE	C24 Tetracyclic Terpane (T6a)	ND	2.95	0.840	U
NONE	C26 Tricyclic Terpane-22S (T6b)	ND	2.95	0.840	U
NONE	C26 Tricyclic Terpane-22R (T6c)	ND	2.95	0.840	U
NONE	C28 Tricyclic Terpane-22S (T7)	ND	2.95	0.840	U
NONE	C28 Tricyclic Terpane-22R (T8)	4.09	2.95	0.840	
NONE	C29 Tricyclic Terpane-22S (T9)	ND	2.95	0.840	U
NONE	C29 Tricyclic Terpane-22R (T10)	ND	2.95	0.840	U
NONE	18a-22,29,30-Trisnorhopane-TS (T11)	ND	2.95	0.840	U
NONE	C30 Tricyclic Terpane-22S	ND	2.95	0.840	U
NONE	C30 Tricyclic Terpane-22R	ND	2.95	0.840	U
53584-59-1	17a(H)-22,29,30-Trisnorhopane-TM (T12)	ND	2.95	0.840	U
NONE	17a/b,21b/a 28,30-Bisnorhopane (T14a)	ND	2.95	0.840	U
NONE	17a(H),21b(H)-25-Norhopane (T14b)	ND	2.95	0.840	U
NONE	30-Norhopane (T15)	ND	2.95	0.840	U
NONE	18a(H)-30-Norneohopane-C29Ts (T16)	ND	2.95	0.840	U
NONE	17a(H)-Diahopane (X)	ND	2.95	0.840	U

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-04
 Client ID : NRW-10
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121514
 Sample Amount : 0.1016 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 08:35
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 04:39
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
NONE	30-Normoretane (T17)	ND	2.95	0.840	U
NONE	18a(H)&18b(H)-Oleananes (T18)	ND	2.95	0.840	U
1176-44-9	Moretane (T20)	ND	2.95	0.840	U
NONE	30-Homohopane-22S (T21)	ND	2.95	0.840	U
NONE	30-Homohopane-22R (T22)	ND	2.95	0.840	U
NONE	Gammacerane/C32-Diahopane	ND	2.95	0.840	U
NONE	30,31-Bishomohopane-22S (T26)	ND	2.95	0.840	U
NONE	30,31-Bishomohopane-22R (T27)	ND	2.95	0.840	U
NONE	30,31-Trishomohopane-22S (T30)	ND	2.95	0.840	U
NONE	30,31-Trishomohopane-22R (T31)	ND	2.95	0.840	U
NONE	Tetrakishomohopane-22S (T32)	ND	2.95	0.840	U
NONE	Tetrakishomohopane-22R (T33)	ND	2.95	0.840	U
NONE	Pentakishomohopane-22S (T34)	ND	2.95	0.840	U
NONE	Pentakishomohopane-22R (T35)	ND	2.95	0.840	U
NONE	13b(H),17a(H)-20S-Diacholestane (S4)	6.23	2.95	0.656	
82079-08-1	13b(H),17a(H)-20R-Diacholestane (S5)	ND	2.95	0.656	U
NONE	13b,17a-20S-Methyldiacholestane (S8)	ND	2.95	0.656	U
NONE	17a(H)20SC27/C29dia	ND	2.95	0.656	U
NONE	17a(H)20RC27/C29dia	ND	2.95	0.656	U
NONE	Unknown Sterane (S18)	ND	2.95	0.656	U
NONE	13a,17b-20S-Ethyldiacholestane (S19)	ND	2.95	0.656	U
NONE	14a,17a-20S-Methylcholestane (S20)	ND	2.95	0.656	U
NONE	14a,17a-20R-Methylcholestane (S24)	ND	2.95	0.656	U
NONE	14a(H),17a(H)-20S-Ethylcholestane (S25)	ND	2.95	0.656	U

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-04
 Client ID : NRW-10
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121514
 Sample Amount : 0.1016 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 08:35
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 04:39
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
NONE	14a(H),17a(H)-20R-Ethylcholestane (S28)	ND	2.95	0.656	U
NONE	14b(H),17b(H)-20R-Cholestane (S14)	ND	2.95	0.656	U
NONE	14b(H),17b(H)-20S-Cholestane (S15)	ND	2.95	0.656	U
NONE	14b,17b-20R-Methylcholestane (S22)	ND	2.95	0.656	U
NONE	14b,17b-20S-Methylcholestane (S23)	ND	2.95	0.656	U
NONE	14b(H),17b(H)-20R-Ethylcholestane (S26)	ND	2.95	0.656	U
NONE	14b(H),17b(H)-20S-Ethylcholestane (S27)	ND	2.95	0.656	U
NONE	C26,20R- +C27,20S- Triaromatic Steroid	3.00	2.95	0.656	
NONE	C28,20S-Triaromatic Steroid	ND	2.95	0.656	U
NONE	C27,20R-Triaromatic Steroid	ND	2.95	0.656	U
NONE	C28,20R-Triaromatic Steroid	ND	2.95	0.656	U

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-04D
 Client ID : NRW-10
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801131507
 Sample Amount : 0.1016 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 08:35
 Date Received : 01/09/15
 Date Analyzed : 01/13/15 23:55
 Date Extracted : 01/12/15
 Dilution Factor : 50
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
91-20-3	Naphthalene	114000	148	42.4	
91-20-3C1	C1-Naphthalenes	46100	148	42.4	
91-20-3C2	C2-Naphthalenes	13600	148	42.4	
208-96-8	Acenaphthylene	19600	148	28.2	
86-73-7	Fluorene	8270	148	39.4	
85-01-8	Phenanthrene	21200	148	48.9	
120-12-7	Anthracene	6700	148	30.4	
206-44-0	Fluoranthene	5910	148	46.9	
129-00-0	Pyrene	8350	148	38.8	

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : WG755041-1
 Client ID : WG755041-1BLANK
 Sample Location :
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121507
 Sample Amount : 0.1 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 01/12/15 18:41
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : NA
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
91-20-3	Naphthalene	ND	3.00	0.862	U
91-20-3C1	C1-Naphthalenes	ND	3.00	0.862	U
91-20-3C2	C2-Naphthalenes	ND	3.00	0.862	U
91-20-3C3	C3-Naphthalenes	ND	3.00	0.862	U
91-20-3C4	C4-Naphthalenes	ND	3.00	0.862	U
92-52-4	Biphenyl	ND	3.00	0.927	U
132-64-9	Dibenzofuran	ND	3.00	0.945	U
208-96-8	Acenaphthylene	ND	3.00	0.572	U
83-32-9	Acenaphthene	ND	3.00	0.529	U
86-73-7	Fluorene	ND	3.00	0.800	U
86-73-7C1	C1-Fluorenes	ND	3.00	0.800	U
86-73-7C2	C2-Fluorenes	ND	3.00	0.800	U
86-73-7C3	C3-Fluorenes	ND	3.00	0.800	U
132-65-0	Dibenzothiophene	ND	3.00	0.827	U
132-65-0C1	C1-Dibenzothiophenes BS	ND	3.00	0.827	U
132-65-0C2	C2-Dibenzothiophenes	ND	3.00	0.827	U
132-65-0C3	C3-Dibenzothiophenes	ND	3.00	0.827	U
132-65-0C4	C4-Dibenzothiophenes	ND	3.00	0.827	U
85-01-8	Phenanthrene	ND	3.00	0.994	U
PHENANTHC1	C1-Phenanthrenes/Anthracenes	ND	3.00	0.994	U
PHENANTHC2	C2-Phenanthrenes/Anthr BS	ND	3.00	0.994	U
PHENANTHC3	C3-Phenanthrenes/Anthracenes	ND	3.00	0.994	U
PHENANTHC4	C4-Phenanthrenes/Anthracenes	ND	3.00	0.994	U
120-12-7	Anthracene	ND	3.00	0.618	U



Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : WG755041-1
 Client ID : WG755041-1BLANK
 Sample Location :
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121507
 Sample Amount : 0.1 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 01/12/15 18:41
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : NA
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
86-74-8	Carbazole	ND	3.00	0.981	U
206-44-0	Fluoranthene	ND	3.00	0.953	U
243-17-4	Benzo(b)fluorene	ND	3.00	0.869	U
129-00-0	Pyrene	ND	3.00	0.789	U
FLUORPYRC1	C1-Fluoranthenes/Pyrenes	ND	3.00	0.789	U
FLUORPYRC2	C2-Fluoranthenes/Pyrenes	ND	3.00	0.789	U
FLUORPYRC3	C3-Fluoranthenes/Pyrenes	ND	3.00	0.789	U
FLUORPYRC4	C4-Fluoranthenes/Pyrenes	ND	3.00	0.789	U
61523-34-0	Naphthobenzothiophenes	ND	3.00	0.839	U
NAPBENZOTHIOPC1	C1-Naphthobenzothiophenes	ND	3.00	0.839	U
NAPBENZOTHIOPC2	C2-Naphthobenzothiophenes	ND	3.00	0.839	U
NAPBENZOTHIOPC3	C3-Naphthobenzothiophenes	ND	3.00	0.839	U
NAPBENZOTHIOPC4	C4-Naphthobenzothiophenes	ND	3.00	0.839	U
56-55-3	Benz(a)anthracene	ND	3.00	0.612	U
218-01-9/217-59-4	Chrysene/Triphenylene	ND	3.00	0.606	U
218-01-9C1	C1-Chrysenes	ND	3.00	0.606	U
218-01-9C2	C2-Chrysenes BS	ND	3.00	0.606	U
218-01-9C3	C3-Chrysenes	ND	3.00	0.606	U
218-01-9C4	C4-Chrysenes	ND	3.00	0.606	U
205-99-2	Benzo(b)fluoranthene	ND	3.00	0.780	U
205-82-3/207-08-9	Benzo(j)+(k)fluoranthene	ND	3.00	0.595	U
203-33-8	Benzo(a)fluoranthene	ND	3.00	0.595	U
192-97-2	Benzo(e)pyrene	ND	3.00	0.619	U
50-32-8	Benzo(a)pyrene	ND	3.00	0.856	U



Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : WG755041-1
 Client ID : WG755041-1BLANK
 Sample Location :
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121507
 Sample Amount : 0.1 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 01/12/15 18:41
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : NA
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
198-55-0	Perylene	ND	3.00	0.579	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	3.00	0.814	U
215-58-7/53-70-3	Dibenz(a,h)+(a,c)anthracene	ND	3.00	0.810	U
191-24-2	Benzo(g,h,i)perylene	ND	3.00	0.797	U
NONE	Hopane (T19)	ND	3.00	0.854	U
NONE	C23 Tricyclic Terpane (T4)	ND	3.00	0.854	U
NONE	C24 Tricyclic Terpane (T5)	ND	3.00	0.854	U
NONE	C25 Tricyclic Terpane (T6)	ND	3.00	0.854	U
NONE	C24 Tetracyclic Terpane (T6a)	ND	3.00	0.854	U
NONE	C26 Tricyclic Terpane-22S (T6b)	ND	3.00	0.854	U
NONE	C26 Tricyclic Terpane-22R (T6c)	ND	3.00	0.854	U
NONE	C28 Tricyclic Terpane-22S (T7)	ND	3.00	0.854	U
NONE	C28 Tricyclic Terpane-22R (T8)	ND	3.00	0.854	U
NONE	C29 Tricyclic Terpane-22S (T9)	ND	3.00	0.854	U
NONE	C29 Tricyclic Terpane-22R (T10)	ND	3.00	0.854	U
NONE	18a-22,29,30-Trisnorhopane-TS (T11)	ND	3.00	0.854	U
NONE	C30 Tricyclic Terpane-22S	ND	3.00	0.854	U
NONE	C30 Tricyclic Terpane-22R	ND	3.00	0.854	U
53584-59-1	17a(H)-22,29,30-Trisnorhopane-TM (T12)	ND	3.00	0.854	U
NONE	17a/b,21b/a 28,30-Bisnorhopane (T14a)	ND	3.00	0.854	U
NONE	17a(H),21b(H)-25-Norhopane (T14b)	ND	3.00	0.854	U
NONE	30-Norhopane (T15)	ND	3.00	0.854	U
NONE	18a(H)-30-Norneohopane-C29Ts (T16)	ND	3.00	0.854	U
NONE	17a(H)-Diahopane (X)	ND	3.00	0.854	U

Form 1

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Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : WG755041-1
 Client ID : WG755041-1BLANK
 Sample Location :
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121507
 Sample Amount : 0.1 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 01/12/15 18:41
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : NA
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
NONE	30-Normoretane (T17)	ND	3.00	0.854	U
NONE	18a(H)&18b(H)-Oleananes (T18)	ND	3.00	0.854	U
1176-44-9	Moretane (T20)	ND	3.00	0.854	U
NONE	30-Homohopane-22S (T21)	ND	3.00	0.854	U
NONE	30-Homohopane-22R (T22)	ND	3.00	0.854	U
NONE	Gammacerane/C32-Diahopane	ND	3.00	0.854	U
NONE	30,31-Bishomohopane-22S (T26)	ND	3.00	0.854	U
NONE	30,31-Bishomohopane-22R (T27)	ND	3.00	0.854	U
NONE	30,31-Trishomohopane-22S (T30)	ND	3.00	0.854	U
NONE	30,31-Trishomohopane-22R (T31)	ND	3.00	0.854	U
NONE	Tetrakishomohopane-22S (T32)	ND	3.00	0.854	U
NONE	Tetrakishomohopane-22R (T33)	ND	3.00	0.854	U
NONE	Pentakishomohopane-22S (T34)	ND	3.00	0.854	U
NONE	Pentakishomohopane-22R (T35)	ND	3.00	0.854	U
NONE	13b(H),17a(H)-20S-Diacholestane (S4)	ND	3.00	0.666	U
82079-08-1	13b(H),17a(H)-20R-Diacholestane (S5)	ND	3.00	0.666	U
NONE	13b,17a-20S-Methyldiacholestane (S8)	ND	3.00	0.666	U
NONE	17a(H)20SC27/C29dia	ND	3.00	0.666	U
NONE	17a(H)20RC27/C29dia	ND	3.00	0.666	U
NONE	Unknown Sterane (S18)	ND	3.00	0.666	U
NONE	13a,17b-20S-Ethylidiacholestane (S19)	ND	3.00	0.666	U
NONE	14a,17a-20S-Methylcholestane (S20)	ND	3.00	0.666	U
NONE	14a,17a-20R-Methylcholestane (S24)	ND	3.00	0.666	U
NONE	14a(H),17a(H)-20S-Ethylcholestane (S25)	ND	3.00	0.666	U



Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : WG755041-1
 Client ID : WG755041-1BLANK
 Sample Location :
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801121507
 Sample Amount : 0.1 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 01/12/15 18:41
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : MS
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : NA
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
NONE	14a(H),17a(H)-20R-Ethylcholestane (S28)	ND	3.00	0.666	U
NONE	14b(H),17b(H)-20R-Cholestane (S14)	ND	3.00	0.666	U
NONE	14b(H),17b(H)-20S-Cholestane (S15)	ND	3.00	0.666	U
NONE	14b,17b-20R-Methylcholestane (S22)	ND	3.00	0.666	U
NONE	14b,17b-20S-Methylcholestane (S23)	ND	3.00	0.666	U
NONE	14b(H),17b(H)-20R-Ethylcholestane (S26)	ND	3.00	0.666	U
NONE	14b(H),17b(H)-20S-Ethylcholestane (S27)	ND	3.00	0.666	U
NONE	C26,20R- +C27,20S- Triaromatic Steroid	ND	3.00	0.666	U
NONE	C28,20S-Triaromatic Steroid	ND	3.00	0.666	U
NONE	C27,20R-Triaromatic Steroid	ND	3.00	0.666	U
NONE	C28,20R-Triaromatic Steroid	ND	3.00	0.666	U

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121511.D
 Acq On : 13 Jan 2015 12:23 am
 Operator : PAH8:MS
 Sample : L1500432-01,32
 Misc : WG755949,WG755041
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 15 11:55:05 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.858	164	31767M4	500.000	ng/mL	0.00
74) Chrysene-d12	43.287	240	39696	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	19.932	136	30805	239.666	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	23.97%#		
42) Phenanthrene-d10	32.725	188	23458	245.868	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	24.59%#		
83) Benzo[b]fluoranthene-d12	47.171	264	22728	293.483	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	29.35%#		
88) Benzo[a]pyrene-d12	48.369	264	19670	288.689	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	28.87%#		
129) 5B(H)Cholane - Surr	43.871	217	4172M4	284.548	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	28.45%#		
Target Compounds						
					Qvalue	
10) Naphthalene	20.078	128	31549591	220533.713	ng/mL	100
11) C1-Naphthalenes	22.733	142	18638375M5	130283.465	ng/mL	
12) C2-Naphthalenes	25.526	156	8327999M5	58213.260	ng/mL	
13) C3-Naphthalenes	27.834	170	2488940M5	17397.854	ng/mL	
14) C4-Naphthalenes	30.590	184	549622M5	3841.894	ng/mL	
23) Biphenyl	24.549	154	1495854	13508.113	ng/mL	100
25) Dibenzofuran	27.625	168	583495M4	5162.721	ng/mL	
26) Acenaphthylene	26.292	152	7946789	59365.356	ng/mL	100
27) Acenaphthene	26.986	153	595857	7284.753	ng/mL	97
29) Fluorene	29.021	166	2664772M4	30433.816	ng/mL	
30) C1-Fluorenes	31.219	180	1192306M5	13617.083	ng/mL	
31) C2-Fluorenes	33.391	194	627788M5	7169.838	ng/mL	
32) C3-Fluorenes	36.056	208	209818M5	2396.289	ng/mL	
33) Dibenzothiophene	32.314	184	1180084	9642.676	ng/mL	96
37) OTP	0.000		0	N.D.	d	
38) C1-Dibenzothiophenes	34.084	198	1124604M5	9189.339	ng/mL	
38) C1-Dibenzothiophenes BS	34.084	198	1124604M5	9189.339	ng/mL	
39) C2-Dibenzothiophenes	36.120	212	618567M5	5054.421	ng/mL	
40) C3-Dibenzothiophenes	37.562	226	221512M5	1810.014	ng/mL	
41) C4-Dibenzothiophenes	39.233	240	57374M5	468.813	ng/mL	
43) Phenanthrene	32.862	178	8030914	67708.644	ng/mL	99
49) C1-Phenanthrenes/Anthrace	34.888	192	5312756M5	44791.851	ng/mL	
50) C2-Phenanthrenes/Anthrace	37.033	206	1767724M5	14903.683	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121511.D
 Acq On : 13 Jan 2015 12:23 am
 Operator : PAH8:MS
 Sample : L1500432-01,32
 Misc : WG755949,WG755041
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 15 11:55:05 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50)	C2-Phenanthrenes/Anthr BS	37.033	206	1767724M5	14903.683	ng/mL	
51)	5AA IS BKGD	0.000		0	N.D.	d	
52)	C3-Phenanthrenes/Anthrace	38.850	220	424790M5	3581.405	ng/mL	
53)	C4-Phenanthrenes/Anthrace	41.050	234	78122M5	658.647	ng/mL	
55)	Anthracene	33.017	178	2731695	25139.262	ng/mL	96
56)	Carbazole	33.655	167	161980	1394.101	ng/mL	91
58)	Fluoranthene	37.599	202	2556785M4	21247.248	ng/mL	
59)	Benzo(b)fluorene	40.092	216	434881M3	6240.682	ng/mL	
60)	Pyrene	38.485	202	3624051	28756.792	ng/mL	97
61)	C1-Fluoranthenes/Pyrenes	39.845	216	3632881M5	28826.858	ng/mL	
62)	C2-Fluoranthenes/Pyrenes	41.498	230	965188M5	7658.753	ng/mL	
63)	C3-Fluoranthenes/Pyrenes	43.753	244	267627M5	2123.616	ng/mL	
64)	C4-Fluoranthenes/Pyrenes	44.986	258	86651M5	687.574	ng/mL	
66)	Naphthobenzothiophene	42.292	234	218454	1970.326	ng/mL	94
67)	Naphthobenzothiophene-2,1	42.292	234	218454	1970.326	ng/mL	94
68)	Naphthobenzothiophene-1,2	42.630	234	65078	586.965	ng/mL#	12
69)	Naphthobenzothiophene-2,3	42.922	234	88515M3	798.353	ng/mL	
70)	C1-Naphthobenzothiophenes	43.680	248	303841M5	2740.467	ng/mL	
71)	C2-Naphthobenzothiophenes	45.177	262	131438M5	1185.493	ng/mL	
72)	C3-Naphthobenzothiophenes	47.052	276	51034M5	460.297	ng/mL	
73)	C4-Naphthobenzothiophenes	49.860	290	24560M5	221.517	ng/mL	
75)	Benz[a]anthracene	43.232	228	1223217M3	13408.139	ng/mL	
77)	Chrysene/Triphenylene	43.388	228	1102288	12622.859	ng/mL	99
78)	C1-Chrysenes	44.849	242	900599M5	10313.216	ng/mL	
79)	C2-Chrysenes	46.540	256	395654M5	4530.835	ng/mL	
79)	C2-Chrysenes BS	46.540	256	395654M5	4530.835	ng/mL	
80)	BBF-D12 Surr BKGD	0.000		0	N.D.	d	
81)	C3-Chrysenes	48.149	270	156431M5	1791.371	ng/mL	
82)	C4-Chrysenes	49.146	284	37624M5	430.852	ng/mL	
84)	Benzo[b]fluoranthene	47.262	252	468727	4810.363	ng/mL	98
85)	Benzo[j]+[k]fluoranthene	47.335	252	665410	6934.860	ng/mL	95
86)	Benzo[a]fluoranthene	47.646	252	347911	3625.906	ng/mL	99
87)	Benzo[e]pyrene	48.277	252	476949	4840.069	ng/mL	98
89)	Benzo[a]pyrene	48.469	252	983475	10915.807	ng/mL	94
90)	Perylene	48.762	252	152341	1609.968	ng/mL	97
91)	Indeno[1,2,3-cd]pyrene	53.289	276	417411M3	3621.582	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.317	278	138460M4	1419.997	ng/mL	
93)	Benzo[g,h,i]perylene	54.605	276	389418	3560.688	ng/mL	100
94)	Hopane (T19)	0.000		0	N.D.	d	
96)	C23 Tricyclic Terpane (T4	0.000		0	N.D.	d	
97)	C24 Tricyclic Terpane (T5	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121511.D
 Acq On : 13 Jan 2015 12:23 am
 Operator : PAH8:MS
 Sample : L1500432-01,32
 Misc : WG755949,WG755041
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 15 11:55:05 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	C25 Tricyclic Terpane (T6	0.000		0	N.D.	d	
99)	C24 Tetracyclic Terpane (	0.000		0	N.D.	d	
100)	C26 Tricyclic Terpane-22S	44.191	191	473M3	14.352	ng/ml	
101)	C26 Tricyclic Terpane-22R	0.000		0	N.D.	d	
102)	C28 Tricyclic Terpane-22S	0.000		0	N.D.	d	
103)	C28 Tricyclic Terpane-22R	46.722	191	458M4	13.897	ng/ml	
104)	C29 Tricyclic Terpane-22S	0.000		0	N.D.	d	
105)	C29 Tricyclic Terpane-22R	0.000		0	N.D.	d	
106)	18a-22,29,30-Trisnorneo	0.000		0	N.D.	d	
107)	C30 Tricyclic Terpane-22S	0.000		0	N.D.	d	
108)	C30 Tricyclic Terpane-22R	0.000		0	N.D.	d	
109)	17a(H)-22,29,30-Trisnor	0.000		0	N.D.	d	
110)	17a/b,21b/a 28,30-Bisnor	0.000		0	N.D.	d	
111)	17a(H),21b(H)-25-Norhop	0.000		0	N.D.	d	
112)	30-Norhopane (T15)	0.000		0	N.D.	d	
113)	18a(H)-30-Norneohopane-C	0.000		0	N.D.	d	
114)	17a(H)-Diahopane (X)	0.000		0	N.D.	d	
115)	30-Normoretane (T17)	0.000		0	N.D.	d	
116)	18a(H)&18b(H)-Oleananes (	0.000		0	N.D.	d	
117)	Moretane (T20)	0.000		0	N.D.	d	
118)	30-Homohopane-22S (T21)	0.000		0	N.D.	d	
119)	30-Homohopane-22R (T22)	0.000		0	N.D.	d	
120)	Gammacerane/C32-diahopane	0.000		0	N.D.	d	
121)	30,31-Bishomohopane-22S (	0.000		0	N.D.	d	
122)	30,31-Bishomohopane-22R (	0.000		0	N.D.	d	
123)	30,31-Trishomohopane-22S	0.000		0	N.D.	d	
124)	30,31-Trishomohopane-22R	0.000		0	N.D.	d	
125)	Tetrakishomohopane-22S (T	0.000		0	N.D.	d	
126)	Tetrakishomohopane-22R (T	0.000		0	N.D.	d	
127)	Pentakishomohopane-22S (T	0.000		0	N.D.	d	
128)	Pentakishomohopane-22R (T	0.000		0	N.D.	d	
130)	13b(H),17a(H)-20S-Diachol	45.387	217	274	18.688	ng/ml	100
131)	13b(H),17a(H)-20R-Diachol	0.000		0	N.D.	d	
132)	13b,17a-20S-Methyldiachol	0.000		0	N.D.	d	
133)	14a,17a-20S-Chol/13b,17a-	0.000		0	N.D.	d	
134)	14a,17a-20R-Chol/13b,17a-	47.884	217	246	16.778	ng/ml	100
135)	Unknown Sterane (S18)	0.000		0	N.D.	d	
136)	13a,17b-20S-Ethyldiachole	0.000		0	N.D.	d	
137)	14a,17a-20S-Methylcholest	0.000		0	N.D.	d	
138)	14a,17a-20R-Methylcholest	0.000		0	N.D.	d	
139)	14a(H),17a(H)-20S-Ethylch	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121511.D
 Acq On : 13 Jan 2015 12:23 am
 Operator : PAH8:MS
 Sample : L1500432-01,32
 Misc : WG755949,WG755041
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 15 11:55:05 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
140) 14a(H),17a(H)-20R-Ethylch	0.000		0	N.D.	d	
141) 14b(H),17b(H)-20R-Cholest	0.000		0	N.D.	d	
142) 14b(H),17b(H)-20S-Cholest	0.000		0	N.D.	d	
143) 14b,17b-20R-Methylcholest	0.000		0	N.D.	d	
144) 14b,17b-20S-Methylcholest	0.000		0	N.D.		
145) 14b(H),17b(H)-20R-Ethylch	0.000		0	N.D.		
146) 14b(H),17b(H)-20S-Ethylch	0.000		0	N.D.		
147) C26,20R- +C27,20S- triaro	49.604	231	175M4	11.936	ng/mL	
148) C28,20S-triaromatic stero	0.000		0	N.D.	d	
149) C27,20R-triaromatic stero	50.911	231	125M2	8.526	ng/mL	
150) C28,20R-triaromatic stero	0.000		0	N.D.		

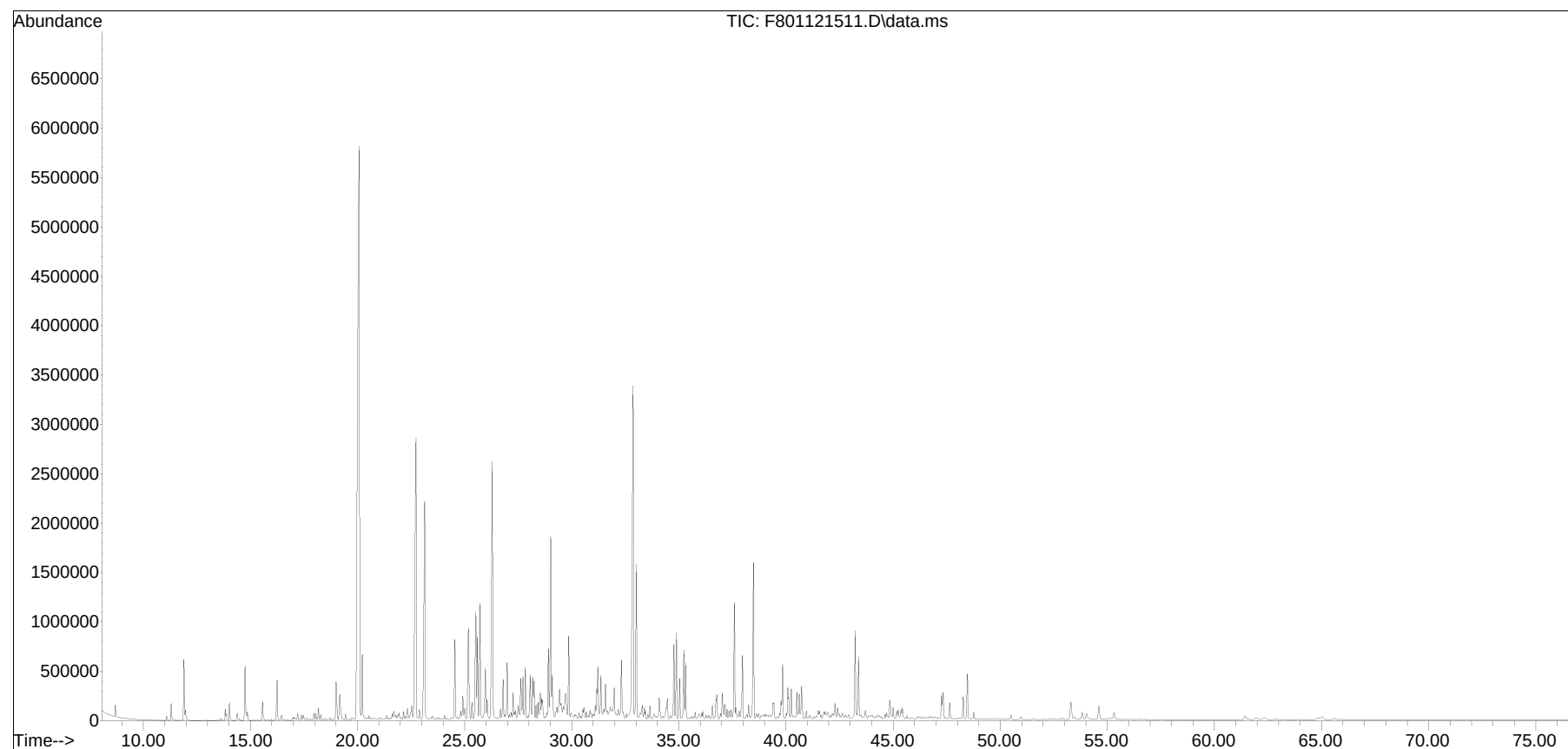
(#) = qualifier out of range (m) = manual integration (+) = signals summed

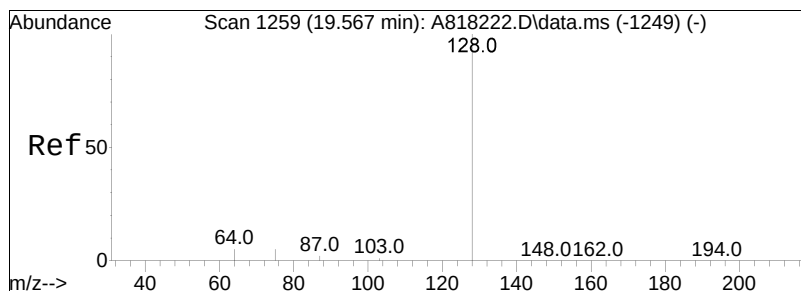
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN12\
Data File : F801121511.D
Acq On : 13 Jan 2015 12:23 am
Operator : PAH8:MS
Sample : L1500432-01,32
Misc : WG755949,WG755041
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 15 11:55:05 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 13 07:23:40 2015
Response via : Initial Calibration

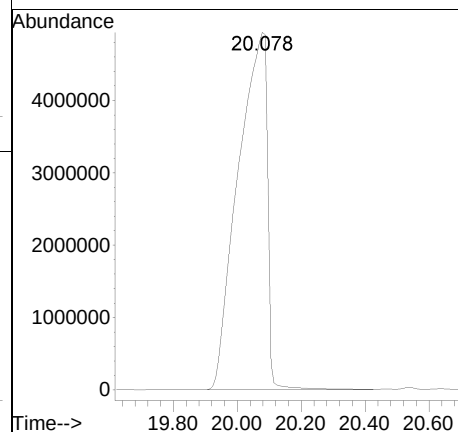
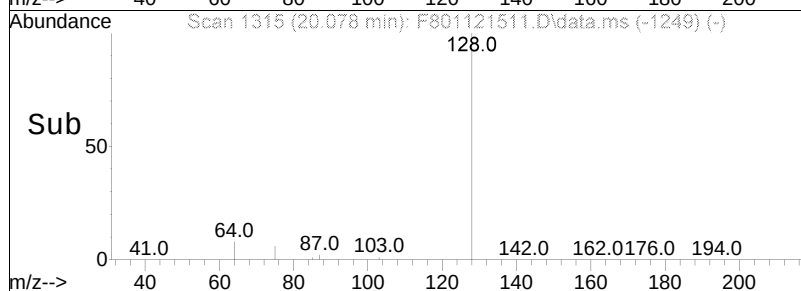
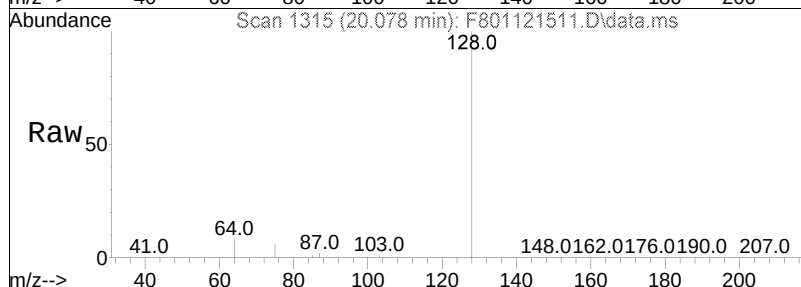
Sub List : ALKPAHURS - ALKPAH and BIO

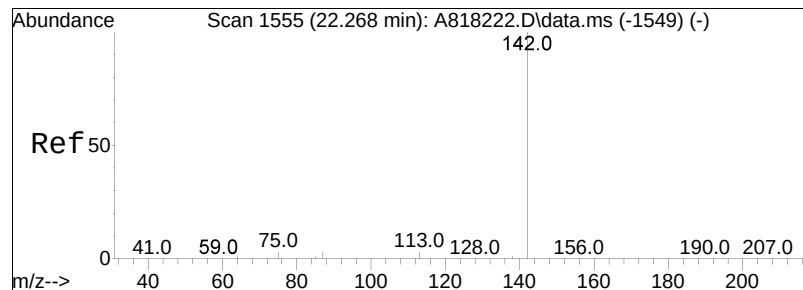




#10
Naphthalene
Concen: 220533.71 ng/mL
RT: 20.078 min Scan# 1315
Delta R.T. 0.100 min
Lab File: F801121511.D
Acq: 13 Jan 2015 12:23 am

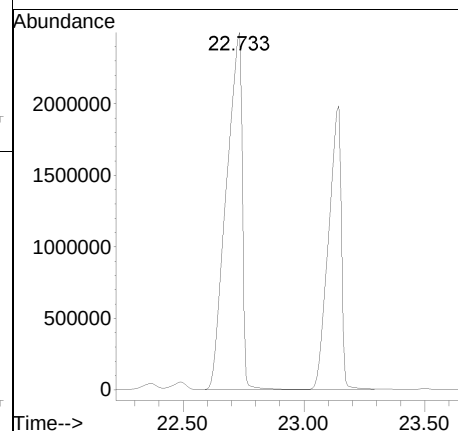
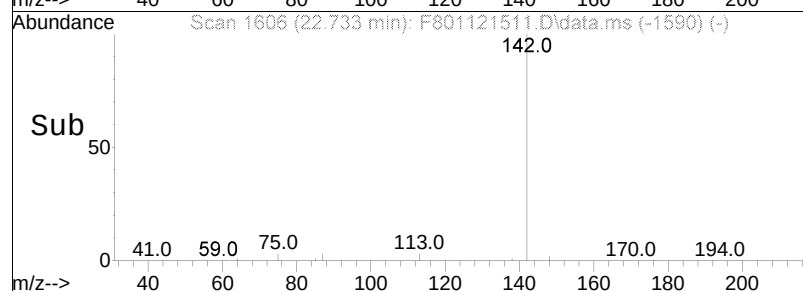
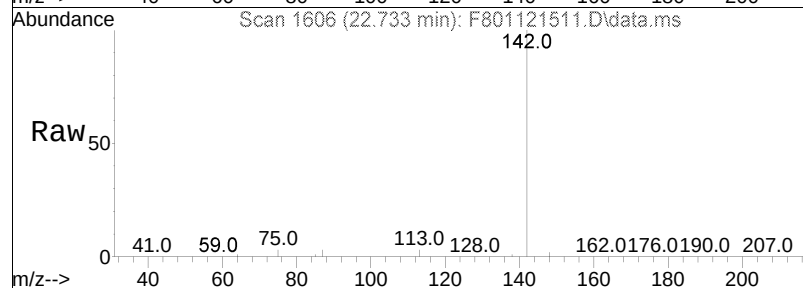
Tgt Ion:128 Resp:31549591

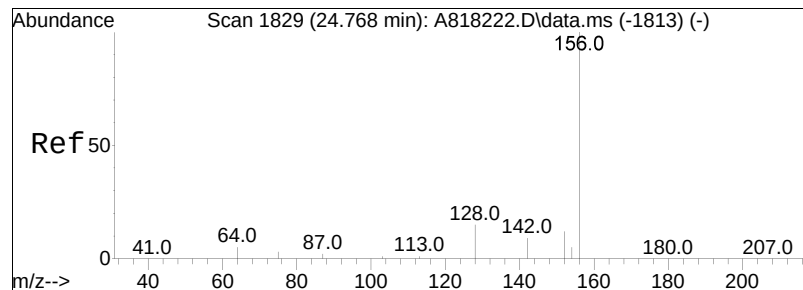




#11
 C1-Naphthalenes
 Concen: 130283.47 ng/mL M5
 RT: 22.733 min Scan# 1606
 Delta R.T. 0.064 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

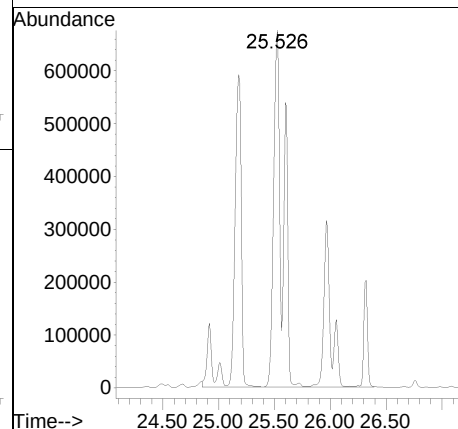
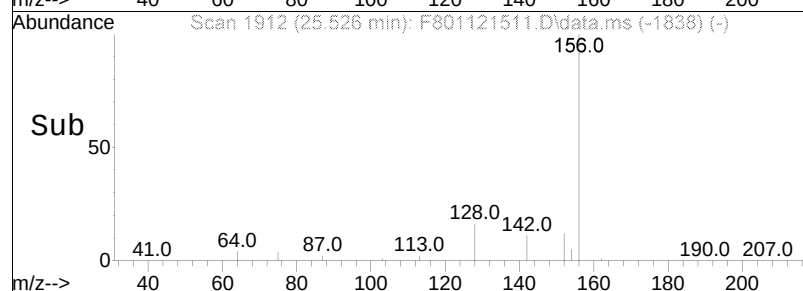
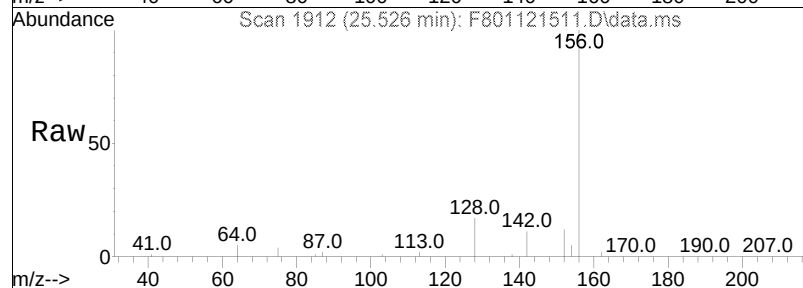
Tgt Ion:142 Resp:18638375

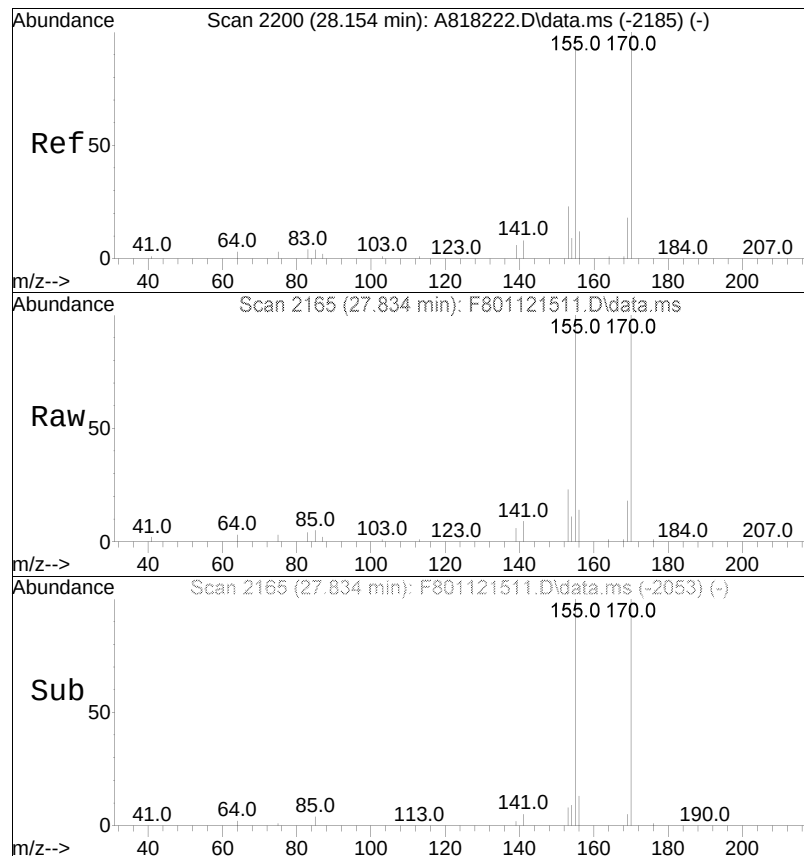




#12
 C2-Naphthalenes
 Concen: 58213.26 ng/mL M5
 RT: 25.526 min Scan# 1912
 Delta R.T. 0.017 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

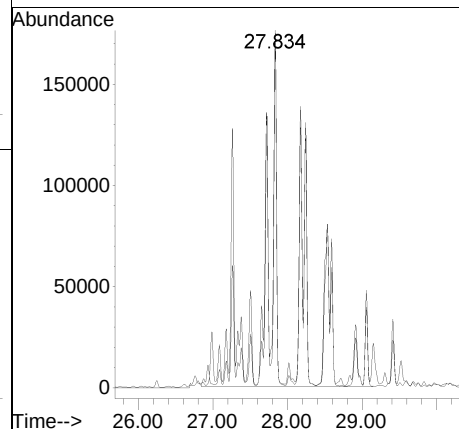
Tgt Ion:156 Resp: 8327999

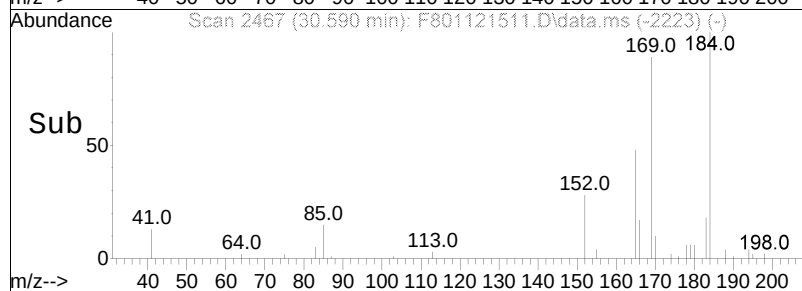
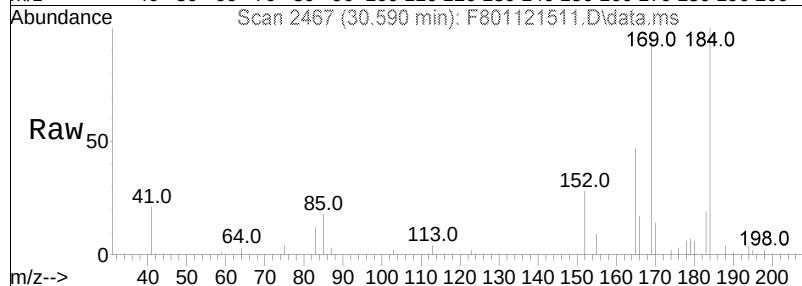
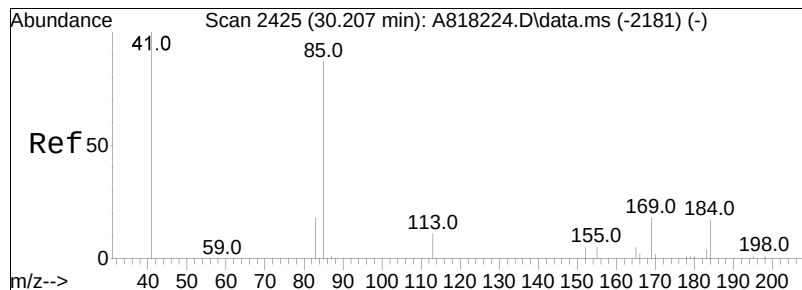




#13
 C3-Naphthalenes
 Concen: 17397.85 ng/mL M5
 RT: 27.834 min Scan# 2165
 Delta R.T. 0.008 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

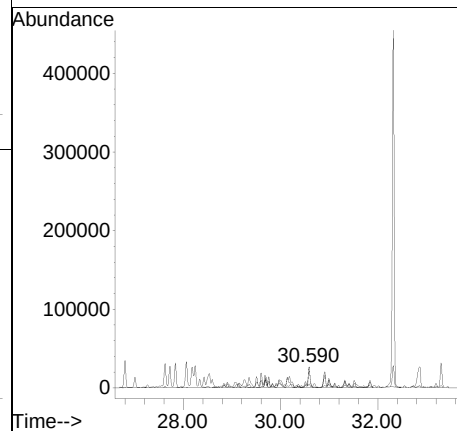
Tgt Ion	Ratio	Lower	Upper
170	100		
155	17.9	75.7	140.7#

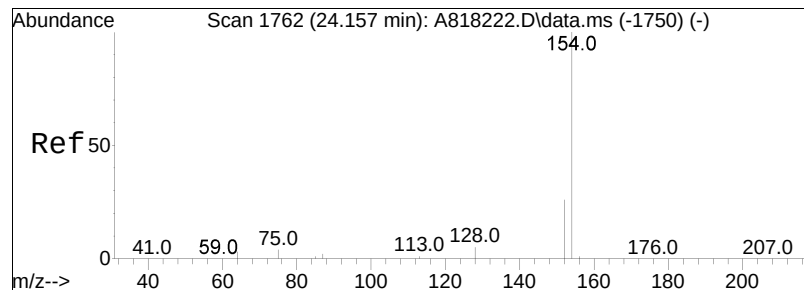




#14
C4-Naphthalenes
Concen: 3841.89 ng/mL M5
RT: 30.590 min Scan# 2467
Delta R.T. -0.000 min
Lab File: F801121511.D
Acq: 13 Jan 2015 12:23 am

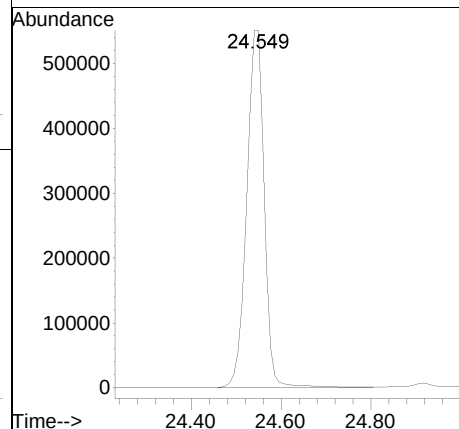
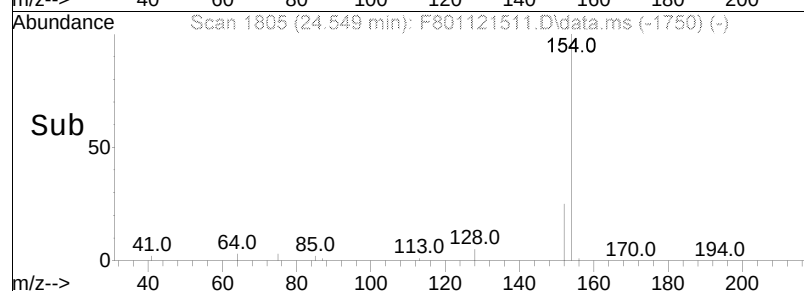
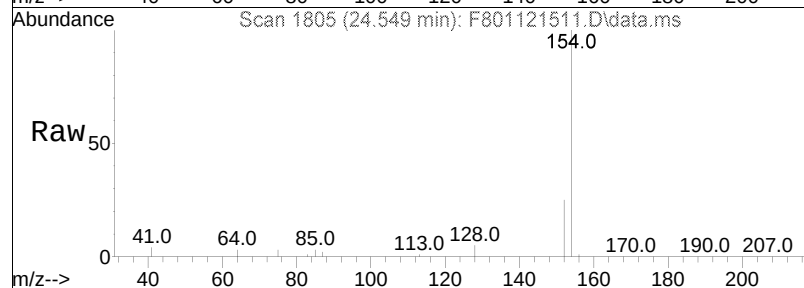
Tgt Ion	Ratio	Resp	Lower	Upper
184	100	549622		
169	6.2		87.1	161.7#
183	1.4		25.7	47.7#

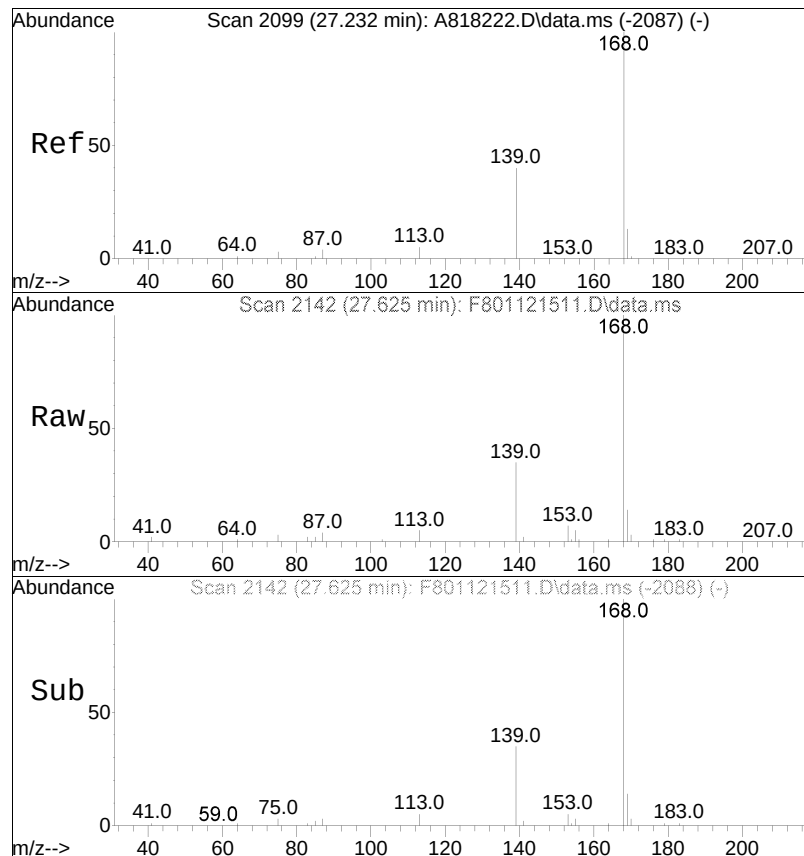




#23
Biphenyl
Concen: 13508.11 ng/mL
RT: 24.549 min Scan# 1805
Delta R.T. -0.000 min
Lab File: F801121511.D
Acq: 13 Jan 2015 12:23 am

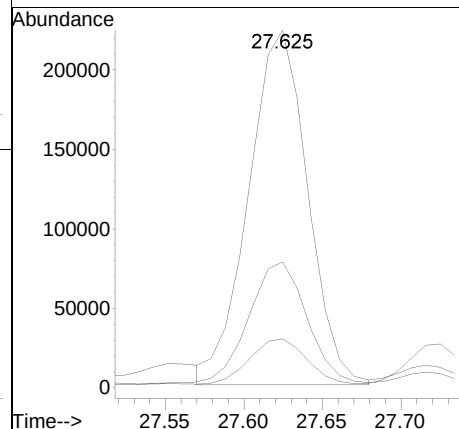
Tgt Ion:154 Resp: 1495854

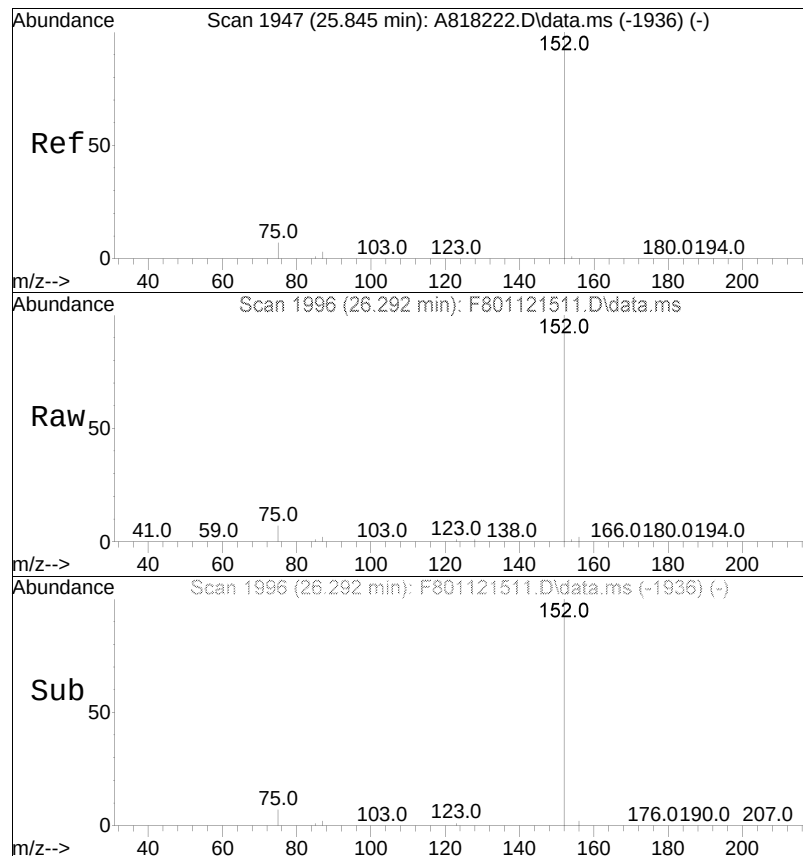




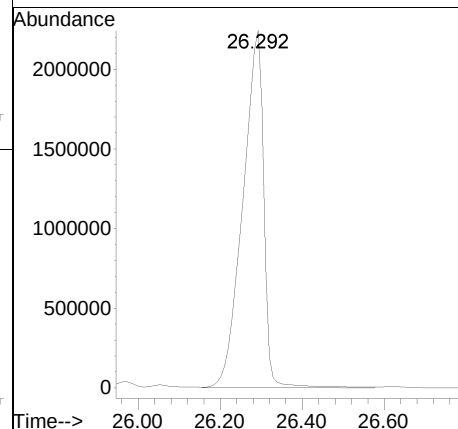
#25
 Dibenzofuran
 Concen: 5162.72 ng/mL M4
 RT: 27.625 min Scan# 2142
 Delta R.T. -0.009 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

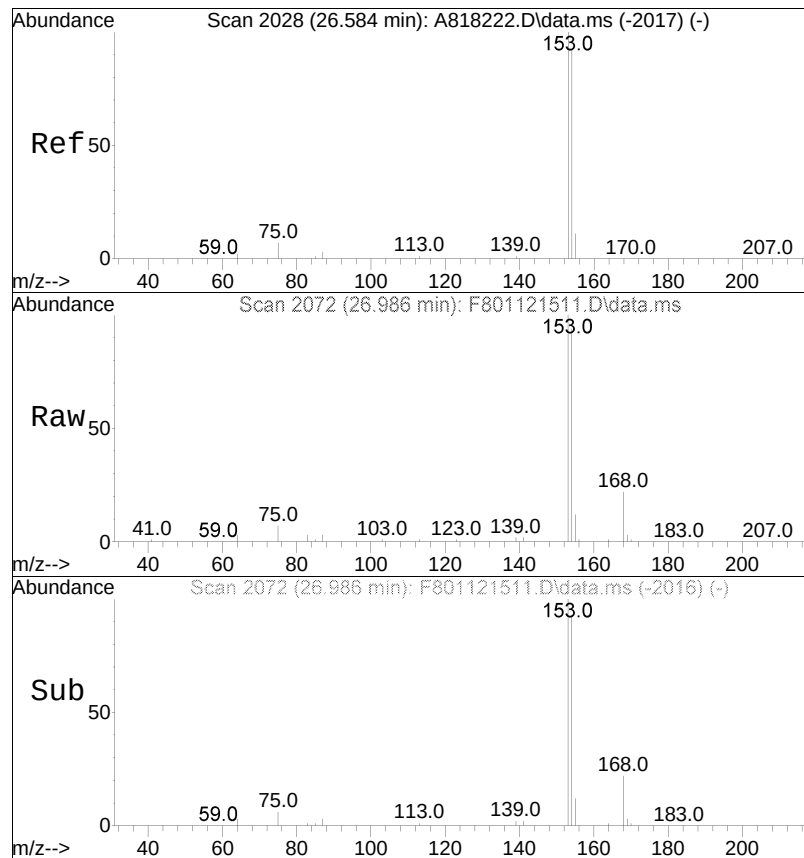
Tgt Ion:	168	Resp:	583495
Ion Ratio	Lower	Upper	
168	100		
139	34.0	26.6	49.4
169	12.2	9.4	17.4





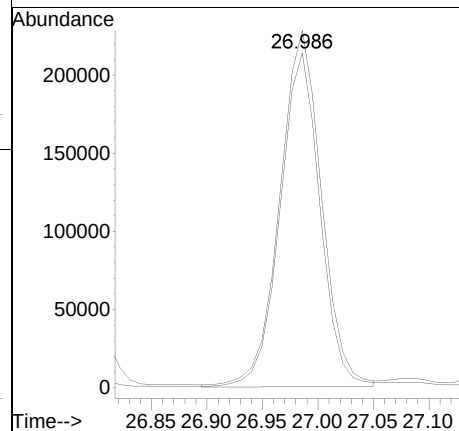
#26
 Acenaphthylene
 Concen: 59365.36 ng/mL
 RT: 26.292 min Scan# 1996
 Delta R.T. 0.046 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am
 Tgt Ion:152 Resp: 7946789

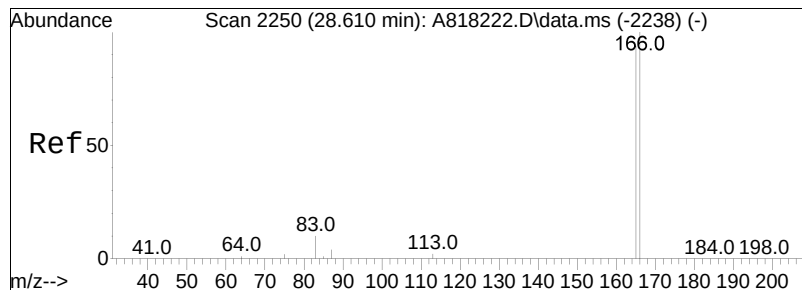




#27
 Acenaphthene
 Concen: 7284.75 ng/mL
 RT: 26.986 min Scan# 2072
 Delta R.T. 0.009 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

Tgt Ion	Ratio	Lower	Upper
153	100		
154	89.2	64.3	119.5





#29

Fluorene

Concen: 30433.82 ng/mL M4

RT: 29.021 min Scan# 2295

Delta R.T. 0.018 min

Lab File: F801121511.D

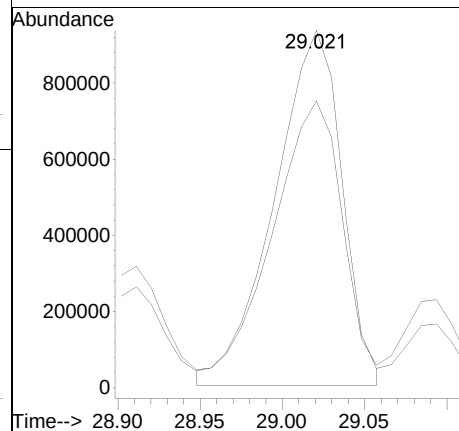
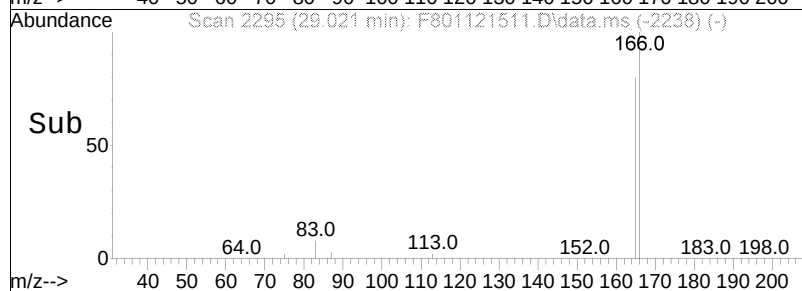
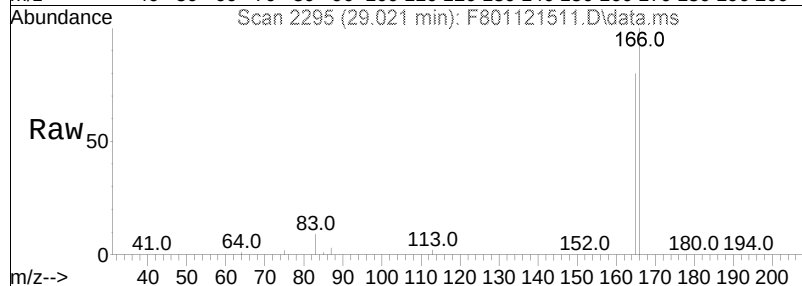
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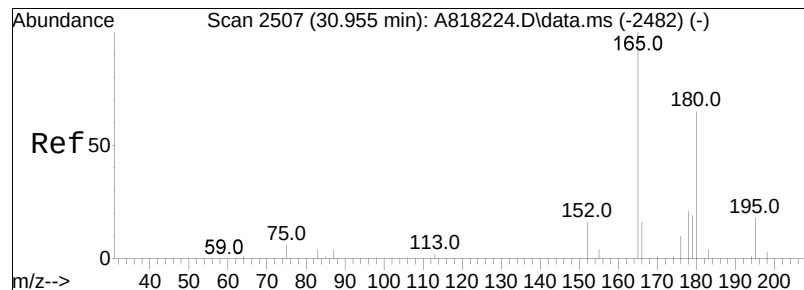
Tgt Ion:166 Resp: 2664772

Ion Ratio Lower Upper

166 100

165 80.8 65.9 122.3





#30

C1-Fluorenes

Concen: 13617.08 ng/mL M5

RT: 31.219 min Scan# 2536

Delta R.T. -0.137 min

Lab File: F801121511.D

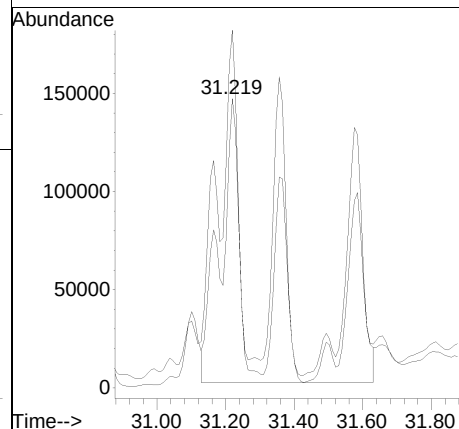
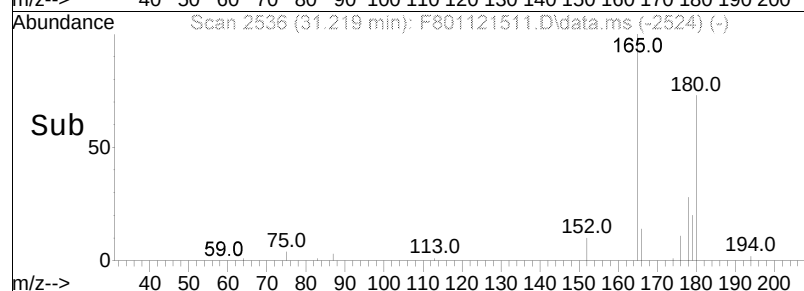
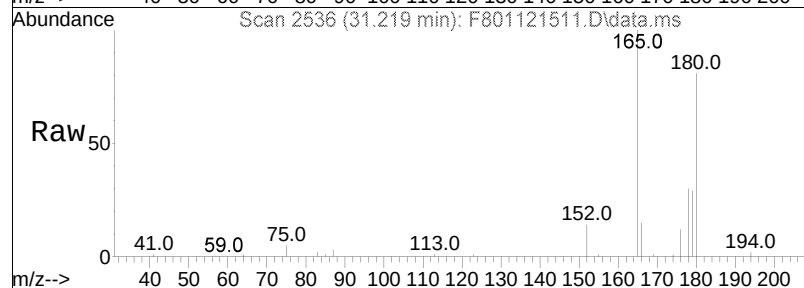
Acq: 13 Jan 2015 12:23 am

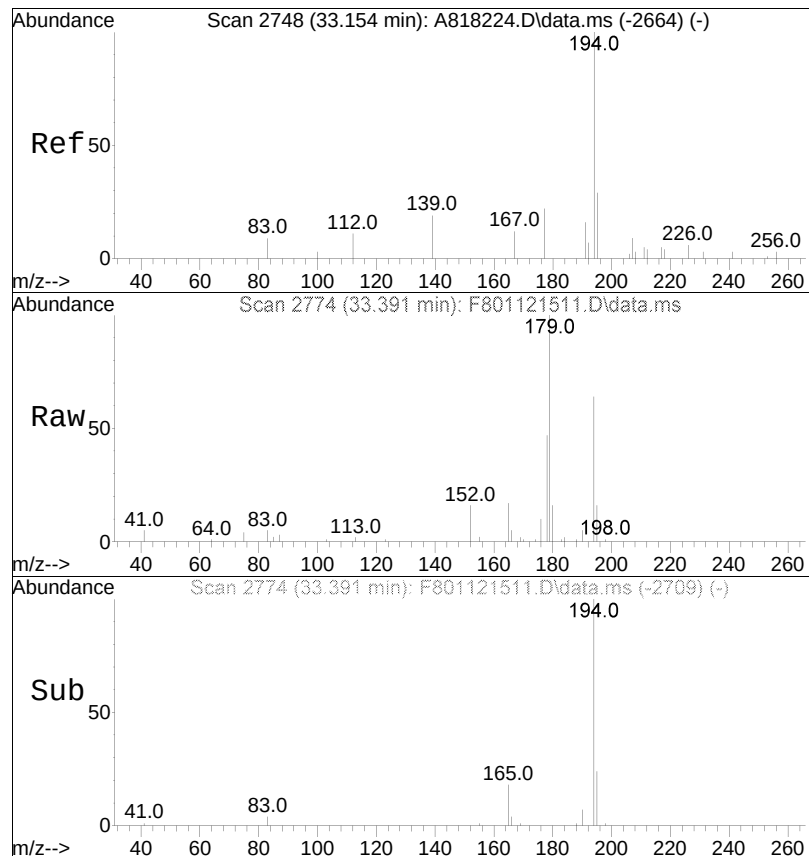
Tgt Ion:180 Resp: 1192306

Ion Ratio Lower Upper

180 100

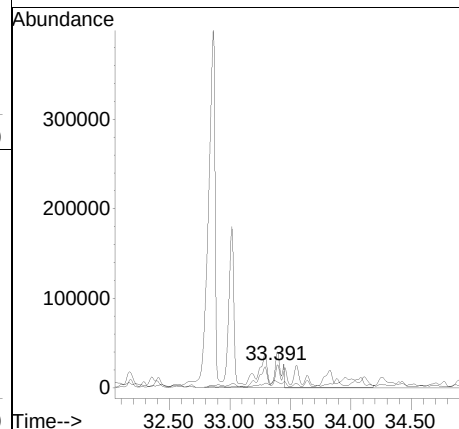
165 33.4 114.8 213.2#

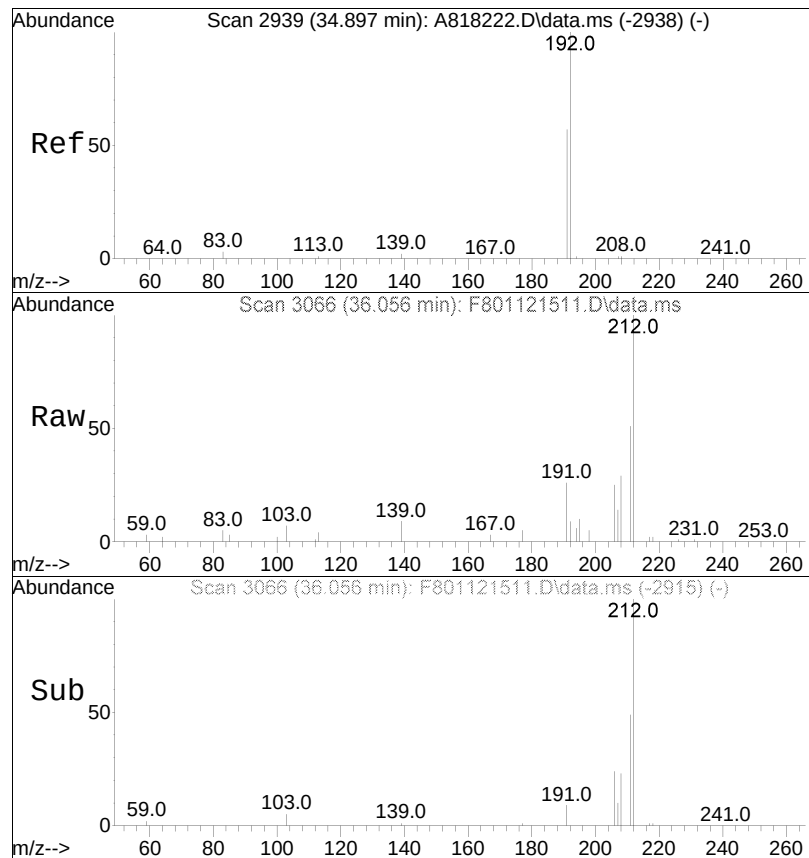




#31
 C2-Fluorenes
 Concen: 7169.84 ng/mL M5
 RT: 33.391 min Scan# 2774
 Delta R.T. -0.155 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

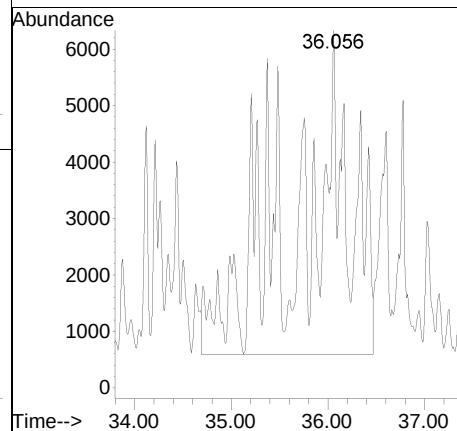
Tgt	Ion	Ratio	Resp	Lower	Upper
194	100		627788		
179	0.0	0.0	0.0		
195	1.7	23.2	43.0#		

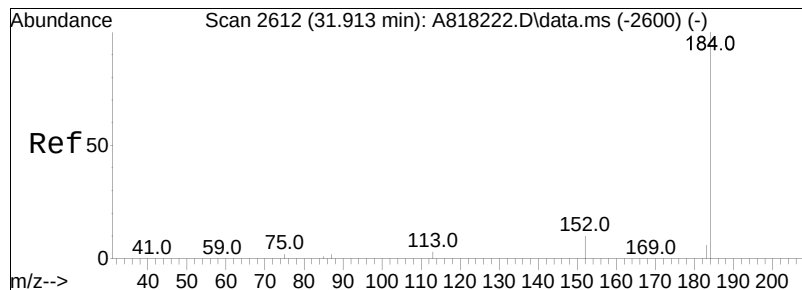




#32
 C3-Fluorenes
 Concen: 2396.29 ng/mL M5
 RT: 36.056 min Scan# 3066
 Delta R.T. 0.685 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

Tgt Ion:208 Resp: 209818





#33

Dibenzothiophene

Concen: 9642.68 ng/mL

RT: 32.314 min Scan# 2656

Delta R.T. -0.000 min

Lab File: F801121511.D

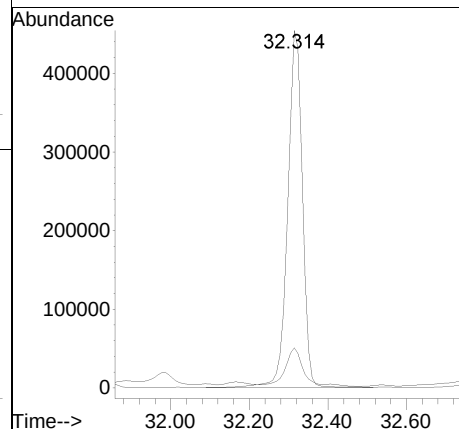
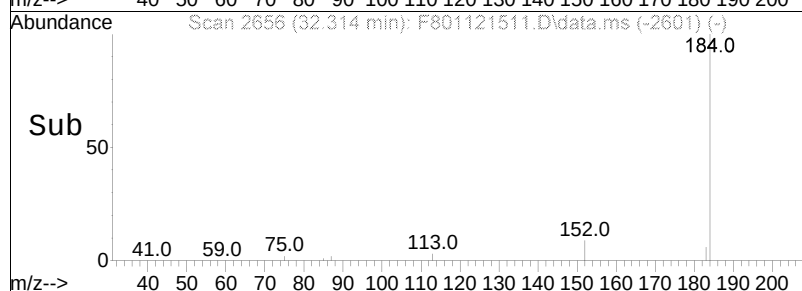
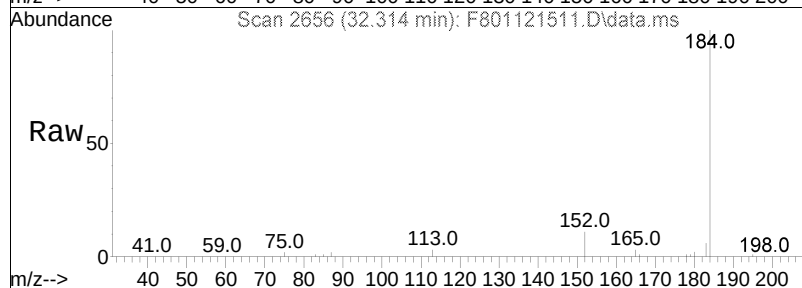
Acq: 13 Jan 2015 12:23 am

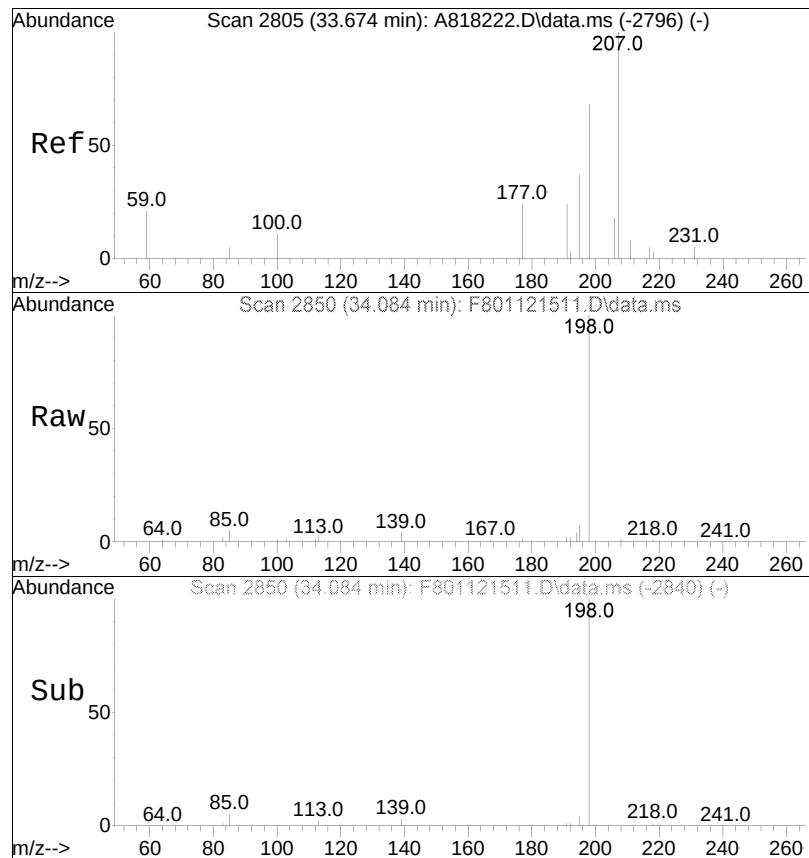
Tgt Ion:184 Resp: 1180084

Ion Ratio Lower Upper

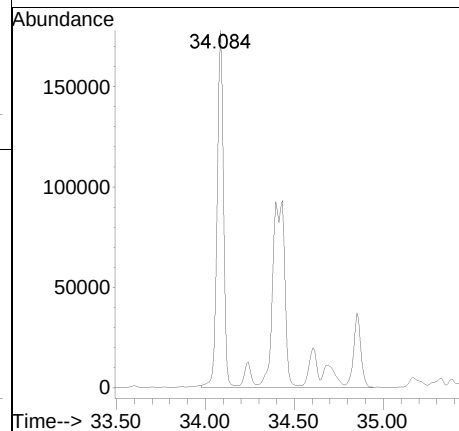
184 100

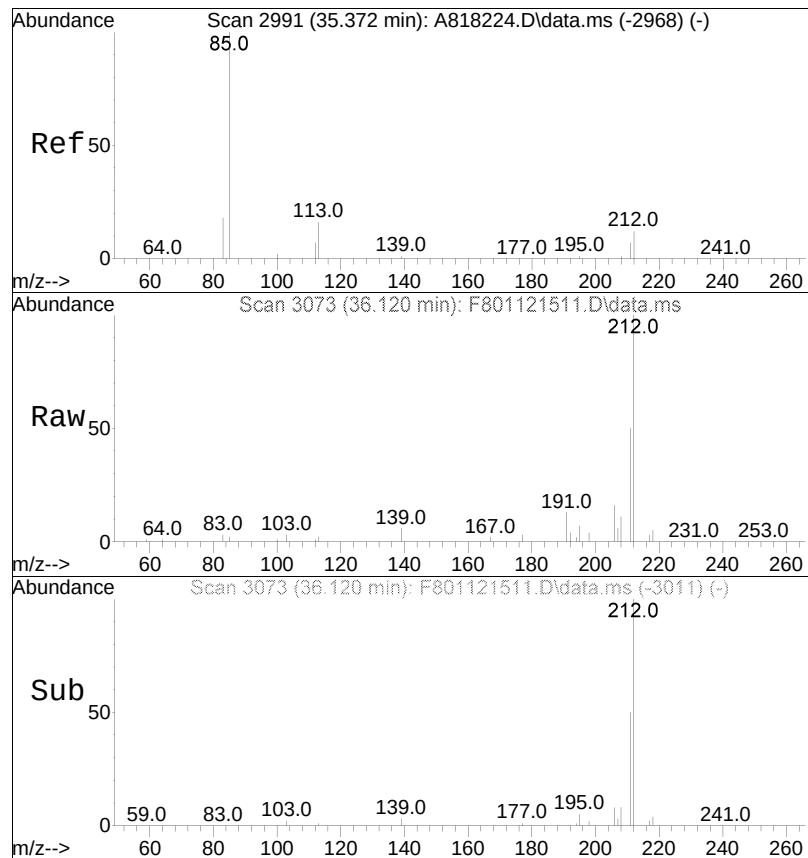
152 11.2 6.9 12.7





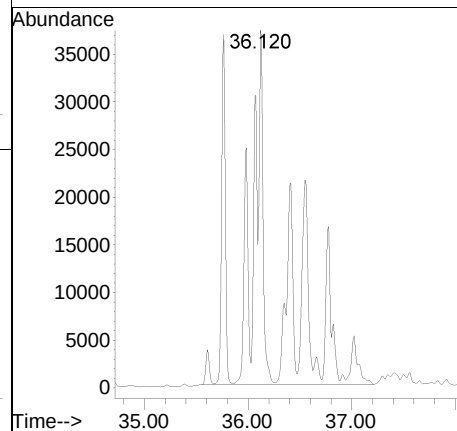
#38
 C1-Dibenzothiophenes
 Concen: 9189.34 ng/mL M5
 RT: 34.084 min Scan# 2850
 Delta R.T. -0.000 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am
 Tgt Ion:198 Resp: 1124604

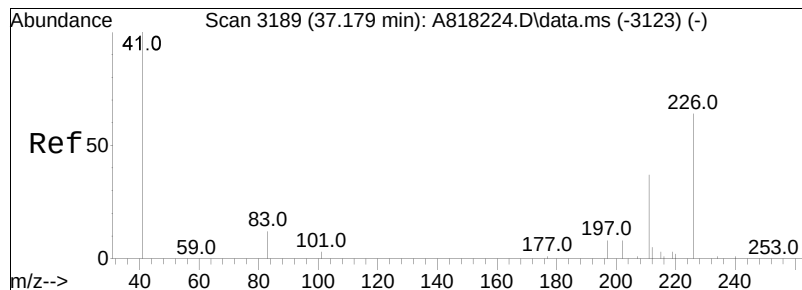




#39
 C2-Dibenzothiophenes
 Concen: 5054.42 ng/mL M5
 RT: 36.120 min Scan# 3073
 Delta R.T. -0.000 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

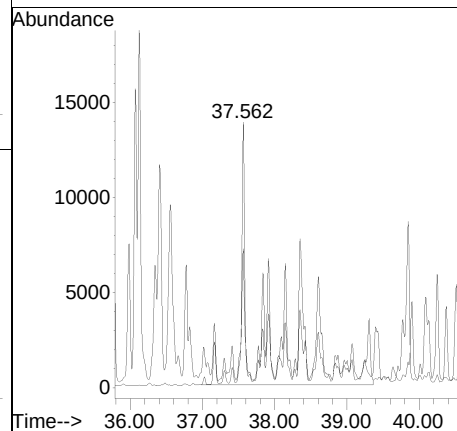
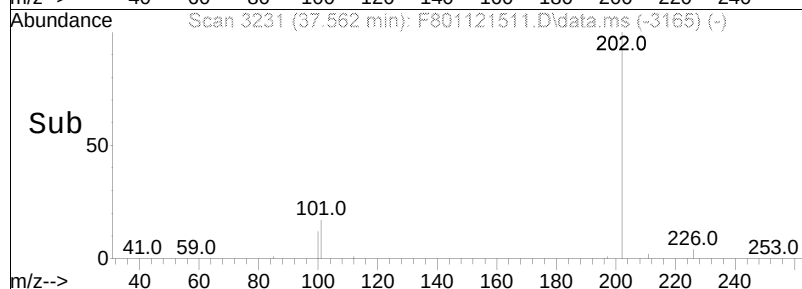
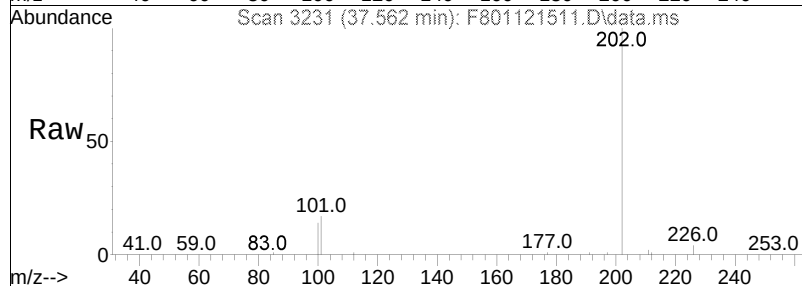
Tgt Ion:212 Resp: 618567

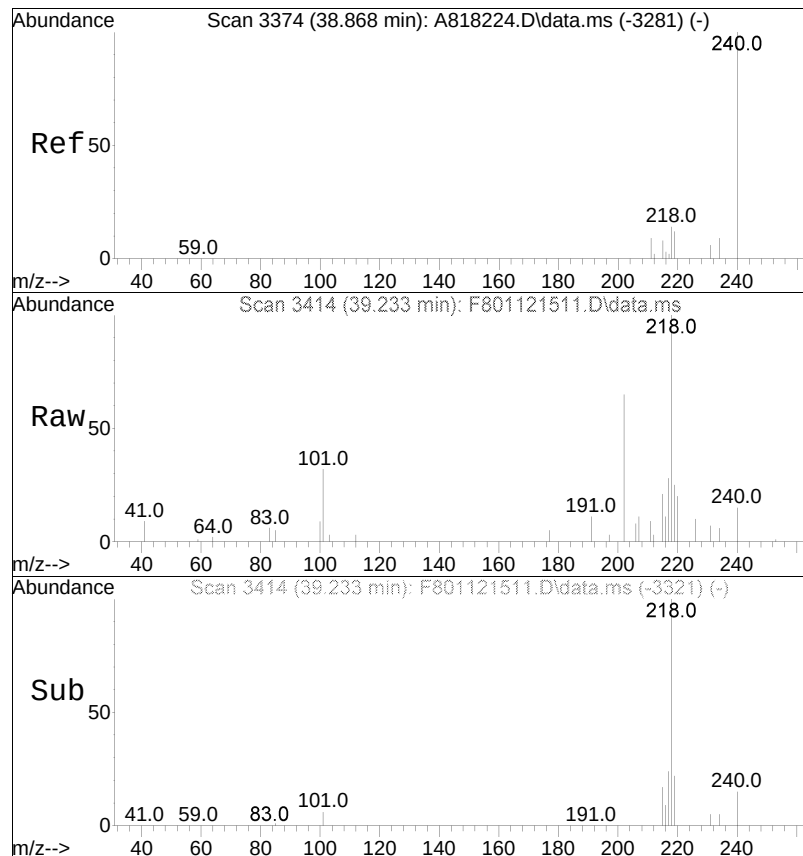




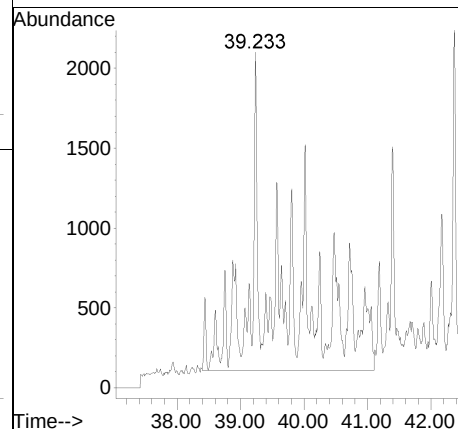
#40
 C3-Dibenzothiophenes
 Concen: 1810.01 ng/mL M5
 RT: 37.562 min Scan# 3231
 Delta R.T. -0.000 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

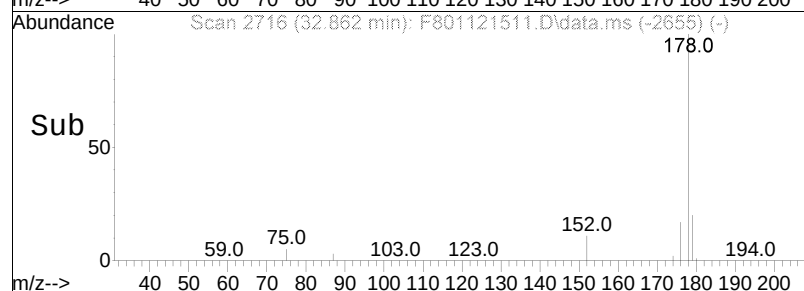
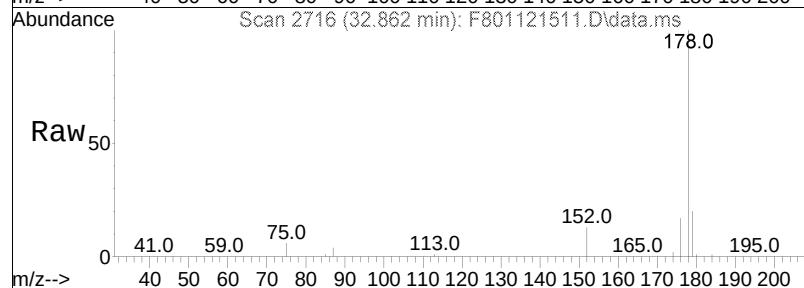
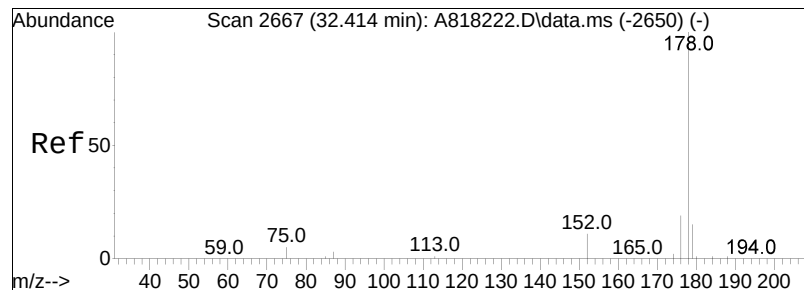
Tgt Ion	Ratio	Lower	Upper
226	100		
211	10.5	42.2	78.4





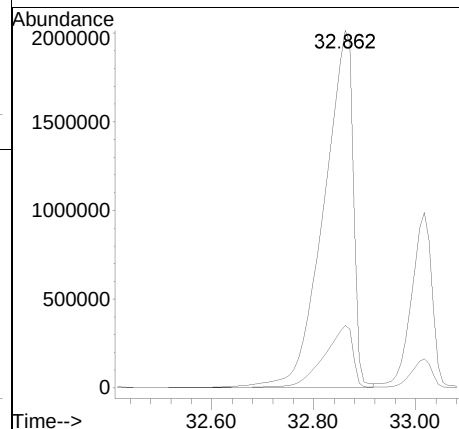
#41
 C4-Dibenzothiophenes
 Concen: 468.81 ng/mL M5
 RT: 39.233 min Scan# 3414
 Delta R.T. -0.009 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am
 Tgt Ion:240 Resp: 57374

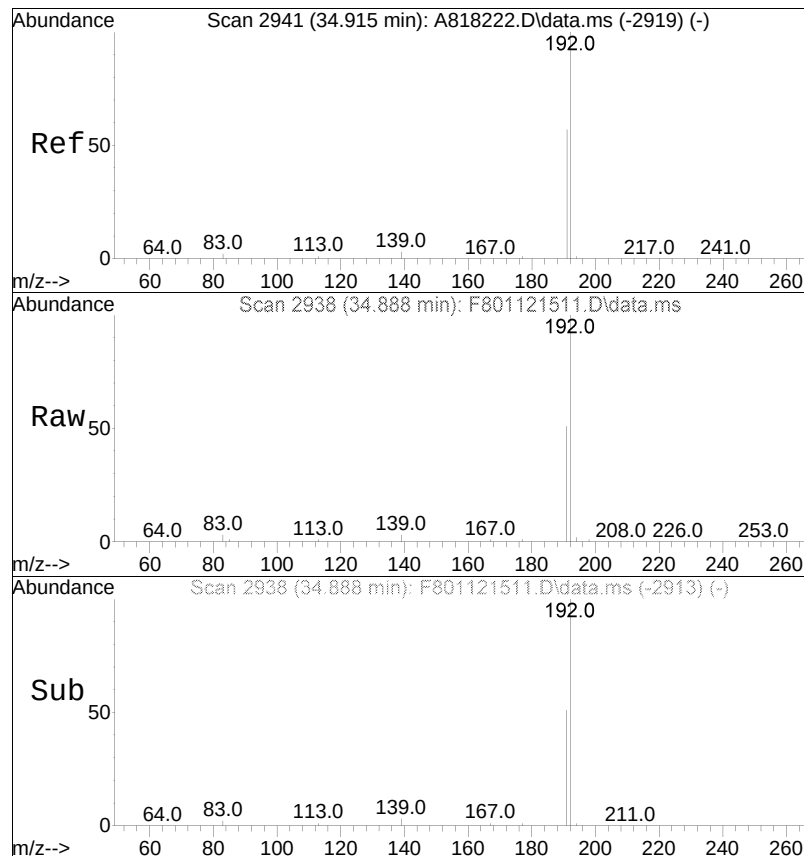




#43
 Phenanthrene
 Concen: 67708.64 ng/mL
 RT: 32.862 min Scan# 2716
 Delta R.T. 0.055 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

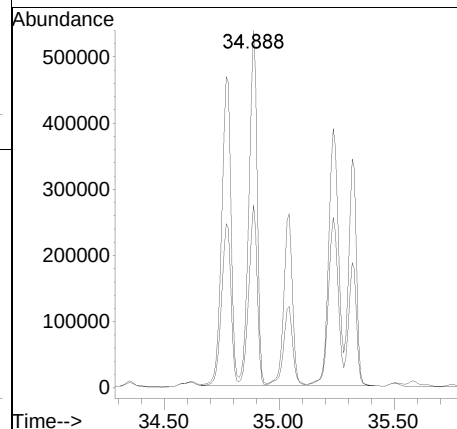
Tgt Ion	Ratio	Lower	Upper
178	100		
176	17.4	12.5	23.1

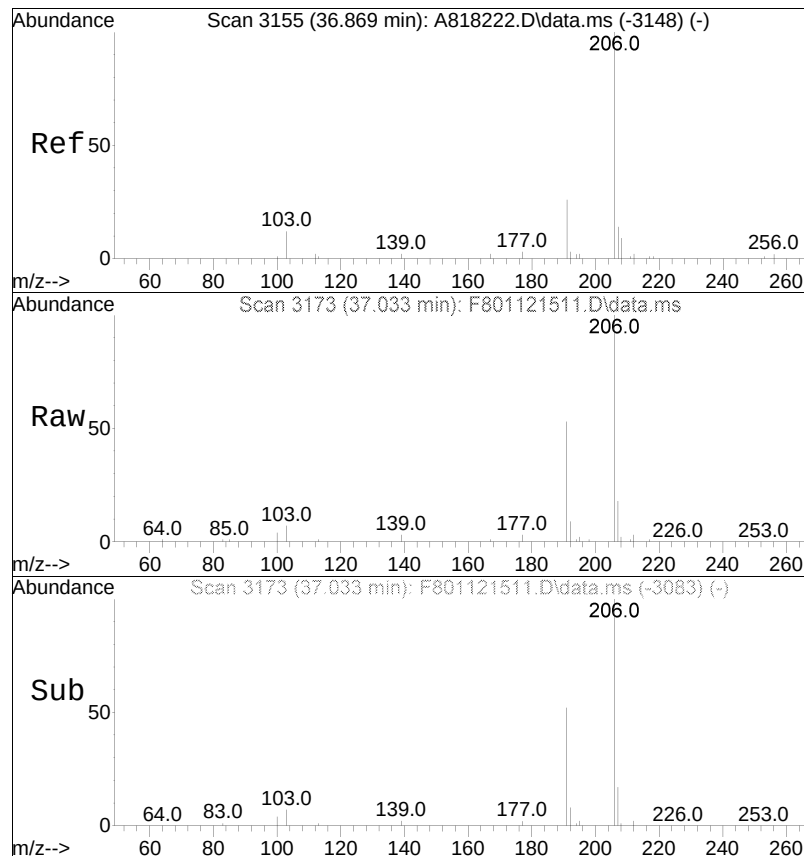




#49
 C1-Phenanthrenes/Anthracenes
 Concen: 44791.85 ng/mL M5
 RT: 34.888 min Scan# 2938
 Delta R.T. -0.329 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

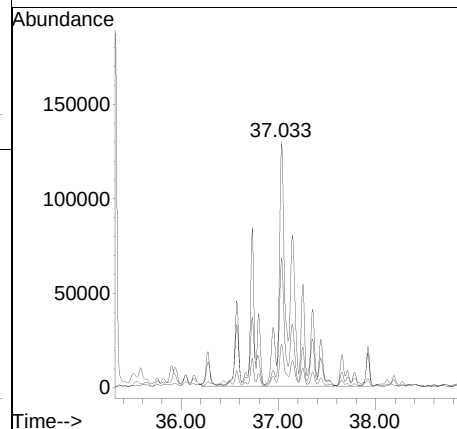
Tgt Ion:192 Resp: 5312756
 Ion Ratio Lower Upper
 192 100
 191 14.0 39.7 73.7#

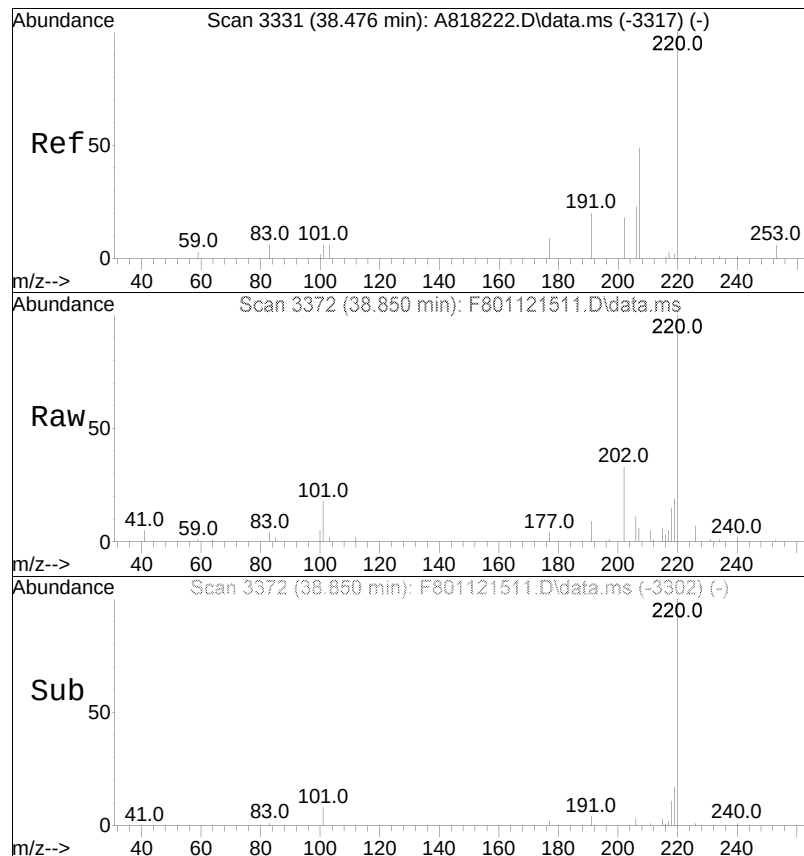




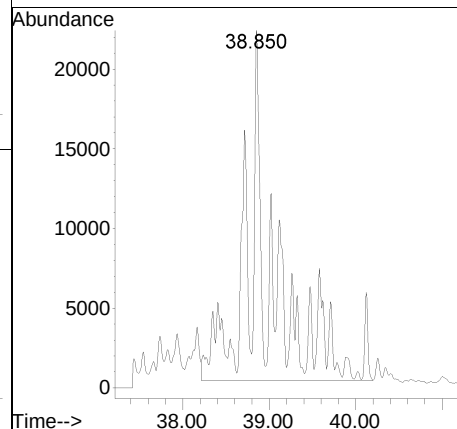
#50
 C2-Phenanthrenes/Anthracenes
 Concen: 14903.68 ng/mL M5
 RT: 37.033 min Scan# 3173
 Delta R.T. 0.009 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

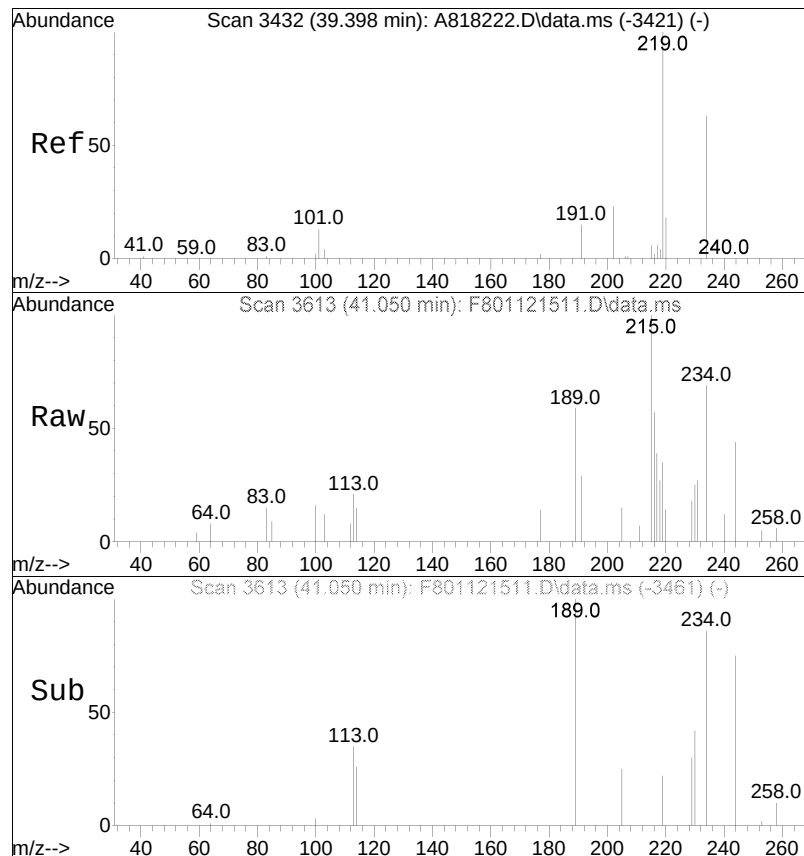
Tgt	Ion:206	Resp: 1767724	
Ion	Ratio	Lower	Upper
206	100		
191	12.6	39.5	73.4#
207	4.1	14.1	26.3#





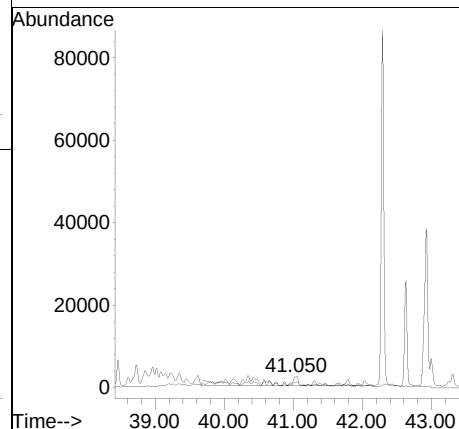
#52
 C3-Phenanthrenes/Anthracenes
 Concen: 3581.40 ng/mL M5
 RT: 38.850 min Scan# 3372
 Delta R.T. -0.009 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am
 Tgt Ion:220 Resp: 424790

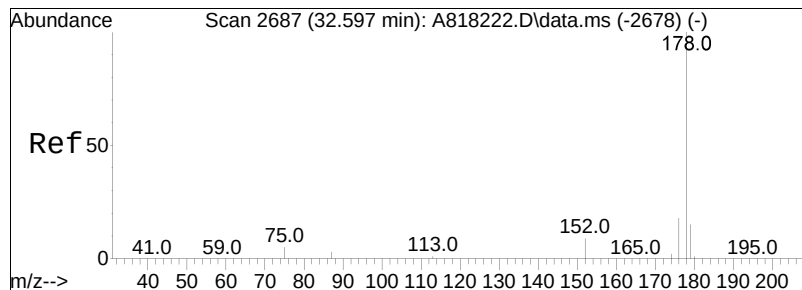




#53
 C4-Phenanthrenes/Anthracenes
 Concen: 658.65 ng/mL M5
 RT: 41.050 min Scan# 3613
 Delta R.T. 0.018 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

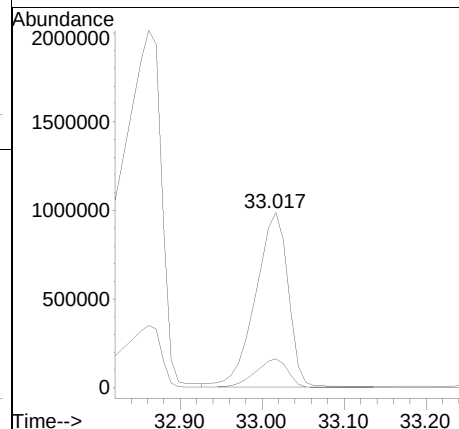
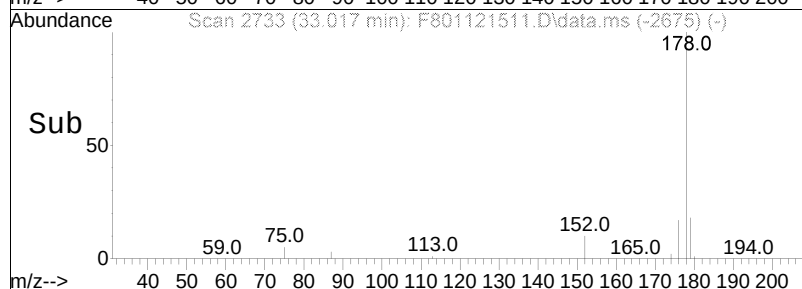
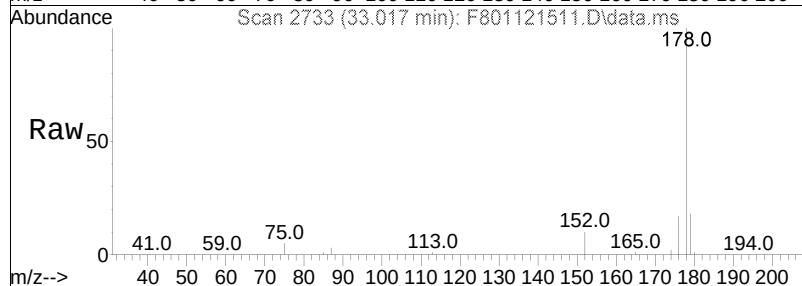
Tgt	Ion	Ratio	Lower	Upper
234	100			
219	6.3	44.7	82.9	

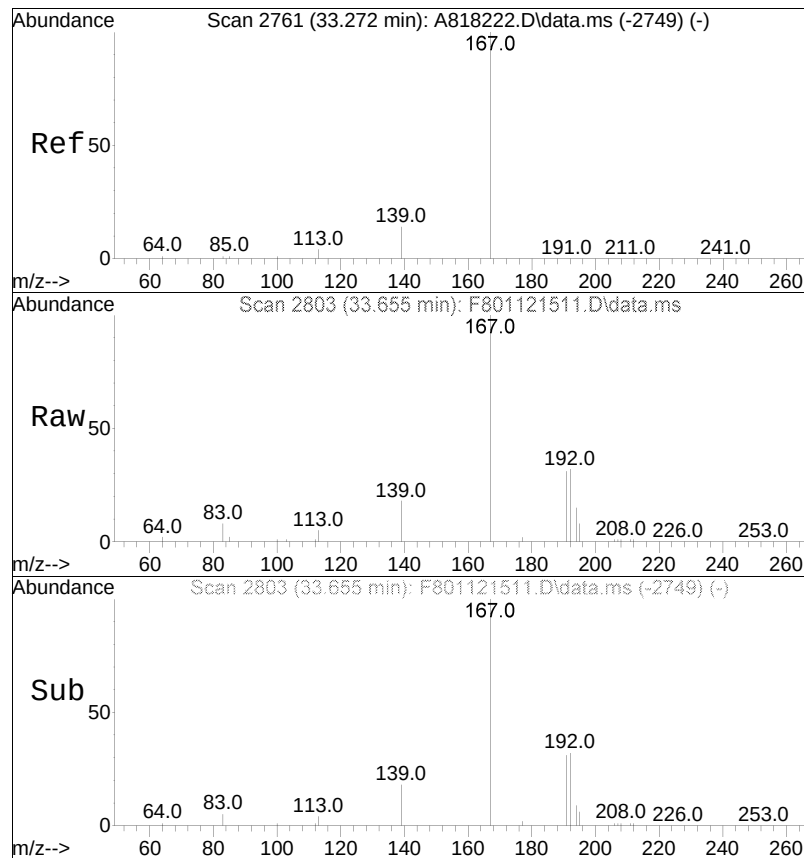




#55
 Anthracene
 Concen: 25139.26 ng/mL
 RT: 33.017 min Scan# 2733
 Delta R.T. 0.027 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

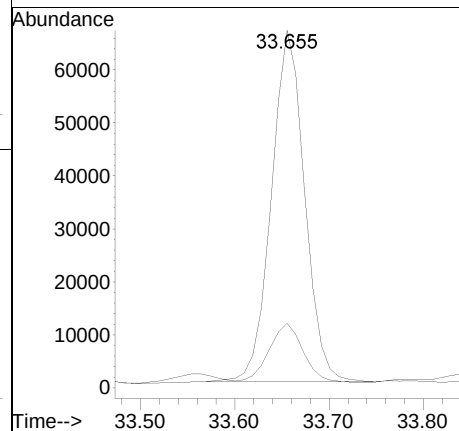
Tgt Ion	Ratio	Lower	Upper
178	100		
176	16.7	12.8	23.8

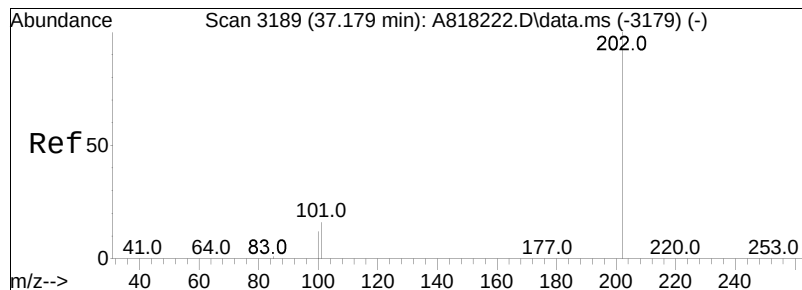




#56
 Carbazole
 Concen: 1394.10 ng/mL
 RT: 33.655 min Scan# 2803
 Delta R.T. -0.009 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

Tgt Ion	Ratio	Lower	Upper
167	100		
139	18.2	10.0	18.6





#58

Fluoranthene

Concen: 21247.25 ng/mL M4

RT: 37.599 min Scan# 3235

Delta R.T. 0.027 min

Lab File: F801121511.D

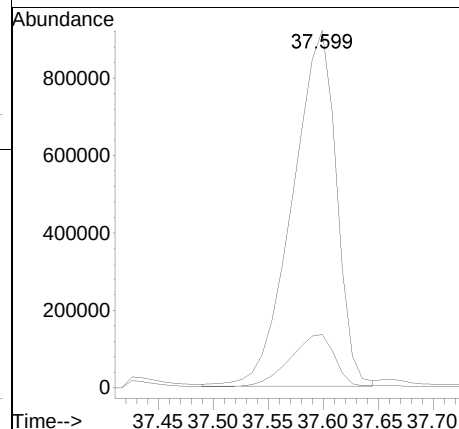
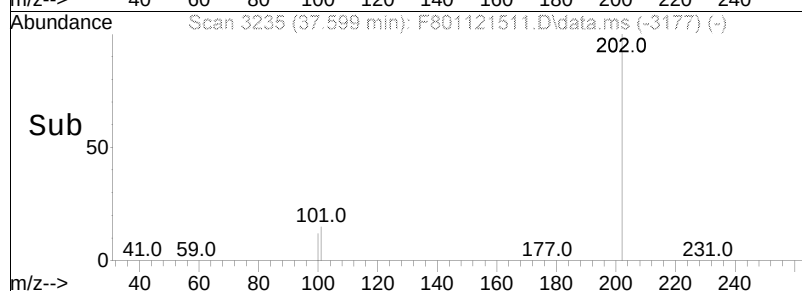
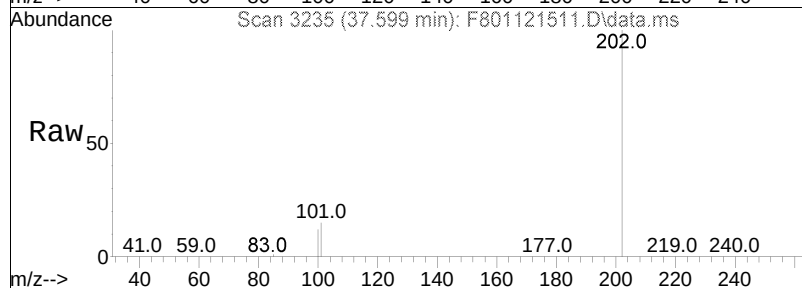
Acq: 13 Jan 2015 12:23 am

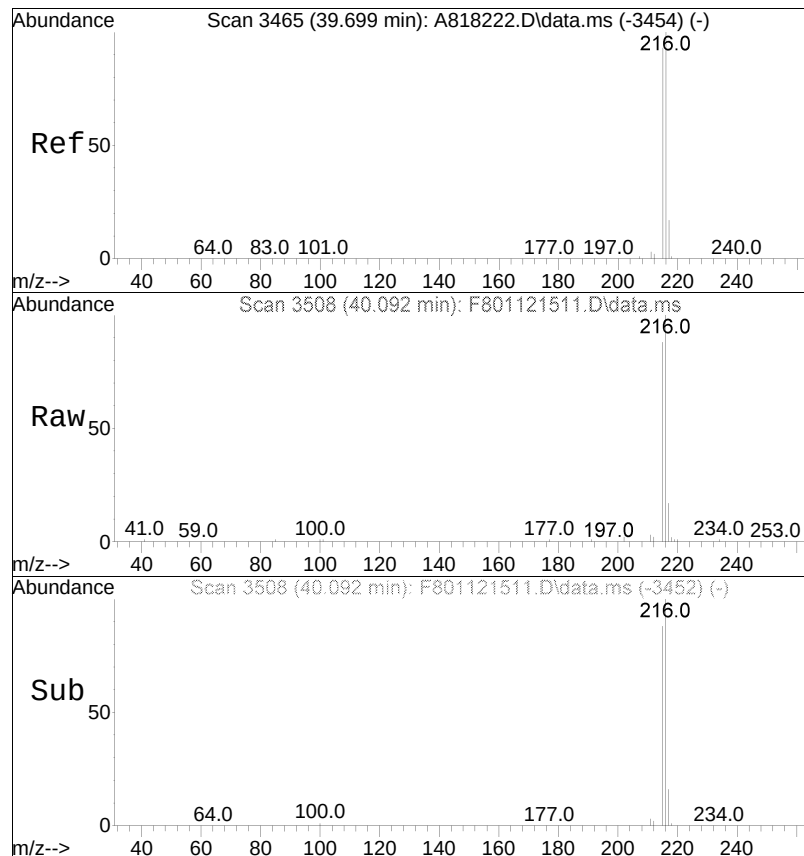
Tgt Ion: 202 Resp: 2556785

Ion Ratio Lower Upper

202 100

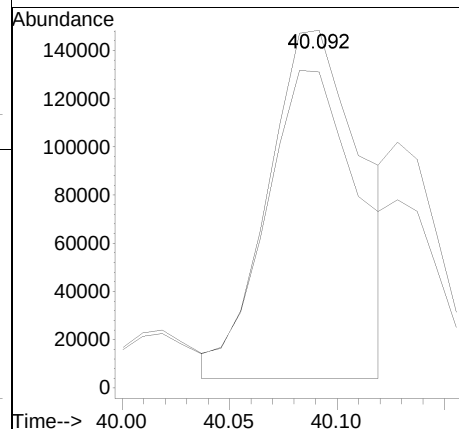
101 15.0 12.7 23.7

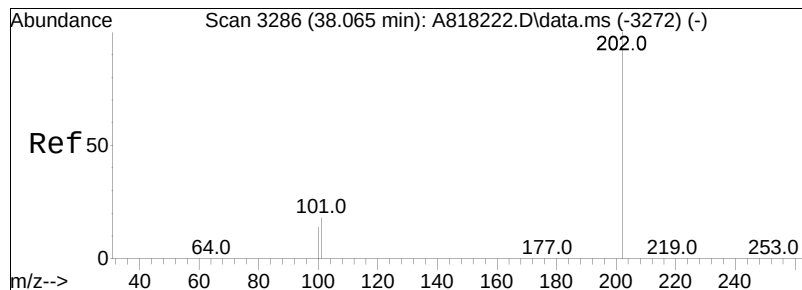




#59
 Benzo(b)fluorene
 Concen: 6240.68 ng/mL M3
 RT: 40.092 min Scan# 3508
 Delta R.T. 0.009 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

Tgt Ion	Ratio	Lower	Upper
216	100		
215	110.1	65.9	122.5





#60

Pyrene

Concen: 28756.79 ng/mL

RT: 38.485 min Scan# 3332

Delta R.T. 0.027 min

Lab File: F801121511.D

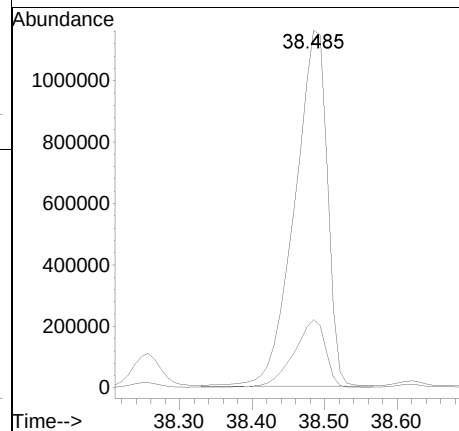
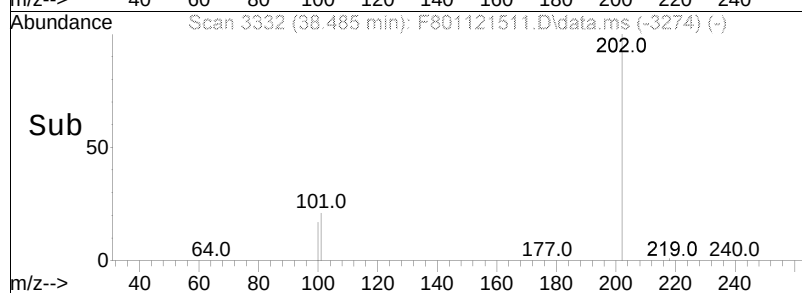
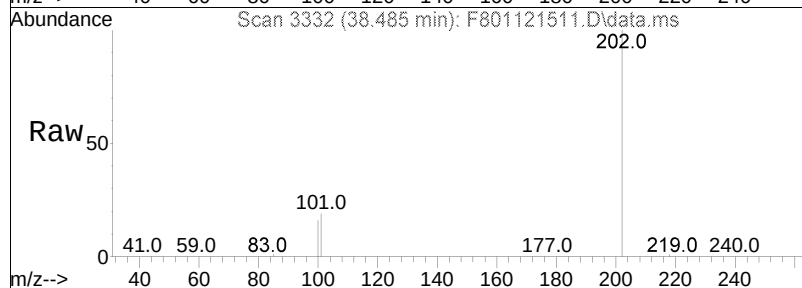
Acq: 13 Jan 2015 12:23 am

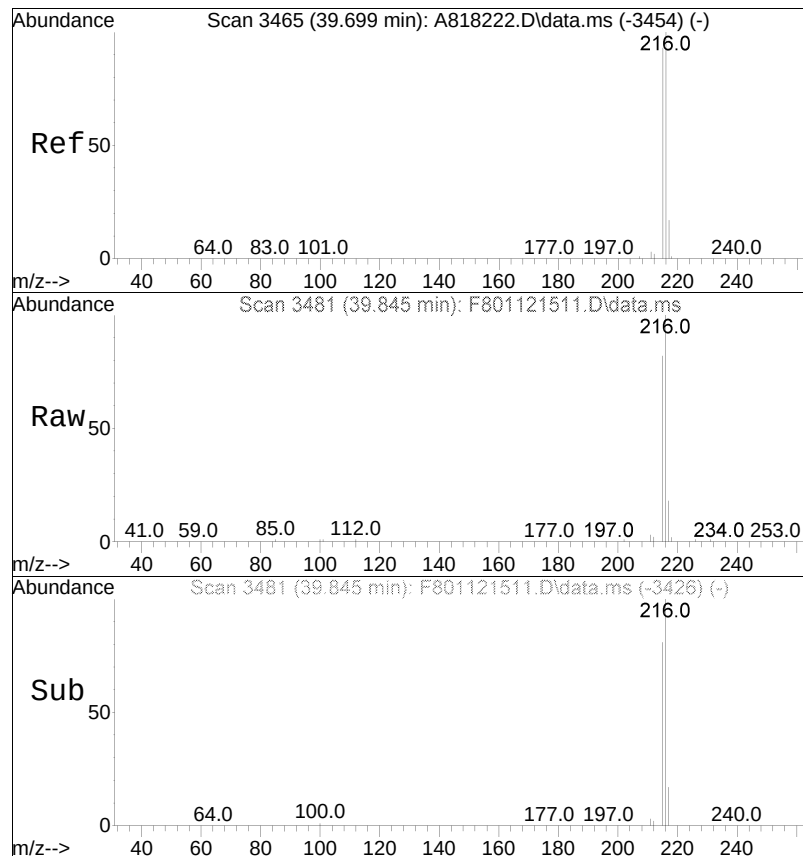
Tgt Ion: 202 Resp: 3624051

Ion Ratio Lower Upper

202 100

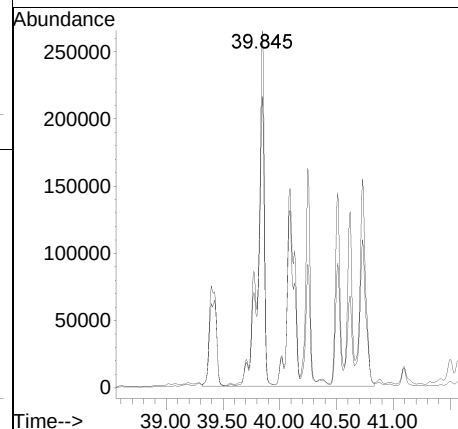
101 18.4 13.9 25.7

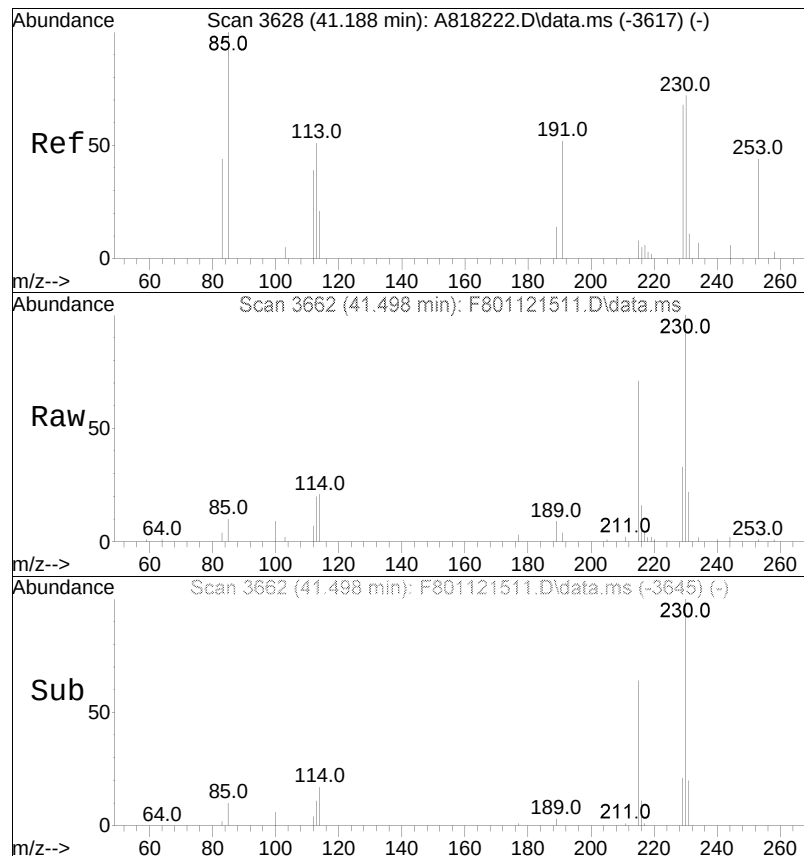




#61
 C1-Fluoranthenes/Pyrenes
 Concen: 28826.86 ng/mL M5
 RT: 39.845 min Scan# 3481
 Delta R.T. 0.009 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

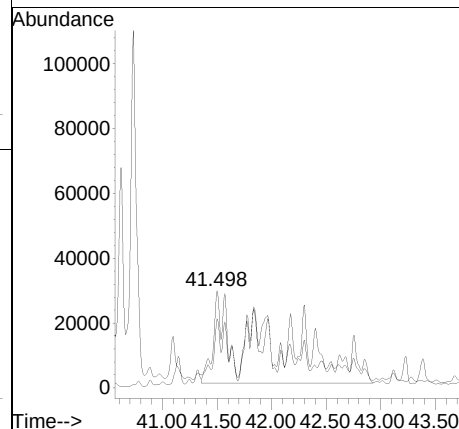
Tgt Ion	Ratio	Lower	Upper
216	100		
215	16.2	65.0	120.8#

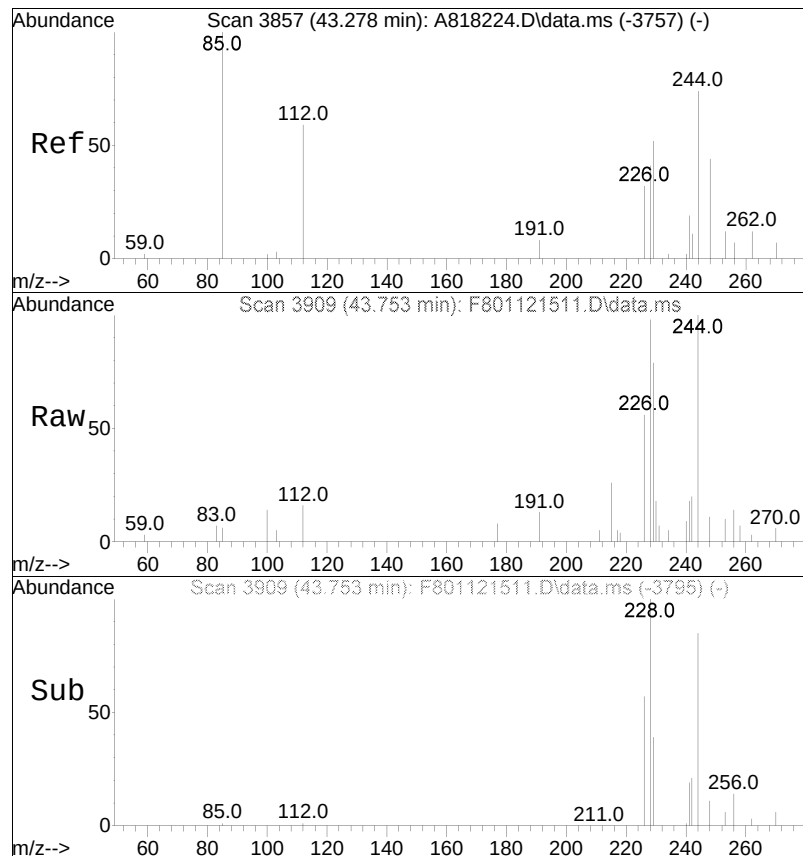




#62
 C2-Fluoranthenes/Pyrenes
 Concen: 7658.75 ng/mL M5
 RT: 41.498 min Scan# 3662
 Delta R.T. -0.456 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

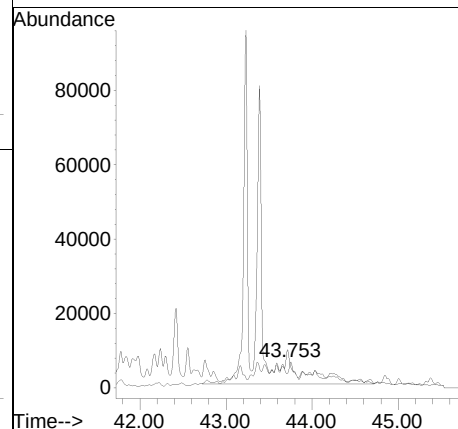
Tgt Ion	Ratio	Lower	Upper
230	100		
215	8.1	74.8	139.0#

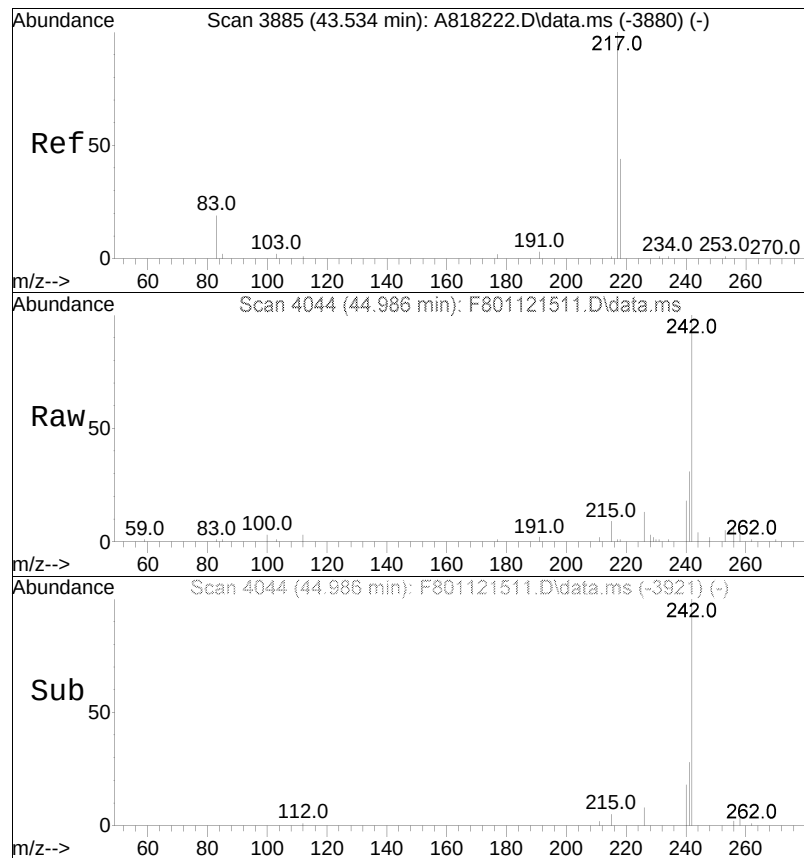




#63
 C3-Fluoranthenes/Pyrenes
 Concen: 2123.62 ng/mL M5
 RT: 43.753 min Scan# 3909
 Delta R.T. 0.110 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

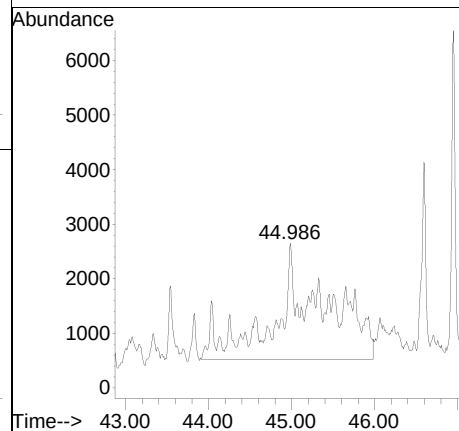
Tgt	Ion	Ratio	Lower	Upper
244	244	100		
229	229	2.4	68.9	127.9#

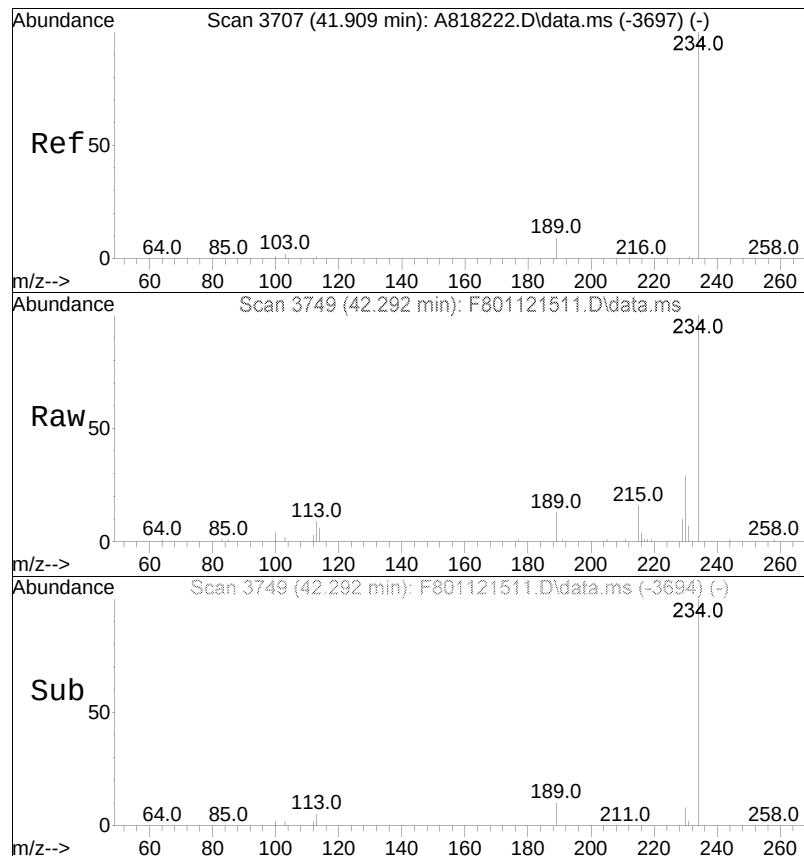




#64
 C4-Fluoranthenes/Pyrenes
 Concen: 687.57 ng/mL M5
 RT: 44.986 min Scan# 4044
 Delta R.T. -0.000 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

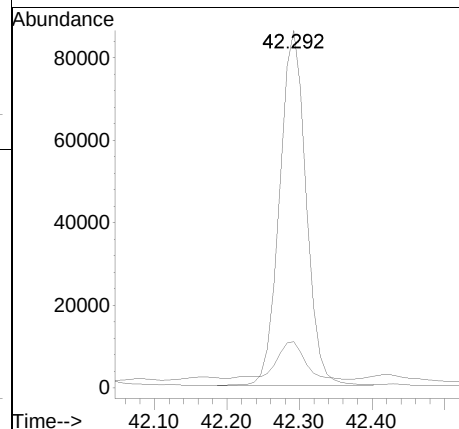
Tgt Ion:258 Resp: 86651

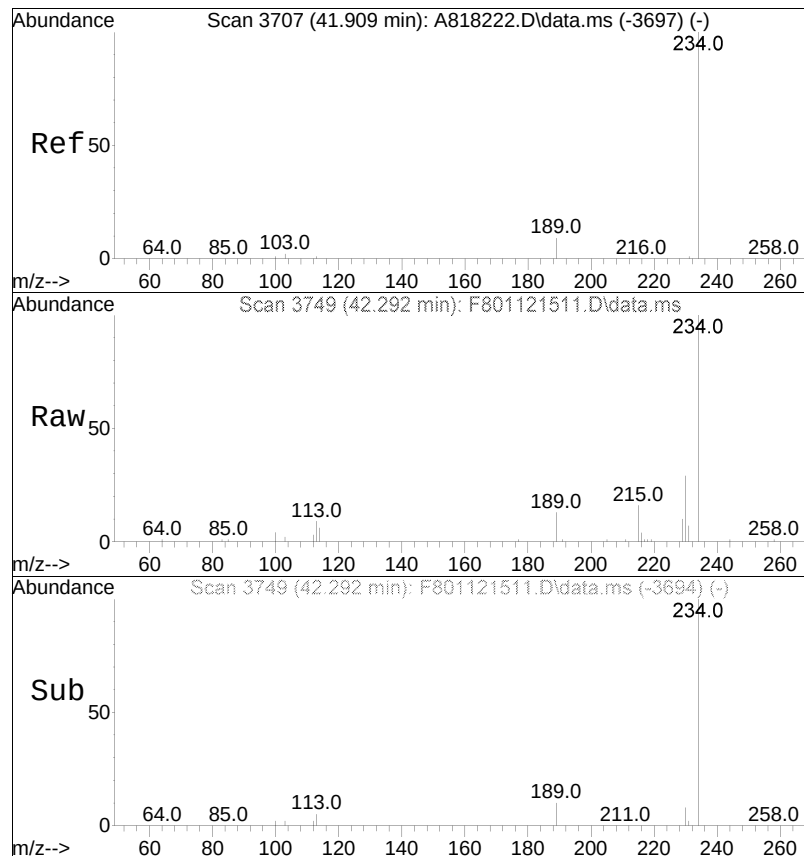




#66
 Naphthobenzothiophene
 Concen: 1970.33 ng/ml
 RT: 42.292 min Scan# 3749
 Delta R.T. -0.000 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

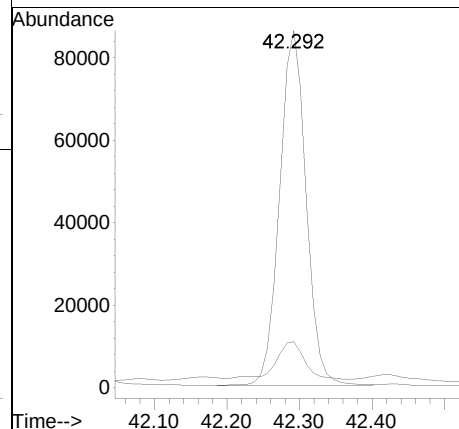
Tgt Ion	Ratio	Lower	Upper
234	100		
189	11.4	6.4	12.0

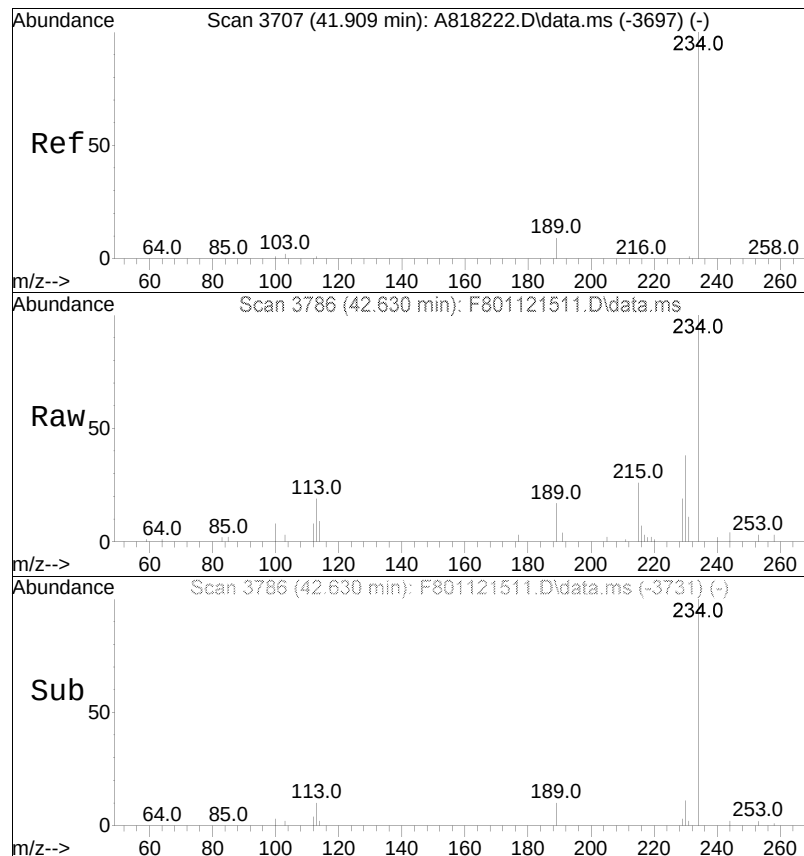




#67
 Naphthobenzothiophene-2,1-D
 Concen: 1970.33 ng/mL
 RT: 42.292 min Scan# 3749
 Delta R.T. -0.000 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

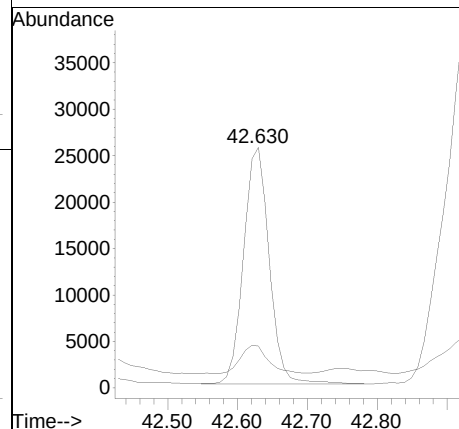
Tgt Ion	Ratio	Lower	Upper
234	100		
189	11.4	6.4	12.0

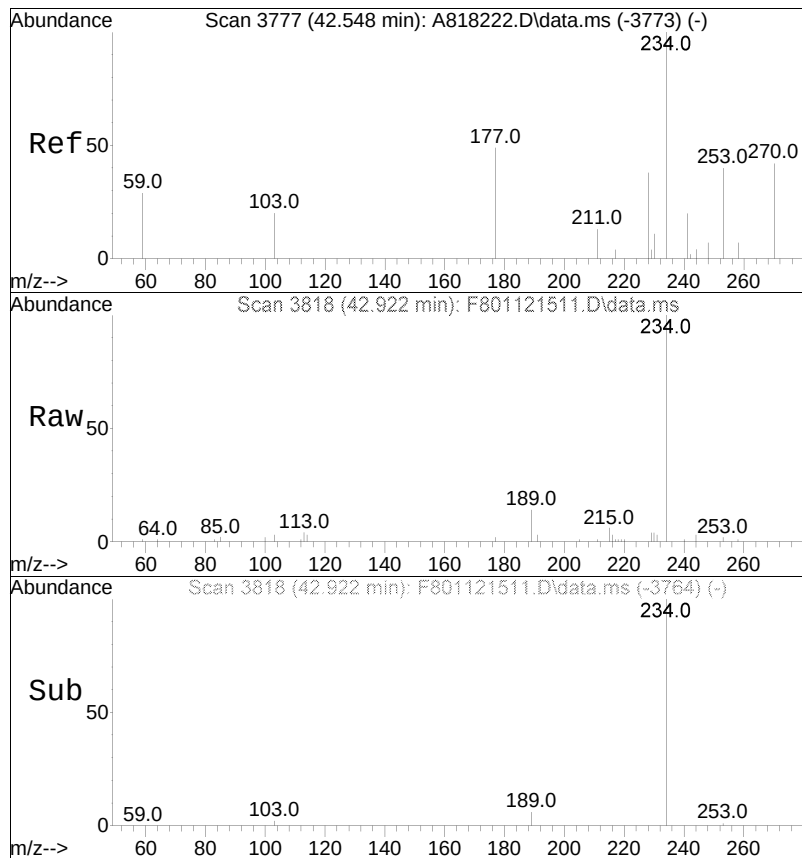




#68
 Naphthobenzothiophene-1,2-D
 Concen: 586.97 ng/mL
 RT: 42.630 min Scan# 3786
 Delta R.T. -0.000 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

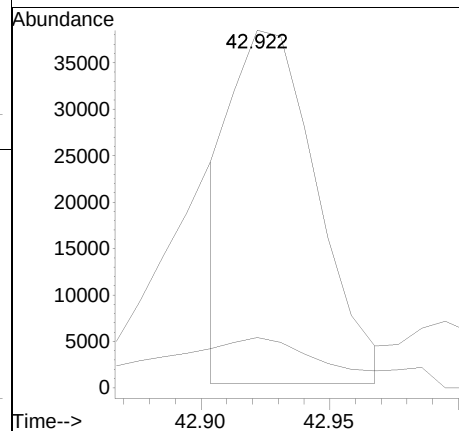
Tgt Ion	Ratio	Lower	Upper
234	100		
189	12.5	70.3	130.5#

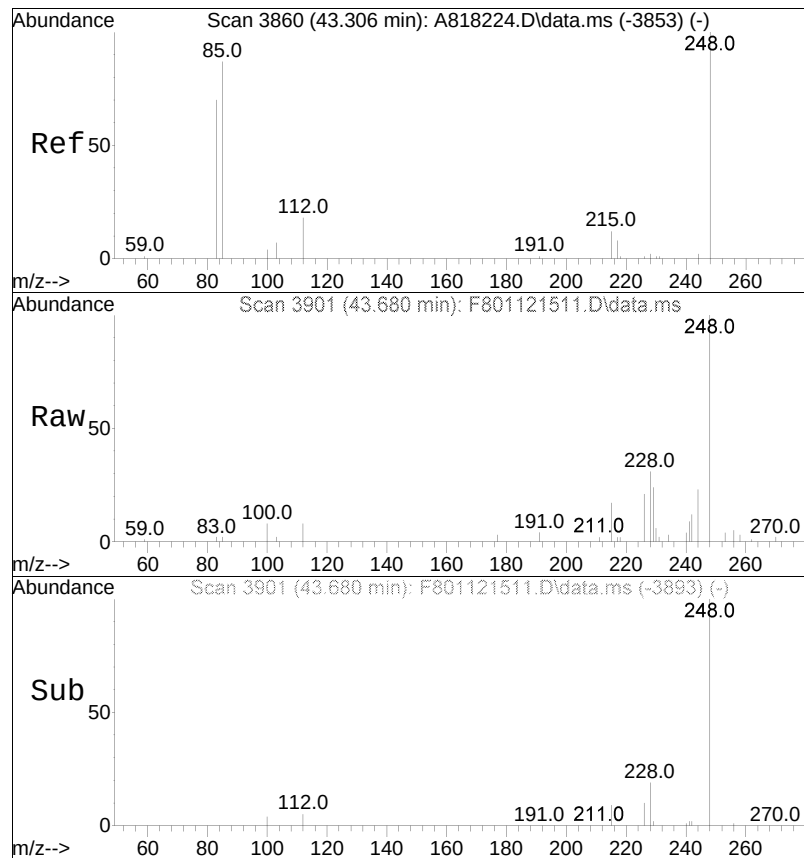




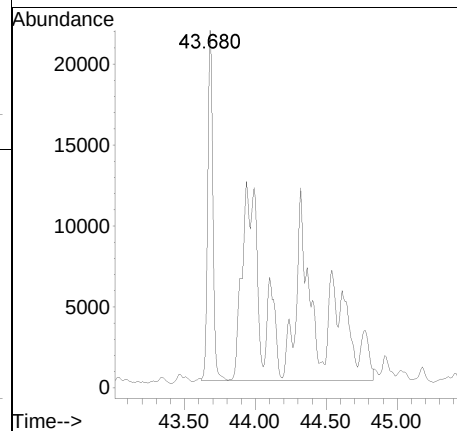
#69
 Naphthobenzothiophene-2,3-D
 Concen: 798.35 ng/mL M3
 RT: 42.922 min Scan# 3818
 Delta R.T. -0.009 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

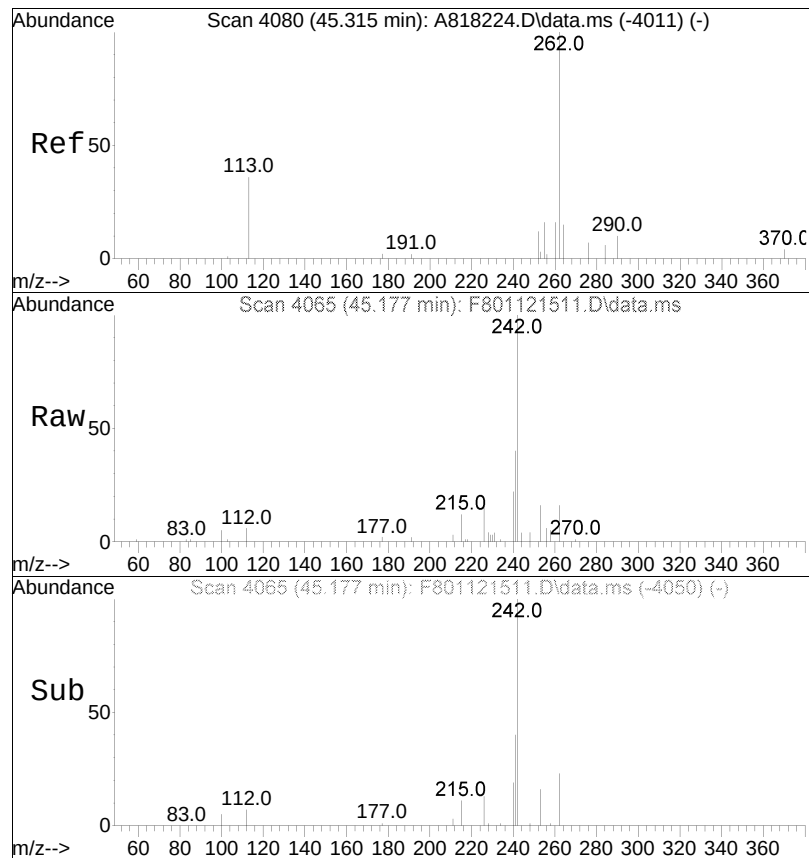
Tgt Ion	Ratio	Lower	Upper
234	100		
189	30.9	108.3	201.1#





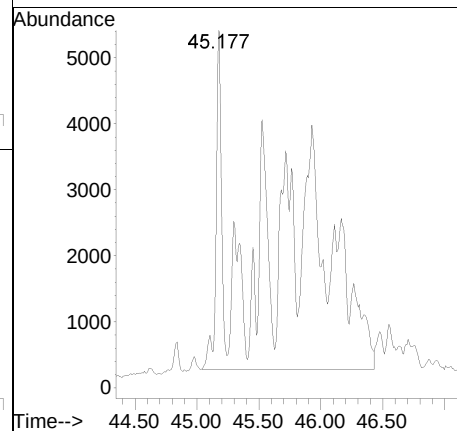
#70
 C1-Naphthobenzothiophenes
 Concen: 2740.47 ng/ml M5
 RT: 43.680 min Scan# 3901
 Delta R.T. -0.000 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am
 Tgt Ion:248 Resp: 303841

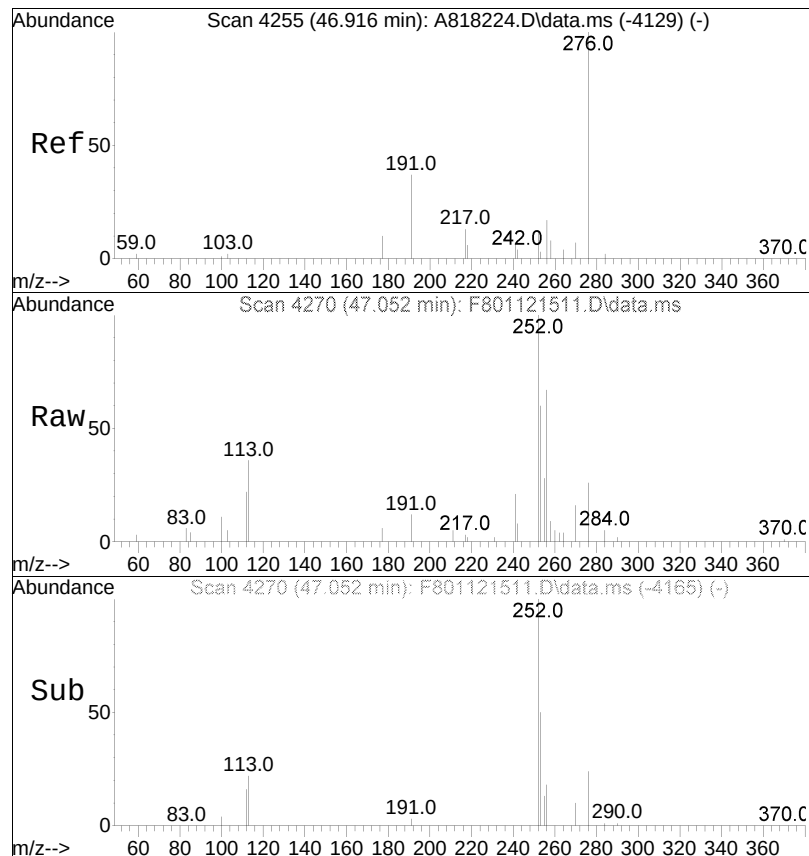




#71
 C2-Naphthobenzothiophenes
 Concen: 1185.49 ng/ml M5
 RT: 45.177 min Scan# 4065
 Delta R.T. -0.502 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

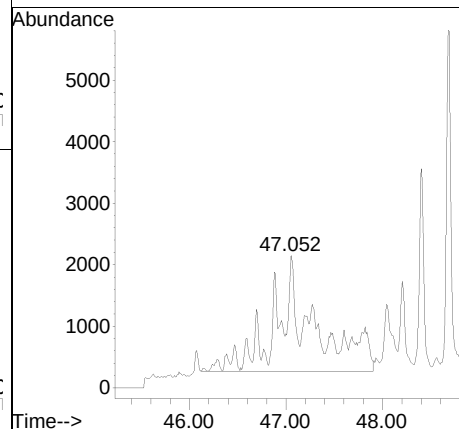
Tgt Ion:262 Resp: 131438

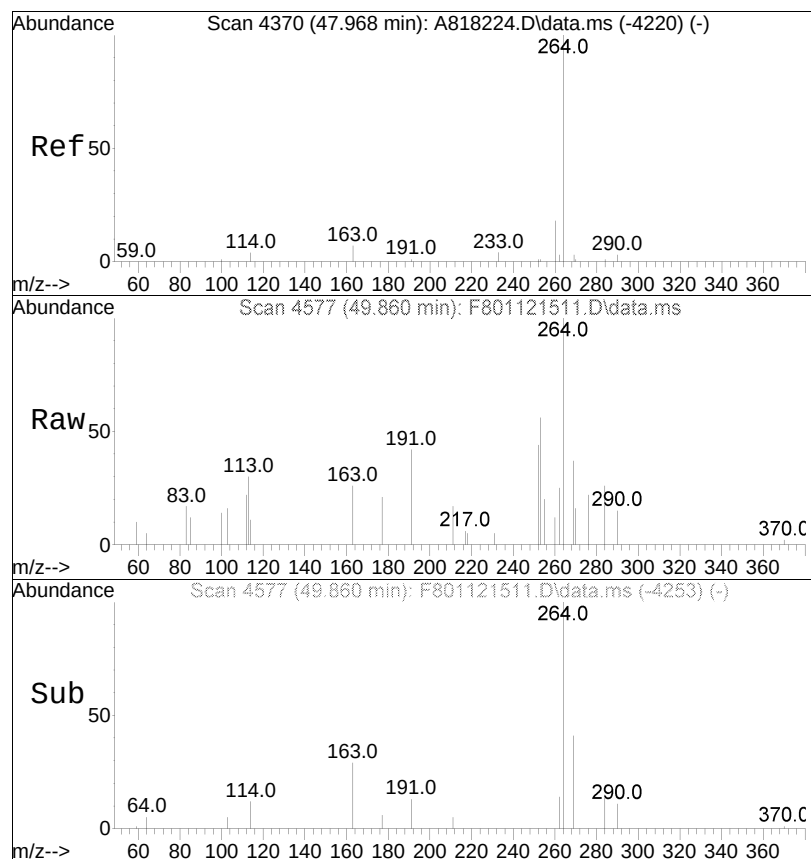




#72
 C3-Naphthobenzothiophenes
 Concen: 460.30 ng/ml M5
 RT: 47.052 min Scan# 4270
 Delta R.T. -0.229 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

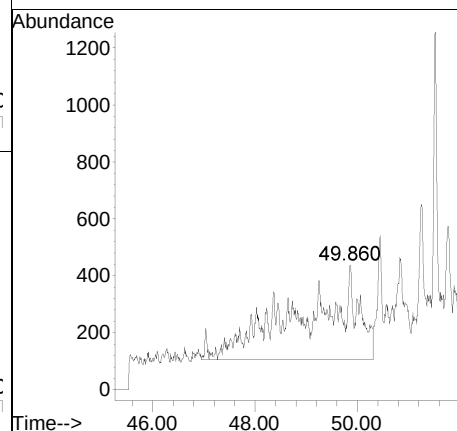
Tgt Ion: 276 Resp: 51034

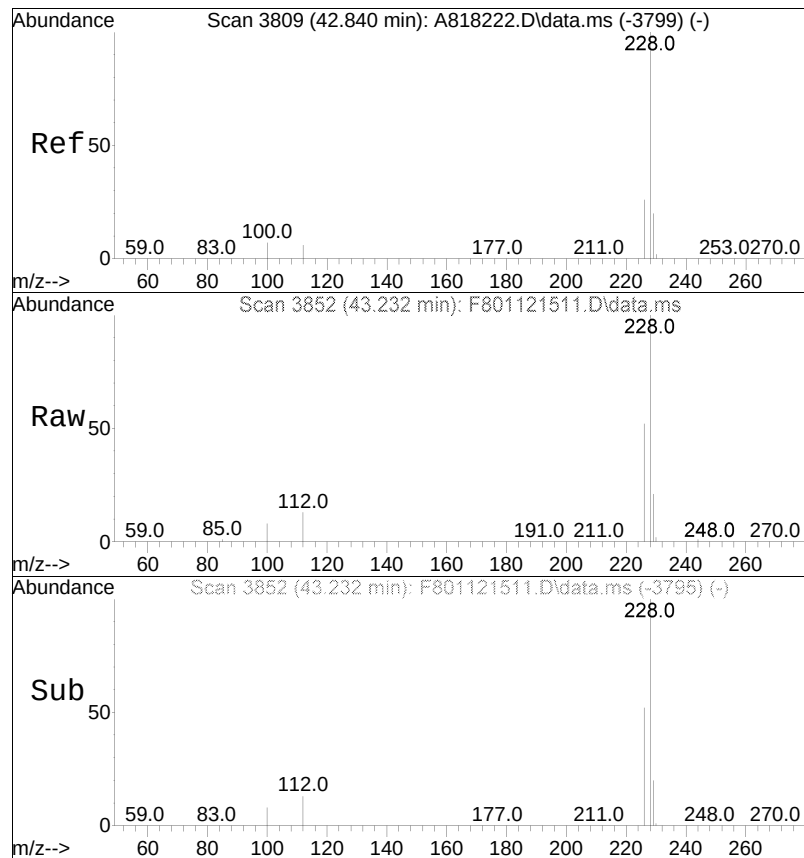




#73
 C4-Naphthobenzothiophenes
 Concen: 221.52 ng/mL M5
 RT: 49.860 min Scan# 4577
 Delta R.T. 1.500 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

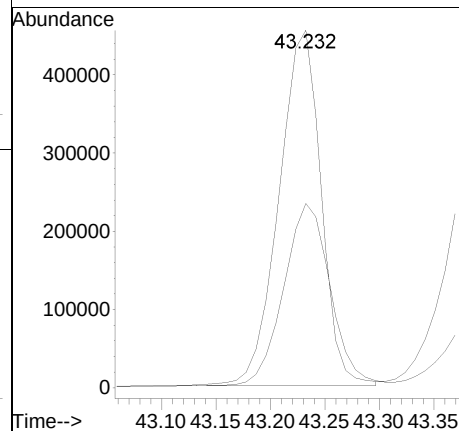
Tgt Ion:290 Resp: 24560

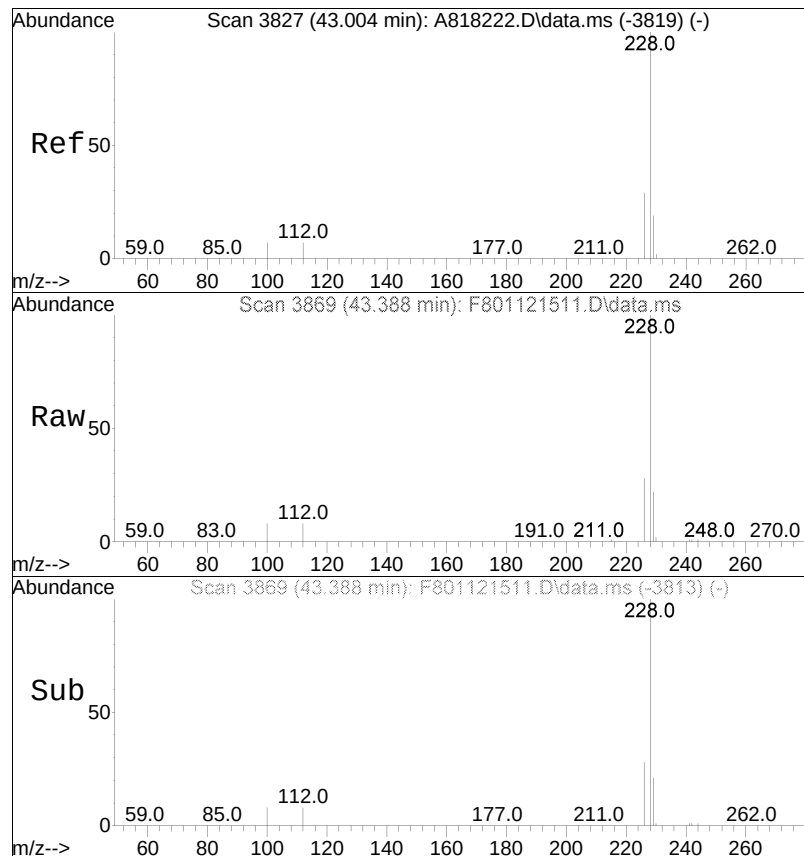




#75
 Benz[a]anthracene
 Concen: 13408.14 ng/mL M3
 RT: 43.232 min Scan# 3852
 Delta R.T. 0.018 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

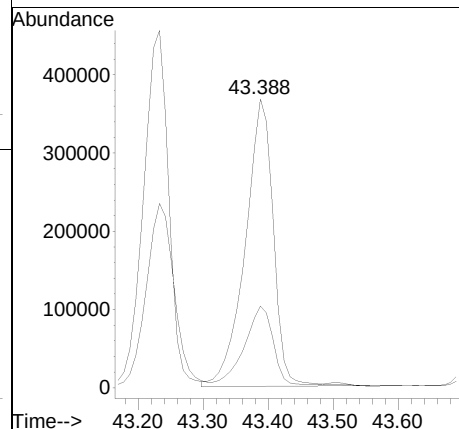
Tgt Ion	Ratio	Lower	Upper
228	100		
226	26.5	18.7	34.7

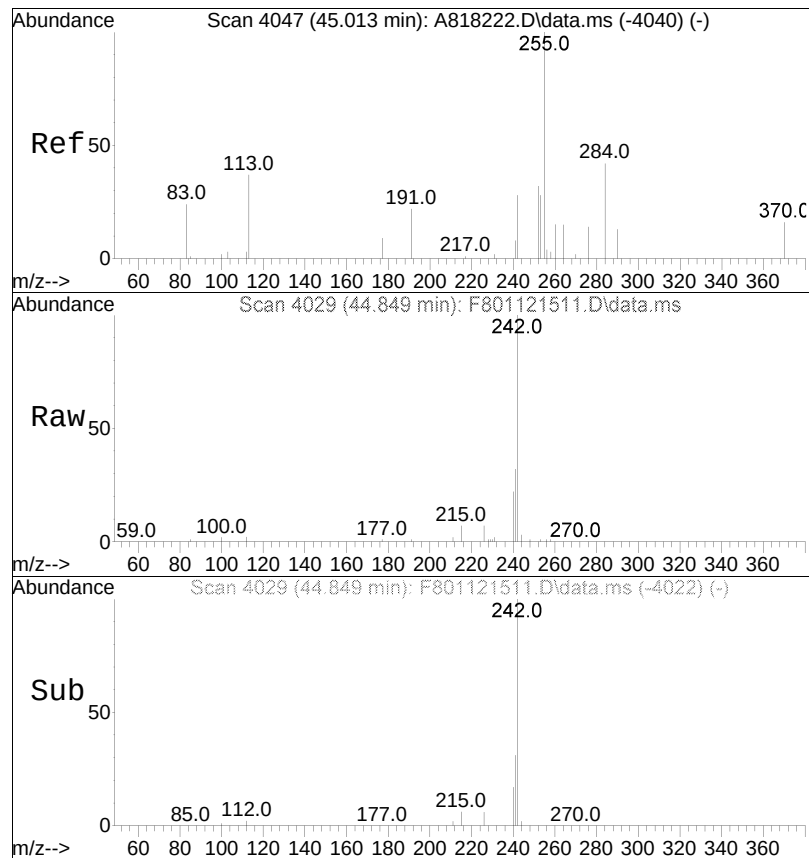




#77
 Chrysene/Triphenylene
 Concen: 12622.86 ng/mL
 RT: 43.388 min Scan# 3869
 Delta R.T. 0.009 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

Tgt Ion	Ratio	Lower	Upper
228	100		
226	29.5	20.2	37.4





#78

C1-Chrysenes

Concen: 10313.22 ng/mL M5

RT: 44.849 min Scan# 4029

Delta R.T. -0.001 min

Lab File: F801121511.D

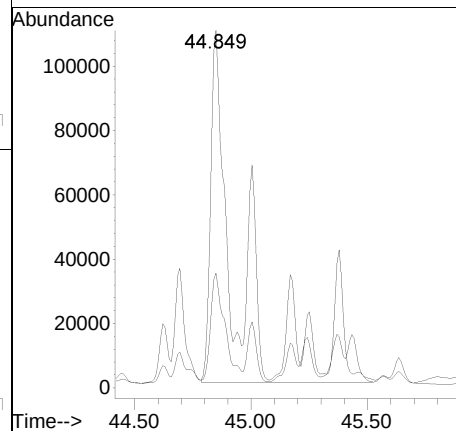
Acq: 13 Jan 2015 12:23 am

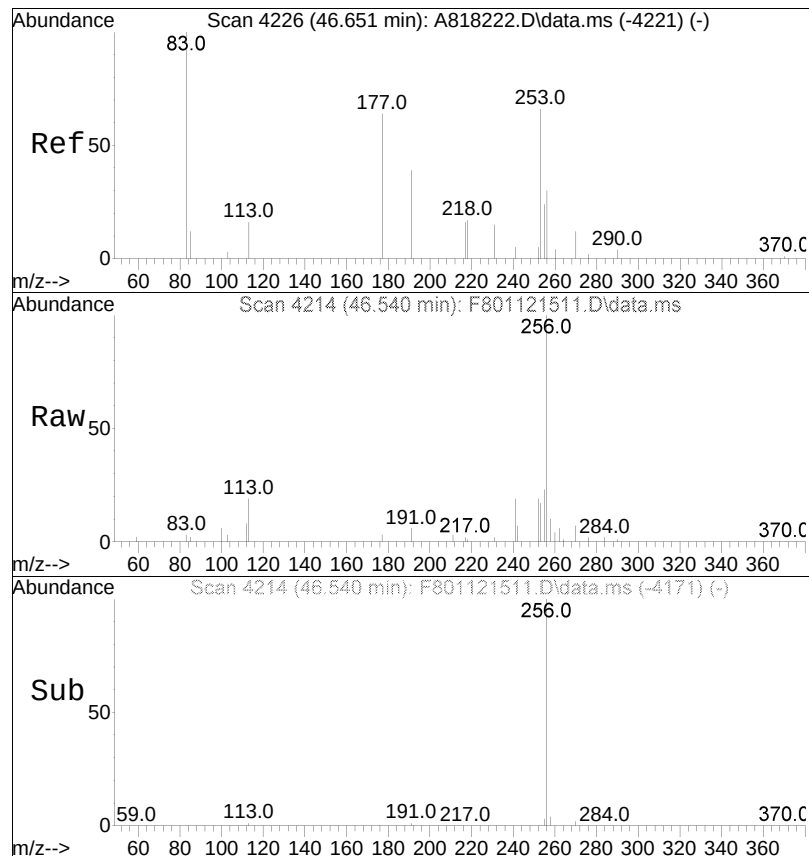
Tgt Ion: 242 Resp: 900599

Ion Ratio Lower Upper

242 100

241 12.1 29.8 55.4#





#79

C2-Chrysenes

Concen: 4530.83 ng/mL M5

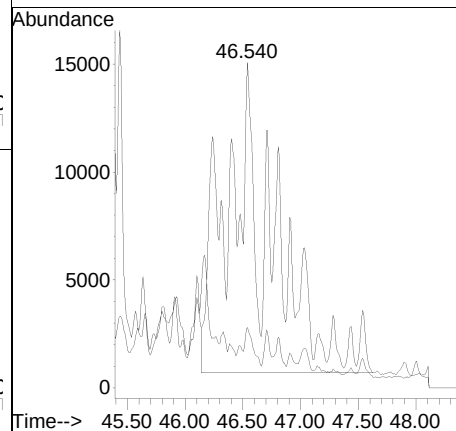
RT: 46.540 min Scan# 4214

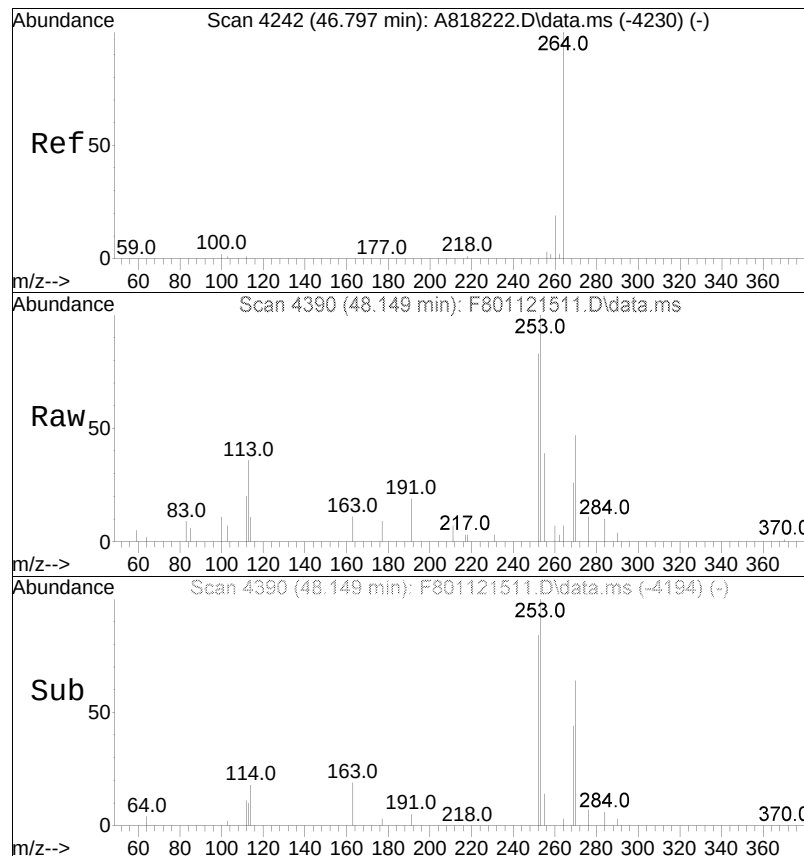
Delta R.T. -0.374 min

Lab File: F801121511.D

Acq: 13 Jan 2015 12:23 am

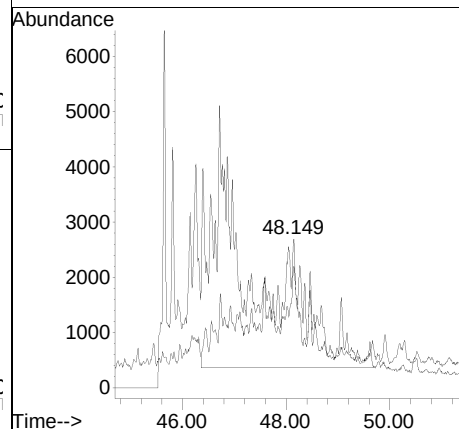
Tgt	Ion	Ratio	Lower	Upper
256	100			
241	0.7	26.2	48.8	

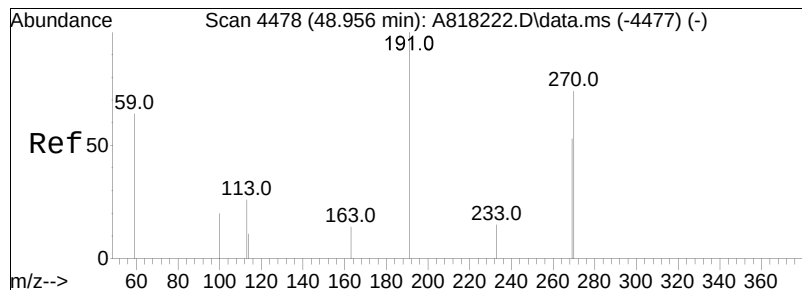




#81
 C3-Chrysenes
 Concen: 1791.37 ng/mL M5
 RT: 48.149 min Scan# 4390
 Delta R.T. -1.473 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

Tgt	Ion	Ratio	Resp	Lower	Upper
270	100		156431		
255	0.1	39.7		73.7#	





#82

C4-Chrysenes

Concen: 430.85 ng/mL M5

RT: 49.146 min Scan# 4499

Delta R.T. -0.576 min

Lab File: F801121511.D

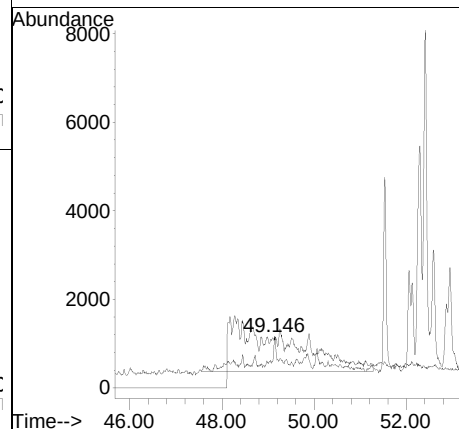
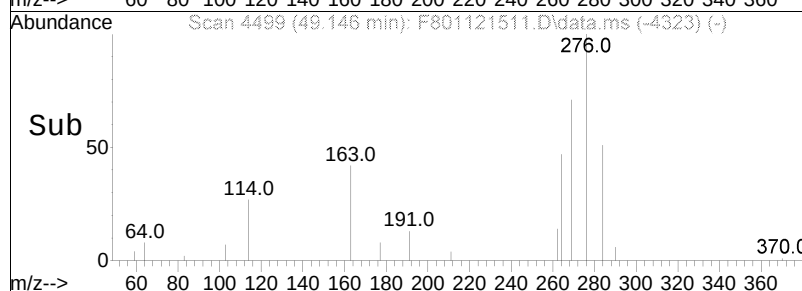
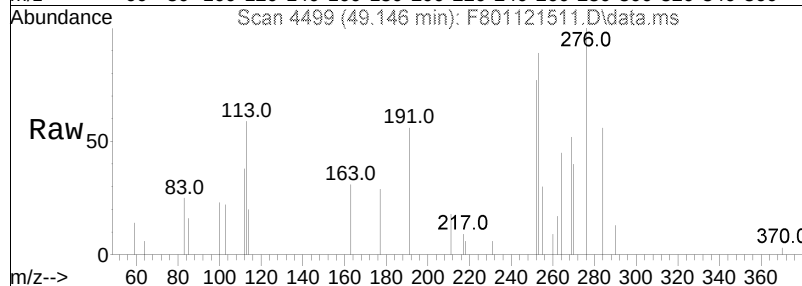
Acq: 13 Jan 2015 12:23 am

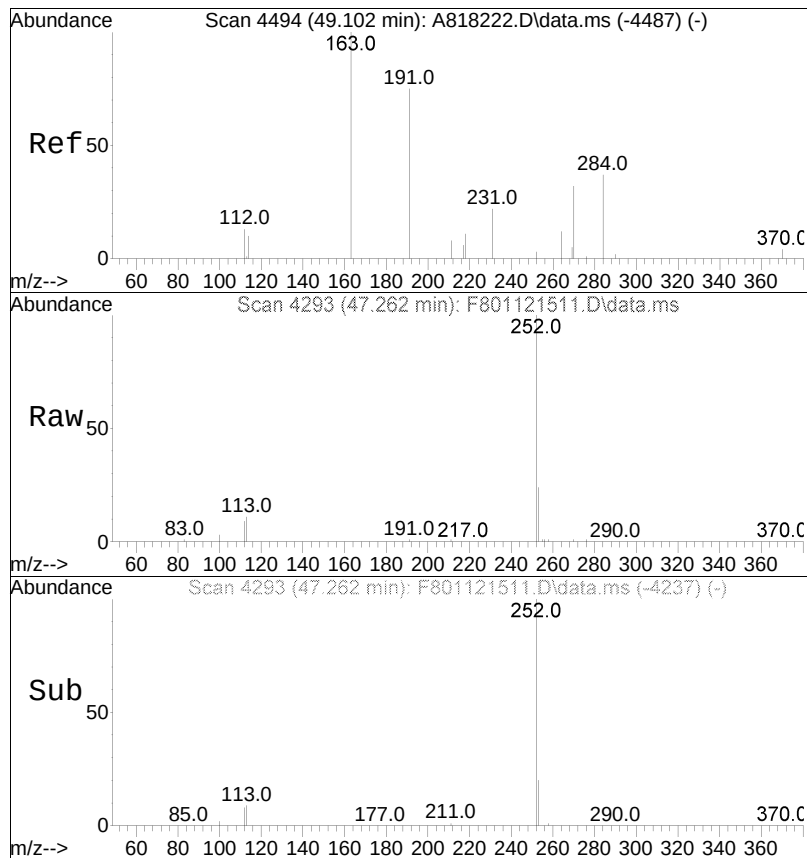
Tgt Ion: 284 Resp: 37624

Ion Ratio Lower Upper

284 100

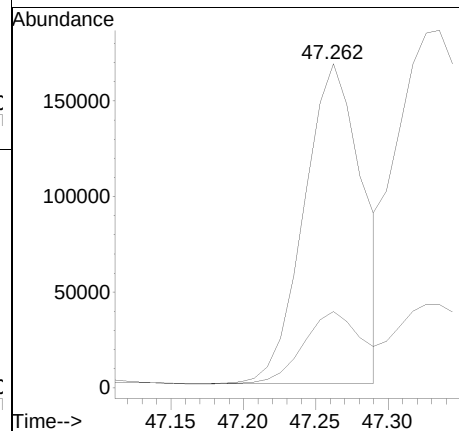
269 0.0 63.6 118.2#

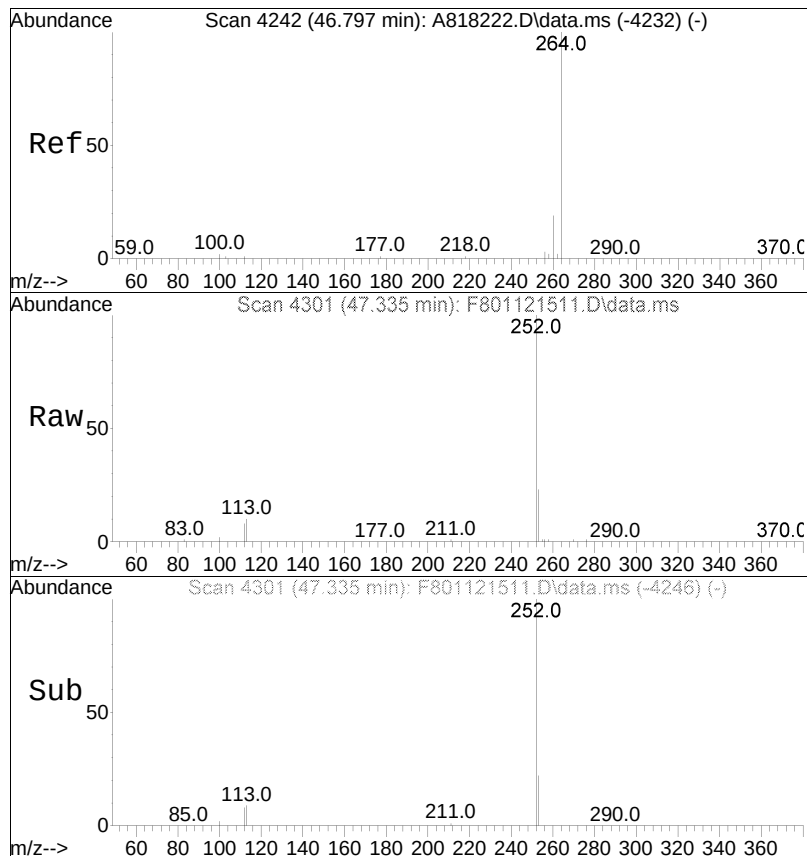




#84
 Benzo[b]fluoranthene
 Concen: 4810.36 ng/mL
 RT: 47.262 min Scan# 4293
 Delta R.T. 0.009 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

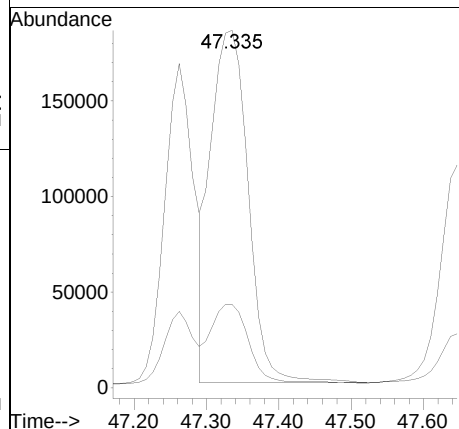
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	22.9	16.6	30.8	

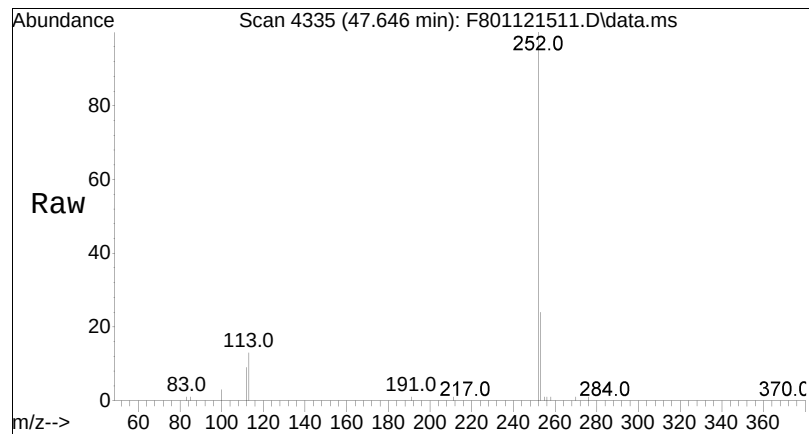




#85
 Benzo[j]+[k]fluoranthene
 Concen: 6934.86 ng/mL
 RT: 47.335 min Scan# 4301
 Delta R.T. -0.000 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

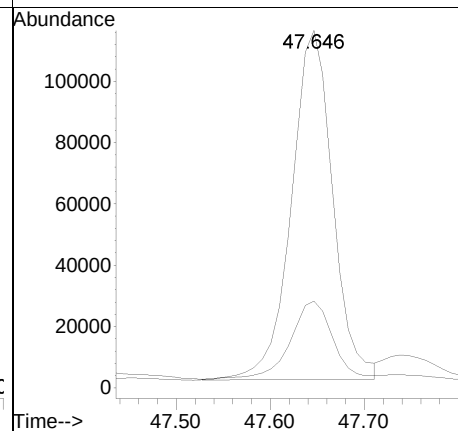
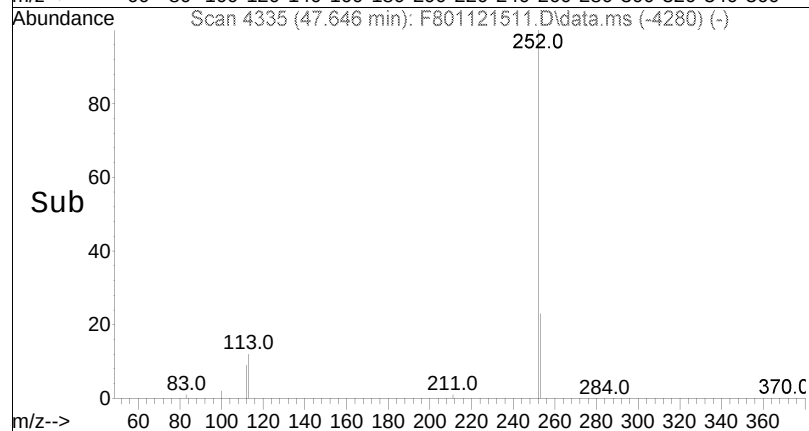
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.6	17.0	31.6	

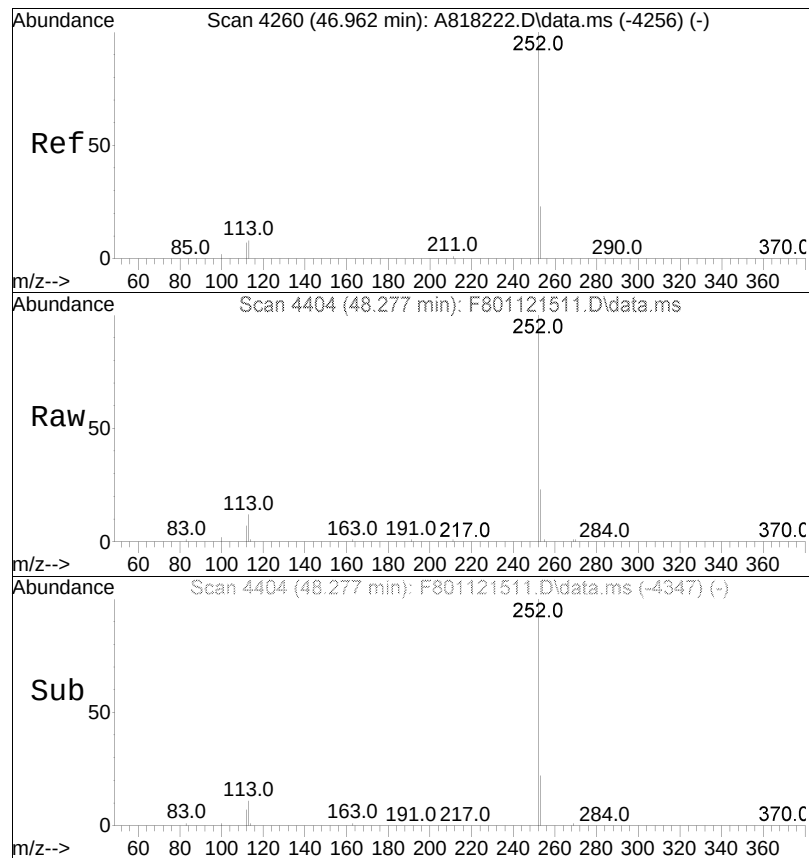




#86
 Benzo[a]fluoranthene
 Concen: 3625.91 ng/mL
 RT: 47.646 min Scan# 4335
 Delta R.T. -0.000 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

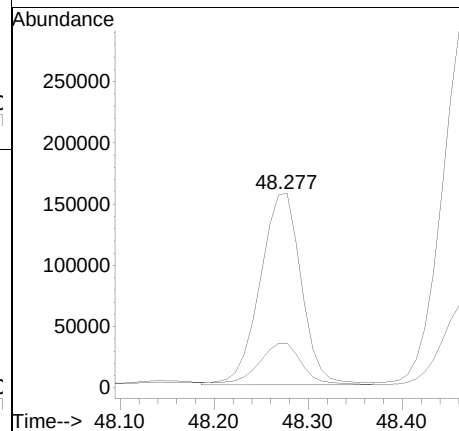
Tgt Ion: 252 Resp: 347911
 Ion Ratio Lower Upper
 252 100
 253 23.9 17.1 31.7

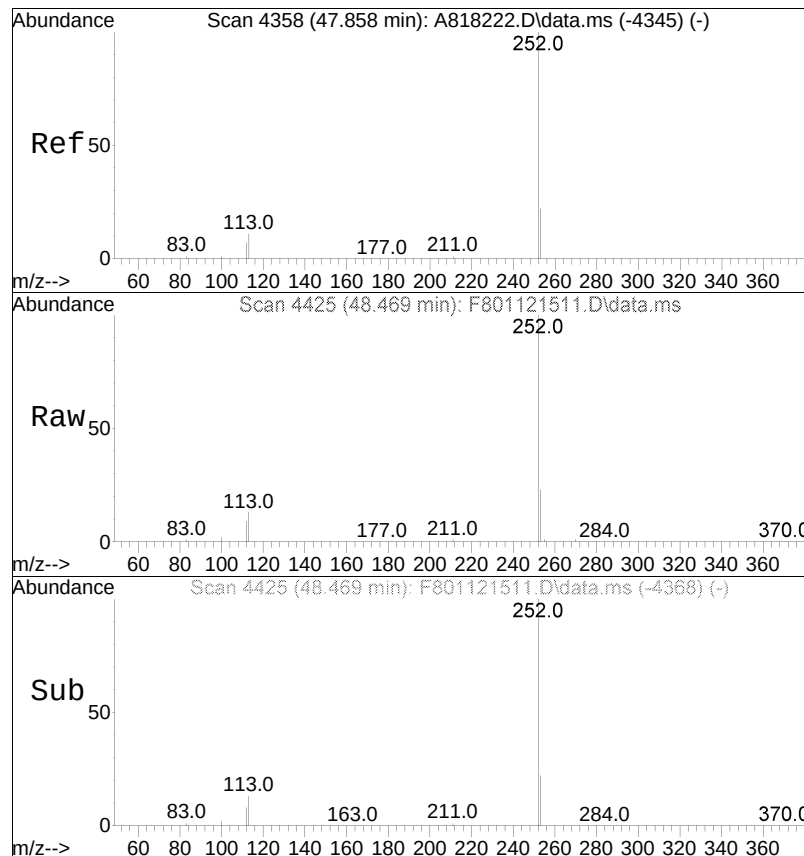




#87
 Benzo[e]pyrene
 Concen: 4840.07 ng/mL
 RT: 48.277 min Scan# 4404
 Delta R.T. 0.018 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

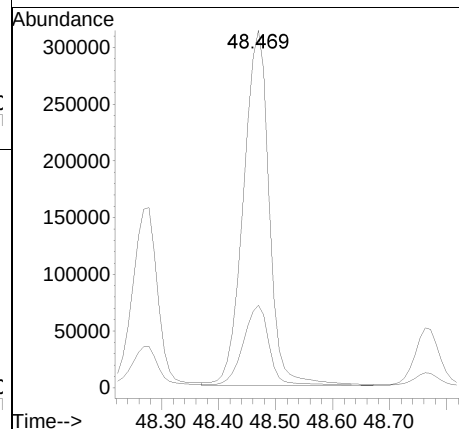
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	23.5	17.2	32.0	

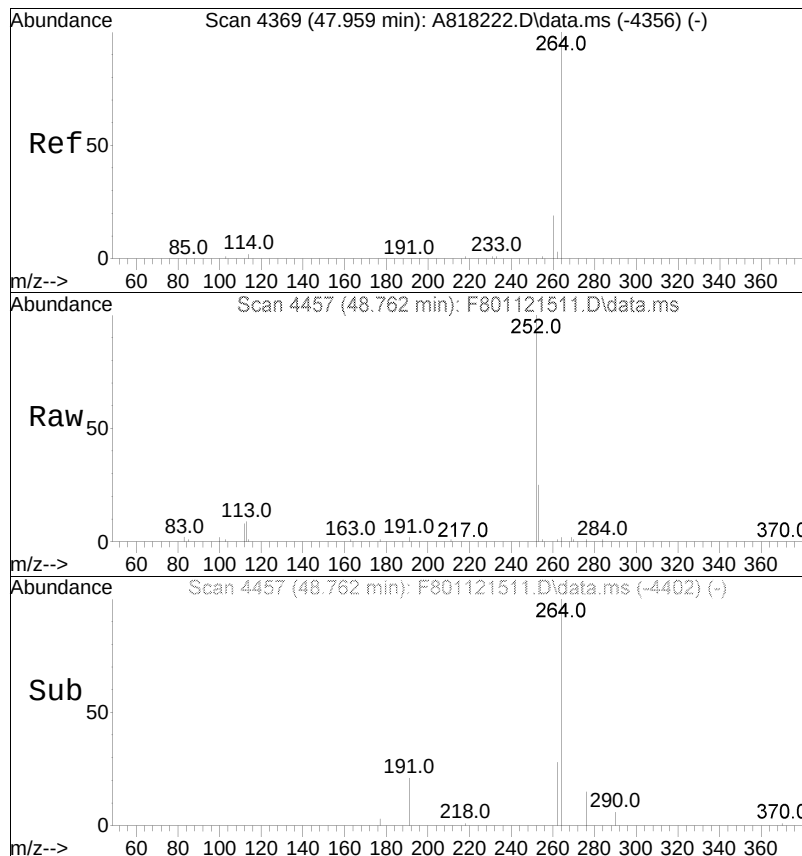




#89
 Benzo[a]pyrene
 Concen: 10915.81 ng/mL
 RT: 48.469 min Scan# 4425
 Delta R.T. 0.018 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

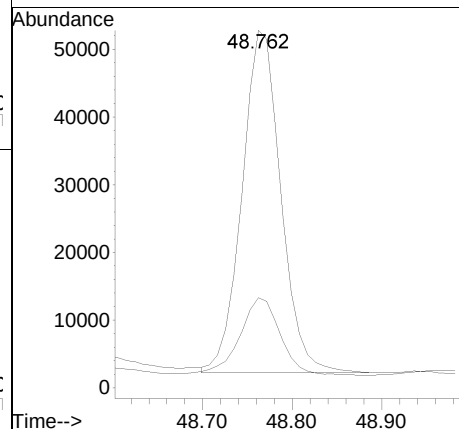
Tgt Ion	Ratio	Lower	Upper
252	100		
253	23.0	18.1	33.7

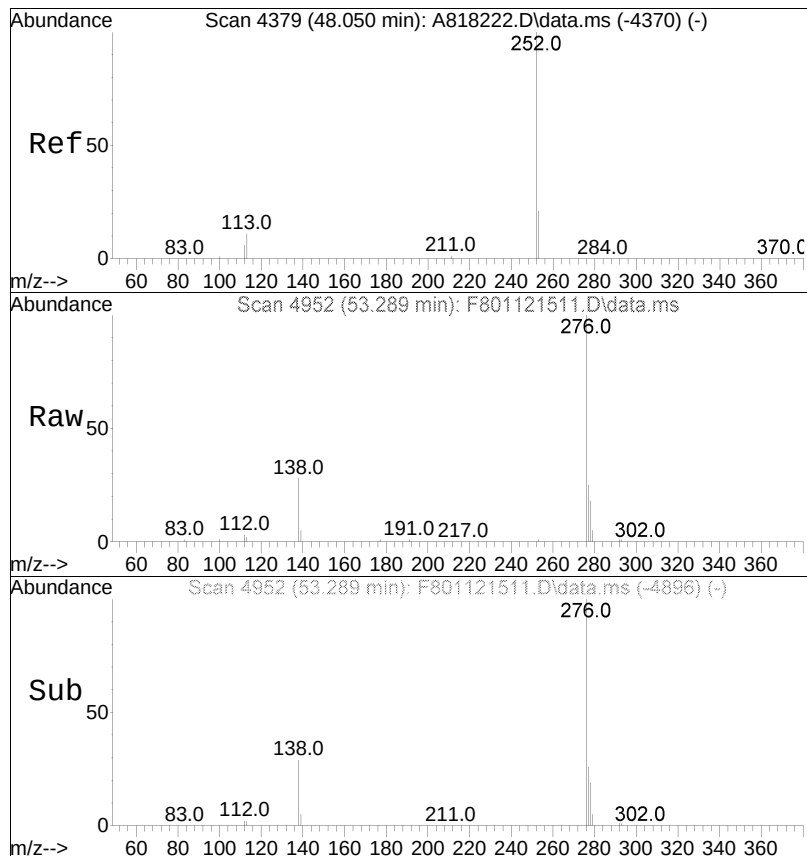




#90
Perylene
Concen: 1609.97 ng/mL
RT: 48.762 min Scan# 4457
Delta R.T. -0.000 min
Lab File: F801121511.D
Acq: 13 Jan 2015 12:23 am

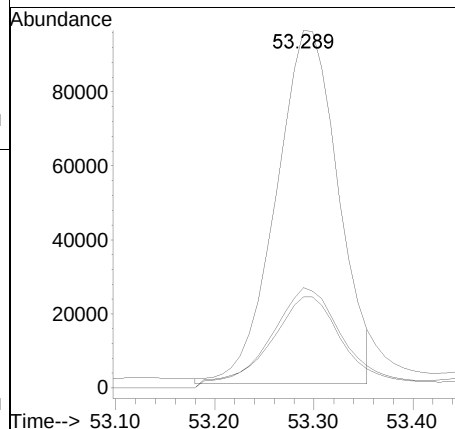
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	24.0	17.8	33.1	

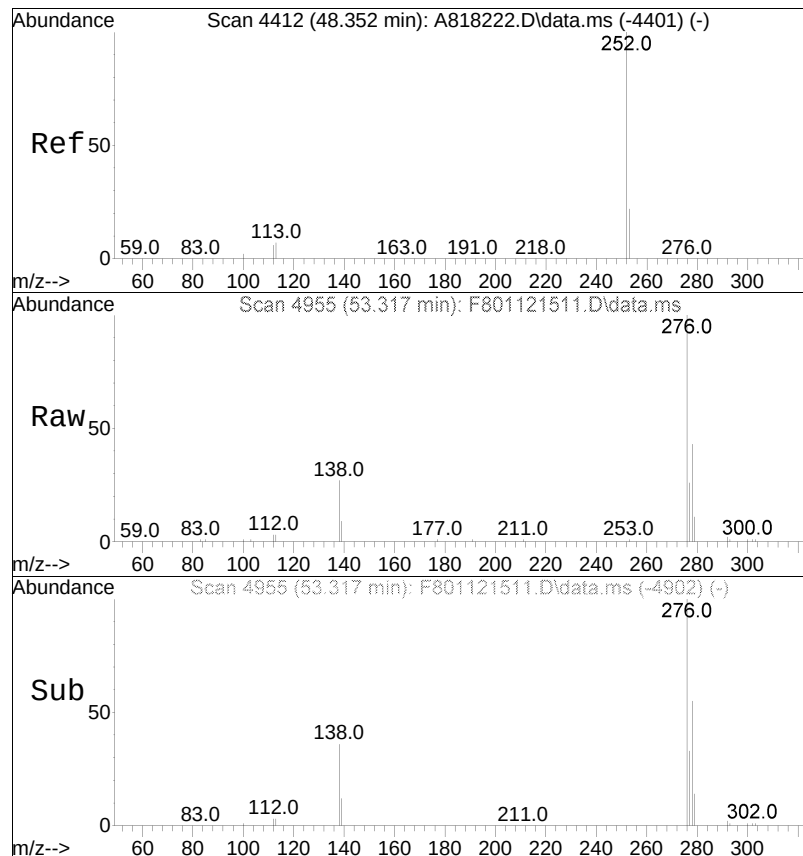




#91
 Indeno[1,2,3-cd]pyrene
 Concen: 3621.58 ng/mL M3
 RT: 53.289 min Scan# 4952
 Delta R.T. 0.009 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

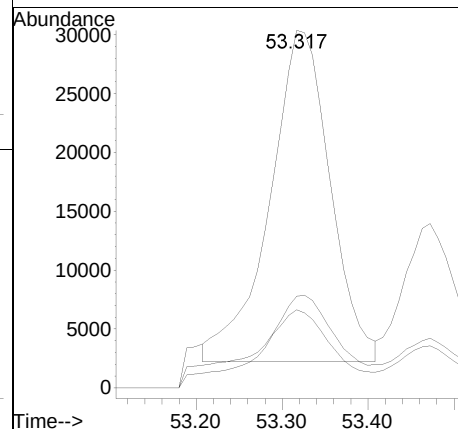
Tgt	Ion:276	Resp:	417411
Ion	Ratio	Lower	Upper
276	100		
138	33.9	19.9	37.0
277	31.4	16.9	31.5

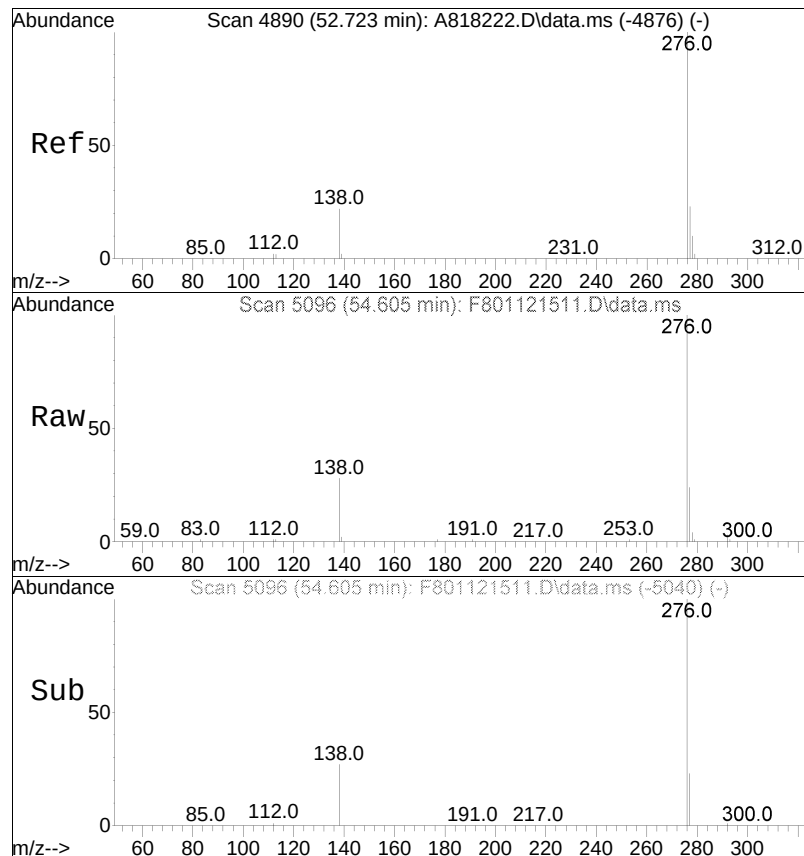




#92
 Dibenz[ah]+[ac]anthracene
 Concen: 1420.00 ng/mL M4
 RT: 53.317 min Scan# 4955
 Delta R.T. -0.018 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

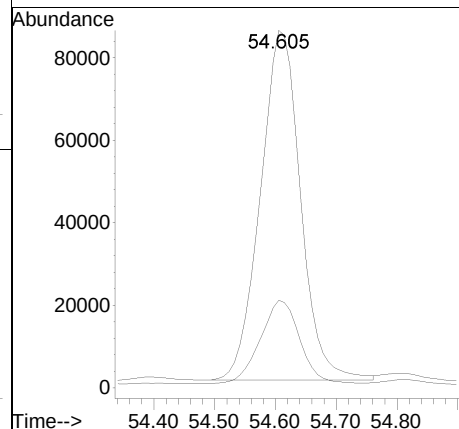
Tgt	Ion	Ratio	Resp	Lower	Upper
278	100		138460		
139	29.6	15.7		29.1#	
279	36.7	17.1		31.9#	

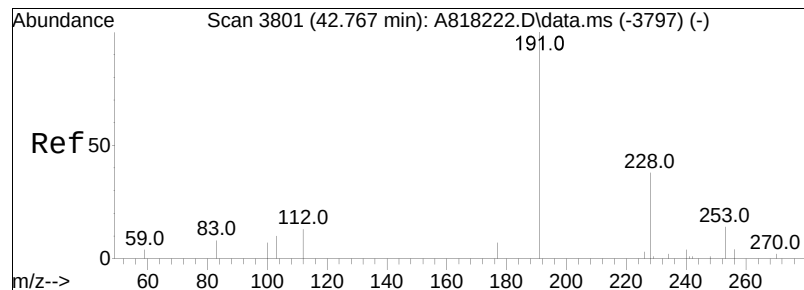




#93
 Benzo[g,h,i]perylene
 Concen: 3560.69 ng/mL
 RT: 54.605 min Scan# 5096
 Delta R.T. 0.009 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

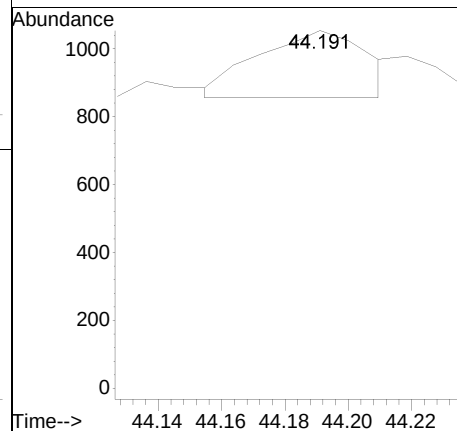
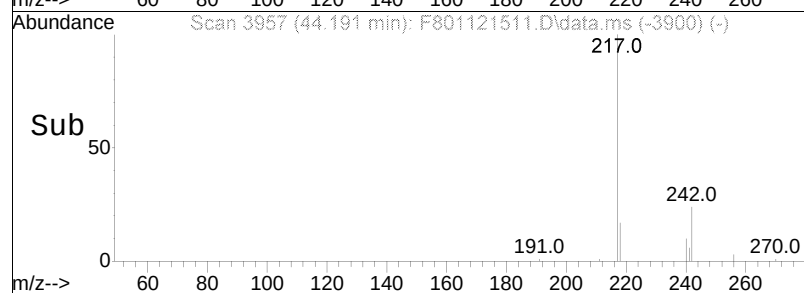
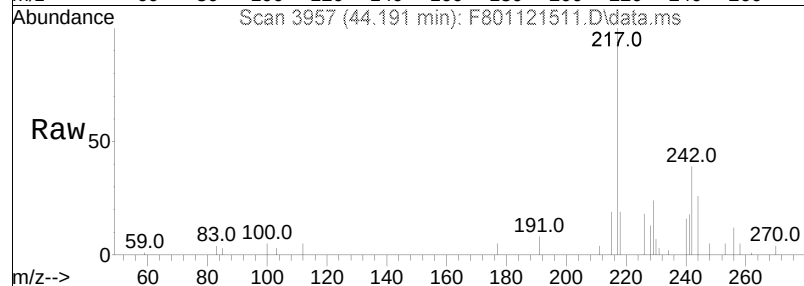
Tgt	Ion	Ratio	Lower	Upper
276	100			
277	23.6	16.6	30.8	

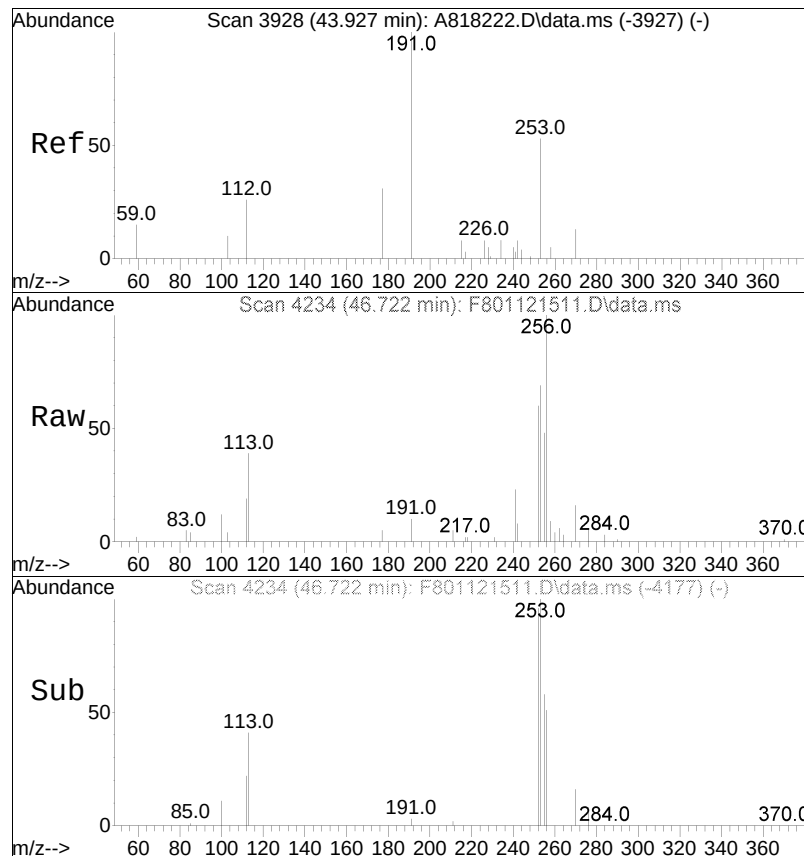




#100
 C26 Tricyclic Terpane-22S (T6b)
 Concen: 14.35 ng/ml M3
 RT: 44.191 min Scan# 3957
 Delta R.T. 0.018 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

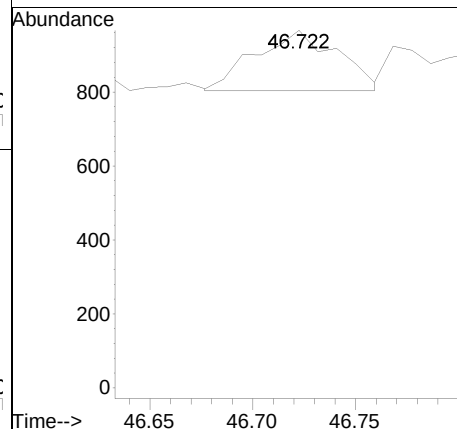
Tgt Ion:191 Resp: 473

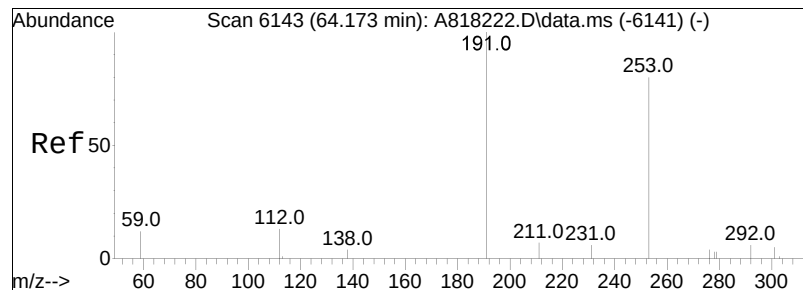




#103
C28 Tricyclic Terpane-22R (T8)
Concen: 13.90 ng/ml M4
RT: 46.722 min Scan# 4234
Delta R.T. 0.018 min
Lab File: F801121511.D
Acq: 13 Jan 2015 12:23 am

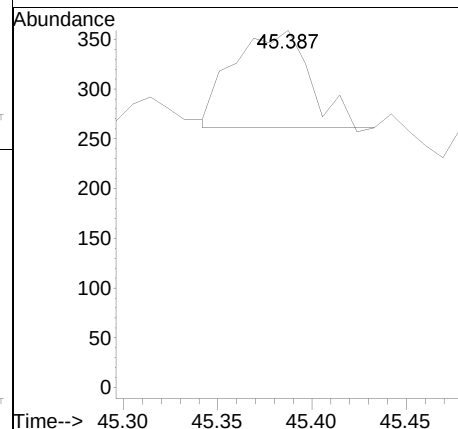
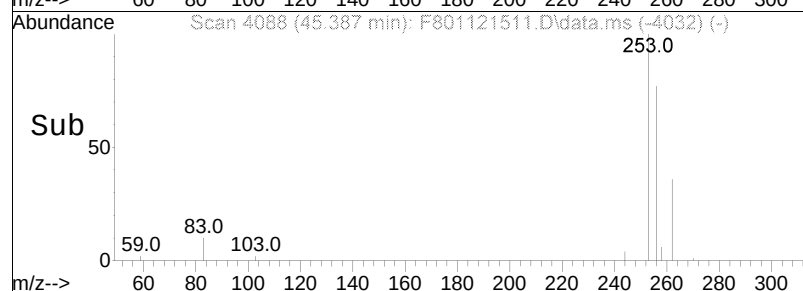
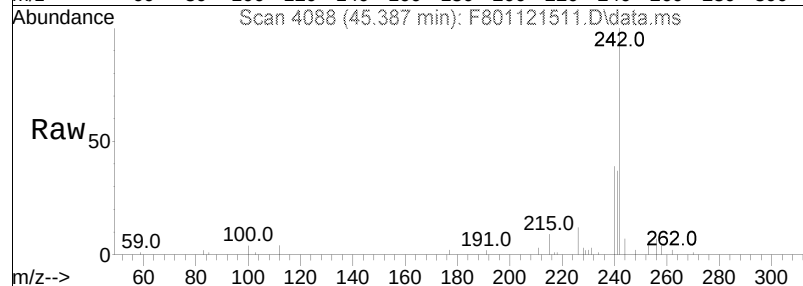
Tgt Ion:191 Resp: 458

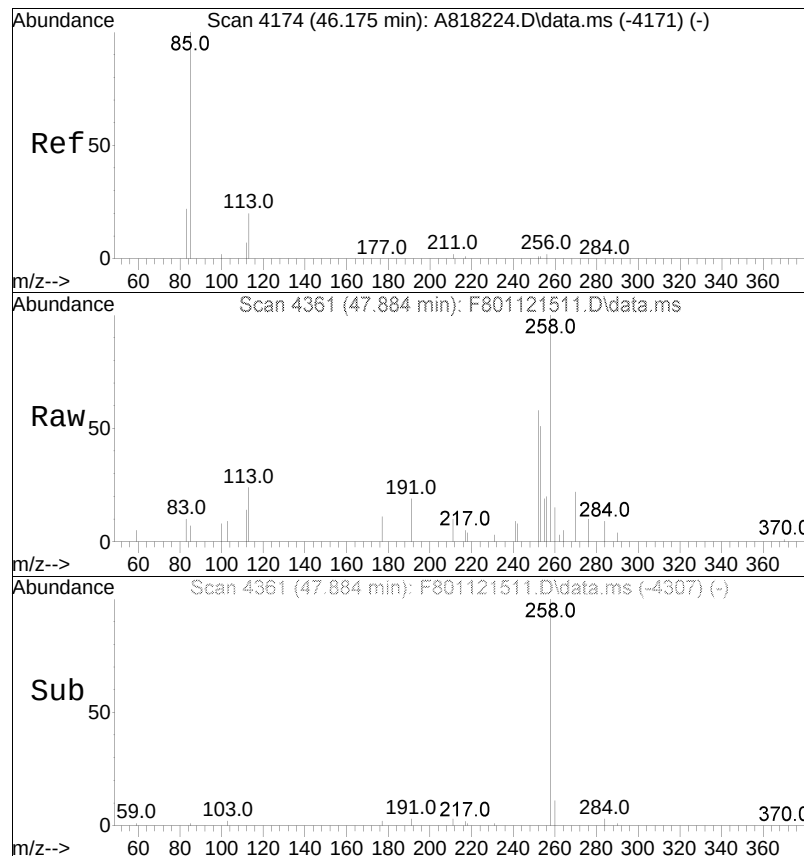




#130
 13b(H),17a(H)-20S-Diacholestane
 Concen: 18.69 ng/ml
 RT: 45.387 min Scan# 4088
 Delta R.T. 0.009 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

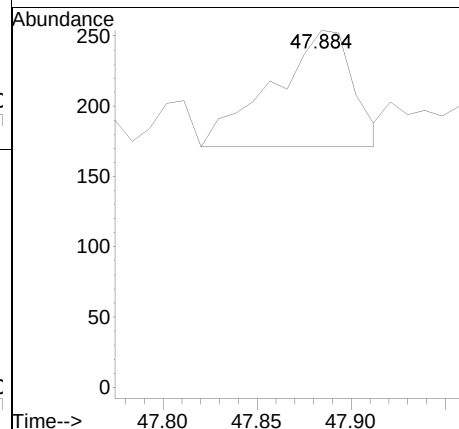
Tgt Ion:217 Resp: 274

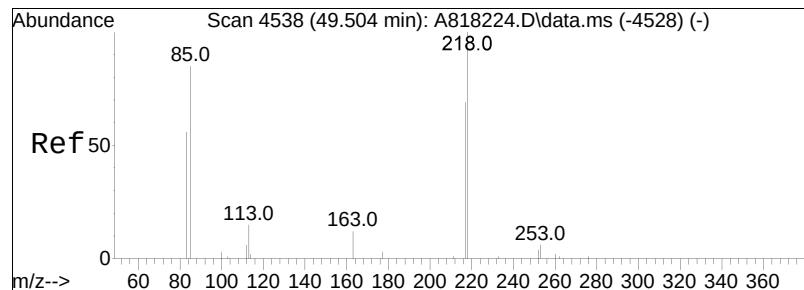




#134
 14a,17a-20R-Chol/13b,17a-20R-E
 Concen: 16.78 ng/ml
 RT: 47.884 min Scan# 4361
 Delta R.T. -0.009 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

Tgt Ion:217 Resp: 246





#147

C26,20R- +C27,20S- triaromatic

Concen: 11.94 ng/mL M4

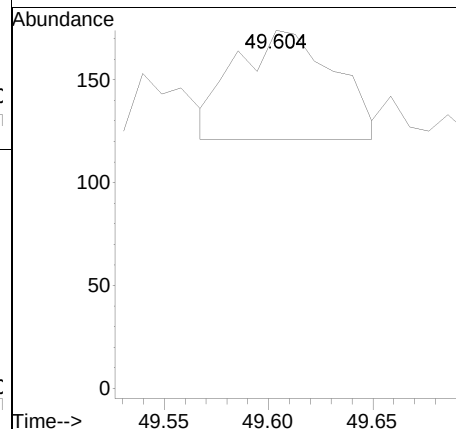
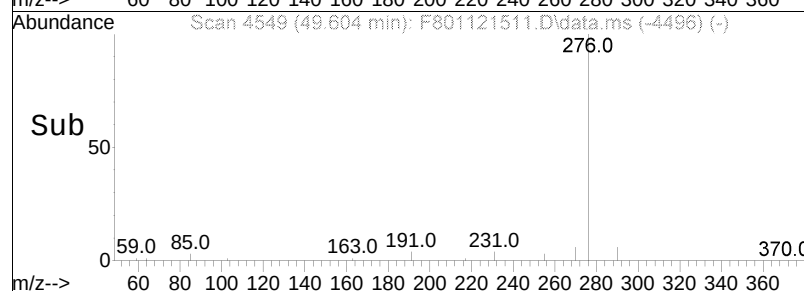
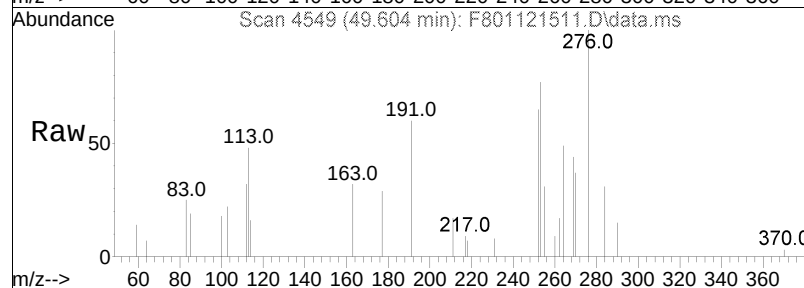
RT: 49.604 min Scan# 4549

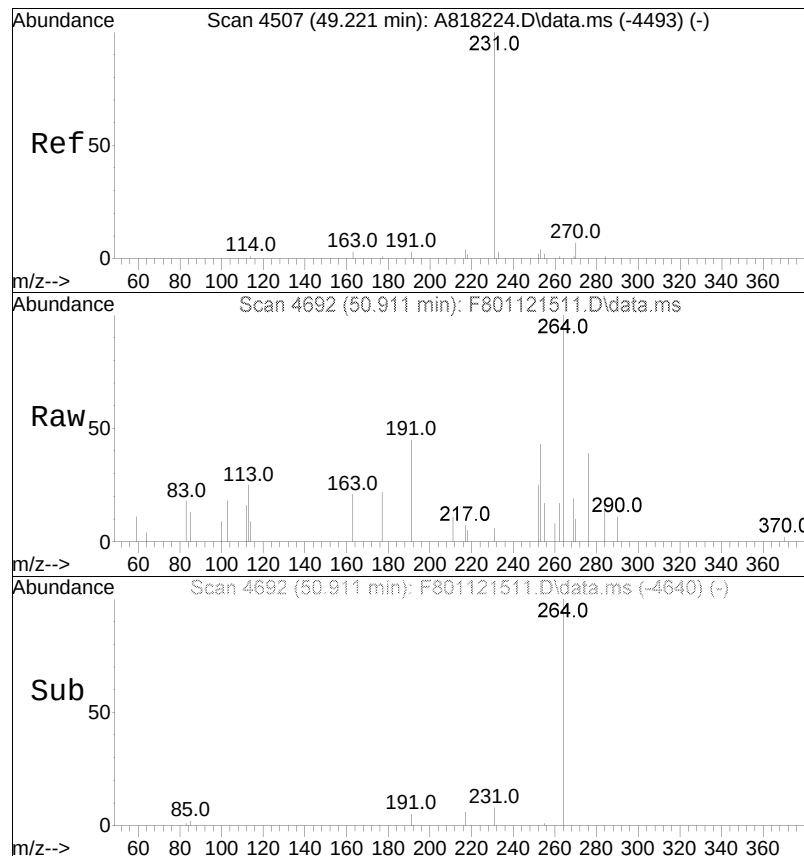
Delta R.T. -0.018 min

Lab File: F801121511.D

Acq: 13 Jan 2015 12:23 am

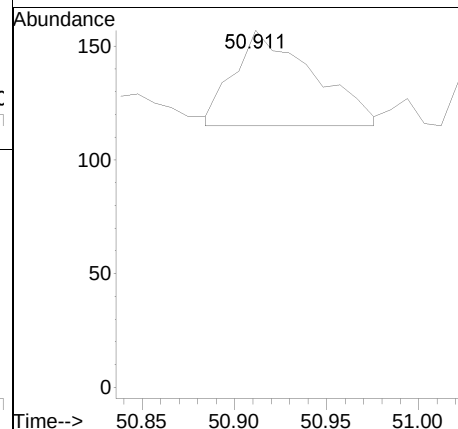
Tgt Ion:231 Resp: 175





#149
 C27,20R-triaromatic steroid
 Concen: 8.53 ng/mL M2
 RT: 50.911 min Scan# 4692
 Delta R.T. -0.027 min
 Lab File: F801121511.D
 Acq: 13 Jan 2015 12:23 am

Tgt Ion:231 Resp: 125



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121512.D
 Acq On : 13 Jan 2015 1:48 am
 Operator : PAH8:MS
 Sample : L1500432-02,32
 Misc : WG755949,WG755041
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 15 11:55:11 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.858	164	28235M4	500.000	ng/mL	0.00
74) Chrysene-d12	43.287	240	37443	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	19.932	136	31176	272.894	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	27.29%#		
42) Phenanthrene-d10	32.734	188	22700	267.686	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	26.77%#		
83) Benzo[b]fluoranthene-d12	47.171	264	22035	301.655	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	30.17%#		
88) Benzo[a]pyrene-d12	48.369	264	19218	299.027	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	29.90%#		
129) 5B(H)Cholane - Surr	43.881	217	4074M4	294.583	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	29.46%#		
Target Compounds						
					Qvalue	
10) Naphthalene	20.087	128	35267989	277364.174	ng/mL	100
11) C1-Naphthalenes	22.733	142	20048801M5	157673.269	ng/mL	
12) C2-Naphthalenes	25.526	156	9554563M5	75141.610	ng/mL	
13) C3-Naphthalenes	27.835	170	3048054M5	23971.341	ng/mL	
14) C4-Naphthalenes	30.590	184	782645M5	6155.091	ng/mL	
23) Biphenyl	24.549	154	1513620	15378.386	ng/mL	100
25) Dibenzofuran	27.625	168	559638M4	5571.051	ng/mL	
26) Acenaphthylene	26.292	152	8085810	67959.995	ng/mL	100
27) Acenaphthene	26.986	153	614413	8451.263	ng/mL	96
29) Fluorene	29.021	166	2516610M4	32337.072	ng/mL	
30) C1-Fluorenes	31.229	180	1338230M5	17195.529	ng/mL	
31) C2-Fluorenes	33.400	194	851997M5	10947.699	ng/mL	
32) C3-Fluorenes	35.372	208	307594M5	3952.416	ng/mL	
33) Dibenzothiophene	32.323	184	1133755	10422.989	ng/mL	93
37) OTP	0.000		0	N.D.	d	
38) C1-Dibenzothiophenes	34.085	198	1190282M5	10942.660	ng/mL	
38) C1-Dibenzothiophenes BS	34.085	198	1190282M5	10942.660	ng/mL	
39) C2-Dibenzothiophenes	35.764	212	747034M5	6867.733	ng/mL	
40) C3-Dibenzothiophenes	37.562	226	298234M5	2741.765	ng/mL	
41) C4-Dibenzothiophenes	39.243	240	83813M5	770.521	ng/mL	
43) Phenanthrene	32.871	178	8515027	80770.651	ng/mL	99
49) C1-Phenanthrenes/Anthrace	34.897	192	6191490M5	58730.369	ng/mL	
50) C2-Phenanthrenes/Anthrace	37.033	206	2350907M5	22299.904	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121512.D
 Acq On : 13 Jan 2015 1:48 am
 Operator : PAH8:MS
 Sample : L1500432-02,32
 Misc : WG755949,WG755041
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 15 11:55:11 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50)	C2-Phenanthrenes/Anthr BS	37.033	206	2350907M5	22299.904	ng/mL	
51)	5AA IS BKGD	0.000		0	N.D.	d	
52)	C3-Phenanthrenes/Anthrace	38.859	220	628564M5	5962.344	ng/mL	
53)	C4-Phenanthrenes/Anthrace	41.050	234	134061M5	1271.657	ng/mL	
55)	Anthracene	33.026	178	2895996	29985.181	ng/mL	96
56)	Carbazole	33.665	167	157535	1525.451	ng/mL#	87
58)	Fluoranthene	37.599	202	2623814M4	24531.829	ng/mL	
59)	Benzo(b)fluorene	40.092	216	426413M3	6884.628	ng/mL	
60)	Pyrene	38.494	202	3853952	34406.527	ng/mL	96
61)	C1-Fluoranthenes/Pyrenes	39.854	216	4078910M5	36414.862	ng/mL	
62)	C2-Fluoranthenes/Pyrenes	41.507	230	1227280M5	10956.660	ng/mL	
63)	C3-Fluoranthenes/Pyrenes	43.753	244	388258M5	3466.211	ng/mL	
64)	C4-Fluoranthenes/Pyrenes	44.995	258	129605M5	1157.061	ng/mL	
66)	Naphthobenzothiophene	42.292	234	248912	2525.878	ng/mL	93
67)	Naphthobenzothiophene-2,1	42.292	234	248912	2525.878	ng/mL	93
68)	Naphthobenzothiophene-1,2	42.630	234	69321	703.447	ng/mL#	13
69)	Naphthobenzothiophene-2,3	42.931	234	101753M3	1032.556	ng/mL	
70)	C1-Naphthobenzothiophenes	43.680	248	365280M5	3706.743	ng/mL	
71)	C2-Naphthobenzothiophenes	45.177	262	179830M5	1824.856	ng/mL	
72)	C3-Naphthobenzothiophenes	47.052	276	71284M5	723.367	ng/mL	
73)	C4-Naphthobenzothiophenes	49.860	290	33381M5	338.740	ng/mL	
75)	Benz[a]anthracene	43.232	228	1336760M3	15534.403	ng/mL	
77)	Chrysene/Triphenylene	43.397	228	1219906	14810.343	ng/mL	100
78)	C1-Chrysenes	44.849	242	1089766M5	13230.371	ng/mL	
79)	C2-Chrysenes	46.540	256	522179M5	6339.546	ng/mL	
79)	C2-Chrysenes BS	46.540	256	522179M5	6339.546	ng/mL	
80)	BBF-D12 Surr BKGD	0.000		0	N.D.	d	
81)	C3-Chrysenes	48.149	270	220428M5	2676.120	ng/mL	
82)	C4-Chrysenes	49.146	284	53106M5	644.737	ng/mL	
84)	Benzo[b]fluoranthene	47.262	252	472286	5138.532	ng/mL	98
85)	Benzo[j]+[k]fluoranthene	47.335	252	699919M6	7733.432	ng/mL	
86)	Benzo[a]fluoranthene	47.646	252	365026	4033.186	ng/mL	99
87)	Benzo[e]pyrene	48.278	252	516735	5559.344	ng/mL	98
89)	Benzo[a]pyrene	48.479	252	1053544	12397.135	ng/mL	94
90)	Perylene	48.771	252	163267	1829.258	ng/mL	95
91)	Indeno[1,2,3-cd]pyrene	53.299	276	420850M4	3871.131	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.326	278	147974M3	1608.883	ng/mL	
93)	Benzo[g,h,i]perylene	54.615	276	413580	4009.161	ng/mL	99
94)	Hopane (T19)	0.000		0	N.D.	d	
96)	C23 Tricyclic Terpane (T4	0.000		0	N.D.	d	
97)	C24 Tricyclic Terpane (T5	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121512.D
 Acq On : 13 Jan 2015 1:48 am
 Operator : PAH8:MS
 Sample : L1500432-02,32
 Misc : WG755949,WG755041
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 15 11:55:11 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	C25 Tricyclic Terpane (T6	0.000		0	N.D.	d	
99)	C24 Tetracyclic Terpane (	0.000		0	N.D.	d	
100)	C26 Tricyclic Terpane-22S	0.000		0	N.D.	d	
101)	C26 Tricyclic Terpane-22R	0.000		0	N.D.	d	
102)	C28 Tricyclic Terpane-22S	0.000		0	N.D.	d	
103)	C28 Tricyclic Terpane-22R	46.713	191	688	22.132	ng/ml	100
104)	C29 Tricyclic Terpane-22S	0.000		0	N.D.	d	
105)	C29 Tricyclic Terpane-22R	0.000		0	N.D.	d	
106)	18a-22,29,30-Trisnorneo	0.000		0	N.D.	d	
107)	C30 Tricyclic Terpane-22S	0.000		0	N.D.	d	
108)	C30 Tricyclic Terpane-22R	0.000		0	N.D.	d	
109)	17a(H)-22,29,30-Trisnor	0.000		0	N.D.	d	
110)	17a/b,21b/a 28,30-Bisnor	0.000		0	N.D.	d	
111)	17a(H),21b(H)-25-Norhop	0.000		0	N.D.	d	
112)	30-Norhopane (T15)	0.000		0	N.D.	d	
113)	18a(H)-30-Norneohopane-C	0.000		0	N.D.	d	
114)	17a(H)-Diahopane (X)	0.000		0	N.D.	d	
115)	30-Normoretane (T17)	0.000		0	N.D.	d	
116)	18a(H)&18b(H)-Oleananes (	0.000		0	N.D.	d	
117)	Moretane (T20)	0.000		0	N.D.	d	
118)	30-Homohopane-22S (T21)	0.000		0	N.D.	d	
119)	30-Homohopane-22R (T22)	0.000		0	N.D.	d	
120)	Gammacerane/C32-diahopane	0.000		0	N.D.	d	
121)	30,31-Bishomohopane-22S (	0.000		0	N.D.	d	
122)	30,31-Bishomohopane-22R (	0.000		0	N.D.	d	
123)	30,31-Trishomohopane-22S	0.000		0	N.D.	d	
124)	30,31-Trishomohopane-22R	0.000		0	N.D.	d	
125)	Tetrakishomohopane-22S (T	0.000		0	N.D.	d	
126)	Tetrakishomohopane-22R (T	0.000		0	N.D.	d	
127)	Pentakishomohopane-22S (T	0.000		0	N.D.	d	
128)	Pentakishomohopane-22R (T	0.000		0	N.D.	d	
130)	13b(H),17a(H)-20S-Diachol	45.378	217	501M4	36.226	ng/ml	
131)	13b(H),17a(H)-20R-Diachol	0.000		0	N.D.	d	
132)	13b,17a-20S-Methyldiachol	0.000		0	N.D.	d	
133)	14a,17a-20S-Chol/13b,17a-	0.000		0	N.D.	d	
134)	14a,17a-20R-Chol/13b,17a-	0.000		0	N.D.	d	
135)	Unknown Sterane (S18)	0.000		0	N.D.	d	
136)	13a,17b-20S-Ethyldiachole	0.000		0	N.D.	d	
137)	14a,17a-20S-Methylcholest	0.000		0	N.D.	d	
138)	14a,17a-20R-Methylcholest	0.000		0	N.D.	d	
139)	14a(H),17a(H)-20S-Ethylch	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121512.D
 Acq On : 13 Jan 2015 1:48 am
 Operator : PAH8:MS
 Sample : L1500432-02,32
 Misc : WG755949,WG755041
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 15 11:55:11 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
140) 14a(H),17a(H)-20R-Ethylch	0.000		0	N.D.	d	
141) 14b(H),17b(H)-20R-Cholest	0.000		0	N.D.	d	
142) 14b(H),17b(H)-20S-Cholest	0.000		0	N.D.	d	
143) 14b,17b-20R-Methylcholest	0.000		0	N.D.	d	
144) 14b,17b-20S-Methylcholest	0.000		0	N.D.	d	
145) 14b(H),17b(H)-20R-Ethylch	0.000		0	N.D.	d	
146) 14b(H),17b(H)-20S-Ethylch	0.000		0	N.D.	d	
147) C26,20R- +C27,20S- triaro	0.000		0	N.D.	d	
148) C28,20S-triaromatic stero	0.000		0	N.D.	d	
149) C27,20R-triaromatic stero	0.000		0	N.D.	d	
150) C28,20R-triaromatic stero	0.000		0	N.D.		

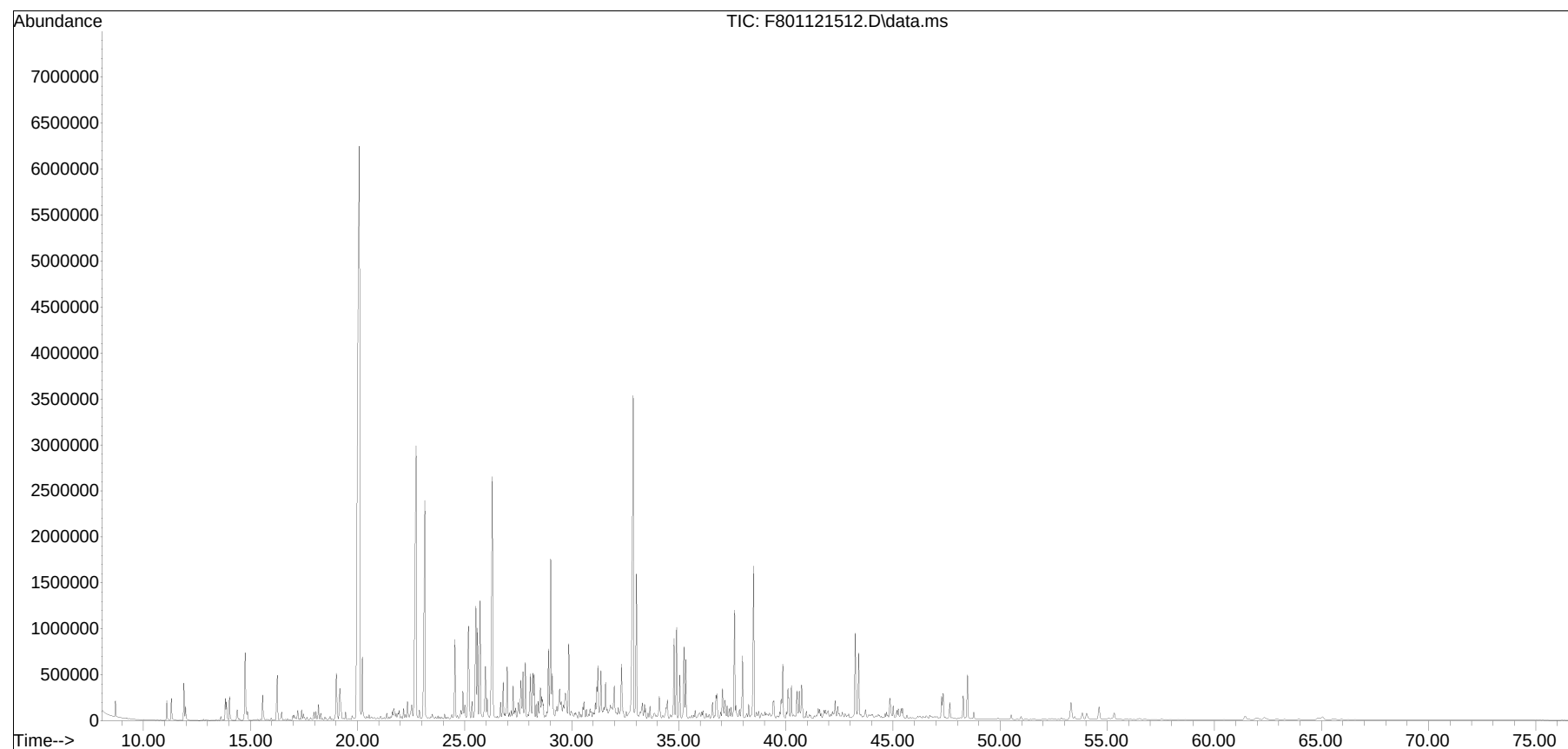
(#) = qualifier out of range (m) = manual integration (+) = signals summed

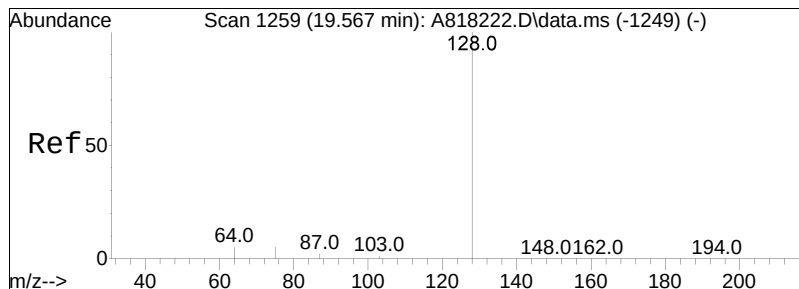
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN12\
Data File : F801121512.D
Acq On : 13 Jan 2015 1:48 am
Operator : PAH8:MS
Sample : L1500432-02,32
Misc : WG755949,WG755041
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 15 11:55:11 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 13 07:23:40 2015
Response via : Initial Calibration

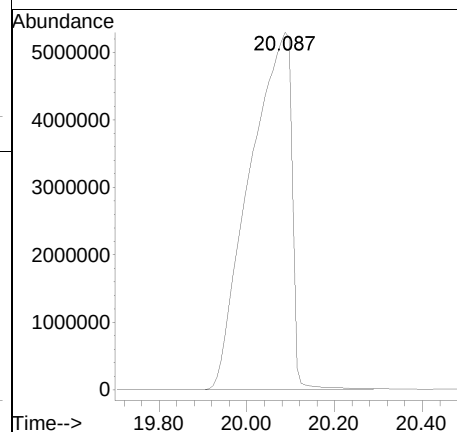
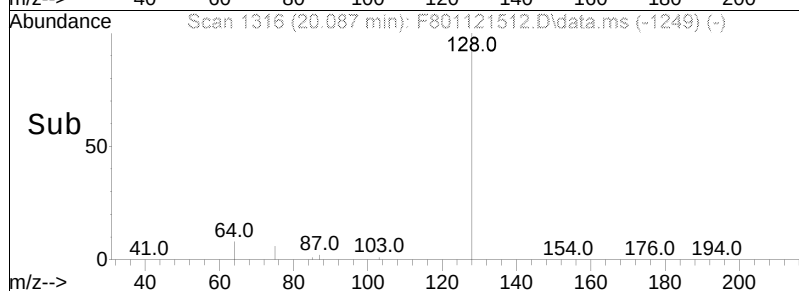
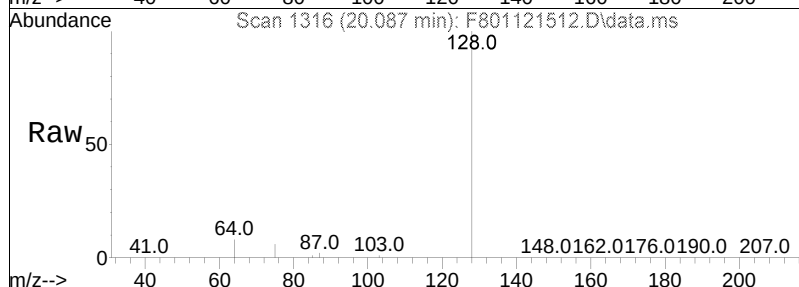
Sub List : ALKPAHURS - ALKPAH and BIO

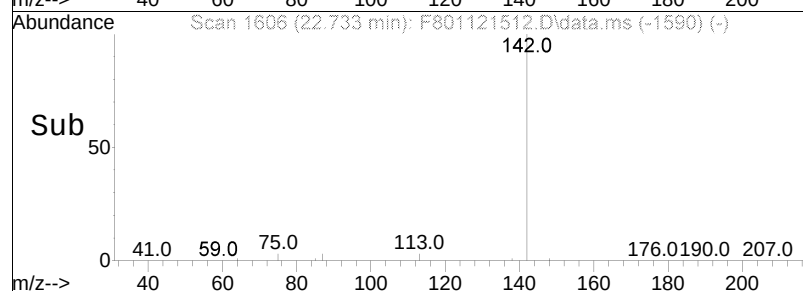
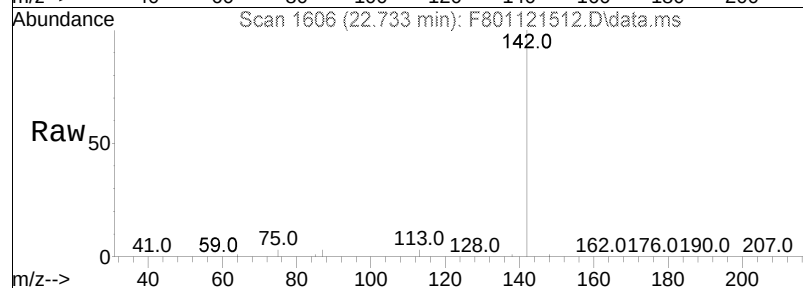
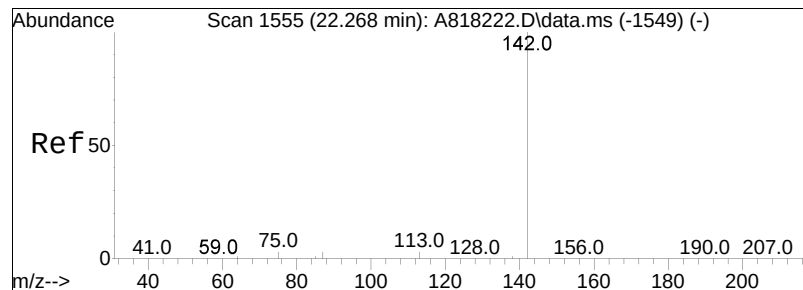




#10
Naphthalene
Concen: 277364.17 ng/mL
RT: 20.087 min Scan# 1316
Delta R.T. 0.110 min
Lab File: F801121512.D
Acq: 13 Jan 2015 1:48 am

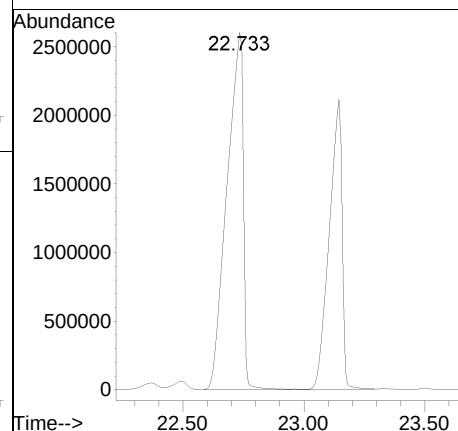
Tgt Ion:128 Resp:35267989

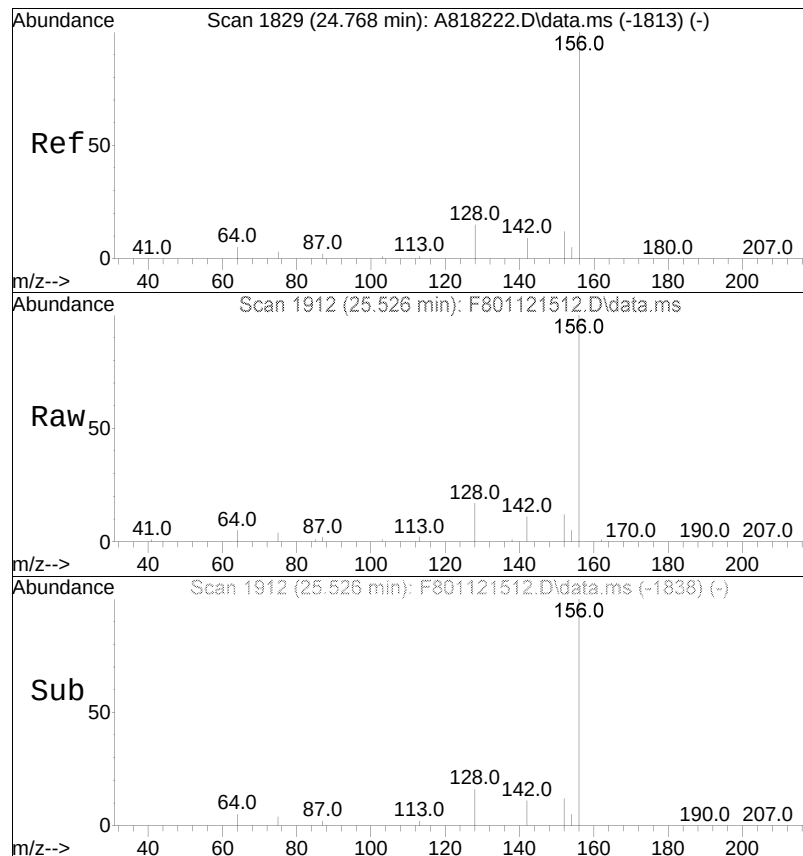




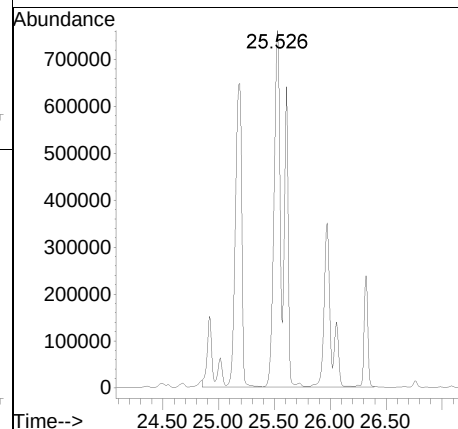
#11
 C1-Naphthalenes
 Concen: 157673.27 ng/mL M5
 RT: 22.733 min Scan# 1606
 Delta R.T. 0.064 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

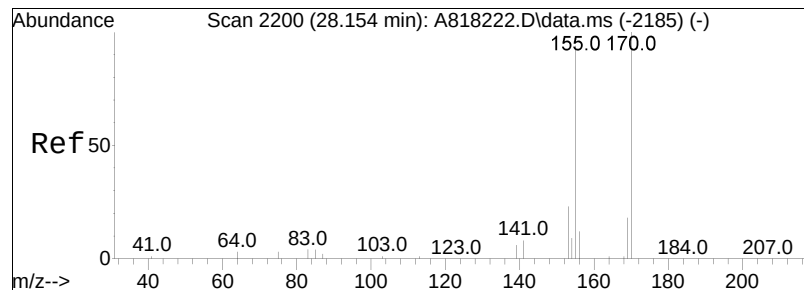
Tgt Ion:142 Resp:20048801





#12
 C2-Naphthalenes
 Concen: 75141.61 ng/mL M5
 RT: 25.526 min Scan# 1912
 Delta R.T. 0.017 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am
 Tgt Ion:156 Resp: 9554563





#13

C3-Naphthalenes

Concen: 23971.34 ng/mL M5

RT: 27.835 min Scan# 2165

Delta R.T. 0.008 min

Lab File: F801121512.D

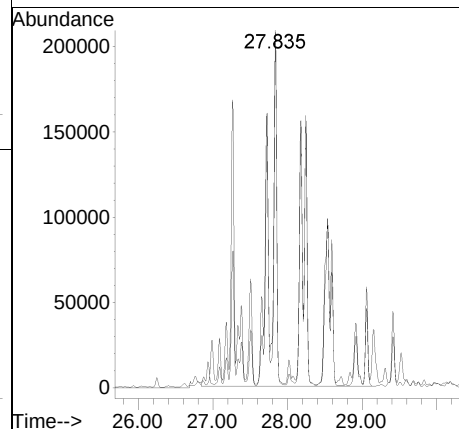
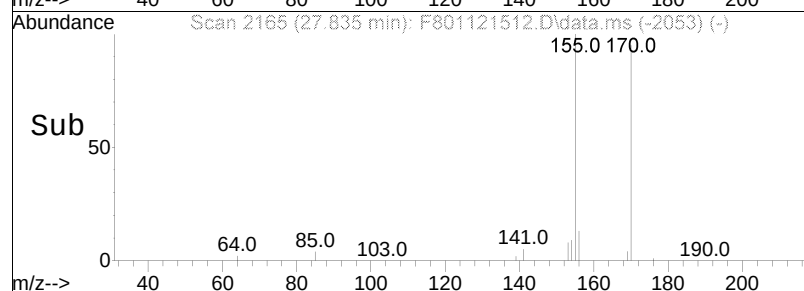
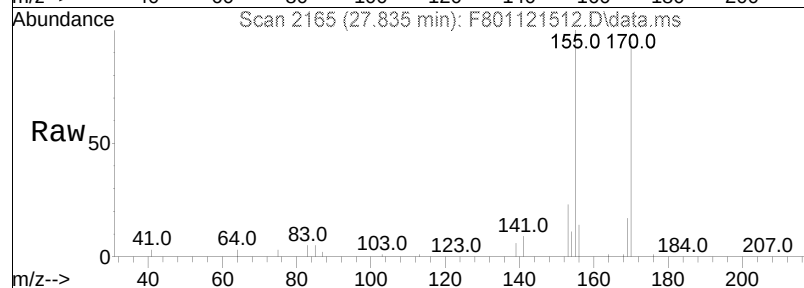
Acq: 13 Jan 2015 1:48 am

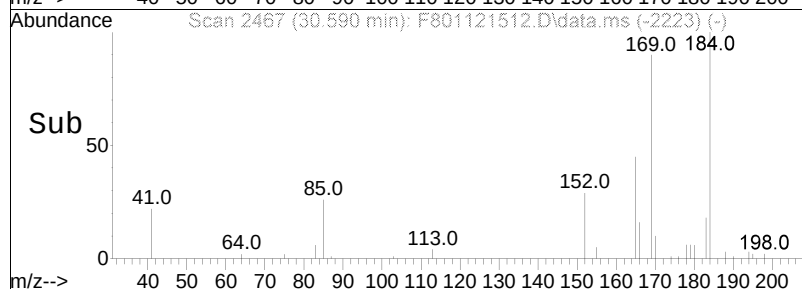
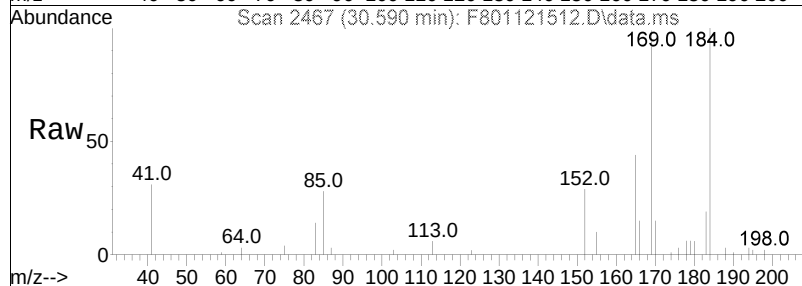
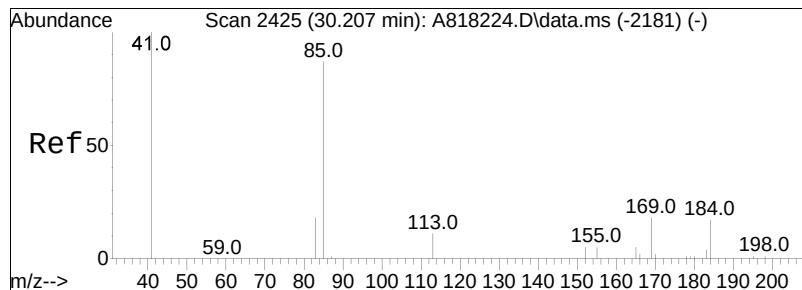
Tgt Ion:170 Resp: 3048054

Ion Ratio Lower Upper

170 100

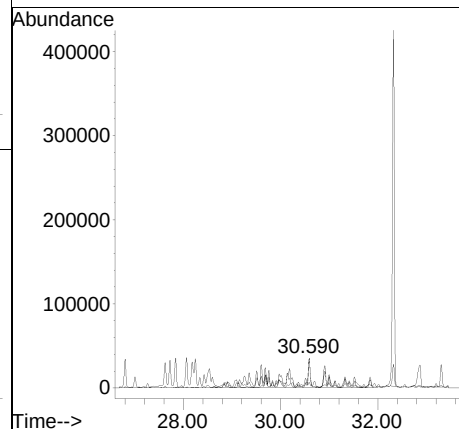
155 17.6 75.7 140.7#

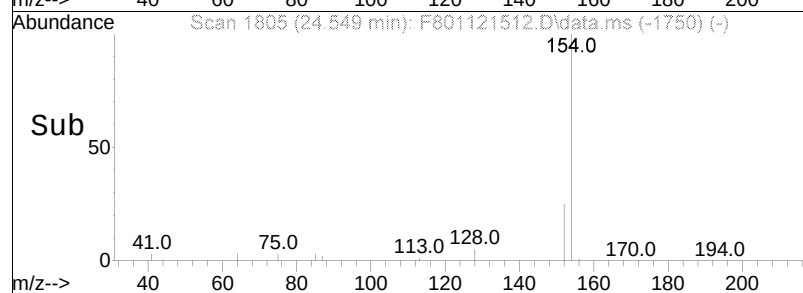
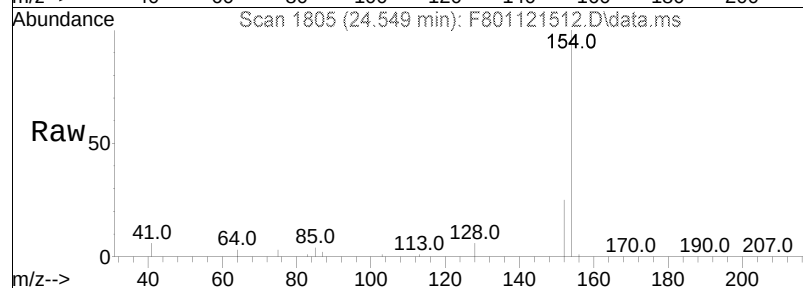
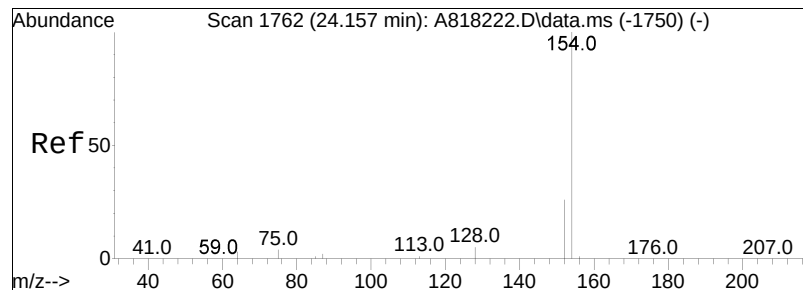




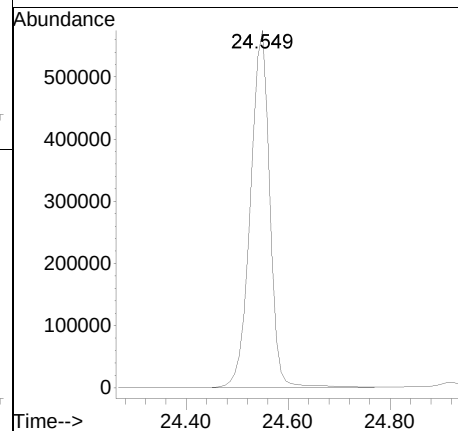
#14
C4-Naphthalenes
Concen: 6155.09 ng/mL M5
RT: 30.590 min Scan# 2467
Delta R.T. 0.000 min
Lab File: F801121512.D
Acq: 13 Jan 2015 1:48 am

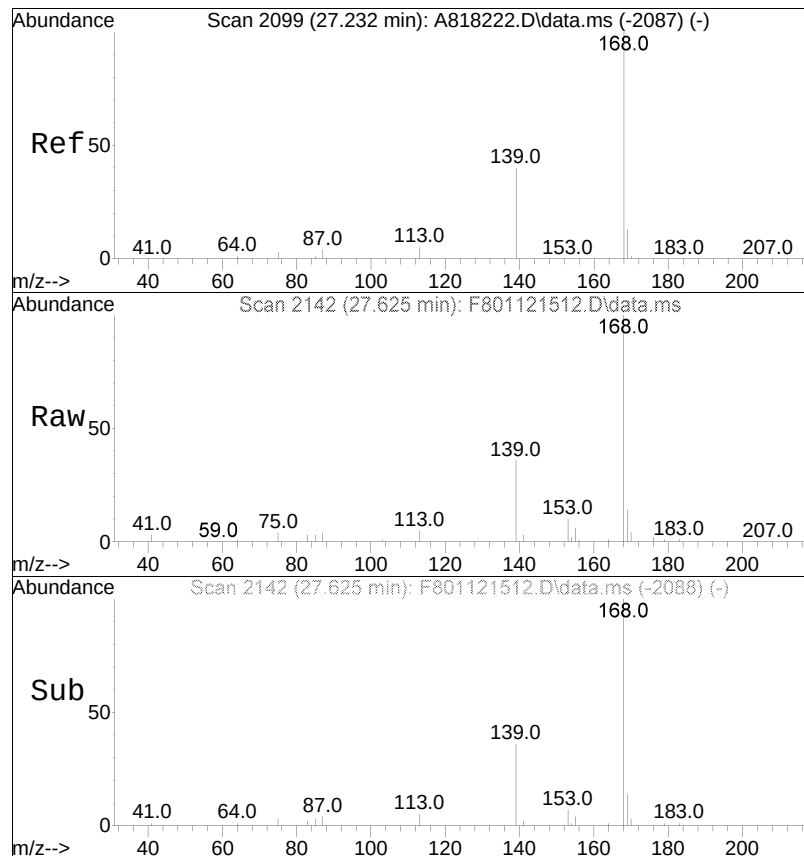
Tgt Ion	Ratio	Lower	Upper
184	100		
169	5.6	87.1	161.7#
183	1.3	25.7	47.7#





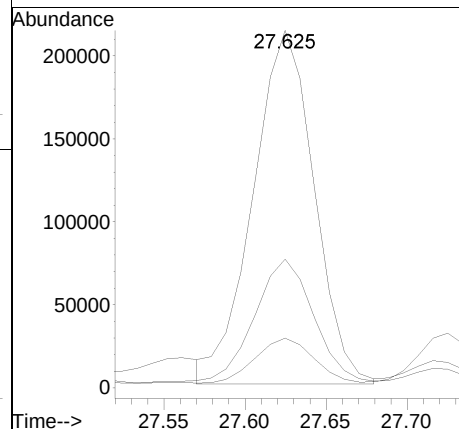
#23
 Biphenyl
 Concen: 15378.39 ng/mL
 RT: 24.549 min Scan# 1805
 Delta R.T. 0.000 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am
 Tgt Ion:154 Resp: 1513620

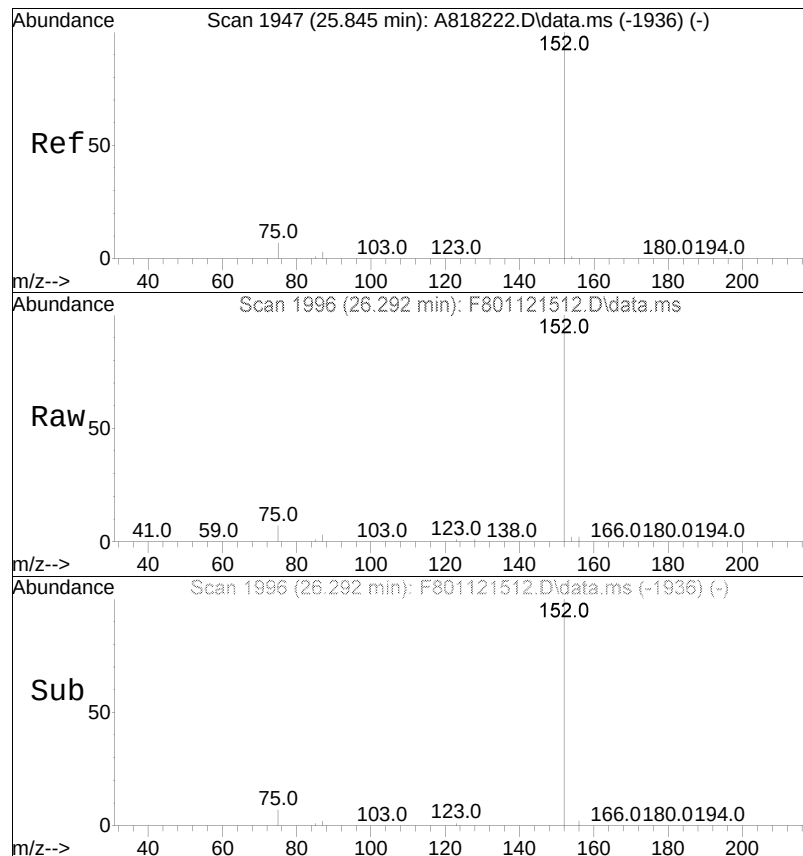




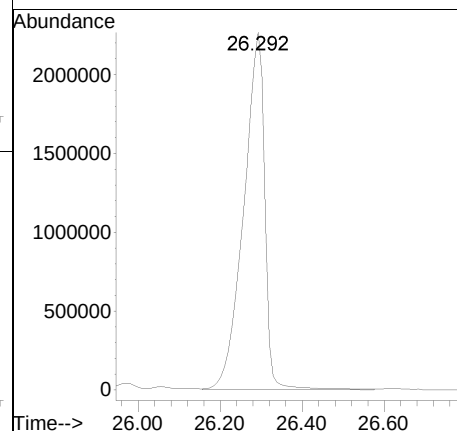
#25
 Dibenzofuran
 Concen: 5571.05 ng/mL M4
 RT: 27.625 min Scan# 2142
 Delta R.T. -0.009 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

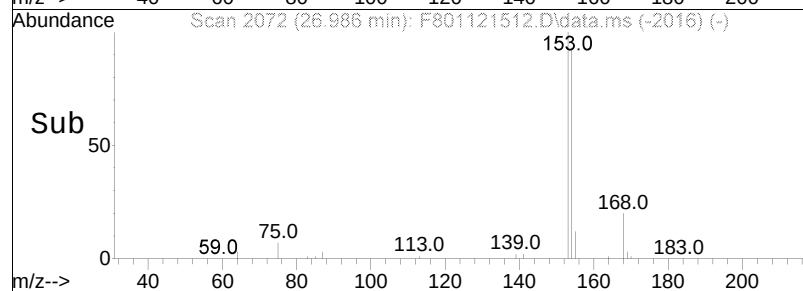
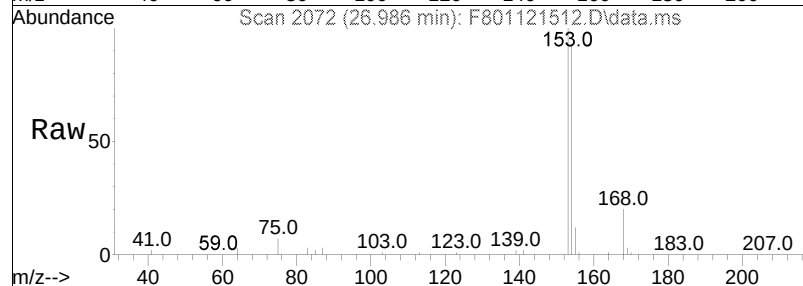
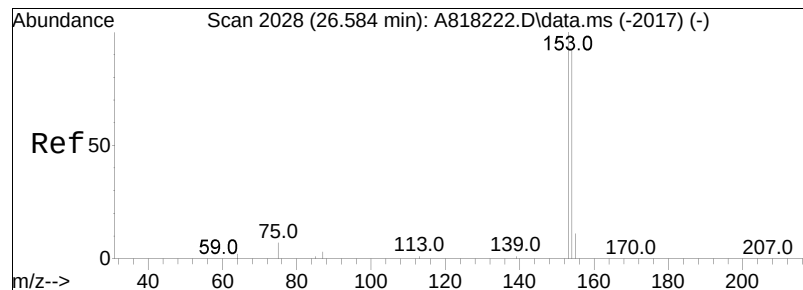
Tgt Ion:	168	Resp:	559638
Ion Ratio	Lower	Upper	
168	100		
139	33.5	26.6	49.4
169	12.0	9.4	17.4





#26
Acenaphthylene
Concen: 67959.99 ng/mL
RT: 26.292 min Scan# 1996
Delta R.T. 0.046 min
Lab File: F801121512.D
Acq: 13 Jan 2015 1:48 am
Tgt Ion:152 Resp: 8085810





#27

Acenaphthene

Concen: 8451.26 ng/mL

RT: 26.986 min Scan# 2072

Delta R.T. 0.009 min

Lab File: F801121512.D

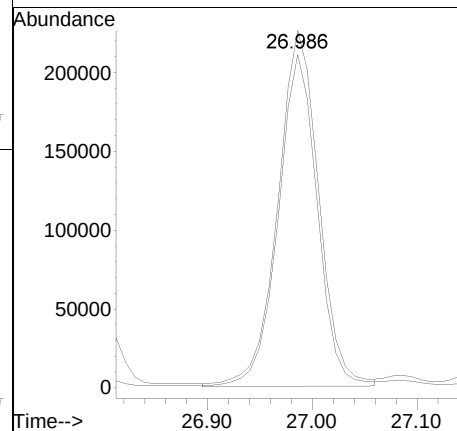
Acq: 13 Jan 2015 1:48 am

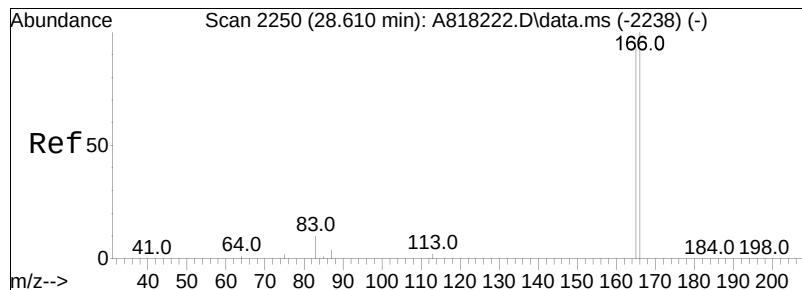
Tgt Ion:153 Resp: 614413

Ion Ratio Lower Upper

153 100

154 88.3 64.3 119.5





#29

Fluorene

Concen: 32337.07 ng/mL M4

RT: 29.021 min Scan# 2295

Delta R.T. 0.018 min

Lab File: F801121512.D

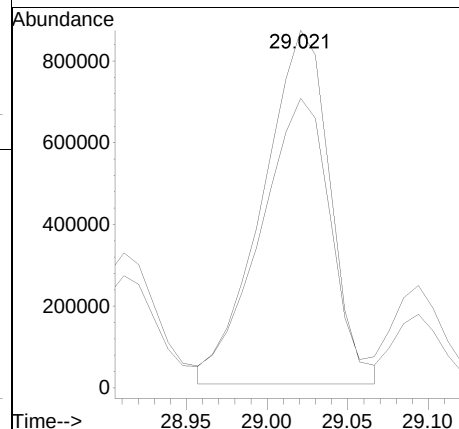
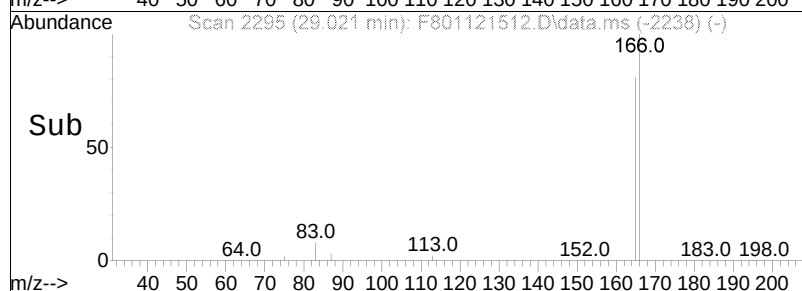
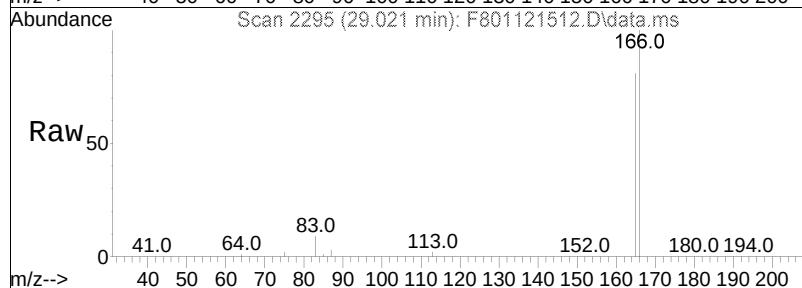
Acq: 13 Jan 2015 1:48 am

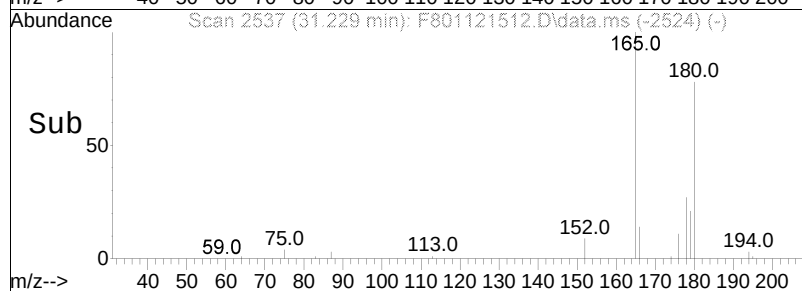
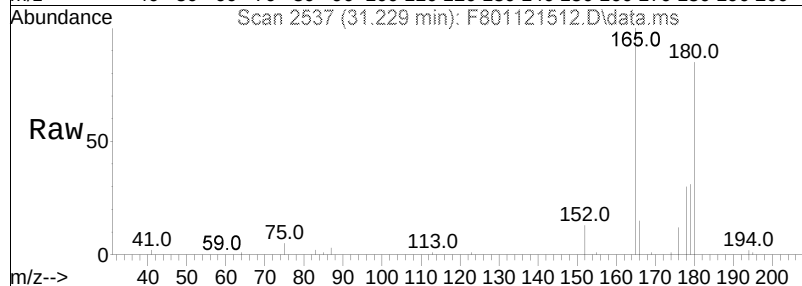
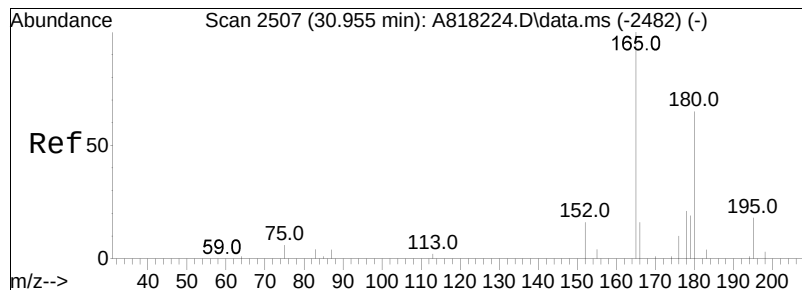
Tgt Ion:166 Resp: 2516610

Ion Ratio Lower Upper

166 100

165 80.8 65.9 122.3





#30

C1-Fluorenes

Concen: 17195.53 ng/mL M5

RT: 31.229 min Scan# 2537

Delta R.T. -0.128 min

Lab File: F801121512.D

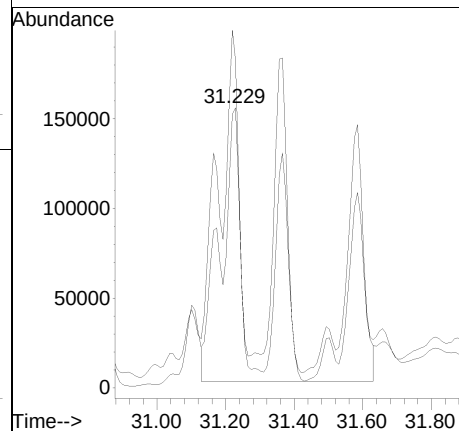
Acq: 13 Jan 2015 1:48 am

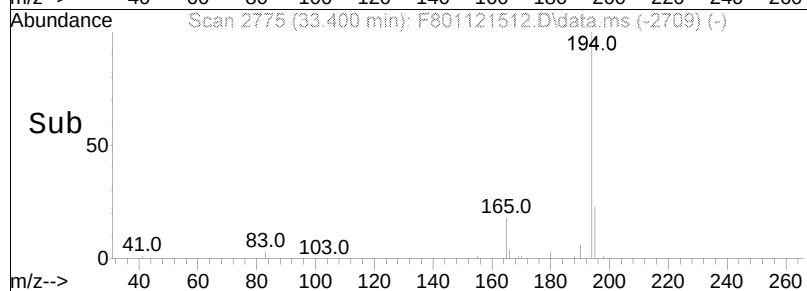
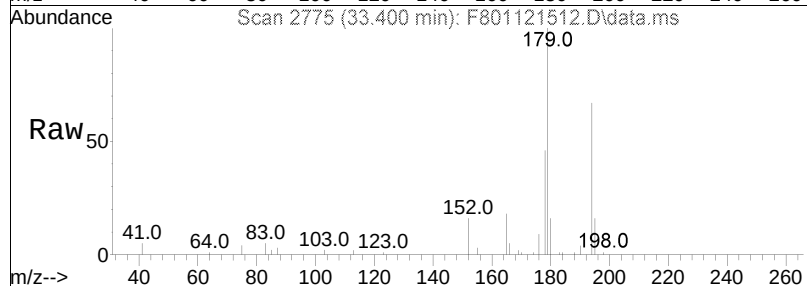
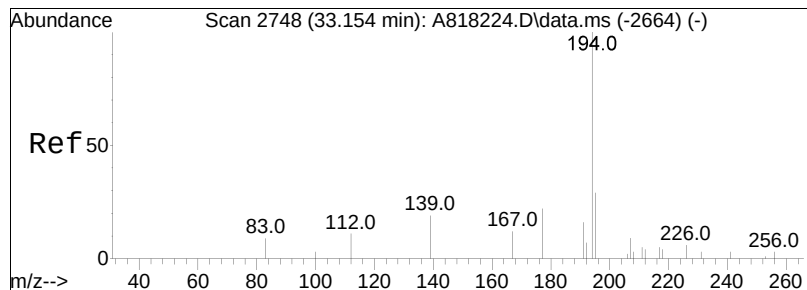
Tgt Ion:180 Resp: 1338230

Ion Ratio Lower Upper

180 100

165 35.1 114.8 213.2#





#31

C2-Fluorenes

Concen: 10947.70 ng/mL M5

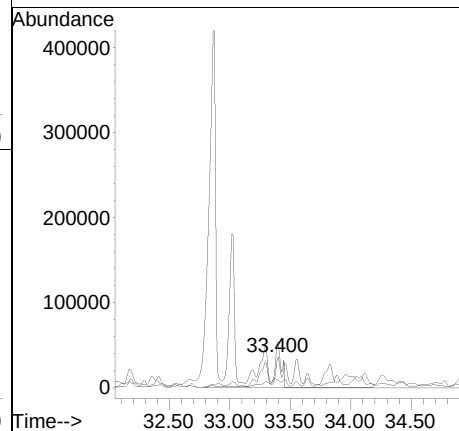
RT: 33.400 min Scan# 2775

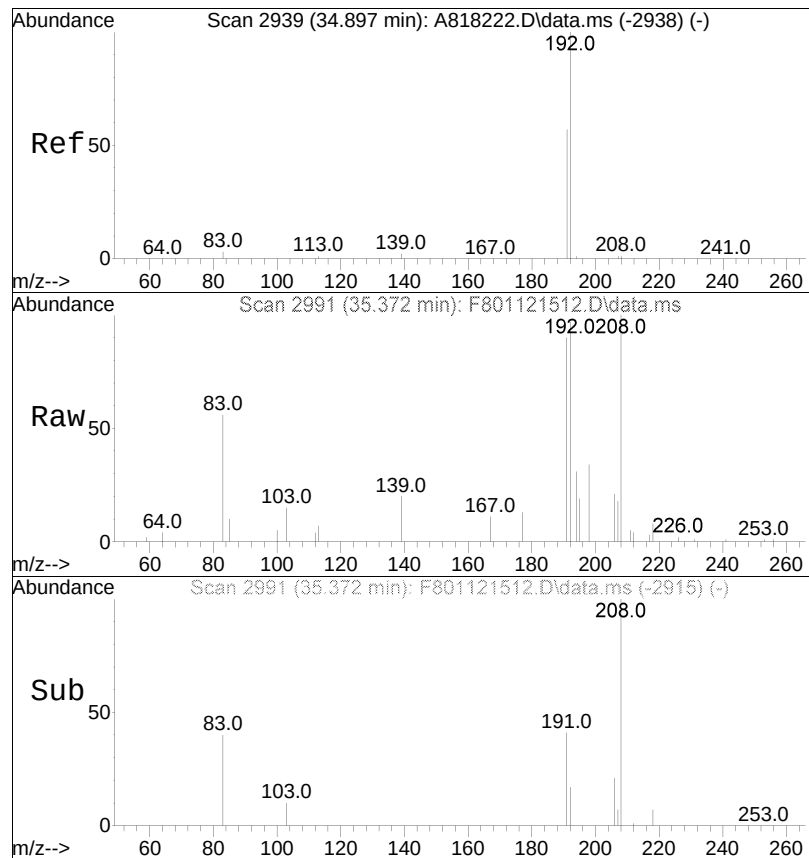
Delta R.T. -0.146 min

Lab File: F801121512.D

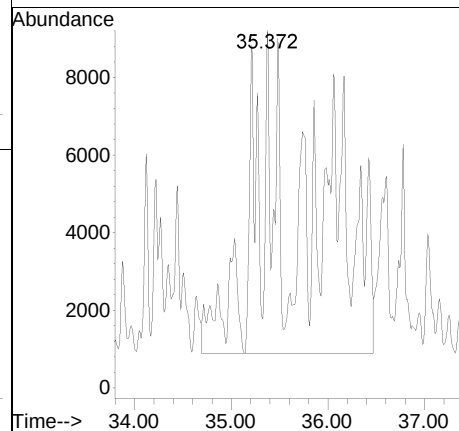
Acq: 13 Jan 2015 1:48 am

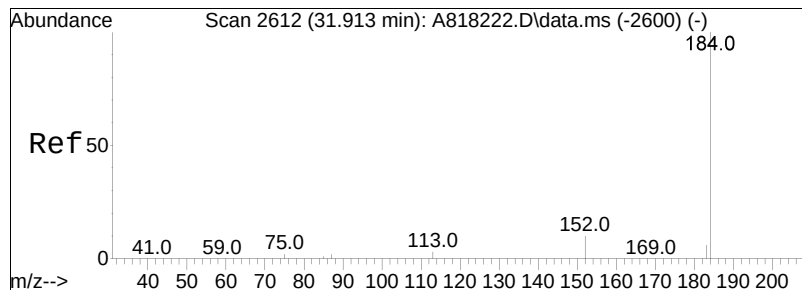
Tgt Ion	Ratio	Resp	Lower	Upper
194	100	851997		
179	0.0	0.0	0.0	
195	1.8	23.2	43.0	





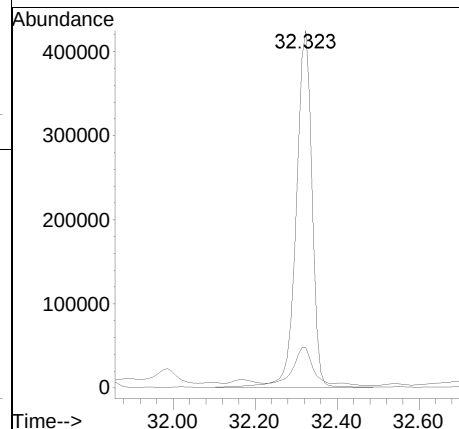
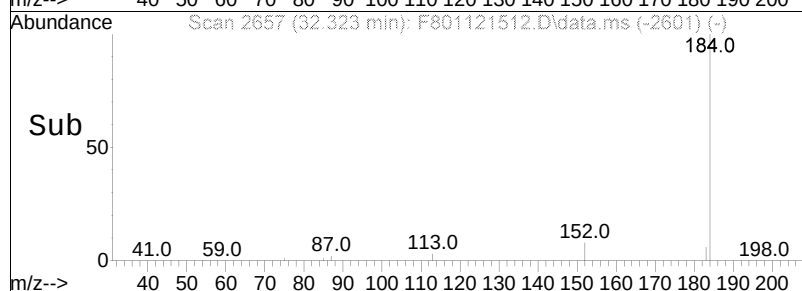
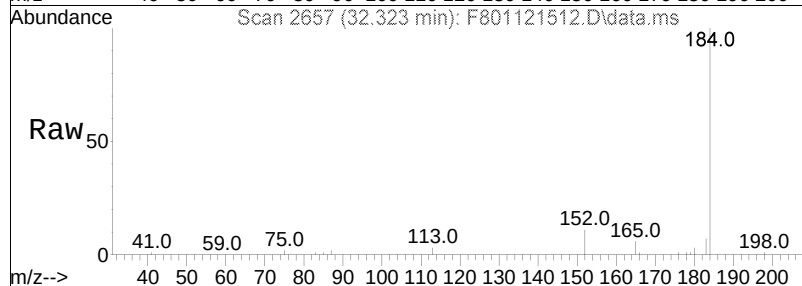
#32
C3-Fluorenes
Concen: 3952.42 ng/mL M5
RT: 35.372 min Scan# 2991
Delta R.T. 0.000 min
Lab File: F801121512.D
Acq: 13 Jan 2015 1:48 am
Tgt Ion:208 Resp: 307594

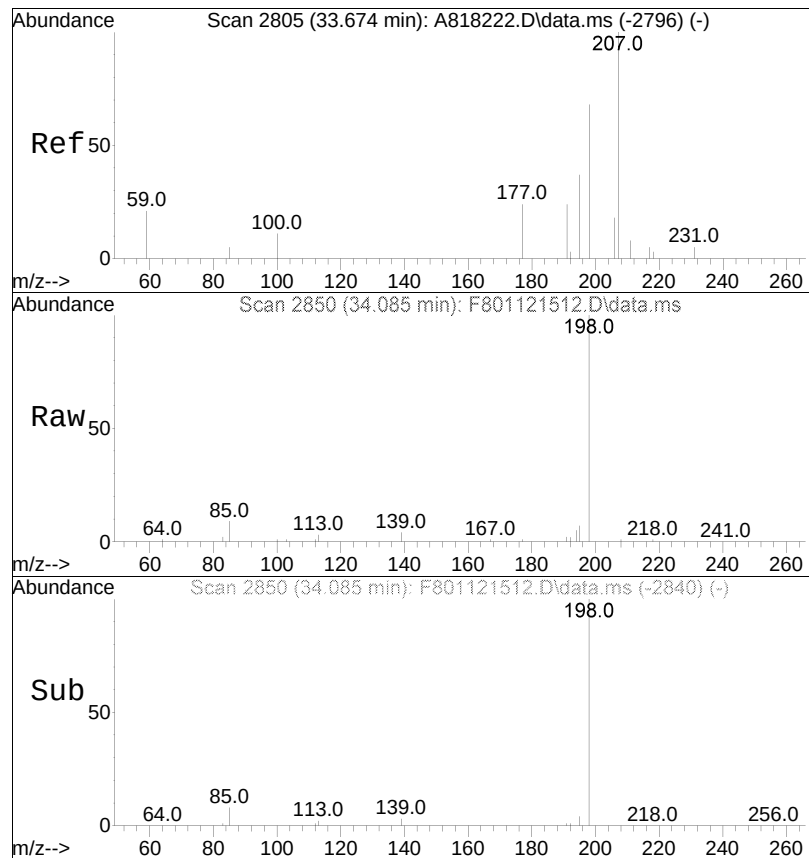




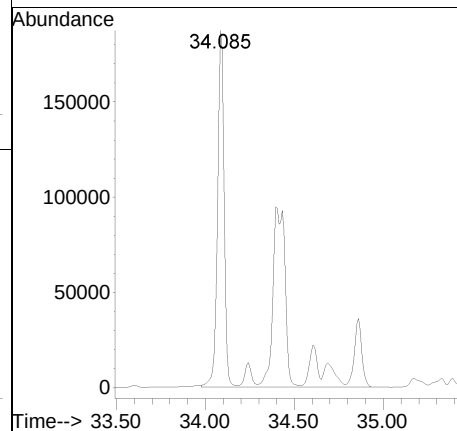
#33
 Dibenzothiophene
 Concen: 10422.99 ng/mL
 RT: 32.323 min Scan# 2657
 Delta R.T. 0.009 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

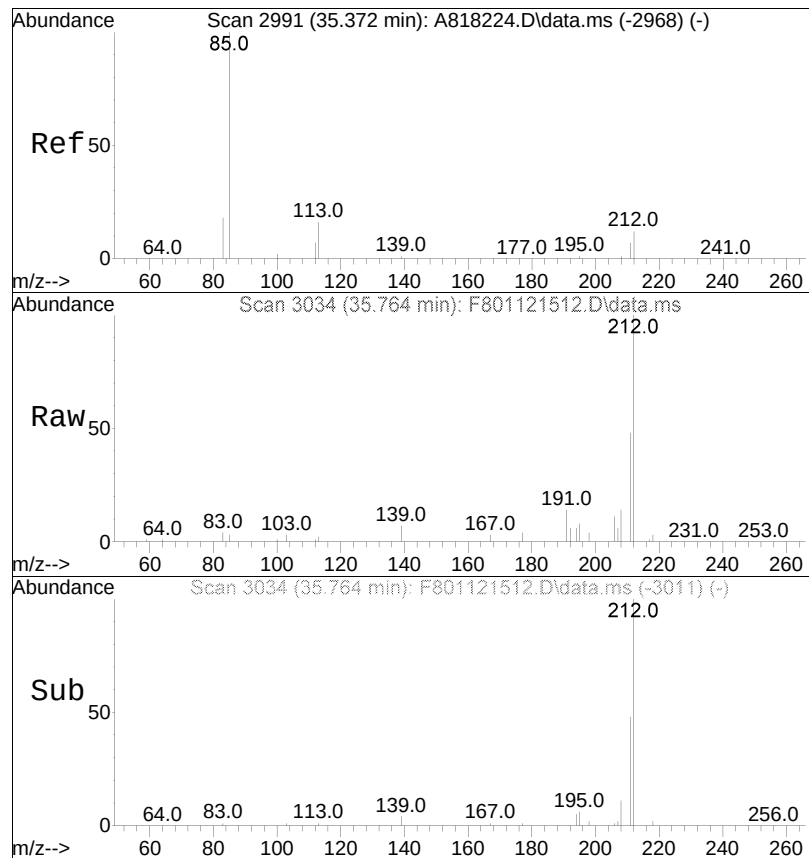
Tgt Ion:184 Resp: 1133755
 Ion Ratio Lower Upper
 184 100
 152 12.3 6.9 12.7



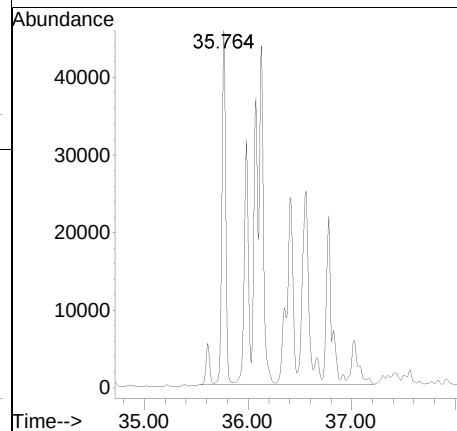


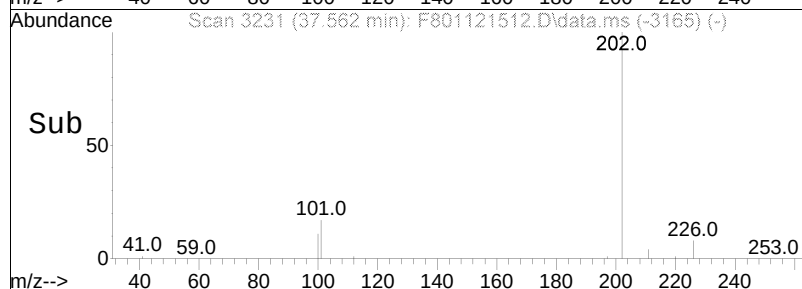
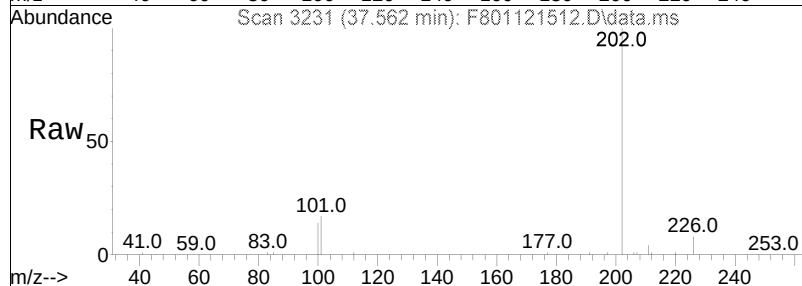
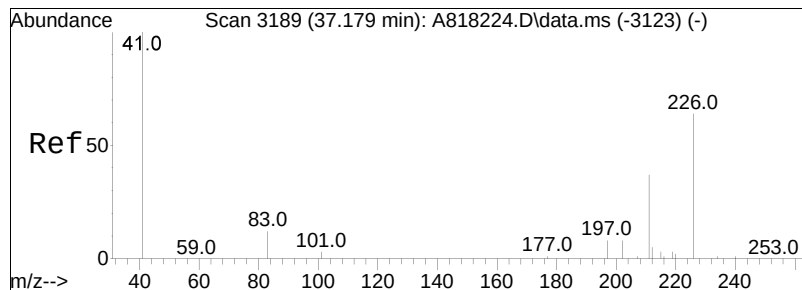
#38
 C1-Dibenzothiophenes
 Concen: 10942.66 ng/mL M5
 RT: 34.085 min Scan# 2850
 Delta R.T. 0.000 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am
 Tgt Ion:198 Resp: 1190282





#39
C2-Dibenzothiophenes
Concen: 6867.73 ng/mL M5
RT: 35.764 min Scan# 3034
Delta R.T. -0.356 min
Lab File: F801121512.D
Acq: 13 Jan 2015 1:48 am
Tgt Ion:212 Resp: 747034





#40

C3-Dibenzothiophenes

Concen: 2741.76 ng/mL M5

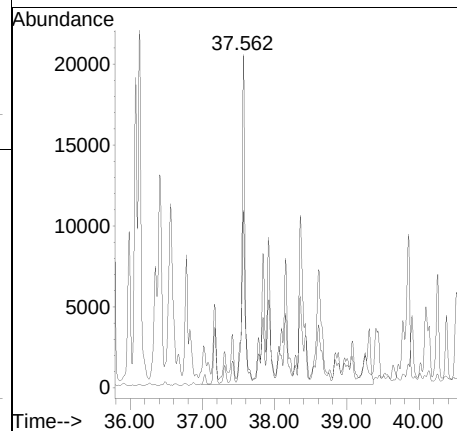
RT: 37.562 min Scan# 3231

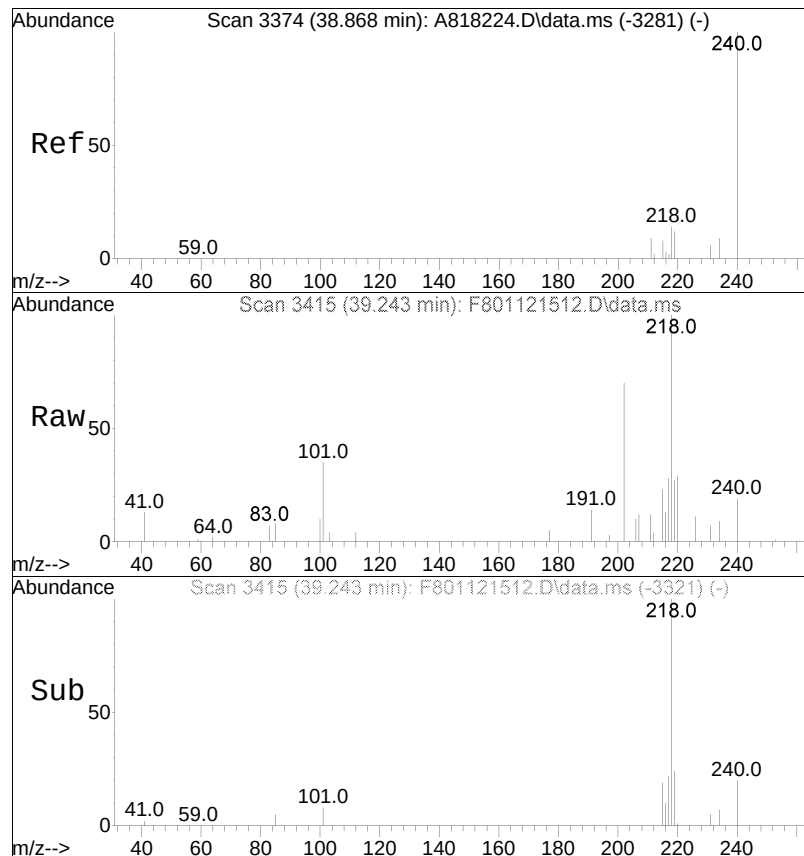
Delta R.T. 0.000 min

Lab File: F801121512.D

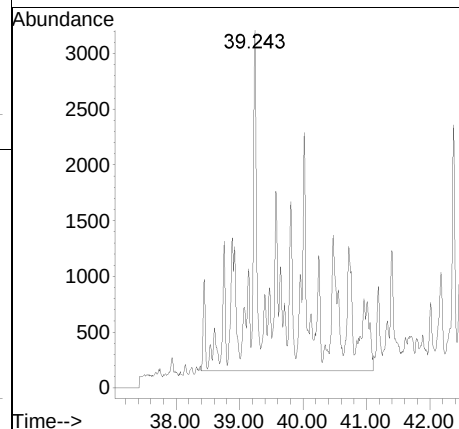
Acq: 13 Jan 2015 1:48 am

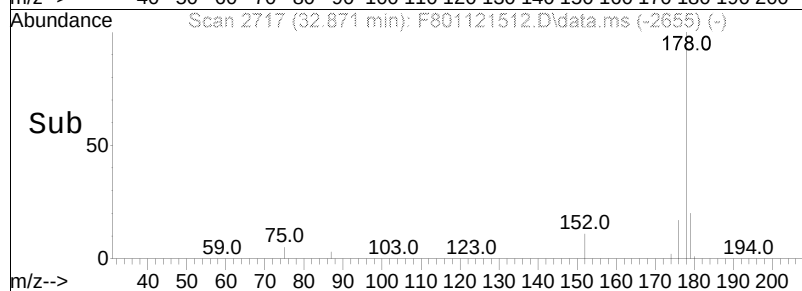
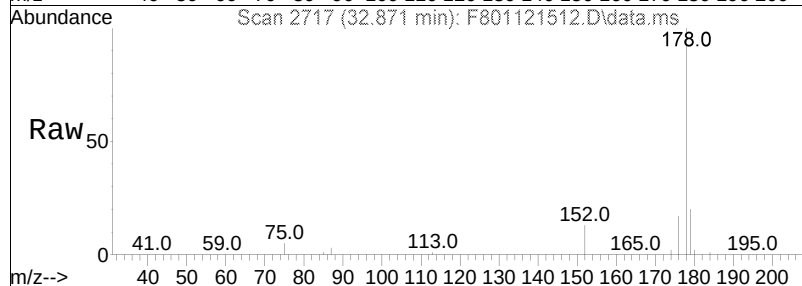
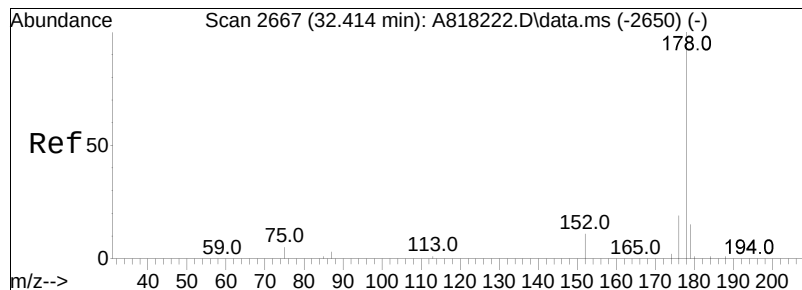
Tgt Ion	Ratio	Lower	Upper
226	100		
211	11.9	42.2	78.4





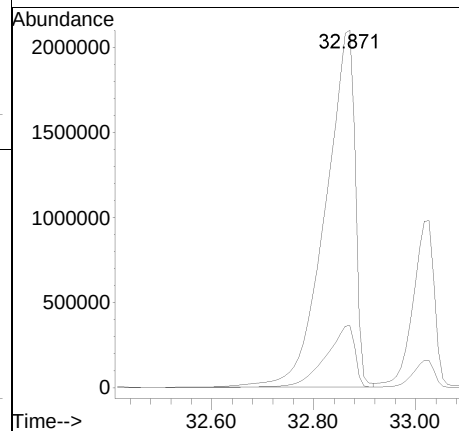
#41
 C4-Dibenzothiophenes
 Concen: 770.52 ng/mL M5
 RT: 39.243 min Scan# 3415
 Delta R.T. 0.000 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am
 Tgt Ion:240 Resp: 83813

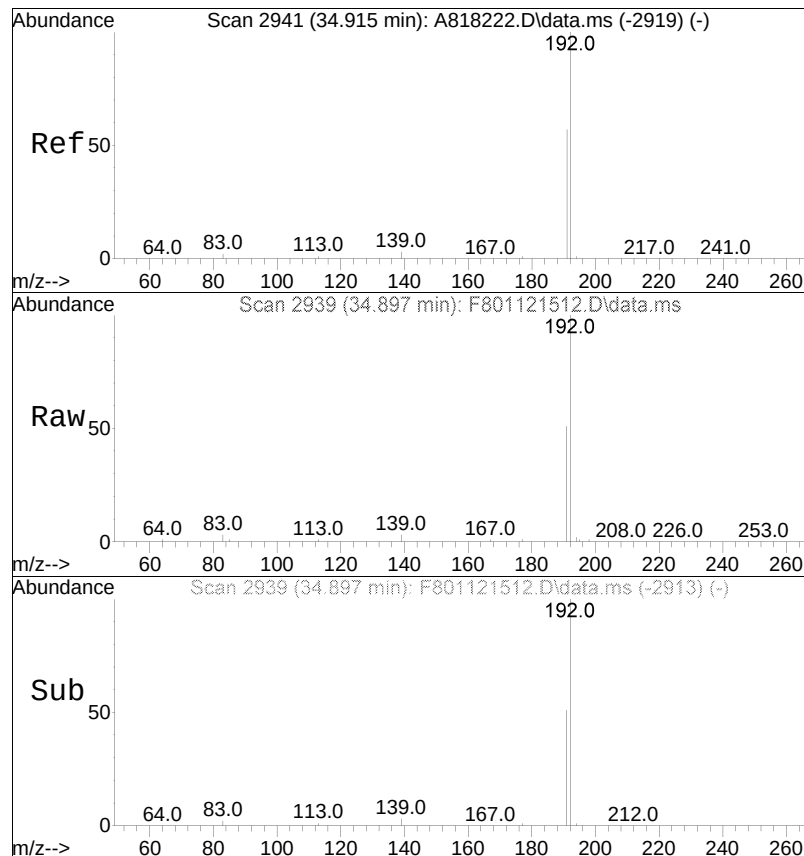




#43
 Phenanthrene
 Concen: 80770.65 ng/mL
 RT: 32.871 min Scan# 2717
 Delta R.T. 0.064 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

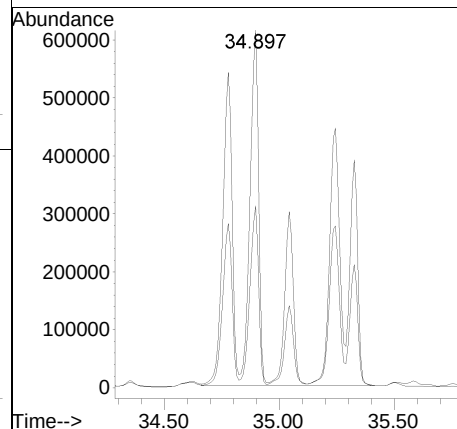
Tgt Ion:178 Resp: 8515027
 Ion Ratio Lower Upper
 178 100
 176 17.4 12.5 23.1

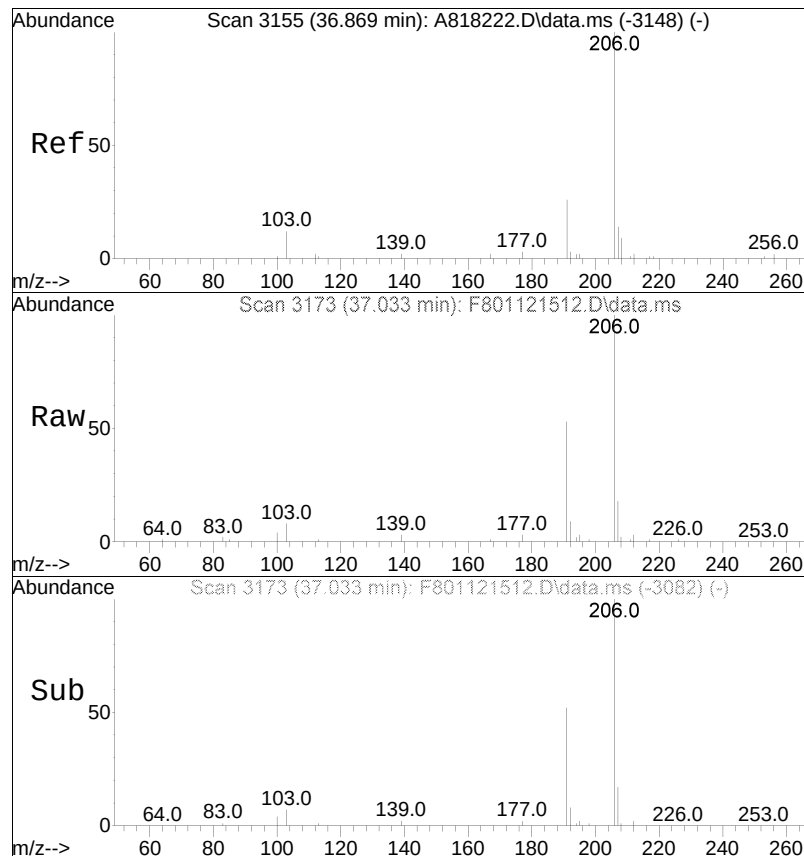




#49
 C1-Phenanthrenes/Anthracenes
 Concen: 58730.37 ng/mL M5
 RT: 34.897 min Scan# 2939
 Delta R.T. -0.319 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

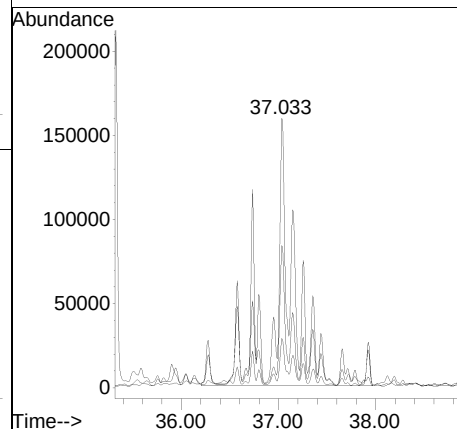
Tgt Ion	192	191	Ratio	Lower	Upper
Resp	6191490				
Ratio	100	13.7			
Lower		39.7			
Upper		73.7			

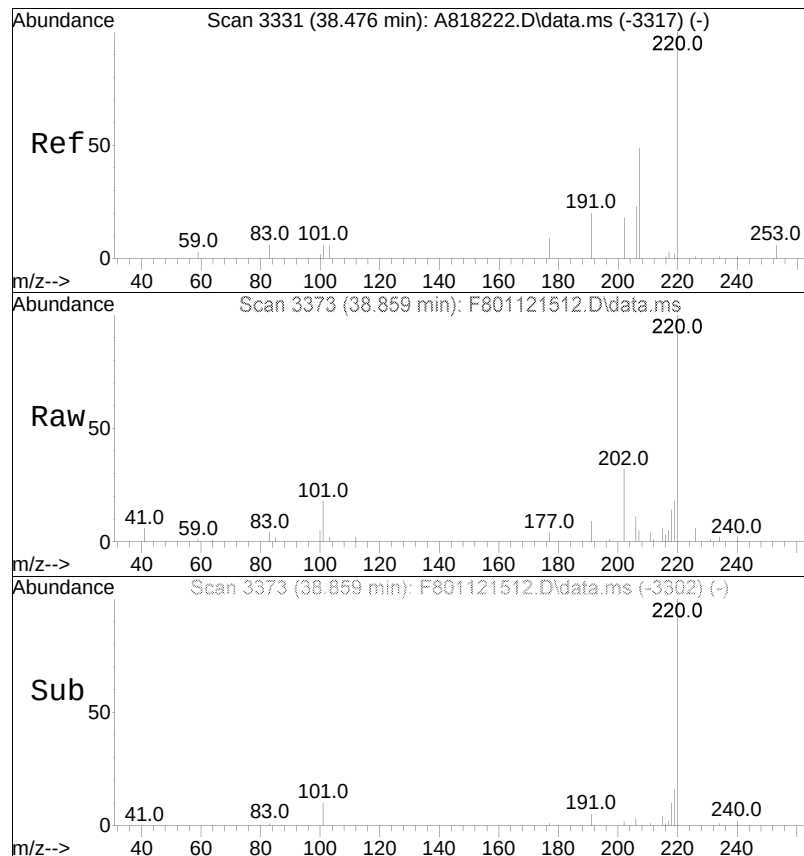




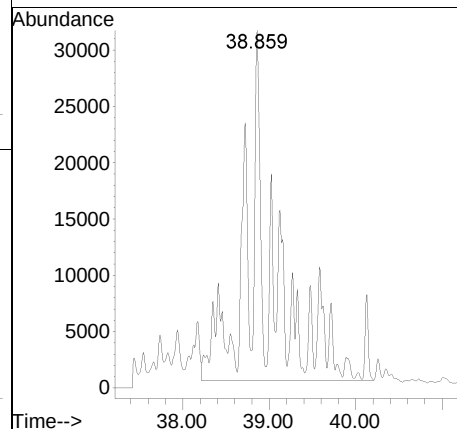
#50
 C2-Phenanthrenes/Anthracenes
 Concen: 22299.90 ng/mL M5
 RT: 37.033 min Scan# 3173
 Delta R.T. 0.009 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

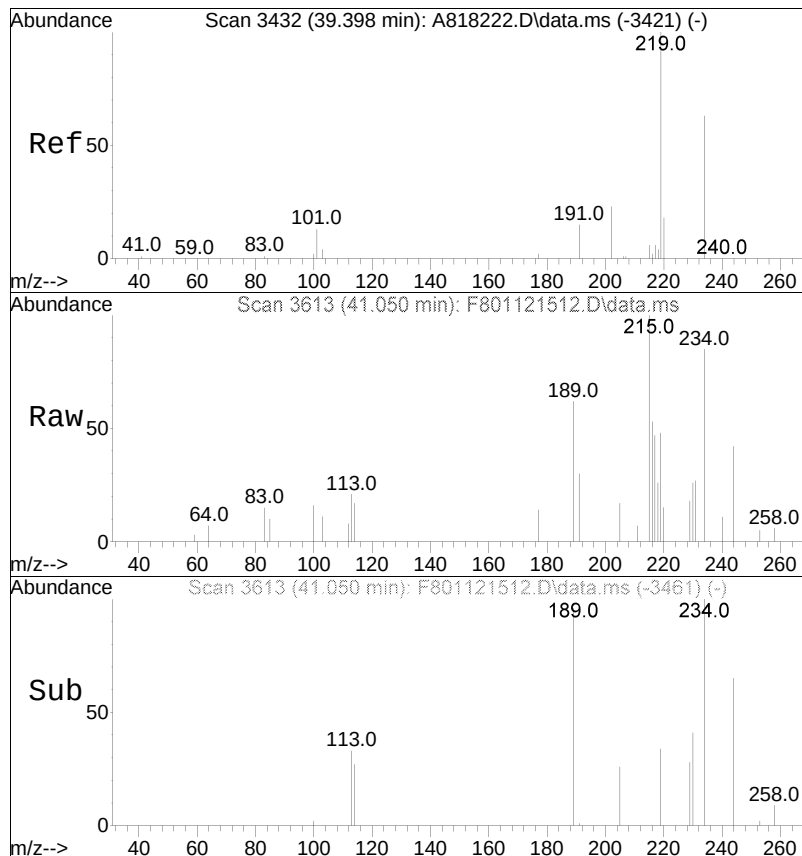
Tgt	Ion	Ratio	Lower	Upper
206	206	100		
191	191	12.1	39.5	73.4#
207	207	3.8	14.1	26.3#





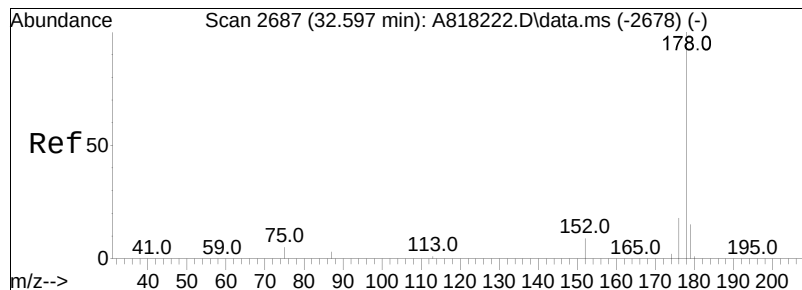
#52
 C3-Phenanthrenes/Anthracenes
 Concen: 5962.34 ng/mL M5
 RT: 38.859 min Scan# 3373
 Delta R.T. 0.000 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am
 Tgt Ion:220 Resp: 628564





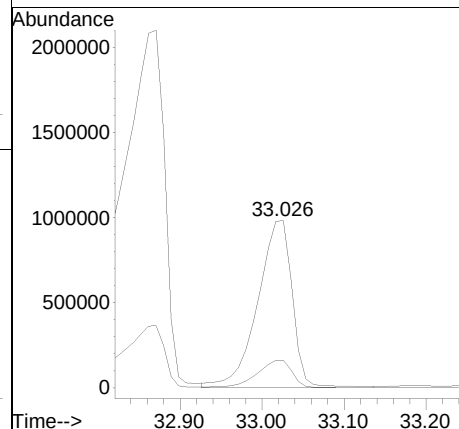
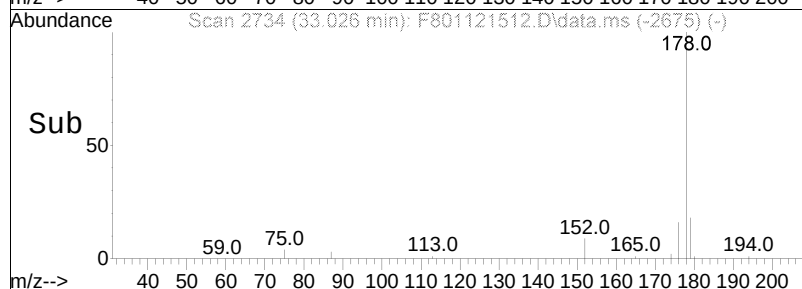
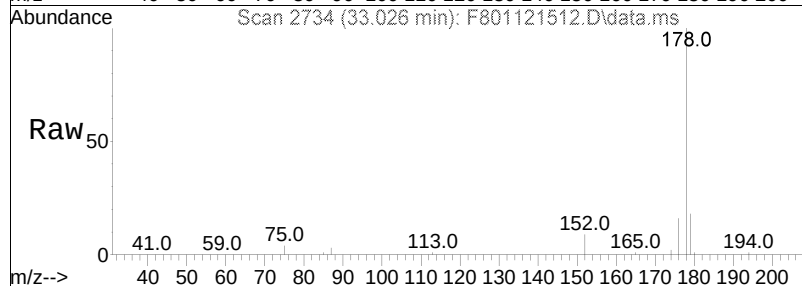
#53
 C4-Phenanthrenes/Anthracenes
 Concen: 1271.66 ng/mL M5
 RT: 41.050 min Scan# 3613
 Delta R.T. 0.018 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

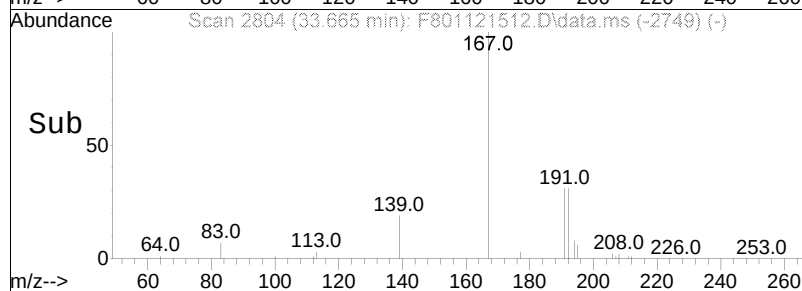
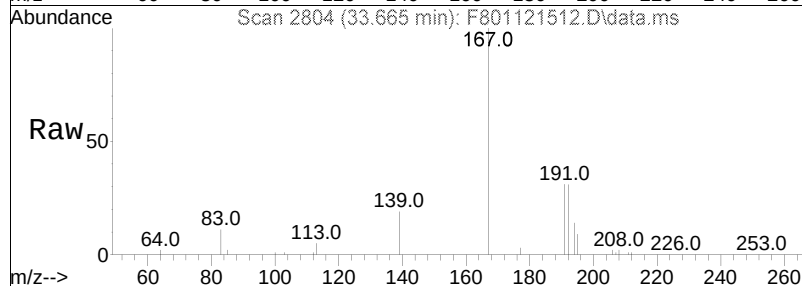
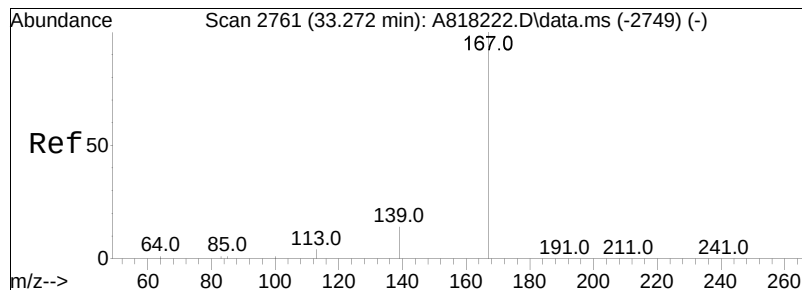
Tgt	Ion	Ratio	Lower	Upper
234	100			
219	5.7	44.7	82.9	



#55
 Anthracene
 Concen: 29985.18 ng/mL
 RT: 33.026 min Scan# 2734
 Delta R.T. 0.036 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

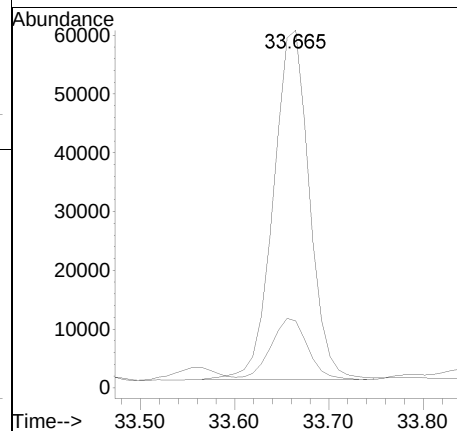
Tgt Ion:178 Resp: 2895996
 Ion Ratio Lower Upper
 178 100
 176 16.4 12.8 23.8

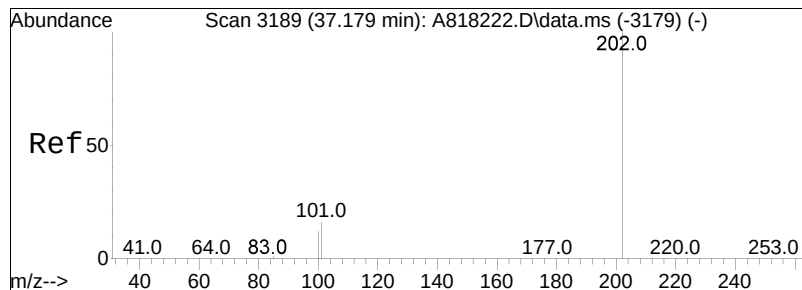




#56
Carbazole
Concen: 1525.45 ng/mL
RT: 33.665 min Scan# 2804
Delta R.T. 0.000 min
Lab File: F801121512.D
Acq: 13 Jan 2015 1:48 am

Tgt Ion	Ratio	Lower	Upper
167	100		
139	19.6	10.0	18.6





#58

Fluoranthene

Concen: 24531.83 ng/mL M4

RT: 37.599 min Scan# 3235

Delta R.T. 0.027 min

Lab File: F801121512.D

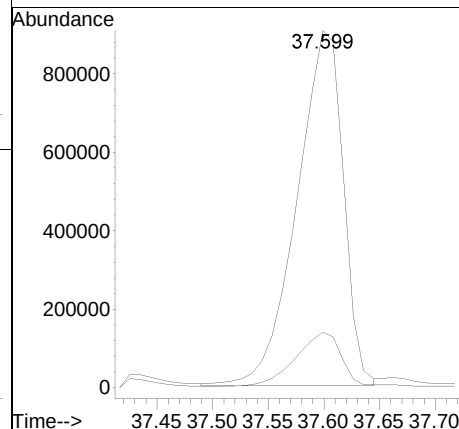
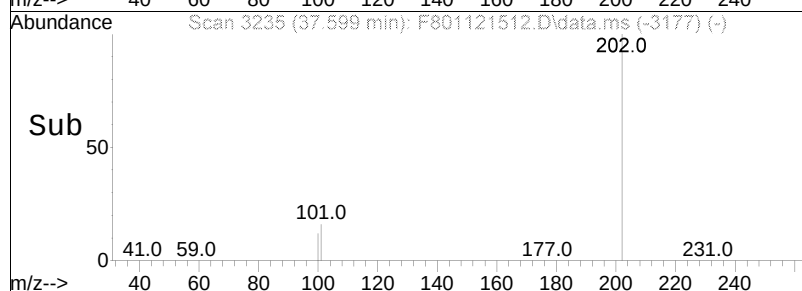
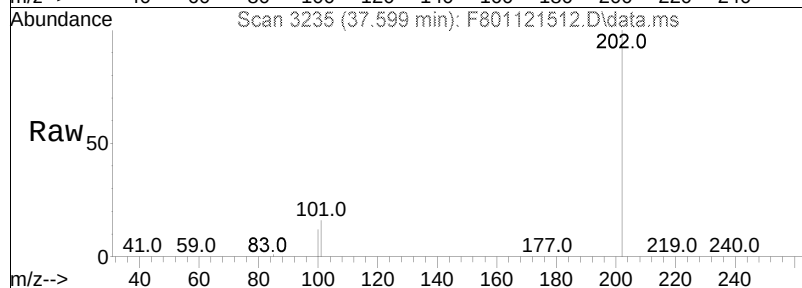
Acq: 13 Jan 2015 1:48 am

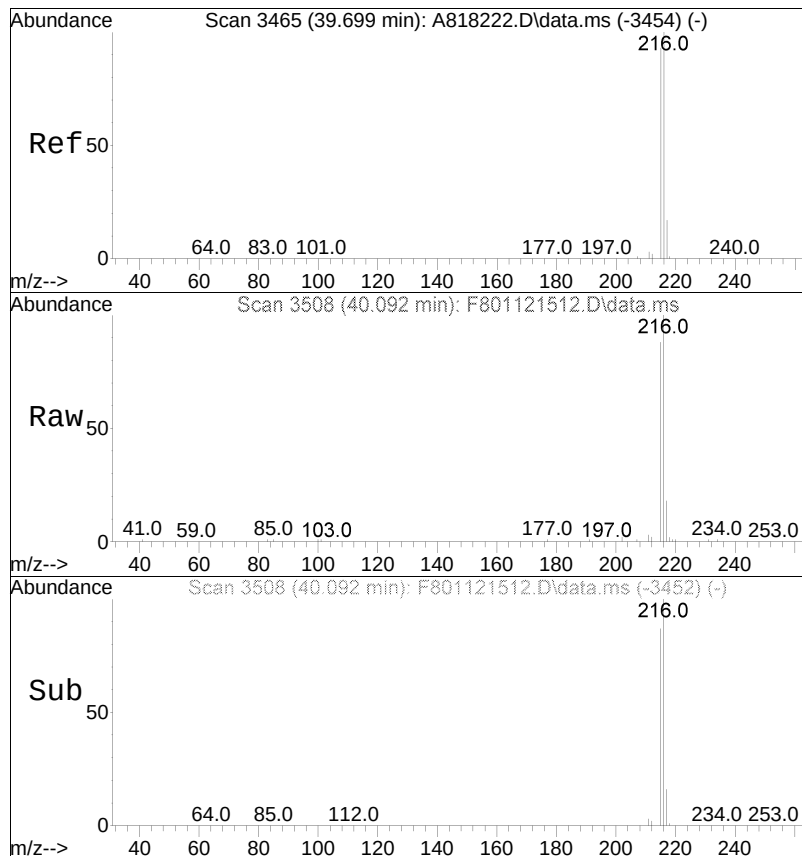
Tgt Ion: 202 Resp: 2623814

Ion Ratio Lower Upper

202 100

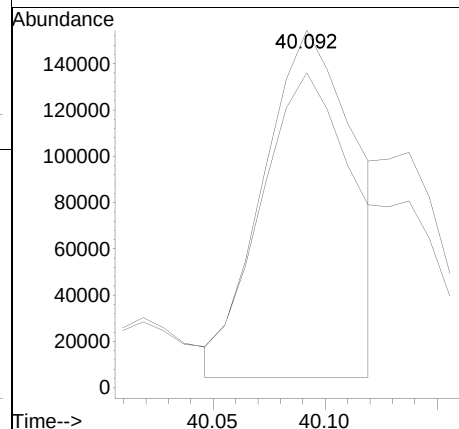
101 15.6 12.7 23.7

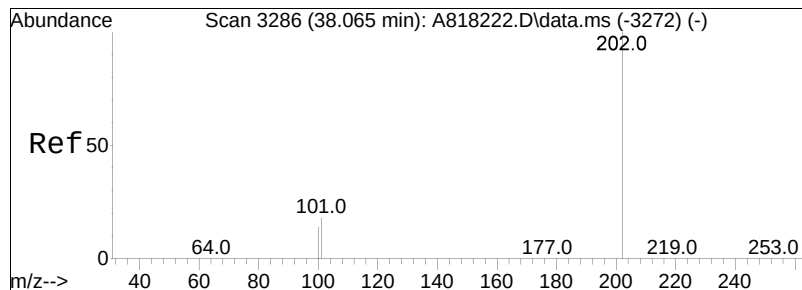




#59
 Benzo(b)fluorene
 Concen: 6884.63 ng/mL M3
 RT: 40.092 min Scan# 3508
 Delta R.T. 0.009 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

Tgt	Ion	Ratio	Lower	Upper
216	100			
215	115.9	65.9	122.5	





#60

Pyrene

Concen: 34406.53 ng/mL

RT: 38.494 min Scan# 3333

Delta R.T. 0.037 min

Lab File: F801121512.D

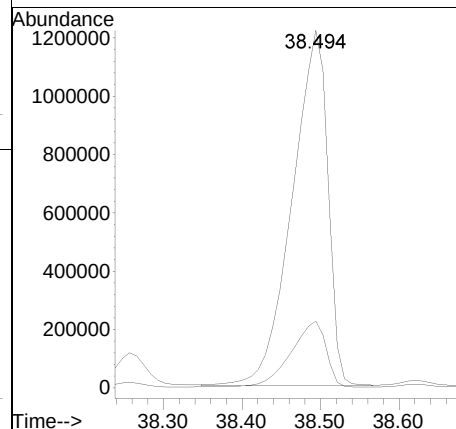
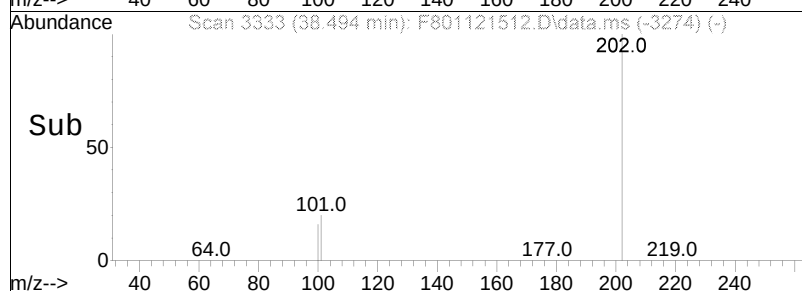
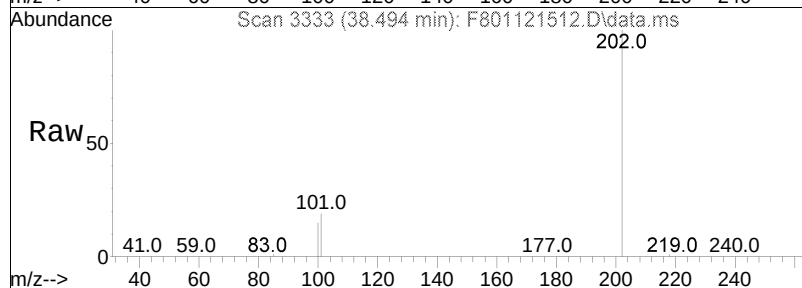
Acq: 13 Jan 2015 1:48 am

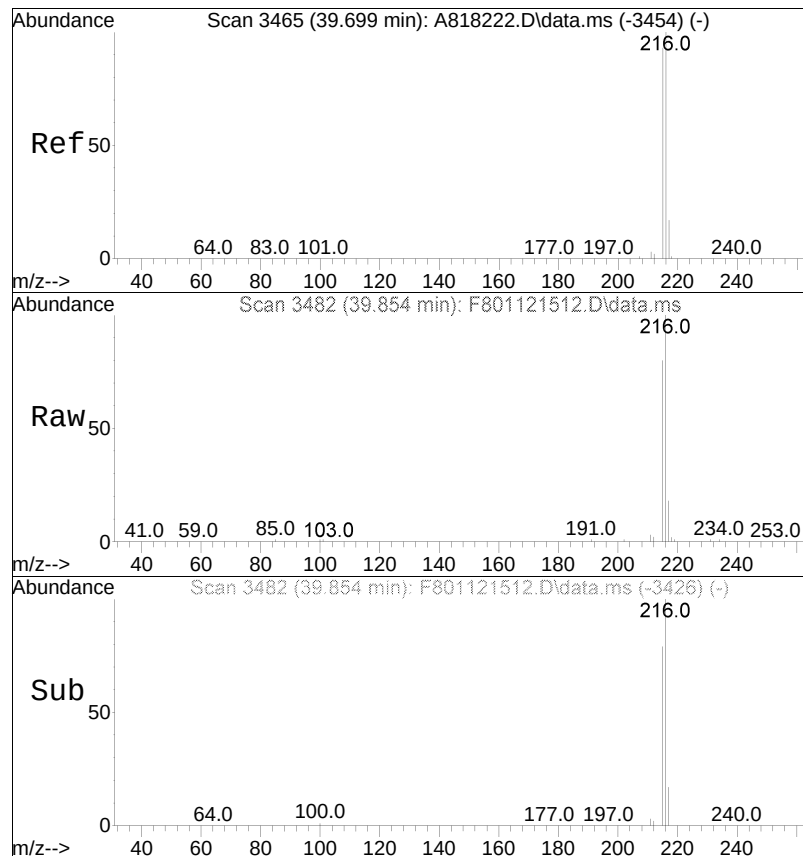
Tgt Ion: 202 Resp: 3853952

Ion Ratio Lower Upper

202 100

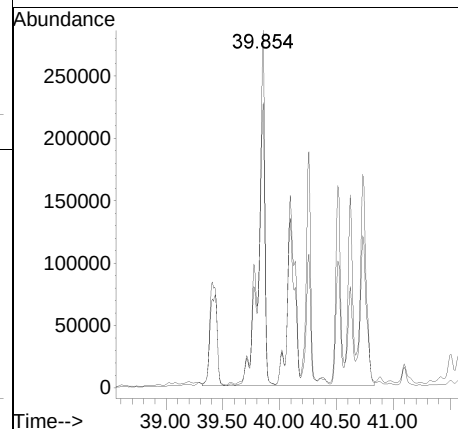
101 18.2 13.9 25.7

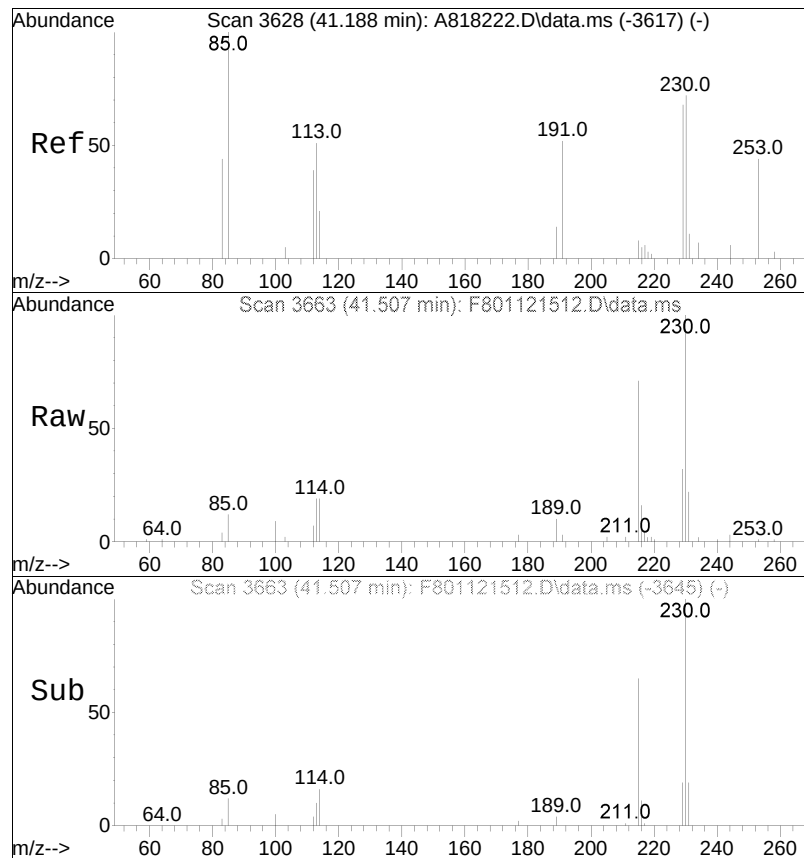




#61
 C1-Fluoranthenes/Pyrenes
 Concen: 36414.86 ng/mL M5
 RT: 39.854 min Scan# 3482
 Delta R.T. 0.018 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

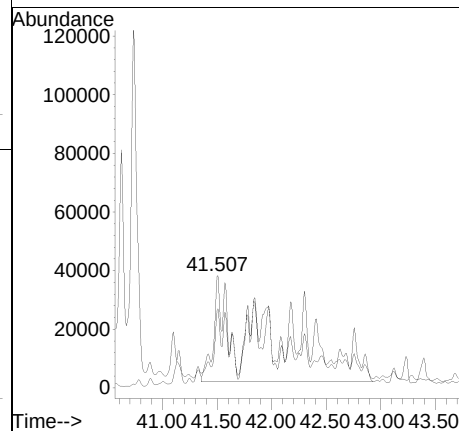
Tgt Ion	Ratio	Lower	Upper
216	100		
215	15.9	65.0	120.8#

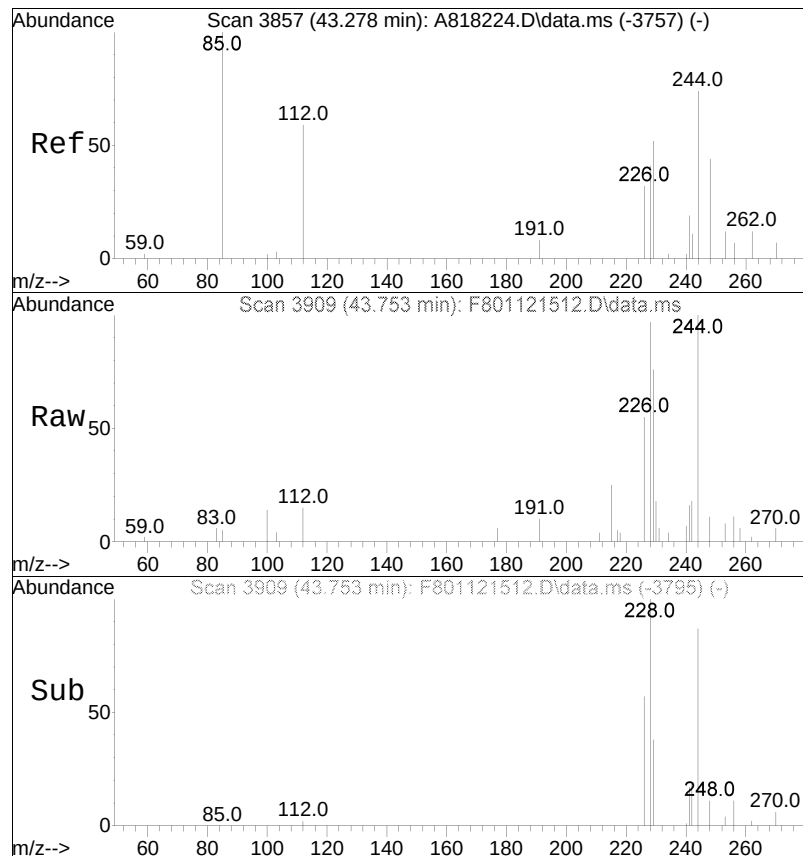




#62
 C2-Fluoranthenes/Pyrenes
 Concen: 10956.66 ng/mL M5
 RT: 41.507 min Scan# 3663
 Delta R.T. -0.447 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

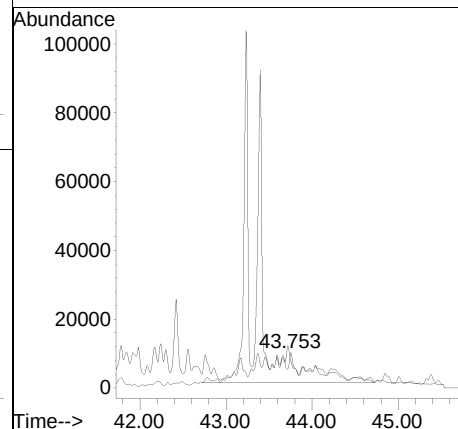
Tgt Ion:230 Resp: 1227280
 Ion Ratio Lower Upper
 230 100
 215 6.6 74.8 139.0#

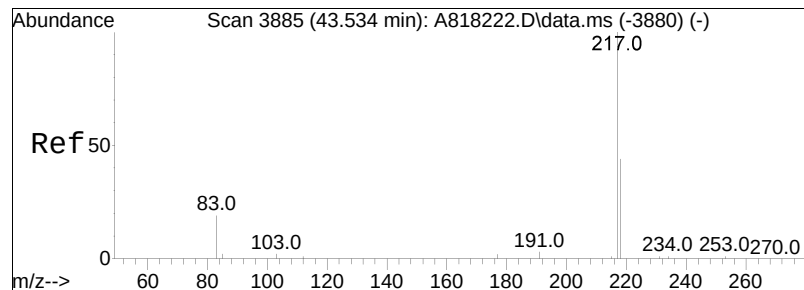




#63
 C3-Fluoranthenes/Pyrenes
 Concen: 3466.21 ng/mL M5
 RT: 43.753 min Scan# 3909
 Delta R.T. 0.110 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

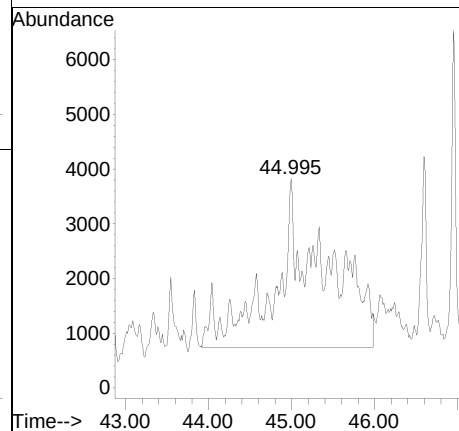
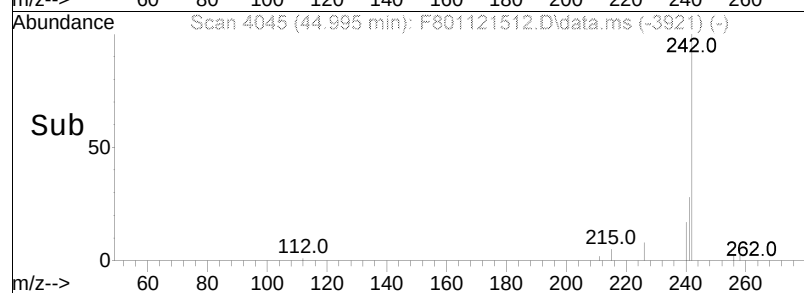
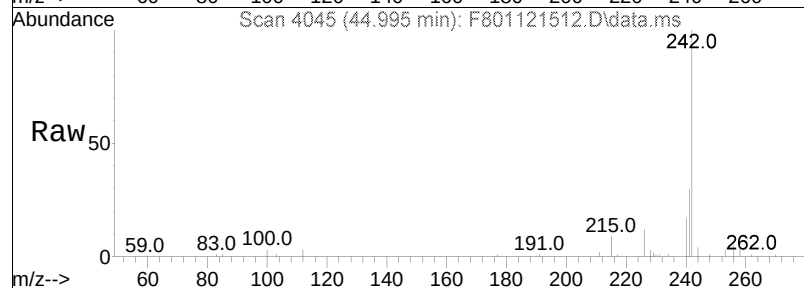
Tgt Ion	Ratio	Lower	Upper
244	100		
229	3.2	68.9	127.9#

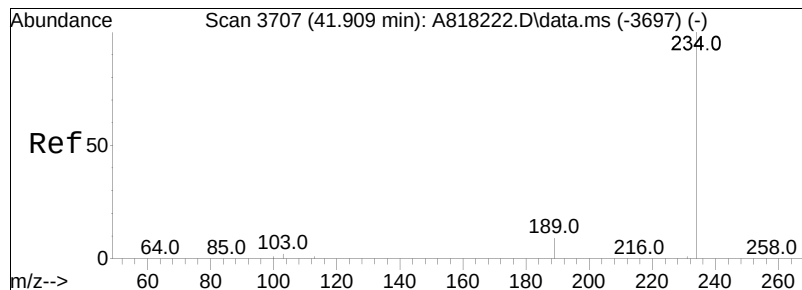




#64
 C4-Fluoranthenes/Pyrenes
 Concen: 1157.06 ng/mL M5
 RT: 44.995 min Scan# 4045
 Delta R.T. 0.009 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

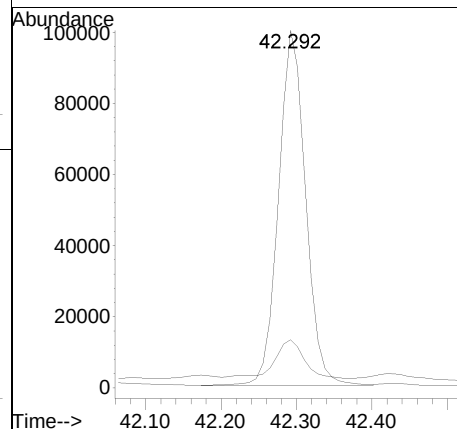
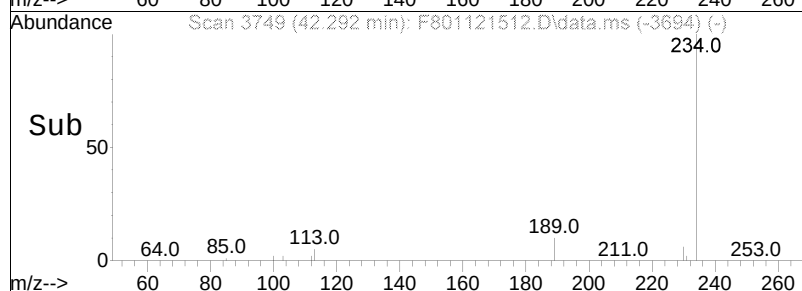
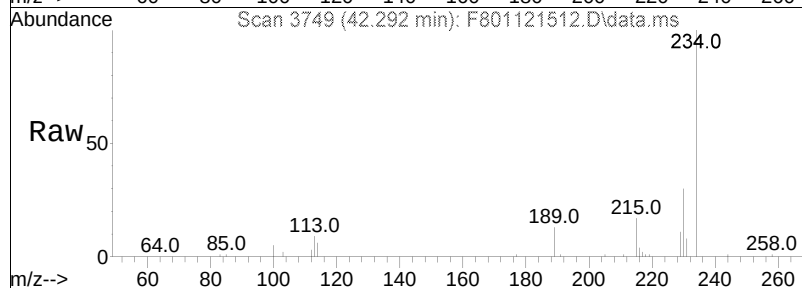
Tgt Ion:258 Resp: 129605

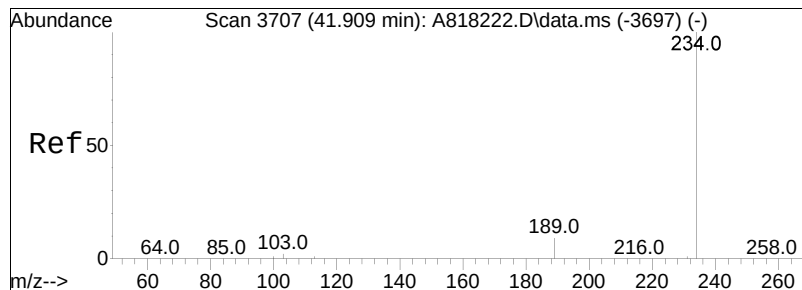




#66
 Naphthobenzothiophene
 Concen: 2525.88 ng/ml
 RT: 42.292 min Scan# 3749
 Delta R.T. 0.000 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

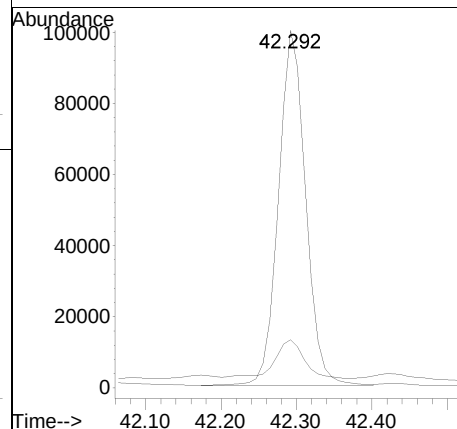
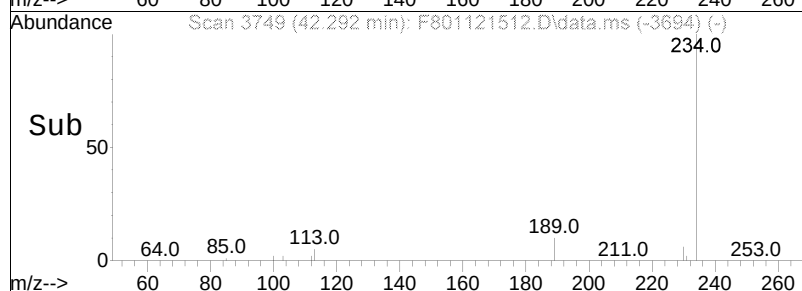
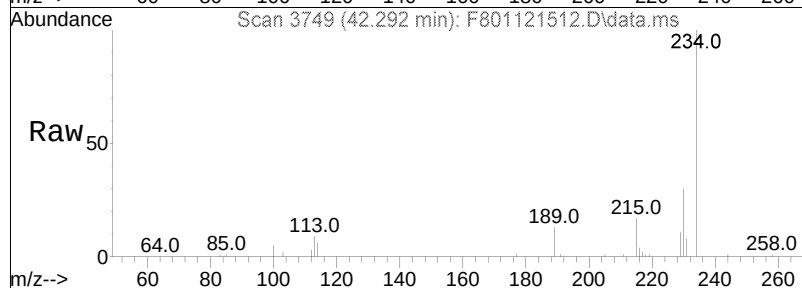
Tgt Ion	Ratio	Lower	Upper
234	100		
189	11.8	6.4	12.0

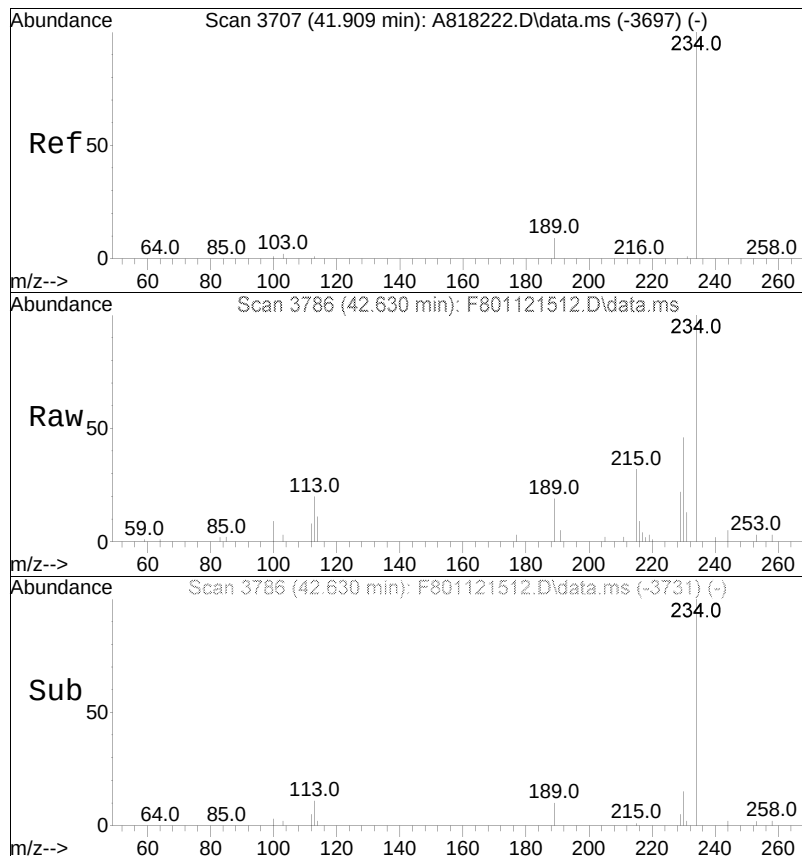




#67
 Naphthobenzothiophene-2,1-D
 Concen: 2525.88 ng/mL
 RT: 42.292 min Scan# 3749
 Delta R.T. 0.000 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

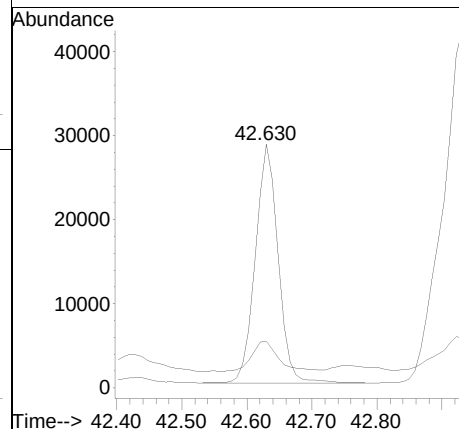
Tgt Ion	Ratio	Lower	Upper
234	100		
189	11.8	6.4	12.0

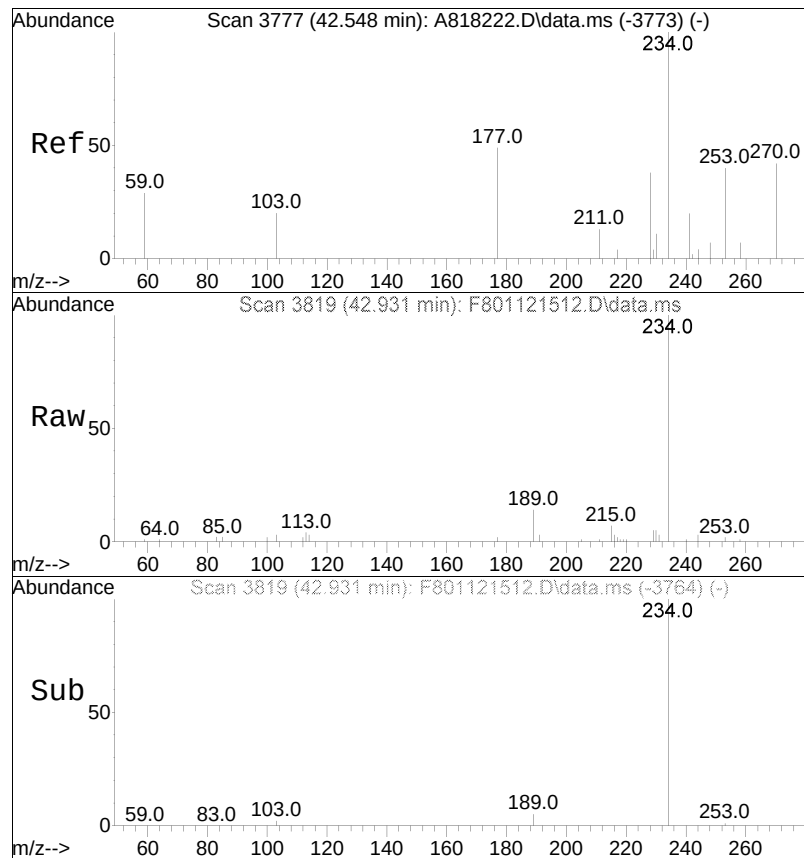




#68
 Naphthobenzothiophene-1,2-D
 Concen: 703.45 ng/mL
 RT: 42.630 min Scan# 3786
 Delta R.T. 0.000 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

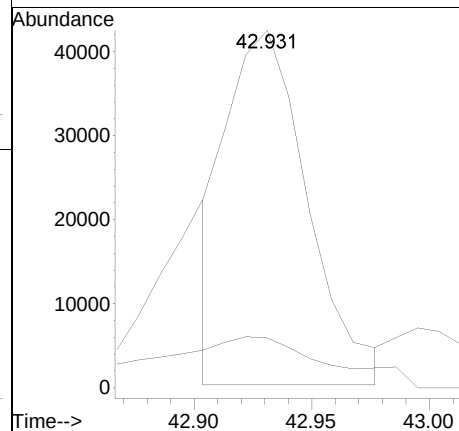
Tgt Ion	Ratio	Lower	Upper
234	100		
189	13.5	70.3	130.5#

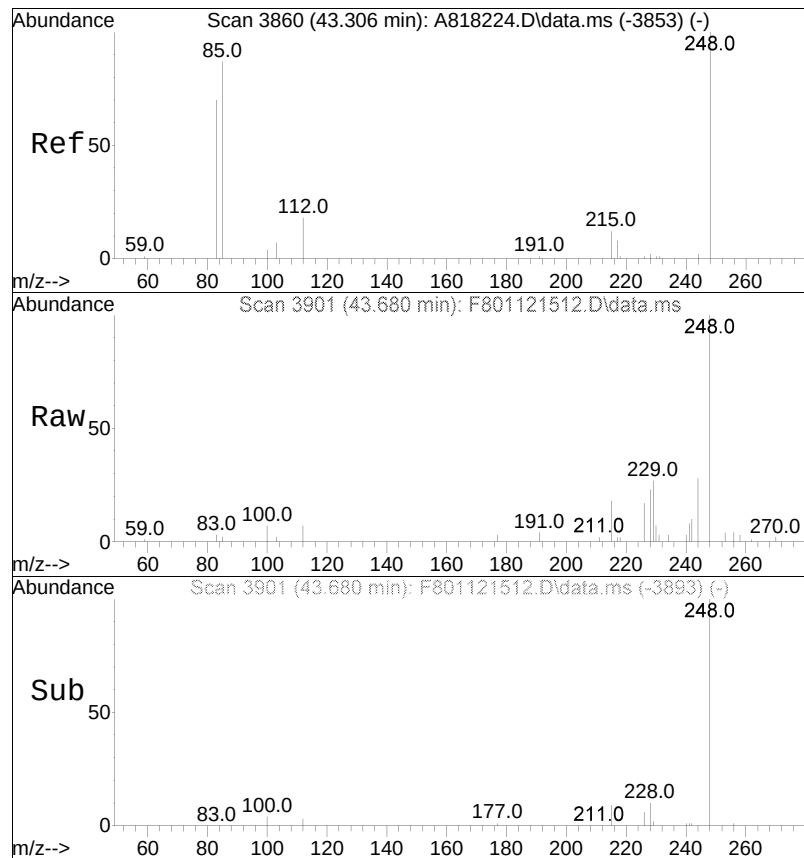




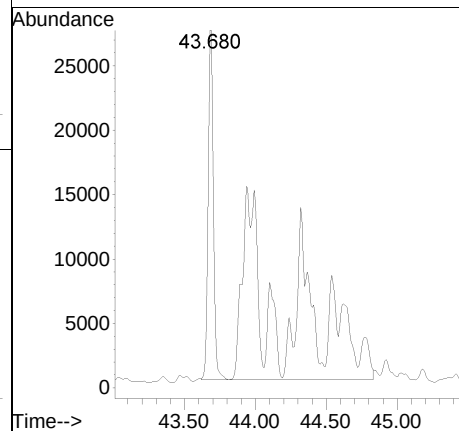
#69
 Naphthobenzothiophene-2,3-D
 Concen: 1032.56 ng/mL M3
 RT: 42.931 min Scan# 3819
 Delta R.T. 0.000 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

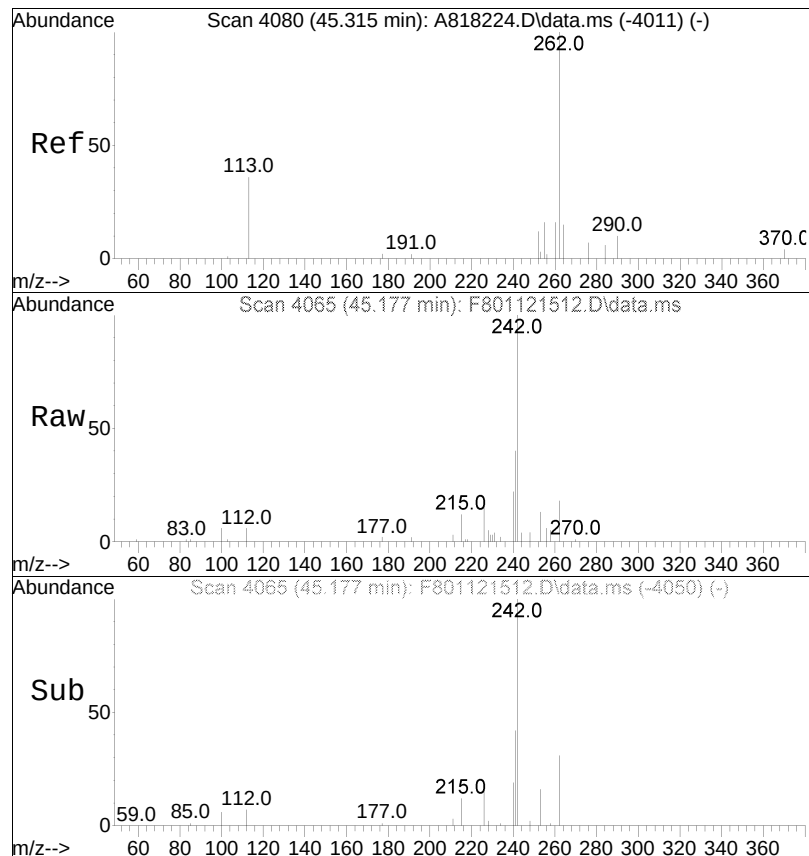
Tgt Ion	Ratio	Lower	Upper
234	100		
189	30.3	108.3	201.1#



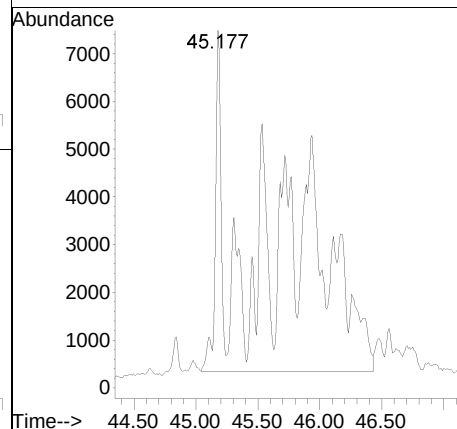


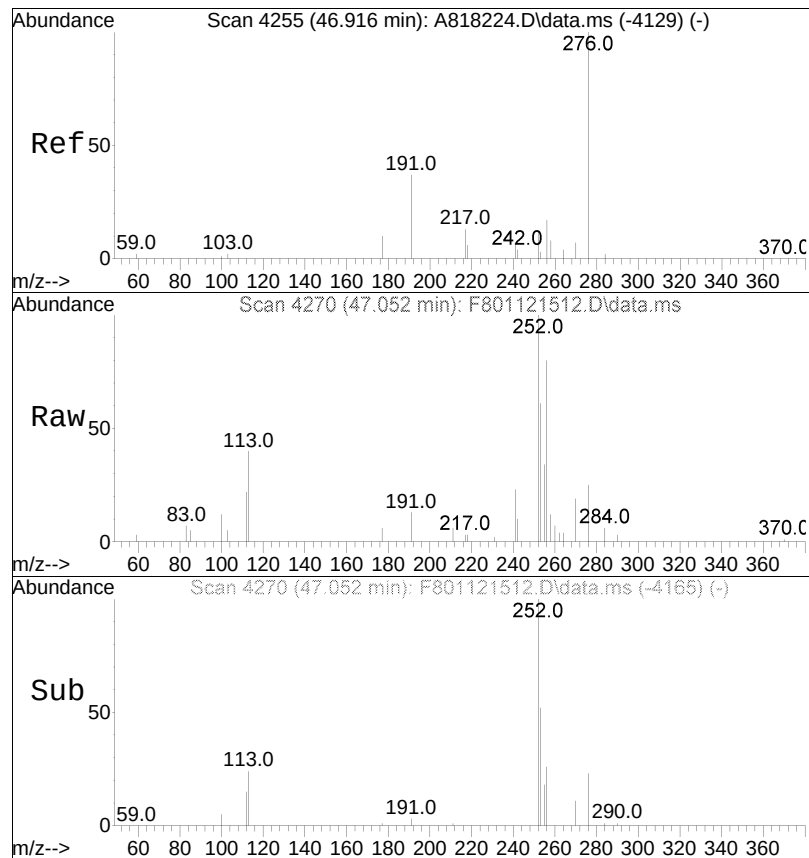
#70
 C1-Naphthobenzothiophenes
 Concen: 3706.74 ng/ml M5
 RT: 43.680 min Scan# 3901
 Delta R.T. 0.000 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am
 Tgt Ion:248 Resp: 365280





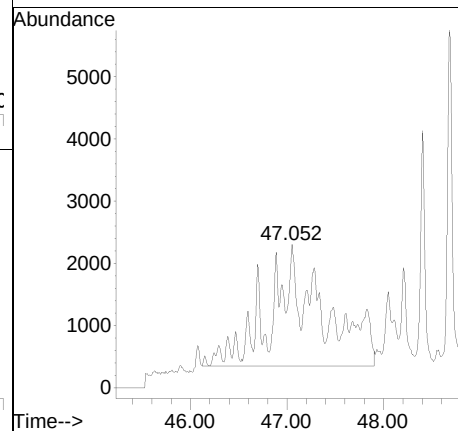
#71
 C2-Naphthobenzothiophenes
 Concen: 1824.86 ng/ml M5
 RT: 45.177 min Scan# 4065
 Delta R.T. -0.502 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am
 Tgt Ion:262 Resp: 179830

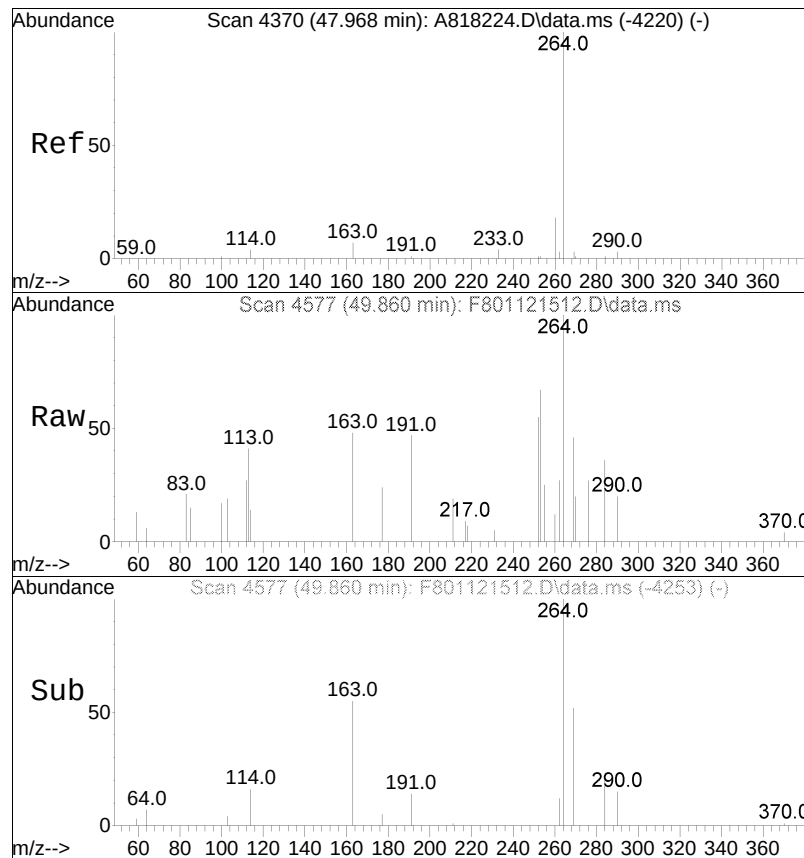




#72
C3-Naphthobenzothiophenes
Concen: 723.37 ng/ml M5
RT: 47.052 min Scan# 4270
Delta R.T. -0.229 min
Lab File: F801121512.D
Acq: 13 Jan 2015 1:48 am

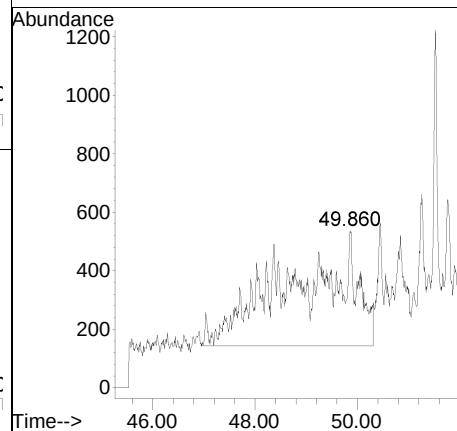
Tgt Ion:276 Resp: 71284

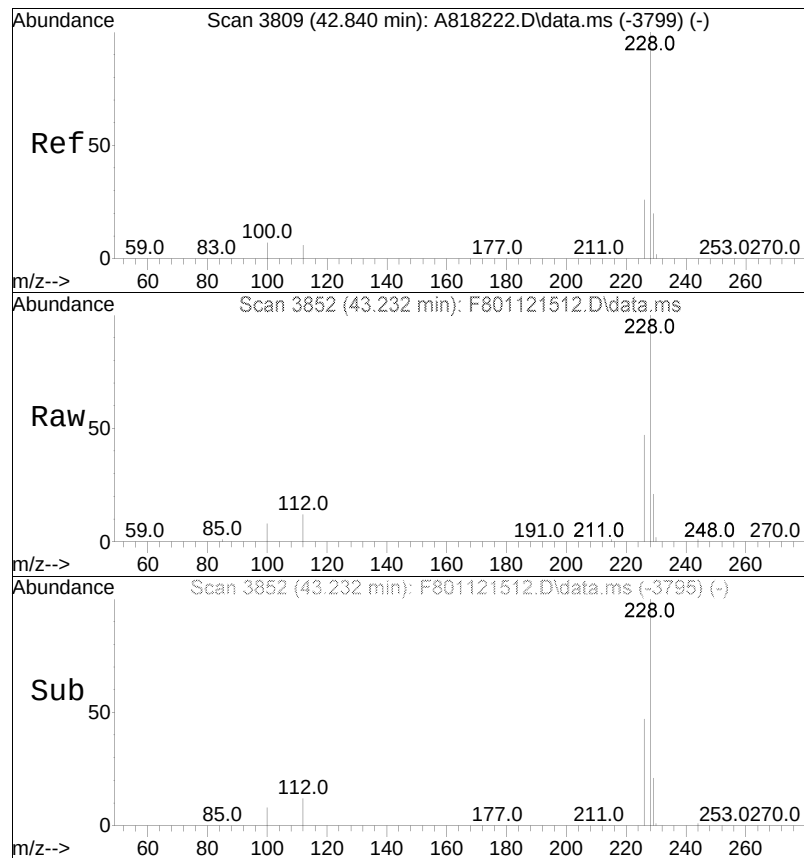




#73
 C4-Naphthobenzothiophenes
 Concen: 338.74 ng/mL M5
 RT: 49.860 min Scan# 4577
 Delta R.T. 1.500 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

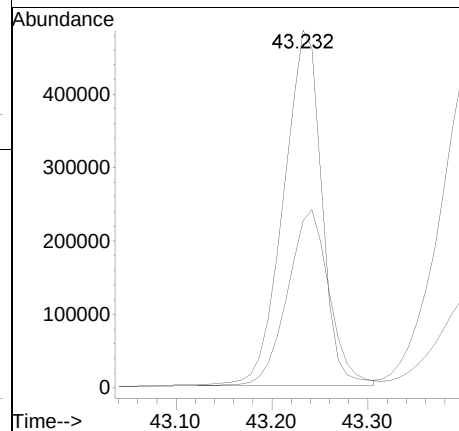
Tgt Ion:290 Resp: 33381

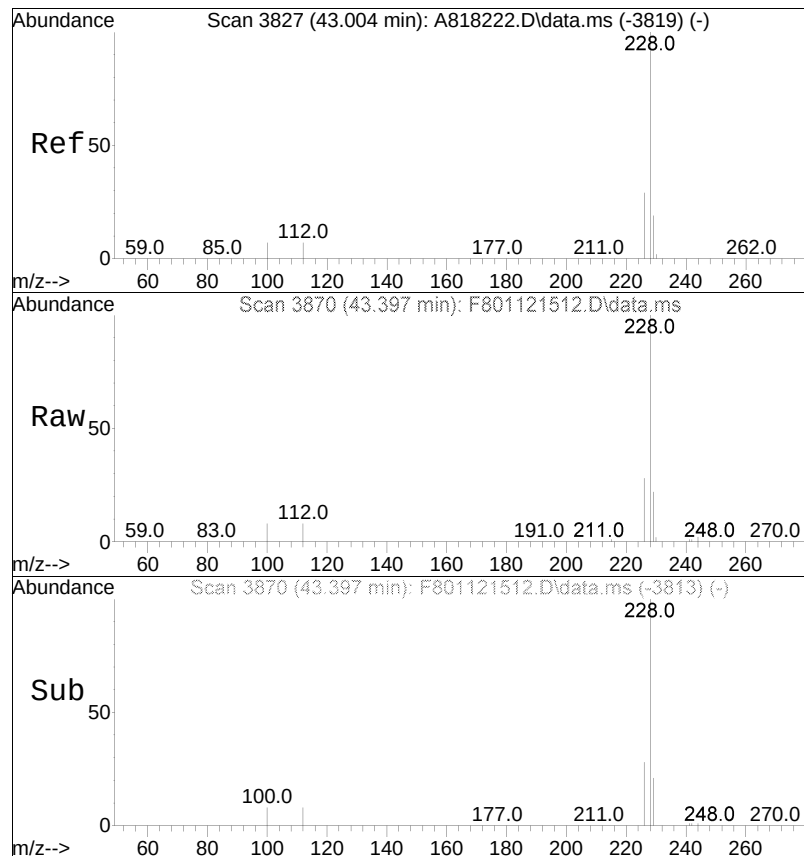




#75
 Benz[a]anthracene
 Concen: 15534.40 ng/mL M3
 RT: 43.232 min Scan# 3852
 Delta R.T. 0.018 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

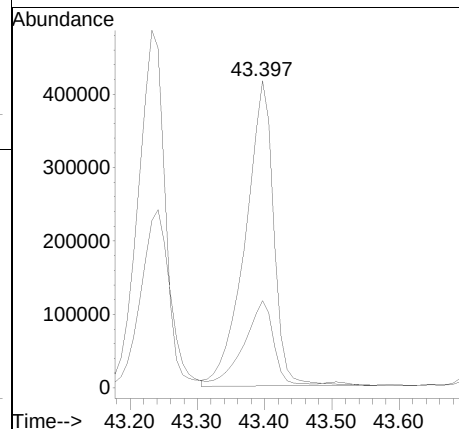
Tgt Ion	Ratio	Lower	Upper
228	100		
226	26.3	18.7	34.7

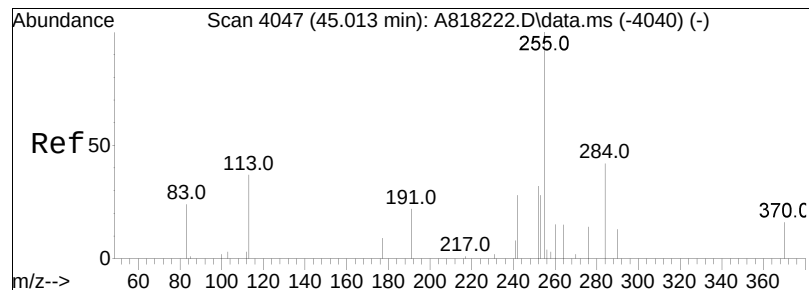




#77
 Chrysene/Triphenylene
 Concen: 14810.34 ng/mL
 RT: 43.397 min Scan# 3870
 Delta R.T. 0.018 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

Tgt Ion	Ratio	Lower	Upper
228	100		
226	28.8	20.2	37.4





#78

C1-Chrysenes

Concen: 13230.37 ng/mL M5

RT: 44.849 min Scan# 4029

Delta R.T. -0.001 min

Lab File: F801121512.D

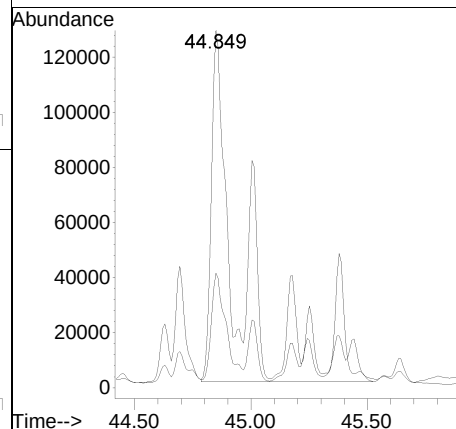
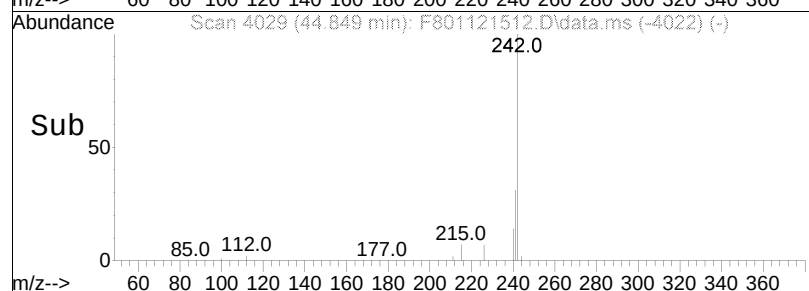
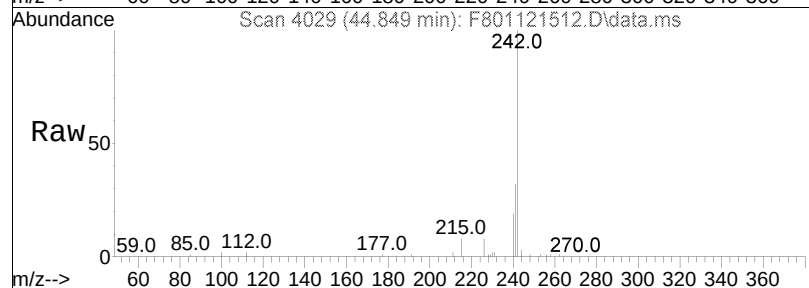
Acq: 13 Jan 2015 1:48 am

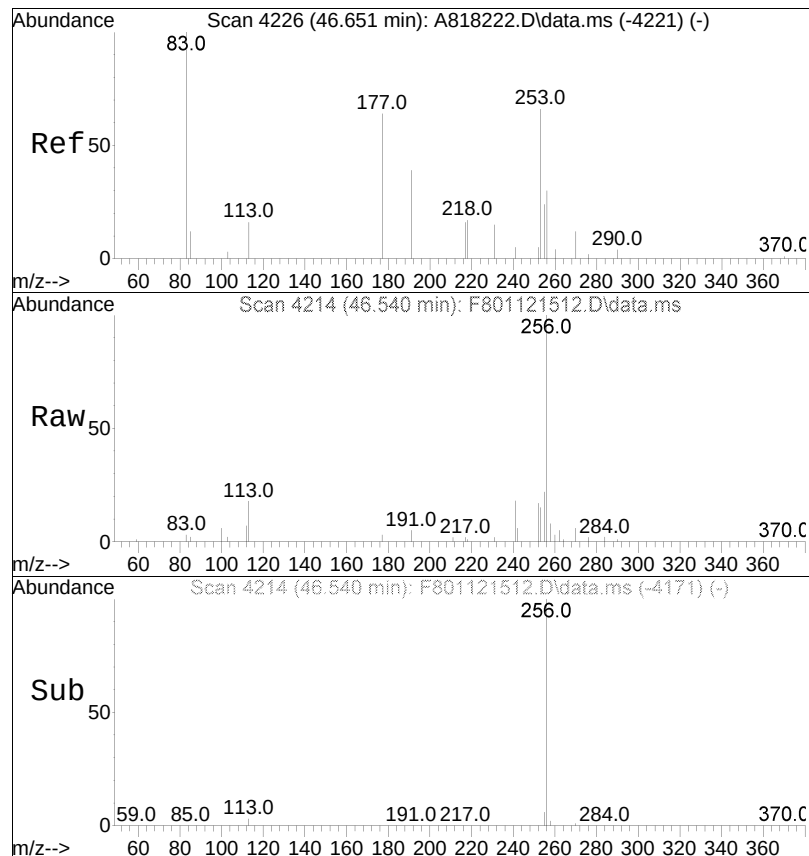
Tgt Ion: 242 Resp: 1089766

Ion Ratio Lower Upper

242 100

241 11.9 29.8 55.4#





#79

C2-Chrysenes

Concen: 6339.55 ng/mL M5

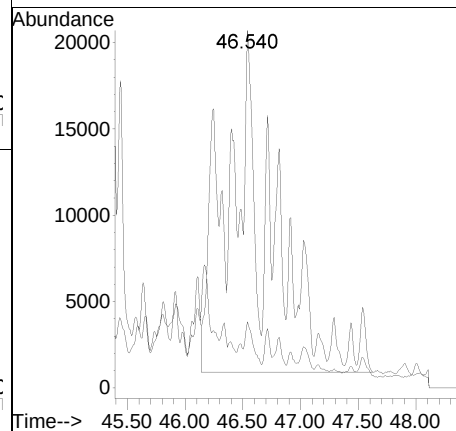
RT: 46.540 min Scan# 4214

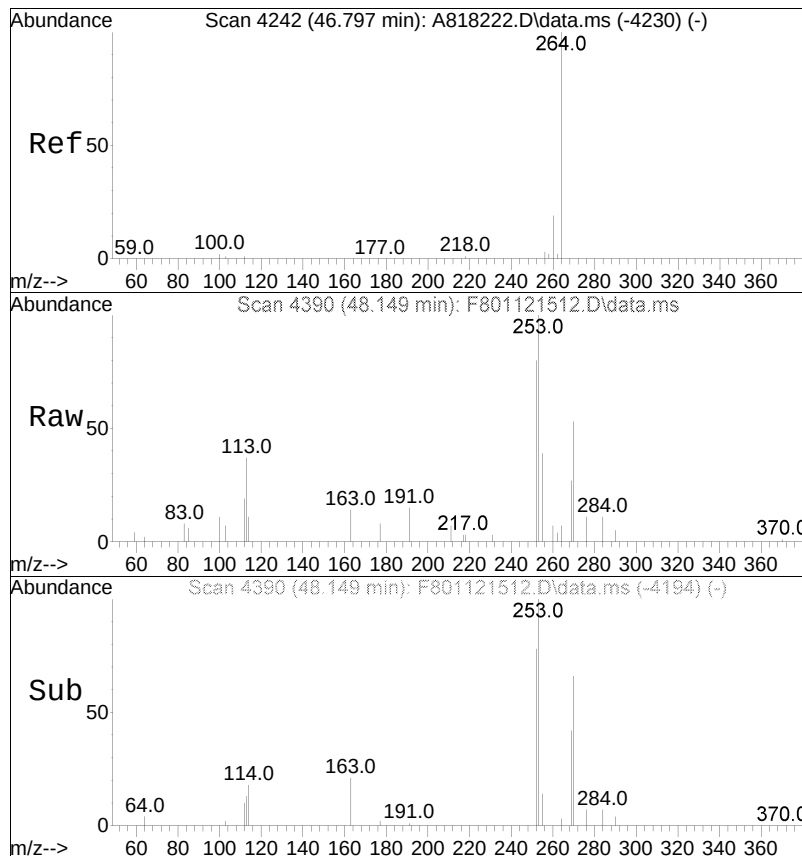
Delta R.T. -0.374 min

Lab File: F801121512.D

Acq: 13 Jan 2015 1:48 am

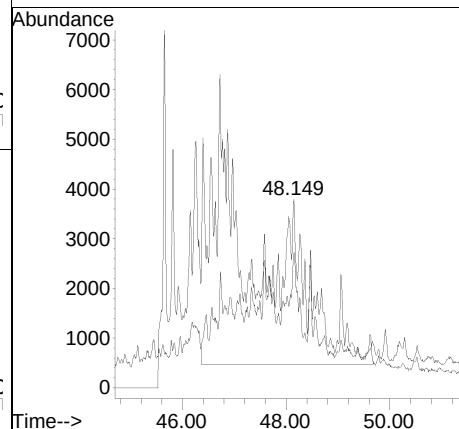
Tgt	Ion	Ratio	Lower	Upper
256	100			
241	0.8	26.2	48.8	

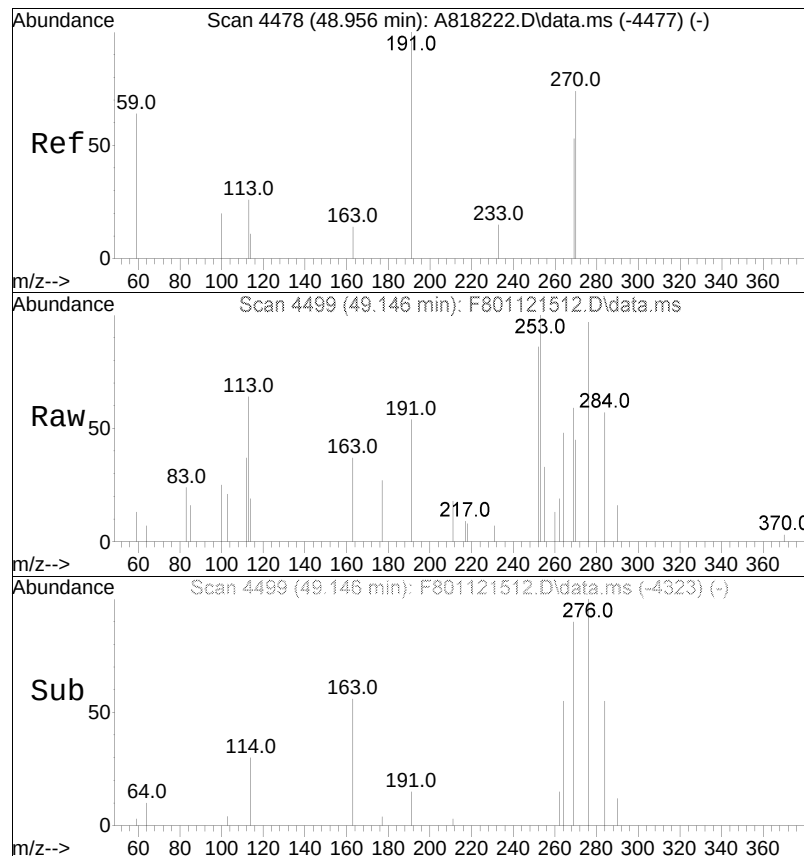




#81
 C3-Chrysenes
 Concen: 2676.12 ng/mL M5
 RT: 48.149 min Scan# 4390
 Delta R.T. -1.472 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

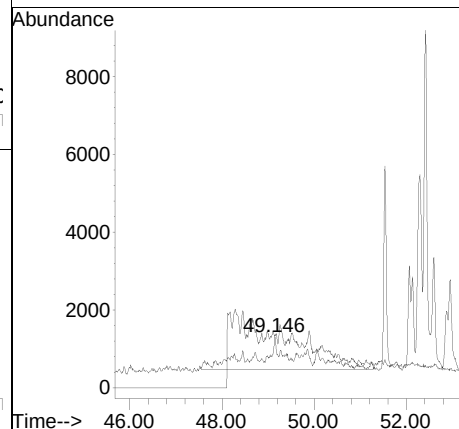
Tgt	Ion	Ratio	Lower	Upper
270	100			
255	0.2	39.7	73.7	

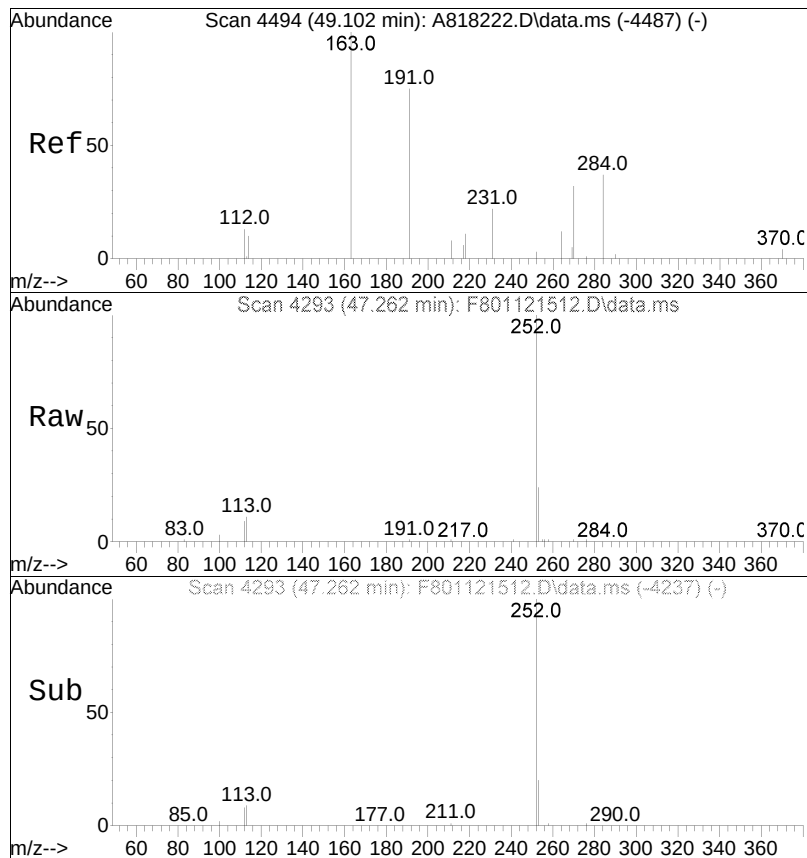




#82
 C4-Chrysenes
 Concen: 644.74 ng/mL M5
 RT: 49.146 min Scan# 4499
 Delta R.T. -0.576 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

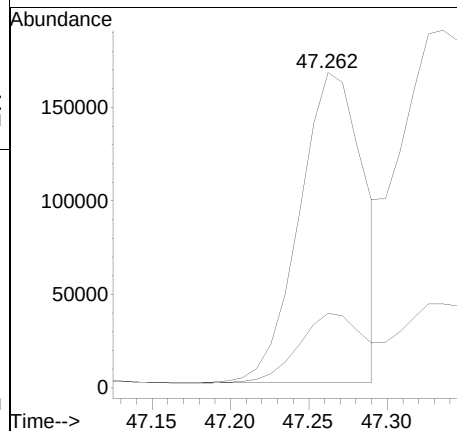
Tgt	Ion	Ratio	Lower	Upper
284	100			
269	0.0	63.6	118.2#	

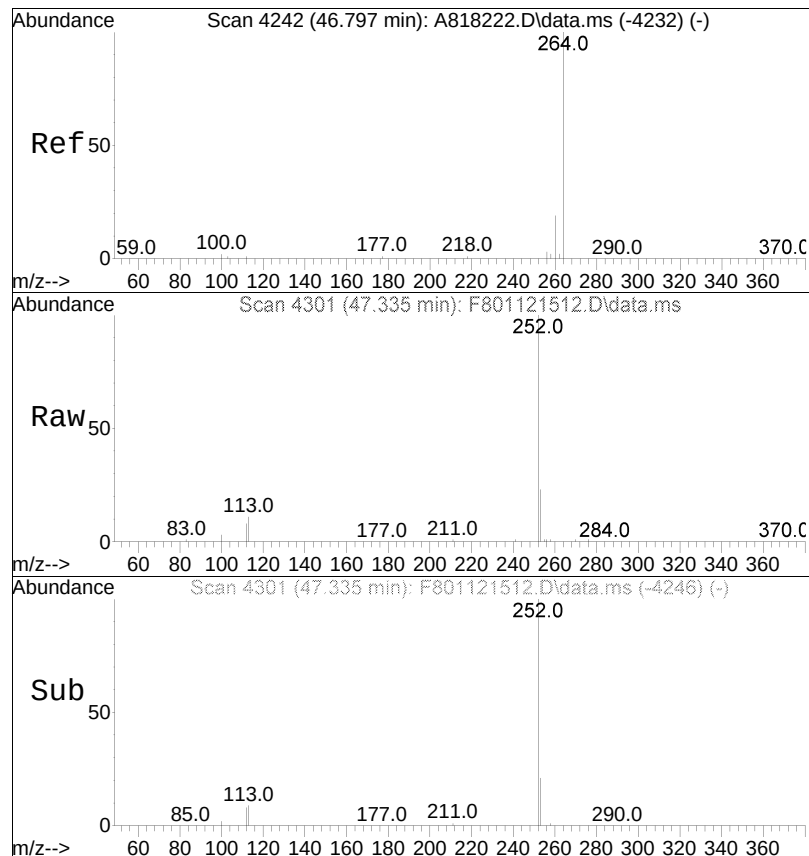




#84
 Benzo[b]fluoranthene
 Concen: 5138.53 ng/mL
 RT: 47.262 min Scan# 4293
 Delta R.T. 0.009 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

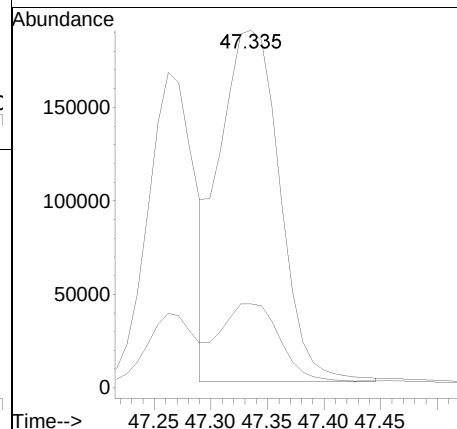
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	22.7	16.6	30.8	

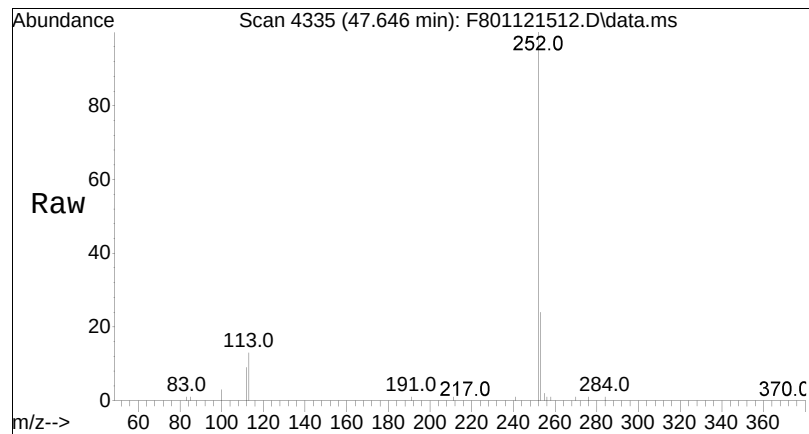




#85
 Benzo[j]+[k]fluoranthene
 Concen: 7733.43 ng/mL M6
 RT: 47.335 min Scan# 4301
 Delta R.T. 0.000 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

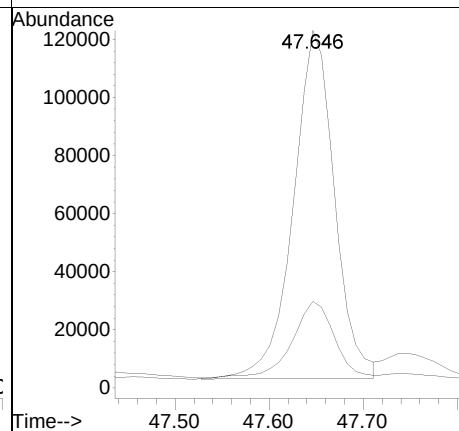
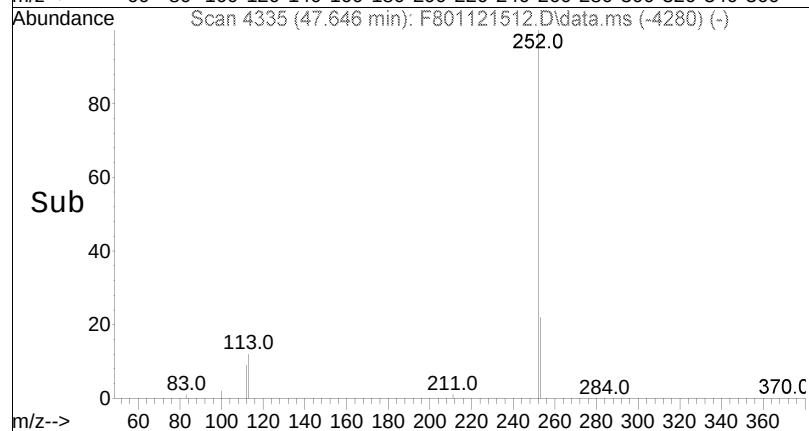
Tgt Ion	Ratio	Lower	Upper
252	100		
253	20.0	17.0	31.6

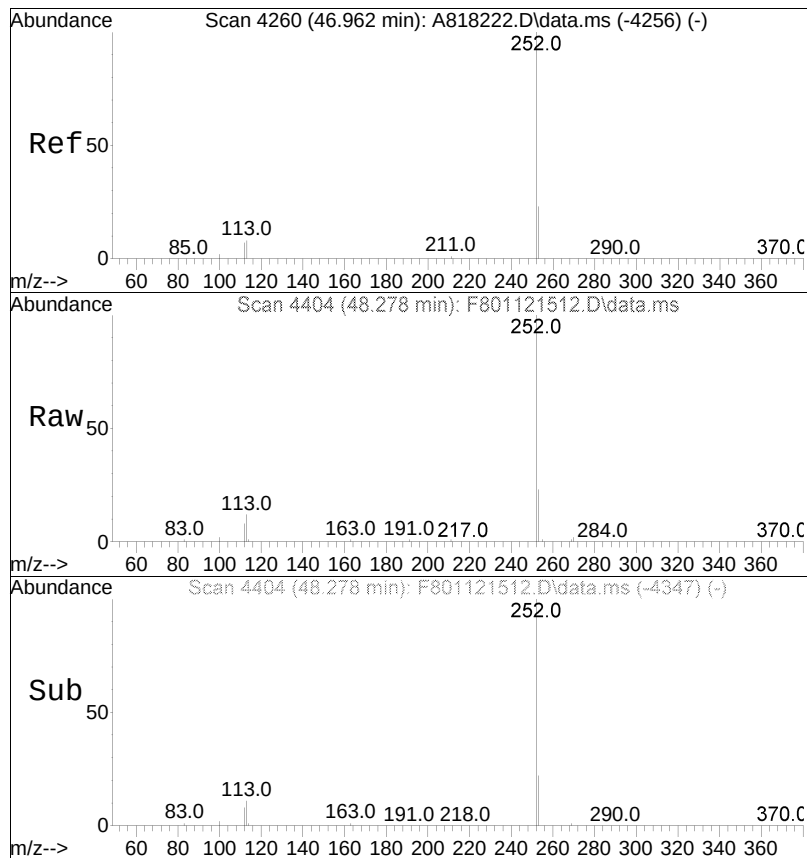




#86
 Benzo[a]fluoranthene
 Concen: 4033.19 ng/mL
 RT: 47.646 min Scan# 4335
 Delta R.T. -0.000 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

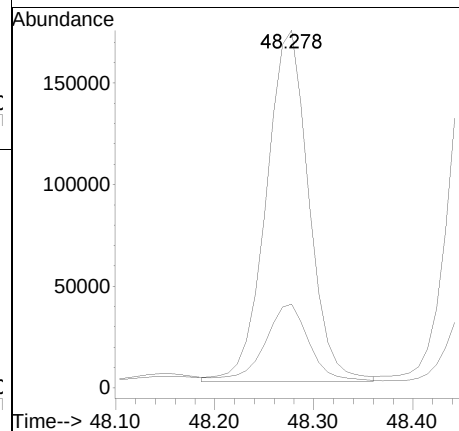
Tgt Ion: 252 Resp: 365026
 Ion Ratio Lower Upper
 252 100
 253 23.7 17.1 31.7

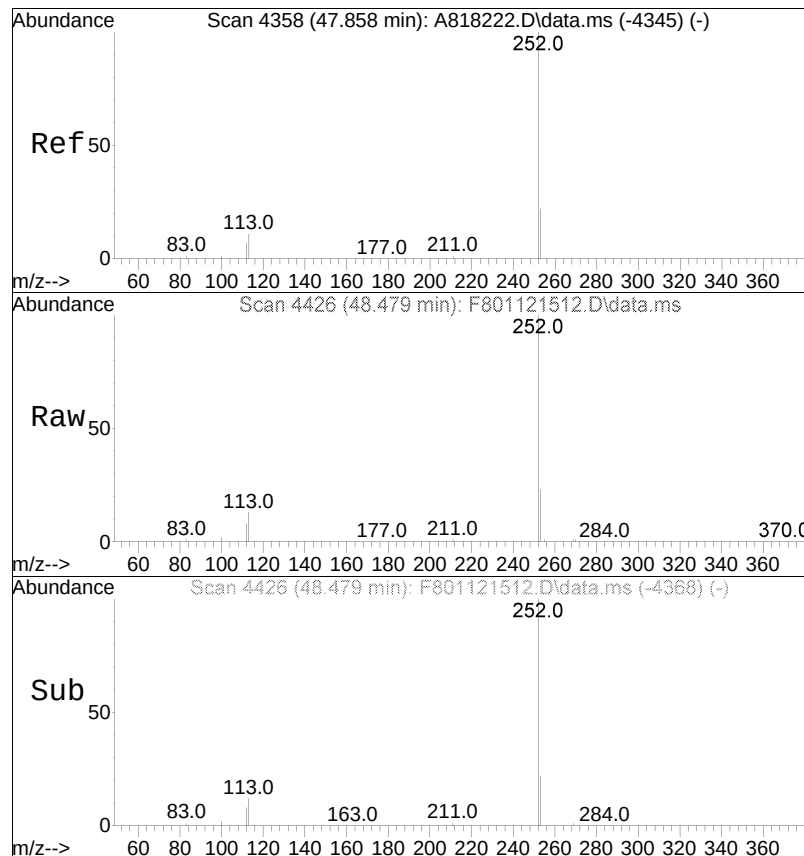




#87
 Benzo[e]pyrene
 Concen: 5559.34 ng/mL
 RT: 48.278 min Scan# 4404
 Delta R.T. 0.018 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

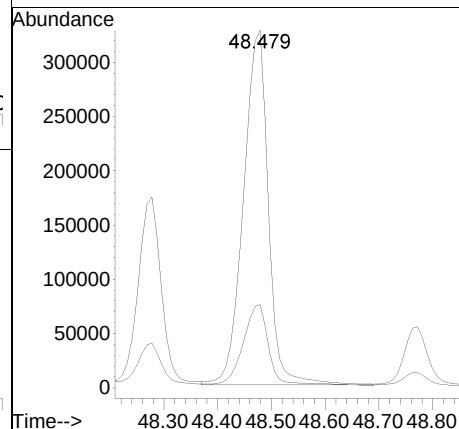
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	23.7	17.2	32.0	

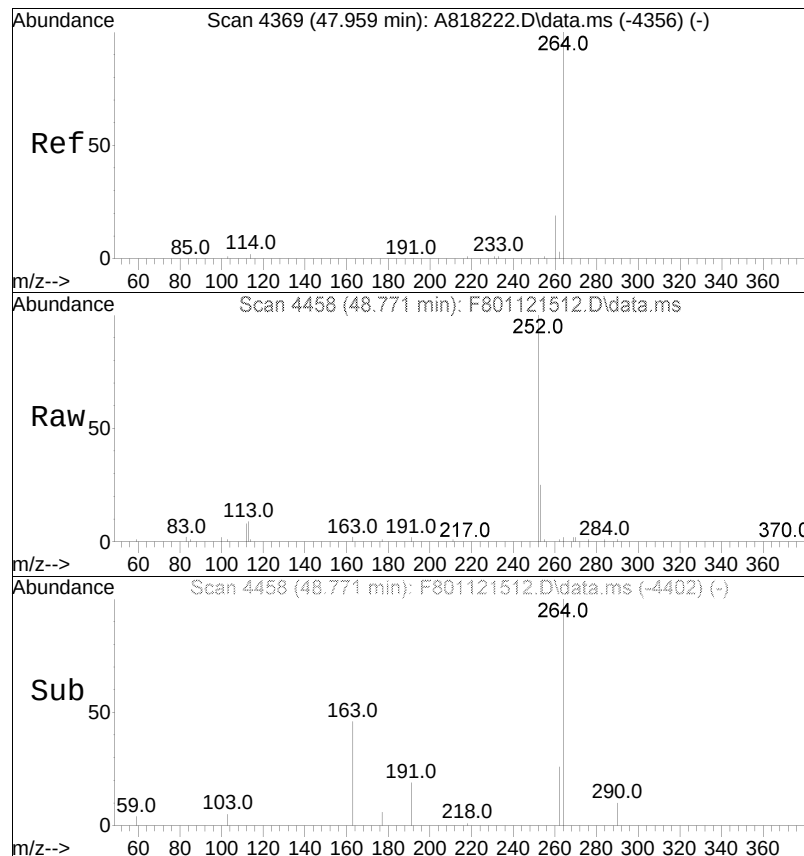




#89
 Benzo[a]pyrene
 Concen: 12397.13 ng/mL
 RT: 48.479 min Scan# 4426
 Delta R.T. 0.027 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

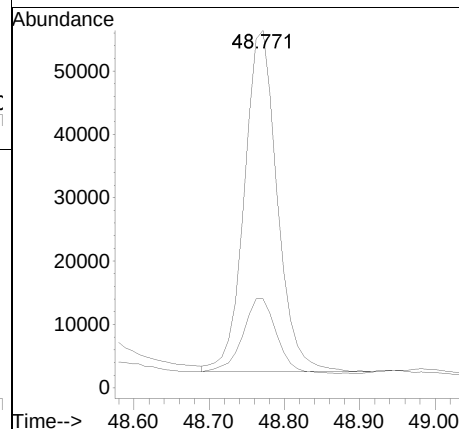
Tgt Ion: 252 Resp: 1053544
 Ion Ratio Lower Upper
 252 100
 253 23.1 18.1 33.7

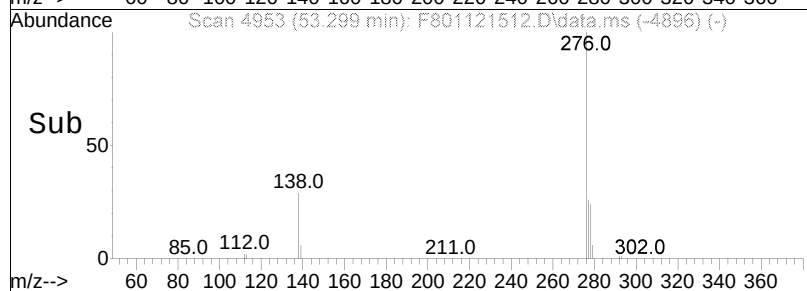
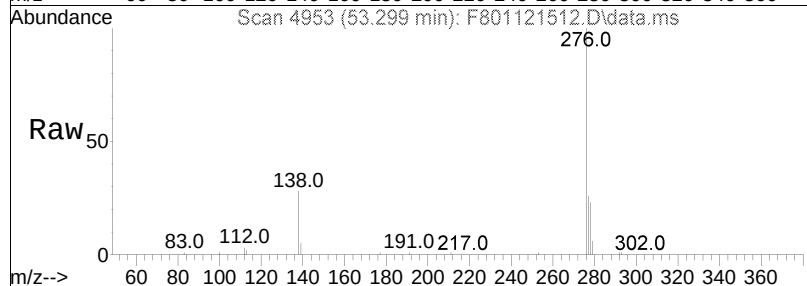
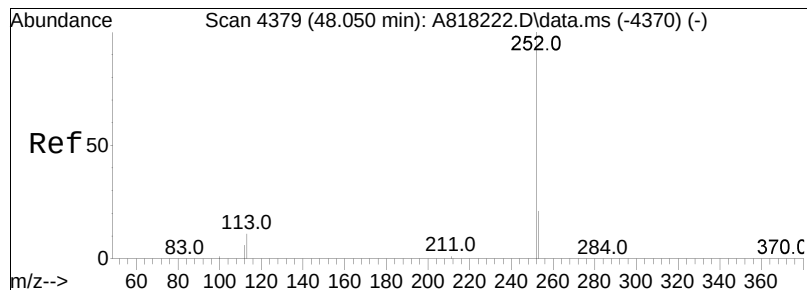




#90
Perylene
Concen: 1829.26 ng/mL
RT: 48.771 min Scan# 4458
Delta R.T. 0.009 min
Lab File: F801121512.D
Acq: 13 Jan 2015 1:48 am

Tgt	Ion	Ratio	Lower	Upper
252	100			
253	23.2	17.8	33.1	





#91

Indeno[1,2,3-cd]pyrene

Concen: 3871.13 ng/mL M4

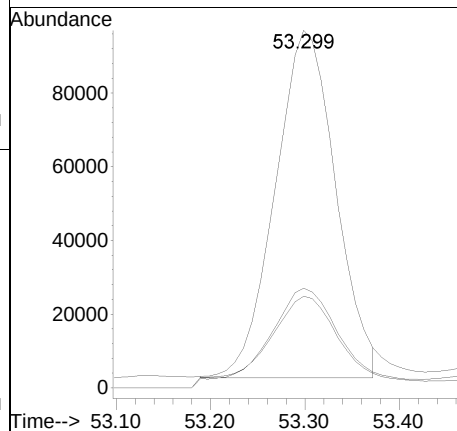
RT: 53.299 min Scan# 4953

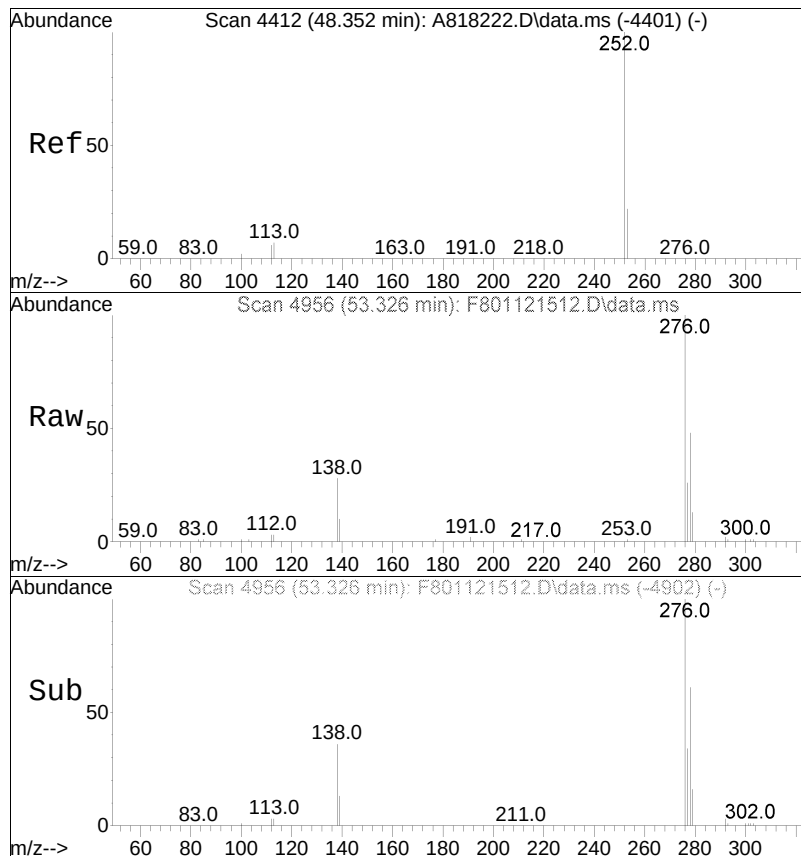
Delta R.T. 0.018 min

Lab File: F801121512.D

Acq: 13 Jan 2015 1:48 am

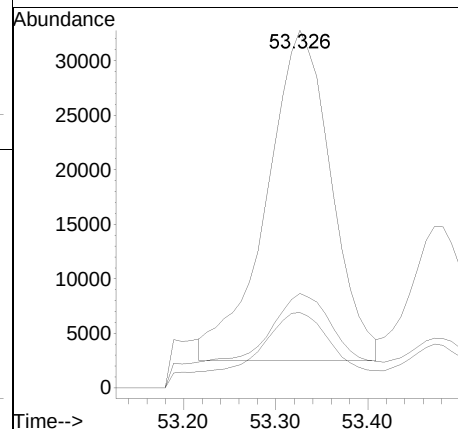
Tgt	Ion:276	Resp:	420850
Ion	Ratio	Lower	Upper
276	100		
138	35.4	19.9	37.0
277	33.5	16.9	31.5#

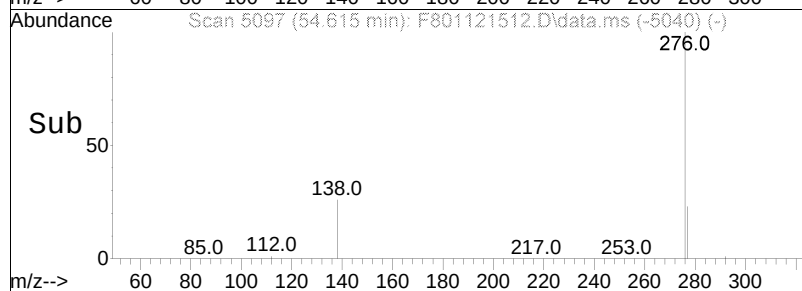
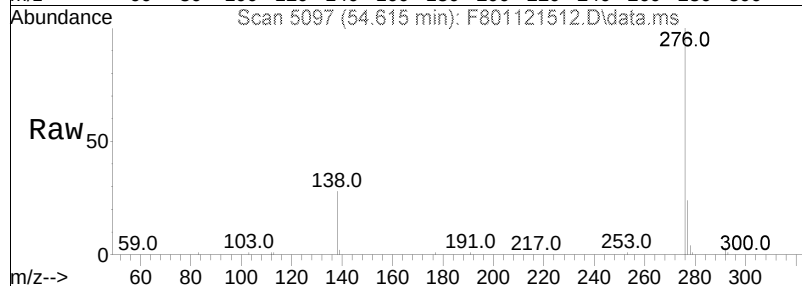
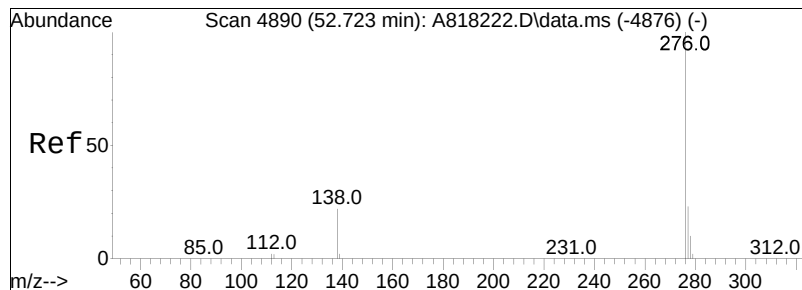




#92
 Dibenz[ah]+[ac]anthracene
 Concen: 1608.88 ng/mL M3
 RT: 53.326 min Scan# 4956
 Delta R.T. -0.009 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

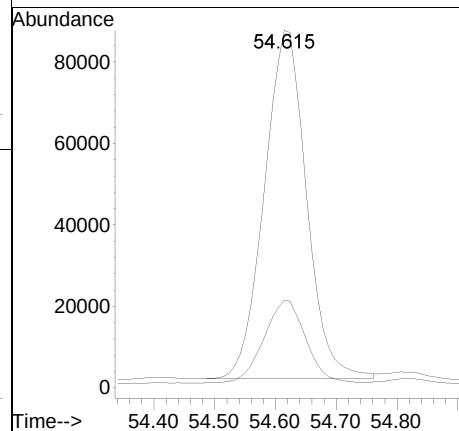
Tgt Ion	Ratio	Resp	Lower	Upper
278	100	147974		
139	9.3	15.7	29.1#	
279	9.8	17.1	31.9#	

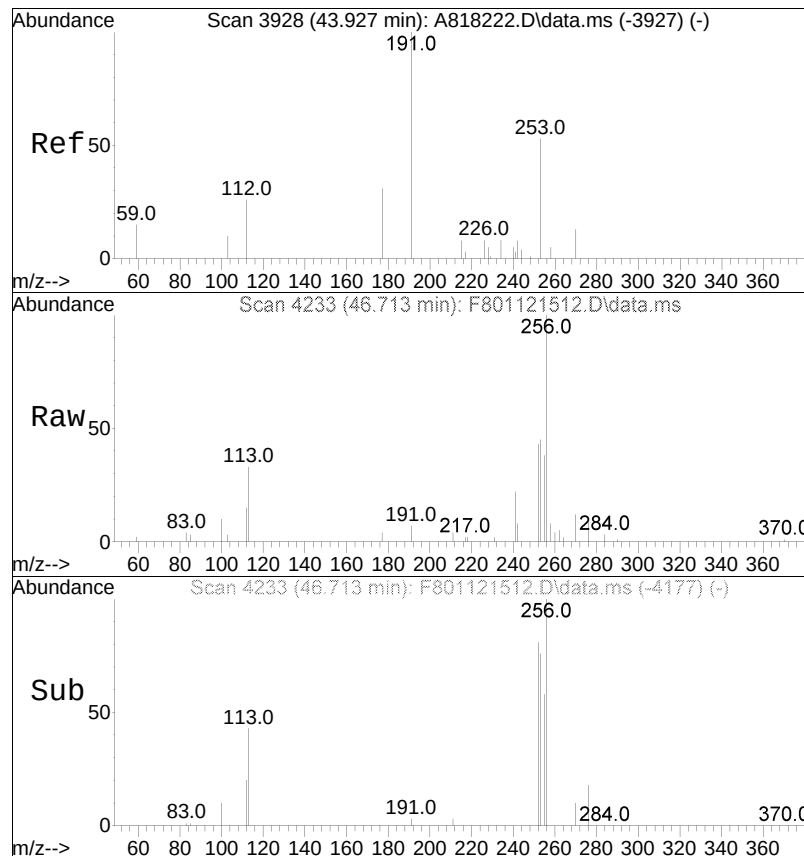




#93
 Benzo[g,h,i]perylene
 Concen: 4009.16 ng/mL
 RT: 54.615 min Scan# 5097
 Delta R.T. 0.018 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

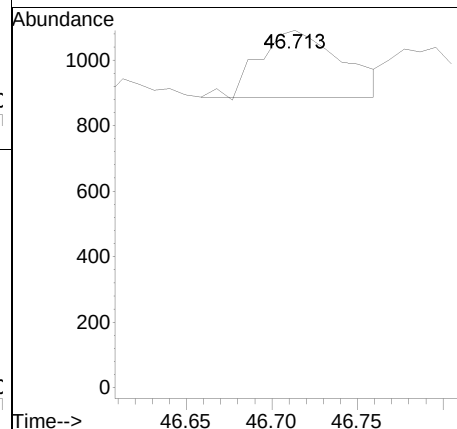
Tgt Ion	Ratio	Lower	Upper
276	100		
277	24.0	16.6	30.8

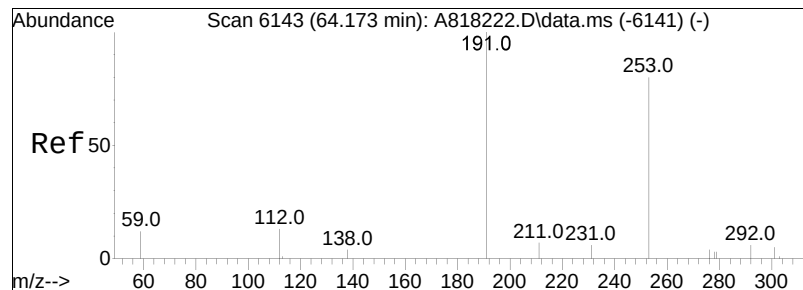




#103
 C28 Tricyclic Terpane-22R (T8)
 Concen: 22.13 ng/ml
 RT: 46.713 min Scan# 4233
 Delta R.T. 0.009 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

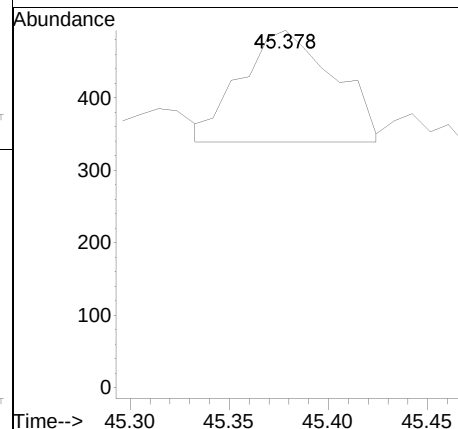
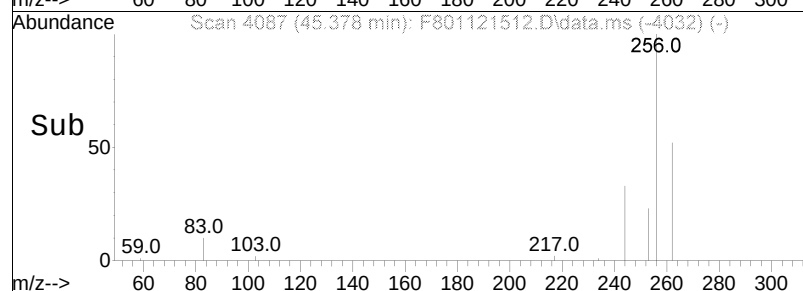
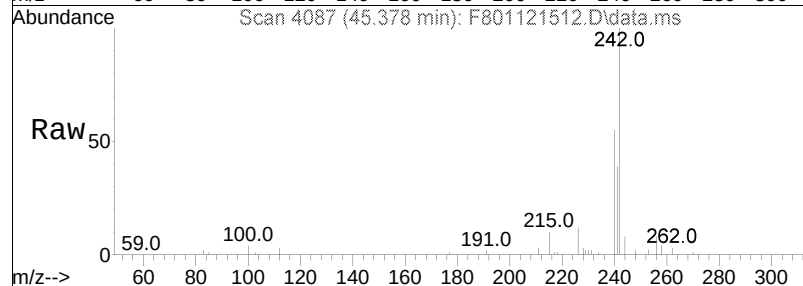
Tgt Ion:191 Resp: 688





#130
 13b(H),17a(H)-20S-Diacholestane
 Concen: 36.23 ng/ml M4
 RT: 45.378 min Scan# 4087
 Delta R.T. 0.000 min
 Lab File: F801121512.D
 Acq: 13 Jan 2015 1:48 am

Tgt Ion:217 Resp: 501



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121513.D
 Acq On : 13 Jan 2015 3:14 am
 Operator : PAH8:MS
 Sample : L1500432-03,32
 Misc : WG755949,WG755041
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 15 11:55:17 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.858	164	28011M4	500.000	ng/mL	0.00
74) Chrysene-d12	43.287	240	35920	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	19.932	136	30231	266.739	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	26.67%#		
42) Phenanthrene-d10	32.725	188	21632	257.132	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	25.71%#		
83) Benzo[b]fluoranthene-d12	47.171	264	20887	298.063	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	29.81%#		
88) Benzo[a]pyrene-d12	48.369	264	18067	293.037	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	29.30%#		
129) 5B(H)Cholane - Surr	43.872	217	3959	298.405	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	29.84%#		
Target Compounds						
						Qvalue
10) Naphthalene	20.078	128	32074136	254263.378	ng/mL	100
11) C1-Naphthalenes	22.734	142	17661581M5	140009.796	ng/mL	
12) C2-Naphthalenes	25.526	156	8368873M5	66343.110	ng/mL	
13) C3-Naphthalenes	27.835	170	2762823M5	21901.906	ng/mL	
14) C4-Naphthalenes	30.590	184	687029M5	5446.330	ng/mL	
23) Biphenyl	24.550	154	1309262	13408.483	ng/mL	100
25) Dibenzofuran	27.625	168	500664M3	5023.836	ng/mL	
26) Acenaphthylene	26.283	152	7276961	61650.845	ng/mL	100
27) Acenaphthene	26.986	153	548831M4	7609.551	ng/mL	
29) Fluorene	29.021	166	2218125M4	28729.626	ng/mL	
30) C1-Fluorenes	31.220	180	1149175M5	14884.358	ng/mL	
31) C2-Fluorenes	33.400	194	733531M5	9500.849	ng/mL	
32) C3-Fluorenes	35.372	208	269935M5	3496.255	ng/mL	
33) Dibenzothiophene	32.314	184	964368	8936.655	ng/mL	93
37) OTP	0.000		0	N.D.	d	
38) C1-Dibenzothiophenes	34.085	198	1021043M5	9461.854	ng/mL	
38) C1-Dibenzothiophenes BS	34.085	198	1021043M5	9461.854	ng/mL	
39) C2-Dibenzothiophenes	35.764	212	646653M5	5992.438	ng/mL	
40) C3-Dibenzothiophenes	37.563	226	260259M5	2411.782	ng/mL	
41) C4-Dibenzothiophenes	39.234	240	73339M5	679.622	ng/mL	
43) Phenanthrene	32.862	178	7318456	69975.530	ng/mL	99
49) C1-Phenanthrenes/Anthrace	34.888	192	5350851M5	51162.244	ng/mL	
50) C2-Phenanthrenes/Anthrace	37.033	206	2056224M5	19660.618	ng/mL	
50) C2-Phenanthrenes/Anthr BS	37.033	206	2056224M5	19660.618	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121513.D
 Acq On : 13 Jan 2015 3:14 am
 Operator : PAH8:MS
 Sample : L1500432-03,32
 Misc : WG755949,WG755041
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 15 11:55:17 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) 5AA IS BKGD	0.000		0	N.D.	d	
52) C3-Phenanthrenes/Anthrace	38.859	220	550704M5	5265.565	ng/mL	
53) C4-Phenanthrenes/Anthrace	41.051	234	123155M5	1177.548	ng/mL	
55) Anthracene	33.017	178	2452149M4	25592.620	ng/mL	
56) Carbazole	33.656	167	136889M4	1336.131	ng/mL	
58) Fluoranthene	37.599	202	2281343M4	21500.406	ng/mL	
59) Benzo(b)fluorene	40.092	216	382728M3	6228.729	ng/mL	
60) Pyrene	38.494	202	3326561	29935.686	ng/mL	97
61) C1-Fluoranthenes/Pyrenes	39.854	216	3568131M5	32109.572	ng/mL	
62) C2-Fluoranthenes/Pyrenes	41.498	230	1083040M5	9746.265	ng/mL	
63) C3-Fluoranthenes/Pyrenes	43.753	244	337268M5	3035.071	ng/mL	
64) C4-Fluoranthenes/Pyrenes	44.995	258	117072M5	1053.530	ng/mL	
66) Naphthobenzothiophene	42.292	234	219742	2247.702	ng/mL	93
67) Naphthobenzothiophene-2,1	42.292	234	219742	2247.702	ng/mL	93
68) Naphthobenzothiophene-1,2	42.630	234	60703	620.920	ng/mL#	13
69) Naphthobenzothiophene-2,3	42.931	234	87032M3	890.235	ng/mL	
70) C1-Naphthobenzothiophenes	43.680	248	327735M5	3352.344	ng/mL	
71) C2-Naphthobenzothiophenes	45.177	262	160432M5	1641.031	ng/mL	
72) C3-Naphthobenzothiophenes	47.061	276	64811M5	662.940	ng/mL	
73) C4-Naphthobenzothiophenes	49.860	290	30892M5	315.989	ng/mL	
75) Benz[a]anthracene	43.232	228	1172632M3	14204.867	ng/mL	
77) Chrysene/Triphenylene	43.397	228	1069327	13532.674	ng/mL	98
78) C1-Chrysenes	44.849	242	966740M5	12234.402	ng/mL	
79) C2-Chrysenes	46.540	256	465175M5	5886.938	ng/mL	
79) C2-Chrysenes BS	46.540	256	465175M5	5886.938	ng/mL	
80) BBF-D12 Surr BKGD	0.000		0	N.D.	d	
81) C3-Chrysenes	48.140	270	199829M5	2528.900	ng/mL	
82) C4-Chrysenes	49.156	284	48549M5	614.403	ng/mL	
84) Benzo[b]fluoranthene	47.262	252	423691	4805.268	ng/mL	98
85) Benzo[j]+[k]fluoranthene	47.336	252	610008M6	7025.776	ng/mL	
86) Benzo[a]fluoranthene	47.647	252	323525	3726.204	ng/mL	99
87) Benzo[e]pyrene	48.278	252	460617	5165.709	ng/mL	98
89) Benzo[a]pyrene	48.470	252	933783	11453.782	ng/mL	95
90) Perylene	48.772	252	143313	1673.772	ng/mL	96
91) Indeno[1,2,3-cd]pyrene	53.299	276	401355M3	3848.340	ng/mL	
92) Dibenz[ah]+[ac]anthracene	53.326	278	139884M4	1585.410	ng/mL	
93) Benzo[g,h,i]perylene	54.615	276	389525	3936.077	ng/mL	99
94) Hopane (T19)	0.000		0	N.D.	d	
96) C23 Tricyclic Terpane (T4)	0.000		0	N.D.	d	
97) C24 Tricyclic Terpane (T5)	41.635	191	596	19.986	ng/mL	100
98) C25 Tricyclic Terpane (T6)	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121513.D
 Acq On : 13 Jan 2015 3:14 am
 Operator : PAH8:MS
 Sample : L1500432-03,32
 Misc : WG755949,WG755041
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 15 11:55:17 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99)	C24 Tetracyclic Terpane (	0.000		0	N.D.	d	
100)	C26 Tricyclic Terpane-22S	0.000		0	N.D.	d	
101)	C26 Tricyclic Terpane-22R	0.000		0	N.D.	d	
102)	C28 Tricyclic Terpane-22S	0.000		0	N.D.	d	
103)	C28 Tricyclic Terpane-22R	46.723	191	527M4	17.672	ng/ml	
104)	C29 Tricyclic Terpane-22S	0.000		0	N.D.	d	
105)	C29 Tricyclic Terpane-22R	0.000		0	N.D.	d	
106)	18a-22,29,30-Trisnorneocho	0.000		0	N.D.	d	
107)	C30 Tricyclic Terpane-22S	0.000		0	N.D.	d	
108)	C30 Tricyclic Terpane-22R	0.000		0	N.D.	d	
109)	17a(H)-22,29,30-Trisnorho	0.000		0	N.D.	d	
110)	17a/b,21b/a 28,30-Bisnorh	0.000		0	N.D.	d	
111)	17a(H),21b(H)-25-Norhopan	0.000		0	N.D.	d	
112)	30-Norhopane (T15)	0.000		0	N.D.	d	
113)	18a(H)-30-Norneohopane-C2	0.000		0	N.D.	d	
114)	17a(H)-Diahopane (X)	0.000		0	N.D.	d	
115)	30-Normoretane (T17)	0.000		0	N.D.	d	
116)	18a(H)&18b(H)-Oleananes (	0.000		0	N.D.	d	
117)	Moretane (T20)	0.000		0	N.D.	d	
118)	30-Homohopane-22S (T21)	0.000		0	N.D.	d	
119)	30-Homohopane-22R (T22)	0.000		0	N.D.	d	
120)	Gammacerane/C32-diahopane	0.000		0	N.D.	d	
121)	30,31-Bishomohopane-22S (	0.000		0	N.D.	d	
122)	30,31-Bishomohopane-22R (	0.000		0	N.D.	d	
123)	30,31-Trishomohopane-22S	0.000		0	N.D.	d	
124)	30,31-Trishomohopane-22R	0.000		0	N.D.	d	
125)	Tetrakishomohopane-22S (T	0.000		0	N.D.	d	
126)	Tetrakishomohopane-22R (T	0.000		0	N.D.	d	
127)	Pentakishomohopane-22S (T	0.000		0	N.D.	d	
128)	Pentakishomohopane-22R (T	0.000		0	N.D.	d	
130)	13b(H),17a(H)-20S-Diachol	45.378	217	400M4	30.150	ng/ml	
131)	13b(H),17a(H)-20R-Diachol	0.000		0	N.D.	d	
132)	13b,17a-20S-Methylidiachol	0.000		0	N.D.	d	
133)	14a,17a-20S-Chol/13b,17a-	0.000		0	N.D.	d	
134)	14a,17a-20R-Chol/13b,17a-	0.000		0	N.D.	d	
135)	Unknown Sterane (S18)	0.000		0	N.D.	d	
136)	13a,17b-20S-Ethylidiachole	0.000		0	N.D.	d	
137)	14a,17a-20S-Methylcholest	0.000		0	N.D.	d	
138)	14a,17a-20R-Methylcholest	0.000		0	N.D.	d	
139)	14a(H),17a(H)-20S-Ethylch	0.000		0	N.D.	d	
140)	14a(H),17a(H)-20R-Ethylch	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121513.D
 Acq On : 13 Jan 2015 3:14 am
 Operator : PAH8:MS
 Sample : L1500432-03,32
 Misc : WG755949,WG755041
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 15 11:55:17 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
141)	14b(H),17b(H)-20R-Cholest	0.000		0	N.D.	d	
142)	14b(H),17b(H)-20S-Cholest	0.000		0	N.D.	d	
143)	14b,17b-20R-Methylcholest	0.000		0	N.D.	d	
144)	14b,17b-20S-Methylcholest	0.000		0	N.D.	d	
145)	14b(H),17b(H)-20R-Ethylch	0.000		0	N.D.	d	
146)	14b(H),17b(H)-20S-Ethylch	0.000		0	N.D.	d	
147)	C26,20R- +C27,20S- triaro	0.000		0	N.D.	d	
148)	C28,20S-triaromatic stero	0.000		0	N.D.		
149)	C27,20R-triaromatic stero	0.000		0	N.D.		
150)	C28,20R-triaromatic stero	0.000		0	N.D.	d	

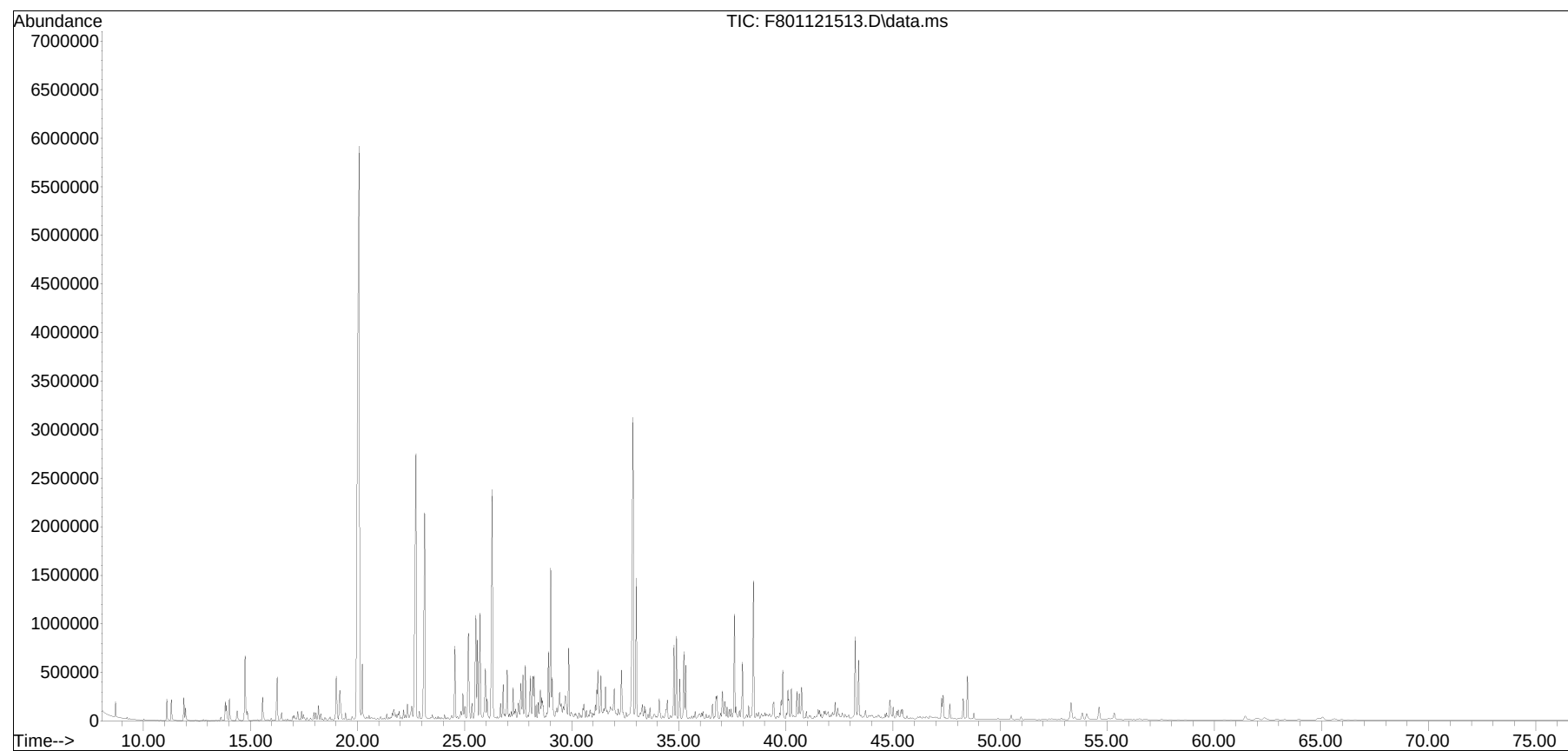
(#) = qualifier out of range (m) = manual integration (+) = signals summed

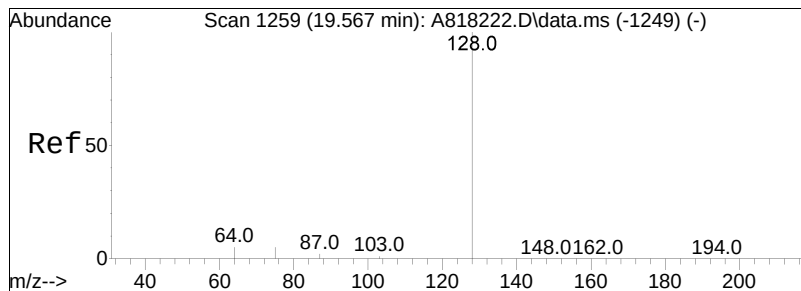
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN12\
Data File : F801121513.D
Acq On : 13 Jan 2015 3:14 am
Operator : PAH8:MS
Sample : L1500432-03,32
Misc : WG755949,WG755041
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 15 11:55:17 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 13 07:23:40 2015
Response via : Initial Calibration

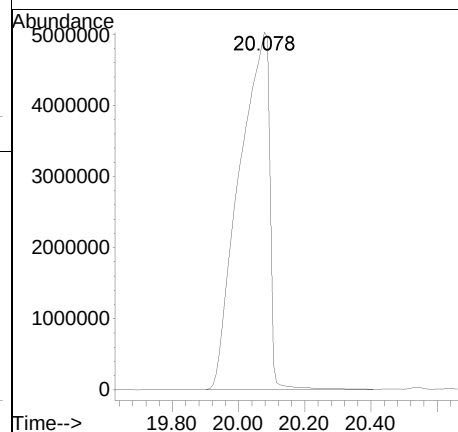
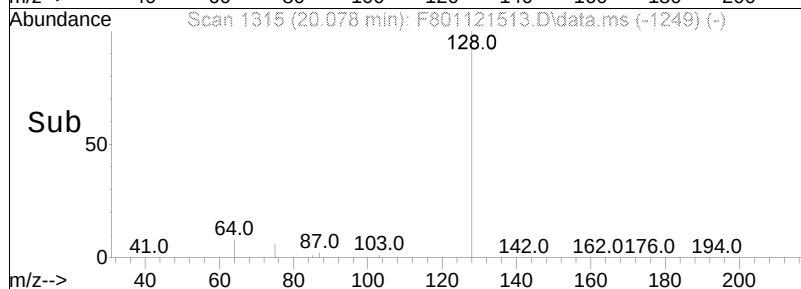
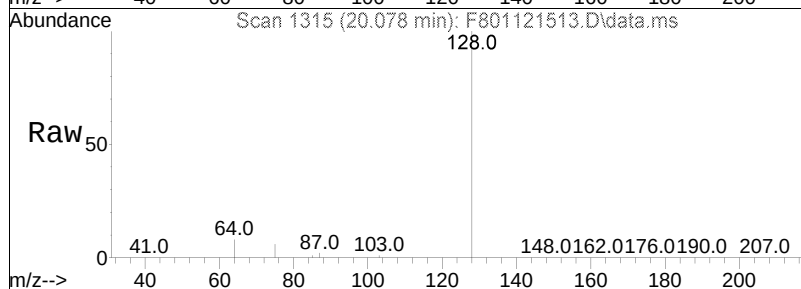
Sub List : ALKPAHURS - ALKPAH and BIO

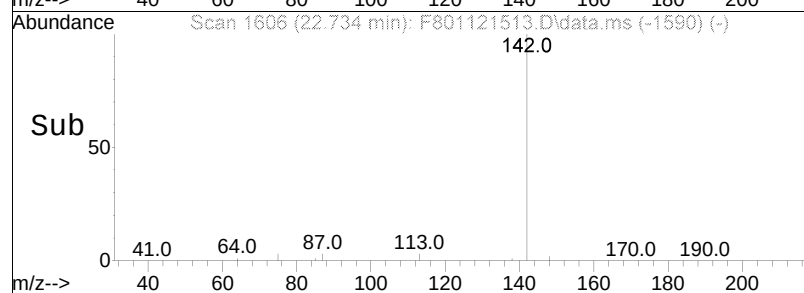
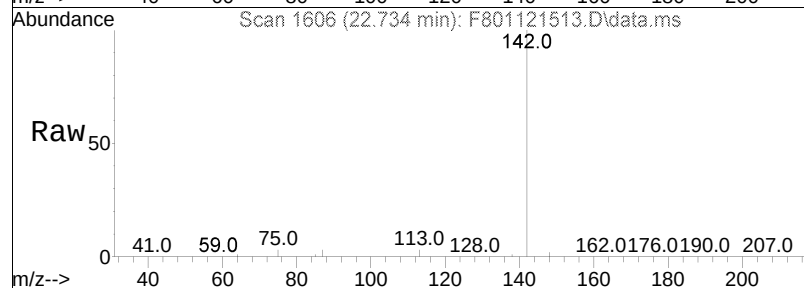
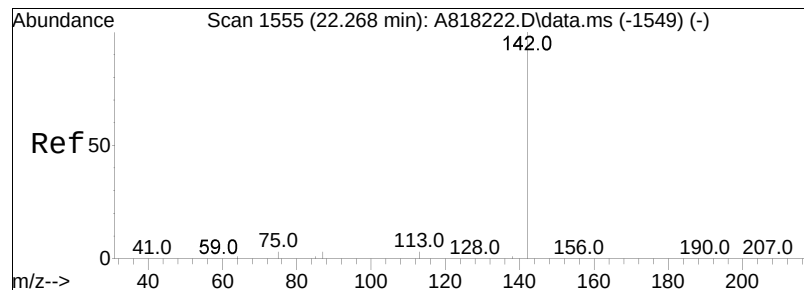




#10
 Naphthalene
 Concen: 254263.38 ng/mL
 RT: 20.078 min Scan# 1315
 Delta R.T. 0.101 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

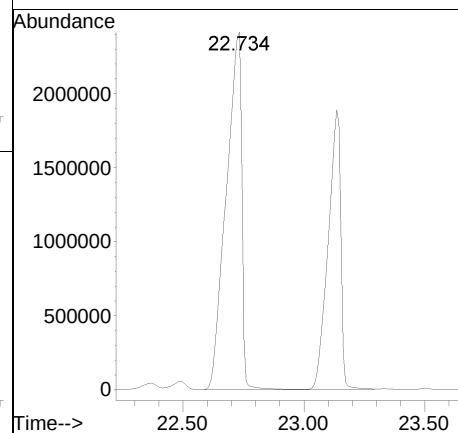
Tgt Ion:128 Resp:32074136

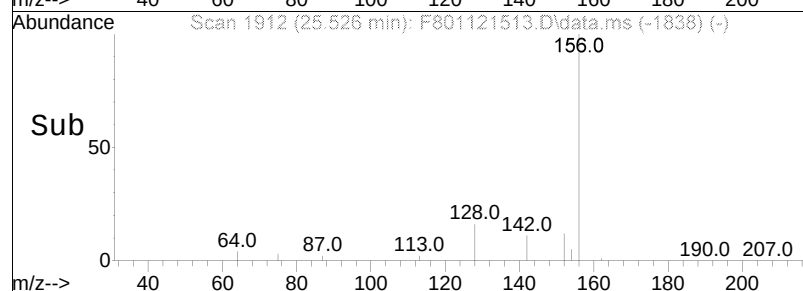
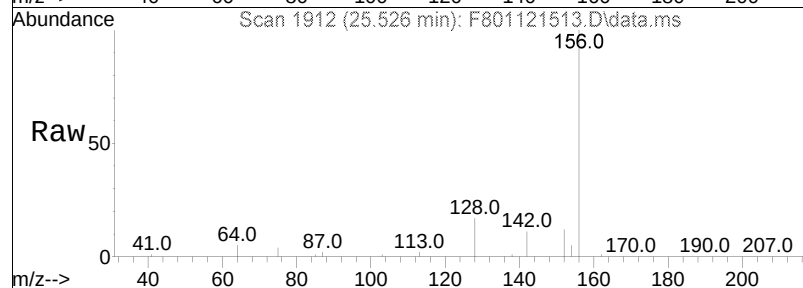
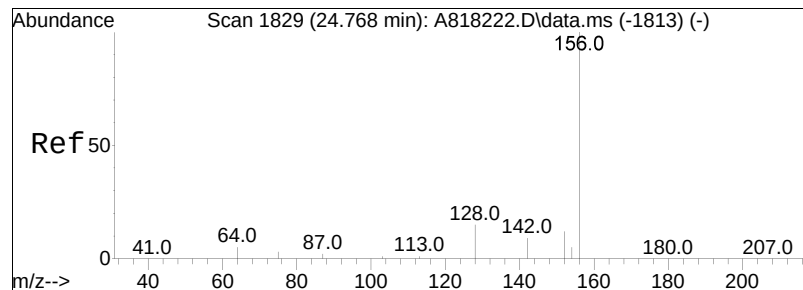




#11
 C1-Naphthalenes
 Concen: 140009.80 ng/mL M5
 RT: 22.734 min Scan# 1606
 Delta R.T. 0.064 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

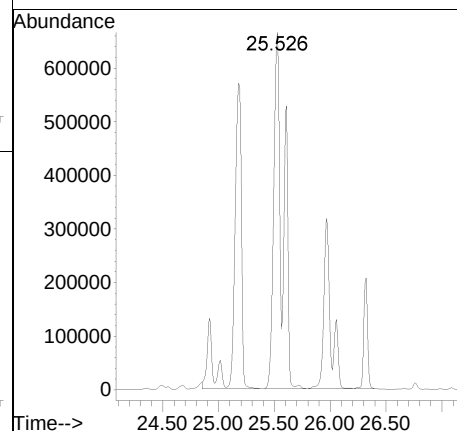
Tgt Ion:142 Resp:17661581

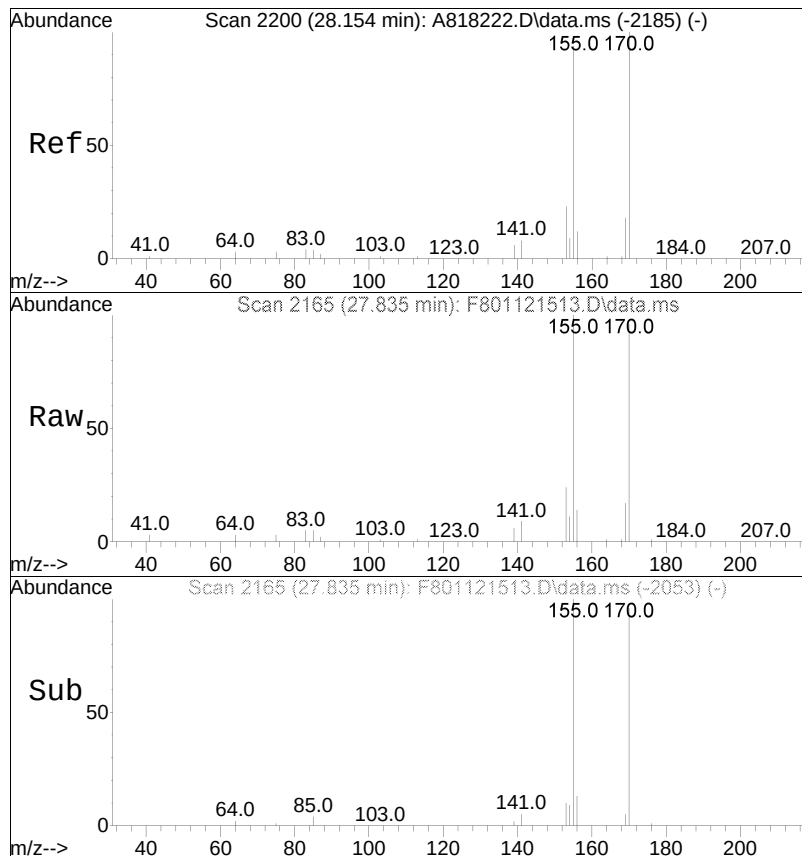




#12
C2-Naphthalenes
Concen: 66343.11 ng/mL M5
RT: 25.526 min Scan# 1912
Delta R.T. 0.017 min
Lab File: F801121513.D
Acq: 13 Jan 2015 3:14 am

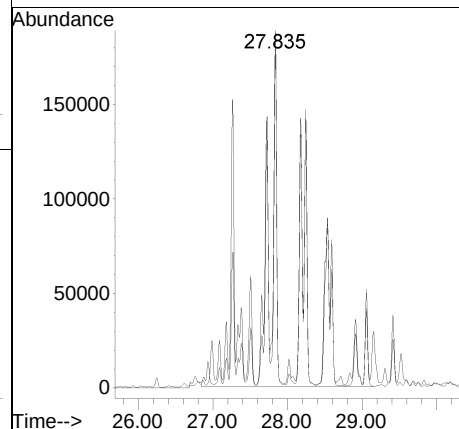
Tgt Ion:156 Resp: 8368873

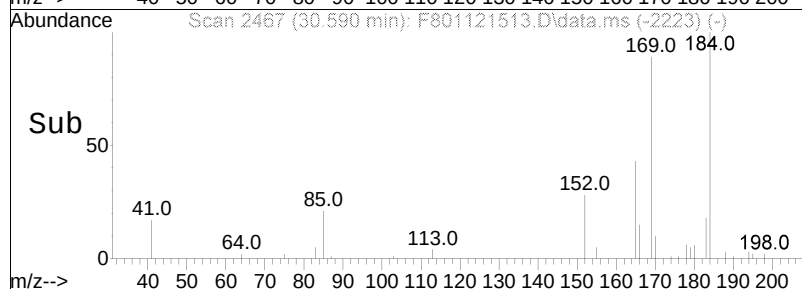
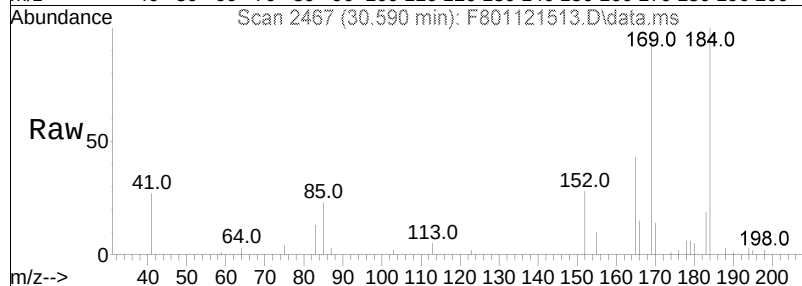
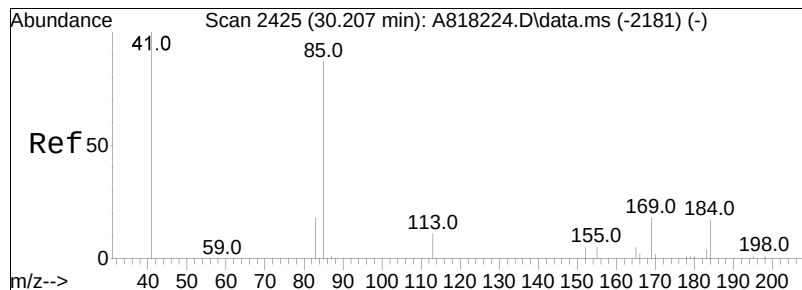




#13
 C3-Naphthalenes
 Concen: 21901.91 ng/mL M5
 RT: 27.835 min Scan# 2165
 Delta R.T. 0.008 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

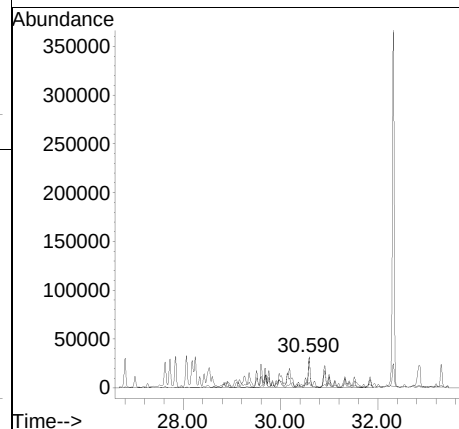
Tgt Ion	Ratio	Lower	Upper
170	100		
155	17.5	75.7	140.7#

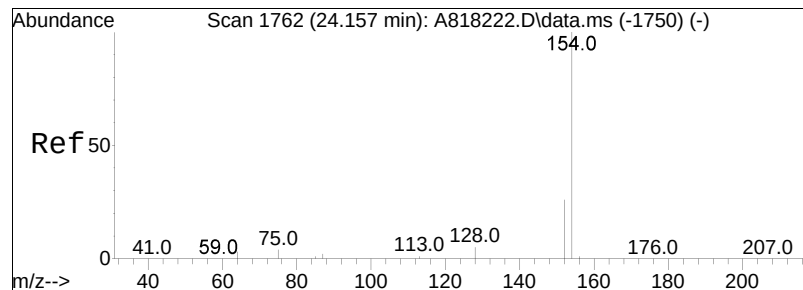




#14
C4-Naphthalenes
Concen: 5446.33 ng/mL M5
RT: 30.590 min Scan# 2467
Delta R.T. 0.000 min
Lab File: F801121513.D
Acq: 13 Jan 2015 3:14 am

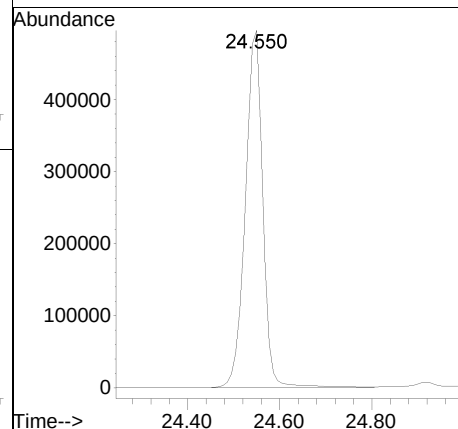
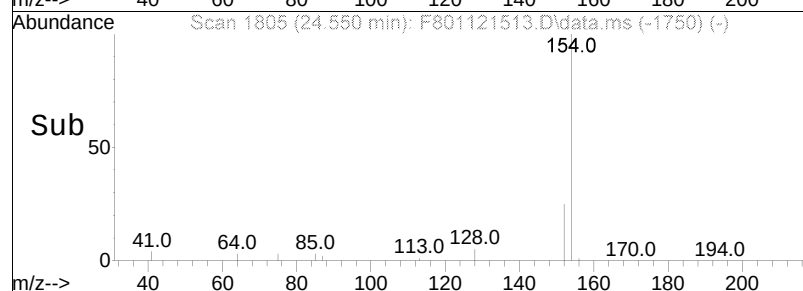
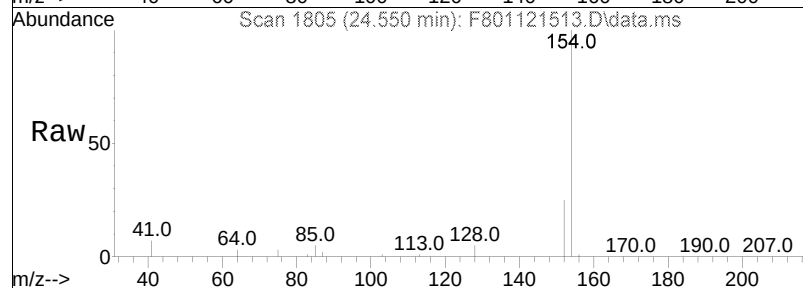
Tgt Ion	Ratio	Resp	Lower	Upper
184	100	687029		
169	5.5		87.1	161.7#
183	1.2		25.7	47.7#

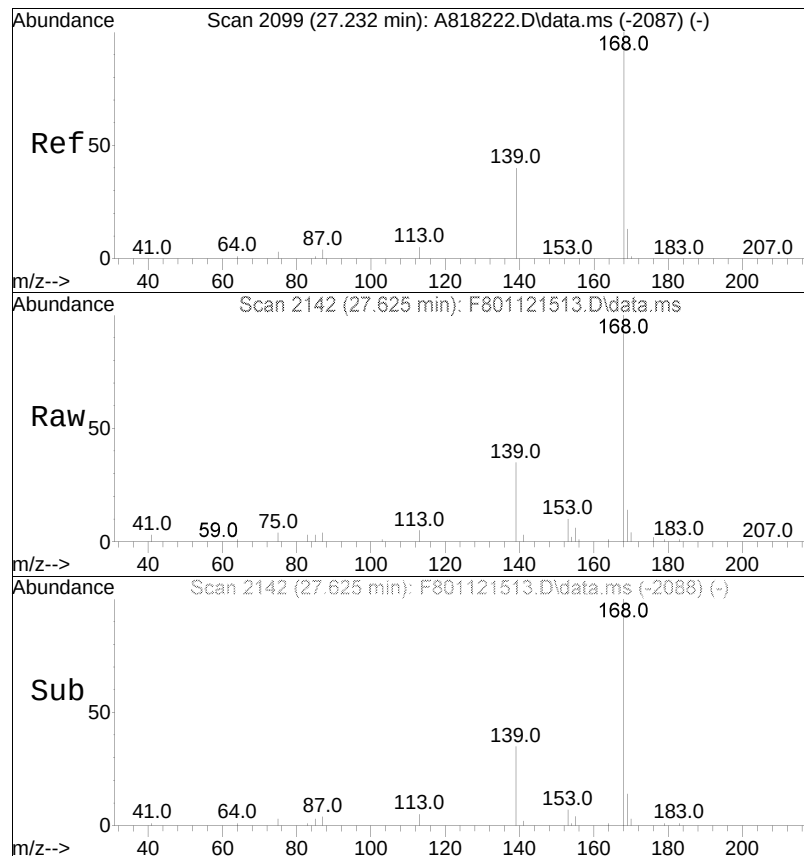




#23
Biphenyl
Concen: 13408.48 ng/mL
RT: 24.550 min Scan# 1805
Delta R.T. 0.000 min
Lab File: F801121513.D
Acq: 13 Jan 2015 3:14 am

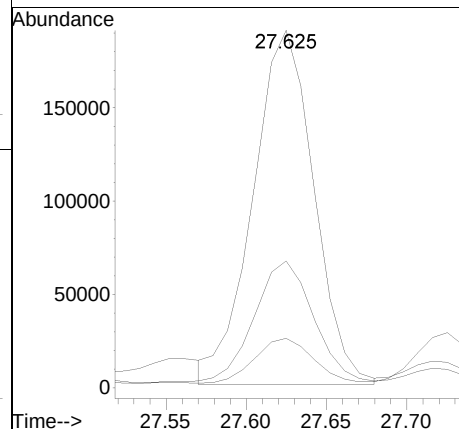
Tgt Ion:154 Resp: 1309262

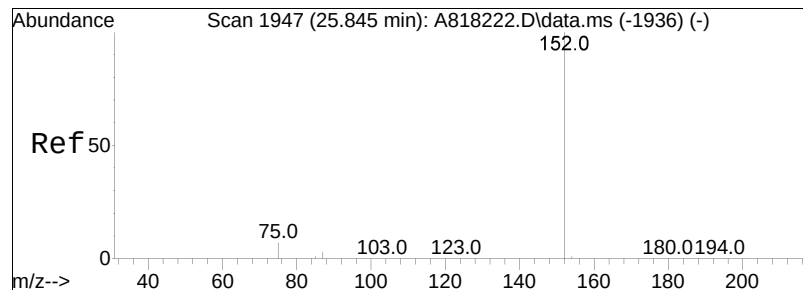




#25
 Dibenzofuran
 Concen: 5023.84 ng/mL M3
 RT: 27.625 min Scan# 2142
 Delta R.T. -0.009 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

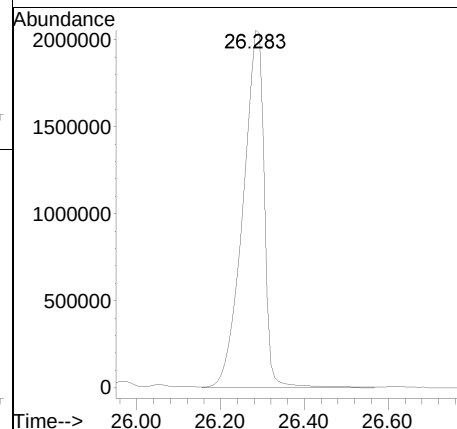
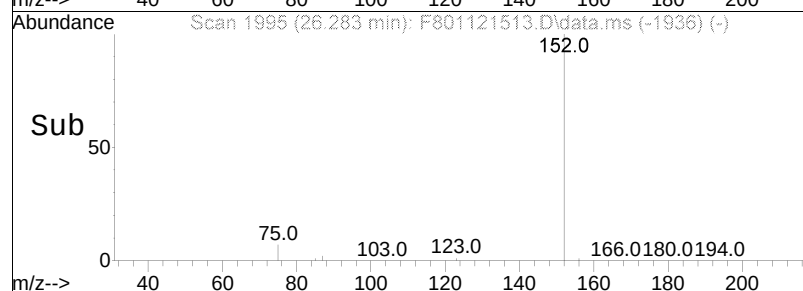
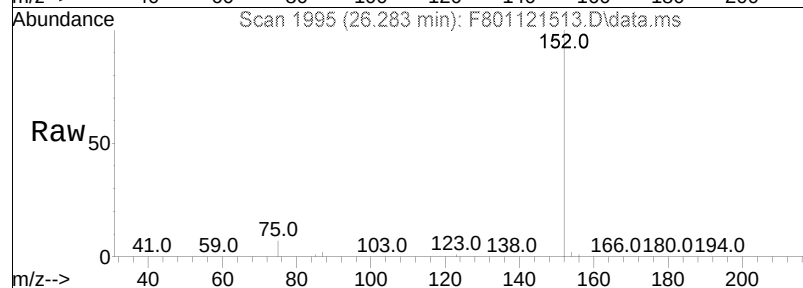
Tgt	Ion:168	Resp:	500664
Ion	Ratio	Lower	Upper
168	100		
139	33.3	26.6	49.4
169	12.0	9.4	17.4

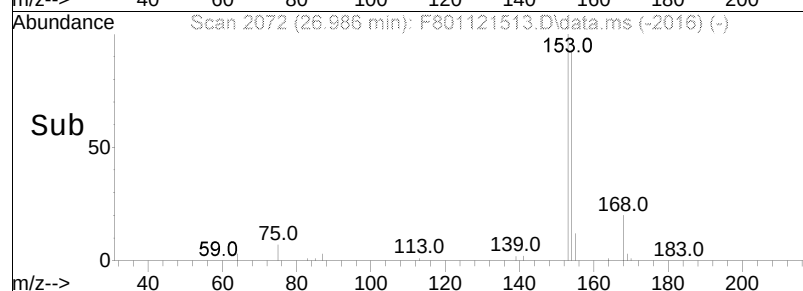
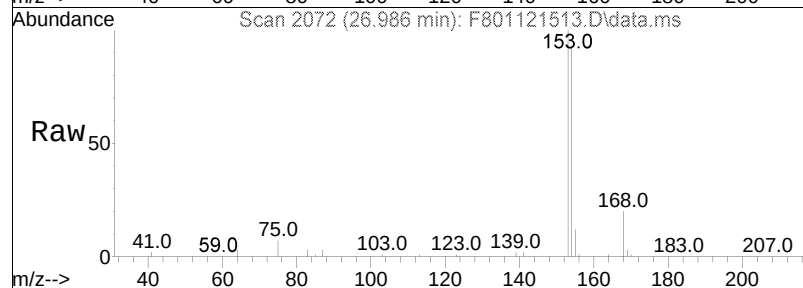
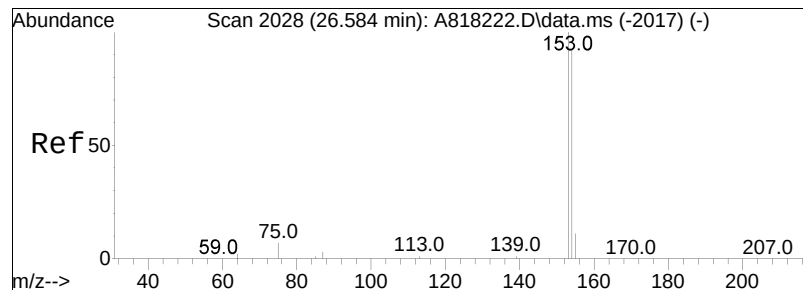




#26
Acenaphthylene
Concen: 61650.84 ng/mL
RT: 26.283 min Scan# 1995
Delta R.T. 0.037 min
Lab File: F801121513.D
Acq: 13 Jan 2015 3:14 am

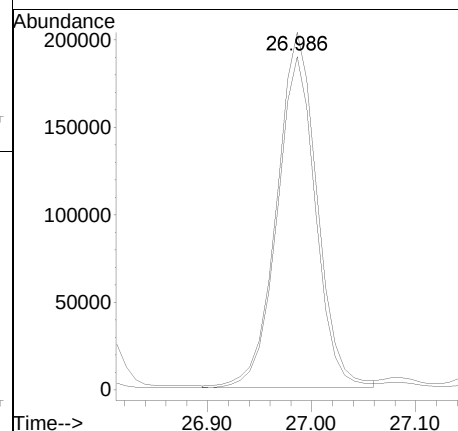
Tgt Ion:152 Resp: 7276961

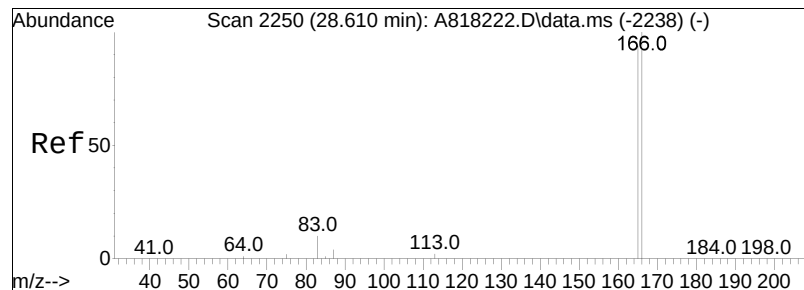




#27
 Acenaphthene
 Concen: 7609.55 ng/mL M4
 RT: 26.986 min Scan# 2072
 Delta R.T. 0.009 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

Tgt Ion	Ratio	Lower	Upper
153	100		
154	88.7	64.3	119.5





#29

Fluorene

Concen: 28729.63 ng/mL M4

RT: 29.021 min Scan# 2295

Delta R.T. 0.018 min

Lab File: F801121513.D

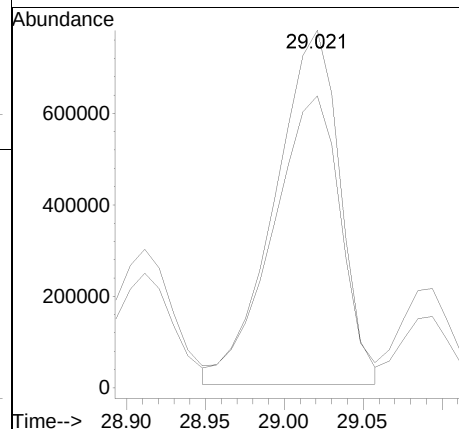
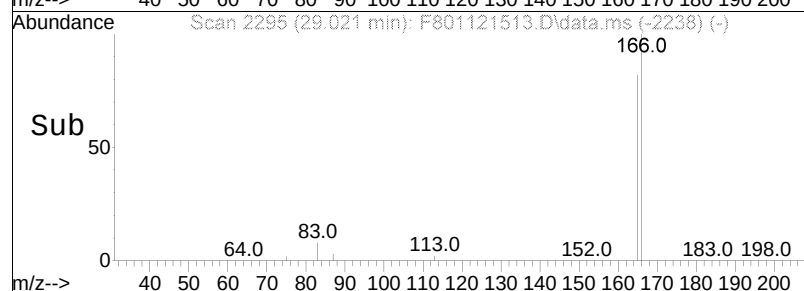
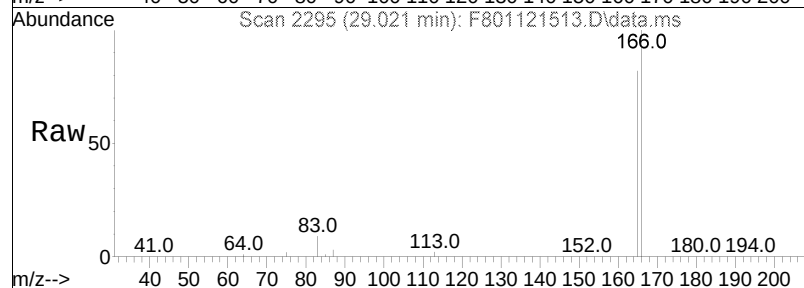
Acq: 13 Jan 2015 3:14 am

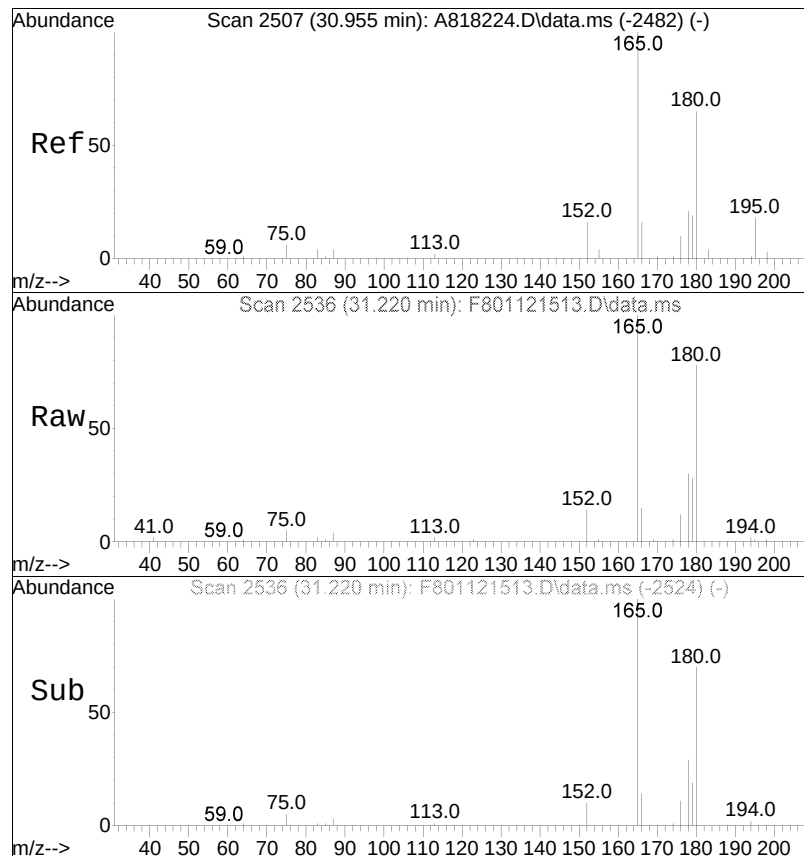
Tgt Ion:166 Resp: 2218125

Ion Ratio Lower Upper

166 100

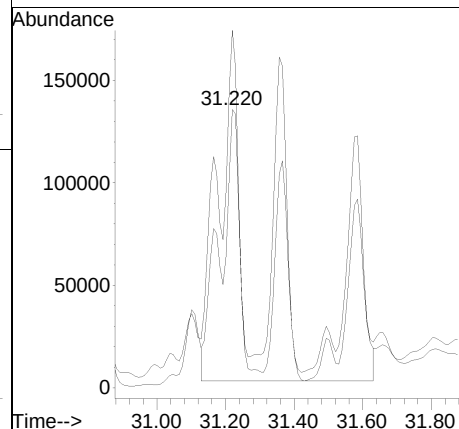
165 82.8 65.9 122.3

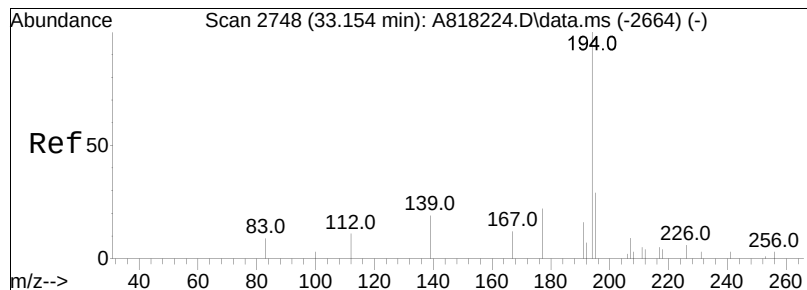




#30
 C1-Fluorenes
 Concen: 14884.36 ng/mL M5
 RT: 31.220 min Scan# 2536
 Delta R.T. -0.137 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

Tgt Ion	Ratio	Lower	Upper
180	100		
165	35.6	114.8	213.2#





#31

C2-Fluorenes

Concen: 9500.85 ng/mL M5

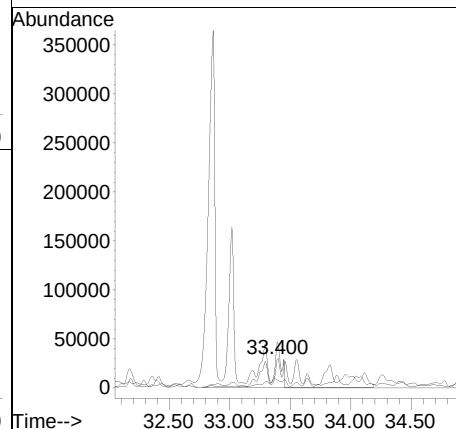
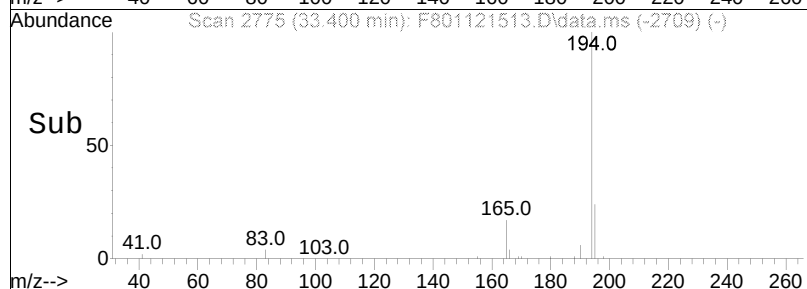
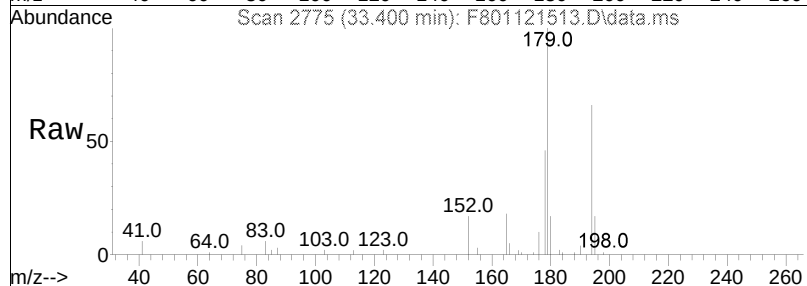
RT: 33.400 min Scan# 2775

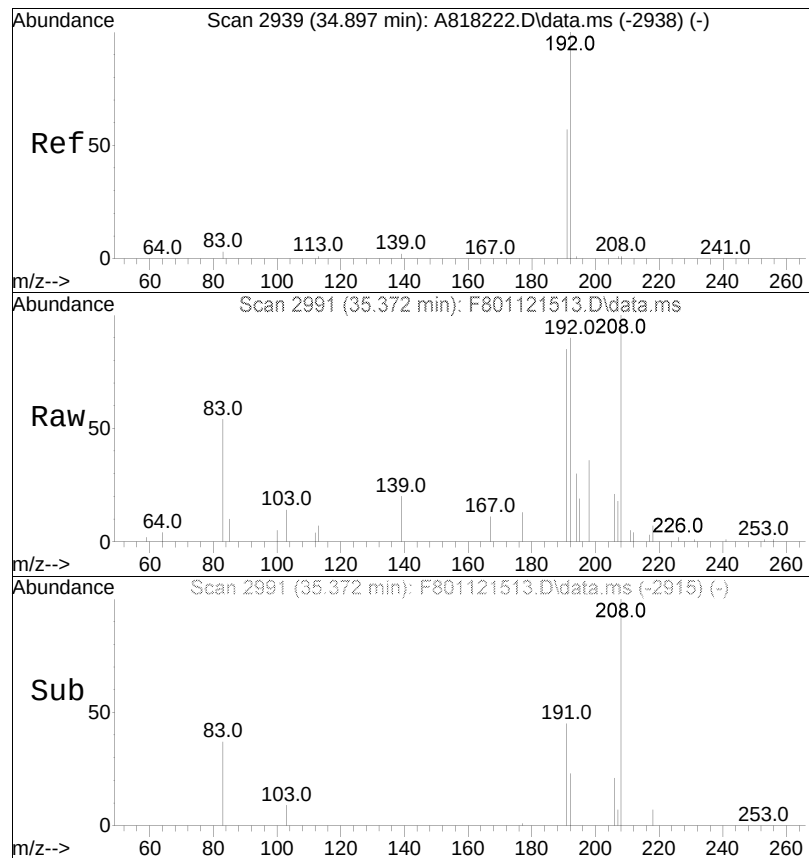
Delta R.T. -0.146 min

Lab File: F801121513.D

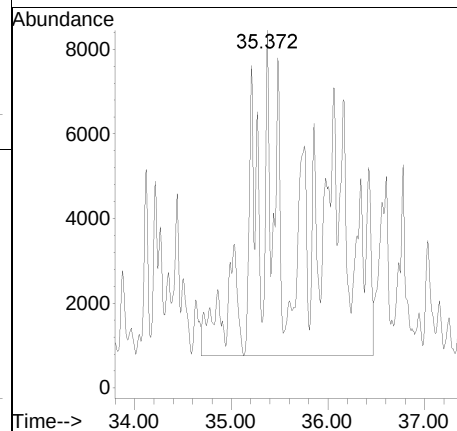
Acq: 13 Jan 2015 3:14 am

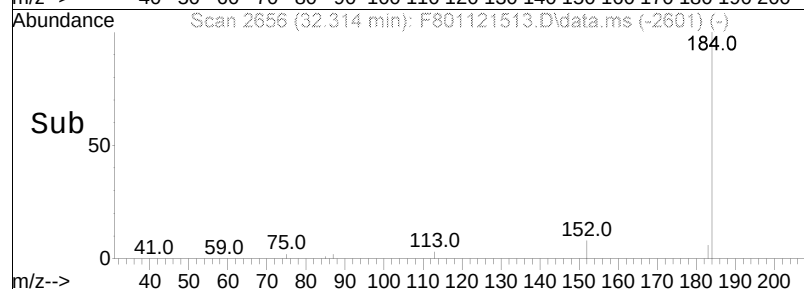
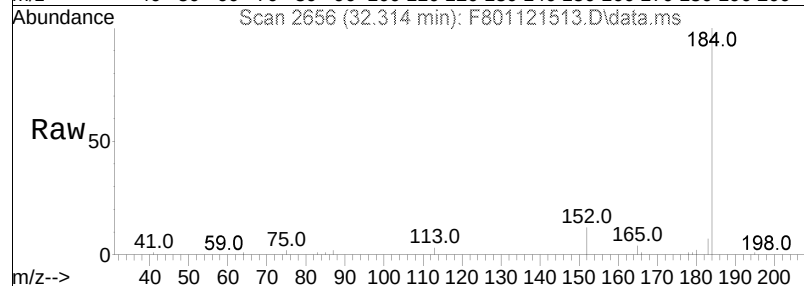
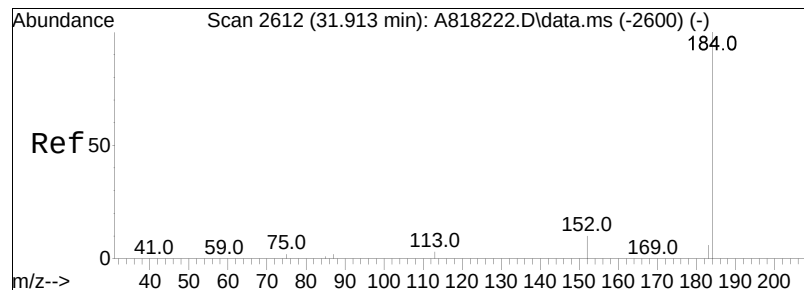
Tgt Ion	Ratio	Lower	Upper
194	100		
179	0.0	0.0	0.0
195	1.7	23.2	43.0#





#32
 C3-Fluorenes
 Concen: 3496.26 ng/mL M5
 RT: 35.372 min Scan# 2991
 Delta R.T. 0.000 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am
 Tgt Ion:208 Resp: 269935





#33

Dibenzothiophene

Concen: 8936.66 ng/mL

RT: 32.314 min Scan# 2656

Delta R.T. 0.000 min

Lab File: F801121513.D

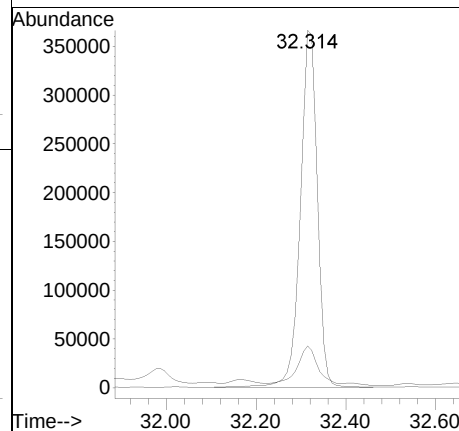
Acq: 13 Jan 2015 3:14 am

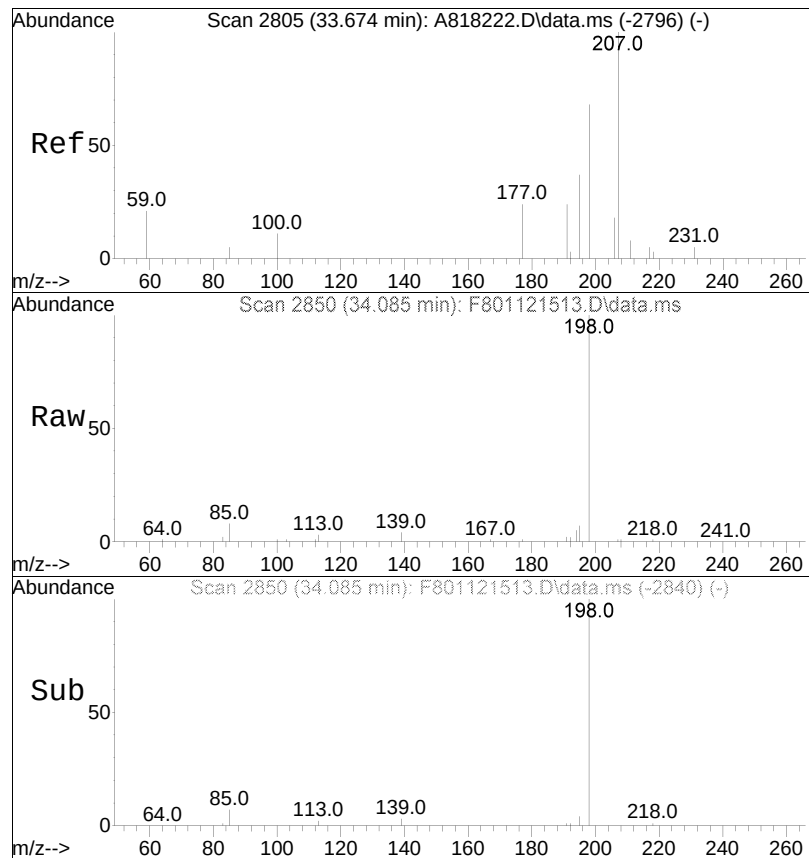
Tgt Ion:184 Resp: 964368

Ion Ratio Lower Upper

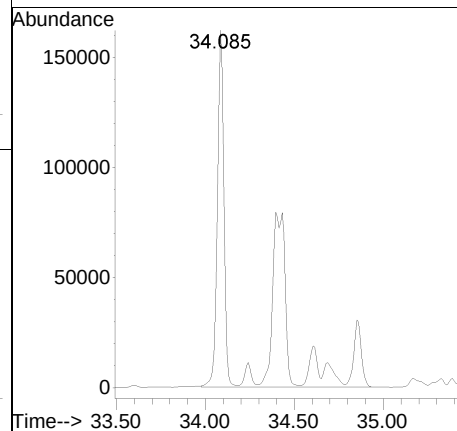
184 100

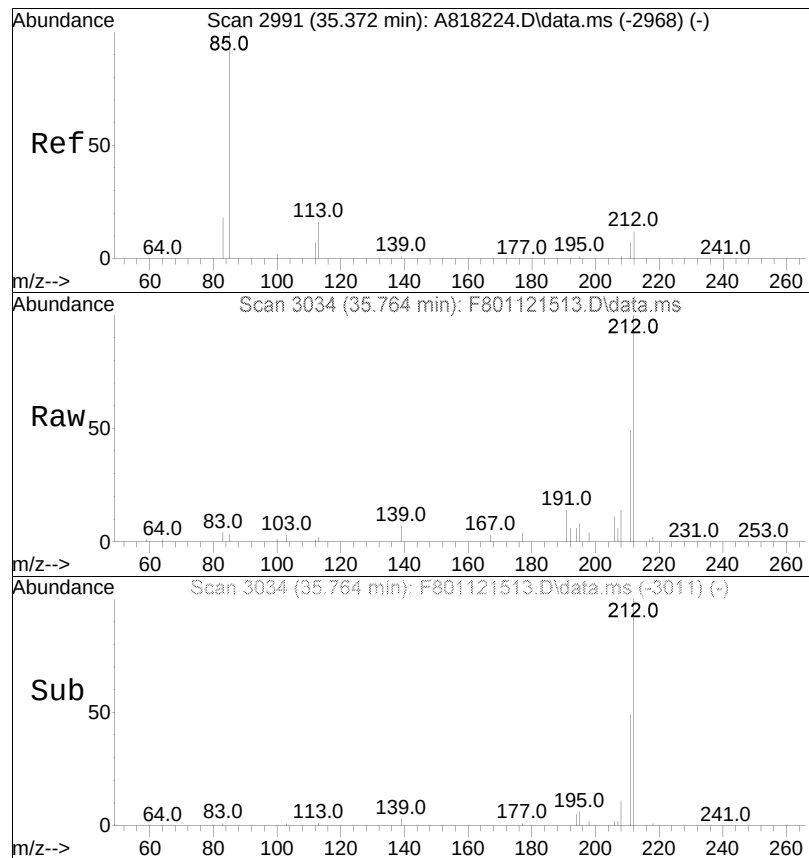
152 12.5 6.9 12.7



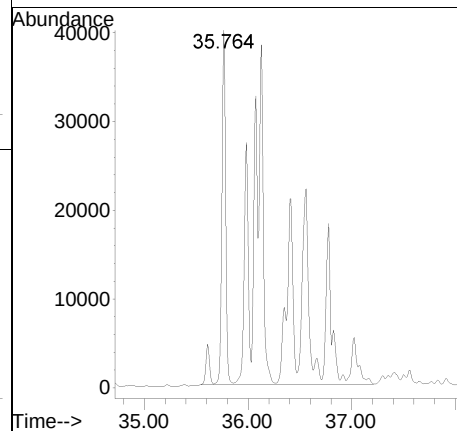


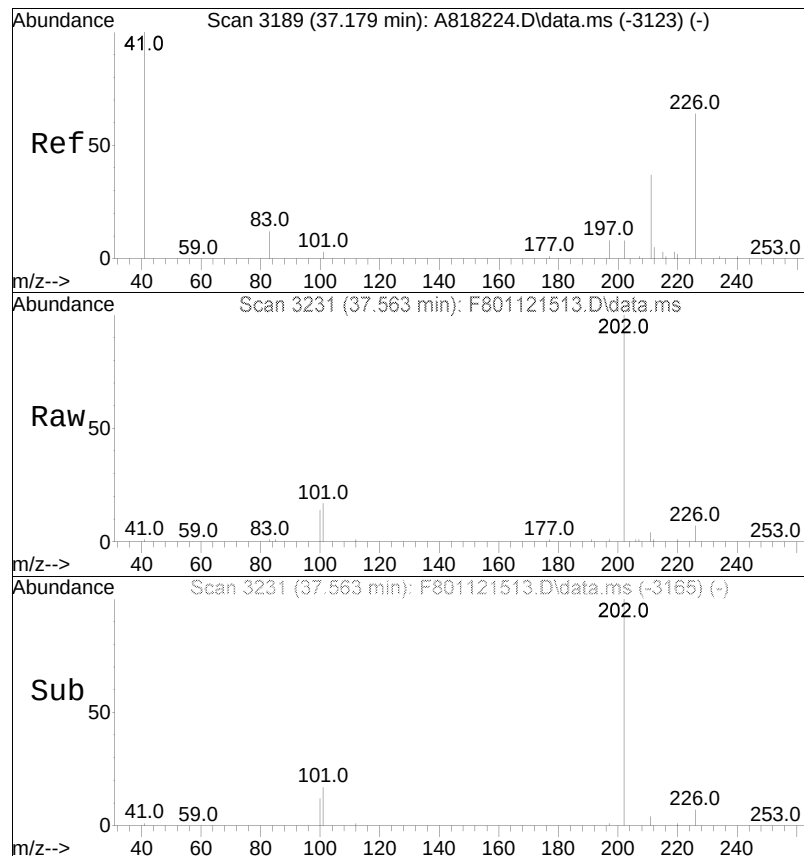
#38
 C1-Dibenzothiophenes
 Concen: 9461.85 ng/mL M5
 RT: 34.085 min Scan# 2850
 Delta R.T. 0.000 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am
 Tgt Ion:198 Resp: 1021043





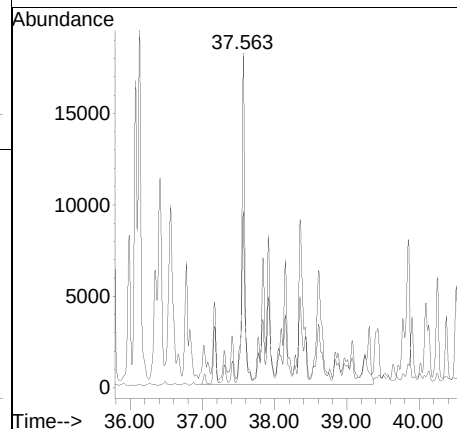
#39
 C2-Dibenzothiophenes
 Concen: 5992.44 ng/mL M5
 RT: 35.764 min Scan# 3034
 Delta R.T. -0.356 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am
 Tgt Ion:212 Resp: 646653

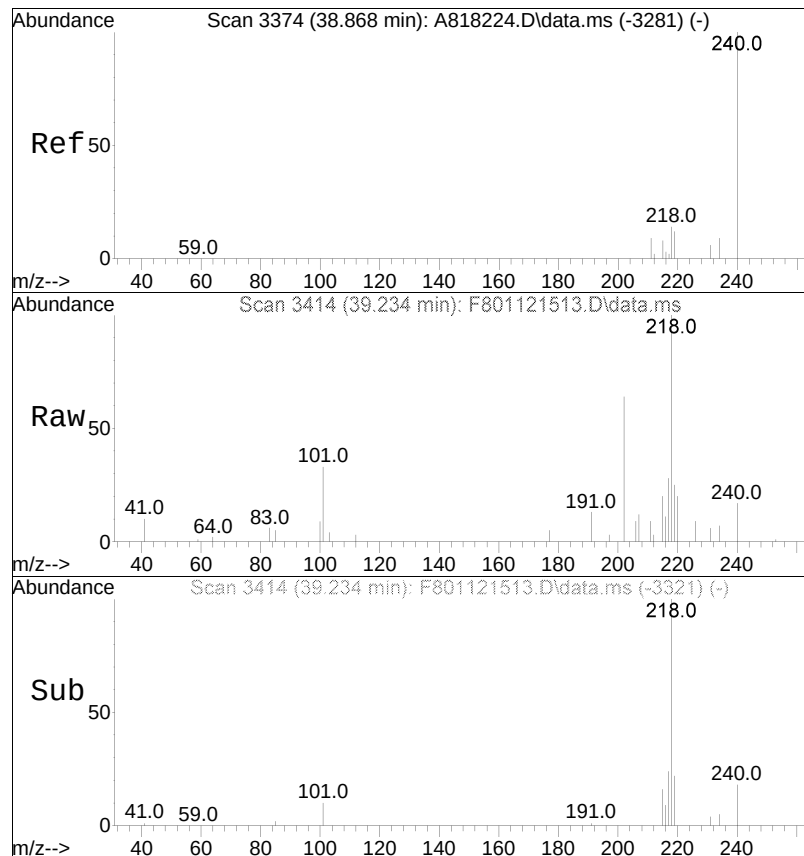




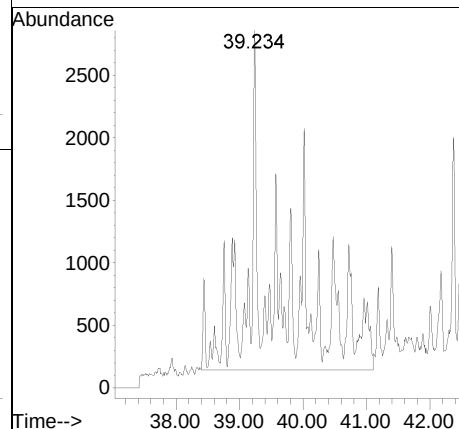
#40
 C3-Dibenzothiophenes
 Concen: 2411.78 ng/mL M5
 RT: 37.563 min Scan# 3231
 Delta R.T. 0.000 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

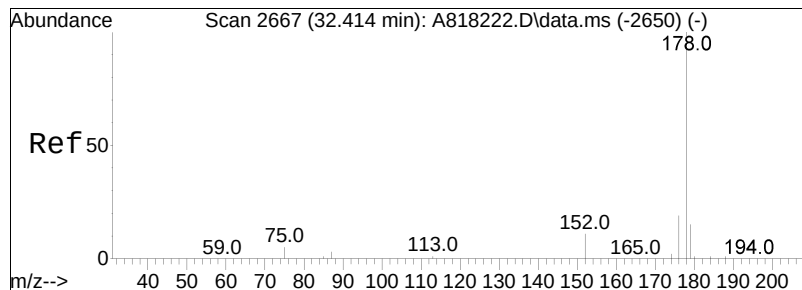
Tgt Ion	Ratio	Lower	Upper
226	100		
211	12.1	42.2	78.4#





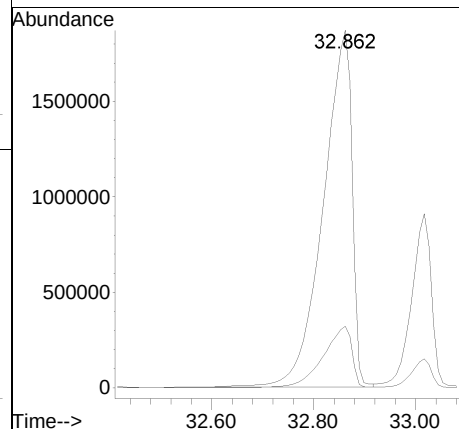
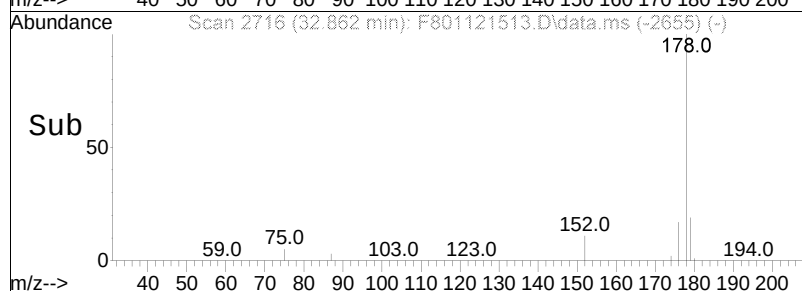
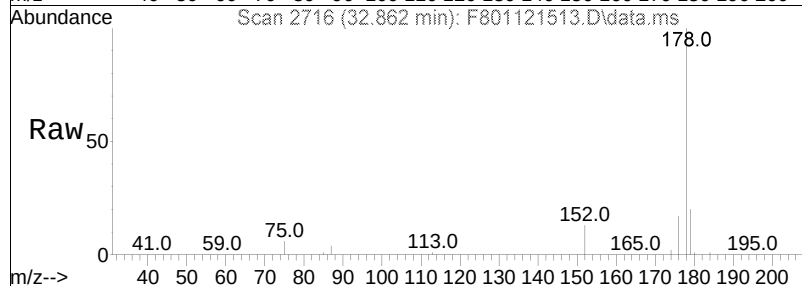
#41
 C4-Dibenzothiophenes
 Concen: 679.62 ng/mL M5
 RT: 39.234 min Scan# 3414
 Delta R.T. -0.009 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am
 Tgt Ion:240 Resp: 73339

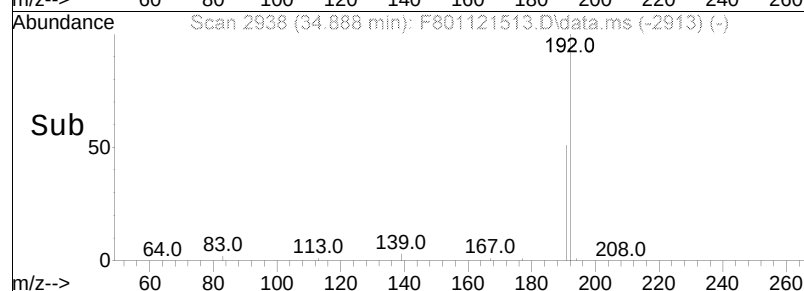
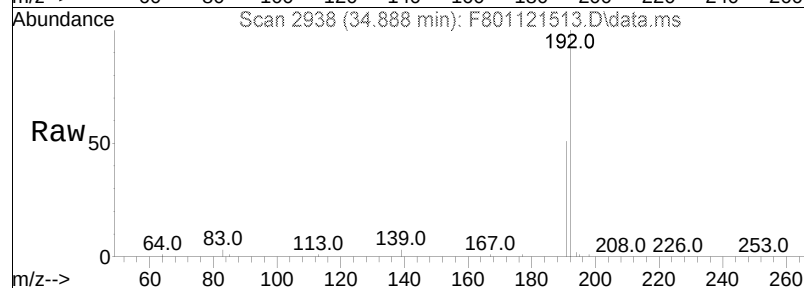
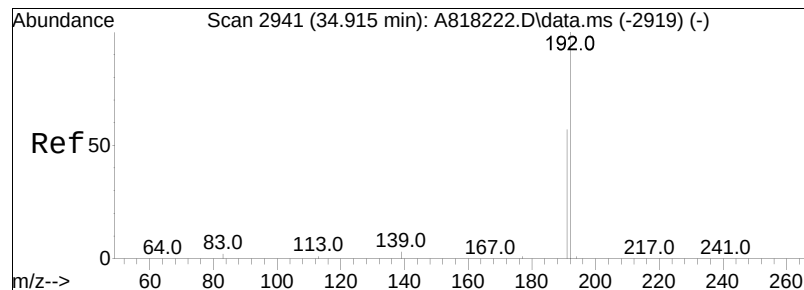




#43
 Phenanthrene
 Concen: 69975.53 ng/mL
 RT: 32.862 min Scan# 2716
 Delta R.T. 0.055 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

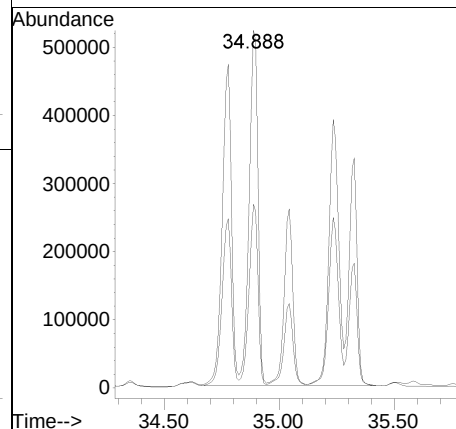
Tgt Ion:178 Resp: 7318456
 Ion Ratio Lower Upper
 178 100
 176 17.3 12.5 23.1

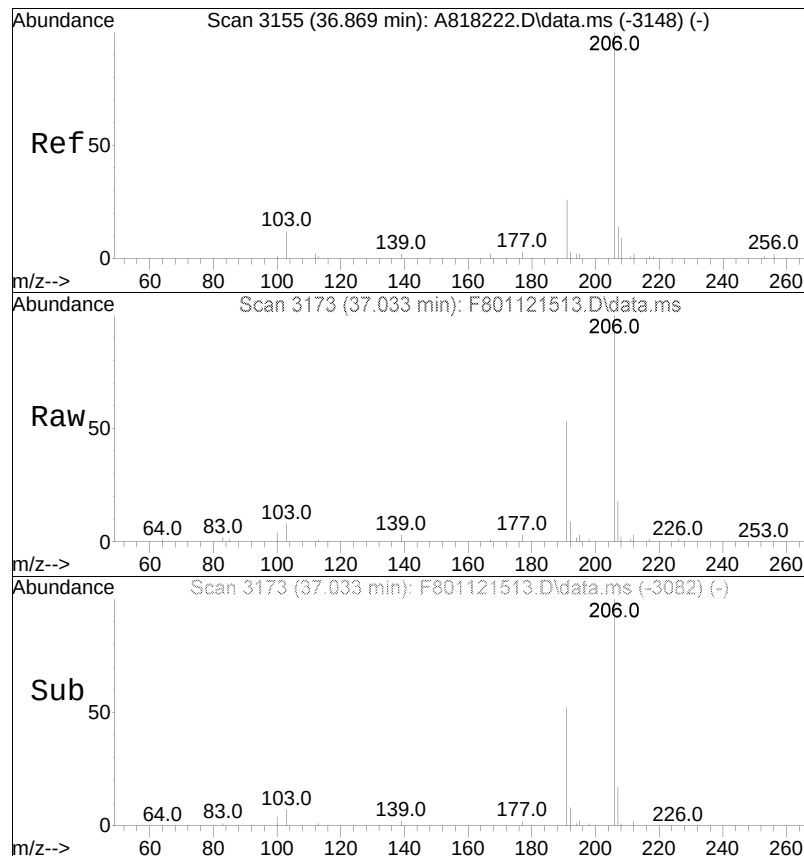




#49
 C1-Phenanthrenes/Anthracenes
 Concen: 51162.24 ng/mL M5
 RT: 34.888 min Scan# 2938
 Delta R.T. -0.328 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

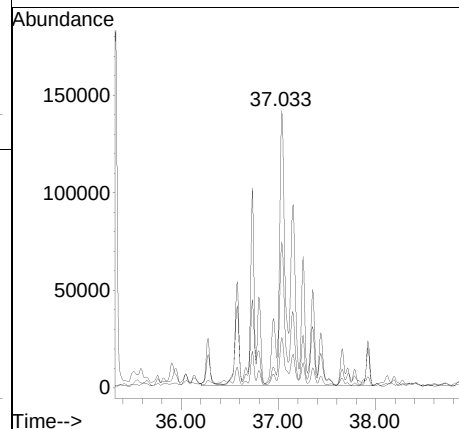
Tgt Ion:192 Resp: 5350851
 Ion Ratio Lower Upper
 192 100
 191 13.6 39.7 73.7#

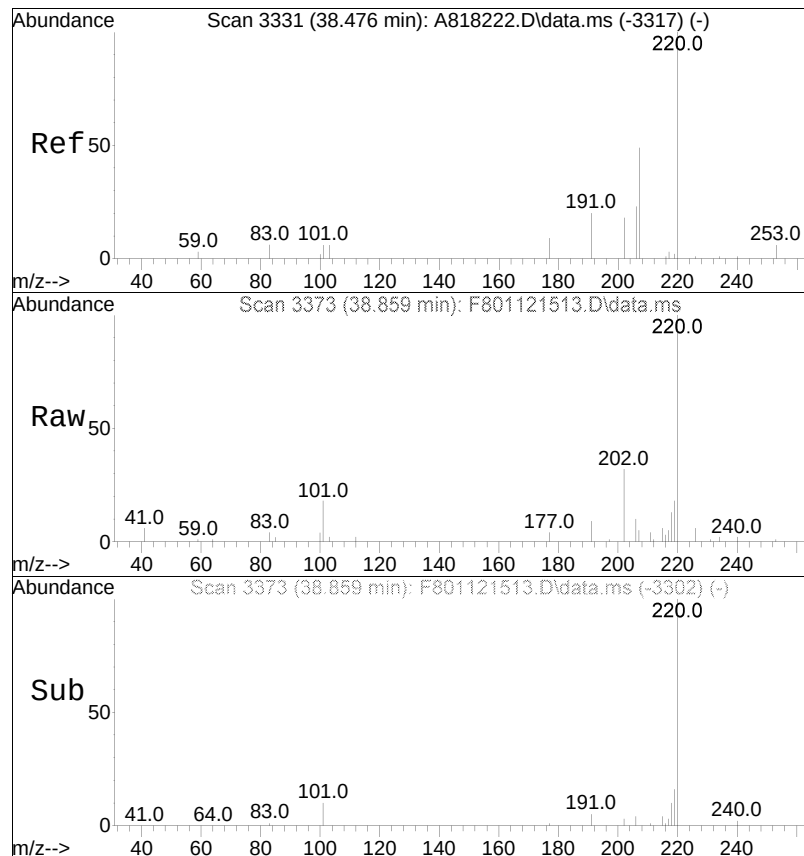




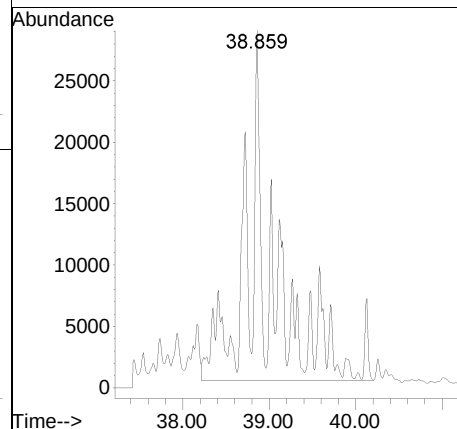
#50
 C2-Phenanthrenes/Anthracenes
 Concen: 19660.62 ng/mL M5
 RT: 37.033 min Scan# 3173
 Delta R.T. 0.009 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

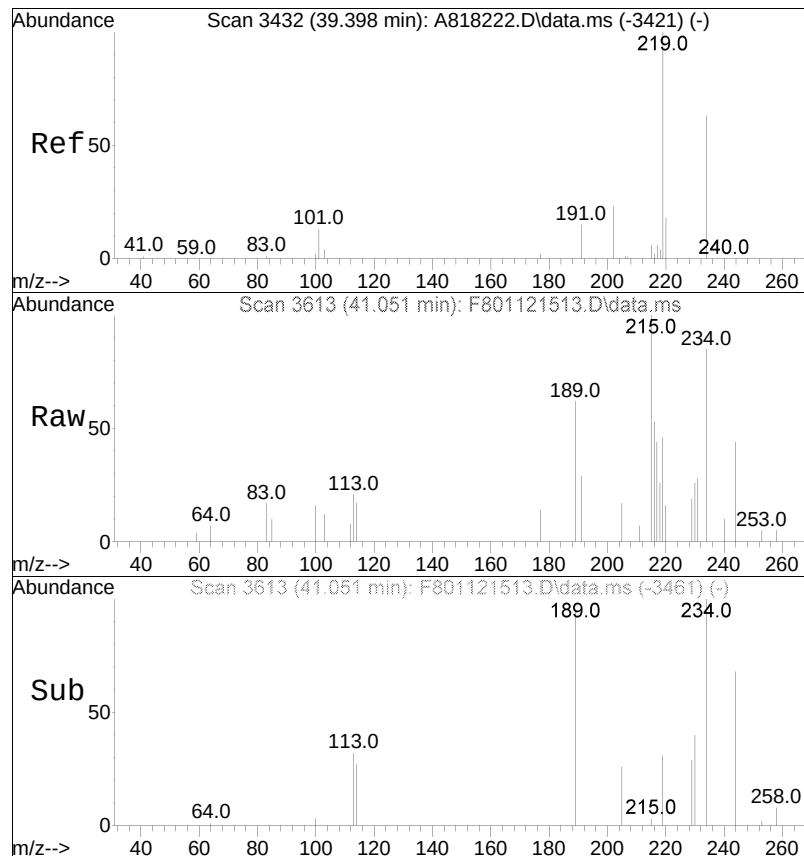
Tgt	Ion	Ratio	Lower	Upper
206	100			
191	12.0	39.5	73.4#	
207	4.0	14.1	26.3#	





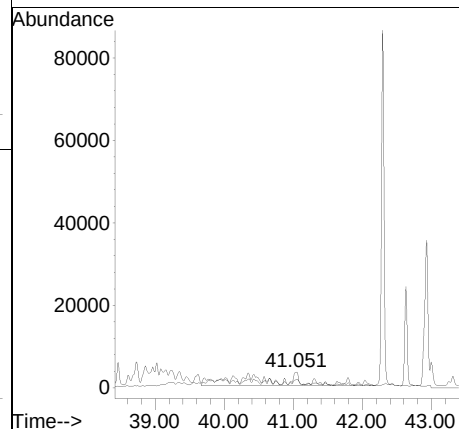
#52
 C3-Phenanthrenes/Anthracenes
 Concen: 5265.56 ng/mL M5
 RT: 38.859 min Scan# 3373
 Delta R.T. 0.000 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am
 Tgt Ion:220 Resp: 550704

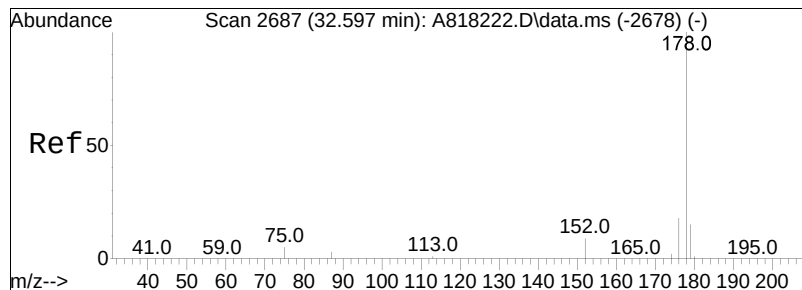




#53
 C4-Phenanthrenes/Anthracenes
 Concen: 1177.55 ng/mL M5
 RT: 41.051 min Scan# 3613
 Delta R.T. 0.018 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

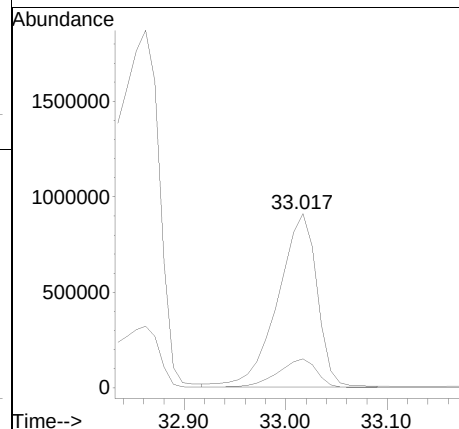
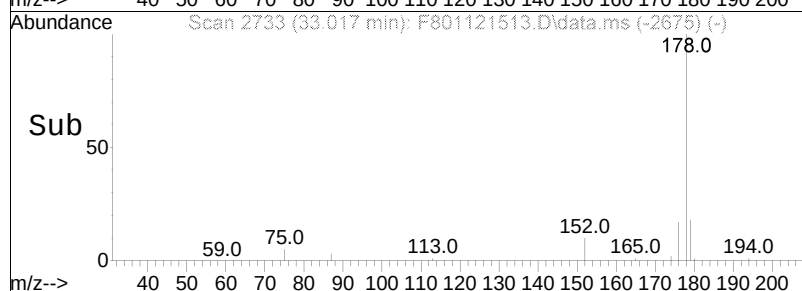
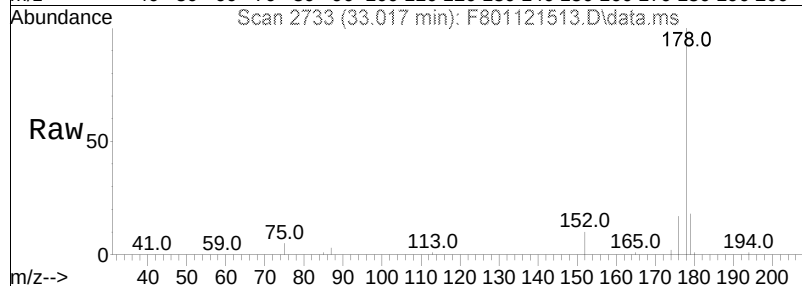
Tgt	Ion	Ratio	Lower	Upper
234	100			
219	5.7	44.7	82.9	

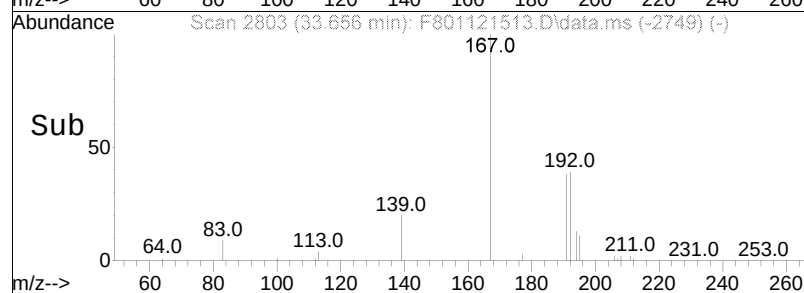
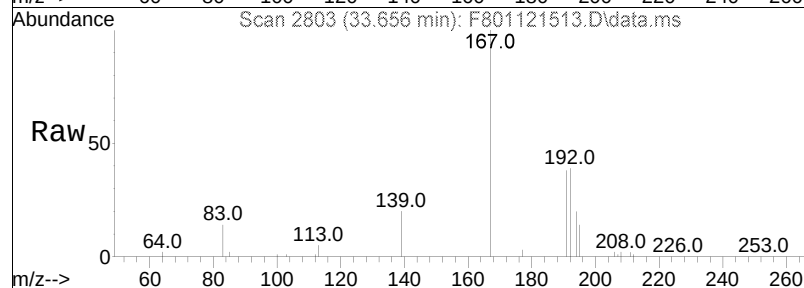
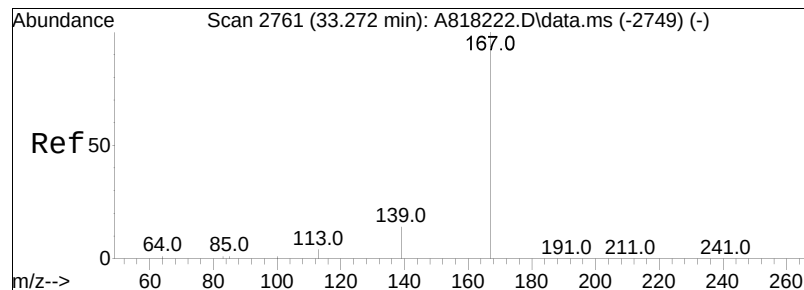




#55
 Anthracene
 Concen: 25592.62 ng/mL M4
 RT: 33.017 min Scan# 2733
 Delta R.T. 0.027 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

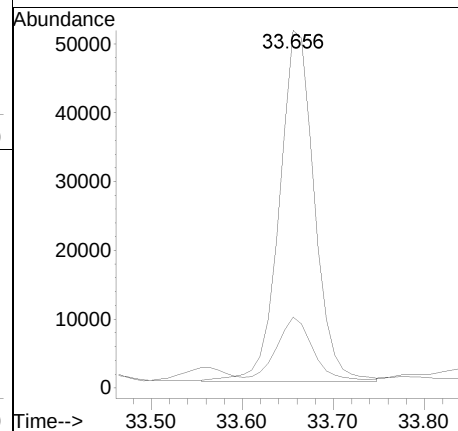
Tgt Ion:178 Resp: 2452149
 Ion Ratio Lower Upper
 178 100
 176 17.2 12.8 23.8

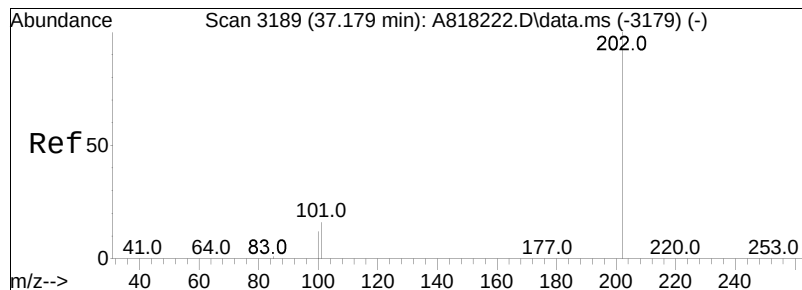




#56
 Carbazole
 Concen: 1336.13 ng/mL M4
 RT: 33.656 min Scan# 2803
 Delta R.T. -0.009 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

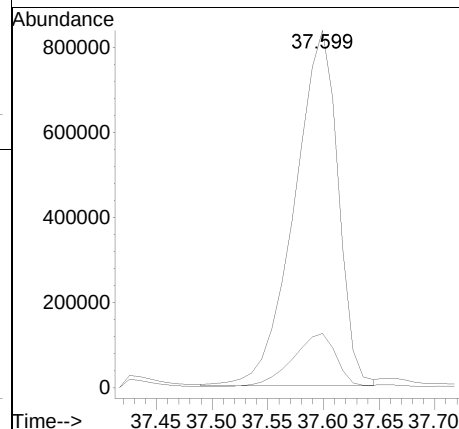
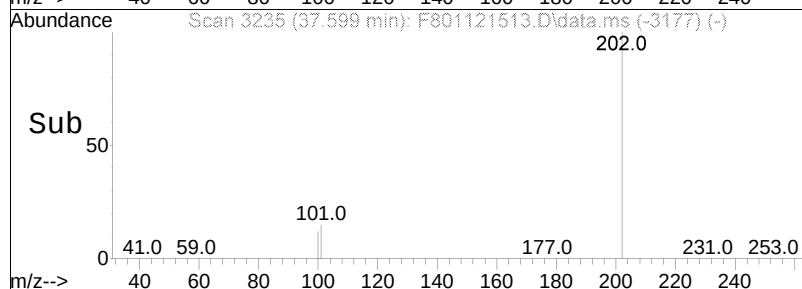
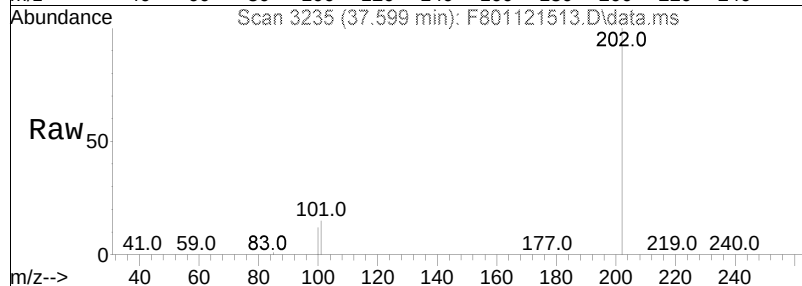
Tgt Ion	Ratio	Lower	Upper
167	100		
139	19.1	10.0	18.6

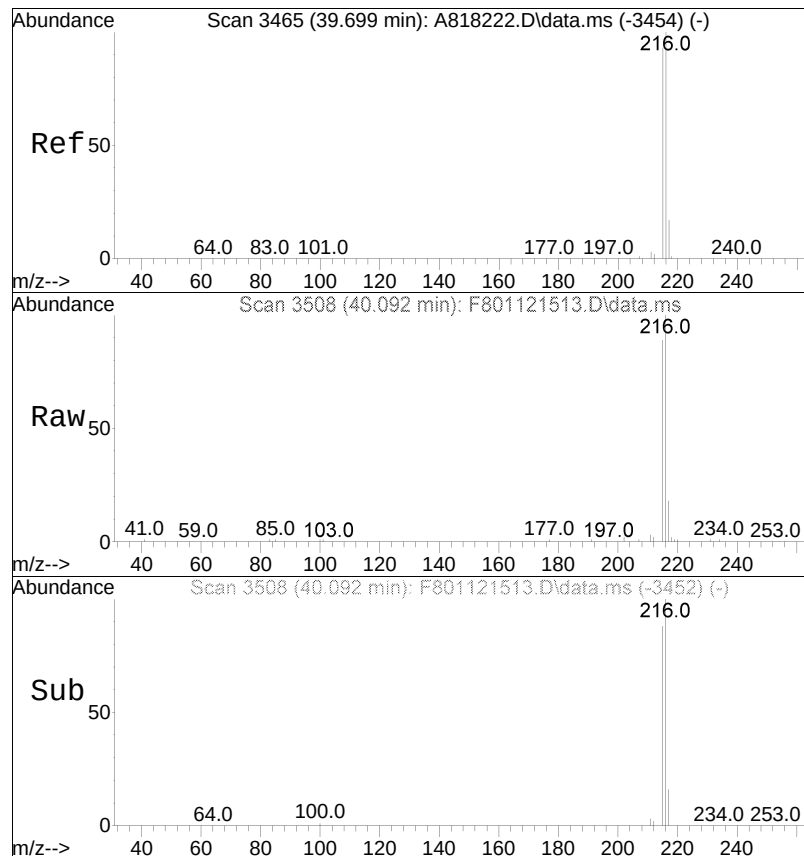




#58
 Fluoranthene
 Concen: 21500.41 ng/mL M4
 RT: 37.599 min Scan# 3235
 Delta R.T. 0.028 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

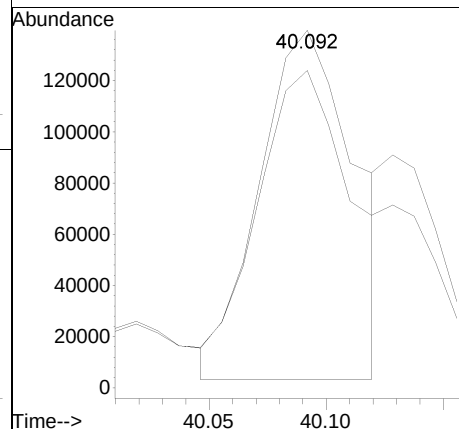
Tgt Ion: 202 Resp: 2281343
 Ion Ratio Lower Upper
 202 100
 101 15.0 12.7 23.7

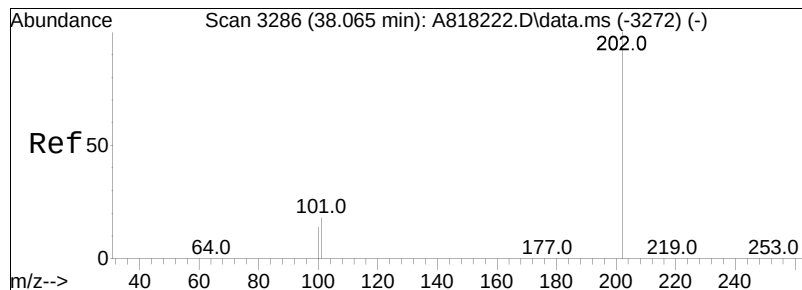




#59
 Benzo(b)fluorene
 Concen: 6228.73 ng/mL M3
 RT: 40.092 min Scan# 3508
 Delta R.T. 0.009 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

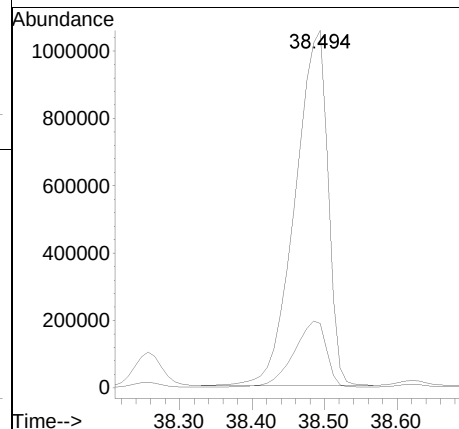
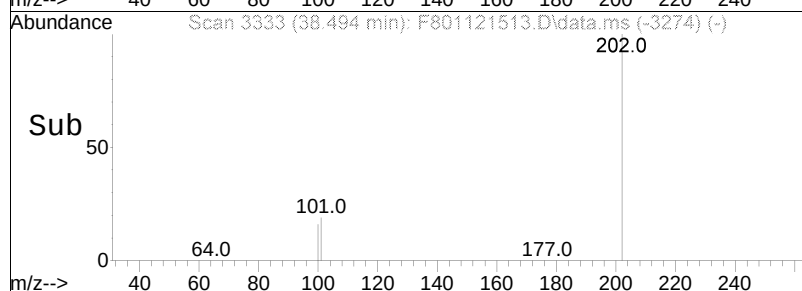
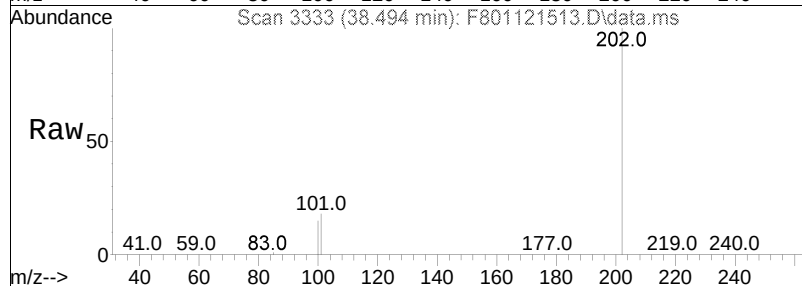
Tgt	Ion	Ratio	Lower	Upper
216	100			
215	110.9	65.9	122.5	

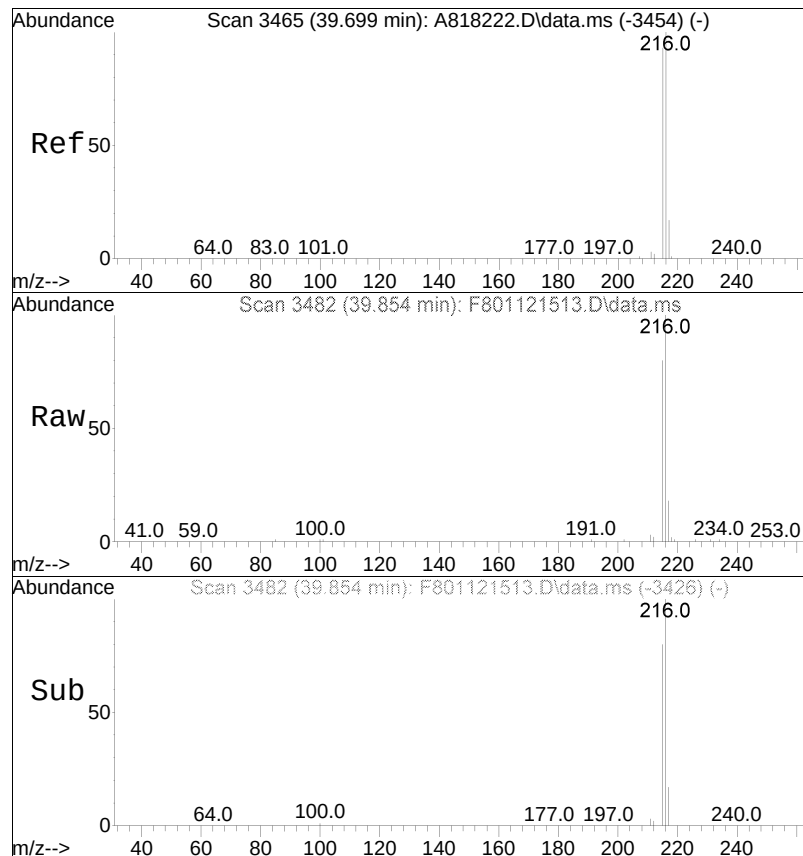




#60
 Pyrene
 Concen: 29935.69 ng/mL
 RT: 38.494 min Scan# 3333
 Delta R.T. 0.037 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

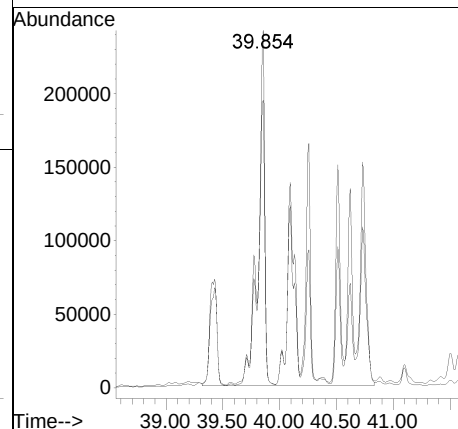
Tgt Ion	Ratio	Lower	Upper
202	100		
101	18.4	13.9	25.7

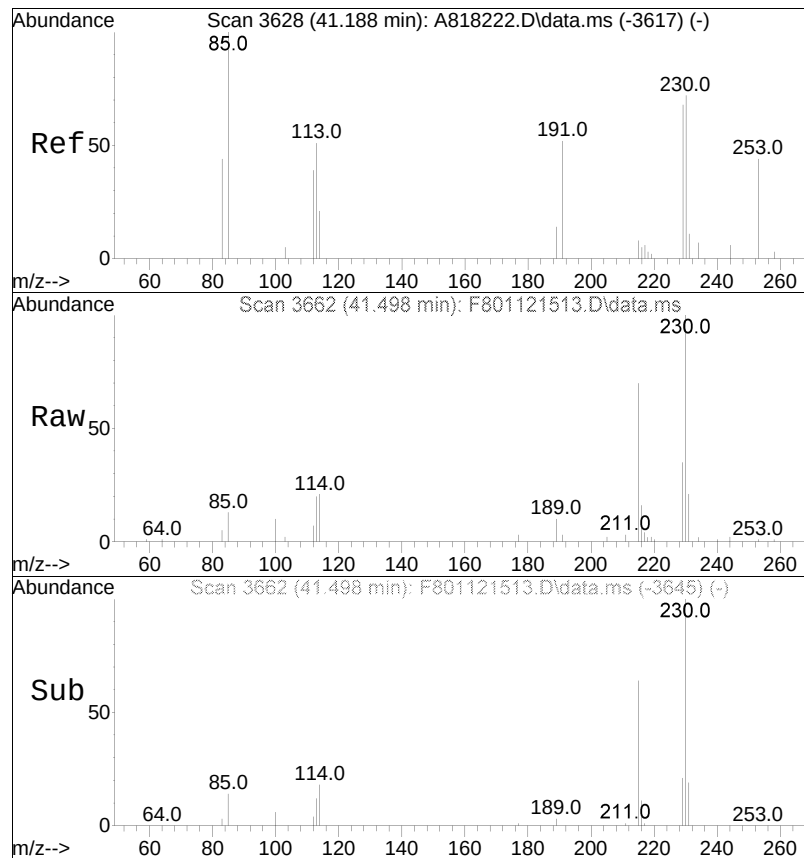




#61
 C1-Fluoranthenes/Pyrenes
 Concen: 32109.57 ng/mL M5
 RT: 39.854 min Scan# 3482
 Delta R.T. 0.018 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

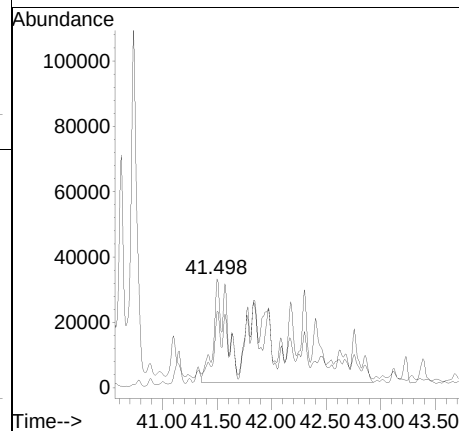
Tgt Ion	Ratio	Lower	Upper
216	100		
215	16.0	65.0	120.8#

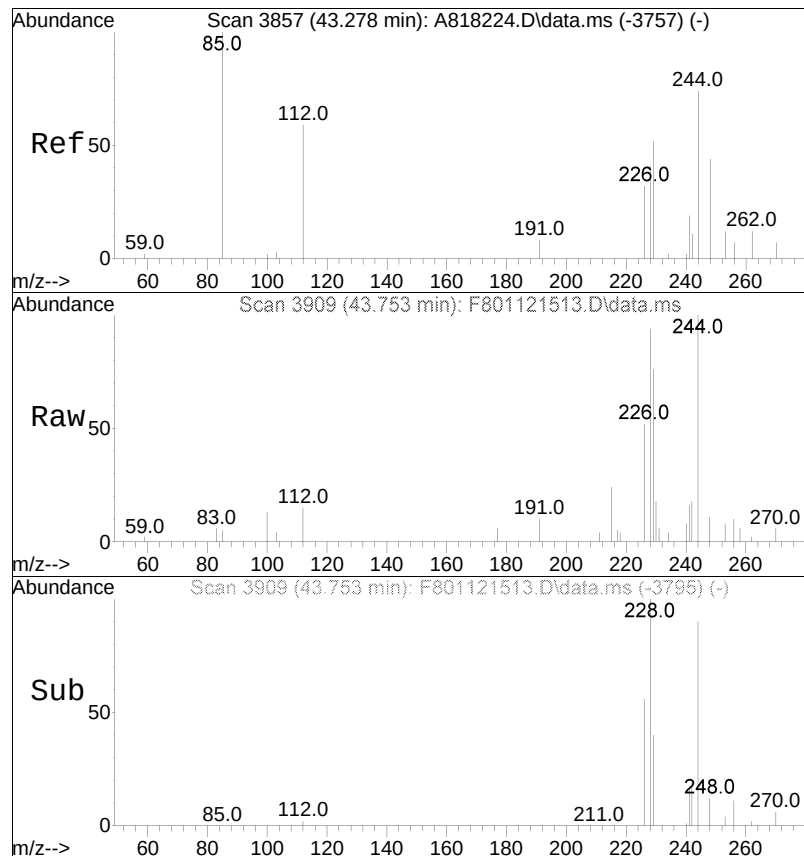




#62
 C2-Fluoranthenes/Pyrenes
 Concen: 9746.27 ng/mL M5
 RT: 41.498 min Scan# 3662
 Delta R.T. -0.456 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

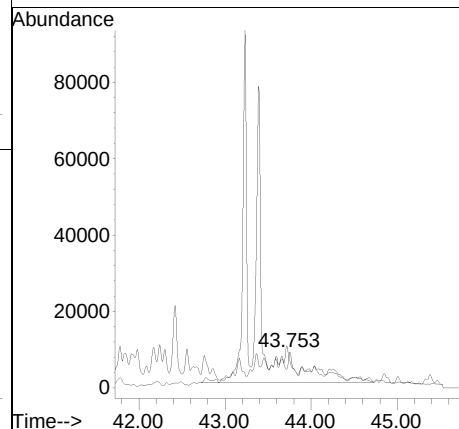
Tgt Ion:230 Resp: 1083040
 Ion Ratio Lower Upper
 230 100
 215 6.7 74.8 139.0#

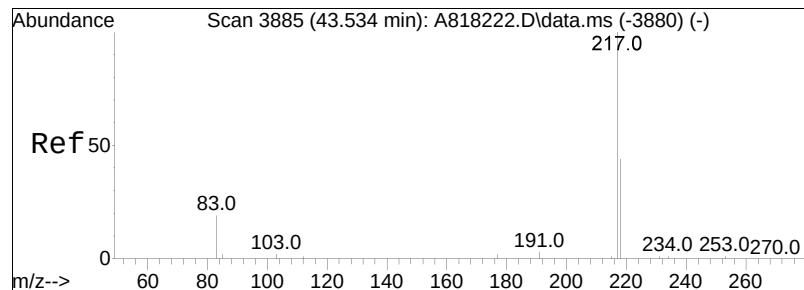




#63
 C3-Fluoranthenes/Pyrenes
 Concen: 3035.07 ng/mL M5
 RT: 43.753 min Scan# 3909
 Delta R.T. 0.110 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

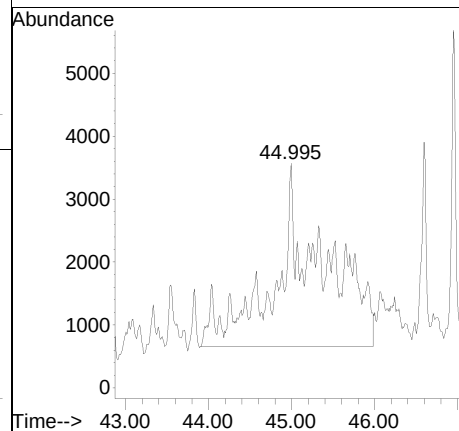
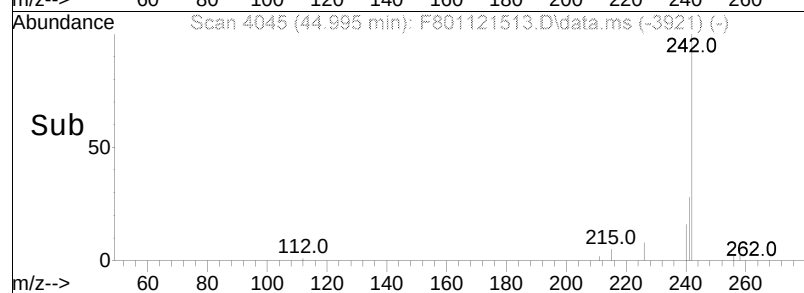
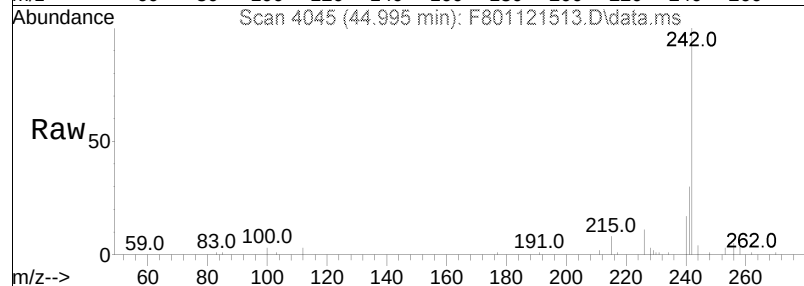
Tgt	Ion	Ratio	Lower	Upper
244	100			
229	2.8	68.9	127.9#	

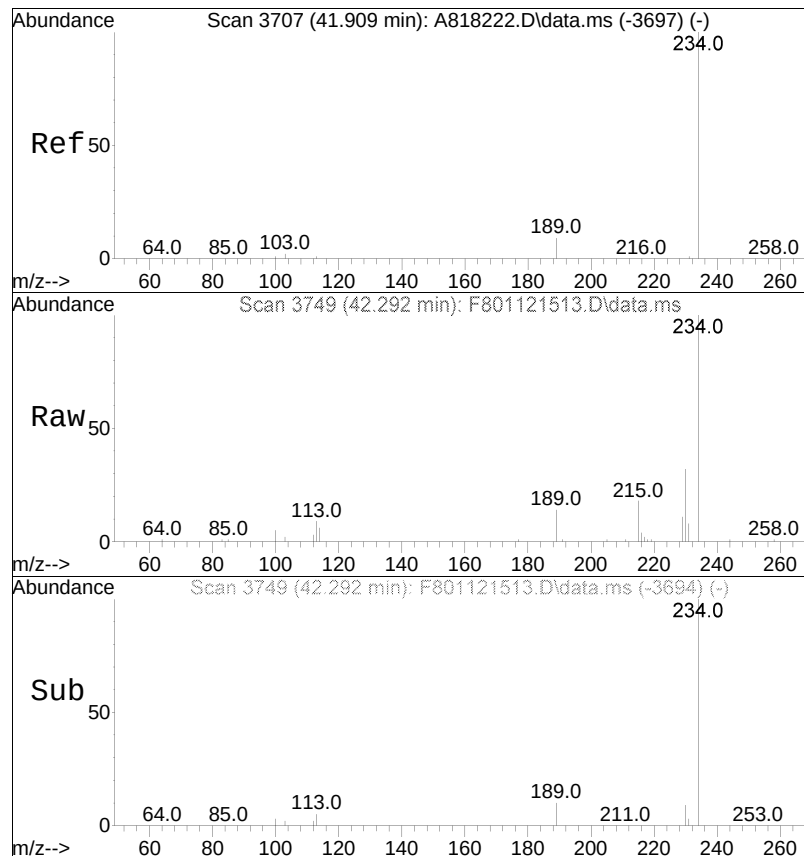




#64
 C4-Fluoranthenes/Pyrenes
 Concen: 1053.53 ng/mL M5
 RT: 44.995 min Scan# 4045
 Delta R.T. 0.009 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

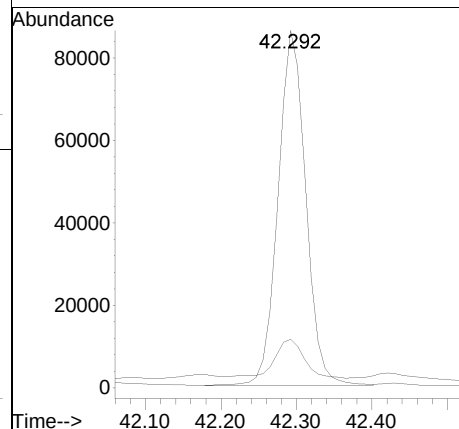
Tgt Ion:258 Resp: 117072

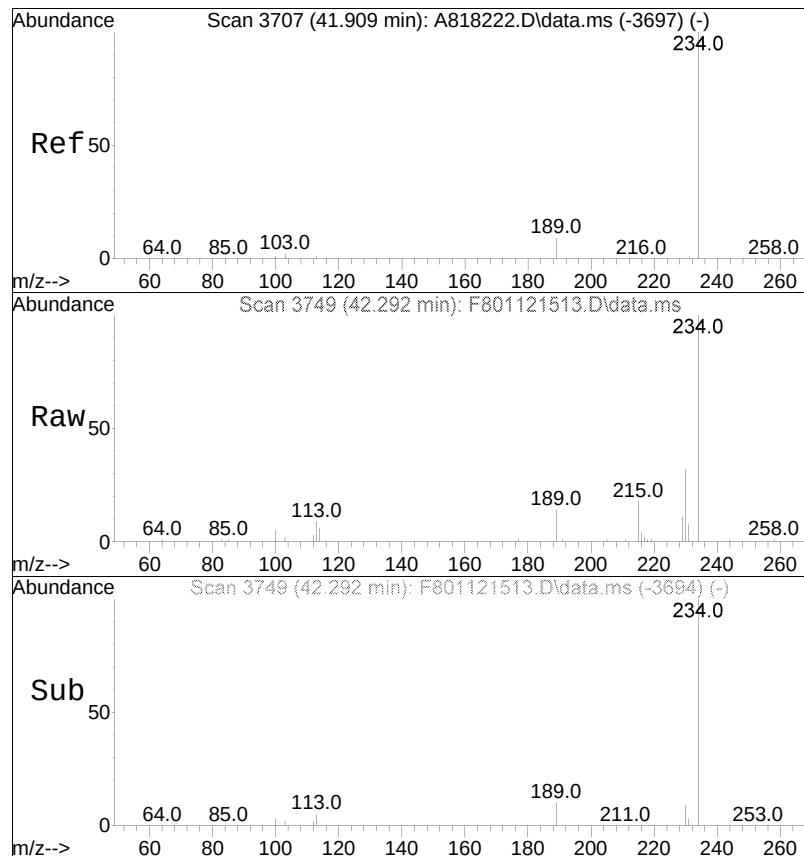




#66
 Naphthobenzothiophene
 Concen: 2247.70 ng/ml
 RT: 42.292 min Scan# 3749
 Delta R.T. 0.000 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

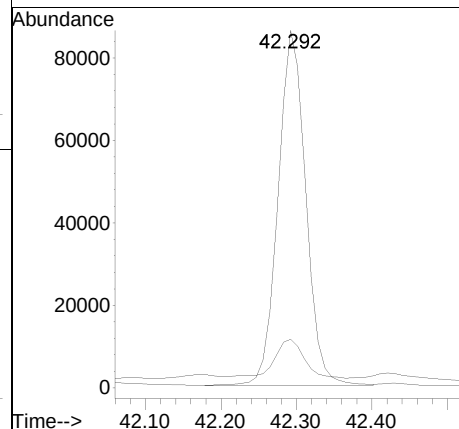
Tgt	Ion	Ratio	Resp	Lower	Upper
234	100		219742		
189	11.8		6.4	12.0	

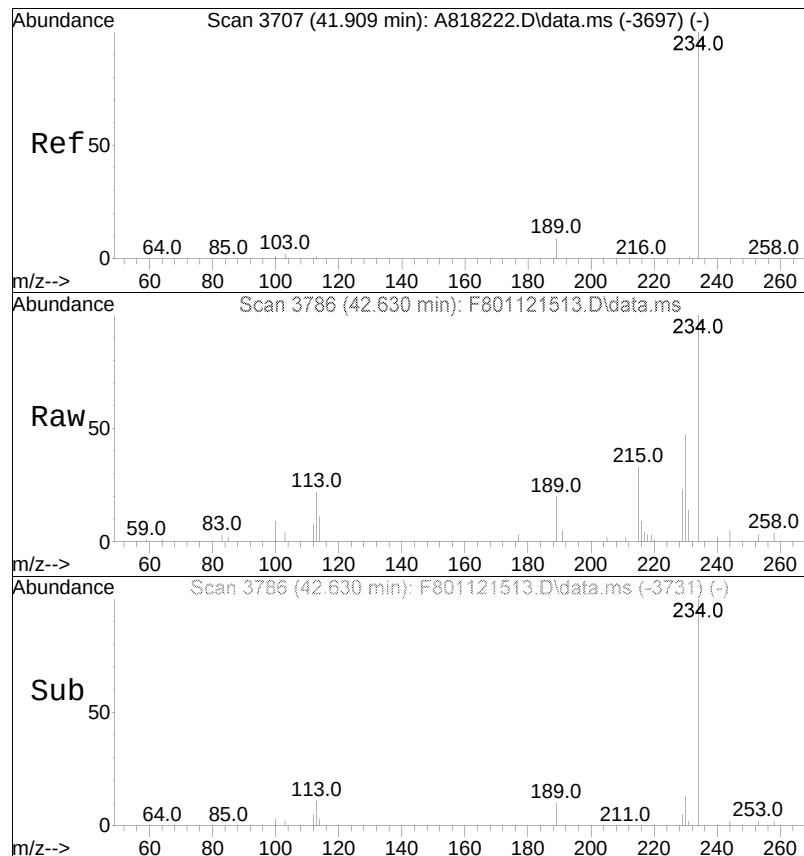




#67
 Naphthobenzothiophene-2,1-D
 Concen: 2247.70 ng/mL
 RT: 42.292 min Scan# 3749
 Delta R.T. 0.000 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

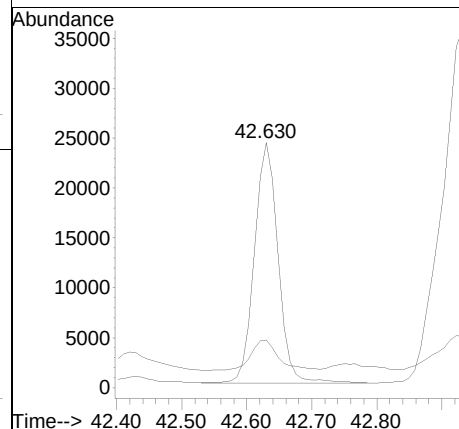
Tgt Ion	Ratio	Lower	Upper
234	100		
189	11.8	6.4	12.0

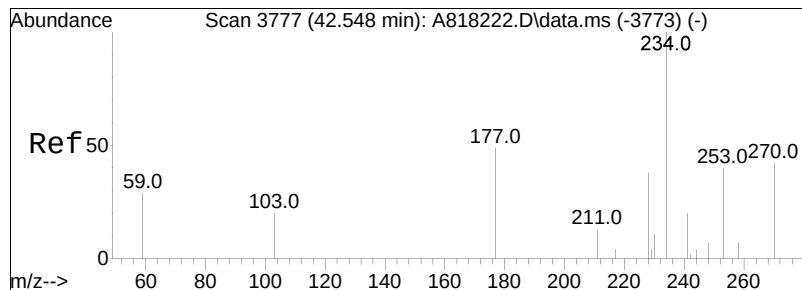




#68
 Naphthobenzothiophene-1,2-D
 Concen: 620.92 ng/mL
 RT: 42.630 min Scan# 3786
 Delta R.T. 0.000 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

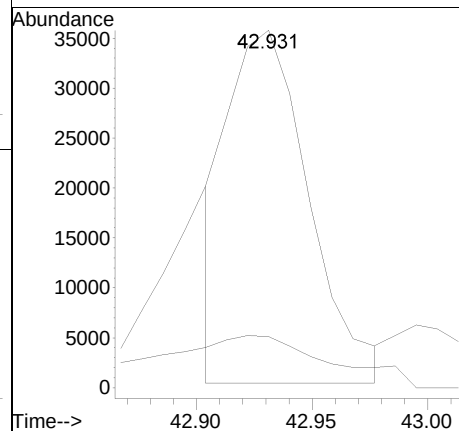
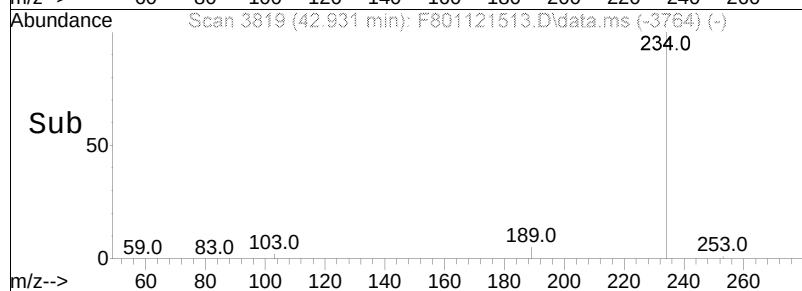
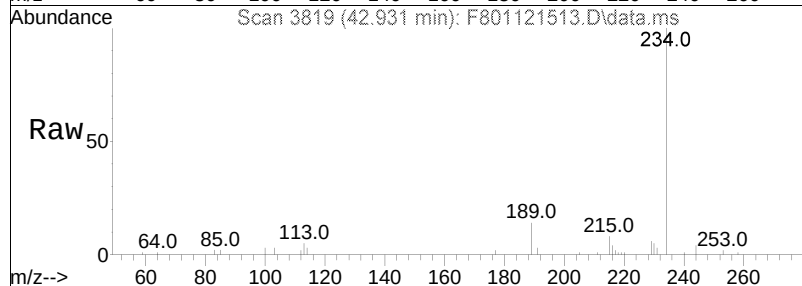
Tgt Ion	Ratio	Lower	Upper
234	100		
189	13.0	70.3	130.5#

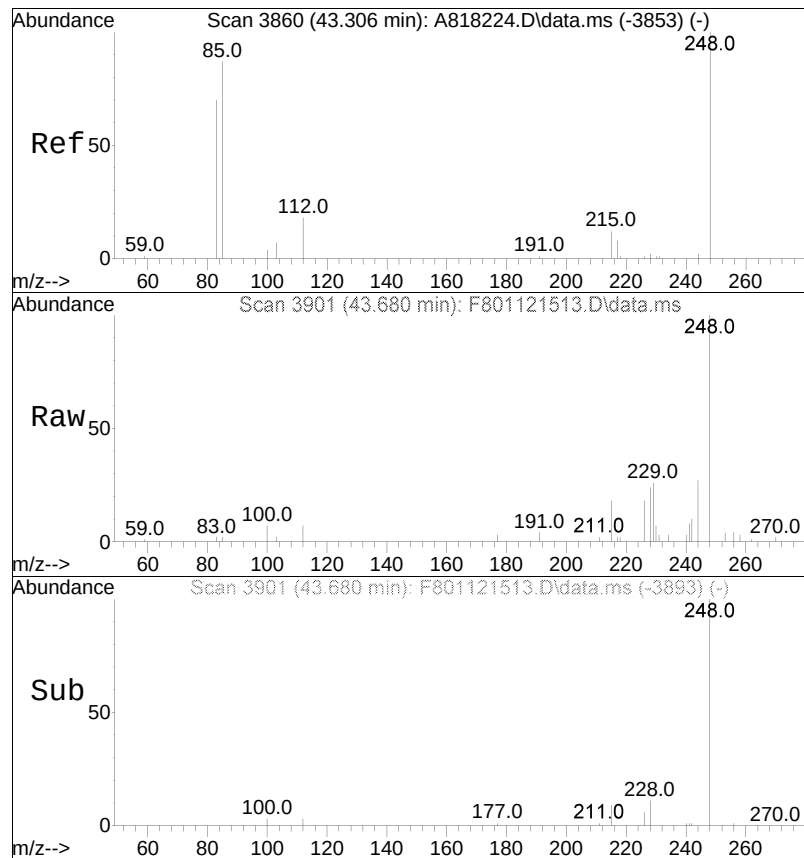




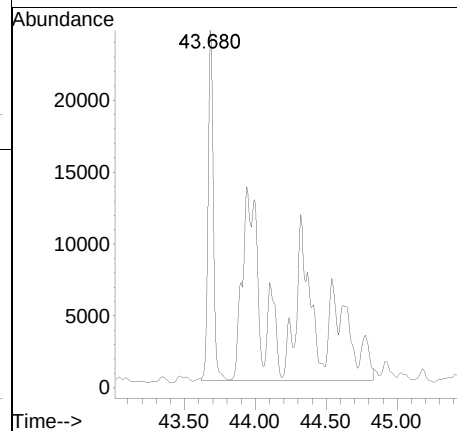
#69
 Naphthobenzothiophene-2,3-D
 Concen: 890.24 ng/mL M3
 RT: 42.931 min Scan# 3819
 Delta R.T. 0.000 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

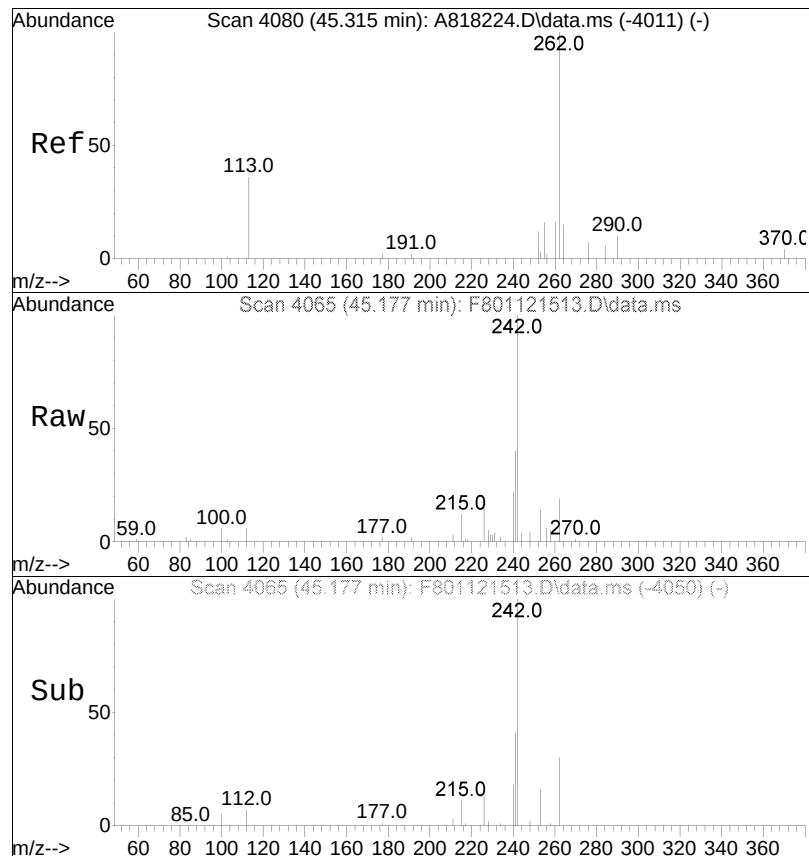
Tgt Ion	Ratio	Lower	Upper
234	100		
189	32.6	108.3	201.1#



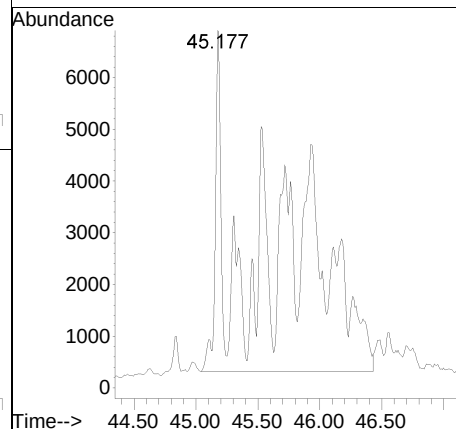


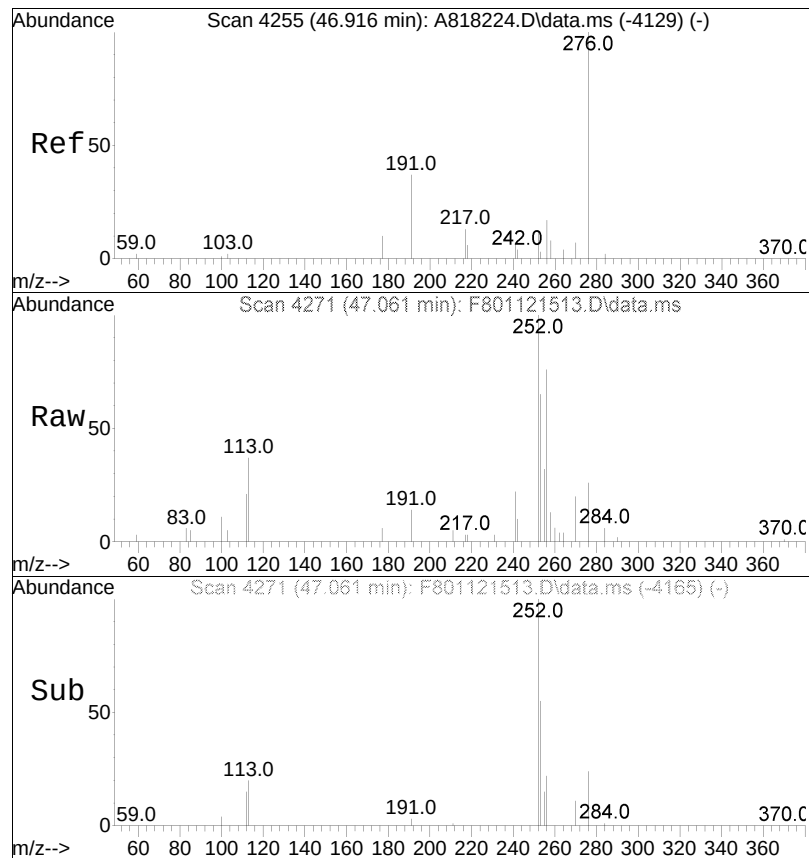
#70
 C1-Naphthobenzothiophenes
 Concen: 3352.34 ng/ml M5
 RT: 43.680 min Scan# 3901
 Delta R.T. 0.000 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am
 Tgt Ion:248 Resp: 327735





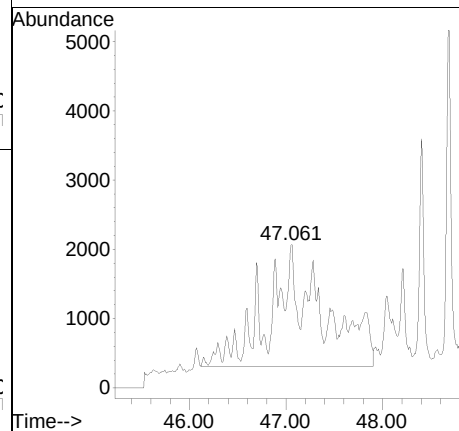
#71
 C2-Naphthobenzothiophenes
 Concen: 1641.03 ng/ml M5
 RT: 45.177 min Scan# 4065
 Delta R.T. -0.502 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am
 Tgt Ion:262 Resp: 160432

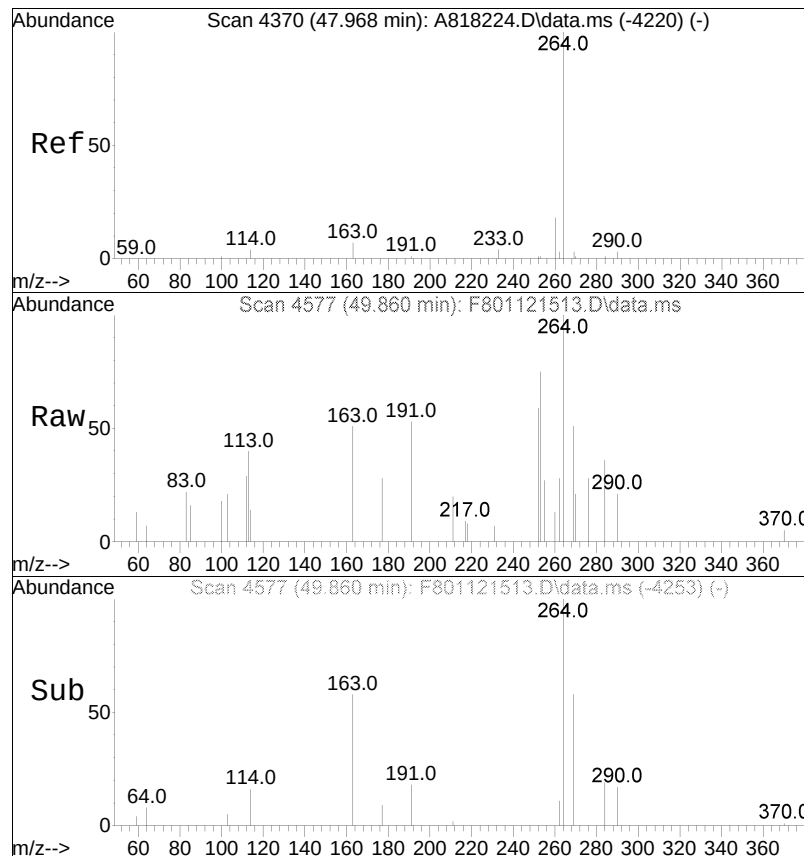




#72
 C3-Naphthobenzothiophenes
 Concen: 662.94 ng/ml M5
 RT: 47.061 min Scan# 4271
 Delta R.T. -0.219 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

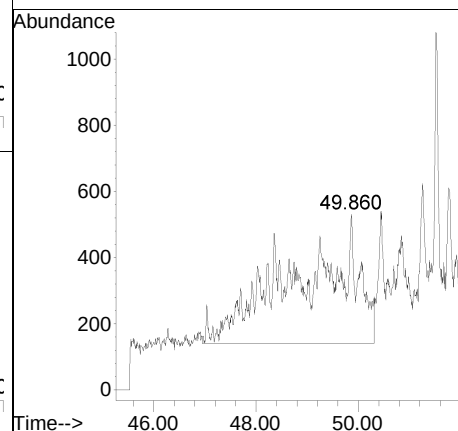
Tgt Ion:276 Resp: 64811

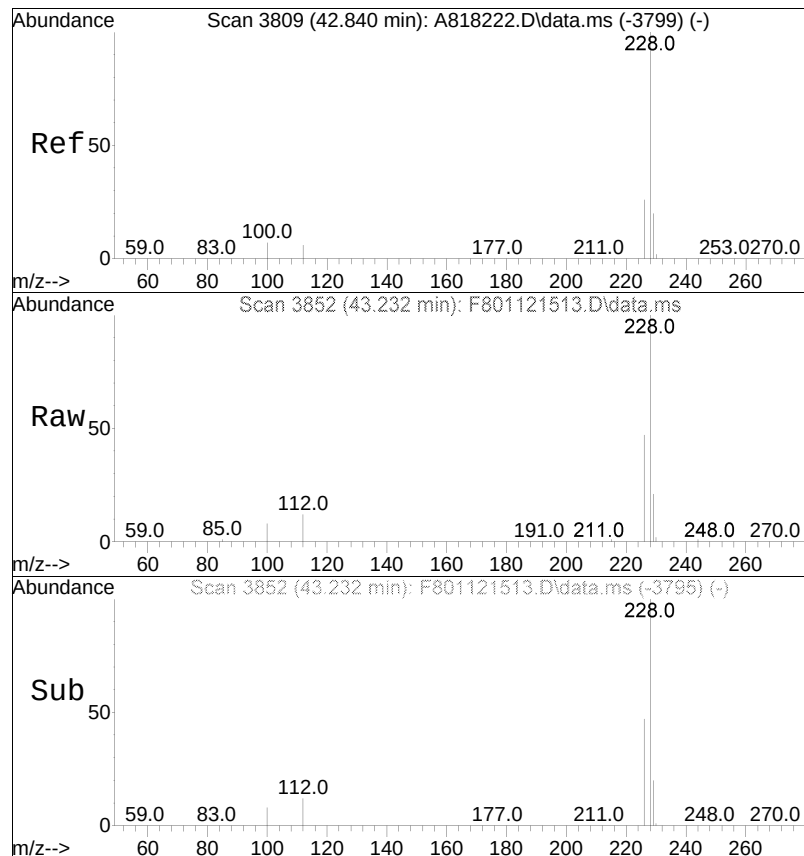




#73
 C4-Naphthobenzothiophenes
 Concen: 315.99 ng/mL M5
 RT: 49.860 min Scan# 4577
 Delta R.T. 1.500 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

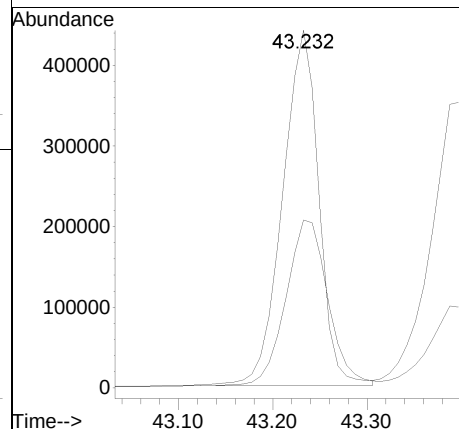
Tgt Ion:290 Resp: 30892

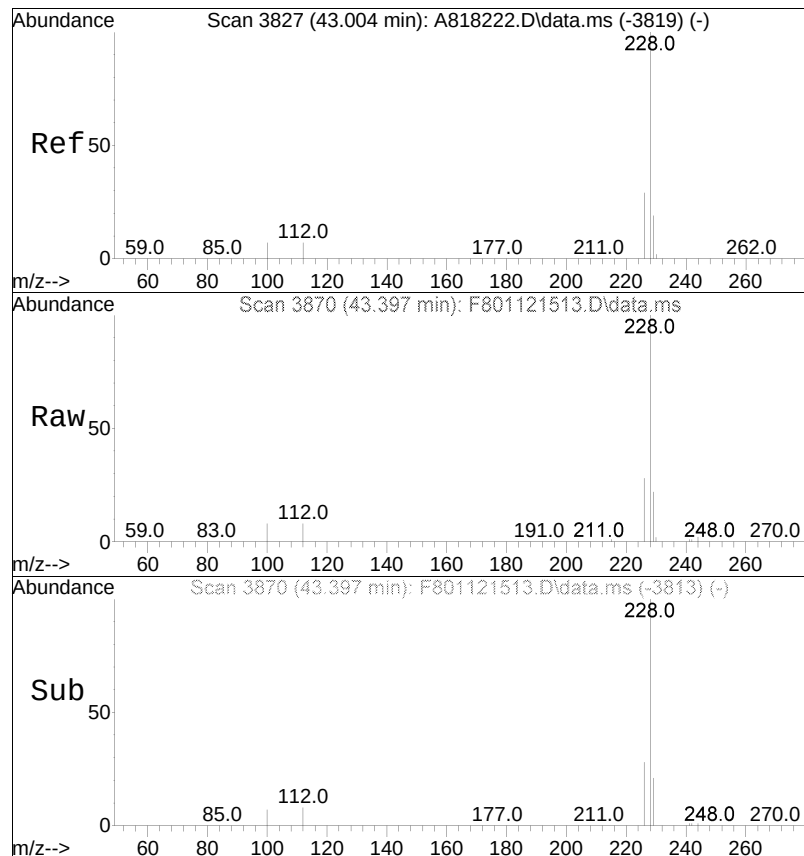




#75
 Benz[a]anthracene
 Concen: 14204.87 ng/mL M3
 RT: 43.232 min Scan# 3852
 Delta R.T. 0.018 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

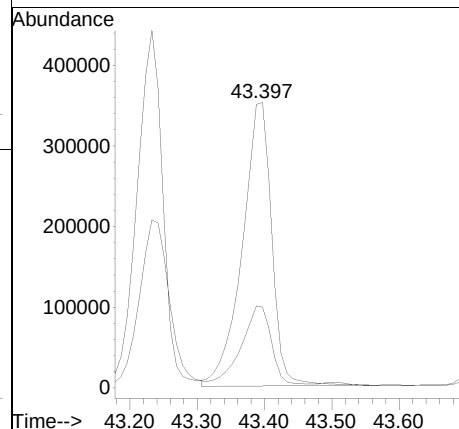
Tgt Ion	Ratio	Lower	Upper
228	100		
226	27.0	18.7	34.7

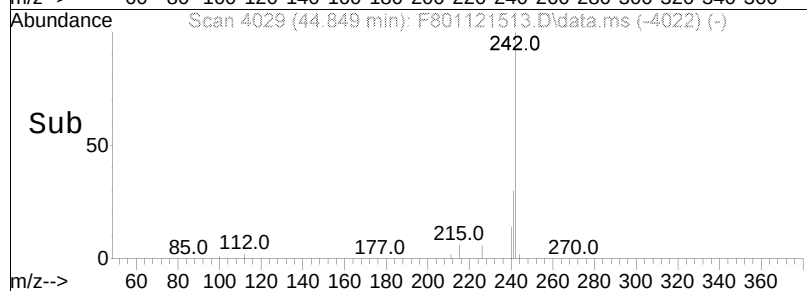
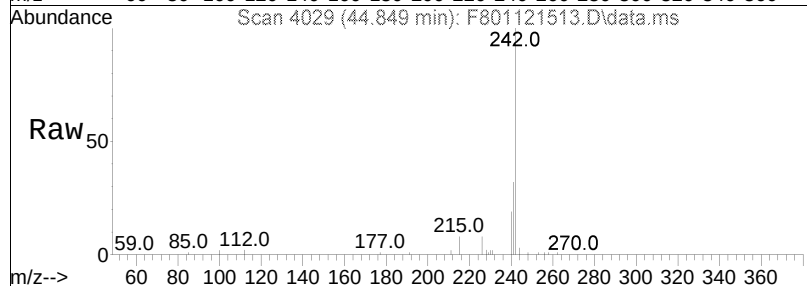
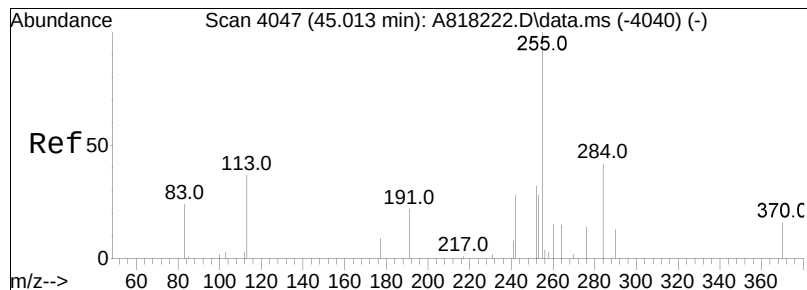




#77
 Chrysene/Triphenylene
 Concen: 13532.67 ng/mL
 RT: 43.397 min Scan# 3870
 Delta R.T. 0.018 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

Tgt Ion:228 Resp: 1069327
 Ion Ratio Lower Upper
 228 100
 226 29.6 20.2 37.4





#78

C1-Chrysenes

Concen: 12234.40 ng/mL M5

RT: 44.849 min Scan# 4029

Delta R.T. -0.001 min

Lab File: F801121513.D

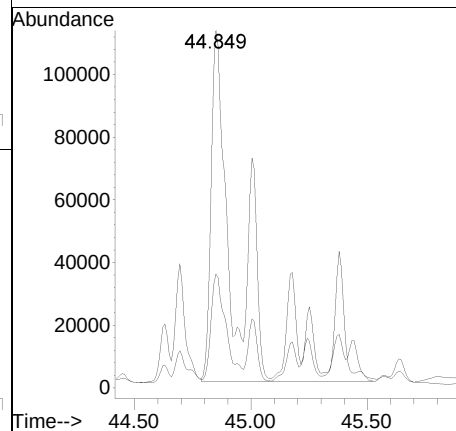
Acq: 13 Jan 2015 3:14 am

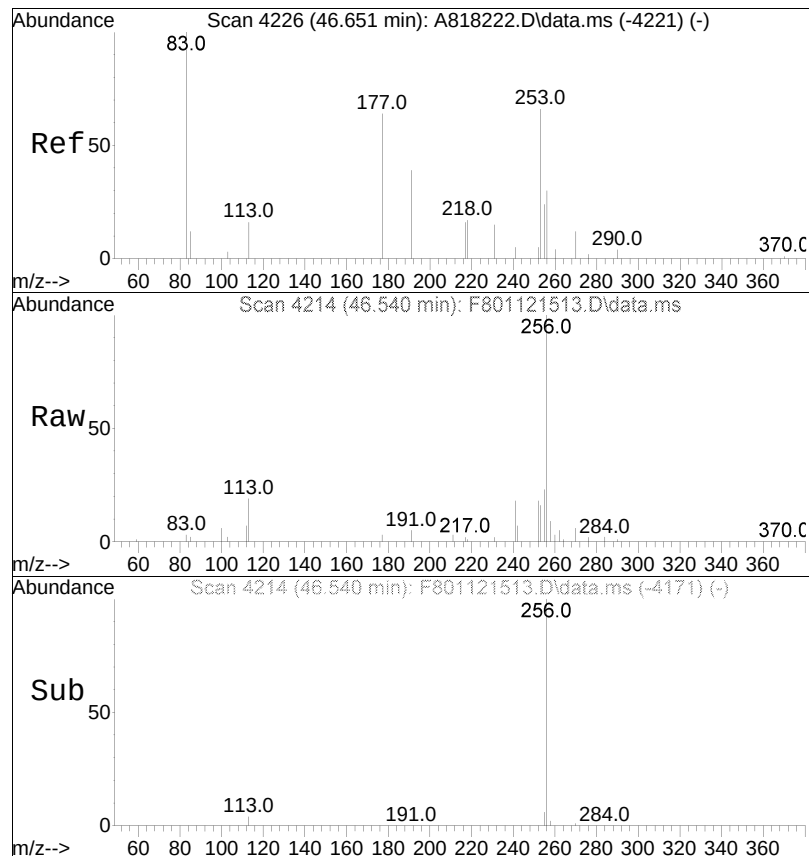
Tgt Ion: 242 Resp: 966740

Ion Ratio Lower Upper

242 100

241 11.8 29.8 55.4#





#79

C2-Chrysenes

Concen: 5886.94 ng/mL M5

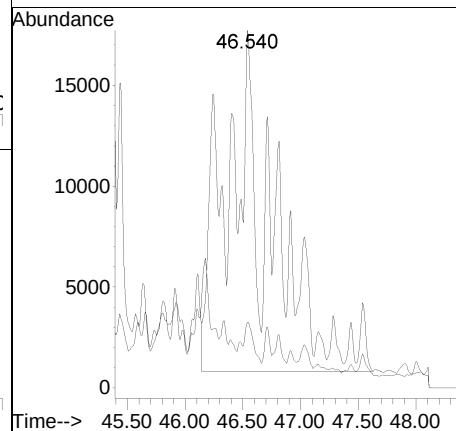
RT: 46.540 min Scan# 4214

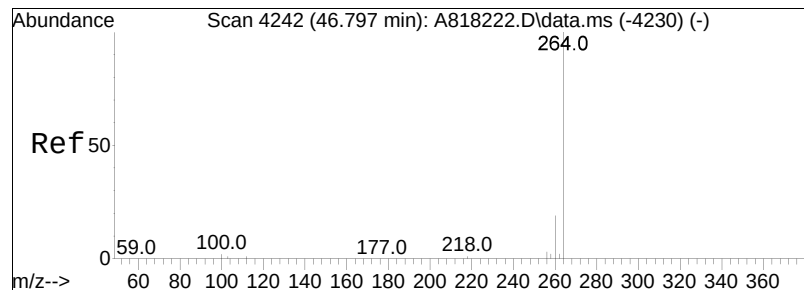
Delta R.T. -0.374 min

Lab File: F801121513.D

Acq: 13 Jan 2015 3:14 am

Tgt	Ion	Ratio	Lower	Upper
256	100			
241	0.3	26.2	48.8	





#81

C3-Chrysenes

Concen: 2528.90 ng/mL M5

RT: 48.140 min Scan# 4389

Delta R.T. -1.481 min

Lab File: F801121513.D

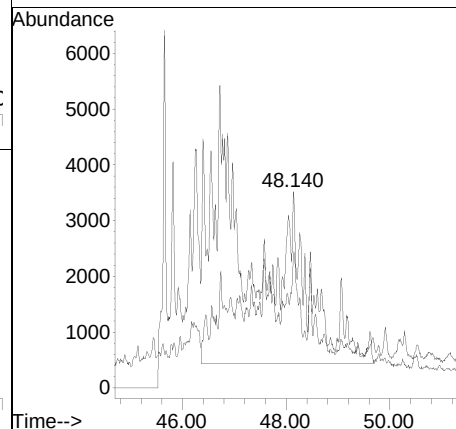
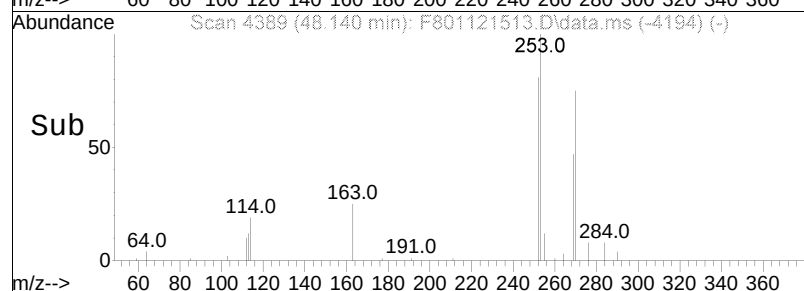
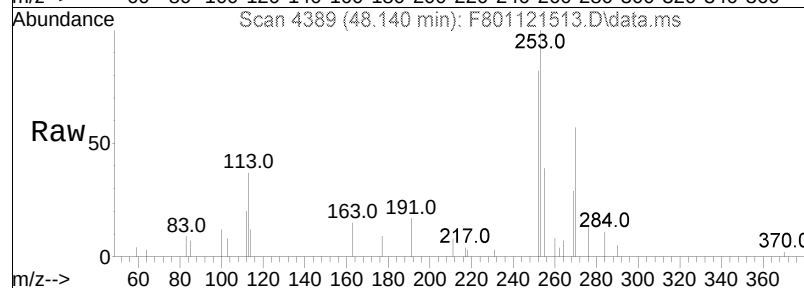
Acq: 13 Jan 2015 3:14 am

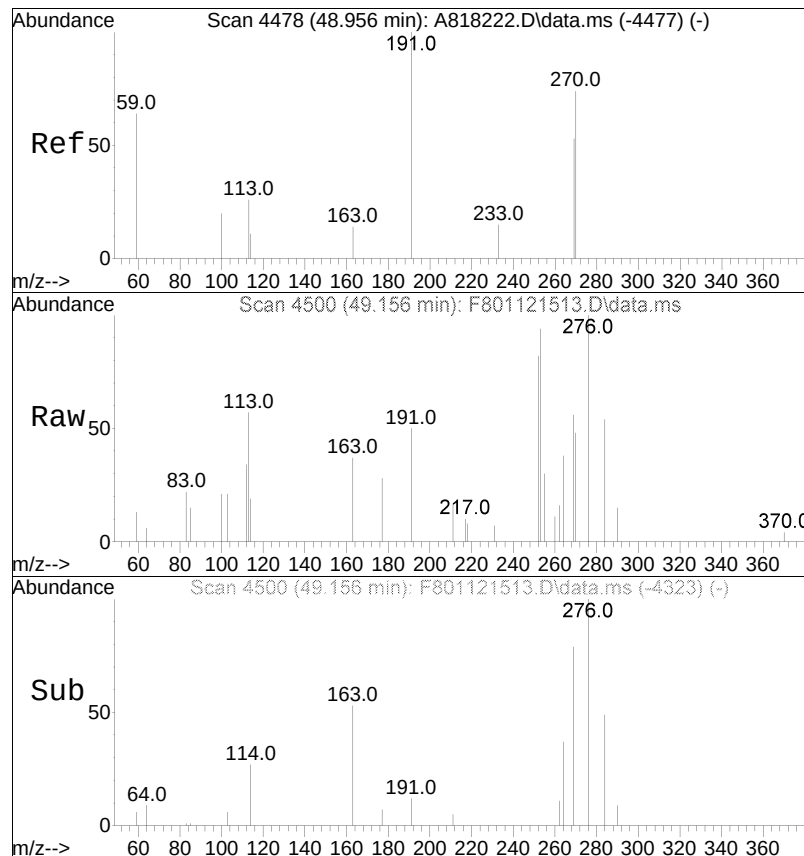
Tgt Ion: 270 Resp: 199829

Ion Ratio Lower Upper

270 100

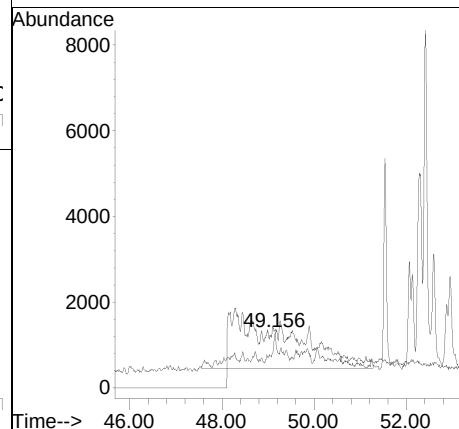
255 0.3 39.7 73.7#

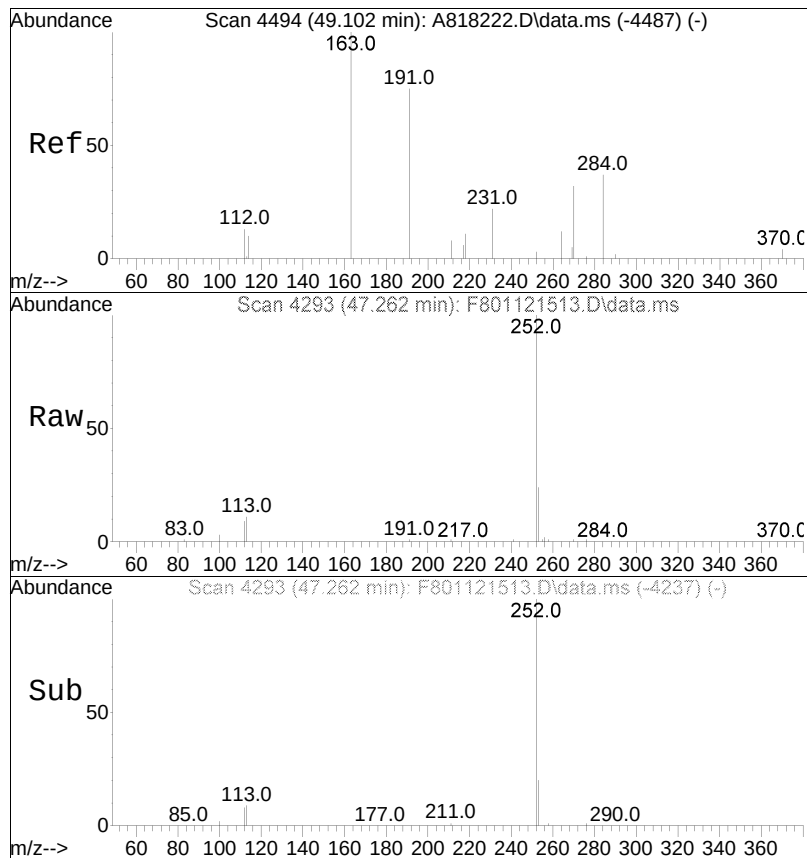




#82
 C4-Chrysenes
 Concen: 614.40 ng/mL M5
 RT: 49.156 min Scan# 4500
 Delta R.T. -0.567 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

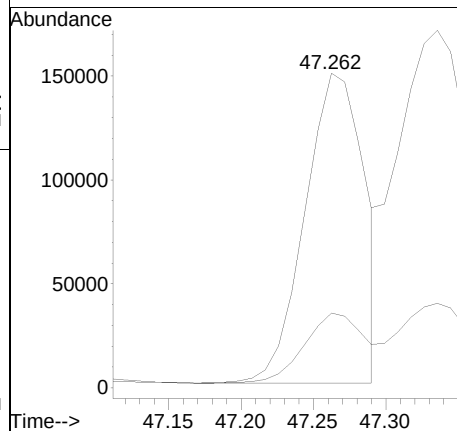
Tgt	Ion	Ratio	Lower	Upper
284	100			
269	0.0	63.6	118.2#	

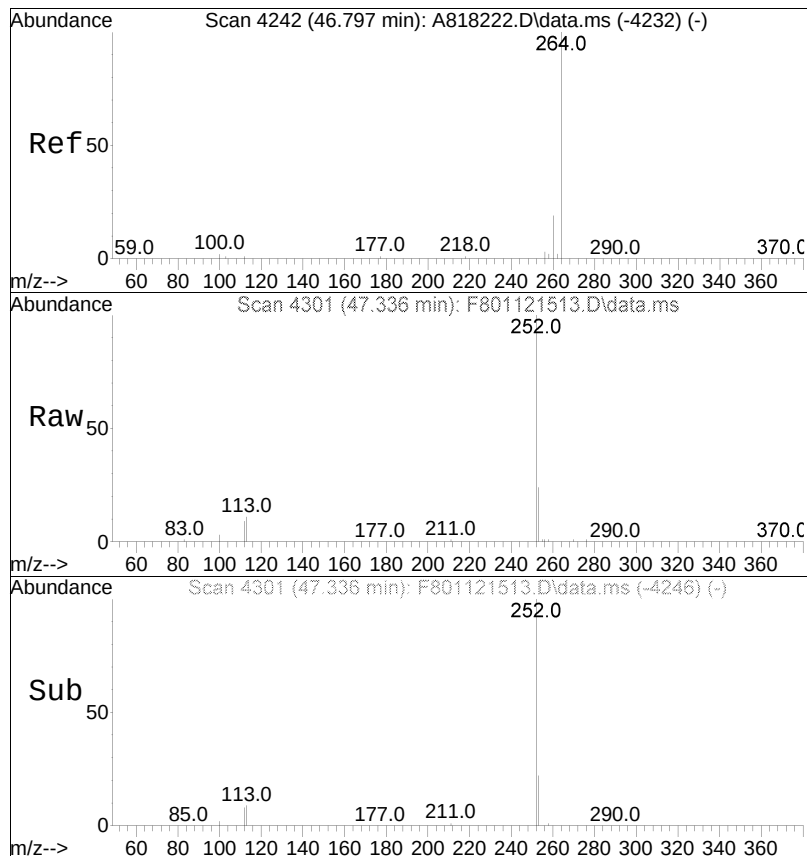




#84
 Benzo[b]fluoranthene
 Concen: 4805.27 ng/mL
 RT: 47.262 min Scan# 4293
 Delta R.T. 0.009 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

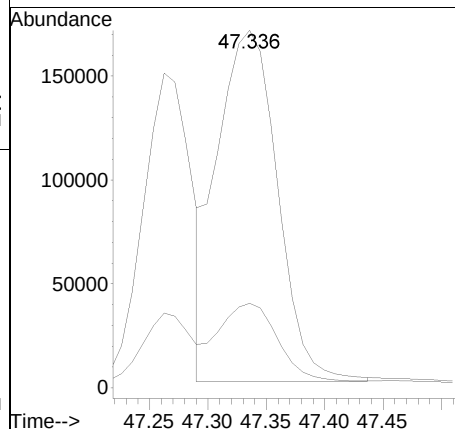
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	22.7	16.6	30.8	

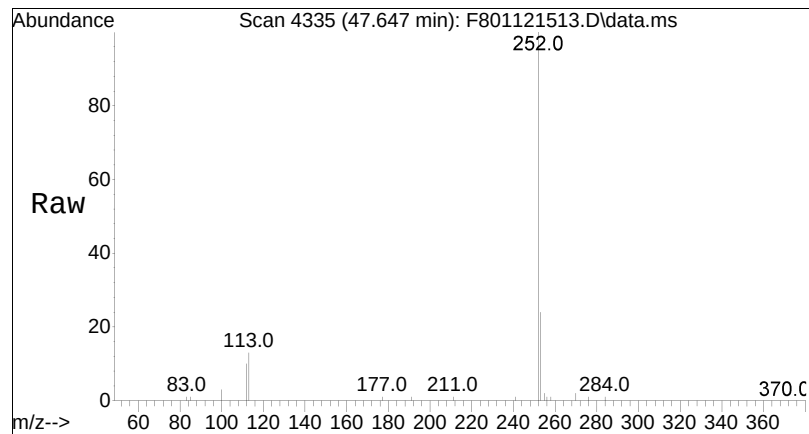




#85
 Benzo[j]+[k]fluoranthene
 Concen: 7025.78 ng/mL M6
 RT: 47.336 min Scan# 4301
 Delta R.T. 0.000 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

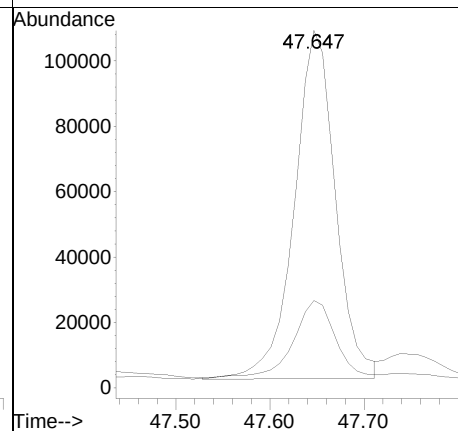
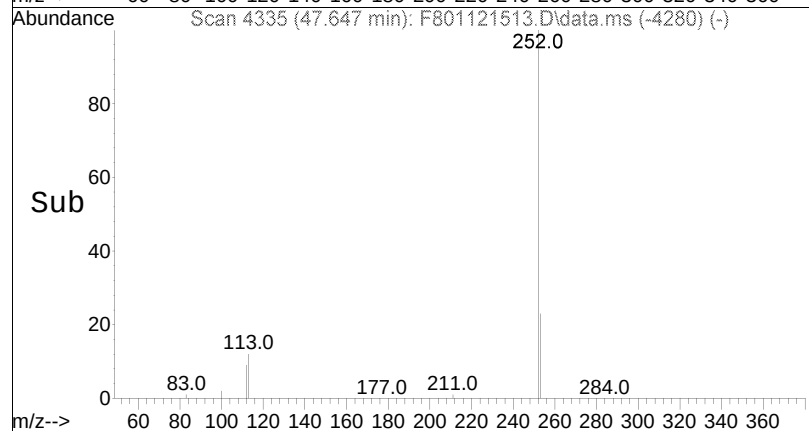
Tgt	Ion	Ratio	Lower	Upper
252	252	100		
253	253	20.0	17.0	31.6

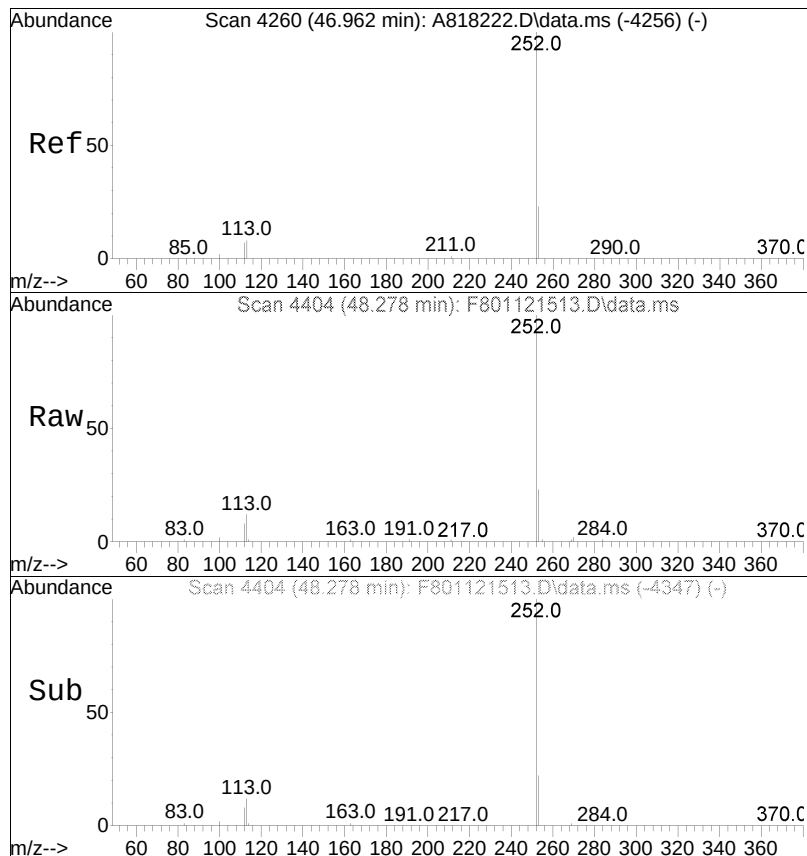




#86
 Benzo[a]fluoranthene
 Concen: 3726.20 ng/mL
 RT: 47.647 min Scan# 4335
 Delta R.T. 0.000 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

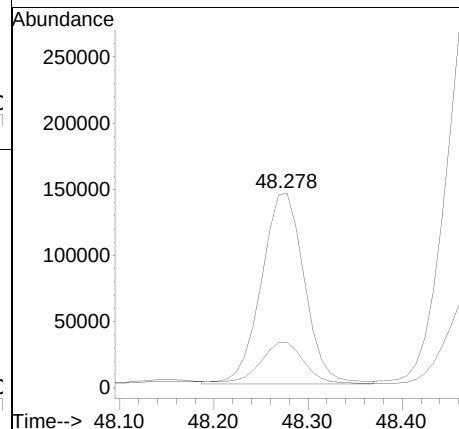
Tgt Ion: 252 Resp: 323525
 Ion Ratio Lower Upper
 252 100
 253 24.0 17.1 31.7

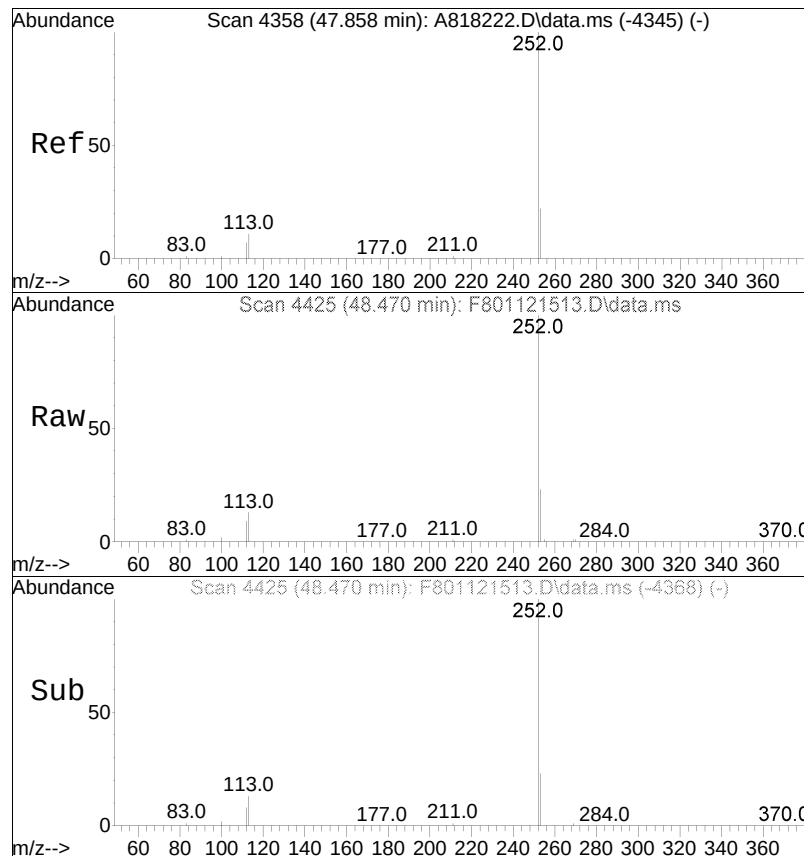




#87
 Benzo[e]pyrene
 Concen: 5165.71 ng/mL
 RT: 48.278 min Scan# 4404
 Delta R.T. 0.018 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

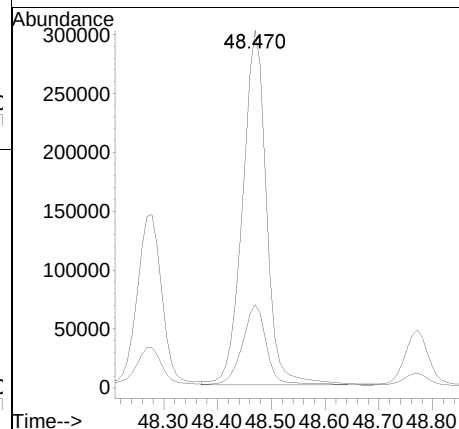
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	23.7	17.2	32.0	

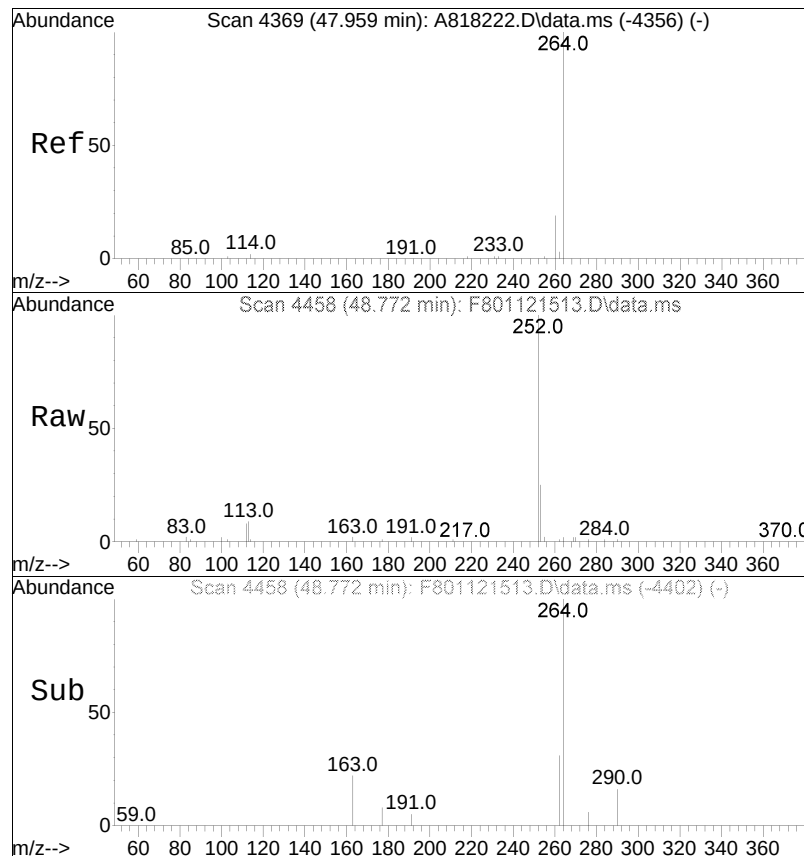




#89
 Benzo[a]pyrene
 Concen: 11453.78 ng/mL
 RT: 48.470 min Scan# 4425
 Delta R.T. 0.018 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

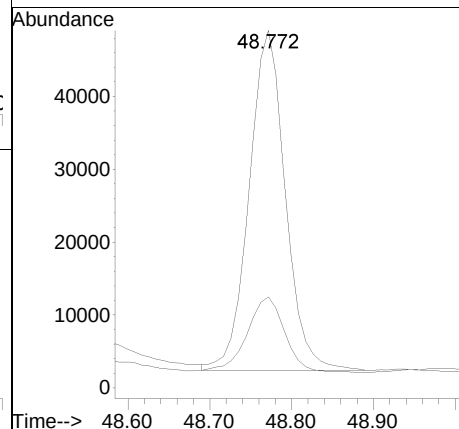
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	23.1	18.1	33.7	

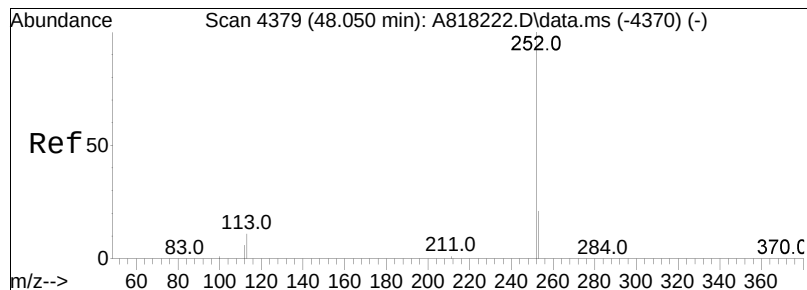




#90
Perylene
Concen: 1673.77 ng/mL
RT: 48.772 min Scan# 4458
Delta R.T. 0.009 min
Lab File: F801121513.D
Acq: 13 Jan 2015 3:14 am

Tgt	Ion	Ratio	Lower	Upper
252	100			
253	23.6	17.8	33.1	





#91

Indeno[1,2,3-cd]pyrene

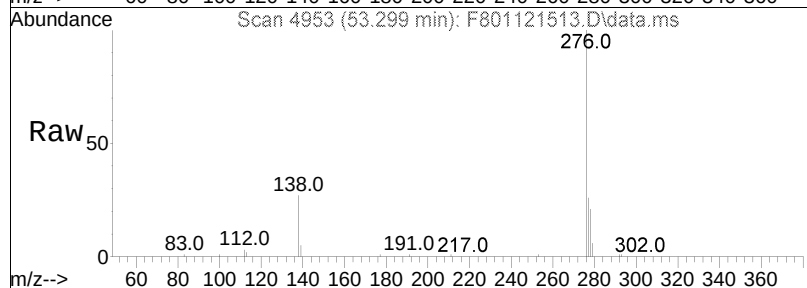
Concen: 3848.34 ng/mL M3

RT: 53.299 min Scan# 4953

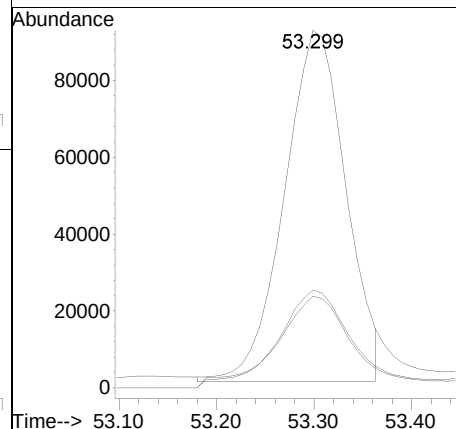
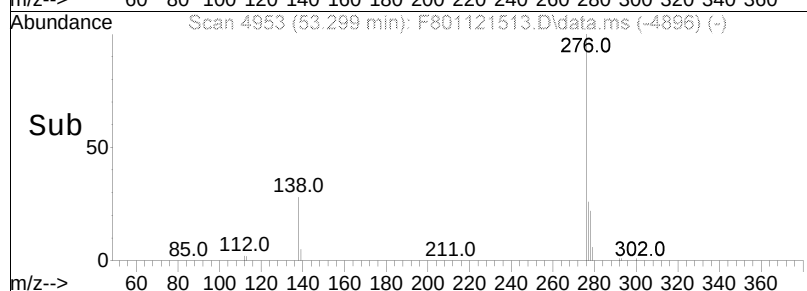
Delta R.T. 0.018 min

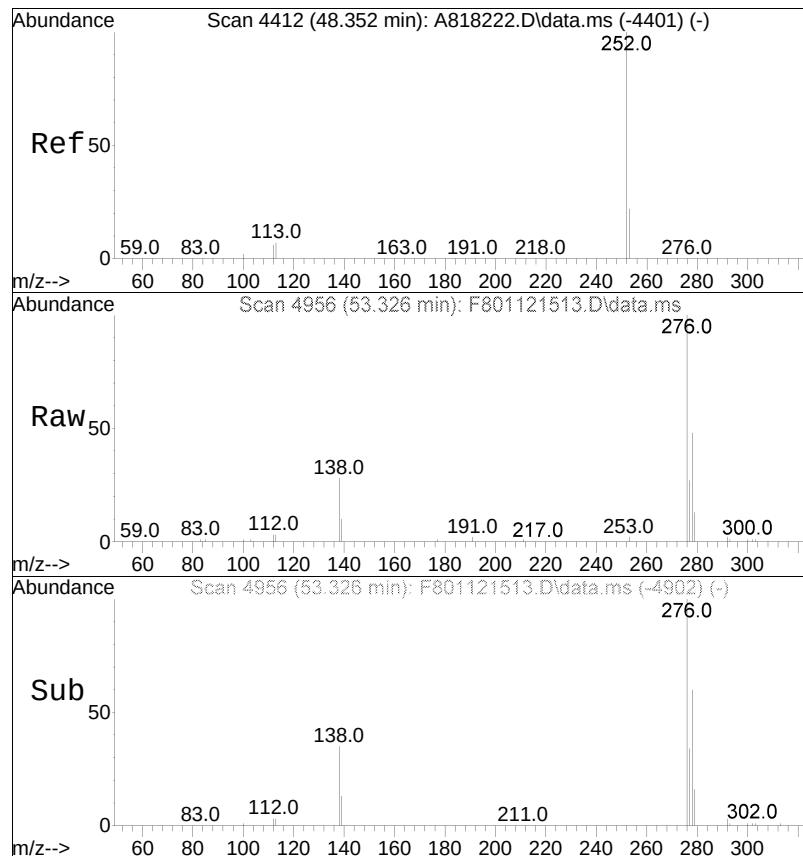
Lab File: F801121513.D

Acq: 13 Jan 2015 3:14 am



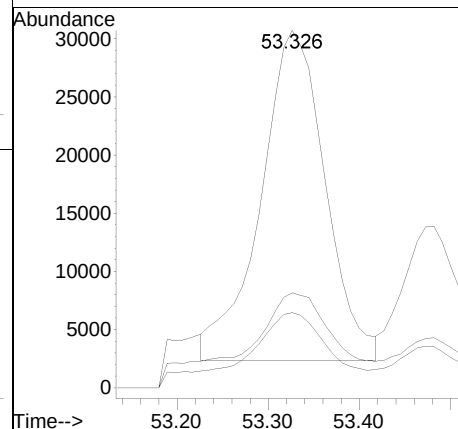
Tgt	Ion:276	Resp:	401355
Ion	Ratio	Lower	Upper
276	100		
138	34.4	19.9	37.0
277	32.9	16.9	31.5#

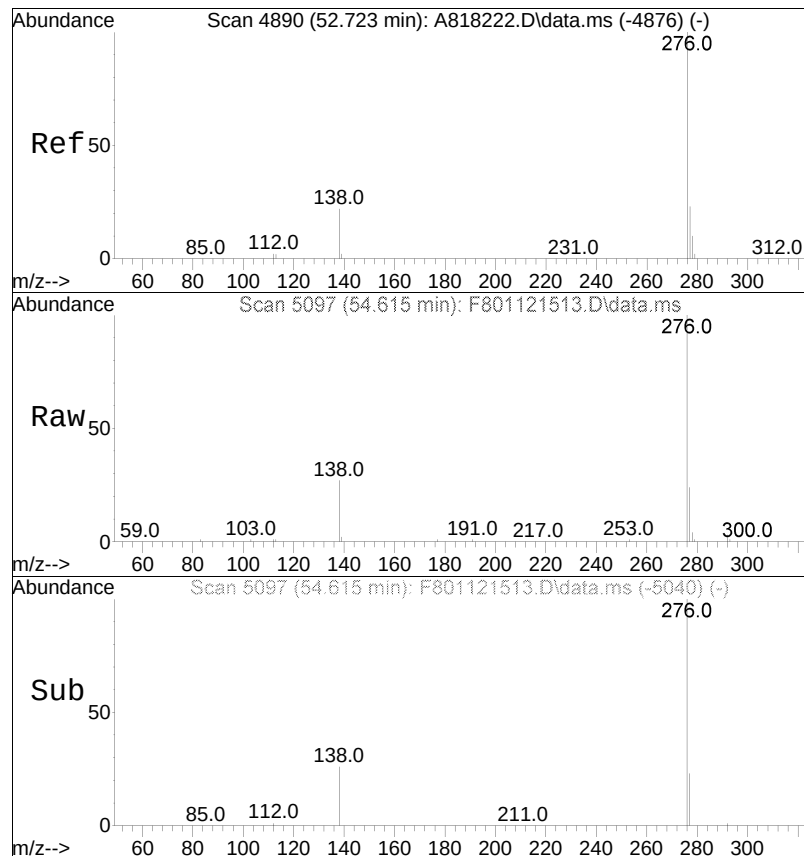




#92
 Dibenz[ah]+[ac]anthracene
 Concen: 1585.41 ng/mL M4
 RT: 53.326 min Scan# 4956
 Delta R.T. -0.009 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

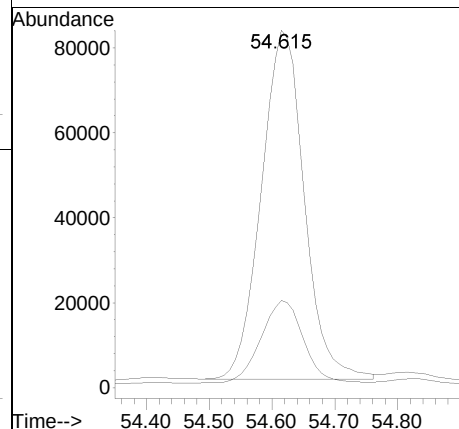
Tgt Ion	Ratio	Resp	Lower	Upper
278	100	139884		
139	8.5	15.7	29.1#	
279	9.5	17.1	31.9#	

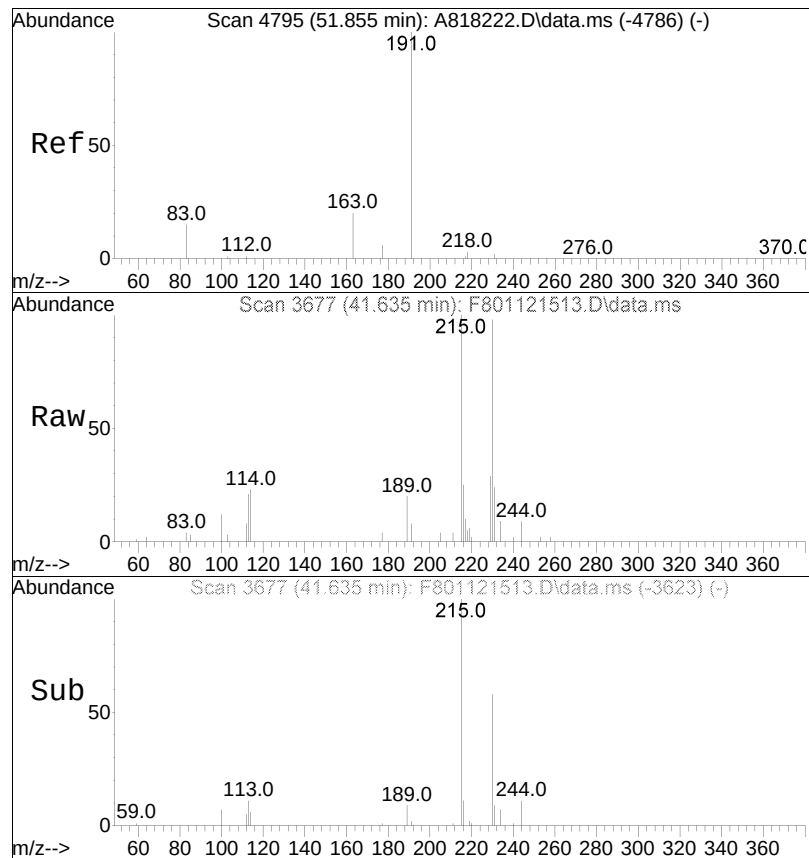




#93
 Benzo[g,h,i]perylene
 Concen: 3936.08 ng/mL
 RT: 54.615 min Scan# 5097
 Delta R.T. 0.018 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

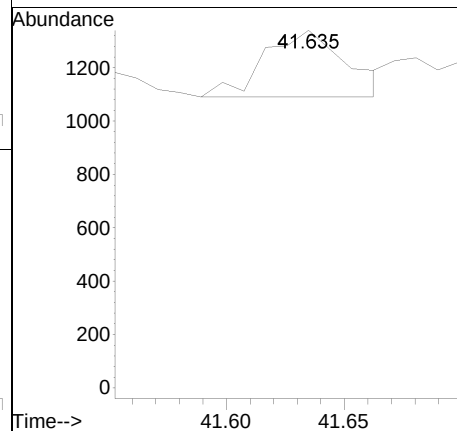
Tgt Ion	Ratio	Lower	Upper
276	100		
277	23.9	16.6	30.8

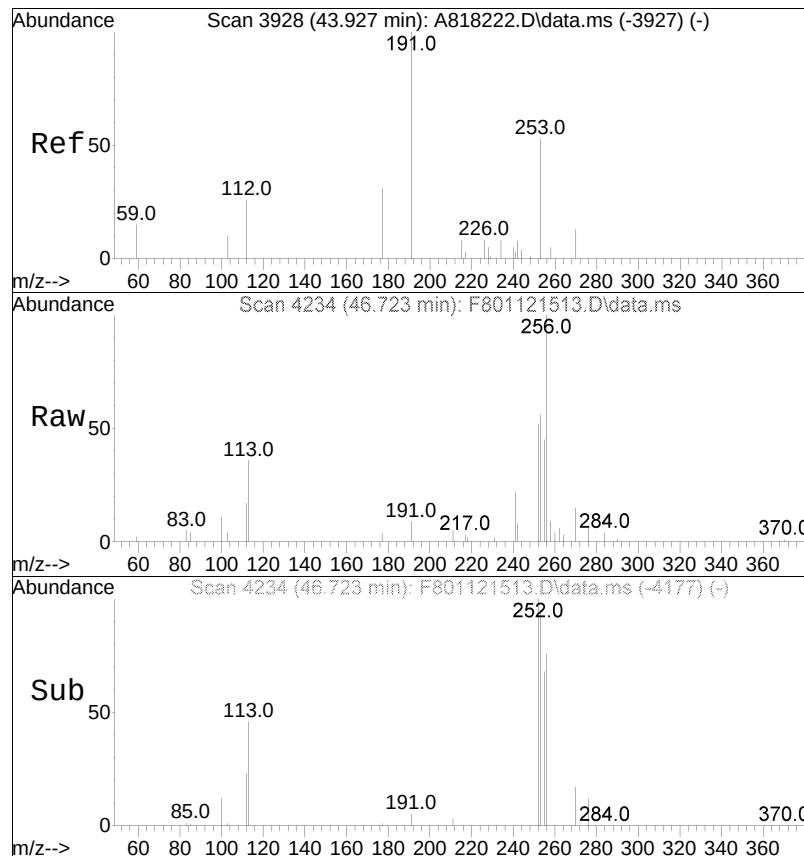




#97
 C24 Tricyclic Terpane (T5)
 Concen: 19.99 ng/ml
 RT: 41.635 min Scan# 3677
 Delta R.T. -0.009 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

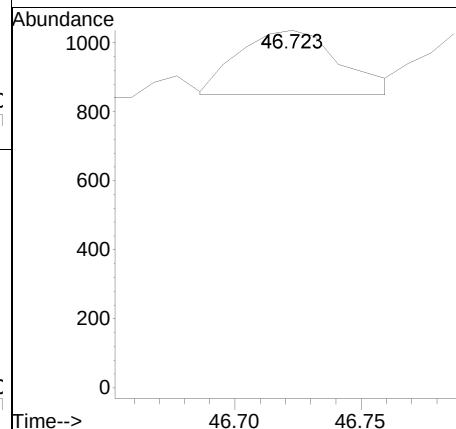
Tgt Ion:191 Resp: 596

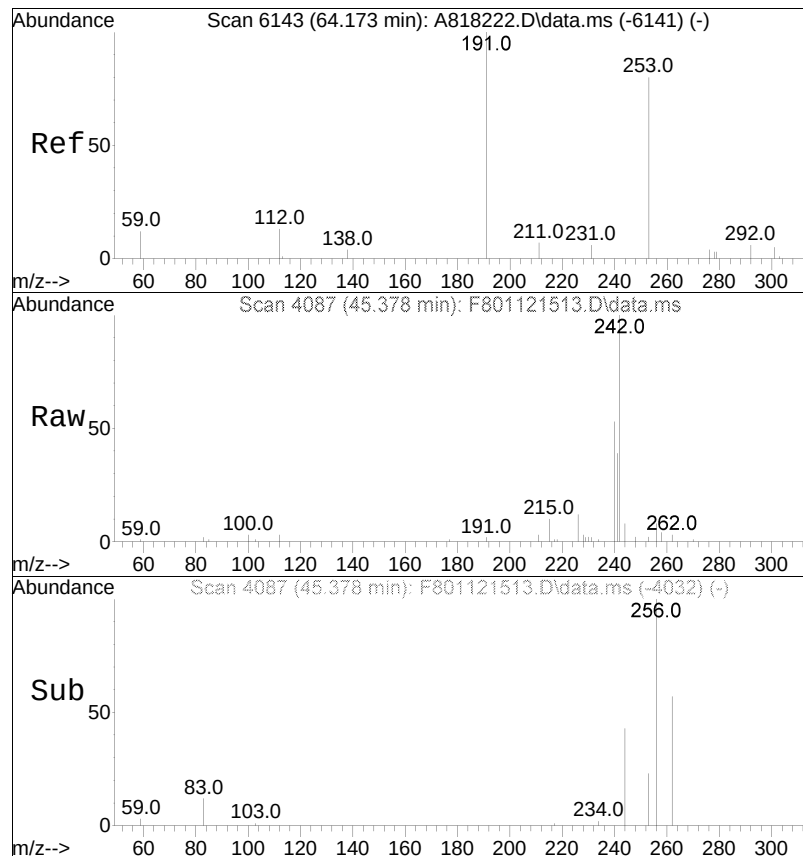




#103
 C28 Tricyclic Terpane-22R (T8)
 Concen: 17.67 ng/ml M4
 RT: 46.723 min Scan# 4234
 Delta R.T. 0.018 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

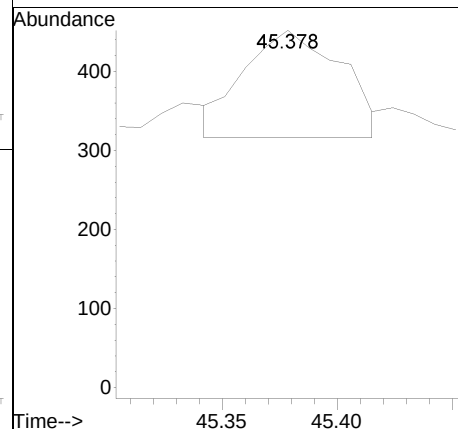
Tgt Ion:191 Resp: 527





#130
 13b(H),17a(H)-20S-Diacholestane
 Concen: 30.15 ng/ml M4
 RT: 45.378 min Scan# 4087
 Delta R.T. 0.000 min
 Lab File: F801121513.D
 Acq: 13 Jan 2015 3:14 am

Tgt Ion:217 Resp: 400



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121514.D
 Acq On : 13 Jan 2015 4:39 am
 Operator : PAH8:MS
 Sample : L1500432-04,32
 Misc : WG755949,WG755041
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 15 11:55:25 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.858	164	28887M4	500.000	ng/mL	0.00
74) Chrysene-d12	43.287	240	40804	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	19.932	136	30266	258.949	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	25.89%#		
42) Phenanthrene-d10	32.725	188	22248	256.434	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	25.64%#		
83) Benzo[b]fluoranthene-d12	47.180	264	22422	281.669	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	28.17%#		
88) Benzo[a]pyrene-d12	48.369	264	19163	273.611	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	27.36%#		
129) 5B(H)Cholane - Surr	43.872	217	4296	285.049	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	28.50%#		
Target Compounds						
						Qvalue
10) Naphthalene	20.114	128	44189720	339684.920	ng/mL	100
11) C1-Naphthalenes	22.743	142	23467822M5	180396.374	ng/mL	
12) C2-Naphthalenes	25.526	156	9181326M5	70576.550	ng/mL	
13) C3-Naphthalenes	27.835	170	2383354M5	18320.764	ng/mL	
14) C4-Naphthalenes	30.590	184	494104M5	3798.161	ng/mL	
23) Biphenyl	24.549	154	1825268	18126.163	ng/mL	100
25) Dibenzofuran	27.625	168	601707M4	5854.642	ng/mL	
26) Acenaphthylene	26.302	152	9663326	79385.610	ng/mL	100
27) Acenaphthene	26.986	153	670039	9008.379	ng/mL	99
29) Fluorene	29.021	166	2961269M4	37191.867	ng/mL	
30) C1-Fluorenes	31.229	180	1146280M5	14396.630	ng/mL	
31) C2-Fluorenes	33.555	194	580539M5	7291.242	ng/mL	
32) C3-Fluorenes	36.065	208	199047M5	2499.918	ng/mL	
33) Dibenzothiophene	32.323	184	1231966	11070.242	ng/mL	97
37) OTP	0.000		0	N.D.	d	
38) C1-Dibenzothiophenes	34.085	198	1153587M5	10365.941	ng/mL	
38) C1-Dibenzothiophenes BS	34.085	198	1153587M5	10365.941	ng/mL	
39) C2-Dibenzothiophenes	36.129	212	625391M5	5619.660	ng/mL	
40) C3-Dibenzothiophenes	37.562	226	217687M5	1956.099	ng/mL	
41) C4-Dibenzothiophenes	39.233	240	56676M5	509.281	ng/mL	
43) Phenanthrene	32.871	178	8677433	80453.357	ng/mL	99
49) C1-Phenanthrenes/Anthrace	34.888	192	5474596M5	50758.056	ng/mL	
50) C2-Phenanthrenes/Anthrace	37.033	206	1767713M5	16389.461	ng/mL	
50) C2-Phenanthrenes/Anthr BS	37.033	206	1767713M5	16389.461	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121514.D
 Acq On : 13 Jan 2015 4:39 am
 Operator : PAH8:MS
 Sample : L1500432-04,32
 Misc : WG755949,WG755041
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 15 11:55:25 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) 5AA IS BKGD	0.000		0	N.D.	d	
52) C3-Phenanthrenes/Anthrace	38.850	220	409128M5	3793.256	ng/mL	
53) C4-Phenanthrenes/Anthrace	41.023	234	77272M5	716.432	ng/mL	
55) Anthracene	33.017	178	3011478M4	30477.109	ng/mL	
56) Carbazole	33.665	167	161719	1530.621	ng/mL	90
58) Fluoranthene	37.599	202	2852351M4	26066.649	ng/mL	
59) Benzo(b)fluorene	40.092	216	470438M4	7423.997	ng/mL	
60) Pyrene	38.494	202	4044515	35292.818	ng/mL	96
61) C1-Fluoranthenes/Pyrenes	39.854	216	3964822M5	34597.410	ng/mL	
62) C2-Fluoranthenes/Pyrenes	41.507	230	1007057M5	8787.674	ng/mL	
63) C3-Fluoranthenes/Pyrenes	43.369	244	268329M5	2341.464	ng/mL	
64) C4-Fluoranthenes/Pyrenes	44.986	258	88648M5	773.551	ng/mL	
66) Naphthobenzothiophene	42.292	234	238320	2363.809	ng/mL	94
67) Naphthobenzothiophene-2,1	42.292	234	238320	2363.809	ng/mL	94
68) Naphthobenzothiophene-1,2	42.630	234	70794	702.180	ng/mL#	12
69) Naphthobenzothiophene-2,3	42.931	234	105625M3	1047.656	ng/mL	
70) C1-Naphthobenzothiophenes	43.680	248	316059M5	3134.874	ng/mL	
71) C2-Naphthobenzothiophenes	45.177	262	135605M5	1345.017	ng/mL	
72) C3-Naphthobenzothiophenes	47.061	276	56704M5	562.426	ng/mL	
73) C4-Naphthobenzothiophenes	49.860	290	26933M5	267.139	ng/mL	
75) Benz[a]anthracene	43.232	228	1374201M3	14654.104	ng/mL	
77) Chrysene/Triphenylene	43.397	228	1232579	13731.609	ng/mL	99
78) C1-Chrysenes	44.849	242	957568M5	10667.835	ng/mL	
79) C2-Chrysenes	46.540	256	417900M5	4655.636	ng/mL	
79) C2-Chrysenes BS	46.540	256	417900M5	4655.636	ng/mL	
80) BBF-D12 Surr BKGD	0.000		0	N.D.	d	
81) C3-Chrysenes	48.150	270	154920M5	1725.894	ng/mL	
82) C4-Chrysenes	49.146	284	48455M5	539.815	ng/mL	
84) Benzo[b]fluoranthene	47.271	252	564802	5638.949	ng/mL	98
85) Benzo[j]+[k]fluoranthene	47.335	252	732075	7422.461	ng/mL	94
86) Benzo[a]fluoranthene	47.646	252	384532	3898.745	ng/mL	98
87) Benzo[e]pyrene	48.278	252	530971	5241.968	ng/mL	99
89) Benzo[a]pyrene	48.479	252	1125650	12154.579	ng/mL	94
90) Perylene	48.771	252	172802	1776.614	ng/mL	95
91) Indeno[1,2,3-cd]pyrene	53.308	276	474579M4	4005.778	ng/mL	
92) Dibenz[ah]+[ac]anthracene	53.335	278	152022M4	1516.748	ng/mL	
93) Benzo[g,h,i]perylene	54.624	276	440767	3920.766	ng/mL	100
94) Hopane (T19)	52.338	191	542	15.999	ng/mL#	63
96) C23 Tricyclic Terpane (T4	0.000		0	N.D.	d	
97) C24 Tricyclic Terpane (T5	0.000		0	N.D.	d	
98) C25 Tricyclic Terpane (T6	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121514.D
 Acq On : 13 Jan 2015 4:39 am
 Operator : PAH8:MS
 Sample : L1500432-04,32
 Misc : WG755949,WG755041
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 15 11:55:25 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99) C24 Tetracyclic Terpane (	0.000		0	N.D.	d	
100) C26 Tricyclic Terpane-22S	0.000		0	N.D.	d	
101) C26 Tricyclic Terpane-22R	0.000		0	N.D.	d	
102) C28 Tricyclic Terpane-22S	0.000		0	N.D.	d	
103) C28 Tricyclic Terpane-22R	46.713	191	704	20.781	ng/ml	100
104) C29 Tricyclic Terpane-22S	0.000		0	N.D.	d	
105) C29 Tricyclic Terpane-22R	0.000		0	N.D.	d	
106) 18a-22,29,30-Trisnorneocho	0.000		0	N.D.	d	
107) C30 Tricyclic Terpane-22S	0.000		0	N.D.	d	
108) C30 Tricyclic Terpane-22R	0.000		0	N.D.	d	
109) 17a(H)-22,29,30-Trisnorho	0.000		0	N.D.	d	
110) 17a/b,21b/a 28,30-Bisnorh	0.000		0	N.D.	d	
111) 17a(H),21b(H)-25-Norhopan	0.000		0	N.D.	d	
112) 30-Norhopane (T15)	0.000		0	N.D.	d	
113) 18a(H)-30-Norneohopane-C2	0.000		0	N.D.	d	
114) 17a(H)-Diahopane (X)	0.000		0	N.D.	d	
115) 30-Normoretane (T17)	0.000		0	N.D.	d	
116) 18a(H)&18b(H)-Oleananes (	0.000		0	N.D.	d	
117) Moretane (T20)	0.000		0	N.D.	d	
118) 30-Homohopane-22S (T21)	0.000		0	N.D.	d	
119) 30-Homohopane-22R (T22)	0.000		0	N.D.	d	
120) Gammacerane/C32-diahopane	0.000		0	N.D.	d	
121) 30,31-Bishomohopane-22S (	0.000		0	N.D.	d	
122) 30,31-Bishomohopane-22R (	0.000		0	N.D.	d	
123) 30,31-Trishomohopane-22S	0.000		0	N.D.	d	
124) 30,31-Trishomohopane-22R	0.000		0	N.D.	d	
125) Tetrakishomohopane-22S (T	0.000		0	N.D.	d	
126) Tetrakishomohopane-22R (T	0.000		0	N.D.	d	
127) Pentakishomohopane-22S (T	0.000		0	N.D.	d	
128) Pentakishomohopane-22R (T	0.000		0	N.D.	d	
130) 13b(H),17a(H)-20S-Diachol	45.378	217	477M4	31.650	ng/ml	
131) 13b(H),17a(H)-20R-Diachol	0.000		0	N.D.	d	
132) 13b,17a-20S-Methylidiachol	0.000		0	N.D.	d	
133) 14a,17a-20S-Chol/13b,17a-	0.000		0	N.D.	d	
134) 14a,17a-20R-Chol/13b,17a-	0.000		0	N.D.	d	
135) Unknown Sterane (S18)	0.000		0	N.D.	d	
136) 13a,17b-20S-Ethylidiachole	0.000		0	N.D.	d	
137) 14a,17a-20S-Methylcholest	0.000		0	N.D.	d	
138) 14a,17a-20R-Methylcholest	0.000		0	N.D.	d	
139) 14a(H),17a(H)-20S-Ethylch	0.000		0	N.D.	d	
140) 14a(H),17a(H)-20R-Ethylch	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121514.D
 Acq On : 13 Jan 2015 4:39 am
 Operator : PAH8:MS
 Sample : L1500432-04,32
 Misc : WG755949,WG755041
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 15 11:55:25 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
141)	14b(H),17b(H)-20R-Cholest	0.000		0	N.D.	d	
142)	14b(H),17b(H)-20S-Cholest	0.000		0	N.D.	d	
143)	14b,17b-20R-Methylcholest	0.000		0	N.D.	d	
144)	14b,17b-20S-Methylcholest	0.000		0	N.D.	d	
145)	14b(H),17b(H)-20R-Ethylch	0.000		0	N.D.	d	
146)	14b(H),17b(H)-20S-Ethylch	0.000		0	N.D.	d	
147)	C26,20R- +C27,20S- triaro	49.604	231	230M4	15.261	ng/mL	
148)	C28,20S-triaromatic stero	0.000		0	N.D.	d	
149)	C27,20R-triaromatic stero	0.000		0	N.D.	d	
150)	C28,20R-triaromatic stero	0.000		0	N.D.	d	

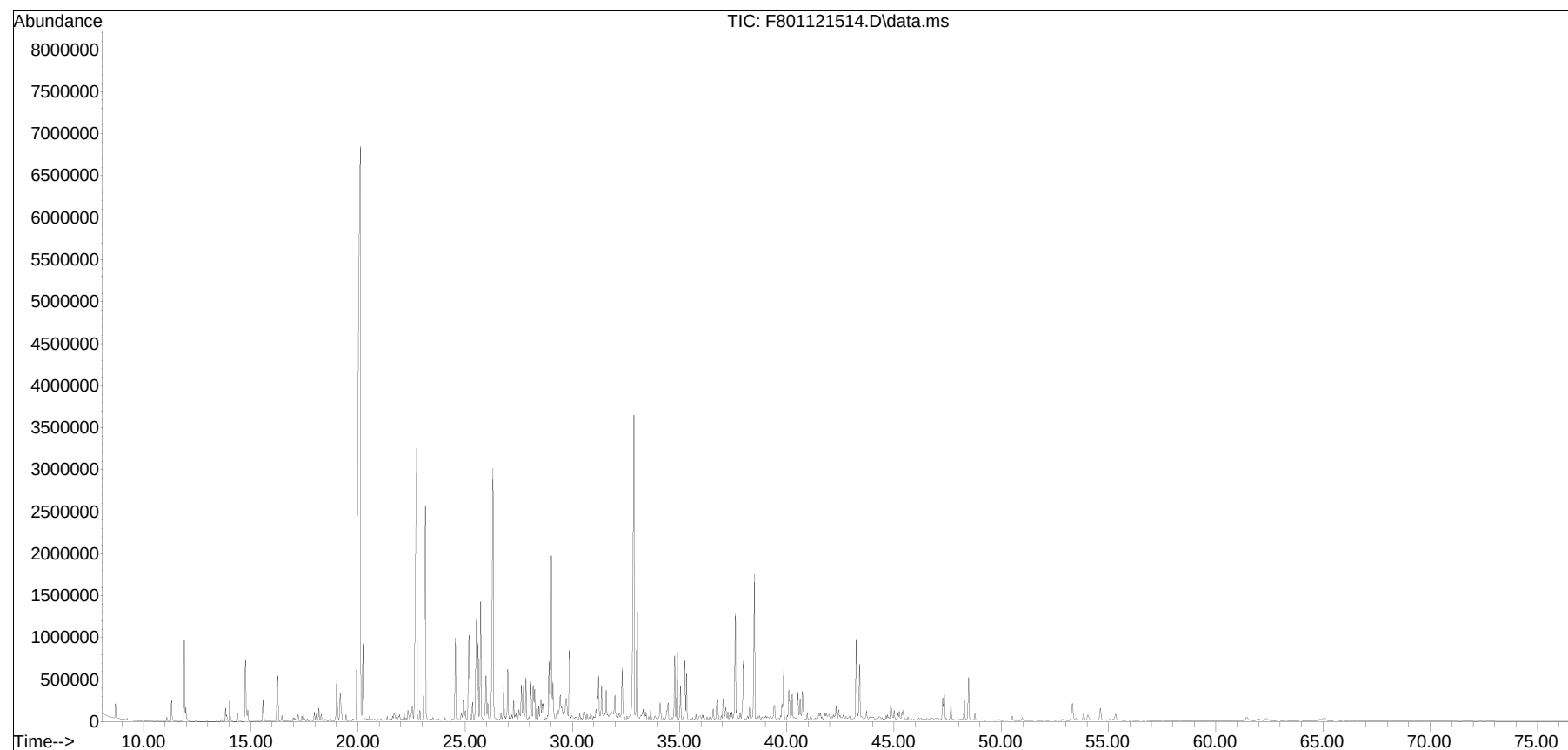
(#) = qualifier out of range (m) = manual integration (+) = signals summed

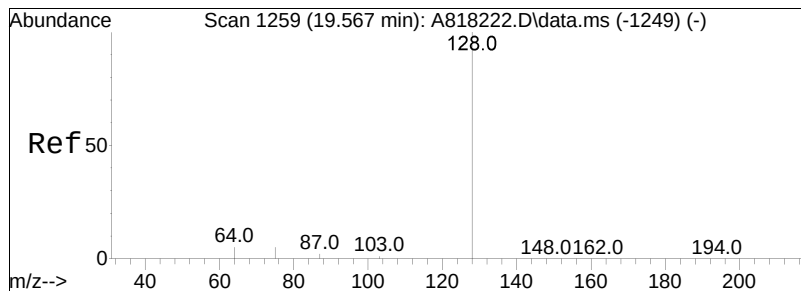
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN12\
Data File : F801121514.D
Acq On : 13 Jan 2015 4:39 am
Operator : PAH8:MS
Sample : L1500432-04,32
Misc : WG755949,WG755041
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 15 11:55:25 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 13 07:23:40 2015
Response via : Initial Calibration

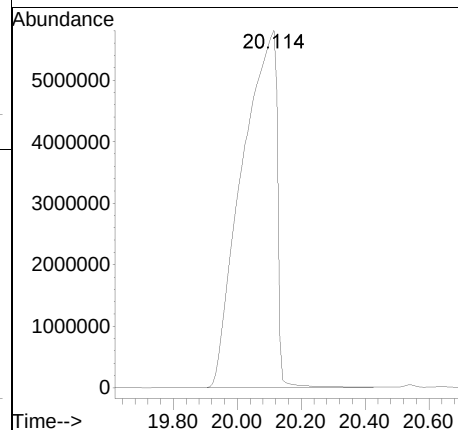
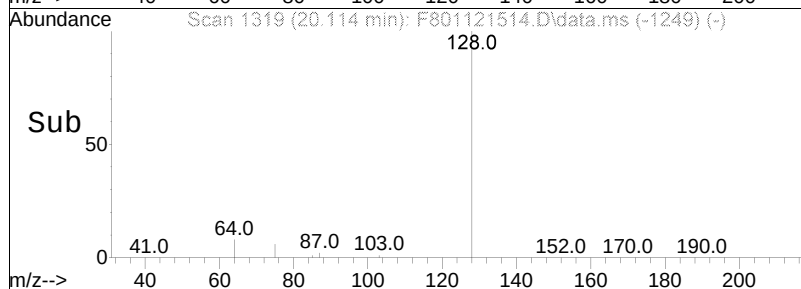
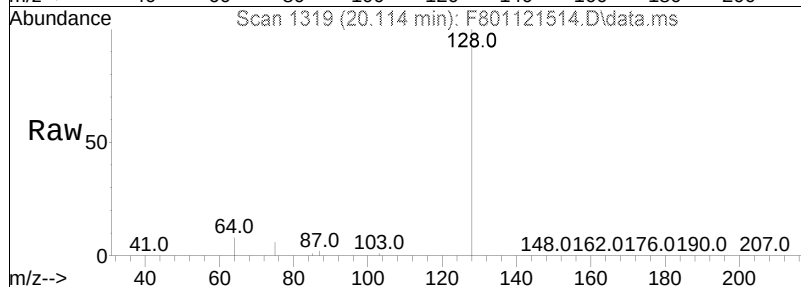
Sub List : ALKPAHURS - ALKPAH and BIO

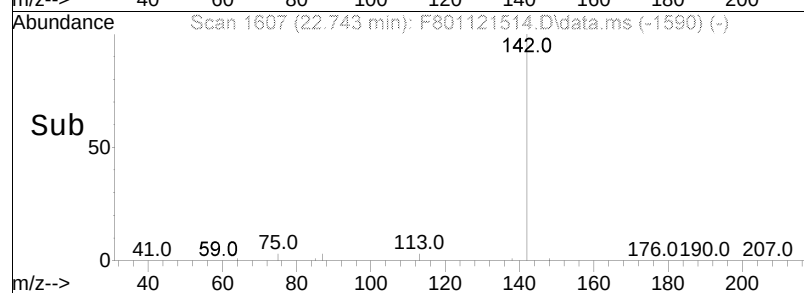
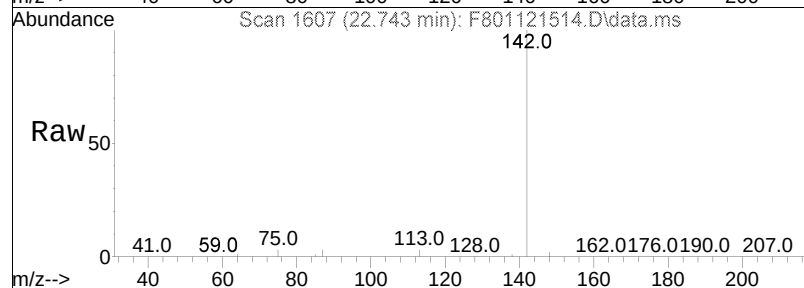
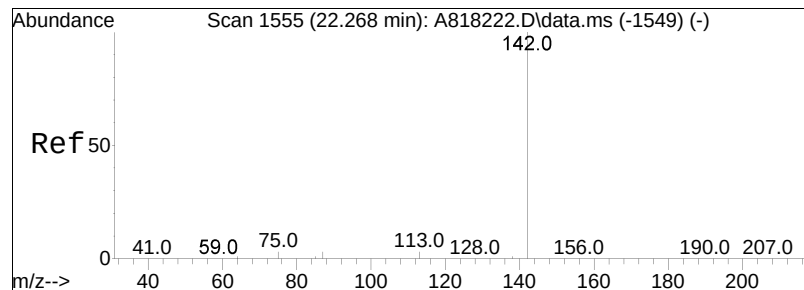




#10
Naphthalene
Concen: 339684.92 ng/mL
RT: 20.114 min Scan# 1319
Delta R.T. 0.137 min
Lab File: F801121514.D
Acq: 13 Jan 2015 4:39 am

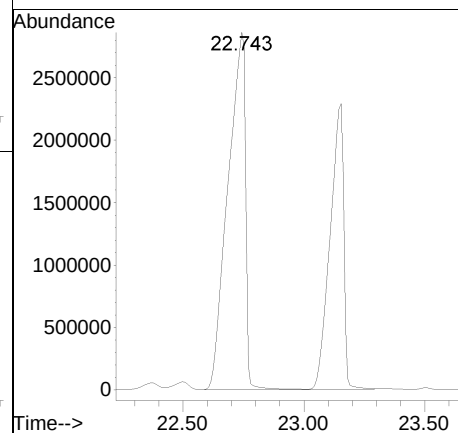
Tgt Ion:128 Resp:44189720

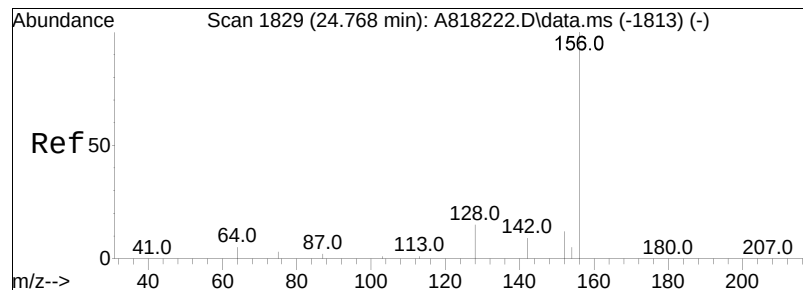




#11
 C1-Naphthalenes
 Concen: 180396.37 ng/mL M5
 RT: 22.743 min Scan# 1607
 Delta R.T. 0.073 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

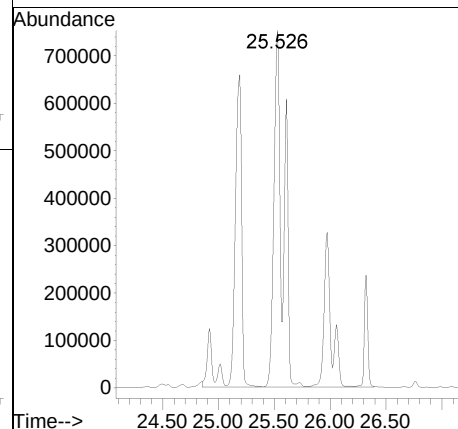
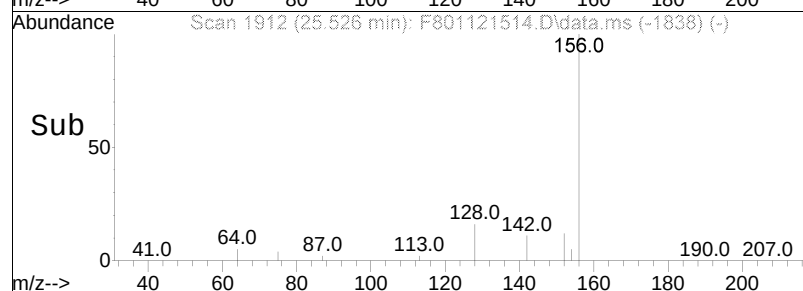
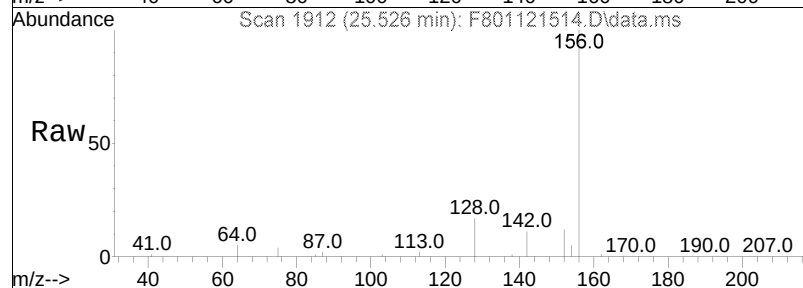
Tgt Ion:142 Resp:23467822

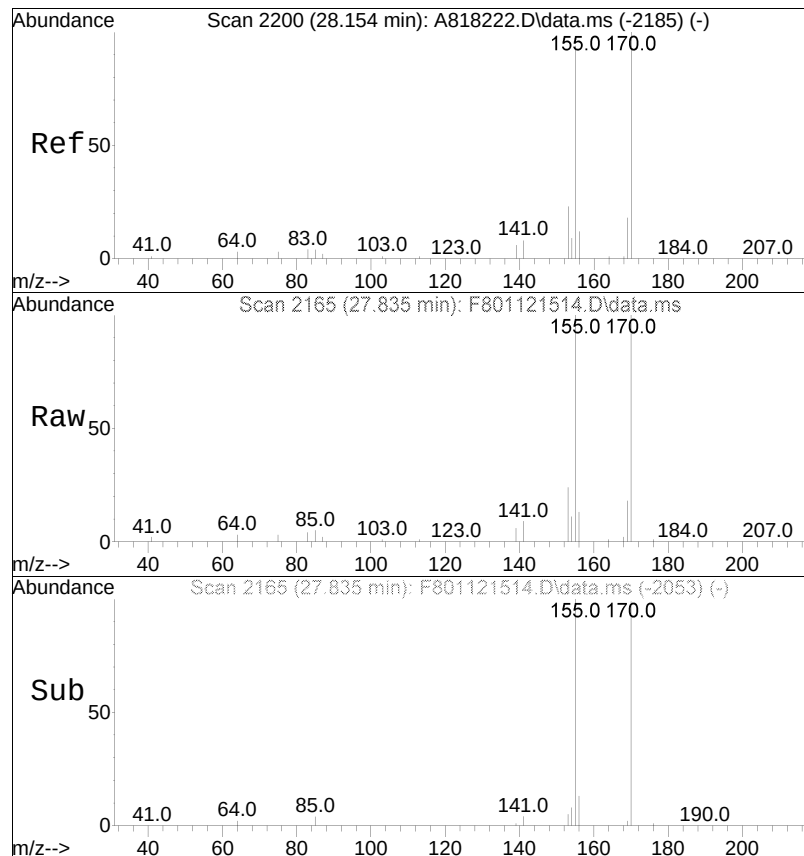




#12
 C2-Naphthalenes
 Concen: 70576.55 ng/mL M5
 RT: 25.526 min Scan# 1912
 Delta R.T. 0.017 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

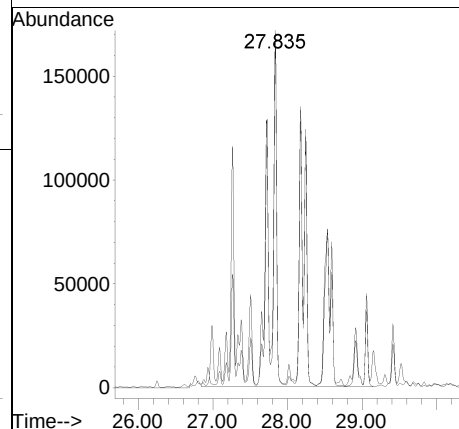
Tgt Ion:156 Resp: 9181326

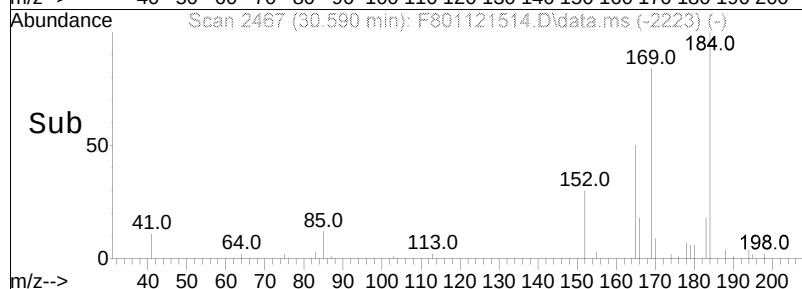
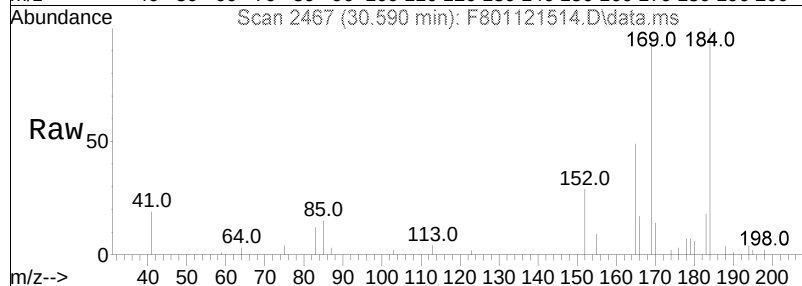
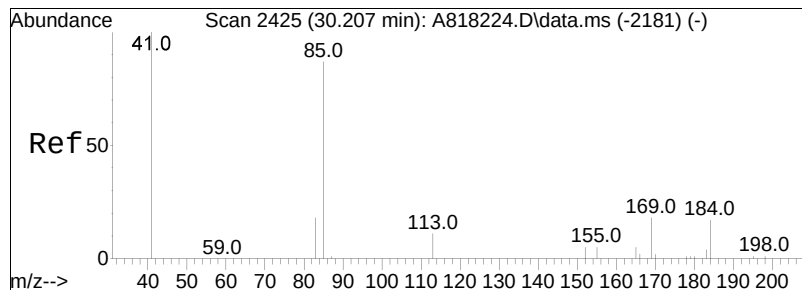




#13
 C3-Naphthalenes
 Concen: 18320.76 ng/mL M5
 RT: 27.835 min Scan# 2165
 Delta R.T. 0.008 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

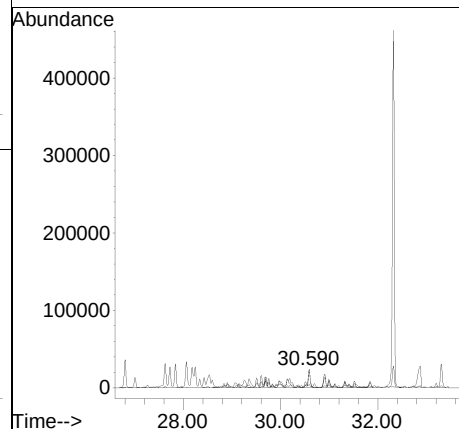
Tgt Ion	Ratio	Lower	Upper
170	100		
155	18.4	75.7	140.7#

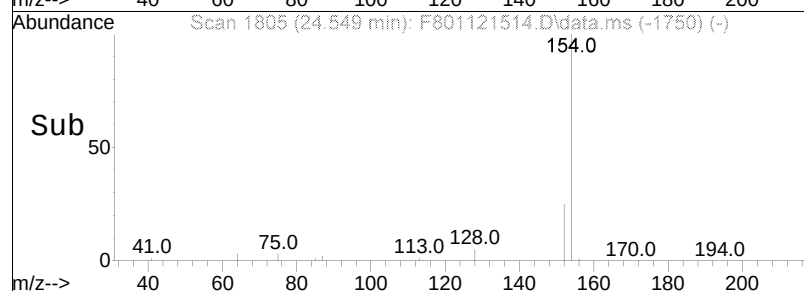
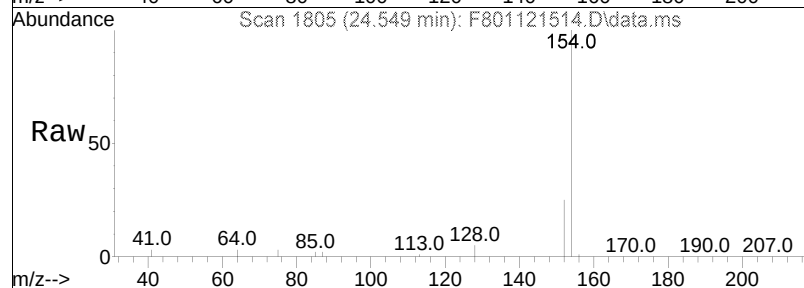
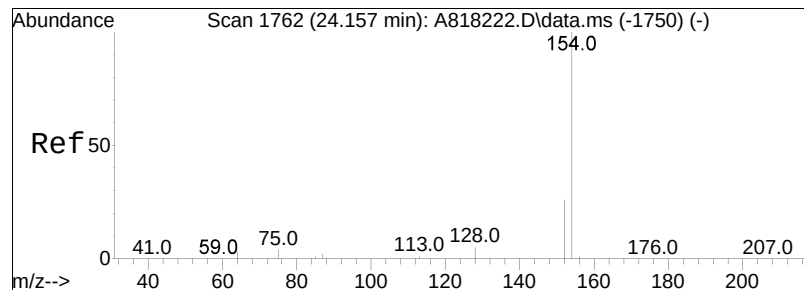




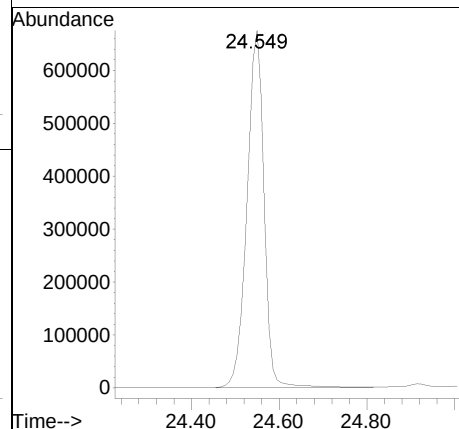
#14
C4-Naphthalenes
Concen: 3798.16 ng/mL M5
RT: 30.590 min Scan# 2467
Delta R.T. 0.000 min
Lab File: F801121514.D
Acq: 13 Jan 2015 4:39 am

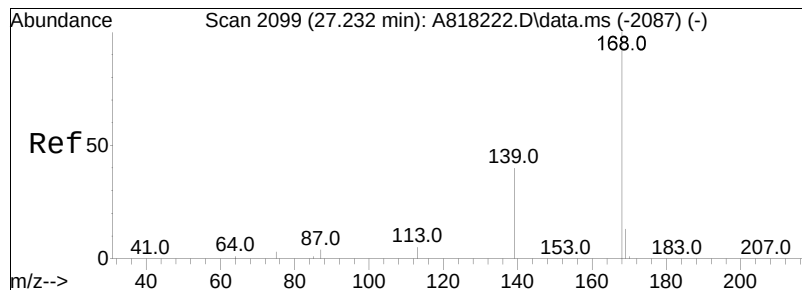
Tgt Ion	Ratio	Resp	Lower	Upper
184	100	494104		
169	6.1		87.1	161.7#
183	1.4		25.7	47.7#





#23
 Biphenyl
 Concen: 18126.16 ng/mL
 RT: 24.549 min Scan# 1805
 Delta R.T. 0.000 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am
 Tgt Ion:154 Resp: 1825268





#25

Dibenzofuran

Concen: 5854.64 ng/mL M4

RT: 27.625 min Scan# 2142

Delta R.T. -0.009 min

Lab File: F801121514.D

Acq: 13 Jan 2015 4:39 am

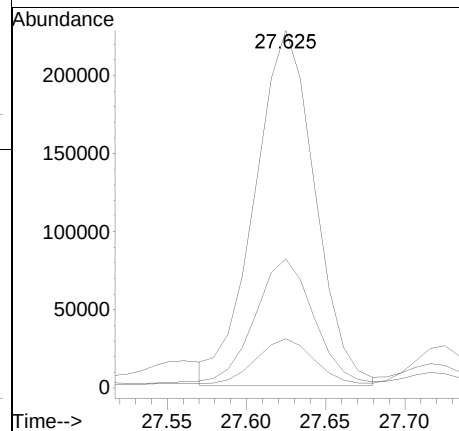
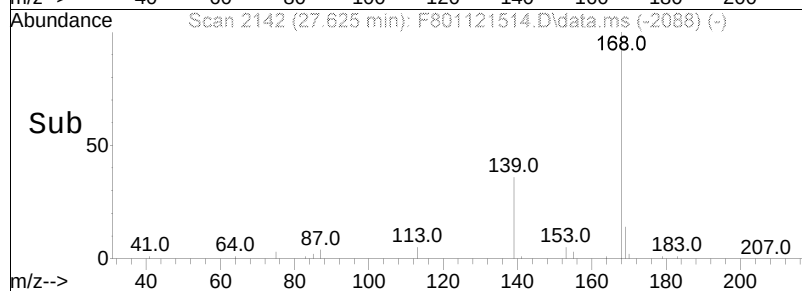
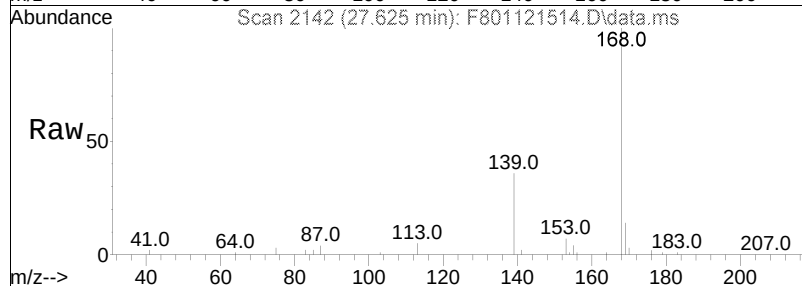
Tgt Ion:168 Resp: 601707

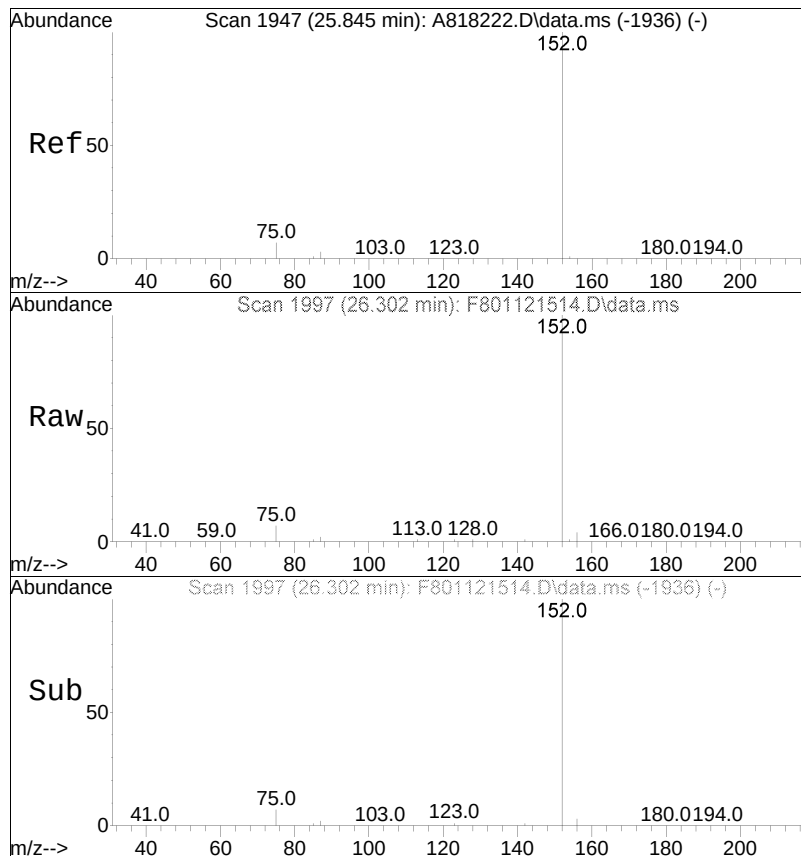
Ion Ratio Lower Upper

168 100

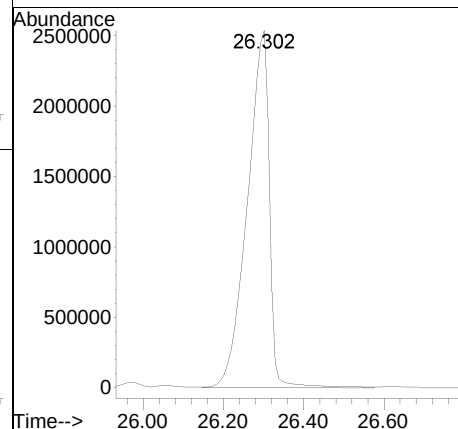
139 34.2 26.6 49.4

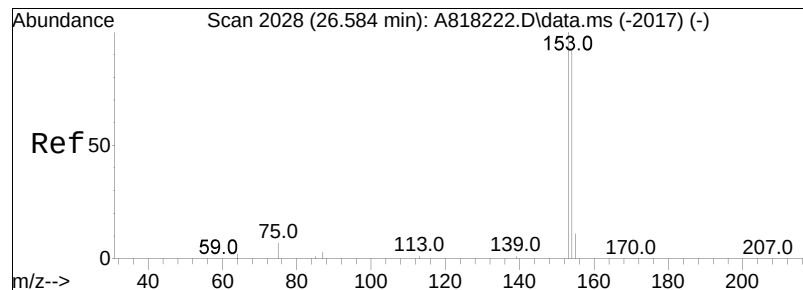
169 12.5 9.4 17.4





#26
 Acenaphthylene
 Concen: 79385.61 ng/mL
 RT: 26.302 min Scan# 1997
 Delta R.T. 0.055 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am
 Tgt Ion:152 Resp: 9663326





#27

Acenaphthene

Concen: 9008.38 ng/mL

RT: 26.986 min Scan# 2072

Delta R.T. 0.009 min

Lab File: F801121514.D

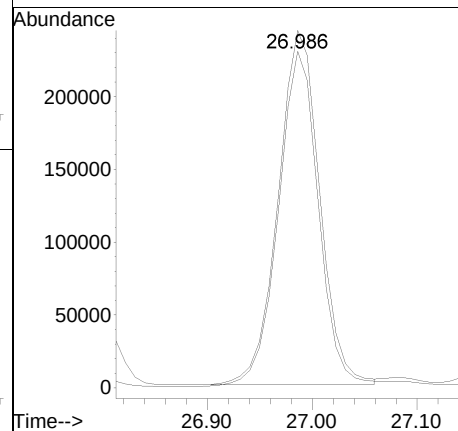
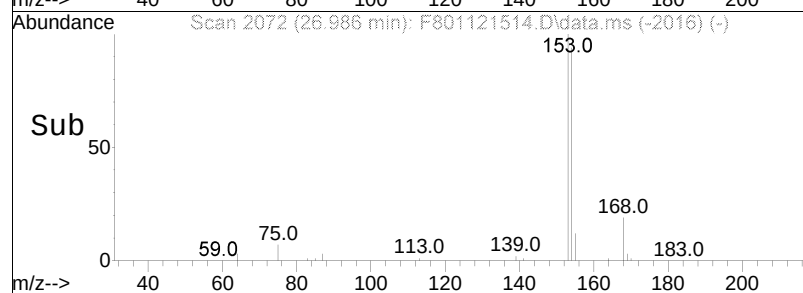
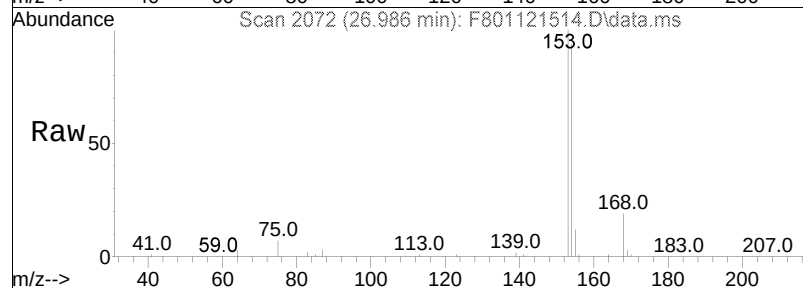
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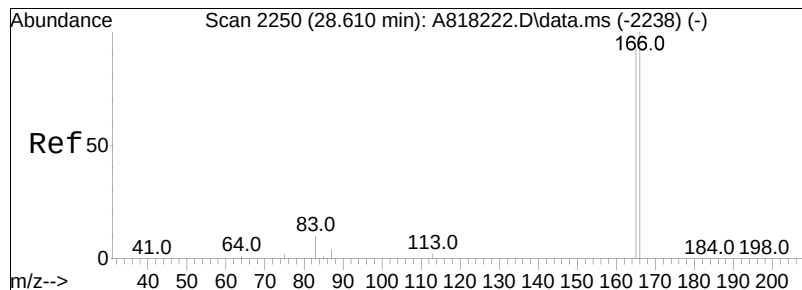
Tgt Ion:153 Resp: 670039

Ion Ratio Lower Upper

153 100

154 92.9 64.3 119.5





#29

Fluorene

Concen: 37191.87 ng/mL M4

RT: 29.021 min Scan# 2295

Delta R.T. 0.018 min

Lab File: F801121514.D

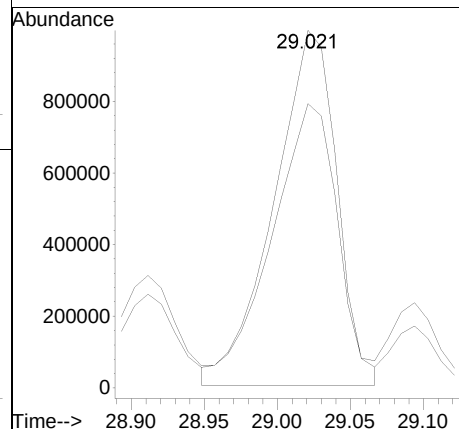
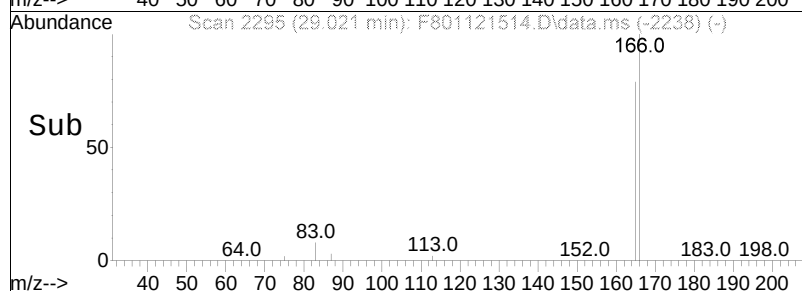
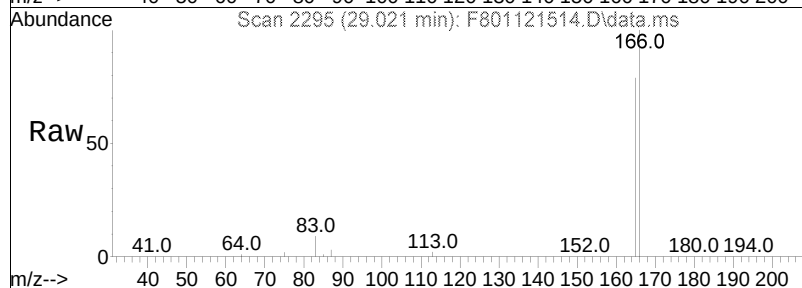
Acq: 13 Jan 2015 4:39 am

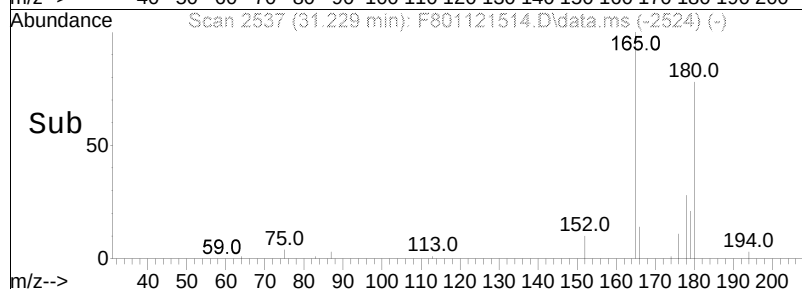
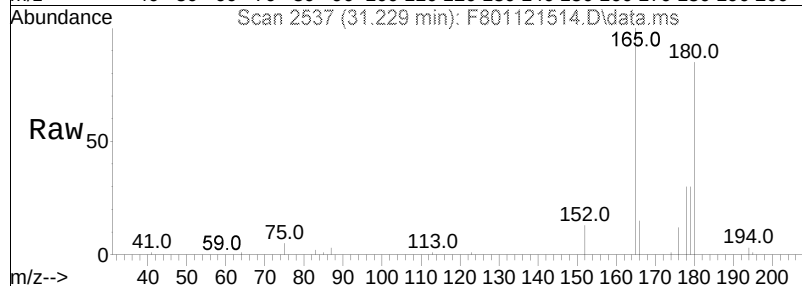
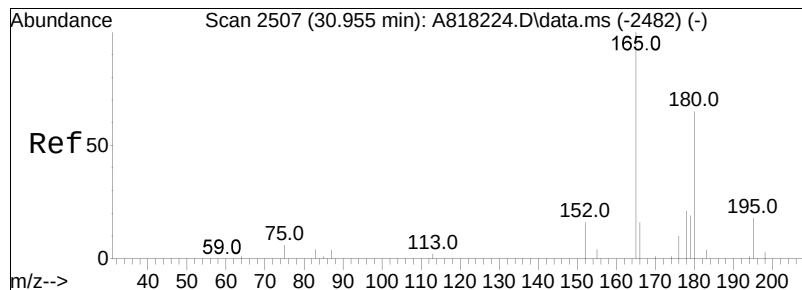
Tgt Ion:166 Resp: 2961269

Ion Ratio Lower Upper

166 100

165 80.6 65.9 122.3





#30

C1-Fluorenes

Concen: 14396.63 ng/mL M5

RT: 31.229 min Scan# 2537

Delta R.T. -0.128 min

Lab File: F801121514.D

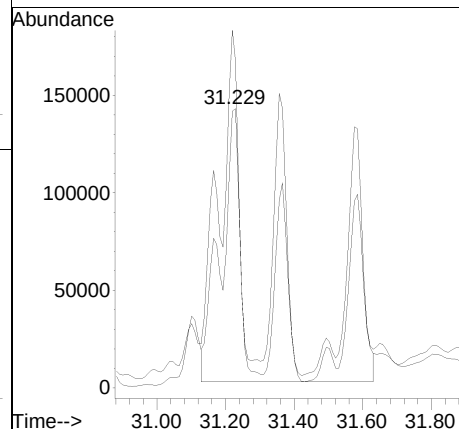
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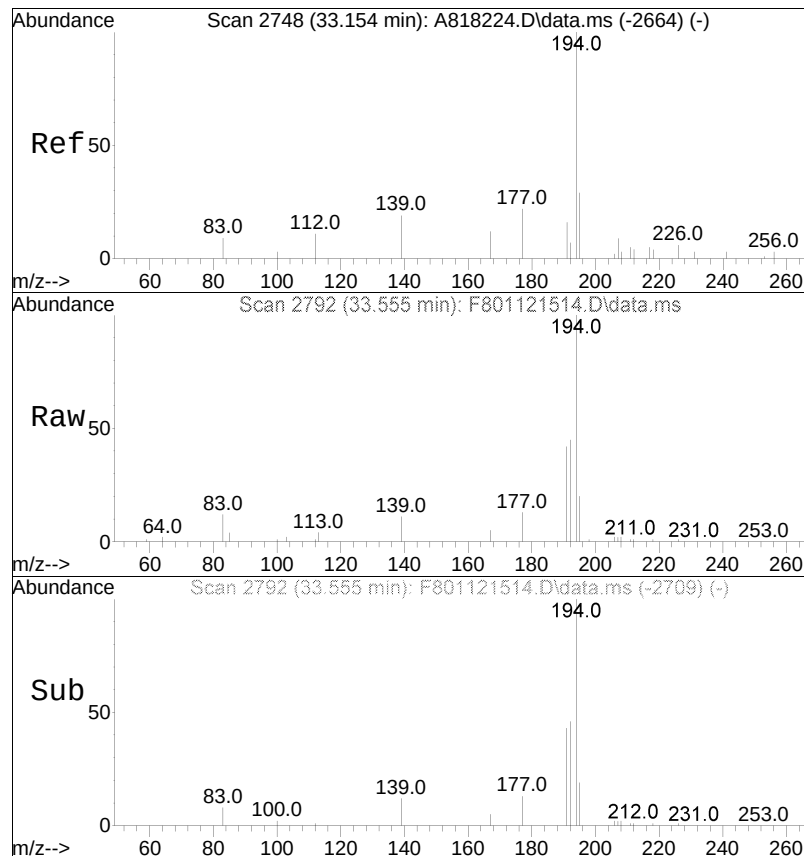
Tgt Ion:180 Resp: 1146280

Ion Ratio Lower Upper

180 100

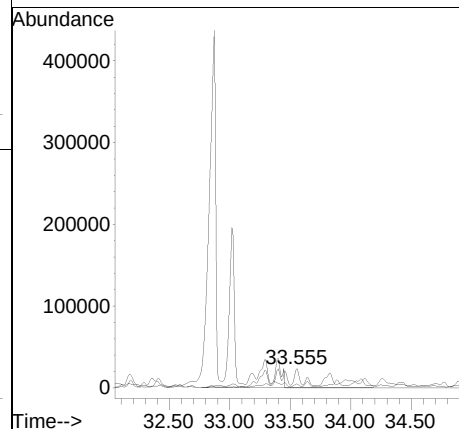
165 32.9 114.8 213.2#

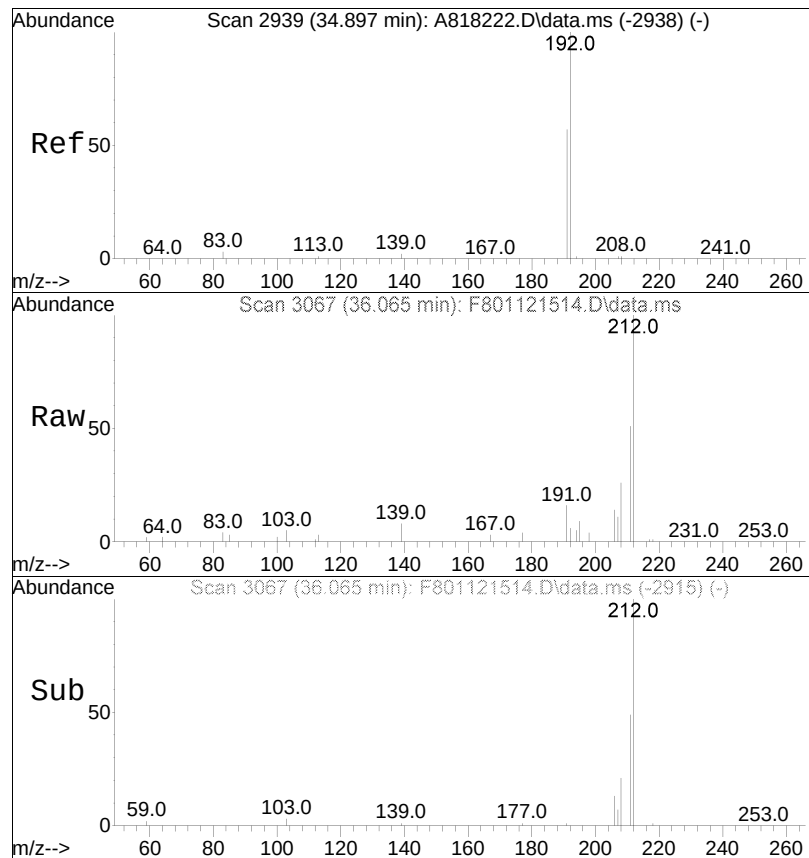




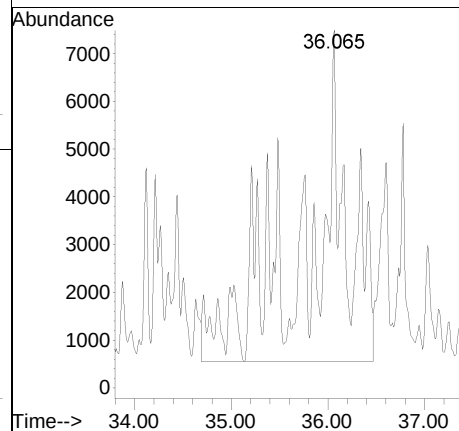
#31
 C2-Fluorenes
 Concen: 7291.24 ng/mL M5
 RT: 33.555 min Scan# 2792
 Delta R.T. 0.009 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

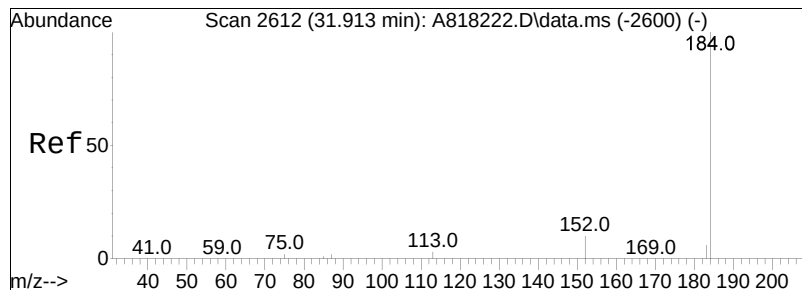
Tgt	Ion	Ratio	Lower	Upper
194	100			
179	0.0	0.0	0.0	
195	1.8	23.2	43.0	





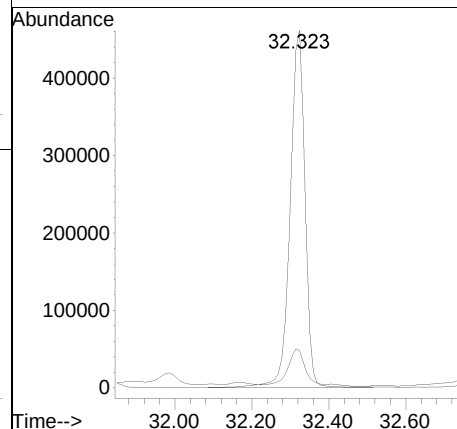
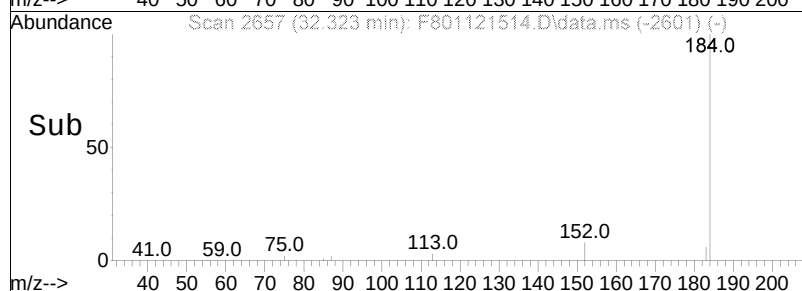
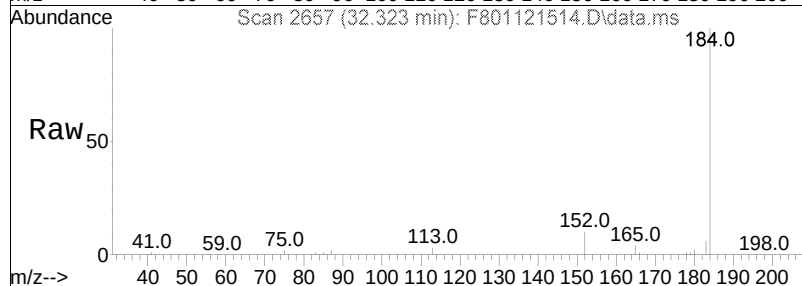
#32
 C3-Fluorenes
 Concen: 2499.92 ng/mL M5
 RT: 36.065 min Scan# 3067
 Delta R.T. 0.694 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am
 Tgt Ion:208 Resp: 199047

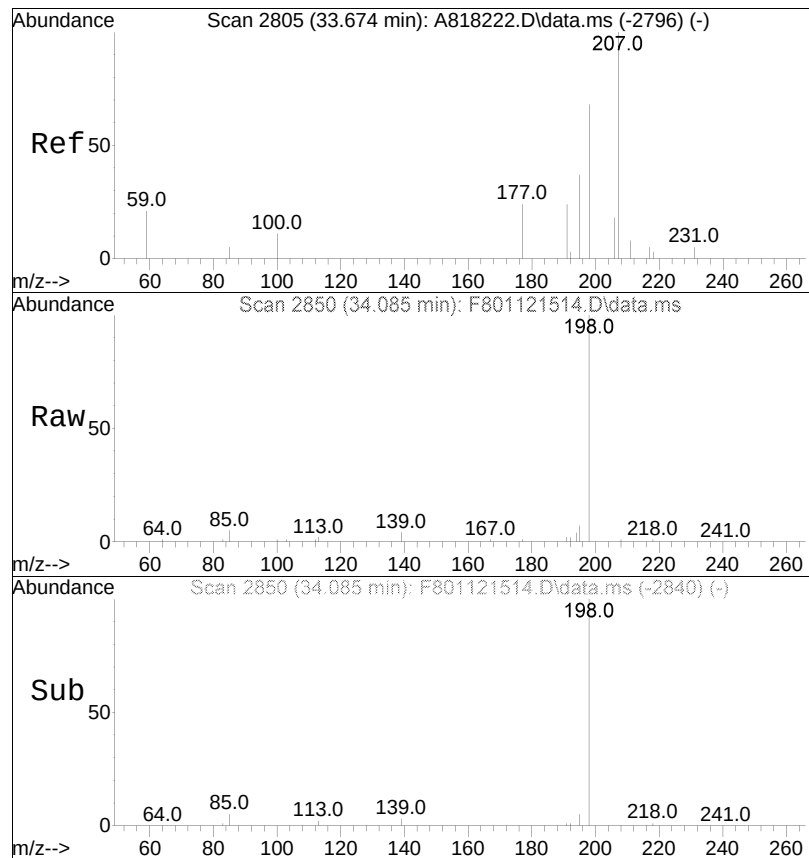




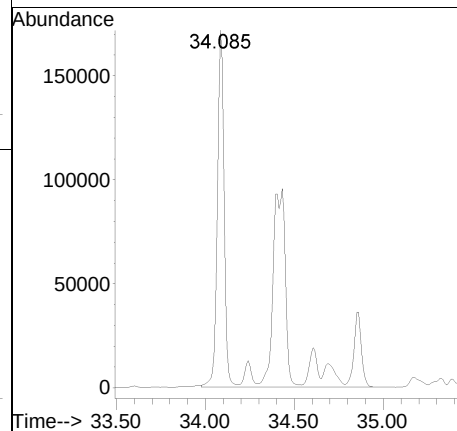
#33
 Dibenzothiophene
 Concen: 11070.24 ng/mL
 RT: 32.323 min Scan# 2657
 Delta R.T. 0.009 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

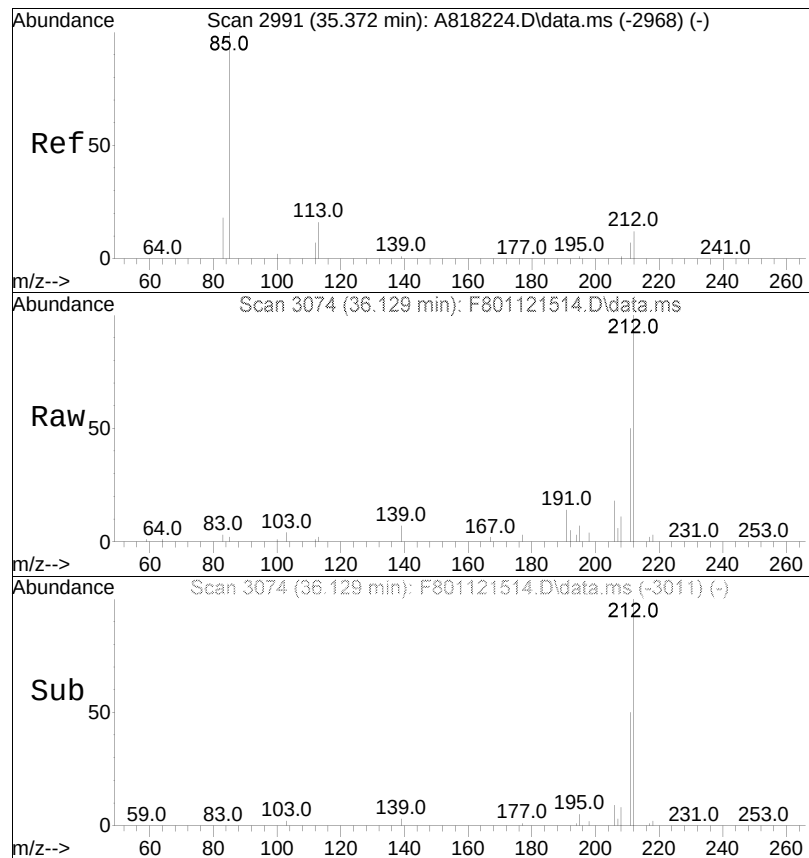
Tgt Ion:184 Resp: 1231966
 Ion Ratio Lower Upper
 184 100
 152 10.9 6.9 12.7



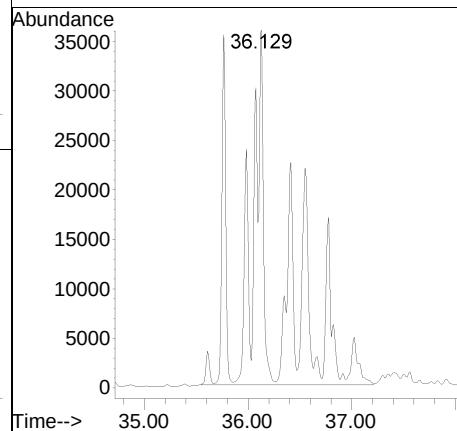


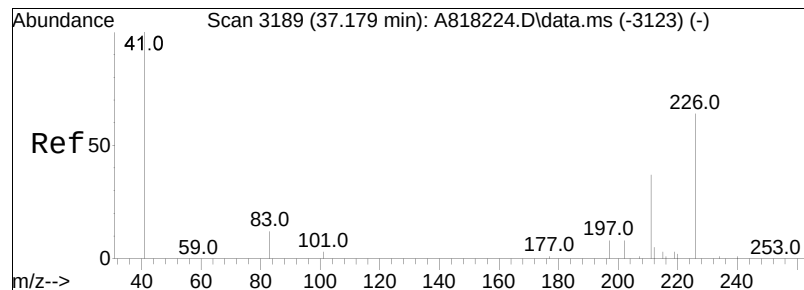
#38
C1-Dibenzothiophenes
Concen: 10365.94 ng/mL M5
RT: 34.085 min Scan# 2850
Delta R.T. 0.000 min
Lab File: F801121514.D
Acq: 13 Jan 2015 4:39 am
Tgt Ion:198 Resp: 1153587





#39
C2-Dibenzothiophenes
Concen: 5619.66 ng/mL M5
RT: 36.129 min Scan# 3074
Delta R.T. 0.009 min
Lab File: F801121514.D
Acq: 13 Jan 2015 4:39 am
Tgt Ion:212 Resp: 625391





#40

C3-Dibenzothiophenes

Concen: 1956.10 ng/mL M5

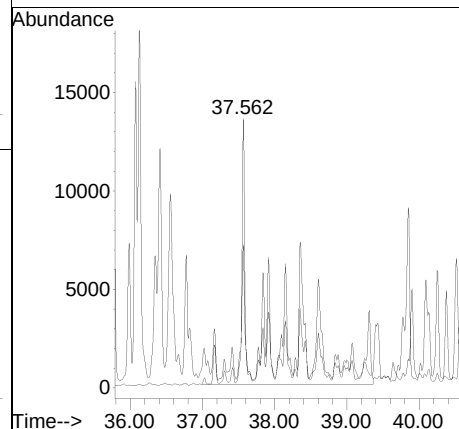
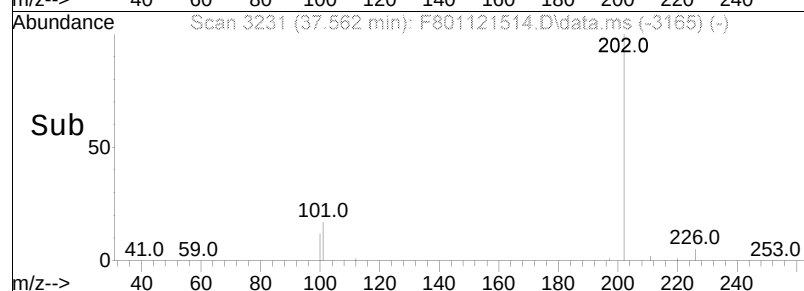
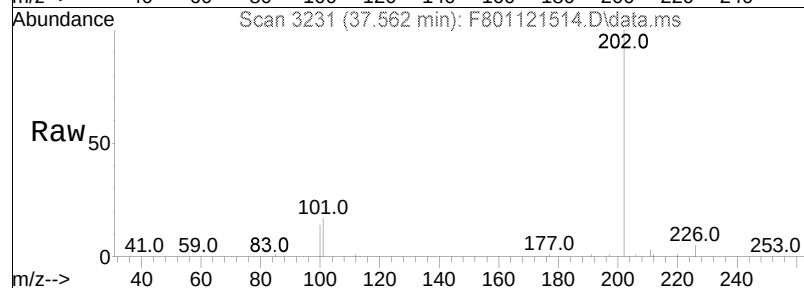
RT: 37.562 min Scan# 3231

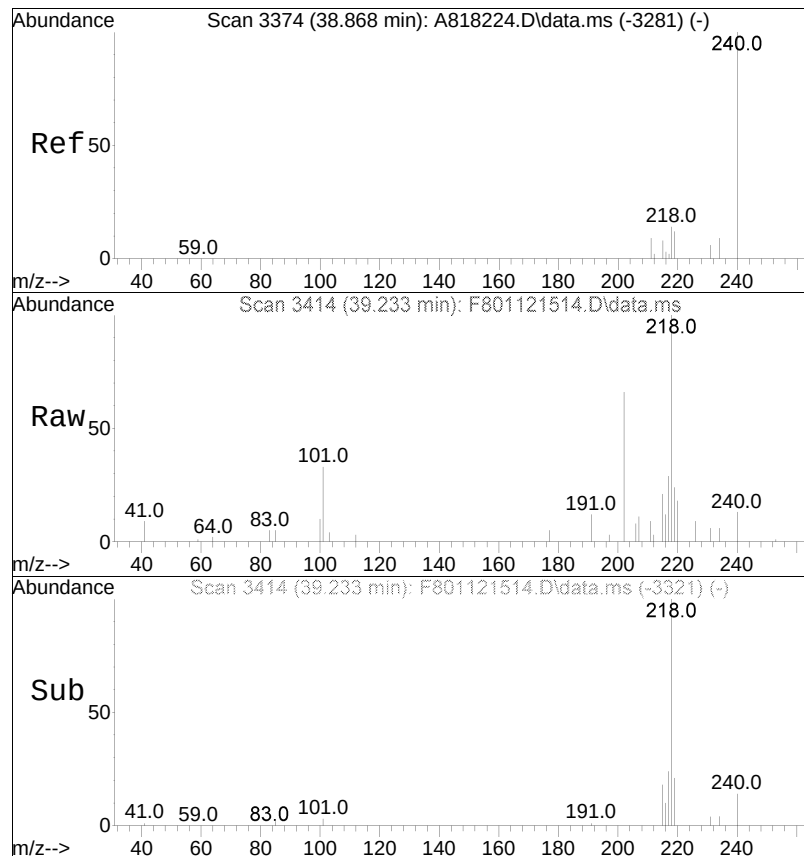
Delta R.T. 0.000 min

Lab File: F801121514.D

Acq: 13 Jan 2015 4:39 am

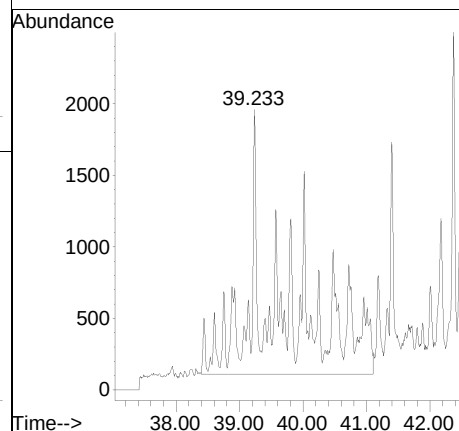
Tgt Ion	Ratio	Lower	Upper
226	100		
211	9.9	42.2	78.4#

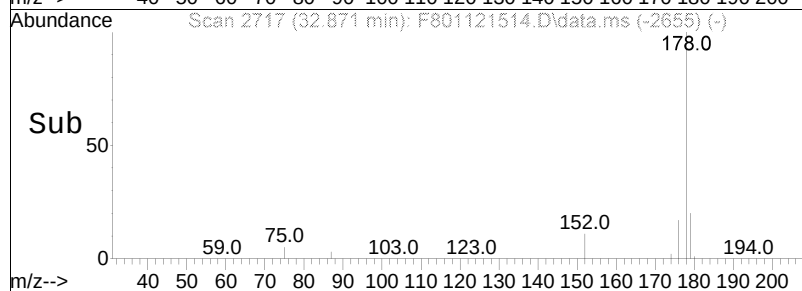
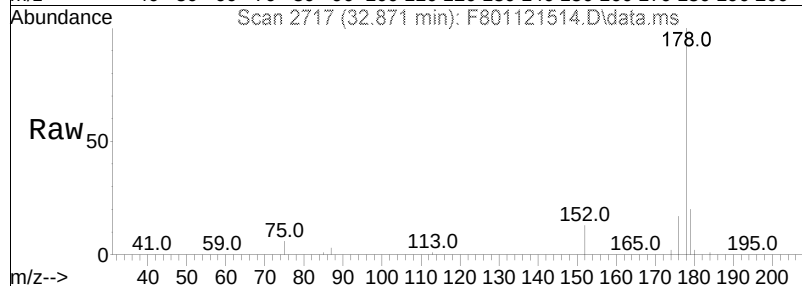
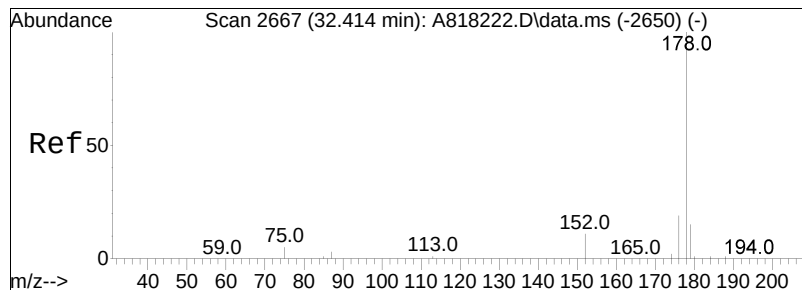




#41
 C4-Dibenzothiophenes
 Concen: 509.28 ng/mL M5
 RT: 39.233 min Scan# 3414
 Delta R.T. -0.009 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

Tgt Ion:240 Resp: 56676





#43

Phenanthrene

Concen: 80453.36 ng/mL

RT: 32.871 min Scan# 2717

Delta R.T. 0.064 min

Lab File: F801121514.D

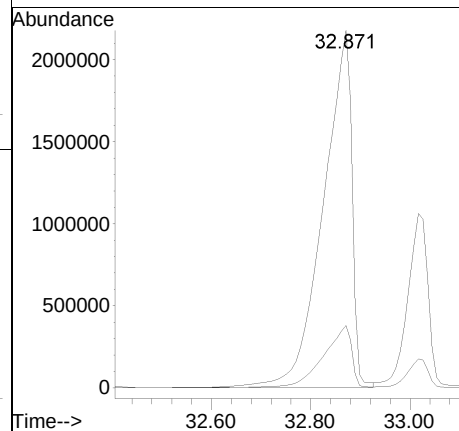
Acq: 13 Jan 2015 4:39 am

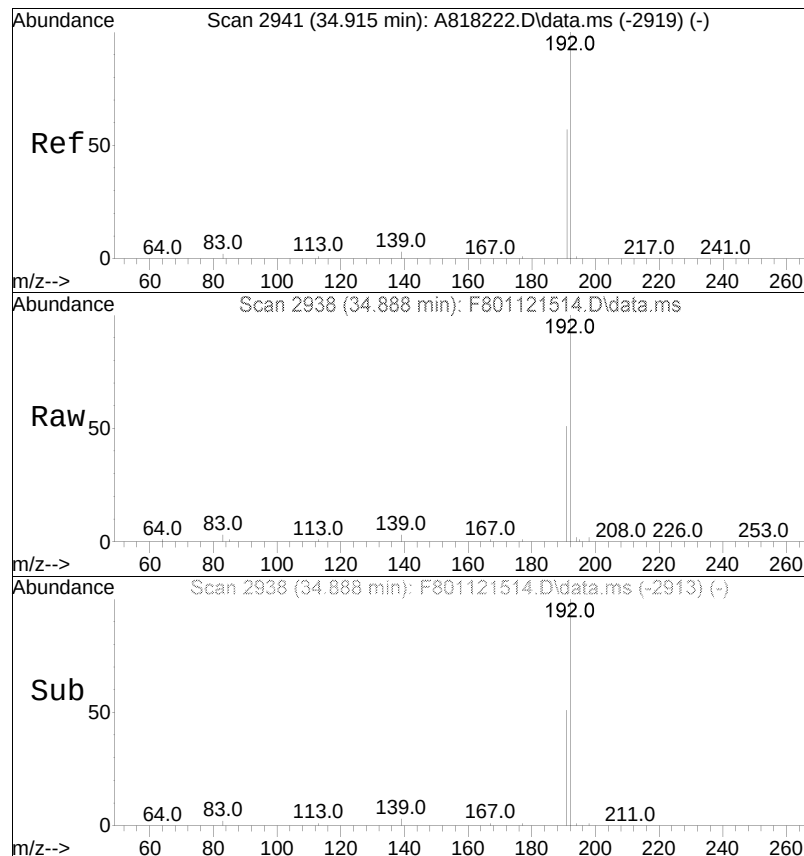
Tgt Ion:178 Resp: 8677433

Ion Ratio Lower Upper

178 100

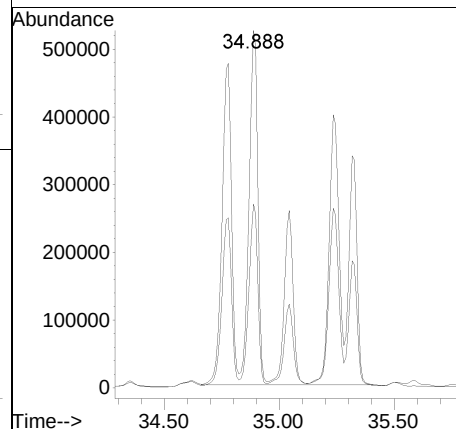
176 17.3 12.5 23.1

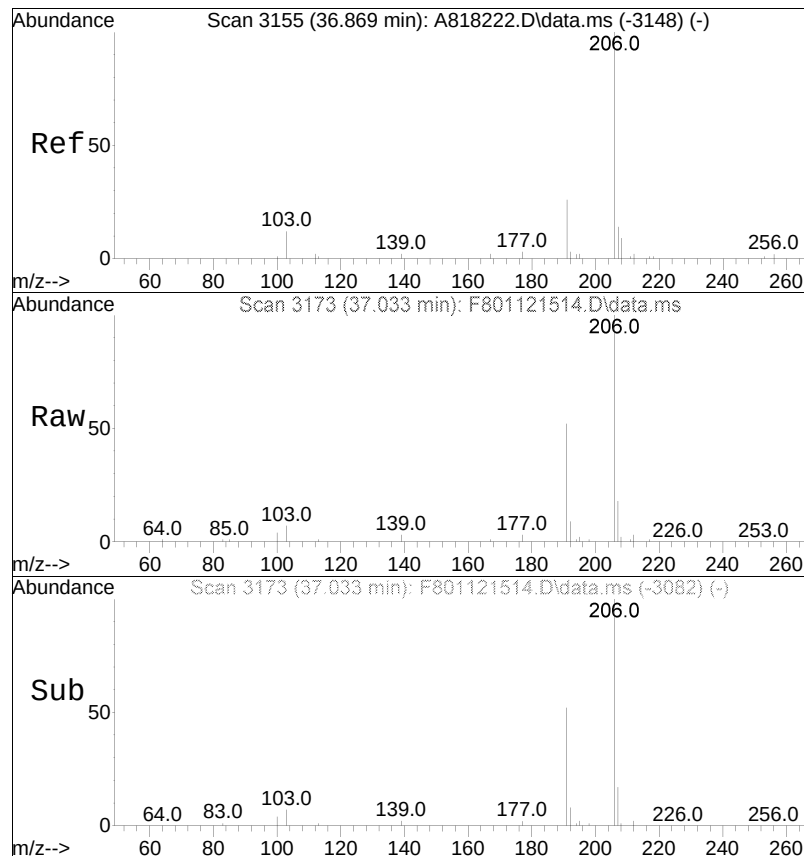




#49
 C1-Phenanthrenes/Anthracenes
 Concen: 50758.06 ng/mL M5
 RT: 34.888 min Scan# 2938
 Delta R.T. -0.328 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

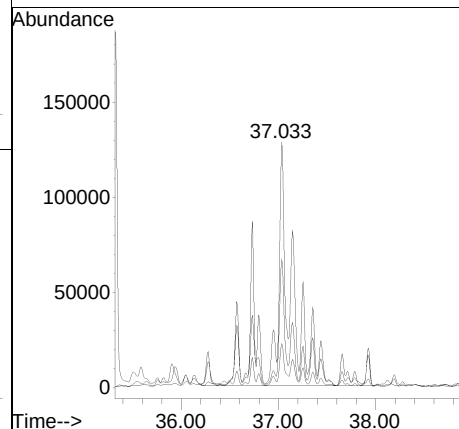
Tgt Ion:192 Resp: 5474596
 Ion Ratio Lower Upper
 192 100
 191 14.1 39.7 73.7#

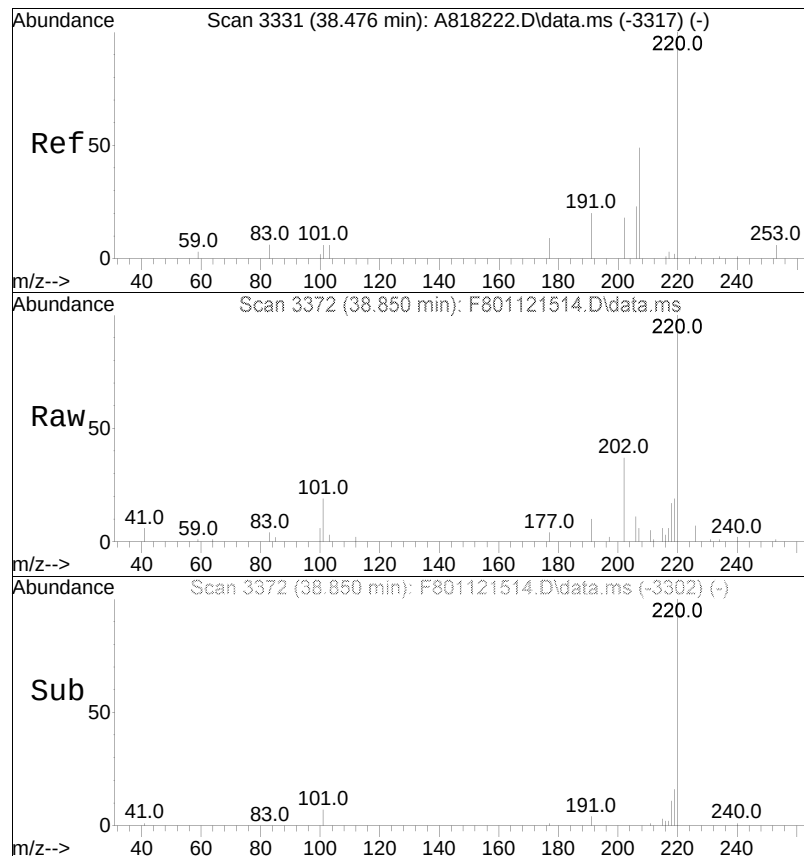




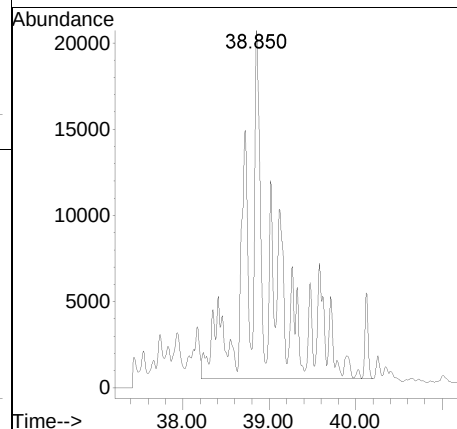
#50
 C2-Phenanthrenes/Anthracenes
 Concen: 16389.46 ng/mL M5
 RT: 37.033 min Scan# 3173
 Delta R.T. 0.009 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

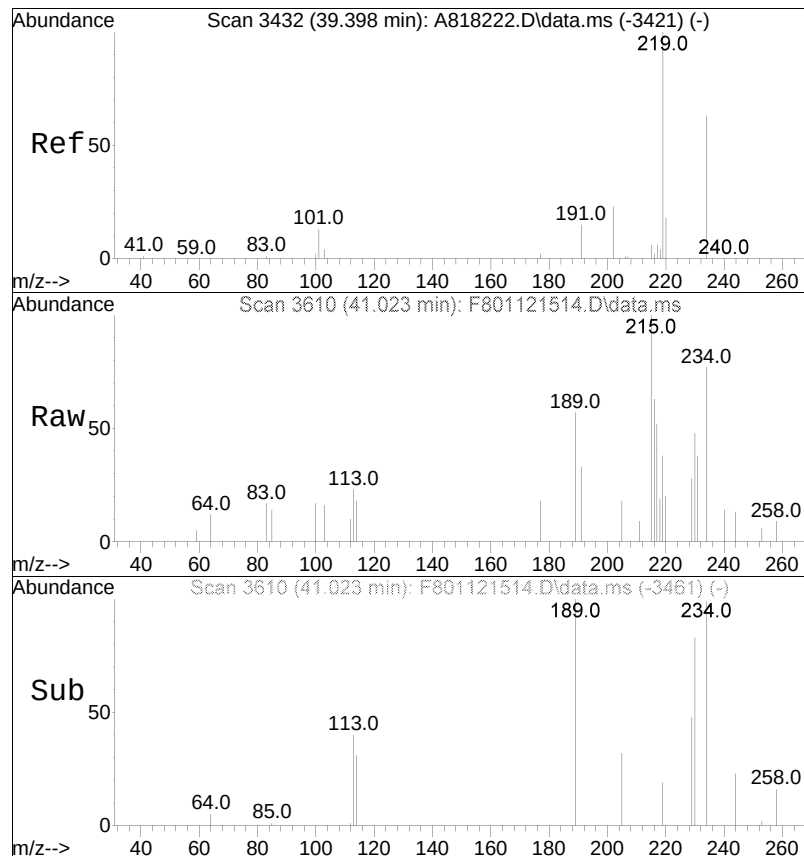
Tgt	Ion:206	Resp: 1767713	
Ion	Ratio	Lower	Upper
206	100		
191	12.7	39.5	73.4#
207	4.3	14.1	26.3#





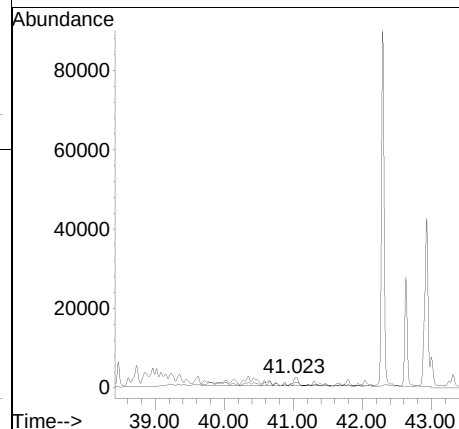
#52
 C3-Phenanthrenes/Anthracenes
 Concen: 3793.26 ng/mL M5
 RT: 38.850 min Scan# 3372
 Delta R.T. -0.009 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am
 Tgt Ion:220 Resp: 409128

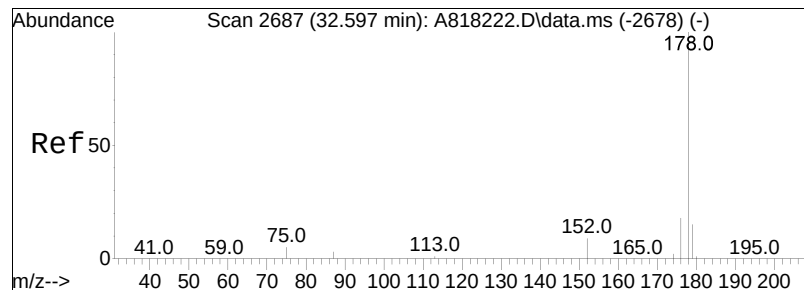




#53
 C4-Phenanthrenes/Anthracenes
 Concen: 716.43 ng/mL M5
 RT: 41.023 min Scan# 3610
 Delta R.T. -0.009 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

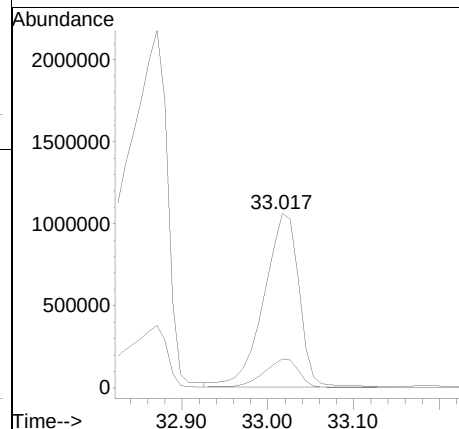
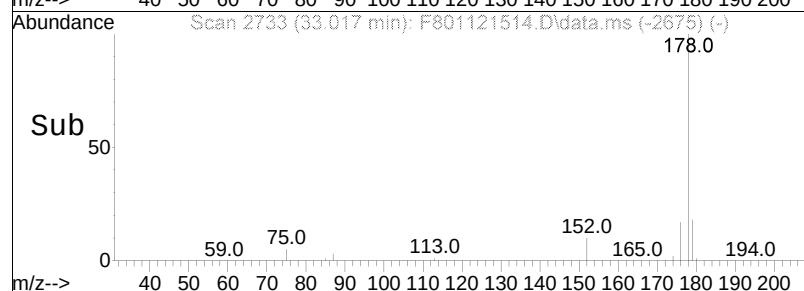
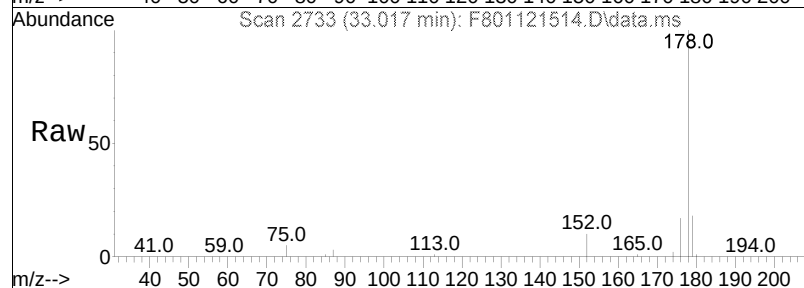
Tgt	Ion	Ratio	Lower	Upper
234	100			
219	1.5	44.7	82.9	

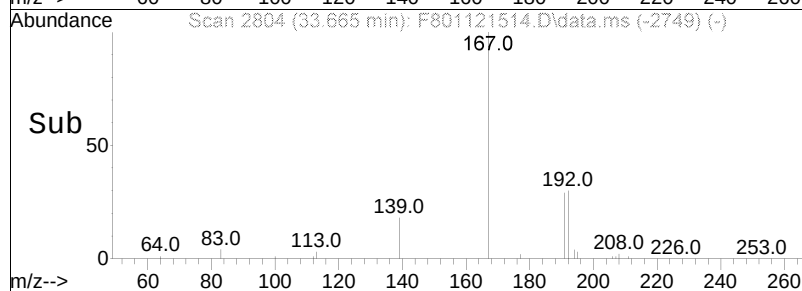
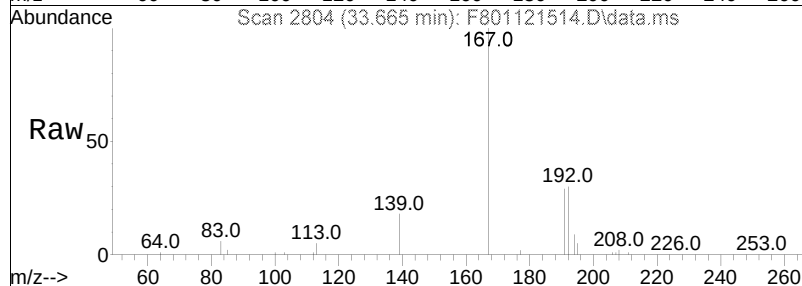
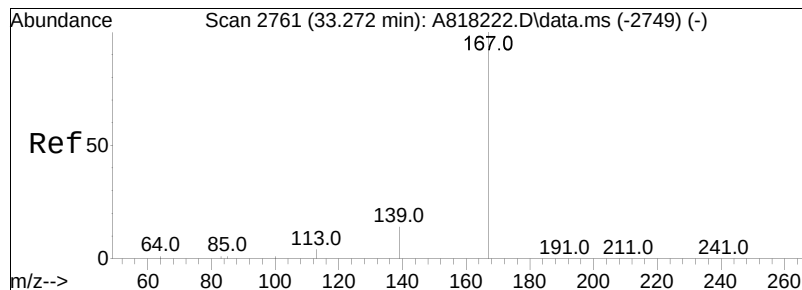




#55
 Anthracene
 Concen: 30477.11 ng/mL M4
 RT: 33.017 min Scan# 2733
 Delta R.T. 0.027 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

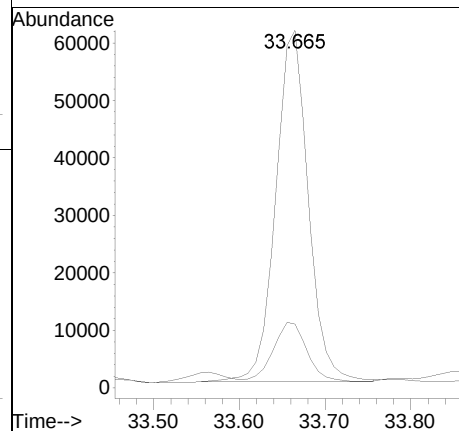
Tgt Ion	Ratio	Lower	Upper
178	100		
176	16.6	12.8	23.8

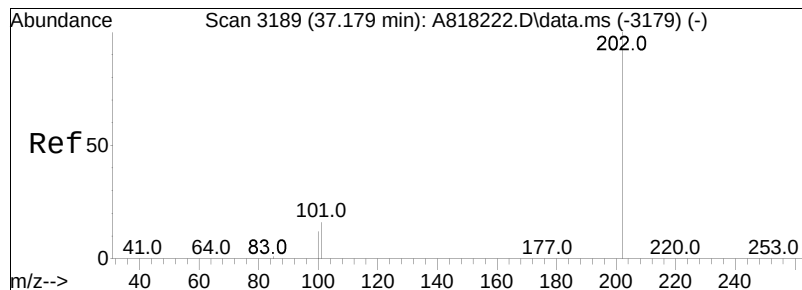




#56
 Carbazole
 Concen: 1530.62 ng/mL
 RT: 33.665 min Scan# 2804
 Delta R.T. 0.000 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

Tgt Ion	Ratio	Lower	Upper
167	100		
139	18.3	10.0	18.6





#58

Fluoranthene

Concen: 26066.65 ng/mL M4

RT: 37.599 min Scan# 3235

Delta R.T. 0.027 min

Lab File: F801121514.D

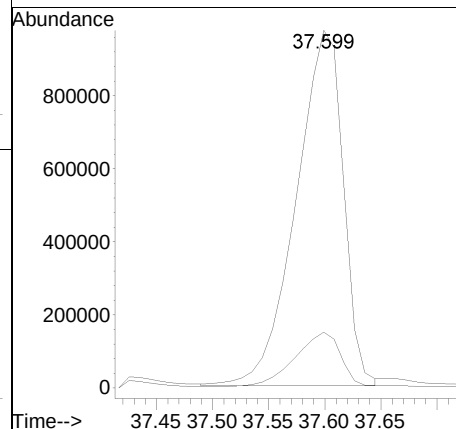
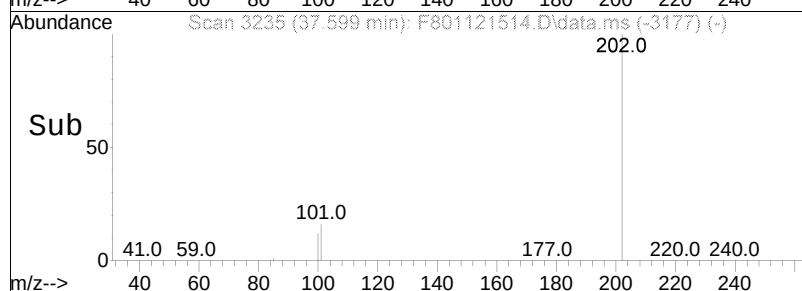
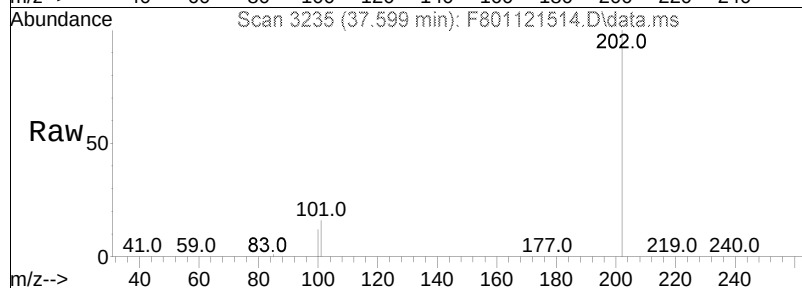
Acq: 13 Jan 2015 4:39 am

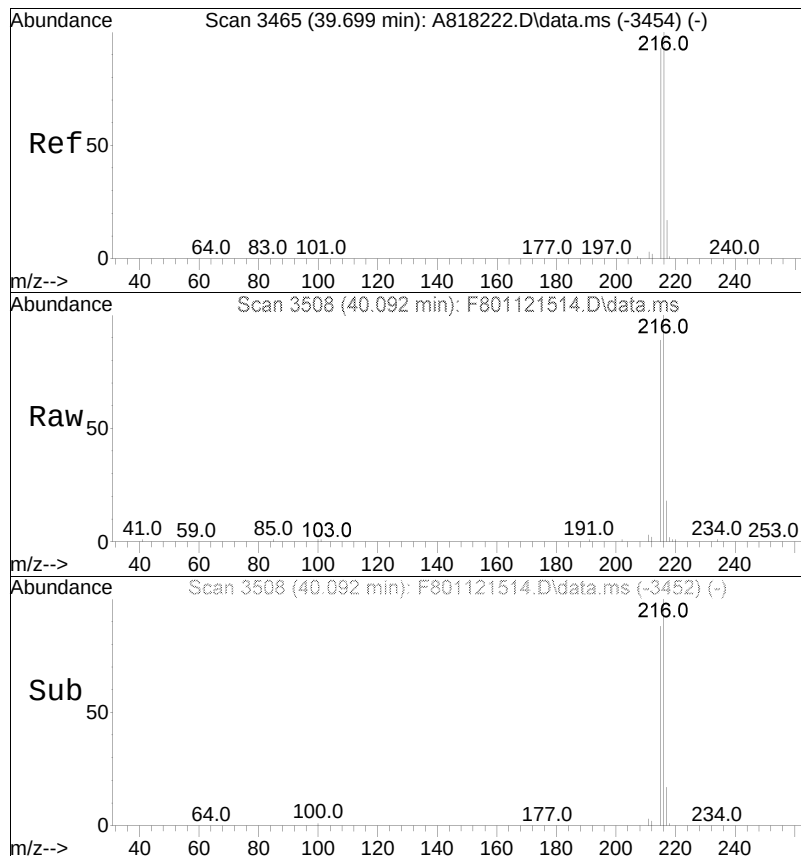
Tgt Ion:202 Resp: 2852351

Ion Ratio Lower Upper

202 100

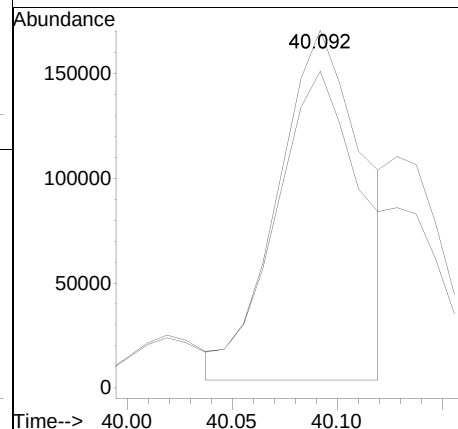
101 15.5 12.7 23.7

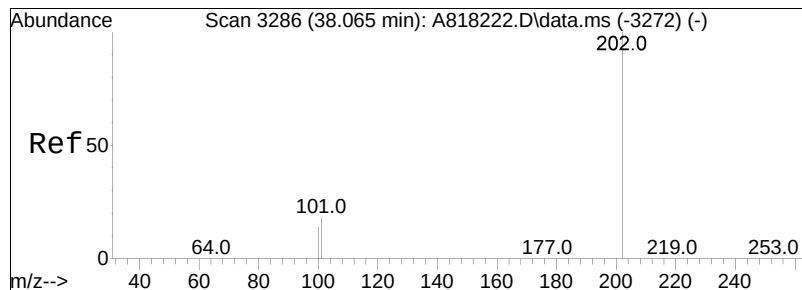




#59
 Benzo(b)fluorene
 Concen: 7424.00 ng/mL M4
 RT: 40.092 min Scan# 3508
 Delta R.T. 0.009 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

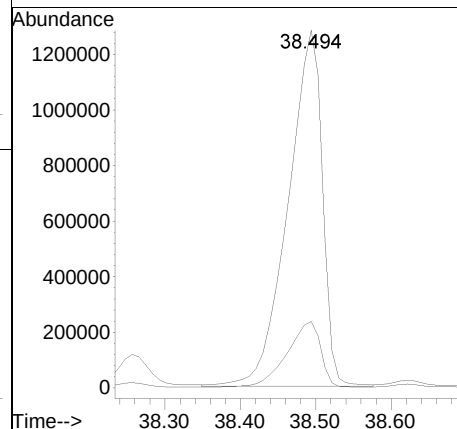
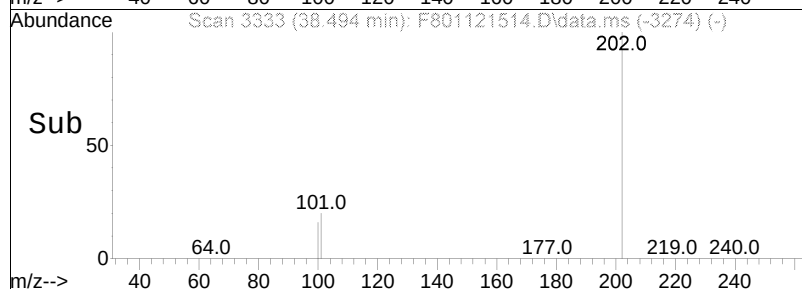
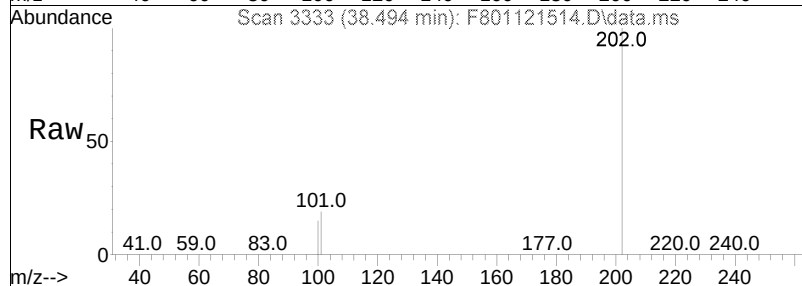
Tgt	Ion	Ratio	Lower	Upper
216	100			
215	112.3	65.9	122.5	

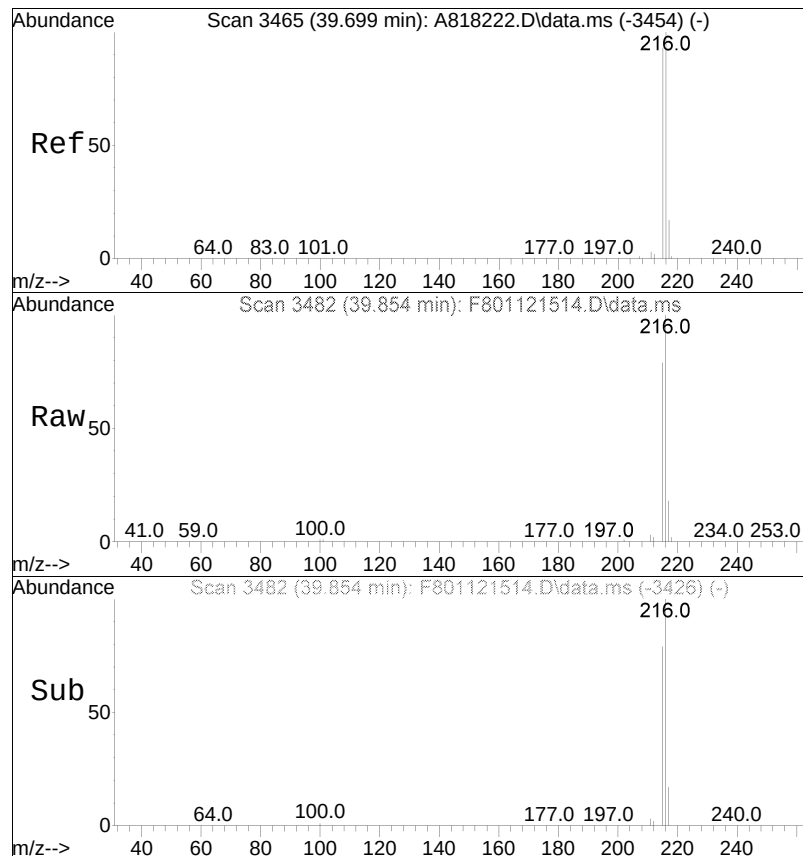




#60
 Pyrene
 Concen: 35292.82 ng/mL
 RT: 38.494 min Scan# 3333
 Delta R.T. 0.037 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

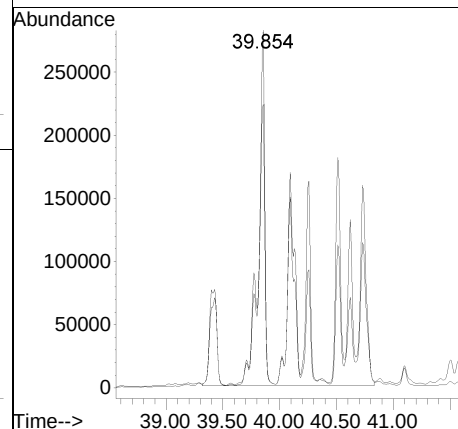
Tgt Ion	Ratio	Lower	Upper
202	100		
101	18.1	13.9	25.7

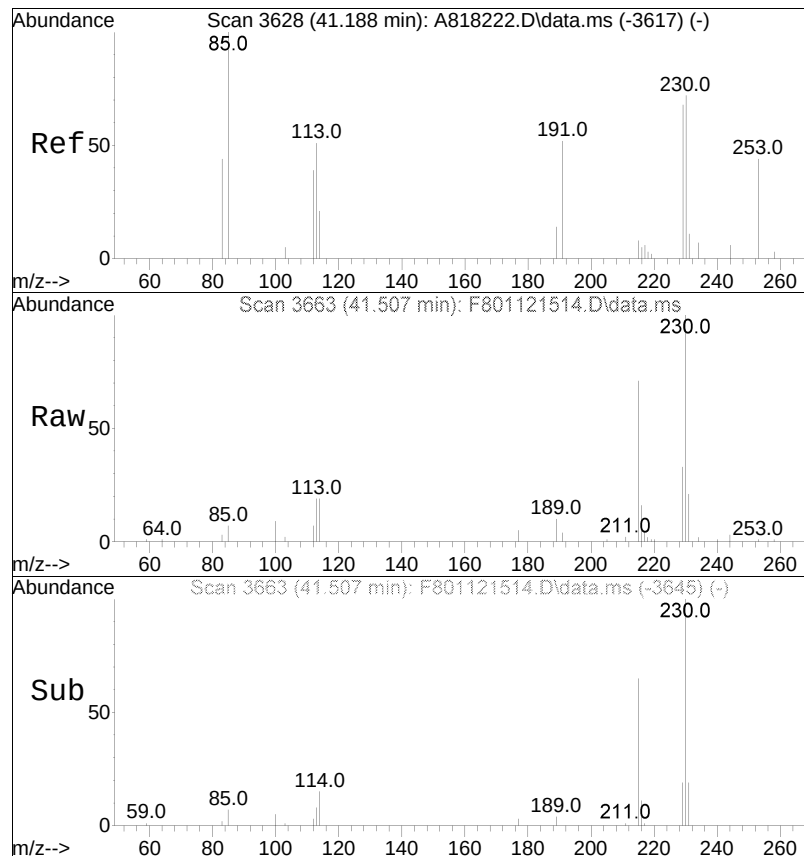




#61
 C1-Fluoranthenes/Pyrenes
 Concen: 34597.41 ng/mL M5
 RT: 39.854 min Scan# 3482
 Delta R.T. 0.018 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

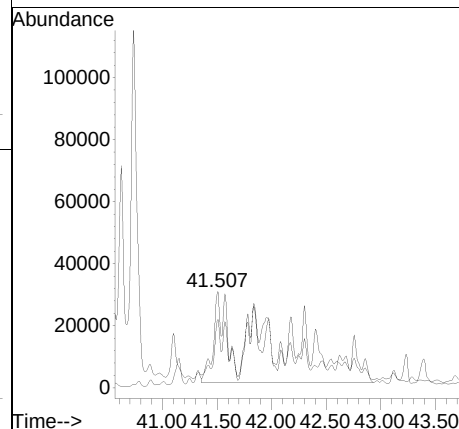
Tgt Ion	Ratio	Lower	Upper
216	100		
215	16.3	65.0	120.8#

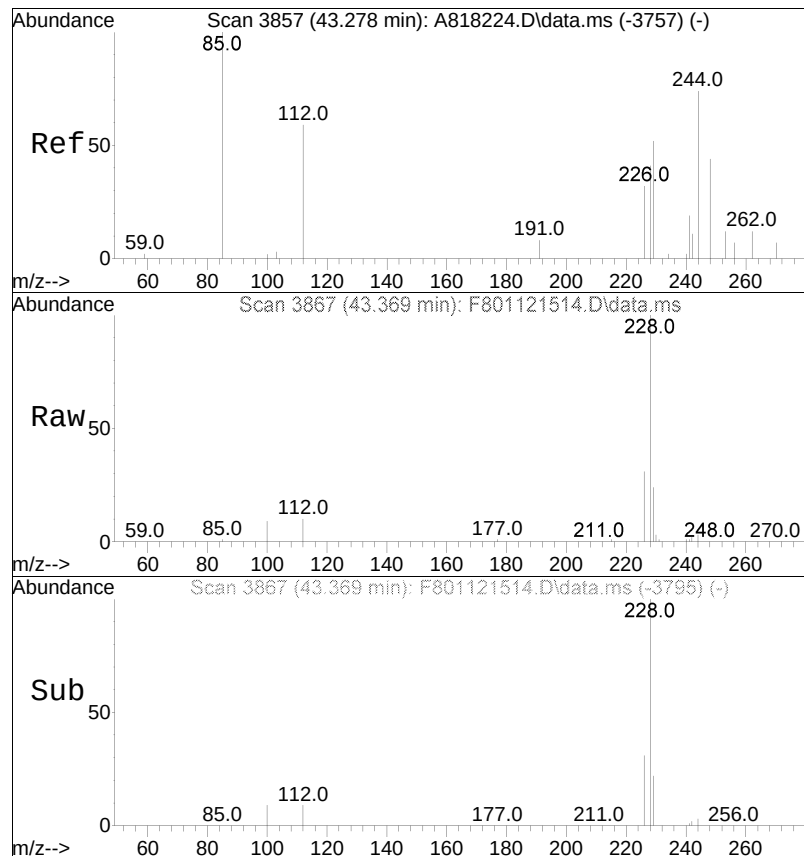




#62
 C2-Fluoranthenes/Pyrenes
 Concen: 8787.67 ng/mL M5
 RT: 41.507 min Scan# 3663
 Delta R.T. -0.447 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

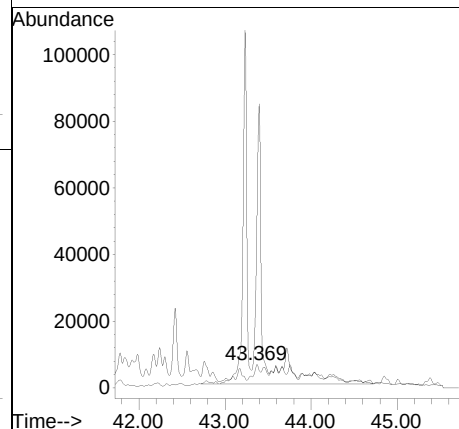
Tgt Ion:230 Resp: 1007057
 Ion Ratio Lower Upper
 230 100
 215 7.8 74.8 139.0#

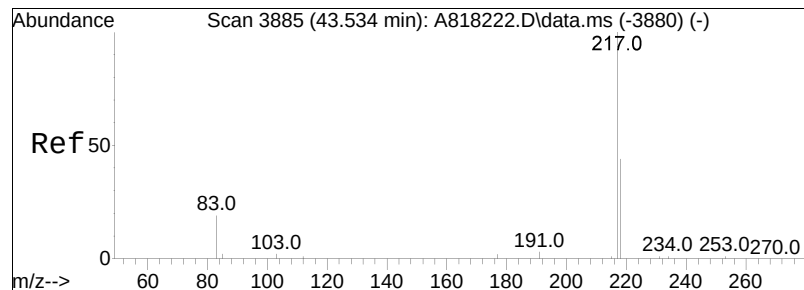




#63
 C3-Fluoranthenes/Pyrenes
 Concen: 2341.46 ng/mL M5
 RT: 43.369 min Scan# 3867
 Delta R.T. -0.274 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

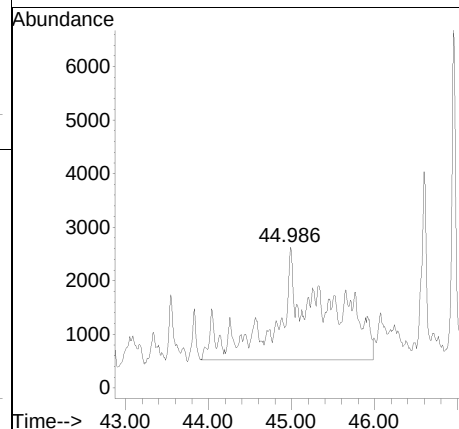
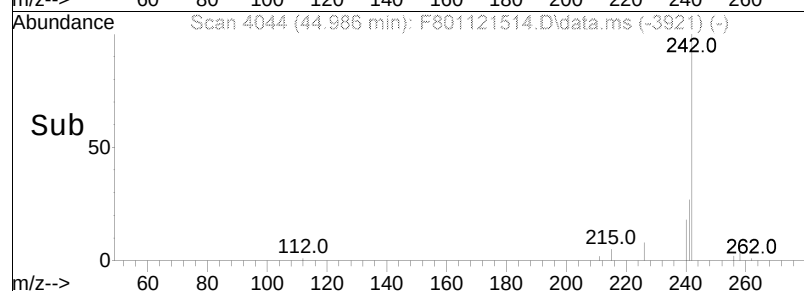
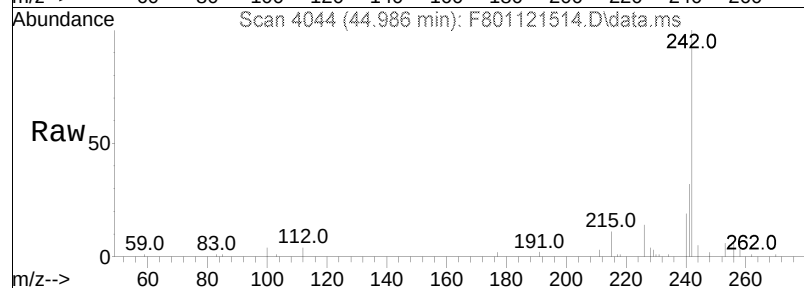
Tgt Ion	Ratio	Lower	Upper
244	100		
229	1.9	68.9	127.9#

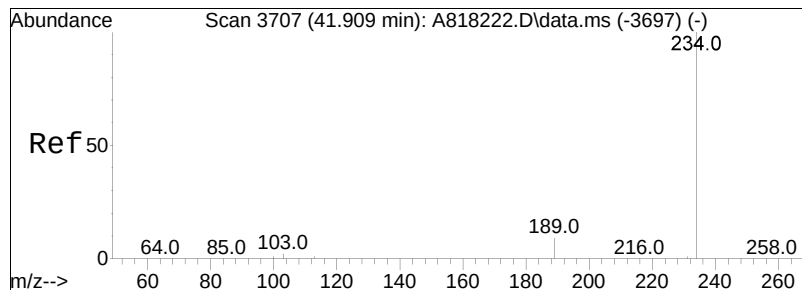




#64
 C4-Fluoranthenes/Pyrenes
 Concen: 773.55 ng/mL M5
 RT: 44.986 min Scan# 4044
 Delta R.T. 0.000 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

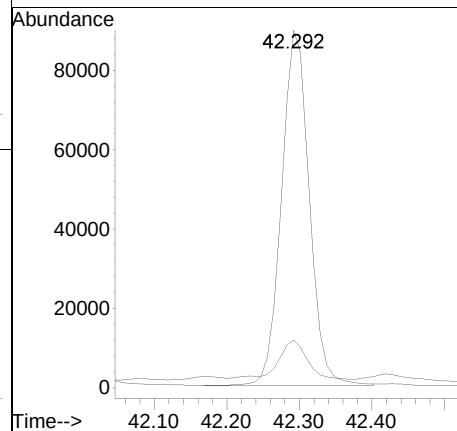
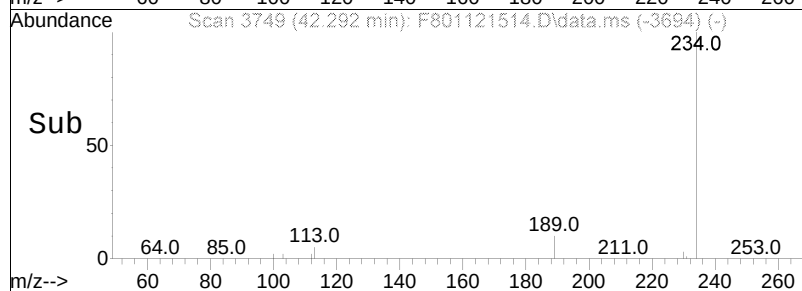
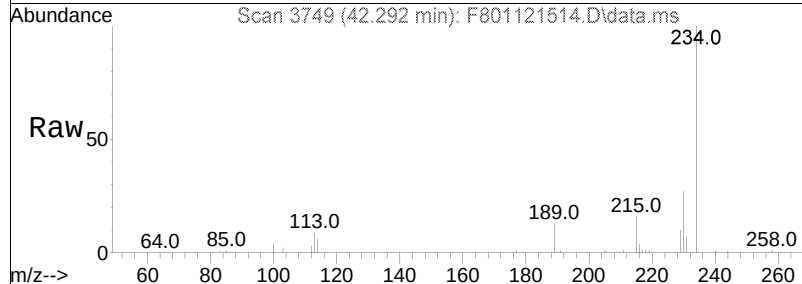
Tgt Ion:258 Resp: 88648

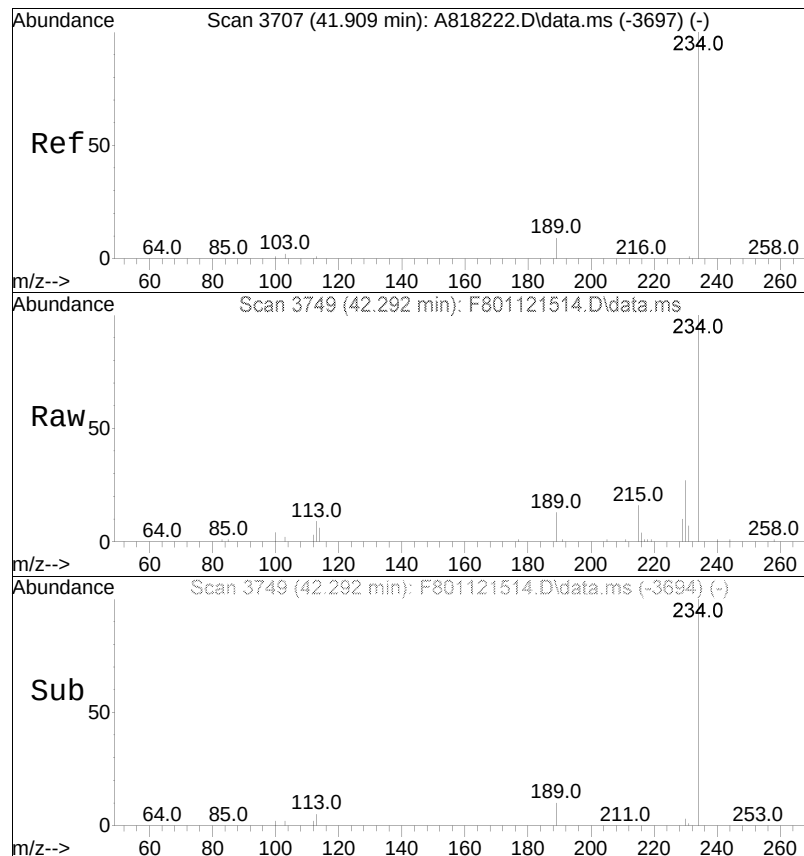




#66
 Naphthobenzothiophene
 Concen: 2363.81 ng/ml
 RT: 42.292 min Scan# 3749
 Delta R.T. 0.000 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

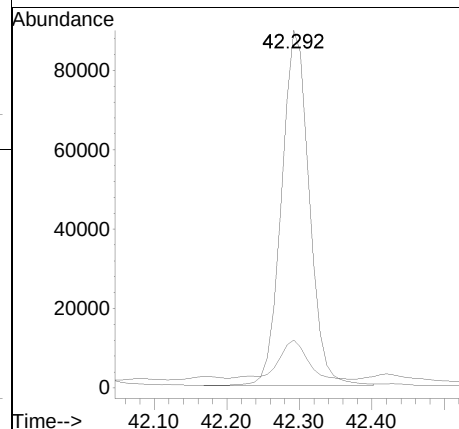
Tgt Ion	Ratio	Lower	Upper
234	100		
189	11.3	6.4	12.0

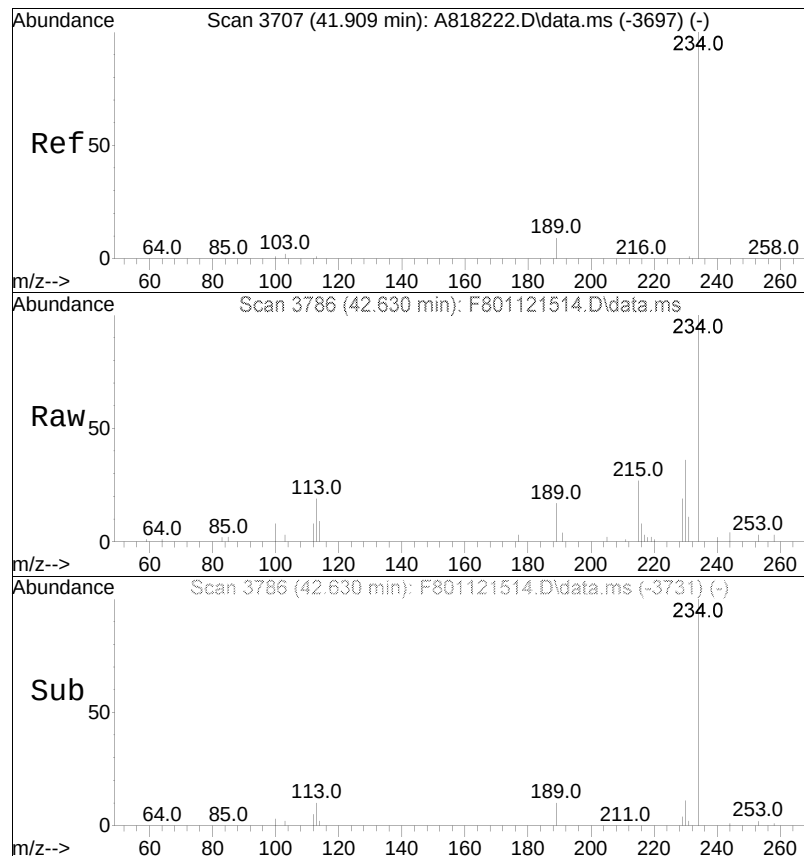




#67
 Naphthobenzothiophene-2,1-D
 Concen: 2363.81 ng/mL
 RT: 42.292 min Scan# 3749
 Delta R.T. 0.000 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

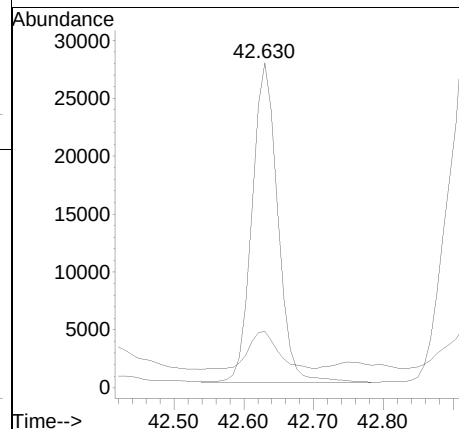
Tgt Ion	Ratio	Lower	Upper
234	100		
189	11.3	6.4	12.0

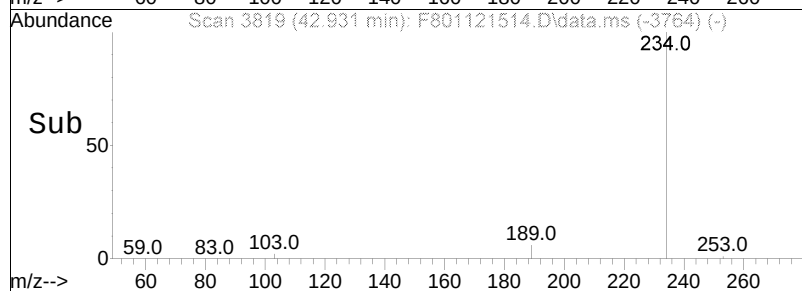
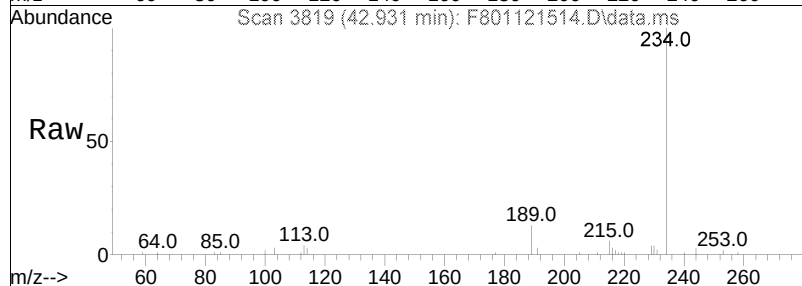
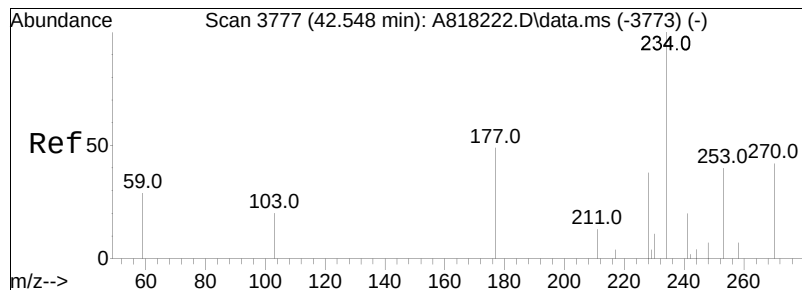




#68
 Naphthobenzothiophene-1,2-D
 Concen: 702.18 ng/mL
 RT: 42.630 min Scan# 3786
 Delta R.T. 0.000 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

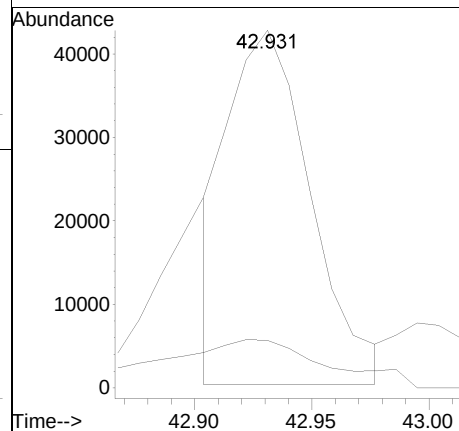
Tgt Ion	Ratio	Lower	Upper
234	100		
189	12.5	70.3	130.5#

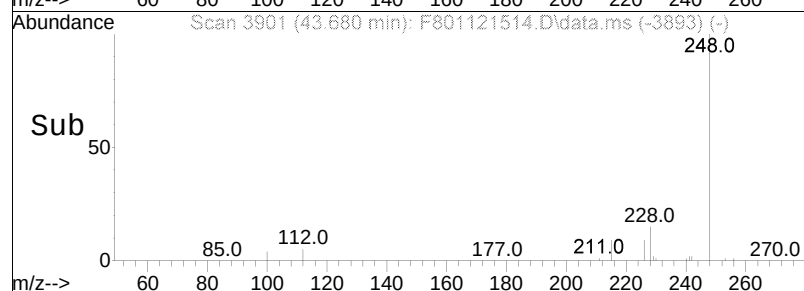
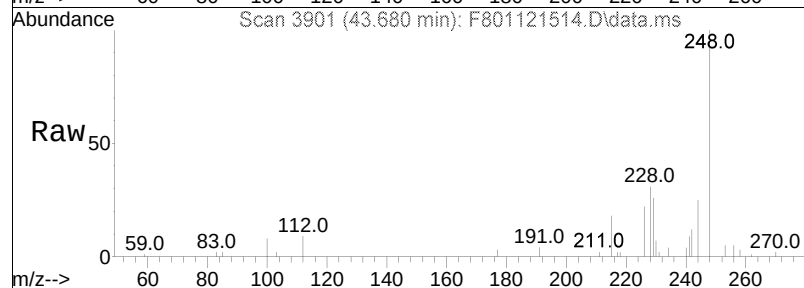
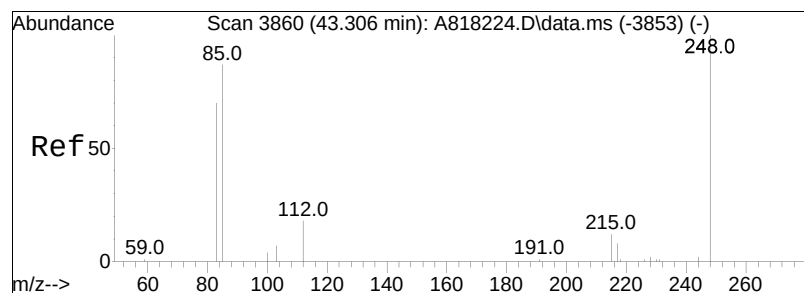




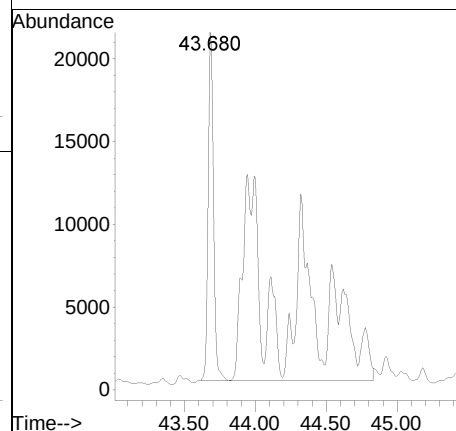
#69
 Naphthobenzothiophene-2,3-D
 Concen: 1047.66 ng/mL M3
 RT: 42.931 min Scan# 3819
 Delta R.T. 0.000 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

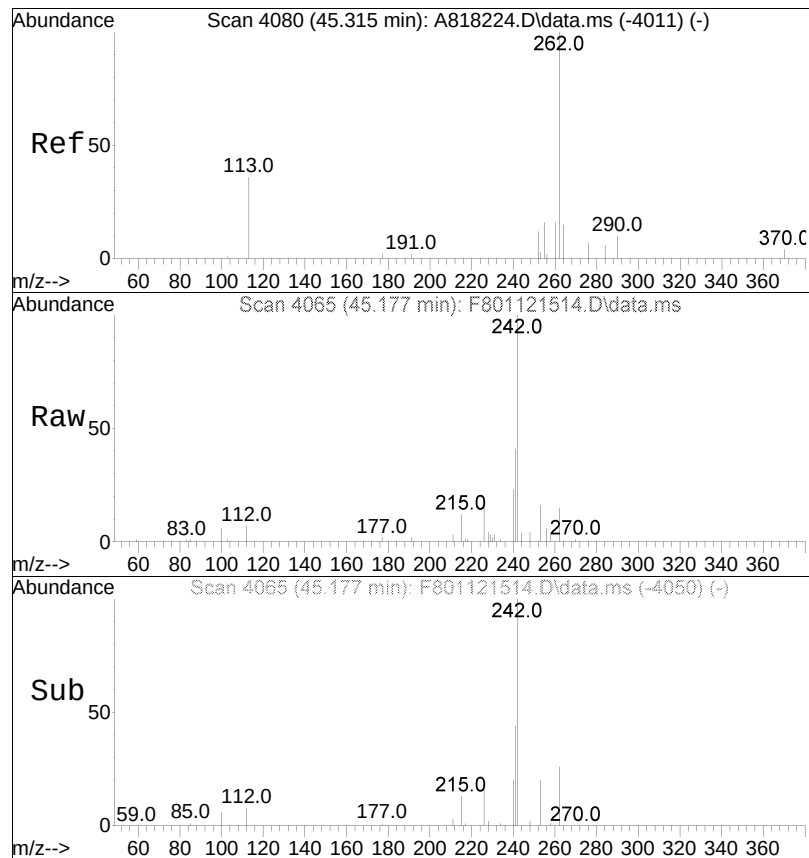
Tgt	Ion	Ratio	Lower	Upper
234	100			
189	27.9	108.3	201.1	



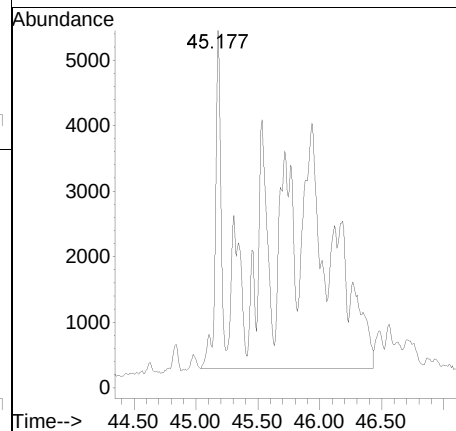


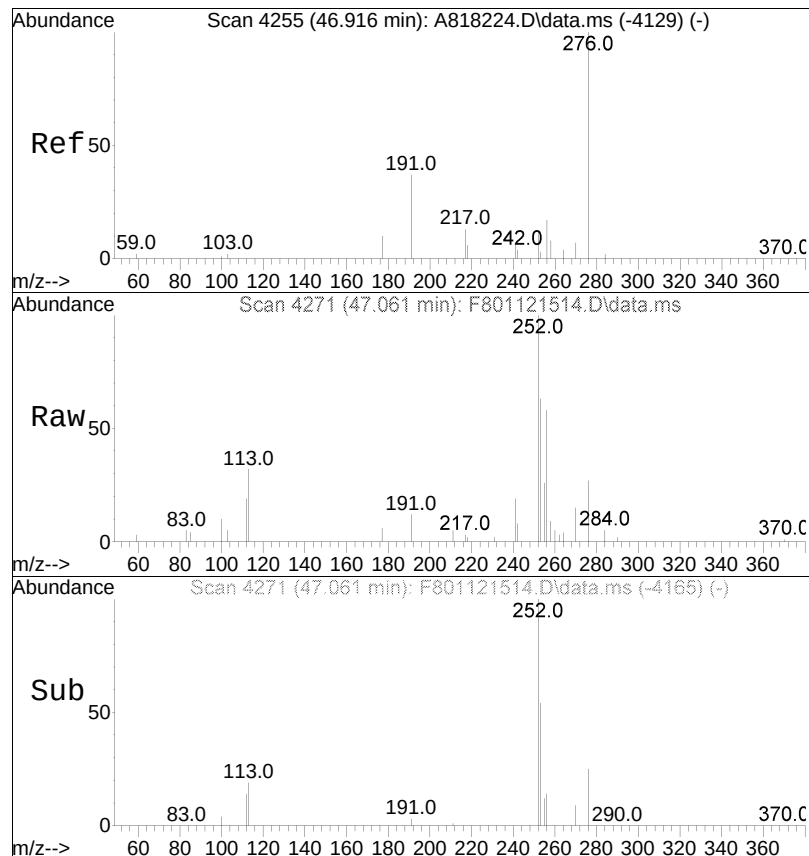
#70
 C1-Naphthobenzothiophenes
 Concen: 3134.87 ng/ml M5
 RT: 43.680 min Scan# 3901
 Delta R.T. 0.000 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am
 Tgt Ion:248 Resp: 316059





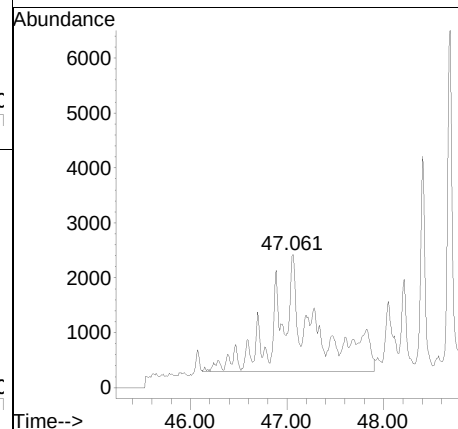
#71
 C2-Naphthobenzothiophenes
 Concen: 1345.02 ng/ml M5
 RT: 45.177 min Scan# 4065
 Delta R.T. -0.502 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am
 Tgt Ion:262 Resp: 135605

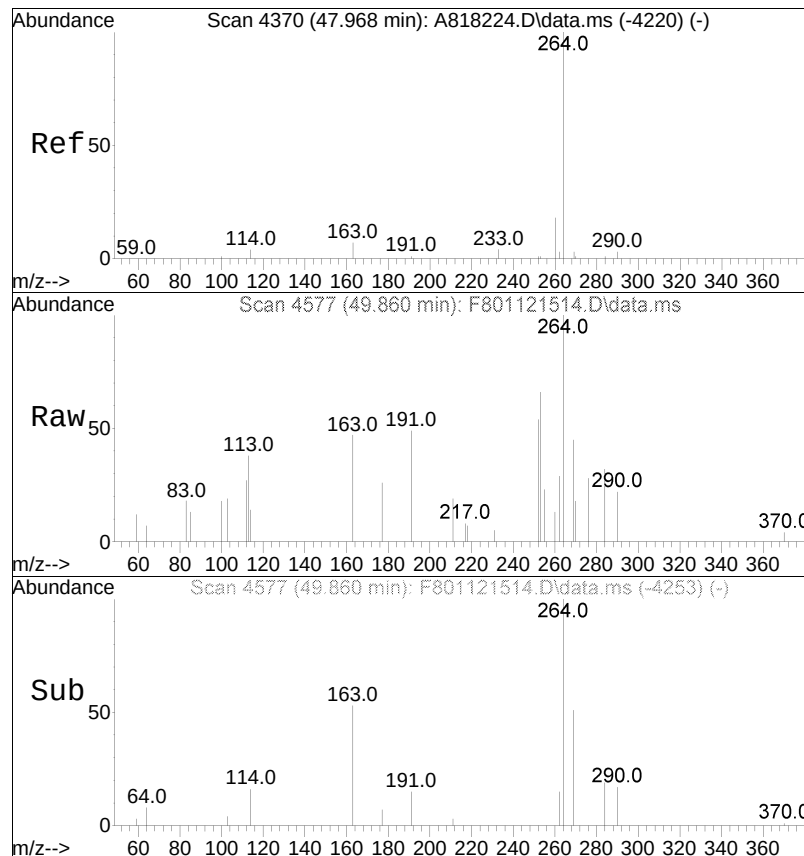




#72
 C3-Naphthobenzothiophenes
 Concen: 562.43 ng/ml M5
 RT: 47.061 min Scan# 4271
 Delta R.T. -0.219 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

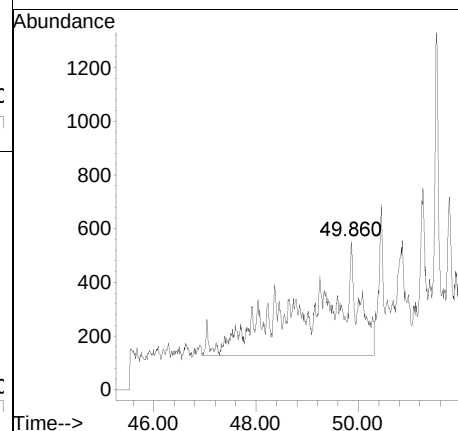
Tgt Ion:276 Resp: 56704

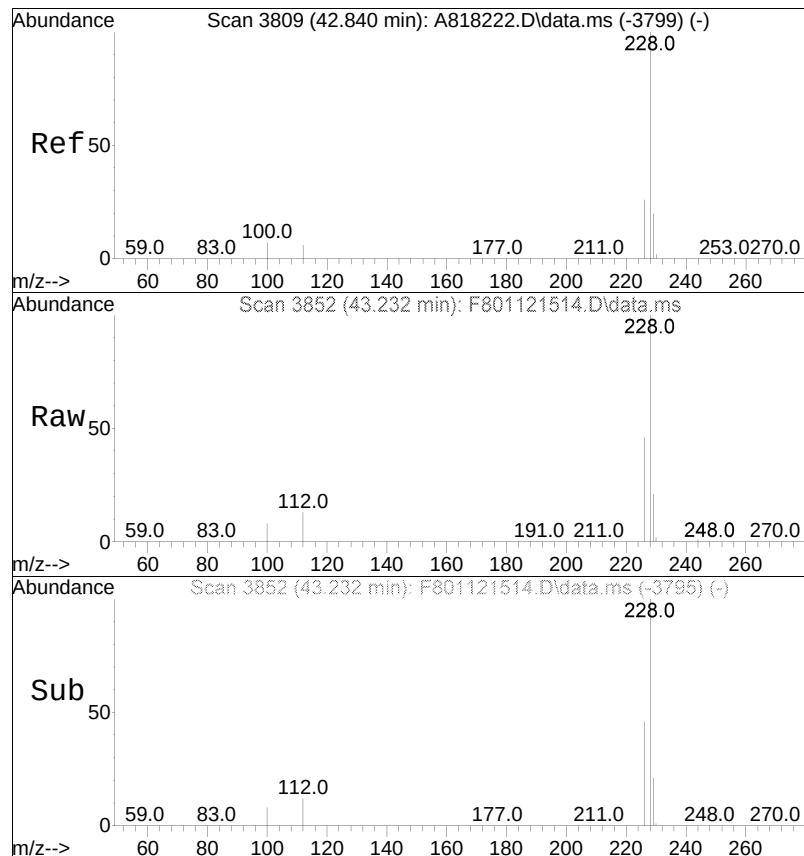




#73
 C4-Naphthobenzothiophenes
 Concen: 267.14 ng/mL M5
 RT: 49.860 min Scan# 4577
 Delta R.T. 1.500 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

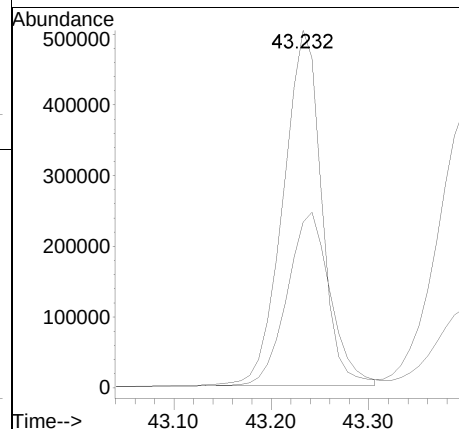
Tgt Ion:290 Resp: 26933

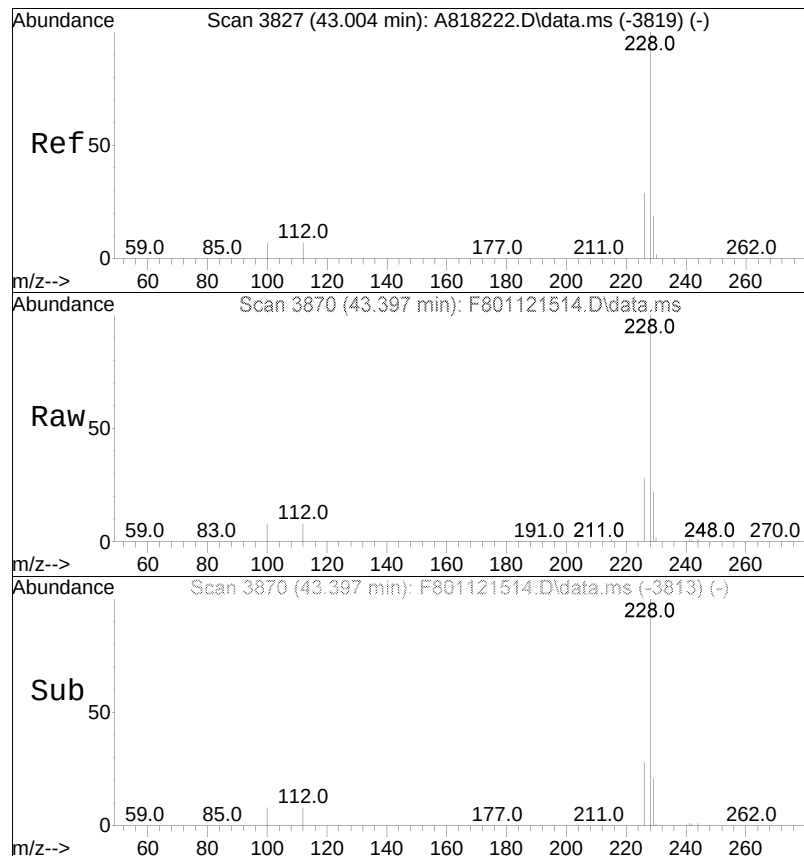




#75
 Benz[a]anthracene
 Concen: 14654.10 ng/mL M3
 RT: 43.232 min Scan# 3852
 Delta R.T. 0.018 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

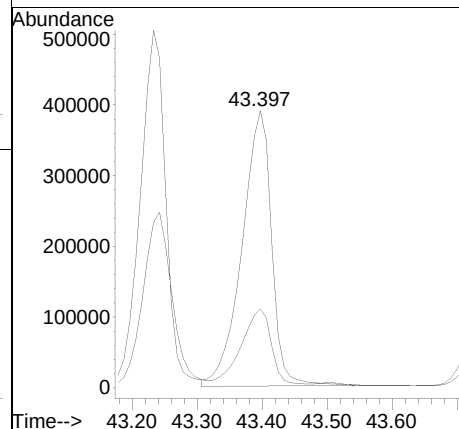
Tgt Ion	Ratio	Lower	Upper
228	100		
226	26.5	18.7	34.7

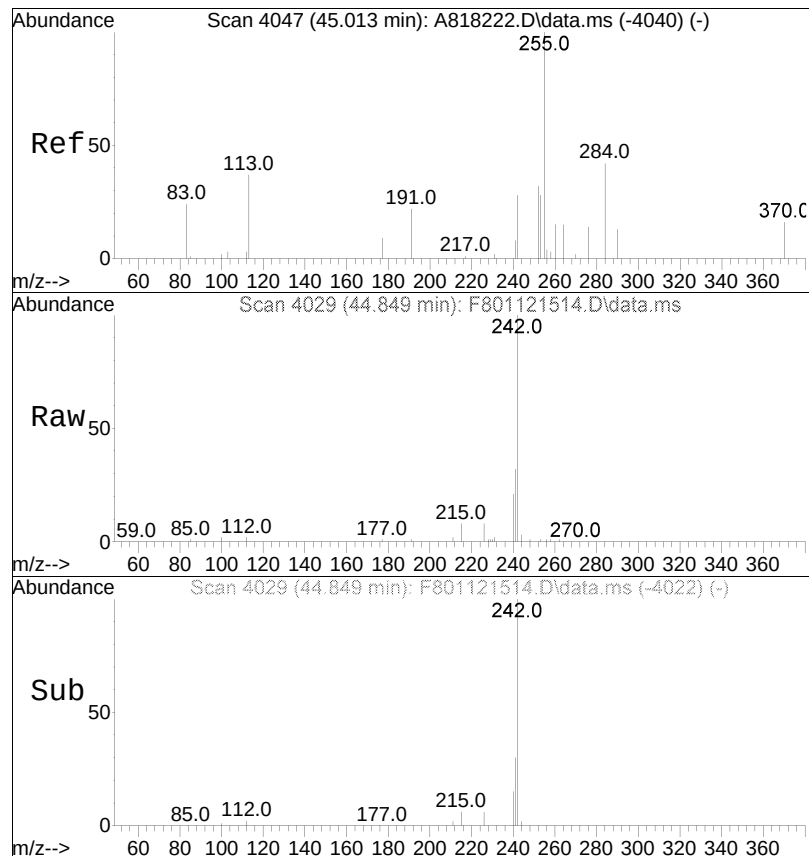




#77
 Chrysene/Triphenylene
 Concen: 13731.61 ng/mL
 RT: 43.397 min Scan# 3870
 Delta R.T. 0.018 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

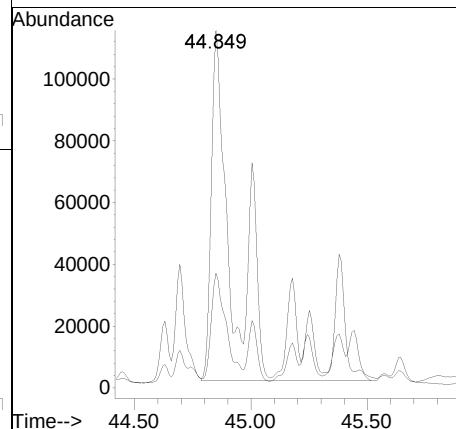
Tgt Ion:228 Resp: 1232579
 Ion Ratio Lower Upper
 228 100
 226 29.6 20.2 37.4

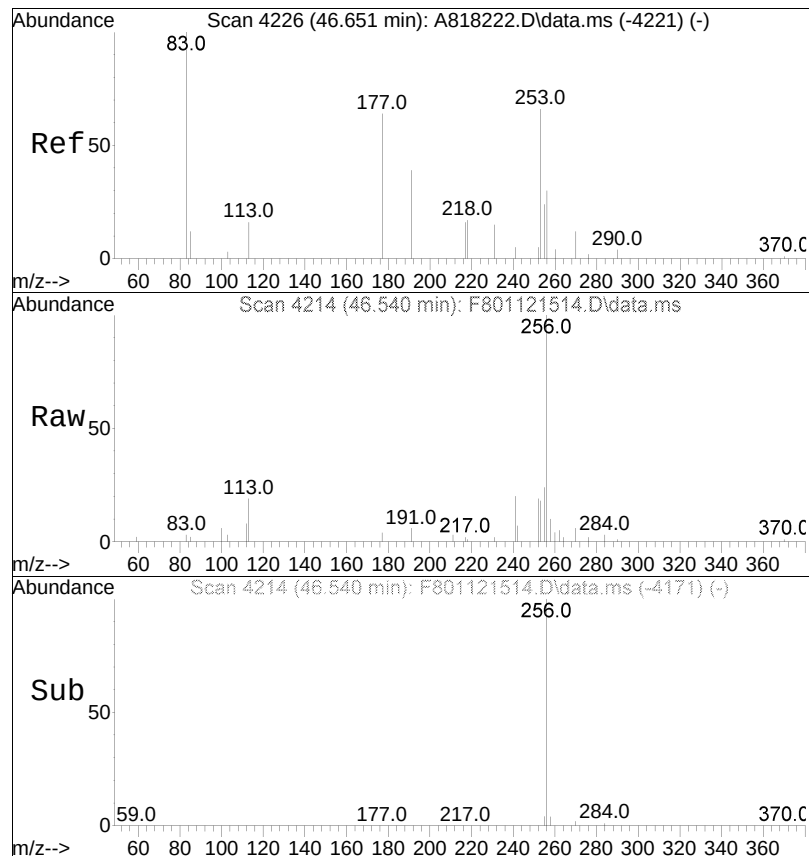




#78
 C1-Chrysenes
 Concen: 10667.83 ng/mL M5
 RT: 44.849 min Scan# 4029
 Delta R.T. -0.001 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

Tgt	Ion	Ratio	Lower	Upper
242	100			
241	12.4	29.8	55.4	





#79

C2-Chrysenes

Concen: 4655.64 ng/mL M5

RT: 46.540 min Scan# 4214

Delta R.T. -0.374 min

Lab File: F801121514.D

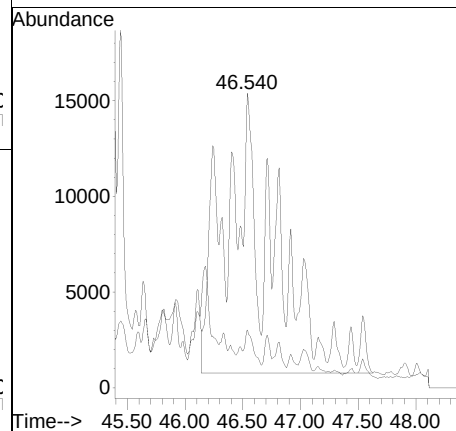
Acq: 13 Jan 2015 4:39 am

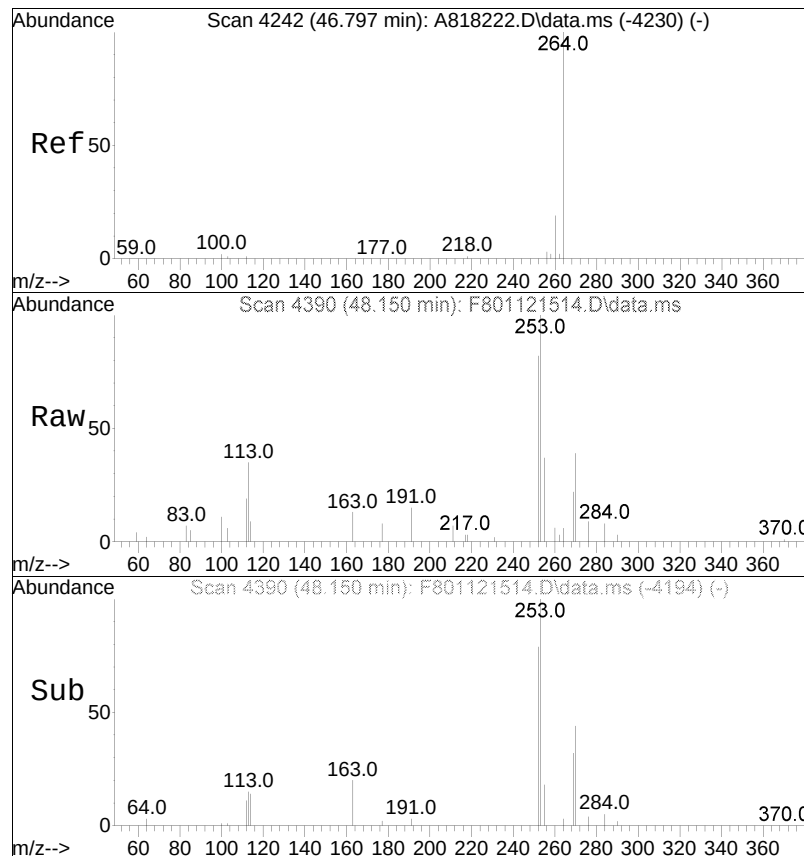
Tgt Ion: 256 Resp: 417900

Ion Ratio Lower Upper

256 100

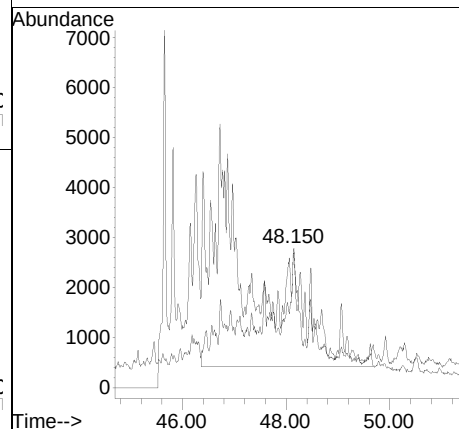
241 0.7 26.2 48.8#

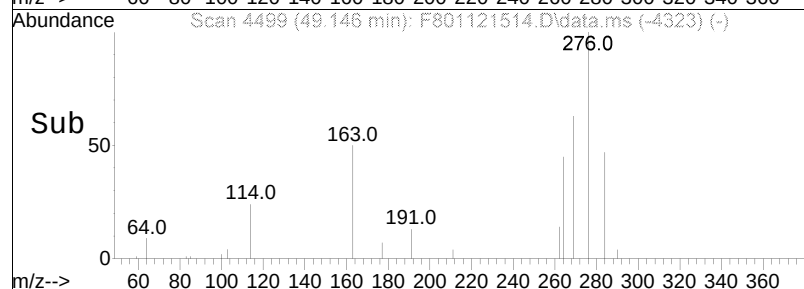
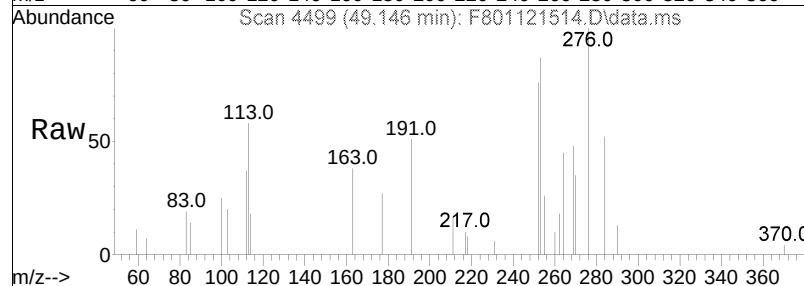
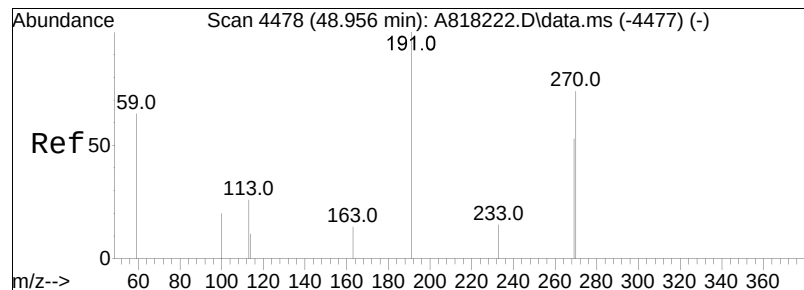




#81
 C3-Chrysenes
 Concen: 1725.89 ng/mL M5
 RT: 48.150 min Scan# 4390
 Delta R.T. -1.472 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

Tgt	Ion	Ratio	Lower	Upper
270	100			
255	0.2	39.7	73.7	





#82

C4-Chrysenes

Concen: 539.82 ng/mL M5

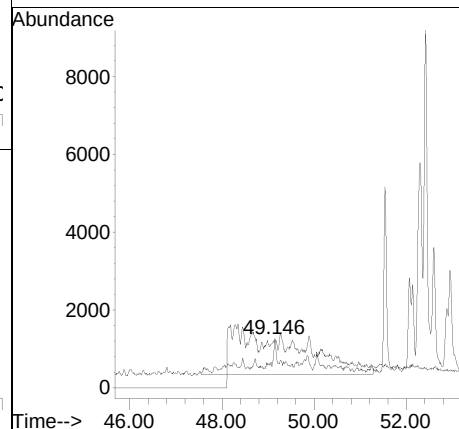
RT: 49.146 min Scan# 4499

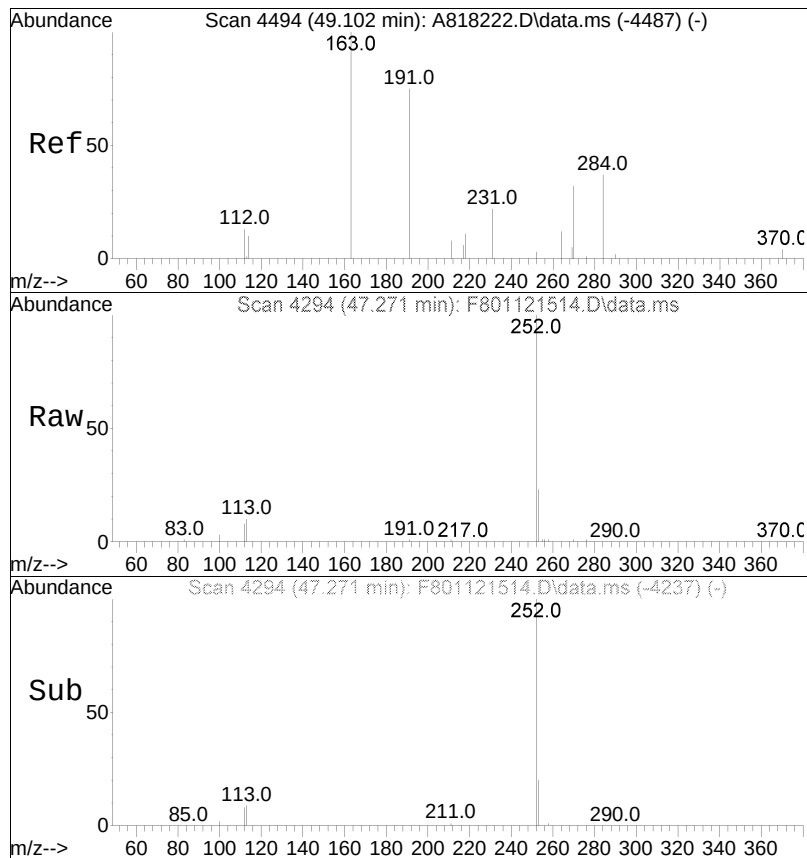
Delta R.T. -0.576 min

Lab File: F801121514.D

Acq: 13 Jan 2015 4:39 am

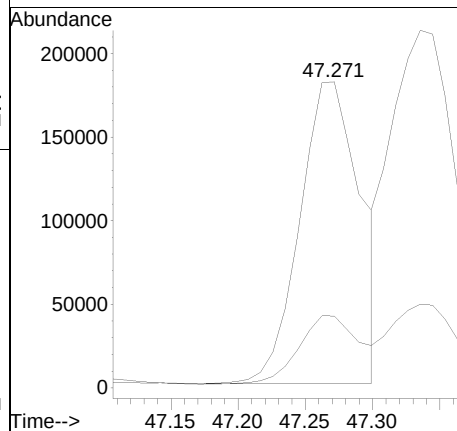
Tgt	Ion	Ratio	Resp	Lower	Upper
284	100		48455		
269	0.0	63.6		118.2#	

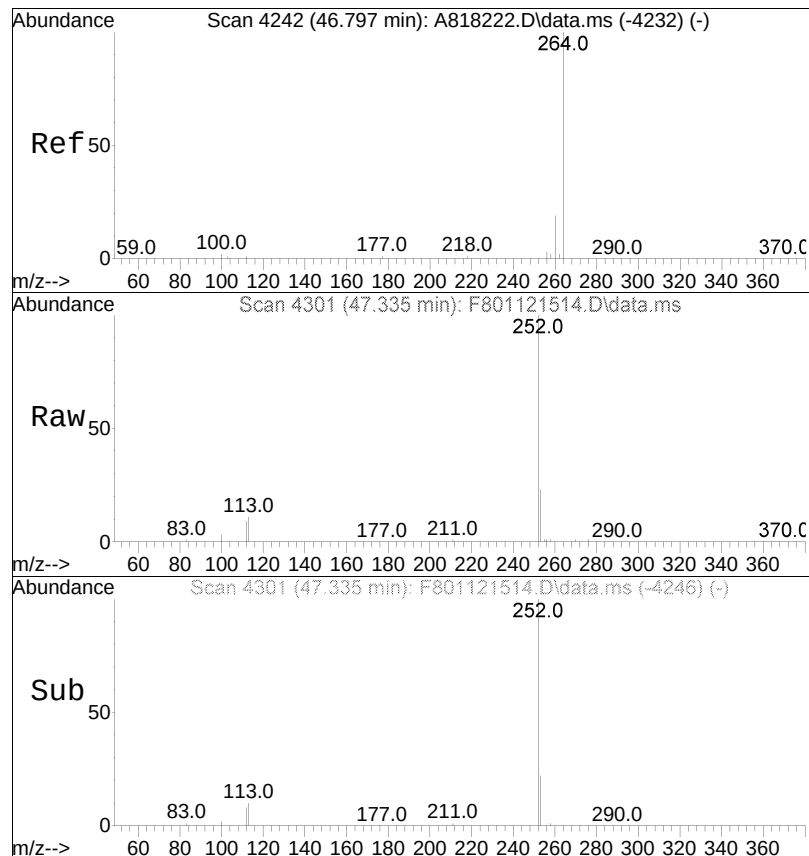




#84
 Benzo[b]fluoranthene
 Concen: 5638.95 ng/mL
 RT: 47.271 min Scan# 4294
 Delta R.T. 0.018 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

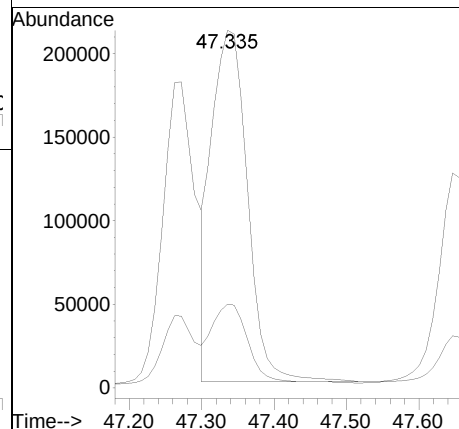
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	22.8	16.6	30.8	

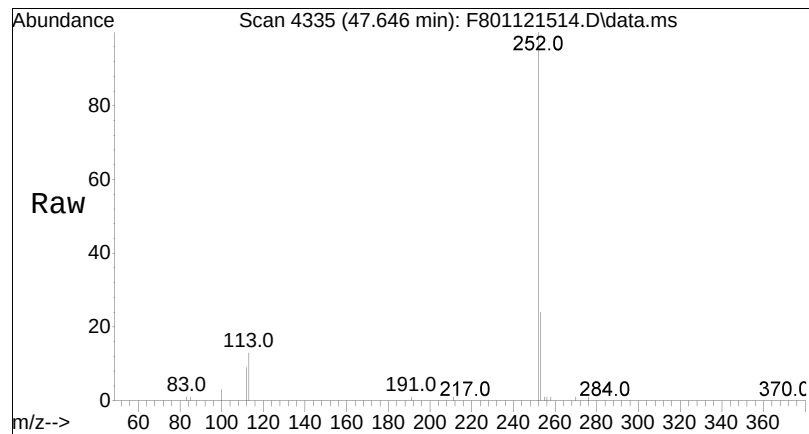




#85
 Benzo[j]+[k]fluoranthene
 Concen: 7422.46 ng/mL
 RT: 47.335 min Scan# 4301
 Delta R.T. 0.000 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

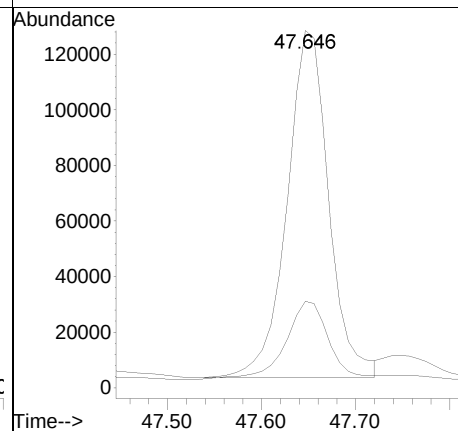
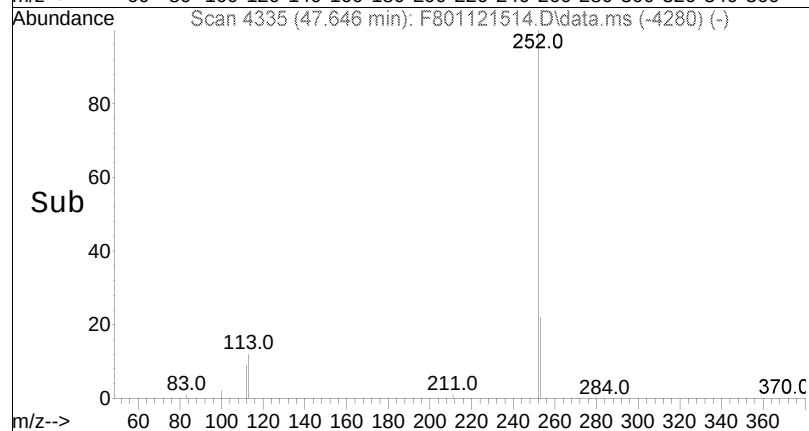
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.4	17.0	31.6	

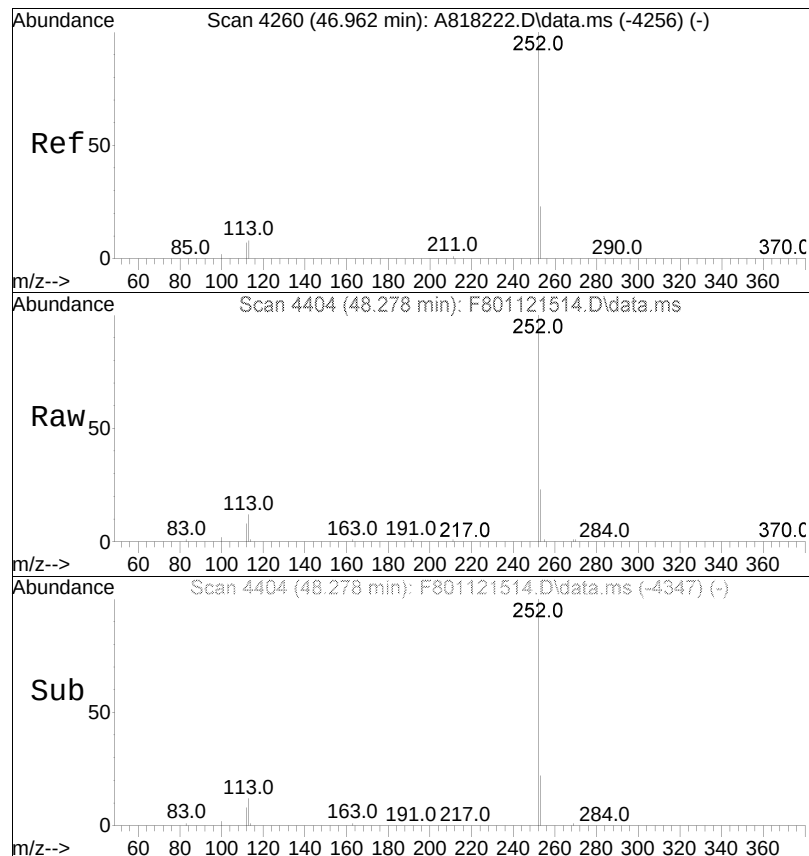




#86
 Benzo[a]fluoranthene
 Concen: 3898.75 ng/mL
 RT: 47.646 min Scan# 4335
 Delta R.T. -0.000 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

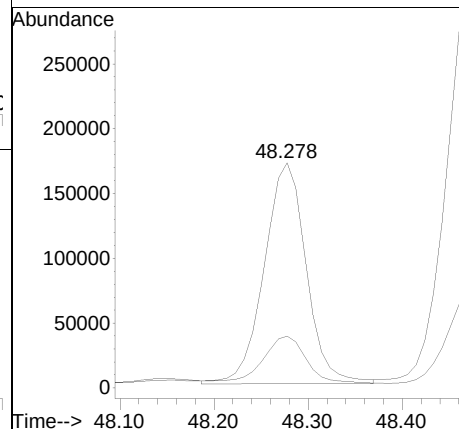
Tgt Ion: 252 Resp: 384532
 Ion Ratio Lower Upper
 252 100
 253 23.6 17.1 31.7

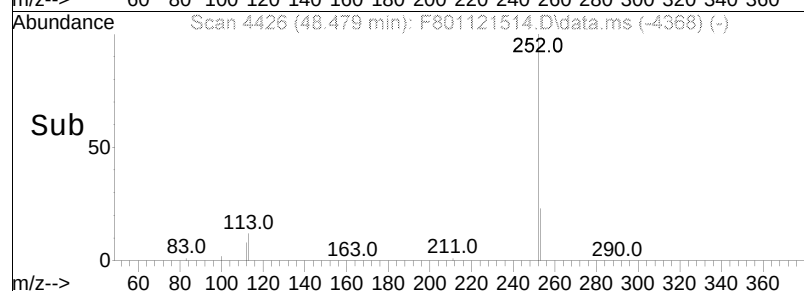
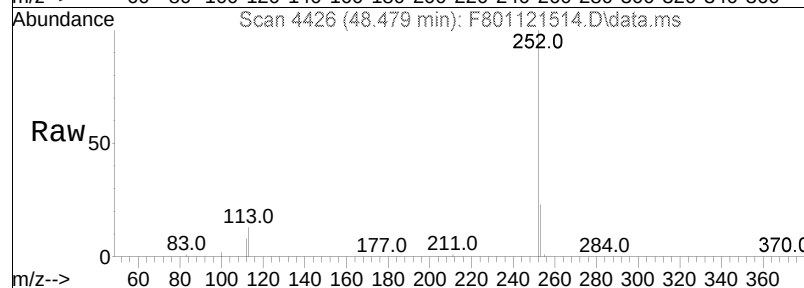
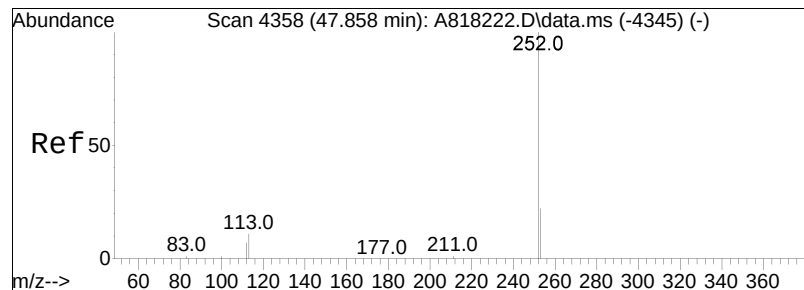




#87
 Benzo[e]pyrene
 Concen: 5241.97 ng/mL
 RT: 48.278 min Scan# 4404
 Delta R.T. 0.018 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

Tgt	Ion	Ratio	Lower	Upper
252	100			
253	24.1	17.2	32.0	





#89

Benzo[a]pyrene

Concen: 12154.58 ng/mL

RT: 48.479 min Scan# 4426

Delta R.T. 0.027 min

Lab File: F801121514.D

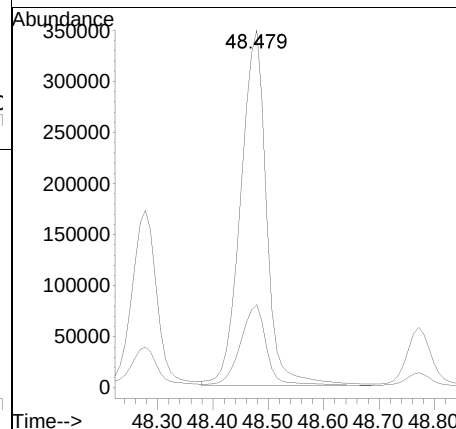
Acq: 13 Jan 2015 4:39 am

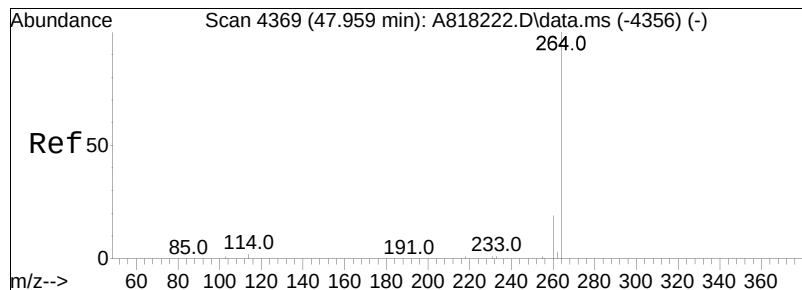
Tgt Ion: 252 Resp: 1125650

Ion Ratio Lower Upper

252 100

253 23.0 18.1 33.7





#90

Perylene

Concen: 1776.61 ng/mL

RT: 48.771 min Scan# 4458

Delta R.T. 0.009 min

Lab File: F801121514.D

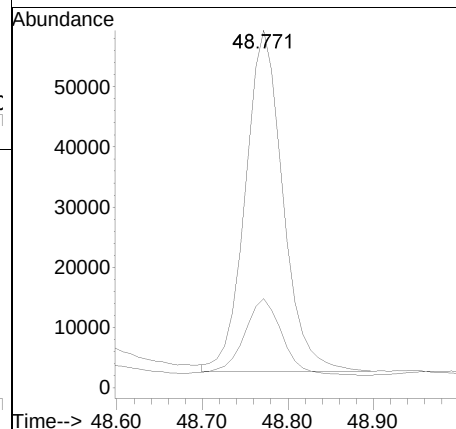
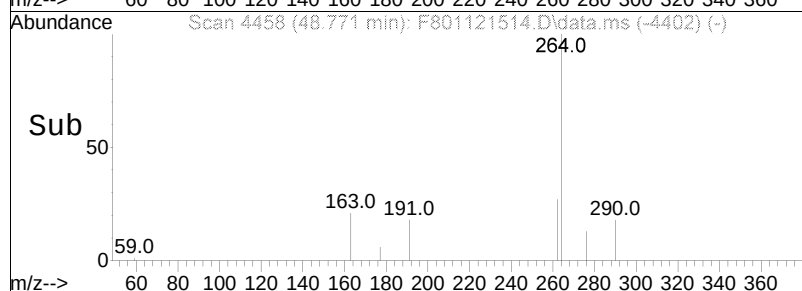
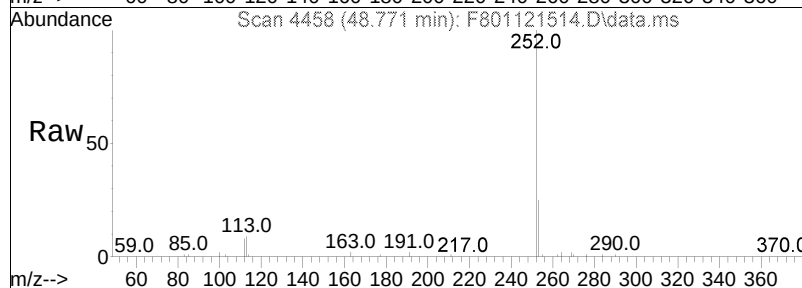
Acq: 13 Jan 2015 4:39 am

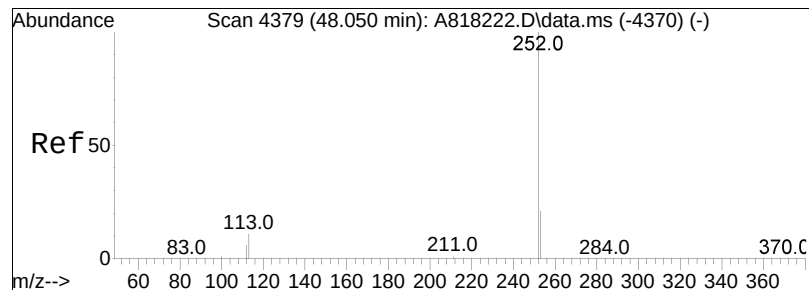
Tgt Ion: 252 Resp: 172802

Ion Ratio Lower Upper

252 100

253 23.2 17.8 33.1





#91

Indeno[1,2,3-cd]pyrene

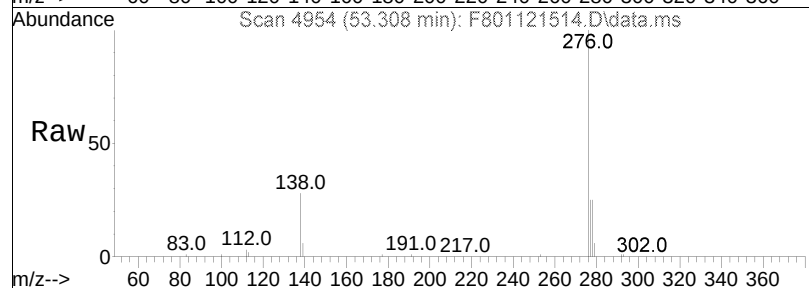
Concen: 4005.78 ng/mL M4

RT: 53.308 min Scan# 4954

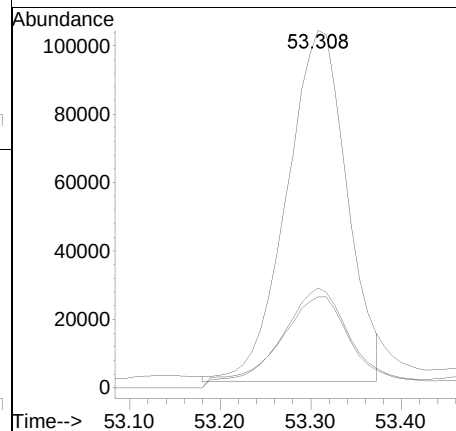
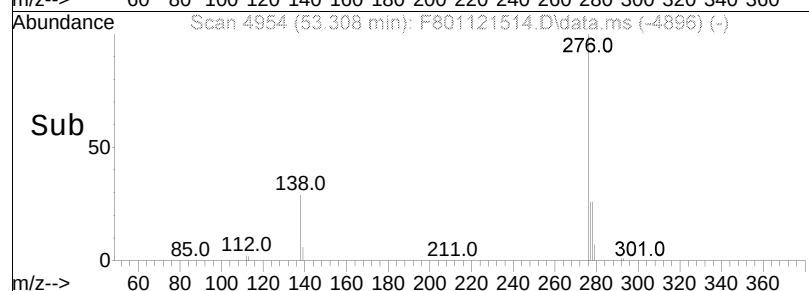
Delta R.T. 0.027 min

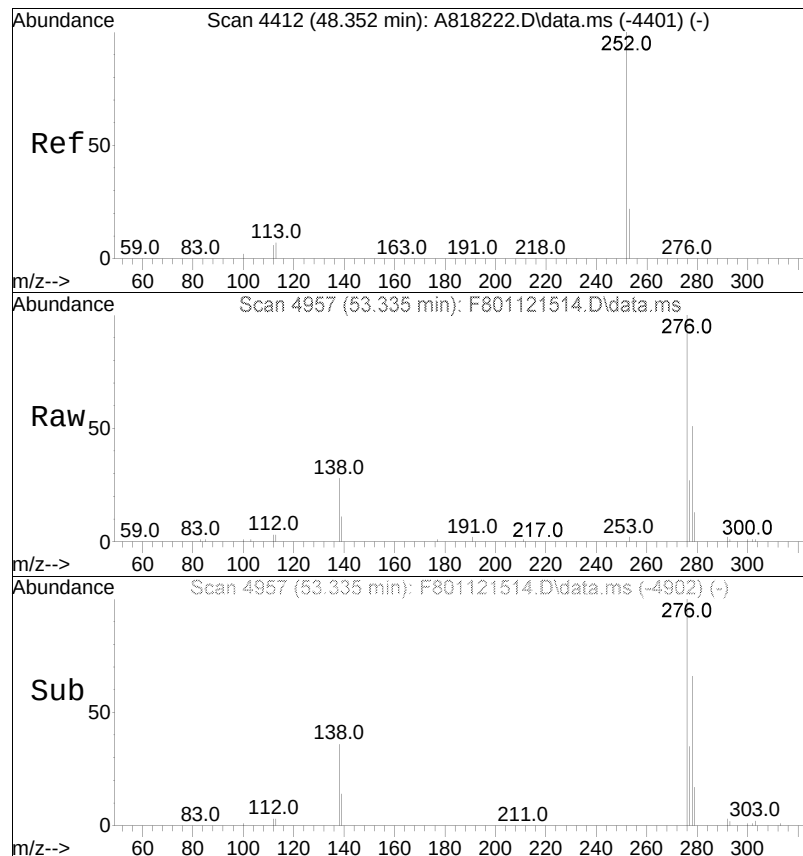
Lab File: F801121514.D

Acq: 13 Jan 2015 4:39 am



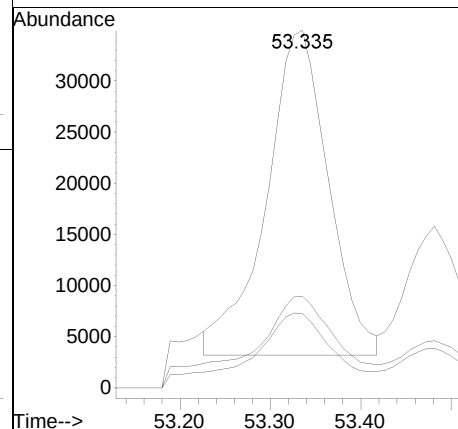
Tgt	Ion:276	Resp:	474579
Ion	Ratio	Lower	Upper
276	100		
138	34.0	19.9	37.0
277	32.7	16.9	31.5#

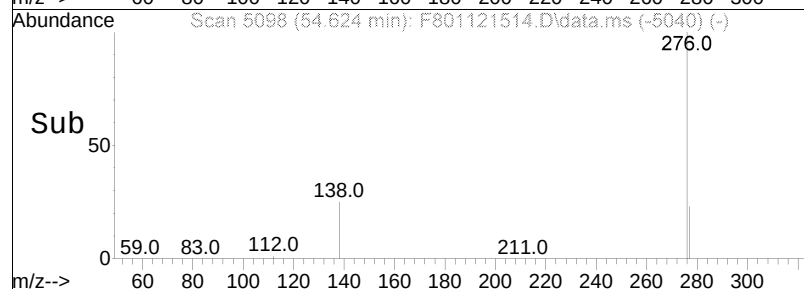
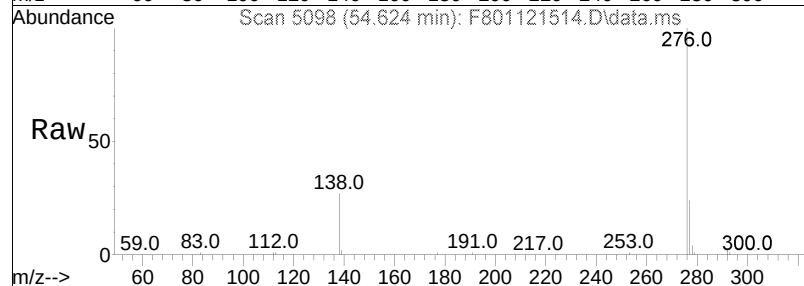
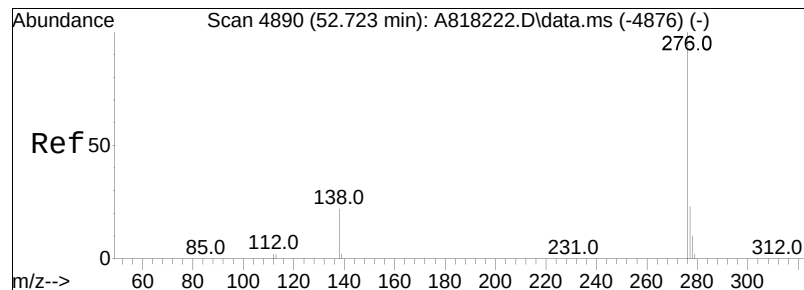




#92
 Dibenz[ah]+[ac]anthracene
 Concen: 1516.75 ng/mL M4
 RT: 53.335 min Scan# 4957
 Delta R.T. 0.000 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

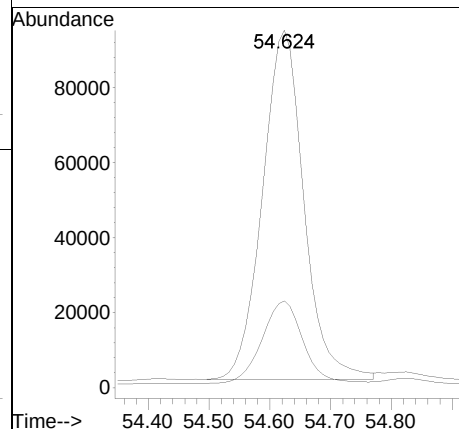
Tgt	Ion:278	Resp:	152022
Ion	Ratio	Lower	Upper
278	100		
139	30.2	15.7	29.1#
279	39.8	17.1	31.9#

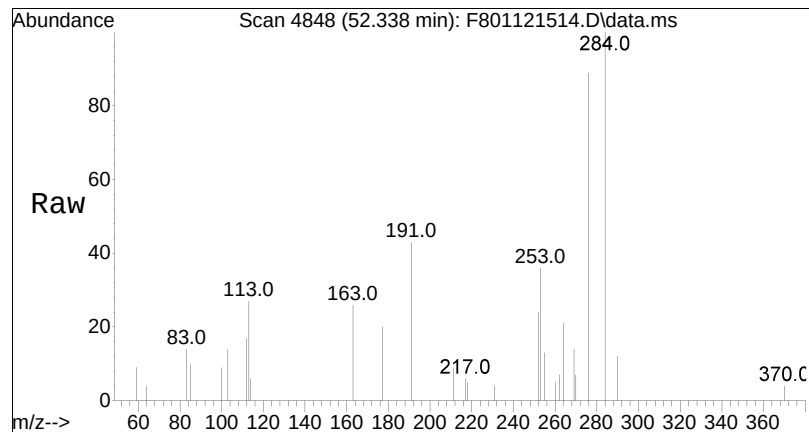




#93
 Benzo[g,h,i]perylene
 Concen: 3920.77 ng/mL
 RT: 54.624 min Scan# 5098
 Delta R.T. 0.027 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

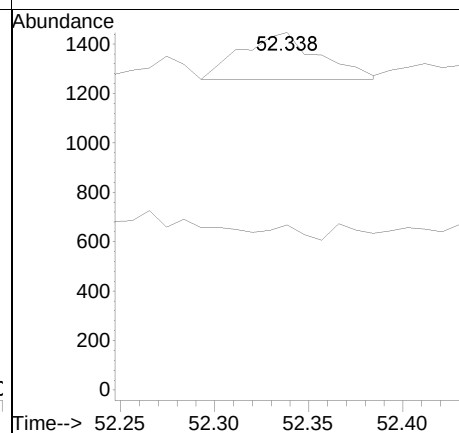
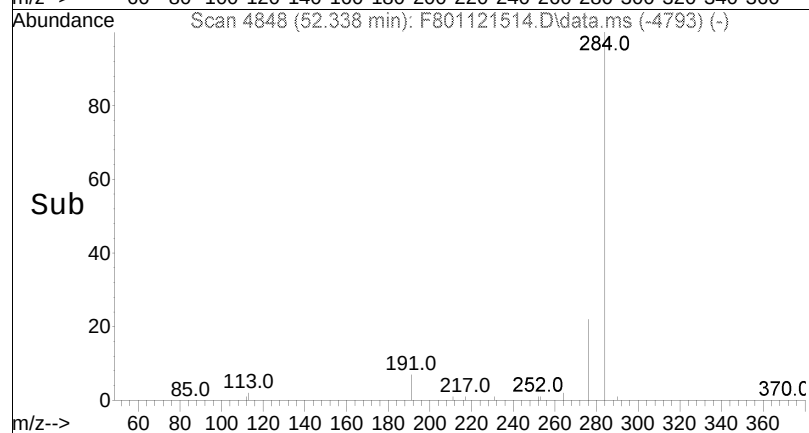
Tgt	Ion	Ratio	Lower	Upper
276	100			
277	23.8	16.6	30.8	

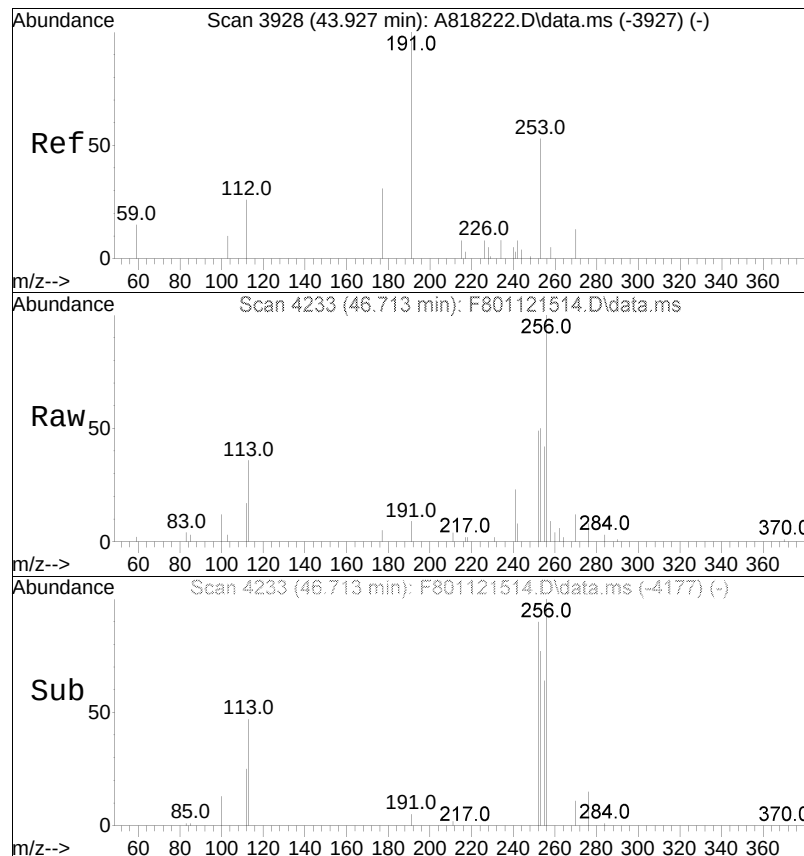




#94
 Hopane (T19)
 Concen: 16.00 ng/mL
 RT: 52.338 min Scan# 4848
 Delta R.T. 0.000 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

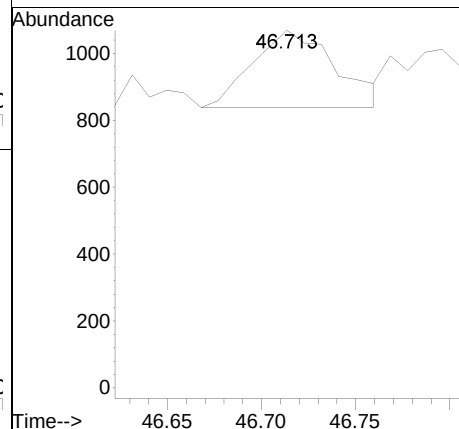
Tgt Ion:191 Resp: 542
 Ion Ratio Lower Upper
 191 100
 177 0.0 10.7 19.9#

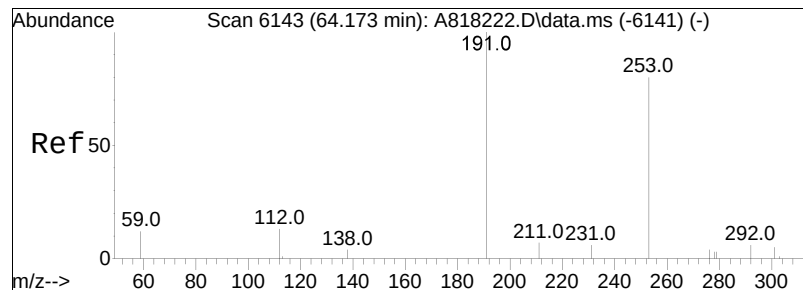




#103
 C28 Tricyclic Terpane-22R (T8)
 Concen: 20.78 ng/ml
 RT: 46.713 min Scan# 4233
 Delta R.T. 0.009 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

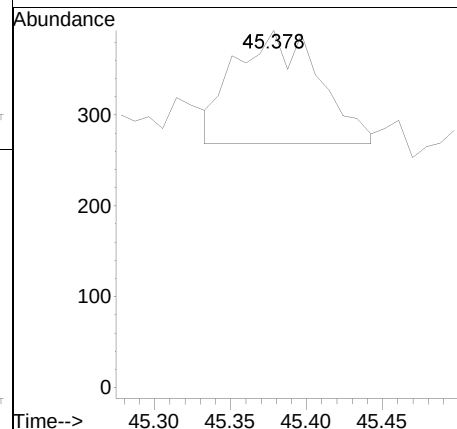
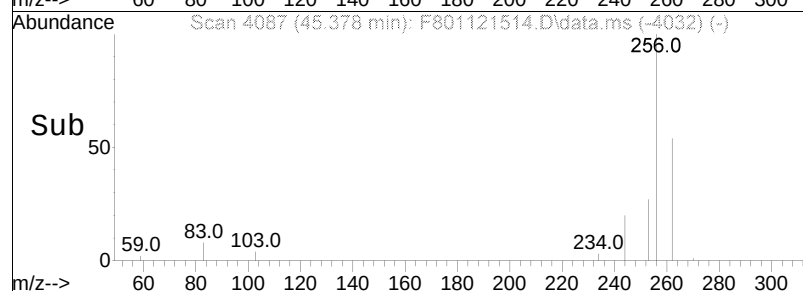
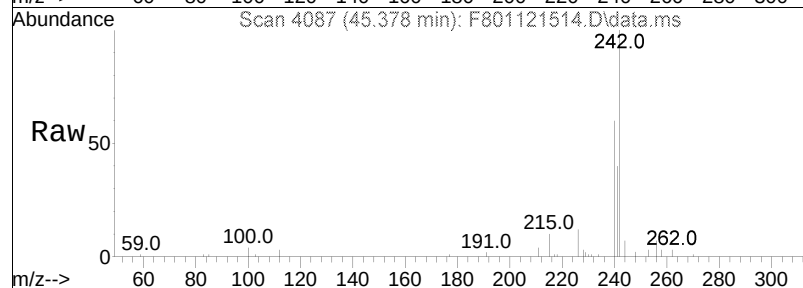
Tgt Ion:191 Resp: 704

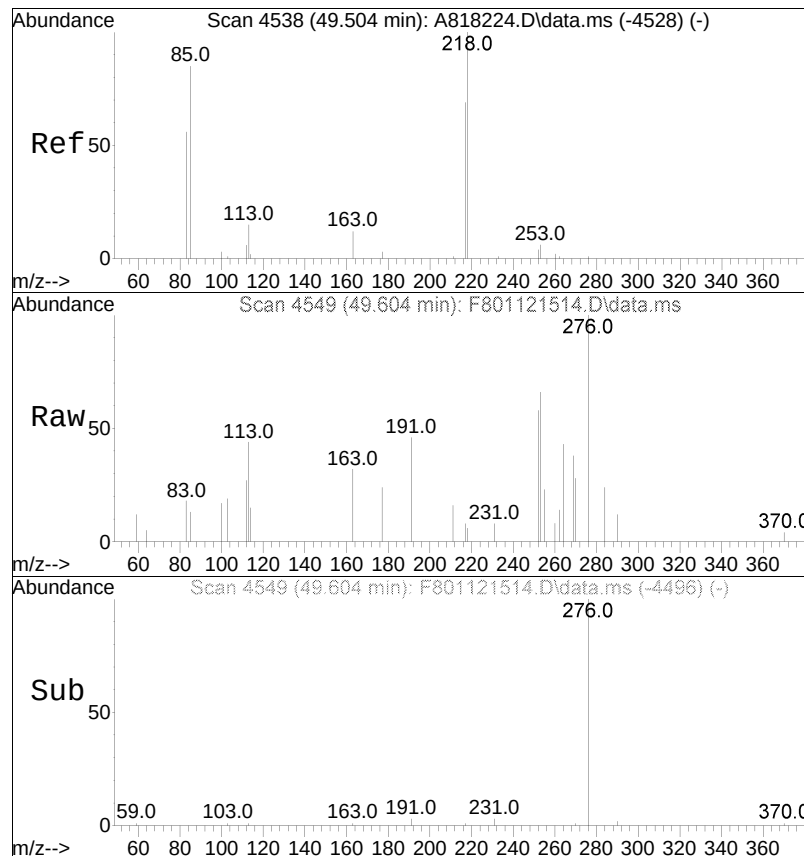




#130
 13b(H),17a(H)-20S-Diacholestane
 Concen: 31.65 ng/ml M4
 RT: 45.378 min Scan# 4087
 Delta R.T. 0.000 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

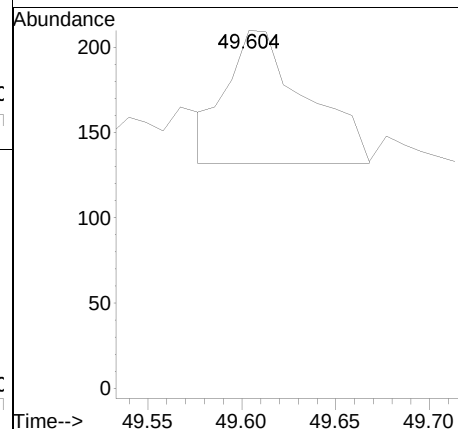
Tgt Ion:217 Resp: 477





#147
 C26,20R- +C27,20S- triaromatic
 Concen: 15.26 ng/mL M4
 RT: 49.604 min Scan# 4549
 Delta R.T. -0.018 min
 Lab File: F801121514.D
 Acq: 13 Jan 2015 4:39 am

Tgt Ion:231 Resp: 230



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN13\
 Data File : F801131504.D
 Acq On : 13 Jan 2015 7:37 pm
 Operator : PAH8:MS
 Sample : L1500432-01D, 32, 50
 Misc : WG755949, WG755041
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 15 11:55:47 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.803	164	39608	500.000	ng/mL	-0.05
74) Chrysene-d12	43.214	240	58610	500.000	ng/mL	-0.06
System Monitoring Compounds						
9) Naphthalene-d8	19.850	136	843	5.260	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.53%#		
42) Phenanthrene-d10	32.661	188	634	5.330	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.53%#		
83) Benzo[b]fluoranthene-d12	47.107	264	620	5.422	ng/mL	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.54%#		
88) Benzo[a]pyrene-d12	48.287	264	446M4	4.433	ng/mL	-0.07
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.44%#		
129) 5B(H)Cholane - Surr	43.817	217	121	5.589	ng/mL	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.56%#		
Target Compounds						
10) Naphthalene	19.923	128	1537106	8617.442	ng/mL	100
11) C1-Naphthalenes	22.615	142	707577M5	3966.873	ng/mL	
12) C2-Naphthalenes	25.444	156	238297M5	1335.959	ng/mL	
26) Acenaphthylene	26.192	152	282983M4	1695.489	ng/mL	
29) Fluorene	28.939	166	83089M4	761.085	ng/mL	
43) Phenanthrene	32.743	178	302146	2043.098	ng/mL	99
55) Anthracene	32.926	178	86773M4	640.469	ng/mL	
58) Fluoranthene	37.508	202	82351	548.871	ng/mL	96
60) Pyrene	38.394	202	123052	783.120	ng/mL	99

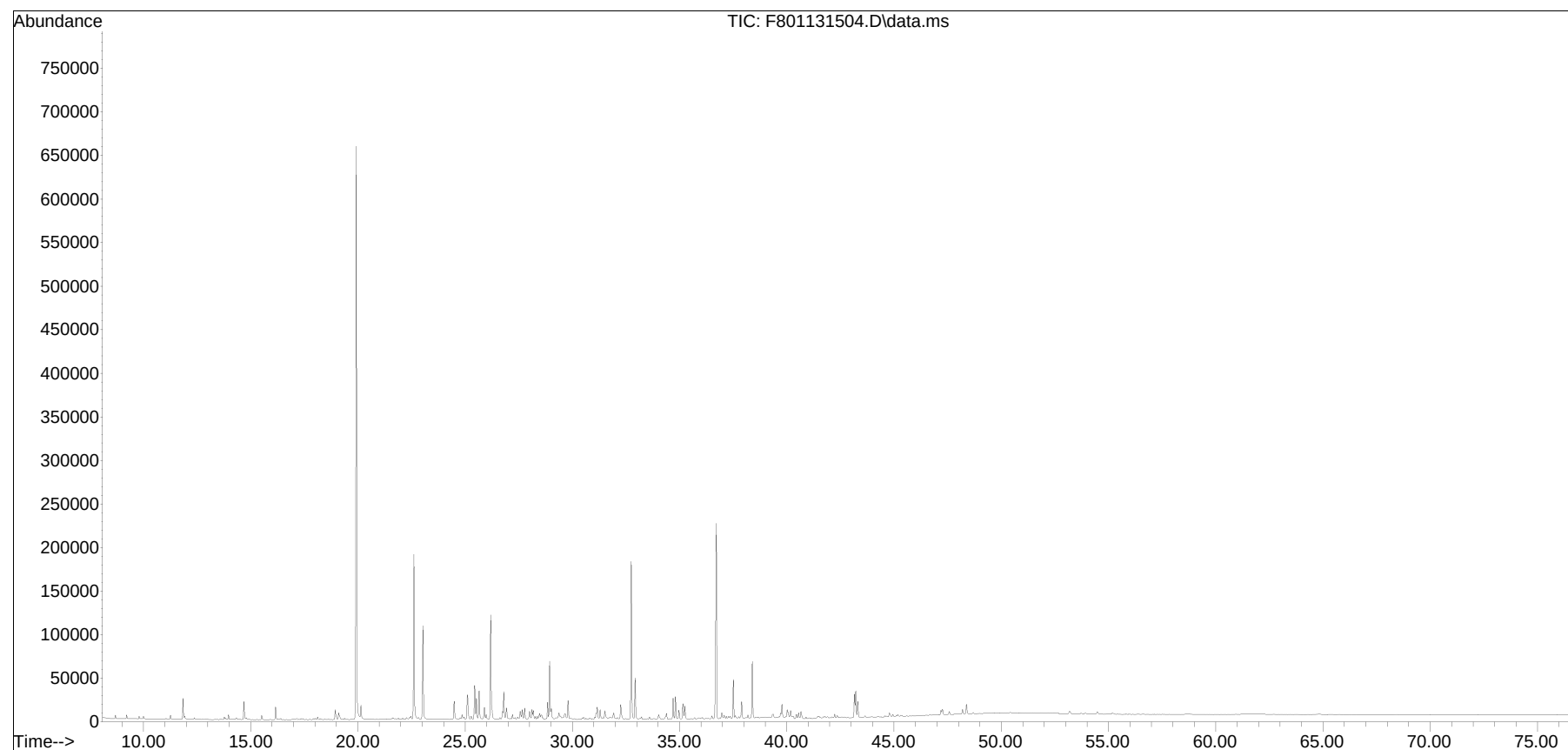
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN13\
Data File : F801131504.D
Acq On : 13 Jan 2015 7:37 pm
Operator : PAH8:MS
Sample : L1500432-01D,32,50
Misc : WG755949,WG755041
ALS Vial : 4 Sample Multiplier: 1

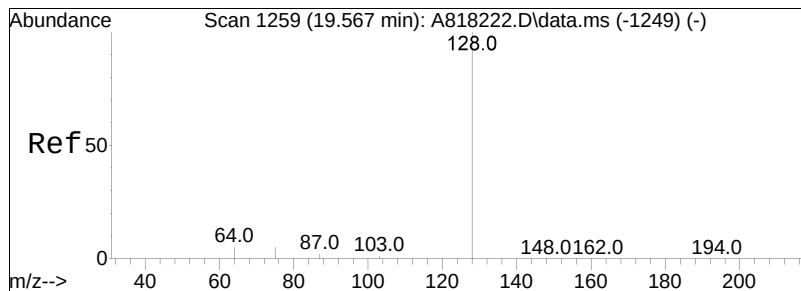
Quant Time: Jan 15 11:55:47 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 13 07:23:40 2015
Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO



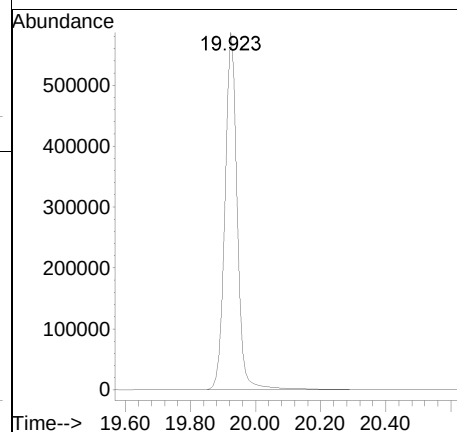
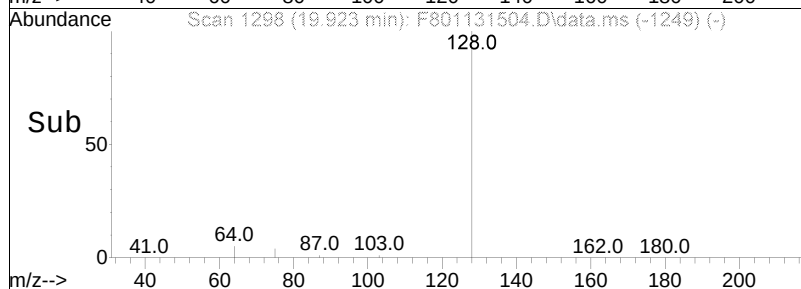
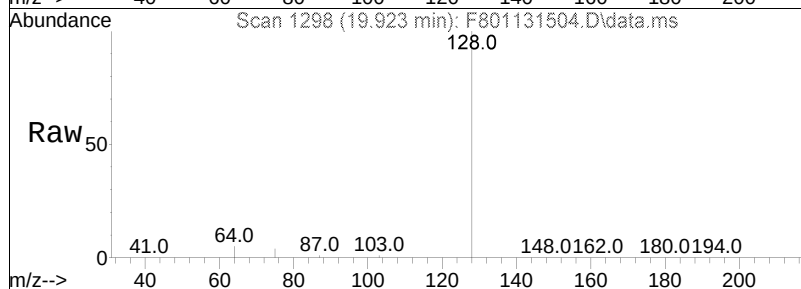
PAH8122314.M Thu Jan 15 12:14:32 2015

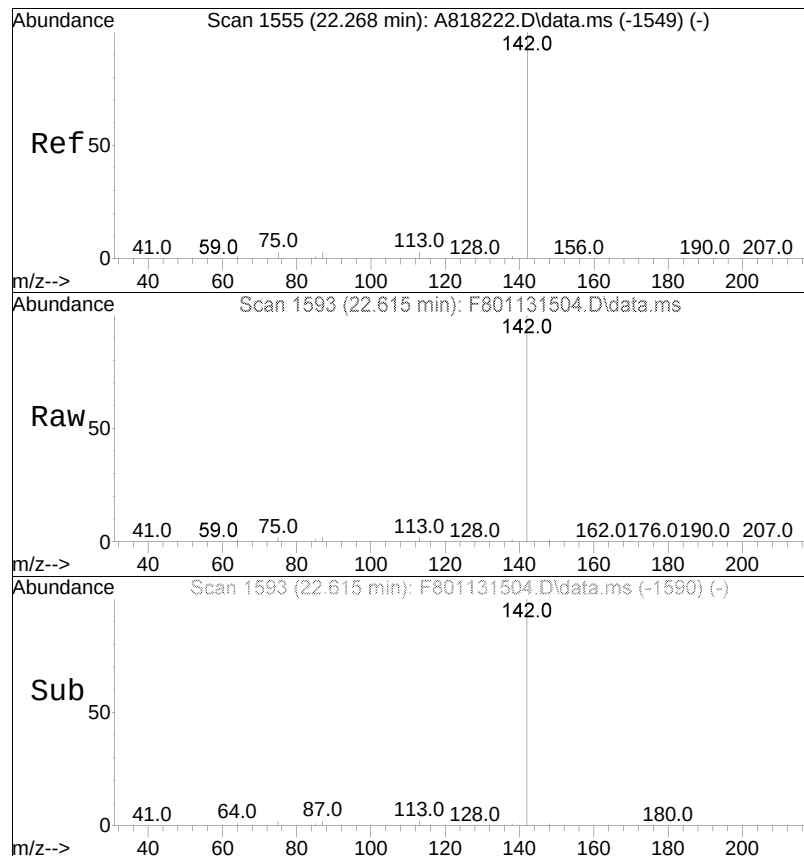
Page 2



#10
Naphthalene
Concen: 8617.44 ng/mL
RT: 19.923 min Scan# 1298
Delta R.T. -0.055 min
Lab File: F801131504.D
Acq: 13 Jan 2015 7:37 pm

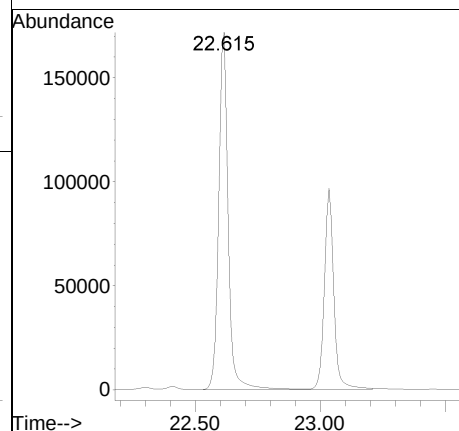
Tgt Ion:128 Resp: 1537106

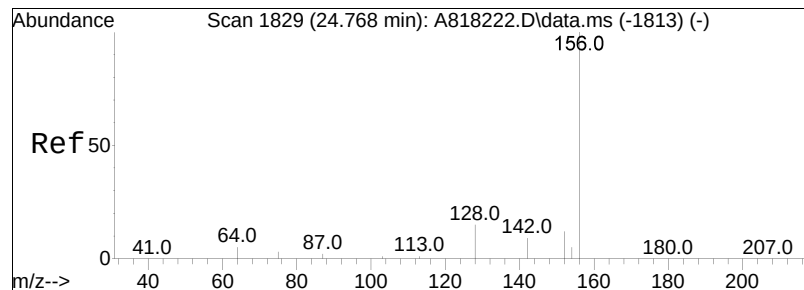




#11
 C1-Naphthalenes
 Concen: 3966.87 ng/mL M5
 RT: 22.615 min Scan# 1593
 Delta R.T. -0.055 min
 Lab File: F801131504.D
 Acq: 13 Jan 2015 7:37 pm

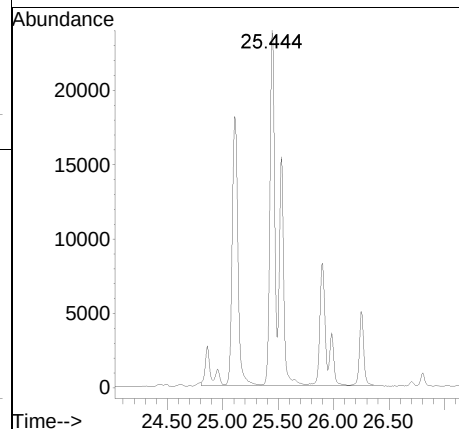
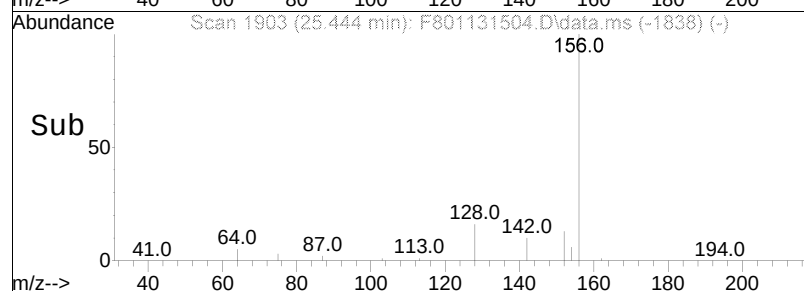
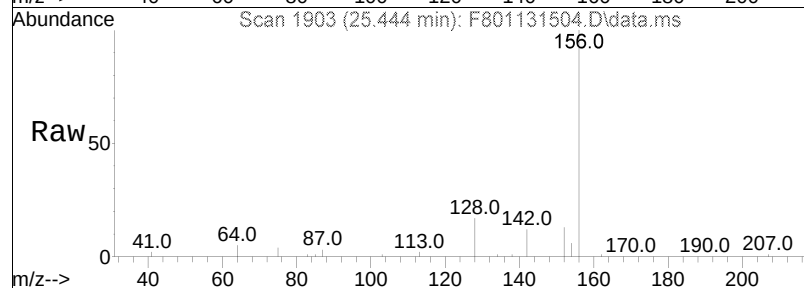
Tgt Ion:142 Resp: 707577

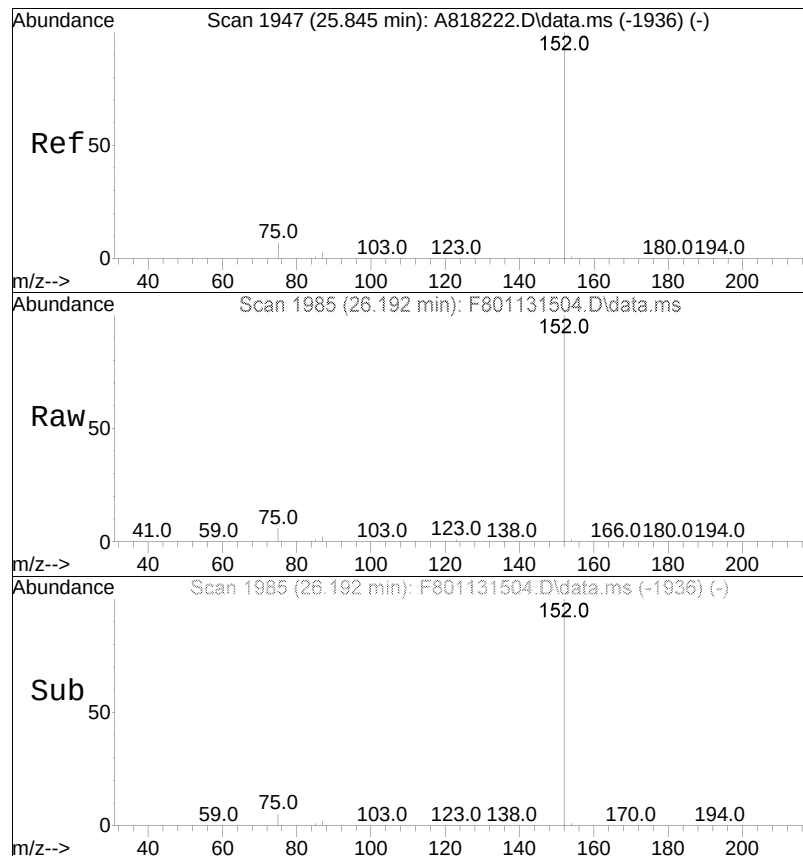




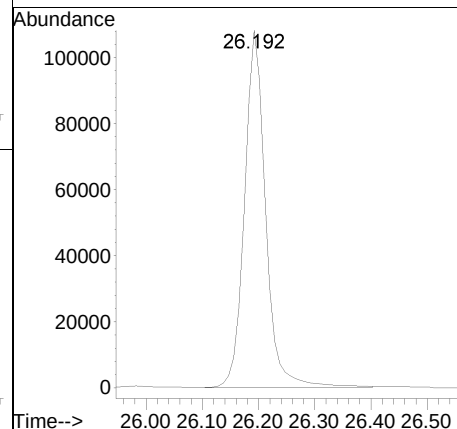
#12
 C2-Naphthalenes
 Concen: 1335.96 ng/mL M5
 RT: 25.444 min Scan# 1903
 Delta R.T. -0.065 min
 Lab File: F801131504.D
 Acq: 13 Jan 2015 7:37 pm

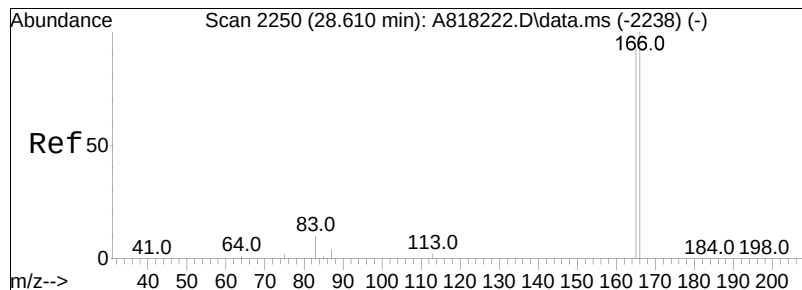
Tgt Ion:156 Resp: 238297





#26
Acenaphthylene
Concen: 1695.49 ng/mL M4
RT: 26.192 min Scan# 1985
Delta R.T. -0.055 min
Lab File: F801131504.D
Acq: 13 Jan 2015 7:37 pm
Tgt Ion:152 Resp: 282983





#29

Fluorene

Concen: 761.09 ng/mL M4

RT: 28.939 min Scan# 2286

Delta R.T. -0.064 min

Lab File: F801131504.D

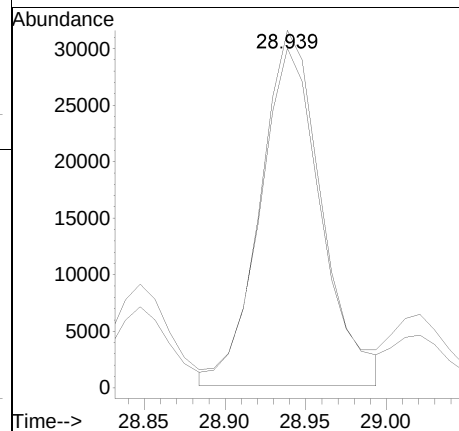
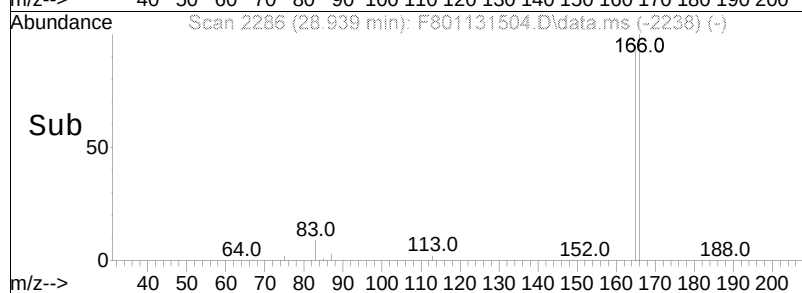
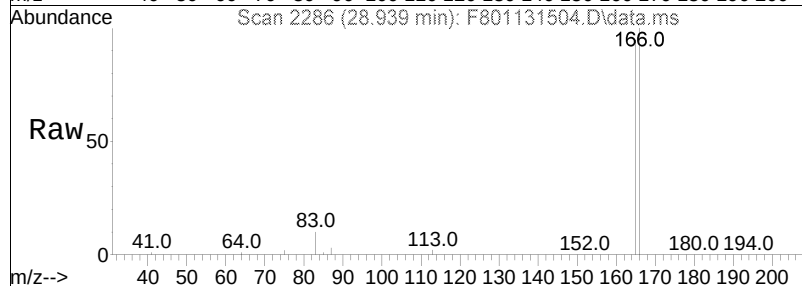
Acq: 13 Jan 2015 7:37 pm

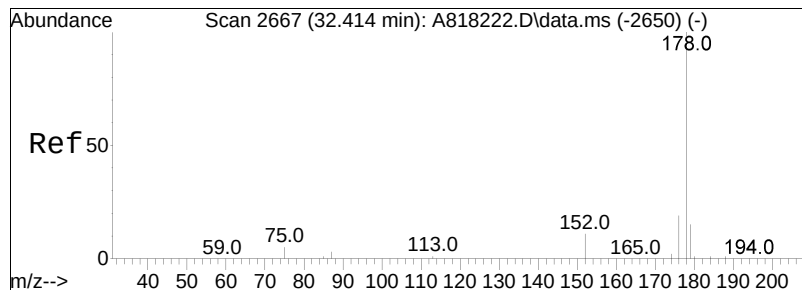
Tgt Ion:166 Resp: 83089

Ion Ratio Lower Upper

166 100

165 89.0 65.9 122.3





#43

Phenanthrene

Concen: 2043.10 ng/mL

RT: 32.743 min Scan# 2703

Delta R.T. -0.064 min

Lab File: F801131504.D

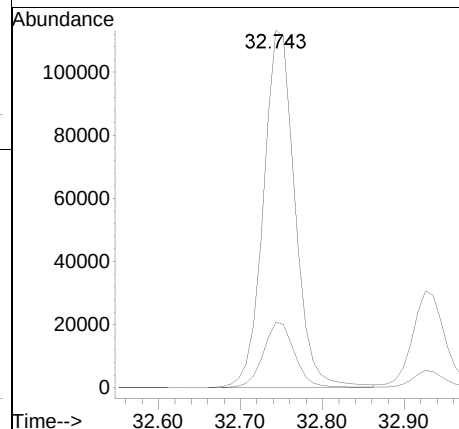
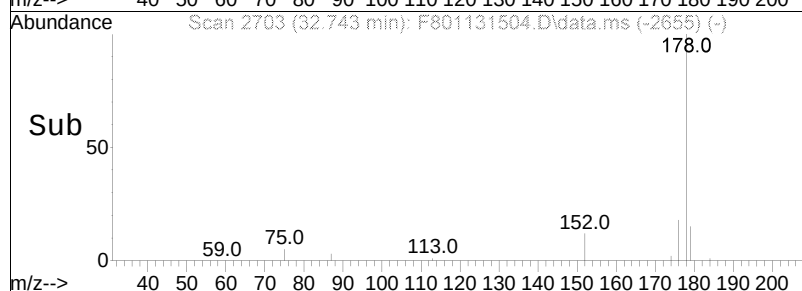
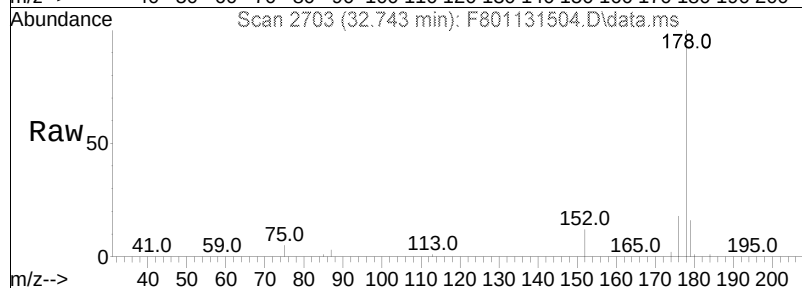
Acq: 13 Jan 2015 7:37 pm

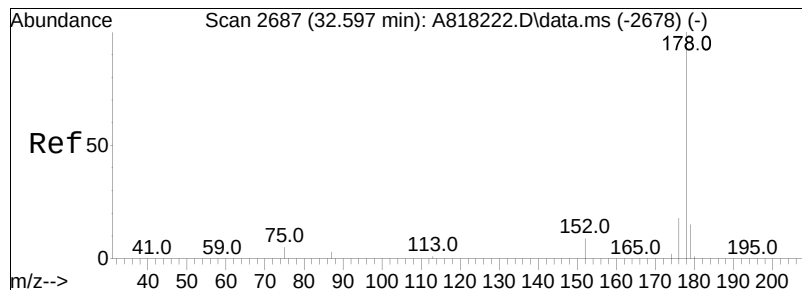
Tgt Ion:178 Resp: 302146

Ion Ratio Lower Upper

178 100

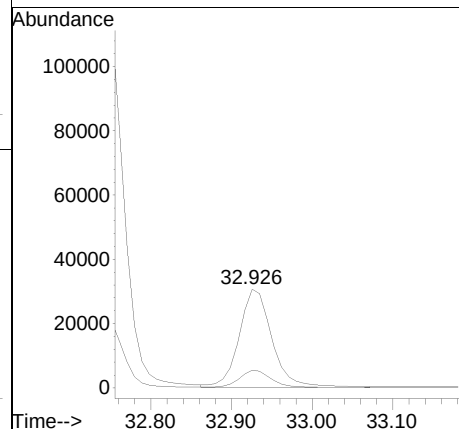
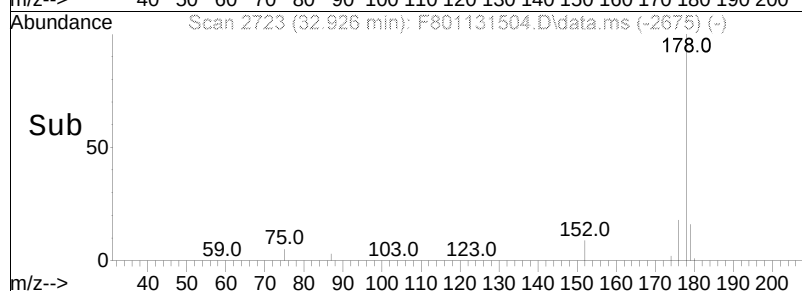
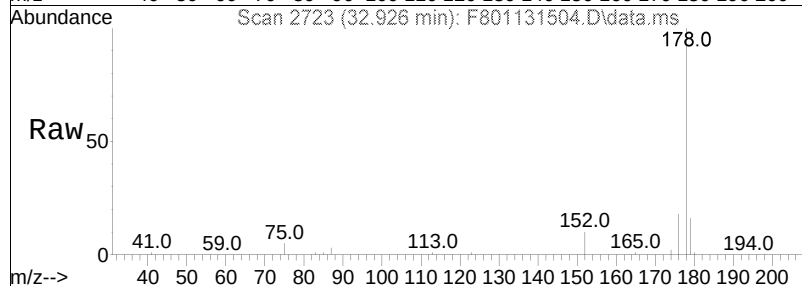
176 18.3 12.5 23.1

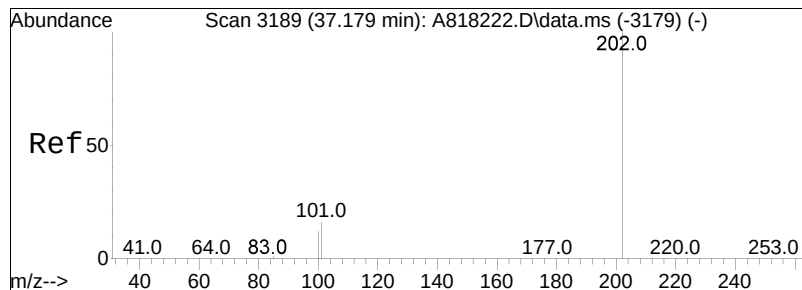




#55
 Anthracene
 Concen: 640.47 ng/mL M4
 RT: 32.926 min Scan# 2723
 Delta R.T. -0.064 min
 Lab File: F801131504.D
 Acq: 13 Jan 2015 7:37 pm

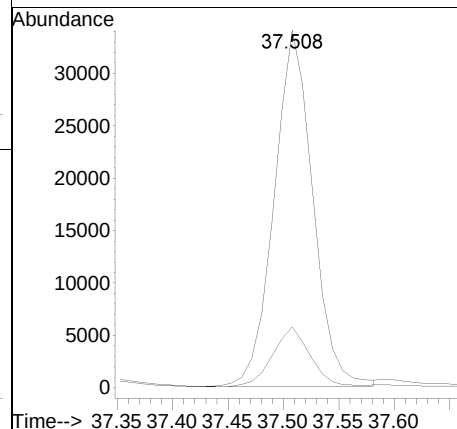
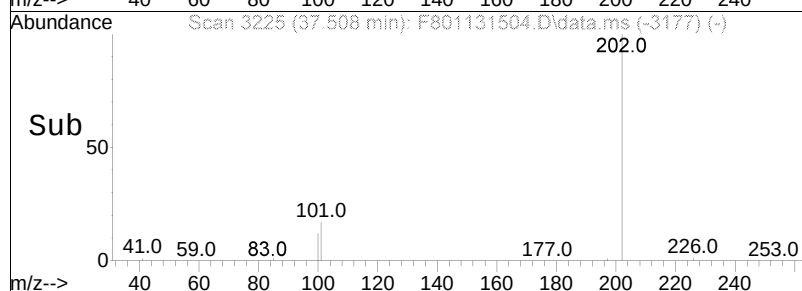
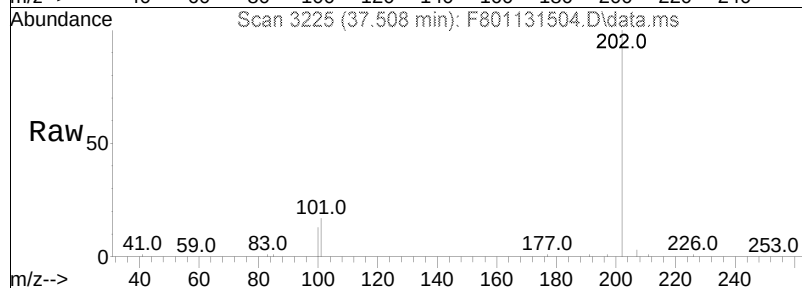
Tgt Ion	Ratio	Lower	Upper
178	100		
176	17.2	12.8	23.8

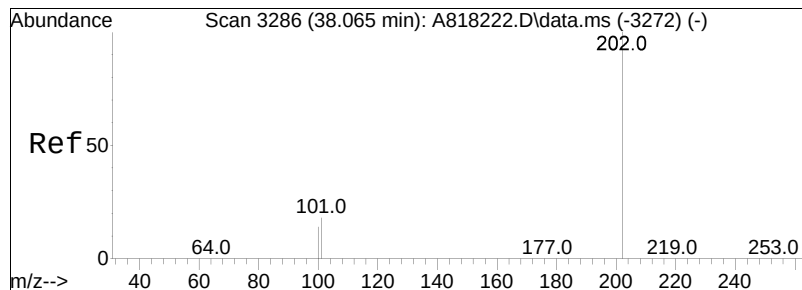




#58
 Fluoranthene
 Concen: 548.87 ng/mL
 RT: 37.508 min Scan# 3225
 Delta R.T. -0.064 min
 Lab File: F801131504.D
 Acq: 13 Jan 2015 7:37 pm

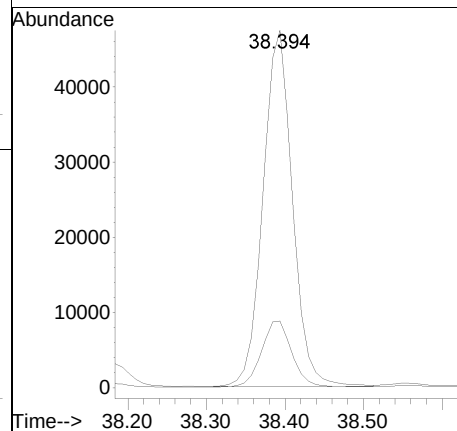
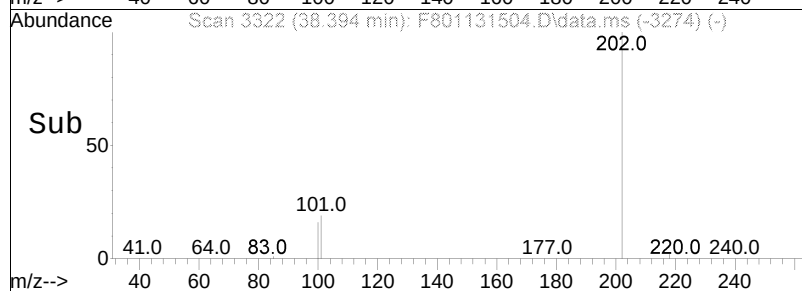
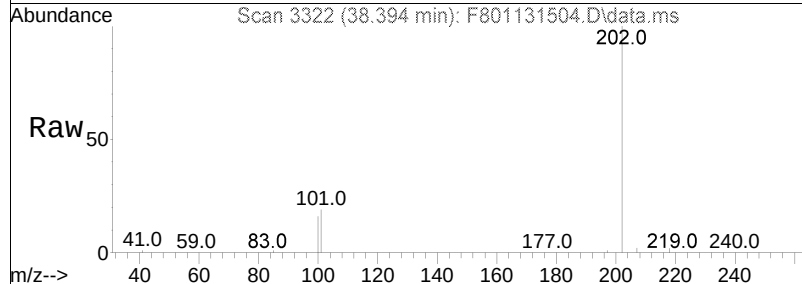
Tgt Ion	Ratio	Lower	Upper
202	100		
101	16.2	12.7	23.7





#60
 Pyrene
 Concen: 783.12 ng/mL
 RT: 38.394 min Scan# 3322
 Delta R.T. -0.064 min
 Lab File: F801131504.D
 Acq: 13 Jan 2015 7:37 pm

Tgt	Ion	Ratio	Lower	Upper
202	100			
101	19.2	13.9	25.7	



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN13\
 Data File : F801131505.D
 Acq On : 13 Jan 2015 9:03 pm
 Operator : PAH8:MS
 Sample : L1500432-02D, 32, 50
 Misc : WG755949, WG755041
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 15 11:55:54 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.803	164	39439	500.000	ng/mL	-0.05
74) Chrysene-d12	43.214	240	59265	500.000	ng/mL	-0.06
System Monitoring Compounds						
9) Naphthalene-d8	19.850	136	865	5.421	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.54%#		
42) Phenanthrene-d10	32.661	188	618	5.217	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.52%#		
83) Benzo[b]fluoranthene-d12	47.107	264	591M4	5.112	ng/mL	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.51%#		
88) Benzo[a]pyrene-d12	48.287	264	531M4	5.220	ng/mL	-0.07
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.52%#		
129) 5B(H)Cholane - Surr	43.817	217	138	6.304	ng/mL	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.63%#		
Target Compounds						
10) Naphthalene	19.923	128	1616238	9099.905	ng/mL	Qvalue 100
11) C1-Naphthalenes	22.615	142	714629M5	4023.576	ng/mL	
12) C2-Naphthalenes	25.444	156	265856M5	1496.849	ng/mL	
26) Acenaphthylene	26.192	152	278183M4	1673.872	ng/mL	
29) Fluorene	28.939	166	80634M4	741.763	ng/mL	
43) Phenanthrene	32.743	178	314387	2134.981	ng/mL	99
55) Anthracene	32.925	178	90715M4	672.434	ng/mL	
58) Fluoranthene	37.508	202	85855	574.678	ng/mL	95
60) Pyrene	38.393	202	131149	838.227	ng/mL	99

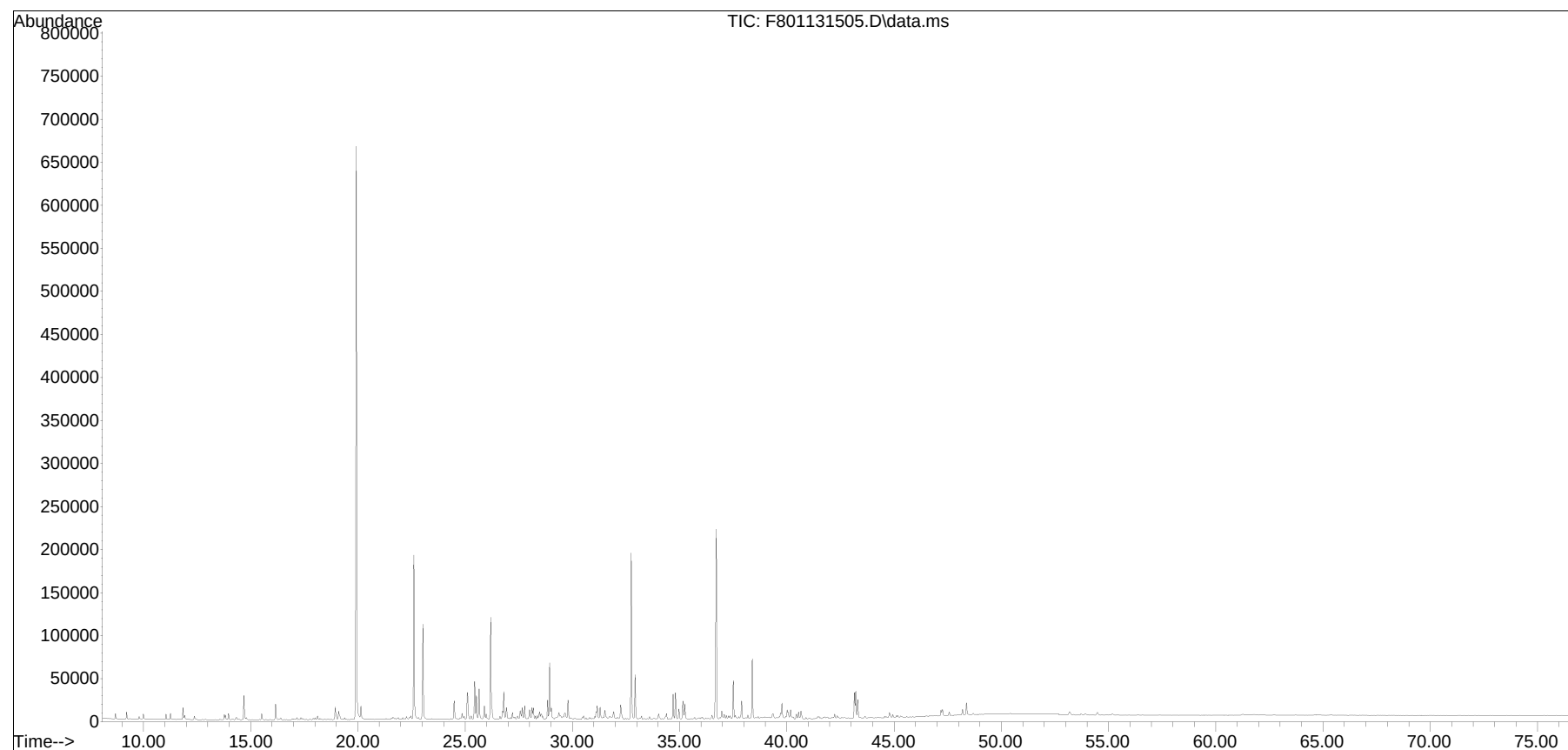
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN13\
Data File : F801131505.D
Acq On : 13 Jan 2015 9:03 pm
Operator : PAH8:MS
Sample : L1500432-02D,32,50
Misc : WG755949,WG755041
ALS Vial : 5 Sample Multiplier: 1

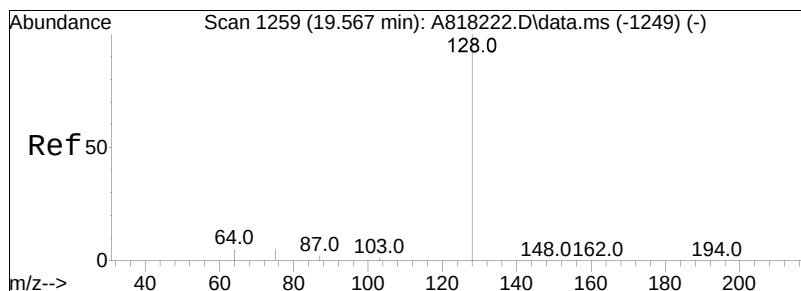
Quant Time: Jan 15 11:55:54 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 13 07:23:40 2015
Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO



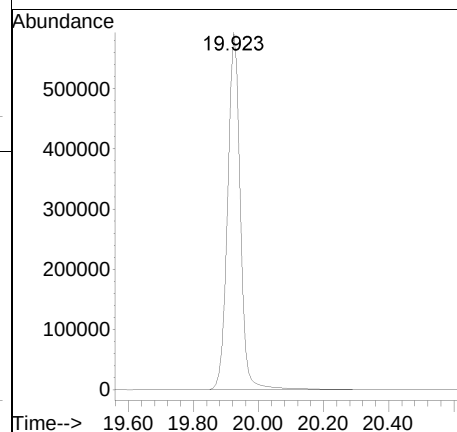
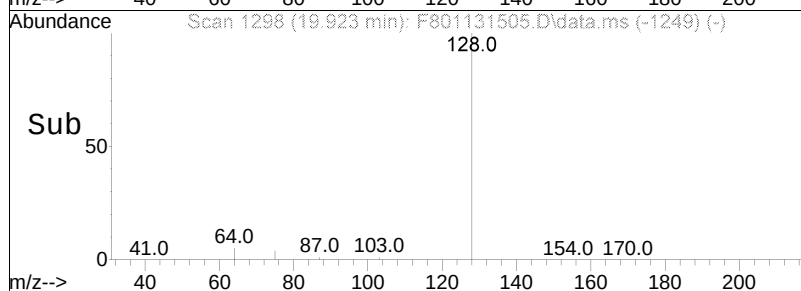
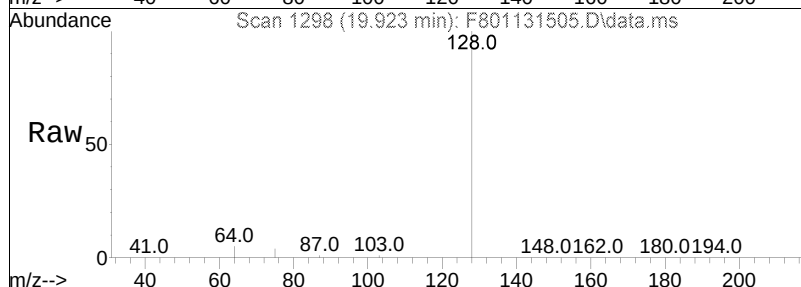
PAH8122314.M Thu Jan 15 12:14:46 2015

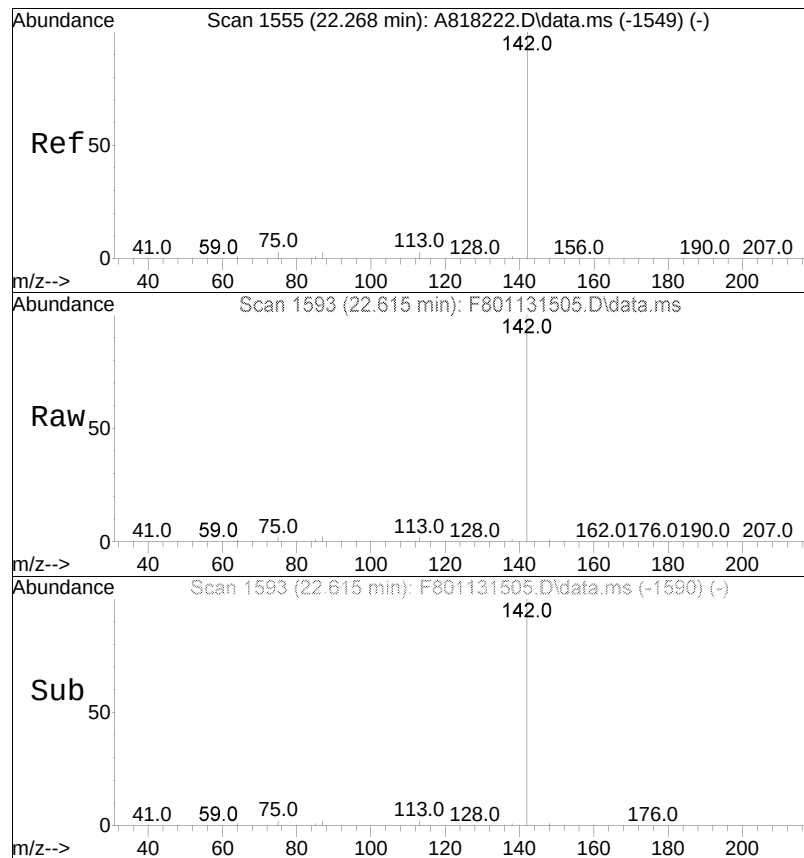
Page 2



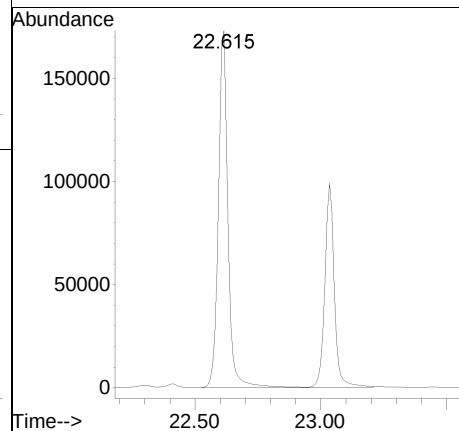
#10
Naphthalene
Concen: 9099.91 ng/mL
RT: 19.923 min Scan# 1298
Delta R.T. -0.055 min
Lab File: F801131505.D
Acq: 13 Jan 2015 9:03 pm

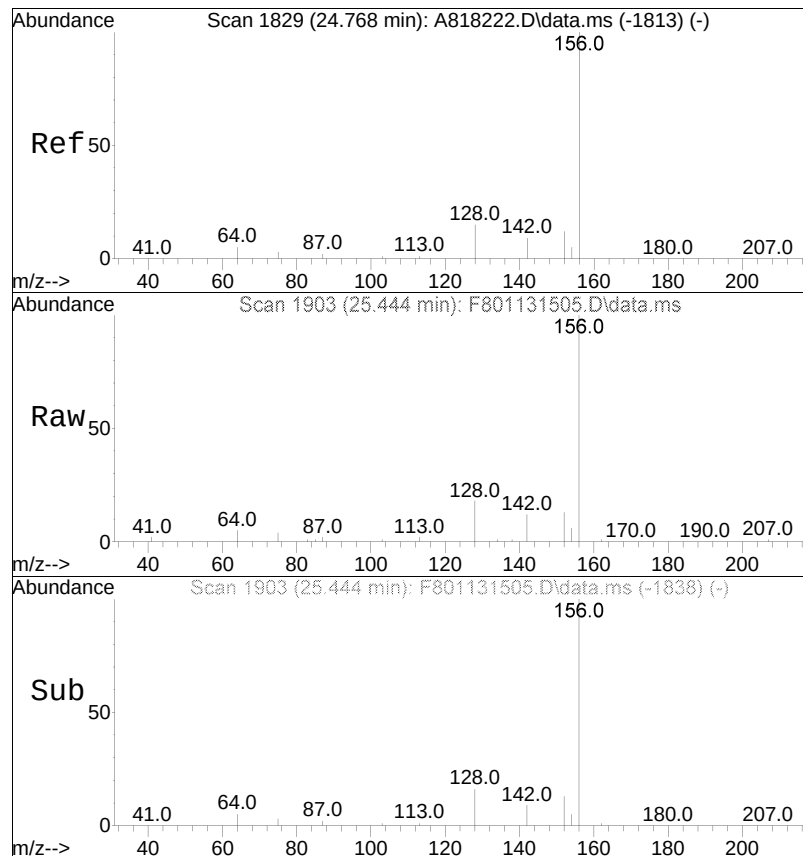
Tgt Ion:128 Resp: 1616238



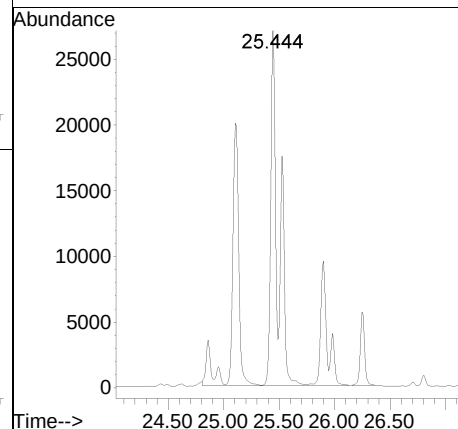


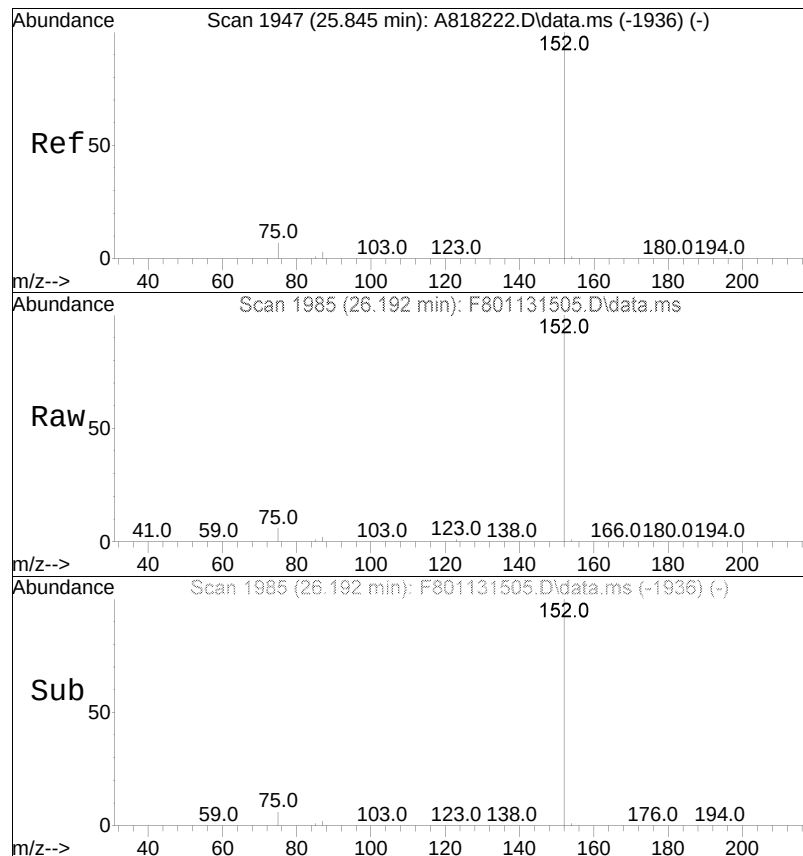
#11
 C1-Naphthalenes
 Concen: 4023.58 ng/mL M5
 RT: 22.615 min Scan# 1593
 Delta R.T. -0.055 min
 Lab File: F801131505.D
 Acq: 13 Jan 2015 9:03 pm
 Tgt Ion:142 Resp: 714629



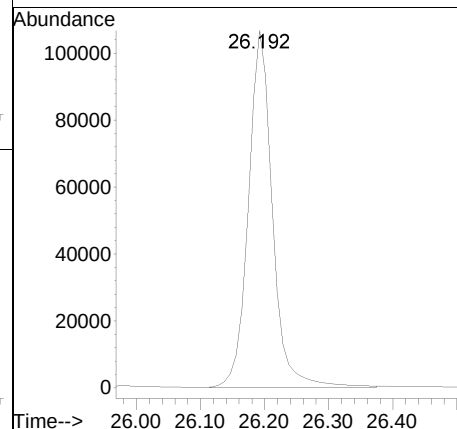


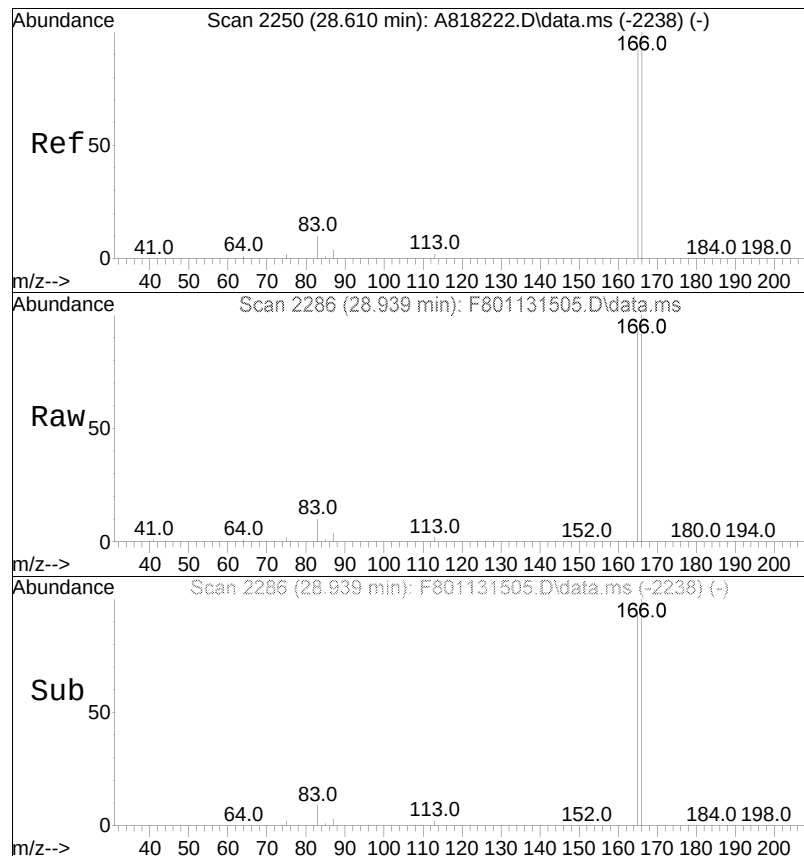
#12
 C2-Naphthalenes
 Concen: 1496.85 ng/mL M5
 RT: 25.444 min Scan# 1903
 Delta R.T. -0.065 min
 Lab File: F801131505.D
 Acq: 13 Jan 2015 9:03 pm
 Tgt Ion:156 Resp: 265856





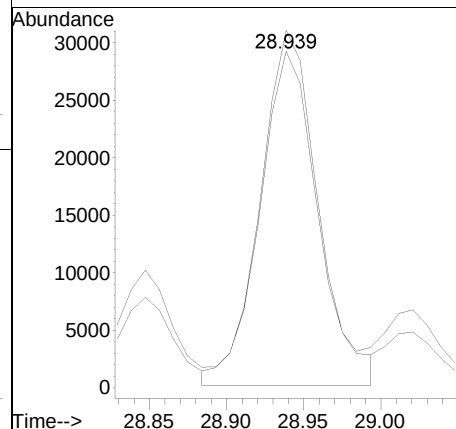
#26
Acenaphthylene
Concen: 1673.87 ng/mL M4
RT: 26.192 min Scan# 1985
Delta R.T. -0.055 min
Lab File: F801131505.D
Acq: 13 Jan 2015 9:03 pm
Tgt Ion:152 Resp: 278183

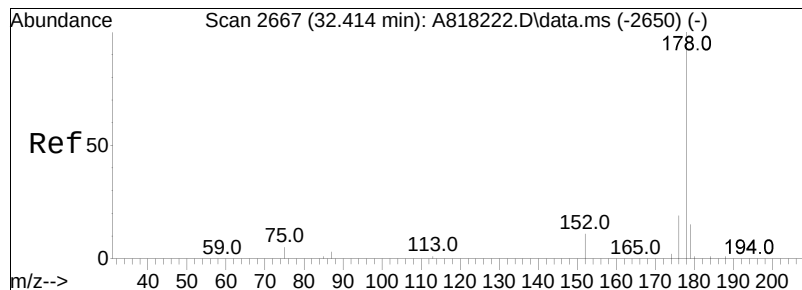




#29
 Fluorene
 Concen: 741.76 ng/mL M4
 RT: 28.939 min Scan# 2286
 Delta R.T. -0.064 min
 Lab File: F801131505.D
 Acq: 13 Jan 2015 9:03 pm

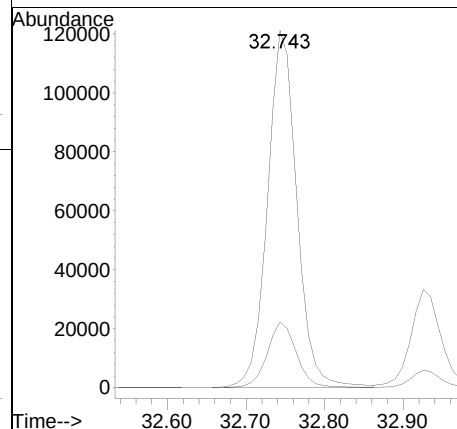
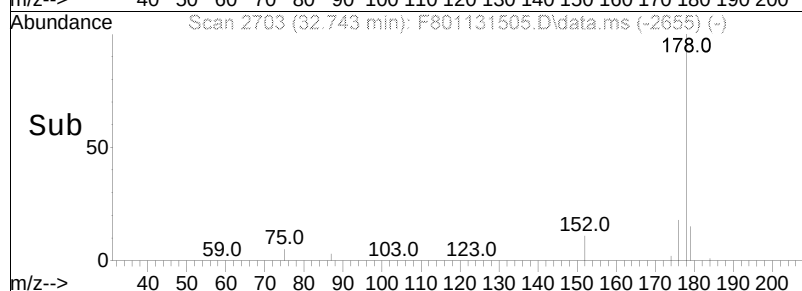
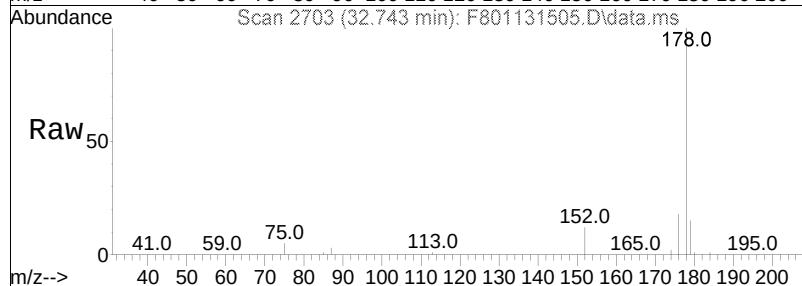
Tgt Ion:	166	Resp:	80634
Ion Ratio	Lower	Upper	
166	100		
165	89.0	65.9	122.3

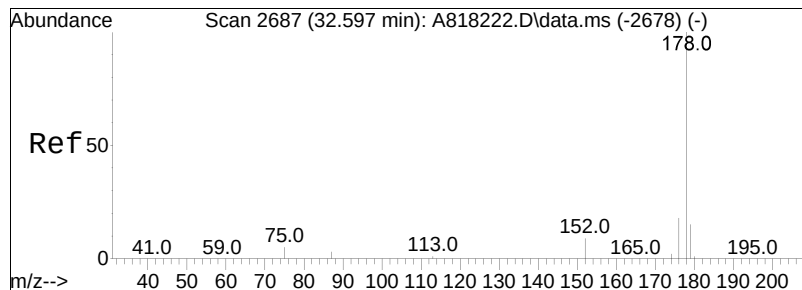




#43
 Phenanthrene
 Concen: 2134.98 ng/mL
 RT: 32.743 min Scan# 2703
 Delta R.T. -0.064 min
 Lab File: F801131505.D
 Acq: 13 Jan 2015 9:03 pm

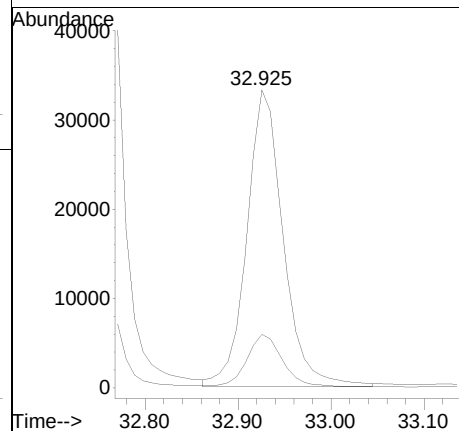
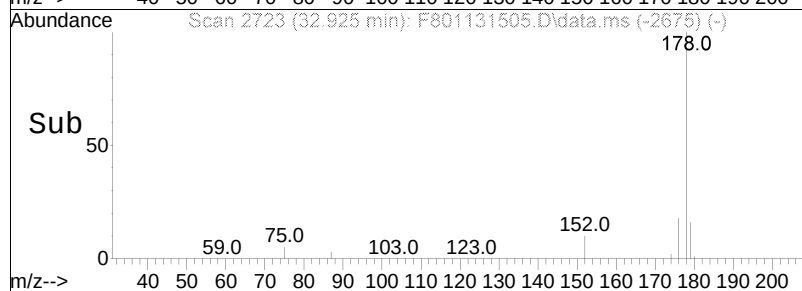
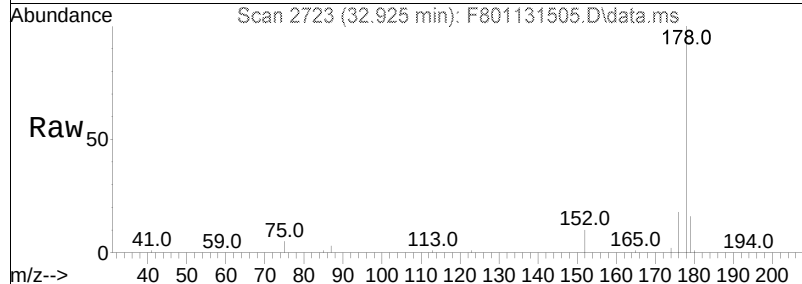
Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.3	12.5	23.1

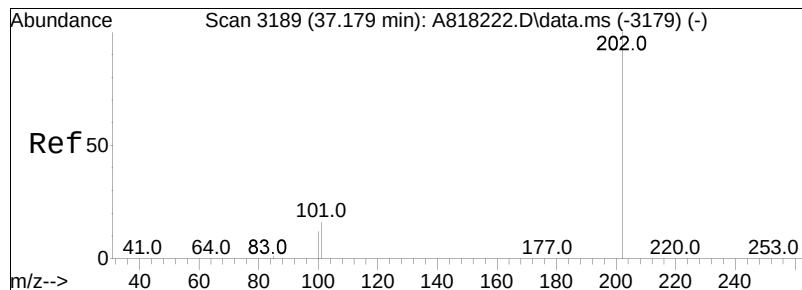




#55
 Anthracene
 Concen: 672.43 ng/mL M4
 RT: 32.925 min Scan# 2723
 Delta R.T. -0.064 min
 Lab File: F801131505.D
 Acq: 13 Jan 2015 9:03 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
176	17.5	12.8	23.8





#58

Fluoranthene

Concen: 574.68 ng/mL

RT: 37.508 min Scan# 3225

Delta R.T. -0.064 min

Lab File: F801131505.D

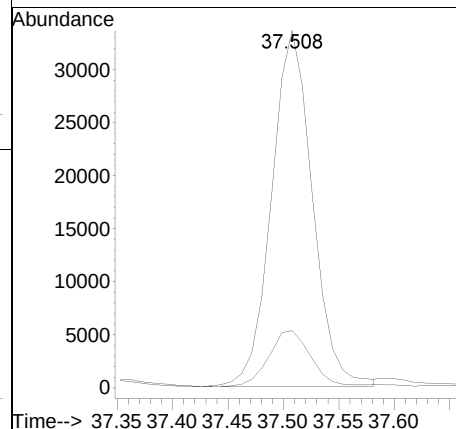
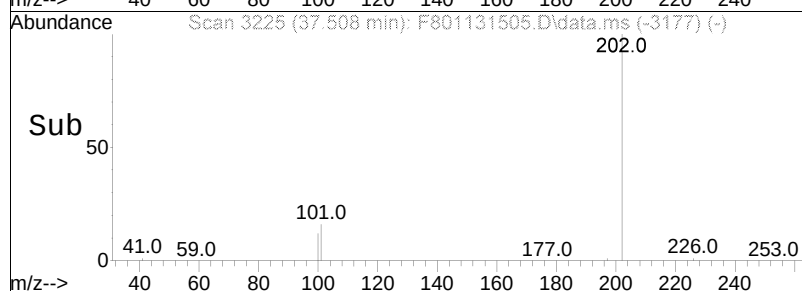
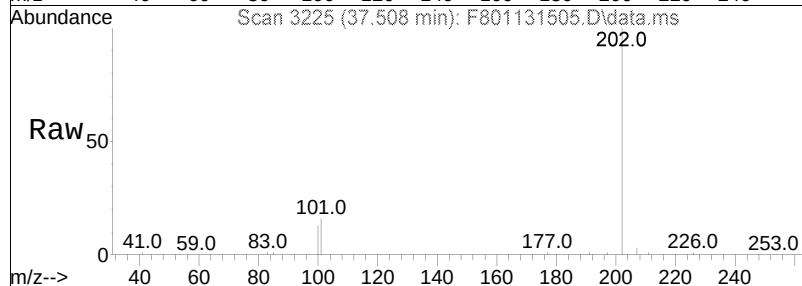
Acq: 13 Jan 2015 9:03 pm

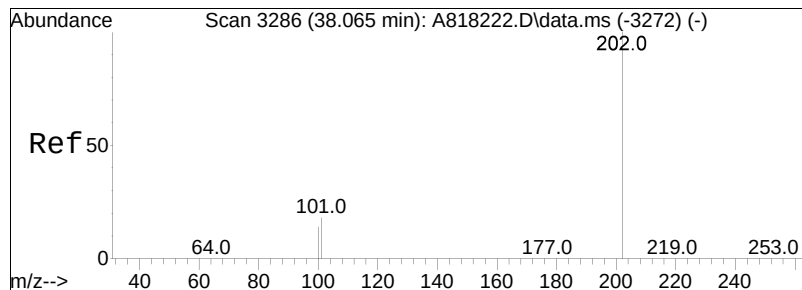
Tgt Ion: 202 Resp: 85855

Ion Ratio Lower Upper

202 100

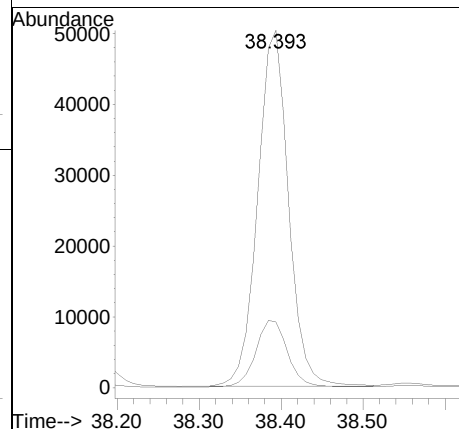
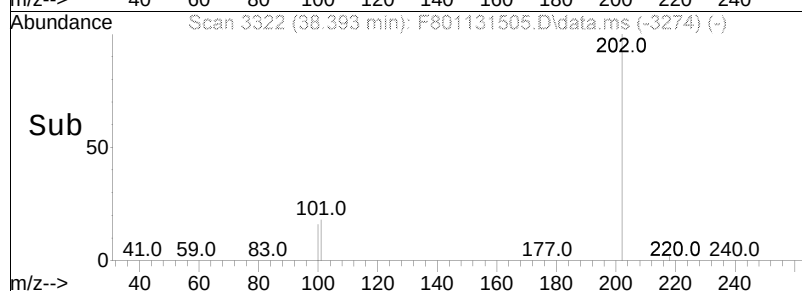
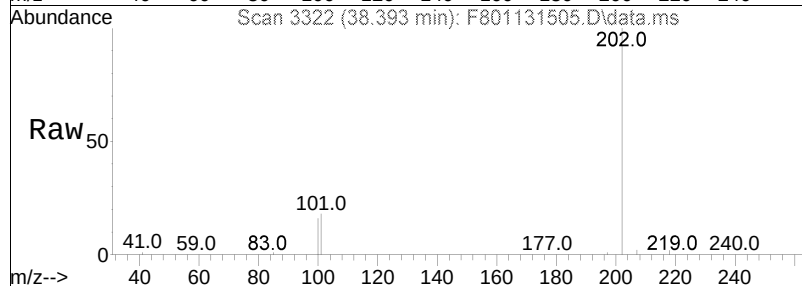
101 16.2 12.7 23.7





#60
 Pyrene
 Concen: 838.23 ng/mL
 RT: 38.393 min Scan# 3322
 Delta R.T. -0.064 min
 Lab File: F801131505.D
 Acq: 13 Jan 2015 9:03 pm

Tgt Ion	Ratio	Lower	Upper
202	100		
101	19.4	13.9	25.7



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN13\
 Data File : F801131506.D
 Acq On : 13 Jan 2015 10:28 pm
 Operator : PAH8:MS
 Sample : L1500432-03D, 32, 50
 Misc : WG755949, WG755041
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 15 11:56:00 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.803	164	39882	500.000	ng/mL	-0.05
74) Chrysene-d12	43.214	240	60253	500.000	ng/mL	-0.06
System Monitoring Compounds						
9) Naphthalene-d8	19.850	136	833	5.162	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.52%#		
42) Phenanthrene-d10	32.652	188	603	5.034	ng/mL	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.50%#		
83) Benzo[b]fluoranthene-d12	47.107	264	560	4.764	ng/mL	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.48%#		
88) Benzo[a]pyrene-d12	48.287	264	503	4.864	ng/mL	-0.07
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.49%#		
129) 5B(H)Cholane - Surr	43.817	217	111M4	4.988	ng/ml	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.50%#		
Target Compounds						
10) Naphthalene	19.923	128	1506189	8386.099	ng/mL	Qvalue 100
11) C1-Naphthalenes	22.615	142	654842M5	3646.003	ng/mL	
12) C2-Naphthalenes	25.444	156	240847M5	1340.978	ng/mL	
26) Acenaphthylene	26.192	152	249632M4	1485.391	ng/mL	
29) Fluorene	28.938	166	71252M4	648.176	ng/mL	
43) Phenanthrene	32.743	178	281584	1890.978	ng/mL	99
55) Anthracene	32.925	178	80698M4	591.538	ng/mL	
58) Fluoranthene	37.508	202	77649M4	513.977	ng/mL	
60) Pyrene	38.393	202	117622	743.420	ng/mL	100

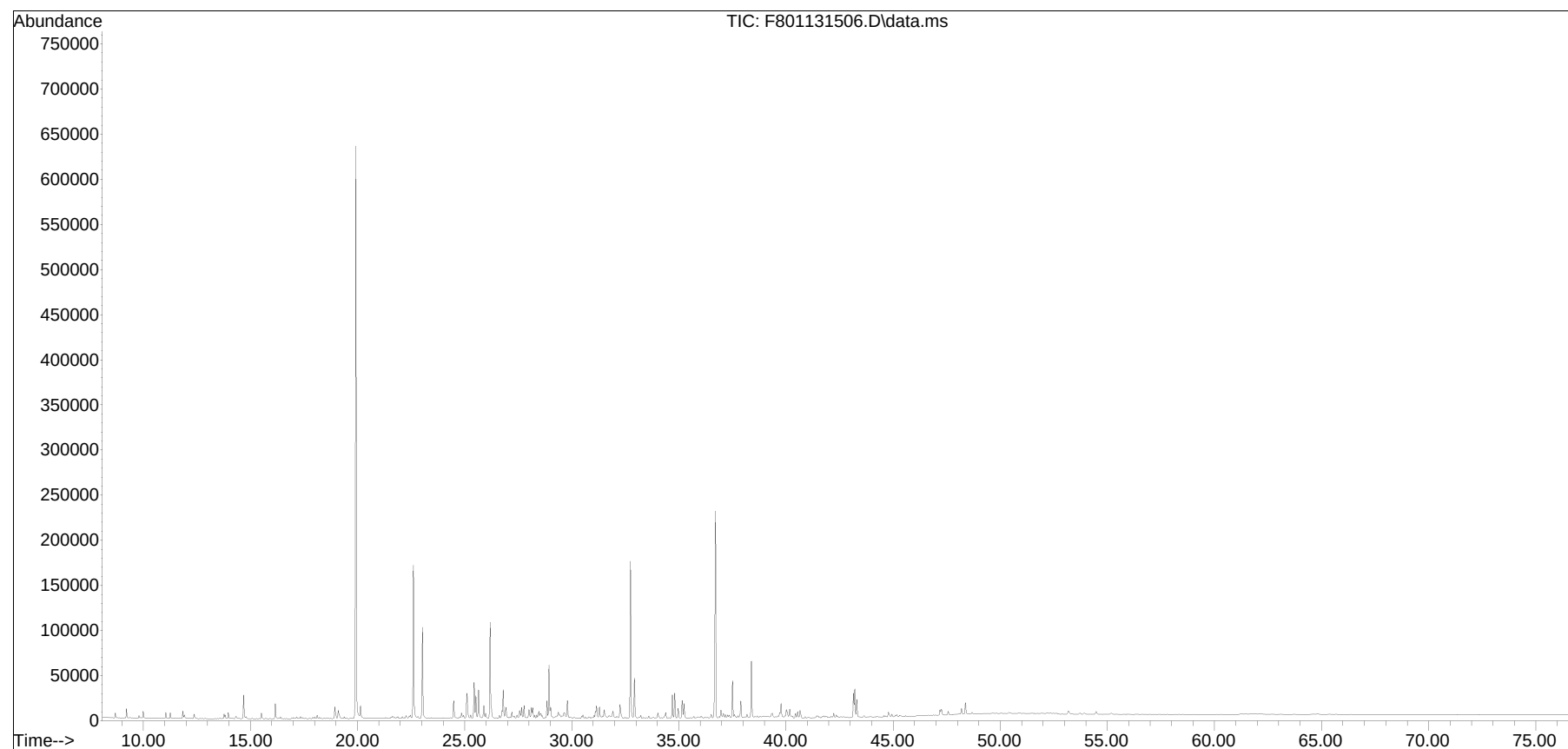
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN13\
Data File : F801131506.D
Acq On : 13 Jan 2015 10:28 pm
Operator : PAH8:MS
Sample : L1500432-03D,32,50
Misc : WG755949,WG755041
ALS Vial : 6 Sample Multiplier: 1

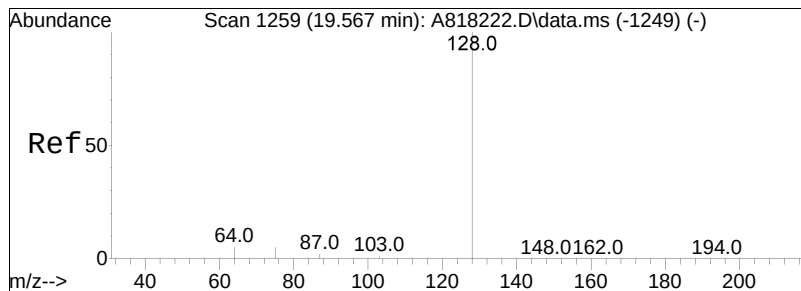
Quant Time: Jan 15 11:56:00 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 13 07:23:40 2015
Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO



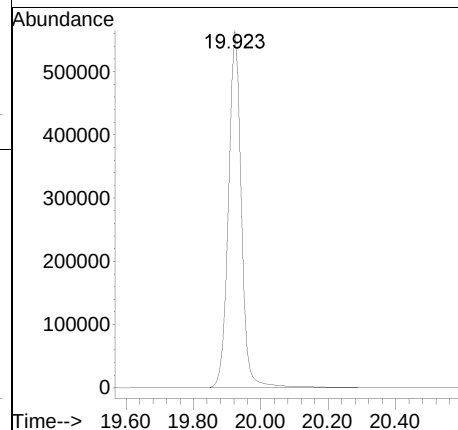
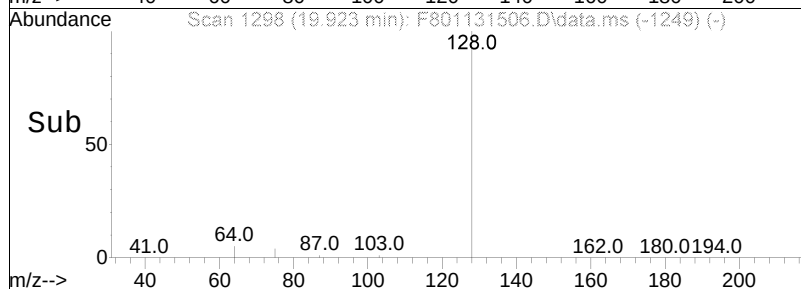
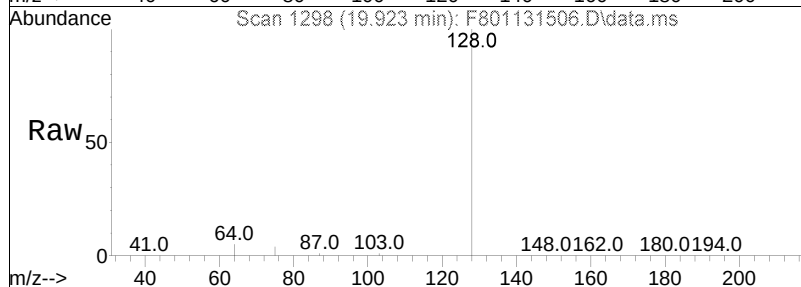
PAH8122314.M Thu Jan 15 12:15:09 2015

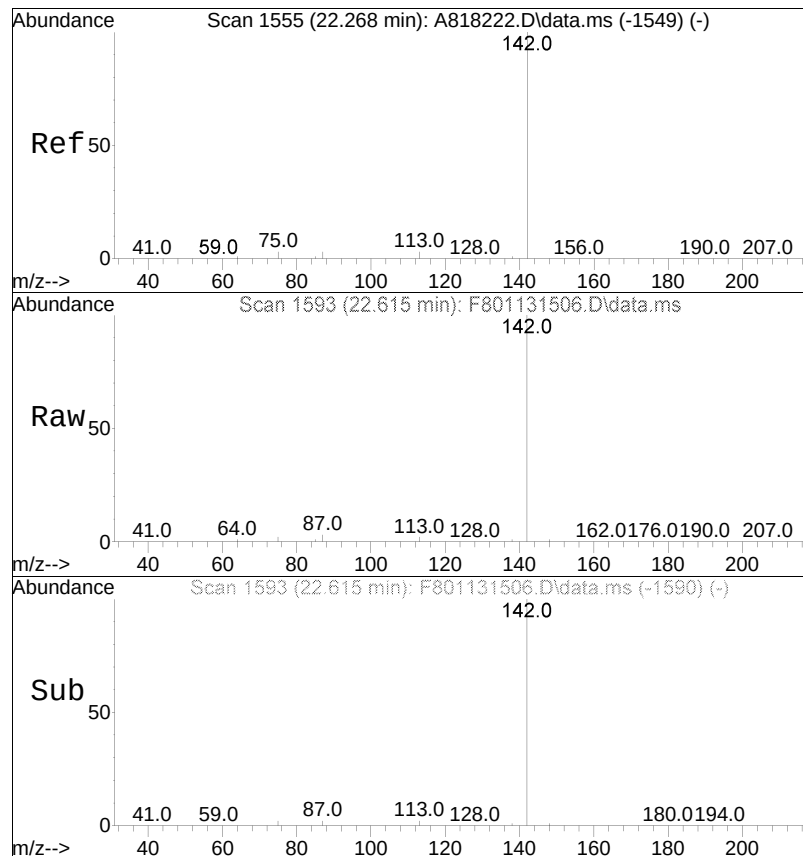
Page 2



#10
Naphthalene
Concen: 8386.10 ng/mL
RT: 19.923 min Scan# 1298
Delta R.T. -0.055 min
Lab File: F801131506.D
Acq: 13 Jan 2015 10:28 pm

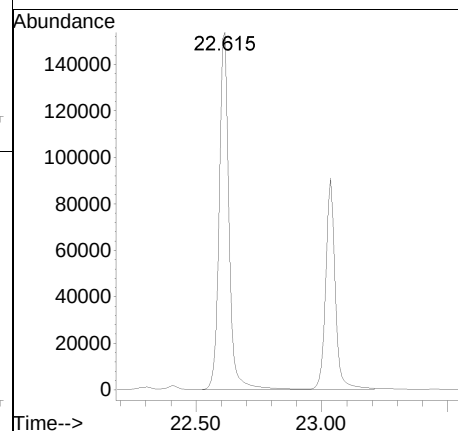
Tgt Ion:128 Resp: 1506189

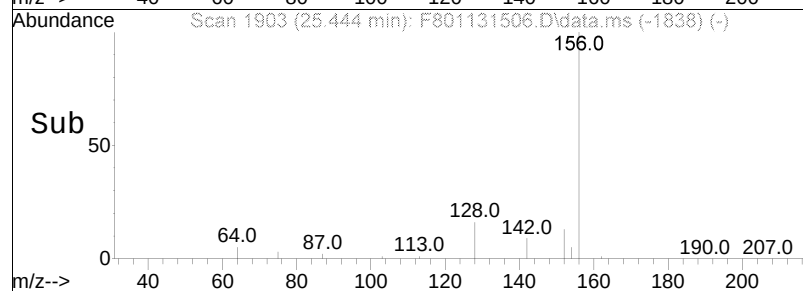
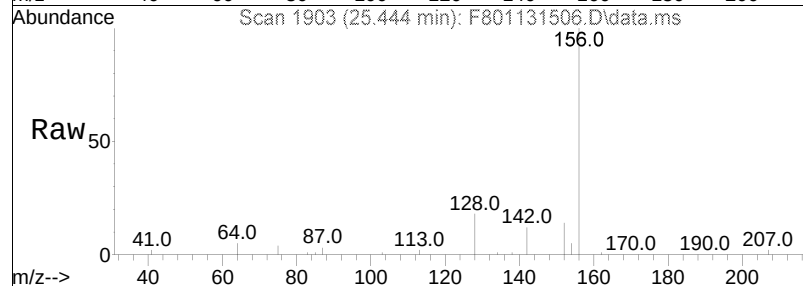
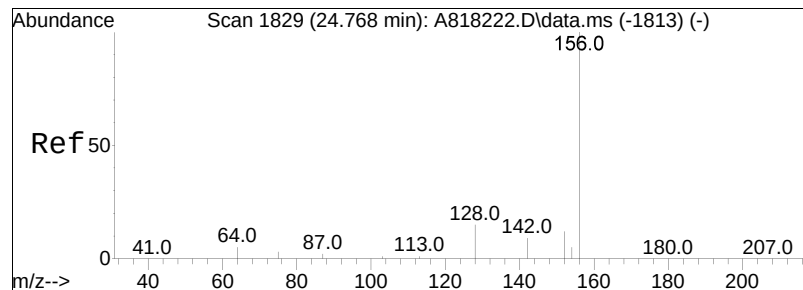




#11
 C1-Naphthalenes
 Concen: 3646.00 ng/mL M5
 RT: 22.615 min Scan# 1593
 Delta R.T. -0.055 min
 Lab File: F801131506.D
 Acq: 13 Jan 2015 10:28 pm

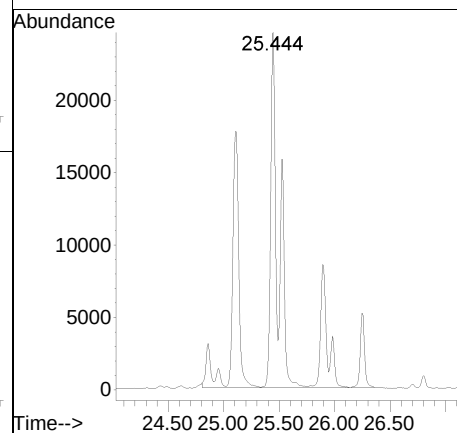
Tgt Ion:142 Resp: 654842

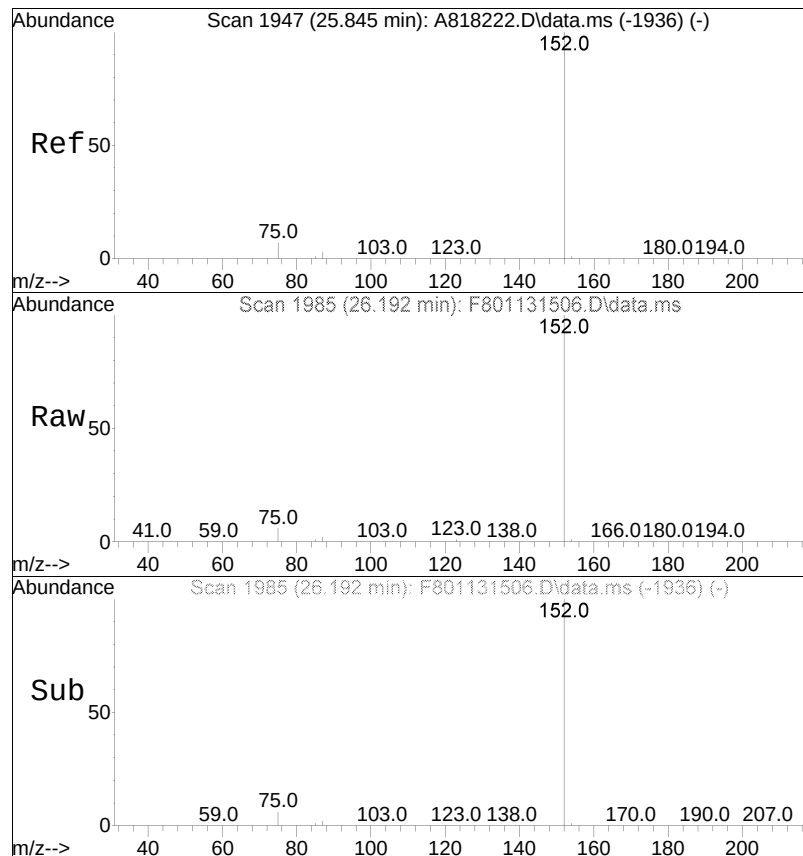




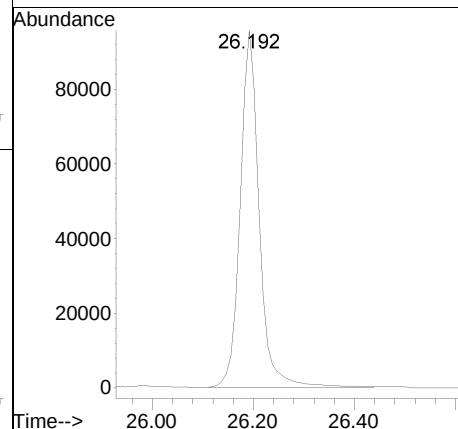
#12
C2-Naphthalenes
Concen: 1340.98 ng/mL M5
RT: 25.444 min Scan# 1903
Delta R.T. -0.065 min
Lab File: F801131506.D
Acq: 13 Jan 2015 10:28 pm

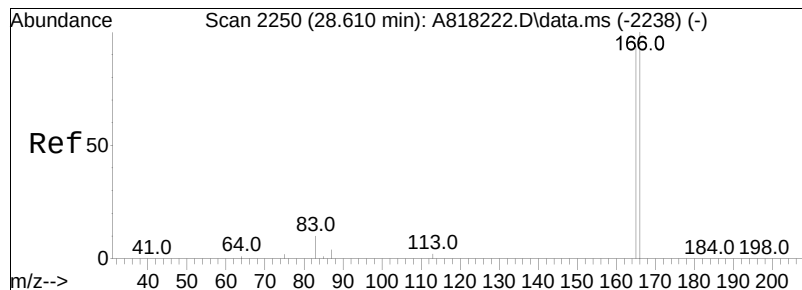
Tgt Ion:156 Resp: 240847





#26
 Acenaphthylene
 Concen: 1485.39 ng/mL M4
 RT: 26.192 min Scan# 1985
 Delta R.T. -0.055 min
 Lab File: F801131506.D
 Acq: 13 Jan 2015 10:28 pm
 Tgt Ion:152 Resp: 249632





#29

Fluorene

Concen: 648.18 ng/mL M4

RT: 28.938 min Scan# 2286

Delta R.T. -0.064 min

Lab File: F801131506.D

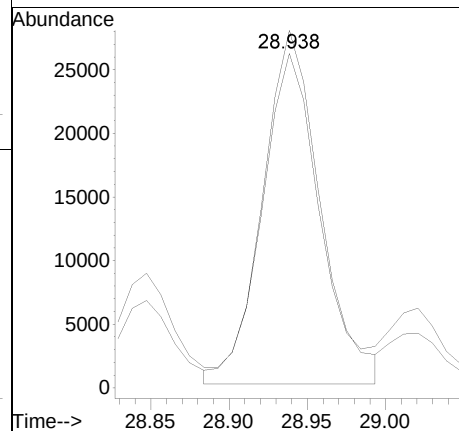
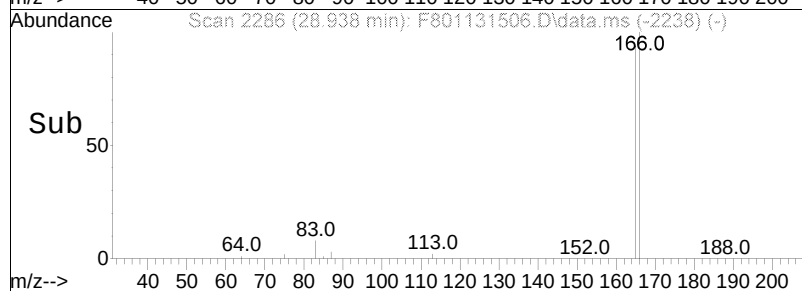
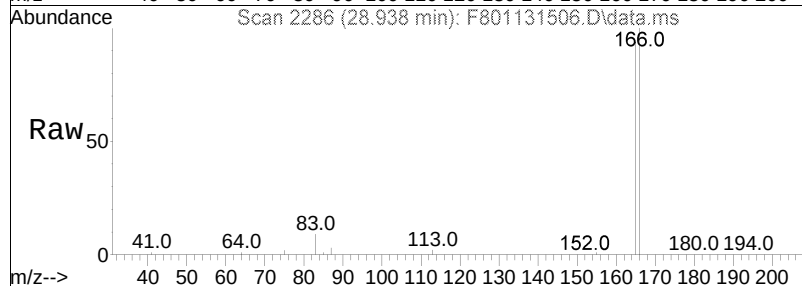
Acq: 13 Jan 2015 10:28 pm

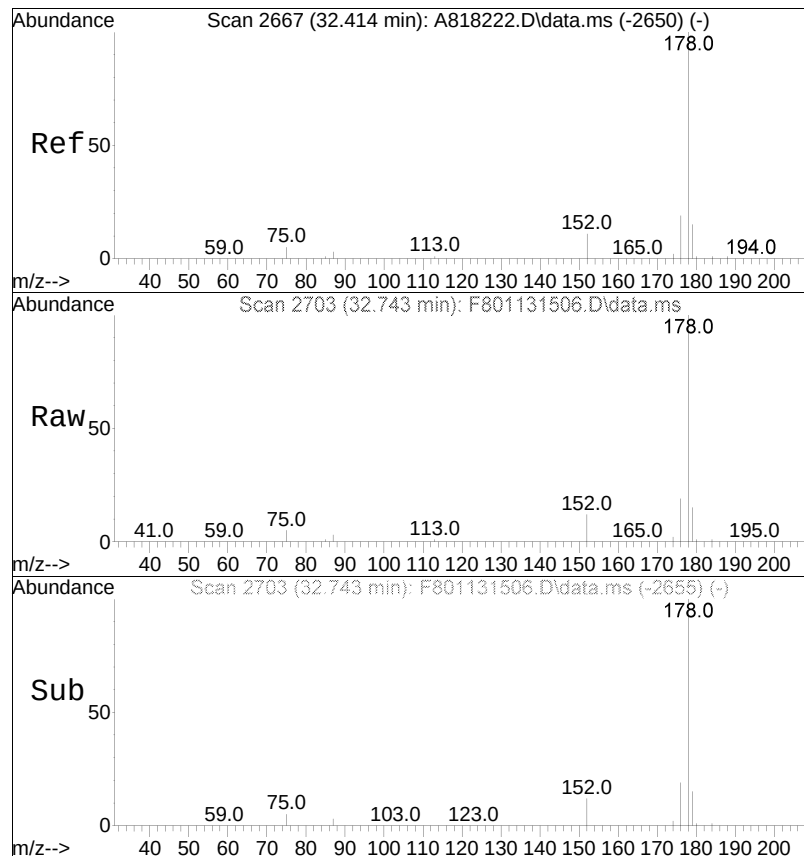
Tgt Ion:166 Resp: 71252

Ion Ratio Lower Upper

166 100

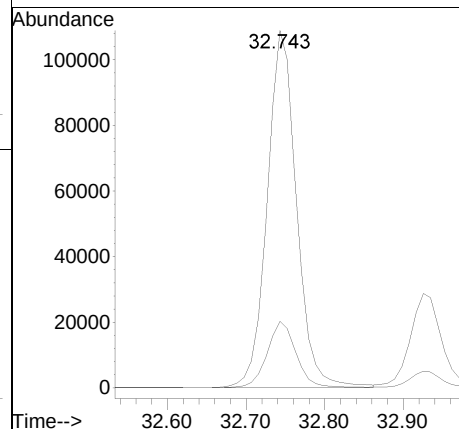
165 88.7 65.9 122.3

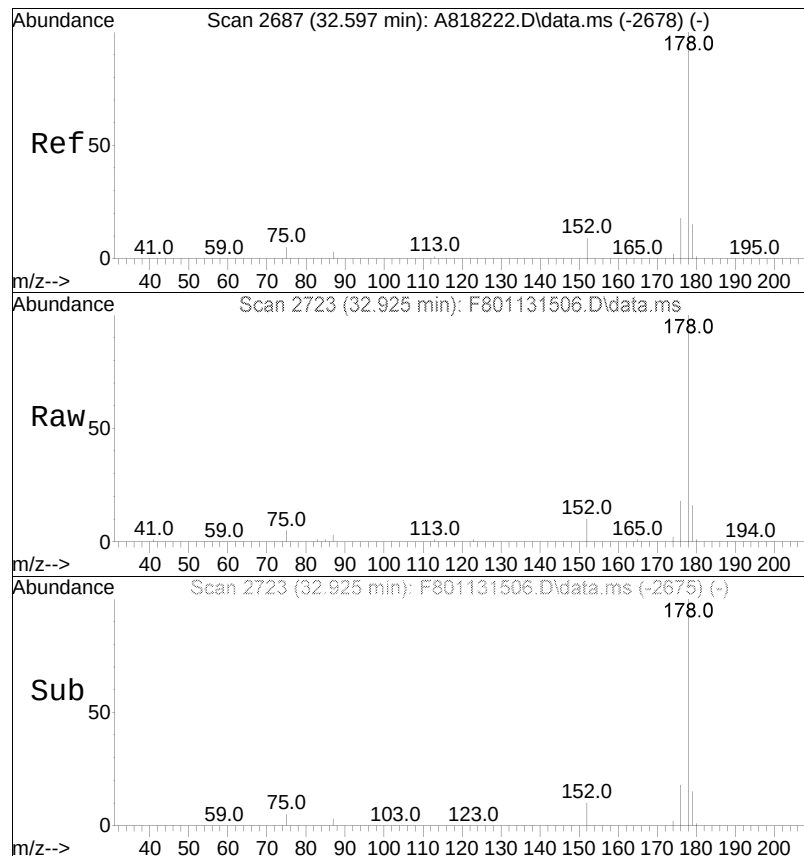




#43
 Phenanthrene
 Concen: 1890.98 ng/mL
 RT: 32.743 min Scan# 2703
 Delta R.T. -0.064 min
 Lab File: F801131506.D
 Acq: 13 Jan 2015 10:28 pm

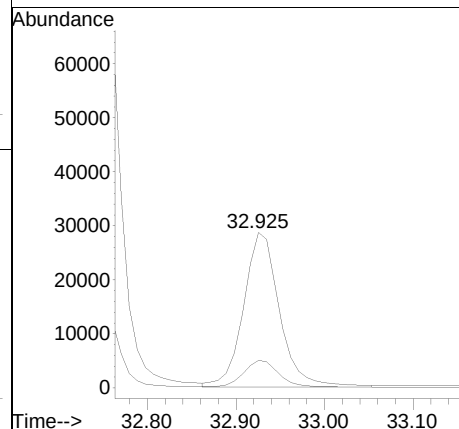
Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.3	12.5	23.1

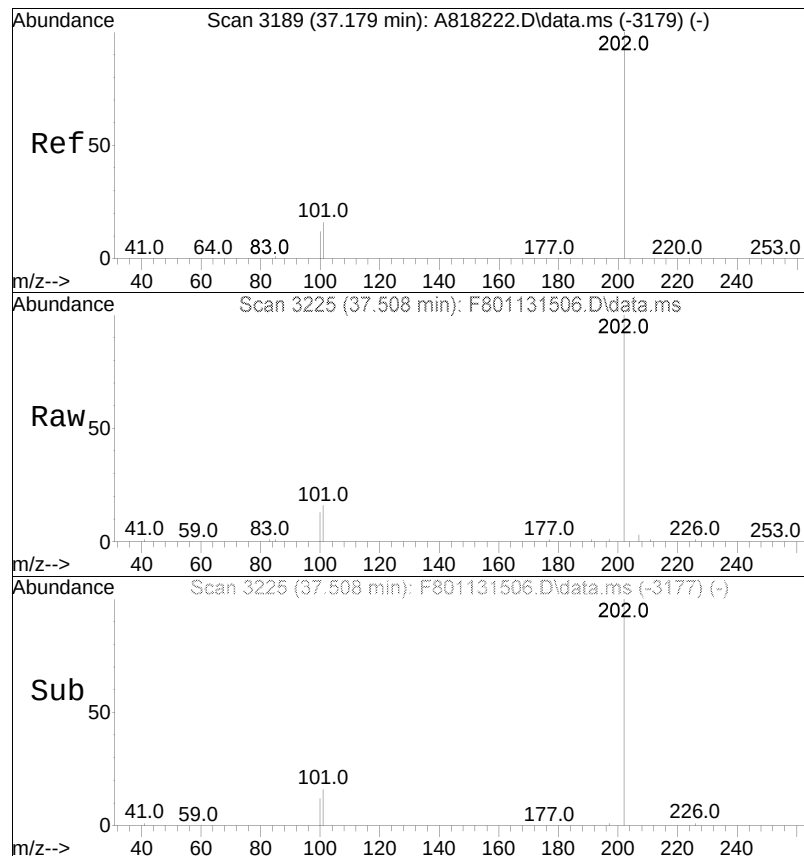




#55
 Anthracene
 Concen: 591.54 ng/mL M4
 RT: 32.925 min Scan# 2723
 Delta R.T. -0.064 min
 Lab File: F801131506.D
 Acq: 13 Jan 2015 10:28 pm

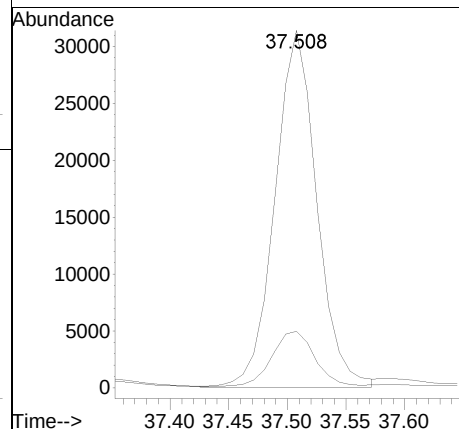
Tgt	Ion	Ratio	Lower	Upper
178	100			
176	17.5	12.8	23.8	

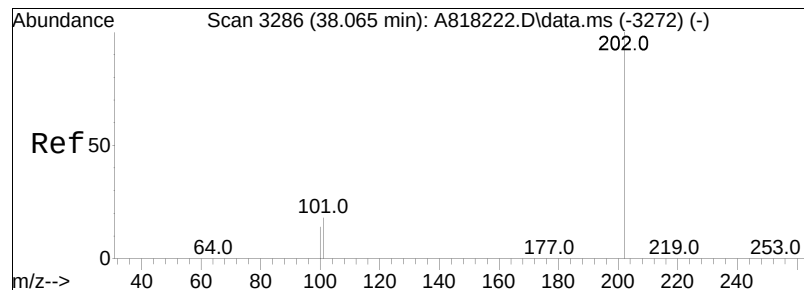




#58
 Fluoranthene
 Concen: 513.98 ng/mL M4
 RT: 37.508 min Scan# 3225
 Delta R.T. -0.064 min
 Lab File: F801131506.D
 Acq: 13 Jan 2015 10:28 pm

Tgt Ion	Ratio	Lower	Upper
202	100		
101	15.9	12.7	23.7





#60

Pyrene

Concen: 743.42 ng/mL

RT: 38.393 min Scan# 3322

Delta R.T. -0.064 min

Lab File: F801131506.D

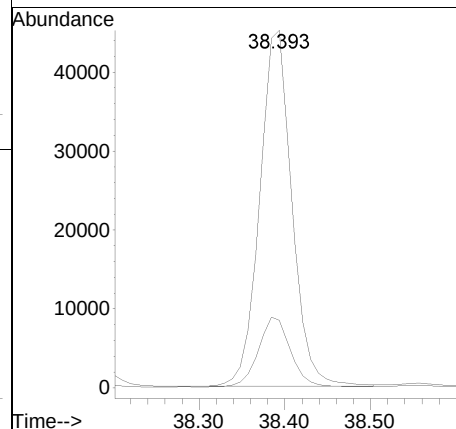
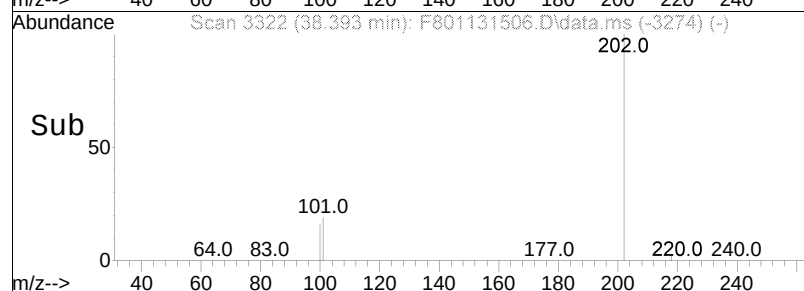
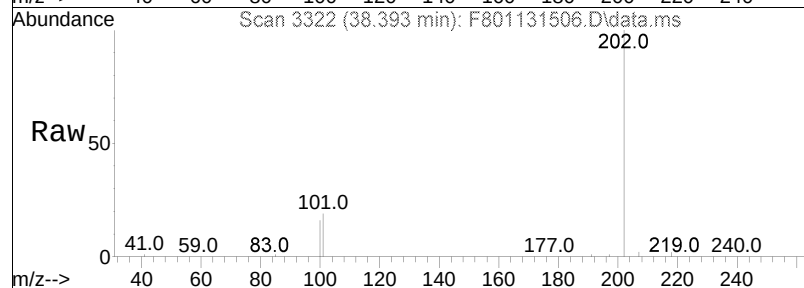
Acq: 13 Jan 2015 10:28 pm

Tgt Ion: 202 Resp: 117622

Ion Ratio Lower Upper

202 100

101 19.6 13.9 25.7



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN13\
 Data File : F801131507.D
 Acq On : 13 Jan 2015 11:55 pm
 Operator : PAH8:MS
 Sample : L1500432-04D, 32, 50
 Misc : WG755949, WG755041
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 15 11:56:07 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.804	164	38976	500.000	ng/mL	-0.05
74) Chrysene-d12	43.214	240	58820	500.000	ng/mL	-0.06
System Monitoring Compounds						
9) Naphthalene-d8	19.850	136	858	5.441	ng/mL	-0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.54%#		
42) Phenanthrene-d10	32.652	188	567	4.844	ng/mL	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.48%#		
83) Benzo[b]fluoranthene-d12	47.107	264	544	4.741	ng/mL	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.47%#		
88) Benzo[a]pyrene-d12	48.287	264	446	4.418	ng/mL	-0.07
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.44%#		
129) 5B(H)Cholane - Surr	43.817	217	95M3	4.373	ng/ml	-0.06
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.44%#		
Target Compounds						
						Qvalue
10) Naphthalene	19.923	128	2032377	11578.824	ng/mL	100
11) C1-Naphthalenes	22.606	142	822693M5	4687.033	ng/mL	
12) C2-Naphthalenes	25.444	156	241880M5	1378.035	ng/mL	
26) Acenaphthylene	26.192	152	327213M4	1992.282	ng/mL	
29) Fluorene	28.939	166	90297M4	840.521	ng/mL	
43) Phenanthrene	32.743	178	313725	2155.794	ng/mL	99
55) Anthracene	32.926	178	90692M4	680.249	ng/mL	
58) Fluoranthene	37.508	202	88720M4	600.909	ng/mL	
60) Pyrene	38.384	202	131127	848.042	ng/mL	100

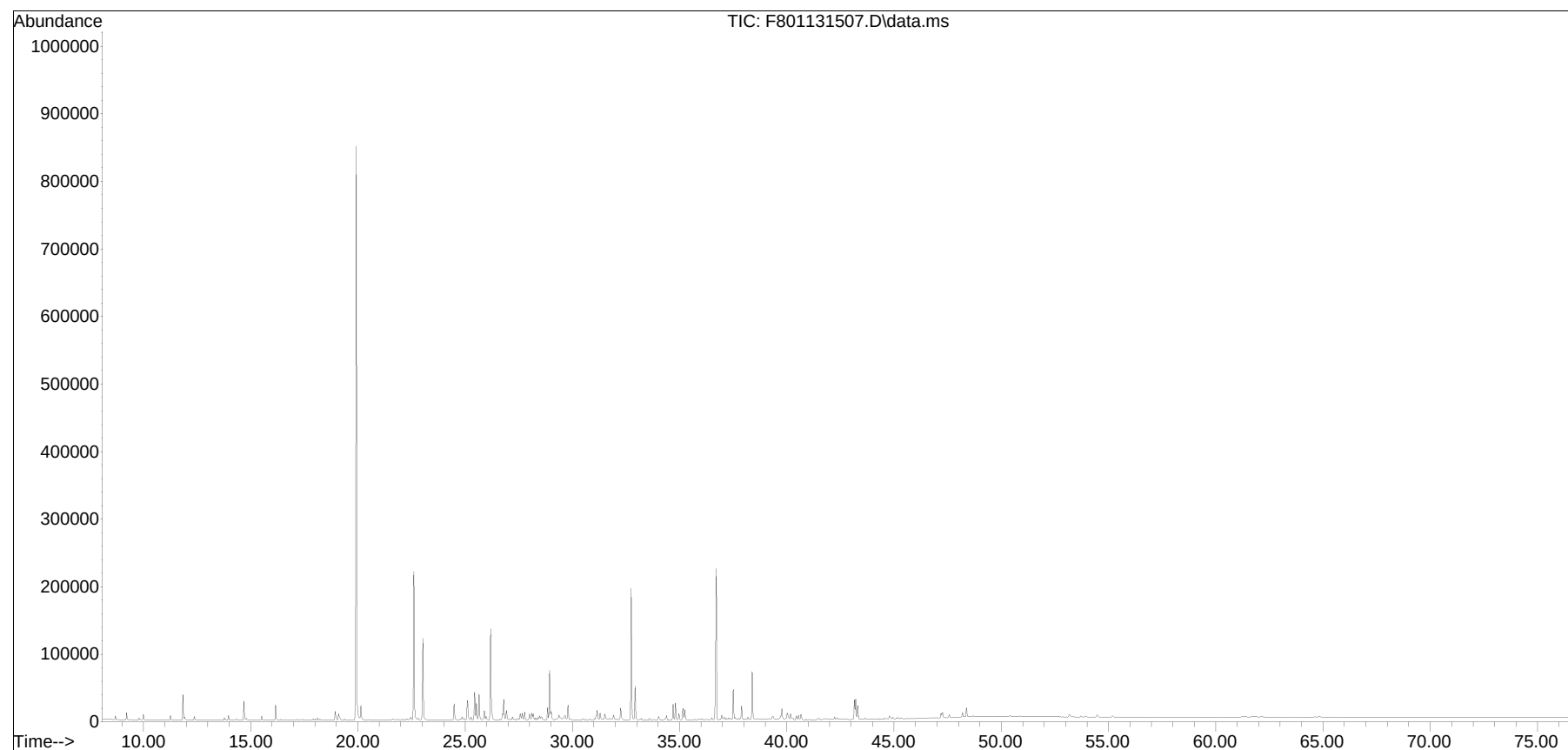
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN13\
Data File : F801131507.D
Acq On : 13 Jan 2015 11:55 pm
Operator : PAH8:MS
Sample : L1500432-04D,32,50
Misc : WG755949,WG755041
ALS Vial : 7 Sample Multiplier: 1

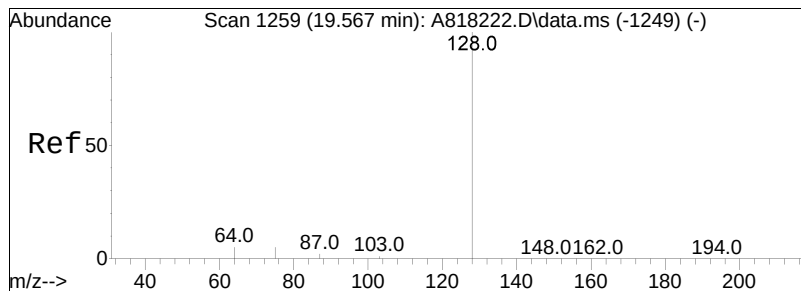
Quant Time: Jan 15 11:56:07 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 13 07:23:40 2015
Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO



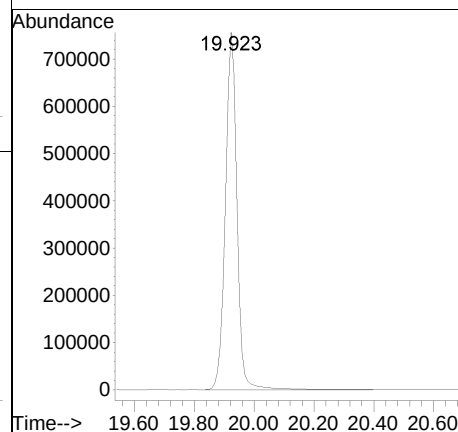
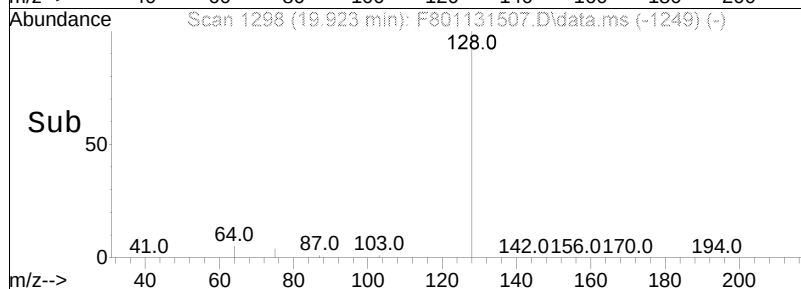
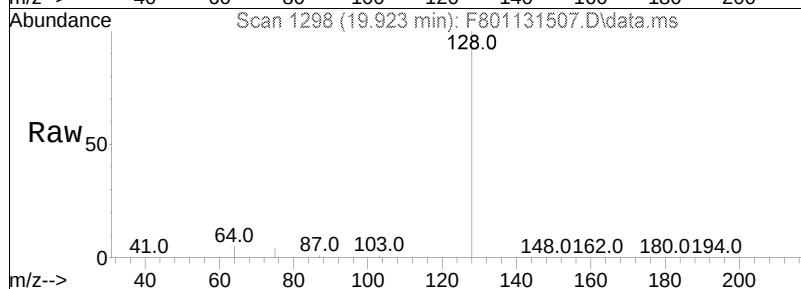
PAH8122314.M Thu Jan 15 12:15:34 2015

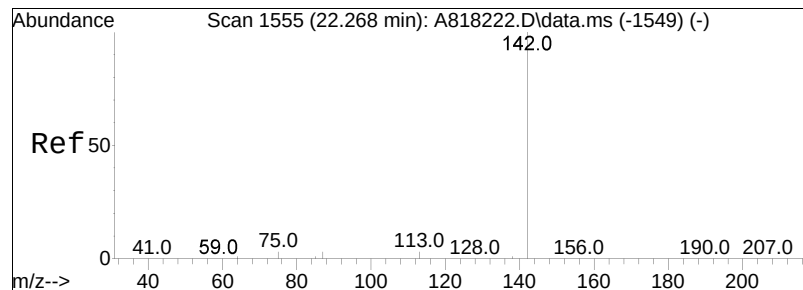
Page 2



#10
 Naphthalene
 Concen: 11578.82 ng/mL
 RT: 19.923 min Scan# 1298
 Delta R.T. -0.055 min
 Lab File: F801131507.D
 Acq: 13 Jan 2015 11:55 pm

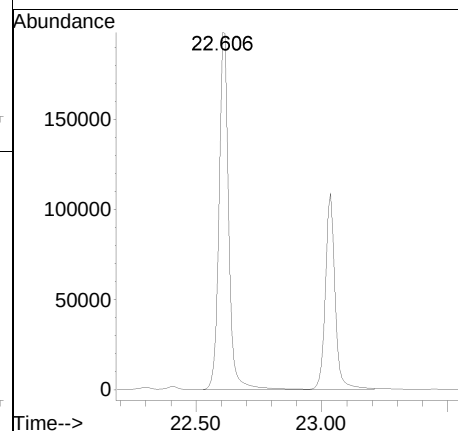
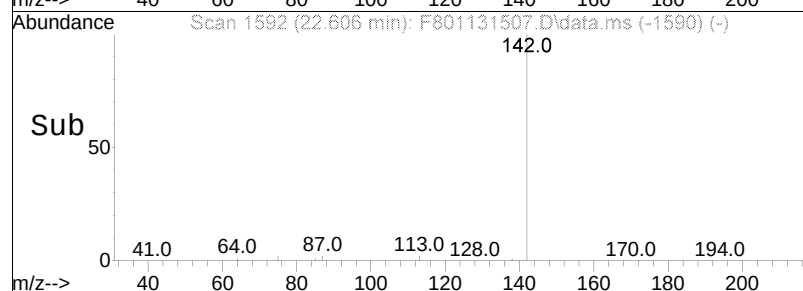
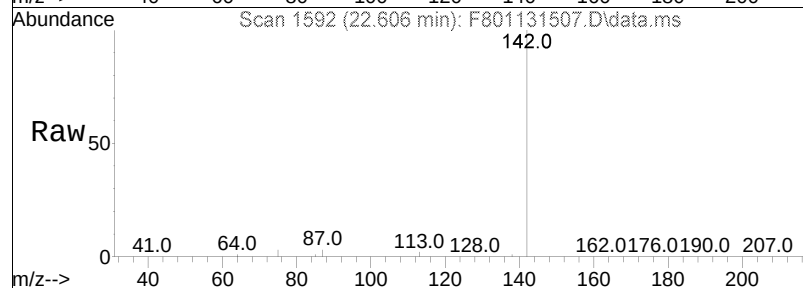
Tgt Ion:128 Resp: 2032377

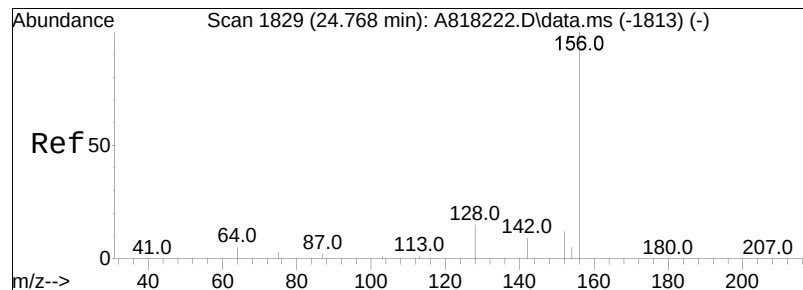




#11
 C1-Naphthalenes
 Concen: 4687.03 ng/mL M5
 RT: 22.606 min Scan# 1592
 Delta R.T. -0.064 min
 Lab File: F801131507.D
 Acq: 13 Jan 2015 11:55 pm

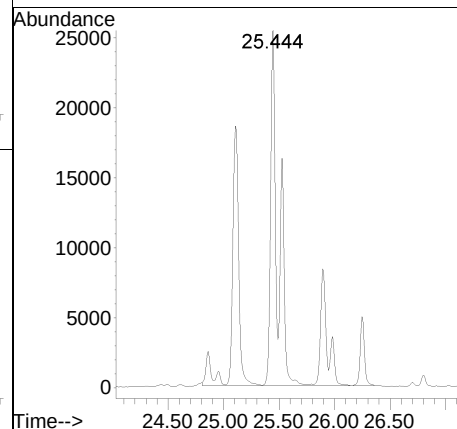
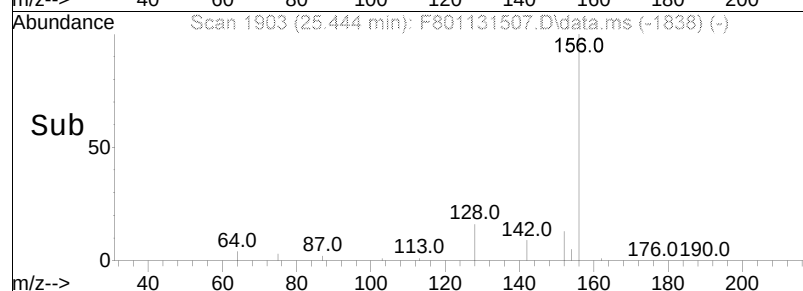
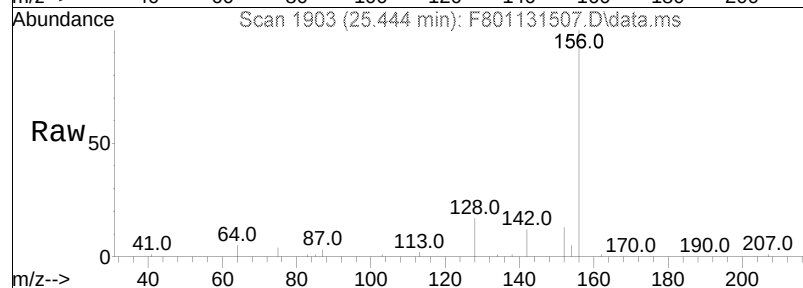
Tgt Ion:142 Resp: 822693

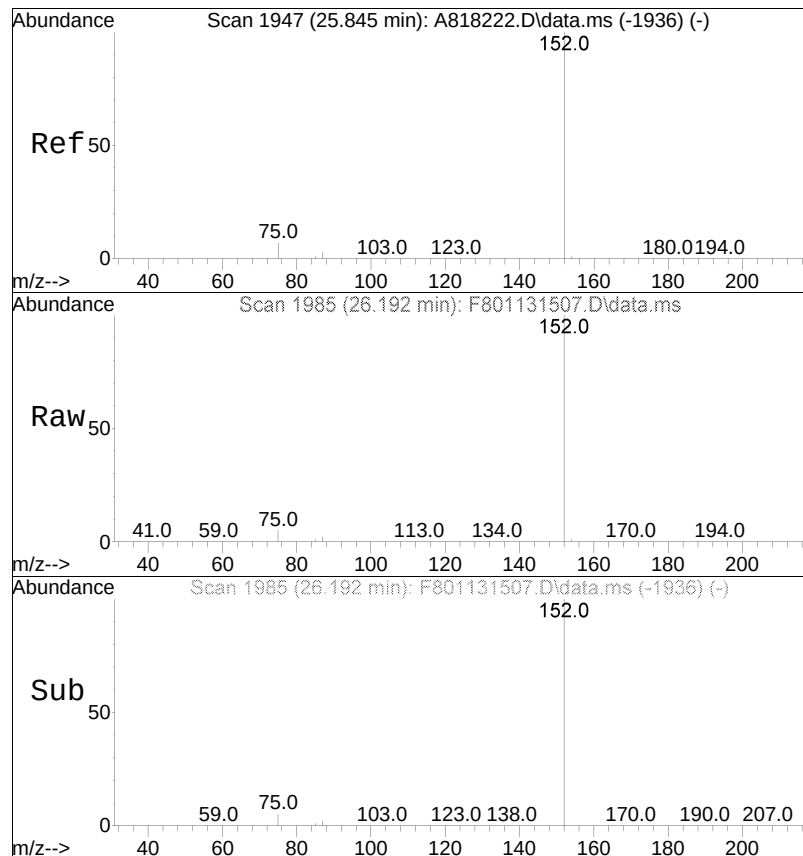




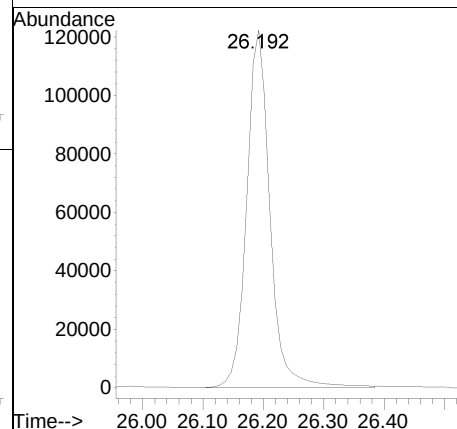
#12
C2-Naphthalenes
Concen: 1378.03 ng/mL M5
RT: 25.444 min Scan# 1903
Delta R.T. -0.065 min
Lab File: F801131507.D
Acq: 13 Jan 2015 11:55 pm

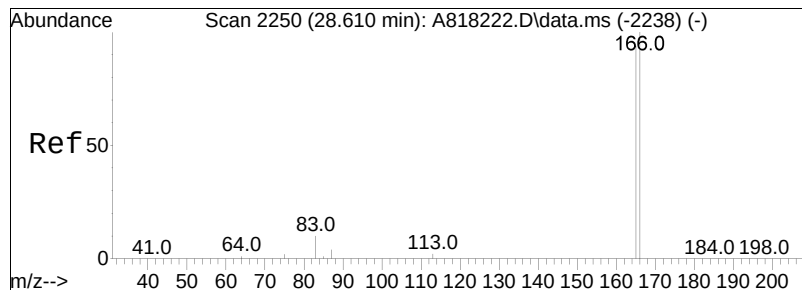
Tgt Ion:156 Resp: 241880





#26
Acenaphthylene
Concen: 1992.28 ng/mL M4
RT: 26.192 min Scan# 1985
Delta R.T. -0.055 min
Lab File: F801131507.D
Acq: 13 Jan 2015 11:55 pm
Tgt Ion:152 Resp: 327213





#29

Fluorene

Concen: 840.52 ng/mL M4

RT: 28.939 min Scan# 2286

Delta R.T. -0.064 min

Lab File: F801131507.D

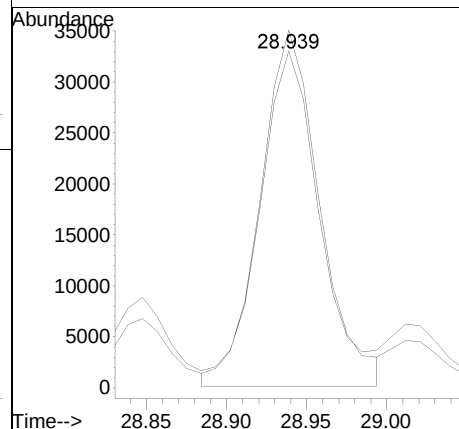
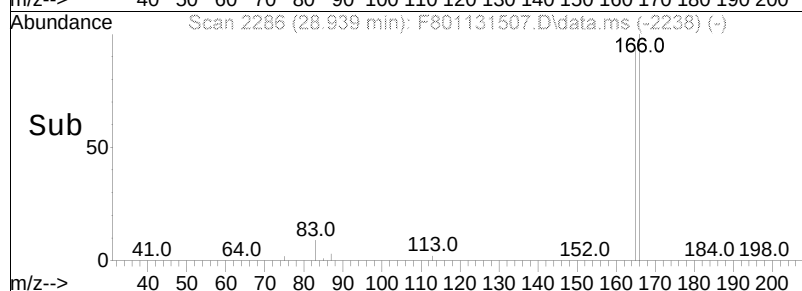
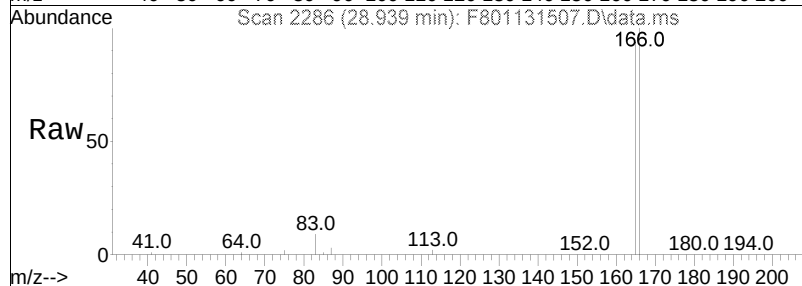
Acq: 13 Jan 2015 11:55 pm

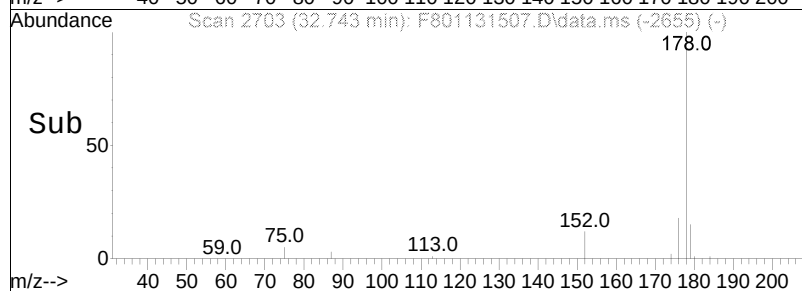
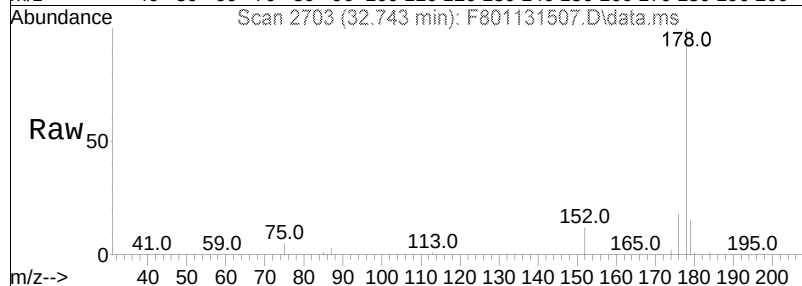
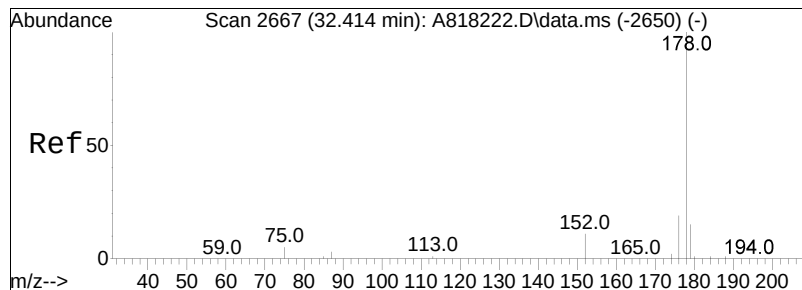
Tgt Ion:166 Resp: 90297

Ion Ratio Lower Upper

166 100

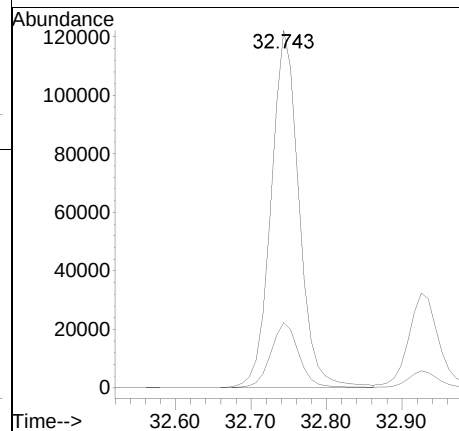
165 89.6 65.9 122.3

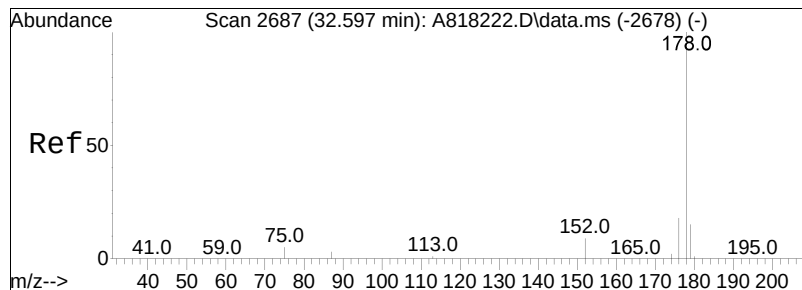




#43
 Phenanthrene
 Concen: 2155.79 ng/mL
 RT: 32.743 min Scan# 2703
 Delta R.T. -0.064 min
 Lab File: F801131507.D
 Acq: 13 Jan 2015 11:55 pm

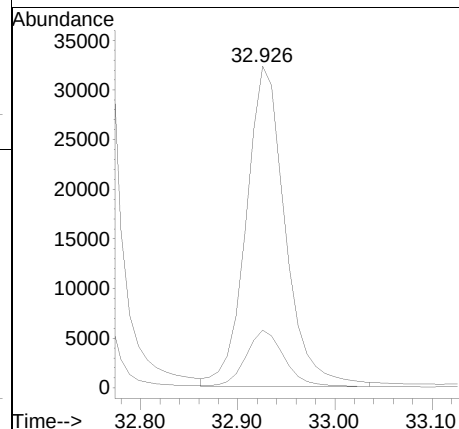
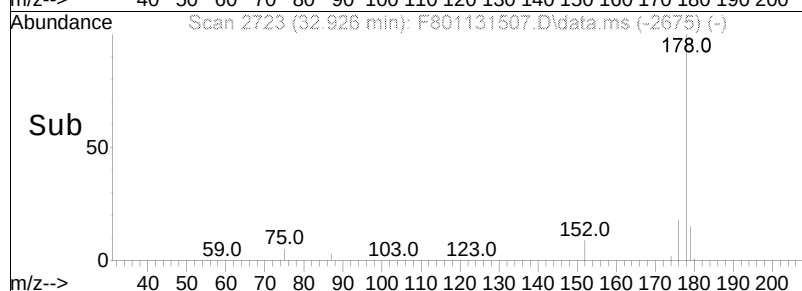
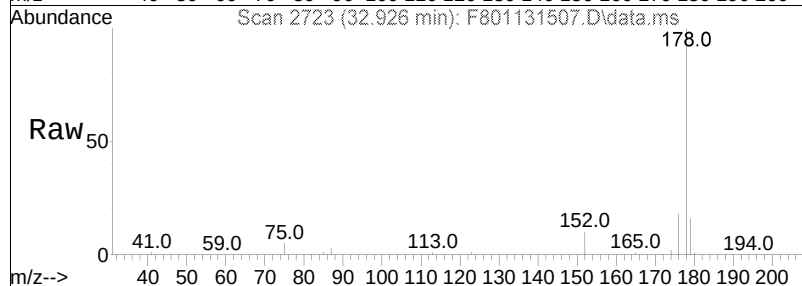
Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.3	12.5	23.1

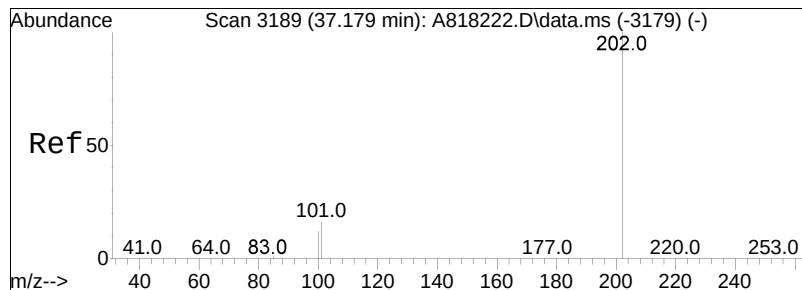




#55
 Anthracene
 Concen: 680.25 ng/mL M4
 RT: 32.926 min Scan# 2723
 Delta R.T. -0.064 min
 Lab File: F801131507.D
 Acq: 13 Jan 2015 11:55 pm

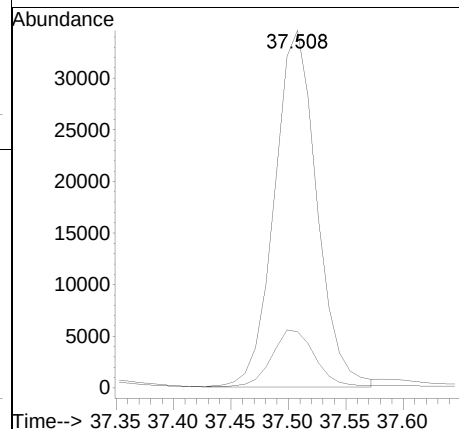
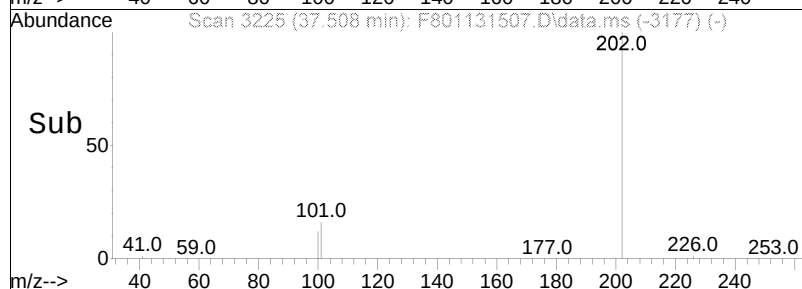
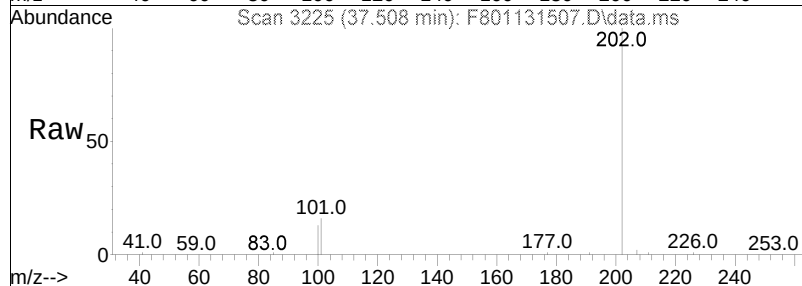
Tgt	Ion	Ratio	Lower	Upper
178	100			
176	17.7	12.8	23.8	

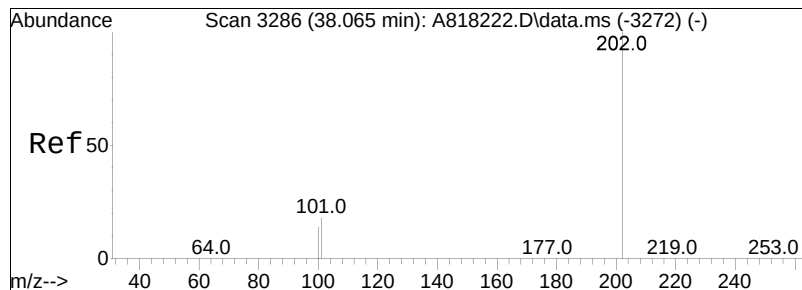




#58
 Fluoranthene
 Concen: 600.91 ng/mL M4
 RT: 37.508 min Scan# 3225
 Delta R.T. -0.064 min
 Lab File: F801131507.D
 Acq: 13 Jan 2015 11:55 pm

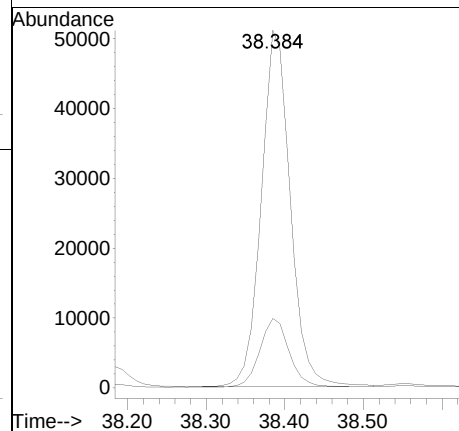
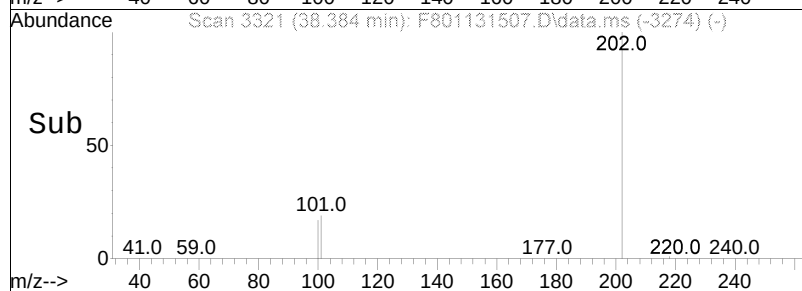
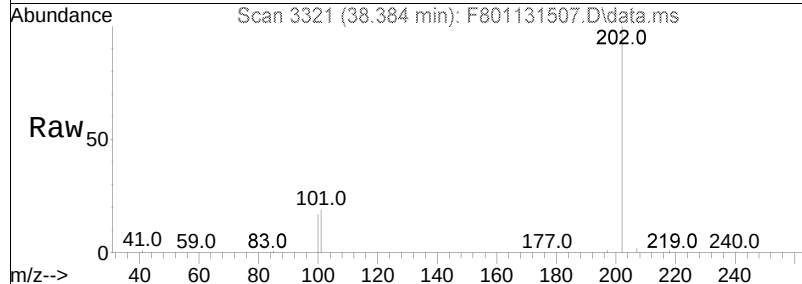
Tgt Ion	Ratio	Lower	Upper
202	100		
101	16.3	12.7	23.7





#60
 Pyrene
 Concen: 848.04 ng/mL
 RT: 38.384 min Scan# 3321
 Delta R.T. -0.073 min
 Lab File: F801131507.D
 Acq: 13 Jan 2015 11:55 pm

Tgt Ion	Ratio	Lower	Upper
202	100		
101	19.7	13.9	25.7



Semivolatiles Standards Data

Initial Calibration

6B
SEMIVOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1500432

Instrument ID: PAH8

Calibration Date(s): 12/23/14

12/23/14

Calibration Times: 14:50

23:29

Calibration Files

10 =F812221409.D 25 =F812221403.D 100 =F812221404.D 500 =F812221405.D 5000=F812221406.D
1e4 =F812221407.D 2e4 =F812221408.D

Compound	10	25	100	500	5000	1e4	2e4	Avg	%RSD
1) i Acenaphthene-d10	-----ISTD-----								
3) A1 trans-Decalin	0.470	0.454	0.478	0.433	0.430	0.445	0.418	0.447	4.87
4) t cis-Decalin	0.353	0.353	0.341	0.331	0.329	0.340	0.320	0.338	3.66
9) s Naphthalene-d8	2.225	2.215	2.246	2.100	1.900	1.847	1.629	2.023	11.69
10) A1 Naphthalene	2.463	2.543	2.619	2.481	2.022	1.926	1.708	2.252	15.93
16) t 2-Methylnaphthalene	1.562	1.480	1.532	1.499	1.424	1.384	1.259	1.449	7.14
17) t 1-Methylnaphthalene	1.486	1.483	1.473	1.448	1.311	1.275	1.163	1.377	9.29
18) A1 Benzothiophene	2.131	2.083	2.109	2.014	1.712	1.657	1.490	1.885	13.77
23) t Biphenyl	1.855	1.880	1.906	1.844	1.655	1.609	1.453	1.743	9.87
24) t 2,6-Dimethylnaphthalene	1.295	1.247	1.285	1.259	1.174	1.150	1.054	1.209	7.23
25) t Dibenzofuran	1.904	1.909	1.960	1.917	1.664	1.624	1.475	1.779	10.61
26) t Acenaphthylene	2.191	2.175	2.239	2.262	2.051	2.006	1.824	2.107	7.42
27) t Acenaphthene	1.377	1.434	1.413	1.382	1.201	1.160	1.045	1.287	11.72
28) t 2,3,5-Trimethylnaphthalene	1.076	1.055	1.059	1.052	0.963	0.958	0.879	1.006	7.29
29) A1 Fluorene	1.432	1.385	1.497	1.480	1.326	1.318	1.208	1.378	7.43
33) A1 Dibenzothiophene	2.009	1.958	2.043	2.052	1.868	1.865	1.688	1.926	6.74
42) s Phenanthrene-d10	1.607	1.625	1.654	1.534	1.390	1.402	1.300	1.502	9.17
43) A1 Phenanthrene	2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60
54) t Retene	0.427	0.409	0.428	0.449	0.455	0.474	0.438	0.440	4.86
55) t Anthracene	1.810	1.827	1.950	1.942	1.544	1.553	1.346	1.710	13.50
56) t Carbazole	1.909	1.805	1.845	1.955	1.793	1.822	1.673	1.829	4.92
57) t 1-Methylphenanthrene	1.250	1.330	1.324	1.369	1.311	1.336	1.224	1.306	3.92
58) A1 Fluoranthene	1.836	1.887	1.942	2.025	1.902	1.924	1.742	1.894	4.66
59) t Benzo(b)fluorene	1.101	1.079	1.091	1.159	1.095	1.119	1.035	1.097	3.45
60) A1 Pyrene	1.869	1.942	1.947	2.220	2.017	2.035	1.855	1.984	6.27
66) A1 Naphthobenzothiophene	1.714	1.706	1.766	1.813	1.765	1.807	1.646	1.745	3.43
67) A2 Naphthobenzothiophene-2,1	1.714	1.706	1.766	1.813	1.765	1.807	1.646	1.745	3.43
74) i Chrysene-d12	-----ISTD-----								
75) t Benz[a]anthracene	1.140	1.094	1.135	1.144	1.200	1.209	1.122	1.149	3.59
76) A1 Chrysene	1.100	1.102	1.117	1.137	1.099	1.103	1.040	1.100	2.69
77) A2 Chrysene/Triphenylene	1.100	1.102	1.117	1.137	1.099	1.103	1.040	1.100	2.69
83) s Benzo[b]fluoranthene-d12	0.940	0.953	0.949	0.918	1.020	1.050	0.997	0.975	4.89
84) t Benzo[b]fluoranthene	1.274	1.232	1.222	1.221	1.229	1.230	1.184	1.227	2.14
85) A1 Benzo[j]+[k]fluoranthene	1.242	1.270	1.268	1.204	1.176	1.200	1.100	1.209	4.93
87) t Benzo[e]pyrene	1.236	1.176	1.211	1.227	1.292	1.313	1.233	1.241	3.78
88) s Benzo[a]pyrene-d12	0.858	0.878	0.876	0.826	0.853	0.878	0.838	0.858	2.42
89) t Benzo[a]pyrene	1.141	1.130	1.141	1.174	1.147	1.152	1.058	1.135	3.20
90) t Perylene	1.212	1.190	1.195	1.160	1.209	1.234	1.141	1.192	2.67
91) t Indeno[1,2,3-cd]pyrene	1.600	1.452	1.462	1.368	1.466	1.438	1.377	1.452	5.26
92) t Dibenz[ah]+[ac]anthracene	1.367	1.191	1.240	1.235	1.213	1.208	1.142	1.228	5.65
93) t Benzo[g,h,i]perylene	1.412	1.393	1.342	1.322	1.413	1.431	1.331	1.378	3.26
94) A1 Hopane (T19)	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
95) A2 17a(H),21B(H)-hopane - C3	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62

6B
SEMIVOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1500432

Instrument ID: PAH8

Calibration Date(s): 12/23/14 12/23/14

Calibration Times: 14:50 23:29

Compound	10	25	100	500	5000	1e4	2e4	Avg	%RSD
129) SA1 5B(H)Cholane - Surr	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67

FORM VI-A2-ALKPAHBIOM

Response Factor Report PAH8

Method Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Method File : PAH8122314.M
 Title : Decalins & Alkylated PAH's
 Last Update : Wed Dec 24 12:33:02 2014
 Response Via : Initial Calibration

Calibration Files

10 =F812221409.D 25 =f812221403.D 100 =F812221404.D 500 =F812221405.D 5000=F812221406.D
 1e4 =F812221407.D 2e4 =F812221408.D

Compound			10	25	100	500	5000	1e4	2e4	Avg	%RSD

1) i	Acenaphthene-d10		-----ISTD-----								
3) A1	trans-Decalin		0.470	0.454	0.478	0.433	0.430	0.445	0.418	0.447	4.87
4) t	cis-Decalin		0.353	0.353	0.341	0.331	0.329	0.340	0.320	0.338	3.66
9) s	Naphthalene-d8		2.225	2.215	2.246	2.100	1.900	1.847	1.629	2.023	11.69
10) A1	Naphthalene		2.463	2.543	2.619	2.481	2.022	1.926	1.708	2.252	15.93
16) t	2-Methylnaphth...		1.562	1.480	1.532	1.499	1.424	1.384	1.259	1.449	7.14
17) t	1-Methylnaphth...		1.486	1.483	1.473	1.448	1.311	1.275	1.163	1.377	9.29
18) A1	Benzothiophene		2.131	2.083	2.109	2.014	1.712	1.657	1.490	1.885	13.77
23) t	Biphenyl		1.855	1.880	1.906	1.844	1.655	1.609	1.453	1.743	9.87
24) t	2,6-Dimethylna...		1.295	1.247	1.285	1.259	1.174	1.150	1.054	1.209	7.23
25) t	Dibenzofuran		1.904	1.909	1.960	1.917	1.664	1.624	1.475	1.779	10.61
26) t	Acenaphthylene		2.191	2.175	2.239	2.262	2.051	2.006	1.824	2.107	7.42
27) t	Acenaphthene		1.377	1.434	1.413	1.382	1.201	1.160	1.045	1.287	11.72
28) t	2,3,5-Trimethy...		1.076	1.055	1.059	1.052	0.963	0.958	0.879	1.006	7.29
29) A1	Fluorene		1.432	1.385	1.497	1.480	1.326	1.318	1.208	1.378	7.43
33) A1	Dibenzothiophene		2.009	1.958	2.043	2.052	1.868	1.865	1.688	1.926	6.74
42) s	Phenanthrene-d10		1.607	1.625	1.654	1.534	1.390	1.402	1.300	1.502	9.17
43) A1	Phenanthrene		2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60
54) t	Retene		0.427	0.409	0.428	0.449	0.455	0.474	0.438	0.440	4.86
55) t	Anthracene		1.810	1.827	1.950	1.942	1.544	1.553	1.346	1.710	13.50
56) t	Carbazole		1.909	1.805	1.845	1.955	1.793	1.822	1.673	1.829	4.92
57) t	1-Methylphenan...		1.250	1.330	1.324	1.369	1.311	1.336	1.224	1.306	3.92
58) A1	Fluoranthene		1.836	1.887	1.942	2.025	1.902	1.924	1.742	1.894	4.66
59) t	Benzo(b)fluorene		1.101	1.079	1.091	1.159	1.095	1.119	1.035	1.097	3.45
60) A1	Pyrene		1.869	1.942	1.947	2.220	2.017	2.035	1.855	1.984	6.27
66) A1	Naphthobenzoth...		1.714	1.706	1.766	1.813	1.765	1.807	1.646	1.745	3.43
67) A2	Naphthobenzoth...		1.714	1.706	1.766	1.813	1.765	1.807	1.646	1.745	3.43
74) i	Chrysene-d12		-----ISTD-----								
75) t	Benz[a]anthracene		1.140	1.094	1.135	1.144	1.200	1.209	1.122	1.149	3.59
76) A1	Chrysene		1.100	1.102	1.117	1.137	1.099	1.103	1.040	1.100	2.69

Response Factor Report PAH8

Method Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Method File : PAH8122314.M
 Title : Decalins & Alkylated PAH's
 Last Update : Wed Dec 24 12:33:02 2014
 Response Via : Initial Calibration

Calibration Files

10 =F812221409.D 25 =f812221403.D 100 =F812221404.D 500 =F812221405.D 5000=F812221406.D
 1e4 =F812221407.D 2e4 =F812221408.D

	Compound	10	25	100	500	5000	1e4	2e4	Avg	%RSD
77)	A2 Chrysene/Triph...	1.100	1.102	1.117	1.137	1.099	1.103	1.040	1.100	2.69
83)	s Benzo[b]fluora...	0.940	0.953	0.949	0.918	1.020	1.050	0.997	0.975	4.89
84)	t Benzo[b]fluora...	1.274	1.232	1.222	1.221	1.229	1.230	1.184	1.227	2.14
85)	A1 Benzo[j]+[k]fl...	1.242	1.270	1.268	1.204	1.176	1.200	1.100	1.209	4.93
87)	t Benzo[e]pyrene	1.236	1.176	1.211	1.227	1.292	1.313	1.233	1.241	3.78
88)	s Benzo[a]pyrene...	0.858	0.878	0.876	0.826	0.853	0.878	0.838	0.858	2.42
89)	t Benzo[a]pyrene	1.141	1.130	1.141	1.174	1.147	1.152	1.058	1.135	3.20
90)	t Perylene	1.212	1.190	1.195	1.160	1.209	1.234	1.141	1.192	2.67
91)	t Indeno[1,2,3-c...	1.600	1.452	1.462	1.368	1.466	1.438	1.377	1.452	5.26
92)	t Dibenz[ah]+[ac...	1.367	1.191	1.240	1.235	1.213	1.208	1.142	1.228	5.65
93)	t Benzo[g,h,i]pe...	1.412	1.393	1.342	1.322	1.413	1.431	1.331	1.378	3.26
94)	A1 Hopane (T19)	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
95)	A2 17a(H),21B(H)-...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
129)	SA1 5B(H)Cholane -...	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67

(#) = Out of Range

PFTBA Tune Raw Data

Tue Dec 23 10:16:49 2014
C:\MSDCHEM\1\5975\pftba.U

Instrument: PAH8
US92012831

Mass 69.00	Mass 219.00	Mass 502.00
Ab 896606	Ab 528652	Ab 94541
Pw50 0.52	Pw50 0.54	Pw50 0.52

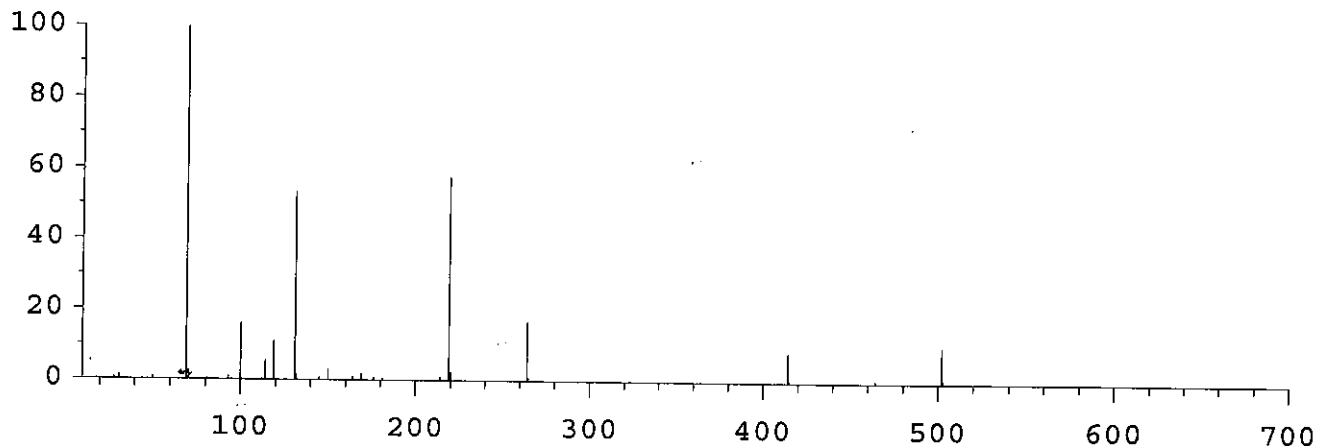
Ion Pol	Pos	MassGain	-492
		MassOffs	-41
Emission	34.6	AmuGain	2357
EIEnergy	69.9	AmuOffs	127.56
Filament	1	Wid219	-0.018
		DC Pol	Pos
Repeller	34.81		
IonFcus	90.2	HEDenab	On
EntLens	0.0	EMVolts	2600
EntOffs	Var		

Samples	8
PFTBA Open Averages	3
Stepsize	0.10

Temperatures and Pressures:
MS Source 230 Foreline53.506
MS Quad 150 HiVac 0.00e00

66 71 216 221 500 505

Scan: 10.00 - 701.00 Samples: 8 Thresh: 100 Step: 0.10
153 peaks Base: 69.00 Abundance: 864320



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	864320	100.00	70.00	8827	1.02
219.00	498816	57.71	220.00	20960	4.20
502.10	89560	10.36	503.00	9113	10.18

Air/Water Check: H2O~0.46% N2~0.90% O2~0.42% CO2~0.08% N2/H2O~194.98%

Ramp Criteria:

Ion Focus Maximum	90	volts using ion	502;	EM Gain	338107
Repeller Maximum	35	volts using ion	219;	Gain Factor	3.38

MassGain Values(Samples): -485(3) -484(2) -478(1) -462(0) -418(FS)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset:	127.6	127.6	127.6	127.6	127.6	127.6	127.6
Entrance Lens Offset:	16.8	14.3	13.8	12.3	16.3	17.1	17.1
Target Abund(%)	1.0	100.0	50.0	50.0	7.5	8.0	
Actual Tune Abund(%)	1.0	100.0	53.4	57.7	8.7	10.4	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221409.D
 Acq On : 23 Dec 2014 11:29 pm
 Operator : PAH8:ML
 Sample : I812231401
 Misc : WG755323, FRAU66 10ng/ml
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 13 11:09:29 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.068	164	39973	500.000	ng/mL	0.00
74) Chrysene-d12	43.515	240	53977	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	20.105	136	1779	11.621	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.16%#		
42) Phenanthrene-d10	32.935	188	1285	11.005	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.10%#		
83) Benzo[b]fluoranthene-d12	47.417	264	1015	9.679	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.97%#		
88) Benzo[a]pyrene-d12	48.634	264	926	10.887	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.09%#		
129) 5B(H)Cholane - Surr	44.127	217	179	10.593	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.06%#		
Target Compounds						
						Qvalue
3) trans-Decalin	16.738	138	188	5.256	ng/mL	100
4) cis-Decalin	17.961	138	141M4	5.205	ng/mL	
10) Naphthalene	20.187	128	1969	11.937	ng/mL	100
16) 2-Methylnaphthalene	22.879	142	1249	11.330	ng/mL	100
17) 1-Methylnaphthalene	23.299	142	1188	11.142	ng/mL	100
18) Benzo[thiophene]	20.397	134	1704	12.449	ng/mL	100
23) Biphenyl	24.759	154	1483	11.182	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.361	156	1035	11.461	ng/mL	100
25) Dibenzofuran	27.844	168	1522	11.207	ng/mL	99
26) Acenaphthylene	26.457	152	1752	11.764	ng/mL	100
27) Acenaphthene	27.196	153	1101	11.638	ng/mL	98
28) 2,3,5-Trimethylnaphthalen	28.756	170	860	11.571	ng/mL	95
29) Fluorene	29.212	166	1145	10.971	ng/mL	96
33) Dibenzothiophene	32.533	184	1606	10.991	ng/mL	100
43) Phenanthrene	33.026	178	1664	11.702	ng/mL	98
54) Retene	40.000	234	341	9.725	ng/mL	88
55) Anthracene	33.208	178	1447M4	11.520	ng/mL	
56) Carbazole	33.874	167	1526	11.528	ng/mL	100
57) 1-Methylphenanthrene	35.527	192	999	9.682	ng/mL	86
58) Fluoranthene	37.800	202	1468	9.984	ng/mL	94
59) Benzo(b)fluorene	40.311	216	880	11.082	ng/mL	94
60) Pyrene	38.685	202	1494	9.749	ng/mL	100
66) Naphthobenzothiophene	42.520	234	1370	9.667	ng/mL	96
67) Naphthobenzothiophene-2,1	42.520	234	1370	9.667	ng/mL	96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221409.D
 Acq On : 23 Dec 2014 11:29 pm
 Operator : PAH8:ML
 Sample : I812231401
 Misc : WG755323, FRAU66 10ng/ml
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 13 11:09:29 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.451	228	1231	11.235	ng/mL	96
76)	Chrysene	43.607	228	1188	10.769	ng/mL	97
77)	Chrysene/Triphenylene	43.607	228	1188	10.769	ng/mL	97
84)	Benzo[b]fluoranthene	47.500	252	1375M3	11.119	ng/mL	
85)	Benzo[j]+[k]fluoranthene	47.591	252	1341	11.473	ng/mL	87
87)	Benzo[e]pyrene	48.533	252	1334M4	10.621	ng/mL	
89)	Benzo[a]pyrene	48.725	252	1232M3	11.319	ng/mL	
90)	Perylene	49.045	252	1308	11.554	ng/mL	92
91)	Indeno[1,2,3-cd]pyrene	53.655	276	1727M3	12.028	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.728	278	1476M4	11.897	ng/mL	
93)	Benzo[g,h,i]perylene	55.016	276	1524	10.628	ng/mL	95
94)	Hopane (T19)	52.750	191	490M4	13.592	ng/mL	
95)	17a(H),21B(H)-hopane - C3	52.750	191	496M4	13.758	ng/mL	

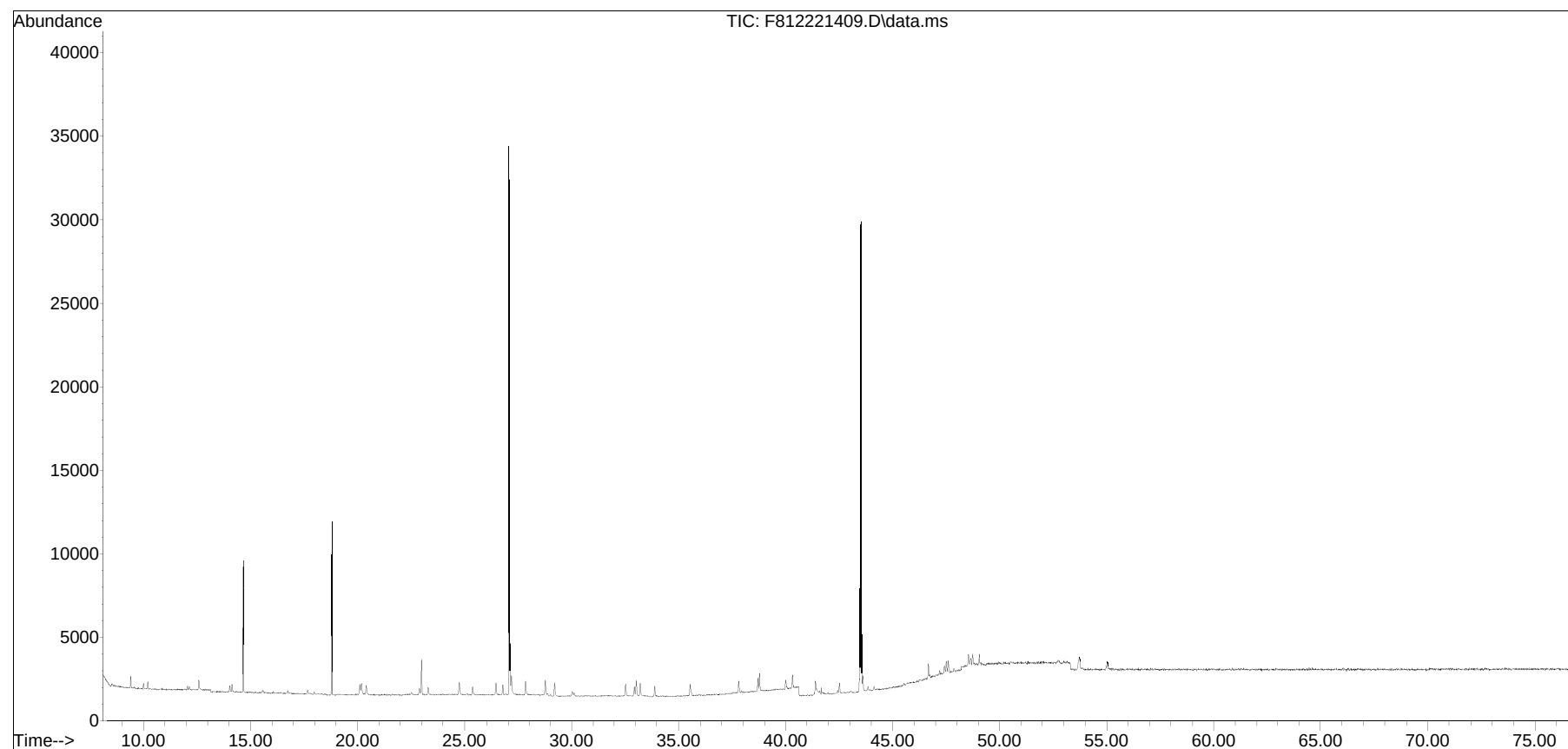
(#) = qualifier out of range (m) = manual integration (+) = signals summed

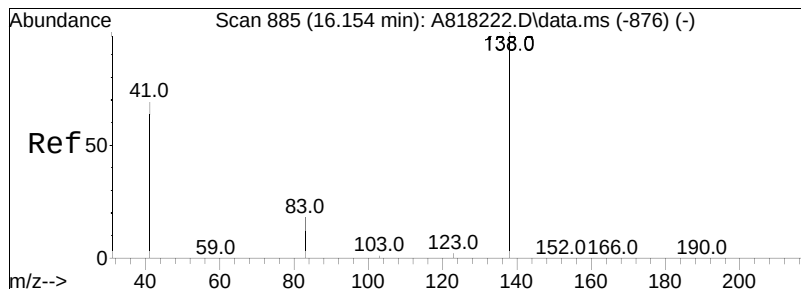
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC23\
Data File : F812221409.D
Acq On : 23 Dec 2014 11:29 pm
Operator : PAH8:ML
Sample : I812231401
Misc : WG755323, FRAU66 10ng/ml
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 13 11:09:29 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 23 07:51:27 2014
Response via : Initial Calibration

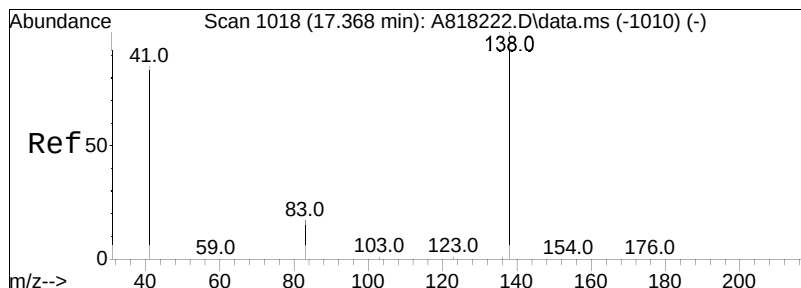
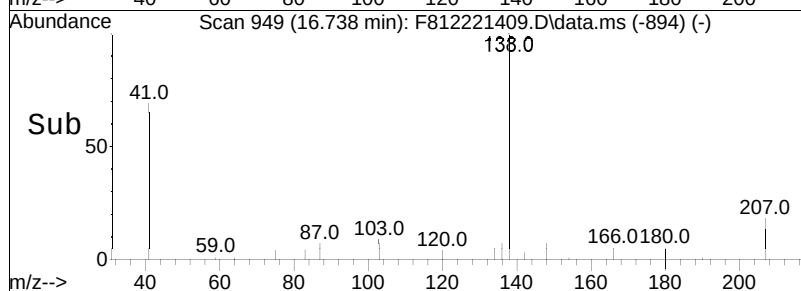
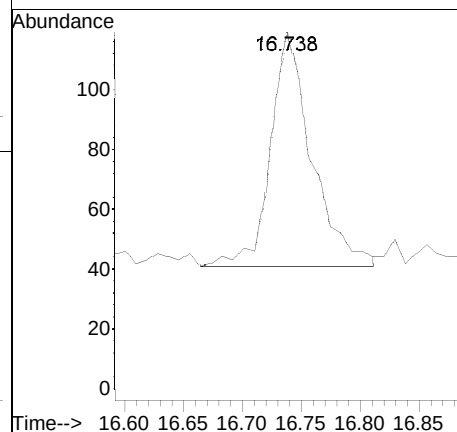
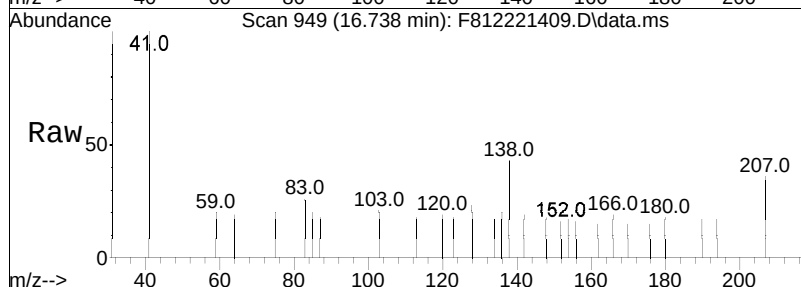
Sub List : ICAL_CCALT_REV2 - CC with five surrogates





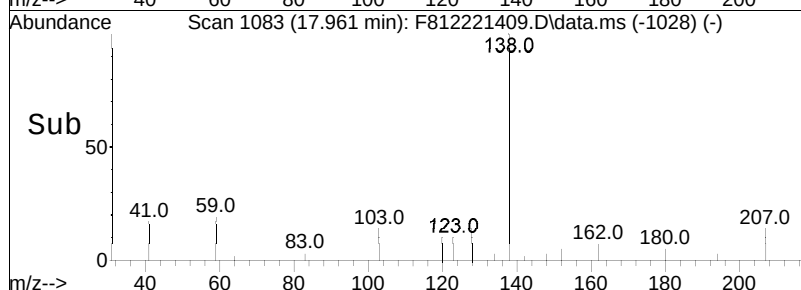
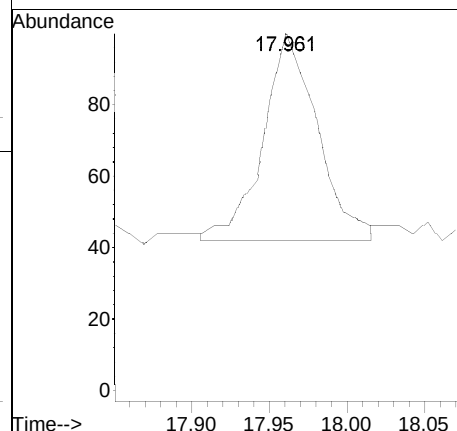
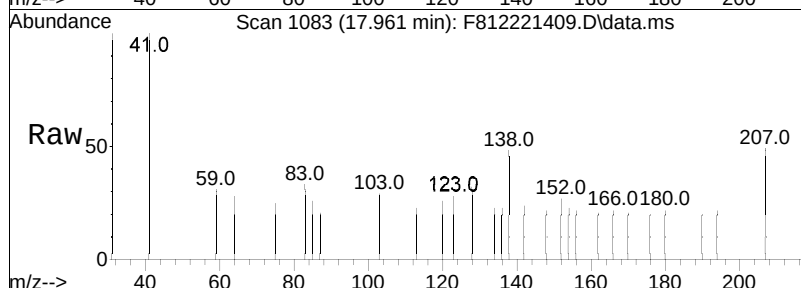
#3
trans-Decalin
Concen: 5.26 ng/mL
RT: 16.738 min Scan# 949
Delta R.T. -0.000 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

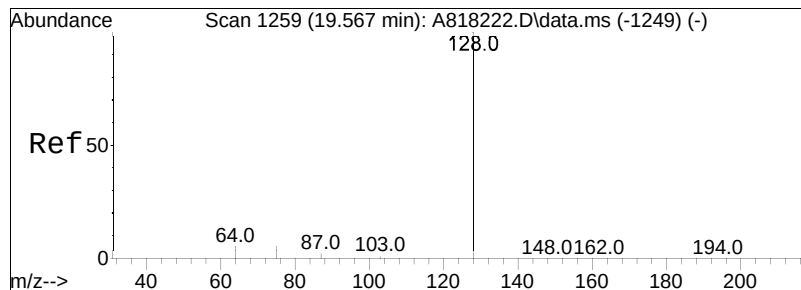
Tgt Ion:138 Resp: 188



#4
cis-Decalin
Concen: 5.21 ng/mL M4
RT: 17.961 min Scan# 1083
Delta R.T. -0.000 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

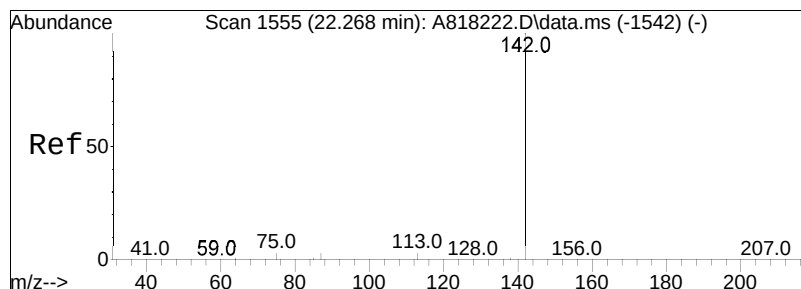
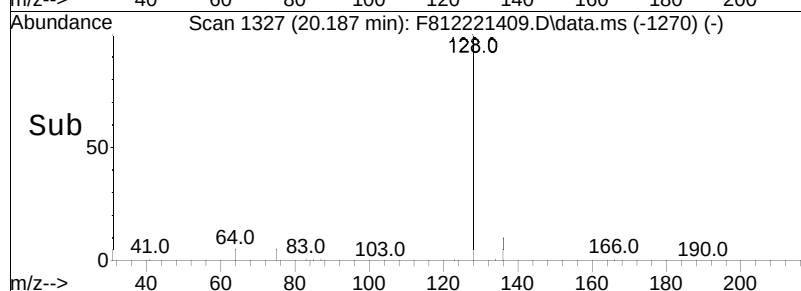
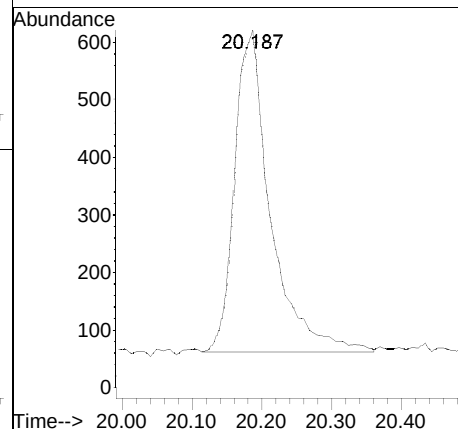
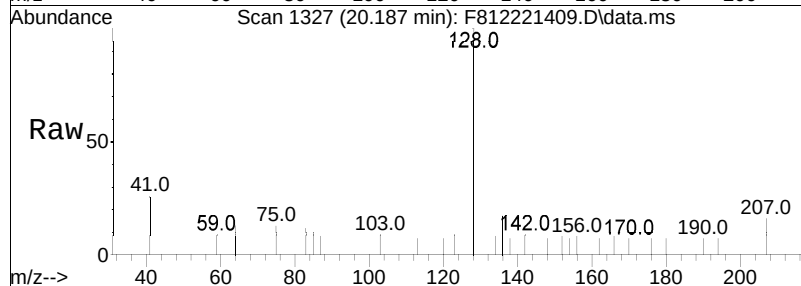
Tgt Ion:138 Resp: 141





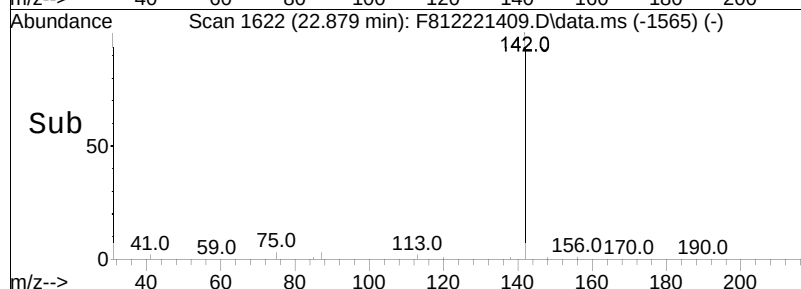
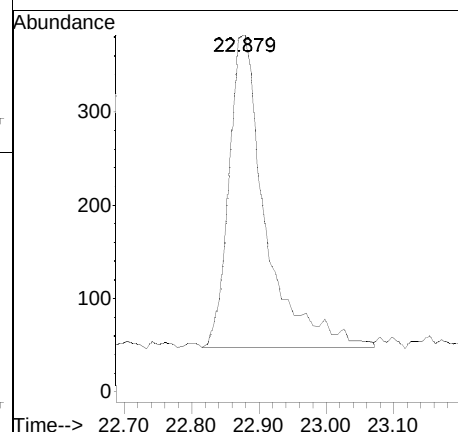
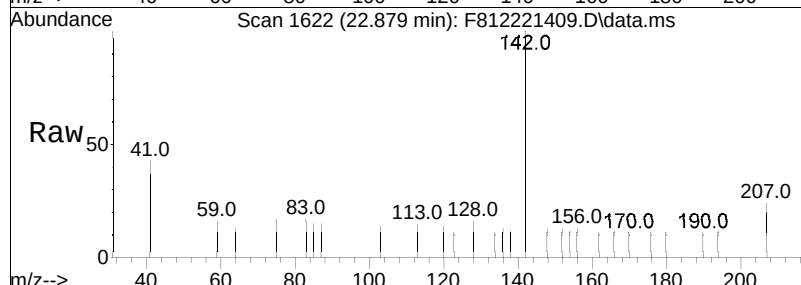
#10
Naphthalene
Concen: 11.94 ng/mL
RT: 20.187 min Scan# 1327
Delta R.T. 0.018 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

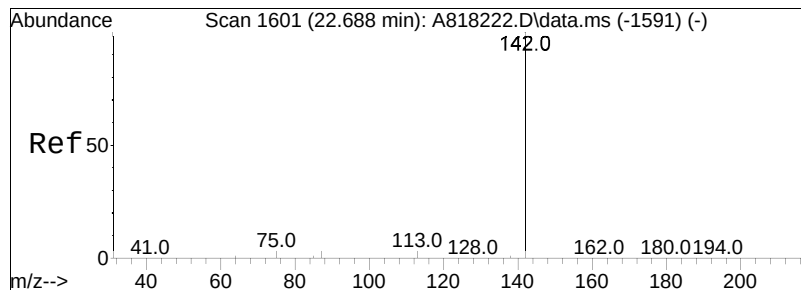
Tgt Ion:128 Resp: 1969



#16
2-Methylnaphthalene
Concen: 11.33 ng/mL
RT: 22.879 min Scan# 1622
Delta R.T. 0.018 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

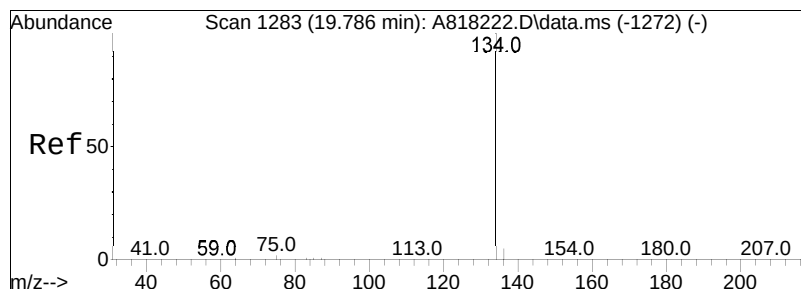
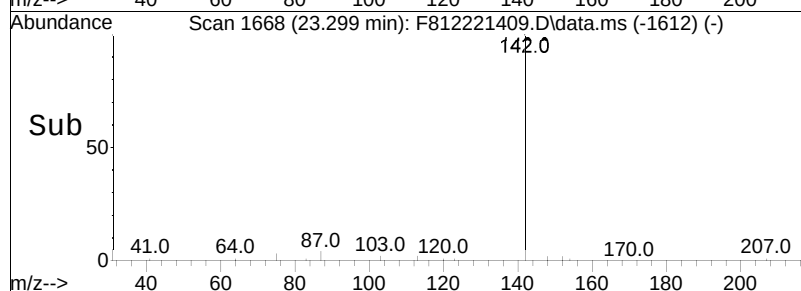
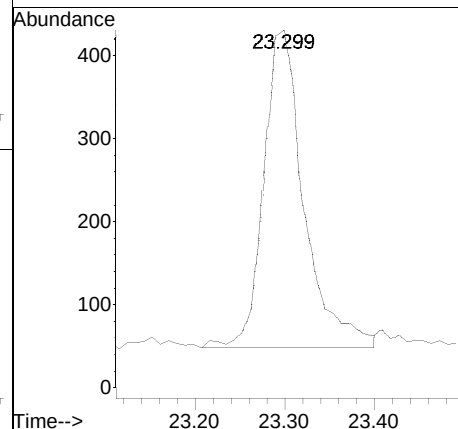
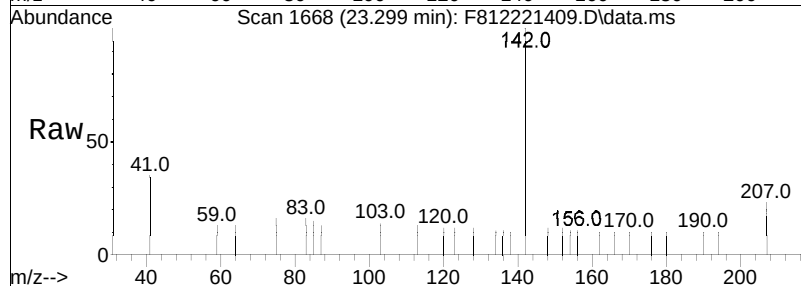
Tgt Ion:142 Resp: 1249





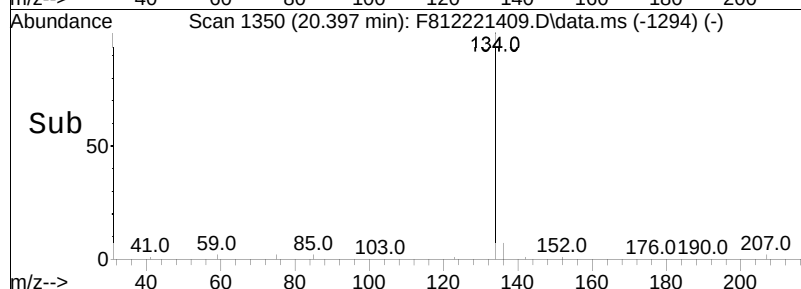
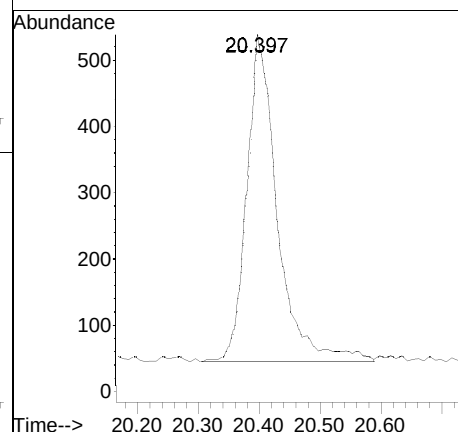
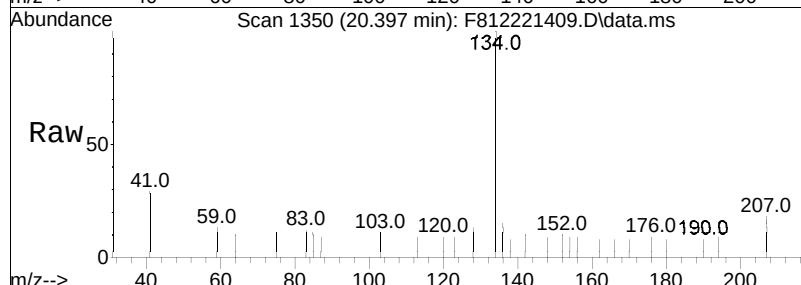
#17
1-Methylnaphthalene
Concen: 11.14 ng/mL
RT: 23.299 min Scan# 1668
Delta R.T. 0.009 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

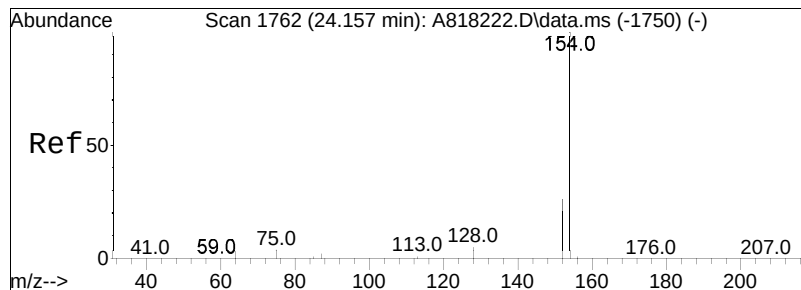
Tgt Ion:142 Resp: 1188



#18
Benzothiophene
Concen: 12.45 ng/mL
RT: 20.397 min Scan# 1350
Delta R.T. 0.009 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

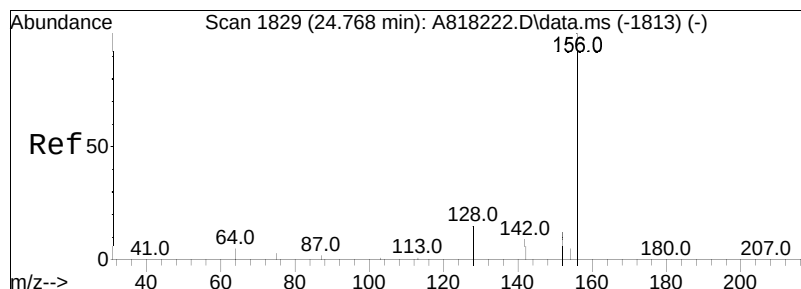
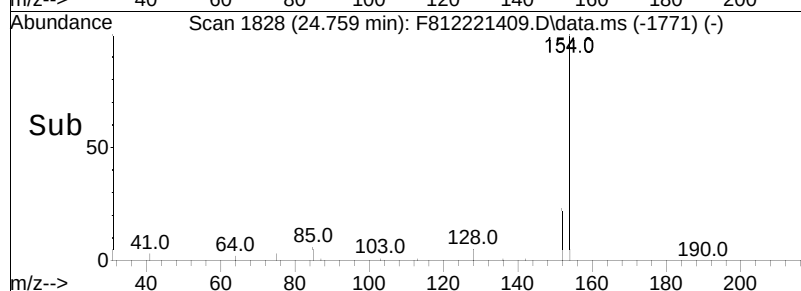
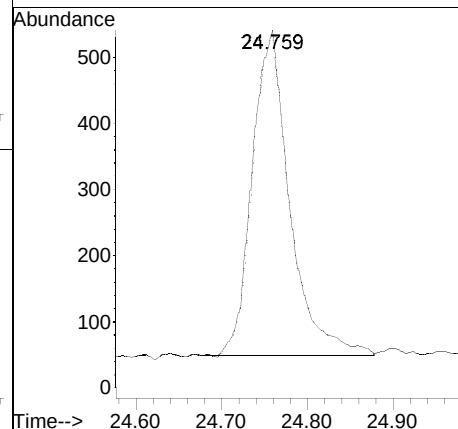
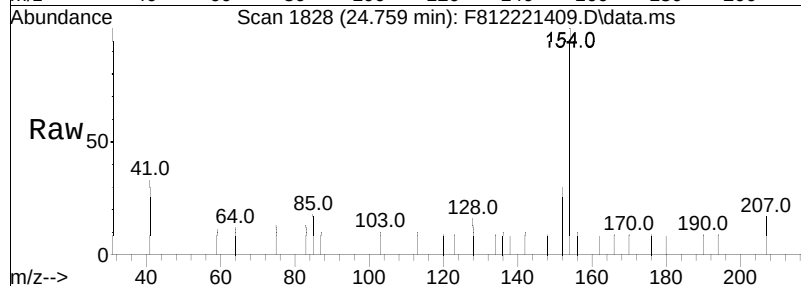
Tgt Ion:134 Resp: 1704





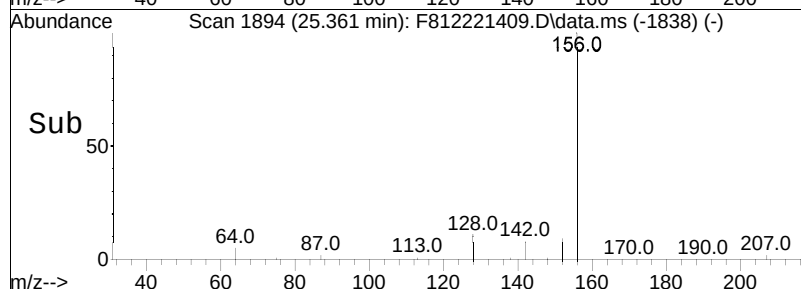
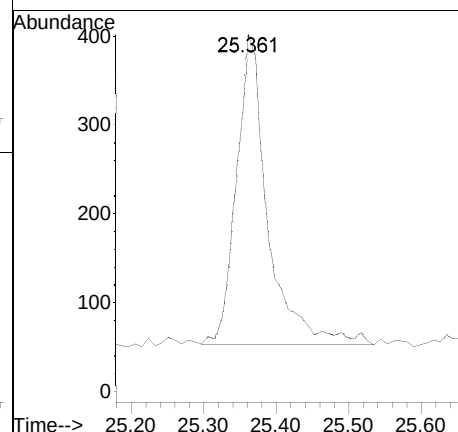
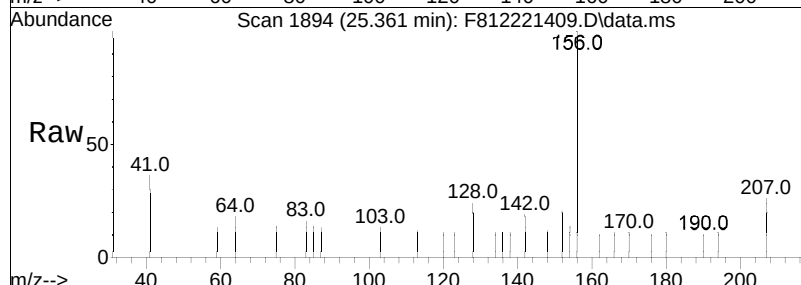
#23
Biphenyl
Concen: 11.18 ng/mL
RT: 24.759 min Scan# 1828
Delta R.T. 0.018 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

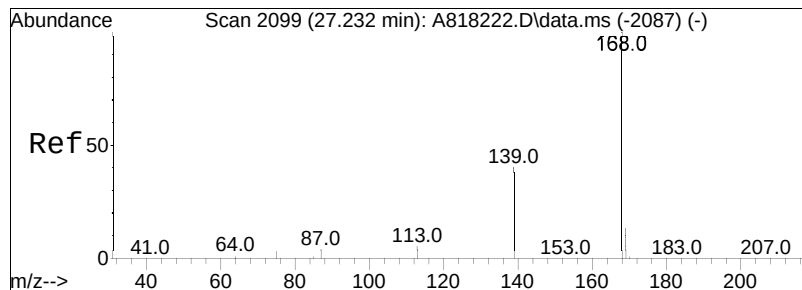
Tgt Ion:154 Resp: 1483



#24
2,6-Dimethylnaphthalene
Concen: 11.46 ng/mL
RT: 25.361 min Scan# 1894
Delta R.T. 0.009 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

Tgt Ion:156 Resp: 1035





#25

Dibenzofuran

Concen: 11.21 ng/mL

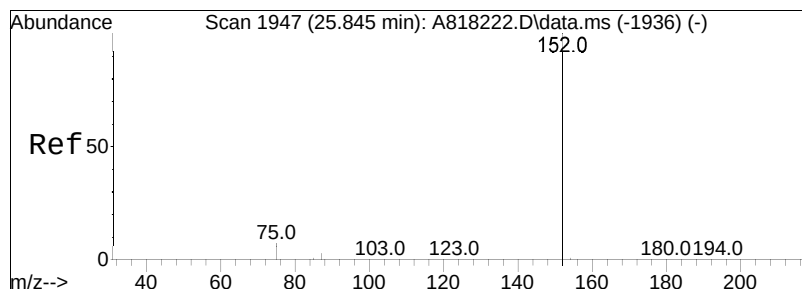
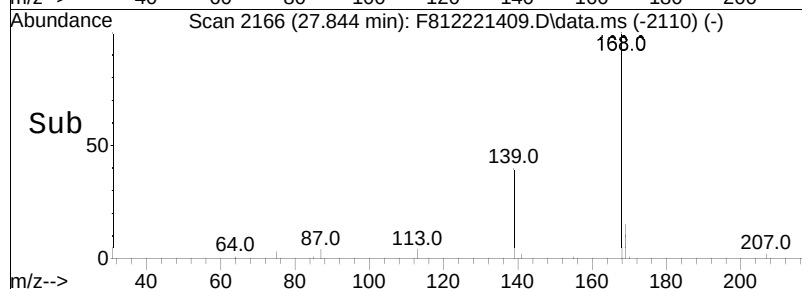
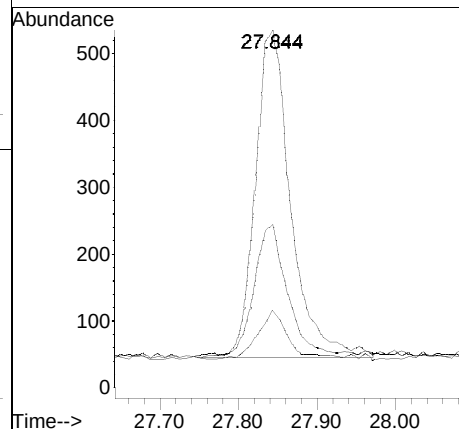
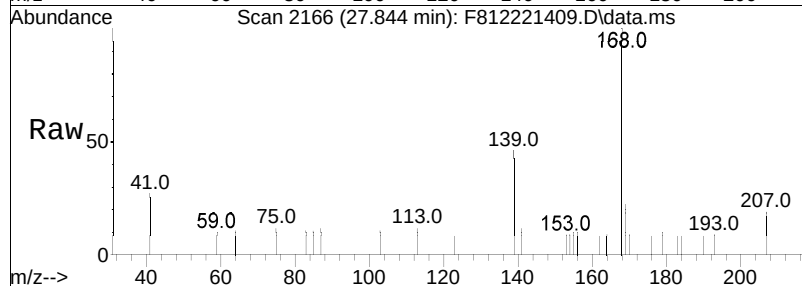
RT: 27.844 min Scan# 2166

Delta R.T. 0.009 min

Lab File: F812221409.D

Acq: 23 Dec 2014 11:29 pm

Tgt Ion:	168	Resp:	1522
Ion Ratio	Lower	Upper	
168	100		
139	38.0	26.9	49.9
169	12.7	9.1	16.9



#26

Acenaphthylene

Concen: 11.76 ng/mL

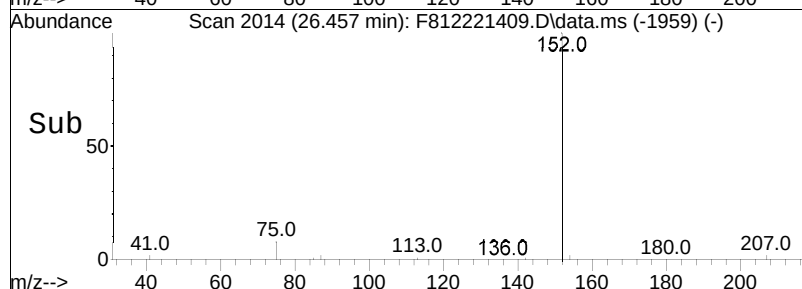
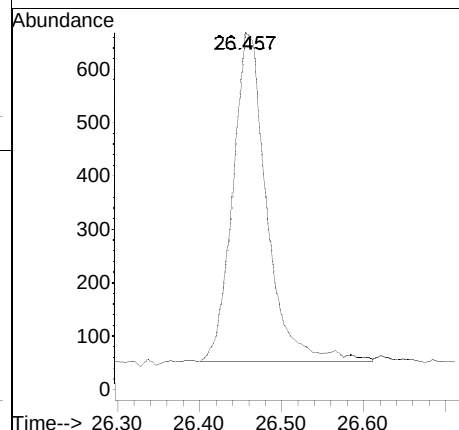
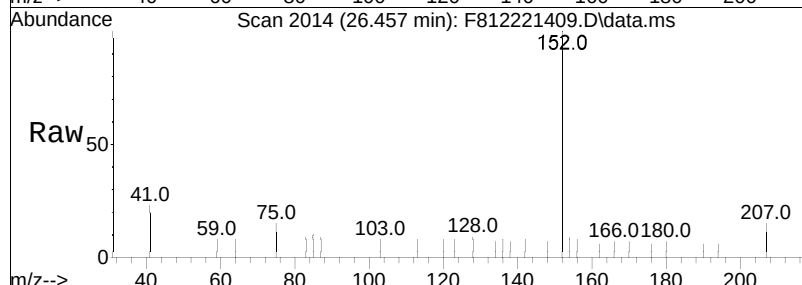
RT: 26.457 min Scan# 2014

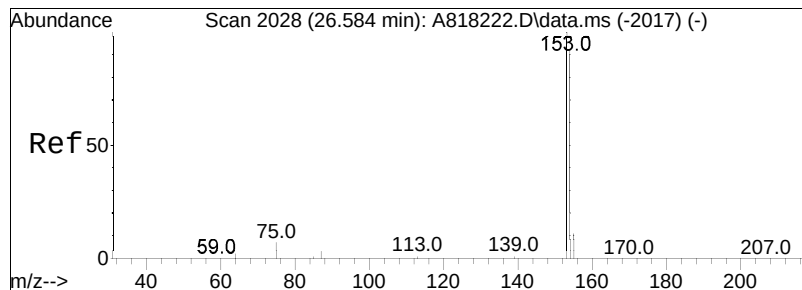
Delta R.T. -0.000 min

Lab File: F812221409.D

Acq: 23 Dec 2014 11:29 pm

Tgt Ion:152 Resp: 1752





#27

Acenaphthene

Concen: 11.64 ng/mL

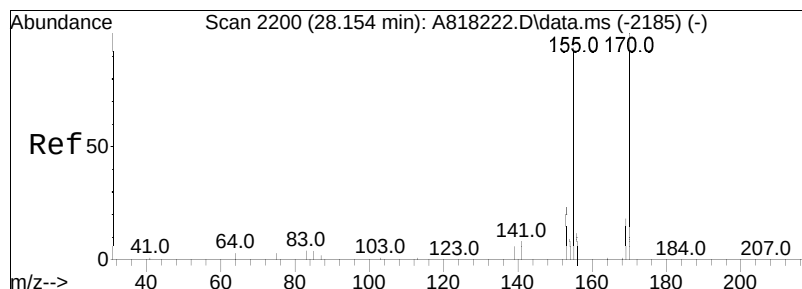
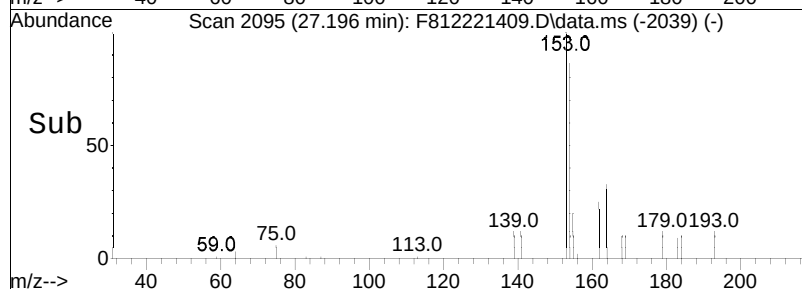
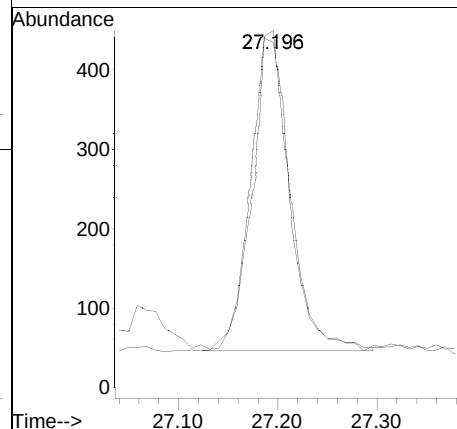
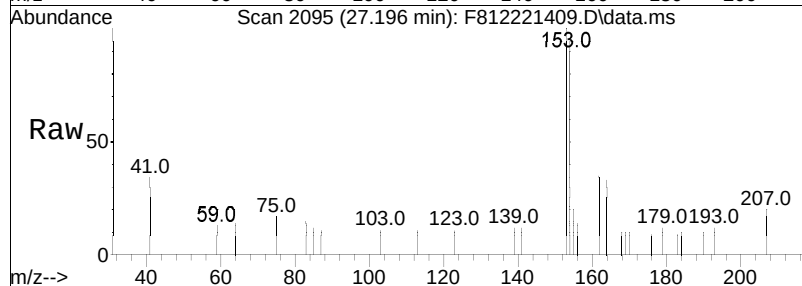
RT: 27.196 min Scan# 2095

Delta R.T. 0.009 min

Lab File: F812221409.D

Acq: 23 Dec 2014 11:29 pm

Tgt Ion	Ratio	Lower	Upper
153	100		
154	94.1	64.7	120.1



#28

2,3,5-Trimethylnaphthalene

Concen: 11.57 ng/mL

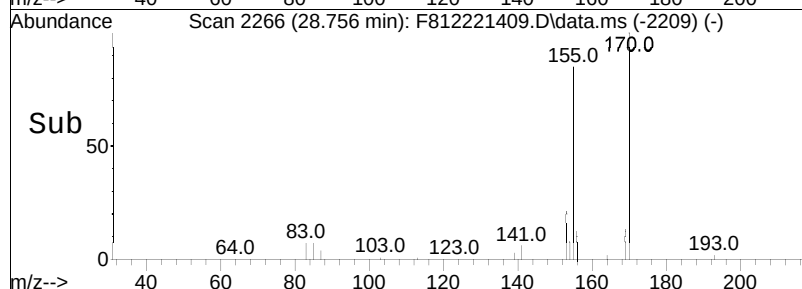
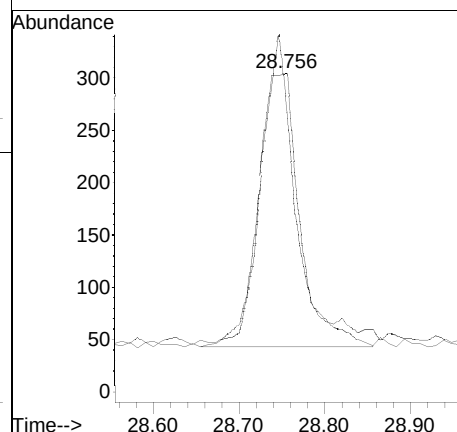
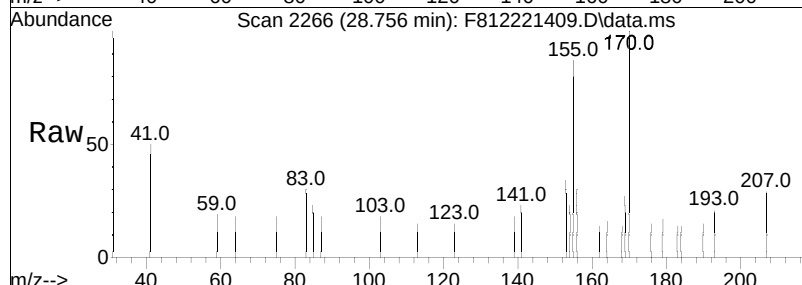
RT: 28.756 min Scan# 2266

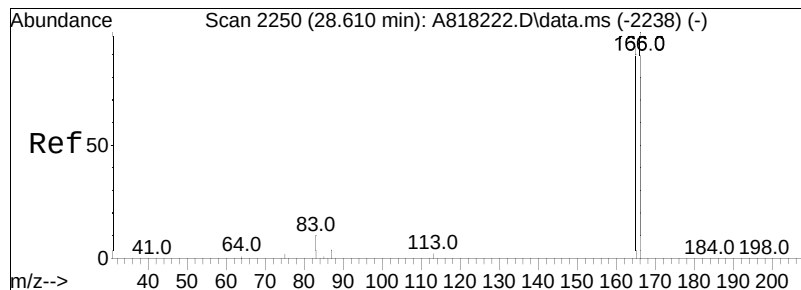
Delta R.T. 0.018 min

Lab File: F812221409.D

Acq: 23 Dec 2014 11:29 pm

Tgt Ion	Ratio	Lower	Upper
170	100		
155	99.4	73.5	136.5





#29

Fluorene

Concen: 10.97 ng/mL

RT: 29.212 min Scan# 2316

Delta R.T. 0.009 min

Lab File: F812221409.D

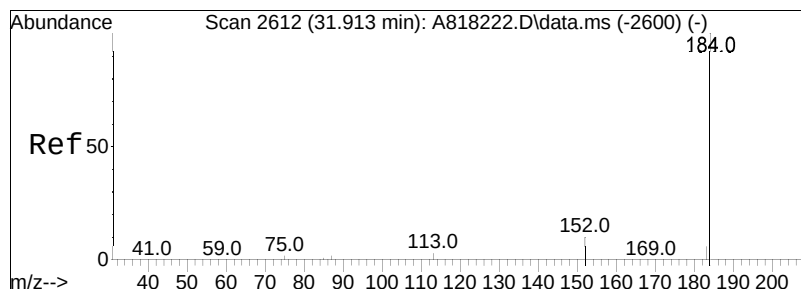
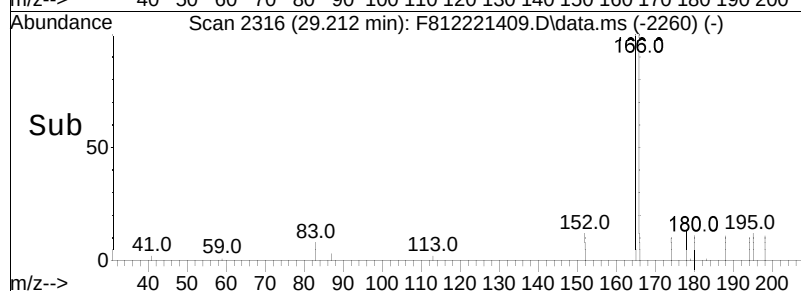
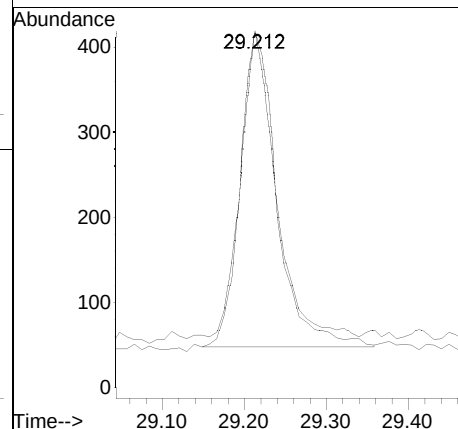
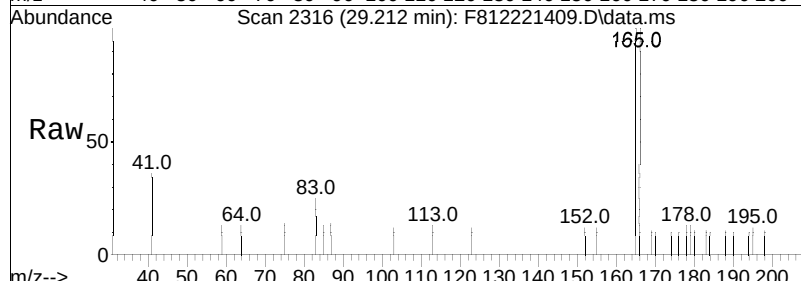
Acq: 23 Dec 2014 11:29 pm

Tgt Ion:166 Resp: 1145

Ion Ratio Lower Upper

166 100

165 91.6 66.7 123.9



#33

Dibenzothiophene

Concen: 10.99 ng/mL

RT: 32.533 min Scan# 2680

Delta R.T. 0.009 min

Lab File: F812221409.D

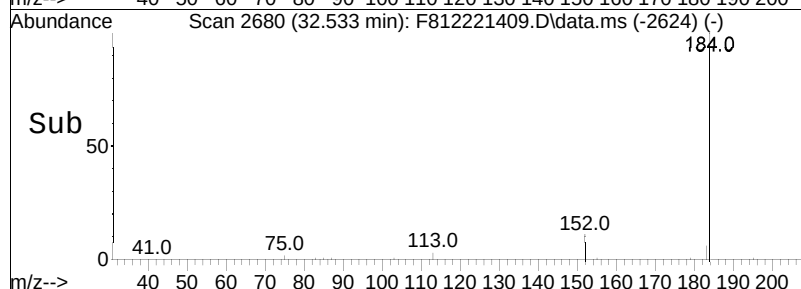
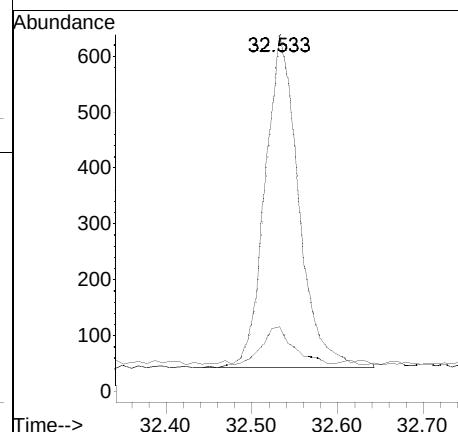
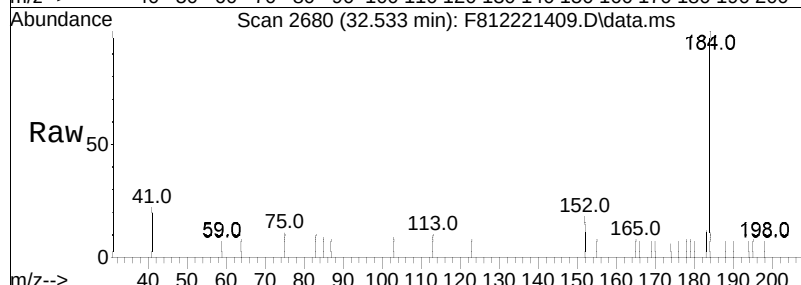
Acq: 23 Dec 2014 11:29 pm

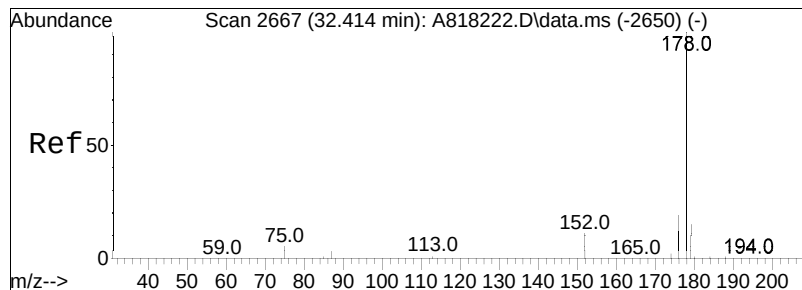
Tgt Ion:184 Resp: 1606

Ion Ratio Lower Upper

184 100

152 10.9 7.6 14.0





#43

Phenanthrene

Concen: 11.70 ng/mL

RT: 33.026 min Scan# 2734

Delta R.T. -0.000 min

Lab File: F812221409.D

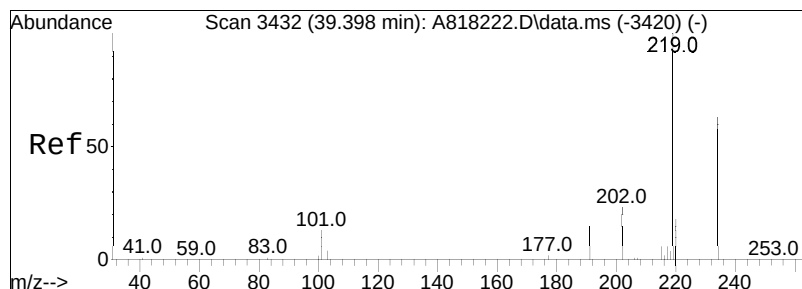
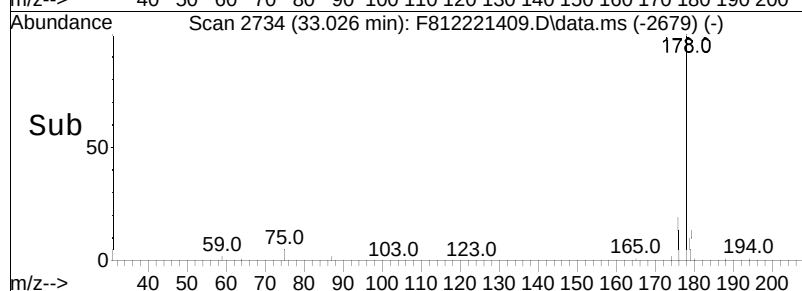
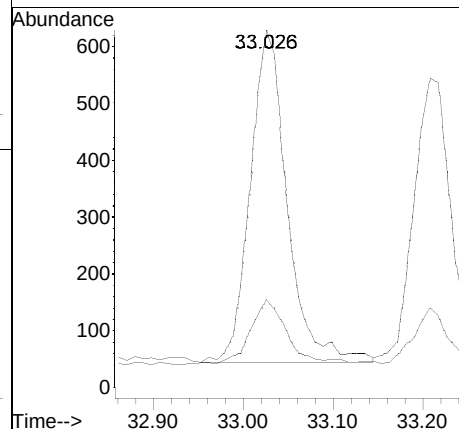
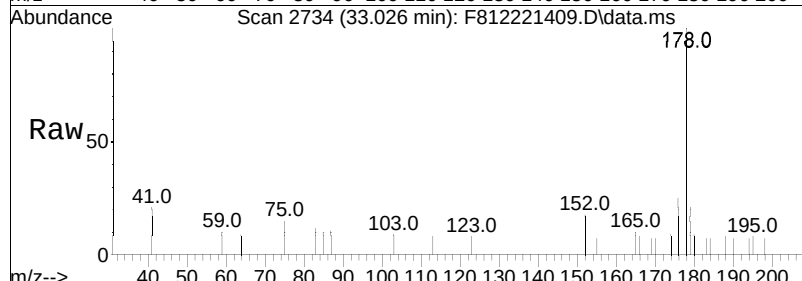
Acq: 23 Dec 2014 11:29 pm

Tgt Ion:178 Resp: 1664

Ion Ratio Lower Upper

178 100

176 19.9 13.4 24.8



#54

Retene

Concen: 9.73 ng/mL

RT: 40.000 min Scan# 3498

Delta R.T. -0.000 min

Lab File: F812221409.D

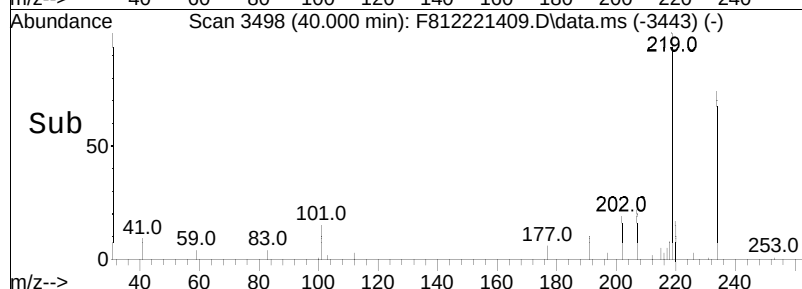
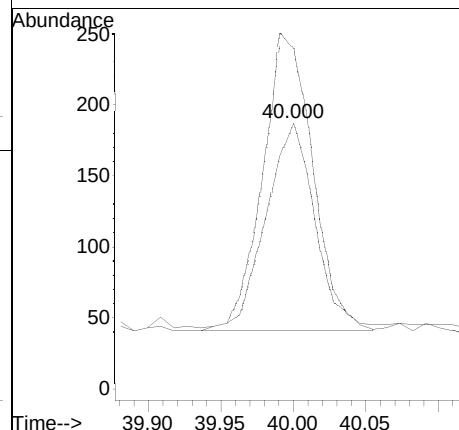
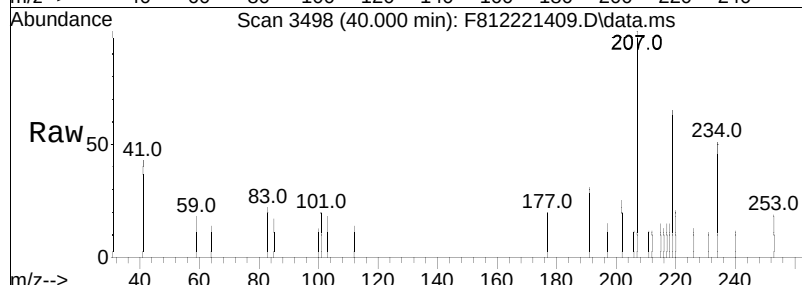
Acq: 23 Dec 2014 11:29 pm

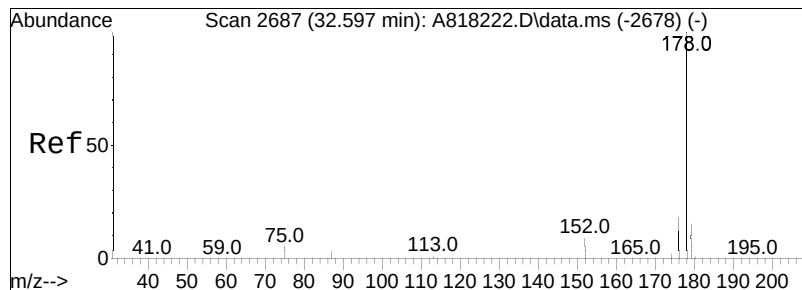
Tgt Ion:234 Resp: 341

Ion Ratio Lower Upper

234 100

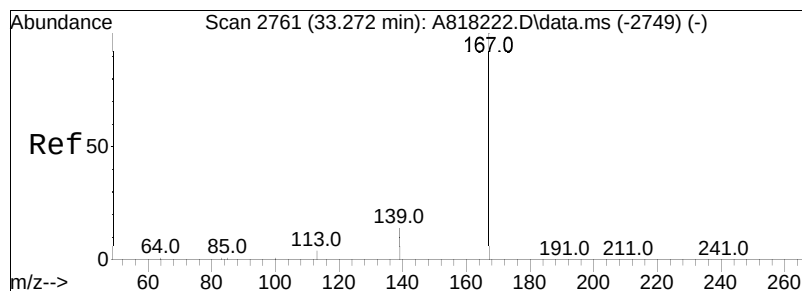
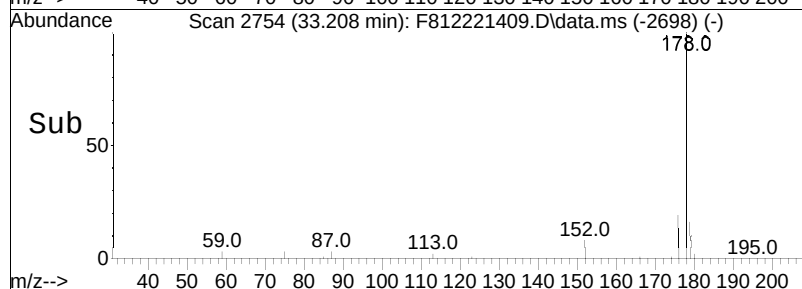
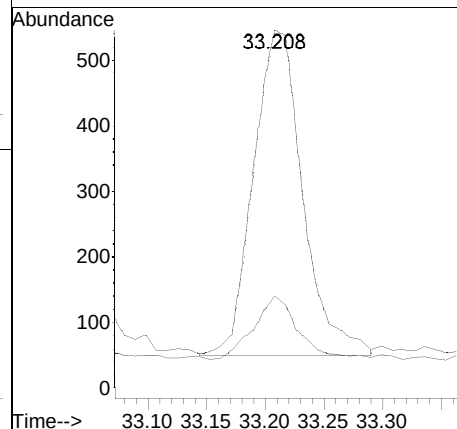
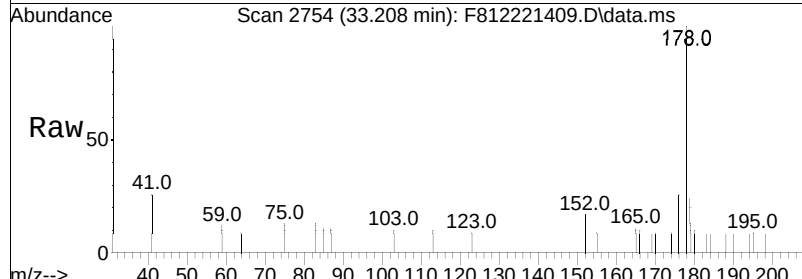
219 142.5 110.9 206.1





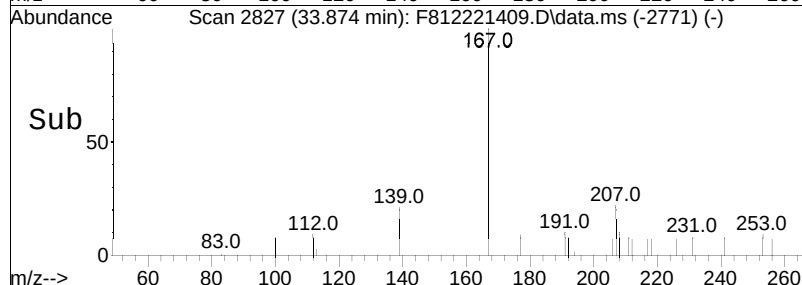
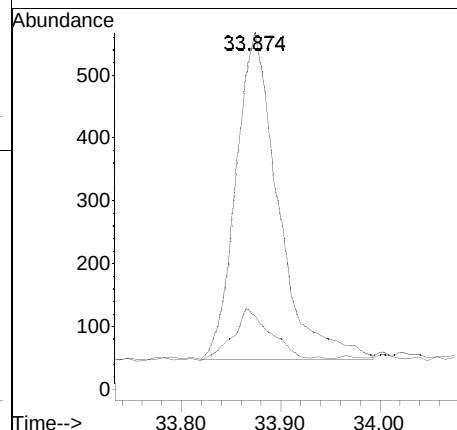
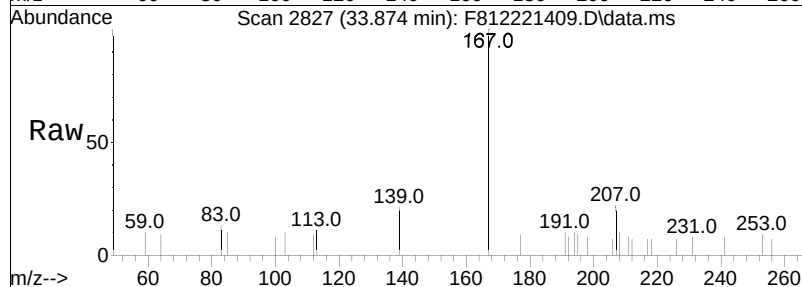
#55
 Anthracene
 Concen: 11.52 ng/mL M4
 RT: 33.208 min Scan# 2754
 Delta R.T. 0.009 min
 Lab File: F812221409.D
 Acq: 23 Dec 2014 11:29 pm

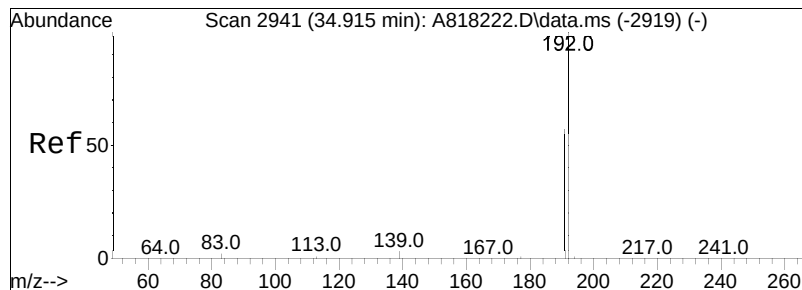
Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.0	12.5	23.3



#56
 Carbazole
 Concen: 11.53 ng/mL
 RT: 33.874 min Scan# 2827
 Delta R.T. 0.009 min
 Lab File: F812221409.D
 Acq: 23 Dec 2014 11:29 pm

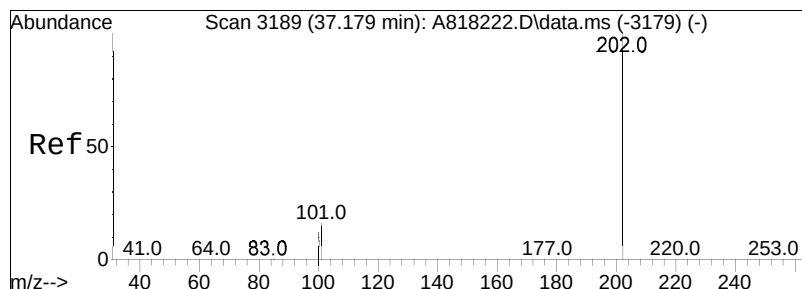
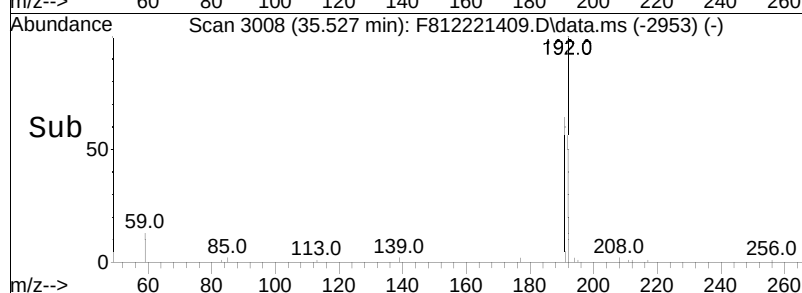
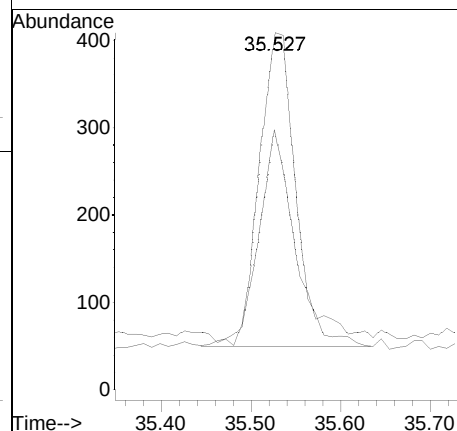
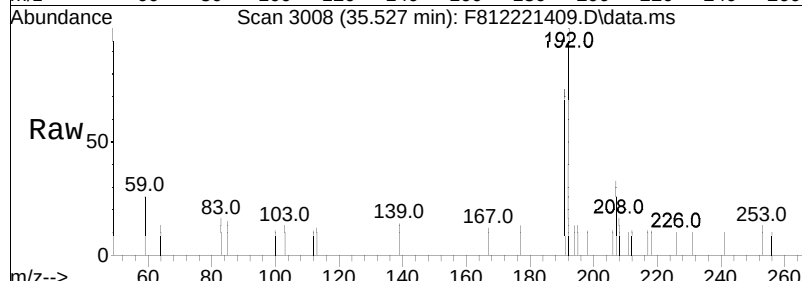
Tgt Ion	Ratio	Lower	Upper
167	100		
139	14.8	10.4	19.4





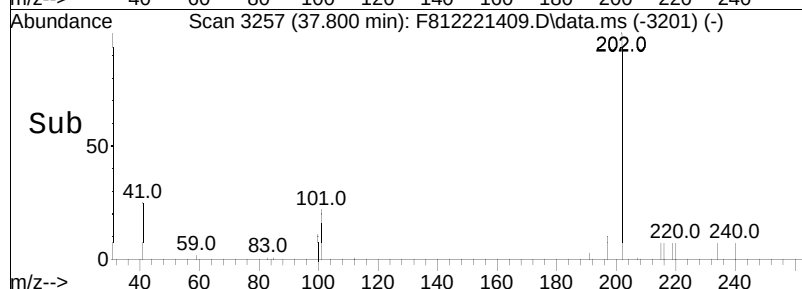
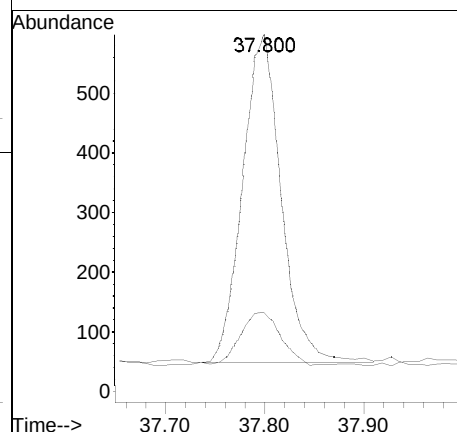
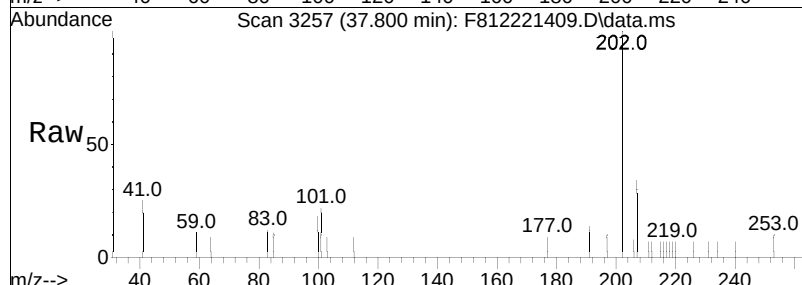
#57
1-Methylphenanthrene
Concen: 9.68 ng/mL
RT: 35.527 min Scan# 3008
Delta R.T. -0.000 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

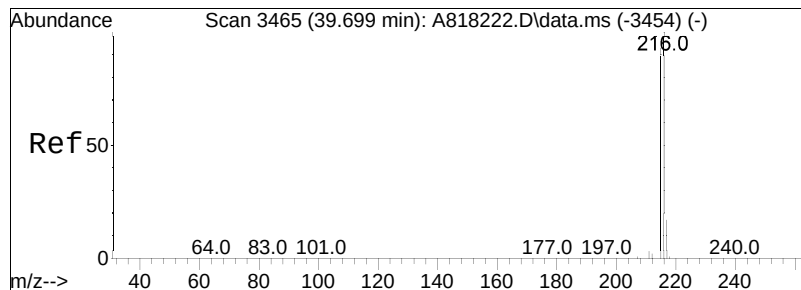
Tgt Ion	Ratio	Lower	Upper
192	100		
191	67.8	40.0	74.4



#58
Fluoranthene
Concen: 9.98 ng/mL
RT: 37.800 min Scan# 3257
Delta R.T. 0.009 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

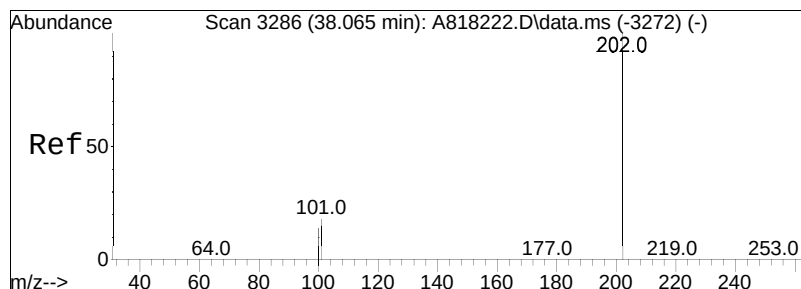
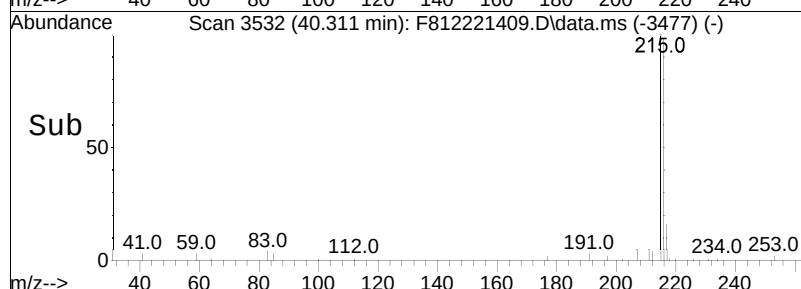
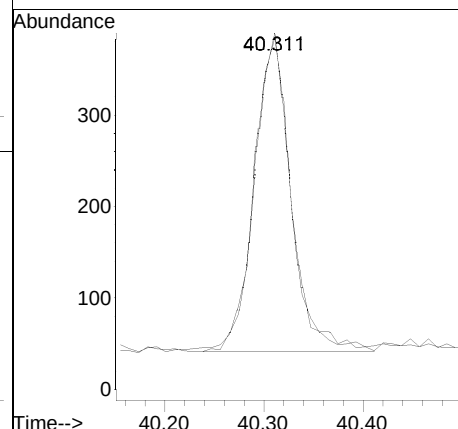
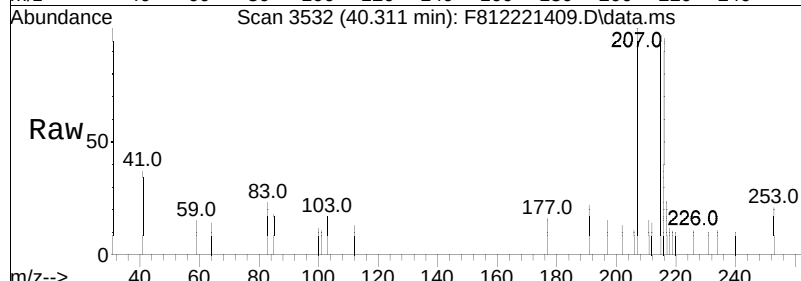
Tgt Ion	Ratio	Lower	Upper
202	100		
101	16.5	13.5	25.1





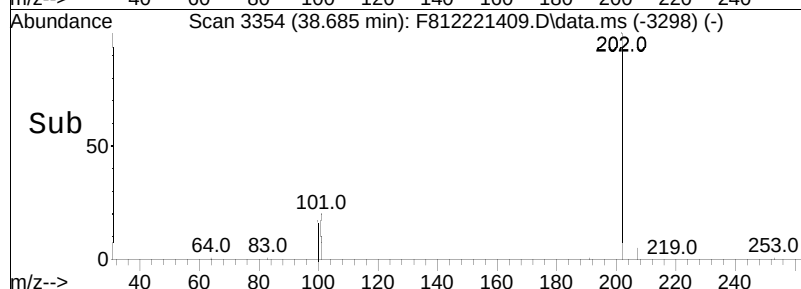
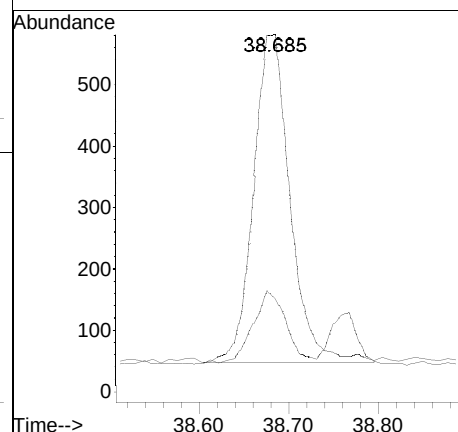
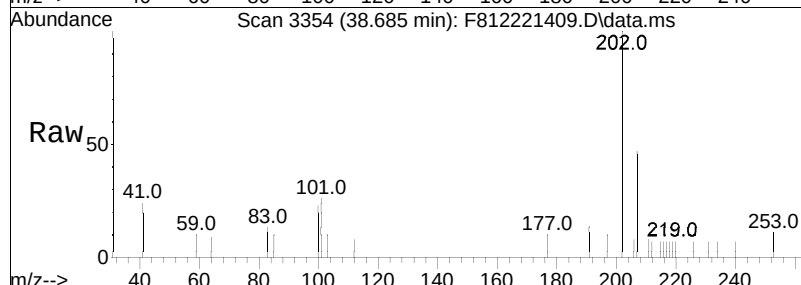
#59
Benzo(b)fluorene
Concen: 11.08 ng/mL
RT: 40.311 min Scan# 3532
Delta R.T. -0.000 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

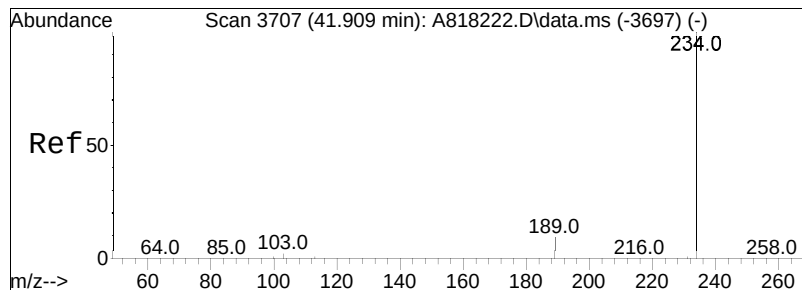
Tgt Ion	Ratio	Lower	Upper
216	100		
215	98.4	64.6	120.0



#60
Pyrene
Concen: 9.75 ng/mL
RT: 38.685 min Scan# 3354
Delta R.T. 0.009 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

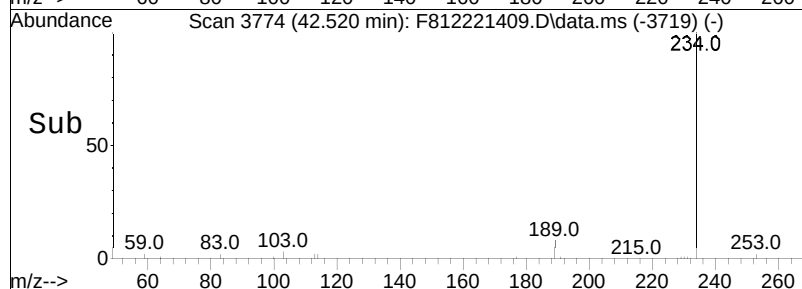
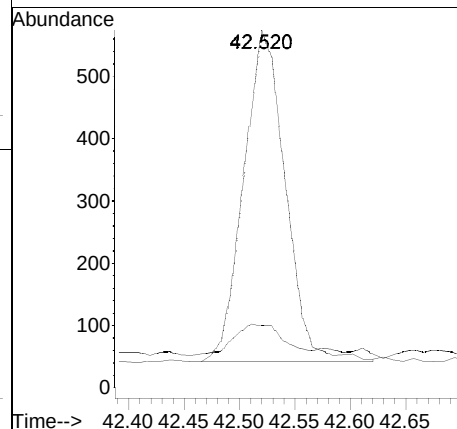
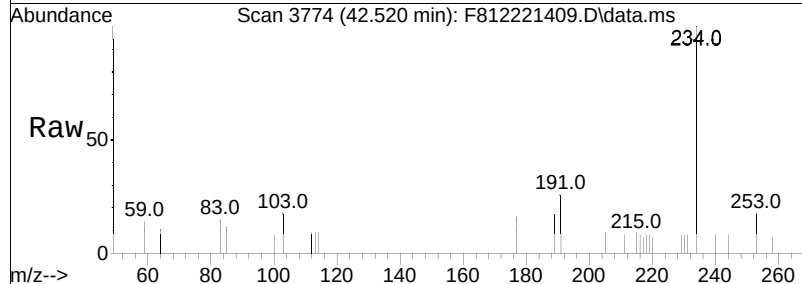
Tgt Ion	Ratio	Lower	Upper
202	100		
101	21.9	15.5	28.7





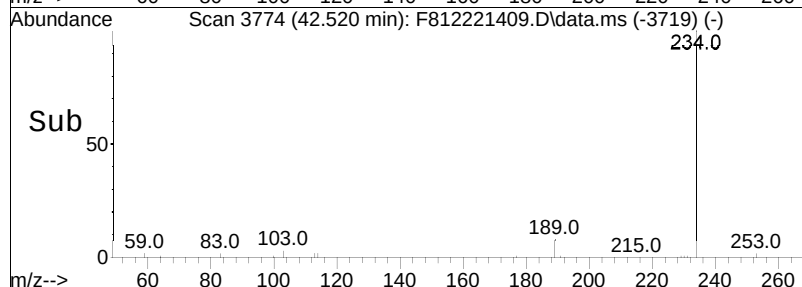
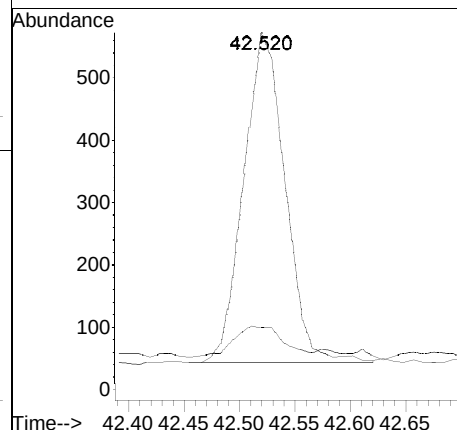
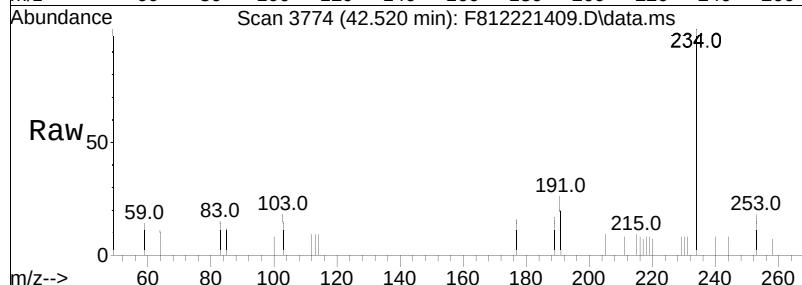
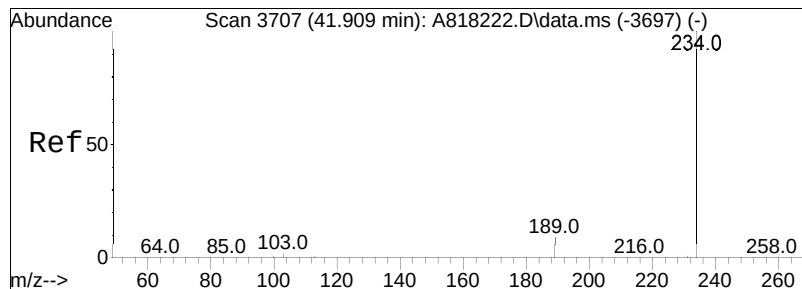
#66
 Naphthobenzothiophene
 Concen: 9.67 ng/ml
 RT: 42.520 min Scan# 3774
 Delta R.T. -0.000 min
 Lab File: F812221409.D
 Acq: 23 Dec 2014 11:29 pm

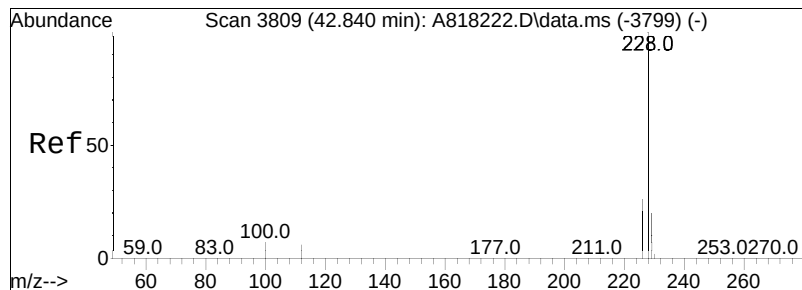
Tgt Ion	Ratio	Lower	Upper
234	100		
189	11.3	6.9	12.9



#67
 Naphthobenzothiophene-2,1-D
 Concen: 9.67 ng/mL
 RT: 42.520 min Scan# 3774
 Delta R.T. -0.000 min
 Lab File: F812221409.D
 Acq: 23 Dec 2014 11:29 pm

Tgt Ion	Ratio	Lower	Upper
234	100		
189	11.3	6.9	12.9





#75

Benz[a]anthracene

Concen: 11.23 ng/mL

RT: 43.451 min Scan# 3876

Delta R.T. 0.009 min

Lab File: F812221409.D

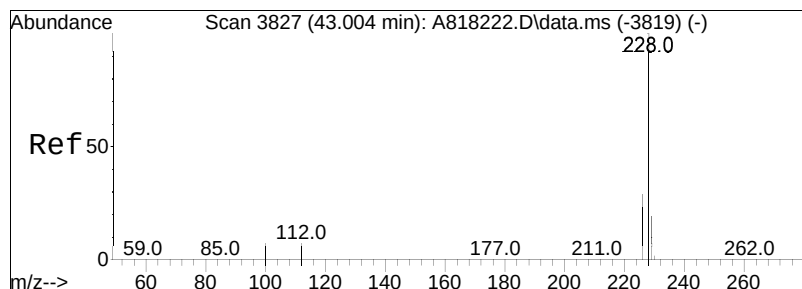
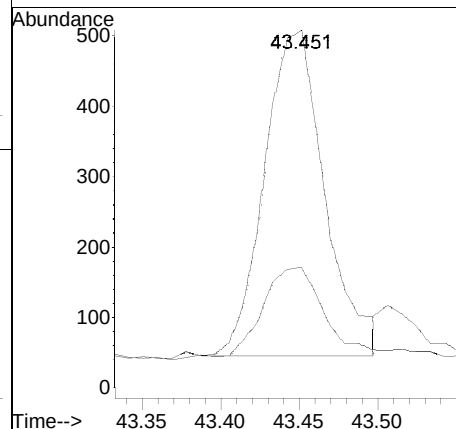
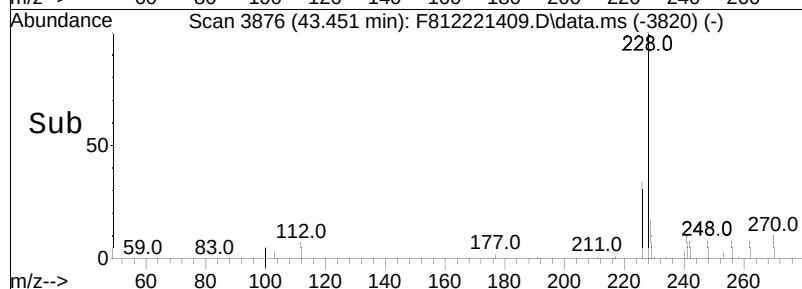
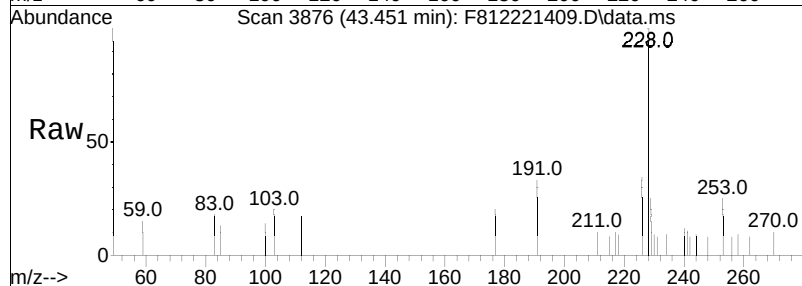
Acq: 23 Dec 2014 11:29 pm

Tgt Ion:228 Resp: 1231

Ion Ratio Lower Upper

228 100

226 29.2 19.0 35.4



#76

Chrysene

Concen: 10.77 ng/mL

RT: 43.607 min Scan# 3893

Delta R.T. -0.000 min

Lab File: F812221409.D

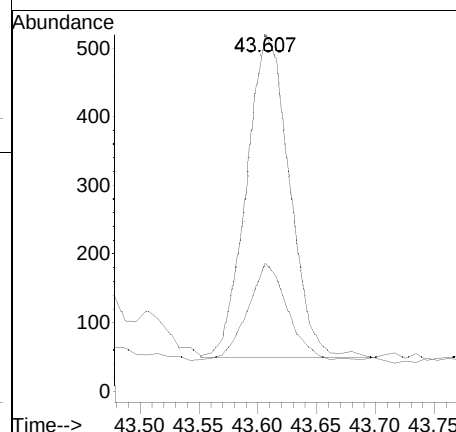
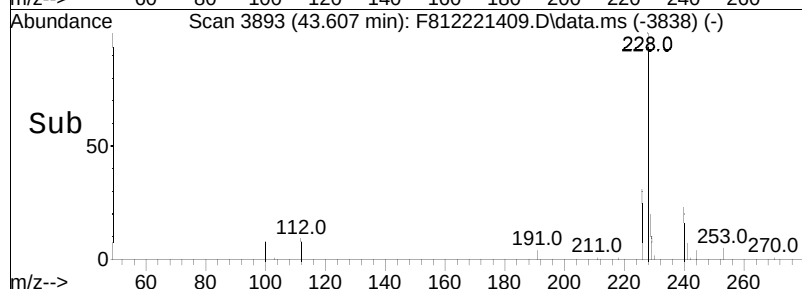
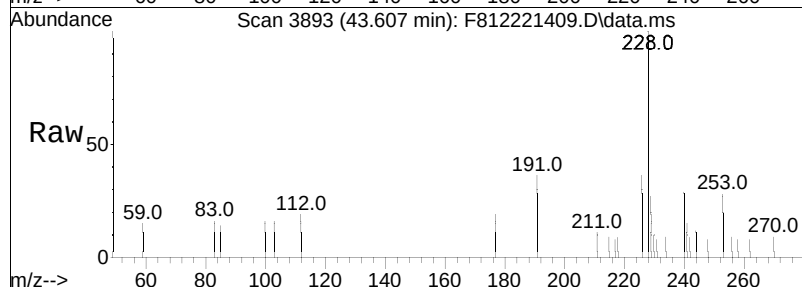
Acq: 23 Dec 2014 11:29 pm

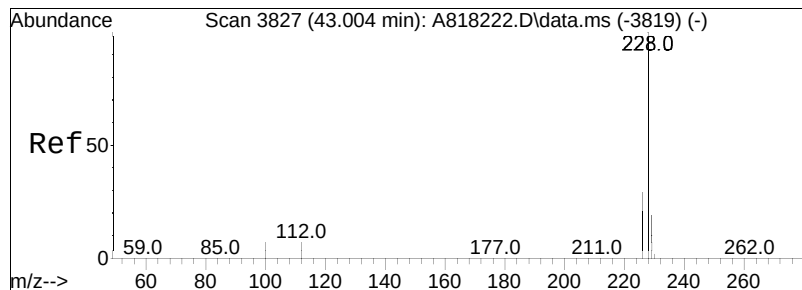
Tgt Ion:228 Resp: 1188

Ion Ratio Lower Upper

228 100

226 31.5 20.7 38.5





#77

Chrysene/Triphenylene

Concen: 10.77 ng/mL

RT: 43.607 min Scan# 3893

Delta R.T. -0.000 min

Lab File: F812221409.D

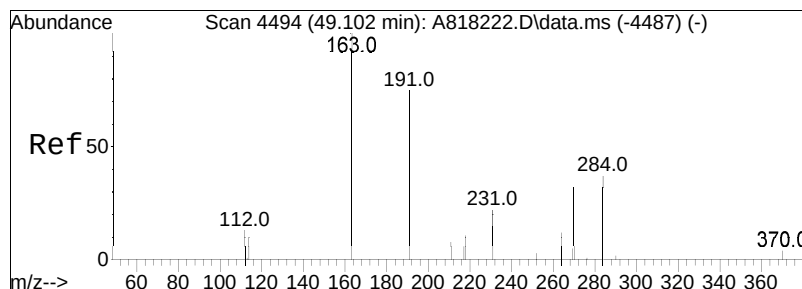
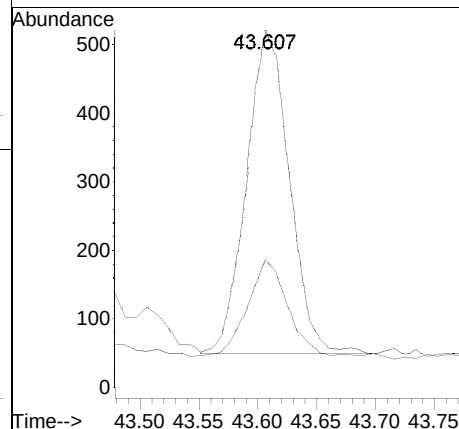
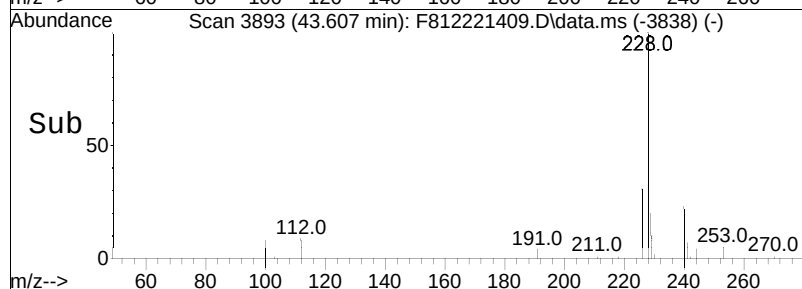
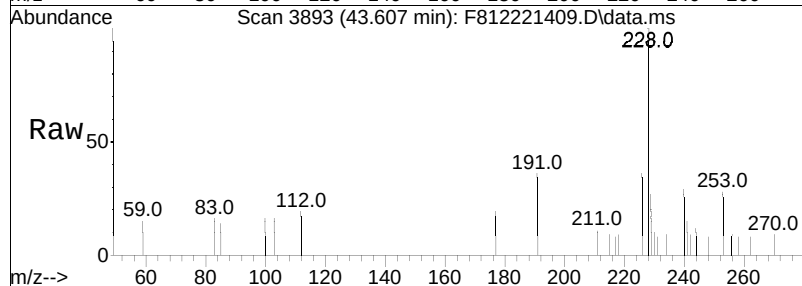
Acq: 23 Dec 2014 11:29 pm

Tgt Ion:228 Resp: 1188

Ion Ratio Lower Upper

228 100

226 31.5 20.7 38.5



#84

Benzo[b]fluoranthene

Concen: 11.12 ng/mL M3

RT: 47.500 min Scan# 4319

Delta R.T. -0.000 min

Lab File: F812221409.D

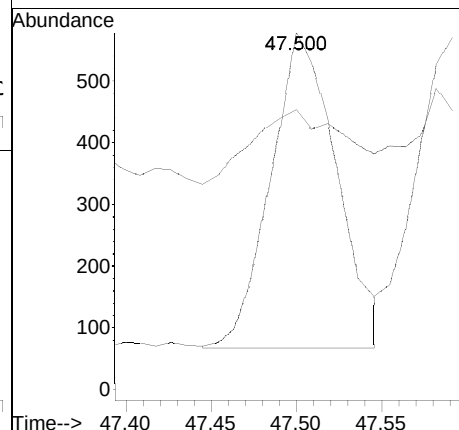
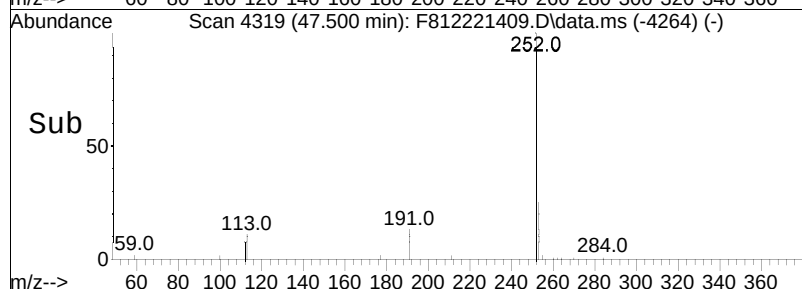
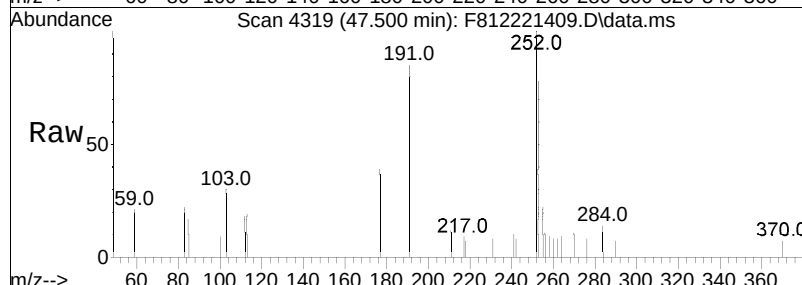
Acq: 23 Dec 2014 11:29 pm

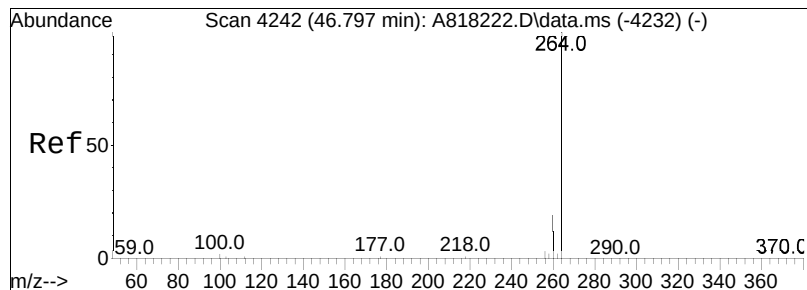
Tgt Ion:252 Resp: 1375

Ion Ratio Lower Upper

252 100

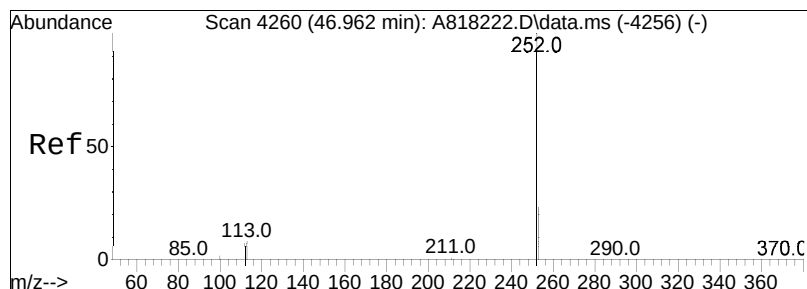
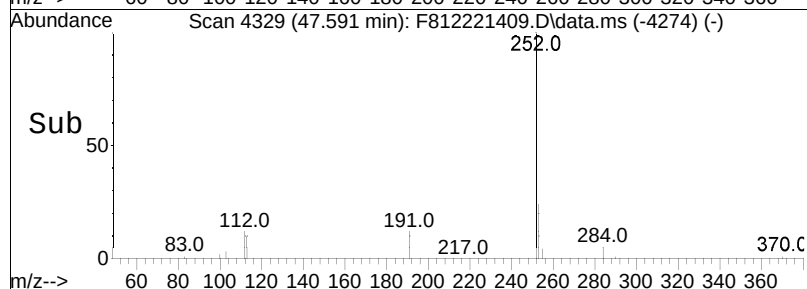
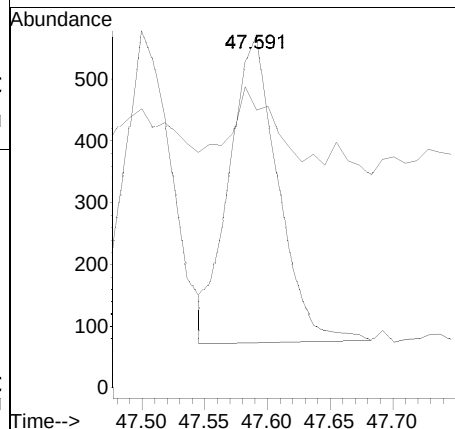
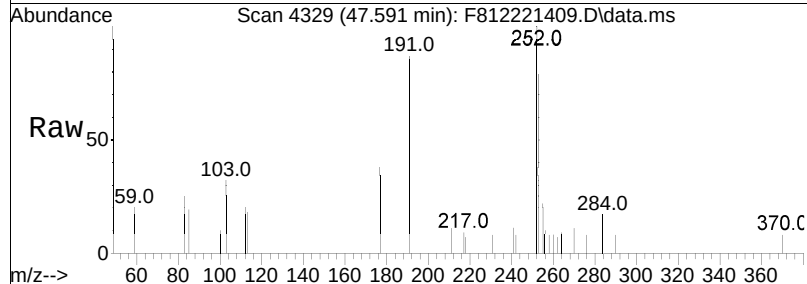
253 17.5 16.5 30.7





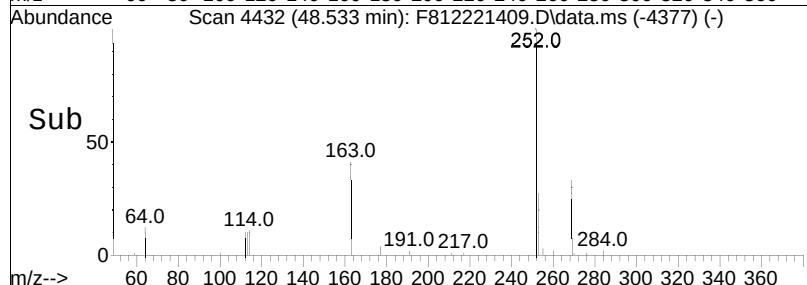
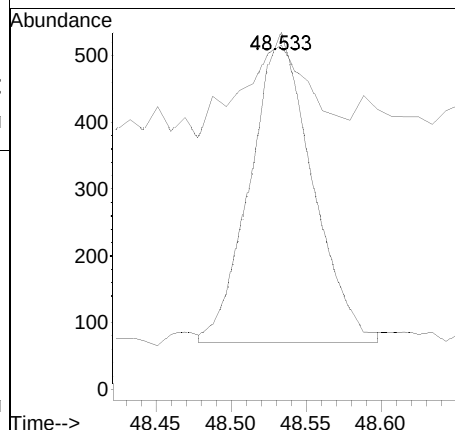
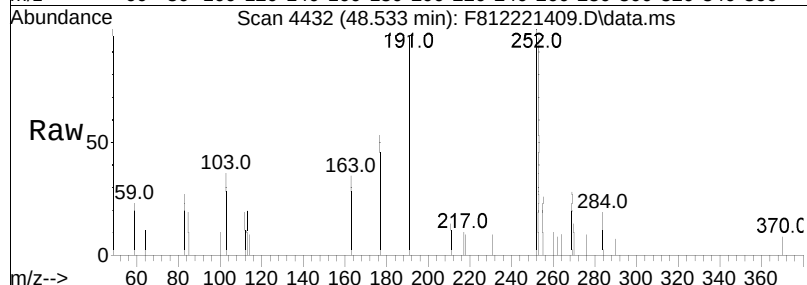
#85
 Benzo[j]+[k]fluoranthene
 Concen: 11.47 ng/mL
 RT: 47.591 min Scan# 4329
 Delta R.T. -0.000 min
 Lab File: F812221409.D
 Acq: 23 Dec 2014 11:29 pm

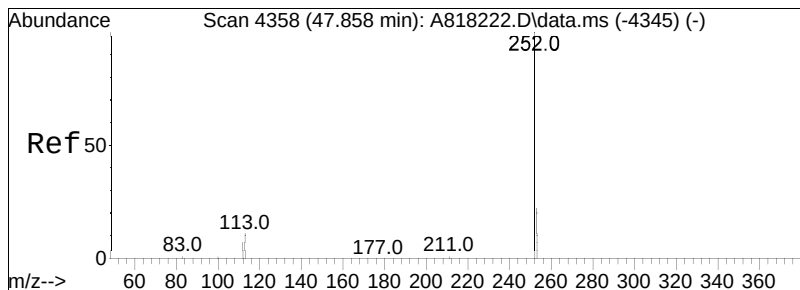
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	18.0	17.1	31.7	



#87
 Benzo[e]pyrene
 Concen: 10.62 ng/mL M4
 RT: 48.533 min Scan# 4432
 Delta R.T. -0.000 min
 Lab File: F812221409.D
 Acq: 23 Dec 2014 11:29 pm

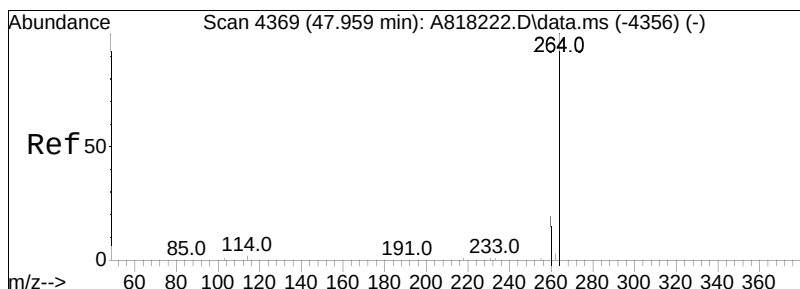
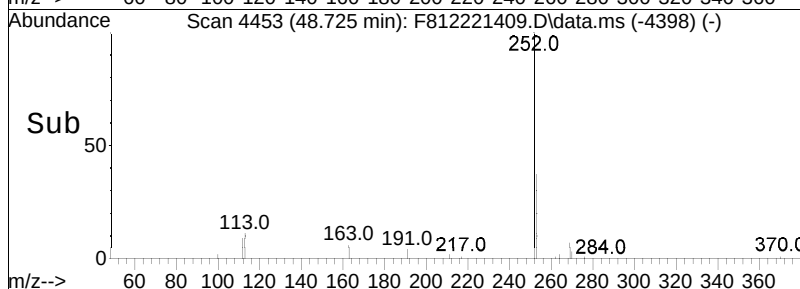
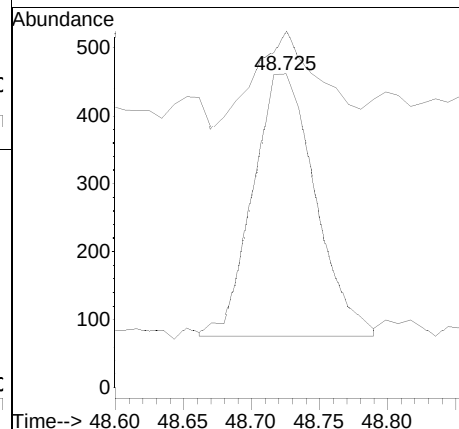
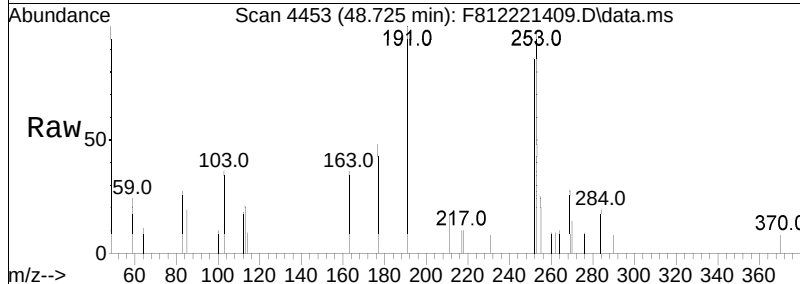
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	33.7	17.4	32.4#	





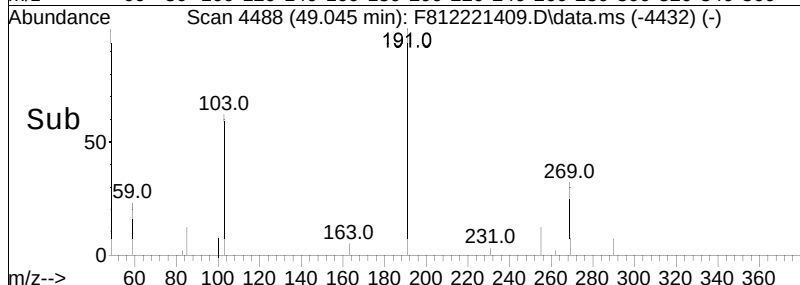
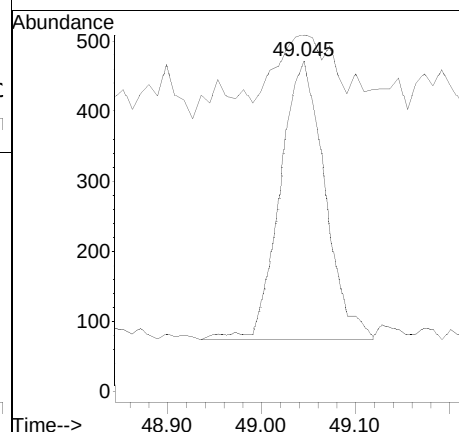
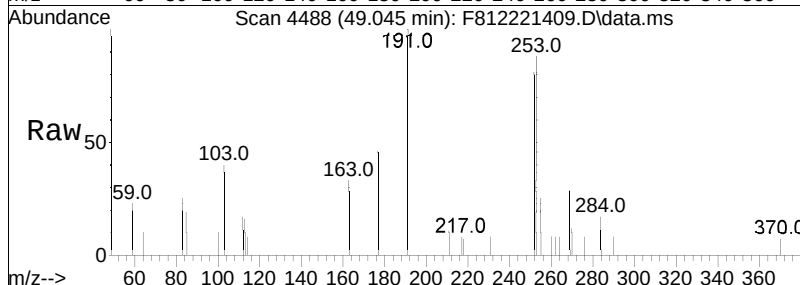
#89
Benzo[a]pyrene
Concen: 11.32 ng/mL M3
RT: 48.725 min Scan# 4453
Delta R.T. -0.000 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

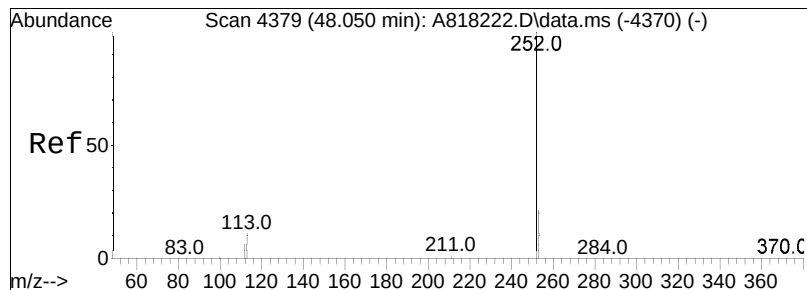
Tgt Ion: 252 Resp: 1232
Ion Ratio Lower Upper
252 100
253 36.4 16.9 31.3#



#90
Perylene
Concen: 11.55 ng/mL
RT: 49.045 min Scan# 4488
Delta R.T. 0.009 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

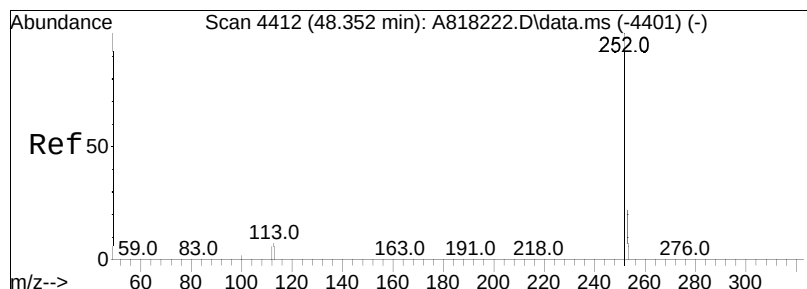
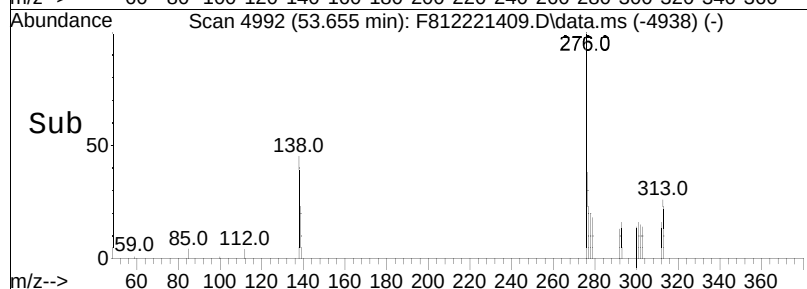
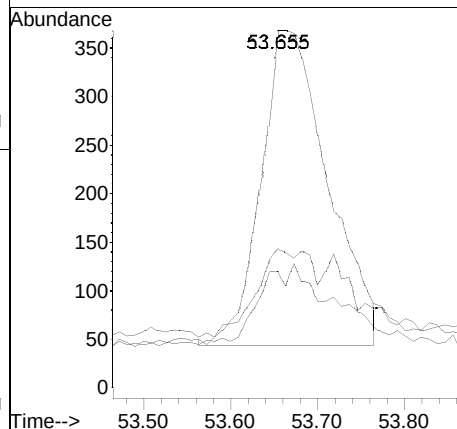
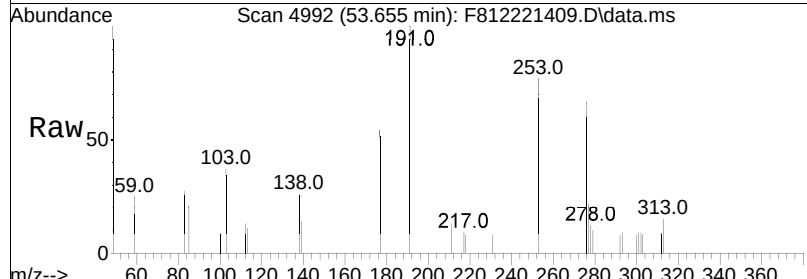
Tgt Ion: 252 Resp: 1308
Ion Ratio Lower Upper
252 100
253 28.6 17.3 32.1





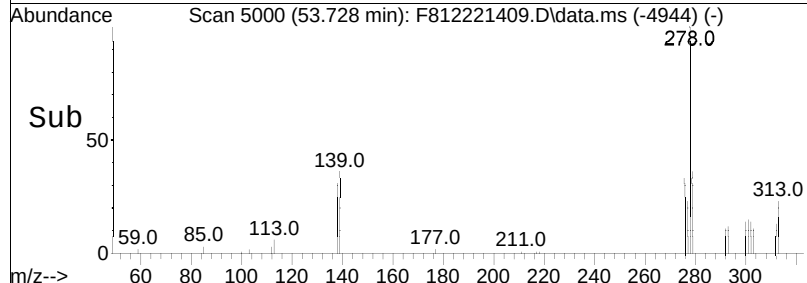
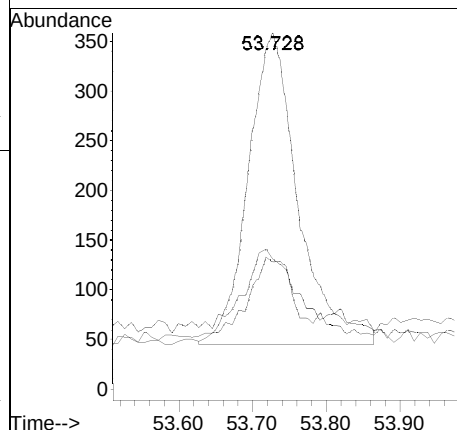
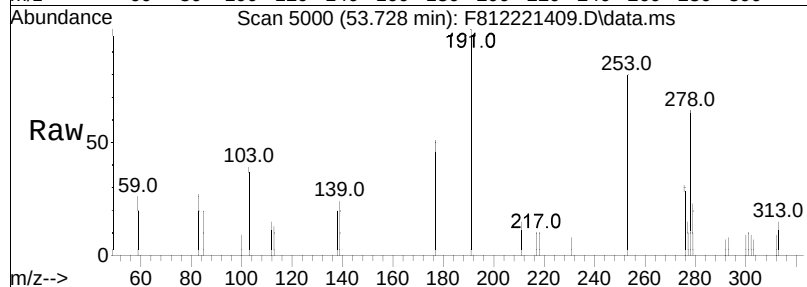
#91
 Indeno[1,2,3-cd]pyrene
 Concen: 12.03 ng/mL M3
 RT: 53.655 min Scan# 4992
 Delta R.T. -0.009 min
 Lab File: F812221409.D
 Acq: 23 Dec 2014 11:29 pm

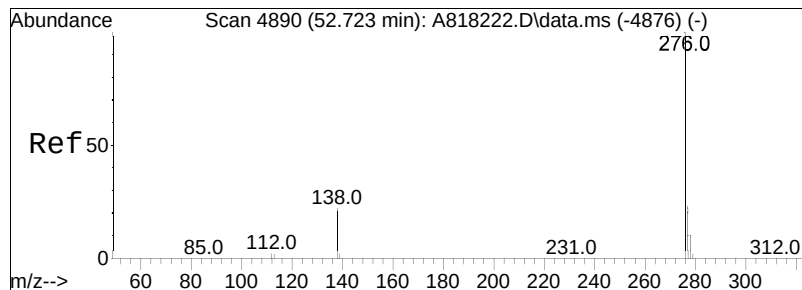
Tgt Ion	Ratio	Resp	Lower	Upper
276	100	1727		
138	23.5	19.3	35.9	
277	9.8	16.5	30.7#	



#92
 Dibenz[ah]+[ac]anthracene
 Concen: 11.90 ng/mL M4
 RT: 53.728 min Scan# 5000
 Delta R.T. 0.009 min
 Lab File: F812221409.D
 Acq: 23 Dec 2014 11:29 pm

Tgt Ion	Ratio	Resp	Lower	Upper
278	100	1476		
139	18.4	16.8	31.2	
279	18.8	17.2	32.0	





#93

Benzo[g,h,i]perylene

Concen: 10.63 ng/mL

RT: 55.016 min Scan# 5141

Delta R.T. 0.009 min

Lab File: F812221409.D

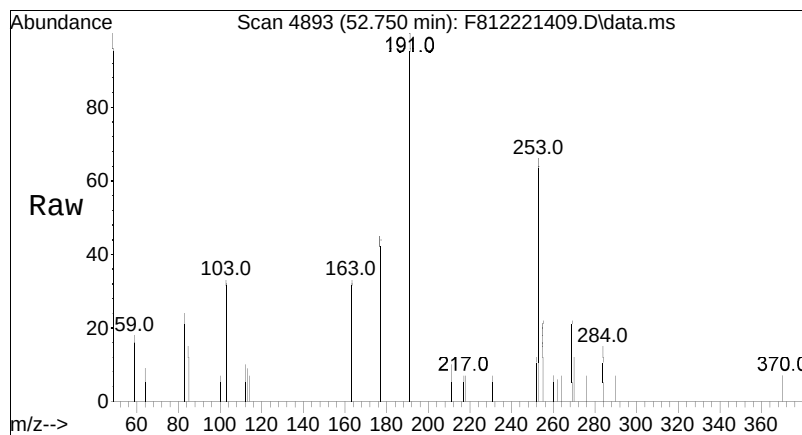
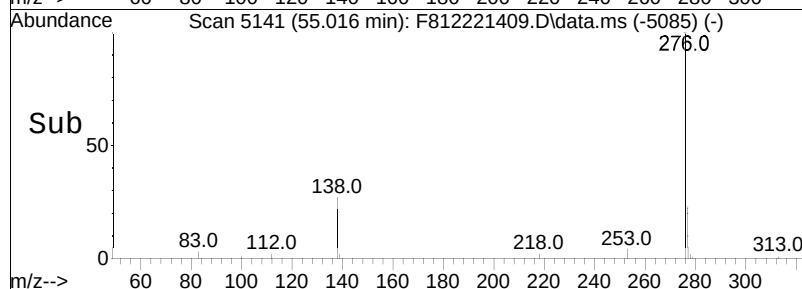
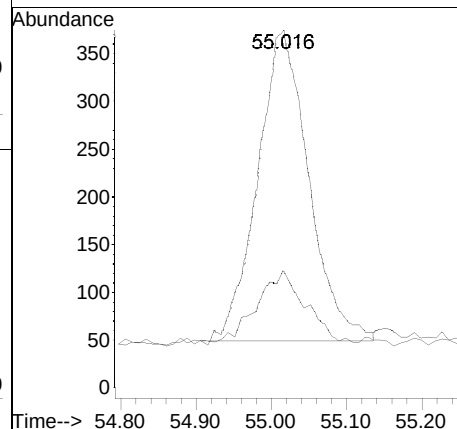
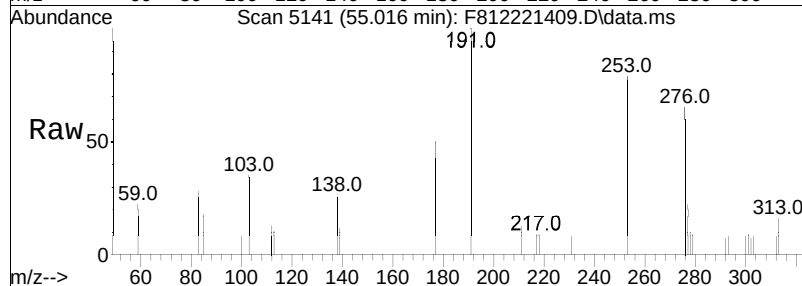
Acq: 23 Dec 2014 11:29 pm

Tgt Ion: 276 Resp: 1524

Ion Ratio Lower Upper

276 100

277 21.3 16.5 30.7



#94

Hopane (T19)

Concen: 13.59 ng/mL M4

RT: 52.750 min Scan# 4893

Delta R.T. 0.009 min

Lab File: F812221409.D

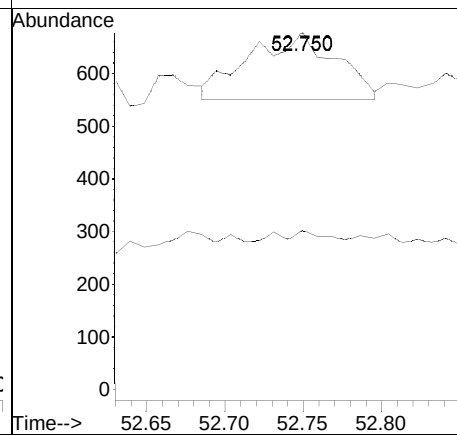
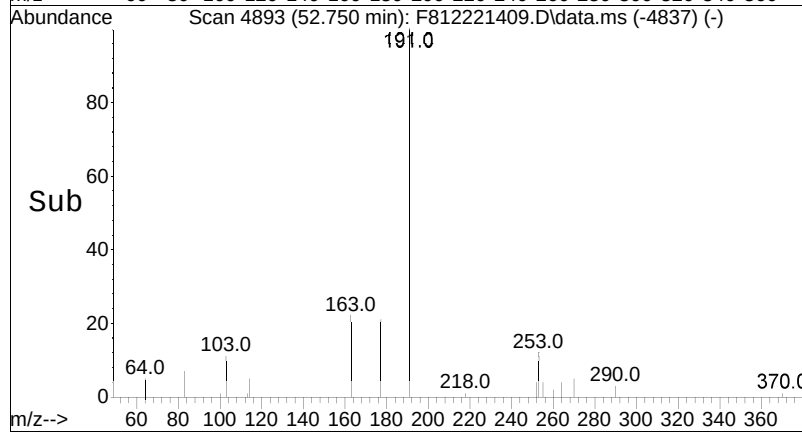
Acq: 23 Dec 2014 11:29 pm

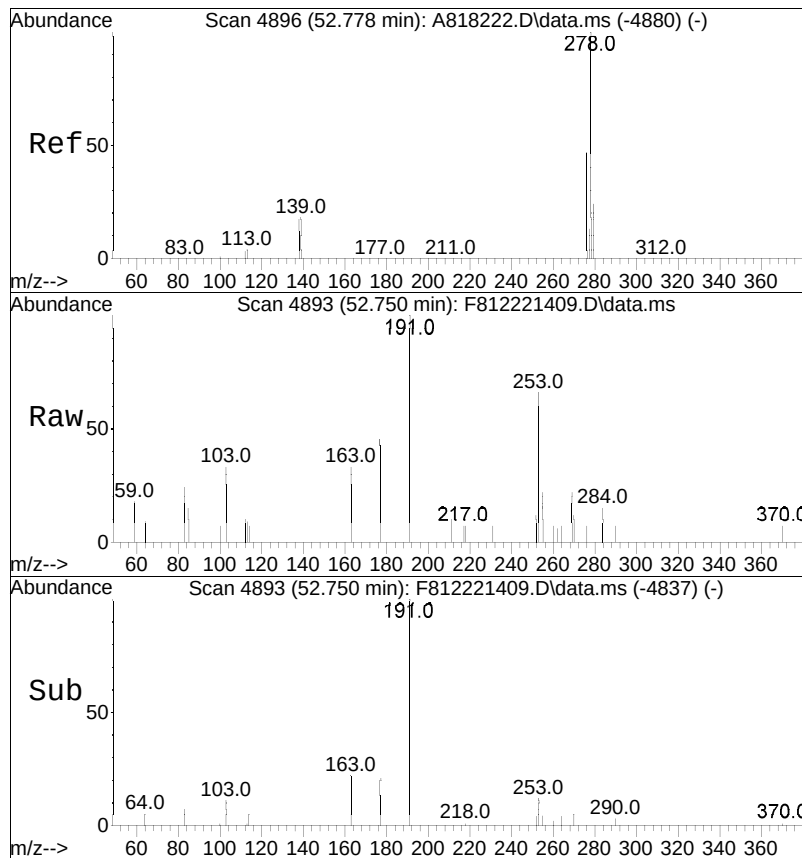
Tgt Ion: 191 Resp: 490

Ion Ratio Lower Upper

191 100

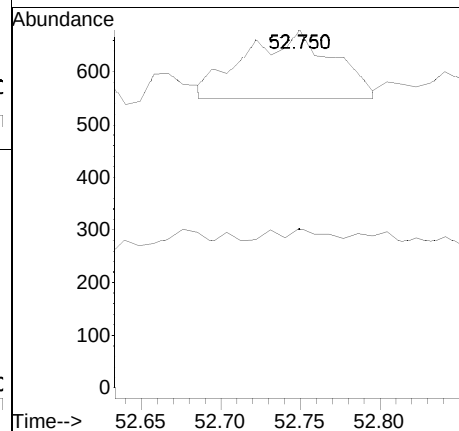
177 0.0 10.1 18.9#





#95
 17a(H),21B(H)-hopane - C₃₀H₅₂
 Concen: 13.76 ng/mL M4
 RT: 52.750 min Scan# 4893
 Delta R.T. 0.009 min
 Lab File: F812221409.D
 Acq: 23 Dec 2014 11:29 pm

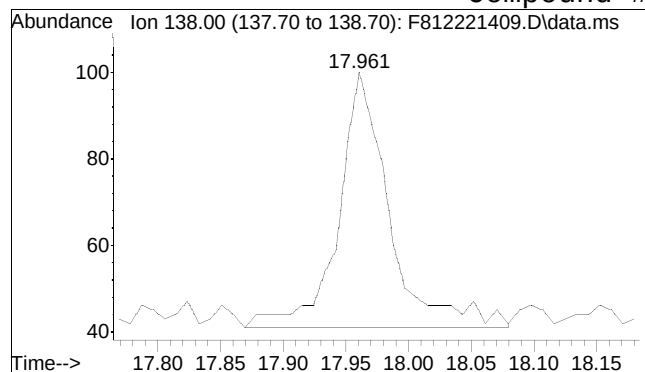
Tgt	Ion	Ratio	Lower	Upper
191	100			
177	0.0	10.1	18.9	



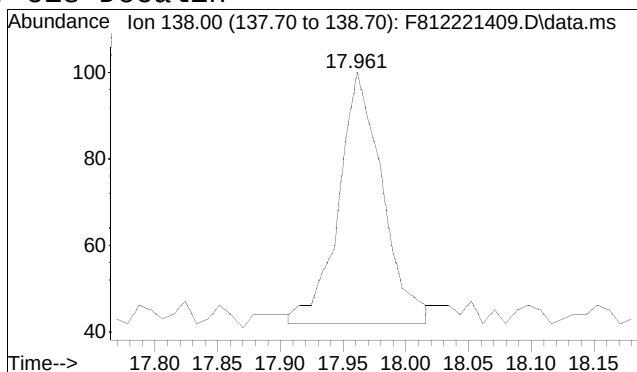
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221409.D Operator : PAH8:ML
 Date Inj'd : 12/23/2014 11:29 pm Instrument : PAH8
 Sample : I812231401 Quant Date : 12/24/2014 11:28 am

Compound #4: cis-Decalin



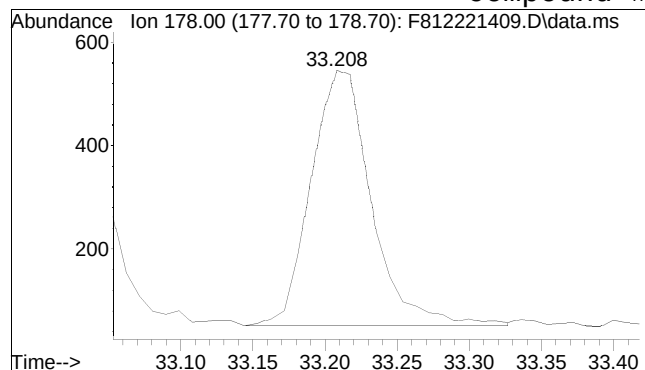
Original Peak Response = 168



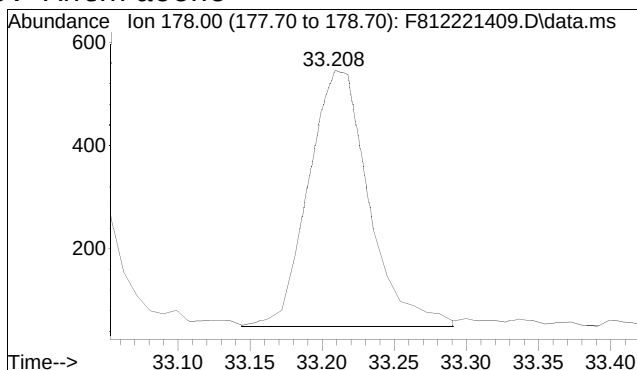
Manual Peak Response = 141 M4

M4 = Poor automated baseline construction.

Compound #55: Anthracene



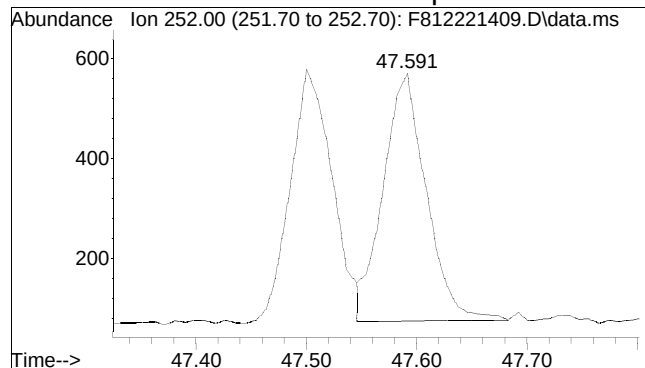
Original Peak Response = 1439



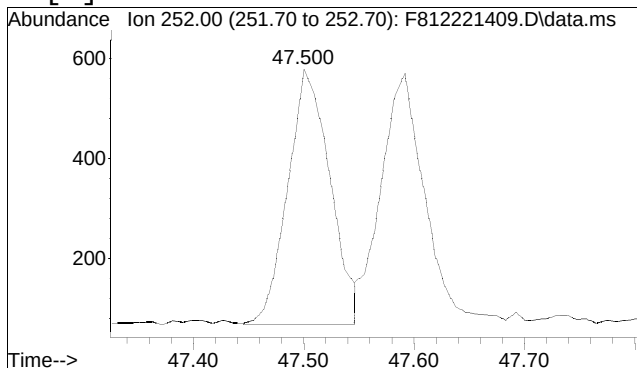
Manual Peak Response = 1447 M4

M4 = Poor automated baseline construction.

Compound #84: Benzo[b]fluoranthene



Original Peak Response = 1341



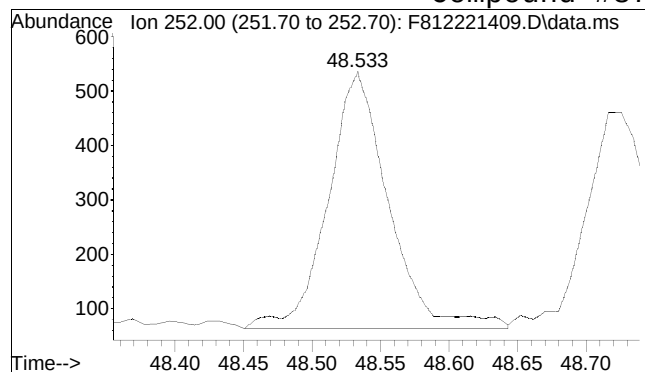
Manual Peak Response = 1375 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

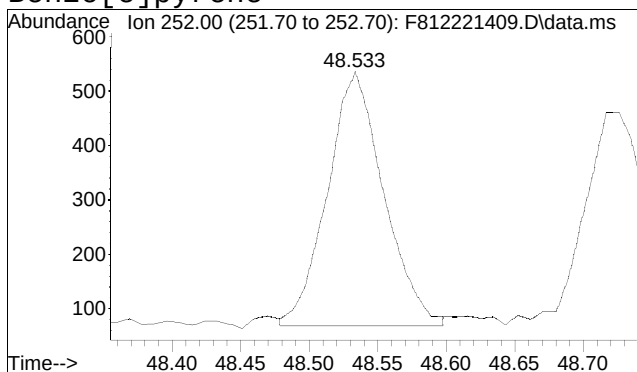
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221409.D Operator : PAH8:ML
 Date Inj'd : 12/23/2014 11:29 pm Instrument : PAH8
 Sample : I812231401 Quant Date : 12/24/2014 11:28 am

Compound #87: Benzo[e]pyrene



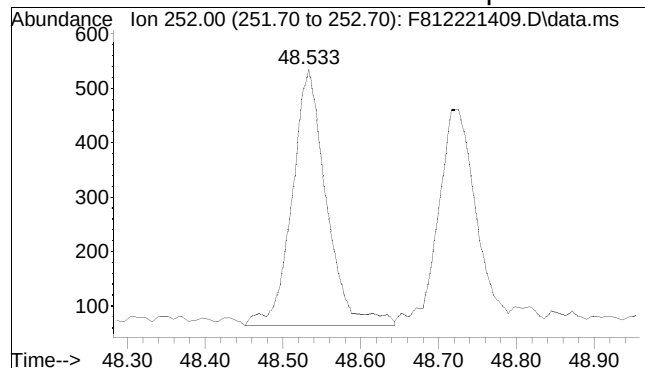
Original Peak Response = 1439



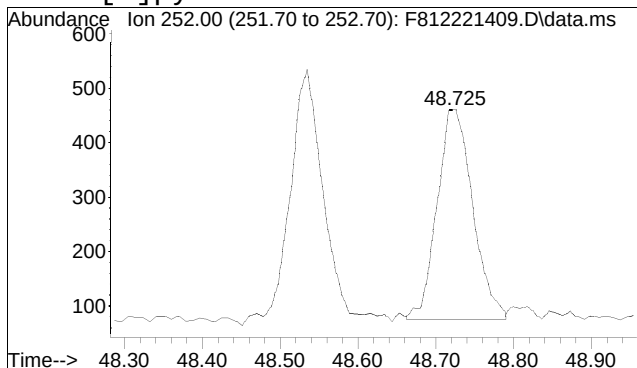
Manual Peak Response = 1334 M4

M4 = Poor automated baseline construction.

Compound #89: Benzo[a]pyrene



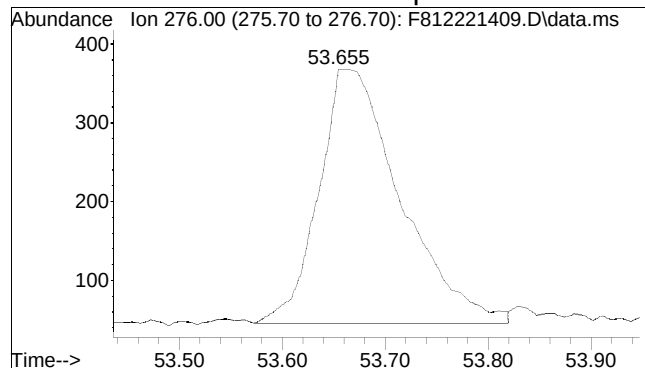
Original Peak Response = 1439



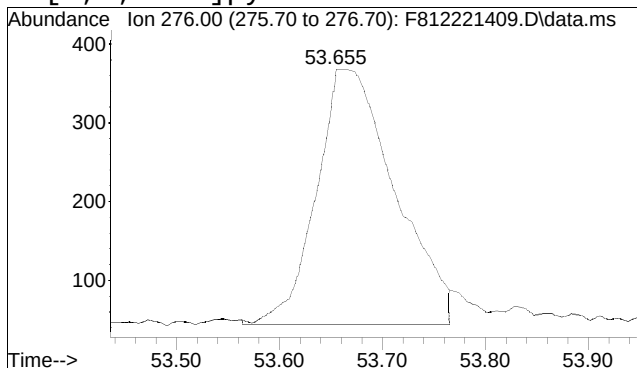
Manual Peak Response = 1232 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 1789



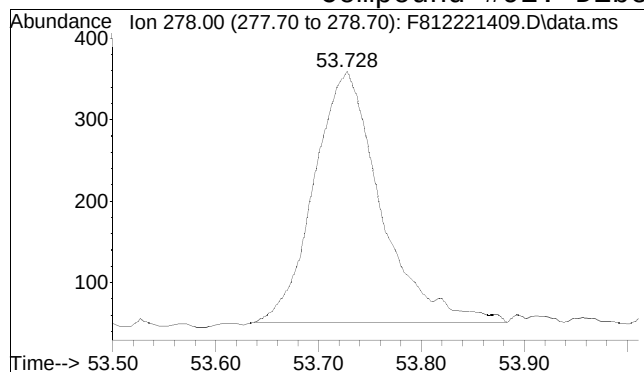
Manual Peak Response = 1727 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

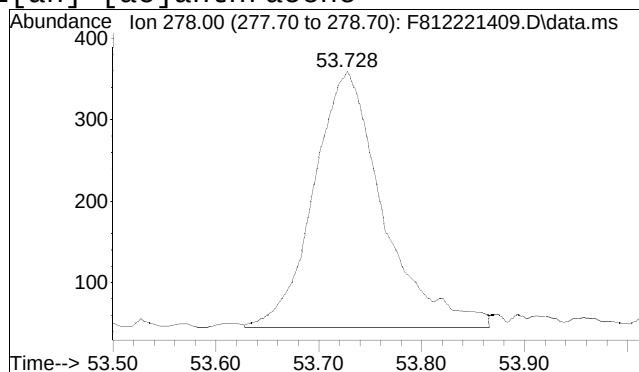
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221409.D Operator : PAH8:ML
 Date Inj'd : 12/23/2014 11:29 pm Instrument : PAH8
 Sample : I812231401 Quant Date : 12/24/2014 11:28 am

Compound #92: Dibenz[ah]+[ac]anthracene



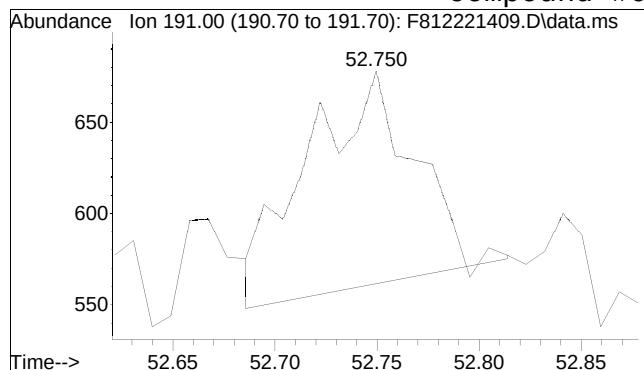
Original Peak Response = 1397

M4 = Poor automated baseline construction.



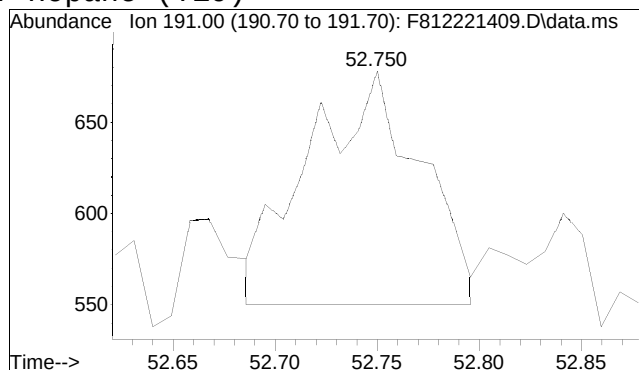
Manual Peak Response = 1476 M4

Compound #94: Hopane (T19)



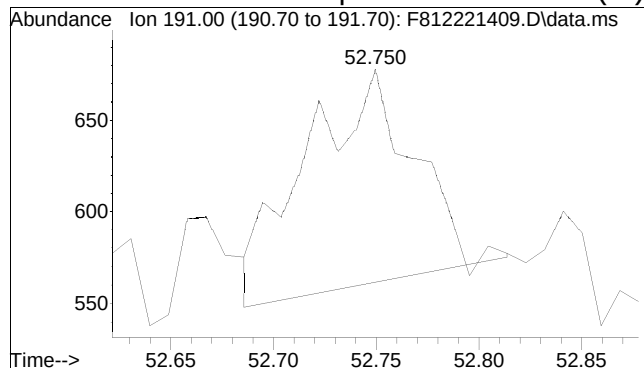
Original Peak Response = 433

M4 = Poor automated baseline construction.



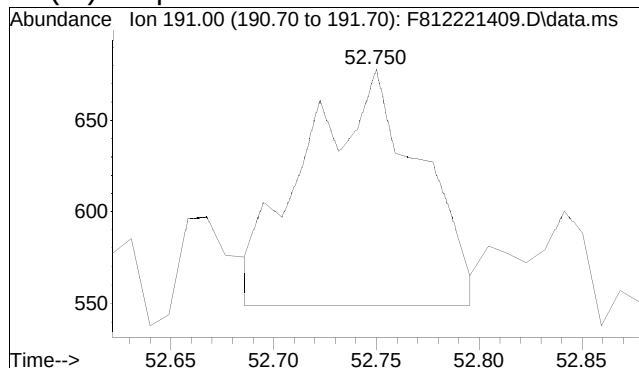
Manual Peak Response = 490 M4

Compound #95: 17a(H),21B(H)-hopane - C30H52



Original Peak Response = 433

M4 = Poor automated baseline construction.



Manual Peak Response = 496 M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : f812221403.D
 Acq On : 23 Dec 2014 2:50 pm
 Operator : PAH8:ML
 Sample : I812231402
 Misc : WG755323, FRAU67 25ng/ml
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 13 11:08:44 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.068	164	38402	500.000	ng/mL	0.00
74) Chrysene-d12	43.515	240	53110	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	20.105	136	4253	28.918	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	2.89%#		
42) Phenanthrene-d10	32.944	188	3121	27.823	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	2.78%#		
83) Benzo[b]fluoranthene-d12	47.417	264	2531	24.529	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	2.45%#		
88) Benzo[a]pyrene-d12	48.634	264	2332	27.865	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	2.79%#		
129) 5B(H)Cholane - Surr	44.127	217	472	28.389	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	2.84%#		
Target Compounds						
						Qvalue
3) trans-Decalin	16.738	138	436	12.688	ng/mL	100
4) cis-Decalin	17.961	138	339	13.026	ng/mL	100
10) Naphthalene	20.178	128	4882	30.809	ng/mL	100
16) 2-Methylnaphthalene	22.870	142	2842	26.835	ng/mL	100
17) 1-Methylnaphthalene	23.299	142	2848	27.805	ng/mL	100
18) Benzothiophene	20.397	134	3999	30.411	ng/mL	100
23) Biphenyl	24.750	154	3609	28.326	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.352	156	2395	27.605	ng/mL	100
25) Dibenzofuran	27.834	168	3665	28.090	ng/mL	97
26) Acenaphthylene	26.457	152	4177	29.195	ng/mL	100
27) Acenaphthene	27.196	153	2753	30.290	ng/mL	99
28) 2,3,5-Trimethylnaphthalen	28.747	170	2025	28.360	ng/mL	92
29) Fluorene	29.212	166	2660	26.529	ng/mL	97
33) Dibenzothiophene	32.533	184	3760	26.786	ng/mL	99
43) Phenanthrene	33.026	178	3864	28.286	ng/mL	98
54) Retene	40.000	234	786	23.333	ng/mL	97
55) Anthracene	33.208	178	3508M4	29.070	ng/mL	
56) Carbazole	33.874	167	3465	27.246	ng/mL	96
57) 1-Methylphenanthrene	35.527	192	2553	25.755	ng/mL	100
58) Fluoranthene	37.800	202	3624	25.656	ng/mL	97
59) Benzo(b)fluorene	40.311	216	2071	27.149	ng/mL	100
60) Pyrene	38.685	202	3728	25.323	ng/mL	98
66) Naphthobenzothiophene	42.529	234	3276	24.061	ng/ml	98
67) Naphthobenzothiophene-2,1	42.529	234	3276	24.061	ng/mL	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : f812221403.D
 Acq On : 23 Dec 2014 2:50 pm
 Operator : PAH8:ML
 Sample : I812231402
 Misc : WG755323,FRAU67 25ng/ml
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 13 11:08:44 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.451	228	2905M3	26.946	ng/mL	
76)	Chrysene	43.607	228	2926	26.956	ng/mL	100
77)	Chrysene/Triphenylene	43.607	228	2926	26.956	ng/mL	100
84)	Benzo[b]fluoranthene	47.500	252	3272	26.892	ng/mL	90
85)	Benzo[j]+[k]fluoranthene	47.591	252	3373	29.328	ng/mL	98
87)	Benzo[e]pyrene	48.533	252	3123	25.272	ng/mL	95
89)	Benzo[a]pyrene	48.725	252	3002	28.032	ng/mL	97
90)	Perylene	49.045	252	3161	28.379	ng/mL	95
91)	Indeno[1,2,3-cd]pyrene	53.673	276	3857M3	27.301	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.728	278	3164	25.920	ng/mL	92
93)	Benzo[g,h,i]perylene	55.016	276	3699	26.218	ng/mL	100
94)	Hopane (T19)	52.750	191	1120	31.575	ng/mL#	65
95)	17a(H),21B(H)-hopane - C3	52.750	191	1120	31.575	ng/mL#	65

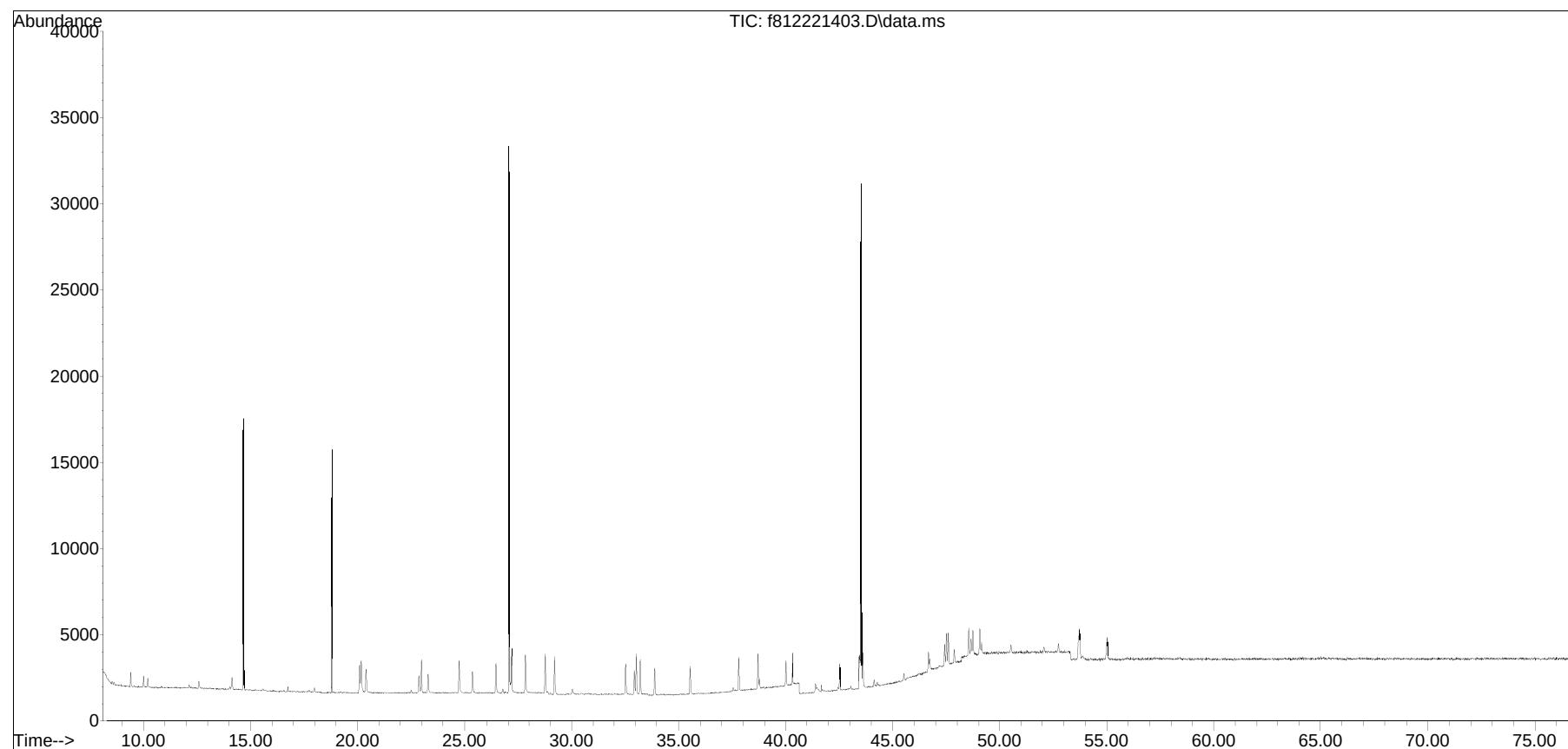
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC23\
Data File : f812221403.D
Acq On : 23 Dec 2014 2:50 pm
Operator : PAH8:ML
Sample : I812231402
Misc : WG755323, FRAU67 25ng/ml
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 13 11:08:44 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 23 07:51:27 2014
Response via : Initial Calibration

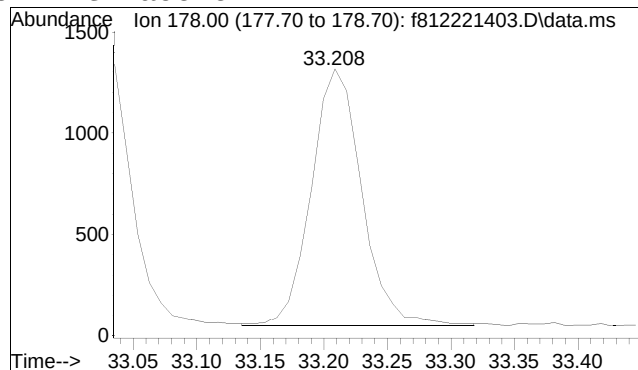
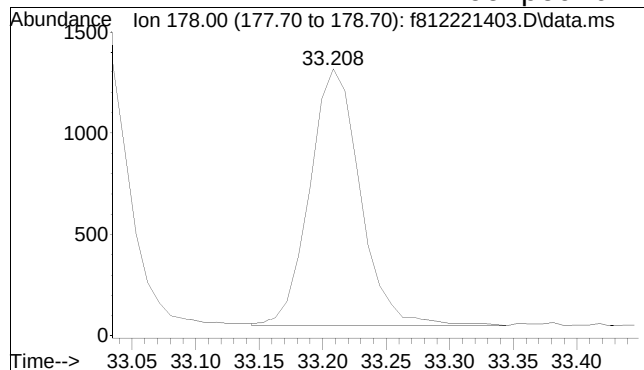
Sub List : ICAL_CCALT_REV2 - CC with five surrogates



Manual Integration/Negative Proof Report

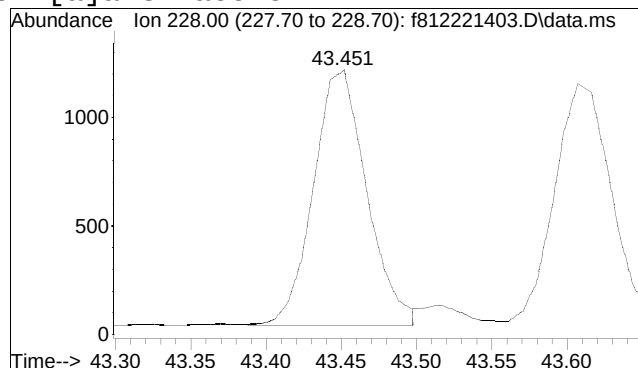
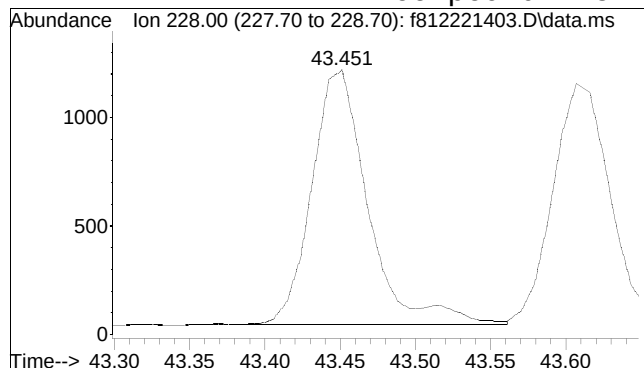
Data Path : O:\Forensics\Data\PAH8\2014Q Method : PAH8122314.M
 Data File : f812221403.D Operator : PAH8:ML
 Date Inj'd : 12/23/2014 2:50 pm Instrument : PAH8
 Sample : I812231402 Quant Date : 12/24/2014 11:28 am

Compound #55: Anthracene



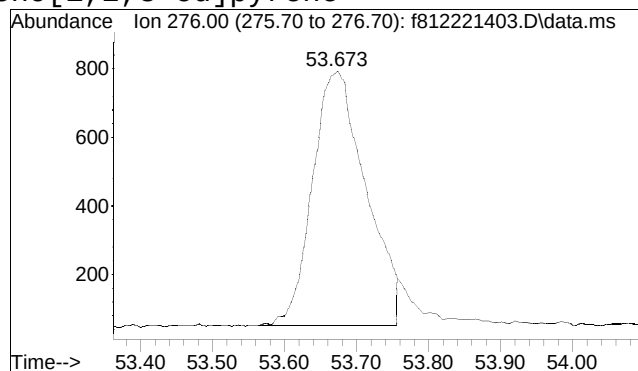
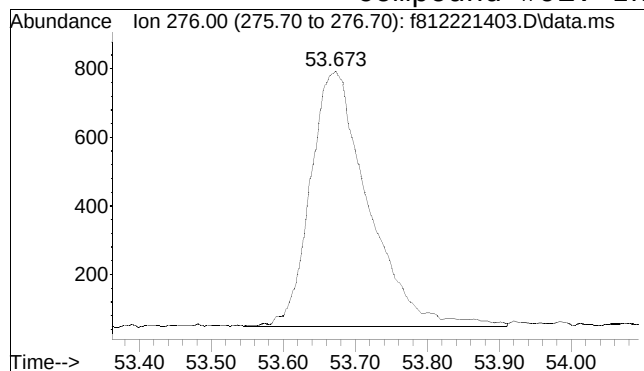
M4 = Poor automated baseline construction.

Compound #75: Benz[a]anthracene



M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Compound #91: Indeno[1,2,3-cd]pyrene



M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221404.D
 Acq On : 23 Dec 2014 4:17 pm
 Operator : PAH8:ML
 Sample : I812231403
 Misc : WG755323,FRAU68 100ng/ml
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 13 11:08:51 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.068	164	28054	500.000	ng/mL	0.00
74) Chrysene-d12	43.515	240	39000	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	20.096	136	12604	117.312	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	11.73%#		
42) Phenanthrene-d10	32.935	188	9279	113.234	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	11.32%#		
83) Benzo[b]fluoranthene-d12	47.417	264	7405	97.731	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	9.77%#		
88) Benzo[a]pyrene-d12	48.634	264	6834	111.202	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	11.12%#		
129) 5B(H)Cholane - Surr	44.127	217	1376	112.704	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	11.27%#		
Target Compounds						
						Qvalue
3) trans-Decalin	16.738	138	1340	53.379	ng/mL	100
4) cis-Decalin	17.961	138	957	50.337	ng/mL	100
10) Naphthalene	20.178	128	14697	126.959	ng/mL	100
16) 2-Methylnaphthalene	22.870	142	8598	111.131	ng/mL	100
17) 1-Methylnaphthalene	23.290	142	8266	110.467	ng/mL	100
18) Benzothiophene	20.397	134	11833	123.178	ng/mL	100
23) Biphenyl	24.750	154	10693	114.885	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.362	156	7212	113.789	ng/mL	100
25) Dibenzofuran	27.834	168	10998	115.385	ng/mL	99
26) Acenaphthylene	26.457	152	12563	120.199	ng/mL	100
27) Acenaphthene	27.196	153	7929	119.417	ng/mL	100
28) 2,3,5-Trimethylnaphthalen	28.747	170	5940	113.873	ng/mL	95
29) Fluorene	29.212	166	8401	114.693	ng/mL	99
33) Dibenzothiophene	32.533	184	11462	111.773	ng/mL	100
43) Phenanthrene	33.026	178	11608	116.319	ng/mL	99
54) Retene	40.000	234	2401	97.567	ng/mL	99
55) Anthracene	33.208	178	10939M4	124.084	ng/mL	
56) Carbazole	33.874	167	10351	111.413	ng/mL	100
57) 1-Methylphenanthrene	35.527	192	7428	102.573	ng/mL	98
58) Fluoranthene	37.800	202	10898	105.609	ng/mL	95
59) Benzo(b)fluorene	40.311	216	6121	109.837	ng/mL	98
60) Pyrene	38.685	202	10924	101.573	ng/mL	96
66) Naphthobenzothiophene	42.520	234	9907	99.604	ng/mL	99
67) Naphthobenzothiophene-2,1	42.520	234	9907	99.604	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221404.D
 Acq On : 23 Dec 2014 4:17 pm
 Operator : PAH8:ML
 Sample : I812231403
 Misc : WG755323,FRAU68 100ng/ml
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 13 11:08:51 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.451	228	8854	111.839	ng/mL	98
76)	Chrysene	43.607	228	8713	109.312	ng/mL	99
77)	Chrysene/Triphenylene	43.607	228	8713	109.312	ng/mL	99
84)	Benzo[b]fluoranthene	47.500	252	9532	106.686	ng/mL	95
85)	Benzo[j]+[k]fluoranthene	47.591	252	9887	117.068	ng/mL	93
87)	Benzo[e]pyrene	48.533	252	9449	104.125	ng/mL	95
89)	Benzo[a]pyrene	48.725	252	8898	113.150	ng/mL	98
90)	Perylene	49.045	252	9324	113.996	ng/mL	98
91)	Indeno[1,2,3-cd]pyrene	53.664	276	11400M3	109.888	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.728	278	9673	107.911	ng/mL	97
93)	Benzo[g,h,i]perylene	55.007	276	10465	101.009	ng/mL	99
94)	Hopane (T19)	52.740	191	3084	118.399	ng/mL	94
95)	17a(H),21B(H)-hopane - C3	52.740	191	3084	118.399	ng/mL	94

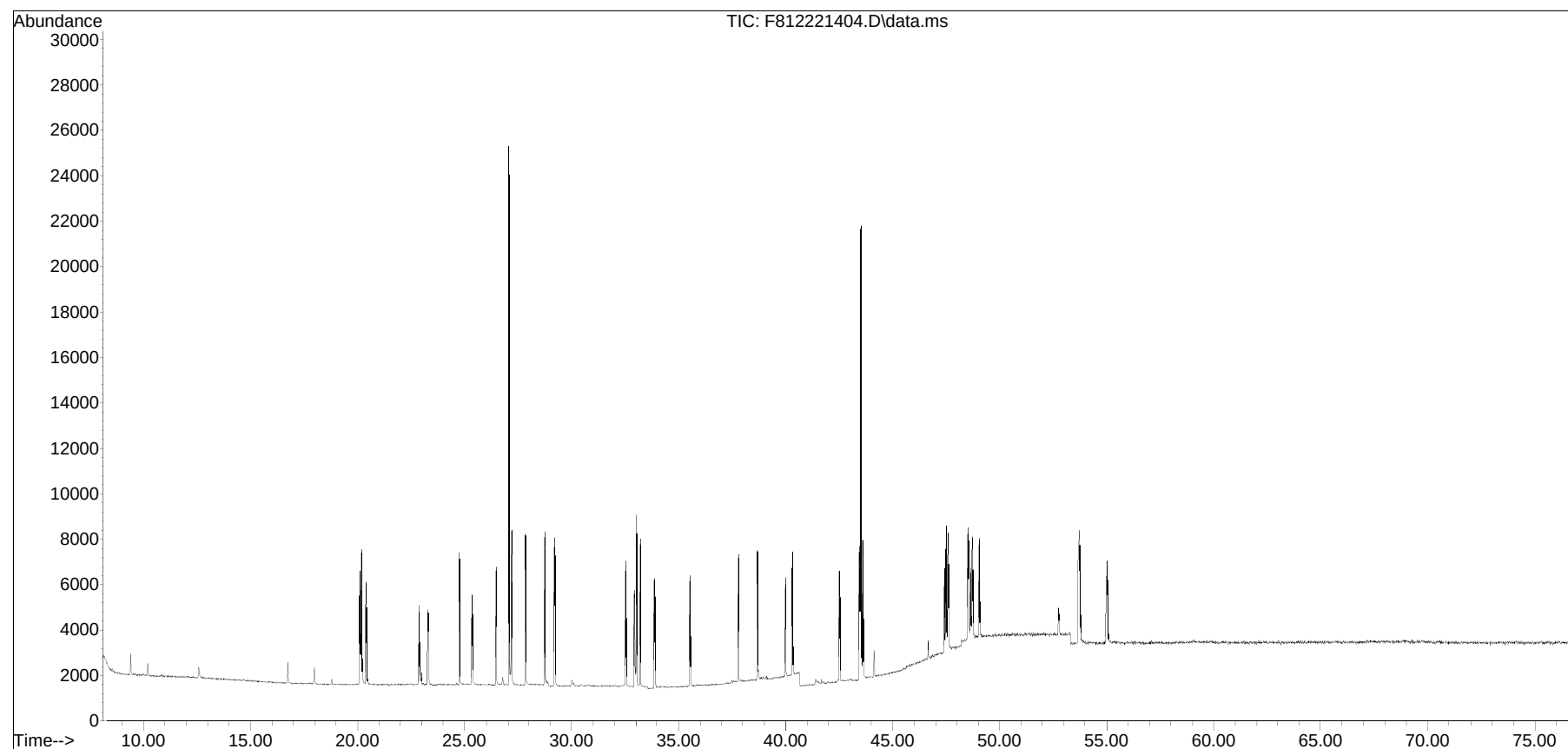
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC23\
Data File : F812221404.D
Acq On : 23 Dec 2014 4:17 pm
Operator : PAH8:ML
Sample : I812231403
Misc : WG755323,FRAU68 100ng/ml
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 13 11:08:51 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 23 07:51:27 2014
Response via : Initial Calibration

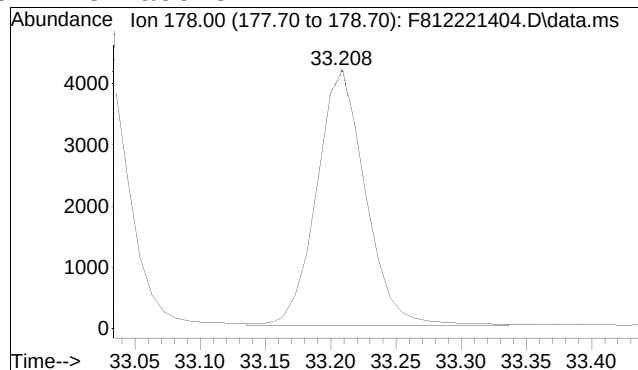
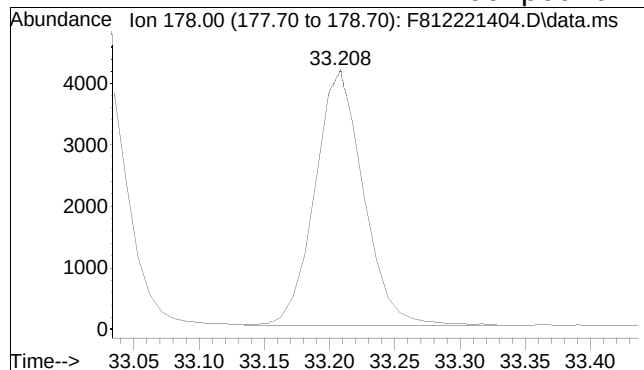
Sub List : ICAL_CCALT_REV2 - CC with five surrogates



Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
Data File : F812221404.D Operator : PAH8:ML
Date Inj'd : 12/23/2014 4:17 pm Instrument : PAH8
Sample : I812231403 Quant Date : 12/24/2014 11:28 am

Compound #55: Anthracene

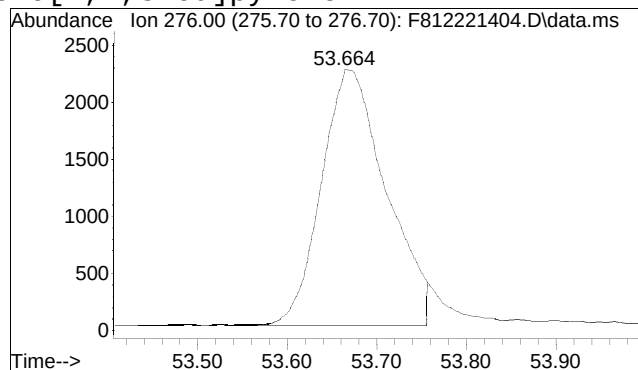
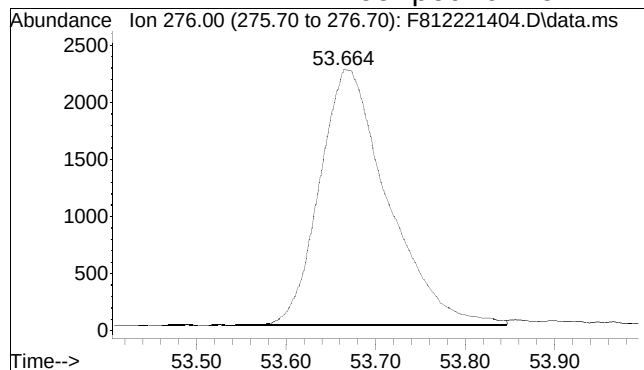


Original Peak Response = 10771

Manual Peak Response = 10939 M4

M4 = Poor automated baseline construction.

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 11894

Manual Peak Response = 11400 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221405.D
 Acq On : 23 Dec 2014 5:44 pm
 Operator : PAH8:ML
 Sample : I812231404
 Misc : WG755323, FRAV19 500ng/ml
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 13 11:08:59 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.068	164	36627	500.000	ng/mL	0.00
74) Chrysene-d12	43.515	240	52691	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	20.096	136	76901	548.225	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	54.82%		
42) Phenanthrene-d10	32.935	188	56185	525.157	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	52.52%		
83) Benzo[b]fluoranthene-d12	47.418	264	48396	472.763	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	47.28%#		
88) Benzo[a]pyrene-d12	48.634	264	43523	524.184	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	52.42%		
129) 5B(H)Cholane - Surr	44.127	217	8970	543.801	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	54.38%		
Target Compounds						
						Qvalue
3) trans-Decalin	16.738	138	7933	242.046	ng/mL	100
4) cis-Decalin	17.961	138	6060	244.141	ng/mL	100
10) Naphthalene	20.169	128	90882	601.321	ng/mL	100
16) 2-Methylnaphthalene	22.870	142	54921	543.713	ng/mL	100
17) 1-Methylnaphthalene	23.290	142	53034	542.854	ng/mL	100
18) Benzothiophene	20.388	134	73757	588.080	ng/mL	100
23) Biphenyl	24.741	154	67523	555.659	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.352	156	46098	557.084	ng/mL	100
25) Dibenzofuran	27.835	168	70200	564.112	ng/mL	98
26) Acenaphthylene	26.457	152	82836M4	607.046	ng/mL	
27) Acenaphthene	27.196	153	50602	583.724	ng/mL	99
28) 2,3,5-Trimethylnaphthalen	28.738	170	38528	565.725	ng/mL	96
29) Fluorene	29.212	166	54218	566.947	ng/mL	99
33) Dibenzothiophene	32.533	184	75174	561.484	ng/mL	99
43) Phenanthrene	33.026	178	74729	573.555	ng/mL	99
54) Retene	40.000	234	16461	512.343	ng/mL	99
55) Anthracene	33.208	178	71144M4	618.115	ng/mL	
56) Carbazole	33.865	167	71605	590.324	ng/mL	99
57) 1-Methylphenanthrene	35.527	192	50135	530.269	ng/mL	100
58) Fluoranthene	37.800	202	74157	550.426	ng/mL	95
59) Benzo(b)fluorene	40.311	216	42444	583.359	ng/mL	99
60) Pyrene	38.685	202	81330	579.217	ng/mL	96
66) Naphthobenzothiophene	42.520	234	66395	511.285	ng/mL	99
67) Naphthobenzothiophene-2,1	42.520	234	66395	511.285	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221405.D
 Acq On : 23 Dec 2014 5:44 pm
 Operator : PAH8:ML
 Sample : I812231404
 Misc : WG755323, FRAV19 500ng/ml
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 13 11:08:59 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.451	228	60268	563.465	ng/mL	98
76)	Chrysene	43.607	228	59928	556.489	ng/mL	99
77)	Chrysene/Triphenylene	43.607	228	59928	556.489	ng/mL	99
84)	Benzo[b]fluoranthene	47.500	252	64324	532.873	ng/mL	96
85)	Benzo[j]+[k]fluoranthene	47.591	252	63430	555.901	ng/mL	95
87)	Benzo[e]pyrene	48.533	252	64635	527.189	ng/mL	95
89)	Benzo[a]pyrene	48.725	252	61869	582.320	ng/mL	96
90)	Perylene	49.046	252	61139	553.266	ng/mL	95
91)	Indeno[1,2,3-cd]pyrene	53.673	276	72078M3	514.254	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.728	278	65062	537.232	ng/mL	97
93)	Benzo[g,h,i]perylene	55.016	276	69639	497.511	ng/mL	98
94)	Hopane (T19)	52.741	191	19212	545.926	ng/mL#	85
95)	17a(H),21B(H)-hopane - C3	52.741	191	19212	545.926	ng/mL#	85

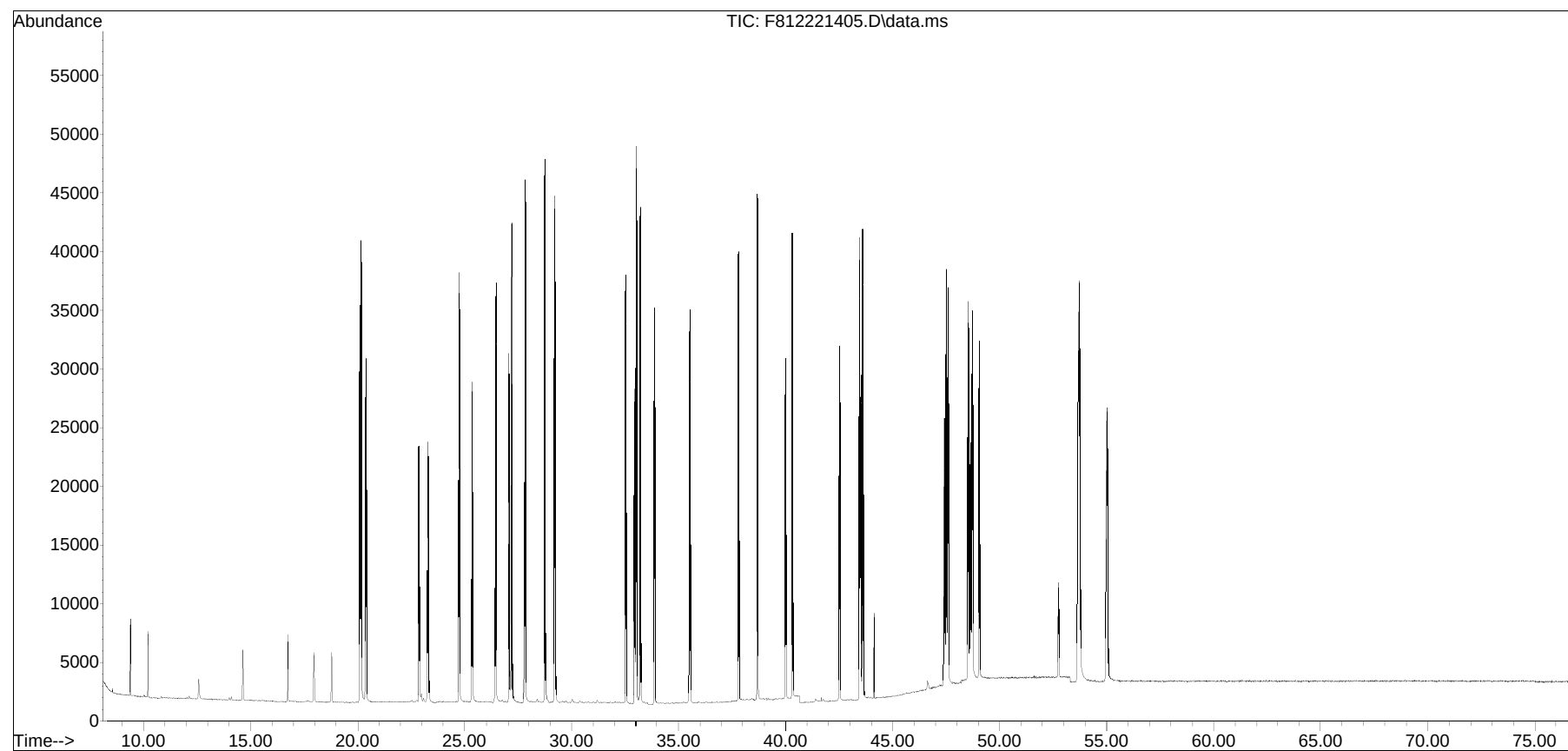
(#) = qualifier out of range (m) = manual integration (+) = signals summed

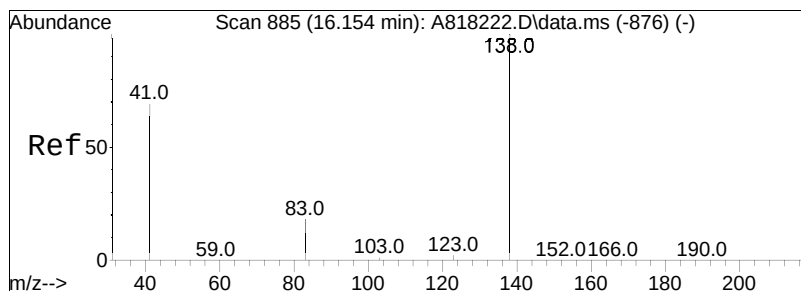
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC23\
Data File : F812221405.D
Acq On : 23 Dec 2014 5:44 pm
Operator : PAH8:ML
Sample : I812231404
Misc : WG755323, FRAV19 500ng/ml
ALS Vial : 5 Sample Multiplier: 1

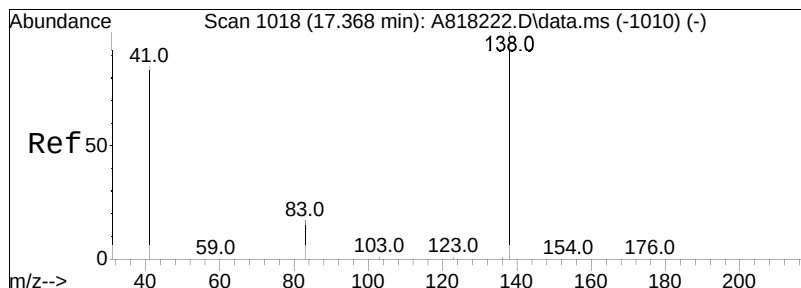
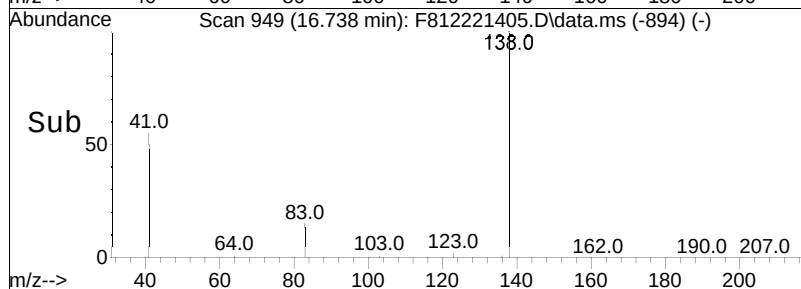
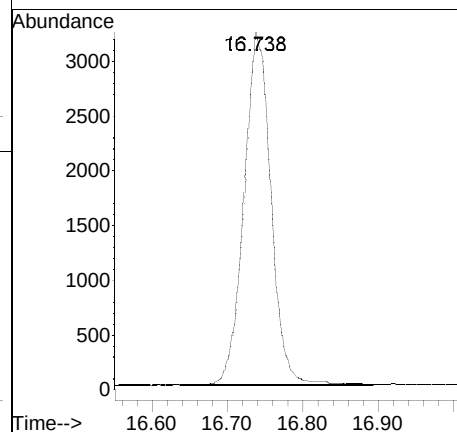
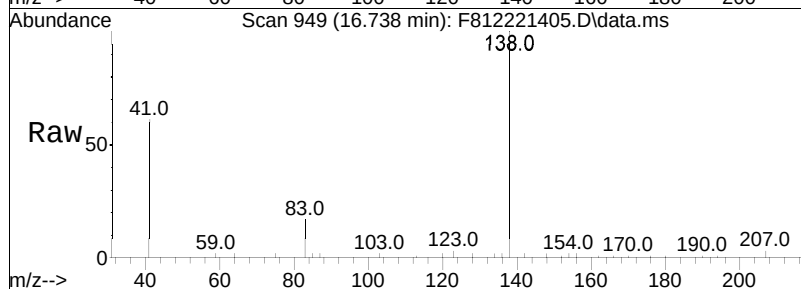
Quant Time: Jan 13 11:08:59 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 23 07:51:27 2014
Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

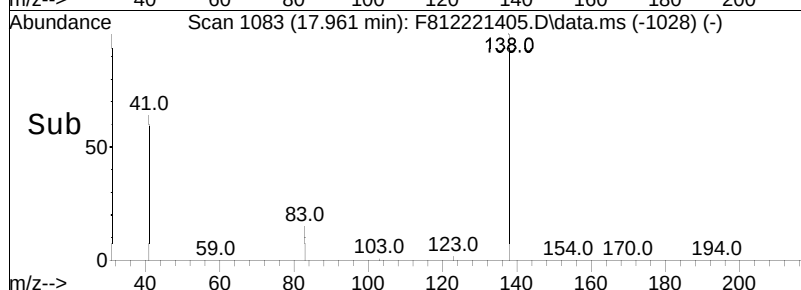
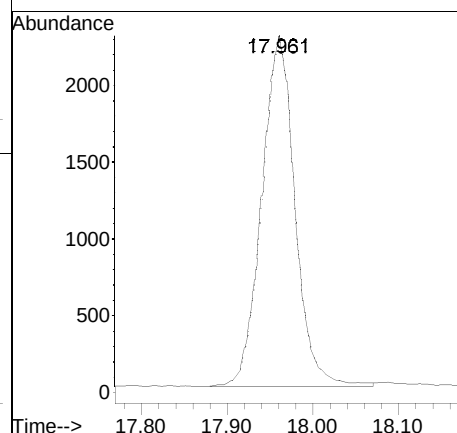
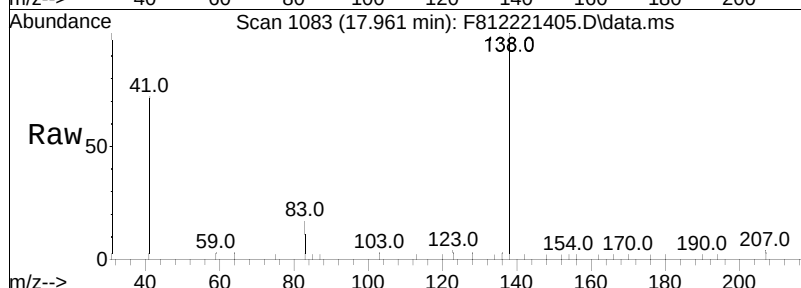


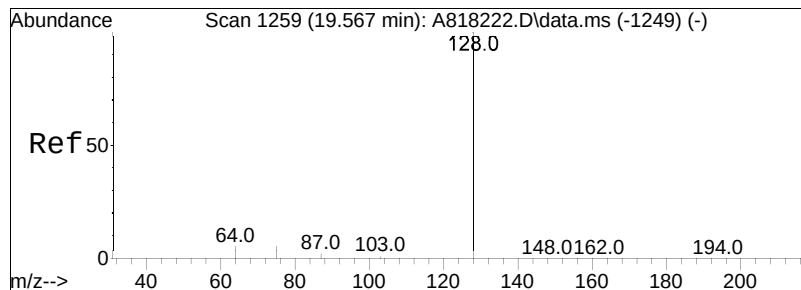


#3
trans-Decalin
Concen: 242.05 ng/mL
RT: 16.738 min Scan# 949
Delta R.T. 0.000 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm
Tgt Ion:138 Resp: 7933



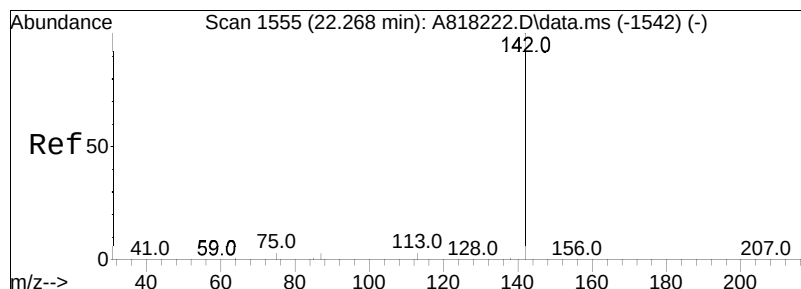
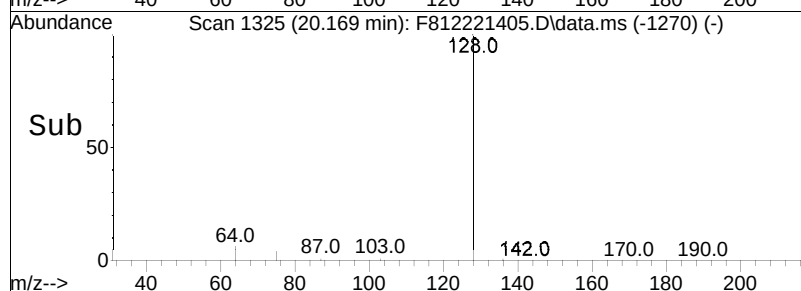
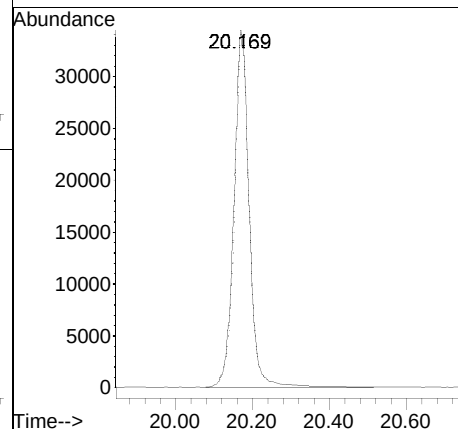
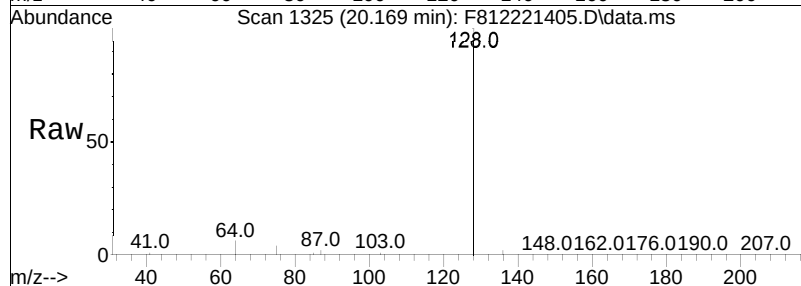
#4
cis-Decalin
Concen: 244.14 ng/mL
RT: 17.961 min Scan# 1083
Delta R.T. 0.000 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm
Tgt Ion:138 Resp: 6060





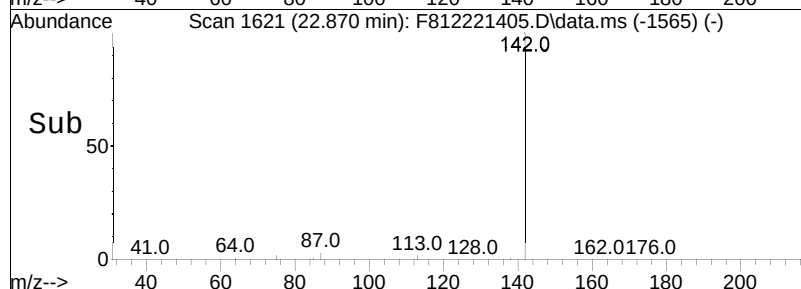
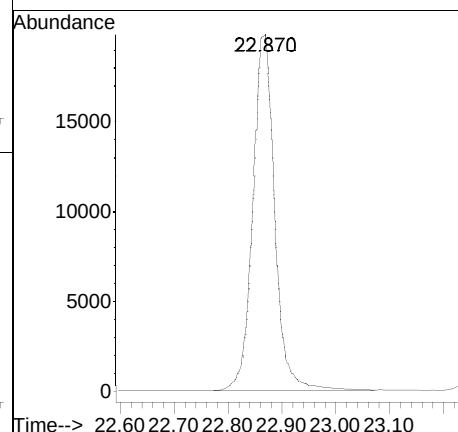
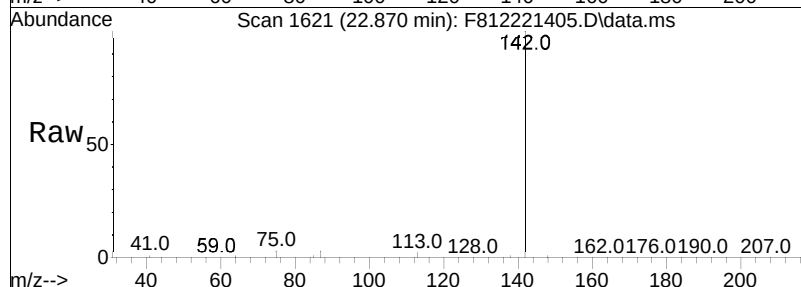
#10
Naphthalene
Concen: 601.32 ng/mL
RT: 20.169 min Scan# 1325
Delta R.T. 0.000 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm

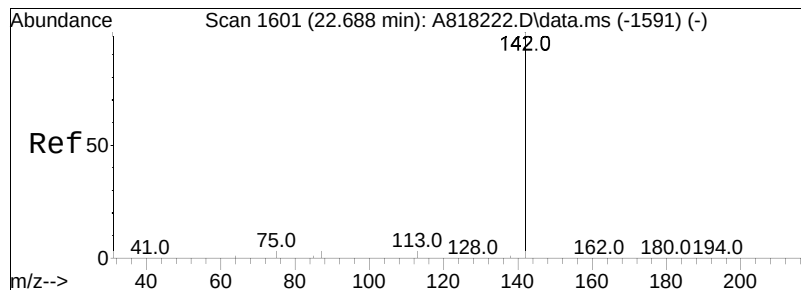
Tgt Ion:128 Resp: 90882



#16
2-Methylnaphthalene
Concen: 543.71 ng/mL
RT: 22.870 min Scan# 1621
Delta R.T. 0.009 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm

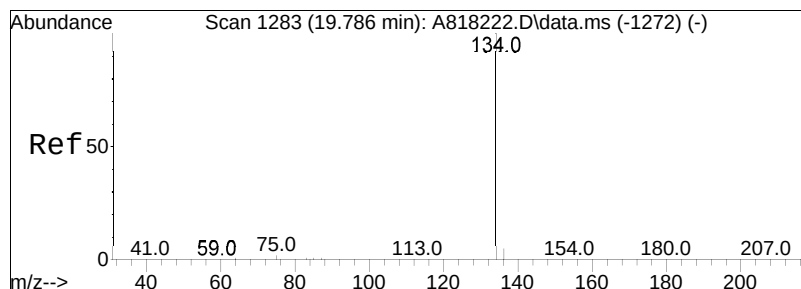
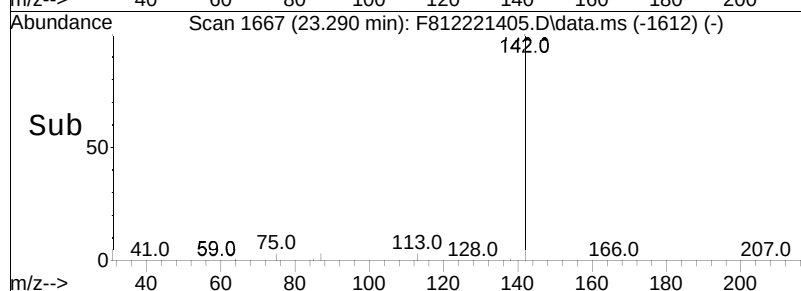
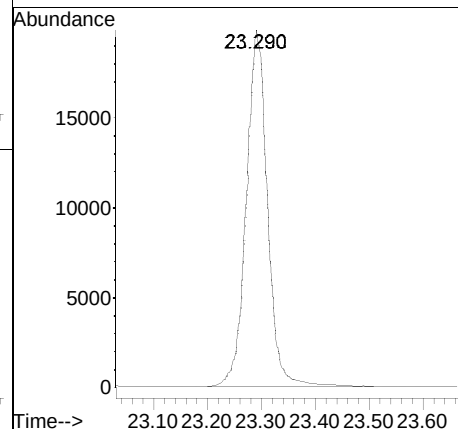
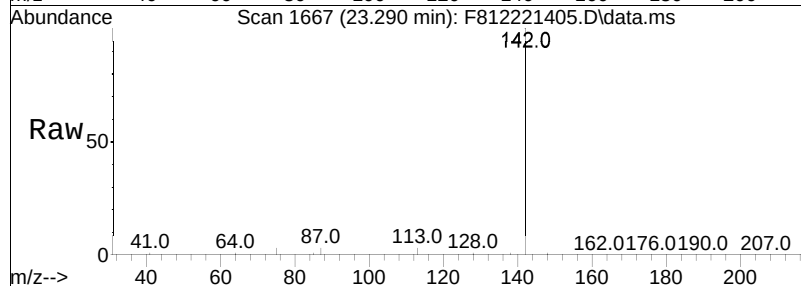
Tgt Ion:142 Resp: 54921





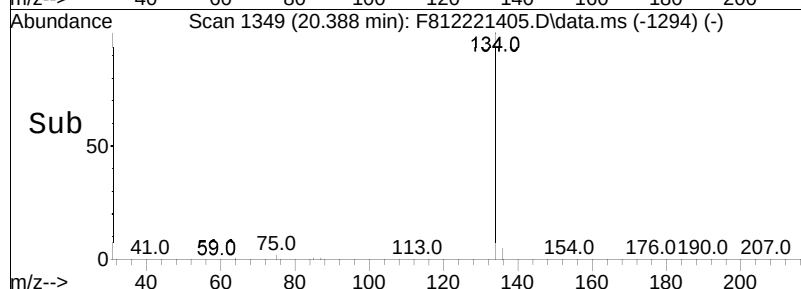
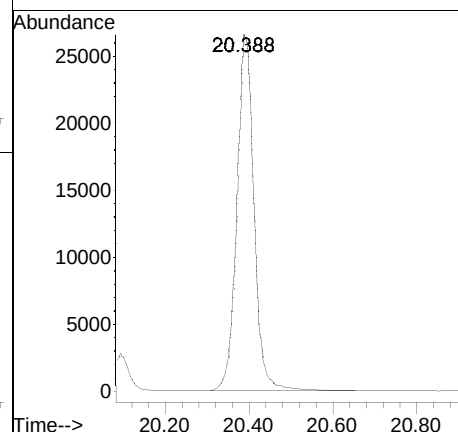
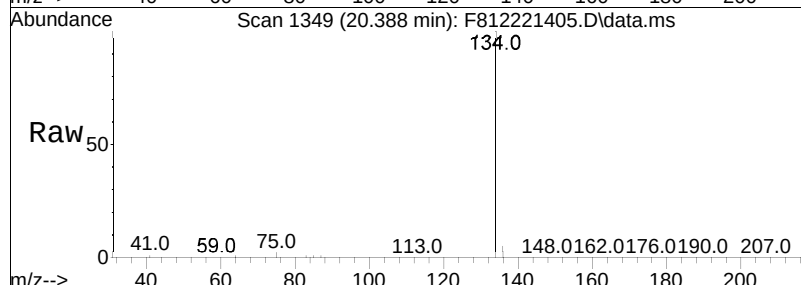
#17
 1-Methylnaphthalene
 Concen: 542.85 ng/mL
 RT: 23.290 min Scan# 1667
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

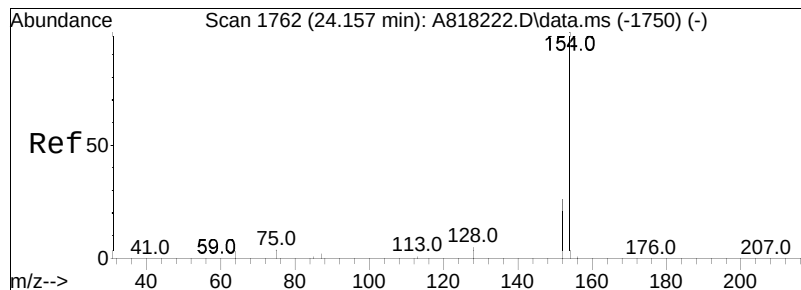
Tgt Ion:142 Resp: 53034



#18
 Benzothiophene
 Concen: 588.08 ng/mL
 RT: 20.388 min Scan# 1349
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

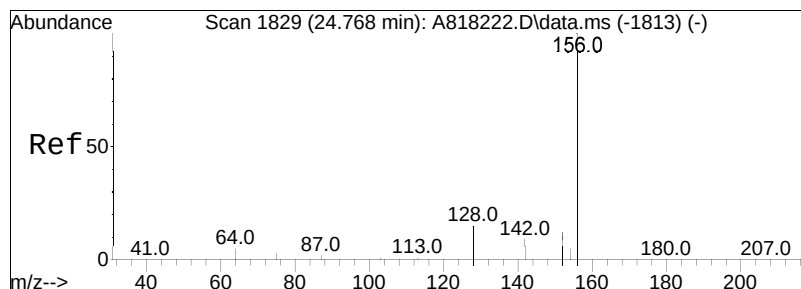
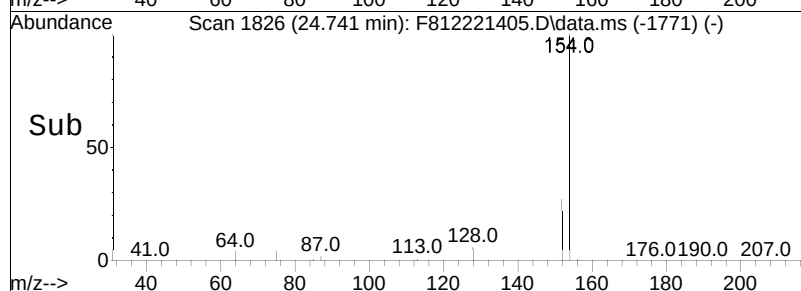
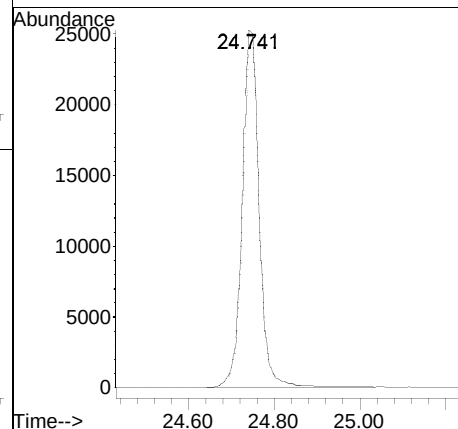
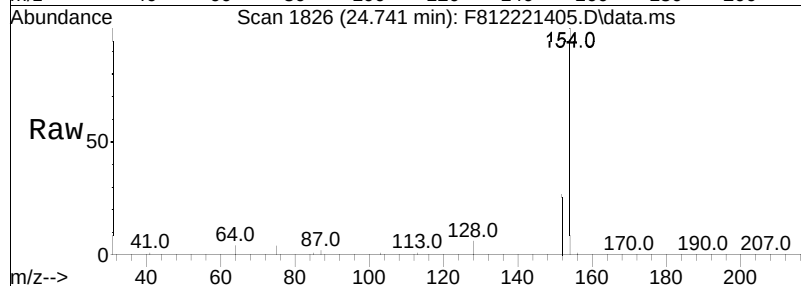
Tgt Ion:134 Resp: 73757





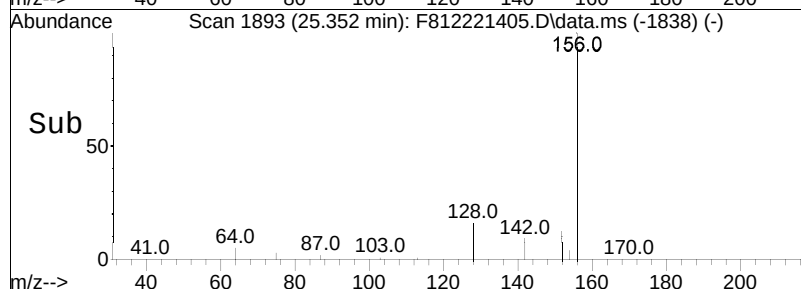
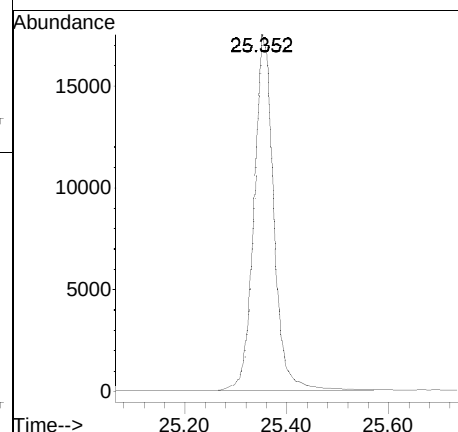
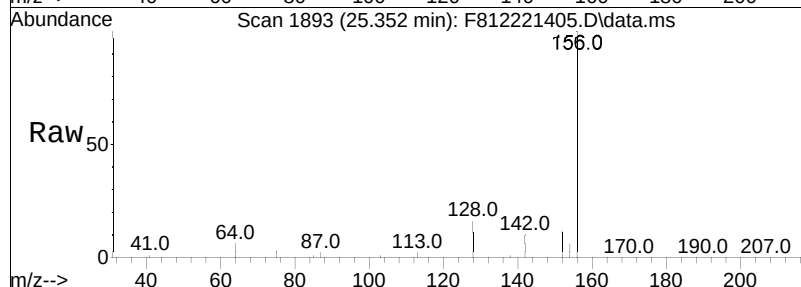
#23
Biphenyl
Concen: 555.66 ng/mL
RT: 24.741 min Scan# 1826
Delta R.T. 0.000 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm

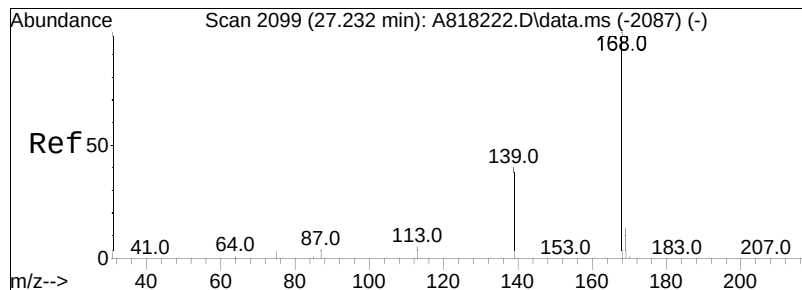
Tgt Ion:154 Resp: 67523



#24
2,6-Dimethylnaphthalene
Concen: 557.08 ng/mL
RT: 25.352 min Scan# 1893
Delta R.T. 0.000 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm

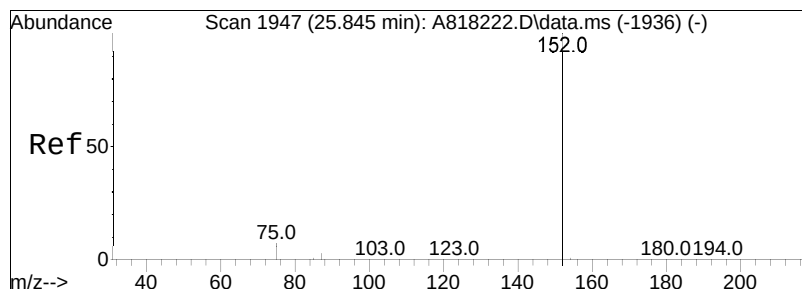
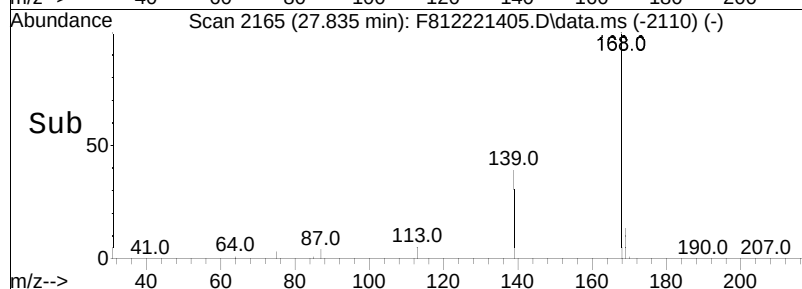
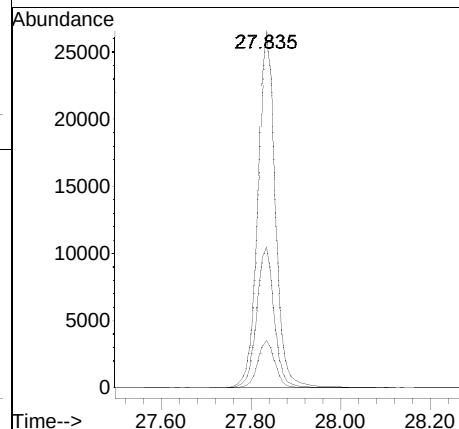
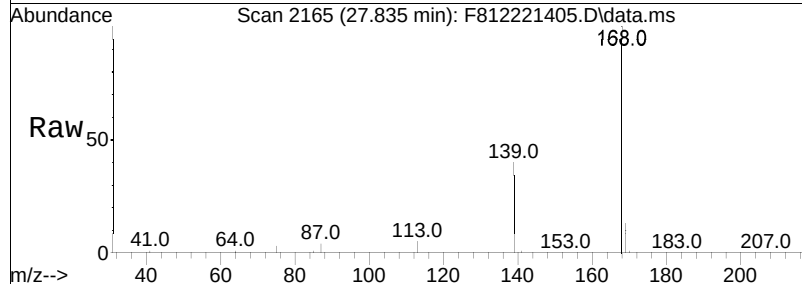
Tgt Ion:156 Resp: 46098





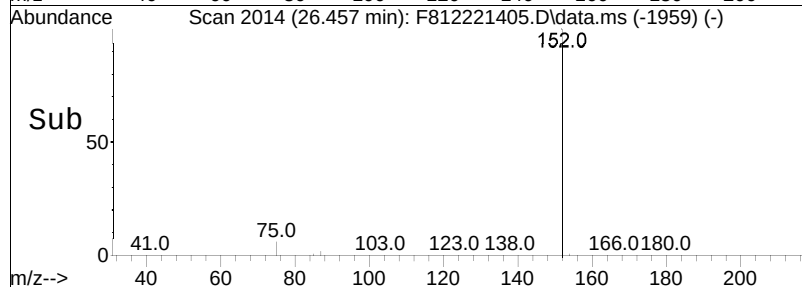
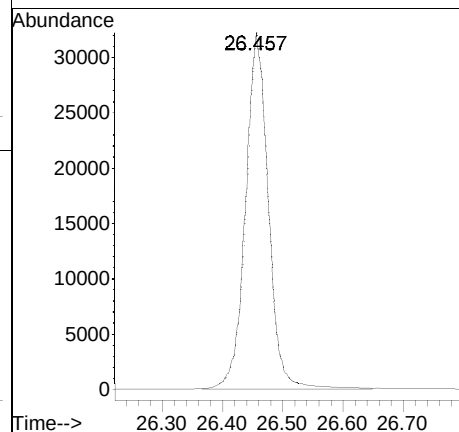
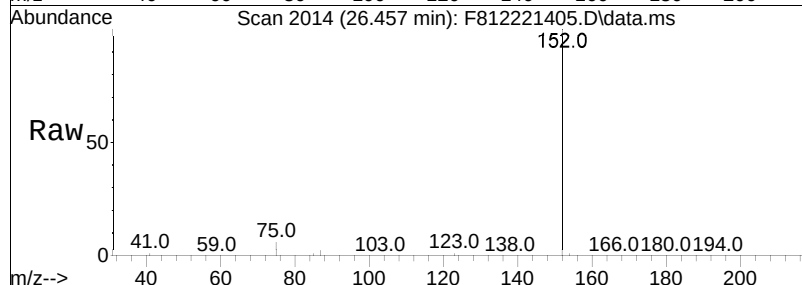
#25
 Dibenzenofuran
 Concen: 564.11 ng/mL
 RT: 27.835 min Scan# 2165
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

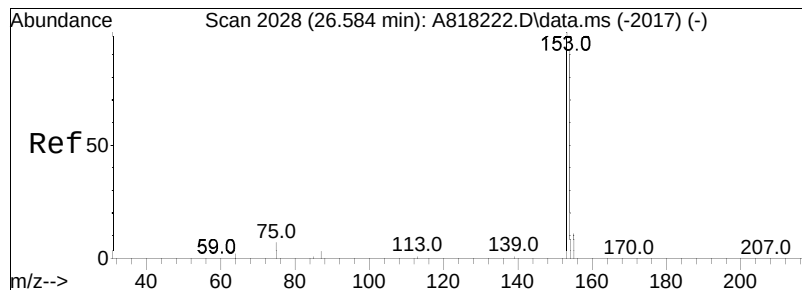
Tgt Ion:	168	Resp:	70200
Ion Ratio	Lower	Upper	
168	100		
139	39.7	26.9	49.9
169	13.3	9.1	16.9



#26
 Acenaphthylene
 Concen: 607.05 ng/mL M4
 RT: 26.457 min Scan# 2014
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

Tgt Ion:152 Resp: 82836





#27

Acenaphthene

Concen: 583.72 ng/mL

RT: 27.196 min Scan# 2095

Delta R.T. 0.009 min

Lab File: F812221405.D

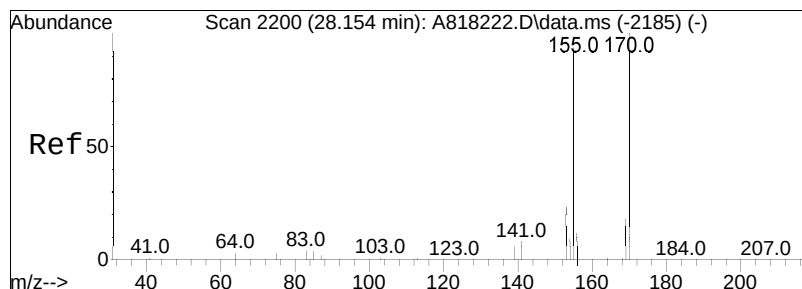
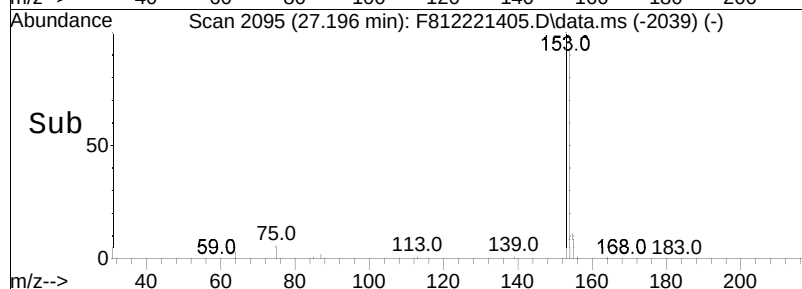
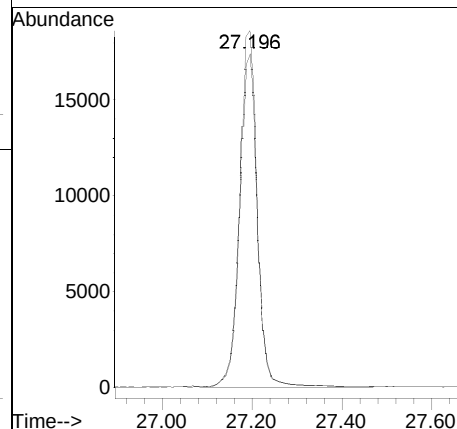
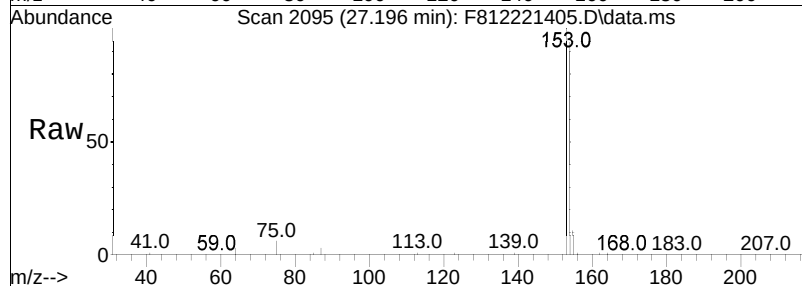
Acq: 23 Dec 2014 5:44 pm

Tgt Ion:153 Resp: 50602

Ion Ratio Lower Upper

153 100

154 91.8 64.7 120.1



#28

2,3,5-Trimethylnaphthalene

Concen: 565.72 ng/mL

RT: 28.738 min Scan# 2264

Delta R.T. 0.000 min

Lab File: F812221405.D

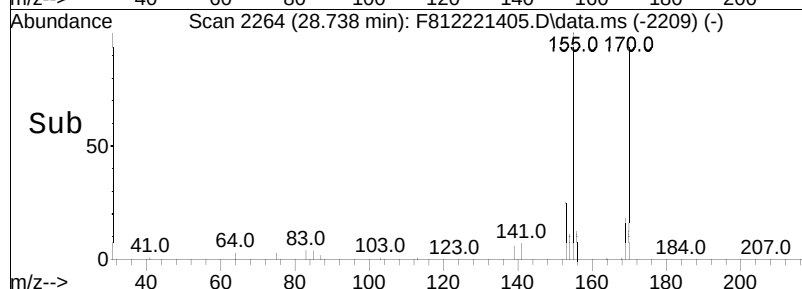
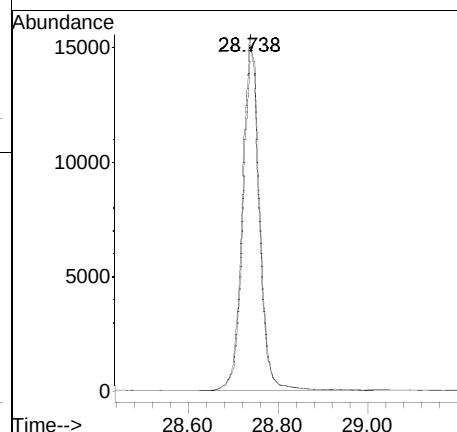
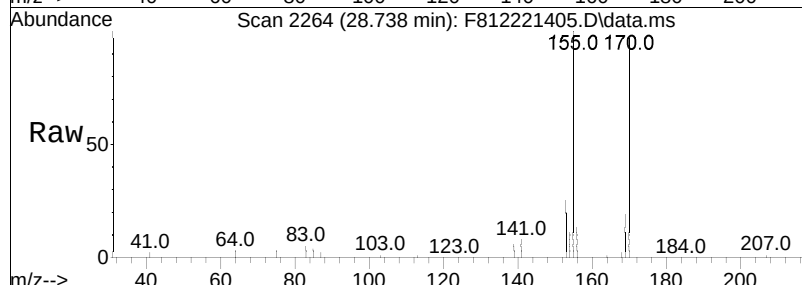
Acq: 23 Dec 2014 5:44 pm

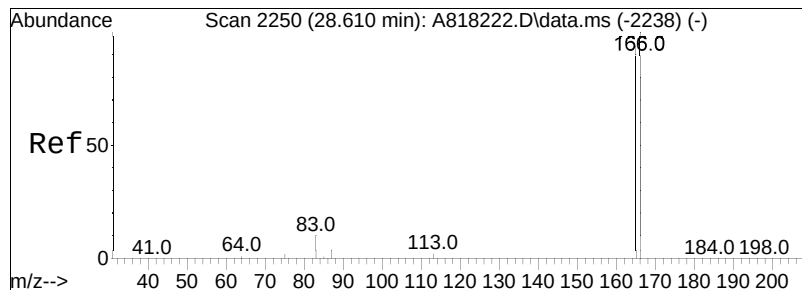
Tgt Ion:170 Resp: 38528

Ion Ratio Lower Upper

170 100

155 101.0 73.5 136.5





#29

Fluorene

Concen: 566.95 ng/mL

RT: 29.212 min Scan# 2316

Delta R.T. 0.009 min

Lab File: F812221405.D

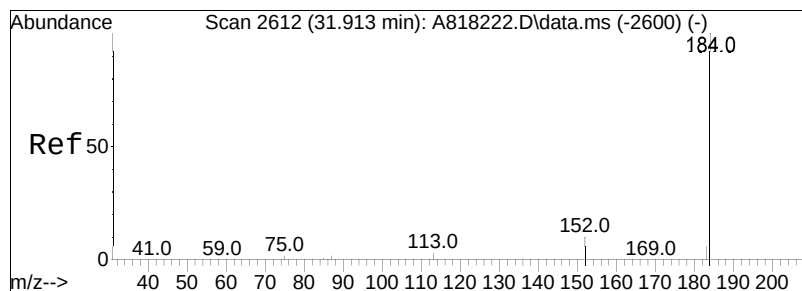
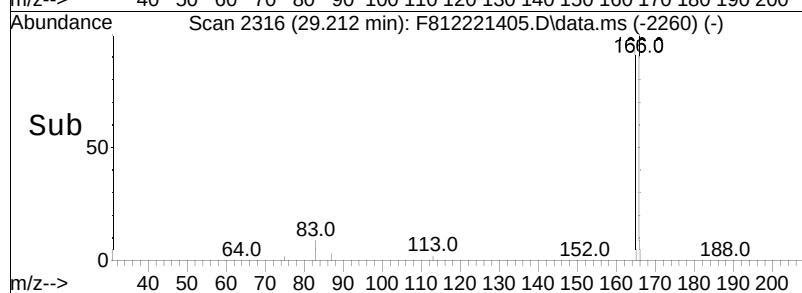
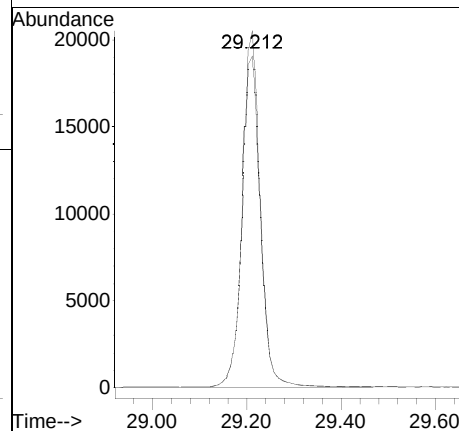
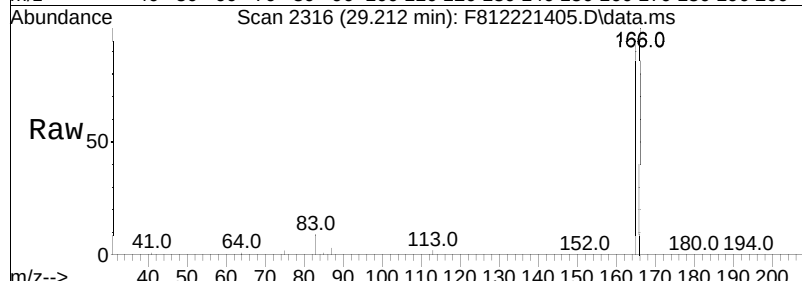
Acq: 23 Dec 2014 5:44 pm

Tgt Ion:166 Resp: 54218

Ion Ratio Lower Upper

166 100

165 94.1 66.7 123.9



#33

Dibenzothiophene

Concen: 561.48 ng/mL

RT: 32.533 min Scan# 2680

Delta R.T. 0.009 min

Lab File: F812221405.D

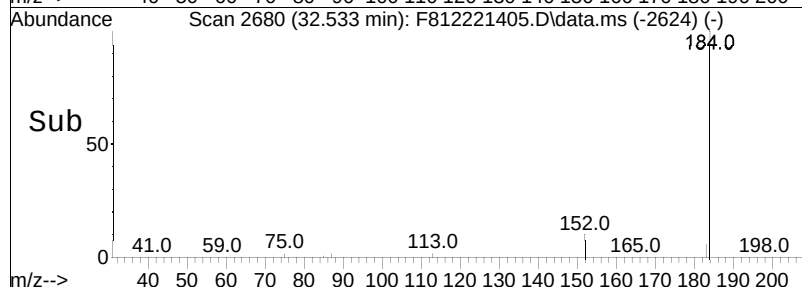
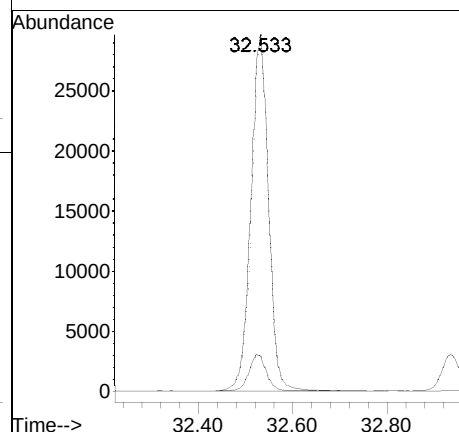
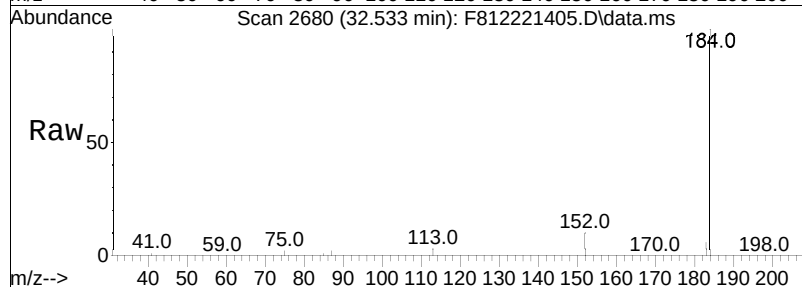
Acq: 23 Dec 2014 5:44 pm

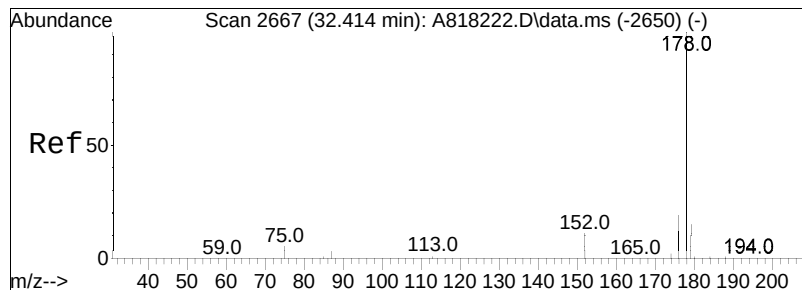
Tgt Ion:184 Resp: 75174

Ion Ratio Lower Upper

184 100

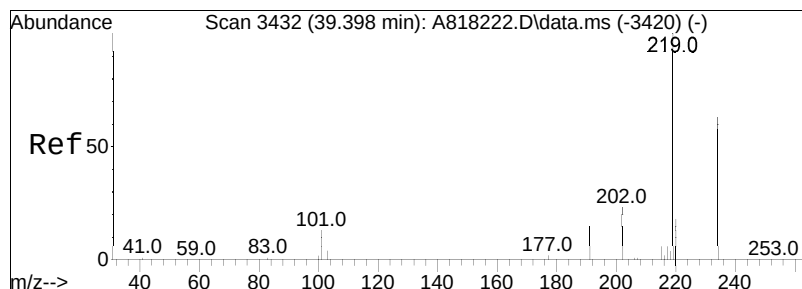
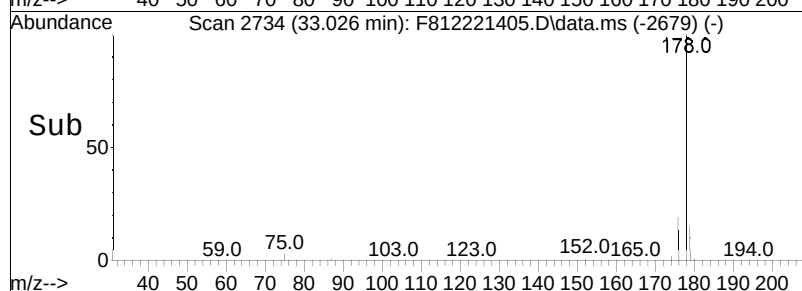
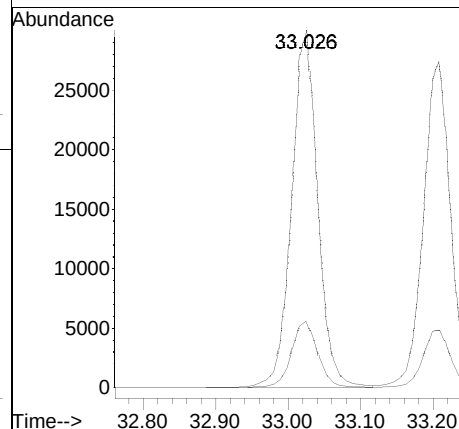
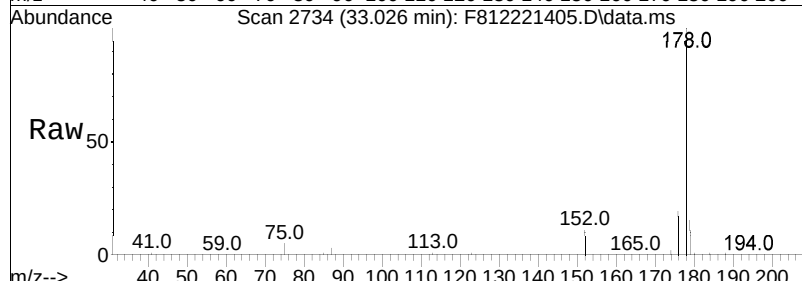
152 10.3 7.6 14.0





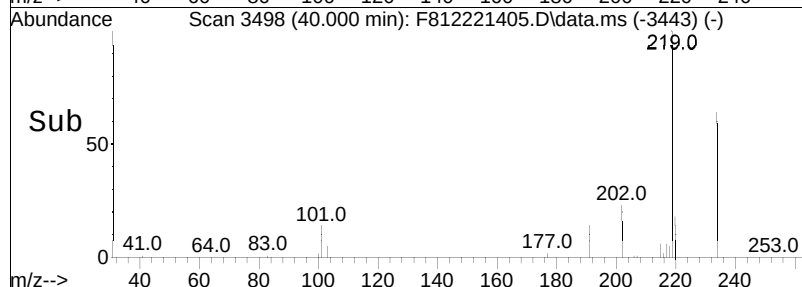
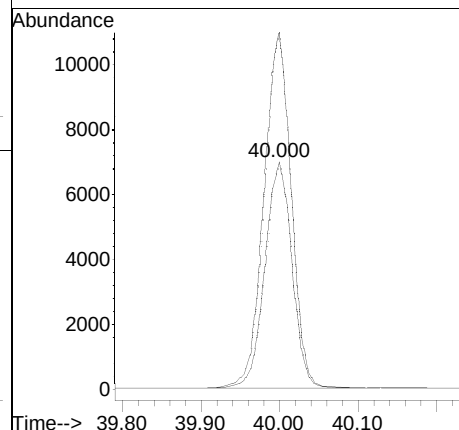
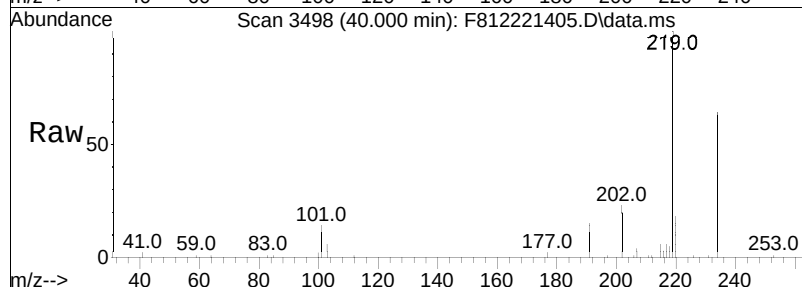
#43
 Phenanthrene
 Concen: 573.55 ng/mL
 RT: 33.026 min Scan# 2734
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

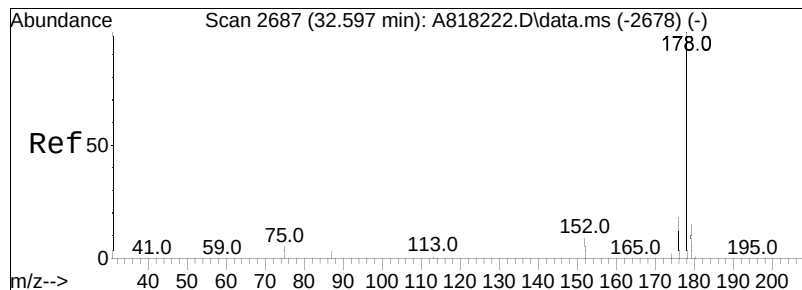
Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.6	13.4	24.8



#54
 Retene
 Concen: 512.34 ng/mL
 RT: 40.000 min Scan# 3498
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

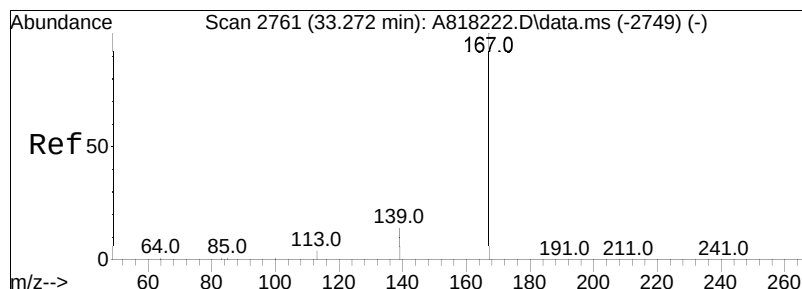
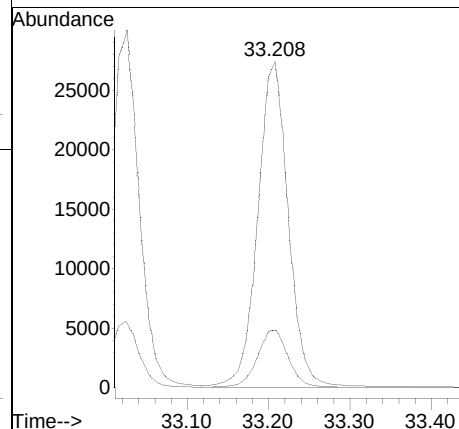
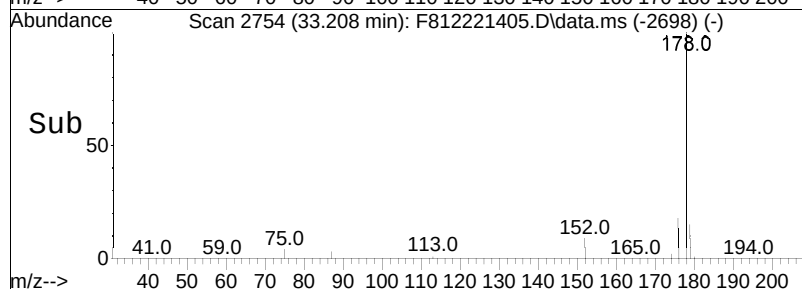
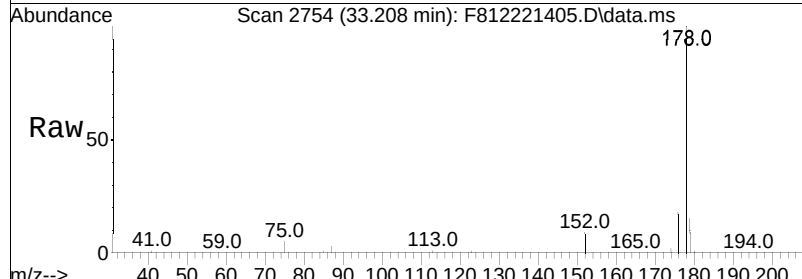
Tgt Ion	Ratio	Lower	Upper
234	100		
219	157.5	110.9	206.1





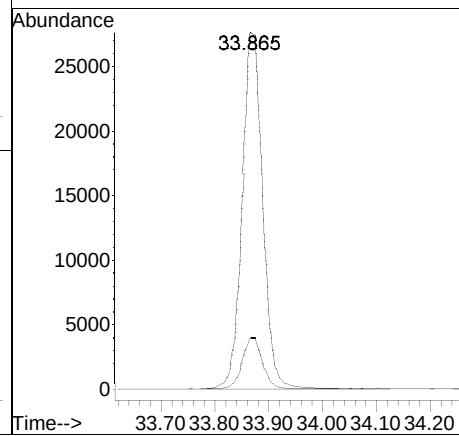
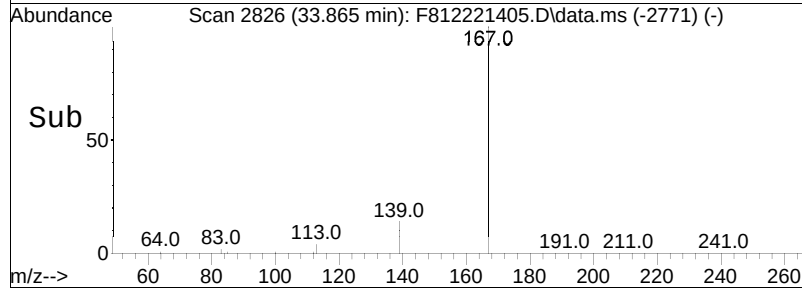
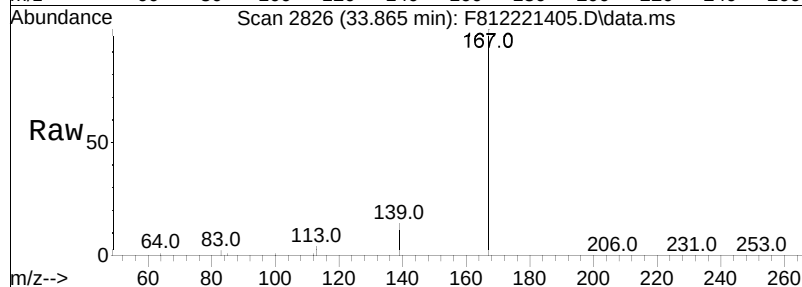
#55
 Anthracene
 Concen: 618.11 ng/mL M4
 RT: 33.208 min Scan# 2754
 Delta R.T. 0.009 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

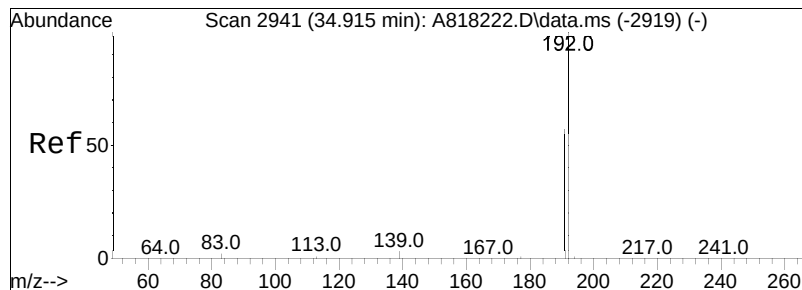
Tgt Ion	Ratio	Lower	Upper
178	100		
176	17.8	12.5	23.3



#56
 Carbazole
 Concen: 590.32 ng/mL
 RT: 33.865 min Scan# 2826
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

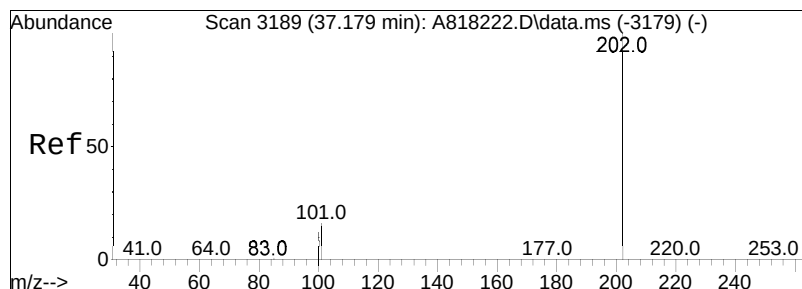
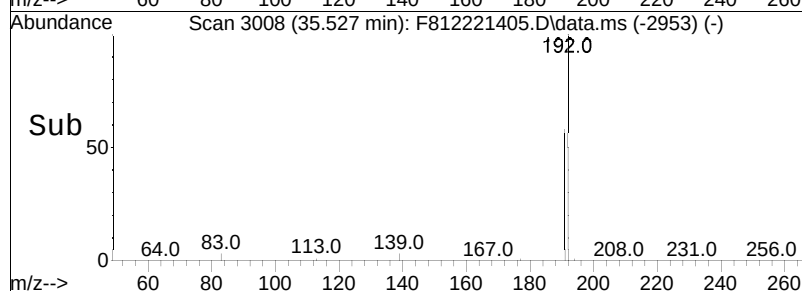
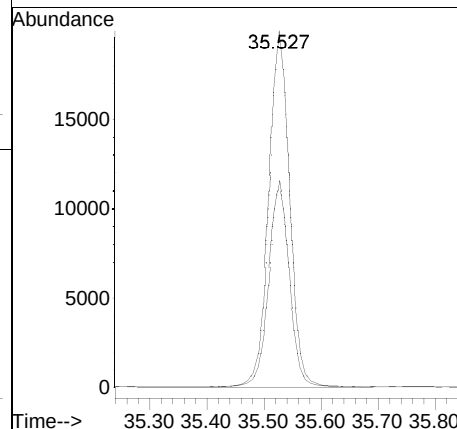
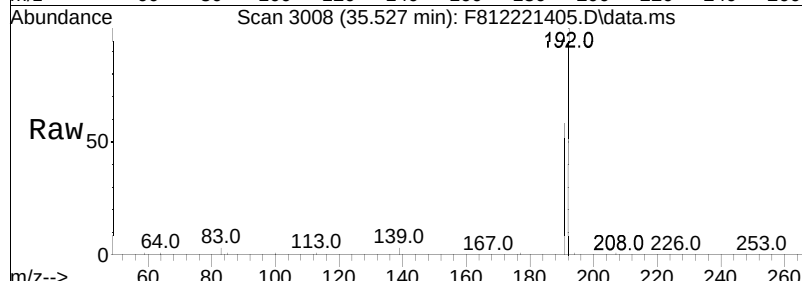
Tgt Ion	Ratio	Lower	Upper
167	100		
139	14.3	10.4	19.4





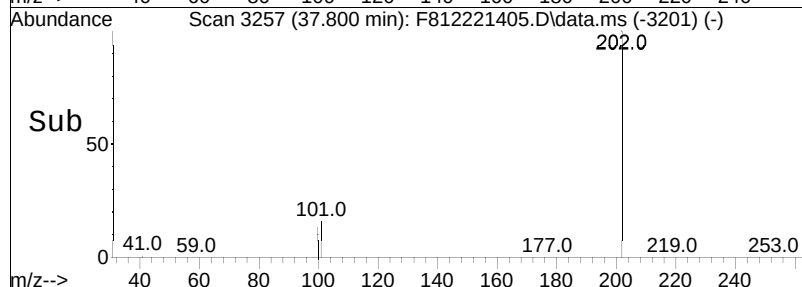
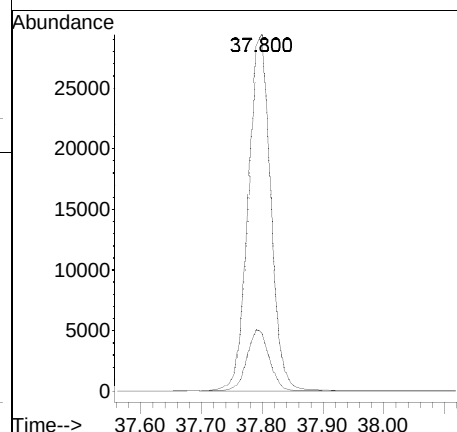
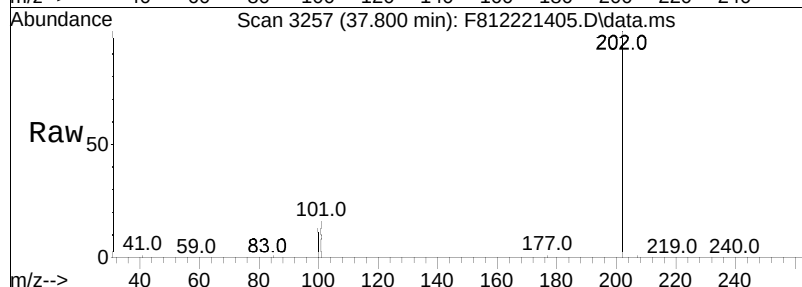
#57
 1-Methylphenanthrene
 Concen: 530.27 ng/mL
 RT: 35.527 min Scan# 3008
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

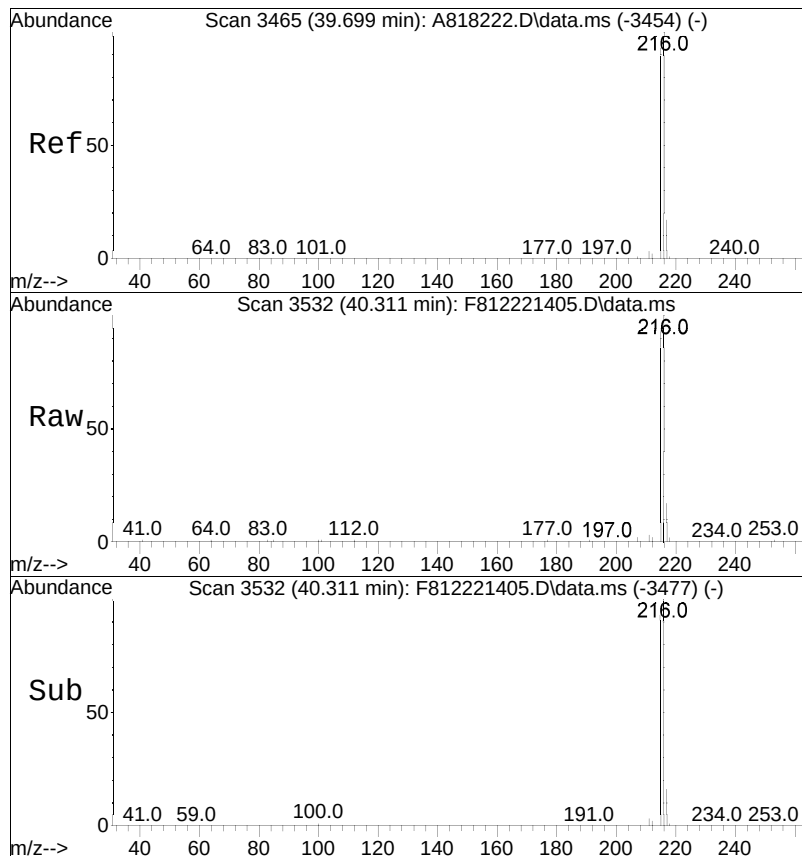
Tgt Ion	Ratio	Lower	Upper
192	100		
191	57.1	40.0	74.4



#58
 Fluoranthene
 Concen: 550.43 ng/mL
 RT: 37.800 min Scan# 3257
 Delta R.T. 0.009 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

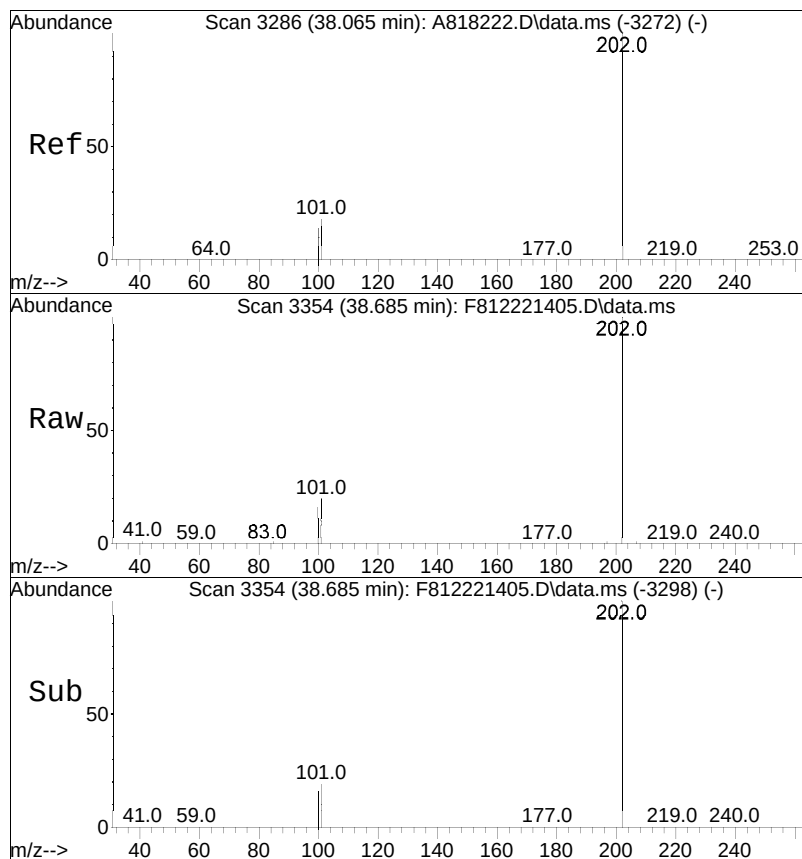
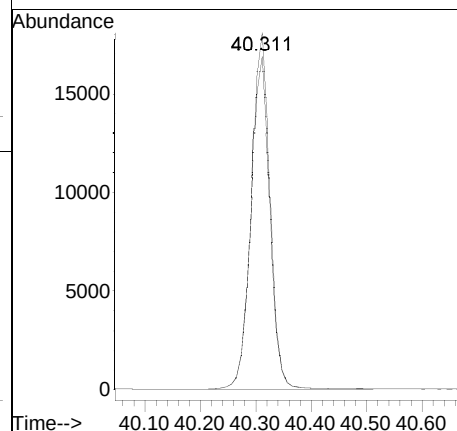
Tgt Ion	Ratio	Lower	Upper
202	100		
101	17.0	13.5	25.1





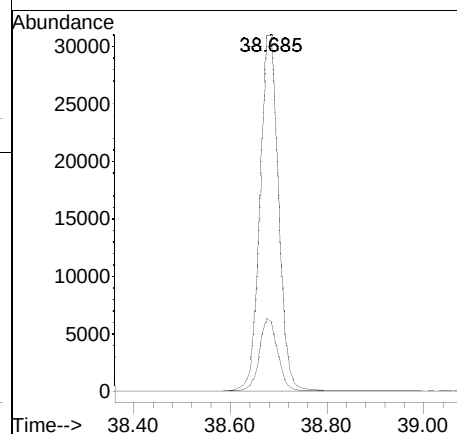
#59
Benzo(b)fluorene
Concen: 583.36 ng/mL
RT: 40.311 min Scan# 3532
Delta R.T. 0.000 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm

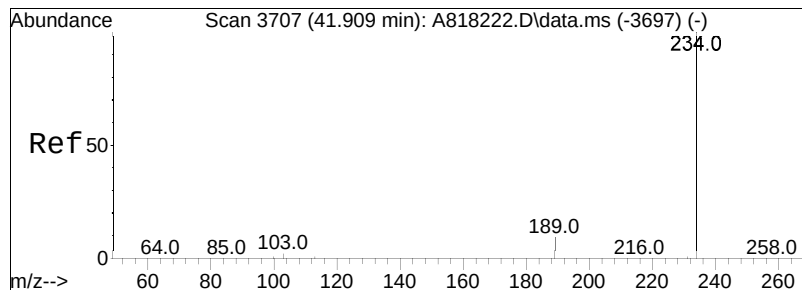
Tgt Ion	Ratio	Lower	Upper
216	100		
215	93.4	64.6	120.0



#60
Pyrene
Concen: 579.22 ng/mL
RT: 38.685 min Scan# 3354
Delta R.T. 0.009 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm

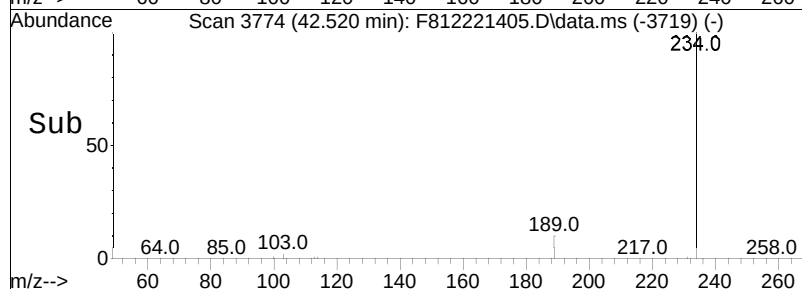
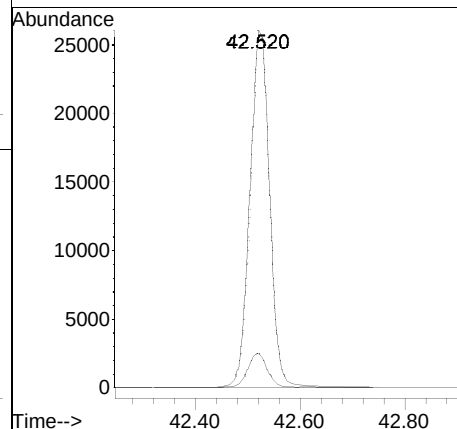
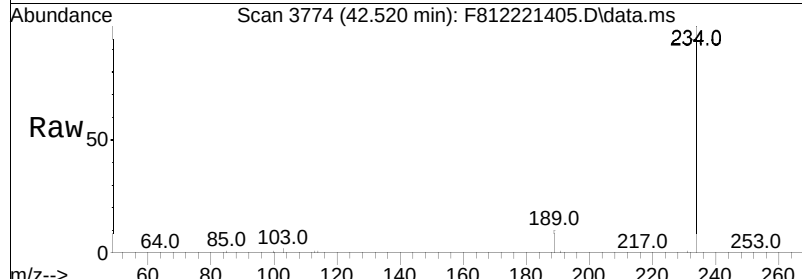
Tgt Ion	Ratio	Lower	Upper
202	100		
101	20.2	15.5	28.7





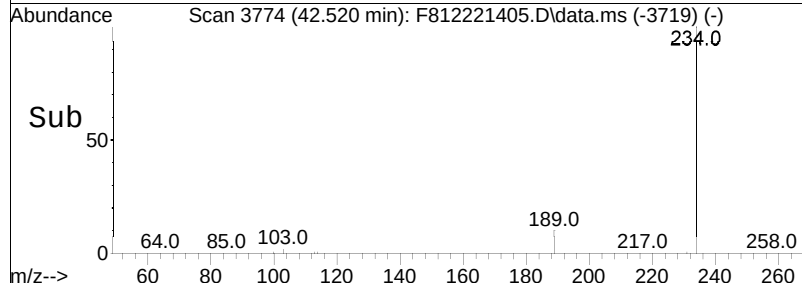
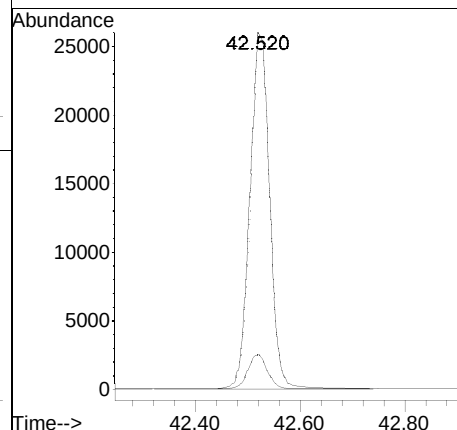
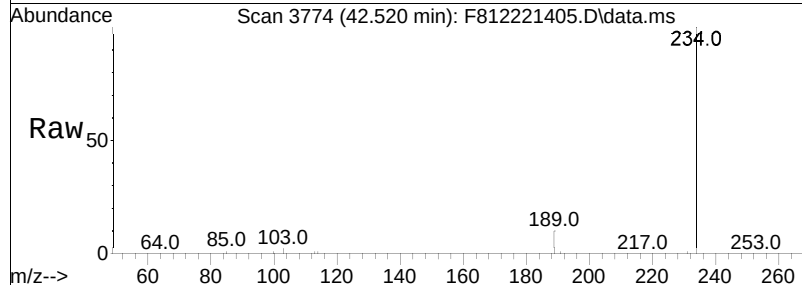
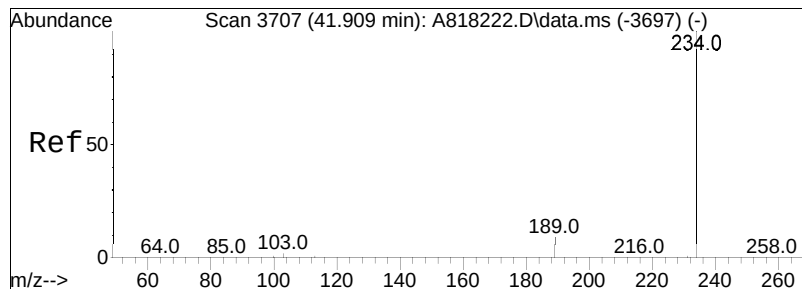
#66
 Naphthobenzothiophene
 Concen: 511.28 ng/ml
 RT: 42.520 min Scan# 3774
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

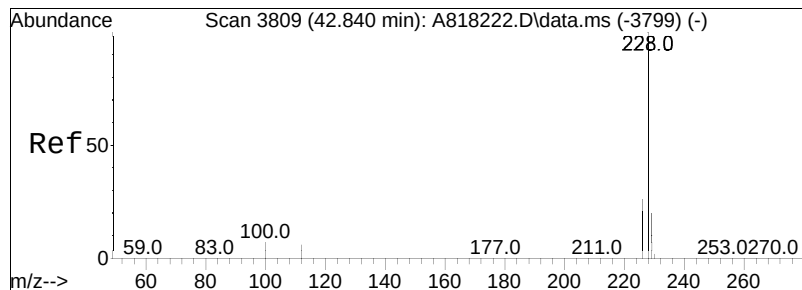
Tgt Ion	Ratio	Lower	Upper
234	100		
189	9.4	6.9	12.9



#67
 Naphthobenzothiophene-2,1-D
 Concen: 511.28 ng/mL
 RT: 42.520 min Scan# 3774
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

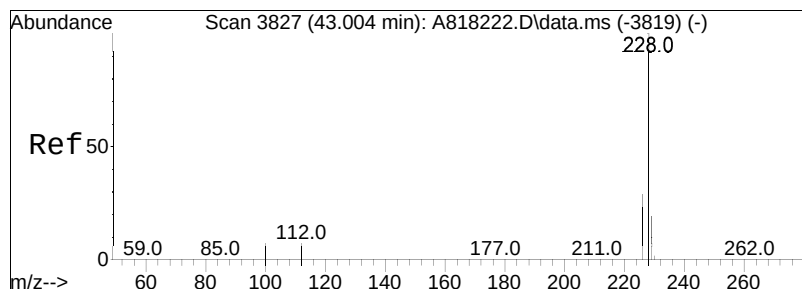
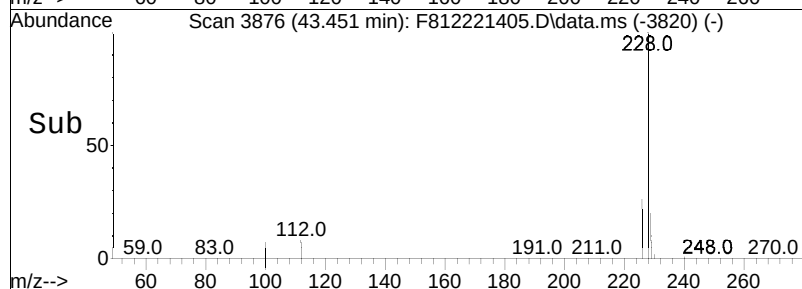
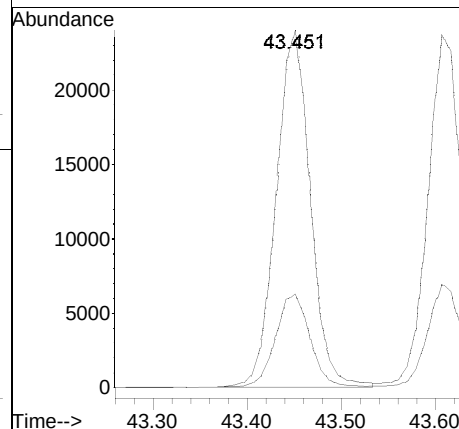
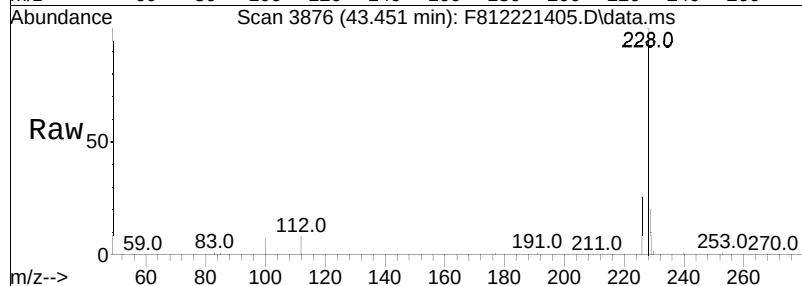
Tgt Ion	Ratio	Lower	Upper
234	100		
189	9.4	6.9	12.9





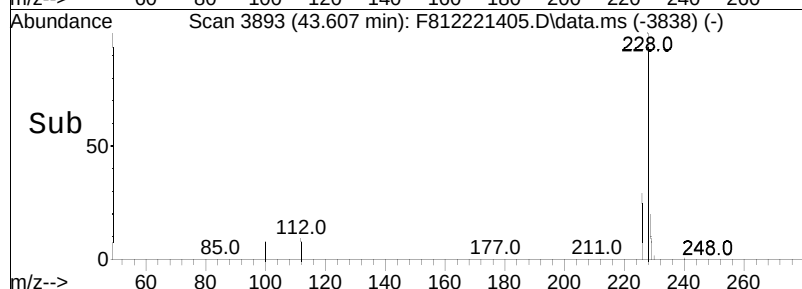
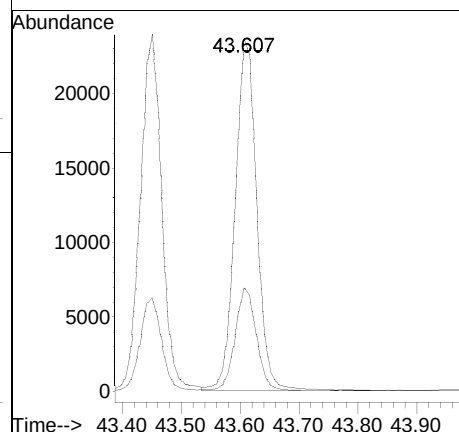
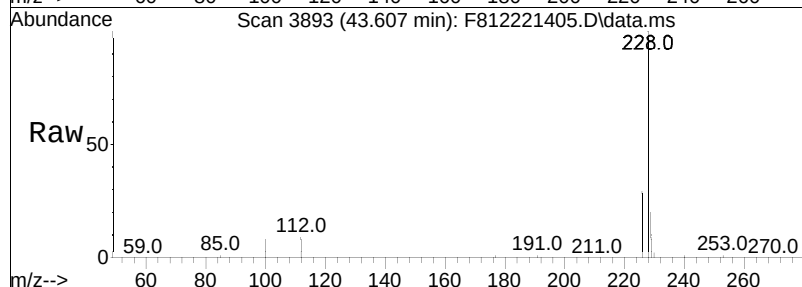
#75
Benz[a]anthracene
Concen: 563.47 ng/mL
RT: 43.451 min Scan# 3876
Delta R.T. 0.009 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm

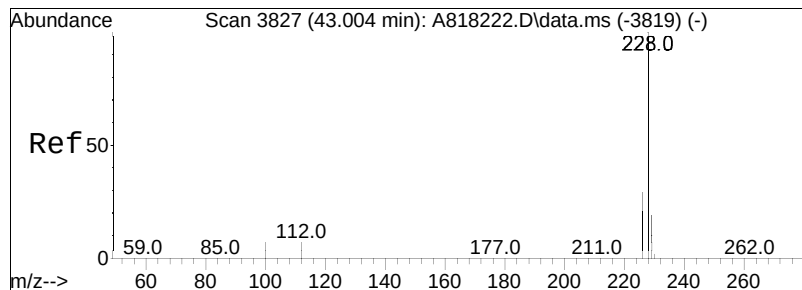
Tgt Ion	Ratio	Lower	Upper
228	100		
226	26.2	19.0	35.4



#76
Chrysene
Concen: 556.49 ng/mL
RT: 43.607 min Scan# 3893
Delta R.T. 0.000 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm

Tgt Ion	Ratio	Lower	Upper
228	100		
226	29.1	20.7	38.5





#77

Chrysene/Triphenylene

Concen: 556.49 ng/mL

RT: 43.607 min Scan# 3893

Delta R.T. 0.000 min

Lab File: F812221405.D

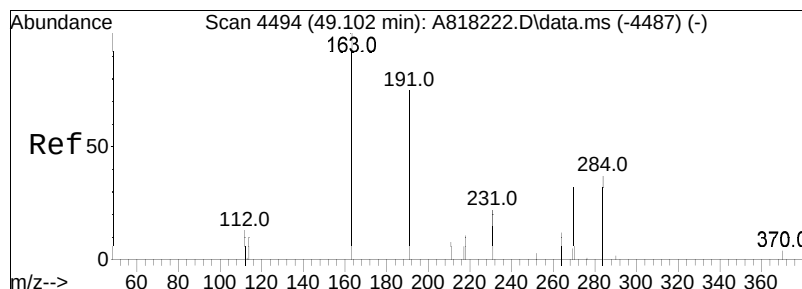
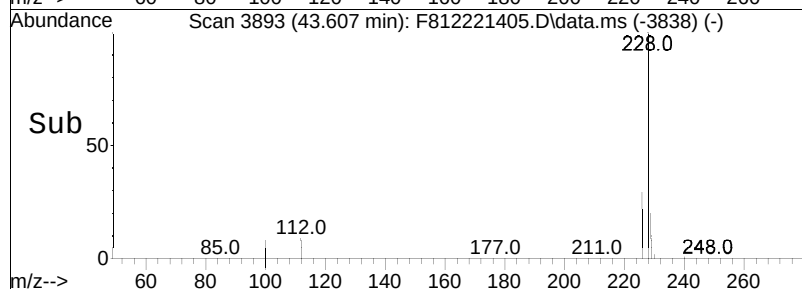
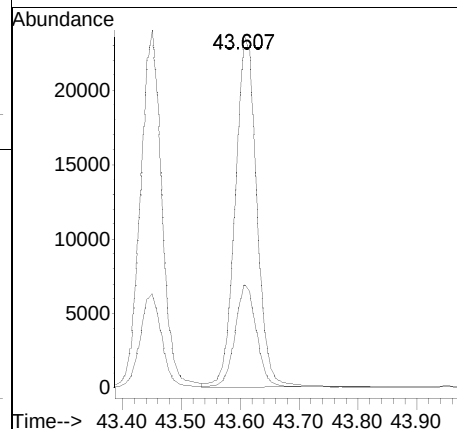
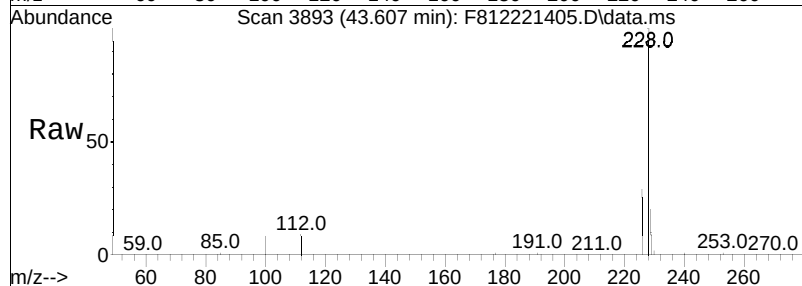
Acq: 23 Dec 2014 5:44 pm

Tgt Ion:228 Resp: 59928

Ion Ratio Lower Upper

228 100

226 29.1 20.7 38.5



#84

Benzo[b]fluoranthene

Concen: 532.87 ng/mL

RT: 47.500 min Scan# 4319

Delta R.T. 0.000 min

Lab File: F812221405.D

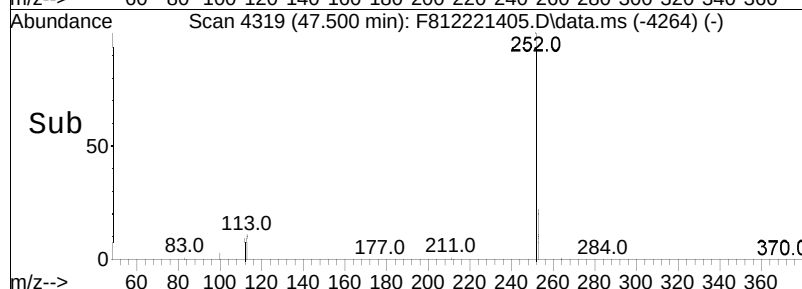
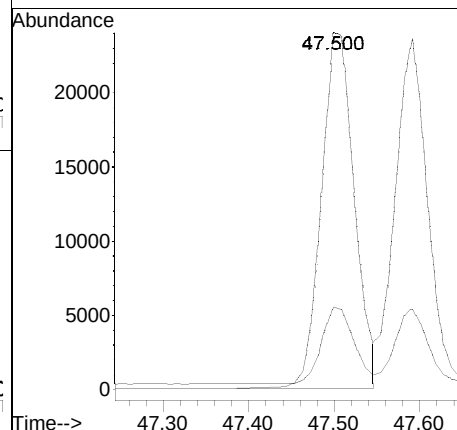
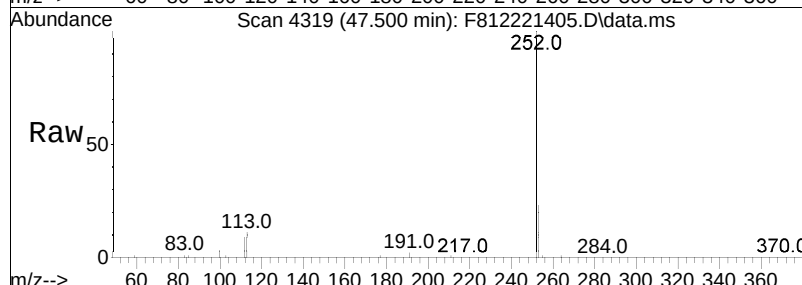
Acq: 23 Dec 2014 5:44 pm

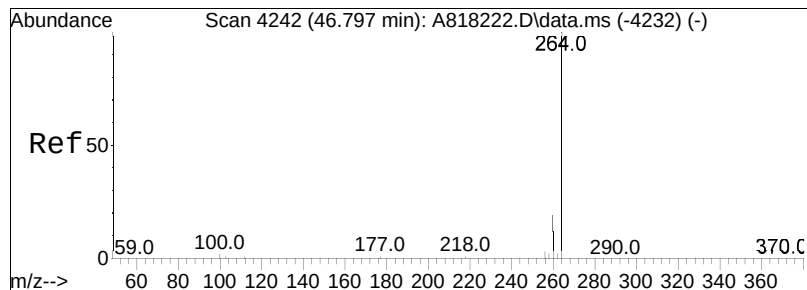
Tgt Ion:252 Resp: 64324

Ion Ratio Lower Upper

252 100

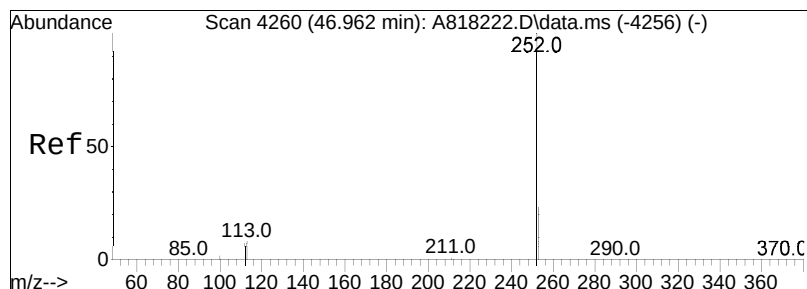
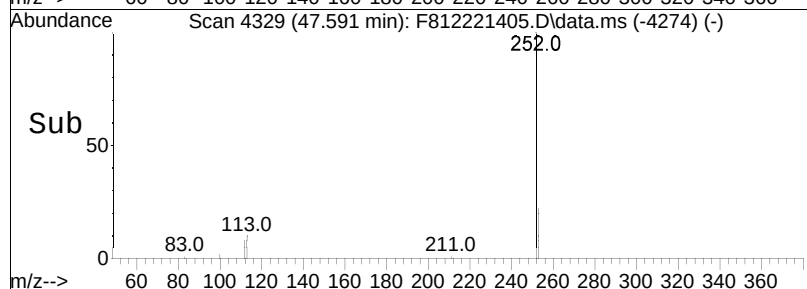
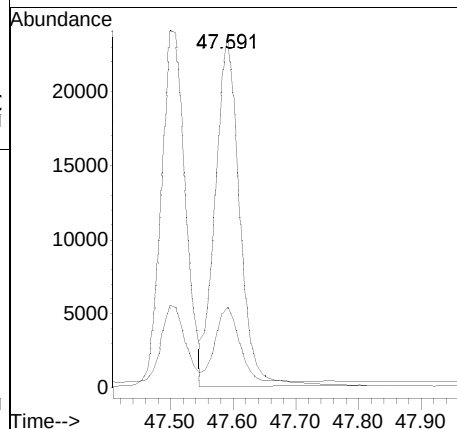
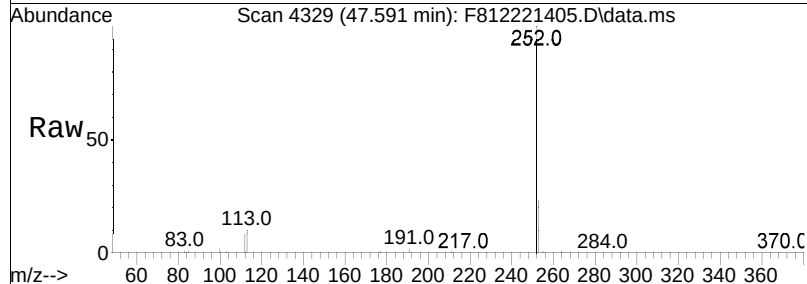
253 21.5 16.5 30.7





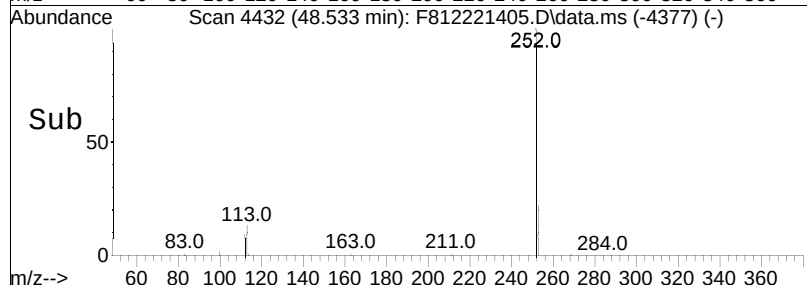
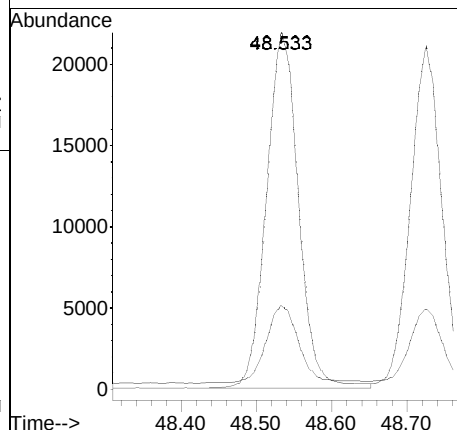
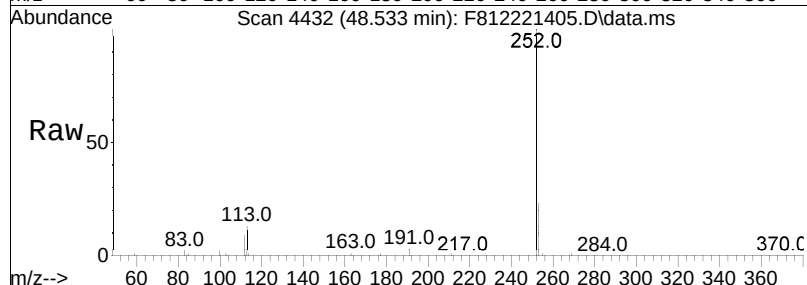
#85
 Benzo[j,k]fluoranthene
 Concen: 555.90 ng/mL
 RT: 47.591 min Scan# 4329
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

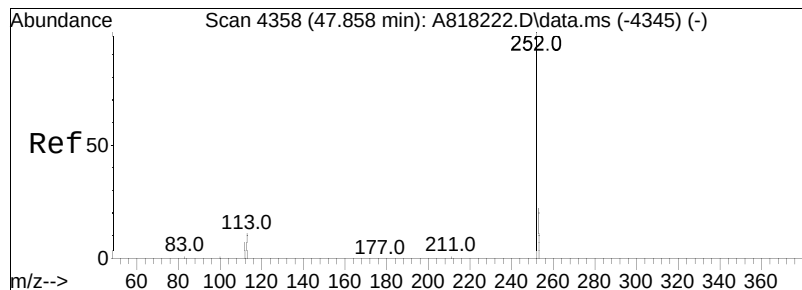
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.7	17.1	31.7	



#87
 Benzo[e]pyrene
 Concen: 527.19 ng/mL
 RT: 48.533 min Scan# 4432
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

Tgt	Ion	Ratio	Lower	Upper
252	100			
253	22.2	17.4	32.4	





#89

Benzo[a]pyrene

Concen: 582.32 ng/mL

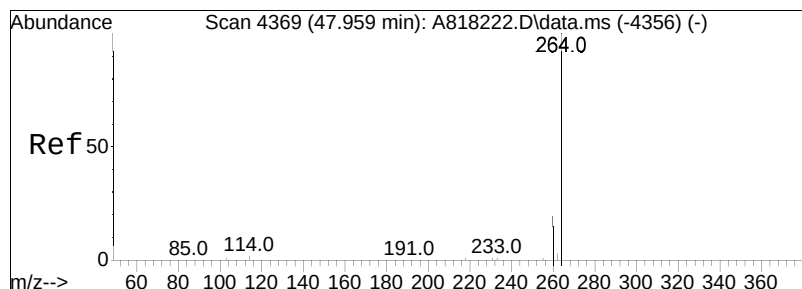
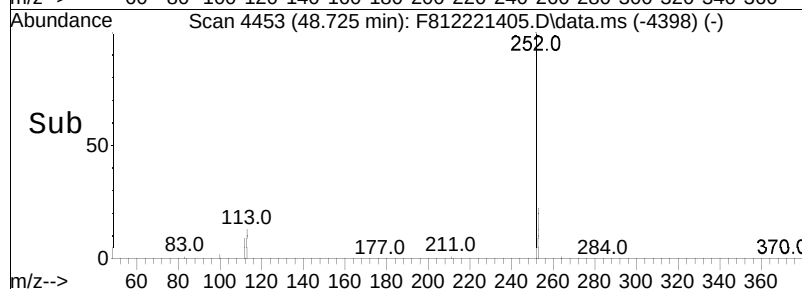
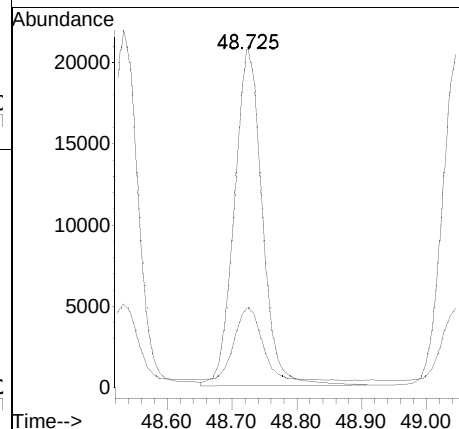
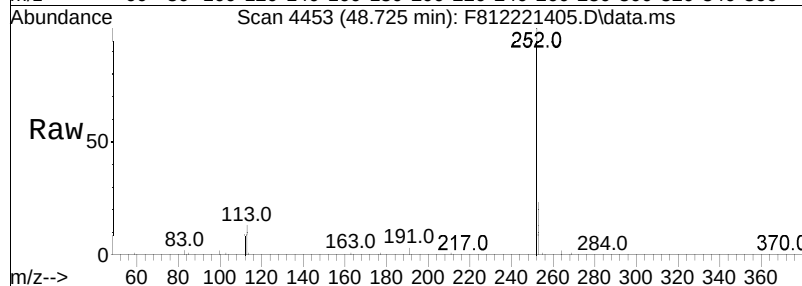
RT: 48.725 min Scan# 4453

Delta R.T. 0.000 min

Lab File: F812221405.D

Acq: 23 Dec 2014 5:44 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.9	16.9	31.3



#90

Perylene

Concen: 553.27 ng/mL

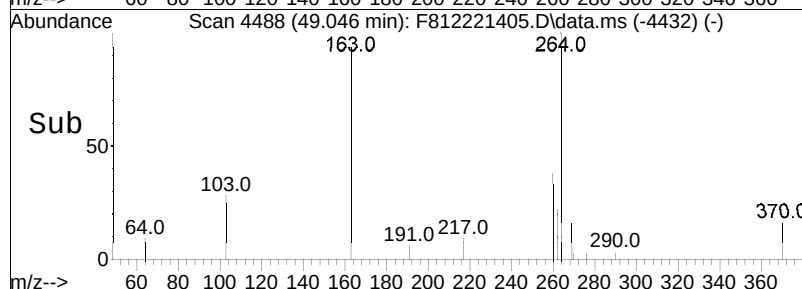
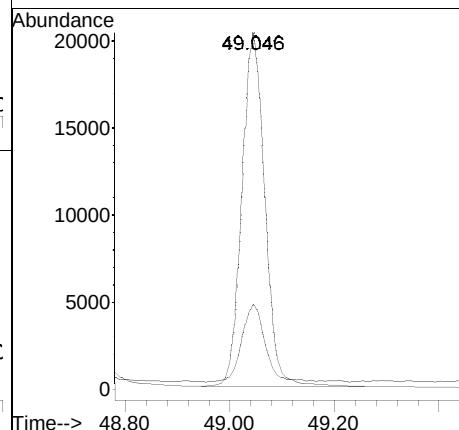
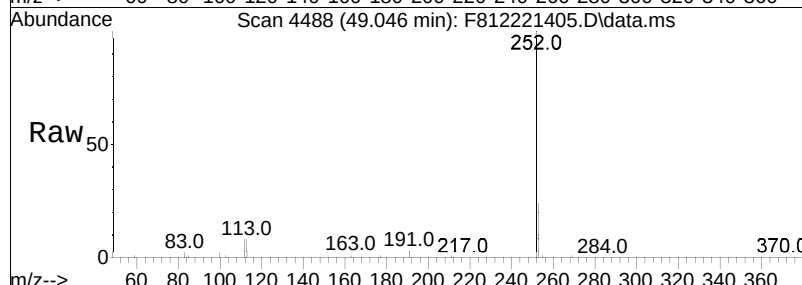
RT: 49.046 min Scan# 4488

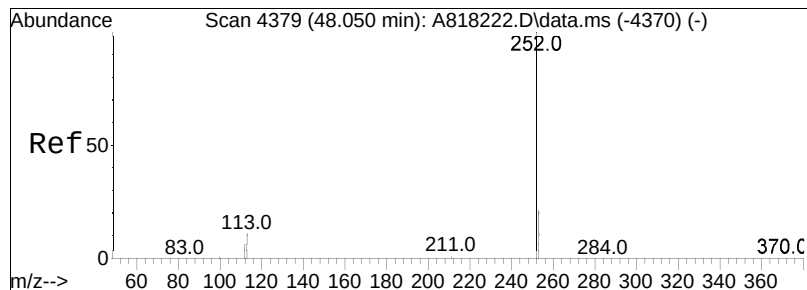
Delta R.T. 0.009 min

Lab File: F812221405.D

Acq: 23 Dec 2014 5:44 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.3	17.3	32.1





#91

Indeno[1,2,3-cd]pyrene

Concen: 514.25 ng/mL M3

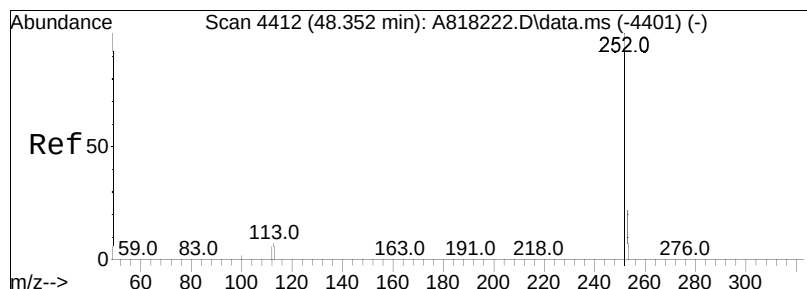
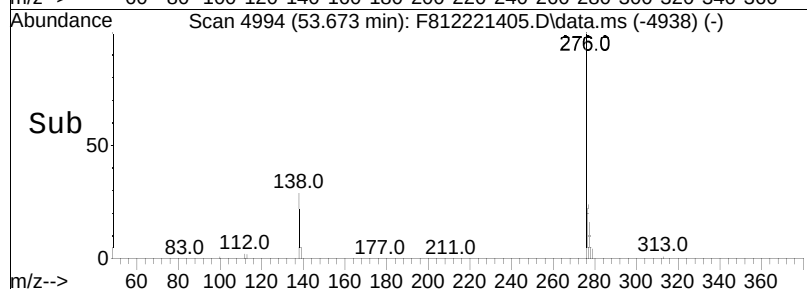
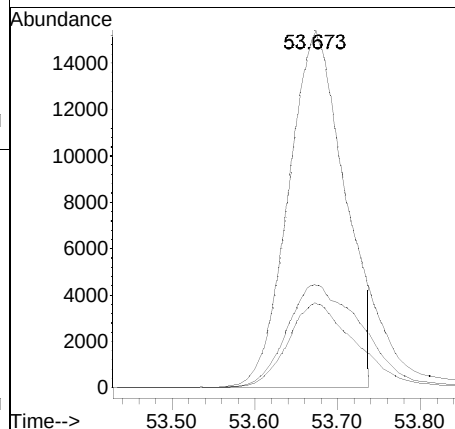
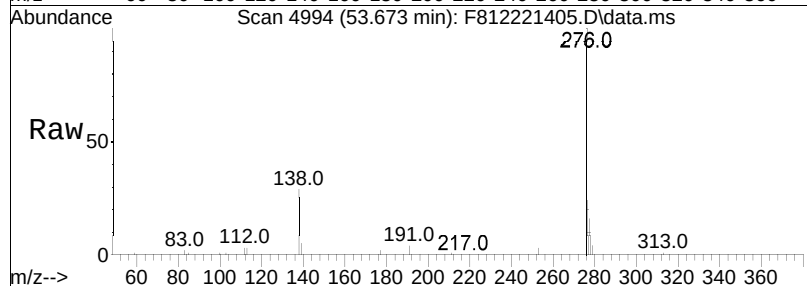
RT: 53.673 min Scan# 4994

Delta R.T. 0.009 min

Lab File: F812221405.D

Acq: 23 Dec 2014 5:44 pm

Tgt Ion:	276	Resp:	72078
Ion Ratio	Lower	Upper	
276	100		
138	38.7	19.3	35.9#
277	28.6	16.5	30.7



#92

Dibenz[ah]+[ac]anthracene

Concen: 537.23 ng/mL

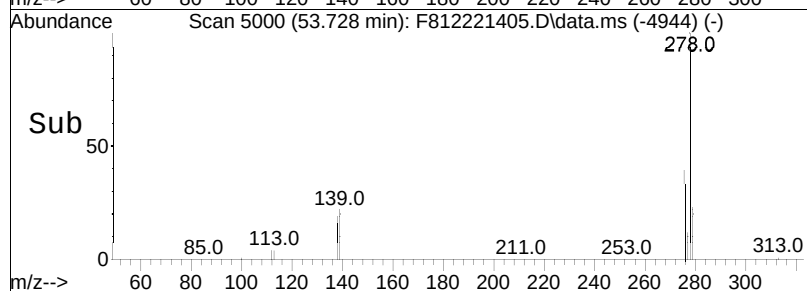
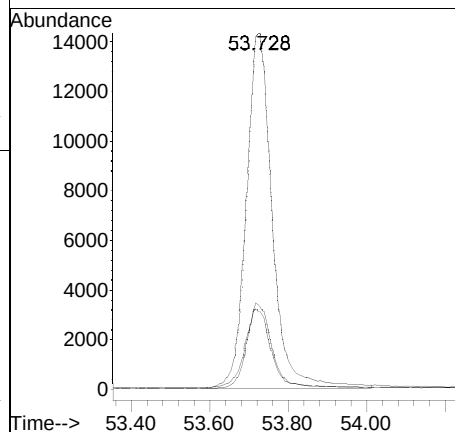
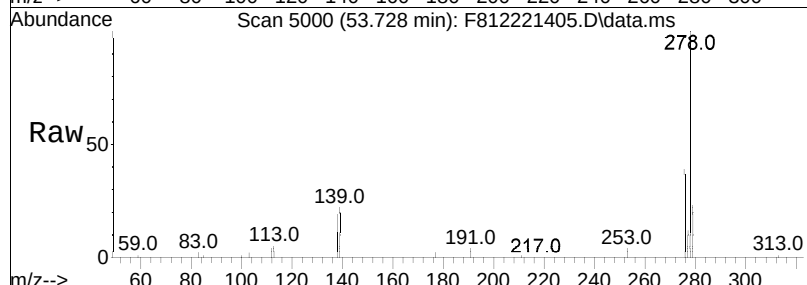
RT: 53.728 min Scan# 5000

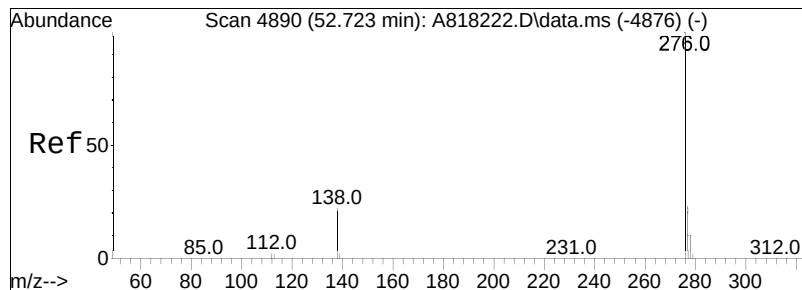
Delta R.T. 0.009 min

Lab File: F812221405.D

Acq: 23 Dec 2014 5:44 pm

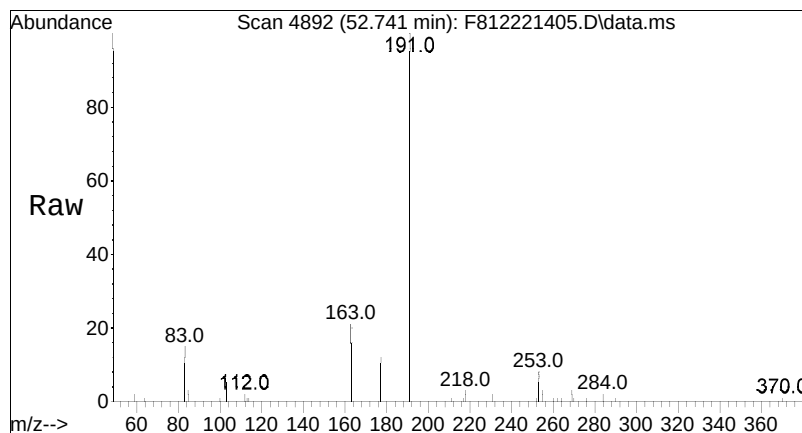
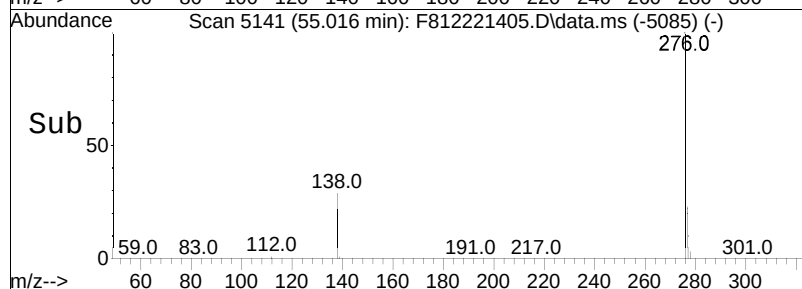
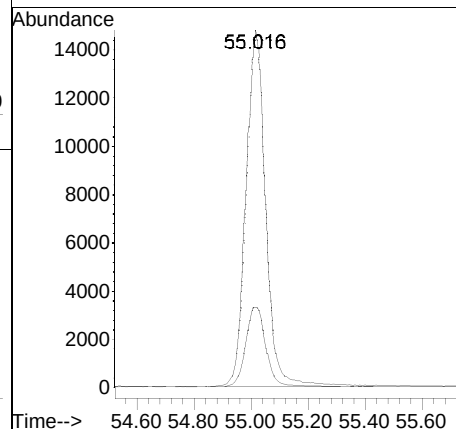
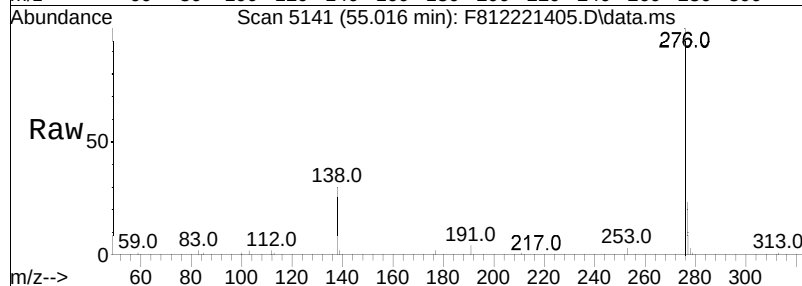
Tgt Ion:	278	Resp:	65062
Ion Ratio	Lower	Upper	
278	100		
139	22.2	16.8	31.2
279	23.1	17.2	32.0





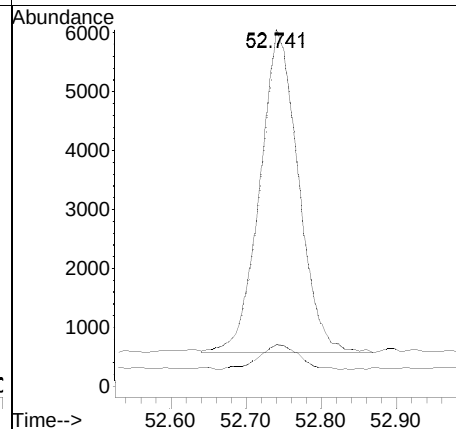
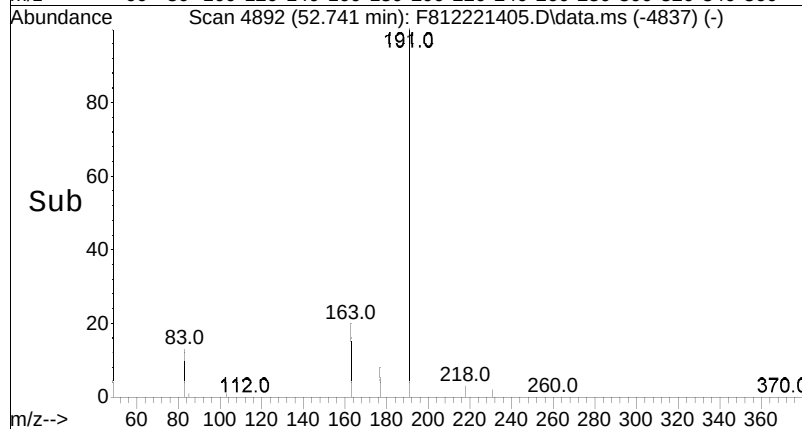
#93
 Benzo[g,h,i]perylene
 Concen: 497.51 ng/mL
 RT: 55.016 min Scan# 5141
 Delta R.T. 0.009 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

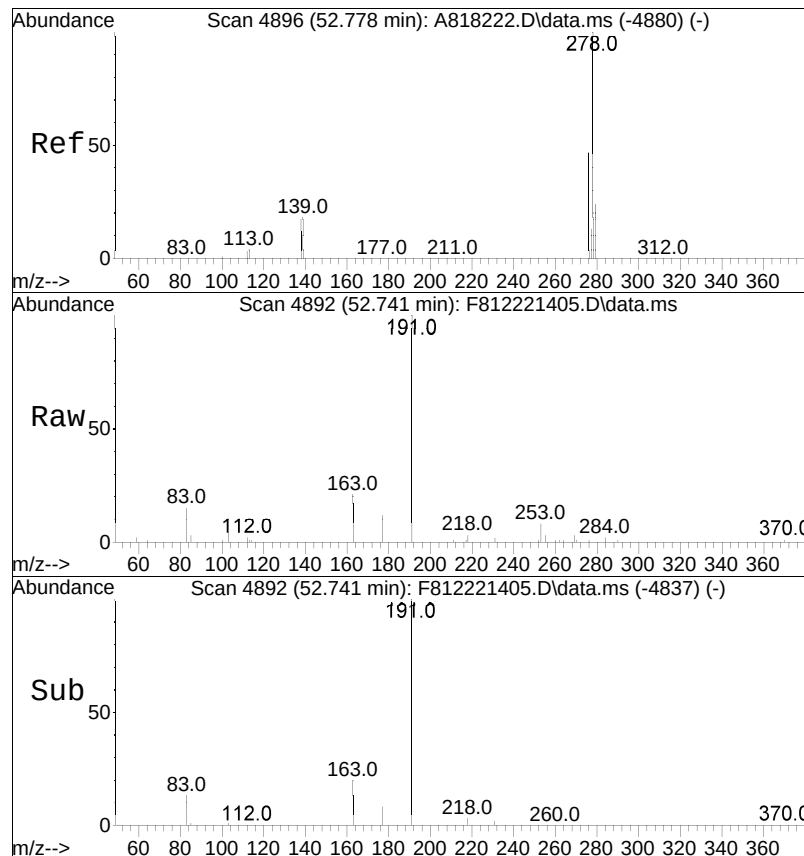
Tgt Ion	Ratio	Lower	Upper
276	100		
277	22.8	16.5	30.7



#94
 Hopane (T19)
 Concen: 545.93 ng/mL
 RT: 52.741 min Scan# 4892
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

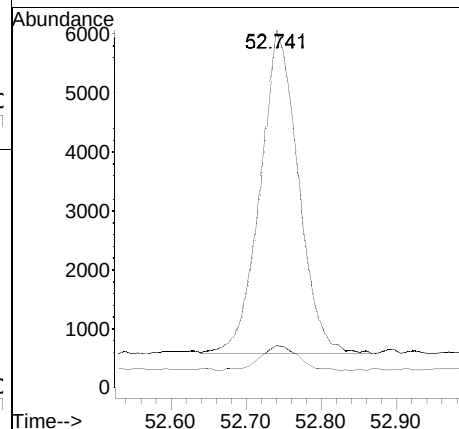
Tgt Ion	Ratio	Lower	Upper
191	100		
177	8.3	10.1	18.9#





#95
 17a(H),21B(H)-hopane - C₃₀H₅₂
 Concen: 545.93 ng/mL
 RT: 52.741 min Scan# 4892
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

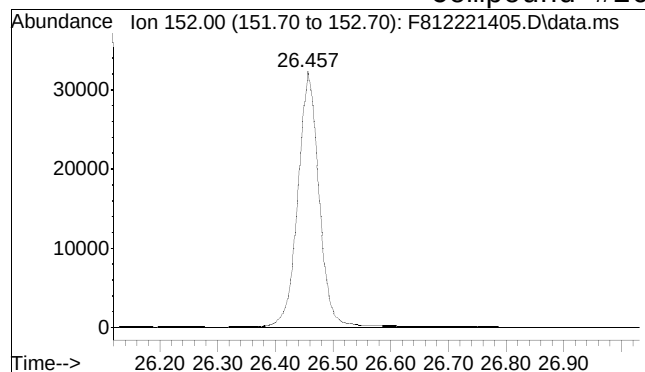
Tgt	Ion	Ratio	Lower	Upper
191	100			
177	8.3	10.1	18.9	



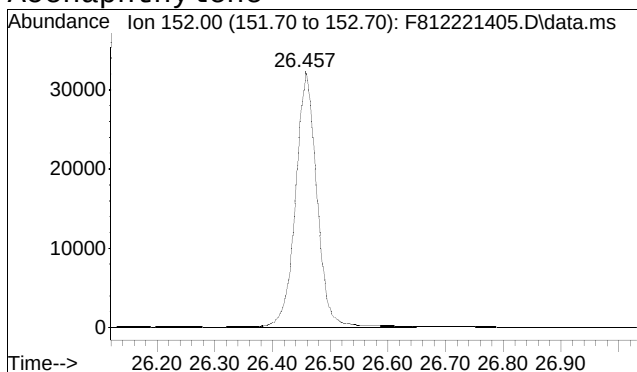
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221405.D Operator : PAH8:ML
 Date Inj'd : 12/23/2014 5:44 pm Instrument : PAH8
 Sample : I812231404 Quant Date : 12/24/2014 11:28 am

Compound #26: Acenaphthylene



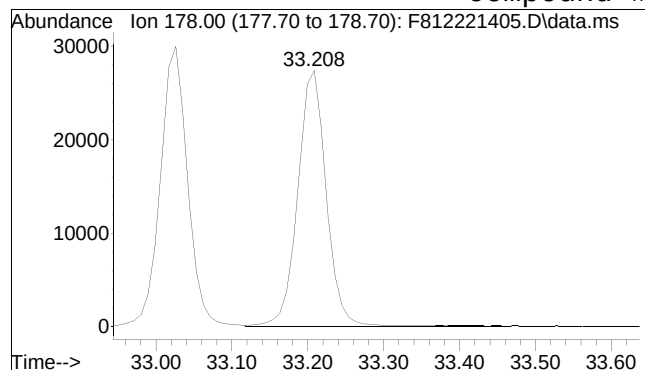
Original Peak Response = 84568



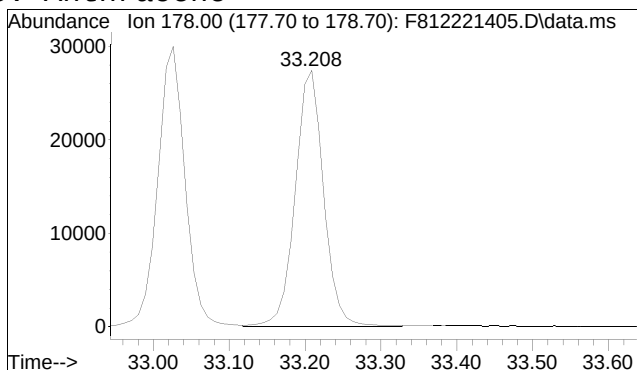
Manual Peak Response = 82836 M4

M4 = Poor automated baseline construction.

Compound #55: Anthracene



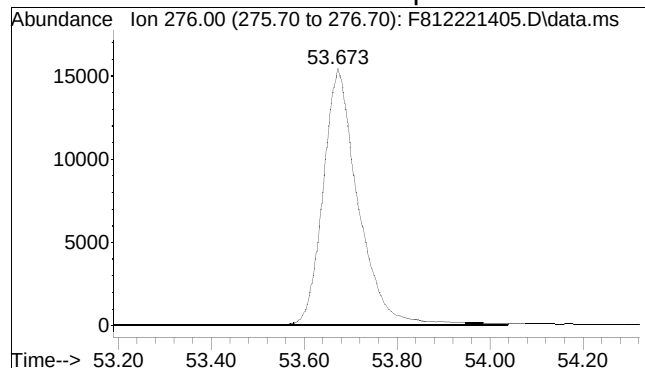
Original Peak Response = 71330



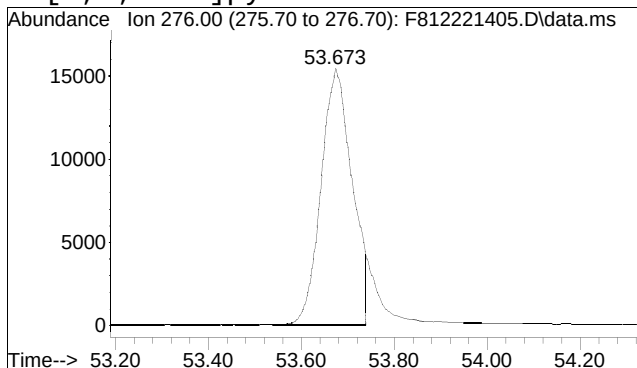
Manual Peak Response = 71144 M4

M4 = Poor automated baseline construction.

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 80857



Manual Peak Response = 72078 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221406.D
 Acq On : 23 Dec 2014 7:10 pm
 Operator : PAH8:ML
 Sample : I812231405
 Misc : WG755323, FRAU81 5000ng/ml
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 13 11:09:06 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.068	164	44809	500.000	ng/mL	0.00
74) Chrysene-d12	43.515	240	58530	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	20.096	136	851349	4961.018	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 496.10%#			
42) Phenanthrene-d10	32.944	188	622682	4757.417	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 475.74%#			
83) Benzo[b]fluoranthene-d12	47.436	264	597245	5252.243	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 525.22%#			
88) Benzo[a]pyrene-d12	48.652	264	499524	5416.008	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 541.60%#			
129) 5B(H)Cholane - Surr	44.136	217	114380	6242.454	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 624.25%#			
Target Compounds						
						Qvalue
3) trans-Decalin	16.747	138	96330	2402.470	ng/mL	100
4) cis-Decalin	17.961	138	73704	2427.139	ng/mL	100
10) Naphthalene	20.178	128	906181	4900.945	ng/mL	100
16) 2-Methylnaphthalene	22.861	142	637909	5162.095	ng/mL	100
17) 1-Methylnaphthalene	23.290	142	587441	4915.063	ng/mL	100
18) Benzo[thiophene	20.388	134	767298	5000.728	ng/mL	100
23) Biphenyl	24.741	154	741531	4987.954	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.352	156	526200	5197.874	ng/mL	100
25) Dibenzofuran	27.834	168	745557	4897.169	ng/mL	99
26) Acenaphthylene	26.457	152	918929M4	5504.529	ng/mL	
27) Acenaphthene	27.196	153	538045	5073.346	ng/mL	97
28) 2,3,5-Trimethylnaphthalen	28.747	170	431296	5176.548	ng/mL	94
29) Fluorene	29.212	166	594126	5078.242	ng/mL	96
33) Dibenzothiophene	32.533	184	836969	5109.929	ng/mL	98
43) Phenanthrene	33.035	178	750736	4709.870	ng/mL	98
54) Retene	40.009	234	203806	5185.103	ng/mL	97
55) Anthracene	33.208	178	691805M4	4913.044	ng/mL	
56) Carbazole	33.874	167	803338	5413.542	ng/mL	98
57) 1-Methylphenanthrene	35.536	192	587246	5077.053	ng/mL	98
58) Fluoranthene	37.800	202	852103M4	5169.815	ng/mL	
59) Benzo(b)fluorene	40.320	216	490593	5511.596	ng/mL	99
60) Pyrene	38.685	202	903908	5262.002	ng/mL	96
66) Naphthobenzothiophene	42.529	234	790691	4977.031	ng/mL	99
67) Naphthobenzothiophene-2,1	42.529	234	790691	4977.031	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221406.D
 Acq On : 23 Dec 2014 7:10 pm
 Operator : PAH8:ML
 Sample : I812231405
 Misc : WG755323, FRAU81 5000ng/ml
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 13 11:09:06 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.461	228	702309	5911.078	ng/mL	97
76)	Chrysene	43.625	228	643359	5378.216	ng/mL	97
77)	Chrysene/Triphenylene	43.625	228	643359	5378.216	ng/mL	97
84)	Benzo[b]fluoranthene	47.527	252	719420	5365.266	ng/mL	97
85)	Benzo[j]+[k]fluoranthene	47.610	252	688322	5430.655	ng/mL	95
87)	Benzo[e]pyrene	48.552	252	756484	5554.649	ng/mL	95
89)	Benzo[a]pyrene	48.744	252	671165	5686.901	ng/mL	96
90)	Perylene	49.064	252	707905	5766.981	ng/mL	94
91)	Indeno[1,2,3-cd]pyrene	53.700	276	857938M3	5510.467	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.755	278	710250	5279.628	ng/mL	97
93)	Benzo[g,h,i]perylene	55.053	276	827096	5319.421	ng/mL	100
94)	Hopane (T19)	52.750	191	244202	6246.959	ng/mL#	84
95)	17a(H),21B(H)-hopane - C3	52.750	191	244202	6246.959	ng/mL#	84

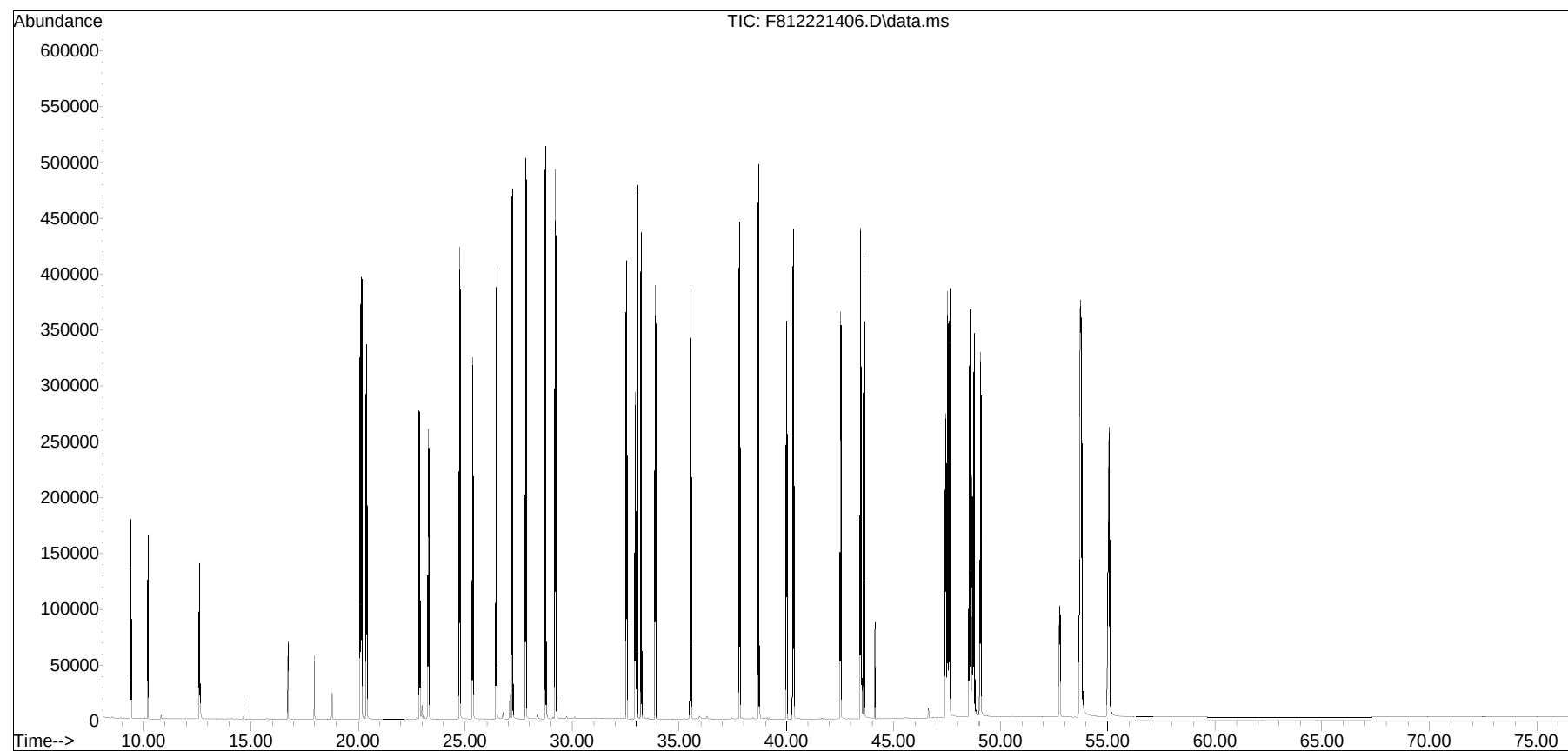
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC23\
Data File : F812221406.D
Acq On : 23 Dec 2014 7:10 pm
Operator : PAH8:ML
Sample : I812231405
Misc : WG755323, FRAU81 5000ng/ml
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 13 11:09:06 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 23 07:51:27 2014
Response via : Initial Calibration

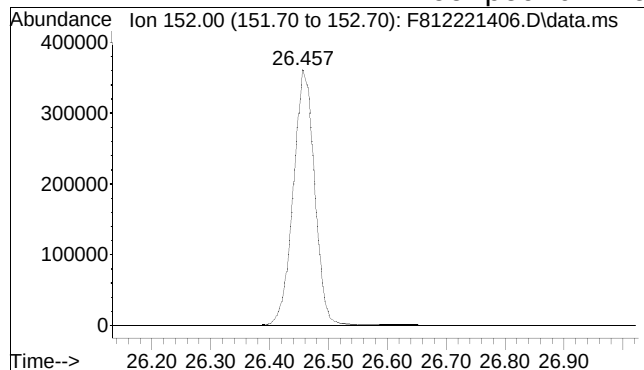
Sub List : ICAL_CCALT_REV2 - CC with five surrogates



Manual Integration/Negative Proof Report

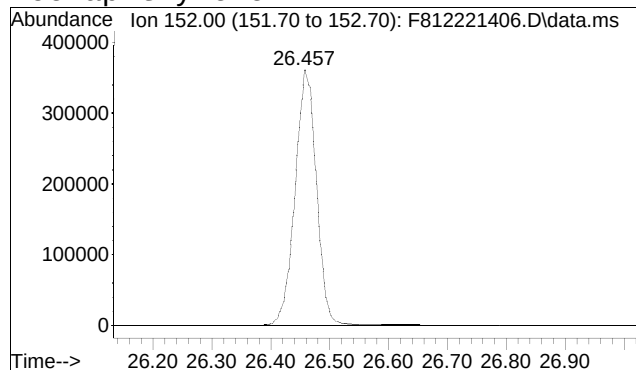
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
Data File : F812221406.D Operator : PAH8:ML
Date Inj'd : 12/23/2014 7:10 pm Instrument : PAH8
Sample : I812231405 Quant Date : 12/24/2014 11:28 am

Compound #26: Acenaphthylene



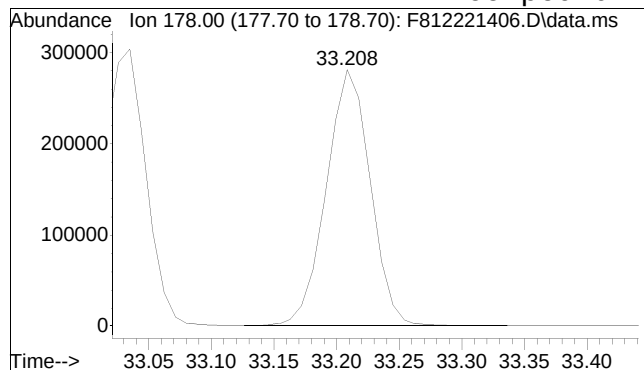
Original Peak Response = 922436

M4 = Poor automated baseline construction.



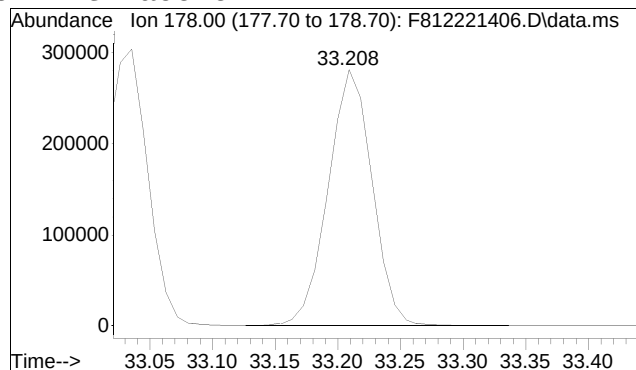
Manual Peak Response = 918929 M4

Compound #55: Anthracene



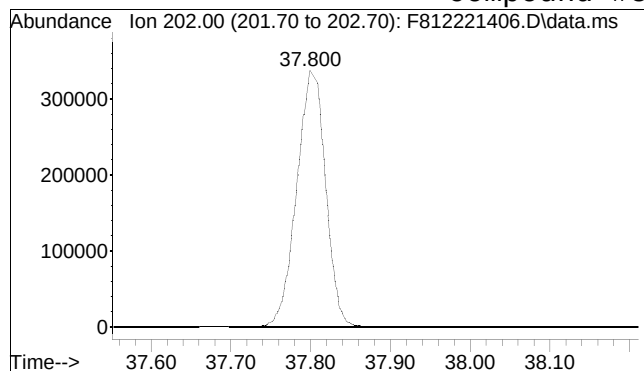
Original Peak Response = 690791

M4 = Poor automated baseline construction.



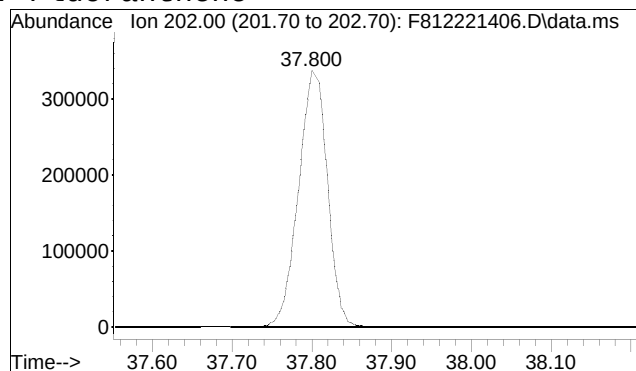
Manual Peak Response = 691805 M4

Compound #58: Fluoranthene



Original Peak Response = 851901

M4 = Poor automated baseline construction.

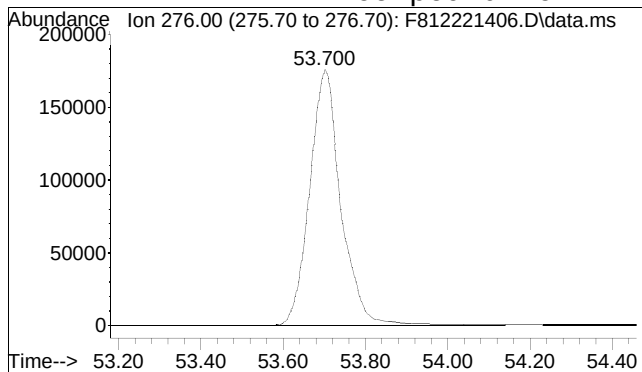


Manual Peak Response = 852103 M4

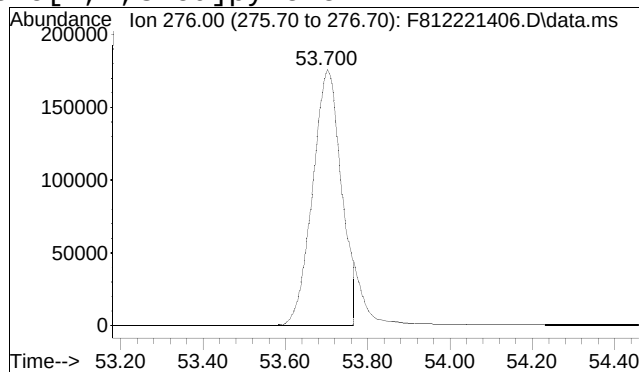
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
Data File : F812221406.D Operator : PAH8:ML
Date Inj'd : 12/23/2014 7:10 pm Instrument : PAH8
Sample : I812231405 Quant Date : 12/24/2014 11:28 am

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 937856



Manual Peak Response = 857938 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221407.D
 Acq On : 23 Dec 2014 8:36 pm
 Operator : PAH8:ML
 Sample : I812231406
 Misc : WG755323,FRAU82 10000ng/ml
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 13 11:09:15 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.068	164	38700	500.000	ng/mL	0.00
74) Chrysene-d12	43.525	240	51328	500.000	ng/mL	0.02
System Monitoring Compounds						
9) Naphthalene-d8	20.096	136	1429371	9644.116	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 964.41%#			
42) Phenanthrene-d10	32.944	188	1084861	9596.951	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 959.70%#			
83) Benzo[b]fluoranthene-d12	47.445	264	1077655	10806.778	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1080.68%#			
88) Benzo[a]pyrene-d12	48.671	264	901449	11145.211	ng/mL	0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1114.52%#			
129) 5B(H)Cholane - Surr	44.136	217	212944	13252.409	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1325.24%#			
Target Compounds						
					Qvalue	
3) trans-Decalin	16.738	138	172308	4975.723	ng/mL	100
4) cis-Decalin	17.961	138	131497	5013.877	ng/mL	100
10) Naphthalene	20.178	128	1490391	9332.959	ng/mL	100
16) 2-Methylnaphthalene	22.870	142	1071273	10037.410	ng/mL	100
17) 1-Methylnaphthalene	23.290	142	986830	9560.079	ng/mL	100
18) Benzothiophene	20.397	134	1282630	9678.874	ng/mL	100
23) Biphenyl	24.750	154	1245391	9699.584	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.362	156	890017	10179.524	ng/mL	100
25) Dibenzofuran	27.835	168	1256868	9558.906	ng/mL	99
26) Acenaphthylene	26.466	152	1552938M4	10770.767	ng/mL	
27) Acenaphthene	27.196	153	898226	9806.540	ng/mL	96
28) 2,3,5-Trimethylnaphthalen	28.747	170	741835	10309.236	ng/mL	92
29) Fluorene	29.212	166	1020017	10094.772	ng/mL	94
33) Dibenzothiophene	32.542	184	1443626	10205.034	ng/mL	98
43) Phenanthrene	33.035	178	1287948	9355.656	ng/mL	97
54) Retene	40.010	234	366923	10808.605	ng/mL	95
55) Anthracene	33.218	178	1202115M4	9884.786	ng/mL	
56) Carbazole	33.884	167	1410261	11003.655	ng/mL	97
57) 1-Methylphenanthrene	35.536	192	1034397	10354.596	ng/mL	97
58) Fluoranthene	37.809	202	1488946M4	10459.627	ng/mL	
59) Benzo(b)fluorene	40.329	216	866193	11267.433	ng/mL	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221407.D
 Acq On : 23 Dec 2014 8:36 pm
 Operator : PAH8:ML
 Sample : I812231406
 Misc : WG755323,FRAU82 10000ng/ml
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 13 11:09:15 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
60)	Pyrene	38.695	202	1574978	10615.868	ng/mL	95
66)	Naphthobenzothiophene	42.539	234	1398526	10192.681	ng/mL	99
67)	Naphthobenzothiophene-2,1	42.539	234	1398526	10192.681	ng/mL	99
75)	Benz[a]anthracene	43.470	228	1240792	11908.624	ng/mL	96
76)	Chrysene	43.634	228	1132402	10794.678	ng/mL	97
77)	Chrysene/Triphenylene	43.634	228	1132402	10794.678	ng/mL	97
84)	Benzo[b]fluoranthene	47.536	252	1262376	10735.484	ng/mL	98
85)	Benzo[j]+[k]fluoranthene	47.628	252	1231801	11082.182	ng/mL	96
87)	Benzo[e]pyrene	48.570	252	1347718	11284.442	ng/mL	95
89)	Benzo[a]pyrene	48.771	252	1182703	11427.370	ng/mL	97
90)	Perylene	49.082	252	1267253	11772.293	ng/mL	95
91)	Indeno[1,2,3-cd]pyrene	53.728	276	1476010M3	10810.505	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.783	278	1240354	10513.854	ng/mL	97
93)	Benzo[g,h,i]perylene	55.090	276	1468693	10771.189	ng/mL	99
94)	Hopane (T19)	52.759	191	449401	13109.244	ng/mL#	84
95)	17a(H),21B(H)-hopane - C3	52.759	191	449401	13109.244	ng/mL#	84

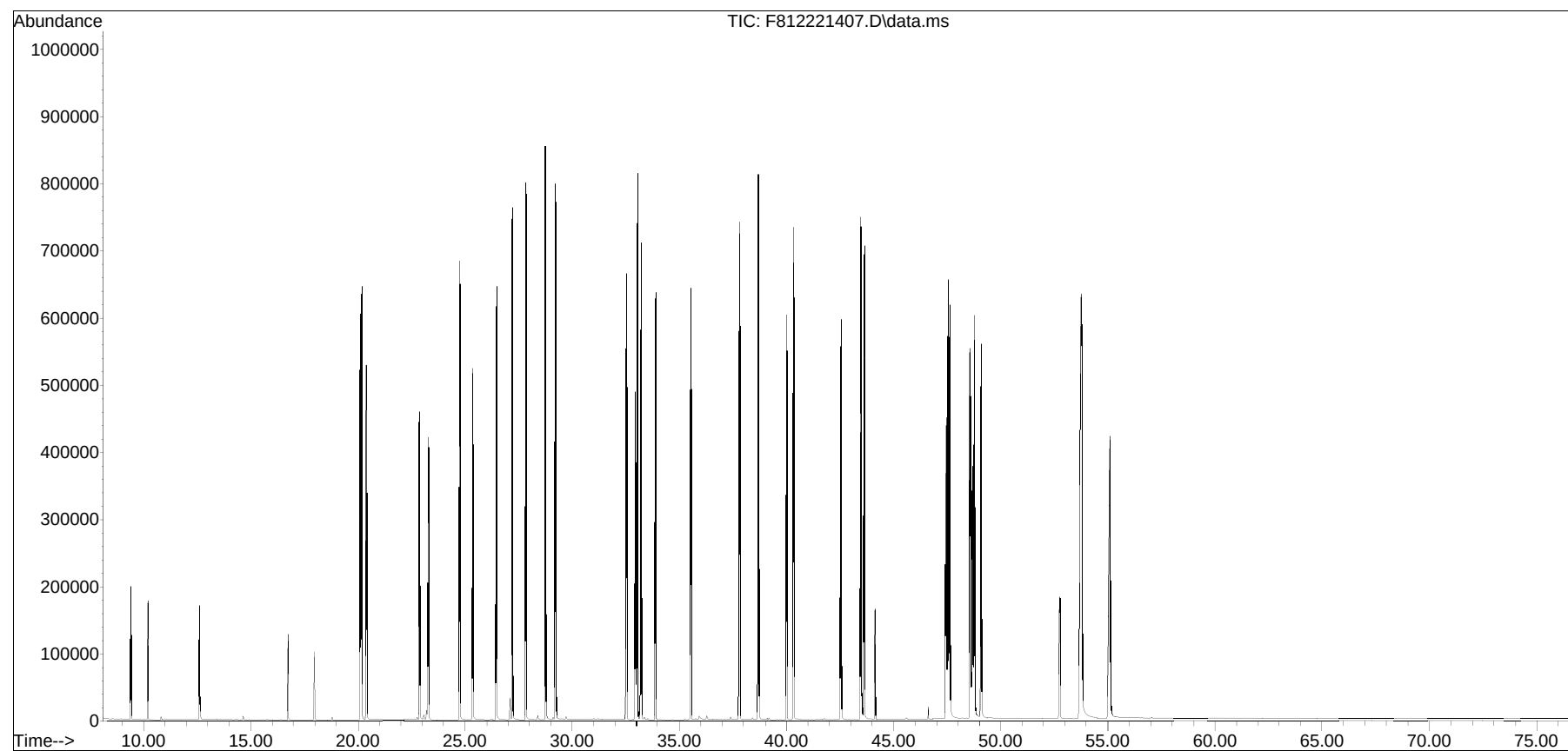
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC23\
Data File : F812221407.D
Acq On : 23 Dec 2014 8:36 pm
Operator : PAH8:ML
Sample : I812231406
Misc : WG755323,FRAU82 10000ng/ml
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 13 11:09:15 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 23 07:51:27 2014
Response via : Initial Calibration

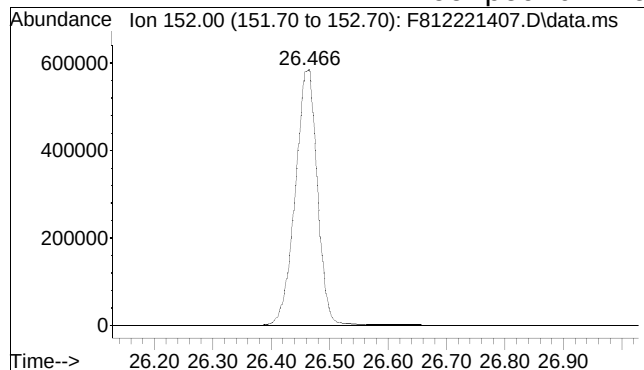
Sub List : ICAL_CCALT_REV2 - CC with five surrogates



Manual Integration/Negative Proof Report

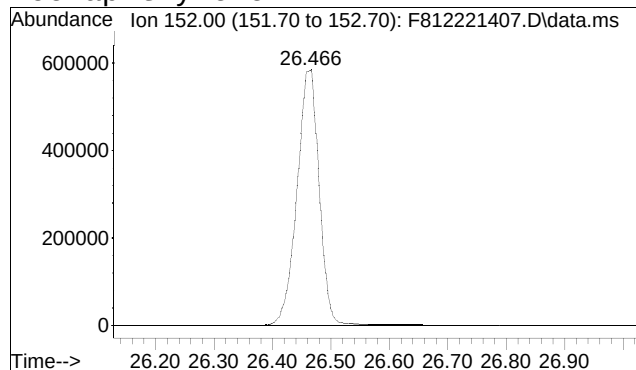
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
Data File : F812221407.D Operator : PAH8:ML
Date Inj'd : 12/23/2014 8:36 pm Instrument : PAH8
Sample : I812231406 Quant Date : 12/24/2014 11:28 am

Compound #26: Acenaphthylene



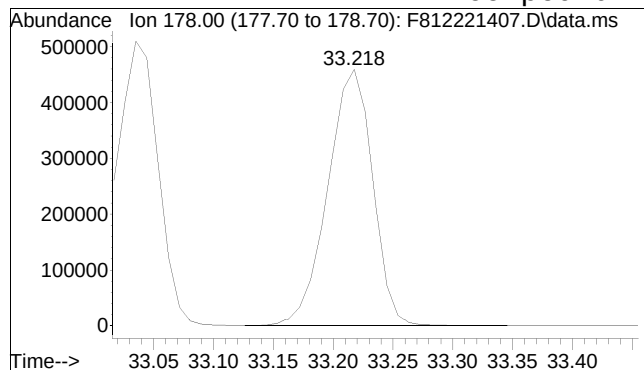
Original Peak Response = 1555898

M4 = Poor automated baseline construction.



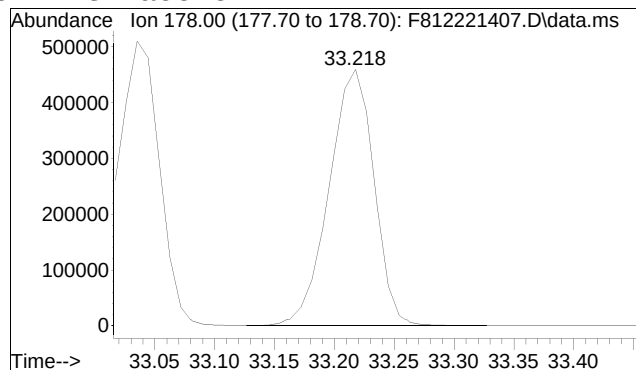
Manual Peak Response = 1552938 M4

Compound #55: Anthracene



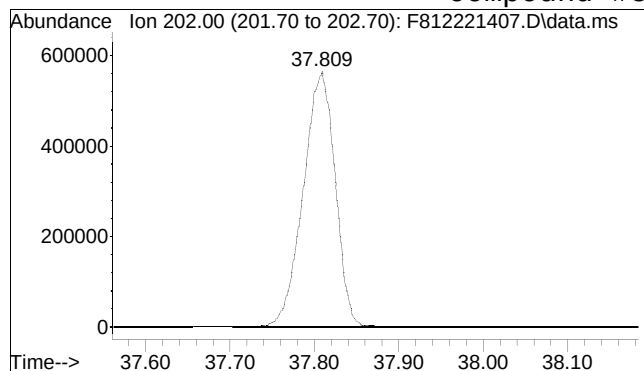
Original Peak Response = 1203945

M4 = Poor automated baseline construction.



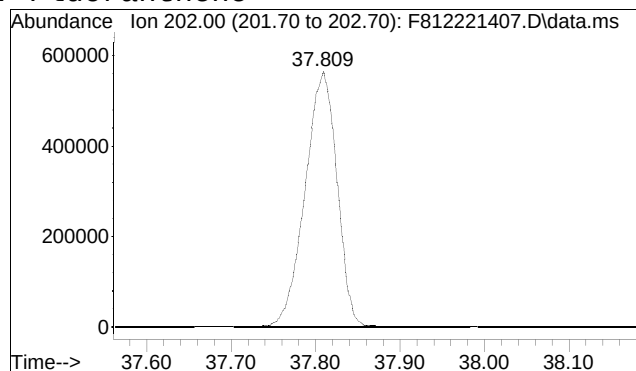
Manual Peak Response = 1202115 M4

Compound #58: Fluoranthene



Original Peak Response = 1488178

M4 = Poor automated baseline construction.

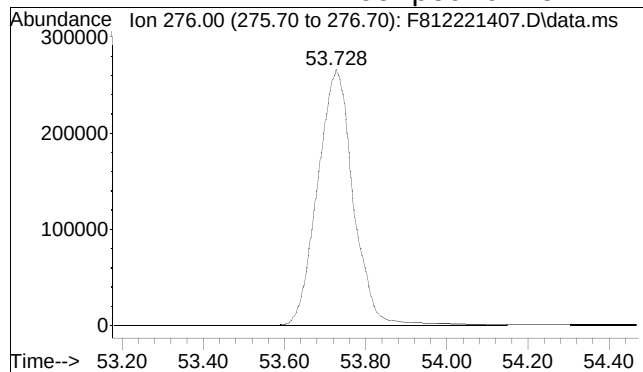


Manual Peak Response = 1488946 M4

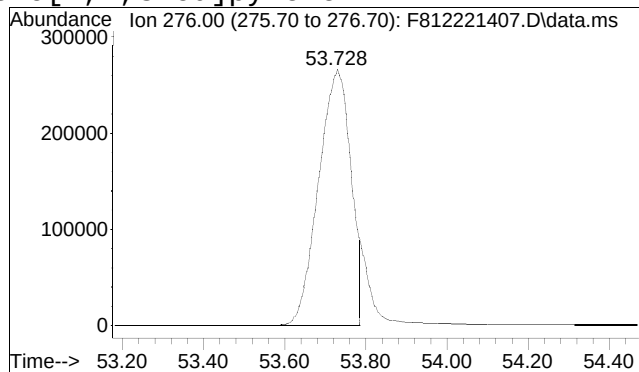
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
Data File : F812221407.D Operator : PAH8:ML
Date Inj'd : 12/23/2014 8:36 pm Instrument : PAH8
Sample : I812231406 Quant Date : 12/24/2014 11:28 am

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 1640680



Manual Peak Response = 1476010 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221408.D
 Acq On : 23 Dec 2014 10:03 pm
 Operator : PAH8:ML
 Sample : I812231407
 Misc : WG755323,FRAU83 20000ng/ml
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 13 11:09:23 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.068	164	37071	500.000	ng/mL	0.00
74) Chrysene-d12	43.534	240	47890	500.000	ng/mL	0.03
System Monitoring Compounds						
9) Naphthalene-d8	20.096	136	2414840	17009.145	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1700.91%#			
42) Phenanthrene-d10	32.953	188	1927840	17803.559	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1780.36%#			
83) Benzo[b]fluoranthene-d12	47.463	264	1909369	20521.819	ng/mL	0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2052.18%#			
88) Benzo[a]pyrene-d12	48.698	264	1604949	21267.570	ng/mL	0.07
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2126.76%#			
129) 5B(H)Cholane - Surr	44.145	217	382505	25513.853	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2551.39%#			
Target Compounds						
					Qvalue	
3) trans-Decalin	16.738	138	310082	9347.684	ng/mL	100
4) cis-Decalin	17.961	138	237208	9441.997	ng/mL	100
10) Naphthalene	20.178	128	2532541	16555.881	ng/mL	100
16) 2-Methylnaphthalene	22.870	142	1867040	18262.146	ng/mL	100
17) 1-Methylnaphthalene	23.299	142	1724165	17437.114	ng/mL	100
18) Benzothiophene	20.397	134	2209242	17403.773	ng/mL	100
23) Biphenyl	24.750	154	2154464	17517.143	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.362	156	1562486	18656.147	ng/mL	100
25) Dibenzofuran	27.844	168	2187631	17368.778	ng/mL	99
26) Acenaphthylene	26.466	152	2704504M4	19581.989	ng/mL	
27) Acenaphthene	27.205	153	1549611	17661.579	ng/mL	93
28) 2,3,5-Trimethylnaphthalen	28.756	170	1304145	18920.024	ng/mL	90
29) Fluorene	29.221	166	1791546	18509.460	ng/mL	92
33) Dibenzothiophene	32.542	184	2503448	18474.597	ng/mL	98
43) Phenanthrene	33.044	178	2262429	17156.455	ng/mL	97
54) Retene	40.019	234	649396	19970.135	ng/mL	93
55) Anthracene	33.227	178	1996096M4	17134.812	ng/mL	
56) Carbazole	33.893	167	2481391M4	20212.003	ng/mL	
57) 1-Methylphenanthrene	35.545	192	1814337	18960.096	ng/mL	95

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221408.D
 Acq On : 23 Dec 2014 10:03 pm
 Operator : PAH8:ML
 Sample : I812231407
 Misc : WG755323,FRAU83 20000ng/ml
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 13 11:09:23 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
58)	Fluoranthene	37.818	202	2583413M4	18945.573	ng/mL	
59)	Benzo(b)fluorene	40.338	216	1534199	20833.809	ng/mL	95
60)	Pyrene	38.704	202	2750836	19356.302	ng/mL	95
66)	Naphthobenzothiophene	42.547	234	2440537	18568.633	ng/mL	99
67)	Naphthobenzothiophene-2,1	42.547	234	2440537	18568.633	ng/mL	99
75)	Benz[a]anthracene	43.479	228	2149151	22107.470	ng/mL	96
76)	Chrysene	43.652	228	1992991	20362.162	ng/mL	96
77)	Chrysene/Triphenylene	43.652	228	1992991	20362.162	ng/mL	96
84)	Benzo[b]fluoranthene	47.555	252	2267778	20670.118	ng/mL	99
85)	Benzo[j]+[k]fluoranthene	47.646	252	2107809	20324.762	ng/mL	97
87)	Benzo[e]pyrene	48.588	252	2362444	21200.792	ng/mL	96
89)	Benzo[a]pyrene	48.799	252	2027351	20994.669	ng/mL	98
90)	Perylene	49.110	252	2186336	21768.281	ng/mL	96
91)	Indeno[1,2,3-cd]pyrene	53.764	276	2637516M3	20704.336	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.810	278	2187293	19871.597	ng/mL	97
93)	Benzo[g,h,i]perylene	55.135	276	2549687	20041.443	ng/mL	99
94)	Hopane (T19)	0.000		0	N.D.	d	
95)	17a(H),21B(H)-hopane - C3	0.000		0	N.D.	d	

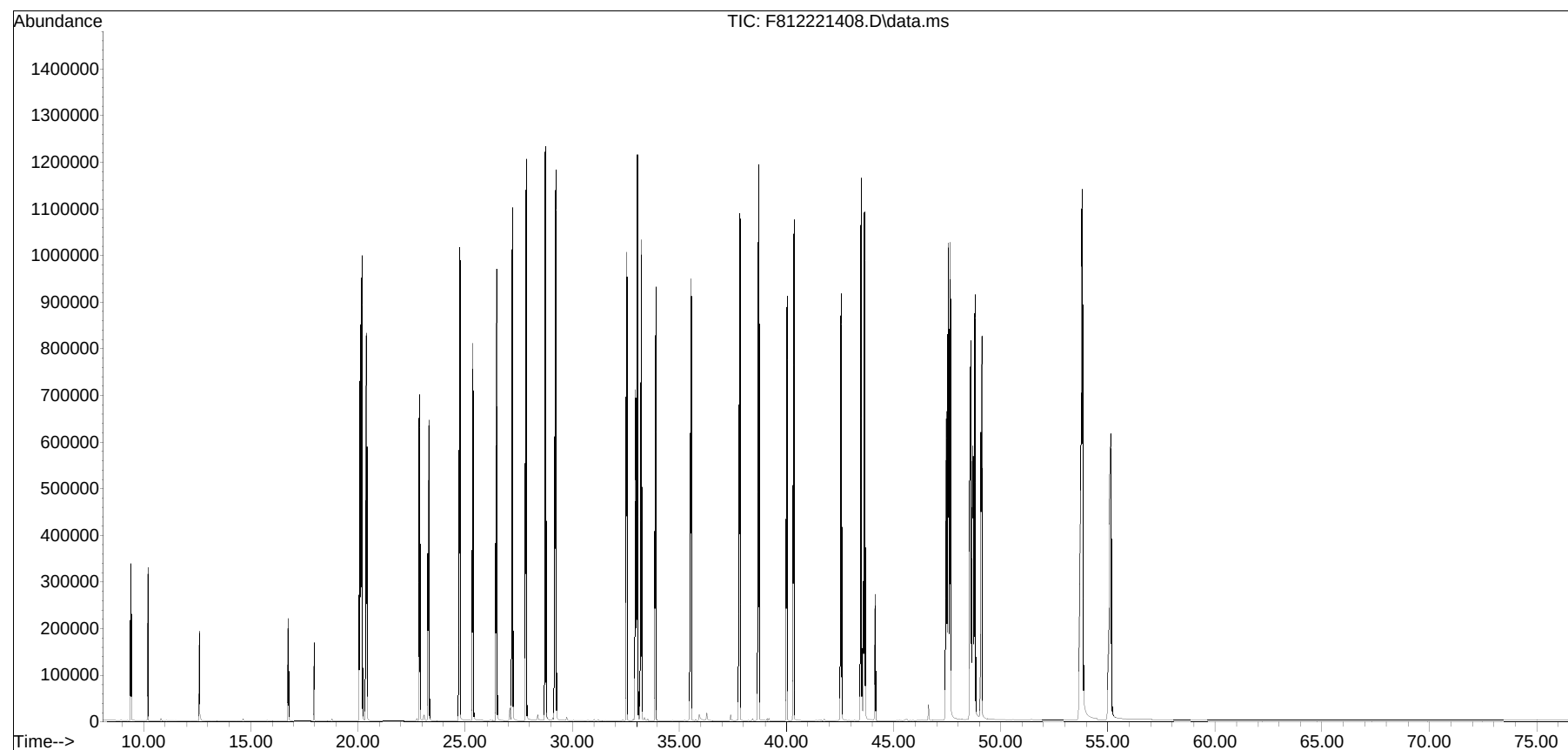
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC23\
Data File : F812221408.D
Acq On : 23 Dec 2014 10:03 pm
Operator : PAH8:ML
Sample : I812231407
Misc : WG755323,FRAU83 20000ng/ml
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 13 11:09:23 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 23 07:51:27 2014
Response via : Initial Calibration

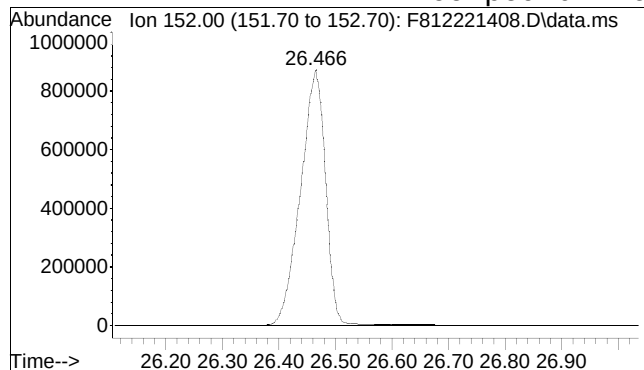
Sub List : ICAL_CCALT_REV2 - CC with five surrogates



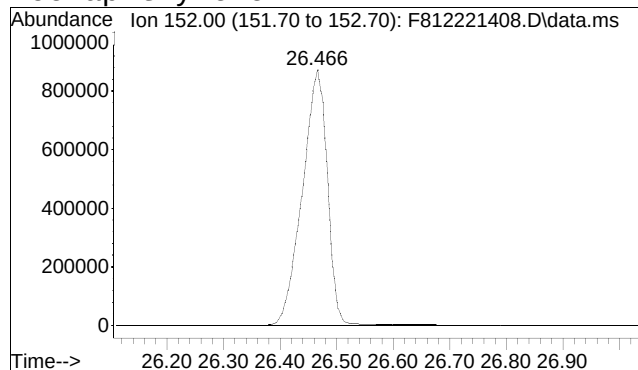
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221408.D Operator : PAH8:ML
 Date Inj'd : 12/23/2014 10:03 pm Instrument : PAH8
 Sample : I812231407 Quant Date : 12/24/2014 11:28 am

Compound #26: Acenaphthylene

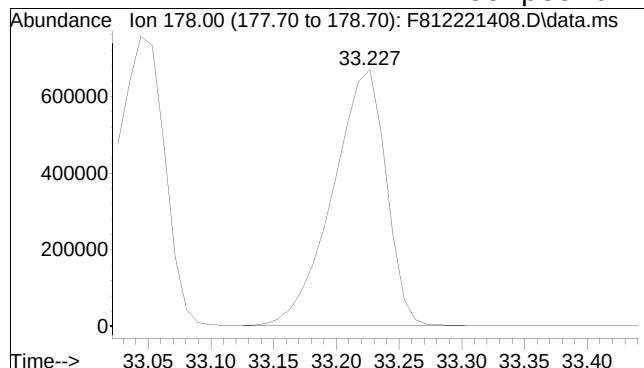


Original Peak Response = 2708811
 M4 = Poor automated baseline construction.

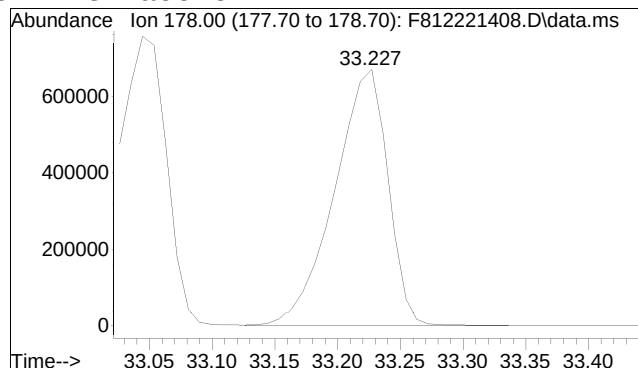


Manual Peak Response = 2704504 M4

Compound #55: Anthracene

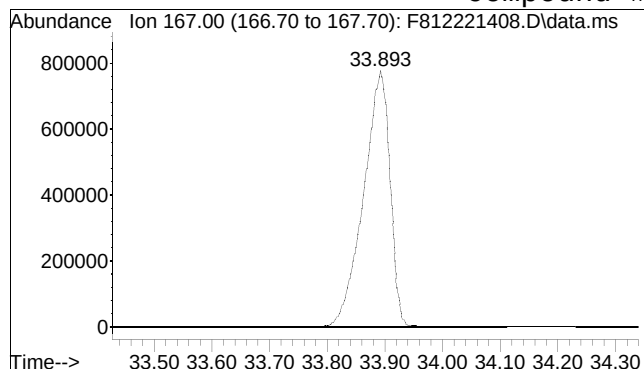


Original Peak Response = 1982555
 M4 = Poor automated baseline construction.

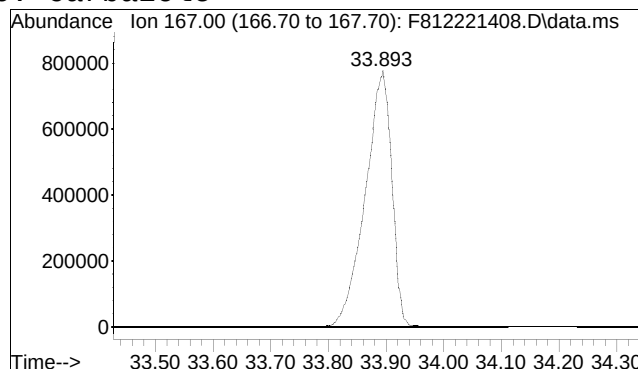


Manual Peak Response = 1996096 M4

Compound #56: Carbazole



Original Peak Response = 2482704
 M4 = Poor automated baseline construction.

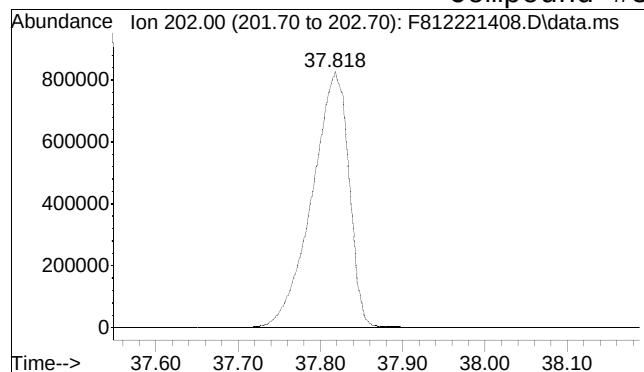


Manual Peak Response = 2481391 M4

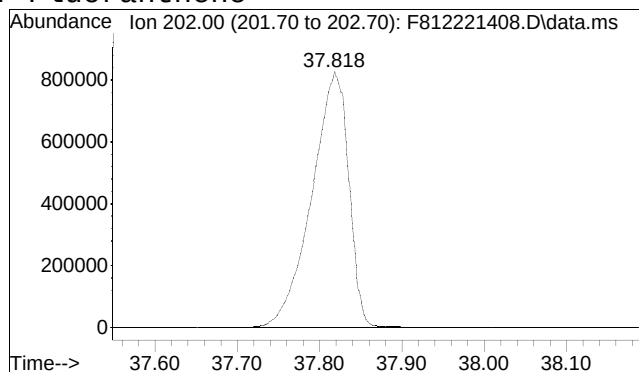
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221408.D Operator : PAH8:ML
 Date Inj'd : 12/23/2014 10:03 pm Instrument : PAH8
 Sample : I812231407 Quant Date : 12/24/2014 11:28 am

Compound #58: Fluoranthene



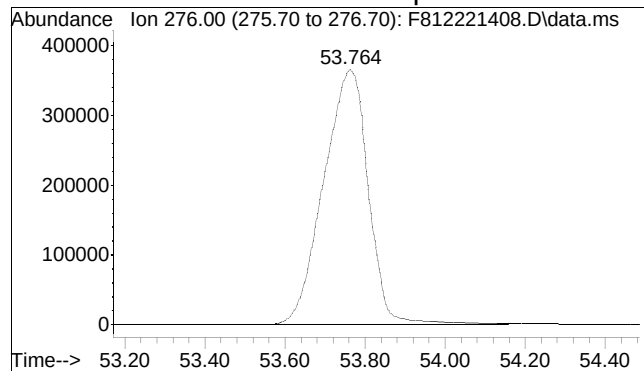
Original Peak Response = 2581583



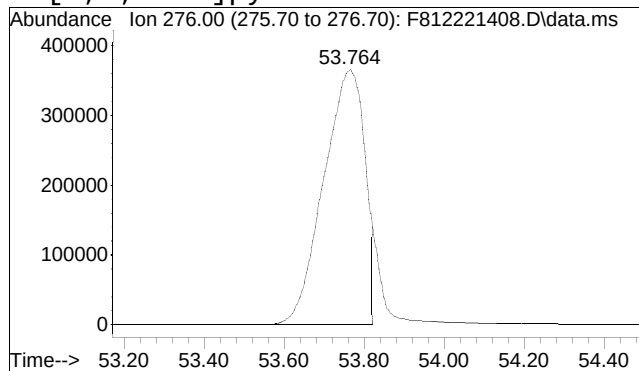
Manual Peak Response = 2583413 M4

M4 = Poor automated baseline construction.

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 2860980



Manual Peak Response = 2637516 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Initial Calibration Verification

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221410.D
 Acq On : 24 Dec 2014 12:55 am
 Operator : PAH8:ML
 Sample : CQ812231401
 Misc : WG755323,FRAU88 500ng/ml
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 13 11:09:38 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Dec 24 12:05:54 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	102	0.26
3 A1	trans-Decalin	0.446	0.419	6.1	100	0.24
4 t	cis-Decalin	0.337	0.322	4.5	102	0.25
9 s	Naphthalene-d8	2.023	2.065	-2.1	100	0.25
10 A1	Naphthalene	2.245	2.515	-12.0	105	0.25
16 t	2-Methylnaphthalene	1.447	1.568	-8.4	107	0.26
17 t	1-Methylnaphthalene	1.372	1.440	-5.0	104	0.26
18 A1	Benzothiophene	1.874	2.019	-7.7	106	0.25
23 t	Biphenyl	1.743	1.870	-7.3	103	0.25
24 t	2,6-Dimethylnaphthalene	1.209	1.278	-5.7	104	0.26
25 t	Dibenzofuran	1.778	1.949	-9.6	104	0.26
26 t	Acenaphthylene	2.112	2.241	-6.1	100	0.26
27 t	Acenaphthene	1.286	1.390	-8.1	103	0.26
28 t	2,3,5-Trimethylnaphthalene	1.006	1.062	-5.6	103	0.26
29 A1	Fluorene	1.380	1.506	-9.1	103	0.27
33 A1	Dibenzothiophene	1.929	2.091	-8.4	103	0.28
42 s	Phenanthrene-d10	1.510	1.517	-0.5	97	0.27
43 A1	Phenanthrene	1.865	2.075	-11.3	104	0.28
54 t	Retene	0.443	0.498	-12.4	108	0.29
55 t	Anthracene	1.709	1.940	-13.5	102	0.28
56 t	Carbazole	1.834	1.946	-6.1	100	0.27
57 t	1-Methylphenanthrene	1.311	1.365	-4.1	99	0.28
58 A1	Fluoranthene	1.900	2.049	-7.8	101	0.28
59 t	Benzo(b)fluorene	1.101	1.158	-5.2	99	0.29
60 A1	Pyrene	1.988	2.276	-14.5	103	0.28
66 A1	Naphthobenzothiophene	1.757	1.904	-8.4	102	0.29
67 A2	Naphthobenzothiophene-2,1-D	1.757	1.904	-8.4	102	0.29
74 i	Chrysene-d12	1.000	1.000	0.0	98	0.30
75 t	Benz[a]anthracene	1.151	1.169	-1.6	99	0.30
76 A1	Chrysene	1.097	1.180	-7.6	103	0.30
77 A2	Chrysene/Triphenylene	1.097	1.180	-7.6	103	0.30
83 s	Benzo[b]fluoranthene-d12	0.992	0.919	7.4	87	0.32
84 t	Benzo[b]fluoranthene	1.223	1.262	-3.2	104	0.31
85 A1	Benzo[j]+[k]fluoranthene	1.203	1.250	-3.9	105	0.33
87 t	Benzo[e]pyrene	1.236	1.203	2.7	99	0.35
88 s	Benzo[a]pyrene-d12	0.861	0.815	5.3	94	0.35
89 t	Benzo[a]pyrene	1.127	1.236	-9.7	108	0.36
90 t	Perylene	1.184	1.179	0.4	104	0.36

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221410.D
 Acq On : 24 Dec 2014 12:55 am
 Operator : PAH8:ML
 Sample : CQ812231401
 Misc : WG755323, FRAU88 500ng/ml
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 13 11:09:38 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Dec 24 12:05:54 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.432	1.433	-0.1	114	0.49
92 t	Dibenz[ah]+[ac]anthracene	1.220	1.269	-4.0	105	0.50#
93 t	Benzo[g,h,i]perylene	1.375	1.357	1.3	102	0.54#
94 A1	Hopane (T19)	0.415	0.000#	100.0#	0#	-52.25#
95 A2	17a(H),21B(H)-hopane - C30H	0.415	0.000#	100.0#	0#	-52.25#
129 SA1	5B(H)Cholane - Surr	0.186	0.000#	100.0#	0#	-43.82#

* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Mass Discrimination (Concentration)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	0.89	0.70 - 1.30

Mass Discrimination (Response)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	0.92	0.70 - 2.00

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221410.D
 Acq On : 24 Dec 2014 12:55 am
 Operator : PAH8:ML
 Sample : CQ812231401
 Misc : WG755323, FRAU88 500ng/ml
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 13 11:09:38 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Dec 24 12:05:54 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.068	164	43869	500.000	ng/mL	0.00
74) Chrysene-d12	43.515	240	61979	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	20.096	136	90572	510.268	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	51.03%		
42) Phenanthrene-d10	32.935	188	66548	505.085	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	50.51%		
83) Benzo[b]fluoranthene-d12	47.417	264	56954	471.029	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	47.10%#		
88) Benzo[a]pyrene-d12	48.634	264	50498	474.682	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	47.47%#		
129) 5B(H)Cholane - Surr	0.000	217	0	0.000	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#		
Target Compounds						
						Qvalue
3) trans-Decalin	16.738	138	9195	234.475	ng/mL	100
4) cis-Decalin	17.961	138	7052	237.741	ng/mL	100
10) Naphthalene	20.169	128	110310	558.360	ng/mL	100
16) 2-Methylnaphthalene	22.870	142	68777	541.089	ng/mL	100
17) 1-Methylnaphthalene	23.290	142	63187	522.997	ng/mL	100
18) Benzothiophene	20.388	134	88556	535.400	ng/mL	100
23) Biphenyl	24.741	154	82040	536.475	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.352	156	56072	528.554	ng/mL	100
25) Dibenzofuran	27.834	168	85487	547.722	ng/mL	99
26) Acenaphthylene	26.457	152	98312	531.822	ng/mL	100
27) Acenaphthene	27.187	153	60967	539.742	ng/mL	99
28) 2,3,5-Trimethylnaphthalen	28.738	170	46581	527.790	ng/mL	95
29) Fluorene	29.212	166	66067	546.386	ng/mL	99
33) Dibenzothiophene	32.533	184	91744	542.851	ng/mL	98
43) Phenanthrene	33.026	178	91036	555.790	ng/mL	99
54) Retene	40.000	234	21828	565.410	ng/mL	99
55) Anthracene	33.208	178	85124M4	567.271	ng/mL	
56) Carbazole	33.874	167	85353	531.949	ng/mL	98
57) 1-Methylphenanthrene	35.527	192	59878	522.536	ng/mL	99
58) Fluoranthene	37.791	202	89871	540.812	ng/mL	96
59) Benzo(b)fluorene	40.311	216	50789	527.776	ng/mL	99
60) Pyrene	38.676	202	99852	573.748	ng/mL	97
66) Naphthobenzothiophene	42.520	234	167045	1091.013	ng/ml	99
67) Naphthobenzothiophene-2,1	42.520	234	167045	1091.013	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221410.D
 Acq On : 24 Dec 2014 12:55 am
 Operator : PAH8:ML
 Sample : CQ812231401
 Misc : WG755323, FRAU88 500ng/ml
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 13 11:09:38 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Dec 24 12:05:54 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.451	228	72427	508.473	ng/mL	98
76)	Chrysene	43.607	228	73164	536.614	ng/mL	98
77)	Chrysene/Triphenylene	43.607	228	73164	536.614	ng/mL	98
84)	Benzo[b]fluoranthene	47.500	252	78229	514.195	ng/mL	96
85)	Benzo[j]+[k]fluoranthene	47.591	252	77496	517.285	ng/mL	94
87)	Benzo[e]pyrene	48.533	252	74585	484.767	ng/mL	94
89)	Benzo[a]pyrene	48.725	252	76630	544.745	ng/mL	95
90)	Perylene	49.045	252	73059	494.511	ng/mL	94
91)	Indeno[1,2,3-cd]pyrene	53.664	276	88823M3	493.585	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.728	278	78636	516.519	ng/mL	98
93)	Benzo[g,h,i]perylene	55.016	276	84120	492.628	ng/mL	99
94)	Hopane (T19)	0.000		0	N.D.	d	
95)	17a(H),21B(H)-hopane - C3	0.000		0	N.D.	d	

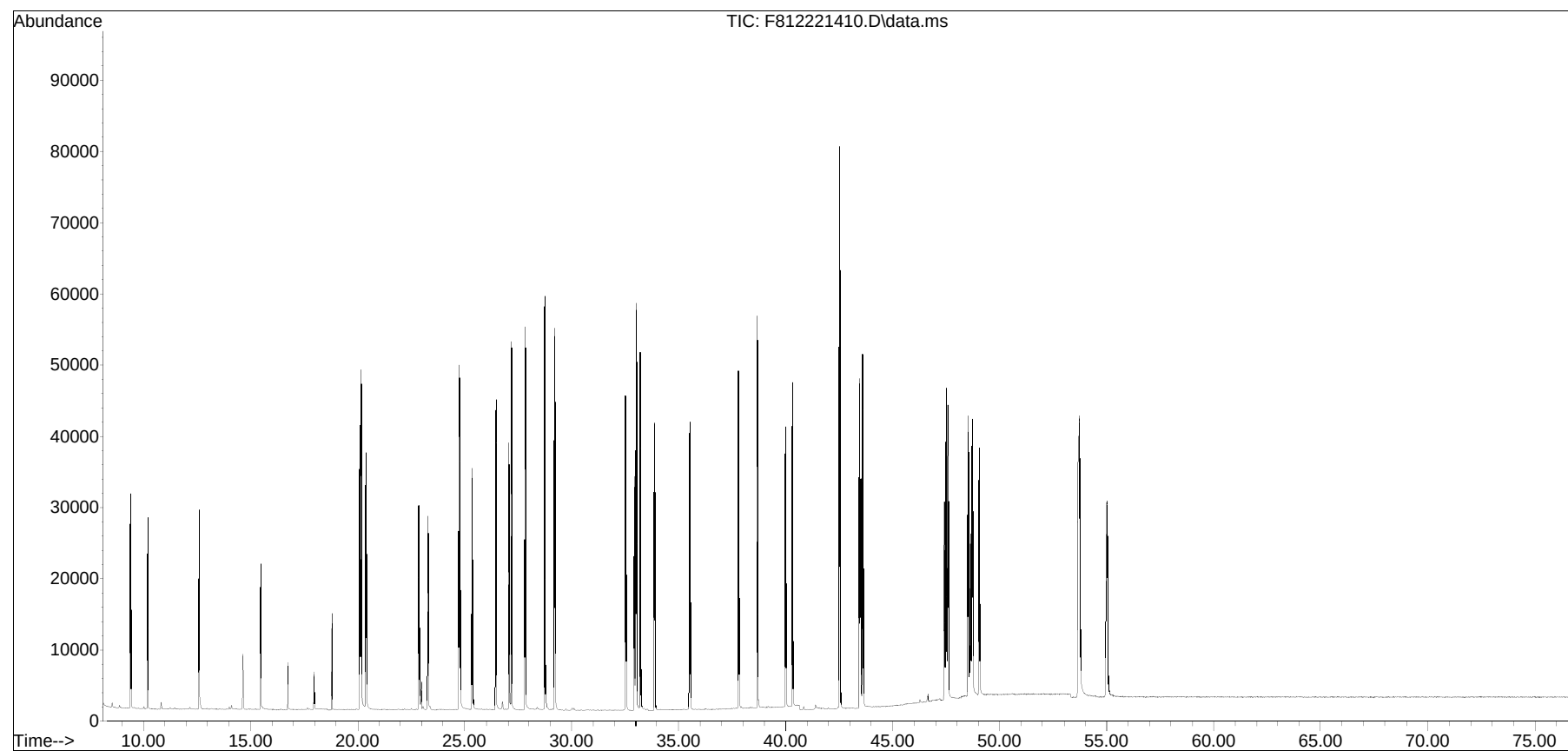
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC23\
Data File : F812221410.D
Acq On : 24 Dec 2014 12:55 am
Operator : PAH8:ML
Sample : CQ812231401
Misc : WG755323, FRAU88 500ng/ml
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 13 11:09:38 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Dec 24 12:05:54 2014
Response via : Initial Calibration

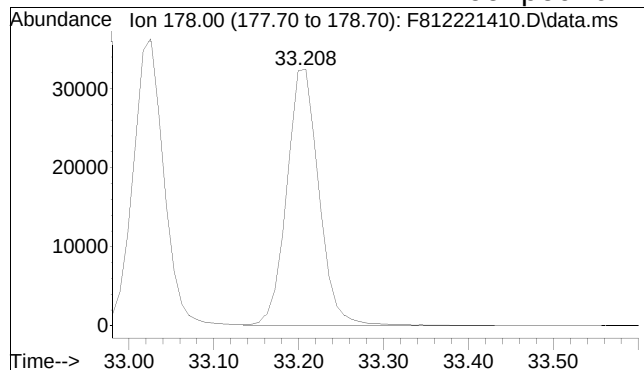
Sub List : ICAL_CCALT_REV2 - CC with five surrogates



Manual Integration/Negative Proof Report

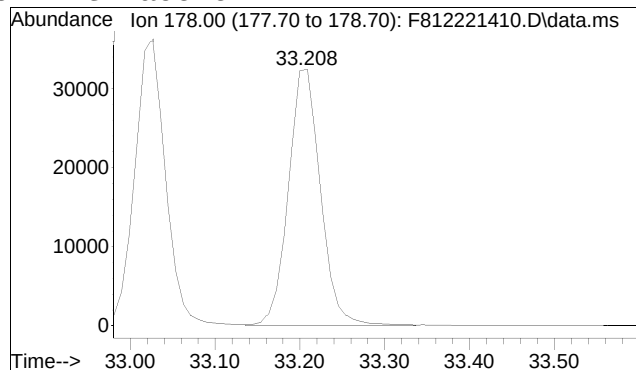
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
Data File : F812221410.D Operator : PAH8:ML
Date Inj'd : 12/24/2014 12:55 am Instrument : PAH8
Sample : CQ812231401 Quant Date : 12/24/2014 12:16 pm

Compound #55: Anthracene



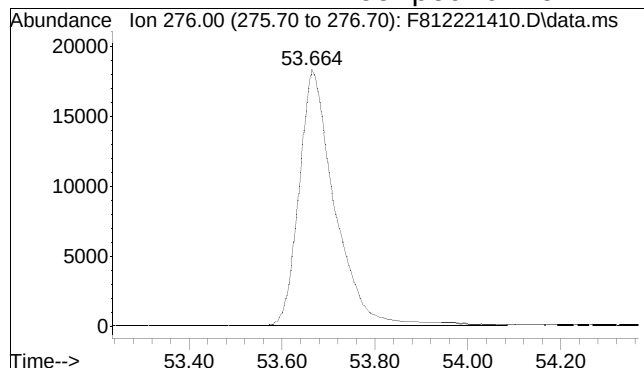
Original Peak Response = 85179

M4 = Poor automated baseline construction.



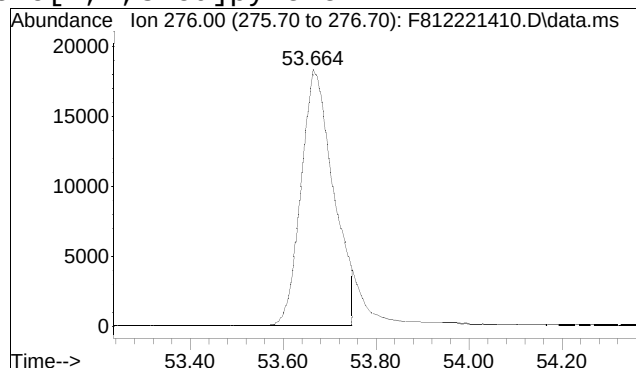
Manual Peak Response = 85124 M4

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 98201

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.



Manual Peak Response = 88823 M3

Alaska North Slope Crude (ANS)

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221412.D
 Acq On : 24 Dec 2014 3:47 am
 Operator : PAH8:ML
 Sample : WG755323-1,0.5055
 Misc : WG755323,FRAU91 5.055 SS011315ANC01
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 13 11:09:46 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Dec 24 12:33:02 2014
 Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.068	164	31047M3	500.000	ng/mL	0.00
74) Chrysene-d12	43.524	240	37527M4	500.000	ng/mL	0.02
System Monitoring Compounds						
9) Naphthalene-d8	20.096	136	117767	937.488	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	93.75%		
42) Phenanthrene-d10	32.944	188	73983	793.414	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	79.34%		
83) Benzo[b]fluoranthene-d12	47.427	264	61785	843.931	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	84.39%		
88) Benzo[a]pyrene-d12	48.643	264	55029	854.321	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	85.43%		
129) 5B(H)Cholane - Surr	44.136	217	16599	1197.555	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	119.76%		
Target Compounds						
						Qvalue
2) 2-butoxyethanol	0.000		0	N.D.	d	
3) trans-Decalin	16.747	138	61507	2216.190	ng/mL	100
4) cis-Decalin	17.961	138	2554M4	121.661	ng/mL	
5) C1-Decalins	18.682	152	100256M5	3612.375	ng/mL	
6) C2-Decalins	20.005	166	87637M5	3157.694	ng/mL	
7) C3-Decalins	22.478	180	44260M5	1594.755	ng/mL	
8) C4-Decalins	25.873	194	44567M5	1605.816	ng/mL	
10) Naphthalene	20.178	128	391823	2802.385	ng/mL	100
11) C1-Naphthalenes	22.870	142	941144M5	6731.222	ng/mL	
12) C2-Naphthalenes	25.708	156	1128265M5	8069.543	ng/mL	
13) C3-Naphthalenes	28.044	170	720059M5	5149.984	ng/mL	
14) C4-Naphthalenes	30.809	184	332853M5	2380.621	ng/mL	
15) Glycol Ether Isomers	0.000		0	N.D.	d	
16) 2-Methylnaphthalene	22.870	142	538863	5990.209	ng/mL	100
17) 1-Methylnaphthalene	23.290	142	403937	4724.148	ng/mL	100
18) Benzothiophene	20.379	134	3483M4	29.754	ng/mL	
19) C1-Benzo(b)thiophenes	22.423	148	19036M5	162.620	ng/mL	
20) C2-Benzo(b)thiophenes	25.909	162	31283M5	267.243	ng/mL	
21) C3-Benzo(b)thiophenes	27.880	176	60437M5	516.299	ng/mL	
22) C4-Benzo(b)thiophenes	29.623	190	43670M5	373.062	ng/mL	
23) Biphenyl	24.750	154	93940	867.986	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.371	156	280587	3737.221	ng/mL	100
25) Dibenzofuran	27.834	168	34838	315.392	ng/mL#	82
26) Acenaphthylene	26.448	152	4642	35.482	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221412.D
 Acq On : 24 Dec 2014 3:47 am
 Operator : PAH8:ML
 Sample : WG755323-1,0.5055
 Misc : WG755323,FRAU91 5.055 SS011315ANC01
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 13 11:09:46 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Dec 24 12:33:02 2014
 Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

27) Acenaphthene	27.205	153	8936M4	111.782	ng/mL	
28) 2,3,5-Trimethylnaphthalen	28.747	170	49091M3	785.945	ng/mL	
29) Fluorene	29.212	166	30998M4	362.232	ng/mL	
30) C1-Fluorenes	31.575	180	61824M5	722.454	ng/mL	
31) C2-Fluorenes	33.765	194	88201M5	1030.686	ng/mL	
32) C3-Fluorenes	35.600	208	76350M5	892.199	ng/mL	
33) Dibenzothiophene	32.533	184	70603	590.289	ng/mL#	78
34) 4-Methyldibenzothiophene(	34.304	198	65171	544.873	ng/mL	100
35) 2/3-Methyldibenzothiophen	34.650	198	49303	412.206	ng/mL	100
36) 1-Methyldibenzothiophene(	35.079	198	20679	172.890	ng/mL	100
37) OTP	34.714	198	8773	73.348	ng/mL	100
38) C1-Dibenzothiophenes	34.304	198	146554M5	1225.290	ng/mL	
38) C1-Dibenzothiophenes BS	34.304	198	137781M5	1151.942	ng/mL	
39) C2-Dibenzothiophenes	35.992	212	168644M5	1409.977	ng/mL	
40) C3-Dibenzothiophenes	37.791	226	163377M5	1365.942	ng/mL	
41) C4-Dibenzothiophenes	39.471	240	93852M5	784.666	ng/mL	
43) Phenanthrene	33.026	178	104421	900.790	ng/mL	96
44) 3-Methylphenanthrene(3MP)	34.988	192	41177	355.214	ng/mL	99
45) 2-Methylphenanthrene(2MP)	35.098	192	45803	395.121	ng/mL	98
46) 2-Methylanthracene(2MA)	35.262	192	1697	14.639	ng/mL	76
47) 9/4-Methylphenanthrene(9M	35.445	192	66173	570.843	ng/mL	99
48) 1-Methylphenanthrene(1MP)	35.536	192	46174M4	398.321	ng/mL	
49) C1-Phenanthrenes/Anthrace	35.445	192	203550M5	1755.928	ng/mL	
50) C2-Phenanthrenes/Anthrace	37.252	206	205687M5	1774.363	ng/mL	
50) C2-Phenanthrenes/Anthr BS	37.252	206	205687M5	1774.363	ng/mL	
51) 5AA IS BKGD	0.000		0	N.D.	d	
52) C3-Phenanthrenes/Anthrace	39.087	220	168250M5	1451.412	ng/mL	
53) C4-Phenanthrenes/Anthrace	41.260	234	68147M5	587.872	ng/mL	
54) Retene	0.000		0	N.D.	d	
55) Anthracene	0.000		0	N.D.	d	
56) Carbazole	33.865	167	3463M4	30.496	ng/mL	
57) 1-Methylphenanthrene	35.536	192	46174M4	569.357	ng/mL	
58) Fluoranthene	37.809	202	2065M4	17.558	ng/mL	
59) Benzo(b)fluorene	40.320	216	1824M4	26.782	ng/mL	
60) Pyrene	38.685	202	7731M4	62.768	ng/mL	
61) C1-Fluoranthenes/Pyrenes	40.073	216	34328M5	278.709	ng/mL	
62) C2-Fluoranthenes/Pyrenes	42.182	230	53541M5	434.700	ng/mL	
63) C3-Fluoranthenes/Pyrenes	43.881	244	71715M5	582.254	ng/mL	
64) C4-Fluoranthenes/Pyrenes	45.232	258	59334M5	481.733	ng/mL	
65) Bis-(2-ethylhexyl)fumarat	0.000		0	N.D.	d	
66) Naphthobenzothiophene	42.529	234	17333	159.959	ng/ml#	64

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221412.D
 Acq On : 24 Dec 2014 3:47 am
 Operator : PAH8:ML
 Sample : WG755323-1,0.5055
 Misc : WG755323,FRAU91 5.055 SS011315ANC01
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 13 11:09:46 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Dec 24 12:33:02 2014
 Response via : Initial Calibration

Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
67)	Naphthobenzothiophene-2,1	42.529	234	17333	159.959	ng/mL#	64
68)	Naphthobenzothiophene-1,2	42.876	234	3547M4	32.734	ng/mL	
69)	Naphthobenzothiophene-2,3	43.168	234	2099M4	19.371	ng/mL	
70)	C1-Naphthobenzothiophenes	43.926	248	65519M5	604.647	ng/mL	
71)	C2-Naphthobenzothiophenes	45.927	262	75502M5	696.776	ng/mL	
72)	C3-Naphthobenzothiophenes	47.536	276	49453M5	456.381	ng/mL	
73)	C4-Naphthobenzothiophenes	48.643	290	35696M5	329.423	ng/mL	
75)	Benz[a]anthracene	43.461	228	1020M3	11.827	ng/mL	
76)	Chrysene	43.598	228	15456M4	187.224	ng/mL	
77)	Chrysene/Triphenylene	43.598	228	15579M4	188.714	ng/mL	
78)	C1-Chrysenes	45.086	242	33177M5	401.886	ng/mL	
79)	C2-Chrysenes	47.161	256	36561M5	442.878	ng/mL	
79)	C2-Chrysenes BS	47.161	256	34265M5	415.065	ng/mL	
80)	BBF-D12 Surr BKGD	47.427	256	2296	27.812	ng/mL	100
81)	C3-Chrysenes	49.933	270	40425M5	489.684	ng/mL	
82)	C4-Chrysenes	49.512	284	26418M5	320.011	ng/mL	
84)	Benzo[b]fluoranthene	47.518	252	2145M4	23.286	ng/mL	
85)	Benzo[j]+[k]fluoranthene	0.000		0	N.D.	d	
86)	Benzo[a]fluoranthene	0.000		0	N.D.	d	
87)	Benzo[e]pyrene	48.542	252	4063M4	43.614	ng/mL	
89)	Benzo[a]pyrene	48.744	252	829M3	9.733	ng/mL	
90)	Perylene	49.055	252	1216	13.594	ng/mL#	68
91)	Indeno[1,2,3-cd]pyrene	53.701	276	301M4	2.763	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.719	278	440M4	4.773	ng/mL	
93)	Benzo[g,h,i]perylene	55.035	276	1382	13.367	ng/mL	88
94)	Hopane (T19)	52.759	191	19117M3	613.595	ng/mL	
95)	17a(H),21B(H)-hopane - C3	52.759	191	19078M3	612.344	ng/mL	
96)	C23 Tricyclic Terpane (T4	41.160	191	11804	378.871	ng/mL	100
97)	C24 Tricyclic Terpane (T5	41.890	191	7160	229.813	ng/mL	100
98)	C25 Tricyclic Terpane (T6	43.369	191	6054M1	194.314	ng/mL	
99)	C24 Tetracyclic Terpane (	44.693	191	2363	75.845	ng/mL	100
100)	C26 Tricyclic Terpane-22S	44.419	191	2625M4	84.254	ng/mL	
101)	C26 Tricyclic Terpane-22R	44.520	191	2540M4	81.526	ng/mL	
102)	C28 Tricyclic Terpane-22S	46.795	191	1761M4	56.523	ng/mL	
103)	C28 Tricyclic Terpane-22R	46.960	191	2244M4	72.025	ng/mL	
104)	C29 Tricyclic Terpane-22S	47.491	191	2386	76.583	ng/mL	100
105)	C29 Tricyclic Terpane-22R	47.692	191	2336M4	74.978	ng/mL	
106)	18a-22,29,30-Trisnorneoho	48.863	191	3611	115.902	ng/mL	100
107)	C30 Tricyclic Terpane-22S	48.945	191	1987M4	63.776	ng/mL	
108)	C30 Tricyclic Terpane-22R	49.192	191	1750M4	56.169	ng/mL	
109)	17a(H)-22,29,30-Trisnorho	49.430	191	4204	134.935	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221412.D
 Acq On : 24 Dec 2014 3:47 am
 Operator : PAH8:ML
 Sample : WG755323-1,0.5055
 Misc : WG755323,FRAU91 5.055 SS011315ANC01
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 13 11:09:46 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Dec 24 12:33:02 2014
 Response via : Initial Calibration

Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110)	17a/b,21b/a 28,30-Bisnorh	50.655	191	735	23.591	ng/ml	100
111)	17a(H),21b(H)-25-Norhopan	50.427	191	1010M4	32.418	ng/ml	
112)	30-Norhopane (T15)	51.341	191	10734M4	344.528	ng/ml	
113)	18a(H)-30-Norneohopane-C2	51.451	191	2818M4	90.449	ng/ml	
114)	17a(H)-Diahopane (X)	51.570	191	1608M4	51.612	ng/ml	
115)	30-Normoretane (T17)	52.146	191	1312	42.111	ng/ml	100
116)	18a(H)&18b(H)-Oleananes (	0.000		0	N.D.	d	
117)	Moretane (T20)	53.472	191	2087M4	66.986	ng/ml	
118)	30-Homohopane-22S (T21)	54.605	191	8637	277.220	ng/ml	100
119)	30-Homohopane-22R (T22)	54.852	191	7159	229.781	ng/ml	100
120)	Gammacerane/C32-diahopane	55.419	191	1507	48.370	ng/mL	100
121)	30,31-Bishomohopane-22S (	56.232	191	6146	197.267	ng/ml	100
122)	30,31-Bishomohopane-22R (	56.625	191	4566	146.554	ng/ml	100
123)	30,31-Trishomohopane-22S	58.443	191	5258	168.765	ng/ml	100
124)	30,31-Trishomohopane-22R	59.083	191	3435M4	110.253	ng/ml	
125)	Tetrakishomohopane-22S (T	61.166	191	3833M4	123.027	ng/ml	
126)	Tetrakishomohopane-22R (T	62.108	191	2625	84.254	ng/ml	100
127)	Pentakishomohopane-22S (T	64.438	191	3870M4	124.215	ng/ml	
128)	Pentakishomohopane-22R (T	65.772	191	2966M4	95.199	ng/ml	
130)	13b(H),17a(H)-20S-Diachol	45.634	217	3918M4	282.669	ng/ml	
131)	13b(H),17a(H)-20R-Diachol	46.055	217	1663M4	119.979	ng/ml	
132)	13b,17a-20S-Methyl diachol	46.750	217	1250M4	90.183	ng/ml	
133)	14a,17a-20S-Chol/13b,17a-	47.637	217	3827	276.104	ng/ml	100
134)	14a,17a-20R-Chol/13b,17a-	48.168	217	4375	315.640	ng/ml	100
135)	Unknown Sterane (S18)	48.451	217	1292	93.213	ng/ml	100
136)	13a,17b-20S-Ethyl diachole	48.735	217	251	18.109	ng/ml	100
137)	14a,17a-20S-Methylcholest	48.890	217	1860	134.192	ng/ml	100
138)	14a,17a-20R-Methylcholest	49.613	217	2021M4	145.808	ng/ml	
139)	14a(H),17a(H)-20S-Ethylch	49.978	217	3100M4	223.653	ng/ml	
140)	14a(H),17a(H)-20R-Ethylch	50.920	217	2032	146.601	ng/ml	100
141)	14b(H),17b(H)-20R-Cholest	47.728	218	2288M4	165.071	ng/ml	
142)	14b(H),17b(H)-20S-Cholest	47.811	218	2450M4	176.758	ng/ml	
143)	14b,17b-20R-Methylcholest	49.064	218	2179M4	157.207	ng/ml	
144)	14b,17b-20S-Methylcholest	49.146	218	2536M4	182.963	ng/ml	
145)	14b(H),17b(H)-20R-Ethylch	50.244	218	3044	219.613	ng/ml	100
146)	14b(H),17b(H)-20S-Ethylch	50.280	218	2310M3	166.658	ng/ml	
147)	C26,20R- +C27,20S- triaro	49.942	231	16048	1157.802	ng/mL	100
148)	C28,20S-triaromatic stero	50.829	231	9902	714.392	ng/mL	100
149)	C27,20R-triaromatic stero	51.295	231	9725	701.622	ng/mL	100
150)	C28,20R-triaromatic stero	52.539	231	8411	606.822	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221412.D
 Acq On : 24 Dec 2014 3:47 am
 Operator : PAH8:ML
 Sample : WG755323-1,0.5055
 Misc : WG755323,FRAU91 5.055 SS011315ANC01
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 13 11:09:46 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Dec 24 12:33:02 2014
 Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

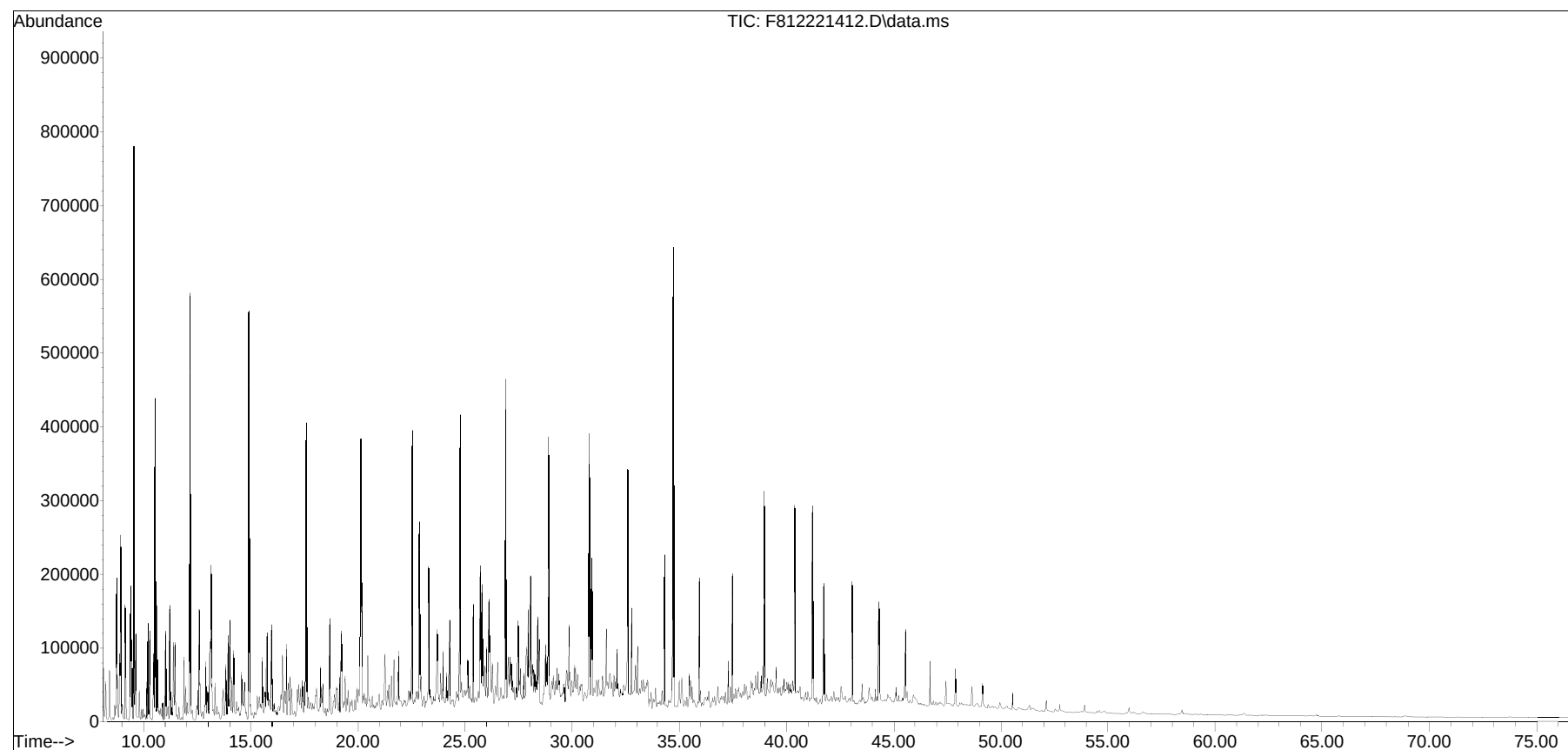
(#) = qualifier out of range (m) = manual integration (+) = signals summed						

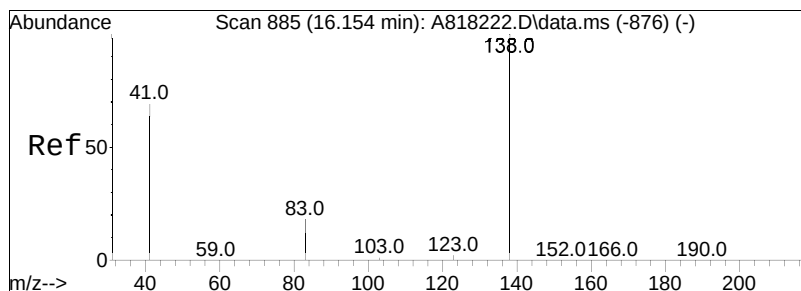
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC23\
Data File : F812221412.D
Acq On : 24 Dec 2014 3:47 am
Operator : PAH8:ML
Sample : WG755323-1,0.5055
Misc : WG755323,FRAU91 5.055 SS011315ANC01
ALS Vial : 12 Sample Multiplier: 1

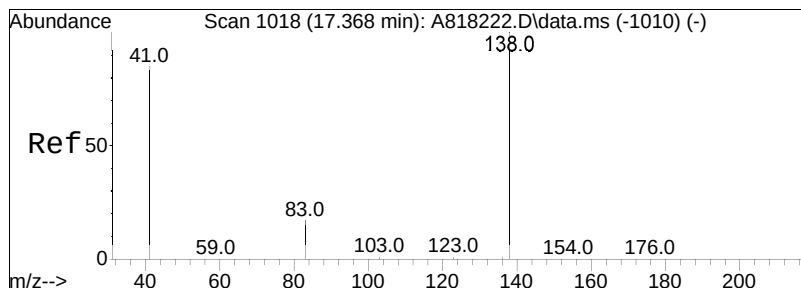
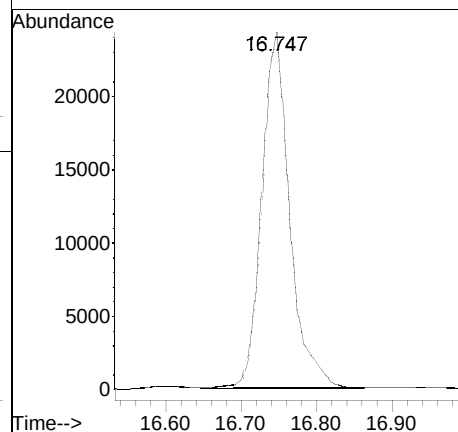
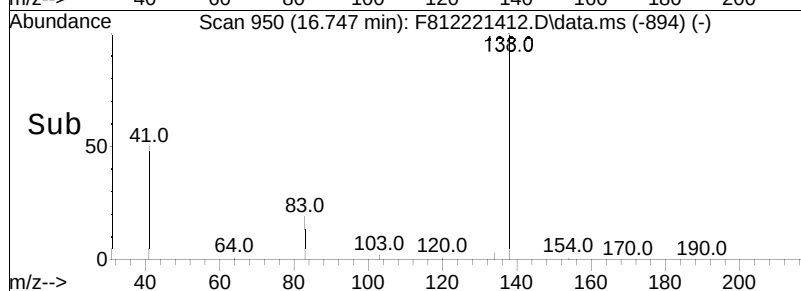
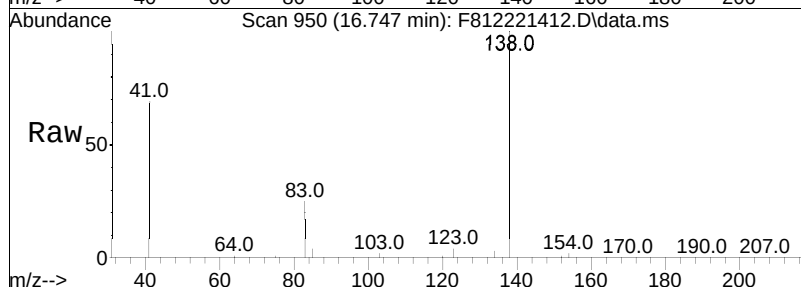
Quant Time: Jan 13 11:09:46 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Dec 24 12:33:02 2014
Response via : Initial Calibration

Sub List : Default - All compounds listed

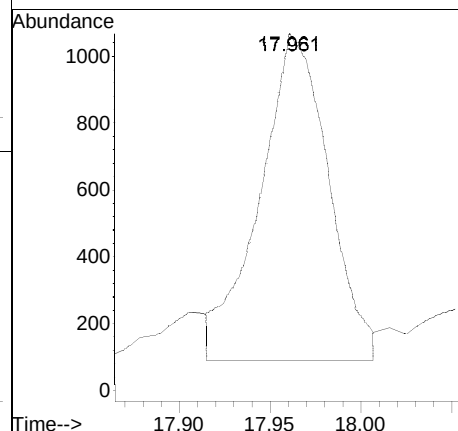
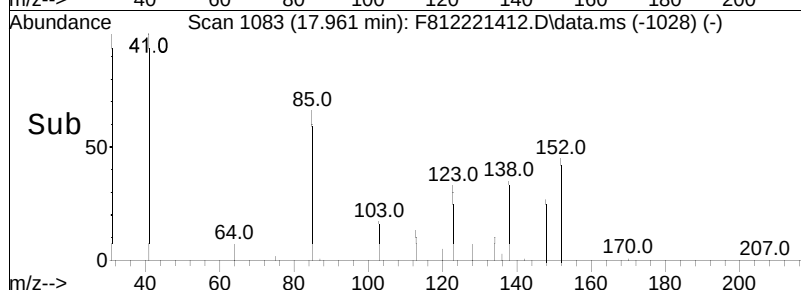
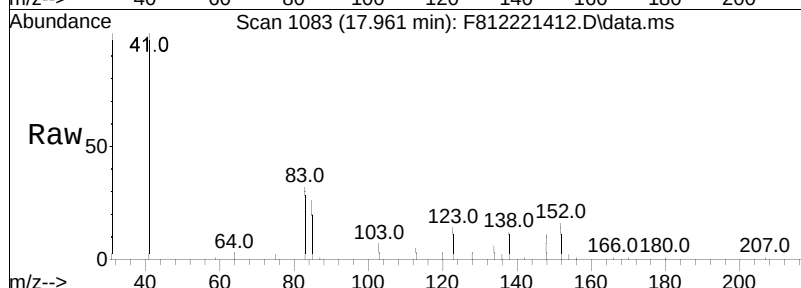


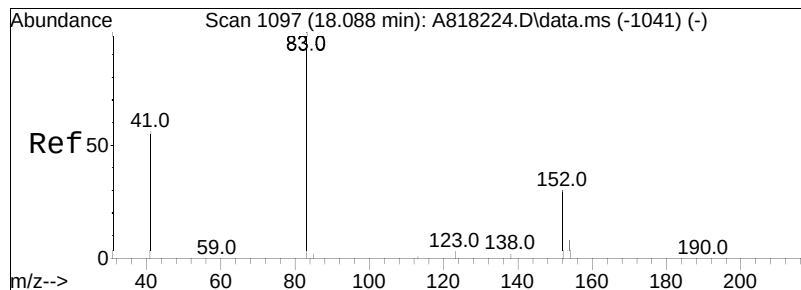


#3
trans-Decalin
Concen: 2216.19 ng/mL
RT: 16.747 min Scan# 950
Delta R.T. 0.009 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am
Tgt Ion:138 Resp: 61507



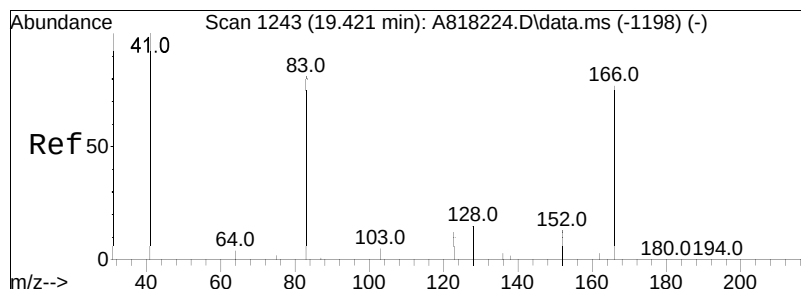
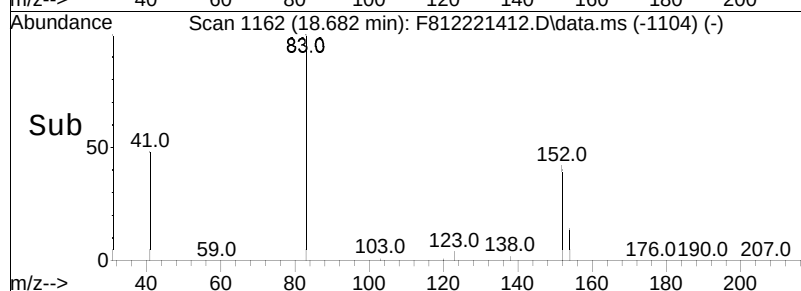
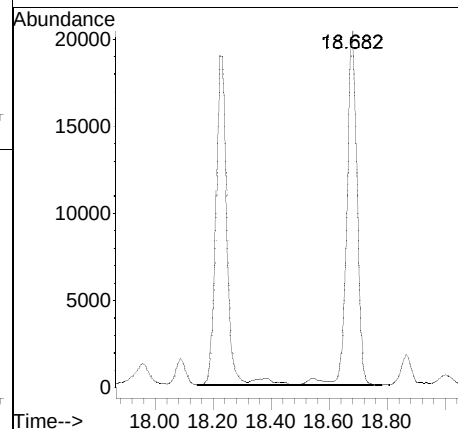
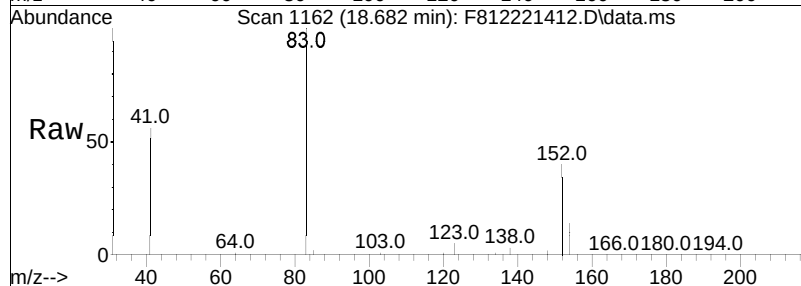
#4
cis-Decalin
Concen: 121.66 ng/mL M4
RT: 17.961 min Scan# 1083
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am
Tgt Ion:138 Resp: 2554





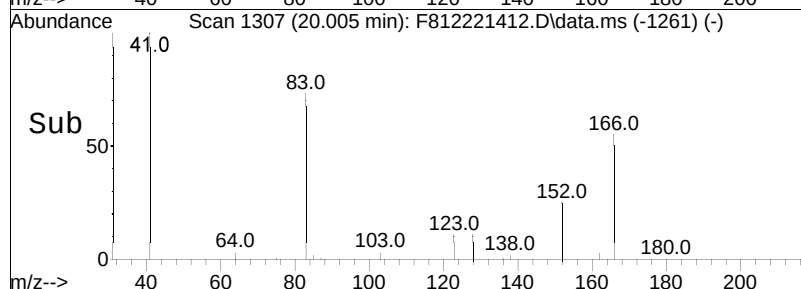
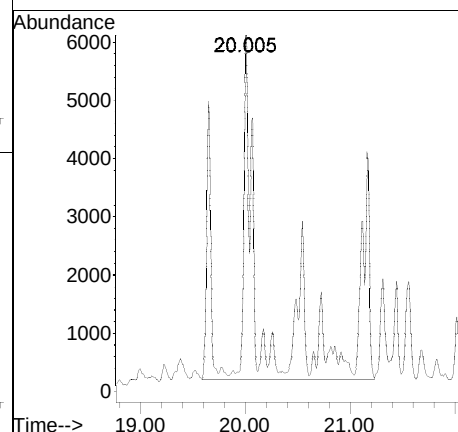
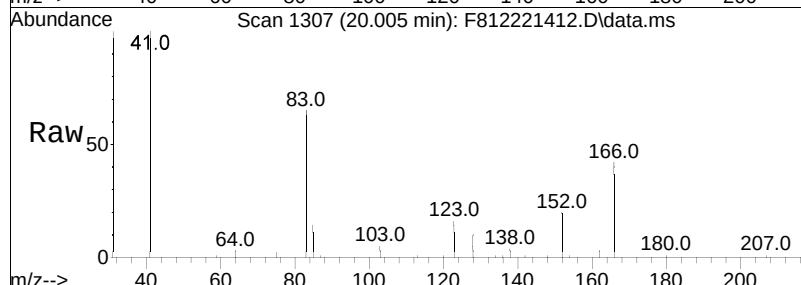
#5
C1-Decalins
Concen: 3612.38 ng/mL M5
RT: 18.682 min Scan# 1162
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

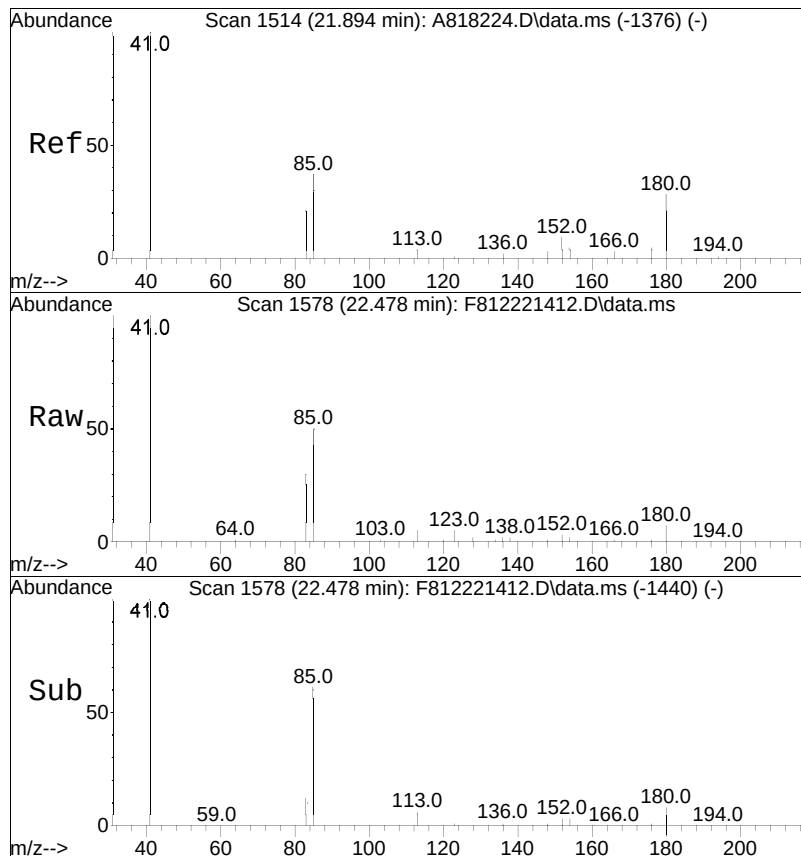
Tgt Ion:152 Resp: 100256



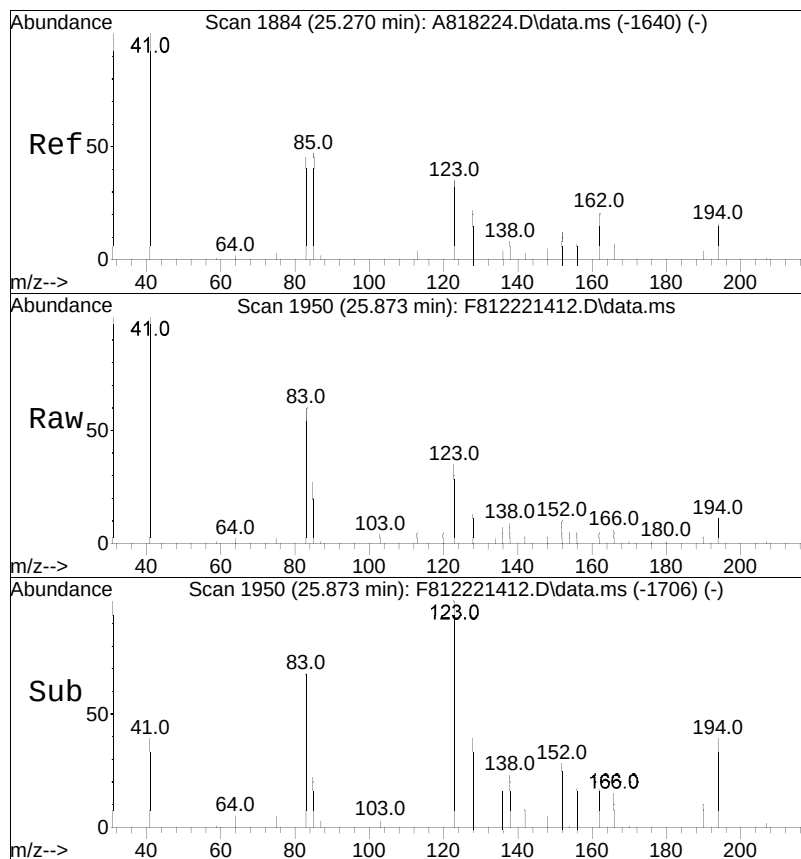
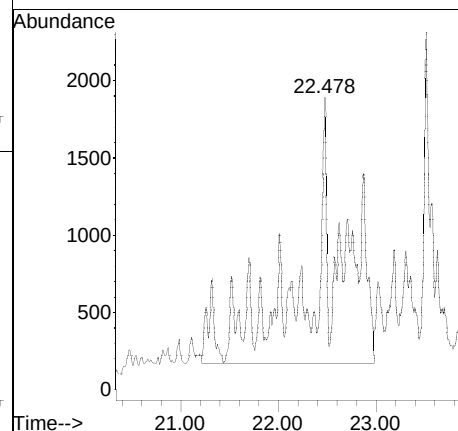
#6
C2-Decalins
Concen: 3157.69 ng/mL M5
RT: 20.005 min Scan# 1307
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

Tgt Ion:166 Resp: 87637

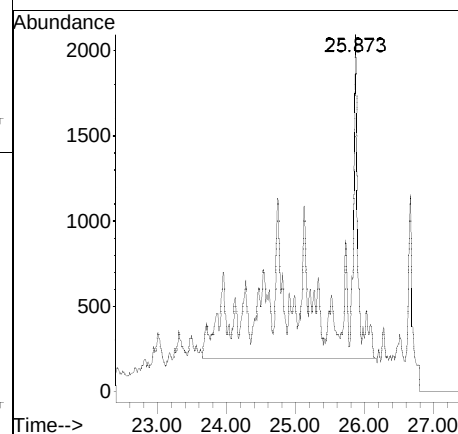


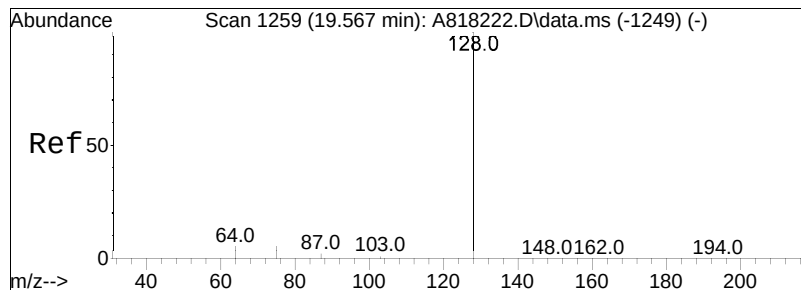


#7
 C3-Decalins
 Concen: 1594.75 ng/mL M5
 RT: 22.478 min Scan# 1578
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am
 Tgt Ion:180 Resp: 44260



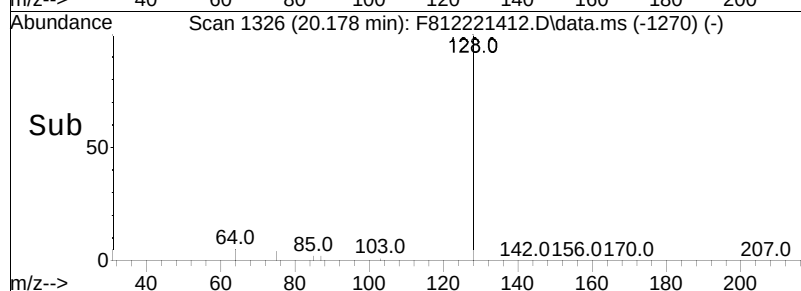
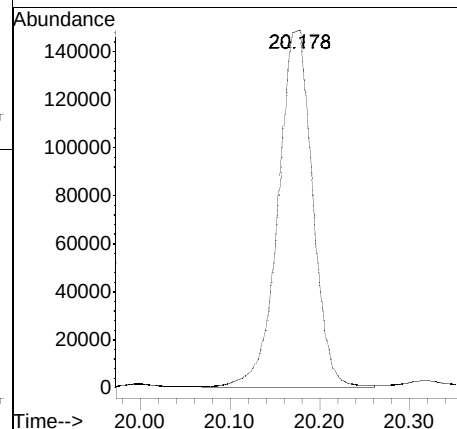
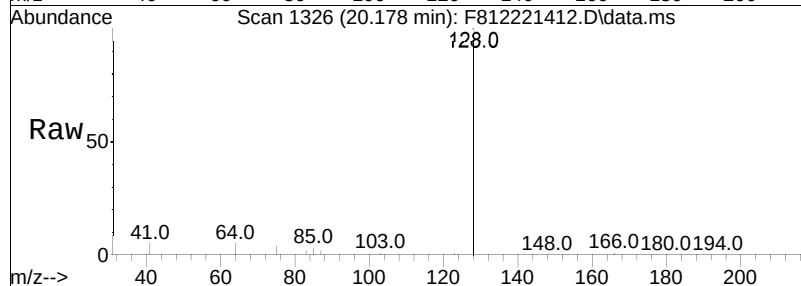
#8
 C4-Decalins
 Concen: 1605.82 ng/mL M5
 RT: 25.873 min Scan# 1950
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am
 Tgt Ion:194 Resp: 44567





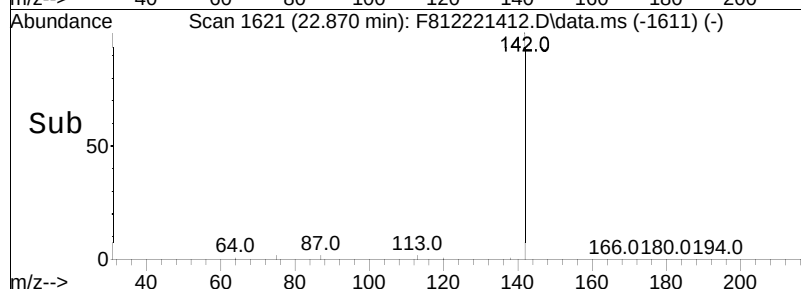
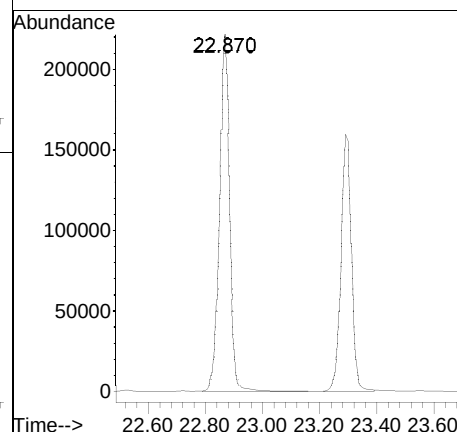
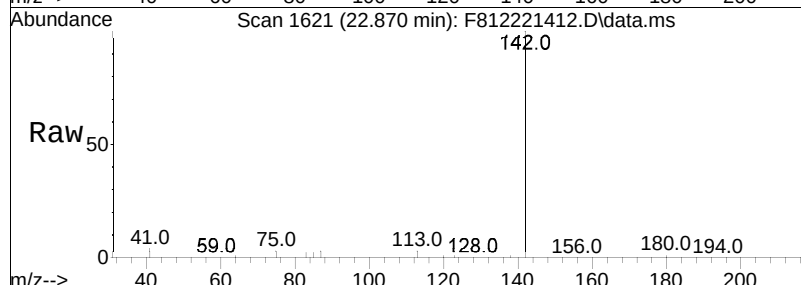
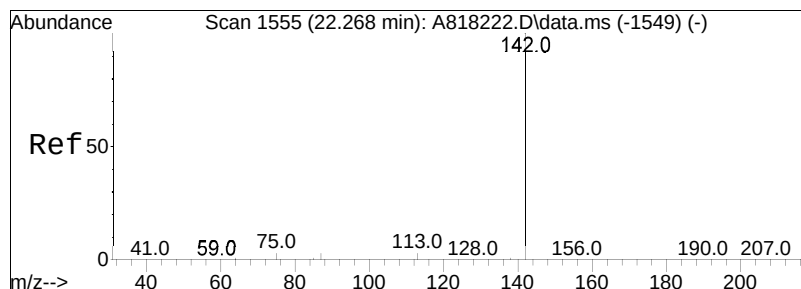
#10
Naphthalene
Concen: 2802.38 ng/mL
RT: 20.178 min Scan# 1326
Delta R.T. 0.009 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

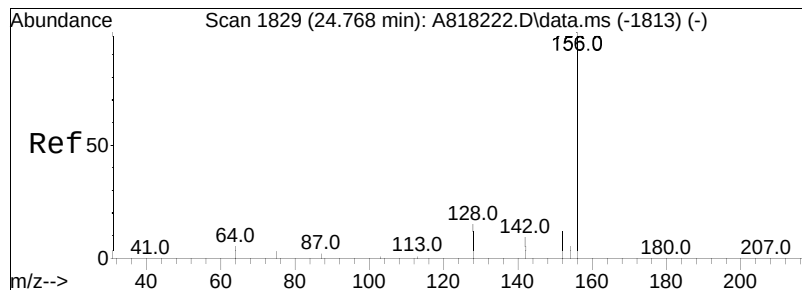
Tgt Ion:128 Resp: 391823



#11
C1-Naphthalenes
Concen: 6731.22 ng/mL M5
RT: 22.870 min Scan# 1621
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

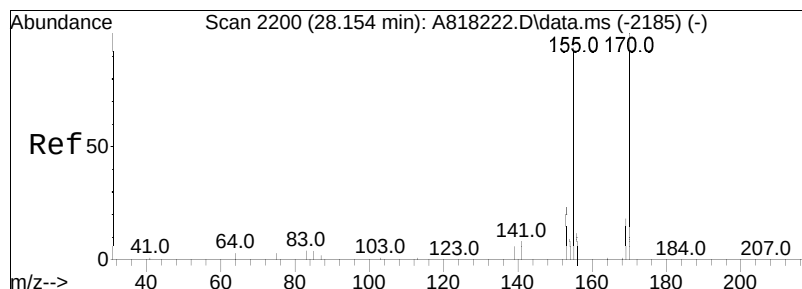
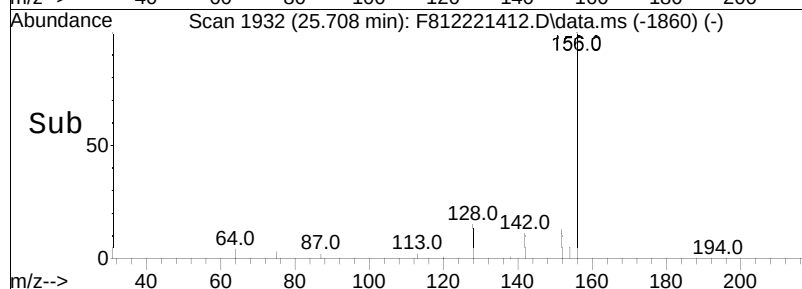
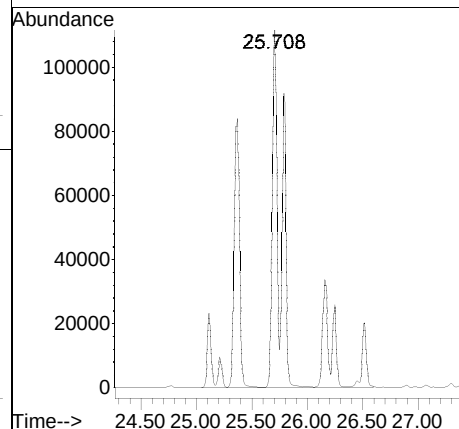
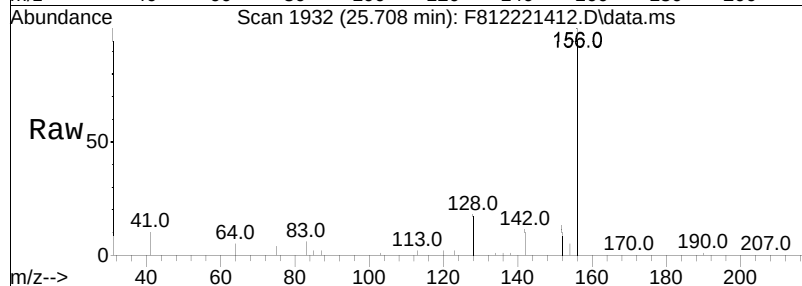
Tgt Ion:142 Resp: 941144





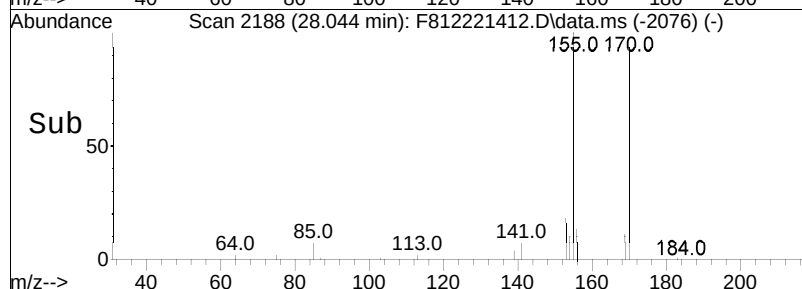
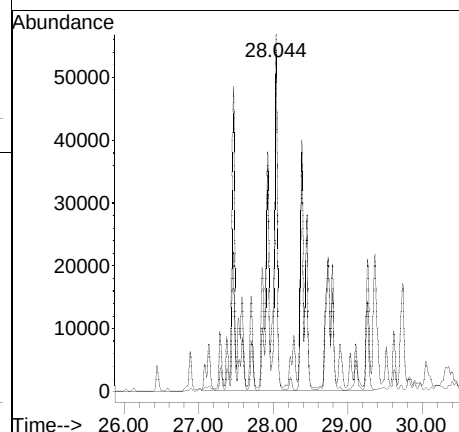
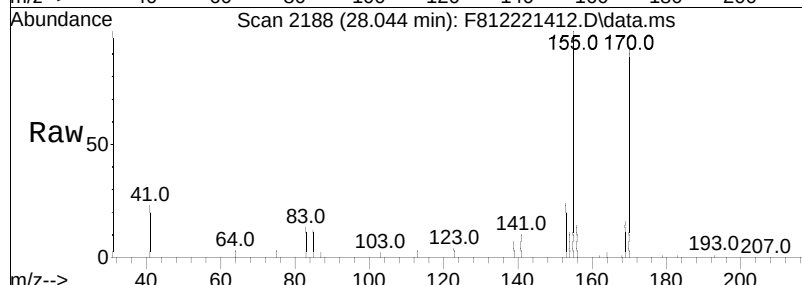
#12
C2-Naphthalenes
Concen: 8069.54 ng/mL M5
RT: 25.708 min Scan# 1932
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

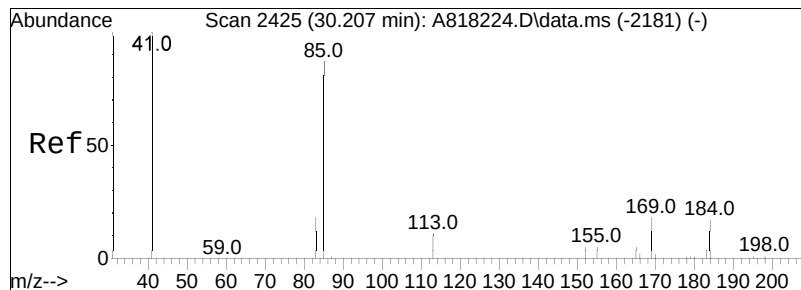
Tgt Ion:156 Resp: 1128265



#13
C3-Naphthalenes
Concen: 5149.98 ng/mL M5
RT: 28.044 min Scan# 2188
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

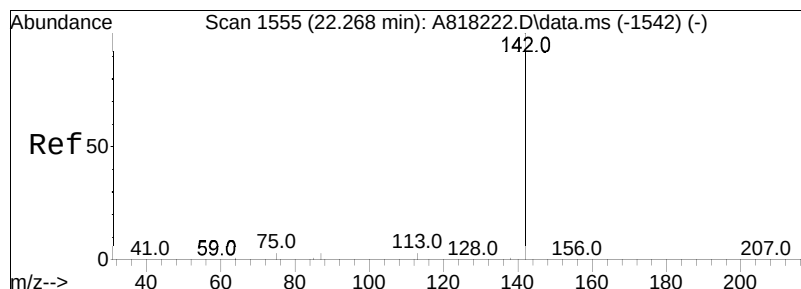
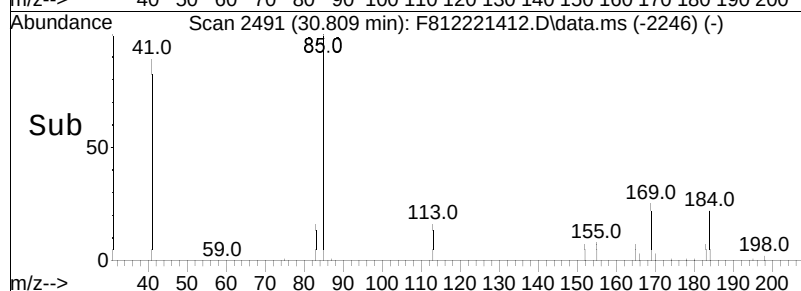
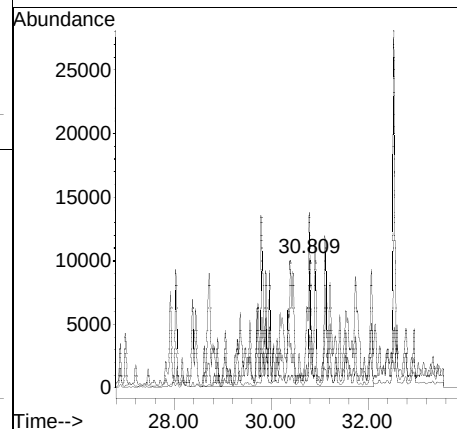
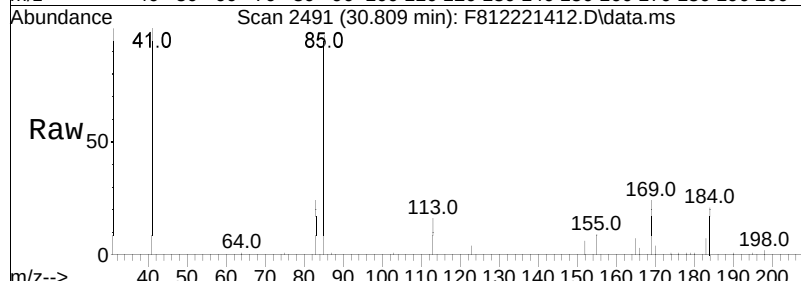
Tgt Ion:170 Resp: 720059
Ion Ratio Lower Upper
170 100
155 21.1 75.7 140.7#





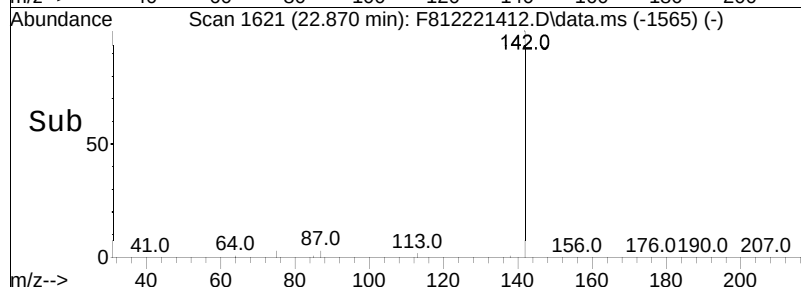
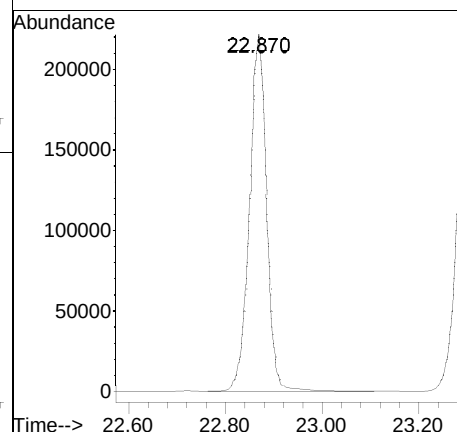
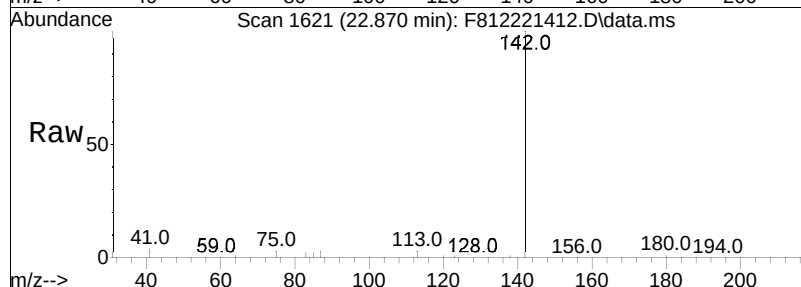
#14
C4-Naphthalenes
Concen: 2380.62 ng/mL M5
RT: 30.809 min Scan# 2491
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

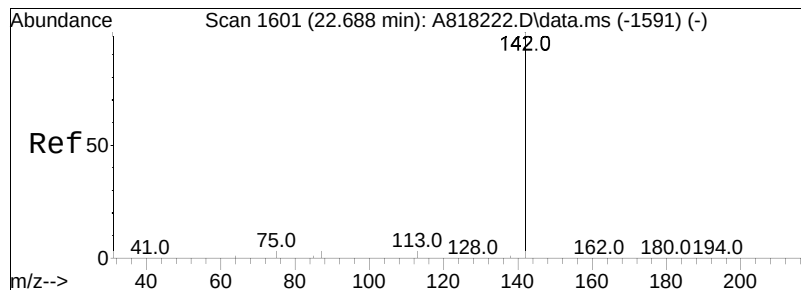
Tgt Ion	Ratio	Lower	Upper
184	100		
169	11.9	81.7	151.7#
183	2.6	23.0	42.8#



#16
2-Methylnaphthalene
Concen: 5990.21 ng/mL
RT: 22.870 min Scan# 1621
Delta R.T. 0.009 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

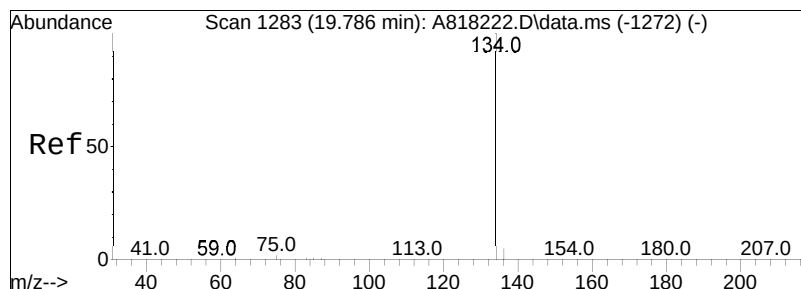
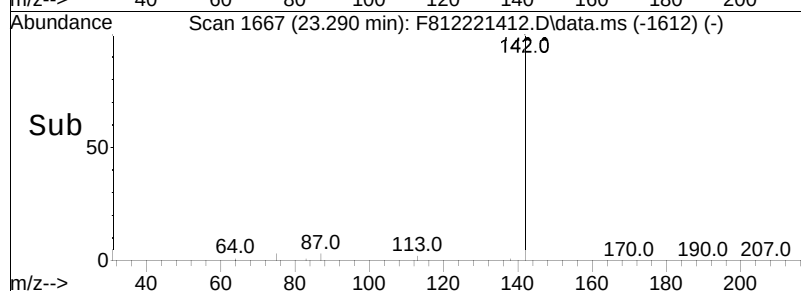
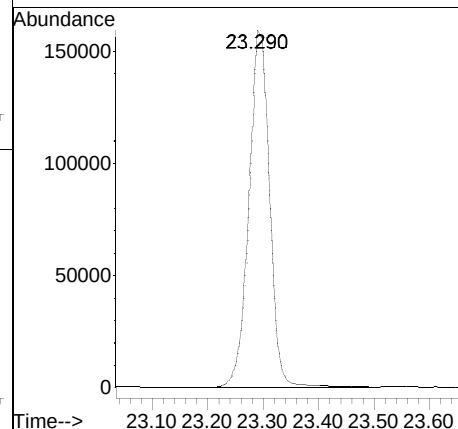
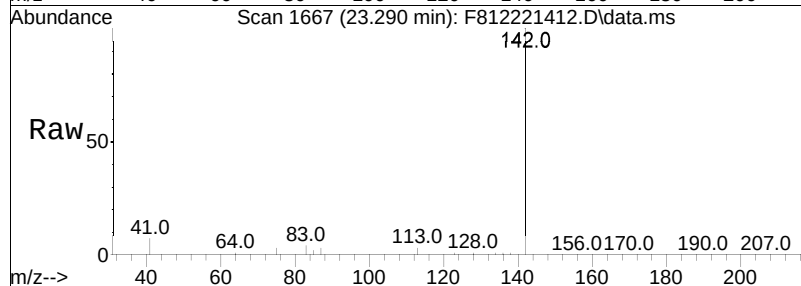
Tgt Ion:142 Resp: 538863





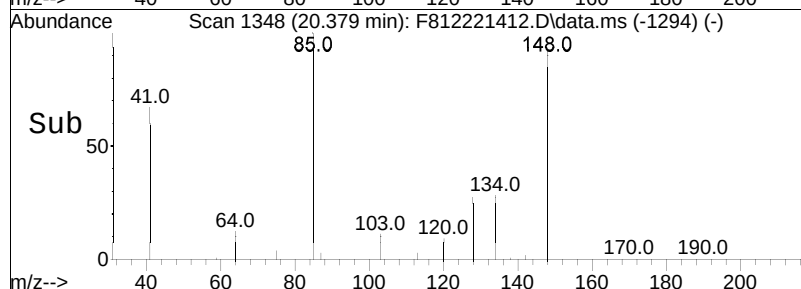
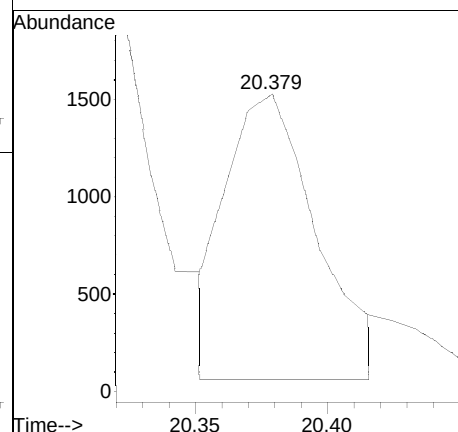
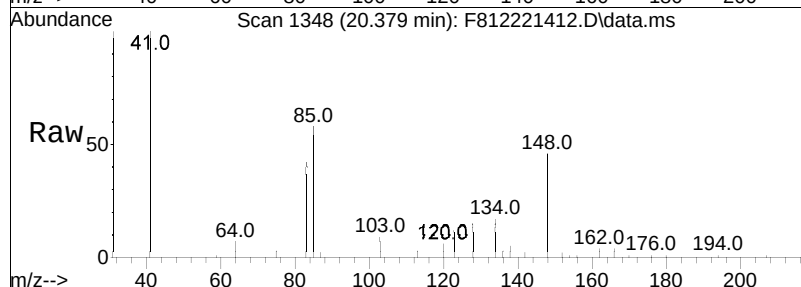
#17
 1-Methylnaphthalene
 Concen: 4724.15 ng/mL
 RT: 23.290 min Scan# 1667
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

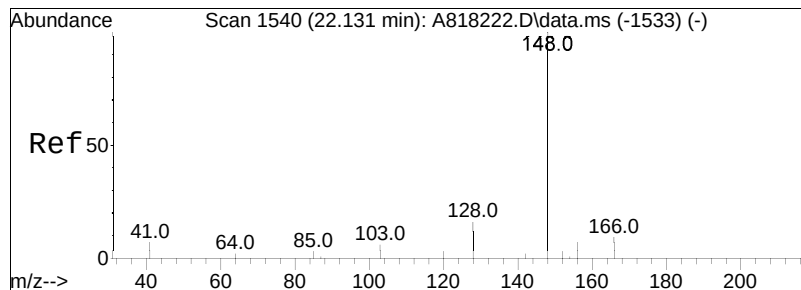
Tgt Ion:142 Resp: 403937



#18
 Benzothiophene
 Concen: 29.75 ng/mL M4
 RT: 20.379 min Scan# 1348
 Delta R.T. -0.009 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

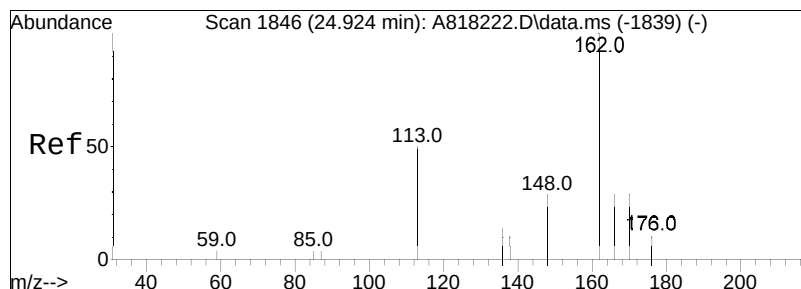
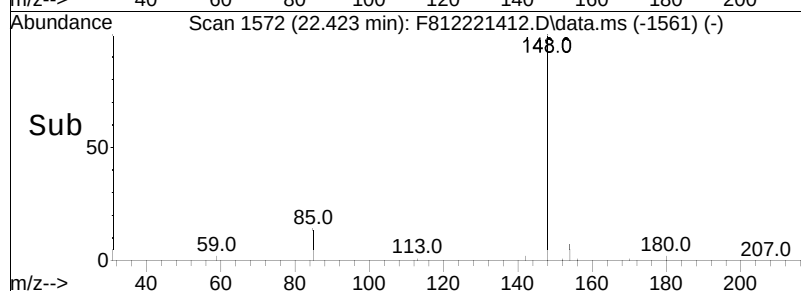
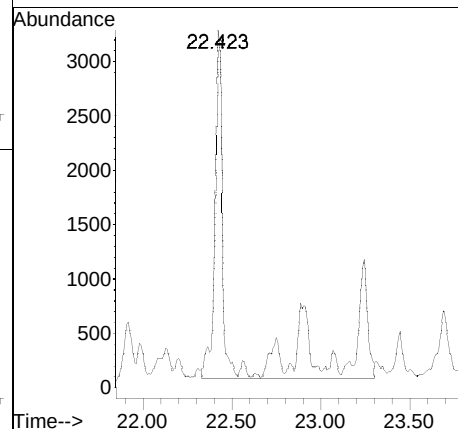
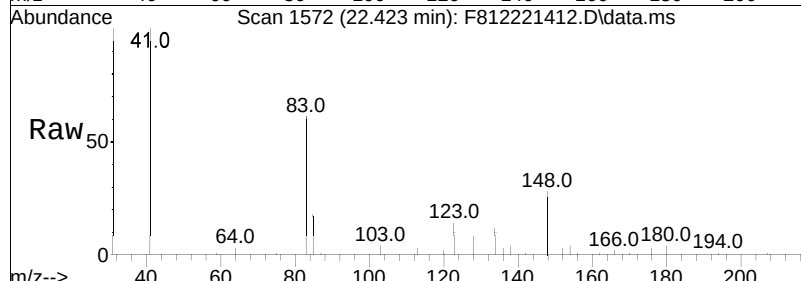
Tgt Ion:134 Resp: 3483





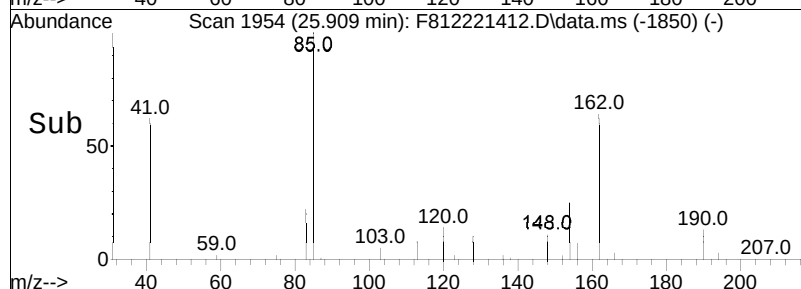
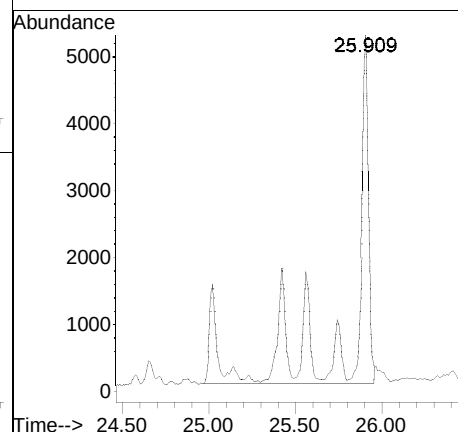
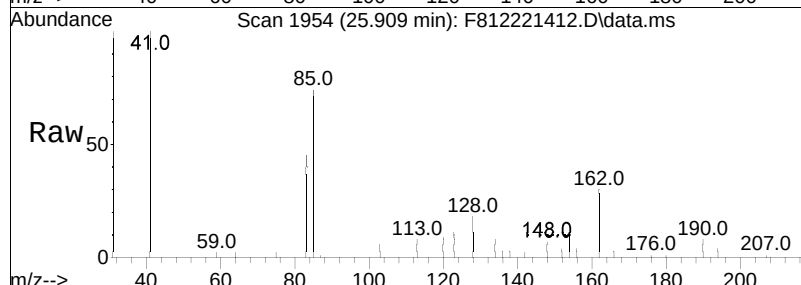
#19
C1-Benzo(b)thiophenes
Concen: 162.62 ng/mL M5
RT: 22.423 min Scan# 1572
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

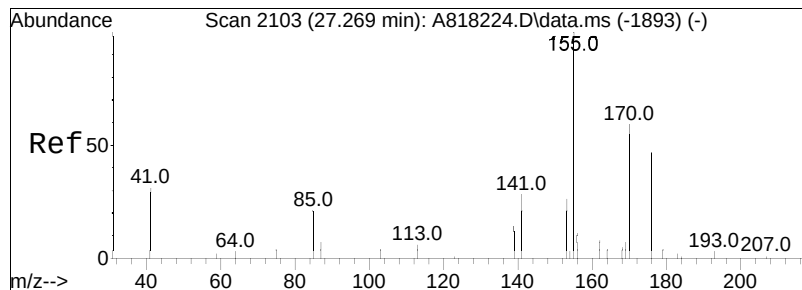
Tgt Ion:148 Resp: 19036



#20
C2-Benzo(b)thiophenes
Concen: 267.24 ng/mL M5
RT: 25.909 min Scan# 1954
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

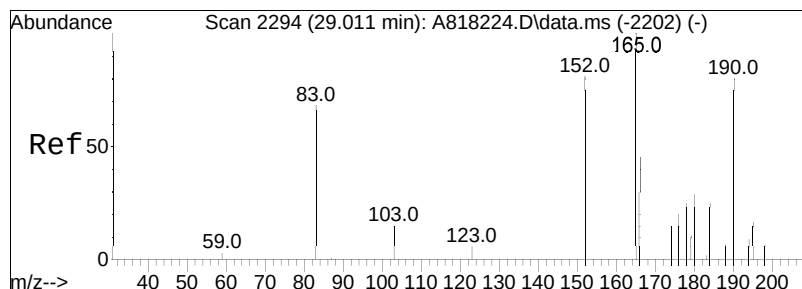
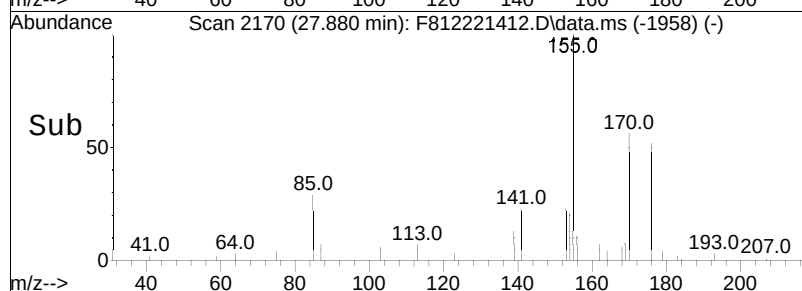
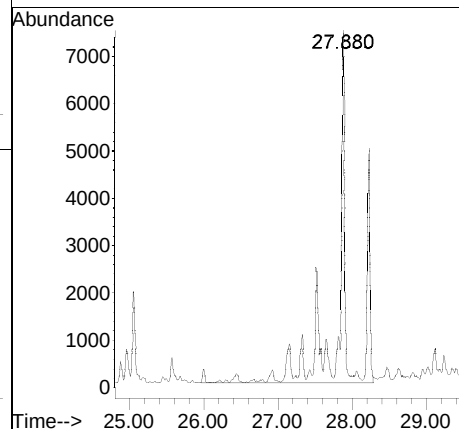
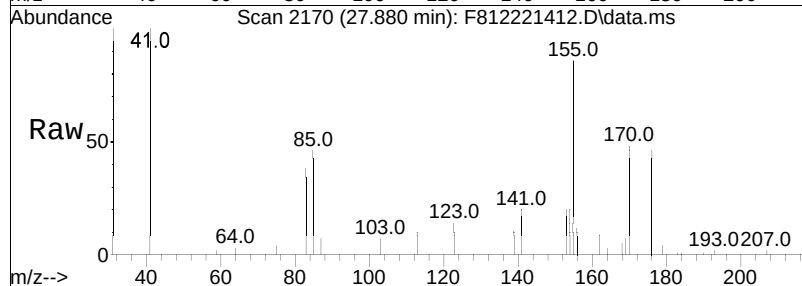
Tgt Ion:162 Resp: 31283





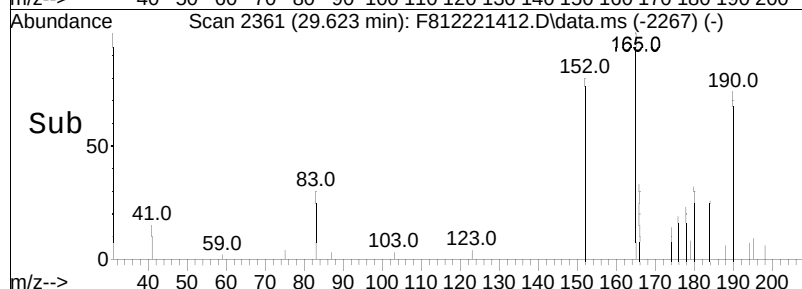
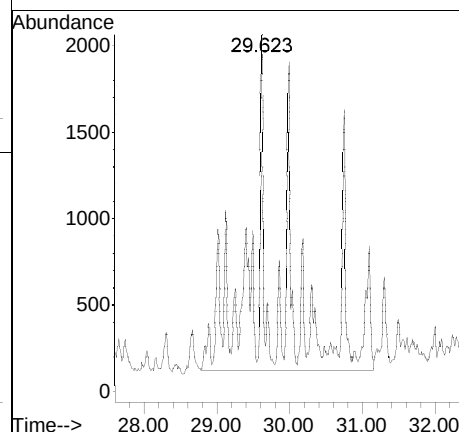
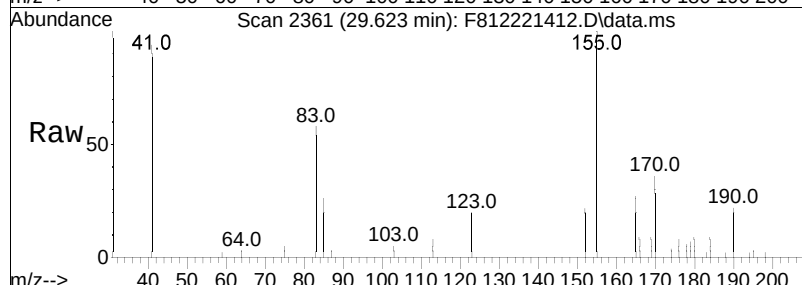
#21
 C3-Benzo(b)thiophenes
 Concen: 516.30 ng/mL M5
 RT: 27.880 min Scan# 2170
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

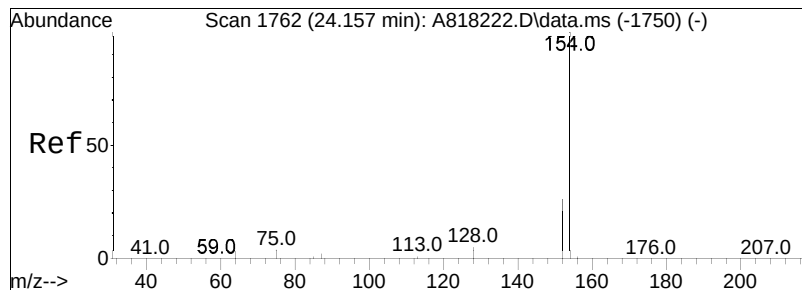
Tgt Ion:176 Resp: 60437



#22
 C4-Benzo(b)thiophenes
 Concen: 373.06 ng/mL M5
 RT: 29.623 min Scan# 2361
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

Tgt Ion:190 Resp: 43670





#23

Biphenyl

Concen: 867.99 ng/mL

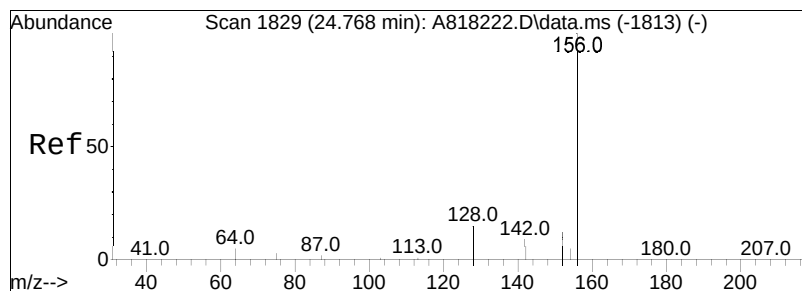
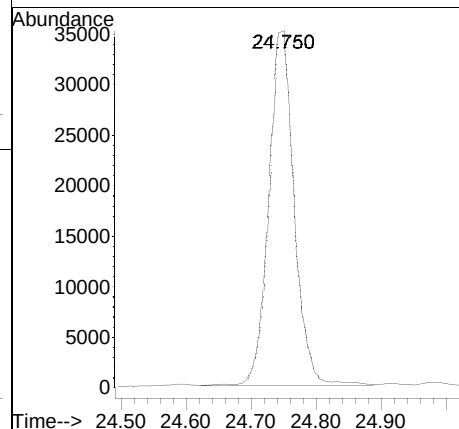
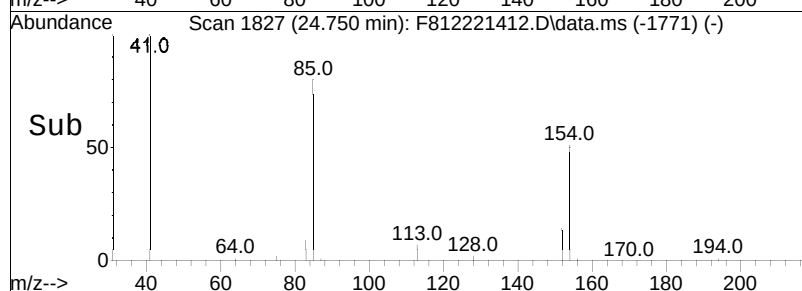
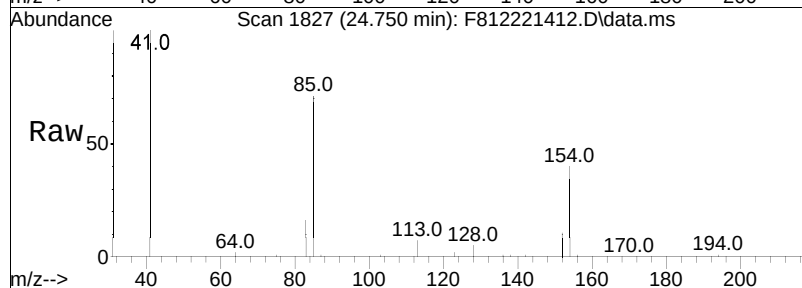
RT: 24.750 min Scan# 1827

Delta R.T. 0.009 min

Lab File: F812221412.D

Acq: 24 Dec 2014 3:47 am

Tgt Ion:154 Resp: 93940



#24

2,6-Dimethylnaphthalene

Concen: 3737.22 ng/mL

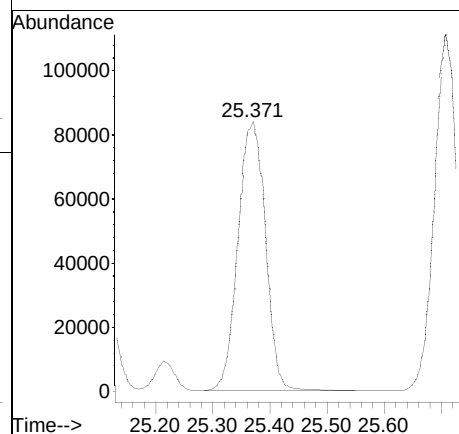
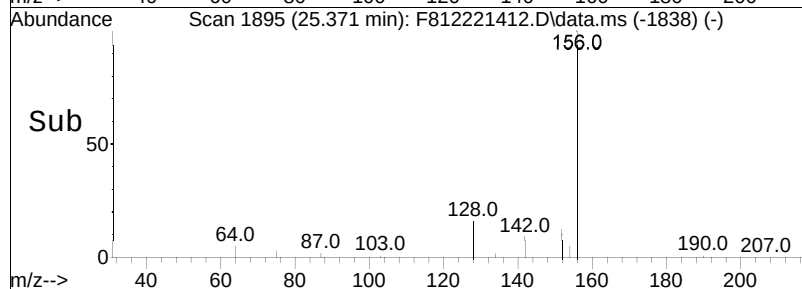
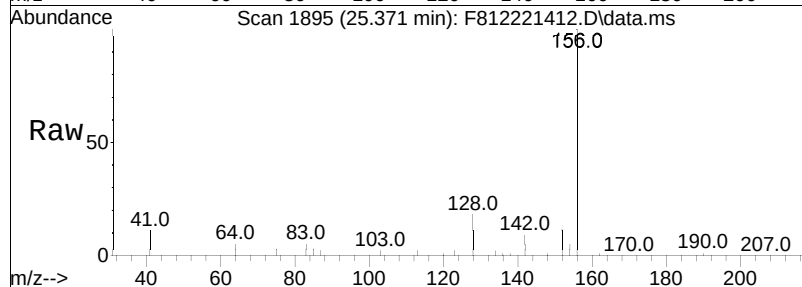
RT: 25.371 min Scan# 1895

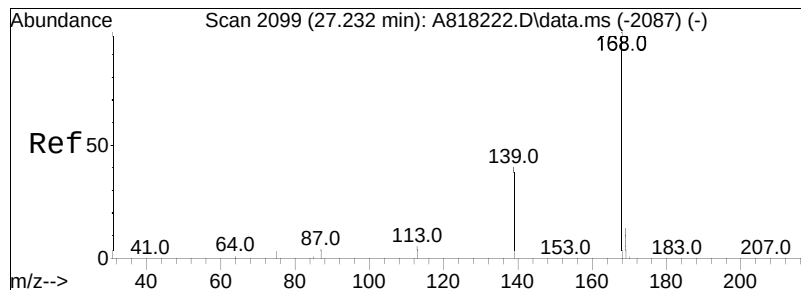
Delta R.T. 0.018 min

Lab File: F812221412.D

Acq: 24 Dec 2014 3:47 am

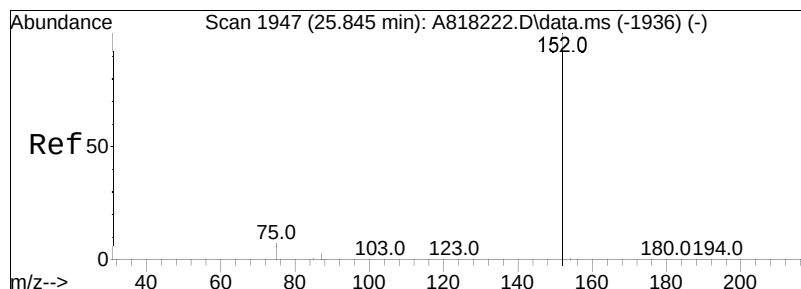
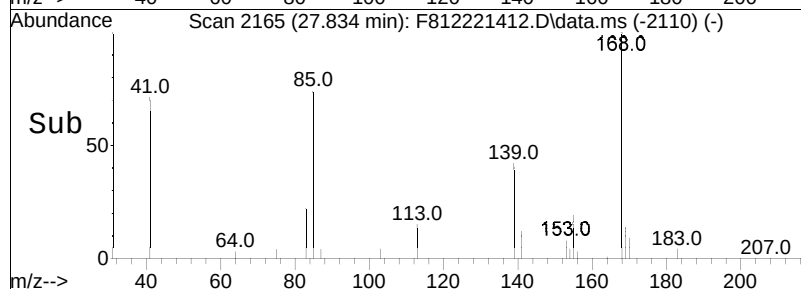
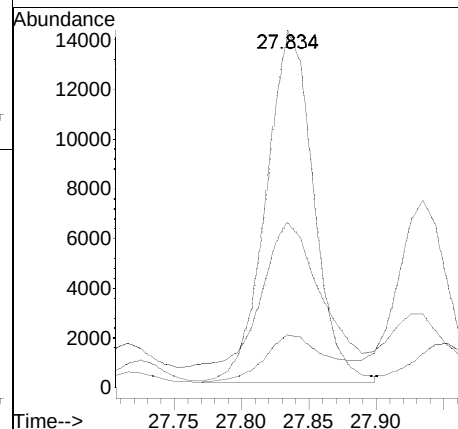
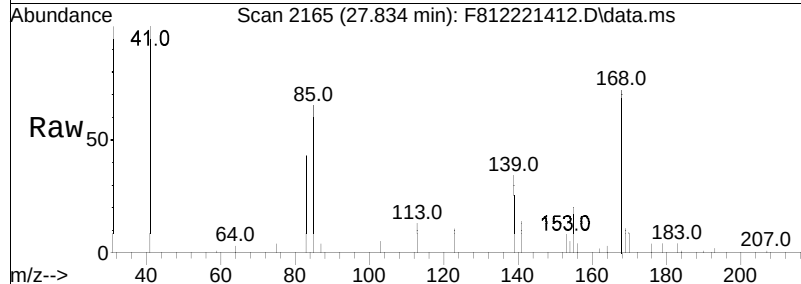
Tgt Ion:156 Resp: 280587





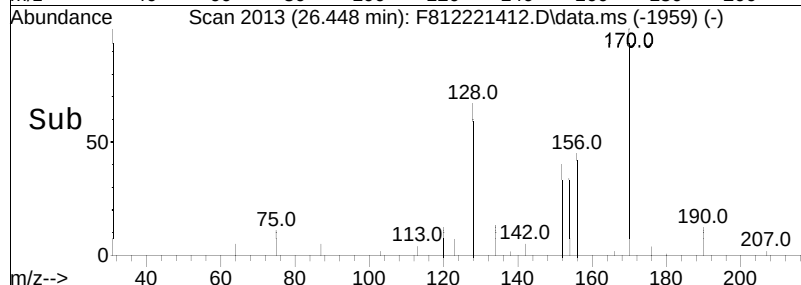
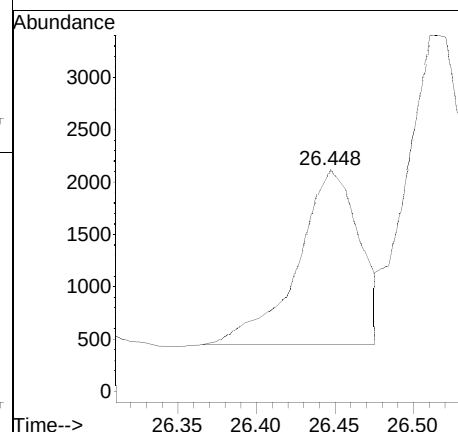
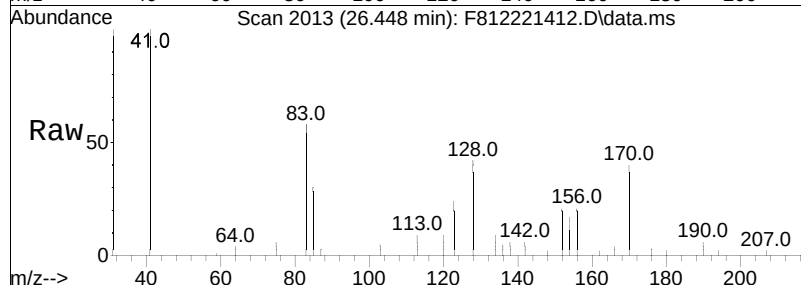
#25
Dibenzofuran
Concen: 315.39 ng/mL
RT: 27.834 min Scan# 2165
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

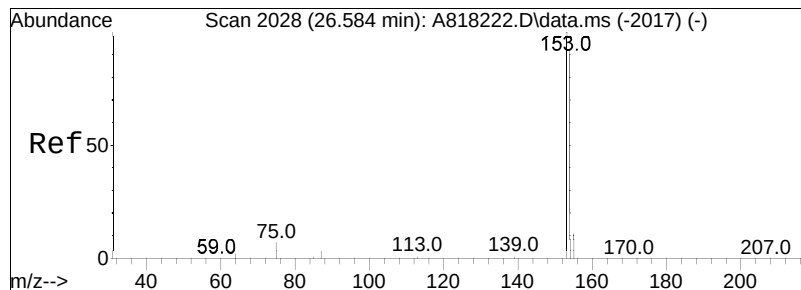
Tgt Ion	Ratio	Lower	Upper
168	100		
139	50.2	26.9	49.9#
169	17.8	9.1	16.9#



#26
Acenaphthylene
Concen: 35.48 ng/mL
RT: 26.448 min Scan# 2013
Delta R.T. -0.009 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

Tgt Ion	Ratio	Lower	Upper
152	100		





#27

Acenaphthene

Concen: 111.78 ng/mL M4

RT: 27.205 min Scan# 2096

Delta R.T. 0.018 min

Lab File: F812221412.D

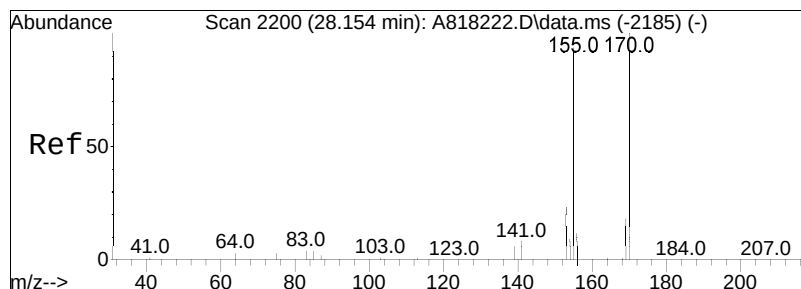
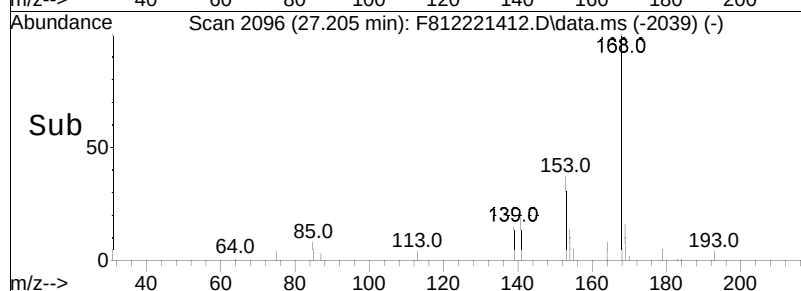
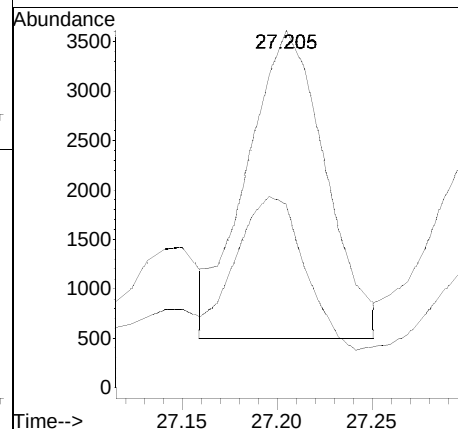
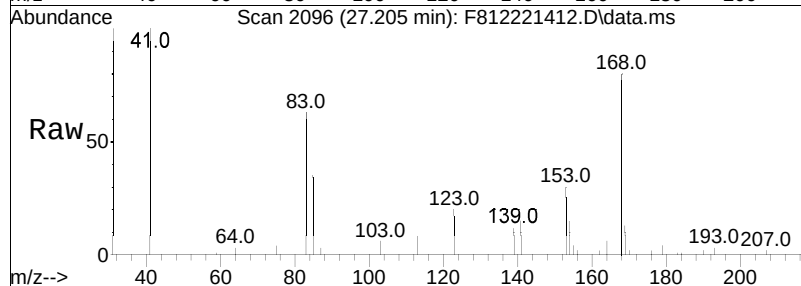
Acq: 24 Dec 2014 3:47 am

Tgt Ion:153 Resp: 8936

Ion Ratio Lower Upper

153 100

154 57.1 64.7 120.1#



#28

2,3,5-Trimethylnaphthalene

Concen: 785.94 ng/mL M3

RT: 28.747 min Scan# 2265

Delta R.T. 0.009 min

Lab File: F812221412.D

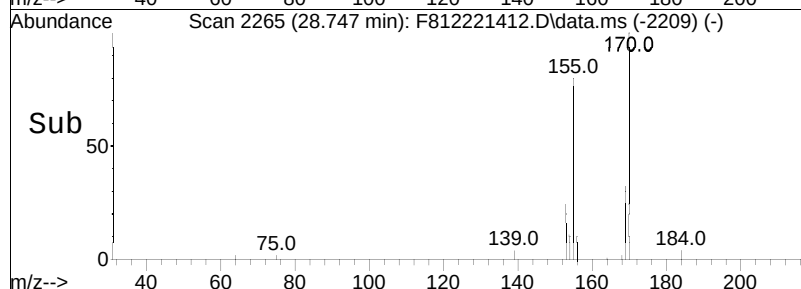
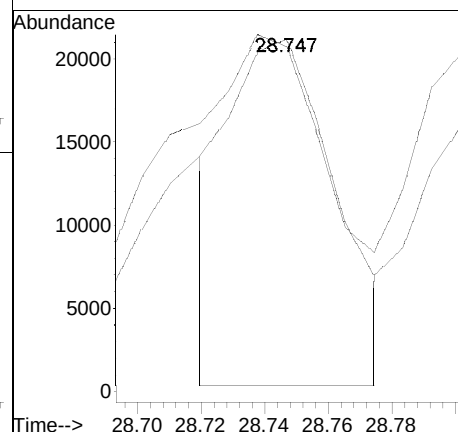
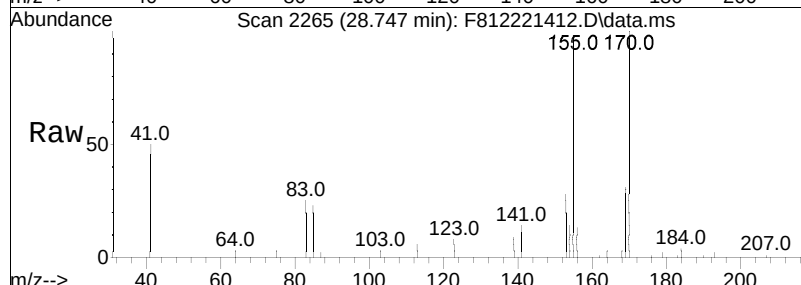
Acq: 24 Dec 2014 3:47 am

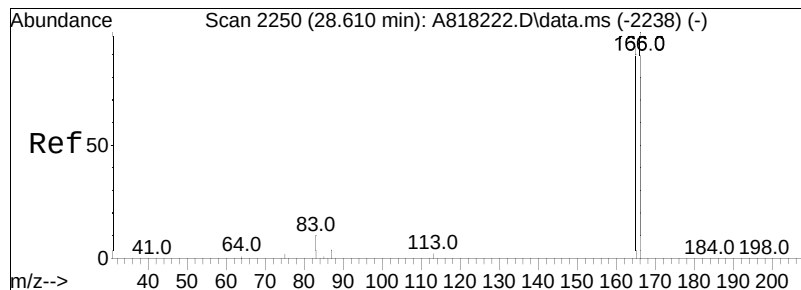
Tgt Ion:170 Resp: 49091

Ion Ratio Lower Upper

170 100

155 162.5 73.5 136.5#





#29

Fluorene

Concen: 362.23 ng/mL M4

RT: 29.212 min Scan# 2316

Delta R.T. 0.009 min

Lab File: F812221412.D

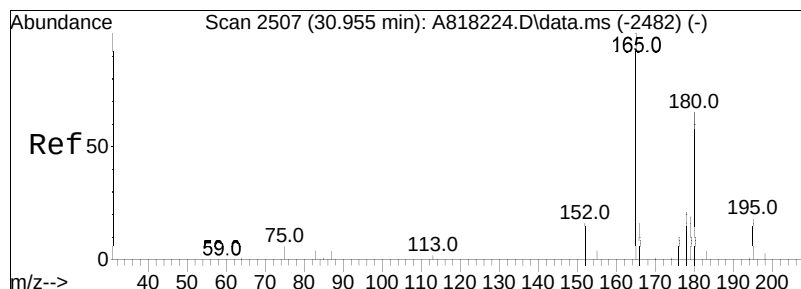
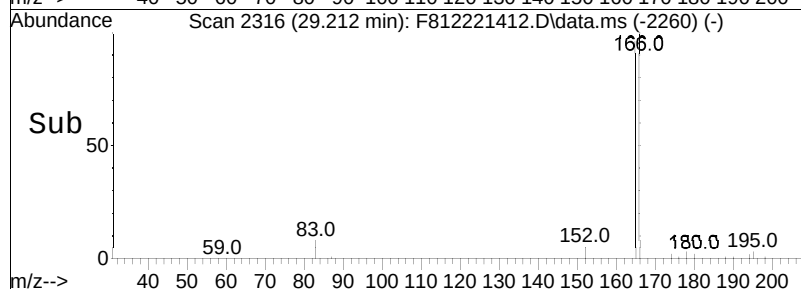
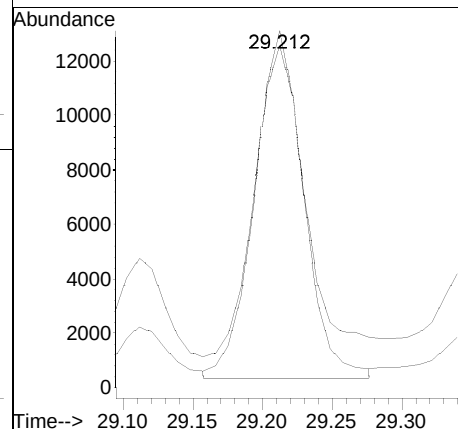
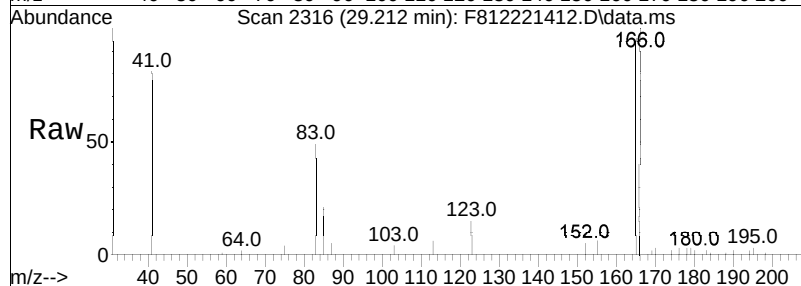
Acq: 24 Dec 2014 3:47 am

Tgt Ion:166 Resp: 30998

Ion Ratio Lower Upper

166 100

165 111.8 66.7 123.9



#30

C1-Fluorenes

Concen: 722.45 ng/mL M5

RT: 31.575 min Scan# 2575

Delta R.T. 0.000 min

Lab File: F812221412.D

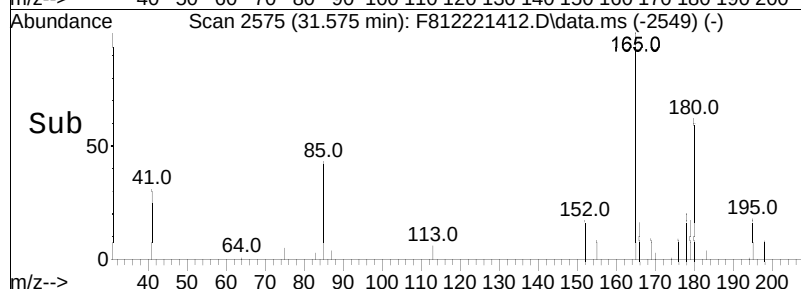
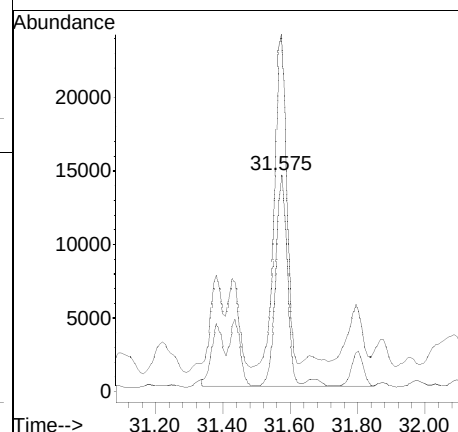
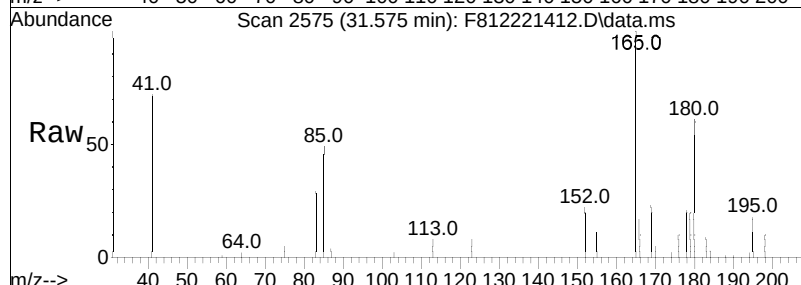
Acq: 24 Dec 2014 3:47 am

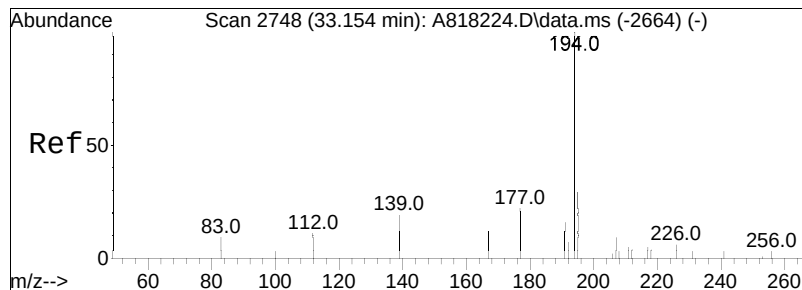
Tgt Ion:180 Resp: 61824

Ion Ratio Lower Upper

180 100

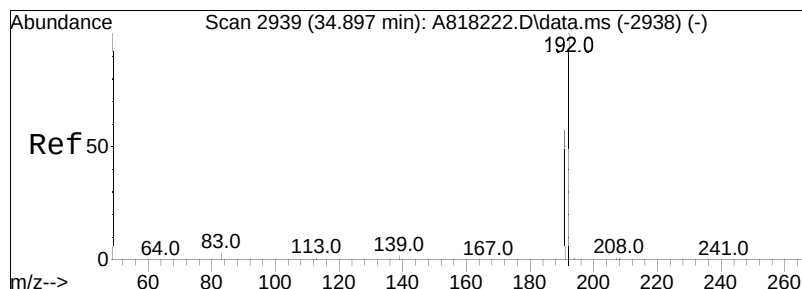
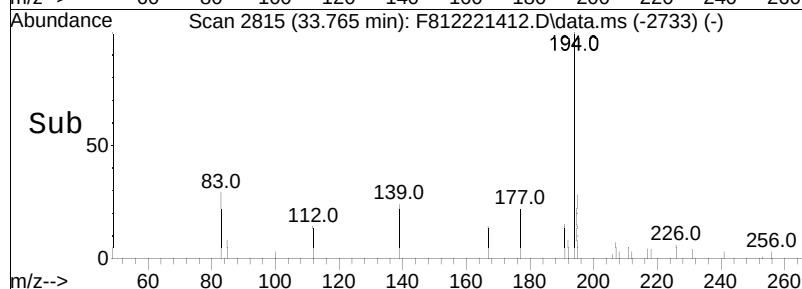
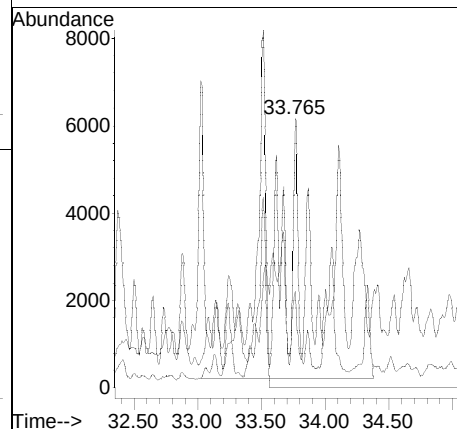
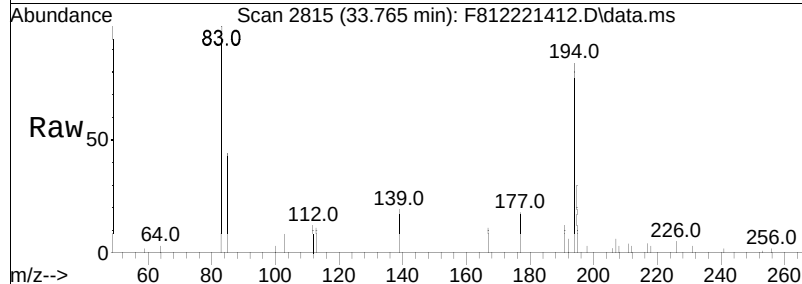
165 90.4 115.3 214.1#





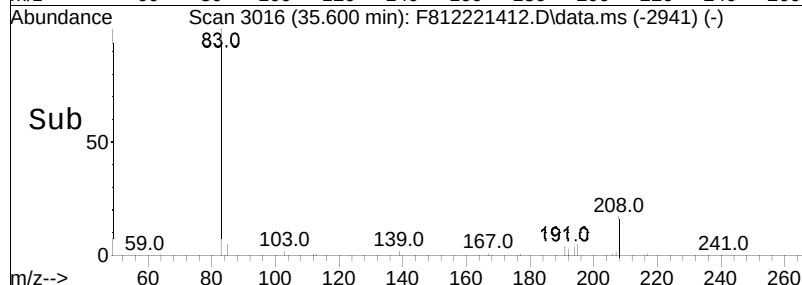
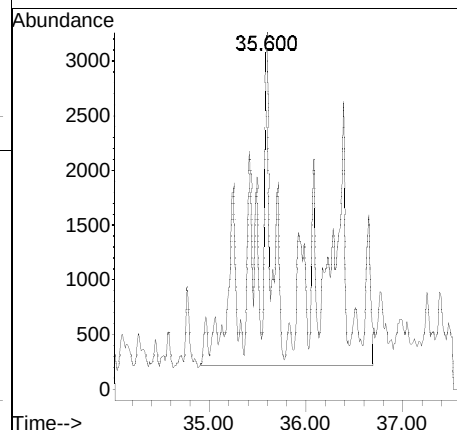
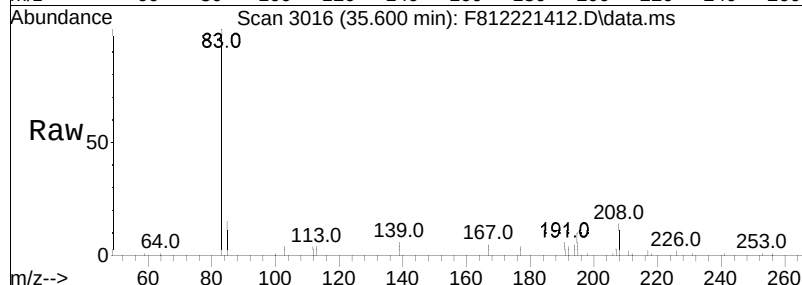
#31
C2-Fluorenes
Concen: 1030.69 ng/mL M5
RT: 33.765 min Scan# 2815
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

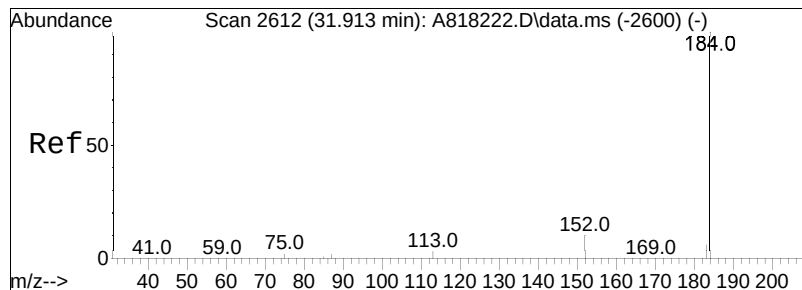
Tgt Ion	Ratio	Lower	Upper
194	100		
179	0.0	0.0	0.0
195	4.5	25.1	46.7#



#32
C3-Fluorenes
Concen: 892.20 ng/mL M5
RT: 35.600 min Scan# 3016
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

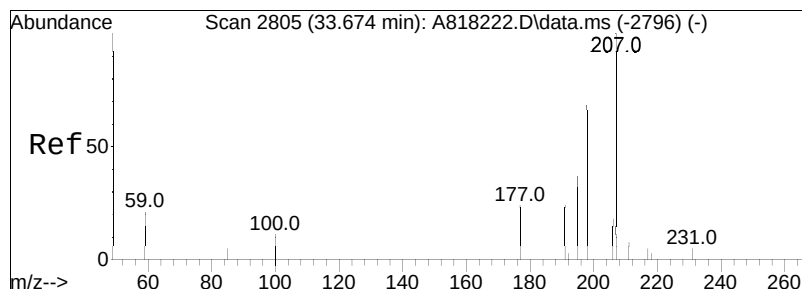
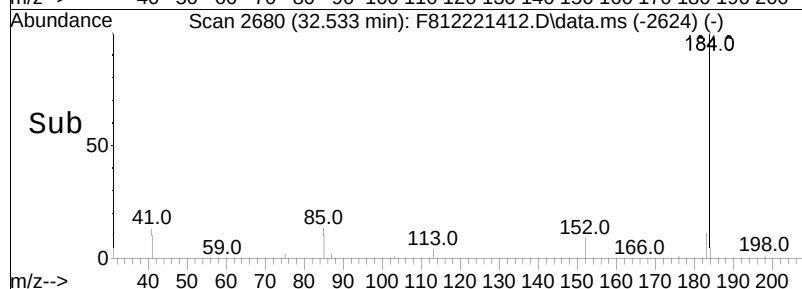
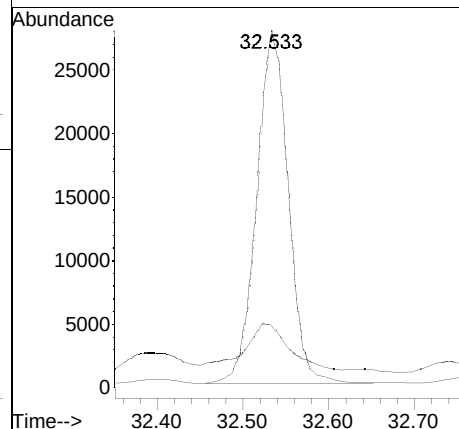
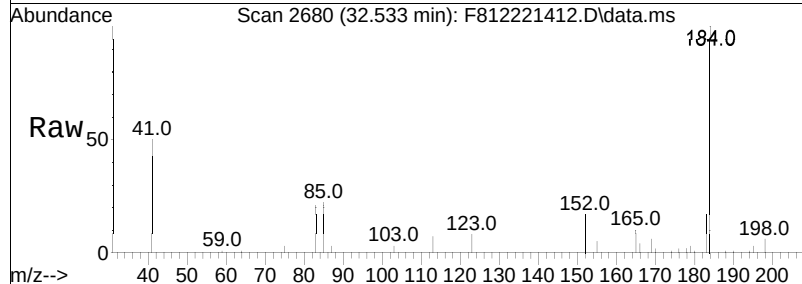
Tgt Ion	Ratio	Lower	Upper
208	100		





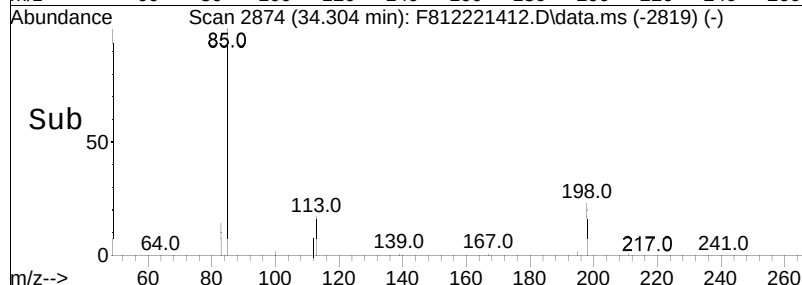
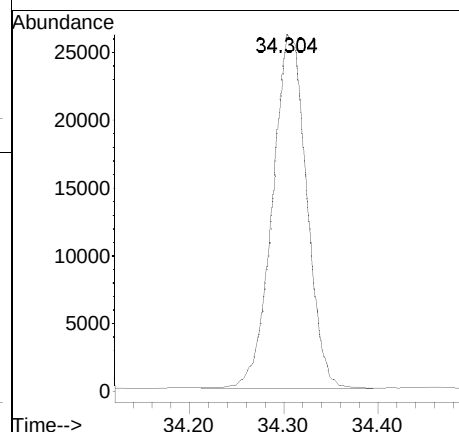
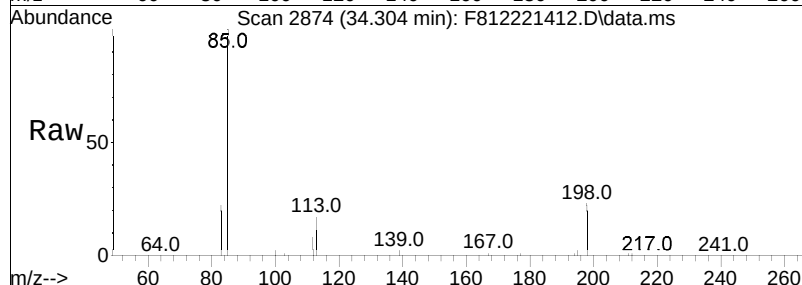
#33
 Dibenzothiophene
 Concen: 590.29 ng/mL
 RT: 32.533 min Scan# 2680
 Delta R.T. 0.009 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

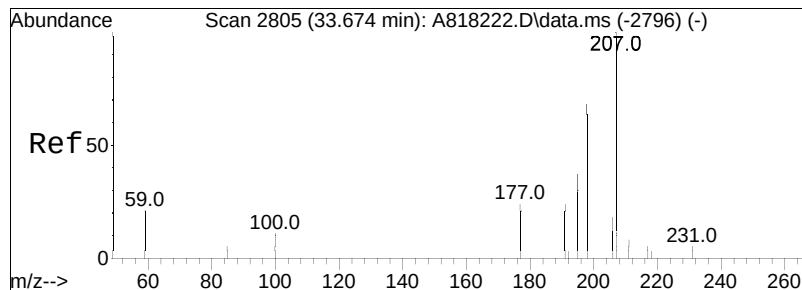
Tgt Ion:184 Resp: 70603
 Ion Ratio Lower Upper
 184 100
 152 19.0 7.6 14.0#



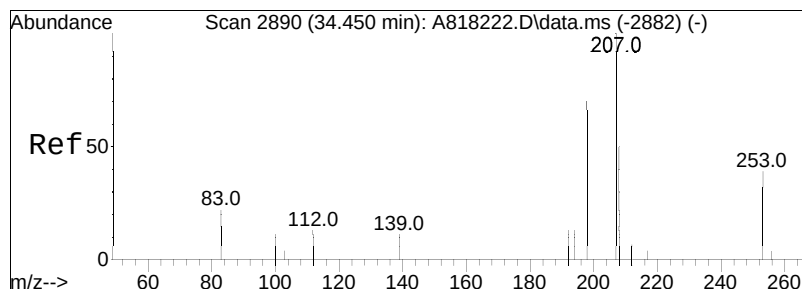
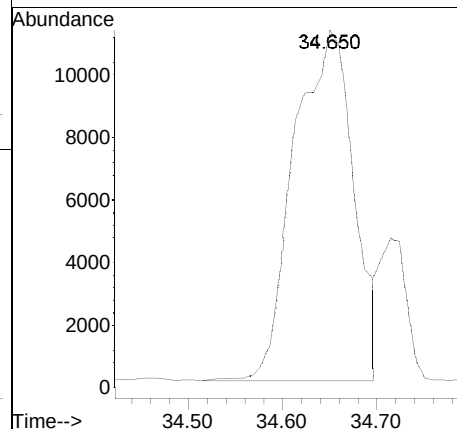
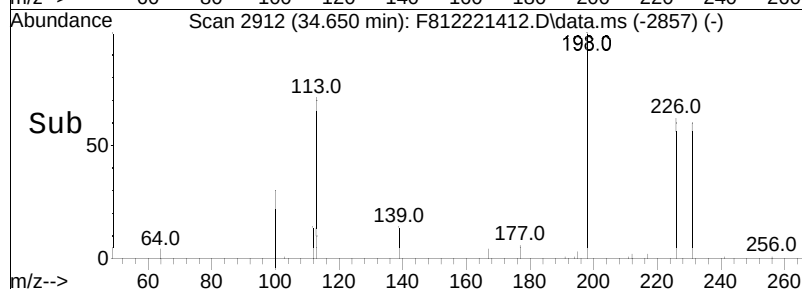
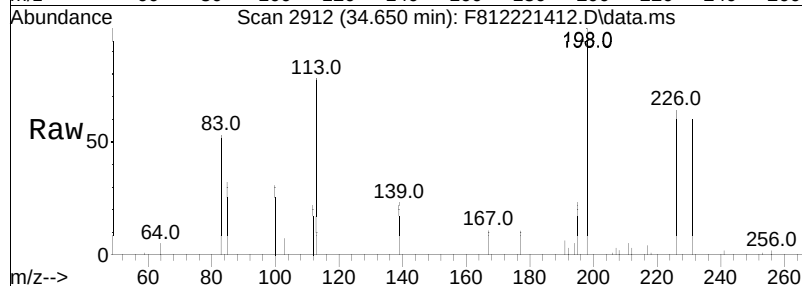
#34
 4-Methyldibenzothiophene(4MDT)
 Concen: 544.87 ng/mL
 RT: 34.304 min Scan# 2874
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

Tgt Ion:198 Resp: 65171

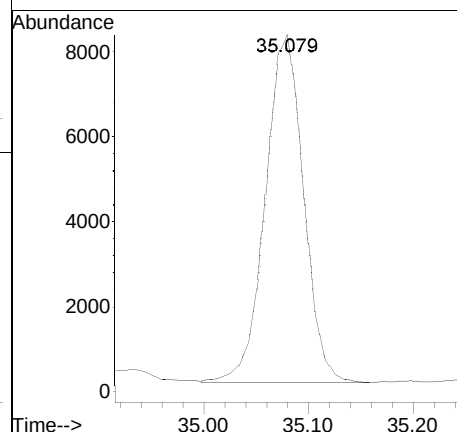
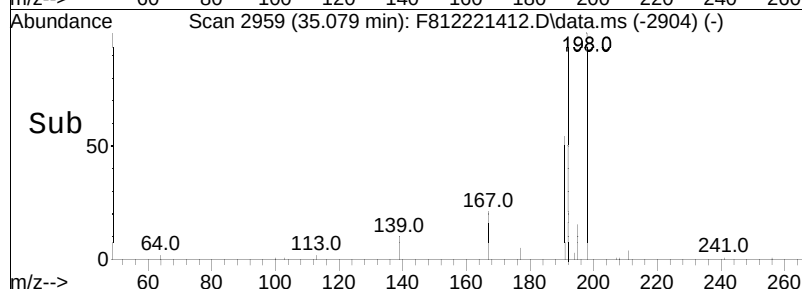
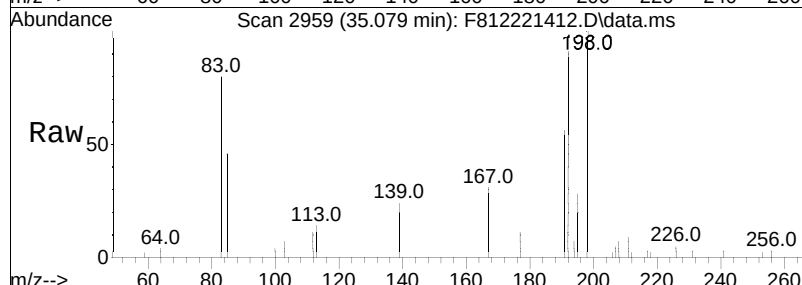


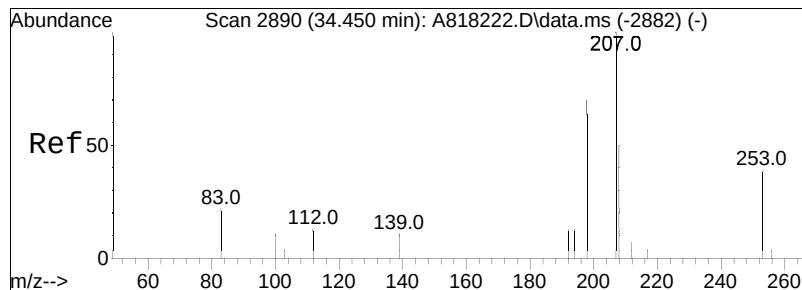


#35
 2/3-Methyldibenzothiophene(2MD)
 Concen: 412.21 ng/mL
 RT: 34.650 min Scan# 2912
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am
 Tgt Ion:198 Resp: 49303



#36
 1-Methyldibenzothiophene(1MDT)
 Concen: 172.89 ng/mL
 RT: 35.079 min Scan# 2959
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am
 Tgt Ion:198 Resp: 20679





#37

OTP

Concen: 73.35 ng/mL

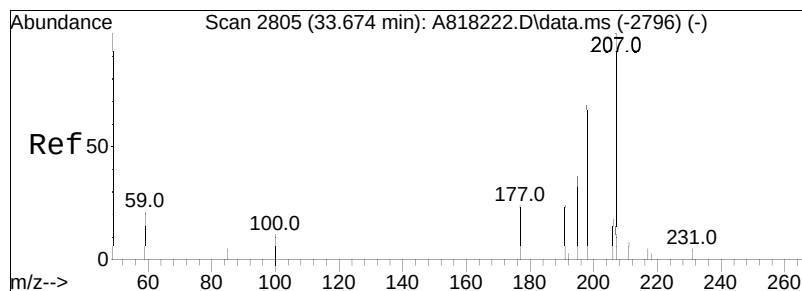
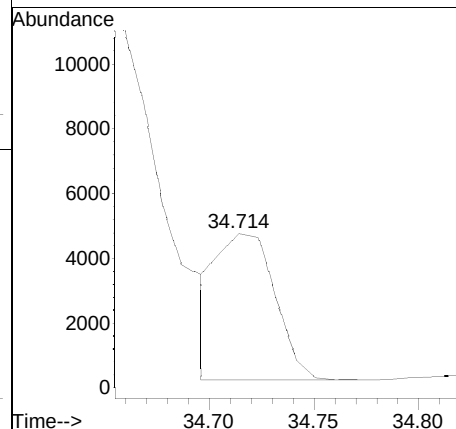
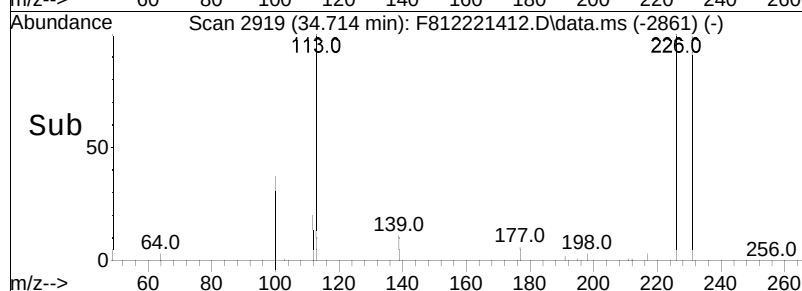
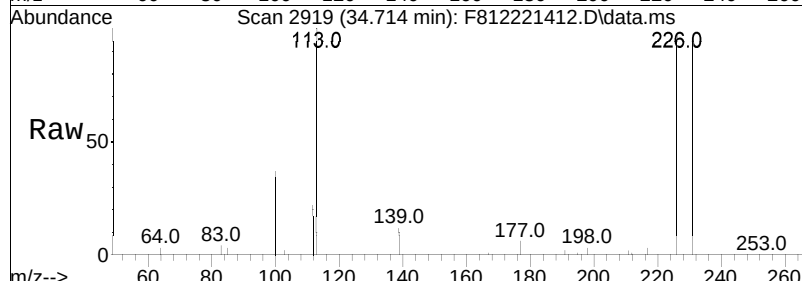
RT: 34.714 min Scan# 2919

Delta R.T. 0.000 min

Lab File: F812221412.D

Acq: 24 Dec 2014 3:47 am

Tgt Ion:198 Resp: 8773



#38

C1-Dibenzothiophenes

Concen: 1225.29 ng/mL M5

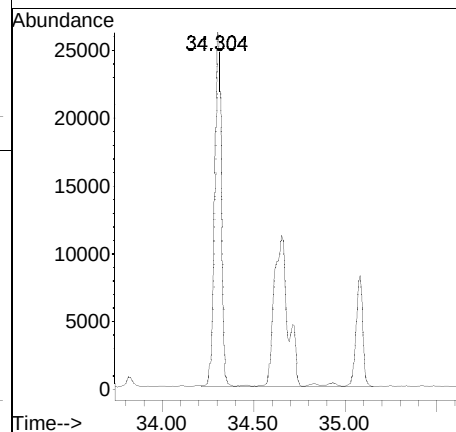
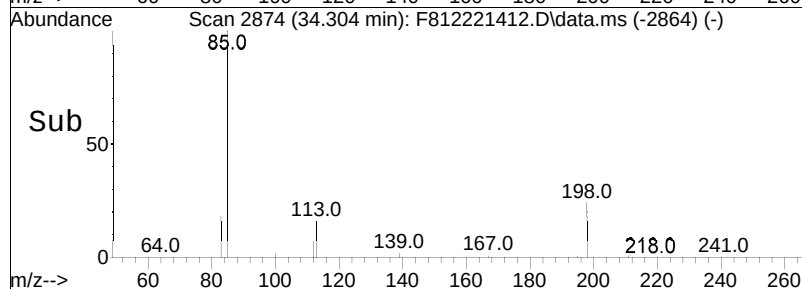
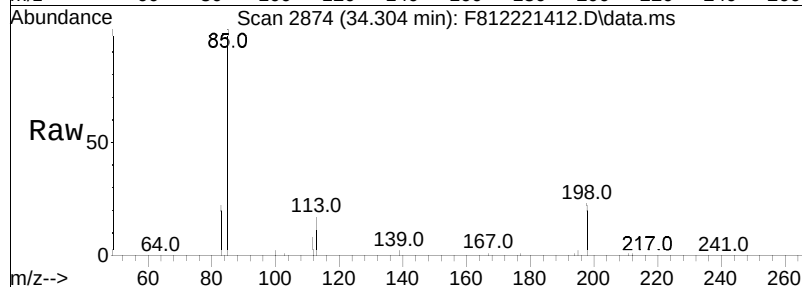
RT: 34.304 min Scan# 2874

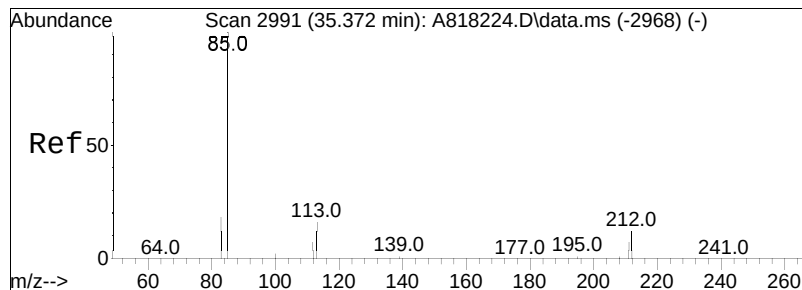
Delta R.T. 0.000 min

Lab File: F812221412.D

Acq: 24 Dec 2014 3:47 am

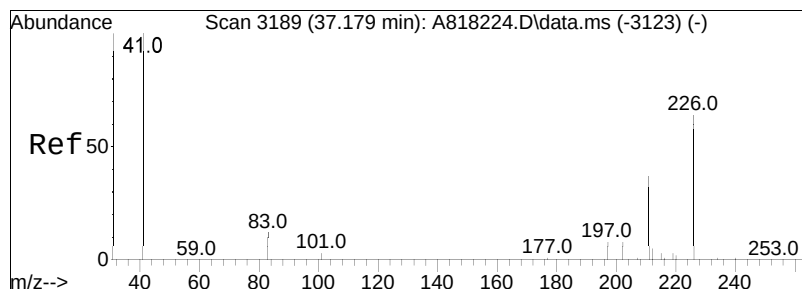
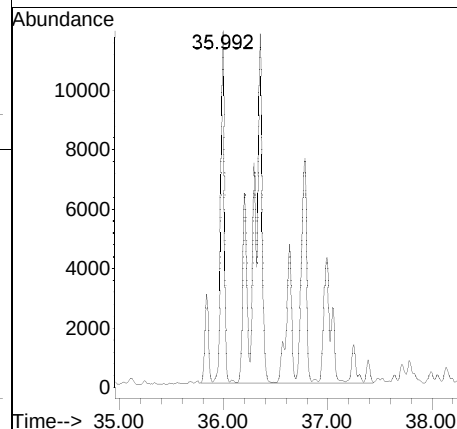
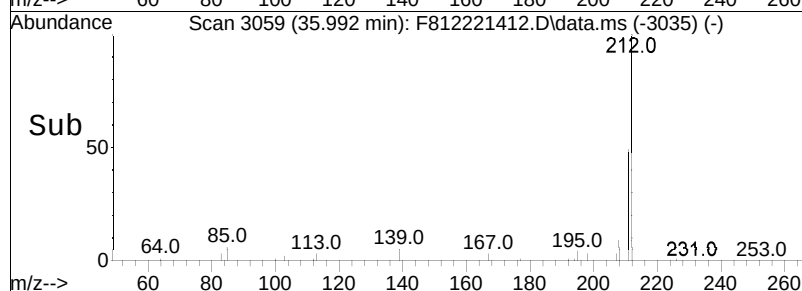
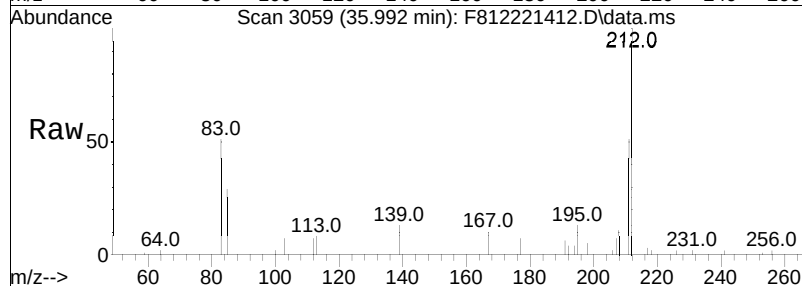
Tgt Ion:198 Resp: 146554





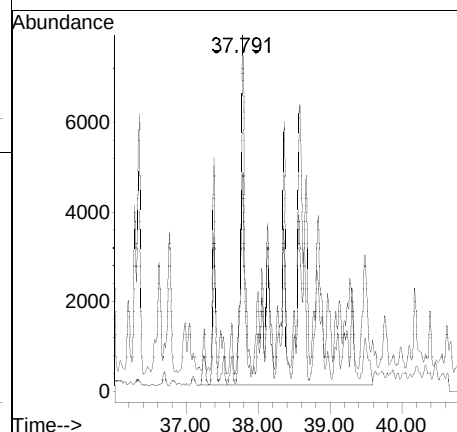
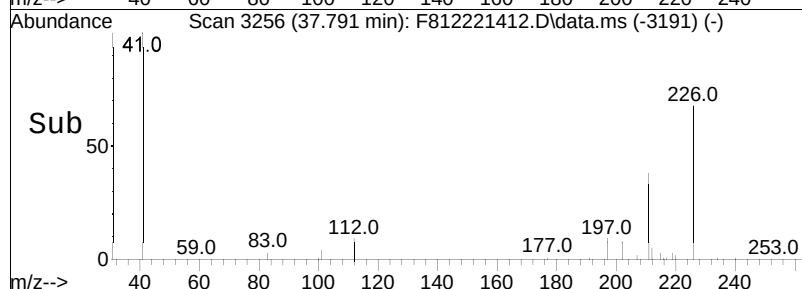
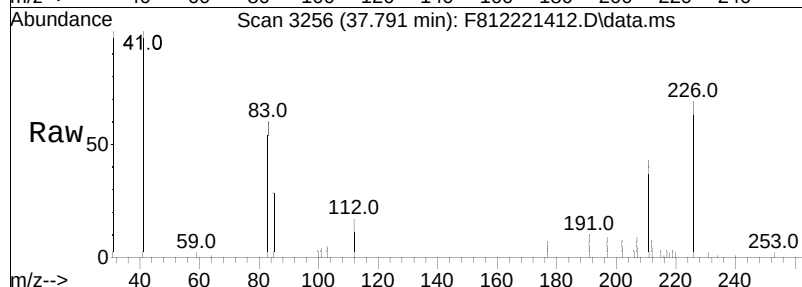
#39
 C2-Dibenzothiophenes
 Concen: 1409.98 ng/mL M5
 RT: 35.992 min Scan# 3059
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

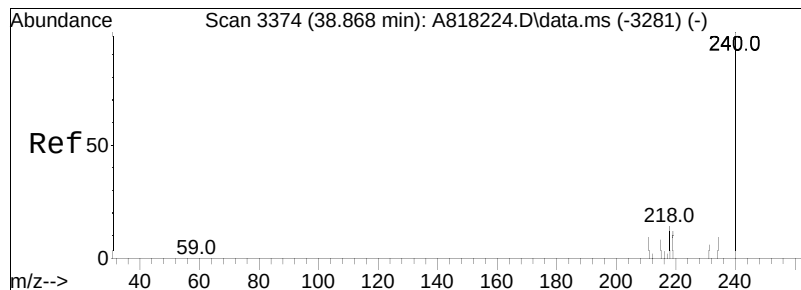
Tgt Ion:212 Resp: 168644



#40
 C3-Dibenzothiophenes
 Concen: 1365.94 ng/mL M5
 RT: 37.791 min Scan# 3256
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

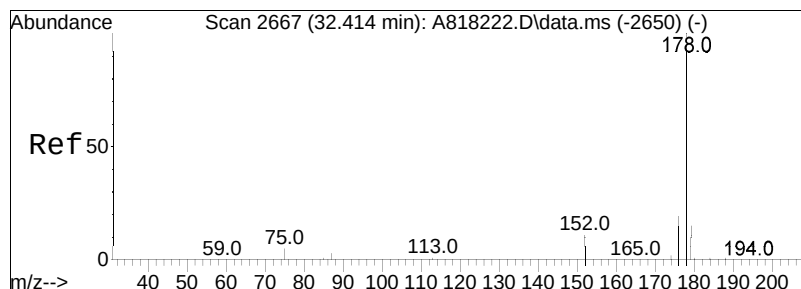
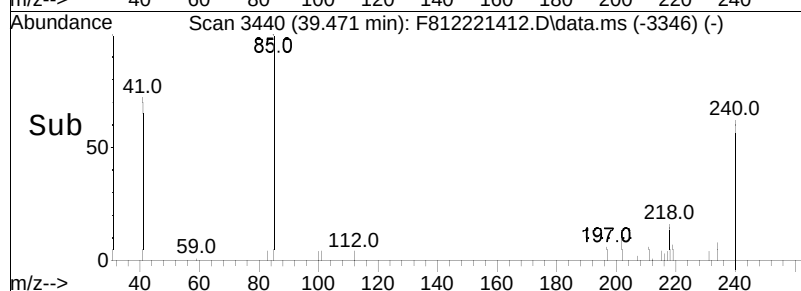
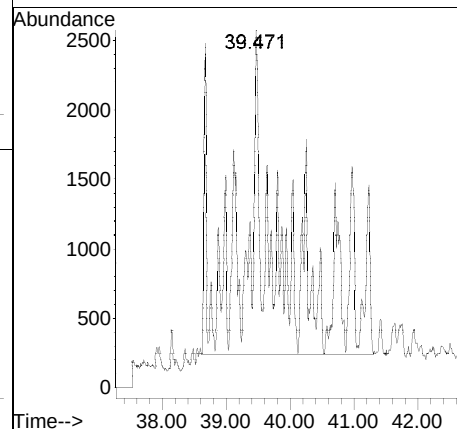
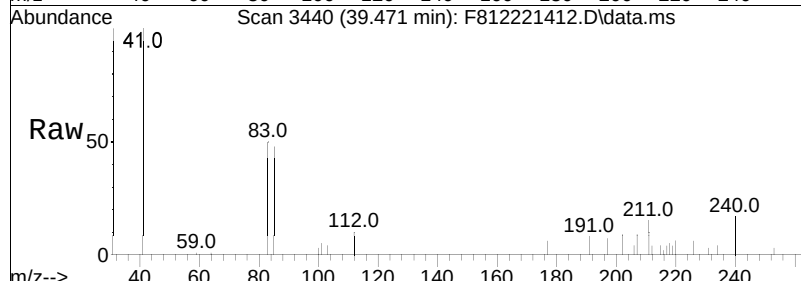
Tgt Ion:226 Resp: 163377
 Ion Ratio Lower Upper
 226 100
 211 1.5 43.0 80.0#





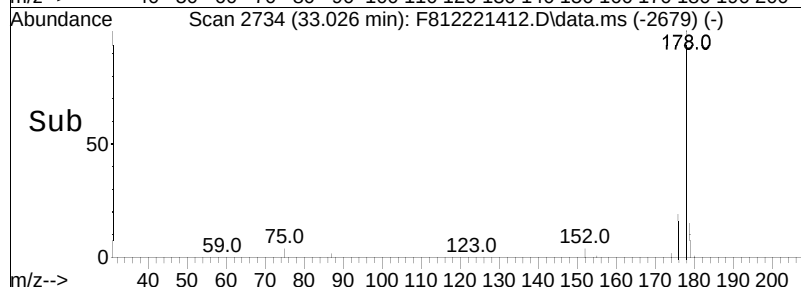
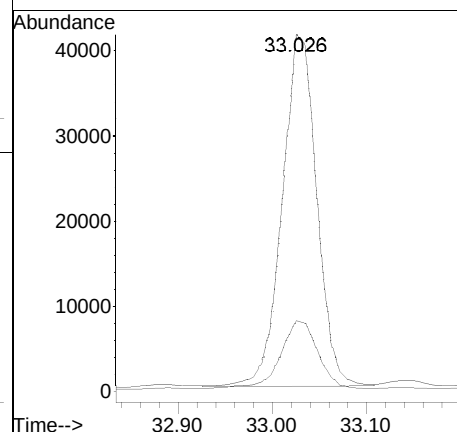
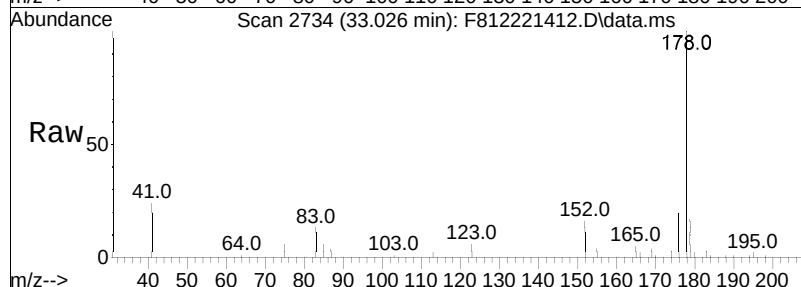
#41
C4-Dibenzothiophenes
Concen: 784.67 ng/mL M5
RT: 39.471 min Scan# 3440
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

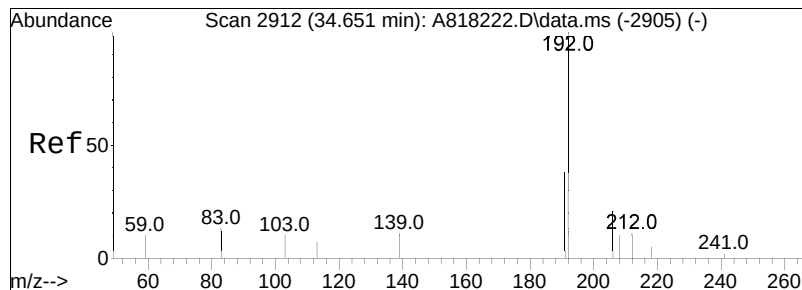
Tgt Ion:240 Resp: 93852



#43
Phenanthrene
Concen: 900.79 ng/mL
RT: 33.026 min Scan# 2734
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

Tgt Ion:178 Resp: 104421
Ion Ratio Lower Upper
178 100
176 21.1 13.4 24.8





#44

3-Methylphenanthrene(3MP)

Concen: 355.21 ng/mL

RT: 34.988 min Scan# 2949

Delta R.T. 0.000 min

Lab File: F812221412.D

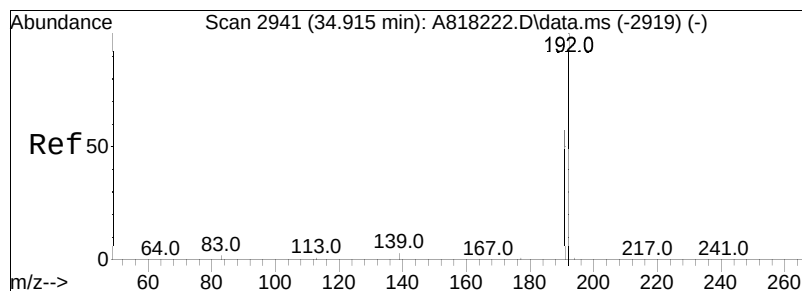
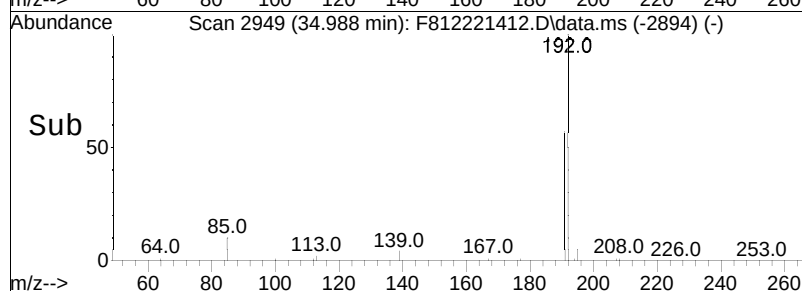
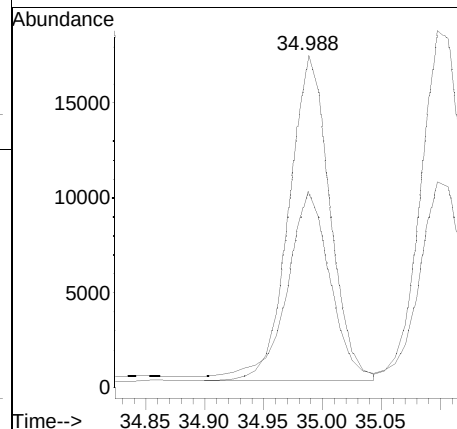
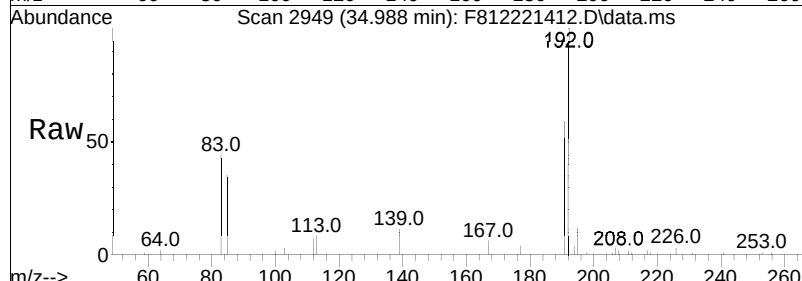
Acq: 24 Dec 2014 3:47 am

Tgt Ion:192 Resp: 41177

Ion Ratio Lower Upper

192 100

191 58.6 41.3 76.7



#45

2-Methylphenanthrene(2MP)

Concen: 395.12 ng/mL

RT: 35.098 min Scan# 2961

Delta R.T. 0.000 min

Lab File: F812221412.D

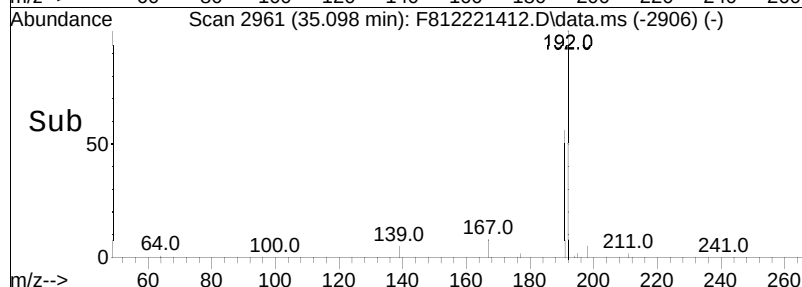
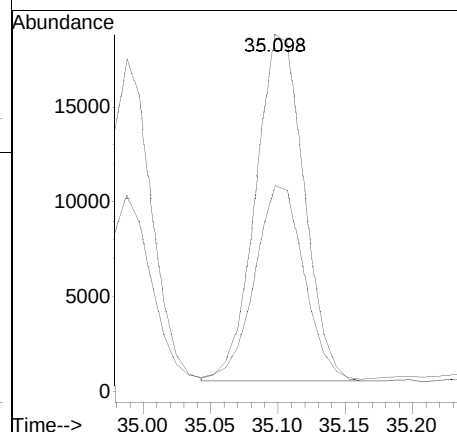
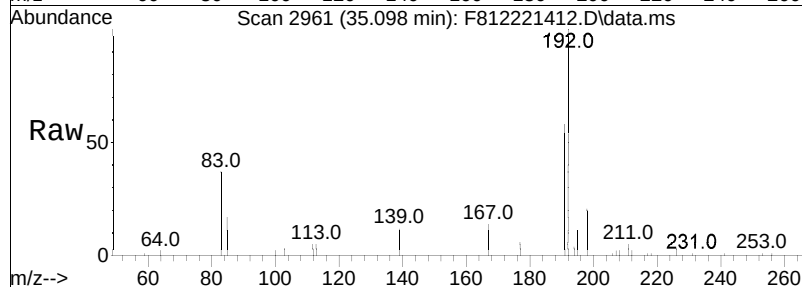
Acq: 24 Dec 2014 3:47 am

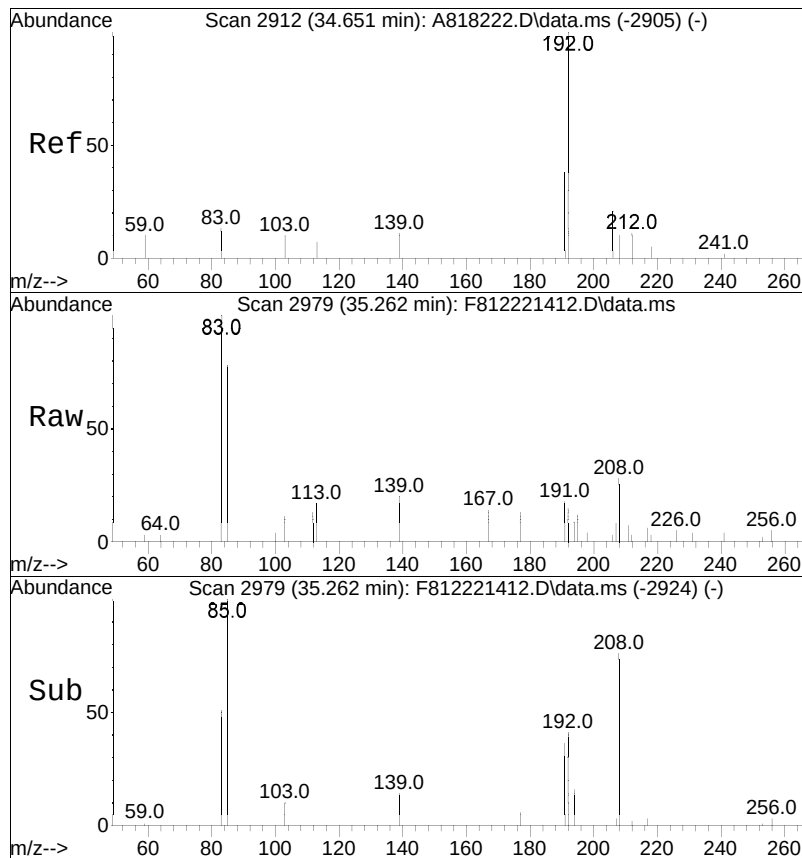
Tgt Ion:192 Resp: 45803

Ion Ratio Lower Upper

192 100

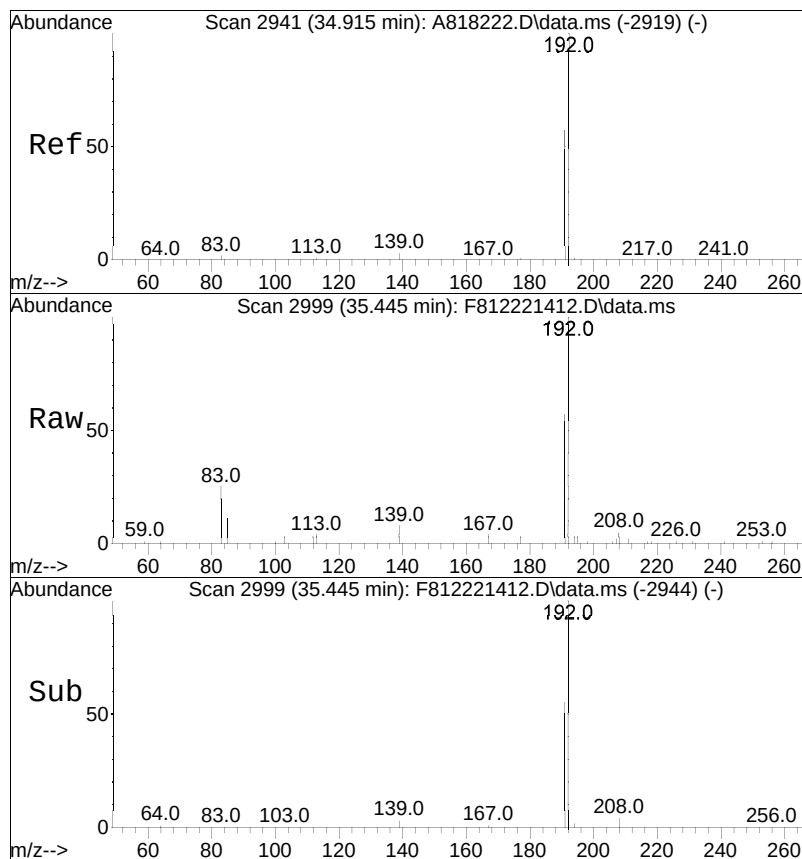
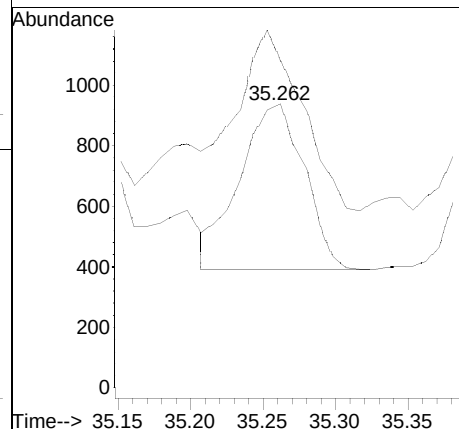
191 55.9 40.3 74.9





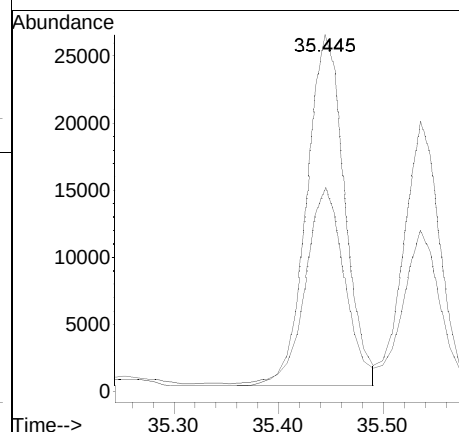
#46
 2-Methylantracene(2MA)
 Concen: 14.64 ng/mL
 RT: 35.262 min Scan# 2979
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

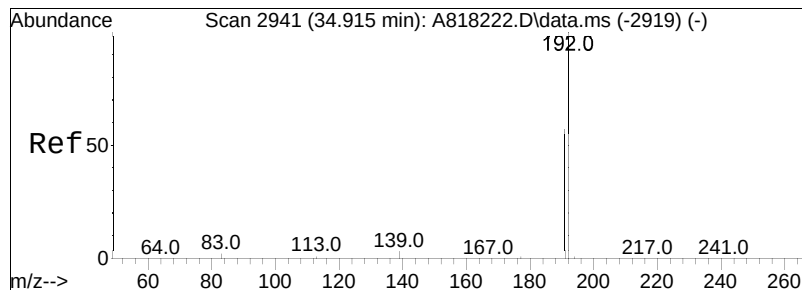
Tgt Ion:192 Resp: 1697
 Ion Ratio Lower Upper
 192 100
 191 141.5 81.0 150.4



#47
 9/4-Methylphenanthrene(9MP)
 Concen: 570.84 ng/mL
 RT: 35.445 min Scan# 2999
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

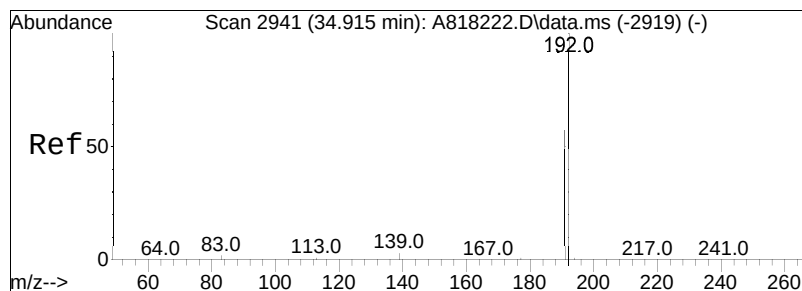
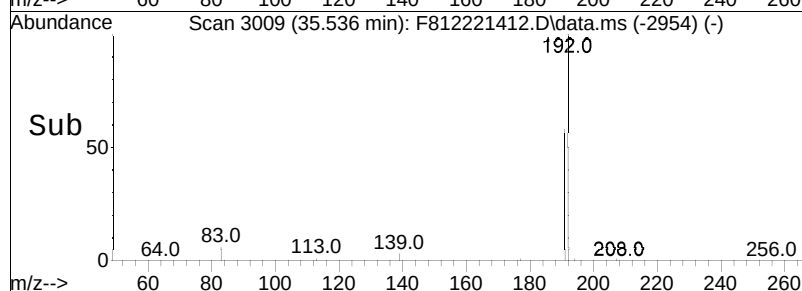
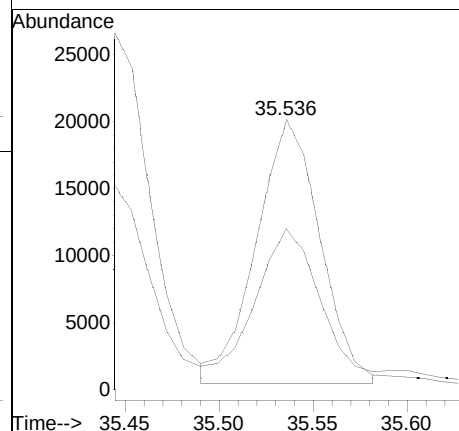
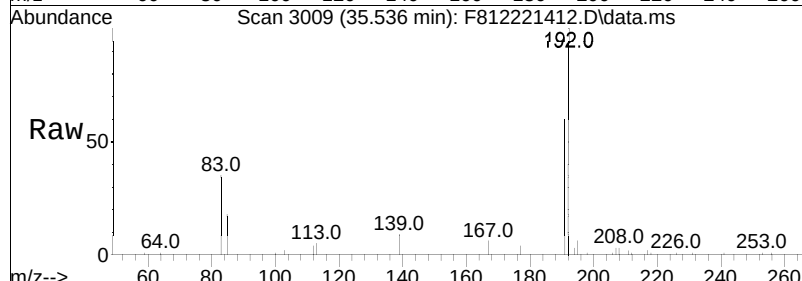
Tgt Ion:192 Resp: 66173
 Ion Ratio Lower Upper
 192 100
 191 56.8 40.0 74.4





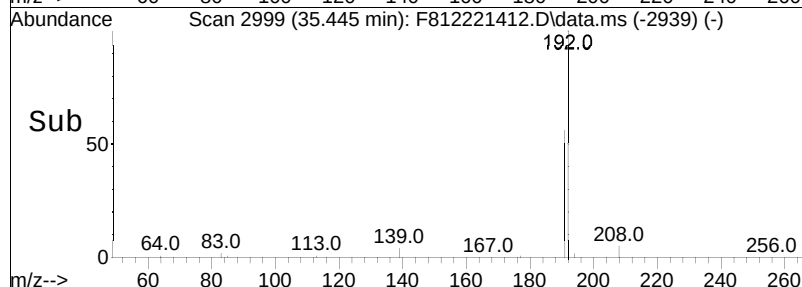
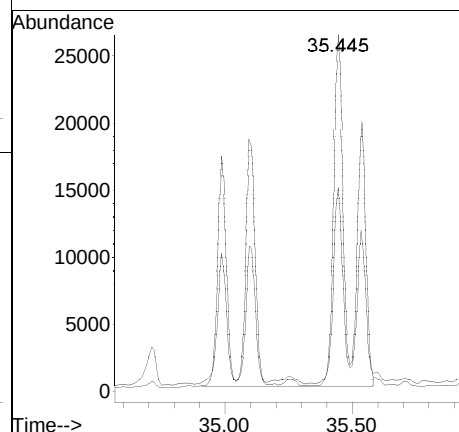
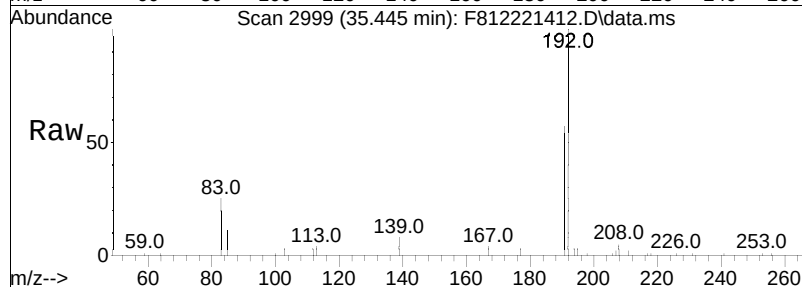
#48
1-Methylphenanthrene(1MP)
Concen: 398.32 ng/mL M4
RT: 35.536 min Scan# 3009
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

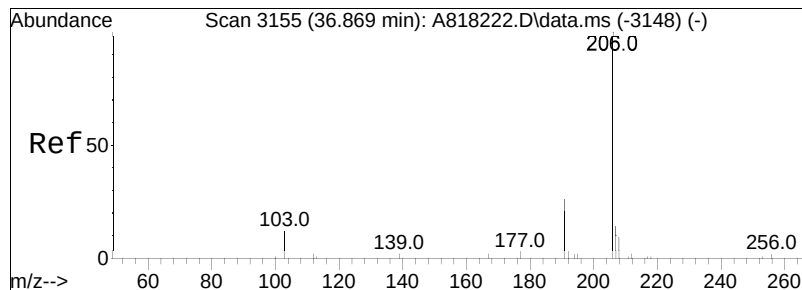
Tgt Ion	Ratio	Resp	Lower	Upper
192	100	46174		
191	61.4	41.6	77.3	



#49
C1-Phenanthrenes/Anthracenes
Concen: 1755.93 ng/mL M5
RT: 35.445 min Scan# 2999
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

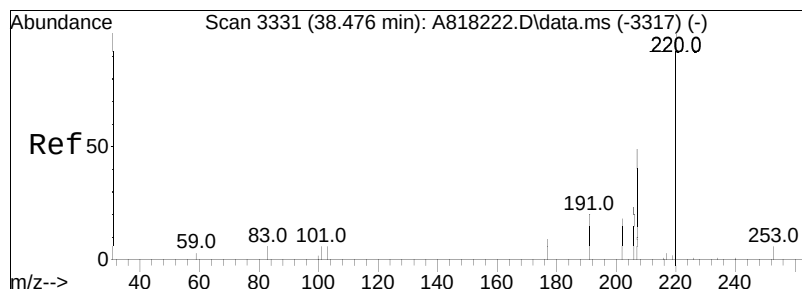
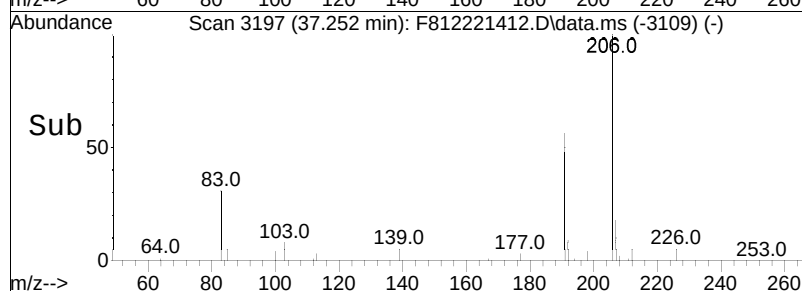
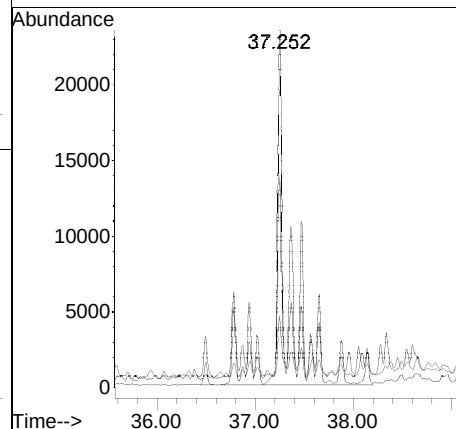
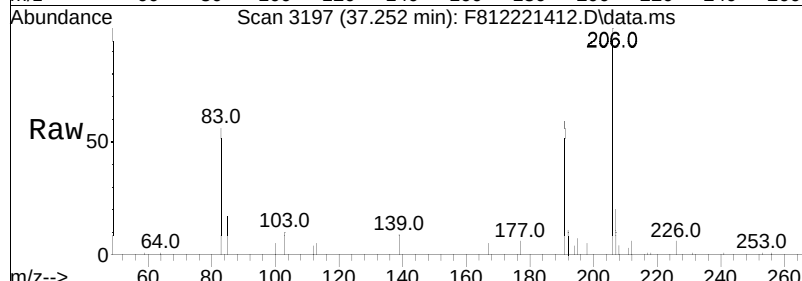
Tgt Ion	Ratio	Resp	Lower	Upper
192	100	203550		
191	18.5	40.0	74.4#	





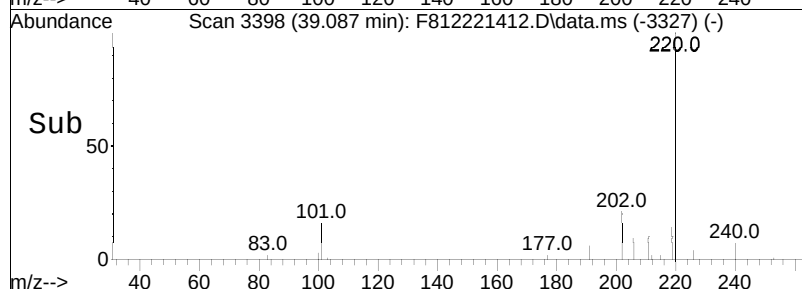
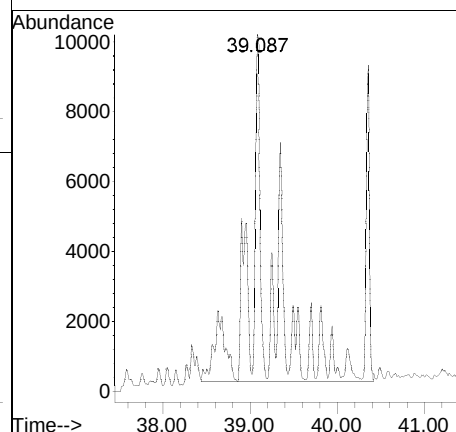
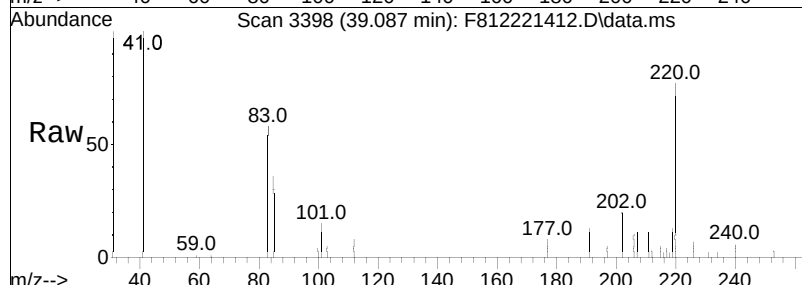
#50
C2-Phenanthrenes/Anthracenes
Concen: 1774.36 ng/mL M5
RT: 37.252 min Scan# 3197
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

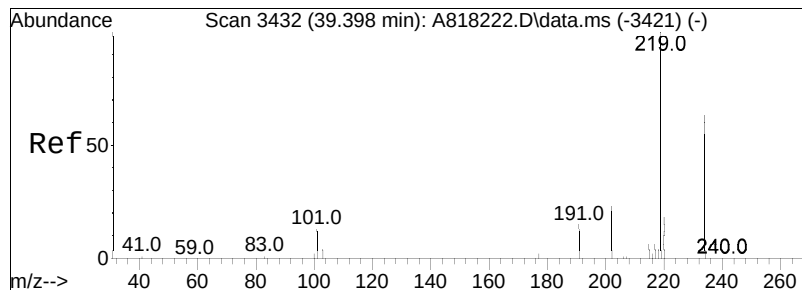
Tgt Ion	Ratio	Lower	Upper
206	100		
191	17.6	41.2	76.4#
207	6.2	14.1	26.3#



#52
C3-Phenanthrenes/Anthracenes
Concen: 1451.41 ng/mL M5
RT: 39.087 min Scan# 3398
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

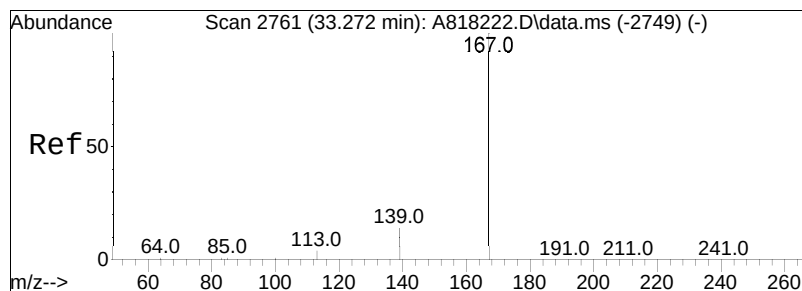
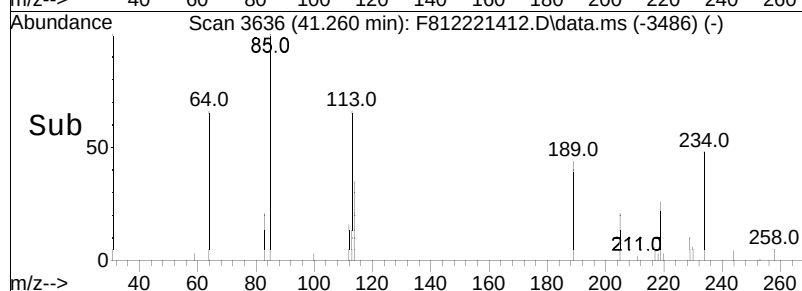
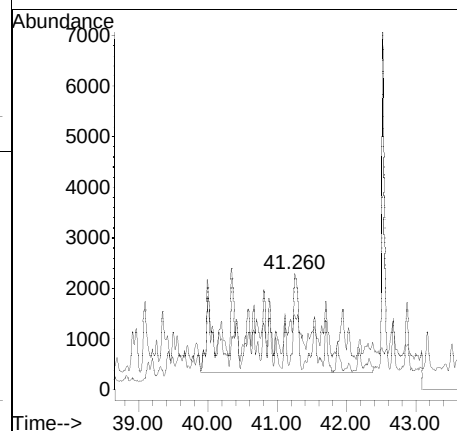
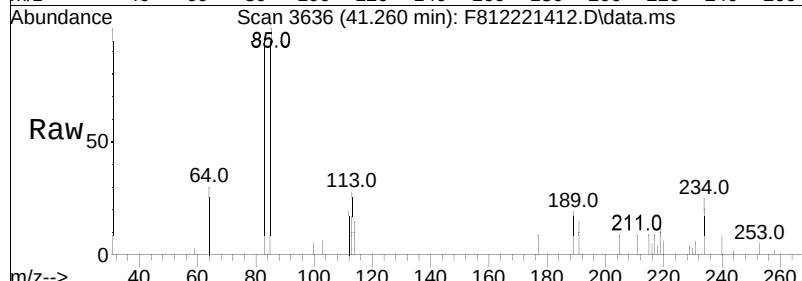
Tgt Ion:220 Resp: 168250





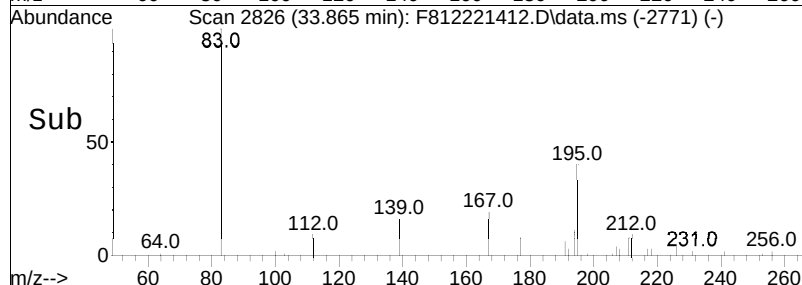
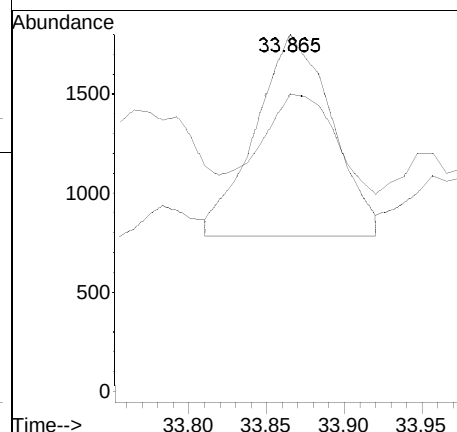
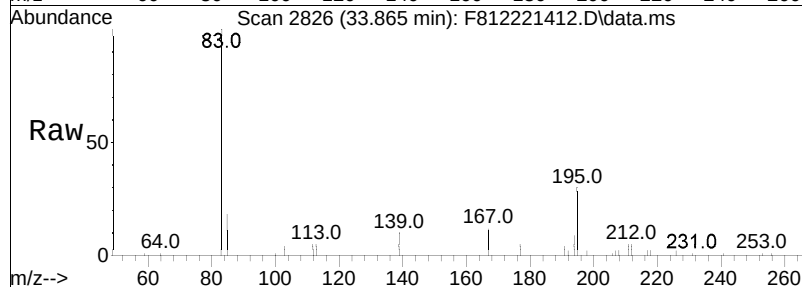
#53
C4-Phenanthrenes/Anthracenes
Concen: 587.87 ng/mL M5
RT: 41.260 min Scan# 3636
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

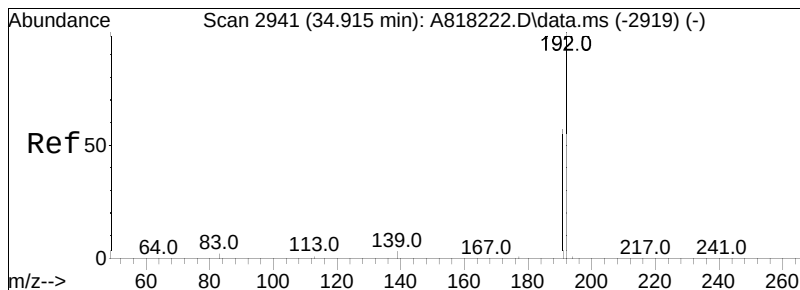
Tgt Ion: 234 Resp: 68147
Ion Ratio Lower Upper
234 100
219 2.7 43.8 81.3#



#56
Carbazole
Concen: 30.50 ng/mL M4
RT: 33.865 min Scan# 2826
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

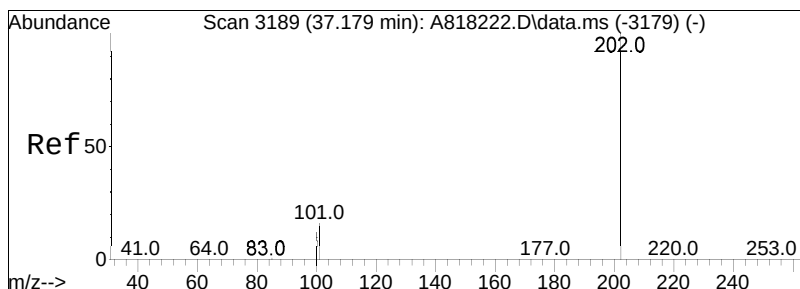
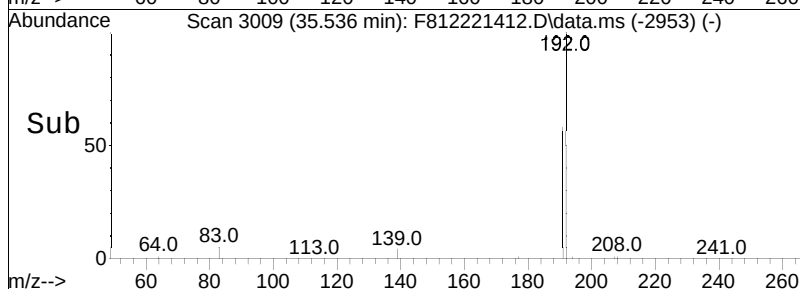
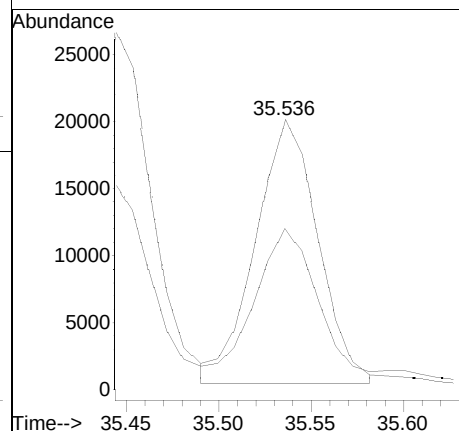
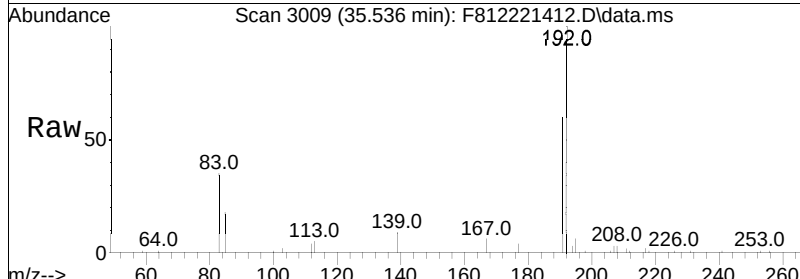
Tgt Ion: 167 Resp: 3463
Ion Ratio Lower Upper
167 100
139 41.8 10.4 19.4#





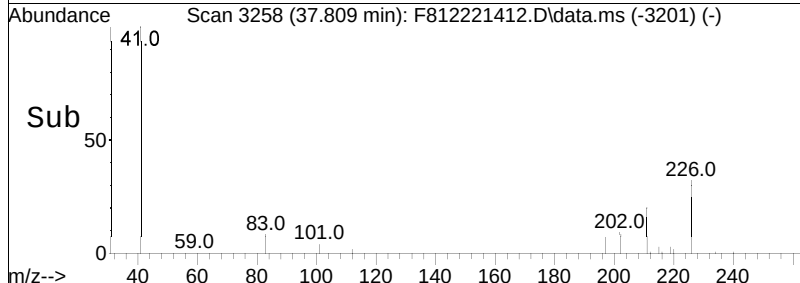
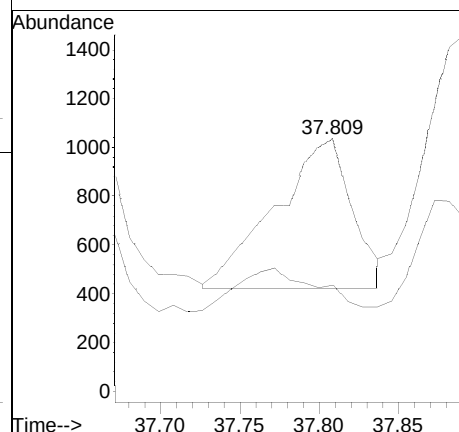
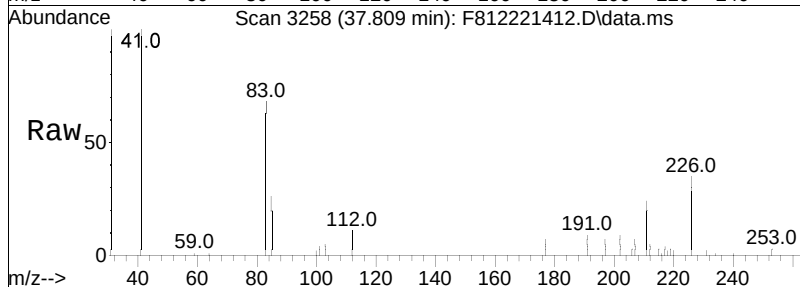
#57
1-Methylphenanthrene
Concen: 569.36 ng/mL M4
RT: 35.536 min Scan# 3009
Delta R.T. 0.009 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

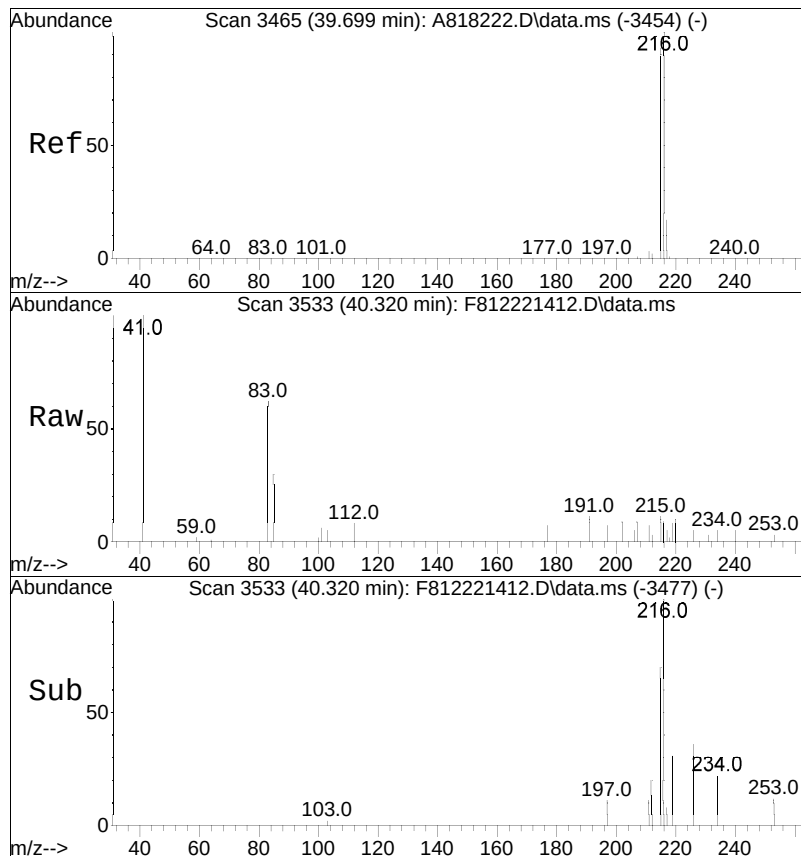
Tgt Ion:192 Resp: 46174
Ion Ratio Lower Upper
192 100
191 60.8 40.0 74.4



#58
Fluoranthene
Concen: 17.56 ng/mL M4
RT: 37.809 min Scan# 3258
Delta R.T. 0.018 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

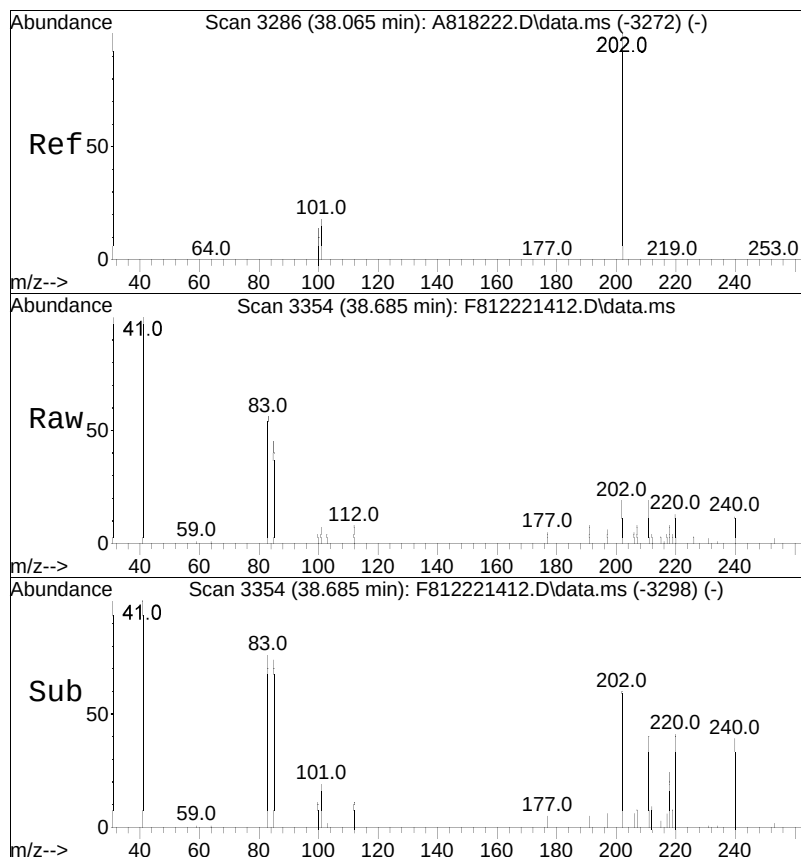
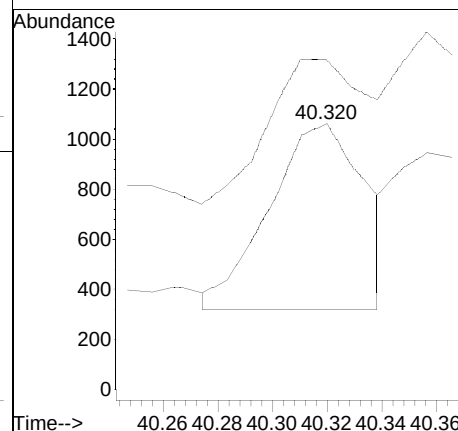
Tgt Ion:202 Resp: 2065
Ion Ratio Lower Upper
202 100
101 0.0 13.5 25.1#





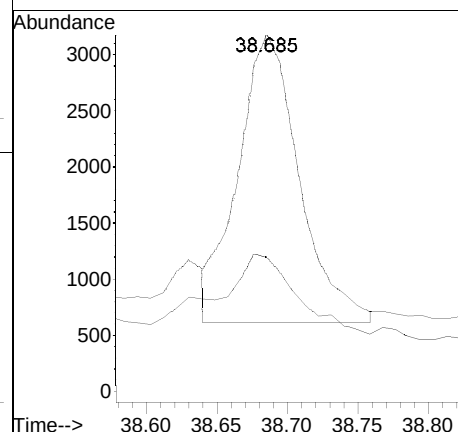
#59
Benzo(b)fluorene
Concen: 26.78 ng/mL M4
RT: 40.320 min Scan# 3533
Delta R.T. 0.009 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

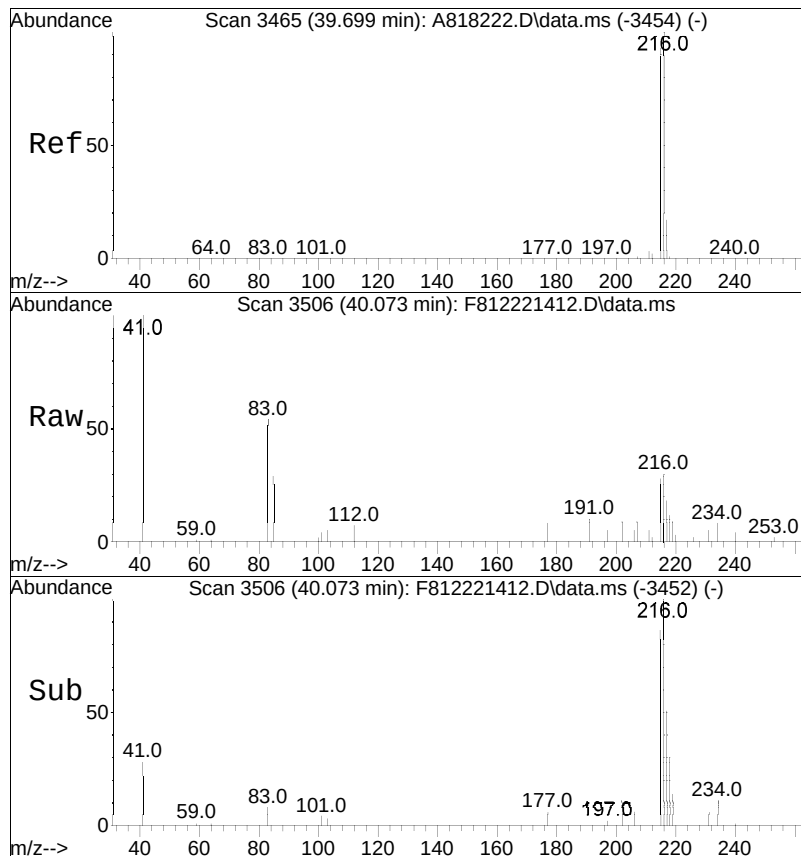
Tgt Ion:216 Resp: 1824
Ion Ratio Lower Upper
216 100
215 84.8 64.6 120.0



#60
Pyrene
Concen: 62.77 ng/mL M4
RT: 38.685 min Scan# 3354
Delta R.T. 0.009 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

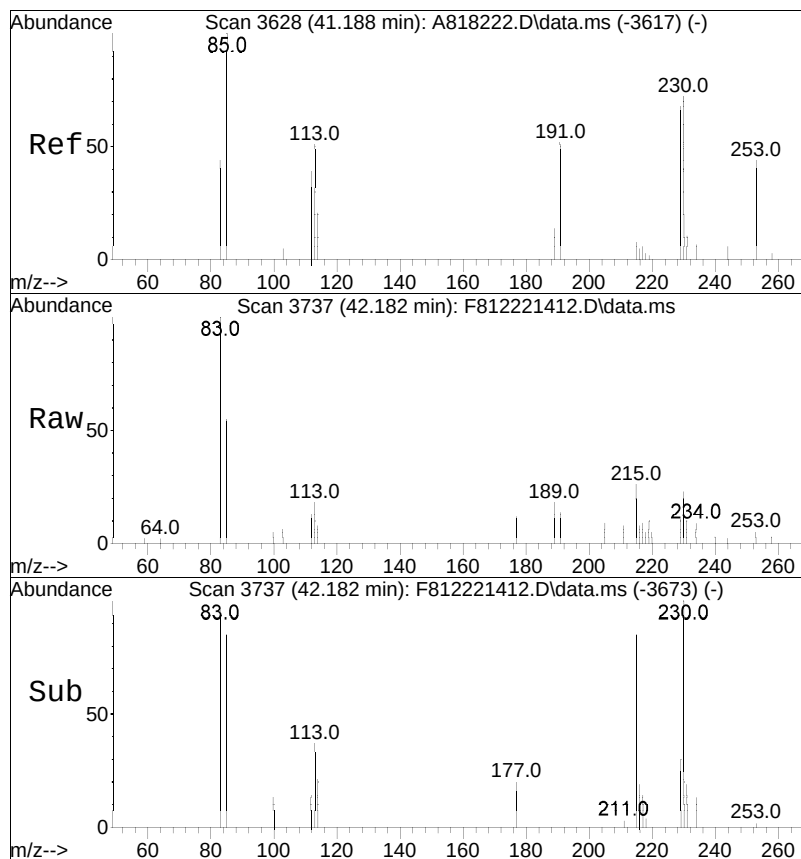
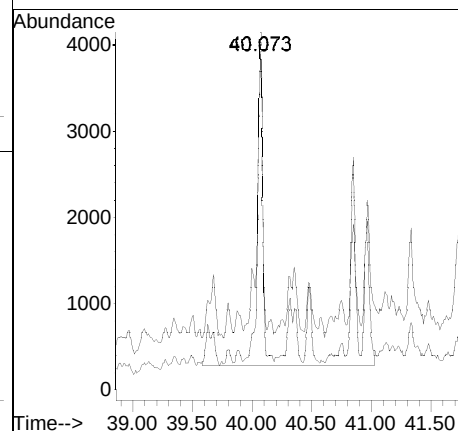
Tgt Ion:202 Resp: 7731
Ion Ratio Lower Upper
202 100
101 40.3 15.5 28.7#





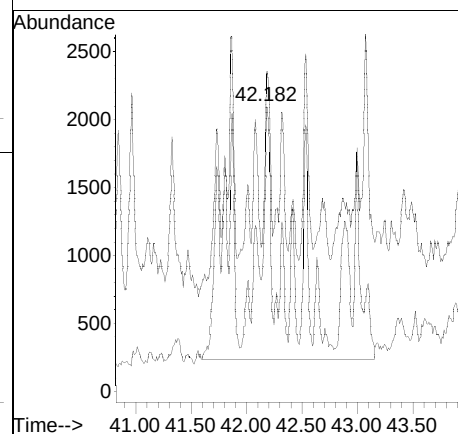
#61
C1-Fluoranthenes/Pyrenes
Concen: 278.71 ng/mL M5
RT: 40.073 min Scan# 3506
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

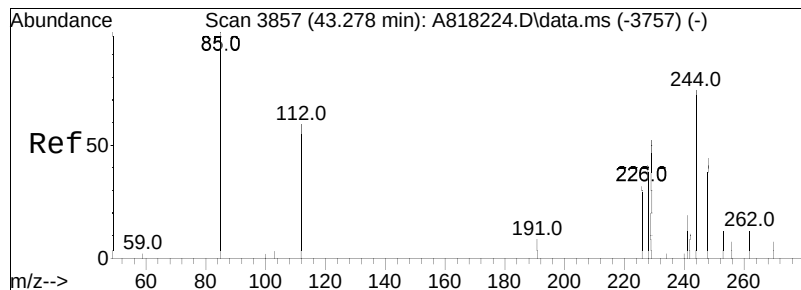
Tgt Ion:216 Resp: 34328
Ion Ratio Lower Upper
216 100
215 22.7 65.8 122.2#



#62
C2-Fluoranthenes/Pyrenes
Concen: 434.70 ng/mL M5
RT: 42.182 min Scan# 3737
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

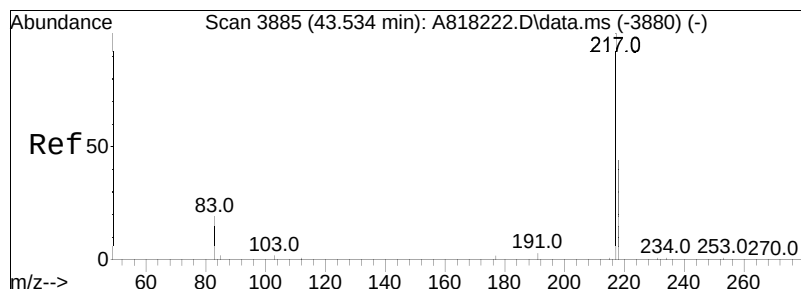
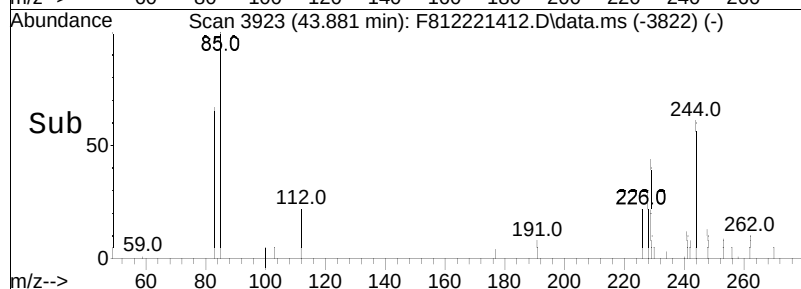
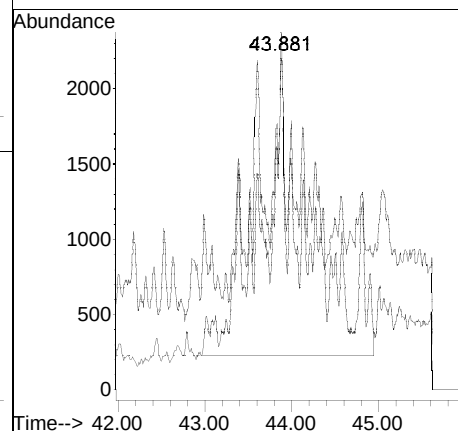
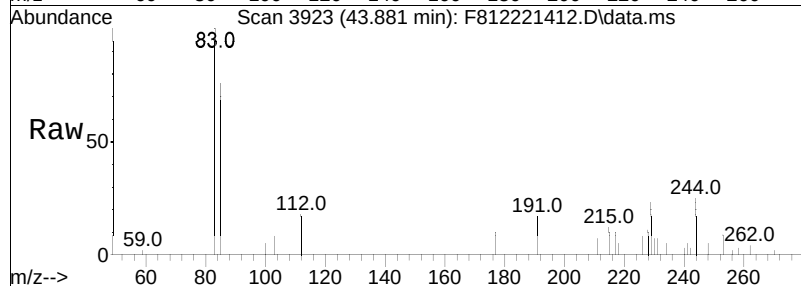
Tgt Ion:230 Resp: 53541
Ion Ratio Lower Upper
230 100
215 1.5 78.6 146.0#





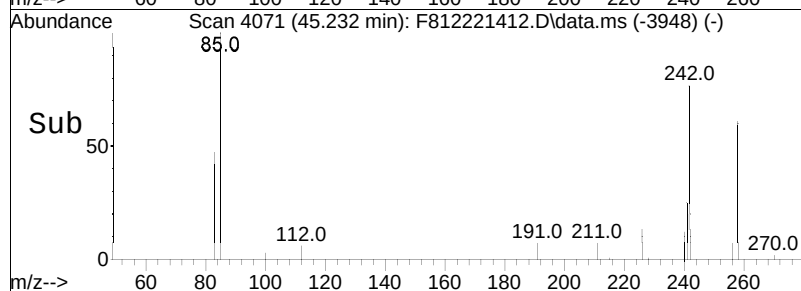
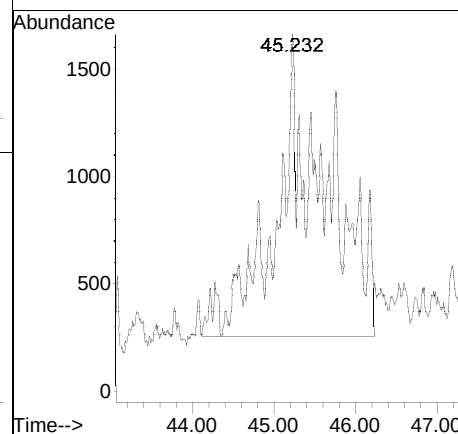
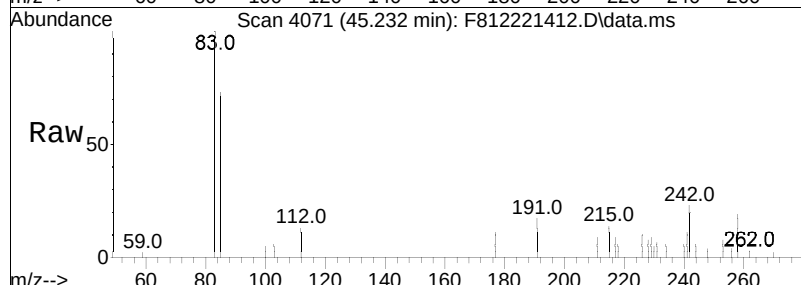
#63
C3-Fluoranthenes/Pyrenes
Concen: 582.25 ng/mL M5
RT: 43.881 min Scan# 3923
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

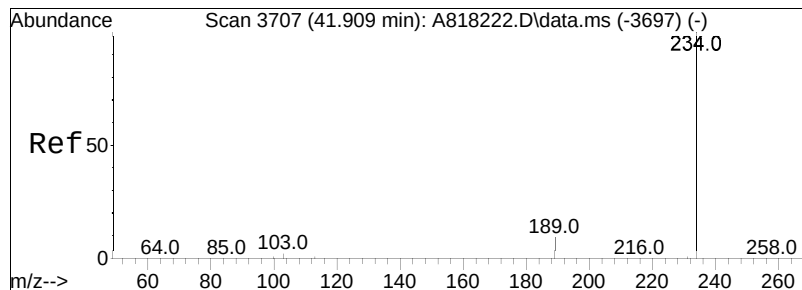
Tgt Ion:244 Resp: 71715
Ion Ratio Lower Upper
244 100
229 5.5 63.9 118.7#



#64
C4-Fluoranthenes/Pyrenes
Concen: 481.73 ng/mL M5
RT: 45.232 min Scan# 4071
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

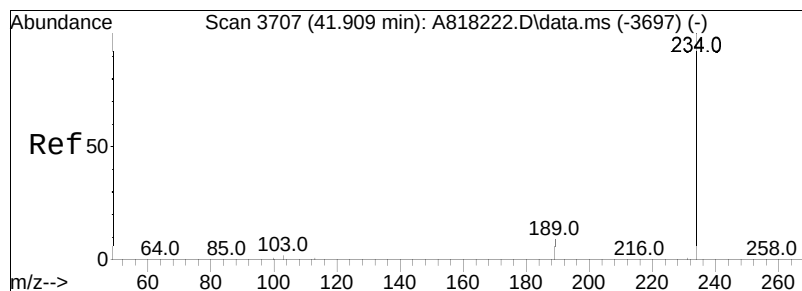
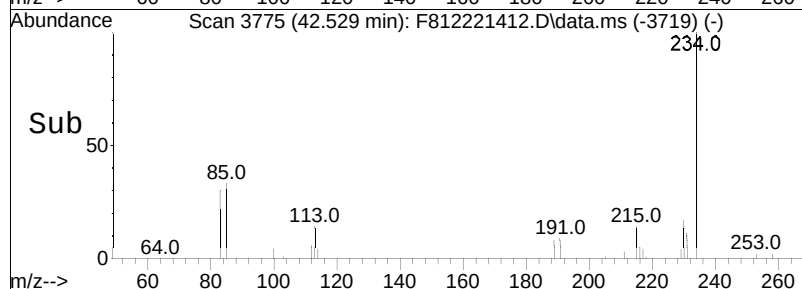
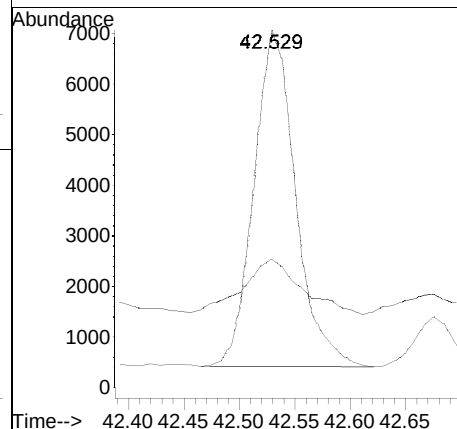
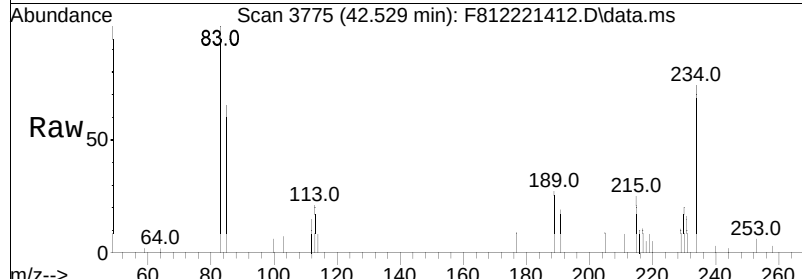
Tgt Ion:258 Resp: 59334





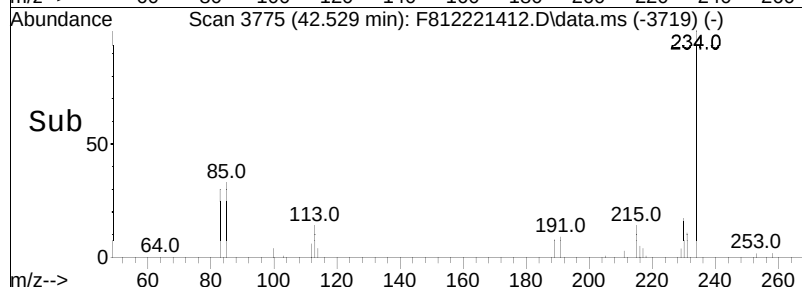
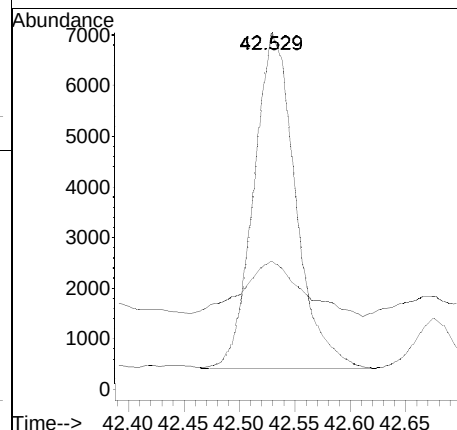
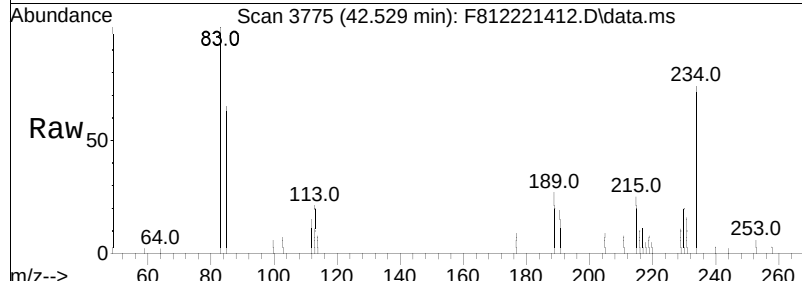
#66
 Naphthobenzothiophene
 Concen: 159.96 ng/mL
 RT: 42.529 min Scan# 3775
 Delta R.T. 0.009 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

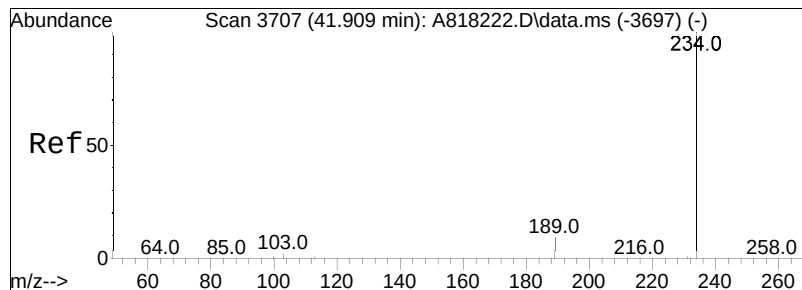
Tgt Ion	Ratio	Lower	Upper
234	100		
189	23.3	6.9	12.9#



#67
 Naphthobenzothiophene-2,1-D
 Concen: 159.96 ng/mL
 RT: 42.529 min Scan# 3775
 Delta R.T. 0.009 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

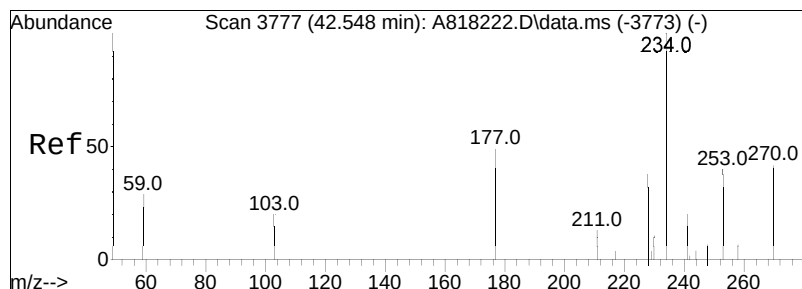
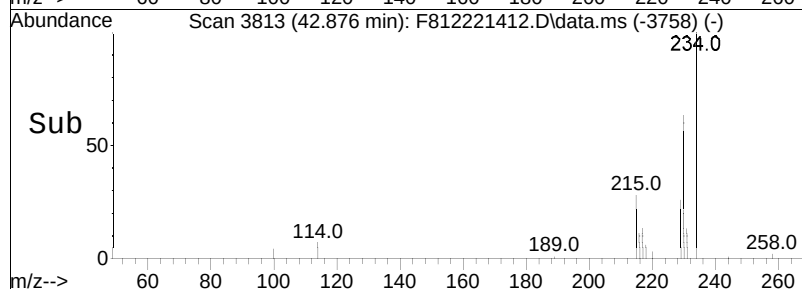
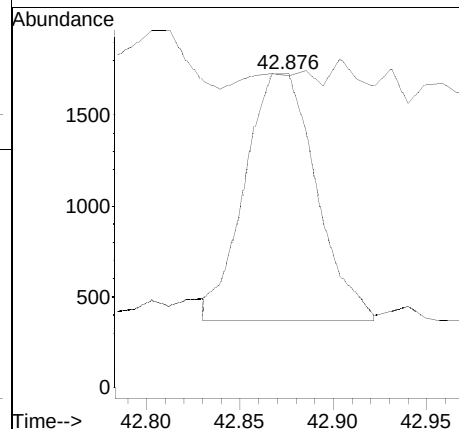
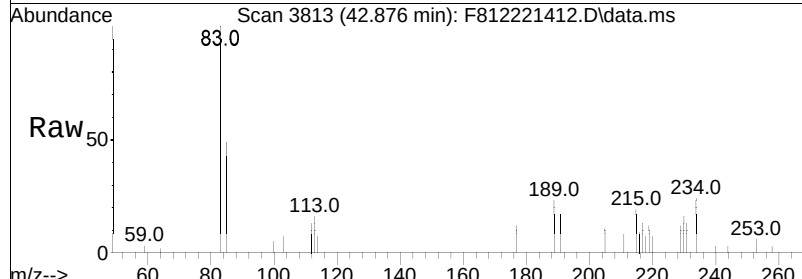
Tgt Ion	Ratio	Lower	Upper
234	100		
189	23.3	6.9	12.9#





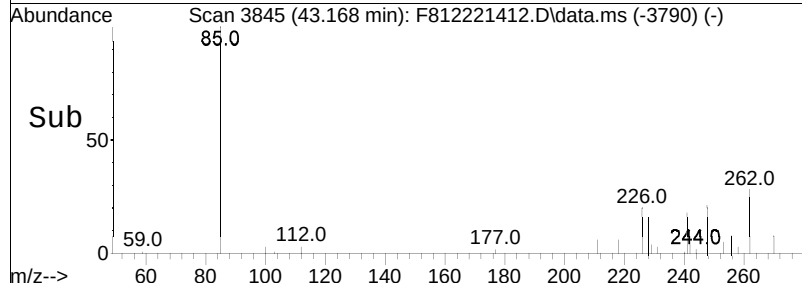
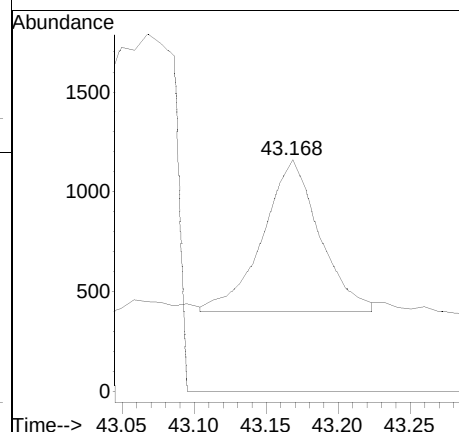
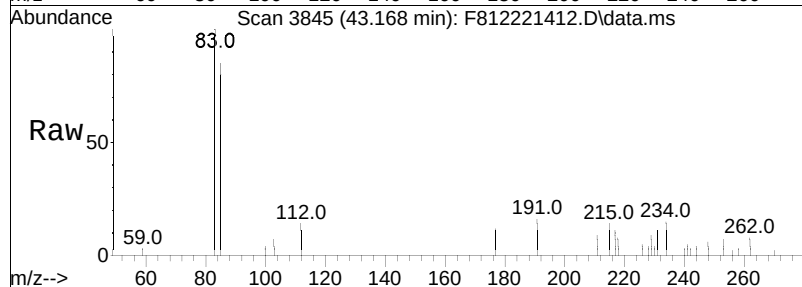
#68
 Naphthobenzothiophene-1,2-D
 Concen: 32.73 ng/mL M4
 RT: 42.876 min Scan# 3813
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

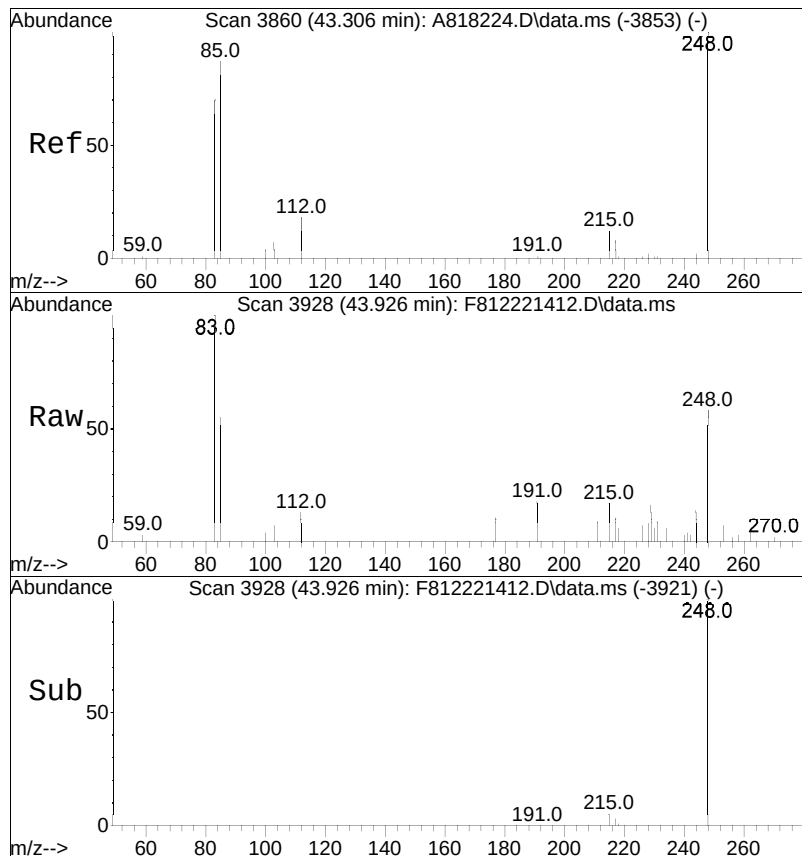
Tgt Ion: 234 Resp: 3547
 Ion Ratio Lower Upper
 234 100
 189 0.0 69.6 129.2#



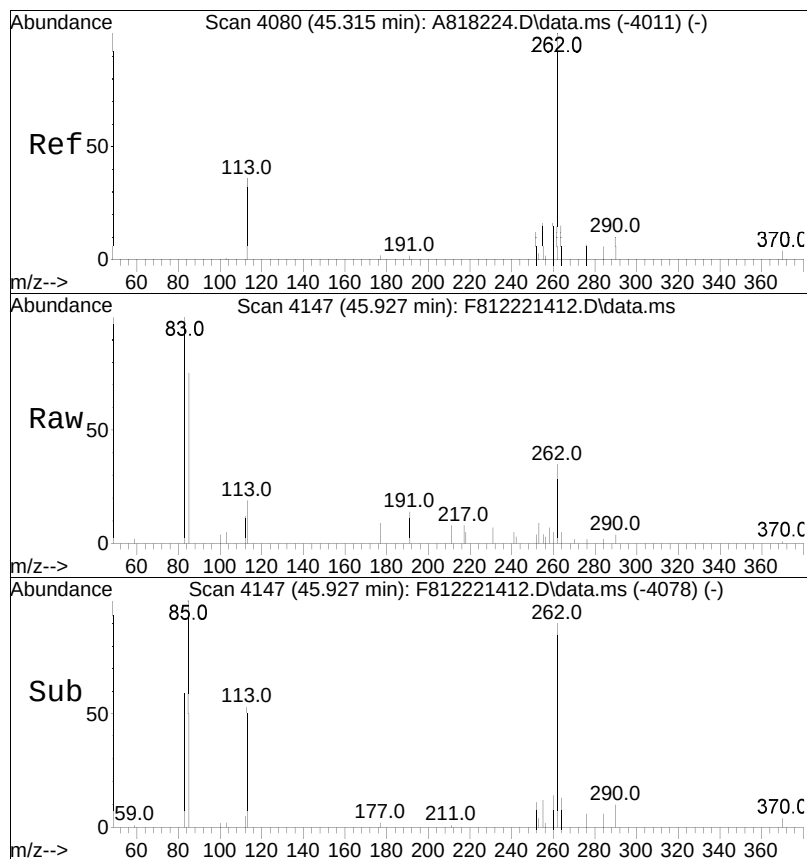
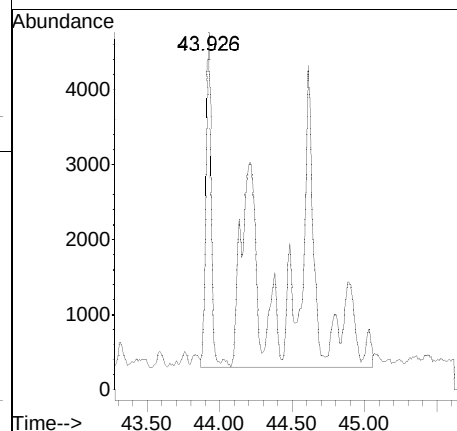
#69
 Naphthobenzothiophene-2,3-D
 Concen: 19.37 ng/mL M4
 RT: 43.168 min Scan# 3845
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

Tgt Ion: 234 Resp: 2099
 Ion Ratio Lower Upper
 234 100
 189 0.0 0.0 0.0

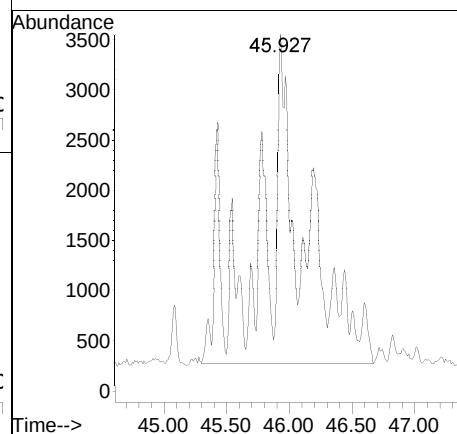


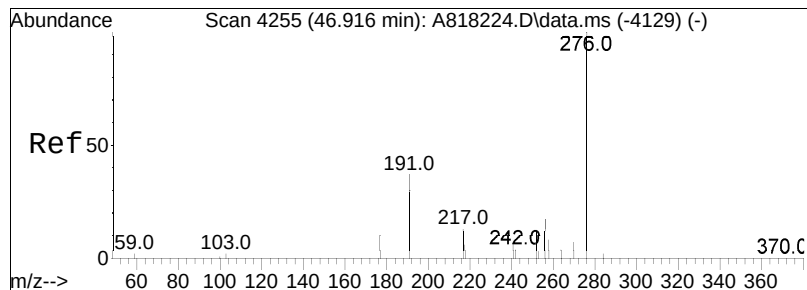


#70
 C1-Naphthobenzothiophenes
 Concen: 604.65 ng/ml M5
 RT: 43.926 min Scan# 3928
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am
 Tgt Ion:248 Resp: 65519



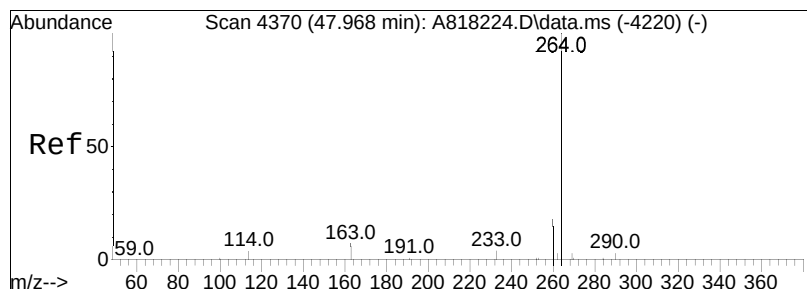
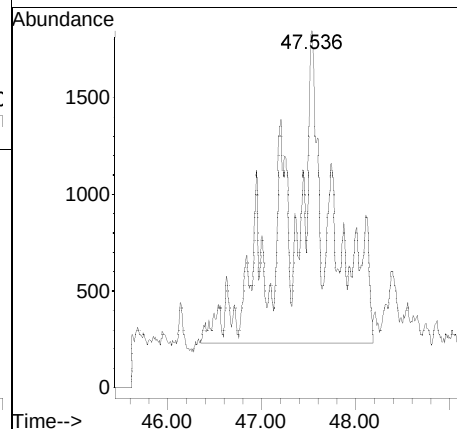
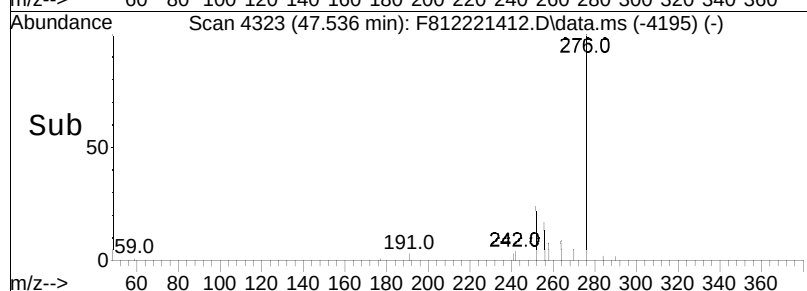
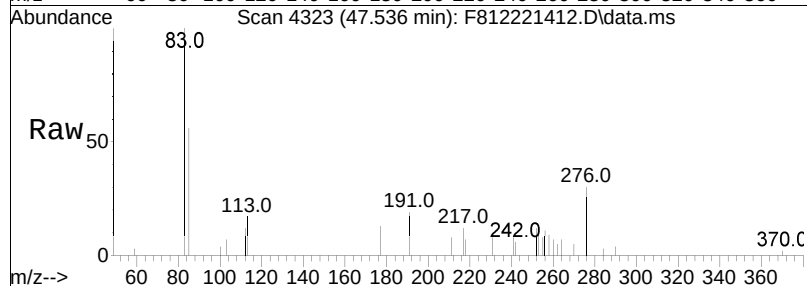
#71
 C2-Naphthobenzothiophenes
 Concen: 696.78 ng/ml M5
 RT: 45.927 min Scan# 4147
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am
 Tgt Ion:262 Resp: 75502





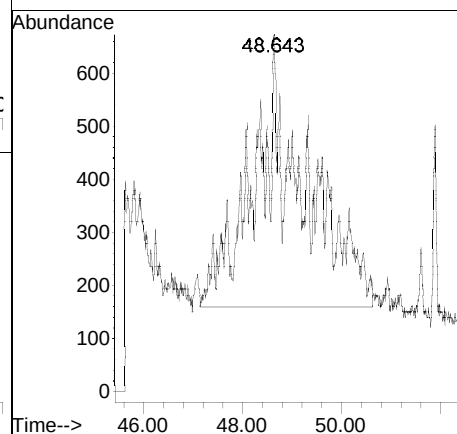
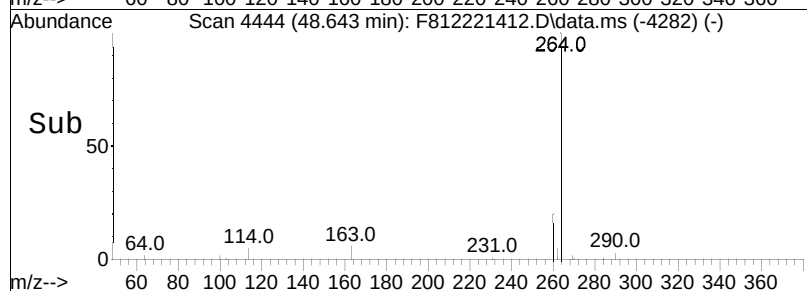
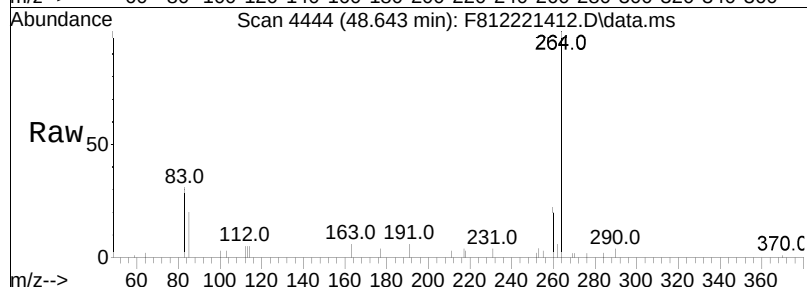
#72
 C3-Naphthobenzothiophenes
 Concen: 456.38 ng/ml M5
 RT: 47.536 min Scan# 4323
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

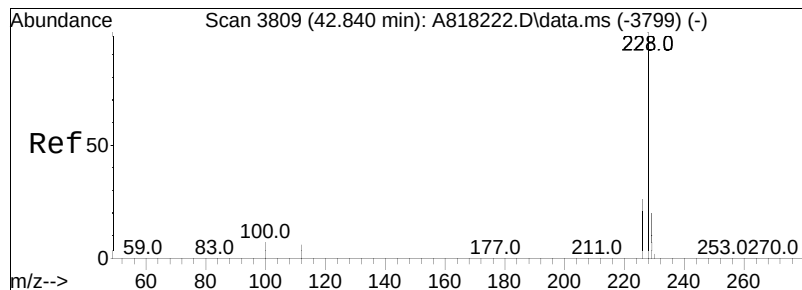
Tgt Ion:276 Resp: 49453



#73
 C4-Naphthobenzothiophenes
 Concen: 329.42 ng/mL M5
 RT: 48.643 min Scan# 4444
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

Tgt Ion:290 Resp: 35696





#75

Benz[a]anthracene

Concen: 11.83 ng/mL M3

RT: 43.461 min Scan# 3877

Delta R.T. 0.018 min

Lab File: F812221412.D

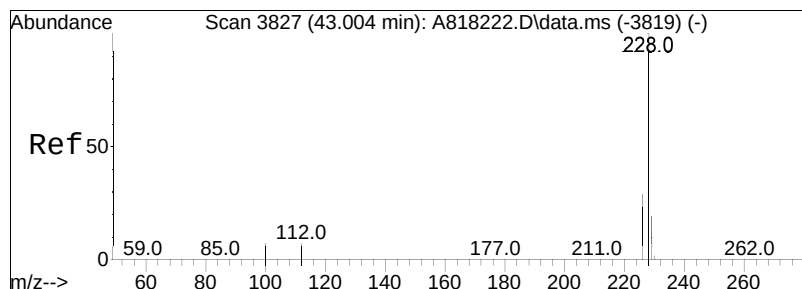
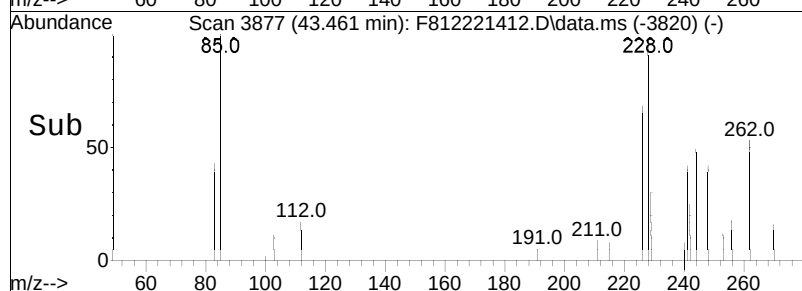
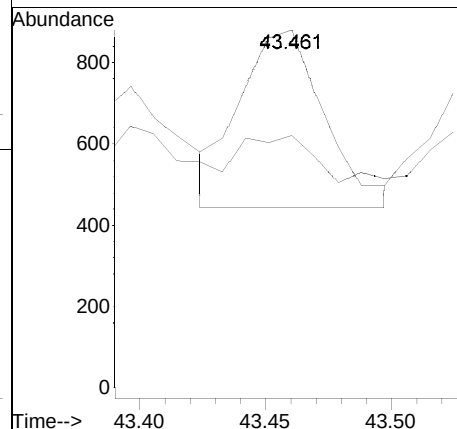
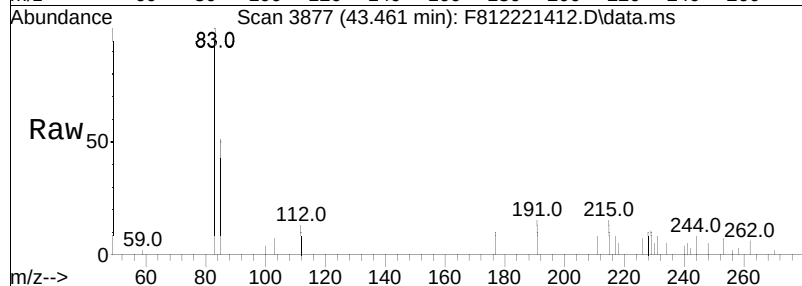
Acq: 24 Dec 2014 3:47 am

Tgt Ion:228 Resp: 1020

Ion Ratio Lower Upper

228 100

226 483.1 19.0 35.4#



#76

Chrysene

Concen: 187.22 ng/mL M4

RT: 43.598 min Scan# 3892

Delta R.T. -0.009 min

Lab File: F812221412.D

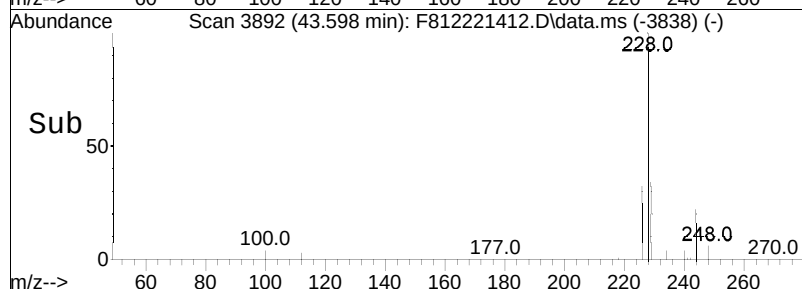
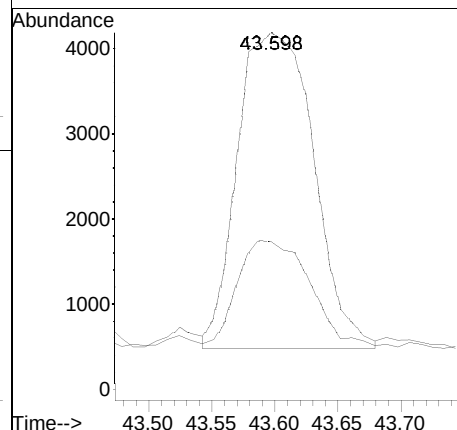
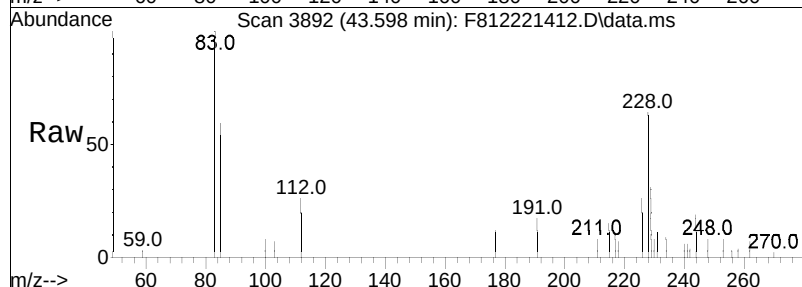
Acq: 24 Dec 2014 3:47 am

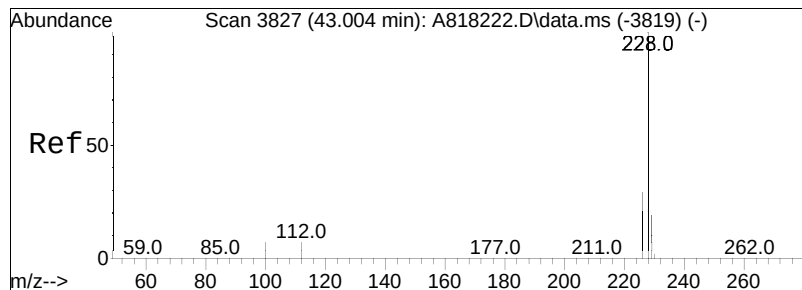
Tgt Ion:228 Resp: 15456

Ion Ratio Lower Upper

228 100

226 32.8 20.7 38.5





#77

Chrysene/Triphenylene

Concen: 188.71 ng/mL M4

RT: 43.598 min Scan# 3892

Delta R.T. -0.009 min

Lab File: F812221412.D

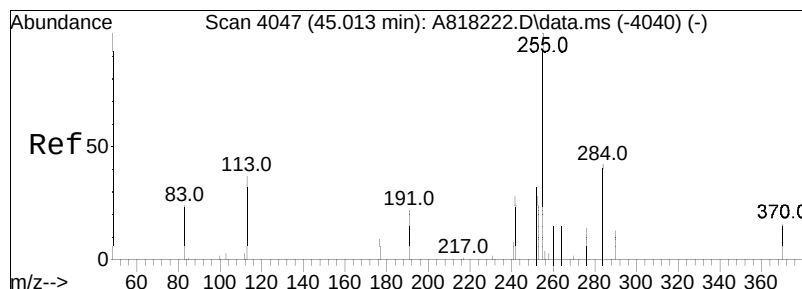
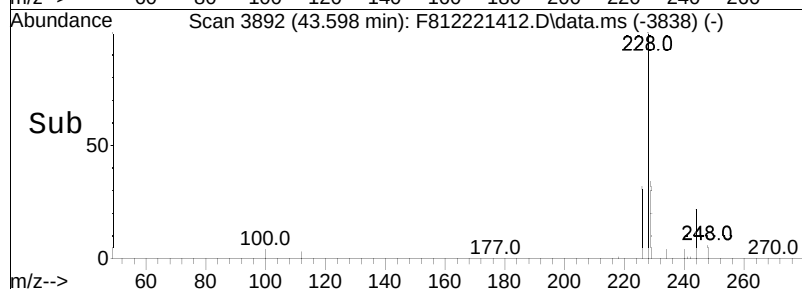
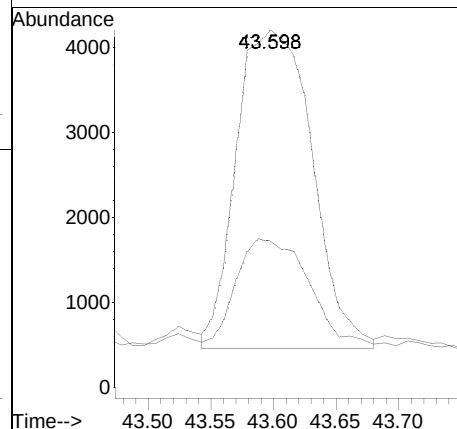
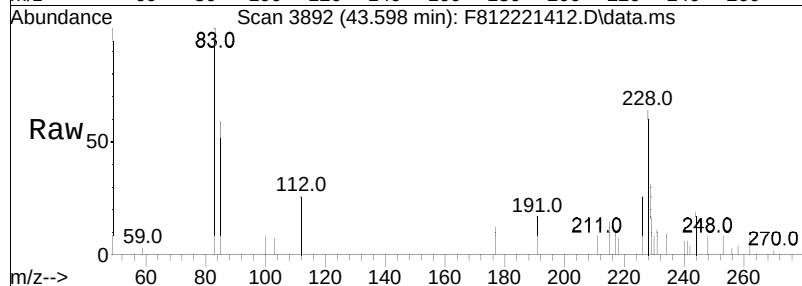
Acq: 24 Dec 2014 3:47 am

Tgt Ion:228 Resp: 15579

Ion Ratio Lower Upper

228 100

226 32.6 20.7 38.5



#78

C1-Chrysenes

Concen: 401.89 ng/mL M5

RT: 45.086 min Scan# 4055

Delta R.T. 0.000 min

Lab File: F812221412.D

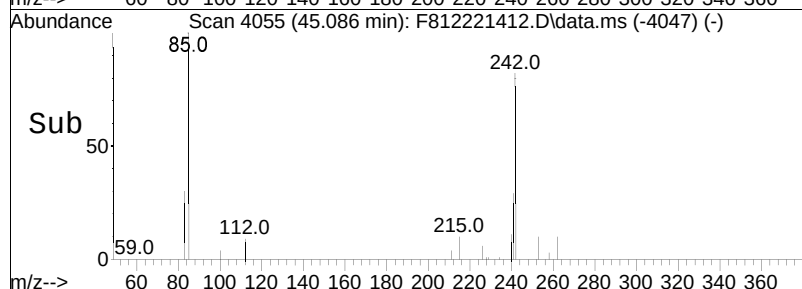
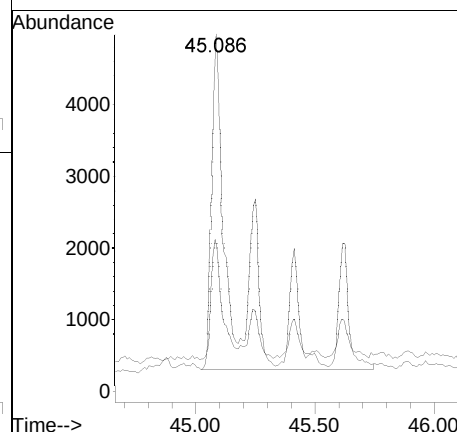
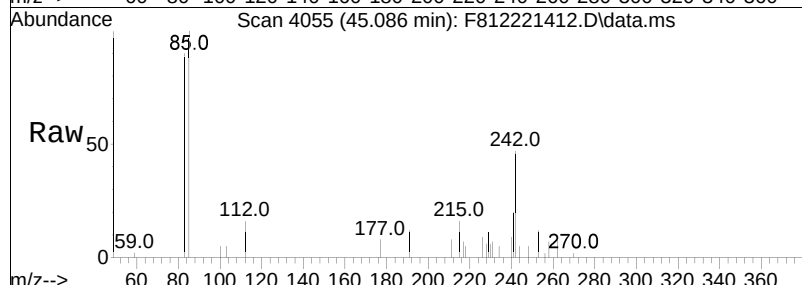
Acq: 24 Dec 2014 3:47 am

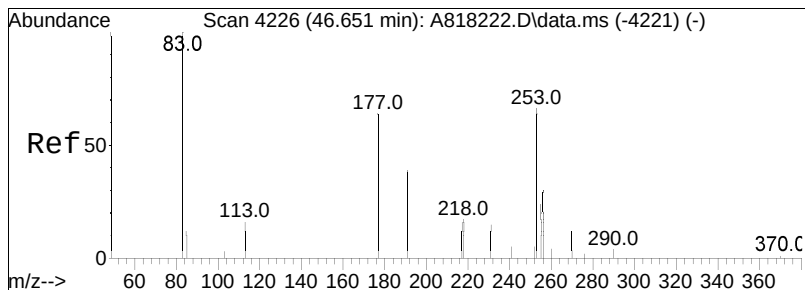
Tgt Ion:242 Resp: 33177

Ion Ratio Lower Upper

242 100

241 12.1 29.8 55.4#





#79

C2-Chrysenes

Concen: 442.88 ng/mL M5

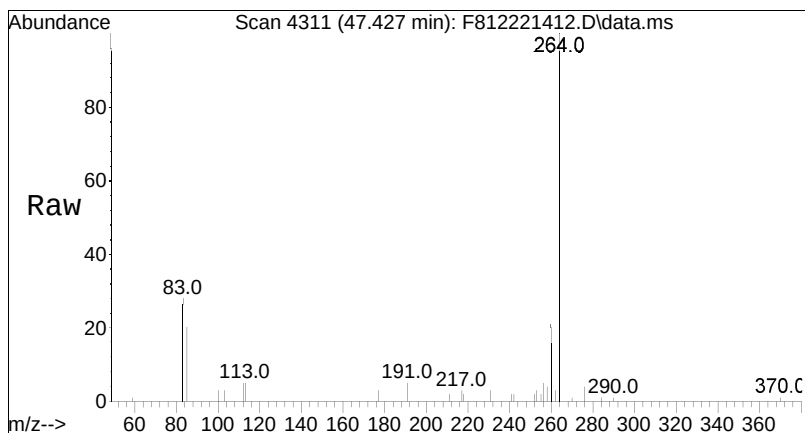
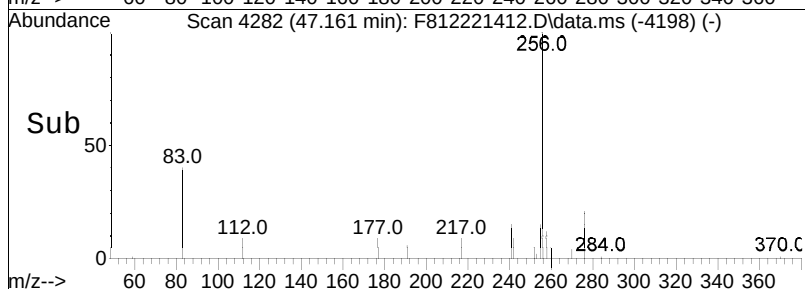
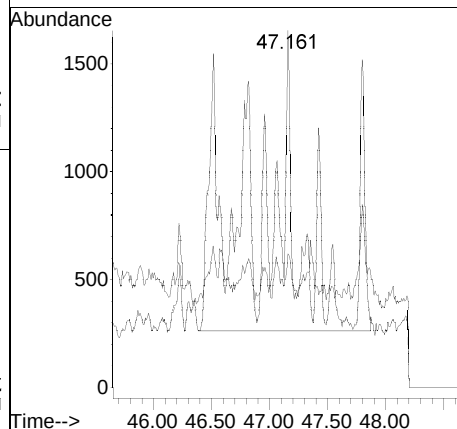
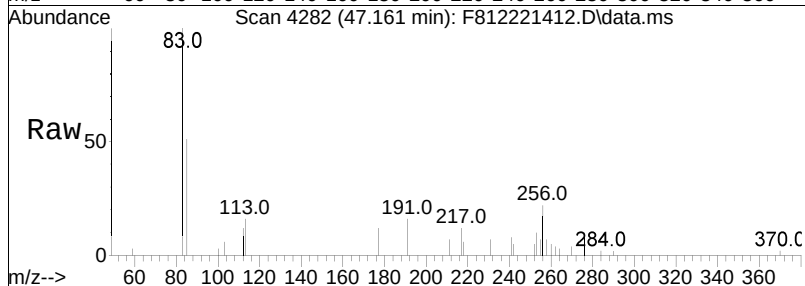
RT: 47.161 min Scan# 4282

Delta R.T. 0.000 min

Lab File: F812221412.D

Acq: 24 Dec 2014 3:47 am

Tgt Ion	Ratio	Lower	Upper
256	100		
241	0.7	26.2	48.8#



#80

BBF-D12 Surr BKGD

Concen: 27.81 ng/mL

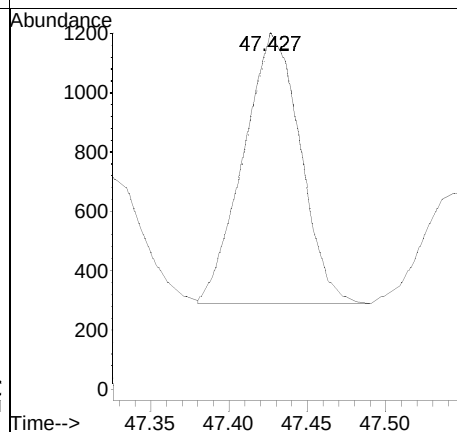
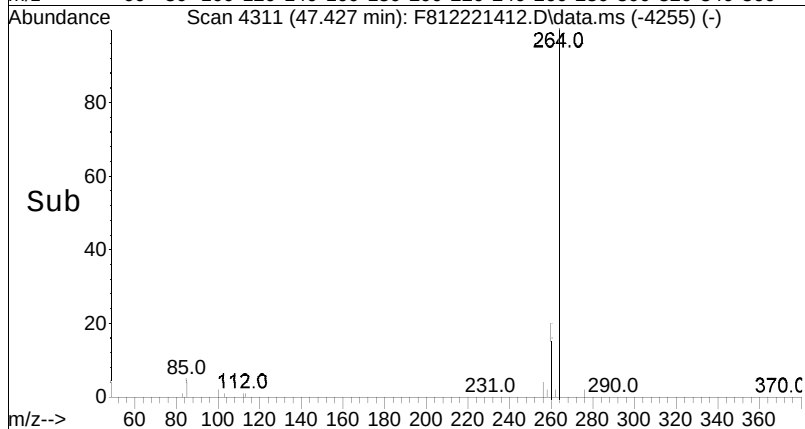
RT: 47.427 min Scan# 4311

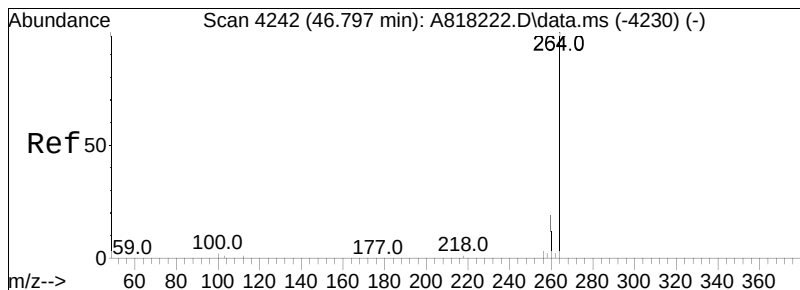
Delta R.T. 0.009 min

Lab File: F812221412.D

Acq: 24 Dec 2014 3:47 am

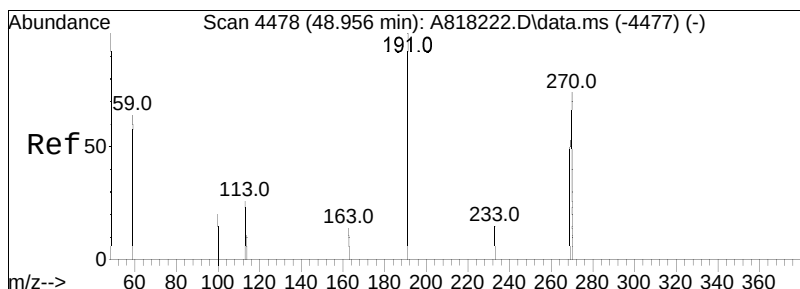
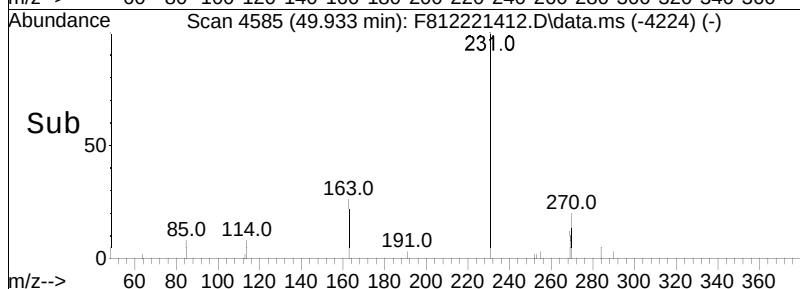
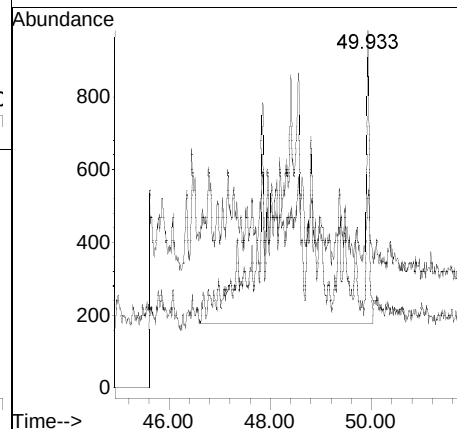
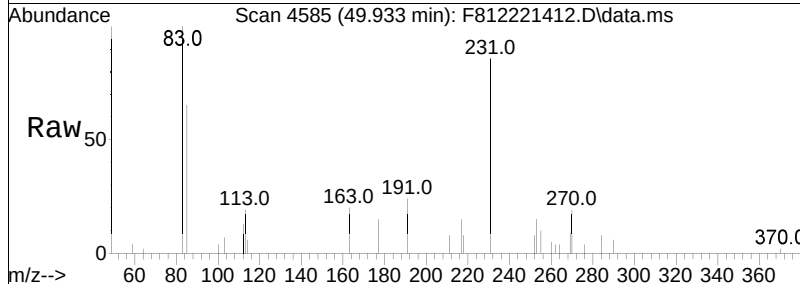
Tgt Ion	Ratio	Lower	Upper
256	100		
2296			





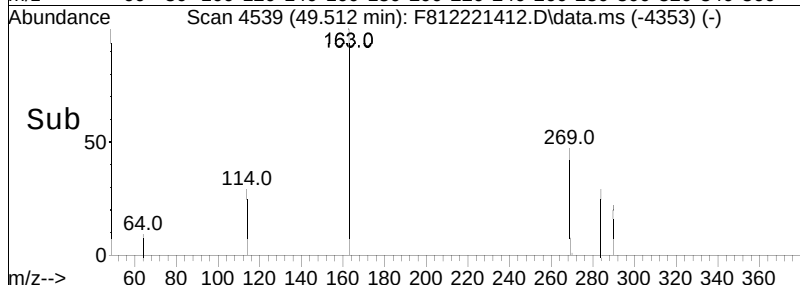
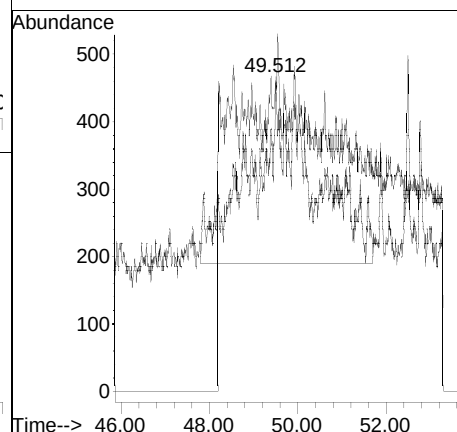
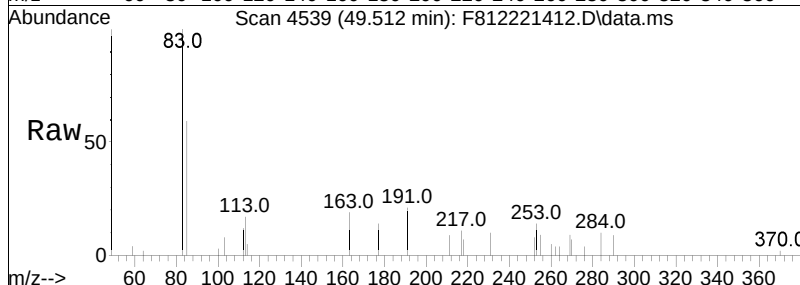
#81
C3-Chrysenes
Concen: 489.68 ng/mL M5
RT: 49.933 min Scan# 4585
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

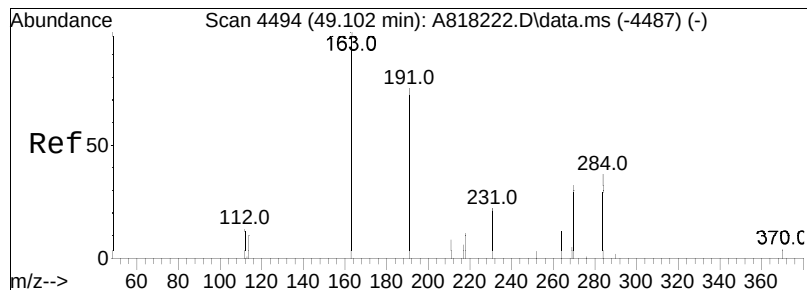
Tgt Ion: 270 Resp: 40425
Ion Ratio Lower Upper
270 100
255 0.5 37.6 69.8#



#82
C4-Chrysenes
Concen: 320.01 ng/mL M5
RT: 49.512 min Scan# 4539
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

Tgt Ion: 284 Resp: 26418
Ion Ratio Lower Upper
284 100
269 0.0 64.5 119.7#





#84

Benzo[b]fluoranthene

Concen: 23.29 ng/mL M4

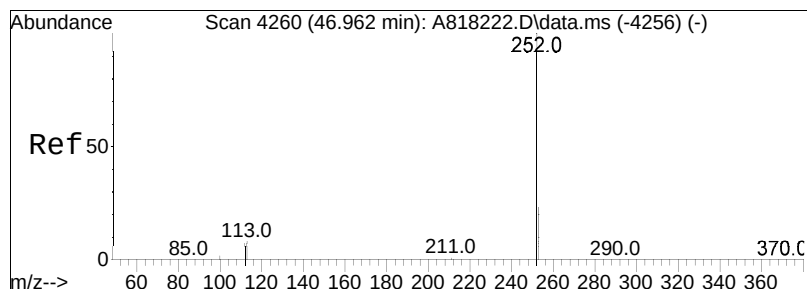
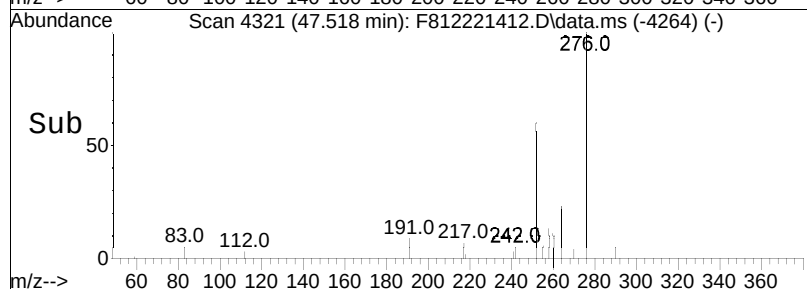
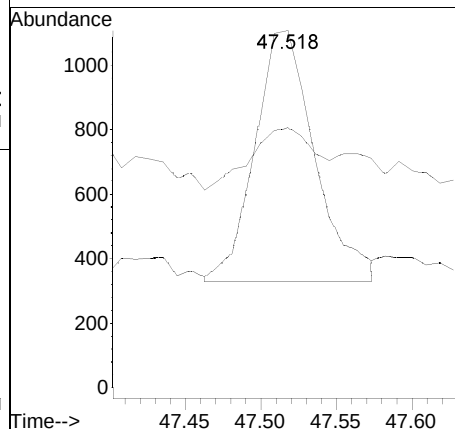
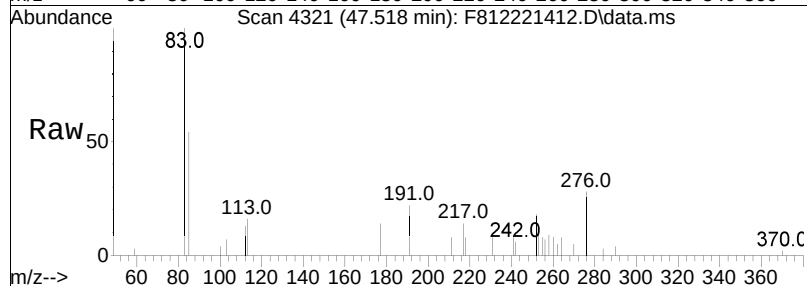
RT: 47.518 min Scan# 4321

Delta R.T. 0.018 min

Lab File: F812221412.D

Acq: 24 Dec 2014 3:47 am

Tgt Ion	Ratio	Lower	Upper
252	100		
253	27.0	16.5	30.7



#87

Benzo[e]pyrene

Concen: 43.61 ng/mL M4

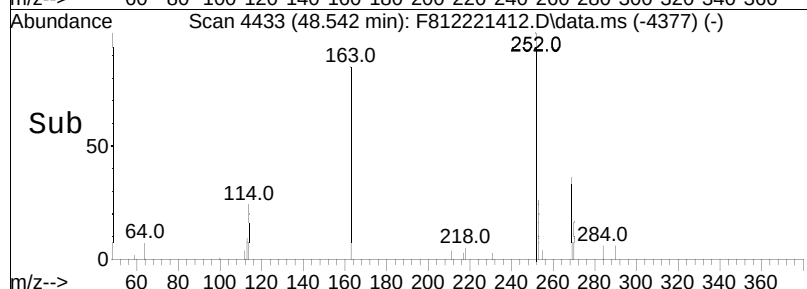
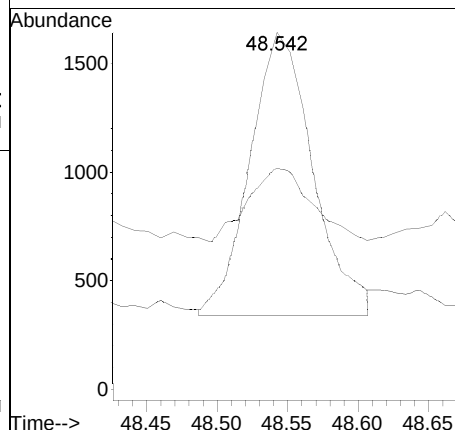
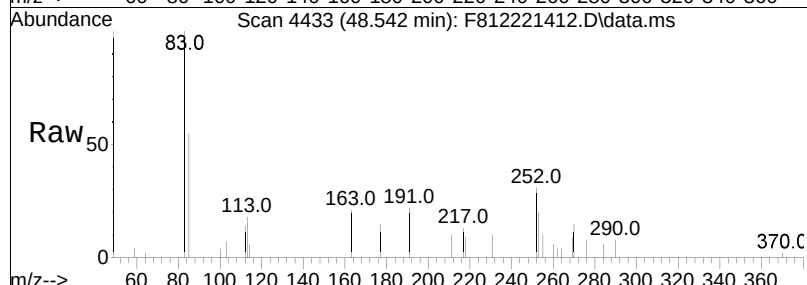
RT: 48.542 min Scan# 4433

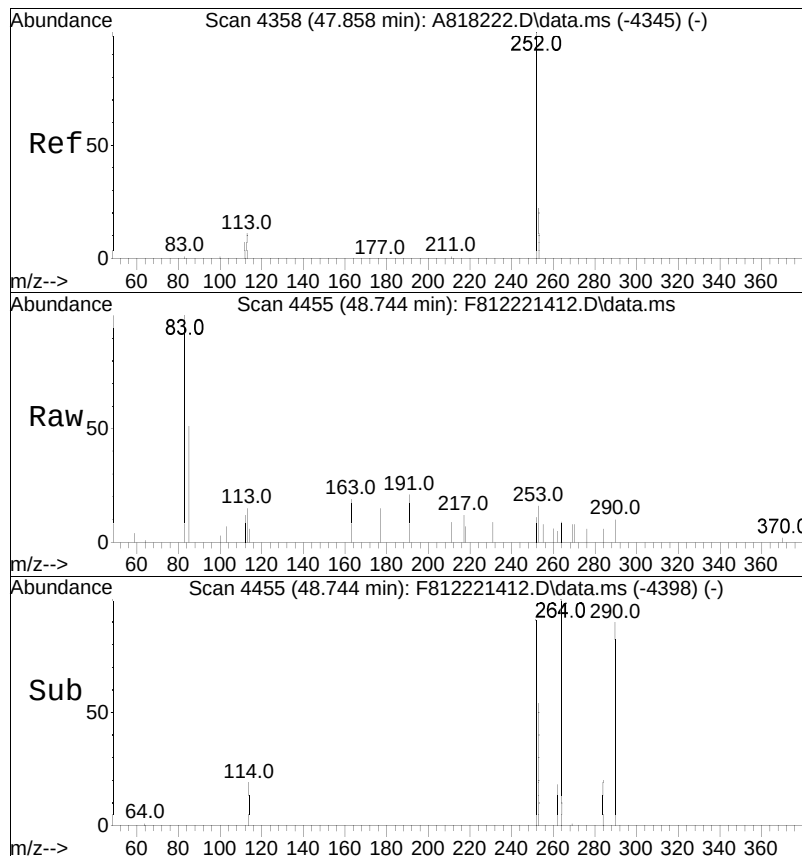
Delta R.T. 0.009 min

Lab File: F812221412.D

Acq: 24 Dec 2014 3:47 am

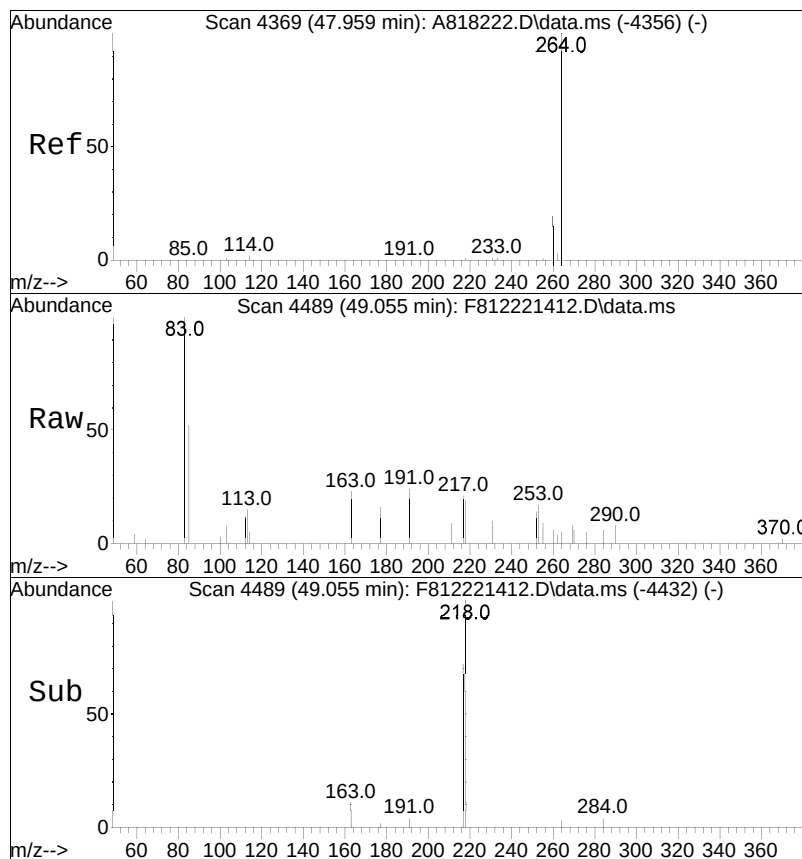
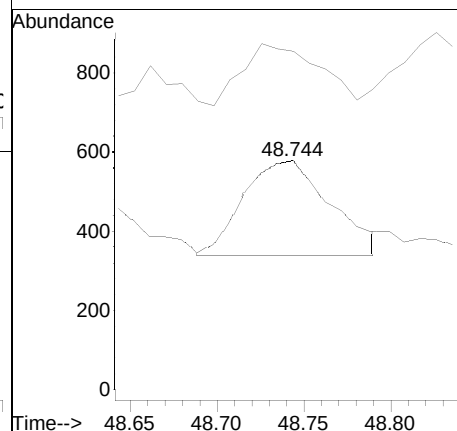
Tgt Ion	Ratio	Lower	Upper
252	100		
253	28.0	17.4	32.4





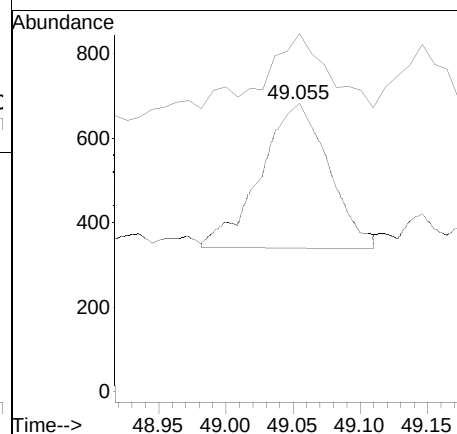
#89
Benzo[a]pyrene
Concen: 9.73 ng/mL M3
RT: 48.744 min Scan# 4455
Delta R.T. 0.018 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

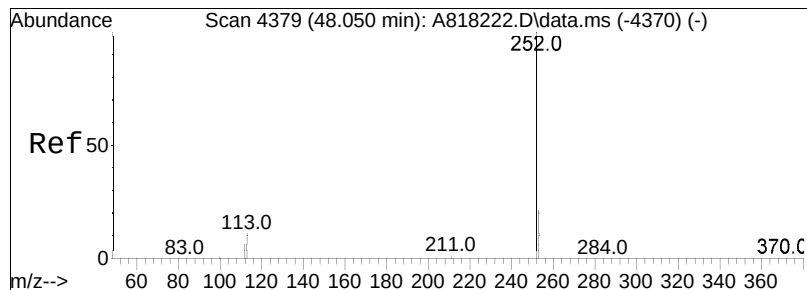
Tgt Ion: 252 Resp: 829
Ion Ratio Lower Upper
252 100
253 135.5 16.9 31.3#



#90
Perylene
Concen: 13.59 ng/mL
RT: 49.055 min Scan# 4489
Delta R.T. 0.018 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

Tgt Ion: 252 Resp: 1216
Ion Ratio Lower Upper
252 100
253 40.7 17.3 32.1#





#91

Indeno[1,2,3-cd]pyrene

Concen: 2.76 ng/mL M4

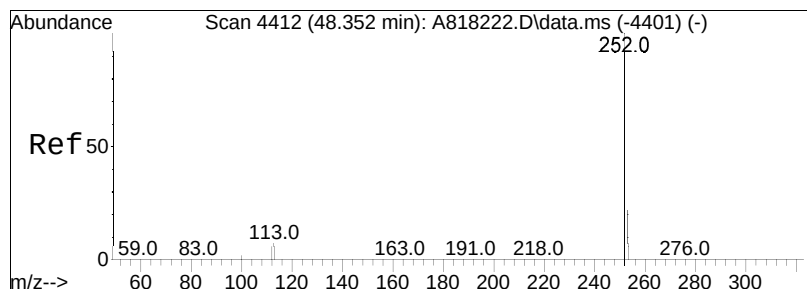
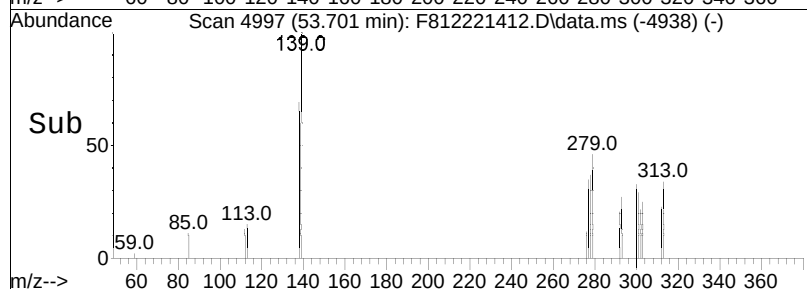
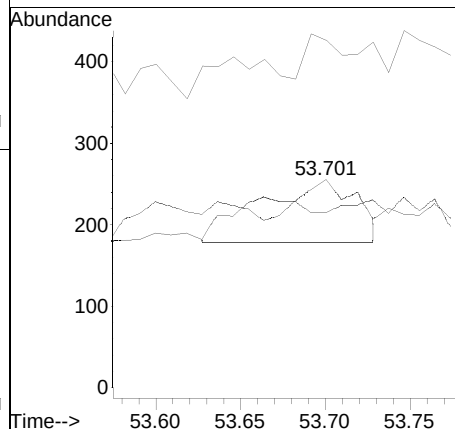
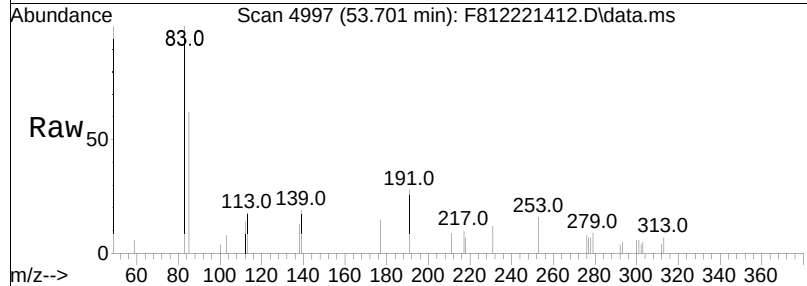
RT: 53.701 min Scan# 4997

Delta R.T. 0.037 min

Lab File: F812221412.D

Acq: 24 Dec 2014 3:47 am

Tgt Ion:	276	Resp:	301
Ion Ratio	Lower	Upper	
276	100		
138	0.0	19.3	35.9#
277	0.0	16.5	30.7#



#92

Dibenz[ah]+[ac]anthracene

Concen: 4.77 ng/mL M4

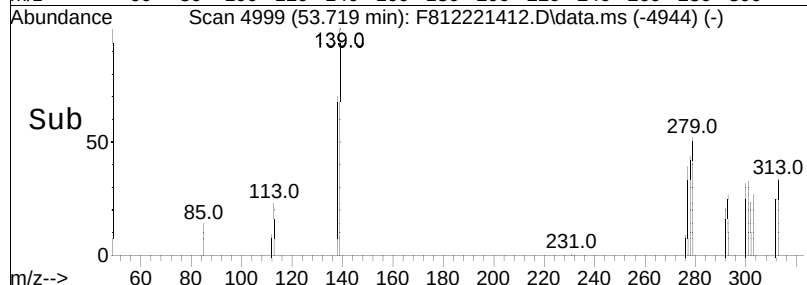
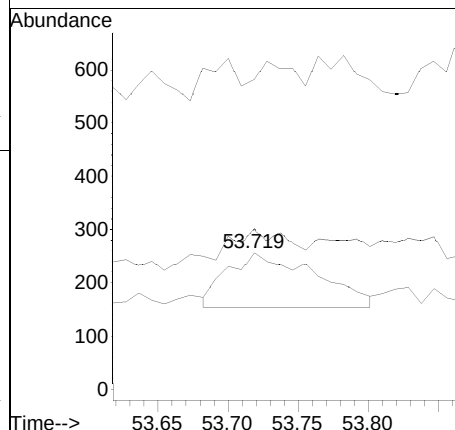
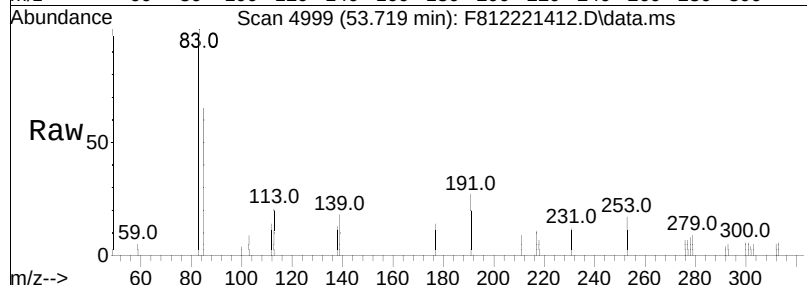
RT: 53.719 min Scan# 4999

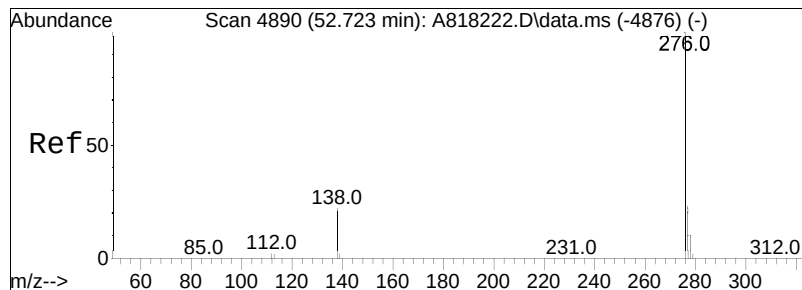
Delta R.T. 0.000 min

Lab File: F812221412.D

Acq: 24 Dec 2014 3:47 am

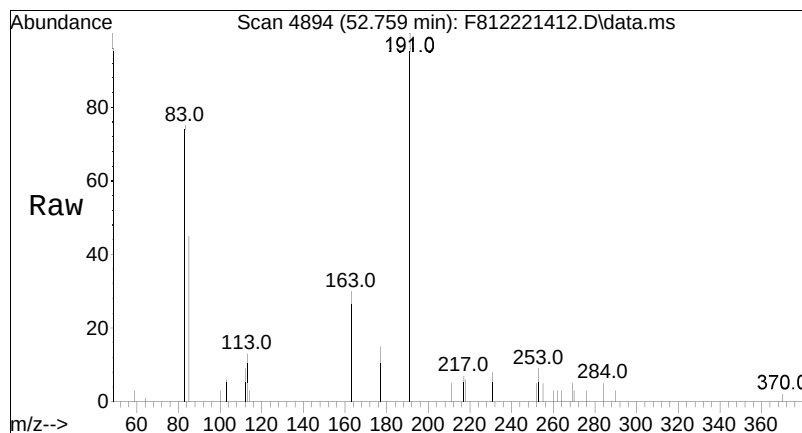
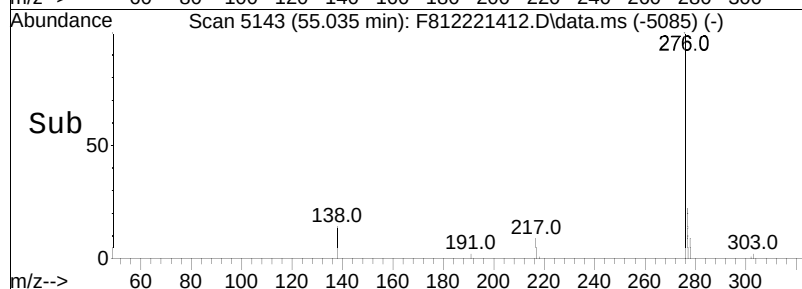
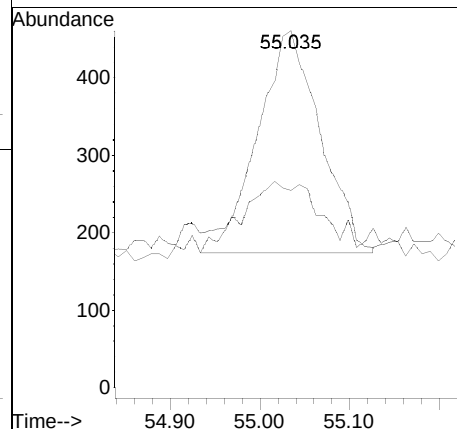
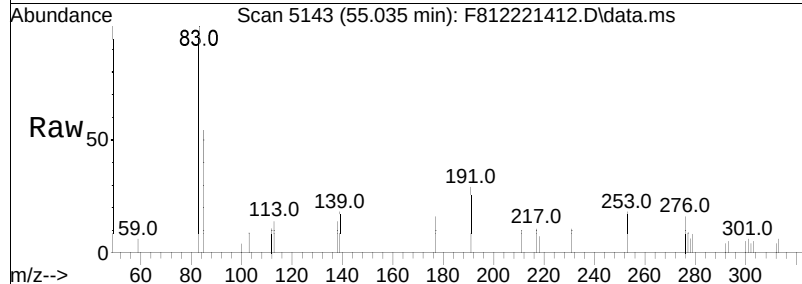
Tgt Ion:	278	Resp:	440
Ion Ratio	Lower	Upper	
278	100		
139	0.0	16.8	31.2#
279	0.0	17.2	32.0#





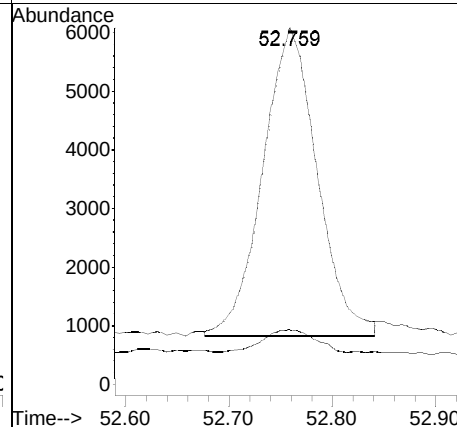
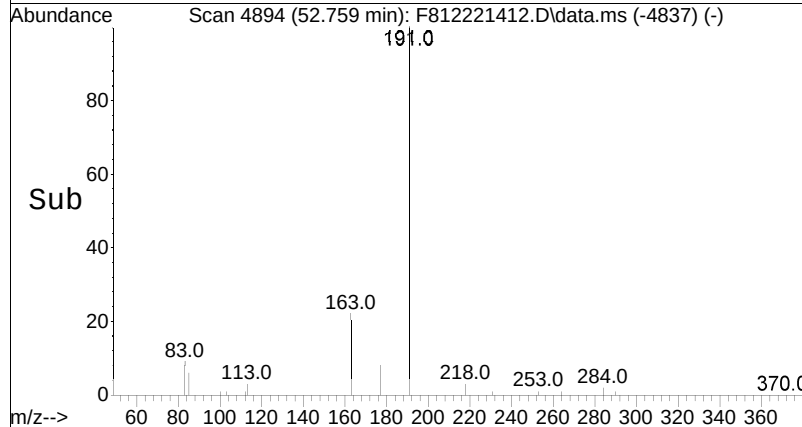
#93
 Benzo[g,h,i]perylene
 Concen: 13.37 ng/mL
 RT: 55.035 min Scan# 5143
 Delta R.T. 0.027 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

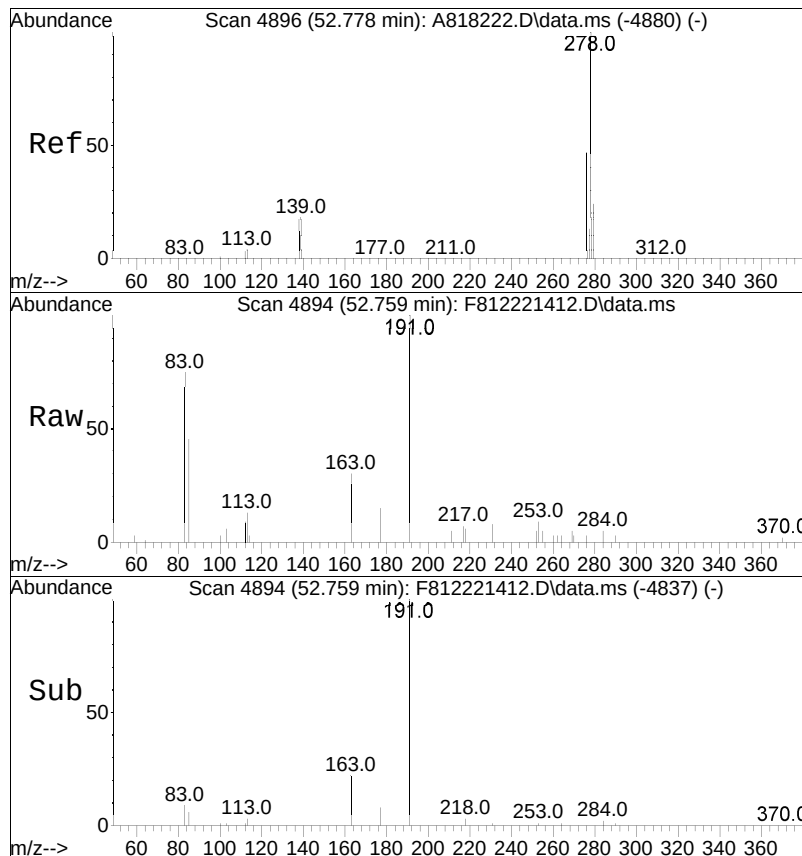
Tgt Ion	Ratio	Lower	Upper
276	100		
277	29.7	16.5	30.7



#94
 Hopane (T19)
 Concen: 613.60 ng/mL M3
 RT: 52.759 min Scan# 4894
 Delta R.T. 0.018 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

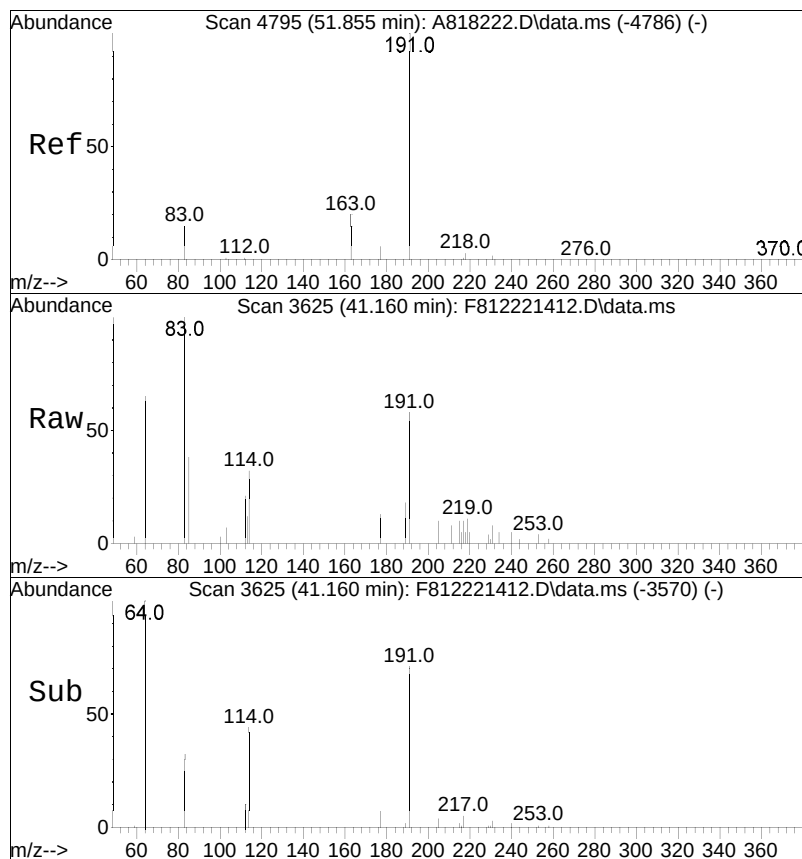
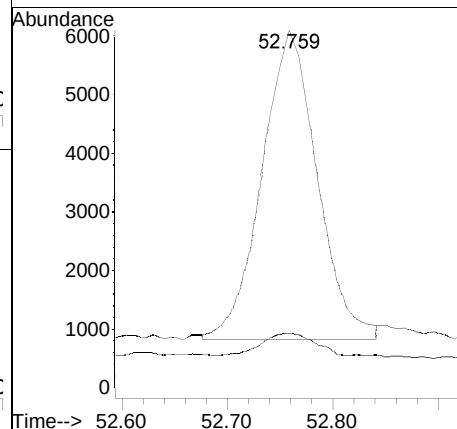
Tgt Ion	Ratio	Lower	Upper
191	100		
177	0.9	10.1	18.9#





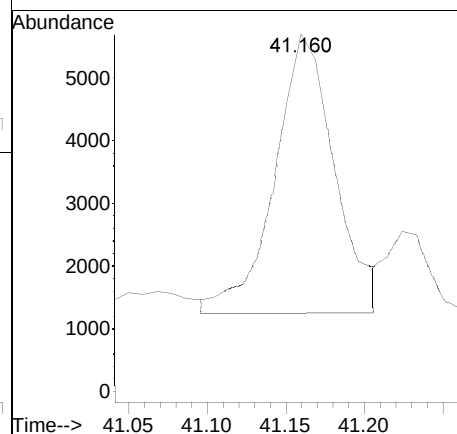
#95
 17a(H),21B(H)-hopane - C₃₀H₅₂
 Concen: 612.34 ng/mL M3
 RT: 52.759 min Scan# 4894
 Delta R.T. 0.018 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

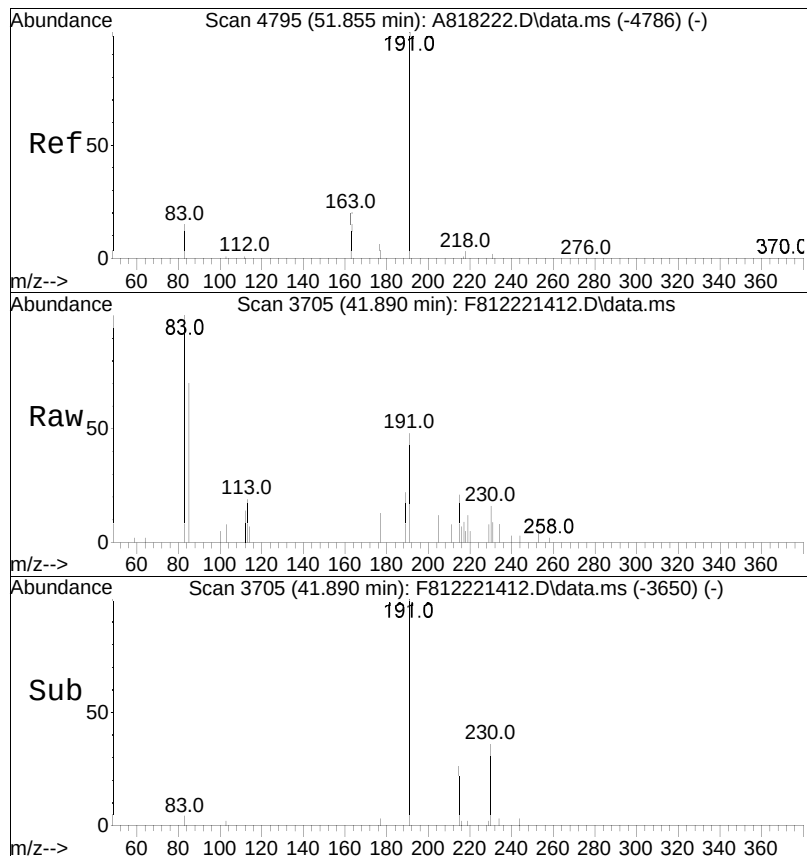
Tgt Ion:191 Resp: 19078
 Ion Ratio Lower Upper
 191 100
 177 0.9 10.1 18.9#



#96
 C23 Tricyclic Terpene (T4)
 Concen: 378.87 ng/mL
 RT: 41.160 min Scan# 3625
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

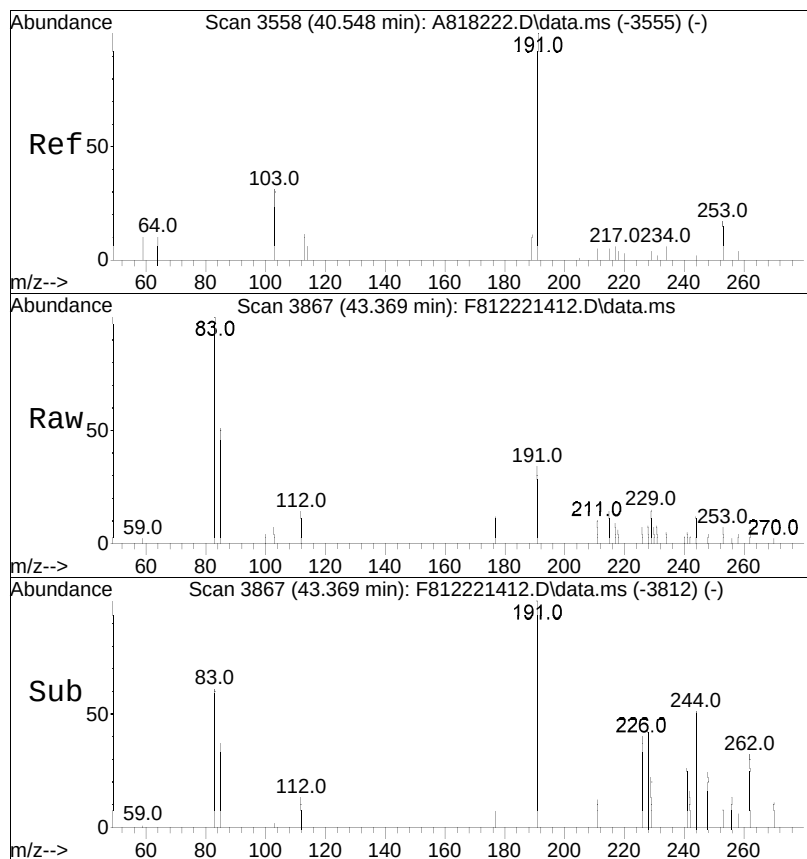
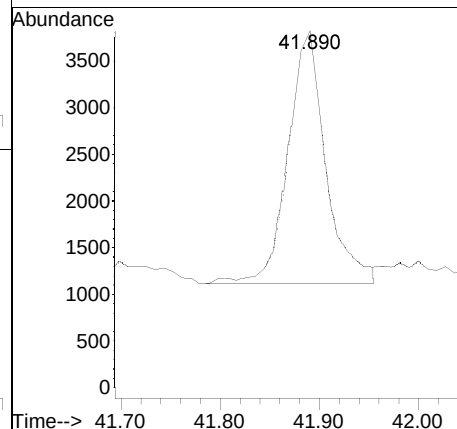
Tgt Ion:191 Resp: 11804





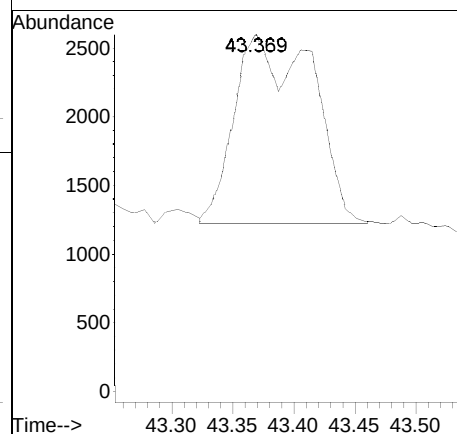
#97
C24 Tricyclic Terpene (T5)
Concen: 229.81 ng/ml
RT: 41.890 min Scan# 3705
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

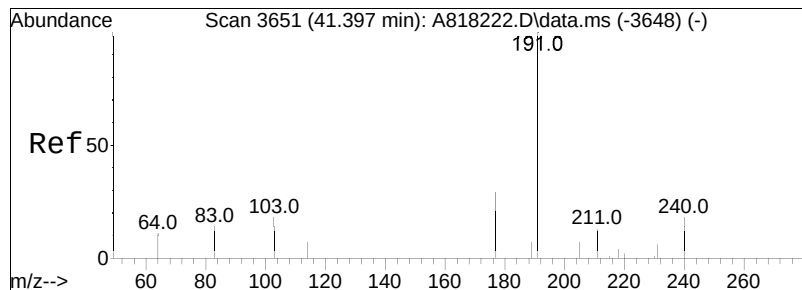
Tgt Ion:191 Resp: 7160



#98
C25 Tricyclic Terpene (T6)
Concen: 194.31 ng/ml M1
RT: 43.369 min Scan# 3867
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

Tgt Ion:191 Resp: 6054





#99

C24 Tetracyclic Terpane (T6a)

Concen: 75.84 ng/ml

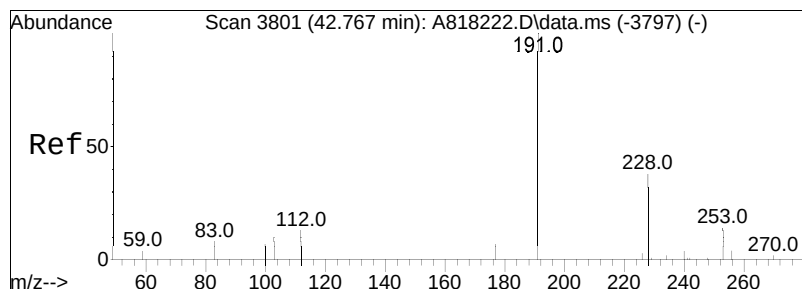
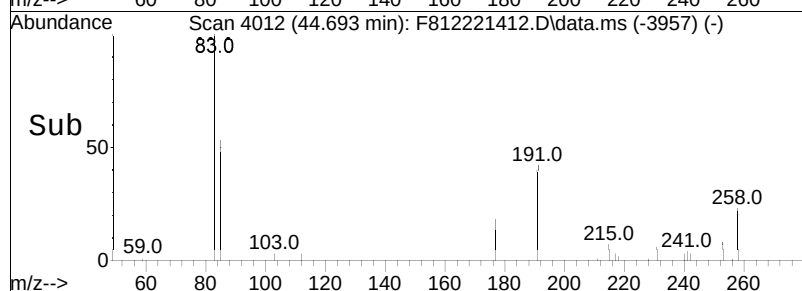
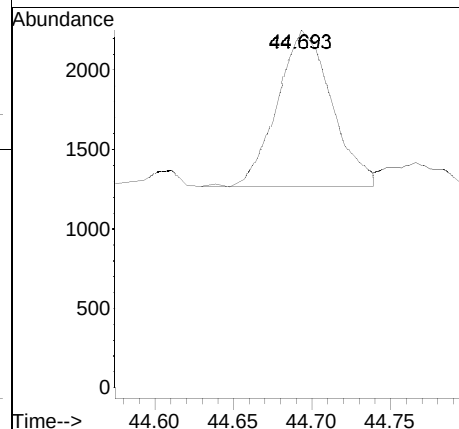
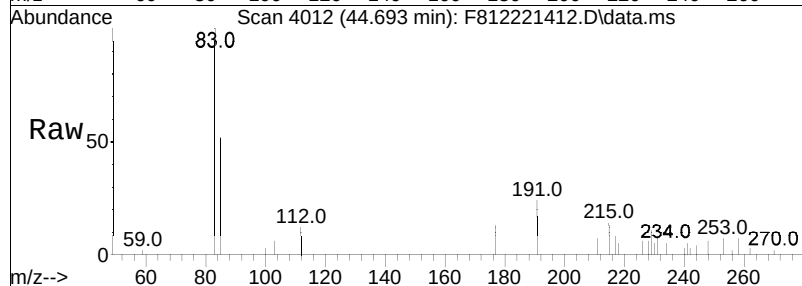
RT: 44.693 min Scan# 4012

Delta R.T. 0.000 min

Lab File: F812221412.D

Acq: 24 Dec 2014 3:47 am

Tgt Ion:191 Resp: 2363



#100

C26 Tricyclic Terpane-22S (T6b)

Concen: 84.25 ng/ml M4

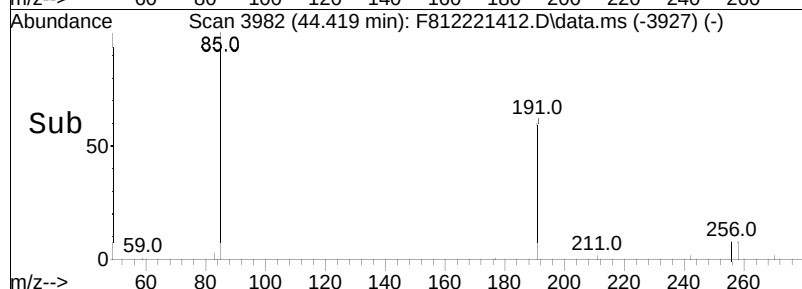
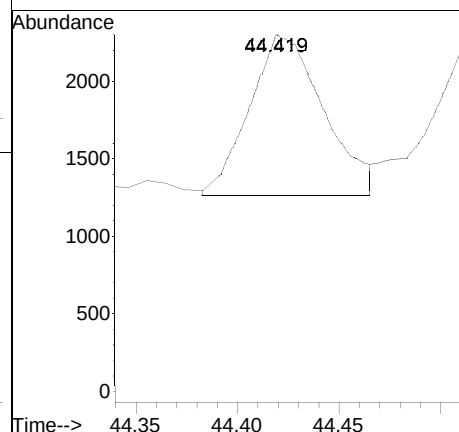
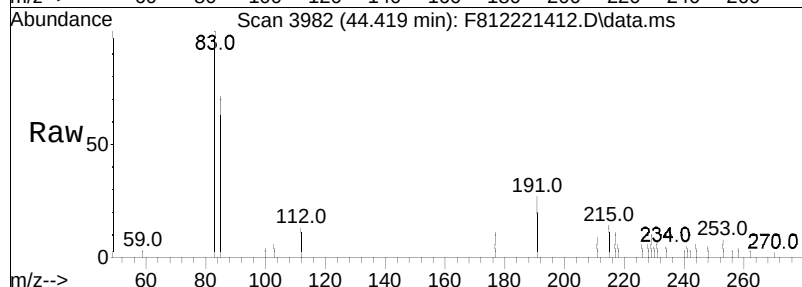
RT: 44.419 min Scan# 3982

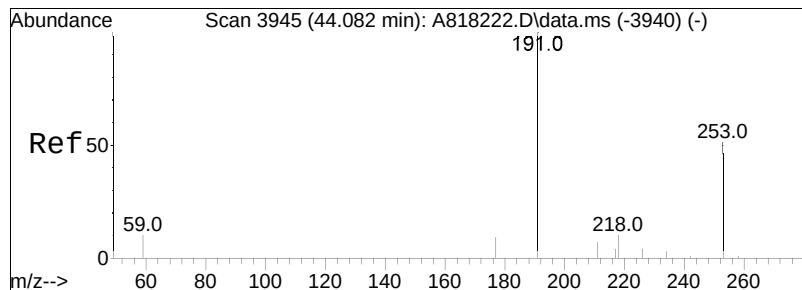
Delta R.T. 0.000 min

Lab File: F812221412.D

Acq: 24 Dec 2014 3:47 am

Tgt Ion:191 Resp: 2625





#101

C26 Tricyclic Terpene-22R (T6c)

Concen: 81.53 ng/ml M4

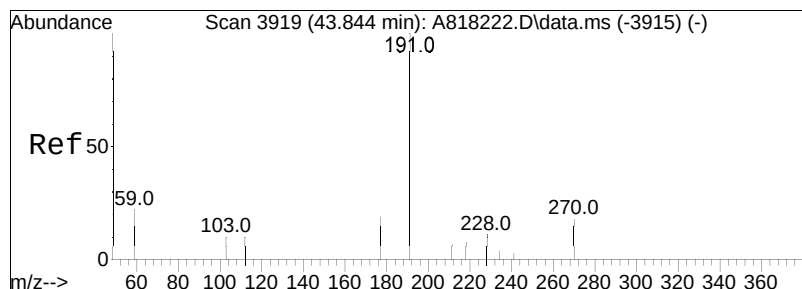
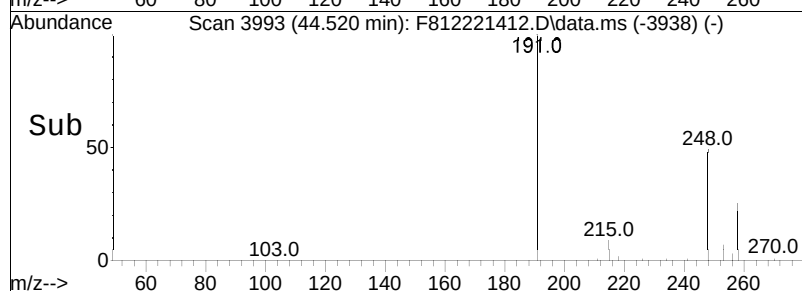
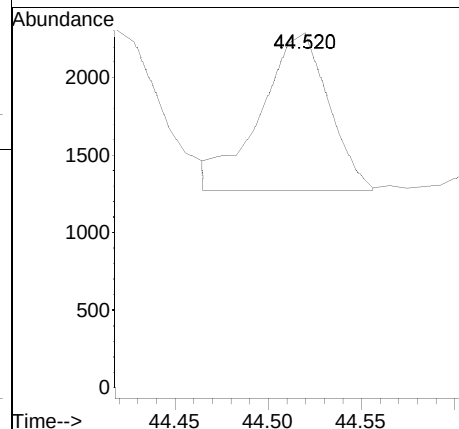
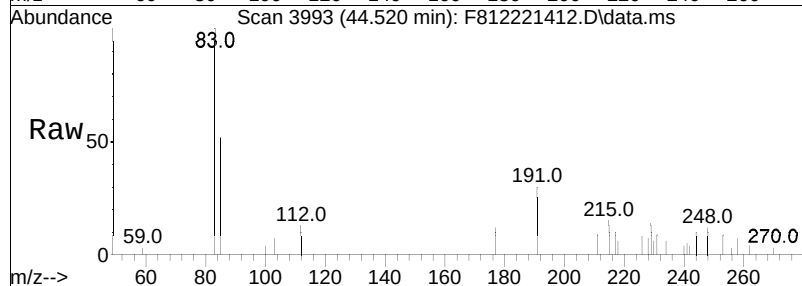
RT: 44.520 min Scan# 3993

Delta R.T. 0.000 min

Lab File: F812221412.D

Acq: 24 Dec 2014 3:47 am

Tgt Ion:191 Resp: 2540



#102

C28 Tricyclic Terpene-22S (T7)

Concen: 56.52 ng/ml M4

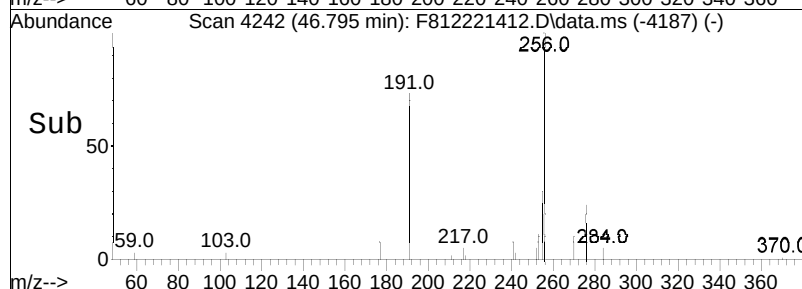
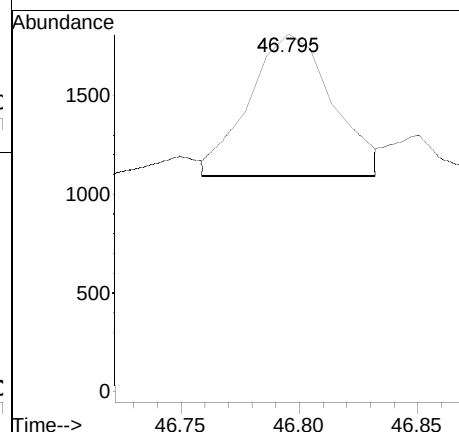
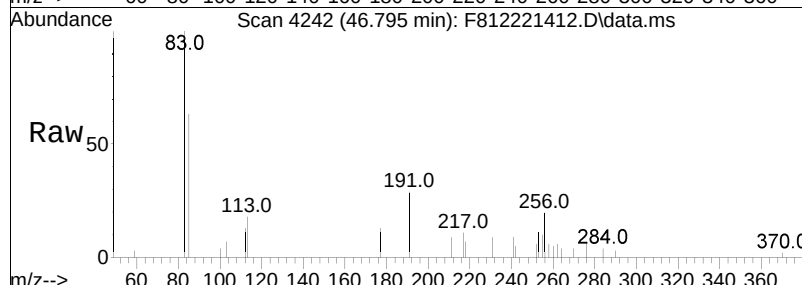
RT: 46.795 min Scan# 4242

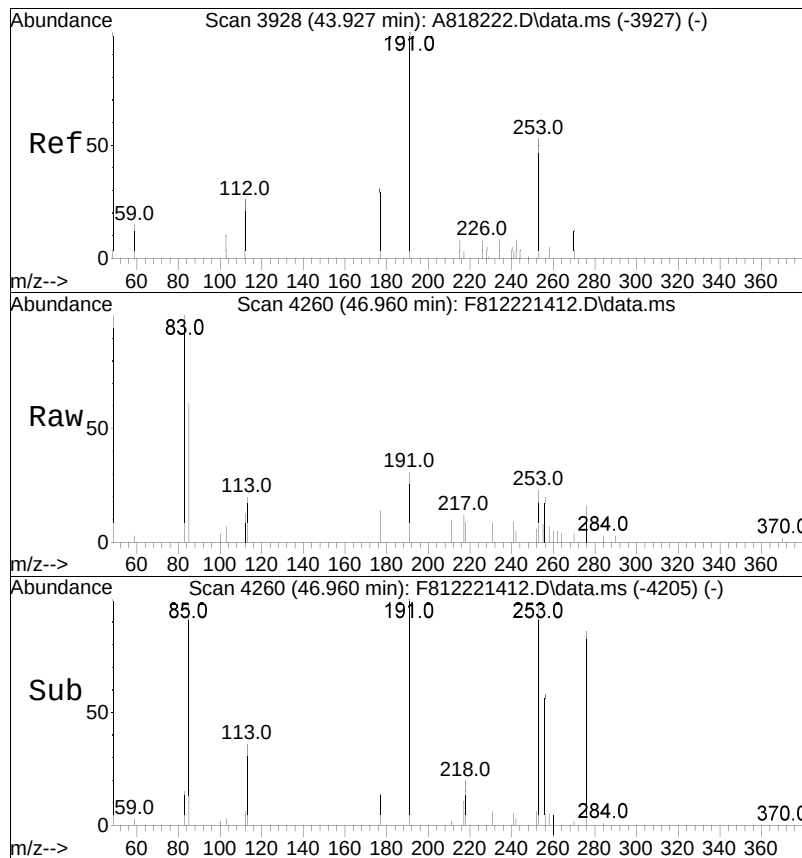
Delta R.T. 0.000 min

Lab File: F812221412.D

Acq: 24 Dec 2014 3:47 am

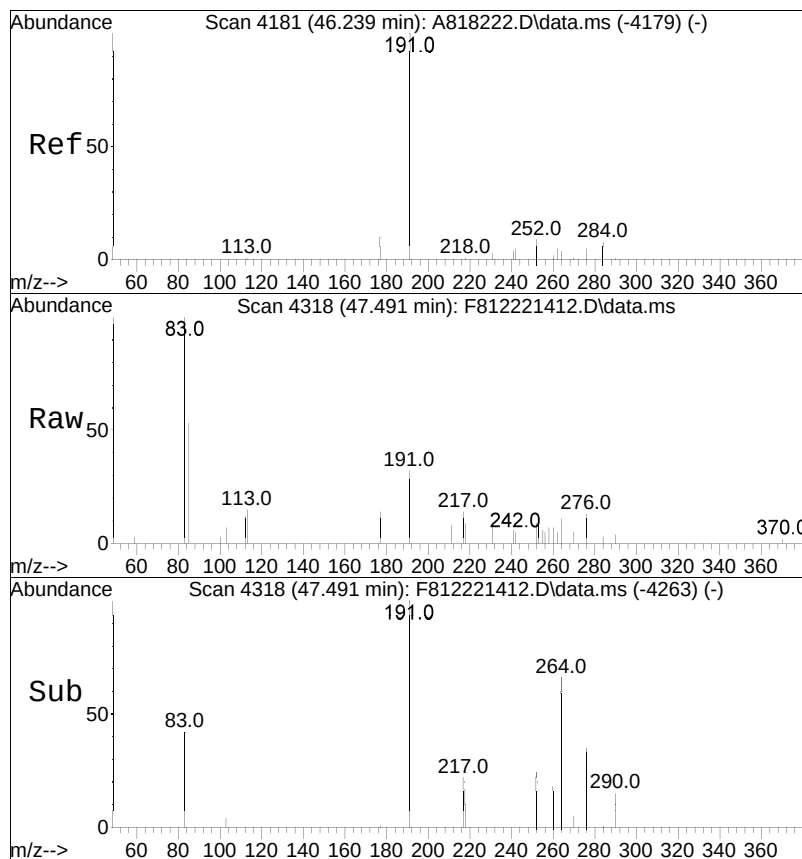
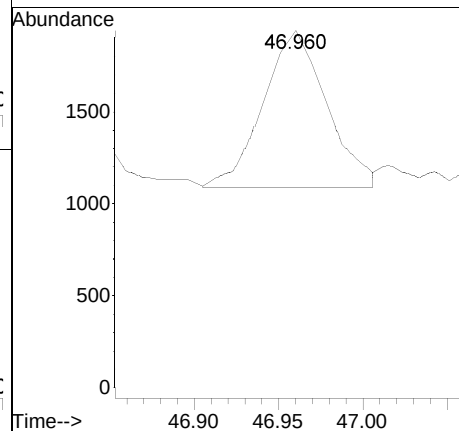
Tgt Ion:191 Resp: 1761





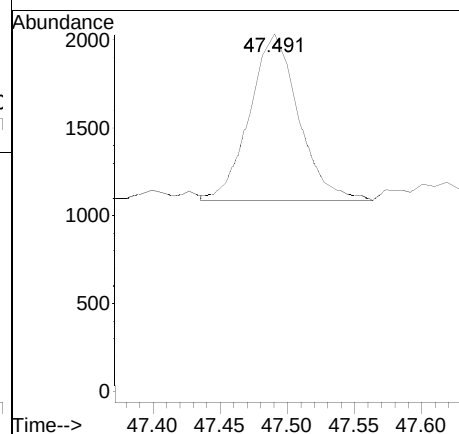
#103
C28 Tricyclic Terpene-22R (T8)
Concen: 72.03 ng/ml M4
RT: 46.960 min Scan# 4260
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

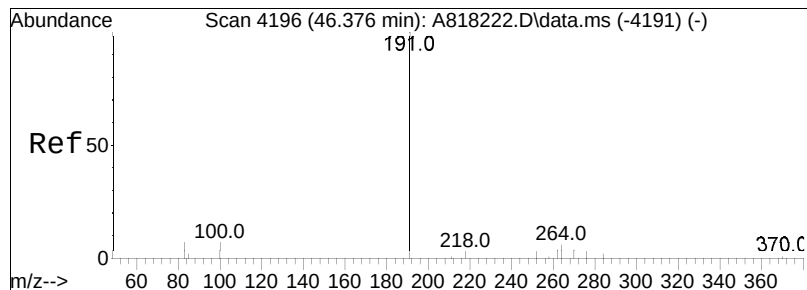
Tgt Ion:191 Resp: 2244



#104
C29 Tricyclic Terpene-22S (T9)
Concen: 76.58 ng/ml
RT: 47.491 min Scan# 4318
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

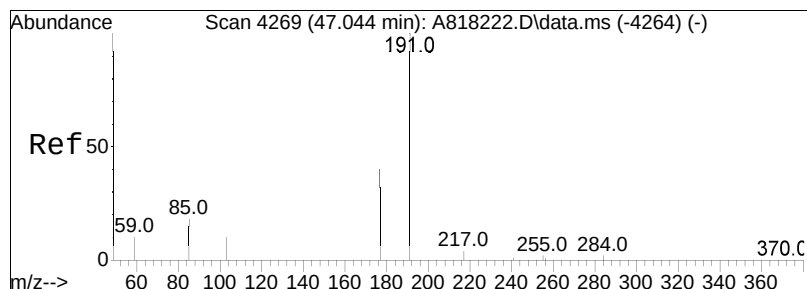
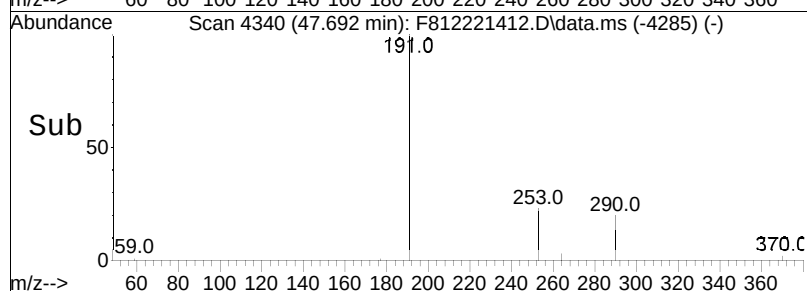
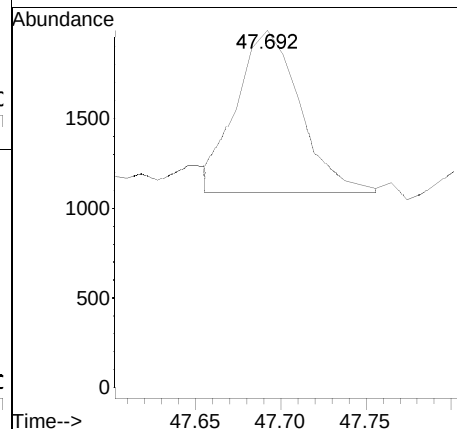
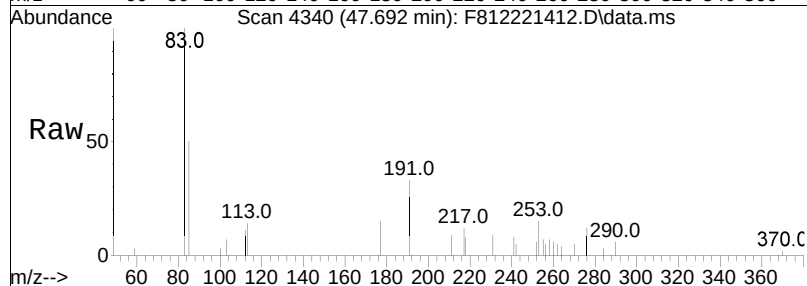
Tgt Ion:191 Resp: 2386





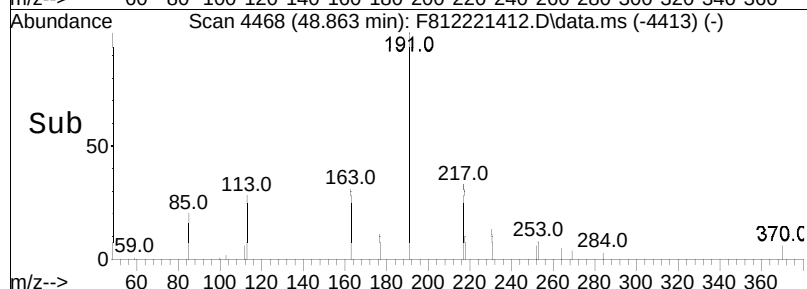
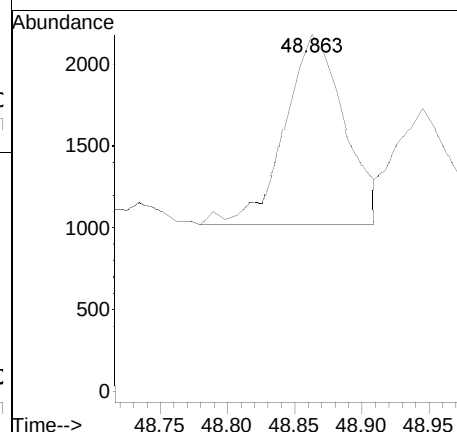
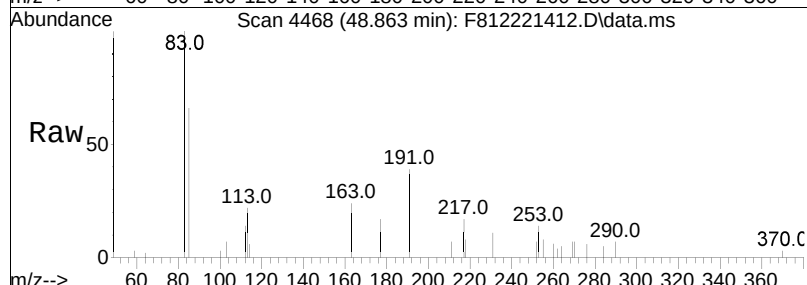
#105
C29 Tricyclic Terpene-22R (T10)
Concen: 74.98 ng/ml M4
RT: 47.692 min Scan# 4340
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

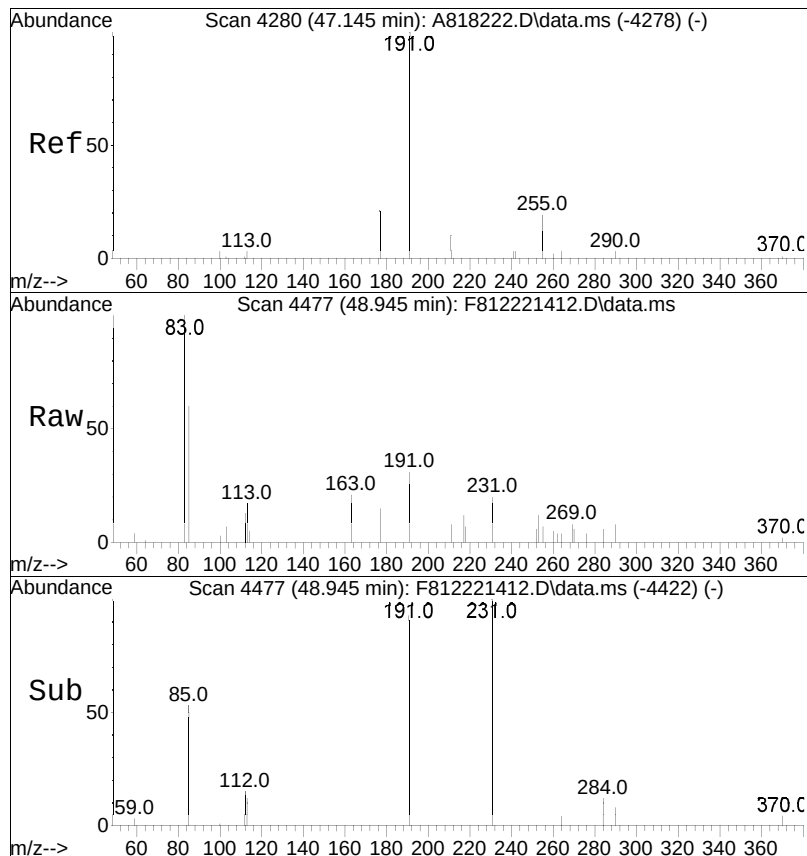
Tgt Ion:191 Resp: 2336



#106
18a-22,29,30-Trisnorneohopane-
Concen: 115.90 ng/ml
RT: 48.863 min Scan# 4468
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

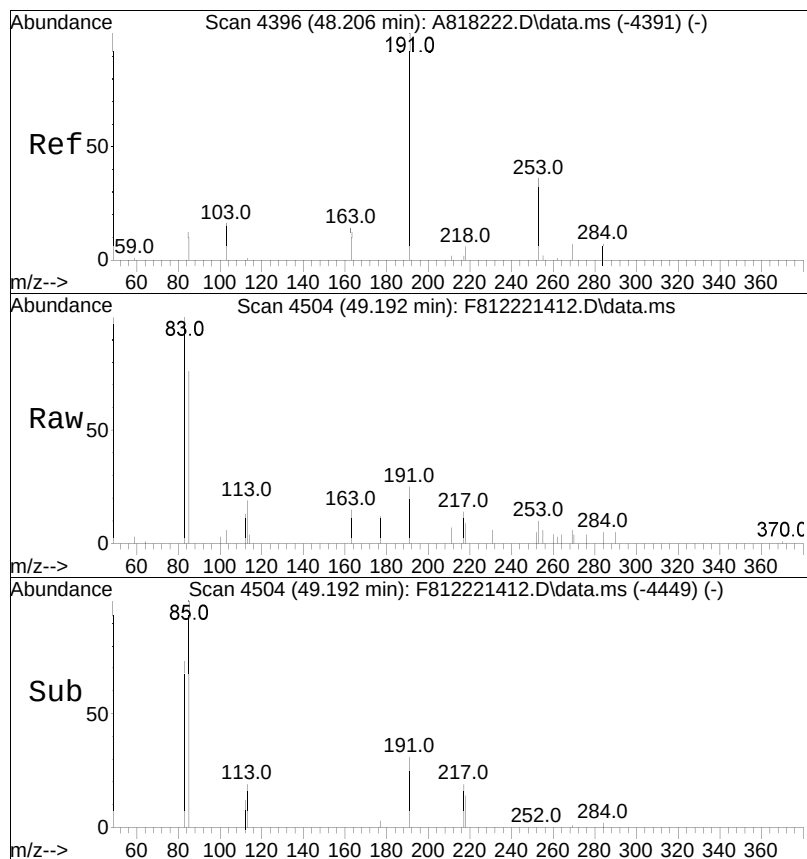
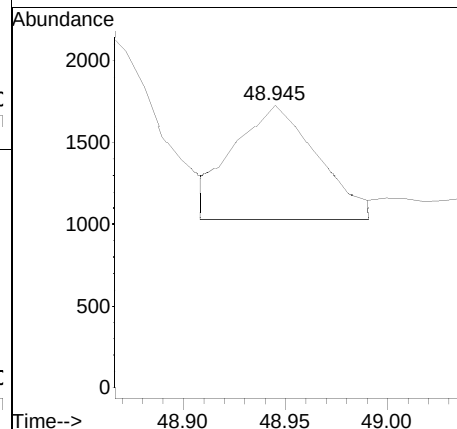
Tgt Ion:191 Resp: 3611





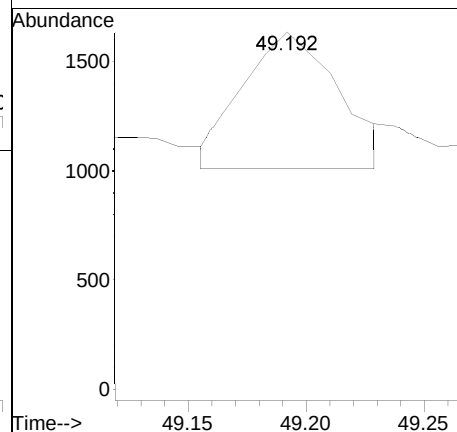
#107
C30 Tricyclic Terpane-22S
Concen: 63.78 ng/mL M4
RT: 48.945 min Scan# 4477
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

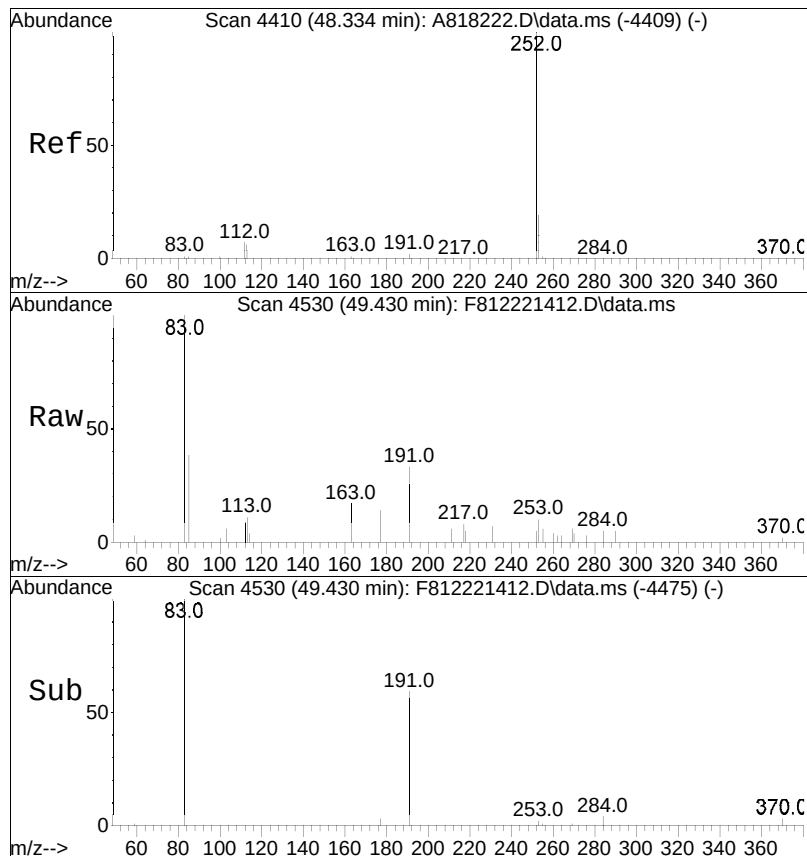
Tgt Ion:191 Resp: 1987



#108
C30 Tricyclic Terpane-22R
Concen: 56.17 ng/mL M4
RT: 49.192 min Scan# 4504
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

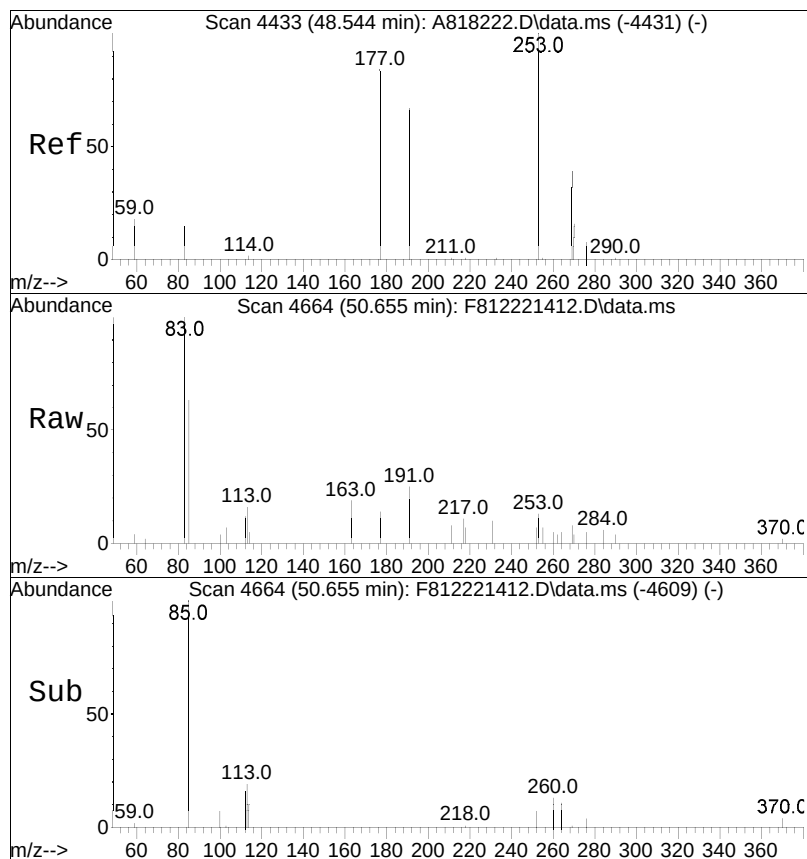
Tgt Ion:191 Resp: 1750





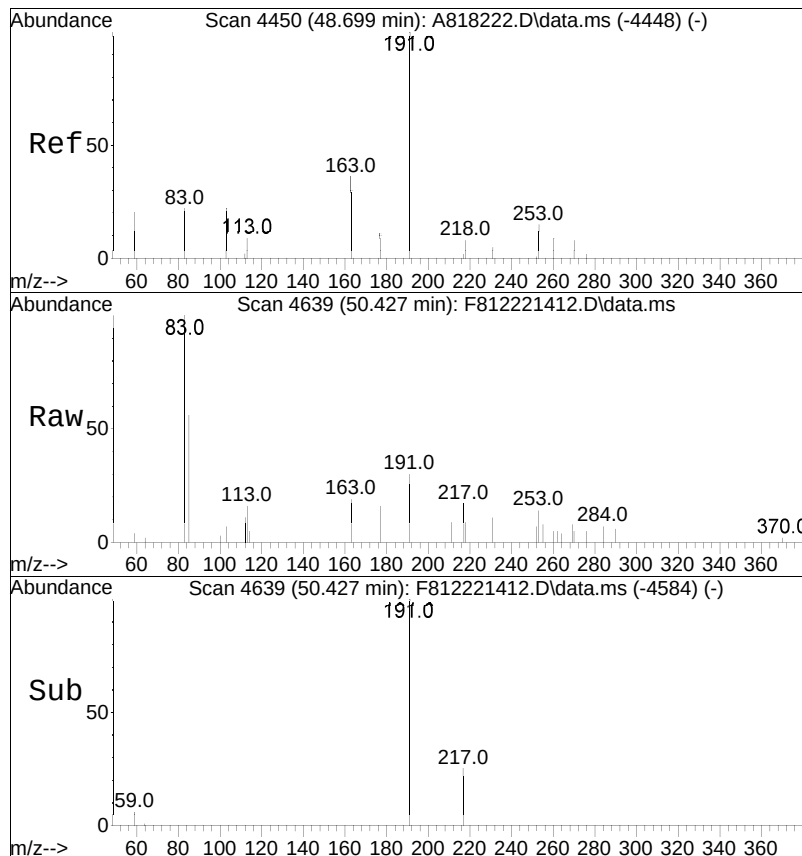
#109
 17a(H)-22,29,30-Trisnorhopane-
 Concen: 134.94 ng/ml
 RT: 49.430 min Scan# 4530
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

Tgt Ion:191 Resp: 4204



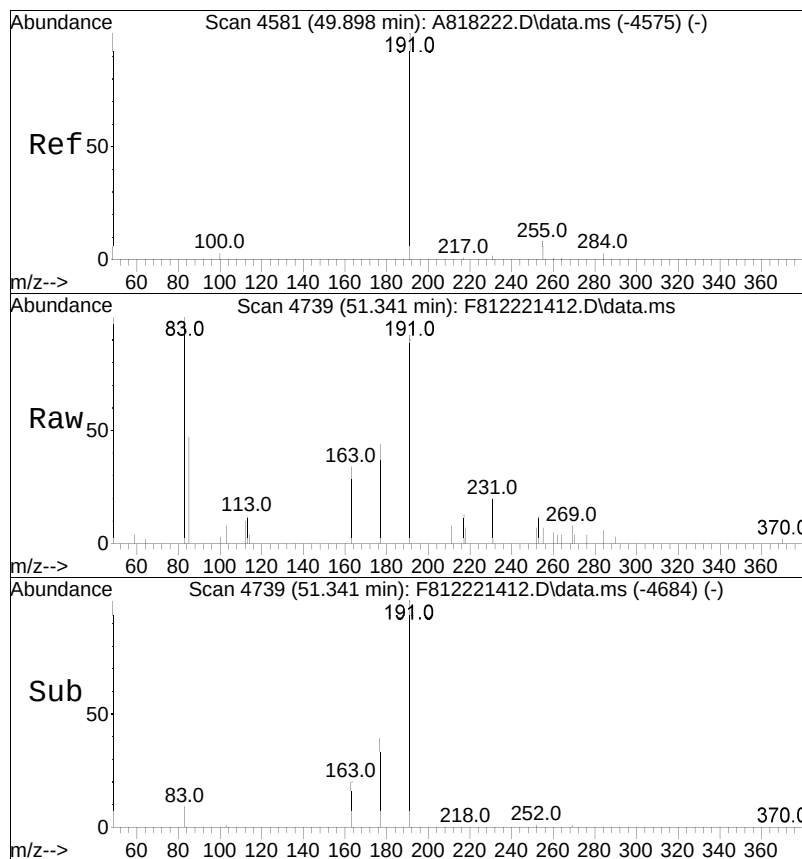
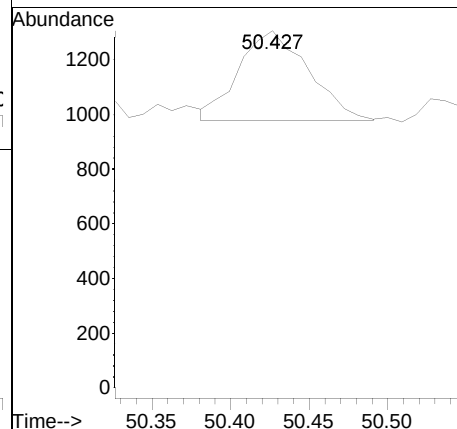
#110
 17a/b,21b/a 28,30-Bisnorhopane
 Concen: 23.59 ng/ml
 RT: 50.655 min Scan# 4664
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

Tgt Ion:191 Resp: 735



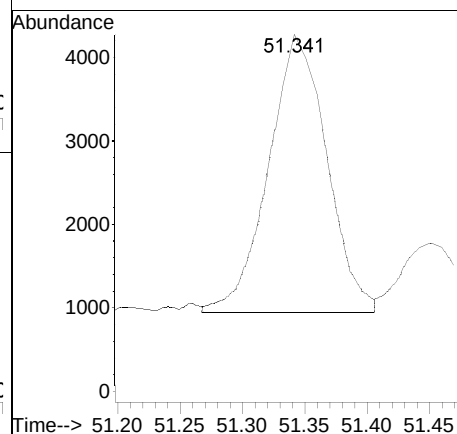
#111
 17a(H),21b(H)-25-Norhopane (T1)
 Concen: 32.42 ng/ml M4
 RT: 50.427 min Scan# 4639
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

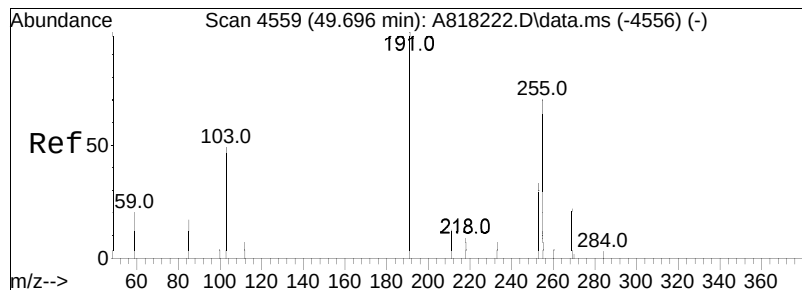
Tgt Ion:191 Resp: 1010



#112
 30-Norhopane (T15)
 Concen: 344.53 ng/ml M4
 RT: 51.341 min Scan# 4739
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

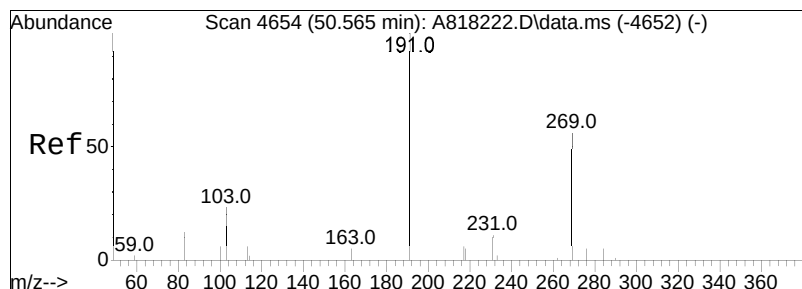
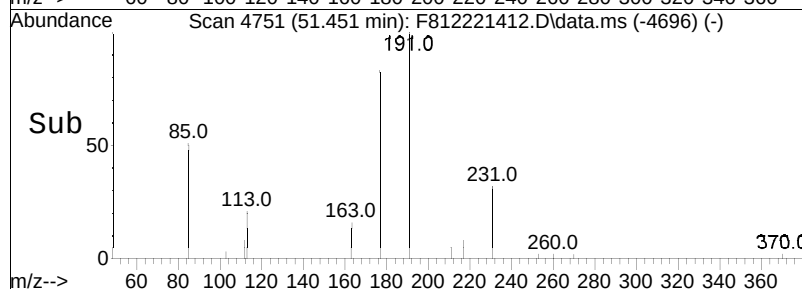
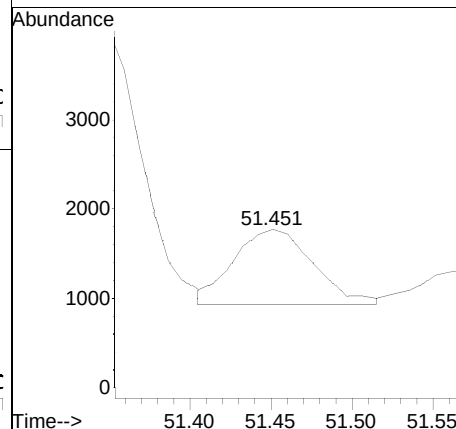
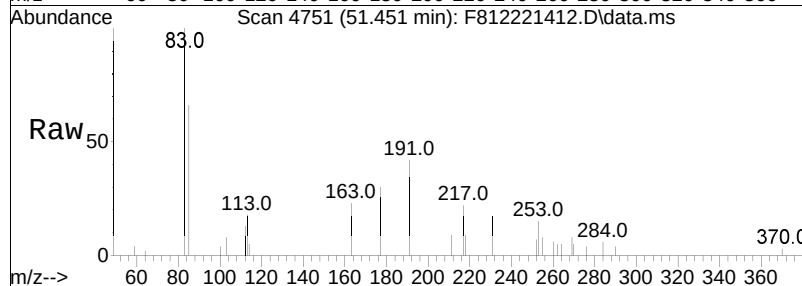
Tgt Ion:191 Resp: 10734





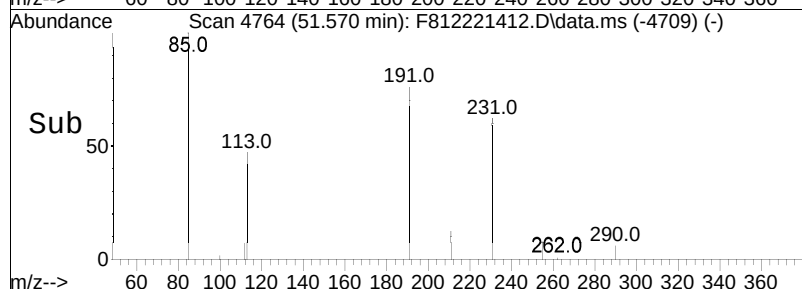
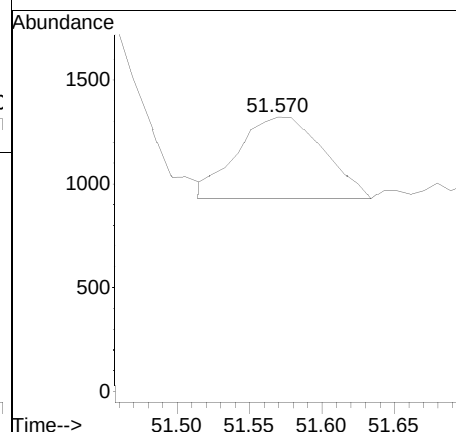
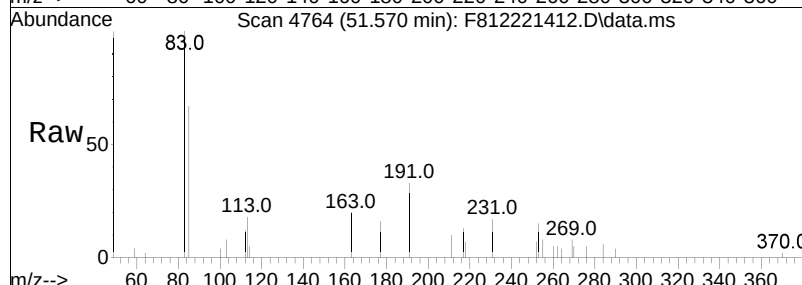
#113
 18a(H)-30-Norneohopane-C29Ts (
 Concen: 90.45 ng/ml M4
 RT: 51.451 min Scan# 4751
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

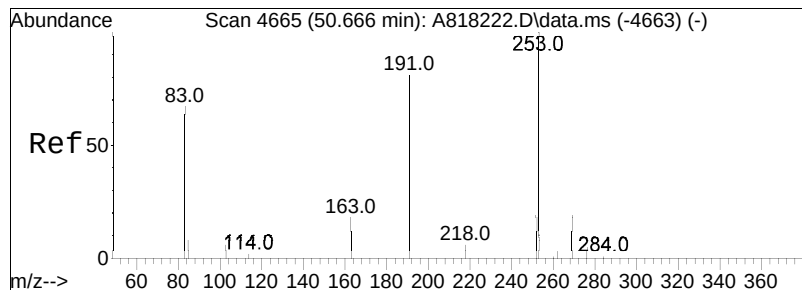
Tgt Ion:191 Resp: 2818



#114
 17a(H)-Diahopane (X)
 Concen: 51.61 ng/ml M4
 RT: 51.570 min Scan# 4764
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

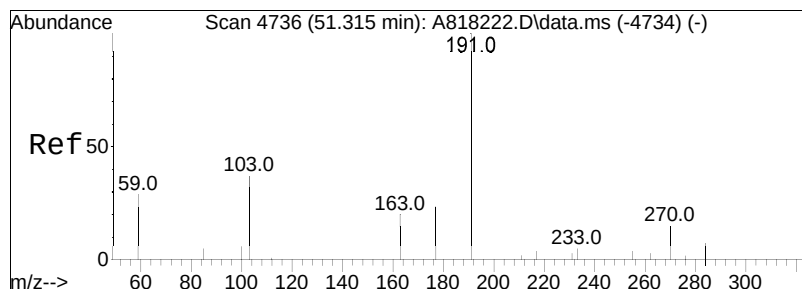
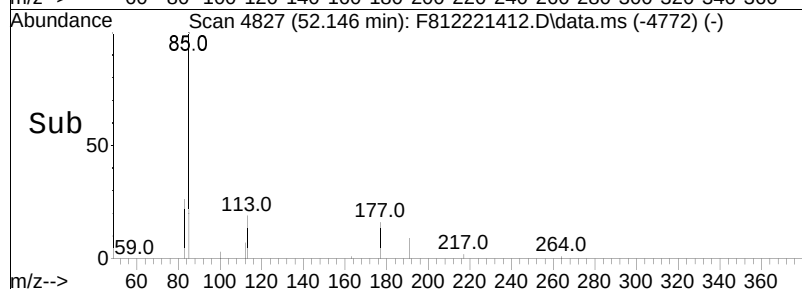
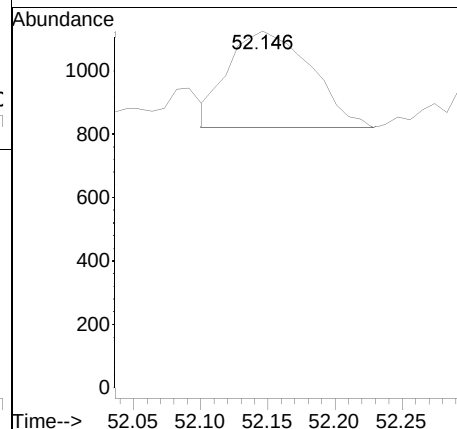
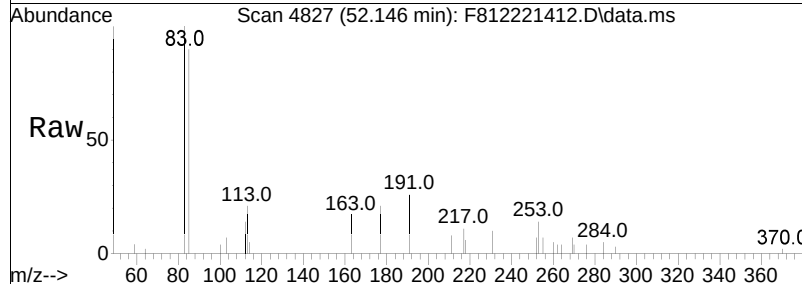
Tgt Ion:191 Resp: 1608





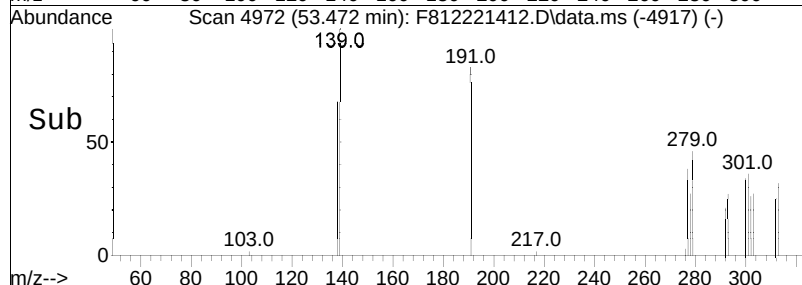
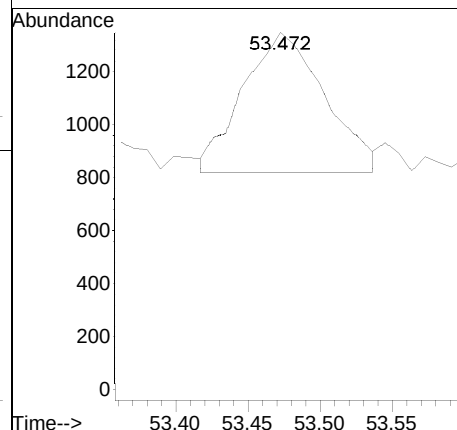
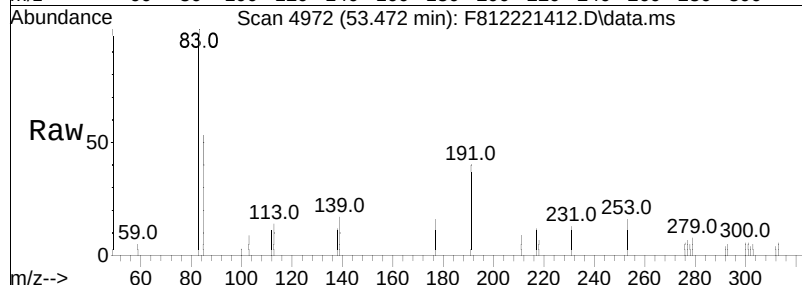
#115
 30-Normoretane (T17)
 Concen: 42.11 ng/ml
 RT: 52.146 min Scan# 4827
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

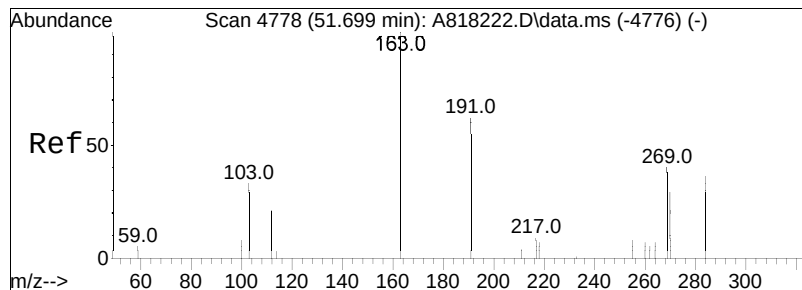
Tgt Ion:191 Resp: 1312



#117
 Moretane (T20)
 Concen: 66.99 ng/ml M4
 RT: 53.472 min Scan# 4972
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

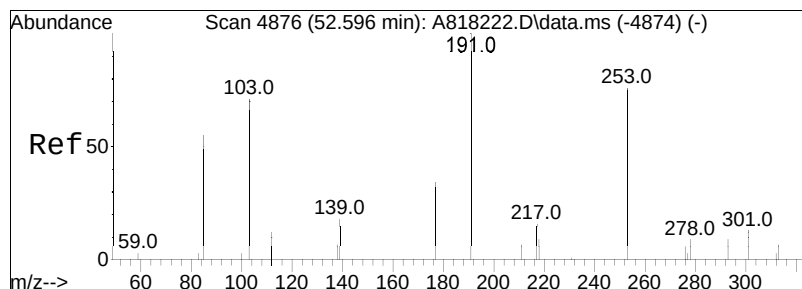
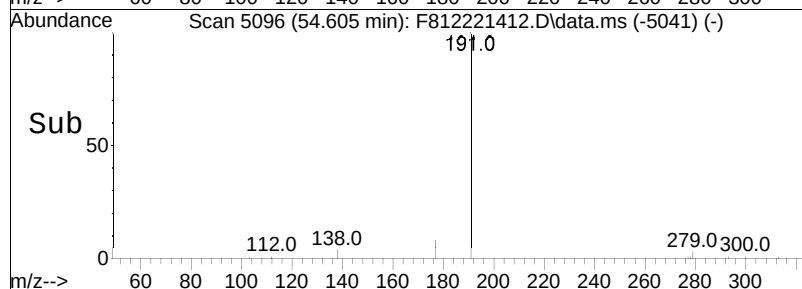
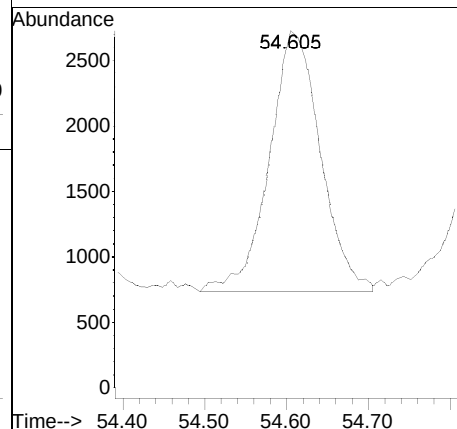
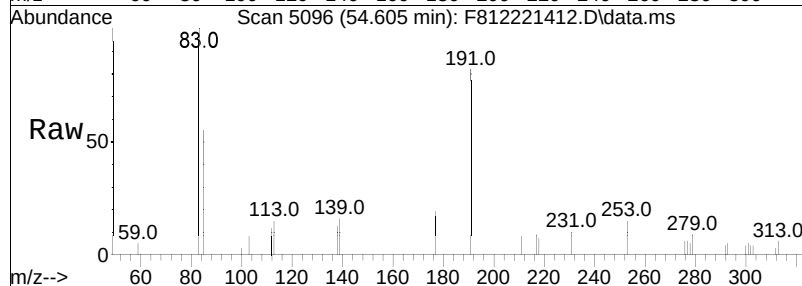
Tgt Ion:191 Resp: 2087





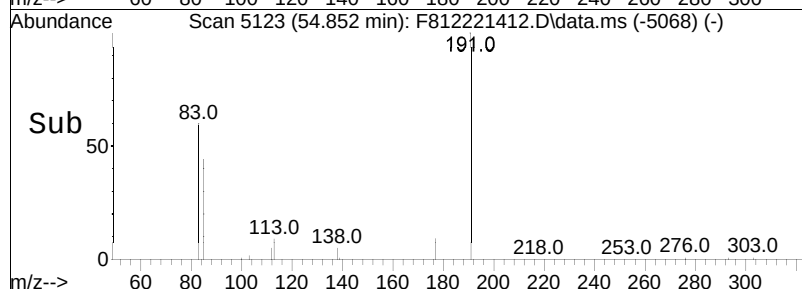
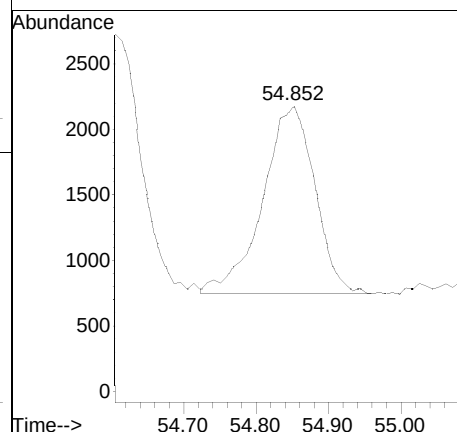
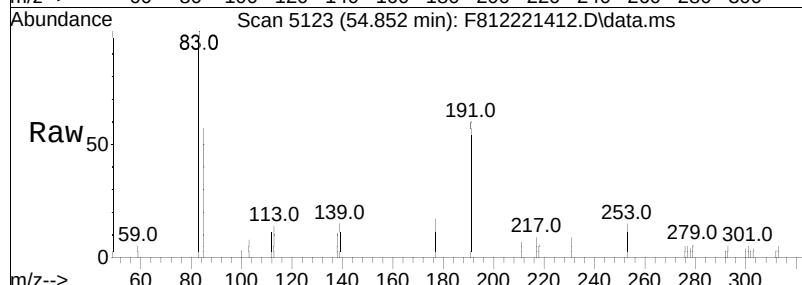
#118
 30-Homohopane-22S (T21)
 Concen: 277.22 ng/ml
 RT: 54.605 min Scan# 5096
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

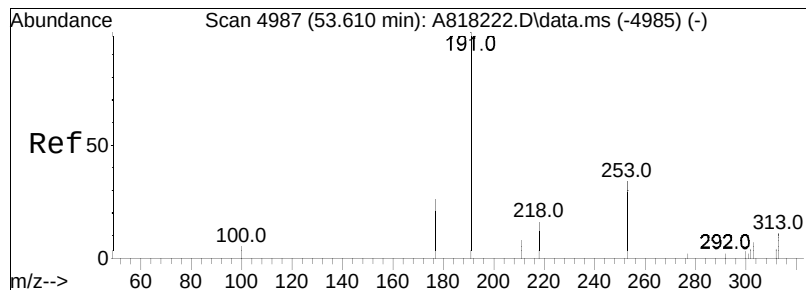
Tgt Ion:191 Resp: 8637



#119
 30-Homohopane-22R (T22)
 Concen: 229.78 ng/ml
 RT: 54.852 min Scan# 5123
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

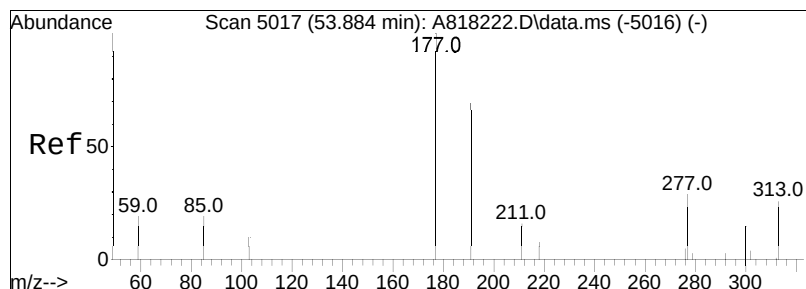
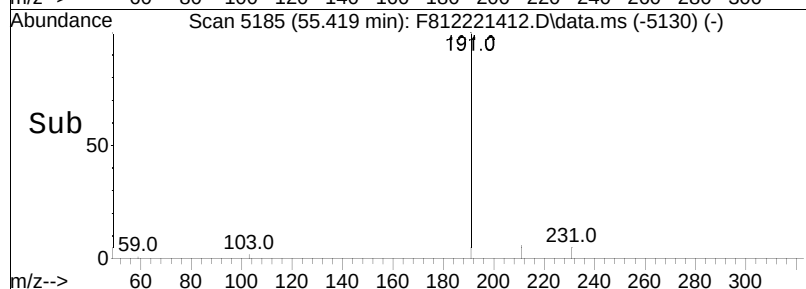
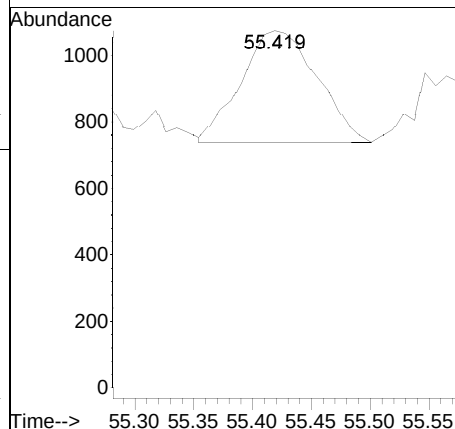
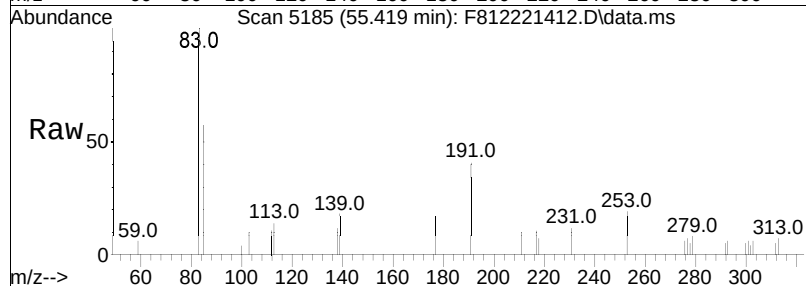
Tgt Ion:191 Resp: 7159





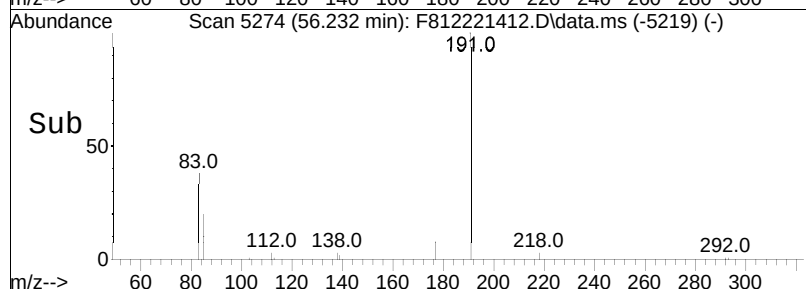
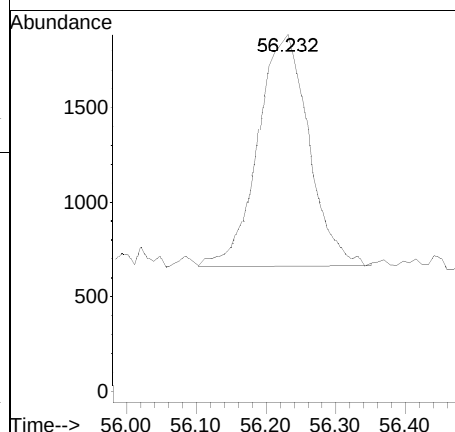
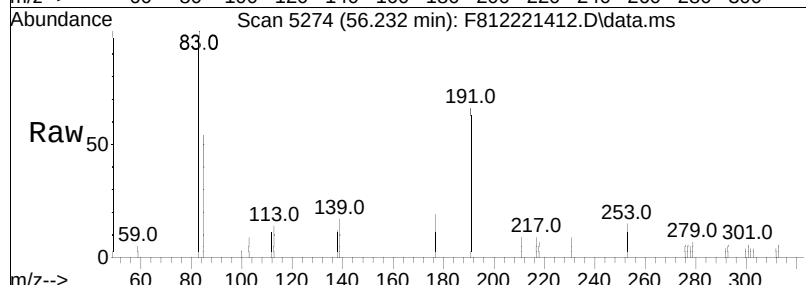
#120
 Gammacerane/C32-diahopane
 Concen: 48.37 ng/mL
 RT: 55.419 min Scan# 5185
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

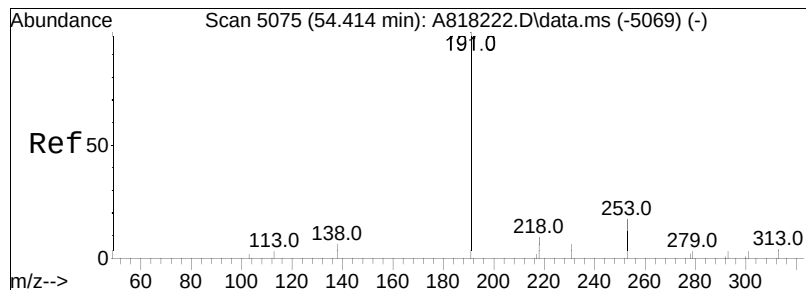
Tgt Ion:191 Resp: 1507



#121
 30,31-Bishomohopane-22S (T26)
 Concen: 197.27 ng/mL
 RT: 56.232 min Scan# 5274
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

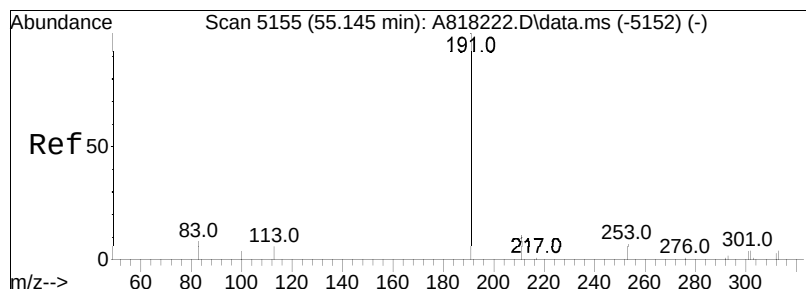
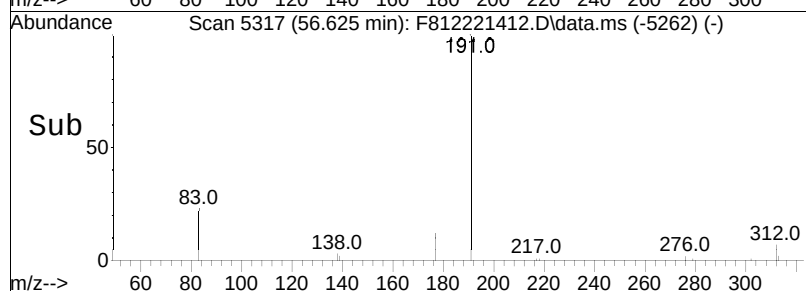
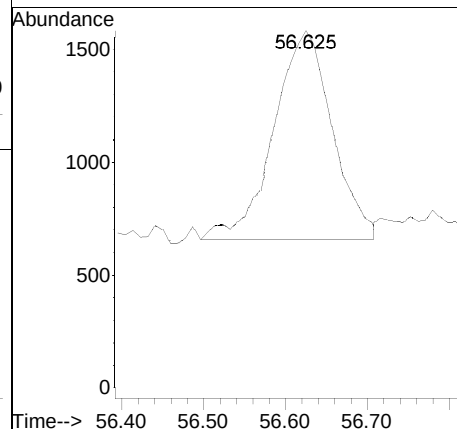
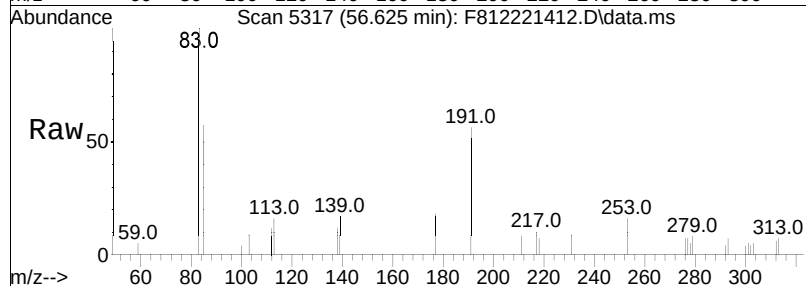
Tgt Ion:191 Resp: 6146





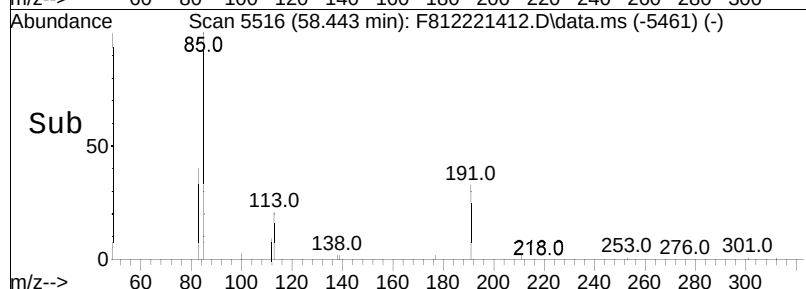
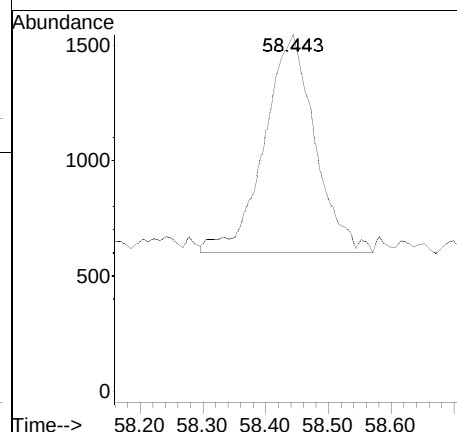
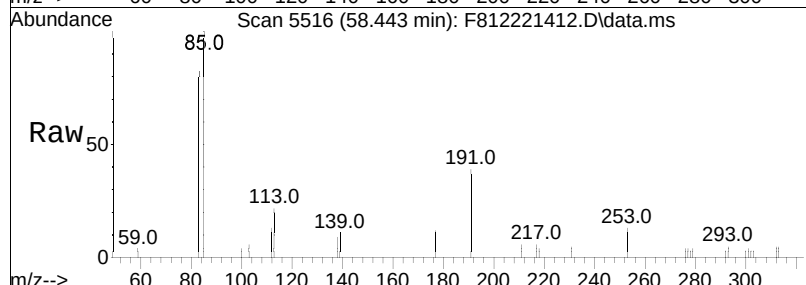
#122
 30,31-Bishomohopane-22R (T27)
 Concen: 146.55 ng/ml
 RT: 56.625 min Scan# 5317
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

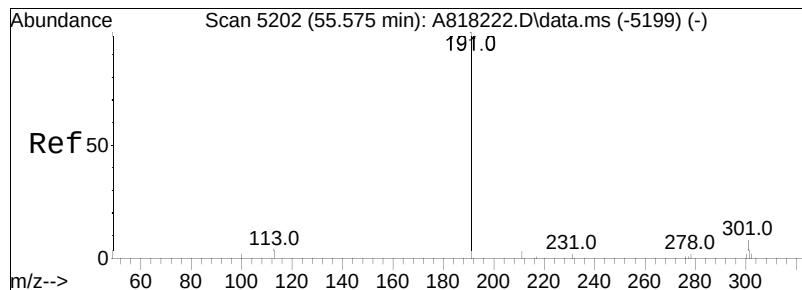
Tgt Ion:191 Resp: 4566



#123
 30,31-Trishomohopane-22S (T30)
 Concen: 168.77 ng/ml
 RT: 58.443 min Scan# 5516
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

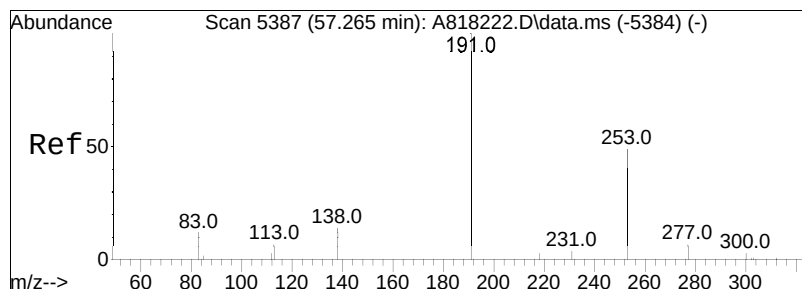
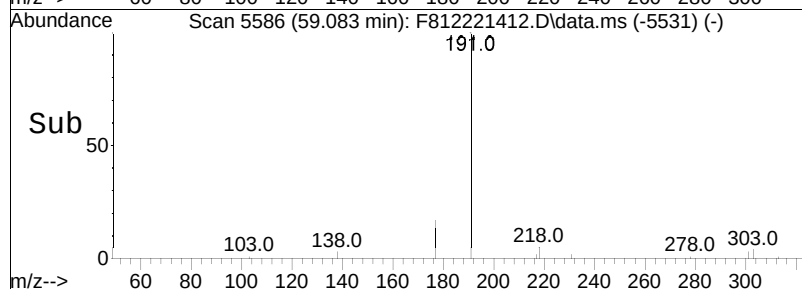
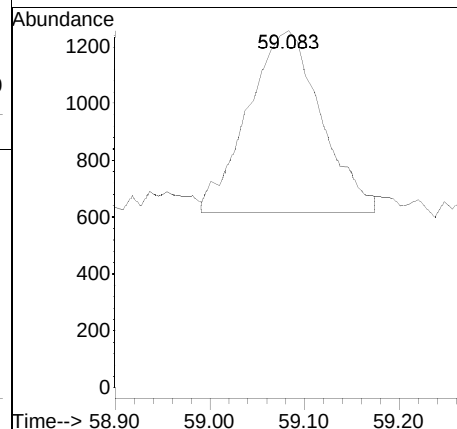
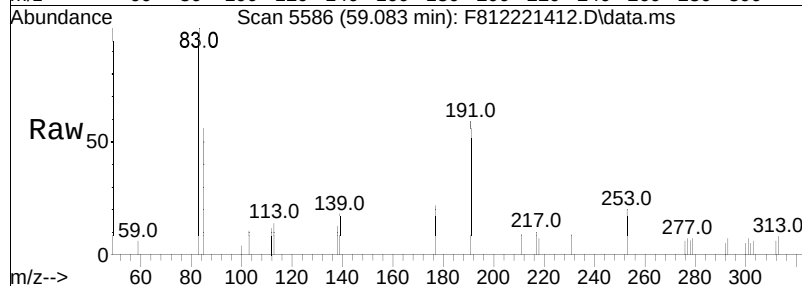
Tgt Ion:191 Resp: 5258





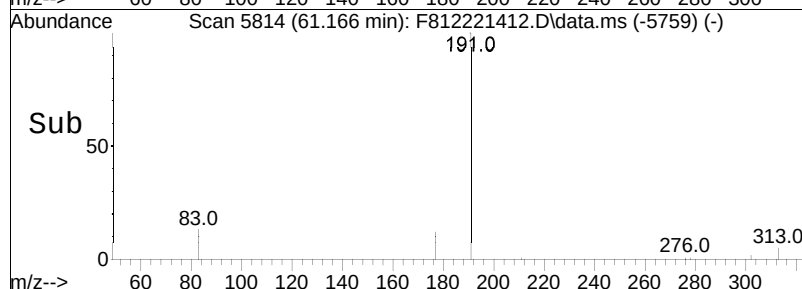
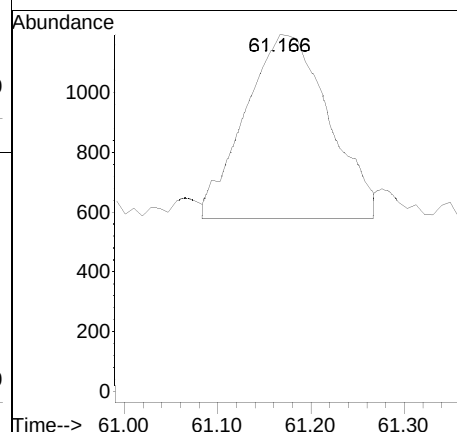
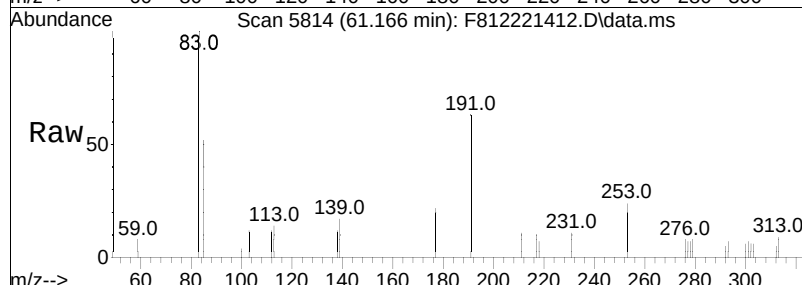
#124
 30,31-Trishomohopane-22R (T31)
 Concen: 110.25 ng/ml M4
 RT: 59.083 min Scan# 5586
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

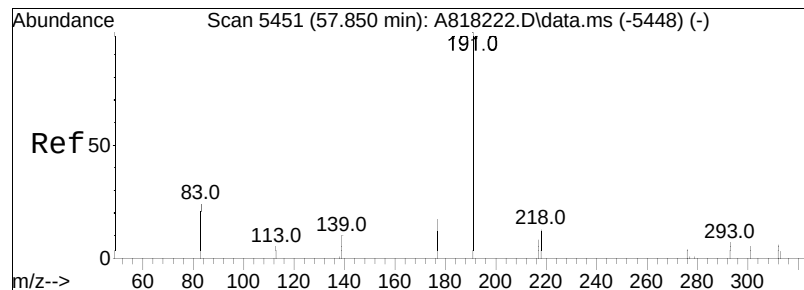
Tgt Ion:191 Resp: 3435



#125
 Tetrakishomohopane-22S (T32)
 Concen: 123.03 ng/ml M4
 RT: 61.166 min Scan# 5814
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

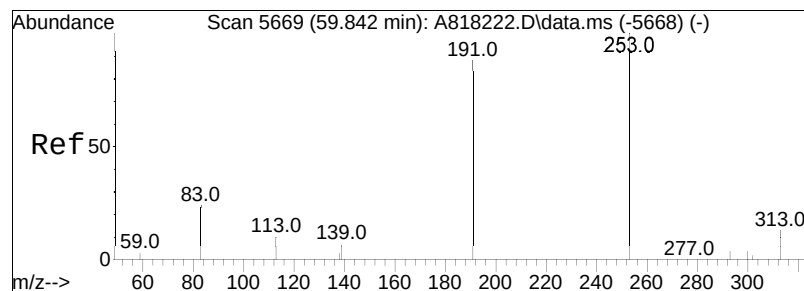
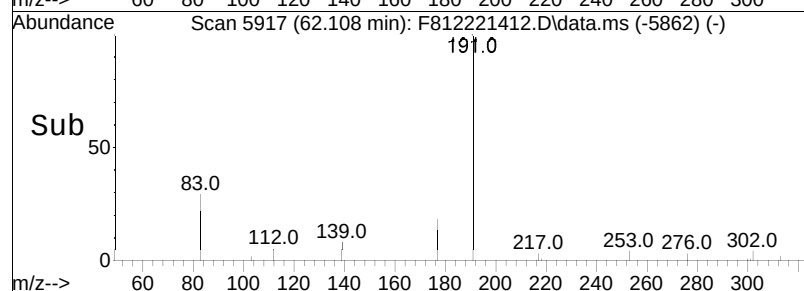
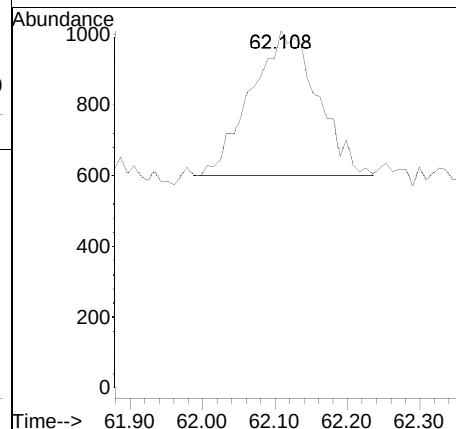
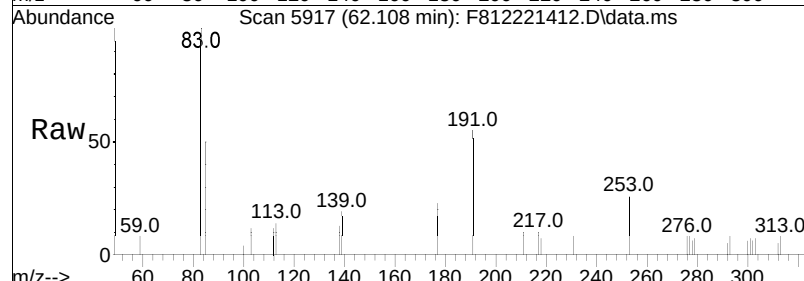
Tgt Ion:191 Resp: 3833





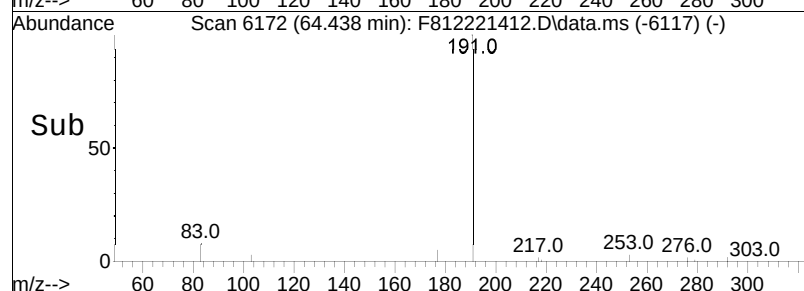
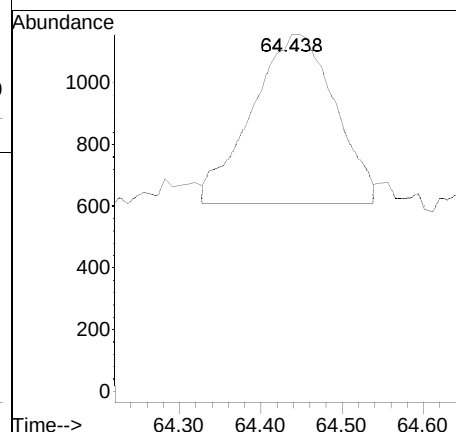
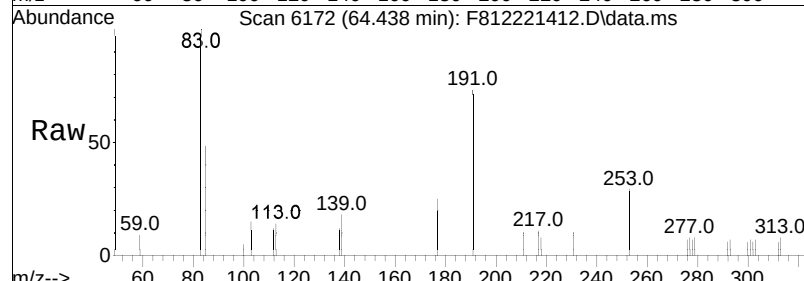
#126
Tetrakishomohopane-22R (T33)
Concen: 84.25 ng/ml
RT: 62.108 min Scan# 5917
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

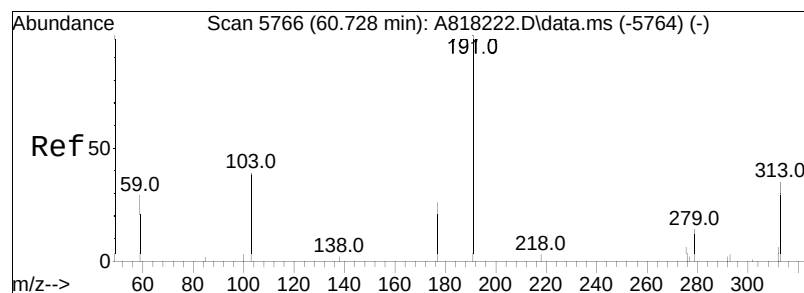
Tgt Ion:191 Resp: 2625



#127
Pentakishomohopane-22S (T34)
Concen: 124.21 ng/ml M4
RT: 64.438 min Scan# 6172
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

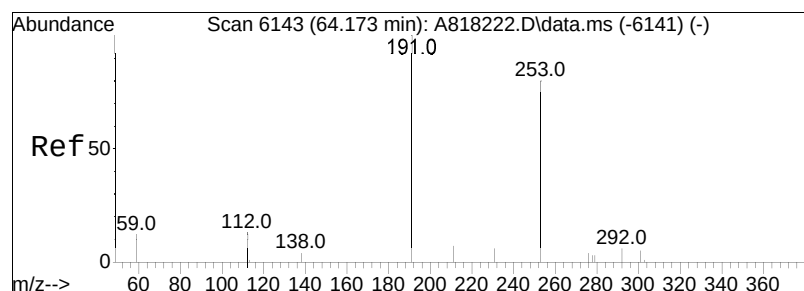
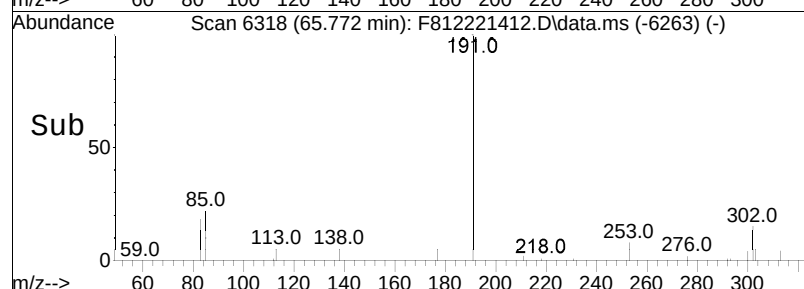
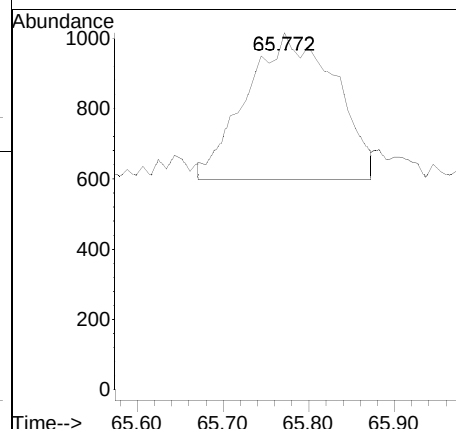
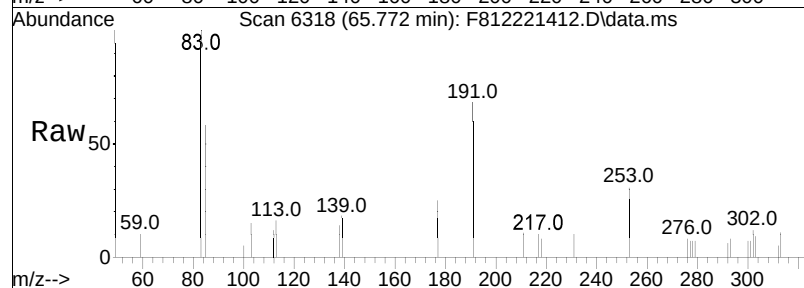
Tgt Ion:191 Resp: 3870





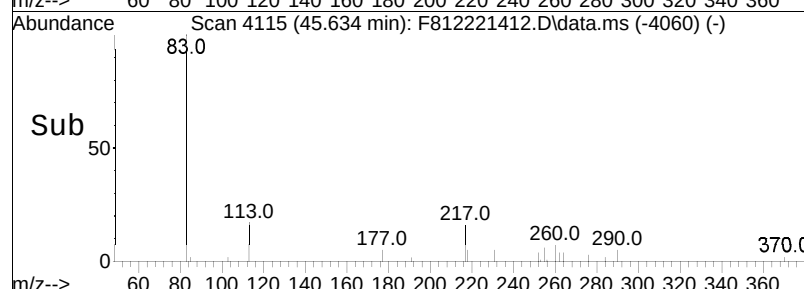
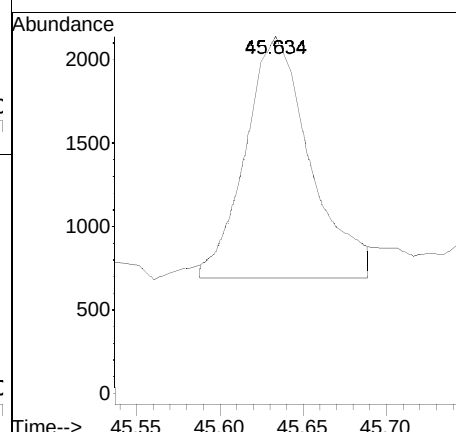
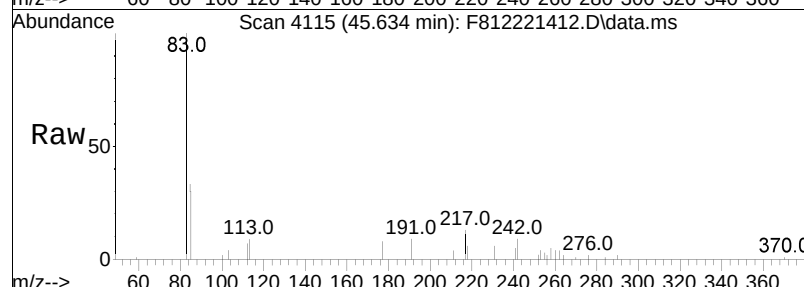
#128
 Pentakishomohopane-22R (T35)
 Concen: 95.20 ng/ml M4
 RT: 65.772 min Scan# 6318
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

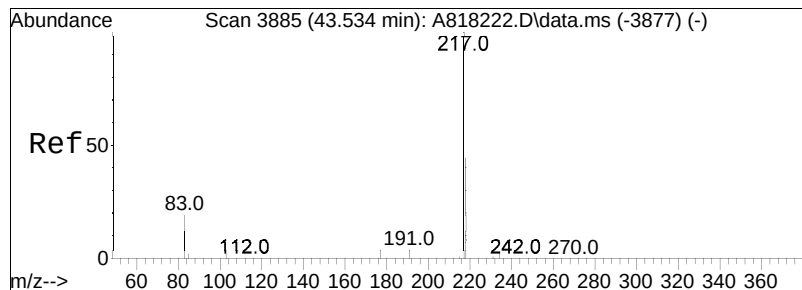
Tgt Ion:191 Resp: 2966



#130
 13b(H),17a(H)-20S-Diacholestane
 Concen: 282.67 ng/ml M4
 RT: 45.634 min Scan# 4115
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

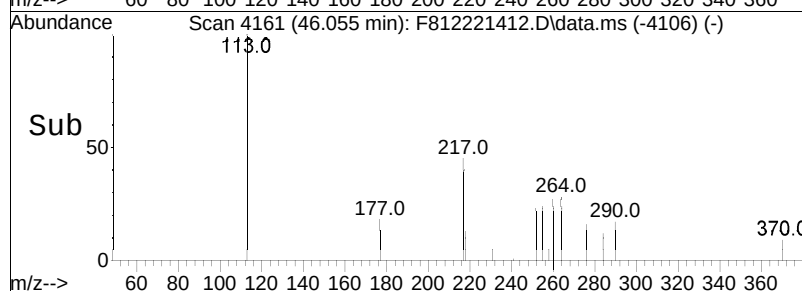
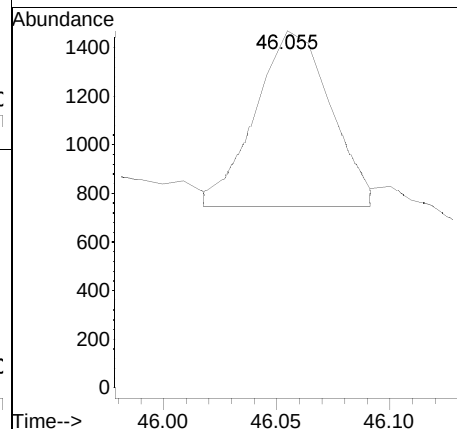
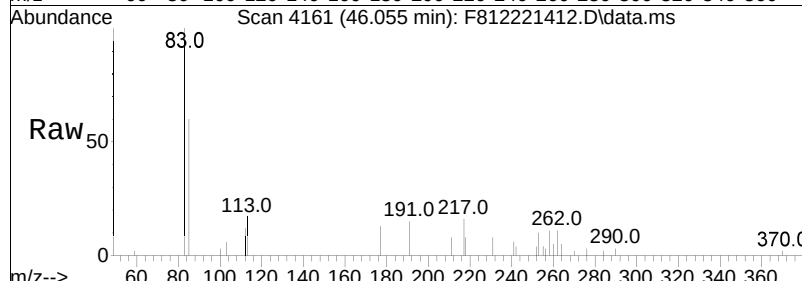
Tgt Ion:217 Resp: 3918





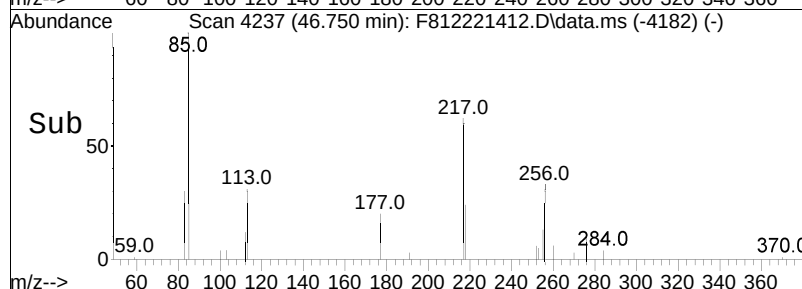
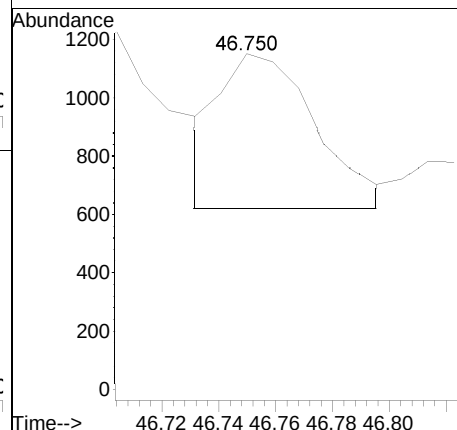
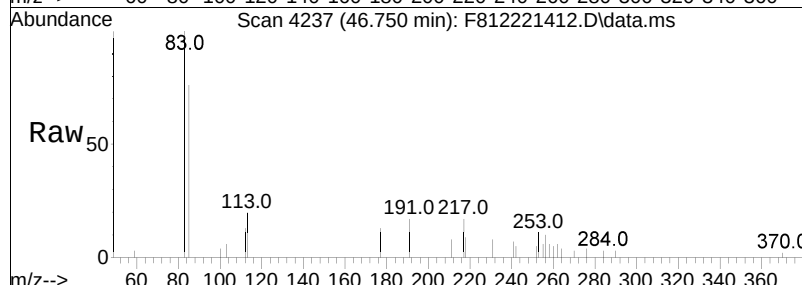
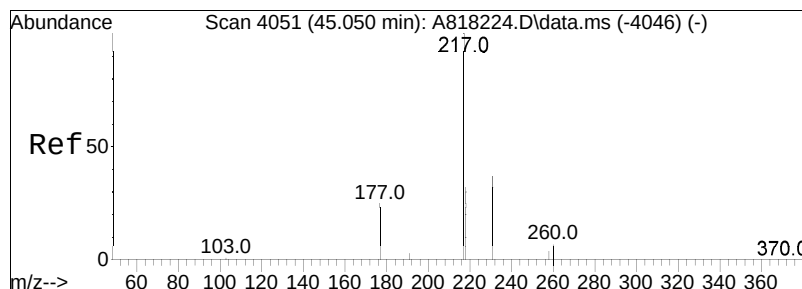
#131
 13b(H),17a(H)-20R-Diacholestane
 Concen: 119.98 ng/ml M4
 RT: 46.055 min Scan# 4161
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

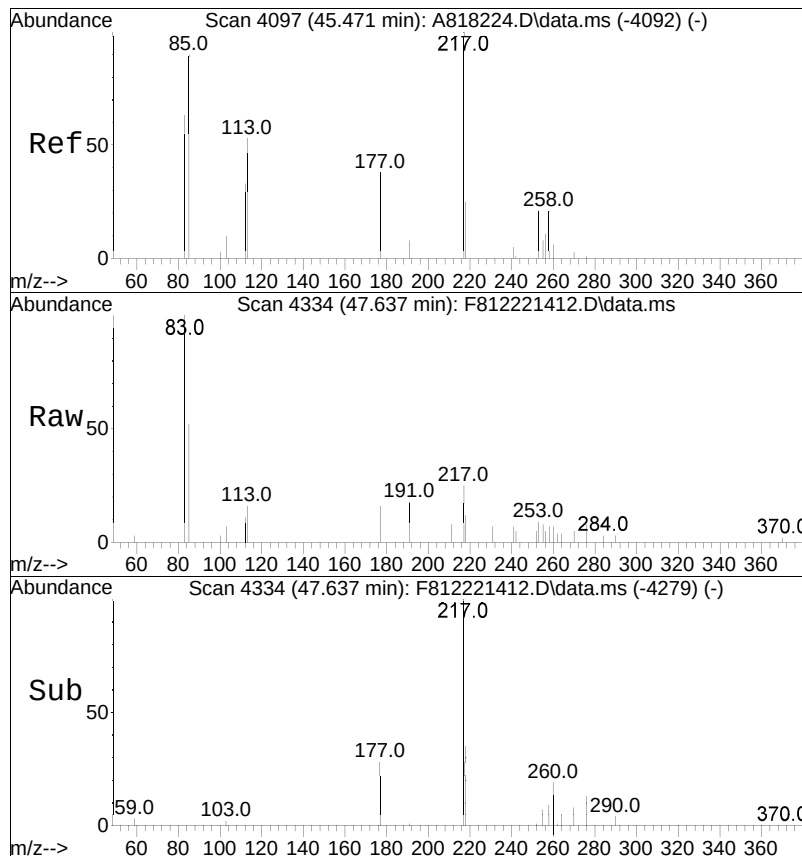
Tgt Ion:217 Resp: 1663



#132
 13b,17a-20S-Methyldiacholestane
 Concen: 90.18 ng/ml M4
 RT: 46.750 min Scan# 4237
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

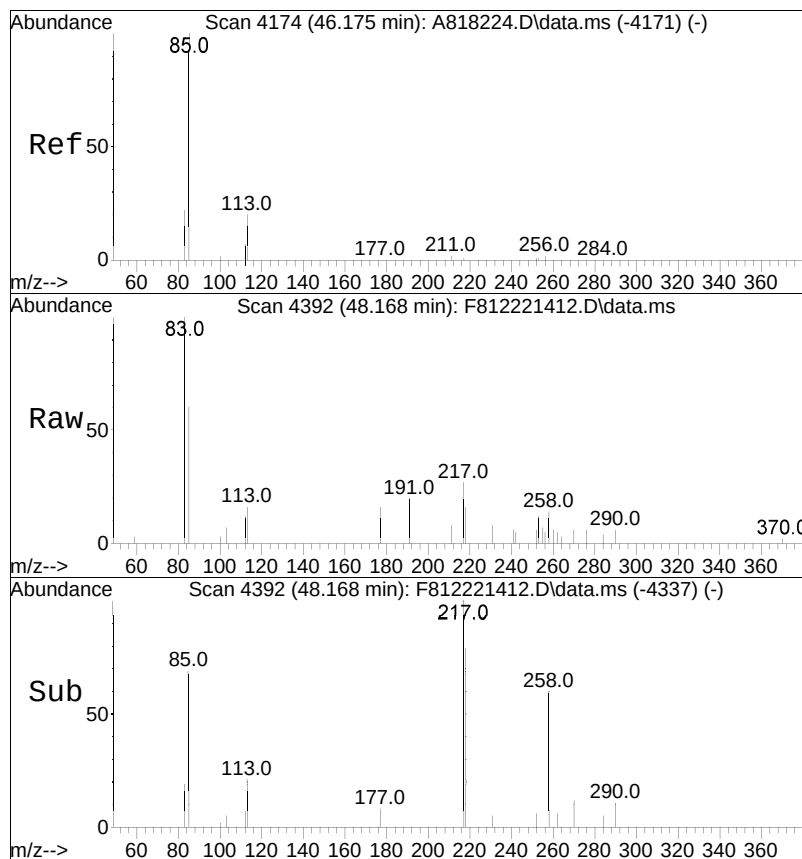
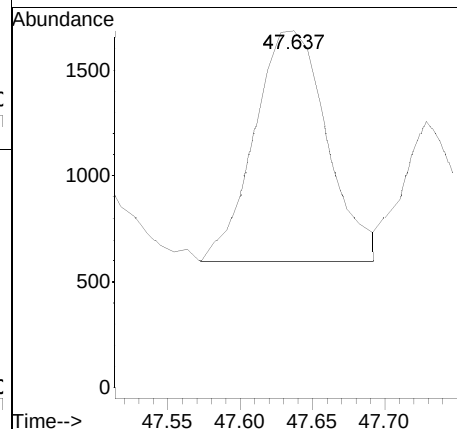
Tgt Ion:217 Resp: 1250





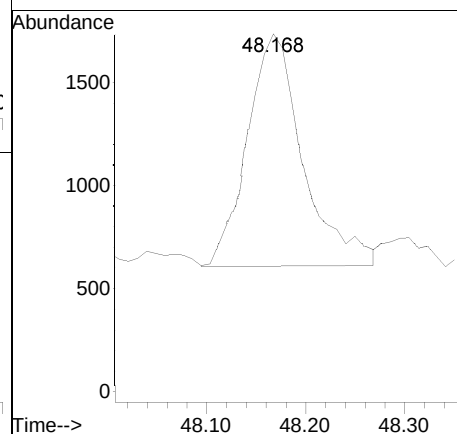
#133
 14a,17a-20S-Chol/13b,17a-20S-E
 Concen: 276.10 ng/ml
 RT: 47.637 min Scan# 4334
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

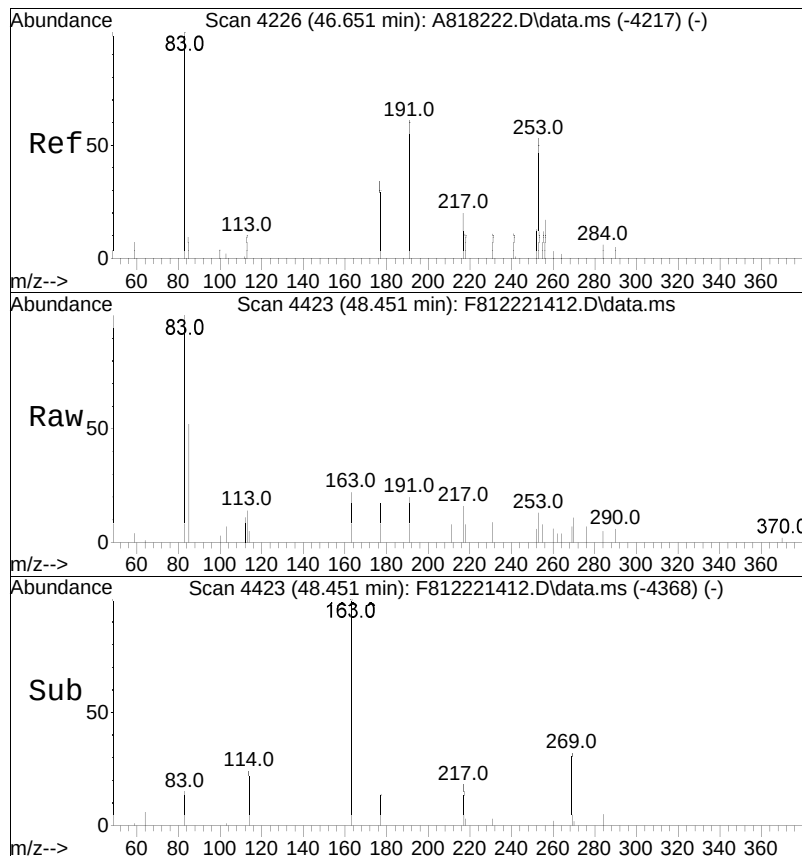
Tgt Ion:217 Resp: 3827



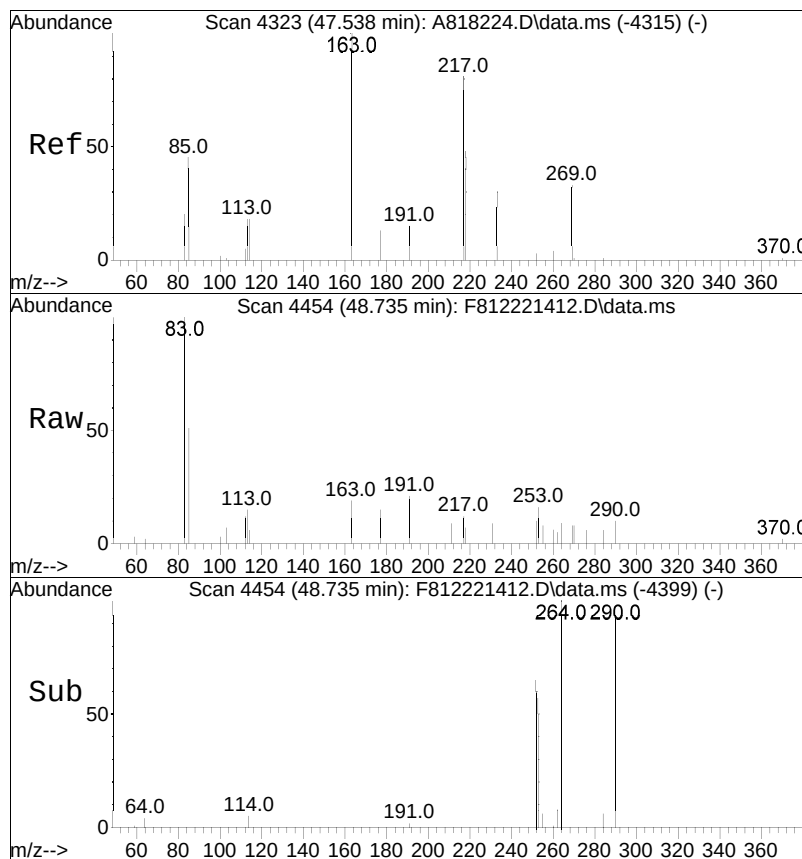
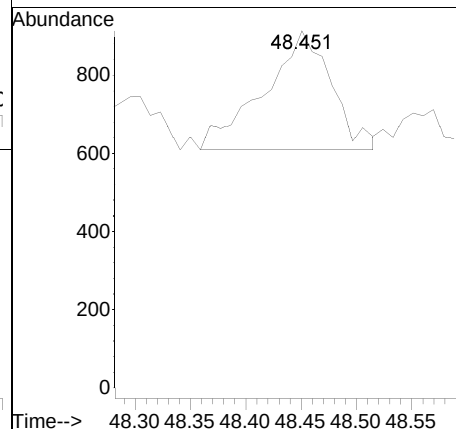
#134
 14a,17a-20R-Chol/13b,17a-20R-E
 Concen: 315.64 ng/ml
 RT: 48.168 min Scan# 4392
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

Tgt Ion:217 Resp: 4375

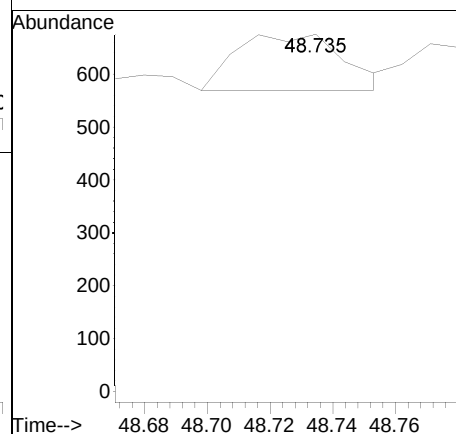


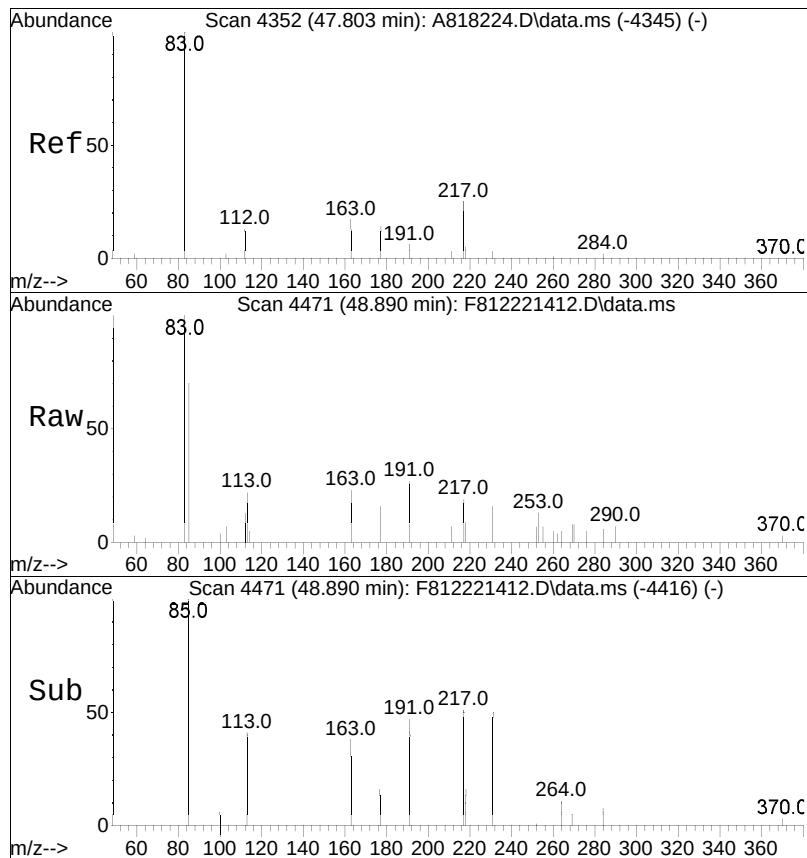


#135
 Unknown Sterane (S18)
 Concen: 93.21 ng/ml
 RT: 48.451 min Scan# 4423
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am
 Tgt Ion:217 Resp: 1292



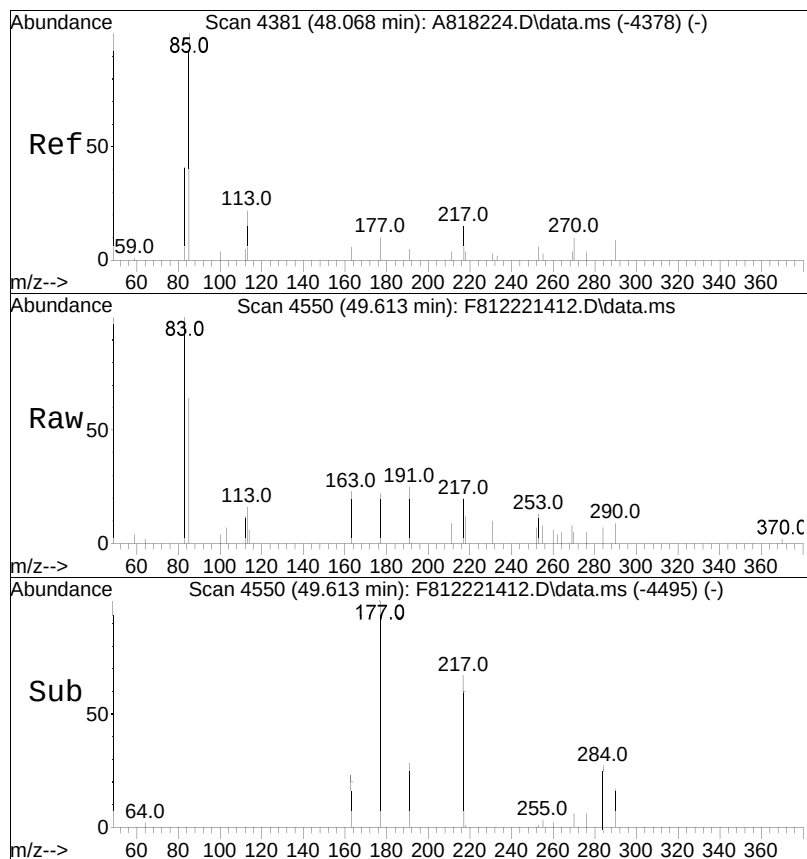
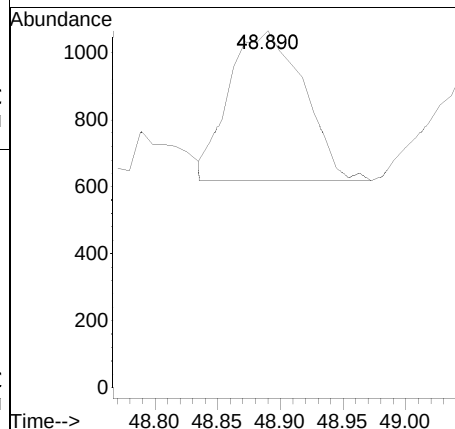
#136
 13a,17b-20S-Ethylidiacholestane
 Concen: 18.11 ng/ml
 RT: 48.735 min Scan# 4454
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am
 Tgt Ion:217 Resp: 251





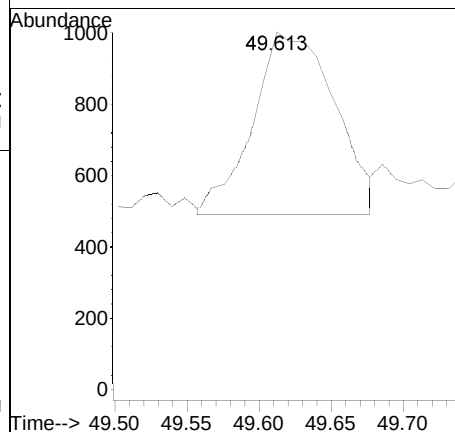
#137
 14a,17a-20S-Methylcholestane (
 Concen: 134.19 ng/ml
 RT: 48.890 min Scan# 4471
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

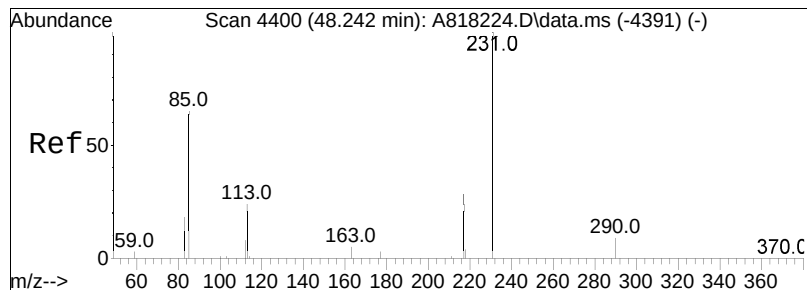
Tgt Ion:217 Resp: 1860



#138
 14a,17a-20R-Methylcholestane (
 Concen: 145.81 ng/ml M4
 RT: 49.613 min Scan# 4550
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

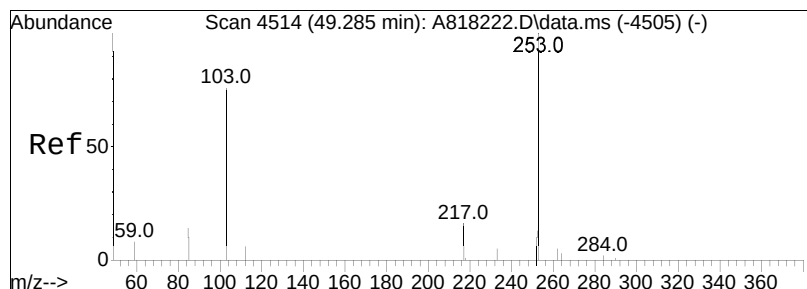
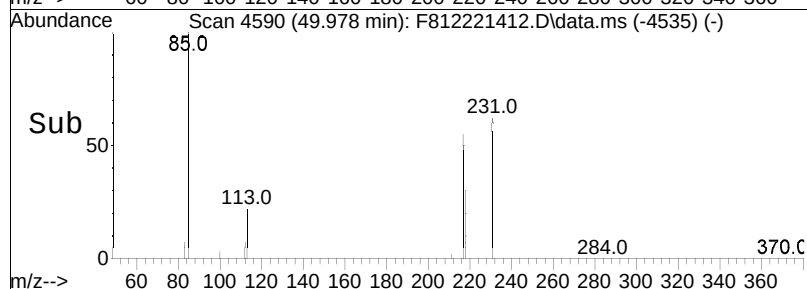
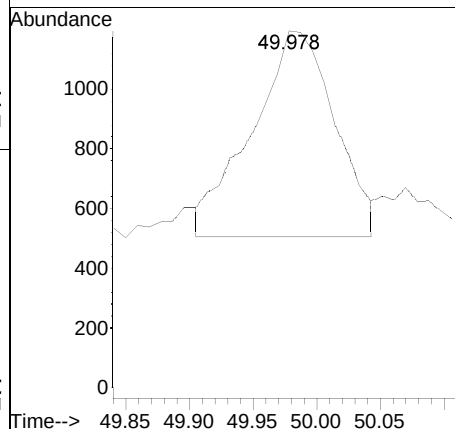
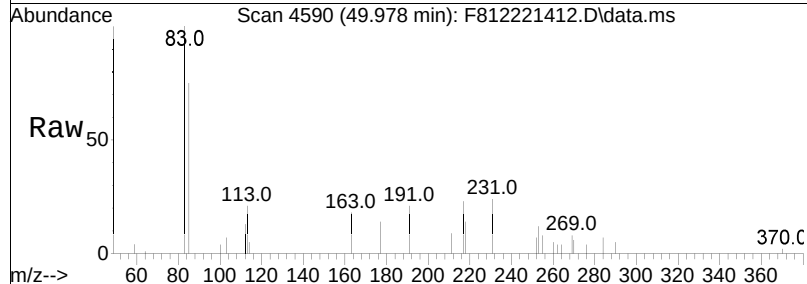
Tgt Ion:217 Resp: 2021





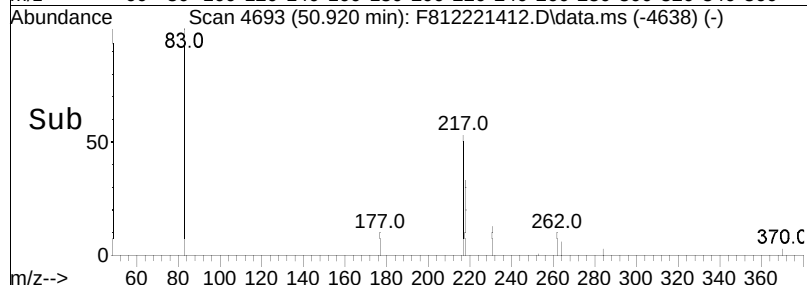
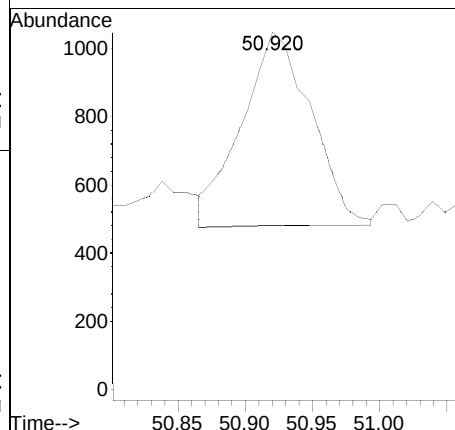
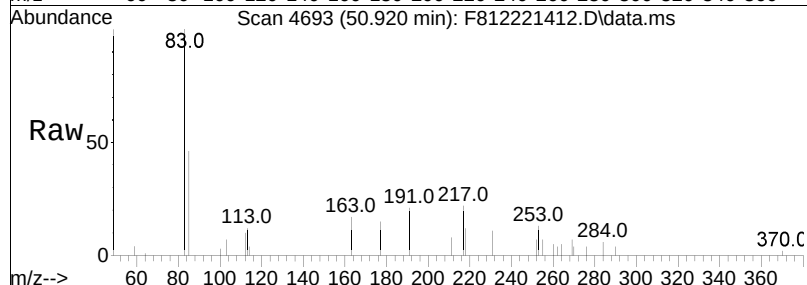
#139
 14a(H),17a(H)-20S-Ethylcholest
 Concen: 223.65 ng/ml M4
 RT: 49.978 min Scan# 4590
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

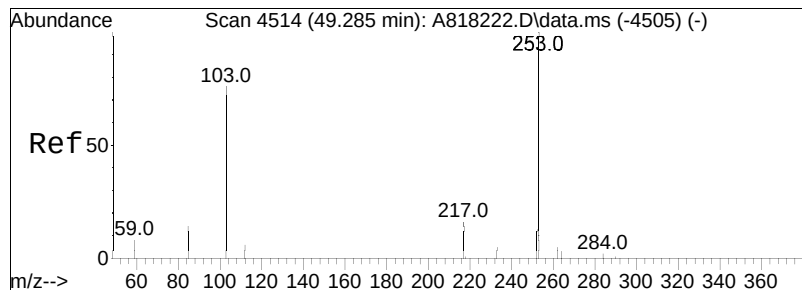
Tgt Ion:217 Resp: 3100



#140
 14a(H),17a(H)-20R-Ethylcholest
 Concen: 146.60 ng/ml
 RT: 50.920 min Scan# 4693
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

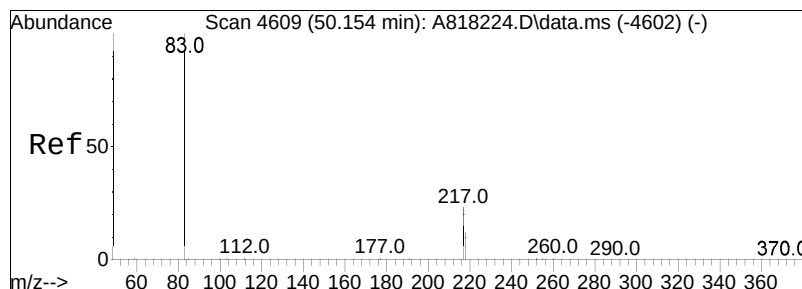
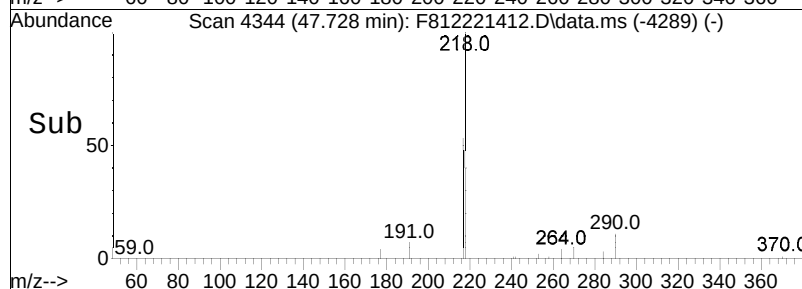
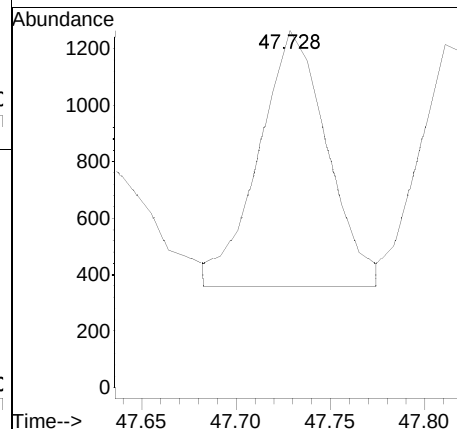
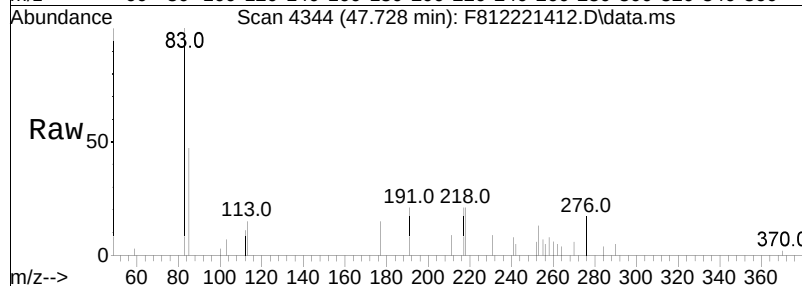
Tgt Ion:217 Resp: 2032





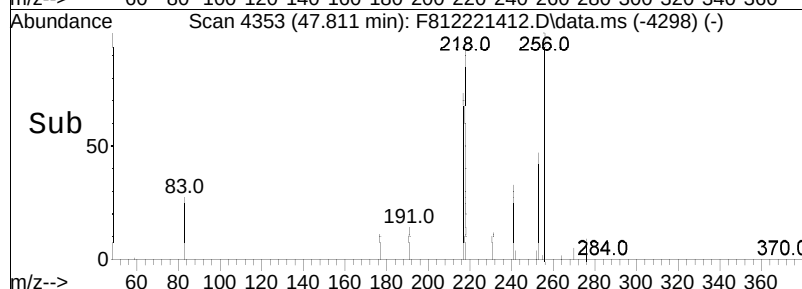
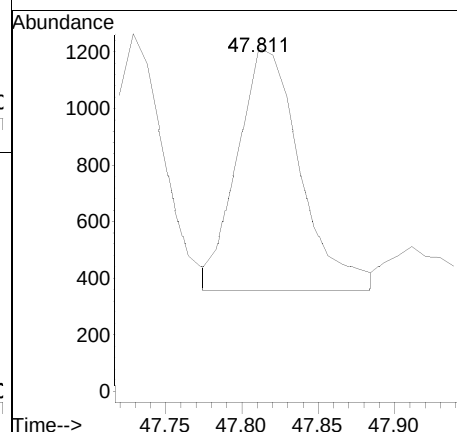
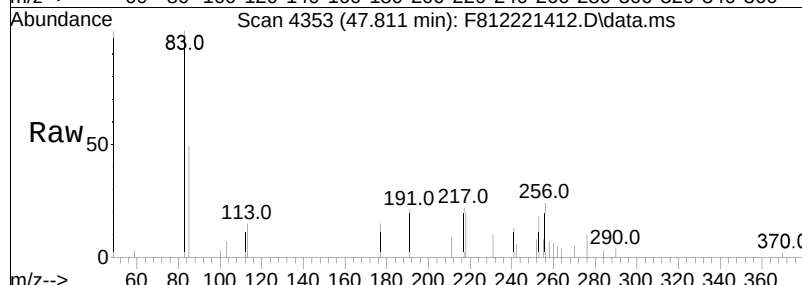
#141
 14b(H),17b(H)-20R-Cholestane (
 Concen: 165.07 ng/ml M4
 RT: 47.728 min Scan# 4344
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

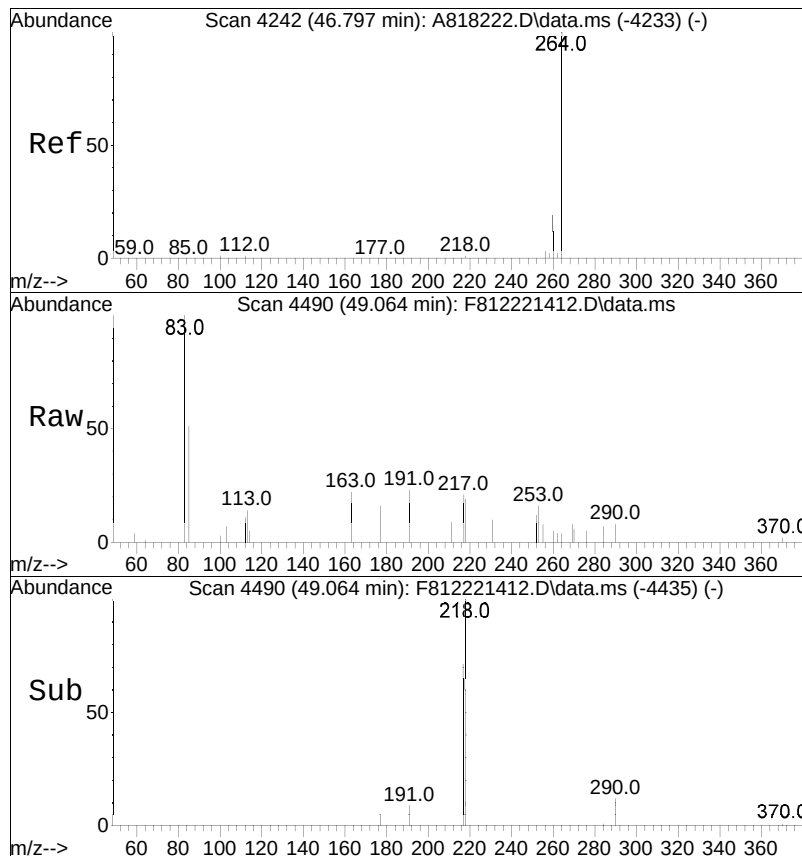
Tgt Ion:218 Resp: 2288



#142
 14b(H),17b(H)-20S-Cholestane (
 Concen: 176.76 ng/ml M4
 RT: 47.811 min Scan# 4353
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

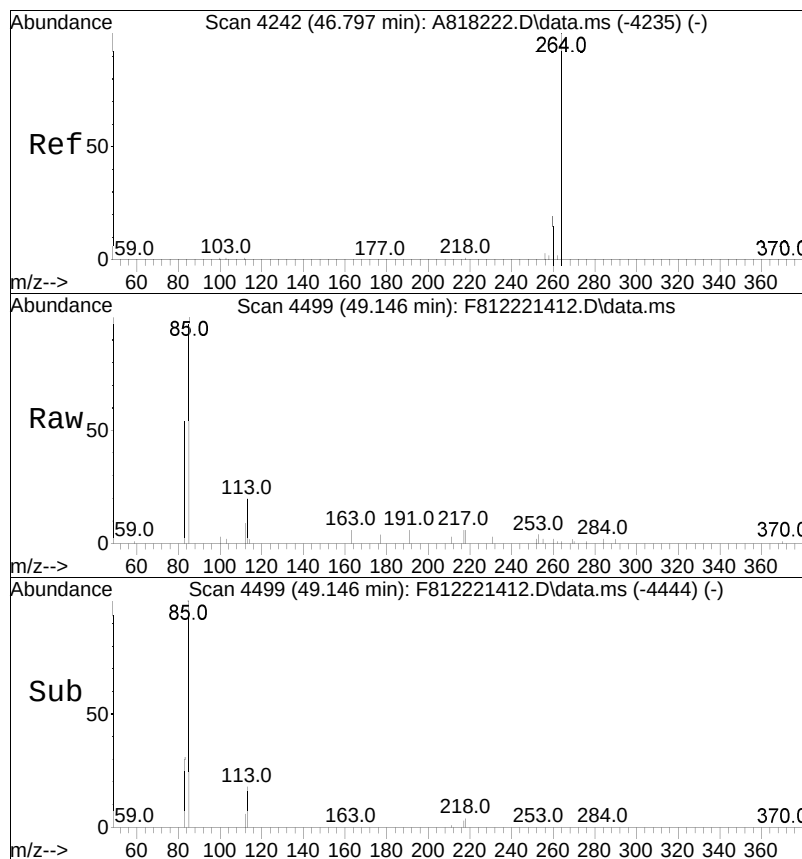
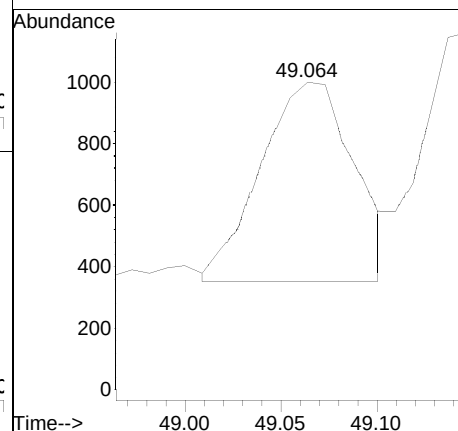
Tgt Ion:218 Resp: 2450





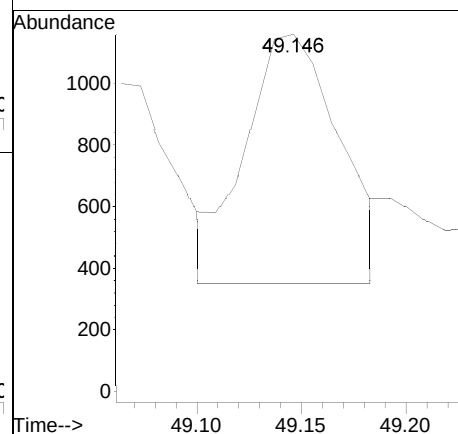
#143
 14b,17b-20R-Methylcholestane (
 Concen: 157.21 ng/ml M4
 RT: 49.064 min Scan# 4490
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

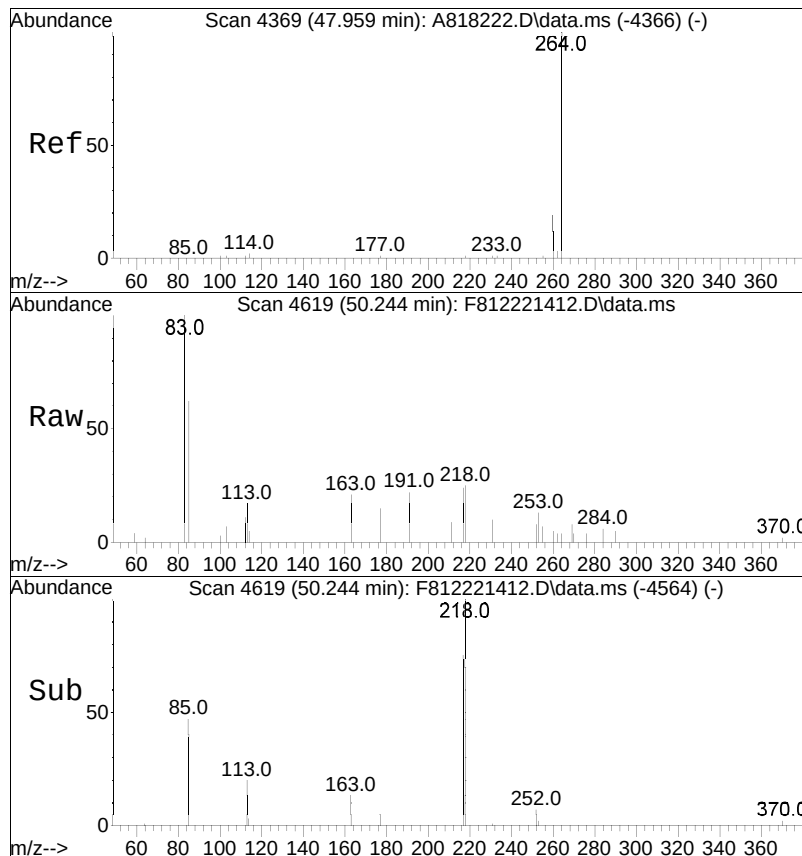
Tgt Ion:218 Resp: 2179



#144
 14b,17b-20S-Methylcholestane (
 Concen: 182.96 ng/ml M4
 RT: 49.146 min Scan# 4499
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

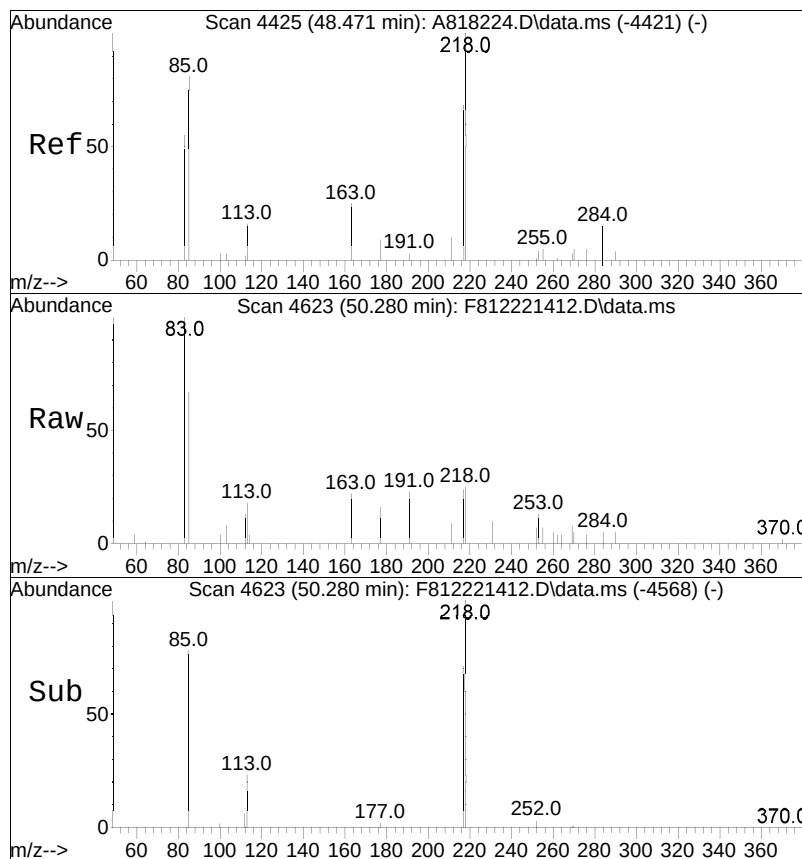
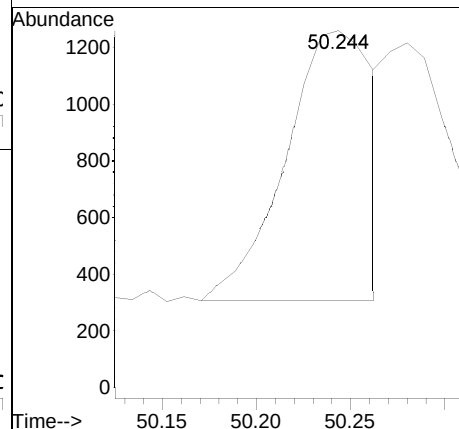
Tgt Ion:218 Resp: 2536





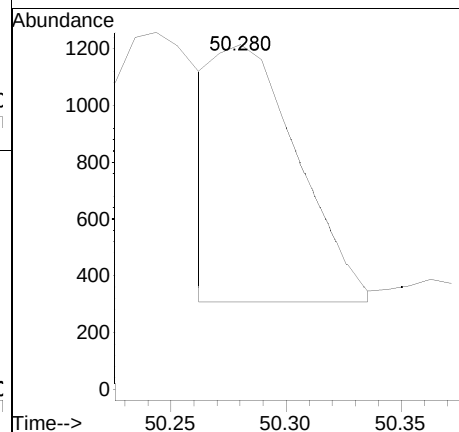
#145
 14b(H),17b(H)-20R-Ethylcholest
 Concen: 219.61 ng/ml
 RT: 50.244 min Scan# 4619
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

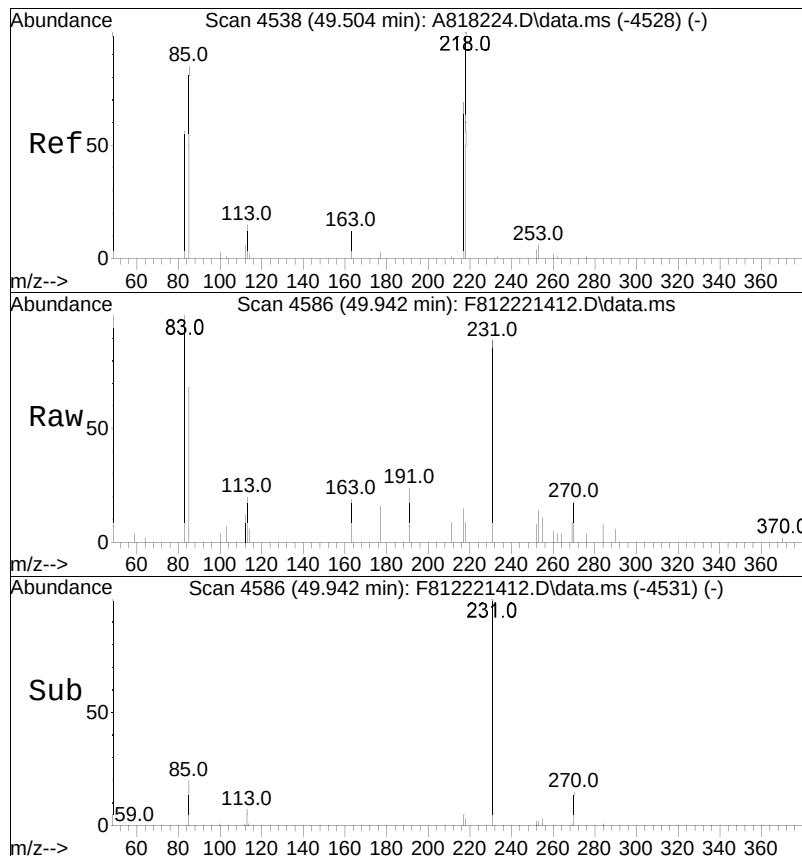
Tgt Ion:218 Resp: 3044



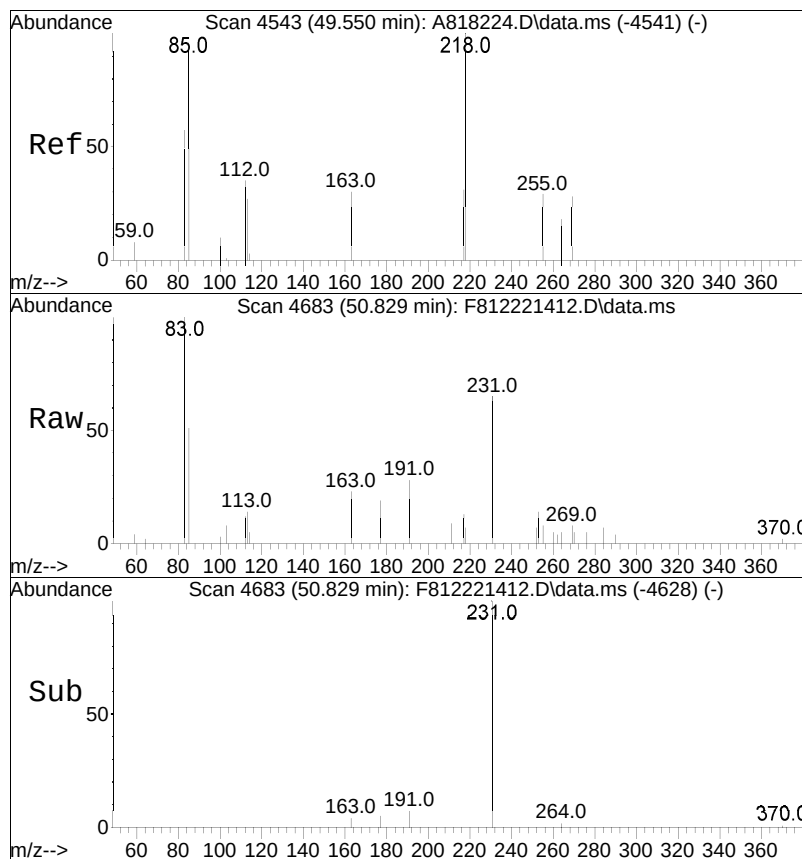
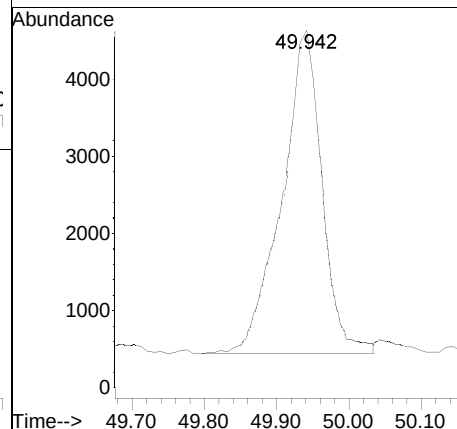
#146
 14b(H),17b(H)-20S-Ethylcholest
 Concen: 166.66 ng/ml M3
 RT: 50.280 min Scan# 4623
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am

Tgt Ion:218 Resp: 2310

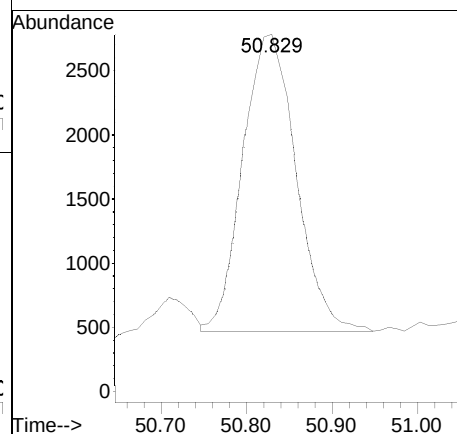


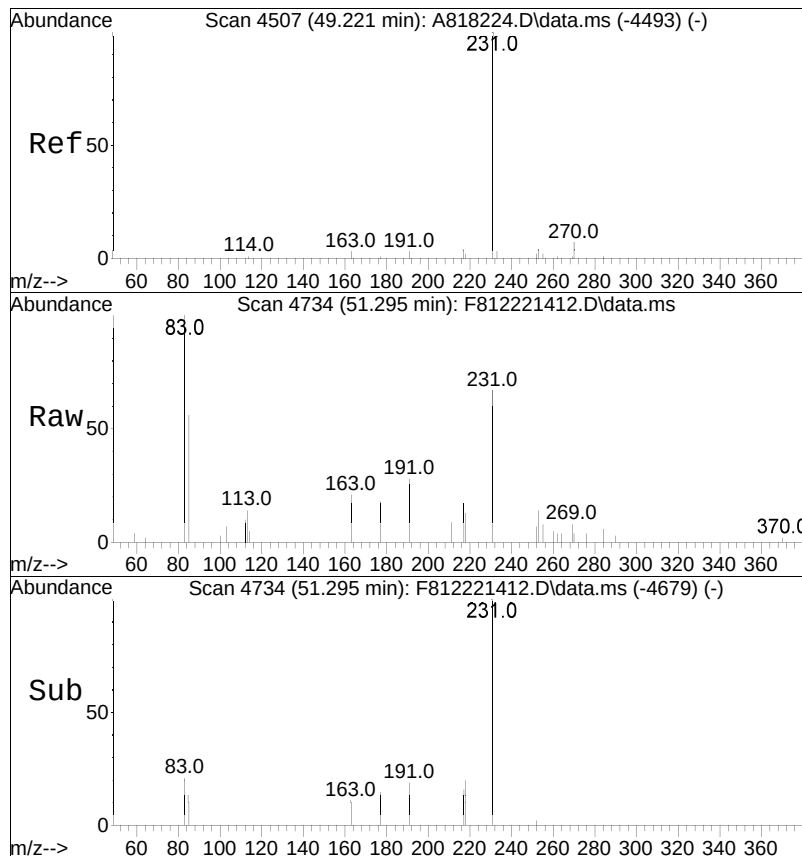


#147
 C26,20R- +C27,20S- triaromatic
 Concen: 1157.80 ng/mL
 RT: 49.942 min Scan# 4586
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am
 Tgt Ion:231 Resp: 16048



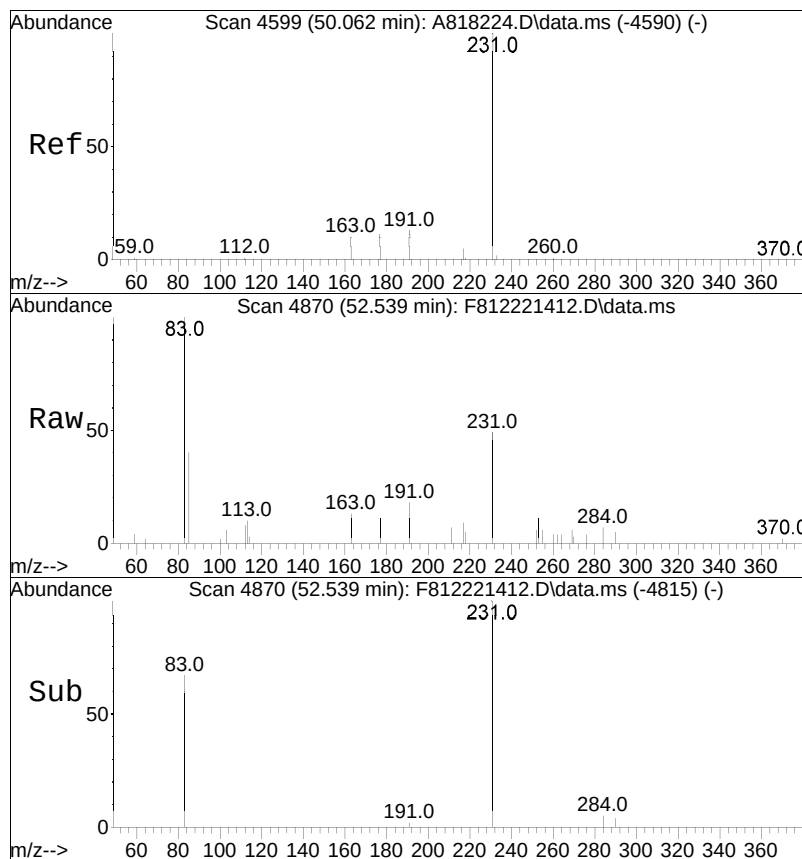
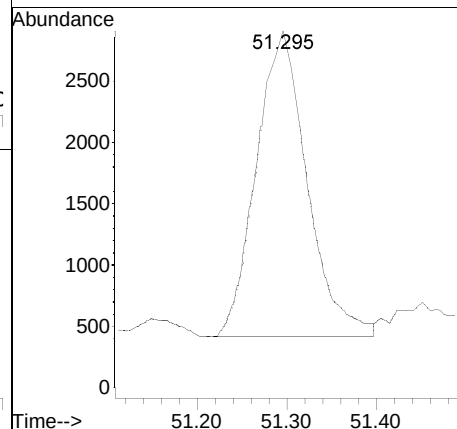
#148
 C28,20S-triaromatic steroid
 Concen: 714.39 ng/mL
 RT: 50.829 min Scan# 4683
 Delta R.T. 0.000 min
 Lab File: F812221412.D
 Acq: 24 Dec 2014 3:47 am
 Tgt Ion:231 Resp: 9902





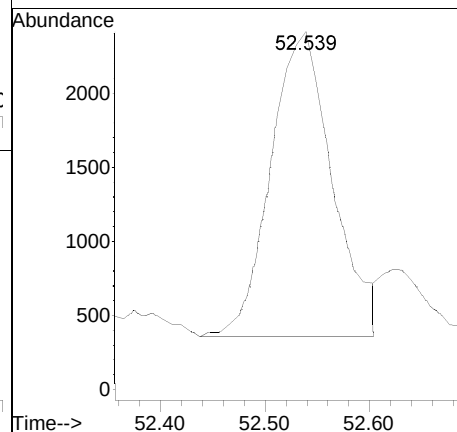
#149
C27,20R-triaromatic steroid
Concen: 701.62 ng/mL
RT: 51.295 min Scan# 4734
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

Tgt Ion:231 Resp: 9725



#150
C28,20R-triaromatic steroid
Concen: 606.82 ng/mL
RT: 52.539 min Scan# 4870
Delta R.T. 0.000 min
Lab File: F812221412.D
Acq: 24 Dec 2014 3:47 am

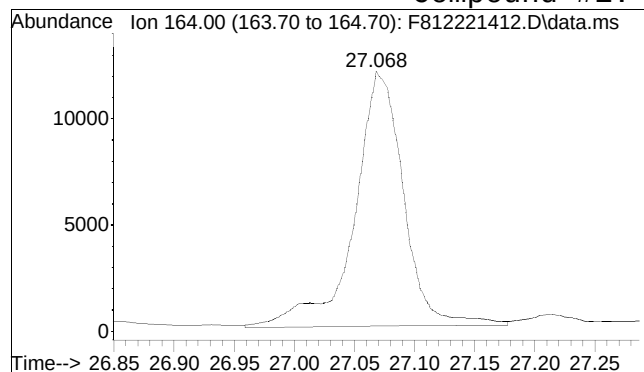
Tgt Ion:231 Resp: 8411



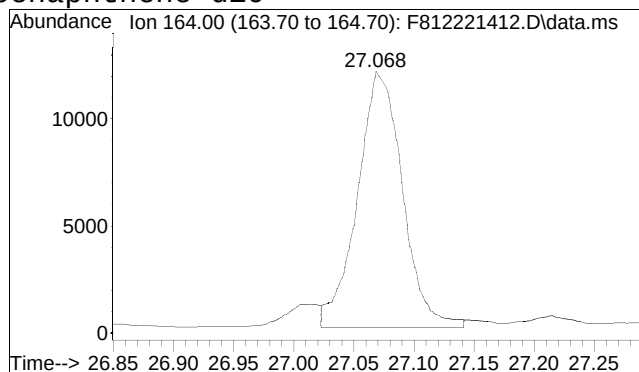
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #1: Acenaphthene-d10



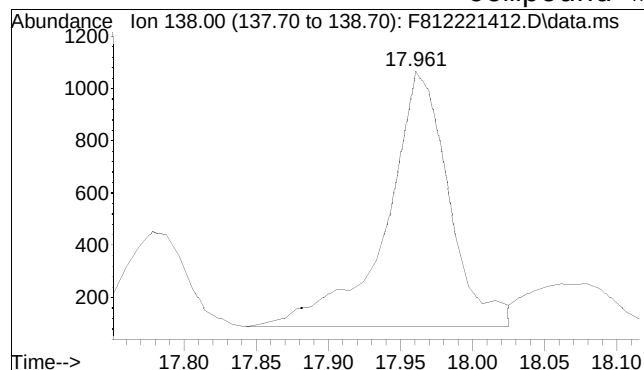
Original Peak Response = 34382



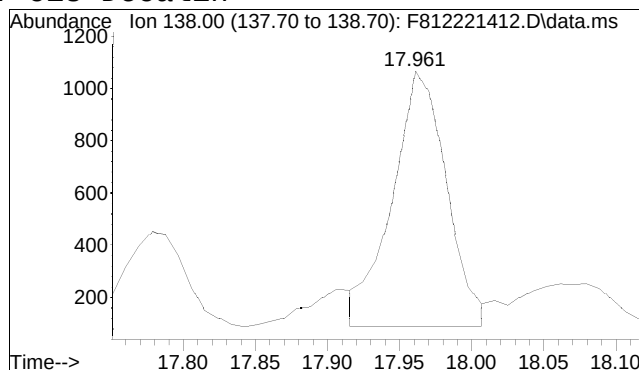
Manual Peak Response = 31047 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Compound #4: cis-Decalin



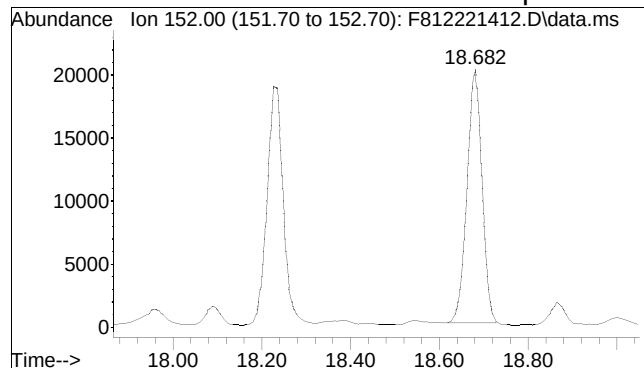
Original Peak Response = 2996



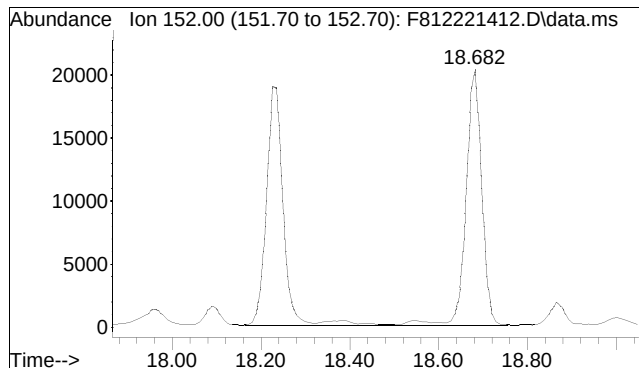
Manual Peak Response = 2554 M4

M4 = Poor automated baseline construction.

Compound #5: C1-Decalins



Original Peak Response = 46992



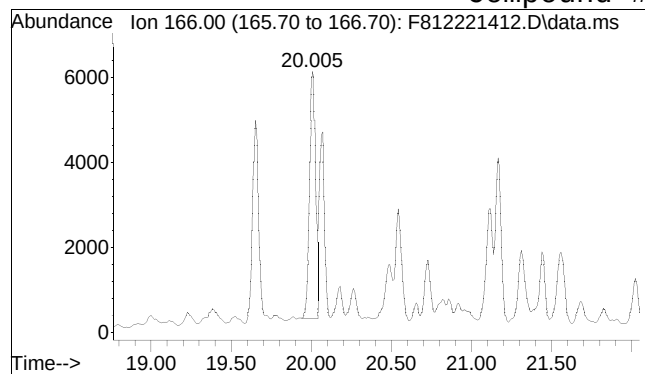
Manual Peak Response = 100256 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

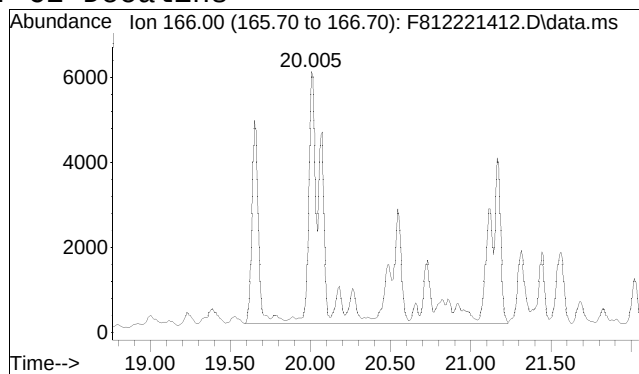
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
Data File : F812221412.D Operator : PAH8:ML
Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #6: C2-Decalins



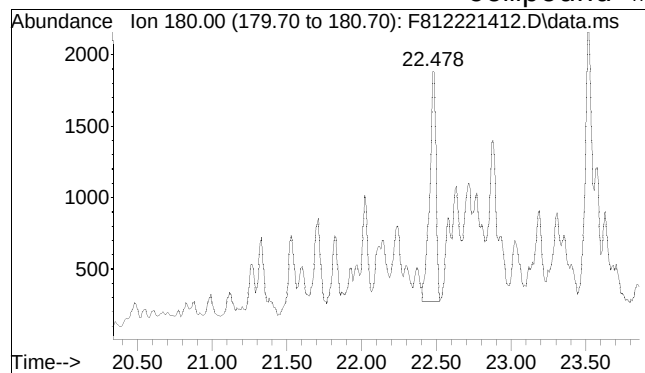
Original Peak Response = 15938

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.



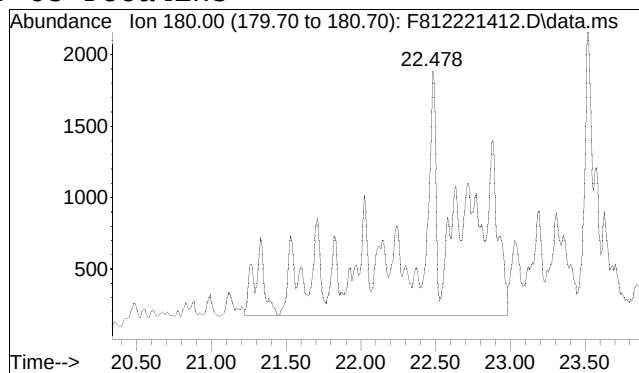
Manual Peak Response = 87637 M5

Compound #7: C3-Decalins



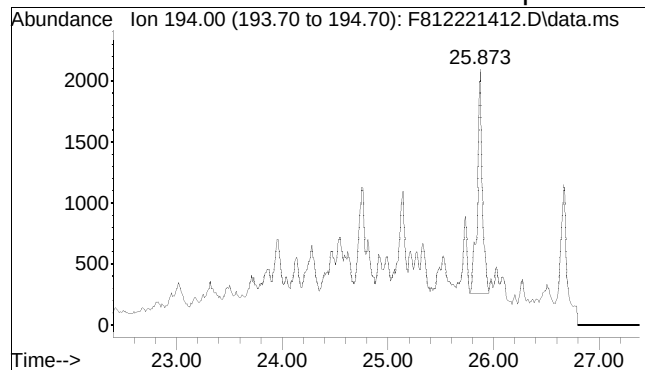
Original Peak Response = 4751

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.



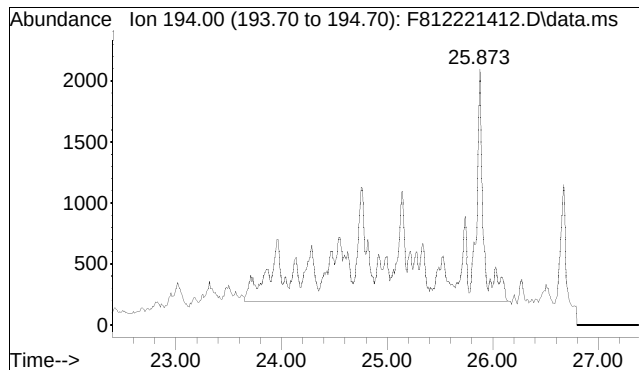
Manual Peak Response = 44260 M5

Compound #8: C4-Decalins



Original Peak Response = 5944

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

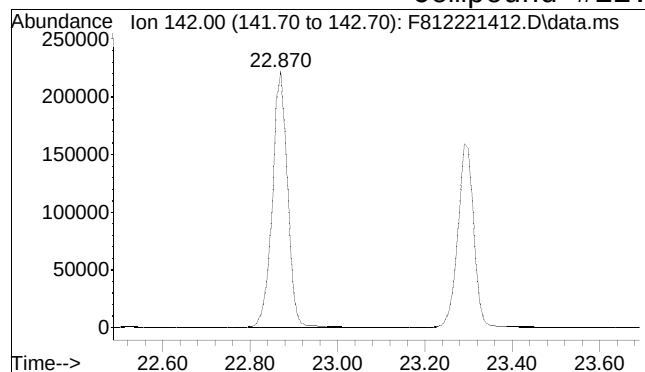


Manual Peak Response = 44567 M5

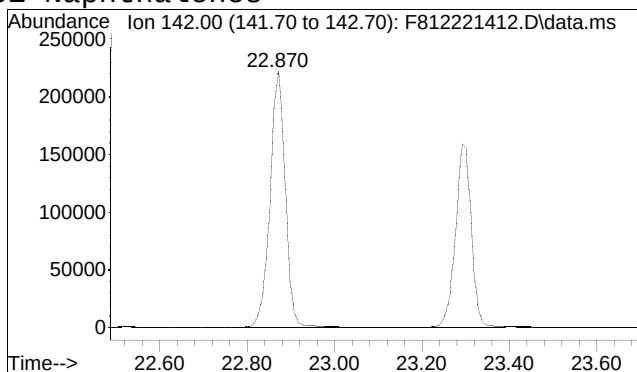
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #11: C1-Naphthalenes



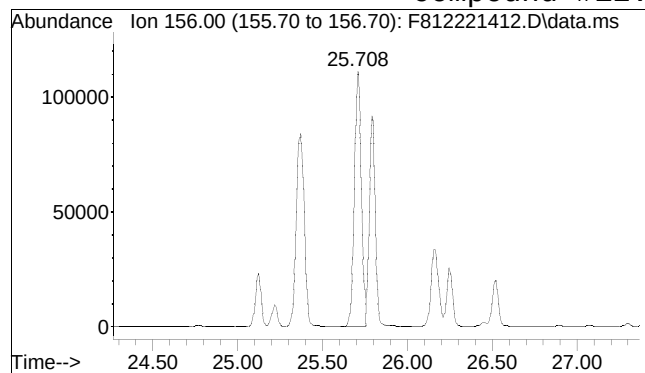
Original Peak Response = 537345



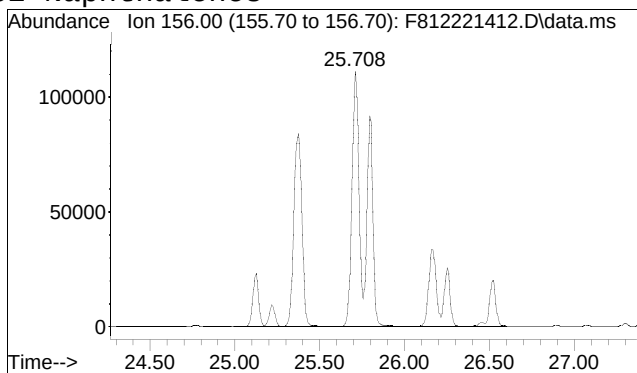
Manual Peak Response = 941144 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Compound #12: C2-Naphthalenes



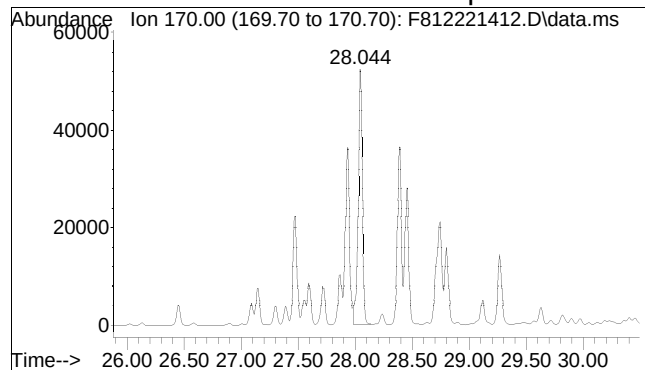
Original Peak Response = 316882



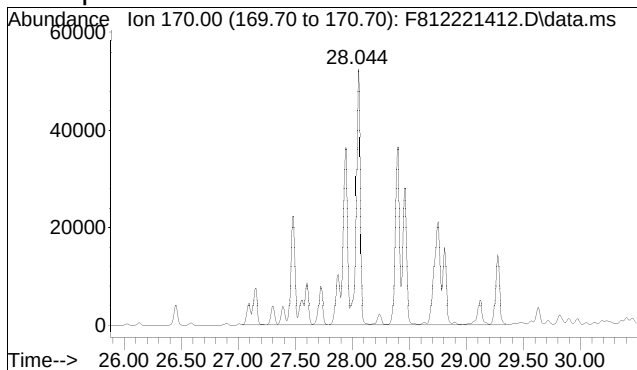
Manual Peak Response = 1128265 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Compound #13: C3-Naphthalenes



Original Peak Response = 127833



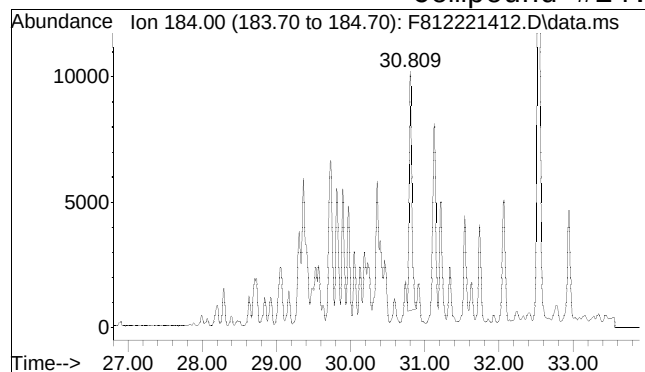
Manual Peak Response = 720059 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

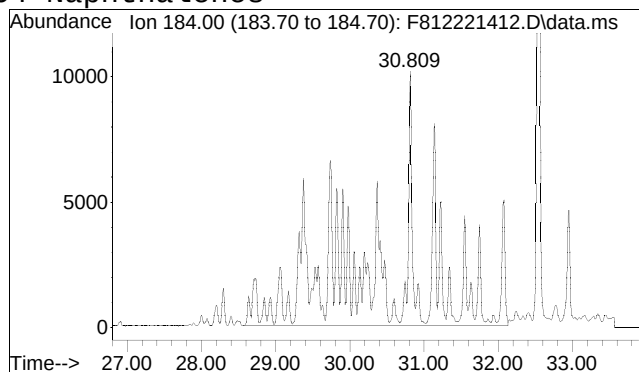
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #14: C4-Naphthalenes



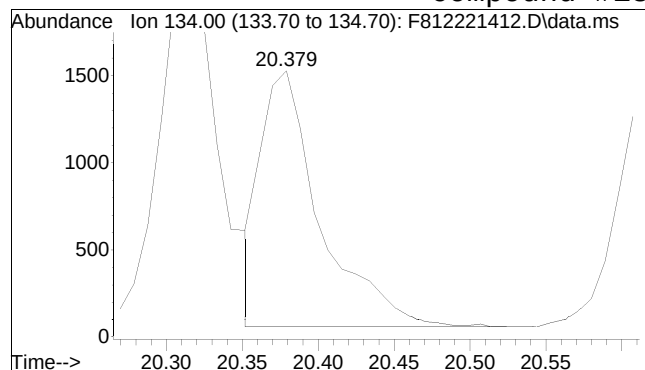
Original Peak Response = 24192



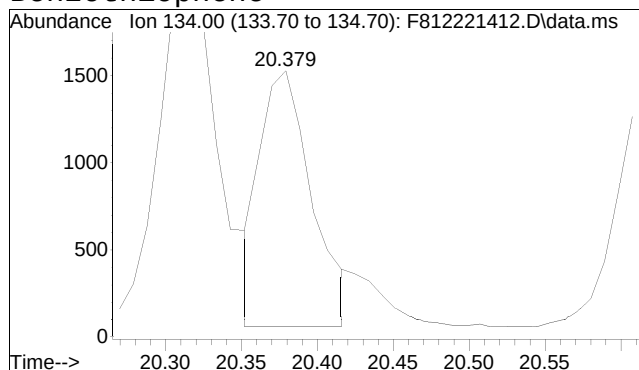
Manual Peak Response = 332853 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Compound #18: Benzothiophene



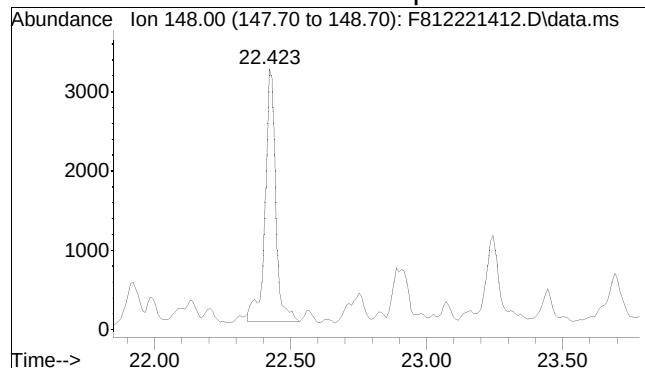
Original Peak Response = 4012



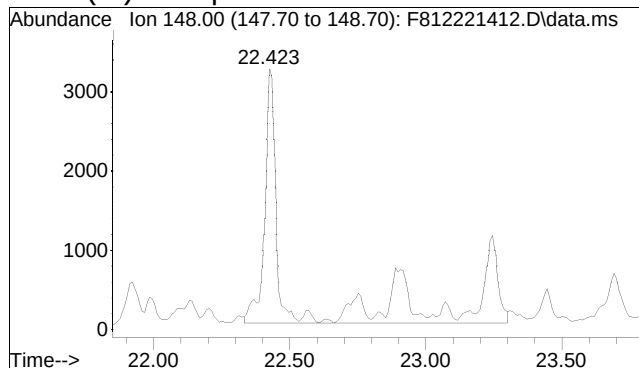
Manual Peak Response = 3483 M4

M4 = Poor automated baseline construction.

Compound #19: C1-Benzo(b)thiophenes



Original Peak Response = 8616



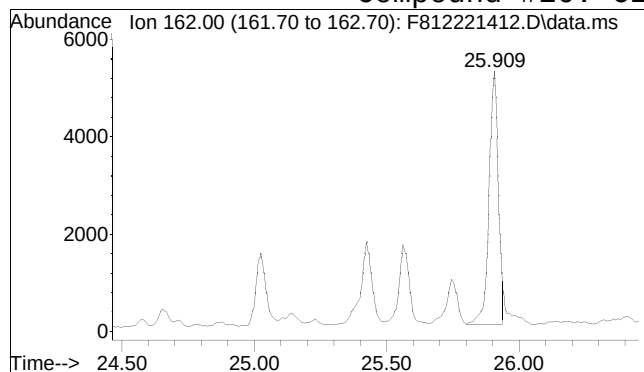
Manual Peak Response = 19036 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

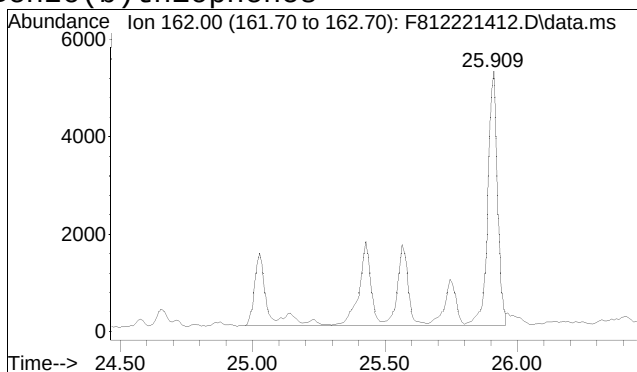
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #20: C2-Benzo(b)thiophenes



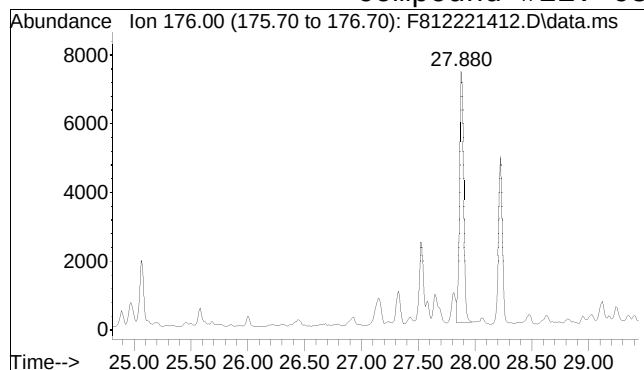
Original Peak Response = 12768



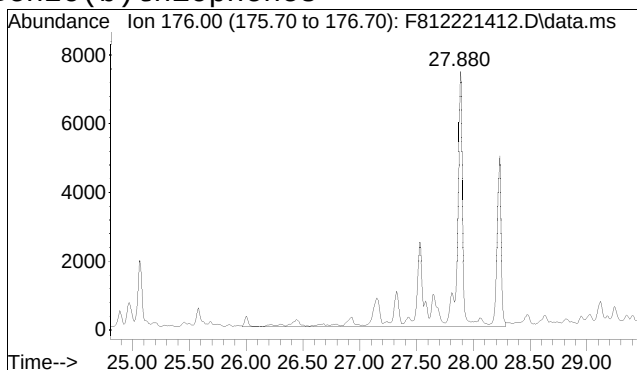
Manual Peak Response = 31283 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Compound #21: C3-Benzo(b)thiophenes



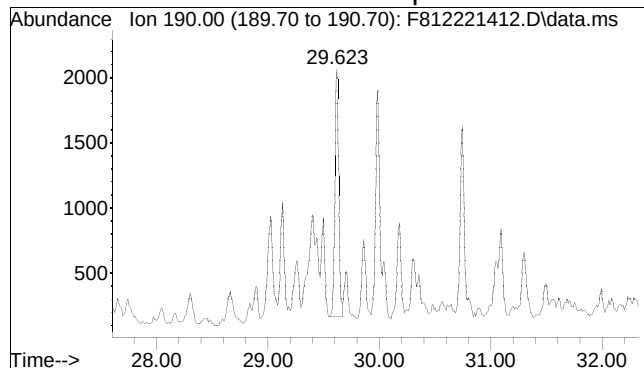
Original Peak Response = 17992



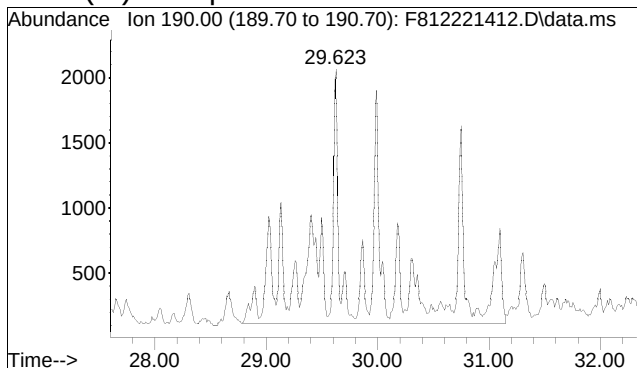
Manual Peak Response = 60437 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Compound #22: C4-Benzo(b)thiophenes



Original Peak Response = 4520



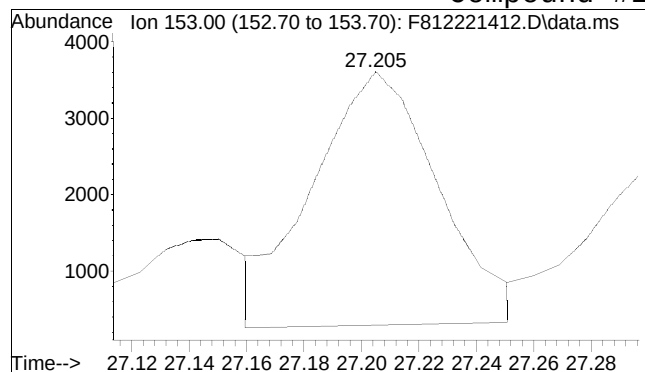
Manual Peak Response = 43670 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

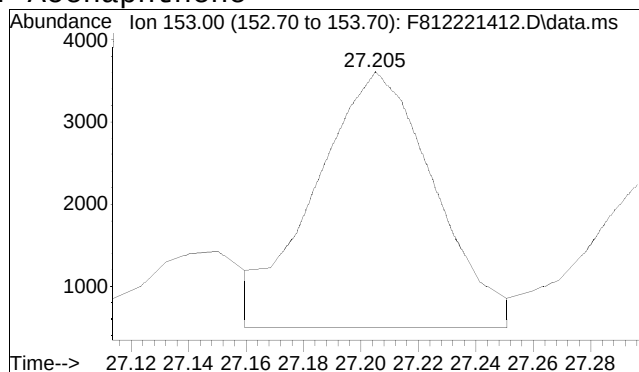
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #27: Acenaphthene



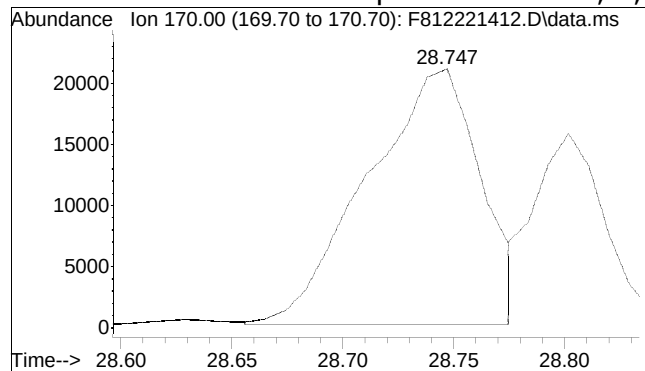
Original Peak Response = 10063



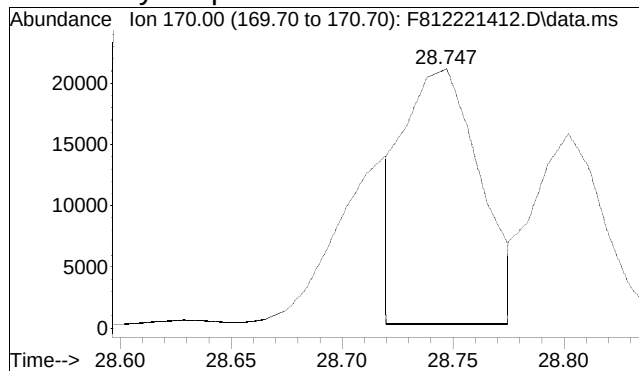
Manual Peak Response = 8936 M4

M4 = Poor automated baseline construction.

Compound #28: 2,3,5-Trimethylnaphthalene



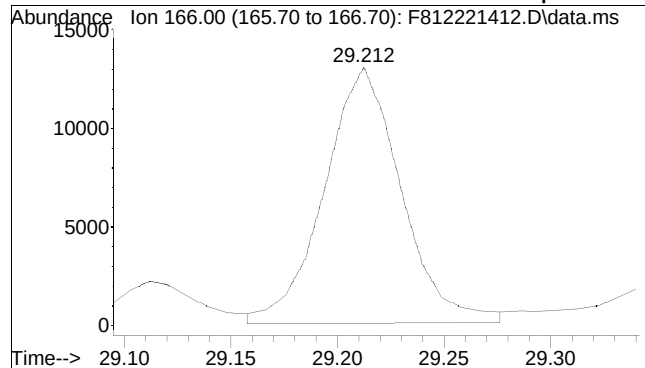
Original Peak Response = 74576



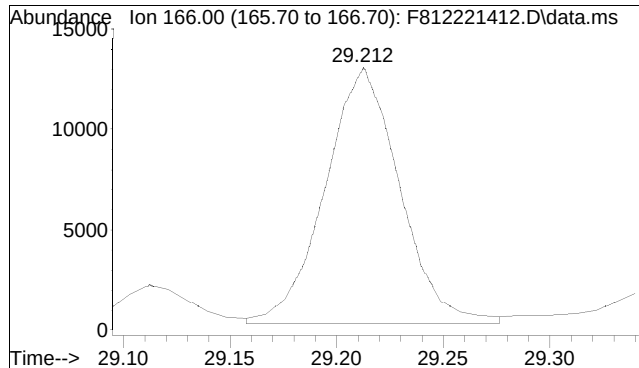
Manual Peak Response = 49091 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Compound #29: Fluorene



Original Peak Response = 32390



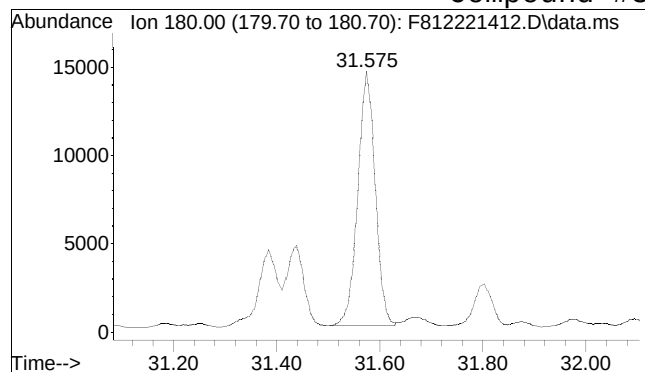
Manual Peak Response = 30998 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

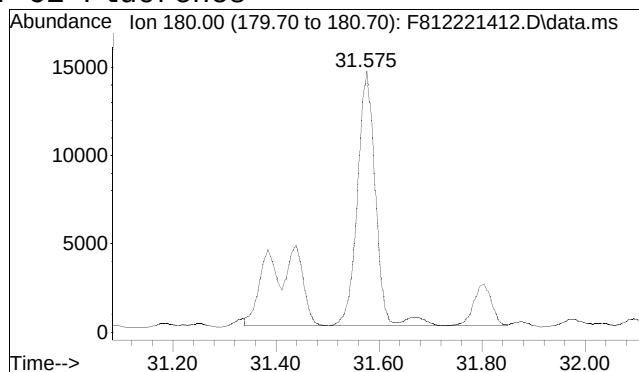
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #30: C1-Fluorenes



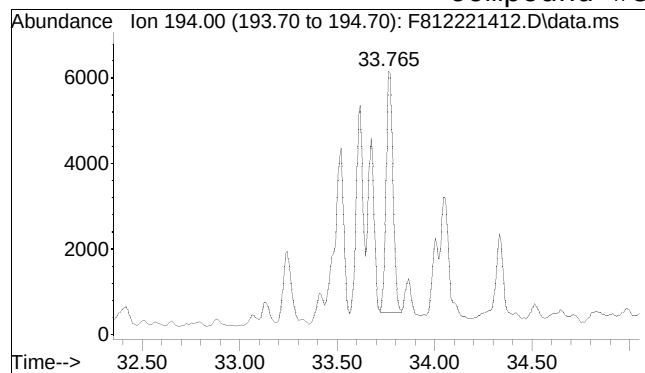
Original Peak Response = 33993

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.



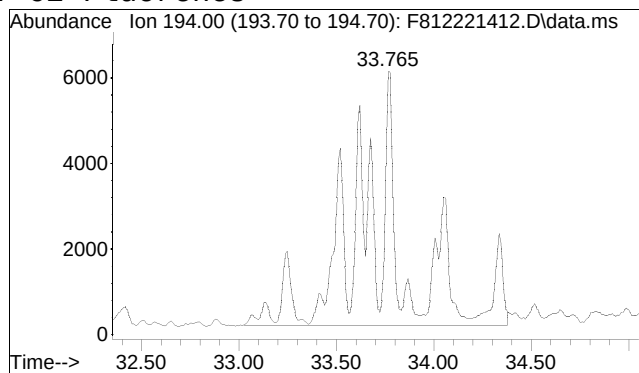
Manual Peak Response = 61824 M5

Compound #31: C2-Fluorenes



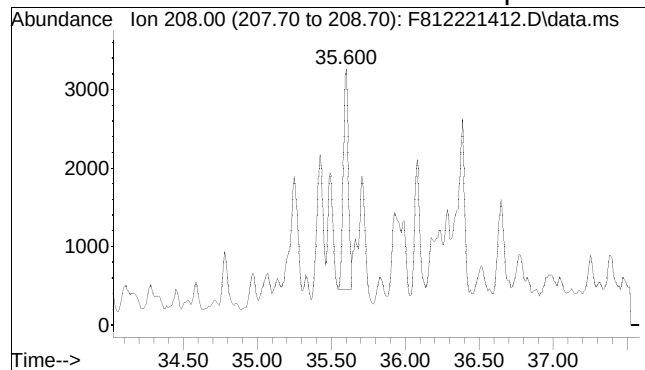
Original Peak Response = 13884

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.



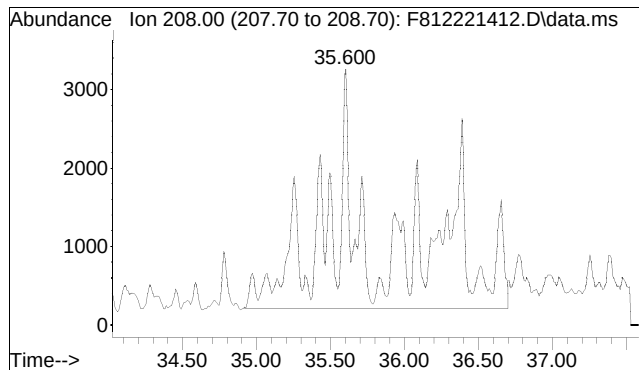
Manual Peak Response = 88201 M5

Compound #32: C3-Fluorenes



Original Peak Response = 6879

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

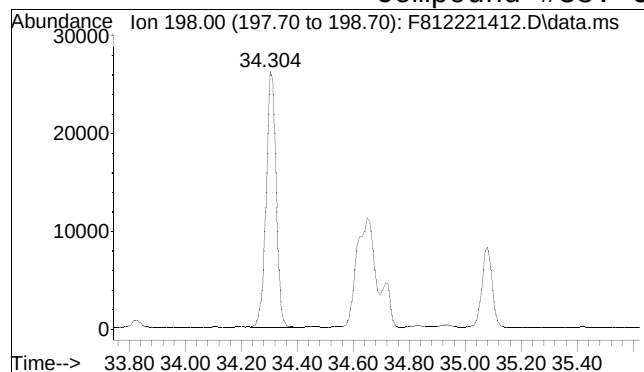


Manual Peak Response = 76350 M5

Manual Integration/Negative Proof Report

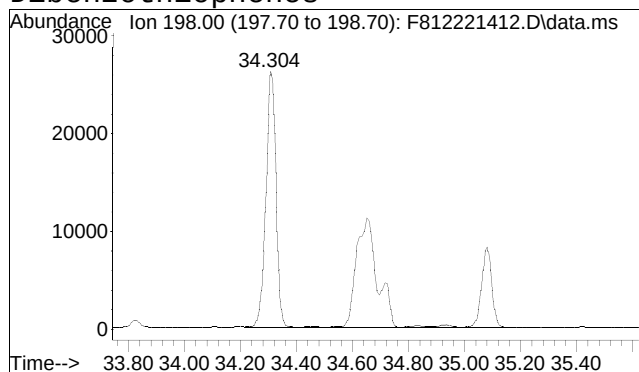
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #38: C1-Dibenzothiophenes



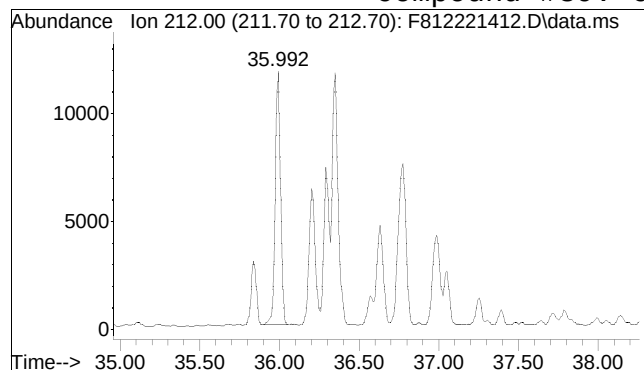
Original Peak Response = 64932

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.



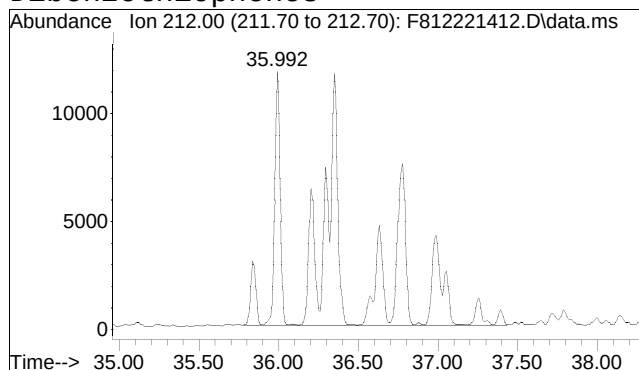
Manual Peak Response = 146554 M5

Compound #39: C2-Dibenzothiophenes



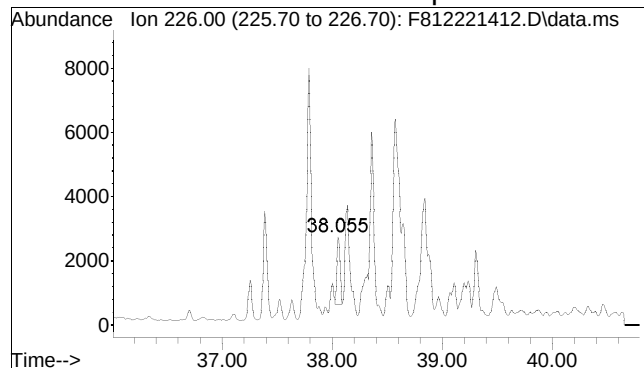
Original Peak Response = 27361

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.



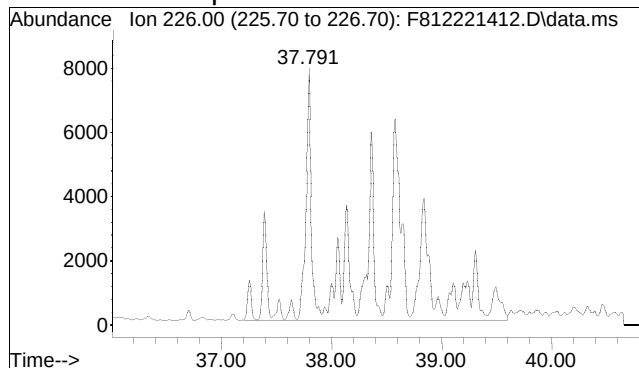
Manual Peak Response = 168644 M5

Compound #40: C3-Dibenzothiophenes



Original Peak Response = 4177

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

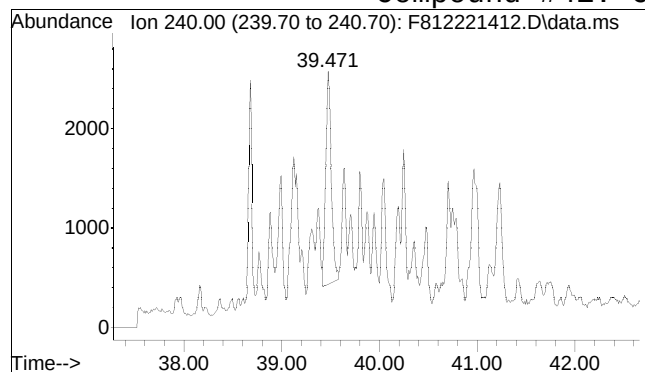


Manual Peak Response = 163377 M5

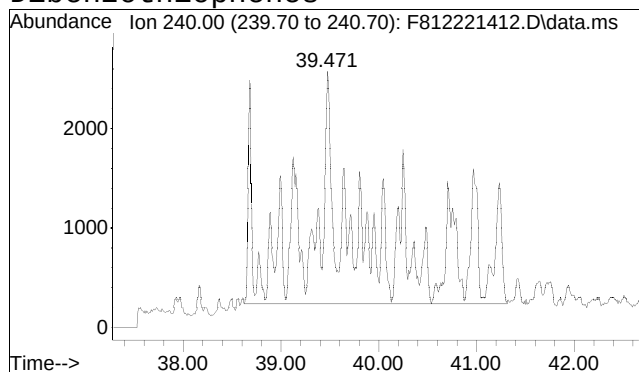
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #41: C4-Dibenzothiophenes



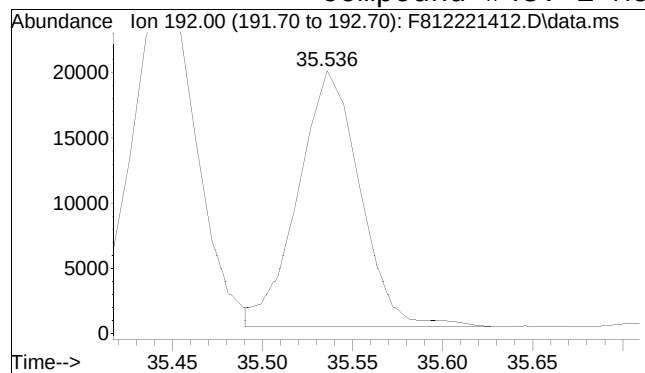
Original Peak Response = 8451



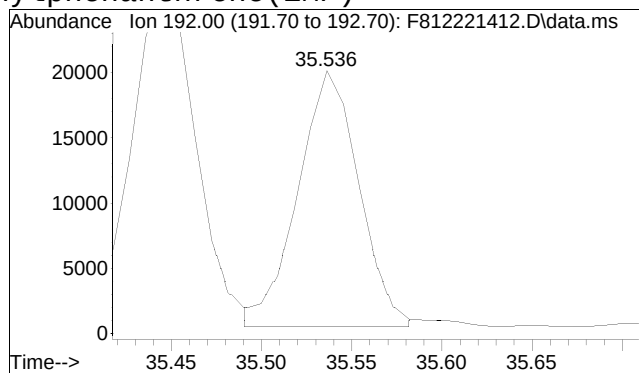
Manual Peak Response = 93852 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Compound #48: 1-Methylphenanthrene(1MP)



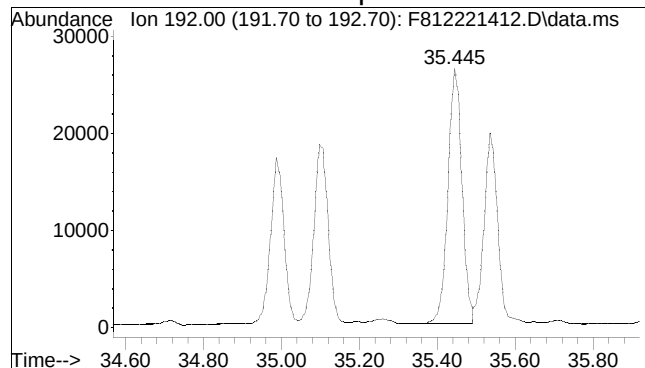
Original Peak Response = 46778



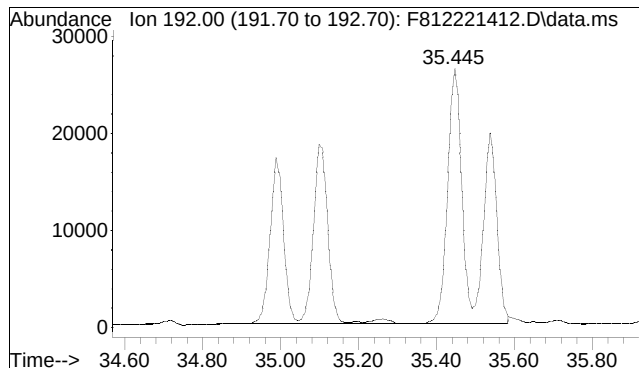
Manual Peak Response = 46174 M4

M4 = Poor automated baseline construction.

Compound #49: C1-Phenanthrenes/Anthracenes



Original Peak Response = 66173



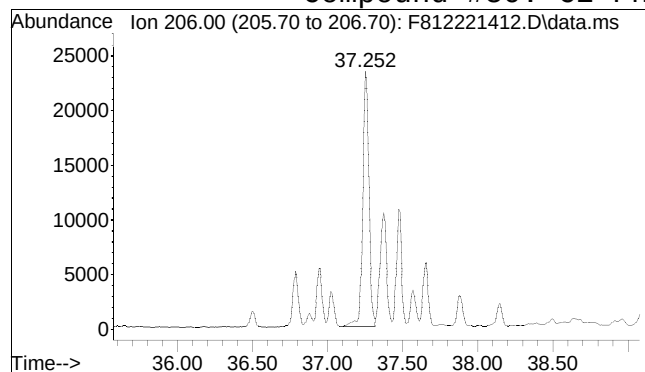
Manual Peak Response = 203550 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

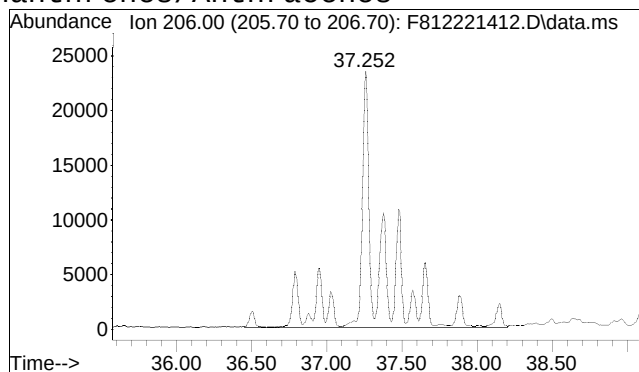
Data Path : 0:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #50: C2-Phenanthrenes/Anthracenes



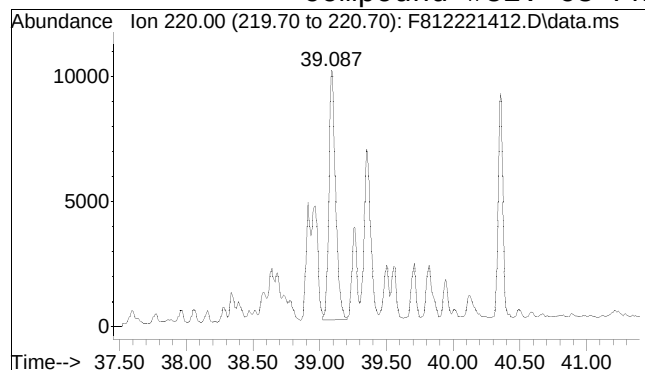
Original Peak Response = 67030

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.



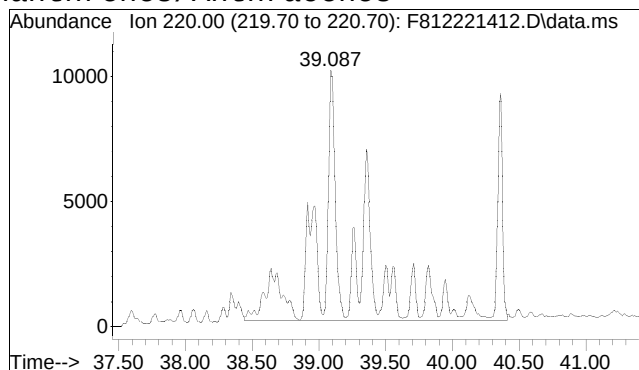
Manual Peak Response = 205687 M5

Compound #52: C3-Phenanthrenes/Anthracenes



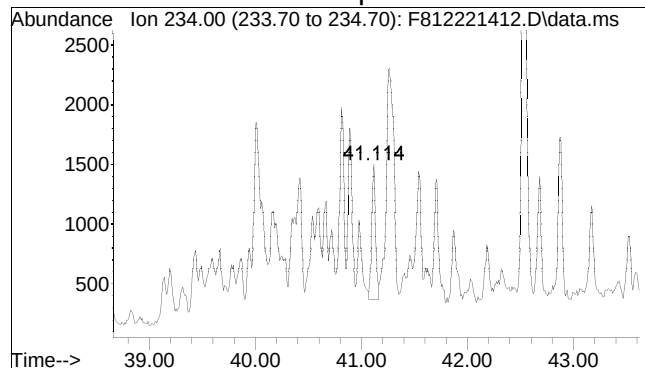
Original Peak Response = 34493

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.



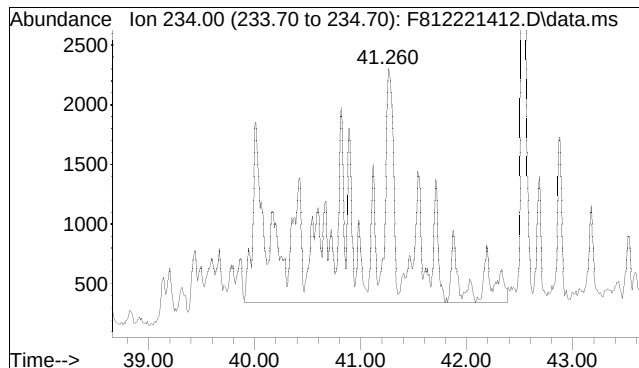
Manual Peak Response = 168250 M5

Compound #53: C4-Phenanthrenes/Anthracenes



Original Peak Response = 2877

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

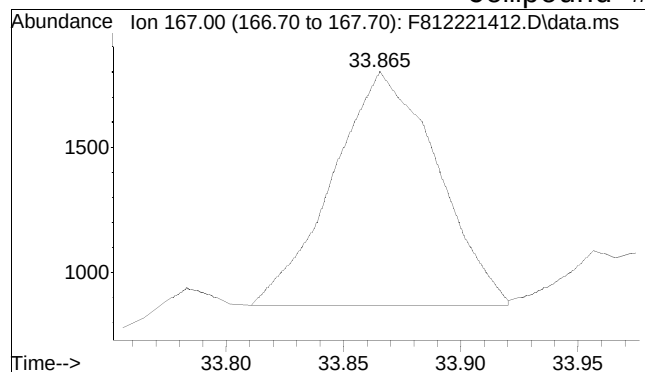


Manual Peak Response = 68147 M5

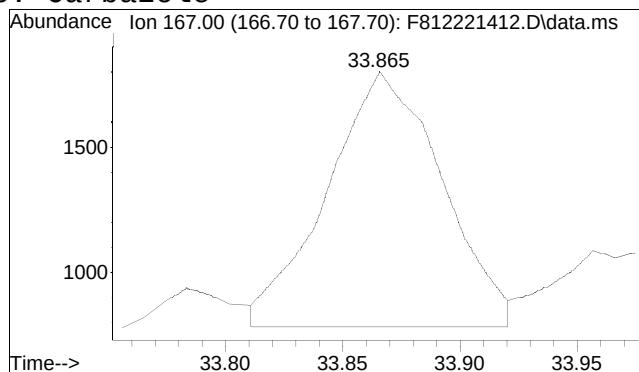
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #56: Carbazole



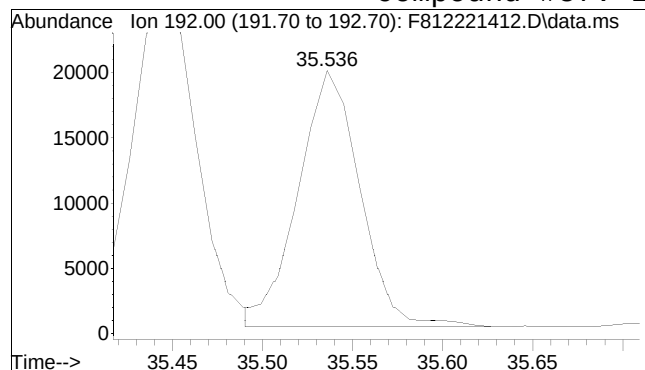
Original Peak Response = 2911



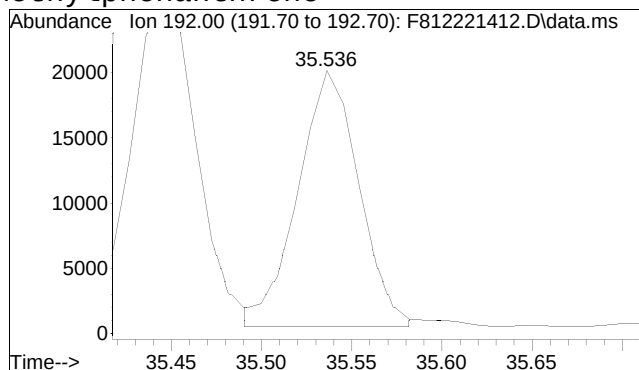
Manual Peak Response = 3463 M4

M4 = Poor automated baseline construction.

Compound #57: 1-Methylphenanthrene



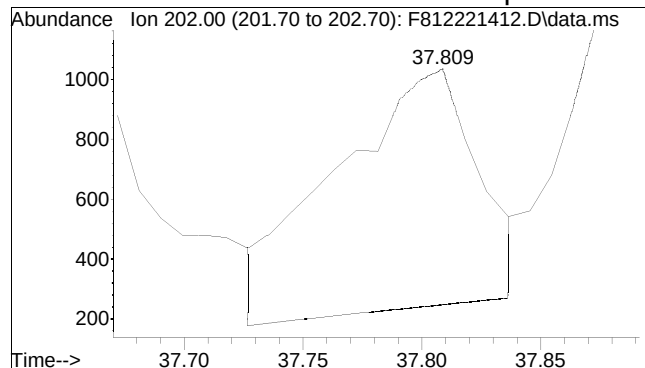
Original Peak Response = 46778



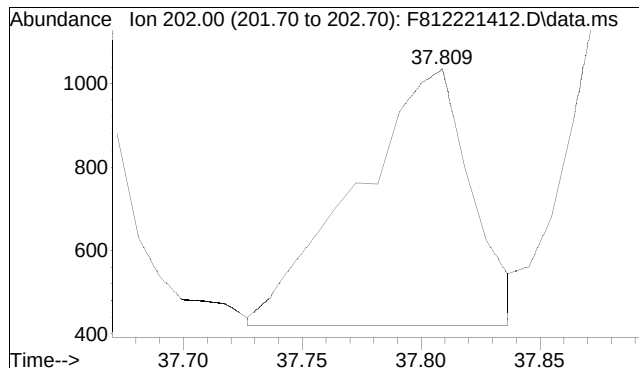
Manual Peak Response = 46174 M4

M4 = Poor automated baseline construction.

Compound #58: Fluoranthene



Original Peak Response = 3360



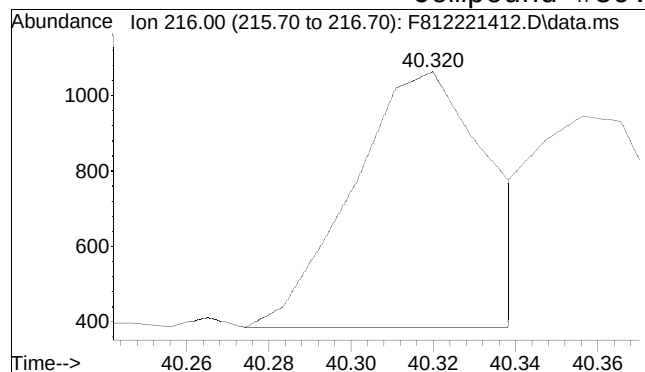
Manual Peak Response = 2065 M4

M4 = Poor automated baseline construction.

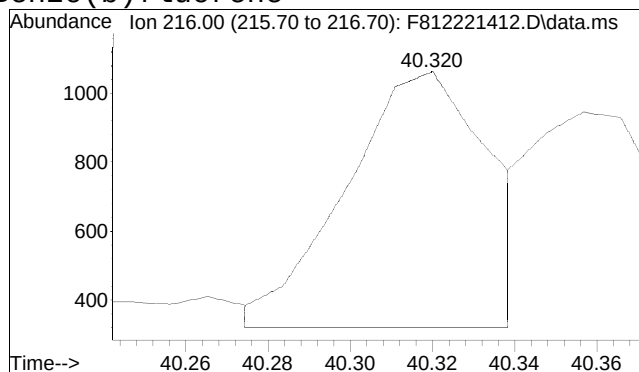
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #59: Benzo(b)fluorene



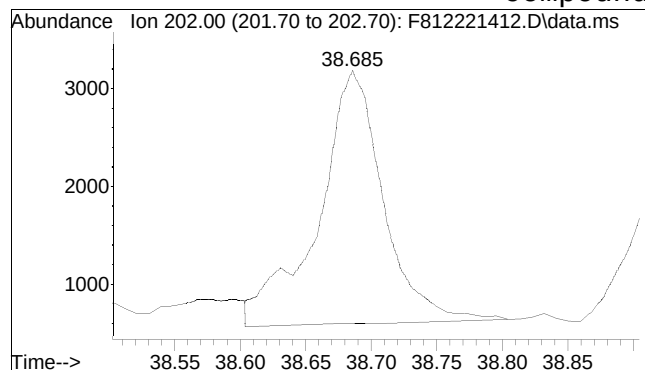
Original Peak Response = 1575



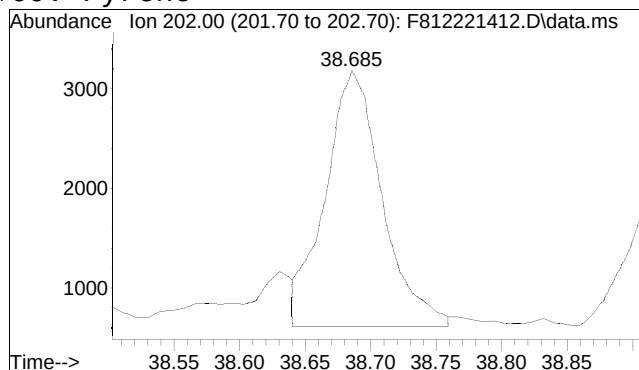
Manual Peak Response = 1824 M4

M4 = Poor automated baseline construction.

Compound #60: Pyrene



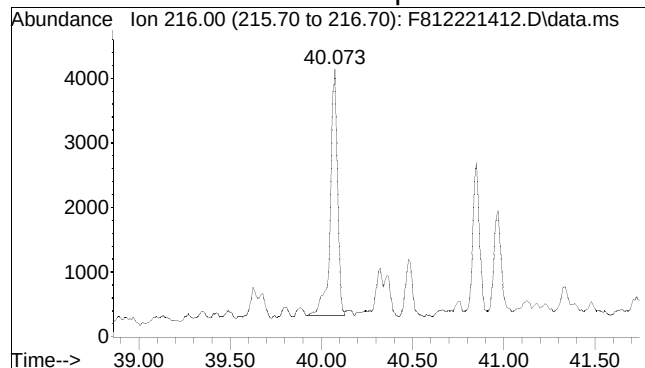
Original Peak Response = 8954



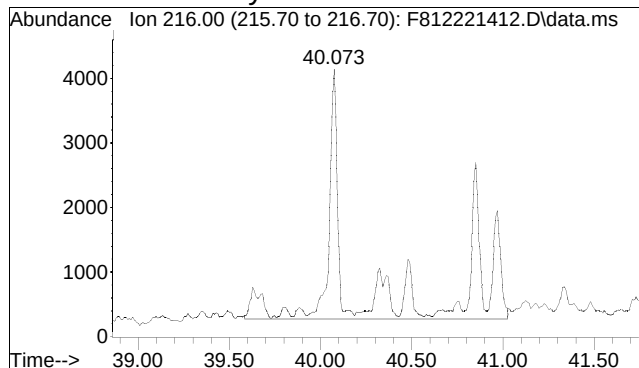
Manual Peak Response = 7731 M4

M4 = Poor automated baseline construction.

Compound #61: C1-Fluoranthenes/Pyrenes



Original Peak Response = 10578



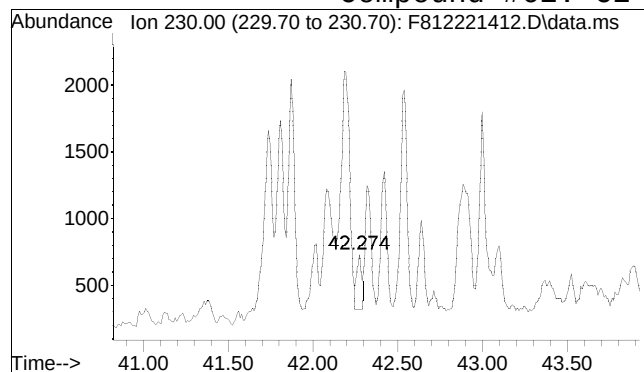
Manual Peak Response = 34328 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

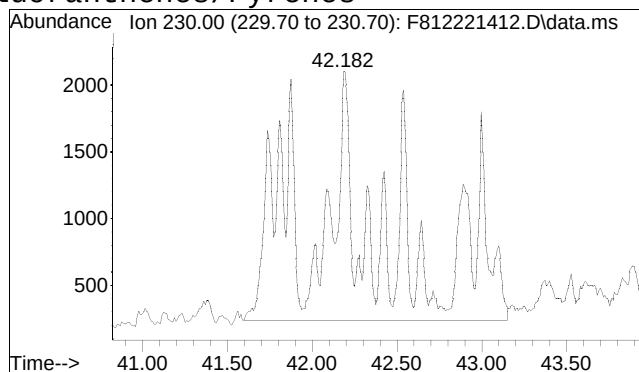
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #62: C2-Fluoranthenes/Pyrenes



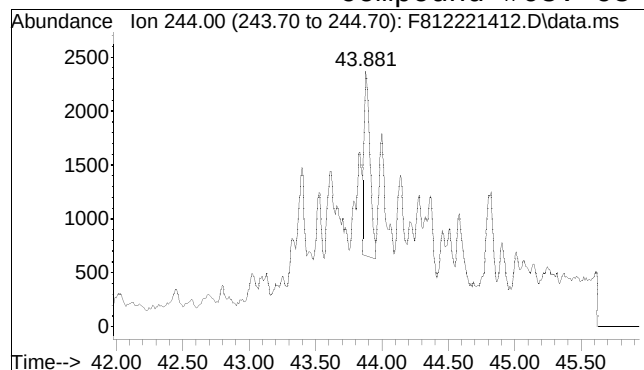
Original Peak Response = 818

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.



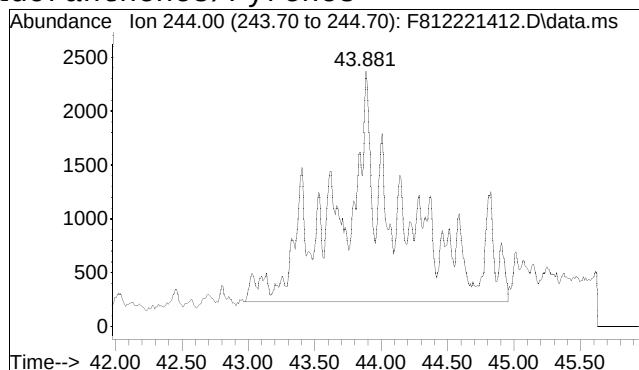
Manual Peak Response = 53541 M5

Compound #63: C3-Fluoranthenes/Pyrenes



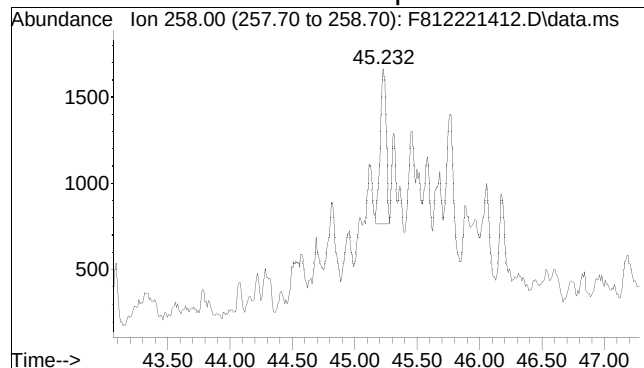
Original Peak Response = 5352

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.



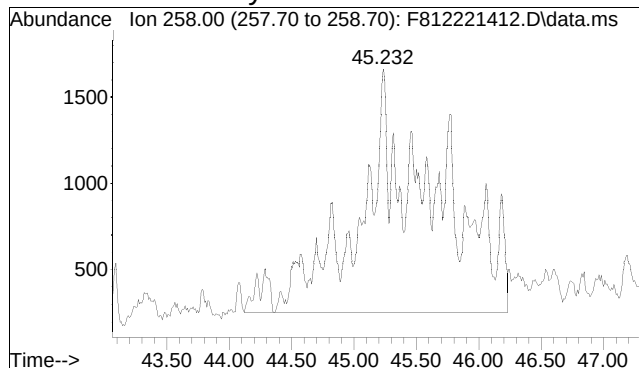
Manual Peak Response = 71715 M5

Compound #64: C4-Fluoranthenes/Pyrenes



Original Peak Response = 3026

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

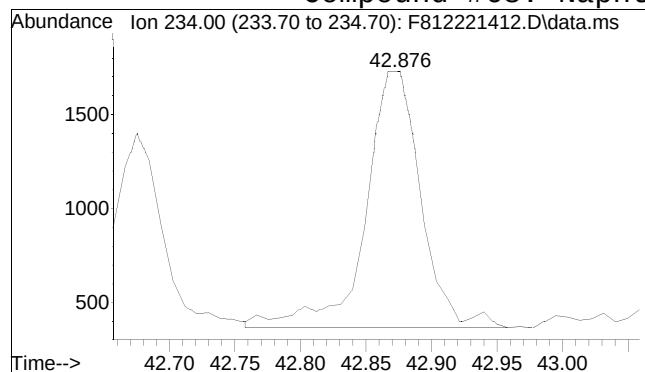


Manual Peak Response = 59334 M5

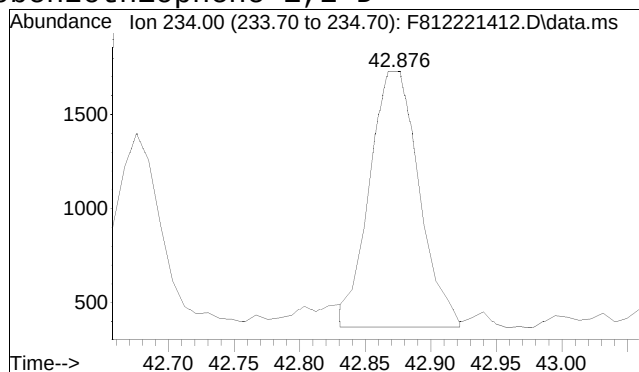
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #68: Naphthobenzothiophene-1,2-D



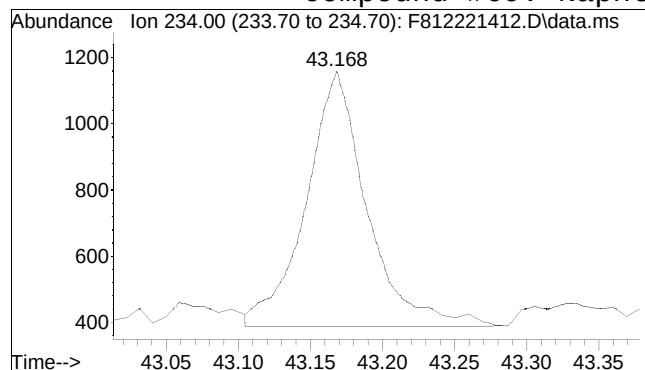
Original Peak Response = 3993



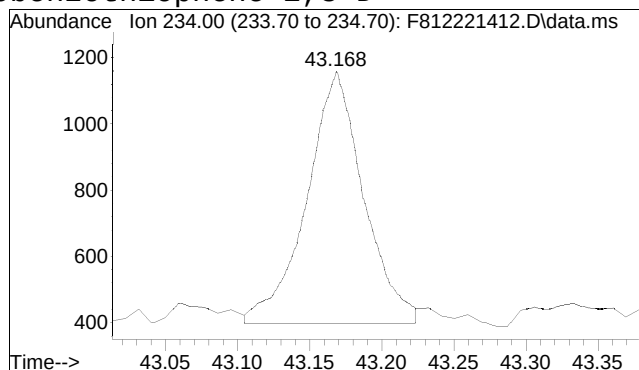
Manual Peak Response = 3547 M4

M4 = Poor automated baseline construction.

Compound #69: Naphthobenzothiophene-2,3-D



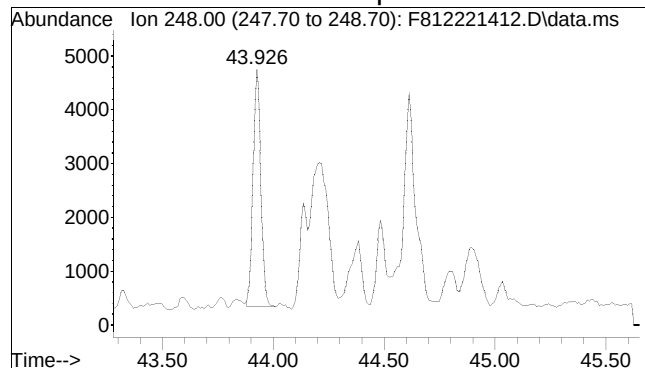
Original Peak Response = 2268



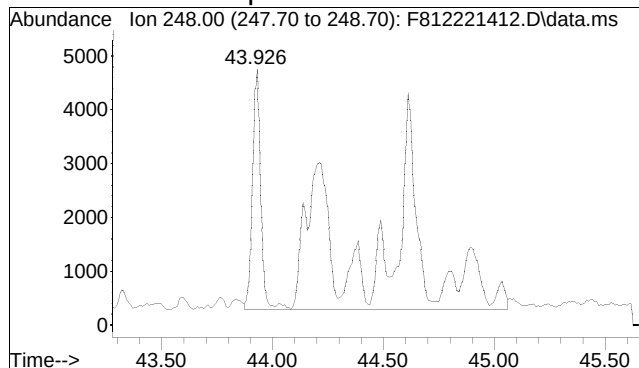
Manual Peak Response = 2099 M4

M4 = Poor automated baseline construction.

Compound #70: C1-Naphthobenzothiophenes



Original Peak Response = 10703



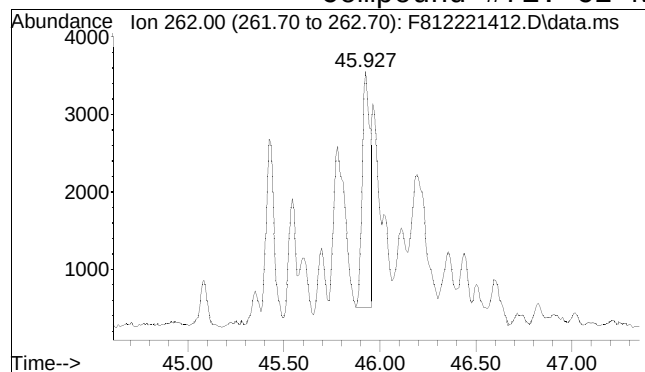
Manual Peak Response = 65519 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

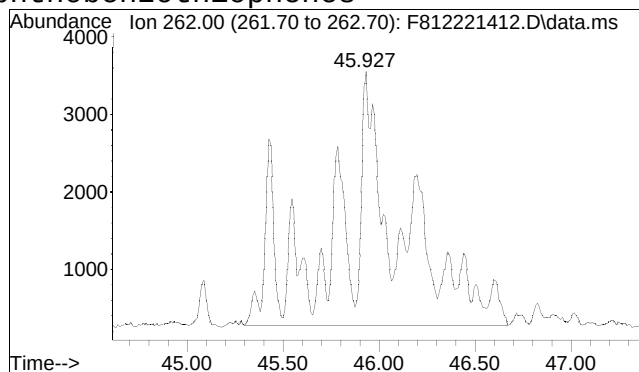
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #71: C2-Naphthobenzothiophenes



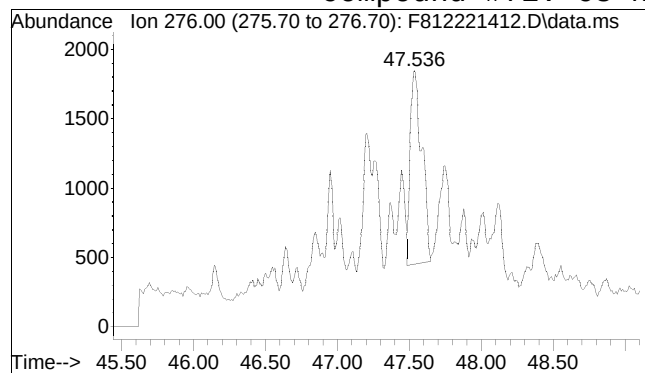
Original Peak Response = 8853



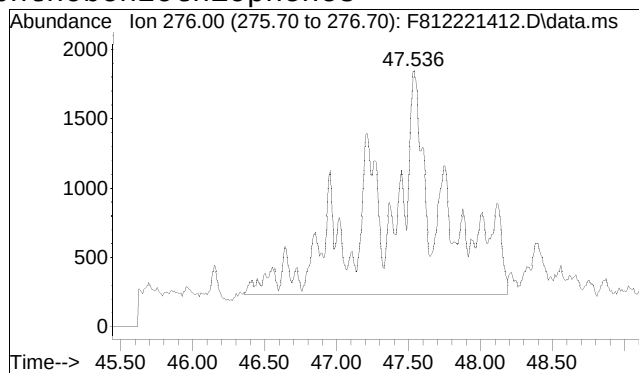
Manual Peak Response = 75502 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Compound #72: C3-Naphthobenzothiophenes



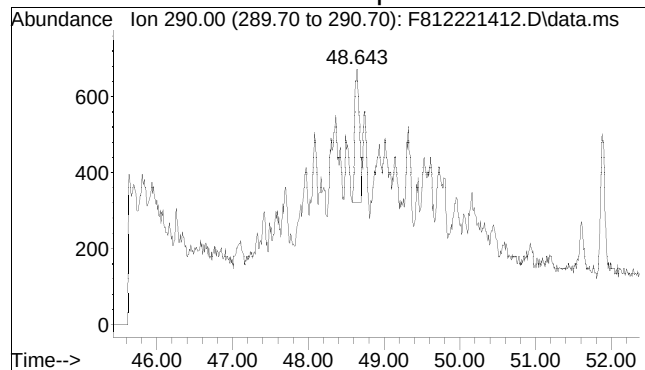
Original Peak Response = 7821



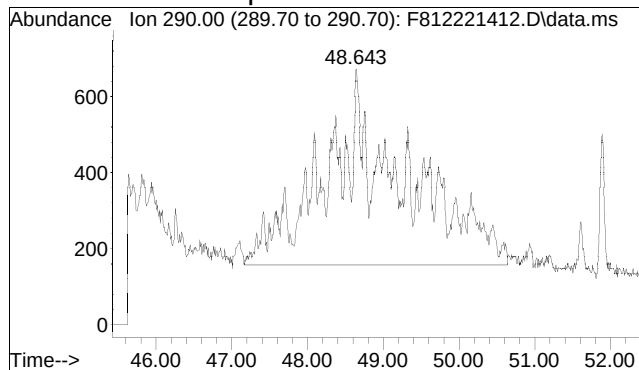
Manual Peak Response = 49453 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Compound #73: C4-Naphthobenzothiophenes



Original Peak Response = 1528



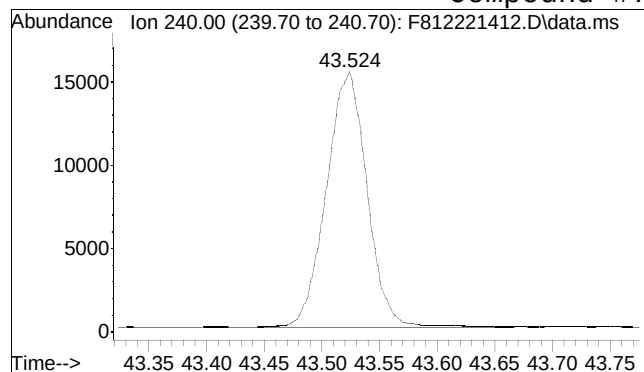
Manual Peak Response = 35696 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

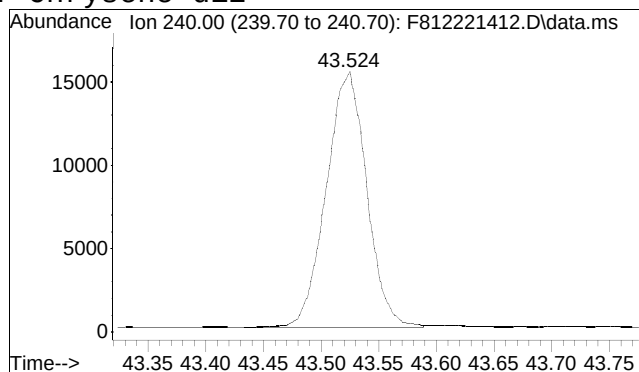
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #74: Chrysene-d12



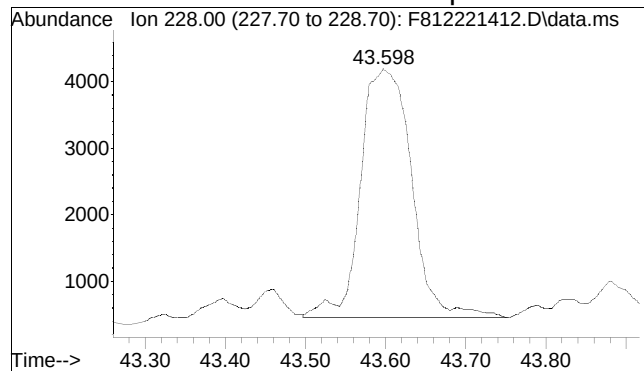
Original Peak Response = 37817



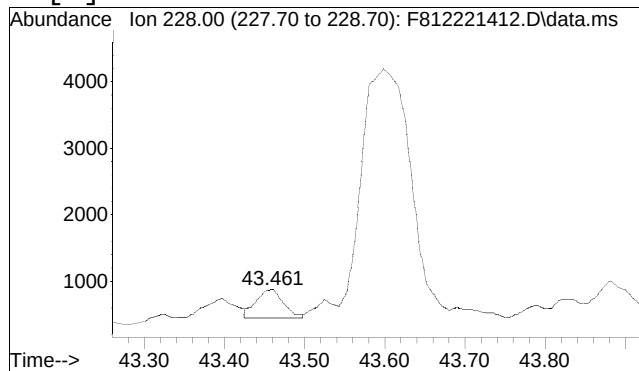
Manual Peak Response = 37527 M4

M4 = Poor automated baseline construction.

Compound #75: Benz[a]anthracene



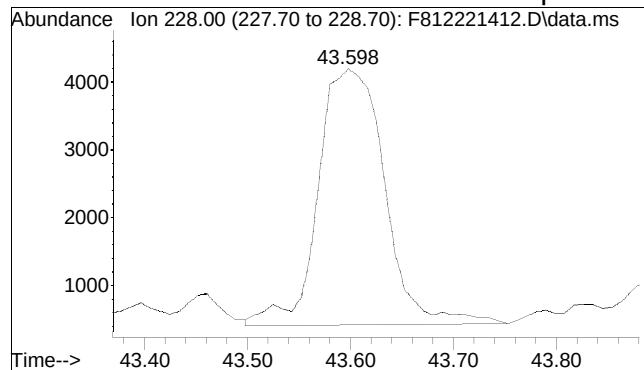
Original Peak Response = 16617



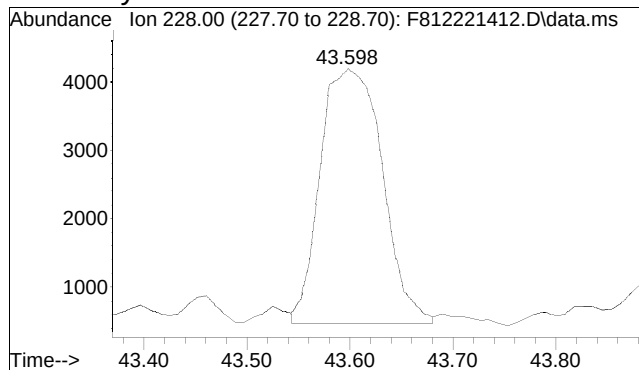
Manual Peak Response = 1020 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Compound #76: Chrysene



Original Peak Response = 16839



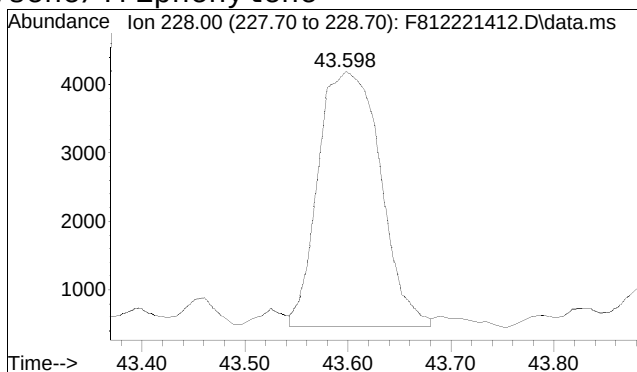
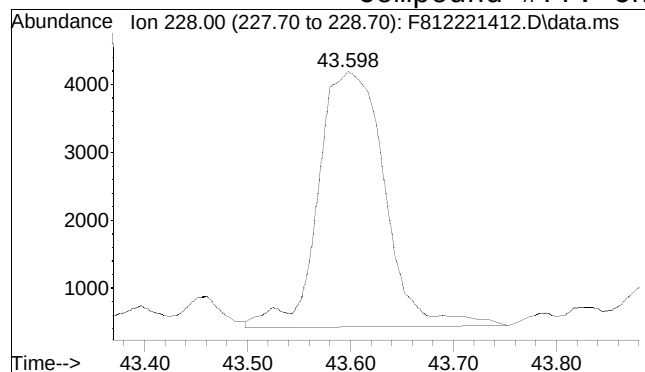
Manual Peak Response = 15456 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

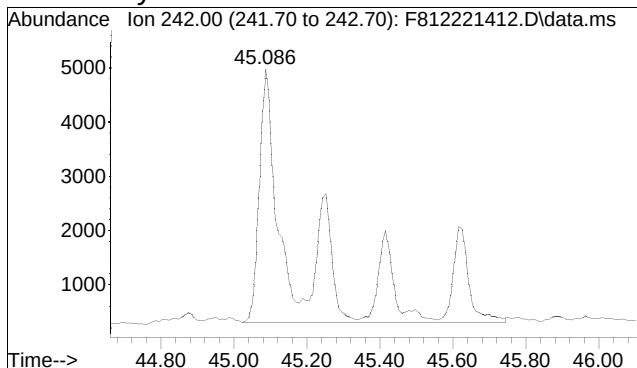
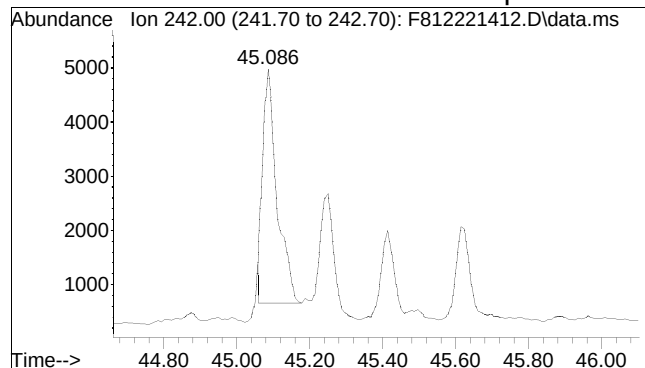
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #77: Chrysene/Triphenylene



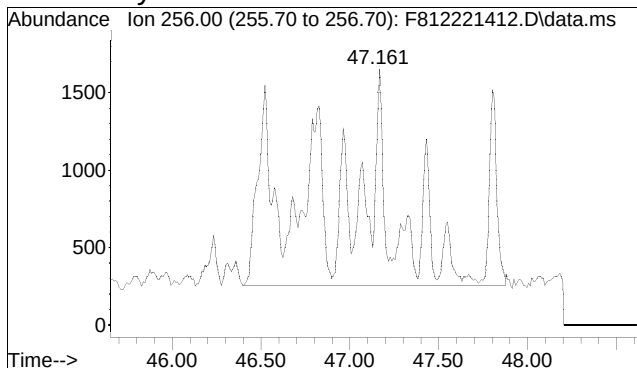
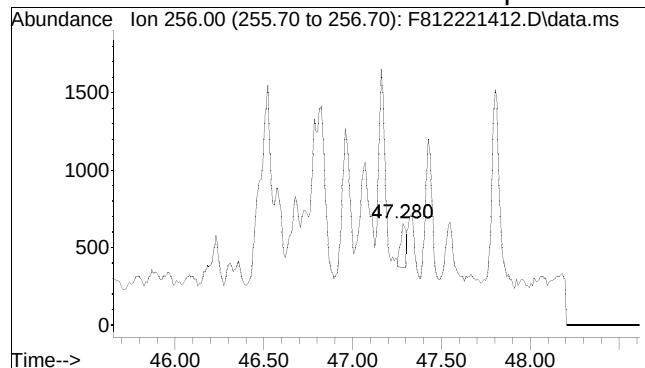
M4 = Poor automated baseline construction.

Compound #78: C1-Chrysenes



M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Compound #79: C2-Chrysenes

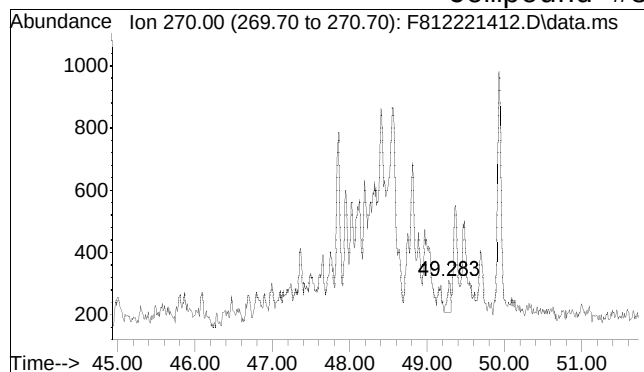


M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

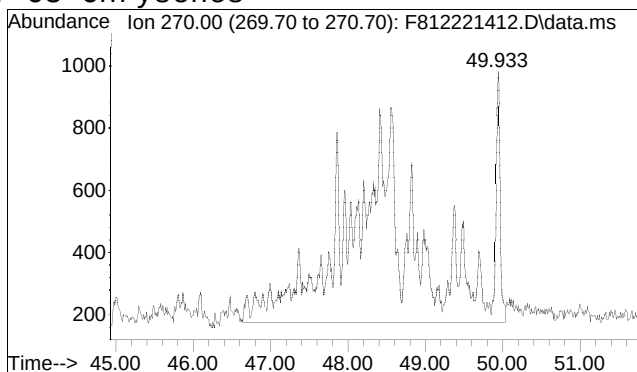
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #81: C3-Chrysenes



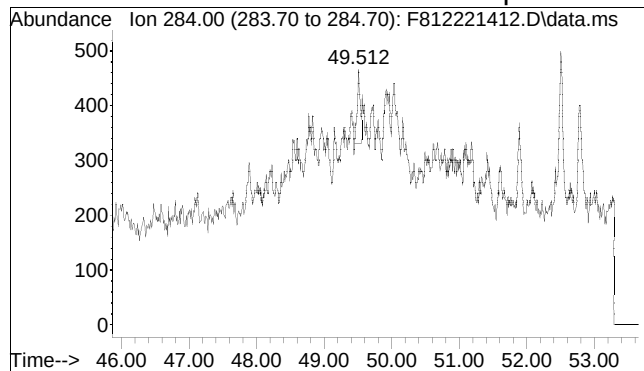
Original Peak Response = 304



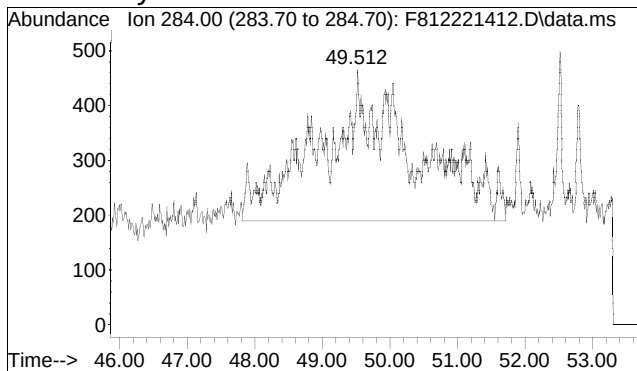
Manual Peak Response = 40425 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Compound #82: C4-Chrysenes



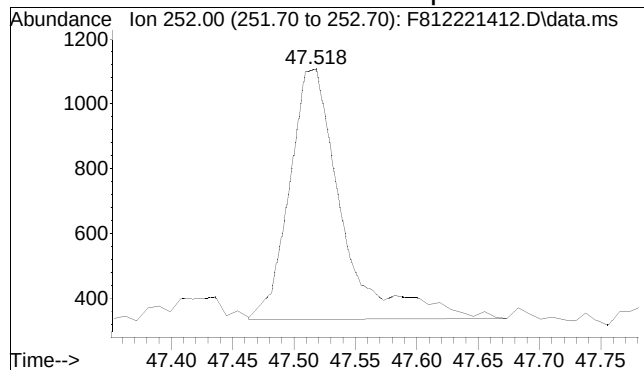
Original Peak Response = 413



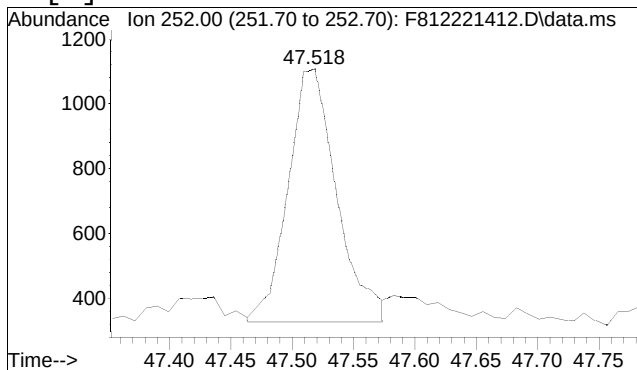
Manual Peak Response = 26418 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Compound #84: Benzo[b]fluoranthene



Original Peak Response = 2278



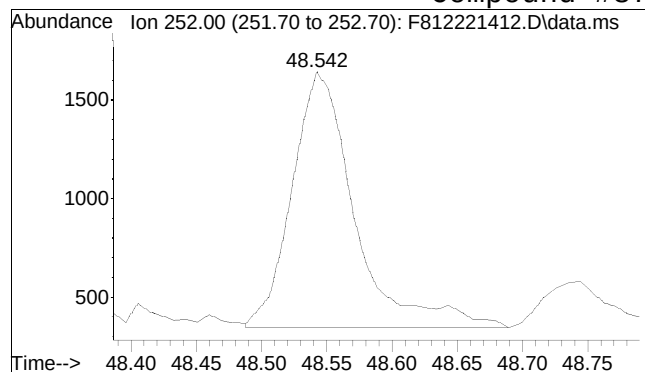
Manual Peak Response = 2145 M4

M4 = Poor automated baseline construction.

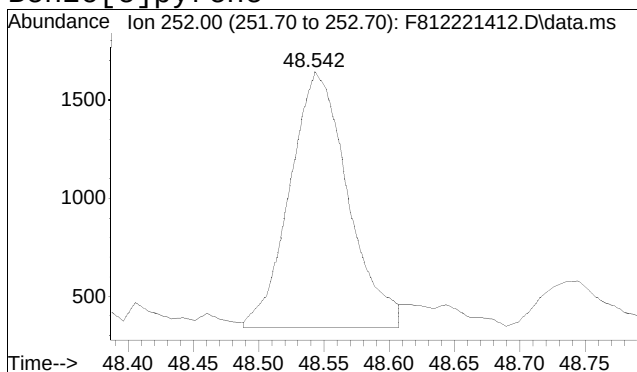
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #87: Benzo[e]pyrene



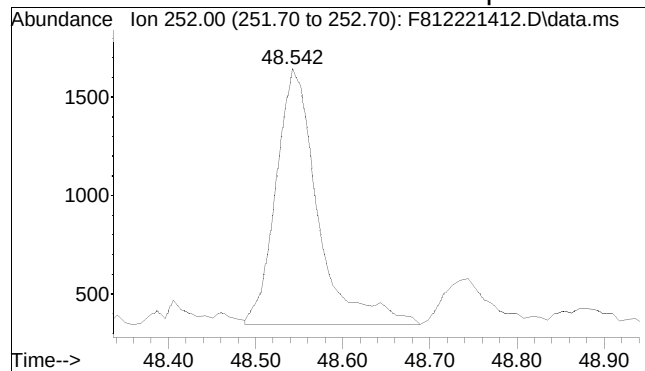
Original Peak Response = 4350



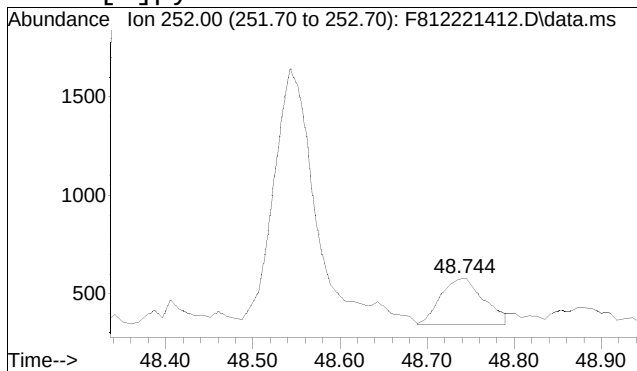
Manual Peak Response = 4063 M4

M4 = Poor automated baseline construction.

Compound #89: Benzo[a]pyrene



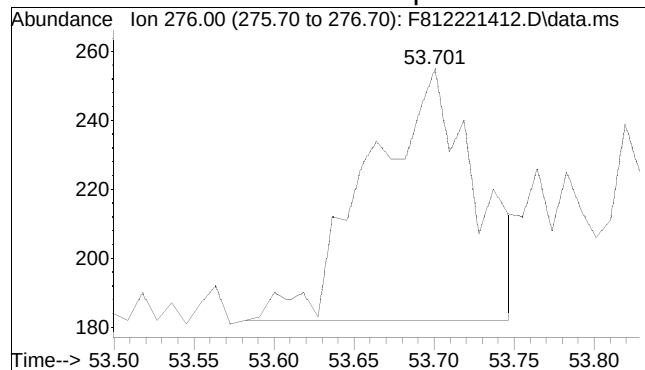
Original Peak Response = 4356



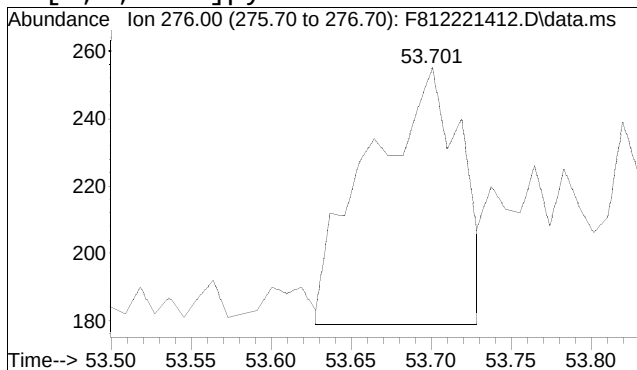
Manual Peak Response = 829 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 334



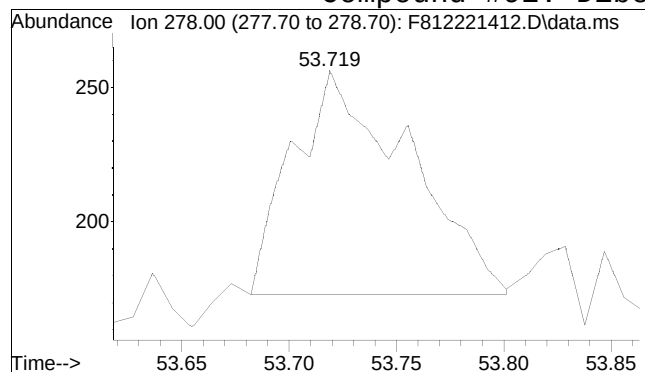
Manual Peak Response = 301 M4

M4 = Poor automated baseline construction.

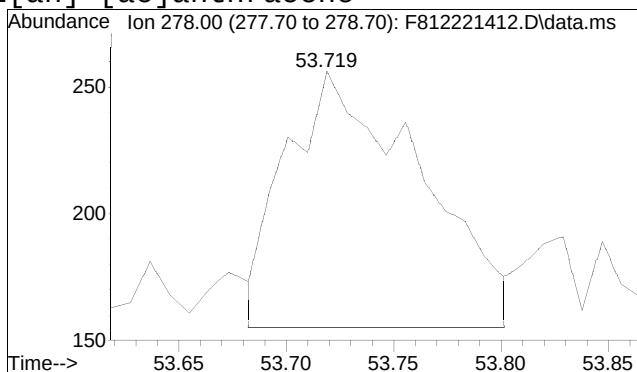
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #92: Dibenz[ah]+[ac]anthracene



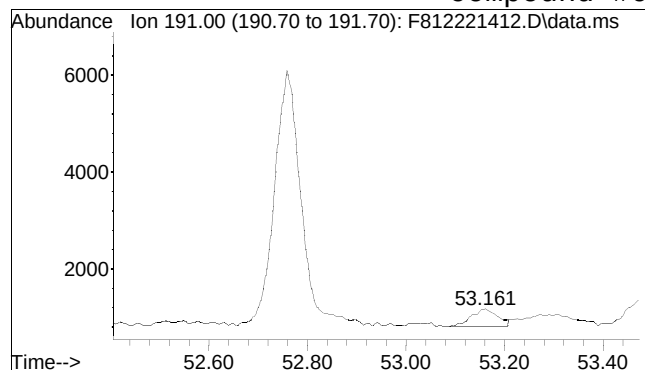
Original Peak Response = 312



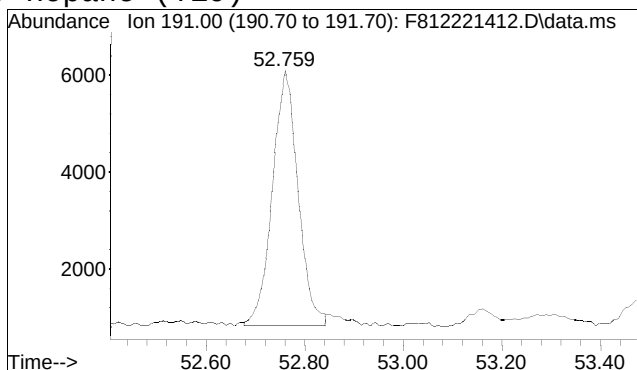
Manual Peak Response = 440 M4

M4 = Poor automated baseline construction.

Compound #94: Hopane (T19)



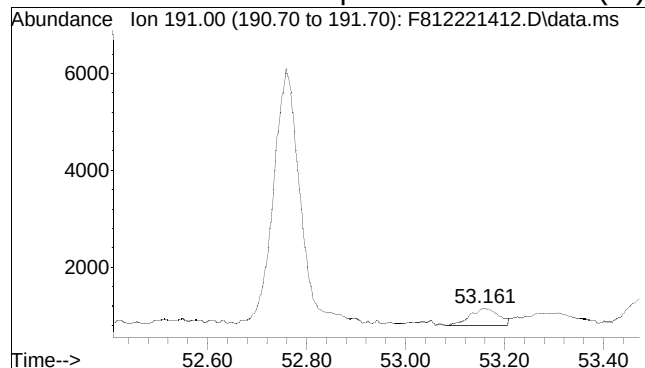
Original Peak Response = 1400



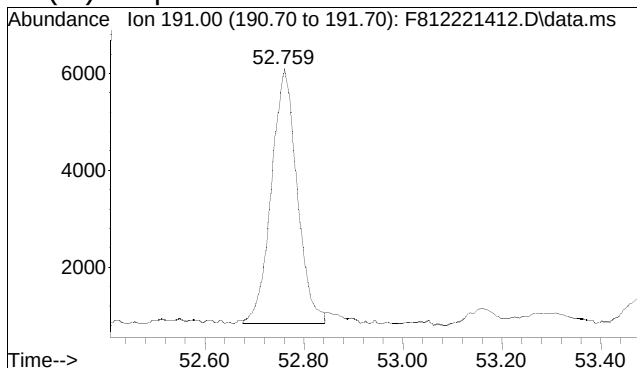
Manual Peak Response = 19117 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Compound #95: 17a(H),21B(H)-hopane - C30H52



Original Peak Response = 1400



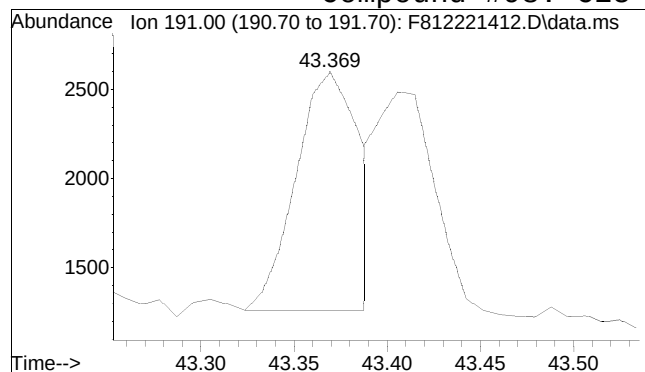
Manual Peak Response = 19078 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

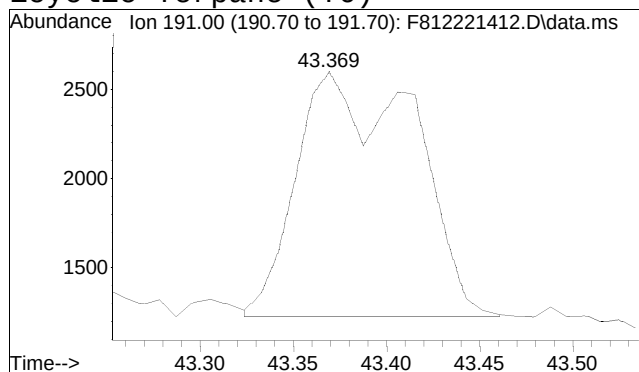
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #98: C25 Tricyclic Terpane (T6)



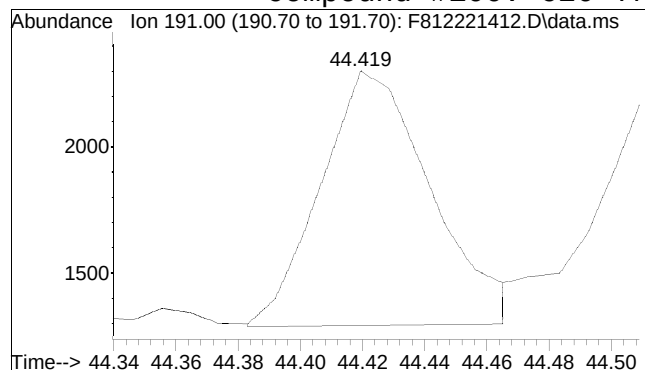
Original Peak Response = 3177

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.



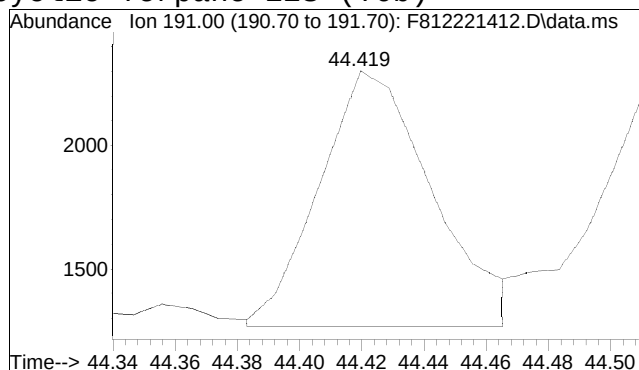
Manual Peak Response = 6054 M1

Compound #100: C26 Tricyclic Terpane-22S (T6b)



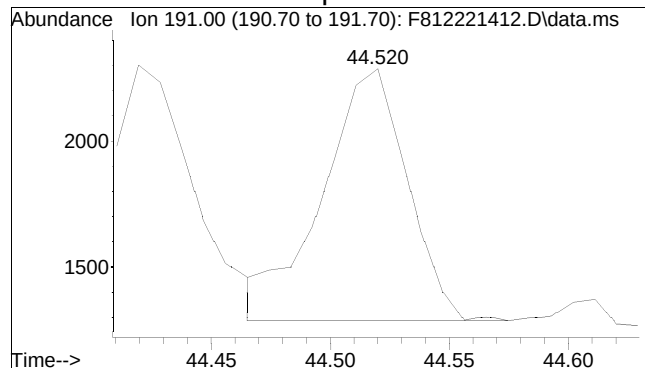
Original Peak Response = 2504

M4 = Poor automated baseline construction.



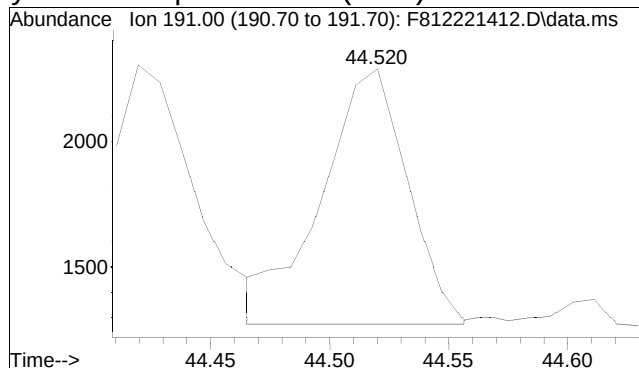
Manual Peak Response = 2625 M4

Compound #101: C26 Tricyclic Terpane-22R (T6c)



Original Peak Response = 2477

M4 = Poor automated baseline construction.

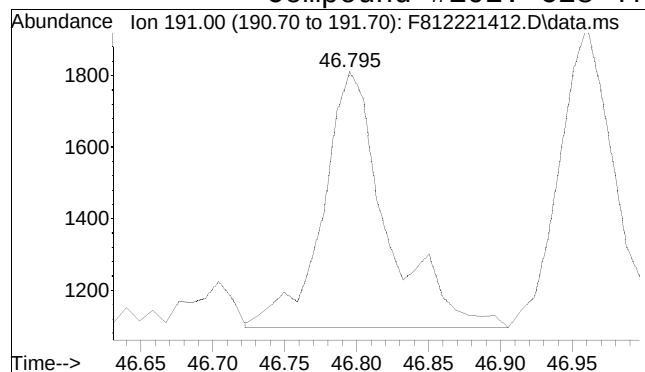


Manual Peak Response = 2540 M4

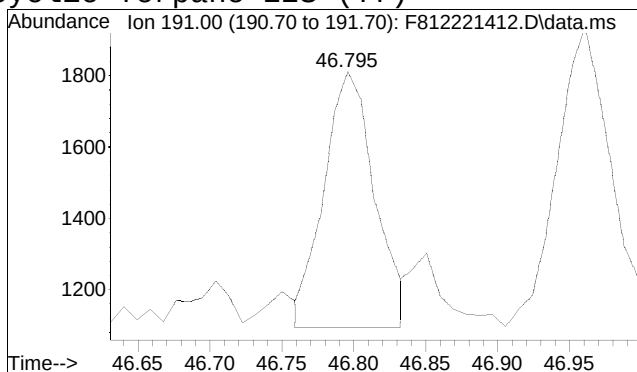
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #102: C28 Tricyclic Terpene-22S (T7)



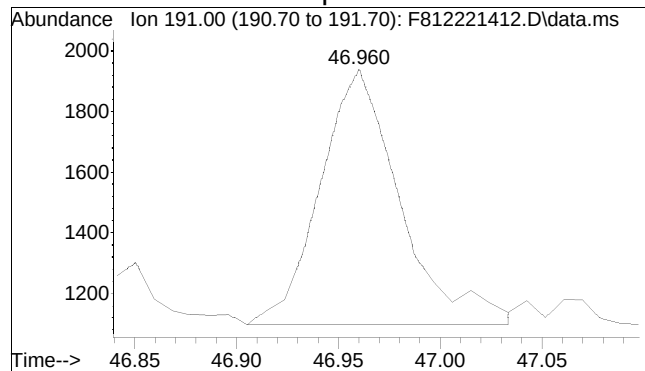
Original Peak Response = 2226



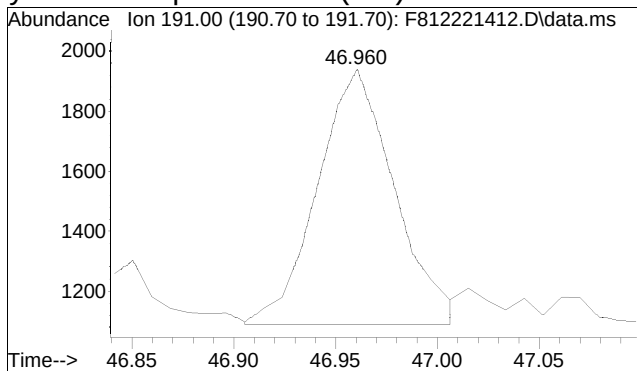
Manual Peak Response = 1761 M4

M4 = Poor automated baseline construction.

Compound #103: C28 Tricyclic Terpene-22R (T8)



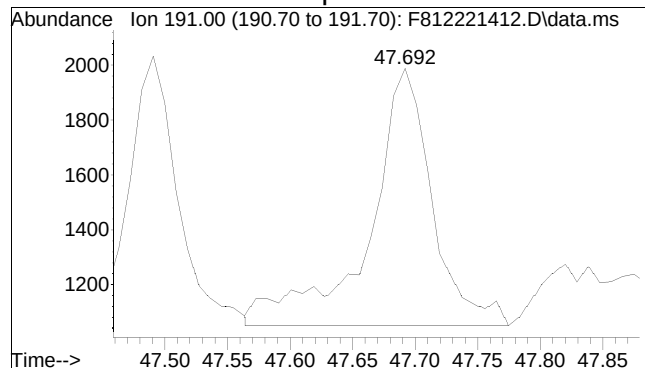
Original Peak Response = 2324



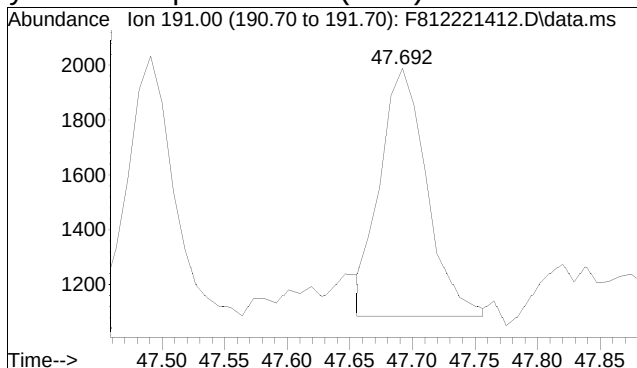
Manual Peak Response = 2244 M4

M4 = Poor automated baseline construction.

Compound #105: C29 Tricyclic Terpene-22R (T10)



Original Peak Response = 3281



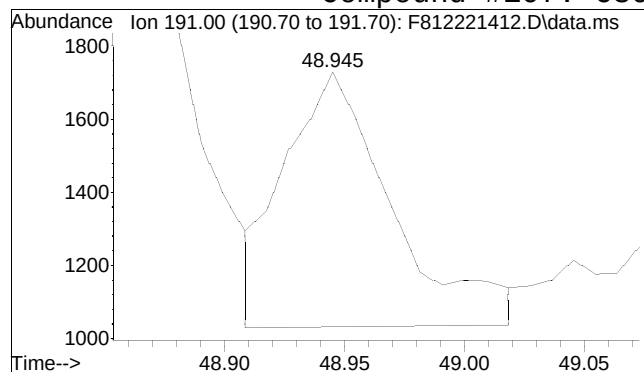
Manual Peak Response = 2336 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

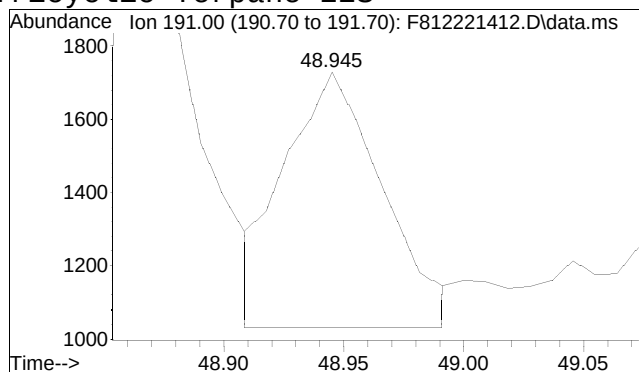
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #107: C30 Tricyclic Terpene-22S



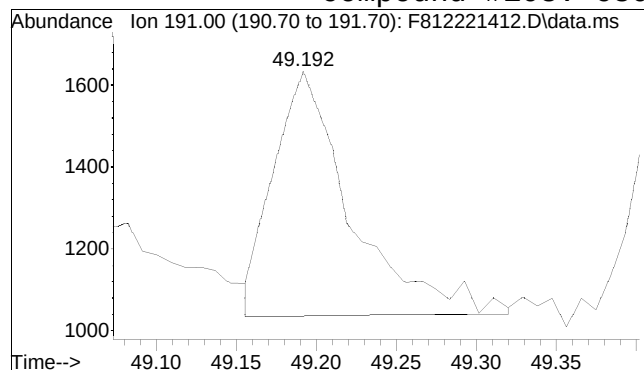
Original Peak Response = 2174

M4 = Poor automated baseline construction.



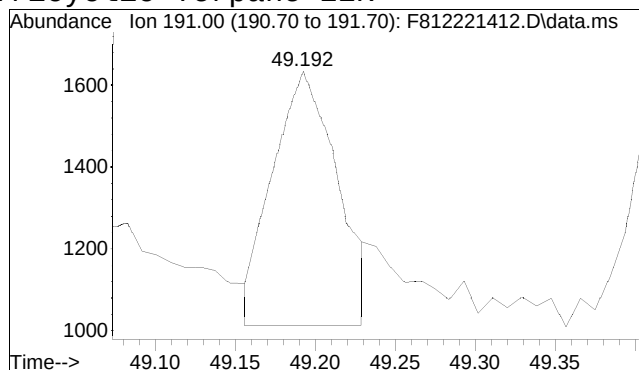
Manual Peak Response = 1987 M4

Compound #108: C30 Tricyclic Terpene-22R



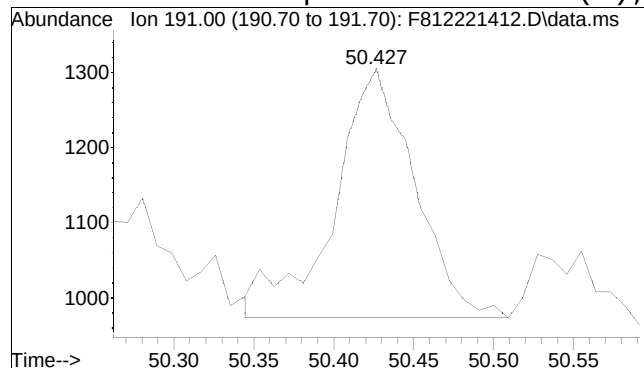
Original Peak Response = 2023

M4 = Poor automated baseline construction.



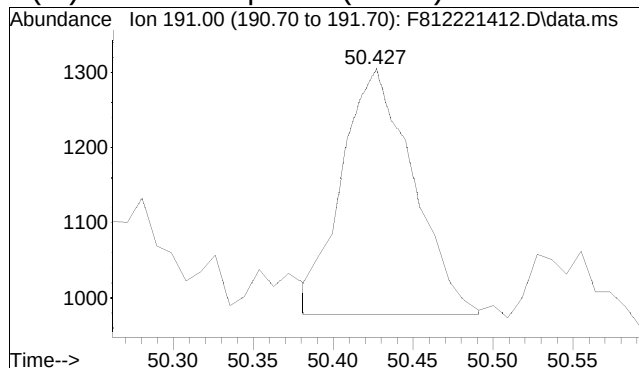
Manual Peak Response = 1750 M4

Compound #111: 17a(H),21b(H)-25-Norhopane (T14b)



Original Peak Response = 1161

M4 = Poor automated baseline construction.

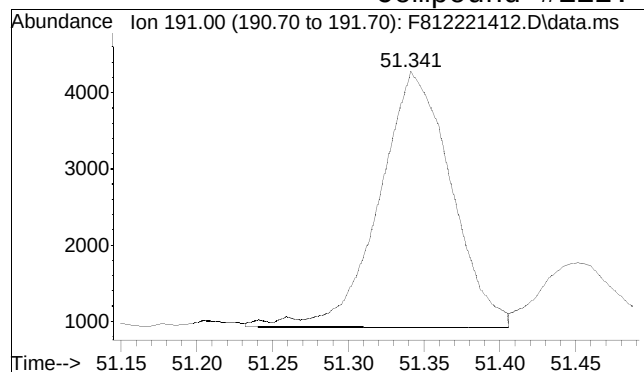


Manual Peak Response = 1010 M4

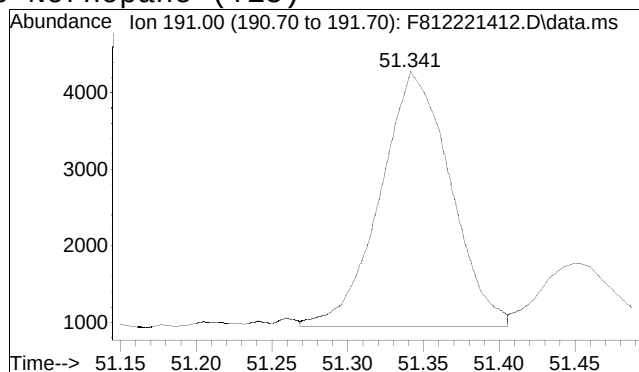
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #112: 30-Norhopane (T15)



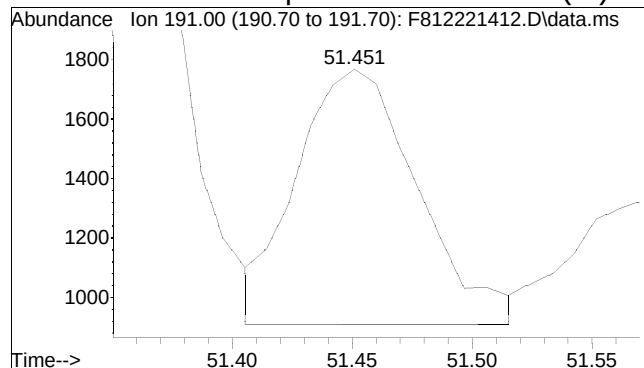
Original Peak Response = 11157



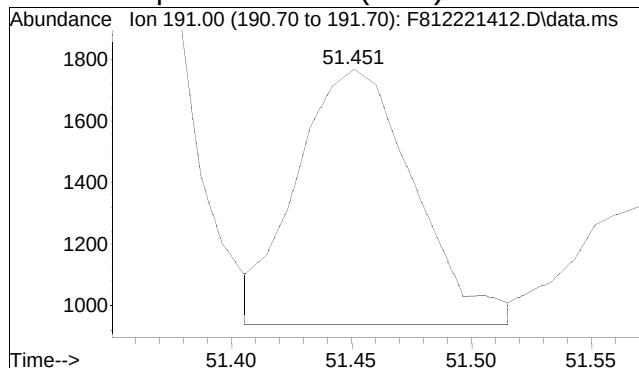
Manual Peak Response = 10734 M4

M4 = Poor automated baseline construction.

Compound #113: 18a(H)-30-Norneohopane-C29Ts (T16)



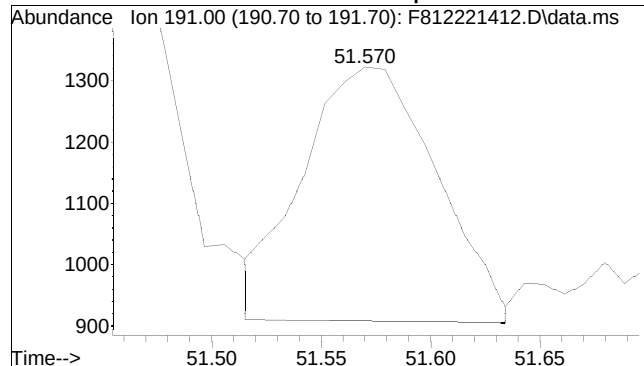
Original Peak Response = 3003



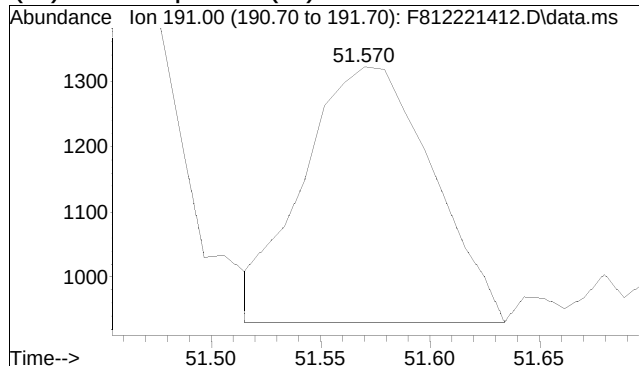
Manual Peak Response = 2818 M4

M4 = Poor automated baseline construction.

Compound #114: 17a(H)-Diahopane (X)



Original Peak Response = 1765



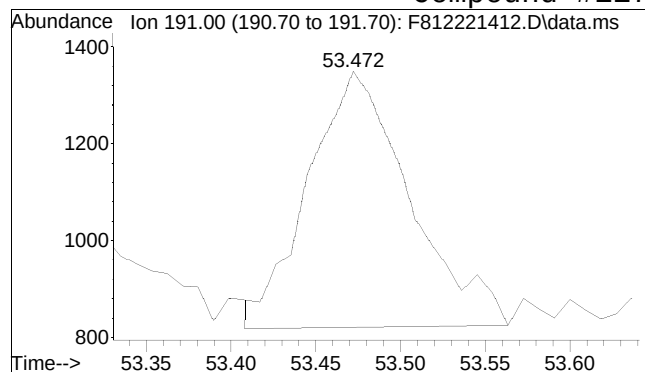
Manual Peak Response = 1608 M4

M4 = Poor automated baseline construction.

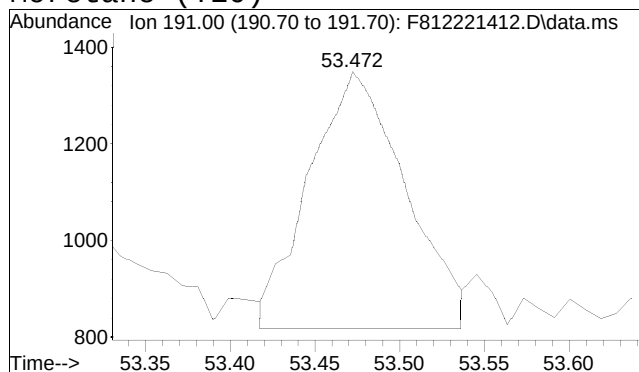
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #117: Moretane (T20)



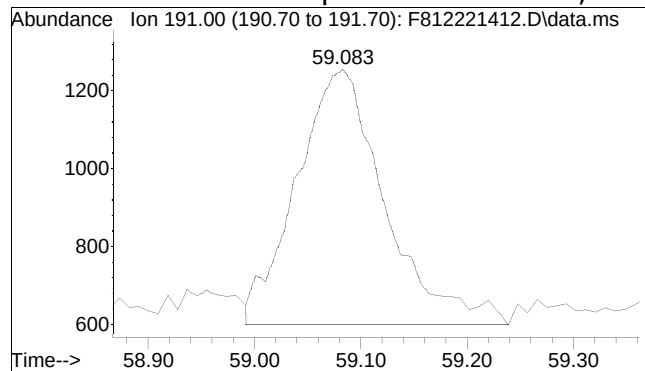
Original Peak Response = 2183



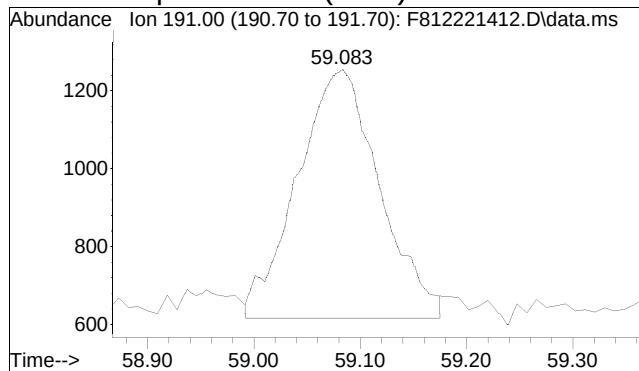
Manual Peak Response = 2087 M4

M4 = Poor automated baseline construction.

Compound #124: 30,31-Trishomohopane-22R (T31)



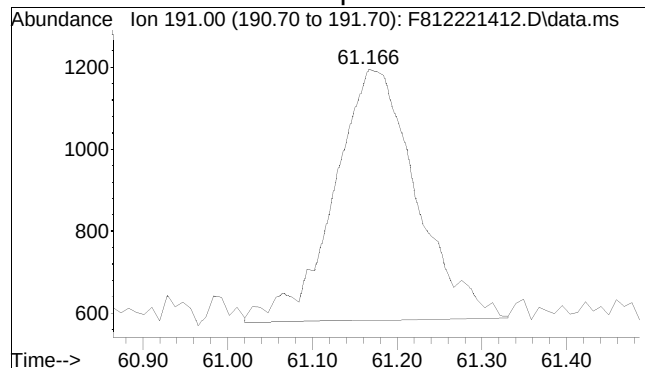
Original Peak Response = 3798



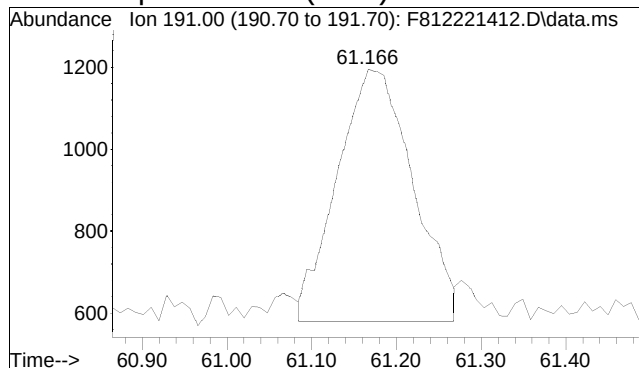
Manual Peak Response = 3435 M4

M4 = Poor automated baseline construction.

Compound #125: Tetrakishomohopane-22S (T32)



Original Peak Response = 4129



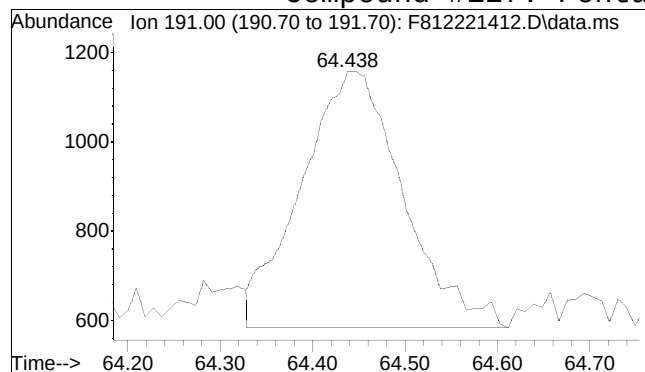
Manual Peak Response = 3833 M4

M4 = Poor automated baseline construction.

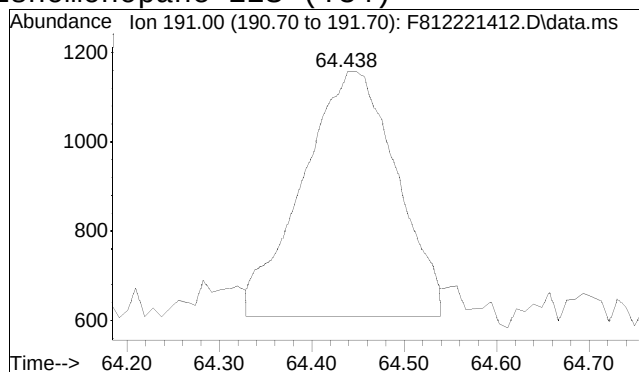
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #127: Pentakishomohopane-22S (T34)



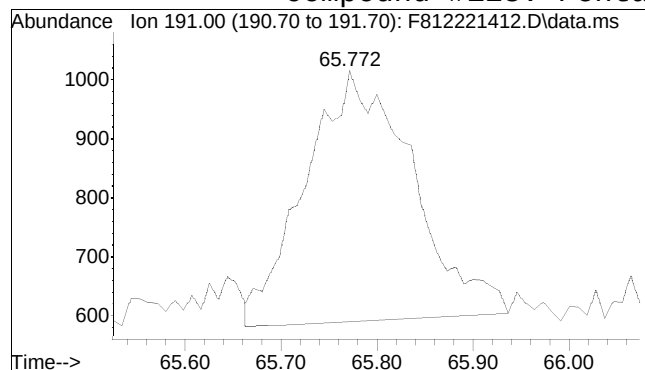
Original Peak Response = 4404



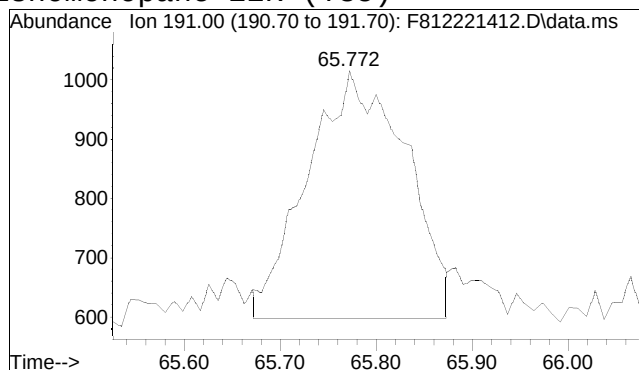
Manual Peak Response = 3870 M4

M4 = Poor automated baseline construction.

Compound #128: Pentakishomohopane-22R (T35)



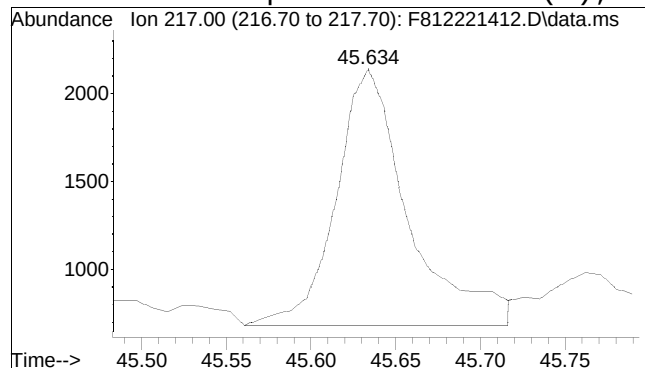
Original Peak Response = 3279



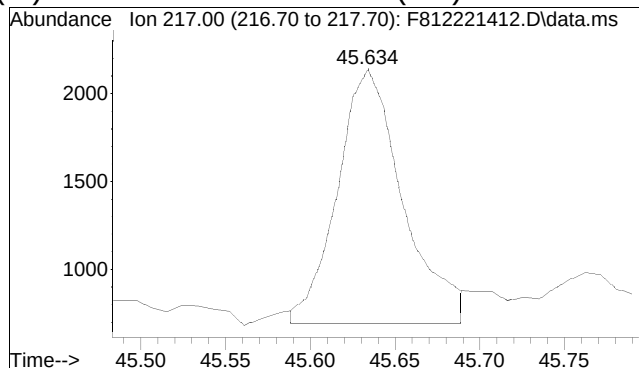
Manual Peak Response = 2966 M4

M4 = Poor automated baseline construction.

Compound #130: 13b(H),17a(H)-20S-Diacholestane (S4)



Original Peak Response = 4346



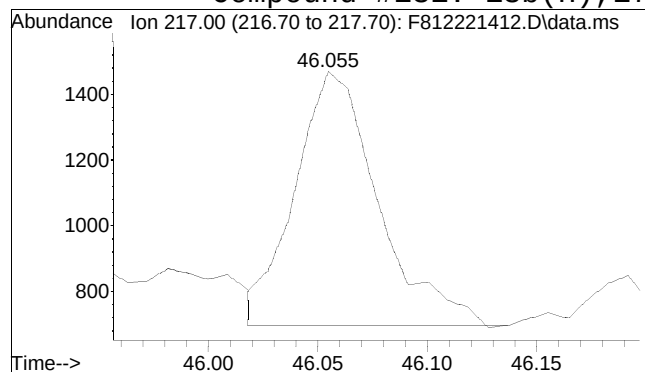
Manual Peak Response = 3918 M4

M4 = Poor automated baseline construction.

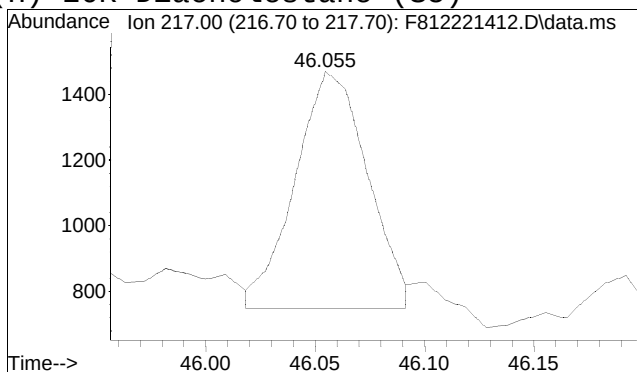
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #131: 13b(H),17a(H)-20R-Diacholestane (S5)



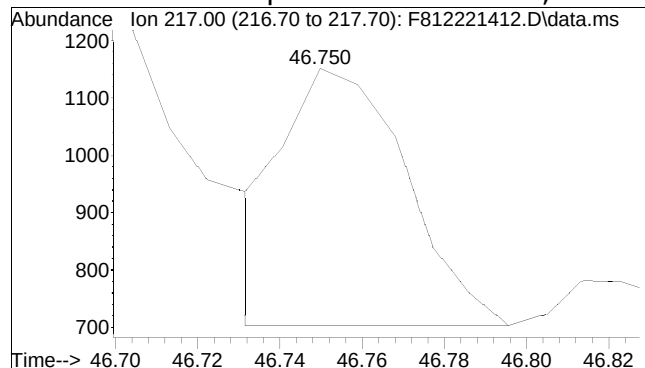
Original Peak Response = 2027



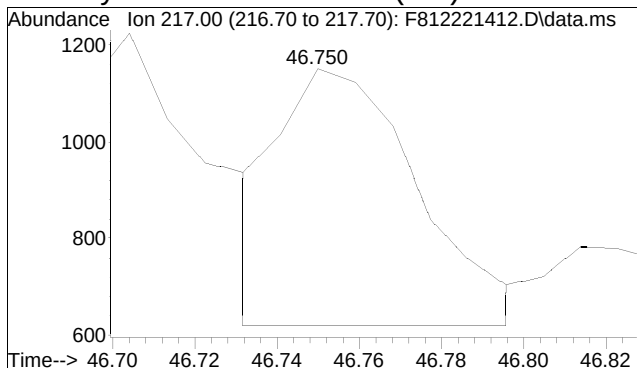
Manual Peak Response = 1663 M4

M4 = Poor automated baseline construction.

Compound #132: 13b,17a-20S-Methyldiacholestane (S8)



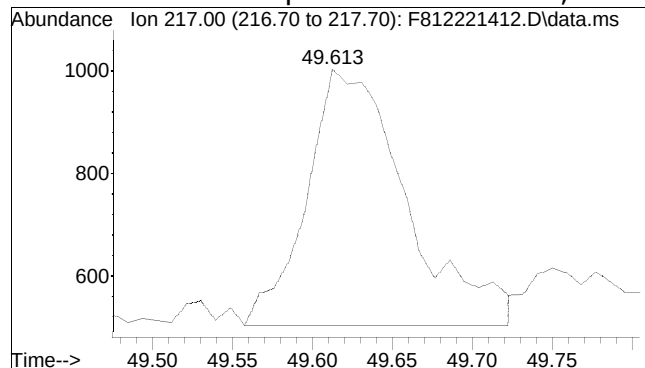
Original Peak Response = 931



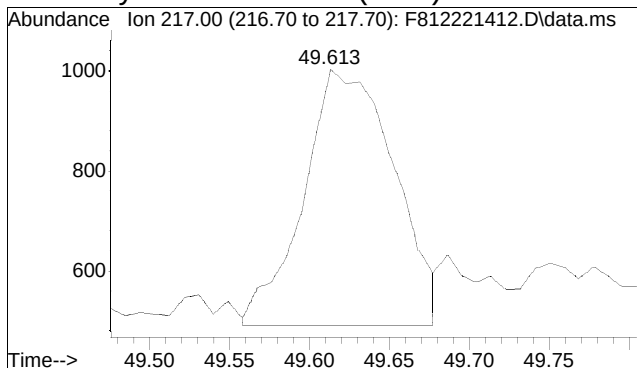
Manual Peak Response = 1250 M4

M4 = Poor automated baseline construction.

Compound #138: 14a,17a-20R-Methylcholestane (S24)



Original Peak Response = 2162



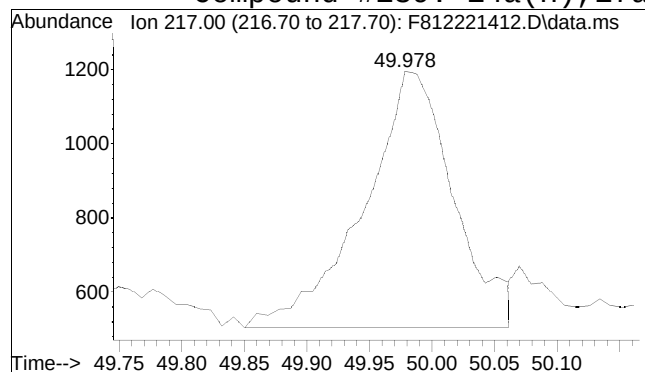
Manual Peak Response = 2021 M4

M4 = Poor automated baseline construction.

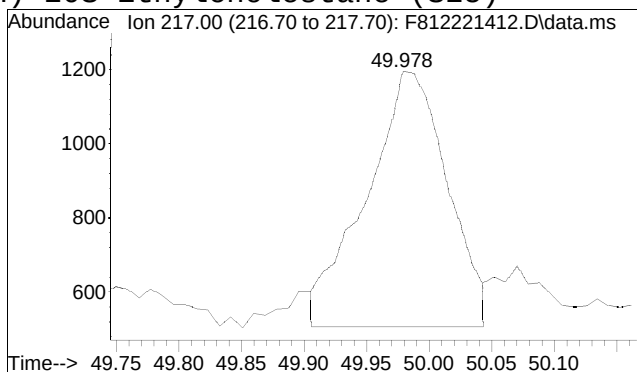
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #139: 14a(H),17a(H)-20S-Ethylcholestane (S25)



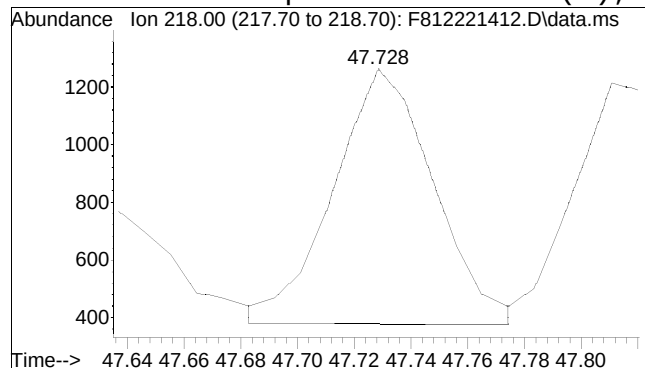
Original Peak Response = 3471



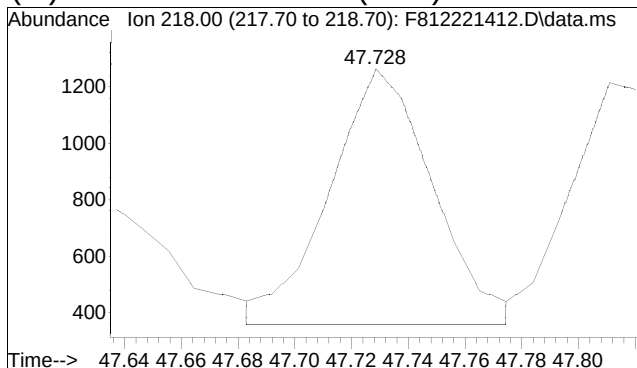
Manual Peak Response = 3100 M4

M4 = Poor automated baseline construction.

Compound #141: 14b(H),17b(H)-20R-Cholestane (S14)



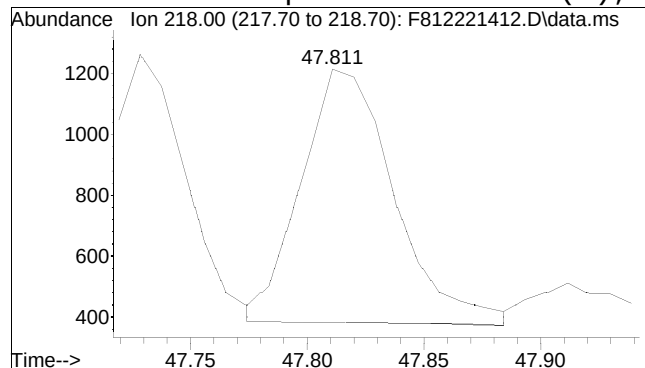
Original Peak Response = 2173



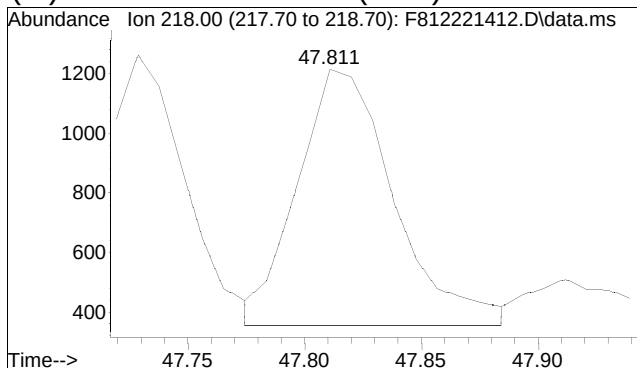
Manual Peak Response = 2288 M4

M4 = Poor automated baseline construction.

Compound #142: 14b(H),17b(H)-20S-Cholestane (S15)



Original Peak Response = 2299



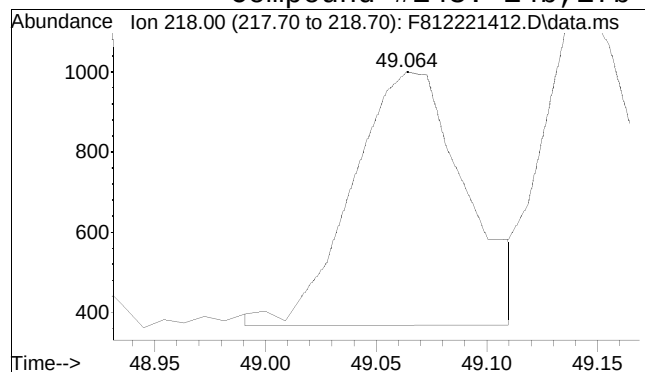
Manual Peak Response = 2450 M4

M4 = Poor automated baseline construction.

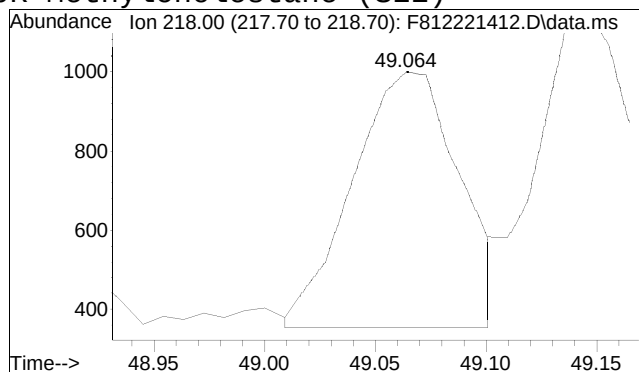
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221412.D Operator : PAH8:ML
 Date Inj'd : 12/24/2014 3:47 am Instrument : PAH8
 Sample : WG755323-1,0.5055 Quant Date : 12/24/2014 12:33 pm

Compound #143: 14b,17b-20R-Methylcholestane (S22)



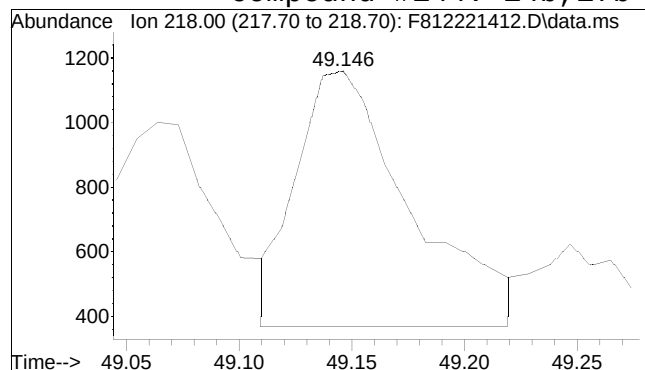
Original Peak Response = 2239



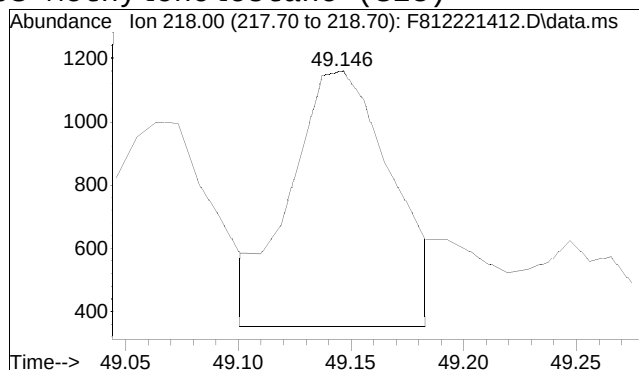
Manual Peak Response = 2179 M4

M4 = Poor automated baseline construction.

Compound #144: 14b,17b-20S-Methylcholestane (S23)



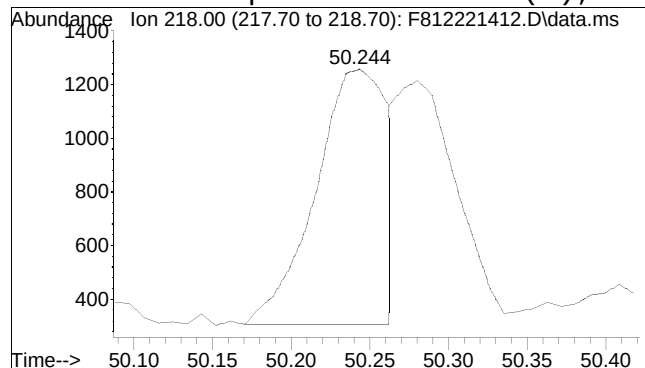
Original Peak Response = 2782



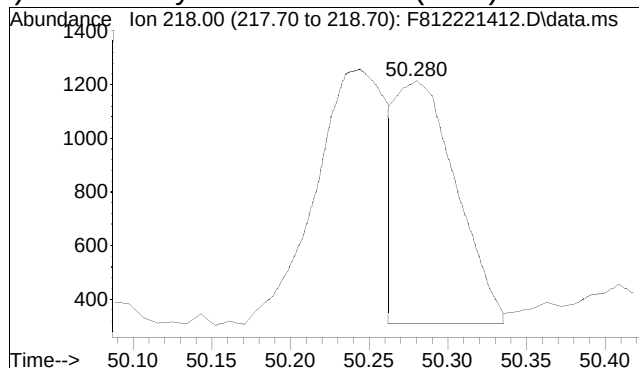
Manual Peak Response = 2536 M4

M4 = Poor automated baseline construction.

Compound #146: 14b(H),17b(H)-20S-Ethylcholestane (S27)



Original Peak Response = 3044



Manual Peak Response = 2310 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Continuing Calibration

7B
SemiVolatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1500432

Instrument ID: PAH8 Calibration Date: 01/12/2015 Time: 11:33

Lab File ID: F801121502 Init. Calib. Date(s): 12/23/14 12/23/14

Sample No: WG755949-1 Init. Calib. Times : 14:50 23:29

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	75	0.06
3 A1	trans-Decalin	0.446	0.457	-2.5	80	0.05
4 t	cis-Decalin	0.337	0.351	-4.2	82	0.05
9 s	Naphthalene-d8	2.023	2.032	-0.4	72	0.05
10 A1	Naphthalene	2.245	2.401	-6.9	74	0.05
16 t	2-Methylnaphthalene	1.447	1.421	1.8	71	0.05
17 t	1-Methylnaphthalene	1.372	1.340	2.3	71	0.05
18 A1	Benzo[thiophene]	1.874	1.929	-2.9	74	0.05
23 t	Biphenyl	1.743	1.850	-6.1	75	0.05
24 t	2,6-Dimethylnaphthalene	1.209	1.233	-2.0	73	0.05
25 t	Dibenzofuran	1.778	1.939	-9.1	76	0.06
26 t	Acenaphthylene	2.112	2.286	-8.2	74	0.05
27 t	Acenaphthene	1.286	1.396	-8.6	76	0.05
28 t	2,3,5-Trimethylnaphthalene	1.006	1.056	-5.0	75	0.05
29 A1	Fluorene	1.380	1.491	-8.0	74	0.06
33 A1	Dibenzothiophene	1.929	2.145	-11.2	77	0.06
42 s	Phenanthrene-d10	1.510	1.607	-6.4	75	0.05
43 A1	Phenanthrene	1.865	2.059	-10.4	76	0.06
54 t	Retene	0.443	0.470	-6.1	75	0.05
55 t	Anthracene	1.709	2.046	-19.7	79	0.06
56 t	Carbazole	1.834	1.888	-2.9	71	0.06
57 t	1-Methylphenanthrene	1.311	1.390	-6.0	74	0.06
58 A1	Fluoranthene	1.900	2.103	-10.7	76	0.06
59 t	Benzo(b)fluorene	1.101	1.150	-4.5	72	0.06
60 A1	Pyrene	1.988	2.332	-17.3	77	0.06
66 A1	Naphthobenzothiophene	1.757	1.929	-9.8	76	0.06
67 A2	Naphthobenzothiophene-2,1-D	1.757	1.929	-9.8	76	0.06
74 i	Chrysene-d12	1.000	1.000	0.0	75	0.06
75 t	Benz[a]anthracene	1.151	1.146	0.4	74	0.06
76 A1	Chrysene	1.097	1.163	-6.0	78	0.07
77 A2	Chrysene/Triphenylene	1.097	1.163	-6.0	78	0.07
83 s	Benzo[b]fluoranthene-d12	0.992	1.029	-3.7	75	0.07
84 t	Benzo[b]fluoranthene	1.223	1.217	0.5	77	0.06
85 A1	Benzo[j]+[k]fluoranthene	1.203	1.200	0.2	77	0.07
87 t	Benzo[e]pyrene	1.236	1.227	0.7	77	0.07
88 s	Benzo[a]pyrene-d12	0.861	0.845	1.9	75	0.07
89 t	Benzo[a]pyrene	1.127	1.154	-2.4	77	0.08
90 t	Perylene	1.184	1.160	2.0	78	0.07

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Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121502.D
 Acq On : 12 Jan 2015 11:33 am
 Operator : PAH8:MS
 Sample : WG755949-1
 Misc : WG755949,CC frav47 500ng/ml
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 15 11:54:37 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.432	1.314	8.2	80	0.11
92 t	Dibenz[ah]+[ac]anthracene	1.220	1.169	4.2	74	0.11
93 t	Benzo[g,h,i]perylene	1.375	1.343	2.3	77	0.12
94 A1	Hopane (T19)	0.415	0.383	7.7	78	0.09
95 A2	17a(H),21B(H)-hopane - C30H	0.415	0.383	7.7	78	0.09
129 SA1	5B(H)Cholane - Surr	0.186	0.186	0.0	79	0.06

* Evaluation of CC level amount vs concentration.

FORM VII A2-ALKPAH/BIOMARKER

7B
SemiVolatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1500432

Instrument ID: PAH8 Calibration Date: 01/13/2015 Time: 06:05

Lab File ID: F801121515 Init. Calib. Date(s): 12/23/14 12/23/14

Sample No: WG755949-2 Init. Calib. Times : 14:50 23:29

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	75	0.09
3 A1	trans-Decalin	0.446	0.495	-11.0	87	0.05
4 t	cis-Decalin	0.337	0.369	-9.5	86	0.05
9 s	Naphthalene-d8	2.023	1.960	3.1	70	0.10
10 A1	Naphthalene	2.245	2.043	9.0	63	0.10
16 t	2-Methylnaphthalene	1.447	1.068	26.2#	54	0.16
17 t	1-Methylnaphthalene	1.372	1.252	8.7	67	0.13
18 A1	Benzo[thiophene]	1.874	1.692	9.7	66	0.11
23 t	Biphenyl	1.743	1.607	7.8	65	0.16
24 t	2,6-Dimethylnaphthalene	1.209	1.090	9.8	65	0.15
25 t	Dibenzofuran	1.778	1.869	-5.1	73	0.15
26 t	Acenaphthylene	2.112	2.350	-11.3	77	0.09
27 t	Acenaphthene	1.286	1.365	-6.1	75	0.09
28 t	2,3,5-Trimethylnaphthalene	1.006	0.980	2.6	70	0.12
29 A1	Fluorene	1.380	1.471	-6.6	74	0.15
33 A1	Dibenzothiophene	1.929	2.136	-10.7	77	0.12
42 s	Phenanthrene-d10	1.510	1.736	-15.0	82	0.11
43 A1	Phenanthrene	1.865	1.905	-2.1	71	0.12
54 t	Retene	0.443	0.527	-19.0	84	0.08
55 t	Anthracene	1.709	2.201	-28.8#	85	0.14
56 t	Carbazole	1.834	2.015	-9.9	76	0.13
57 t	1-Methylphenanthrene	1.311	1.476	-12.6	79	0.11
58 A1	Fluoranthene	1.900	2.258	-18.8	82	0.09
59 t	Benzo(b)fluorene	1.101	1.269	-15.3	80	0.10
60 A1	Pyrene	1.988	2.506	-26.1#	84	0.09
66 A1	Naphthobenzothiophene	1.757	2.060	-17.2	81	0.09
67 A2	Naphthobenzothiophene-2,1-D	1.757	2.060	-17.2	81	0.09
74 i	Chrysene-d12	1.000	1.000	0.0	85	0.10
75 t	Benz[a]anthracene	1.151	1.003	12.9	74	0.10
76 A1	Chrysene	1.097	1.114	-1.5	85	0.10
77 A2	Chrysene/Triphenylene	1.097	1.114	-1.5	85	0.10
83 s	Benzo[b]fluoranthene-d12	0.992	1.051	-5.9	87	0.09
84 t	Benzo[b]fluoranthene	1.223	1.012	17.3	73	0.08
85 A1	Benzo[j]+[k]fluoranthene	1.203	1.330	-10.6	97	0.09
87 t	Benzo[e]pyrene	1.236	1.163	5.9	84	0.09
88 s	Benzo[a]pyrene-d12	0.861	0.874	-1.5	88	0.10
89 t	Benzo[a]pyrene	1.127	1.171	-3.9	89	0.11
90 t	Perylene	1.184	1.169	1.3	90	0.10

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Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121515.D
 Acq On : 13 Jan 2015 6:05 am
 Operator : PAH8:MS
 Sample : WG755949-2
 Misc : WG755949,cc frav47 500ng/ml
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 15 11:55:33 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.432	1.236	13.7	86	0.16
92 t	Dibenz[ah]+[ac]anthracene	1.220	1.204	1.3	87	0.16
93 t	Benzo[g,h,i]perylene	1.375	1.310	4.7	86	0.16
94 A1	Hopane (T19)	0.415	0.368	11.3	86	0.08
95 A2	17a(H),21B(H)-hopane - C30H	0.415	0.368	11.3	86	0.08
129 SA1	5B(H)Cholane - Surr	0.186	0.182	2.2	87	0.05

* Evaluation of CC level amount vs concentration.

FORM VII A2-ALKPAH/BIOMARKER

7B
SemiVolatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1500432

Instrument ID: PAH8 Calibration Date: 01/13/2015 Time: 16:45

Lab File ID: F801131502 Init. Calib. Date(s): 12/23/14 12/23/14

Sample No: WG755949-3 Init. Calib. Times : 14:50 23:29

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	100	0.00
3 A1	trans-Decalin	0.446	0.426	4.5	100	0.00
4 t	cis-Decalin	0.337	0.321	4.7	100	0.00
9 s	Naphthalene-d8	2.023	2.101	-3.9	100	0.00
10 A1	Naphthalene	2.245	2.432	-8.3	100	0.00
16 t	2-Methylnaphthalene	1.447	1.488	-2.8	100	0.00
17 t	1-Methylnaphthalene	1.372	1.411	-2.8	100	0.00
18 A1	Benzo[thiophene]	1.874	1.937	-3.4	100	0.00
23 t	Biphenyl	1.743	1.843	-5.7	100	0.00
24 t	2,6-Dimethylnaphthalene	1.209	1.256	-3.9	100	0.00
25 t	Dibenzofuran	1.778	1.911	-7.5	100	0.00
26 t	Acenaphthylene	2.112	2.244	-6.3	98	0.00
27 t	Acenaphthene	1.286	1.372	-6.7	100	0.00
28 t	2,3,5-Trimethylnaphthalene	1.006	1.055	-4.9	100	0.00
29 A1	Fluorene	1.380	1.494	-8.3	100	0.00
33 A1	Dibenzothiophene	1.929	2.075	-7.6	100	0.00
42 s	Phenanthrene-d10	1.510	1.595	-5.6	100	0.00
43 A1	Phenanthrene	1.865	2.021	-8.4	100	0.00
54 t	Retene	0.443	0.469	-5.9	100	0.00
55 t	Anthracene	1.709	1.936	-13.3	100	0.00
56 t	Carbazole	1.834	1.991	-8.6	100	0.00
57 t	1-Methylphenanthrene	1.311	1.401	-6.9	100	0.00
58 A1	Fluoranthene	1.900	2.066	-8.7	100	0.00
59 t	Benzo(b)fluorene	1.101	1.187	-7.8	100	0.00
60 A1	Pyrene	1.988	2.249	-13.1	100	0.00
66 A1	Naphthobenzothiophene	1.757	1.899	-8.1	100	0.00
67 A2	Naphthobenzothiophene-2,1-D	1.757	1.899	-8.1	100	0.00
74 i	Chrysene-d12	1.000	1.000	0.0	100	0.00
75 t	Benz[a]anthracene	1.151	1.159	-0.7	100	0.00
76 A1	Chrysene	1.097	1.117	-1.8	100	0.00
77 A2	Chrysene/Triphenylene	1.097	1.117	-1.8	100	0.00
83 s	Benzo[b]fluoranthene-d12	0.992	1.033	-4.1	100	0.00
84 t	Benzo[b]fluoranthene	1.223	1.191	2.6	100	0.00
85 A1	Benzo[j]+[k]fluoranthene	1.203	1.168	2.9	100	0.00
87 t	Benzo[e]pyrene	1.236	1.189	3.8	100	0.00
88 s	Benzo[a]pyrene-d12	0.861	0.844	2.0	100	0.00
89 t	Benzo[a]pyrene	1.127	1.121	0.5	100	0.00
90 t	Perylene	1.184	1.109	6.3	100	0.00

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Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN13\
 Data File : F801131502.D
 Acq On : 13 Jan 2015 4:45 pm
 Operator : PAH8:MS
 Sample : WG755949-3
 Misc : WG755949,cc frav47 500ng/ml
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 15 11:55:41 2015
 Quant Method : 0:\Forensics\Data\PAH8\2015\JAN15\JAN13\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Jan 14 08:20:30 2015

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.432	1.319	7.9	107	0.00
92 t	Dibenz[ah]+[ac]anthracene	1.220	1.180	3.3	100	0.00
93 t	Benzo[g,h,i]perylene	1.375	1.301	5.4	100	0.00
94 A1	Hopane (T19)	0.415	0.367	11.6	100	0.00
95 A2	17a(H),21B(H)-hopane - C30H	0.415	0.367	11.6	100	0.00
129 SA1	5B(H)Cholane - Surr	0.186	0.178	4.3	100	0.00

* Evaluation of CC level amount vs concentration.

FORM VII A2-ALKPAH/BIOMARKER

7B
SemiVolatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1500432

Instrument ID: PAH8 Calibration Date: 01/14/2015 Time: 01:20

Lab File ID: F801131508 Init. Calib. Date(s): 12/23/14 12/23/14

Sample No: WG755949-4 Init. Calib. Times : 14:50 23:29

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	85	0.00
3 A1	trans-Decalin	0.446	0.434	2.7	87	0.00
4 t	cis-Decalin	0.337	0.327	3.0	87	0.00
9 s	Naphthalene-d8	2.023	2.107	-4.2	85	0.00
10 A1	Naphthalene	2.245	2.463	-9.7	86	0.00
16 t	2-Methylnaphthalene	1.447	1.482	-2.4	85	0.00
17 t	1-Methylnaphthalene	1.372	1.395	-1.7	84	0.00
18 A1	Benzo[thiophene]	1.874	1.952	-4.2	86	0.00
23 t	Biphenyl	1.743	1.846	-5.9	85	0.00
24 t	2,6-Dimethylnaphthalene	1.209	1.245	-3.0	85	0.00
25 t	Dibenzofuran	1.778	1.890	-6.3	84	0.00
26 t	Acenaphthylene	2.112	2.211	-4.7	82	0.00
27 t	Acenaphthene	1.286	1.365	-6.1	85	0.00
28 t	2,3,5-Trimethylnaphthalene	1.006	1.046	-4.0	85	0.00
29 A1	Fluorene	1.380	1.472	-6.7	84	0.00
33 A1	Dibenzothiophene	1.929	2.057	-6.6	85	0.00
42 s	Phenanthrene-d10	1.510	1.569	-3.9	84	0.00
43 A1	Phenanthrene	1.865	1.992	-6.8	84	0.00
54 t	Retene	0.443	0.450	-1.6	82	0.00
55 t	Anthracene	1.709	1.932	-13.0	85	0.00
56 t	Carbazole	1.834	1.932	-5.3	83	0.00
57 t	1-Methylphenanthrene	1.311	1.344	-2.5	82	0.00
58 A1	Fluoranthene	1.900	1.985	-4.5	82	0.00
59 t	Benzo(b)fluorene	1.101	1.128	-2.5	81	0.00
60 A1	Pyrene	1.988	2.180	-9.7	83	0.00
66 A1	Naphthobenzothiophene	1.757	1.814	-3.2	81	0.00
67 A2	Naphthobenzothiophene-2,1-D	1.757	1.814	-3.2	81	0.00
74 i	Chrysene-d12	1.000	1.000	0.0	84	0.00
75 t	Benz[a]anthracene	1.151	1.129	1.9	82	0.00
76 A1	Chrysene	1.097	1.133	-3.3	85	0.00
77 A2	Chrysene/Triphenylene	1.097	1.133	-3.3	85	0.00
83 s	Benzo[b]fluoranthene-d12	0.992	1.025	-3.3	83	0.00
84 t	Benzo[b]fluoranthene	1.223	1.199	2.0	84	0.00
85 A1	Benzo[j]+[k]fluoranthene	1.203	1.193	0.8	86	0.00
87 t	Benzo[e]pyrene	1.236	1.204	2.6	85	0.00
88 s	Benzo[a]pyrene-d12	0.861	0.852	1.0	85	0.00
89 t	Benzo[a]pyrene	1.127	1.161	-3.0	87	0.00
90 t	Perylene	1.184	1.152	2.7	87	0.00

PAH8122314.M Thu Jan 15 13:14:39 2015

Page: 1

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN13\
 Data File : F801131508.D
 Acq On : 14 Jan 2015 1:20 am
 Operator : PAH8:MS
 Sample : WG755949-4
 Misc : WG755949,cc frav47 500ng/ml
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 15 11:56:14 2015
 Quant Method : 0:\Forensics\Data\PAH8\2015\JAN15\JAN13\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Jan 14 08:20:30 2015

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.432	1.336	6.7	91	0.00
92 t	Dibenz[ah]+[ac]anthracene	1.220	1.226	-0.5	87	0.00
93 t	Benzo[g,h,i]perylene	1.375	1.330	3.3	86	0.00
94 A1	Hopane (T19)	0.415	0.379	8.7	87	0.00
95 A2	17a(H),21B(H)-hopane - C30H	0.415	0.379	8.7	87	0.00
129 SA1	5B(H)Cholane - Surr	0.186	0.177	4.8	84	0.00

* Evaluation of CC level amount vs concentration.

FORM VII A2-ALKPAH/BIOMARKER

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121502.D
 Acq On : 12 Jan 2015 11:33 am
 Operator : PAH8:MS
 Sample : WG755949-1
 Misc : WG755949,CC frav47 500ng/ml
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 15 11:54:37 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	75	0.06
3 A1	trans-Decalin	0.446	0.457	-2.5	80	0.05
4 t	cis-Decalin	0.337	0.351	-4.2	82	0.05
9 s	Naphthalene-d8	2.023	2.032	-0.4	72	0.05
10 A1	Naphthalene	2.245	2.401	-6.9	74	0.05
16 t	2-Methylnaphthalene	1.447	1.421	1.8	71	0.05
17 t	1-Methylnaphthalene	1.372	1.340	2.3	71	0.05
18 A1	Benzothiophene	1.874	1.929	-2.9	74	0.05
23 t	Biphenyl	1.743	1.850	-6.1	75	0.05
24 t	2,6-Dimethylnaphthalene	1.209	1.233	-2.0	73	0.05
25 t	Dibenzofuran	1.778	1.939	-9.1	76	0.06
26 t	Acenaphthylene	2.112	2.286	-8.2	74	0.05
27 t	Acenaphthene	1.286	1.396	-8.6	76	0.05
28 t	2,3,5-Trimethylnaphthalene	1.006	1.056	-5.0	75	0.05
29 A1	Fluorene	1.380	1.491	-8.0	74	0.06
33 A1	Dibenzothiophene	1.929	2.145	-11.2	77	0.06
42 s	Phenanthrene-d10	1.510	1.607	-6.4	75	0.05
43 A1	Phenanthrene	1.865	2.059	-10.4	76	0.06
54 t	Retene	0.443	0.470	-6.1	75	0.05
55 t	Anthracene	1.709	2.046	-19.7	79	0.06
56 t	Carbazole	1.834	1.888	-2.9	71	0.06
57 t	1-Methylphenanthrene	1.311	1.390	-6.0	74	0.06
58 A1	Fluoranthene	1.900	2.103	-10.7	76	0.06
59 t	Benzo(b)fluorene	1.101	1.150	-4.5	72	0.06
60 A1	Pyrene	1.988	2.332	-17.3	77	0.06
66 A1	Naphthobenzothiophene	1.757	1.929	-9.8	76	0.06
67 A2	Naphthobenzothiophene-2,1-D	1.757	1.929	-9.8	76	0.06
74 i	Chrysene-d12	1.000	1.000	0.0	75	0.06
75 t	Benz[a]anthracene	1.151	1.146	0.4	74	0.06
76 A1	Chrysene	1.097	1.163	-6.0	78	0.07
77 A2	Chrysene/Triphenylene	1.097	1.163	-6.0	78	0.07
83 s	Benzo[b]fluoranthene-d12	0.992	1.029	-3.7	75	0.07
84 t	Benzo[b]fluoranthene	1.223	1.217	0.5	77	0.06
85 A1	Benzo[j]+[k]fluoranthene	1.203	1.200	0.2	77	0.07
87 t	Benzo[e]pyrene	1.236	1.227	0.7	77	0.07
88 s	Benzo[a]pyrene-d12	0.861	0.845	1.9	75	0.07
89 t	Benzo[a]pyrene	1.127	1.154	-2.4	77	0.08
90 t	Perylene	1.184	1.160	2.0	78	0.07

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121502.D
 Acq On : 12 Jan 2015 11:33 am
 Operator : PAH8:MS
 Sample : WG755949-1
 Misc : WG755949,CC frav47 500ng/ml
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 15 11:54:37 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.432	1.314	8.2	80	0.11
92 t	Dibenz[ah]+[ac]anthracene	1.220	1.169	4.2	74	0.11
93 t	Benzo[g,h,i]perylene	1.375	1.343	2.3	77	0.12
94 A1	Hopane (T19)	0.415	0.383	7.7	78	0.09
95 A2	17a(H),21B(H)-hopane - C30H	0.415	0.383	7.7	78	0.09
129 SA1	5B(H)Cholane - Surr	0.186	0.186	0.0	79	0.06

* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Mass Discrimination (Concentration)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	0.88	0.70 - 1.30

Mass Discrimination (Response)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	0.97	0.70 - 2.00

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121502.D
 Acq On : 12 Jan 2015 11:33 am
 Operator : PAH8:MS
 Sample : WG755949-1
 Misc : WG755949,CC frav47 500ng/ml
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 15 11:54:37 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.858	164	32068M4	500.000	ng/mL	0.00
74) Chrysene-d12	43.278	240	47533	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	19.905	136	65151	502.124	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	50.21%		
42) Phenanthrene-d10	32.716	188	51527	534.996	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	53.50%		
83) Benzo[b]fluoranthene-d12	47.171	264	48933	527.685	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	52.77%		
88) Benzo[a]pyrene-d12	48.360	264	40159	492.222	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	49.22%#		
129) 5B(H)Cholane - Surr	43.881	217	8859	504.600	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	50.46%		
Target Compounds						
						Qvalue
3) trans-Decalin	16.555	138	7327	255.597	ng/mL	100
4) cis-Decalin	17.769	138	5634	259.833	ng/mL	100
10) Naphthalene	19.978	128	77004	533.211	ng/mL	100
16) 2-Methylnaphthalene	22.670	142	45567	490.413	ng/mL	100
17) 1-Methylnaphthalene	23.089	142	42970	486.545	ng/mL	100
18) Benzothiophene	20.197	134	61870	511.713	ng/mL	100
23) Biphenyl	24.549	154	59321	530.662	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.152	156	39539	509.864	ng/mL	100
25) Dibenzofuran	27.634	168	62179	544.991	ng/mL	99
26) Acenaphthylene	26.247	152	73292	542.378	ng/mL	100
27) Acenaphthene	26.977	153	44772	542.230	ng/mL	100
28) 2,3,5-Trimethylnaphthalen	28.528	170	33851	524.698	ng/mL	98
29) Fluorene	29.002	166	47818M4	540.994	ng/mL	
33) Dibenzothiophene	32.314	184	68799	556.892	ng/mL	99
43) Phenanthrene	32.807	178	66027	551.449	ng/mL	99
54) Retene	39.763	234	15080	534.363	ng/mL	97
55) Anthracene	32.989	178	65614	598.165	ng/mL	97
56) Carbazole	33.665	167	60543	516.180	ng/mL	99
57) 1-Methylphenanthrene	35.308	192	44573	532.116	ng/mL	99
58) Fluoranthene	37.572	202	67428M4	555.077	ng/mL	
59) Benzo(b)fluorene	40.083	216	36894	524.471	ng/mL	100
60) Pyrene	38.457	202	74771	587.738	ng/mL	99
66) Naphthobenzothiophene	42.292	234	61850	552.614	ng/ml	99
67) Naphthobenzothiophene-2,1	42.292	234	61850	552.614	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121502.D
 Acq On : 12 Jan 2015 11:33 am
 Operator : PAH8:MS
 Sample : WG755949-1
 Misc : WG755949,CC frav47 500ng/ml
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 15 11:54:37 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.214	228	54456	498.497	ng/mL	99
76)	Chrysene	43.378	228	55300	528.858	ng/mL	99
77)	Chrysene/Triphenylene	43.378	228	55300	528.858	ng/mL	99
84)	Benzo[b]fluoranthene	47.253	252	57863	495.919	ng/mL	94
85)	Benzo[j]+[k]fluoranthene	47.335	252	57059	496.620	ng/mL	94
87)	Benzo[e]pyrene	48.259	252	58320	494.252	ng/mL	94
89)	Benzo[a]pyrene	48.451	252	54836	508.288	ng/mL	92
90)	Perylene	48.762	252	55154	486.776	ng/mL	95
91)	Indeno[1,2,3-cd]pyrene	53.280	276	62456M3	452.543	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.335	278	55546M4	475.737	ng/mL	
93)	Benzo[g,h,i]perylene	54.596	276	63825	487.372	ng/mL	99
94)	Hopane (T19)	52.338	191	18187	460.863	ng/mL#	87
95)	17a(H),21B(H)-hopane - C3	52.338	191	18187	460.863	ng/mL#	87

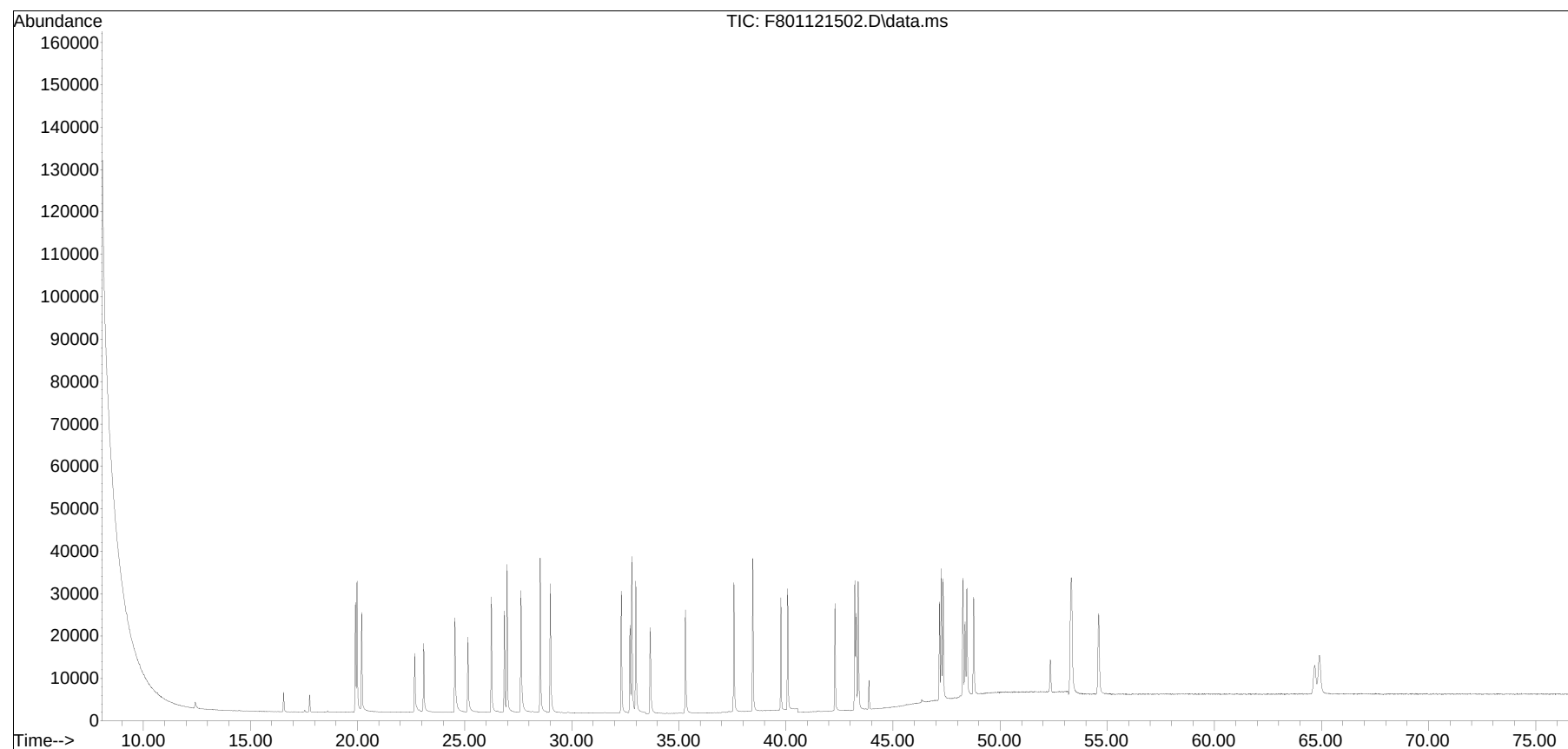
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN12\
Data File : F801121502.D
Acq On : 12 Jan 2015 11:33 am
Operator : PAH8:MS
Sample : WG755949-1
Misc : WG755949,CC frav47 500ng/ml
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 15 11:54:37 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 13 07:23:40 2015
Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121515.D
 Acq On : 13 Jan 2015 6:05 am
 Operator : PAH8:MS
 Sample : WG755949-2
 Misc : WG755949,cc frav47 500ng/ml
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 15 11:55:33 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	75	0.09
3 A1	trans-Decalin	0.446	0.495	-11.0	87	0.05
4 t	cis-Decalin	0.337	0.369	-9.5	86	0.05
9 s	Naphthalene-d8	2.023	1.960	3.1	70	0.10
10 A1	Naphthalene	2.245	2.043	9.0	63	0.10
16 t	2-Methylnaphthalene	1.447	1.068	26.2#	54	0.16
17 t	1-Methylnaphthalene	1.372	1.252	8.7	67	0.13
18 A1	Benzothiophene	1.874	1.692	9.7	66	0.11
23 t	Biphenyl	1.743	1.607	7.8	65	0.16
24 t	2,6-Dimethylnaphthalene	1.209	1.090	9.8	65	0.15
25 t	Dibenzofuran	1.778	1.869	-5.1	73	0.15
26 t	Acenaphthylene	2.112	2.350	-11.3	77	0.09
27 t	Acenaphthene	1.286	1.365	-6.1	75	0.09
28 t	2,3,5-Trimethylnaphthalene	1.006	0.980	2.6	70	0.12
29 A1	Fluorene	1.380	1.471	-6.6	74	0.15
33 A1	Dibenzothiophene	1.929	2.136	-10.7	77	0.12
42 s	Phenanthrene-d10	1.510	1.736	-15.0	82	0.11
43 A1	Phenanthrene	1.865	1.905	-2.1	71	0.12
54 t	Retene	0.443	0.527	-19.0	84	0.08
55 t	Anthracene	1.709	2.201	-28.8#	85	0.14
56 t	Carbazole	1.834	2.015	-9.9	76	0.13
57 t	1-Methylphenanthrene	1.311	1.476	-12.6	79	0.11
58 A1	Fluoranthene	1.900	2.258	-18.8	82	0.09
59 t	Benzo(b)fluorene	1.101	1.269	-15.3	80	0.10
60 A1	Pyrene	1.988	2.506	-26.1#	84	0.09
66 A1	Naphthobenzothiophene	1.757	2.060	-17.2	81	0.09
67 A2	Naphthobenzothiophene-2,1-D	1.757	2.060	-17.2	81	0.09
74 i	Chrysene-d12	1.000	1.000	0.0	85	0.10
75 t	Benz[a]anthracene	1.151	1.003	12.9	74	0.10
76 A1	Chrysene	1.097	1.114	-1.5	85	0.10
77 A2	Chrysene/Triphenylene	1.097	1.114	-1.5	85	0.10
83 s	Benzo[b]fluoranthene-d12	0.992	1.051	-5.9	87	0.09
84 t	Benzo[b]fluoranthene	1.223	1.012	17.3	73	0.08
85 A1	Benzo[j]+[k]fluoranthene	1.203	1.330	-10.6	97	0.09
87 t	Benzo[e]pyrene	1.236	1.163	5.9	84	0.09
88 s	Benzo[a]pyrene-d12	0.861	0.874	-1.5	88	0.10
89 t	Benzo[a]pyrene	1.127	1.171	-3.9	89	0.11
90 t	Perylene	1.184	1.169	1.3	90	0.10

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121515.D
 Acq On : 13 Jan 2015 6:05 am
 Operator : PAH8:MS
 Sample : WG755949-2
 Misc : WG755949,cc frav47 500ng/ml
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 15 11:55:33 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.432	1.236	13.7	86	0.16
92 t	Dibenz[ah]+[ac]anthracene	1.220	1.204	1.3	87	0.16
93 t	Benzo[g,h,i]perylene	1.375	1.310	4.7	86	0.16
94 A1	Hopane (T19)	0.415	0.368	11.3	86	0.08
95 A2	17a(H),21B(H)-hopane - C30H	0.415	0.368	11.3	86	0.08
129 SA1	5B(H)Cholane - Surr	0.186	0.182	2.2	87	0.05

* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Mass Discrimination (Concentration)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	0.93	0.70 - 1.30

Mass Discrimination (Response)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	1.15	0.70 - 2.00

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121515.D
 Acq On : 13 Jan 2015 6:05 am
 Operator : PAH8:MS
 Sample : WG755949-2
 Misc : WG755949,cc frav47 500ng/ml
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 15 11:55:33 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.895	164	32299	500.000	ng/mL	0.04
74) Chrysene-d12	43.314	240	54151	500.000	ng/mL	0.04
System Monitoring Compounds						
9) Naphthalene-d8	19.950	136	63320M4	484.522	ng/mL	0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery =	48.45%#		
42) Phenanthrene-d10	32.770	188	56065	577.950	ng/mL	0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery =	57.80%		
83) Benzo[b]fluoranthene-d12	47.189	264	56939	538.978	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	53.90%		
88) Benzo[a]pyrene-d12	48.387	264	47321	509.121	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	50.91%		
129) 5B(H)Cholane - Surr	43.871	217	9863	493.128	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	49.31%#		
Target Compounds						
						Qvalue
3) trans-Decalin	16.546	138	8002	277.148	ng/mL	100
4) cis-Decalin	17.760	138	5964	273.085	ng/mL	100
10) Naphthalene	20.023	128	65974	453.567	ng/mL	100
16) 2-Methylnaphthalene	22.779	142	34490M4	368.542	ng/mL	
17) 1-Methylnaphthalene	23.162	142	40425M4	454.455	ng/mL	
18) Benzothiophene	20.251	134	54659M4	448.839	ng/mL	
23) Biphenyl	24.659	154	51896	460.921	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.252	156	35221	450.935	ng/mL	100
25) Dibenzofuran	27.716	168	60375	525.395	ng/mL	99
26) Acenaphthylene	26.283	152	75889M4	557.580	ng/mL	
27) Acenaphthene	27.013	153	44087	530.115	ng/mL	99
28) 2,3,5-Trimethylnaphthalen	28.592	170	31655	487.150	ng/mL	98
29) Fluorene	29.084	166	47506	533.620	ng/mL	98
33) Dibenzothiophene	32.369	184	68981	554.372	ng/mL	100
43) Phenanthrene	32.862	178	61533	510.240	ng/mL	99
54) Retene	39.790	234	17025	598.970	ng/mL	96
55) Anthracene	33.062	178	71082M4	643.379	ng/mL	
56) Carbazole	33.728	167	65085	550.936	ng/mL	96
57) 1-Methylphenanthrene	35.353	192	47664	564.947	ng/mL	100
58) Fluoranthene	37.599	202	72931	596.084	ng/mL	98
59) Benzo(b)fluorene	40.119	216	40982	578.418	ng/mL	98
60) Pyrene	38.485	202	80941	631.687	ng/mL	98
66) Naphthobenzothiophene	42.319	234	66526	590.142	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121515.D
 Acq On : 13 Jan 2015 6:05 am
 Operator : PAH8:MS
 Sample : WG755949-2
 Misc : WG755949,cc frav47 500ng/ml
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 15 11:55:33 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
67)	Naphthobenzothiophene-2,1	42.319	234	66526	590.142	ng/mL	100
75)	Benz[a]anthracene	43.251	228	54310	436.400	ng/mL	91
76)	Chrysene	43.406	228	60299	506.189	ng/mL	100
77)	Chrysene/Triphenylene	43.406	228	60299	506.189	ng/mL	100
84)	Benzo[b]fluoranthene	47.271	252	54786	412.162	ng/mL	96
85)	Benzo[j]+[k]fluoranthene	47.354	252	72017M4	550.204	ng/mL	
87)	Benzo[e]pyrene	48.277	252	62965	468.402	ng/mL	95
89)	Benzo[a]pyrene	48.479	252	63428M4	516.076	ng/mL	
90)	Perylene	48.790	252	63308	490.455	ng/mL	89
91)	Indeno[1,2,3-cd]pyrene	53.335	276	66910M3	425.565	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.381	278	65171M4	489.957	ng/mL	
93)	Benzo[g,h,i]perylene	54.633	276	70915	475.331	ng/mL	97
94)	Hopane (T19)	52.329	191	19926	443.221	ng/mL#	84
95)	17a(H),21B(H)-hopane - C3	52.329	191	19926	443.221	ng/mL#	84

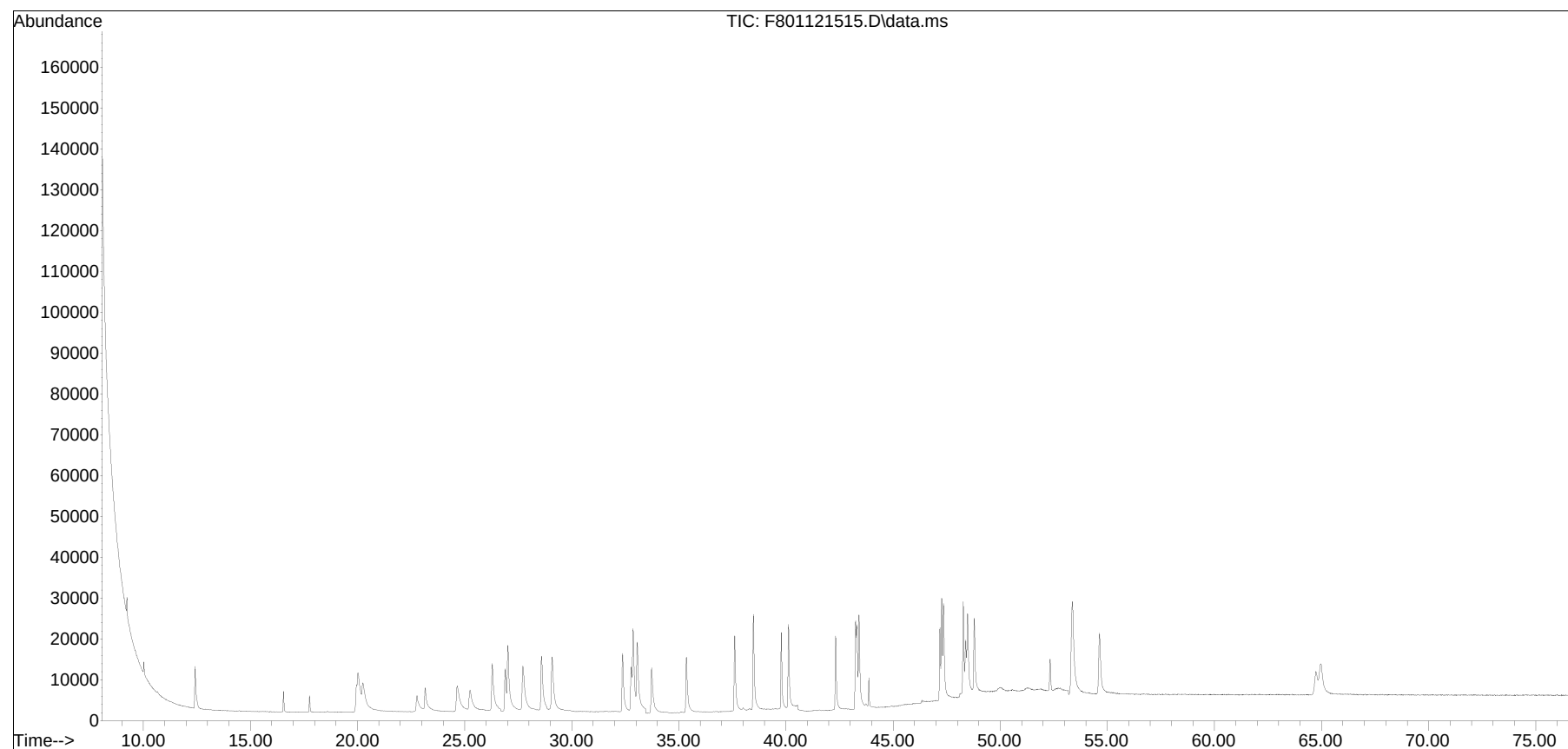
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN12\
Data File : F801121515.D
Acq On : 13 Jan 2015 6:05 am
Operator : PAH8:MS
Sample : WG755949-2
Misc : WG755949,cc frav47 500ng/ml
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 15 11:55:33 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 13 07:23:40 2015
Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates



Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN13\
 Data File : F801131502.D
 Acq On : 13 Jan 2015 4:45 pm
 Operator : PAH8:MS
 Sample : WG755949-3
 Misc : WG755949,cc frav47 500ng/ml
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 15 11:55:41 2015
 Quant Method : 0:\Forensics\Data\PAH8\2015\JAN15\JAN13\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Jan 14 08:20:30 2015
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	100	0.00
3 A1	trans-Decalin	0.446	0.426	4.5	100	0.00
4 t	cis-Decalin	0.337	0.321	4.7	100	0.00
9 s	Naphthalene-d8	2.023	2.101	-3.9	100	0.00
10 A1	Naphthalene	2.245	2.432	-8.3	100	0.00
16 t	2-Methylnaphthalene	1.447	1.488	-2.8	100	0.00
17 t	1-Methylnaphthalene	1.372	1.411	-2.8	100	0.00
18 A1	Benzo[thiophene]	1.874	1.937	-3.4	100	0.00
23 t	Biphenyl	1.743	1.843	-5.7	100	0.00
24 t	2,6-Dimethylnaphthalene	1.209	1.256	-3.9	100	0.00
25 t	Dibenzofuran	1.778	1.911	-7.5	100	0.00
26 t	Acenaphthylene	2.112	2.244	-6.3	98	0.00
27 t	Acenaphthene	1.286	1.372	-6.7	100	0.00
28 t	2,3,5-Trimethylnaphthalene	1.006	1.055	-4.9	100	0.00
29 A1	Fluorene	1.380	1.494	-8.3	100	0.00
33 A1	Dibenzothiophene	1.929	2.075	-7.6	100	0.00
42 s	Phenanthrene-d10	1.510	1.595	-5.6	100	0.00
43 A1	Phenanthrene	1.865	2.021	-8.4	100	0.00
54 t	Retene	0.443	0.469	-5.9	100	0.00
55 t	Anthracene	1.709	1.936	-13.3	100	0.00
56 t	Carbazole	1.834	1.991	-8.6	100	0.00
57 t	1-Methylphenanthrene	1.311	1.401	-6.9	100	0.00
58 A1	Fluoranthene	1.900	2.066	-8.7	100	0.00
59 t	Benzo(b)fluorene	1.101	1.187	-7.8	100	0.00
60 A1	Pyrene	1.988	2.249	-13.1	100	0.00
66 A1	Naphthobenzothiophene	1.757	1.899	-8.1	100	0.00
67 A2	Naphthobenzothiophene-2,1-D	1.757	1.899	-8.1	100	0.00
74 i	Chrysene-d12	1.000	1.000	0.0	100	0.00
75 t	Benz[a]anthracene	1.151	1.159	-0.7	100	0.00
76 A1	Chrysene	1.097	1.117	-1.8	100	0.00
77 A2	Chrysene/Triphenylene	1.097	1.117	-1.8	100	0.00
83 s	Benzo[b]fluoranthene-d12	0.992	1.033	-4.1	100	0.00
84 t	Benzo[b]fluoranthene	1.223	1.191	2.6	100	0.00
85 A1	Benzo[j]+[k]fluoranthene	1.203	1.168	2.9	100	0.00
87 t	Benzo[e]pyrene	1.236	1.189	3.8	100	0.00
88 s	Benzo[a]pyrene-d12	0.861	0.844	2.0	100	0.00
89 t	Benzo[a]pyrene	1.127	1.121	0.5	100	0.00
90 t	Perylene	1.184	1.109	6.3	100	0.00

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN13\
 Data File : F801131502.D
 Acq On : 13 Jan 2015 4:45 pm
 Operator : PAH8:MS
 Sample : WG755949-3
 Misc : WG755949,cc frav47 500ng/ml
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 15 11:55:41 2015
 Quant Method : 0:\Forensics\Data\PAH8\2015\JAN15\JAN13\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Jan 14 08:20:30 2015
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.432	1.319	7.9	107	0.00
92 t	Dibenz[ah]+[ac]anthracene	1.220	1.180	3.3	100	0.00
93 t	Benzo[g,h,i]perylene	1.375	1.301	5.4	100	0.00
94 A1	Hopane (T19)	0.415	0.367	11.6	100	0.00
95 A2	17a(H),21B(H)-hopane - C30H	0.415	0.367	11.6	100	0.00
129 SA1	5B(H)Cholane - Surr	0.186	0.178	4.3	100	0.00

* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Mass Discrimination (Concentration)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	0.87	0.70 - 1.30

Mass Discrimination (Response)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	0.95	0.70 - 2.00

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN13\
 Data File : F801131502.D
 Acq On : 13 Jan 2015 4:45 pm
 Operator : PAH8:MS
 Sample : WG755949-3
 Misc : WG755949,cc frav47 500ng/ml
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 15 11:55:41 2015
 Quant Method : O:\Forensics\Data\PAH8\2015\JAN15\JAN13\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Jan 14 08:20:30 2015
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.803	164	43038	500.000	ng/mL	0.00
74) Chrysene-d12	43.214	240	63400	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	19.850	136	90443	519.310	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	51.93%		
42) Phenanthrene-d10	32.661	188	68644	527.990	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	52.80%		
83) Benzo[b]fluoranthene-d12	47.098	264	65480	520.686	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	52.07%		
88) Benzo[a]pyrene-d12	48.287	264	53483	490.039	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	49.00%#		
129) 5B(H)Cholane - Surr	43.817	217	11284	479.002	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	47.90%#		
Target Compounds						
						Qvalue
3) trans-Decalin	16.501	138	9171	238.913	ng/mL	100
4) cis-Decalin	17.714	138	6905	238.289	ng/mL	100
10) Naphthalene	19.923	128	104687	541.809	ng/mL	100
16) 2-Methylnaphthalene	22.615	142	64025	514.029	ng/mL	100
17) 1-Methylnaphthalene	23.035	142	60734	514.363	ng/mL	100
18) Benzo[thiophene	20.142	134	83358	516.715	ng/mL	100
23) Biphenyl	24.495	154	79300	528.613	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.097	156	54040	519.416	ng/mL	100
25) Dibenzofuran	27.570	168	82265	537.478	ng/mL	99
26) Acenaphthylene	26.192	152	96580M4	531.381	ng/mL	
27) Acenaphthene	26.922	153	59056	533.473	ng/mL	99
28) 2,3,5-Trimethylnaphthalen	28.473	170	45386	523.981	ng/mL	97
29) Fluorene	28.939	166	64292	541.211	ng/mL	99
33) Dibenzothiophene	32.250	184	89314	537.767	ng/mL	98
43) Phenanthrene	32.743	178	86992	541.888	ng/mL	99
54) Retene	39.708	234	20173	529.313	ng/mL	98
55) Anthracene	32.926	178	83327	566.314	ng/mL	99
56) Carbazole	33.601	167	85681	542.784	ng/mL	98
57) 1-Methylphenanthrene	35.244	192	60284	534.371	ng/mL	100
58) Fluoranthene	37.508	202	88903	543.635	ng/mL	95
59) Benzo(b)fluorene	40.019	216	51078	539.062	ng/mL	100
60) Pyrene	38.394	202	96813	565.846	ng/mL	95
66) Naphthobenzothiophene	42.228	234	81732	540.301	ng/ml	99
67) Naphthobenzothiophene-2,1	42.228	234	81732	540.301	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN13\
 Data File : F801131502.D
 Acq On : 13 Jan 2015 4:45 pm
 Operator : PAH8:MS
 Sample : WG755949-3
 Misc : WG755949,cc frav47 500ng/ml
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 15 11:55:41 2015
 Quant Method : O:\Forensics\Data\PAH8\2015\JAN15\JAN13\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Jan 14 08:20:30 2015
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.150	228	73467	503.276	ng/mL	98
76)	Chrysene	43.306	228	70802	509.013	ng/mL	99
77)	Chrysene/Triphenylene	43.306	228	70802	509.013	ng/mL	99
84)	Benzo[b]fluoranthene	47.190	252	75508	486.875	ng/mL	97
85)	Benzo[j]+[k]fluoranthene	47.263	252	74055	485.288	ng/mL	92
87)	Benzo[e]pyrene	48.187	252	75386	481.075	ng/mL	95
89)	Benzo[a]pyrene	48.370	252	71050	497.107	ng/mL	94
90)	Perylene	48.690	252	70292	468.015	ng/mL	97
91)	Indeno[1,2,3-cd]pyrene	53.171	276	83636M3	460.700	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.226	278	74790	483.346	ng/mL	96
93)	Benzo[g,h,i]perylene	54.478	276	82498	473.303	ng/mL	100
94)	Hopane (T19)	52.248	191	23243	441.227	ng/mL#	86
95)	17a(H),21B(H)-hopane - C3	52.248	191	23243	441.227	ng/mL#	86

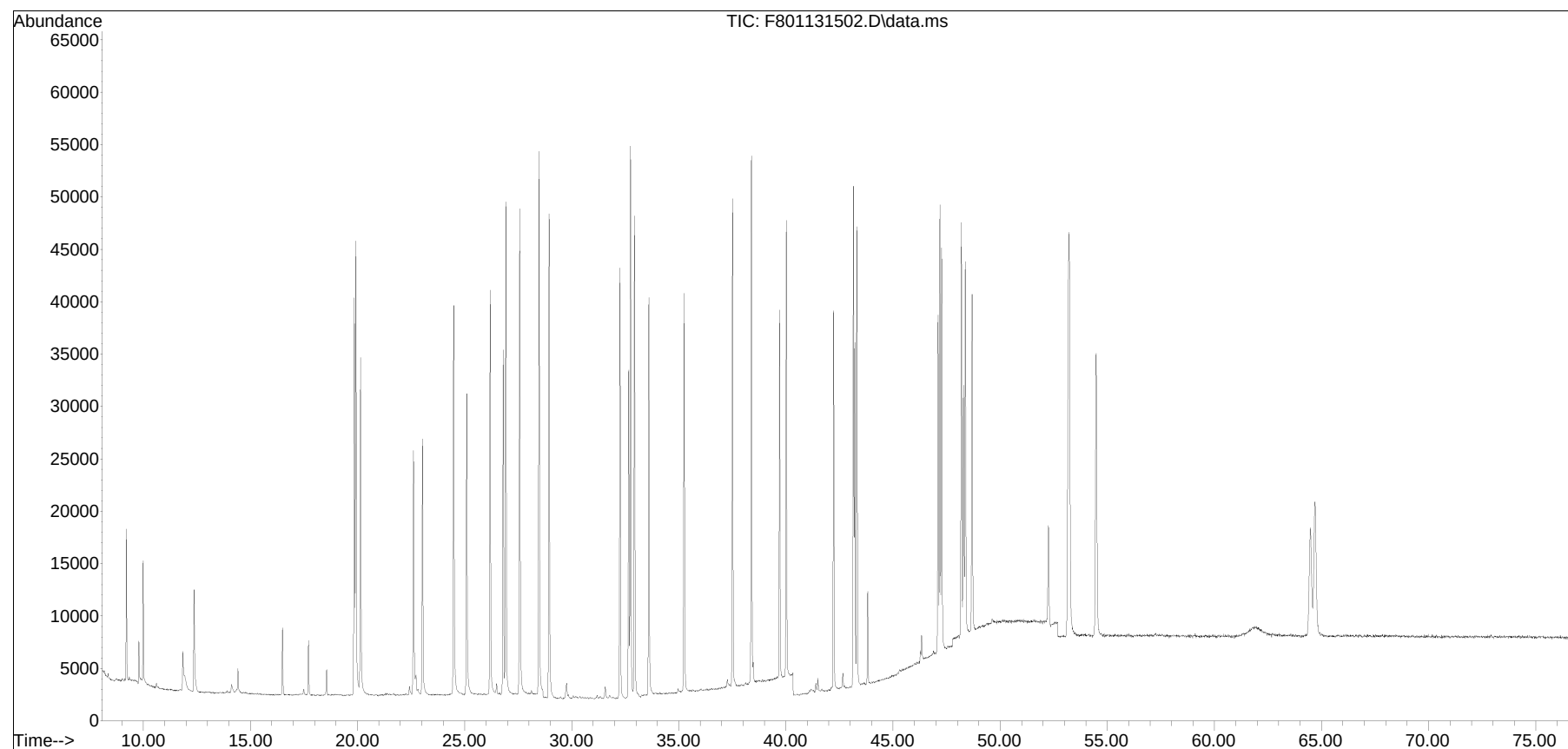
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN13\
Data File : F801131502.D
Acq On : 13 Jan 2015 4:45 pm
Operator : PAH8:MS
Sample : WG755949-3
Misc : WG755949,cc frav47 500ng/ml
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 15 11:55:41 2015
Quant Method : 0:\Forensics\Data\PAH8\2015\JAN15\JAN13\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 14 08:20:30 2015
Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN13\
 Data File : F801131508.D
 Acq On : 14 Jan 2015 1:20 am
 Operator : PAH8:MS
 Sample : WG755949-4
 Misc : WG755949,cc frav47 500ng/ml
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 15 11:56:14 2015
 Quant Method : O:\Forensics\Data\PAH8\2015\JAN15\JAN13\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Jan 14 08:20:30 2015
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	85	0.00
3 A1	trans-Decalin	0.446	0.434	2.7	87	0.00
4 t	cis-Decalin	0.337	0.327	3.0	87	0.00
9 s	Naphthalene-d8	2.023	2.107	-4.2	85	0.00
10 A1	Naphthalene	2.245	2.463	-9.7	86	0.00
16 t	2-Methylnaphthalene	1.447	1.482	-2.4	85	0.00
17 t	1-Methylnaphthalene	1.372	1.395	-1.7	84	0.00
18 A1	Benzothiophene	1.874	1.952	-4.2	86	0.00
23 t	Biphenyl	1.743	1.846	-5.9	85	0.00
24 t	2,6-Dimethylnaphthalene	1.209	1.245	-3.0	85	0.00
25 t	Dibenzofuran	1.778	1.890	-6.3	84	0.00
26 t	Acenaphthylene	2.112	2.211	-4.7	82	0.00
27 t	Acenaphthene	1.286	1.365	-6.1	85	0.00
28 t	2,3,5-Trimethylnaphthalene	1.006	1.046	-4.0	85	0.00
29 A1	Fluorene	1.380	1.472	-6.7	84	0.00
33 A1	Dibenzothiophene	1.929	2.057	-6.6	85	0.00
42 s	Phenanthrene-d10	1.510	1.569	-3.9	84	0.00
43 A1	Phenanthrene	1.865	1.992	-6.8	84	0.00
54 t	Retene	0.443	0.450	-1.6	82	0.00
55 t	Anthracene	1.709	1.932	-13.0	85	0.00
56 t	Carbazole	1.834	1.932	-5.3	83	0.00
57 t	1-Methylphenanthrene	1.311	1.344	-2.5	82	0.00
58 A1	Fluoranthene	1.900	1.985	-4.5	82	0.00
59 t	Benzo(b)fluorene	1.101	1.128	-2.5	81	0.00
60 A1	Pyrene	1.988	2.180	-9.7	83	0.00
66 A1	Naphthobenzothiophene	1.757	1.814	-3.2	81	0.00
67 A2	Naphthobenzothiophene-2,1-D	1.757	1.814	-3.2	81	0.00
74 i	Chrysene-d12	1.000	1.000	0.0	84	0.00
75 t	Benz[a]anthracene	1.151	1.129	1.9	82	0.00
76 A1	Chrysene	1.097	1.133	-3.3	85	0.00
77 A2	Chrysene/Triphenylene	1.097	1.133	-3.3	85	0.00
83 s	Benzo[b]fluoranthene-d12	0.992	1.025	-3.3	83	0.00
84 t	Benzo[b]fluoranthene	1.223	1.199	2.0	84	0.00
85 A1	Benzo[j]+[k]fluoranthene	1.203	1.193	0.8	86	0.00
87 t	Benzo[e]pyrene	1.236	1.204	2.6	85	0.00
88 s	Benzo[a]pyrene-d12	0.861	0.852	1.0	85	0.00
89 t	Benzo[a]pyrene	1.127	1.161	-3.0	87	0.00
90 t	Perylene	1.184	1.152	2.7	87	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN13\
 Data File : F801131508.D
 Acq On : 14 Jan 2015 1:20 am
 Operator : PAH8:MS
 Sample : WG755949-4
 Misc : WG755949,cc frav47 500ng/ml
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 15 11:56:14 2015
 Quant Method : O:\Forensics\Data\PAH8\2015\JAN15\JAN13\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Jan 14 08:20:30 2015
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.432	1.336	6.7	91	0.00
92 t	Dibenz[ah]+[ac]anthracene	1.220	1.226	-0.5	87	0.00
93 t	Benzo[g,h,i]perylene	1.375	1.330	3.3	86	0.00
94 A1	Hopane (T19)	0.415	0.379	8.7	87	0.00
95 A2	17a(H),21B(H)-hopane - C30H	0.415	0.379	8.7	87	0.00
129 SA1	5B(H)Cholane - Surr	0.186	0.177	4.8	84	0.00

* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Mass Discrimination (Concentration)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	0.91	0.70 - 1.30

Mass Discrimination (Response)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	0.97	0.70 - 2.00

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN13\
 Data File : F801131508.D
 Acq On : 14 Jan 2015 1:20 am
 Operator : PAH8:MS
 Sample : WG755949-4
 Misc : WG755949,cc frav47 500ng/ml
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 15 11:56:14 2015
 Quant Method : 0:\Forensics\Data\PAH8\2015\JAN15\JAN13\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Jan 14 08:20:30 2015
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.803	164	36700	500.000	ng/mL	0.00
74) Chrysene-d12	43.214	240	53174	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	19.850	136	77322	520.644	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	52.06%		
42) Phenanthrene-d10	32.661	188	57585	519.420	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	51.94%		
83) Benzo[b]fluoranthene-d12	47.098	264	54512	516.832	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	51.68%		
88) Benzo[a]pyrene-d12	48.287	264	45311	495.004	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	49.50%#		
129) 5B(H)Cholane - Surr	43.817	217	9426	477.081	ng/ml	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	47.71%#		
Target Compounds						
						Qvalue
3) trans-Decalin	16.501	138	7967	243.390	ng/mL	100
4) cis-Decalin	17.714	138	6008	243.140	ng/mL	100
10) Naphthalene	19.923	128	90388	548.593	ng/mL	100
16) 2-Methylnaphthalene	22.615	142	54403	512.209	ng/mL	100
17) 1-Methylnaphthalene	23.034	142	51201	508.513	ng/mL	100
18) Benzo[thiophene	20.142	134	71642	520.784	ng/mL	100
23) Biphenyl	24.495	154	67736	529.505	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.097	156	45702	515.135	ng/mL	100
25) Dibenzofuran	27.579	168	69379	531.569	ng/mL	98
26) Acenaphthylene	26.192	152	81157M4	523.638	ng/mL	
27) Acenaphthene	26.922	153	50083	530.548	ng/mL	99
28) 2,3,5-Trimethylnaphthalen	28.473	170	38379	519.605	ng/mL	96
29) Fluorene	28.948	166	54035	533.422	ng/mL	99
33) Dibenzothiophene	32.250	184	75500	533.099	ng/mL	98
43) Phenanthrene	32.743	178	73122	534.151	ng/mL	99
54) Retene	39.708	234	16531	508.659	ng/mL	98
55) Anthracene	32.934	178	70896	565.040	ng/mL	100
56) Carbazole	33.601	167	70916	526.833	ng/mL	99
57) 1-Methylphenanthrene	35.244	192	49309	512.570	ng/mL	99
58) Fluoranthene	37.508	202	72853	522.425	ng/mL	95
59) Benzo(b)fluorene	40.019	216	41389	512.243	ng/mL	98
60) Pyrene	38.393	202	80013	548.417	ng/mL	96
66) Naphthobenzothiophene	42.228	234	66560	515.992	ng/ml	100
67) Naphthobenzothiophene-2,1	42.228	234	66560	515.992	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN13\
 Data File : F801131508.D
 Acq On : 14 Jan 2015 1:20 am
 Operator : PAH8:MS
 Sample : WG755949-4
 Misc : WG755949,cc frav47 500ng/ml
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 15 11:56:14 2015
 Quant Method : 0:\Forensics\Data\PAH8\2015\JAN15\JAN13\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Jan 14 08:20:30 2015
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.150	228	60035	490.353	ng/mL	98
76)	Chrysene	43.315	228	60243	516.393	ng/mL	98
77)	Chrysene/Triphenylene	43.315	228	60243	516.393	ng/mL	98
84)	Benzo[b]fluoranthene	47.180	252	63757	490.165	ng/mL	96
85)	Benzo[j]+[k]fluoranthene	47.272	252	63438	495.661	ng/mL	94
87)	Benzo[e]pyrene	48.187	252	63996	486.928	ng/mL	95
89)	Benzo[a]pyrene	48.379	252	61739	515.034	ng/mL	95
90)	Perylene	48.690	252	61244	486.191	ng/mL	96
91)	Indeno[1,2,3-cd]pyrene	53.180	276	71062M4	466.716	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.226	278	65169	502.164	ng/mL	96
93)	Benzo[g,h,i]perylene	54.477	276	70700	483.621	ng/mL	100
94)	Hopane (T19)	52.247	191	20151	456.096	ng/mL#	88
95)	17a(H),21B(H)-hopane - C3	52.247	191	20151	456.096	ng/mL#	88

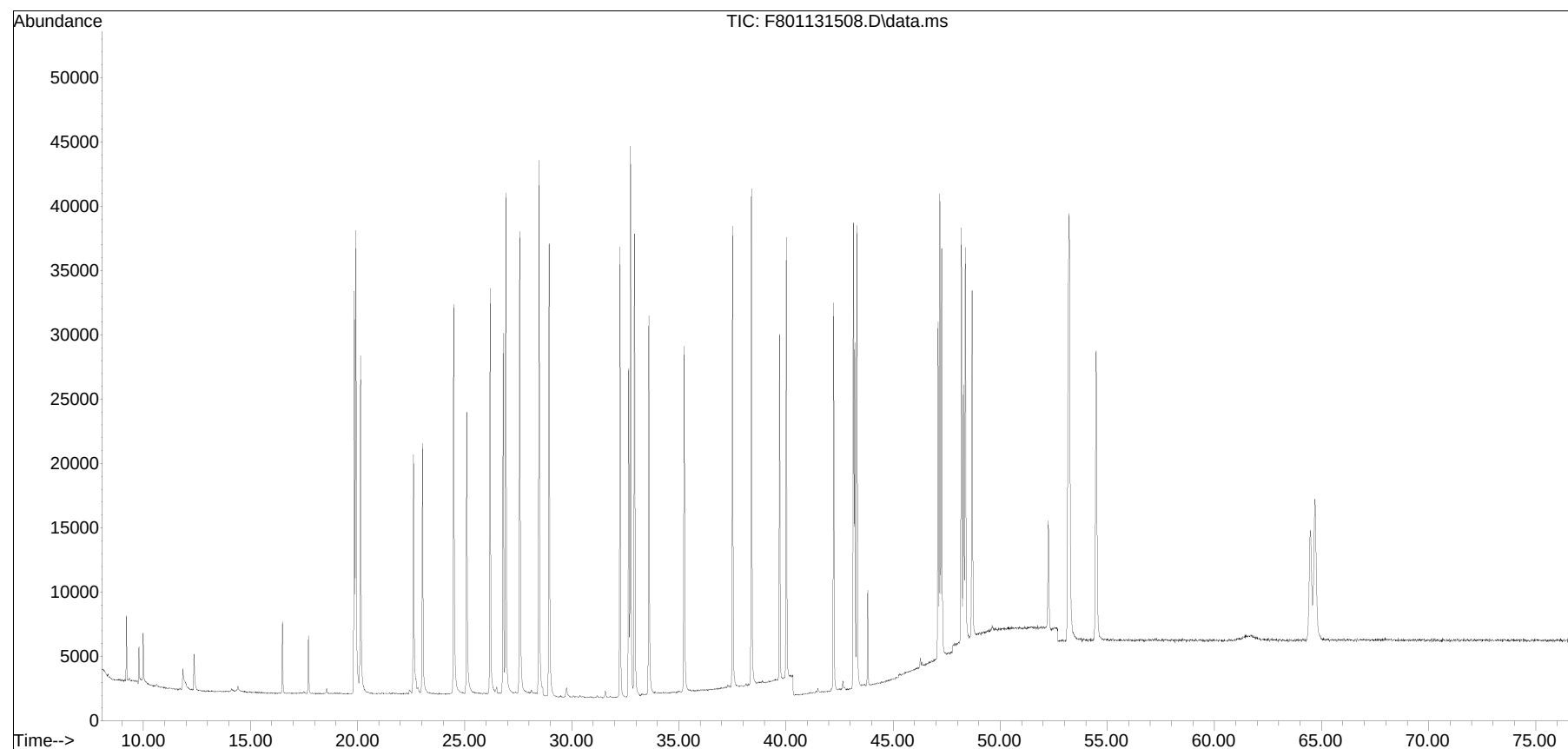
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN13\
Data File : F801131508.D
Acq On : 14 Jan 2015 1:20 am
Operator : PAH8:MS
Sample : WG755949-4
Misc : WG755949,cc frav47 500ng/ml
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 15 11:56:14 2015
Quant Method : 0:\Forensics\Data\PAH8\2015\JAN15\JAN13\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Jan 14 08:20:30 2015
Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates



Semivolatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121507.D
 Acq On : 12 Jan 2015 6:41 pm
 Operator : PAH8:MS
 Sample : wg755041-1,32
 Misc : WG755949,WG755041
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 15 11:54:46 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.867	164	30919	500.000	ng/mL	0.00
74) Chrysene-d12	43.278	240	50788	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	19.904	136	29395	234.969	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	23.50%#		
42) Phenanthrene-d10	32.734	188	25236	271.758	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	27.18%#		
83) Benzo[b]fluoranthene-d12	47.180	264	23360	235.765	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	23.58%#		
88) Benzo[a]pyrene-d12	48.369	264	20336	233.280	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	23.33%#		
129) 5B(H)Cholane - Surr	43.872	217	4317	230.133	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	23.01%#		
Target Compounds						
						Qvalue
10) Naphthalene	0.000		0		N.D.	
11) C1-Naphthalenes	0.000		0		N.D.	
12) C2-Naphthalenes	0.000		0		N.D.	
13) C3-Naphthalenes	0.000		0		N.D.	
14) C4-Naphthalenes	0.000		0		N.D.	
23) Biphenyl	0.000		0		N.D.	
25) Dibenzofuran	0.000		0		N.D.	
26) Acenaphthylene	0.000		0		N.D.	
27) Acenaphthene	0.000		0		N.D.	d
29) Fluorene	0.000		0		N.D.	d
30) C1-Fluorenes	0.000		0		N.D.	
31) C2-Fluorenes	0.000		0		N.D.	
32) C3-Fluorenes	0.000		0		N.D.	
33) Dibenzothiophene	0.000		0		N.D.	d
38) C1-Dibenzothiophenes	0.000		0		N.D.	d
38) C1-Dibenzothiophenes BS	0.000		0d	0.000	ng/mL	
39) C2-Dibenzothiophenes	0.000		0		N.D.	
40) C3-Dibenzothiophenes	0.000		0		N.D.	
41) C4-Dibenzothiophenes	0.000		0		N.D.	
43) Phenanthrene	0.000		0		N.D.	
49) C1-Phenanthrenes/Anthrace	0.000		0		N.D.	
50) C2-Phenanthrenes/Anthrace	0.000		0		N.D.	d
50) C2-Phenanthrenes/Anthr BS	0.000		0d	0.000	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121507.D
 Acq On : 12 Jan 2015 6:41 pm
 Operator : PAH8:MS
 Sample : wg755041-1,32
 Misc : WG755949,WG755041
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 15 11:54:46 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) C3-Phenanthrenes/Anthrace	0.000		0		N.D.	
53) C4-Phenanthrenes/Anthrace	0.000		0		N.D.	
55) Anthracene	0.000		0		N.D.	
56) Carbazole	0.000		0		N.D.	d
58) Fluoranthene	0.000		0		N.D.	d
59) Benzo(b)fluorene	0.000		0		N.D.	
60) Pyrene	0.000		0		N.D.	
61) C1-Fluoranthenes/Pyrenes	0.000		0		N.D.	
62) C2-Fluoranthenes/Pyrenes	0.000		0		N.D.	
63) C3-Fluoranthenes/Pyrenes	0.000		0		N.D.	
64) C4-Fluoranthenes/Pyrenes	0.000		0		N.D.	
66) Naphthobenzothiophene	0.000		0		N.D.	
70) C1-Naphthobenzothiophenes	0.000		0		N.D.	
71) C2-Naphthobenzothiophenes	0.000		0		N.D.	
72) C3-Naphthobenzothiophenes	0.000		0		N.D.	
73) C4-Naphthobenzothiophenes	0.000		0		N.D.	
75) Benz[a]anthracene	0.000		0		N.D.	d
77) Chrysene/Triphenylene	0.000		0		N.D.	d
78) C1-Chrysenes	0.000		0		N.D.	
79) C2-Chrysenes	0.000		0		N.D.	d
79) C2-Chrysenes BS	0.000		0d	0.000	ng/mL	
81) C3-Chrysenes	0.000		0		N.D.	
82) C4-Chrysenes	0.000		0		N.D.	
84) Benzo[b]fluoranthene	0.000		0		N.D.	
85) Benzo[j]+[k]fluoranthene	0.000		0		N.D.	
86) Benzo[a]fluoranthene	0.000		0		N.D.	
87) Benzo[e]pyrene	0.000		0		N.D.	d
89) Benzo[a]pyrene	0.000		0		N.D.	d
90) Perylene	0.000		0		N.D.	
91) Indeno[1,2,3-cd]pyrene	0.000		0		N.D.	
92) Dibenz[ah]+[ac]anthracene	0.000		0		N.D.	
93) Benzo[g,h,i]perylene	0.000		0		N.D.	
94) Hopane (T19)	0.000		0		N.D.	d
100) C26 Tricyclic Terpane-22S	0.000		0		N.D.	d
101) C26 Tricyclic Terpane-22R	0.000		0		N.D.	d
102) C28 Tricyclic Terpane-22S	0.000		0		N.D.	d
103) C28 Tricyclic Terpane-22R	0.000		0		N.D.	d
104) C29 Tricyclic Terpane-22S	0.000		0		N.D.	d
105) C29 Tricyclic Terpane-22R	0.000		0		N.D.	d
106) 18a-22,29,30-Trisnorneoho	0.000		0		N.D.	d
107) C30 Tricyclic Terpane-22S	0.000		0		N.D.	d

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121507.D
 Acq On : 12 Jan 2015 6:41 pm
 Operator : PAH8:MS
 Sample : wg755041-1,32
 Misc : WG755949,WG755041
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 15 11:54:46 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) C30 Tricyclic Terpane-22R	0.000		0	N.D.	d	
109) 17a(H)-22,29,30-Trisnorho	0.000		0	N.D.	d	
110) 17a/b,21b/a 28,30-Bisnorh	0.000		0	N.D.	d	
111) 17a(H),21b(H)-25-Norhopan	0.000		0	N.D.	d	
112) 30-Norhopane (T15)	0.000		0	N.D.	d	
113) 18a(H)-30-Norneohopane-C2	0.000		0	N.D.	d	
114) 17a(H)-Diahopane (X)	0.000		0	N.D.	d	
115) 30-Normoretane (T17)	0.000		0	N.D.	d	
116) 18a(H)&18b(H)-Oleananes (	0.000		0	N.D.	d	
117) Moretane (T20)	0.000		0	N.D.	d	
118) 30-Homohopane-22S (T21)	0.000		0	N.D.	d	
119) 30-Homohopane-22R (T22)	0.000		0	N.D.	d	
120) Gammacerane/C32-diahopane	0.000		0	N.D.	d	
121) 30,31-Bishomohopane-22S (	0.000		0	N.D.	d	
122) 30,31-Bishomohopane-22R (	0.000		0	N.D.	d	
123) 30,31-Trishomohopane-22S	0.000		0	N.D.	d	
124) 30,31-Trishomohopane-22R	0.000		0	N.D.	d	
125) Tetrakishomohopane-22S (T	0.000		0	N.D.	d	
126) Tetrakishomohopane-22R (T	0.000		0	N.D.	d	
127) Pentakishomohopane-22S (T	0.000		0	N.D.	d	
128) Pentakishomohopane-22R (T	0.000		0	N.D.	d	
130) 13b(H),17a(H)-20S-Diachol	0.000		0	N.D.		
131) 13b(H),17a(H)-20R-Diachol	0.000		0	N.D.		
132) 13b,17a-20S-Methylidiachol	0.000		0	N.D.		
133) 14a,17a-20S-Chol/13b,17a-	0.000		0	N.D.		
134) 14a,17a-20R-Chol/13b,17a-	0.000		0	N.D.		
135) Unknown Sterane (S18)	0.000		0	N.D.		
136) 13a,17b-20S-Ethylidiachole	0.000		0	N.D.		
137) 14a,17a-20S-Methylcholest	0.000		0	N.D.		
138) 14a,17a-20R-Methylcholest	0.000		0	N.D.		
139) 14a(H),17a(H)-20S-Ethylch	0.000		0	N.D.		
140) 14a(H),17a(H)-20R-Ethylch	0.000		0	N.D.		
141) 14b(H),17b(H)-20R-Cholest	0.000		0	N.D.	d	
142) 14b(H),17b(H)-20S-Cholest	0.000		0	N.D.	d	
143) 14b,17b-20R-Methylcholest	0.000		0	N.D.	d	
144) 14b,17b-20S-Methylcholest	0.000		0	N.D.		
145) 14b(H),17b(H)-20R-Ethylch	0.000		0	N.D.		
146) 14b(H),17b(H)-20S-Ethylch	0.000		0	N.D.		
147) C26,20R- +C27,20S- triaro	0.000		0	N.D.		
148) C28,20S-triaromatic stero	0.000		0	N.D.		
149) C27,20R-triaromatic stero	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121507.D
 Acq On : 12 Jan 2015 6:41 pm
 Operator : PAH8:MS
 Sample : wg755041-1,32
 Misc : WG755949,WG755041
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 15 11:54:46 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
150)	C28,20R-triaromatic stero	0.000		0		N.D.	

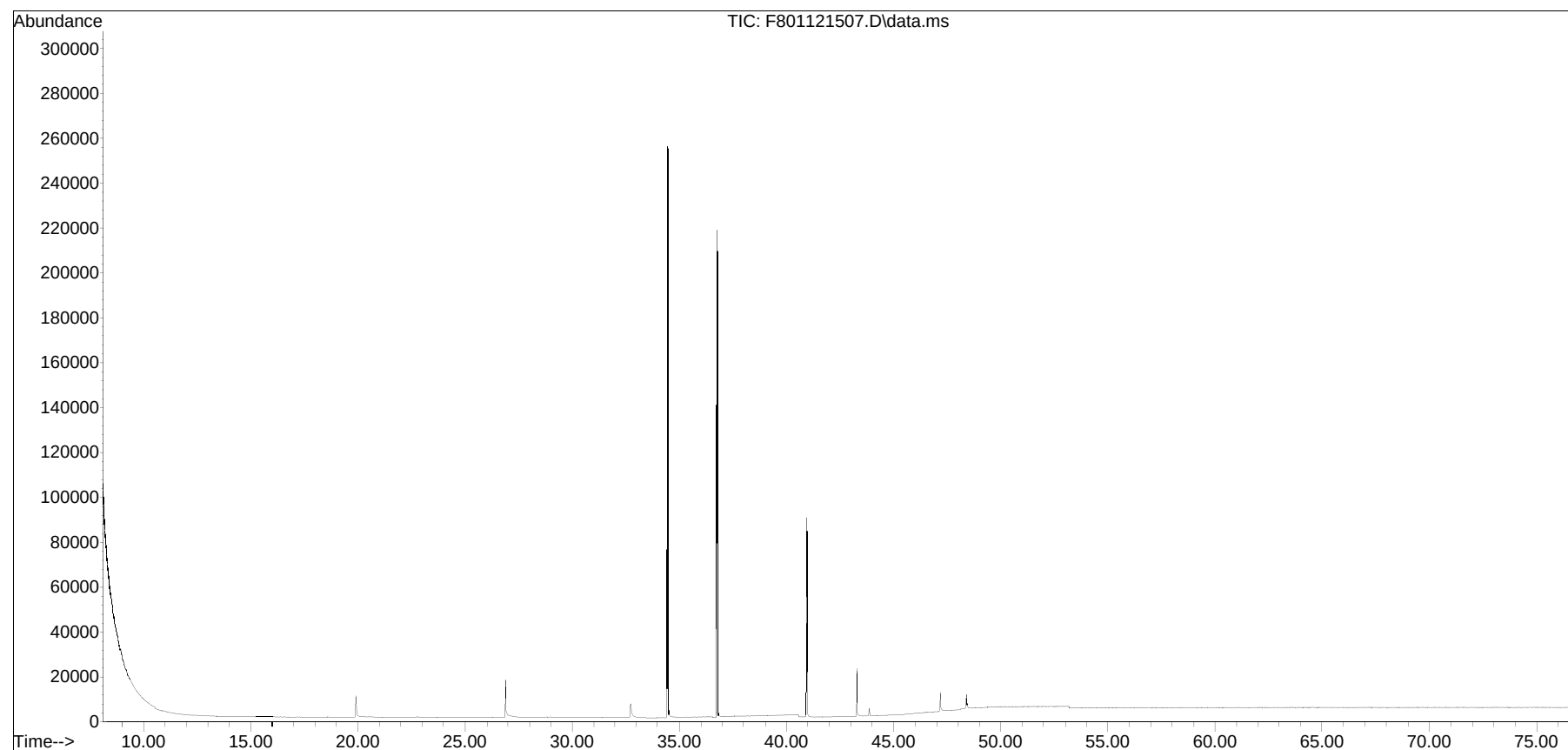
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN12\
Data File : F801121507.D
Acq On : 12 Jan 2015 6:41 pm
Operator : PAH8:MS
Sample : wg755041-1,32
Misc : WG755949,WG755041
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 15 11:54:46 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 13 07:23:40 2015
Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO



PAH8122314.M Thu Jan 15 12:45:24 2015

Page 5

Manual Integration/Negative Proof Report

Data Path	: 0:\Forensics\Data\PAH8\2015Q	Method	: PAH8122314.M
Data File	: F801121507.D	Operator	: PAH8:MS
Date Inj'd	: 1/12/2015 6:41 pm	Instrument	: PAH8
Sample	: wg755041-1,32	Quant Date	: 1/13/2015 7:24 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121508.D
 Acq On : 12 Jan 2015 8:07 pm
 Operator : PAH8:MS
 Sample : wg755041-2,32
 Misc : WG755949,WG755041
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 15 11:54:52 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.858	164	35769	500.000	ng/mL	0.00
74) Chrysene-d12	43.278	240	53746	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	19.905	136	32491	224.501	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	22.45%#		
42) Phenanthrene-d10	32.725	188	26418	245.912	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	24.59%#		
83) Benzo[b]fluoranthene-d12	47.171	264	24493	233.595	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	23.36%#		
88) Benzo[a]pyrene-d12	48.360	264	21740	235.660	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	23.57%#		
129) 5B(H)Cholane - Surr	43.872	217	4682	235.854	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	23.59%#		
Target Compounds						
10) Naphthalene	19.978	128	37826	234.823	ng/mL	100
11) C1-Naphthalenes	0.000		0	N.D.	d	
12) C2-Naphthalenes	0.000		0	N.D.		
13) C3-Naphthalenes	0.000		0	N.D.		
14) C4-Naphthalenes	0.000		0	N.D.		
23) Biphenyl	0.000		0	N.D.	d	
25) Dibenzofuran	0.000		0	N.D.		
26) Acenaphthylene	26.247	152	39007	258.793	ng/mL	100
27) Acenaphthene	26.986	153	24308	263.932	ng/mL	99
29) Fluorene	29.002	166	25489M4	258.535	ng/mL	
30) C1-Fluorenes	0.000		0	N.D.		
31) C2-Fluorenes	0.000		0	N.D.		
32) C3-Fluorenes	0.000		0	N.D.		
33) Dibenzothiophene	0.000		0	N.D.	d	
37) OTP	0.000		0	N.D.	d	
38) C1-Dibenzothiophenes	0.000		0	N.D.	d	
38) C1-Dibenzothiophenes BS	0.000		0d	0.000	ng/mL	
39) C2-Dibenzothiophenes	0.000		0	N.D.	d	
40) C3-Dibenzothiophenes	0.000		0	N.D.		
41) C4-Dibenzothiophenes	0.000		0	N.D.	d	
43) Phenanthrene	32.816	178	34086	255.226	ng/mL	98
49) C1-Phenanthrenes/Anthrace	0.000		0	N.D.		
50) C2-Phenanthrenes/Anthrace	0.000		0	N.D.	d	
50) C2-Phenanthrenes/Anthr BS	0.000		0d	0.000	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121508.D
 Acq On : 12 Jan 2015 8:07 pm
 Operator : PAH8:MS
 Sample : wg755041-2,32
 Misc : WG755949,WG755041
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 15 11:54:52 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) 5AA IS BKGD	0.000		0	N.D.	d	
52) C3-Phenanthrenes/Anthrace	0.000		0	N.D.		
53) C4-Phenanthrenes/Anthrace	0.000		0	N.D.		
55) Anthracene	32.999	178	34628	283.020	ng/mL	97
56) Carbazole	0.000		0	N.D.	d	
58) Fluoranthene	37.572	202	36544M4	269.708	ng/mL	
59) Benzo(b)fluorene	0.000		0	N.D.		
60) Pyrene	38.448	202	38216	269.315	ng/mL	100
61) C1-Fluoranthenes/Pyrenes	0.000		0	N.D.		
62) C2-Fluoranthenes/Pyrenes	0.000		0	N.D.		
63) C3-Fluoranthenes/Pyrenes	0.000		0	N.D.		
64) C4-Fluoranthenes/Pyrenes	0.000		0	N.D.		
66) Naphthobenzothiophene	0.000		0	N.D.		
67) Naphthobenzothiophene-2,1	0.000		0	N.D.		
68) Naphthobenzothiophene-1,2	0.000		0	N.D.		
69) Naphthobenzothiophene-2,3	0.000		0	N.D.	d	
70) C1-Naphthobenzothiophenes	0.000		0	N.D.		
71) C2-Naphthobenzothiophenes	0.000		0	N.D.		
72) C3-Naphthobenzothiophenes	0.000		0	N.D.		
73) C4-Naphthobenzothiophenes	0.000		0	N.D.		
75) Benz[a]anthracene	43.214	228	30615	247.856	ng/mL	99
77) Chrysene/Triphenylene	43.369	228	29732	251.471	ng/mL	100
78) C1-Chrysenes	0.000		0	N.D.		
79) C2-Chrysenes	0.000		0	N.D.	d	
79) C2-Chrysenes BS	0.000		0d	0.000	ng/mL	
80) BBF-D12 Surr BKGD	0.000		0	N.D.	d	
81) C3-Chrysenes	0.000		0	N.D.		
82) C4-Chrysenes	0.000		0	N.D.	d	
84) Benzo[b]fluoranthene	47.253	252	32908	249.437	ng/mL	97
85) Benzo[j]+[k]fluoranthene	47.335	252	35100	270.182	ng/mL	92
86) Benzo[a]fluoranthene	0.000		0	N.D.	d	
87) Benzo[e]pyrene	0.000		0	N.D.	d	
89) Benzo[a]pyrene	48.451	252	32723	268.254	ng/mL	90
90) Perylene	0.000		0	N.D.	d	
91) Indeno[1,2,3-cd]pyrene	53.289	276	35702M3	228.785	ng/mL	
92) Dibenz[ah]+[ac]anthracene	53.335	278	32224M4	244.086	ng/mL	
93) Benzo[g,h,i]perylene	54.596	276	34386	232.220	ng/mL	98
94) Hopane (T19)	0.000		0	N.D.	d	
96) C23 Tricyclic Terpane (T4	0.000		0	N.D.	d	
97) C24 Tricyclic Terpane (T5	0.000		0	N.D.		
98) C25 Tricyclic Terpane (T6	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121508.D
 Acq On : 12 Jan 2015 8:07 pm
 Operator : PAH8:MS
 Sample : wg755041-2,32
 Misc : WG755949,WG755041
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 15 11:54:52 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99) C24 Tetracyclic Terpane (	0.000		0	N.D.	d	
100) C26 Tricyclic Terpane-22S	0.000		0	N.D.	d	
101) C26 Tricyclic Terpane-22R	0.000		0	N.D.	d	
102) C28 Tricyclic Terpane-22S	0.000		0	N.D.	d	
103) C28 Tricyclic Terpane-22R	0.000		0	N.D.	d	
104) C29 Tricyclic Terpane-22S	0.000		0	N.D.	d	
105) C29 Tricyclic Terpane-22R	0.000		0	N.D.	d	
106) 18a-22,29,30-Trisnorneocho	0.000		0	N.D.	d	
107) C30 Tricyclic Terpane-22S	0.000		0	N.D.	d	
108) C30 Tricyclic Terpane-22R	0.000		0	N.D.	d	
109) 17a(H)-22,29,30-Trisnorho	0.000		0	N.D.	d	
110) 17a/b,21b/a 28,30-Bisnorh	0.000		0	N.D.	d	
111) 17a(H),21b(H)-25-Norhopan	0.000		0	N.D.	d	
112) 30-Norhopane (T15)	0.000		0	N.D.	d	
113) 18a(H)-30-Norneohopane-C2	0.000		0	N.D.	d	
114) 17a(H)-Diahopane (X)	0.000		0	N.D.	d	
115) 30-Normoretane (T17)	0.000		0	N.D.	d	
116) 18a(H)&18b(H)-Oleananes (	0.000		0	N.D.	d	
117) Moretane (T20)	0.000		0	N.D.	d	
118) 30-Homohopane-22S (T21)	0.000		0	N.D.	d	
119) 30-Homohopane-22R (T22)	0.000		0	N.D.	d	
120) Gammacerane/C32-diahopane	0.000		0	N.D.	d	
121) 30,31-Bishomohopane-22S (	0.000		0	N.D.	d	
122) 30,31-Bishomohopane-22R (	0.000		0	N.D.	d	
123) 30,31-Trishomohopane-22S	0.000		0	N.D.	d	
124) 30,31-Trishomohopane-22R	0.000		0	N.D.	d	
125) Tetrakishomohopane-22S (T	0.000		0	N.D.	d	
126) Tetrakishomohopane-22R (T	0.000		0	N.D.	d	
127) Pentakishomohopane-22S (T	0.000		0	N.D.	d	
128) Pentakishomohopane-22R (T	0.000		0	N.D.	d	
130) 13b(H),17a(H)-20S-Diachol	0.000		0	N.D.		
131) 13b(H),17a(H)-20R-Diachol	0.000		0	N.D.		
132) 13b,17a-20S-Methyl diachol	0.000		0	N.D.		
133) 14a,17a-20S-Chol/13b,17a-	0.000		0	N.D.		
134) 14a,17a-20R-Chol/13b,17a-	0.000		0	N.D.		
135) Unknown Sterane (S18)	0.000		0	N.D.		
136) 13a,17b-20S-Ethyl diachole	0.000		0	N.D.		
137) 14a,17a-20S-Methylcholest	0.000		0	N.D.		
138) 14a,17a-20R-Methylcholest	0.000		0	N.D.		
139) 14a(H),17a(H)-20S-Ethylch	0.000		0	N.D.		
140) 14a(H),17a(H)-20R-Ethylch	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121508.D
 Acq On : 12 Jan 2015 8:07 pm
 Operator : PAH8:MS
 Sample : wg755041-2,32
 Misc : WG755949,WG755041
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 15 11:54:52 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
141) 14b(H),17b(H)-20R-Cholest	0.000		0		N.D.	d
142) 14b(H),17b(H)-20S-Cholest	0.000		0		N.D.	d
143) 14b,17b-20R-Methylcholest	0.000		0		N.D.	d
144) 14b,17b-20S-Methylcholest	0.000		0		N.D.	
145) 14b(H),17b(H)-20R-Ethylch	0.000		0		N.D.	
146) 14b(H),17b(H)-20S-Ethylch	0.000		0		N.D.	
147) C26,20R- +C27,20S- triaro	0.000		0		N.D.	
148) C28,20S-triaromatic stero	0.000		0		N.D.	
149) C27,20R-triaromatic stero	0.000		0		N.D.	
150) C28,20R-triaromatic stero	0.000		0		N.D.	

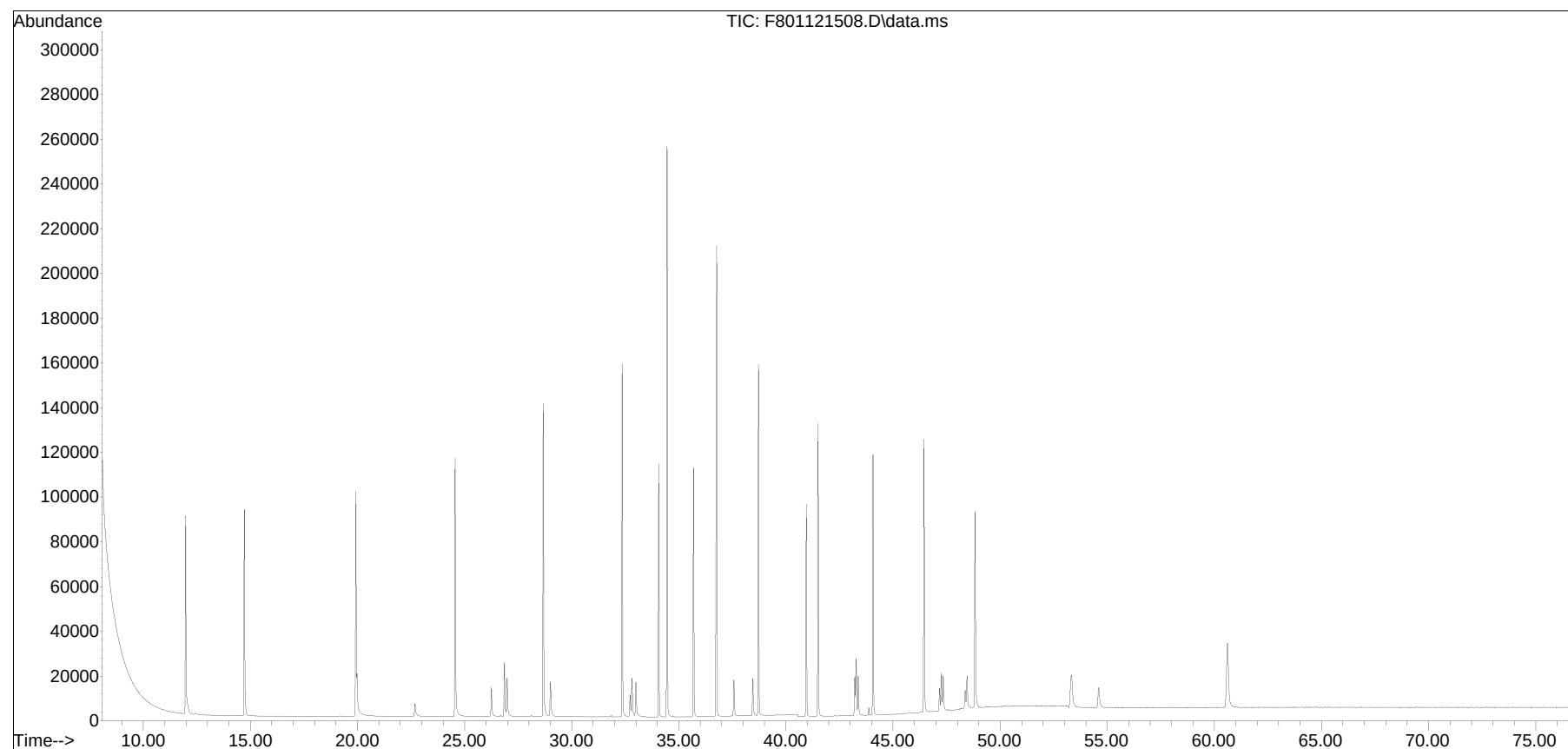
(#) = qualifier out of range (m) = manual integration (+) = signals summed

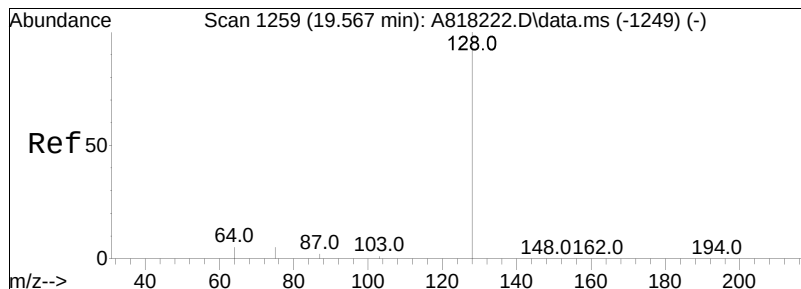
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN12\
Data File : F801121508.D
Acq On : 12 Jan 2015 8:07 pm
Operator : PAH8:MS
Sample : wg755041-2,32
Misc : WG755949,WG755041
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 15 11:54:52 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 13 07:23:40 2015
Response via : Initial Calibration

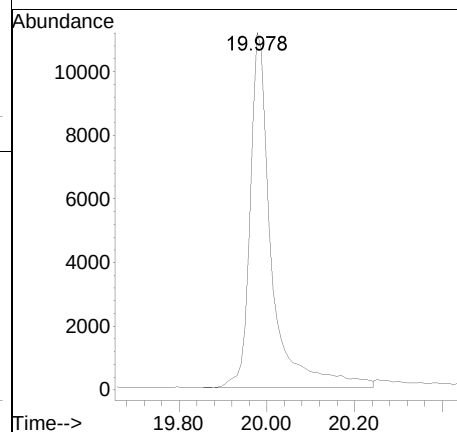
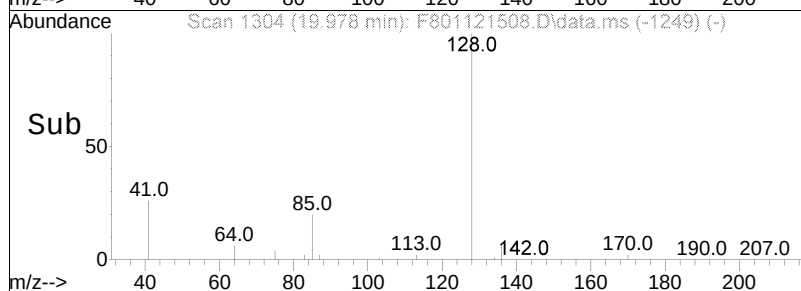
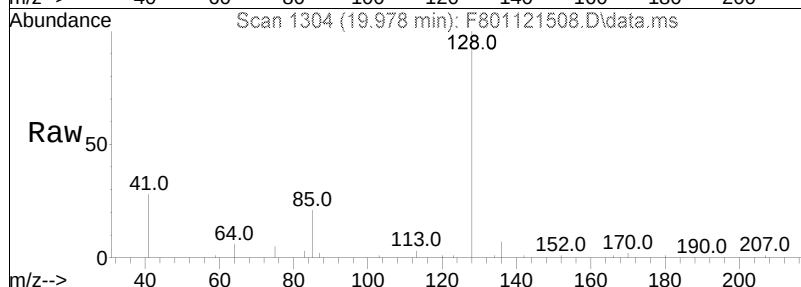
Sub List : ALKPAHURS - ALKPAH and BIO

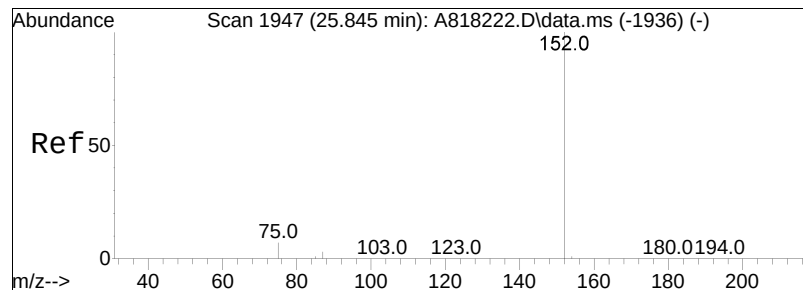




#10
Naphthalene
Concen: 234.82 ng/mL
RT: 19.978 min Scan# 1304
Delta R.T. 0.000 min
Lab File: F801121508.D
Acq: 12 Jan 2015 8:07 pm

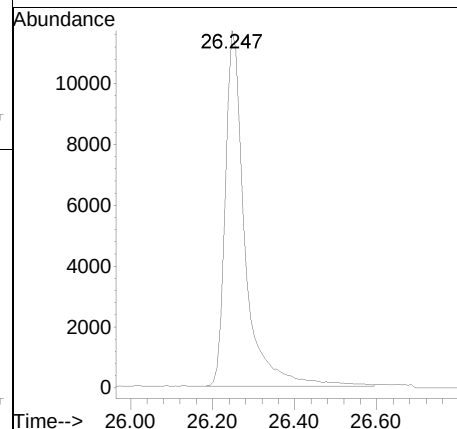
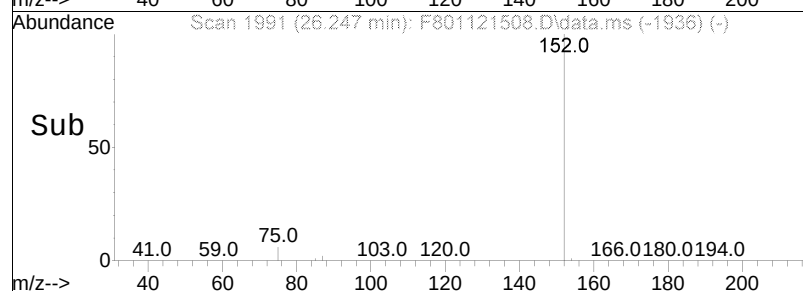
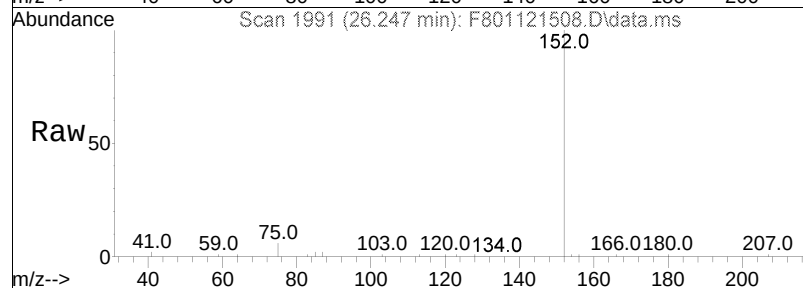
Tgt Ion:128 Resp: 37826

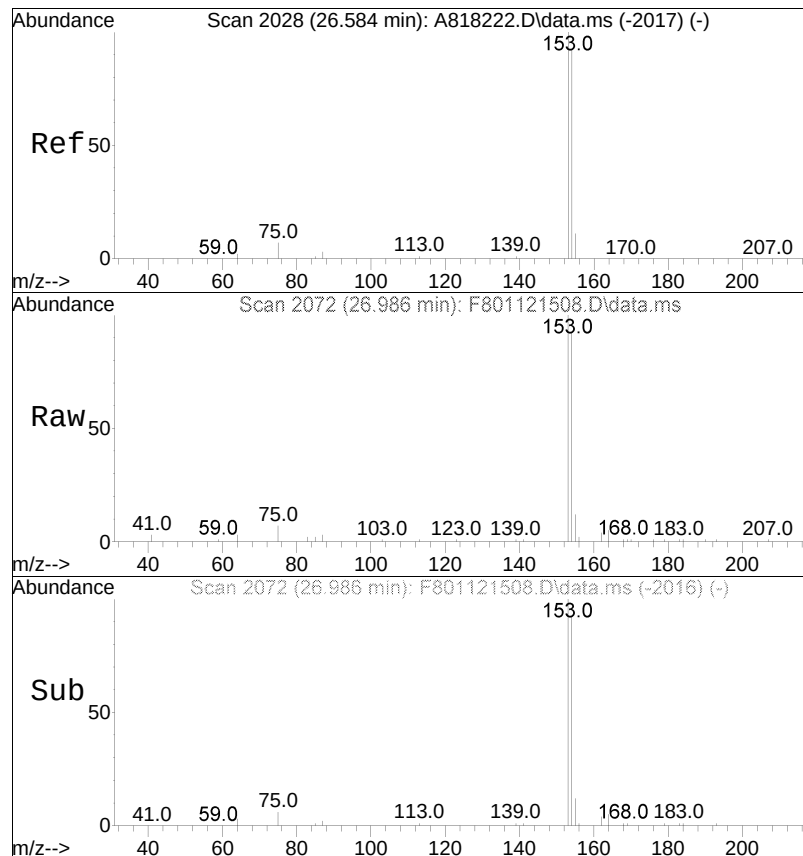




#26
Acenaphthylene
Concen: 258.79 ng/mL
RT: 26.247 min Scan# 1991
Delta R.T. 0.000 min
Lab File: F801121508.D
Acq: 12 Jan 2015 8:07 pm

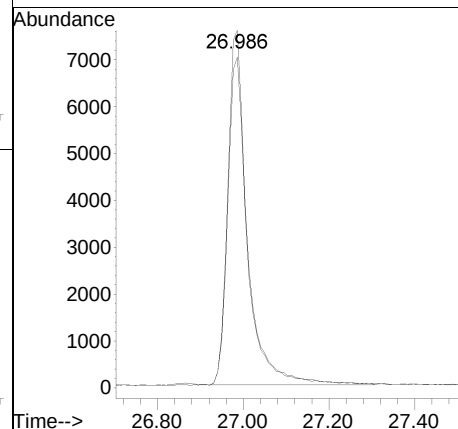
Tgt Ion:152 Resp: 39007

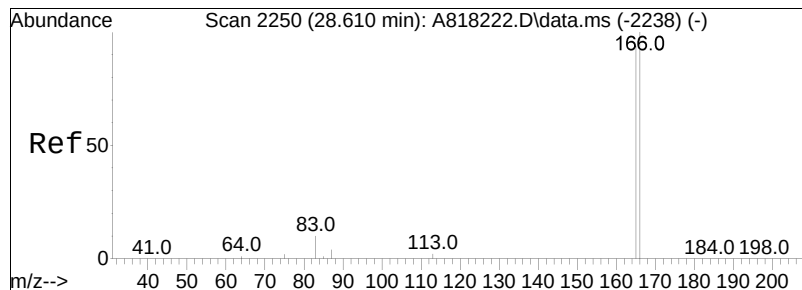




#27
 Acenaphthene
 Concen: 263.93 ng/mL
 RT: 26.986 min Scan# 2072
 Delta R.T. 0.009 min
 Lab File: F801121508.D
 Acq: 12 Jan 2015 8:07 pm

Tgt Ion	Ratio	Lower	Upper
153	100		
154	92.6	64.3	119.5





#29

Fluorene

Concen: 258.53 ng/mL M4

RT: 29.002 min Scan# 2293

Delta R.T. 0.000 min

Lab File: F801121508.D

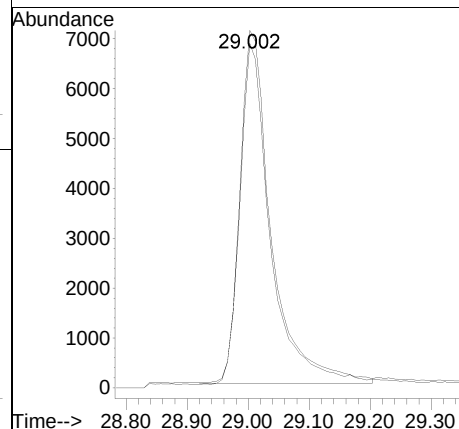
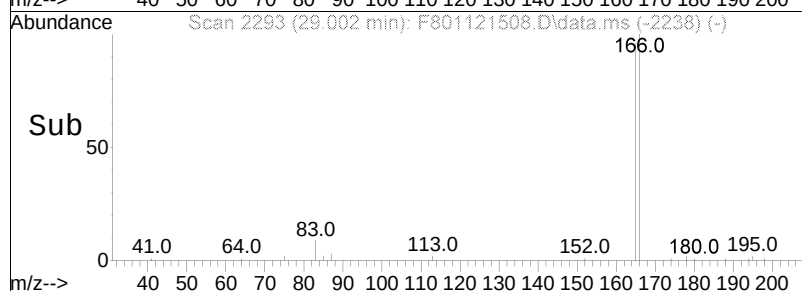
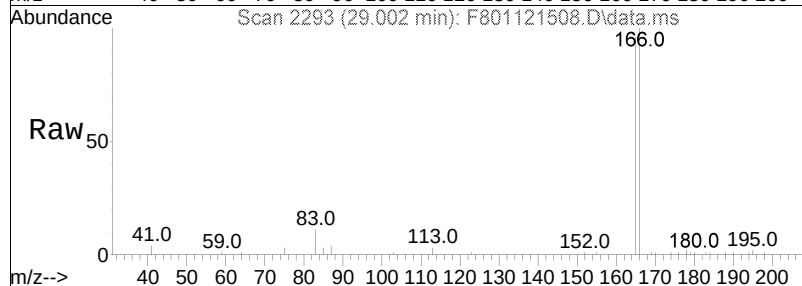
Acq: 12 Jan 2015 8:07 pm

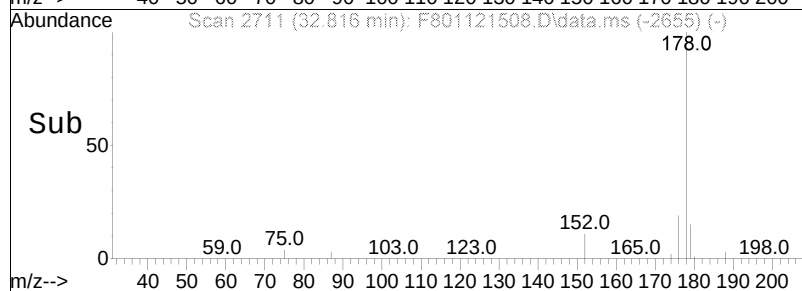
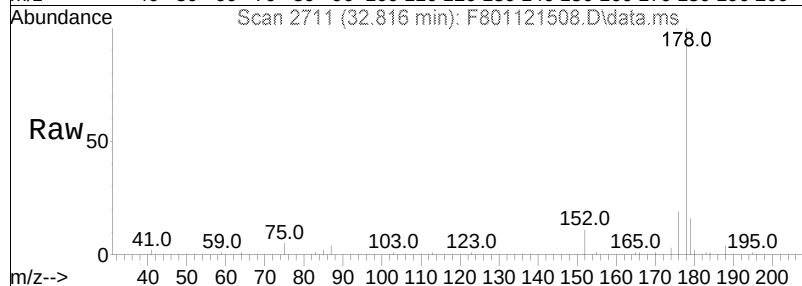
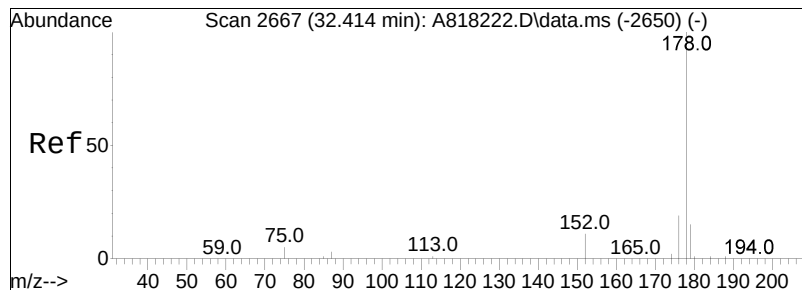
Tgt Ion:166 Resp: 25489

Ion Ratio Lower Upper

166 100

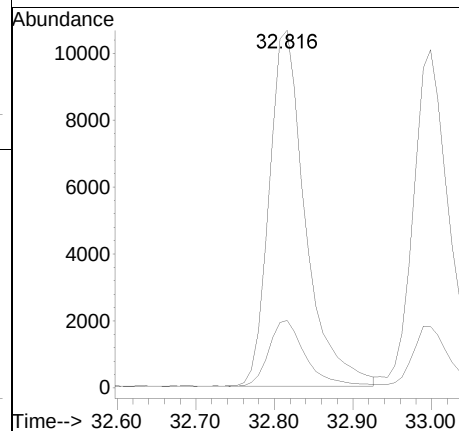
165 0.0 65.9 122.3#

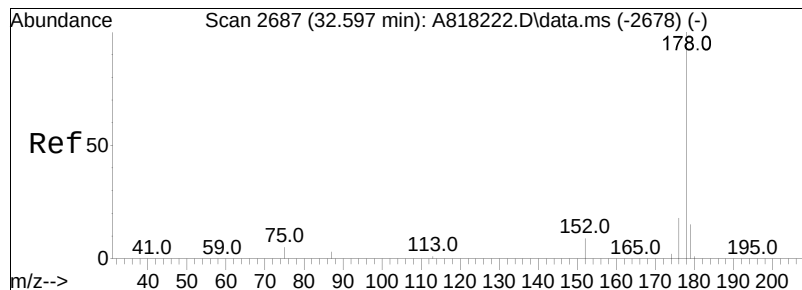




#43
 Phenanthrene
 Concen: 255.23 ng/mL
 RT: 32.816 min Scan# 2711
 Delta R.T. 0.009 min
 Lab File: F801121508.D
 Acq: 12 Jan 2015 8:07 pm

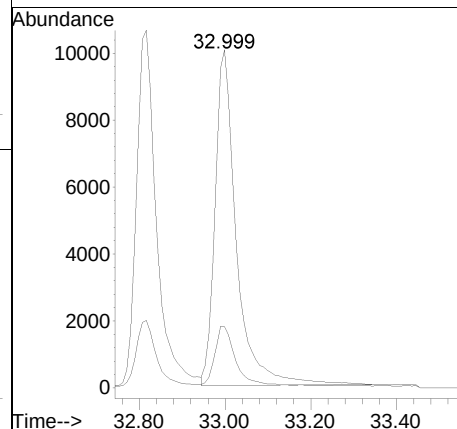
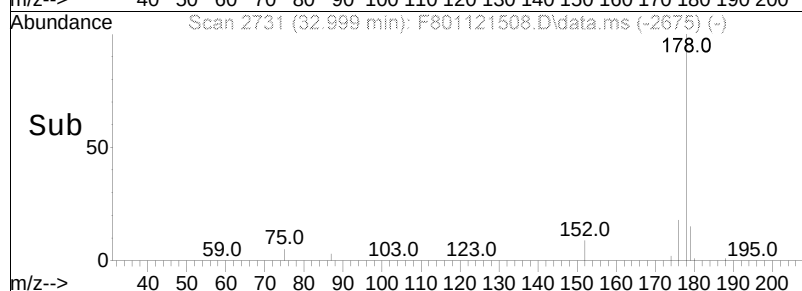
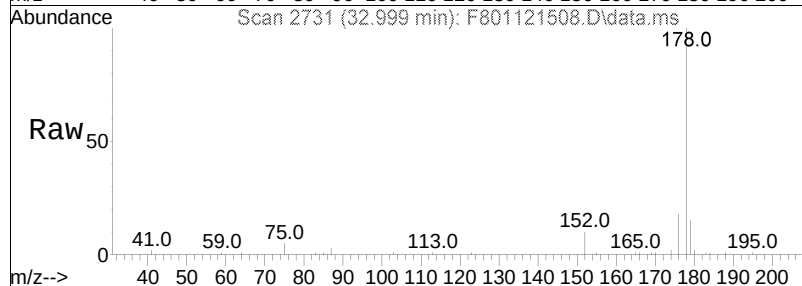
Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.7	12.5	23.1

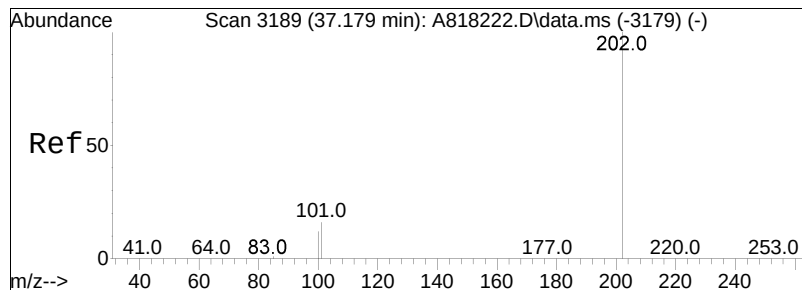




#55
 Anthracene
 Concen: 283.02 ng/mL
 RT: 32.999 min Scan# 2731
 Delta R.T. 0.009 min
 Lab File: F801121508.D
 Acq: 12 Jan 2015 8:07 pm

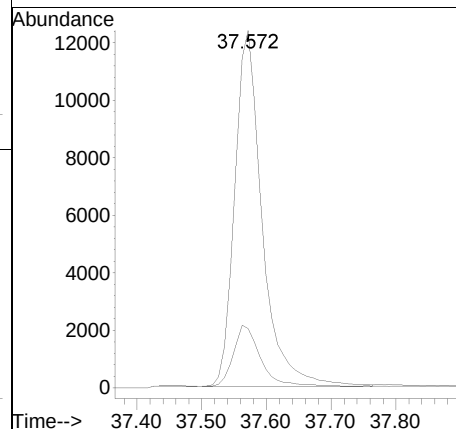
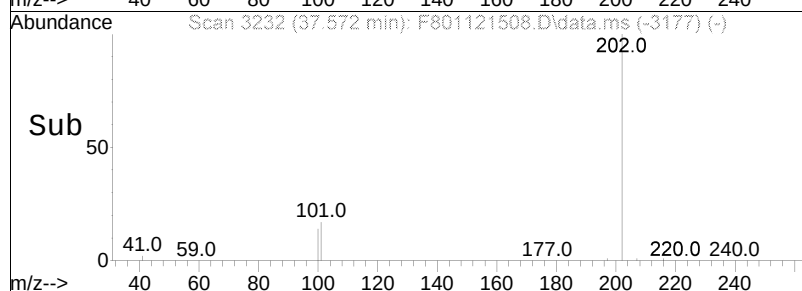
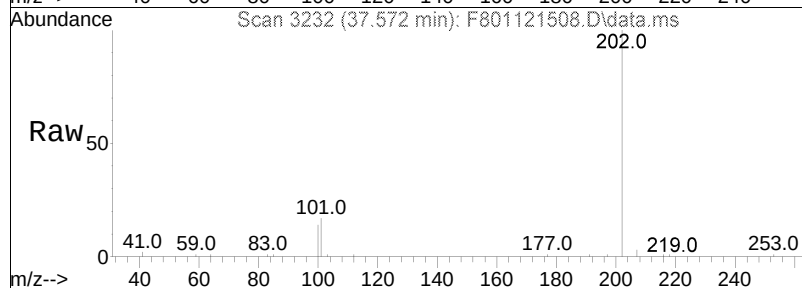
Tgt Ion	Ratio	Lower	Upper
178	100		
176	16.9	12.8	23.8

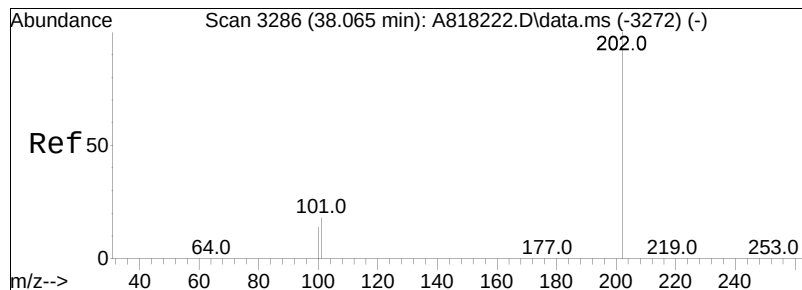




#58
 Fluoranthene
 Concen: 269.71 ng/mL M4
 RT: 37.572 min Scan# 3232
 Delta R.T. 0.000 min
 Lab File: F801121508.D
 Acq: 12 Jan 2015 8:07 pm

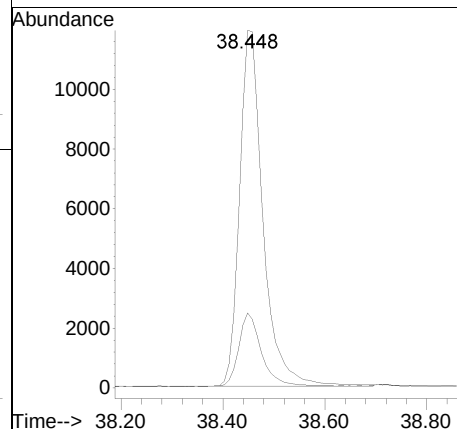
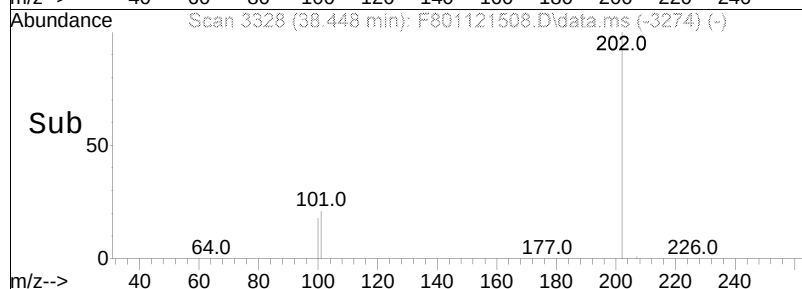
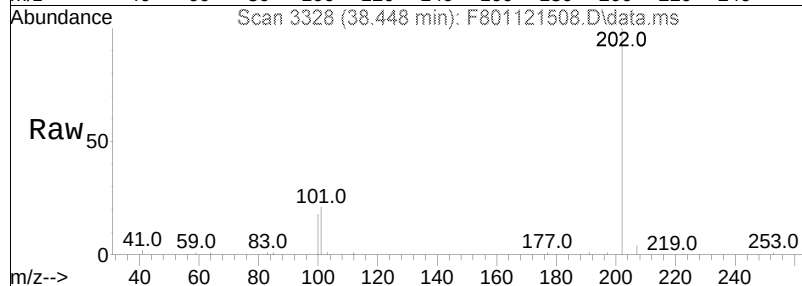
Tgt Ion	Ratio	Lower	Upper
202	100		
101	17.5	12.7	23.7

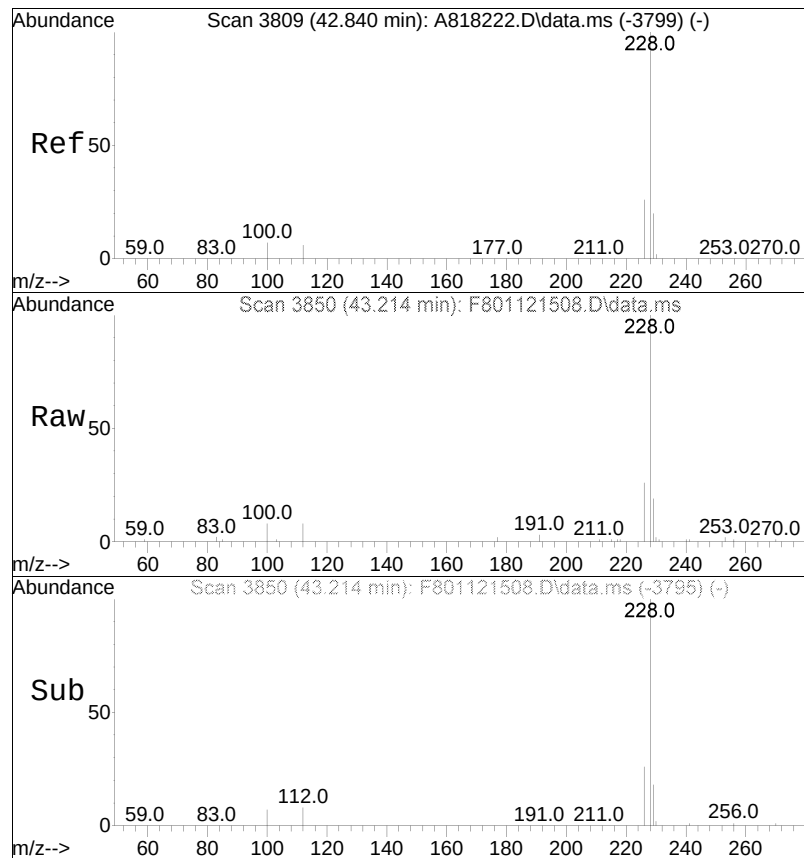




#60
 Pyrene
 Concen: 269.32 ng/mL
 RT: 38.448 min Scan# 3328
 Delta R.T. -0.009 min
 Lab File: F801121508.D
 Acq: 12 Jan 2015 8:07 pm

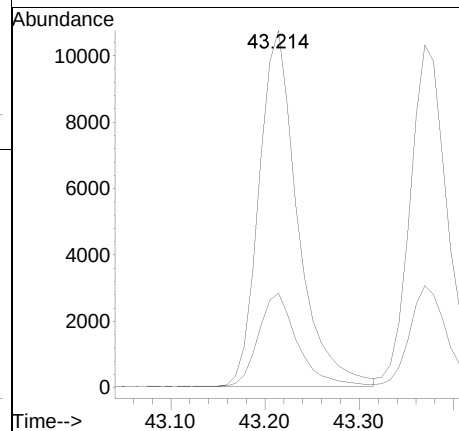
Tgt Ion	Ratio	Lower	Upper
202	100		
101	19.9	13.9	25.7

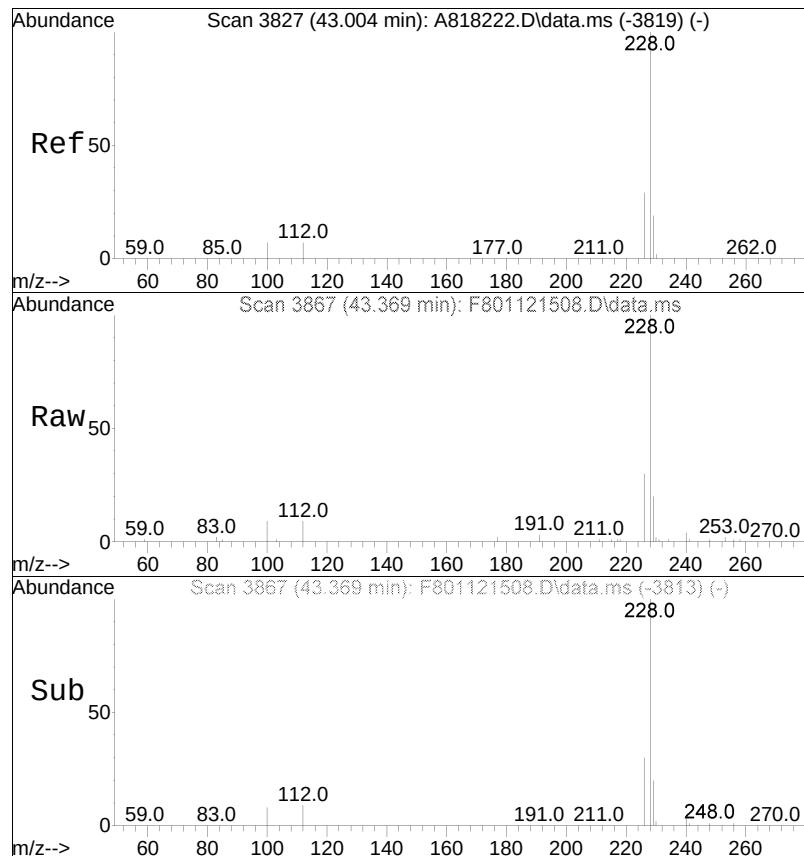




#75
Benz[a]anthracene
Concen: 247.86 ng/mL
RT: 43.214 min Scan# 3850
Delta R.T. 0.000 min
Lab File: F801121508.D
Acq: 12 Jan 2015 8:07 pm

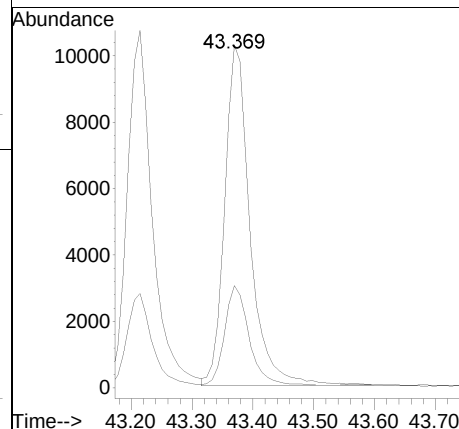
Tgt Ion	Ratio	Lower	Upper
228	100		
226	26.1	18.7	34.7

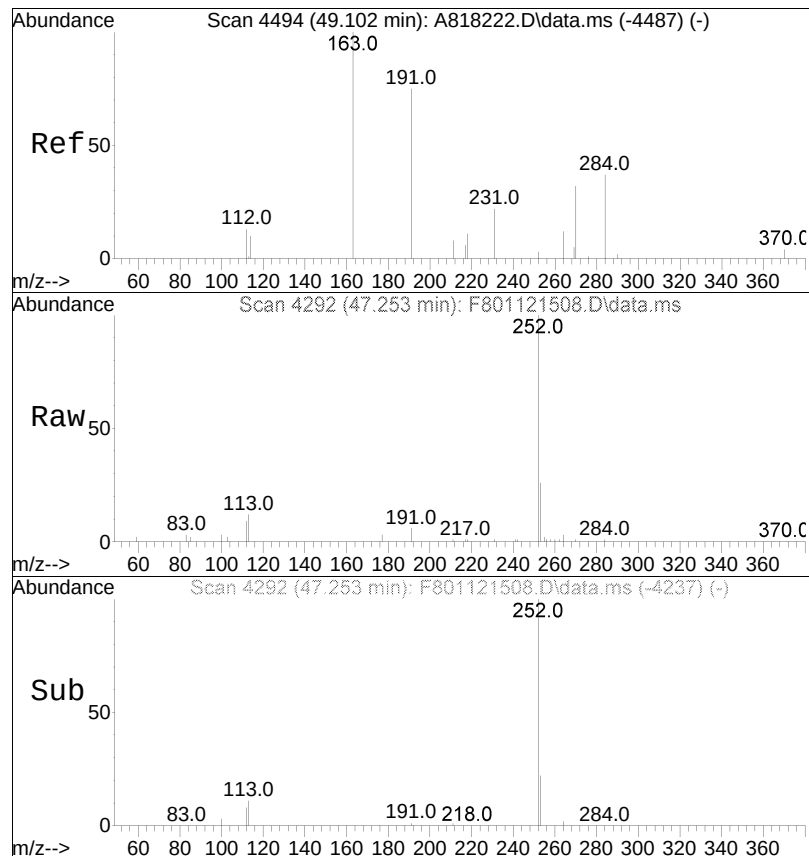




#77
 Chrysene/Triphenylene
 Concen: 251.47 ng/mL
 RT: 43.369 min Scan# 3867
 Delta R.T. -0.009 min
 Lab File: F801121508.D
 Acq: 12 Jan 2015 8:07 pm

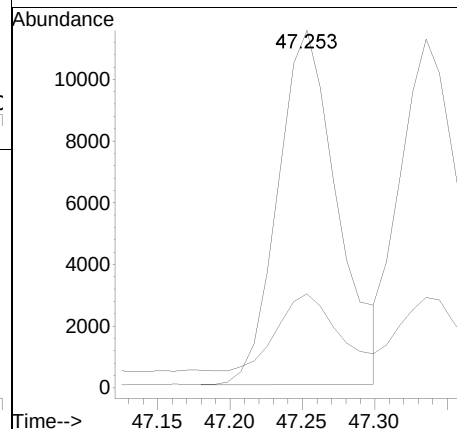
Tgt	Ion	Ratio	Lower	Upper
228	228	100		
226	226	28.7	20.2	37.4

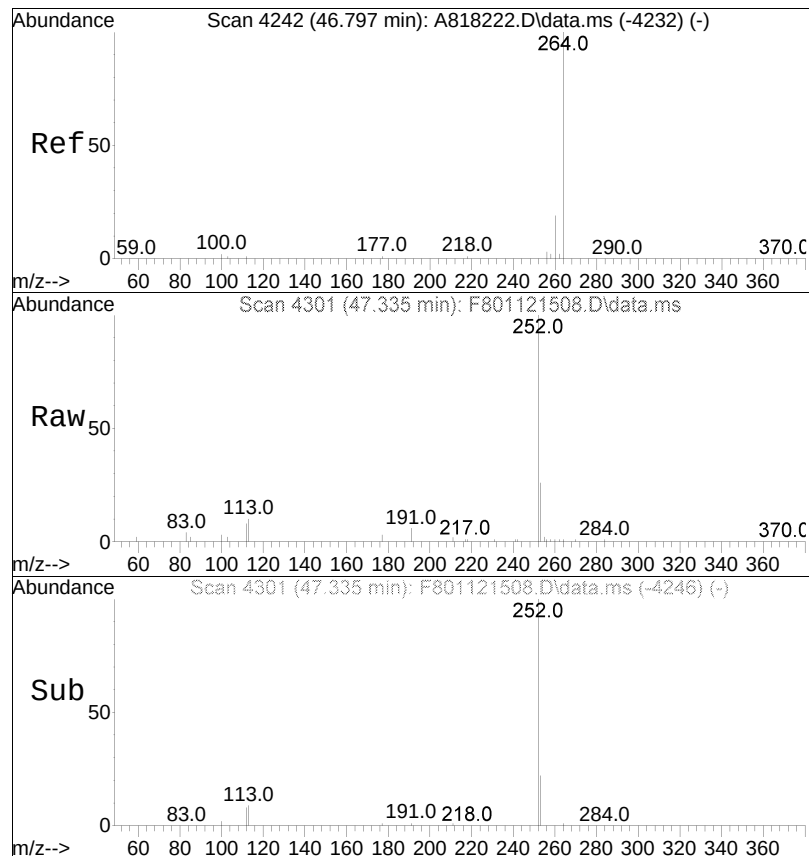




#84
 Benzo[b]fluoranthene
 Concen: 249.44 ng/mL
 RT: 47.253 min Scan# 4292
 Delta R.T. 0.000 min
 Lab File: F801121508.D
 Acq: 12 Jan 2015 8:07 pm

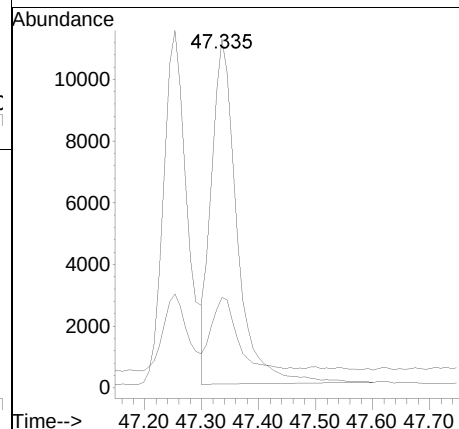
Tgt	Ion	Ratio	Resp	Lower	Upper
252	100		32908		
253	22.0	16.6	30.8		

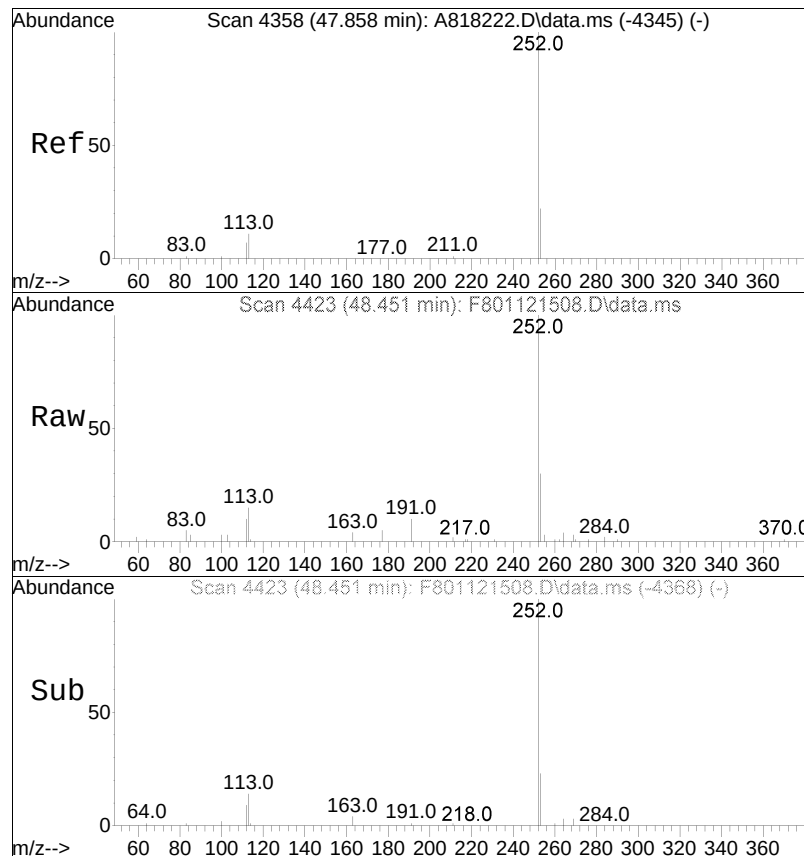




#85
 Benzo[j]+[k]fluoranthene
 Concen: 270.18 ng/mL
 RT: 47.335 min Scan# 4301
 Delta R.T. 0.000 min
 Lab File: F801121508.D
 Acq: 12 Jan 2015 8:07 pm

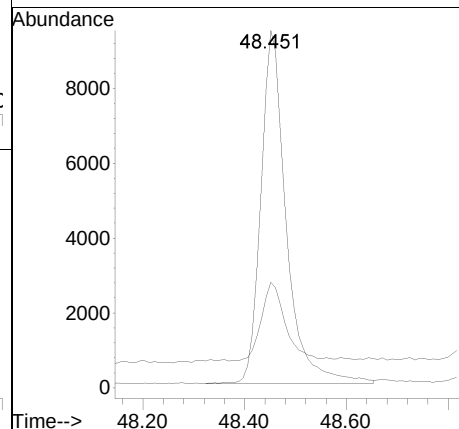
Tgt	Ion	Ratio	Lower	Upper
252	252	100		
253	253	20.2	17.0	31.6

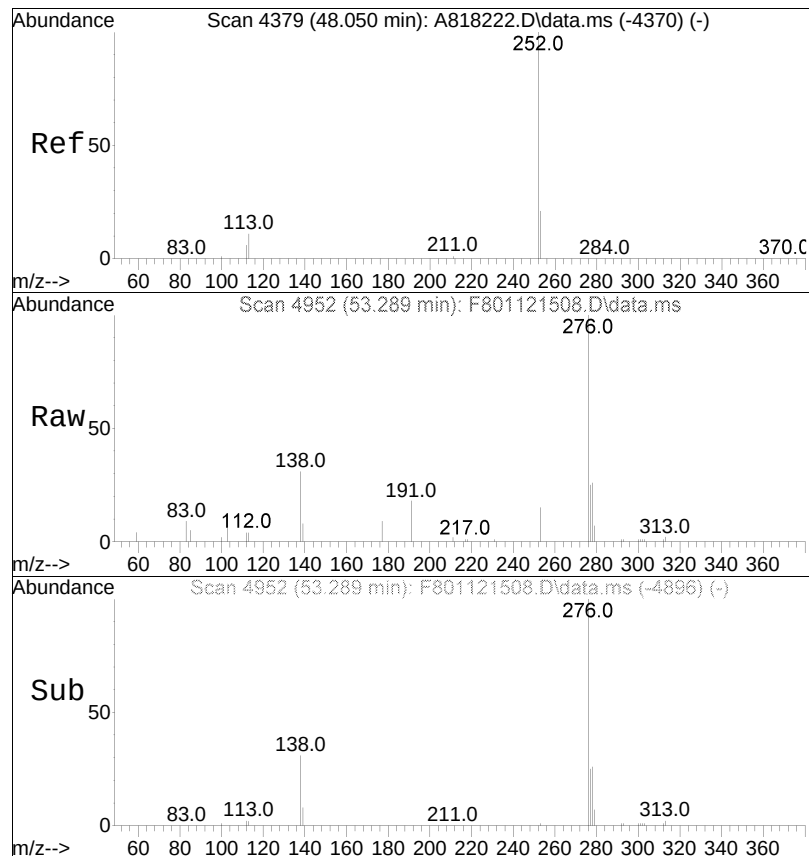




#89
 Benzo[a]pyrene
 Concen: 268.25 ng/mL
 RT: 48.451 min Scan# 4423
 Delta R.T. 0.000 min
 Lab File: F801121508.D
 Acq: 12 Jan 2015 8:07 pm

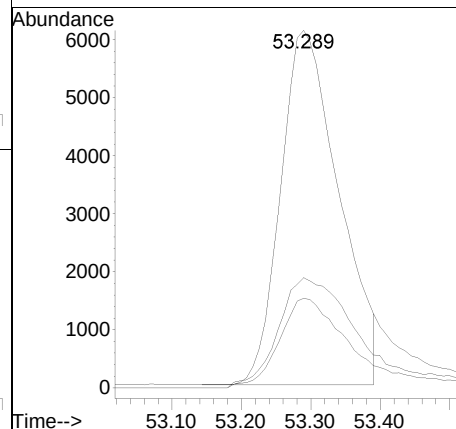
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	20.9	18.1	33.7	

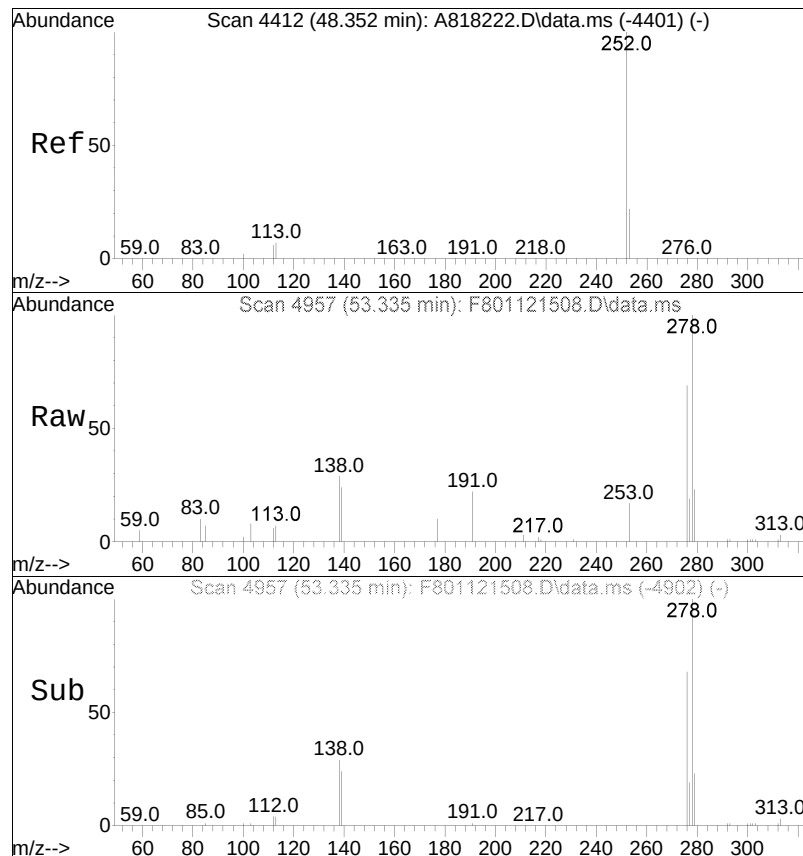




#91
 Indeno[1,2,3-cd]pyrene
 Concen: 228.78 ng/mL M3
 RT: 53.289 min Scan# 4952
 Delta R.T. 0.009 min
 Lab File: F801121508.D
 Acq: 12 Jan 2015 8:07 pm

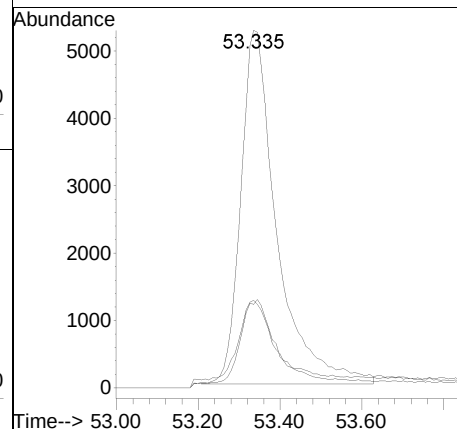
Tgt Ion	Ratio	Resp	Lower	Upper
276	100	35702		
138	43.8		19.9	37.0#
277	31.6		16.9	31.5#

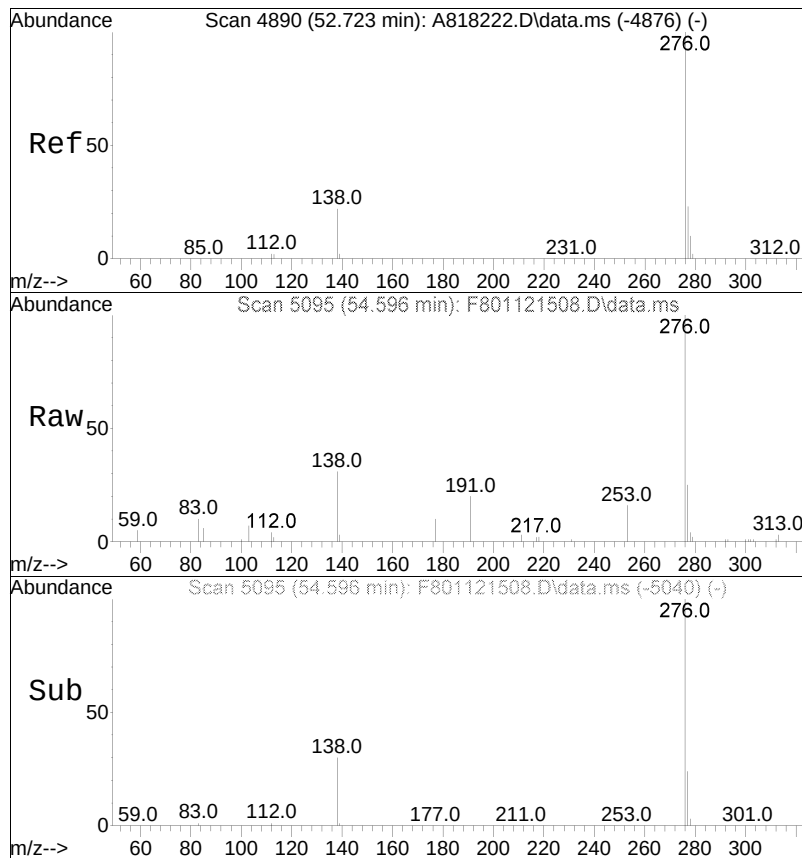




#92
 Dibenz[ah]+[ac]anthracene
 Concen: 244.09 ng/mL M4
 RT: 53.335 min Scan# 4957
 Delta R.T. 0.000 min
 Lab File: F801121508.D
 Acq: 12 Jan 2015 8:07 pm

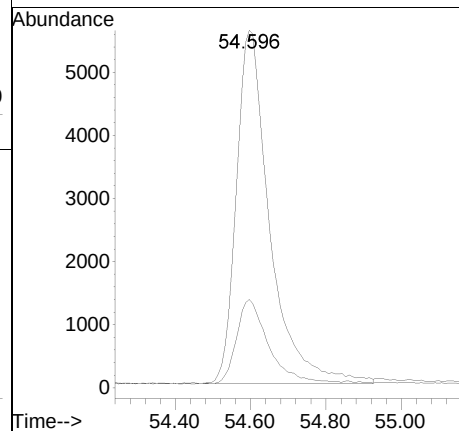
Tgt	Ion:278	Resp:	32224
Ion	Ratio	Lower	Upper
278	100		
139	24.4	15.7	29.1
279	24.4	17.1	31.9





#93
 Benzo[g,h,i]perylene
 Concen: 232.22 ng/mL
 RT: 54.596 min Scan# 5095
 Delta R.T. 0.000 min
 Lab File: F801121508.D
 Acq: 12 Jan 2015 8:07 pm

Tgt	Ion	Ratio	Lower	Upper
276	100			
277	22.9	16.6	30.8	



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121509.D
 Acq On : 12 Jan 2015 9:32 pm
 Operator : PAH8:MS
 Sample : wg755041-3,32
 Misc : WG755949,WG755041
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 15 11:54:59 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.858	164	34986	500.000	ng/mL	0.00
74) Chrysene-d12	43.278	240	53374	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	19.904	136	33027	233.312	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	23.33%#		
42) Phenanthrene-d10	32.725	188	26318	250.464	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	25.05%#		
83) Benzo[b]fluoranthene-d12	47.171	264	24871	238.853	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	23.89%#		
88) Benzo[a]pyrene-d12	48.369	264	21873	238.755	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	23.88%#		
129) 5B(H)Cholane - Surr	43.871	217	4711	238.969	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	23.90%#		
Target Compounds						
10) Naphthalene	19.977	128	38869	246.699	ng/mL	100
11) C1-Naphthalenes	0.000		0	N.D.	d	
12) C2-Naphthalenes	0.000		0	N.D.		
13) C3-Naphthalenes	0.000		0	N.D.		
14) C4-Naphthalenes	0.000		0	N.D.		
23) Biphenyl	0.000		0	N.D.	d	
25) Dibenzofuran	0.000		0	N.D.		
26) Acenaphthylene	26.247	152	39227	266.078	ng/mL	100
27) Acenaphthene	26.977	153	24559	272.625	ng/mL	100
29) Fluorene	29.002	166	25860	268.168	ng/mL	99
30) C1-Fluorenes	0.000		0	N.D.		
31) C2-Fluorenes	0.000		0	N.D.		
32) C3-Fluorenes	0.000		0	N.D.	d	
33) Dibenzothiophene	0.000		0	N.D.	d	
37) OTP	0.000		0	N.D.	d	
38) C1-Dibenzothiophenes	0.000		0	N.D.	d	
38) C1-Dibenzothiophenes BS	0.000		0d	0.000	ng/mL	
39) C2-Dibenzothiophenes	0.000		0	N.D.	d	
40) C3-Dibenzothiophenes	0.000		0	N.D.		
41) C4-Dibenzothiophenes	0.000		0	N.D.	d	
43) Phenanthrene	32.816	178	34164	261.535	ng/mL	98
49) C1-Phenanthrenes/Anthrace	0.000		0	N.D.		
50) C2-Phenanthrenes/Anthrace	0.000		0	N.D.	d	
50) C2-Phenanthrenes/Anthr BS	0.000		0d	0.000	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121509.D
 Acq On : 12 Jan 2015 9:32 pm
 Operator : PAH8:MS
 Sample : wg755041-3,32
 Misc : WG755949,WG755041
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 15 11:54:59 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) 5AA IS BKGD	0.000		0	N.D.	d	
52) C3-Phenanthrenes/Anthrace	0.000		0	N.D.		
53) C4-Phenanthrenes/Anthrace	0.000		0	N.D.		
55) Anthracene	32.998	178	34880	291.460	ng/mL	98
56) Carbazole	0.000		0	N.D.	d	
58) Fluoranthene	37.571	202	36985M4	279.072	ng/mL	
59) Benzo(b)fluorene	0.000		0	N.D.		
60) Pyrene	38.457	202	38648	278.455	ng/mL	99
61) C1-Fluoranthenes/Pyrenes	0.000		0	N.D.		
62) C2-Fluoranthenes/Pyrenes	0.000		0	N.D.		
63) C3-Fluoranthenes/Pyrenes	0.000		0	N.D.		
64) C4-Fluoranthenes/Pyrenes	0.000		0	N.D.		
66) Naphthobenzothiophene	0.000		0	N.D.		
67) Naphthobenzothiophene-2,1	0.000		0	N.D.		
68) Naphthobenzothiophene-1,2	0.000		0	N.D.		
69) Naphthobenzothiophene-2,3	0.000		0	N.D.	d	
70) C1-Naphthobenzothiophenes	0.000		0	N.D.		
71) C2-Naphthobenzothiophenes	0.000		0	N.D.		
72) C3-Naphthobenzothiophenes	0.000		0	N.D.		
73) C4-Naphthobenzothiophenes	0.000		0	N.D.		
75) Benz[a]anthracene	43.214	228	31071	253.301	ng/mL	99
77) Chrysene/Triphenylene	43.369	228	30218	257.363	ng/mL	99
78) C1-Chrysenes	0.000		0	N.D.		
79) C2-Chrysenes	0.000		0	N.D.	d	
79) C2-Chrysenes BS	0.000		0d	0.000	ng/mL	
80) BBF-D12 Surr BKGD	0.000		0	N.D.	d	
81) C3-Chrysenes	0.000		0	N.D.		
82) C4-Chrysenes	0.000		0	N.D.	d	
84) Benzo[b]fluoranthene	47.253	252	33465	255.426	ng/mL	97
85) Benzo[j]+[k]fluoranthene	47.335	252	34986	271.181	ng/mL	95
86) Benzo[a]fluoranthene	0.000		0	N.D.	d	
87) Benzo[e]pyrene	0.000		0	N.D.	d	
89) Benzo[a]pyrene	48.451	252	33350	275.299	ng/mL	96
90) Perylene	0.000		0	N.D.	d	
91) Indeno[1,2,3-cd]pyrene	53.289	276	36687M3	236.736	ng/mL	
92) Dibenz[ah]+[ac]anthracene	53.344	278	32651M4	249.044	ng/mL	
93) Benzo[g,h,i]perylene	54.605	276	35322	240.204	ng/mL	99
94) Hopane (T19)	0.000		0	N.D.	d	
96) C23 Tricyclic Terpane (T4	0.000		0	N.D.	d	
97) C24 Tricyclic Terpane (T5	0.000		0	N.D.	d	
98) C25 Tricyclic Terpane (T6	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121509.D
 Acq On : 12 Jan 2015 9:32 pm
 Operator : PAH8:MS
 Sample : wg755041-3,32
 Misc : WG755949,WG755041
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 15 11:54:59 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99) C24 Tetracyclic Terpane (	0.000		0	N.D.	d	
100) C26 Tricyclic Terpane-22S	0.000		0	N.D.	d	
101) C26 Tricyclic Terpane-22R	0.000		0	N.D.	d	
102) C28 Tricyclic Terpane-22S	0.000		0	N.D.	d	
103) C28 Tricyclic Terpane-22R	0.000		0	N.D.	d	
104) C29 Tricyclic Terpane-22S	0.000		0	N.D.	d	
105) C29 Tricyclic Terpane-22R	0.000		0	N.D.	d	
106) 18a-22,29,30-Trisnorneocho	0.000		0	N.D.	d	
107) C30 Tricyclic Terpane-22S	0.000		0	N.D.	d	
108) C30 Tricyclic Terpane-22R	0.000		0	N.D.	d	
109) 17a(H)-22,29,30-Trisnorho	0.000		0	N.D.	d	
110) 17a/b,21b/a 28,30-Bisnorh	0.000		0	N.D.	d	
111) 17a(H),21b(H)-25-Norhopan	0.000		0	N.D.	d	
112) 30-Norhopane (T15)	0.000		0	N.D.	d	
113) 18a(H)-30-Norneohopane-C2	0.000		0	N.D.	d	
114) 17a(H)-Diahopane (X)	0.000		0	N.D.	d	
115) 30-Normoretane (T17)	0.000		0	N.D.	d	
116) 18a(H)&18b(H)-Oleananes (	0.000		0	N.D.	d	
117) Moretane (T20)	0.000		0	N.D.	d	
118) 30-Homohopane-22S (T21)	0.000		0	N.D.	d	
119) 30-Homohopane-22R (T22)	0.000		0	N.D.	d	
120) Gammacerane/C32-diahopane	0.000		0	N.D.	d	
121) 30,31-Bishomohopane-22S (	0.000		0	N.D.	d	
122) 30,31-Bishomohopane-22R (	0.000		0	N.D.	d	
123) 30,31-Trishomohopane-22S	0.000		0	N.D.	d	
124) 30,31-Trishomohopane-22R	0.000		0	N.D.	d	
125) Tetrakishomohopane-22S (T	0.000		0	N.D.	d	
126) Tetrakishomohopane-22R (T	0.000		0	N.D.	d	
127) Pentakishomohopane-22S (T	0.000		0	N.D.	d	
128) Pentakishomohopane-22R (T	0.000		0	N.D.	d	
130) 13b(H),17a(H)-20S-Diachol	0.000		0	N.D.		
131) 13b(H),17a(H)-20R-Diachol	0.000		0	N.D.		
132) 13b,17a-20S-Methyl diachol	0.000		0	N.D.		
133) 14a,17a-20S-Chol/13b,17a-	0.000		0	N.D.		
134) 14a,17a-20R-Chol/13b,17a-	0.000		0	N.D.		
135) Unknown Sterane (S18)	0.000		0	N.D.		
136) 13a,17b-20S-Ethyl diachole	0.000		0	N.D.		
137) 14a,17a-20S-Methylcholest	0.000		0	N.D.		
138) 14a,17a-20R-Methylcholest	0.000		0	N.D.		
139) 14a(H),17a(H)-20S-Ethylch	0.000		0	N.D.		
140) 14a(H),17a(H)-20R-Ethylch	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN12\
 Data File : F801121509.D
 Acq On : 12 Jan 2015 9:32 pm
 Operator : PAH8:MS
 Sample : wg755041-3,32
 Misc : WG755949,WG755041
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 15 11:54:59 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Jan 13 07:23:40 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
141)	14b(H),17b(H)-20R-Cholest	0.000		0	N.D.	d	
142)	14b(H),17b(H)-20S-Cholest	0.000		0	N.D.	d	
143)	14b,17b-20R-Methylcholest	0.000		0	N.D.	d	
144)	14b,17b-20S-Methylcholest	0.000		0	N.D.		
145)	14b(H),17b(H)-20R-Ethylch	0.000		0	N.D.		
146)	14b(H),17b(H)-20S-Ethylch	0.000		0	N.D.		
147)	C26,20R- +C27,20S- triaro	0.000		0	N.D.		
148)	C28,20S-triaromatic stero	0.000		0	N.D.		
149)	C27,20R-triaromatic stero	0.000		0	N.D.		
150)	C28,20R-triaromatic stero	0.000		0	N.D.		

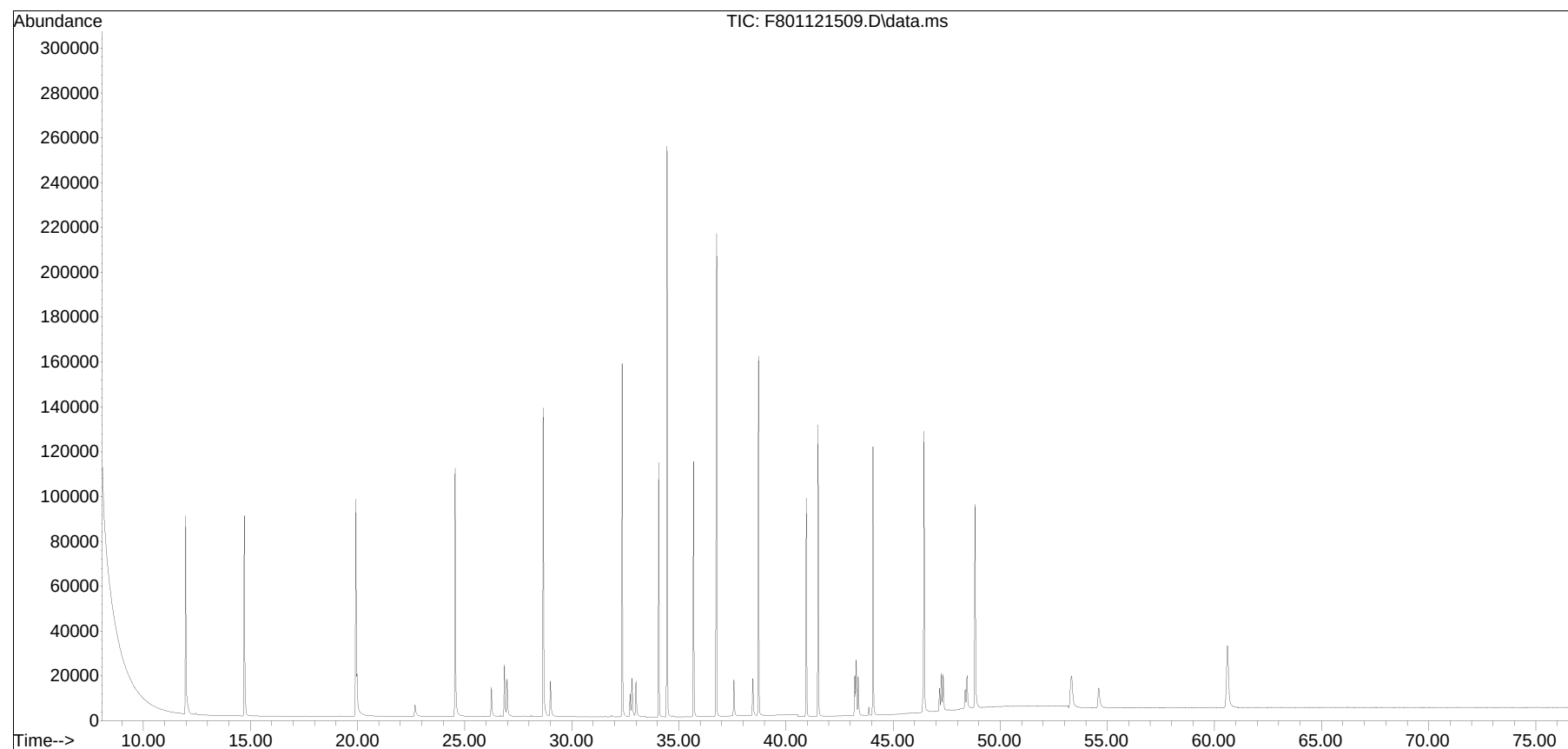
(#) = qualifier out of range (m) = manual integration (+) = signals summed

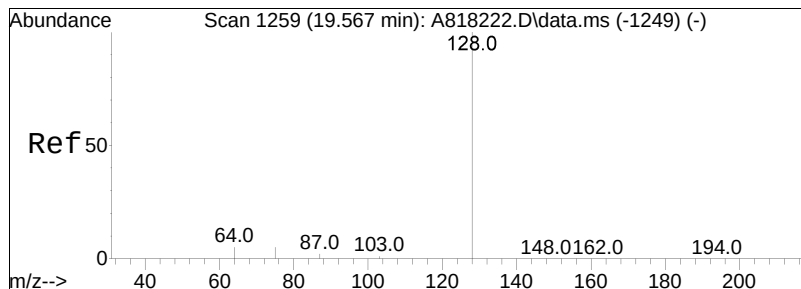
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN12\
Data File : F801121509.D
Acq On : 12 Jan 2015 9:32 pm
Operator : PAH8:MS
Sample : wg755041-3,32
Misc : WG755949,WG755041
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 15 11:54:59 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Jan 13 07:23:40 2015
Response via : Initial Calibration

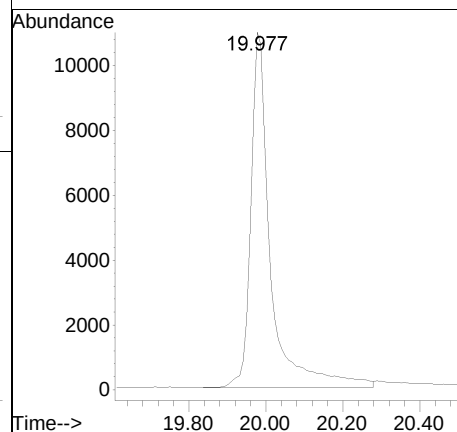
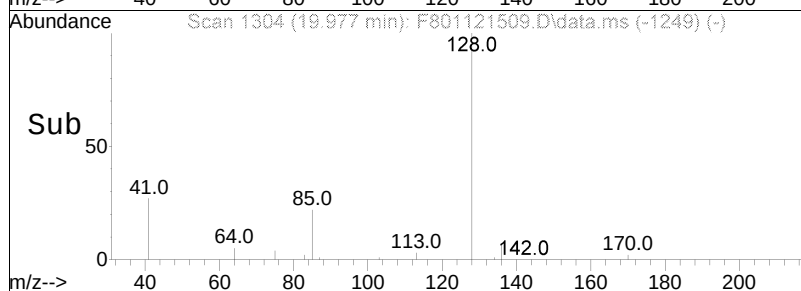
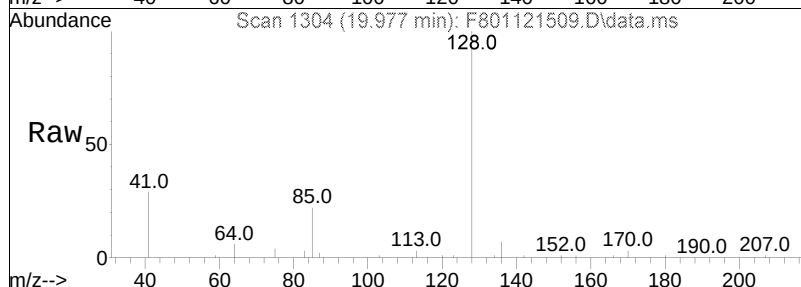
Sub List : ALKPAHURS - ALKPAH and BIO

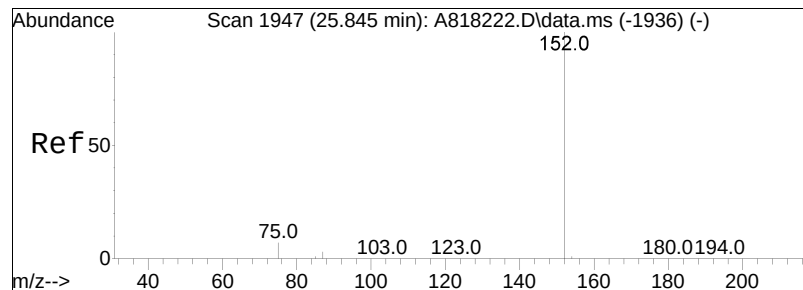




#10
Naphthalene
Concen: 246.70 ng/mL
RT: 19.977 min Scan# 1304
Delta R.T. -0.000 min
Lab File: F801121509.D
Acq: 12 Jan 2015 9:32 pm

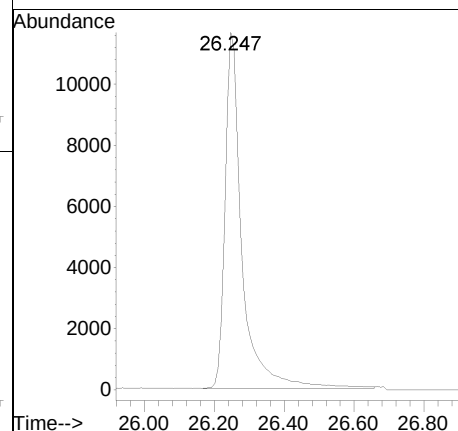
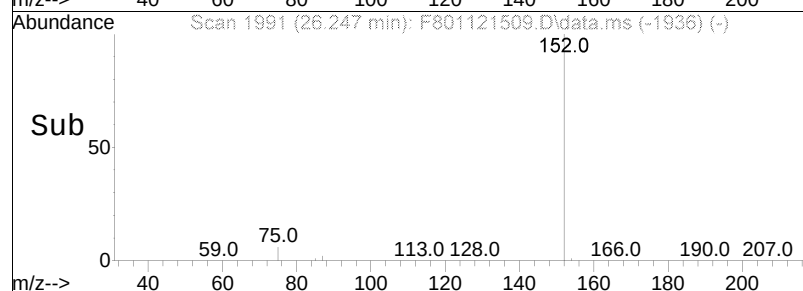
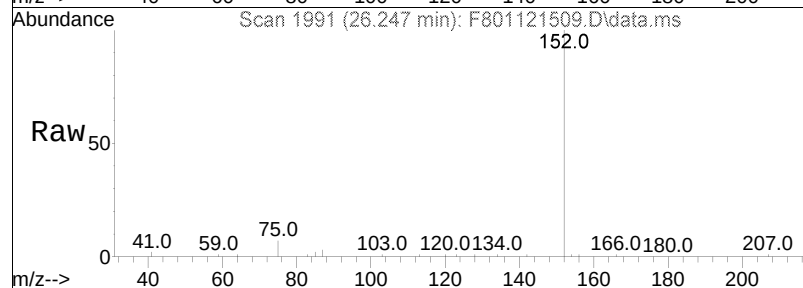
Tgt Ion:128 Resp: 38869

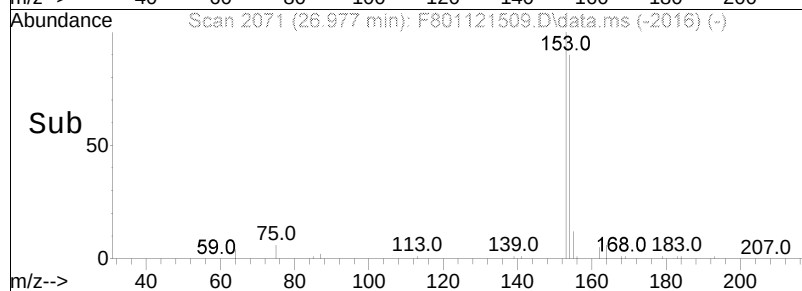
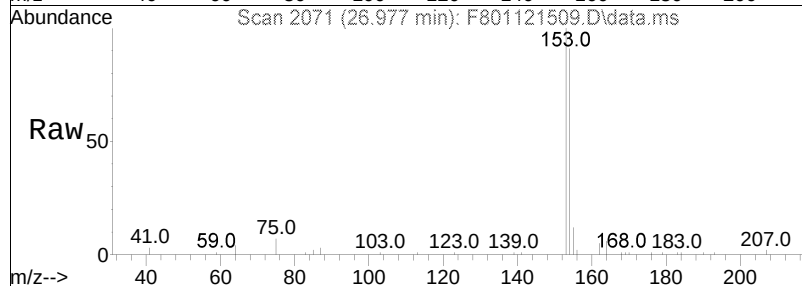
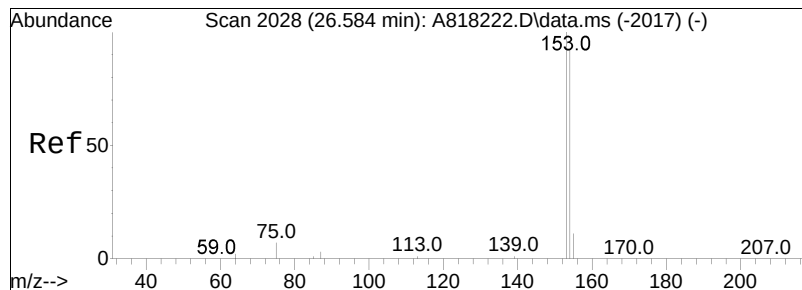




#26
 Acenaphthylene
 Concen: 266.08 ng/mL
 RT: 26.247 min Scan# 1991
 Delta R.T. -0.000 min
 Lab File: F801121509.D
 Acq: 12 Jan 2015 9:32 pm

Tgt Ion:152 Resp: 39227





#27

Acenaphthene

Concen: 272.62 ng/mL

RT: 26.977 min Scan# 2071

Delta R.T. -0.000 min

Lab File: F801121509.D

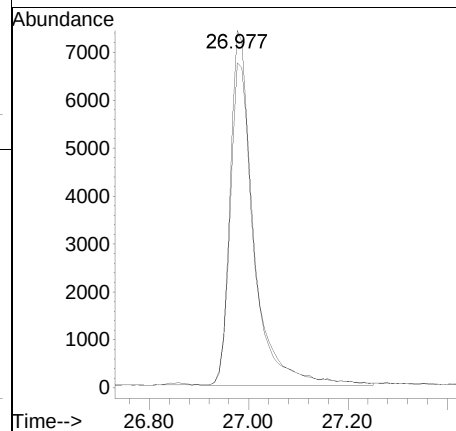
Acq: 12 Jan 2015 9:32 pm

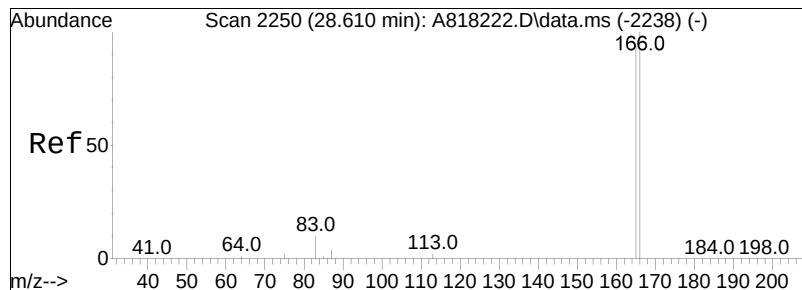
Tgt Ion:153 Resp: 24559

Ion Ratio Lower Upper

153 100

154 91.9 64.3 119.5





#29

Fluorene

Concen: 268.17 ng/mL

RT: 29.002 min Scan# 2293

Delta R.T. -0.000 min

Lab File: F801121509.D

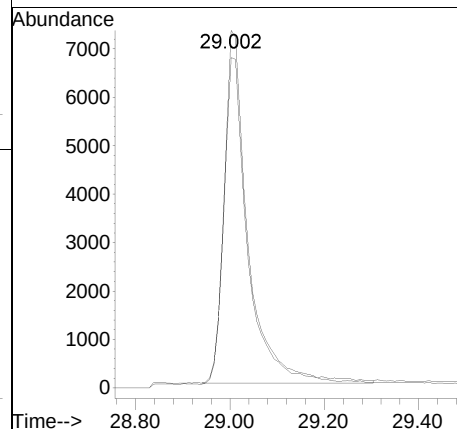
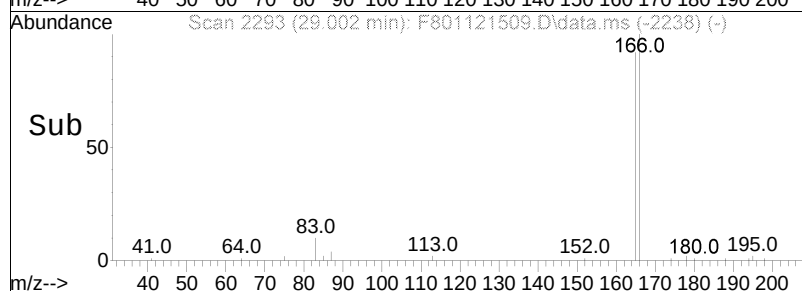
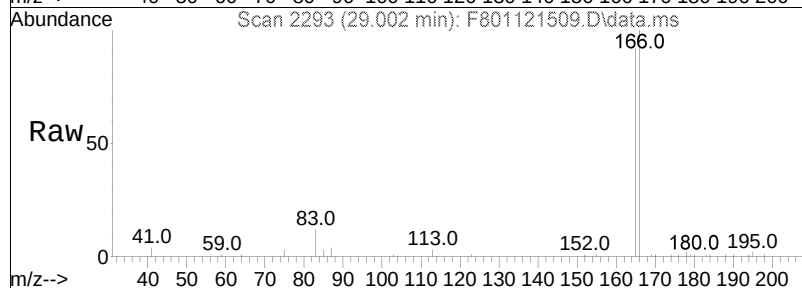
Acq: 12 Jan 2015 9:32 pm

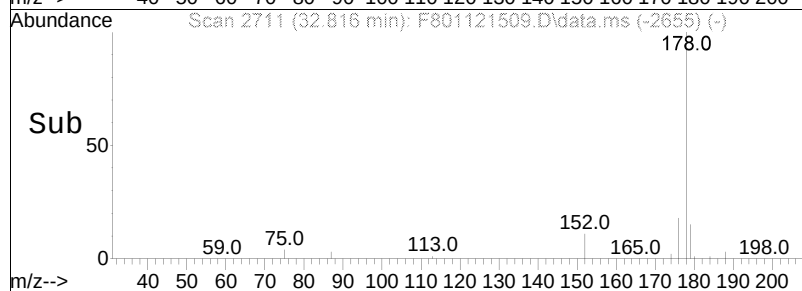
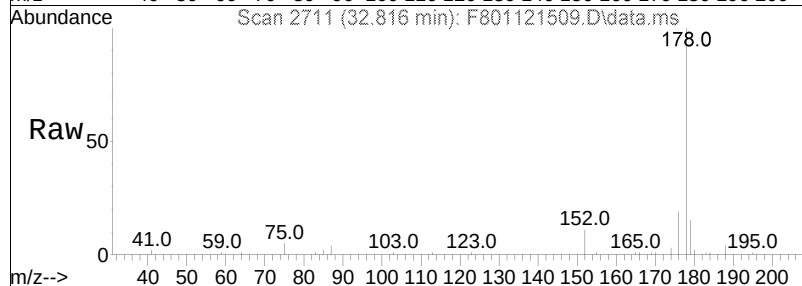
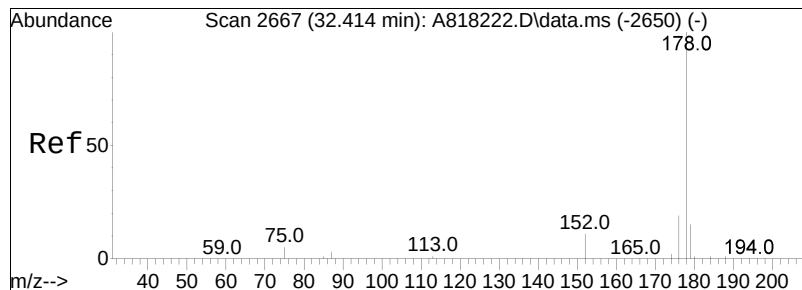
Tgt Ion:166 Resp: 25860

Ion Ratio Lower Upper

166 100

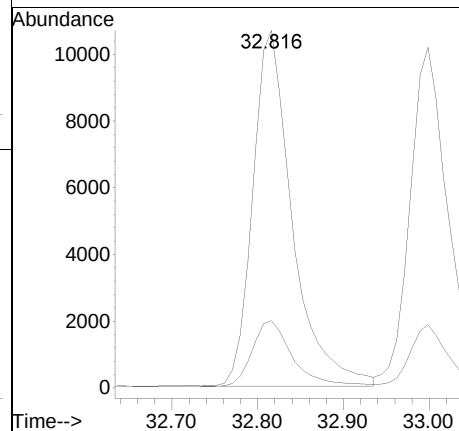
165 93.5 65.9 122.3

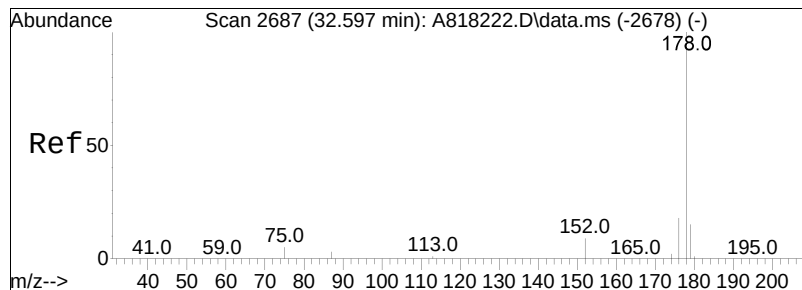




#43
 Phenanthrene
 Concen: 261.53 ng/mL
 RT: 32.816 min Scan# 2711
 Delta R.T. 0.009 min
 Lab File: F801121509.D
 Acq: 12 Jan 2015 9:32 pm

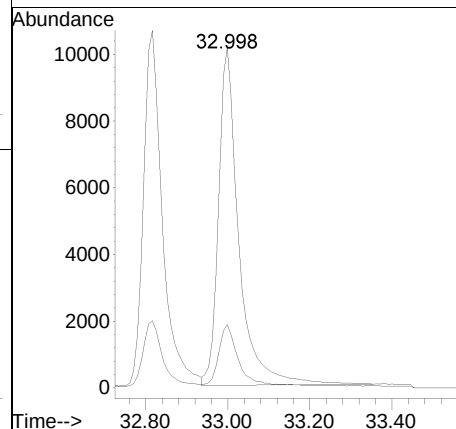
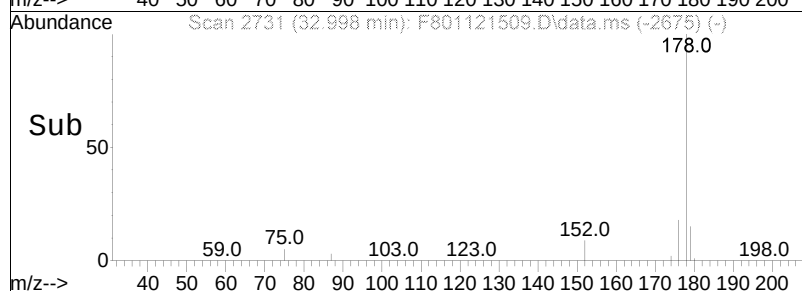
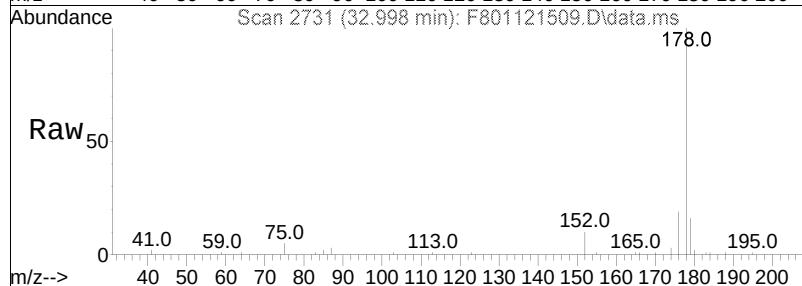
Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.8	12.5	23.1

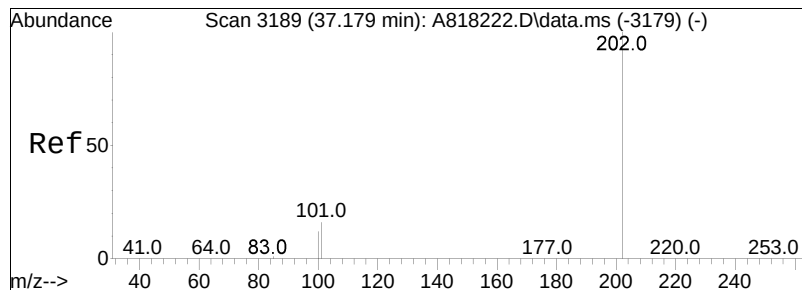




#55
 Anthracene
 Concen: 291.46 ng/mL
 RT: 32.998 min Scan# 2731
 Delta R.T. 0.009 min
 Lab File: F801121509.D
 Acq: 12 Jan 2015 9:32 pm

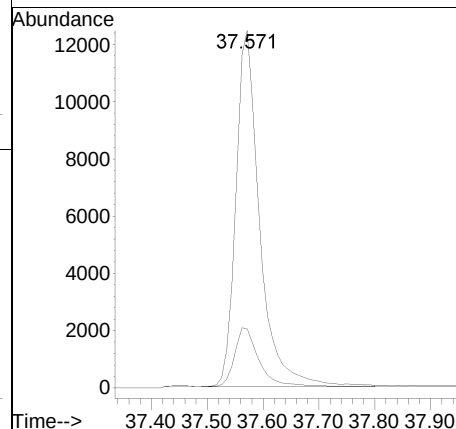
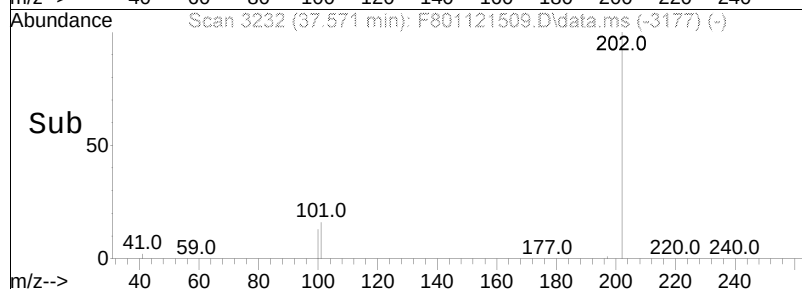
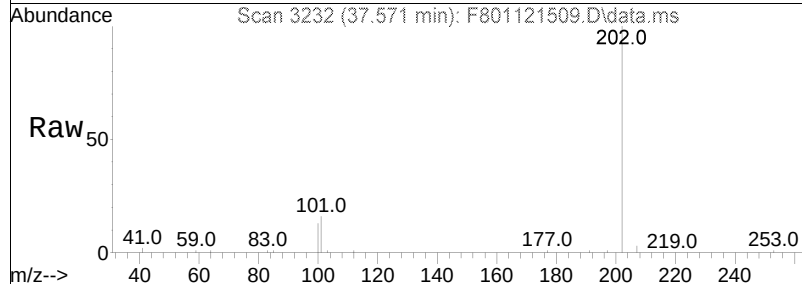
Tgt Ion	Ratio	Lower	Upper
178	100		
176	17.6	12.8	23.8

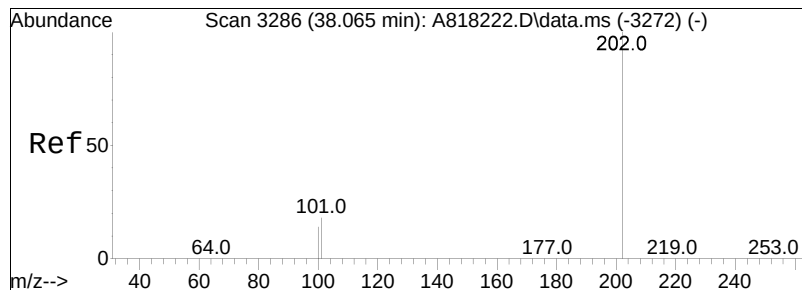




#58
 Fluoranthene
 Concen: 279.07 ng/mL M4
 RT: 37.571 min Scan# 3232
 Delta R.T. -0.000 min
 Lab File: F801121509.D
 Acq: 12 Jan 2015 9:32 pm

Tgt Ion	Ratio	Lower	Upper
202	100		
101	17.3	12.7	23.7





#60

Pyrene

Concen: 278.46 ng/mL

RT: 38.457 min Scan# 3329

Delta R.T. -0.000 min

Lab File: F801121509.D

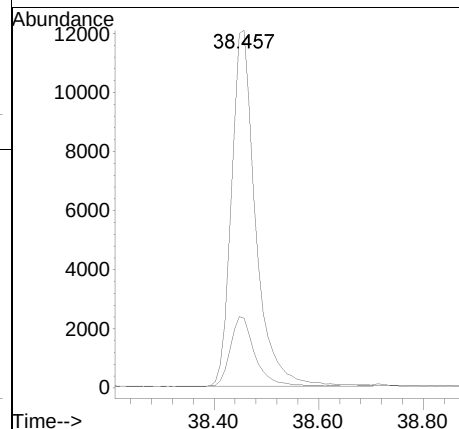
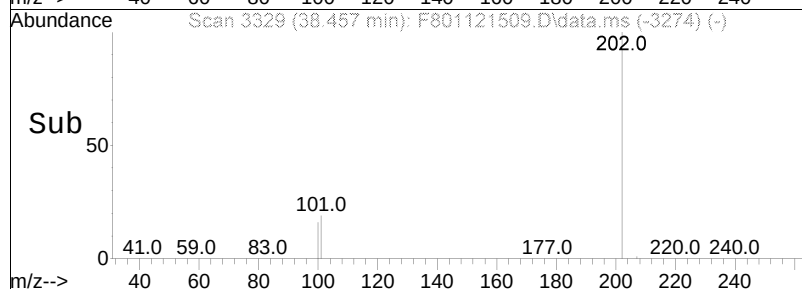
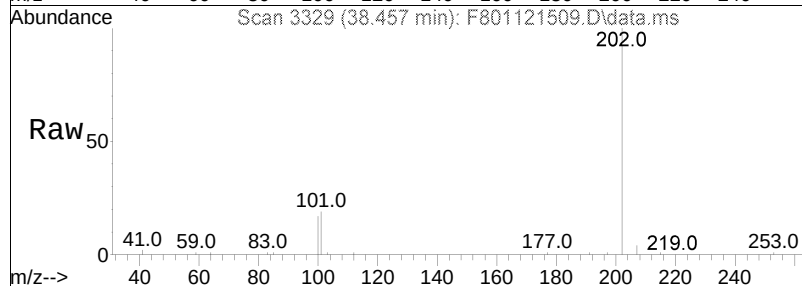
Acq: 12 Jan 2015 9:32 pm

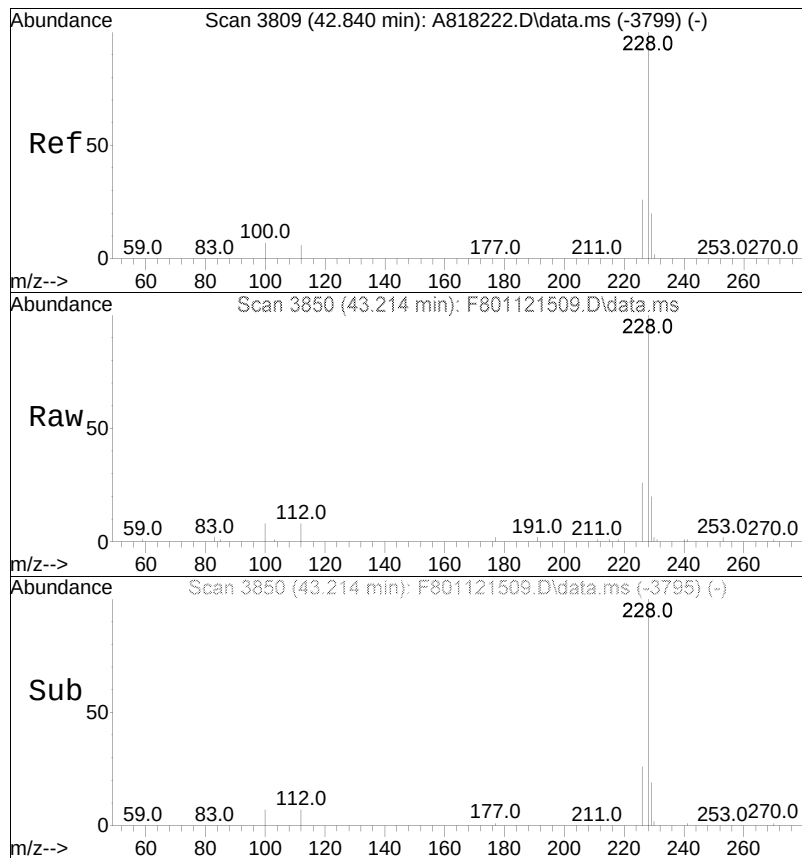
Tgt Ion: 202 Resp: 38648

Ion Ratio Lower Upper

202 100

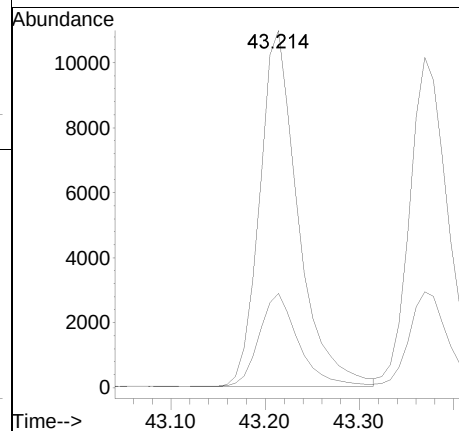
101 20.1 13.9 25.7

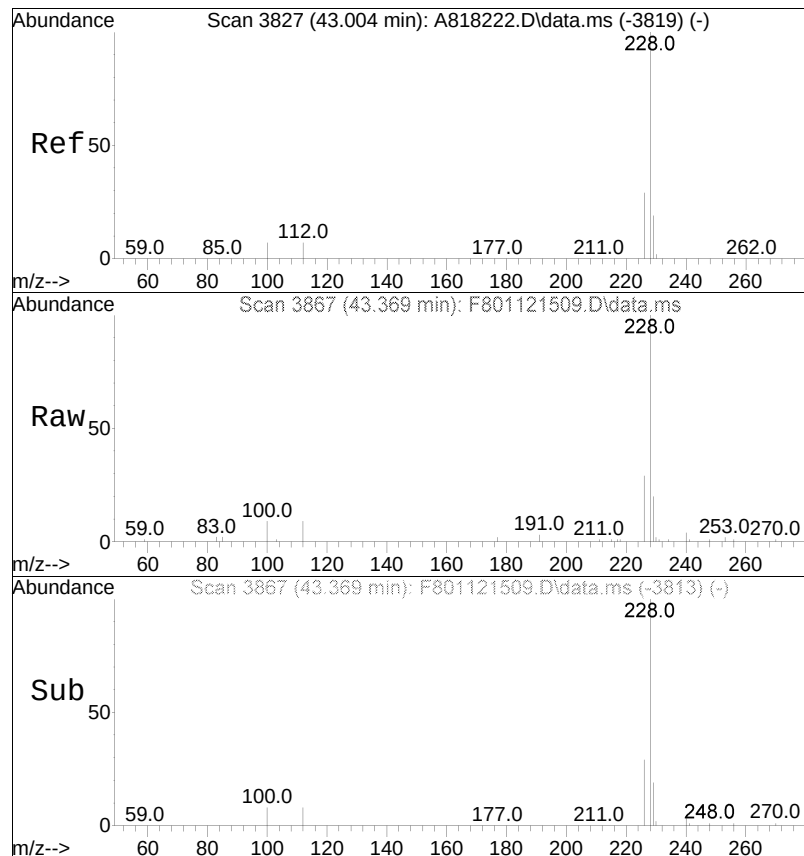




#75
Benz[a]anthracene
Concen: 253.30 ng/mL
RT: 43.214 min Scan# 3850
Delta R.T. -0.000 min
Lab File: F801121509.D
Acq: 12 Jan 2015 9:32 pm

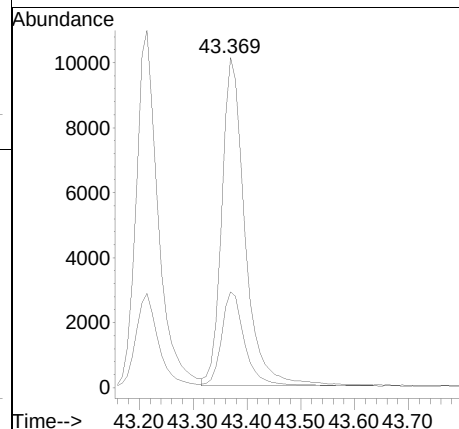
Tgt Ion	Ratio	Lower	Upper
228	100		
226	26.4	18.7	34.7

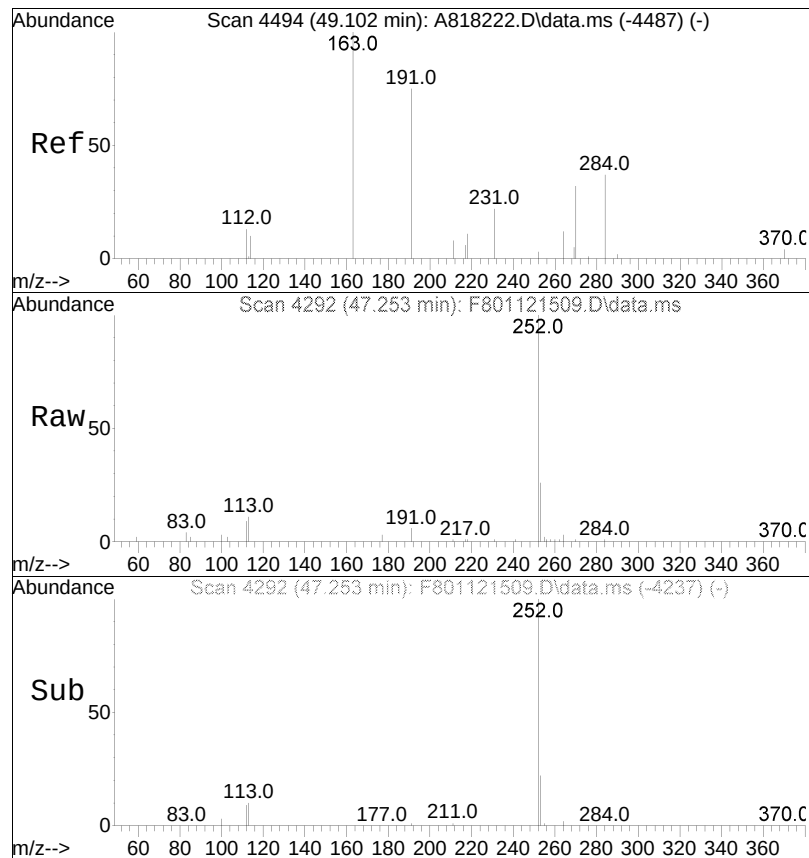




#77
 Chrysene/Triphenylene
 Concen: 257.36 ng/mL
 RT: 43.369 min Scan# 3867
 Delta R.T. -0.009 min
 Lab File: F801121509.D
 Acq: 12 Jan 2015 9:32 pm

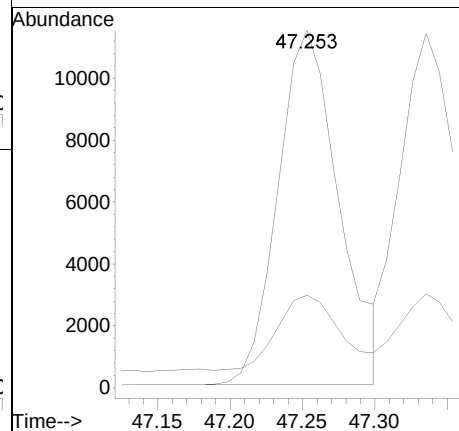
Tgt	Ion	Ratio	Lower	Upper
228	100			
226	28.1	20.2	37.4	

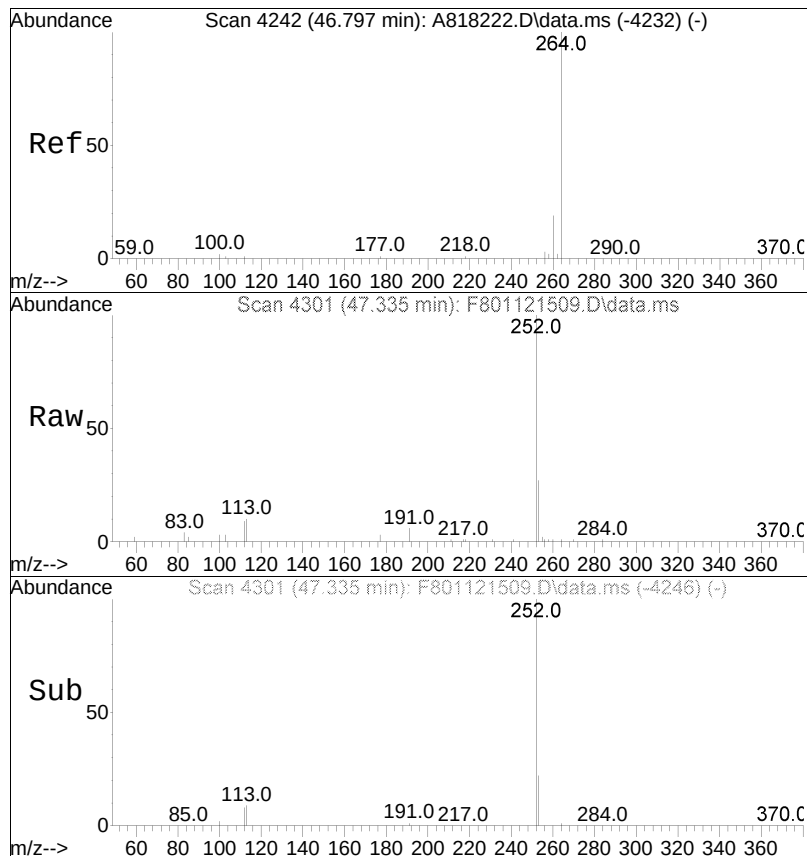




#84
Benzo[b]fluoranthene
Concen: 255.43 ng/mL
RT: 47.253 min Scan# 4292
Delta R.T. -0.000 min
Lab File: F801121509.D
Acq: 12 Jan 2015 9:32 pm

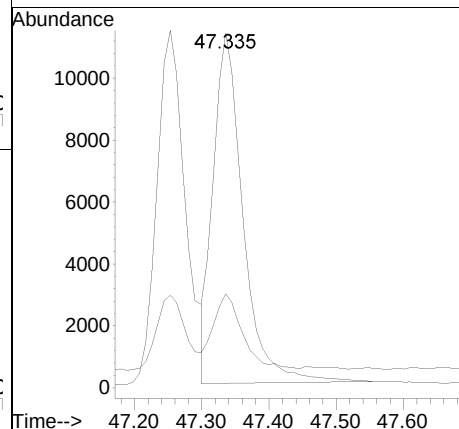
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	22.2	16.6	30.8	

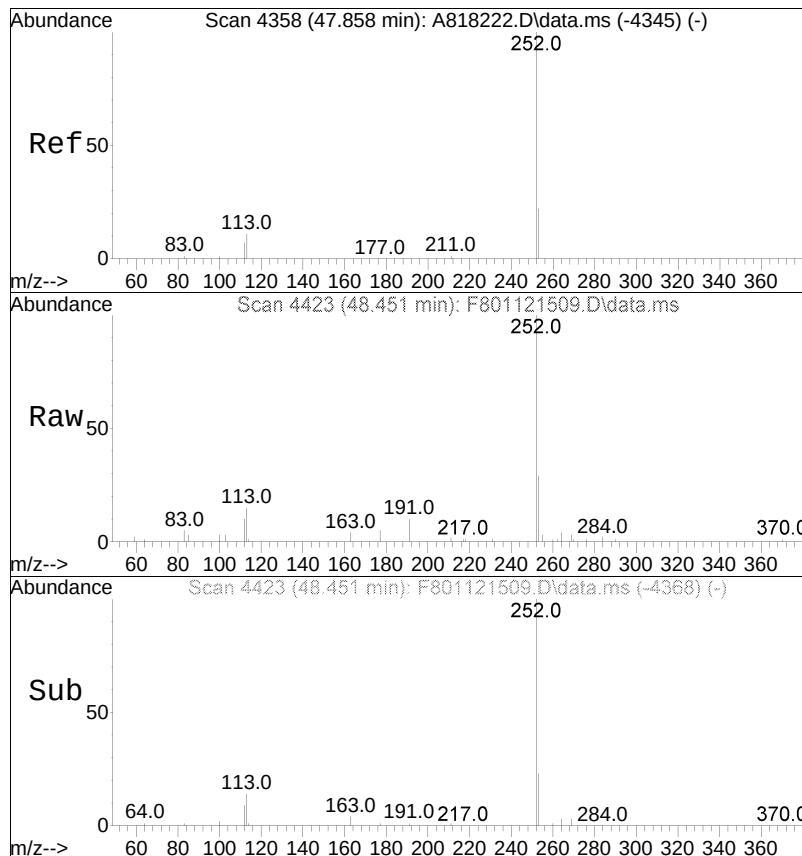




#85
 Benzo[j]+[k]fluoranthene
 Concen: 271.18 ng/mL
 RT: 47.335 min Scan# 4301
 Delta R.T. -0.000 min
 Lab File: F801121509.D
 Acq: 12 Jan 2015 9:32 pm

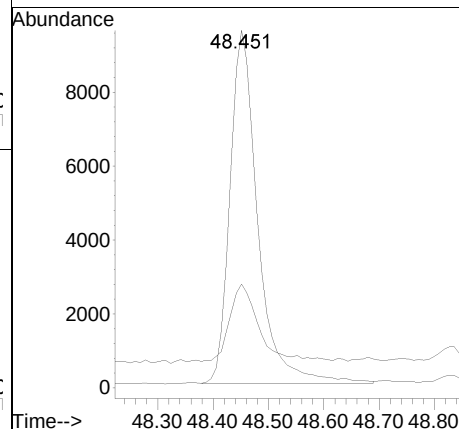
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.6	17.0	31.6	

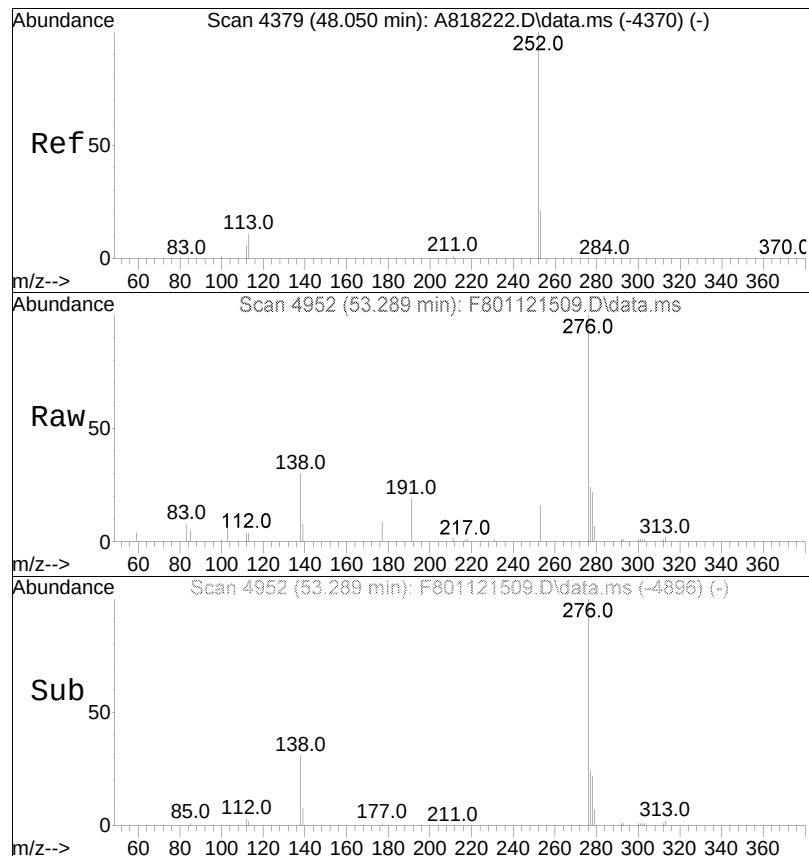




#89
 Benzo[a]pyrene
 Concen: 275.30 ng/mL
 RT: 48.451 min Scan# 4423
 Delta R.T. -0.000 min
 Lab File: F801121509.D
 Acq: 12 Jan 2015 9:32 pm

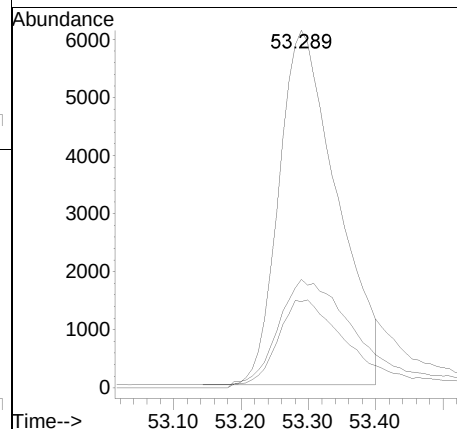
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	23.6	18.1	33.7	

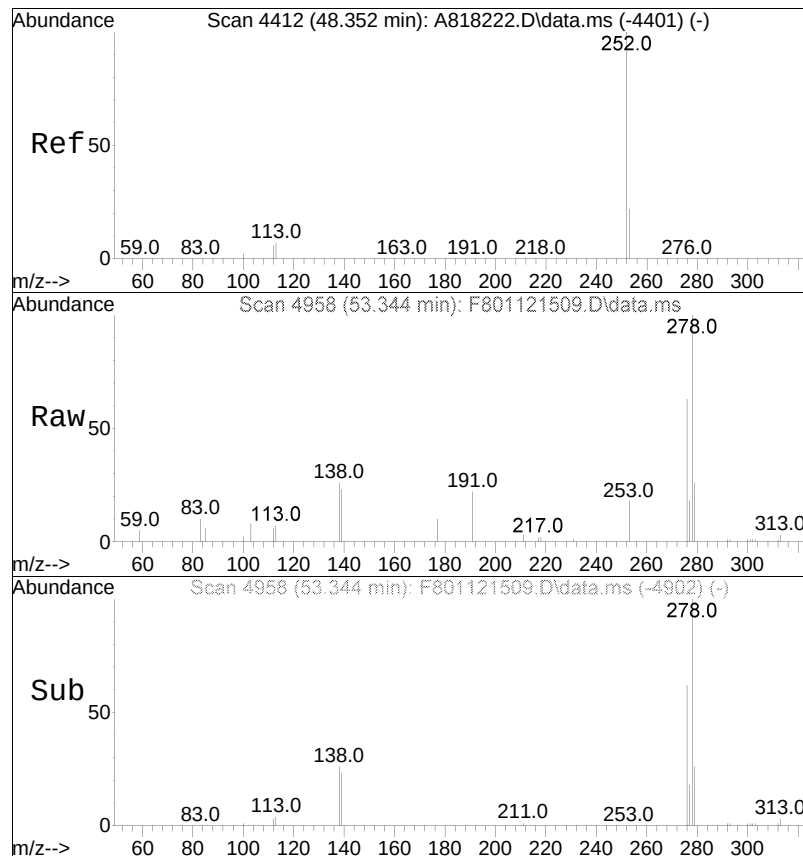




#91
 Indeno[1,2,3-cd]pyrene
 Concen: 236.74 ng/mL M3
 RT: 53.289 min Scan# 4952
 Delta R.T. 0.009 min
 Lab File: F801121509.D
 Acq: 12 Jan 2015 9:32 pm

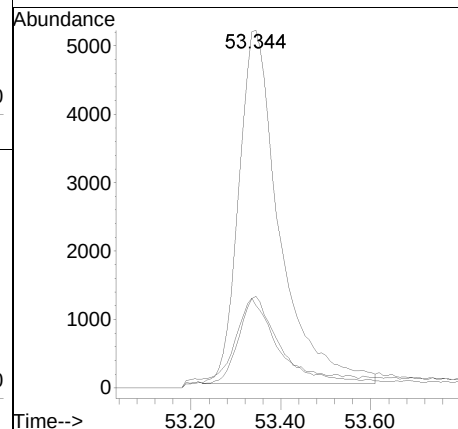
Tgt	Ion:276	Resp:	36687
Ion	Ratio	Lower	Upper
276	100		
138	42.7	19.9	37.0#
277	31.8	16.9	31.5#

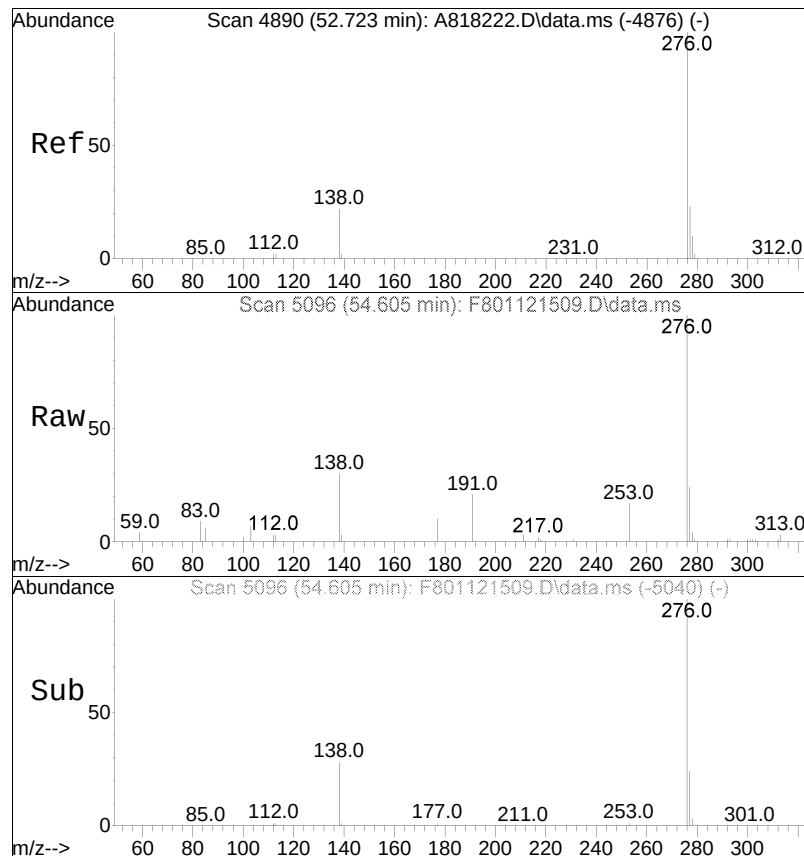




#92
 Dibenz[ah]+[ac]anthracene
 Concen: 249.04 ng/mL M4
 RT: 53.344 min Scan# 4958
 Delta R.T. 0.009 min
 Lab File: F801121509.D
 Acq: 12 Jan 2015 9:32 pm

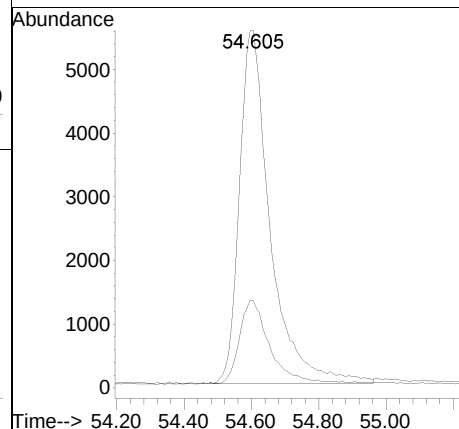
Tgt Ion:	278	Resp:	32651
Ion Ratio	Lower	Upper	
278	100		
139	28.8	15.7	29.1
279	25.6	17.1	31.9





#93
 Benzo[g,h,i]perylene
 Concen: 240.20 ng/mL
 RT: 54.605 min Scan# 5096
 Delta R.T. 0.009 min
 Lab File: F801121509.D
 Acq: 12 Jan 2015 9:32 pm

Tgt Ion	Ratio	Lower	Upper
276	100		
277	23.3	16.6	30.8



Calculation of Semi Volatile Organic Compounds

Results of Water Analysis- calculation as performed in report form:

$$\text{Concentration (ug/L)} = \frac{(\text{Conc}) (\text{Vf}) (\text{DF})}{(\text{Vi})} \times 1000$$

where:

Conc =Raw on-column concentration obtained from the quantitation report using Initial Calibration results.

Vf = Final volume of extract (mL)

Vi= Volume of sample extracted (mL)

DF= Dilution factor

Results of Sediment/Soil Analysis- calculation as performed in report form:

$$\text{Concentration (ug/Kg)} = \frac{(\text{Conc}) (\text{Vf}) (\text{DF})}{(\text{W}) (\%S)}$$

where:

Conc =Raw on-column concentration obtained from the quantitation report using Initial Calibration results.

Vf = Final volume of extract (mL)

W= Aliquot of sample (wet), g

DF= Dilution factor

%S= Sample %solid (in decimal form)

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Jan 15 2015, 02:29 pm

Work Group: WG755041 for Department: 2 Organic Preparation

Created: 12-JAN-15 Due: Operator: wr

Sample	Client ID	C Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1500432-01	NRW-02	S A2-ALKPAH/BIOMARKER	OIL	DONE	U	0109	0130	S0	Vial-A-20
L1500432-01	NRW-02	S A2-TPH	OIL	DONE	U	0109	0130	S0	Vial-A-20
L1500432-02	NRW-07	S A2-ALKPAH/BIOMARKER	OIL	DONE	U	0109	0130	S0	Vial-A-20
L1500432-02	NRW-07	S A2-TPH	OIL	DONE	U	0109	0130	S0	Vial-A-20
L1500432-03	NRW-09	S A2-ALKPAH/BIOMARKER	OIL	DONE	U	0109	0130	S0	Vial-A-20
L1500432-03	NRW-09	S A2-TPH	OIL	DONE	U	0109	0130	S0	Vial-A-20
L1500432-04	NRW-10	S A2-ALKPAH/BIOMARKER	OIL	DONE	U	0109	0130	S0	Vial-A-20
L1500432-04	NRW-10	S A2-TPH	OIL	DONE	U	0109	0130	S0	Vial-A-20
WG755041-1	Laboratory Method Bl	S A2-ALKPAH/BIOMARKER	OIL	DONE	U				
WG755041-1	Laboratory Method Bl	S A2-TPH	OIL	DONE	U				
WG755041-2	Laboratory Control S	S A2-ALKPAH/BIOMARKER	OIL	DONE	U				
WG755041-2	Laboratory Control S	S A2-TPH	OIL	DONE	U				
WG755041-3	LCS Duplicate	S A2-ALKPAH/BIOMARKER	OIL	DONE	U				
WG755041-3	LCS Duplicate	S A2-TPH	OIL	DONE	U				
Comments:									
WG755041-3	WG755041-2								

Analysis log File

Total Files Reported in Log : 24

Log Generated From Directory: 0:\Forensics\Data\PAH8\2014\DEC14\DEC23\

No.	DATA FILE	INJ METH	SAMPLE NAME	MISC	DATE INJ'D
1	F812221401.D	FRNC8A.M	LL	1x	12/23/2014 10:28 am
2	F812221402.D	FRNC8A.M	I812231401 RA	L1 FRAU66	12/23/2014 1:25 pm
3	F812221403.D	FRNC8A.M	I812231402	FRAU67 25ng/ml	12/23/2014 2:50 pm
4	F812221404.D	FRNC8A.M	I812231403	FRAU68 100ng/ml	12/23/2014 4:17 pm
5	F812221405.D	FRNC8A.M	I812231404	FRAV19 500ng/ml	12/23/2014 5:44 pm
6	F812221406.D	FRNC8A.M	I812231405	FRAU81 5000ng/ml	12/23/2014 7:10 pm
7	F812221407.D	FRNC8A.M	I812231406	FRAU82 10000ng/ml	12/23/2014 8:36 pm
8	F812221408.D	FRNC8A.M	I812231407	FRAU83 20000ng/ml	12/23/2014 10:03 pm
9	F812221409.D	FRNC8A.M	I812231401	FRAU66 10ng/ml	12/23/2014 11:29 pm
10	F812221410.D	FRNC8A.M	cQ812231401 pass	FRAU88 500ng/ml	12/24/2014 12:55 am
11	F812221411.D	FRNC8A.M	DCM		12/24/2014 2:21 am
12	F812221412.D	FRNC8A.M	WG755323-1	FRAU91 5.055	12/24/2014 3:47 am
13	F812221413.D	FRNC8A.M	DCM		12/24/2014 5:13 am
14	F812221414.D	FRNC8A.M	MC252812231401		12/24/2014 6:39 am
15	F812221415.D	FRNC8A.M	C812231401		12/24/2014 8:05 am
16	F812221416.D	FRNC8A.M	C812231402		12/28/2014 11:55 am
17	F812221417.D	FRNC8A.M	DCM		12/28/2014 1:21 pm
18	F812221418.D	FRNC8A.M	L1	1X	12/28/2014 2:47 pm
19	F812221419.D	FRNC8A.M	L2	1X	12/28/2014 4:13 pm
20	F812221420.D	FRNC8A.M	L3	1X	12/28/2014 5:39 pm
21	F812221421.D	FRNC8A.M	L4	1X	12/28/2014 7:06 pm
22	F812221422.D	FRNC8A.M	L5	1X	12/28/2014 8:31 pm
23	F812221423.D	FRNC8A.M	L6	1X	12/28/2014 9:57 pm
24	F812221424.D	FRNC8A.M	L7	1X	12/28/2014 11:22 pm

PAH8122314.M

Analysis log File

Total Files Reported in Log : 15
 Log Generated From Directory: 0:\Forensics\Data\PAH8\2015\JAN15\JAN12\

No.	DATA FILE	INJ METH	SAMPLE NAME	MISC	DATE INJ'D
1	F801121501.D	FRNC8A.M	pRIME	CC FRAV19 500NG/ML	1/12/2015 10:09 am
2	F801121502.D	FRNC8A.M	WG755949-1	WG755949,CC frav47 5..	1/12/2015 11:33 am
3	F801121503.D	FRNC8A.M	ans801121501	frav91 5.055	1/12/2015 12:58 pm
4	F801121504.D	FRNC8A.M	dcm	dcm	1/12/2015 2:23 pm
5	F801121505.D	FRNC8A.M	dcm	dcm	1/12/2015 3:49 pm
6	F801121506.D	FRNC8A.M	gpc blk	1x	1/12/2015 5:15 pm
7	F801121507.D	FRNC8A.M	wg755041-1,32	WG755949, WG755041	1/12/2015 6:41 pm
8	F801121508.D	FRNC8A.M	wg755041-2,32	WG755949, WG755041	1/12/2015 8:07 pm
9	F801121509.D	FRNC8A.M	wg755041-3,32	WG755949, WG755041	1/12/2015 9:32 pm
10	F801121510.D	FRNC8A.M	gpc lcs	1x	1/12/2015 10:57 pm
11	F801121511.D	FRNC8A.M	L1500432-01,32	WG755949, WG755041	1/13/2015 12:23 am
12	F801121512.D	FRNC8A.M	L1500432-02,32	WG755949, WG755041	1/13/2015 1:48 am
13	F801121513.D	FRNC8A.M	L1500432-03,32	WG755949, WG755041	1/13/2015 3:14 am
14	F801121514.D	FRNC8A.M	L1500432-04,32	WG755949, WG755041	1/13/2015 4:39 am
15	F801121515.D	FRNC8A.M	WG755949-2	WG755949,cc frav47 5..	1/13/2015 6:05 am

Analysis log File

Total Files Reported in Log : 10
 Log Generated From Directory: 0:\Forensics\Data\PAH8\2015\JAN15\JAN13\

No.	DATA FILE	INJ METH	SAMPLE NAME	MISC	DATE INJ'D
1	F801131501.D	FRNC8A.M	pRIME	CC FRAV19 500NG/ML	1/13/2015 9:37 am
2	F801131502.D	FRNC8A.M	WG755949-3	WG755949,cc frav47 5..	1/13/2015 4:45 pm
3	F801131503.D	FRNC8A.M	ans801121501	frav91 5.055	1/13/2015 6:11 pm
4	F801131504.D	FRNC8A.M	L1500432-01D,32,50	WG755949,WG755041	1/13/2015 7:37 pm
5	F801131505.D	FRNC8A.M	L1500432-02D,32,50	WG755949,WG755041	1/13/2015 9:03 pm
6	F801131506.D	FRNC8A.M	L1500432-03D,32,50	WG755949,WG755041	1/13/2015 10:28 pm
7	F801131507.D	FRNC8A.M	L1500432-04D,32,50	WG755949,WG755041	1/13/2015 11:55 pm
8	F801131508.D	FRNC8A.M	WG755949-4	WG755949,cc frav47 5..	1/14/2015 1:20 am
9	F801131509.D	FRNC8A.M	c801131503	cc frav47 500ng/ml	1/14/2015 8:35 am
10	F801131510.D	FRNC8A.M	c801131504	cc frav47 500ng/ml	1/14/2015 11:11 am

ORGANIC ELN REPORT

Workgroup: WG755041

Prep Method: EPA 3580A Solvent Type: DCM Surrogate Type: A2-PAH/SHC Spike Type: A2-PAH/SHC Spike Verify by: JNW Lims Spikelot: A2-PAH/SHC Additional Reagents/Std's RIS FRAV06	Conc.Method: Solvent Type: Lot #: Additional Reagents/Std's	Cleanup 1 Cleanup Method 1: Cleanup Method 2: Solvent Type: Lot #: Additional Reagents/Std's
---	--	---

Sample/ Type	Extraction										Concentration
	Extract Date	Analyst	Sample Weight g	Balance Id	Extract Vol ml	Split Vol ml	Surr Amt ml	Spike Amt ml	Is Amt ml	Final Vol ml	
WG755041-1 BLANK	01/12/15 12:29	Chris Kerkhoff	.1	F30621	10	10	.5		.1	20	
WG755041-2 LCS	01/12/15 12:29	Chris Kerkhoff	.1	F30621	10	10	.5	.5	.1	20	
WG755041-3 LCSD	01/12/15 12:29	Chris Kerkhoff	.1	F30621	10	10	.5	.5	.1	20	
L1500432-01 OIL	01/12/15 12:29	Chris Kerkhoff	0.1002	F30621	10	10	.5		.1	20	
L1500432-02 OIL	01/12/15 12:29	Chris Kerkhoff	0.1045	F30621	10	10	.5		.1	20	
L1500432-03 OIL	01/12/15 12:29	Chris Kerkhoff	0.1012	F30621	10	10	.5		.1	20	
L1500432-04 OIL	01/12/15 12:29	Chris Kerkhoff	0.1016	F30621	10	10	.5		.1	20	

Petroleum Hydrocarbon Identification TPH-PHI

Petroleum QC Summary

Form 2

Surrogate Recovery

FID FORENSICS

Client: URS Corporation
Project Name: WILLIAMSBURG

Lab Number: L1500432
Project Number: 11176638
Matrix: Oil

GC Column 1: RTX-5

CLIENT ID (LAB SAMPLE NO.)	d50 %REC	OTP %REC	%REC	%REC	OTHER (1)	OTHER (2)	TOT OUT
WG755041-3LCSD	95	98	--	--			0
WG755041-2LCS	96	99	--	--			0
WG755041-1BLANK	93	95	--	--			0
NRW-02 (L1500432-01)	97	100	--	--			0
NRW-07 (L1500432-02)	102	103	--	--			0
NRW-09 (L1500432-03)	100	101	--	--			0
NRW-10 (L1500432-04)	100	101	--	--			0

d50- = D50-TETRACOSANE
OTP = O-TERPHENYL

QC LIMITS
(50-130)
(50-130)

* Values outside of QC limits

FORM II A2-TPH



3
LAB CONTROL/LAB CONTROL DUPLICATE SAMPLE RECOVERY
OIL FID FORENSICS

Lab Name: Alpha Analytical Labs

SDG No.: L1500432

Lab Control Sample: WG755041-2LCS

Lab Control Dup : WG755041-3LCSD

Matrix: Oil

Injected: 01/14/15 15:07

Injected: 01/14/15 00:47

Lab File ID: F17011315032

Lab File ID: F17011315016

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONC mg/kg	LCS CONC mg/kg	LCS % REC	LCSD CONC mg/kg	LCSD % REC	% RPD	QC LIMITS RPD REC.
n-Nonane (C9)	1000	NA	1030	103	1000	100	3	30 50-130
n-Decane (C10)	1000	NA	966	96	975	97	1	30 50-130
n-Dodecane (C12)	1000	NA	988	99	975	97	2	30 50-130
n-Tetradecane (C14)	1000	NA	993	99	981	98	1	30 50-130
n-Hexadecane (C16)	1000	NA	1060	106	1060	106	0	30 50-130
n-Octadecane (C18)	1000	NA	1060	106	1070	107	1	30 50-130
n-Nonadecane (C19)	1000	NA	968	97	979	98	1	30 50-130
n-Eicosane (C20)	1000	NA	997	100	1000	100	0	30 50-130
n-Docosane (C22)	1000	NA	1030	103	1000	100	3	30 50-130
n-Tetracosane (C24)	1000	NA	1000	100	1000	100	0	30 50-130
n-Hexacosane (C26)	1000	NA	984	98	982	98	0	30 50-130
n-Octacosane (C28)	1000	NA	1010	101	1010	101	0	30 50-130
n-Triacontane (C30)	1000	NA	967	97	979	98	1	30 50-130
n-Hexatriacontane (C36)	1000	NA	869	87	939	94	8	30 50-130

* Values outside of QC limits.

COMMENTS: _____

FORM III A2-TPH

SAMPLE NO.

WG755041-1BLANK

Lab File ID: F17011315012

Date Extracted: 01/12/15

Date Analyzed (2):

Time Analyzed (2):

Instrument ID (2):

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

COMMENTS: _____

8B

Lab Name: Alpha Analytical Labs

SDG No. : L1500432

Lab File ID (Standard): F17011315006

Date Analyzed: 01/13/15

Instrument ID : FID17

Time Analyzed: 17:23

[illegible]

IS1(5-A) = 5-ALPHA ANDROSTANE

$$\text{IS2}(\quad) =$$
$$\text{IS3}(\quad) =$$

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50 % of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

* Values outside of QC limits.

8B

Lab Name: Alpha Analytical Labs

SDG No. : L1500432

Lab File ID (Standard): F17011315026

Date Analyzed: 01/14/15

Instrument ID : FID17

Time Analyzed: 08:11

[illegible]

IS1(5-A) = 5-ALPHA ANDROSTANE
IS2() =
IS3() =

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50 % of internal standard area
 RT UPPER LIMIT = +0.50 minutes of internal standard RT
 RT LOWER LIMIT = -0.50 minutes of internal standard RT

* Values outside of QC limits.

Determination of Method Detection Limits

Alpha Analytical Inc.
Mansfield, MA

Approved

Page 1 of 1
Analyst: JT
Date: 4/13, 4/20, 4/23-24/2012
Instrument ID: PAH3, FID6R, FID9F, FID17R, FID16F
Column ID: Phenomenex ZB-5
Prep Method: SOP OP-013
Prep Chemist: CS, DB

Method: EPA 8015D(M)

2012

GC/FID Saturated Hydrocarbons Soil

Table (MDL)		Instrument ID	PAH 3	PAH 3	FID 6R	FID 6R	FID 9F	FID 9F	FID 17R	FID 17R	FID 16F	FID 16F	T value used for calculating MDL: 2.821					
		Date Analyzed	MDL 01	MDL 02	MDL 03	MDL 04	MDL 05	MDL 06	MDL 07	MDL 08	MDL 09	MDL 10						
No.	Analytes	Target conc. (mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	Mean (mg/Kg)	Mean Accuracy	Standard Deviation	Calc. MDL (mg/Kg)	Current RL (mg/Kg)	Comment
1	n-Octane (C8)	0.0667	0.0260	0.0197	0.0189	0.0223	0.0223	0.0212	0.0271	0.0266	0.0275	0.0219	0.0234	35%	0.0032	0.0090	0.0667	
2	n-Nonane (C9)	0.0667	0.0466	0.0398	0.0414	0.0457	0.0409	0.0419	0.0478	0.0476	0.0489	0.0417	0.0442	66%	0.0034	0.0096	0.0667	
3	n-Decane (C10)	0.0667	0.0546	0.0509	0.0527	0.0557	0.0445	0.0468	0.0507	0.0510	0.0497	0.0438	0.0500	75%	0.0040	0.0112	0.0667	
4	n-Undecane (C11)	0.0667	0.0575	0.0540	0.0544	0.0571	0.0462	0.0437	0.0484	0.0491	0.0491	0.0444	0.0504	76%	0.0050	0.0142	0.0667	
5	n-Dodecane (C12)	0.0667	0.0607	0.0560	0.0554	0.0577	0.0456	0.0505	0.0457	0.0497	0.0524	0.0480	0.0522	78%	0.0052	0.0145	0.0667	
6	n-Tridecane (C13)	0.0667	0.0591	0.0570	0.0567	0.0590	0.0404	0.0434	0.0487	0.0529	0.0533	0.0487	0.0519	78%	0.0065	0.0183	0.0667	
7	n-Tetradecane (C14)	0.0667	0.0589	0.0571	0.0573	0.0602	0.0514	0.0557	0.0515	0.0521	0.0586	0.0545	0.0557	84%	0.0032	0.0091	0.0667	
8	n-Pentadecane (C15)	0.0667	0.0622	0.0601	0.0603	0.0613	0.0613	0.0643	0.0559	0.0594	0.0655	0.0604	0.0611	92%	0.0027	0.0075	0.0667	
9	n-Hexadecane (C16)	0.0667	0.0617	0.0590	0.0586	0.0691	0.0612	0.0625	0.0570	0.0574	0.0631	0.0596	0.0609	91%	0.0036	0.0100	0.0667	
10	n-Heptadecane (C17)	0.0667	0.0621	0.0599	0.0591	0.0611	0.0513	0.0527	0.0503	0.0498	0.0583	0.0537	0.0558	84%	0.0047	0.0134	0.0667	
11	Pristane	0.0667	0.0617	0.0595	0.0623	0.0645	0.0673	0.0700	0.0673	0.0659	0.0699	0.0637	0.0652	98%	0.0035	0.0098	0.0667	
12	n-Octadecane (C18) *	0.0667	0.0629	0.0611	0.0641	0.0662	0.0729	0.0743	0.0620	0.0623	0.0688	0.0627	0.0657	99%	0.0047	0.0134	0.0667	
13	Phytane	0.0667	0.0625	0.0602	0.0631	0.0648	0.0689	0.0687	0.0666	0.0651	0.0676	0.0622	0.0650	97%	0.0030	0.0084	0.0667	
14	n-Nonadecane (C19)	0.0667	0.0636	0.0616	0.0622	0.0633	0.0590	0.0611	0.0571	0.0573	0.0627	0.0567	0.0605	91%	0.0027	0.0076	0.0667	
15	n-Eicosane (C20)	0.0667	0.0635	0.0616	0.0629	0.0638	0.0613	0.0639	0.0579	0.0583	0.0663	0.0599	0.0619	93%	0.0027	0.0075	0.0667	
16	n-Heneicosane (C21)	0.0667	0.0643	0.0622	0.0635	0.0646	0.0644	0.0658	0.0601	0.0604	0.0665	0.0601	0.0632	95%	0.0024	0.0067	0.0667	
17	n-Docosane (C22)	0.0667	0.0639	0.0615	0.0640	0.0652	0.0658	0.0649	0.0609	0.0615	0.0676	0.0604	0.0636	95%	0.0024	0.0068	0.0667	
18	n-Tricosane (C23)	0.0667	0.0641	0.0630	0.0667	0.0677	0.0653	0.0694	0.0633	0.0634	0.0688	0.0629	0.0655	98%	0.0025	0.0071	0.0667	
19	n-Tetracosane (C24)	0.0667	0.0641	0.0640	0.0663	0.0671	0.0622	0.0655	0.0611	0.0615	0.0666	0.0601	0.0639	96%	0.0025	0.0070	0.0667	
20	n-Pentacosane (C25) *	0.0667	0.0693	0.0657	0.0689	0.0687	0.0957	0.1005	0.0713	0.0715	0.0705	0.0657	0.0748	112%	0.0125	0.0353	0.0667	
21	n-Hexacosane (C26)	0.0667	0.0634	0.0625	0.0646	0.0655	0.0666	0.0694	0.0610	0.0610	0.0662	0.0608	0.0641	96%	0.0029	0.0081	0.0667	
22	n-Heptacosane (C27)	0.0667	0.0653	0.0642	0.0666	0.0685	0.0643	0.0695	0.0639	0.0633	0.0689	0.0621	0.0657	99%	0.0026	0.0072	0.0667	
23	n-Octacosane (C28)	0.0667	0.0642	0.0631	0.0742	0.0698	0.0662	0.0673	0.0621	0.0621	0.0674	0.0630	0.0660	99%	0.0039	0.0110	0.0667	
24	n-Nonacosane (C29) *	0.0667	0.0634	0.0621	0.0652	0.0657	0.0631	0.0648	0.0601	0.0595	0.0933	0.0862	0.0683	103%	0.0116	0.0327	0.0667	
25	n-Triacontane (C30)	0.0667	0.0657	0.0648	0.0669	0.0679	0.0686	0.0685	0.0635	0.0628	0.0670	0.0615	0.0657	99%	0.0025	0.0070	0.0667	
26	n-Hentriacontane (C31)	0.0667	0.0649	0.0637	0.0665	0.0677	0.0658	0.0680	0.0623	0.0607	0.0657	0.0599	0.0645	97%	0.0028	0.0079	0.0667	
27	n-Dotriacontane (C32)	0.0667	0.0637	0.0625	0.0655	0.0669	0.0639	0.0654	0.0615	0.0591	0.0629	0.0586	0.0630	95%	0.0027	0.0076	0.0667	
28	n-Tritriacontane (C33)	0.0667	0.0675	0.0663	0.0675	0.0701	0.0679	0.0694	0.0639	0.0601	0.0655	0.0613	0.0660	99%	0.0033	0.0093	0.0667	
29	n-tetrtriacontane (C34)	0.0667	0.0645	0.0637	0.0656	0.0678	0.0634	0.0670	0.0613	0.0573	0.0600	0.0571	0.0628	94%	0.0038	0.0106	0.0667	
30	n-Pentatriacontane (C35)	0.0667	0.0655	0.0633	0.0655	0.0683	0.0618	0.0658	0.0605	0.0566	0.0598	0.0559	0.0623	93%	0.0041	0.0116	0.0667	
31	n-Hexatriacontane (C36)	0.0667	0.0647	0.0637	0.0661	0.0685	0.0643	0.0655	0.0596	0.0555	0.0579	0.0551	0.0621	93%	0.0047	0.0133	0.0667	
32	n-Heptatriacontane (C37)	0.0667	0.0641	0.0629	0.0657	0.0686	0.0615	0.0646	0.0585	0.0543	0.0556	0.0531	0.0609	91%	0.0052	0.0148	0.0667	
33	n-Octatriacontane (C38)	0.0667	0.0643	0.0631	0.0649	0.0671	0.0601	0.0635	0.0590	0.0545	0.0541	0.0505	0.0601	90%	0.0055	0.0155	0.0667	
34	n-Tetracontane (C40)	0.0667	0.0635	0.0617	0.0671	0.0670	0.0613	0.0615	0.0560	0.0515	0.0476	0.0459	0.0583	87%	0.0077	0.0216	0.0667	
Surrogates																		
1	ortho-terphenyl	1.6667	1.6365	1.5881	1.6001	1.6119	1.6243	1.6699	1.5931	1.5903	1.7721	1.6406	1.633	98%				
2	d50-Tetracosane	1.6667	1.6039	1.5647	1.6025	1.6249	1.5925	1.6319	1.5581	1.5591	1.6562	1.5391	1.593	96%				

Comments:

* Targets C18, C25, C29 are C qualified.

C= Coelution: Targets co-elute with MS surrogates

Client-specific MDL

Determination of Method Detection Limits

Alpha Analytical Inc.
Mansfield, MA

Approved

Page 1 of 1
Analyst: JT
Date: 4/9/12 - 4/12/12
Instrument ID: FID9F, 16R, 17F, 2R, 6F
Column ID: Phenomenex ZB-5
Prep Method: SOP OP-013
Prep Chemist: CS

Method: EPA 8015D(M)

2012

GC/FID Saturated Hydrocarbons Soil

Table (MDL)		Data File	A917413	A917415	A1610097	A1610099	A003174	A003176	C692936	C692938	E24723	E24725	T value used for calculating					
		Inst/Date Analyzed	FID9R 4/9/12	FID9R 4/9/12	FID16R 4/9/12	FID16R 4/9/12	FID17F 4/10/12	FID17F 4/10/12	FID6F 4/12/12	FID6F 4/12/12	FID2 4/12/12	FID2 4/12/12	MDL: 2.821					
No.	Analytes	Target conc. (mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	Mean (mg/Kg)	Mean Accuracy	Standard Deviation	Calc. MDL (mg/Kg)	Current RL (mg/Kg)	Comment
1	n-Octane (C8)	0.0667	0.0241	0.0234	0.0269	0.0229	0.0260	0.0245	0.0241	0.0217	0.0217	0.0254	0.0241	36%	0.0017	0.0049	0.0667	
2	n-Nonane (C9)	0.0667	0.0455	0.0466	0.0476	0.0418	0.0509	0.0505	0.0445	0.0437	0.0569	0.0650	0.0493	74%	0.0070	0.0198	0.0667	
3	n-Decane (C10)	0.0667	0.0501	0.0522	0.0485	0.0420	0.0541	0.0542	0.0481	0.0459	0.0609	0.0680	0.0524	79%	0.0075	0.0213	0.0667	
4	n-Undecane (C11)	0.0667	0.0507	0.0529	0.0500	0.0465	0.0390	0.0389	0.0463	0.0443	0.0563	0.0609	0.0486	73%	0.0071	0.0199	0.0667	
5	n-Dodecane (C12)	0.0667	0.0518	0.0541	0.0520	0.0495	0.0469	0.0467	0.0568	0.0532	0.0554	0.0583	0.0525	79%	0.0039	0.0110	0.0667	
6	n-Tridecane (C13)	0.0667	0.0527	0.0562	0.0501	0.0483	0.0466	0.0469	0.0523	0.0507	0.0556	0.0603	0.0520	78%	0.0044	0.0124	0.0667	
7	n-Tetradecane (C14)	0.0667	0.0541	0.0587	0.0569	0.0547	0.0494	0.0505	0.0527	0.0504	0.0568	0.0593	0.0543	82%	0.0036	0.0100	0.0667	
8	n-Pentadecane (C15)	0.0667	0.0627	0.0645	0.0640	0.0617	0.0564	0.0567	0.0609	0.0587	0.0593	0.0614	0.0606	91%	0.0028	0.0080	0.0667	
9	n-Hexadecane (C16)	0.0667	0.0649	0.0659	0.0687	0.0651	0.0622	0.0623	0.0633	0.0602	0.0602	0.0618	0.0635	95%	0.0027	0.0076	0.0667	
10	n-Heptadecane (C17)	0.0667	0.0587	0.0607	0.0550	0.0518	0.0421	0.0410	0.0507	0.0481	0.0609	0.0629	0.0532	80%	0.0078	0.0220	0.0667	
11	Pristane	0.0667	0.0637	0.0667	0.0724	0.0679	0.0738	0.0782	0.0674	0.0651	0.0621	0.0649	0.0682	102%	0.0050	0.0142	0.0667	
12	n-Octadecane (C18) *	0.0667	0.0656	0.0682	0.0684	0.0672	0.0610	0.0616	0.0655	0.0622	0.0631	0.0650	0.0648	97%	0.0027	0.0076	0.0667	
13	Phytane	0.0667	0.0621	0.0672	0.0705	0.0655	0.0680	0.0677	0.0681	0.0630	0.0635	0.0655	0.0661	99%	0.0027	0.0075	0.0667	
14	n-Nonadecane (C19)	0.0667	0.0619	0.0639	0.0569	0.0559	0.0487	0.0487	0.0556	0.0539	0.0634	0.0654	0.0574	86%	0.0061	0.0171	0.0667	
15	n-Eicosane (C20)	0.0667	0.0631	0.0655	0.0621	0.0604	0.0579	0.0580	0.0585	0.0565	0.0640	0.0655	0.0611	92%	0.0033	0.0094	0.0667	
16	n-Heneicosane (C21)	0.0667	0.0647	0.0673	0.0649	0.0631	0.0607	0.0611	0.0604	0.0587	0.0642	0.0664	0.0631	95%	0.0028	0.0080	0.0667	
17	n-Docosane (C22)	0.0667	0.0645	0.0669	0.0640	0.0627	0.0603	0.0600	0.0648	0.0605	0.0645	0.0662	0.0634	95%	0.0025	0.0070	0.0667	
18	n-Tricosane (C23)	0.0667	0.0676	0.0704	0.0661	0.0644	0.0621	0.0623	0.0639	0.0616	0.0667	0.0687	0.0654	98%	0.0030	0.0085	0.0667	
19	n-Tetracosane (C24)	0.0667	0.0652	0.0679	0.0638	0.0622	0.0668	0.0723	0.0613	0.0585	0.0660	0.0681	0.0652	98%	0.0040	0.0112	0.0667	
20	n-Pentacosane (C25) *	0.0667	0.0679	0.0699	0.0752	0.0735	0.0751	0.0696	0.0761	0.0748	0.0659	0.0681	0.0716	107%	0.0037	0.0105	0.0667	
21	n-Hexacosane (C26)	0.0667	0.0647	0.0673	0.0641	0.0626	0.0608	0.0605	0.0599	0.0577	0.0663	0.0683	0.0632	95%	0.0035	0.0098	0.0667	
22	n-Heptacosane (C27)	0.0667	0.0660	0.0691	0.0664	0.0648	0.0631	0.0633	0.0640	0.0613	0.0681	0.0700	0.0656	98%	0.0028	0.0080	0.0667	
23	n-Octacosane (C28)	0.0667	0.0655	0.0677	0.0671	0.0638	0.0746	0.0790	0.0656	0.0623	0.0689	0.0701	0.0685	103%	0.0051	0.0143	0.0667	
24	n-Nonacosane (C29) *	0.0667	0.0979	0.0986	0.0663	0.0640	0.0877	0.0887	0.0601	0.0573	0.0676	0.0701	0.0758	114%	0.0157	0.0444	0.0667	
25	n-Triacontane (C30)	0.0667	0.0667	0.0691	0.0670	0.0651	0.0640	0.0672	0.0651	0.0621	0.0693	0.0711	0.0667	100%	0.0027	0.0076	0.0667	
26	n-Hentriacontane (C31)	0.0667	0.0659	0.0684	0.0662	0.0647	0.0611	0.0623	0.0630	0.0603	0.0685	0.0701	0.0651	98%	0.0033	0.0094	0.0667	
27	n-Dotriacontane (C32)	0.0667	0.0649	0.0667	0.0651	0.0636	0.0613	0.0612	0.0627	0.0603	0.0677	0.0692	0.0643	96%	0.0030	0.0084	0.0667	
28	n-Tritriacontane (C33)	0.0667	0.0676	0.0698	0.0698	0.0679	0.0626	0.0638	0.0661	0.0644	0.0710	0.0727	0.0676	101%	0.0033	0.0094	0.0667	
29	n-tetratriacontane (C34)	0.0667	0.0657	0.0676	0.0667	0.0653	0.0603	0.0612	0.0643	0.0606	0.0684	0.0698	0.0650	97%	0.0033	0.0094	0.0667	
30	n-Pentatriacontane (C35)	0.0667	0.0650	0.0673	0.0661	0.0644	0.0591	0.0583	0.0629	0.0617	0.0681	0.0693	0.0642	96%	0.0037	0.0104	0.0667	
31	n-Hexatriacontane (C36)	0.0667	0.0652	0.0673	0.0670	0.0654	0.0581	0.0585	0.0632	0.0597	0.0687	0.0701	0.0643	96%	0.0043	0.0121	0.0667	
32	n-Heptatriacontane (C37)	0.0667	0.0647	0.0661	0.0663	0.0650	0.0572	0.0576	0.0617	0.0595	0.0683	0.0696	0.0636	95%	0.0044	0.0123	0.0667	
33	n-Octatriacontane (C38)	0.0667	0.0649	0.0665	0.0666	0.0651	0.0563	0.0566	0.0649	0.0603	0.0682	0.0691	0.0638	96%	0.0046	0.0129	0.0667	
34	n-Tetracontane (C40)	0.0667	0.0622	0.0637	0.0656	0.0626	0.0524	0.0536	0.0605	0.0571	0.0667	0.0677	0.0612	92%	0.0053	0.0150	0.0667	
Surrogates																		
1	ortho-terphenyl	1.670	1.602	1.642	1.669	1.626	1.613	1.612	1.593	1.589	1.617	1.657	1.622	97%				
2	d50-Tetracosane	1.670	1.558	1.602	1.612	1.571	1.534	1.538	1.523	1.525	1.626	1.659	1.575	94%				

Comments:

MDL for FID 9F, 16R, 17F, 2R, 6F

* Targets C18, C25, C29 are C qualified. C= Coelution: Targets co-elute with MS surrogates

Client-specific MDL

Petroleum Data

Form 1

FID FORENSICS

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-01
 Client ID : NRW-02
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8015D(M)
 Lab File ID : F17011315018
 Sample Amount : 0.1002 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N
 Sulfur Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 09:45
 Date Received : 01/09/15
 Date Analyzed : 01/14/15 02:16
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : NL
 Instrument ID : FID17
 GC Column : RTX-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
NONE	Total Petroleum Hydrocarbons (C9-C44)	619000	6590	3290	



Form 1

FID FORENSICS

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-02
 Client ID : NRW-07
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8015D(M)
 Lab File ID : F17011315020
 Sample Amount : 0.1045 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N
 Sulfur Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 10:50
 Date Received : 01/09/15
 Date Analyzed : 01/14/15 03:45
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : NL
 Instrument ID : FID17
 GC Column : RTX-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
NONE	Total Petroleum Hydrocarbons (C9-C44)	727000	6320	3160	



Form 1

FID FORENSICS

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-03
 Client ID : NRW-09
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8015D(M)
 Lab File ID : F17011315022
 Sample Amount : 0.1012 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N
 Sulfur Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 07:30
 Date Received : 01/09/15
 Date Analyzed : 01/14/15 05:13
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : NL
 Instrument ID : FID17
 GC Column : RTX-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
NONE	Total Petroleum Hydrocarbons (C9-C44)	689000	6520	3260	



Form 1

FID FORENSICS

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1500432-04
 Client ID : NRW-10
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8015D(M)
 Lab File ID : F17011315024
 Sample Amount : 0.1016 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N
 Sulfur Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : 01/09/15 08:35
 Date Received : 01/09/15
 Date Analyzed : 01/14/15 06:42
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : NL
 Instrument ID : FID17
 GC Column : RTX-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
NONE	Total Petroleum Hydrocarbons (C9-C44)	744000	6500	3250	

Form 1

FID FORENSICS

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : WG755041-1
 Client ID : WG755041-1BLANK
 Sample Location :
 Sample Matrix : OIL
 Analytical Method : 1,8015D(M)
 Lab File ID : F17011315012
 Sample Amount : 0.1 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N
 Sulfur Cleanup : N

Lab Number : L1500432
 Project Number : 11176638
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 01/13/15 21:49
 Date Extracted : 01/12/15
 Dilution Factor : 1
 Analyst : NL
 Instrument ID : FID17
 GC Column : RTX-5
 %Solids : NA
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
NONE	Total Petroleum Hydrocarbons (C9-C44)	ND	6600	3300	U

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315018.d
 Signal(s) : FID1A.CH
 Acq On : 14 Jan 2015 2:16 am
 Operator : FID17:NL
 Sample : L1500432-01,42
 Misc : WG755546,WG755041
 ALS Vial : 9 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 11:22:02 2015
 Quant Method : C:\msdchem\1\DATA\FID17\2015\January\Jan13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Blank Name : IB1701131501F
 Blank File : F17011315010.d

Sub List : TPH - TPH

Compound	R.T.	Response	Conc Units

Internal Standards			
1) I 5-alpha-androstane	31.136	56069638	50.000 ug/mL M4
System Monitoring Compounds			
19) s ortho-terphenyl	29.110	15468025	12.535 ug/mL M4
Spiked Amount 50.000	Range 50 - 130	Recovery =	25.07%#
24) s d50-Tetracosane	35.793	12142298	12.116 ug/mL M4
Spiked Amount 50.000	Range 50 - 130	Recovery =	24.23%#
Target Compounds			
42) h C9-C44 Total Petroleu...	40.166	3999812235	3634.320 ug/mL m
42) h C9-C44 Total Petroleu BS	40.166	3414150363	3102.175 ug/mL m
45) h Total Resolved Hydroc...	40.697	2722037315	2473.305 ug/mL m

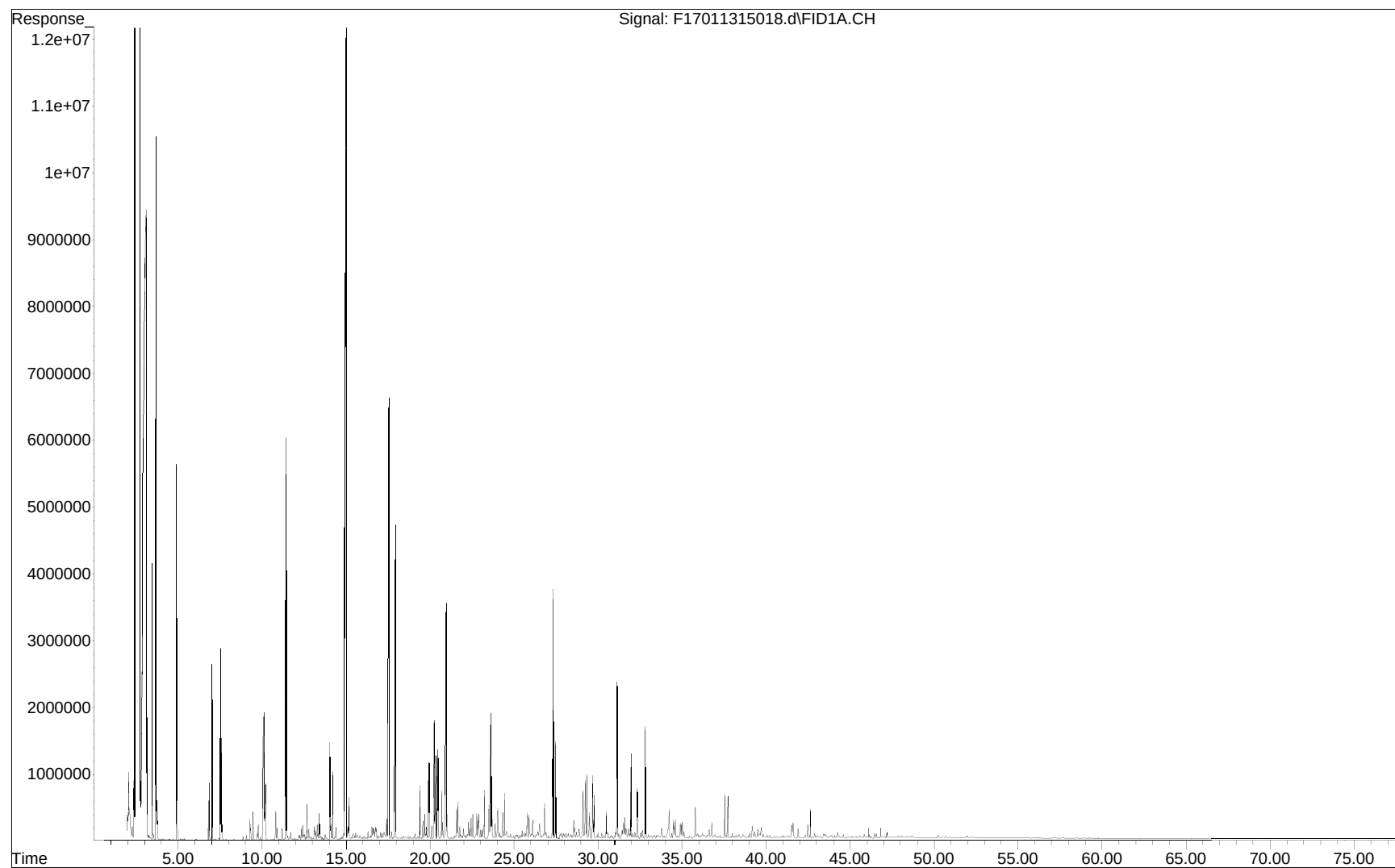
SemiQuant Compounds - Not Calibrated on this Instrument

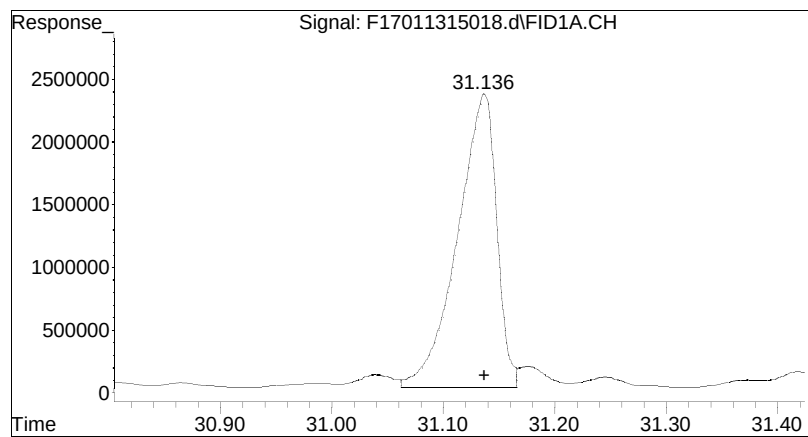
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

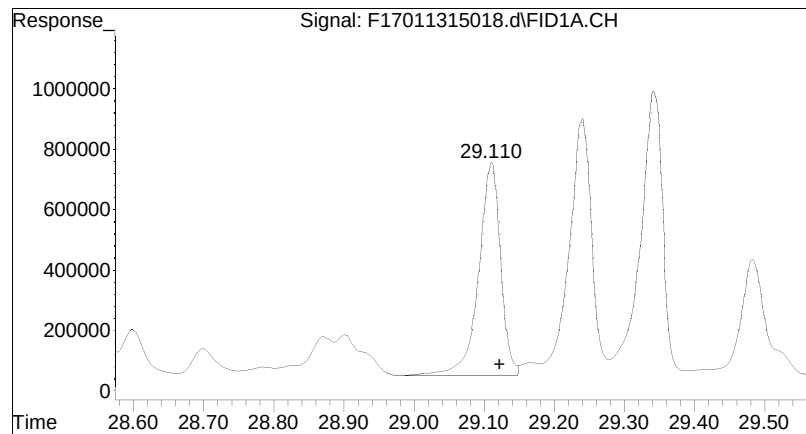
Data Path : 0:\Forensics\Data\FID17\2015\Jan\Jan13\
Data File : F17011315018.d
Operator : FID17:NL
Acquired : 14 Jan 2015 2:16 am using AcqMethod FID17.M
Instrument: FID17
Sample : L1500432-01,42
Misc Info : WG755546,WG755041
ALS Vial : 9





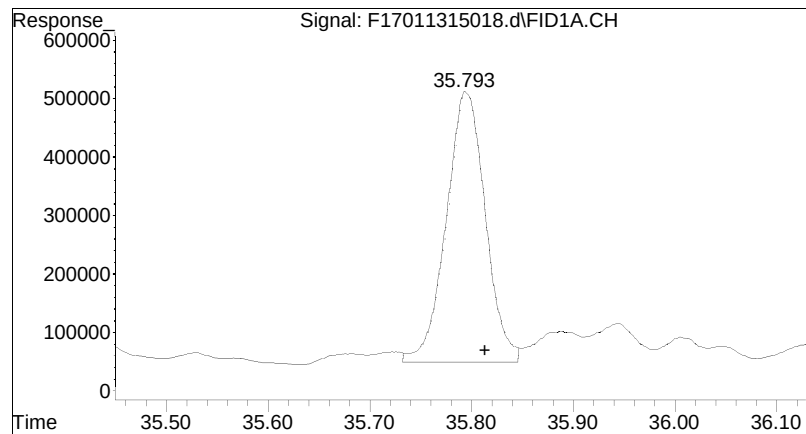
#1 5-alpha-androstane

R.T.: 31.136 min
Delta R.T.: 0.000 min
Response: 56069638
Conc: 50.00 ug/mL M4



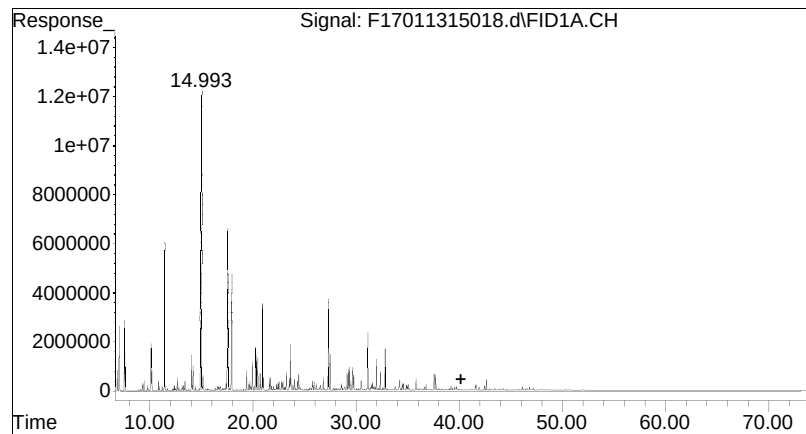
#19 ortho-terphenyl

R.T.: 29.110 min
Delta R.T.: -0.012 min
Response: 15468025
Conc: 12.53 ug/mL M4



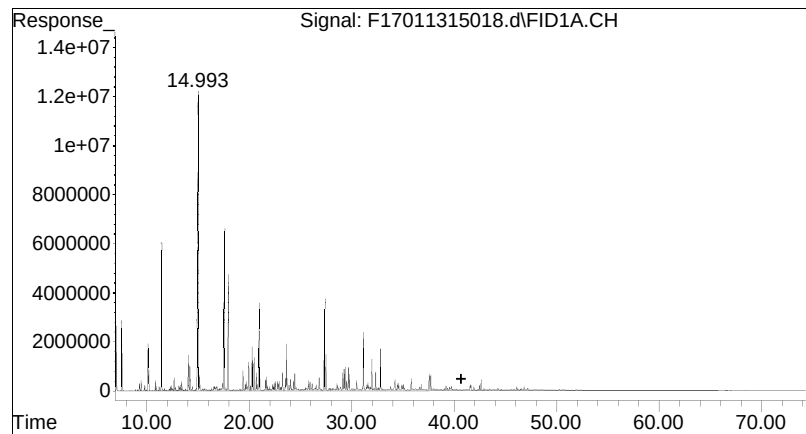
#24 d50-Tetracosane

R.T.: 35.793 min
Delta R.T.: -0.020 min
Response: 12142298
Conc: 12.12 ug/mL M4



#42 C9-C44 Total Petroleum Hy

R.T.: 40.166 min
Delta R.T.: 0.000 min
Response: 3999812235
Conc: 3634.32 ug/mL m



#45 Total Resolved Hydrocarbo

R.T.: 40.697 min
Delta R.T.: 0.000 min
Response: 2722037315
Conc: 2473.30 ug/mL m

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315020.d
 Signal(s) : FID1A.CH
 Acq On : 14 Jan 2015 3:45 am
 Operator : FID17:NL
 Sample : L1500432-02,42
 Misc : WG755546,WG755041
 ALS Vial : 10 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 09:38:59 2015
 Quant Method : C:\msdchem\1\DATA\FID17\2015\January\Jan13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Blank Name : IB1701131501F
 Blank File : F17011315010.d

Sub List : TPH - TPH

Compound	R.T.	Response	Conc Units

Internal Standards			
1) I 5-alpha-androstane	31.138	57135821	50.000 ug/mL M4
System Monitoring Compounds			
19) s ortho-terphenyl	29.114	16153246	12.846 ug/mL M4
Spiked Amount 50.000 Range	50 - 130	Recovery =	25.69%#
24) s d50-Tetracosane	35.796	12988661	12.718 ug/mL M4
Spiked Amount 50.000 Range	50 - 130	Recovery =	25.44%#
Target Compounds			
42) h C9-C44 Total Petroleu...	40.166	4843880390	4319.130 ug/mL m
42) h C9-C44 Total Petroleu BS	40.166	4258218518	3796.915 ug/mL m
45) h Total Resolved Hydroc...	40.697	3208607987	2861.011 ug/mL m

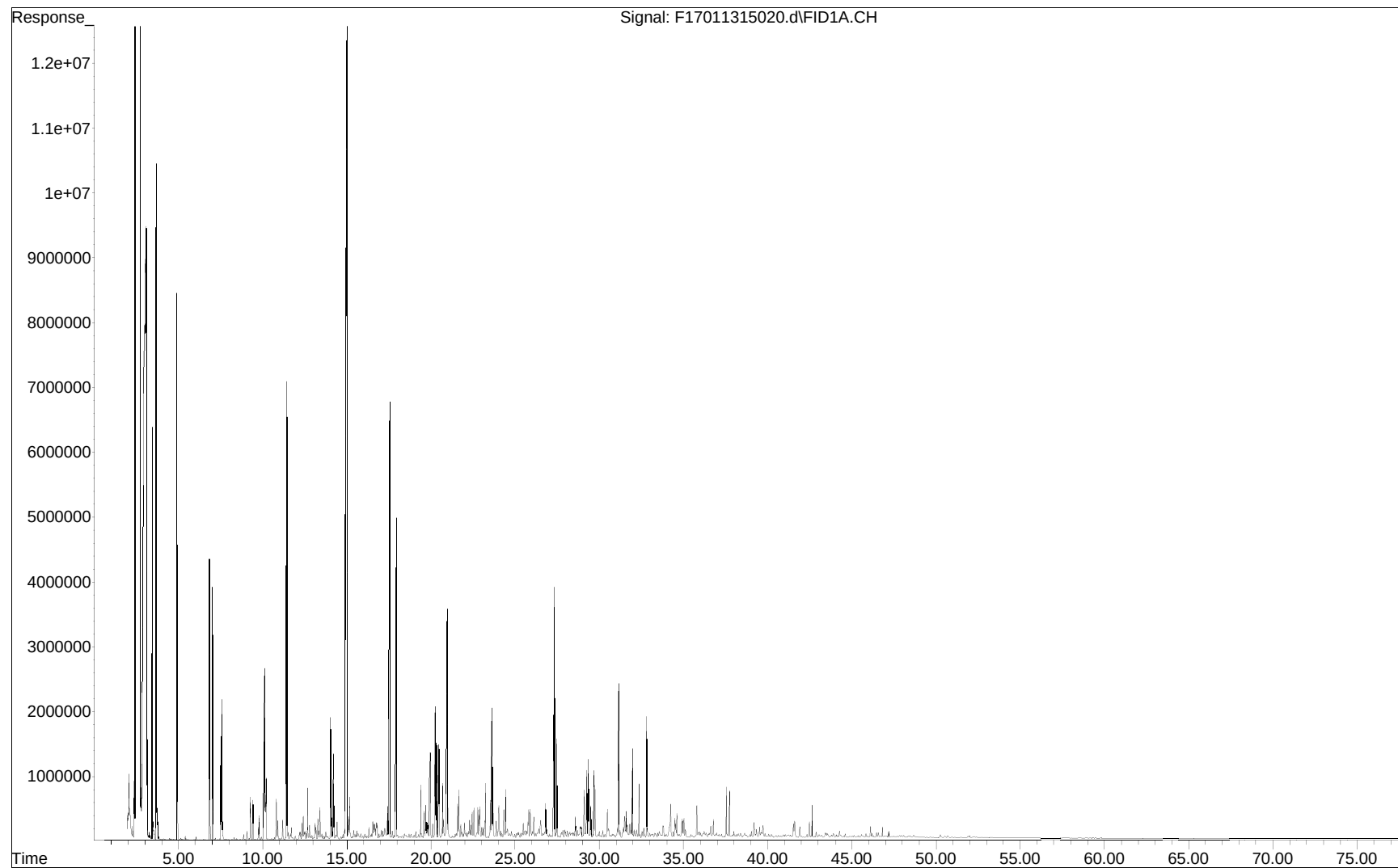
SemiQuant Compounds - Not Calibrated on this Instrument

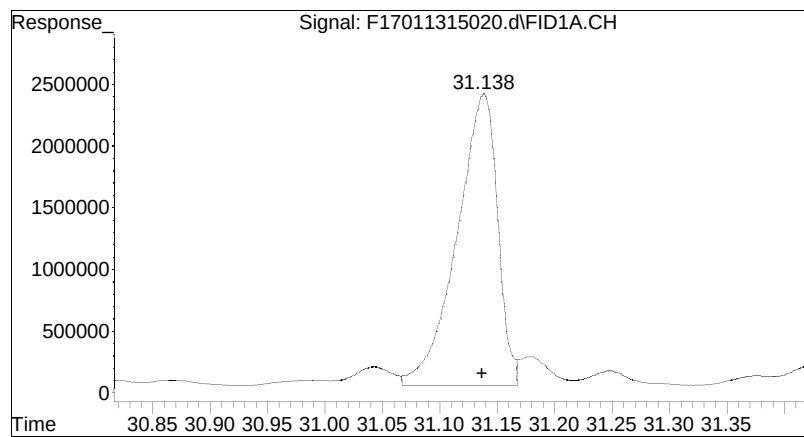
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

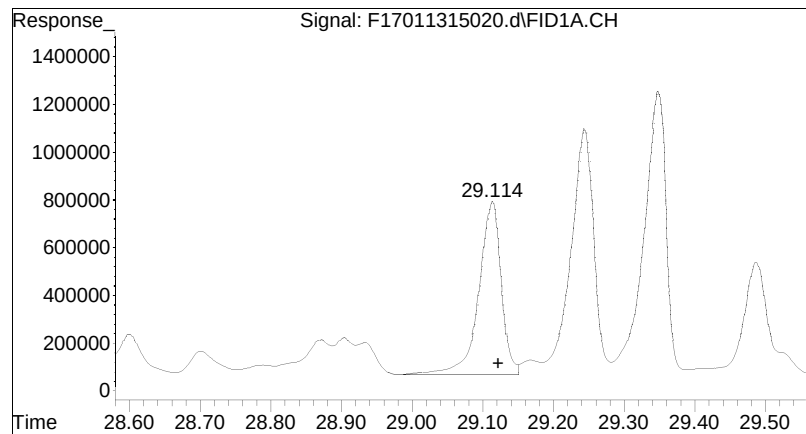
Data Path : 0:\Forensics\Data\FID17\2015\Jan\Jan13\
Data File : F17011315020.d
Operator : FID17:NL
Acquired : 14 Jan 2015 3:45 am using AcqMethod FID17.M
Instrument: FID17
Sample : L1500432-02,42
Misc Info : WG755546,WG755041
ALS Vial : 10





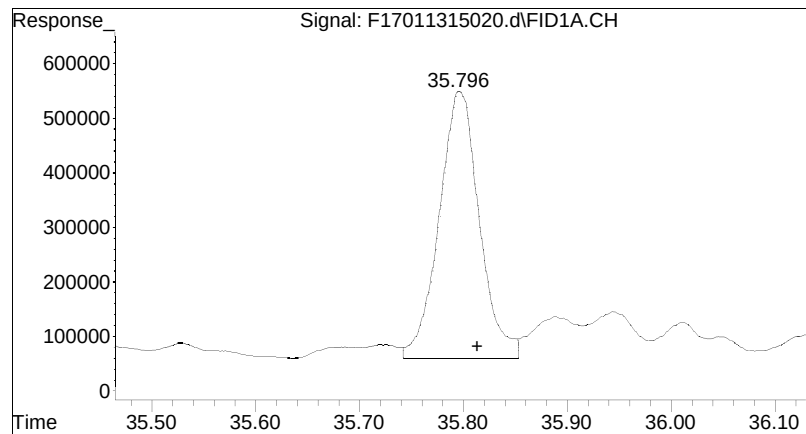
#1 5-alpha-androstane

R.T.: 31.138 min
Delta R.T.: 0.001 min
Response: 57135821
Conc: 50.00 ug/mL M4



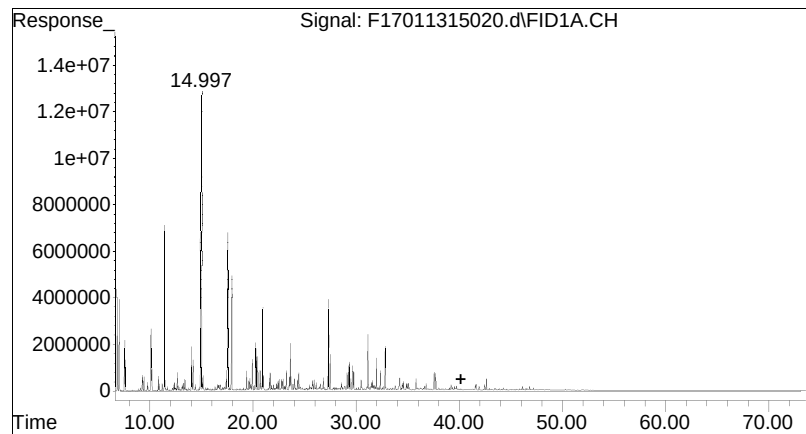
#19 ortho-terphenyl

R.T.: 29.114 min
Delta R.T.: -0.008 min
Response: 16153246
Conc: 12.85 ug/mL M4



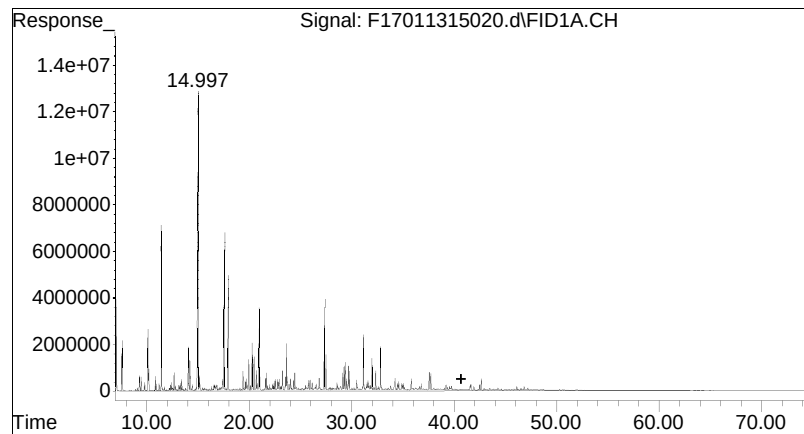
#24 d50-Tetracosane

R.T.: 35.796 min
Delta R.T.: -0.018 min
Response: 12988661
Conc: 12.72 ug/mL M4



#42 C9-C44 Total Petroleum Hy

R.T.: 40.166 min
Delta R.T.: 0.000 min
Response: 4843880390
Conc: 4319.13 ug/mL m



#45 Total Resolved Hydrocarbo

R.T.: 40.697 min
Delta R.T.: 0.000 min
Response: 3208607987
Conc: 2861.01 ug/mL m

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315022.d
 Signal(s) : FID1A.CH
 Acq On : 14 Jan 2015 5:13 am
 Operator : FID17:NL
 Sample : L1500432-03,42
 Misc : WG755546,WG755041
 ALS Vial : 11 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 11:23:22 2015
 Quant Method : C:\msdchem\1\DATA\FID17\2015\January\Jan13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Blank Name : IB1701131501F
 Blank File : F17011315010.d

Sub List : TPH - TPH

Compound	R.T.	Response	Conc Units

Internal Standards			
1) I 5-alpha-androstane	31.137	59344056	50.000 ug/mL M4
System Monitoring Compounds			
19) s ortho-terphenyl	29.114	16514138	12.644 ug/mL M4
Spiked Amount 50.000	Range 50 - 130	Recovery =	25.29%#
24) s d50-Tetracosane	35.799	13207203	12.451 ug/mL M4
Spiked Amount 50.000	Range 50 - 130	Recovery =	24.90%#
Target Compounds			
42) h C9-C44 Total Petroleu...	40.166	4648654838	3990.813 ug/mL m
42) h C9-C44 Total Petroleu BS	40.166	4062992966	3488.030 ug/mL m
45) h Total Resolved Hydroc...	40.697	3044421675	2613.599 ug/mL m

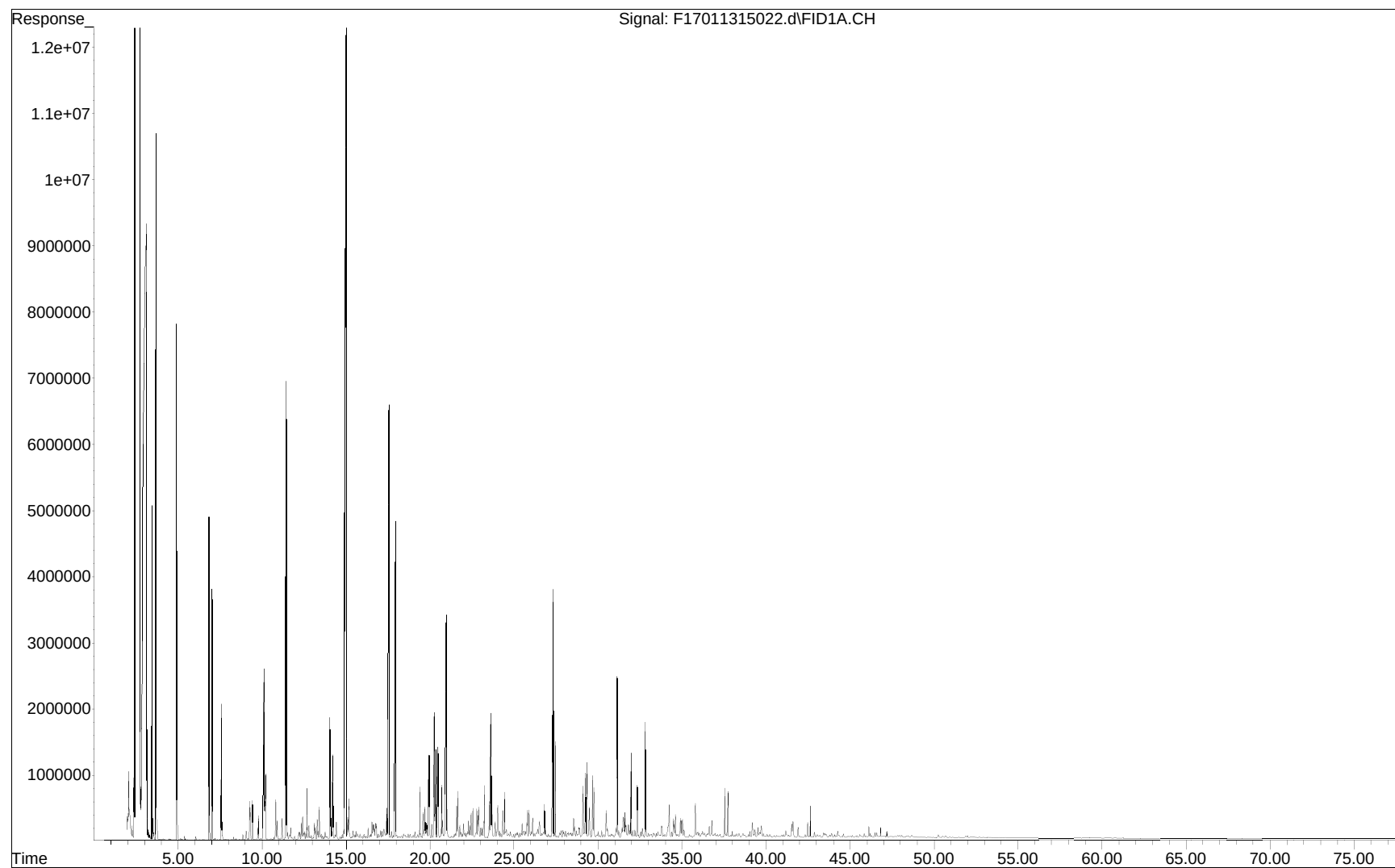
SemiQuant Compounds - Not Calibrated on this Instrument

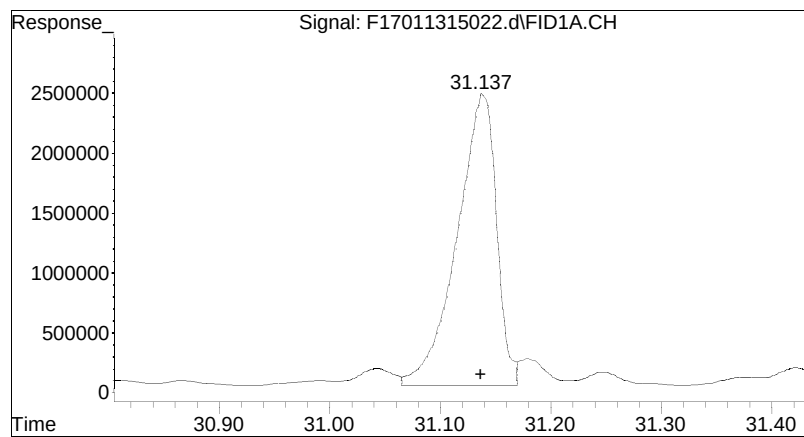
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

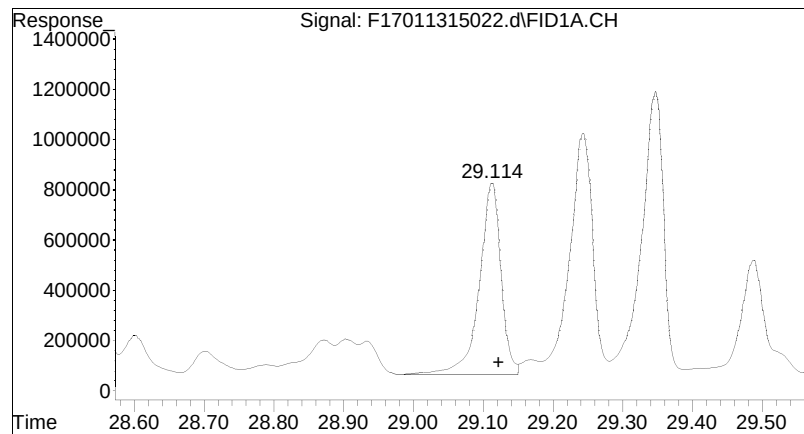
Data Path : 0:\Forensics\Data\FID17\2015\Jan\Jan13\
Data File : F17011315022.d
Operator : FID17:NL
Acquired : 14 Jan 2015 5:13 am using AcqMethod FID17.M
Instrument: FID17
Sample : L1500432-03,42
Misc Info : WG755546,WG755041
ALS Vial : 11





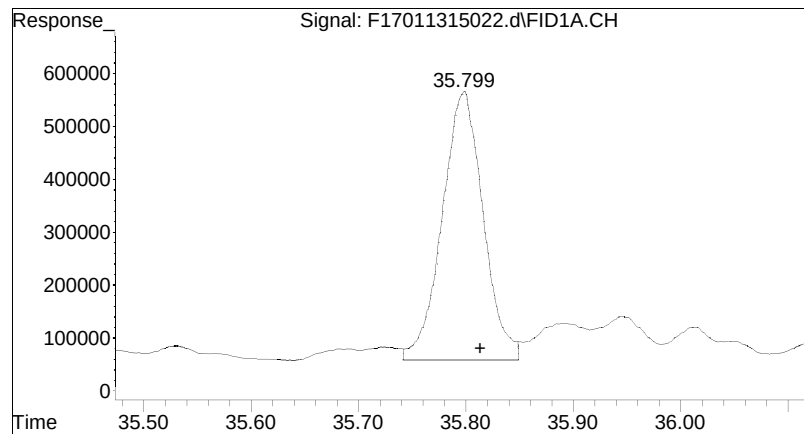
#1 5-alpha-androstane

R.T.: 31.137 min
Delta R.T.: 0.000 min
Response: 59344056
Conc: 50.00 ug/mL M4



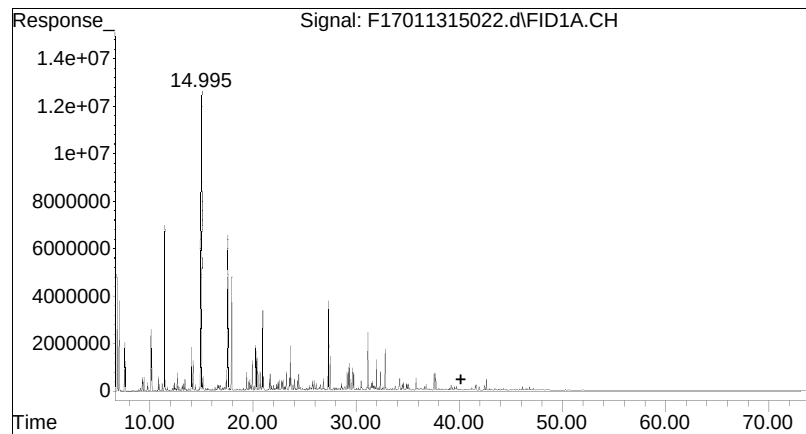
#19 ortho-terphenyl

R.T.: 29.114 min
Delta R.T.: -0.009 min
Response: 16514138
Conc: 12.64 ug/mL M4



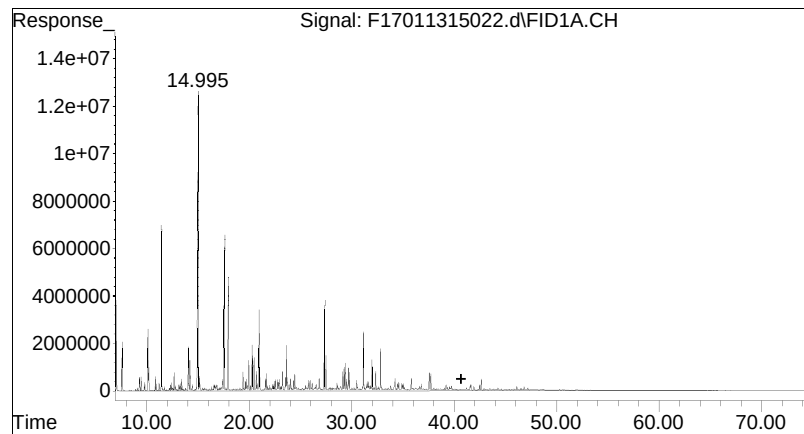
#24 d50-Tetracosane

R.T.: 35.799 min
Delta R.T.: -0.015 min
Response: 13207203
Conc: 12.45 ug/mL M4



#42 C9-C44 Total Petroleum Hy

R.T.: 40.166 min
Delta R.T.: 0.000 min
Response: 4648654838
Conc: 3990.81 ug/mL m



#45 Total Resolved Hydrocarbo

R.T.: 40.697 min
Delta R.T.: 0.000 min
Response: 3044421675
Conc: 2613.60 ug/mL m

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315024.d
 Signal(s) : FID1A.CH
 Acq On : 14 Jan 2015 6:42 am
 Operator : FID17:NL
 Sample : L1500432-04,42
 Misc : WG755546,WG755041
 ALS Vial : 12 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 11:24:05 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\2015\JANUARY\JAN13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Mon Nov 17 14:46:09 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Blank Name : IB1701131501F
 Blank File : F17011315010.D

Sub List : TPH - TPH

Compound	R.T.	Response	Conc Units

Internal Standards			
1) I 5-alpha-androstane	31.139	57739719	50.000 ug/mL M4
System Monitoring Compounds			
19) s ortho-terphenyl	29.113	16121670	12.687 ug/mL M4
Spiked Amount 50.000 Range	50 - 130	Recovery =	25.37%#
24) s d50-Tetracosane	35.795	12849399	12.450 ug/mL M4
Spiked Amount 50.000 Range	50 - 130	Recovery =	24.90%#
Target Compounds			
42) h C9-C44 Total Petroleu...	40.166	4869232818	4296.326 ug/mL m
42) h C9-C44 Total Petroleu BS	40.166	4283570946	3779.572 ug/mL m
45) h Total Resolved Hydroc...	40.697	3521933127	3107.548 ug/mL m

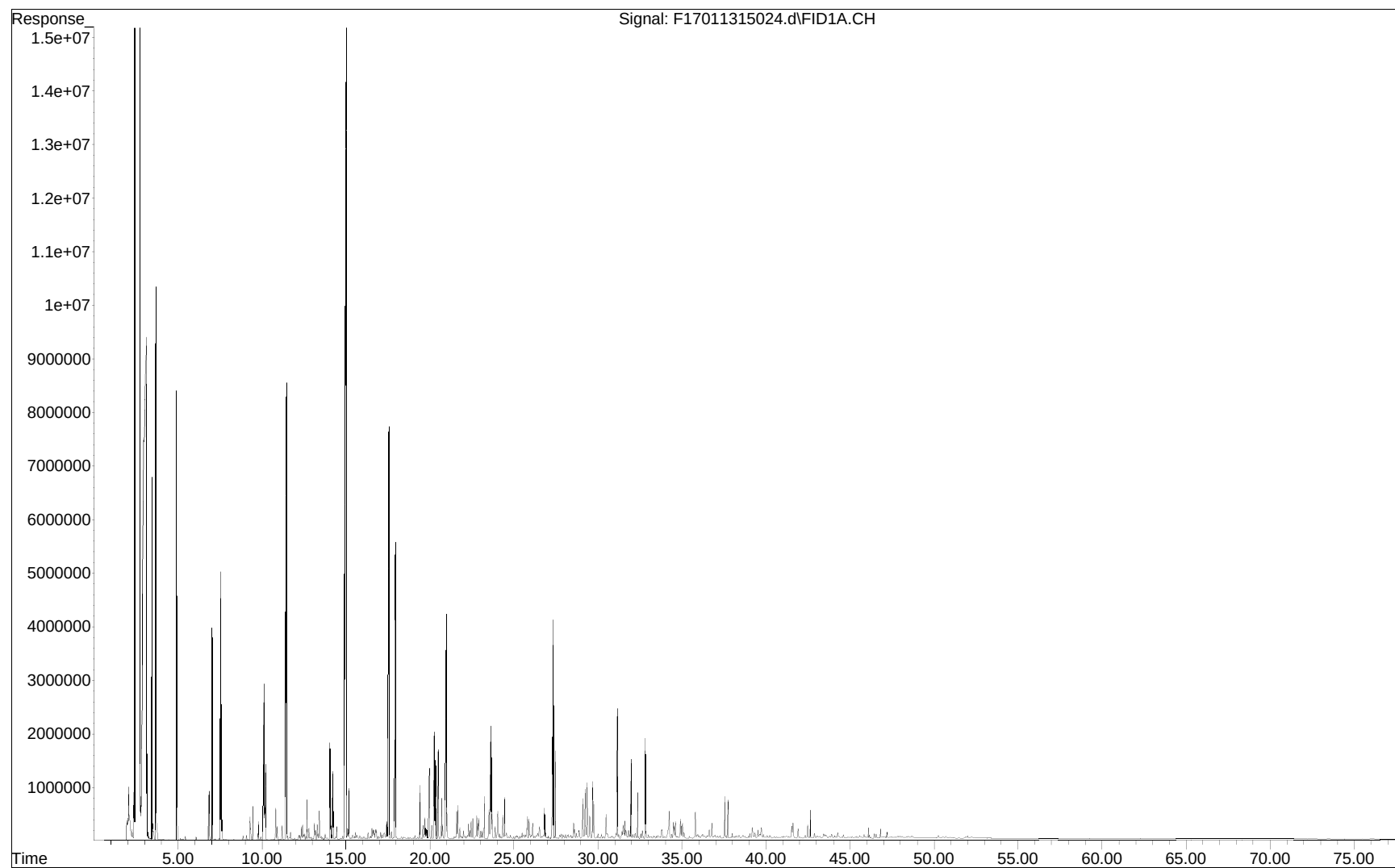
SemiQuant Compounds - Not Calibrated on this Instrument

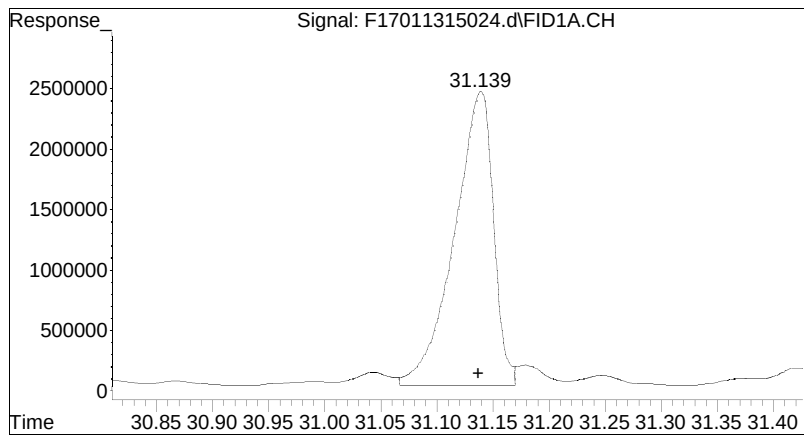
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

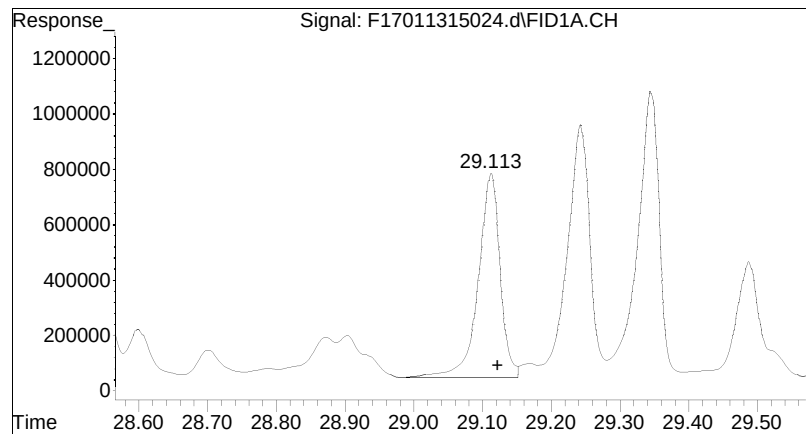
Data Path : 0:\Forensics\Data\FID17\2015\Jan\Jan13\
Data File : F17011315024.d
Operator : FID17:NL
Acquired : 14 Jan 2015 6:42 am using AcqMethod FID17.M
Instrument: FID17
Sample : L1500432-04,42
Misc Info : WG755546,WG755041
ALS Vial : 12





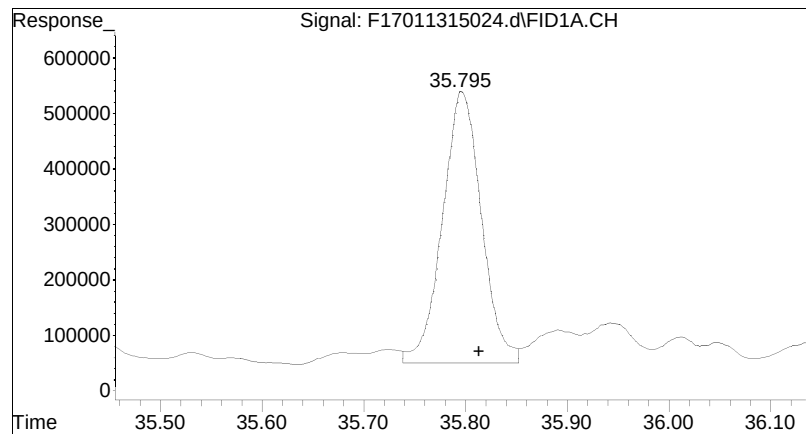
#1 5-alpha-androstane

R.T.: 31.139 min
Delta R.T.: 0.002 min
Response: 57739719
Conc: 50.00 ug/mL M4



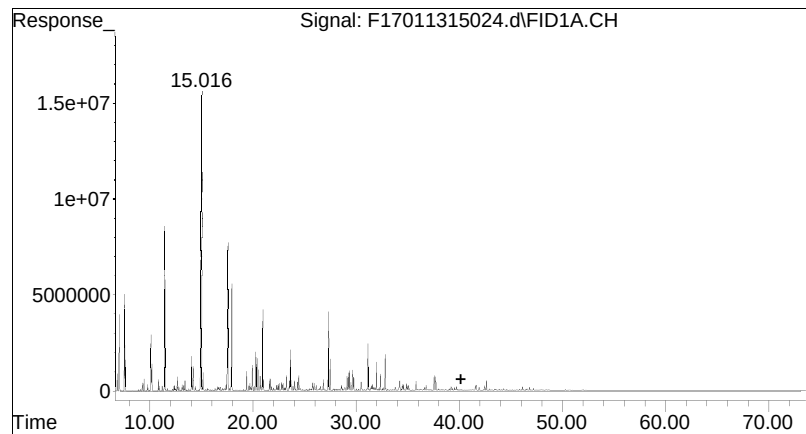
#19 ortho-terphenyl

R.T.: 29.113 min
Delta R.T.: -0.010 min
Response: 16121670
Conc: 12.69 ug/mL M4



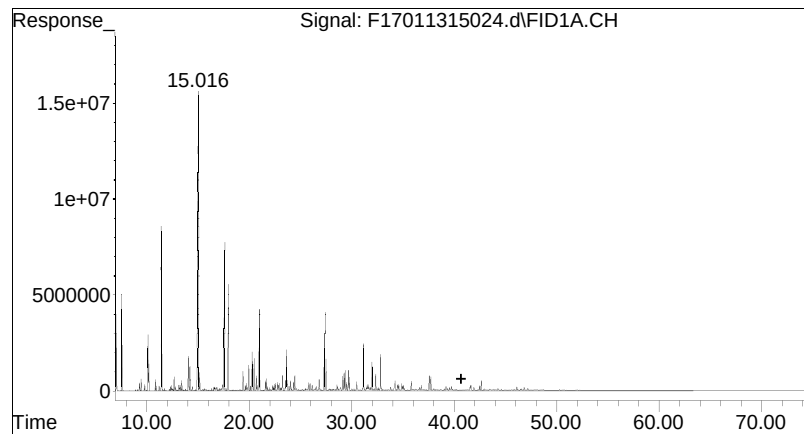
#24 d50-Tetracosane

R.T.: 35.795 min
Delta R.T.: -0.018 min
Response: 12849399
Conc: 12.45 ug/mL M4



#42 C9-C44 Total Petroleum Hy

R.T.: 40.166 min
Delta R.T.: 0.000 min
Response: 4869232818
Conc: 4296.33 ug/mL m



#45 Total Resolved Hydrocarbo

R.T.: 40.697 min
Delta R.T.: 0.000 min
Response: 3521933127
Conc: 3107.55 ug/mL m

Petroleum Standards Data

Initial Calibration

6B
FID FORENSICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1500432

Instrument ID: FID17

Calibration Date(s): 11/10/14

11/11/14

Calibration Times: 19:02

02:29

Calibration Files

1 =F17111014012.d 10 =F17111014014.d 50 =F17111014016.d 100 =F17111014018.d 200 =F17111014020.d
500 =F17111014022.d

Compound	1	10	50	100	200	500	Avg	%RSD
1) I 5-alpha-androstane	-----ISTD-----							
2) t n-Octane (C8)	0.858	0.822	0.839	0.861	0.855		0.847	1.94
3) t n-Nonane (C9)	0.883	0.849	0.862	0.888	0.874		0.871	1.81
4) t n-Decane (C10)	0.892	0.867	0.891	0.913	0.906		0.894	1.96
5) t n-Undecane (C11)	0.873	0.886	0.914	0.926	0.917		0.903	2.47
6) t n-Dodecane (C12)	0.883	0.905	0.933	0.938	0.930		0.918	2.55
7) t n-Tridecane (C13)	0.894	0.914	0.941	0.941	0.934		0.925	2.19
8) t 1380	0.908	0.928	0.953	0.950	0.943		0.936	2.00
9) t n-Tetradecane (C14)	0.908	0.928	0.953	0.950	0.943		0.936	2.00
10) t 1470	0.927	0.946	0.971	0.968	0.960		0.954	1.90
11) t n-Pentadecane (C15)	0.927	0.946	0.971	0.968	0.960		0.954	1.90
12) t n-Hexadecane (C16)	0.958	0.954	0.969	0.964	0.957		0.960	0.65
13) t 1650	0.910	0.946	0.975	0.971	0.966		0.953	2.81
14) t n-Heptadecane (C17)	0.910	0.946	0.975	0.971	0.966		0.953	2.81
15) t Pristane	1.010	0.976	0.989	0.982	0.968		0.985	1.63
16) t n-Octadecane (C18)	0.959	0.973	0.994	0.993	0.981		0.980	1.47
17) t Phytane	0.875	0.859	0.870	0.864	0.856		0.865	0.88
18) t n-Nonadecane (C19)	0.968	0.970	0.987	0.985	0.975		0.977	0.88
19) s ortho-terphenyl	1.173	1.089	1.093	1.096	1.076	1.076	1.100	3.34
20) t n-Eicosane (C20)	0.970	0.968	0.983	0.982	0.974		0.975	0.67
21) t n-Heneicosane (C21)	0.972	0.976	0.989	0.993	0.983		0.983	0.91
22) t n-Docosane (C22)	0.986	0.984	0.996	1.003	0.994		0.993	0.81
23) t n-Tricosane (C23)	1.001	0.992	1.003	1.013	1.003		1.002	0.77
24) s d50-Tetracosane	0.950	0.876	0.877	0.900	0.883	0.876	0.894	3.25
25) t n-Tetracosane (C24)	0.994	0.992	1.005	1.020	1.010		1.004	1.13
26) t n-Pentacosane (C25)	0.994	0.987	0.997	1.013	1.004		0.999	0.99
27) t n-Hexacosane (C26)	1.012	1.010	1.017	1.037	1.031		1.021	1.18
28) t n-Heptacosane (C27)	1.023	1.000	1.005	1.029	1.024		1.016	1.28
29) t n-Octacosane (C28)	1.031	0.992	0.999	1.027	1.024		1.015	1.76
30) t n-Nonacosane (C29)	1.009	0.999	1.002	1.038	1.037		1.017	1.86
31) t n-Triacontane (C30)	1.021	1.000	1.002	1.043	1.044		1.022	2.09
32) t n-Hentriacontane (C31)	1.016	1.000	0.999	1.048	1.049		1.023	2.42
33) t n-Dotriacontane (C32)	1.015	1.008	1.005	1.060	1.063		1.030	2.81
34) t n-Tritriacontane (C33)	0.965	0.948	0.948	1.006	1.009		0.975	3.11
35) t n-tetratriacontane (C34)	1.000	0.984	0.987	1.055	1.058		1.017	3.63
36) t n-Pentatriacontane (C35)	0.997	0.990	0.992	1.066	1.070		1.023	4.04
37) t n-Hexatriacontane (C36)	1.025	1.013	1.019	1.099	1.101		1.052	4.26
38) t n-Heptatriacontane (C37)	1.012	0.986	0.997	1.079	1.079		1.031	4.36
39) t n-Octatriacontane (C38)	0.984	0.968	0.982	1.062	1.060		1.011	4.55
40) t n-Nonatriacontane	1.028	1.004	1.033	1.114	1.105		1.057	4.66
41) t n-Tetracontane (C40)	1.028	1.004	1.033	1.114	1.105		1.057	4.66
42) h C9-C44 Total	0.970	0.963	0.976	1.002	0.997		0.981	1.75
43) h C9-C40 Total	0.970	0.963	0.976	1.002	0.997		0.981	1.75

6B
FID FORENSICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1500432

Instrument ID: FID17 Calibration Date(s): 11/10/14 11/11/14

Calibration Times: 19:02 02:29

Compound		1	10	50	100	200	500	Avg	%RSD
44) h	C10-C28 DRO	0.970	0.963	0.976	1.002	0.997		0.981	1.75
45) h	Total Resolve	0.970	0.963	0.976	1.002	0.997		0.981	1.75

FORM VI-A2-TPH

Response Factor Report FID17

Method Path : 0:\Forensics\Data\FID17\2014\NOV\NOV10\
 Method File : HC17111014F.M
 Title : FID Forensics
 Last Update : Mon Nov 17 14:46:09 2014
 Response Via : Initial Calibration

Calibration Files

1 =F17111014012.d 10 =F17111014014.d 50 =F17111014016.d 100 =F17111014018.d 200 =F17111014020.d
 500 =F17111014022.d

Compound		1	10	50	100	200	500	Avg	%RSD

1) I	5-alpha-androstane	-----ISTD-----							
2) t	n-Octane (C8)	0.858	0.822	0.839	0.861	0.855		0.847	1.94
3) t	n-Nonane (C9)	0.883	0.849	0.862	0.888	0.874		0.871	1.81
4) t	n-Decane (C10)	0.892	0.867	0.891	0.913	0.906		0.894	1.96
5) t	n-Undecane (C11)	0.873	0.886	0.914	0.926	0.917		0.903	2.47
6) t	n-Dodecane (C12)	0.883	0.905	0.933	0.938	0.930		0.918	2.55
7) t	n-Tridecane (...)	0.894	0.914	0.941	0.941	0.934		0.925	2.19
8) t	1380	0.908	0.928	0.953	0.950	0.943		0.936	2.00
9) t	n-Tetradecane...	0.908	0.928	0.953	0.950	0.943		0.936	2.00
10) t	1470	0.927	0.946	0.971	0.968	0.960		0.954	1.90
11) t	n-Pentadecane...	0.927	0.946	0.971	0.968	0.960		0.954	1.90
12) t	n-Hexadecane ...	0.958	0.954	0.969	0.964	0.957		0.960	0.65
13) t	1650	0.910	0.946	0.975	0.971	0.966		0.953	2.81
14) t	n-Heptadecane...	0.910	0.946	0.975	0.971	0.966		0.953	2.81
15) t	Pristane	1.010	0.976	0.989	0.982	0.968		0.985	1.63
16) t	n-Octadecane ...	0.959	0.973	0.994	0.993	0.981		0.980	1.47
17) t	Phytane	0.875	0.859	0.870	0.864	0.856		0.865	0.88
18) t	n-Nonadecane ...	0.968	0.970	0.987	0.985	0.975		0.977	0.88
19) s	ortho-terphenyl	1.173	1.089	1.093	1.096	1.076	1.076	1.100	3.34
20) t	n-Eicosane (C20)	0.970	0.968	0.983	0.982	0.974		0.975	0.67
21) t	n-Heneicosane...	0.972	0.976	0.989	0.993	0.983		0.983	0.91
22) t	n-Docosane (C22)	0.986	0.984	0.996	1.003	0.994		0.993	0.81
23) t	n-Tricosane (...)	1.001	0.992	1.003	1.013	1.003		1.002	0.77
24) s	d50-Tetracosane	0.950	0.876	0.877	0.900	0.883	0.876	0.894	3.25
25) t	n-Tetracosane...	0.994	0.992	1.005	1.020	1.010		1.004	1.13
26) t	n-Pentacosane...	0.994	0.987	0.997	1.013	1.004		0.999	0.99
27) t	n-Hexacosane ...	1.012	1.010	1.017	1.037	1.031		1.021	1.18
28) t	n-Heptacosane...	1.023	1.000	1.005	1.029	1.024		1.016	1.28
29) t	n-Octacosane ...	1.031	0.992	0.999	1.027	1.024		1.015	1.76
30) t	n-Nonacosane ...	1.009	0.999	1.002	1.038	1.037		1.017	1.86
31) t	n-Triacontane...	1.021	1.000	1.002	1.043	1.044		1.022	2.09

Response Factor Report FID17

Method Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Method File : HC17111014F.M
 Title : FID Forensics
 Last Update : Mon Nov 17 14:46:09 2014
 Response Via : Initial Calibration

Calibration Files

1 =F17111014012.d 10 =F17111014014.d 50 =F17111014016.d 100 =F17111014018.d 200 =F17111014020.d
 500 =F17111014022.d

	Compound	1	10	50	100	200	500	Avg	%RSD
32) t	n-Hentriacont...	1.016	1.000	0.999	1.048	1.049		1.023	2.42
33) t	n-Dotriaconta...	1.015	1.008	1.005	1.060	1.063		1.030	2.81
34) t	n-Tritriacont...	0.965	0.948	0.948	1.006	1.009		0.975	3.11
35) t	n-tetatriacono...	1.000	0.984	0.987	1.055	1.058		1.017	3.63
36) t	n-Pentatriacono...	0.997	0.990	0.992	1.066	1.070		1.023	4.04
37) t	n-Hexatriacono...	1.025	1.013	1.019	1.099	1.101		1.052	4.26
38) t	n-Heptatriacono...	1.012	0.986	0.997	1.079	1.079		1.031	4.36
39) t	n-Octatriacono...	0.984	0.968	0.982	1.062	1.060		1.011	4.55
40) t	n-Nonatriacono...	1.028	1.004	1.033	1.114	1.105		1.057	4.66
41) t	n-Tetracontan...	1.028	1.004	1.033	1.114	1.105		1.057	4.66
42) h	C9-C44 Total ...	0.970	0.963	0.976	1.002	0.997		0.981	1.75
43) h	C9-C40 Total ...	0.970	0.963	0.976	1.002	0.997		0.981	1.75
44) h	C10-C28 DRO	0.970	0.963	0.976	1.002	0.997		0.981	1.75
45) h	Total Resolve...	0.970	0.963	0.976	1.002	0.997		0.981	1.75

 (#) = Out of Range

RSF Update Summary Report

Method Path.....: O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Method File.....: HC17111014F.M
 Method Title.....: FID Forensics
 Last Update.....: Mon Nov 17 14:44:21 2014

Generating Average Response Factor For: C9-C44 Total Petroleum Hydrocarbons

No	Compound	Level	Conc	Response

1	n-Nonane (C9)	1	1.00000	956166.850
2	n-Decane (C10)	1	1.00000	965575.156
3	n-Undecane (C11)	1	1.00000	945978.032
4	n-Dodecane (C12)	1	1.00000	956040.780
5	n-Tridecane (C13)	1	1.00000	968666.065
6	n-Tetradecane (C14)	1	1.00000	982914.837
7	n-Pentadecane (C15)	1	1.00000	1003729.234
8	n-Hexadecane (C16)	1	1.00000	1037076.323
9	n-Heptadecane (C17)	1	1.00000	985154.446
10	Pristane	1	1.00000	1093918.178
11	n-Octadecane (C18)	1	1.00000	1038773.184
12	Phytane	1	1.00000	947367.010
13	n-Nonadecane (C19)	1	1.00000	1048873.675
14	n-Eicosane (C20)	1	1.00000	1050923.185
15	n-Heneicosane (C21)	1	1.00000	1052164.354
16	n-Docosane (C22)	1	1.00000	1067395.148
17	n-Tricosane (C23)	1	1.00000	1084446.063
18	n-Tetracosane (C24)	1	1.00000	1076773.677
19	n-Pentacosane (C25)	1	1.00000	1076154.642
20	n-Hexacosane (C26)	1	1.00000	1095972.739
21	n-Heptacosane (C27)	1	1.00000	1108389.553
22	n-Octacosane (C28)	1	1.00000	1117077.100
23	n-Nonacosane (C29)	1	1.00000	1093208.318
24	n-Triacontane (C30)	1	1.00000	1105800.579
25	n-Hentriacontane (C31)	1	1.00000	1100716.731
26	n-Dotriacontane (C32)	1	1.00000	1099085.755
27	n-Tritriacontane (C33)	1	1.00000	1045498.580
28	n-tetratriacontane (C34)	1	1.00000	1083357.182
29	n-Pentatriacontane (C35)	1	1.00000	1079522.254
30	n-Hexatriacontane (C36)	1	1.00000	1109798.951
31	n-Heptatriacontane (C37)	1	1.00000	1096538.366
32	n-Octatriacontane (C38)	1	1.00000	1065698.162
33	n-Tetracontane (C40)	1	1.00000	1113747.106

Avg RSF For: C9-C44 Total Petroleum			1.00000	1050075.825

1	n-Nonane (C9)	2	10.00000	9571218.032
2	n-Decane (C10)	2	10.00000	9773459.692
3	n-Undecane (C11)	2	10.00000	9991961.996
4	n-Dodecane (C12)	2	10.00000	10206110.806
5	n-Tridecane (C13)	2	10.00000	10303226.050
6	n-Tetradecane (C14)	2	10.00000	10460708.697
7	n-Pentadecane (C15)	2	10.00000	10664004.171
8	n-Hexadecane (C16)	2	10.00000	10751385.225
9	n-Heptadecane (C17)	2	10.00000	10666998.447
10	Pristane	2	10.00000	10997838.390
11	n-Octadecane (C18)	2	10.00000	10973499.727
12	Phytane	2	10.00000	9686819.949
13	n-Nonadecane (C19)	2	10.00000	10933111.412
14	n-Eicosane (C20)	2	10.00000	10914757.626

rfupdate.txt				
15	n-Heneicosane (C21)	2	10.00000	11005550.647
16	n-Docosane (C22)	2	10.00000	11090258.377
17	n-Tricosane (C23)	2	10.00000	11177596.766
18	n-Tetracosane (C24)	2	10.00000	11187494.340
19	n-Pentacosane (C25)	2	10.00000	11131468.403
20	n-Hexacosane (C26)	2	10.00000	11381761.427
21	n-Heptacosane (C27)	2	10.00000	11270080.304
22	n-Octacosane (C28)	2	10.00000	11186318.226
23	n-Nonacosane (C29)	2	10.00000	11258816.490
24	n-Triacontane (C30)	2	10.00000	11268522.448
25	n-Hentriacontane (C31)	2	10.00000	11275401.001
26	n-Dotriacontane (C32)	2	10.00000	11359576.684
27	n-Tritriacontane (C33)	2	10.00000	10681175.532
28	n-tetratriacontane (C34)	2	10.00000	11092909.132
29	n-Pentatriacontane (C35)	2	10.00000	11156812.789
30	n-Hexatriacontane (C36)	2	10.00000	11422542.616
31	n-Heptatriacontane (C37)	2	10.00000	11112602.223
32	n-Octatriacontane (C38)	2	10.00000	10908503.254
33	n-Tetracontane (C40)	2	10.00000	11317317.803

Avg RSF For: C9-C44 Total Petroleum			10.00000	10853933.596
1	n-Nonane (C9)	3	50.00000	46801134.640
2	n-Decane (C10)	3	50.00000	48405866.302
3	n-Undecane (C11)	3	50.00000	49661379.227
4	n-Dodecane (C12)	3	50.00000	50686941.286
5	n-Tridecane (C13)	3	50.00000	51093773.490
6	n-Tetradecane (C14)	3	50.00000	51735305.888
7	n-Pentadecane (C15)	3	50.00000	52726106.277
8	n-Hexadecane (C16)	3	50.00000	52629891.295
9	n-Heptadecane (C17)	3	50.00000	52933667.657
10	Pristane	3	50.00000	53728133.846
11	n-Octadecane (C18)	3	50.00000	53966088.468
12	Phytane	3	50.00000	47224331.509
13	n-Nonadecane (C19)	3	50.00000	53604297.258
14	n-Eicosane (C20)	3	50.00000	53373894.140
15	n-Heneicosane (C21)	3	50.00000	53706674.897
16	n-Docosane (C22)	3	50.00000	54114794.335
17	n-Tricosane (C23)	3	50.00000	54468080.152
18	n-Tetracosane (C24)	3	50.00000	54558609.238
19	n-Pentacosane (C25)	3	50.00000	54123508.809
20	n-Hexacosane (C26)	3	50.00000	55246629.154
21	n-Heptacosane (C27)	3	50.00000	54568290.738
22	n-Octacosane (C28)	3	50.00000	54246379.777
23	n-Nonacosane (C29)	3	50.00000	54437873.339
24	n-Triacontane (C30)	3	50.00000	54410127.134
25	n-Hentriacontane (C31)	3	50.00000	54264859.615
26	n-Dotriacontane (C32)	3	50.00000	54592430.086
27	n-Tritriacontane (C33)	3	50.00000	51478791.228
28	n-tetratriacontane (C34)	3	50.00000	53603676.807
29	n-Pentatriacontane (C35)	3	50.00000	53899156.017
30	n-Hexatriacontane (C36)	3	50.00000	55334260.358
31	n-Heptatriacontane (C37)	3	50.00000	54162137.881
32	n-Octatriacontane (C38)	3	50.00000	53323713.930
33	n-Tetracontane (C40)	3	50.00000	56122385.531

Avg RSF For: C9-C44 Total Petroleum			50.00000	53007066.373
1	n-Nonane (C9)	4	100.00000	92546861.192
2	n-Decane (C10)	4	100.00000	95150145.551
3	n-Undecane (C11)	4	100.00000	96504886.549
4	n-Dodecane (C12)	4	100.00000	97813354.954
5	n-Tridecane (C13)	4	100.00000	98128724.750
6	n-Tetradecane (C14)	4	100.00000	99098349.370
7	n-Pentadecane (C15)	4	100.00000	100894959.280
8	n-Hexadecane (C16)	4	100.00000	100542165.042

rfupdate.txt			
9 n-Heptadecane (C17)	4	100.00000	101195746.220
10 Pristane	4	100.00000	102363704.392
11 n-Octadecane (C18)	4	100.00000	103494807.730
12 Phytane	4	100.00000	90107645.961
13 n-Nonadecane (C19)	4	100.00000	102722661.551
14 n-Eicosane (C20)	4	100.00000	102338718.868
15 n-Heneicosane (C21)	4	100.00000	103561695.242
16 n-Docosane (C22)	4	100.00000	104611286.417
17 n-Tricosane (C23)	4	100.00000	105634839.540
18 n-Tetracosane (C24)	4	100.00000	106336756.883
19 n-Pentacosane (C25)	4	100.00000	105611101.081
20 n-Hexacosane (C26)	4	100.00000	108152181.990
21 n-Heptacosane (C27)	4	100.00000	107262727.666
22 n-Octacosane (C28)	4	100.00000	107073578.813
23 n-Nonacosane (C29)	4	100.00000	108209907.372
24 n-Triacontane (C30)	4	100.00000	108739389.295
25 n-Hentriacontane (C31)	4	100.00000	109245612.750
26 n-Dotriacontane (C32)	4	100.00000	110550981.571
27 n-Tritriacontane (C33)	4	100.00000	104844271.241
28 n-tetratriacontane (C34)	4	100.00000	110027218.622
29 n-Pentatriacontane (C35)	4	100.00000	111133176.317
30 n-Hexatriacontane (C36)	4	100.00000	114629087.490
31 n-Heptatriacontane (C37)	4	100.00000	112472231.403
32 n-Octatriacontane (C38)	4	100.00000	110748872.947
33 n-Tetracontane (C40)	4	100.00000	116119008.402

Avg RSF For: C9-C44 Total Petroleum		100.00000	104480807.771
1 n-Nonane (C9)	5	200.00000	183994497.292
2 n-Decane (C10)	5	200.00000	190630603.670
3 n-Undecane (C11)	5	200.00000	192977775.796
4 n-Dodecane (C12)	5	200.00000	195722039.931
5 n-Tridecane (C13)	5	200.00000	196451380.600
6 n-Tetradecane (C14)	5	200.00000	198370822.567
7 n-Pentadecane (C15)	5	200.00000	201966601.052
8 n-Hexadecane (C16)	5	200.00000	201302145.051
9 n-Heptadecane (C17)	5	200.00000	203355194.176
10 Pristane	5	200.00000	203706839.250
11 n-Octadecane (C18)	5	200.00000	206512059.176
12 Phytane	5	200.00000	180095178.986
13 n-Nonadecane (C19)	5	200.00000	205137349.145
14 n-Eicosane (C20)	5	200.00000	204858566.695
15 n-Heneicosane (C21)	5	200.00000	206881189.955
16 n-Docosane (C22)	5	200.00000	209103777.146
17 n-Tricosane (C23)	5	200.00000	211118913.202
18 n-Tetracosane (C24)	5	200.00000	212476277.808
19 n-Pentacosane (C25)	5	200.00000	211377509.264
20 n-Hexacosane (C26)	5	200.00000	216859002.454
21 n-Heptacosane (C27)	5	200.00000	215525450.662
22 n-Octacosane (C28)	5	200.00000	215543841.344
23 n-Nonacosane (C29)	5	200.00000	218200394.427
24 n-Triacontane (C30)	5	200.00000	219666382.510
25 n-Hentriacontane (C31)	5	200.00000	220837165.611
26 n-Dotriacontane (C32)	5	200.00000	223659666.599
27 n-Tritriacontane (C33)	5	200.00000	212305009.296
28 n-tetratriacontane (C34)	5	200.00000	222719307.925
29 n-Pentatriacontane (C35)	5	200.00000	225244105.605
30 n-Hexatriacontane (C36)	5	200.00000	231762250.063
31 n-Heptatriacontane (C37)	5	200.00000	226986887.768
32 n-Octatriacontane (C38)	5	200.00000	222999978.711
33 n-Tetracontane (C40)	5	200.00000	232479116.576

Avg RSF For: C9-C44 Total Petroleum		200.00000	209722038.797

Generating Reference Response Factors

		rfupdate.txt	
No	Compound	No	Reference Compound

8	1380	9	n-Tetradecane (C14)
10	1470	11	n-Pentadecane (C15)
13	1650	14	n-Heptadecane (C17)
40	n-Nonatriacontane (C39)	41	n-Tetracontane (C40)
43	C9-C40 Total Petroleum Hydrocarbons	42	C9-C44 Total Petroleum
44	C10-C28 DRO	42	C9-C44 Total Petroleum
45	Total Resolved Hydrocarbons	42	C9-C44 Total Petroleum

Abacus Response Factor Update Macro Ver. 1.0			

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014012.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 7:02 pm
 Operator : FID17:NL
 Sample : I1711011401R
 Misc : WG743851, FRAV23 1ug/mL
 ALS Vial : 6 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:28:33 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Tue Nov 05 21:46:11 2013
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.266	54151158	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.225	1270913	1.047	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 2.09%#
24) s	d50-Tetracosane	35.902	1028871	1.075	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 2.15%#
Target Compounds					
2) t	n-Octane (C8)	5.546	928802	0.968	ug/mL M4
3) t	n-Nonane (C9)	7.756	956167	0.949	ug/mL M4
4) t	n-Decane (C10)	10.249	965575	0.913	ug/mL M4
5) t	n-Undecane (C11)	12.766	945978	0.912	ug/mL M4
6) t	n-Dodecane (C12)	15.196	956041	0.915	ug/mL M4
7) t	n-Tridecane (C13)	17.506	968666	0.928	ug/mL M4
9) t	n-Tetradecane (C14)	19.691	982915	0.909	ug/mL M4
11) t	n-Pentadecane (C15)	21.760	1003729	0.940	ug/mL M4
12) t	n-Hexadecane (C16)	23.721	1037076	0.964	ug/mL M4
14) t	n-Heptadecane (C17)	25.581	985154	0.911	ug/mL M4
15) t	Pristane	25.691	1093918	1.009	ug/mL M4
16) t	n-Octadecane (C18)	27.353	1038773	0.966	ug/mL M4
17) t	Phytane	27.514	947367	0.867	ug/mL M4
18) t	n-Nonadecane (C19)	29.039	1048874	0.981	ug/mL M4
20) t	n-Eicosane (C20)	30.652	1050923	0.978	ug/mL M4
21) t	n-Heneicosane (C21)	32.194	1052164	0.968	ug/mL M4
22) t	n-Docosane (C22)	33.669	1067395	0.977	ug/mL M4
23) t	n-Tricosane (C23)	35.087	1084446	0.987	ug/mL M4
25) t	n-Tetracosane (C24)	36.448	1076774	0.979	ug/mL M4
26) t	n-Pentacosane (C25)	37.758	1076155	0.975	ug/mL M4
27) t	n-Hexacosane (C26)	39.019	1095973	0.973	ug/mL M4
28) t	n-Heptacosane (C27)	40.236	1108390	0.991	ug/mL M4
29) t	n-Octacosane (C28)	41.409	1117077	0.996	ug/mL M4
30) t	n-Nonacosane (C29)	42.544	1093208	0.966	ug/mL M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014012.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 7:02 pm
 Operator : FID17:NL
 Sample : I1711011401R
 Misc : WG743851, FRAV23 1ug/mL
 ALS Vial : 6 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:28:33 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Tue Nov 05 21:46:11 2013
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc Units
31) t	n-Triacontane (C30)	43.643	1105801	0.973 ug/mL M4
32) t	n-Hentriacontane (C31)	44.706	1100717	0.962 ug/mL M4
33) t	n-Dotriacontane (C32)	45.736	1099086	0.966 ug/mL M4
34) t	n-Tritriacontane (C33)	46.734	1045499	0.946 ug/mL M4
35) t	n-tetratriacontane (C34)	47.754	1083357	0.923 ug/mL M4
36) t	n-Pentatriacontane (C35)	48.902	1079522	0.925 ug/mL M4
37) t	n-Hexatriacontane (C36)	50.206	1109799	0.878 ug/mL M4
38) t	n-Heptatriacontane (C37)	51.723	1096538	0.930 ug/mL M4
39) t	n-Octatriacontane (C38)	53.487	1065698	0.904 ug/mL M4
41) t	n-Tetracontane (C40)	58.012	1113747	0.982 ug/mL M4

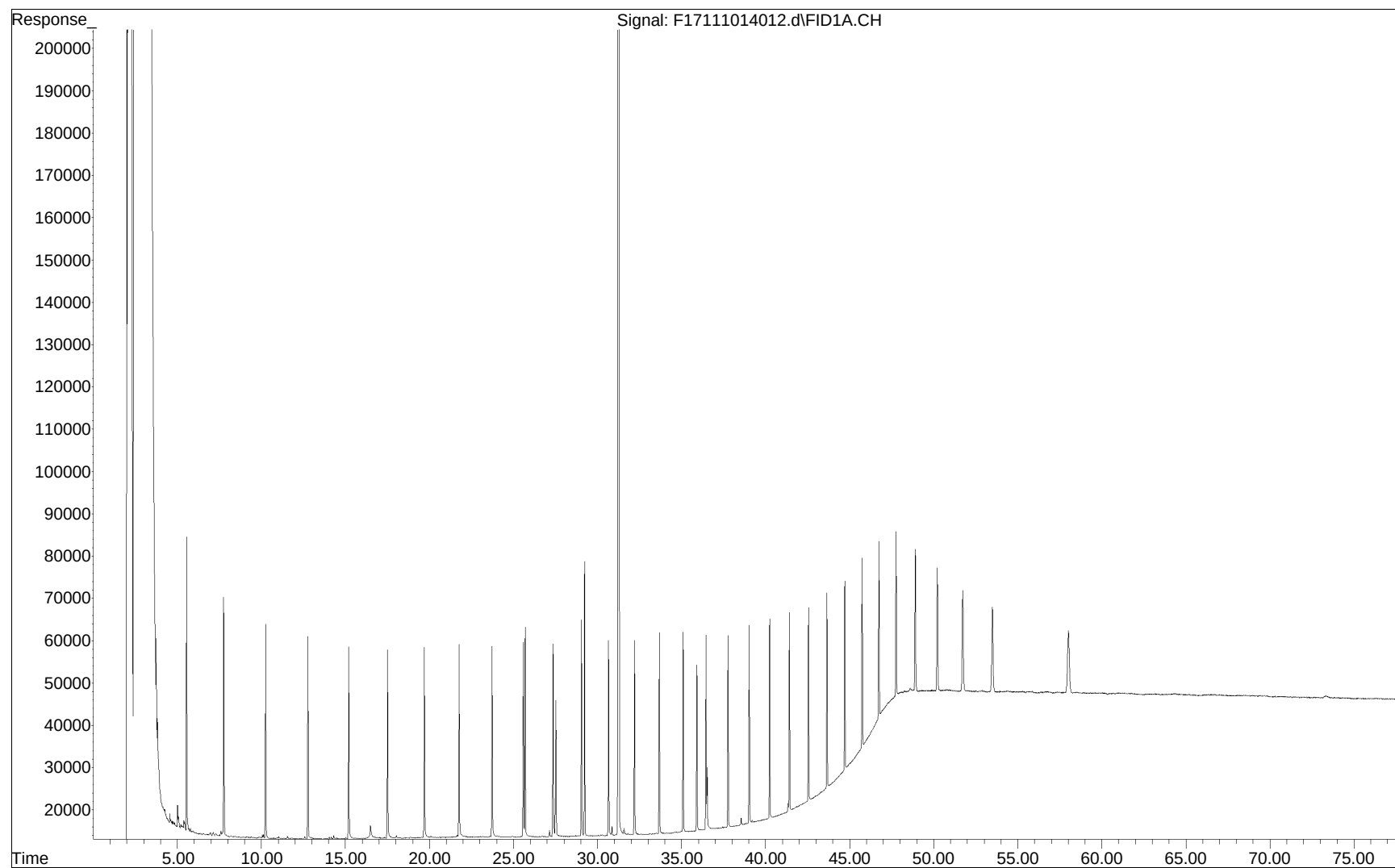
SemiQuant Compounds - Not Calibrated on this Instrument

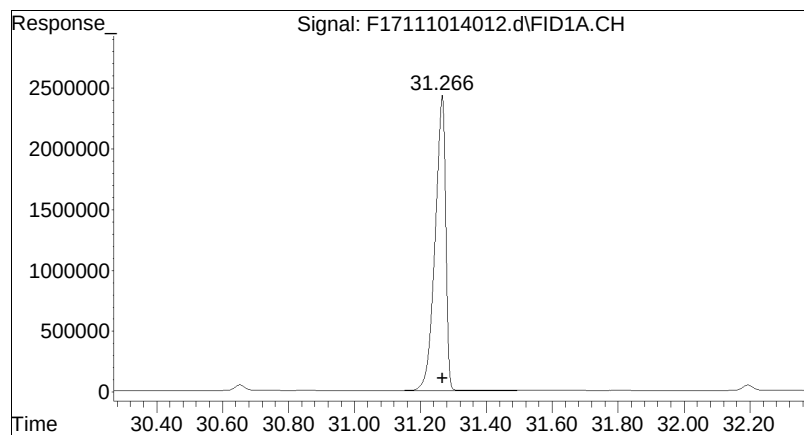
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

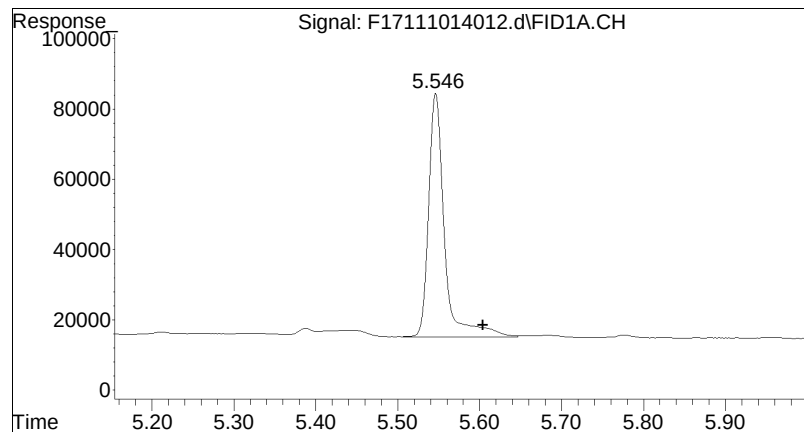
File : 0:\Forensics\Data\FID17\2014\NOV\NOV10\F17111014012.d
Operator : FID17:NL
Acquired : 10 Nov 2014 7:02 pm using AcqMethod FID17.M
Sample Name: I1711011401R
Instrument: FID17
Misc Info : WG743851, FRAV23 1ug/mL
Vial Number: 6
CurrentMeth: 0:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M





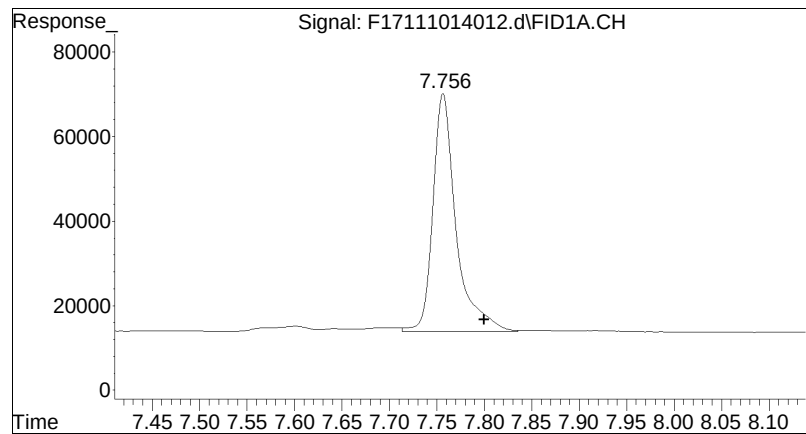
#1 5-alpha-androstane

R.T.: 31.266 min
Delta R.T.: -0.003 min
Response: 54151158
Conc: 50.00 ug/mL M4



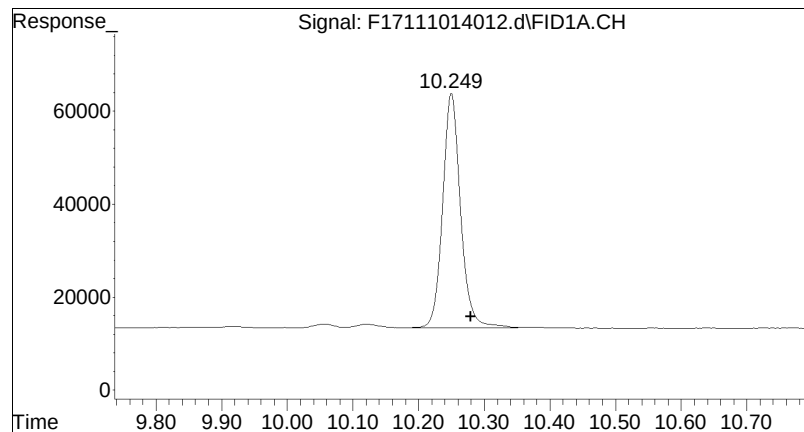
#2 n-Octane (C8)

R.T.: 5.546 min
Delta R.T.: -0.058 min
Response: 928802
Conc: 0.97 ug/mL M4



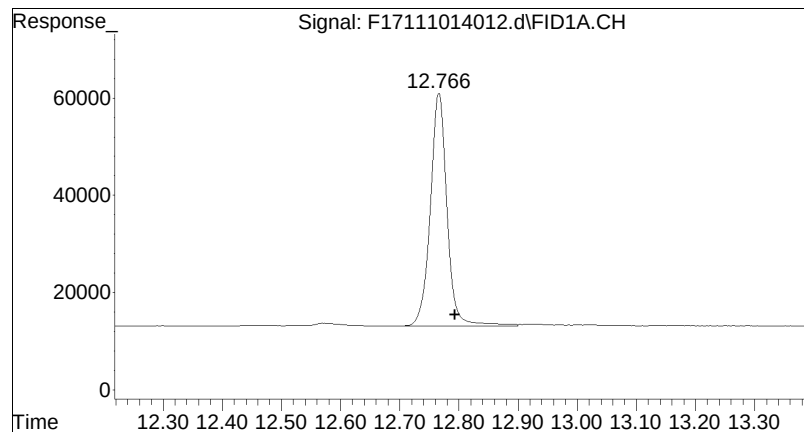
#3 n-Nonane (C9)

R.T.: 7.756 min
Delta R.T.: -0.044 min
Response: 956167
Conc: 0.95 ug/mL M4



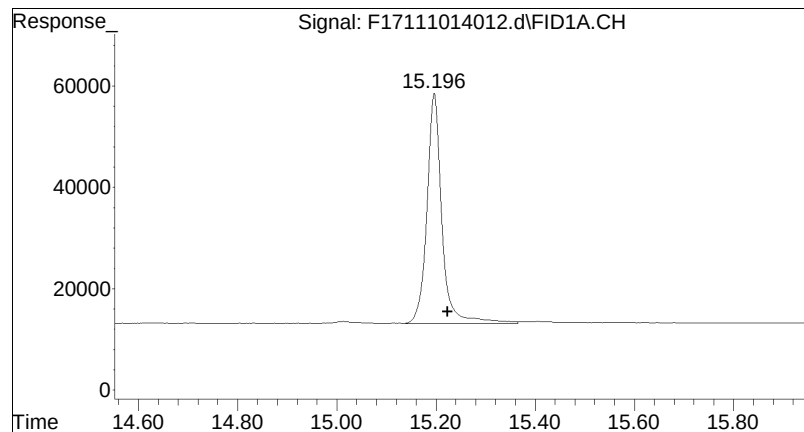
#4 n-Decane (C10)

R.T.: 10.249 min
Delta R.T.: -0.030 min
Response: 965575
Conc: 0.91 ug/mL M4



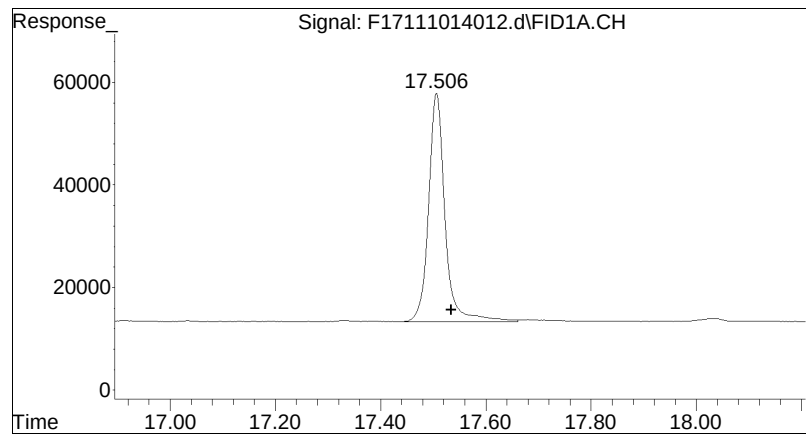
#5 n-Undecane (C11)

R.T.: 12.766 min
Delta R.T.: -0.027 min
Response: 945978
Conc: 0.91 ug/mL M4



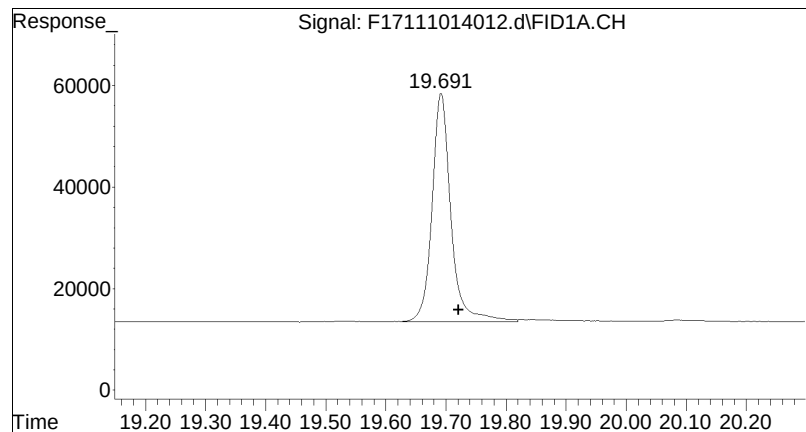
#6 n-Dodecane (C12)

R.T.: 15.196 min
Delta R.T.: -0.027 min
Response: 956041
Conc: 0.91 ug/mL M4



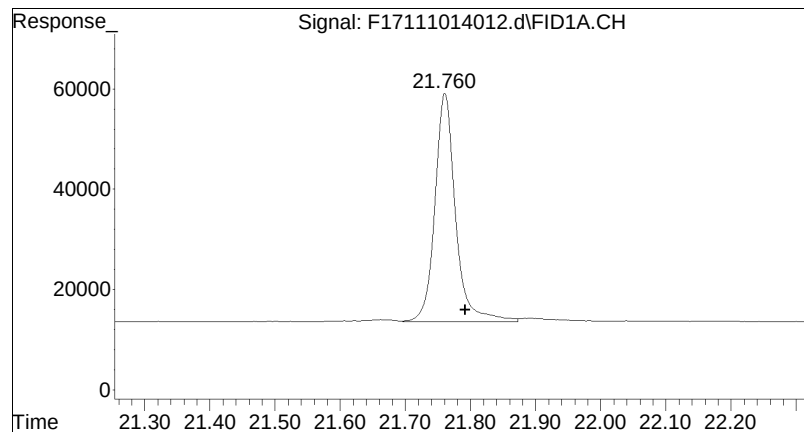
#7 n-Tridecane (C13)

R.T.: 17.506 min
Delta R.T.: -0.028 min
Response: 968666
Conc: 0.93 ug/mL M4



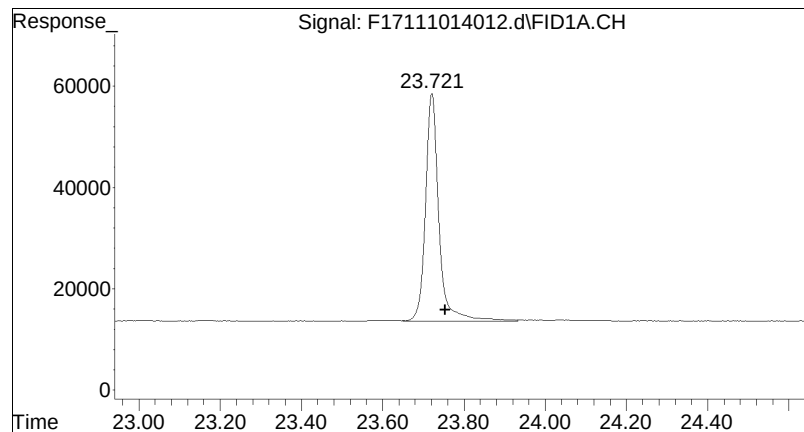
#9 n-Tetradecane (C14)

R.T.: 19.691 min
Delta R.T.: -0.030 min
Response: 982915
Conc: 0.91 ug/mL M4



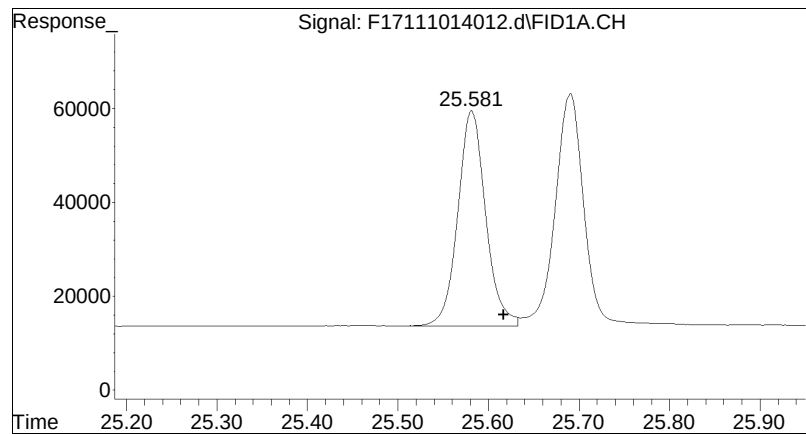
#11 n-Pentadecane (C15)

R.T.: 21.760 min
Delta R.T.: -0.032 min
Response: 1003729
Conc: 0.94 ug/mL M4



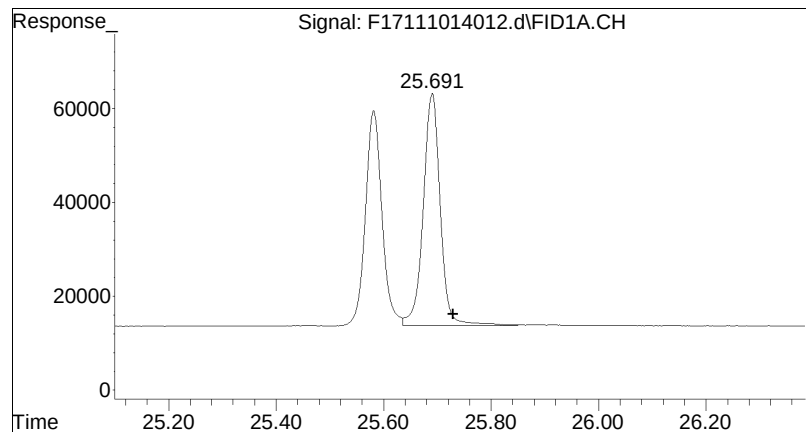
#12 n-Hexadecane (C16)

R.T.: 23.721 min
Delta R.T.: -0.032 min
Response: 1037076
Conc: 0.96 ug/mL M4



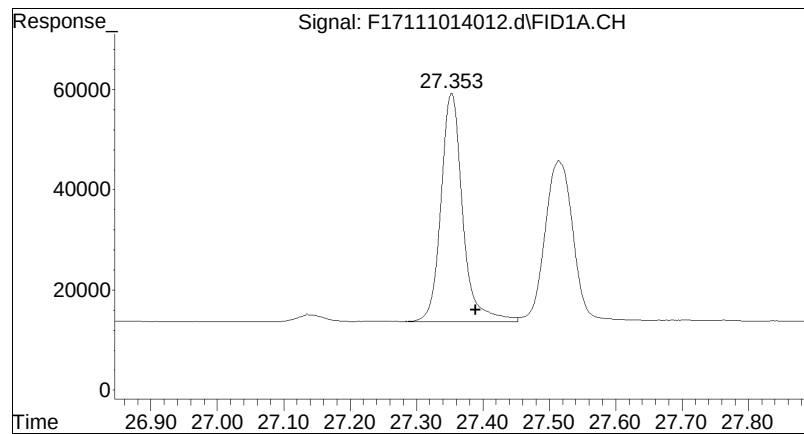
#14 n-Heptadecane (C17)

R.T.: 25.581 min
Delta R.T.: -0.036 min
Response: 985154
Conc: 0.91 ug/mL M4



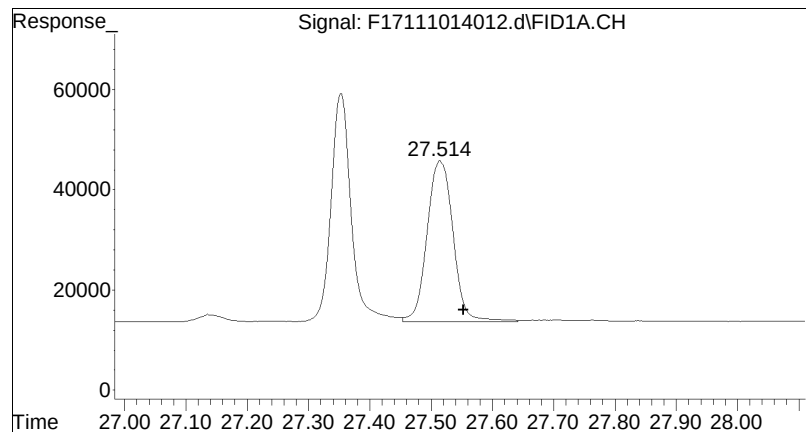
#15 Pristane

R.T.: 25.691 min
Delta R.T.: -0.039 min
Response: 1093918
Conc: 1.01 ug/mL M4



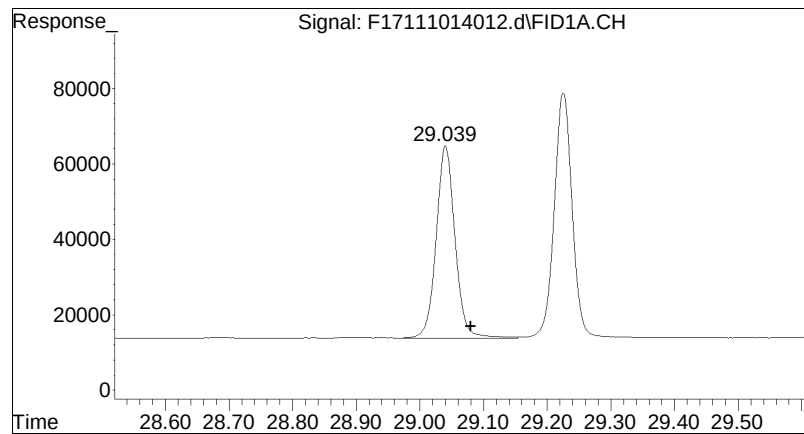
#16 n-Octadecane (C18)

R.T.: 27.353 min
Delta R.T.: -0.037 min
Response: 1038773
Conc: 0.97 ug/mL M4



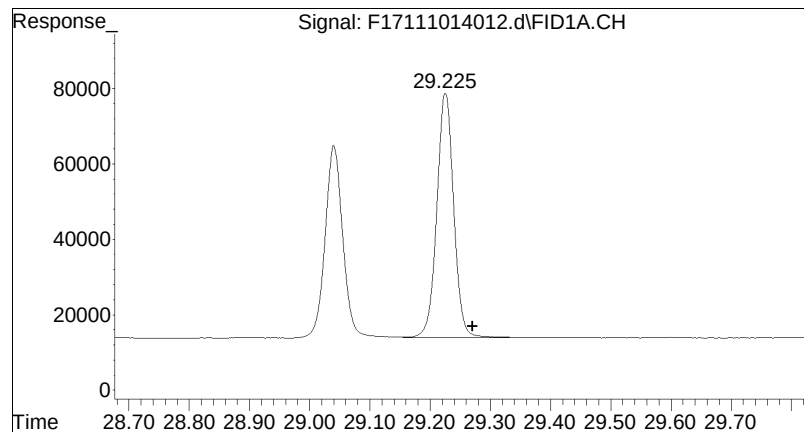
#17 Phytane

R.T.: 27.514 min
Delta R.T.: -0.039 min
Response: 947367
Conc: 0.87 ug/mL M4



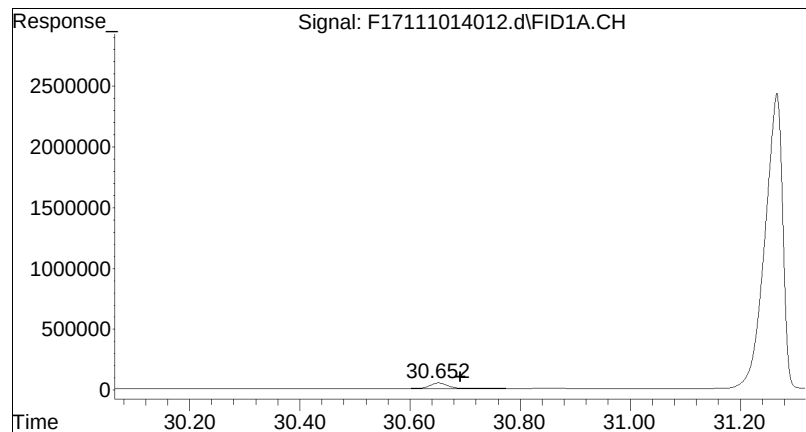
#18 n-Nonadecane (C19)

R.T.: 29.039 min
Delta R.T.: -0.041 min
Response: 1048874
Conc: 0.98 ug/mL M4



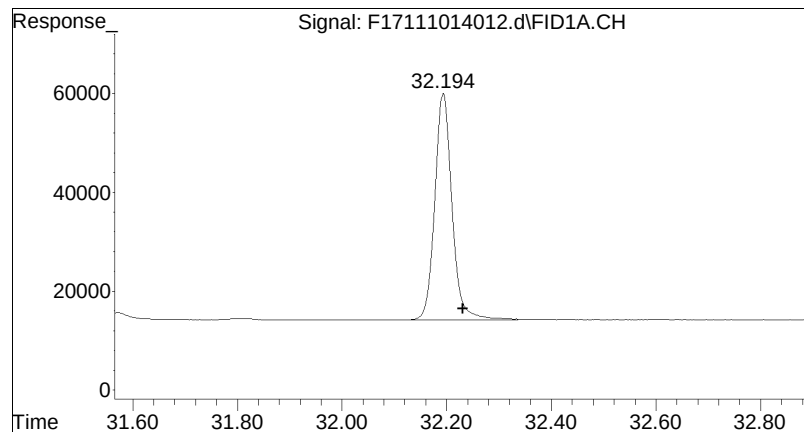
#19 ortho-terphenyl

R.T.: 29.225 min
Delta R.T.: -0.046 min
Response: 1270913
Conc: 1.05 ug/mL M4



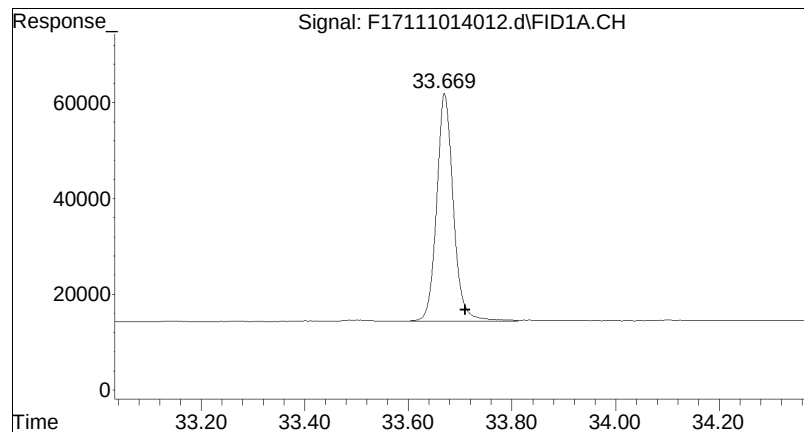
#20 n-Eicosane (C20)

R.T.: 30.652 min
Delta R.T.: -0.039 min
Response: 1050923
Conc: 0.98 ug/mL M4



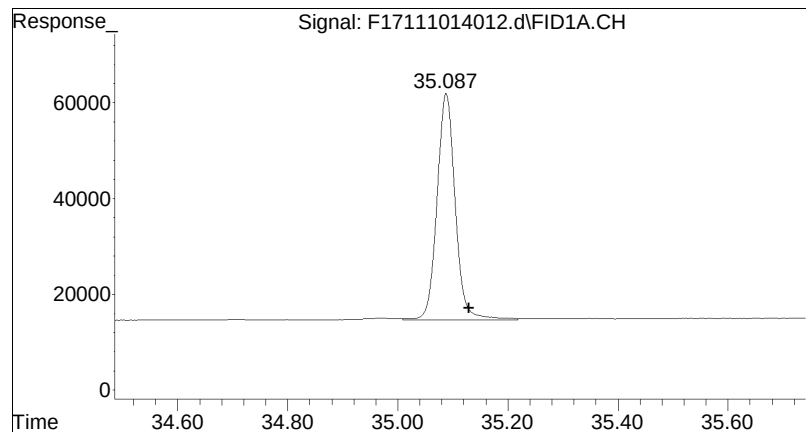
#21 n-Heneicosane (C21)

R.T.: 32.194 min
Delta R.T.: -0.037 min
Response: 1052164
Conc: 0.97 ug/mL M4



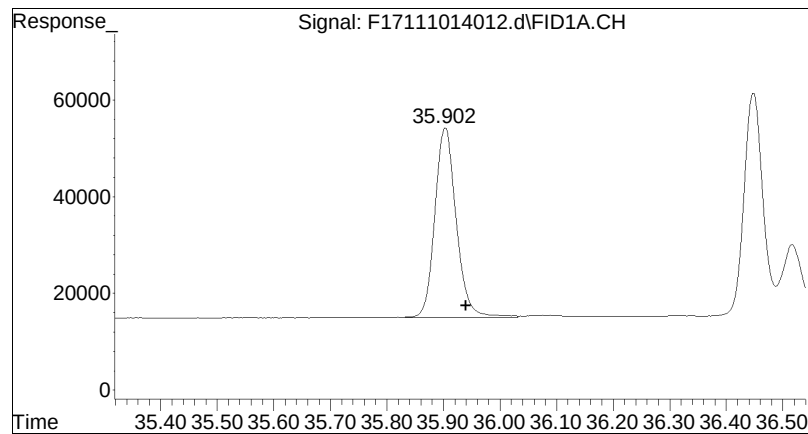
#22 n-Docosane (C22)

R.T.: 33.669 min
Delta R.T.: -0.040 min
Response: 1067395
Conc: 0.98 ug/mL M4



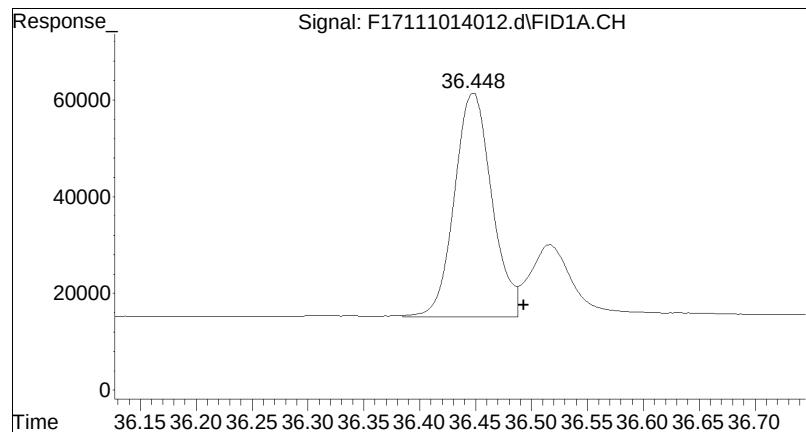
#23 n-Tricosane (C23)

R.T.: 35.087 min
Delta R.T.: -0.041 min
Response: 1084446
Conc: 0.99 ug/mL M4



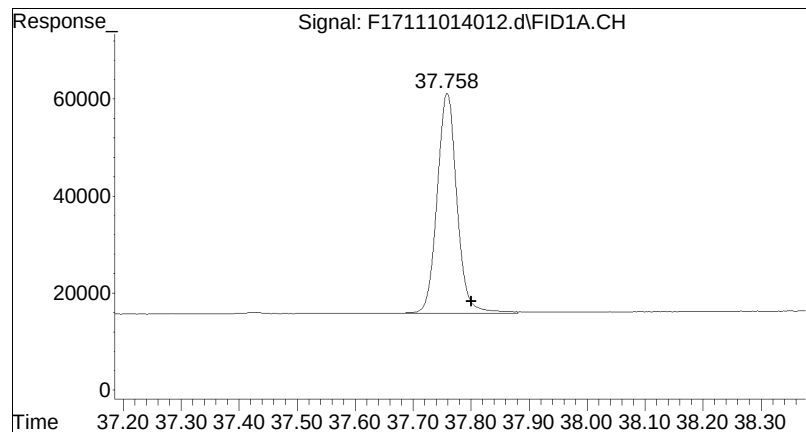
#24 d50-Tetracosane

R.T.: 35.902 min
Delta R.T.: -0.038 min
Response: 1028871
Conc: 1.07 ug/mL M4



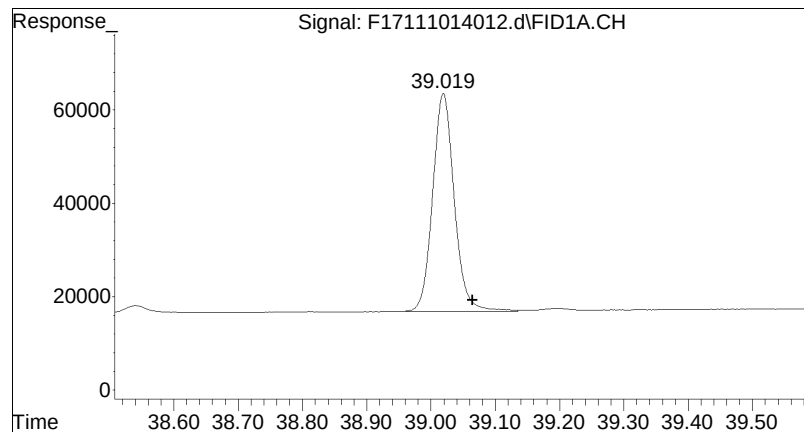
#25 n-Tetracosane (C24)

R.T.: 36.448 min
Delta R.T.: -0.045 min
Response: 1076774
Conc: 0.98 ug/mL M4



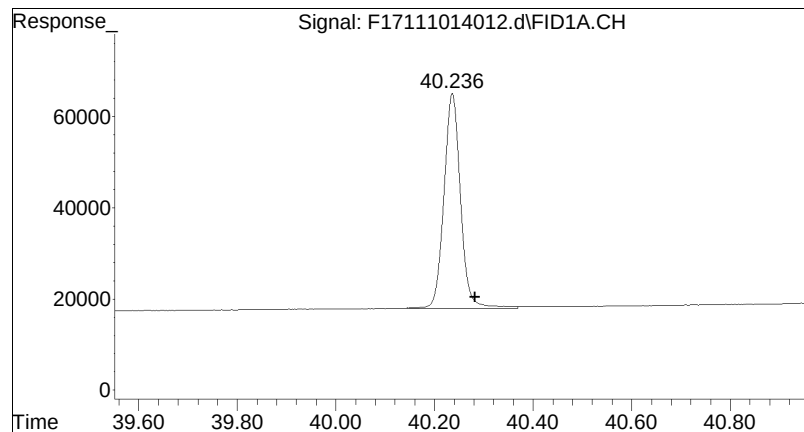
#26 n-Pentacosane (C25)

R.T.: 37.758 min
Delta R.T.: -0.041 min
Response: 1076155
Conc: 0.97 ug/mL M4



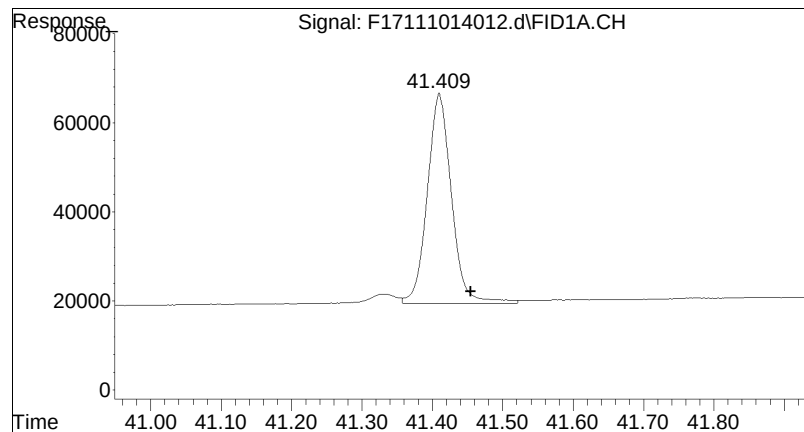
#27 n-Hexacosane (C26)

R.T.: 39.019 min
Delta R.T.: -0.045 min
Response: 1095973
Conc: 0.97 ug/mL M4



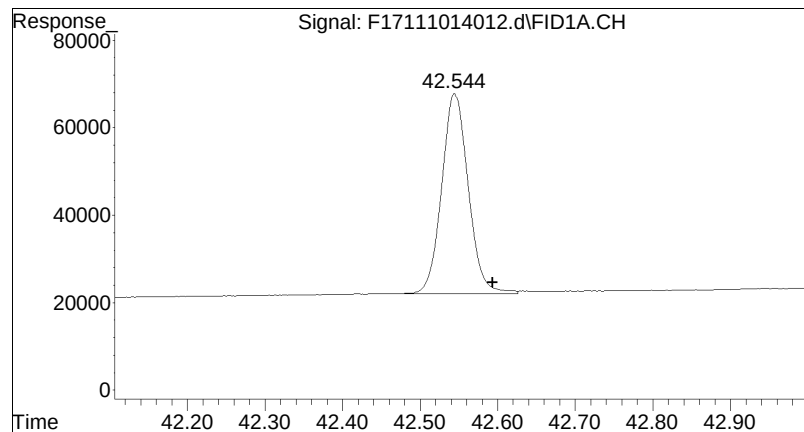
#28 n-Heptacosane (C27)

R.T.: 40.236 min
Delta R.T.: -0.046 min
Response: 1108390
Conc: 0.99 ug/mL M4



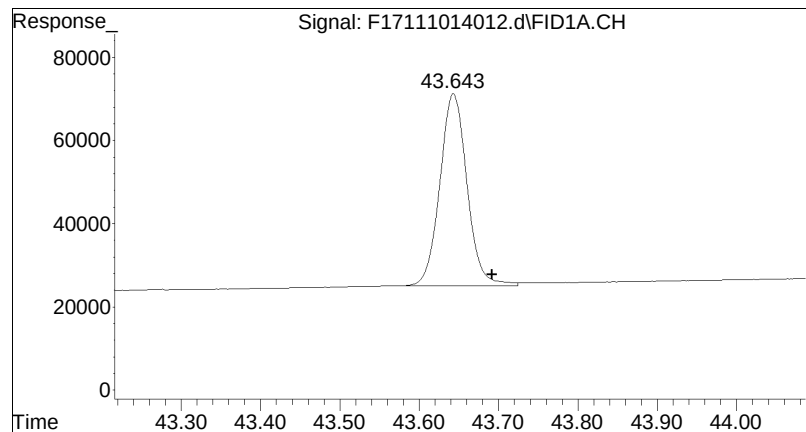
#29 n-Octacosane (C28)

R.T.: 41.409 min
Delta R.T.: -0.045 min
Response: 1117077
Conc: 1.00 ug/mL M4



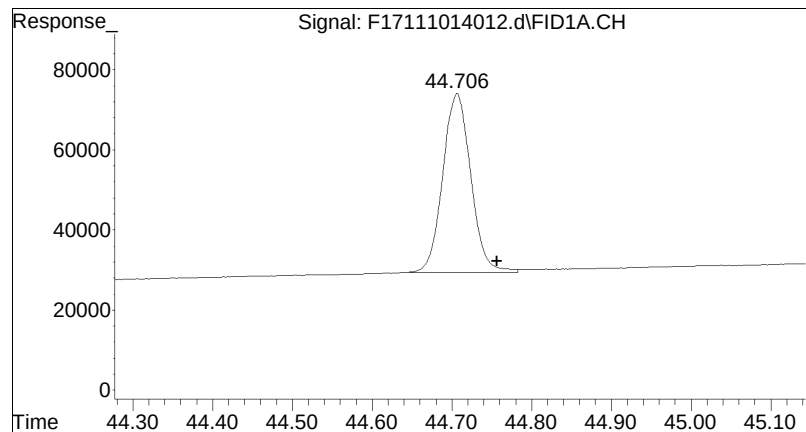
#30 n-Nonacosane (C29)

R.T.: 42.544 min
Delta R.T.: -0.049 min
Response: 1093208
Conc: 0.97 ug/mL M4



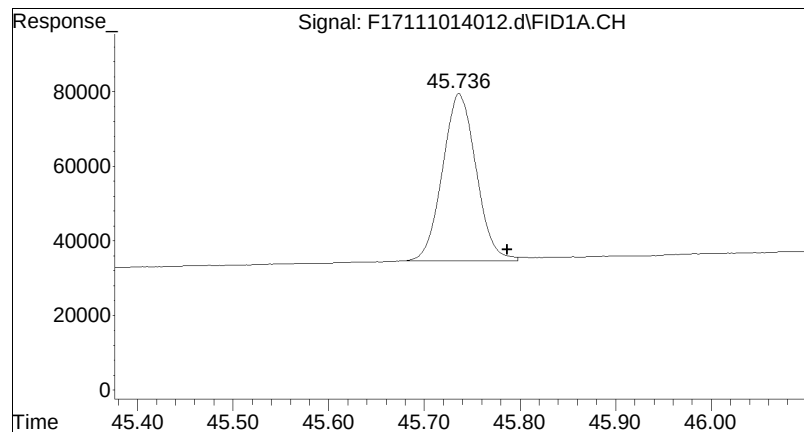
#31 n-Triacontane (C30)

R.T.: 43.643 min
Delta R.T.: -0.049 min
Response: 1105801
Conc: 0.97 ug/mL M4



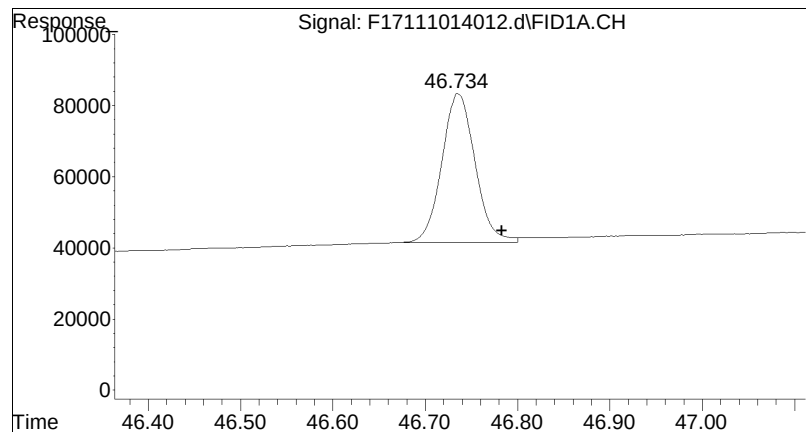
#32 n-Hentriacontane (C31)

R.T.: 44.706 min
Delta R.T.: -0.050 min
Response: 1100717
Conc: 0.96 ug/mL M4



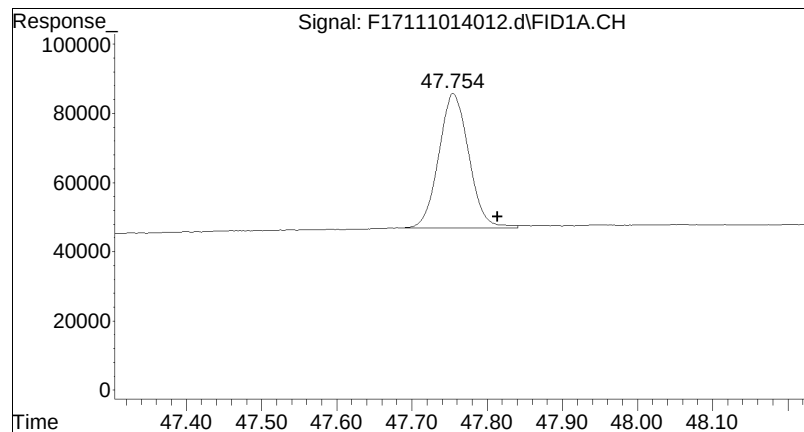
#33 n-Dotriacontane (C32)

R.T.: 45.736 min
Delta R.T.: -0.050 min
Response: 1099086
Conc: 0.97 ug/mL M4



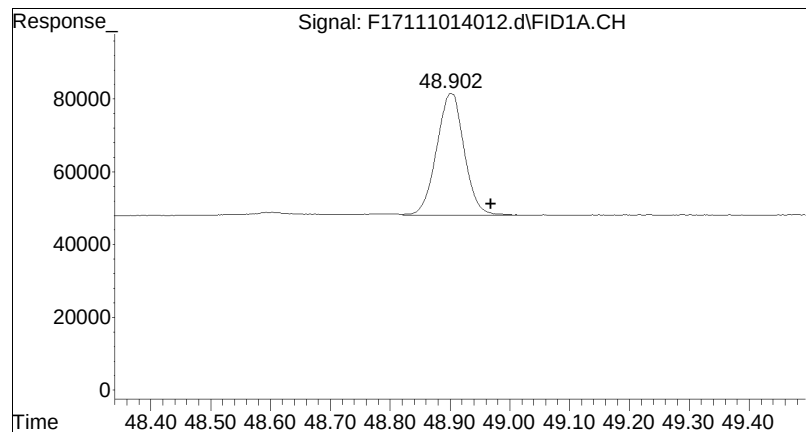
#34 n-Tritriacontane (C33)

R.T.: 46.734 min
Delta R.T.: -0.049 min
Response: 1045499
Conc: 0.95 ug/mL M4



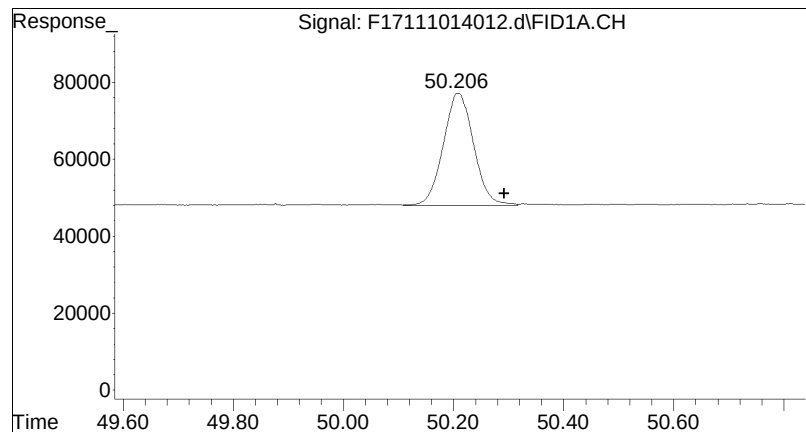
#35 n-tetratriacontane (C34)

R.T.: 47.754 min
Delta R.T.: -0.059 min
Response: 1083357
Conc: 0.92 ug/mL M4



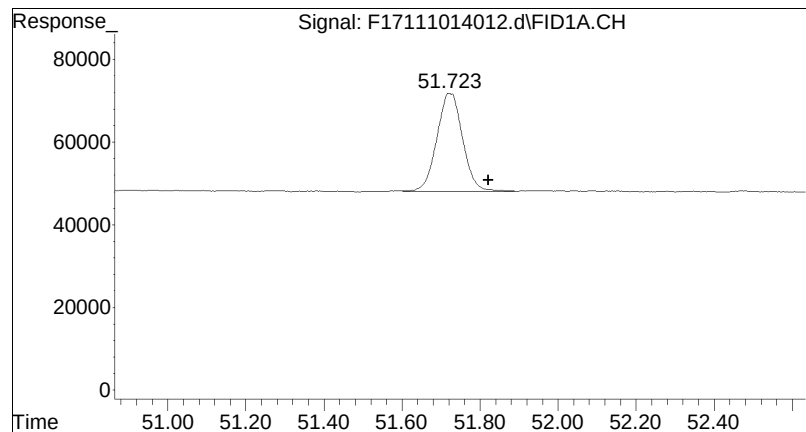
#36 n-Pentatriacontane (C35)

R.T.: 48.902 min
Delta R.T.: -0.066 min
Response: 1079522
Conc: 0.92 ug/mL M4



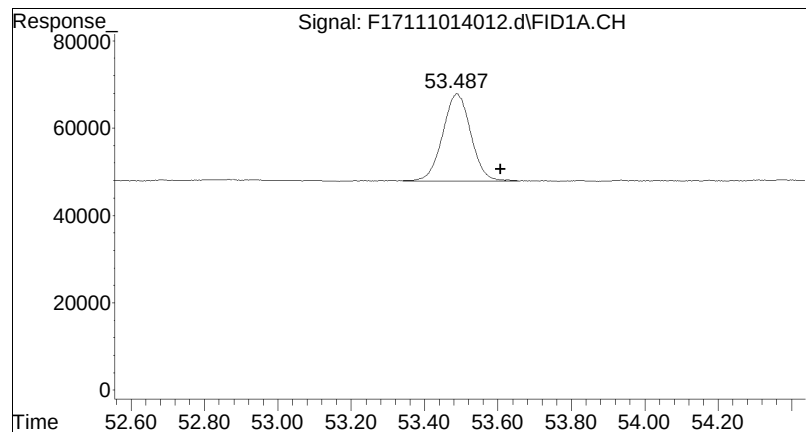
#37 n-Hexatriacontane (C36)

R.T.: 50.206 min
Delta R.T.: -0.086 min
Response: 1109799
Conc: 0.88 ug/mL M4



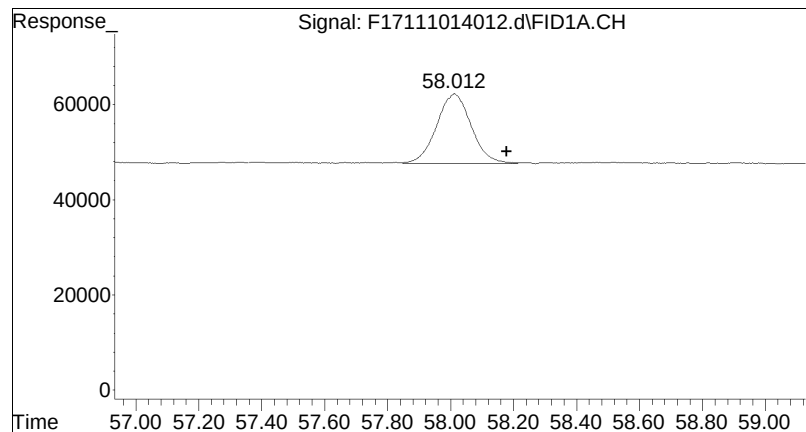
#38 n-Heptatriacontane (C37)

R.T.: 51.723 min
Delta R.T.: -0.099 min
Response: 1096538
Conc: 0.93 ug/mL M4



#39 n-Octatriacontane (C38)

R.T.: 53.487 min
Delta R.T.: -0.120 min
Response: 1065698
Conc: 0.90 ug/mL M4



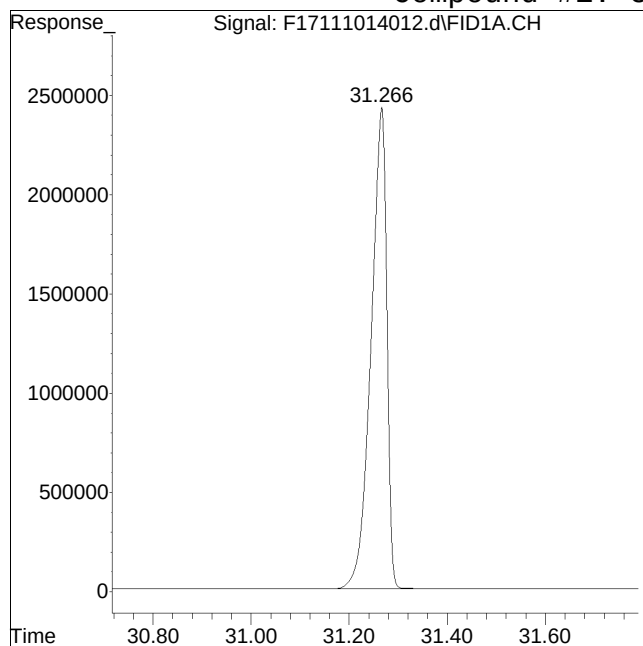
#41 n-Tetracontane (C40)

R.T.: 58.012 min
Delta R.T.: -0.166 min
Response: 1113747
Conc: 0.98 ug/mL M4

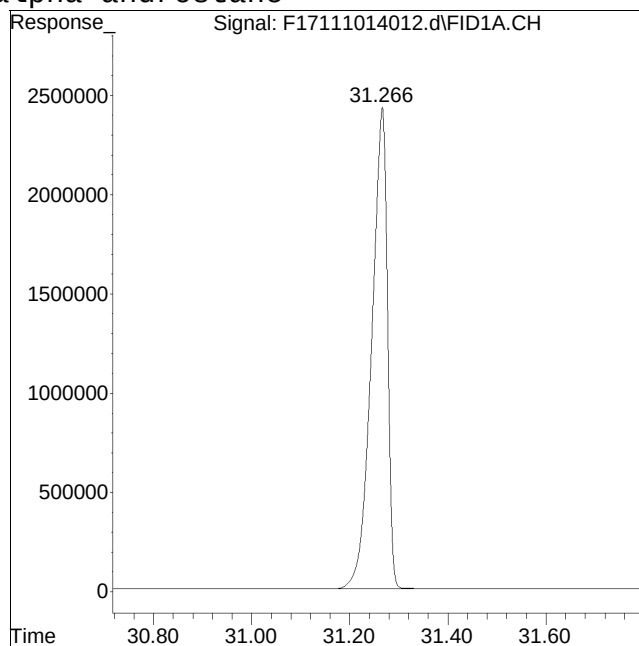
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #1: 5-alpha-androstane



Original Peak Response = 54120435



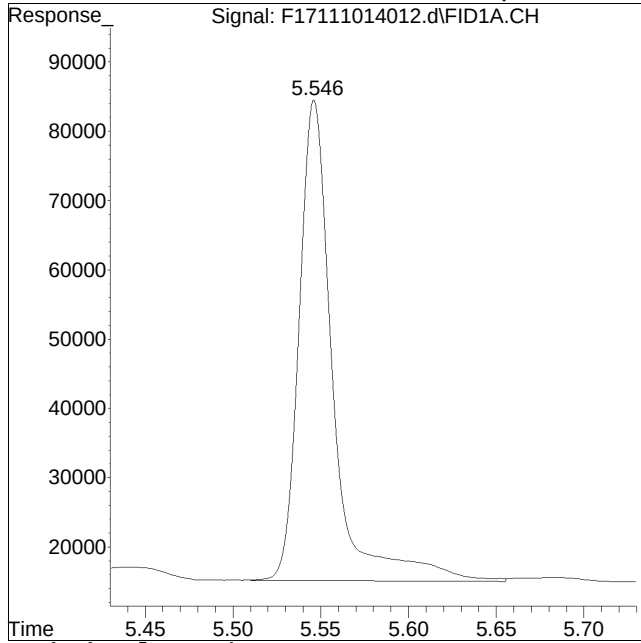
Manual Peak Response = 54151158 M4

M4 = Poor automated baseline construction.

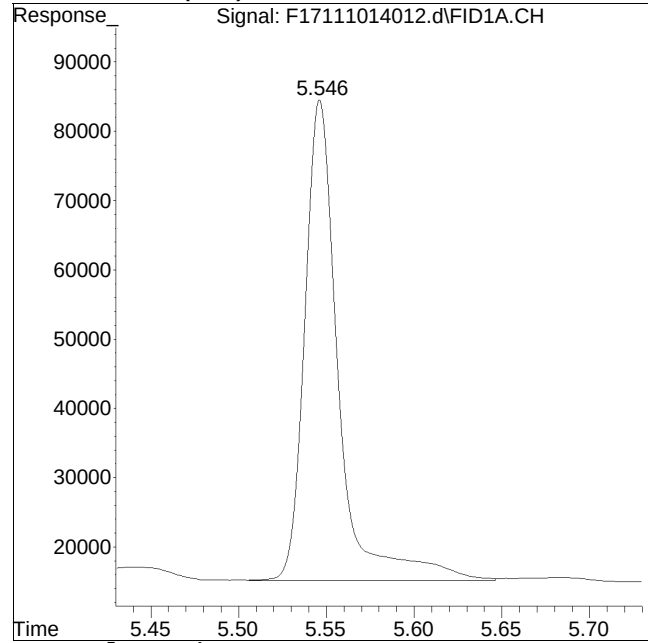
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #2: n-Octane (C8)



Original Peak Response = 936326



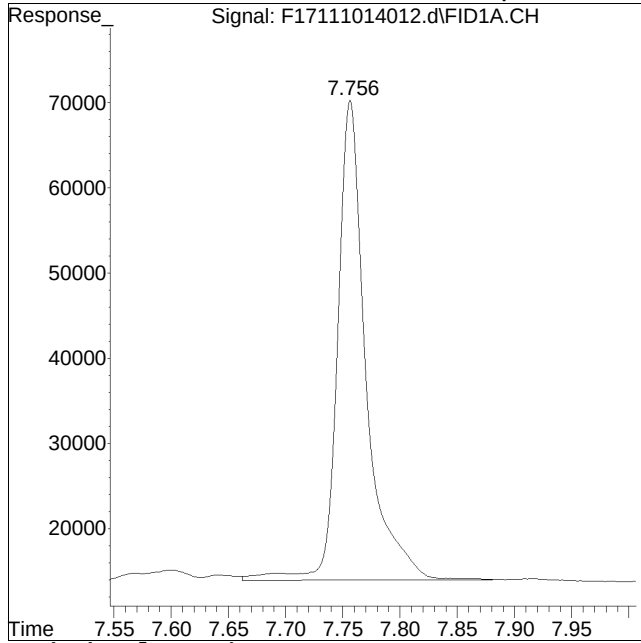
Manual Peak Response = 928802 M4

M4 = Poor automated baseline construction.

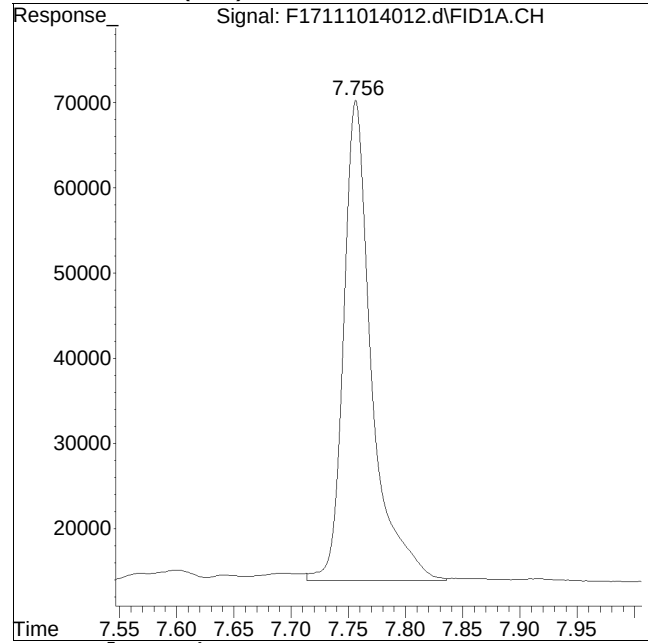
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #3: n-Nonane (C9)



Original Peak Response = 976987

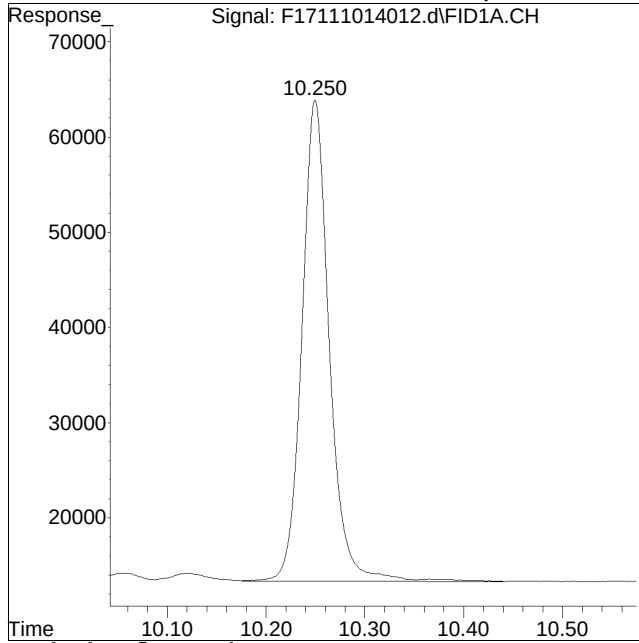


Manual Peak Response = 956167 M4

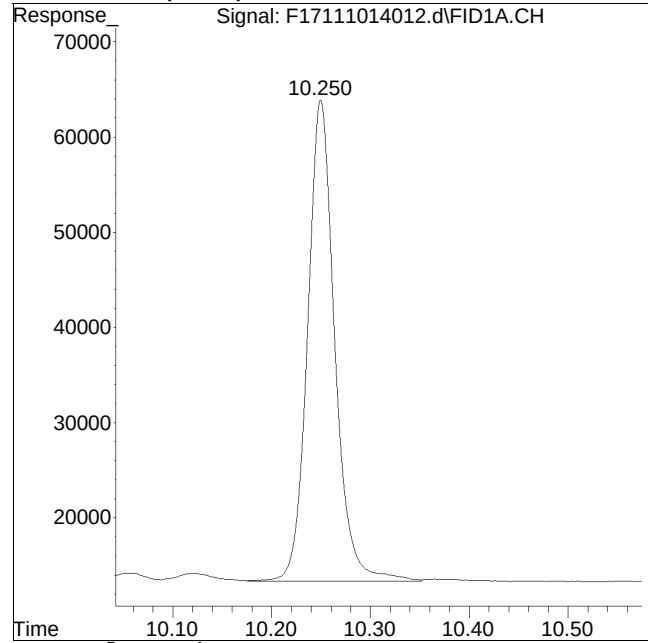
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #4: n-Decane (C10)



Original Peak Response = 974074



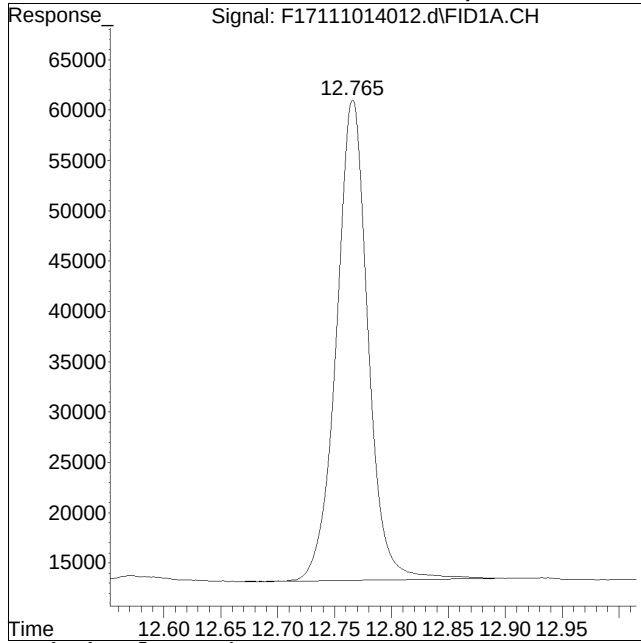
Manual Peak Response = 965575 M4

M4 = Poor automated baseline construction.

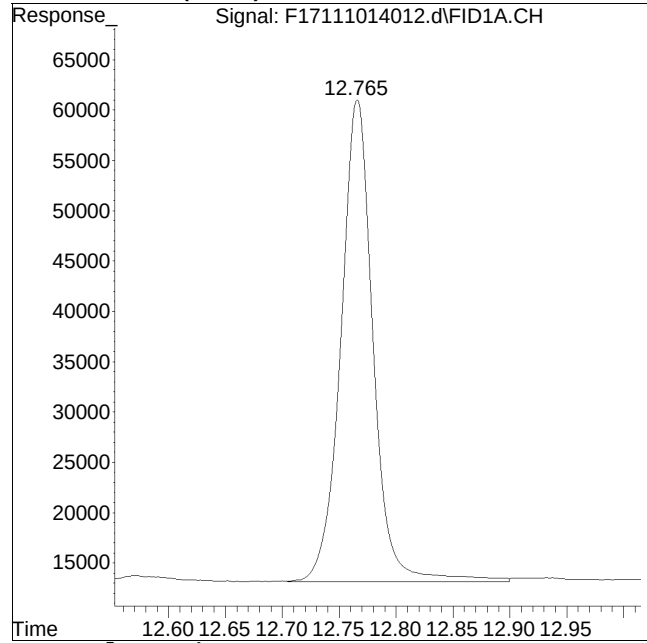
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #5: n-Undecane (C11)



Original Peak Response = 923969



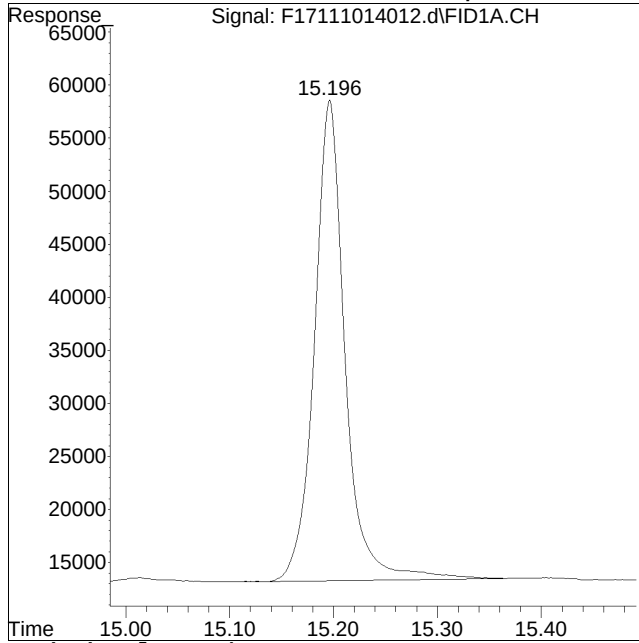
Manual Peak Response = 945978 M4

M4 = Poor automated baseline construction.

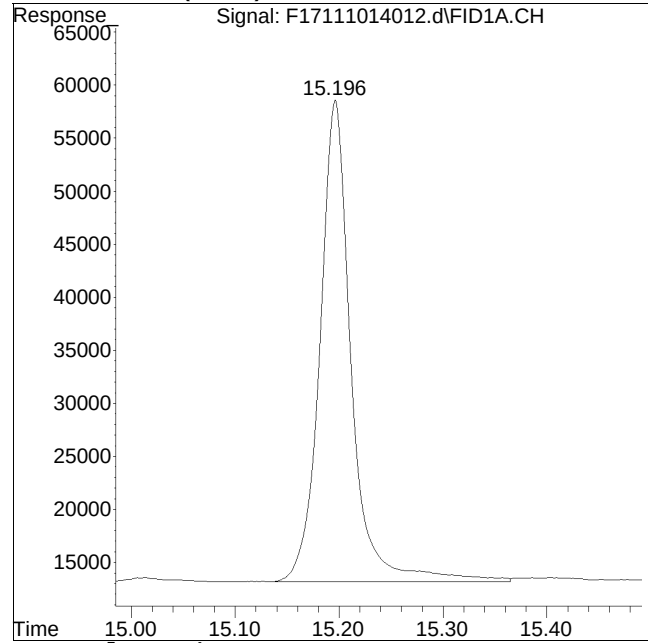
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #6: n-Dodecane (C12)



Original Peak Response = 930089



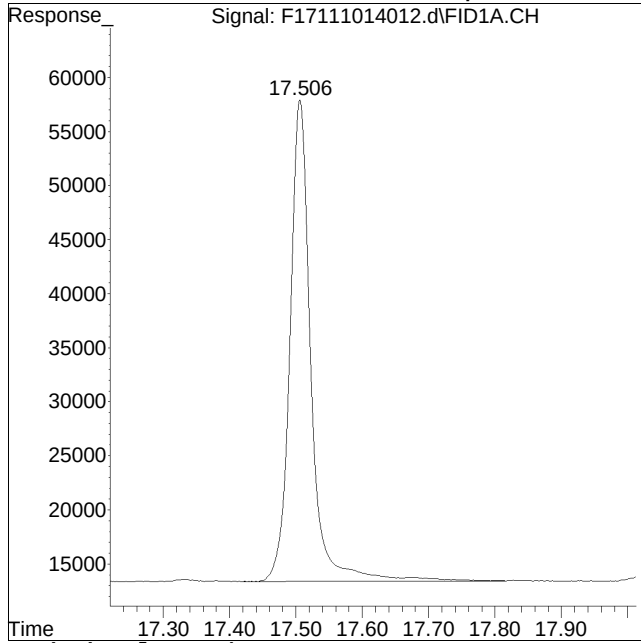
Manual Peak Response = 956041 M4

M4 = Poor automated baseline construction.

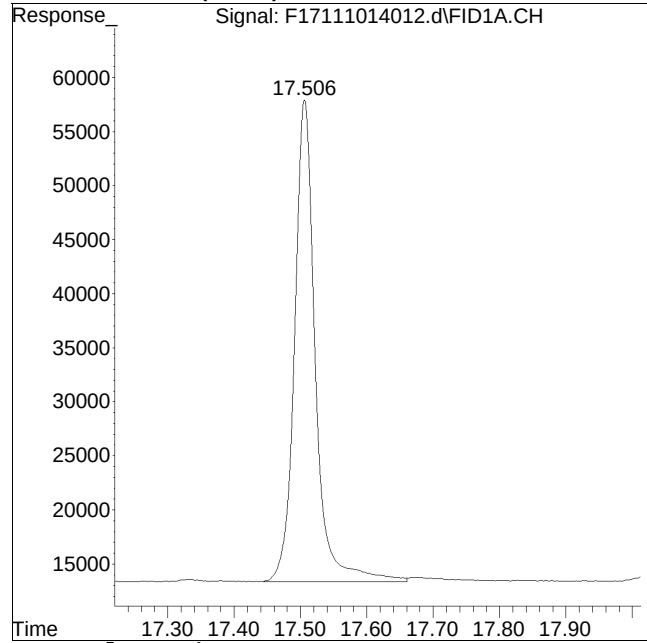
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #7: n-Tridecane (C13)



Original Peak Response = 977898



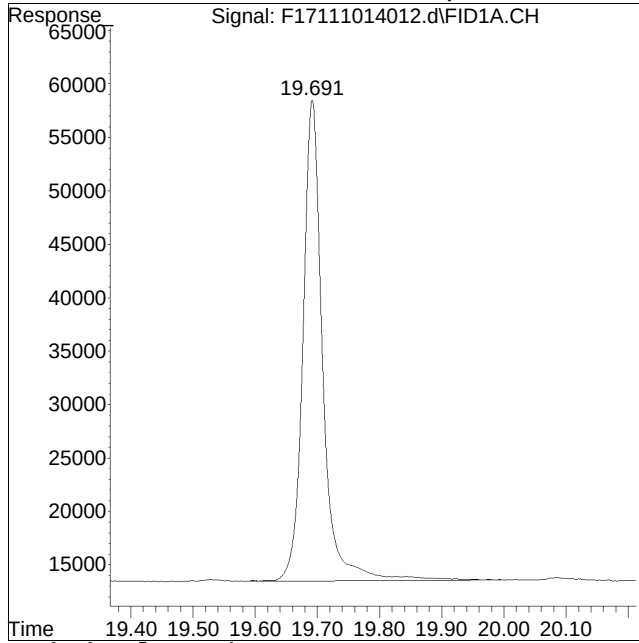
Manual Peak Response = 968666 M4

M4 = Poor automated baseline construction.

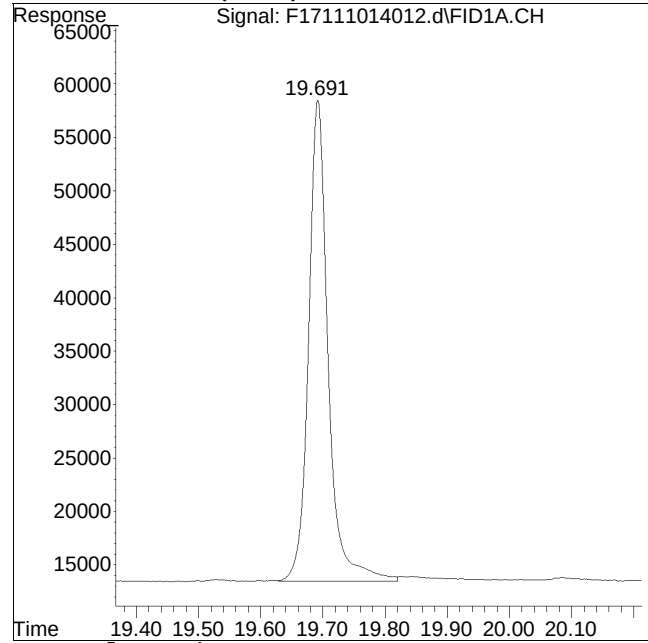
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #9: n-Tetradecane (C14)



Original Peak Response = 998749

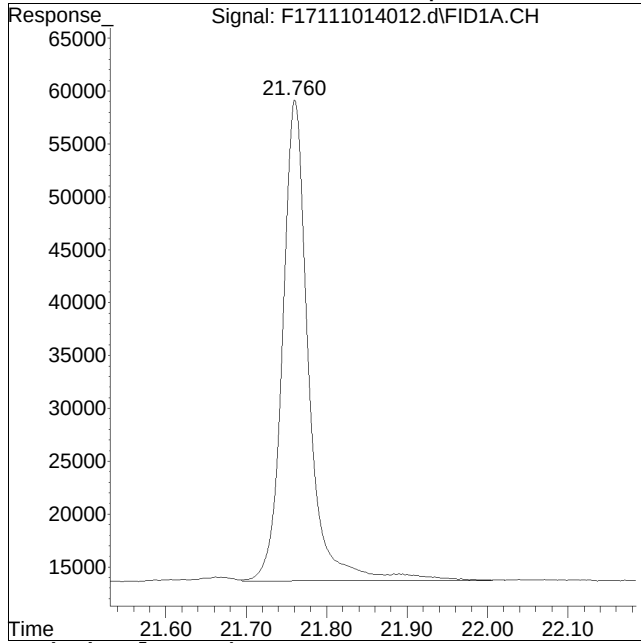


Manual Peak Response = 982915 M4

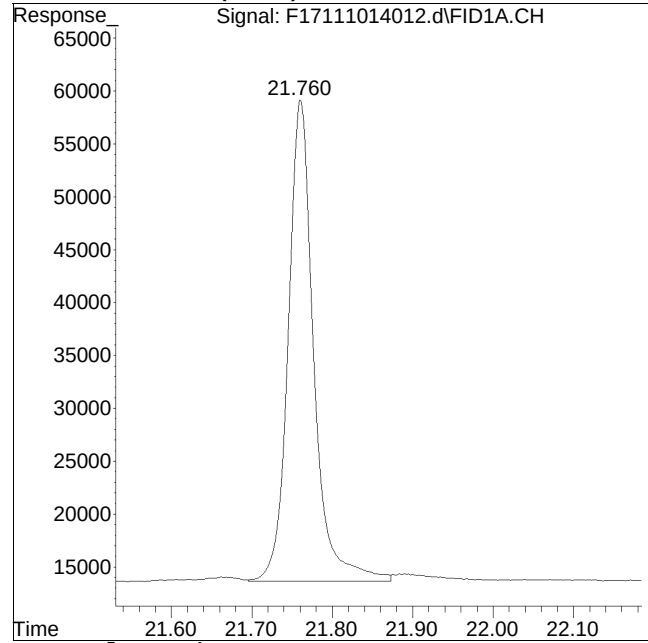
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #11: n-Pentadecane (C15)



Original Peak Response = 1021111



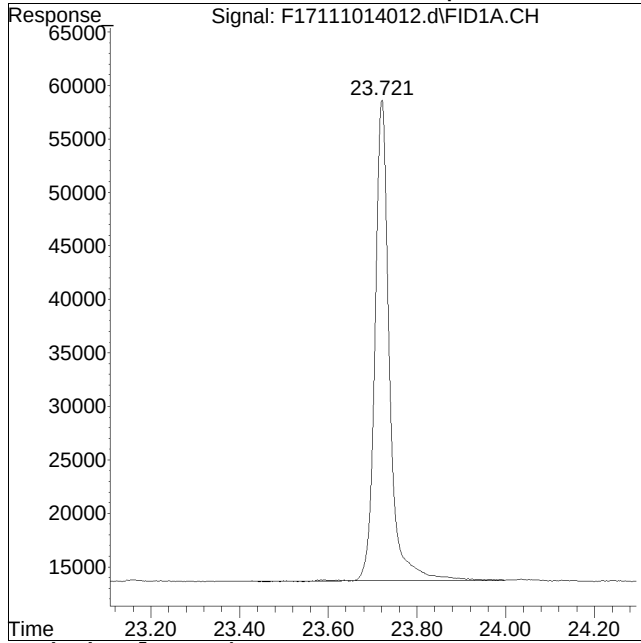
Manual Peak Response = 1003729 M4

M4 = Poor automated baseline construction.

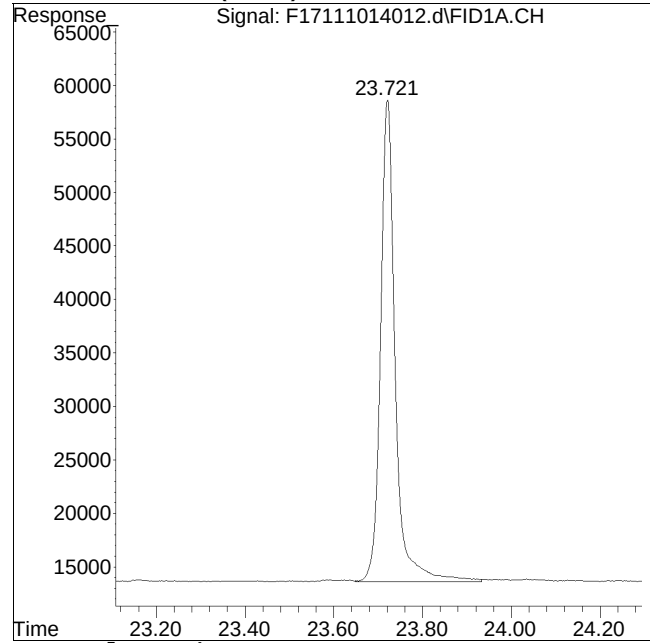
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #12: n-Hexadecane (C16)



Original Peak Response = 1020711



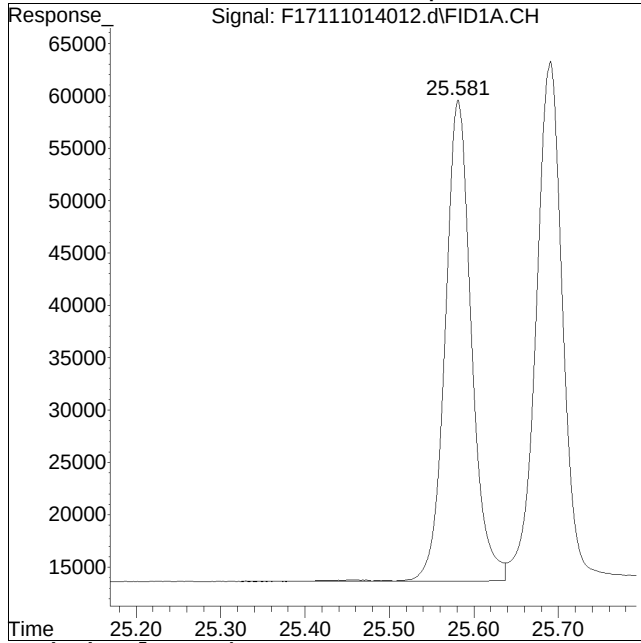
Manual Peak Response = 1037076 M4

M4 = Poor automated baseline construction.

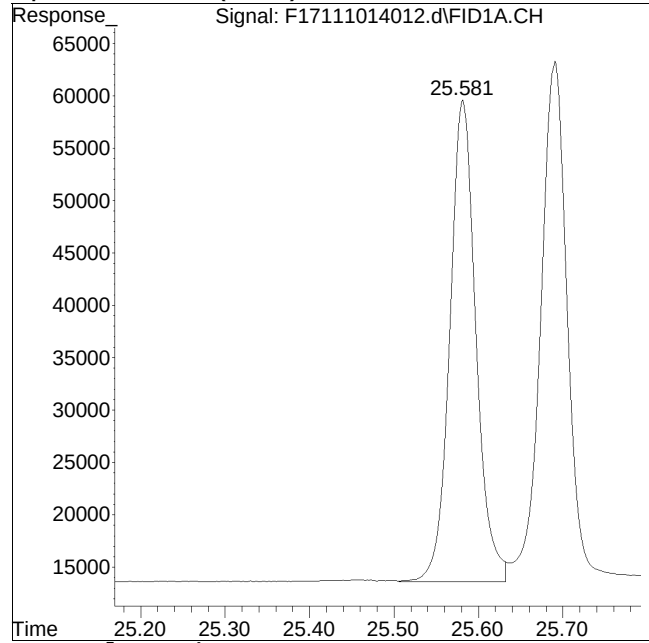
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #14: n-Heptadecane (C17)



Original Peak Response = 988250



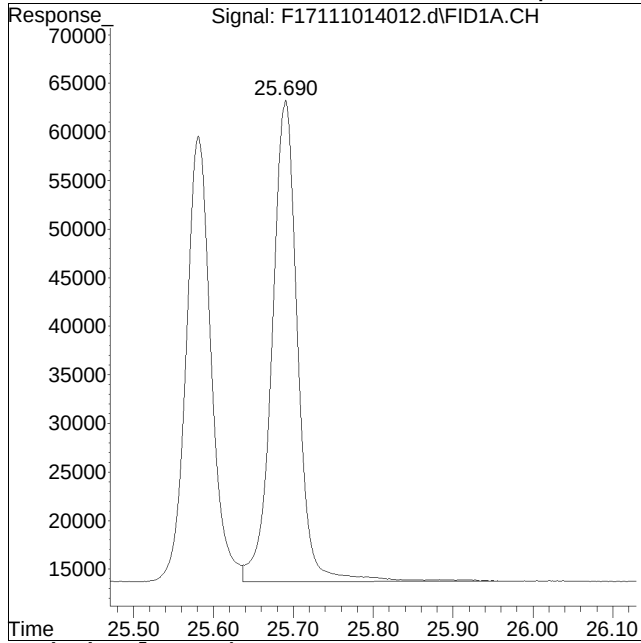
Manual Peak Response = 985154 M4

M4 = Poor automated baseline construction.

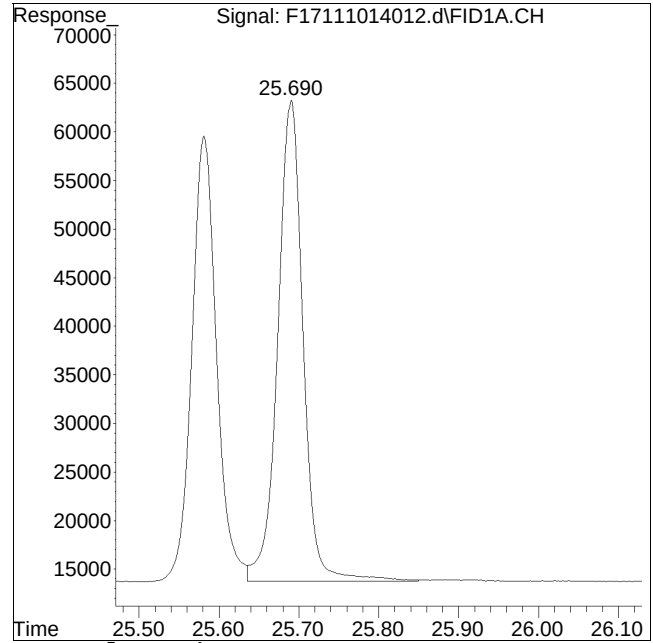
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #15: Pristane



Original Peak Response = 1102023



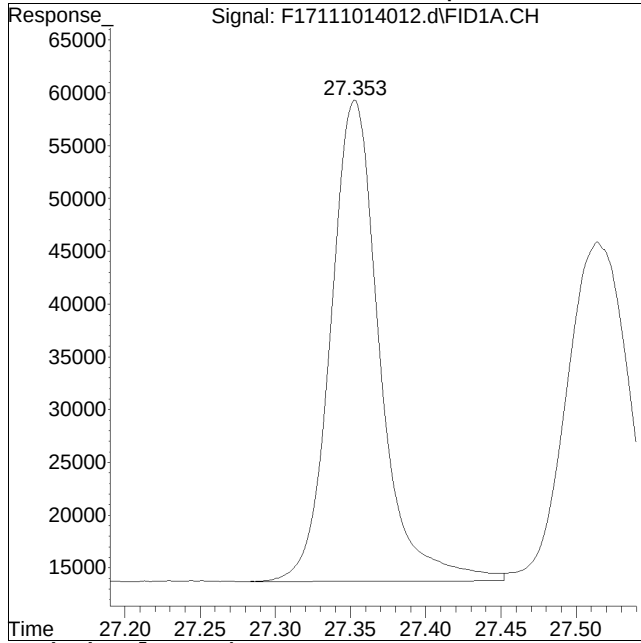
Manual Peak Response = 1093918 M4

M4 = Poor automated baseline construction.

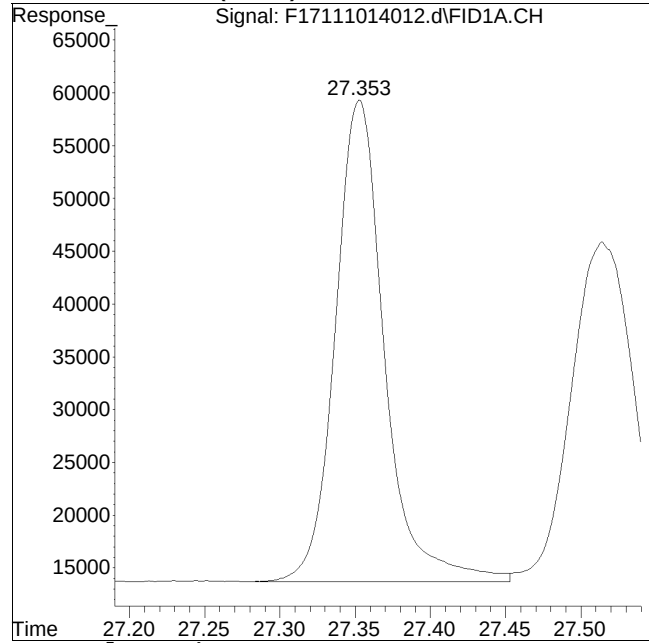
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #16: n-Octadecane (C18)



Original Peak Response = 1032053



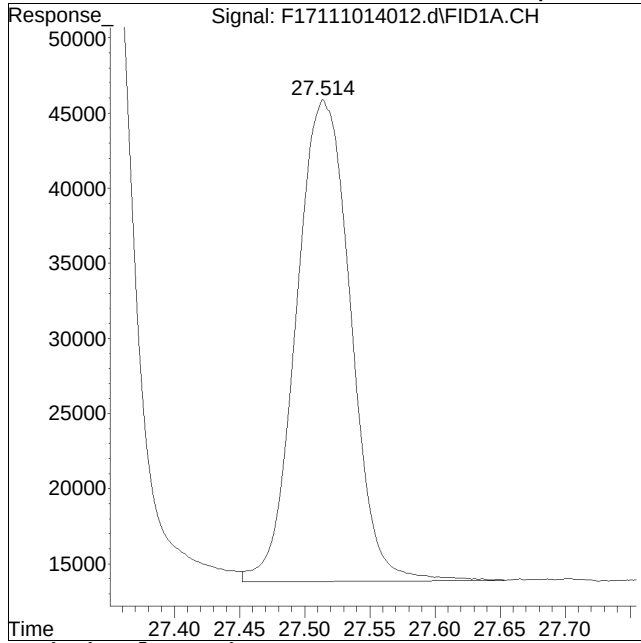
Manual Peak Response = 1038773 M4

M4 = Poor automated baseline construction.

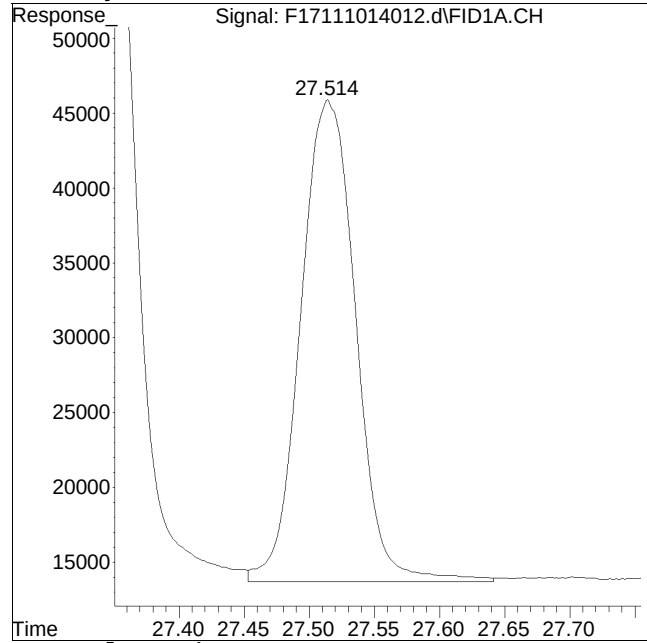
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #17: Phytane



Original Peak Response = 931411



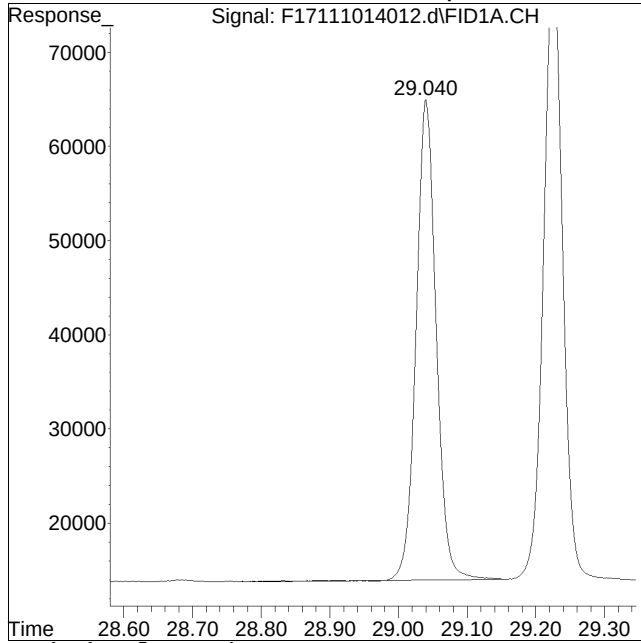
Manual Peak Response = 947367 M4

M4 = Poor automated baseline construction.

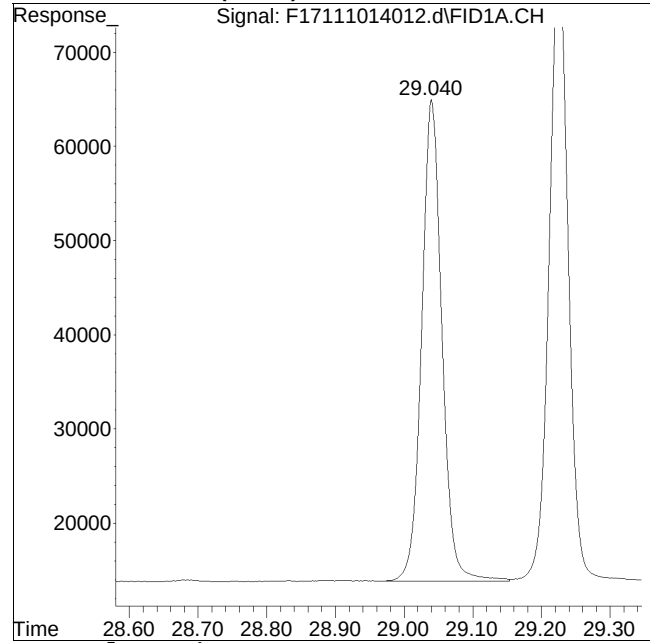
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #18: n-Nonadecane (C19)



Original Peak Response = 1036098



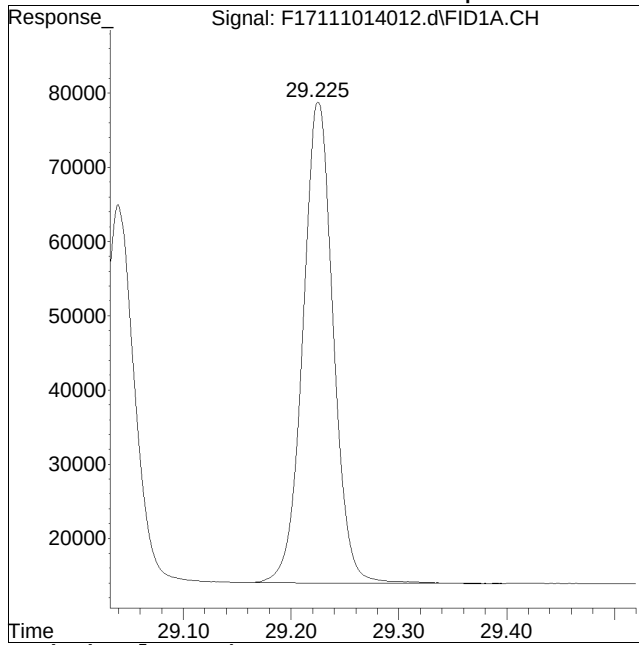
Manual Peak Response = 1048874 M4

M4 = Poor automated baseline construction.

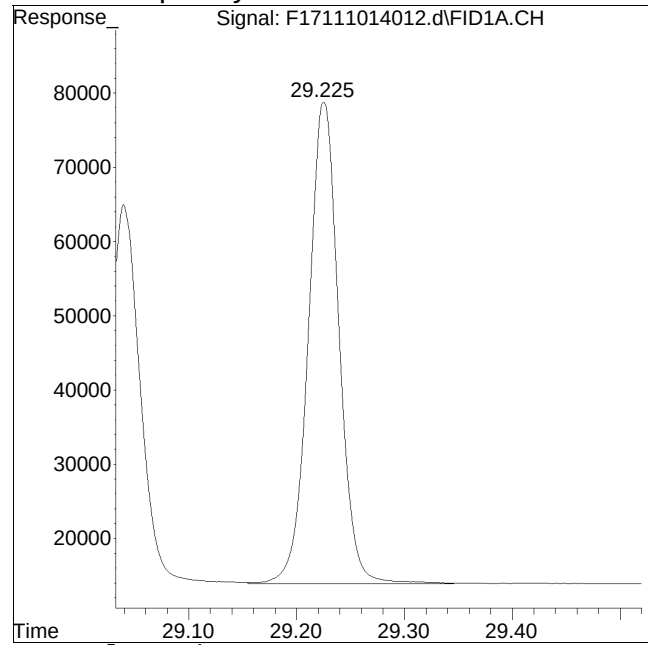
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #19: ortho-terphenyl



Original Peak Response = 1264243



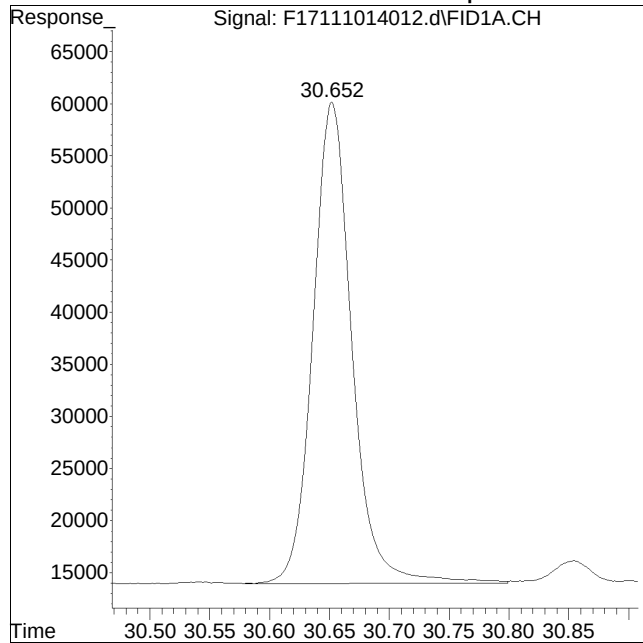
Manual Peak Response = 1270913 M4

M4 = Poor automated baseline construction.

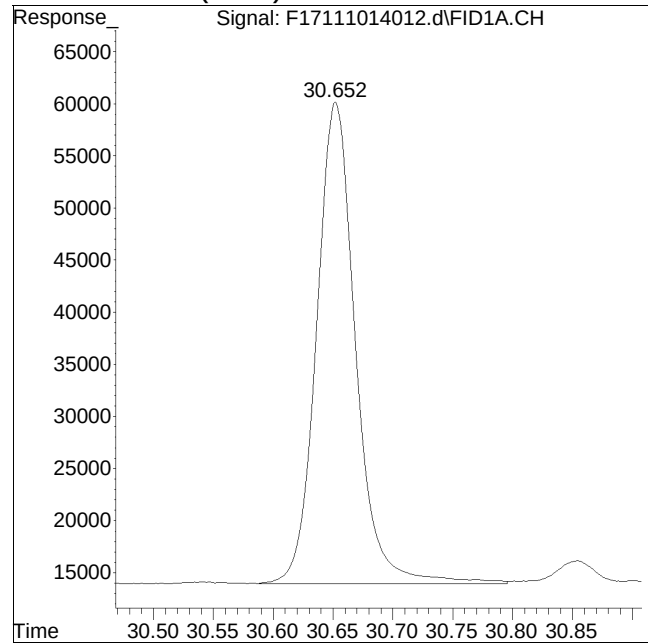
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #20: n-Eicosane (C20)



Original Peak Response = 1045495



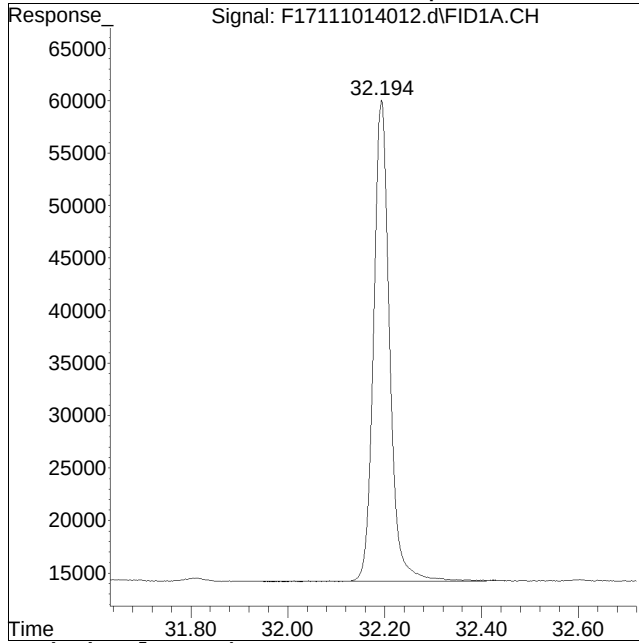
Manual Peak Response = 1050923 M4

M4 = Poor automated baseline construction.

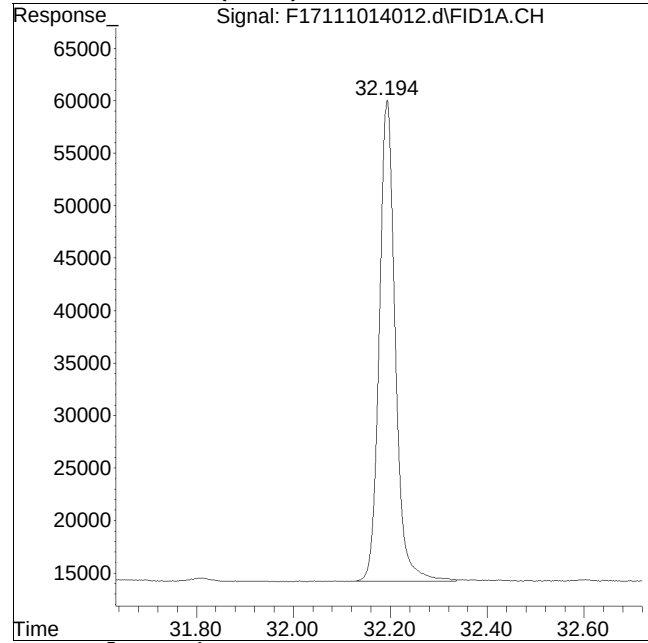
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #21: n-Heneicosane (C21)



Original Peak Response = 1049843



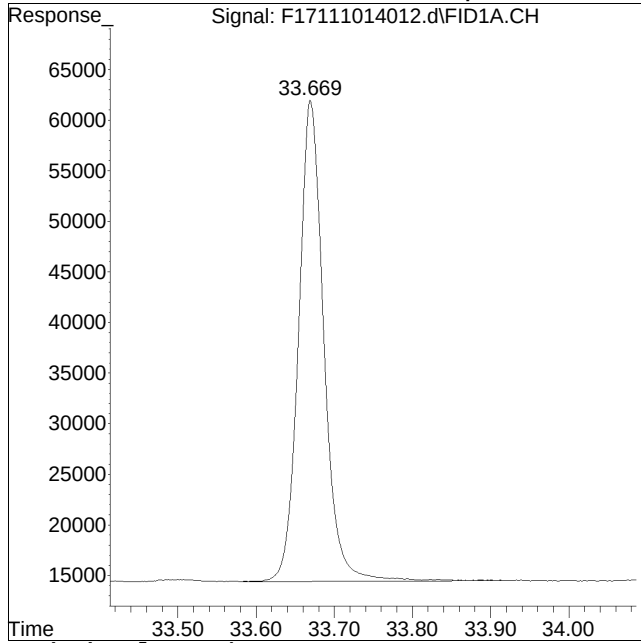
Manual Peak Response = 1052164 M4

M4 = Poor automated baseline construction.

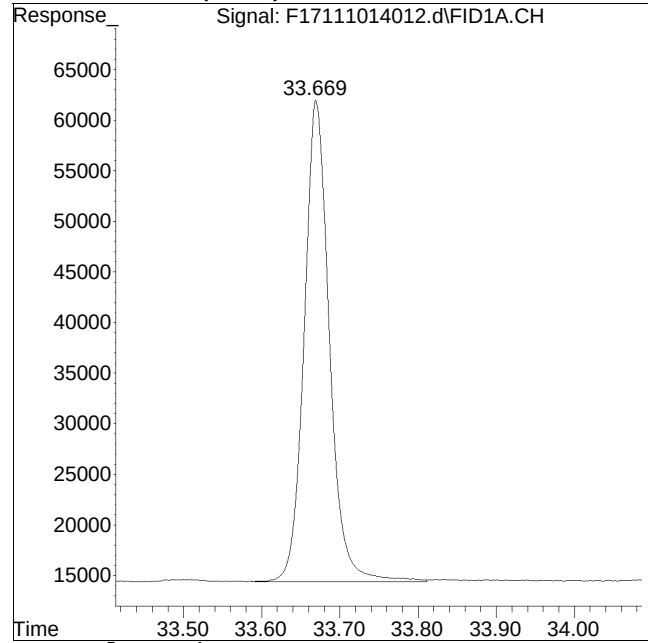
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #22: n-Docosane (C22)



Original Peak Response = 1066831



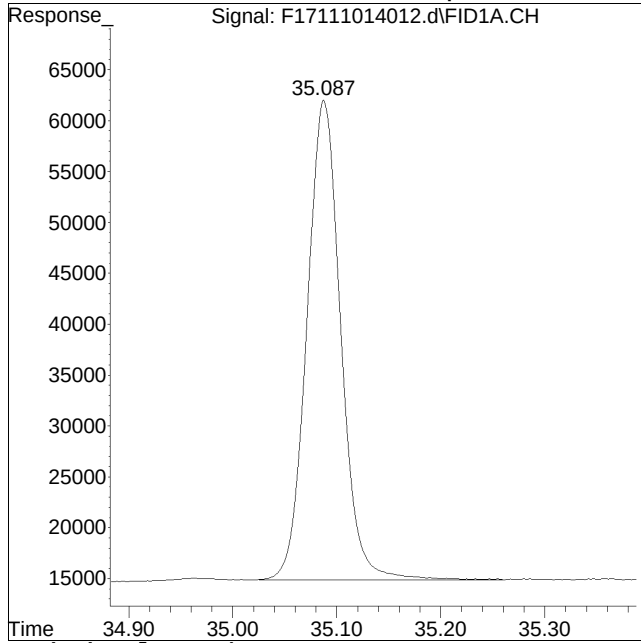
Manual Peak Response = 1067395 M4

M4 = Poor automated baseline construction.

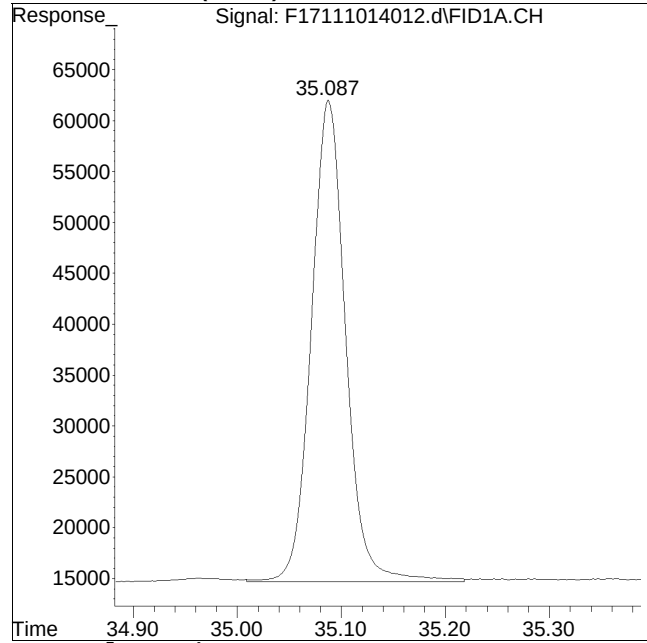
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #23: n-Tricosane (C23)



Original Peak Response = 1064606



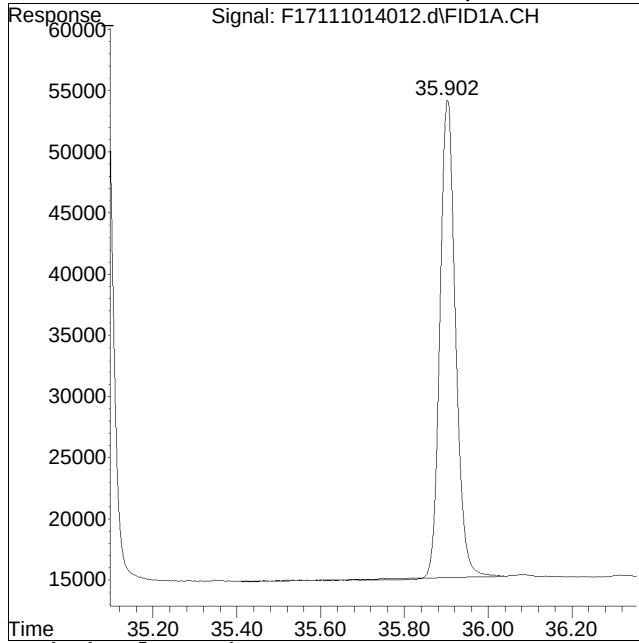
Manual Peak Response = 1084446 M4

M4 = Poor automated baseline construction.

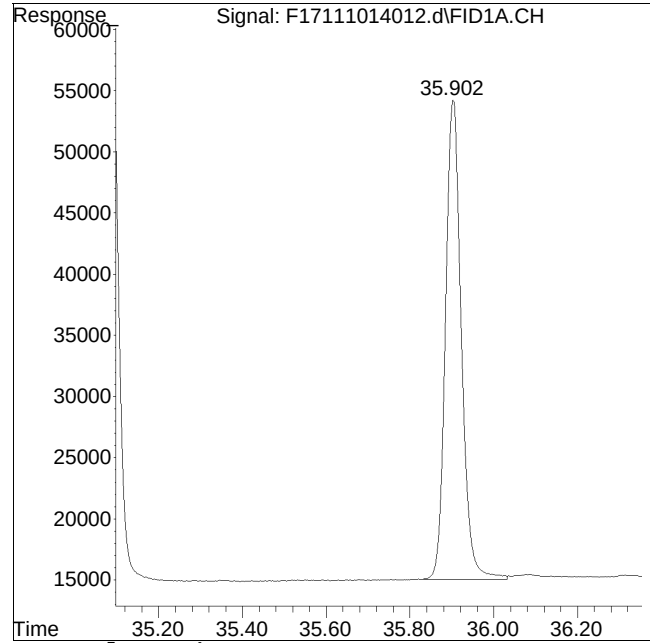
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #24: d50-Tetracosane



Original Peak Response = 1002696



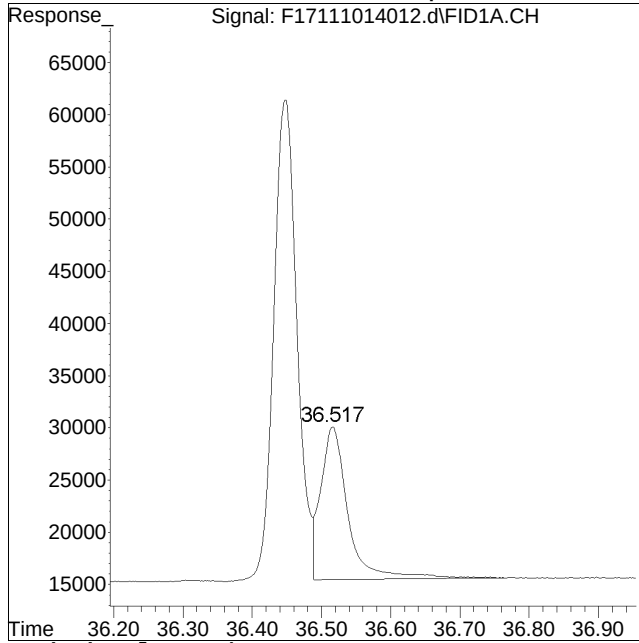
Manual Peak Response = 1028871 M4

M4 = Poor automated baseline construction.

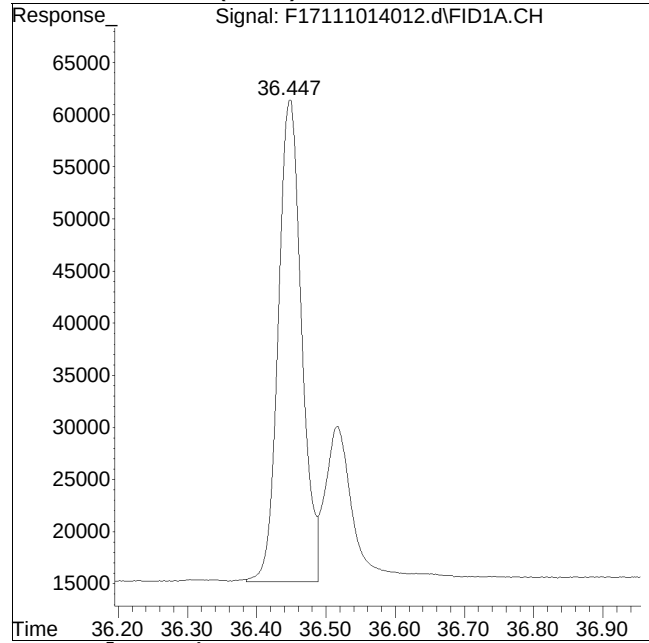
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #25: n-Tetracosane (C24)



Original Peak Response = 406392



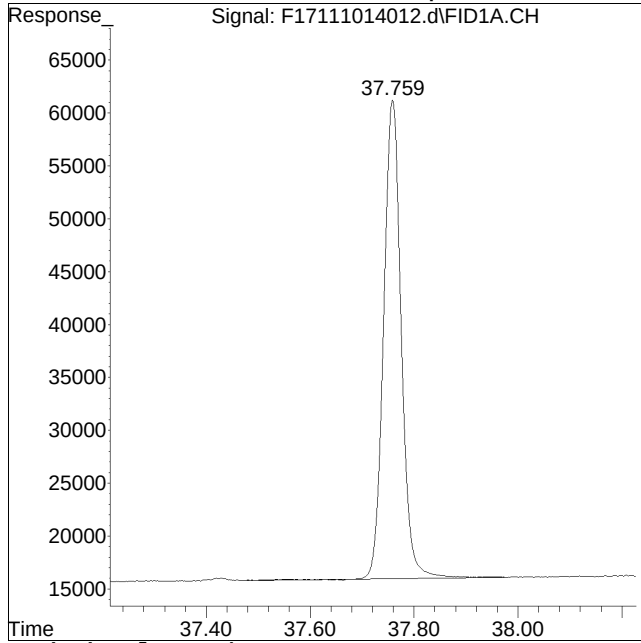
Manual Peak Response = 1076774 M4

M4 = Poor automated baseline construction.

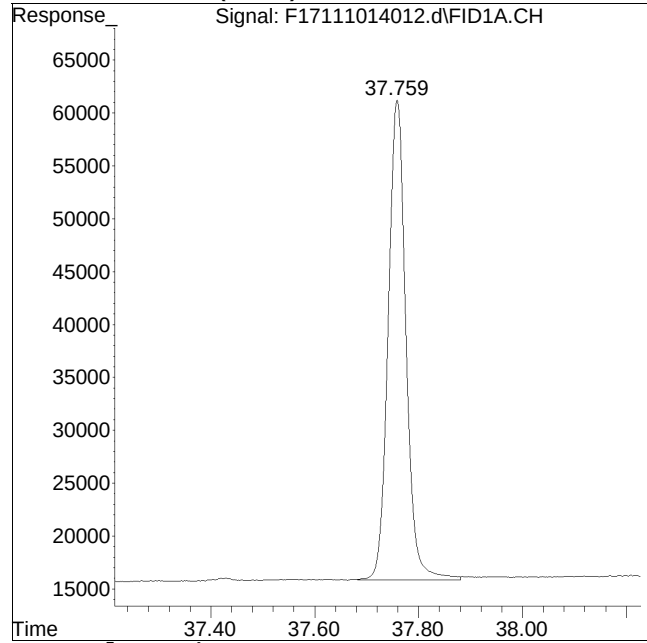
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #26: n-Pentacosane (C25)



Original Peak Response = 1068066



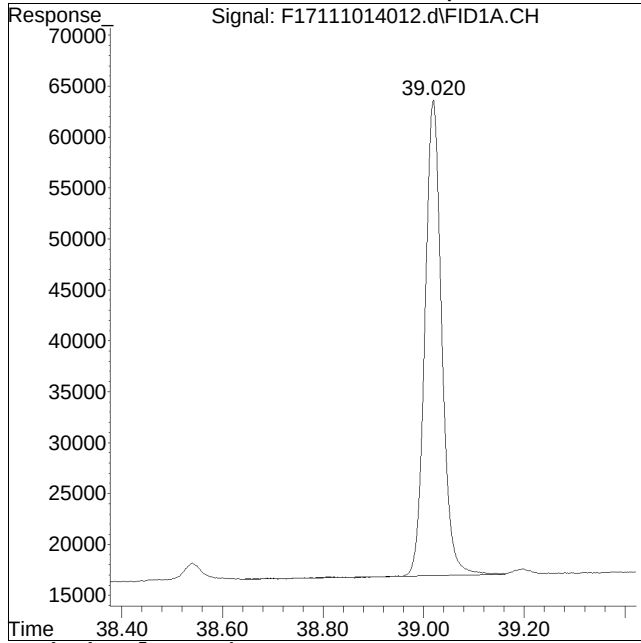
Manual Peak Response = 1076155 M4

M4 = Poor automated baseline construction.

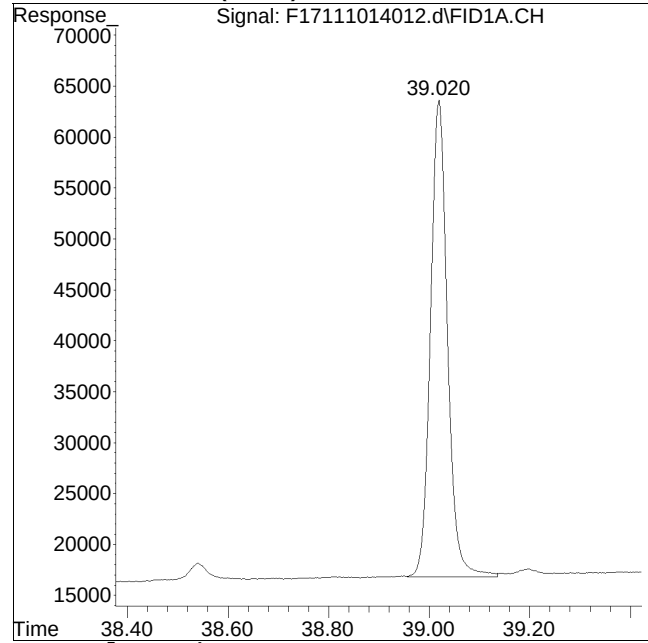
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #27: n-Hexacosane (C26)



Original Peak Response = 1084867



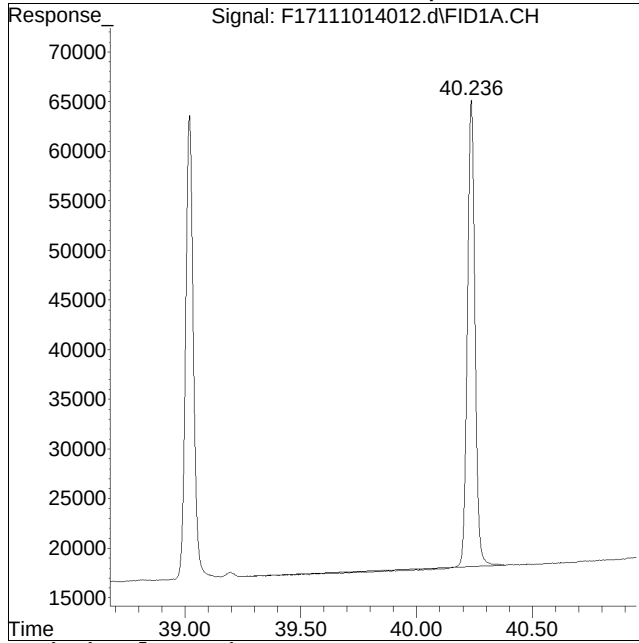
Manual Peak Response = 1095973 M4

M4 = Poor automated baseline construction.

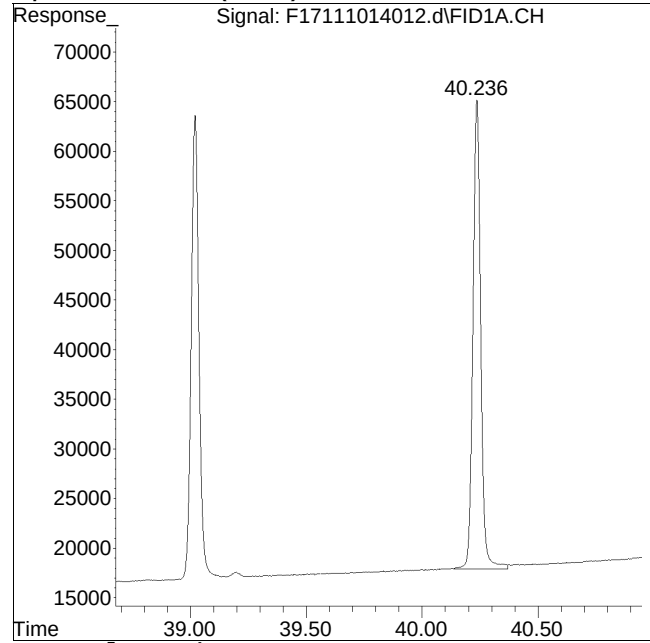
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #28: n-Heptacosane (C27)



Original Peak Response = 1035449



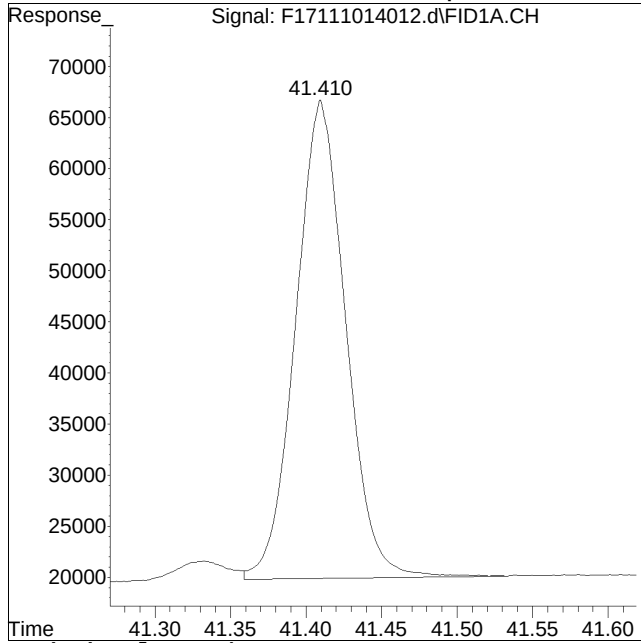
Manual Peak Response = 1108390 M4

M4 = Poor automated baseline construction.

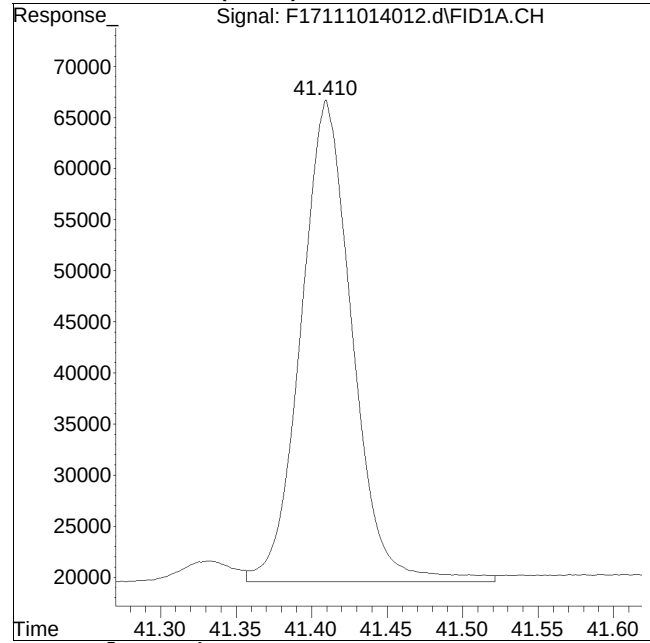
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #29: n-Octacosane (C28)



Original Peak Response = 1075963



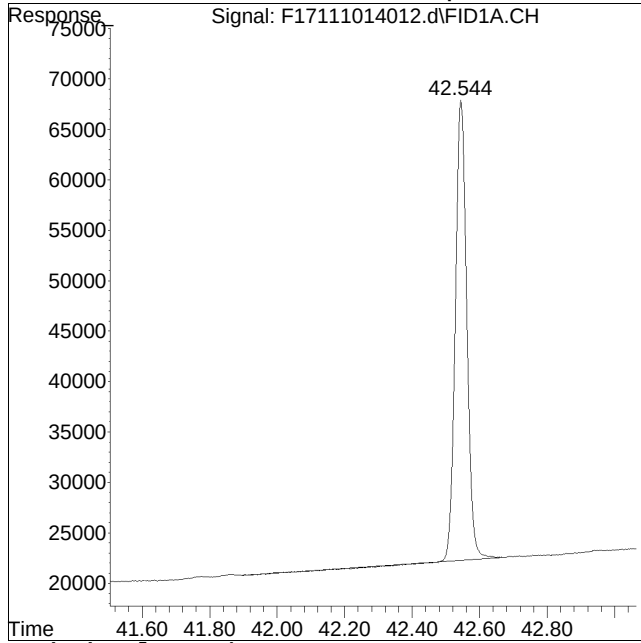
Manual Peak Response = 1117077 M4

M4 = Poor automated baseline construction.

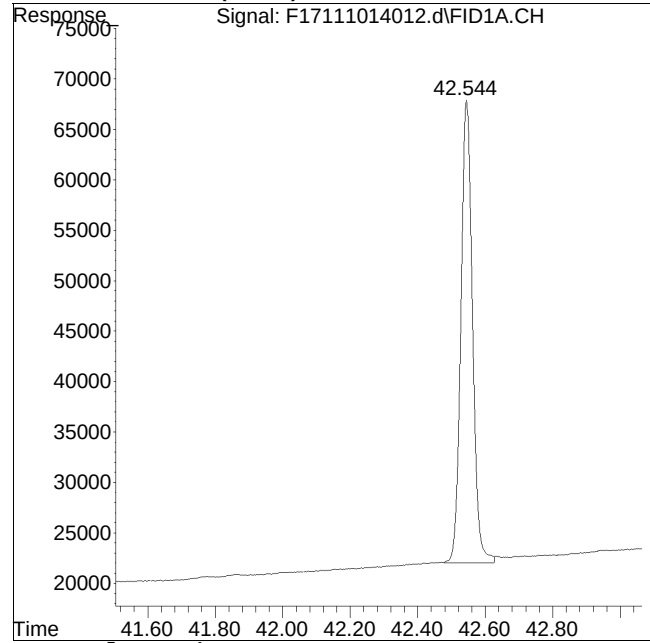
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #30: n-Nonacosane (C29)



Original Peak Response = 1066445



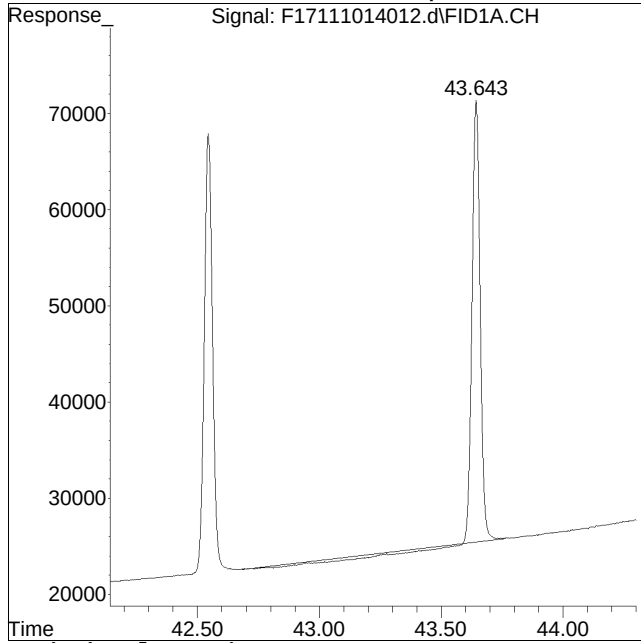
Manual Peak Response = 1093208 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

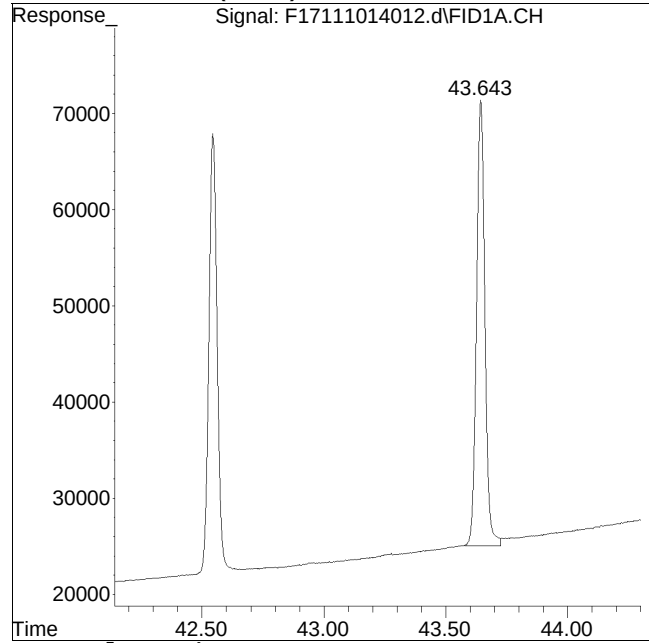
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #31: n-Triacontane (C30)



Original Peak Response = 958793

M4 = Poor automated baseline construction.

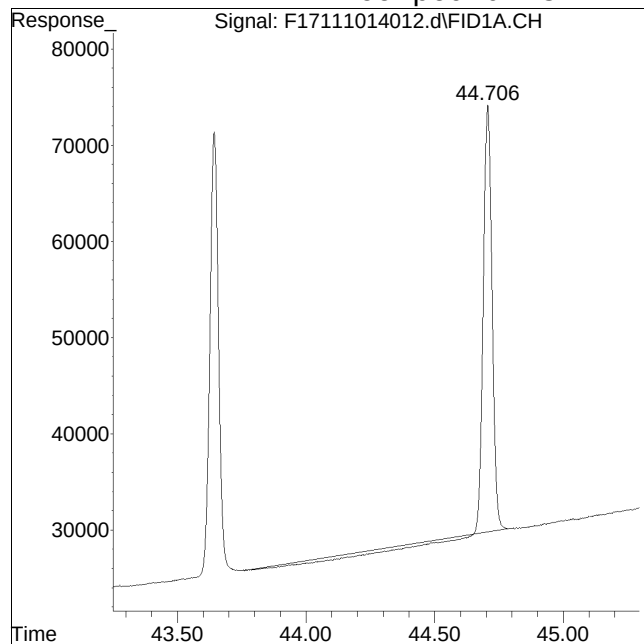


Manual Peak Response = 1105801 M4

Manual Integration/Negative Proof Report

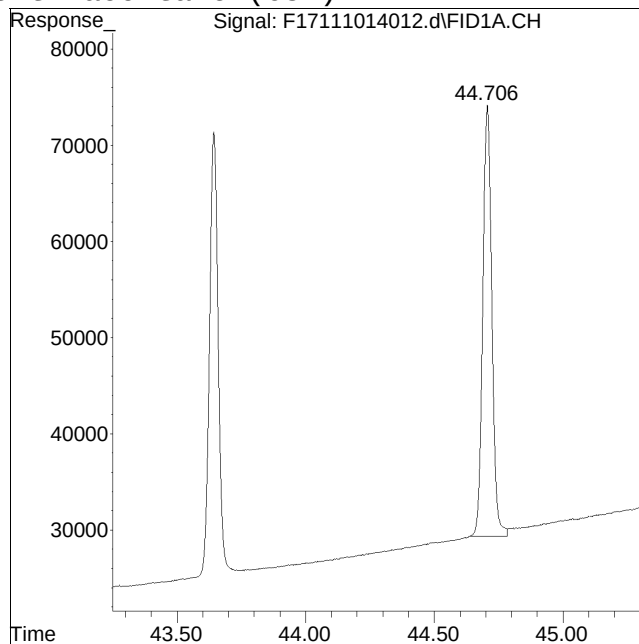
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #32: n-Hentriacontane (C31)



Original Peak Response = 915445

M4 = Poor automated baseline construction.

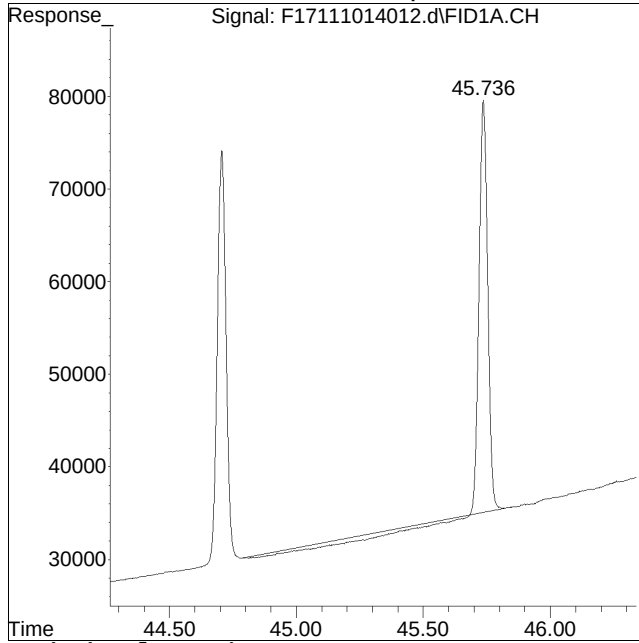


Manual Peak Response = 1100717 M4

Manual Integration/Negative Proof Report

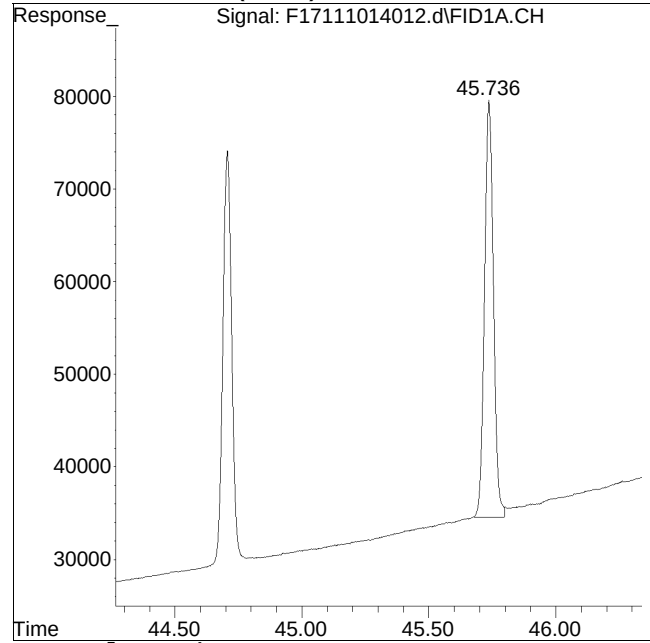
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #33: n-Dotriacontane (C32)



Original Peak Response = 878165

M4 = Poor automated baseline construction.

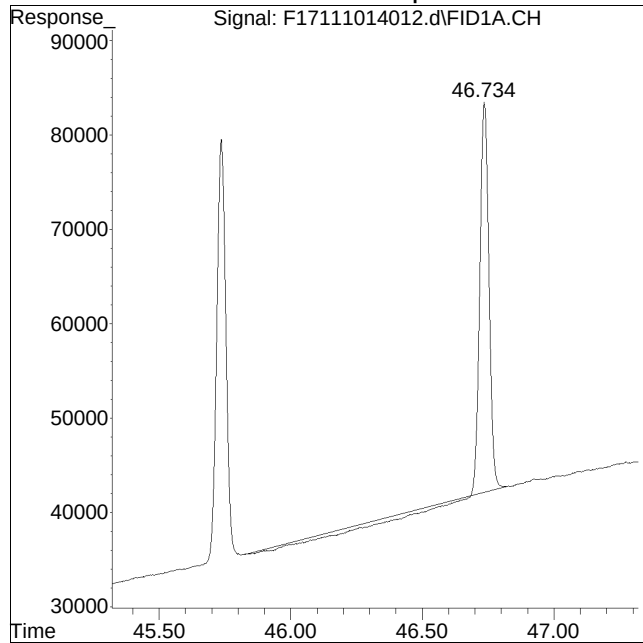


Manual Peak Response = 1099086 M4

Manual Integration/Negative Proof Report

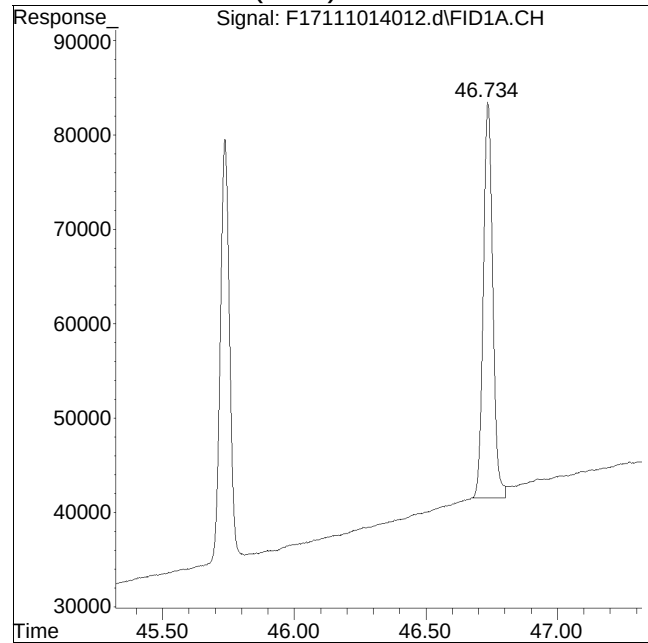
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #34: n-Tritriacontane (C33)



Original Peak Response = 829578

M4 = Poor automated baseline construction.

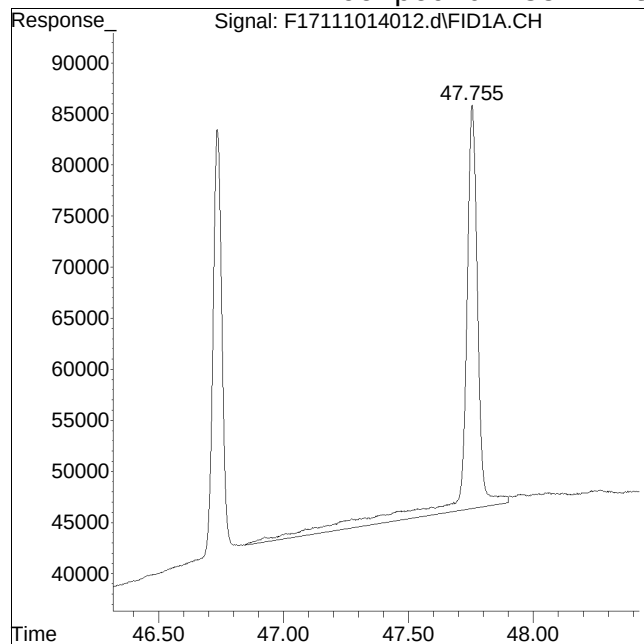


Manual Peak Response = 1045499 M4

Manual Integration/Negative Proof Report

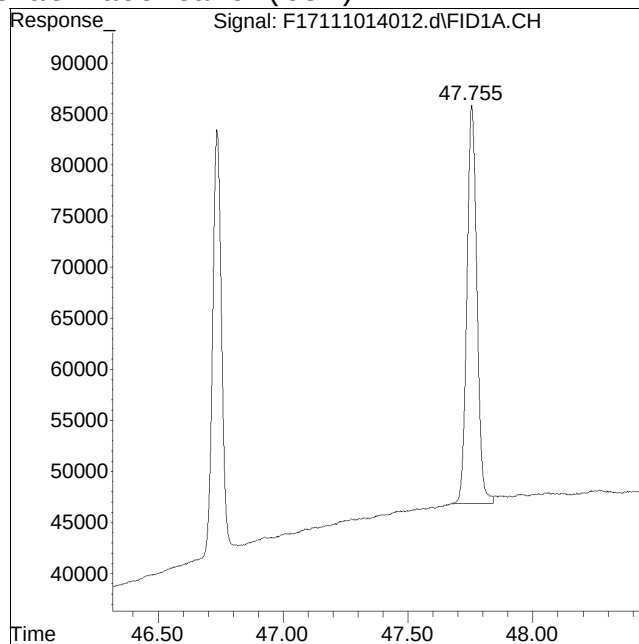
Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #35: n-tetratriacontane (C34)



Original Peak Response = 1455441

M4 = Poor automated baseline construction.

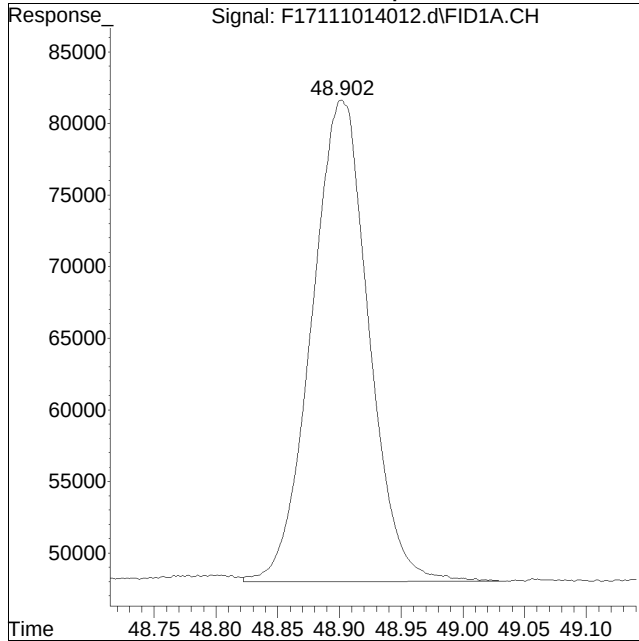


Manual Peak Response = 1083357 M4

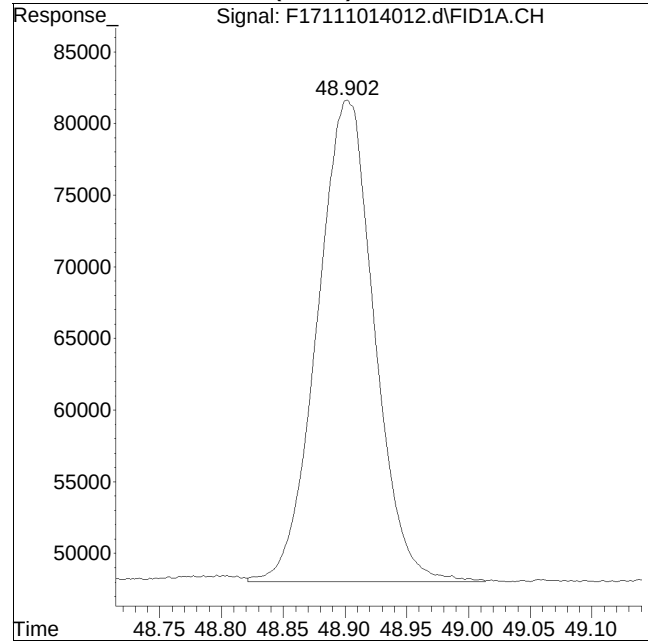
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #36: n-Pentatriacontane (C35)



Original Peak Response = 1082549



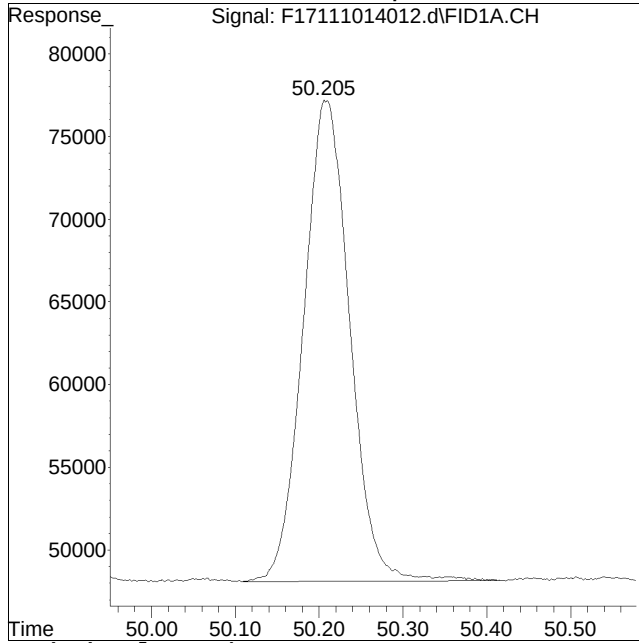
Manual Peak Response = 1079522 M4

M4 = Poor automated baseline construction.

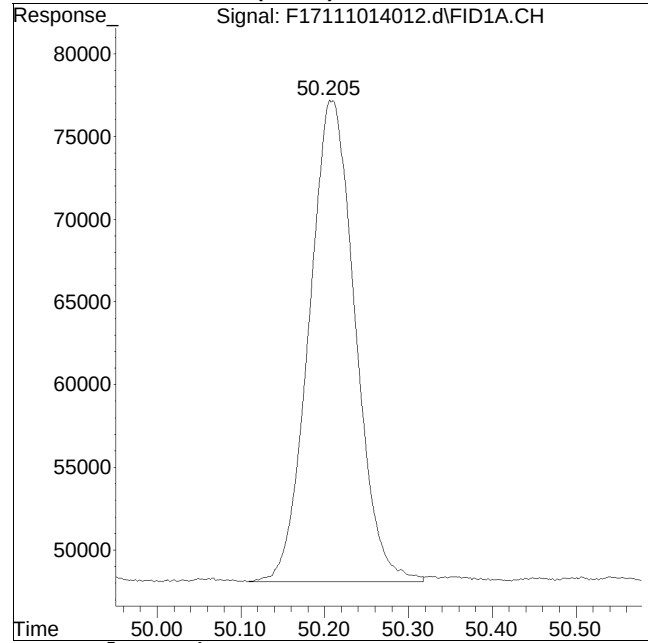
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #37: n-Hexatriacontane (C36)



Original Peak Response = 1115286



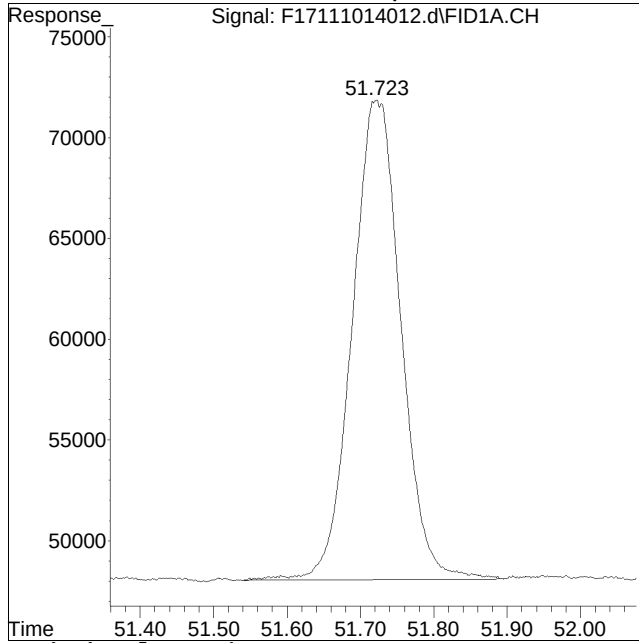
Manual Peak Response = 1109799 M4

M4 = Poor automated baseline construction.

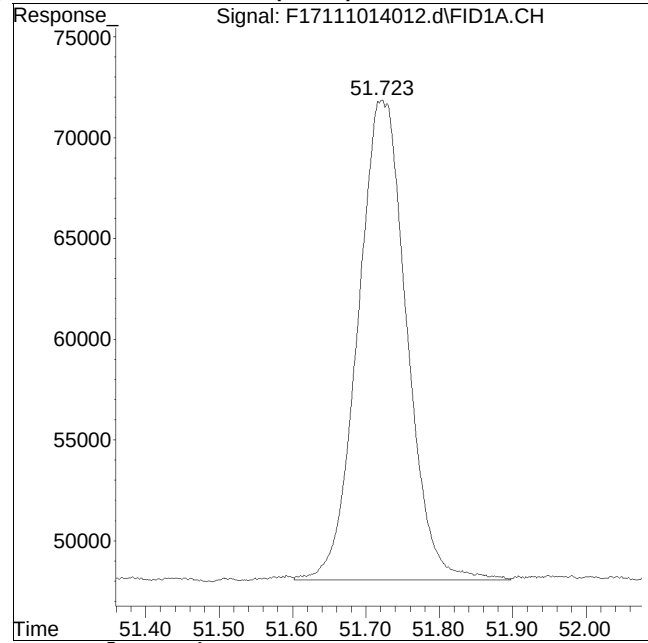
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #38: n-Heptatriacontane (C37)



Original Peak Response = 1095611



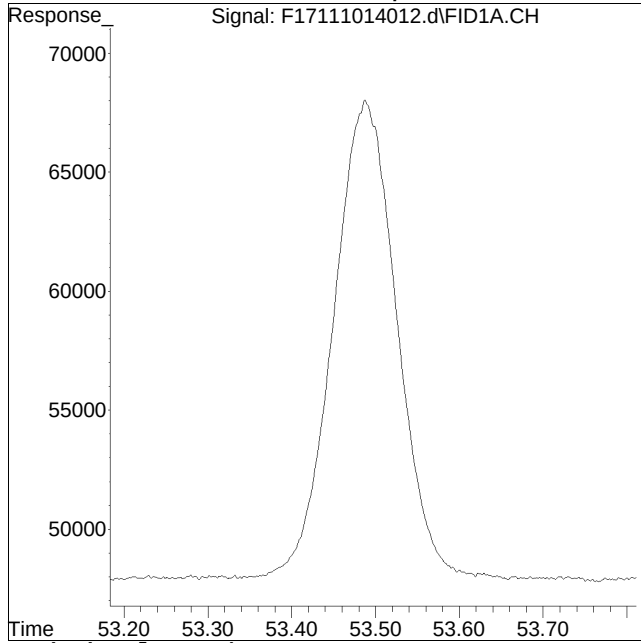
Manual Peak Response = 1096538 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

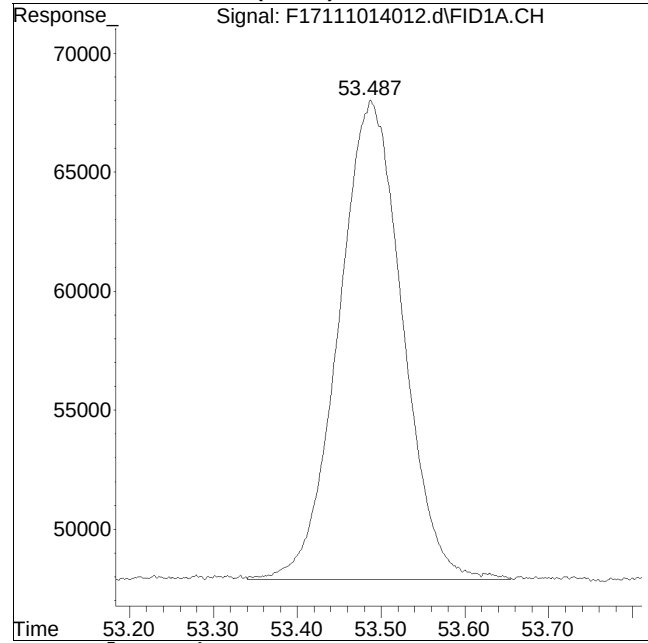
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

Compound #39: n-Octatriacontane (C38)



Original Peak Response = 0

M4 = Poor automated baseline construction.

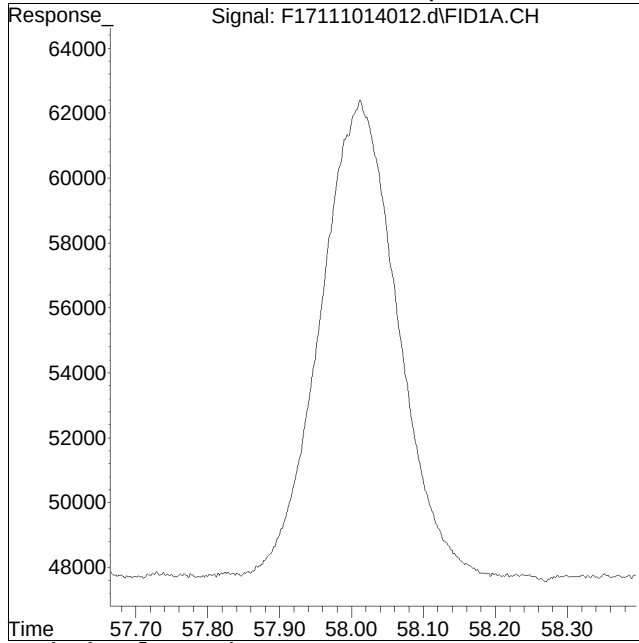


Manual Peak Response = 1065698 M4

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014012.d Operator : FID17:NL
Date Inj'd : 11/10/2014 7:02 pm Instrument : FID17
Sample : I1711011401R Quant Date : 11/14/2014 12:19 pm

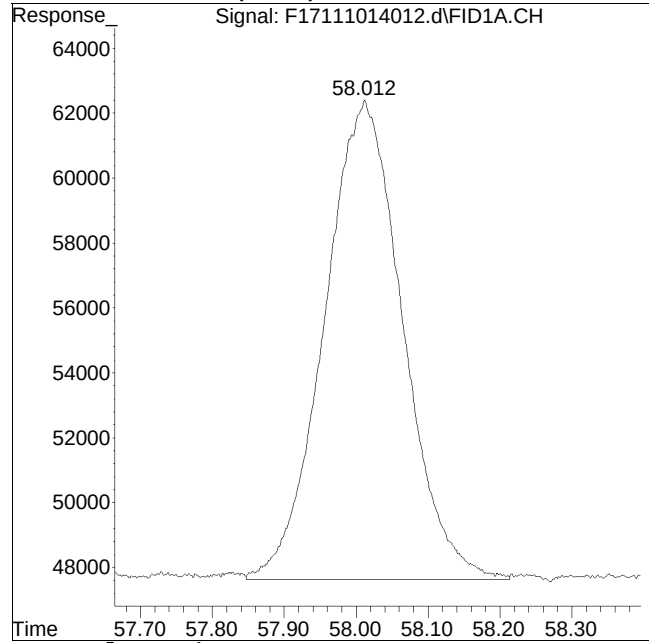
Compound #41: n-Tetracontane (C40)



Original Peak Response = 0

Manual Peak Response = 1113747 M4

M4 = Poor automated baseline construction.



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014014.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 8:31 pm
 Operator : FID17:NL
 Sample : I1711011402R
 Misc : WG743851, FRAV24 10ug/mL
 ALS Vial : 7 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:33:35 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.266	56364062	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.228	12275311	9.720	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 19.44%#
24) s	d50-Tetracosane	35.904	9879621	9.913	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 19.83%#
Target Compounds					
2) t	n-Octane (C8)	5.553	9260703	9.273	ug/mL M4
3) t	n-Nonane (C9)	7.759	9571218	9.122	ug/mL M4
4) t	n-Decane (C10)	10.251	9773460	8.876	ug/mL M4
5) t	n-Undecane (C11)	12.766	9991962	9.250	ug/mL M4
6) t	n-Dodecane (C12)	15.197	10206111	9.384	ug/mL M4
7) t	n-Tridecane (C13)	17.507	10303226	9.485	ug/mL M4
9) t	n-Tetradecane (C14)	19.693	10460709	9.290	ug/mL M4
11) t	n-Pentadecane (C15)	21.762	10664004	9.593	ug/mL M4
12) t	n-Hexadecane (C16)	23.722	10751385	9.597	ug/mL M4
14) t	n-Heptadecane (C17)	25.582	10666998	9.472	ug/mL M4
15) t	Pristane	25.693	10997838	9.743	ug/mL M4
16) t	n-Octadecane (C18)	27.354	10973500	9.804	ug/mL M4
17) t	Phytane	27.517	9686820	8.518	ug/mL M4
18) t	n-Nonadecane (C19)	29.043	10933111	9.823	ug/mL M4
20) t	n-Eicosane (C20)	30.655	10914758	9.761	ug/mL M4
21) t	n-Heneicosane (C21)	32.195	11005551	9.731	ug/mL M4
22) t	n-Docosane (C22)	33.673	11090258	9.751	ug/mL M4
23) t	n-Tricosane (C23)	35.090	11177597	9.772	ug/mL M4
25) t	n-Tetracosane (C24)	36.450	11187494	9.770	ug/mL M4
26) t	n-Pentacosane (C25)	37.758	11131468	9.688	ug/mL M4
27) t	n-Hexacosane (C26)	39.021	11381761	9.704	ug/mL M4
28) t	n-Heptacosane (C27)	40.239	11270080	9.681	ug/mL M4
29) t	n-Octacosane (C28)	41.414	11186318	9.579	ug/mL M4
30) t	n-Nonacosane (C29)	42.547	11258816	9.554	ug/mL M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014014.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 8:31 pm
 Operator : FID17:NL
 Sample : I1711011402R
 Misc : WG743851, FRAV24 10ug/mL
 ALS Vial : 7 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:33:35 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc Units
31) t	n-Triacontane (C30)	43.644	11268522	9.530 ug/mL M4
32) t	n-Hentriacontane (C31)	44.709	11275401	9.464 ug/mL M4
33) t	n-Dotriacontane (C32)	45.737	11359577	9.590 ug/mL M4
34) t	n-Tritriacontane (C33)	46.738	10681176	9.283 ug/mL M4
35) t	n-tetratriacontane (C34)	47.758	11092909	9.084 ug/mL M4
36) t	n-Pentatriacontane (C35)	48.907	11156813	9.183 ug/mL M4
37) t	n-Hexatriacontane (C36)	50.215	11422543	8.683 ug/mL M4
38) t	n-Heptatriacontane (C37)	51.728	11112602	9.054 ug/mL M4
39) t	n-Octatriacontane (C38)	53.487	10908503	8.894 ug/mL M4
41) t	n-Tetracontane (C40)	58.025	11317318	9.591 ug/mL M4

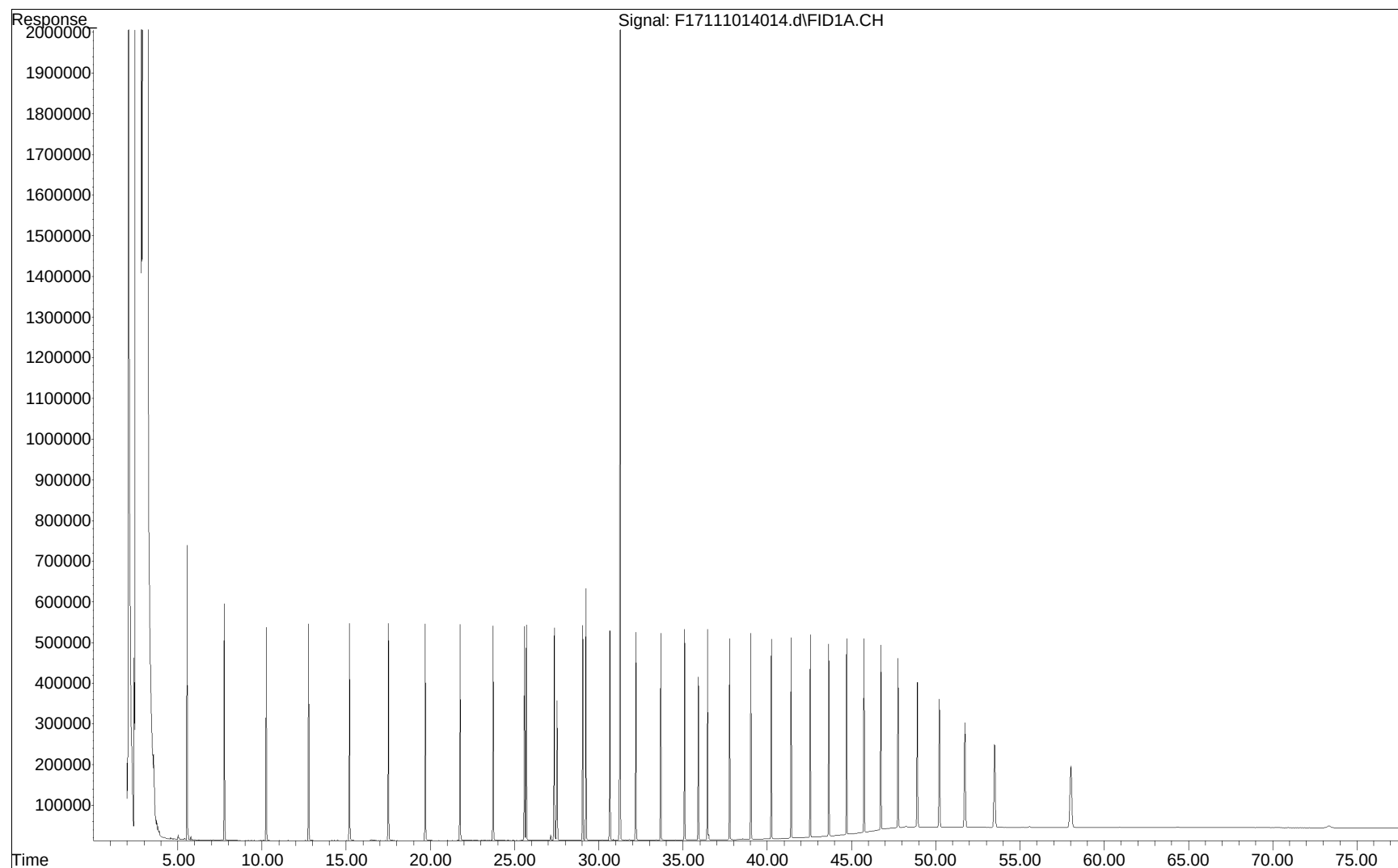
SemiQuant Compounds - Not Calibrated on this Instrument

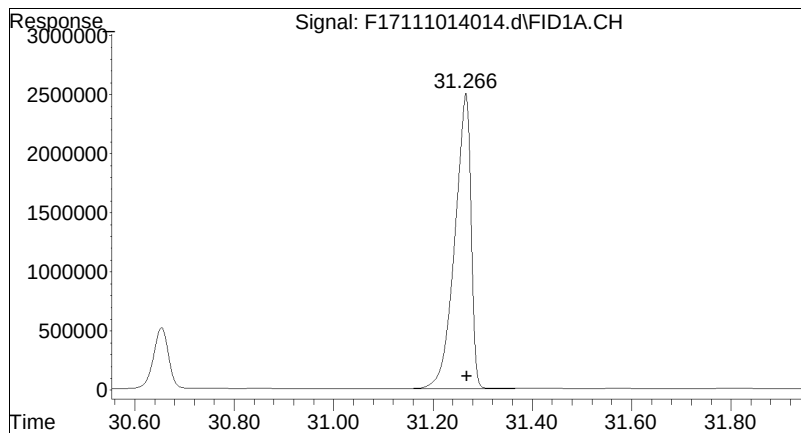
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

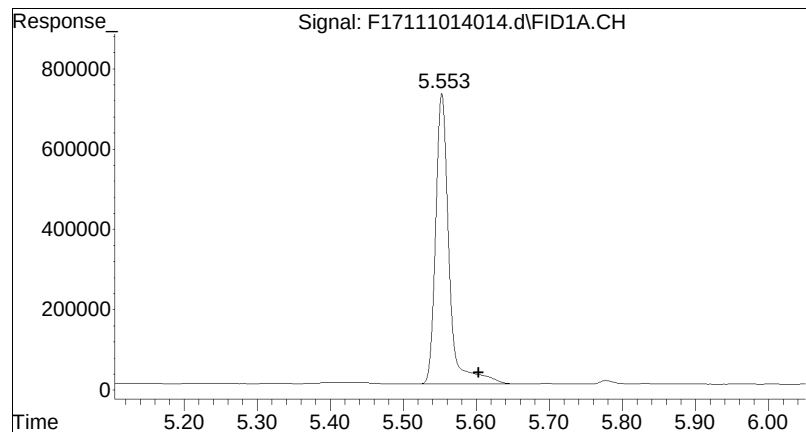
File : 0:\Forensics\Data\FID17\2014\NOV\NOV10\F17111014014.d
Operator : FID17:NL
Acquired : 10 Nov 2014 8:31 pm using AcqMethod FID17.M
Sample Name: I1711011402R
Instrument: FID17
Misc Info : WG743851, FRAV24 10ug/mL
Vial Number: 7
CurrentMeth: 0:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M





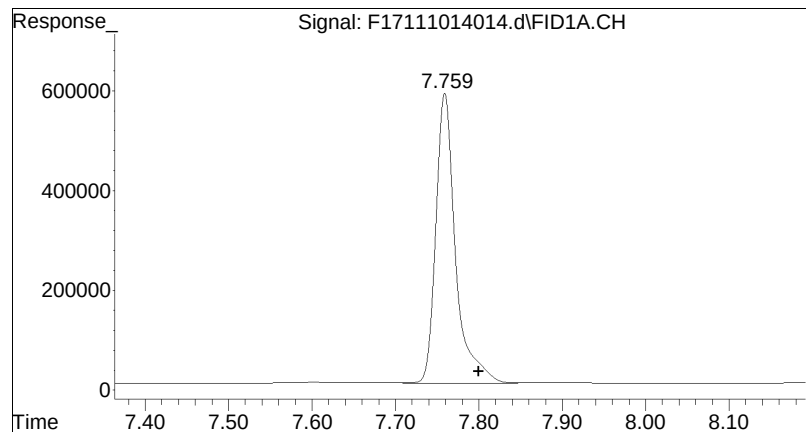
#1 5-alpha-androstane

R.T.: 31.266 min
Delta R.T.: -0.003 min
Response: 56364062
Conc: 50.00 ug/mL M4



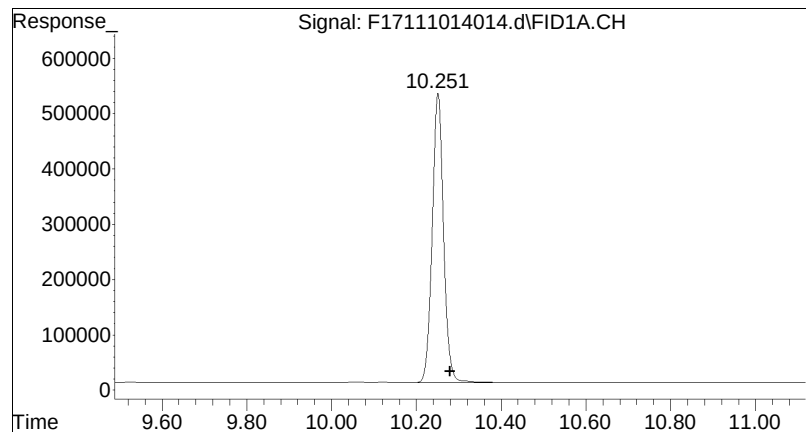
#2 n-Octane (C8)

R.T.: 5.553 min
Delta R.T.: -0.051 min
Response: 9260703
Conc: 9.27 ug/mL M4



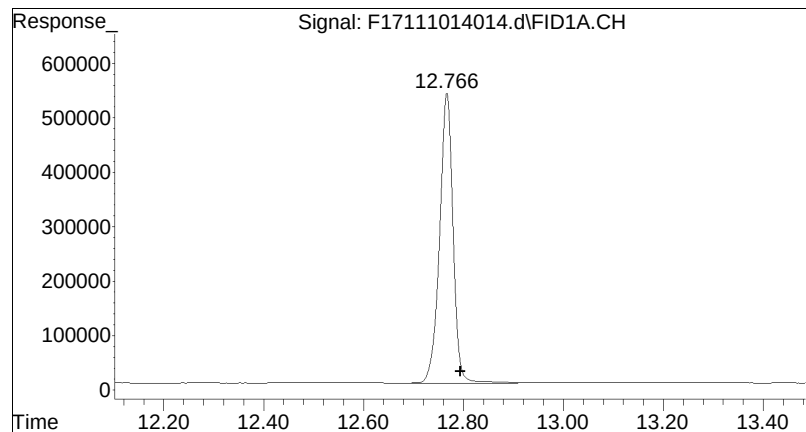
#3 n-Nonane (C9)

R.T.: 7.759 min
Delta R.T.: -0.041 min
Response: 9571218
Conc: 9.12 ug/mL M4



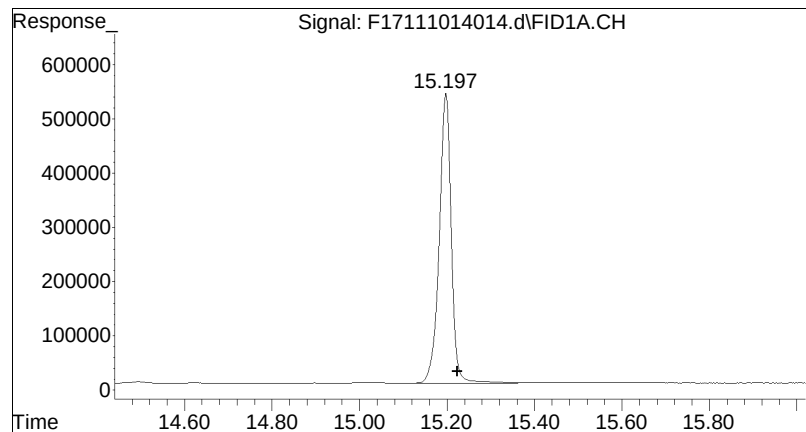
#4 n-Decane (C10)

R.T.: 10.251 min
Delta R.T.: -0.028 min
Response: 9773460
Conc: 8.88 ug/mL M4



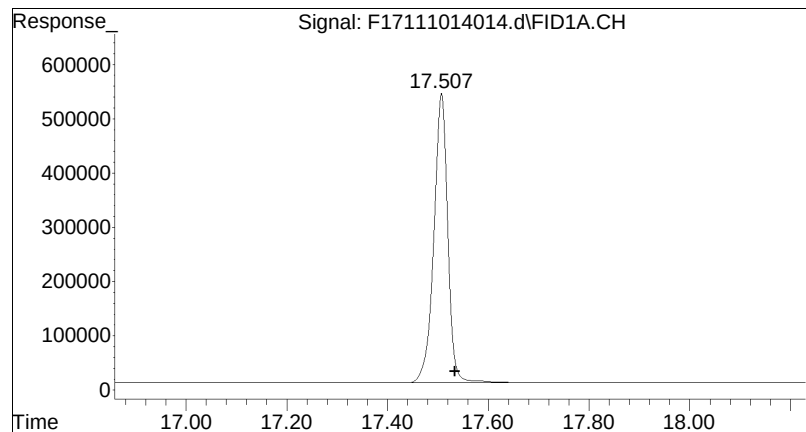
#5 n-Undecane (C11)

R.T.: 12.766 min
Delta R.T.: -0.027 min
Response: 9991962
Conc: 9.25 ug/mL M4



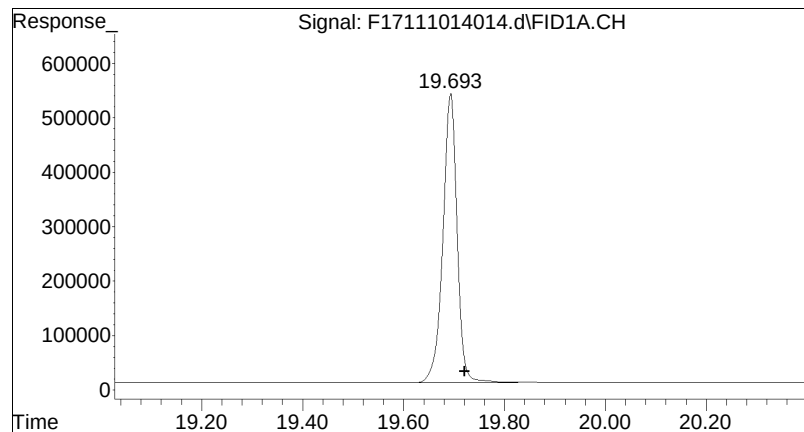
#6 n-Dodecane (C12)

R.T.: 15.197 min
Delta R.T.: -0.027 min
Response: 10206111
Conc: 9.38 ug/mL M4



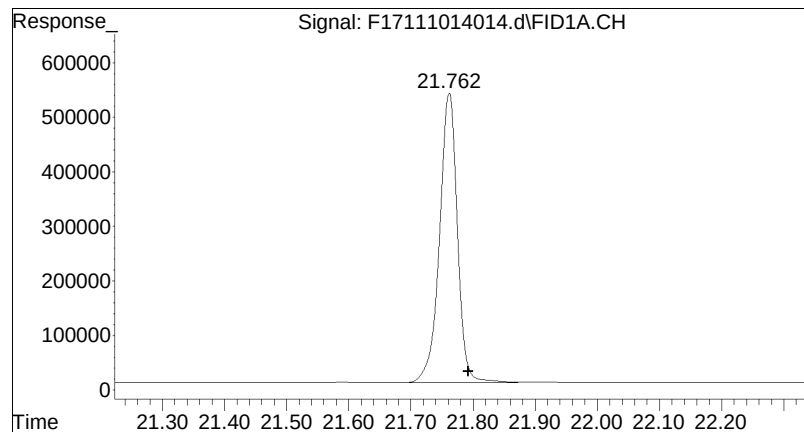
#7 n-Tridecane (C13)

R.T.: 17.507 min
Delta R.T.: -0.027 min
Response: 10303226
Conc: 9.48 ug/mL M4



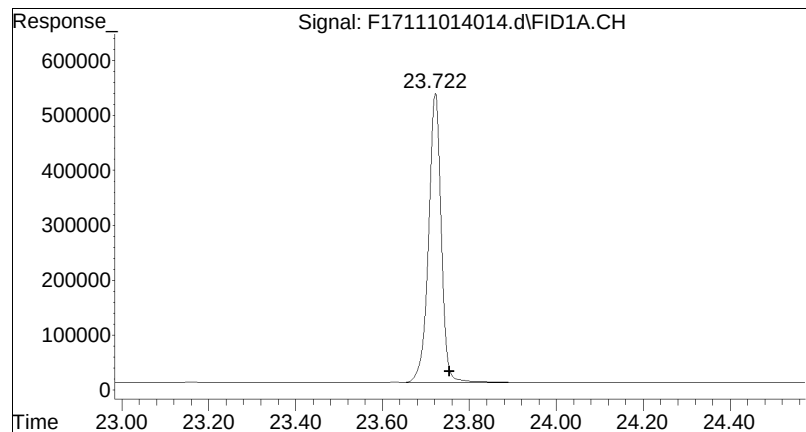
#9 n-Tetradecane (C14)

R.T.: 19.693 min
Delta R.T.: -0.028 min
Response: 10460709
Conc: 9.29 ug/mL M4



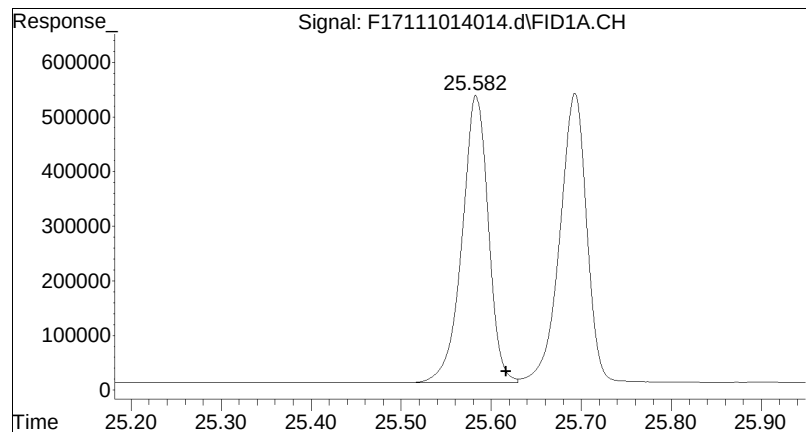
#11 n-Pentadecane (C15)

R.T.: 21.762 min
Delta R.T.: -0.030 min
Response: 10664004
Conc: 9.59 ug/mL M4



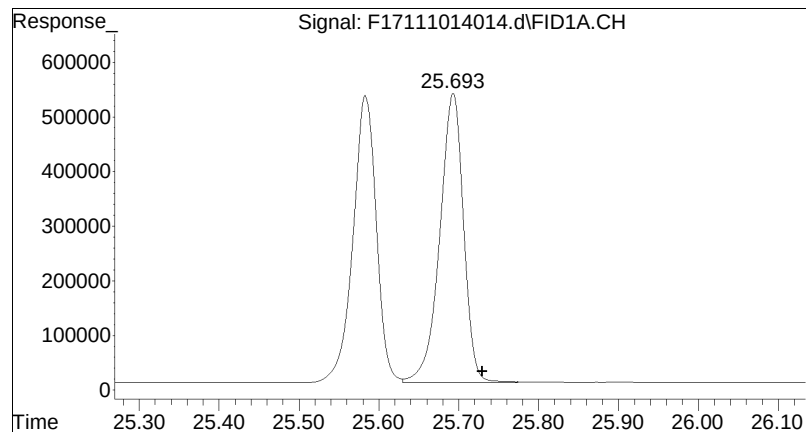
#12 n-Hexadecane (C16)

R.T.: 23.722 min
Delta R.T.: -0.031 min
Response: 10751385
Conc: 9.60 ug/mL M4



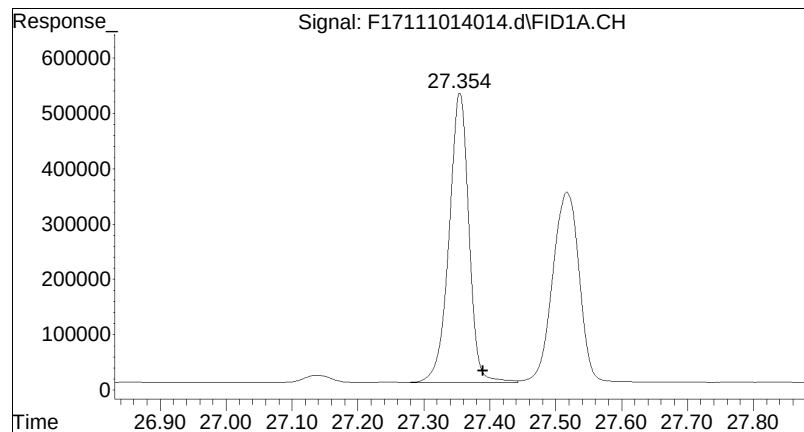
#14 n-Heptadecane (C17)

R.T.: 25.582 min
Delta R.T.: -0.034 min
Response: 10666998
Conc: 9.47 ug/mL M4



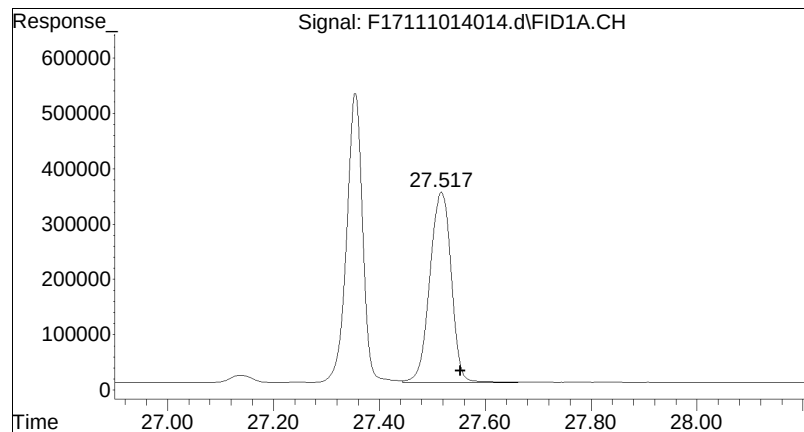
#15 Pristane

R.T.: 25.693 min
Delta R.T.: -0.037 min
Response: 10997838
Conc: 9.74 ug/mL M4



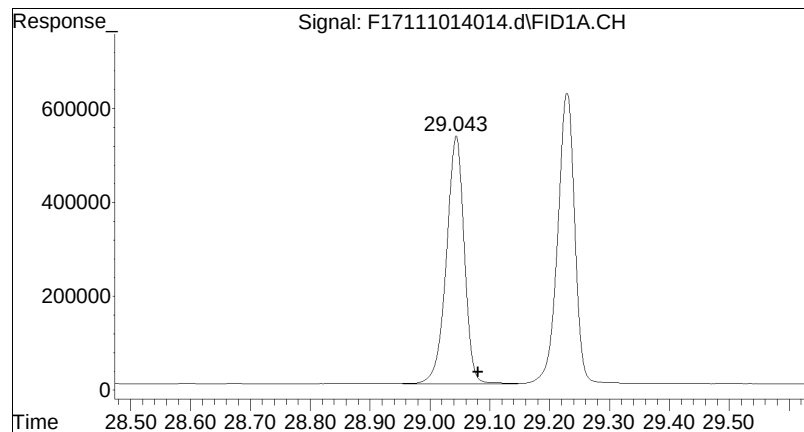
#16 n-Octadecane (C18)

R.T.: 27.354 min
Delta R.T.: -0.035 min
Response: 10973500
Conc: 9.80 ug/mL M4



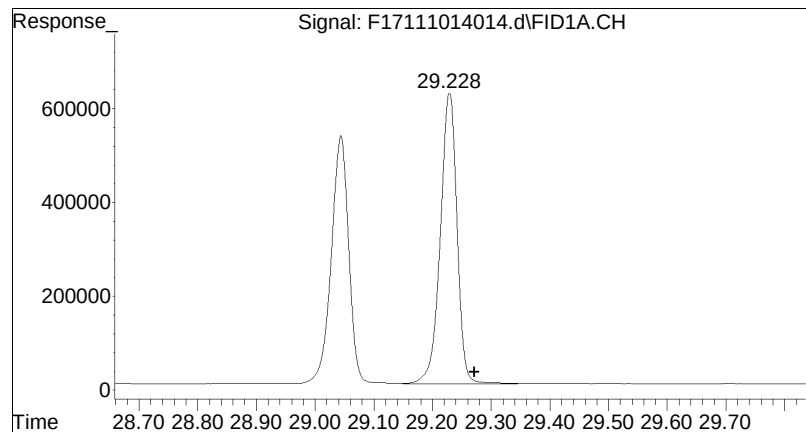
#17 Phytane

R.T.: 27.517 min
Delta R.T.: -0.036 min
Response: 9686820
Conc: 8.52 ug/mL M4



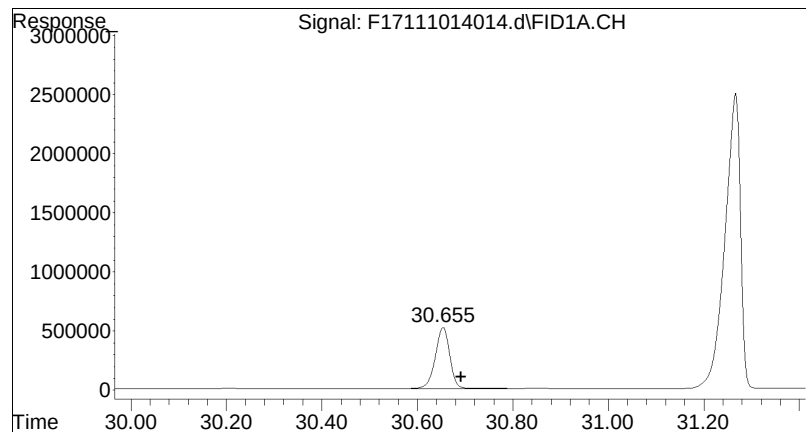
#18 n-Nonadecane (C19)

R.T.: 29.043 min
Delta R.T.: -0.036 min
Response: 10933111
Conc: 9.82 ug/mL M4



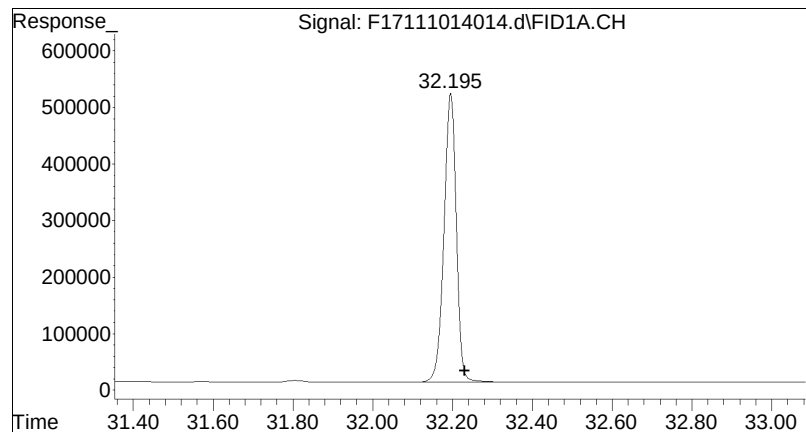
#19 ortho-terphenyl

R.T.: 29.228 min
Delta R.T.: -0.042 min
Response: 12275311
Conc: 9.72 ug/mL M4



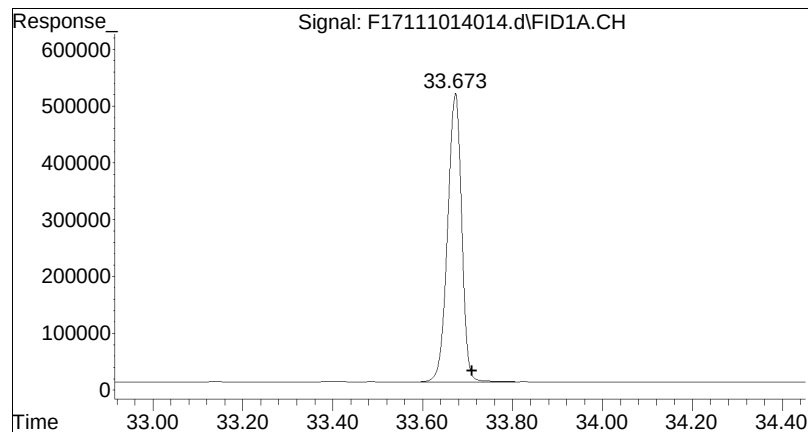
#20 n-Eicosane (C20)

R.T.: 30.655 min
Delta R.T.: -0.037 min
Response: 10914758
Conc: 9.76 ug/mL M4



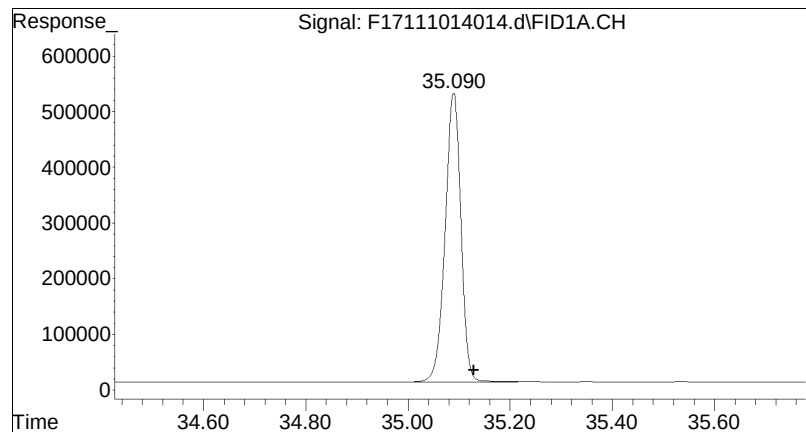
#21 n-Heneicosane (C21)

R.T.: 32.195 min
Delta R.T.: -0.036 min
Response: 11005551
Conc: 9.73 ug/mL M4



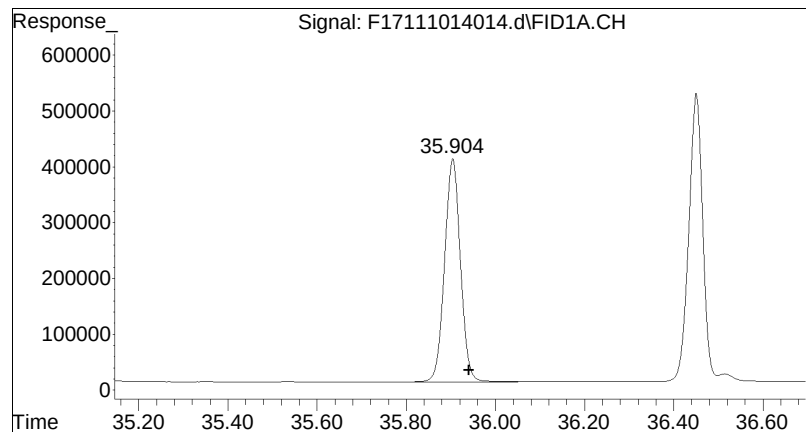
#22 n-Docosane (C22)

R.T.: 33.673 min
Delta R.T.: -0.036 min
Response: 11090258
Conc: 9.75 ug/mL M4



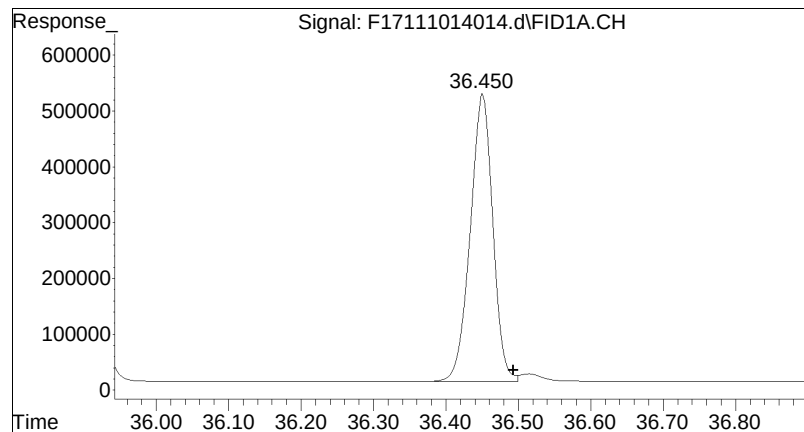
#23 n-Tricosane (C23)

R.T.: 35.090 min
Delta R.T.: -0.039 min
Response: 11177597
Conc: 9.77 ug/mL M4



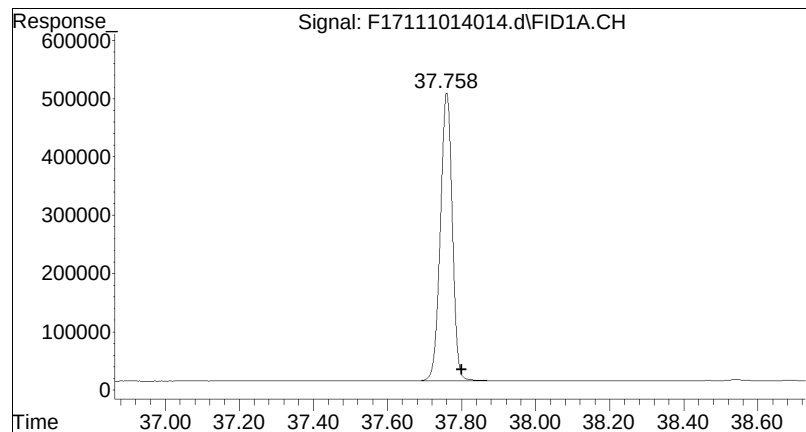
#24 d50-Tetracosane

R.T.: 35.904 min
Delta R.T.: -0.036 min
Response: 9879621
Conc: 9.91 ug/mL M4



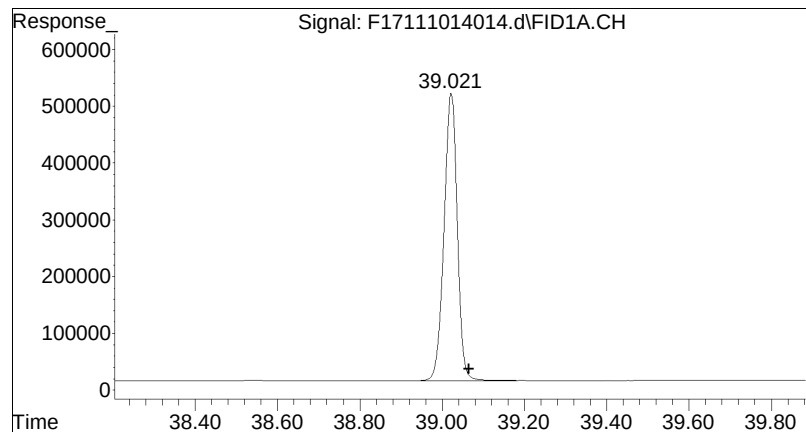
#25 n-Tetracosane (C24)

R.T.: 36.450 min
Delta R.T.: -0.044 min
Response: 11187494
Conc: 9.77 ug/mL M4



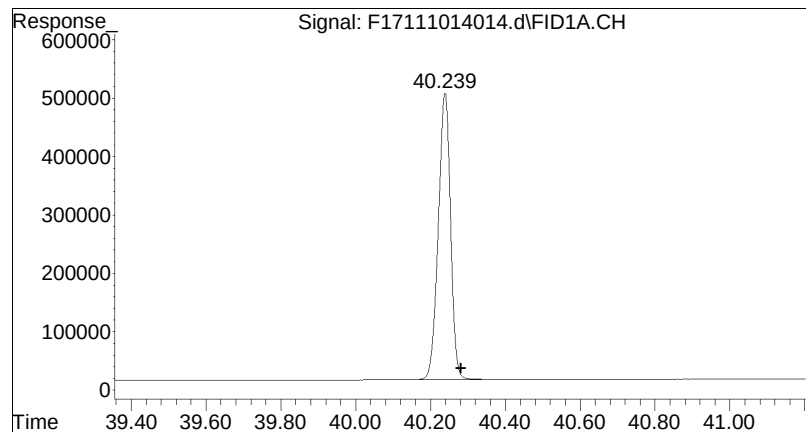
#26 n-Pentacosane (C25)

R.T.: 37.758 min
Delta R.T.: -0.042 min
Response: 11131468
Conc: 9.69 ug/mL M4



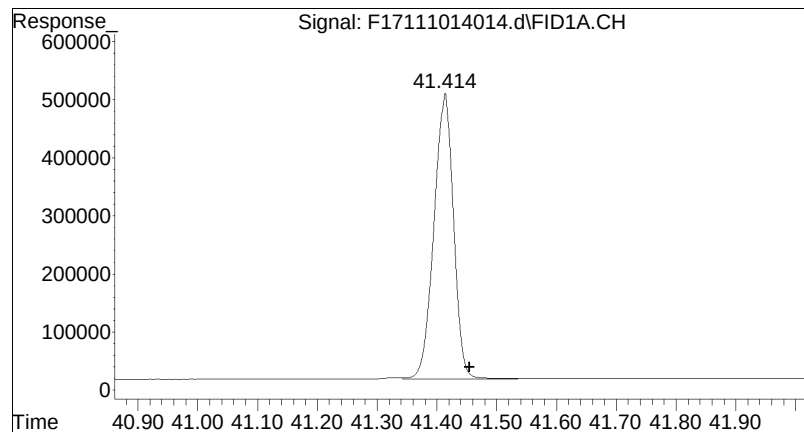
#27 n-Hexacosane (C26)

R.T.: 39.021 min
Delta R.T.: -0.044 min
Response: 11381761
Conc: 9.70 ug/mL M4



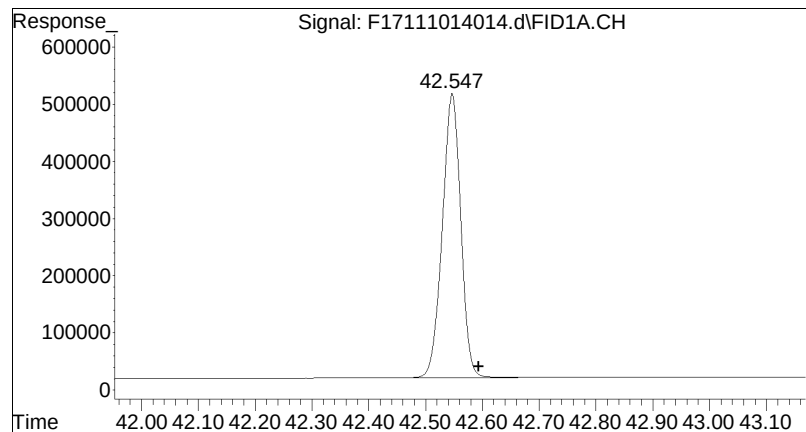
#28 n-Heptacosane (C27)

R.T.: 40.239 min
Delta R.T.: -0.042 min
Response: 11270080
Conc: 9.68 ug/mL M4



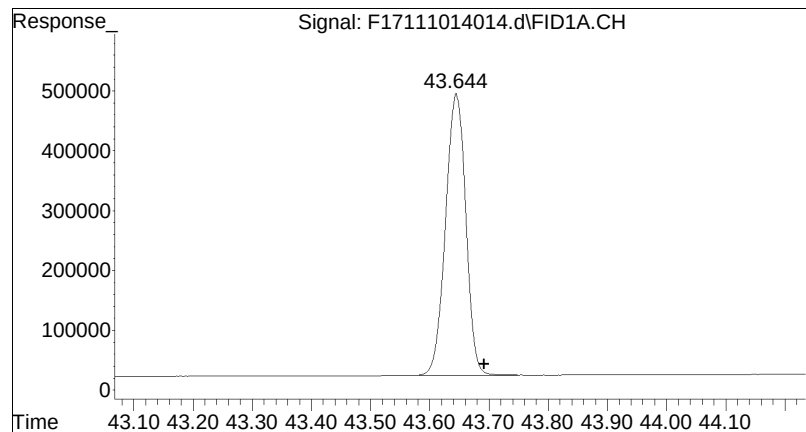
#29 n-Octacosane (C28)

R.T.: 41.414 min
Delta R.T.: -0.041 min
Response: 11186318
Conc: 9.58 ug/mL M4



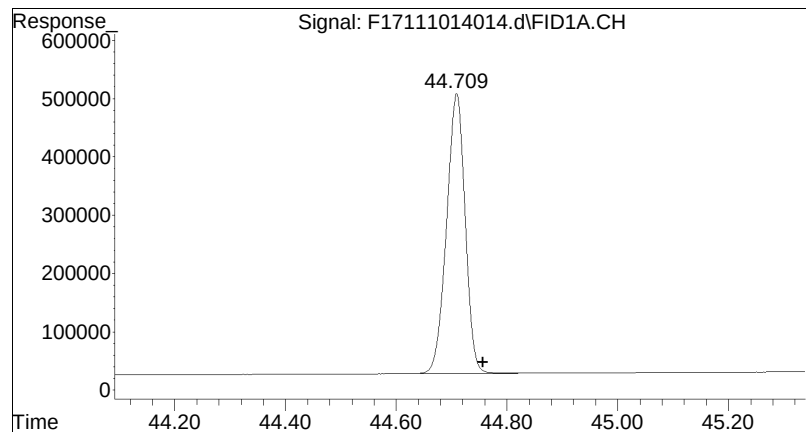
#30 n-Nonacosane (C29)

R.T.: 42.547 min
Delta R.T.: -0.047 min
Response: 11258816
Conc: 9.55 ug/mL M4



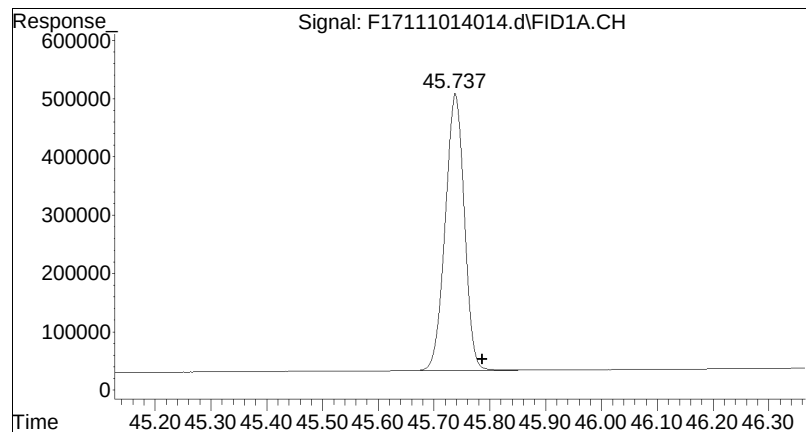
#31 n-Triacontane (C30)

R.T.: 43.644 min
Delta R.T.: -0.048 min
Response: 11268522
Conc: 9.53 ug/mL M4



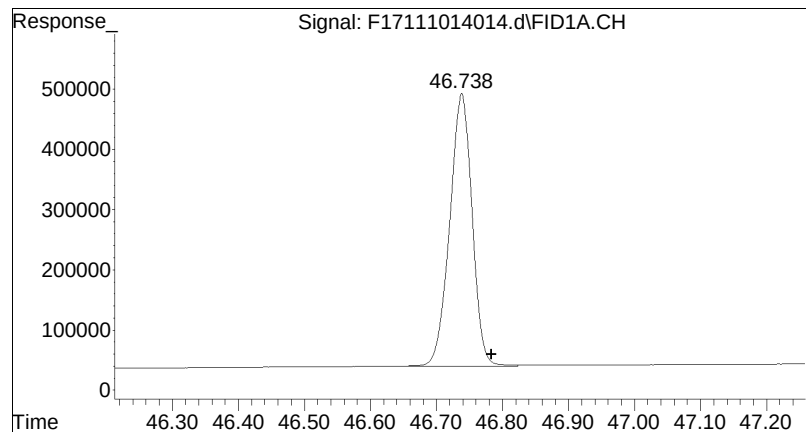
#32 n-Hentriacontane (C31)

R.T.: 44.709 min
Delta R.T.: -0.048 min
Response: 11275401
Conc: 9.46 ug/mL M4



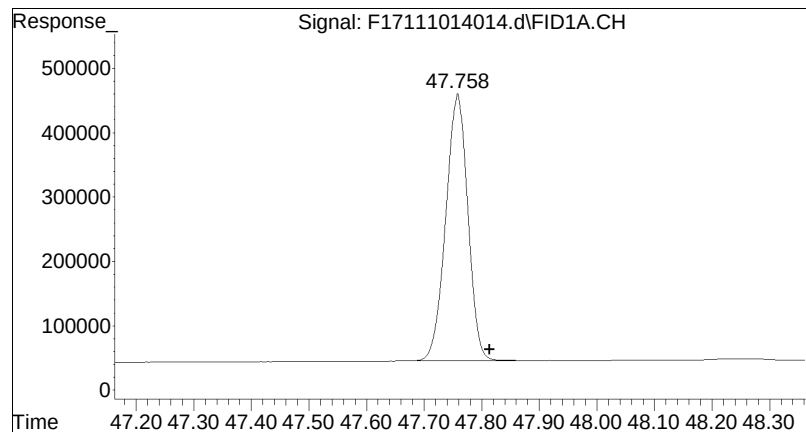
#33 n-Dotriacontane (C32)

R.T.: 45.737 min
Delta R.T.: -0.049 min
Response: 11359577
Conc: 9.59 ug/mL M4



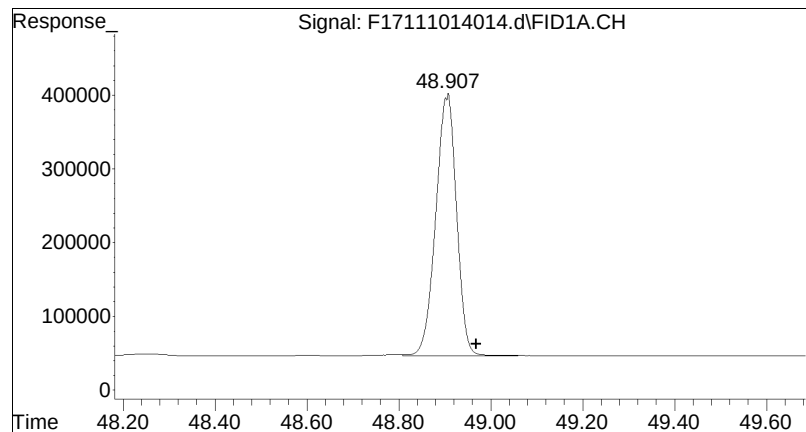
#34 n-Tritriacontane (C33)

R.T.: 46.738 min
Delta R.T.: -0.045 min
Response: 10681176
Conc: 9.28 ug/mL M4



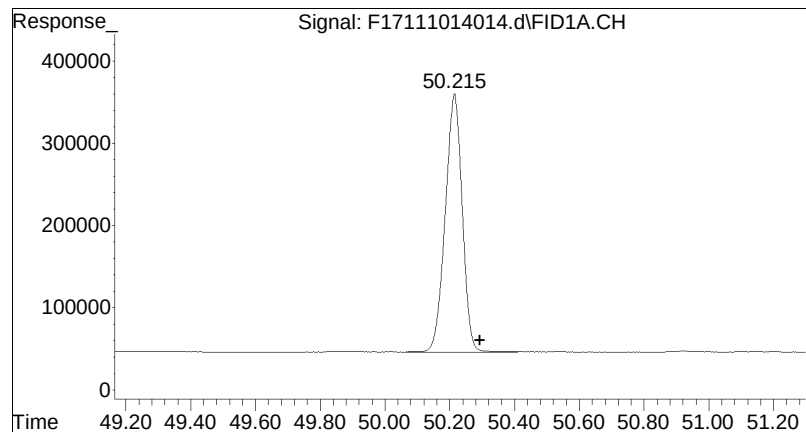
#35 n-tetratriacontane (C34)

R.T.: 47.758 min
Delta R.T.: -0.056 min
Response: 11092909
Conc: 9.08 ug/mL M4



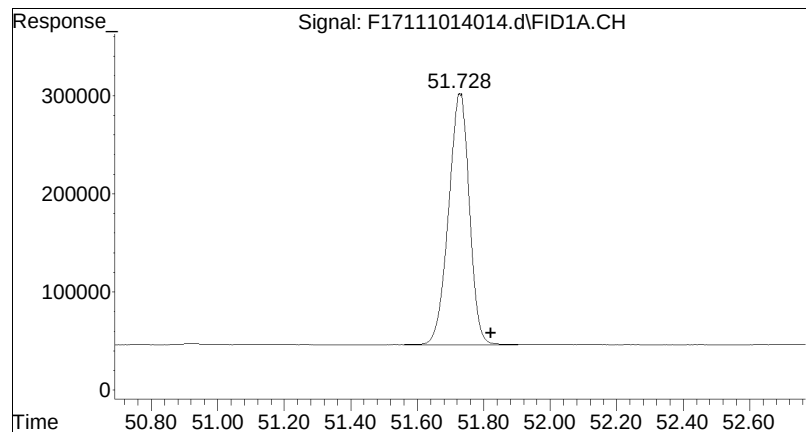
#36 n-Pentatriacontane (C35)

R.T.: 48.907 min
Delta R.T.: -0.060 min
Response: 11156813
Conc: 9.18 ug/mL M4



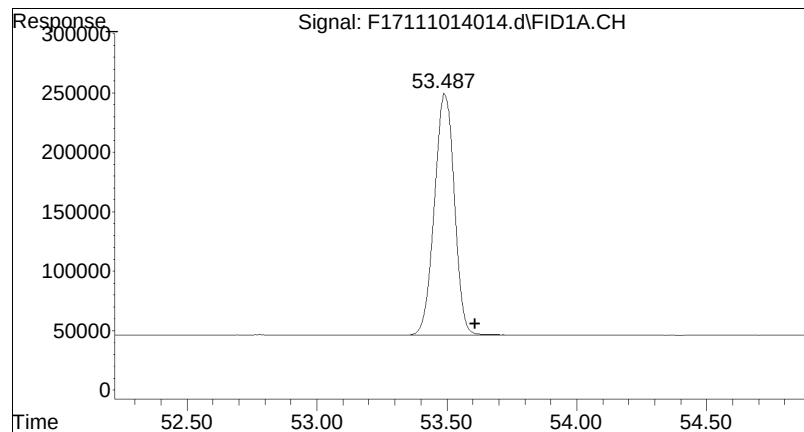
#37 n-Hexatriacontane (C36)

R.T.: 50.215 min
Delta R.T.: -0.078 min
Response: 11422543
Conc: 8.68 ug/mL M4



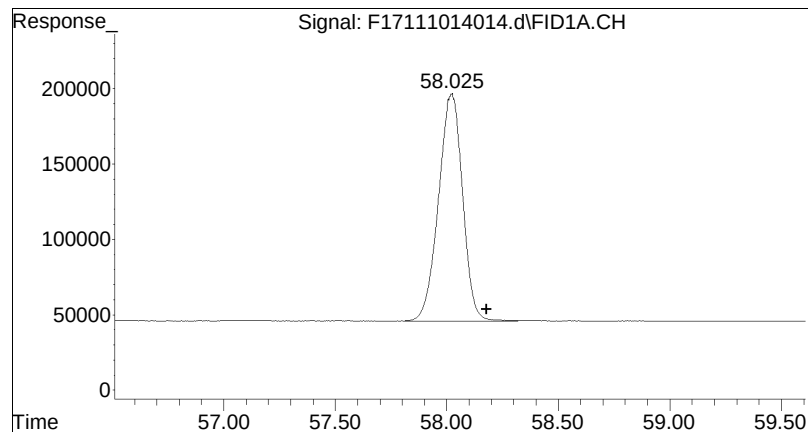
#38 n-Heptatriacontane (C37)

R.T.: 51.728 min
Delta R.T.: -0.094 min
Response: 11112602
Conc: 9.05 ug/mL M4



#39 n-Octatriacontane (C38)

R.T.: 53.487 min
Delta R.T.: -0.120 min
Response: 10908503
Conc: 8.89 ug/mL M4



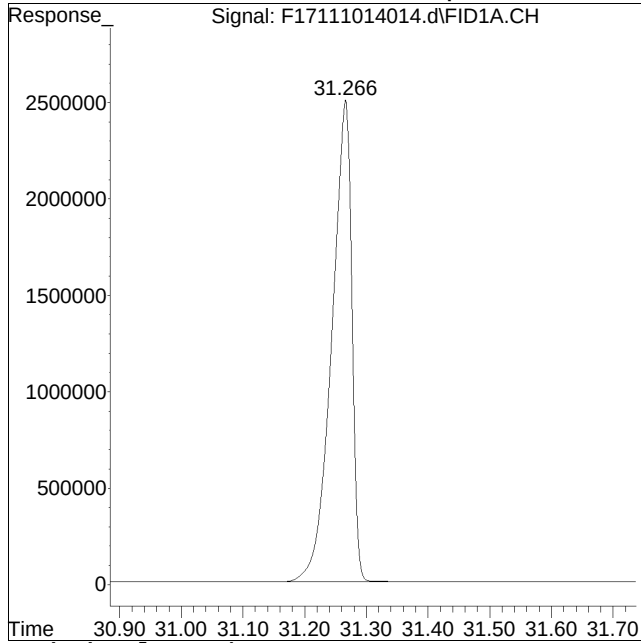
#41 n-Tetracontane (C40)

R.T.: 58.025 min
Delta R.T.: -0.153 min
Response: 11317318
Conc: 9.59 ug/mL M4

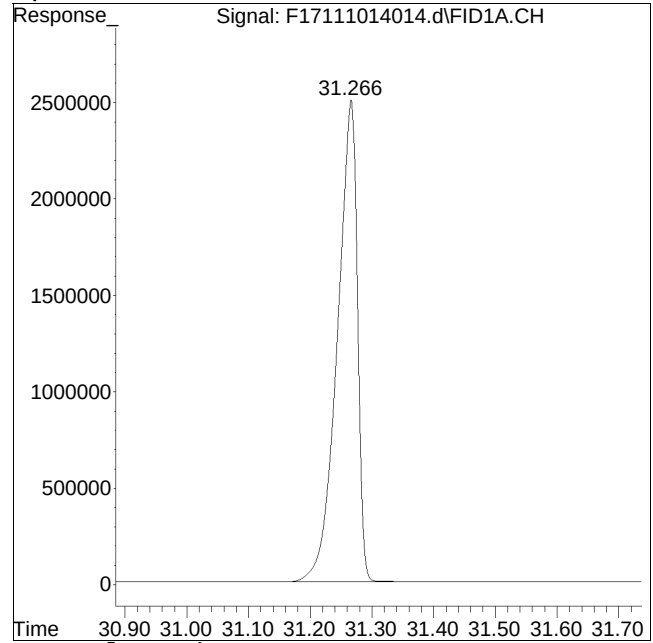
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #1: 5-alpha-androstane



Original Peak Response = 56431452



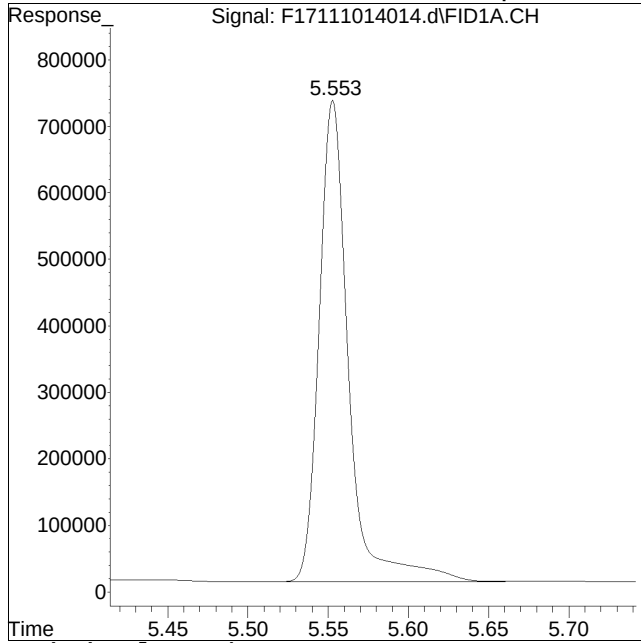
Manual Peak Response = 56364062 M4

M4 = Poor automated baseline construction.

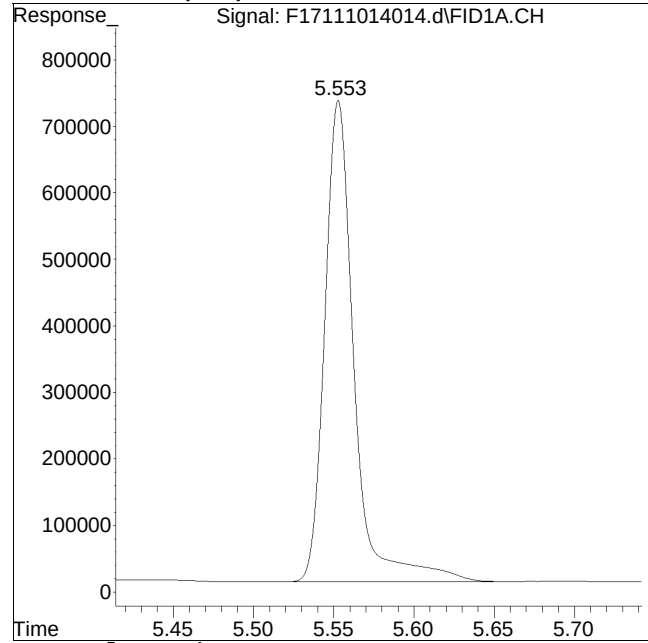
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #2: n-Octane (C8)



Original Peak Response = 9269586



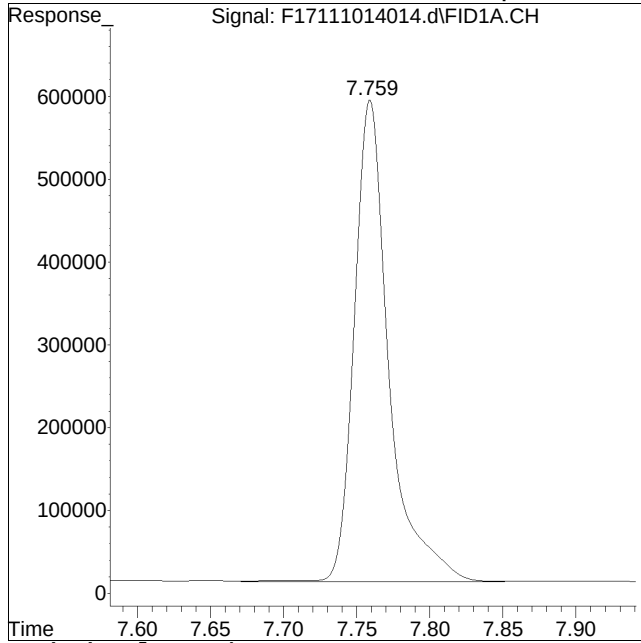
Manual Peak Response = 9260703 M4

M4 = Poor automated baseline construction.

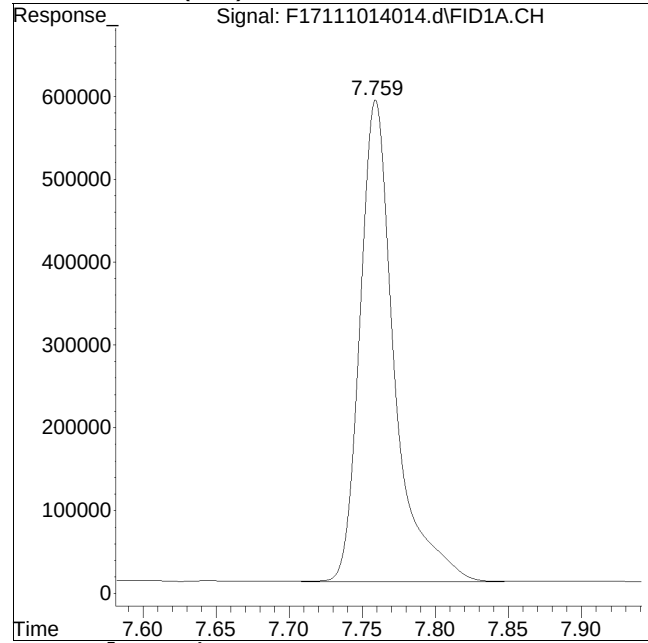
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #3: n-Nonane (C9)



Original Peak Response = 9627044

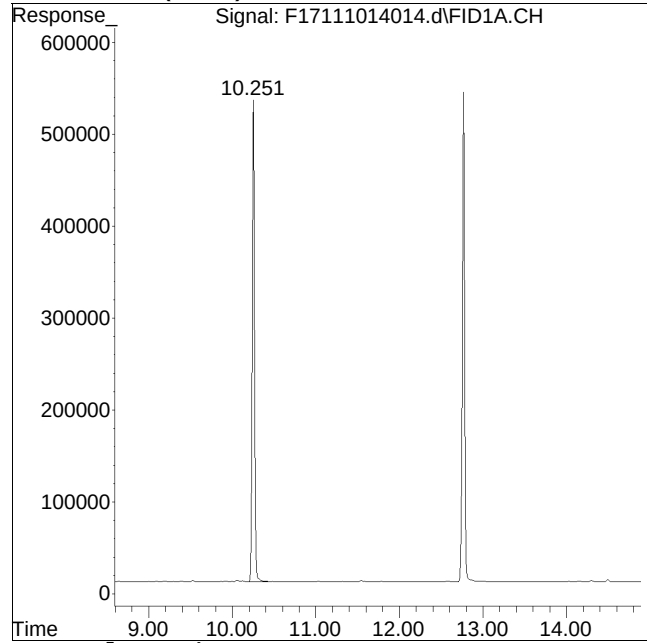
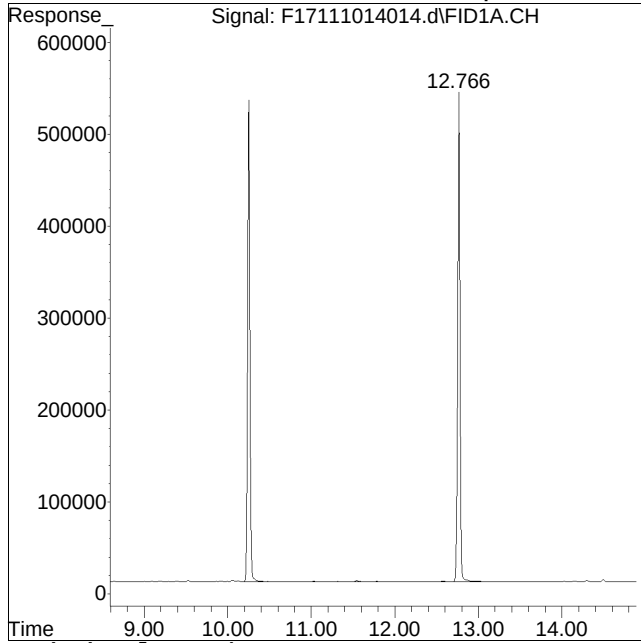


Manual Peak Response = 9571218 M4

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #4: n-Decane (C10)



Original Peak Response = 9796895

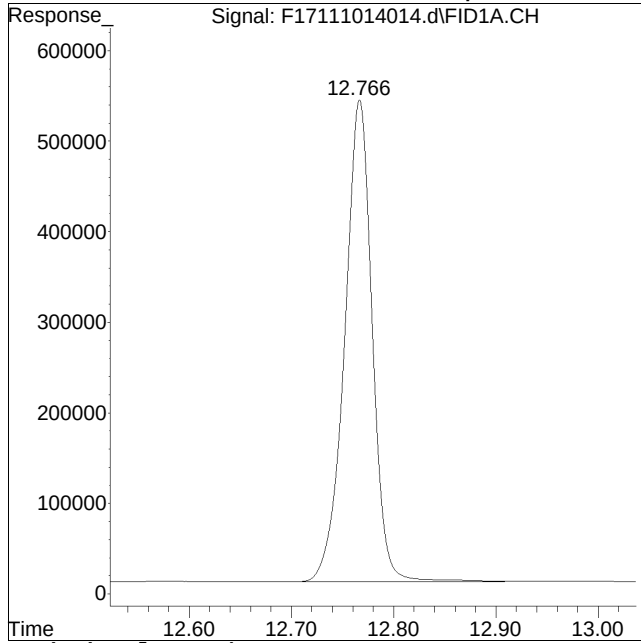
Manual Peak Response = 9773460 M4

M4 = Poor automated baseline construction.

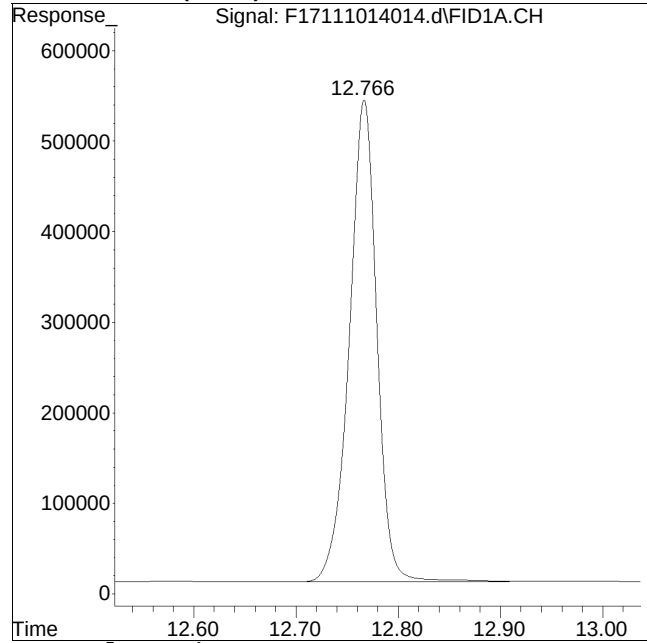
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #5: n-Undecane (C11)



Original Peak Response = 9949432



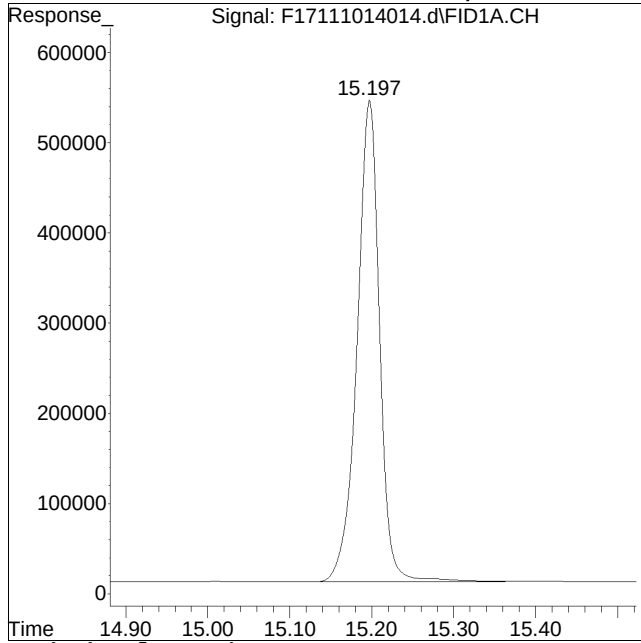
Manual Peak Response = 9991962 M4

M4 = Poor automated baseline construction.

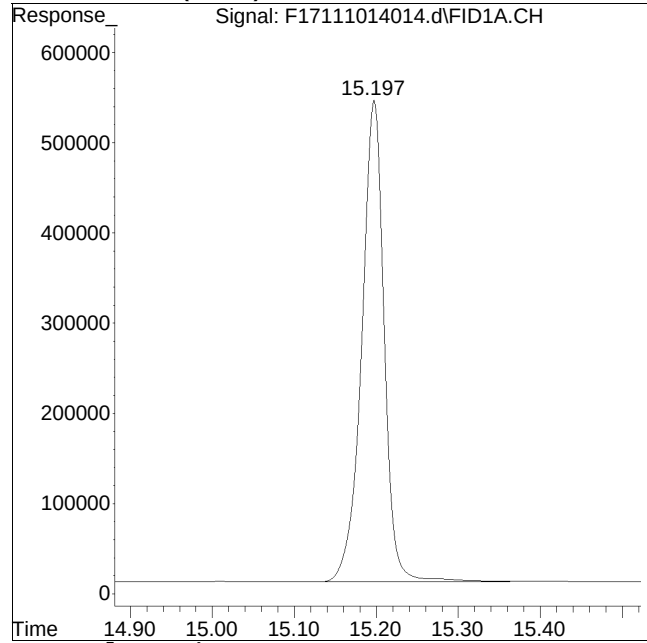
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #6: n-Dodecane (C12)



Original Peak Response = 10163447



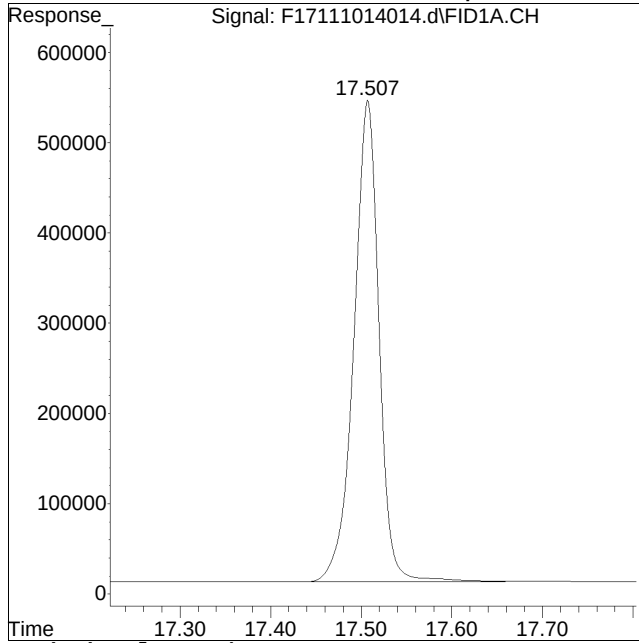
Manual Peak Response = 10206111 M4

M4 = Poor automated baseline construction.

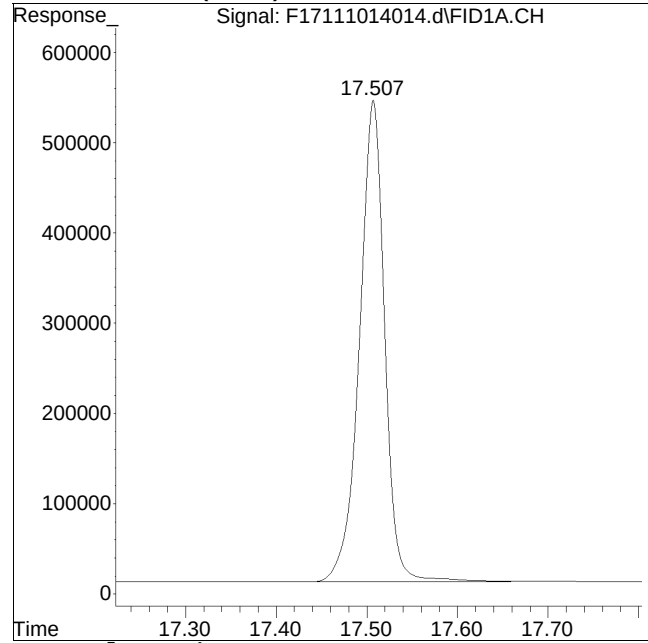
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #7: n-Tridecane (C13)



Original Peak Response = 10296893



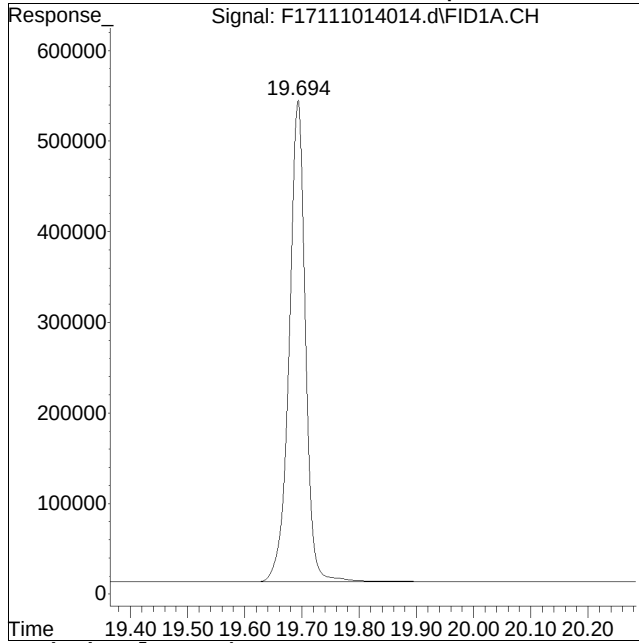
Manual Peak Response = 10303226 M4

M4 = Poor automated baseline construction.

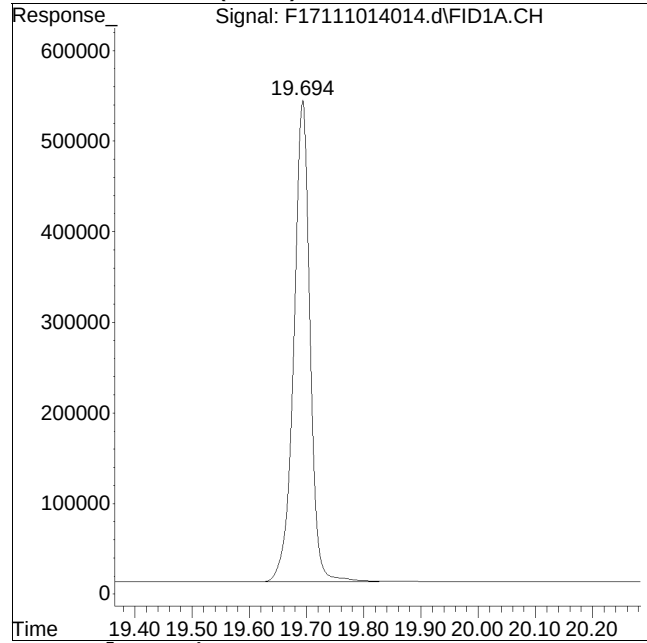
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #9: n-Tetradecane (C14)



Original Peak Response = 10501203



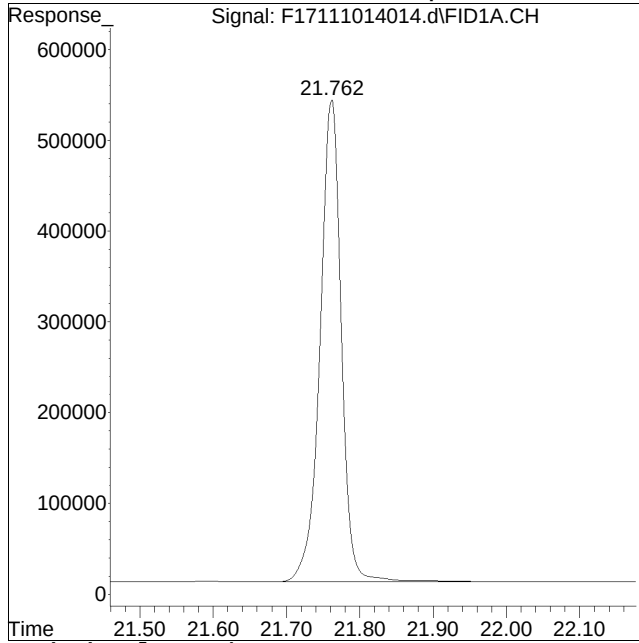
Manual Peak Response = 10460709 M4

M4 = Poor automated baseline construction.

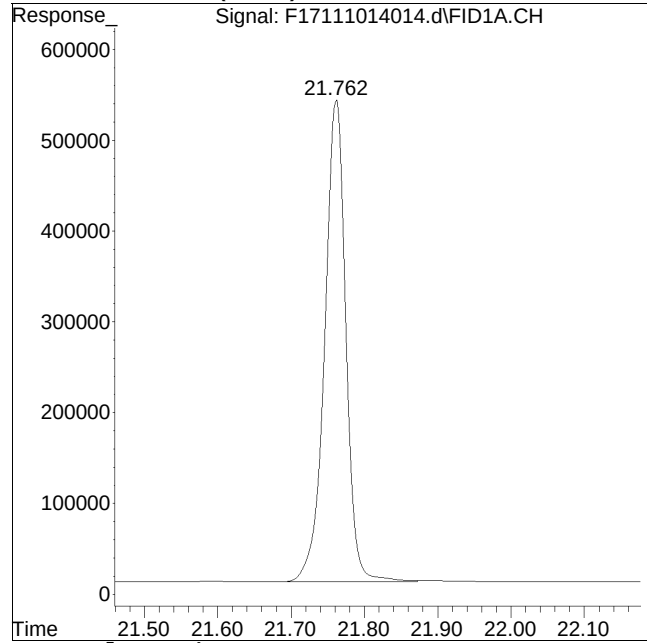
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #11: n-Pentadecane (C15)



Original Peak Response = 10692994



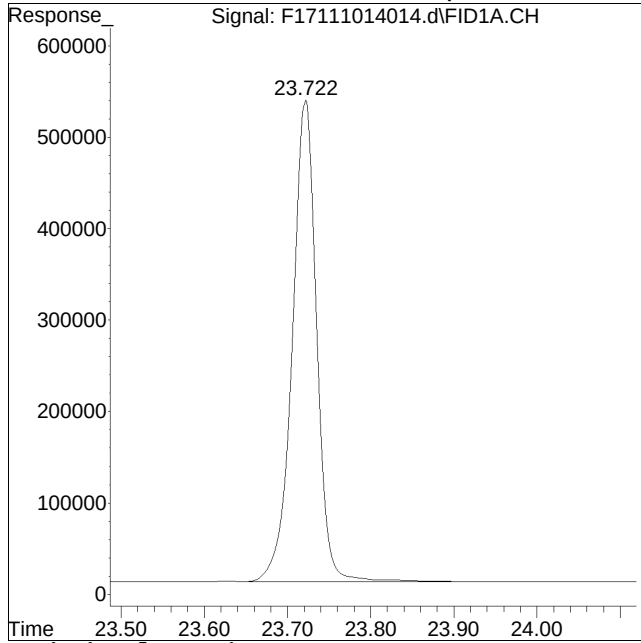
Manual Peak Response = 10664004 M4

M4 = Poor automated baseline construction.

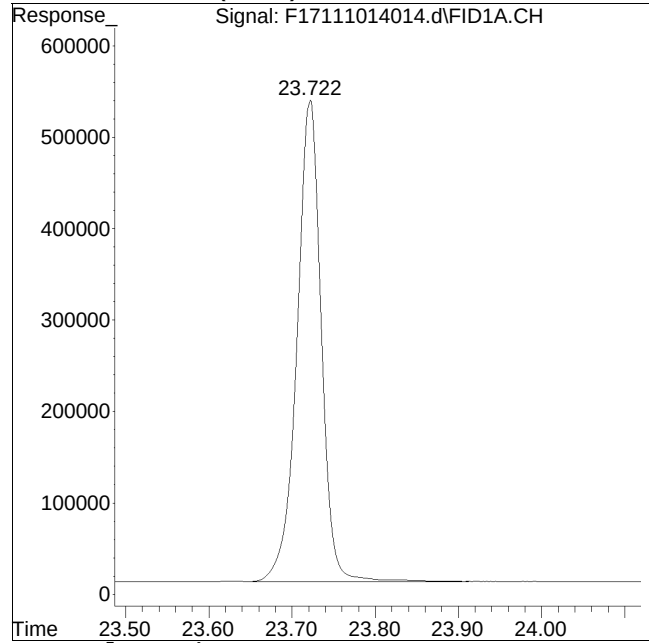
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #12: n-Hexadecane (C16)



Original Peak Response = 10702073



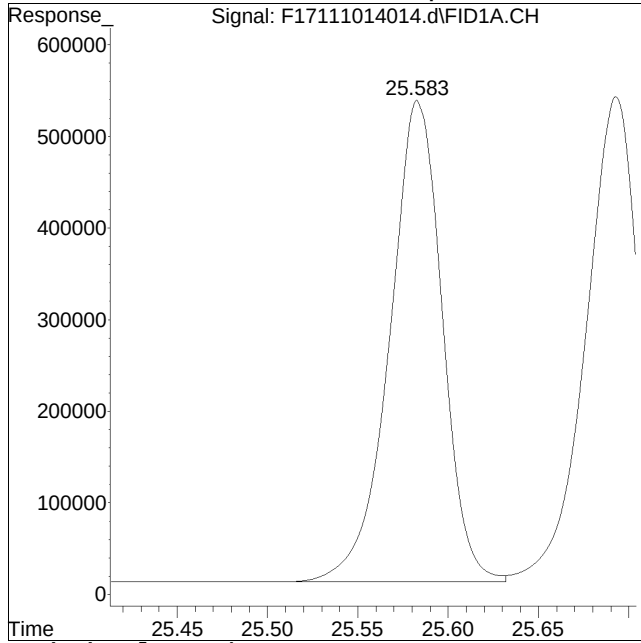
Manual Peak Response = 10751385 M4

M4 = Poor automated baseline construction.

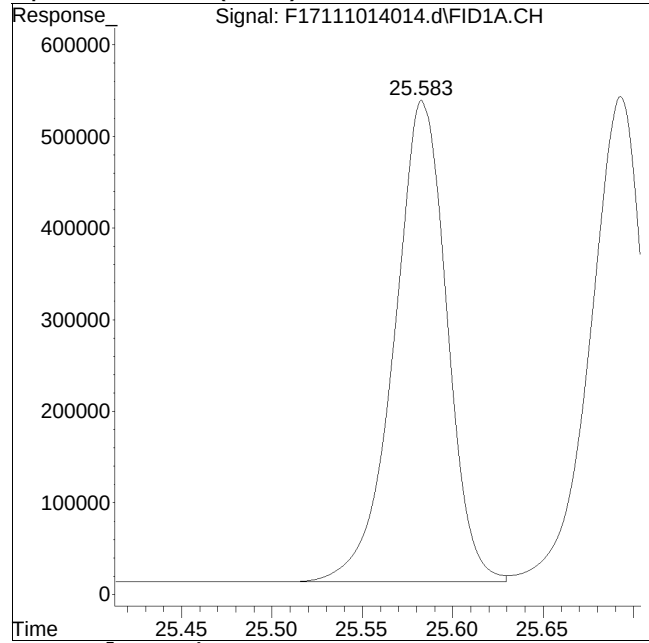
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #14: n-Heptadecane (C17)



Original Peak Response = 10660305



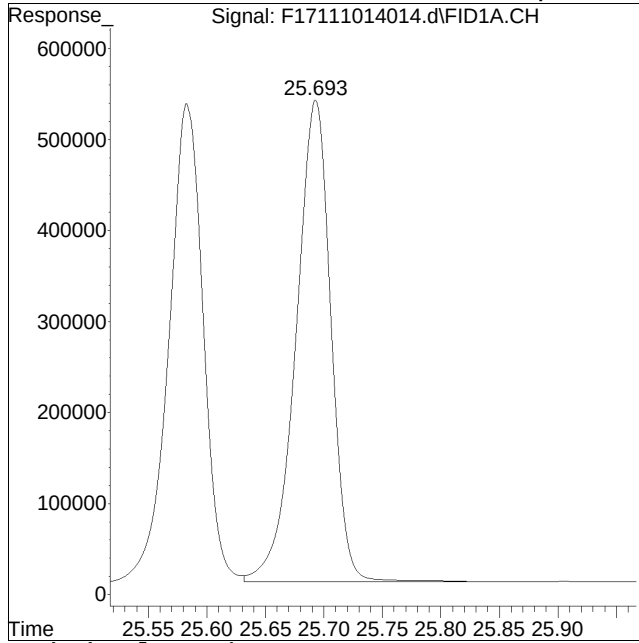
Manual Peak Response = 10666998 M4

M4 = Poor automated baseline construction.

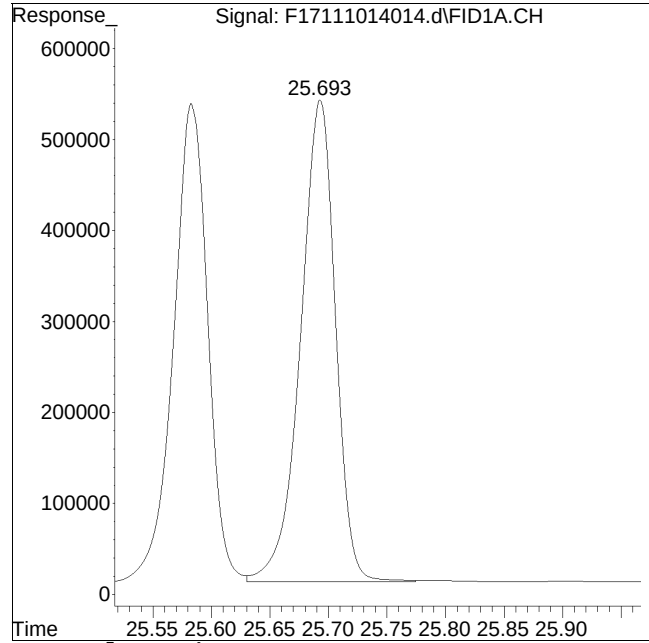
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #15: Pristane



Original Peak Response = 11004569



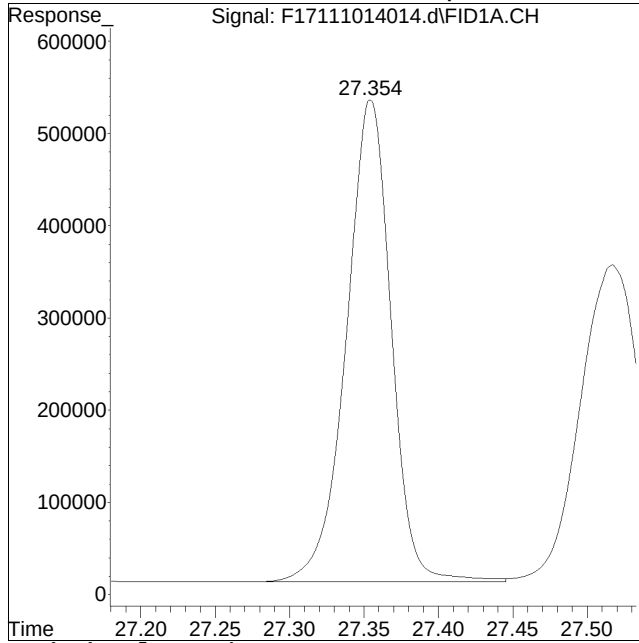
Manual Peak Response = 10997838 M4

M4 = Poor automated baseline construction.

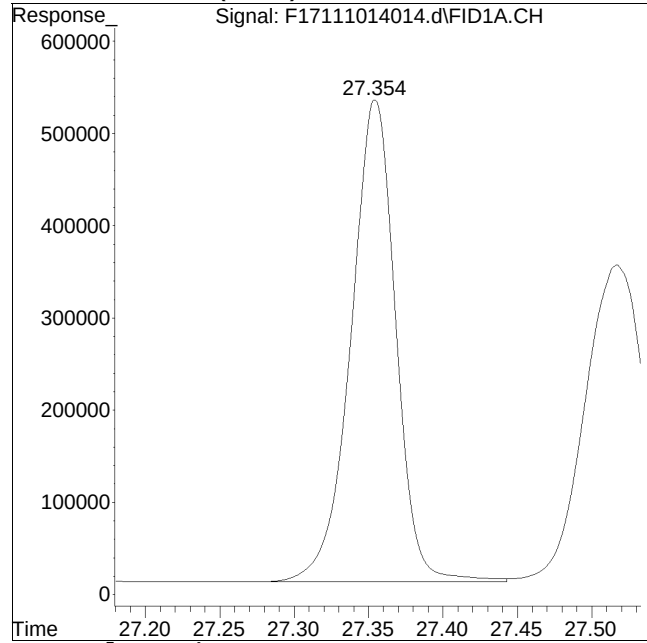
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #16: n-Octadecane (C18)



Original Peak Response = 10969424



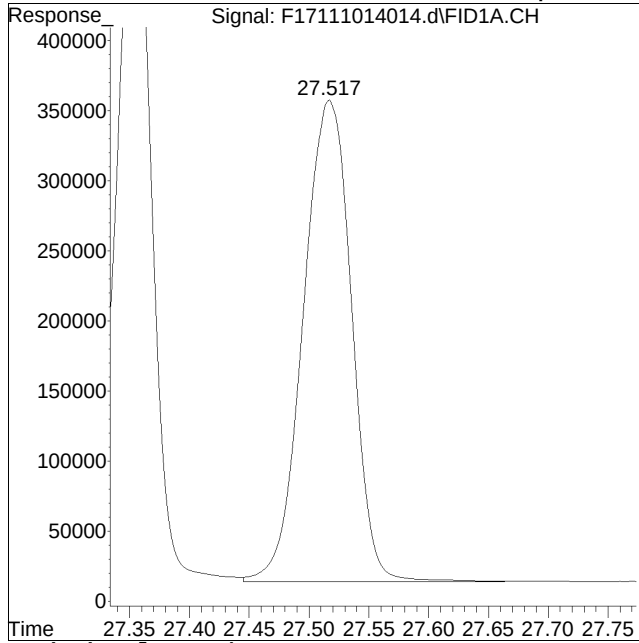
Manual Peak Response = 10973500 M4

M4 = Poor automated baseline construction.

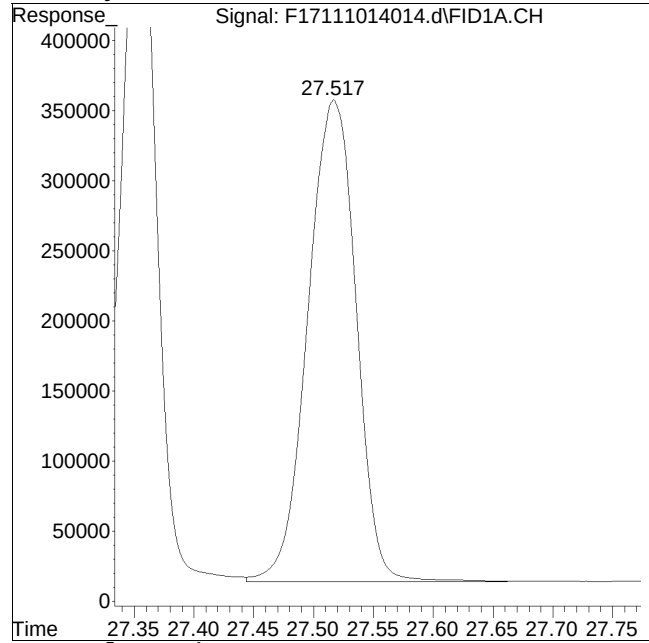
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #17: Phytane



Original Peak Response = 9671524



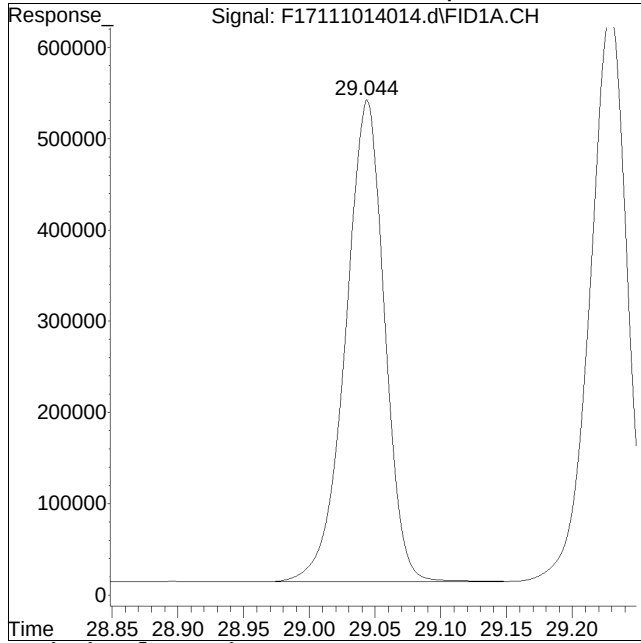
Manual Peak Response = 9686820 M4

M4 = Poor automated baseline construction.

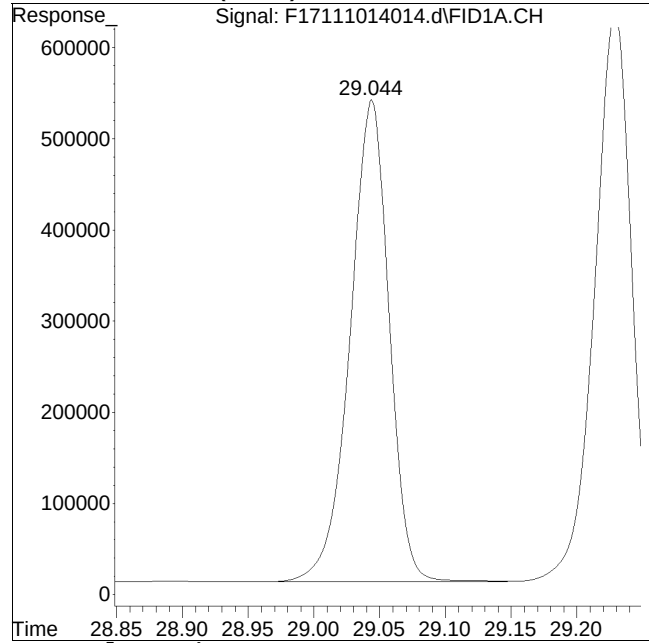
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #18: n-Nonadecane (C19)



Original Peak Response = 10892410



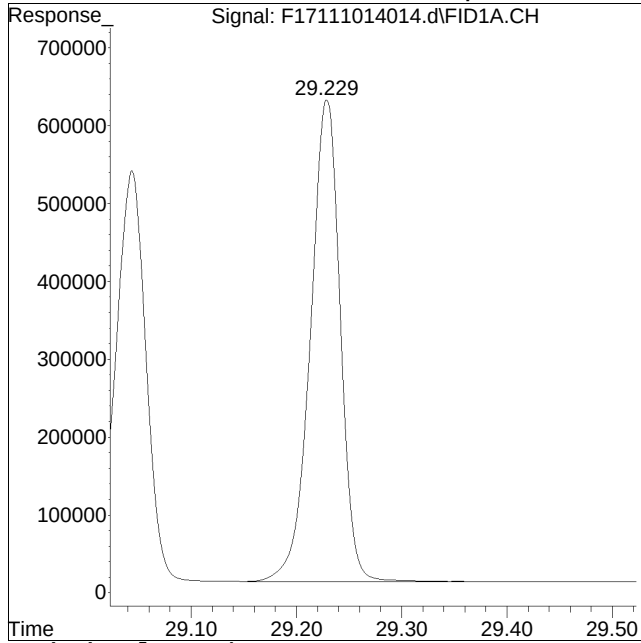
Manual Peak Response = 10933111 M4

M4 = Poor automated baseline construction.

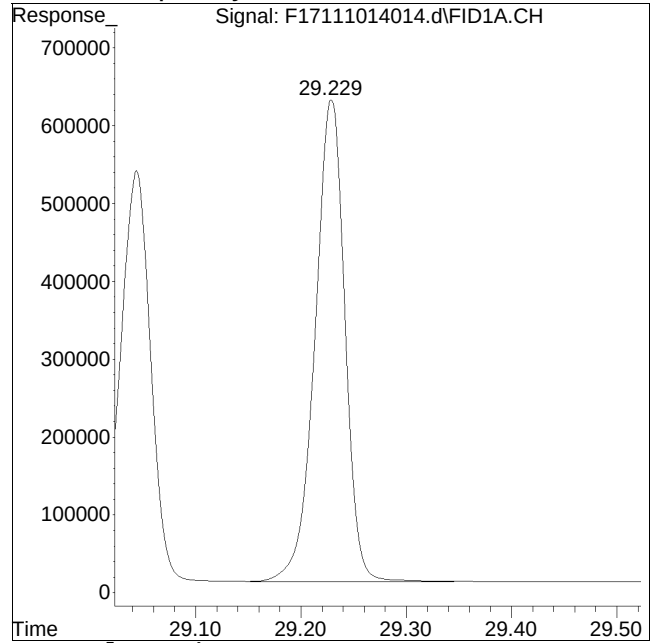
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #19: ortho-terphenyl



Original Peak Response = 12213350



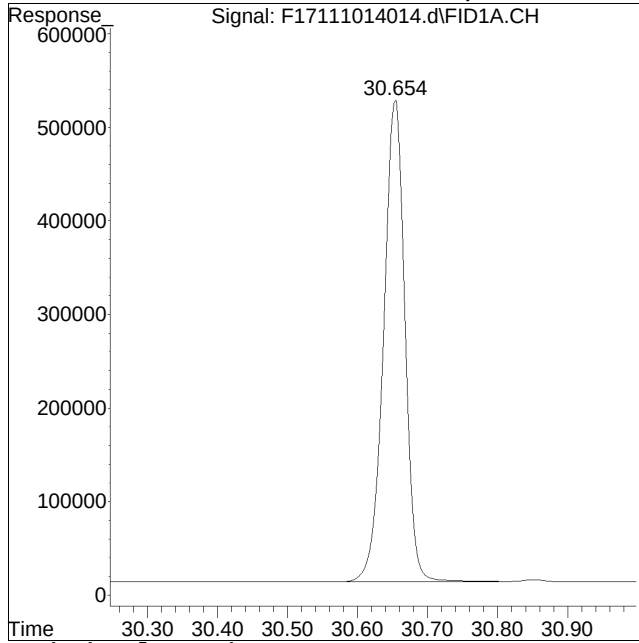
Manual Peak Response = 12275311 M4

M4 = Poor automated baseline construction.

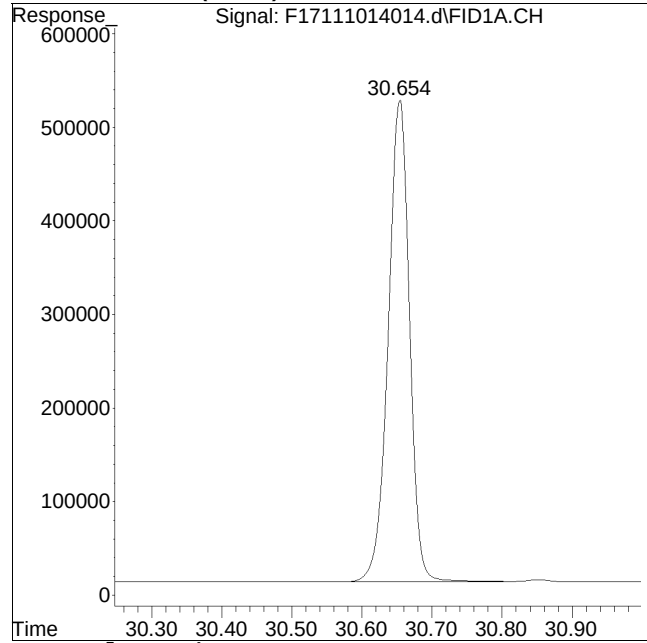
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #20: n-Eicosane (C20)



Original Peak Response = 10911685



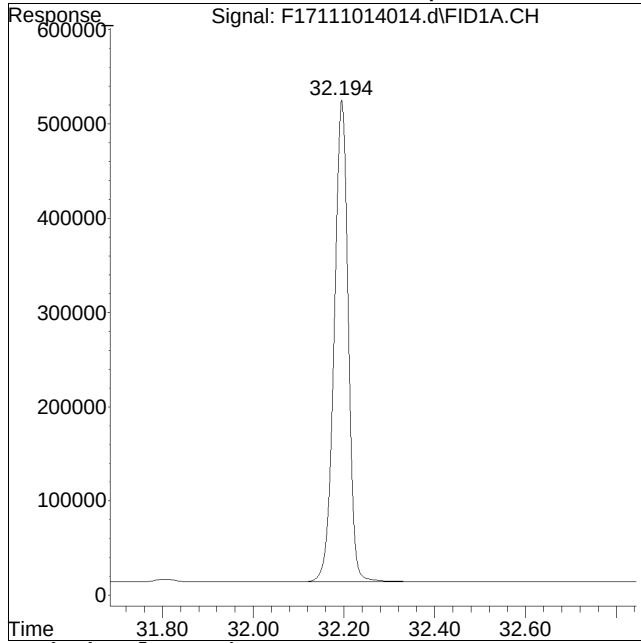
Manual Peak Response = 10914758 M4

M4 = Poor automated baseline construction.

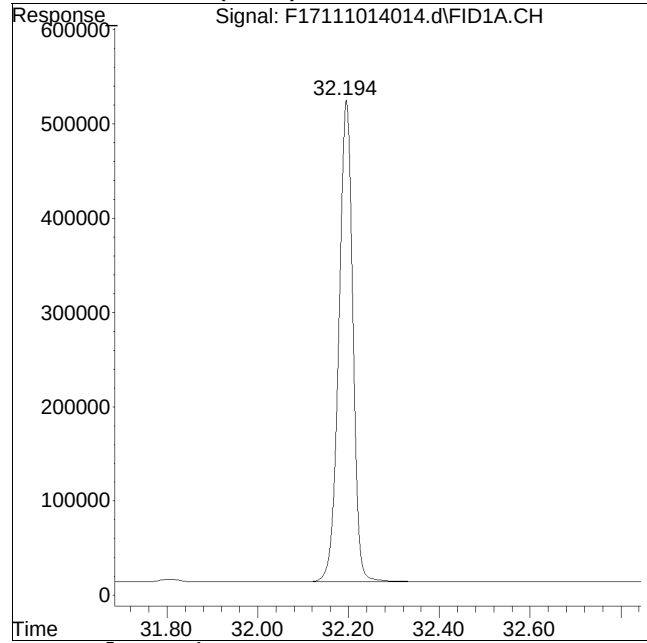
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\20140114
Data File : F17111014014.d
Date Inj'd : 11/10/2014 8:31 pm
Sample : I1711011402R
Method : HC17111014F.M
Operator : FID17:NL
Instrument : FID17
Quant Date : 11/14/2014 12:19 pm

Compound #21: n-Heneicosane (C21)



Original Peak Response = 11020565



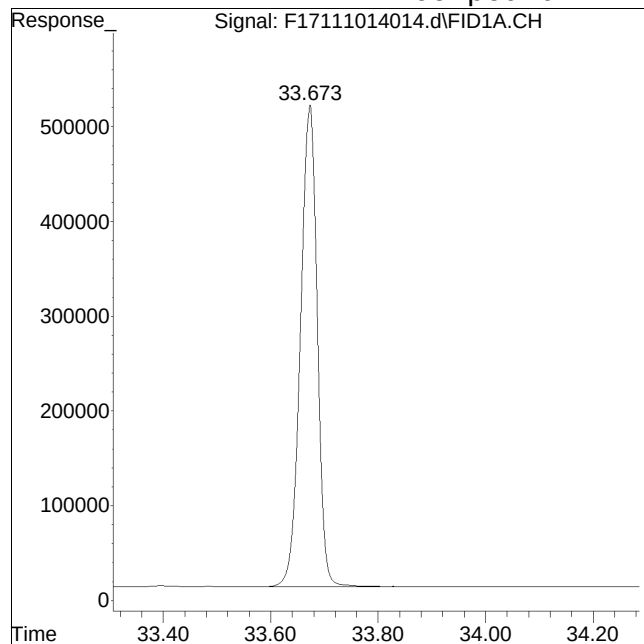
Manual Peak Response = 11005551 M4

M4 = Poor automated baseline construction.

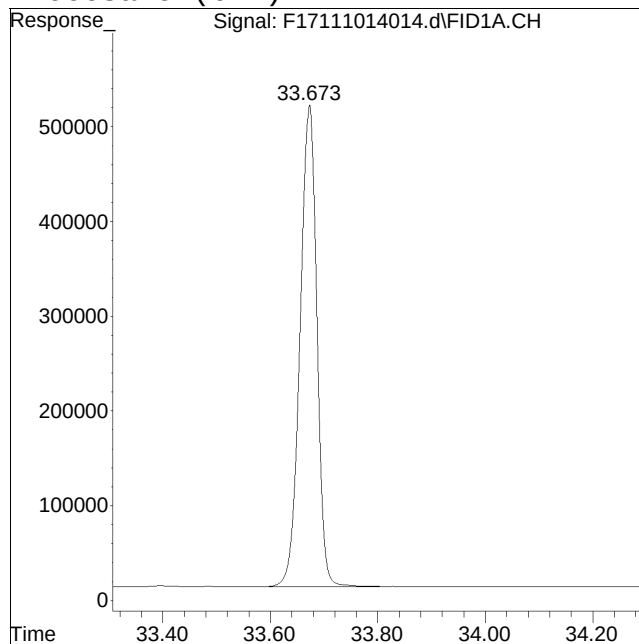
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #22: n-Docosane (C22)



Original Peak Response = 11113275



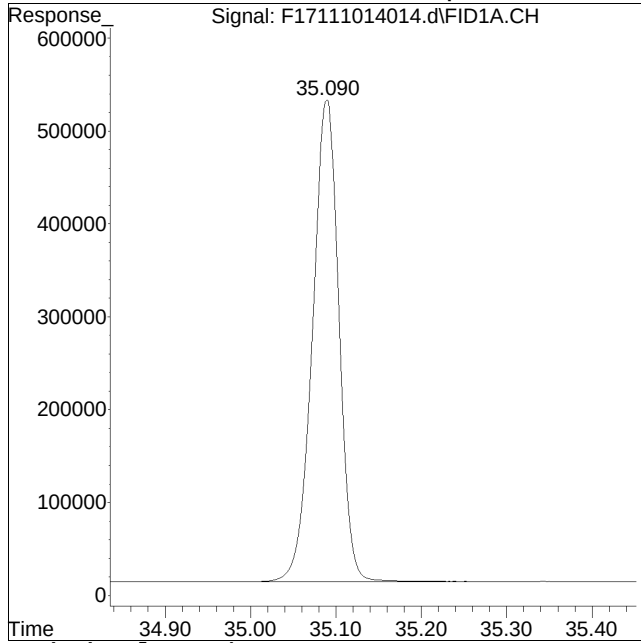
Manual Peak Response = 11090258 M4

M4 = Poor automated baseline construction.

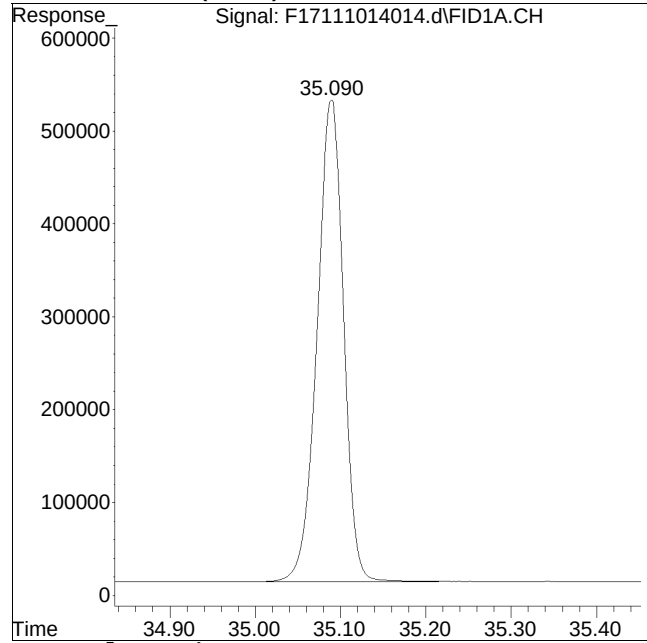
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #23: n-Tricosane (C23)



Original Peak Response = 11154956



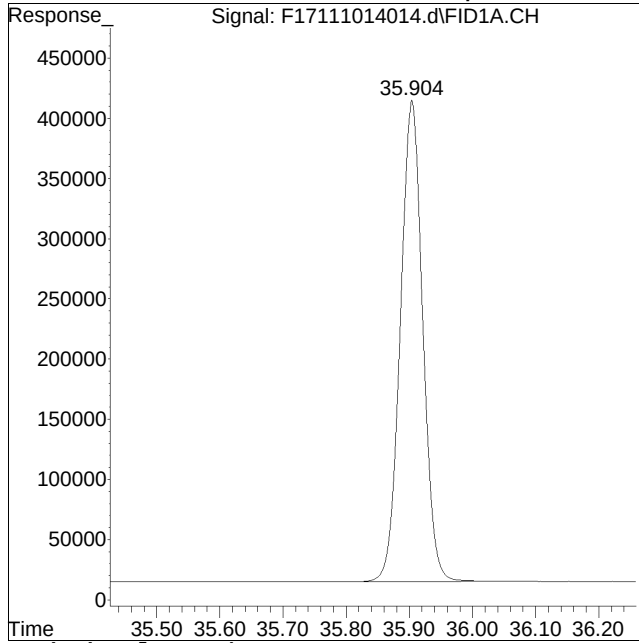
Manual Peak Response = 11177597 M4

M4 = Poor automated baseline construction.

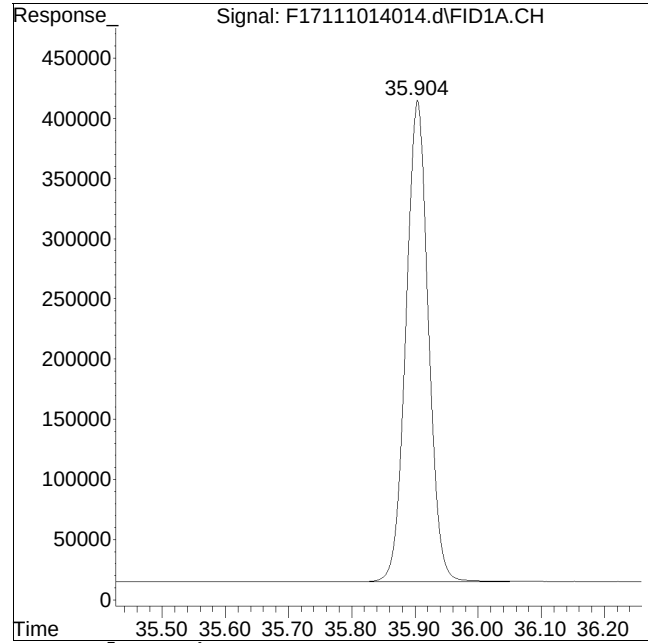
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #24: d50-Tetracosane



Original Peak Response = 9822957



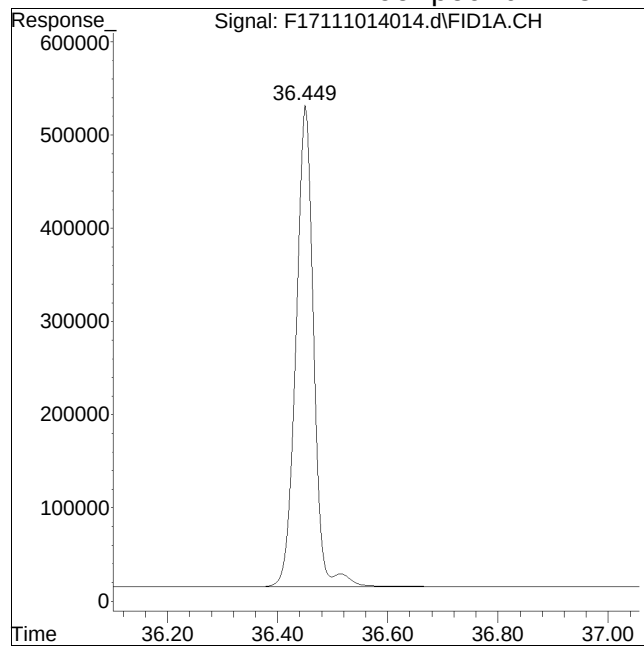
Manual Peak Response = 9879621 M4

M4 = Poor automated baseline construction.

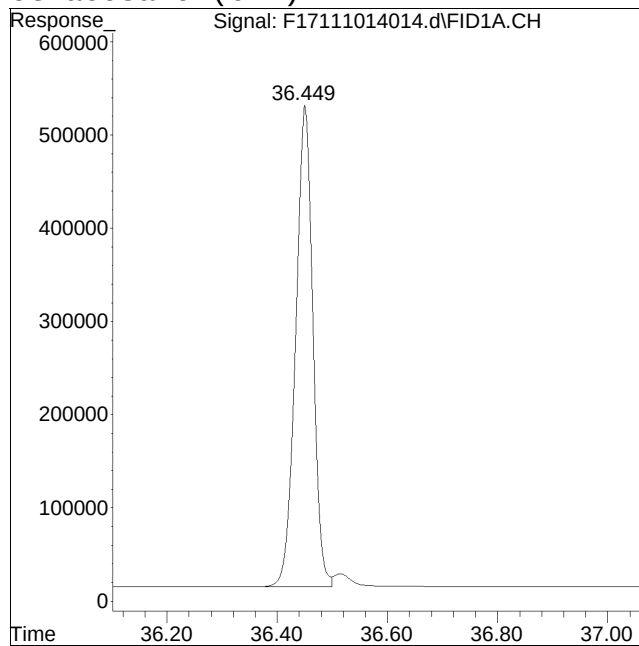
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #25: n-Tetracosane (C24)



Original Peak Response = 11541322



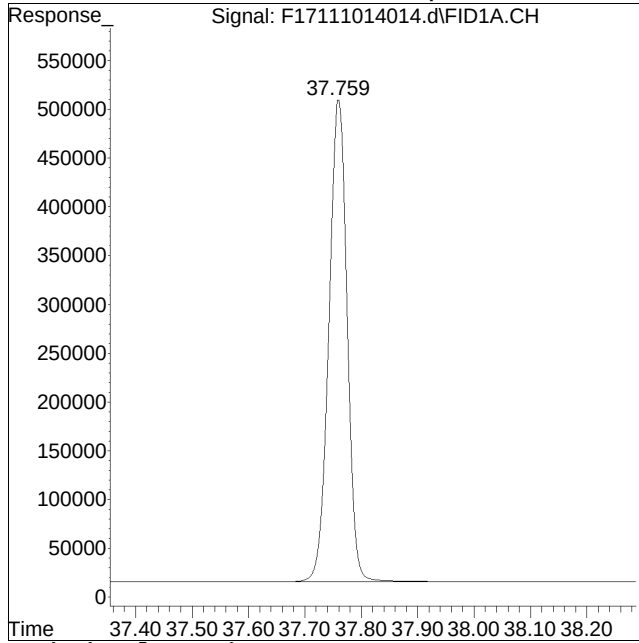
Manual Peak Response = 11187494 M4

M4 = Poor automated baseline construction.

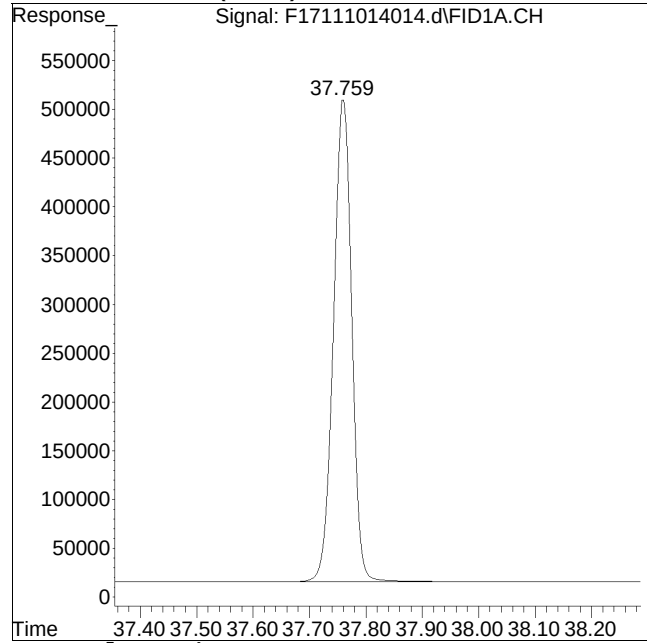
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #26: n-Pentacosane (C25)



Original Peak Response = 11133186



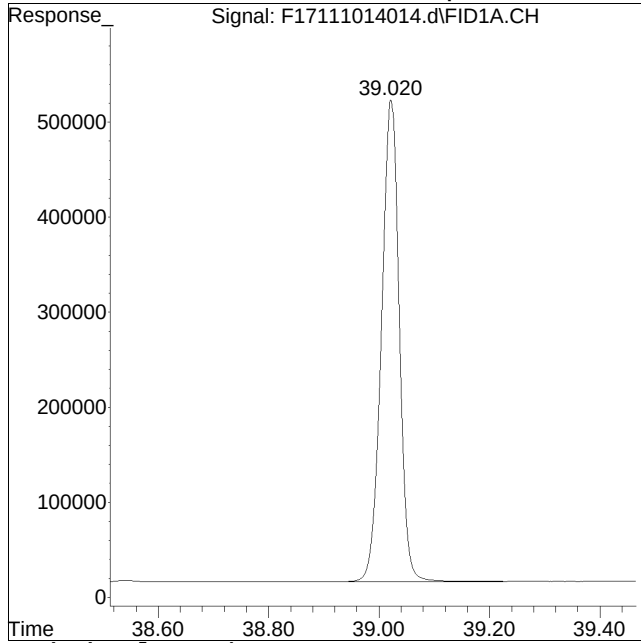
Manual Peak Response = 11131468 M4

M4 = Poor automated baseline construction.

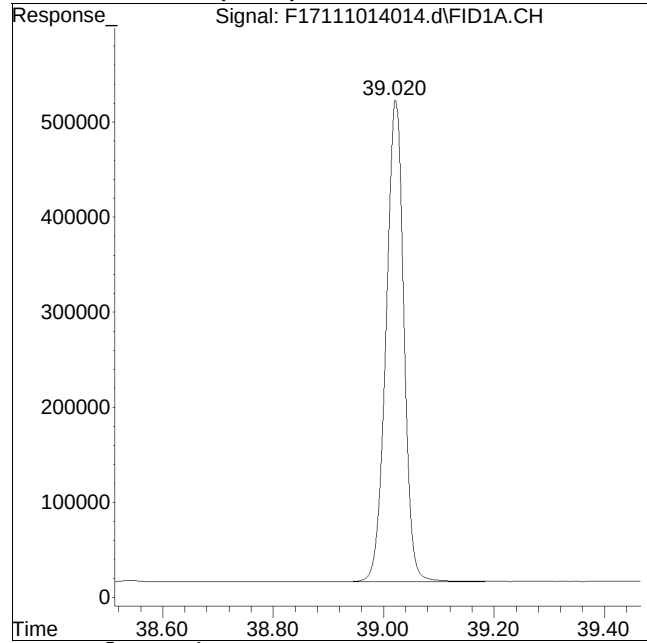
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #27: n-Hexacosane (C26)



Original Peak Response = 11373844



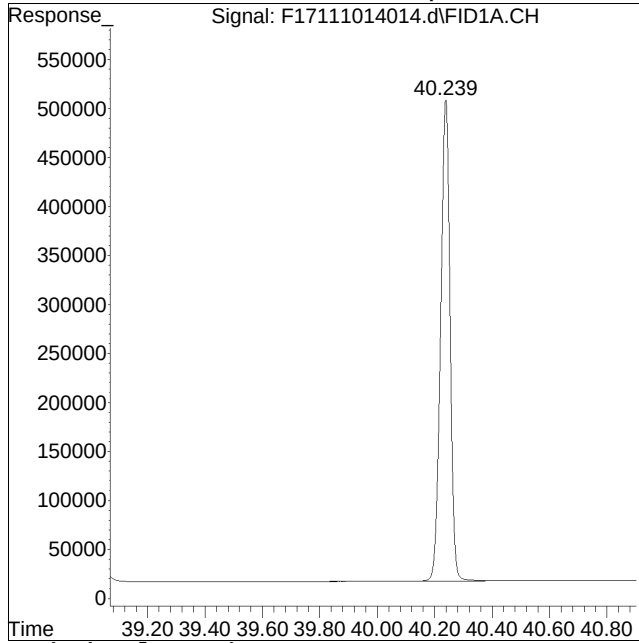
Manual Peak Response = 11381761 M4

M4 = Poor automated baseline construction.

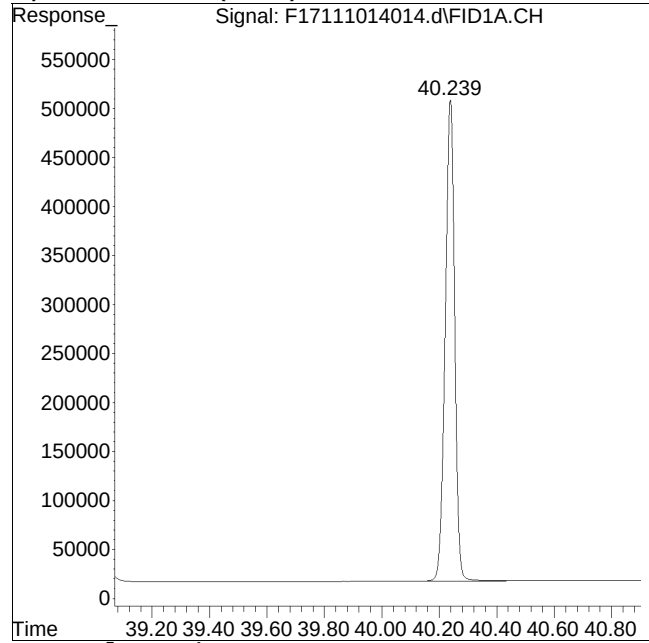
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #28: n-Heptacosane (C27)



Original Peak Response = 11228137



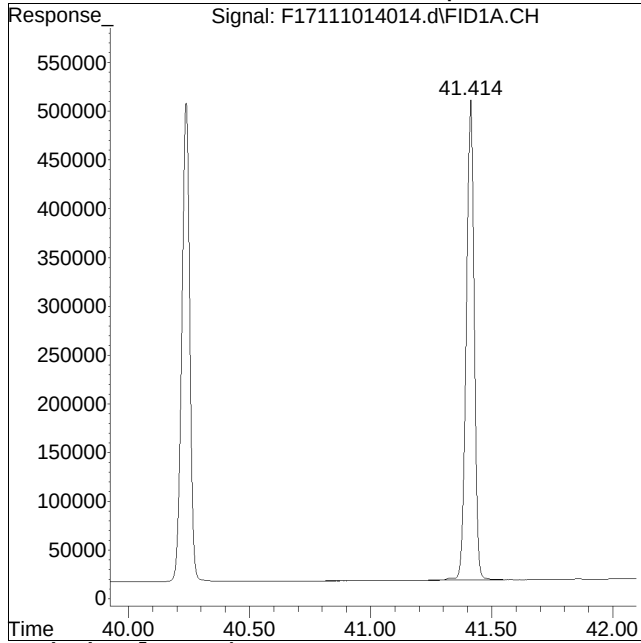
Manual Peak Response = 11270080 M4

M4 = Poor automated baseline construction.

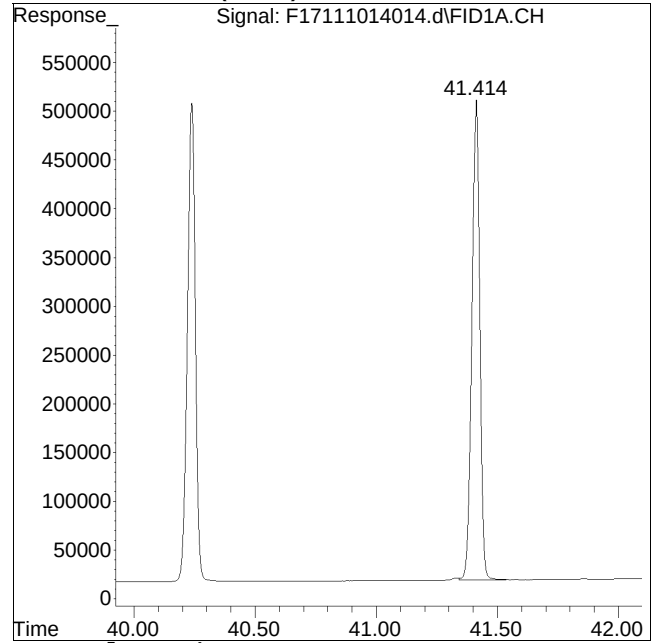
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #29: n-Octacosane (C28)



Original Peak Response = 11168974



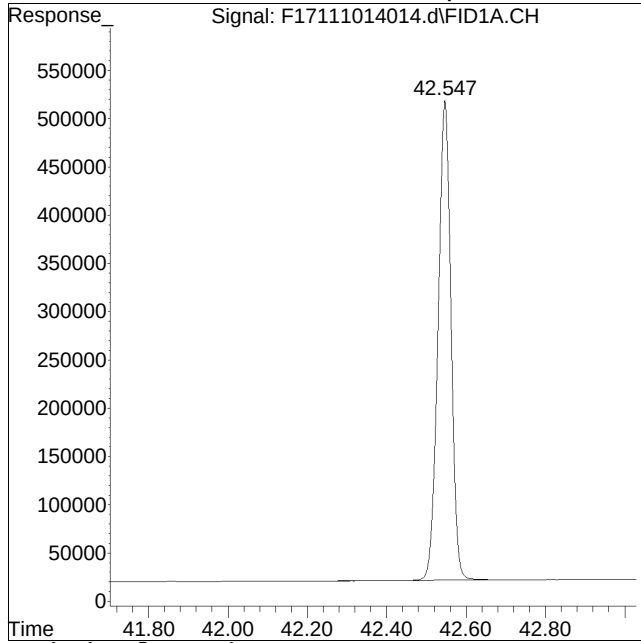
Manual Peak Response = 11186318 M4

M4 = Poor automated baseline construction.

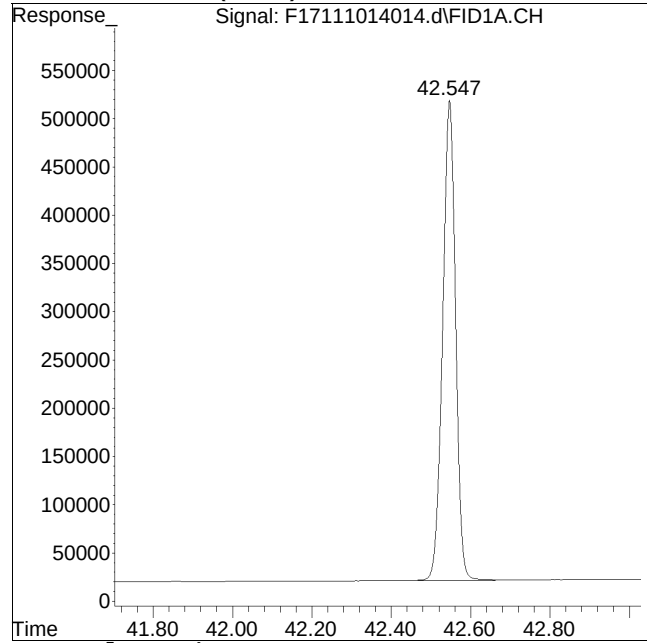
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #30: n-Nonacosane (C29)



Original Peak Response = 11206927



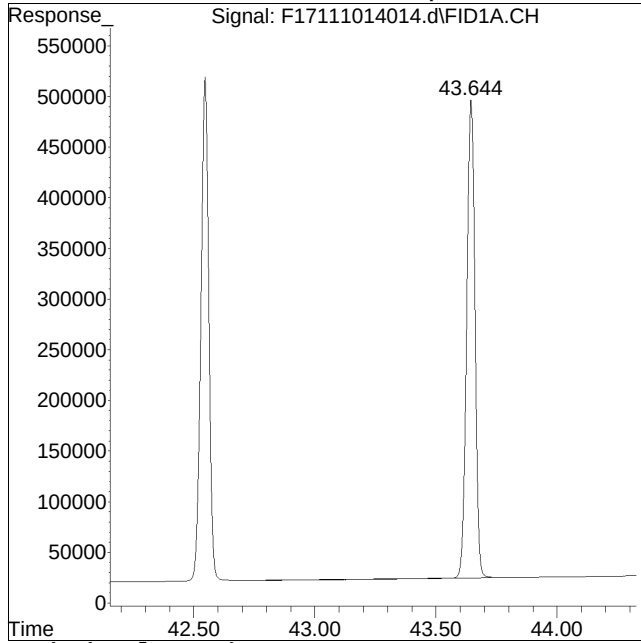
Manual Peak Response = 11258816 M4

M4 = Poor automated baseline construction.

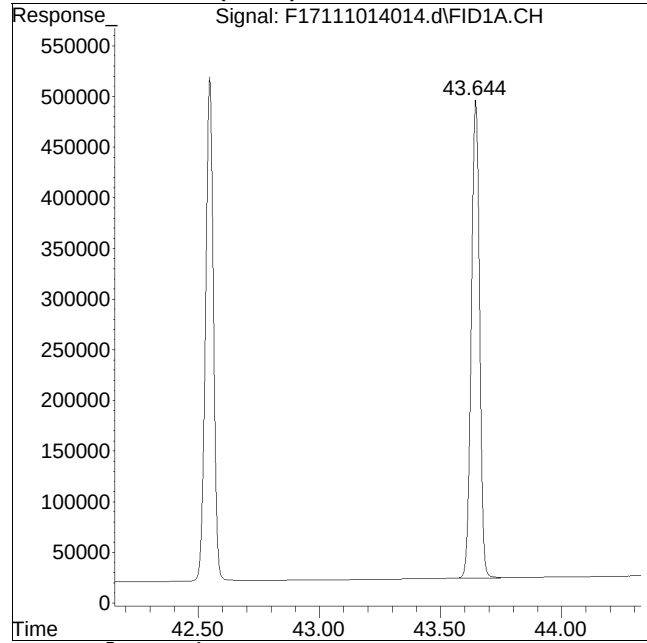
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #31: n-Triacontane (C30)



Original Peak Response = 11102349



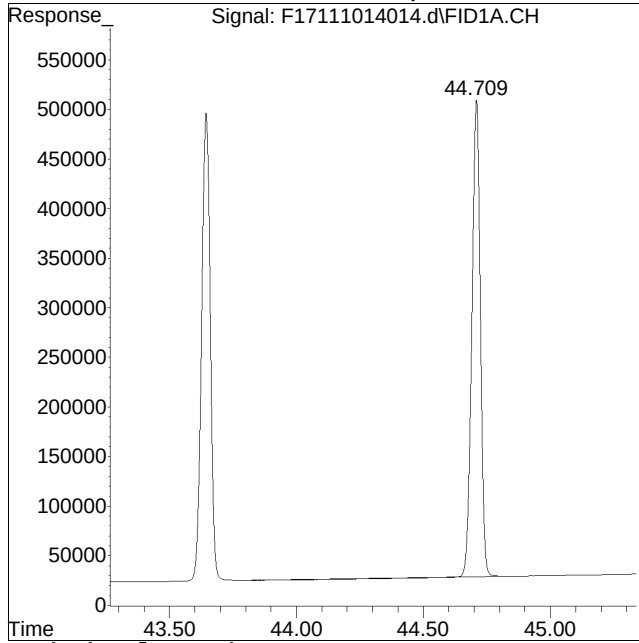
Manual Peak Response = 11268522 M4

M4 = Poor automated baseline construction.

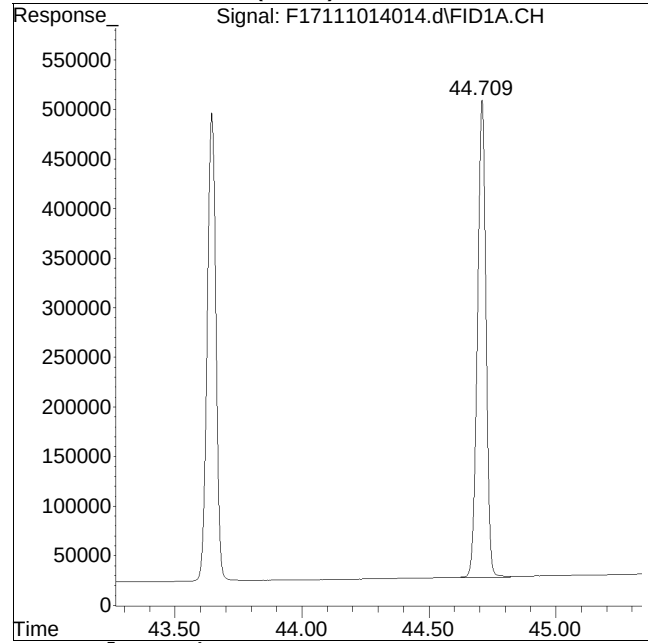
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #32: n-Hentriacontane (C31)



Original Peak Response = 11022452



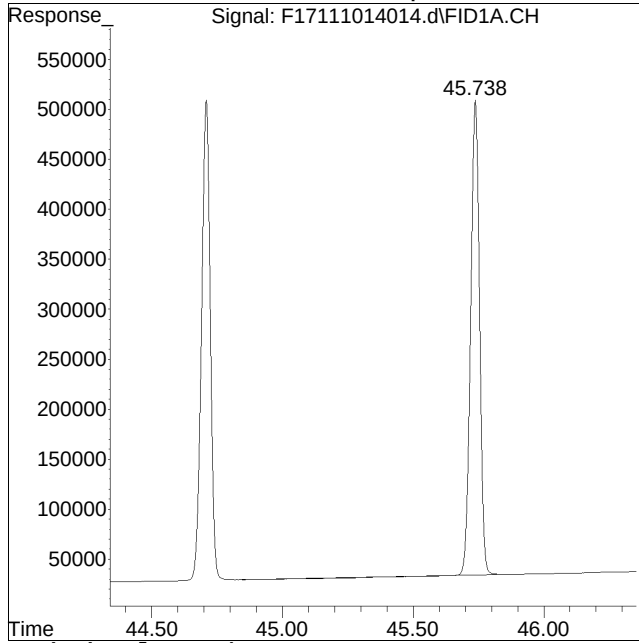
Manual Peak Response = 11275401 M4

M4 = Poor automated baseline construction.

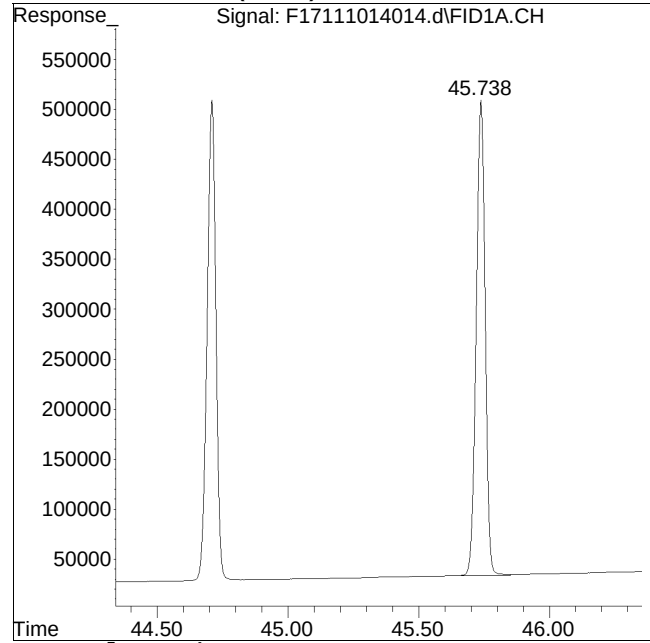
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #33: n-Dotriacontane (C32)



Original Peak Response = 11127782



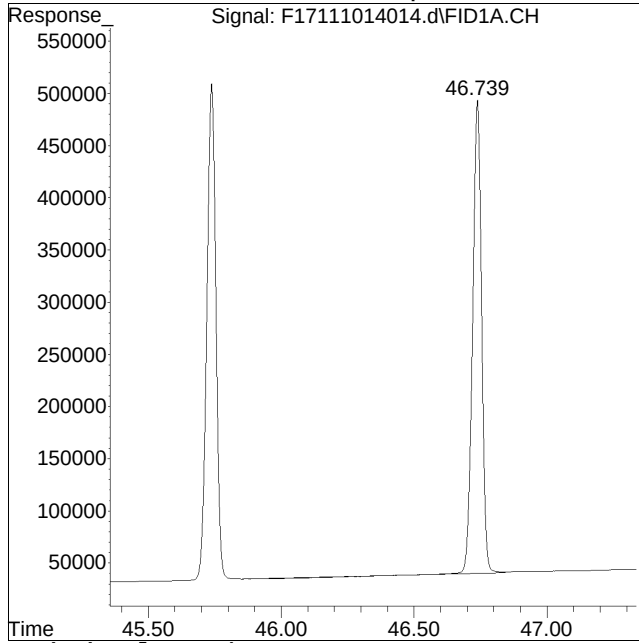
Manual Peak Response = 11359577 M4

M4 = Poor automated baseline construction.

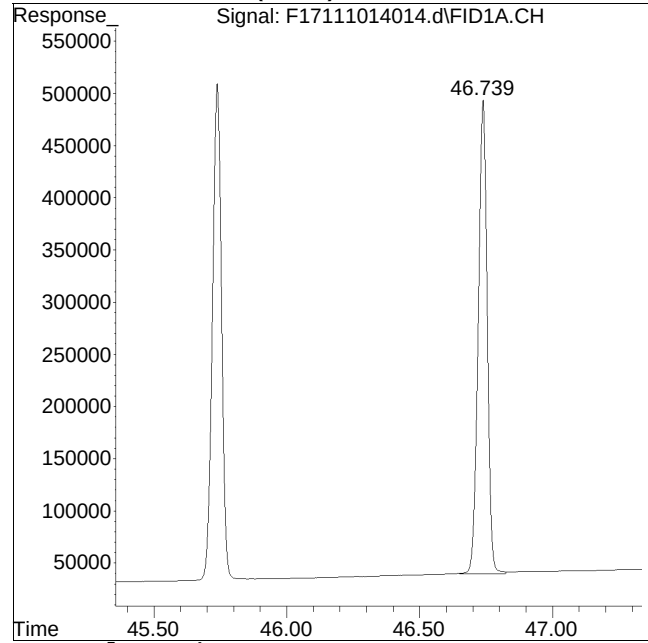
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #34: n-Tritriacontane (C33)



Original Peak Response = 10599200



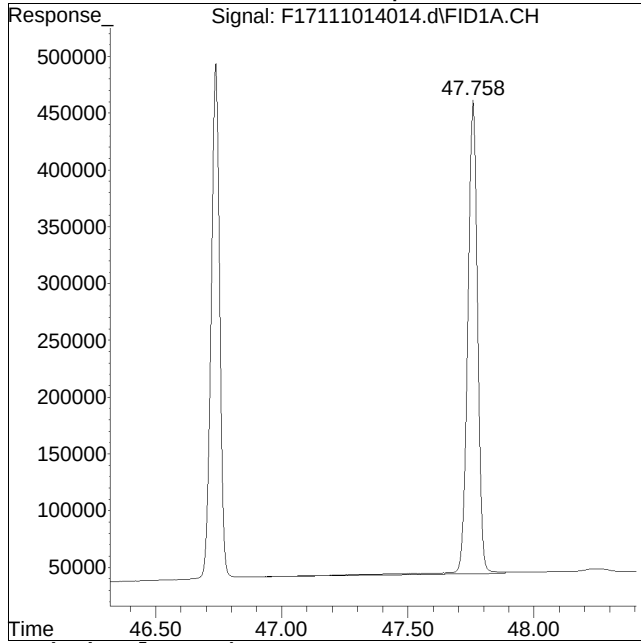
Manual Peak Response = 10681176 M4

M4 = Poor automated baseline construction.

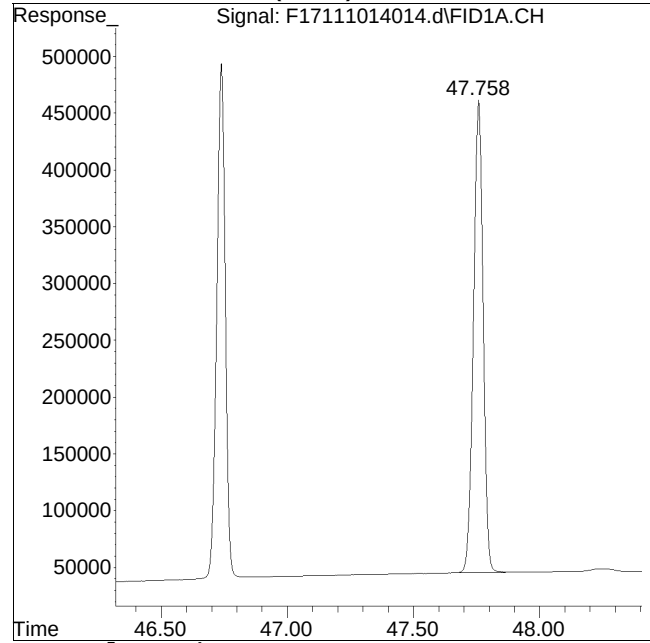
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #35: n-tetratriacontane (C34)



Original Peak Response = 11467704



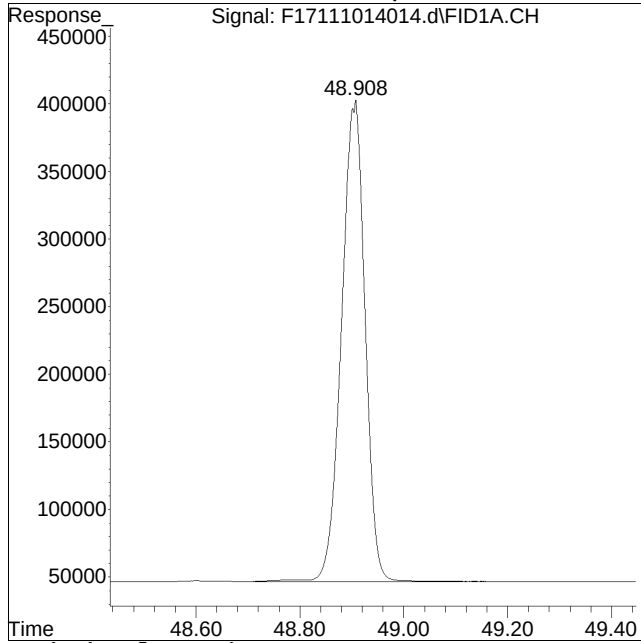
Manual Peak Response = 11092909 M4

M4 = Poor automated baseline construction.

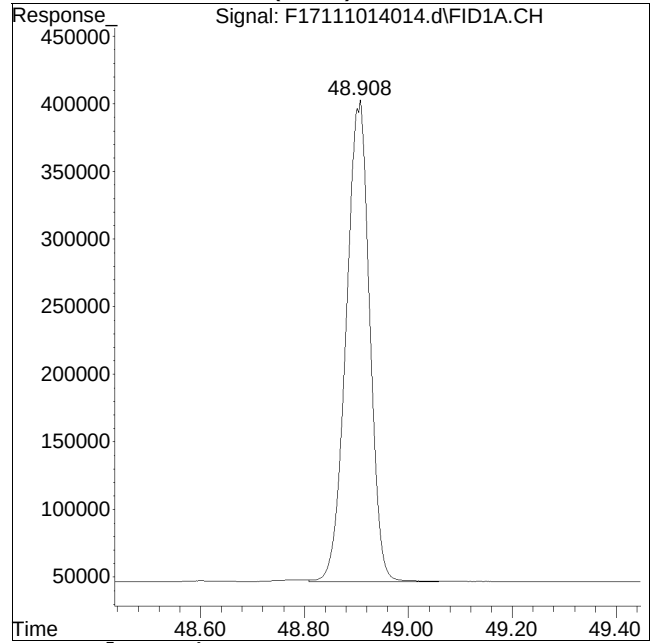
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #36: n-Pentatriacontane (C35)



Original Peak Response = 11244205



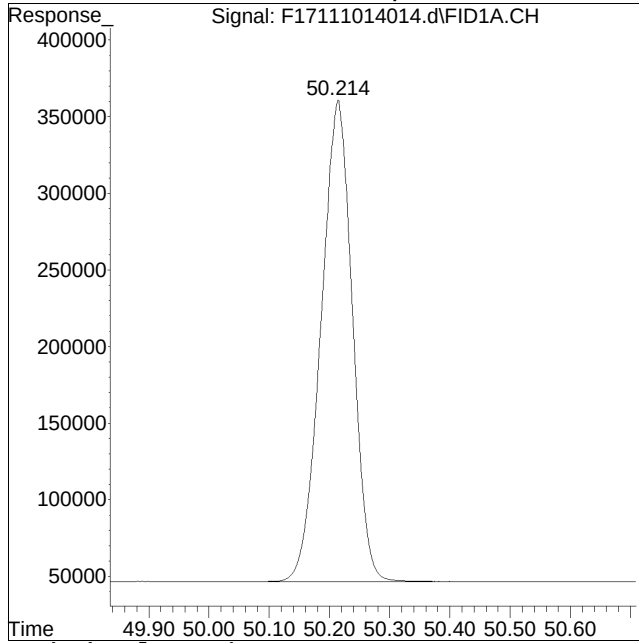
Manual Peak Response = 11156813 M4

M4 = Poor automated baseline construction.

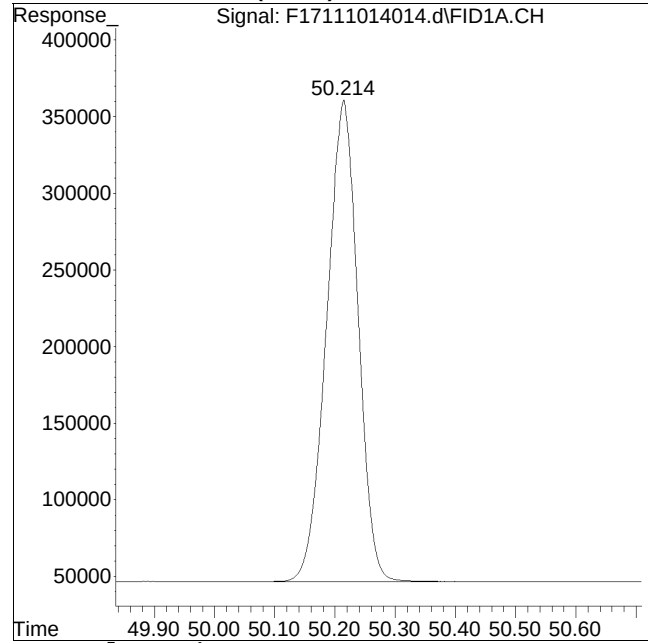
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #37: n-Hexatriacontane (C36)



Original Peak Response = 11421282



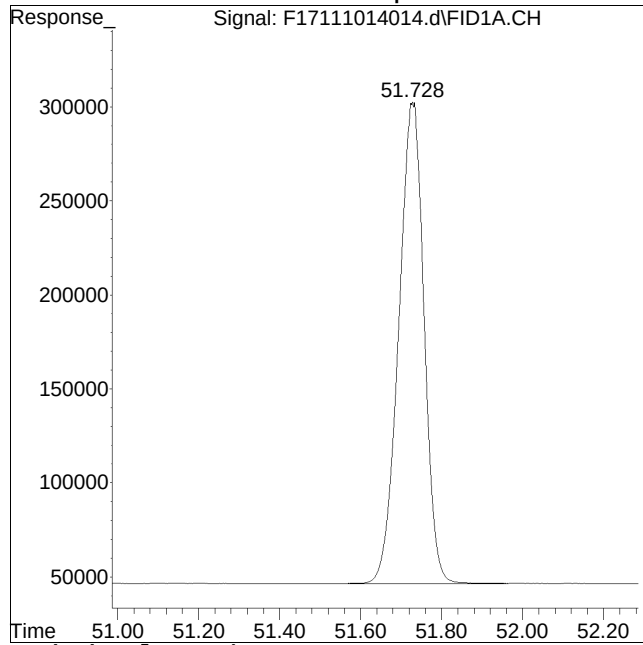
Manual Peak Response = 11422543 M4

M4 = Poor automated baseline construction.

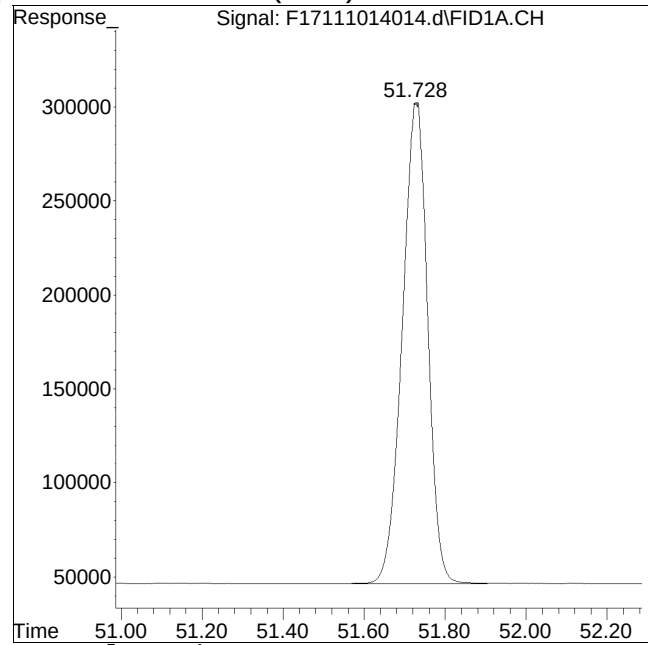
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

Compound #38: n-Heptatriacontane (C37)



Original Peak Response = 11116197



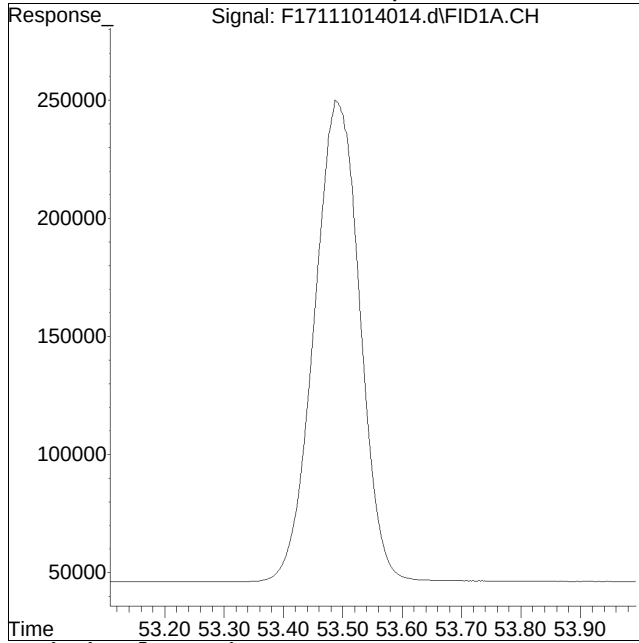
Manual Peak Response = 11112602 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I1711011402R Quant Date : 11/14/2014 12:19 pm

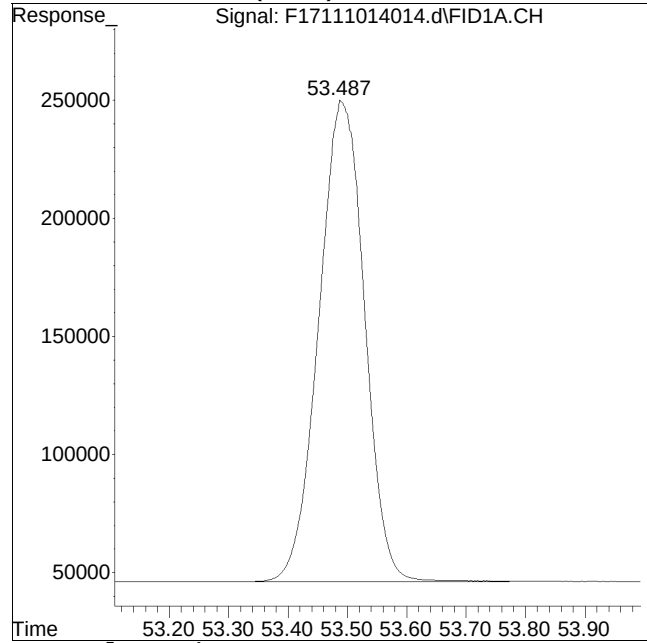
Compound #39: n-Octatriacontane (C38)



Original Peak Response = 0

Manual Peak Response = 10908503 M4

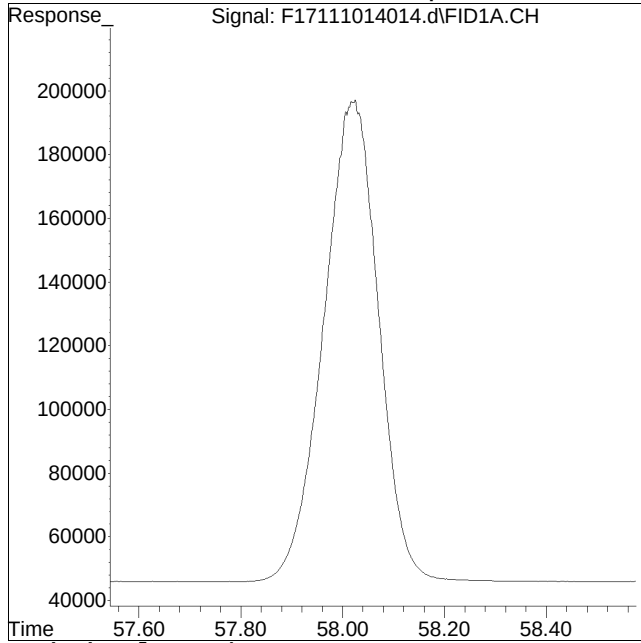
M4 = Poor automated baseline construction.



Manual Integration/Negative Proof Report

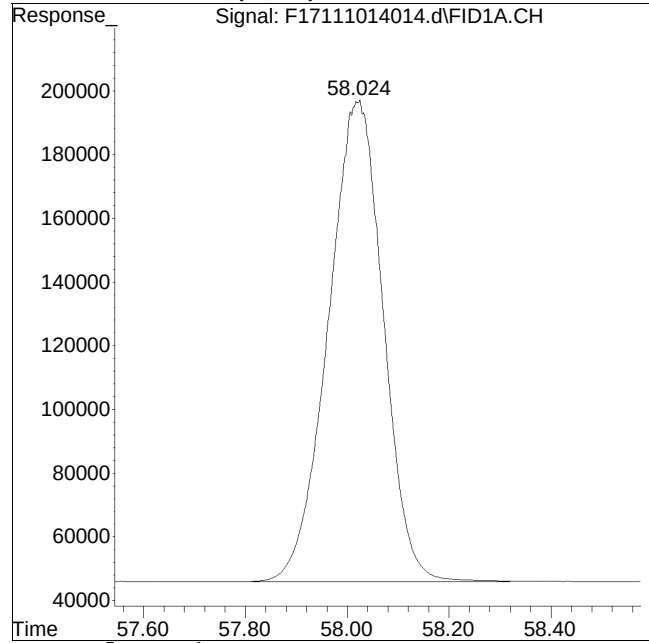
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014014.d Operator : FID17:NL
Date Inj'd : 11/10/2014 8:31 pm Instrument : FID17
Sample : I17111011402R Quant Date : 11/14/2014 12:19 pm

Compound #41: n-Tetracontane (C40)



Original Peak Response = 0

M4 = Poor automated baseline construction.



Manual Peak Response = 11317318 M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014016.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 10:01 pm
 Operator : FID17:NL
 Sample : I1711011403R
 Misc : WG743851, FRAV14 50ug/mL
 ALS Vial : 8 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:36:11 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.266	54310906	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.249	59342026	48.765	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 97.53%
24) s	d50-Tetracosane	35.922	47616898	49.586	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 99.17%
Target Compounds					
2) t	n-Octane (C8)	5.578	45560434	47.344	ug/mL M4
3) t	n-Nonane (C9)	7.777	46801135	46.290	ug/mL M4
4) t	n-Decane (C10)	10.264	48405866	45.622	ug/mL M4
5) t	n-Undecane (C11)	12.780	49661379	47.712	ug/mL M4
6) t	n-Dodecane (C12)	15.210	50686941	48.367	ug/mL M4
7) t	n-Tridecane (C13)	17.521	51093773	48.813	ug/mL M4
9) t	n-Tetradecane (C14)	19.708	51735306	47.681	ug/mL M4
11) t	n-Pentadecane (C15)	21.777	52726106	49.224	ug/mL M4
12) t	n-Hexadecane (C16)	23.737	52629891	48.757	ug/mL M4
14) t	n-Heptadecane (C17)	25.600	52933668	48.780	ug/mL M4
15) t	Pristane	25.711	53728134	49.395	ug/mL M4
16) t	n-Octadecane (C18)	27.372	53966088	50.035	ug/mL M4
17) t	Phytane	27.535	47224332	43.098	ug/mL M4
18) t	n-Nonadecane (C19)	29.062	53604297	49.982	ug/mL M4
20) t	n-Eicosane (C20)	30.671	53373894	49.539	ug/mL M4
21) t	n-Heneicosane (C21)	32.211	53706675	49.283	ug/mL M4
22) t	n-Docosane (C22)	33.690	54114794	49.379	ug/mL M4
23) t	n-Tricosane (C23)	35.108	54468080	49.419	ug/mL M4
25) t	n-Tetracosane (C24)	36.471	54558609	49.445	ug/mL M4
26) t	n-Pentacosane (C25)	37.781	54123509	48.884	ug/mL M4
27) t	n-Hexacosane (C26)	39.042	55246629	48.884	ug/mL M4
28) t	n-Heptacosane (C27)	40.259	54568291	48.648	ug/mL M4
29) t	n-Octacosane (C28)	41.432	54246380	48.210	ug/mL M4
30) t	n-Nonacosane (C29)	42.568	54437873	47.942	ug/mL M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014016.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 10:01 pm
 Operator : FID17:NL
 Sample : I1711011403R
 Misc : WG743851, FRAV14 50ug/mL
 ALS Vial : 8 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:36:11 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc Units
31) t	n-Triacontane (C30)	43.665	54410127	47.757 ug/mL M4
32) t	n-Hentriacontane (C31)	44.729	54264860	47.267 ug/mL M4
33) t	n-Dotriacontane (C32)	45.760	54592430	47.831 ug/mL M4
34) t	n-Tritriacontane (C33)	46.757	51478791	46.432 ug/mL M4
35) t	n-tetratriacontane (C34)	47.782	53603677	45.555 ug/mL M4
36) t	n-Pentatriacontane (C35)	48.929	53899156	46.041 ug/mL M4
37) t	n-Hexatriacontane (C36)	50.247	55334260	43.654 ug/mL M4
38) t	n-Heptatriacontane (C37)	51.769	54162138	45.796 ug/mL M4
39) t	n-Octatriacontane (C38)	53.546	53323714	45.119 ug/mL M4
41) t	n-Tetracontane (C40)	58.094	56122386	49.359 ug/mL M4

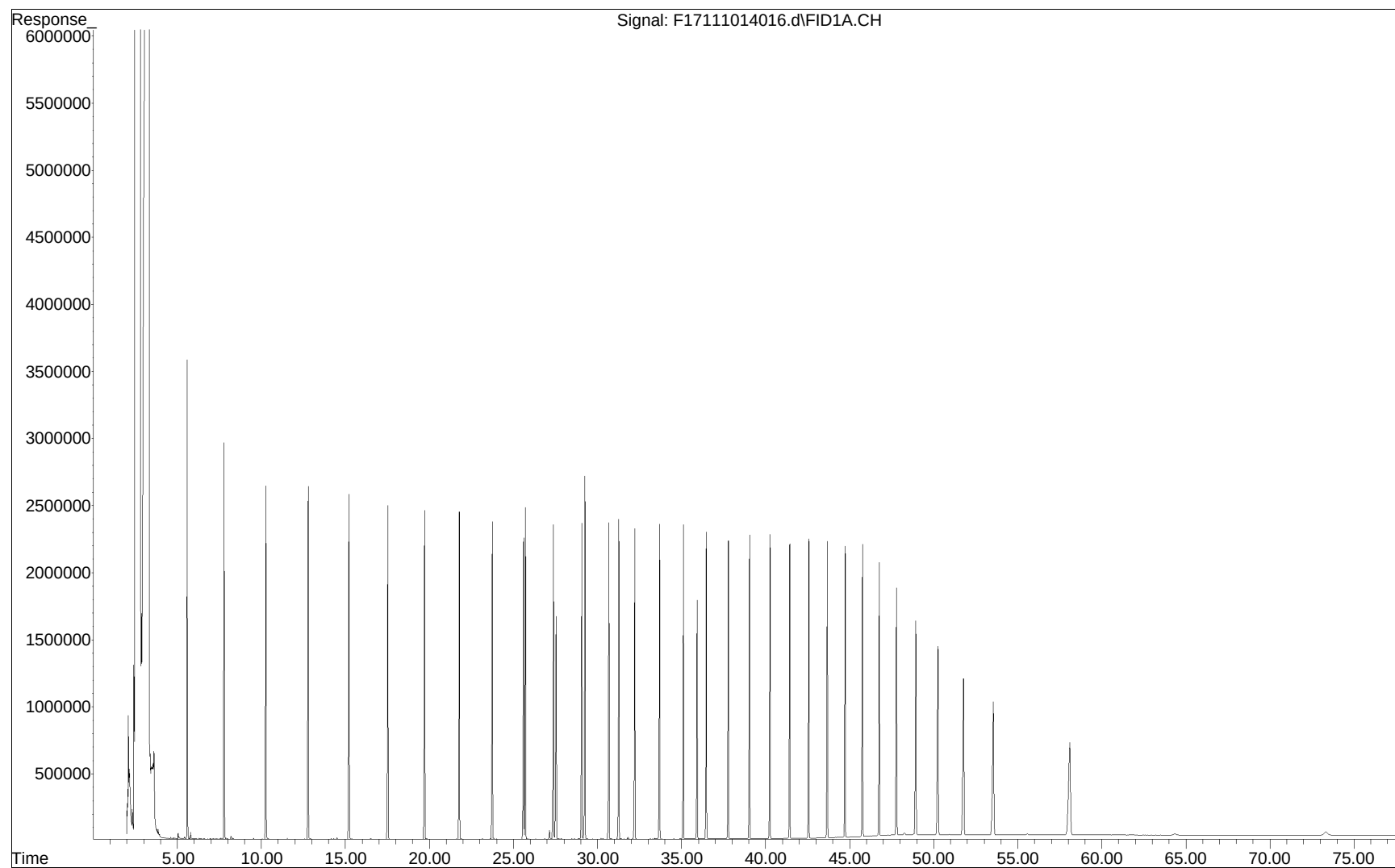
SemiQuant Compounds - Not Calibrated on this Instrument

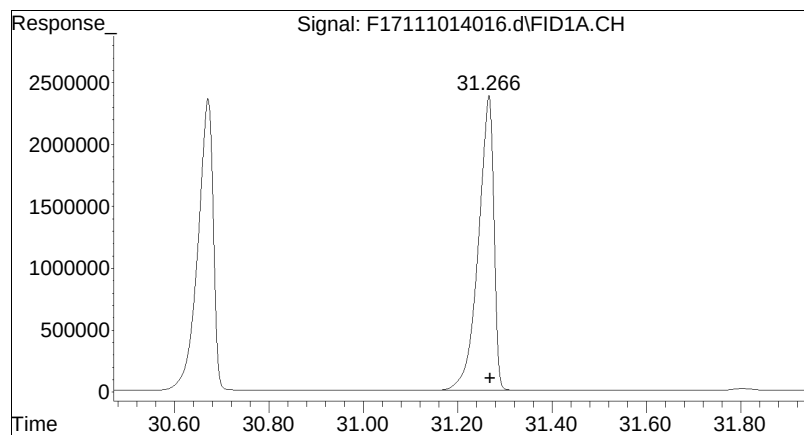
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

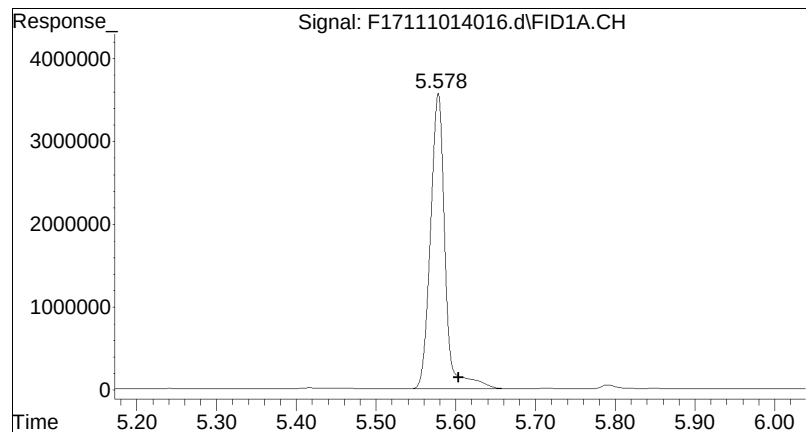
File : 0:\Forensics\Data\FID17\2014\NOV\NOV10\F17111014016.d
Operator : FID17:NL
Acquired : 10 Nov 2014 10:01 pm using AcqMethod FID17.M
Sample Name: I1711011403R
Instrument: FID17
Misc Info : WG743851, FRAV14 50ug/mL
Vial Number: 8
CurrentMeth: 0:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M





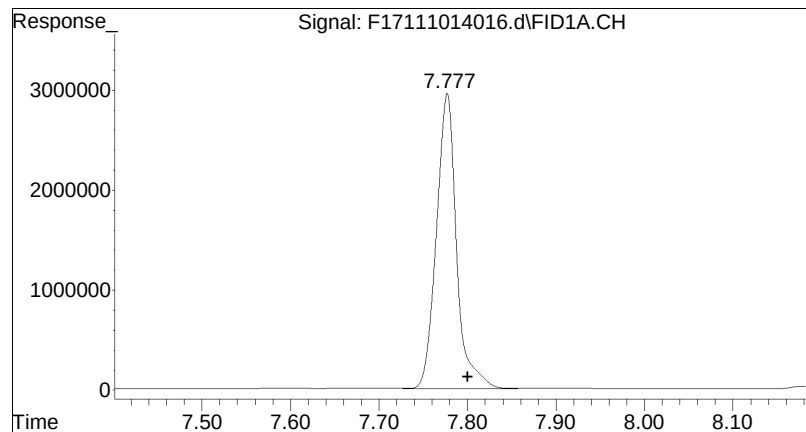
#1 5-alpha-androstane

R.T.: 31.266 min
Delta R.T.: -0.003 min
Response: 54310906
Conc: 50.00 ug/mL M4



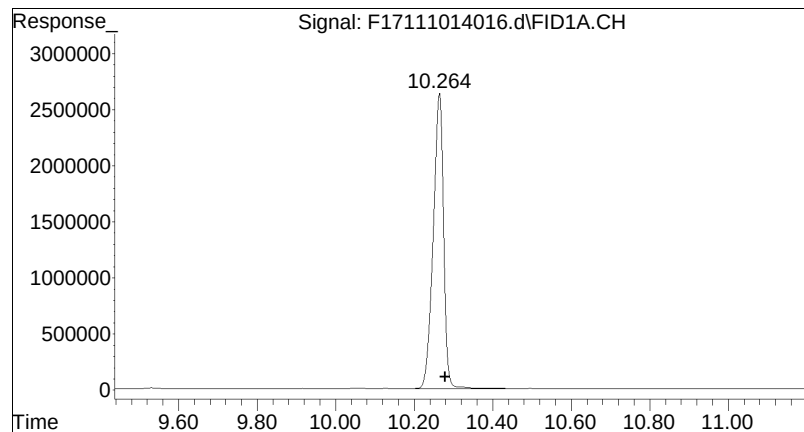
#2 n-Octane (C8)

R.T.: 5.578 min
Delta R.T.: -0.026 min
Response: 45560434
Conc: 47.34 ug/mL M4



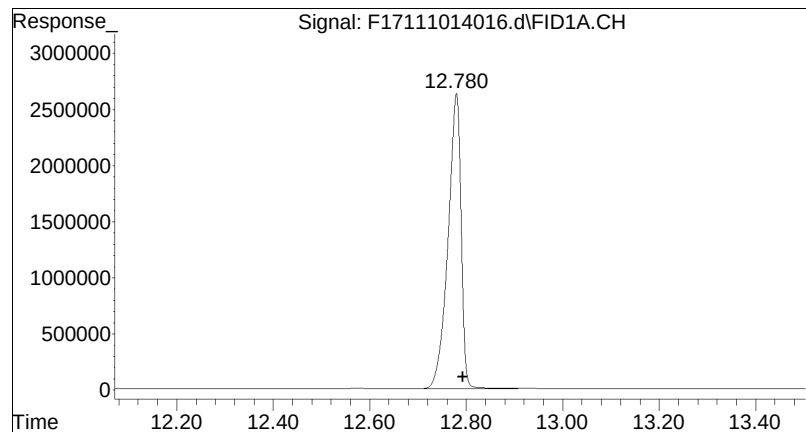
#3 n-Nonane (C9)

R.T.: 7.777 min
Delta R.T.: -0.023 min
Response: 46801135
Conc: 46.29 ug/mL M4



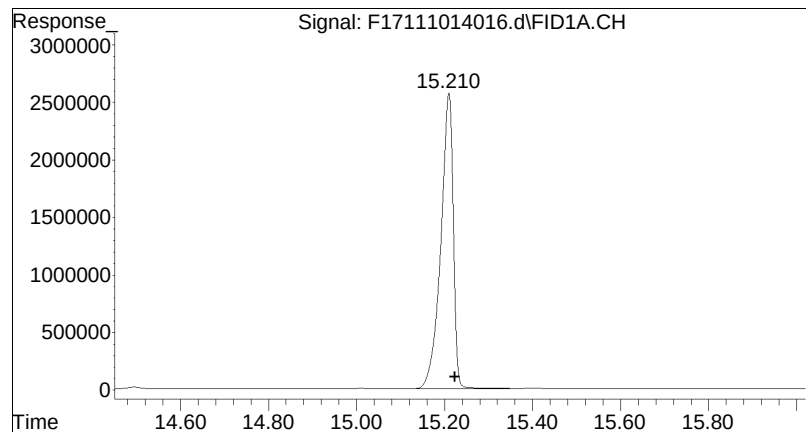
#4 n-Decane (C10)

R.T.: 10.264 min
Delta R.T.: -0.015 min
Response: 48405866
Conc: 45.62 ug/mL M4



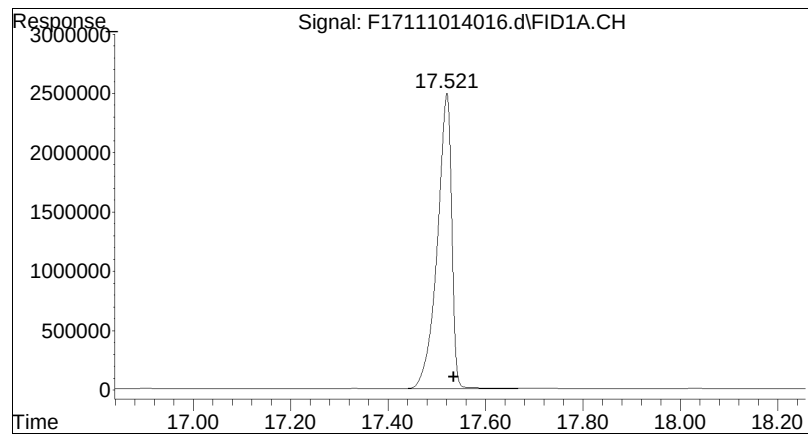
#5 n-Undecane (C11)

R.T.: 12.780 min
Delta R.T.: -0.013 min
Response: 49661379
Conc: 47.71 ug/mL M4



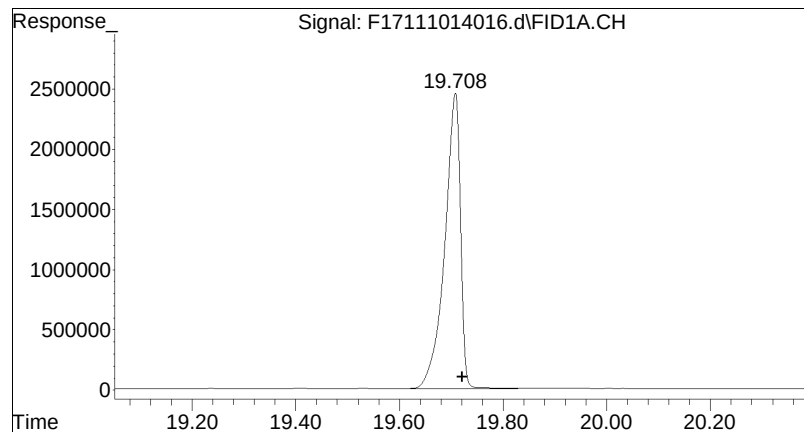
#6 n-Dodecane (C12)

R.T.: 15.210 min
Delta R.T.: -0.014 min
Response: 50686941
Conc: 48.37 ug/mL M4



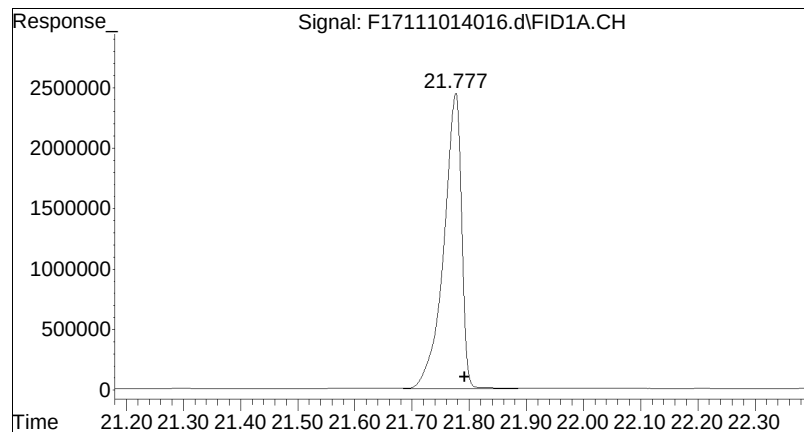
#7 n-Tridecane (C13)

R.T.: 17.521 min
Delta R.T.: -0.013 min
Response: 51093773
Conc: 48.81 ug/mL M4



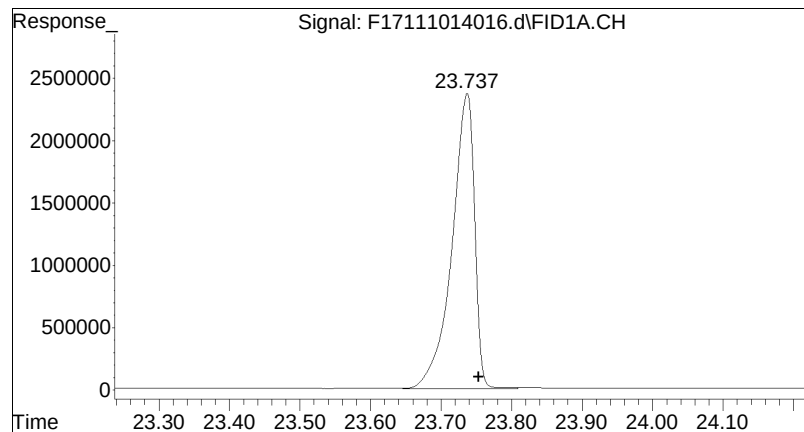
#9 n-Tetradecane (C14)

R.T.: 19.708 min
Delta R.T.: -0.014 min
Response: 51735306
Conc: 47.68 ug/mL M4



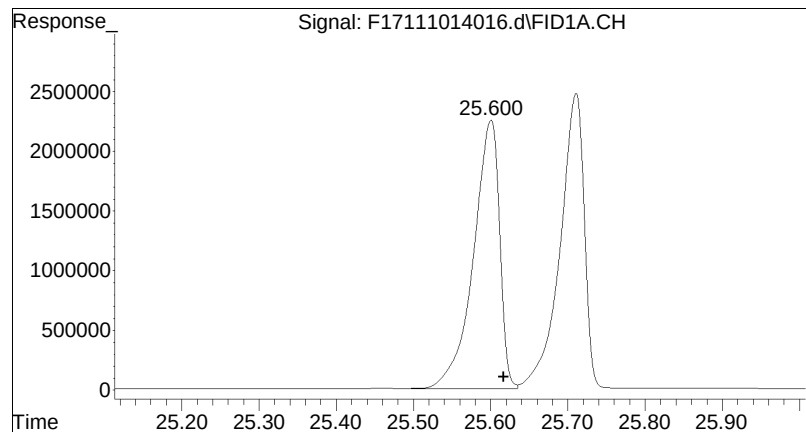
#11 n-Pentadecane (C15)

R.T.: 21.777 min
Delta R.T.: -0.015 min
Response: 52726106
Conc: 49.22 ug/mL M4



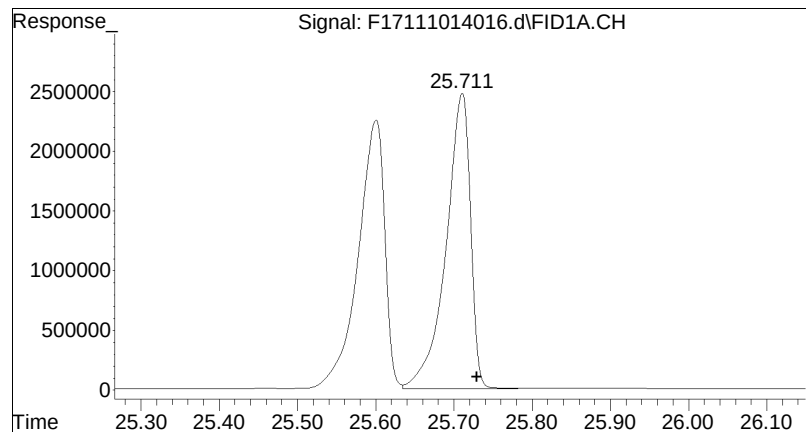
#12 n-Hexadecane (C16)

R.T.: 23.737 min
Delta R.T.: -0.016 min
Response: 52629891
Conc: 48.76 ug/mL M4



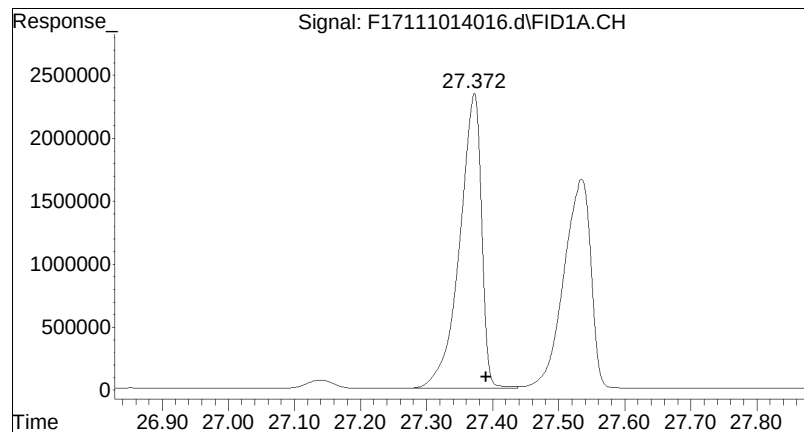
#14 n-Heptadecane (C17)

R.T.: 25.600 min
Delta R.T.: -0.016 min
Response: 52933668
Conc: 48.78 ug/mL M4



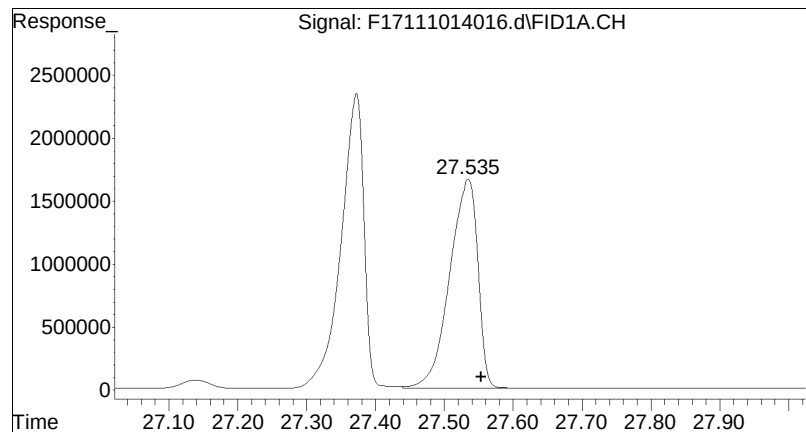
#15 Pristane

R.T.: 25.711 min
Delta R.T.: -0.019 min
Response: 53728134
Conc: 49.40 ug/mL M4



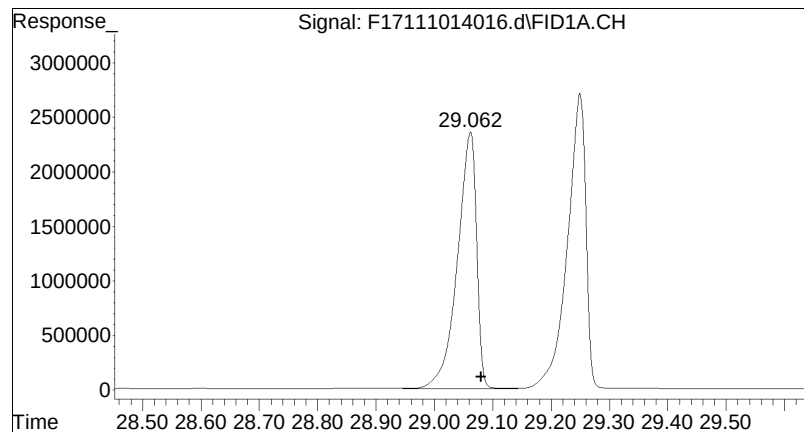
#16 n-Octadecane (C18)

R.T.: 27.372 min
Delta R.T.: -0.017 min
Response: 53966088
Conc: 50.04 ug/mL M4



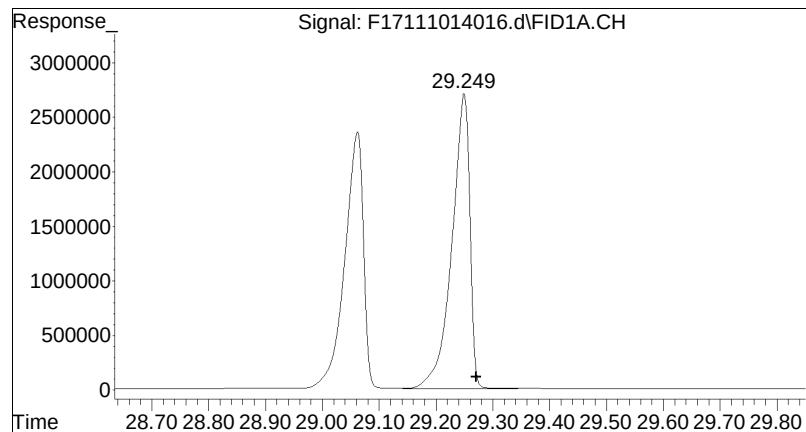
#17 Phytane

R.T.: 27.535 min
Delta R.T.: -0.018 min
Response: 47224332
Conc: 43.10 ug/mL M4



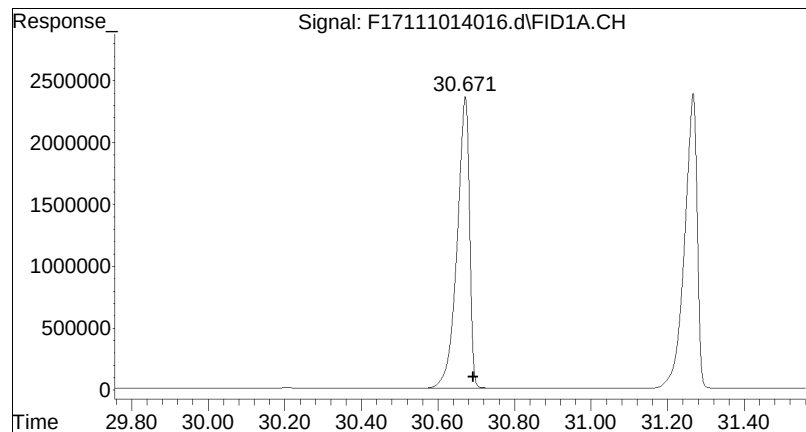
#18 n-Nonadecane (C19)

R.T.: 29.062 min
Delta R.T.: -0.018 min
Response: 53604297
Conc: 49.98 ug/mL M4



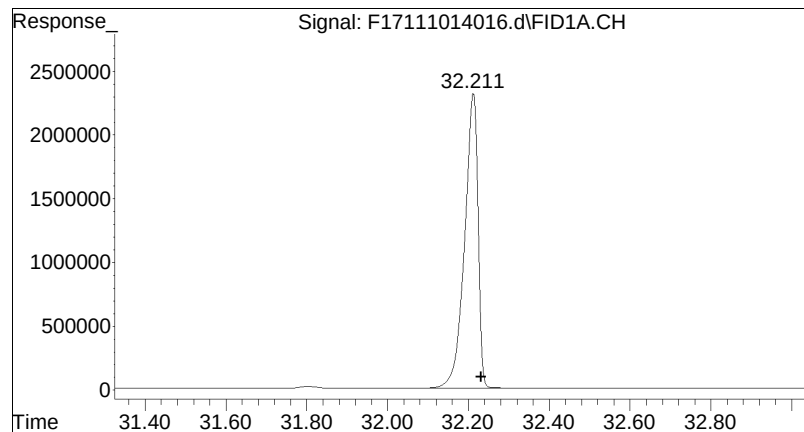
#19 ortho-terphenyl

R.T.: 29.249 min
Delta R.T.: -0.022 min
Response: 59342026
Conc: 48.76 ug/mL M4



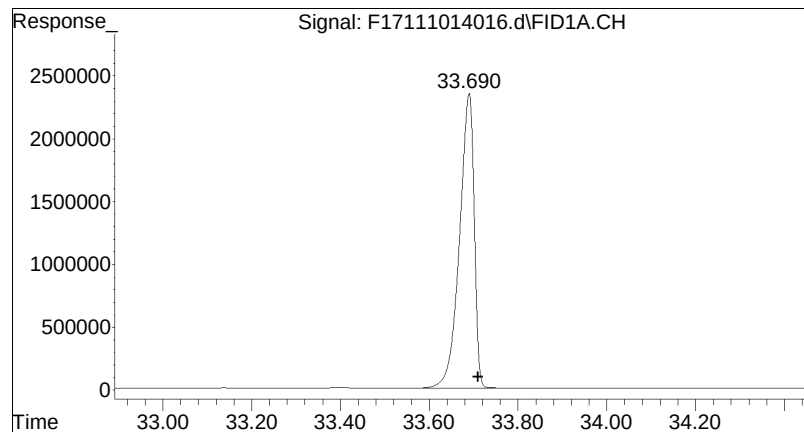
#20 n-Eicosane (C20)

R.T.: 30.671 min
Delta R.T.: -0.020 min
Response: 53373894
Conc: 49.54 ug/mL M4



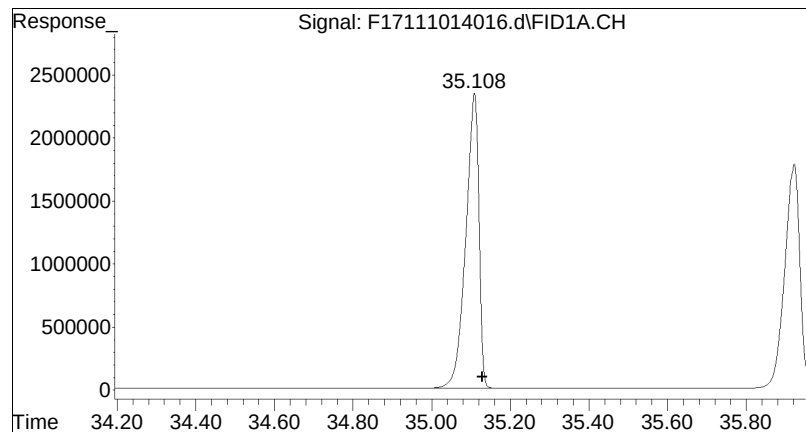
#21 n-Heneicosane (C21)

R.T.: 32.211 min
Delta R.T.: -0.020 min
Response: 53706675
Conc: 49.28 ug/mL M4



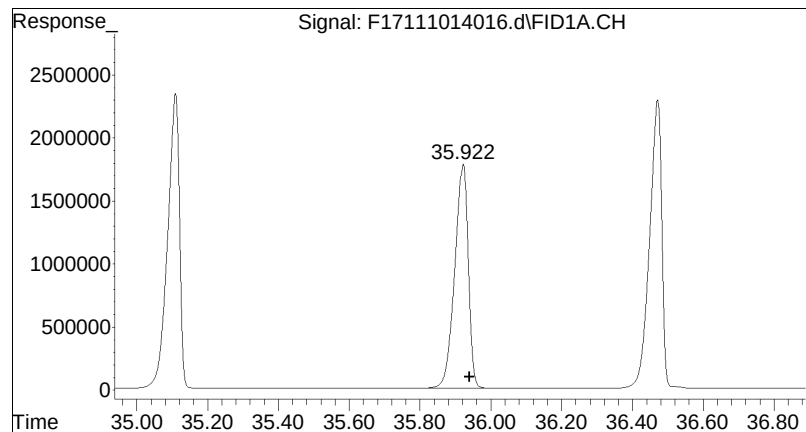
#22 n-Docosane (C22)

R.T.: 33.690 min
Delta R.T.: -0.020 min
Response: 54114794
Conc: 49.38 ug/mL M4



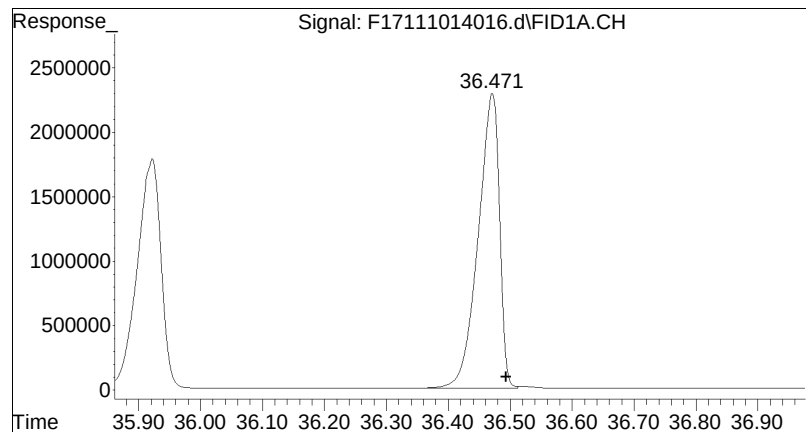
#23 n-Tricosane (C23)

R.T.: 35.108 min
Delta R.T.: -0.021 min
Response: 54468080
Conc: 49.42 ug/mL M4



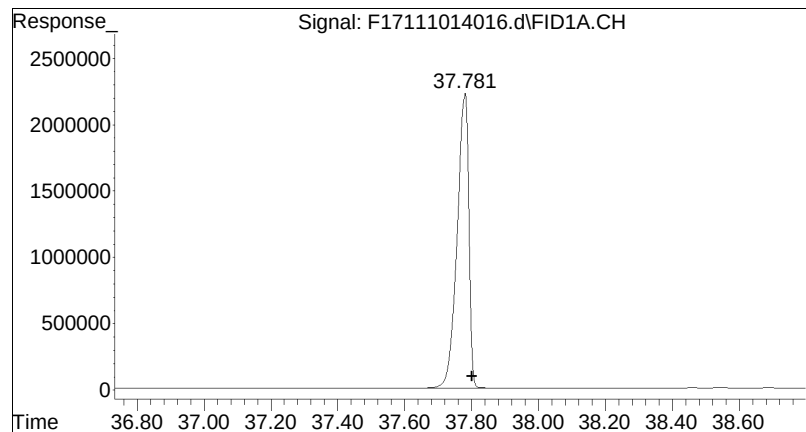
#24 d50-Tetracosane

R.T.: 35.922 min
Delta R.T.: -0.018 min
Response: 47616898
Conc: 49.59 ug/mL M4



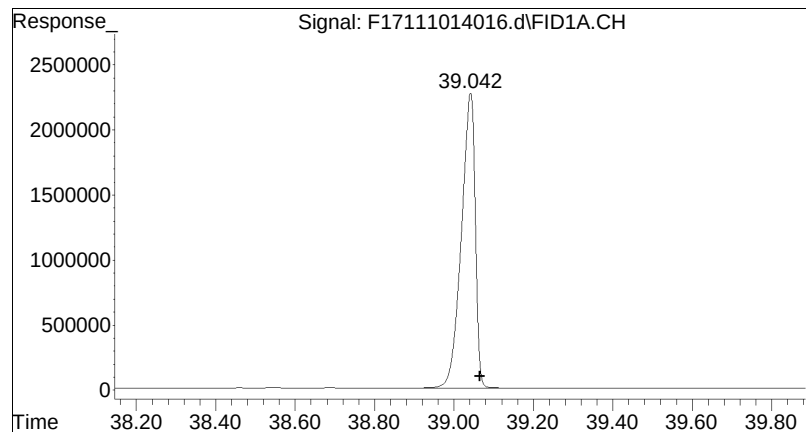
#25 n-Tetracosane (C24)

R.T.: 36.471 min
Delta R.T.: -0.023 min
Response: 54558609
Conc: 49.44 ug/mL M4



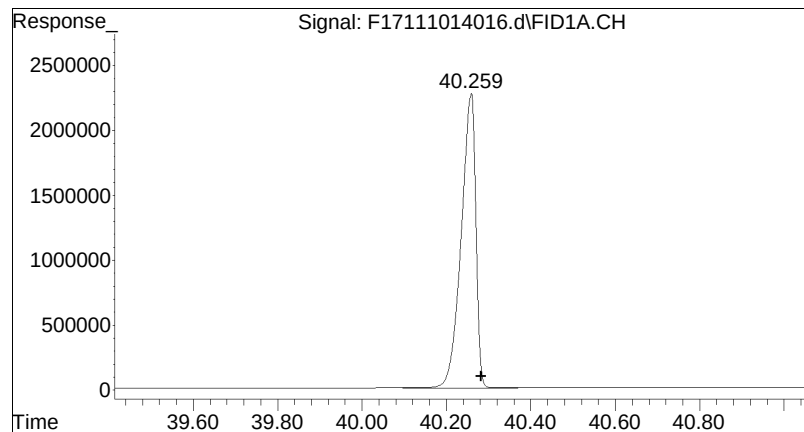
#26 n-Pentacosane (C25)

R.T.: 37.781 min
Delta R.T.: -0.019 min
Response: 54123509
Conc: 48.88 ug/mL M4



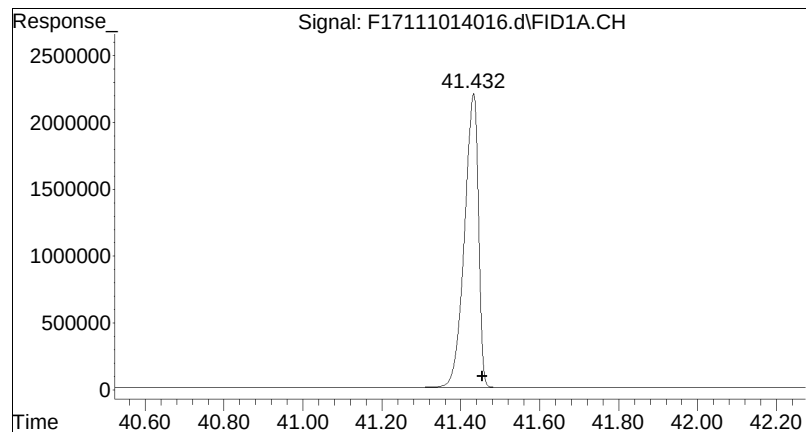
#27 n-Hexacosane (C26)

R.T.: 39.042 min
Delta R.T.: -0.022 min
Response: 55246629
Conc: 48.88 ug/mL M4



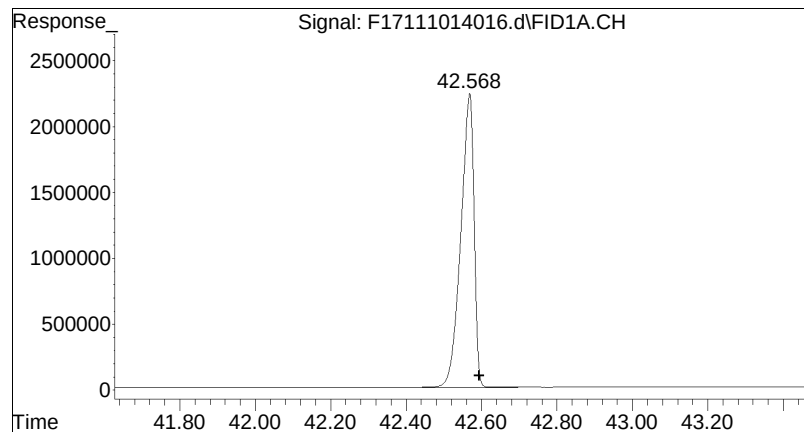
#28 n-Heptacosane (C27)

R.T.: 40.259 min
Delta R.T.: -0.022 min
Response: 54568291
Conc: 48.65 ug/mL M4



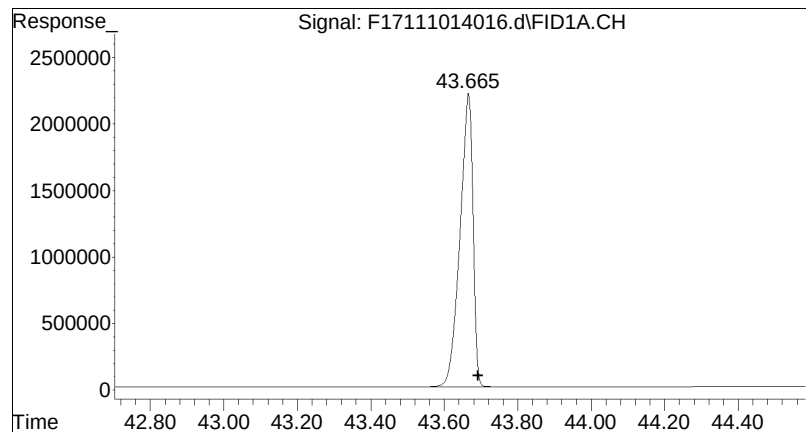
#29 n-Octacosane (C28)

R.T.: 41.432 min
Delta R.T.: -0.022 min
Response: 54246380
Conc: 48.21 ug/mL M4



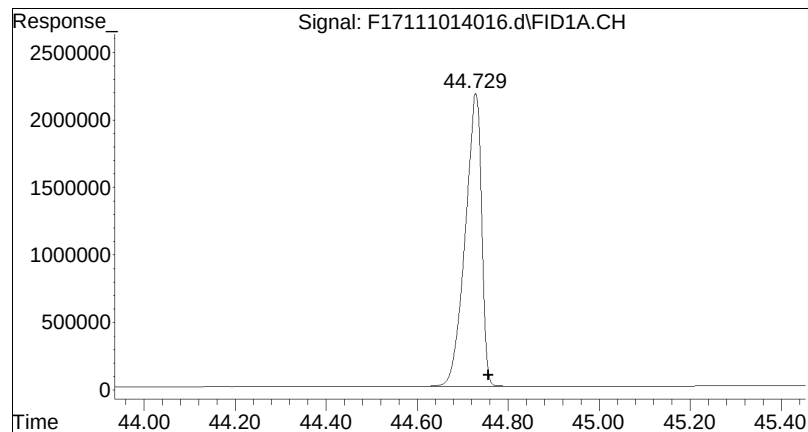
#30 n-Nonacosane (C29)

R.T.: 42.568 min
Delta R.T.: -0.025 min
Response: 54437873
Conc: 47.94 ug/mL M4



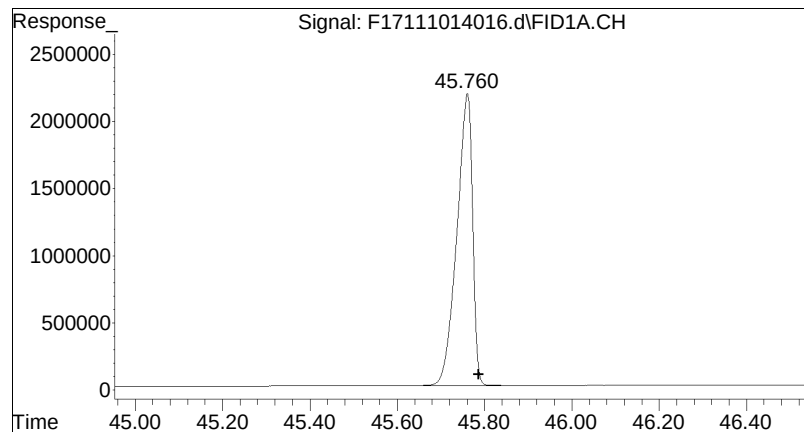
#31 n-Triacontane (C30)

R.T.: 43.665 min
Delta R.T.: -0.027 min
Response: 54410127
Conc: 47.76 ug/mL M4



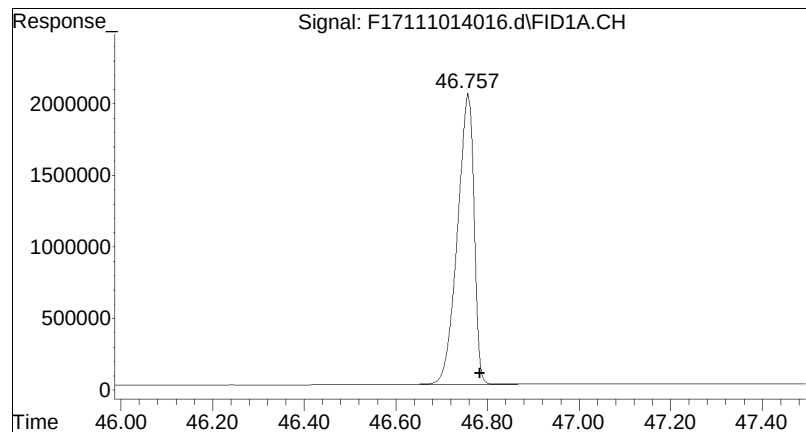
#32 n-Hentriacontane (C31)

R.T.: 44.729 min
Delta R.T.: -0.028 min
Response: 54264860
Conc: 47.27 ug/mL M4



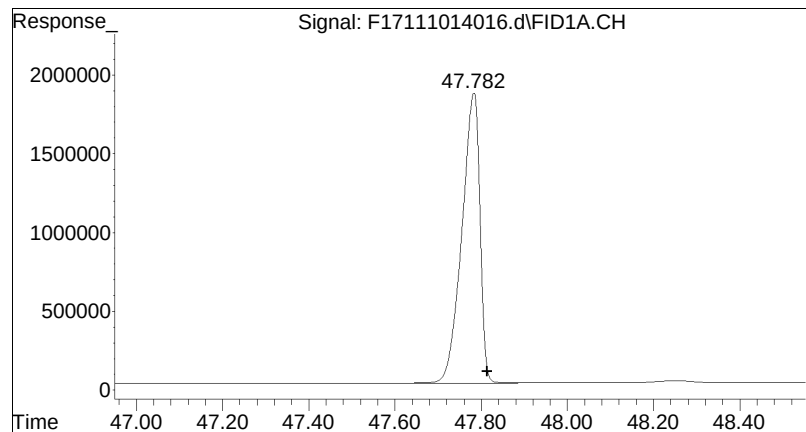
#33 n-Dotriacontane (C32)

R.T.: 45.760 min
Delta R.T.: -0.026 min
Response: 54592430
Conc: 47.83 ug/mL M4



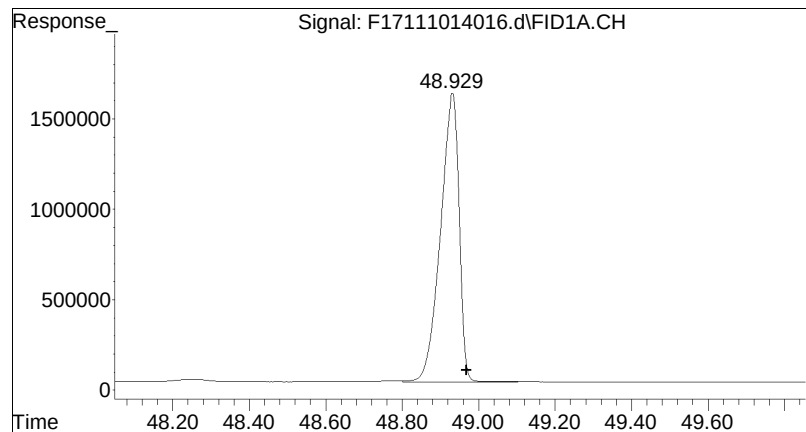
#34 n-Tritriacontane (C33)

R.T.: 46.757 min
Delta R.T.: -0.026 min
Response: 51478791
Conc: 46.43 ug/mL M4



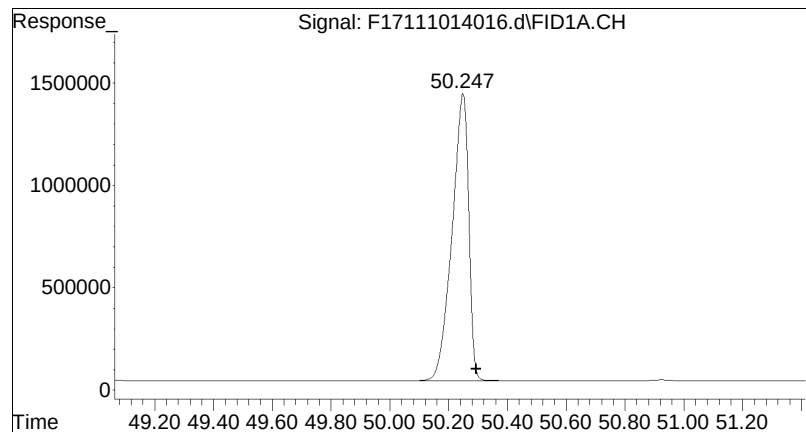
#35 n-tetratriacontane (C34)

R.T.: 47.782 min
Delta R.T.: -0.031 min
Response: 53603677
Conc: 45.56 ug/mL M4



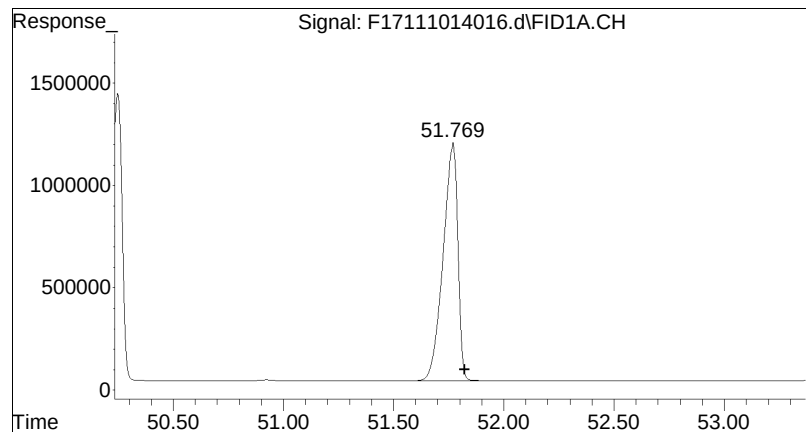
#36 n-Pentatriacontane (C35)

R.T.: 48.929 min
Delta R.T.: -0.038 min
Response: 53899156
Conc: 46.04 ug/mL M4



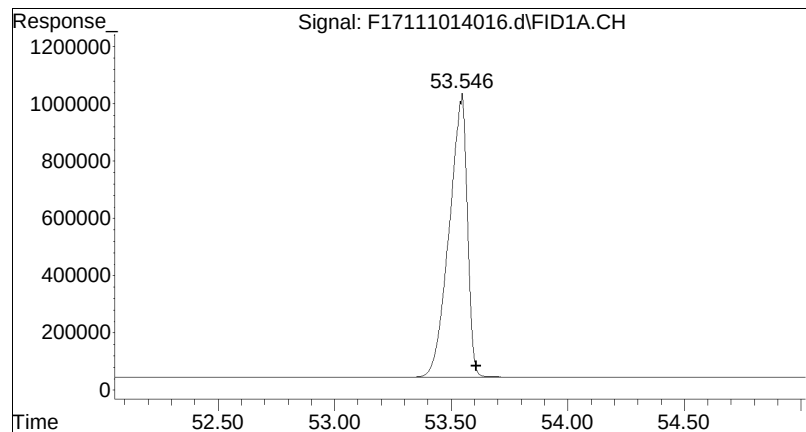
#37 n-Hexatriacontane (C36)

R.T.: 50.247 min
Delta R.T.: -0.046 min
Response: 55334260
Conc: 43.65 ug/mL M4



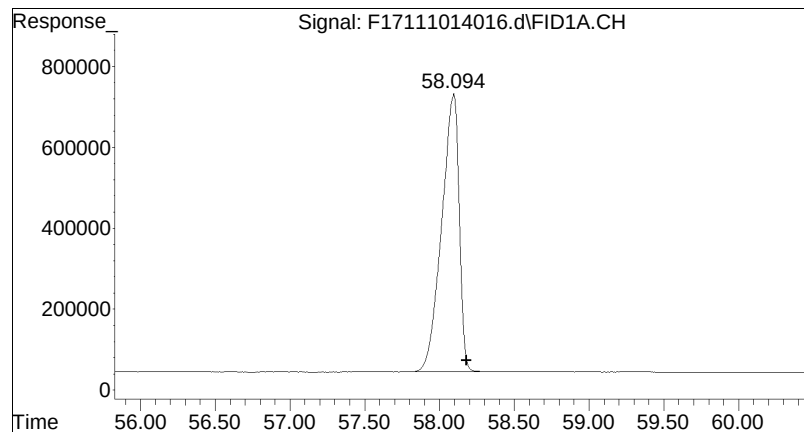
#38 n-Heptatriacontane (C37)

R.T.: 51.769 min
Delta R.T.: -0.053 min
Response: 54162138
Conc: 45.80 ug/mL M4



#39 n-Octatriacontane (C38)

R.T.: 53.546 min
Delta R.T.: -0.061 min
Response: 53323714
Conc: 45.12 ug/mL M4



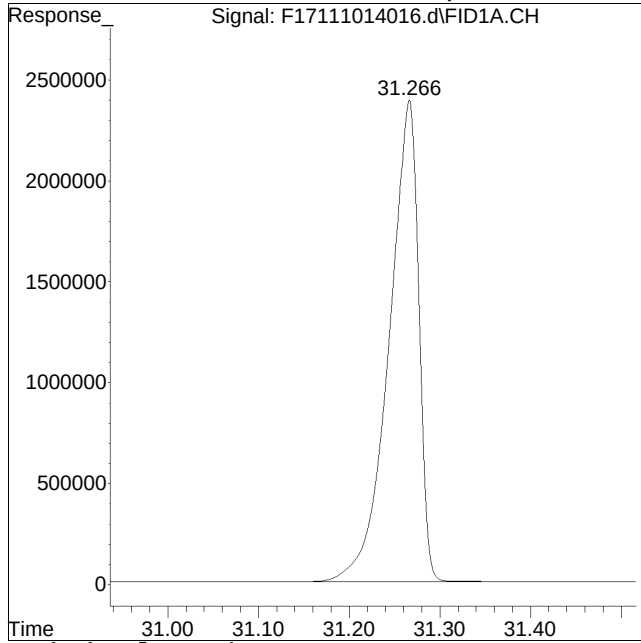
#41 n-Tetracontane (C40)

R.T.: 58.094 min
Delta R.T.: -0.084 min
Response: 56122386
Conc: 49.36 ug/mL M4

Manual Integration/Negative Proof Report

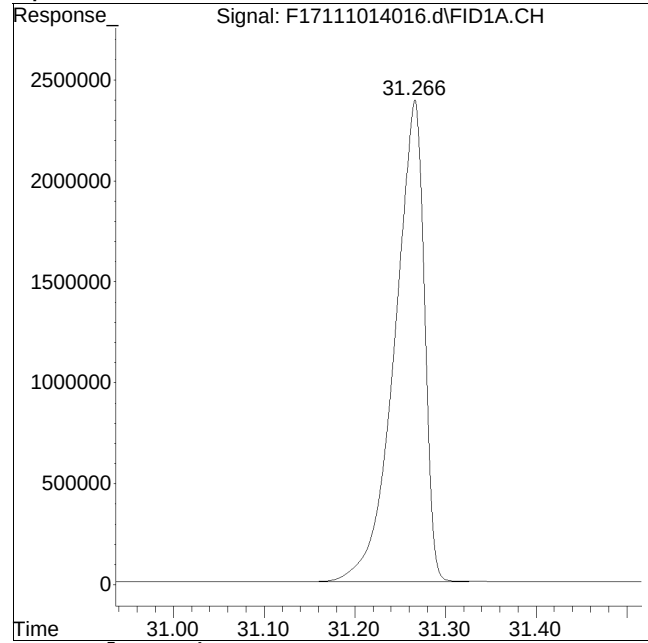
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #1: 5-alpha-androstane



Original Peak Response = 54311912

M4 = Poor automated baseline construction.

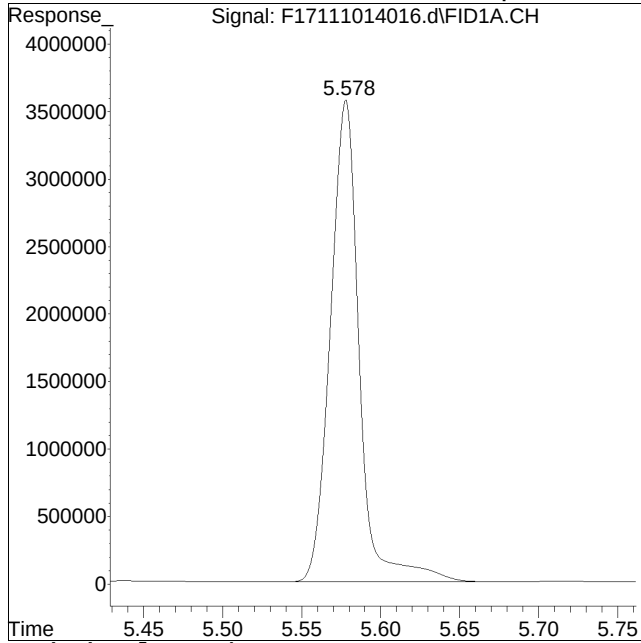


Manual Peak Response = 54310906 M4

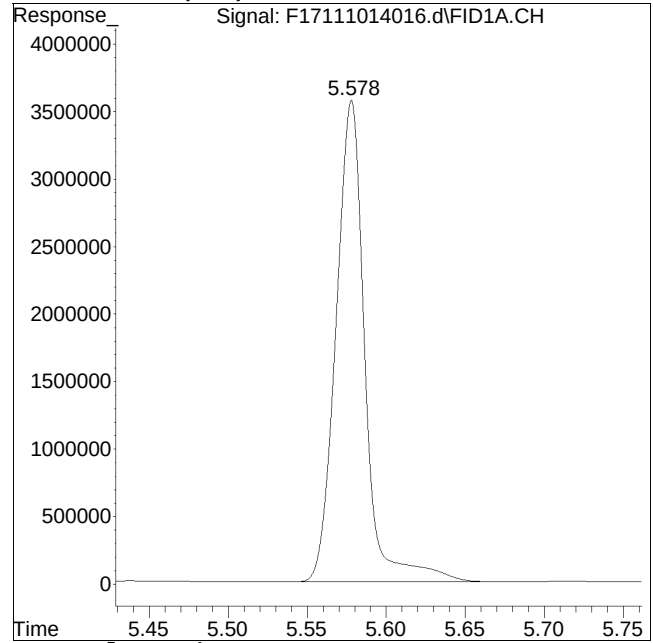
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #2: n-Octane (C8)



Original Peak Response = 45579669



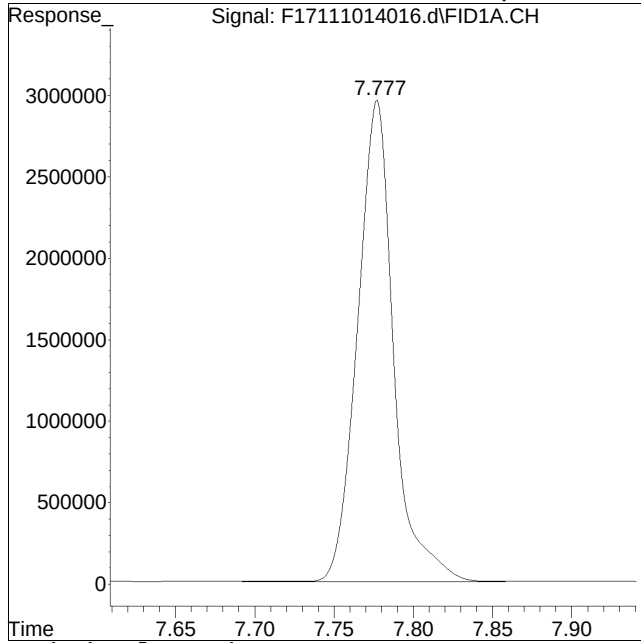
Manual Peak Response = 45560434 M4

M4 = Poor automated baseline construction.

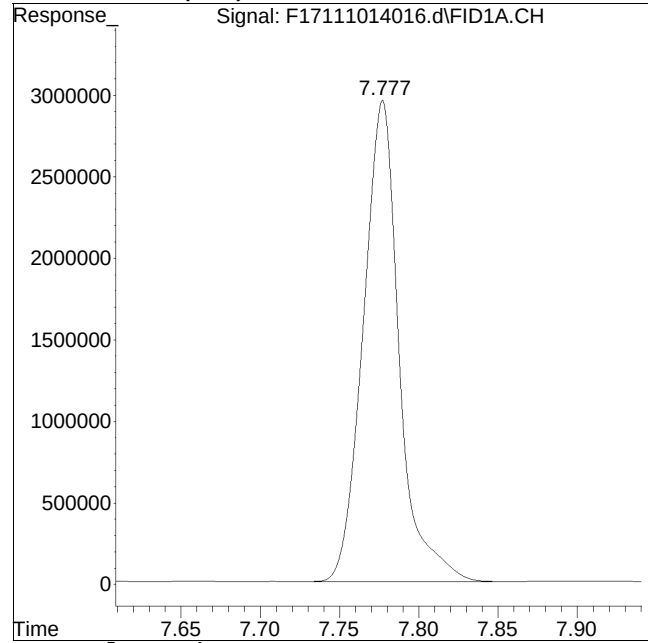
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #3: n-Nonane (C9)



Original Peak Response = 46953698



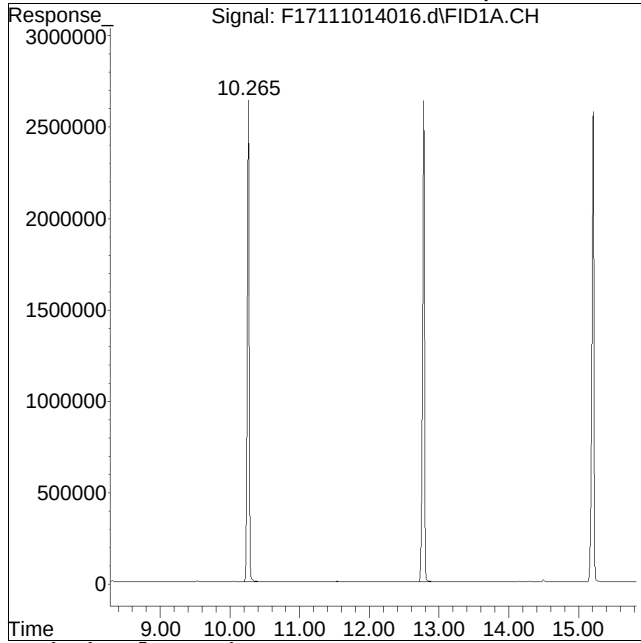
Manual Peak Response = 46801135 M4

M4 = Poor automated baseline construction.

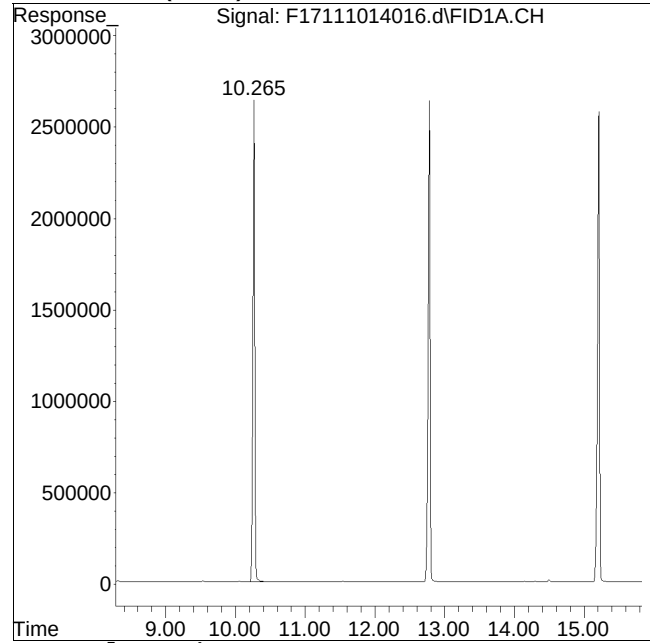
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #4: n-Decane (C10)



Original Peak Response = 47925067



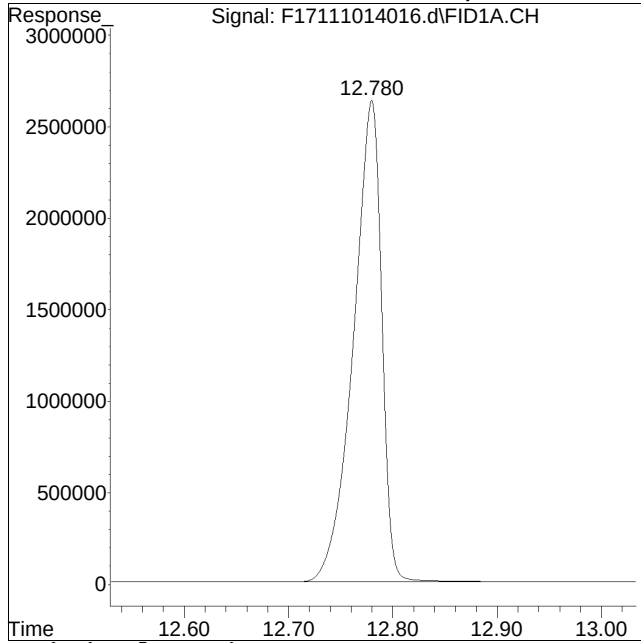
Manual Peak Response = 48405866 M4

M4 = Poor automated baseline construction.

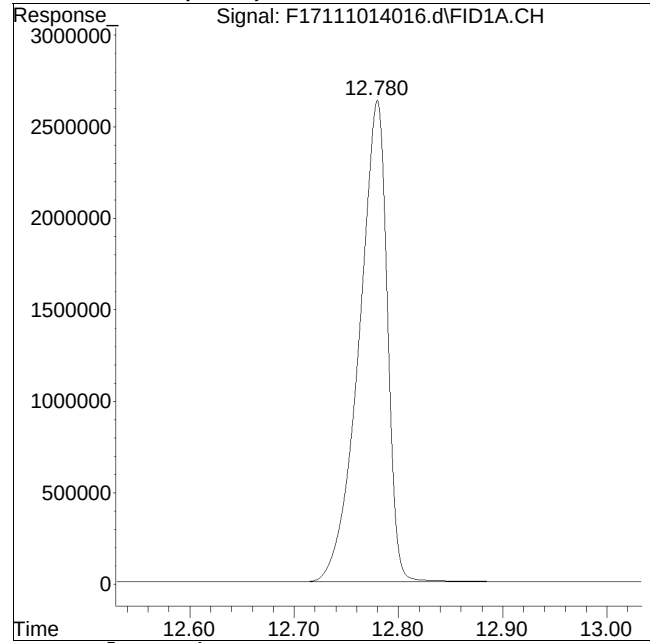
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #5: n-Undecane (C11)



Original Peak Response = 49639595



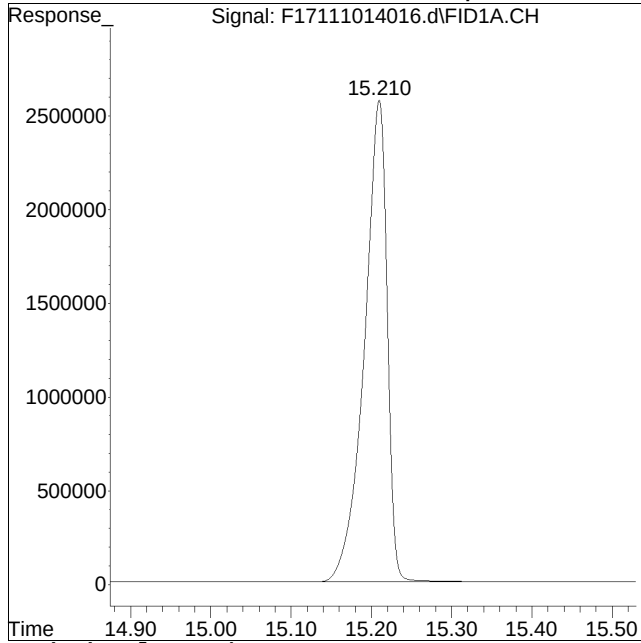
Manual Peak Response = 49661379 M4

M4 = Poor automated baseline construction.

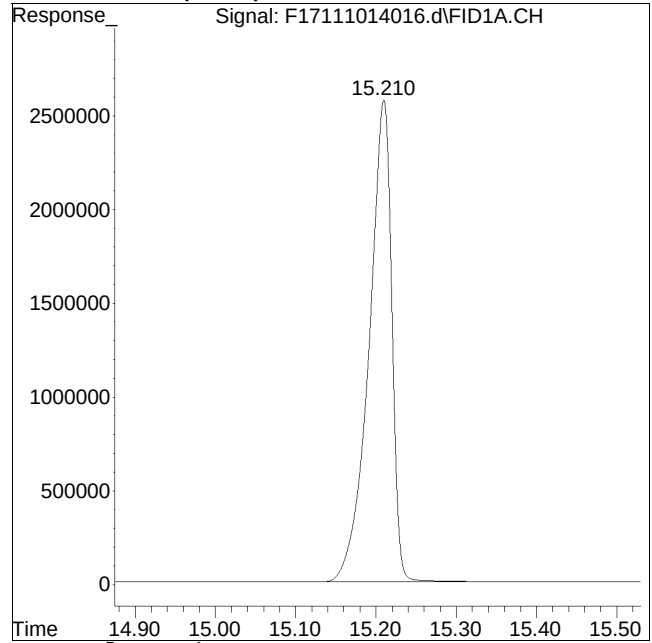
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #6: n-Dodecane (C12)



Original Peak Response = 50582409



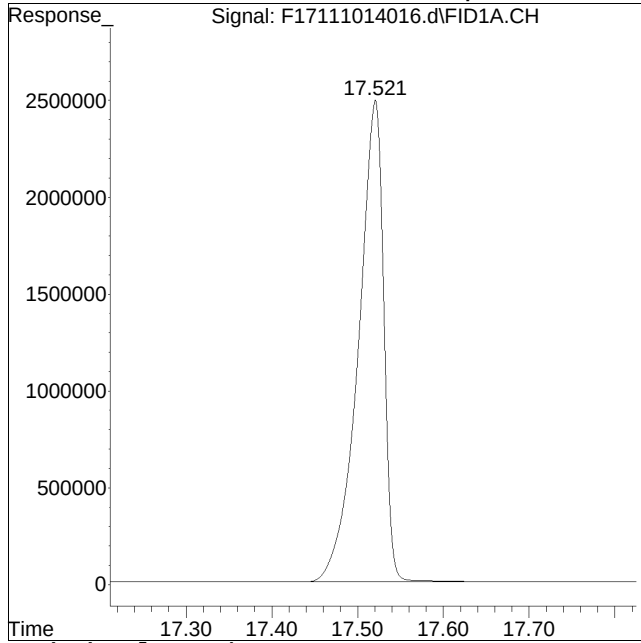
Manual Peak Response = 50686941 M4

M4 = Poor automated baseline construction.

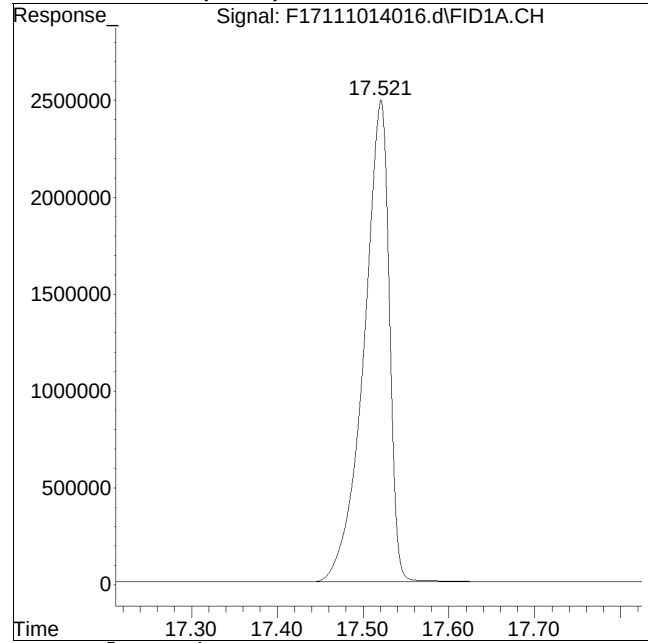
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #7: n-Tridecane (C13)



Original Peak Response = 51111533



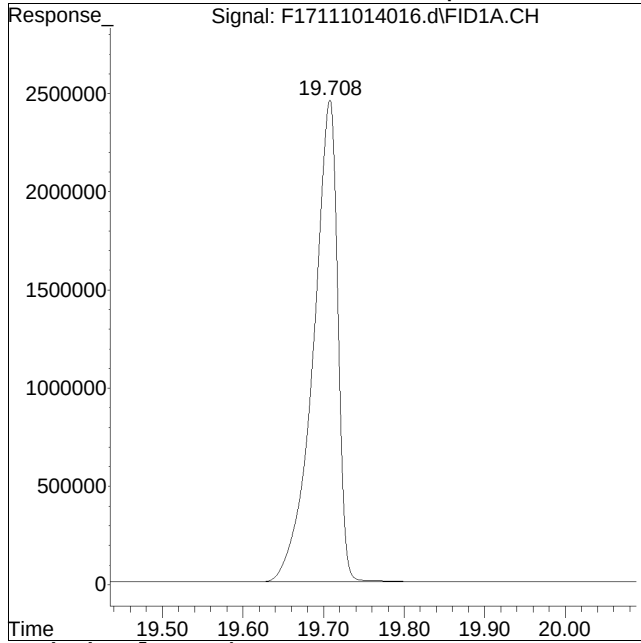
Manual Peak Response = 51093773 M4

M4 = Poor automated baseline construction.

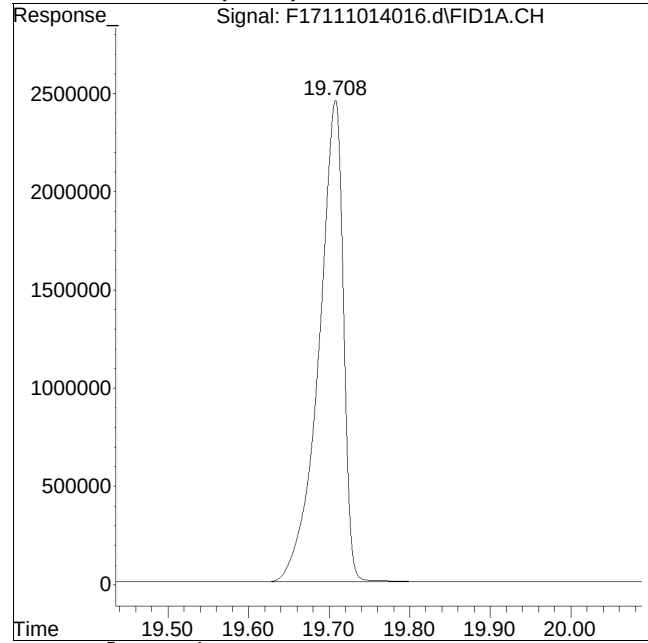
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #9: n-Tetradecane (C14)



Original Peak Response = 51786344



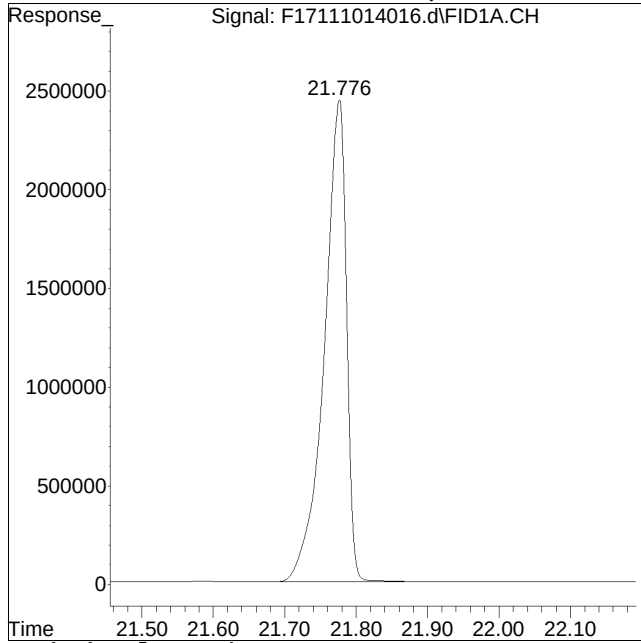
Manual Peak Response = 51735306 M4

M4 = Poor automated baseline construction.

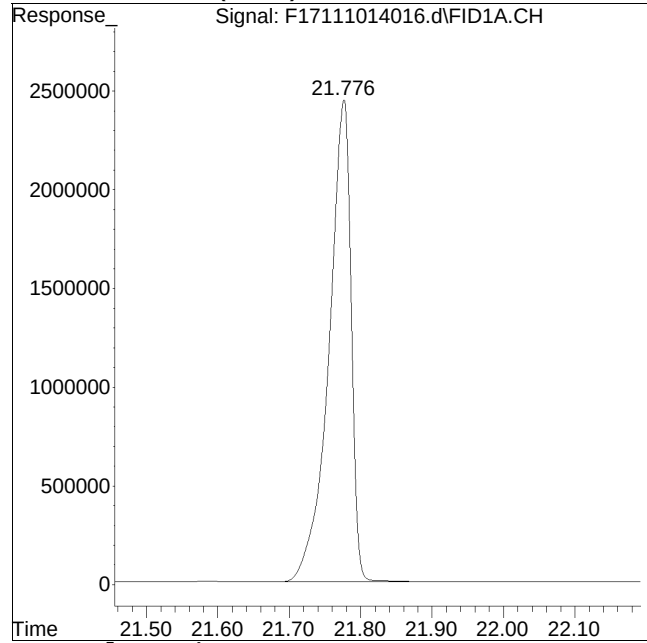
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #11: n-Pentadecane (C15)



Original Peak Response = 52765931



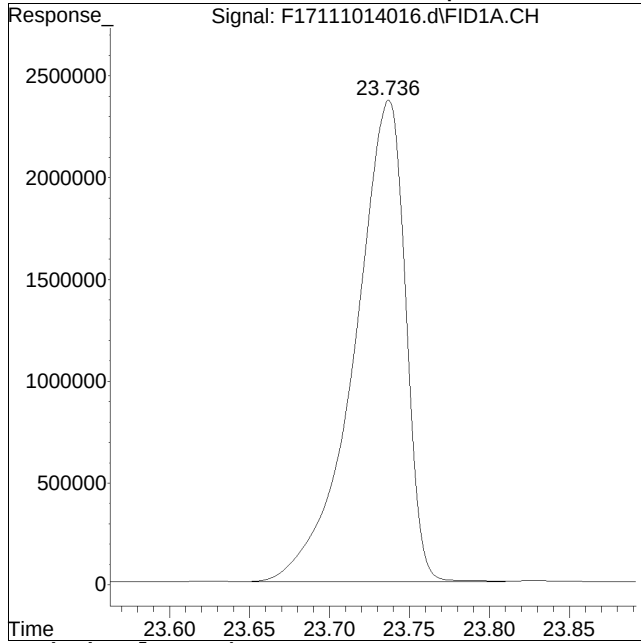
Manual Peak Response = 52726106 M4

M4 = Poor automated baseline construction.

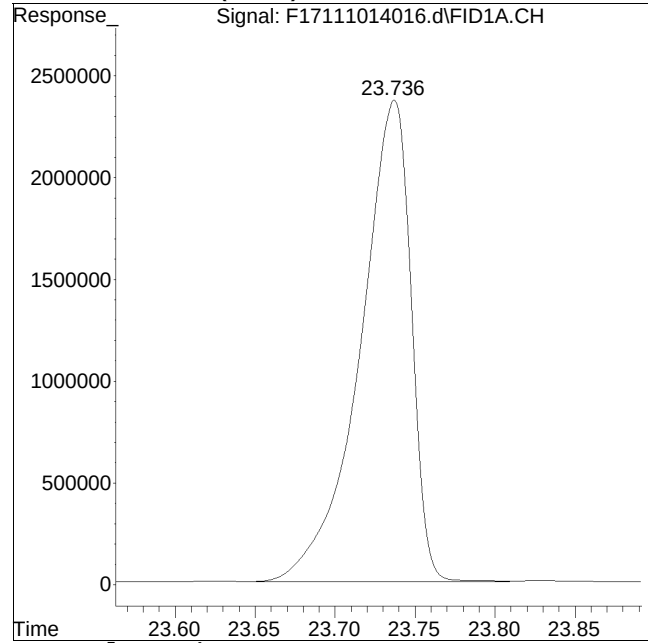
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #12: n-Hexadecane (C16)



Original Peak Response = 52595491



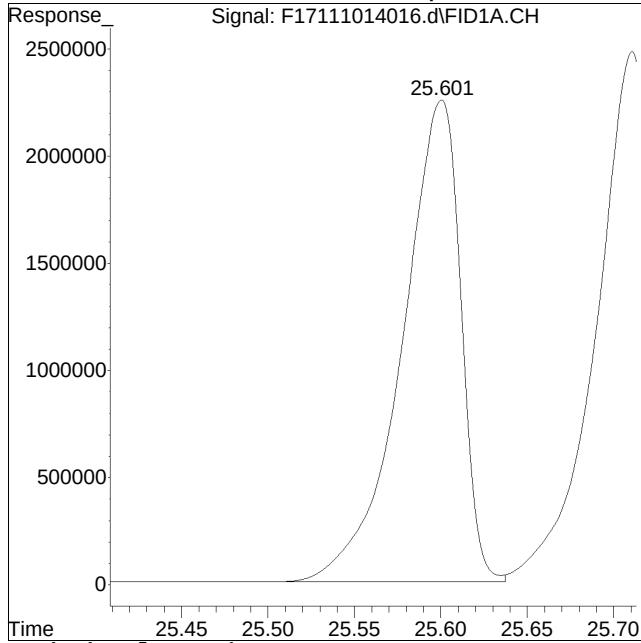
Manual Peak Response = 52629891 M4

M4 = Poor automated baseline construction.

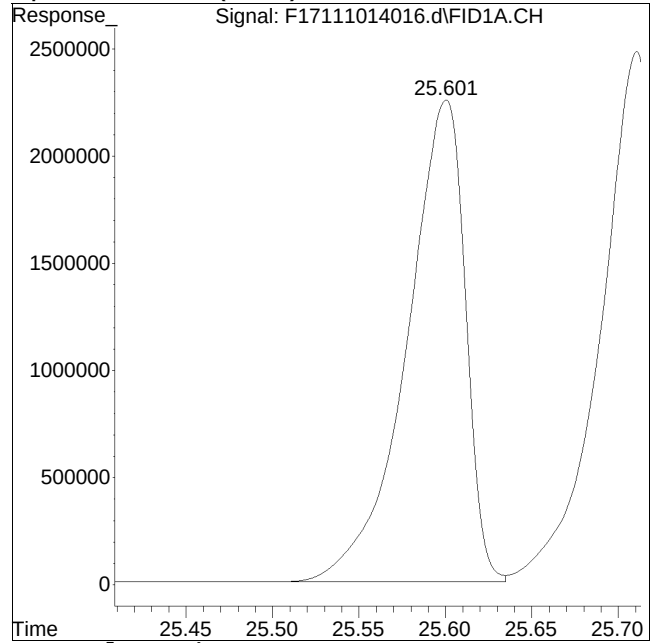
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #14: n-Heptadecane (C17)



Original Peak Response = 52949269



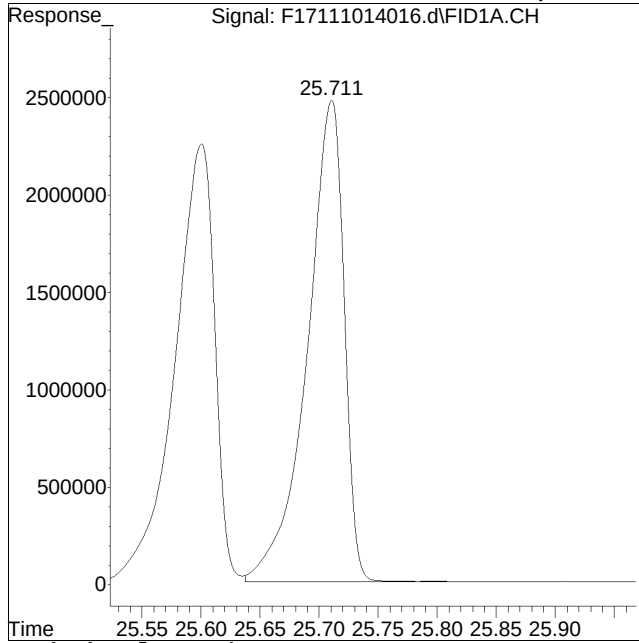
Manual Peak Response = 52933668 M4

M4 = Poor automated baseline construction.

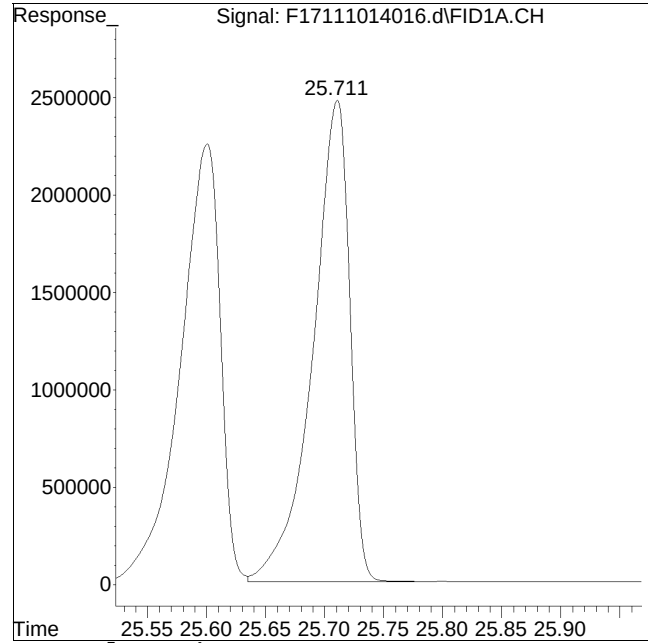
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I17111011403R Quant Date : 11/14/2014 12:19 pm

Compound #15: Pristane



Original Peak Response = 53810894



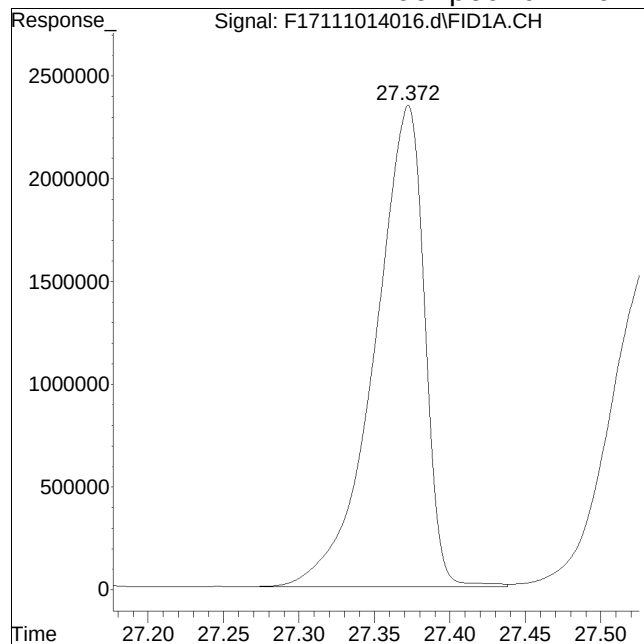
Manual Peak Response = 53728134 M4

M4 = Poor automated baseline construction.

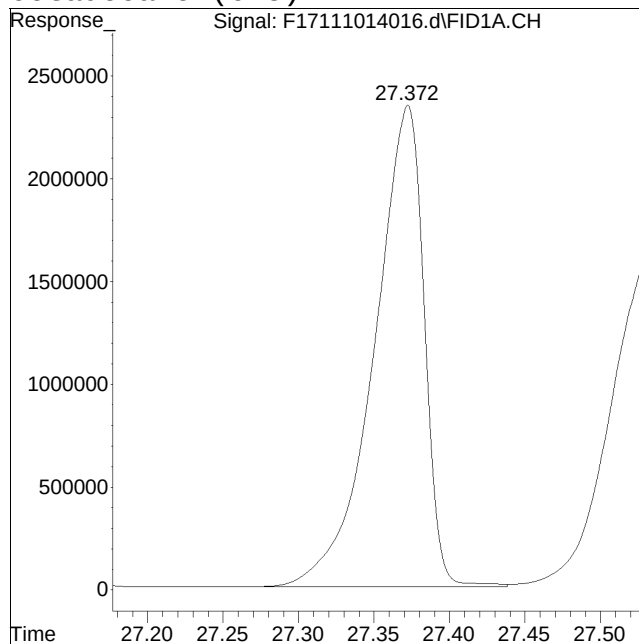
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #16: n-Octadecane (C18)



Original Peak Response = 54018157



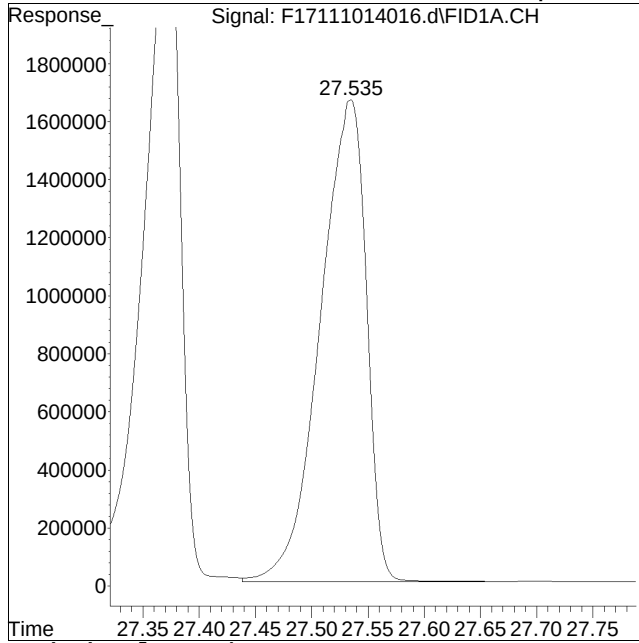
Manual Peak Response = 53966088 M4

M4 = Poor automated baseline construction.

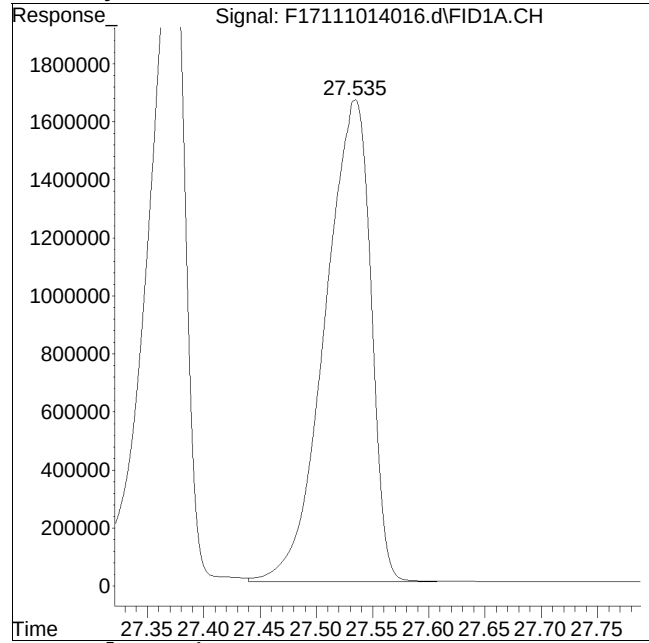
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #17: Phytane



Original Peak Response = 47399106



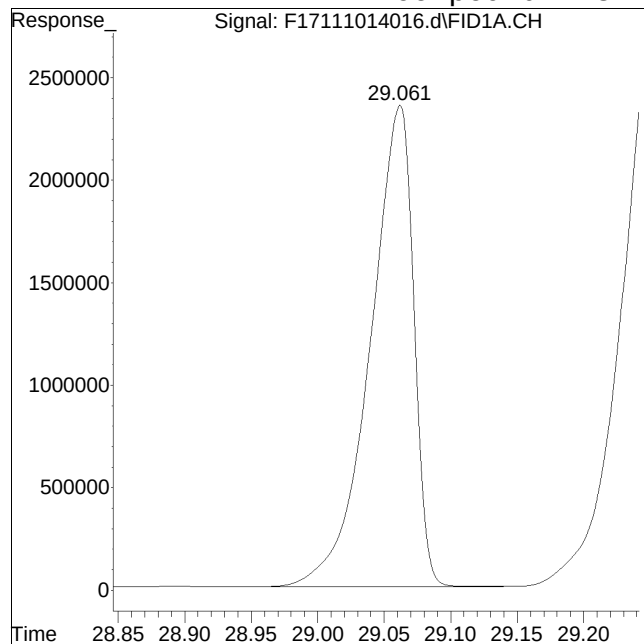
Manual Peak Response = 47224332 M4

M4 = Poor automated baseline construction.

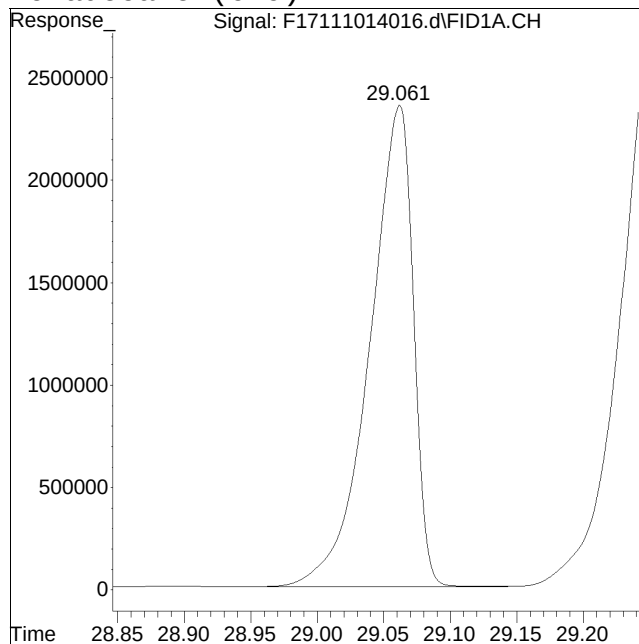
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
 Data File : F17111014016.d Operator : FID17:NL
 Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
 Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #18: n-Nonadecane (C19)



Original Peak Response = 53485106



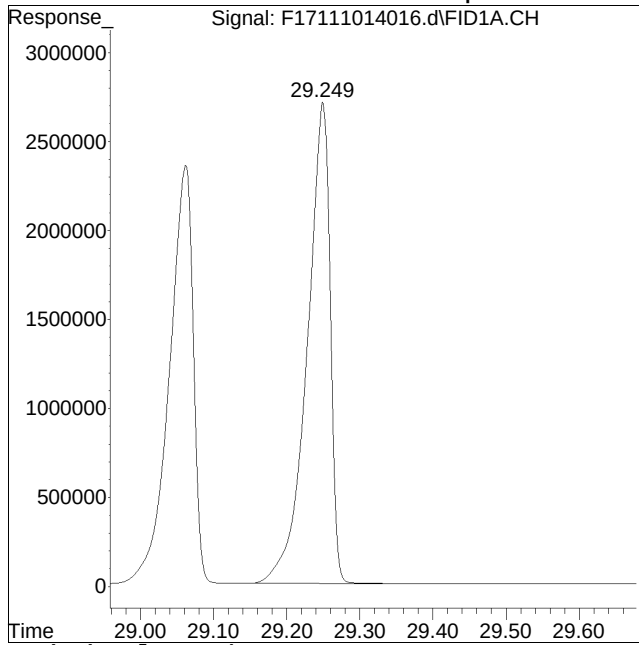
Manual Peak Response = 53604297 M4

M4 = Poor automated baseline construction.

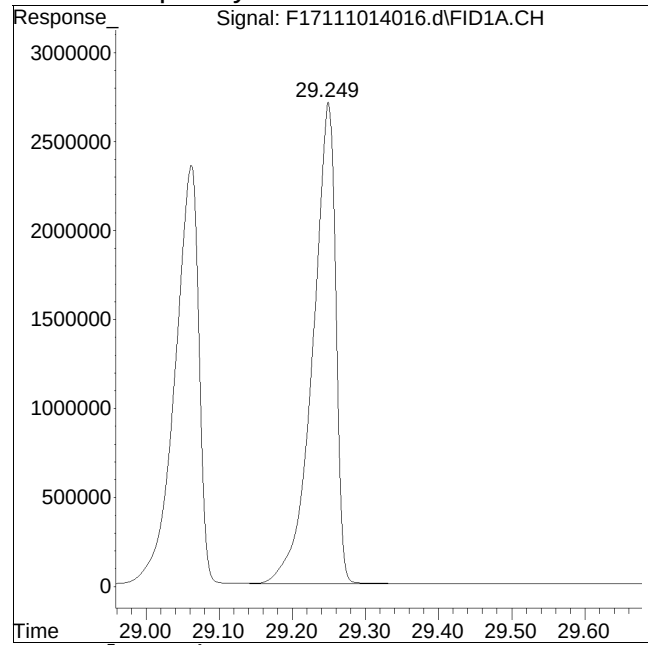
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #19: ortho-terphenyl



Original Peak Response = 58985869



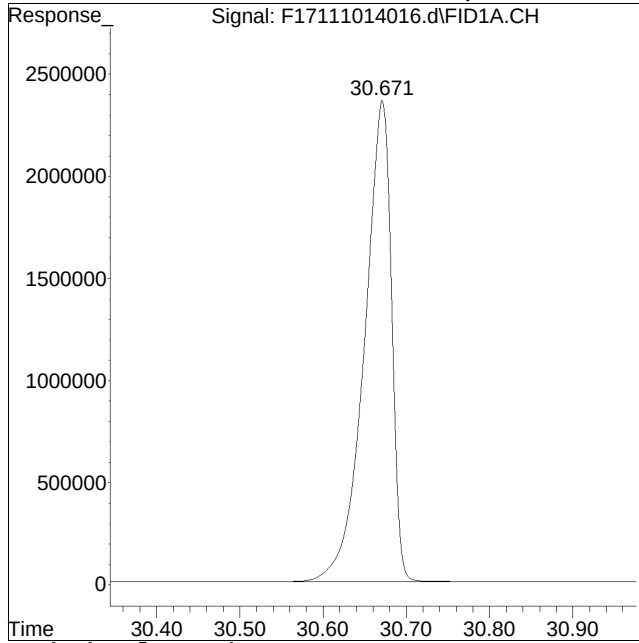
Manual Peak Response = 59342026 M4

M4 = Poor automated baseline construction.

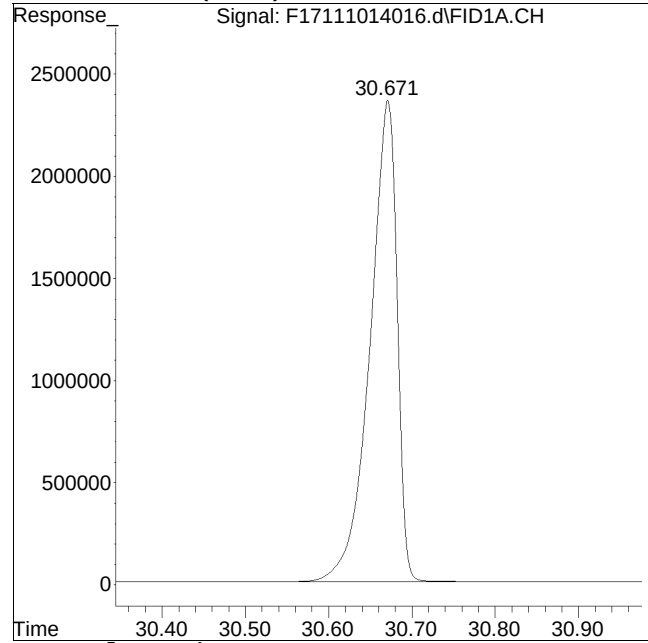
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #20: n-Eicosane (C20)



Original Peak Response = 53435368



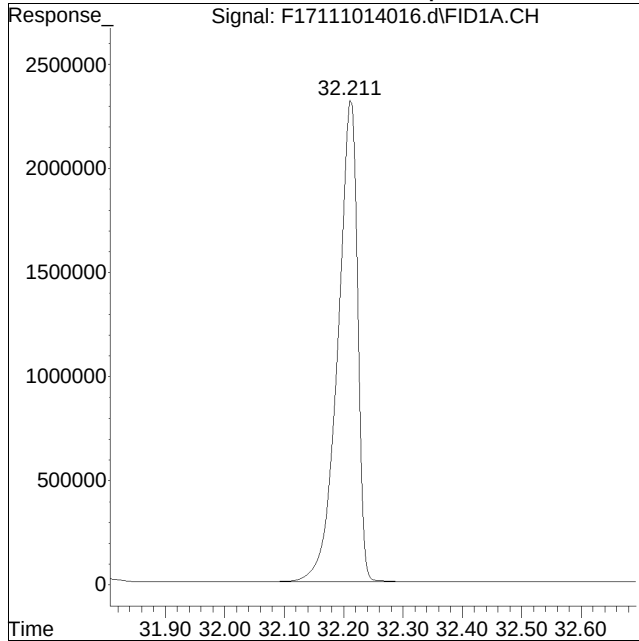
Manual Peak Response = 53373894 M4

M4 = Poor automated baseline construction.

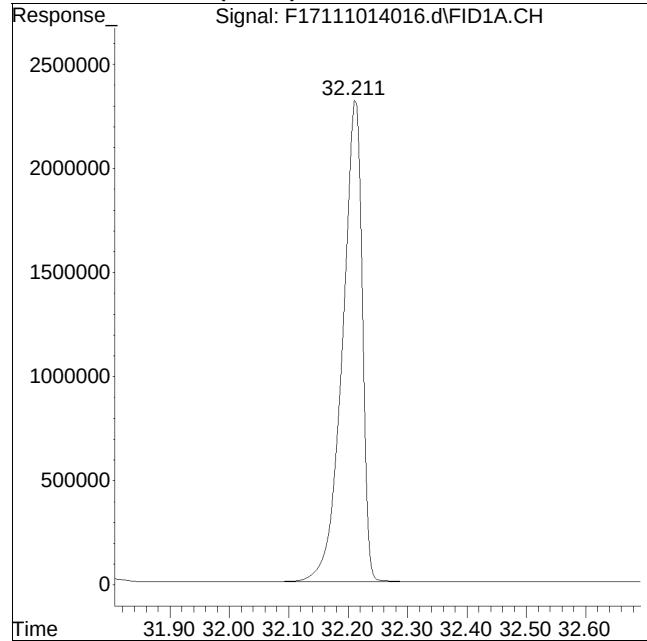
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #21: n-Heneicosane (C21)



Original Peak Response = 53650385



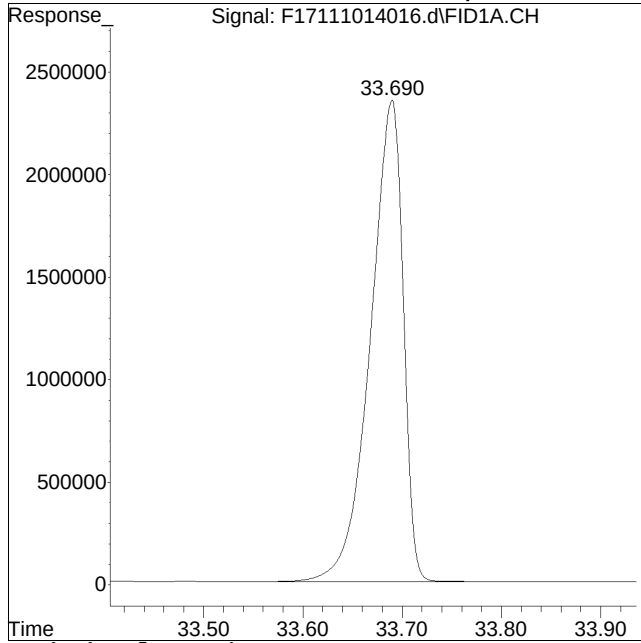
Manual Peak Response = 53706675 M4

M4 = Poor automated baseline construction.

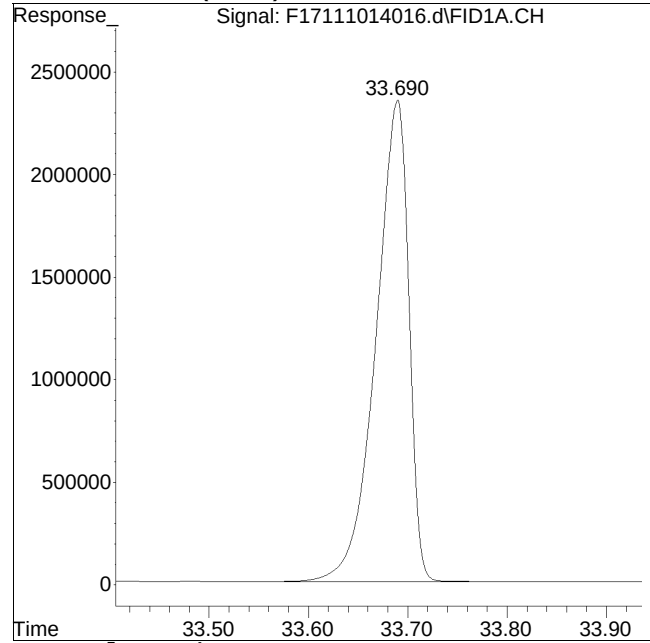
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #22: n-Docosane (C22)



Original Peak Response = 54124083



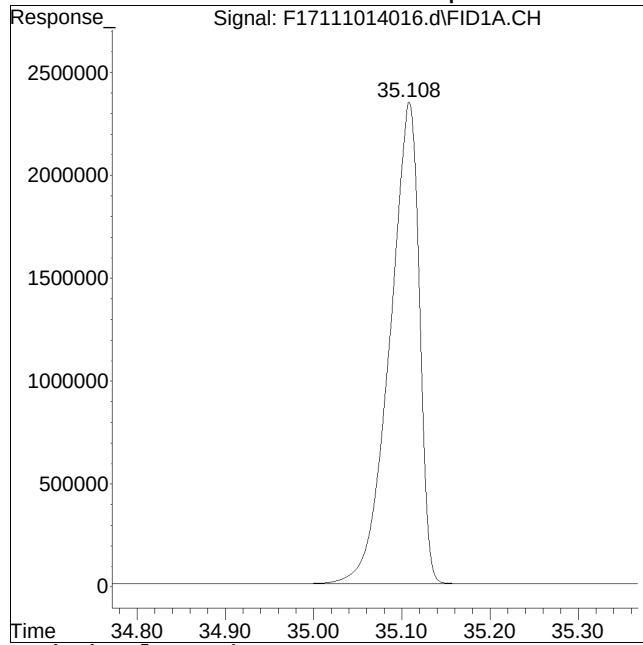
Manual Peak Response = 54114794 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

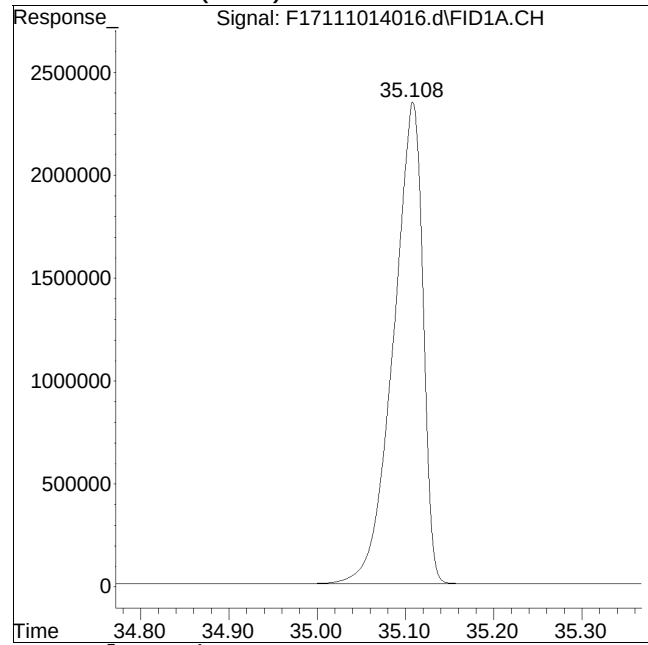
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #23: n-Tricosane (C23)



Original Peak Response = 54452941

M4 = Poor automated baseline construction.

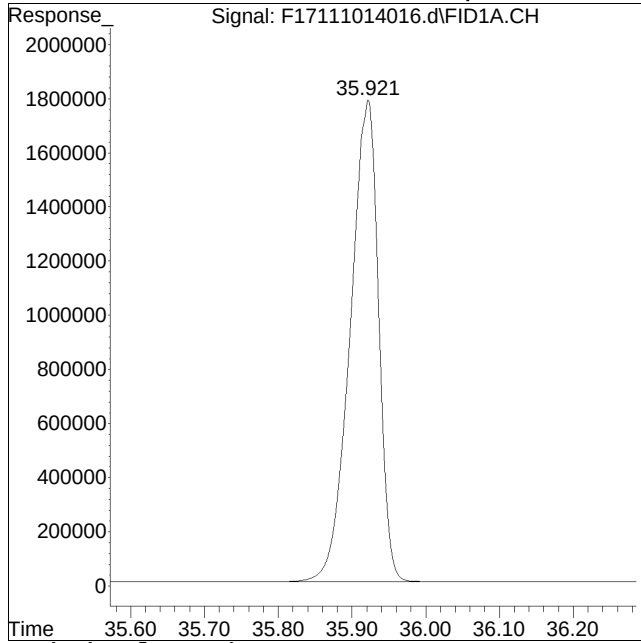


Manual Peak Response = 54468080 M4

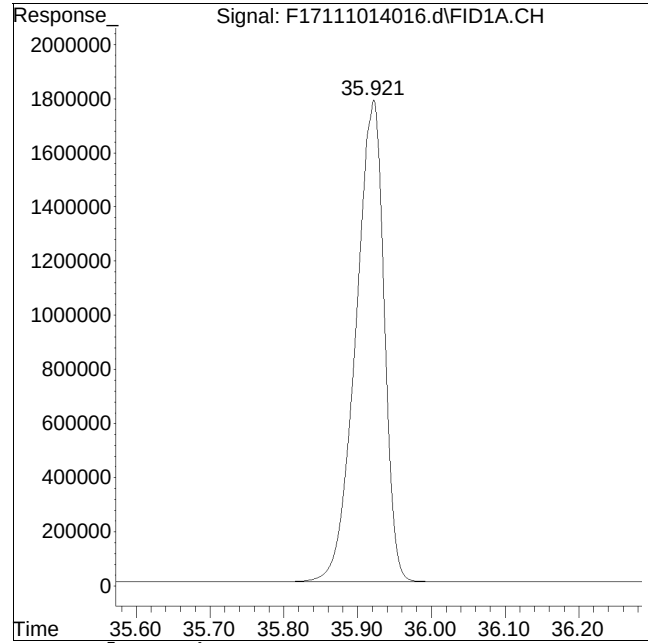
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #24: d50-Tetracosane



Original Peak Response = 47597293



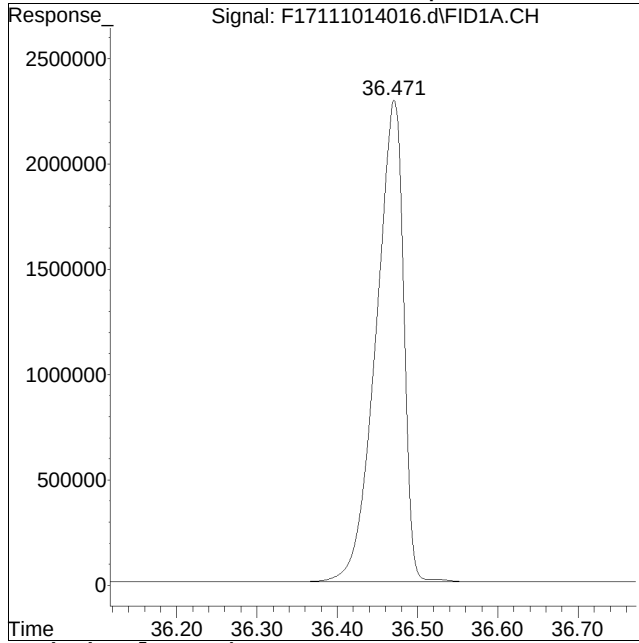
Manual Peak Response = 47616898 M4

M4 = Poor automated baseline construction.

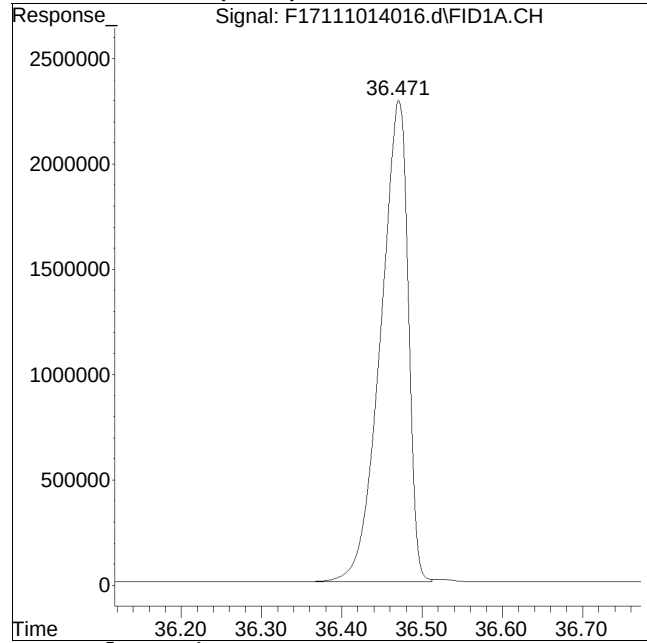
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #25: n-Tetracosane (C24)



Original Peak Response = 54837400



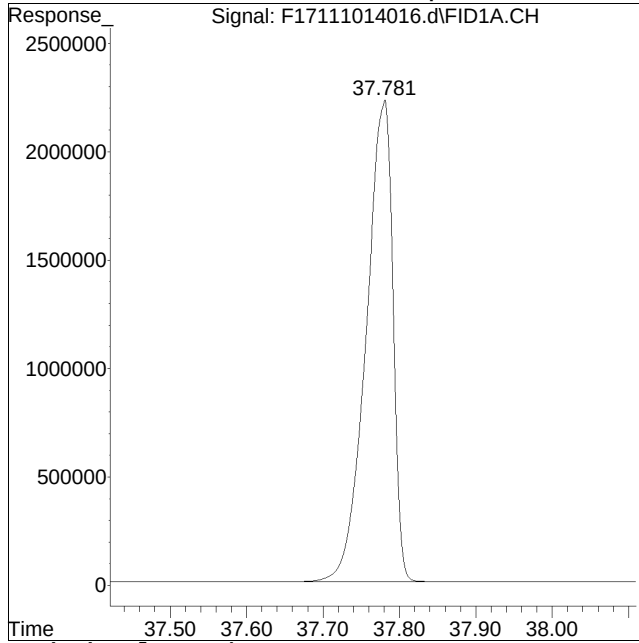
Manual Peak Response = 54558609 M4

M4 = Poor automated baseline construction.

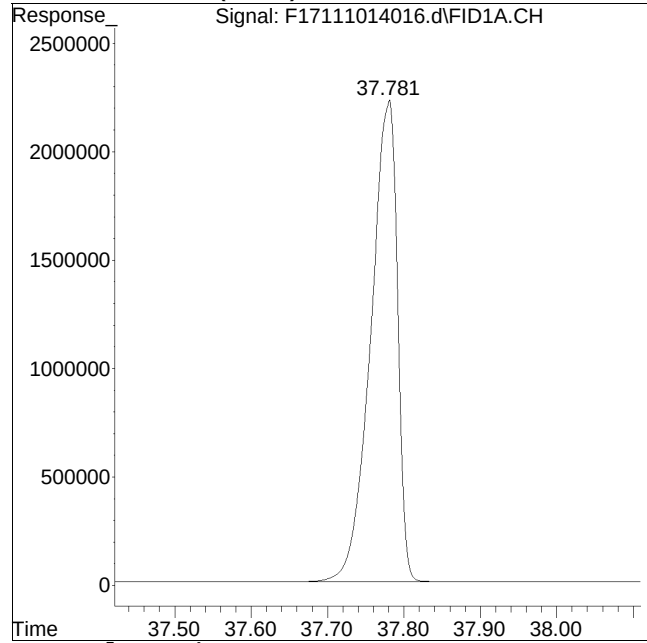
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #26: n-Pentacosane (C25)



Original Peak Response = 54103546



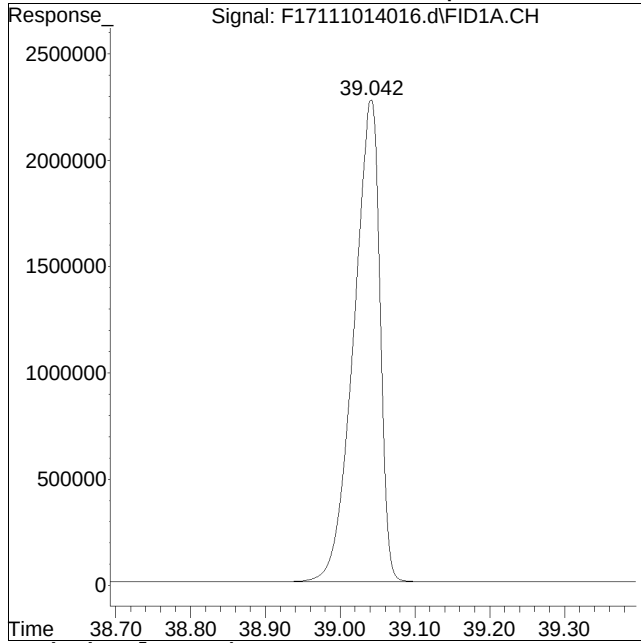
Manual Peak Response = 54123509 M4

M4 = Poor automated baseline construction.

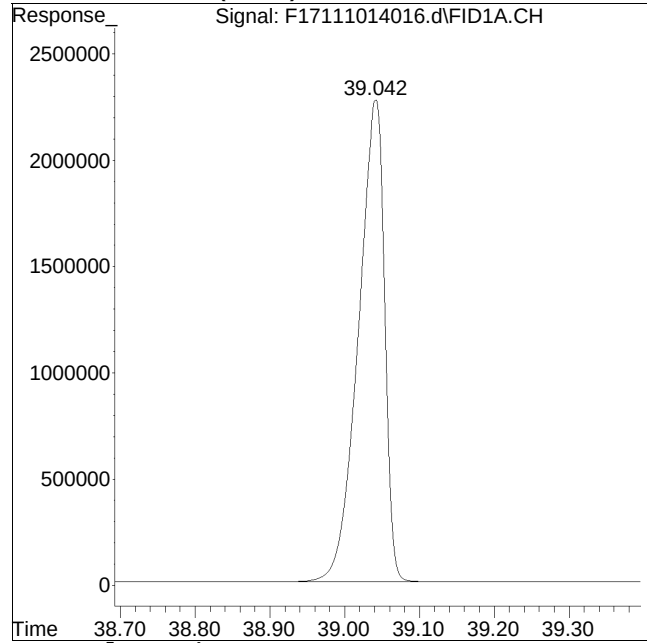
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #27: n-Hexacosane (C26)



Original Peak Response = 55232892



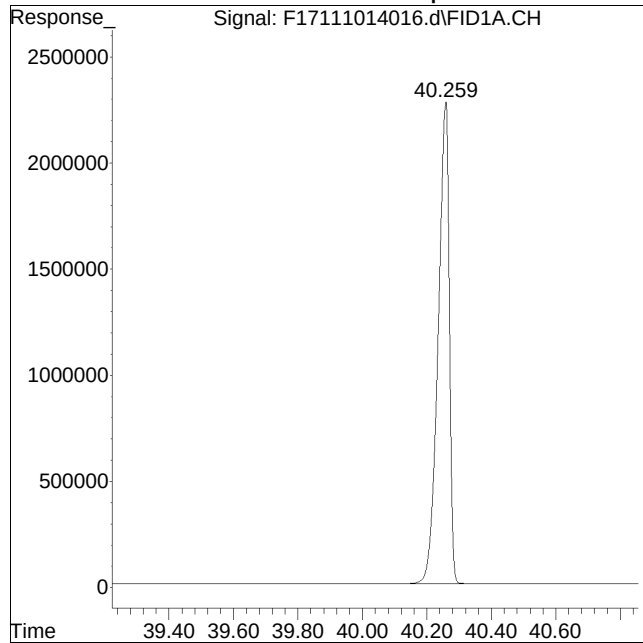
Manual Peak Response = 55246629 M4

M4 = Poor automated baseline construction.

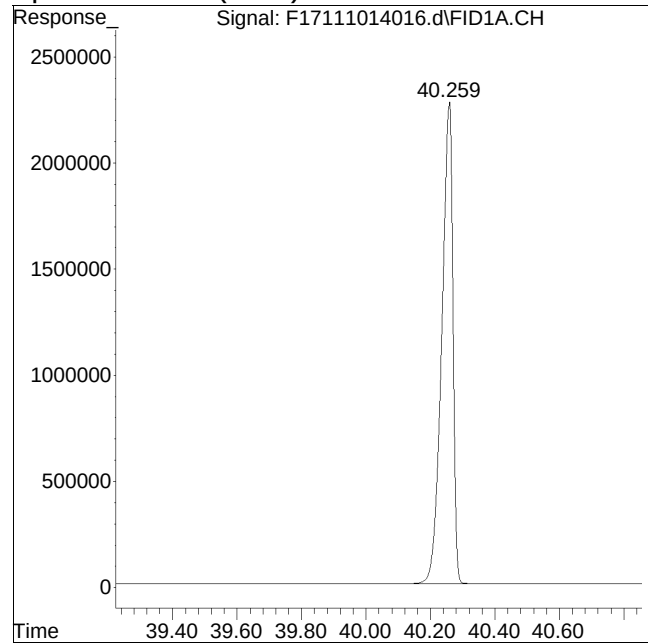
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #28: n-Heptacosane (C27)



Original Peak Response = 54542318



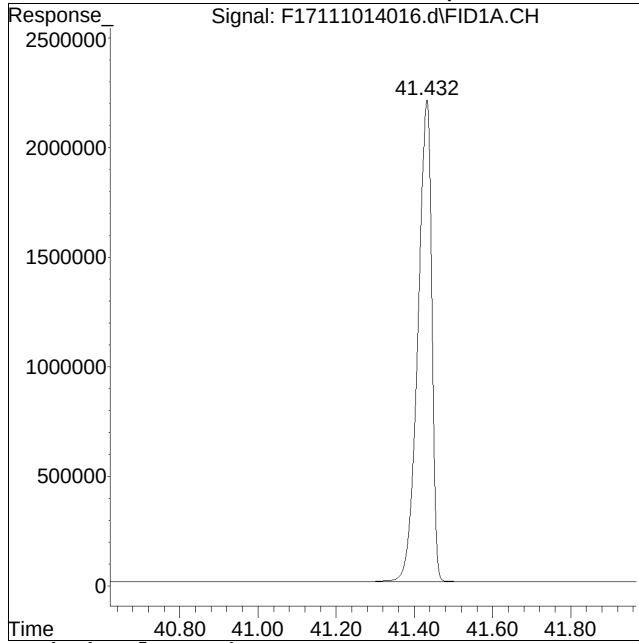
Manual Peak Response = 54568291 M4

M4 = Poor automated baseline construction.

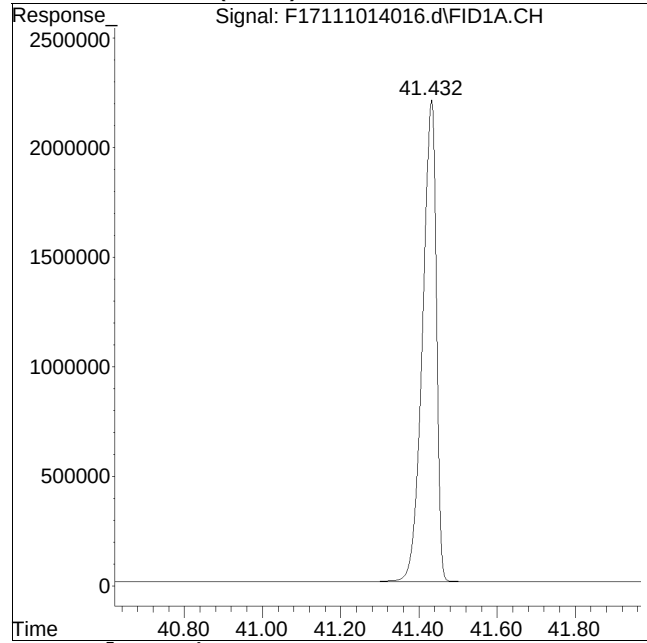
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #29: n-Octacosane (C28)



Original Peak Response = 54299410



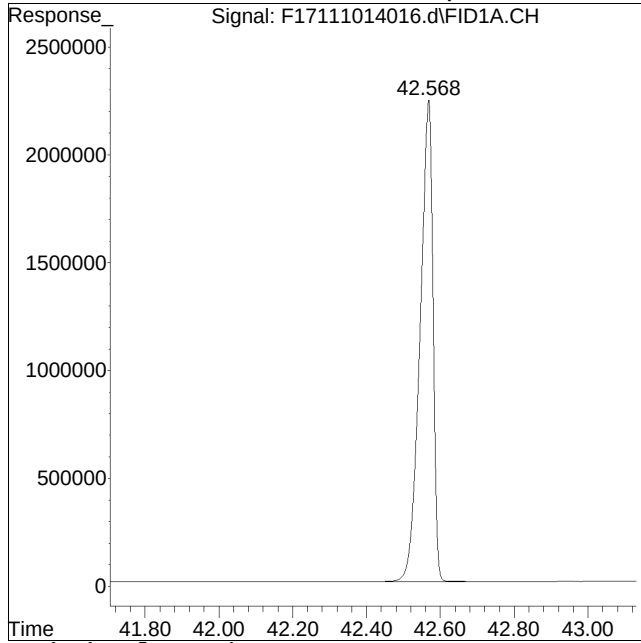
Manual Peak Response = 54246380 M4

M4 = Poor automated baseline construction.

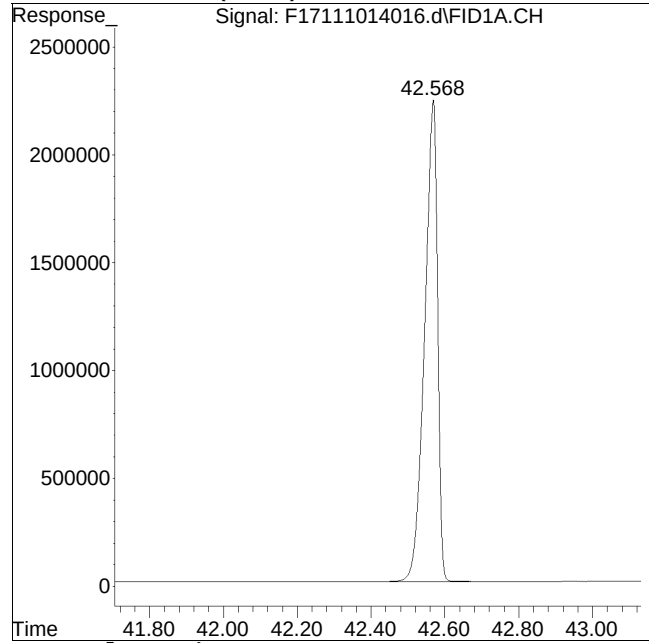
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #30: n-Nonacosane (C29)



Original Peak Response = 54457850



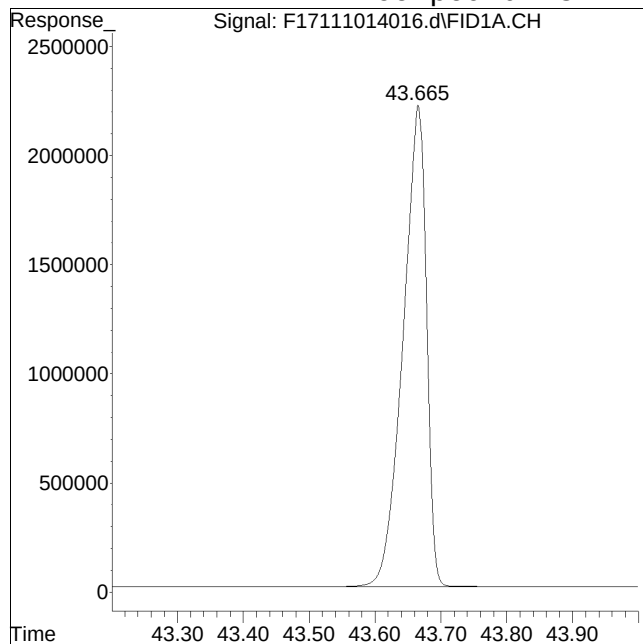
Manual Peak Response = 54437873 M4

M4 = Poor automated baseline construction.

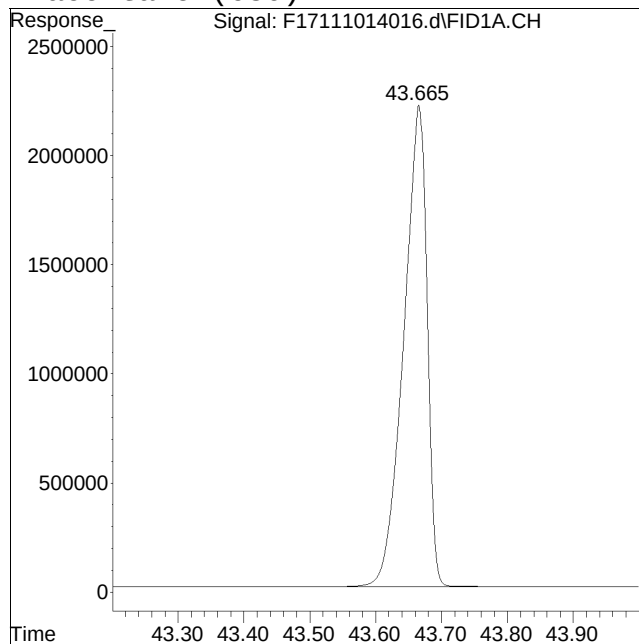
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #31: n-Triacontane (C30)



Original Peak Response = 54374506



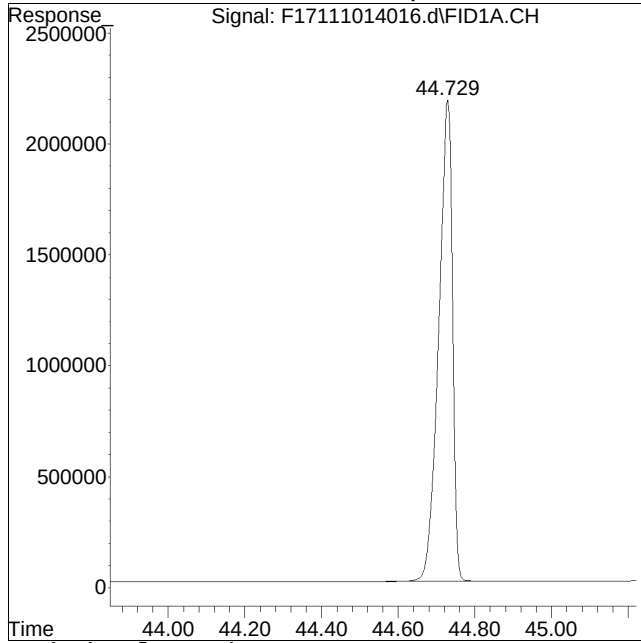
Manual Peak Response = 54410127 M4

M4 = Poor automated baseline construction.

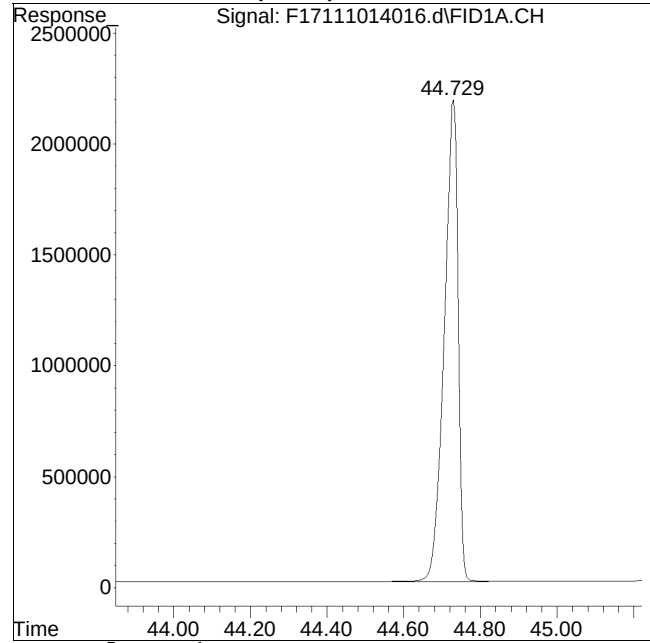
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #32: n-Hentriacontane (C31)



Original Peak Response = 54198024



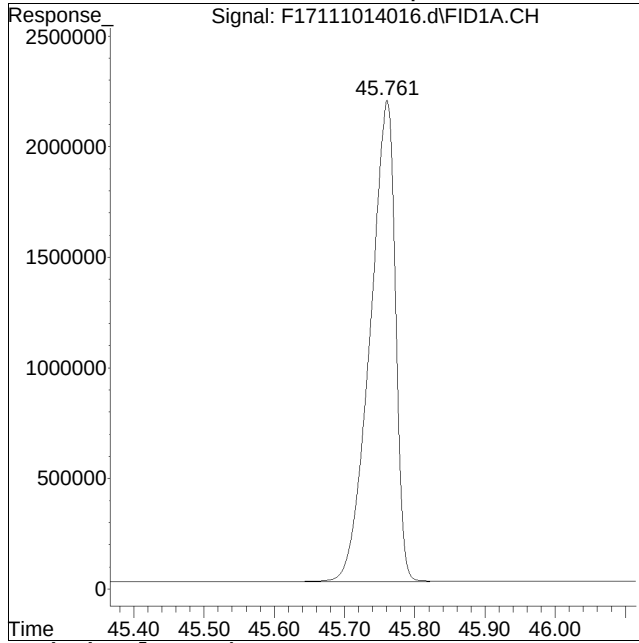
Manual Peak Response = 54264860 M4

M4 = Poor automated baseline construction.

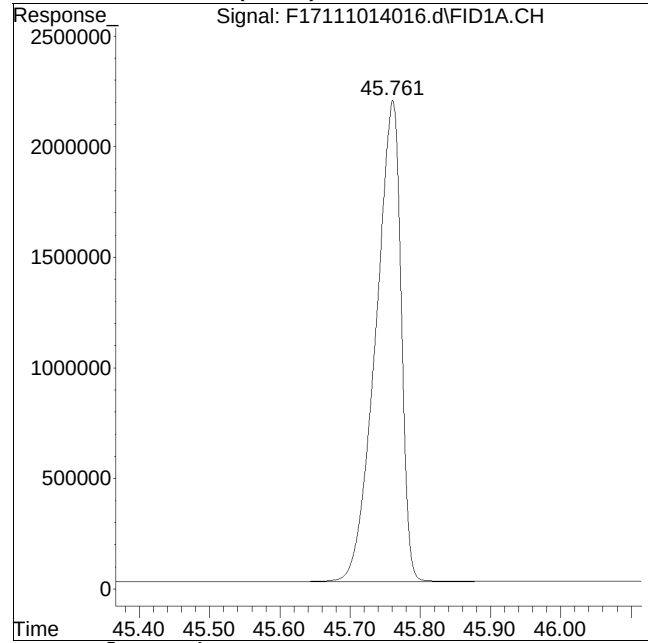
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #33: n-Dotriacontane (C32)



Original Peak Response = 54497181



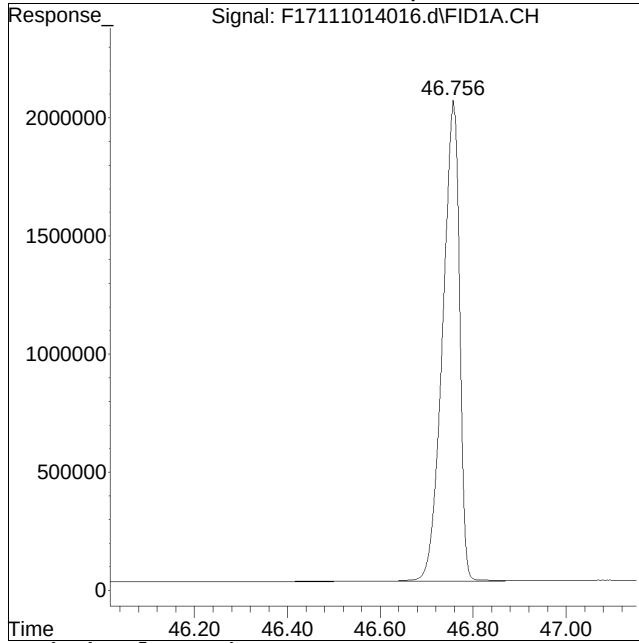
Manual Peak Response = 54592430 M4

M4 = Poor automated baseline construction.

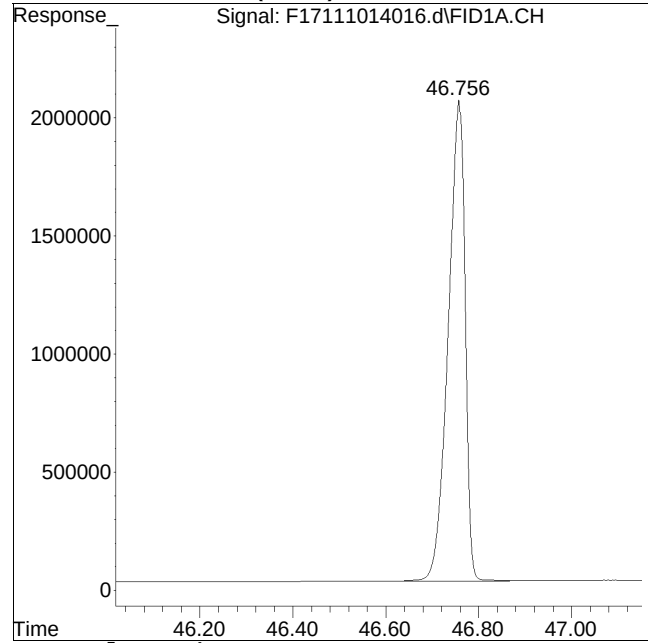
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #34: n-Tritriacontane (C33)



Original Peak Response = 51546038



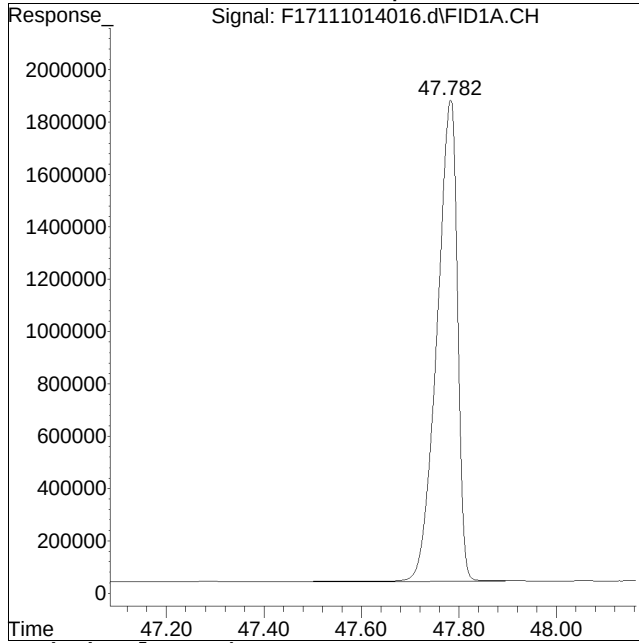
Manual Peak Response = 51478791 M4

M4 = Poor automated baseline construction.

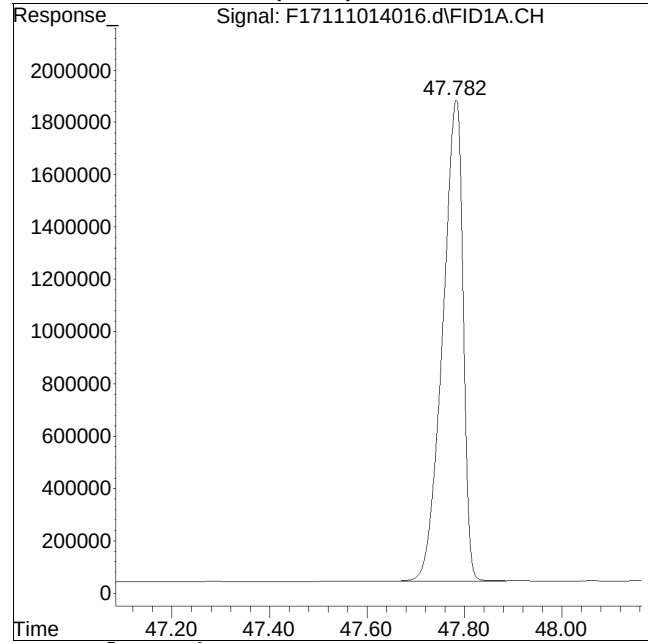
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #35: n-tetratriacontane (C34)



Original Peak Response = 53847701



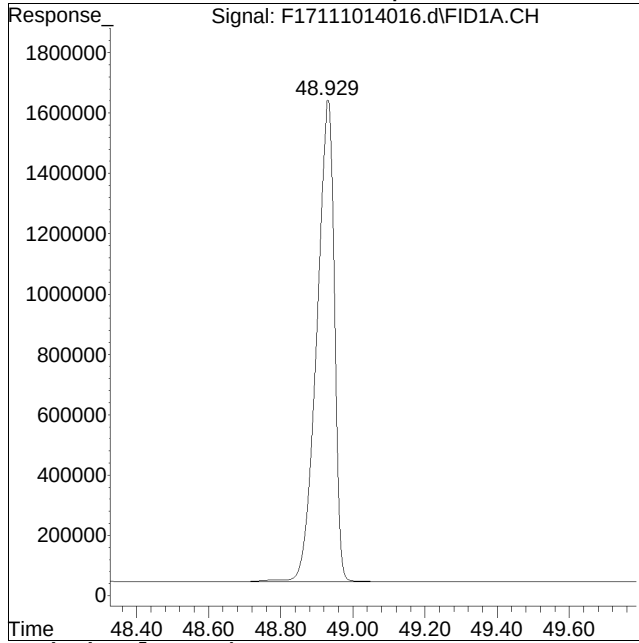
Manual Peak Response = 53603677 M4

M4 = Poor automated baseline construction.

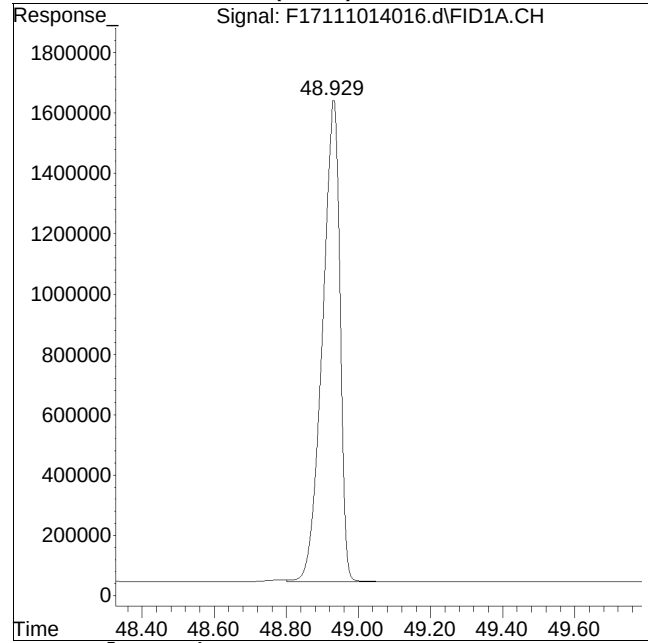
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #36: n-Pentatriacontane (C35)



Original Peak Response = 54222504



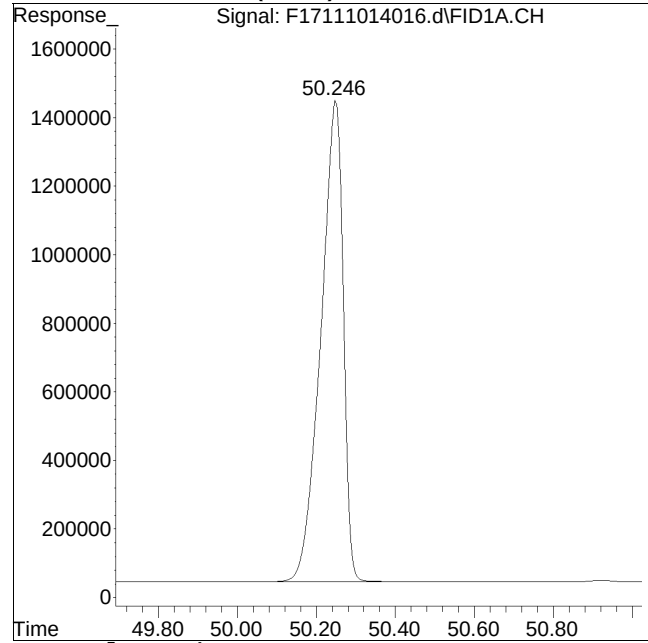
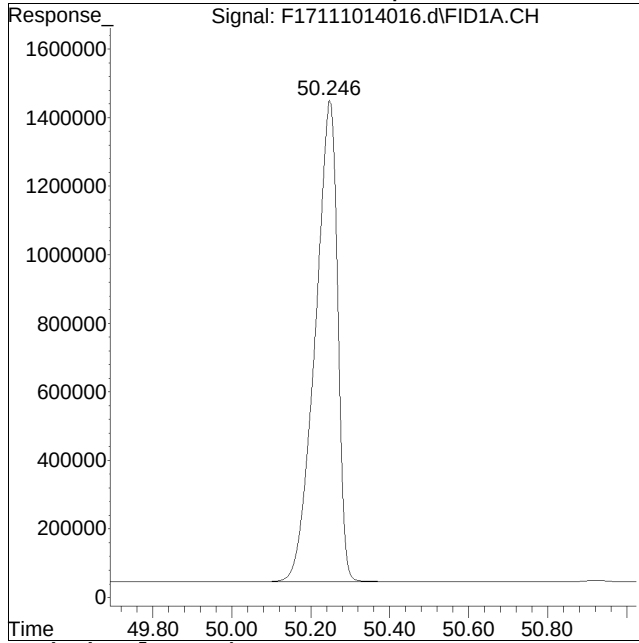
Manual Peak Response = 53899156 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #37: n-Hexatriacontane (C36)



Original Peak Response = 55467605

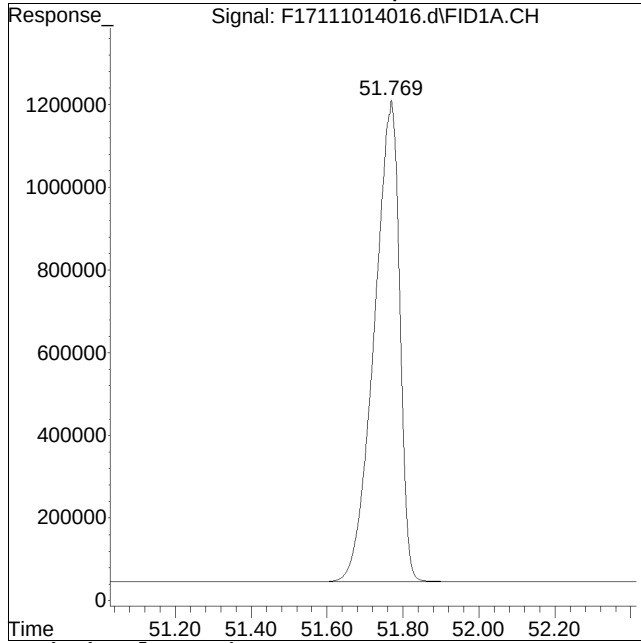
Manual Peak Response = 55334260 M4

M4 = Poor automated baseline construction.

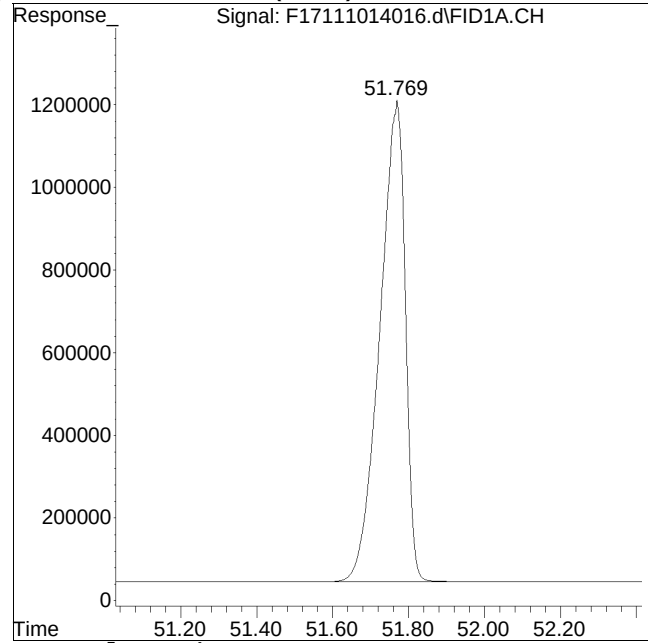
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #38: n-Heptatriacontane (C37)



Original Peak Response = 54107794



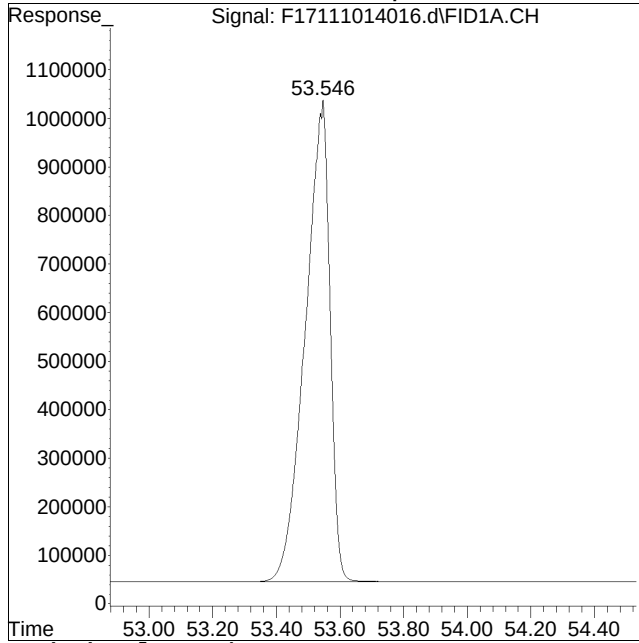
Manual Peak Response = 54162138 M4

M4 = Poor automated baseline construction.

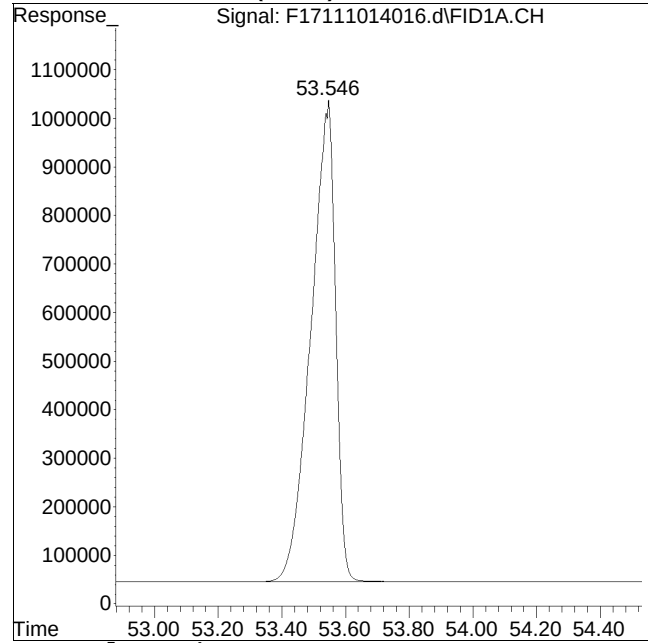
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I17111011403R Quant Date : 11/14/2014 12:19 pm

Compound #39: n-Octatriacontane (C38)



Original Peak Response = 53371314



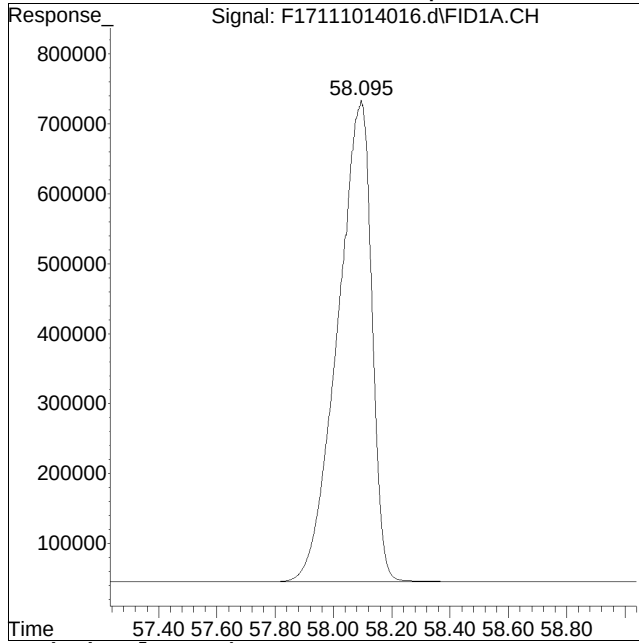
Manual Peak Response = 53323714 M4

M4 = Poor automated baseline construction.

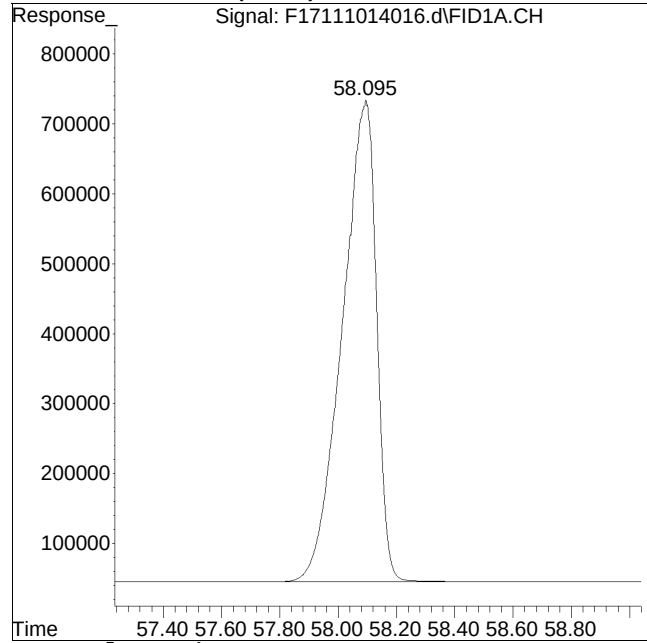
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014016.d Operator : FID17:NL
Date Inj'd : 11/10/2014 10:01 pm Instrument : FID17
Sample : I1711011403R Quant Date : 11/14/2014 12:19 pm

Compound #41: n-Tetracontane (C40)



Original Peak Response = 56078526



Manual Peak Response = 56122386 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014018.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 11:30 pm
 Operator : FID17:NL
 Sample : I1711011404R
 Misc : WG743851, FRAV25 100ug/mL
 ALS Vial : 9 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:40:38 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.269	52130313	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.271	114237478	97.803	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 195.61%#
24) s	d50-Tetracosane	35.940	93830621	101.798	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 203.60%#
Target Compounds					
2) t	n-Octane (C8)	5.604	89742592	97.156	ug/mL M4
3) t	n-Nonane (C9)	7.800	92546861	95.364	ug/mL M4
4) t	n-Decane (C10)	10.279	95150146	93.429	ug/mL M4
5) t	n-Undecane (C11)	12.793	96504887	96.595	ug/mL M4
6) t	n-Dodecane (C12)	15.224	97813355	97.240	ug/mL M4
7) t	n-Tridecane (C13)	17.534	98128725	97.669	ug/mL M4
9) t	n-Tetradecane (C14)	19.721	99098349	95.153	ug/mL M4
11) t	n-Pentadecane (C15)	21.792	100894959	98.133	ug/mL M4
12) t	n-Hexadecane (C16)	23.753	100542165	97.040	ug/mL M4
14) t	n-Heptadecane (C17)	25.617	101195746	97.156	ug/mL M4
15) t	Pristane	25.729	102363704	98.045	ug/mL M4
16) t	n-Octadecane (C18)	27.389	103494808	99.970	ug/mL M4
17) t	Phytane	27.553	90107646	85.674	ug/mL M4
18) t	n-Nonadecane (C19)	29.080	102722662	99.788	ug/mL M4
20) t	n-Eicosane (C20)	30.691	102338719	98.958	ug/mL M4
21) t	n-Heneicosane (C21)	32.231	103561695	99.007	ug/mL M4
22) t	n-Docosane (C22)	33.709	104611286	99.449	ug/mL M4
23) t	n-Tricosane (C23)	35.129	105634840	99.851	ug/mL M4
25) t	n-Tetracosane (C24)	36.493	106336757	100.401	ug/mL M4
26) t	n-Pentacosane (C25)	37.800	105611101	99.378	ug/mL M4
27) t	n-Hexacosane (C26)	39.064	108152182	99.699	ug/mL M4
28) t	n-Heptacosane (C27)	40.282	107262728	99.625	ug/mL M4
29) t	n-Octacosane (C28)	41.454	107073579	99.140	ug/mL M4
30) t	n-Nonacosane (C29)	42.593	108209907	99.283	ug/mL M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014018.d
 Signal(s) : FID1A.CH
 Acq On : 10 Nov 2014 11:30 pm
 Operator : FID17:NL
 Sample : I1711011404R
 Misc : WG743851, FRAV25 100ug/mL
 ALS Vial : 9 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:40:38 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc	Units
31) t	n-Triacontane (C30)	43.692	108739389	99.436	ug/mL M4
32) t	n-Hentriacontane (C31)	44.756	109245613	99.137	ug/mL M4
33) t	n-Dotriacontane (C32)	45.786	110550982	100.911	ug/mL M4
34) t	n-Tritriacontane (C33)	46.783	104844271	98.522	ug/mL M4
35) t	n-tetratriacontane (C34)	47.813	110027219	97.418	ug/mL M4
36) t	n-Pentatriacontane (C35)	48.968	111133176	98.902	ug/mL M4
37) t	n-Hexatriacontane (C36)	50.292	114629087	94.216	ug/mL M4
38) t	n-Heptatriacontane (C37)	51.822	112472231	99.077	ug/mL M4
39) t	n-Octatriacontane (C38)	53.607	110748873	97.628	ug/mL M4
41) t	n-Tetracontane (C40)	58.178	116119008	106.397	ug/mL M4

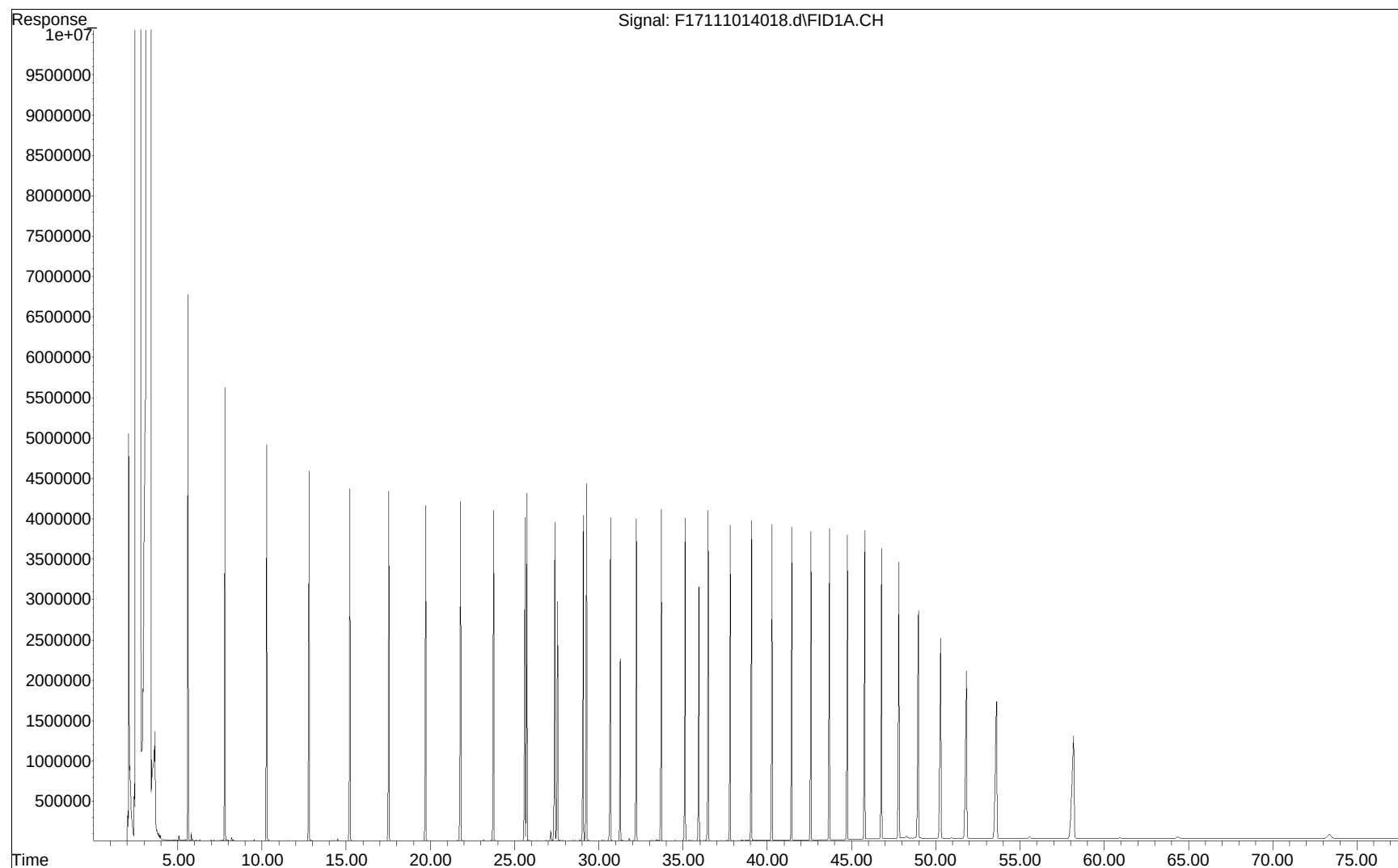
SemiQuant Compounds - Not Calibrated on this Instrument

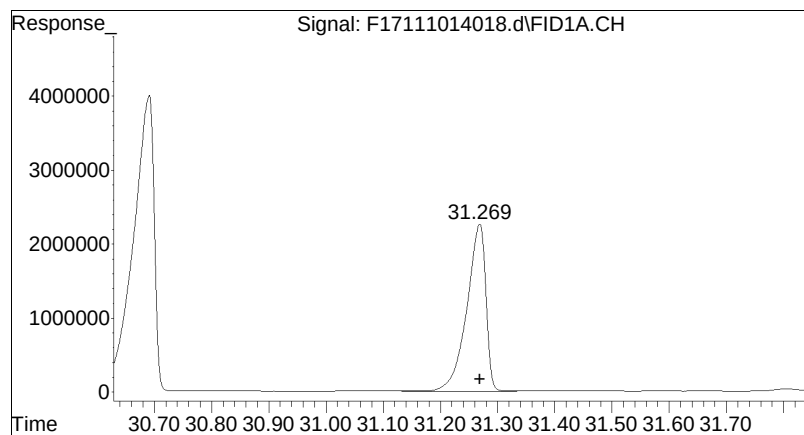
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

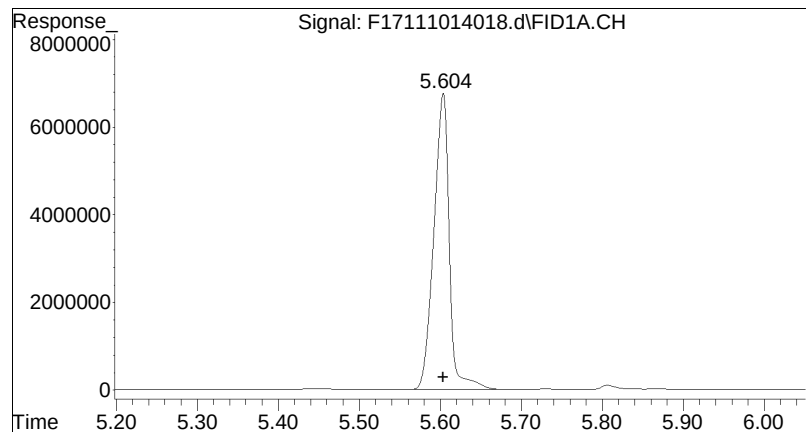
File : 0:\Forensics\Data\FID17\2014\NOV\NOV10\F17111014018.d
Operator : FID17:NL
Acquired : 10 Nov 2014 11:30 pm using AcqMethod FID17.M
Sample Name: I1711011404R
Instrument: FID17
Misc Info : WG743851, FRAV25 100ug/mL
Vial Number: 9
CurrentMeth: 0:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M





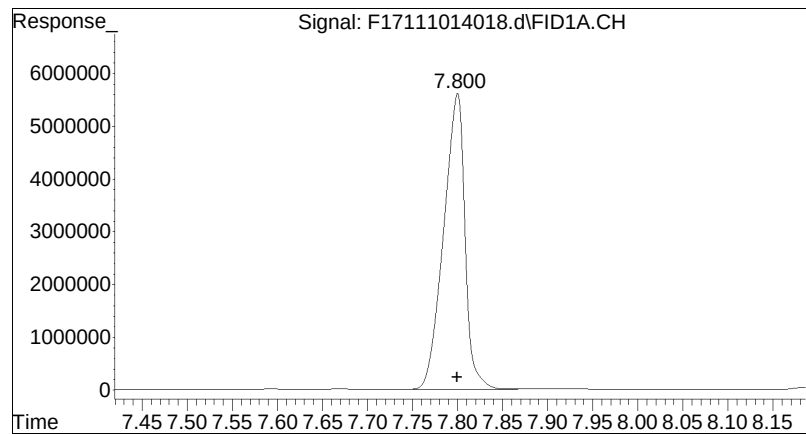
#1 5-alpha-androstane

R.T.: 31.269 min
Delta R.T.: 0.000 min
Response: 52130313
Conc: 50.00 ug/mL M4



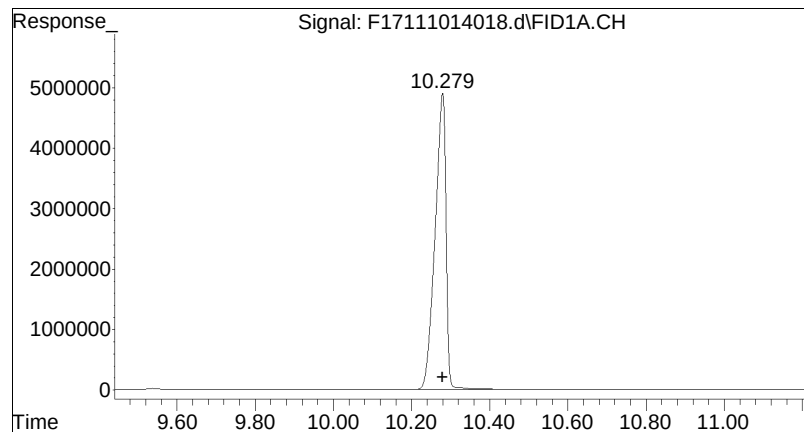
#2 n-Octane (C8)

R.T.: 5.604 min
Delta R.T.: 0.000 min
Response: 89742592
Conc: 97.16 ug/mL M4



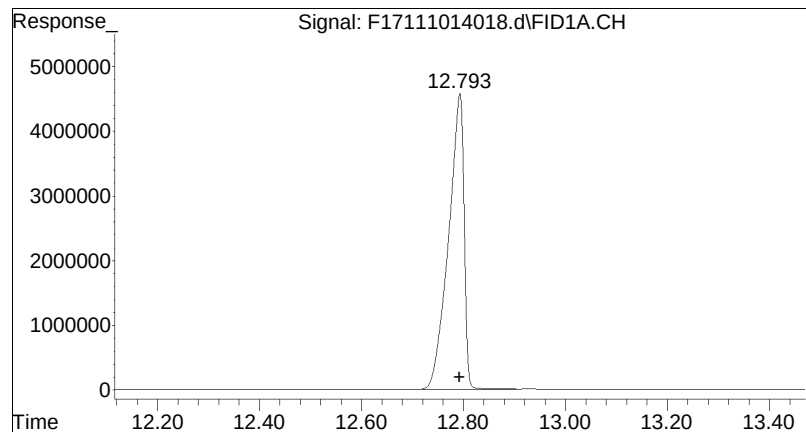
#3 n-Nonane (C9)

R.T.: 7.800 min
Delta R.T.: 0.000 min
Response: 92546861
Conc: 95.36 ug/mL M4



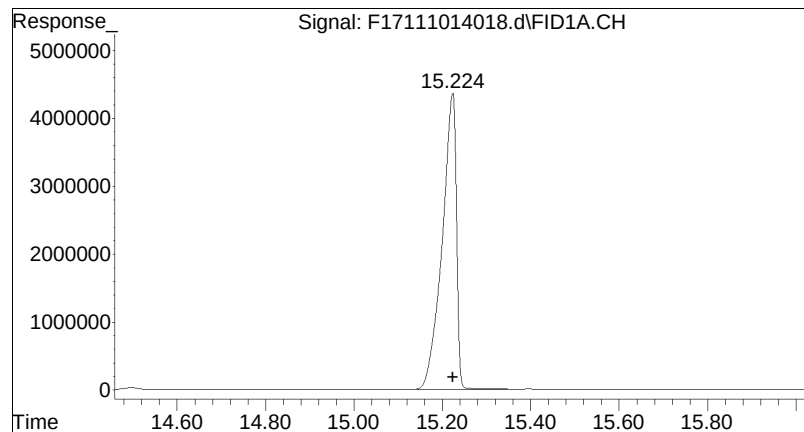
#4 n-Decane (C10)

R.T.: 10.279 min
Delta R.T.: 0.000 min
Response: 95150146
Conc: 93.43 ug/mL M4



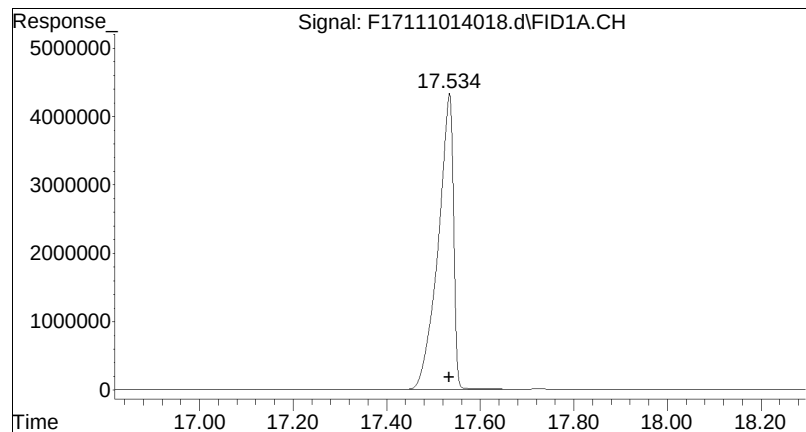
#5 n-Undecane (C11)

R.T.: 12.793 min
Delta R.T.: 0.000 min
Response: 96504887
Conc: 96.59 ug/mL M4



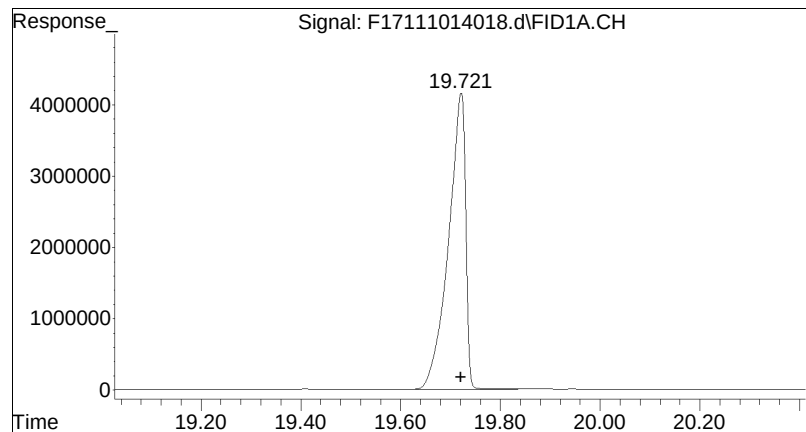
#6 n-Dodecane (C12)

R.T.: 15.224 min
Delta R.T.: 0.000 min
Response: 97813355
Conc: 97.24 ug/mL M4



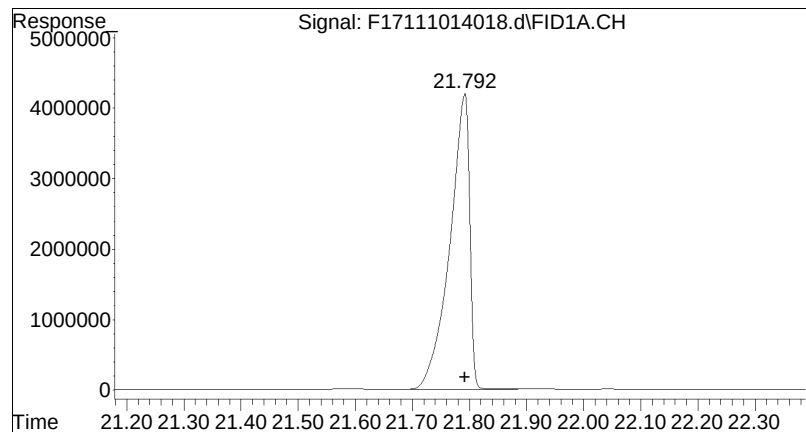
#7 n-Tridecane (C13)

R.T.: 17.534 min
Delta R.T.: 0.000 min
Response: 98128725
Conc: 97.67 ug/mL M4



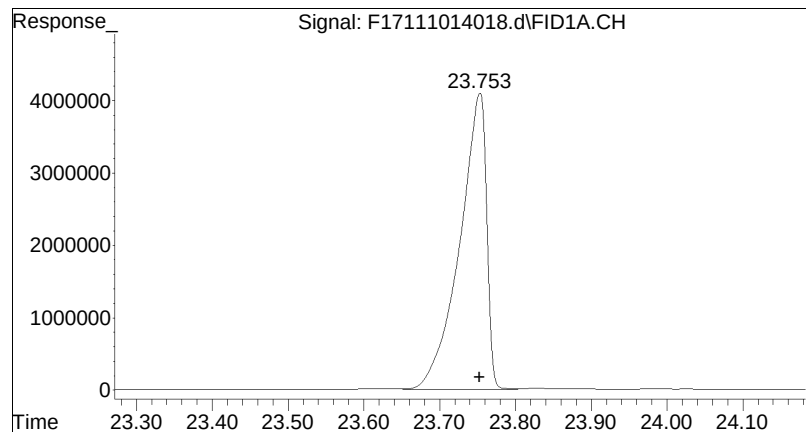
#9 n-Tetradecane (C14)

R.T.: 19.721 min
Delta R.T.: 0.000 min
Response: 99098349
Conc: 95.15 ug/mL M4



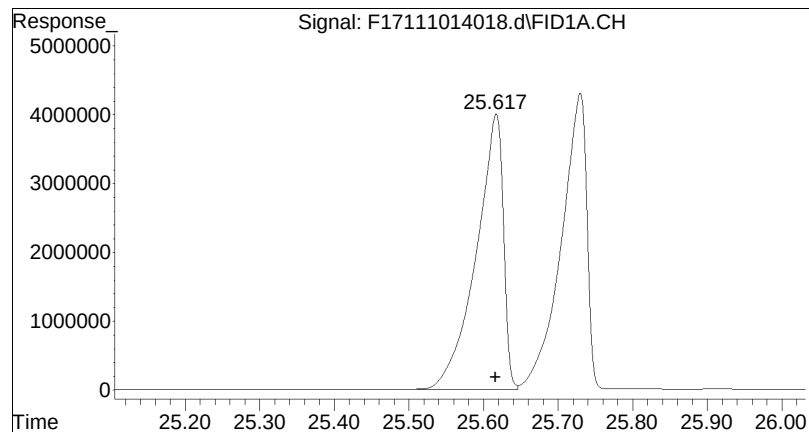
#11 n-Pentadecane (C15)

R.T.: 21.792 min
Delta R.T.: 0.000 min
Response: 100894959
Conc: 98.13 ug/mL M4



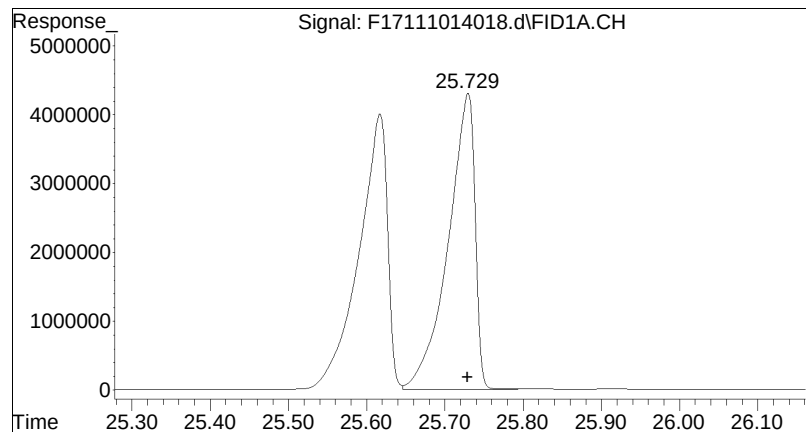
#12 n-Hexadecane (C16)

R.T.: 23.753 min
Delta R.T.: 0.000 min
Response: 100542165
Conc: 97.04 ug/mL M4



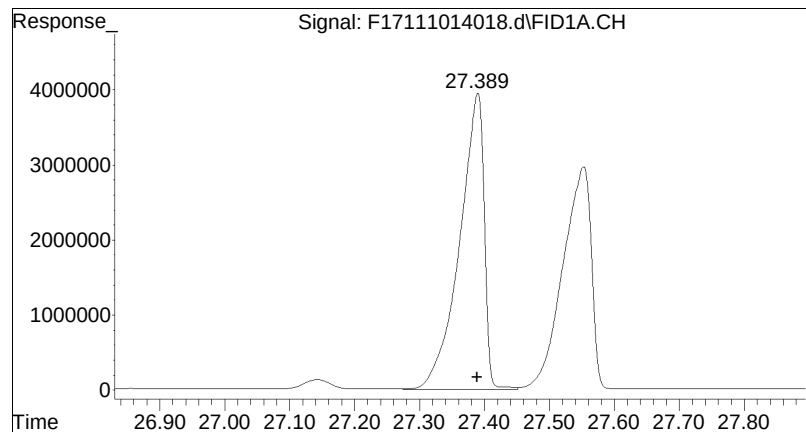
#14 n-Heptadecane (C17)

R.T.: 25.617 min
Delta R.T.: 0.000 min
Response: 101195746
Conc: 97.16 ug/mL M4



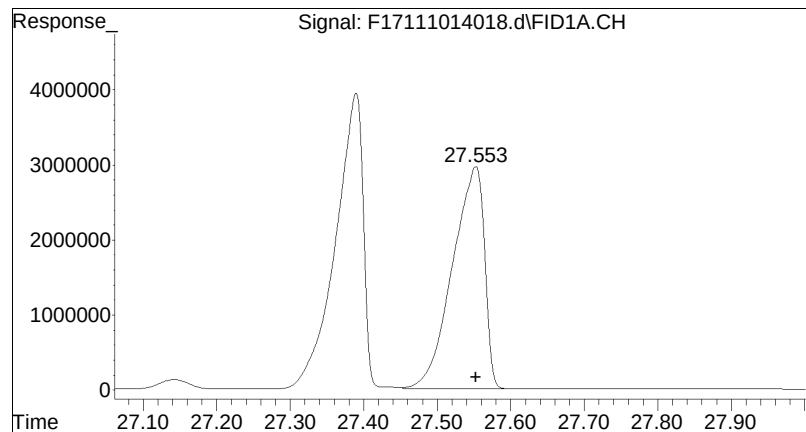
#15 Pristane

R.T.: 25.729 min
Delta R.T.: 0.000 min
Response: 102363704
Conc: 98.05 ug/mL M4



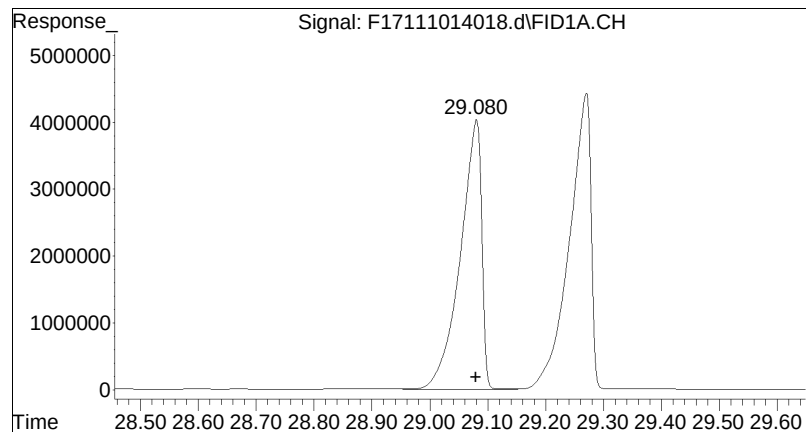
#16 n-Octadecane (C18)

R.T.: 27.389 min
Delta R.T.: 0.000 min
Response: 103494808
Conc: 99.97 ug/mL M4



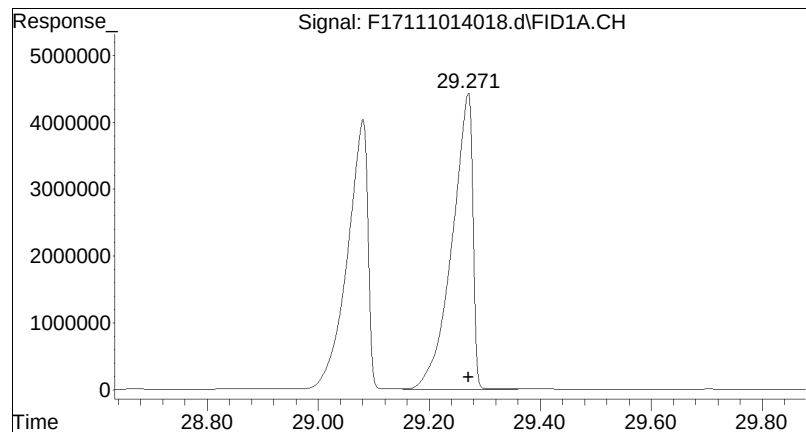
#17 Phytane

R.T.: 27.553 min
Delta R.T.: 0.000 min
Response: 90107646
Conc: 85.67 ug/mL M4



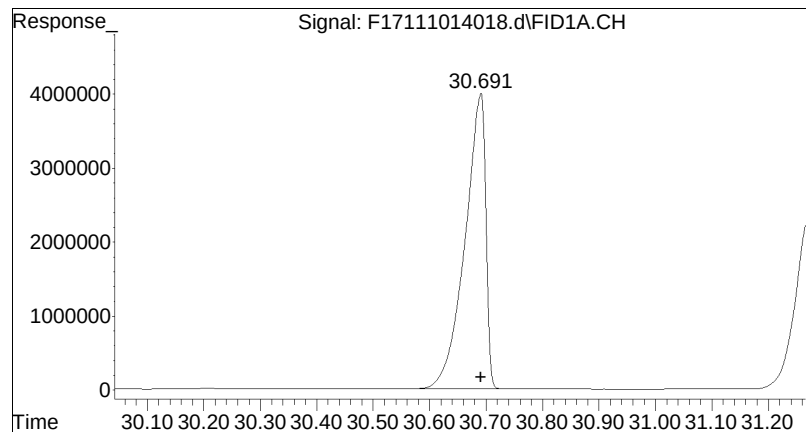
#18 n-Nonadecane (C19)

R.T.: 29.080 min
Delta R.T.: 0.000 min
Response: 102722662
Conc: 99.79 ug/mL M4



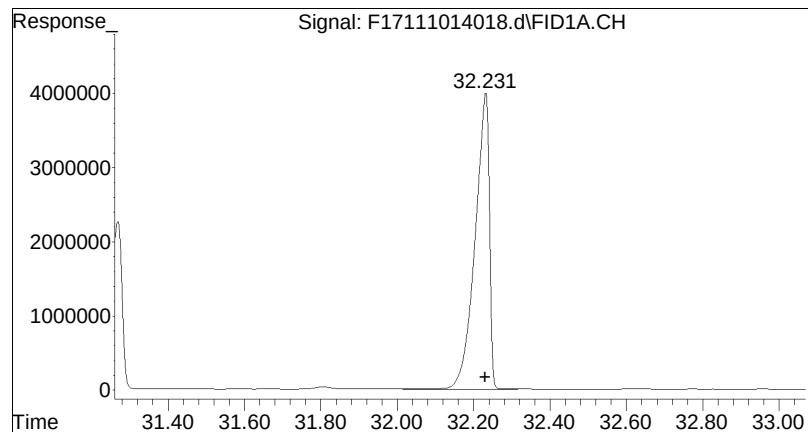
#19 ortho-terphenyl

R.T.: 29.271 min
Delta R.T.: 0.000 min
Response: 114237478
Conc: 97.80 ug/mL M4



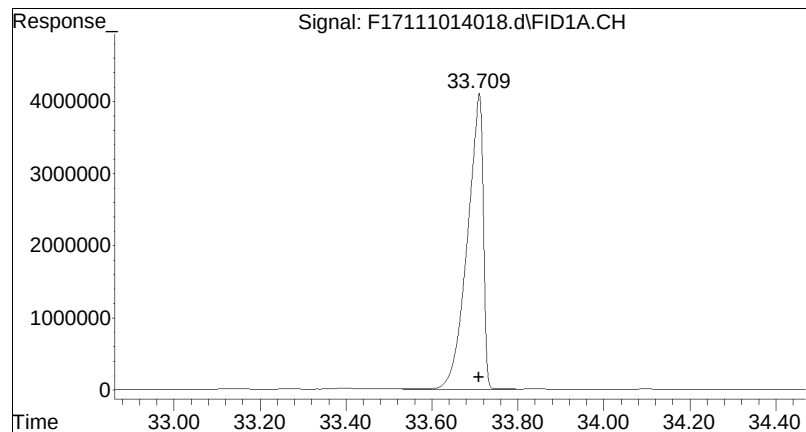
#20 n-Eicosane (C20)

R.T.: 30.691 min
Delta R.T.: 0.000 min
Response: 102338719
Conc: 98.96 ug/mL M4



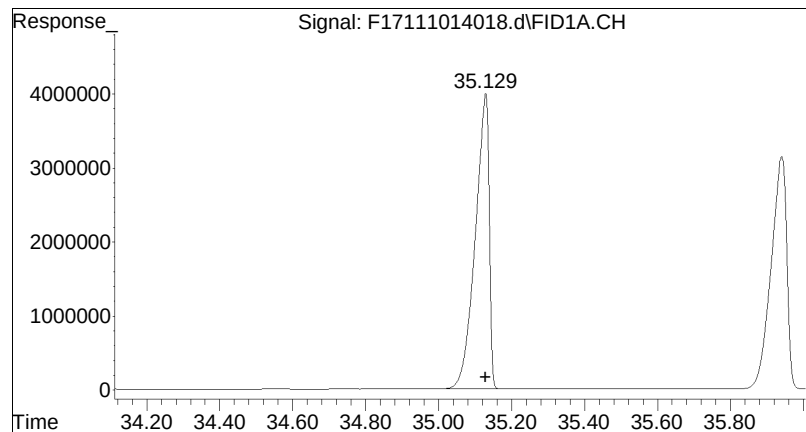
#21 n-Heneicosane (C21)

R.T.: 32.231 min
Delta R.T.: 0.000 min
Response: 103561695
Conc: 99.01 ug/mL M4



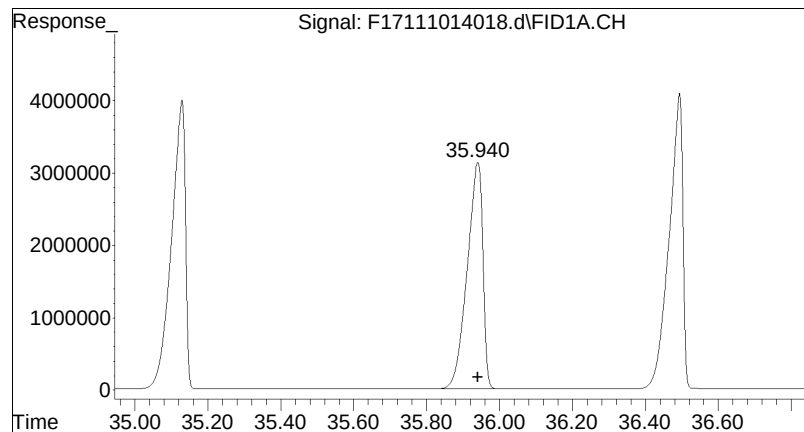
#22 n-Docosane (C22)

R.T.: 33.709 min
Delta R.T.: 0.000 min
Response: 104611286
Conc: 99.45 ug/mL M4



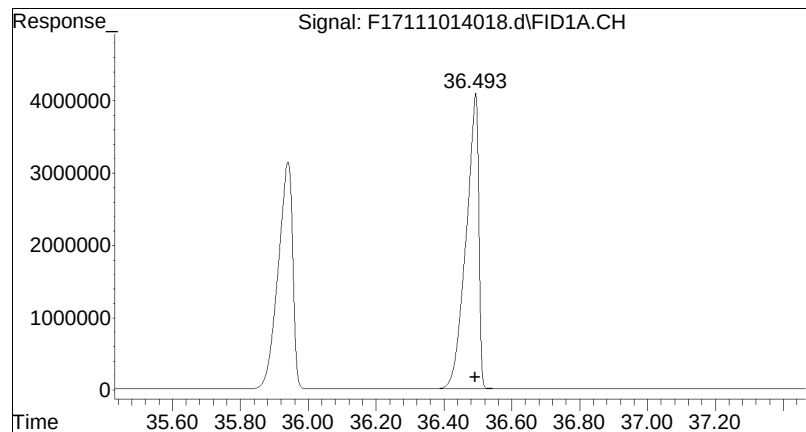
#23 n-Tricosane (C23)

R.T.: 35.129 min
Delta R.T.: 0.000 min
Response: 105634840
Conc: 99.85 ug/mL M4



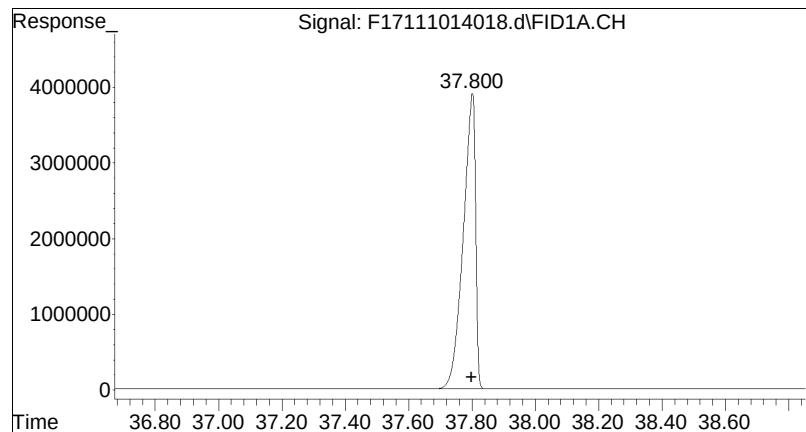
#24 d50-Tetracosane

R.T.: 35.940 min
Delta R.T.: 0.000 min
Response: 93830621
Conc: 101.80 ug/mL M4



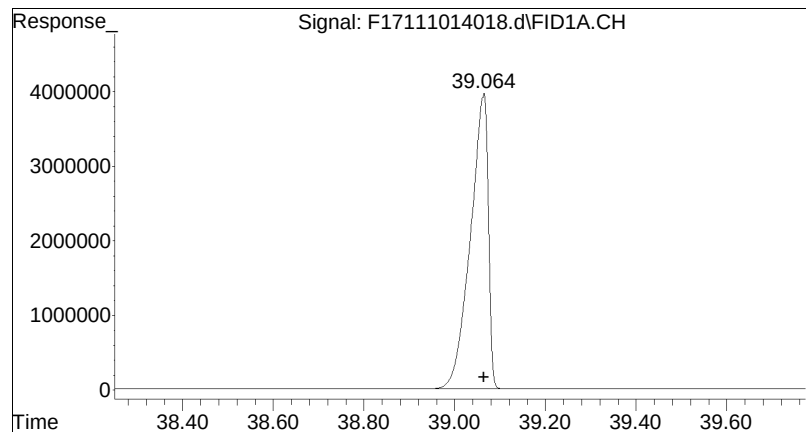
#25 n-Tetracosane (C24)

R.T.: 36.493 min
Delta R.T.: 0.000 min
Response: 106336757
Conc: 100.40 ug/mL M4



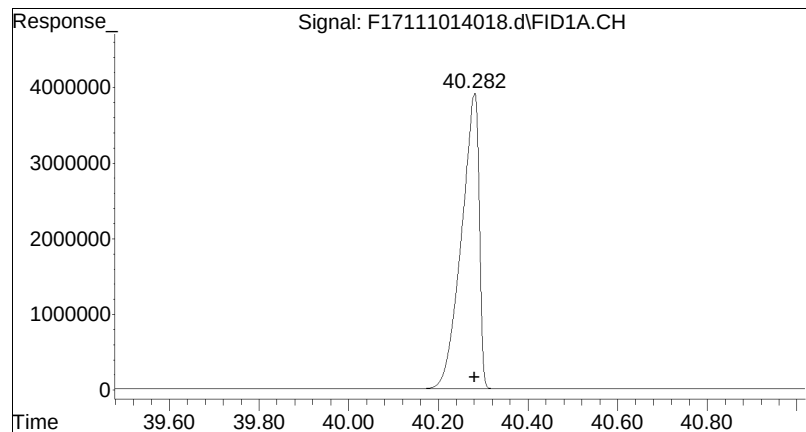
#26 n-Pentacosane (C25)

R.T.: 37.800 min
Delta R.T.: 0.000 min
Response: 105611101
Conc: 99.38 ug/mL M4



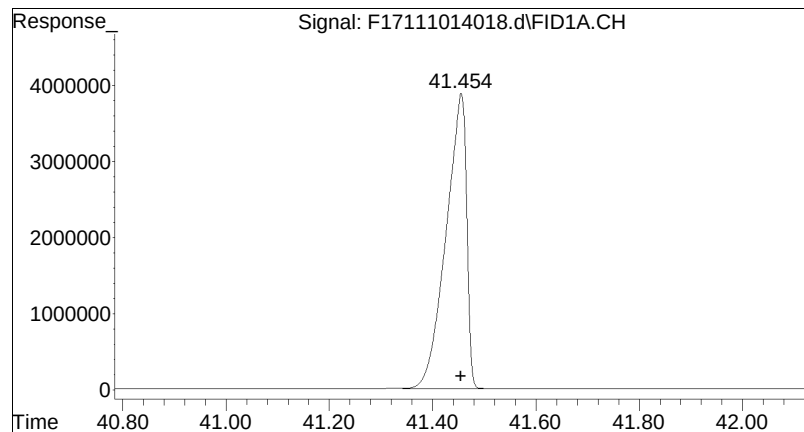
#27 n-Hexacosane (C26)

R.T.: 39.064 min
Delta R.T.: 0.000 min
Response: 108152182
Conc: 99.70 ug/mL M4



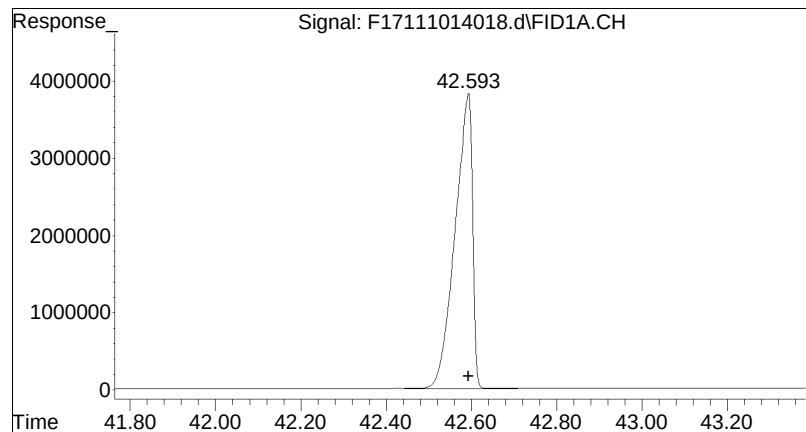
#28 n-Heptacosane (C27)

R.T.: 40.282 min
Delta R.T.: 0.000 min
Response: 107262728
Conc: 99.62 ug/mL M4



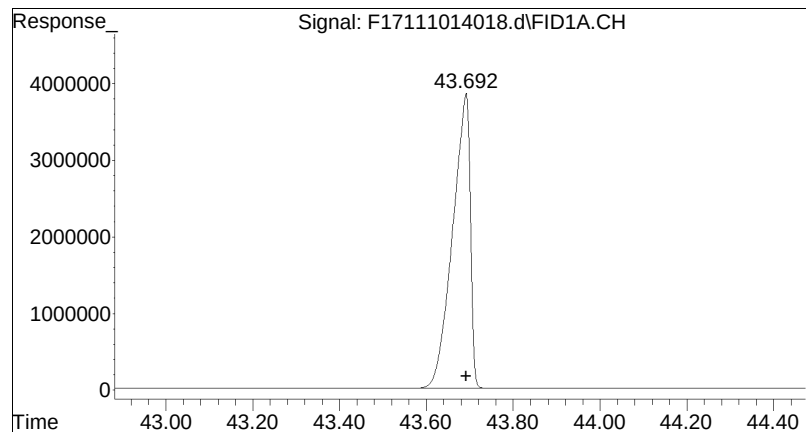
#29 n-Octacosane (C28)

R.T.: 41.454 min
Delta R.T.: 0.000 min
Response: 107073579
Conc: 99.14 ug/mL M4



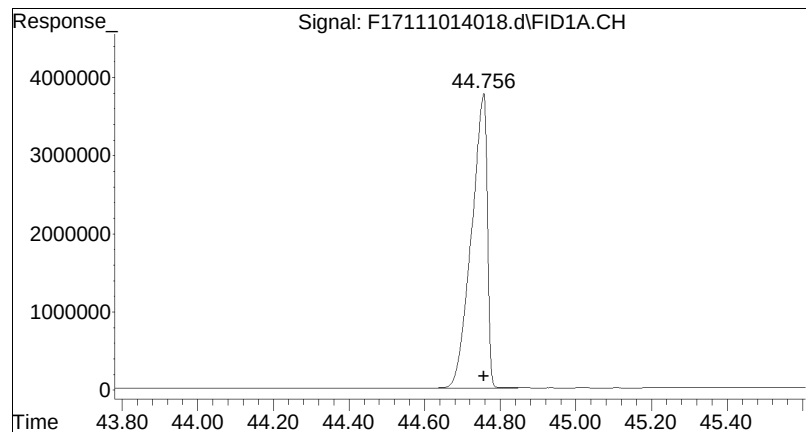
#30 n-Nonacosane (C29)

R.T.: 42.593 min
Delta R.T.: 0.000 min
Response: 108209907
Conc: 99.28 ug/mL M4



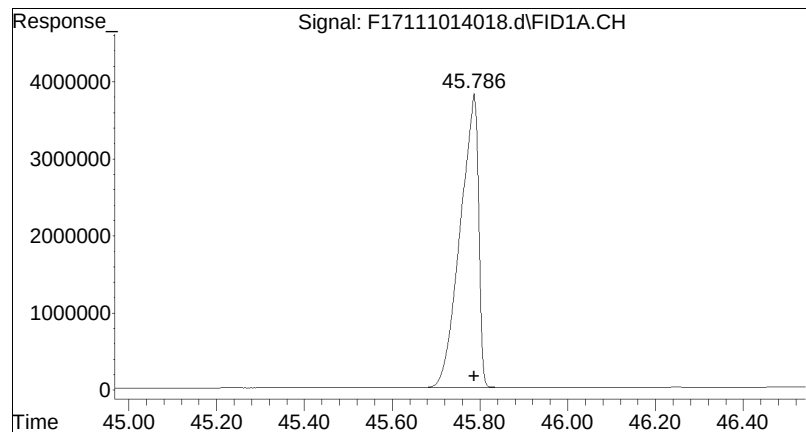
#31 n-Triacontane (C30)

R.T.: 43.692 min
Delta R.T.: 0.000 min
Response: 108739389
Conc: 99.44 ug/mL M4



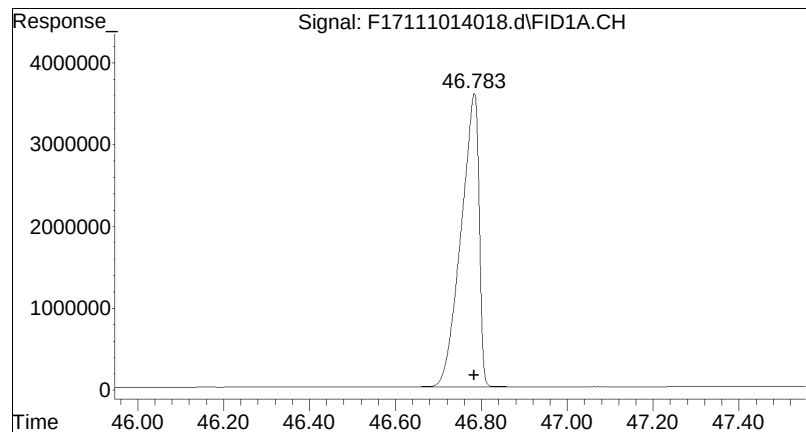
#32 n-Hentriacontane (C31)

R.T.: 44.756 min
Delta R.T.: 0.000 min
Response: 109245613
Conc: 99.14 ug/mL M4



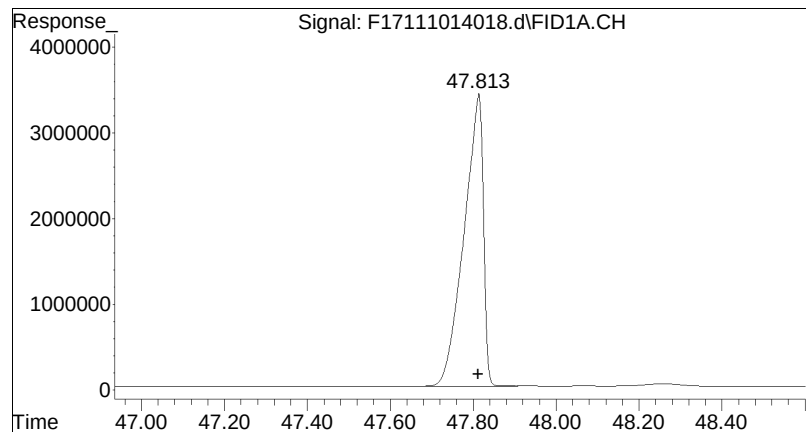
#33 n-Dotriacontane (C32)

R.T.: 45.786 min
Delta R.T.: 0.000 min
Response: 110550982
Conc: 100.91 ug/mL M4



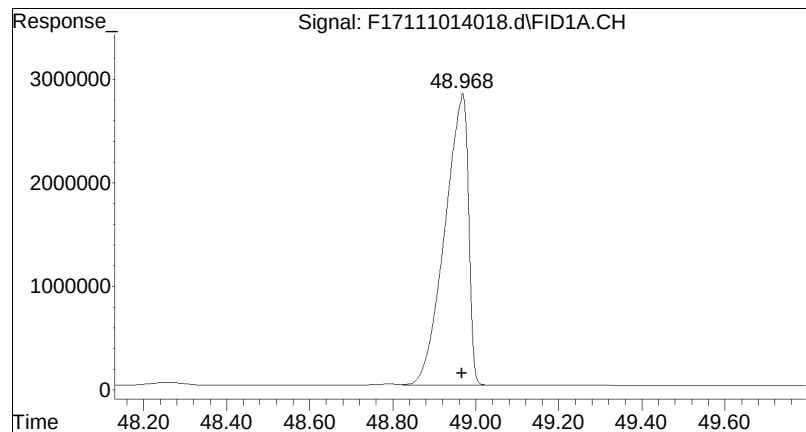
#34 n-Tritriacontane (C33)

R.T.: 46.783 min
Delta R.T.: 0.000 min
Response: 104844271
Conc: 98.52 ug/mL M4



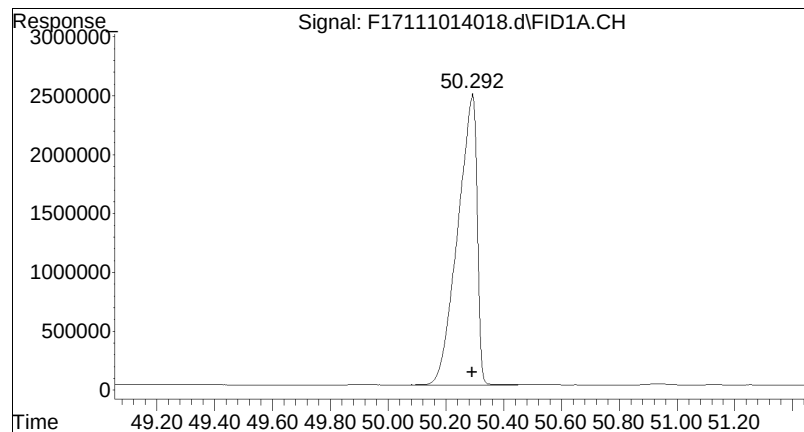
#35 n-tetratriacontane (C34)

R.T.: 47.813 min
Delta R.T.: 0.000 min
Response: 110027219
Conc: 97.42 ug/mL M4



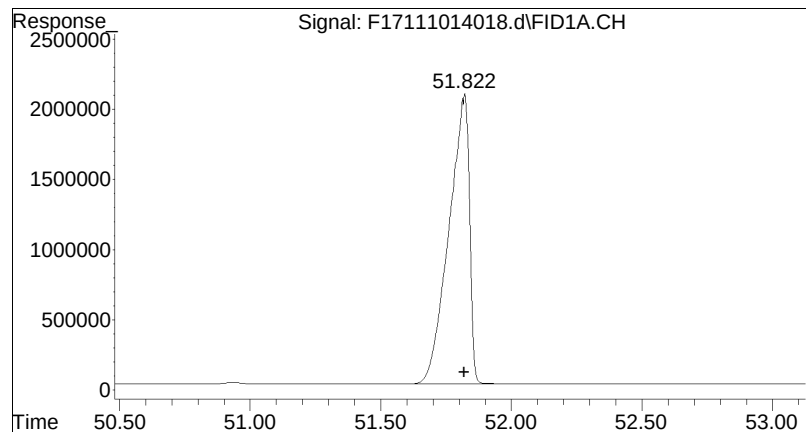
#36 n-Pentatriacontane (C35)

R.T.: 48.968 min
Delta R.T.: 0.000 min
Response: 111133176
Conc: 98.90 ug/mL M4



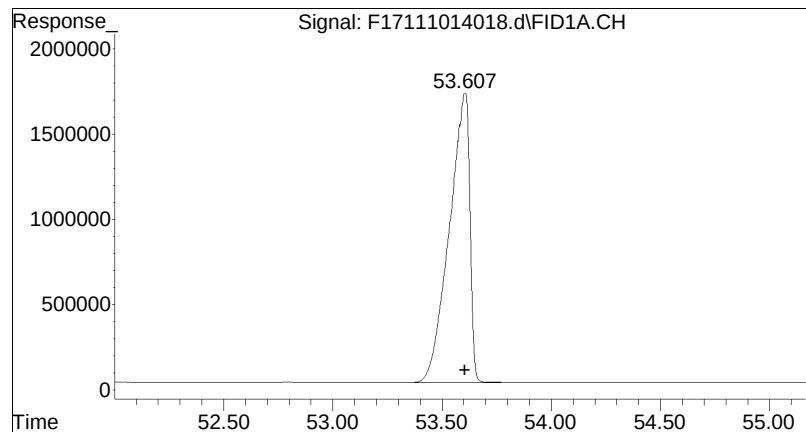
#37 n-Hexatriacontane (C36)

R.T.: 50.292 min
Delta R.T.: 0.000 min
Response: 114629087
Conc: 94.22 ug/mL M4



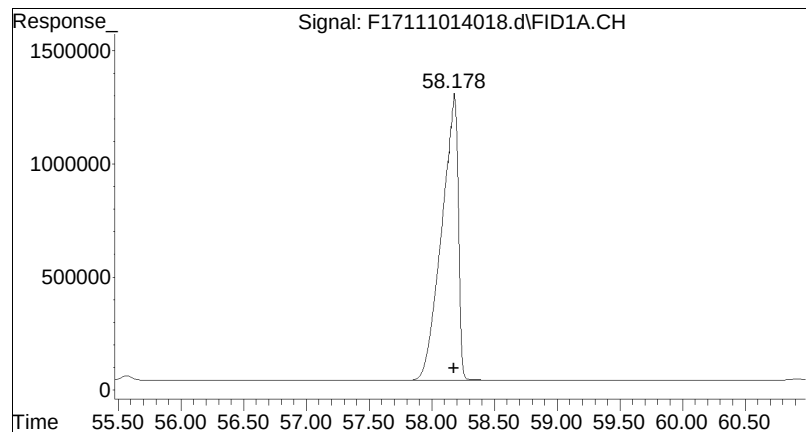
#38 n-Heptatriacontane (C37)

R.T.: 51.822 min
Delta R.T.: 0.000 min
Response: 112472231
Conc: 99.08 ug/mL M4



#39 n-Octatriacontane (C38)

R.T.: 53.607 min
Delta R.T.: 0.000 min
Response: 110748873
Conc: 97.63 ug/mL M4



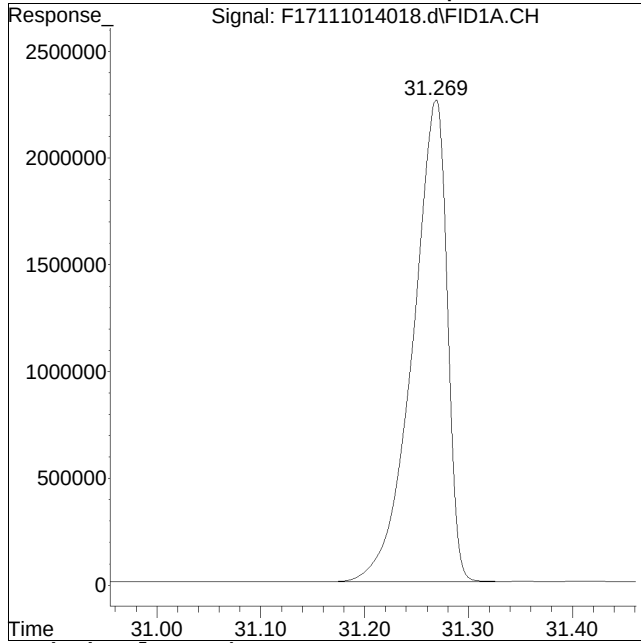
#41 n-Tetracontane (C40)

R.T.: 58.178 min
Delta R.T.: 0.000 min
Response: 116119008
Conc: 106.40 ug/mL M4

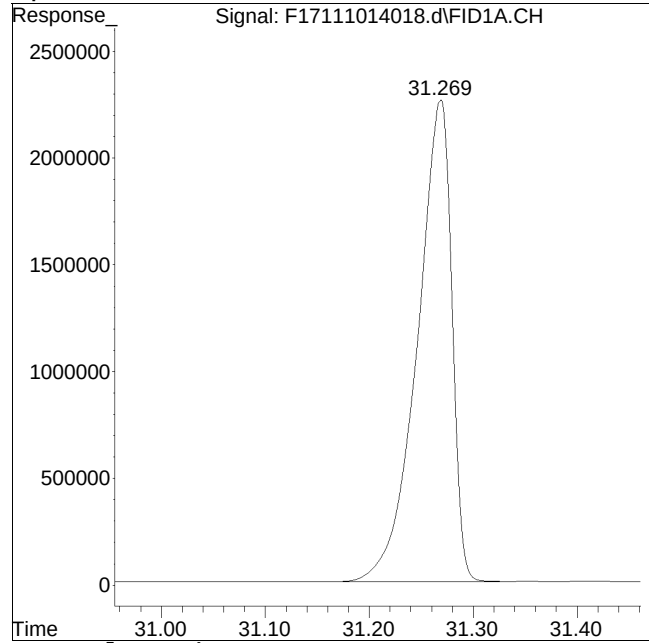
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #1: 5-alpha-androstane



Original Peak Response = 52114626



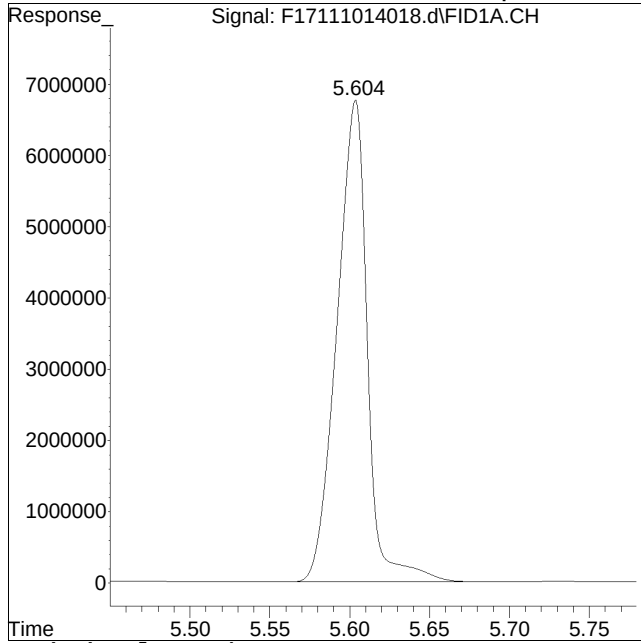
Manual Peak Response = 52130313 M4

M4 = Poor automated baseline construction.

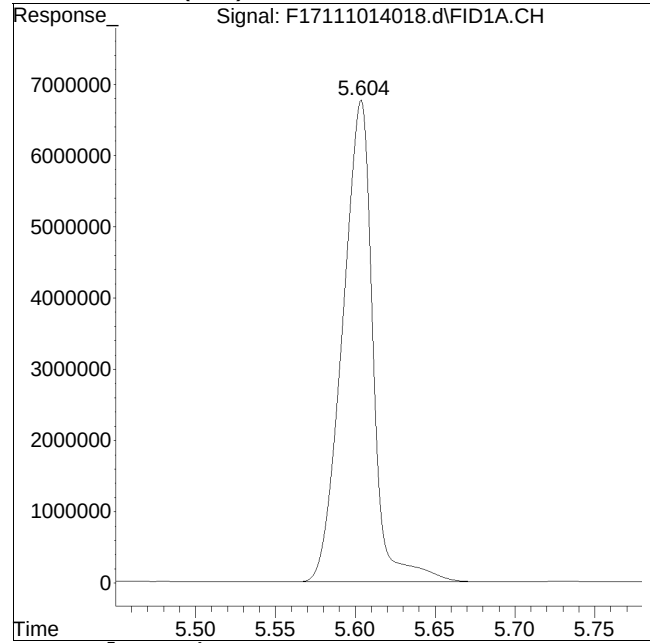
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #2: n-Octane (C8)



Original Peak Response = 89761593



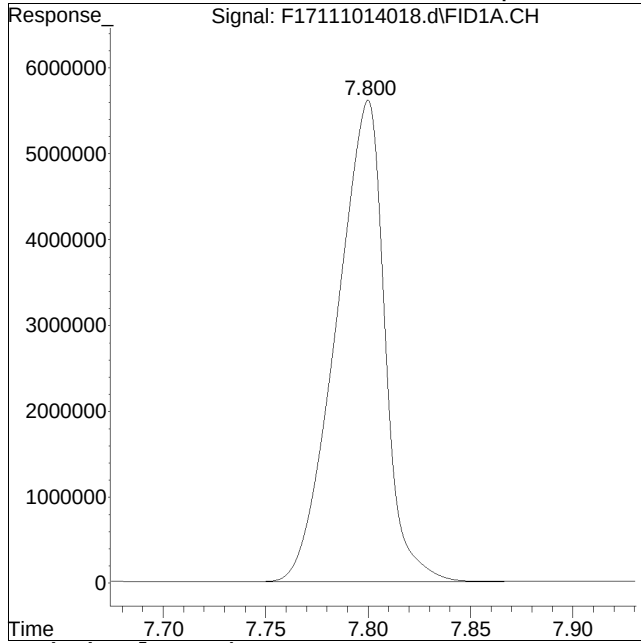
Manual Peak Response = 89742592 M4

M4 = Poor automated baseline construction.

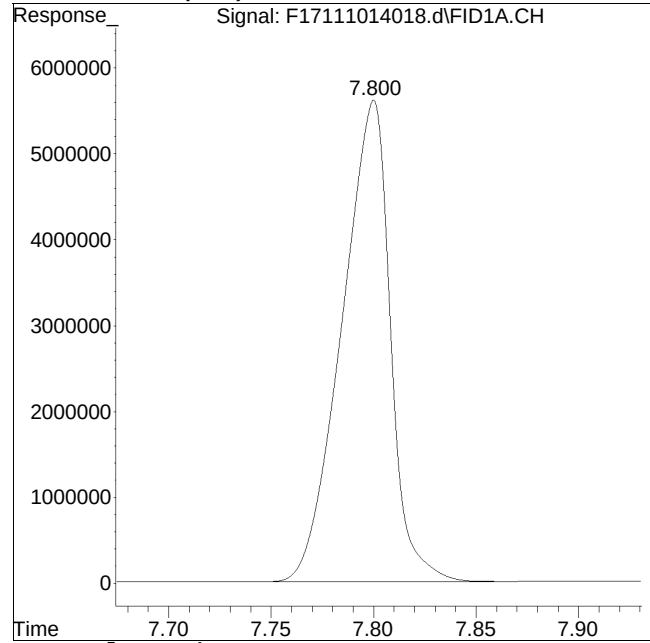
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #3: n-Nonane (C9)



Original Peak Response = 92650241



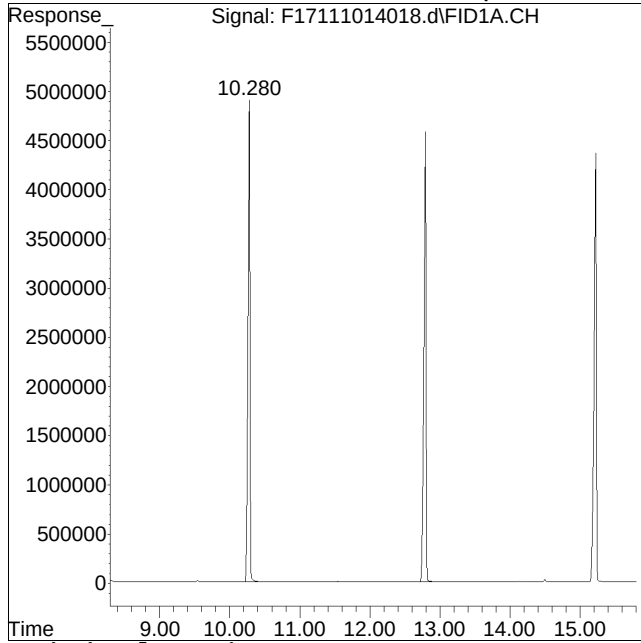
Manual Peak Response = 92546861 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

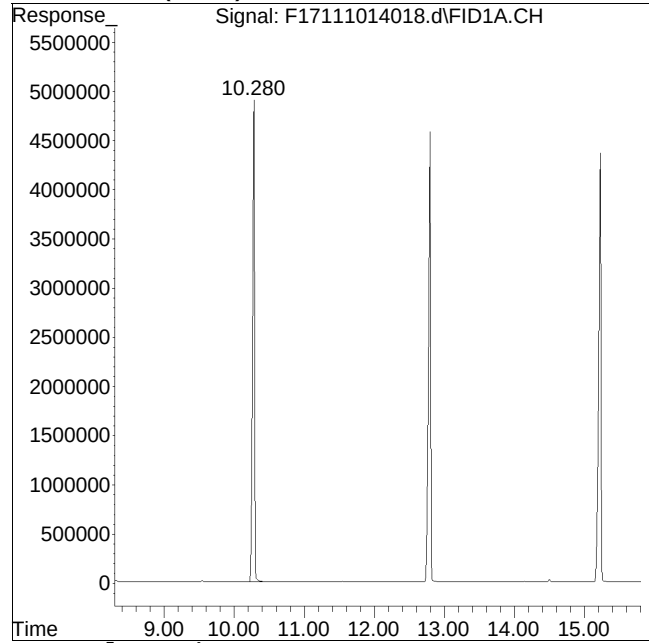
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #4: n-Decane (C10)



Original Peak Response = 94438265

M4 = Poor automated baseline construction.

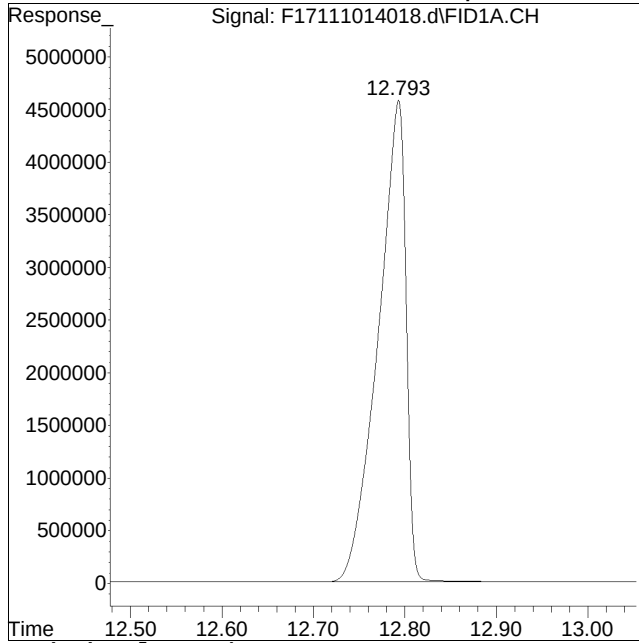


Manual Peak Response = 95150146 M4

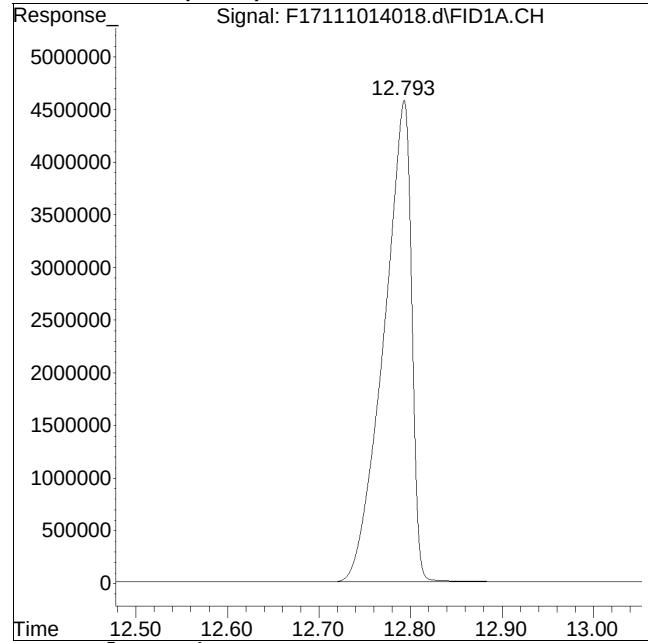
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #5: n-Undecane (C11)



Original Peak Response = 96522128



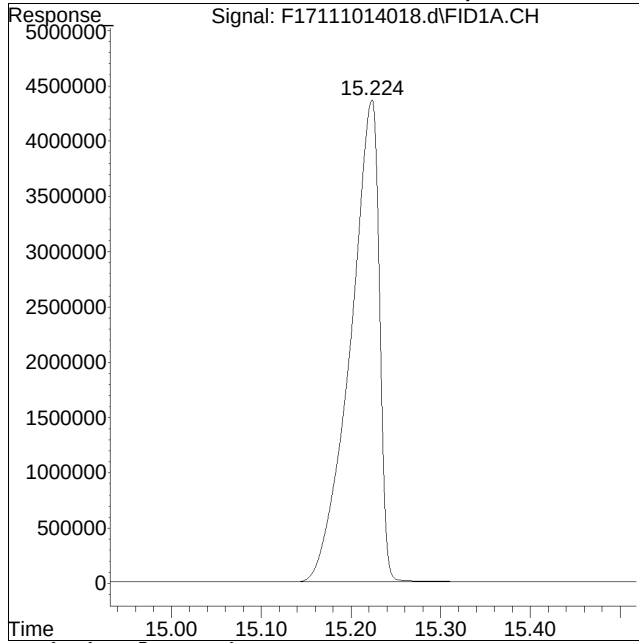
Manual Peak Response = 96504887 M4

M4 = Poor automated baseline construction.

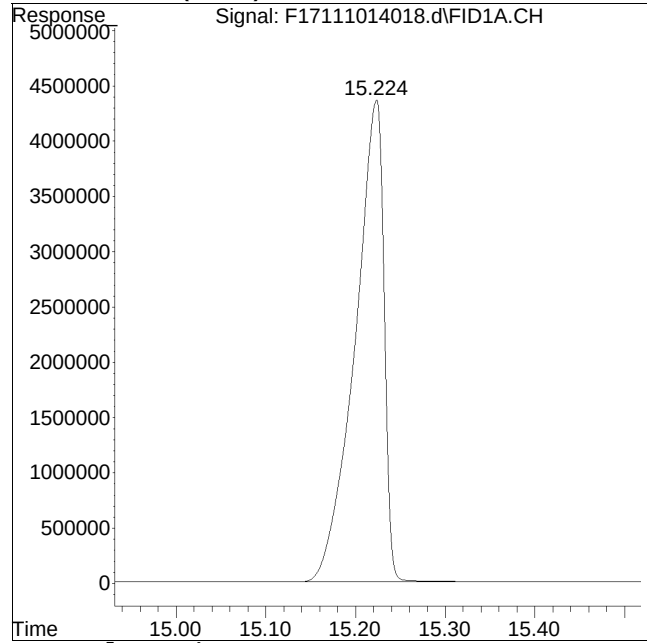
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #6: n-Dodecane (C12)



Original Peak Response = 97736580



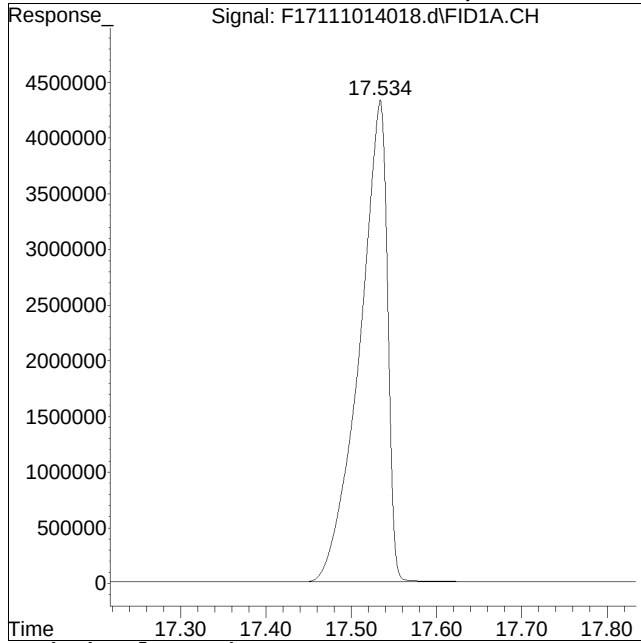
Manual Peak Response = 97813355 M4

M4 = Poor automated baseline construction.

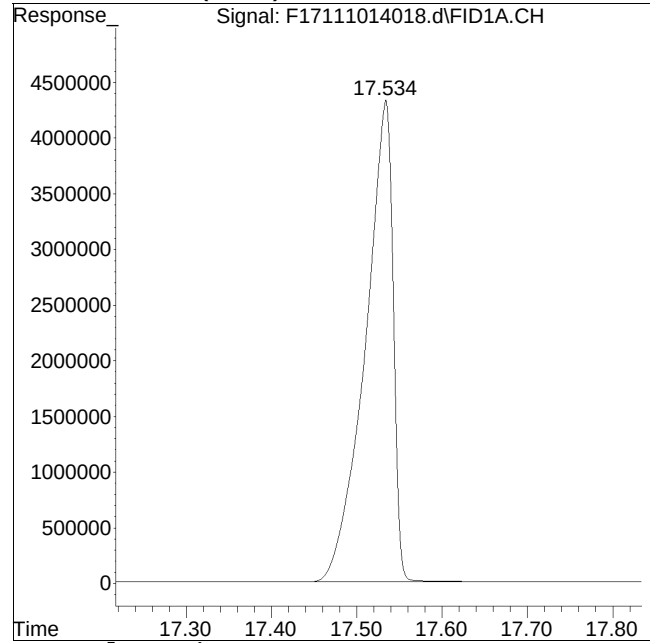
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #7: n-Tridecane (C13)



Original Peak Response = 98144870



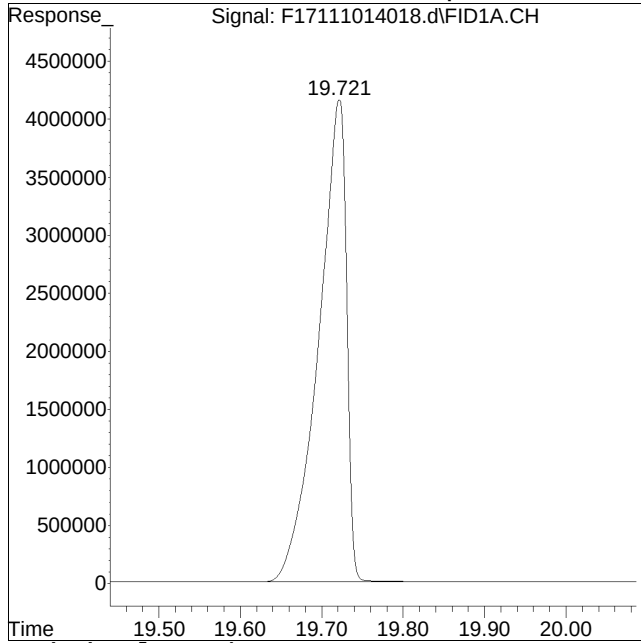
Manual Peak Response = 98128725 M4

M4 = Poor automated baseline construction.

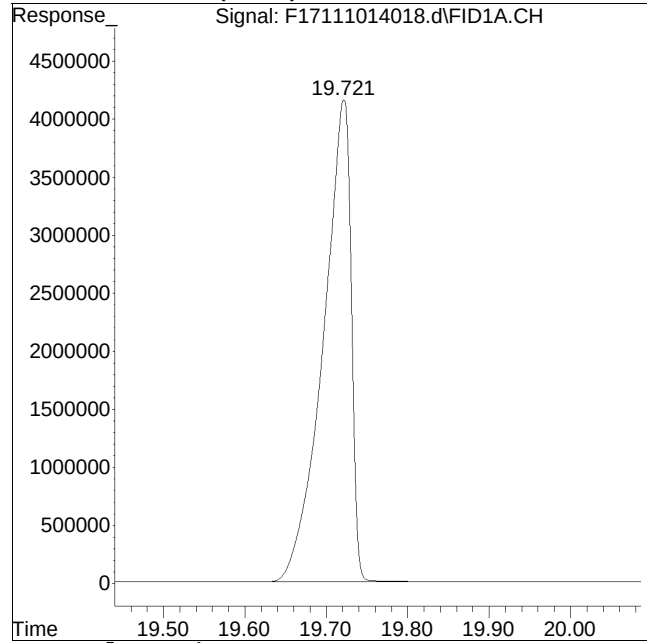
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #9: n-Tetradecane (C14)



Original Peak Response = 99196181



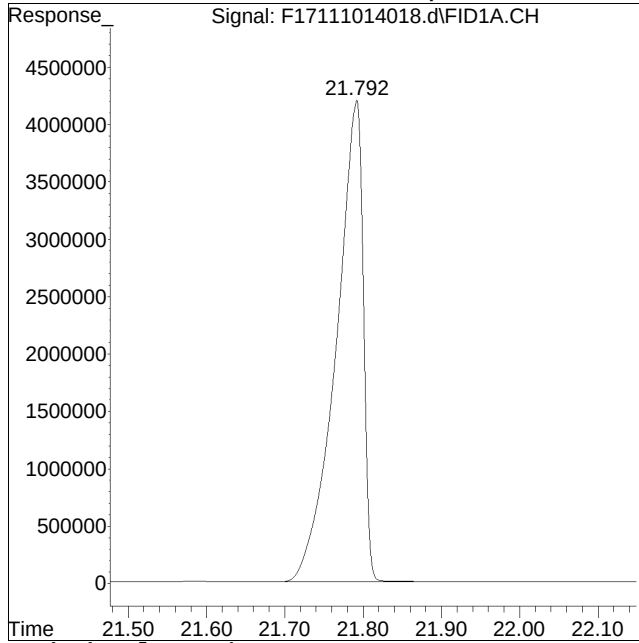
Manual Peak Response = 99098349 M4

M4 = Poor automated baseline construction.

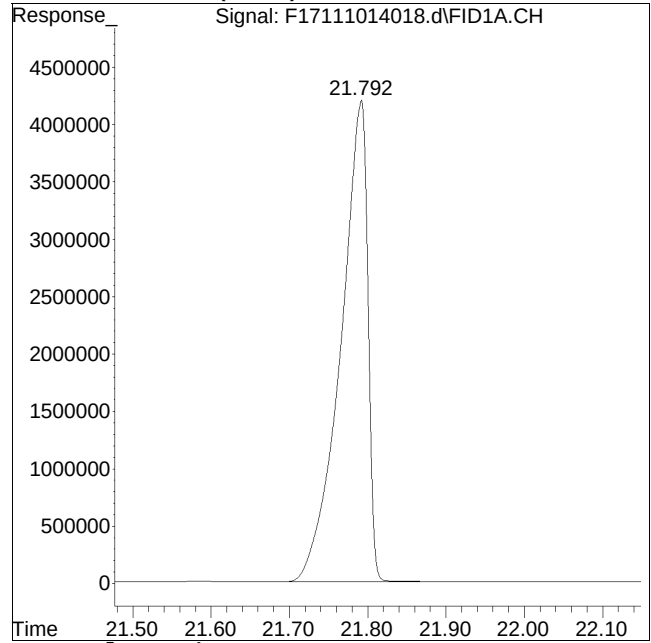
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #11: n-Pentadecane (C15)



Original Peak Response = 100967552



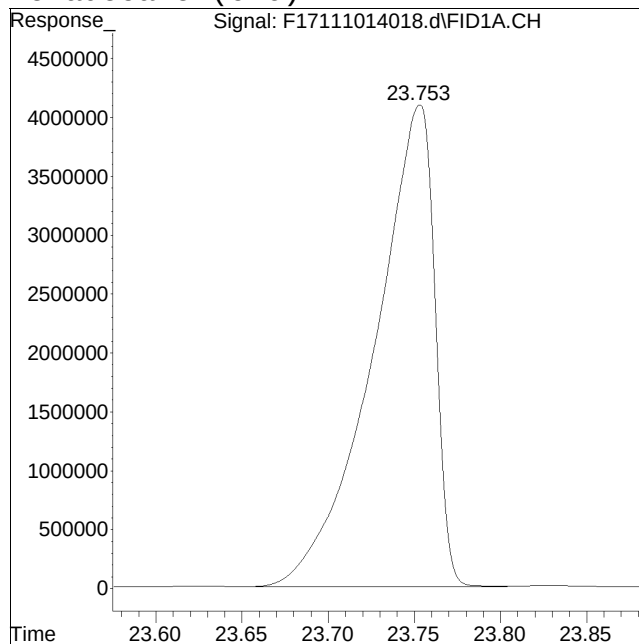
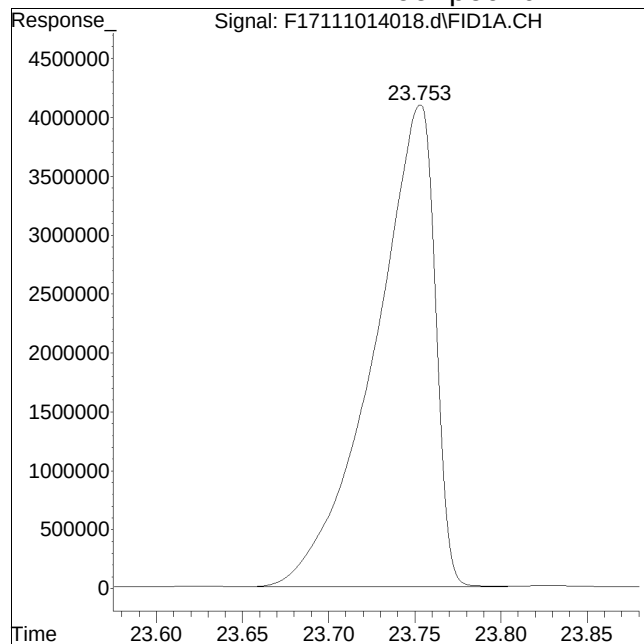
Manual Peak Response = 100894959 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
 Data File : F17111014018.d Operator : FID17:NL
 Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
 Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #12: n-Hexadecane (C16)



Original Peak Response = 100502501

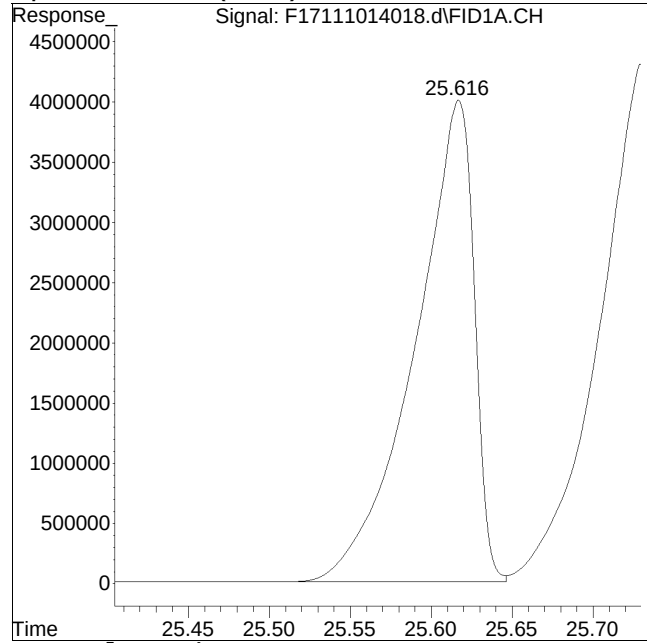
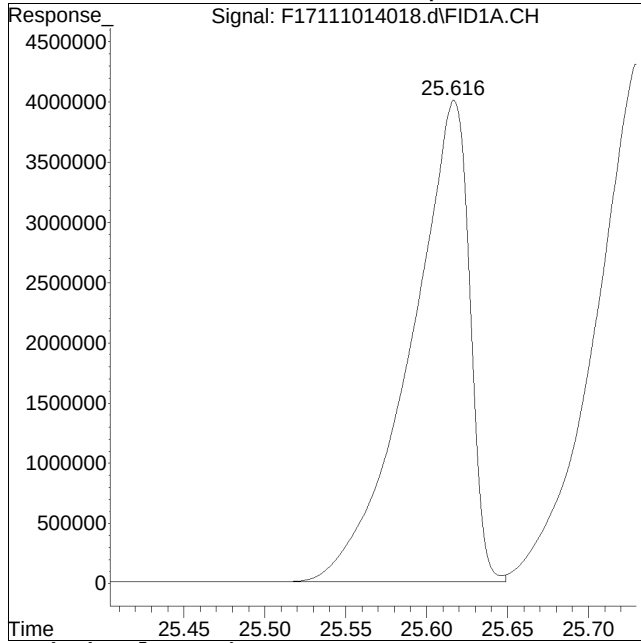
Manual Peak Response = 100542165 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #14: n-Heptadecane (C17)



Original Peak Response = 101308168

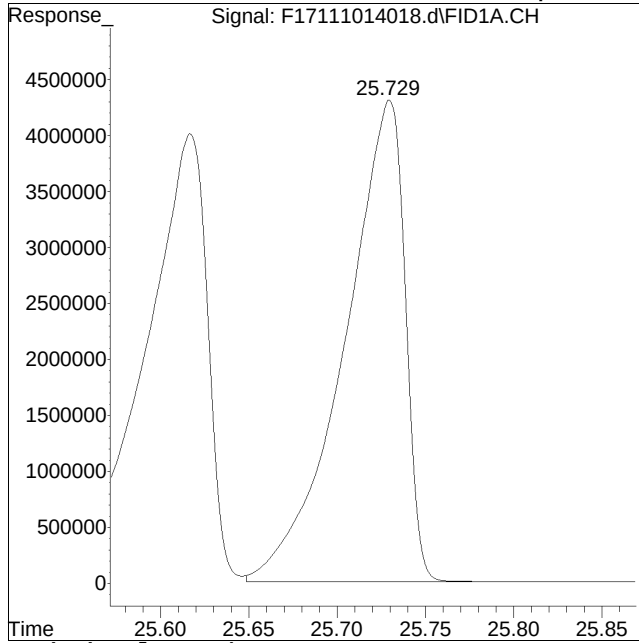
Manual Peak Response = 101195746 M4

M4 = Poor automated baseline construction.

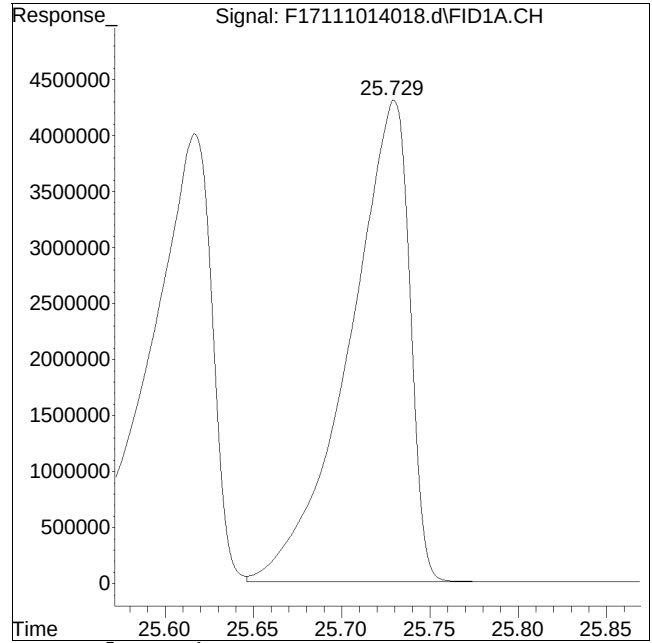
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #15: Pristane



Original Peak Response = 102335862



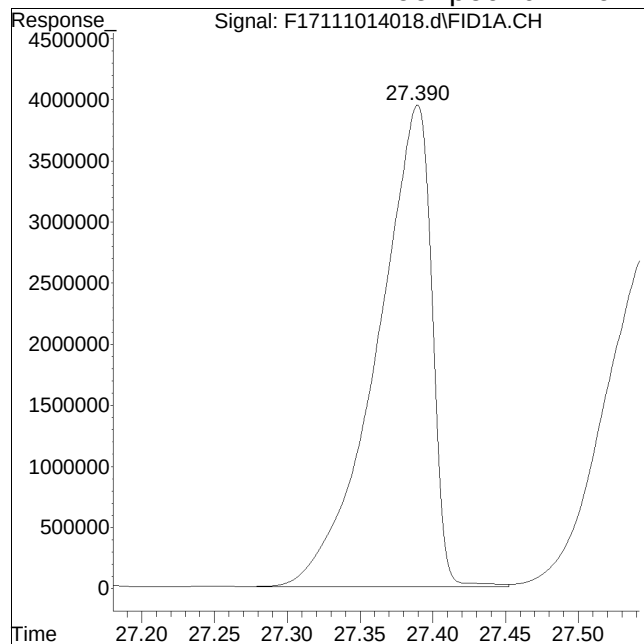
Manual Peak Response = 102363704 M4

M4 = Poor automated baseline construction.

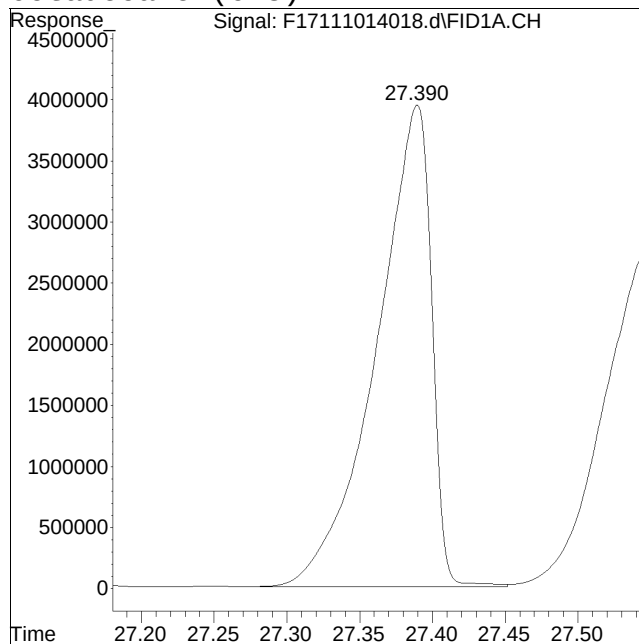
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #16: n-Octadecane (C18)



Original Peak Response = 103518717



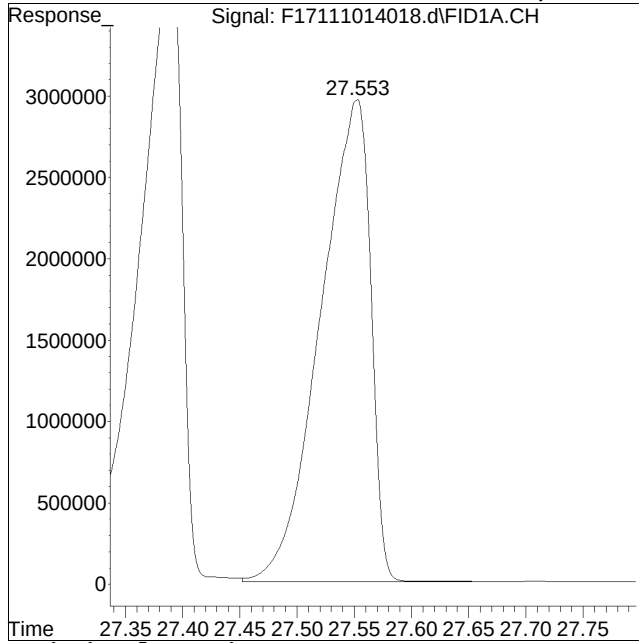
Manual Peak Response = 103494808 M4

M4 = Poor automated baseline construction.

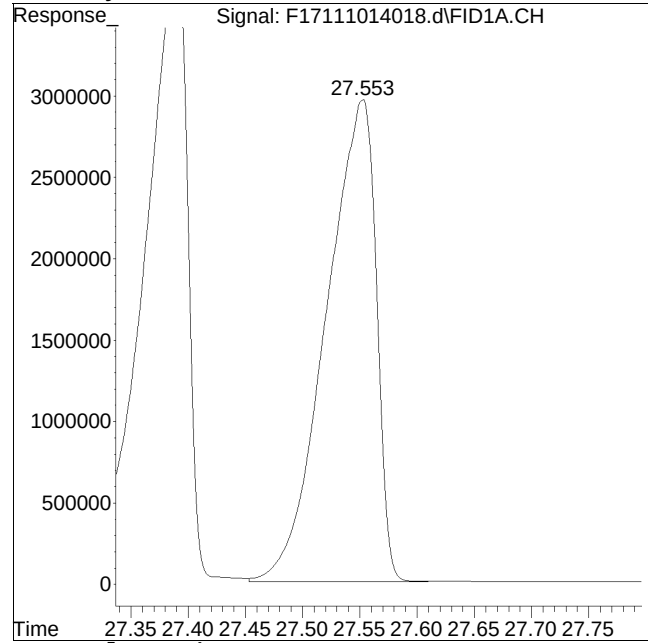
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #17: Phytane



Original Peak Response = 90336279



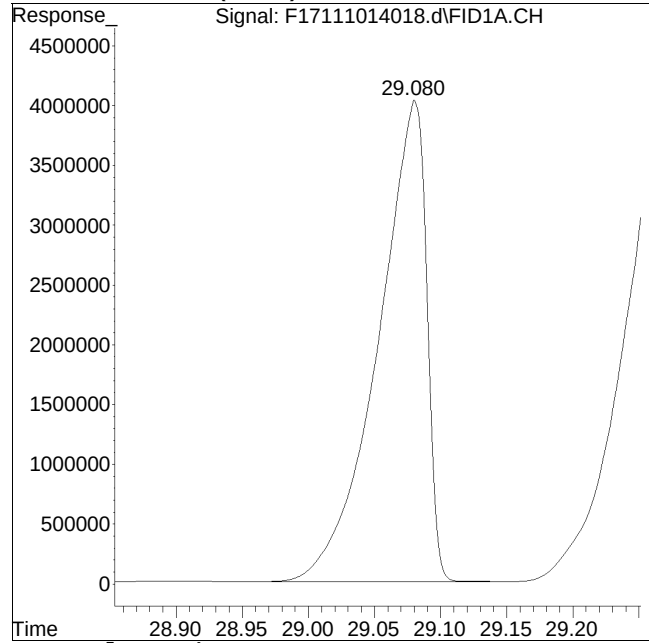
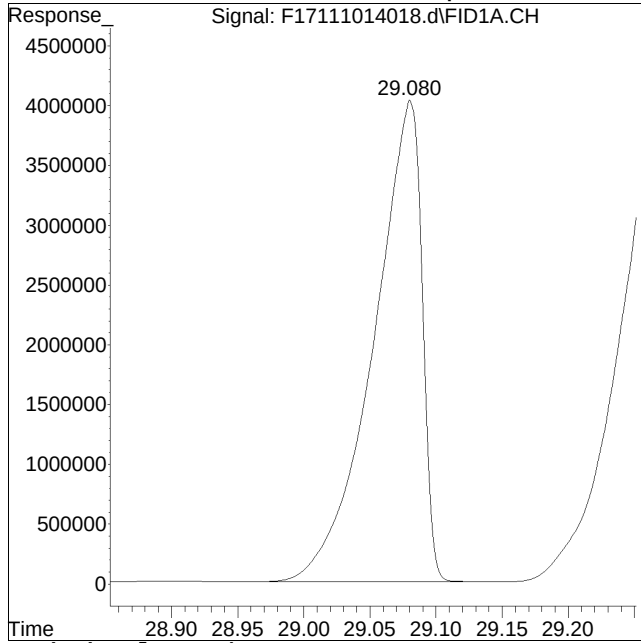
Manual Peak Response = 90107646 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #18: n-Nonadecane (C19)



Original Peak Response = 102556916

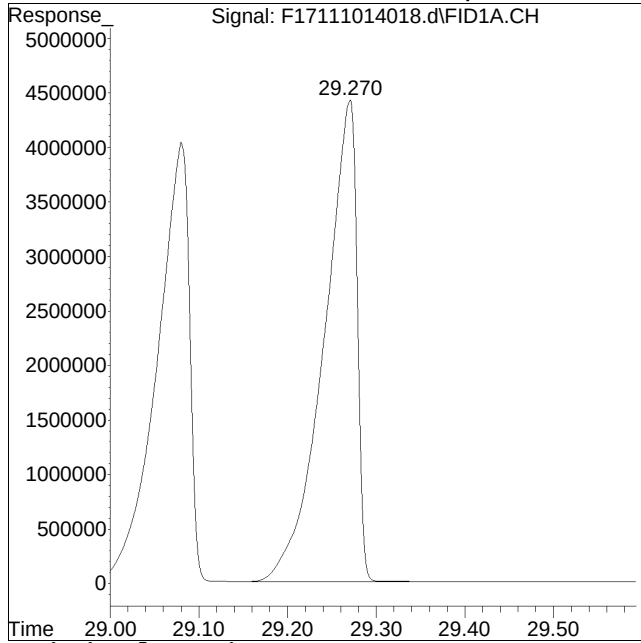
Manual Peak Response = 102722662 M4

M4 = Poor automated baseline construction.

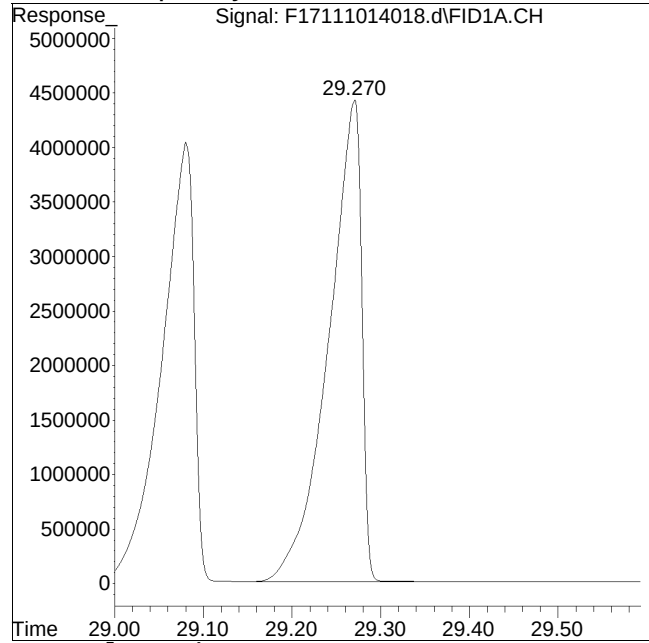
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #19: ortho-terphenyl



Original Peak Response = 113986234



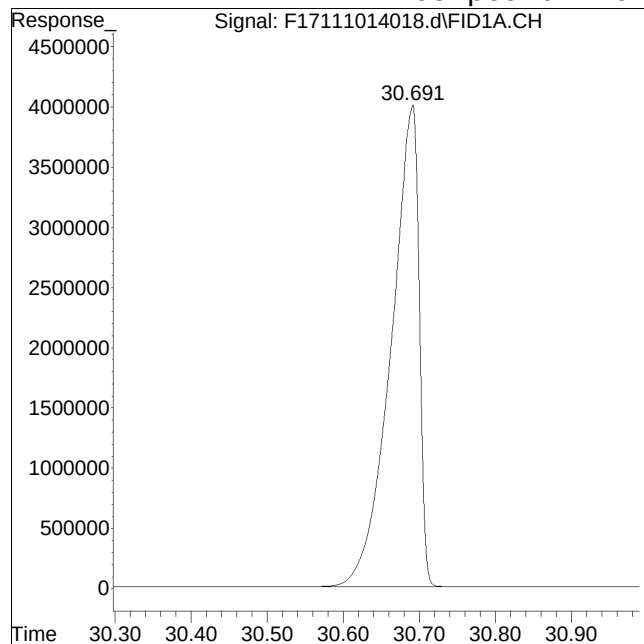
Manual Peak Response = 114237478 M4

M4 = Poor automated baseline construction.

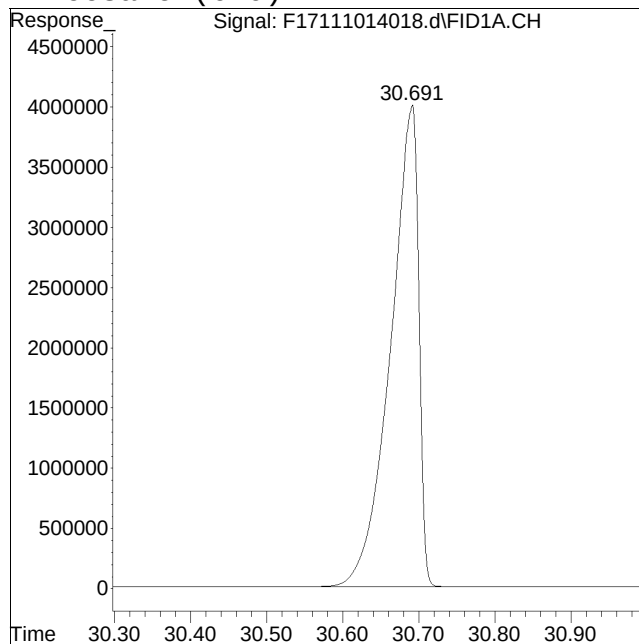
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #20: n-Eicosane (C20)



Original Peak Response = 102593918



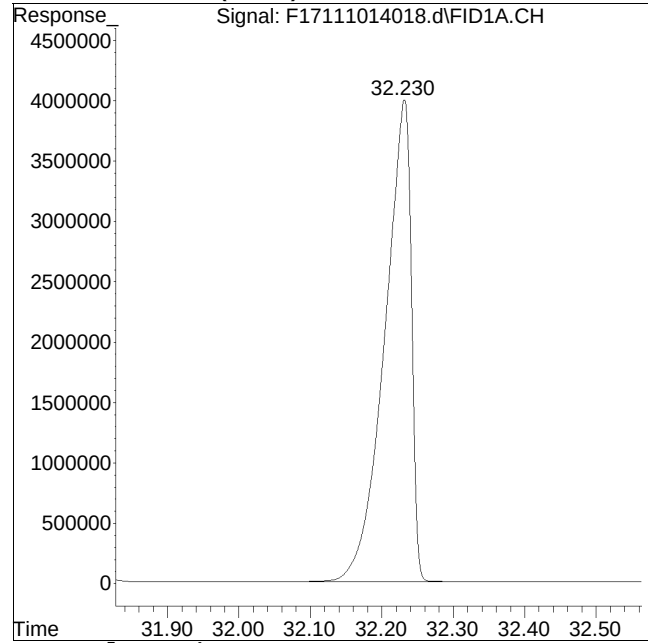
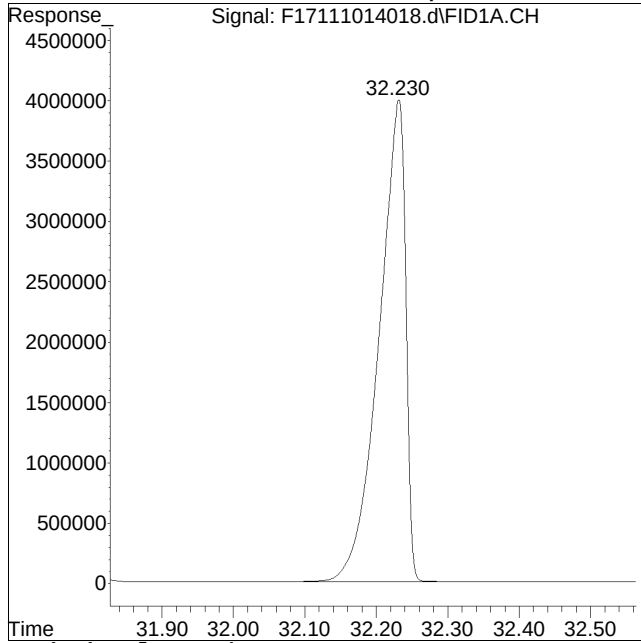
Manual Peak Response = 102338719 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #21: n-Heneicosane (C21)



Original Peak Response = 103486675

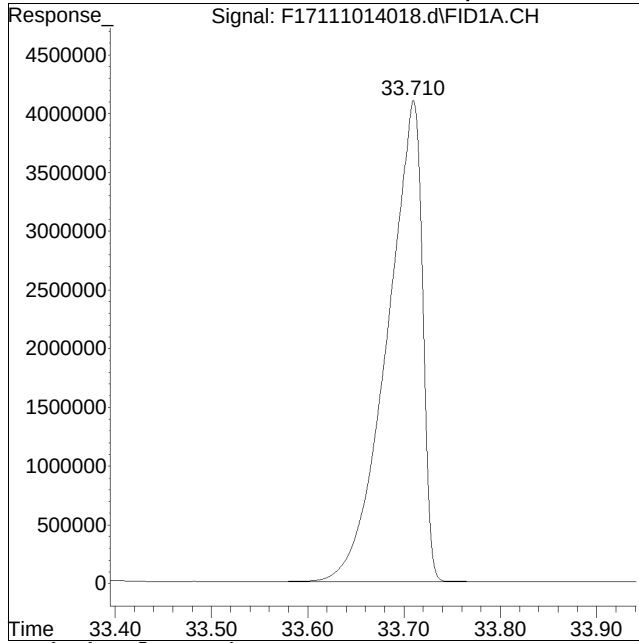
Manual Peak Response = 103561695 M4

M4 = Poor automated baseline construction.

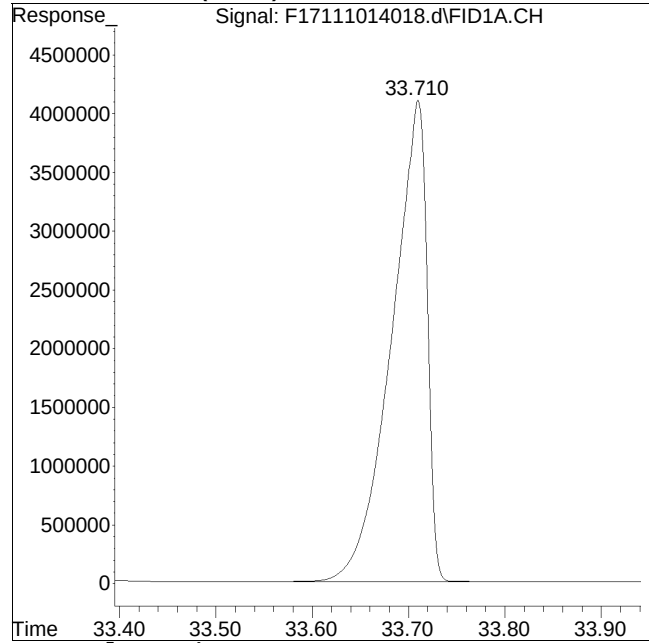
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #22: n-Docosane (C22)



Original Peak Response = 104629133



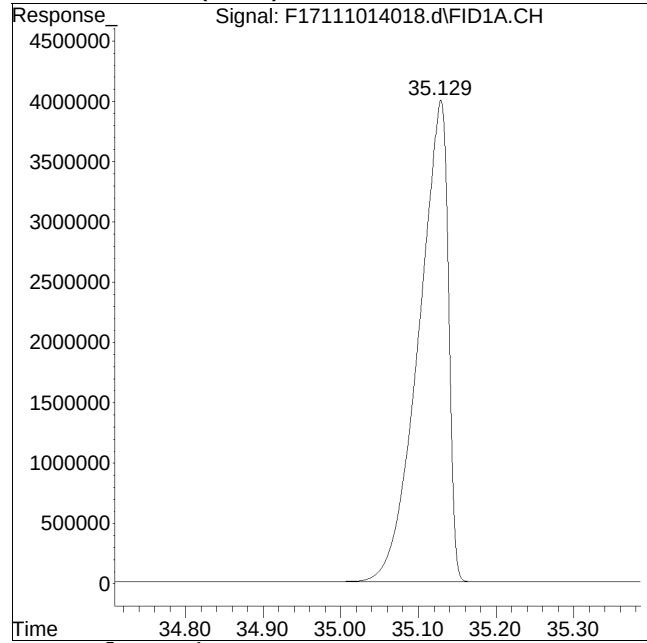
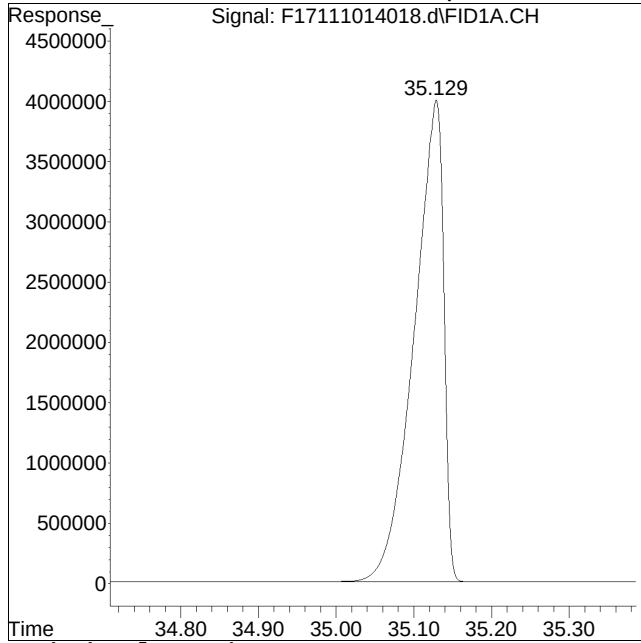
Manual Peak Response = 104611286 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #23: n-Tricosane (C23)



Original Peak Response = 105638678

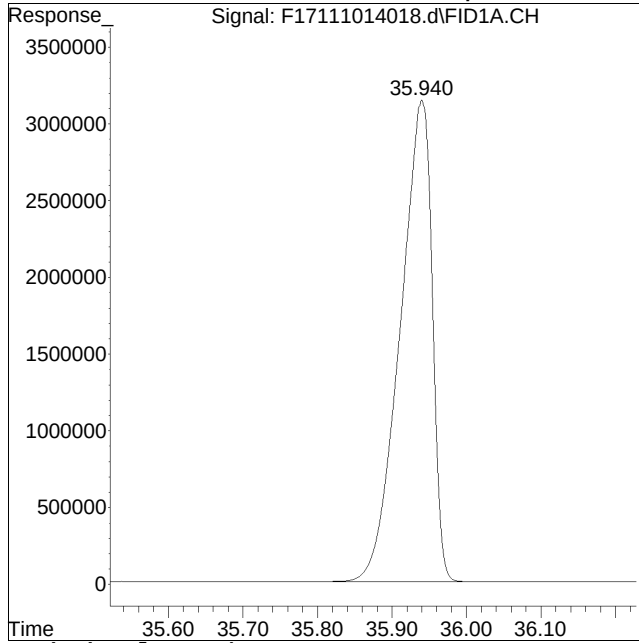
Manual Peak Response = 105634840 M4

M4 = Poor automated baseline construction.

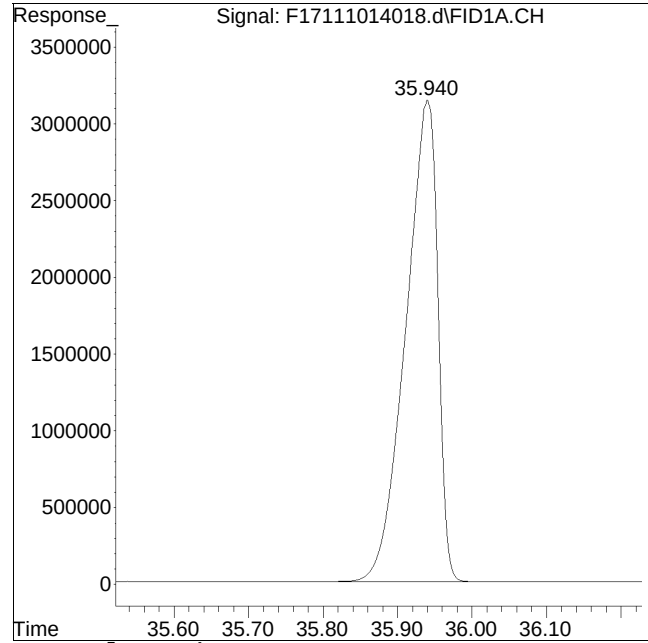
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #24: d50-Tetracosane



Original Peak Response = 93757081



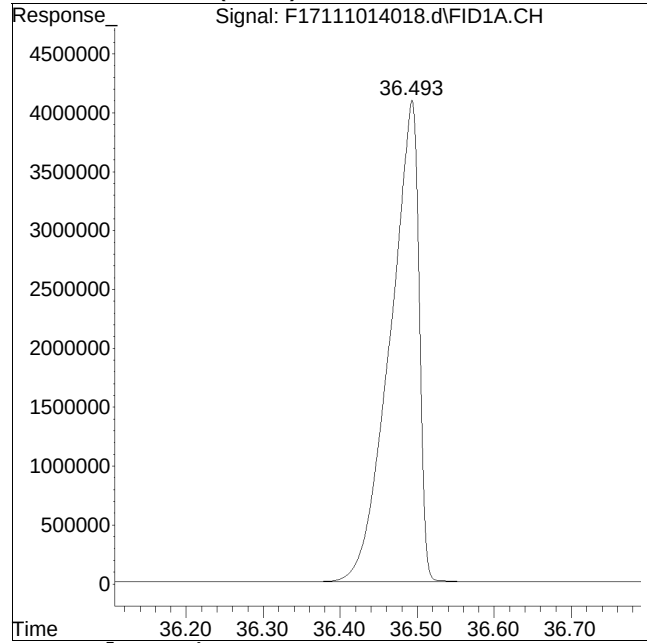
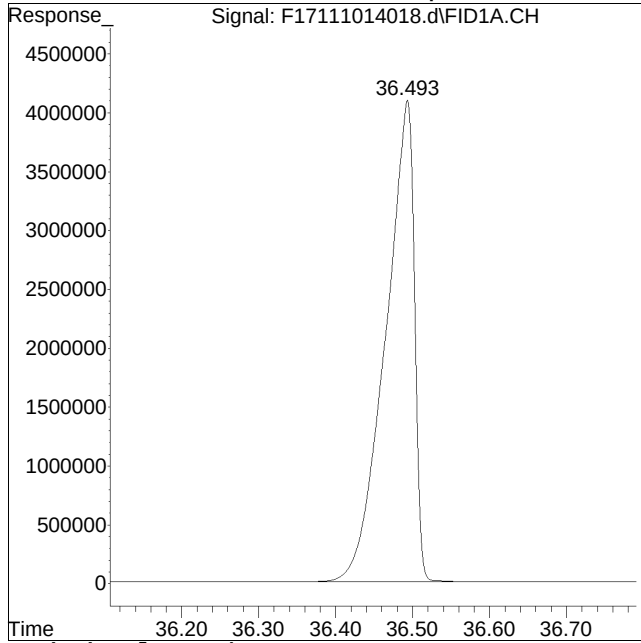
Manual Peak Response = 93830621 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #25: n-Tetracosane (C24)



Original Peak Response = 106346818

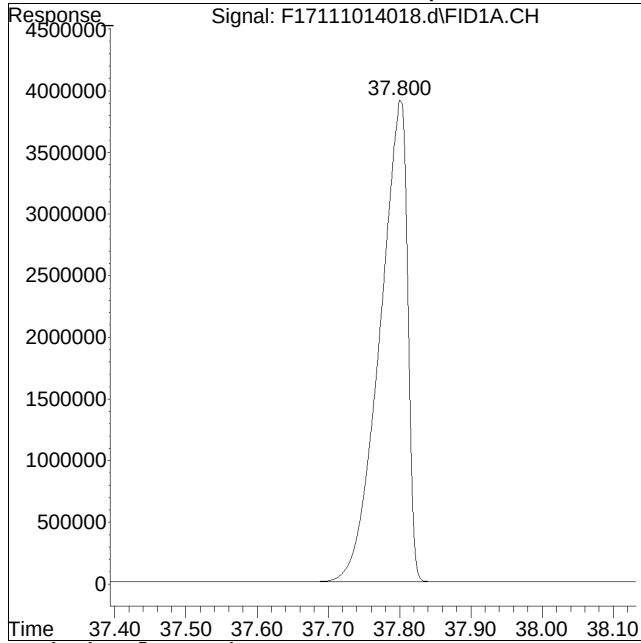
Manual Peak Response = 106336757 M4

M4 = Poor automated baseline construction.

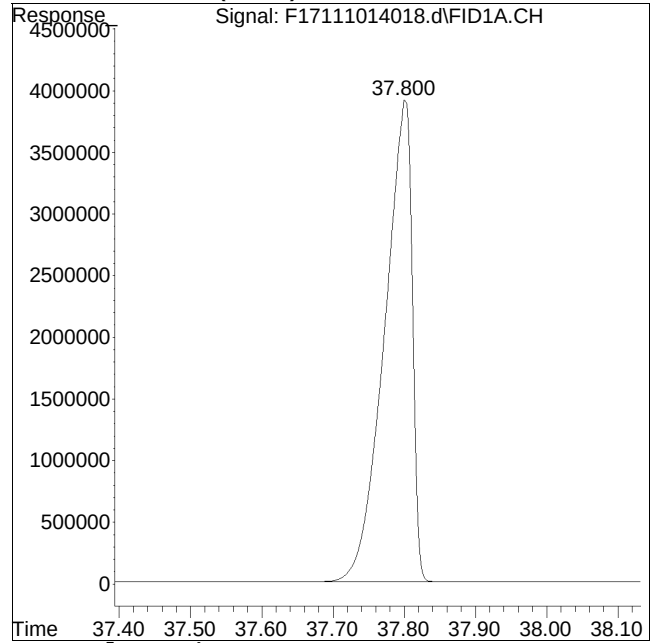
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #26: n-Pentacosane (C25)



Original Peak Response = 105582349



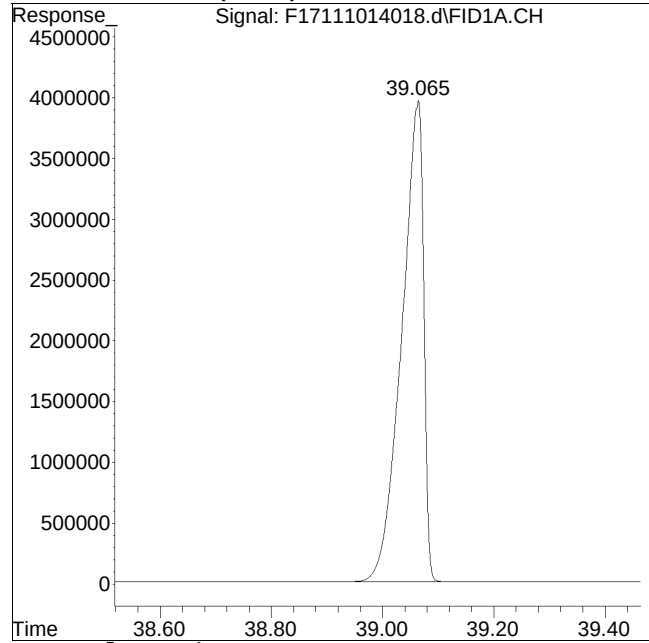
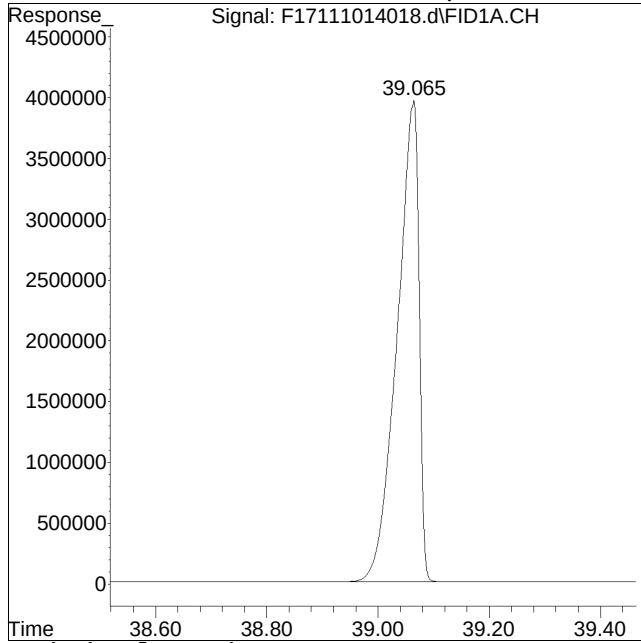
Manual Peak Response = 105611101 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #27: n-Hexacosane (C26)



Original Peak Response = 108274841

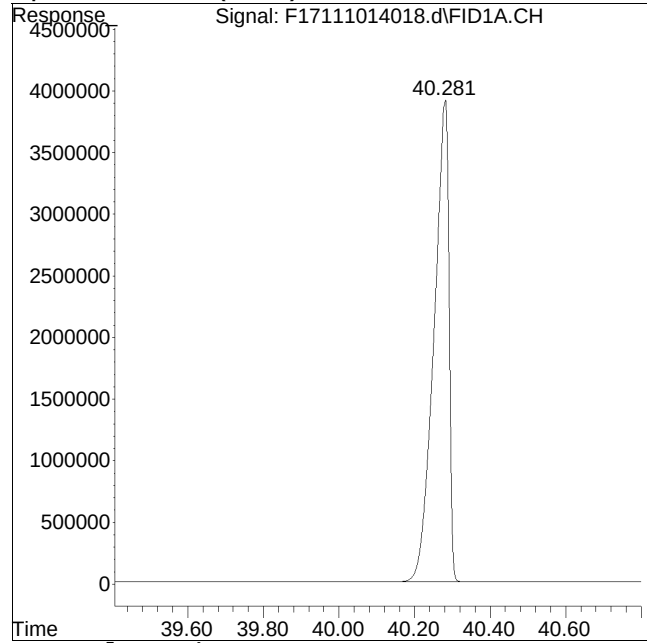
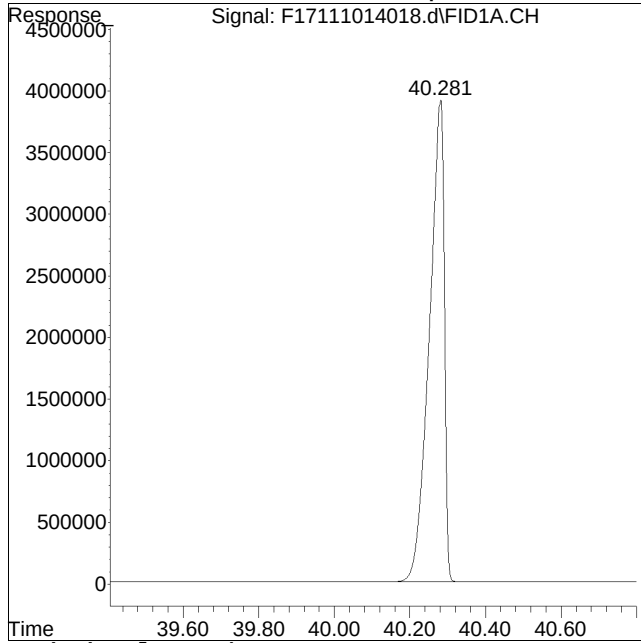
Manual Peak Response = 108152182 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #28: n-Heptacosane (C27)



Original Peak Response = 107291291

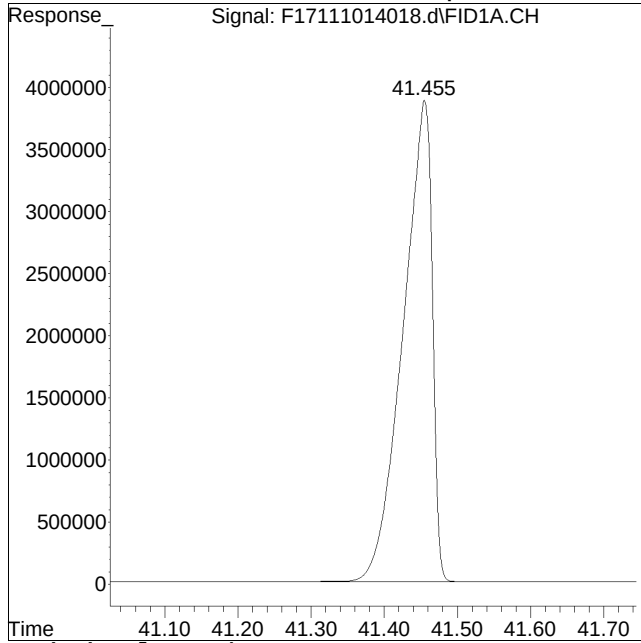
Manual Peak Response = 107262728 M4

M4 = Poor automated baseline construction.

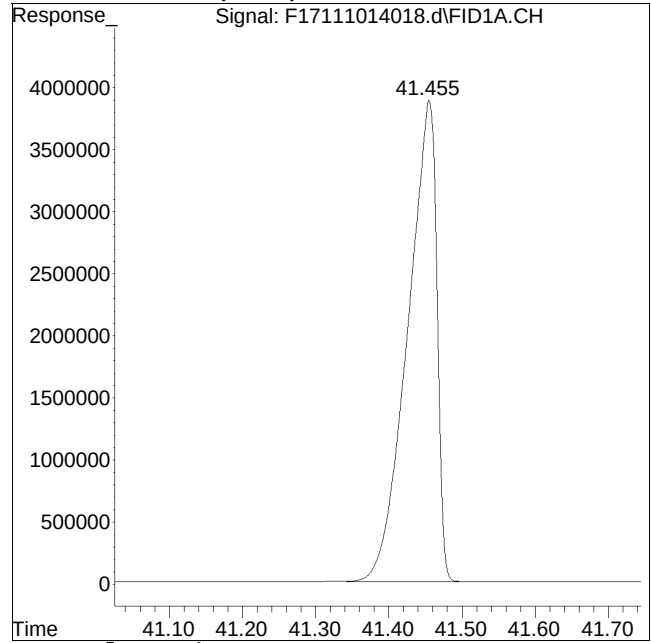
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #29: n-Octacosane (C28)



Original Peak Response = 107315946



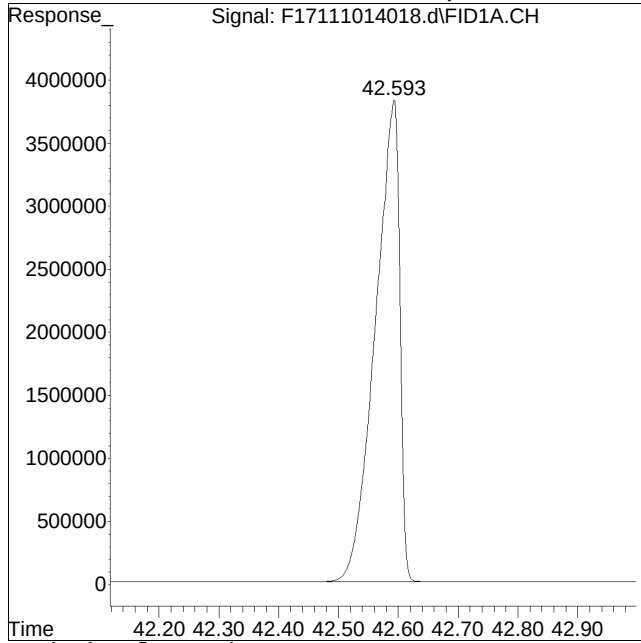
Manual Peak Response = 107073579 M4

M4 = Poor automated baseline construction.

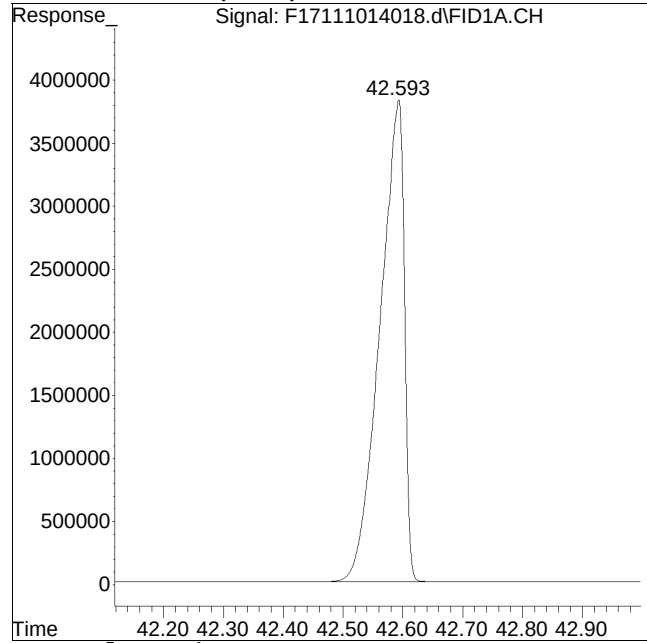
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #30: n-Nonacosane (C29)



Original Peak Response = 108225490



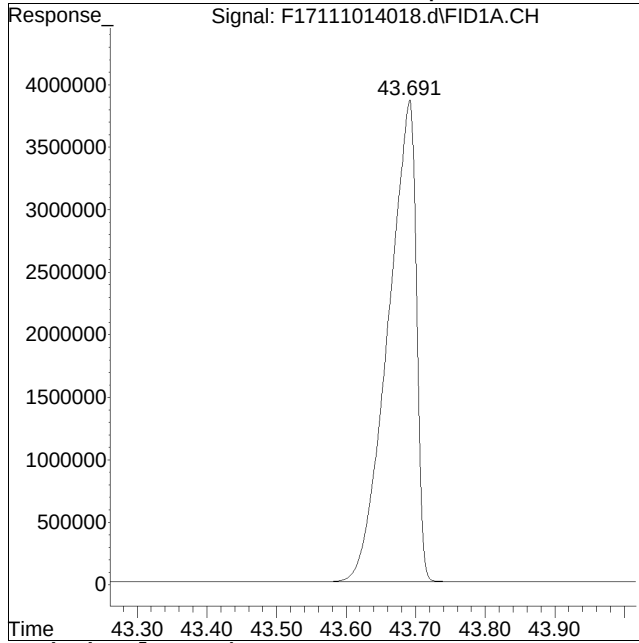
Manual Peak Response = 108209907 M4

M4 = Poor automated baseline construction.

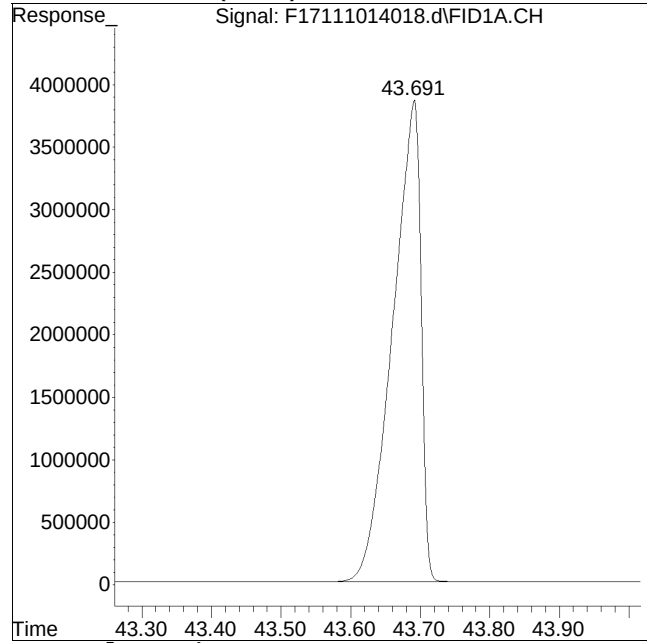
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #31: n-Triacontane (C30)



Original Peak Response = 108696266



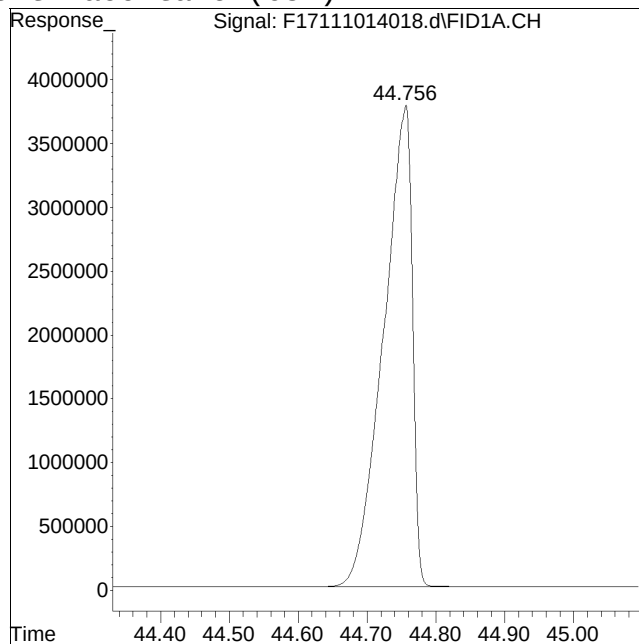
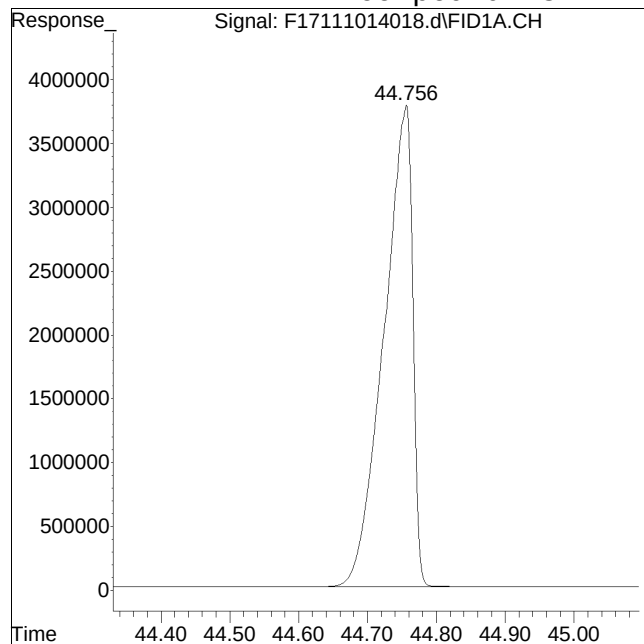
Manual Peak Response = 108739389 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
 Data File : F17111014018.d Operator : FID17:NL
 Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
 Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #32: n-Hentriacontane (C31)



Original Peak Response = 109205352

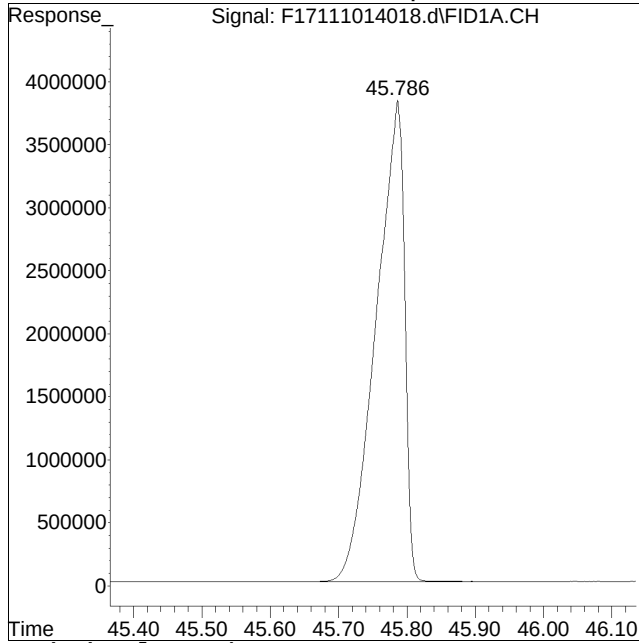
Manual Peak Response = 109245613 M4

M4 = Poor automated baseline construction.

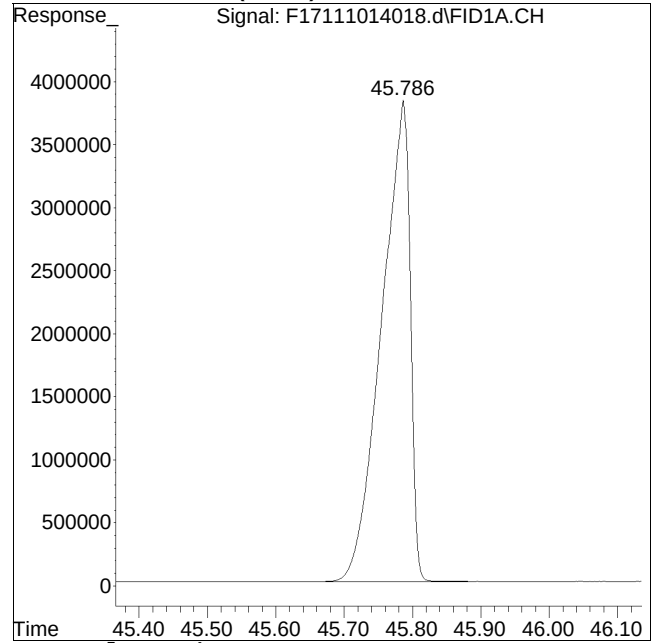
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #33: n-Dotriacontane (C32)



Original Peak Response = 110467144



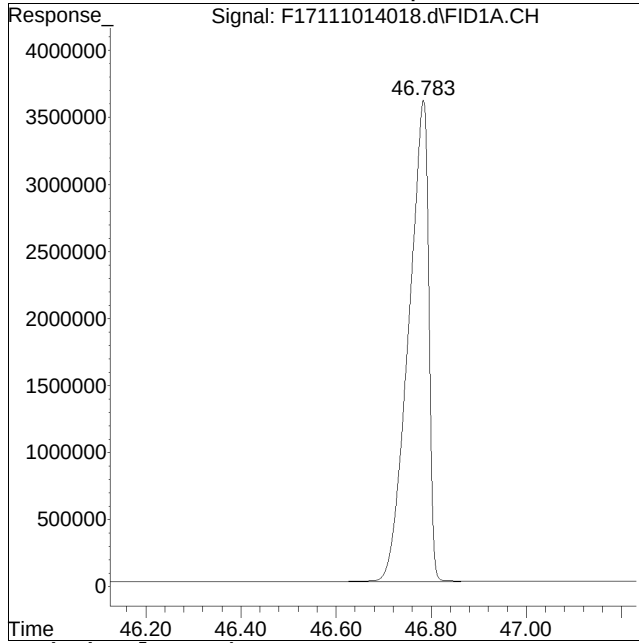
Manual Peak Response = 110550982 M4

M4 = Poor automated baseline construction.

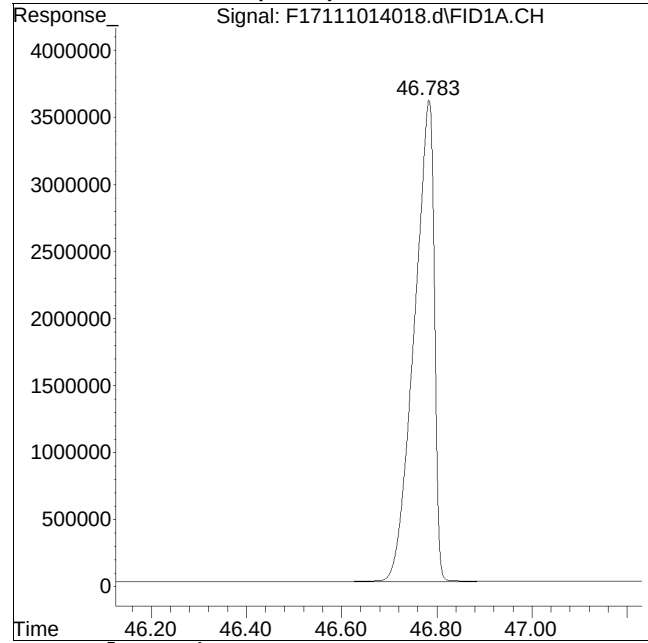
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #34: n-Tritriacontane (C33)



Original Peak Response = 105080883



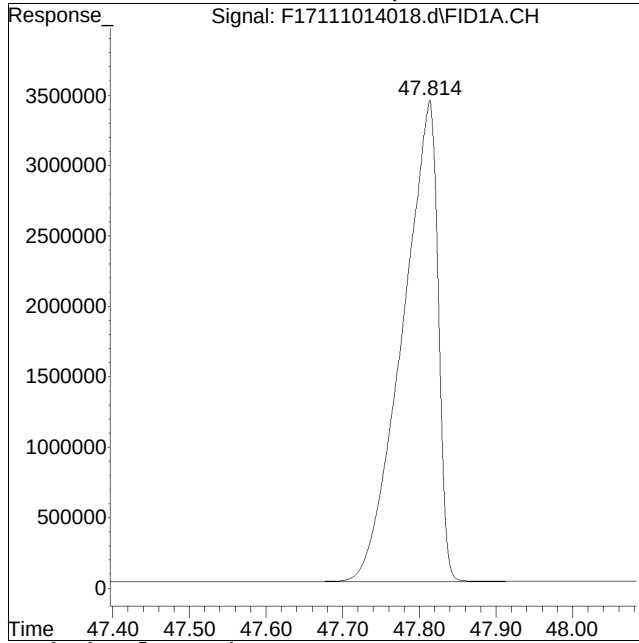
Manual Peak Response = 104844271 M4

M4 = Poor automated baseline construction.

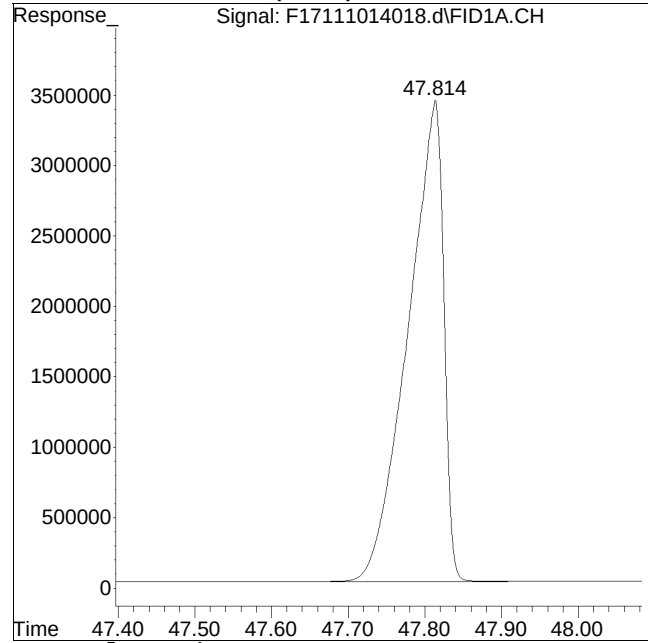
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #35: n-tetratriacontane (C34)



Original Peak Response = 110113503



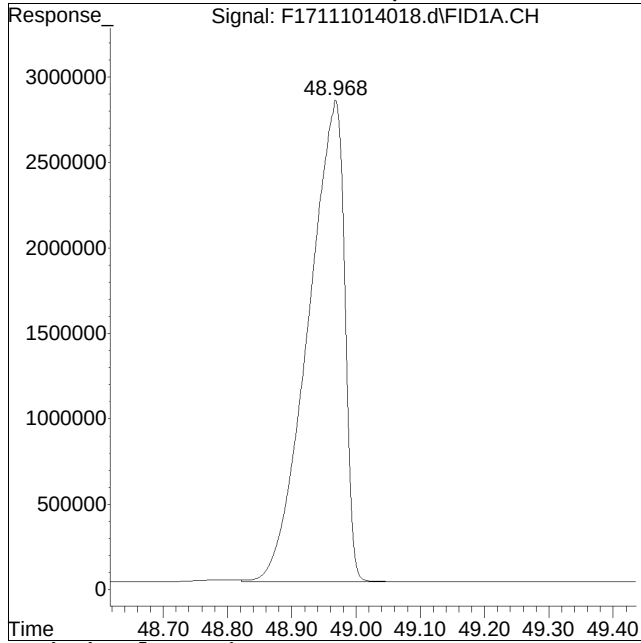
Manual Peak Response = 110027219 M4

M4 = Poor automated baseline construction.

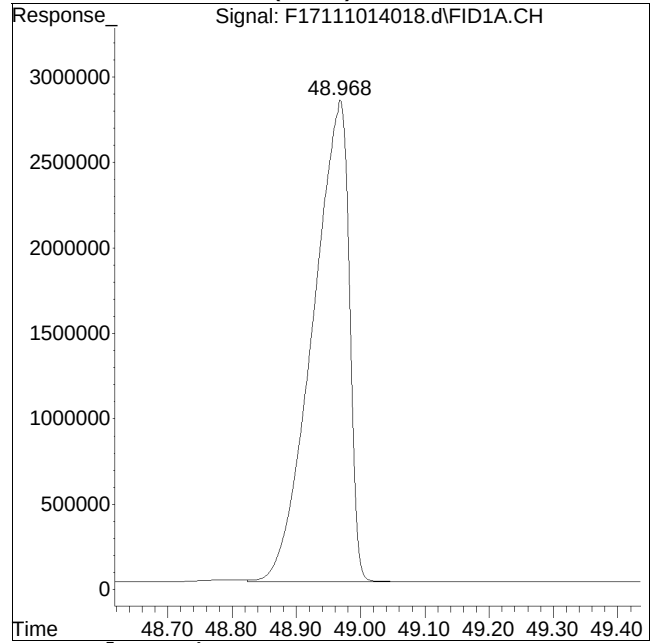
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #36: n-Pentatriacontane (C35)



Original Peak Response = 111213257



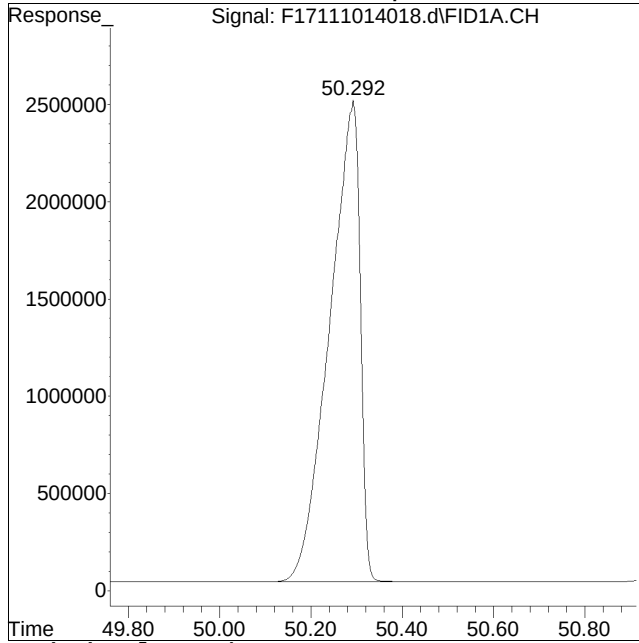
Manual Peak Response = 111133176 M4

M4 = Poor automated baseline construction.

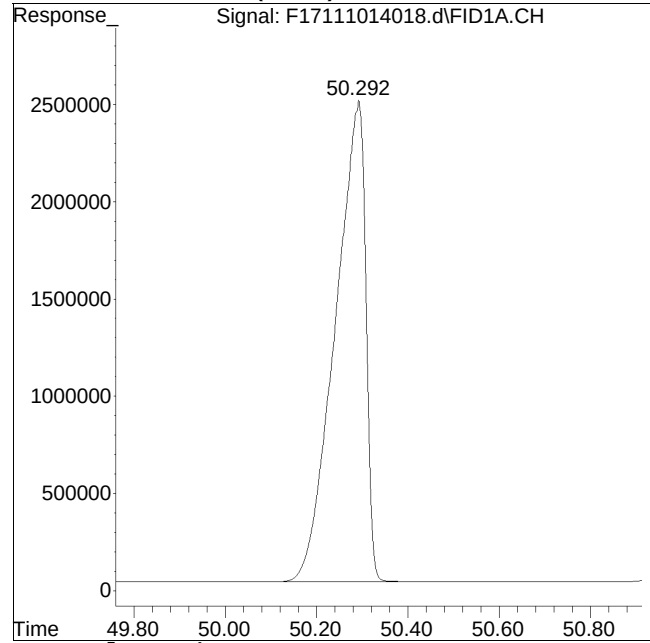
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #37: n-Hexatriacontane (C36)



Original Peak Response = 114718885



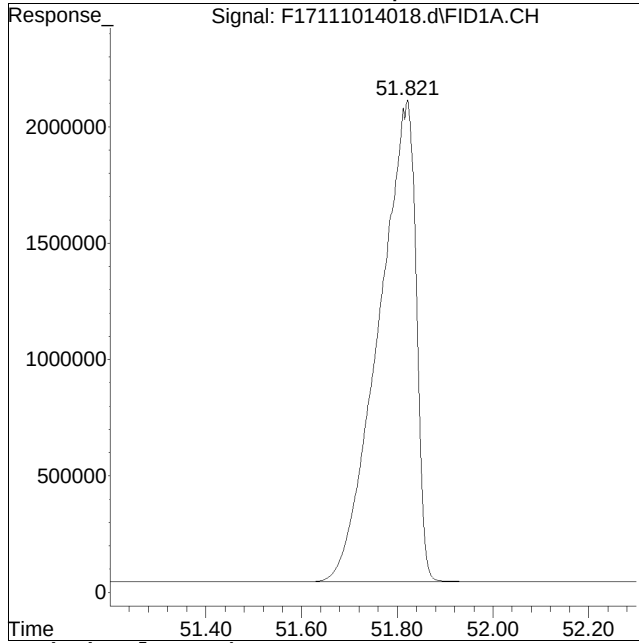
Manual Peak Response = 114629087 M4

M4 = Poor automated baseline construction.

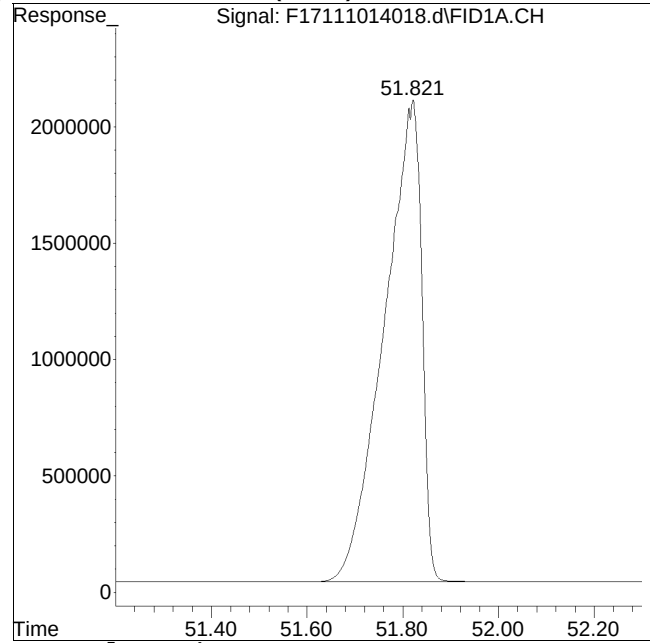
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #38: n-Heptatriacontane (C37)



Original Peak Response = 112287059



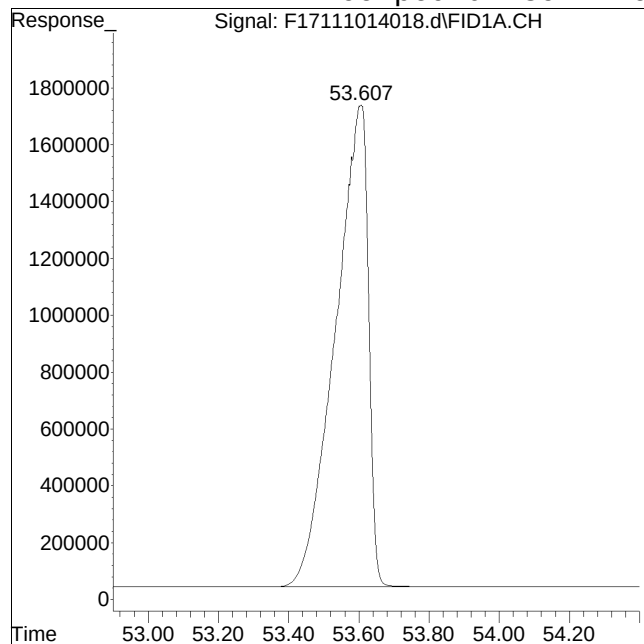
Manual Peak Response = 112472231 M4

M4 = Poor automated baseline construction.

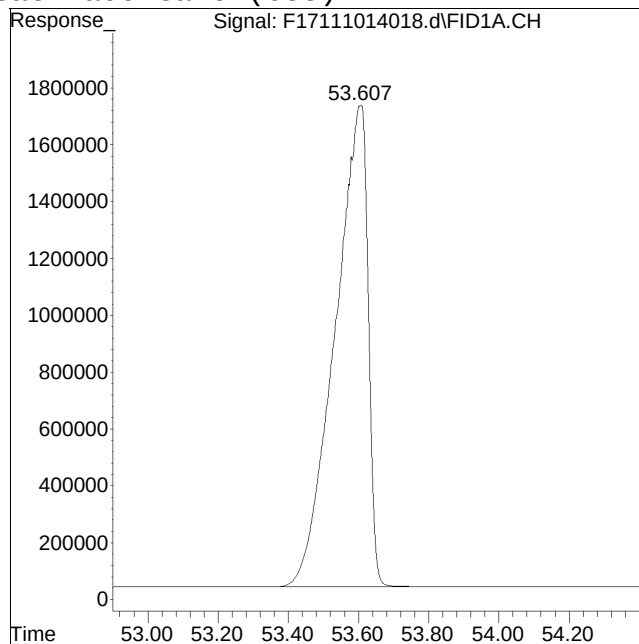
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
 Data File : F17111014018.d Operator : FID17:NL
 Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
 Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #39: n-Octatriacontane (C38)



Original Peak Response = 110736741



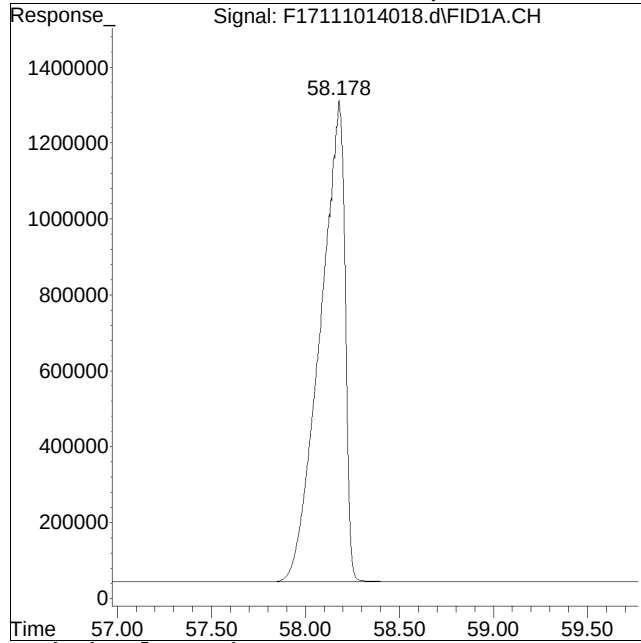
Manual Peak Response = 110748873 M4

M4 = Poor automated baseline construction.

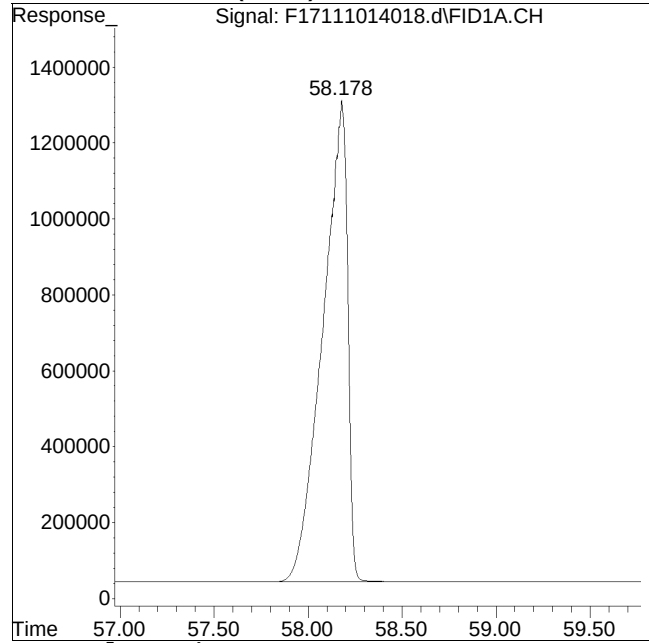
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014018.d Operator : FID17:NL
Date Inj'd : 11/10/2014 11:30 pm Instrument : FID17
Sample : I1711011404R Quant Date : 11/14/2014 12:19 pm

Compound #41: n-Tetracontane (C40)



Original Peak Response = 116134055



Manual Peak Response = 116119008 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014020.d
 Signal(s) : FID1A.CH
 Acq On : 11 Nov 2014 1:00 am
 Operator : FID17:NL
 Sample : I1711011405R
 Misc : WG743851, FRAV26 200ug/mL
 ALS Vial : 10 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:07:26 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.269	52608463	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.292	226451625	192.111	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 384.22%#
24) s	d50-Tetracosane	35.964	185908620	199.861	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 399.72%#
Target Compounds					
2) t	n-Octane (C8)	5.665	179952168	193.046	ug/mL M4
3) t	n-Nonane (C9)	7.843	183994497	187.873	ug/mL M4
4) t	n-Decane (C10)	10.307	190630604	185.480	ug/mL M4
5) t	n-Undecane (C11)	12.813	192977776	191.401	ug/mL M4
6) t	n-Dodecane (C12)	15.241	195722040	192.807	ug/mL M4
7) t	n-Tridecane (C13)	17.550	196451381	193.754	ug/mL M4
9) t	n-Tetradecane (C14)	19.740	198370823	188.742	ug/mL M4
11) t	n-Pentadecane (C15)	21.809	201966601	194.653	ug/mL M4
12) t	n-Hexadecane (C16)	23.770	201302145	192.523	ug/mL M4
14) t	n-Heptadecane (C17)	25.638	203355194	193.463	ug/mL M4
15) t	Pristane	25.751	203706839	193.339	ug/mL M4
16) t	n-Octadecane (C18)	27.411	206512059	197.666	ug/mL M4
17) t	Phytane	27.573	180095179	169.678	ug/mL M4
18) t	n-Nonadecane (C19)	29.100	205137349	197.465	ug/mL M4
20) t	n-Eicosane (C20)	30.711	204858567	196.291	ug/mL M4
21) t	n-Heneicosane (C21)	32.254	206881190	195.985	ug/mL M4
22) t	n-Docosane (C22)	33.732	209103777	196.978	ug/mL M4
23) t	n-Tricosane (C23)	35.154	211118913	197.747	ug/mL M4
25) t	n-Tetracosane (C24)	36.519	212476278	198.792	ug/mL M4
26) t	n-Pentacosane (C25)	37.828	211377509	197.094	ug/mL M4
27) t	n-Hexacosane (C26)	39.092	216859002	198.092	ug/mL M4
28) t	n-Heptacosane (C27)	40.309	215525451	198.359	ug/mL M4
29) t	n-Octacosane (C28)	41.485	215543841	197.759	ug/mL M4
30) t	n-Nonacosane (C29)	42.622	218200394	198.381	ug/mL M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014020.d
 Signal(s) : FID1A.CH
 Acq On : 11 Nov 2014 1:00 am
 Operator : FID17:NL
 Sample : I1711011405R
 Misc : WG743851, FRAV26 200ug/mL
 ALS Vial : 10 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:07:26 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc	Units	
31) t	n-Triacontane (C30)	43.722	219666383	199.046	ug/mL	M4
32) t	n-Hentriacontane (C31)	44.787	220837166	198.582	ug/mL	M4
33) t	n-Dotriacontane (C32)	45.818	223659667	202.301	ug/mL	M4
34) t	n-Tritriacontane (C33)	46.817	212305009	197.690	ug/mL	M4
35) t	n-tetratriacontane (C34)	47.853	222719308	195.403	ug/mL	M4
36) t	n-Pentatriacontane (C35)	49.015	225244106	198.632	ug/mL	M4
37) t	n-Hexatriacontane (C36)	50.347	231762250	188.759	ug/mL	M4
38) t	n-Heptatriacontane (C37)	51.885	226986888	198.137	ug/mL	M4
39) t	n-Octatriacontane (C38)	53.685	222999979	194.794	ug/mL	M4
41) t	n-Tetracontane (C40)	58.296	232479117	211.078	ug/mL	M4

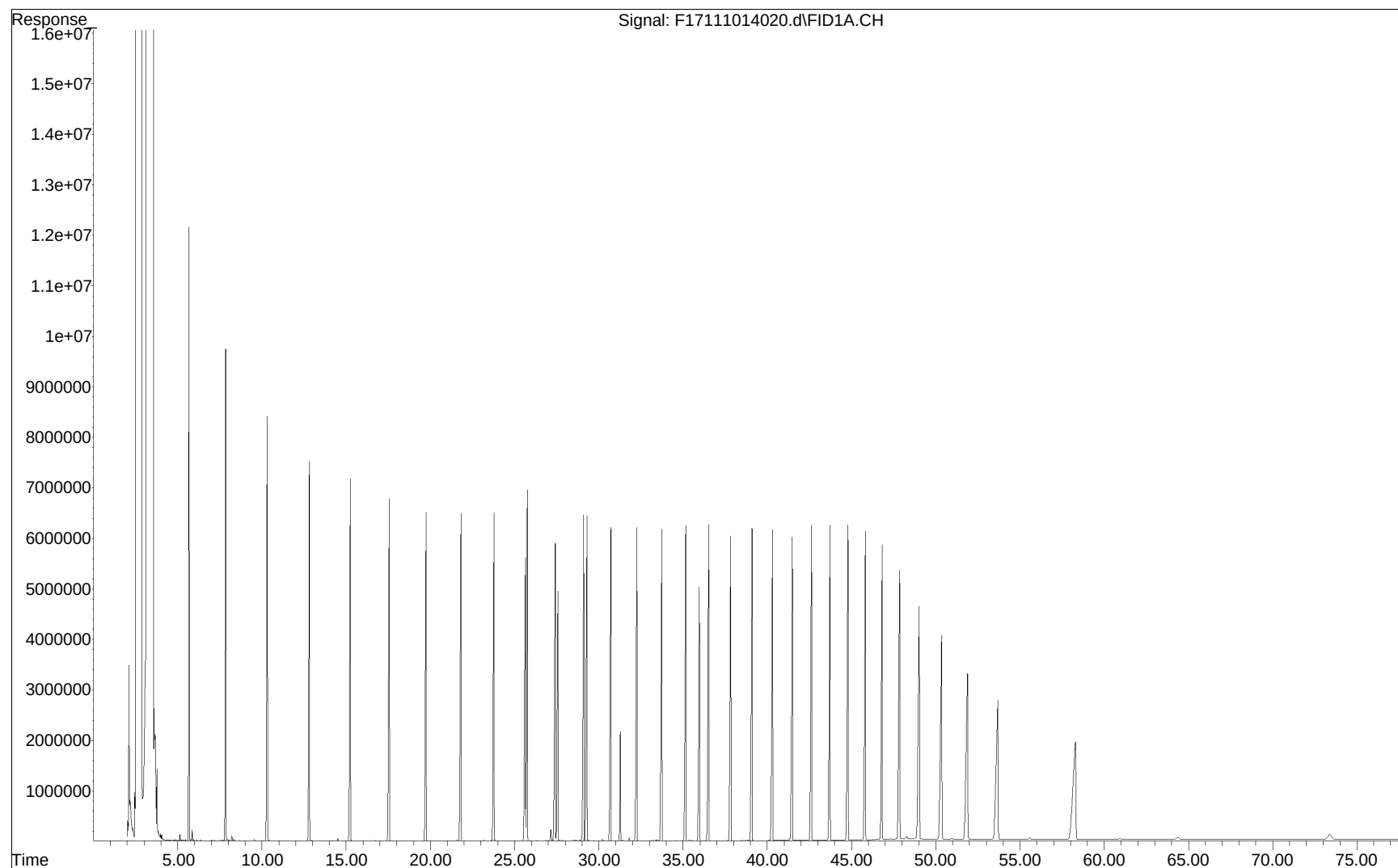
SemiQuant Compounds - Not Calibrated on this Instrument

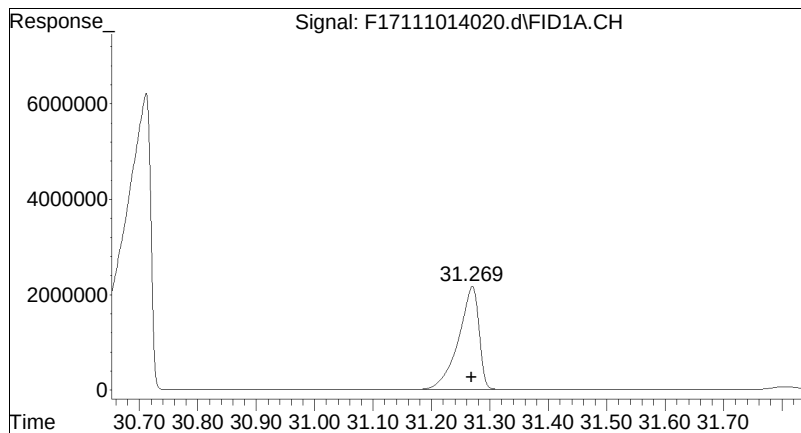
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

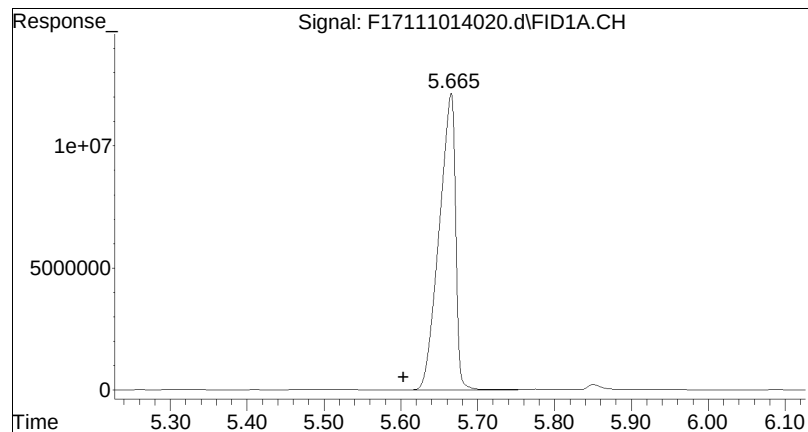
File : 0:\Forensics\Data\FID17\2014\NOV\NOV10\F17111014020.d
Operator : FID17:NL
Acquired : 11 Nov 2014 1:00 am using AcqMethod FID17.M
Sample Name: I1711011405R
Instrument: FID17
Misc Info : WG743851, FRAV26 200ug/mL
Vial Number: 10
CurrentMeth: 0:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M





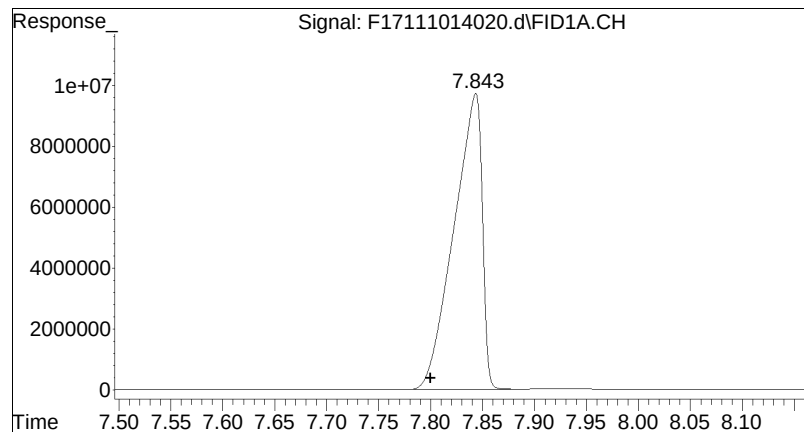
#1 5-alpha-androstane

R.T.: 31.269 min
Delta R.T.: 0.000 min
Response: 52608463
Conc: 50.00 ug/mL M4



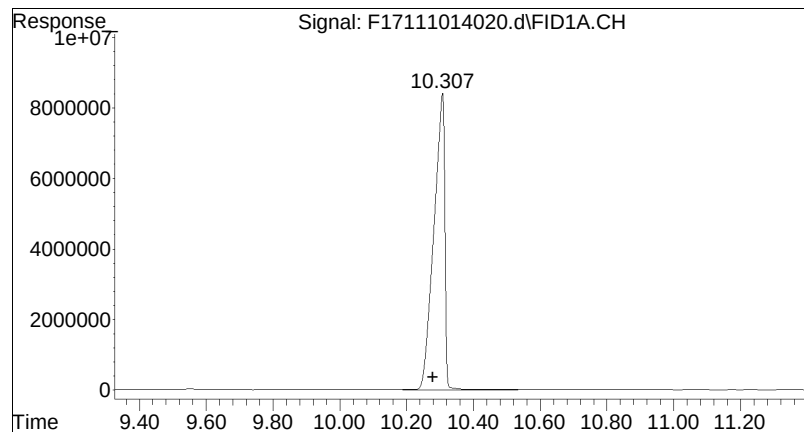
#2 n-Octane (C8)

R.T.: 5.665 min
Delta R.T.: 0.062 min
Response: 179952168
Conc: 193.05 ug/mL M4



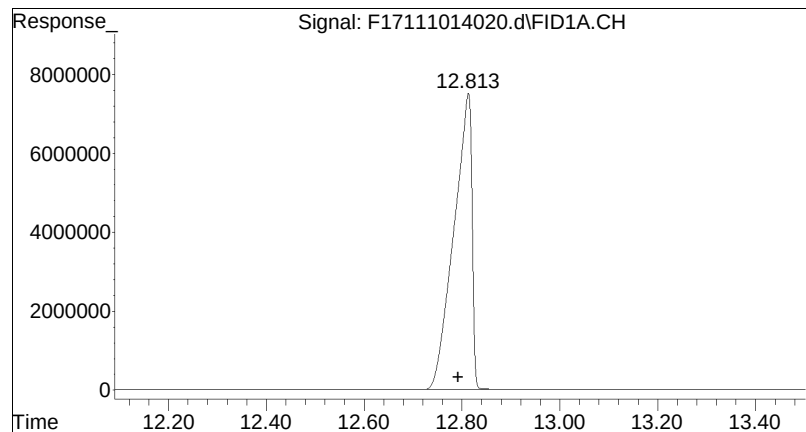
#3 n-Nonane (C9)

R.T.: 7.843 min
Delta R.T.: 0.043 min
Response: 183994497
Conc: 187.87 ug/mL M4



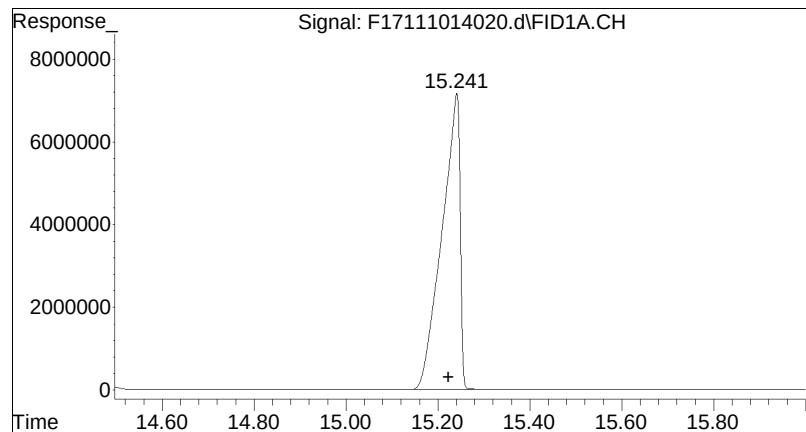
#4 n-Decane (C10)

R.T.: 10.307 min
Delta R.T.: 0.028 min
Response: 190630604
Conc: 185.48 ug/mL M4



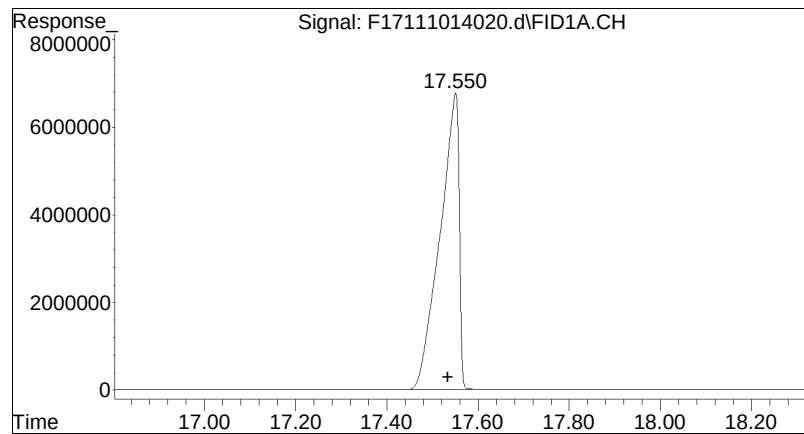
#5 n-Undecane (C11)

R.T.: 12.813 min
Delta R.T.: 0.020 min
Response: 19297776
Conc: 191.40 ug/mL M4



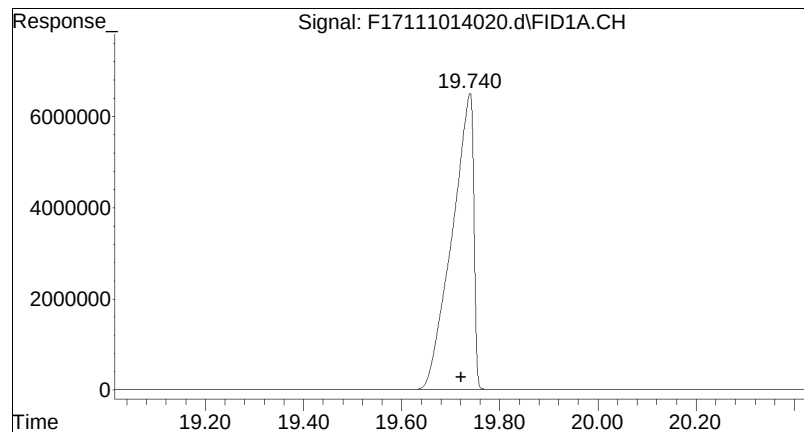
#6 n-Dodecane (C12)

R.T.: 15.241 min
Delta R.T.: 0.017 min
Response: 195722040
Conc: 192.81 ug/mL M4



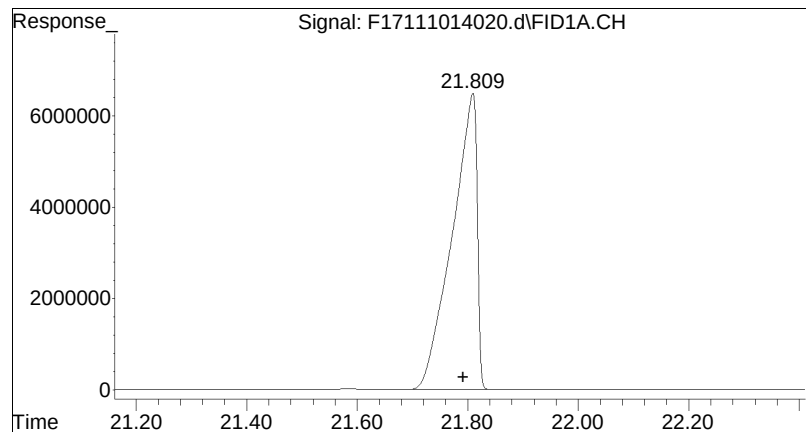
#7 n-Tridecane (C13)

R.T.: 17.550 min
Delta R.T.: 0.016 min
Response: 196451381
Conc: 193.75 ug/mL M4



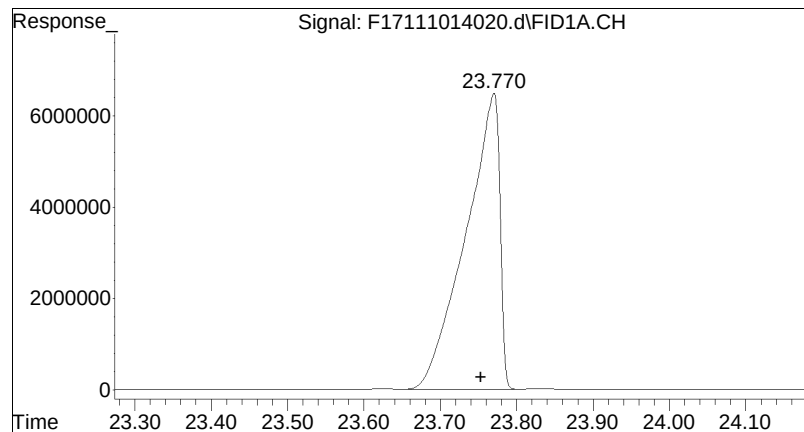
#9 n-Tetradecane (C14)

R.T.: 19.740 min
Delta R.T.: 0.018 min
Response: 198370823
Conc: 188.74 ug/mL M4



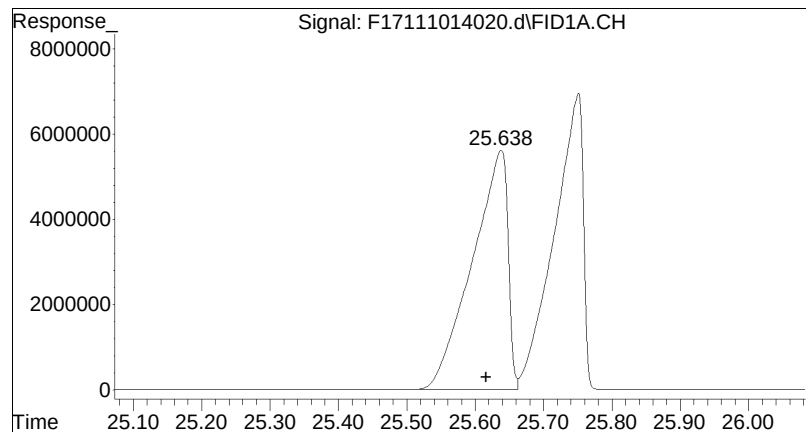
#11 n-Pentadecane (C15)

R.T.: 21.809 min
Delta R.T.: 0.017 min
Response: 201966601
Conc: 194.65 ug/mL M4



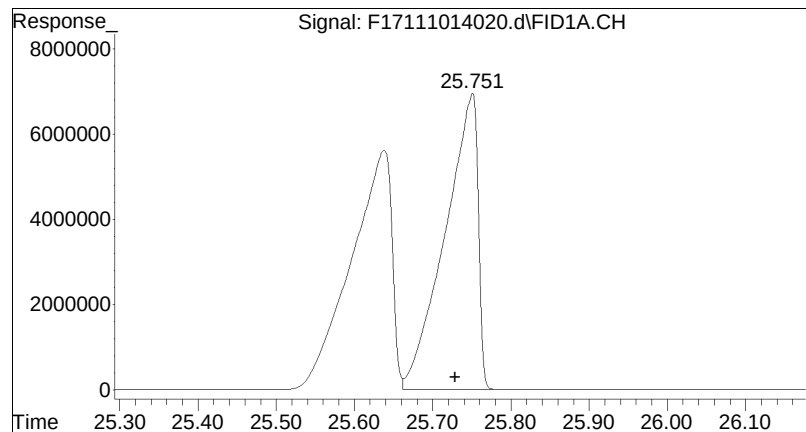
#12 n-Hexadecane (C16)

R.T.: 23.770 min
Delta R.T.: 0.017 min
Response: 201302145
Conc: 192.52 ug/mL M4



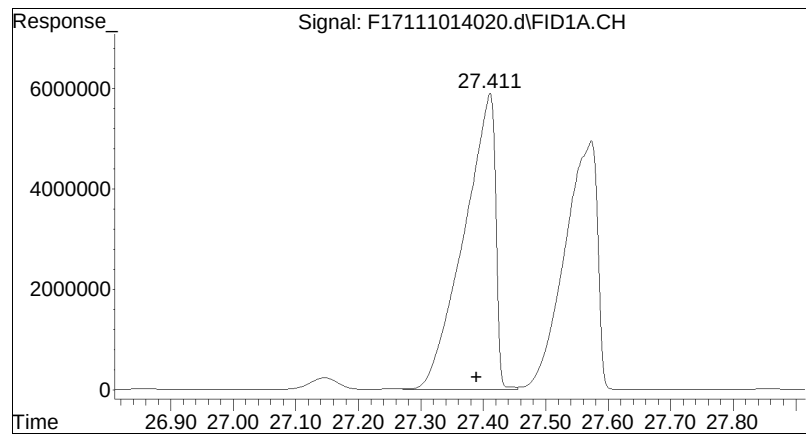
#14 n-Heptadecane (C17)

R.T.: 25.638 min
Delta R.T.: 0.021 min
Response: 203355194
Conc: 193.46 ug/mL M4



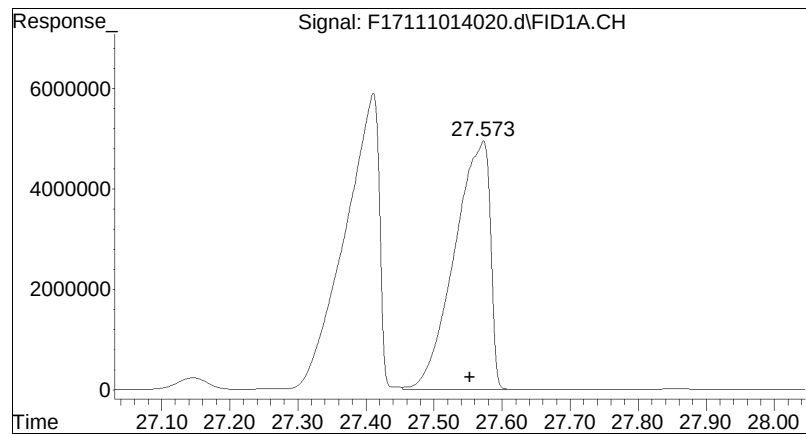
#15 Pristane

R.T.: 25.751 min
Delta R.T.: 0.022 min
Response: 203706839
Conc: 193.34 ug/mL M4



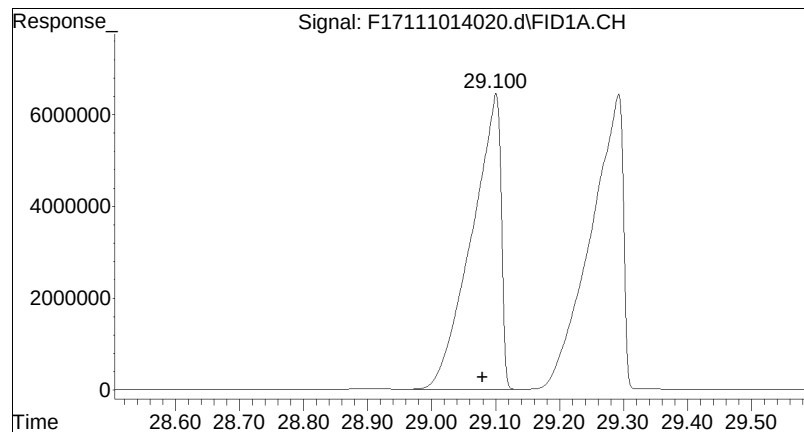
#16 n-Octadecane (C18)

R.T.: 27.411 min
Delta R.T.: 0.021 min
Response: 206512059
Conc: 197.67 ug/mL M4



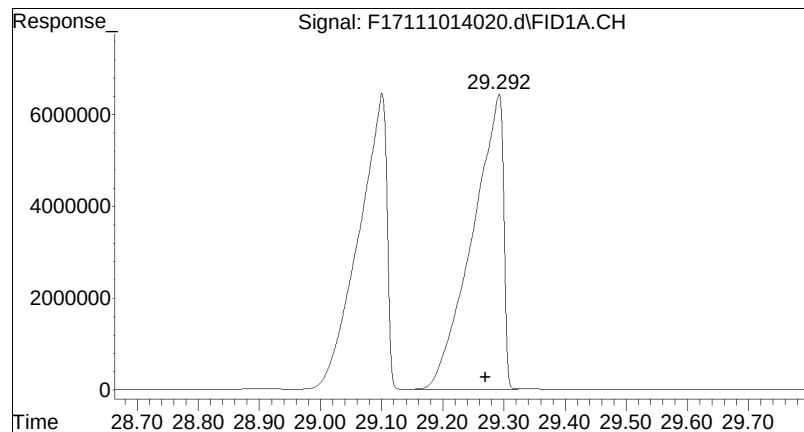
#17 Phytane

R.T.: 27.573 min
Delta R.T.: 0.020 min
Response: 180095179
Conc: 169.68 ug/mL M4



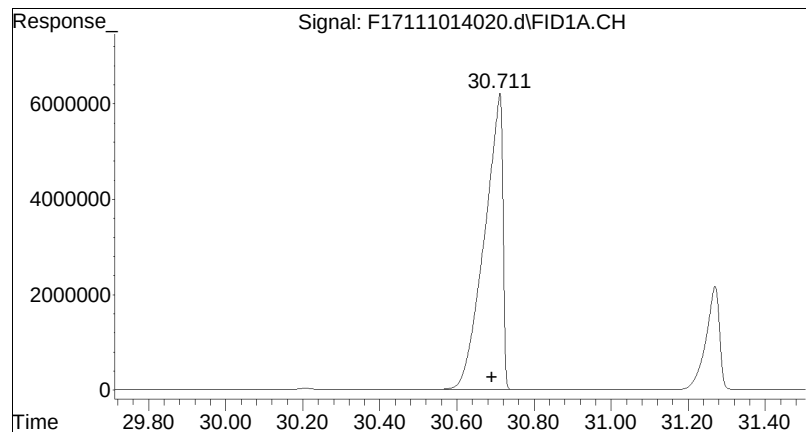
#18 n-Nonadecane (C19)

R.T.: 29.100 min
Delta R.T.: 0.020 min
Response: 205137349
Conc: 197.47 ug/mL M4



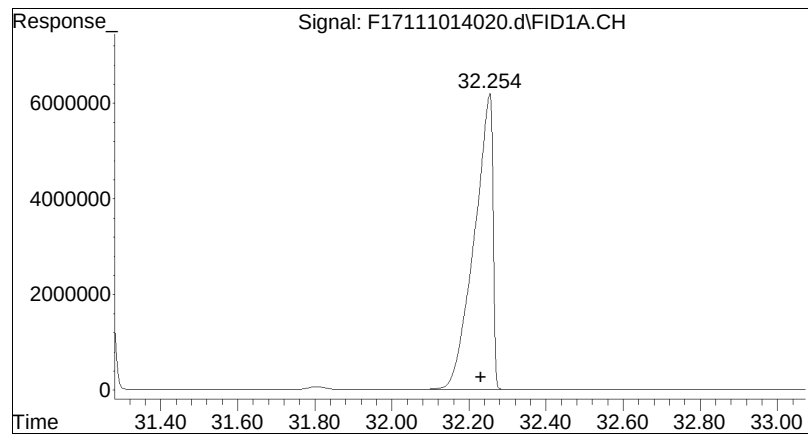
#19 ortho-terphenyl

R.T.: 29.292 min
Delta R.T.: 0.021 min
Response: 226451625
Conc: 192.11 ug/mL M4



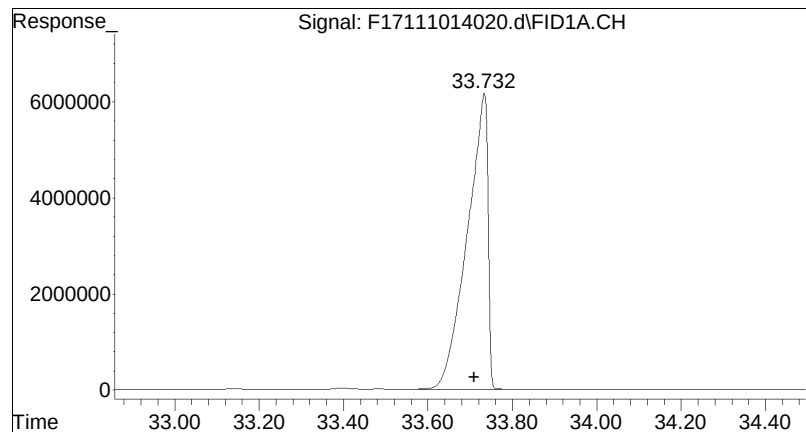
#20 n-Eicosane (C20)

R.T.: 30.711 min
Delta R.T.: 0.020 min
Response: 204858567
Conc: 196.29 ug/mL M4



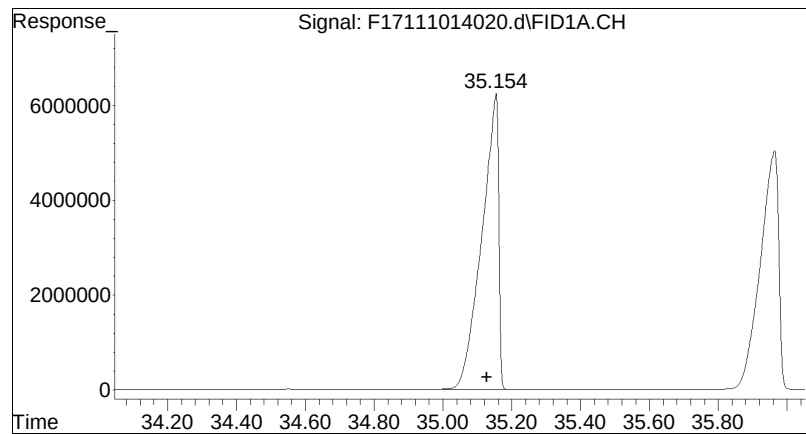
#21 n-Heneicosane (C21)

R.T.: 32.254 min
Delta R.T.: 0.024 min
Response: 206881190
Conc: 195.99 ug/mL M4



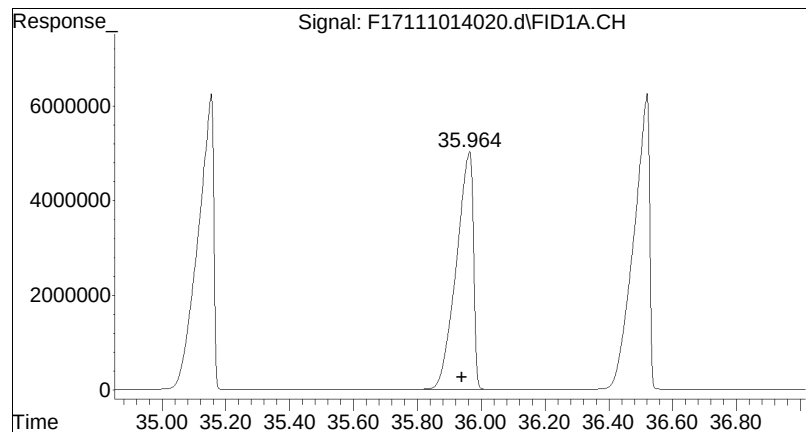
#22 n-Docosane (C22)

R.T.: 33.732 min
Delta R.T.: 0.023 min
Response: 209103777
Conc: 196.98 ug/mL M4



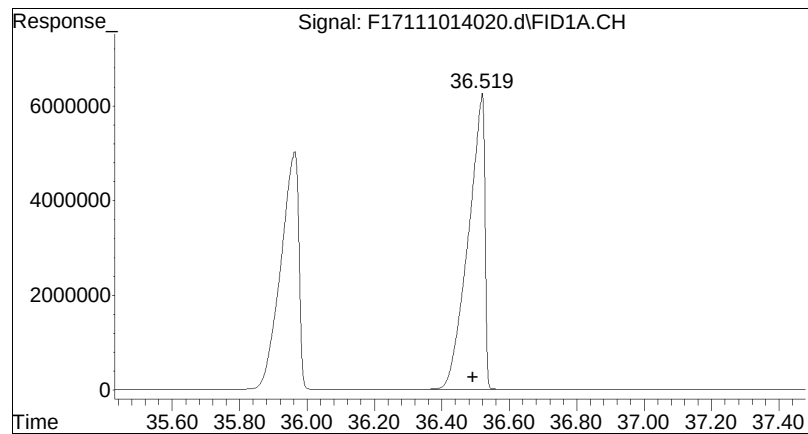
#23 n-Tricosane (C23)

R.T.: 35.154 min
Delta R.T.: 0.026 min
Response: 21118913
Conc: 197.75 ug/mL M4



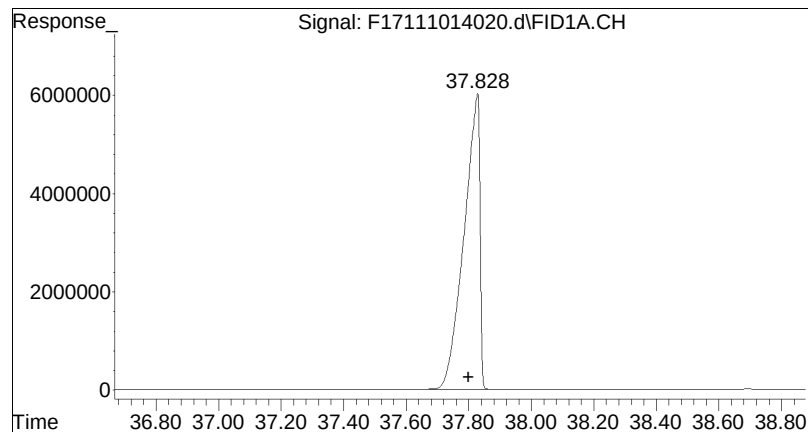
#24 d50-Tetracosane

R.T.: 35.964 min
Delta R.T.: 0.024 min
Response: 185908620
Conc: 199.86 ug/mL M4



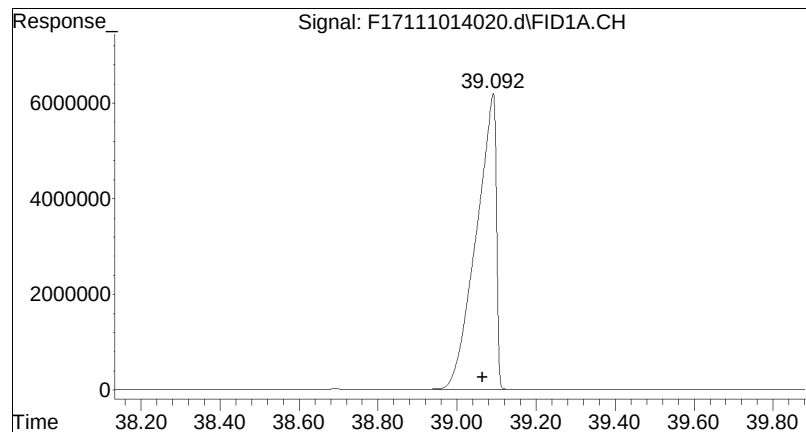
#25 n-Tetracosane (C24)

R.T.: 36.519 min
Delta R.T.: 0.026 min
Response: 212476278
Conc: 198.79 ug/mL M4



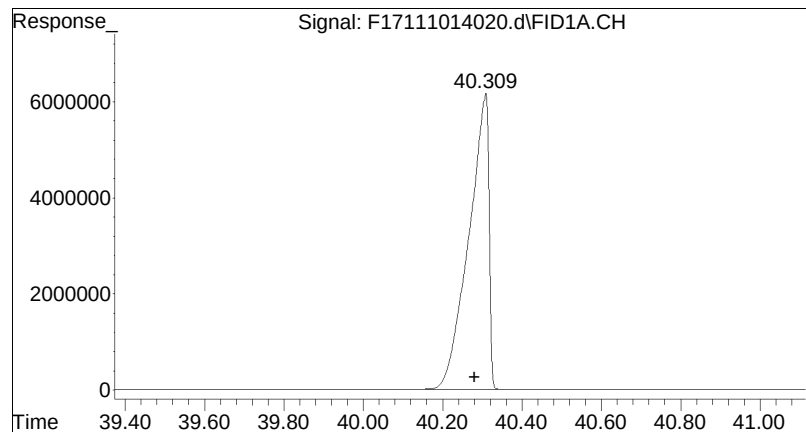
#26 n-Pentacosane (C25)

R.T.: 37.828 min
Delta R.T.: 0.028 min
Response: 211377509
Conc: 197.09 ug/mL M4



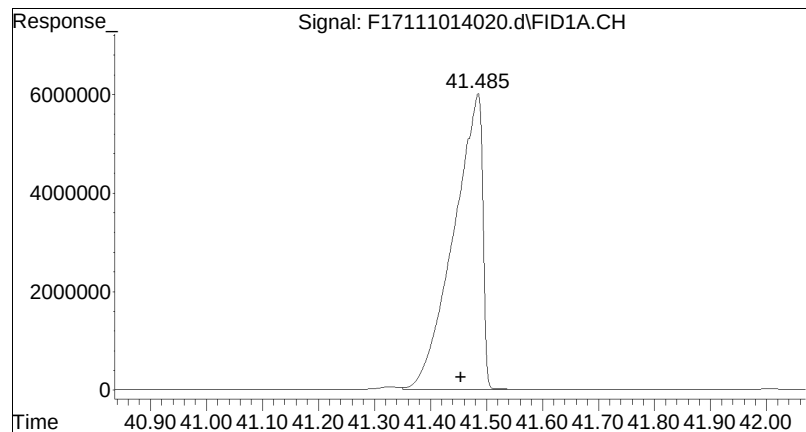
#27 n-Hexacosane (C26)

R.T.: 39.092 min
Delta R.T.: 0.027 min
Response: 216859002
Conc: 198.09 ug/mL M4



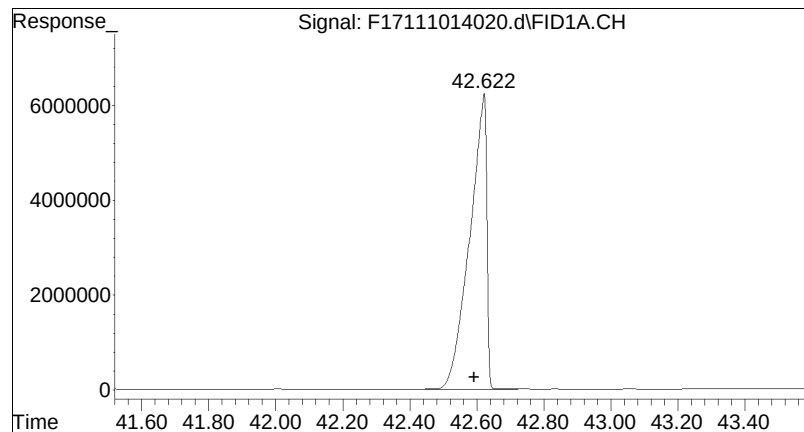
#28 n-Heptacosane (C27)

R.T.: 40.309 min
Delta R.T.: 0.027 min
Response: 215525451
Conc: 198.36 ug/mL M4



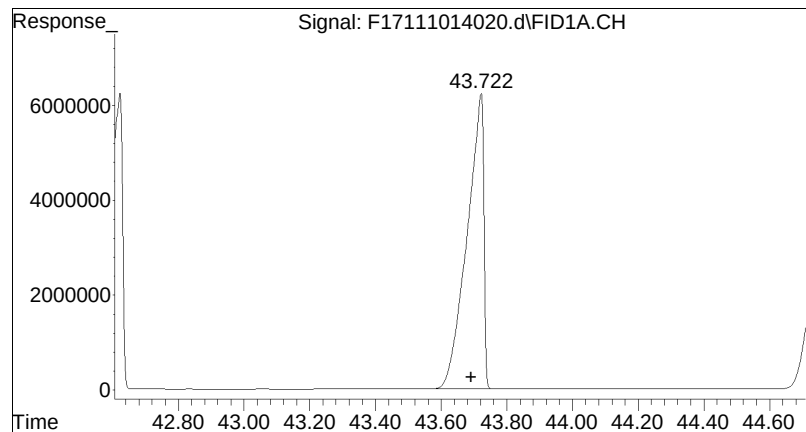
#29 n-Octacosane (C28)

R.T.: 41.485 min
Delta R.T.: 0.031 min
Response: 215543841
Conc: 197.76 ug/mL M4



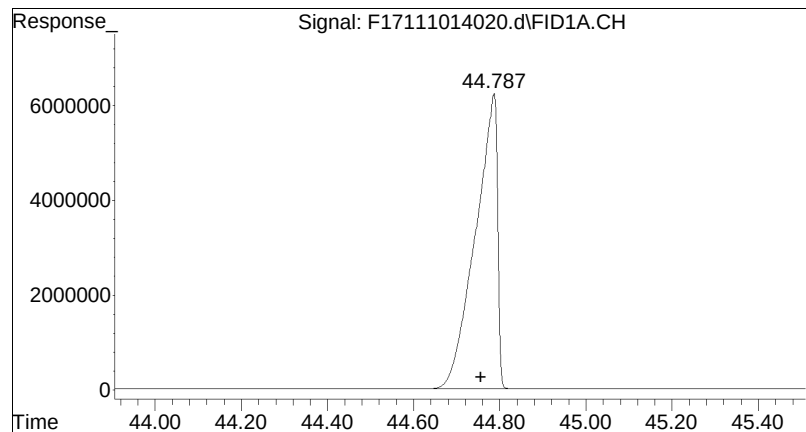
#30 n-Nonacosane (C29)

R.T.: 42.622 min
Delta R.T.: 0.029 min
Response: 218200394
Conc: 198.38 ug/mL M4



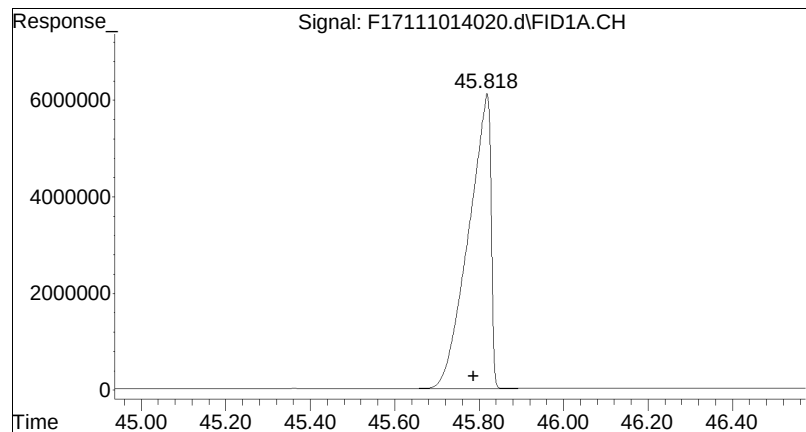
#31 n-Triacontane (C30)

R.T.: 43.722 min
Delta R.T.: 0.031 min
Response: 219666383
Conc: 199.05 ug/mL M4



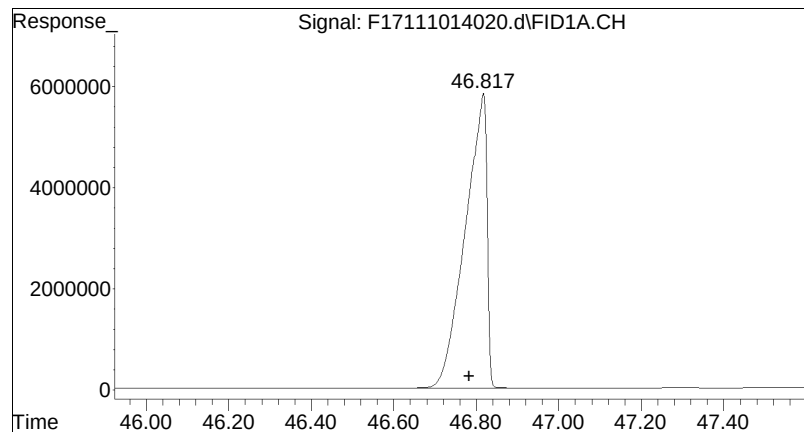
#32 n-Hentriacontane (C31)

R.T.: 44.787 min
Delta R.T.: 0.030 min
Response: 220837166
Conc: 198.58 ug/mL M4



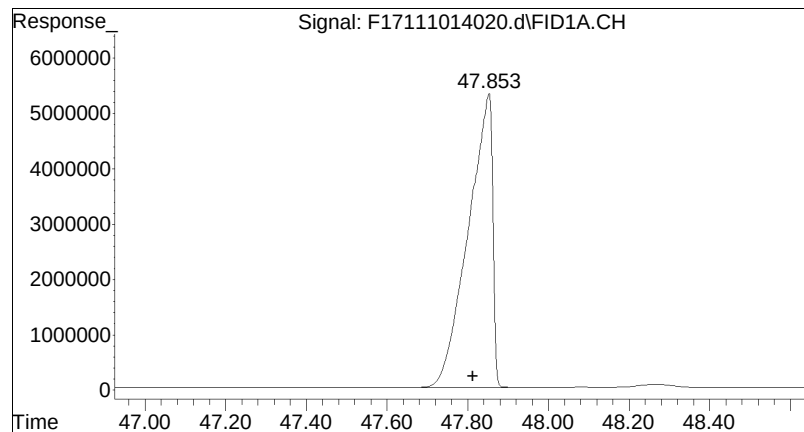
#33 n-Dotriacontane (C32)

R.T.: 45.818 min
Delta R.T.: 0.032 min
Response: 223659667
Conc: 202.30 ug/mL M4



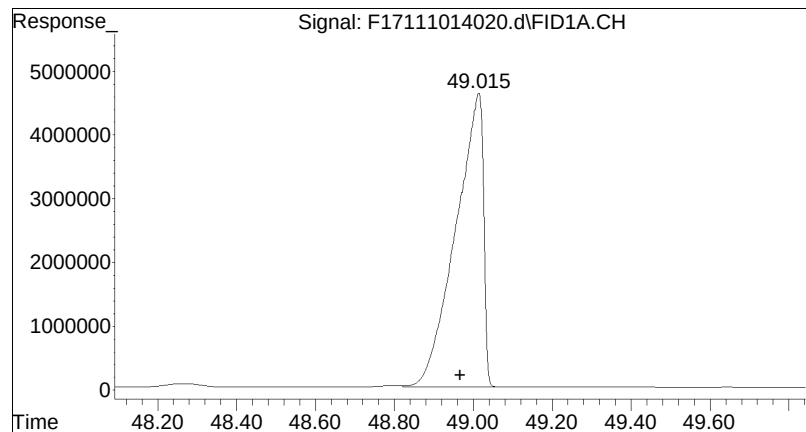
#34 n-Tritriacontane (C33)

R.T.: 46.817 min
Delta R.T.: 0.034 min
Response: 212305009
Conc: 197.69 ug/mL M4



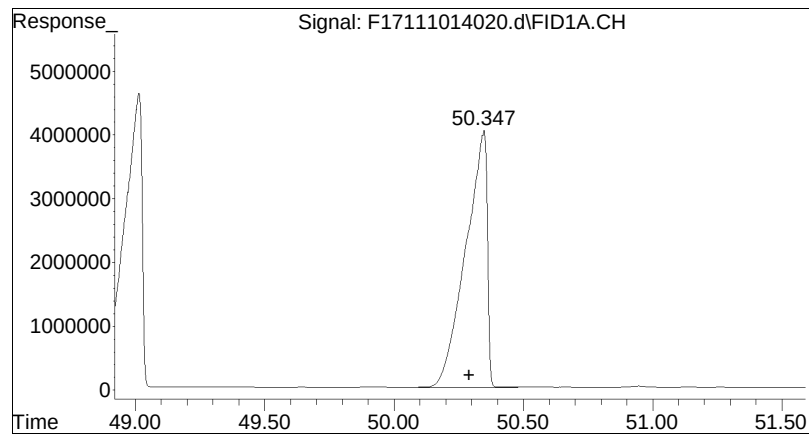
#35 n-tetratriacontane (C34)

R.T.: 47.853 min
Delta R.T.: 0.040 min
Response: 222719308
Conc: 195.40 ug/mL M4



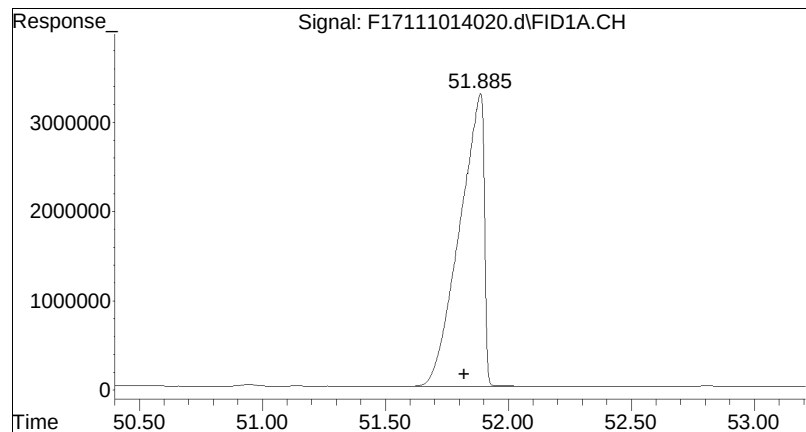
#36 n-Pentatriacontane (C35)

R.T.: 49.015 min
Delta R.T.: 0.047 min
Response: 225244106
Conc: 198.63 ug/mL M4



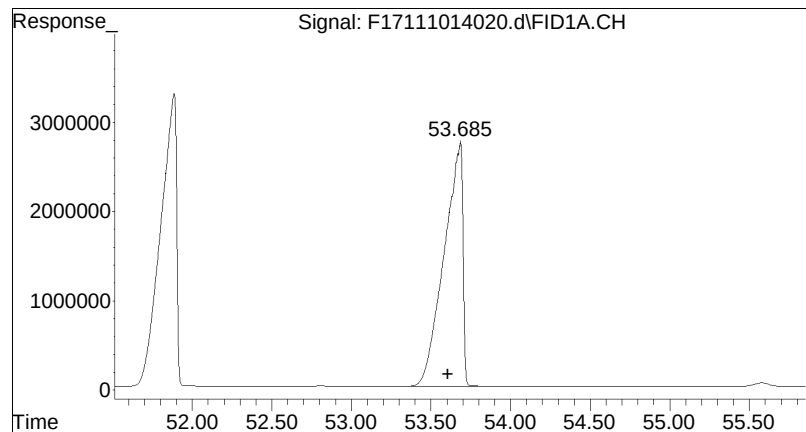
#37 n-Hexatriacontane (C36)

R.T.: 50.347 min
Delta R.T.: 0.055 min
Response: 231762250
Conc: 188.76 ug/mL M4



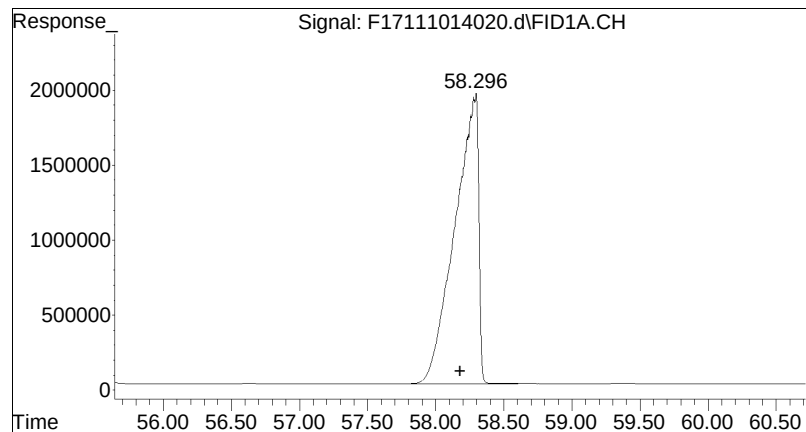
#38 n-Heptatriacontane (C37)

R.T.: 51.885 min
Delta R.T.: 0.063 min
Response: 226986888
Conc: 198.14 ug/mL M4



#39 n-Octatriacontane (C38)

R.T.: 53.685 min
Delta R.T.: 0.078 min
Response: 222999979
Conc: 194.79 ug/mL M4



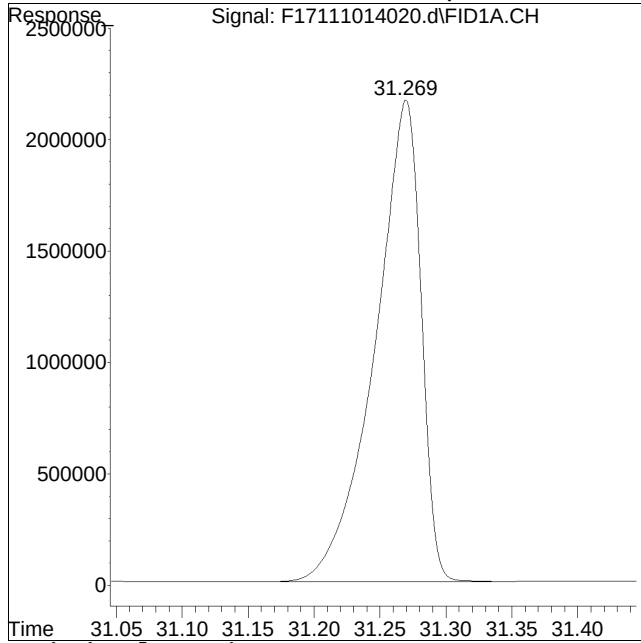
#41 n-Tetracontane (C40)

R.T.: 58.296 min
Delta R.T.: 0.118 min
Response: 232479117
Conc: 211.08 ug/mL M4

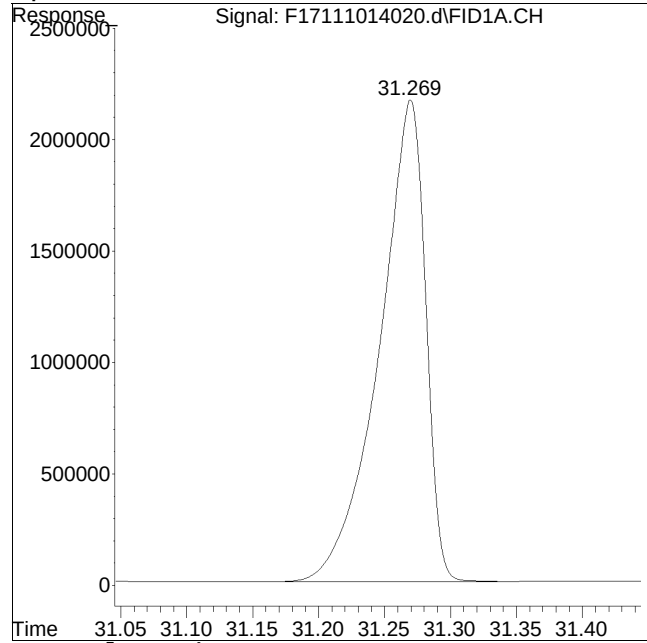
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #1: 5-alpha-androstane



Original Peak Response = 52594049



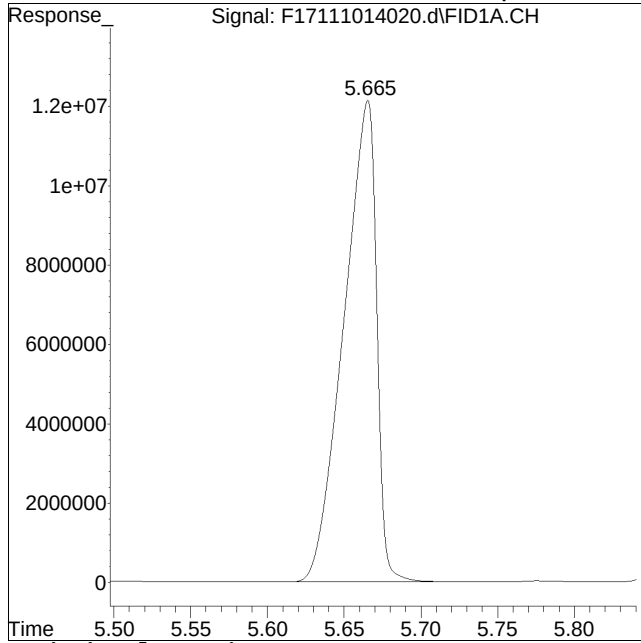
Manual Peak Response = 52608463 M4

M4 = Poor automated baseline construction.

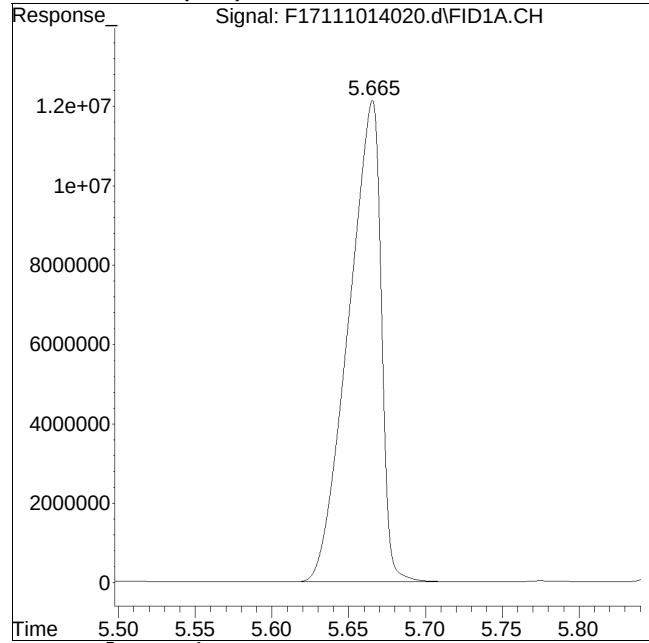
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #2: n-Octane (C8)



Original Peak Response = 179947142



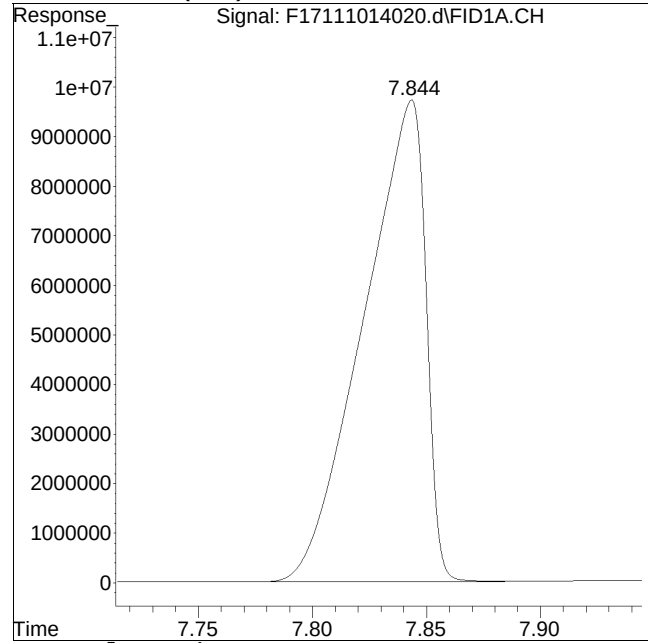
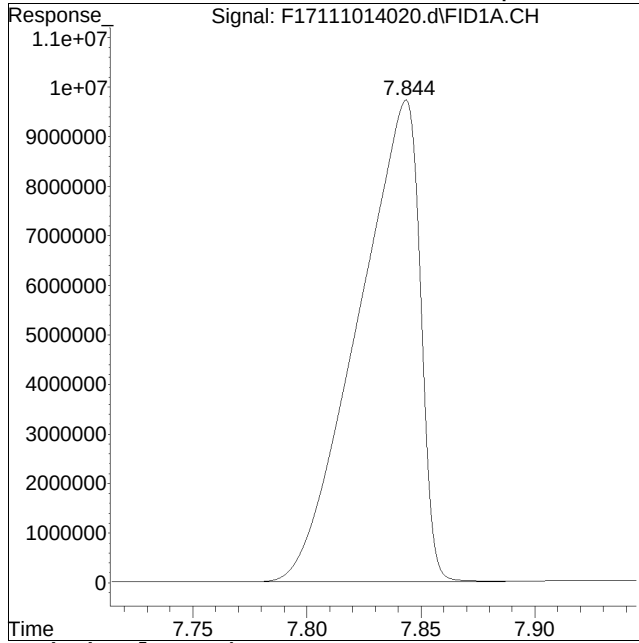
Manual Peak Response = 179952168 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #3: n-Nonane (C9)



Original Peak Response = 184176484

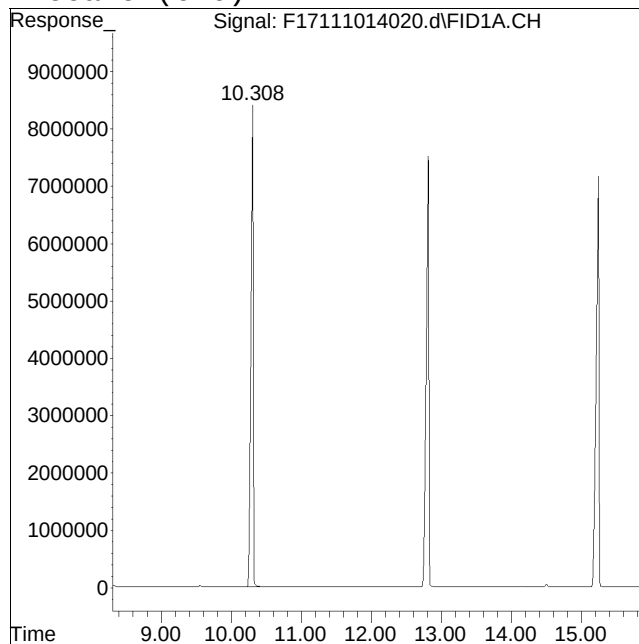
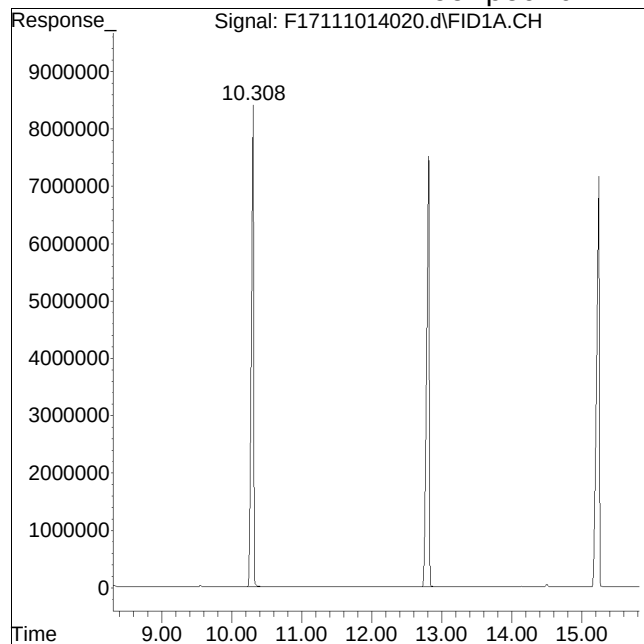
Manual Peak Response = 183994497 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
 Data File : F17111014020.d Operator : FID17:NL
 Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
 Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #4: n-Decane (C10)



Original Peak Response = 188681070

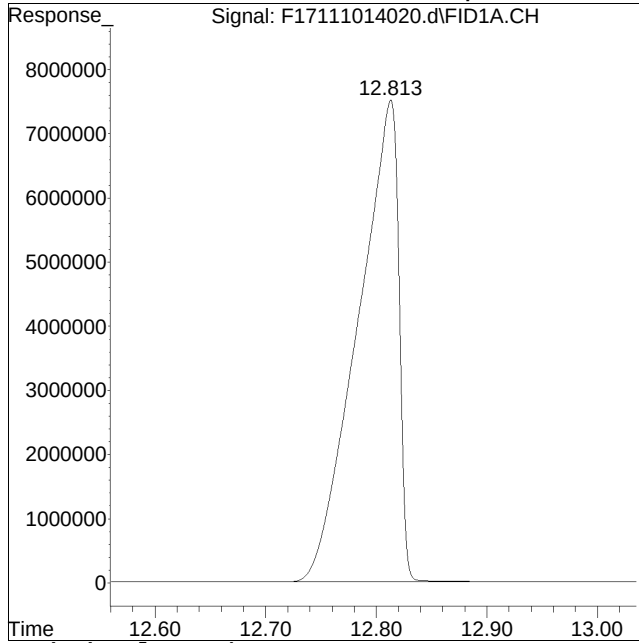
Manual Peak Response = 190630604 M4

M4 = Poor automated baseline construction.

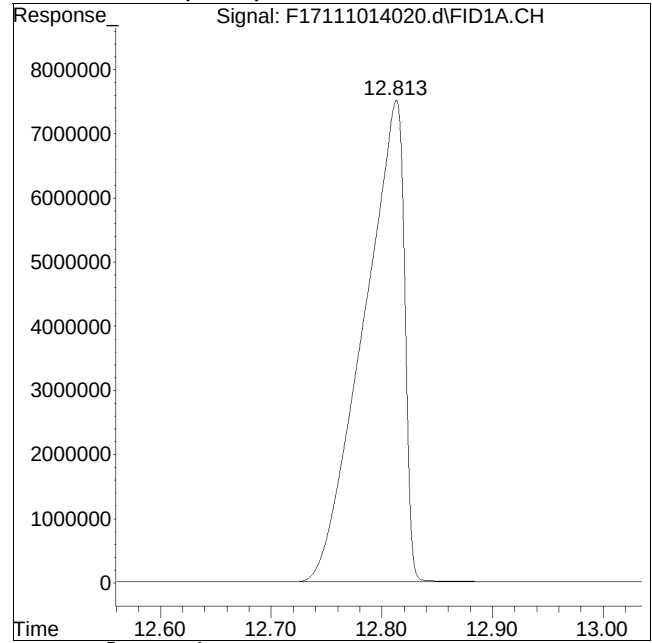
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #5: n-Undecane (C11)



Original Peak Response = 192984123



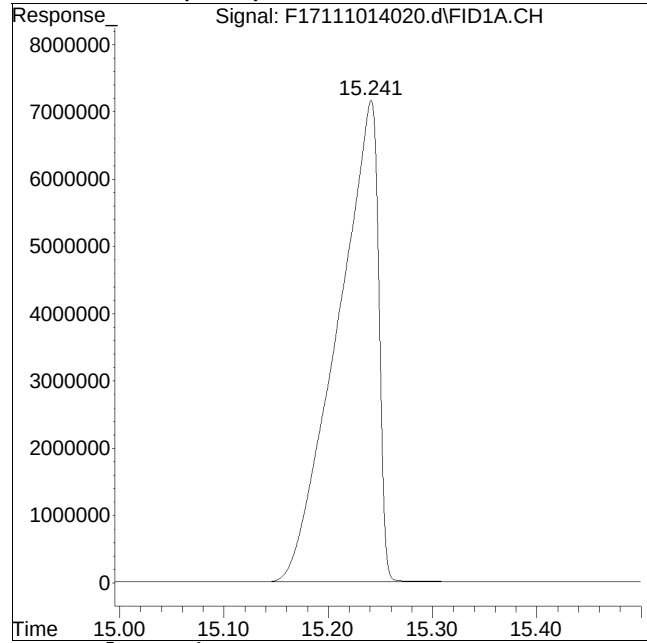
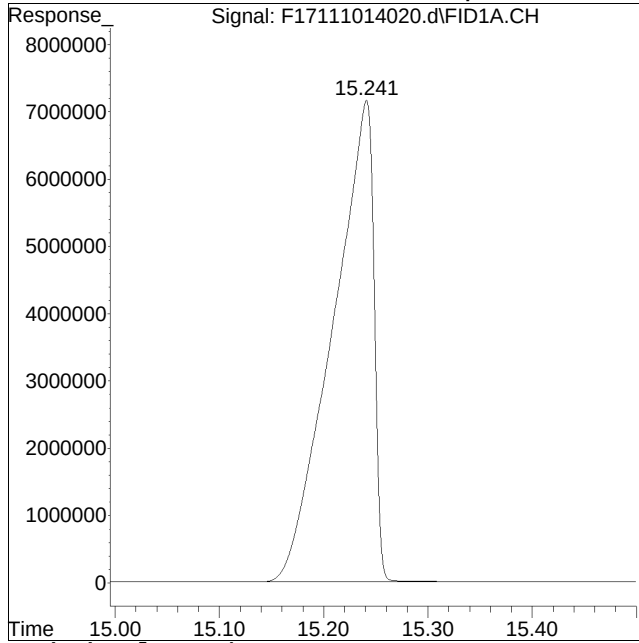
Manual Peak Response = 192977776 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #6: n-Dodecane (C12)



Original Peak Response = 195713454

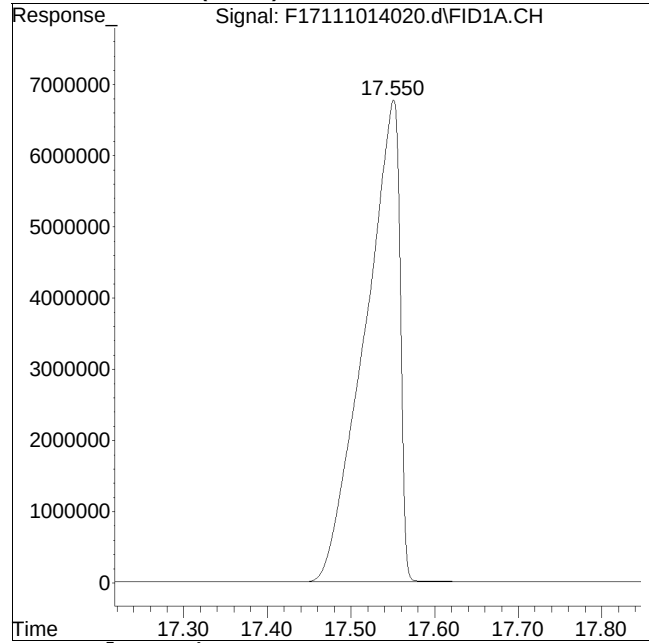
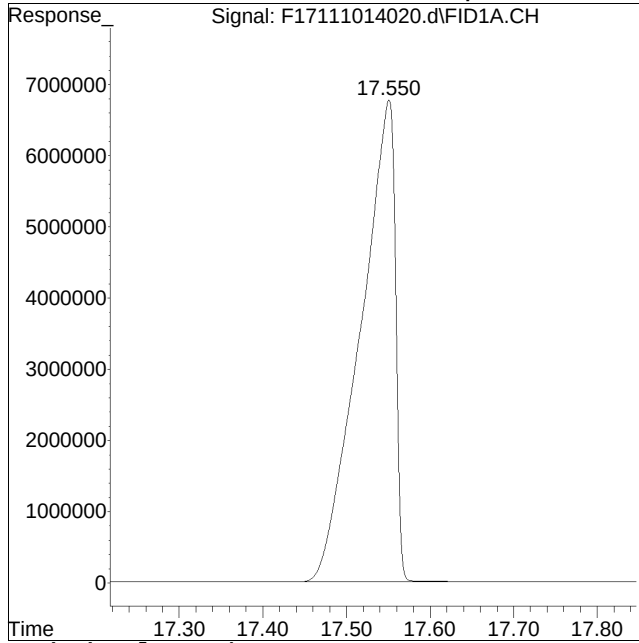
Manual Peak Response = 195722040 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #7: n-Tridecane (C13)



Original Peak Response = 196477164

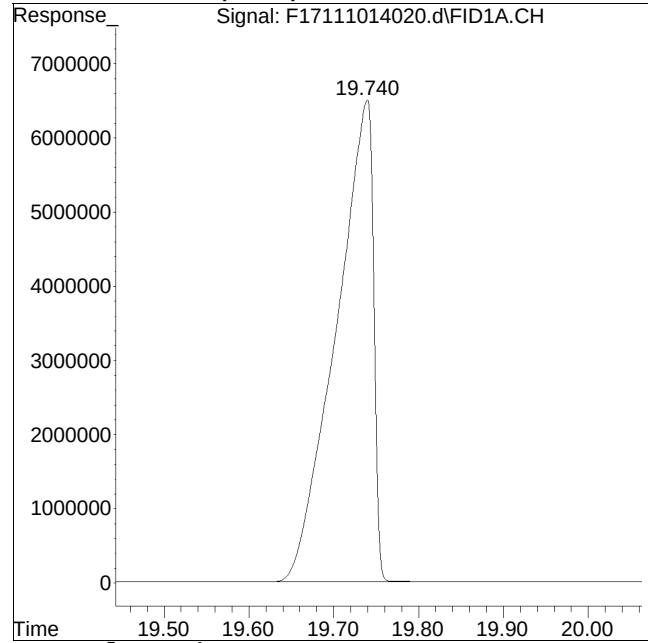
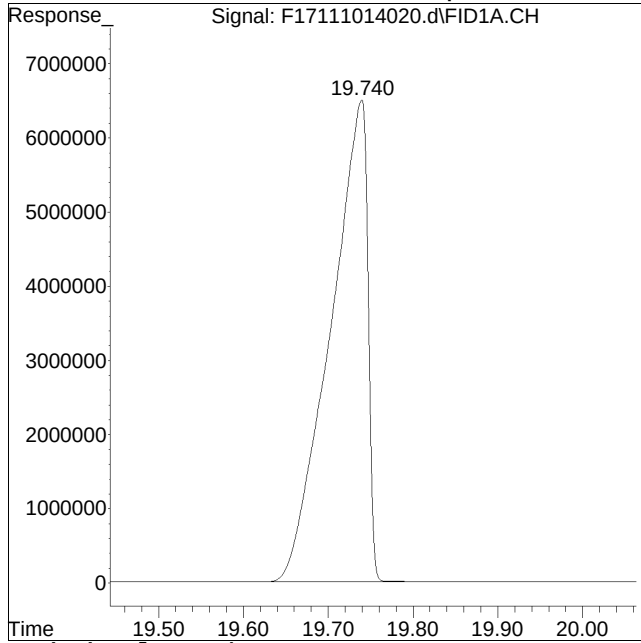
Manual Peak Response = 196451381 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #9: n-Tetradecane (C14)



Original Peak Response = 198425471

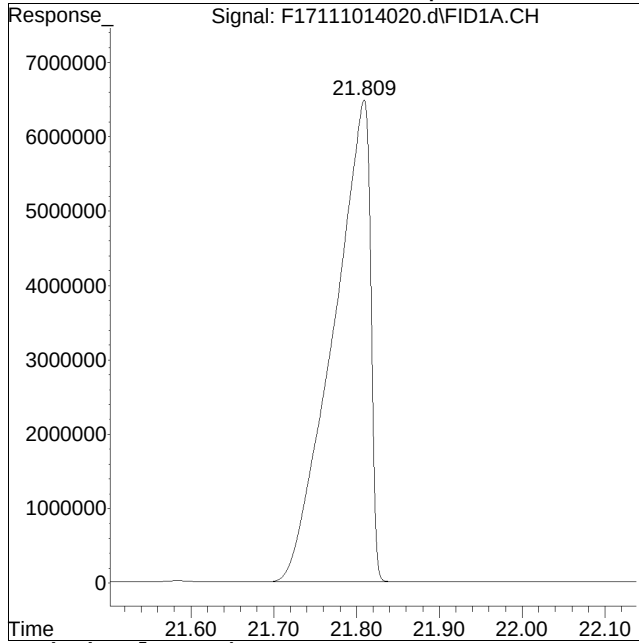
Manual Peak Response = 198370823 M4

M4 = Poor automated baseline construction.

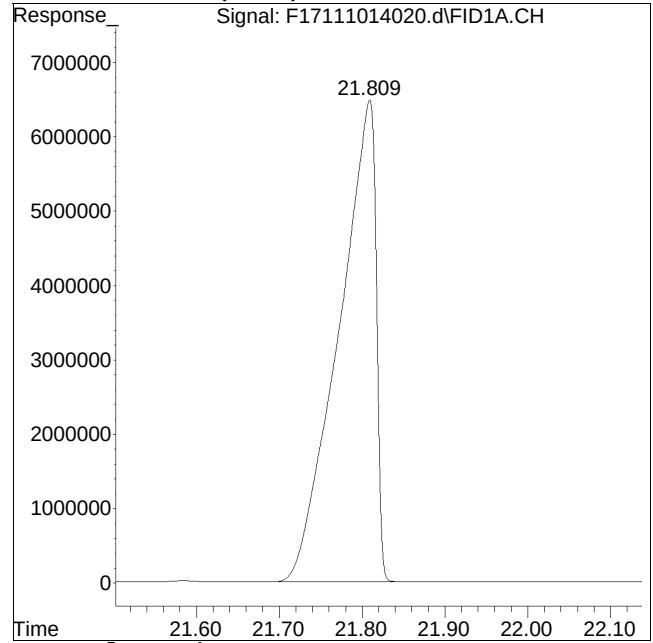
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #11: n-Pentadecane (C15)



Original Peak Response = 202043606



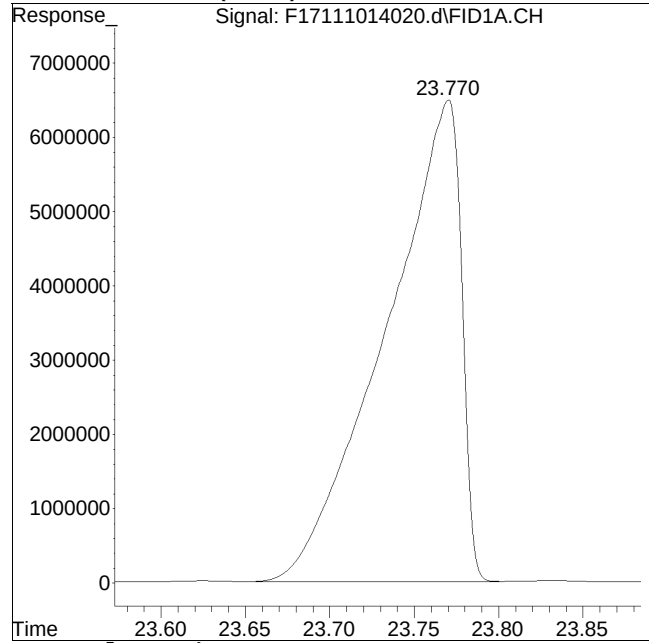
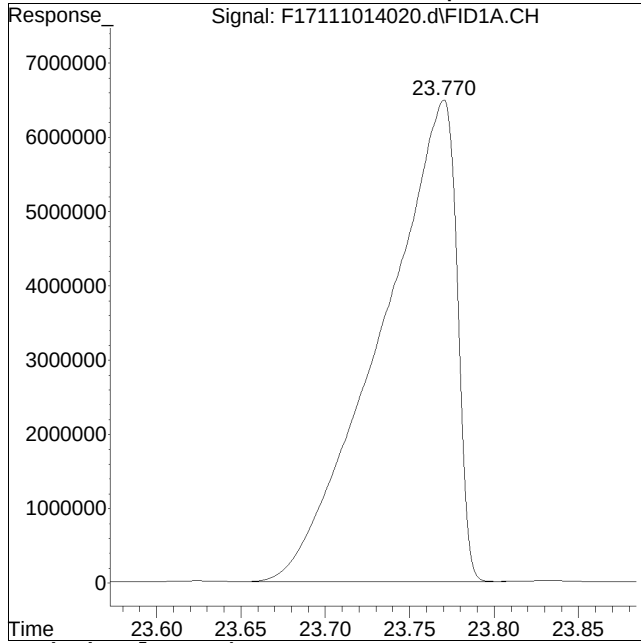
Manual Peak Response = 201966601 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #12: n-Hexadecane (C16)



Original Peak Response = 201304134

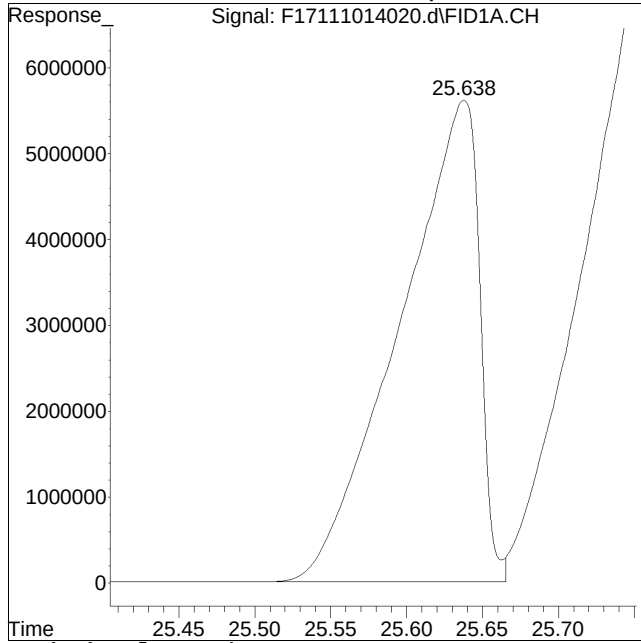
Manual Peak Response = 201302145 M4

M4 = Poor automated baseline construction.

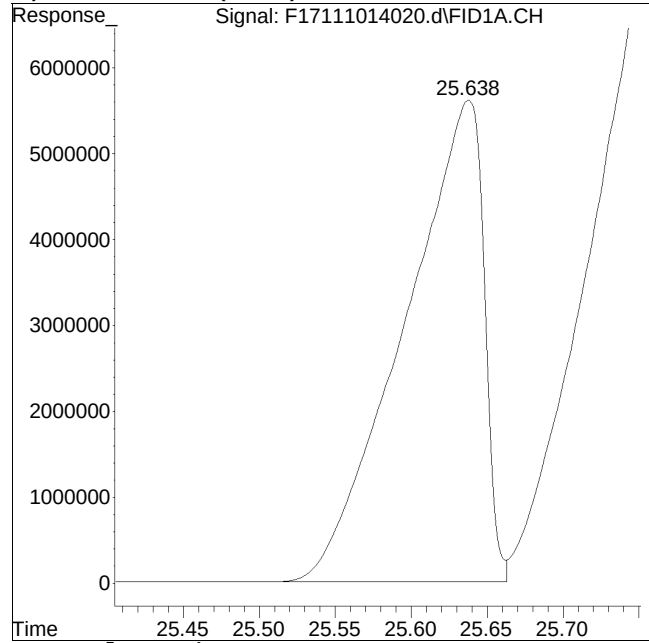
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #14: n-Heptadecane (C17)



Original Peak Response = 203853308



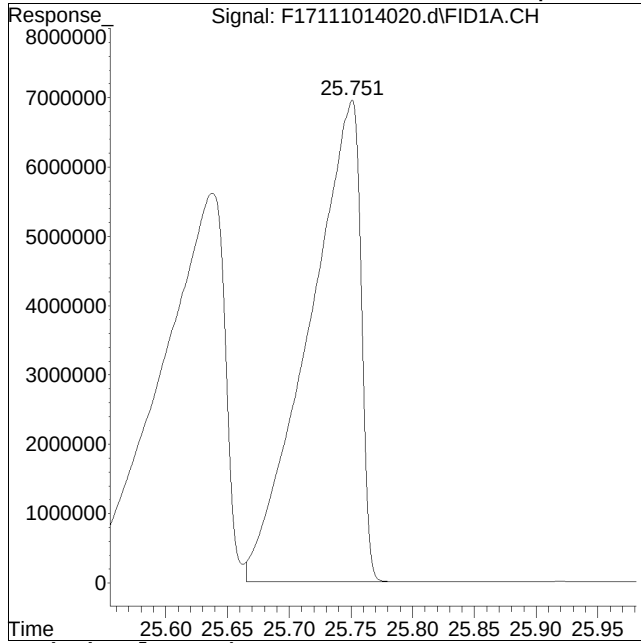
Manual Peak Response = 203355194 M4

M4 = Poor automated baseline construction.

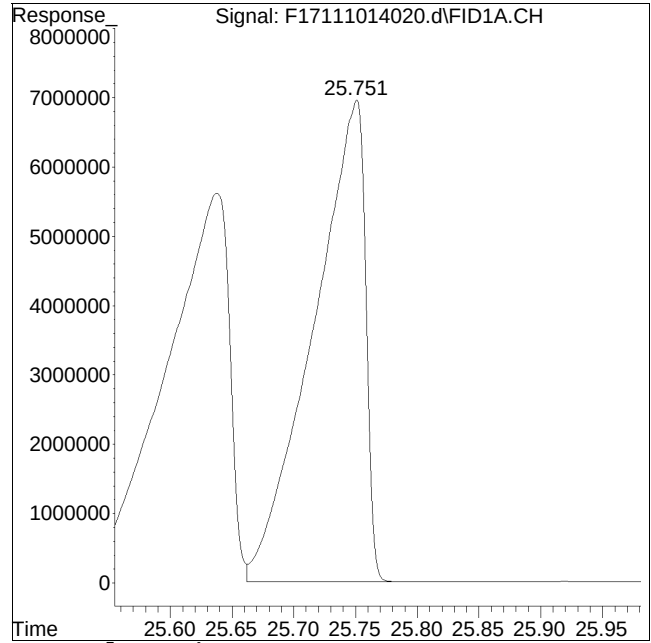
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #15: Pristane



Original Peak Response = 203372327



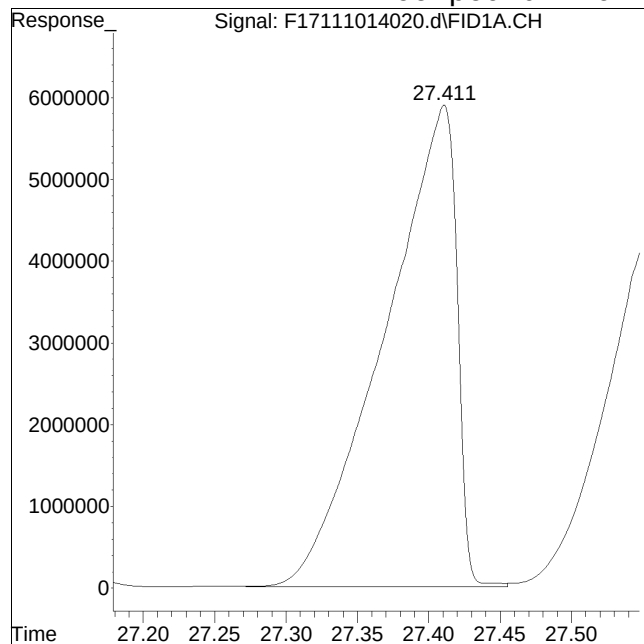
Manual Peak Response = 203706839 M4

M4 = Poor automated baseline construction.

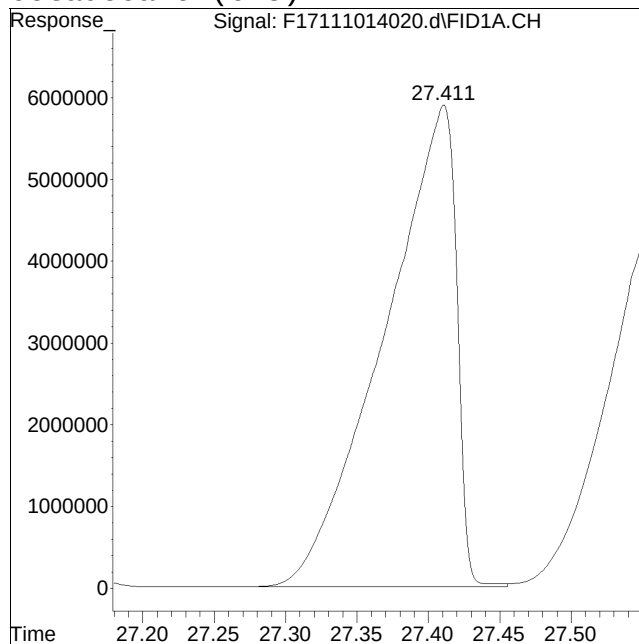
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
 Data File : F17111014020.d Operator : FID17:NL
 Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
 Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #16: n-Octadecane (C18)



Original Peak Response = 206820252



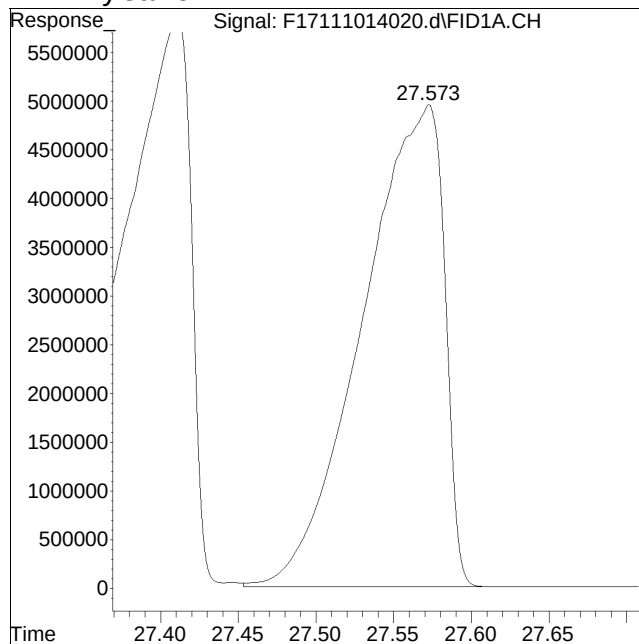
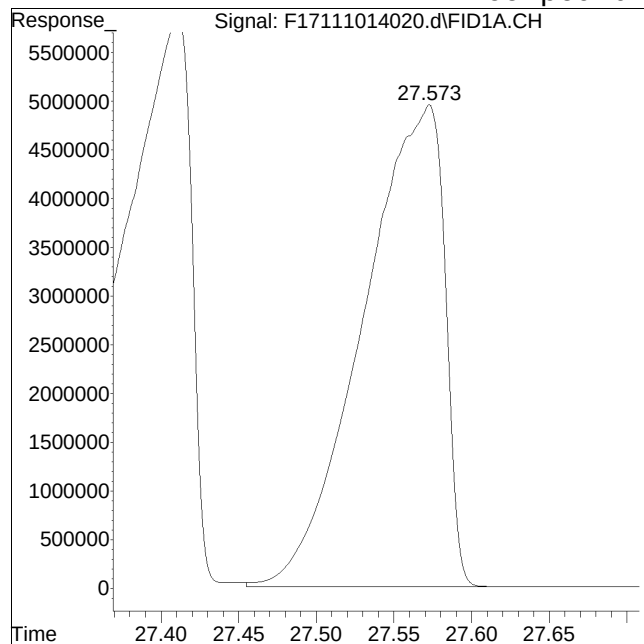
Manual Peak Response = 206512059 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
 Data File : F17111014020.d Operator : FID17:NL
 Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
 Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #17: Phytane



Original Peak Response = 180203530

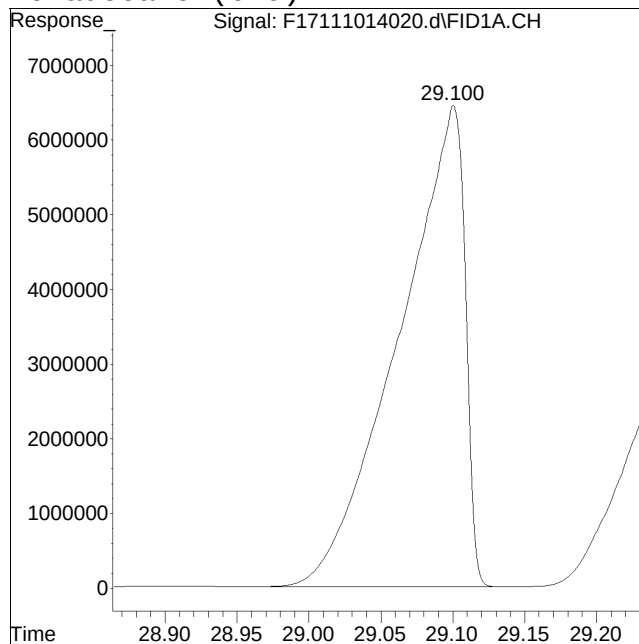
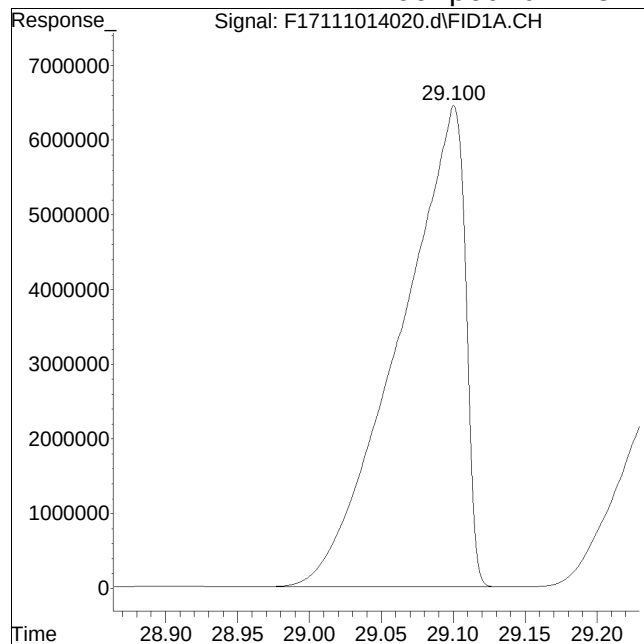
Manual Peak Response = 180095179 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
 Data File : F17111014020.d Operator : FID17:NL
 Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
 Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #18: n-Nonadecane (C19)



Original Peak Response = 204759429

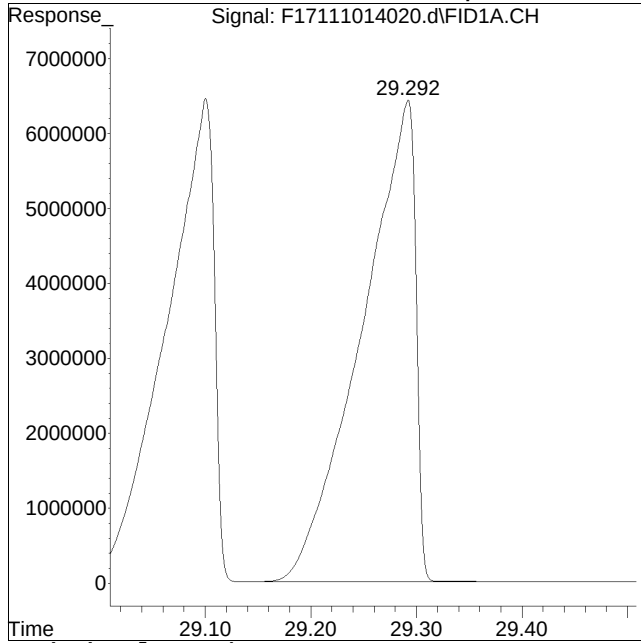
Manual Peak Response = 205137349 M4

M4 = Poor automated baseline construction.

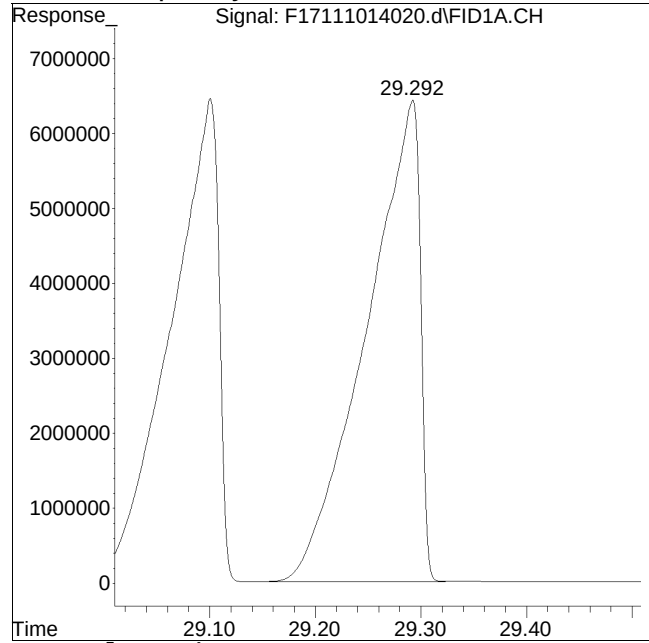
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #19: ortho-terphenyl



Original Peak Response = 226252762



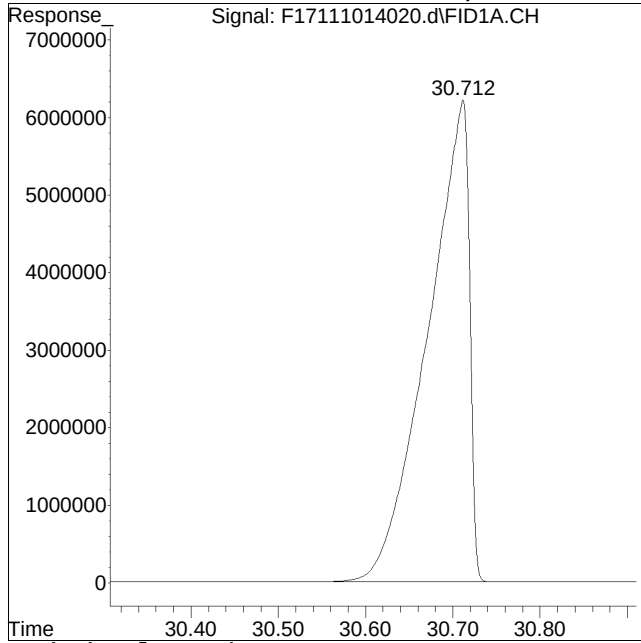
Manual Peak Response = 226451625 M4

M4 = Poor automated baseline construction.

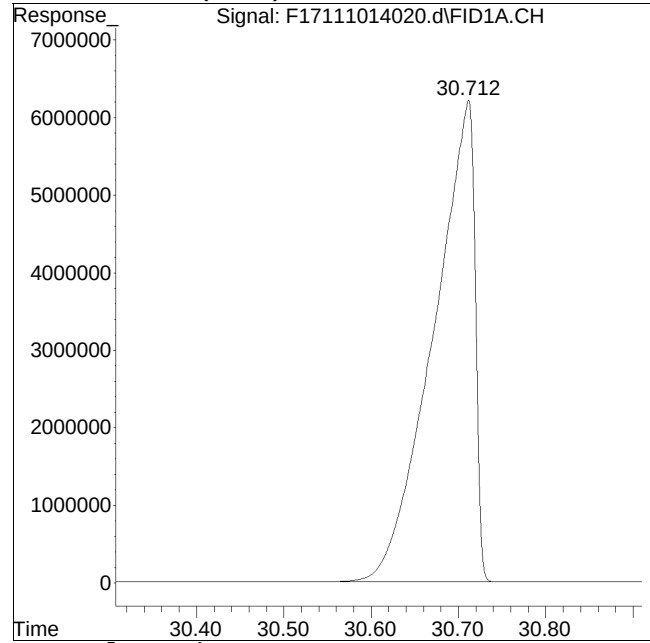
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #20: n-Eicosane (C20)



Original Peak Response = 204977130



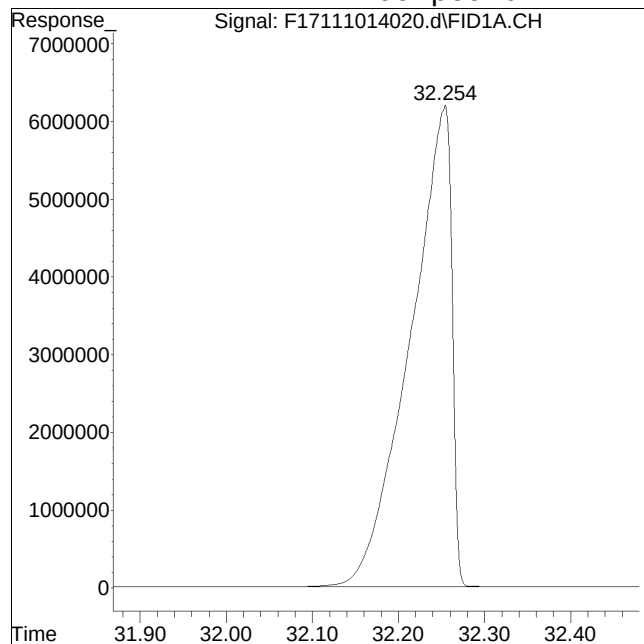
Manual Peak Response = 204858567 M4

M4 = Poor automated baseline construction.

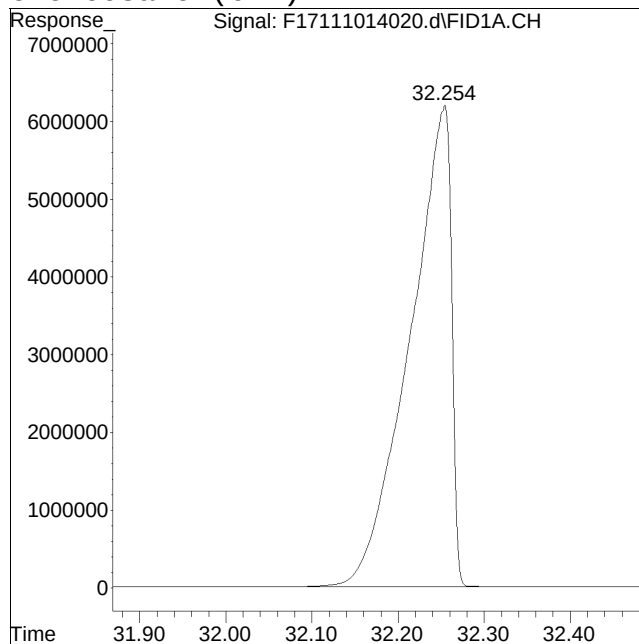
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #21: n-Heneicosane (C21)



Original Peak Response = 206843558



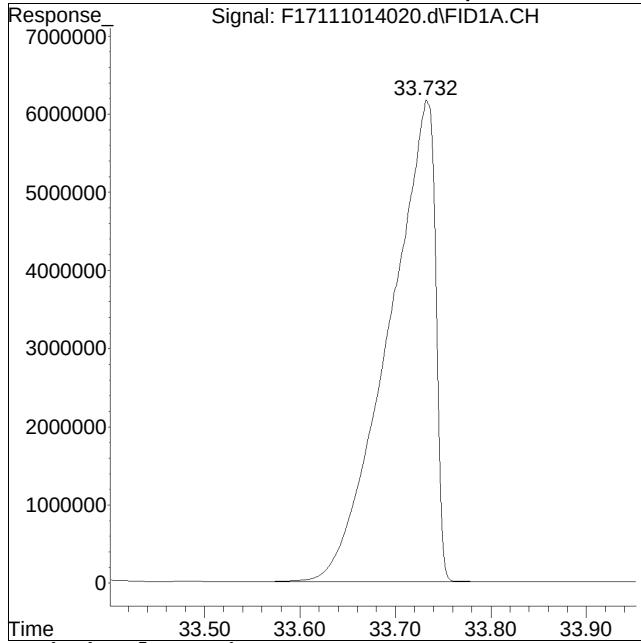
Manual Peak Response = 206881190 M4

M4 = Poor automated baseline construction.

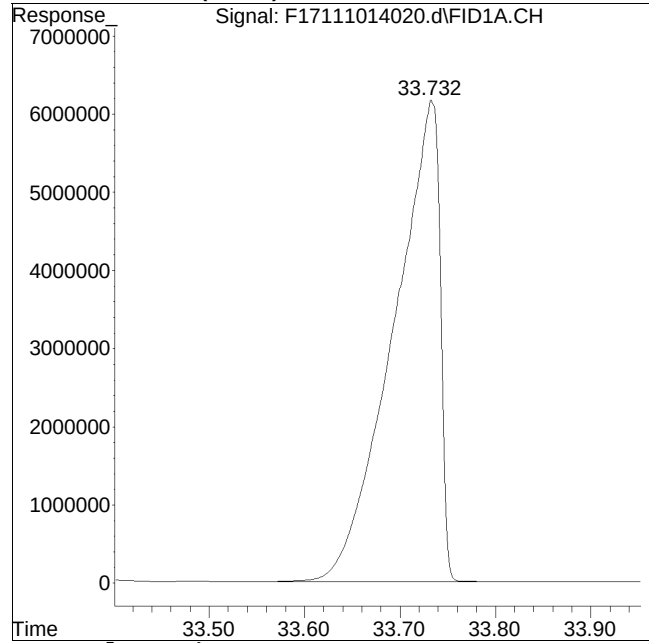
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #22: n-Docosane (C22)



Original Peak Response = 209031287



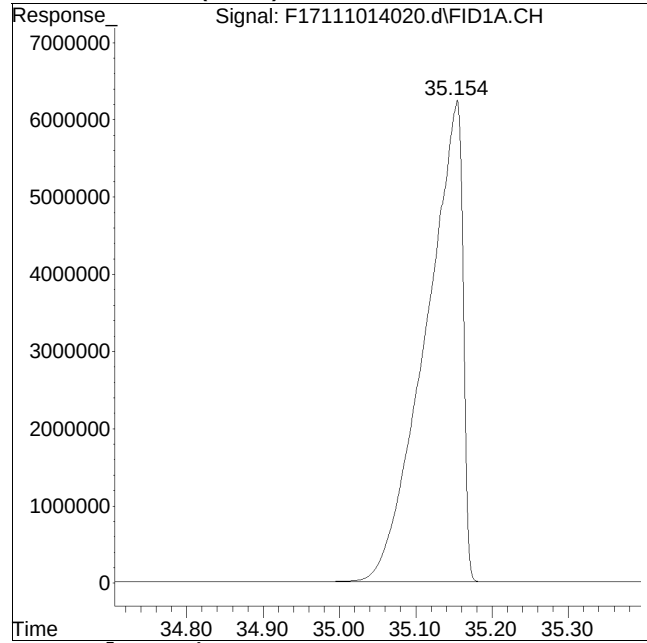
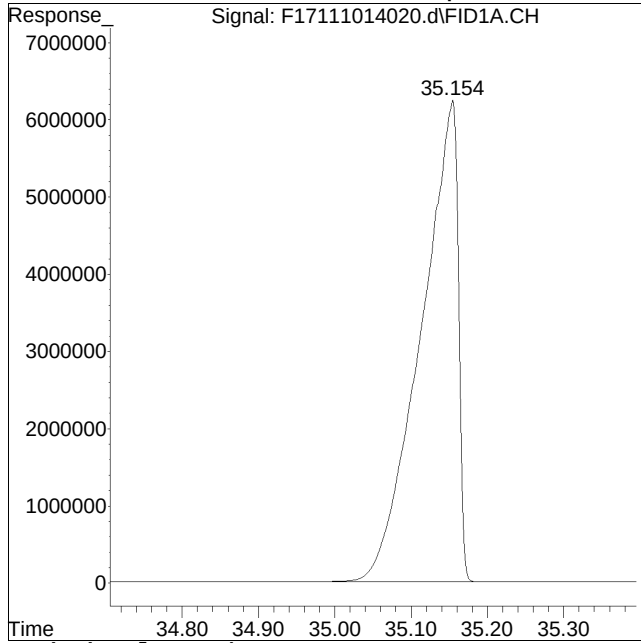
Manual Peak Response = 209103777 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #23: n-Tricosane (C23)



Original Peak Response = 211022944

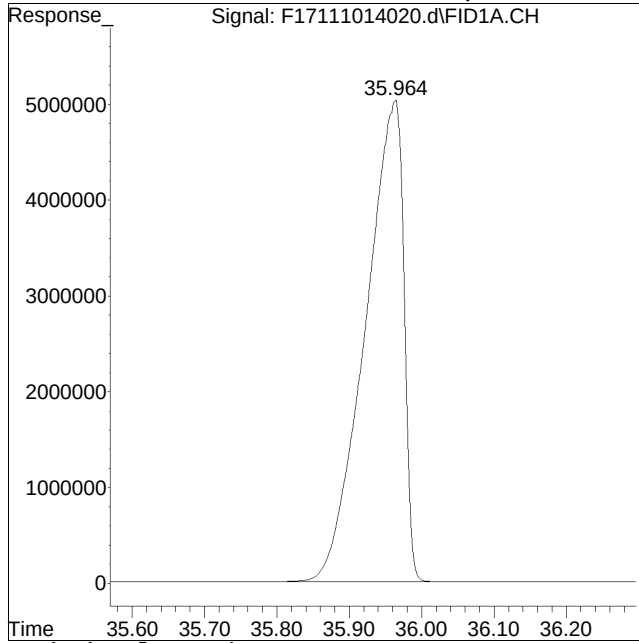
Manual Peak Response = 211118913 M4

M4 = Poor automated baseline construction.

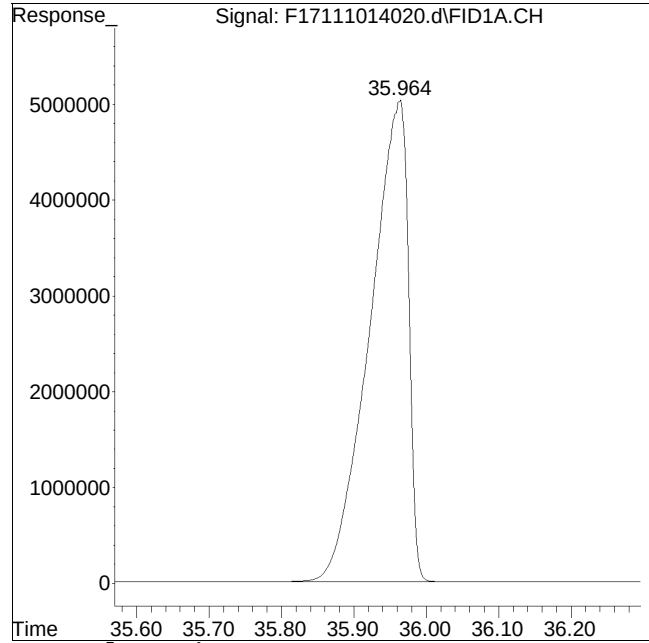
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #24: d50-Tetracosane



Original Peak Response = 185910734



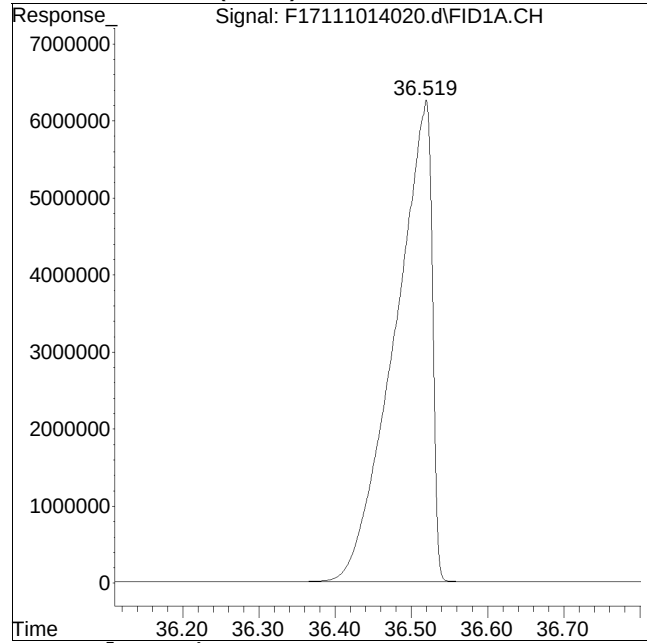
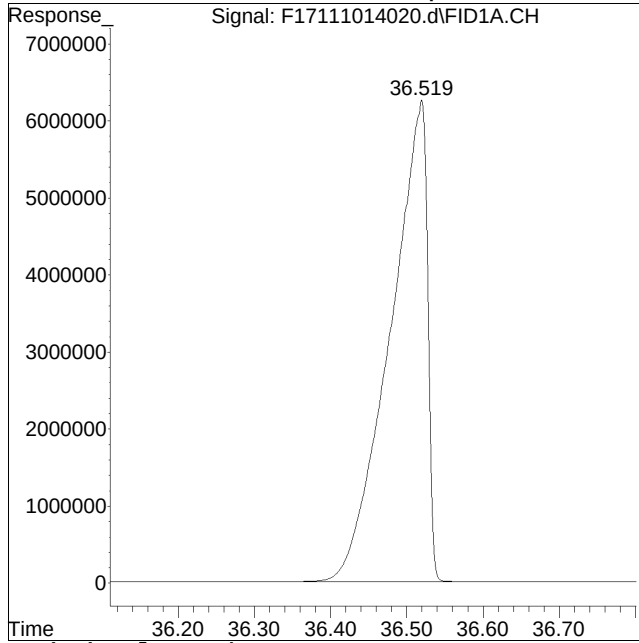
Manual Peak Response = 185908620 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #25: n-Tetracosane (C24)



Original Peak Response = 212528079

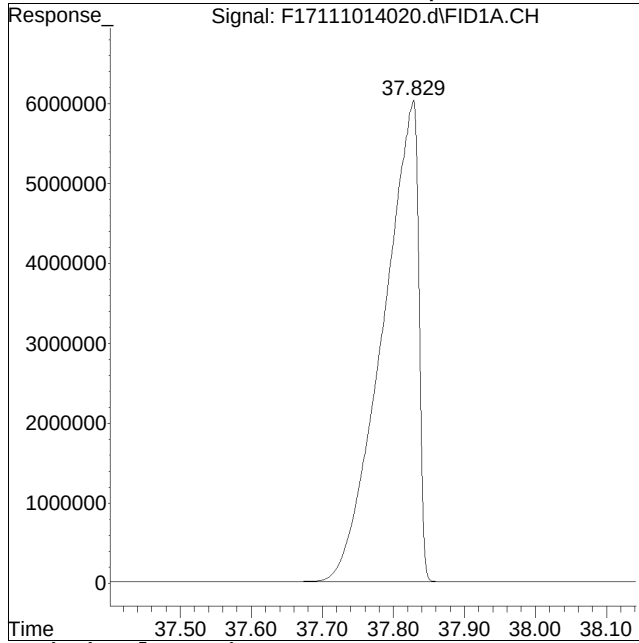
Manual Peak Response = 212476278 M4

M4 = Poor automated baseline construction.

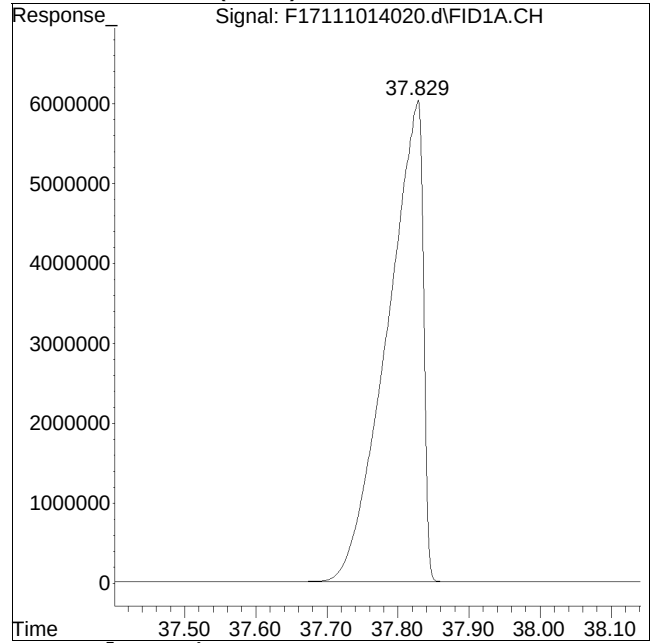
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #26: n-Pentacosane (C25)



Original Peak Response = 211323670



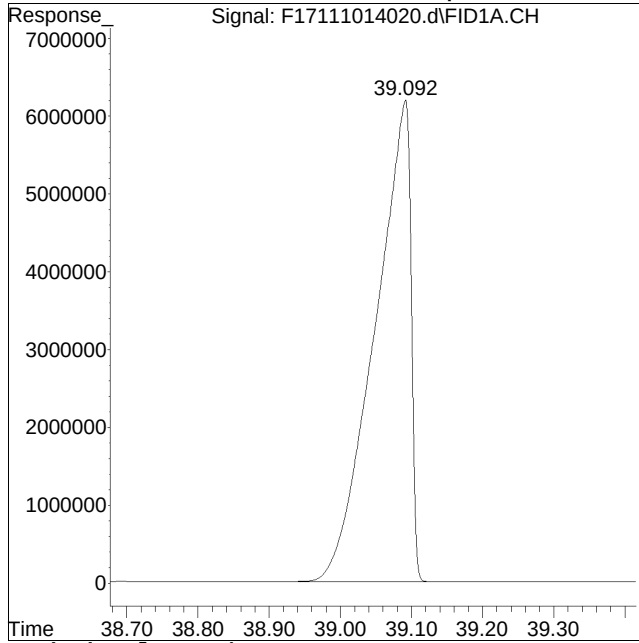
Manual Peak Response = 211377509 M4

M4 = Poor automated baseline construction.

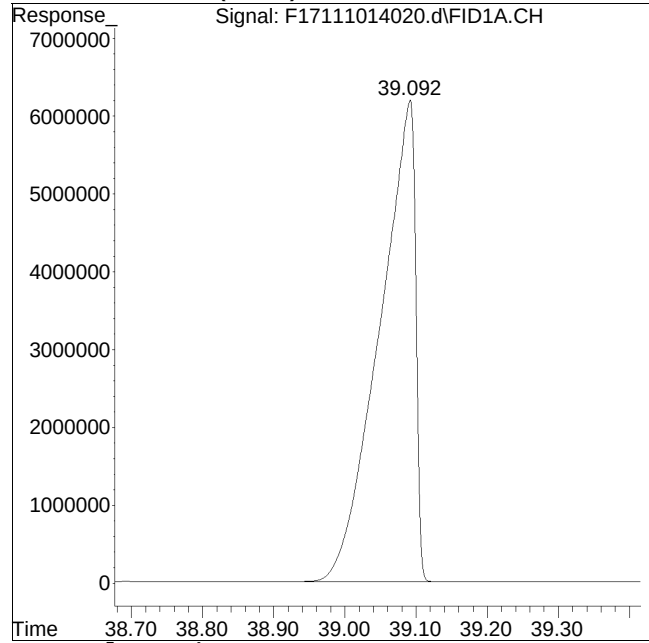
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #27: n-Hexacosane (C26)



Original Peak Response = 217009710



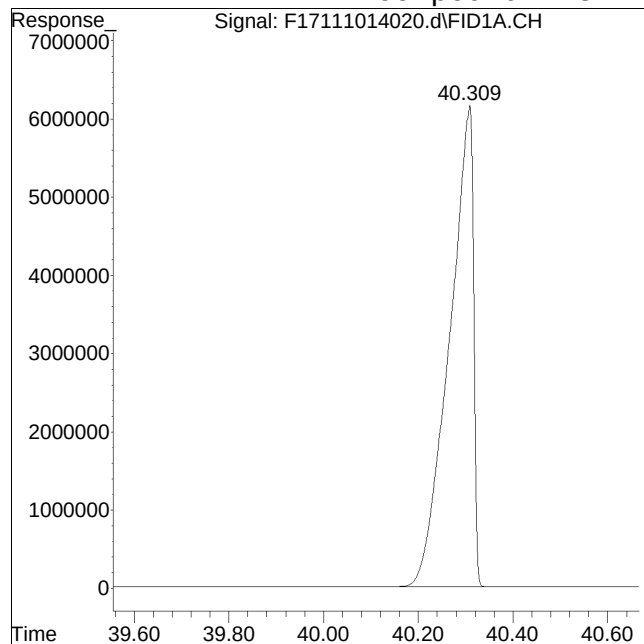
Manual Peak Response = 216859002 M4

M4 = Poor automated baseline construction.

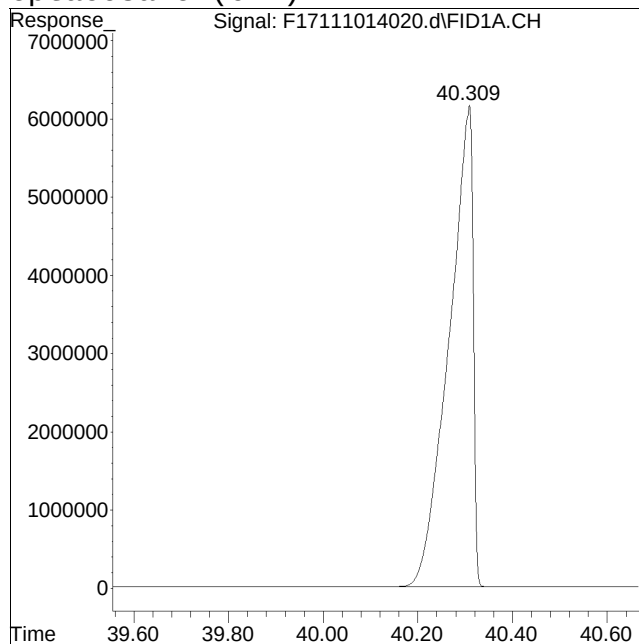
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #28: n-Heptacosane (C27)



Original Peak Response = 215224352



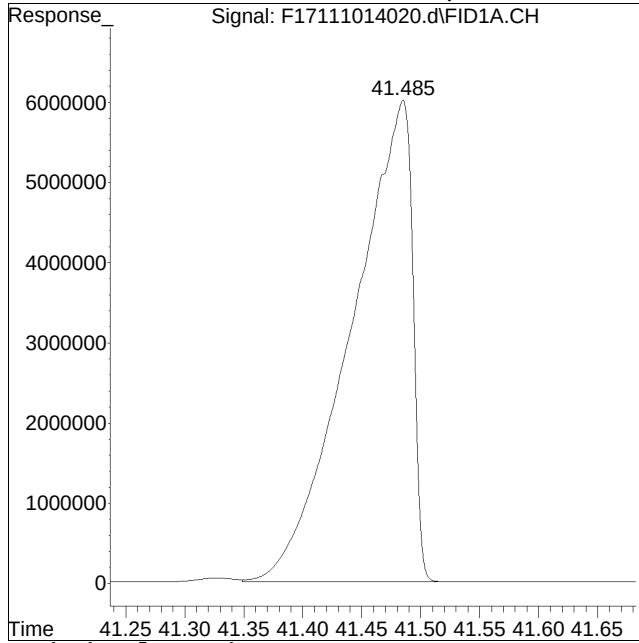
Manual Peak Response = 215525451 M4

M4 = Poor automated baseline construction.

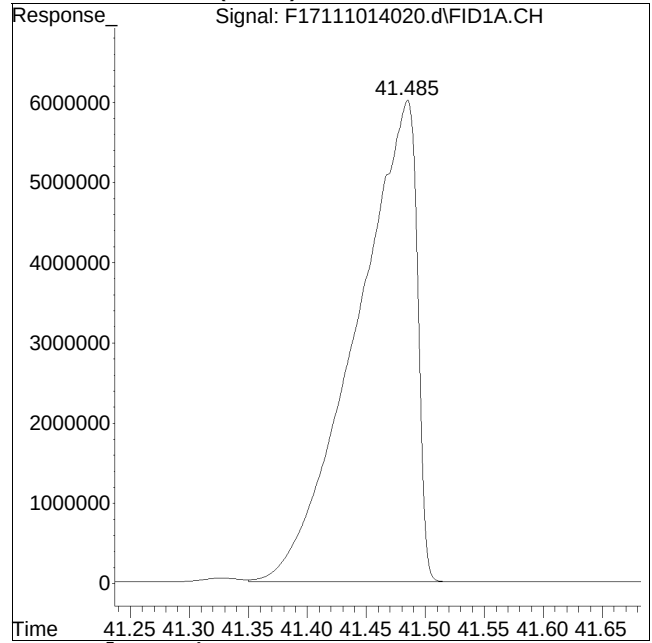
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #29: n-Octacosane (C28)



Original Peak Response = 215638183



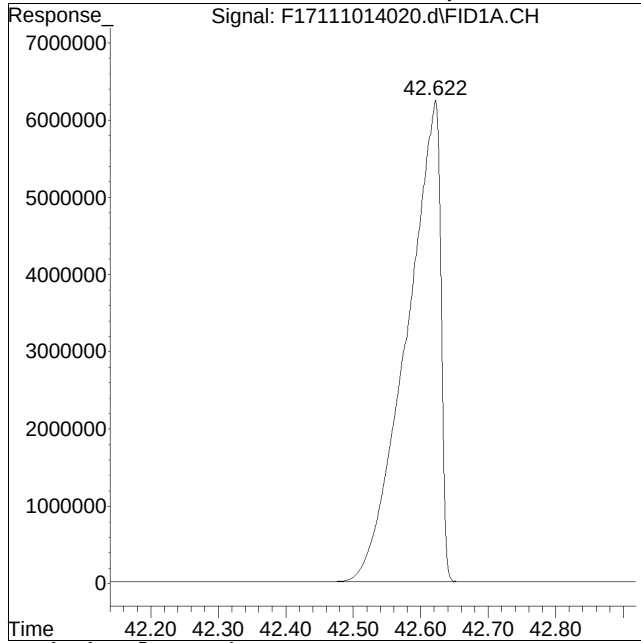
Manual Peak Response = 215543841 M4

M4 = Poor automated baseline construction.

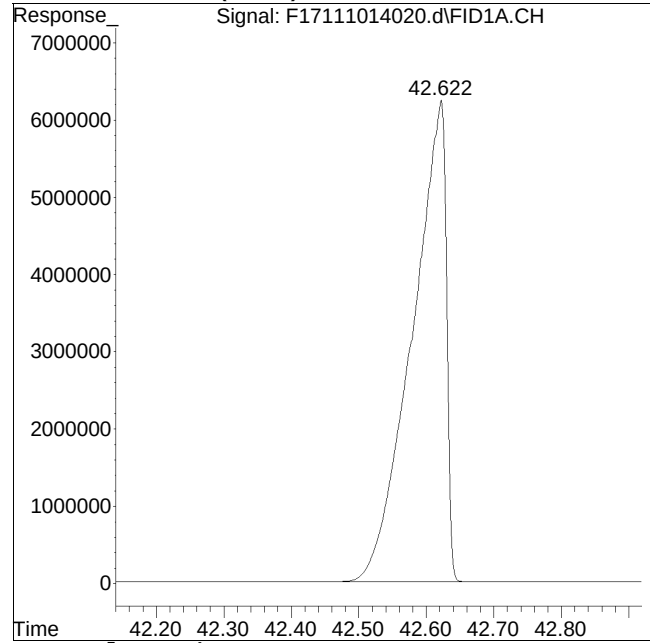
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #30: n-Nonacosane (C29)



Original Peak Response = 218189618



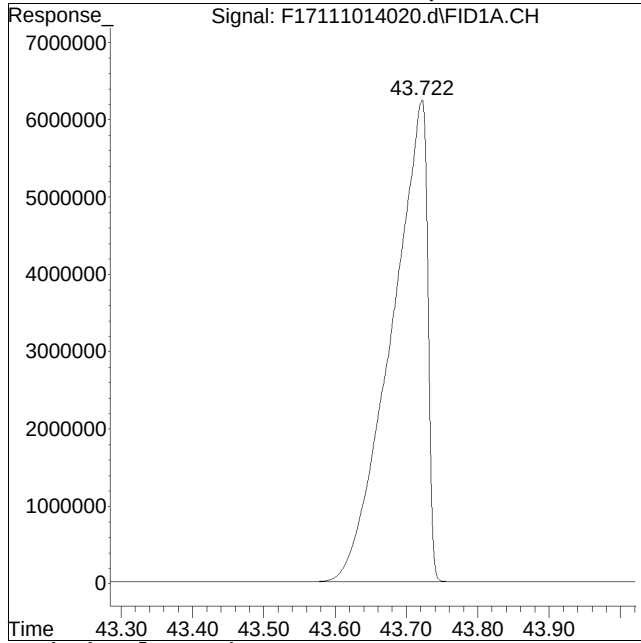
Manual Peak Response = 218200394 M4

M4 = Poor automated baseline construction.

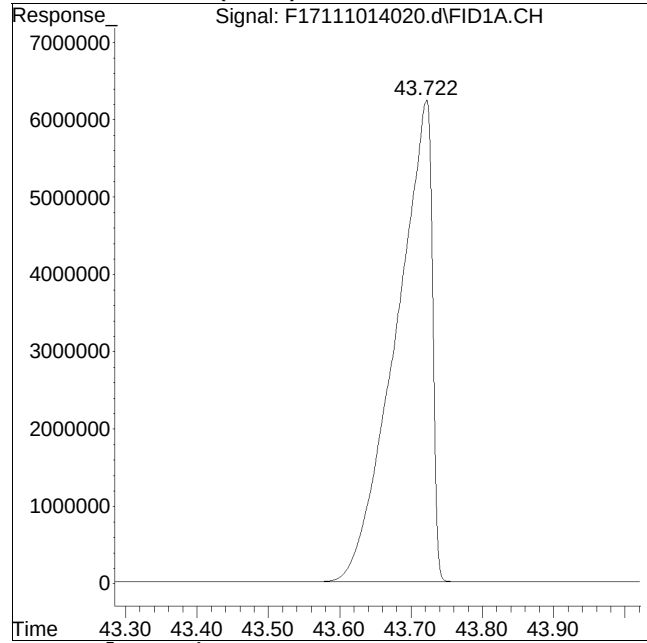
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #31: n-Triacontane (C30)



Original Peak Response = 219499838



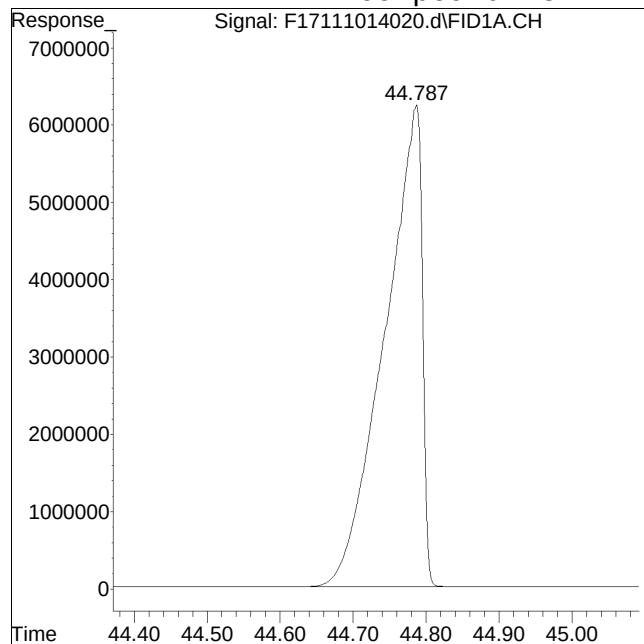
Manual Peak Response = 219666383 M4

M4 = Poor automated baseline construction.

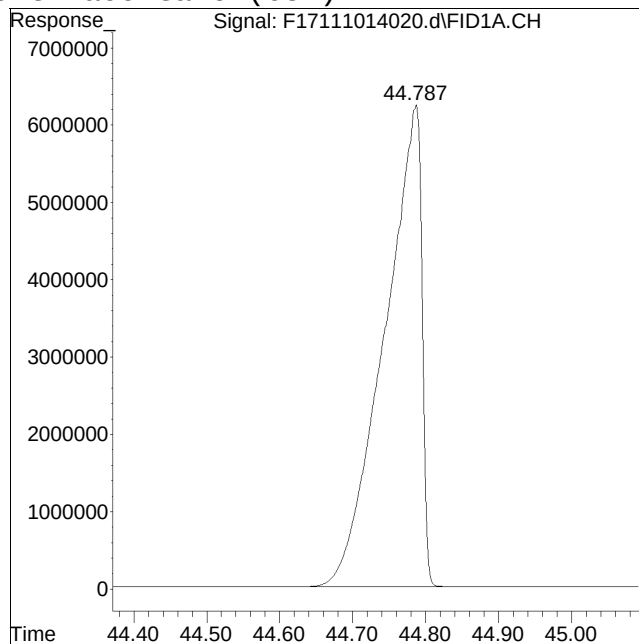
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #32: n-Hentriacontane (C31)



Original Peak Response = 220878986



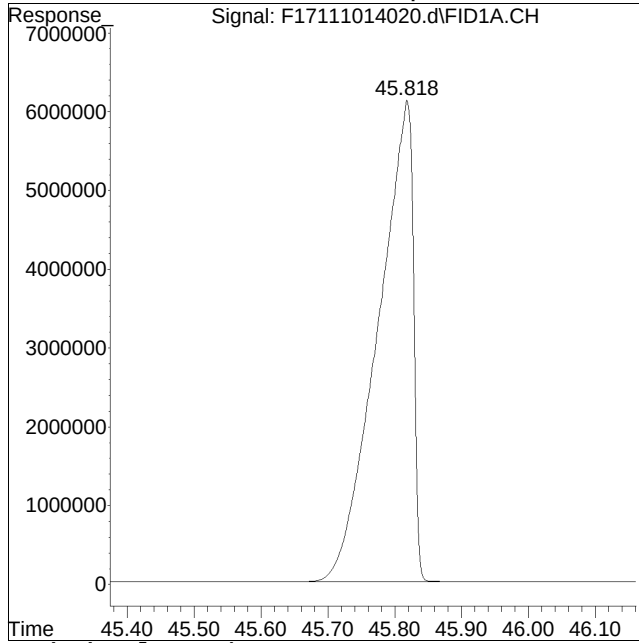
Manual Peak Response = 220837166 M4

M4 = Poor automated baseline construction.

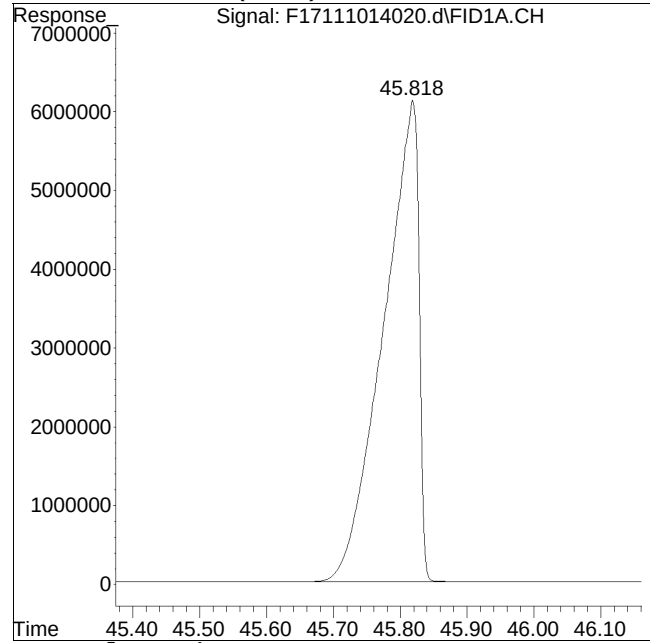
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #33: n-Dotriacontane (C32)



Original Peak Response = 223585637



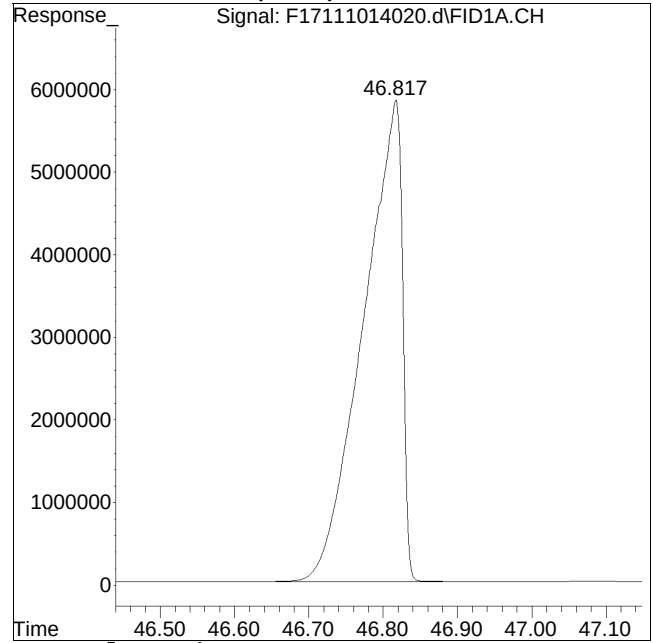
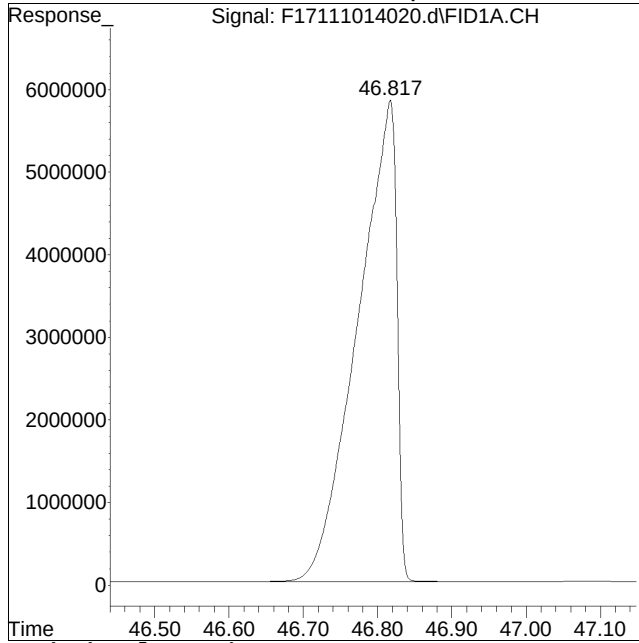
Manual Peak Response = 223659667 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #34: n-Tritriacontane (C33)



Original Peak Response = 212455471

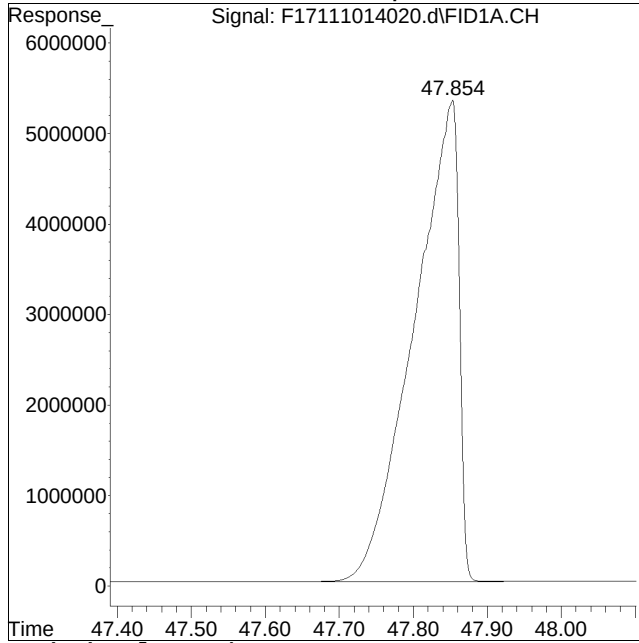
Manual Peak Response = 212305009 M4

M4 = Poor automated baseline construction.

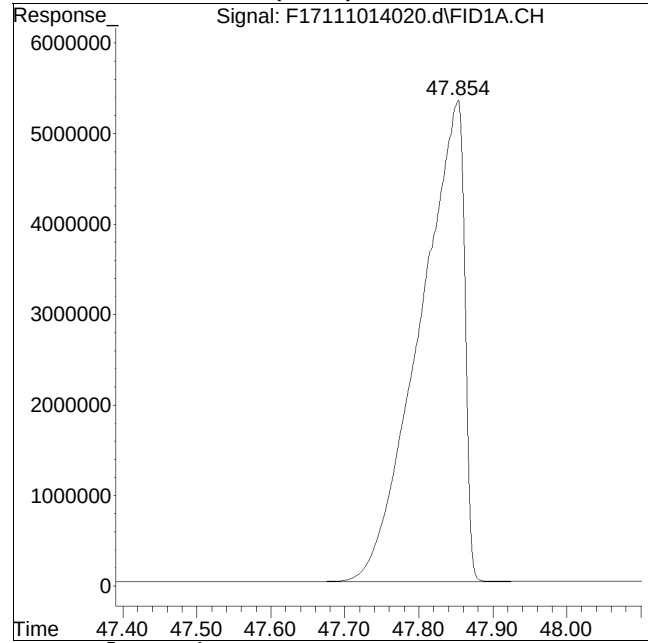
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #35: n-tetratriacontane (C34)



Original Peak Response = 222609394



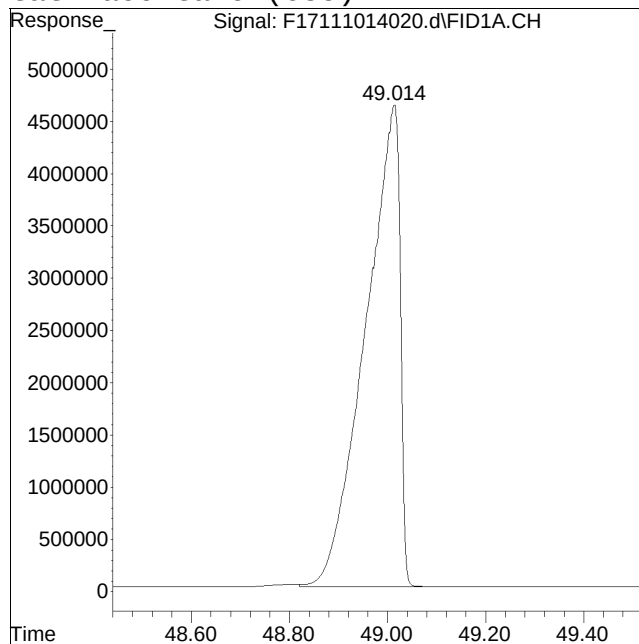
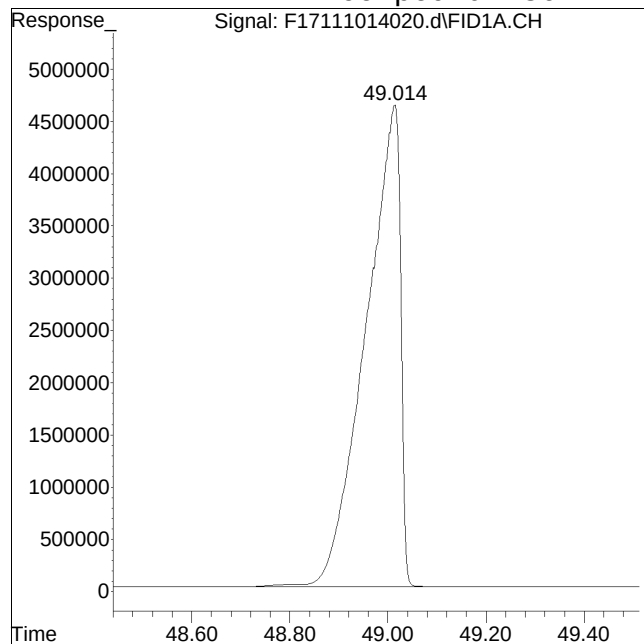
Manual Peak Response = 222719308 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
 Data File : F17111014020.d Operator : FID17:NL
 Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
 Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #36: n-Pentatriacontane (C35)



Original Peak Response = 226214044

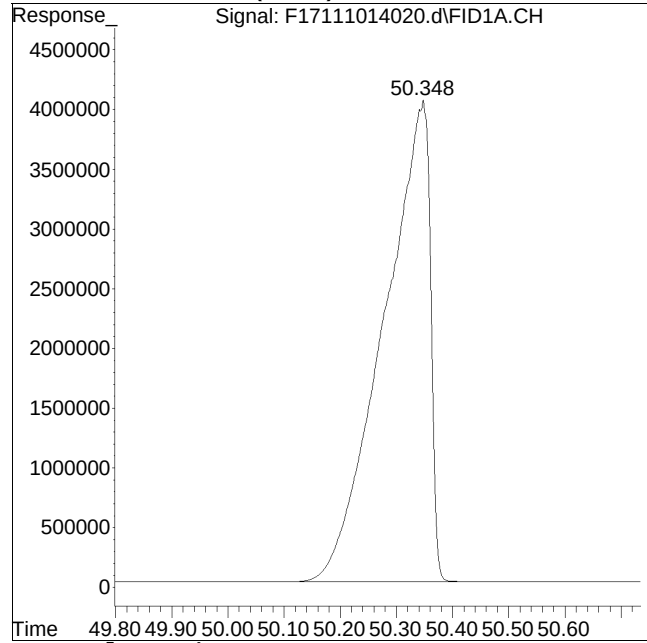
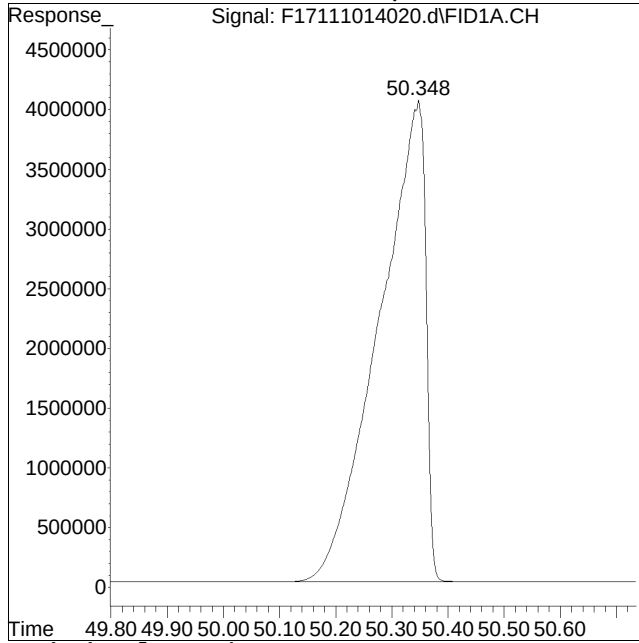
Manual Peak Response = 225244106 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #37: n-Hexatriacontane (C36)



Original Peak Response = 231785406

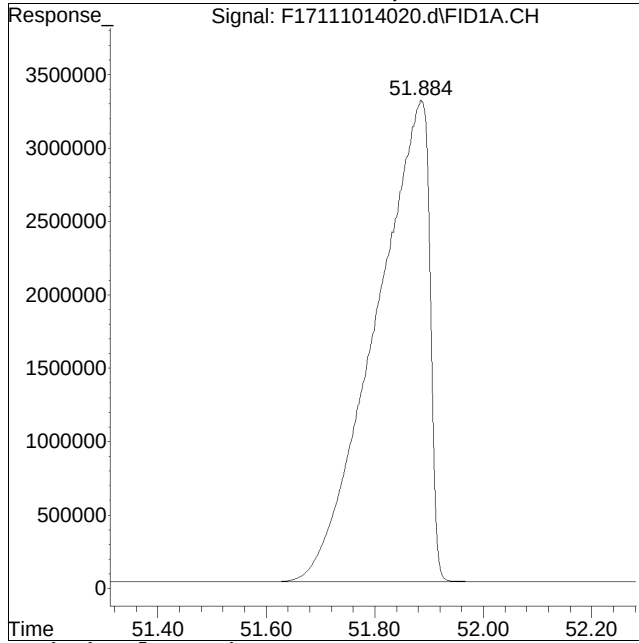
Manual Peak Response = 231762250 M4

M4 = Poor automated baseline construction.

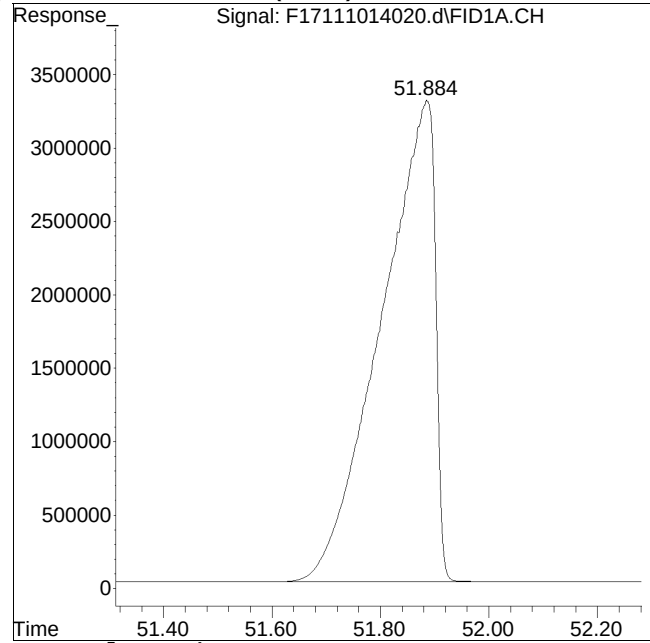
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #38: n-Heptatriacontane (C37)



Original Peak Response = 226689941



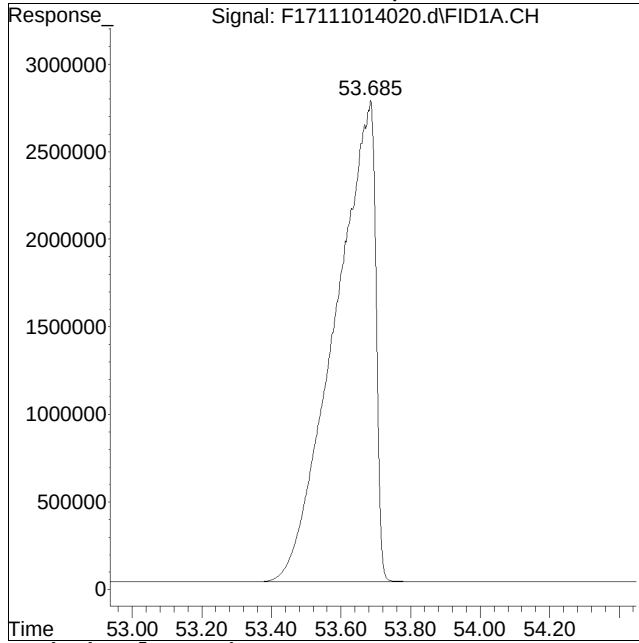
Manual Peak Response = 226986888 M4

M4 = Poor automated baseline construction.

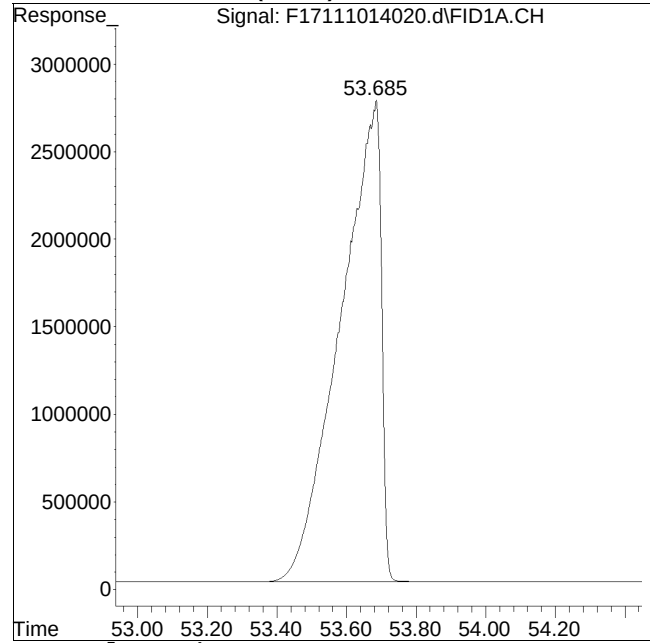
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #39: n-Octatriacontane (C38)



Original Peak Response = 222912539



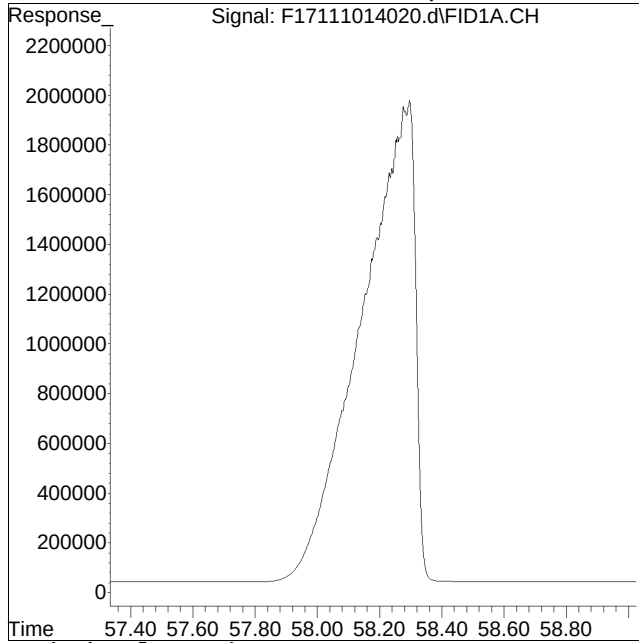
Manual Peak Response = 222999979 M4

M4 = Poor automated baseline construction.

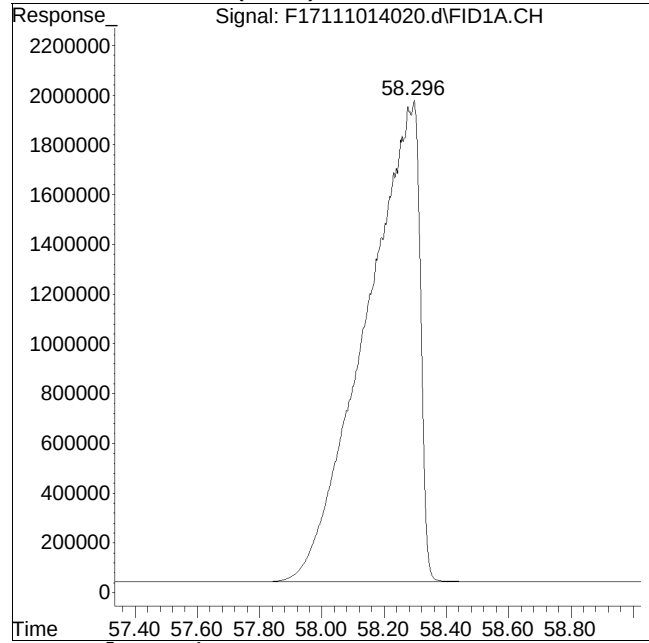
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014020.d Operator : FID17:NL
Date Inj'd : 11/11/2014 1:00 am Instrument : FID17
Sample : I1711011405R Quant Date : 11/14/2014 12:19 pm

Compound #41: n-Tetracontane (C40)



Original Peak Response = 0



Manual Peak Response = 232479117 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014022.d
 Signal(s) : FID1A.CH
 Acq On : 11 Nov 2014 2:29 am
 Operator : FID17:NL
 Sample : I1711011406R
 Misc : WG743851, FRAV27 500ug/mL
 ALS Vial : 11 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 14:07:31 2014
 Quant Method : C:\msdchem\1\DATA\FID17\November\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Fri Nov 14 12:19:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound	R.T.	Response	Conc Units

Internal Standards			
1) I 5-alpha-androstane	31.267	53637140	50.000 ug/mL M4
System Monitoring Compounds			
19) s ortho-terphenyl	29.347	576911715	480.039 ug/mL M4
Spiked Amount 50.000	Range 50 - 130	Recovery = 960.08%#	
24) s d50-Tetracosane	36.014	469670030	495.236 ug/mL M4
Spiked Amount 50.000	Range 50 - 130	Recovery = 990.47%#	

Target Compounds

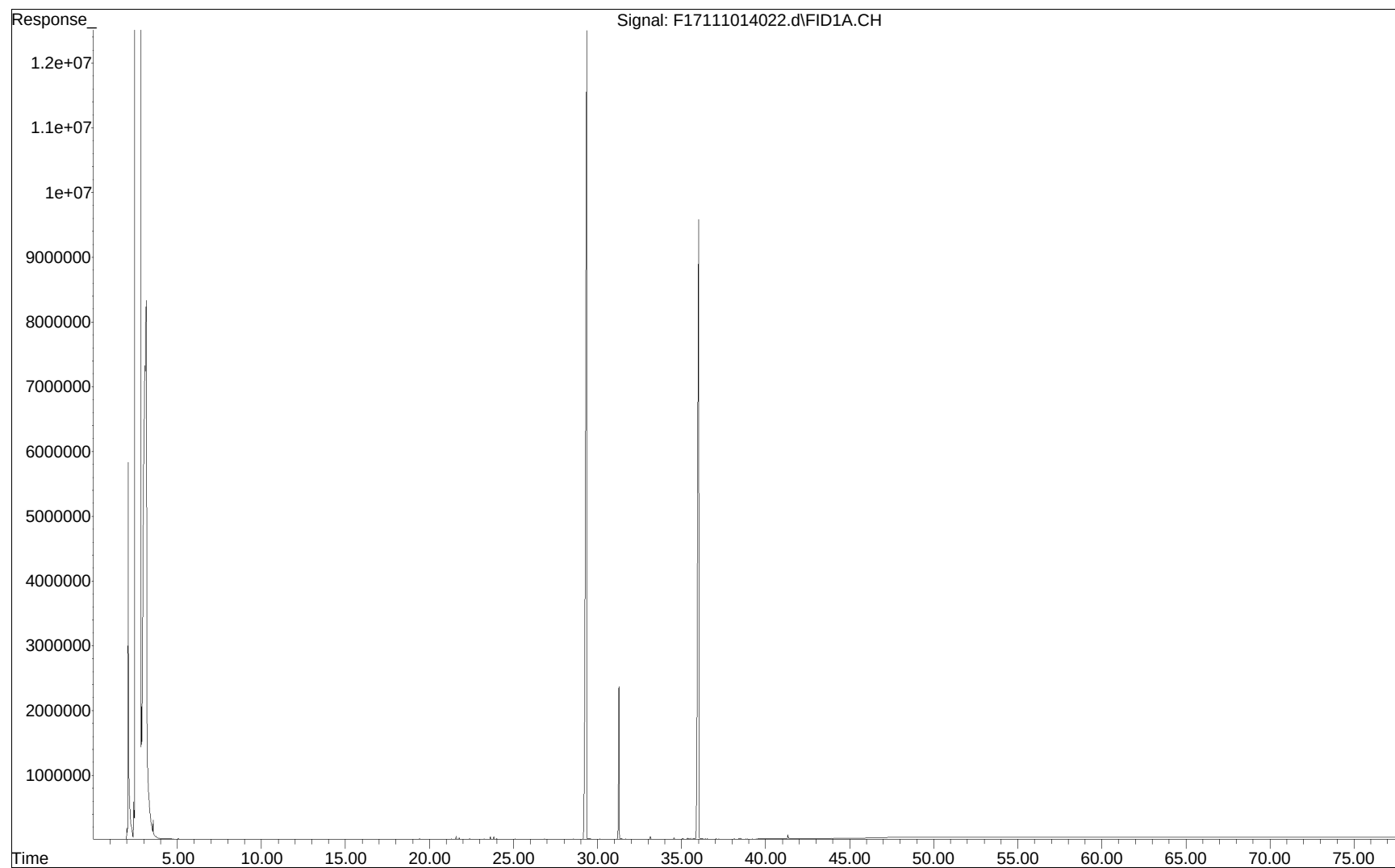
SemiQuant Compounds - Not Calibrated on this Instrument

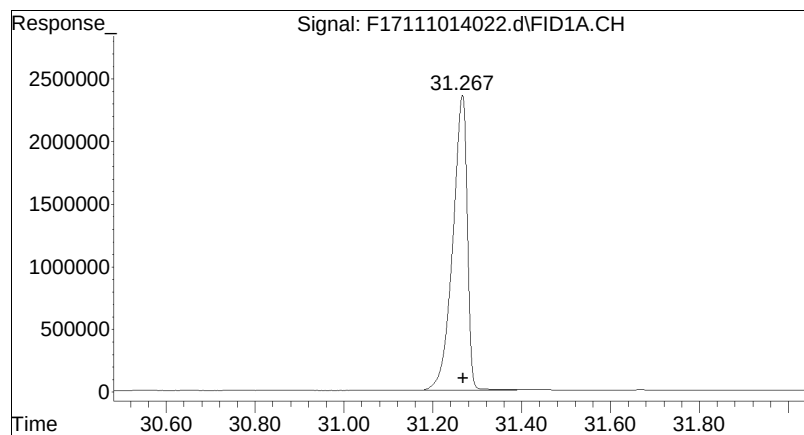
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

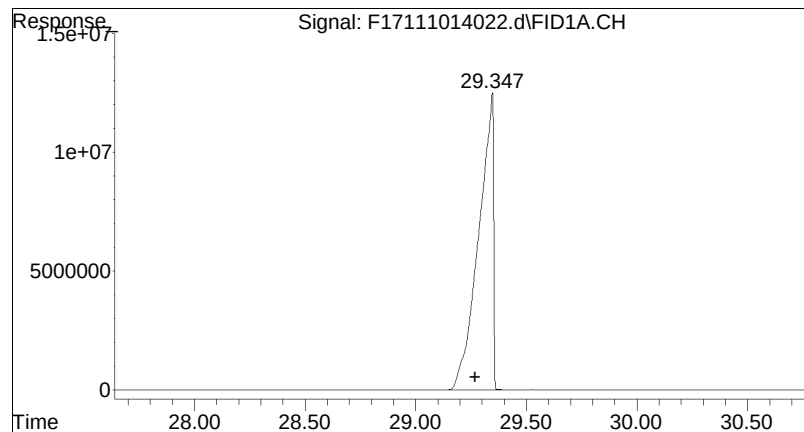
File : 0:\Forensics\Data\FID17\2014\NOV\NOV10\F17111014022.d
Operator : FID17:NL
Acquired : 11 Nov 2014 2:29 am using AcqMethod FID17.M
Sample Name: I1711011406R
Instrument: FID17
Misc Info : WG743851, FRAV27 500ug/mL
Vial Number: 11
CurrentMeth: 0:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M





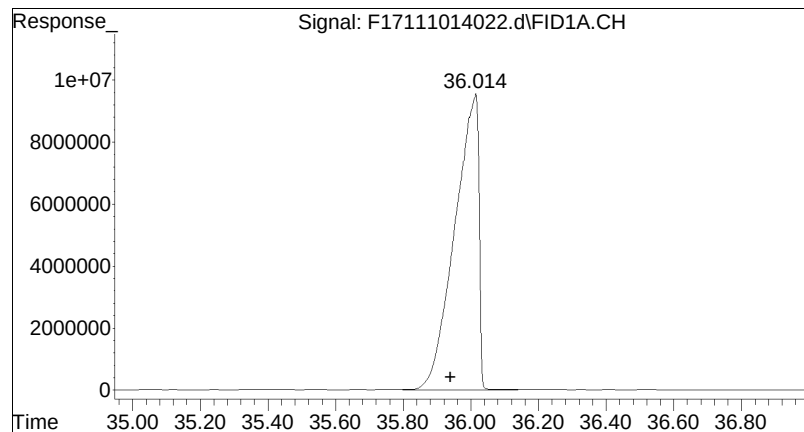
#1 5-alpha-androstane

R.T.: 31.267 min
Delta R.T.: -0.002 min
Response: 53637140
Conc: 50.00 ug/mL M4



#19 ortho-terphenyl

R.T.: 29.347 min
Delta R.T.: 0.076 min
Response: 576911715
Conc: 480.04 ug/mL M4



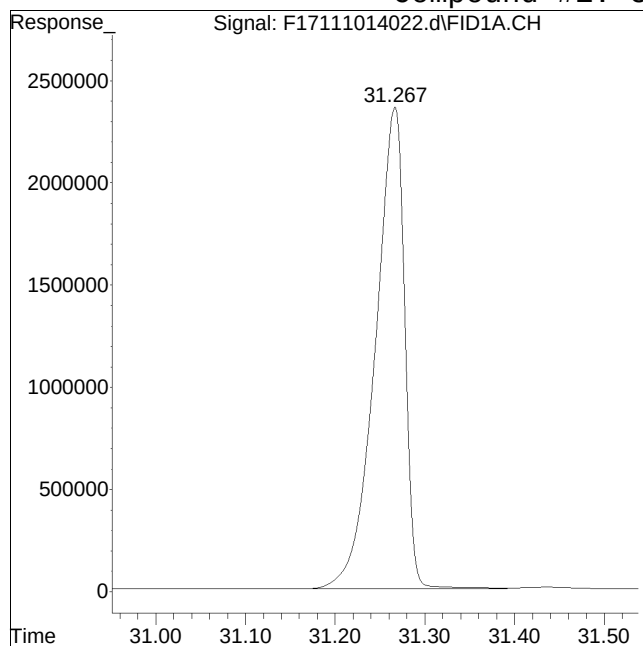
#24 d50-Tetracosane

R.T.: 36.014 min
Delta R.T.: 0.074 min
Response: 469670030
Conc: 495.24 ug/mL M4

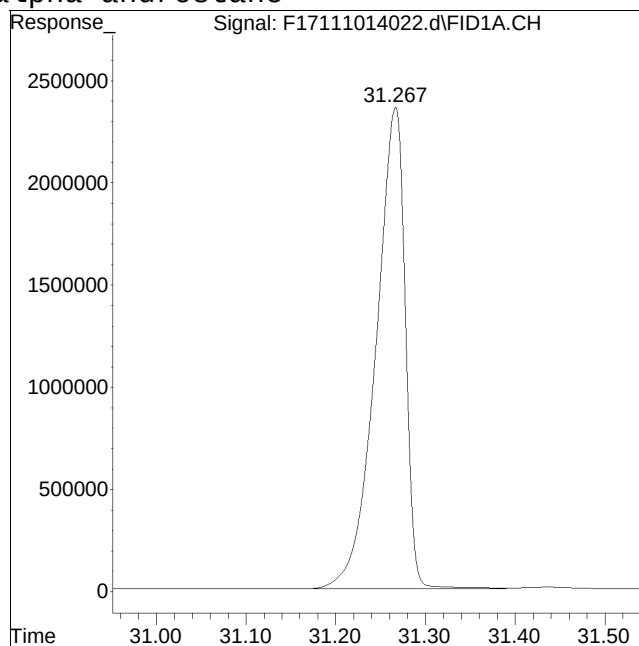
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014022.d Operator : FID17:NL
Date Inj'd : 11/11/2014 2:29 am Instrument : FID17
Sample : I1711011406R Quant Date : 11/14/2014 12:19 pm

Compound #1: 5-alpha-androstane



Original Peak Response = 53644600



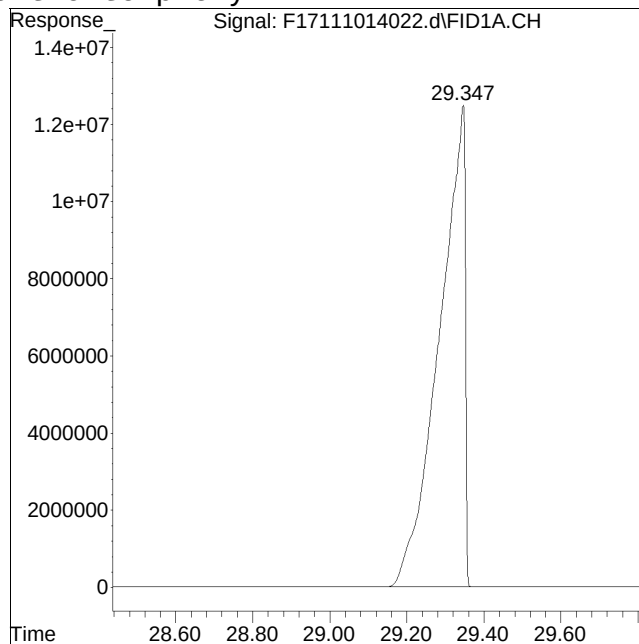
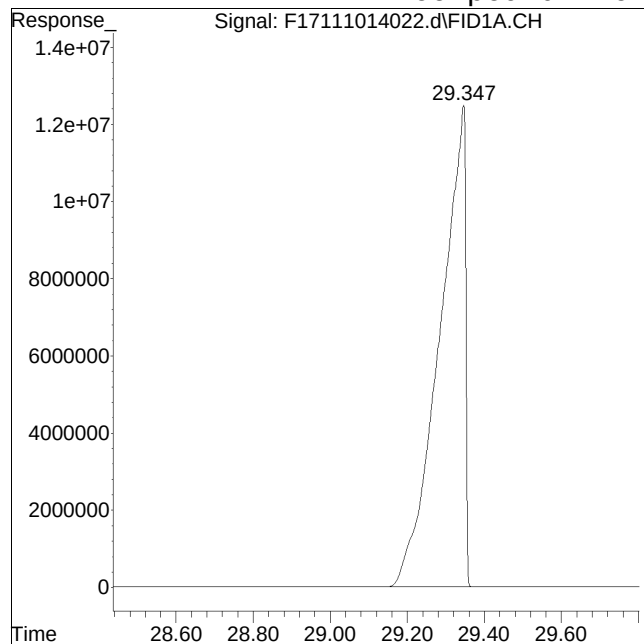
Manual Peak Response = 53637140 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
 Data File : F17111014022.d Operator : FID17:NL
 Date Inj'd : 11/11/2014 2:29 am Instrument : FID17
 Sample : I1711011406R Quant Date : 11/14/2014 12:19 pm

Compound #19: ortho-terphenyl



Original Peak Response = 575997155

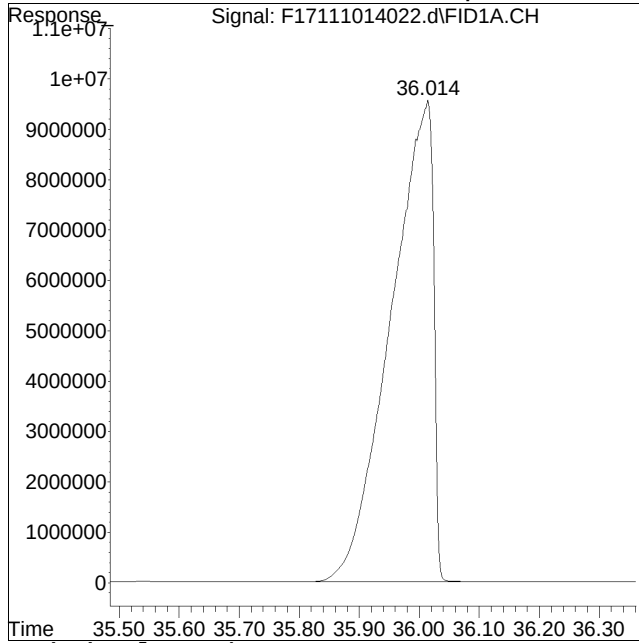
Manual Peak Response = 576911715 M4

M4 = Poor automated baseline construction.

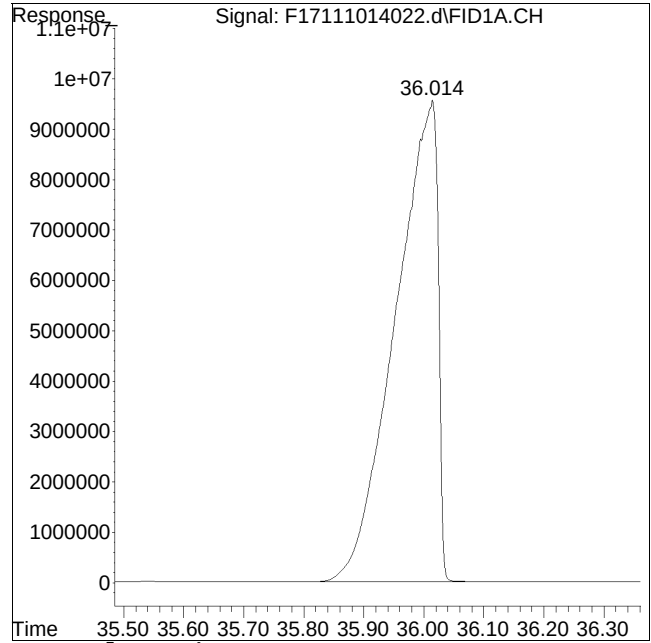
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014022.d Operator : FID17:NL
Date Inj'd : 11/11/2014 2:29 am Instrument : FID17
Sample : I1711011406R Quant Date : 11/14/2014 12:19 pm

Compound #24: d50-Tetracosane



Original Peak Response = 469841556



Manual Peak Response = 469670030 M4

M4 = Poor automated baseline construction.

Initial Calibration Verification

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014028.d
 Signal(s) : FID1A.CH
 Acq On : 11 Nov 2014 6:58 am
 Operator : FID17:NL
 Sample : WG743851-7,42
 Misc : WG743851,FRAV28 50ug/mL
 ALS Vial : 14 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 15:07:10 2014
 Quant Method : O:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Mon Nov 17 15:07:02 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 I	5-alpha-androstane	50.000	50.000	0.0	106	0.00
2 t	n-Octane (C8)	50.000	46.946	6.1	101	-0.03
3 t	n-Nonane (C9)	50.000	48.656	2.7	105	-0.02
4 t	n-Decane (C10)	50.000	50.645	-1.3	108	-0.01
5 t	n-Undecane (C11)	50.000	49.632	0.7	104	-0.01
6 t	n-Dodecane (C12)	50.000	49.480	1.0	104	-0.02
7 t	n-Tridecane (C13)	50.000	49.285	1.4	103	-0.02
9 t	n-Tetradecane (C14)	50.000	50.581	-1.2	106	-0.01
11 t	n-Pentadecane (C15)	50.000	49.125	1.8	103	-0.02
12 t	n-Hexadecane (C16)	50.000	49.127	1.7	104	-0.02
14 t	n-Heptadecane (C17)	50.000	49.744	0.5	104	-0.02
15 t	Pristane	50.000	48.613	2.8	103	-0.02
16 t	n-Octadecane (C18)	50.000	48.217	3.6	101	-0.02
17 t	Phytane	50.000	55.695	-11.4	118	-0.02
18 t	n-Nonadecane (C19)	50.000	48.179	3.6	101	-0.02
19 s	ortho-terphenyl	50.000	49.050	1.9	105	-0.02
20 t	n-Eicosane (C20)	50.000	48.449	3.1	102	-0.02
21 t	n-Heneicosane (C21)	50.000	48.514	3.0	103	-0.02
22 t	n-Docosane (C22)	50.000	48.284	3.4	102	-0.02
23 t	n-Tricosane (C23)	50.000	47.984	4.0	102	-0.02
24 s	d50-Tetracosane	50.000	48.399	3.2	105	-0.02
25 t	n-Tetracosane (C24)	50.000	47.916	4.2	102	-0.02
26 t	n-Pentacosane (C25)	50.000	48.148	3.7	103	-0.02
27 t	n-Hexacosane (C26)	50.000	47.888	4.2	102	-0.02
28 t	n-Heptacosane (C27)	50.000	47.537	4.9	102	-0.03
29 t	n-Octacosane (C28)	50.000	47.578	4.8	103	-0.02
30 t	n-Nonacosane (C29)	50.000	47.654	4.7	103	-0.03
31 t	n-Triacontane (C30)	50.000	47.330	5.3	103	-0.03
32 t	n-Hentriacontane (C31)	50.000	47.247	5.5	103	-0.03
33 t	n-Dotriacontane (C32)	50.000	46.266	7.5	101	-0.03
34 t	n-Tritriacontane (C33)	50.000	47.131	5.7	103	-0.03
35 t	n-tetratriacontane (C34)	50.000	47.532	4.9	104	-0.03
36 t	n-Pentatriacontane (C35)	50.000	47.134	5.7	103	-0.04
37 t	n-Hexatriacontane (C36)	50.000	49.057	1.9	108	-0.04
38 t	n-Heptatriacontane (C37)	50.000	46.715	6.6	103	-0.06
39 t	n-Octatriacontane (C38)	50.000	47.501	5.0	104	-0.06
41 t	n-Tetracontane (C40)	50.000	43.639	12.7	95	-0.09

Evaluate Continuing Calibration Report - Not Found

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Mass Discrimination (Response)	Ratio	Range Limits
n-Hexatriacontane (C36) to n-Eicosane (C20)	1.09	0.85 - 1.15

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014028.d
 Signal(s) : FID1A.CH
 Acq On : 11 Nov 2014 6:58 am
 Operator : FID17:NL
 Sample : WG743851-7,42
 Misc : WG743851,FRAV28 50ug/mL
 ALS Vial : 14 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 15:07:10 2014
 Quant Method : O:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Mon Nov 17 15:07:02 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 I	5-alpha-androstane	50.000	50.000	0.0	106	0.00
2 t	n-Octane (C8)	50.000	46.946	6.1	101	-0.03
3 t	n-Nonane (C9)	50.000	48.656	2.7	105	-0.02
4 t	n-Decane (C10)	50.000	50.645	-1.3	108	-0.01
5 t	n-Undecane (C11)	50.000	49.632	0.7	104	-0.01
6 t	n-Dodecane (C12)	50.000	49.480	1.0	104	-0.02
7 t	n-Tridecane (C13)	50.000	49.285	1.4	103	-0.02
9 t	n-Tetradecane (C14)	50.000	50.581	-1.2	106	-0.01
11 t	n-Pentadecane (C15)	50.000	49.125	1.8	103	-0.02
12 t	n-Hexadecane (C16)	50.000	49.127	1.7	104	-0.02
14 t	n-Heptadecane (C17)	50.000	49.744	0.5	104	-0.02
15 t	Pristane	50.000	48.613	2.8	103	-0.02
16 t	n-Octadecane (C18)	50.000	48.217	3.6	101	-0.02
17 t	Phytane	50.000	55.695	-11.4	118	-0.02
18 t	n-Nonadecane (C19)	50.000	48.179	3.6	101	-0.02
19 s	ortho-terphenyl	50.000	49.050	1.9	105	-0.02
20 t	n-Eicosane (C20)	50.000	48.449	3.1	102	-0.02
21 t	n-Heneicosane (C21)	50.000	48.514	3.0	103	-0.02
22 t	n-Docosane (C22)	50.000	48.284	3.4	102	-0.02
23 t	n-Tricosane (C23)	50.000	47.984	4.0	102	-0.02
24 s	d50-Tetracosane	50.000	48.399	3.2	105	-0.02
25 t	n-Tetracosane (C24)	50.000	47.916	4.2	102	-0.02
26 t	n-Pentacosane (C25)	50.000	48.148	3.7	103	-0.02
27 t	n-Hexacosane (C26)	50.000	47.888	4.2	102	-0.02
28 t	n-Heptacosane (C27)	50.000	47.537	4.9	102	-0.03
29 t	n-Octacosane (C28)	50.000	47.578	4.8	103	-0.02
30 t	n-Nonacosane (C29)	50.000	47.654	4.7	103	-0.03
31 t	n-Triacontane (C30)	50.000	47.330	5.3	103	-0.03
32 t	n-Hentriacontane (C31)	50.000	47.247	5.5	103	-0.03
33 t	n-Dotriacontane (C32)	50.000	46.266	7.5	101	-0.03
34 t	n-Tritriacontane (C33)	50.000	47.131	5.7	103	-0.03
35 t	n-tetratriacontane (C34)	50.000	47.532	4.9	104	-0.03
36 t	n-Pentatriacontane (C35)	50.000	47.134	5.7	103	-0.04
37 t	n-Hexatriacontane (C36)	50.000	49.057	1.9	108	-0.04
38 t	n-Heptatriacontane (C37)	50.000	46.715	6.6	103	-0.06
39 t	n-Octatriacontane (C38)	50.000	47.501	5.0	104	-0.06
41 t	n-Tetracontane (C40)	50.000	43.639	12.7	95	-0.09

Evaluate Continuing Calibration Report - Not Found

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Mass Discrimination (Response)	Ratio	Range Limits
n-Hexatriacontane (C36) to n-Eicosane (C20)	1.09	0.85 - 1.15

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014028.d
 Signal(s) : FID1A.CH
 Acq On : 11 Nov 2014 6:58 am
 Operator : FID17:NL
 Sample : WG743851-7,42
 Misc : WG743851,FRAV28 50ug/mL
 ALS Vial : 14 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 15:07:10 2014
 Quant Method : O:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Mon Nov 17 15:07:02 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.264	57779435	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.248	62373197	49.050	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 98.10%
24) s	d50-Tetracosane	35.919	49983701	48.399	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 96.80%
Target Compounds					
2) t	n-Octane (C8)	5.574	45937686	46.946	ug/mL M4
3) t	n-Nonane (C9)	7.775	48980250	48.656	ug/mL M4
4) t	n-Decane (C10)	10.264	52302066	50.645	ug/mL M4
5) t	n-Undecane (C11)	12.778	51812091	49.632	ug/mL M4
6) t	n-Dodecane (C12)	15.208	52486341	49.480	ug/mL M4
7) t	n-Tridecane (C13)	17.519	52668836	49.285	ug/mL M4
9) t	n-Tetradecane (C14)	19.707	54725250	50.581	ug/mL M4
11) t	n-Pentadecane (C15)	21.775	54168850	49.125	ug/mL M4
12) t	n-Hexadecane (C16)	23.736	54515136	49.127	ug/mL M4
14) t	n-Heptadecane (C17)	25.599	54810624	49.744	ug/mL M4
15) t	Pristane	25.710	55331736	48.613	ug/mL M4
16) t	n-Octadecane (C18)	27.371	54607398	48.217	ug/mL M4
17) t	Phytane	27.534	55654924	55.695	ug/mL M4
18) t	n-Nonadecane (C19)	29.061	54399183	48.179	ug/mL M4
20) t	n-Eicosane (C20)	30.670	54603600	48.449	ug/mL M4
21) t	n-Heneicosane (C21)	32.211	55087763	48.514	ug/mL M4
22) t	n-Docosane (C22)	33.691	55381679	48.284	ug/mL M4
23) t	n-Tricosane (C23)	35.108	55584473	47.984	ug/mL M4
25) t	n-Tetracosane (C24)	36.470	55601443	47.916	ug/mL M4
26) t	n-Pentacosane (C25)	37.779	55584700	48.148	ug/mL M4
27) t	n-Hexacosane (C26)	39.039	56520227	47.888	ug/mL M4
28) t	n-Heptacosane (C27)	40.257	55822334	47.537	ug/mL M4
29) t	n-Octacosane (C28)	41.429	55792477	47.578	ug/mL M4
30) t	n-Nonacosane (C29)	42.567	56007887	47.654	ug/mL M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2014\NOV\NOV10\
 Data File : F17111014028.d
 Signal(s) : FID1A.CH
 Acq On : 11 Nov 2014 6:58 am
 Operator : FID17:NL
 Sample : WG743851-7,42
 Misc : WG743851,FRAV28 50ug/mL
 ALS Vial : 14 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Nov 17 15:07:10 2014
 Quant Method : O:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Mon Nov 17 15:07:02 2014
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc Units
31) t	n-Triacontane (C30)	43.664	55890152	47.330 ug/mL M4
32) t	n-Hentriacontane (C31)	44.729	55831872	47.247 ug/mL M4
33) t	n-Dotriacontane (C32)	45.759	55077837	46.266 ug/mL M4
34) t	n-Tritriacontane (C33)	46.757	53104426	47.131 ug/mL M4
35) t	n-tetratriacontane (C34)	47.781	55861107	47.532 ug/mL M4
36) t	n-Pentatriacontane (C35)	48.932	55722183	47.134 ug/mL M4
37) t	n-Hexatriacontane (C36)	50.249	59610361	49.057 ug/mL M4
38) t	n-Heptatriacontane (C37)	51.766	55634288	46.715 ug/mL M4
39) t	n-Octatriacontane (C38)	53.545	55500204	47.501 ug/mL M4
41) t	n-Tetracontane (C40)	58.090	53295101	43.639 ug/mL M4

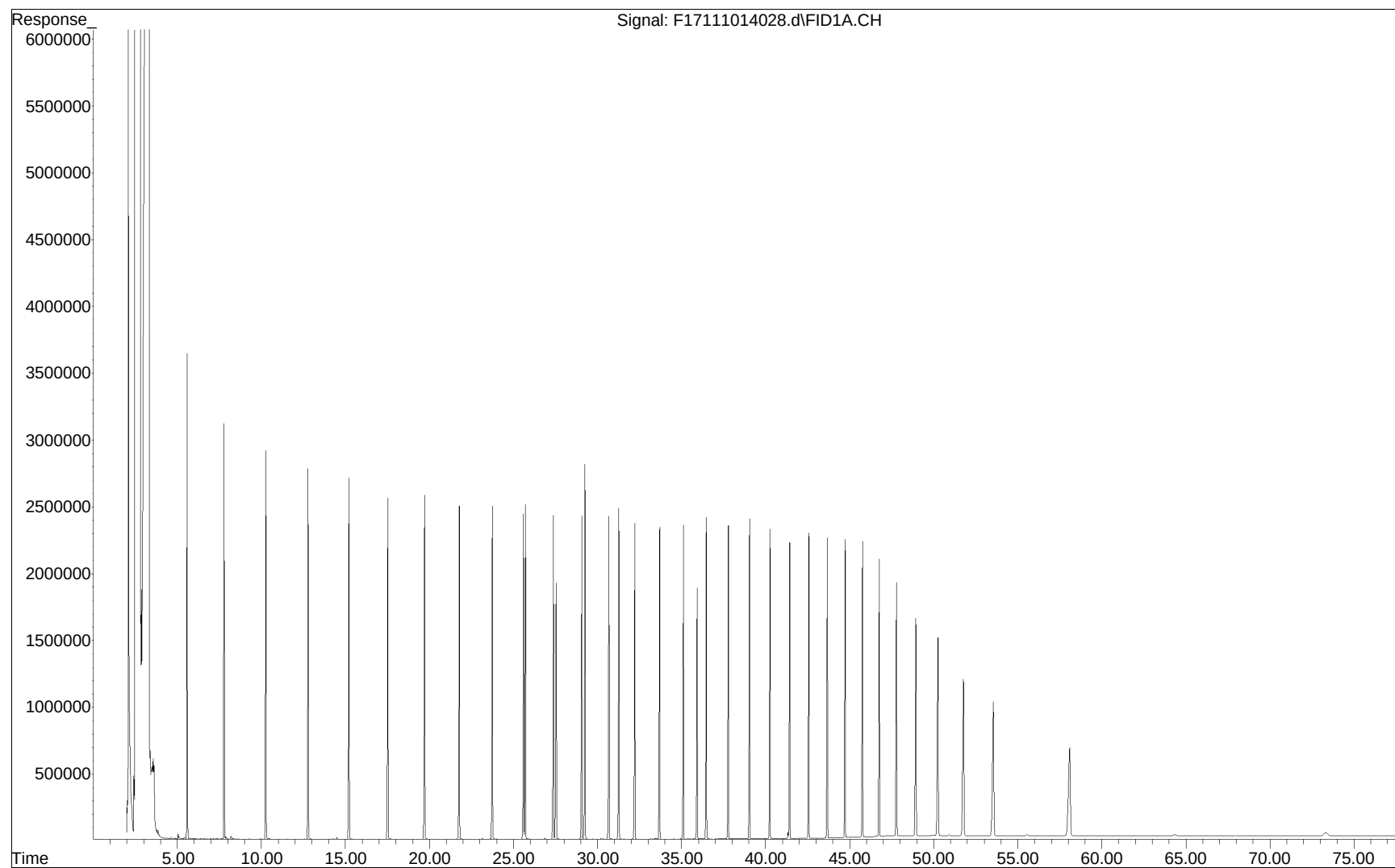
SemiQuant Compounds - Not Calibrated on this Instrument

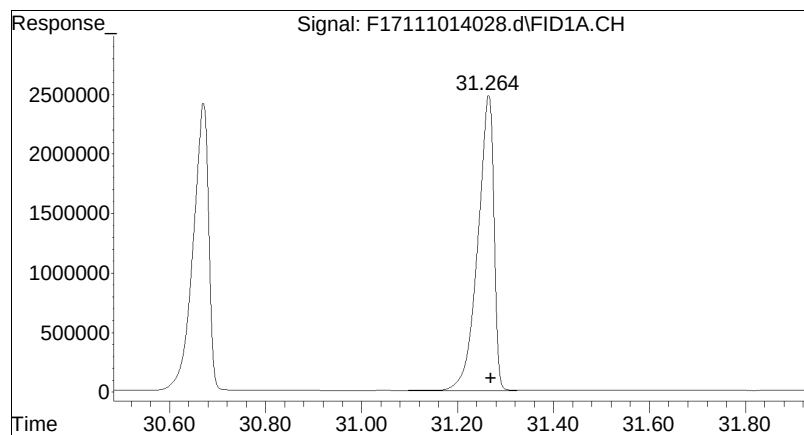
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(m)=manual int.

Quantitation Report (QT Reviewed)

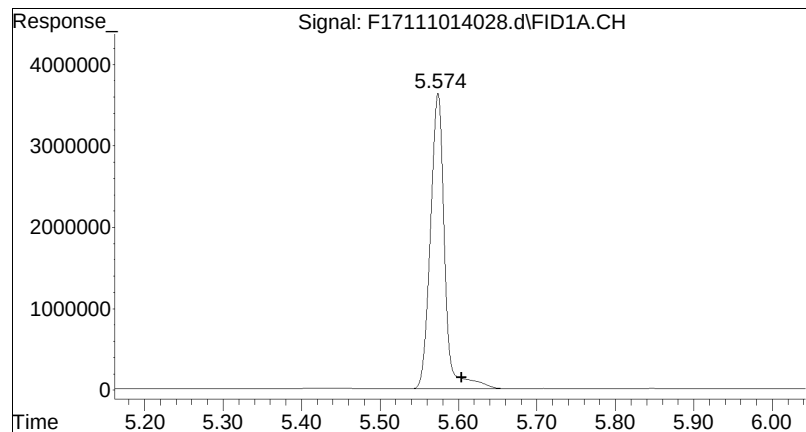
File : 0:\Forensics\Data\FID17\2014\NOV\NOV10\F17111014028.d
Operator : FID17:NL
Acquired : 11 Nov 2014 6:58 am using AcqMethod FID17.M
Sample Name: WG743851-7,42
Instrument: FID17
Misc Info : WG743851, FRAV28 50ug/mL
Vial Number: 14
CurrentMeth: 0:\Forensics\Data\FID17\2014\NOV\NOV10\HC17111014F.M





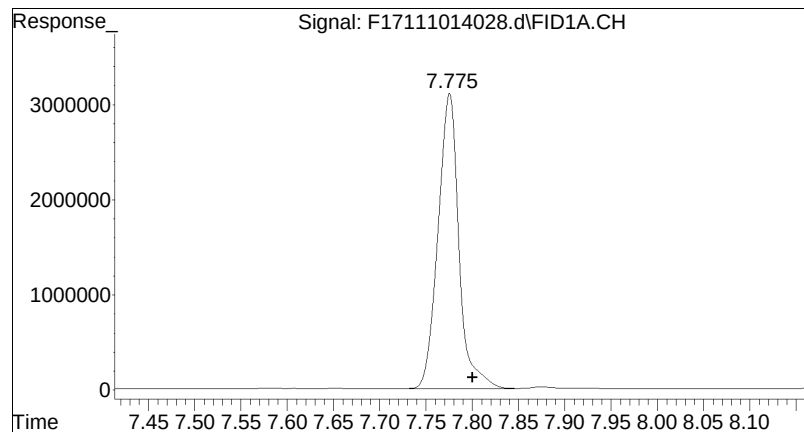
#1 5-alpha-androstane

R.T.: 31.264 min
Delta R.T.: -0.005 min
Response: 57779435
Conc: 50.00 ug/mL M4



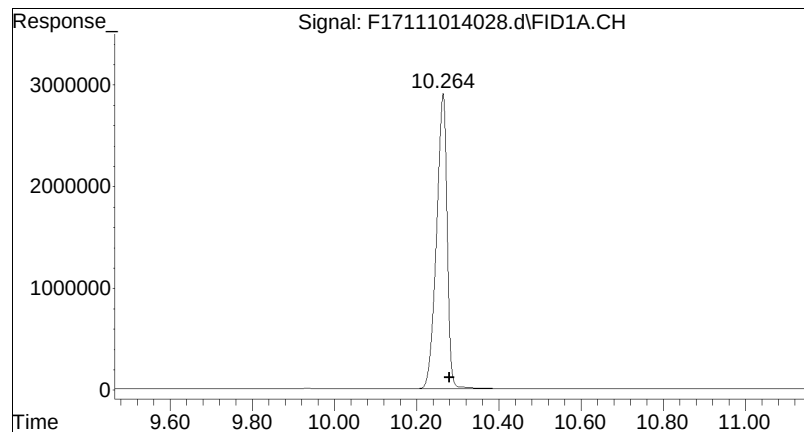
#2 n-Octane (C8)

R.T.: 5.574 min
Delta R.T.: -0.030 min
Response: 45937686
Conc: 46.95 ug/mL M4



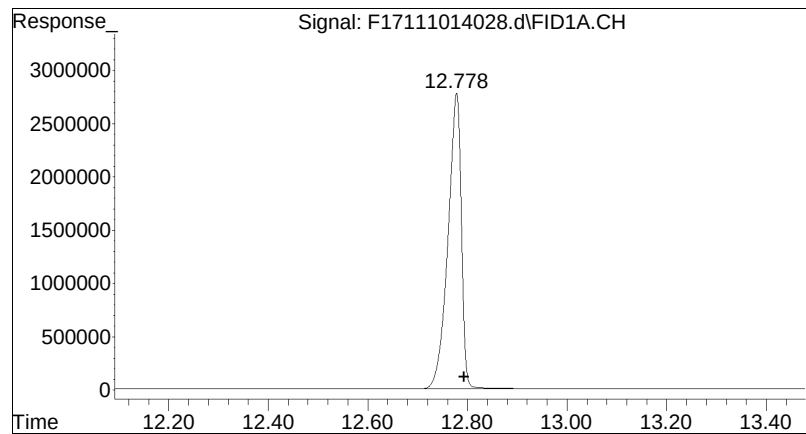
#3 n-Nonane (C9)

R.T.: 7.775 min
Delta R.T.: -0.025 min
Response: 48980250
Conc: 48.66 ug/mL M4



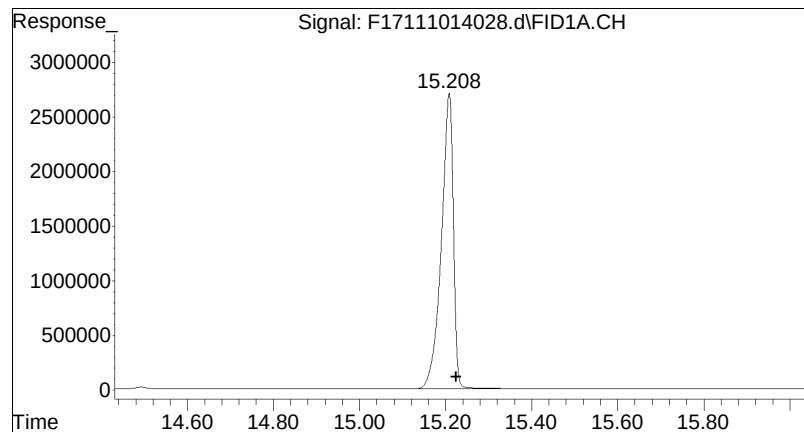
#4 n-Decane (C10)

R.T.: 10.264 min
Delta R.T.: -0.015 min
Response: 52302066
Conc: 50.65 ug/mL M4



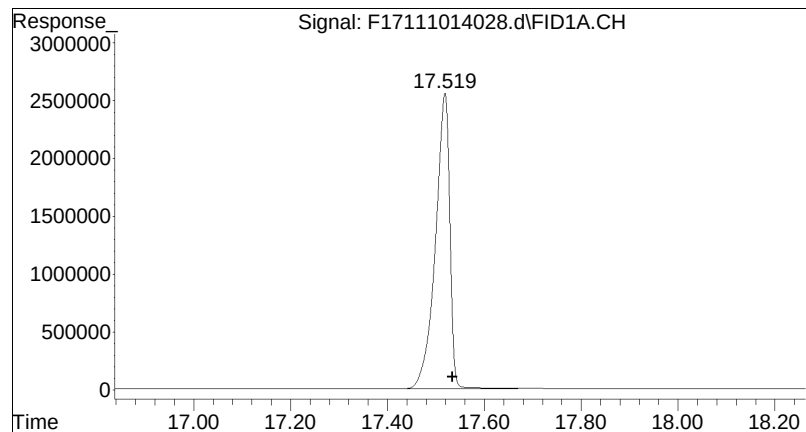
#5 n-Undecane (C11)

R.T.: 12.778 min
Delta R.T.: -0.015 min
Response: 51812091
Conc: 49.63 ug/mL M4



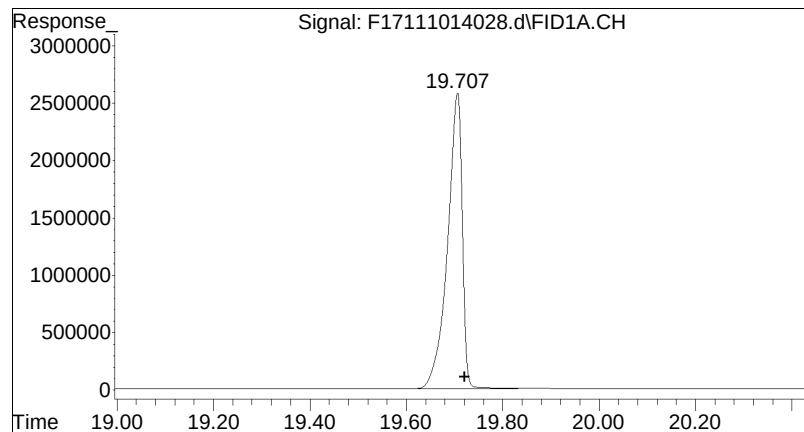
#6 n-Dodecane (C12)

R.T.: 15.208 min
Delta R.T.: -0.016 min
Response: 52486341
Conc: 49.48 ug/mL M4



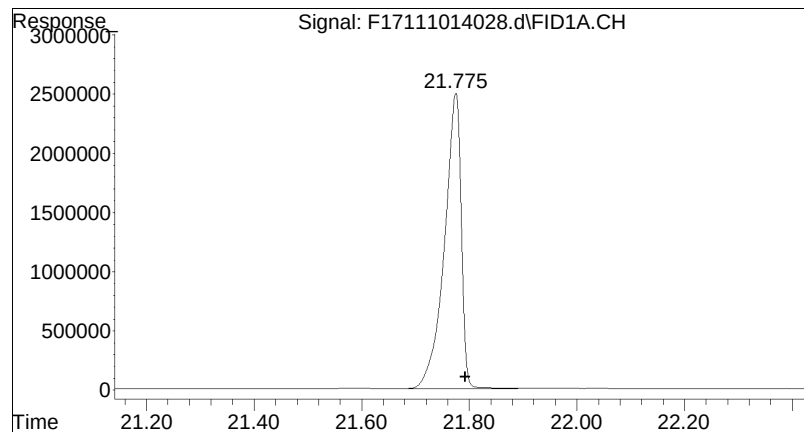
#7 n-Tridecane (C13)

R.T.: 17.519 min
Delta R.T.: -0.015 min
Response: 52668836
Conc: 49.28 ug/mL M4



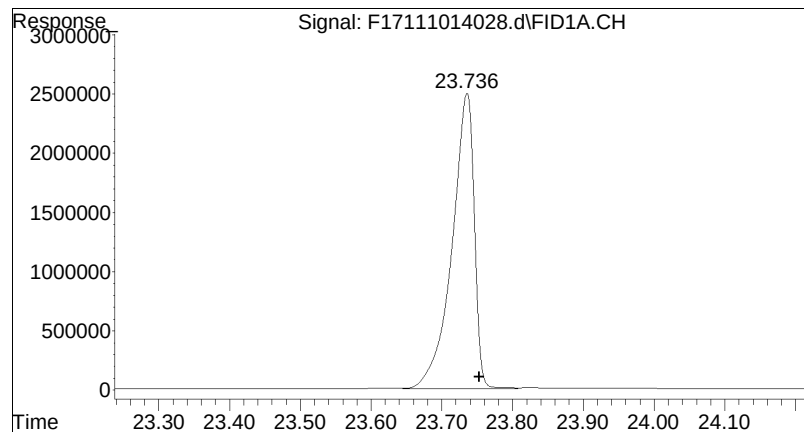
#9 n-Tetradecane (C14)

R.T.: 19.707 min
Delta R.T.: -0.014 min
Response: 54725250
Conc: 50.58 ug/mL M4



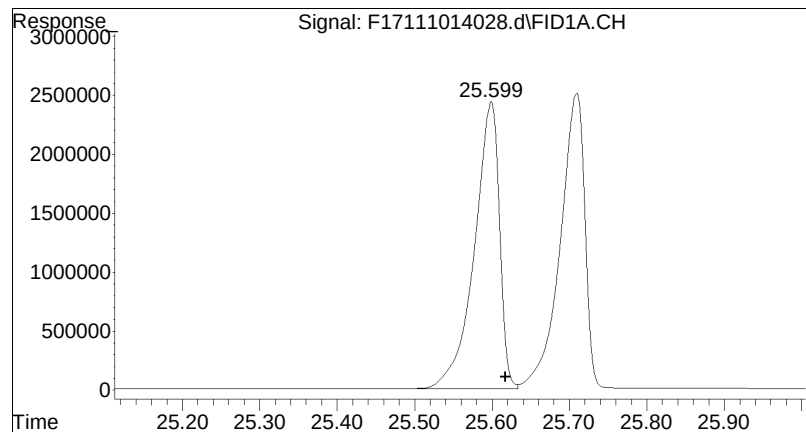
#11 n-Pentadecane (C15)

R.T.: 21.775 min
Delta R.T.: -0.017 min
Response: 54168850
Conc: 49.12 ug/mL M4



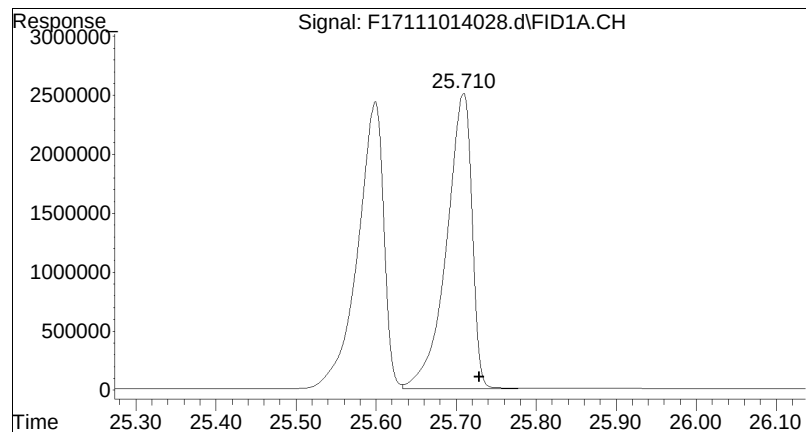
#12 n-Hexadecane (C16)

R.T.: 23.736 min
Delta R.T.: -0.017 min
Response: 54515136
Conc: 49.13 ug/mL M4



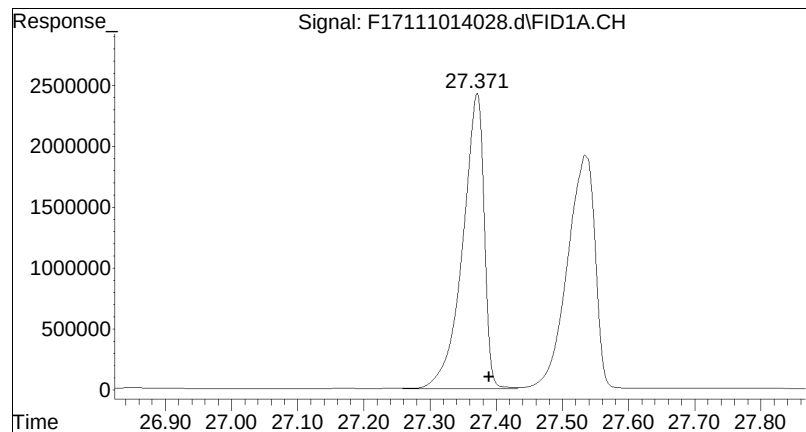
#14 n-Heptadecane (C17)

R.T.: 25.599 min
Delta R.T.: -0.018 min
Response: 54810624
Conc: 49.74 ug/mL M4



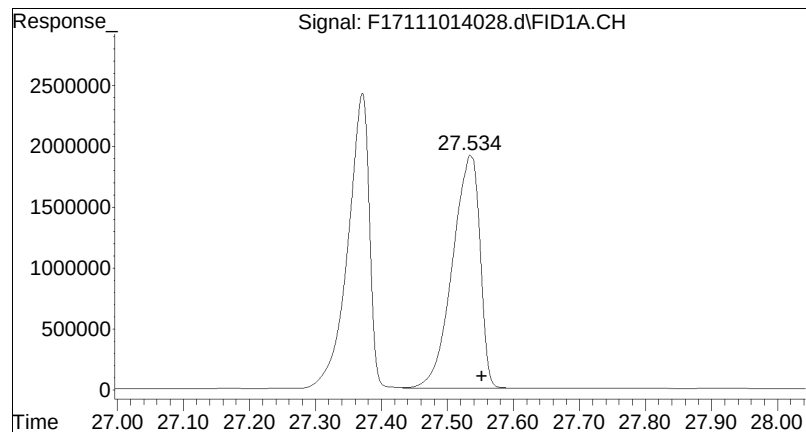
#15 Pristane

R.T.: 25.710 min
Delta R.T.: -0.019 min
Response: 55331736
Conc: 48.61 ug/mL M4



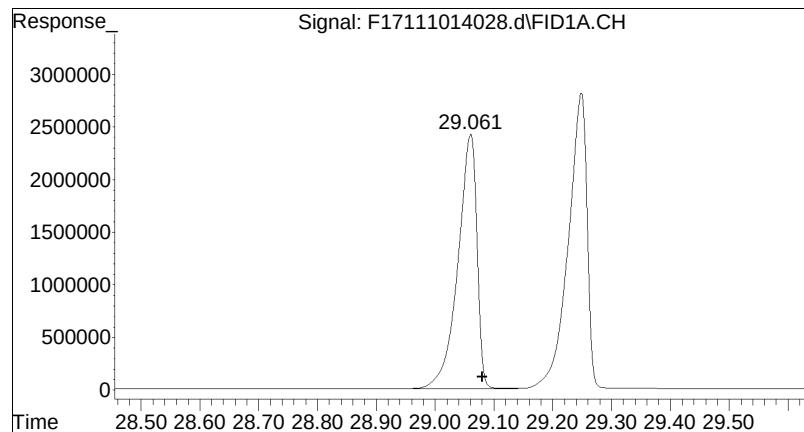
#16 n-Octadecane (C18)

R.T.: 27.371 min
Delta R.T.: -0.018 min
Response: 54607398
Conc: 48.22 ug/mL M4



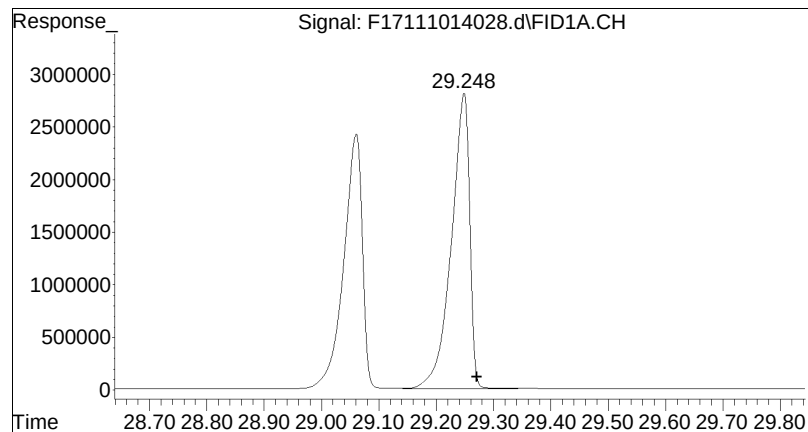
#17 Phytane

R.T.: 27.534 min
Delta R.T.: -0.019 min
Response: 55654924
Conc: 55.70 ug/mL M4



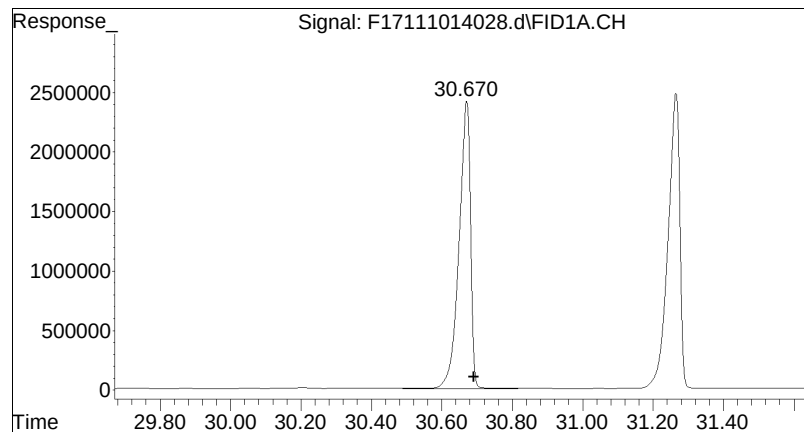
#18 n-Nonadecane (C19)

R.T.: 29.061 min
Delta R.T.: -0.019 min
Response: 54399183
Conc: 48.18 ug/mL M4



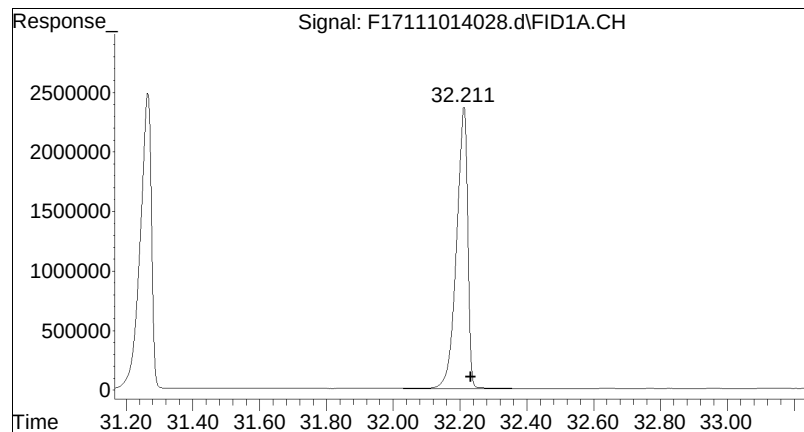
#19 ortho-terphenyl

R.T.: 29.248 min
Delta R.T.: -0.023 min
Response: 62373197
Conc: 49.05 ug/mL M4



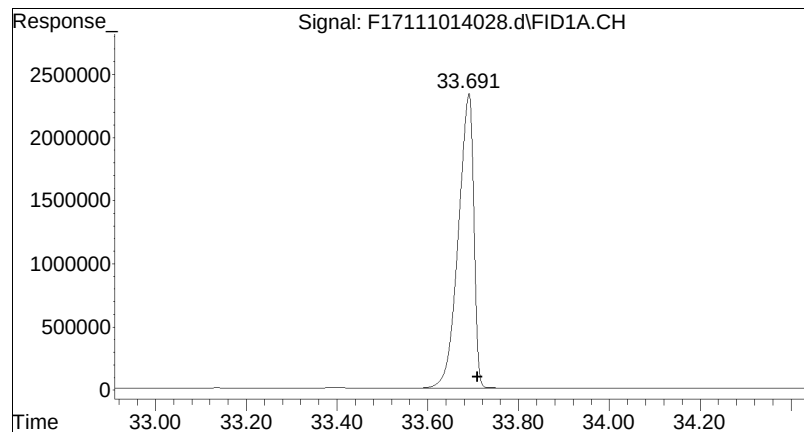
#20 n-Eicosane (C20)

R.T.: 30.670 min
Delta R.T.: -0.021 min
Response: 54603600
Conc: 48.45 ug/mL M4



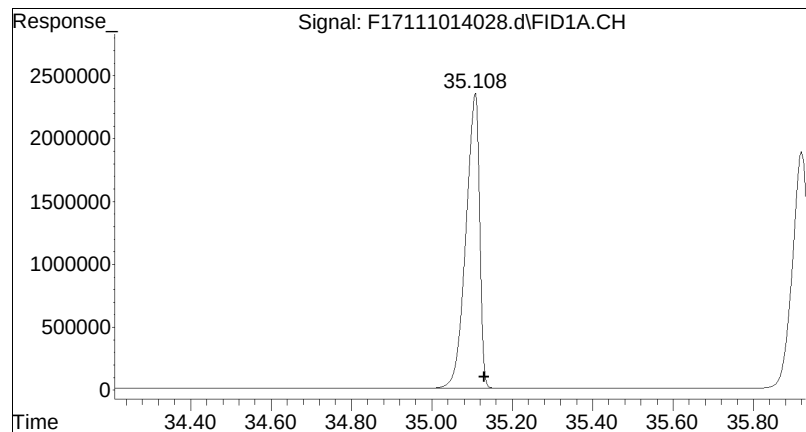
#21 n-Heneicosane (C21)

R.T.: 32.211 min
Delta R.T.: -0.020 min
Response: 55087763
Conc: 48.51 ug/mL M4



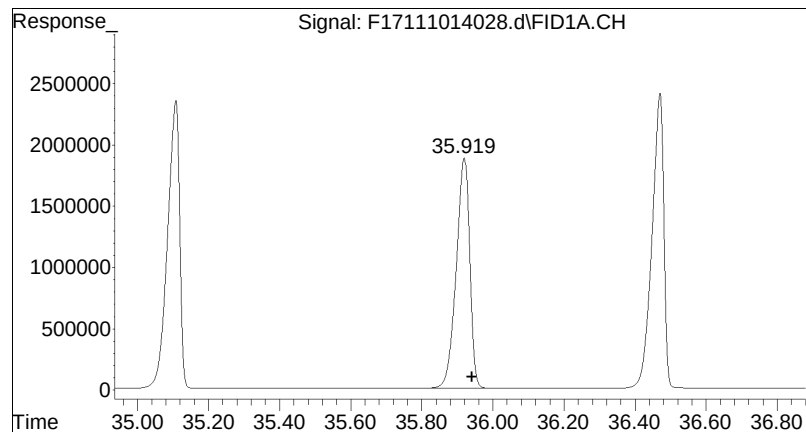
#22 n-Docosane (C22)

R.T.: 33.691 min
Delta R.T.: -0.018 min
Response: 55381679
Conc: 48.28 ug/mL M4



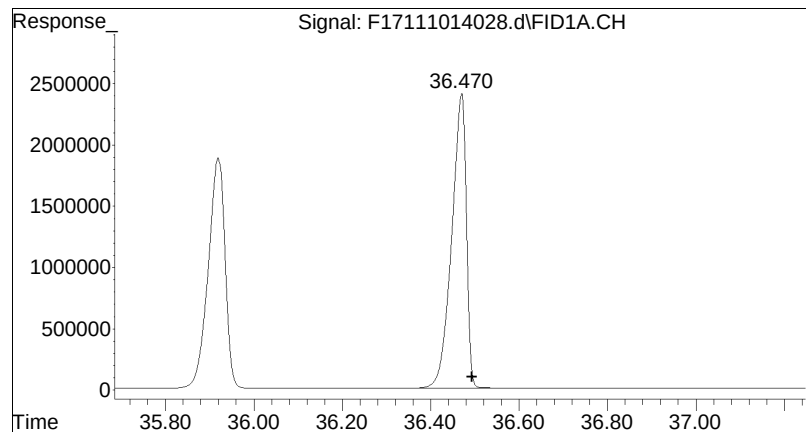
#23 n-Tricosane (C23)

R.T.: 35.108 min
Delta R.T.: -0.021 min
Response: 55584473
Conc: 47.98 ug/mL M4



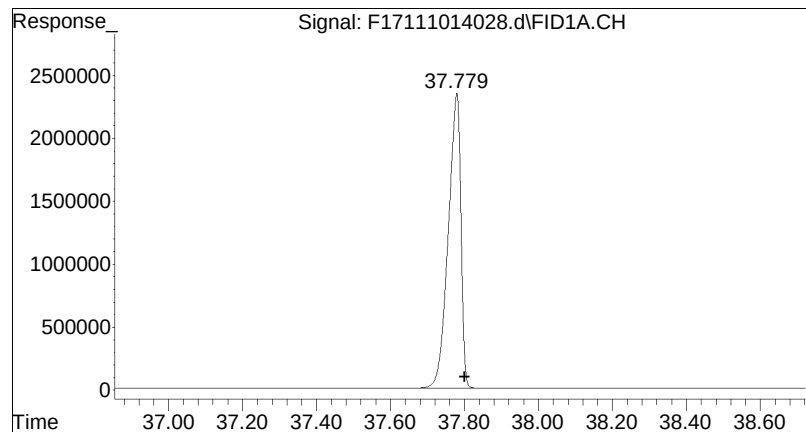
#24 d50-Tetracosane

R.T.: 35.919 min
Delta R.T.: -0.021 min
Response: 49983701
Conc: 48.40 ug/mL M4



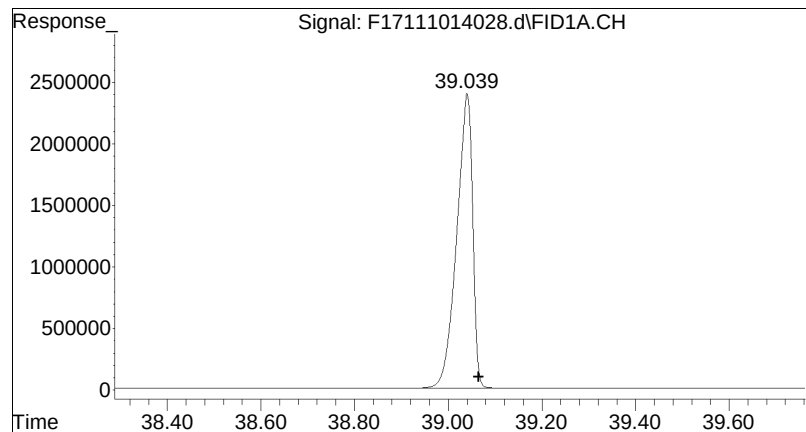
#25 n-Tetracosane (C24)

R.T.: 36.470 min
Delta R.T.: -0.023 min
Response: 55601443
Conc: 47.92 ug/mL M4



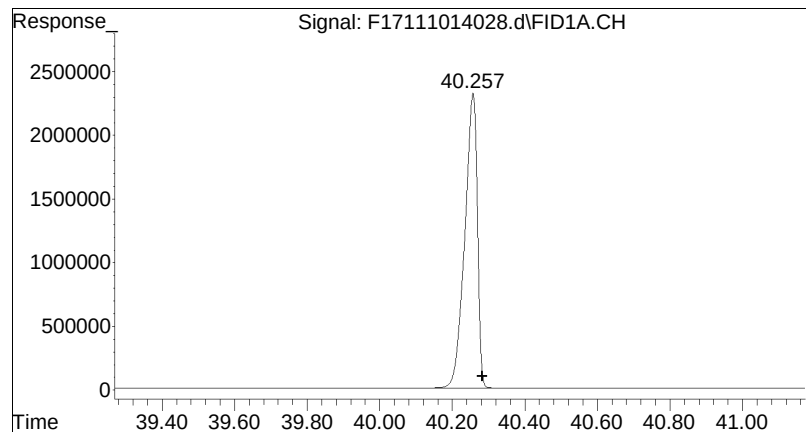
#26 n-Pentacosane (C25)

R.T.: 37.779 min
Delta R.T.: -0.021 min
Response: 55584700
Conc: 48.15 ug/mL M4



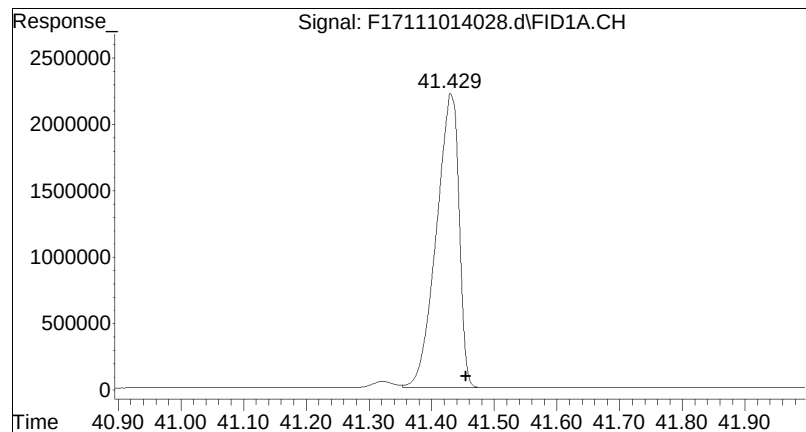
#27 n-Hexacosane (C26)

R.T.: 39.039 min
Delta R.T.: -0.025 min
Response: 56520227
Conc: 47.89 ug/mL M4



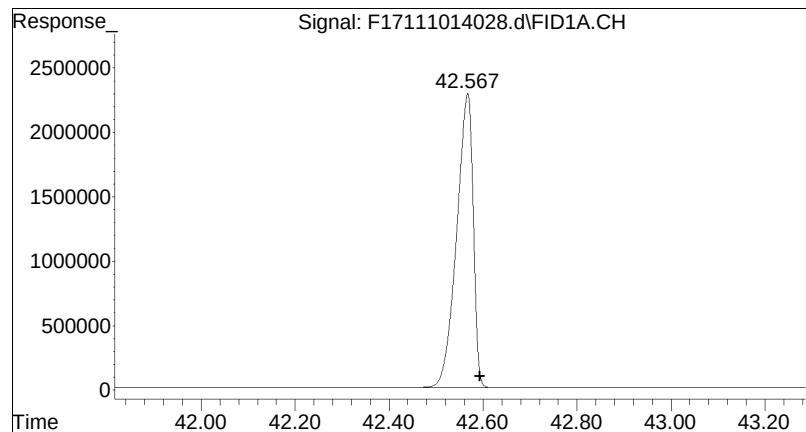
#28 n-Heptacosane (C27)

R.T.: 40.257 min
Delta R.T.: -0.025 min
Response: 55822334
Conc: 47.54 ug/mL M4



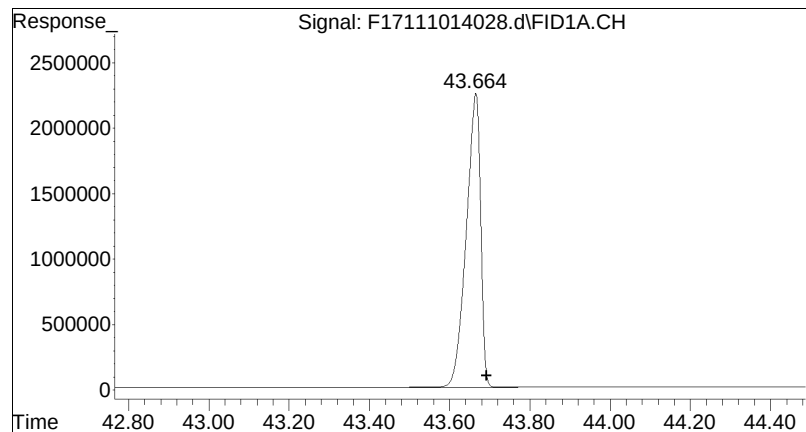
#29 n-Octacosane (C28)

R.T.: 41.429 min
Delta R.T.: -0.025 min
Response: 55792477
Conc: 47.58 ug/mL M4



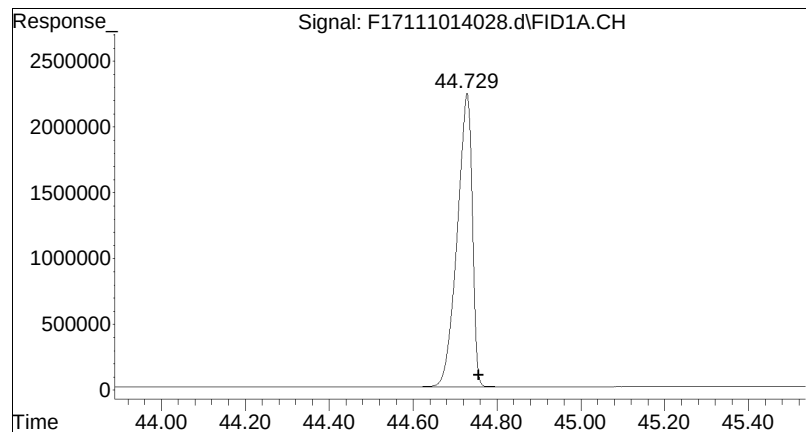
#30 n-Nonacosane (C29)

R.T.: 42.567 min
Delta R.T.: -0.026 min
Response: 56007887
Conc: 47.65 ug/mL M4



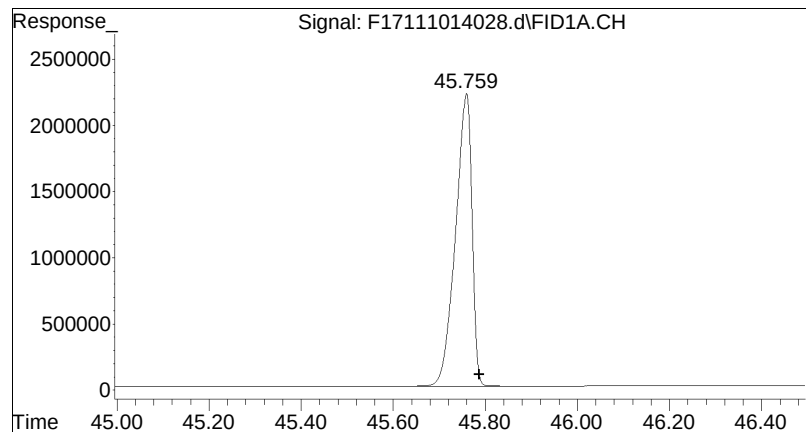
#31 n-Triacontane (C30)

R.T.: 43.664 min
Delta R.T.: -0.028 min
Response: 55890152
Conc: 47.33 ug/mL M4



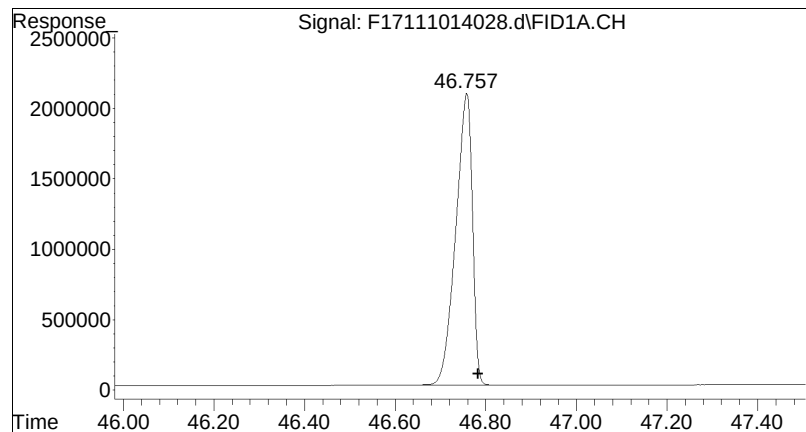
#32 n-Hentriacontane (C31)

R.T.: 44.729 min
Delta R.T.: -0.027 min
Response: 55831872
Conc: 47.25 ug/mL M4



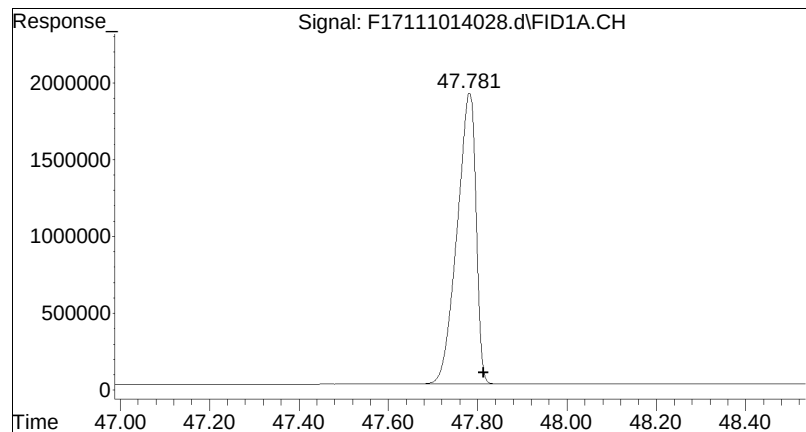
#33 n-Dotriacontane (C32)

R.T.: 45.759 min
Delta R.T.: -0.027 min
Response: 55077837
Conc: 46.27 ug/mL M4



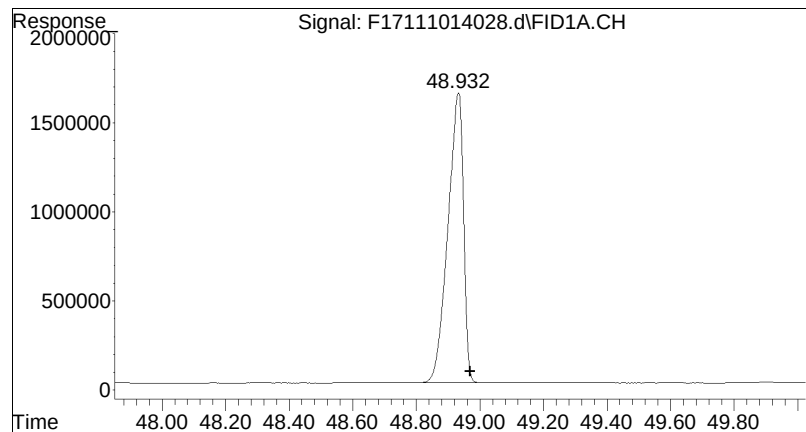
#34 n-Tritriacontane (C33)

R.T.: 46.757 min
Delta R.T.: -0.026 min
Response: 53104426
Conc: 47.13 ug/mL M4



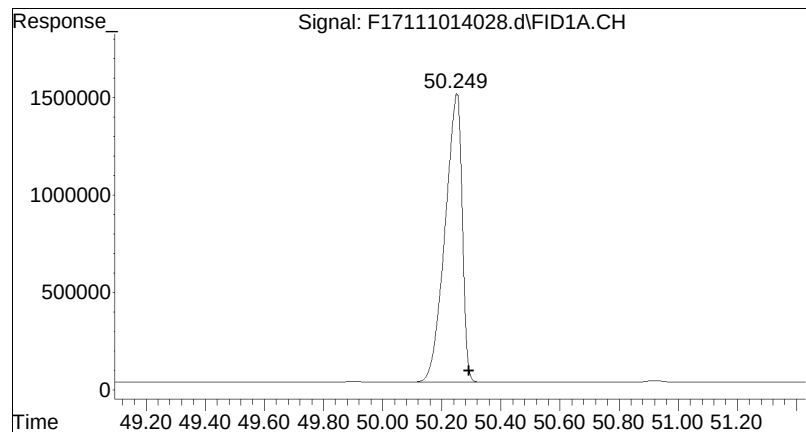
#35 n-tetratriacontane (C34)

R.T.: 47.781 min
Delta R.T.: -0.032 min
Response: 55861107
Conc: 47.53 ug/mL M4



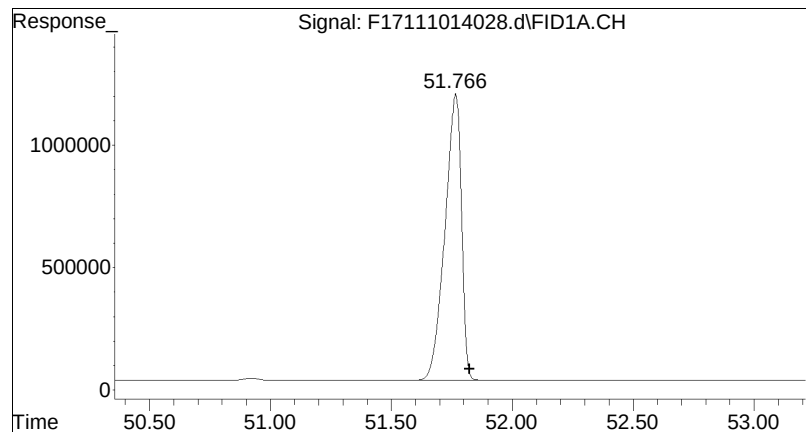
#36 n-Pentatriacontane (C35)

R.T.: 48.932 min
Delta R.T.: -0.036 min
Response: 55722183
Conc: 47.13 ug/mL M4



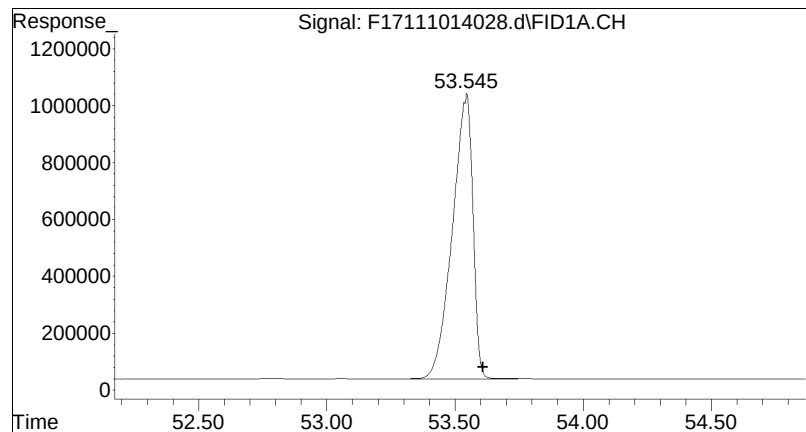
#37 n-Hexatriacontane (C36)

R.T.: 50.249 min
Delta R.T.: -0.043 min
Response: 59610361
Conc: 49.06 ug/mL M4



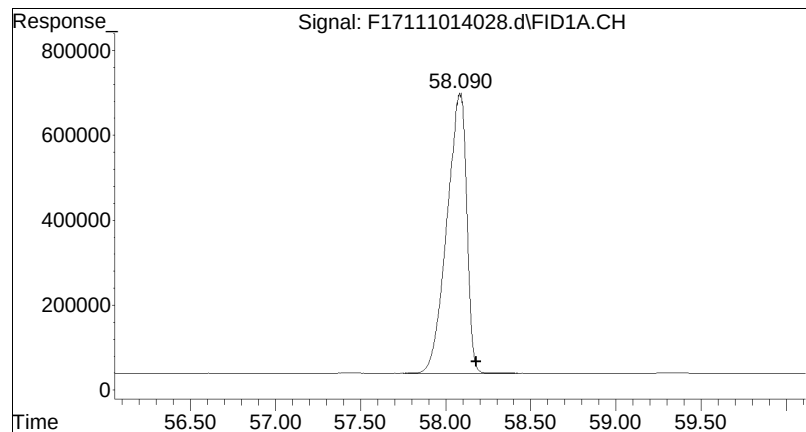
#38 n-Heptatriacontane (C37)

R.T.: 51.766 min
Delta R.T.: -0.056 min
Response: 55634288
Conc: 46.71 ug/mL M4



#39 n-Octatriacontane (C38)

R.T.: 53.545 min
Delta R.T.: -0.062 min
Response: 55500204
Conc: 47.50 ug/mL M4



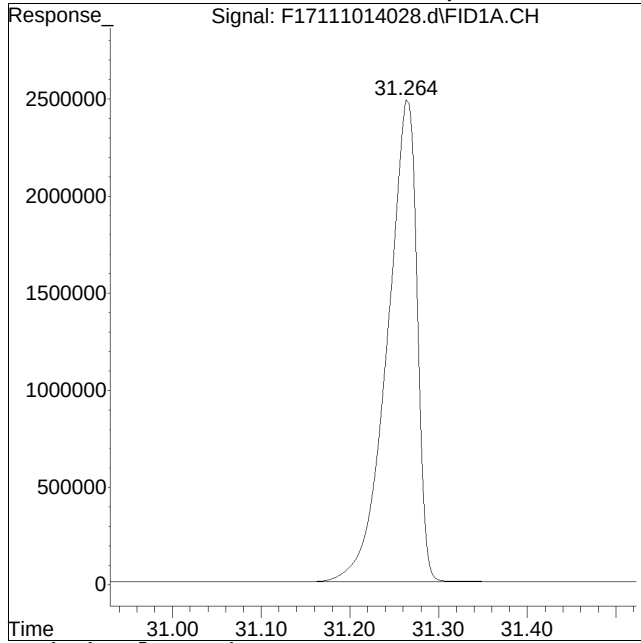
#41 n-Tetracontane (C40)

R.T.: 58.090 min
Delta R.T.: -0.088 min
Response: 53295101
Conc: 43.64 ug/mL M4

Manual Integration/Negative Proof Report

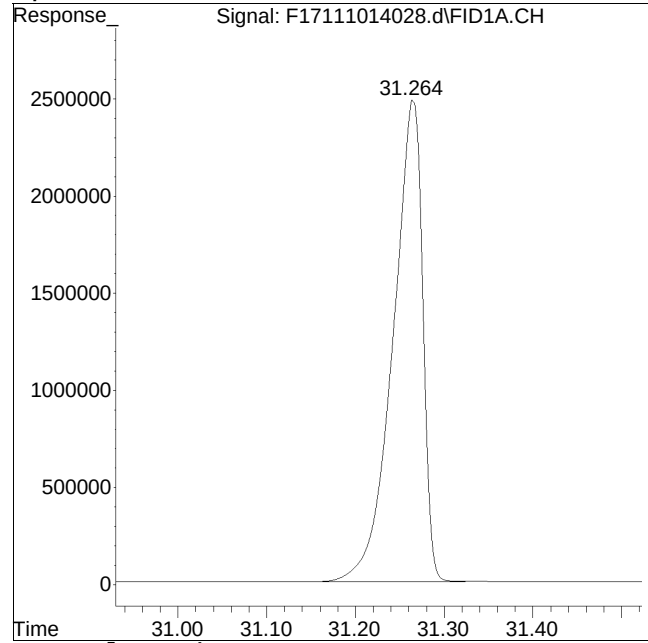
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #1: 5-alpha-androstane



Original Peak Response = 57810641

M4 = Poor automated baseline construction.

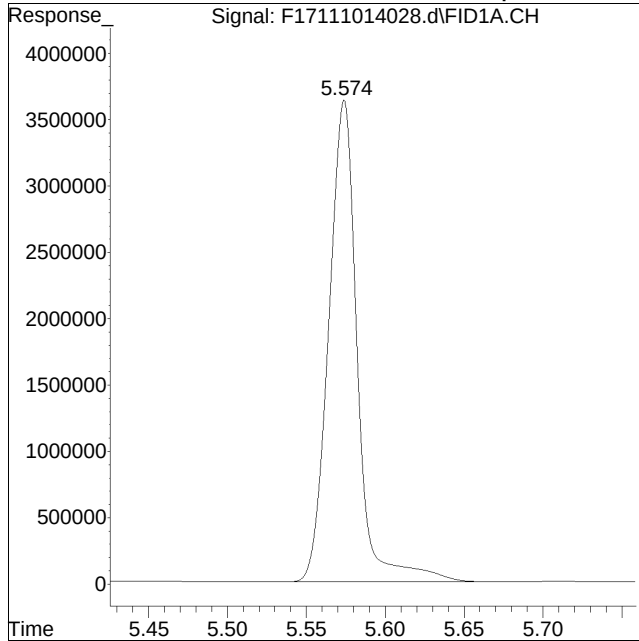


Manual Peak Response = 57779435 M4

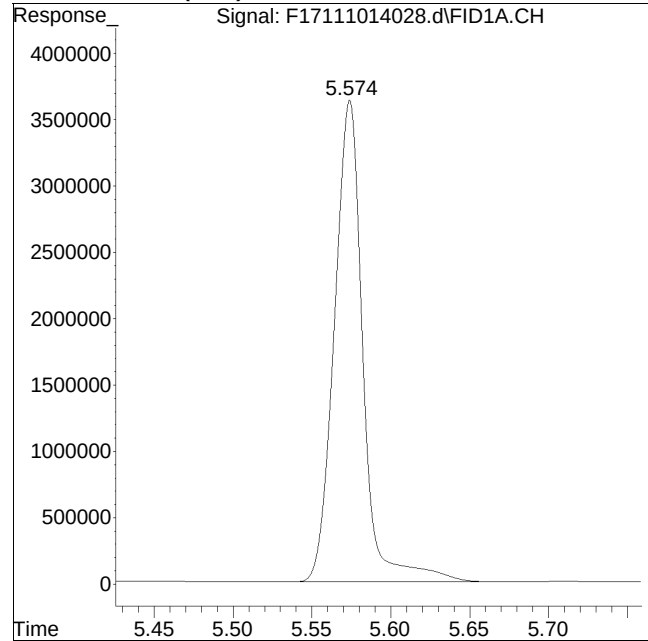
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #2: n-Octane (C8)



Original Peak Response = 45955159



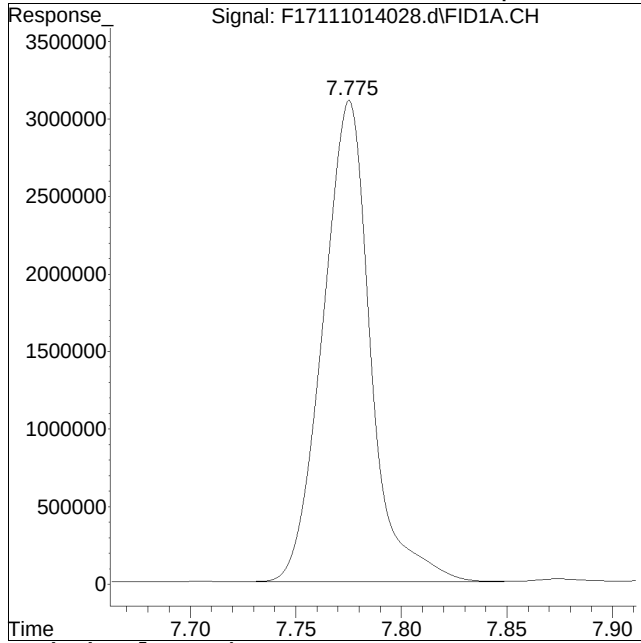
Manual Peak Response = 45937686 M4

M4 = Poor automated baseline construction.

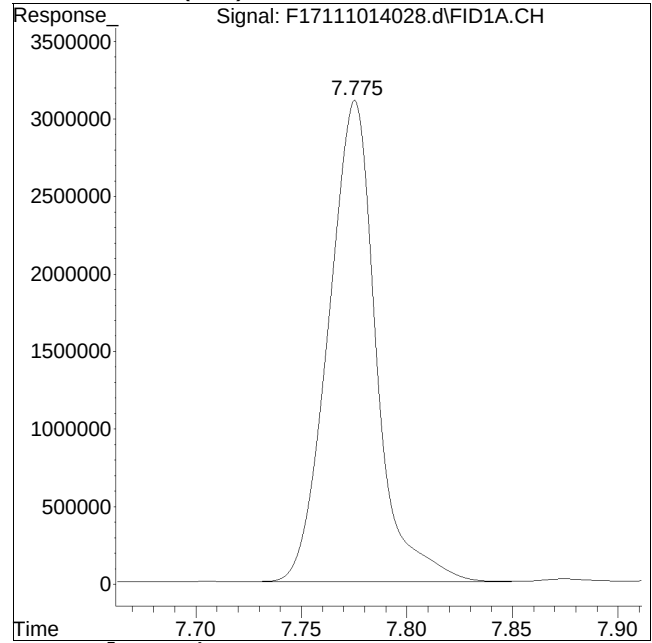
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #3: n-Nonane (C9)



Original Peak Response = 48984915



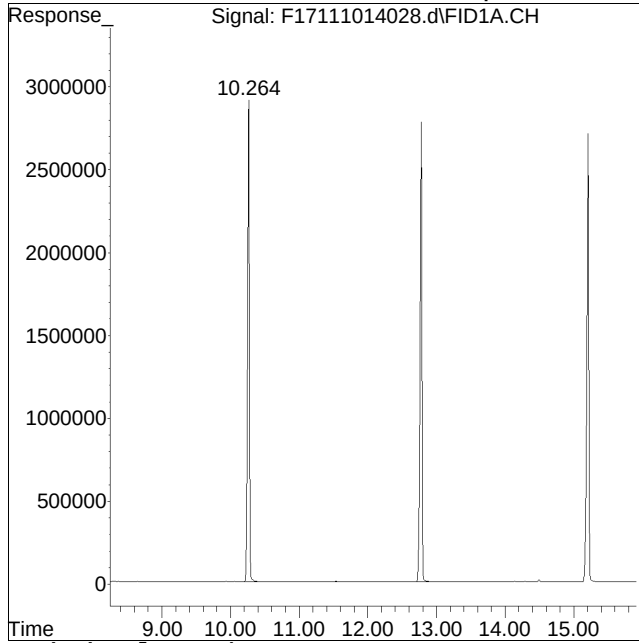
Manual Peak Response = 48980250 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

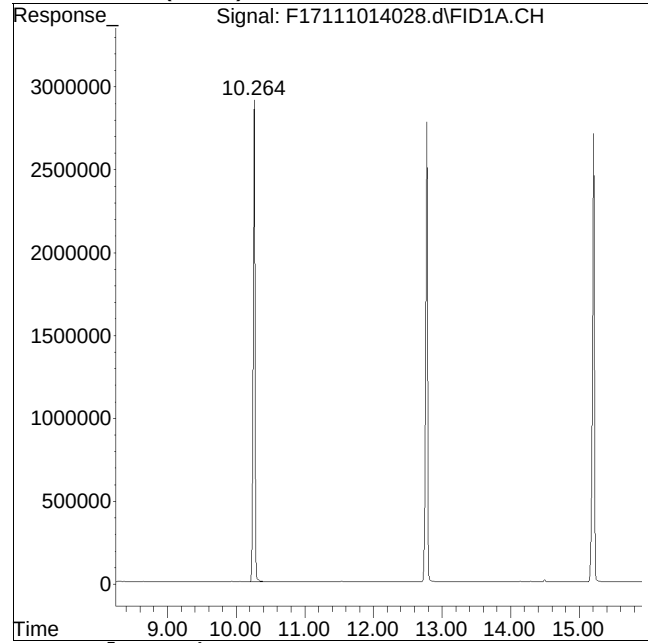
Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #4: n-Decane (C10)



Original Peak Response = 51656043

M4 = Poor automated baseline construction.

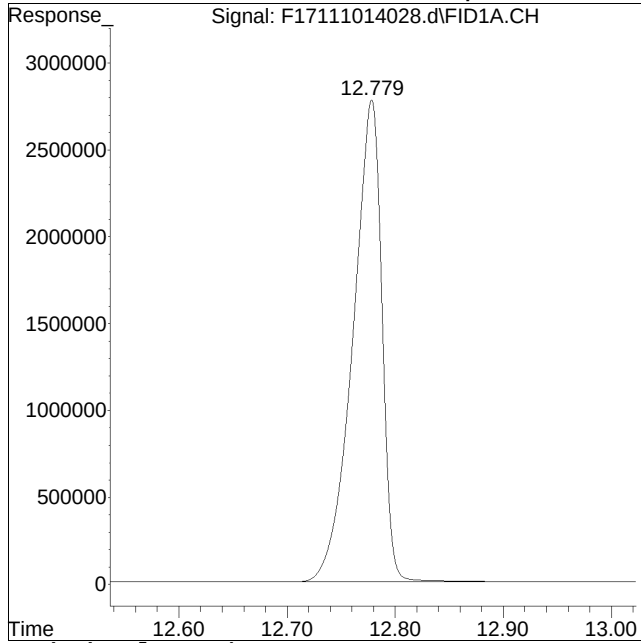


Manual Peak Response = 52302066 M4

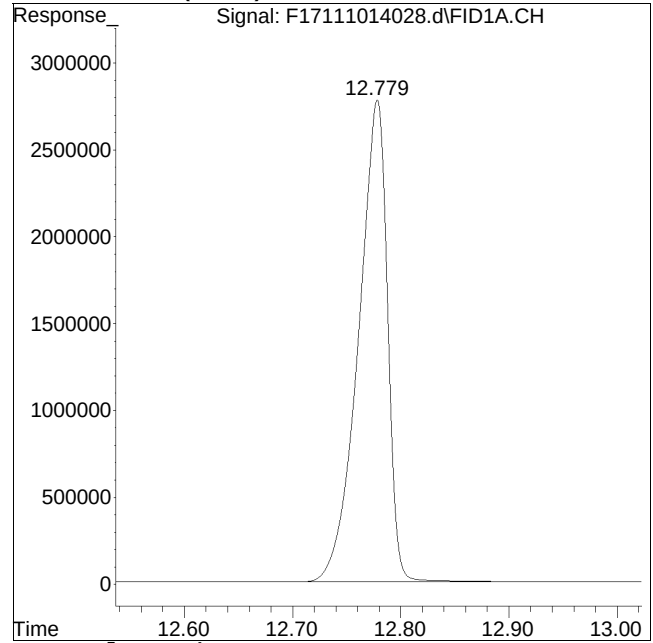
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #5: n-Undecane (C11)



Original Peak Response = 51789676



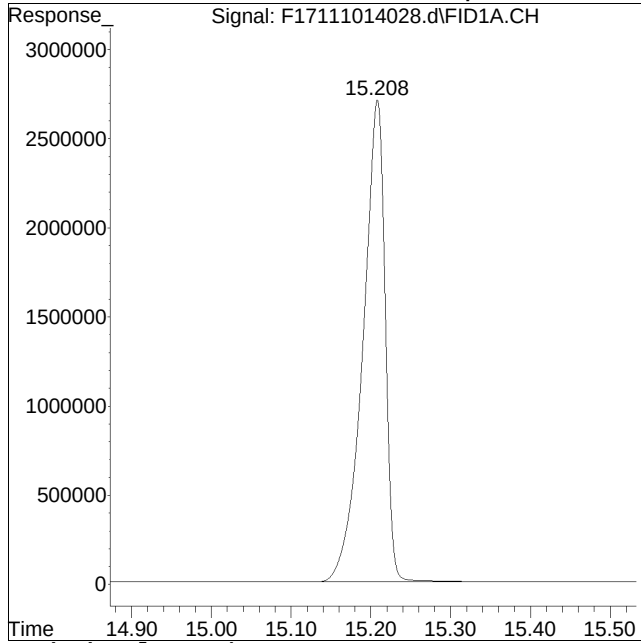
Manual Peak Response = 51812091 M4

M4 = Poor automated baseline construction.

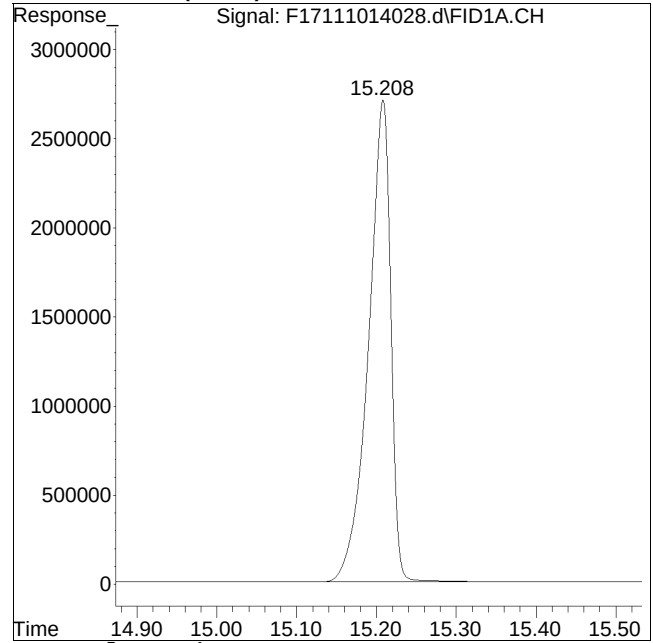
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\201QMethod : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #6: n-Dodecane (C12)



Original Peak Response = 52373765



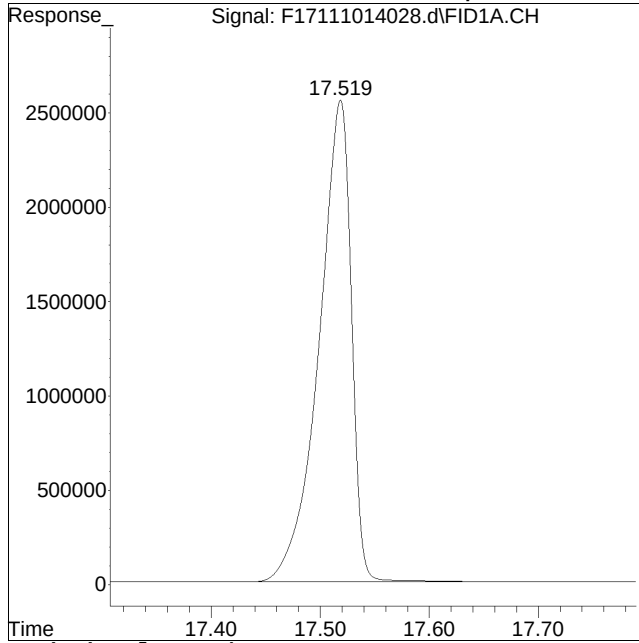
Manual Peak Response = 52486341 M4

M4 = Poor automated baseline construction.

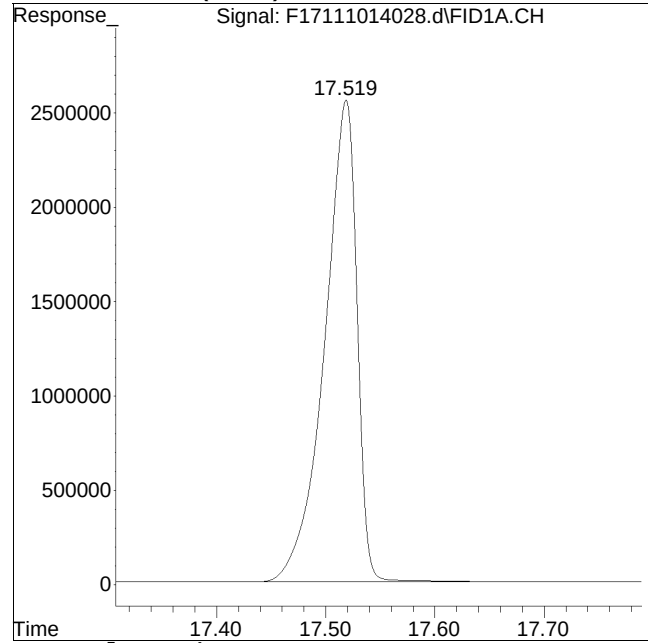
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #7: n-Tridecane (C13)



Original Peak Response = 52650885



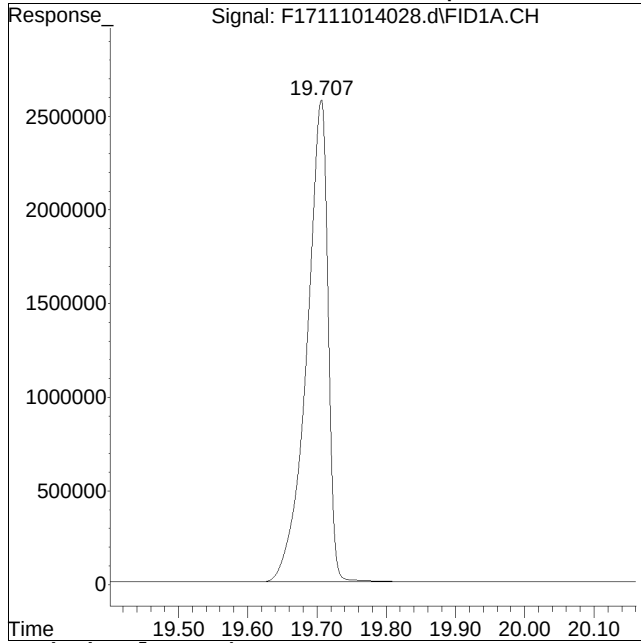
Manual Peak Response = 52668836 M4

M4 = Poor automated baseline construction.

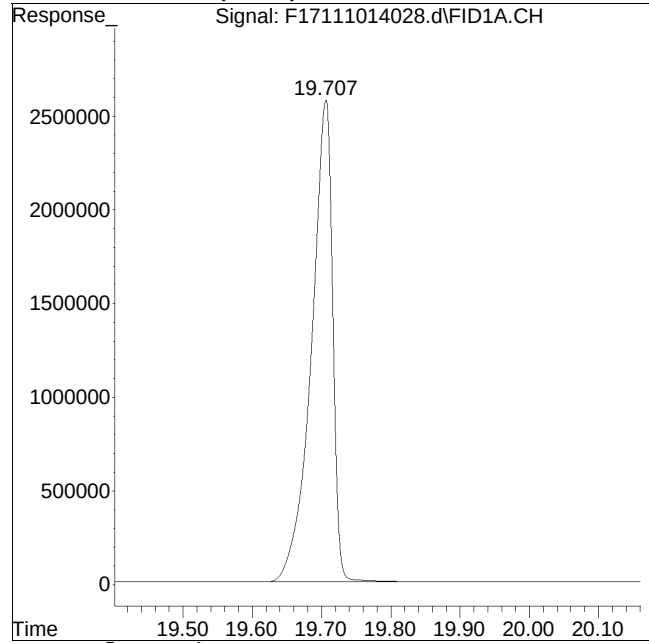
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #9: n-Tetradecane (C14)



Original Peak Response = 54838832



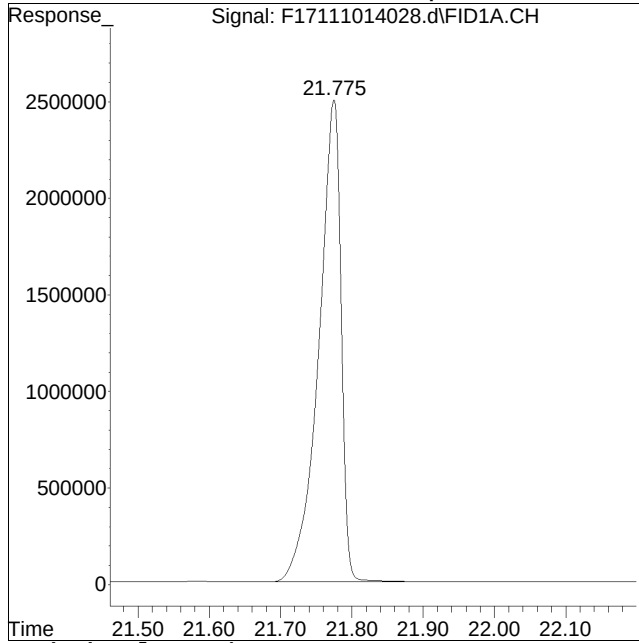
Manual Peak Response = 54725250 M4

M4 = Poor automated baseline construction.

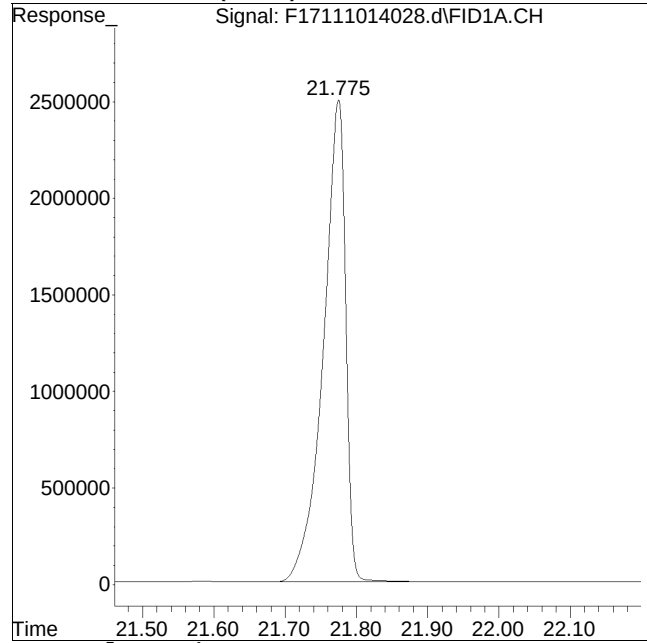
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #11: n-Pentadecane (C15)



Original Peak Response = 54161252



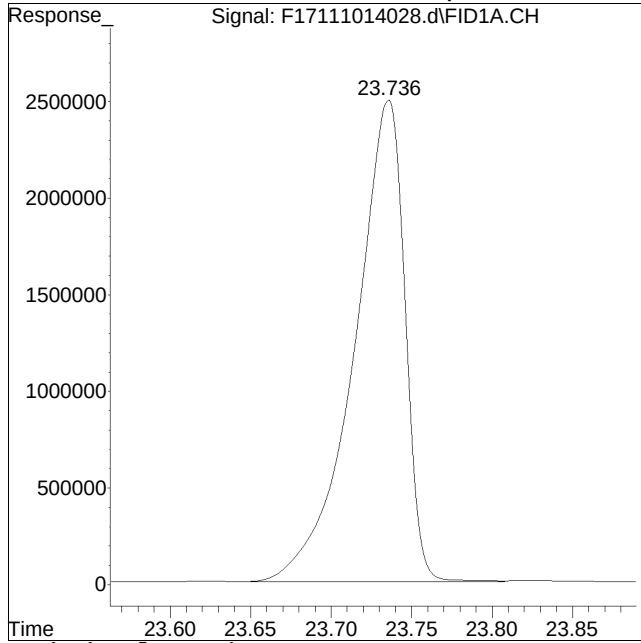
Manual Peak Response = 54168850 M4

M4 = Poor automated baseline construction.

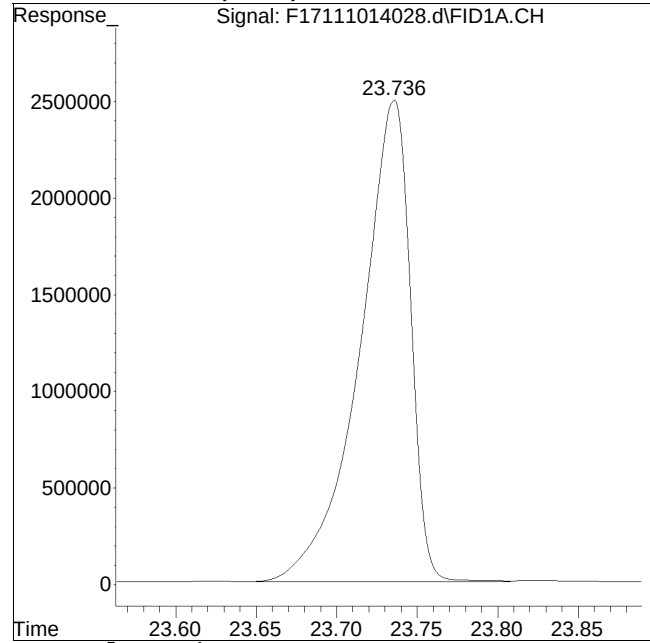
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #12: n-Hexadecane (C16)



Original Peak Response = 54520372



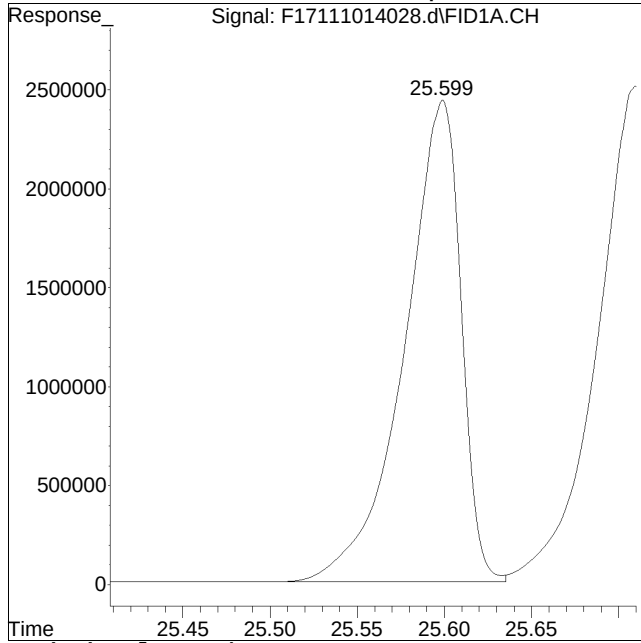
Manual Peak Response = 54515136 M4

M4 = Poor automated baseline construction.

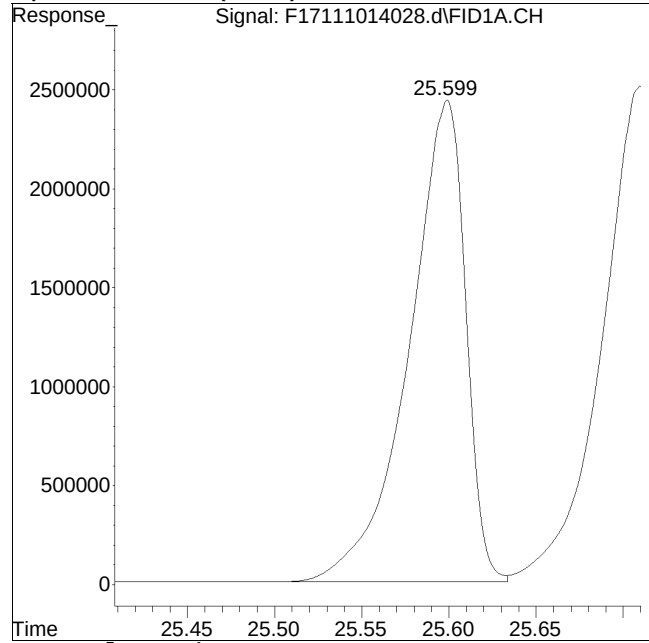
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #14: n-Heptadecane (C17)



Original Peak Response = 54807903



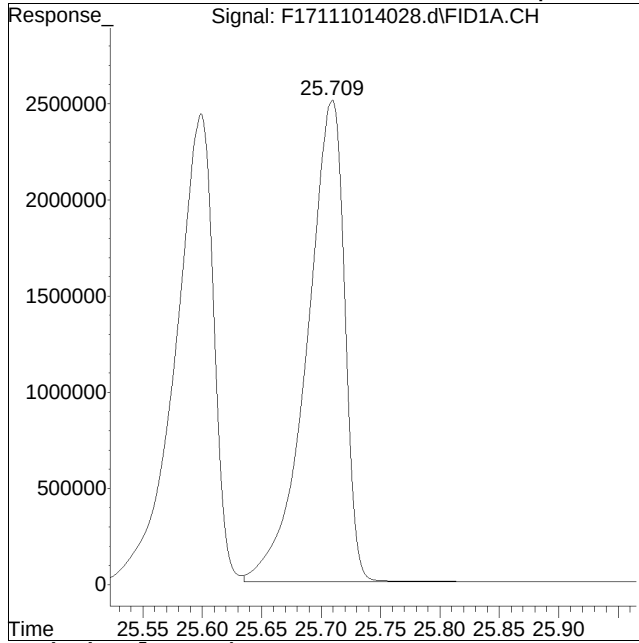
Manual Peak Response = 54810624 M4

M4 = Poor automated baseline construction.

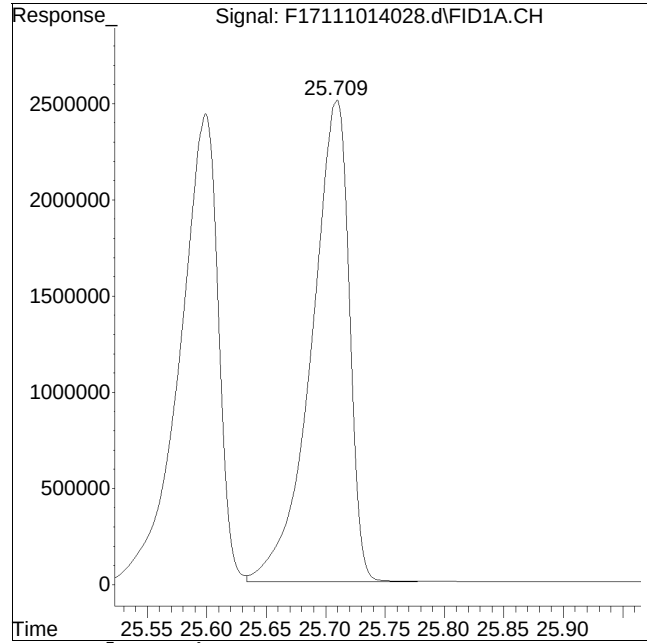
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #15: Pristane



Original Peak Response = 55462518



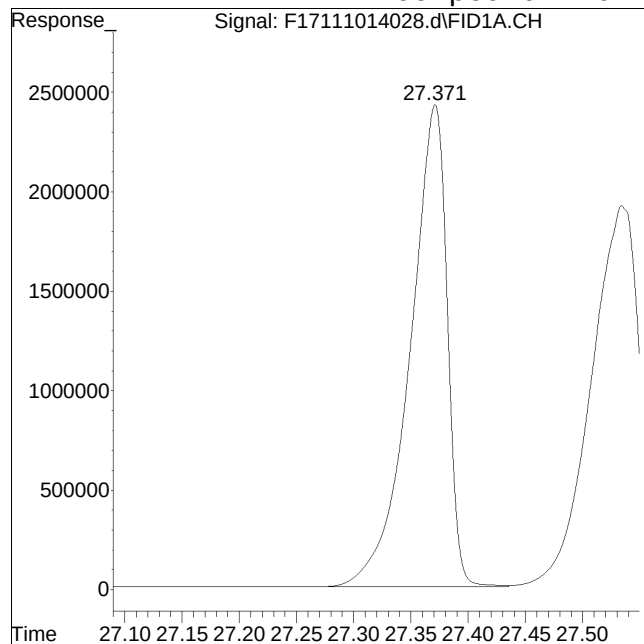
Manual Peak Response = 55331736 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

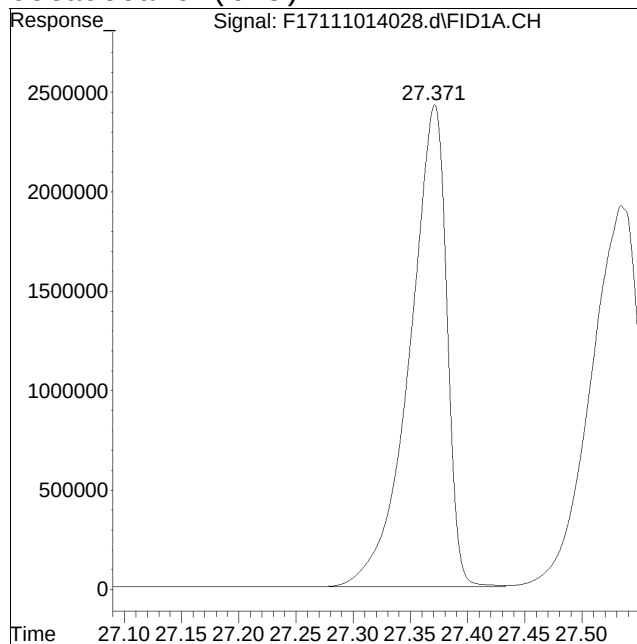
Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #16: n-Octadecane (C18)



Original Peak Response = 54661867

M4 = Poor automated baseline construction.

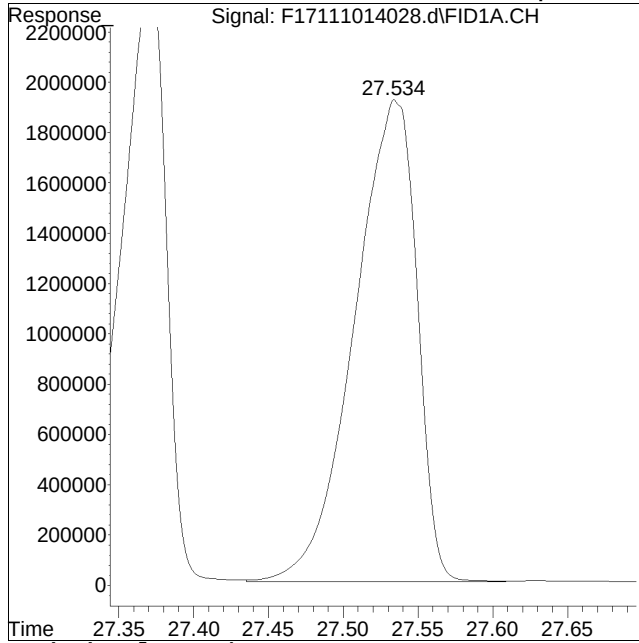


Manual Peak Response = 54607398 M4

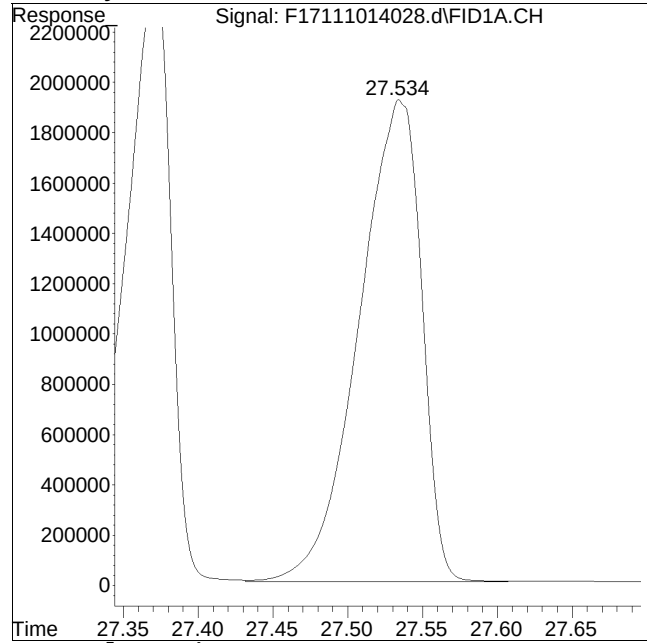
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #17: Phytane



Original Peak Response = 55708840



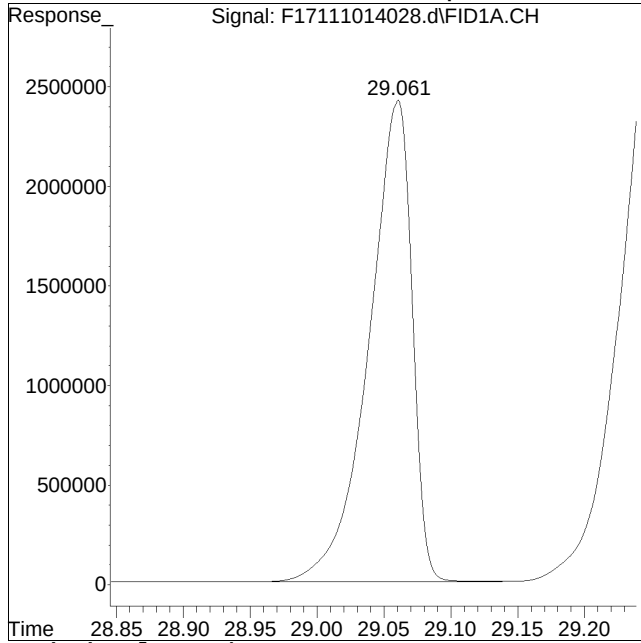
Manual Peak Response = 55654924 M4

M4 = Poor automated baseline construction.

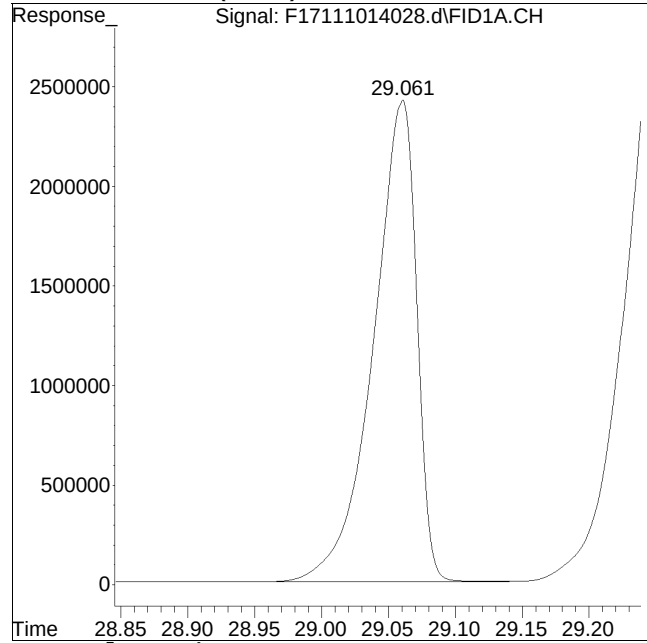
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #18: n-Nonadecane (C19)



Original Peak Response = 54256496



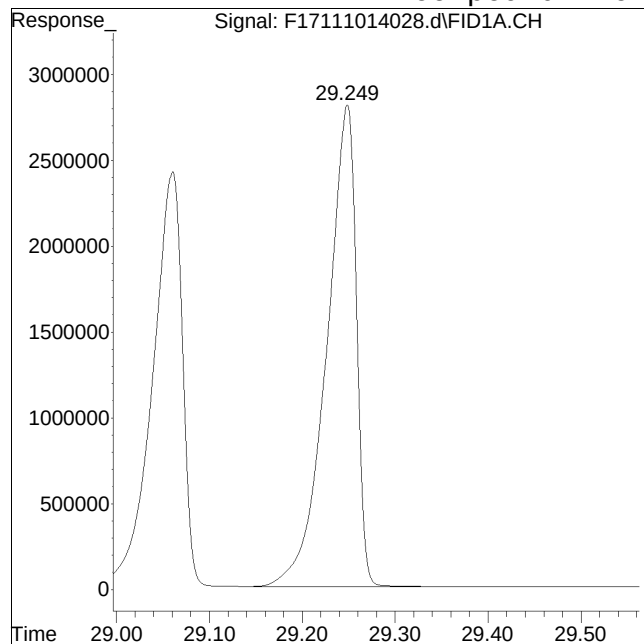
Manual Peak Response = 54399183 M4

M4 = Poor automated baseline construction.

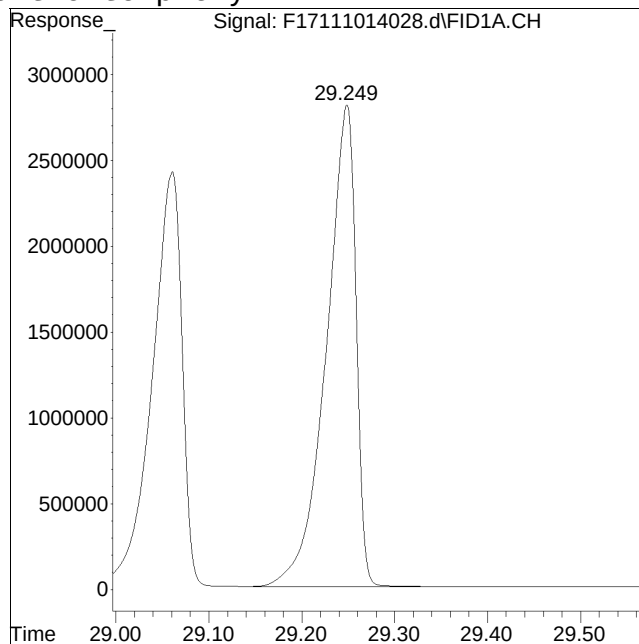
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010 Method : HC17111014F.M
 Data File : F17111014028.d Operator : FID17:NL
 Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
 Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #19: ortho-terphenyl



Original Peak Response = 62183463



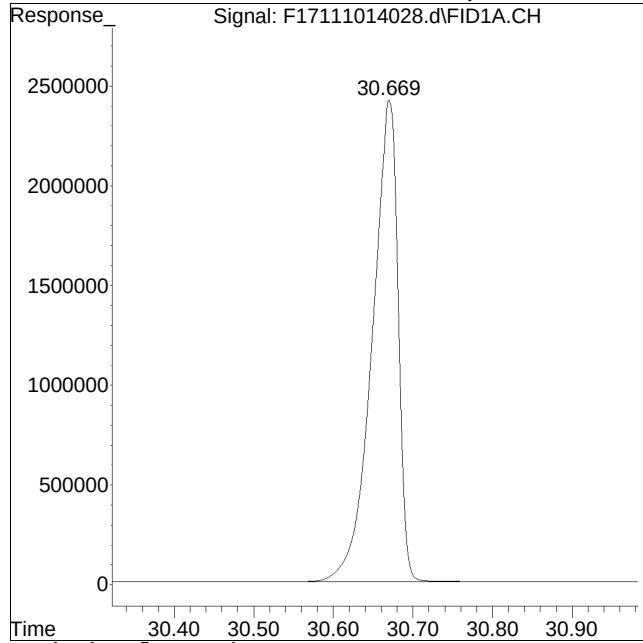
Manual Peak Response = 62373197 M4

M4 = Poor automated baseline construction.

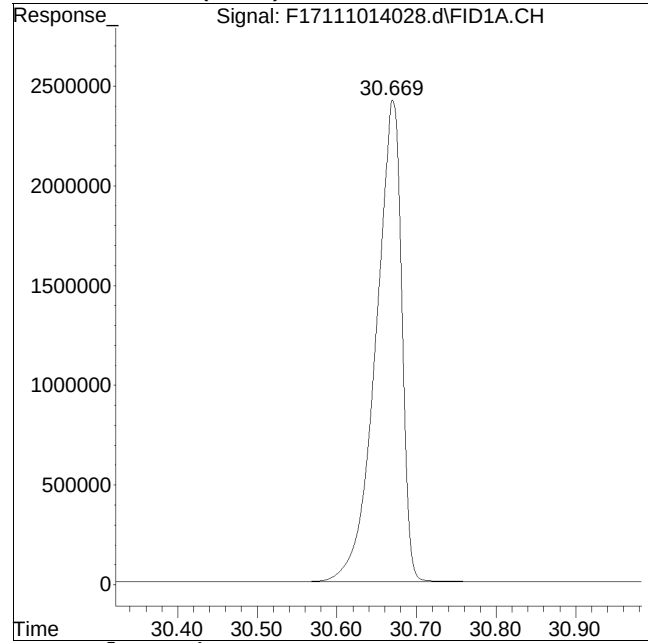
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #20: n-Eicosane (C20)



Original Peak Response = 54662198



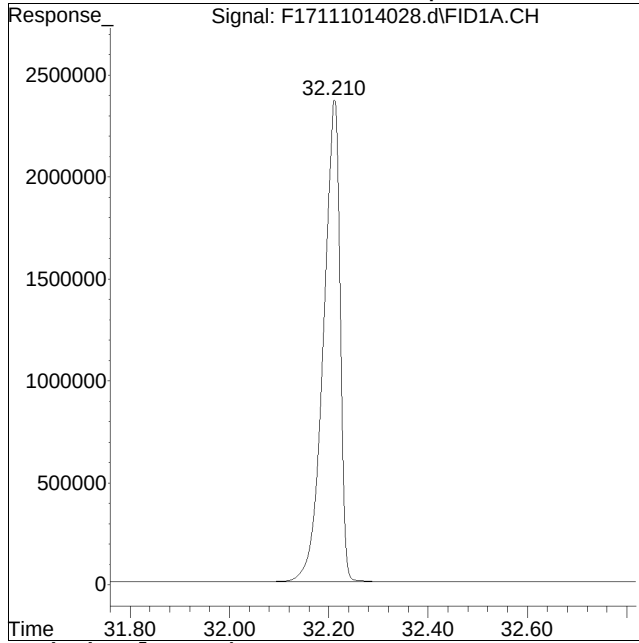
Manual Peak Response = 54603600 M4

M4 = Poor automated baseline construction.

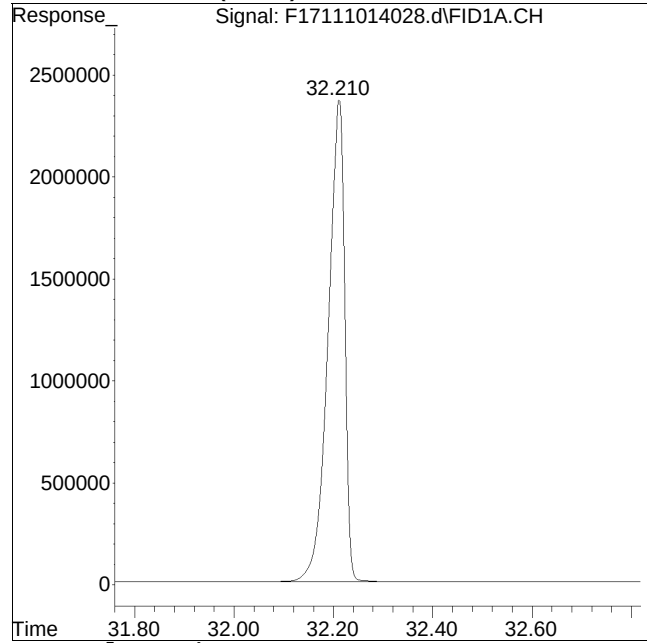
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #21: n-Heneicosane (C21)



Original Peak Response = 54970870



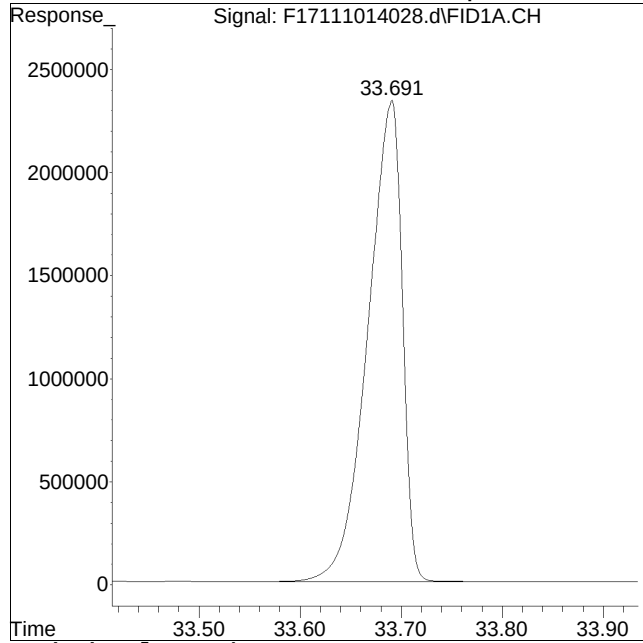
Manual Peak Response = 55087763 M4

M4 = Poor automated baseline construction.

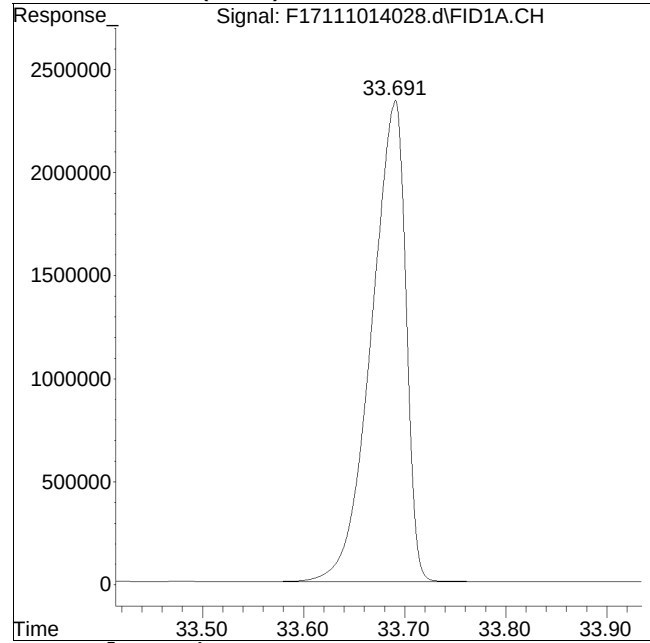
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #22: n-Docosane (C22)



Original Peak Response = 55330223



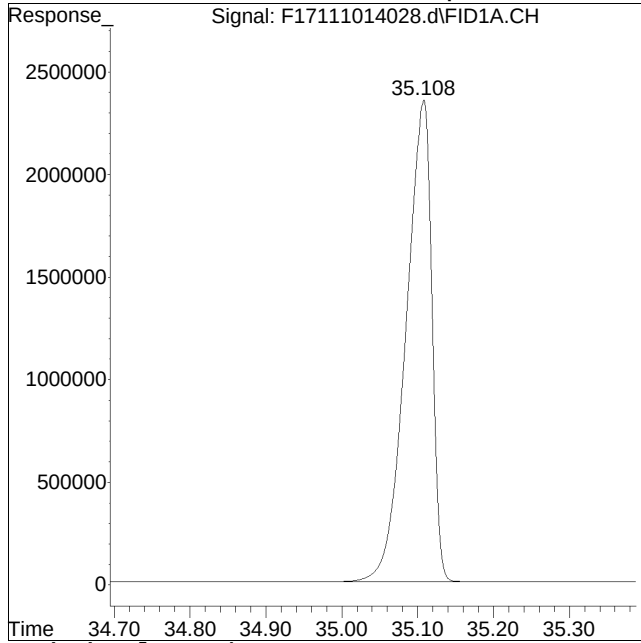
Manual Peak Response = 55381679 M4

M4 = Poor automated baseline construction.

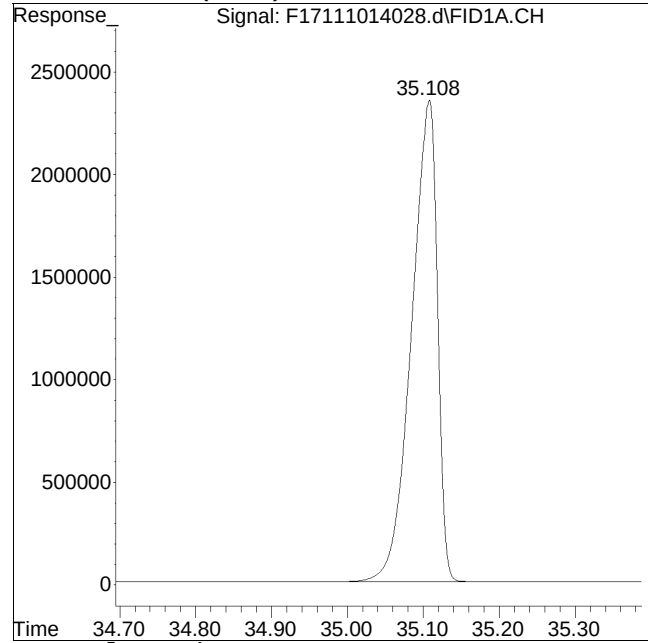
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #23: n-Tricosane (C23)



Original Peak Response = 55580721



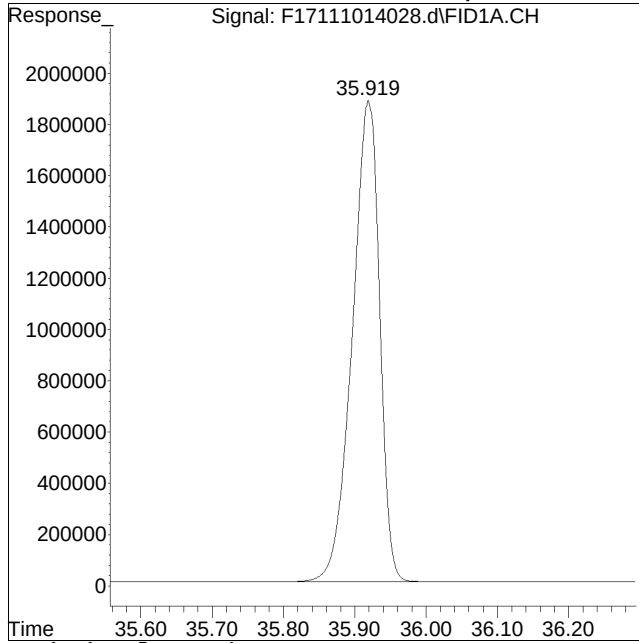
Manual Peak Response = 55584473 M4

M4 = Poor automated baseline construction.

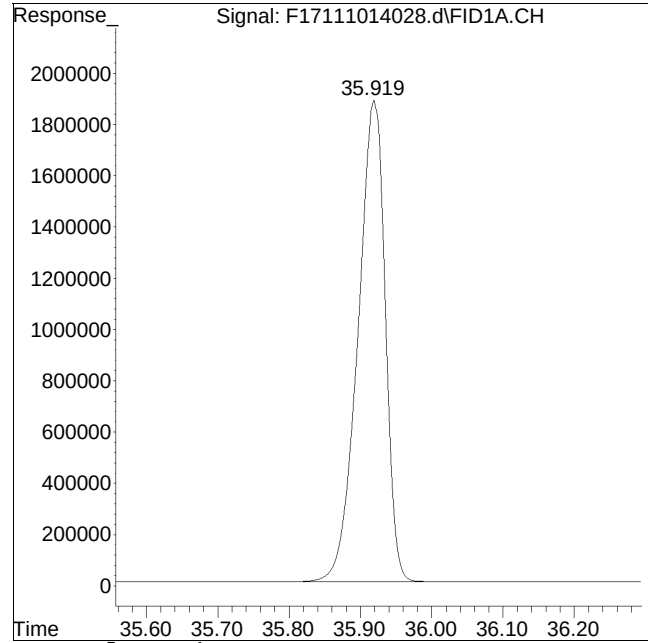
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #24: d50-Tetracosane



Original Peak Response = 49999498



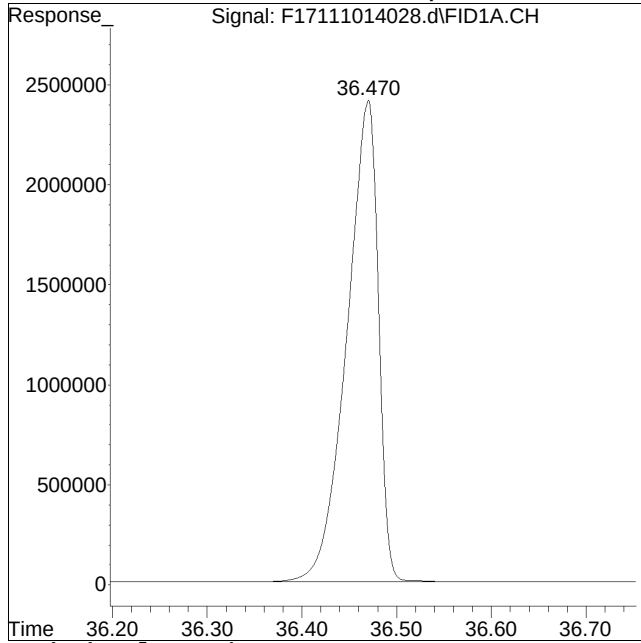
Manual Peak Response = 49983701 M4

M4 = Poor automated baseline construction.

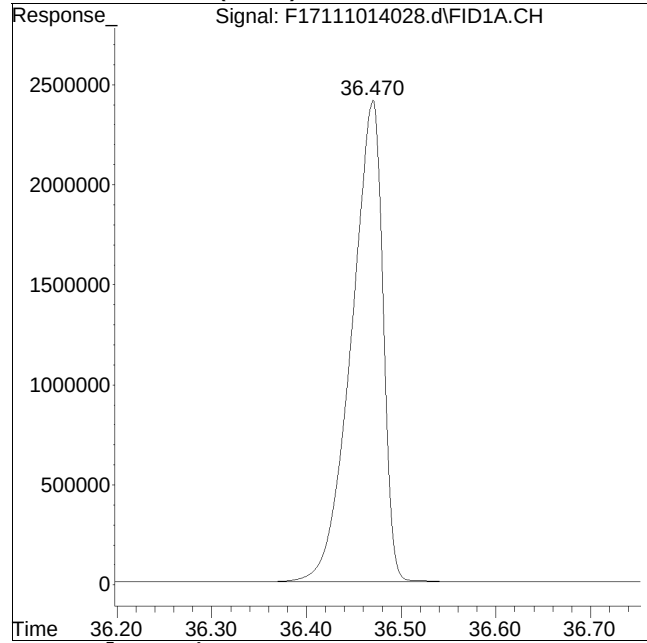
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #25: n-Tetracosane (C24)



Original Peak Response = 55592063



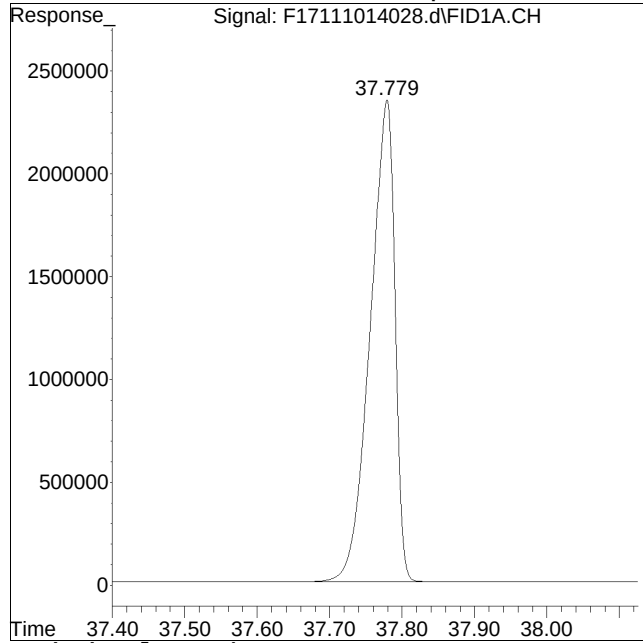
Manual Peak Response = 55601443 M4

M4 = Poor automated baseline construction.

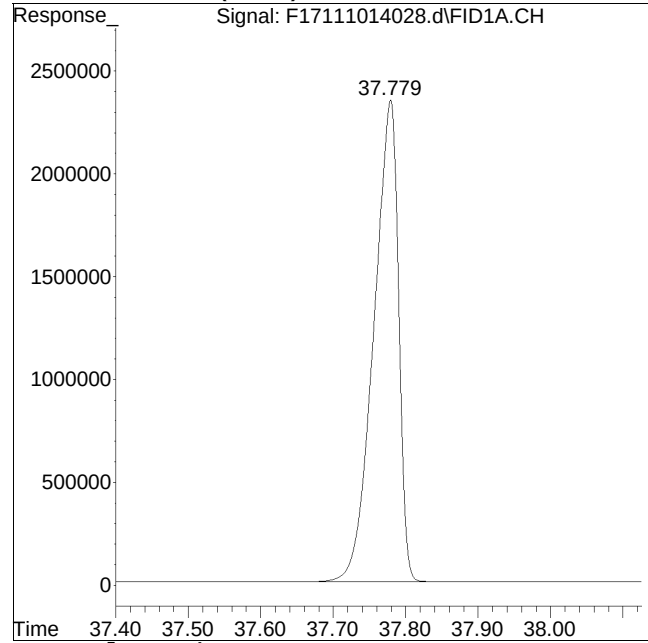
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #26: n-Pentacosane (C25)



Original Peak Response = 55605391



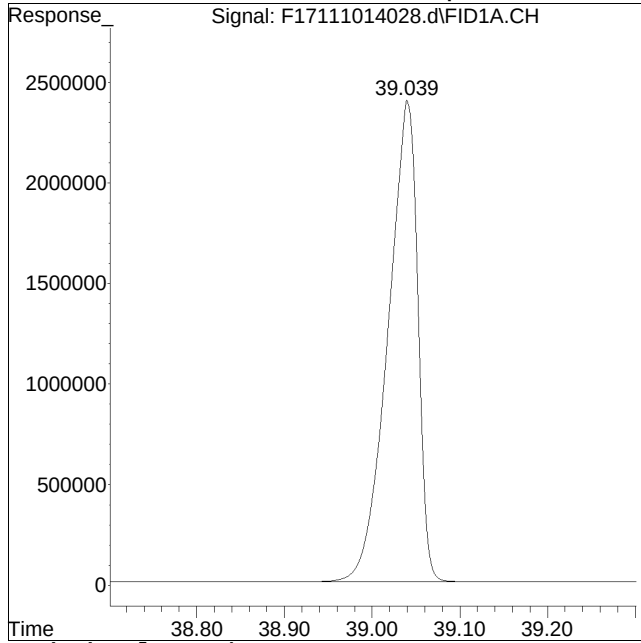
Manual Peak Response = 55584700 M4

M4 = Poor automated baseline construction.

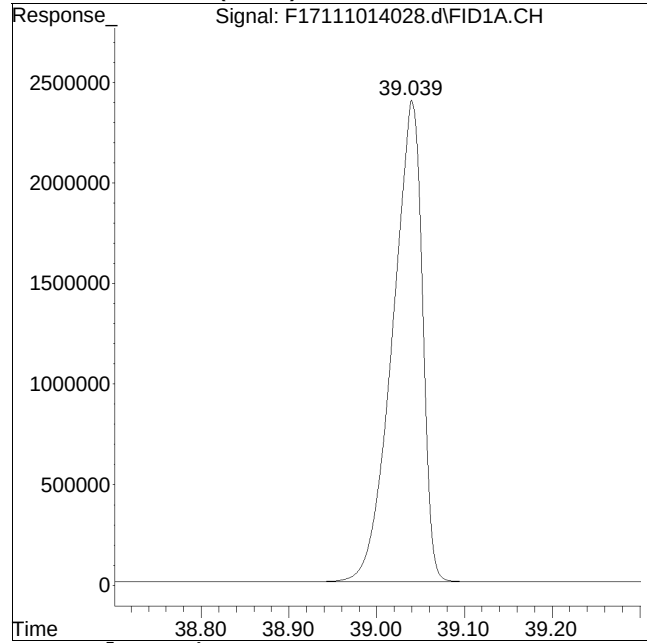
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #27: n-Hexacosane (C26)



Original Peak Response = 56554758



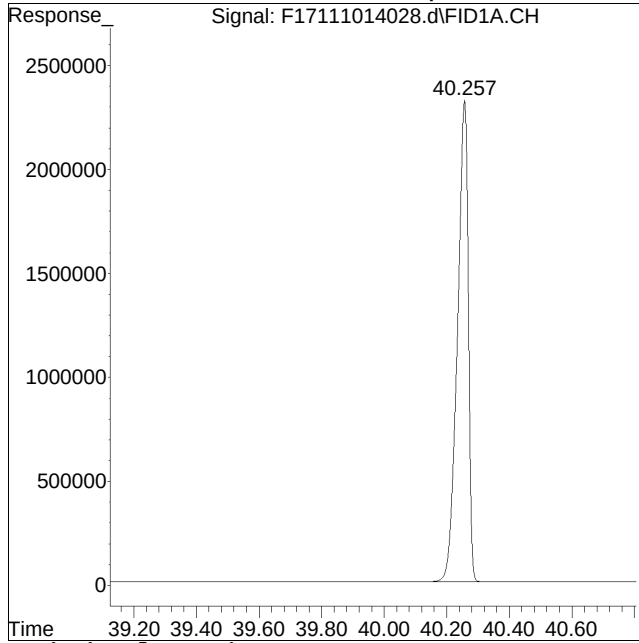
Manual Peak Response = 56520227 M4

M4 = Poor automated baseline construction.

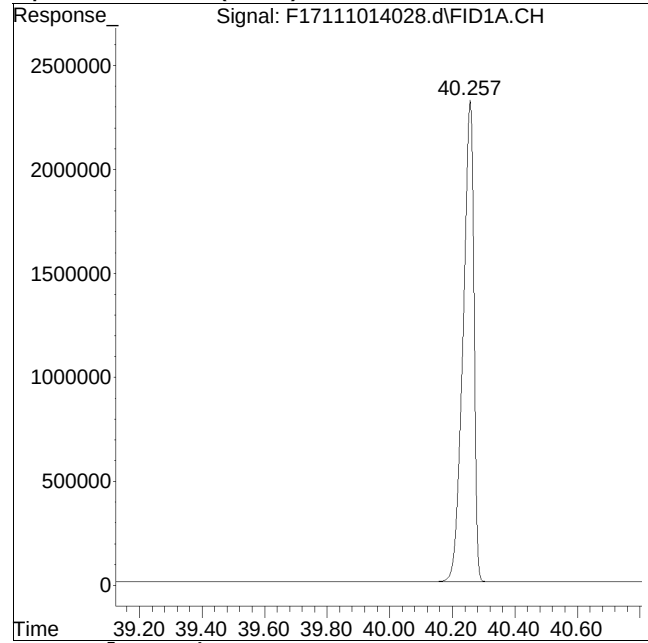
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #28: n-Heptacosane (C27)



Original Peak Response = 55844588



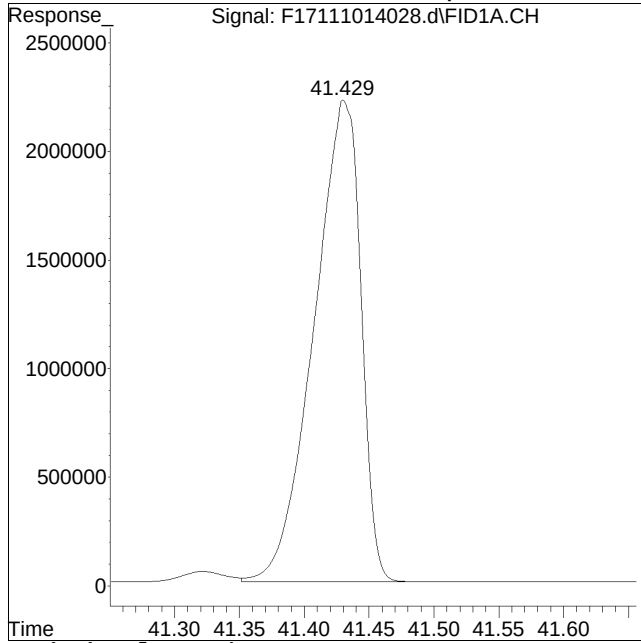
Manual Peak Response = 55822334 M4

M4 = Poor automated baseline construction.

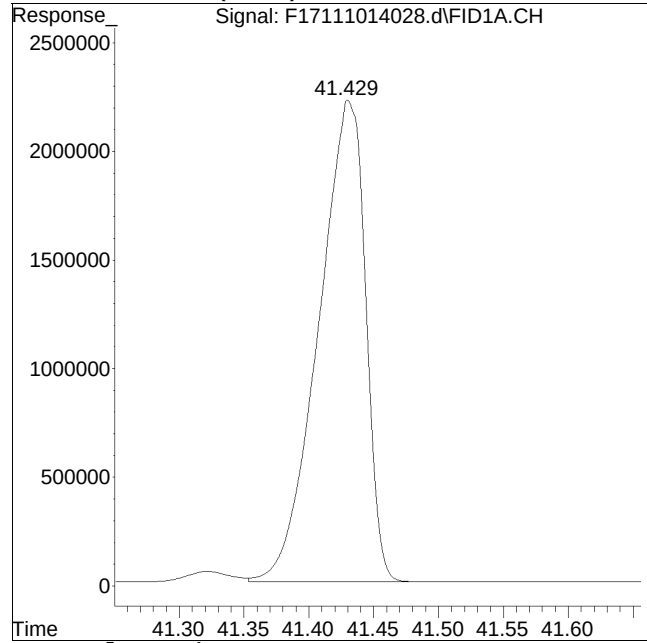
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #29: n-Octacosane (C28)



Original Peak Response = 55854682



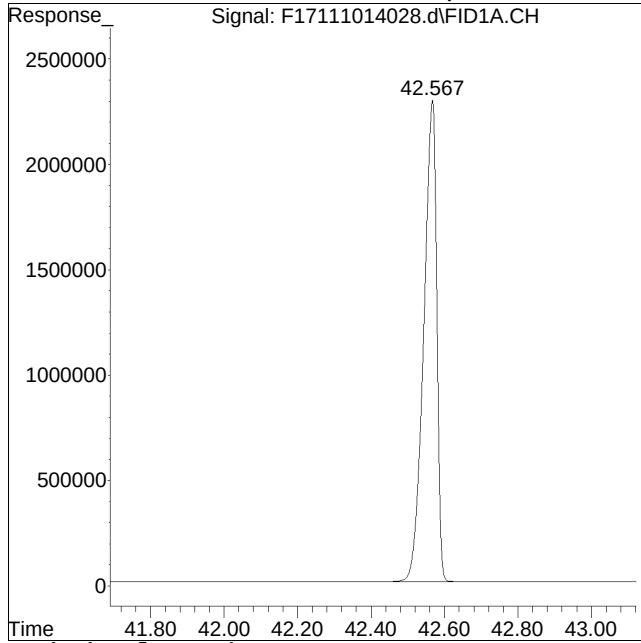
Manual Peak Response = 55792477 M4

M4 = Poor automated baseline construction.

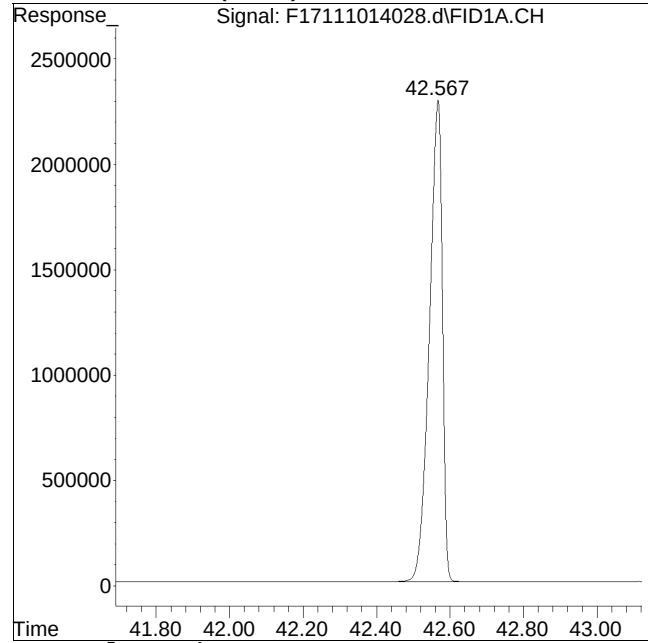
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #30: n-Nonacosane (C29)



Original Peak Response = 56030723



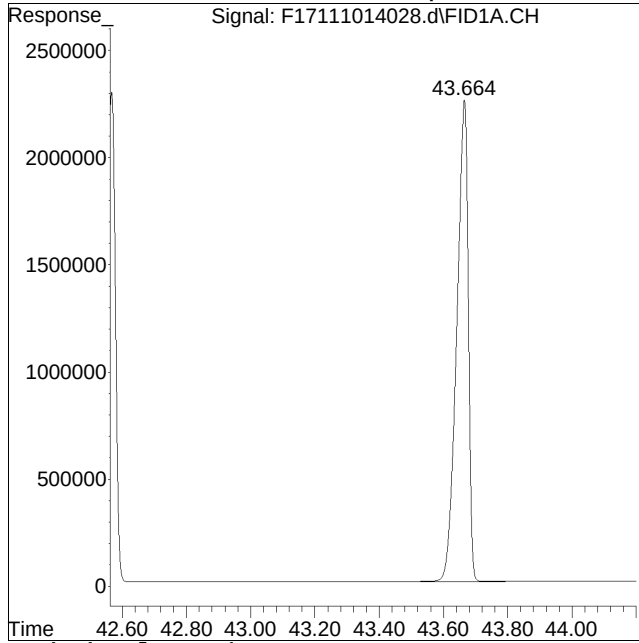
Manual Peak Response = 56007887 M4

M4 = Poor automated baseline construction.

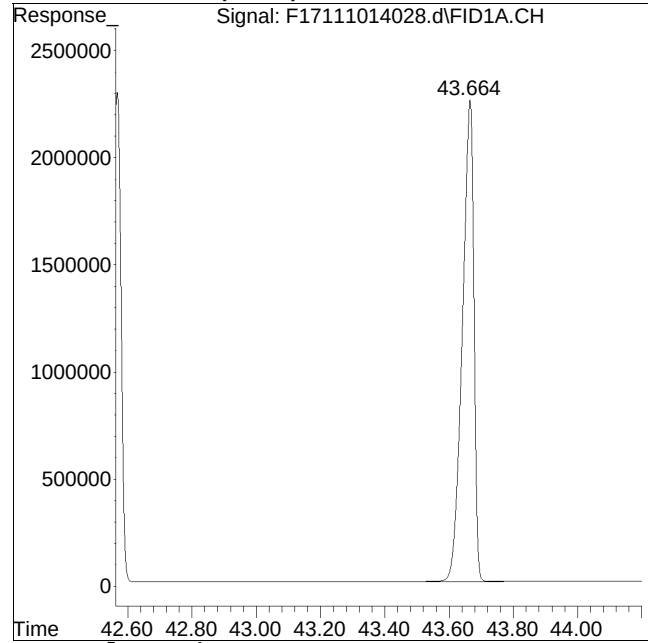
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #31: n-Triacontane (C30)



Original Peak Response = 55875908



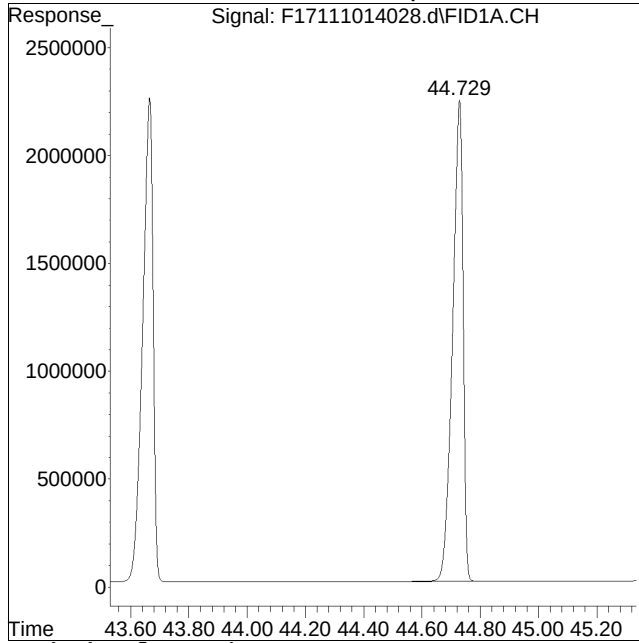
Manual Peak Response = 55890152 M4

M4 = Poor automated baseline construction.

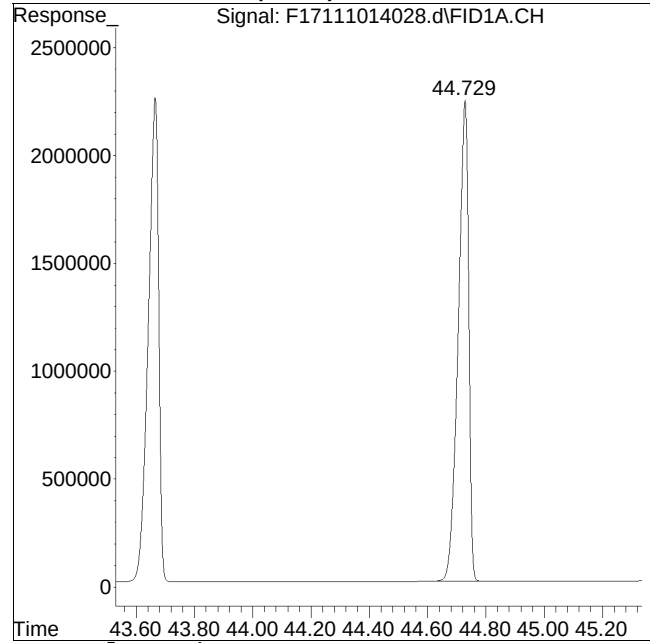
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #32: n-Hentriacontane (C31)



Original Peak Response = 55776747



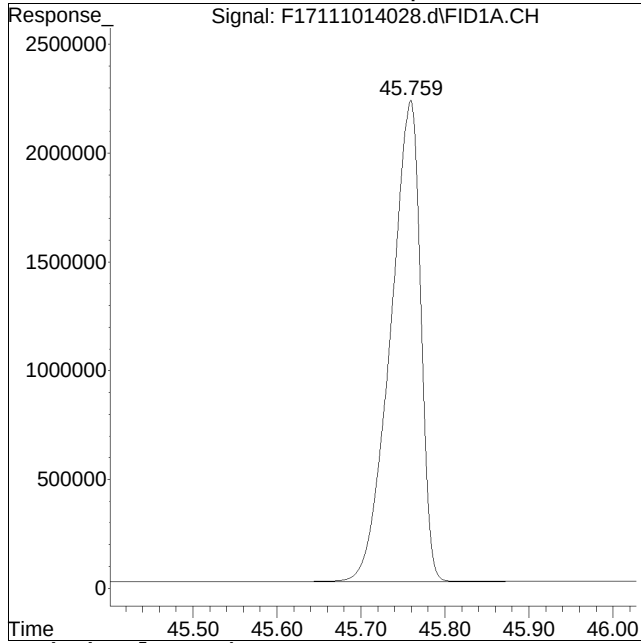
Manual Peak Response = 55831872 M4

M4 = Poor automated baseline construction.

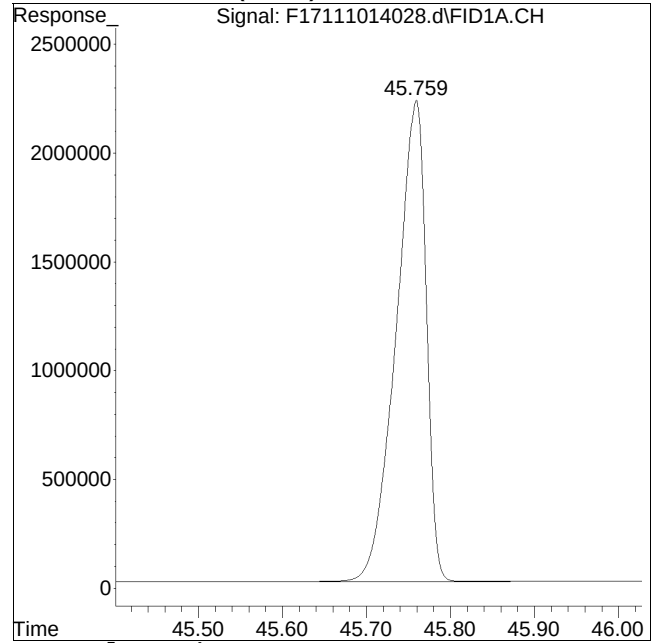
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #33: n-Dotriacontane (C32)



Original Peak Response = 55094420



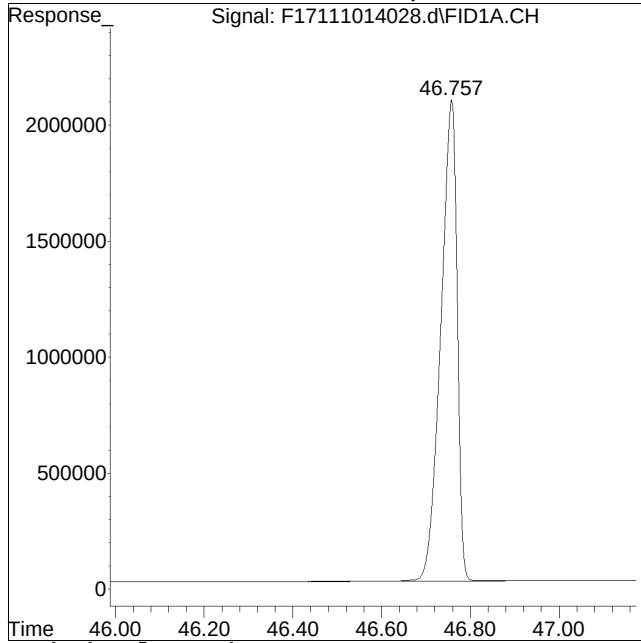
Manual Peak Response = 55077837 M4

M4 = Poor automated baseline construction.

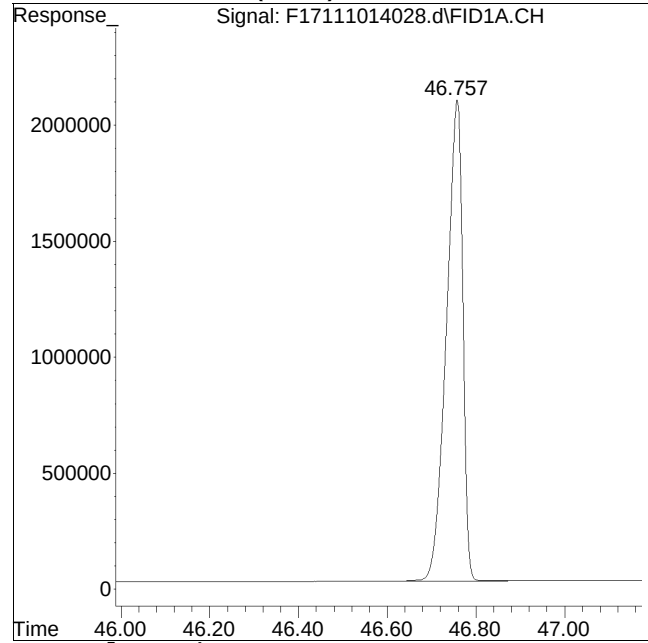
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #34: n-Tritriacontane (C33)



Original Peak Response = 53224242



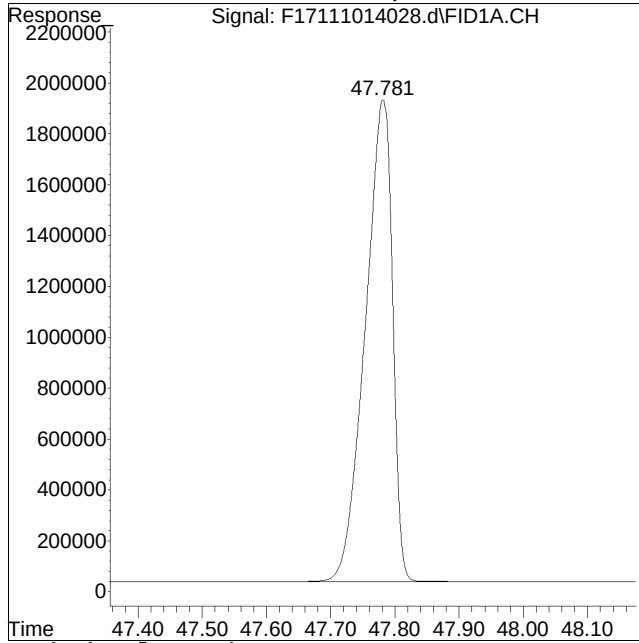
Manual Peak Response = 53104426 M4

M4 = Poor automated baseline construction.

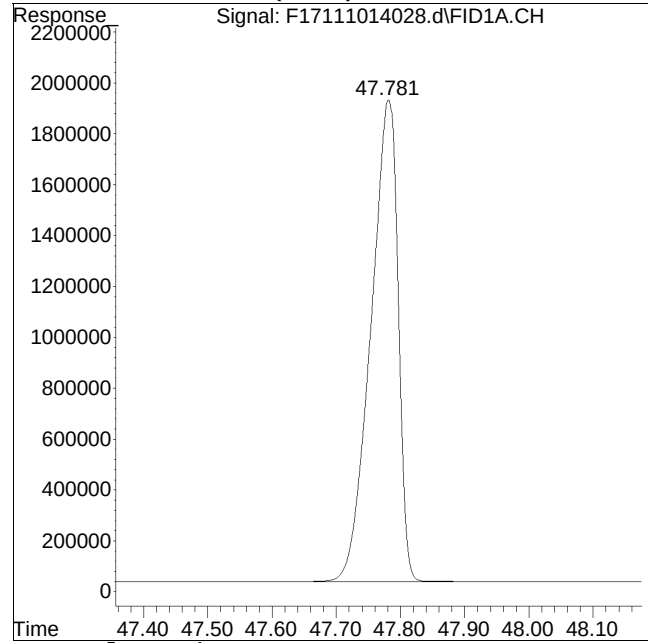
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #35: n-tetratriacontane (C34)



Original Peak Response = 55947322



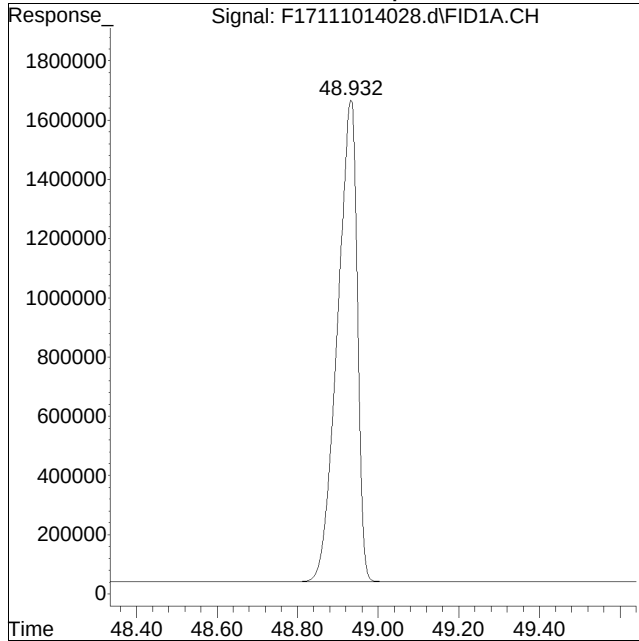
Manual Peak Response = 55861107 M4

M4 = Poor automated baseline construction.

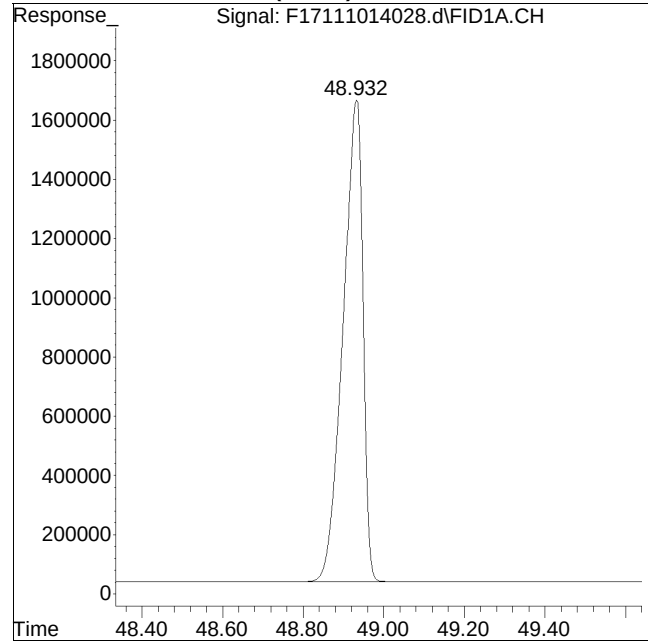
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #36: n-Pentatriacontane (C35)



Original Peak Response = 55771209



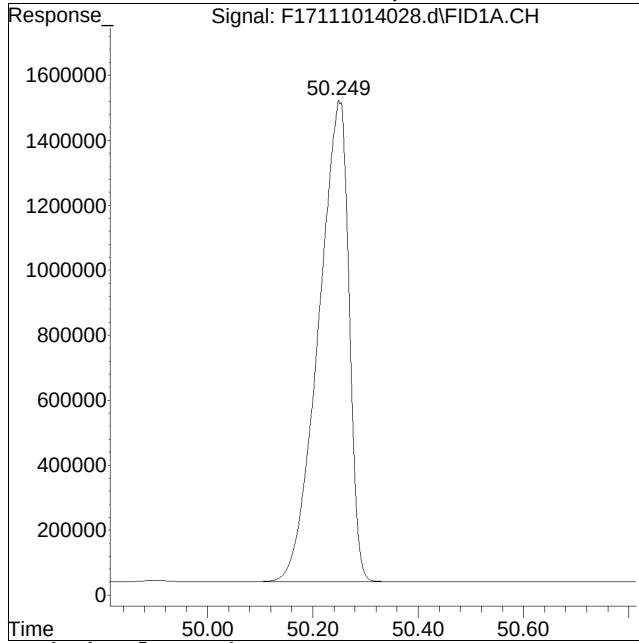
Manual Peak Response = 55722183 M4

M4 = Poor automated baseline construction.

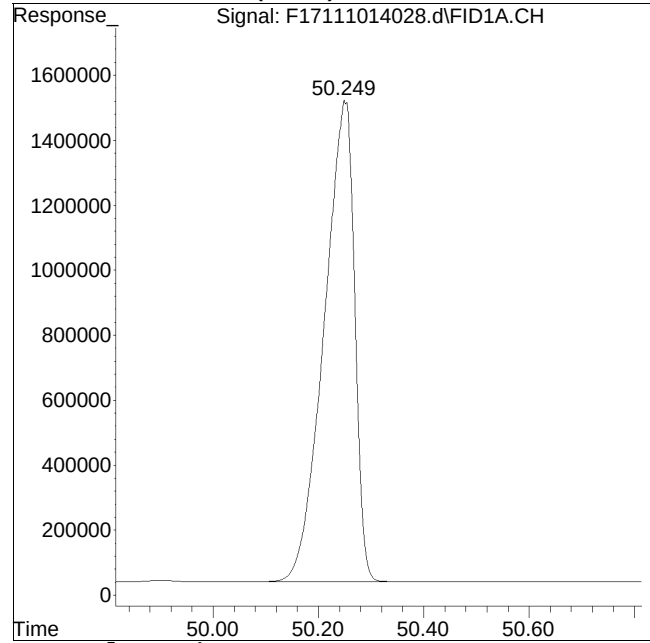
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #37: n-Hexatriacontane (C36)



Original Peak Response = 59638827



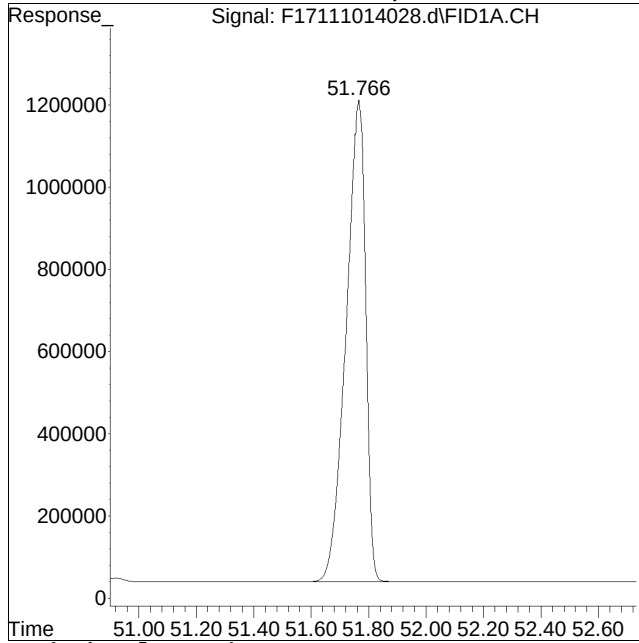
Manual Peak Response = 59610361 M4

M4 = Poor automated baseline construction.

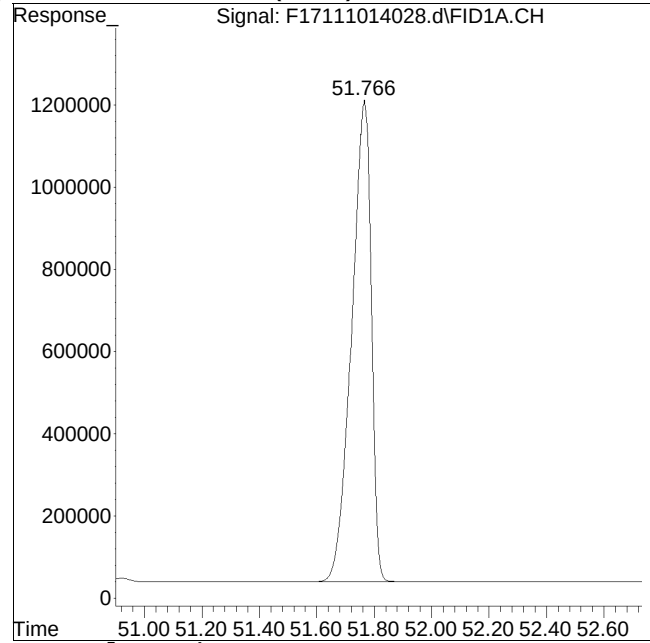
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #38: n-Heptatriacontane (C37)



Original Peak Response = 55660971



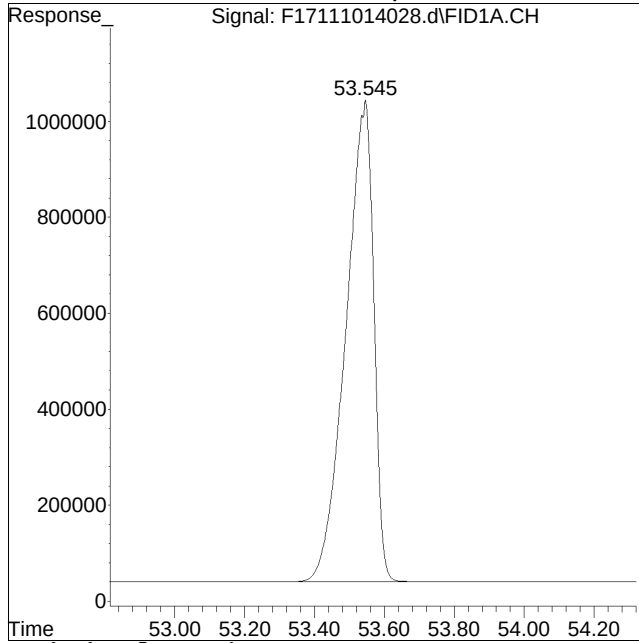
Manual Peak Response = 55634288 M4

M4 = Poor automated baseline construction.

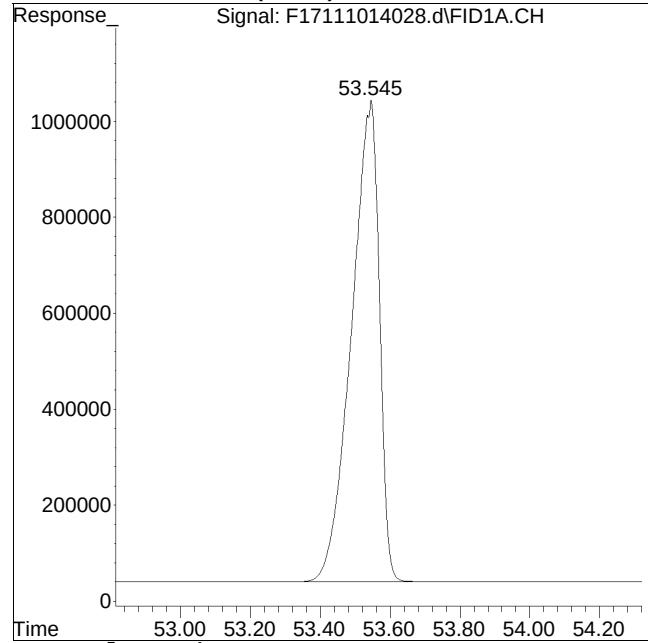
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #39: n-Octatriacontane (C38)



Original Peak Response = 55516242



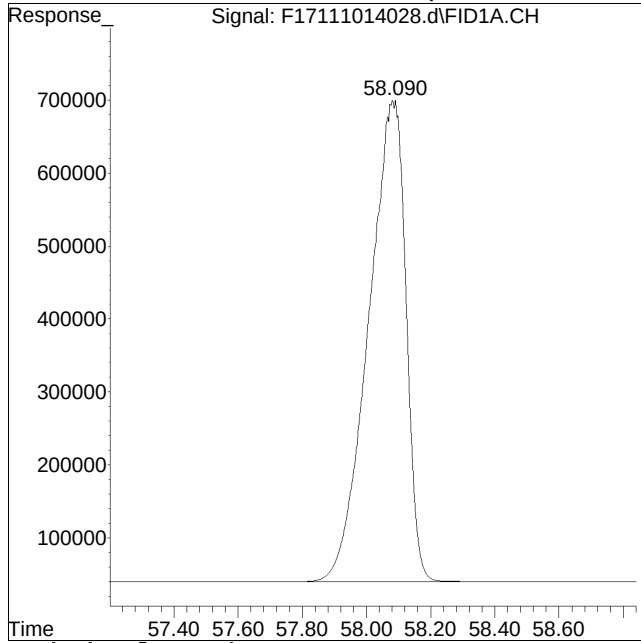
Manual Peak Response = 55500204 M4

M4 = Poor automated baseline construction.

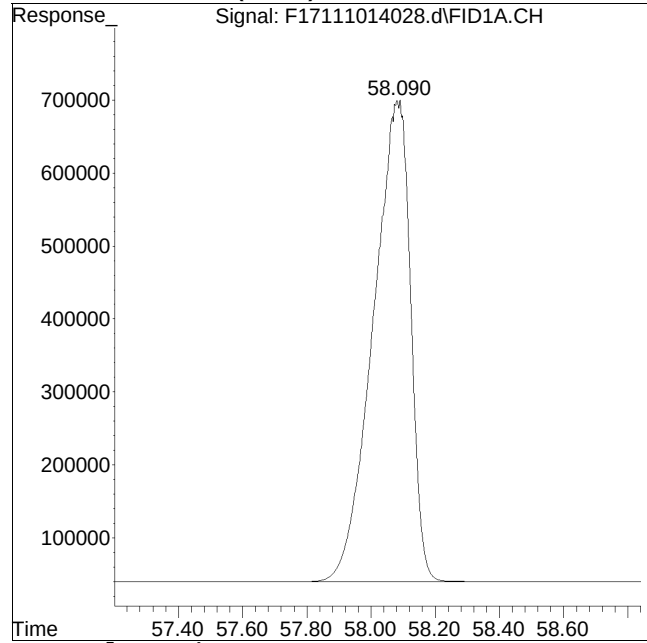
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\FID17\2010Method : HC17111014F.M
Data File : F17111014028.d Operator : FID17:NL
Date Inj'd : 11/11/2014 6:58 am Instrument : FID17
Sample : WG743851-7,42 Quant Date : 11/17/2014 3:07 pm

Compound #41: n-Tetracontane (C40)



Original Peak Response = 53279992



Manual Peak Response = 53295101 M4

M4 = Poor automated baseline construction.

Continuing Calibration

7
FID FORENSICS CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1500432

Instrument ID: FID17 Calibration Date: 01/13/2015 Time: 17:23

Lab File ID: F17011315006 Init. Calib. Date(s): 11/10/14 11/11/14

Sample No: WG755546-1 Init. Calib. Times : 19:02 02:29

Injection Time: 01/13/2015 17:23

Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 I	5-alpha-androstane	50.000	50.000	0.0	97	0.00
2 t	n-Octane (C8)	50.000	49.461	1.1	96	0.00
3 t	n-Nonane (C9)	50.000	50.650	-1.3	99	0.00
4 t	n-Decane (C10)	50.000	50.479	-1.0	98	0.00
5 t	n-Undecane (C11)	50.000	50.686	-1.4	97	0.00
6 t	n-Dodecane (C12)	50.000	51.255	-2.5	97	0.00
7 t	n-Tridecane (C13)	50.000	51.170	-2.3	97	0.00
9 t	n-Tetradecane (C14)	50.000	51.263	-2.5	97	0.00
11 t	n-Pentadecane (C15)	50.000	50.967	-1.9	97	0.00
12 t	n-Hexadecane (C16)	50.000	50.690	-1.4	97	0.00
14 t	n-Heptadecane (C17)	50.000	51.008	-2.0	96	0.00
15 t	Pristane	50.000	50.418	-0.8	97	0.00
16 t	n-Octadecane (C18)	50.000	50.833	-1.7	97	0.00
17 t	Phytane	50.000	50.423	-0.8	97	0.00
18 t	n-Nonadecane (C19)	50.000	50.517	-1.0	97	0.00
19 s	ortho-terphenyl	50.000	49.843	0.3	97	0.00
20 t	n-Eicosane (C20)	50.000	50.605	-1.2	97	0.00
21 t	n-Heneicosane (C21)	50.000	50.598	-1.2	97	0.00
22 t	n-Docosane (C22)	50.000	50.637	-1.3	97	0.00
23 t	n-Tricosane (C23)	50.000	50.411	-0.8	97	0.00
24 s	d50-Tetracosane	50.000	49.440	1.1	97	0.00
25 t	n-Tetracosane (C24)	50.000	50.607	-1.2	98	0.00
26 t	n-Pentacosane (C25)	50.000	50.285	-0.6	97	0.00
27 t	n-Hexacosane (C26)	50.000	50.362	-0.7	98	0.00
28 t	n-Heptacosane (C27)	50.000	50.107	-0.2	98	0.00
29 t	n-Octacosane (C28)	50.000	49.984	0.0	98	0.00
30 t	n-Nonacosane (C29)	50.000	50.163	-0.3	98	0.00
31 t	n-Triacontane (C30)	50.000	49.950	0.1	98	0.00
32 t	n-Hentriacontane (C31)	50.000	49.986	0.0	99	0.00
33 t	n-Dotriacontane (C32)	50.000	49.872	0.3	99	0.00
34 t	n-Tritriacontane (C33)	50.000	49.794	0.4	99	0.00
35 t	n-tetratriacontane (C34)	50.000	49.671	0.7	99	0.00

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315006.d
 Signal(s) : FID1A.CH
 Acq On : 13 Jan 2015 5:23 pm
 Operator : FID17:NL
 Sample : WG755546-1
 Misc : WG755546,FRAV14 50ug/mL
 ALS Vial : 3 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 09:38:26 2015
 Quant Method : C:\msdchem\1\DATA\FID17\2015\January\Jan13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
36 t	n-Pentatriacontane (C35)	50.000	49.426	1.1	98	0.00
37 t	n-Hexatriacontane (C36)	50.000	49.166	1.7	98	0.00
38 t	n-Heptatriacontane (C37)	50.000	48.542	2.9	97	0.00
39 t	n-Octatriacontane (C38)	50.000	48.377	3.2	96	0.00
41 t	n-Tetracontane (C40)	50.000	47.355	5.3	94	0.00

Evaluate Continuing Calibration Report - Not Founds

FORM VII A2-TPH

7
FID FORENSICS CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1500432

Instrument ID: FID17 Calibration Date: 01/14/2015 Time: 08:11

Lab File ID: F17011315026 Init. Calib. Date(s): 11/10/14 11/11/14

Sample No: WG755546-2 Init. Calib. Times : 19:02 02:29

Injection Time: 01/14/2015 08:11

Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 I	5-alpha-androstane	50.000	50.000	0.0	102	0.00
2 t	n-Octane (C8)	50.000	48.927	2.1	101	0.00
3 t	n-Nonane (C9)	50.000	50.659	-1.3	105	0.00
4 t	n-Decane (C10)	50.000	51.175	-2.3	105	0.00
5 t	n-Undecane (C11)	50.000	51.572	-3.1	104	0.00
6 t	n-Dodecane (C12)	50.000	51.743	-3.5	104	0.00
7 t	n-Tridecane (C13)	50.000	51.612	-3.2	104	0.00
9 t	n-Tetradecane (C14)	50.000	51.658	-3.3	104	0.00
11 t	n-Pentadecane (C15)	50.000	51.443	-2.9	103	0.00
12 t	n-Hexadecane (C16)	50.000	51.059	-2.1	103	0.00
14 t	n-Heptadecane (C17)	50.000	51.326	-2.7	103	0.00
15 t	Pristane	50.000	50.490	-1.0	103	0.00
16 t	n-Octadecane (C18)	50.000	51.116	-2.2	103	0.00
17 t	Phytane	50.000	50.562	-1.1	103	0.00
18 t	n-Nonadecane (C19)	50.000	50.763	-1.5	103	0.00
19 s	ortho-terphenyl	50.000	49.885	0.2	103	0.00
20 t	n-Eicosane (C20)	50.000	50.798	-1.6	103	0.00
21 t	n-Heneicosane (C21)	50.000	50.845	-1.7	103	0.00
22 t	n-Docosane (C22)	50.000	50.689	-1.4	103	0.00
23 t	n-Tricosane (C23)	50.000	50.599	-1.2	103	0.00
24 s	d50-Tetracosane	50.000	49.499	1.0	103	0.00
25 t	n-Tetracosane (C24)	50.000	50.684	-1.4	104	0.00
26 t	n-Pentacosane (C25)	50.000	50.517	-1.0	104	0.00
27 t	n-Hexacosane (C26)	50.000	50.530	-1.1	104	0.00
28 t	n-Heptacosane (C27)	50.000	50.292	-0.6	104	0.00
29 t	n-Octacosane (C28)	50.000	50.183	-0.4	104	0.00
30 t	n-Nonacosane (C29)	50.000	50.460	-0.9	105	0.00
31 t	n-Triacontane (C30)	50.000	50.283	-0.6	105	0.00
32 t	n-Hentriacontane (C31)	50.000	50.275	-0.5	105	0.00
33 t	n-Dotriacontane (C32)	50.000	50.313	-0.6	105	0.00
34 t	n-Tritriacontane (C33)	50.000	50.165	-0.3	106	0.00
35 t	n-tetratriacontane (C34)	50.000	50.116	-0.2	106	0.00

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315026.d
 Signal(s) : FID1A.CH
 Acq On : 14 Jan 2015 8:11 am
 Operator : FID17:NL
 Sample : WG755546-2
 Misc : WG755546,FRAV14 50ug/mL
 ALS Vial : 13 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 09:39:15 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\2015\JANUARY\JAN13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
36 t	n-Pentatriacontane (C35)	50.000	49.937	0.1	105	0.00
37 t	n-Hexatriacontane (C36)	50.000	49.811	0.4	105	0.02
38 t	n-Heptatriacontane (C37)	50.000	49.344	1.3	104	0.02
39 t	n-Octatriacontane (C38)	50.000	49.073	1.9	103	0.02
41 t	n-Tetracontane (C40)	50.000	48.009	4.0	100	0.02

Evaluate Continuing Calibration Report - Not Founds

FORM VII A2-TPH

7
FID FORENSICS CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1500432

Instrument ID: FID17 Calibration Date: 01/14/2015 Time: 16:36

Lab File ID: F17011315034 Init. Calib. Date(s): 11/10/14 11/11/14

Sample No: WG755546-3 Init. Calib. Times : 19:02 02:29

Injection Time: 01/14/2015 16:36

Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
Signal Phase : Rtx-5MS
Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 I	5-alpha-androstane	50.000	50.000	0.0	99	0.00
2 t	n-Octane (C8)	50.000	50.482	-1.0	101	0.00
3 t	n-Nonane (C9)	50.000	51.466	-2.9	103	0.00
4 t	n-Decane (C10)	50.000	51.364	-2.7	102	0.00
5 t	n-Undecane (C11)	50.000	51.855	-3.7	101	0.00
6 t	n-Dodecane (C12)	50.000	51.790	-3.6	101	0.00
7 t	n-Tridecane (C13)	50.000	51.626	-3.3	101	0.00
9 t	n-Tetradecane (C14)	50.000	51.681	-3.4	101	0.00
11 t	n-Pentadecane (C15)	50.000	51.481	-3.0	100	0.00
12 t	n-Hexadecane (C16)	50.000	51.004	-2.0	100	0.00
14 t	n-Heptadecane (C17)	50.000	51.281	-2.6	99	0.00
15 t	Pristane	50.000	50.549	-1.1	100	0.00
16 t	n-Octadecane (C18)	50.000	51.045	-2.1	100	0.00
17 t	Phytane	50.000	50.595	-1.2	100	0.00
18 t	n-Nonadecane (C19)	50.000	50.779	-1.6	100	0.00
19 s	ortho-terphenyl	50.000	49.810	0.4	99	0.00
20 t	n-Eicosane (C20)	50.000	50.749	-1.5	100	0.00
21 t	n-Heneicosane (C21)	50.000	50.774	-1.5	100	0.00
22 t	n-Docosane (C22)	50.000	50.652	-1.3	100	0.00
23 t	n-Tricosane (C23)	50.000	50.559	-1.1	100	0.00
24 s	d50-Tetracosane	50.000	49.490	1.0	100	0.00
25 t	n-Tetracosane (C24)	50.000	50.624	-1.2	100	0.00
26 t	n-Pentacosane (C25)	50.000	50.471	-0.9	100	0.00
27 t	n-Hexacosane (C26)	50.000	50.505	-1.0	100	0.00
28 t	n-Heptacosane (C27)	50.000	50.256	-0.5	101	0.00
29 t	n-Octacosane (C28)	50.000	50.247	-0.5	101	0.00
30 t	n-Nonacosane (C29)	50.000	50.406	-0.8	101	0.00
31 t	n-Triacontane (C30)	50.000	50.282	-0.6	102	0.00
32 t	n-Hentriacontane (C31)	50.000	50.220	-0.4	102	0.00
33 t	n-Dotriacontane (C32)	50.000	50.280	-0.6	102	0.00
34 t	n-Tritriacontane (C33)	50.000	50.164	-0.3	102	0.00
35 t	n-tetratriacontane (C34)	50.000	50.169	-0.3	102	0.00

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315034.d
 Signal(s) : FID1A.CH
 Acq On : 14 Jan 2015 4:36 pm
 Operator : FID17:NL
 Sample : WG755546-3
 Misc : WG755546,FRAV14 50ug/mL
 ALS Vial : 17 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 09:39:44 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\2015\JANUARY\JAN13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
36 t	n-Pentatriacontane (C35)	50.000	50.025	-0.0	102	0.00
37 t	n-Hexatriacontane (C36)	50.000	49.826	0.3	102	0.00
38 t	n-Heptatriacontane (C37)	50.000	49.460	1.1	101	0.00
39 t	n-Octatriacontane (C38)	50.000	49.129	1.7	100	0.00
41 t	n-Tetracontane (C40)	50.000	47.949	4.1	97	0.00

Evaluate Continuing Calibration Report - Not Founds

FORM VII A2-TPH

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315006.d
 Signal(s) : FID1A.CH
 Acq On : 13 Jan 2015 5:23 pm
 Operator : FID17:NL
 Sample : WG755546-1
 Misc : WG755546, FRAV14 50ug/mL
 ALS Vial : 3 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 09:38:26 2015
 Quant Method : C:\msdchem\1\DATA\FID17\2015\January\Jan13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 I	5-alpha-androstane	50.000	50.000	0.0	97	0.00
2 t	n-Octane (C8)	50.000	49.461	1.1	96	0.00
3 t	n-Nonane (C9)	50.000	50.650	-1.3	99	0.00
4 t	n-Decane (C10)	50.000	50.479	-1.0	98	0.00
5 t	n-Undecane (C11)	50.000	50.686	-1.4	97	0.00
6 t	n-Dodecane (C12)	50.000	51.255	-2.5	97	0.00
7 t	n-Tridecane (C13)	50.000	51.170	-2.3	97	0.00
9 t	n-Tetradecane (C14)	50.000	51.263	-2.5	97	0.00
11 t	n-Pentadecane (C15)	50.000	50.967	-1.9	97	0.00
12 t	n-Hexadecane (C16)	50.000	50.690	-1.4	97	0.00
14 t	n-Heptadecane (C17)	50.000	51.008	-2.0	96	0.00
15 t	Pristane	50.000	50.418	-0.8	97	0.00
16 t	n-Octadecane (C18)	50.000	50.833	-1.7	97	0.00
17 t	Phytane	50.000	50.423	-0.8	97	0.00
18 t	n-Nonadecane (C19)	50.000	50.517	-1.0	97	0.00
19 s	ortho-terphenyl	50.000	49.843	0.3	97	0.00
20 t	n-Eicosane (C20)	50.000	50.605	-1.2	97	0.00
21 t	n-Heneicosane (C21)	50.000	50.598	-1.2	97	0.00
22 t	n-Docosane (C22)	50.000	50.637	-1.3	97	0.00
23 t	n-Tricosane (C23)	50.000	50.411	-0.8	97	0.00
24 s	d50-Tetracosane	50.000	49.440	1.1	97	0.00
25 t	n-Tetracosane (C24)	50.000	50.607	-1.2	98	0.00
26 t	n-Pentacosane (C25)	50.000	50.285	-0.6	97	0.00
27 t	n-Hexacosane (C26)	50.000	50.362	-0.7	98	0.00
28 t	n-Heptacosane (C27)	50.000	50.107	-0.2	98	0.00
29 t	n-Octacosane (C28)	50.000	49.984	0.0	98	0.00
30 t	n-Nonacosane (C29)	50.000	50.163	-0.3	98	0.00
31 t	n-Triacontane (C30)	50.000	49.950	0.1	98	0.00
32 t	n-Hentriacontane (C31)	50.000	49.986	0.0	99	0.00
33 t	n-Dotriacontane (C32)	50.000	49.872	0.3	99	0.00
34 t	n-Tritriacontane (C33)	50.000	49.794	0.4	99	0.00
35 t	n-tetratriacontane (C34)	50.000	49.671	0.7	99	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315006.d
 Signal(s) : FID1A.CH
 Acq On : 13 Jan 2015 5:23 pm
 Operator : FID17:NL
 Sample : WG755546-1
 Misc : WG755546, FRAV14 50ug/mL
 ALS Vial : 3 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 09:38:26 2015
 Quant Method : C:\msdchem\1\DATA\FID17\2015\January\Jan13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
36 t	n-Pentatriacontane (C35)	50.000	49.426	1.1	98	0.00
37 t	n-Hexatriacontane (C36)	50.000	49.166	1.7	98	0.00
38 t	n-Heptatriacontane (C37)	50.000	48.542	2.9	97	0.00
39 t	n-Octatriacontane (C38)	50.000	48.377	3.2	96	0.00
41 t	n-Tetracontane (C40)	50.000	47.355	5.3	94	0.00

Evaluate Continuing Calibration Report - Not Found

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Mass Discrimination (Response)	Ratio	Range Limits
n-Hexatriacontane (C36) to n-Eicosane (C20)	1.05	0.85 - 1.15

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315006.d
 Signal(s) : FID1A.CH
 Acq On : 13 Jan 2015 5:23 pm
 Operator : FID17:NL
 Sample : WG755546-1
 Misc : WG755546, FRAV14 50ug/mL
 ALS Vial : 3 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 09:38:26 2015
 Quant Method : C:\msdchem\1\DATA\FID17\2015\January\Jan13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.131	52466793	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.119	57554125	49.843	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 99.69%
24) s	d50-Tetracosane	35.808	46364278	49.440	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 98.88%
Target Compounds					
2) t	n-Octane (C8)	5.471	43948977	49.461	ug/mL M4
3) t	n-Nonane (C9)	7.672	46299201	50.650	ug/mL M4
4) t	n-Decane (C10)	10.158	47336605	50.479	ug/mL M4
5) t	n-Undecane (C11)	12.672	48047387	50.686	ug/mL M4
6) t	n-Dodecane (C12)	15.101	49369264	51.255	ug/mL M4
7) t	n-Tridecane (C13)	17.411	49655431	51.170	ug/mL M4
9) t	n-Tetradecane (C14)	19.598	50363114	51.263	ug/mL M4
11) t	n-Pentadecane (C15)	21.667	51032980	50.967	ug/mL M4
12) t	n-Hexadecane (C16)	23.625	51076804	50.690	ug/mL M4
14) t	n-Heptadecane (C17)	25.490	51035413	51.008	ug/mL M4
15) t	Pristane	25.600	52109145	50.418	ug/mL M4
16) t	n-Octadecane (C18)	27.261	52276724	50.833	ug/mL M4
17) t	Phytane	27.422	45753491	50.423	ug/mL M4
18) t	n-Nonadecane (C19)	28.949	51794532	50.517	ug/mL M4
20) t	n-Eicosane (C20)	30.560	51789607	50.605	ug/mL M4
21) t	n-Heneicosane (C21)	32.100	52171223	50.598	ug/mL M4
22) t	n-Docosane (C22)	33.576	52739944	50.637	ug/mL M4
23) t	n-Tricosane (C23)	34.993	53027365	50.411	ug/mL M4
25) t	n-Tetracosane (C24)	36.354	53324968	50.607	ug/mL M4
26) t	n-Pentacosane (C25)	37.663	52713977	50.285	ug/mL M4
27) t	n-Hexacosane (C26)	38.925	53974777	50.362	ug/mL M4
28) t	n-Heptacosane (C27)	40.140	53429663	50.107	ug/mL M4
29) t	n-Octacosane (C28)	41.314	53224508	49.984	ug/mL M4
30) t	n-Nonacosane (C29)	42.450	53535976	50.163	ug/mL M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315006.d
 Signal(s) : FID1A.CH
 Acq On : 13 Jan 2015 5:23 pm
 Operator : FID17:NL
 Sample : WG755546-1
 Misc : WG755546, FRAV14 50ug/mL
 ALS Vial : 3 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 09:38:26 2015
 Quant Method : C:\msdchem\1\DATA\FID17\2015\January\Jan13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc Units
31) t	n-Triacontane (C30)	43.547	53559970	49.950 ug/mL M4
32) t	n-Hentriacontane (C31)	44.610	53637501	49.986 ug/mL M4
33) t	n-Dotriacontane (C32)	45.639	53911292	49.872 ug/mL M4
34) t	n-Tritriacontane (C33)	46.634	50946677	49.794 ug/mL M4
35) t	n-tetratriacontane (C34)	47.645	53008104	49.671 ug/mL M4
36) t	n-Pentatriacontane (C35)	48.772	53059358	49.426 ug/mL M4
37) t	n-Hexatriacontane (C36)	50.060	54249837	49.166 ug/mL M4
38) t	n-Heptatriacontane (C37)	51.540	52494501	48.542 ug/mL M4
39) t	n-Octatriacontane (C38)	53.281	51327076	48.377 ug/mL M4
41) t	n-Tetracontane (C40)	57.723	52515406	47.355 ug/mL M4

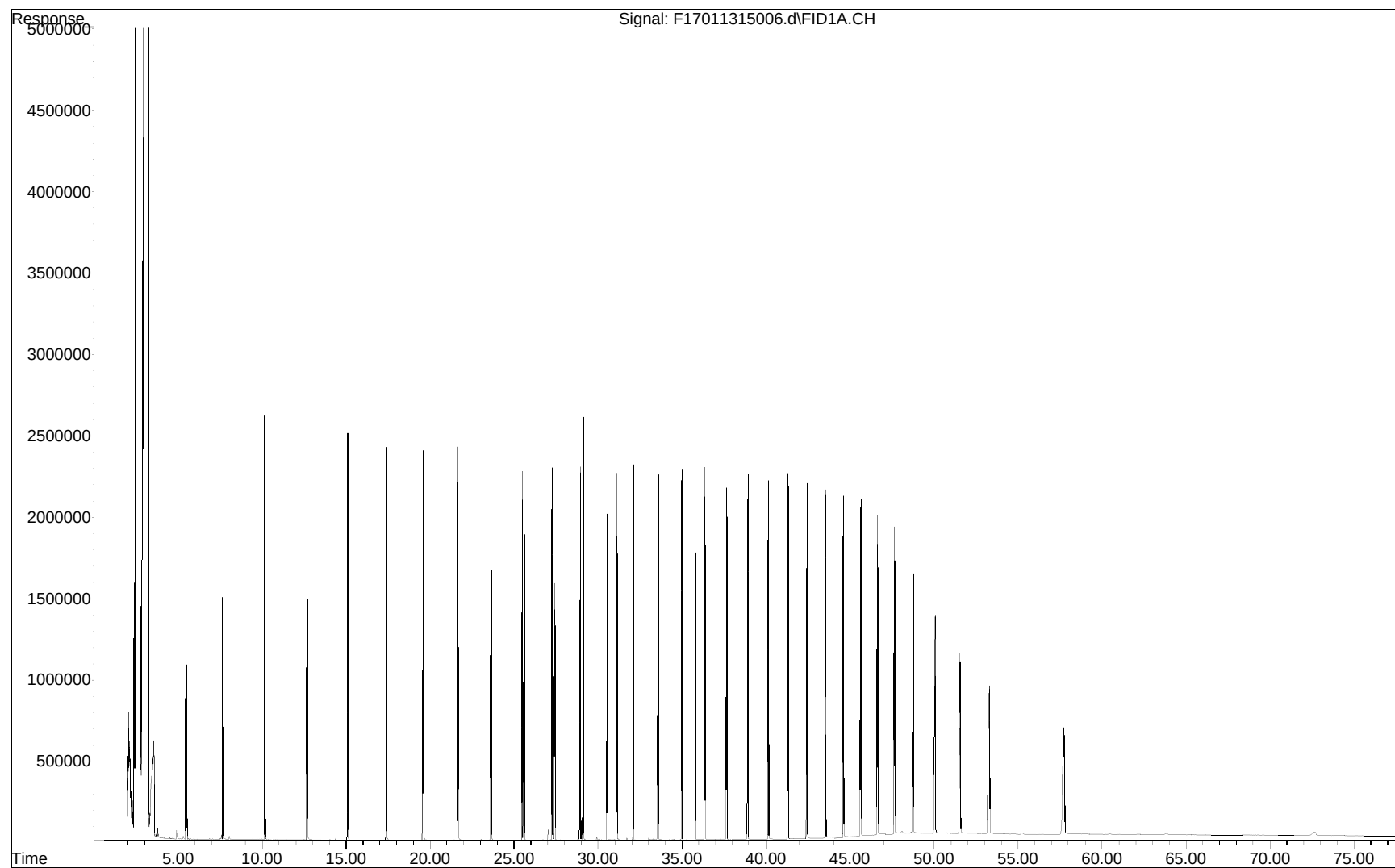
SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\FID17\2015\Jan\Jan13\
Data File : F17011315006.d
Operator : FID17:NL
Acquired : 13 Jan 2015 5:23 pm using AcqMethod FID17.M
Instrument: FID17
Sample : WG755546-1
Misc Info : WG755546, FRAV14 50ug/mL
ALS Vial : 3



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315026.d
 Signal(s) : FID1A.CH
 Acq On : 14 Jan 2015 8:11 am
 Operator : FID17:NL
 Sample : WG755546-2
 Misc : WG755546, FRAV14 50ug/mL
 ALS Vial : 13 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 09:39:15 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\2015\JANUARY\JAN13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 I	5-alpha-androstane	50.000	50.000	0.0	102	0.00
2 t	n-Octane (C8)	50.000	48.927	2.1	101	0.00
3 t	n-Nonane (C9)	50.000	50.659	-1.3	105	0.00
4 t	n-Decane (C10)	50.000	51.175	-2.3	105	0.00
5 t	n-Undecane (C11)	50.000	51.572	-3.1	104	0.00
6 t	n-Dodecane (C12)	50.000	51.743	-3.5	104	0.00
7 t	n-Tridecane (C13)	50.000	51.612	-3.2	104	0.00
9 t	n-Tetradecane (C14)	50.000	51.658	-3.3	104	0.00
11 t	n-Pentadecane (C15)	50.000	51.443	-2.9	103	0.00
12 t	n-Hexadecane (C16)	50.000	51.059	-2.1	103	0.00
14 t	n-Heptadecane (C17)	50.000	51.326	-2.7	103	0.00
15 t	Pristane	50.000	50.490	-1.0	103	0.00
16 t	n-Octadecane (C18)	50.000	51.116	-2.2	103	0.00
17 t	Phytane	50.000	50.562	-1.1	103	0.00
18 t	n-Nonadecane (C19)	50.000	50.763	-1.5	103	0.00
19 s	ortho-terphenyl	50.000	49.885	0.2	103	0.00
20 t	n-Eicosane (C20)	50.000	50.798	-1.6	103	0.00
21 t	n-Heneicosane (C21)	50.000	50.845	-1.7	103	0.00
22 t	n-Docosane (C22)	50.000	50.689	-1.4	103	0.00
23 t	n-Tricosane (C23)	50.000	50.599	-1.2	103	0.00
24 s	d50-Tetracosane	50.000	49.499	1.0	103	0.00
25 t	n-Tetracosane (C24)	50.000	50.684	-1.4	104	0.00
26 t	n-Pentacosane (C25)	50.000	50.517	-1.0	104	0.00
27 t	n-Hexacosane (C26)	50.000	50.530	-1.1	104	0.00
28 t	n-Heptacosane (C27)	50.000	50.292	-0.6	104	0.00
29 t	n-Octacosane (C28)	50.000	50.183	-0.4	104	0.00
30 t	n-Nonacosane (C29)	50.000	50.460	-0.9	105	0.00
31 t	n-Triacontane (C30)	50.000	50.283	-0.6	105	0.00
32 t	n-Hentriacontane (C31)	50.000	50.275	-0.5	105	0.00
33 t	n-Dotriacontane (C32)	50.000	50.313	-0.6	105	0.00
34 t	n-Tritriacontane (C33)	50.000	50.165	-0.3	106	0.00
35 t	n-tetratriacontane (C34)	50.000	50.116	-0.2	106	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315026.d
 Signal(s) : FID1A.CH
 Acq On : 14 Jan 2015 8:11 am
 Operator : FID17:NL
 Sample : WG755546-2
 Misc : WG755546, FRAV14 50ug/mL
 ALS Vial : 13 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 09:39:15 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\2015\JANUARY\JAN13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
36 t	n-Pentatriacontane (C35)	50.000	49.937	0.1	105	0.00
37 t	n-Hexatriacontane (C36)	50.000	49.811	0.4	105	0.02
38 t	n-Heptatriacontane (C37)	50.000	49.344	1.3	104	0.02
39 t	n-Octatriacontane (C38)	50.000	49.073	1.9	103	0.02
41 t	n-Tetracontane (C40)	50.000	48.009	4.0	100	0.02

Evaluate Continuing Calibration Report - Not Found

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Mass Discrimination (Response)	Ratio	Range Limits
n-Hexatriacontane (C36) to n-Eicosane (C20)	1.06	0.85 - 1.15

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315026.d
 Signal(s) : FID1A.CH
 Acq On : 14 Jan 2015 8:11 am
 Operator : FID17:NL
 Sample : WG755546-2
 Misc : WG755546, FRAV14 50ug/mL
 ALS Vial : 13 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 09:39:15 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\2015\JANUARY\JAN13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.136	55538870	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.122	60974942	49.885	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 99.77%
24) s	d50-Tetracosane	35.812	49137442	49.499	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 99.00%
Target Compounds					
2) t	n-Octane (C8)	5.475	46019768	48.927	ug/mL M4
3) t	n-Nonane (C9)	7.671	49019185	50.659	ug/mL M4
4) t	n-Decane (C10)	10.154	50799222	51.175	ug/mL M4
5) t	n-Undecane (C11)	12.669	51749879	51.572	ug/mL M4
6) t	n-Dodecane (C12)	15.100	52758201	51.743	ug/mL M4
7) t	n-Tridecane (C13)	17.411	53017012	51.612	ug/mL M4
9) t	n-Tetradecane (C14)	19.599	53722617	51.658	ug/mL M4
11) t	n-Pentadecane (C15)	21.668	54525182	51.443	ug/mL M4
12) t	n-Hexadecane (C16)	23.629	54461877	51.059	ug/mL M4
14) t	n-Heptadecane (C17)	25.493	54360717	51.326	ug/mL M4
15) t	Pristane	25.602	55239277	50.490	ug/mL M4
16) t	n-Octadecane (C18)	27.265	55645642	51.116	ug/mL M4
17) t	Phytane	27.425	48566112	50.562	ug/mL M4
18) t	n-Nonadecane (C19)	28.954	55093544	50.763	ug/mL M4
20) t	n-Eicosane (C20)	30.564	55030244	50.798	ug/mL M4
21) t	n-Heneicosane (C21)	32.106	55496080	50.845	ug/mL M4
22) t	n-Docosane (C22)	33.581	55885626	50.689	ug/mL M4
23) t	n-Tricosane (C23)	35.000	56341784	50.599	ug/mL M4
25) t	n-Tetracosane (C24)	36.362	56533755	50.684	ug/mL M4
26) t	n-Pentacosane (C25)	37.669	56057680	50.517	ug/mL M4
27) t	n-Hexacosane (C26)	38.932	57325605	50.530	ug/mL M4
28) t	n-Heptacosane (C27)	40.148	56767434	50.292	ug/mL M4
29) t	n-Octacosane (C28)	41.320	56565682	50.183	ug/mL M4
30) t	n-Nonacosane (C29)	42.458	57005493	50.460	ug/mL M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315026.d
 Signal(s) : FID1A.CH
 Acq On : 14 Jan 2015 8:11 am
 Operator : FID17:NL
 Sample : WG755546-2
 Misc : WG755546, FRAV14 50ug/mL
 ALS Vial : 13 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 09:39:15 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\2015\JANUARY\JAN13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc Units
31) t	n-Triacontane (C30)	43.553	57074506	50.283 ug/mL M4
32) t	n-Hentriacontane (C31)	44.616	57105507	50.275 ug/mL M4
33) t	n-Dotriacontane (C32)	45.646	57573493	50.313 ug/mL M4
34) t	n-Tritriacontane (C33)	46.640	54331744	50.165 ug/mL M4
35) t	n-tetratriacontane (C34)	47.655	56614293	50.116 ug/mL M4
36) t	n-Pentatriacontane (C35)	48.781	56746791	49.937 ug/mL M4
37) t	n-Hexatriacontane (C36)	50.076	58179834	49.811 ug/mL M4
38) t	n-Heptatriacontane (C37)	51.563	56486861	49.344 ug/mL M4
39) t	n-Octatriacontane (C38)	53.300	55114220	49.073 ug/mL M4
41) t	n-Tetracontane (C40)	57.742	56358381	48.009 ug/mL M4

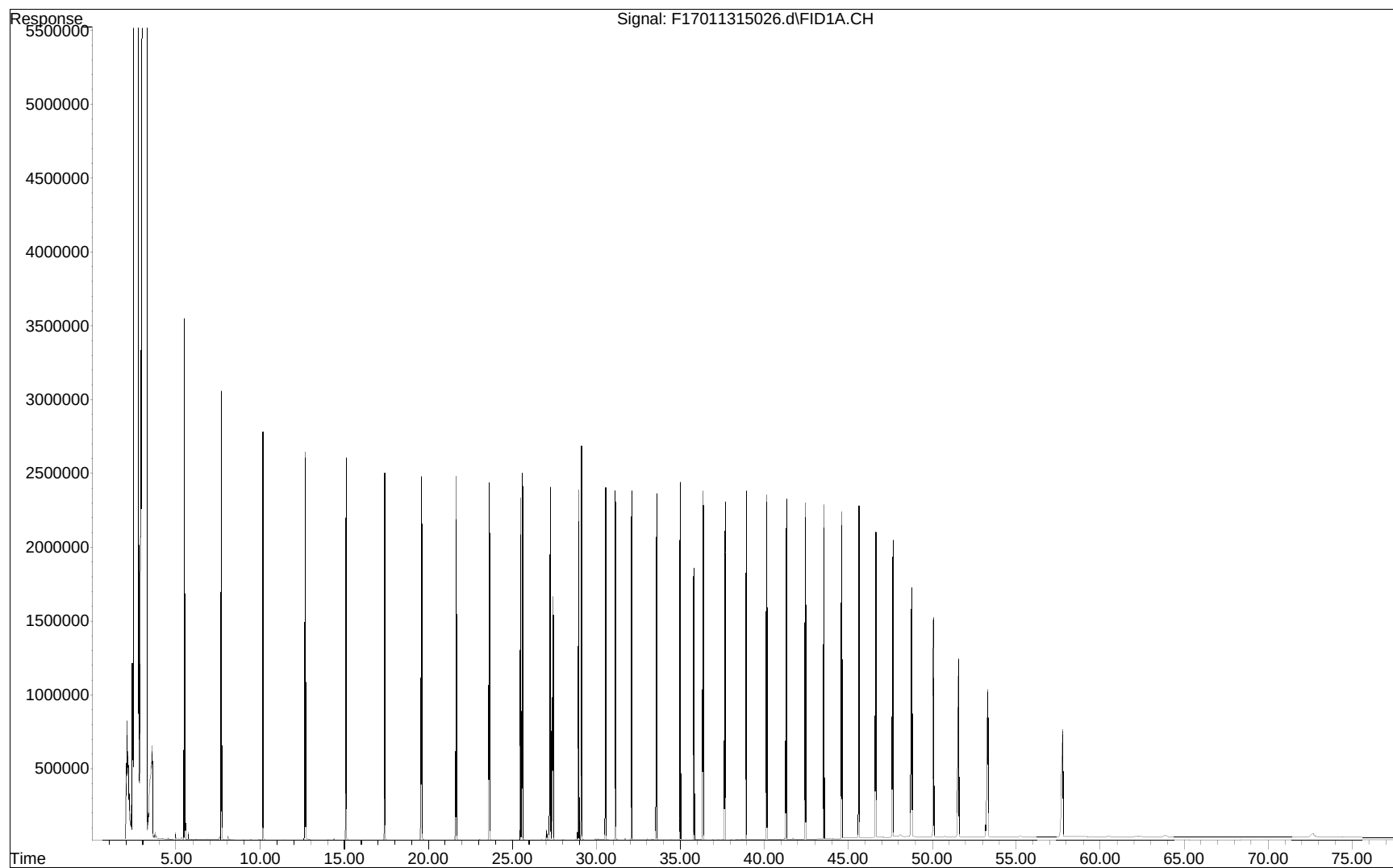
SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\FID17\2015\Jan\Jan13\
Data File : F17011315026.d
Operator : FID17:NL
Acquired : 14 Jan 2015 8:11 am using AcqMethod FID17.M
Instrument: FID17
Sample : WG755546-2
Misc Info : WG755546,FRAV14 50ug/mL
ALS Vial : 13



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315034.d
 Signal(s) : FID1A.CH
 Acq On : 14 Jan 2015 4:36 pm
 Operator : FID17:NL
 Sample : WG755546-3
 Misc : WG755546, FRAV14 50ug/mL
 ALS Vial : 17 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 09:39:44 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\2015\JANUARY\JAN13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 I	5-alpha-androstane	50.000	50.000	0.0	99	0.00
2 t	n-Octane (C8)	50.000	50.482	-1.0	101	0.00
3 t	n-Nonane (C9)	50.000	51.466	-2.9	103	0.00
4 t	n-Decane (C10)	50.000	51.364	-2.7	102	0.00
5 t	n-Undecane (C11)	50.000	51.855	-3.7	101	0.00
6 t	n-Dodecane (C12)	50.000	51.790	-3.6	101	0.00
7 t	n-Tridecane (C13)	50.000	51.626	-3.3	101	0.00
9 t	n-Tetradecane (C14)	50.000	51.681	-3.4	101	0.00
11 t	n-Pentadecane (C15)	50.000	51.481	-3.0	100	0.00
12 t	n-Hexadecane (C16)	50.000	51.004	-2.0	100	0.00
14 t	n-Heptadecane (C17)	50.000	51.281	-2.6	99	0.00
15 t	Pristane	50.000	50.549	-1.1	100	0.00
16 t	n-Octadecane (C18)	50.000	51.045	-2.1	100	0.00
17 t	Phytane	50.000	50.595	-1.2	100	0.00
18 t	n-Nonadecane (C19)	50.000	50.779	-1.6	100	0.00
19 s	ortho-terphenyl	50.000	49.810	0.4	99	0.00
20 t	n-Eicosane (C20)	50.000	50.749	-1.5	100	0.00
21 t	n-Heneicosane (C21)	50.000	50.774	-1.5	100	0.00
22 t	n-Docosane (C22)	50.000	50.652	-1.3	100	0.00
23 t	n-Tricosane (C23)	50.000	50.559	-1.1	100	0.00
24 s	d50-Tetracosane	50.000	49.490	1.0	100	0.00
25 t	n-Tetracosane (C24)	50.000	50.624	-1.2	100	0.00
26 t	n-Pentacosane (C25)	50.000	50.471	-0.9	100	0.00
27 t	n-Hexacosane (C26)	50.000	50.505	-1.0	100	0.00
28 t	n-Heptacosane (C27)	50.000	50.256	-0.5	101	0.00
29 t	n-Octacosane (C28)	50.000	50.247	-0.5	101	0.00
30 t	n-Nonacosane (C29)	50.000	50.406	-0.8	101	0.00
31 t	n-Triacontane (C30)	50.000	50.282	-0.6	102	0.00
32 t	n-Hentriacontane (C31)	50.000	50.220	-0.4	102	0.00
33 t	n-Dotriacontane (C32)	50.000	50.280	-0.6	102	0.00
34 t	n-Tritriacontane (C33)	50.000	50.164	-0.3	102	0.00
35 t	n-tetratriacontane (C34)	50.000	50.169	-0.3	102	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315034.d
 Signal(s) : FID1A.CH
 Acq On : 14 Jan 2015 4:36 pm
 Operator : FID17:NL
 Sample : WG755546-3
 Misc : WG755546, FRAV14 50ug/mL
 ALS Vial : 17 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 09:39:44 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\2015\JANUARY\JAN13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
36 t	n-Pentatriacontane (C35)	50.000	50.025	-0.0	102	0.00
37 t	n-Hexatriacontane (C36)	50.000	49.826	0.3	102	0.00
38 t	n-Heptatriacontane (C37)	50.000	49.460	1.1	101	0.00
39 t	n-Octatriacontane (C38)	50.000	49.129	1.7	100	0.00
41 t	n-Tetracontane (C40)	50.000	47.949	4.1	97	0.00

Evaluate Continuing Calibration Report - Not Found

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Mass Discrimination (Response)	Ratio	Range Limits
n-Hexatriacontane (C36) to n-Eicosane (C20)	1.06	0.85 - 1.15

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315034.d
 Signal(s) : FID1A.CH
 Acq On : 14 Jan 2015 4:36 pm
 Operator : FID17:NL
 Sample : WG755546-3
 Misc : WG755546, FRAV14 50ug/mL
 ALS Vial : 17 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 09:39:44 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\2015\JANUARY\JAN13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.139	53798710	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.124	58976078	49.810	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 99.62%
24) s	d50-Tetracosane	35.816	47589630	49.490	ug/mL M4
Spiked Amount	50.000	Range	50 - 130	Recovery	= 98.98%
Target Compounds					
2) t	n-Octane (C8)	5.473	45994550	50.482	ug/mL M4
3) t	n-Nonane (C9)	7.671	48240001	51.466	ug/mL M4
4) t	n-Decane (C10)	10.153	49389295	51.364	ug/mL M4
5) t	n-Undecane (C11)	12.669	50403746	51.855	ug/mL M4
6) t	n-Dodecane (C12)	15.100	51151104	51.790	ug/mL M4
7) t	n-Tridecane (C13)	17.411	51369547	51.626	ug/mL M4
9) t	n-Tetradecane (C14)	19.600	52062865	51.681	ug/mL M4
11) t	n-Pentadecane (C15)	21.669	52856280	51.481	ug/mL M4
12) t	n-Hexadecane (C16)	23.630	52698607	51.004	ug/mL M4
14) t	n-Heptadecane (C17)	25.493	52611521	51.281	ug/mL M4
15) t	Pristane	25.603	53571620	50.549	ug/mL M4
16) t	n-Octadecane (C18)	27.266	53827463	51.045	ug/mL M4
17) t	Phytane	27.426	47074862	50.595	ug/mL M4
18) t	n-Nonadecane (C19)	28.955	53384352	50.779	ug/mL M4
20) t	n-Eicosane (C20)	30.567	53254755	50.749	ug/mL M4
21) t	n-Heneicosane (C21)	32.108	53682114	50.774	ug/mL M4
22) t	n-Docosane (C22)	33.585	54094542	50.652	ug/mL M4
23) t	n-Tricosane (C23)	35.004	54532689	50.559	ug/mL M4
25) t	n-Tetracosane (C24)	36.364	54696845	50.624	ug/mL M4
26) t	n-Pentacosane (C25)	37.672	54252831	50.471	ug/mL M4
27) t	n-Hexacosane (C26)	38.933	55501977	50.505	ug/mL M4
28) t	n-Heptacosane (C27)	40.151	54948728	50.256	ug/mL M4
29) t	n-Octacosane (C28)	41.323	54862509	50.247	ug/mL M4
30) t	n-Nonacosane (C29)	42.460	55160451	50.406	ug/mL M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315034.d
 Signal(s) : FID1A.CH
 Acq On : 14 Jan 2015 4:36 pm
 Operator : FID17:NL
 Sample : WG755546-3
 Misc : WG755546, FRAV14 50ug/mL
 ALS Vial : 17 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 09:39:44 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\2015\JANUARY\JAN13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : CCAL - CCAL

	Compound	R.T.	Response	Conc Units
31) t	n-Triacontane (C30)	43.558	55284627	50.282 ug/mL M4
32) t	n-Hentriacontane (C31)	44.620	55256590	50.220 ug/mL M4
33) t	n-Dotriacontane (C32)	45.651	55732804	50.280 ug/mL M4
34) t	n-Tritriacontane (C33)	46.648	52627681	50.164 ug/mL M4
35) t	n-tetratriacontane (C34)	47.657	54898632	50.169 ug/mL M4
36) t	n-Pentatriacontane (C35)	48.789	55065604	50.025 ug/mL M4
37) t	n-Hexatriacontane (C36)	50.078	56374440	49.826 ug/mL M4
38) t	n-Heptatriacontane (C37)	51.563	54845724	49.460 ug/mL M4
39) t	n-Octatriacontane (C38)	53.303	53448283	49.129 ug/mL M4
41) t	n-Tetracontane (C40)	57.752	54523704	47.949 ug/mL M4

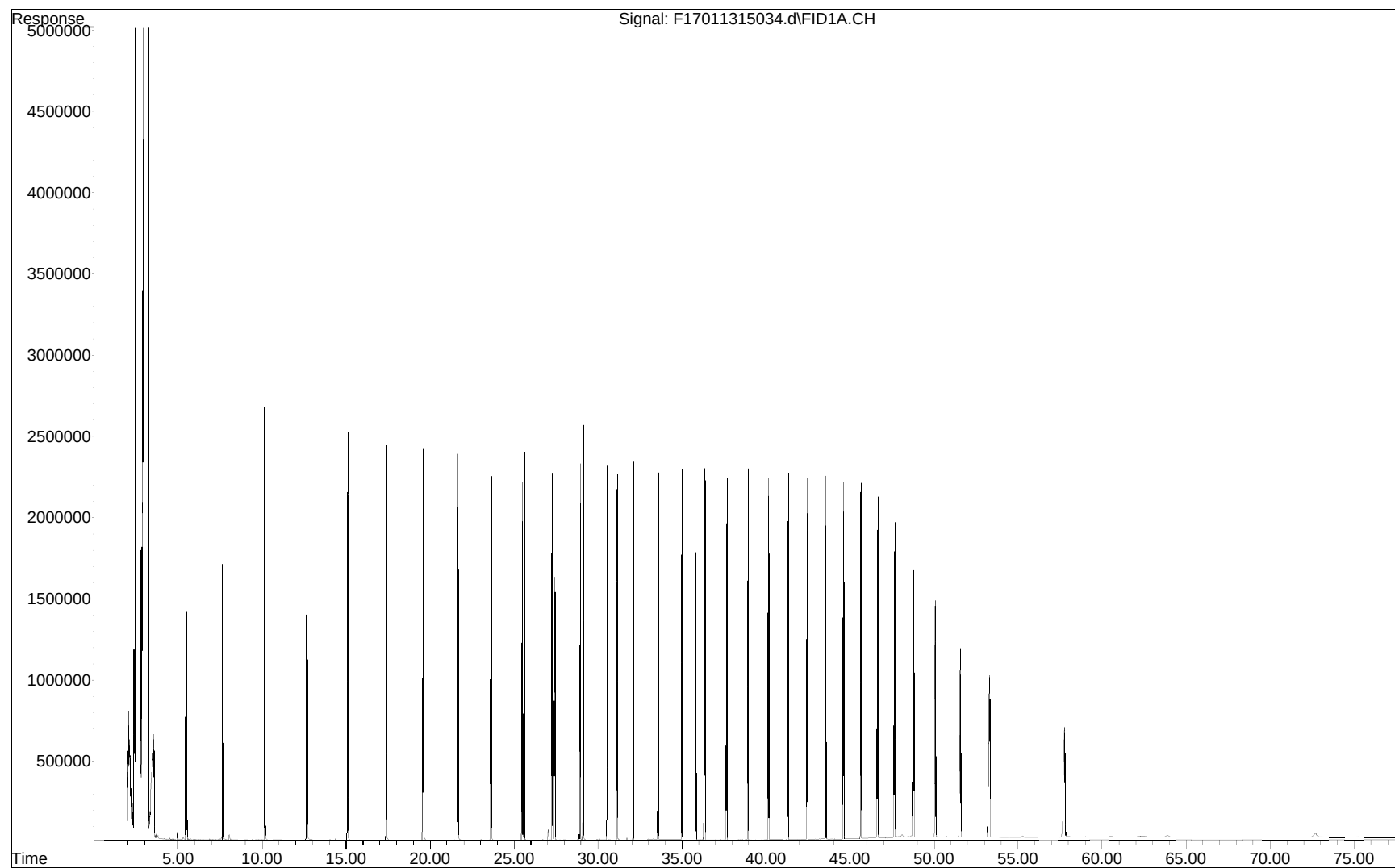
SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\FID17\2015\Jan\Jan13\
Data File : F17011315034.d
Operator : FID17:NL
Acquired : 14 Jan 2015 4:36 pm using AcqMethod FID17.M
Instrument: FID17
Sample : WG755546-3
Misc Info : WG755546, FRAV14 50ug/mL
ALS Vial : 17



Petroleum Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315012.d
 Signal(s) : FID1A.CH
 Acq On : 13 Jan 2015 9:49 pm
 Operator : FID17:NL
 Sample : WG755041-1,42
 Misc : WG755546,WG755041
 ALS Vial : 6 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 09:38:37 2015
 Quant Method : C:\msdchem\1\DATA\FID17\2015\January\Jan13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Blank Name : IB1701131501F
 Blank File : F17011315010.d

Sub List : TPH - TPH

Compound	R.T.	Response	Conc Units

Internal Standards			
1) I 5-alpha-androstane	31.131	53218355	50.000 ug/mL M4
System Monitoring Compounds			
19) s ortho-terphenyl	29.099	13881267	11.852 ug/mL M4
Spiked Amount 50.000	Range 50 - 130	Recovery =	23.70%#
24) s d50-Tetracosane	35.795	11042979	11.609 ug/mL M4
Spiked Amount 50.000	Range 50 - 130	Recovery =	23.22%#
Target Compounds			
42) h C9-C44 Total Petroleu...	40.166	561993124	537.998 ug/mL m
42) h C9-C44 Total Petroleu BS	40.166	-23668748	N.D. ug/mL m
45) h Total Resolved Hydroc...	40.697	5352915	5.124 ug/mL m

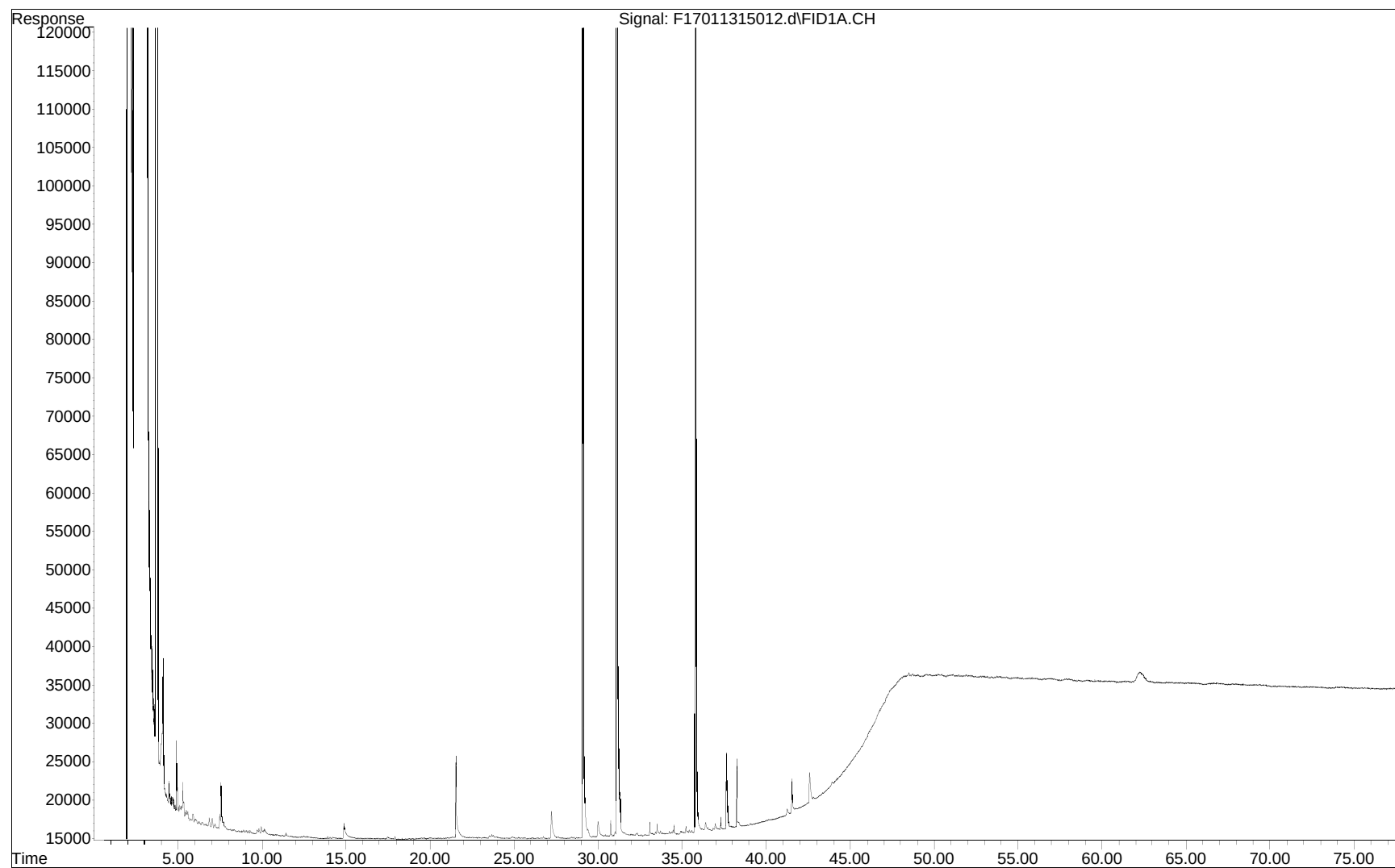
SemiQuant Compounds - Not Calibrated on this Instrument

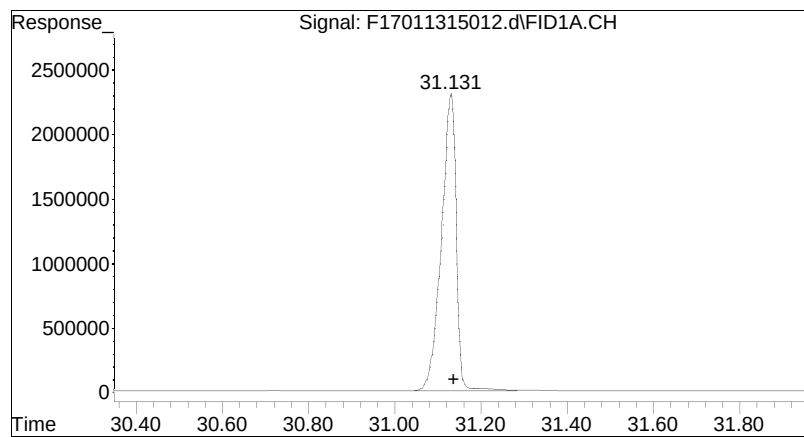
(f)=RT Delta > 1/2 Window

(m)=manual int.

Quantitation Report (QT Reviewed)

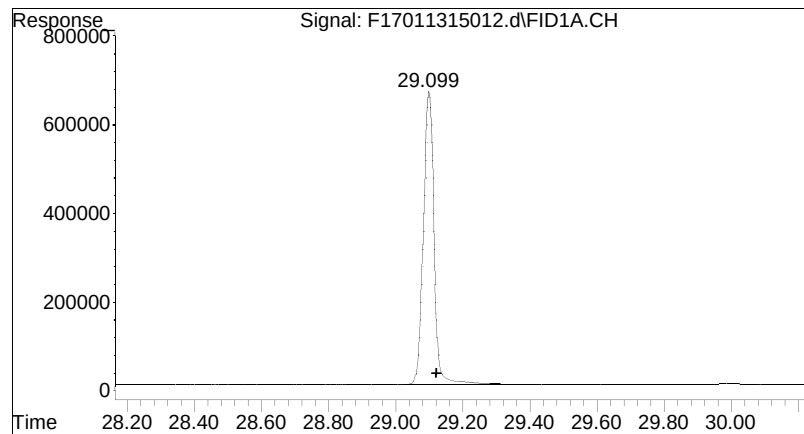
Data Path : 0:\Forensics\Data\FID17\2015\Jan\Jan13\
Data File : F17011315012.d
Operator : FID17:NL
Acquired : 13 Jan 2015 9:49 pm using AcqMethod FID17.M
Instrument: FID17
Sample : WG755041-1,42
Misc Info : WG755546,WG755041
ALS Vial : 6





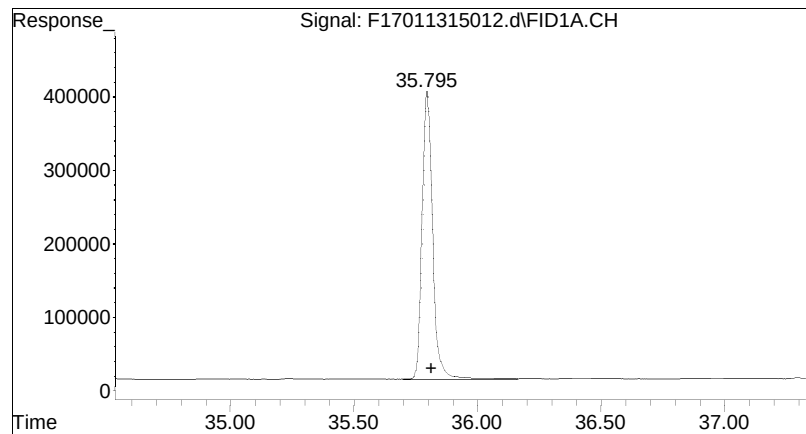
#1 5-alpha-androstane

R.T.: 31.131 min
Delta R.T.: -0.006 min
Response: 53218355
Conc: 50.00 ug/mL M4



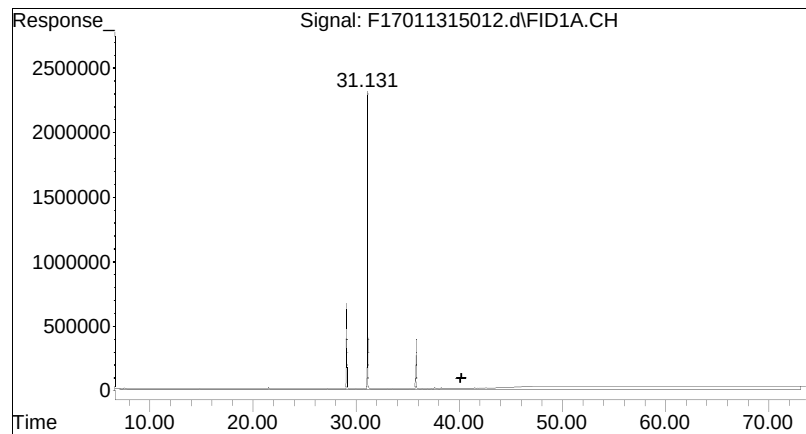
#19 ortho-terphenyl

R.T.: 29.099 min
Delta R.T.: -0.024 min
Response: 13881267
Conc: 11.85 ug/mL M4



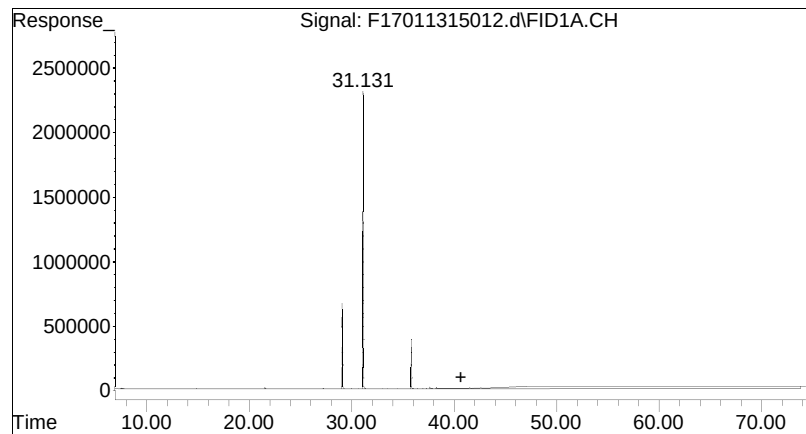
#24 d50-Tetracosane

R.T.: 35.795 min
Delta R.T.: -0.019 min
Response: 11042979
Conc: 11.61 ug/mL M4



#42 C9-C44 Total Petroleum Hy

R.T.: 40.166 min
Delta R.T.: 0.000 min
Response: 561993124
Conc: 538.00 ug/mL m



#45 Total Resolved Hydrocarbo

R.T.: 40.697 min
Delta R.T.: 0.000 min
Response: 5352915
Conc: 5.12 ug/mL m

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315032.d
 Signal(s) : FID1A.CH
 Acq On : 14 Jan 2015 3:07 pm
 Operator : FID17:NL
 Sample : WG755041-2,42
 Misc : WG755546,WG755041
 ALS Vial : 16 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 11:20:37 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\2015\JANUARY\JAN13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Blank Name : IB1701131502F
 Blank File : F17011315030.D

Sub List : TPH_QC_Samples - TPH_QC_Samples

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.142	48295937	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.109	13107974	12.332	ug/mL M4
Spiked Amount 50.000		Range 50 - 130	Recovery =	24.66%#	
24) s	d50-Tetracosane	35.807	10385901	12.031	ug/mL M4
Spiked Amount 50.000		Range 50 - 130	Recovery =	24.06%#	
Target Compounds					
3) t	n-Nonane (C9)	7.654	4318392	5.132	ug/mL M4
4) t	n-Decane (C10)	10.143	4168823	4.829	ug/mL M4
6) t	n-Dodecane (C12)	15.099	4379143	4.939	ug/mL M4
9) t	n-Tetradecane (C14)	19.602	4490753	4.966	ug/mL M4
12) t	n-Hexadecane (C16)	23.635	4904666	5.288	ug/mL M4
16) t	n-Octadecane (C18)	27.259	5043895	5.328	ug/mL M4
18) t	n-Nonadecane (C19)	28.946	4569041	4.841	ug/mL M4
20) t	n-Eicosane (C20)	30.564	4693924	4.983	ug/mL M4
22) t	n-Docosane (C22)	33.581	4943100	5.156	ug/mL M4
25) t	n-Tetracosane (C24)	36.356	4872828	5.024	ug/mL M4
27) t	n-Hexacosane (C26)	38.926	4851633	4.918	ug/mL M4
29) t	n-Octacosane (C28)	41.314	4947232	5.047	ug/mL M4
31) t	n-Triacontane (C30)	43.545	4772548	4.835	ug/mL M4
37) t	n-Hexatriacontane (C36)	50.048	4412546	4.344	ug/mL M4
42) h	C9-C44 Total Petroleu...	40.166	599480563	632.377	ug/mL m
42) h	C9-C44 Total Petroleu BS	40.166	114524299	120.809	ug/mL m
45) h	Total Resolved Hydroc...	40.697	73188042	77.204	ug/mL m

SemiQuant Compounds - Not Calibrated on this Instrument

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315032.d
 Signal(s) : FID1A.CH
 Acq On : 14 Jan 2015 3:07 pm
 Operator : FID17:NL
 Sample : WG755041-2,42
 Misc : WG755546,WG755041
 ALS Vial : 16 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 11:20:37 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\2015\JANUARY\JAN13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Blank Name : IB1701131502F
 Blank File : F17011315030.D

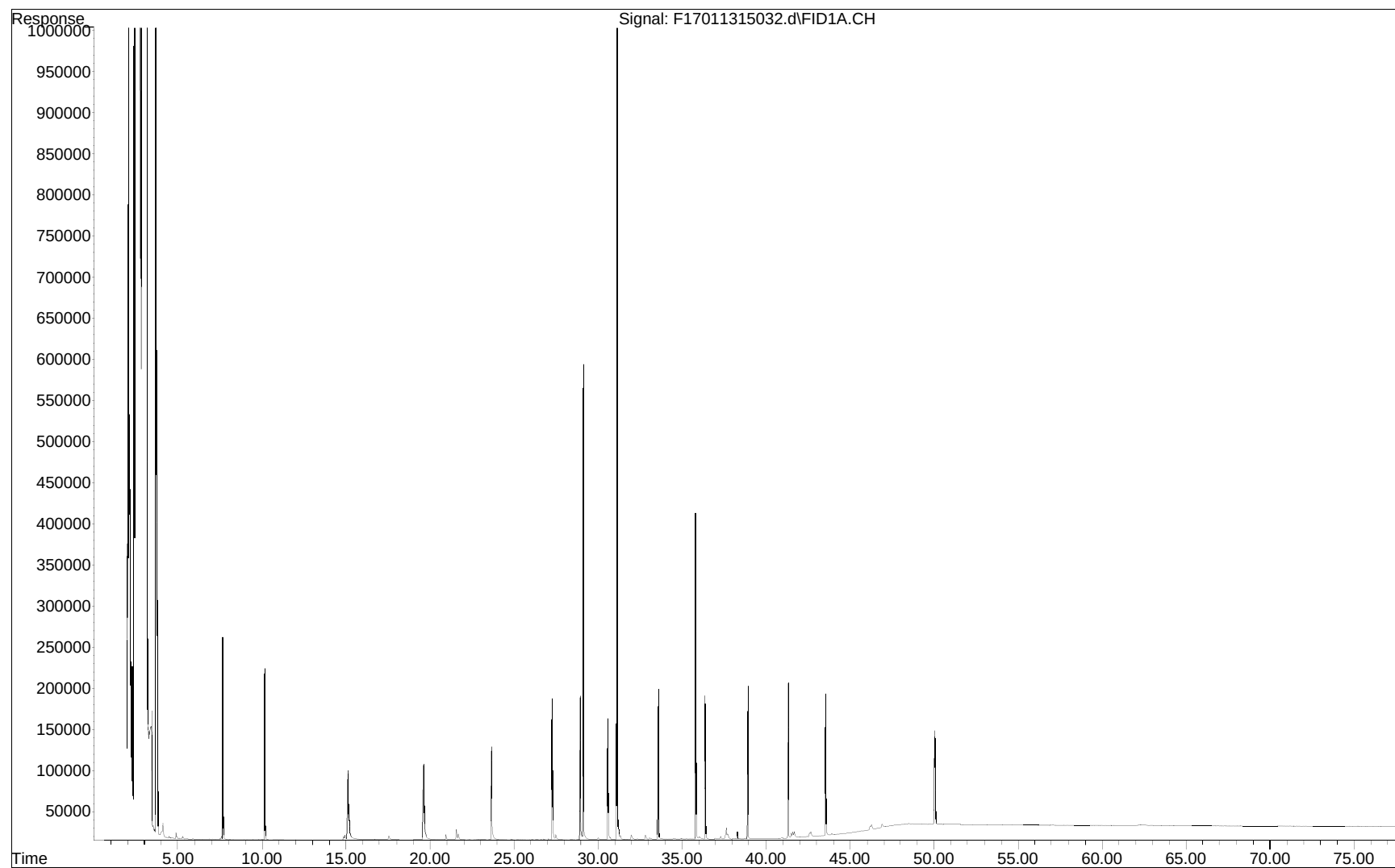
Sub List : TPH_QC_Samples - TPH_QC_Samples

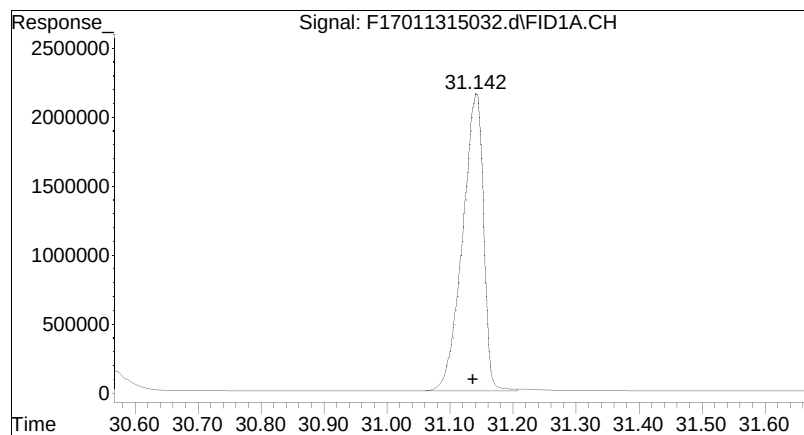
Compound	R.T.	Response	Conc Units

(f)=RT Delta > 1/2 Window			(m)=manual int.

Quantitation Report (QT Reviewed)

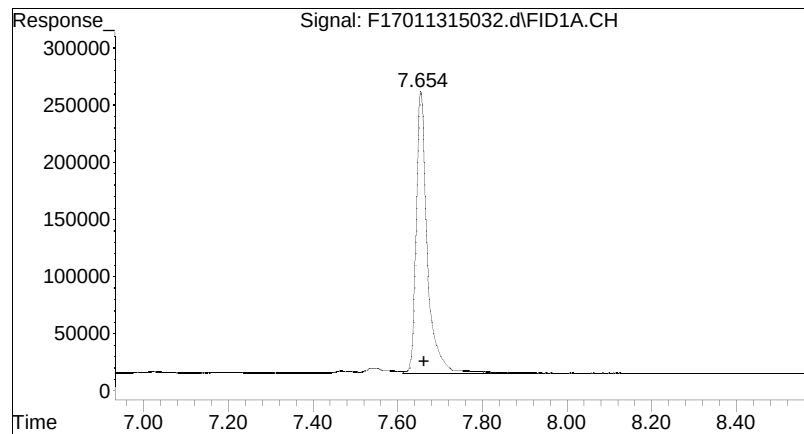
Data Path : 0:\Forensics\Data\FID17\2015\Jan\Jan13\
Data File : F17011315032.d
Operator : FID17:NL
Acquired : 14 Jan 2015 3:07 pm using AcqMethod FID17.M
Instrument: FID17
Sample : WG755041-2,42
Misc Info : WG755546,WG755041
ALS Vial : 16





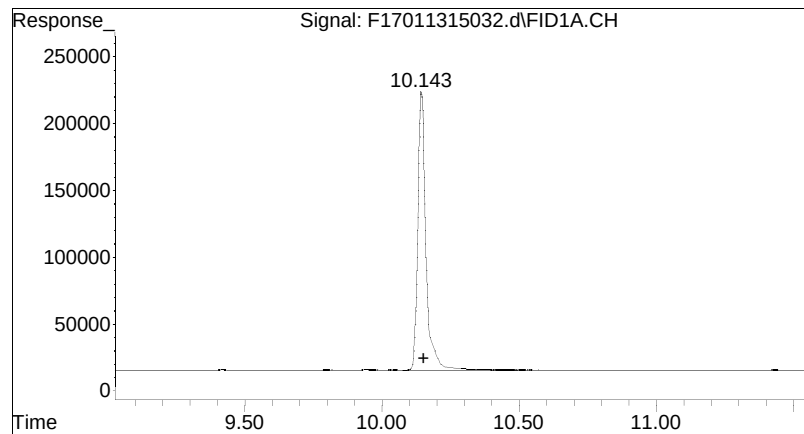
#1 5-alpha-androstane

R.T.: 31.142 min
Delta R.T.: 0.005 min
Response: 48295937
Conc: 50.00 ug/mL M4



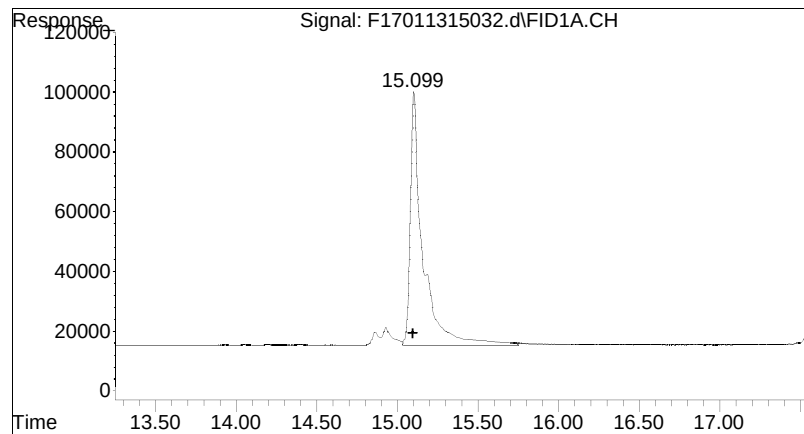
#3 n-Nonane (C9)

R.T.: 7.654 min
Delta R.T.: -0.008 min
Response: 4318392
Conc: 5.13 ug/mL M4



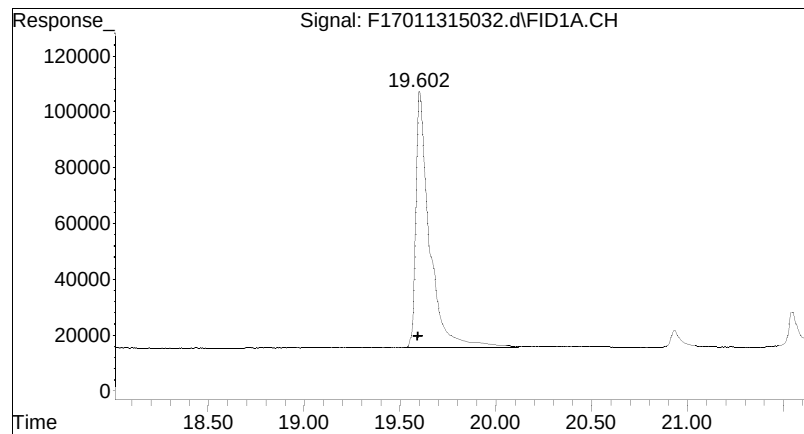
#4 n-Decane (C10)

R.T.: 10.143 min
Delta R.T.: -0.009 min
Response: 4168823
Conc: 4.83 ug/mL M4



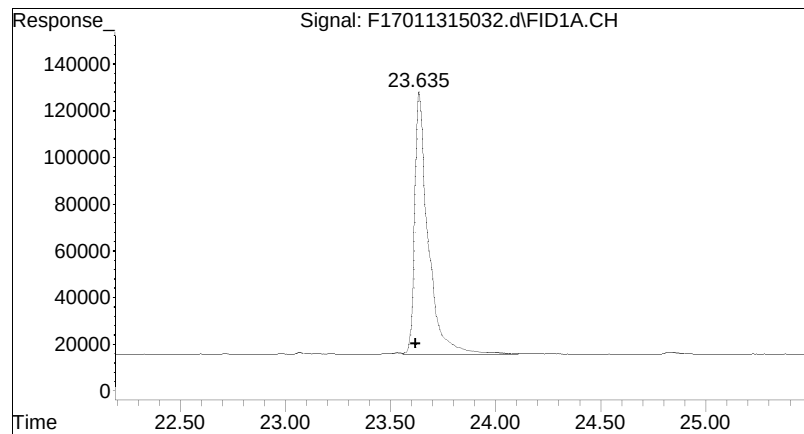
#6 n-Dodecane (C12)

R.T.: 15.099 min
Delta R.T.: 0.000 min
Response: 4379143
Conc: 4.94 ug/mL M4



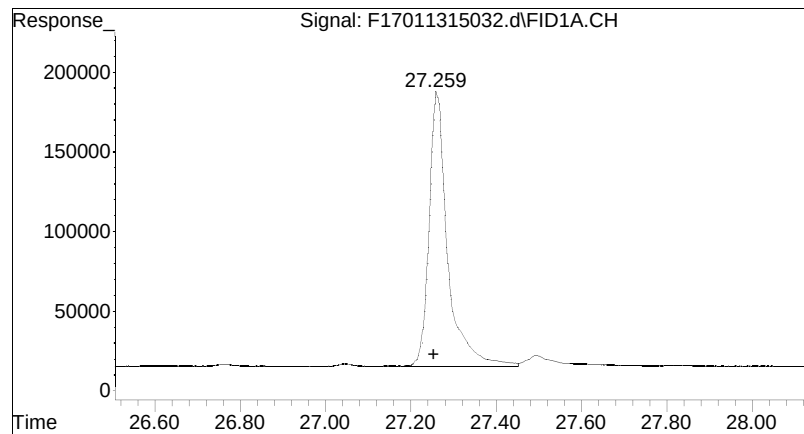
#9 n-Tetradecane (C14)

R.T.: 19.602 min
Delta R.T.: 0.006 min
Response: 4490753
Conc: 4.97 ug/mL M4



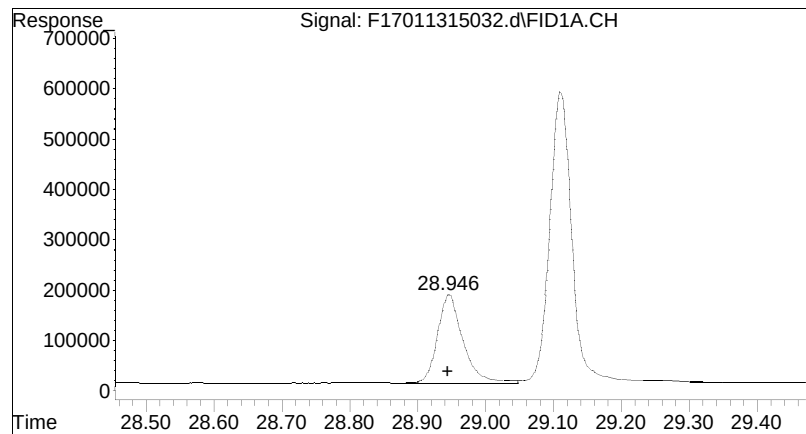
#12 n-Hexadecane (C16)

R.T.: 23.635 min
Delta R.T.: 0.012 min
Response: 4904666
Conc: 5.29 ug/mL M4



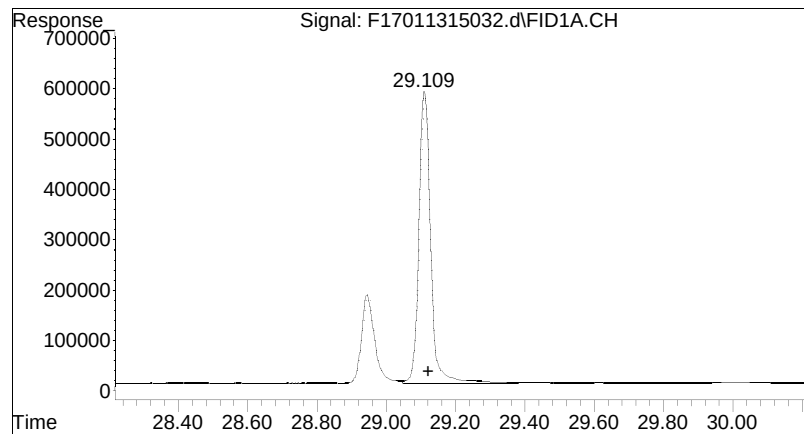
#16 n-Octadecane (C18)

R.T.: 27.259 min
Delta R.T.: 0.005 min
Response: 5043895
Conc: 5.33 ug/mL M4



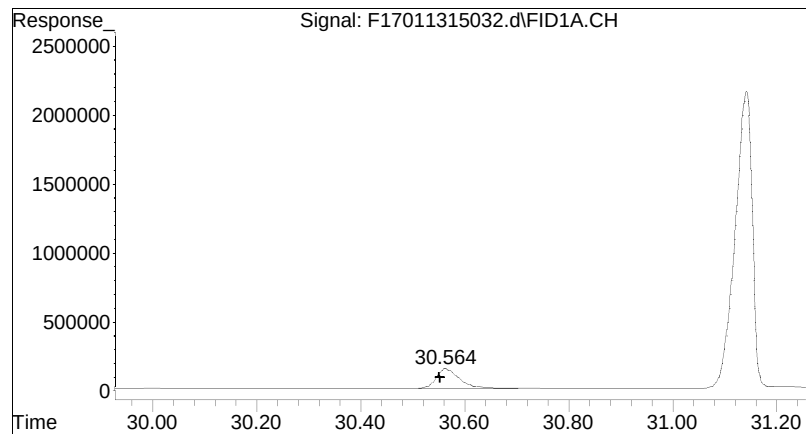
#18 n-Nonadecane (C19)

R.T.: 28.946 min
Delta R.T.: 0.002 min
Response: 4569041
Conc: 4.84 ug/mL M4



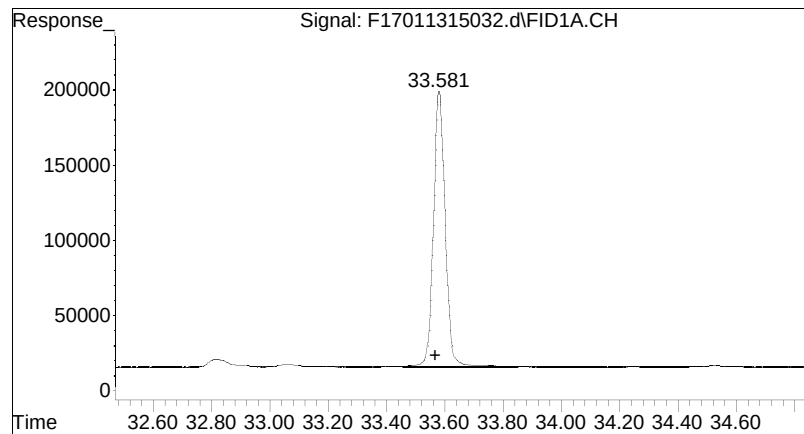
#19 ortho-terphenyl

R.T.: 29.109 min
Delta R.T.: -0.013 min
Response: 13107974
Conc: 12.33 ug/mL M4



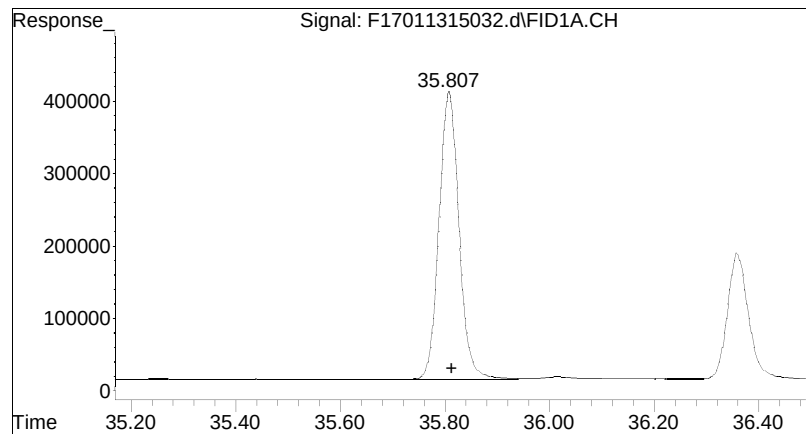
#20 n-Eicosane (C20)

R.T.: 30.564 min
Delta R.T.: 0.011 min
Response: 4693924
Conc: 4.98 ug/mL M4



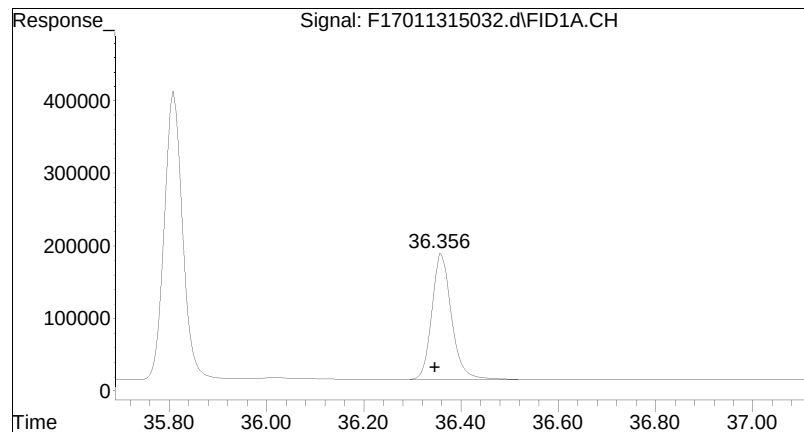
#22 n-Docosane (C22)

R.T.: 33.581 min
Delta R.T.: 0.013 min
Response: 4943100
Conc: 5.16 ug/mL M4



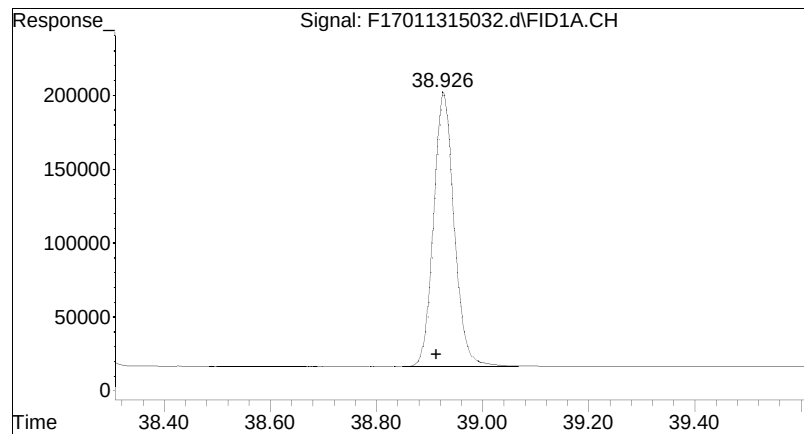
#24 d50-Tetracosane

R.T.: 35.807 min
Delta R.T.: -0.006 min
Response: 10385901
Conc: 12.03 ug/mL M4



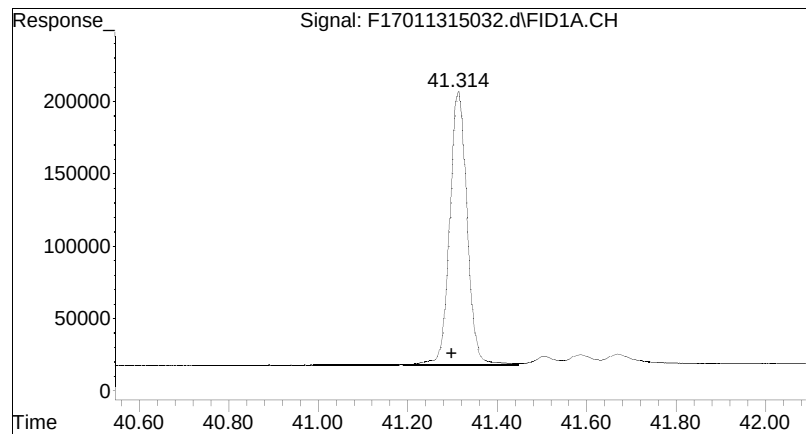
#25 n-Tetracosane (C24)

R.T.: 36.356 min
Delta R.T.: 0.009 min
Response: 4872828
Conc: 5.02 ug/mL M4



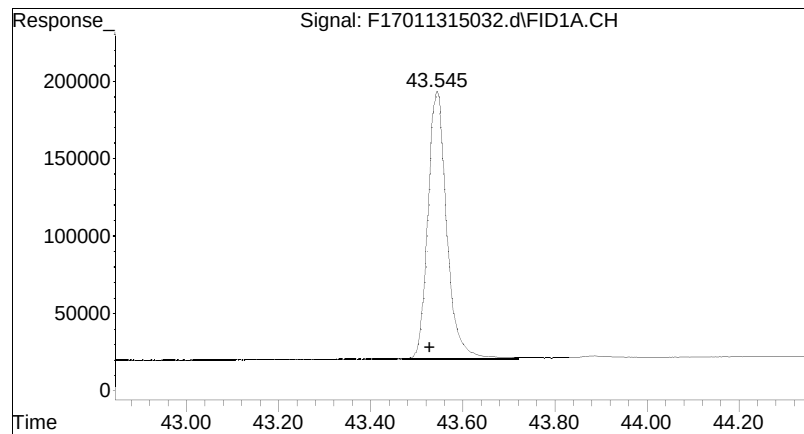
#27 n-Hexacosane (C26)

R.T.: 38.926 min
Delta R.T.: 0.013 min
Response: 4851633
Conc: 4.92 ug/mL M4



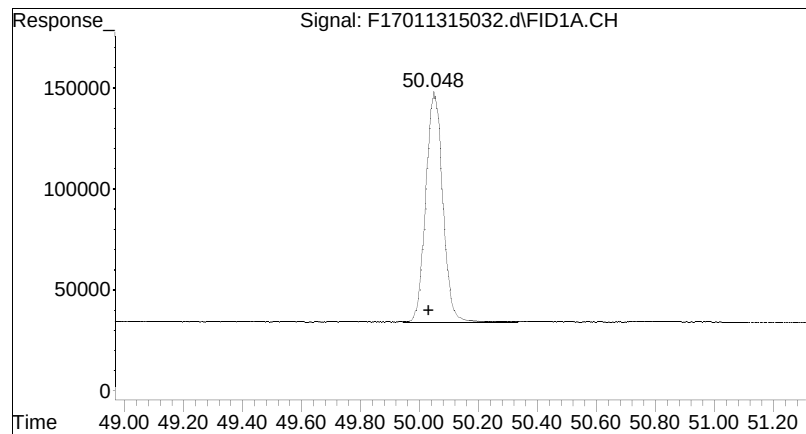
#29 n-Octacosane (C28)

R.T.: 41.314 min
Delta R.T.: 0.015 min
Response: 4947232
Conc: 5.05 ug/mL M4



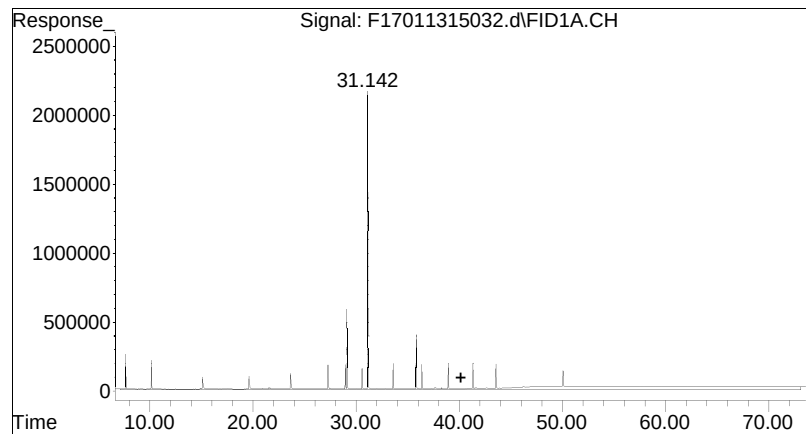
#31 n-Triacontane (C30)

R.T.: 43.545 min
Delta R.T.: 0.016 min
Response: 4772548
Conc: 4.84 ug/mL M4



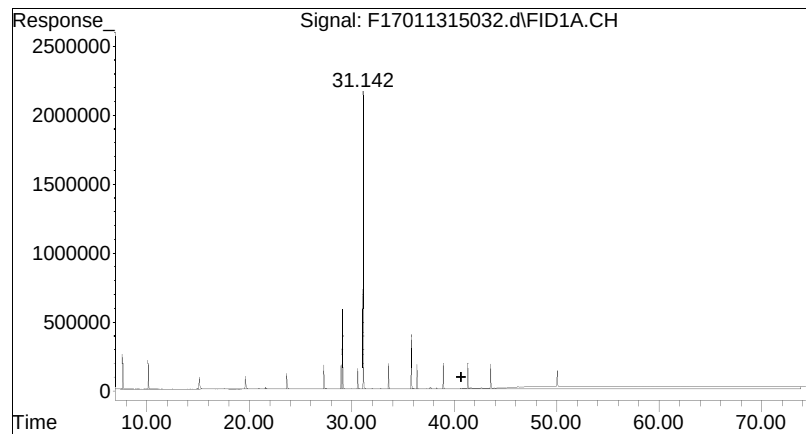
#37 n-Hexatriacontane (C36)

R.T.: 50.048 min
Delta R.T.: 0.017 min
Response: 4412546
Conc: 4.34 ug/mL M4



#42 C9-C44 Total Petroleum Hy

R.T.: 40.166 min
Delta R.T.: 0.000 min
Response: 599480563
Conc: 632.38 ug/mL m



#45 Total Resolved Hydrocarbo

R.T.: 40.697 min
Delta R.T.: 0.000 min
Response: 73188042
Conc: 77.20 ug/mL m

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315016.d
 Signal(s) : FID1A.CH
 Acq On : 14 Jan 2015 12:47 am
 Operator : FID17:NL
 Sample : WG755041-3,42
 Misc : WG755546,WG755041
 ALS Vial : 8 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 11:19:28 2015
 Quant Method : C:\msdchem\1\DATA\FID17\2015\January\Jan13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Blank Name : IB1701131501F
 Blank File : F17011315010.d

Sub List : TPH_QC_Samples - TPH_QC_Samples

Compound		R.T.	Response	Conc	Units

Internal Standards					
1) I	5-alpha-androstane	31.130	52769515	50.000	ug/mL M4
System Monitoring Compounds					
19) s	ortho-terphenyl	29.099	14290592	12.305	ug/mL M4
Spiked Amount 50.000		Range 50 - 130	Recovery =	24.61%#	
24) s	d50-Tetracosane	35.793	11257766	11.936	ug/mL M4
Spiked Amount 50.000		Range 50 - 130	Recovery =	23.87%#	
Target Compounds					
3) t	n-Nonane (C9)	7.649	4611421	5.016	ug/mL M4
4) t	n-Decane (C10)	10.137	4595944	4.873	ug/mL M4
6) t	n-Dodecane (C12)	15.089	4721547	4.874	ug/mL M4
9) t	n-Tetradecane (C14)	19.586	4846526	4.905	ug/mL M4
12) t	n-Hexadecane (C16)	23.617	5371359	5.300	ug/mL M4
16) t	n-Octadecane (C18)	27.247	5556476	5.372	ug/mL M4
18) t	n-Nonadecane (C19)	28.935	5046994	4.894	ug/mL M4
20) t	n-Eicosane (C20)	30.547	5156159	5.009	ug/mL M4
22) t	n-Docosane (C22)	33.562	5260588	5.022	ug/mL M4
25) t	n-Tetracosane (C24)	36.340	5301965	5.003	ug/mL M4
27) t	n-Hexacosane (C26)	38.909	5290678	4.908	ug/mL M4
29) t	n-Octacosane (C28)	41.296	5386641	5.030	ug/mL M4
31) t	n-Triacontane (C30)	43.529	5277446	4.893	ug/mL M4
37) t	n-Hexatriacontane (C36)	50.028	5208933	4.694	ug/mL M4
42) h	C9-C44 Total Petroleu...	40.166	609431896	588.374	ug/mL m
42) h	C9-C44 Total Petroleu BS	40.166	23770024	22.949	ug/mL m
45) h	Total Resolved Hydroc...	40.697	78803525	76.081	ug/mL m

SemiQuant Compounds - Not Calibrated on this Instrument

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315016.d
 Signal(s) : FID1A.CH
 Acq On : 14 Jan 2015 12:47 am
 Operator : FID17:NL
 Sample : WG755041-3,42
 Misc : WG755546,WG755041
 ALS Vial : 8 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 11:19:28 2015
 Quant Method : C:\msdchem\1\DATA\FID17\2015\January\Jan13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Blank Name : IB1701131501F
 Blank File : F17011315010.d

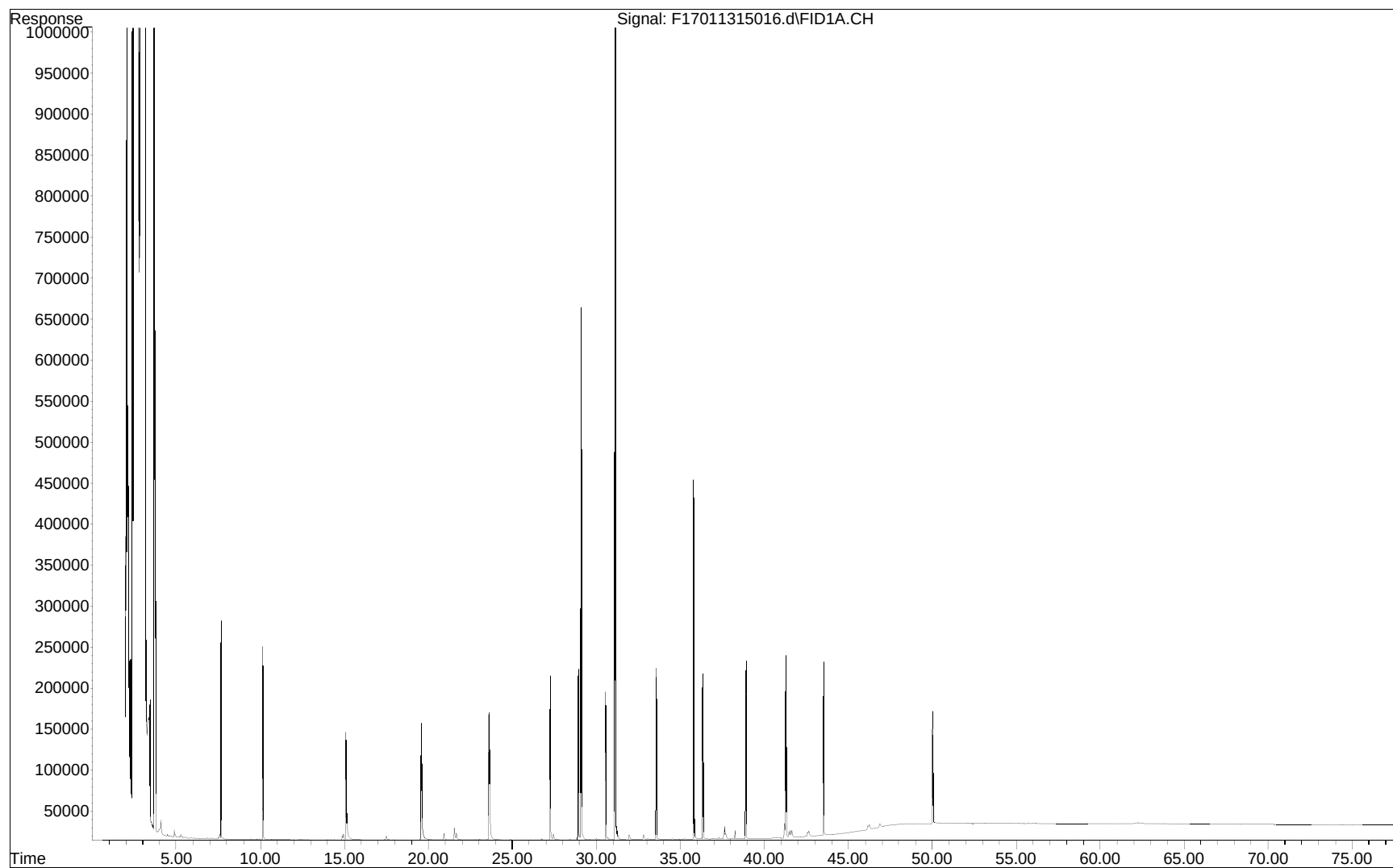
Sub List : TPH_QC_Samples - TPH_QC_Samples

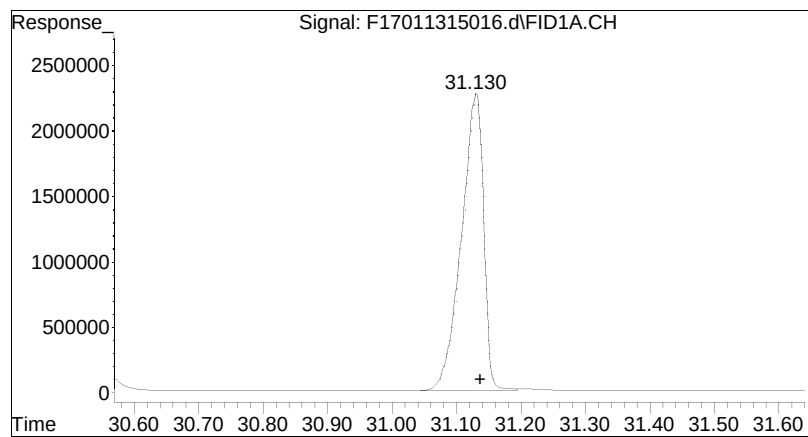
Compound	R.T.	Response	Conc Units

(f)=RT Delta > 1/2 Window			(m)=manual int.

Quantitation Report (QT Reviewed)

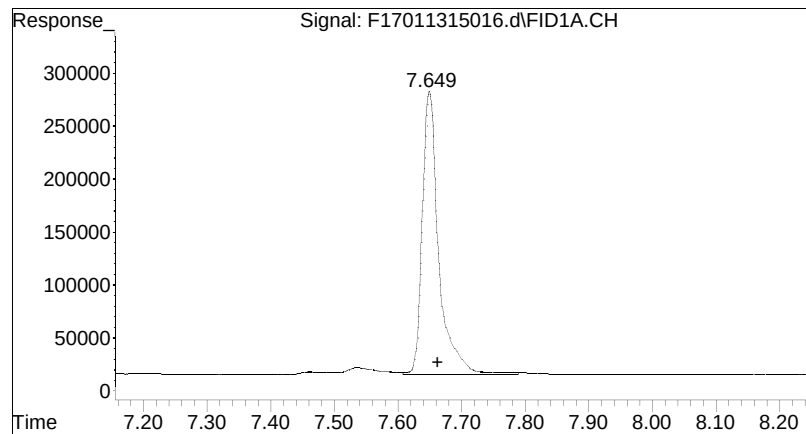
Data Path : 0:\Forensics\Data\FID17\2015\Jan\Jan13\
Data File : F17011315016.d
Operator : FID17:NL
Acquired : 14 Jan 2015 12:47 am using AcqMethod FID17.M
Instrument: FID17
Sample : WG755041-3,42
Misc Info : WG755546,WG755041
ALS Vial : 8





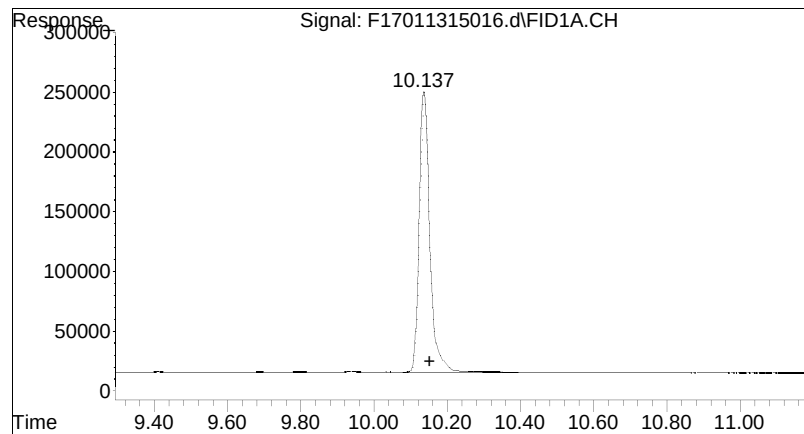
#1 5-alpha-androstane

R.T.: 31.130 min
Delta R.T.: -0.007 min
Response: 52769515
Conc: 50.00 ug/mL M4



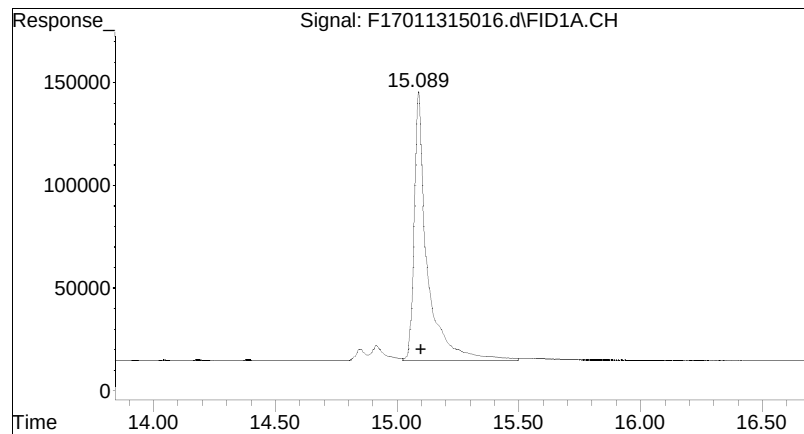
#3 n-Nonane (C9)

R.T.: 7.649 min
Delta R.T.: -0.014 min
Response: 4611421
Conc: 5.02 ug/mL M4



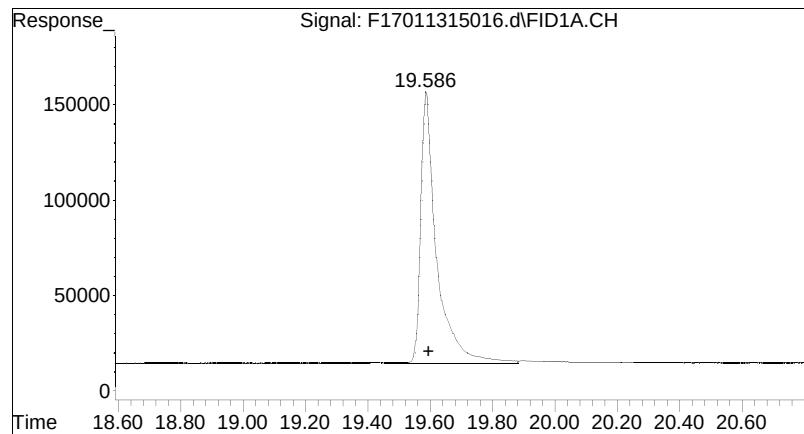
#4 n-Decane (C10)

R.T.: 10.137 min
Delta R.T.: -0.016 min
Response: 4595944
Conc: 4.87 ug/mL M4



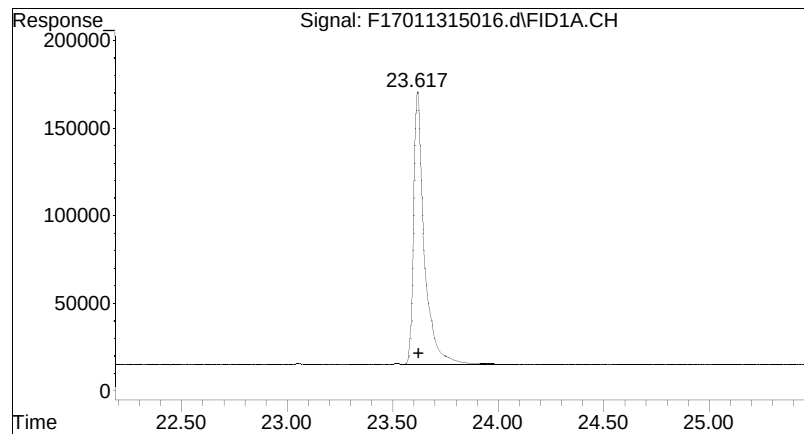
#6 n-Dodecane (C12)

R.T.: 15.089 min
Delta R.T.: -0.010 min
Response: 4721547
Conc: 4.87 ug/mL M4



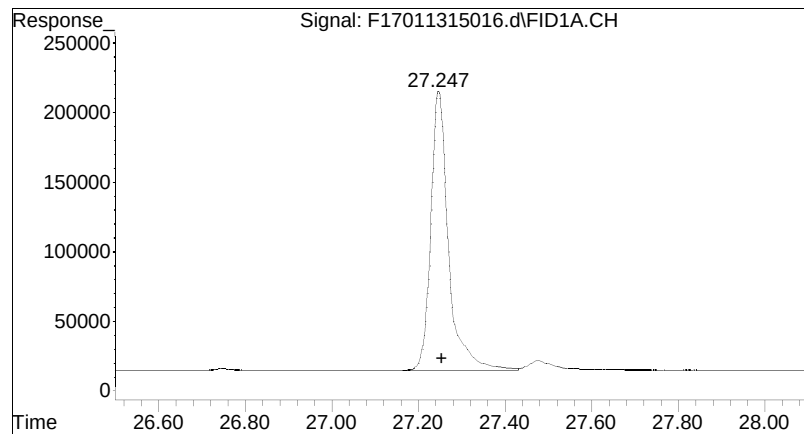
#9 n-Tetradecane (C14)

R.T.: 19.586 min
Delta R.T.: -0.009 min
Response: 4846526
Conc: 4.90 ug/mL M4



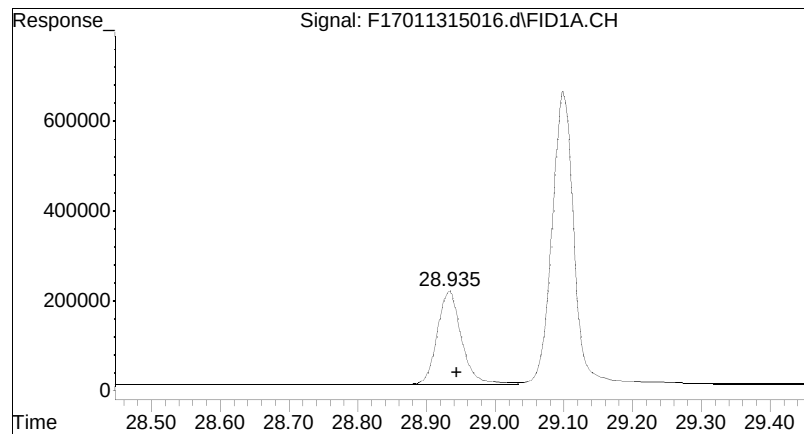
#12 n-Hexadecane (C16)

R.T.: 23.617 min
Delta R.T.: -0.006 min
Response: 5371359
Conc: 5.30 ug/mL M4



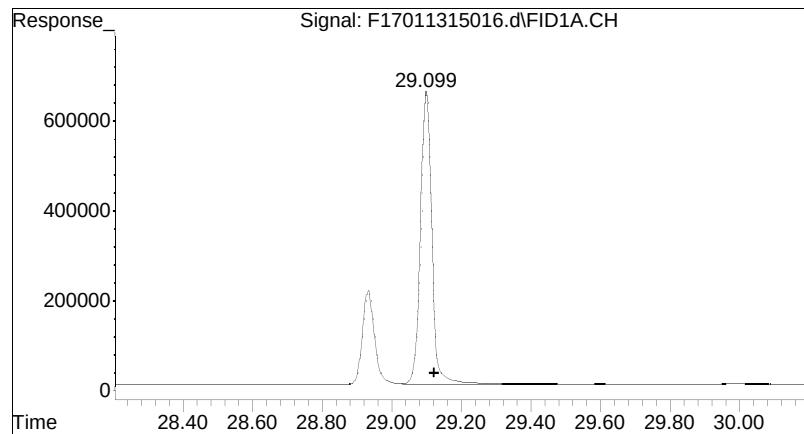
#16 n-Octadecane (C18)

R.T.: 27.247 min
Delta R.T.: -0.007 min
Response: 5556476
Conc: 5.37 ug/mL M4



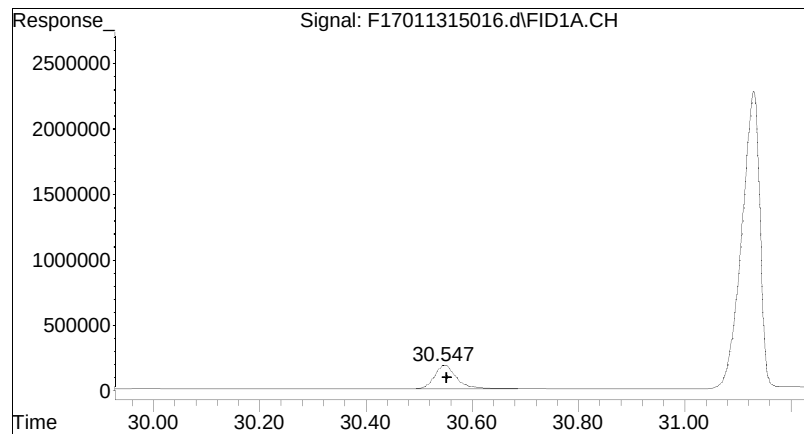
#18 n-Nonadecane (C19)

R.T.: 28.935 min
Delta R.T.: -0.010 min
Response: 5046994
Conc: 4.89 ug/mL M4



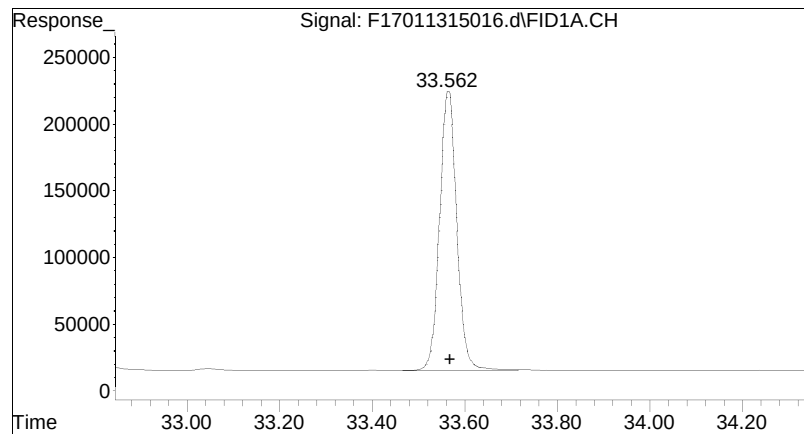
#19 ortho-terphenyl

R.T.: 29.099 min
Delta R.T.: -0.023 min
Response: 14290592
Conc: 12.31 ug/mL M4



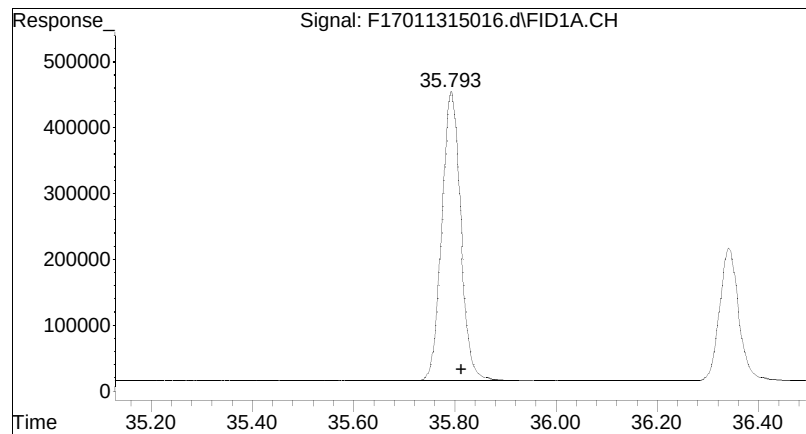
#20 n-Eicosane (C20)

R.T.: 30.547 min
Delta R.T.: -0.007 min
Response: 5156159
Conc: 5.01 ug/mL M4



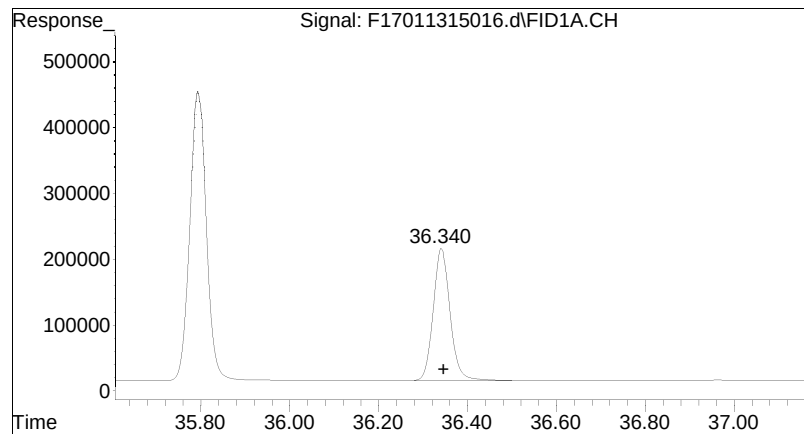
#22 n-Docosane (C22)

R.T.: 33.562 min
Delta R.T.: -0.006 min
Response: 5260588
Conc: 5.02 ug/mL M4



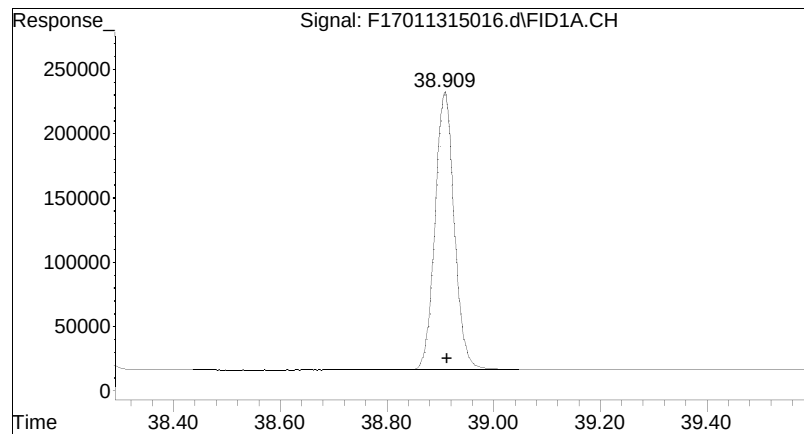
#24 d50-Tetracosane

R.T.: 35.793 min
Delta R.T.: -0.021 min
Response: 11257766
Conc: 11.94 ug/mL M4



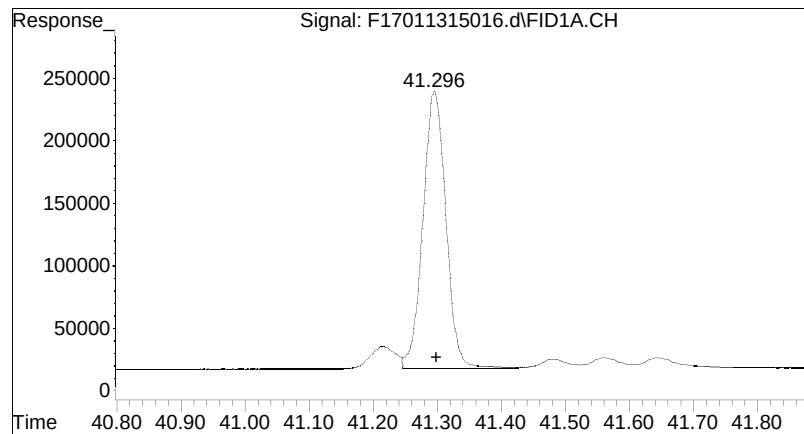
#25 n-Tetracosane (C24)

R.T.: 36.340 min
Delta R.T.: -0.007 min
Response: 5301965
Conc: 5.00 ug/mL M4



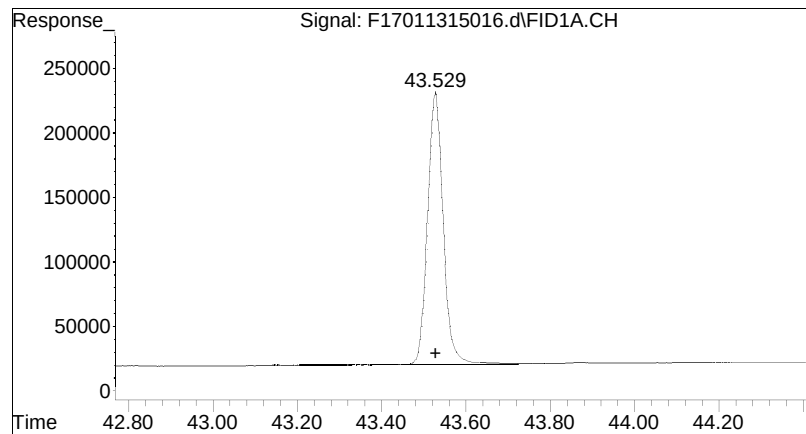
#27 n-Hexacosane (C26)

R.T.: 38.909 min
Delta R.T.: -0.004 min
Response: 5290678
Conc: 4.91 ug/mL M4



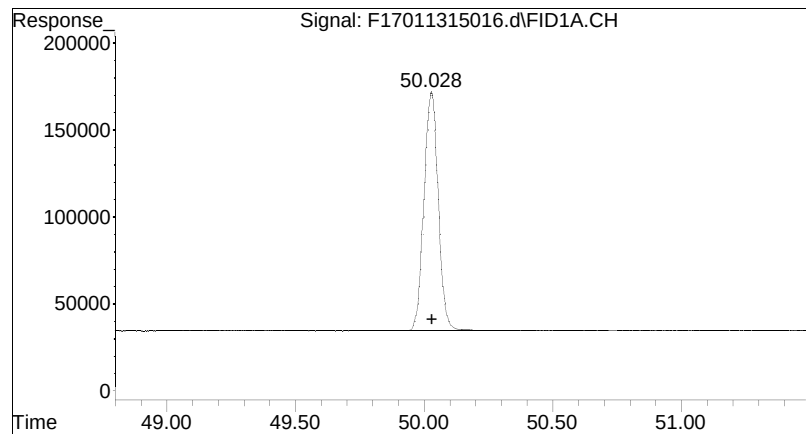
#29 n-Octacosane (C28)

R.T.: 41.296 min
Delta R.T.: -0.003 min
Response: 5386641
Conc: 5.03 ug/mL M4



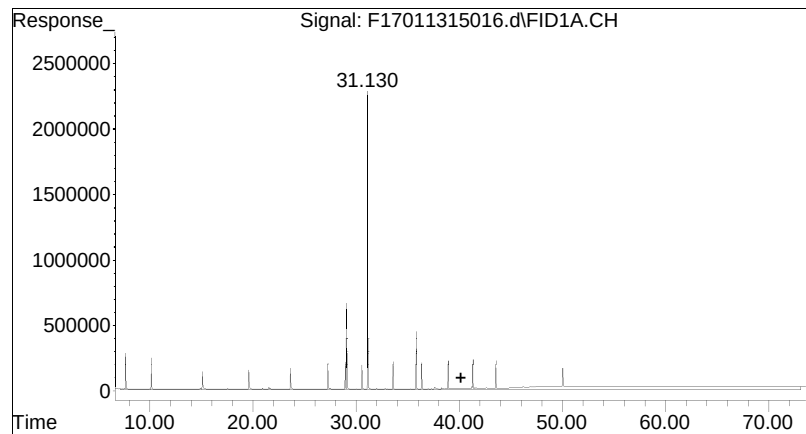
#31 n-Triacontane (C30)

R.T.: 43.529 min
Delta R.T.: 0.000 min
Response: 5277446
Conc: 4.89 ug/mL M4



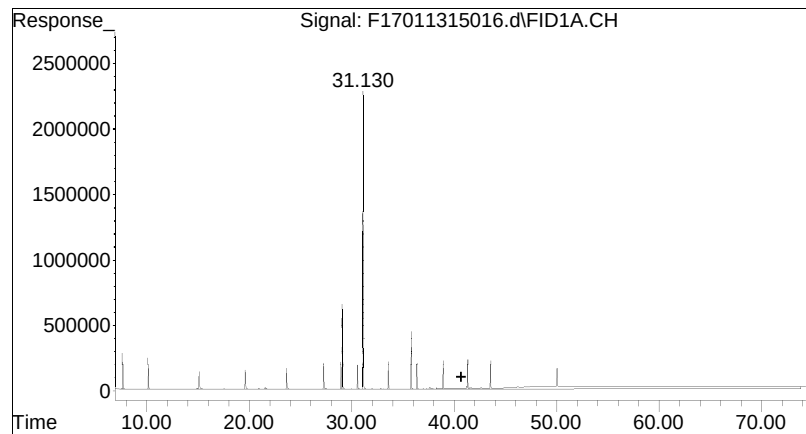
#37 n-Hexatriacontane (C36)

R.T.: 50.028 min
Delta R.T.: -0.003 min
Response: 5208933
Conc: 4.69 ug/mL M4



#42 C9-C44 Total Petroleum Hy

R.T.: 40.166 min
Delta R.T.: 0.000 min
Response: 609431896
Conc: 588.37 ug/mL m



#45 Total Resolved Hydrocarbo

R.T.: 40.697 min
Delta R.T.: 0.000 min
Response: 78803525
Conc: 76.08 ug/mL m

Data Path : O:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315010.d
 Signal(s) : FID1A.CH
 Acq On : 13 Jan 2015 8:20 pm
 Operator : FID17:NL
 Sample : IB1701131501F
 Misc : DCM
 ALS Vial : 5 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 11:53:31 2015
 Quant Method : C:\msdchem\1\DATA\FID17\2015\January\Jan13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : TPH - TPH

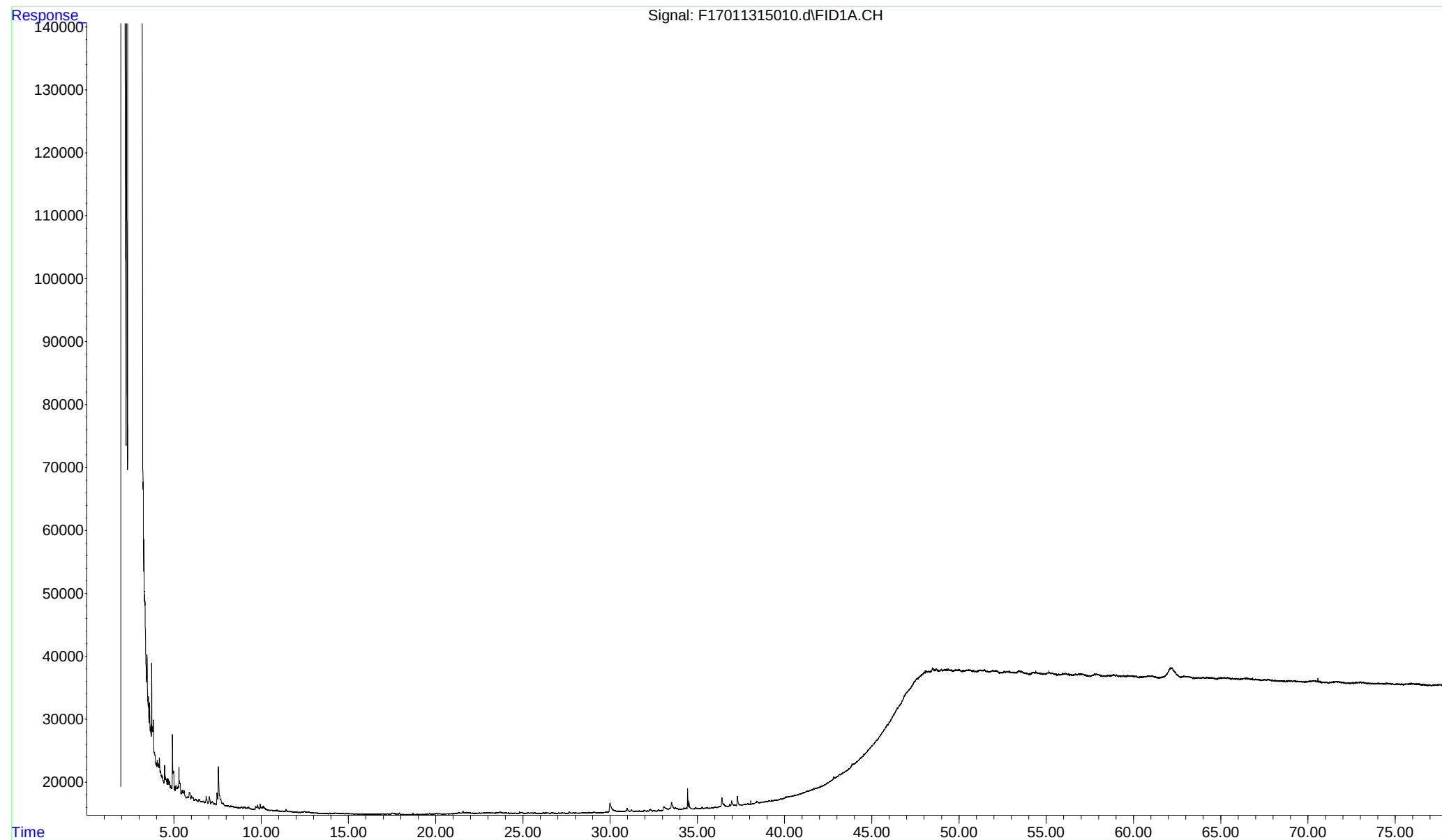
Compound	R.T.	Response	Conc	Units
Internal Standards				
1) I 5-alpha-androstane	31.145	1873	50.000	ug/mL M4
System Monitoring Compounds				
19) s ortho-terphenyl	0.000	0	N.D.	ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery	=	0.00%#
24) s d50-Tetracosane	0.000	0	N.D.	ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery	=	0.00%#
Target Compounds				
42) h C9-C44 Total Petroleu...	40.166	585661872	15934074.062	ug/mL M5
45) h Total Resolved Hydroc...	0.000	0	N.D.	ug/mL d

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : 0:\Forensics\Data\FID17\2015\Jan\Jan13\
Data File : F17011315010.d
Operator : FID17:NL
Acquired : 13 Jan 2015 8:20 pm using AcqMethod FID17.M
Instrument: FID17
Sample : IB1701131501F
Misc Info : DCM
ALS Vial : 5



Data Path : O:\Forensics\Data\FID17\2015\Jan\Jan13\
 Data File : F17011315030.d
 Signal(s) : FID1A.CH
 Acq On : 14 Jan 2015 11:09 am
 Operator : FID17:NL
 Sample : IB1701131502F
 Misc : DCM
 ALS Vial : 15 Sample Multiplier: 1

Integration File: SHCINT2.E
 Quant Time: Jan 15 11:55:29 2015
 Quant Method : C:\MSDCHEM\1\DATA\FID17\2015\JANUARY\JAN13\HC17111014F.M
 Quant Title : FID Forensics
 QLast Update : Wed Jan 14 06:57:25 2015
 Response via : Initial Calibration
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0
 Signal Phase : Rtx-5MS
 Signal Info : 0.25mm

Sub List : TPH - TPH

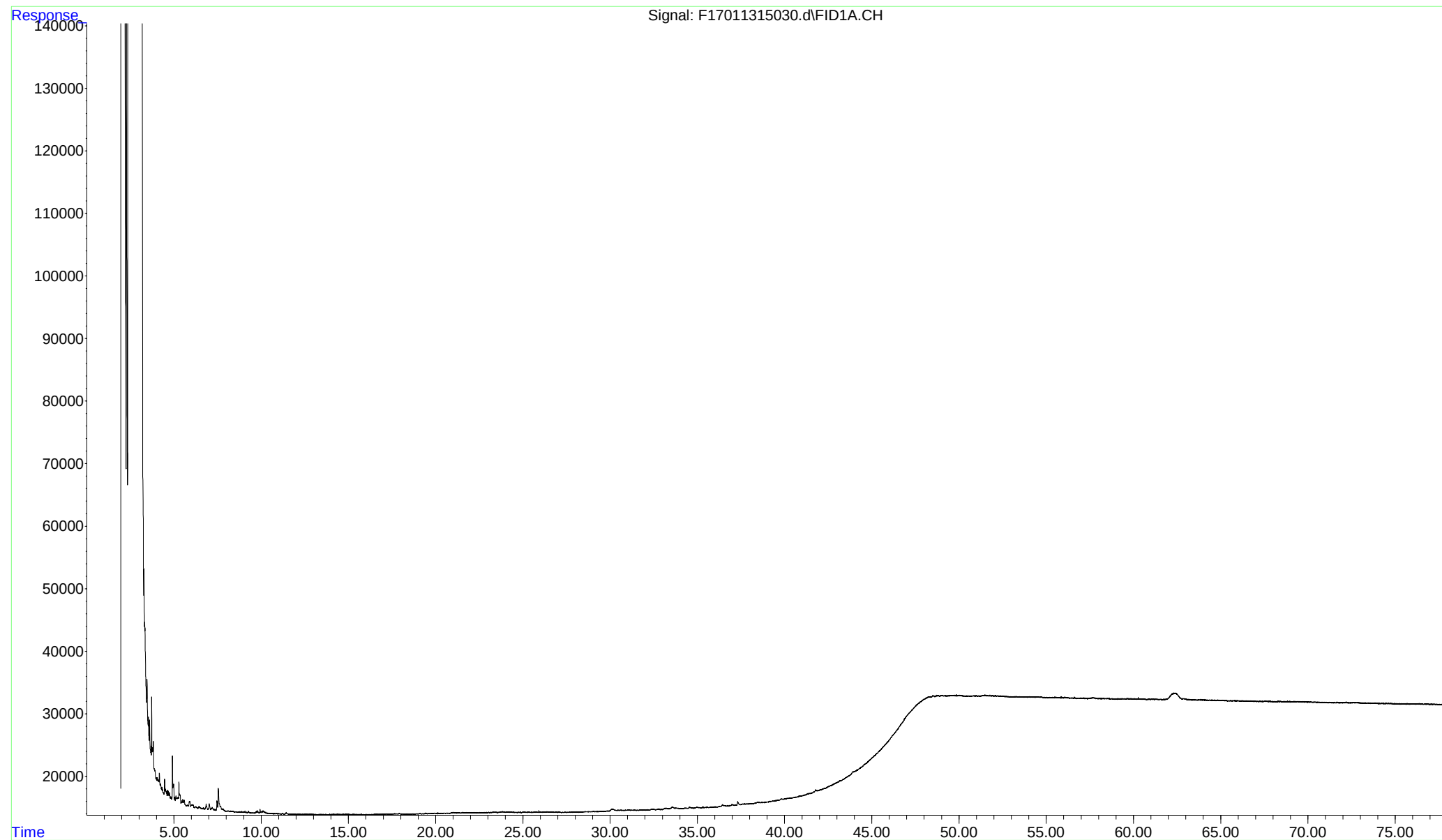
Compound	R.T.	Response	Conc	Units
Internal Standards				
1) I 5-alpha-androstane	31.154	1209	50.000	ug/mL M4
System Monitoring Compounds				
19) s ortho-terphenyl	0.000	0	N.D.	ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery	=	0.00%#
24) s d50-Tetracosane	0.000	0	N.D.	ug/mL
Spiked Amount 50.000	Range 50 - 130	Recovery	=	0.00%#
Target Compounds				
42) h C9-C44 Total Petroleu...	40.166	484956264	20435320.274	ug/mL m
45) h Total Resolved Hydroc...	0.000	0	N.D.	ug/mL d

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : 0:\Forensics\Data\FID17\2015\Jan\Jan13\
Data File : F17011315030.d
Operator : FID17:NL
Acquired : 14 Jan 2015 11:09 am using AcqMethod FID17.M
Instrument: FID17
Sample : IB1701131502F
Misc Info : DCM
ALS Vial : 15





Calculation of GC Organic Compounds

Aqueous Concentration Formula: $\text{Amt} * \text{DF} * 1000 * (1/\text{Vo}) * \text{Vf}$

Where:

DF = Dilution Factor

Vo = Volume of Sample (mL)

Vf = Extraction Lab Final Volume (mL)

Soil Concentration Formula: $\text{Amt} * \text{DF} * 1000 * (1/\text{Wt}) * \text{Vf} * (100/\text{TS})$

Where:

DF = Dilution Factor

Wt = Weight of Sample (g)

Vf = Extraction Lab Final Volume (mL)

TS = Total Solids

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Jan 15 2015, 12:51 pm

Work Group: WG755041 for Department: 2 Organic Preparation

Created: 12-JAN-15 Due: Operator: wr

Sample	Client ID	C Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1500432-01	NRW-02	S A2-ALKPAH/BIOMARKER	OIL	DONE	U	0109	0130	S0	Vial-A-20
L1500432-01	NRW-02	S A2-TPH	OIL	DONE	U	0109	0130	S0	Vial-A-20
L1500432-02	NRW-07	S A2-ALKPAH/BIOMARKER	OIL	DONE	U	0109	0130	S0	Vial-A-20
L1500432-02	NRW-07	S A2-TPH	OIL	DONE	U	0109	0130	S0	Vial-A-20
L1500432-03	NRW-09	S A2-ALKPAH/BIOMARKER	OIL	DONE	U	0109	0130	S0	Vial-A-20
L1500432-03	NRW-09	S A2-TPH	OIL	DONE	U	0109	0130	S0	Vial-A-20
L1500432-04	NRW-10	S A2-ALKPAH/BIOMARKER	OIL	DONE	U	0109	0130	S0	Vial-A-20
L1500432-04	NRW-10	S A2-TPH	OIL	DONE	U	0109	0130	S0	Vial-A-20
WG755041-1	Laboratory Method Bl	S A2-ALKPAH/BIOMARKER	OIL	DONE	U				
WG755041-1	Laboratory Method Bl	S A2-TPH	OIL	DONE	U				
WG755041-2	Laboratory Control S	S A2-ALKPAH/BIOMARKER	OIL	DONE	U				
WG755041-2	Laboratory Control S	S A2-TPH	OIL	DONE	U				
WG755041-3	LCS Duplicate	S A2-ALKPAH/BIOMARKER	OIL	DONE	U				
WG755041-3	LCS Duplicate	S A2-TPH	OIL	DONE	U				
Comments:									
WG755041-3	WG755041-2								

Analysis log File

Total Files Reported in Log : 16

Log Generated From Directory: O:\Forensics\Data\FID17\2014\NOV\NOV10\

No.	DATA FILE	INJ METH	SAMPLE NAME	MISC	DATE INJ'D
1	F17111014002.d	FID17.M	Primer	Primer	11/10/2014 11:38 a
2	F17111014004.d	FID17.M	ANS	FRAU76	11/10/2014 1:06 p
3	F17111014006.d	FID17.M	DCM	DCM	11/10/2014 2:35 p
4	F17111014008.d	FID17.M	IB1711101401F	DCM	11/10/2014 4:04 p
5	F17111014010.d	FID17.M	Primer	Primer	11/10/2014 5:32 p
6	F17111014012.d	FID17.M	I1711101401R	FRAV23 1ug/mL	11/10/2014 7:02 p
7	F17111014014.d	FID17.M	I1711101402R	FRAV24 10ug/mL	11/10/2014 8:31 p
8	F17111014016.d	FID17.M	I1711101403R	FRAV14 50ug/mL	11/10/2014 10:01 p
9	F17111014018.d	FID17.M	I1711101404R	FRAV25 100ug/mL	11/10/2014 11:30 p
10	F17111014020.d	FID17.M	I1711101405R	FRAV26 200ug/mL	11/11/2014 1:00 a
11	F17111014022.d	FID17.M	I1711101406R	FRAV27 500ug/mL	11/11/2014 2:29 a
12	F17111014024.d	FID17.M	DCM	DCM	11/11/2014 3:59 a
13	F17111014026.d	FID17.M	IB1711101402F	DCM	11/11/2014 5:28 a
14	F17111014028.d	FID17.M	CQ1711101401R ✓ PASS	FRAV28 50ug/mL	11/11/2014 6:58 a
15	F17111014030.d	FID17.M	TO111714ANC01 ✓ PASS	1X FRAU76 10.045mg/mL	11/11/2014 8:27 a
16	F17111014032.d	FID17.M	TO111714MC201	1X FRAU77 5.227mg/mL	11/11/2014 9:56 a

Processing Method: HC17111014F.M

Printed: 11/17/14

Page: 1

Analysis log File

Total Files Reported in Log : 19

Log Generated From Directory: O:\Forensics\Data\FID17\2015\Jan\Jan13\

1/15/15

No.	DATA FILE	INJ METH	SAMPLE NAME	MISC	DATE	INJ'D
1	F17011315002.d	FID17.M	Spike Check	Spike Check	1/13/2015	2:25 pm
2	F17011315004.d	FID17.M	ANS	FRAU76 10.045mg/mL	1/13/2015	3:54 pm
3	F17011315006.d	FID17.M	WG755546-1	WG755546, FRAV14 50ug..	1/13/2015	5:23 pm
4	F17011315008.d	FID17.M	DCM	DCM	1/13/2015	6:52 pm
5	F17011315010.d	FID17.M	IB1701131501F	DCM	1/13/2015	8:20 pm
6	F17011315012.d	FID17.M	WG755041-1,42	WG755546, WG755041	1/13/2015	9:49 pm
7	F17011315014.d	FID17.M	WG755041-2,42-cc-vu-150ul	WG755546, WG755041	1/13/2015	11:18 pm
8	F17011315016.d	FID17.M	WG755041-3,42	WG755546, WG755041	1/14/2015	12:47 am
9	F17011315018.d	FID17.M	L1500432-01,42	WG755546, WG755041	1/14/2015	2:16 am
10	F17011315020.d	FID17.M	L1500432-02,42	WG755546, WG755041	1/14/2015	3:45 am
11	F17011315022.d	FID17.M	L1500432-03,42	WG755546, WG755041	1/14/2015	5:13 am
12	F17011315024.d	FID17.M	L1500432-04,42	WG755546, WG755041	1/14/2015	6:42 am
13	F17011315026.d	FID17.M	WG755546-2	WG755546, FRAV14 50ug..	1/14/2015	8:11 am
14	F17011315028.d	FID17.M	DCM	DCM	1/14/2015	9:40 am
15	F17011315030.d	FID17.M	IB1701131502F	DCM	1/14/2015	11:09 am
16	F17011315032.d	FID17.M	WG755014-2,42	WG755546, WG755041	1/14/2015	3:07 pm
17	F17011315034.d	FID17.M	WG755546-3	WG755546, FRAV14 50ug..	1/14/2015	4:36 pm
18	F17011315036.d	FID17.M	DCM	DCM	1/14/2015	6:05 pm
19	F17011315038.d	FID17.M	IB1701131503F	DCM	1/14/2015	7:34 pm

Production Meeting: HC17111014F.M

CCU - FRAV14 - 50ug/mL

Printed: 01/15/15

Page: 1



ORGANIC ELN REPORT

Workgroup: WG755041

Prep Method: EPA 3580A Solvent Type: DCM Surrogate Type: A2-PAH/SHC Spike Type: A2-PAH/SHC Spike Verify by: JNW Lims Spikelot: A2-PAH/SHC Additional Reagents/Std RISFRAV06	Conc.Method: Solvent Type: Lot #: Additional Reagents/Std	Cleanup 1 Cleanup Method 1: Cleanup Method 2: Solvent Type: Lot #: Additional Reagents/Std
--	--	---

Sample/ Type	Extraction										Concentration	
	Extract Date	Analyst	Sample Weight g	Balanc e Id	Extract Vol ml	Split Vol ml	Surr Amt ml	Spike Amt ml	Is Amt ml	Final Vol ml		
WG755041-1 BLANK	01/12/15 12:29	Chris Kerkhoff	.1	F30621	10	10	.5		.1	20		
WG755041-2 LCS	01/12/15 12:29	Chris Kerkhoff	.1	F30621	10	10	.5	.5	.1	20		
WG755041-3 LCSD	01/12/15 12:29	Chris Kerkhoff	.1	F30621	10	10	.5	.5	.1	20		
L1500432-01 OIL	01/12/15 12:29	Chris Kerkhoff	0.1002	F30621	10	10	.5		.1	20		
L1500432-02 OIL	01/12/15 12:29	Chris Kerkhoff	0.1045	F30621	10	10	.5		.1	20		
L1500432-03 OIL	01/12/15 12:29	Chris Kerkhoff	0.1012	F30621	10	10	.5		.1	20		
L1500432-04 OIL	01/12/15 12:29	Chris Kerkhoff	0.1016	F30621	10	10	.5		.1	20		



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Alpha Analytical

Laboratory Code: 11148

SDG Number: L1501041

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Project Name: WILLIAMSBURG
Project Number: 11176638

Lab Number: L1501041
Report Date: 01/28/15

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1501041-01	GTP-12-27'-29' (5-7)	OIL	BROOKLYN	01/15/15 15:00	01/16/15

Project Name: WILLIAMSBURG
Project Number: 11176638

Lab Number: L1501041
Report Date: 01/28/15

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: WILLIAMSBURG
Project Number: 11176638

Lab Number: L1501041
Report Date: 01/28/15

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Alkylated PAH's & Biomarkers

L1501041-01 was re-analyzed on dilution in order to quantify the sample within the calibration range. The results should be considered estimated, and are qualified with an E flag, for any compounds that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compounds that exceeded the calibration range.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Report Date: 01/28/15

Title: Technical Director/Representative



List of Organic Method Qualifiers

Table 1

Qualifier (Q)	Description
B	Entered if the analyte is found in the associated blank as well as the sample.
C	Applied to pesticide results when the identification has been confirmed by GC/MS.
D	Included when the all identified compounds in the analysis are at the secondary dilution factor.
E	Identified compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
J	Indicates an estimated value, may indicate one of the following, depending on the situation: (1) The reported value is estimated and below the MDL. (2) Used when estimating a concentration for TIC where a 1:1 response is assumed or when the result indicates the presence of a compound that meets the identification criteria, but the results is less than the quantitation limit, but greater than zero. (3) QC associated with this analyte is within warning limits.
N	Included for TIC that indicate presumptive evidence of a compound.
U	Entered if the analyte was analyzed for, but not detected.
P	Used for a pesticide/Aroclor target analyte when the concentration difference between 2 GC columns is greater than 25%; the lower value is flagged with a "P".
EMPC	"Estimated Maximum Possible Concentration" – The amount of analyte cannot be accurately quantified, so a maximum concentration has been estimated for the compound.
"XYZ"	"Wildcard" or Laboratory defined qualifier.

Note: Form I allows only one character in each qualifier column. If multiple qualifiers are applicable, please assess qualifier priority in the following order: U, E, J, B, D, C, P, N. Reporting done in the EDD may include multiple qualifiers when applicable, separated by a single space.

(Information obtained from NYSDEC ASP Exhibit B, 7/2005, page 64)

List of Inorganic Method Qualifiers

Table 2

Qualifier	Column (1)	Description
Concentration qualifiers		
B	C	Entered if the reported value was less than the CRDL, but greater than the IDL.
U	C	Entered if the analyte was analyzed for, but not detected.
J	C	Entered if the reported value is estimated and below the MDL.
*	C	Duplicate precision exceeds RPD limit.
M	C	Replicate precision exceeds RPD limit.
"XYZ"	C	"Wildcard" or Laboratory defined qualifier.
Qualifier specific entries		
E	Q	Entered if the reported value is estimated because of the presence of interferences.
Method qualifiers		
A	M	Flame atomic absorption
AS	M	Semi-automated spectrophotometric
AV	M	Automated cold vapor atomic absorption
C	M	Manual spectrophotometric
F	M	Furnace atomic absorption
MS	M	Mass spectrometry (ICP-MS)
NR	M	Analyte is not required to be analyzed
P	M	Inductively coupled plasma (ICP)
" "	M	No data have been entered

(1) The term "Column" is used to indicate under which column heading in the reporting forms that the qualifier will be found under.

Note: Form I allows only one character in each qualifier column. If multiple qualifiers are applicable to column C, please assess qualifier priority in the following order: U, J, B. Reporting done in the EDD may include multiple qualifiers when applicable, separated by a single space.

(Information obtained from NYSDEC ASP Exhibit B, 7/2005, page 65)

Volatile Organics Instruments

Volatile Organics: Jack

Instrument: Agilent 5975MSD
Trap: Supelco K Trap (VOACARB 3000)
Concentrator: EST Encon
Autosampler: EST Centurion
Purge time: 11 min

Column Type: RTX-VMS
Column Length: 20 Meters
df: 1.00um
ID: 0.18mm
Desorb: 2 min

Volatile Organics: Quimby

Instrument: Agilent 5973MSD
Trap: Supelco K Trap (VOACARB 3000)
Concentrator: EST Encon
Autosampler: EST Centurion
Purge time: 11 min

Column Type: RTX-VMS
Column Length: 20 Meters
df: 1.00um
ID: 0.18mm
Desorb: 2 min

Volatile Organics: Curly

Instrument: Agilent 5972 MSD
Trap: Supelco K Trap (VOACARB 3000)
Concentrator: Tekmar 3000
Autosampler: Archon
Purge time: 11 min

Column Type: Restek RTX-502.2
Column Length: 40 Meters
df: 1.00 um
ID: 0.18 mm
Desorb: 2 min

Volatile Organics: Elaine

Instrument: Agilent 5973 MSD
Trap: Supelco K Trap (VOACARB 3000)
Concentrator: Teledyne Velocity
Autosampler: Teledyne Solatek
Purge time: 11 min

Column Type: Restek RTX-502.2
Column Length: 40 Meters
df: 1.00 um
ID: 0.18 mm
Desorb: 2 min



Volatile Organics: Gonzo

Instrument: Agilent 5973 MSD
Trap: Supelco K Trap (VOACARB 3000)
Concentrator: Teledyne Velocity
Autosampler: Teledyne Solatek
Purge time: 11 min

Column Type: Restek RTX-502.2
Column Length: 40 Meters
df: 1.00 μ m
ID: 0.18 mm
Desorb: 2 min

Volatile Organics: VOA101

Instrument: Agilent 5975C inert XL MSD
Trap: EST K Trap (VOACARB 3000)
Concentrator: Encon Evolution
Autosampler: EST Centurion
Purge time: 11 min

Column Type: Restek RTX-VMS
Column Length: 30 Meters
df: 1.40 μ m
ID: 0.25 mm
Desorb: 1 min

Volatile Organics: Charlie/Voa100/Voa104

Instrument: Agilent 5975C MSD
Trap: Supelco K Trap (VOACARB 3000)
Concentrator: Encon Evolution
Autosampler: EST Centurion
Purge time: 11 min

Column Type: Agilent DB-624
Column Length: 25 Meters
df: 1.12 μ m
ID: 0.20 mm
Desorb: 2 min

Volatile Organics: M

Instrument: Agilent 6890

Concentrator: Tekmar 2016
Autosampler: Tekmar 3100

Column Type: Restek RTX 502.2
Column Length: 105 Meters
df: 3.00 μ m
ID: 0.53 mm

Volatile Organics: L/N

Instrument: Agilent 6890

Concentrator: Encon Evolution
Autosampler: EST Centurion

Column Type: Restek RTX 502.2
Column Length: 105 Meters
df: 3.00 μ m
ID: 0.53 mm

Volatile Organics: O/P

Instrument: Agilent 7890A

Concentrator: Encon Evolution
Autosampler: EST Centurion

Column Type: Restek RTX 502.2
Column Length: 105 Meters
df: 3.00 μ m
ID: 0.53 mm

Volatile Organics in Air Instruments

Volatile Organics in Air:

Instrument: Agilent 6890 GC / 5975 MSD	Column Type: Restek RTX-1
	Column Length: 60 Meters
Concentrator: Entech 7100A	df: 1.00 um
Autosampler: Entech 7016CA	ID: 0.52 mm
Trap 1: Glass Bead: manufacturer-Entech: 20 cm packing material	
Trap 2: Tenax: manufacturer-Entech: 20 cm packing material	

Semivolatile Organics Instruments

Semivolatile Organics (Acid/Base/Neutral Extractables): Buffy

Instrument: Agilent 5973N MSD	Injection volume: 1 ul
Column Type: Restek RTX-5MS	df: 0.25 um
Column Length: 30 Meters	ID: 0.32 mm

Semivolatile Organics (Acid/Base/Neutral Extractables): Juliet/GCMS5/GCMS7

Instrument: Agilent 5973N MSD	Injection volume: 1 ul
Column Type: Restek RXI-5SIL MS	df: 0.25 um
Column Length: 30 Meters	ID: 0.32 mm

Polynuclear Aromatic Hydrocarbons by 8270 SIM: Dakota/Mork

Instrument: Agilent 5973 MSD	Injection volume: 1 ul
Column Type: Restek RTX-5MS	df: 0.25 um
Column Length: 30 Meters	ID: 0.32 mm

Polynuclear Aromatic Hydrocarbons by 8270 SIM: Mindy

Instrument: Agilent 5973N MSD	Injection volume: 1 ul
Column Type: Restek RXI-5SIL MS	df: 0.25 um
Column Length: 30 Meters	ID: 0.32 mm

Pesticides/PCB : Pest 11/Pest2/Pest7/Pest12

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1uL
Column Type: Restek RTX-CLP (Channel A)	df: 0.32 um
Column: Restek RTX-CLPPesticide II (Channel B)	df: 0.25 um
Column Length: 30 Meters (Both)	ID: 0.32 mm (Both)

Pesticides/PCB: Pest 10/ Pest9

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1uL
Column Type: Restek STX-CLP (Channel A)	df: 0.32 um
Column: Restek STX-CLPPesticide II (Channel B)	df: 0.25 um
Column Length: 30 Meters (Both)	ID: 0.32 mm (Both)

Herbicides

Instrument: Agilent 6890 w/Dual Micro ECDs
Column Type: Restek RTX-1701 (Channel A)
Column Type: Restek RTX-5 (Channel B)
Column Length: 30 Meters (Both)

Injection Volume: 1uL
df: 0.25 um
df: 0.25 um
ID: 0.32 mm (Both)

Petro9

Instrument: Agilent 6890 w/FID
Column: Restek RTX-5
Column Length: 30 Meters

Injection Volume: 1uL
df: 0.25 um
ID: 0.32 mm

EPH Petro10/ Petro11

Instrument: Agilent 6890N w/FID
Column: Restek RTX-5-MS
Column Length: 30 Meters

Injection Volume: 1uL
df: 0.25um
ID: 0.32 mm

Explosives

Instrument: Dionex ICS-3000, AS50 Autosampler and PDA-100 detectors.
Injection Volume: 100uL
Column: Phenomenex Synergi 4u Hydro-RP and Luna 5u Phenyl-Hexyl.

GC/MS Forensic Semivolatile Organic Instruments

Semivolatile Organics (ALK-PAH extractables): PAH1/PAH2/PAH3/PAH4

Instrument: Agilent 5973C MSD
Column Type: Phenomenex ZB-5
Column Length: 60 Meters

Injection volume: 1 ul
df: 0.25 um
ID: 0.25 mm

Semivolatile Organics (ALK-PAH extractables): PAH8/PAH9/PAH10/PAH11/PAH12/PAH13/PAH14

Instrument: Agilent 5975C MSD
Column Type: Phenomenex ZB-5
Column Length: 60 Meters

Injection volume: 1 ul
df: 0.25 um
ID: 0.25 mm

Semivolatile Organics (ALK-PAH extractables): PAH17/PAH18/PAH19

Instrument: Agilent 5975C MSD
Column Type: Phenomenex ZB-5
Column Length: 60 Meters

Injection volume: 1 ul
df: 0.25 um
ID: 0.25 mm

GC/FID Forensic Semivolatile Organic Instruments

Semivolatile Organics (SHC extractables):PAH1/PAH2/PAH3/PAH4/PAH8

Instrument: Agilent 6890N w/FID
Column: Restek RTX-5
Column Length: 60 Meters

Injection Volume: 1uL
df: 0.25um
ID: 0.25 mm

Semivolatile Organics (SHC extractables): FID6 (dual column)/ FID9 (dual column)/ FID17 (dual column)

Instrument: Agilent 6890N w/FID
Column: Restek RTX-5
Column Length: 60 Meters

Injection Volume: 1uL
df: 0.25um
ID: 0.25 mm

Semivolatile Organics (SHC extractables):FID7 (dual column)

Instrument: Agilent 7890N w/FID
Column: Restek RTX-5
Column Length: 60 Meters

Injection Volume: 1uL
df: 0.25um
ID: 0.25 mm



Sample Delivery Group Form

Laboratory Job number: L1501041

Project Number: 11176638

Project Name: WILLIAMSBURG

Received: 01/16/2015 14:40

Client Account: URS Corporation

Received by: TWM

Samples Delivered by: COURIER

Call Tracker #

Bill Of Laden N/A

Trackingnum

Coc Present Present

Container Status Intact

Sample IDs Samples rec'd in MF 01/16/15 at 5.1C (09849)

All Containers Accounted For? Yes

Were Extra Samples Received? No

Do Sample Labels and COC agree? Yes

Are Samples in Appropriate Containers? Yes

Are Samples Received within Holding time? Yes

pH of Samples upon Receipt

Are samples Properly Preserved? Yes

Initial pH preserved in house with

Final pH

Other Issues

Chlorine Check N/A

Are VOA/VPV Vials Present? No

Aqueous: Do Vials Contain Head Space? N/A

Soils: Is MeOH Covering the Soil? N/A

Reagent H2O Preserved vials Frozen on N/A

Frozen by Client N/A

Cooler	Seal	Ice Present	Blue Ice Present	Temp. (Celsius)	Frozen upon Receipt	Delivered Direct from Site
A	Absent	Yes	No	5.1 - IR Gun	No	No

Project Manager: Gina Bartolomeo

Review Date: 01/19/2015

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Jan 28 2015, 02:11 pm

Login Number: L1501041

Account: URS-BUFFALO URS Corporation Project: 11176638

Sample #	Client ID	Received: 16 JAN 15	Due Date: 30 JAN 15
		Mat PR Collected	Container

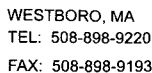
L1501041-01 GTP-12-27'-29' (5-7 6 S0 15JAN15 15:00 2-Vial-A-20

06-FEB-15 is firm 15 day TAT ALK/PAH: reporting list built, see scanned info ASP-B Package Due Date:
02/06/15

A2-ALKPAH/BIOMARKER, A2-TPH, ASP-B, TS100

Page 1

Logged By: Lisa Westerlind



PAGE 1 OF 1

Date Rec'd in Lab:

ALPHA Job #:

L150104/

Project Information

Project Name: Williamsburg

Project Location: Brooklyn

Project #: 11176638

Project Manager: Jon Sandquist

ALPHA Quote #:

Turn-Around Time

☐ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: _____ Time: _____

Client Information

Client: VRS Corp

Address: 257 W. Genesee St.

Suite 400 Buffalo NY

Phone: 716-923-1207

Fax:

Email: Jon.Sundquist@urs.com

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

Expedited TAT (confirm w/ J. Sundquist)

PLEASE NOTE

MS/MSD (at unit cost) will be omitted unless you check here:

Full CUP line (or level in) del variable (Please conform with
) will be omitted unless you check here: ☐ J. Song first,

[illegible]

SAMPLE HANDLING

Filtration

☐ Done☐ Not needed

☐ Lab to do

Preservation

☐ Lab to do

(Please specify below)

Sample Specific Cor

Sample Specific Comments

Container Type	6
----------------	---

Preservative

Relinquished By:

Date/Time

Received By:

Date/Time

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Organics

Semivolatiles Data- Method 8270C-SIM

Semivolatiles QC Summary

Form 2

Surrogate Recovery

SemiVolatile Organics

Client: URS Corporation
Project Name: WILLIAMSBURG

Lab Number: L1501041
Project Number: 11176638
Matrix: Oil

CLIENT ID (LAB SAMPLE NO.)	S1 (ND8)	S2 (PHE)	S3 (BAP)	S4 (5HC)	S5 ()	S6 ()	TOT OUT
GTP-12-27'-29' (5-7) (L1501041-01)	101	102	110	107	--	--	0
GTP-12-27'-29' (5-7) (L1501041-01D)	114	99	100	103	--	--	0
WG756707-3LCSD	95	89	95	90	--	--	0
WG756707-2LCS	100	93	92	90	--	--	0
WG756707-1BLANK	105	93	85	88	--	--	0

ND8 = NAPHTHALENE-D8
PHE = PHENANTHRENE-D10
BAP = BENZO(A)PYRENE-D12
5HC = 5B(H)CHOLANE

QC LIMITS
(50-130)
(50-130)
(50-130)
(50-130)

* Values outside of QC limits

FORM II A2-ALKPAH/BIOMARKER



3
LAB CONTROL/LAB CONTROL DUPLICATE SAMPLE RECOVERY
OIL SEMIVOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1501041

Lab Control Sample: WG756707-2LCS

Lab Control Dup : WG756707-3LCSD

Matrix: Oil

Injected: 01/20/15 20:46

Injected: 01/20/15 22:11

Lab File ID: F801201508

Lab File ID: F801201509

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONC mg/kg	LCS CONC mg/kg	LCS % REC	LCSD CONC mg/kg	LCSD % REC	% RPD	QC LIMITS RPD REC.
Naphthalene	50000	NA	55.3	111	54.3	109	2	30 50-130
Acenaphthylene	50000	NA	51.4	103	51.4	103	0	30 50-130
Acenaphthene	50000	NA	53.0	106	54.1	108	2	30 50-130
Fluorene	50000	NA	50.5	101	51.1	102	1	30 50-130
Phenanthrene	50000	NA	49.6	99	49.2	98	1	30 50-130
Anthracene	50000	NA	52.4	105	53.0	106	1	30 50-130
Fluoranthene	50000	NA	50.4	101	49.8	100	1	30 50-130
Pyrene	50000	NA	49.5	99	49.4	99	0	30 50-130
Benz(a)anthracene	50000	NA	49.1	98	49.9	100	2	30 50-130
Chrysene/Triphenylene	50000	NA	49.3	99	51.4	103	4	30 50-130
Benzo(b)fluoranthene	50000	NA	53.4	107	53.5	107	0	30 50-130
Benzo(j)+(k)Fluoranthene	50000	NA	54.7	109	52.9	106	3	30 50-130
Benzo(a)pyrene	50000	NA	54.3	108	55.5	111	3	30 50-130
Indeno(1,2,3-cd)Pyrene	50000	NA	48.3	97	49.1	98	1	30 50-130
Dibenz(a,h)+(a,c)anthrac	50000	NA	49.8	100	52.3	105	5	30 50-130
Benzo(g,h,i)perylene	50000	NA	47.5	95	49.9	100	5	30 50-130

* Values outside of QC limits.

COMMENTS: _____

FORM III A2-ALKPAH/BIOMARKER

4B

WG756707-1BLANK

Time Analyzed: 19:20

[illegible]

COMMENTS: _____

Determination of Method Detection Limits

Alpha Analytical Inc.
Westborough, MA

Approved

Page 1 of 1
Analyst: MS
Date: 11/9-10/2009
Instrument ID: PAH 8
Column ID: Z-B5
Prep Method: Shaker Table
Prep Chemist: MA, BA

Method: EPA 8270C

2009

GC/MS Alkylated PAH Soil

Table (MDL)		Data File	mdl01	mdl02	mdl03	mdl04	mdl05	mdl06	mdl07	mdl08	T value used for calculating MDL: 2.998					
No.	Analytes	Target conc. (ug/Kg)	Rep-1 (ug/Kg)	Rep-2 (ug/Kg)	Rep-3 (ug/Kg)	Rep-4 (ug/Kg)	Rep-5 (ug/Kg)	Rep-6 (ug/Kg)	Rep-7 (ug/Kg)	Rep-8 (ug/Kg)	Mean (ug/Kg)	Mean Accuracy	Standard Deviation	Calc.MDL (ug/Kg)	Current RL (ug/Kg)	Comment
1	trans-Decalin	0.267	0.220	0.279	0.213	0.260	0.269	0.224	0.241	0.201	0.24	89%	0.028	0.085	1.000	
2	cis-Decalin	0.267	0.209	0.268	0.287	0.262	0.323	0.212	0.284	0.271	0.26	99%	0.038	0.115	1.000	
3	Naphthalene	0.533	0.439	0.443	0.413	0.443	0.420	0.422	0.385	0.429	0.42	80%	0.019	0.058	1.000	
4	2-Methylnaphthalene	0.533	0.437	0.455	0.458	0.558	0.453	0.401	0.441	0.448	0.46	86%	0.045	0.135	1.000	
5	1-Methylnaphthalene	0.533	0.437	0.473	0.435	0.453	0.480	0.416	0.420	0.444	0.44	83%	0.023	0.069	1.000	
6	Benzo[thiophene]	0.533	0.414	0.380	0.373	0.421	0.410	0.385	0.381	0.333	0.39	73%	0.028	0.085	1.000	
7	Biphenyl	0.533	0.453	0.449	0.443	0.509	0.449	0.433	0.444	0.326	0.44	82%	0.051	0.153	1.000	
8	2,6-Dimethylnaphthalene	0.533	0.455	0.446	0.477	0.455	0.375	0.450	0.435	0.410	0.44	82%	0.032	0.096	1.000	
9	Dibenzofuran	0.533	0.429	0.419	0.451	0.452	0.407	0.405	0.397	0.437	0.42	80%	0.021	0.063	1.000	
10	Acenaphthylene	0.533	0.446	0.445	0.442	0.447	0.458	0.447	0.473	0.393	0.44	83%	0.023	0.069	1.000	
11	Acenaphthene	0.533	0.417	0.447	0.469	0.444	0.461	0.423	0.441	0.460	0.45	83%	0.018	0.055	1.000	
12	2,3,5-Trimethylnaphthalene	0.533	0.456	0.510	0.465	0.479	0.482	0.451	0.477	0.461	0.47	89%	0.019	0.056	1.000	
13	Fluorene	0.533	0.452	0.456	0.455	0.557	0.433	0.453	0.458	0.459	0.47	87%	0.038	0.113	1.000	
14	Dibenzothiophene	0.533	0.443	0.428	0.423	0.439	0.413	0.331	0.372	0.428	0.41	77%	0.039	0.116	1.000	
15	Phenanthrene	0.533	0.469	0.493	0.468	0.473	0.447	0.473	0.428	0.454	0.46	87%	0.020	0.059	1.000	
16	Retene	0.533	0.551	0.664	0.576	0.549	0.580	0.511	0.521	0.603	0.57	107%	0.049	0.147	1.000	
17	Anthracene	0.533	0.403	0.417	0.404	0.411	0.387	0.367	0.373	0.388	0.39	74%	0.018	0.054	1.000	
18	Carbazole	0.533	0.376	0.371	0.353	0.382	0.302	0.317	0.317	0.315	0.34	64%	0.032	0.097	1.000	
19	1-Methylphenanthrene	0.533	0.501	0.505	0.459	0.496	0.483	0.457	0.437	0.469	0.48	89%	0.024	0.073	1.000	
20	Fluoranthene	0.533	0.469	0.555	0.490	0.499	0.472	0.480	0.476	0.441	0.49	91%	0.033	0.099	1.000	
21	Benzo(b)fluorene	0.533	0.474	0.498	0.460	0.465	0.441	0.469	0.447	0.481	0.47	88%	0.018	0.055	1.000	
22	Pyrene	0.533	0.519	0.517	0.493	0.610	0.523	0.511	0.466	0.531	0.52	98%	0.041	0.124	1.000	
23	Naphthobenzothiophene	0.533	0.471	0.485	0.469	0.485	0.470	0.414	0.477	0.517	0.47	89%	0.029	0.086	1.000	
24	Benz(a)anthracene	0.533	0.479	0.473	0.448	0.449	0.483	0.439	0.412	0.451	0.45	85%	0.023	0.070	1.000	
25	Chrysene/Triphenylene	0.533	0.448	0.503	0.465	0.449	0.441	0.458	0.432	0.456	0.46	86%	0.021	0.064	1.000	
26	Benzo(b)fluoranthene	0.533	0.487	0.563	0.507	0.488	0.487	0.467	0.440	0.455	0.49	91%	0.038	0.113	1.000	
27	Benzo(k)fluoranthene	0.533	0.415	0.547	0.417	0.417	0.453	0.443	0.463	0.449	0.45	84%	0.043	0.129	1.000	
28	Benzo(e)pyrene	0.533	0.514	0.526	0.488	0.482	0.480	0.465	0.441	0.526	0.49	92%	0.030	0.091	1.000	
29	Benzo(a)pyrene	0.533	0.489	0.487	0.419	0.445	0.431	0.432	0.393	0.458	0.44	83%	0.033	0.098	1.000	
30	Perylene	0.533	0.517	0.475	0.475	0.467	0.433	0.467	0.422	0.468	0.47	87%	0.029	0.087	1.000	
31	Indeno[1,2,3-cd]pyrene	0.533	0.533	0.561	0.520	0.523	0.497	0.436	0.464	0.465	0.50	94%	0.042	0.126	1.000	
32	Dibenz(a,h)anthracene	0.533	0.439	0.451	0.387	0.361	0.402	0.439	0.363	0.390	0.40	76%	0.035	0.105	1.000	
33	Benzo(g,h,i)perylene	0.533	0.468	0.522	0.459	0.481	0.472	0.428	0.486	0.457	0.47	88%	0.027	0.081	1.000	
Surrogates																
1	2-Methylnaphthalene-d10	66.667	28.587	29.411	29.231	29.435	29.808	29.376	29.923	30.027	29.47	44%				
2	Pyrene-d10	66.667	36.463	36.500	36.013	37.905	37.036	36.565	36.519	37.080	36.76	55%				
3	Benzo(b)fluoranthene-d12	66.667	35.599	35.967	35.562	36.889	35.903	36.137	35.739	36.082	35.98	54%				
4	5B(H)Cholane	0.533	0.503	0.531	0.498	0.599	0.493	0.552	0.487	0.535	0.52	98%				

Comments:

Semivolatile Sample Data

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1501041-01
 Client ID : GTP-12-27'-29' (5-7)
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801201510
 Sample Amount : 0.1 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1501041
 Project Number : 11176638
 Date Collected : 01/15/15 15:00
 Date Received : 01/16/15
 Date Analyzed : 01/20/15 23:37
 Date Extracted : 01/20/15
 Dilution Factor : 1
 Analyst : AC
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
91-20-3	Naphthalene	40800	3.00	0.862	E
91-20-3C1	C1-Naphthalenes	18600	3.00	0.862	E
91-20-3C2	C2-Naphthalenes	6260	3.00	0.862	
91-20-3C3	C3-Naphthalenes	1550	3.00	0.862	
91-20-3C4	C4-Naphthalenes	314	3.00	0.862	
92-52-4	Biphenyl	1730	3.00	0.927	
132-64-9	Dibenzofuran	520	3.00	0.945	
208-96-8	Acenaphthylene	8040	3.00	0.572	E
83-32-9	Acenaphthene	842	3.00	0.529	
86-73-7	Fluorene	3470	3.00	0.800	
86-73-7C1	C1-Fluorenes	1280	3.00	0.800	
86-73-7C2	C2-Fluorenes	543	3.00	0.800	
86-73-7C3	C3-Fluorenes	202	3.00	0.800	
132-65-0	Dibenzothiophene	1040	3.00	0.827	
132-65-0C1	C1-Dibenzothiophenes BS	872	3.00	0.827	
132-65-0C2	C2-Dibenzothiophenes	454	3.00	0.827	
132-65-0C3	C3-Dibenzothiophenes	154	3.00	0.827	
132-65-0C4	C4-Dibenzothiophenes	39.1	3.00	0.827	
85-01-8	Phenanthrene	7530	3.00	0.994	E
PHENANTHC1	C1-Phenanthrenes/Anthracenes	4340	3.00	0.994	
PHENANTHC2	C2-Phenanthrenes/Anthr BS	1300	3.00	0.994	
PHENANTHC3	C3-Phenanthrenes/Anthracenes	294	3.00	0.994	
PHENANTHC4	C4-Phenanthrenes/Anthracenes	57.8	3.00	0.994	
120-12-7	Anthracene	2730	3.00	0.618	



Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1501041-01
 Client ID : GTP-12-27'-29' (5-7)
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801201510
 Sample Amount : 0.1 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1501041
 Project Number : 11176638
 Date Collected : 01/15/15 15:00
 Date Received : 01/16/15
 Date Analyzed : 01/20/15 23:37
 Date Extracted : 01/20/15
 Dilution Factor : 1
 Analyst : AC
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
86-74-8	Carbazole	126	3.00	0.981	
206-44-0	Fluoranthene	2330	3.00	0.953	
243-17-4	Benzo(b)fluorene	624	3.00	0.869	
129-00-0	Pyrene	3230	3.00	0.789	
FLUORPYRC1	C1-Fluoranthenes/Pyrenes	2930	3.00	0.789	
FLUORPYRC2	C2-Fluoranthenes/Pyrenes	726	3.00	0.789	
FLUORPYRC3	C3-Fluoranthenes/Pyrenes	197	3.00	0.789	
FLUORPYRC4	C4-Fluoranthenes/Pyrenes	69.4	3.00	0.789	
61523-34-0	Naphthobenzothiophenes	364	3.00	0.839	
NAPBENZOTHIOPC1	C1-Naphthobenzothiophenes	276	3.00	0.839	
NAPBENZOTHIOPC2	C2-Naphthobenzothiophenes	115	3.00	0.839	
NAPBENZOTHIOPC3	C3-Naphthobenzothiophenes	49.3	3.00	0.839	
NAPBENZOTHIOPC4	C4-Naphthobenzothiophenes	23.9	3.00	0.839	
56-55-3	Benz(a)anthracene	1500	3.00	0.612	
218-01-9/217-59-4	Chrysene/Triphenylene	1320	3.00	0.606	
218-01-9C1	C1-Chrysenes	1040	3.00	0.606	
218-01-9C2	C2-Chrysenes BS	420	3.00	0.606	
218-01-9C3	C3-Chrysenes	155	3.00	0.606	
218-01-9C4	C4-Chrysenes	ND	3.00	0.606	U
205-99-2	Benzo(b)fluoranthene	523	3.00	0.780	
205-82-3/207-08-9	Benzo(j)+(k)fluoranthene	769	3.00	0.595	
203-33-8	Benzo(a)fluoranthene	395	3.00	0.595	
192-97-2	Benzo(e)pyrene	545	3.00	0.619	
50-32-8	Benzo(a)pyrene	1220	3.00	0.856	



Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1501041-01
 Client ID : GTP-12-27'-29' (5-7)
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801201510
 Sample Amount : 0.1 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1501041
 Project Number : 11176638
 Date Collected : 01/15/15 15:00
 Date Received : 01/16/15
 Date Analyzed : 01/20/15 23:37
 Date Extracted : 01/20/15
 Dilution Factor : 1
 Analyst : AC
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
198-55-0	Perylene	175	3.00	0.579	
193-39-5	Indeno(1,2,3-cd)pyrene	403	3.00	0.814	
215-58-7/53-70-3	Dibenz(a,h)+(a,c)anthracene	148	3.00	0.810	
191-24-2	Benzo(g,h,i)perylene	402	3.00	0.797	
NONE	Hopane (T19)	ND	3.00	0.854	U
NONE	C23 Tricyclic Terpane (T4)	ND	3.00	0.854	U
NONE	C24 Tricyclic Terpane (T5)	ND	3.00	0.854	U
NONE	C25 Tricyclic Terpane (T6)	ND	3.00	0.854	U
NONE	C24 Tetracyclic Terpane (T6a)	ND	3.00	0.854	U
NONE	C26 Tricyclic Terpane-22S (T6b)	ND	3.00	0.854	U
NONE	C26 Tricyclic Terpane-22R (T6c)	ND	3.00	0.854	U
NONE	C28 Tricyclic Terpane-22S (T7)	ND	3.00	0.854	U
NONE	C28 Tricyclic Terpane-22R (T8)	ND	3.00	0.854	U
NONE	C29 Tricyclic Terpane-22S (T9)	ND	3.00	0.854	U
NONE	C29 Tricyclic Terpane-22R (T10)	ND	3.00	0.854	U
NONE	18a-22,29,30-Trisnorhopane-TS (T11)	ND	3.00	0.854	U
NONE	C30 Tricyclic Terpane-22S	ND	3.00	0.854	U
NONE	C30 Tricyclic Terpane-22R	ND	3.00	0.854	U
53584-59-1	17a(H)-22,29,30-Trisnorhopane-TM (T12)	ND	3.00	0.854	U
NONE	17a/b,21b/a 28,30-Bisnorhopane (T14a)	ND	3.00	0.854	U
NONE	17a(H),21b(H)-25-Norhopane (T14b)	ND	3.00	0.854	U
NONE	30-Norhopane (T15)	ND	3.00	0.854	U
NONE	18a(H)-30-Norneohopane-C29Ts (T16)	ND	3.00	0.854	U
NONE	17a(H)-Diahopane (X)	ND	3.00	0.854	U

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1501041-01
 Client ID : GTP-12-27'-29' (5-7)
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801201510
 Sample Amount : 0.1 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1501041
 Project Number : 11176638
 Date Collected : 01/15/15 15:00
 Date Received : 01/16/15
 Date Analyzed : 01/20/15 23:37
 Date Extracted : 01/20/15
 Dilution Factor : 1
 Analyst : AC
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
NONE	30-Normoretane (T17)	ND	3.00	0.854	U
NONE	18a(H)&18b(H)-Oleananes (T18)	ND	3.00	0.854	U
1176-44-9	Moretane (T20)	ND	3.00	0.854	U
NONE	30-Homohopane-22S (T21)	ND	3.00	0.854	U
NONE	30-Homohopane-22R (T22)	ND	3.00	0.854	U
NONE	Gammacerane/C32-Diahopane	ND	3.00	0.854	U
NONE	30,31-Bishomohopane-22S (T26)	ND	3.00	0.854	U
NONE	30,31-Bishomohopane-22R (T27)	ND	3.00	0.854	U
NONE	30,31-Trishomohopane-22S (T30)	ND	3.00	0.854	U
NONE	30,31-Trishomohopane-22R (T31)	ND	3.00	0.854	U
NONE	Tetrakishomohopane-22S (T32)	ND	3.00	0.854	U
NONE	Tetrakishomohopane-22R (T33)	ND	3.00	0.854	U
NONE	Pentakishomohopane-22S (T34)	ND	3.00	0.854	U
NONE	Pentakishomohopane-22R (T35)	ND	3.00	0.854	U
NONE	13b(H),17a(H)-20S-Diacholestane (S4)	3.70	3.00	0.666	
82079-08-1	13b(H),17a(H)-20R-Diacholestane (S5)	ND	3.00	0.666	U
NONE	13b,17a-20S-Methyldiacholestane (S8)	ND	3.00	0.666	U
NONE	17a(H)20SC27/C29dia	ND	3.00	0.666	U
NONE	17a(H)20RC27/C29dia	ND	3.00	0.666	U
NONE	Unknown Sterane (S18)	ND	3.00	0.666	U
NONE	13a,17b-20S-Ethyldiacholestane (S19)	ND	3.00	0.666	U
NONE	14a,17a-20S-Methylcholestane (S20)	ND	3.00	0.666	U
NONE	14a,17a-20R-Methylcholestane (S24)	ND	3.00	0.666	U
NONE	14a(H),17a(H)-20S-Ethylcholestane (S25)	ND	3.00	0.666	U



Form 1

SemiVolatile Organics

Client	: URS Corporation	Lab Number	: L1501041
Project Name	: WILLIAMSBURG	Project Number	: 11176638
Lab ID	: L1501041-01	Date Collected	: 01/15/15 15:00
Client ID	: GTP-12-27'-29' (5-7)	Date Received	: 01/16/15
Sample Location	: BROOKLYN	Date Analyzed	: 01/20/15 23:37
Sample Matrix	: OIL	Date Extracted	: 01/20/15
Analytical Method	: 1,8270D-SIM(M)	Dilution Factor	: 1
Lab File ID	: F801201510	Analyst	: AC
Sample Amount	: 0.1 g	Instrument ID	: PAH8
Extraction Method	: EPA 3580A	GC Column	: ZB-5
Extract Volume	: 20000 uL	%Solids	: 100
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
NONE	14a(H),17a(H)-20R-Ethylcholestane (S28)	ND	3.00	0.666	U
NONE	14b(H),17b(H)-20R-Cholestane (S14)	ND	3.00	0.666	U
NONE	14b(H),17b(H)-20S-Cholestane (S15)	ND	3.00	0.666	U
NONE	14b,17b-20R-Methylcholestane (S22)	ND	3.00	0.666	U
NONE	14b,17b-20S-Methylcholestane (S23)	ND	3.00	0.666	U
NONE	14b(H),17b(H)-20R-Ethylcholestane (S26)	ND	3.00	0.666	U
NONE	14b(H),17b(H)-20S-Ethylcholestane (S27)	ND	3.00	0.666	U
NONE	C26,20R- +C27,20S- Triaromatic Steroid	ND	3.00	0.666	U
NONE	C28,20S-Triaromatic Steroid	ND	3.00	0.666	U
NONE	C27,20R-Triaromatic Steroid	ND	3.00	0.666	U
NONE	C28,20R-Triaromatic Steroid	ND	3.00	0.666	U

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : L1501041-01D
 Client ID : GTP-12-27'-29' (5-7)
 Sample Location : BROOKLYN
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801201513
 Sample Amount : 0.1 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1501041
 Project Number : 11176638
 Date Collected : 01/15/15 15:00
 Date Received : 01/16/15
 Date Analyzed : 01/21/15 10:48
 Date Extracted : 01/20/15
 Dilution Factor : 20
 Analyst : AC
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : 100
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
91-20-3	Naphthalene	61600	60.0	17.2	
91-20-3C1	C1-Naphthalenes	23100	60.0	17.2	
208-96-8	Acenaphthylene	9600	60.0	11.4	
85-01-8	Phenanthrene	9720	60.0	19.9	

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : WG756707-1
 Client ID : WG756707-1BLANK
 Sample Location :
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801201507
 Sample Amount : 0.1 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1501041
 Project Number : 11176638
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 01/20/15 19:20
 Date Extracted : 01/20/15
 Dilution Factor : 1
 Analyst : AC
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : NA
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
91-20-3	Naphthalene	ND	3.00	0.862	U
91-20-3C1	C1-Naphthalenes	ND	3.00	0.862	U
91-20-3C2	C2-Naphthalenes	ND	3.00	0.862	U
91-20-3C3	C3-Naphthalenes	ND	3.00	0.862	U
91-20-3C4	C4-Naphthalenes	ND	3.00	0.862	U
92-52-4	Biphenyl	ND	3.00	0.927	U
132-64-9	Dibenzofuran	ND	3.00	0.945	U
208-96-8	Acenaphthylene	ND	3.00	0.572	U
83-32-9	Acenaphthene	ND	3.00	0.529	U
86-73-7	Fluorene	ND	3.00	0.800	U
86-73-7C1	C1-Fluorenes	ND	3.00	0.800	U
86-73-7C2	C2-Fluorenes	ND	3.00	0.800	U
86-73-7C3	C3-Fluorenes	ND	3.00	0.800	U
132-65-0	Dibenzothiophene	ND	3.00	0.827	U
132-65-0C1	C1-Dibenzothiophenes BS	ND	3.00	0.827	U
132-65-0C2	C2-Dibenzothiophenes	ND	3.00	0.827	U
132-65-0C3	C3-Dibenzothiophenes	ND	3.00	0.827	U
132-65-0C4	C4-Dibenzothiophenes	ND	3.00	0.827	U
85-01-8	Phenanthrene	ND	3.00	0.994	U
PHENANTHC1	C1-Phenanthrenes/Anthracenes	ND	3.00	0.994	U
PHENANTHC2	C2-Phenanthrenes/Anthr BS	ND	3.00	0.994	U
PHENANTHC3	C3-Phenanthrenes/Anthracenes	ND	3.00	0.994	U
PHENANTHC4	C4-Phenanthrenes/Anthracenes	ND	3.00	0.994	U
120-12-7	Anthracene	ND	3.00	0.618	U



Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : WG756707-1
 Client ID : WG756707-1BLANK
 Sample Location :
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801201507
 Sample Amount : 0.1 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1501041
 Project Number : 11176638
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 01/20/15 19:20
 Date Extracted : 01/20/15
 Dilution Factor : 1
 Analyst : AC
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : NA
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
86-74-8	Carbazole	ND	3.00	0.981	U
206-44-0	Fluoranthene	ND	3.00	0.953	U
243-17-4	Benzo(b)fluorene	ND	3.00	0.869	U
129-00-0	Pyrene	ND	3.00	0.789	U
FLUORPYRC1	C1-Fluoranthenes/Pyrenes	ND	3.00	0.789	U
FLUORPYRC2	C2-Fluoranthenes/Pyrenes	ND	3.00	0.789	U
FLUORPYRC3	C3-Fluoranthenes/Pyrenes	ND	3.00	0.789	U
FLUORPYRC4	C4-Fluoranthenes/Pyrenes	ND	3.00	0.789	U
61523-34-0	Naphthobenzothiophenes	ND	3.00	0.839	U
NAPBENZOTHIOPC1	C1-Naphthobenzothiophenes	ND	3.00	0.839	U
NAPBENZOTHIOPC2	C2-Naphthobenzothiophenes	ND	3.00	0.839	U
NAPBENZOTHIOPC3	C3-Naphthobenzothiophenes	ND	3.00	0.839	U
NAPBENZOTHIOPC4	C4-Naphthobenzothiophenes	ND	3.00	0.839	U
56-55-3	Benz(a)anthracene	ND	3.00	0.612	U
218-01-9/217-59-4	Chrysene/Triphenylene	ND	3.00	0.606	U
218-01-9C1	C1-Chrysenes	ND	3.00	0.606	U
218-01-9C2	C2-Chrysenes BS	ND	3.00	0.606	U
218-01-9C3	C3-Chrysenes	ND	3.00	0.606	U
218-01-9C4	C4-Chrysenes	ND	3.00	0.606	U
205-99-2	Benzo(b)fluoranthene	ND	3.00	0.780	U
205-82-3/207-08-9	Benzo(j)+(k)fluoranthene	ND	3.00	0.595	U
203-33-8	Benzo(a)fluoranthene	ND	3.00	0.595	U
192-97-2	Benzo(e)pyrene	ND	3.00	0.619	U
50-32-8	Benzo(a)pyrene	ND	3.00	0.856	U

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : WG756707-1
 Client ID : WG756707-1BLANK
 Sample Location :
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801201507
 Sample Amount : 0.1 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1501041
 Project Number : 11176638
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 01/20/15 19:20
 Date Extracted : 01/20/15
 Dilution Factor : 1
 Analyst : AC
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : NA
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
198-55-0	Perylene	ND	3.00	0.579	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	3.00	0.814	U
215-58-7/53-70-3	Dibenz(a,h)+(a,c)anthracene	ND	3.00	0.810	U
191-24-2	Benzo(g,h,i)perylene	ND	3.00	0.797	U
NONE	Hopane (T19)	ND	3.00	0.854	U
NONE	C23 Tricyclic Terpane (T4)	ND	3.00	0.854	U
NONE	C24 Tricyclic Terpane (T5)	ND	3.00	0.854	U
NONE	C25 Tricyclic Terpane (T6)	ND	3.00	0.854	U
NONE	C24 Tetracyclic Terpane (T6a)	ND	3.00	0.854	U
NONE	C26 Tricyclic Terpane-22S (T6b)	ND	3.00	0.854	U
NONE	C26 Tricyclic Terpane-22R (T6c)	ND	3.00	0.854	U
NONE	C28 Tricyclic Terpane-22S (T7)	ND	3.00	0.854	U
NONE	C28 Tricyclic Terpane-22R (T8)	ND	3.00	0.854	U
NONE	C29 Tricyclic Terpane-22S (T9)	ND	3.00	0.854	U
NONE	C29 Tricyclic Terpane-22R (T10)	ND	3.00	0.854	U
NONE	18a-22,29,30-Trisnorhopane-TS (T11)	ND	3.00	0.854	U
NONE	C30 Tricyclic Terpane-22S	ND	3.00	0.854	U
NONE	C30 Tricyclic Terpane-22R	ND	3.00	0.854	U
53584-59-1	17a(H)-22,29,30-Trisnorhopane-TM (T12)	ND	3.00	0.854	U
NONE	17a/b,21b/a 28,30-Bisnorhopane (T14a)	ND	3.00	0.854	U
NONE	17a(H),21b(H)-25-Norhopane (T14b)	ND	3.00	0.854	U
NONE	30-Norhopane (T15)	ND	3.00	0.854	U
NONE	18a(H)-30-Norneohopane-C29Ts (T16)	ND	3.00	0.854	U
NONE	17a(H)-Diahopane (X)	ND	3.00	0.854	U

Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : WG756707-1
 Client ID : WG756707-1BLANK
 Sample Location :
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801201507
 Sample Amount : 0.1 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1501041
 Project Number : 11176638
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 01/20/15 19:20
 Date Extracted : 01/20/15
 Dilution Factor : 1
 Analyst : AC
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : NA
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
NONE	30-Normoretane (T17)	ND	3.00	0.854	U
NONE	18a(H)&18b(H)-Oleananes (T18)	ND	3.00	0.854	U
1176-44-9	Moretane (T20)	ND	3.00	0.854	U
NONE	30-Homohopane-22S (T21)	ND	3.00	0.854	U
NONE	30-Homohopane-22R (T22)	ND	3.00	0.854	U
NONE	Gammacerane/C32-Diahopane	ND	3.00	0.854	U
NONE	30,31-Bishomohopane-22S (T26)	ND	3.00	0.854	U
NONE	30,31-Bishomohopane-22R (T27)	ND	3.00	0.854	U
NONE	30,31-Trishomohopane-22S (T30)	ND	3.00	0.854	U
NONE	30,31-Trishomohopane-22R (T31)	ND	3.00	0.854	U
NONE	Tetrakishomohopane-22S (T32)	ND	3.00	0.854	U
NONE	Tetrakishomohopane-22R (T33)	ND	3.00	0.854	U
NONE	Pentakishomohopane-22S (T34)	ND	3.00	0.854	U
NONE	Pentakishomohopane-22R (T35)	ND	3.00	0.854	U
NONE	13b(H),17a(H)-20S-Diacholestane (S4)	ND	3.00	0.666	U
82079-08-1	13b(H),17a(H)-20R-Diacholestane (S5)	ND	3.00	0.666	U
NONE	13b,17a-20S-Methyldiacholestane (S8)	ND	3.00	0.666	U
NONE	17a(H)20SC27/C29dia	ND	3.00	0.666	U
NONE	17a(H)20RC27/C29dia	ND	3.00	0.666	U
NONE	Unknown Sterane (S18)	ND	3.00	0.666	U
NONE	13a,17b-20S-Ethylidiacholestane (S19)	ND	3.00	0.666	U
NONE	14a,17a-20S-Methylcholestane (S20)	ND	3.00	0.666	U
NONE	14a,17a-20R-Methylcholestane (S24)	ND	3.00	0.666	U
NONE	14a(H),17a(H)-20S-Ethylcholestane (S25)	ND	3.00	0.666	U



Form 1

SemiVolatile Organics

Client : URS Corporation
 Project Name : WILLIAMSBURG
 Lab ID : WG756707-1
 Client ID : WG756707-1BLANK
 Sample Location :
 Sample Matrix : OIL
 Analytical Method : 1,8270D-SIM(M)
 Lab File ID : F801201507
 Sample Amount : 0.1 g
 Extraction Method : EPA 3580A
 Extract Volume : 20000 uL
 GPC Cleanup : N

Lab Number : L1501041
 Project Number : 11176638
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 01/20/15 19:20
 Date Extracted : 01/20/15
 Dilution Factor : 1
 Analyst : AC
 Instrument ID : PAH8
 GC Column : ZB-5
 %Solids : NA
 Injection Volume : 1 uL

CAS NO.	Parameter	mg/kg			Qualifier
		Results	RL	MDL	
NONE	14a(H),17a(H)-20R-Ethylcholestane (S28)	ND	3.00	0.666	U
NONE	14b(H),17b(H)-20R-Cholestane (S14)	ND	3.00	0.666	U
NONE	14b(H),17b(H)-20S-Cholestane (S15)	ND	3.00	0.666	U
NONE	14b,17b-20R-Methylcholestane (S22)	ND	3.00	0.666	U
NONE	14b,17b-20S-Methylcholestane (S23)	ND	3.00	0.666	U
NONE	14b(H),17b(H)-20R-Ethylcholestane (S26)	ND	3.00	0.666	U
NONE	14b(H),17b(H)-20S-Ethylcholestane (S27)	ND	3.00	0.666	U
NONE	C26,20R- +C27,20S- Triaromatic Steroid	ND	3.00	0.666	U
NONE	C28,20S-Triaromatic Steroid	ND	3.00	0.666	U
NONE	C27,20R-Triaromatic Steroid	ND	3.00	0.666	U
NONE	C28,20R-Triaromatic Steroid	ND	3.00	0.666	U

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN20\
 Data File : F801201510.D
 Acq On : 20 Jan 2015 11:37 pm
 Operator : PAH8:AC
 Sample : L1501041-01,32
 Misc : WG758803,WG756707
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 28 12:17:36 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Sun Jan 25 09:33:30 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.803	164	26714M4	500.000	ng/mL	0.00
74) Chrysene-d12	43.223	240	35133M4	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	19.877	136	27419	253.673	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery =	25.37%#		
42) Phenanthrene-d10	32.670	188	20515	255.694	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	25.57%#		
83) Benzo[b]fluoranthene-d12	47.116	264	18888	275.574	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	27.56%#		
88) Benzo[a]pyrene-d12	48.296	264	16654	276.170	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	27.62%#		
129) 5B(H)Cholane - Surr	43.817	217	3461	266.713	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	26.67%#		
Target Compounds						
						Qvalue
10) Naphthalene	20.014	128	24545291	204026.567	ng/mL	100
11) C1-Naphthalenes	22.660	142	11200918M5	93104.818	ng/mL	
12) C2-Naphthalenes	25.462	156	3767366M5	31315.284	ng/mL	
13) C3-Naphthalenes	27.780	170	930721M5	7736.385	ng/mL	
14) C4-Naphthalenes	30.535	184	188905M5	1570.225	ng/mL	
23) Biphenyl	24.485	154	804163	8635.487	ng/mL	100
25) Dibenzofuran	27.570	168	247389M4	2602.910	ng/mL	
26) Acenaphthylene	26.228	152	4527275M4	40217.545	ng/mL	
27) Acenaphthene	26.931	153	289556	4209.618	ng/mL	97
29) Fluorene	28.957	166	1276272M4	17333.126	ng/mL	
30) C1-Fluorenes	31.165	180	470131M5	6384.877	ng/mL	
31) C2-Fluorenes	33.336	194	200066M5	2717.108	ng/mL	
32) C3-Fluorenes	36.001	208	74260M5	1008.529	ng/mL	
33) Dibenzothiophene	32.259	184	535378	5202.145	ng/mL	95
37) OTP	0.000		0	N.D.	d	
38) C1-Dibenzothiophenes	34.021	198	448583M5	4358.778	ng/mL	
38) C1-Dibenzothiophenes BS	34.021	198	448583M5	4358.778	ng/mL	
39) C2-Dibenzothiophenes	36.065	212	233898M5	2272.733	ng/mL	
40) C3-Dibenzothiophenes	37.499	226	79050M5	768.111	ng/mL	
41) C4-Dibenzothiophenes	39.179	240	20105M5	195.356	ng/mL	
43) Phenanthrene	32.789	178	3753825	37634.872	ng/mL	97
49) C1-Phenanthrenes/Anthrace	34.824	192	2164487M5	21700.583	ng/mL	
50) C2-Phenanthrenes/Anthrace	36.969	206	648956M5	6506.264	ng/mL	
50) C2-Phenanthrenes/Anthr BS	36.969	206	648956M5	6506.264	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN20\
 Data File : F801201510.D
 Acq On : 20 Jan 2015 11:37 pm
 Operator : PAH8:AC
 Sample : L1501041-01,32
 Misc : WG758803,WG756707
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 28 12:17:36 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Sun Jan 25 09:33:30 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) 5AA IS BKGD	0.000		0	N.D.	d	
52) C3-Phenanthrenes/Anthrace	38.795	220	146713M5	1470.906	ng/mL	
53) C4-Phenanthrenes/Anthrace	41.726	234	28832M5	289.062	ng/mL	
55) Anthracene	32.944	178	1248778M4	13666.044	ng/mL	
56) Carbazole	33.601	167	61431	628.721	ng/mL	92
58) Fluoranthene	37.526	202	1179024	11651.140	ng/mL	95
59) Benzo(b)fluorene	40.028	216	182869M3	3120.607	ng/mL	
60) Pyrene	38.421	202	1713946	16172.626	ng/mL	99
61) C1-Fluoranthenes/Pyrenes	39.781	216	1551816M5	14642.783	ng/mL	
62) C2-Fluoranthenes/Pyrenes	41.443	230	384621M5	3629.246	ng/mL	
63) C3-Fluoranthenes/Pyrenes	43.698	244	104607M5	987.061	ng/mL	
64) C4-Fluoranthenes/Pyrenes	44.931	258	36778M5	347.034	ng/mL	
66) Naphthobenzothiophene	42.228	234	98117M3	1052.349	ng/mL	
67) Naphthobenzothiophene-2,1	42.228	234	98255M3	1053.829	ng/mL	
68) Naphthobenzothiophene-1,2	42.566	234	28109	301.482	ng/mL#	5
69) Naphthobenzothiophene-2,3	42.867	234	43309M3	464.508	ng/mL	
70) C1-Naphthobenzothiophenes	43.625	248	128560M5	1378.864	ng/mL	
71) C2-Naphthobenzothiophenes	45.123	262	53830M5	577.351	ng/mL	
72) C3-Naphthobenzothiophenes	46.998	276	22996M5	246.642	ng/mL	
73) C4-Naphthobenzothiophenes	49.787	290	11134M5	119.417	ng/mL	
75) Benz[a]anthracene	43.169	228	605687M3	7501.442	ng/mL	
77) Chrysene/Triphenylene	43.324	228	510609	6606.670	ng/mL	99
78) C1-Chrysenes	44.785	242	402652M5	5209.836	ng/mL	
79) C2-Chrysenes	46.485	256	162430M5	2101.650	ng/mL	
79) C2-Chrysenes BS	46.485	256	162430M5	2101.650	ng/mL	
80) BBF-D12 Surr BKGD	0.000		0	N.D.	d	
81) C3-Chrysenes	48.077	270	59816M5	773.948	ng/mL	
82) C4-Chrysenes	0.000		0	N.D.	d	
84) Benzo[b]fluoranthene	47.199	252	225495	2614.727	ng/mL	97
85) Benzo[j]+[k]fluoranthene	47.272	252	326621	3846.130	ng/mL	95
86) Benzo[a]fluoranthene	47.583	252	167567	1973.188	ng/mL	98
87) Benzo[e]pyrene	48.205	252	237806	2726.678	ng/mL	98
89) Benzo[a]pyrene	48.397	252	487789	6117.248	ng/mL	94
90) Perylene	48.699	252	73171	873.717	ng/mL	92
91) Indeno[1,2,3-cd]pyrene	53.198	276	205622M4	2015.744	ng/mL	
92) Dibenz[ah]+[ac]anthracene	53.235	278	63888M4	740.310	ng/mL	
93) Benzo[g,h,i]perylene	54.505	276	194510	2009.515	ng/mL	99
94) Hopane (T19)	0.000		0	N.D.	d	
96) C23 Tricyclic Terpane (T4	0.000		0	N.D.	d	
97) C24 Tricyclic Terpane (T5	0.000		0	N.D.	d	
98) C25 Tricyclic Terpane (T6	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN20\
 Data File : F801201510.D
 Acq On : 20 Jan 2015 11:37 pm
 Operator : PAH8:AC
 Sample : L1501041-01,32
 Misc : WG758803,WG756707
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 28 12:17:36 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Sun Jan 25 09:33:30 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99) C24 Tetracyclic Terpane (	0.000		0	N.D.	d	
100) C26 Tricyclic Terpane-22S	0.000		0	N.D.	d	
101) C26 Tricyclic Terpane-22R	0.000		0	N.D.	d	
102) C28 Tricyclic Terpane-22S	0.000		0	N.D.	d	
103) C28 Tricyclic Terpane-22R	0.000		0	N.D.	d	
104) C29 Tricyclic Terpane-22S	0.000		0	N.D.	d	
105) C29 Tricyclic Terpane-22R	0.000		0	N.D.	d	
106) 18a-22,29,30-Trisnorneocho	0.000		0	N.D.	d	
107) C30 Tricyclic Terpane-22S	0.000		0	N.D.	d	
108) C30 Tricyclic Terpane-22R	0.000		0	N.D.	d	
109) 17a(H)-22,29,30-Trisnorho	0.000		0	N.D.	d	
110) 17a/b,21b/a 28,30-Bisnorh	0.000		0	N.D.	d	
111) 17a(H),21b(H)-25-Norhopan	0.000		0	N.D.	d	
112) 30-Norhopane (T15)	0.000		0	N.D.	d	
113) 18a(H)-30-Norneohopane-C2	0.000		0	N.D.	d	
114) 17a(H)-Diahopane (X)	0.000		0	N.D.	d	
115) 30-Normoretane (T17)	0.000		0	N.D.	d	
116) 18a(H)&18b(H)-Oleananes (	0.000		0	N.D.	d	
117) Moretane (T20)	0.000		0	N.D.	d	
118) 30-Homohopane-22S (T21)	0.000		0	N.D.	d	
119) 30-Homohopane-22R (T22)	0.000		0	N.D.	d	
120) Gammacerane/C32-diahopane	0.000		0	N.D.	d	
121) 30,31-Bishomohopane-22S (	0.000		0	N.D.	d	
122) 30,31-Bishomohopane-22R (	0.000		0	N.D.	d	
123) 30,31-Trishomohopane-22S	0.000		0	N.D.	d	
124) 30,31-Trishomohopane-22R	0.000		0	N.D.	d	
125) Tetrakishomohopane-22S (T	0.000		0	N.D.	d	
126) Tetrakishomohopane-22R (T	0.000		0	N.D.	d	
127) Pentakishomohopane-22S (T	0.000		0	N.D.	d	
128) Pentakishomohopane-22R (T	0.000		0	N.D.	d	
130) 13b(H),17a(H)-20S-Diachol	45.305	217	240	18.495	ng/ml	100
131) 13b(H),17a(H)-20R-Diachol	0.000		0	N.D.	d	
132) 13b,17a-20S-Methyl diachol	0.000		0	N.D.	d	
133) 14a,17a-20S-Chol/13b,17a-	0.000		0	N.D.		
134) 14a,17a-20R-Chol/13b,17a-	0.000		0	N.D.		
135) Unknown Sterane (S18)	0.000		0	N.D.		
136) 13a,17b-20S-Ethyl diachole	0.000		0	N.D.		
137) 14a,17a-20S-Methylcholest	0.000		0	N.D.	d	
138) 14a,17a-20R-Methylcholest	0.000		0	N.D.	d	
139) 14a(H),17a(H)-20S-Ethylch	0.000		0	N.D.	d	
140) 14a(H),17a(H)-20R-Ethylch	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN20\
 Data File : F801201510.D
 Acq On : 20 Jan 2015 11:37 pm
 Operator : PAH8:AC
 Sample : L1501041-01,32
 Misc : WG758803,WG756707
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 28 12:17:36 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Sun Jan 25 09:33:30 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
141) 14b(H),17b(H)-20R-Cholest	0.000		0	N.D.	d	
142) 14b(H),17b(H)-20S-Cholest	0.000		0	N.D.	d	
143) 14b,17b-20R-Methylcholest	0.000		0	N.D.	d	
144) 14b,17b-20S-Methylcholest	0.000		0	N.D.	d	
145) 14b(H),17b(H)-20R-Ethylch	0.000		0	N.D.		
146) 14b(H),17b(H)-20S-Ethylch	0.000		0	N.D.		
147) C26,20R- +C27,20S- triaro	0.000		0	N.D.	d	
148) C28,20S-triaromatic stero	0.000		0	N.D.		
149) C27,20R-triaromatic stero	0.000		0	N.D.		
150) C28,20R-triaromatic stero	0.000		0	N.D.	d	

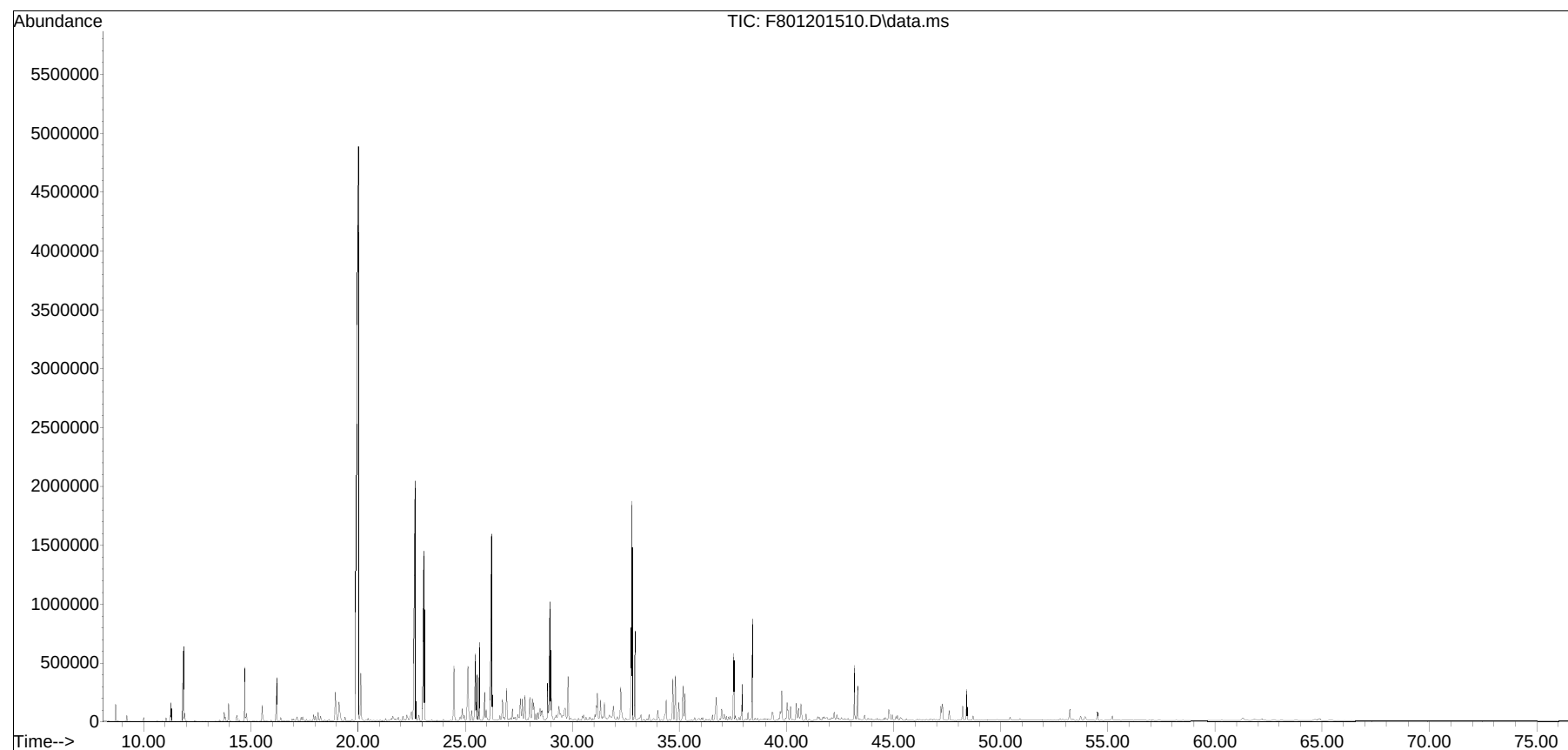
(#) = qualifier out of range (m) = manual integration (+) = signals summed

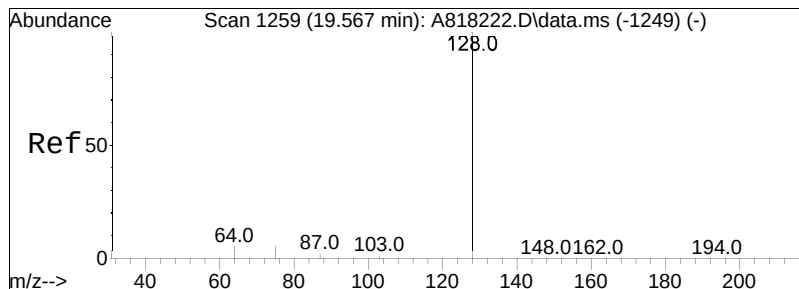
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN20\
Data File : F801201510.D
Acq On : 20 Jan 2015 11:37 pm
Operator : PAH8:AC
Sample : L1501041-01,32
Misc : WG758803,WG756707
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 28 12:17:36 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Sun Jan 25 09:33:30 2015
Response via : Initial Calibration

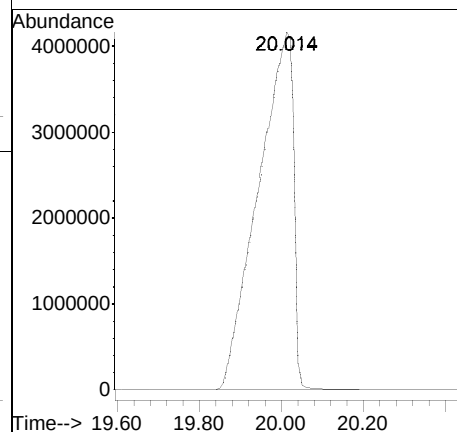
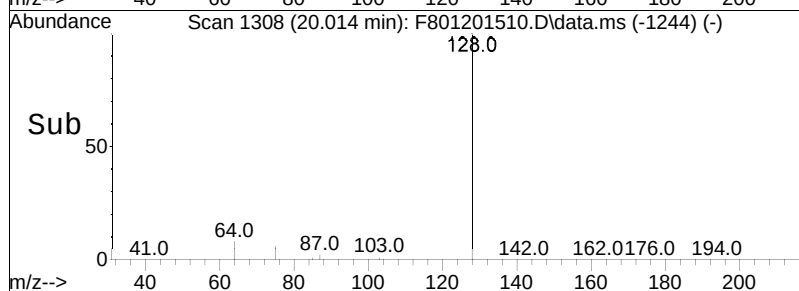
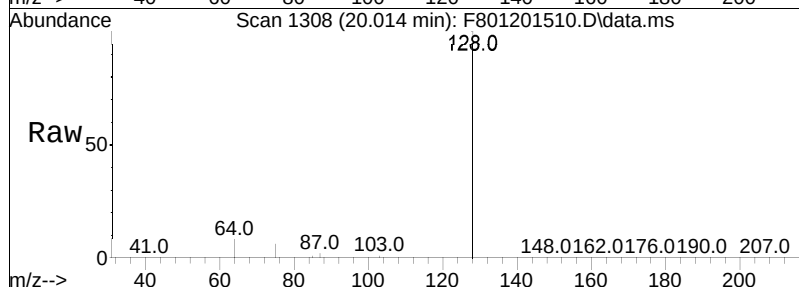
Sub List : ALKPAHURS - ALKPAH and BIO

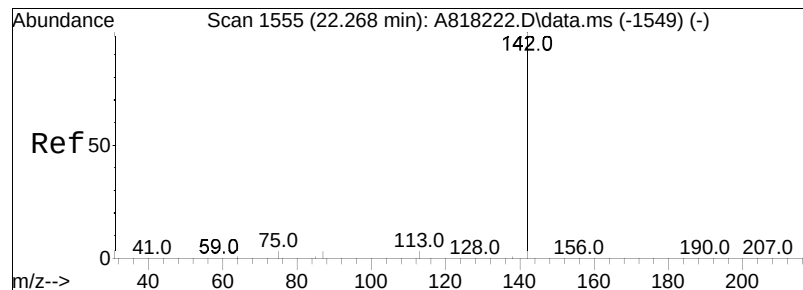




#10
Naphthalene
Concen: 204026.57 ng/mL
RT: 20.014 min Scan# 1308
Delta R.T. 0.082 min
Lab File: F801201510.D
Acq: 20 Jan 2015 11:37 pm

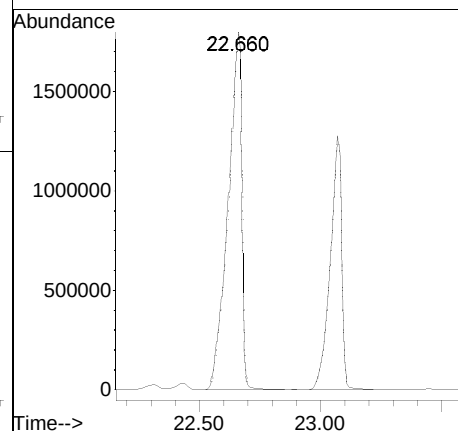
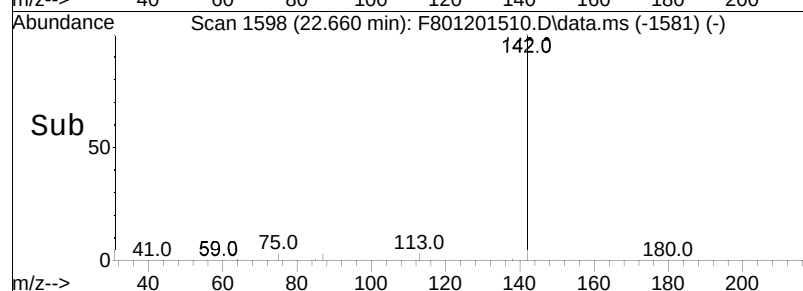
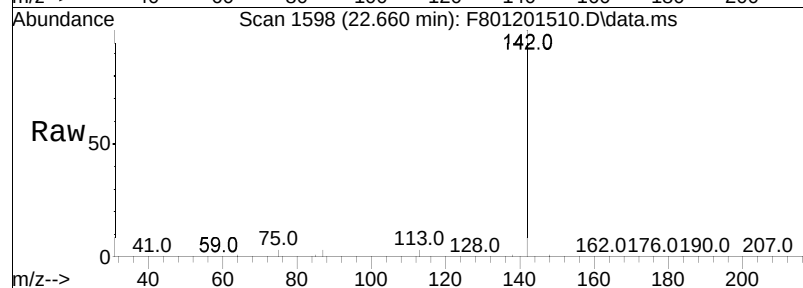
Tgt Ion:128 Resp:24545291

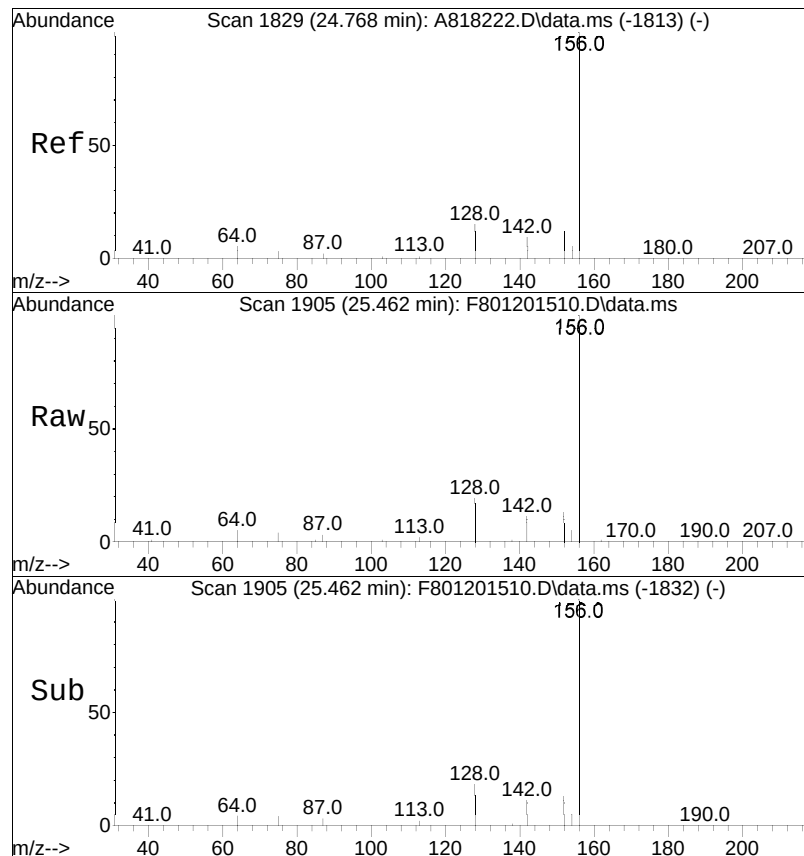




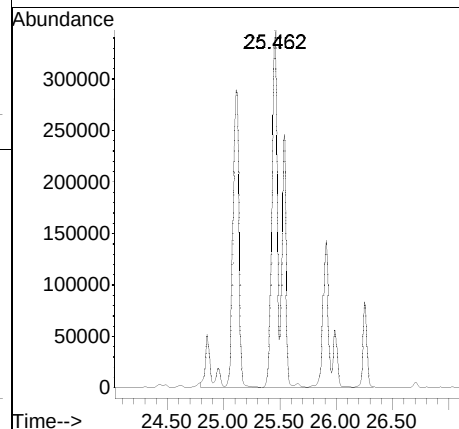
#11
 C1-Naphthalenes
 Concen: 93104.82 ng/mL M5
 RT: 22.660 min Scan# 1598
 Delta R.T. 0.053 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

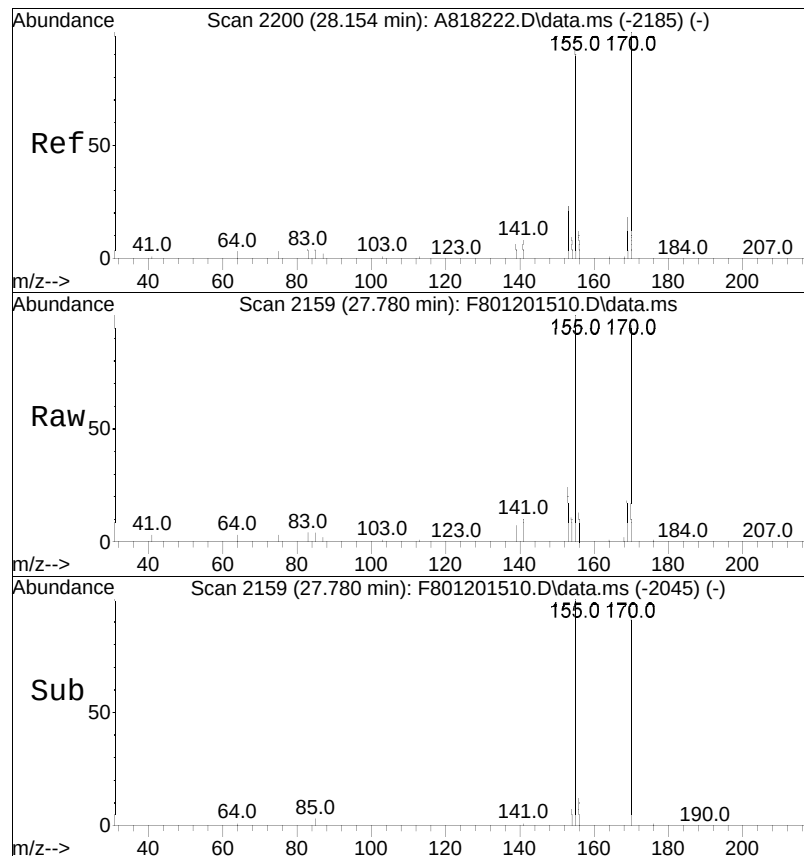
Tgt Ion:142 Resp:11200918





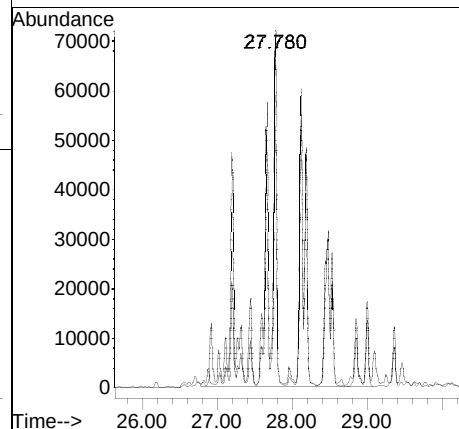
#12
C2-Naphthalenes
Concen: 31315.28 ng/mL M5
RT: 25.462 min Scan# 1905
Delta R.T. 0.014 min
Lab File: F801201510.D
Acq: 20 Jan 2015 11:37 pm
Tgt Ion:156 Resp: 3767366

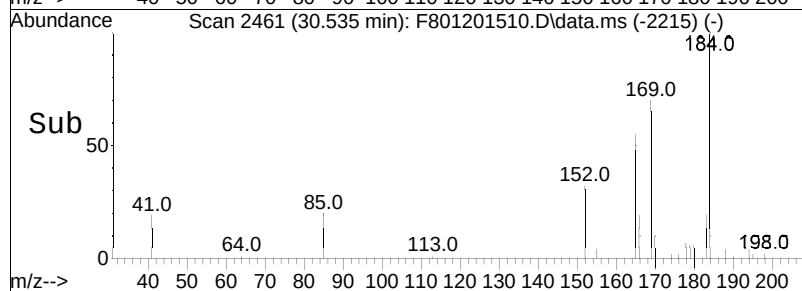
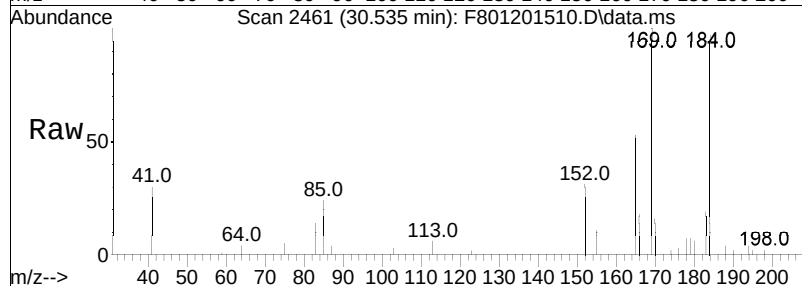
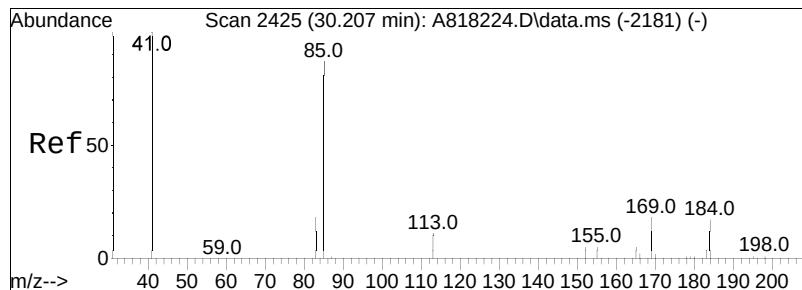




#13
 C3-Naphthalenes
 Concen: 7736.38 ng/mL M5
 RT: 27.780 min Scan# 2159
 Delta R.T. 0.019 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

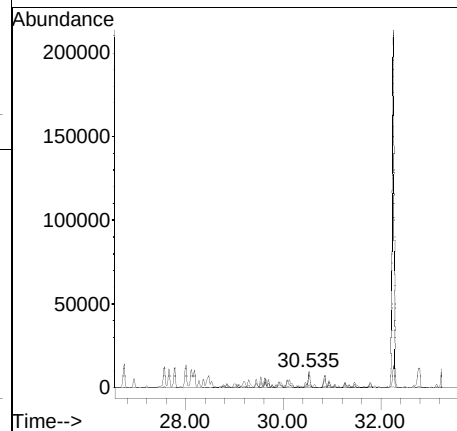
Tgt Ion	Ratio	Lower	Upper
170	100		
155	19.6	75.7	140.7#

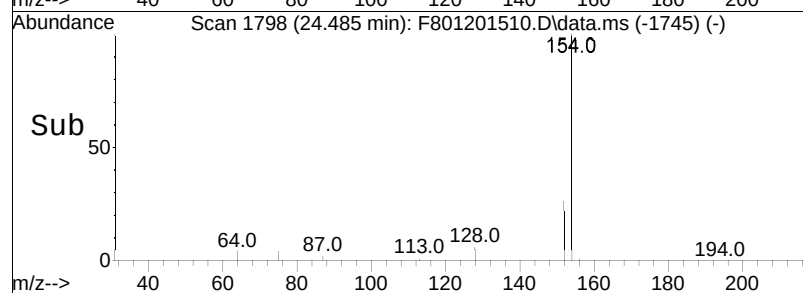
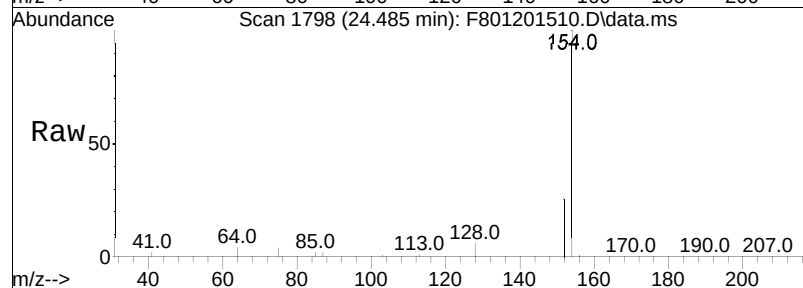
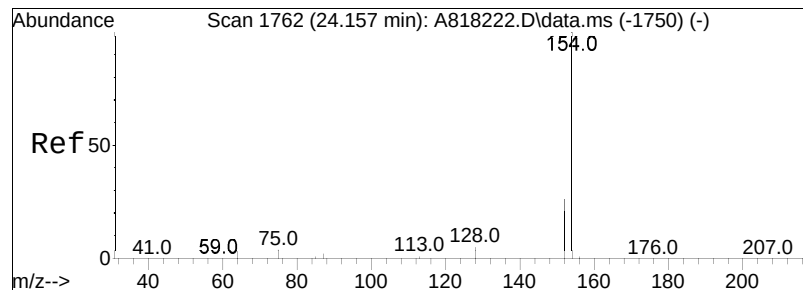




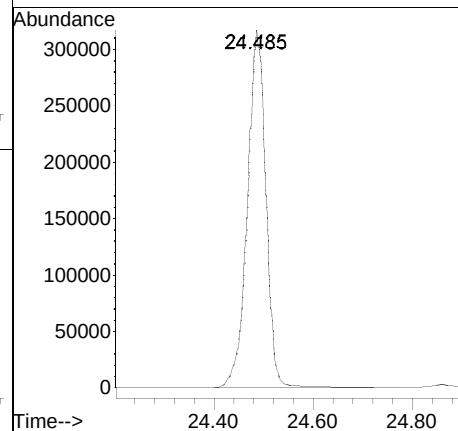
#14
 C4-Naphthalenes
 Concen: 1570.23 ng/mL M5
 RT: 30.535 min Scan# 2461
 Delta R.T. 0.018 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

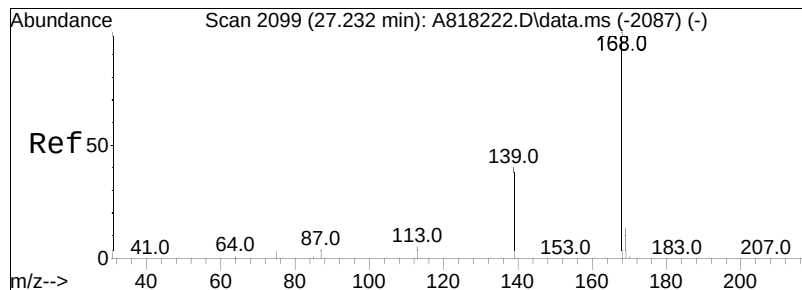
Tgt Ion	Ratio	Resp	Lower	Upper
184	100	188905		
169	6.4		87.1	161.7#
183	1.3		25.7	47.7#





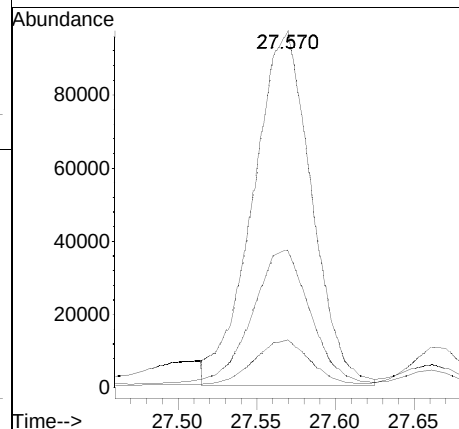
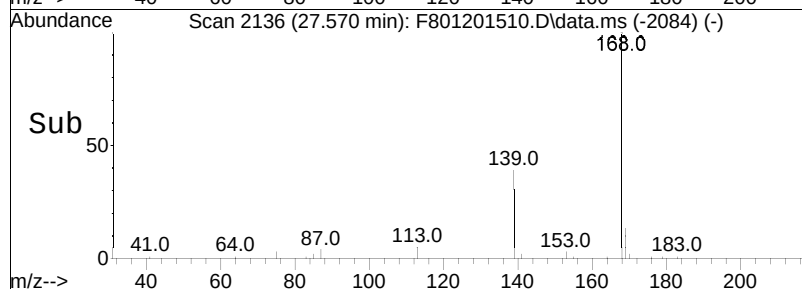
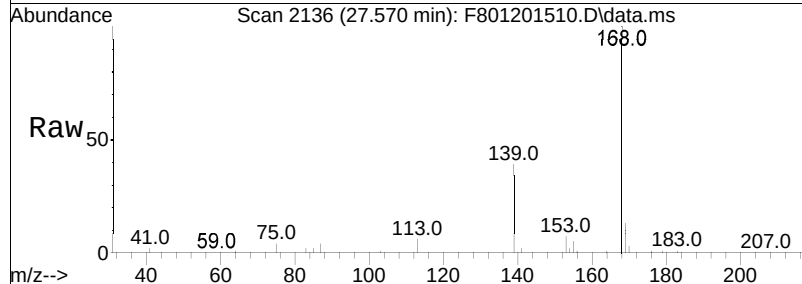
#23
 Biphenyl
 Concen: 8635.49 ng/mL
 RT: 24.485 min Scan# 1798
 Delta R.T. -0.018 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm
 Tgt Ion:154 Resp: 804163

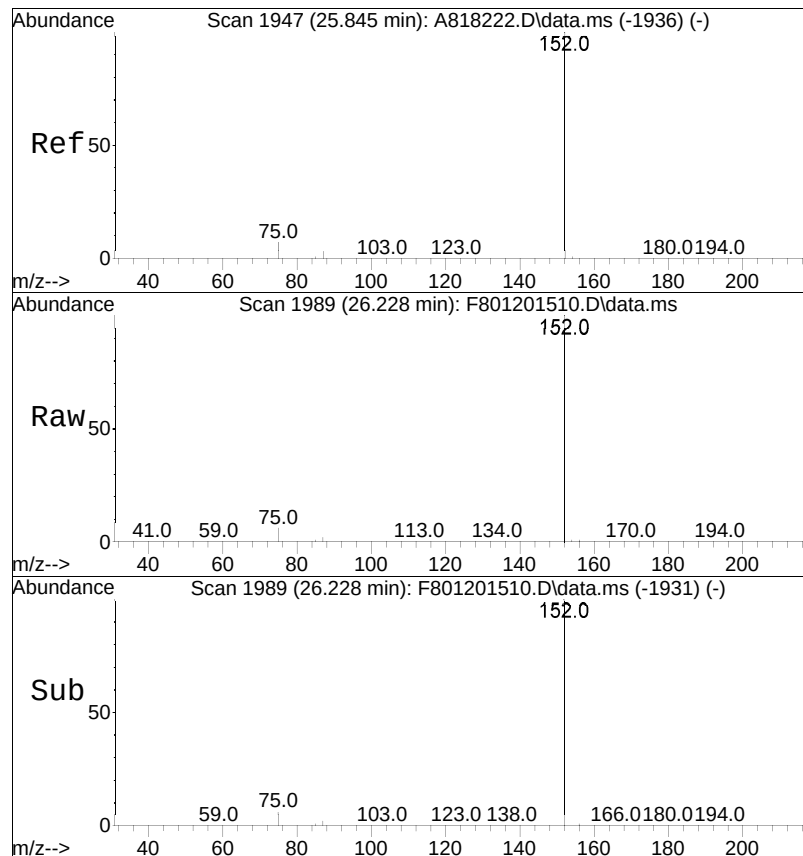




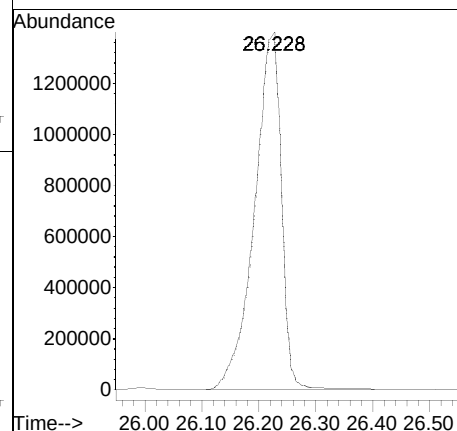
#25
Dibenzofuran
Concen: 2602.91 ng/mL M4
RT: 27.570 min Scan# 2136
Delta R.T. -0.027 min
Lab File: F801201510.D
Acq: 20 Jan 2015 11:37 pm

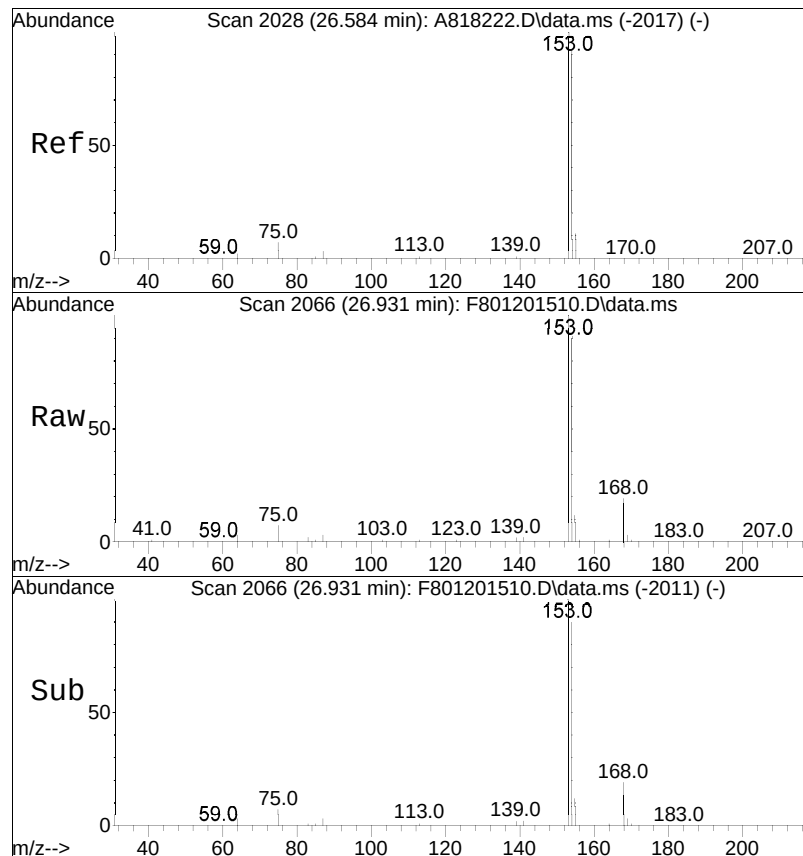
Tgt	Ion:168	Resp:	247389
Ion	Ratio	Lower	Upper
168	100		
139	38.9	29.7	55.1
169	14.6	9.4	17.6





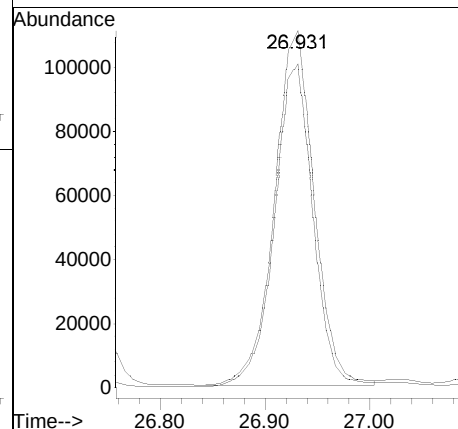
#26
 Acenaphthylene
 Concen: 40217.54 ng/mL M4
 RT: 26.228 min Scan# 1989
 Delta R.T. 0.027 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm
 Tgt Ion:152 Resp: 4527275

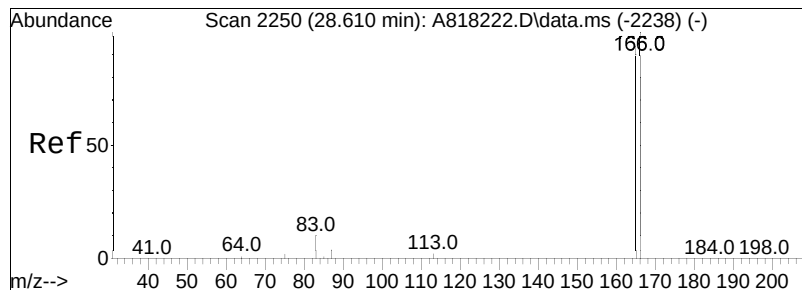




#27
 Acenaphthene
 Concen: 4209.62 ng/mL
 RT: 26.931 min Scan# 2066
 Delta R.T. 0.000 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

Tgt Ion	Ratio	Resp	Lower	Upper
153	100	289556		
154	89.8		65.0	120.8





#29

Fluorene

Concen: 17333.13 ng/mL M4

RT: 28.957 min Scan# 2288

Delta R.T. -0.009 min

Lab File: F801201510.D

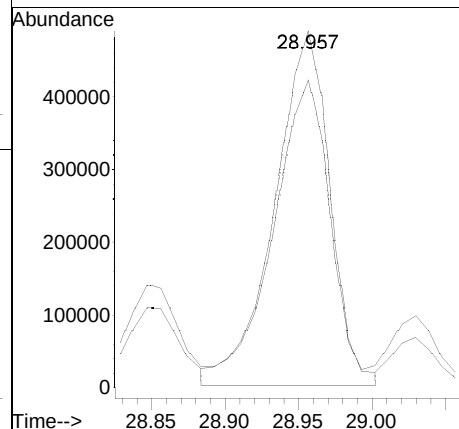
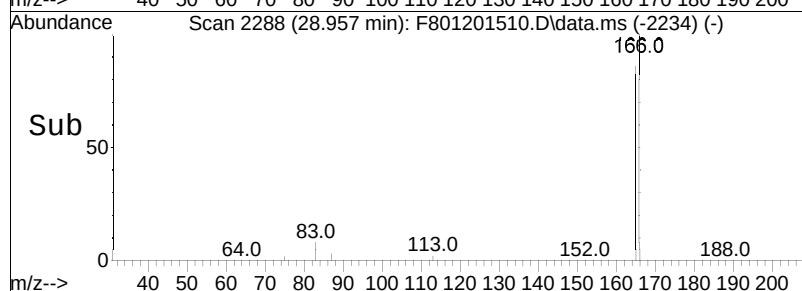
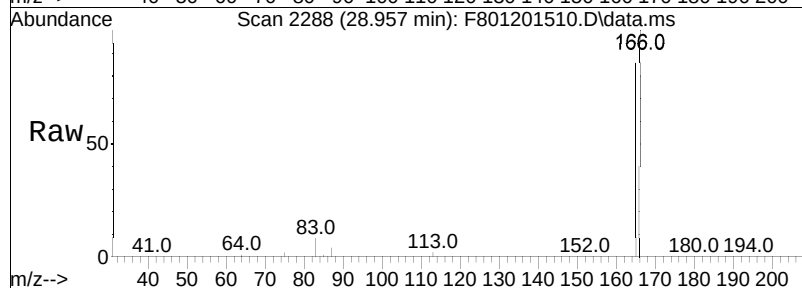
Acq: 20 Jan 2015 11:37 pm

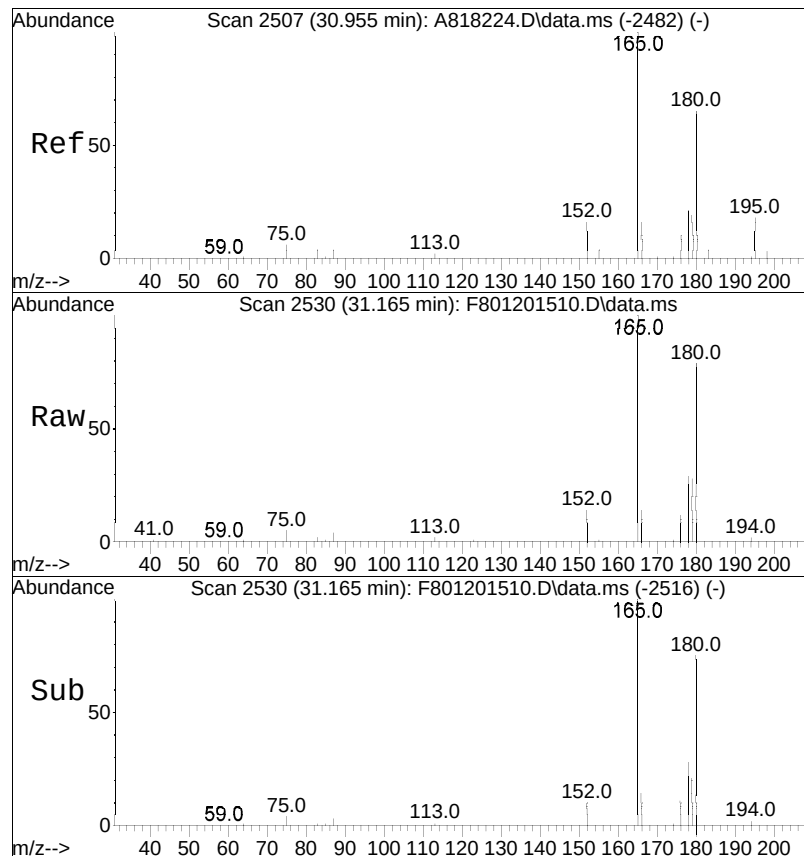
Tgt Ion:166 Resp: 1276272

Ion Ratio Lower Upper

166 100

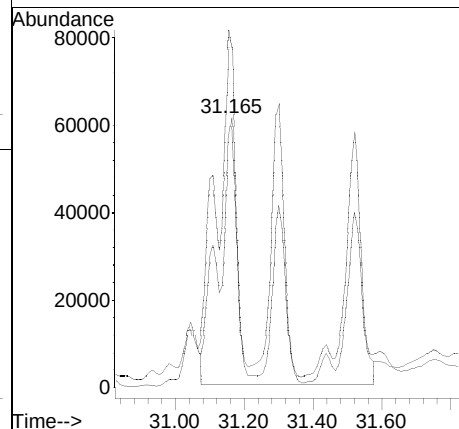
165 85.2 66.1 122.8

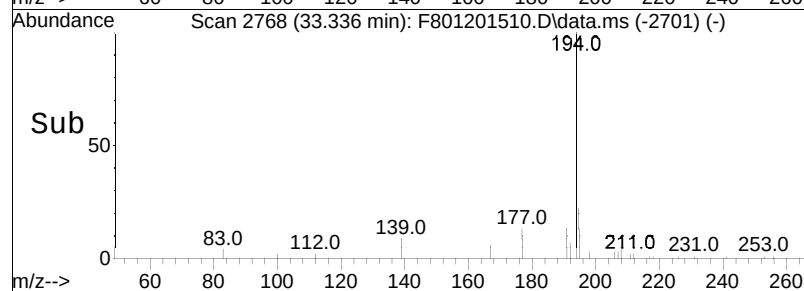
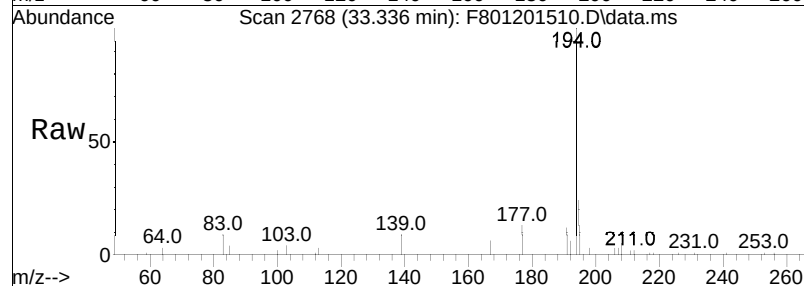
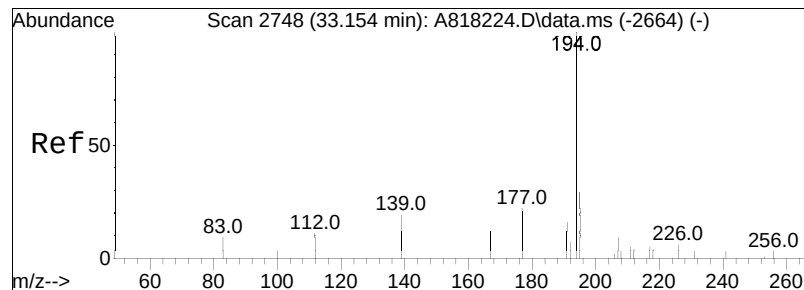




#30
 C1-Fluorenes
 Concen: 6384.88 ng/mL M5
 RT: 31.165 min Scan# 2530
 Delta R.T. -0.117 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

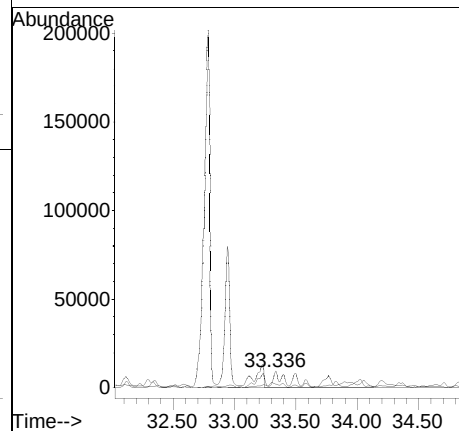
Tgt Ion	Ratio	Lower	Upper
180	100		
165	35.0	114.8	213.2#

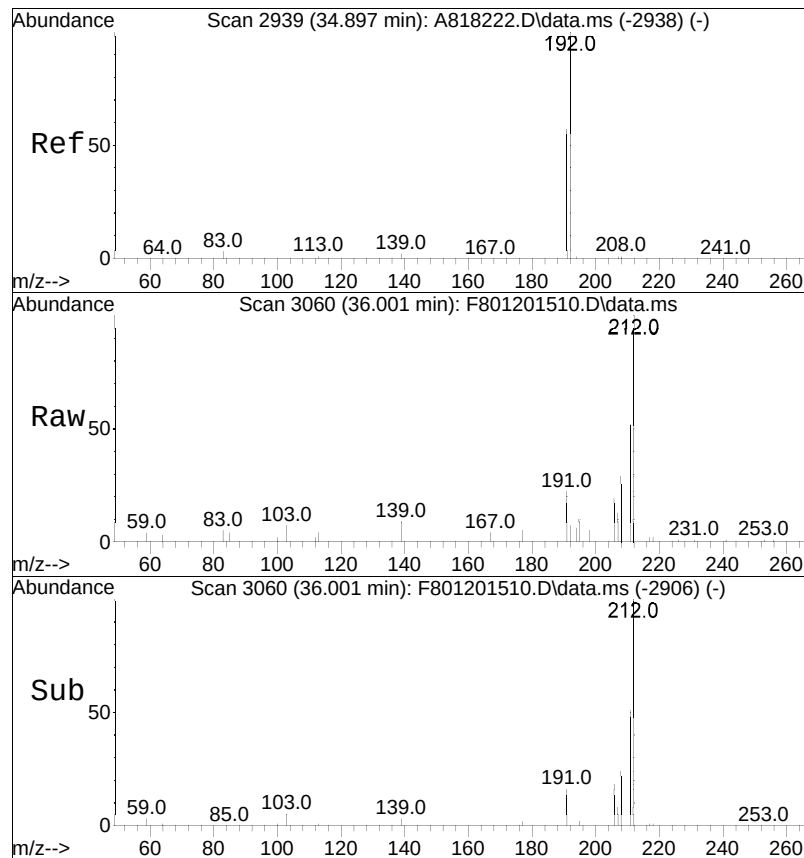




#31
C2-Fluorenes
Concen: 2717.11 ng/mL M5
RT: 33.336 min Scan# 2768
Delta R.T. -0.144 min
Lab File: F801201510.D
Acq: 20 Jan 2015 11:37 pm

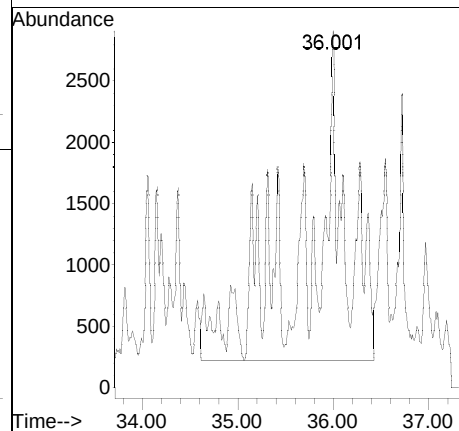
Tgt Ion	Ratio	Lower	Upper
194	100		
179	0.0	0.0	0.0
195	2.0	22.3	41.5#

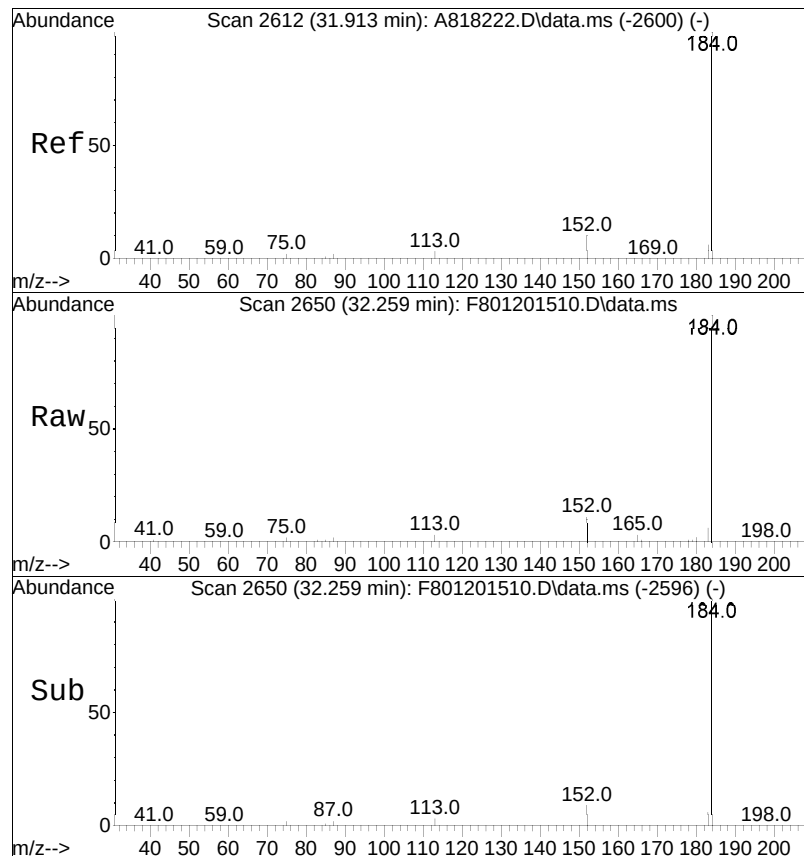




#32
 C3-Fluorenes
 Concen: 1008.53 ng/mL M5
 RT: 36.001 min Scan# 3060
 Delta R.T. 0.714 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

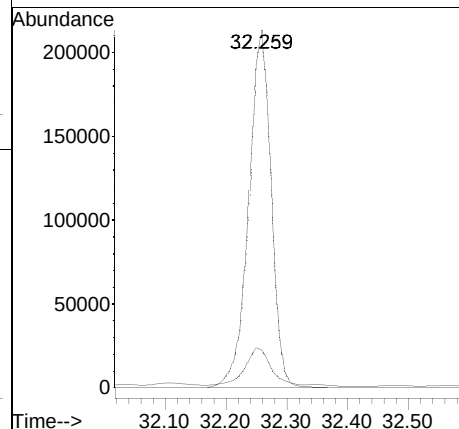
Tgt Ion:208 Resp: 74260

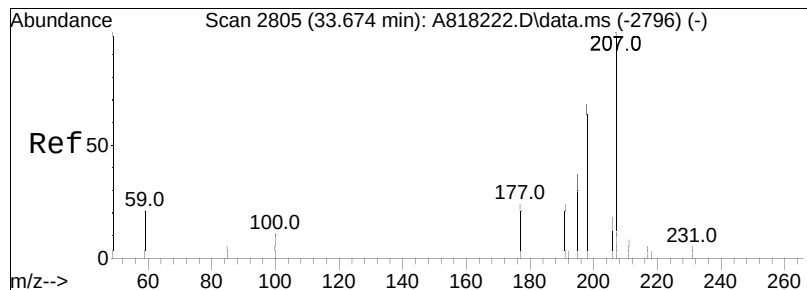




#33
 Dibenzothiophene
 Concen: 5202.14 ng/mL
 RT: 32.259 min Scan# 2650
 Delta R.T. -0.009 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

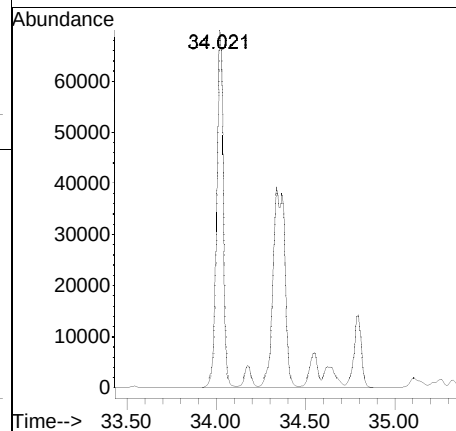
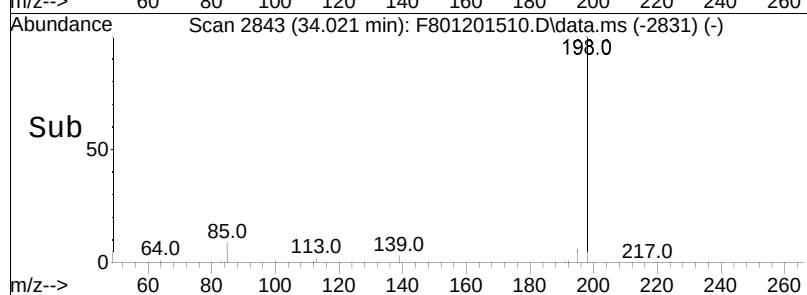
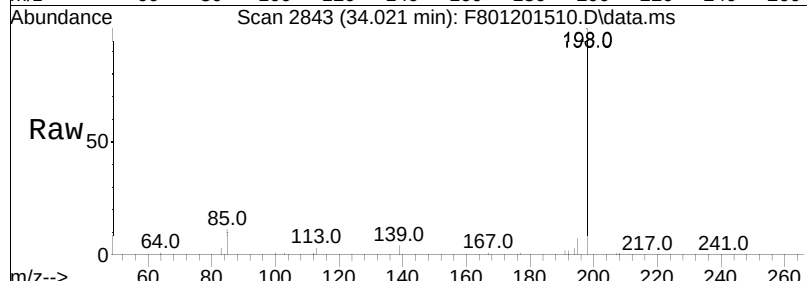
Tgt Ion	Ratio	Lower	Upper
184	100		
152	11.9	6.9	12.9

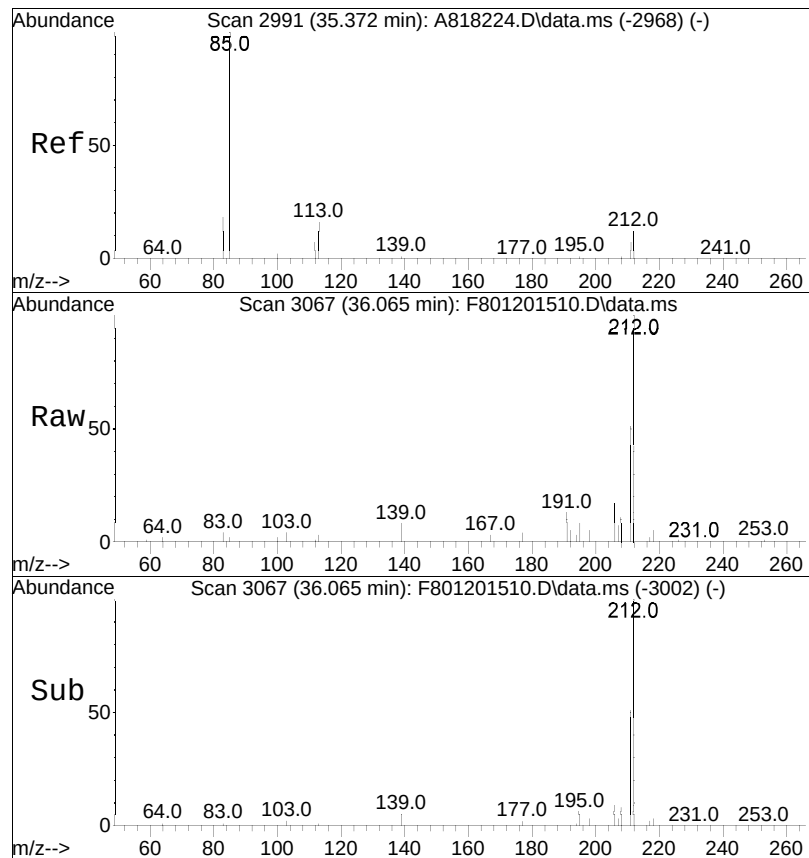




#38
C1-Dibenzothiophenes
Concen: 4358.78 ng/mL M5
RT: 34.021 min Scan# 2843
Delta R.T. 0.017 min
Lab File: F801201510.D
Acq: 20 Jan 2015 11:37 pm

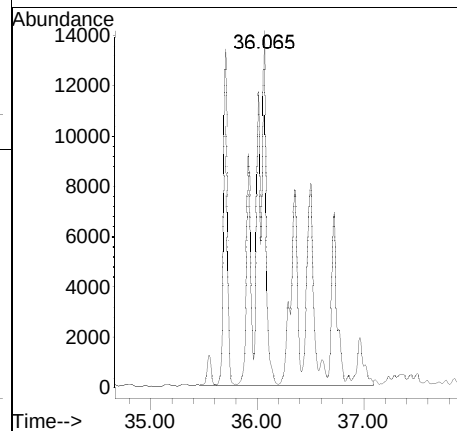
Tgt Ion:198 Resp: 448583

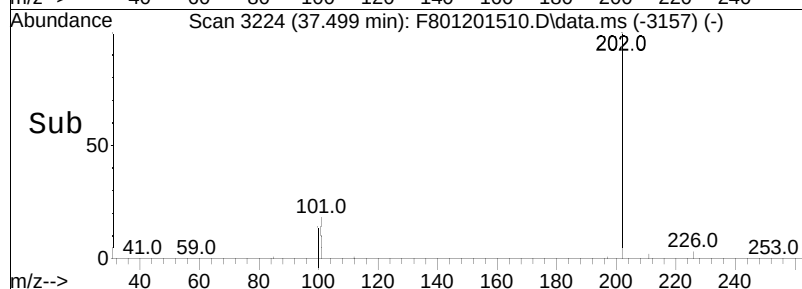
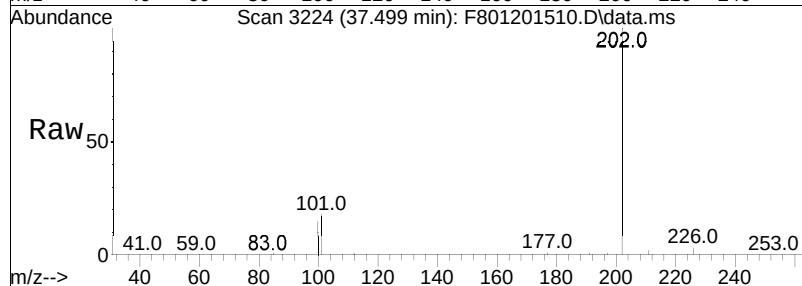
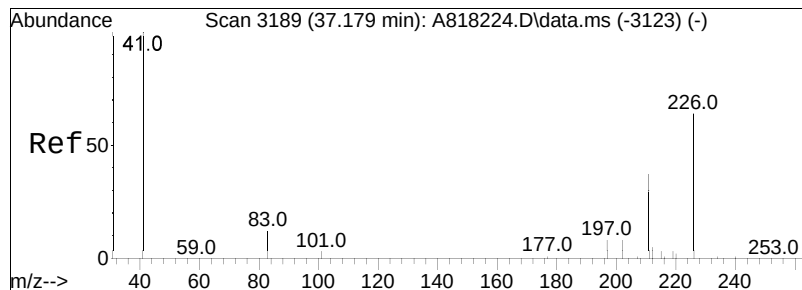




#39
 C2-Dibenzothiophenes
 Concen: 2272.73 ng/mL M5
 RT: 36.065 min Scan# 3067
 Delta R.T. 0.031 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

Tgt Ion:212 Resp: 233898





#40

C3-Dibenzothiophenes

Concen: 768.11 ng/mL M5

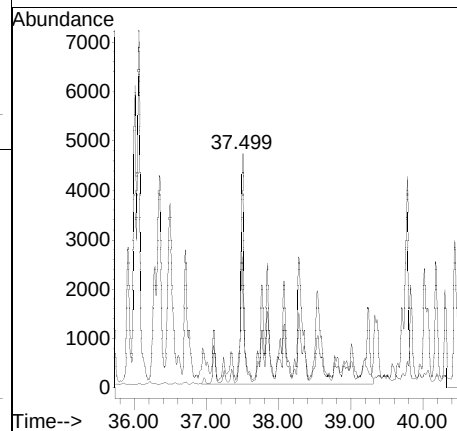
RT: 37.499 min Scan# 3224

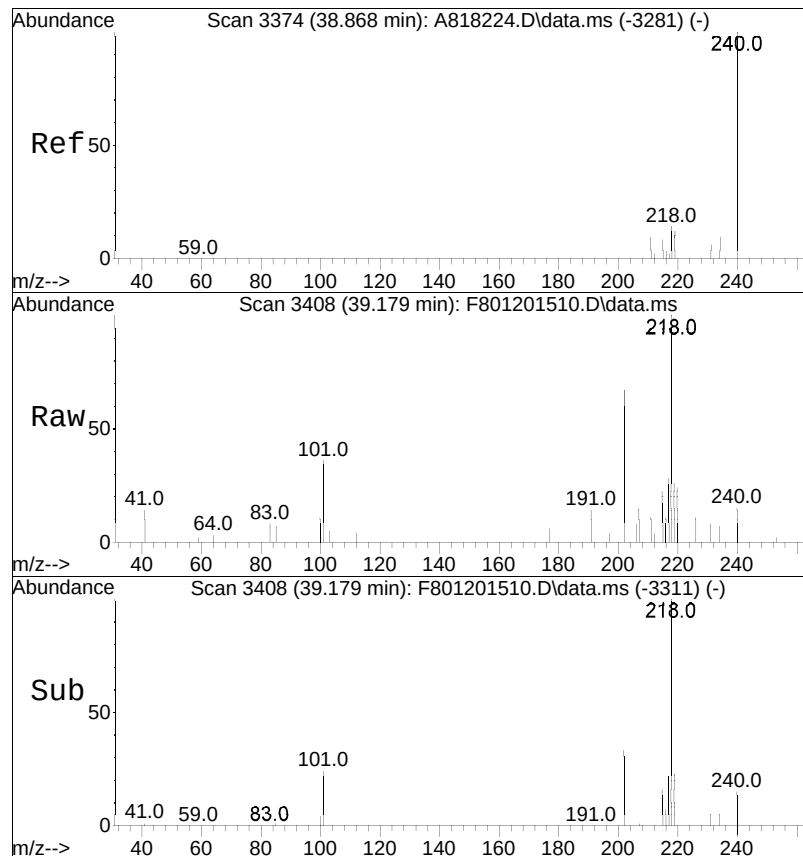
Delta R.T. 0.009 min

Lab File: F801201510.D

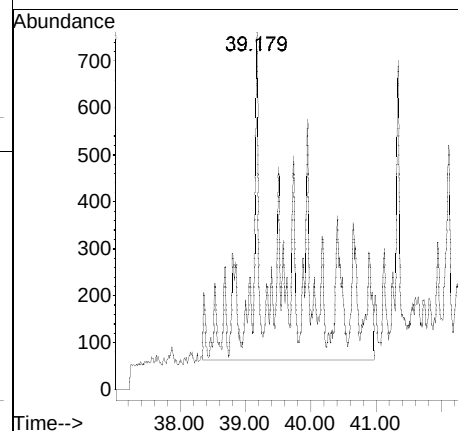
Acq: 20 Jan 2015 11:37 pm

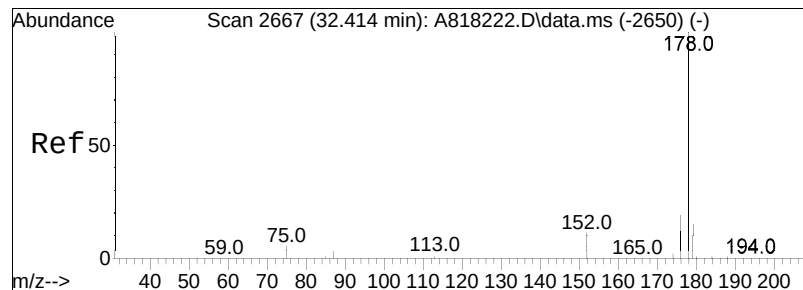
Tgt Ion	Ratio	Lower	Upper
226	100		
211	11.0	44.9	83.5#





#41
 C4-Dibenzothiophenes
 Concen: 195.36 ng/mL M5
 RT: 39.179 min Scan# 3408
 Delta R.T. 0.029 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm
 Tgt Ion:240 Resp: 20105





#43

Phenanthrene

Concen: 37634.87 ng/mL

RT: 32.789 min Scan# 2708

Delta R.T. 0.027 min

Lab File: F801201510.D

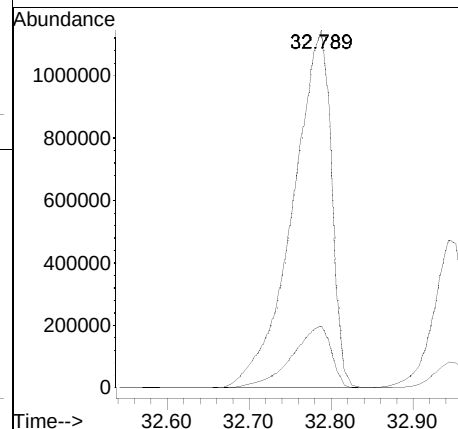
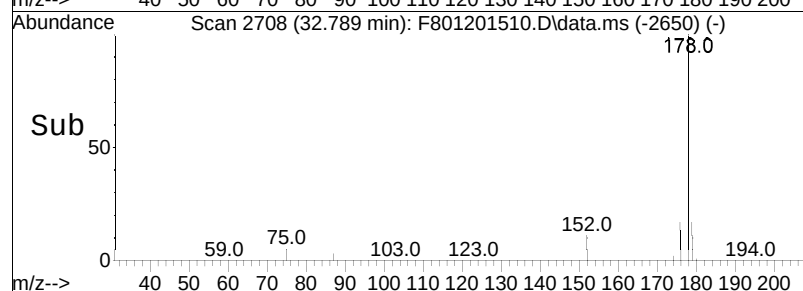
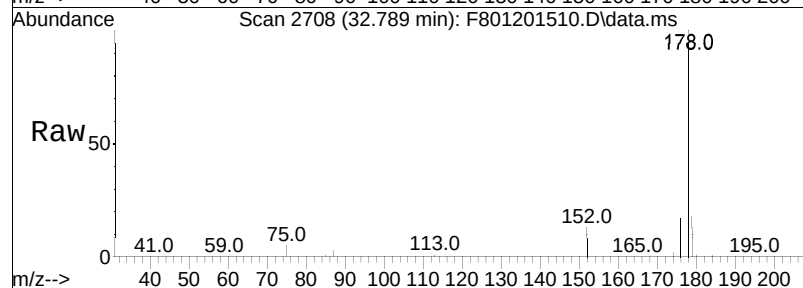
Acq: 20 Jan 2015 11:37 pm

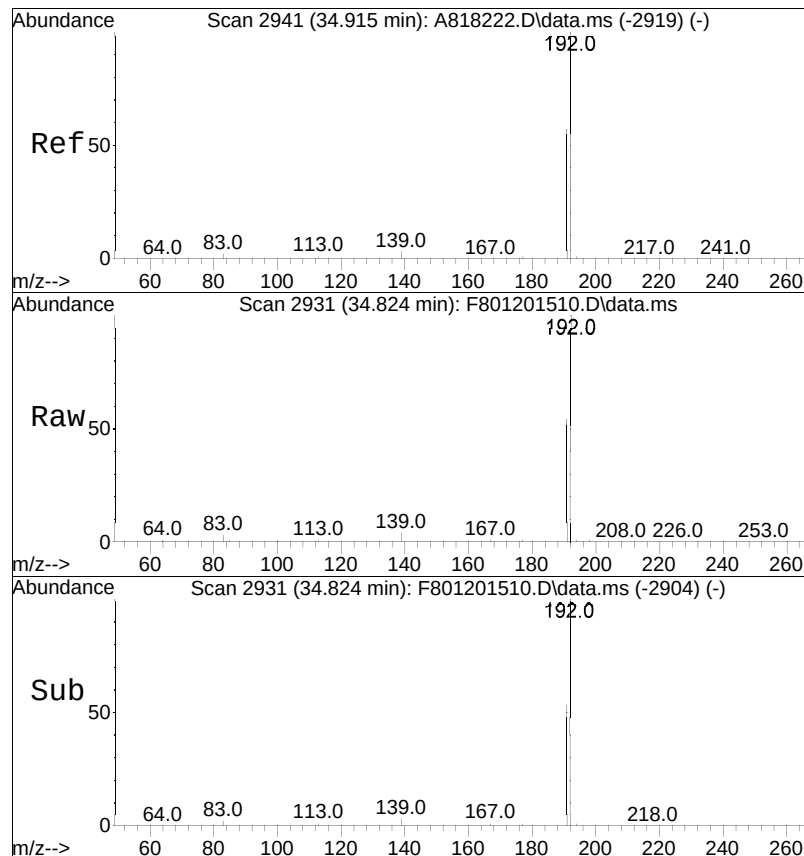
Tgt Ion:178 Resp: 3753825

Ion Ratio Lower Upper

178 100

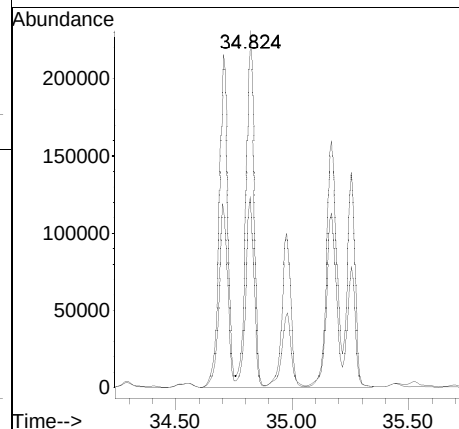
176 17.6 13.2 24.6

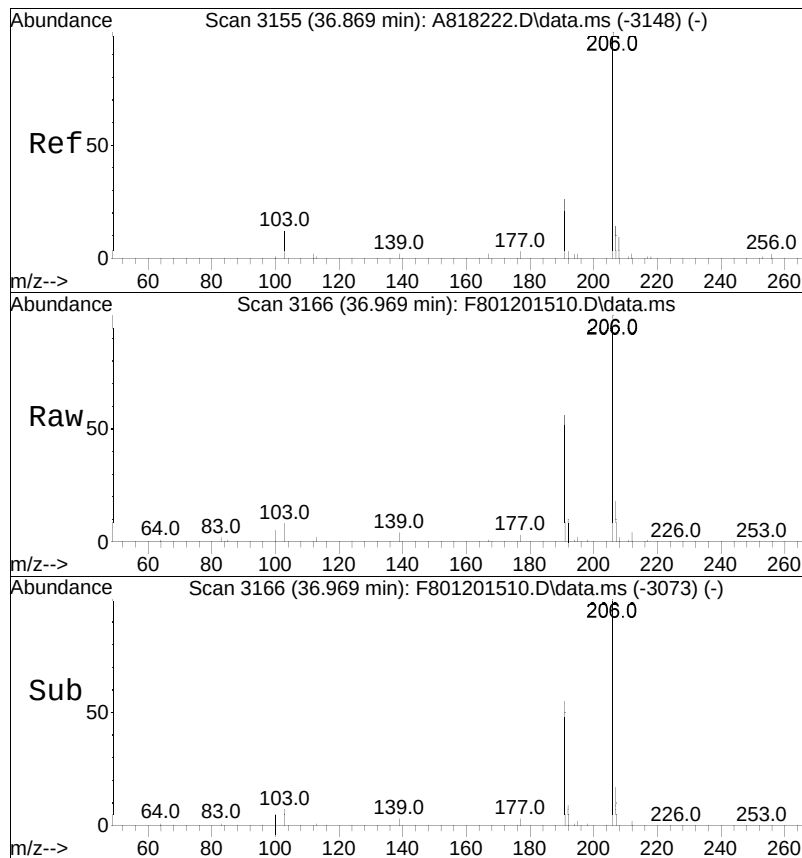




#49
 C1-Phenanthrenes/Anthracenes
 Concen: 21700.58 ng/mL M5
 RT: 34.824 min Scan# 2931
 Delta R.T. -0.326 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

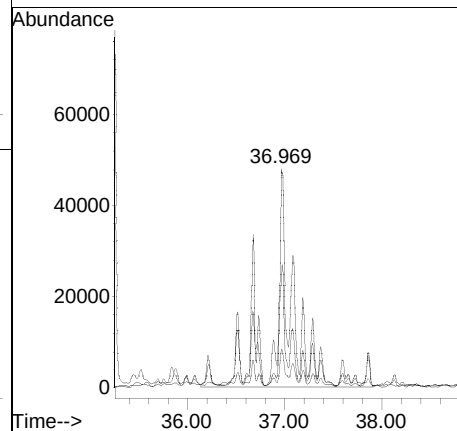
Tgt Ion:192 Resp: 2164487
 Ion Ratio Lower Upper
 192 100
 191 15.0 40.3 74.9#

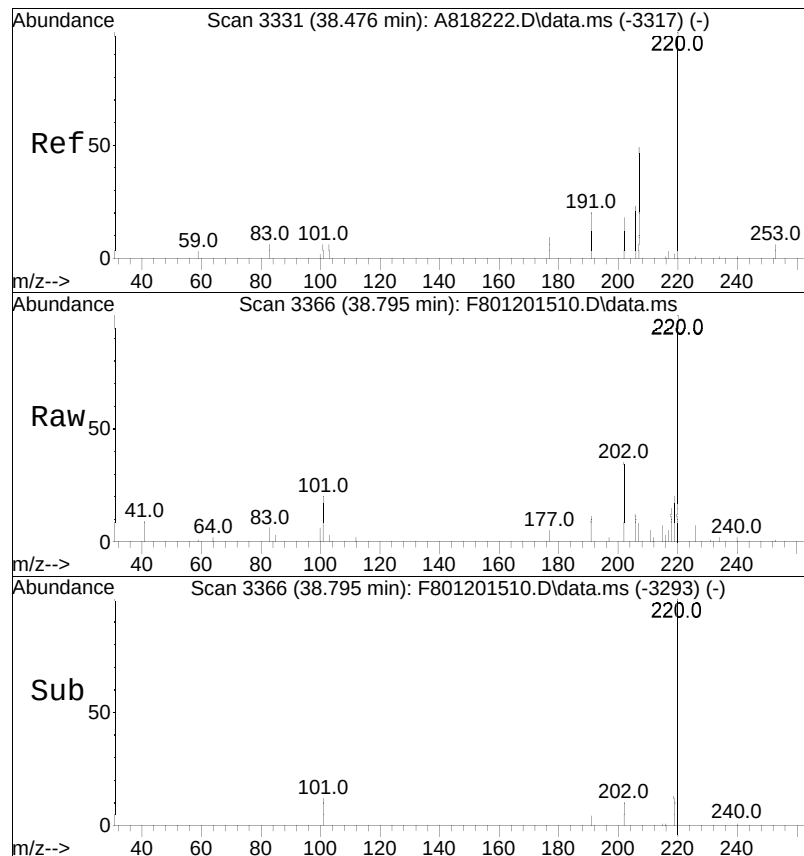




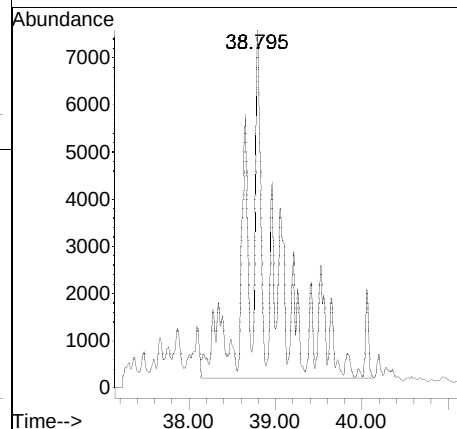
#50
 C2-Phenanthrenes/Anthracenes
 Concen: 6506.26 ng/mL M5
 RT: 36.969 min Scan# 3166
 Delta R.T. 0.033 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

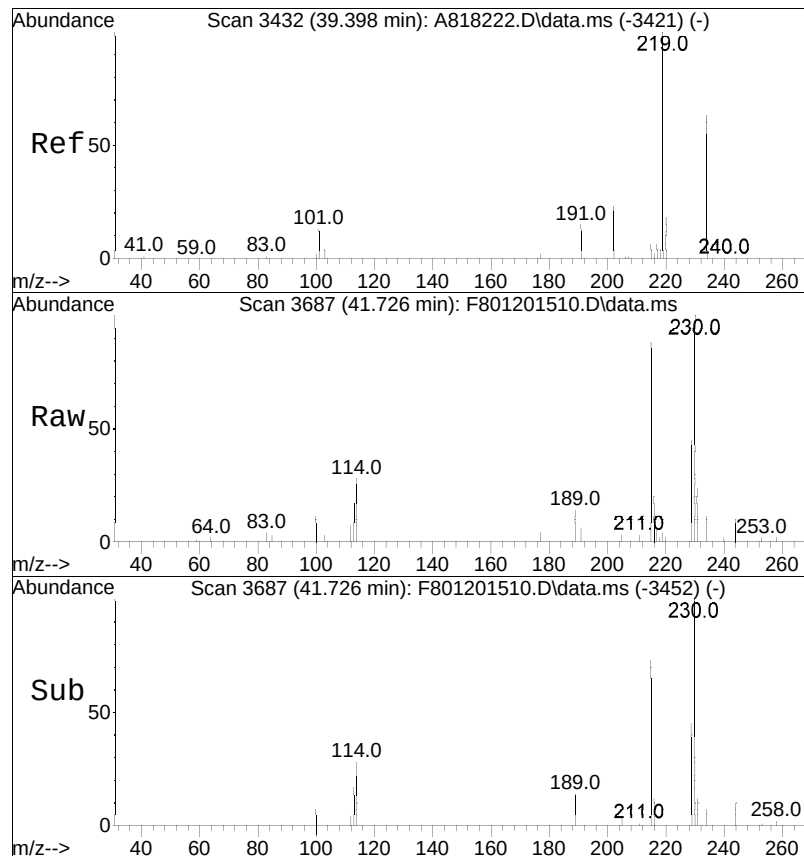
Tgt	Ion:206	Resp:	648956
Ion	Ratio	Lower	Upper
206	100		
191	13.8	39.5	73.4#
207	3.7	14.1	26.3#





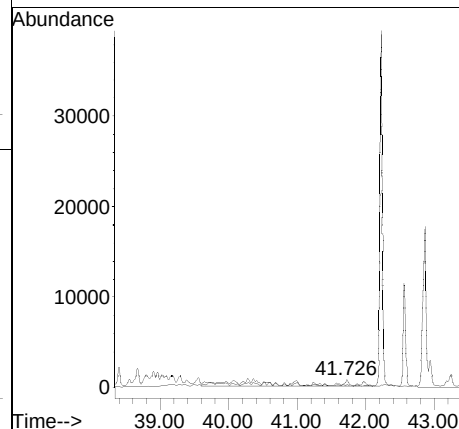
#52
 C3-Phenanthrenes/Anthracenes
 Concen: 1470.91 ng/mL M5
 RT: 38.795 min Scan# 3366
 Delta R.T. 0.013 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm
 Tgt Ion:220 Resp: 146713

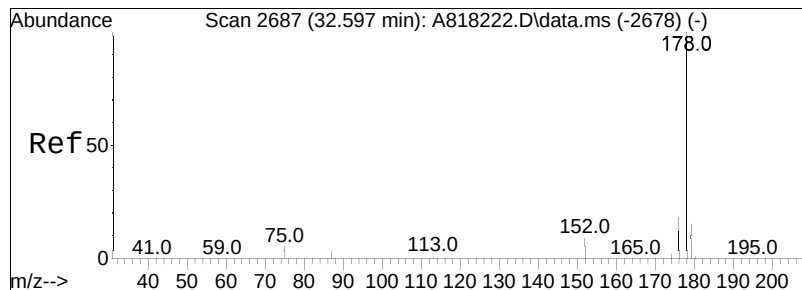




#53
 C4-Phenanthrenes/Anthracenes
 Concen: 289.06 ng/mL M5
 RT: 41.726 min Scan# 3687
 Delta R.T. 0.781 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

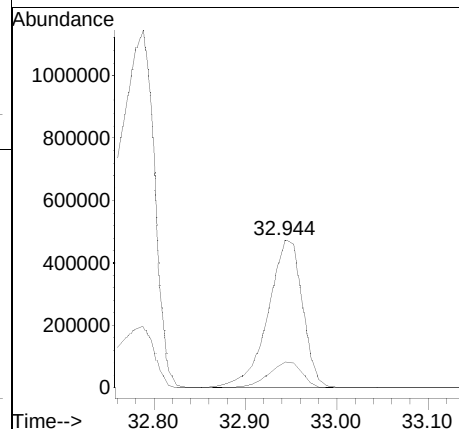
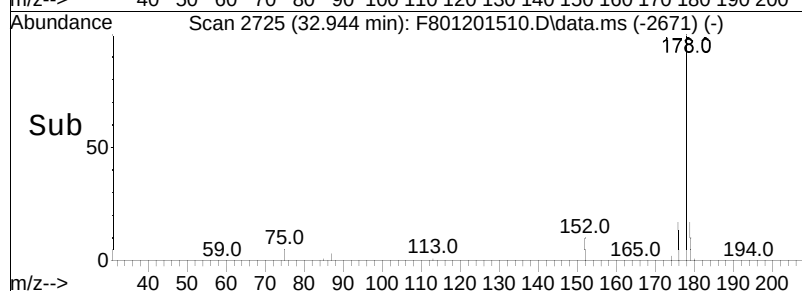
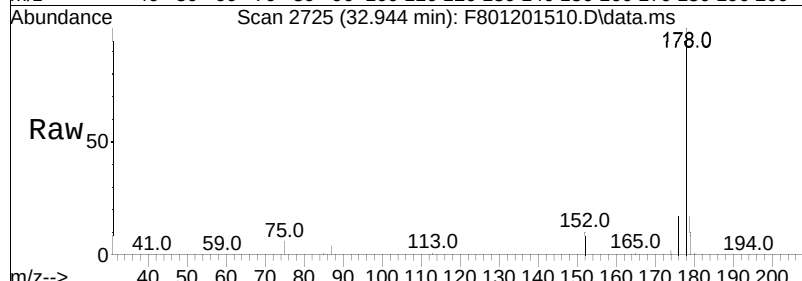
Tgt	Ion	Ratio	Lower	Upper
234	100			
219	5.2	45.1	83.9	

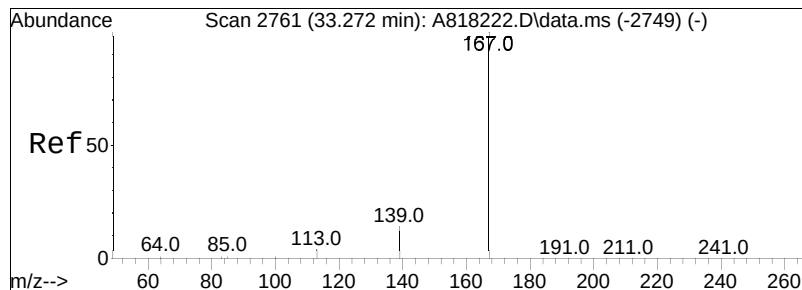




#55
 Anthracene
 Concen: 13666.04 ng/mL M4
 RT: 32.944 min Scan# 2725
 Delta R.T. -0.009 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

Tgt Ion: 178 Resp: 1248778
 Ion Ratio Lower Upper
 178 100
 176 17.7 12.7 23.5





#56

Carbazole

Concen: 628.72 ng/mL

RT: 33.601 min Scan# 2797

Delta R.T. -0.027 min

Lab File: F801201510.D

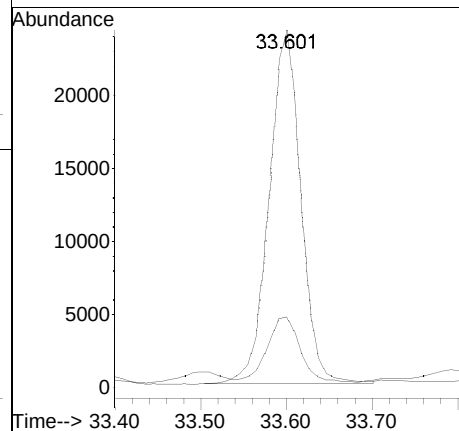
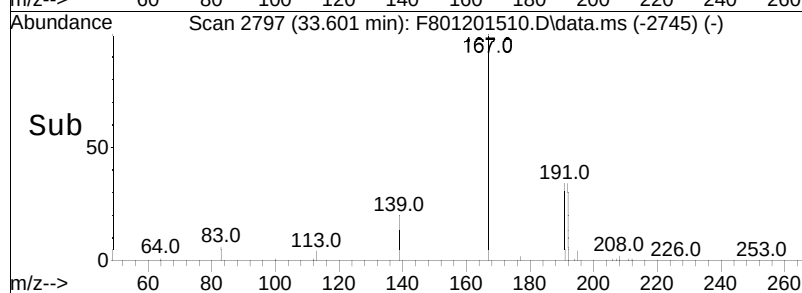
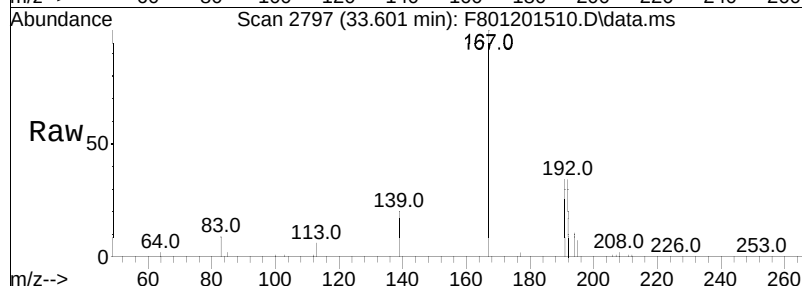
Acq: 20 Jan 2015 11:37 pm

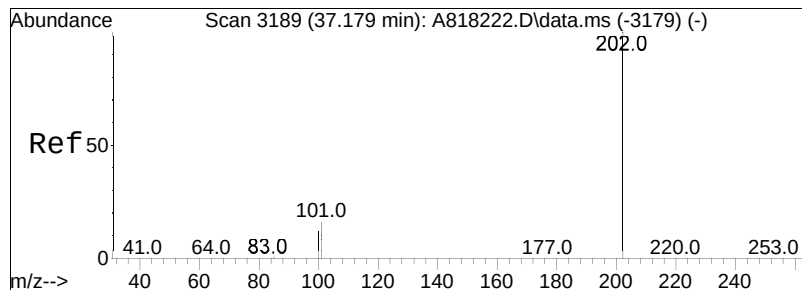
Tgt Ion:167 Resp: 61431

Ion Ratio Lower Upper

167 100

139 19.1 11.0 20.4





#58

Fluoranthene

Concen: 11651.14 ng/mL

RT: 37.526 min Scan# 3227

Delta R.T. 0.000 min

Lab File: F801201510.D

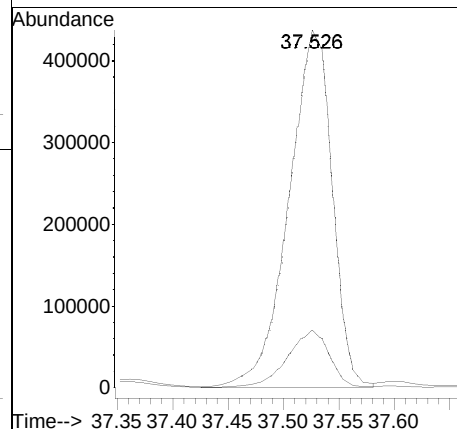
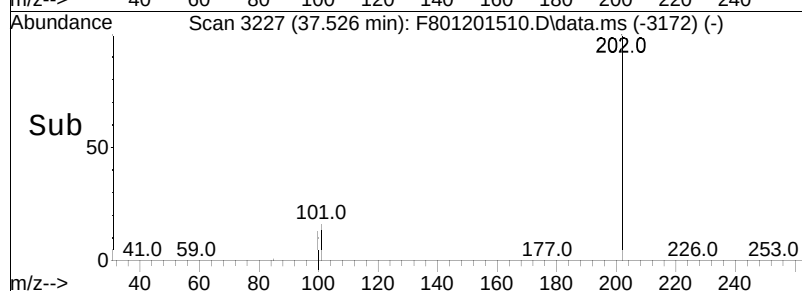
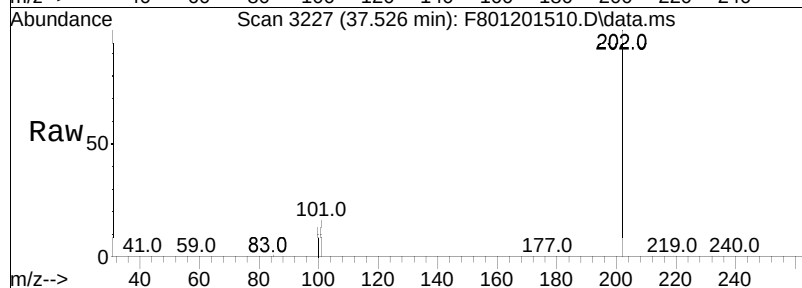
Acq: 20 Jan 2015 11:37 pm

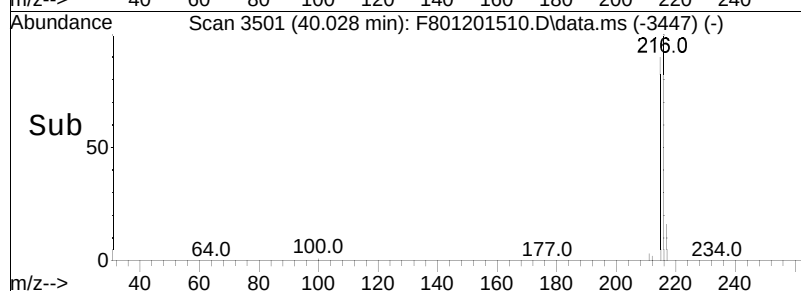
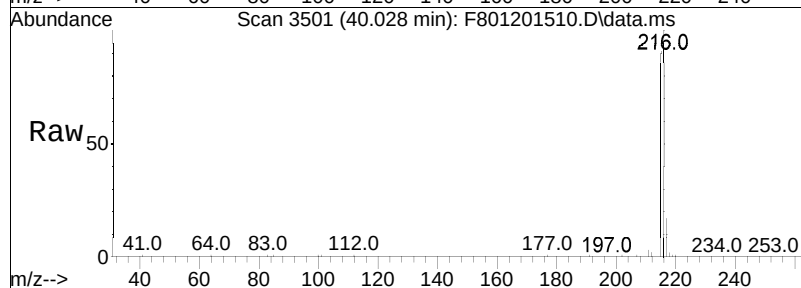
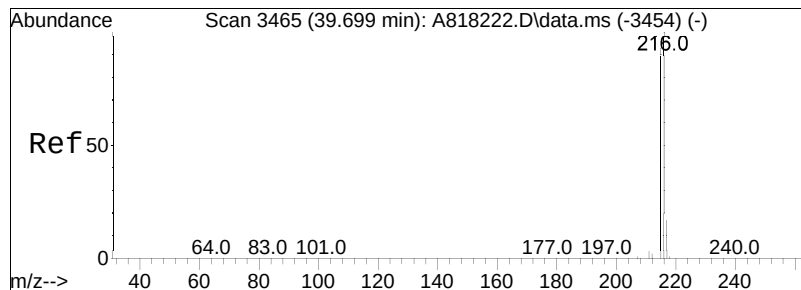
Tgt Ion: 202 Resp: 1179024

Ion Ratio Lower Upper

202 100

101 15.5 12.3 22.9





#59

Benzo(b)fluorene

Concen: 3120.61 ng/mL M3

RT: 40.028 min Scan# 3501

Delta R.T. -0.009 min

Lab File: F801201510.D

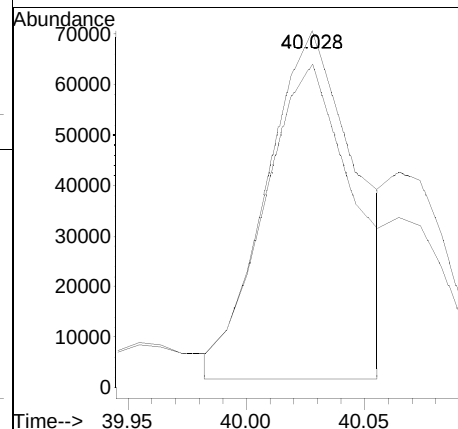
Acq: 20 Jan 2015 11:37 pm

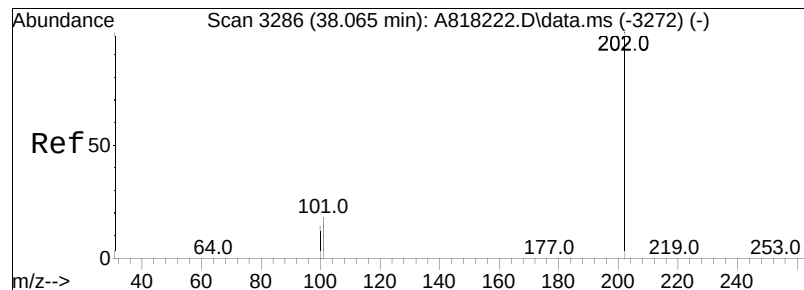
Tgt Ion: 216 Resp: 182869

Ion Ratio Lower Upper

216 100

215 116.5 63.8 118.6





#60

Pyrene

Concen: 16172.63 ng/mL

RT: 38.421 min Scan# 3325

Delta R.T. 0.018 min

Lab File: F801201510.D

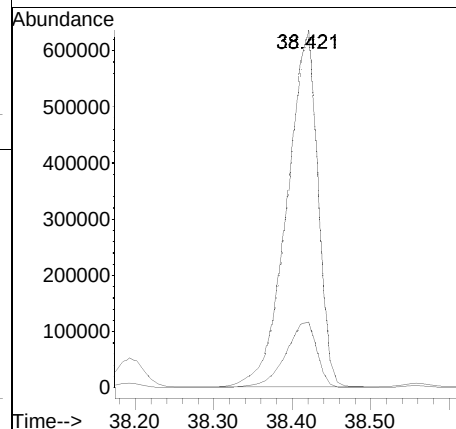
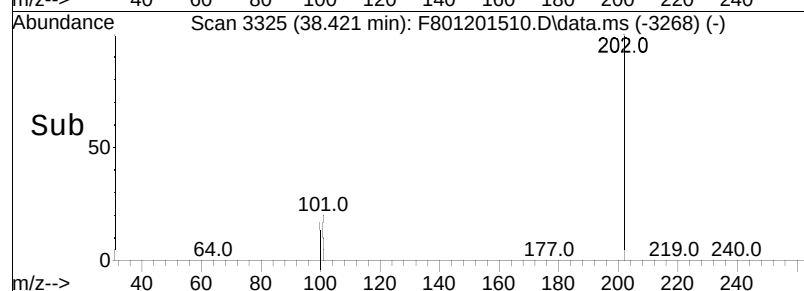
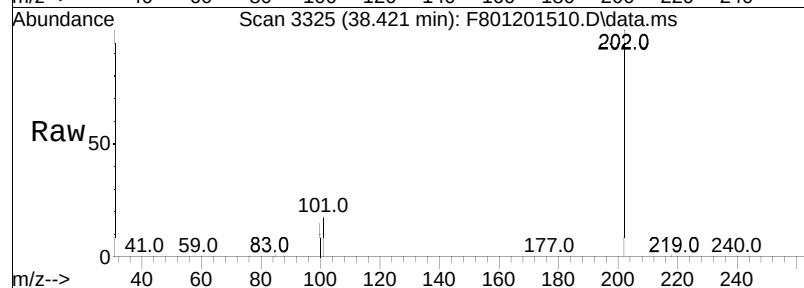
Acq: 20 Jan 2015 11:37 pm

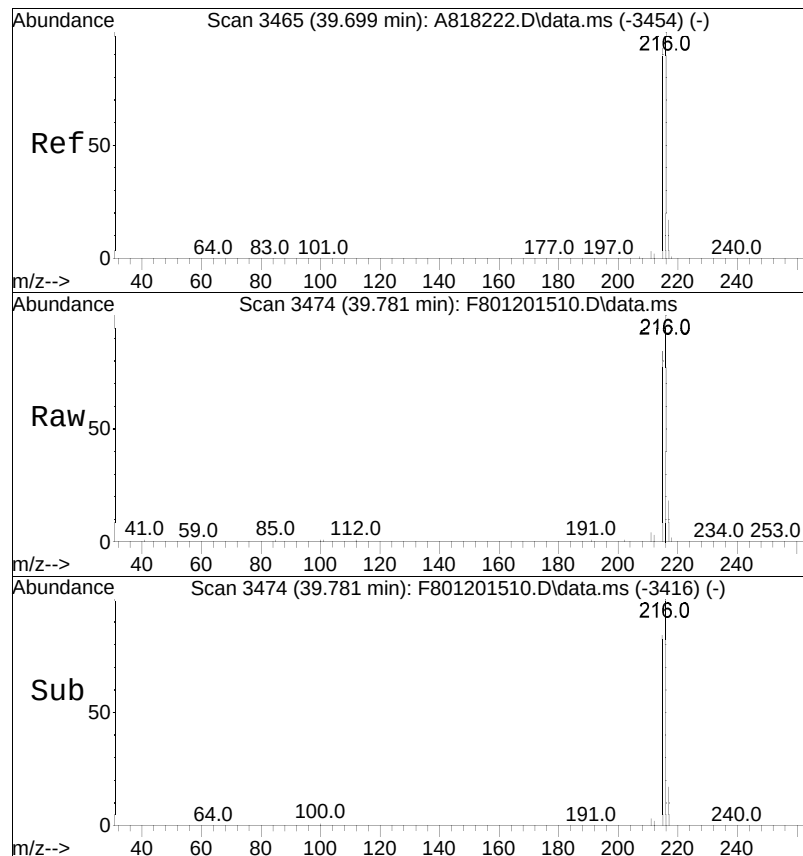
Tgt Ion: 202 Resp: 1713946

Ion Ratio Lower Upper

202 100

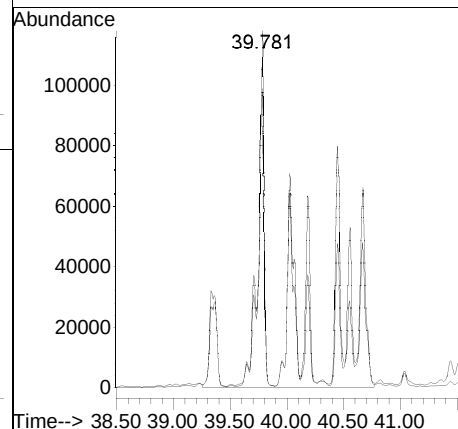
101 18.7 13.6 25.2

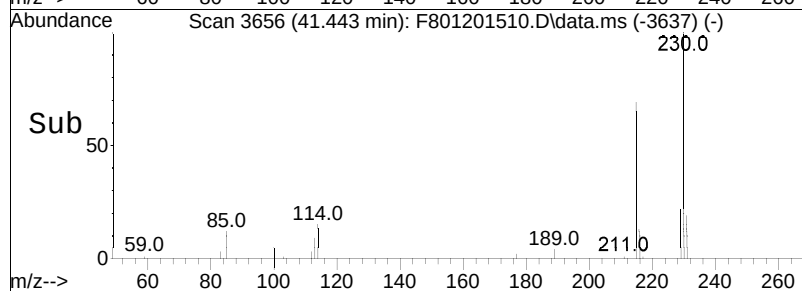
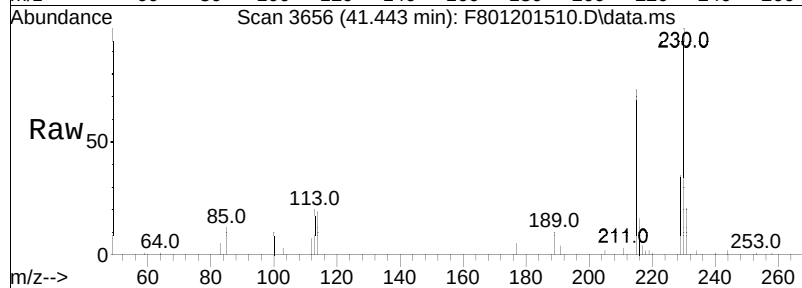
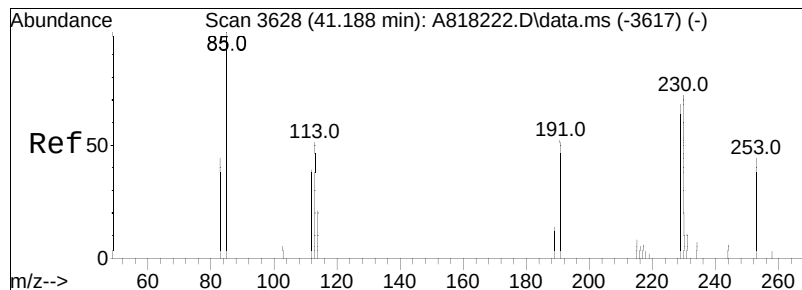




#61
 C1-Fluoranthenes/Pyrenes
 Concen: 14642.78 ng/mL M5
 RT: 39.781 min Scan# 3474
 Delta R.T. 0.014 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

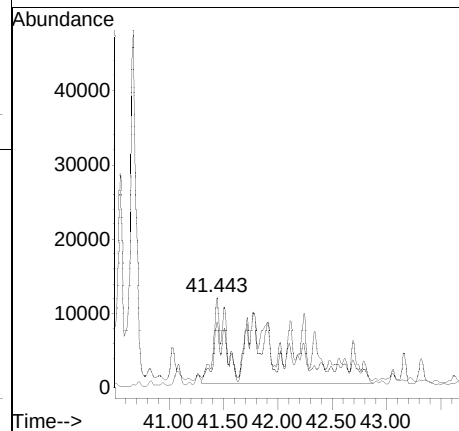
Tgt	Ion	Ratio	Lower	Upper
216	100			
215	16.7	64.2	119.2#	

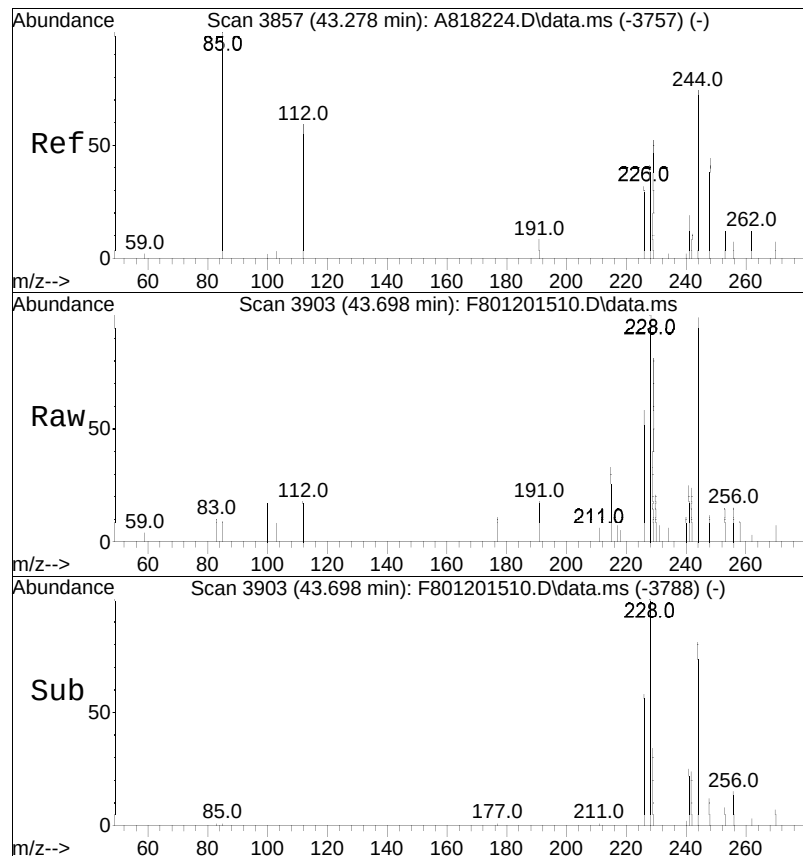




#62
C2-Fluoranthenes/Pyrenes
Concen: 3629.25 ng/mL M5
RT: 41.443 min Scan# 3656
Delta R.T. -0.123 min
Lab File: F801201510.D
Acq: 20 Jan 2015 11:37 pm

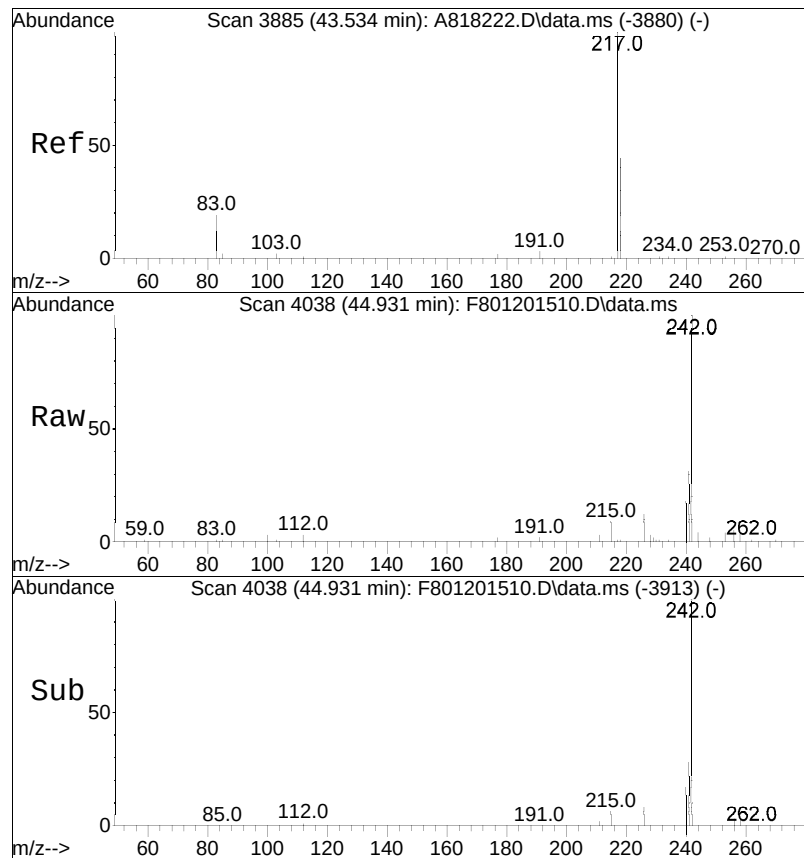
Tgt	Ion	Ratio	Resp	Lower	Upper
230	100		384621		
215	2.3	86.5	160.7#		



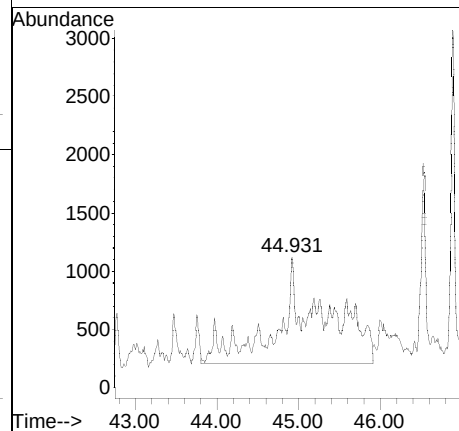


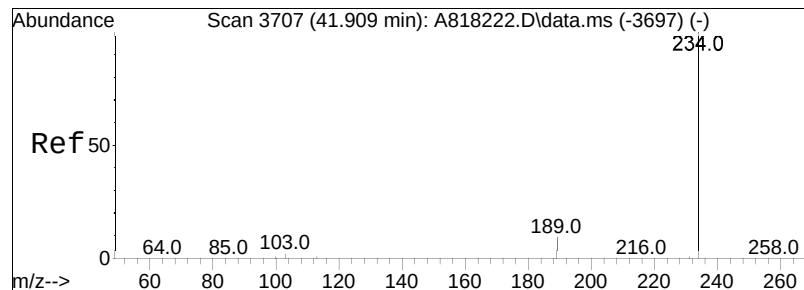
#63
 C3-Fluoranthenes/Pyrenes
 Concen: 987.06 ng/mL M5
 RT: 43.698 min Scan# 3903
 Delta R.T. 0.134 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

Tgt Ion:244 Resp: 104607
 Ion Ratio Lower Upper
 244 100
 229 1.9 68.7 127.7#



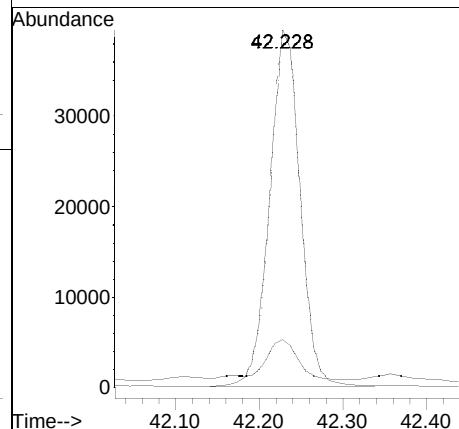
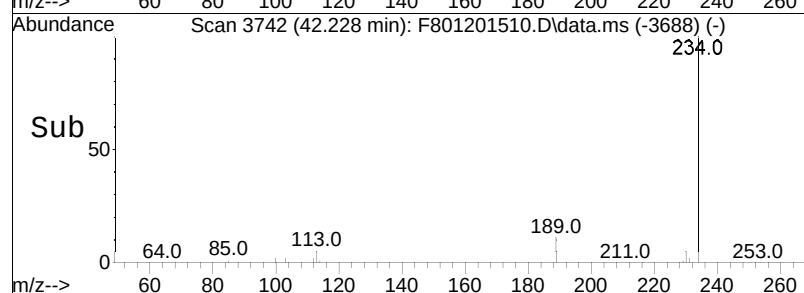
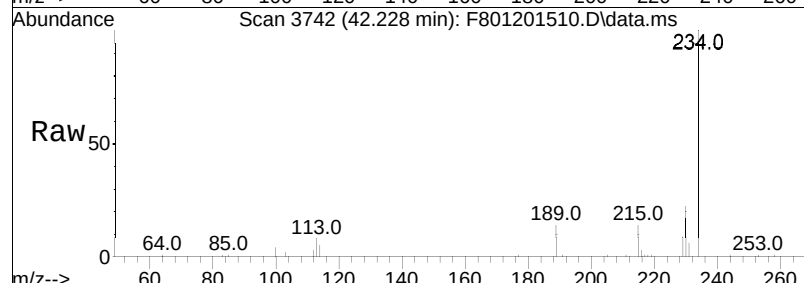
#64
 C4-Fluoranthenes/Pyrenes
 Concen: 347.03 ng/mL M5
 RT: 44.931 min Scan# 4038
 Delta R.T. 0.015 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm
 Tgt Ion:258 Resp: 36778

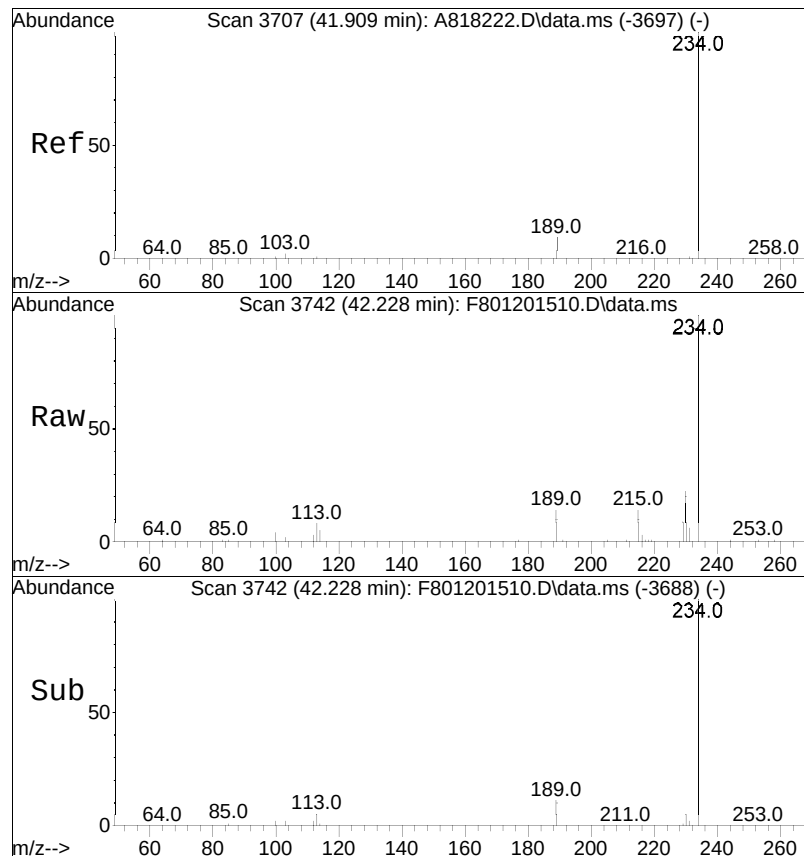




#66
 Naphthobenzothiophene
 Concen: 1052.35 ng/ml M3
 RT: 42.228 min Scan# 3742
 Delta R.T. -0.009 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

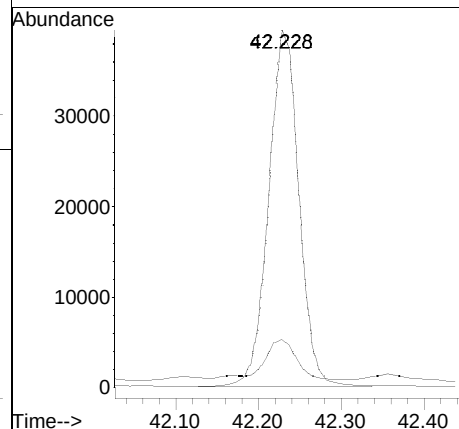
Tgt Ion	Ratio	Lower	Upper
234	100		
189	0.1	6.9	12.9#

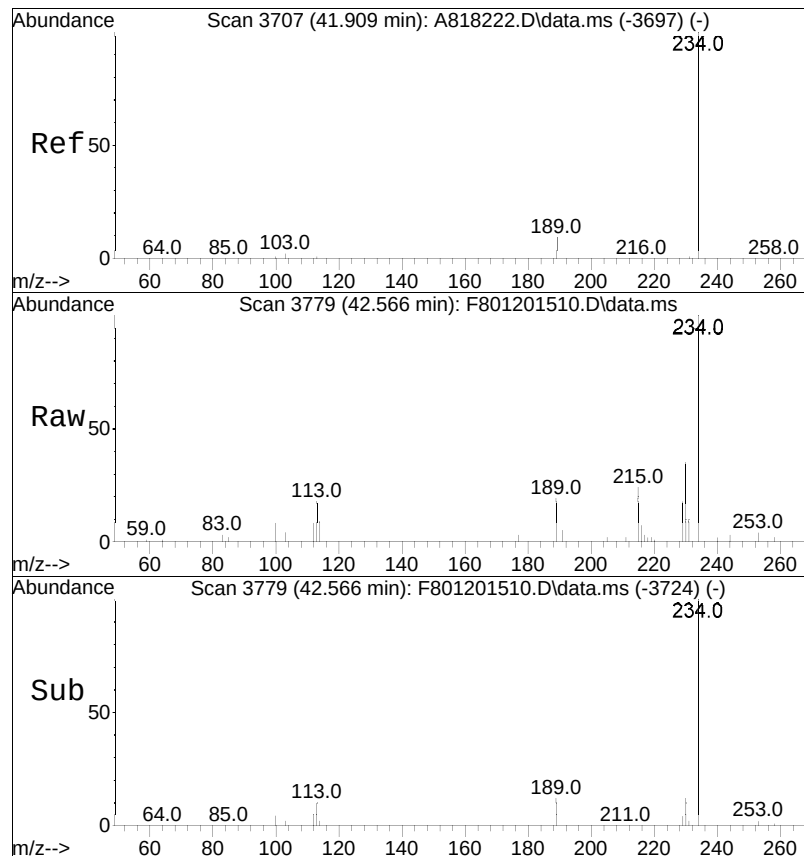




#67
 Naphthobenzothiophene-2,1-D
 Concen: 1053.83 ng/mL M3
 RT: 42.228 min Scan# 3742
 Delta R.T. -0.009 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

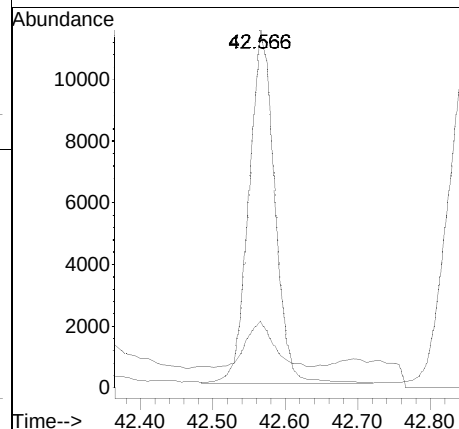
Tgt Ion	Ratio	Lower	Upper
234	100		
189	0.1	6.9	12.9#

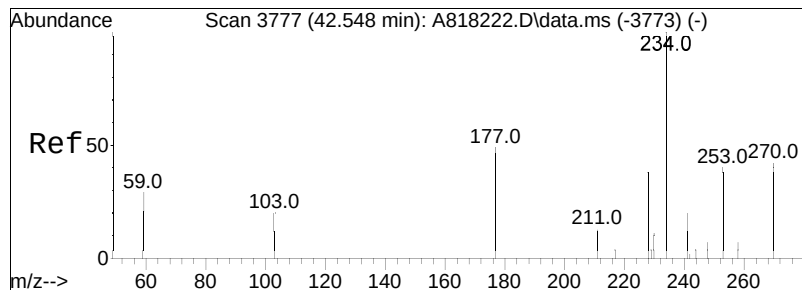




#68
 Naphthobenzothiophene-1,2-D
 Concen: 301.48 ng/mL
 RT: 42.566 min Scan# 3779
 Delta R.T. -0.000 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

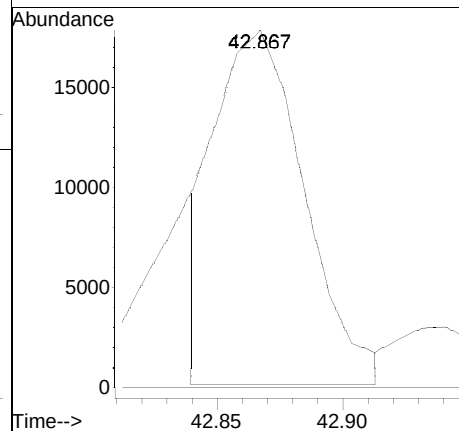
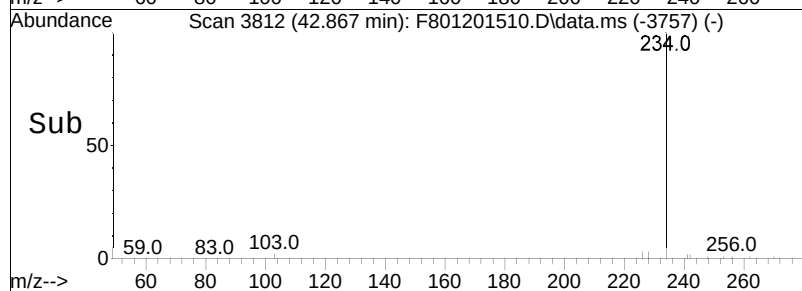
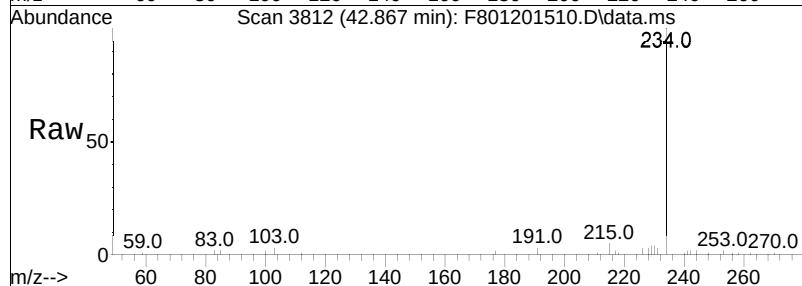
Tgt Ion	Ratio	Lower	Upper
234	100		
189	13.1	81.4	151.2#

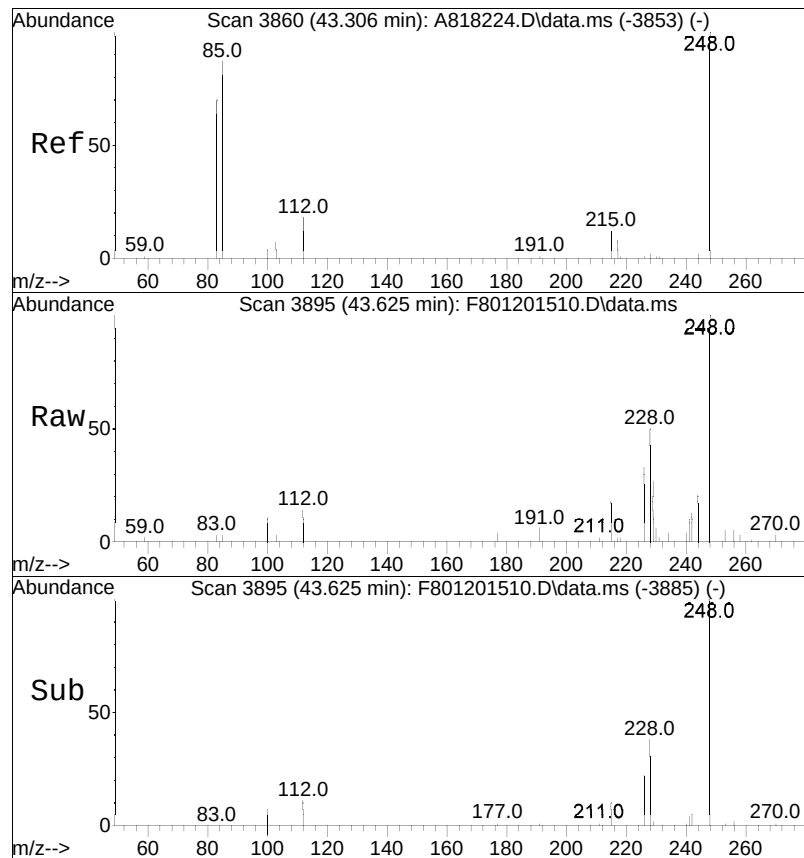




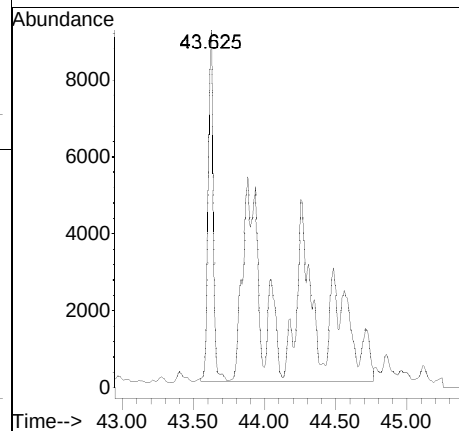
#69
 Naphthobenzothiophene-2,3-D
 Concen: 464.51 ng/mL M3
 RT: 42.867 min Scan# 3812
 Delta R.T. -0.000 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

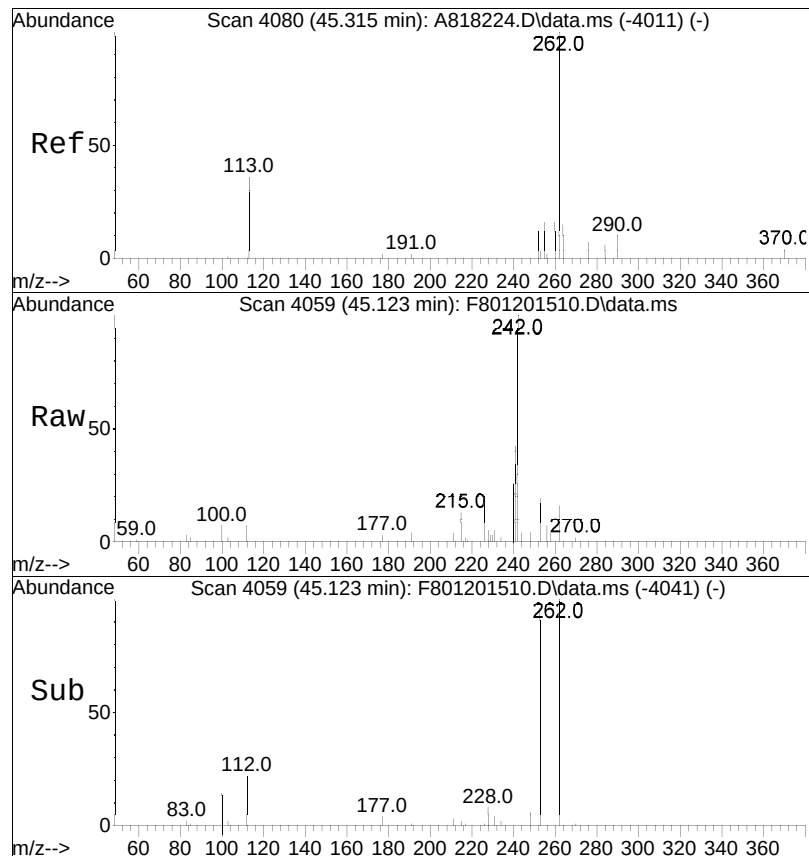
Tgt Ion	Ratio	Lower	Upper
234	100		
189	0.0	0.0	0.0





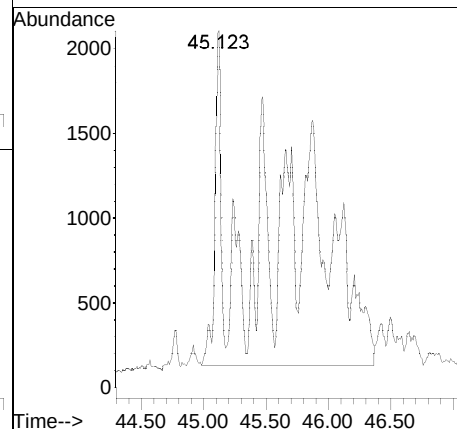
#70
 C1-Naphthobenzothiophenes
 Concen: 1378.86 ng/ml M5
 RT: 43.625 min Scan# 3895
 Delta R.T. 0.015 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm
 Tgt Ion:248 Resp: 128560

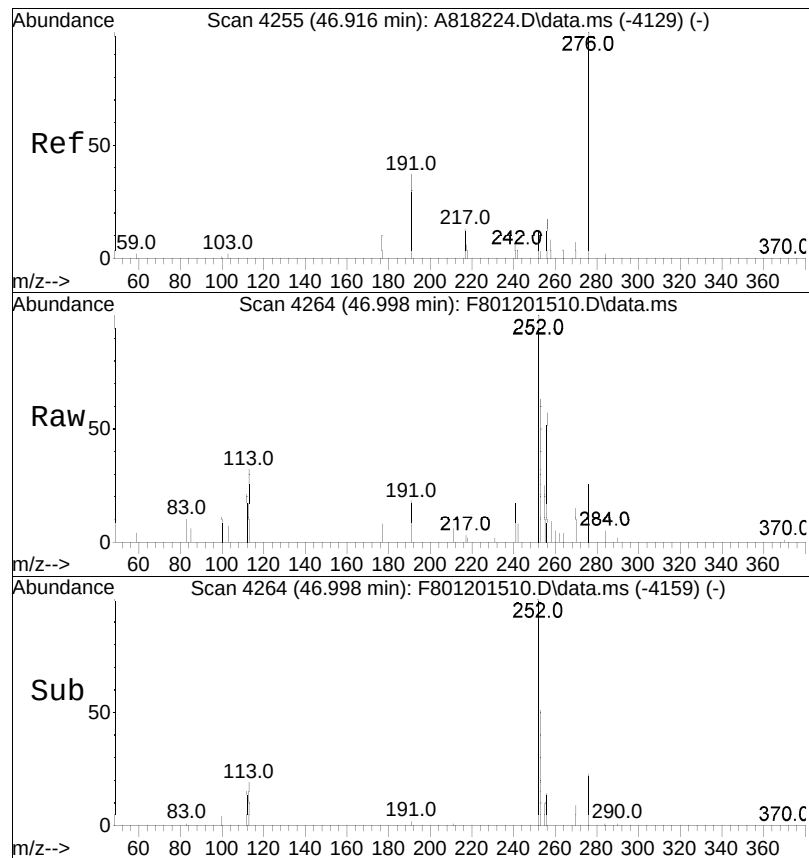




#71
 C2-Naphthobenzothiophenes
 Concen: 577.35 ng/ml M5
 RT: 45.123 min Scan# 4059
 Delta R.T. -0.478 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

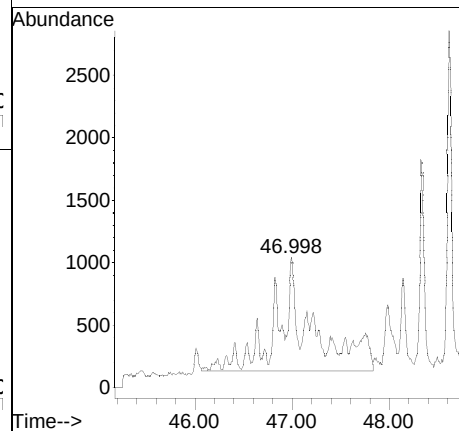
Tgt Ion:262 Resp: 53830

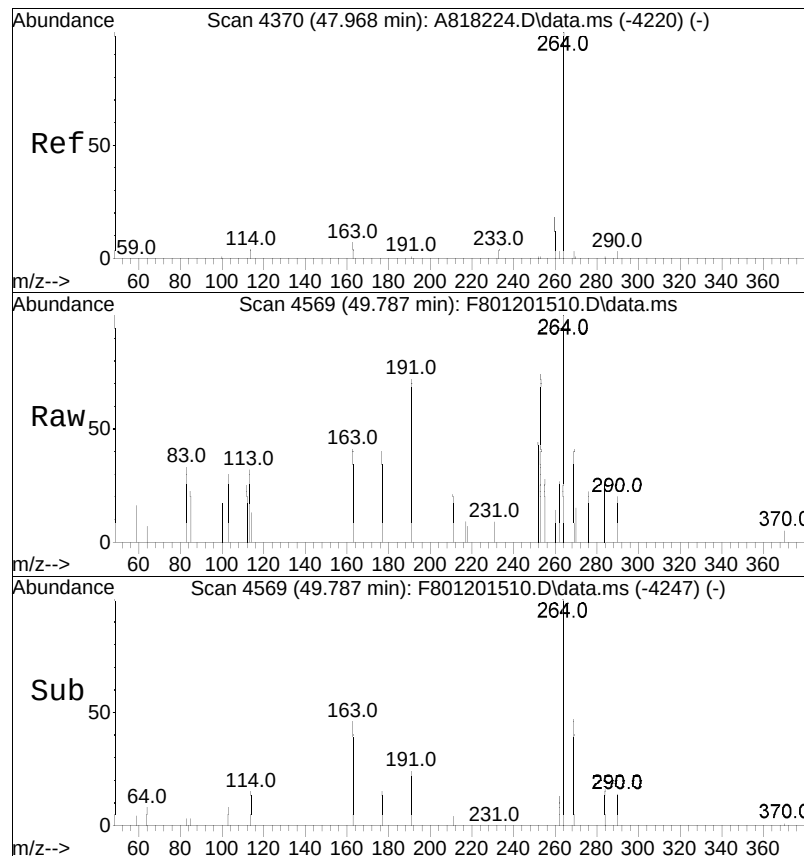




#72
C3-Naphthobenzothiophenes
Concen: 246.64 ng/ml M5
RT: 46.998 min Scan# 4264
Delta R.T. -0.203 min
Lab File: F801201510.D
Acq: 20 Jan 2015 11:37 pm

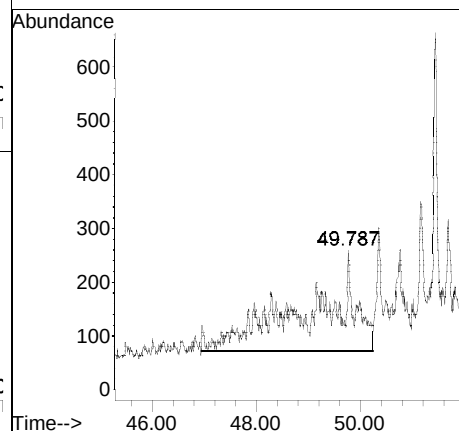
Tgt Ion:276 Resp: 22996

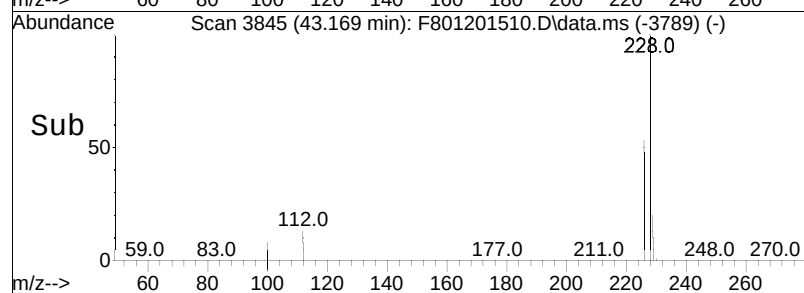
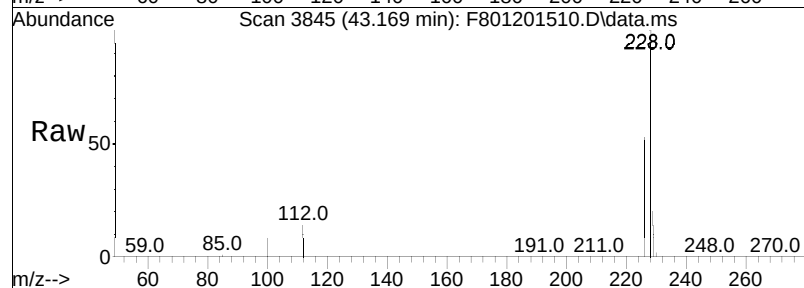
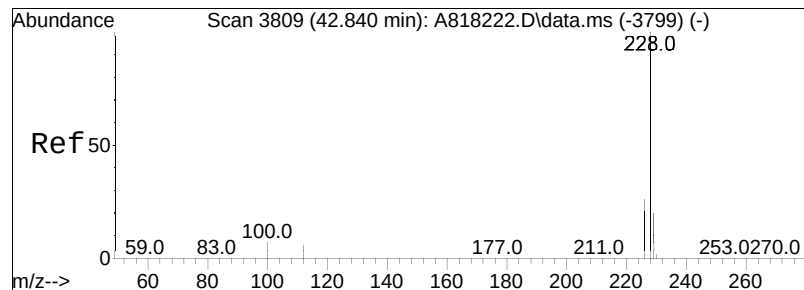




#73
C4-Naphthobenzothiophenes
Concen: 119.42 ng/mL M5
RT: 49.787 min Scan# 4569
Delta R.T. 1.516 min
Lab File: F801201510.D
Acq: 20 Jan 2015 11:37 pm

Tgt Ion:290 Resp: 11134





#75

Benz[a]anthracene

Concen: 7501.44 ng/mL M3

RT: 43.169 min Scan# 3845

Delta R.T. 0.009 min

Lab File: F801201510.D

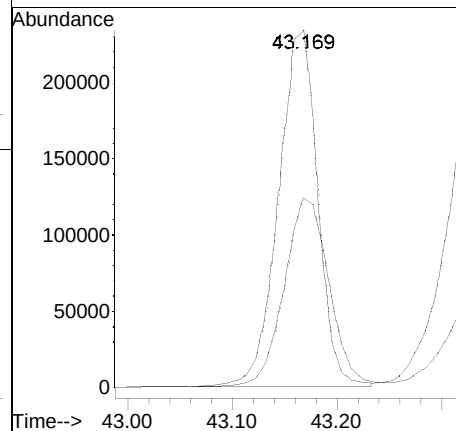
Acq: 20 Jan 2015 11:37 pm

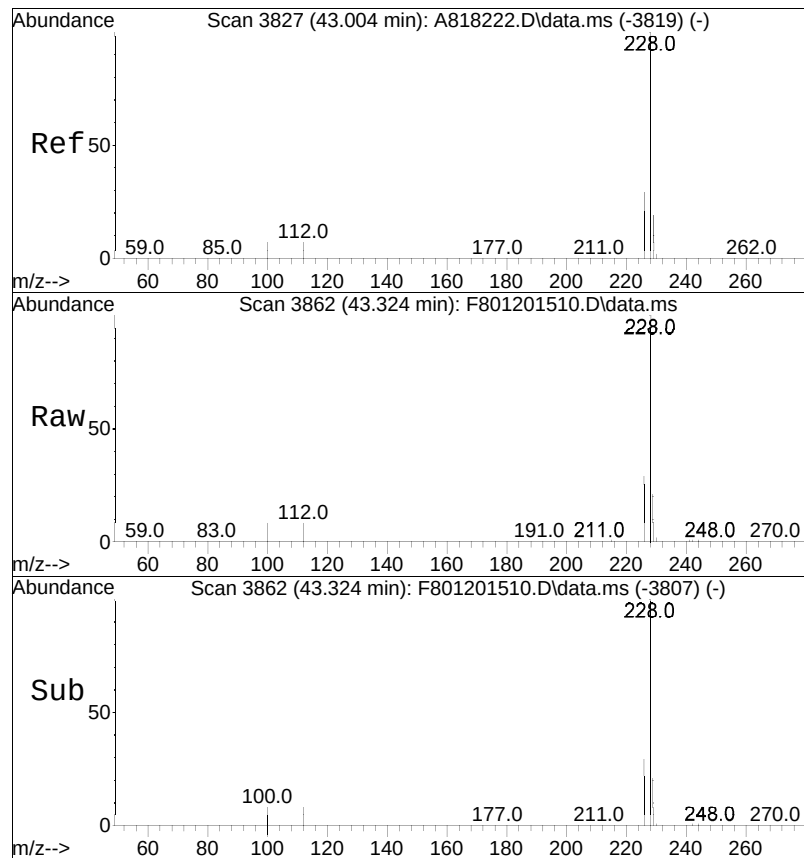
Tgt Ion: 228 Resp: 605687

Ion Ratio Lower Upper

228 100

226 25.4 18.9 35.1





#77

Chrysene/Triphenylene

Concen: 6606.67 ng/mL

RT: 43.324 min Scan# 3862

Delta R.T. 0.000 min

Lab File: F801201510.D

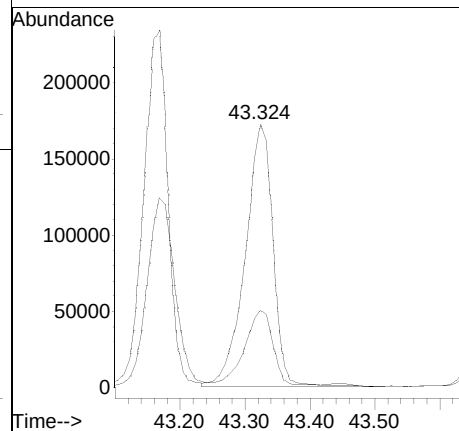
Acq: 20 Jan 2015 11:37 pm

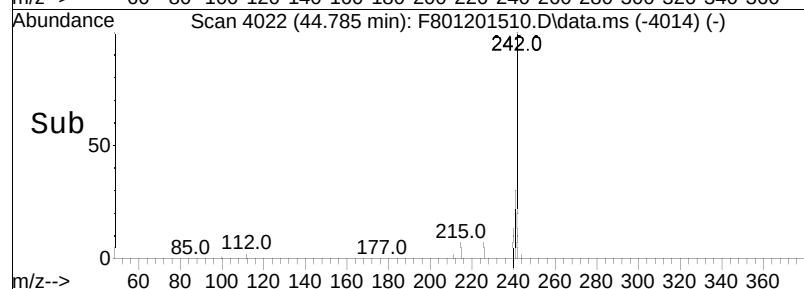
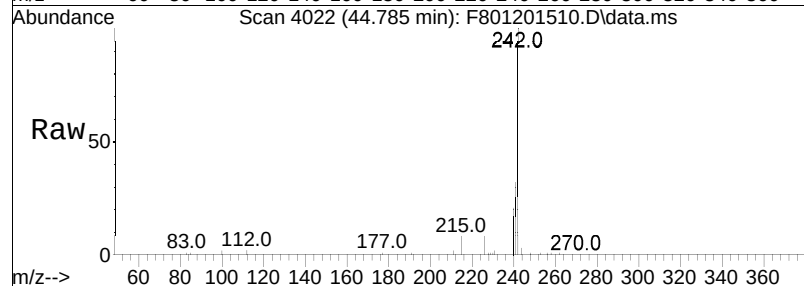
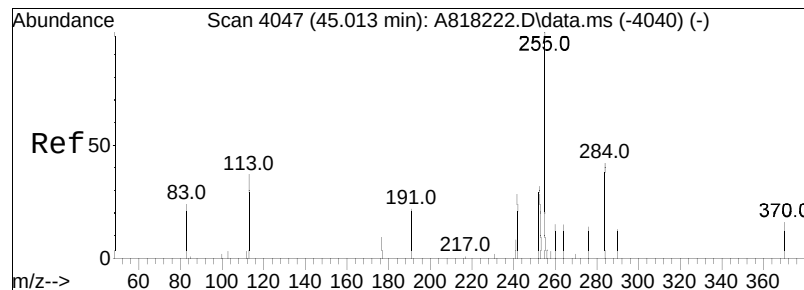
Tgt Ion:228 Resp: 510609

Ion Ratio Lower Upper

228 100

226 30.1 20.8 38.6





#78

C1-Chrysenes

Concen: 5209.84 ng/mL M5

RT: 44.785 min Scan# 4022

Delta R.T. 0.001 min

Lab File: F801201510.D

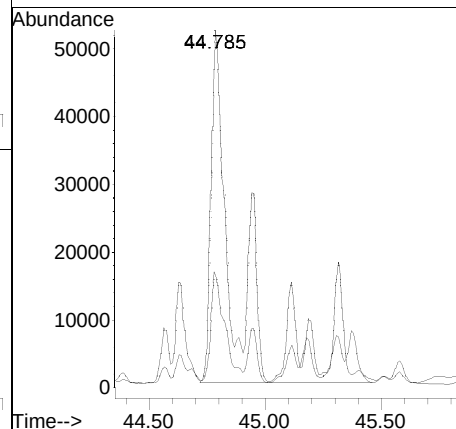
Acq: 20 Jan 2015 11:37 pm

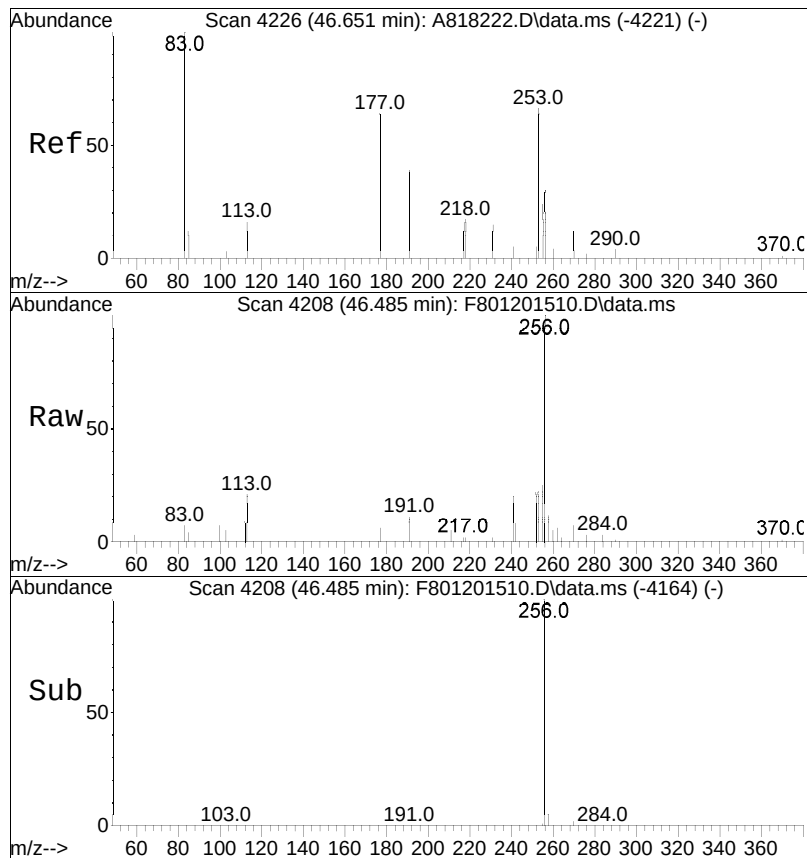
Tgt Ion: 242 Resp: 402652

Ion Ratio Lower Upper

242 100

241 15.1 29.8 55.4#





#79

C2-Chrysenes

Concen: 2101.65 ng/mL M5

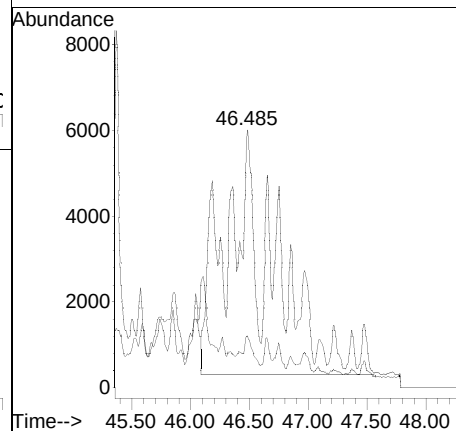
RT: 46.485 min Scan# 4208

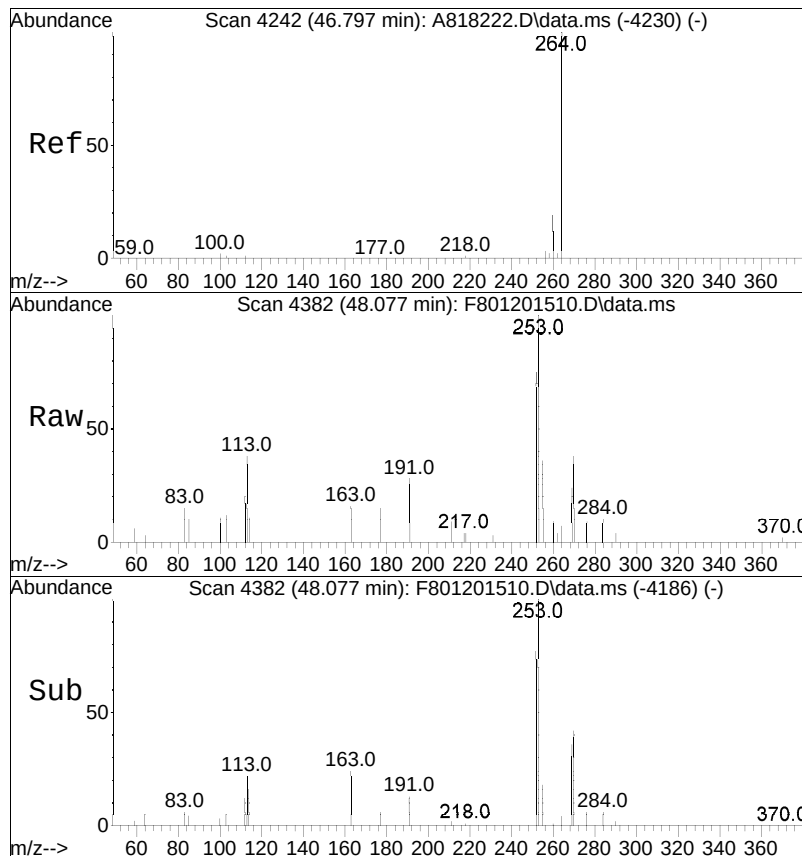
Delta R.T. -0.366 min

Lab File: F801201510.D

Acq: 20 Jan 2015 11:37 pm

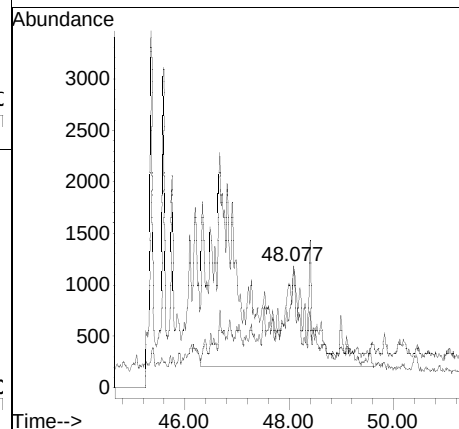
Tgt	Ion	Ratio	Lower	Upper
256	100			
241	0.8	26.9	50.1	

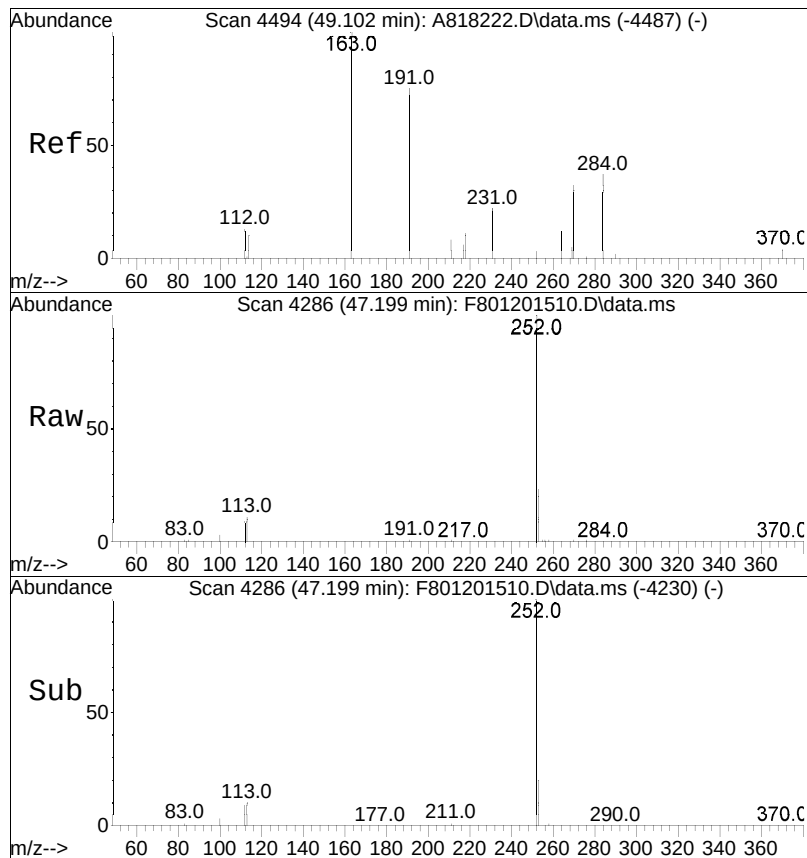




#81
 C3-Chrysenes
 Concen: 773.95 ng/mL M5
 RT: 48.077 min Scan# 4382
 Delta R.T. -1.472 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

Tgt	Ion	Ratio	Lower	Upper
270	100			
255	0.0	39.7	73.7#	





#84

Benzo[b]fluoranthene

Concen: 2614.73 ng/mL

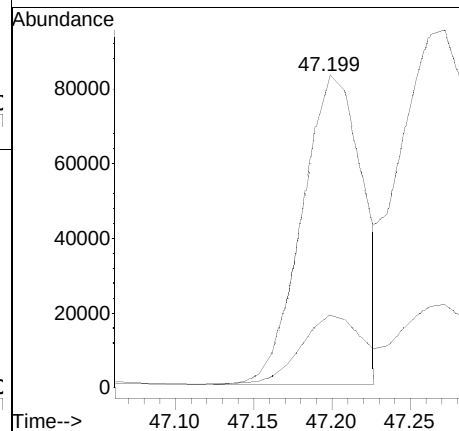
RT: 47.199 min Scan# 4286

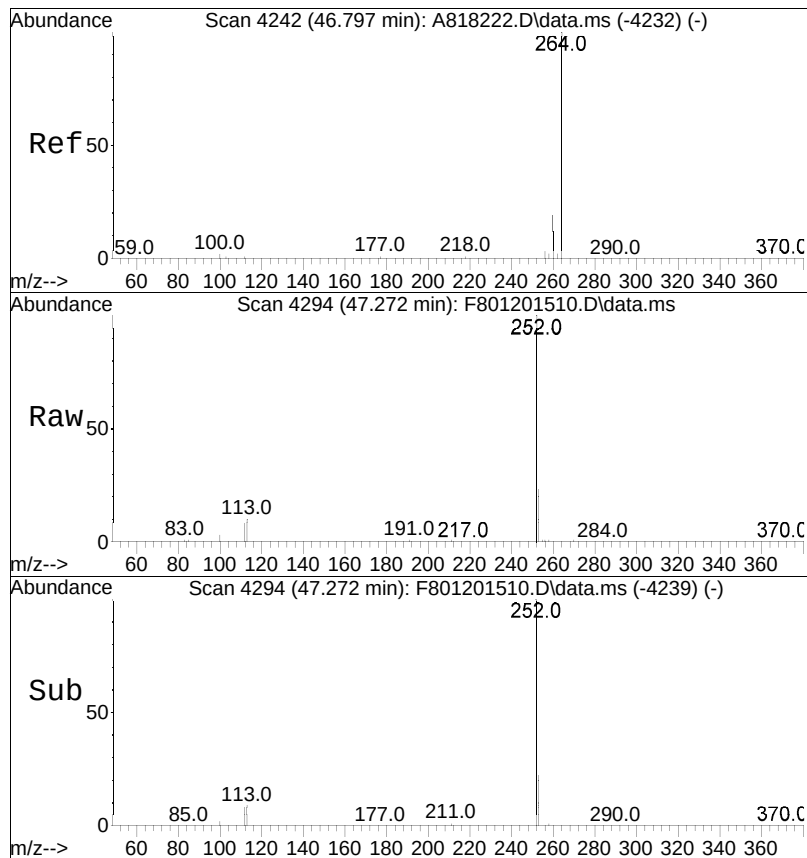
Delta R.T. 0.009 min

Lab File: F801201510.D

Acq: 20 Jan 2015 11:37 pm

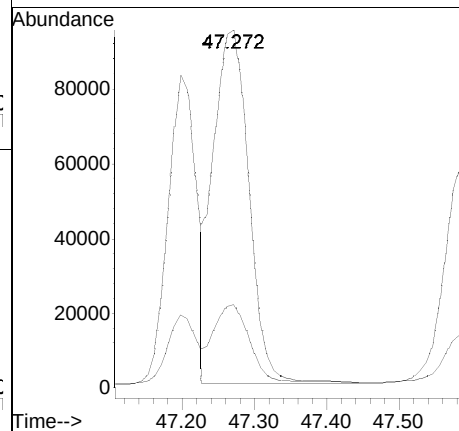
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	22.5	16.9	31.3	

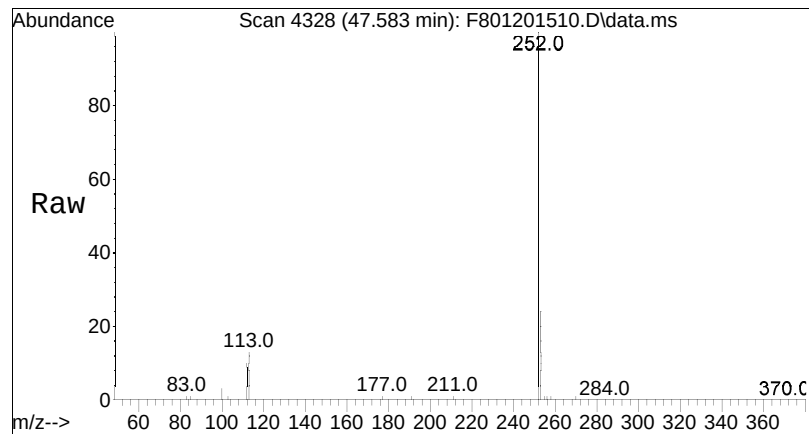




#85
 Benzo[j]+[k]fluoranthene
 Concen: 3846.13 ng/mL
 RT: 47.272 min Scan# 4294
 Delta R.T. 0.000 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

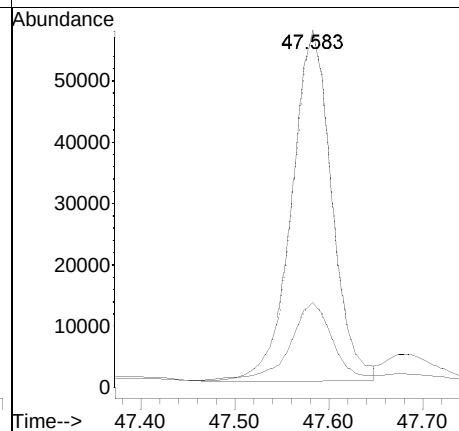
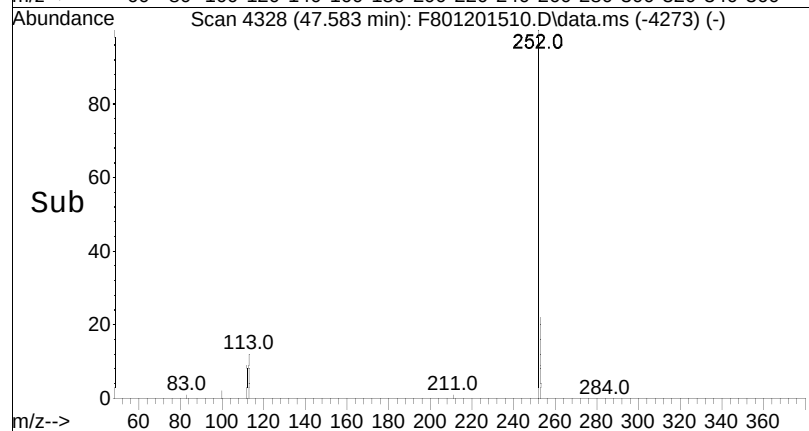
Tgt	Ion	Ratio	Lower	Upper
252	100			
253	21.8	17.1	31.7	

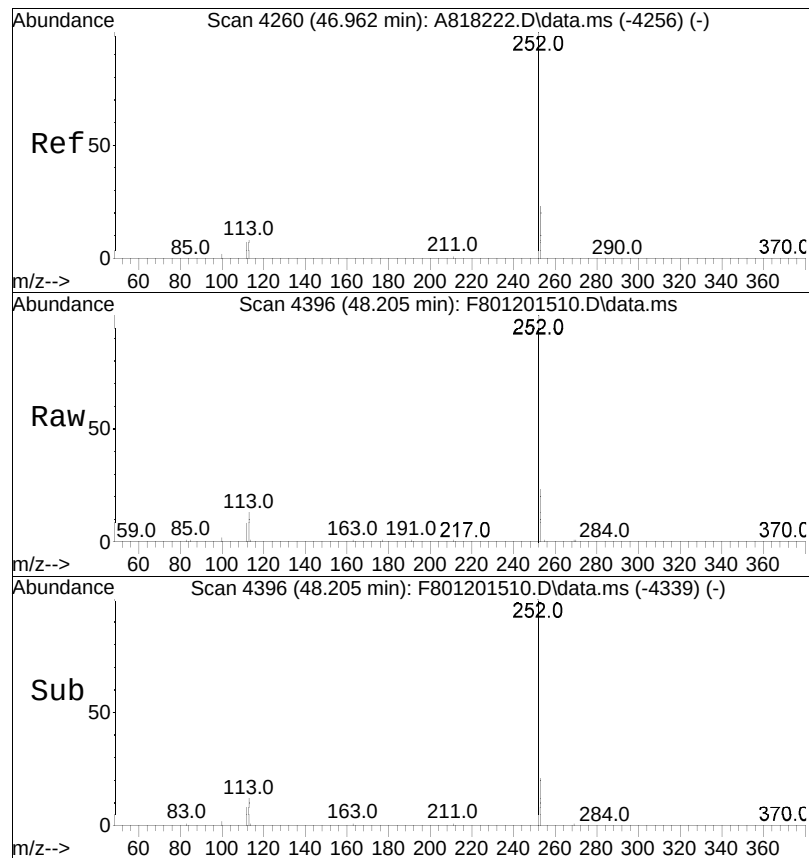




#86
 Benzo[a]fluoranthene
 Concen: 1973.19 ng/mL
 RT: 47.583 min Scan# 4328
 Delta R.T. 0.006 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

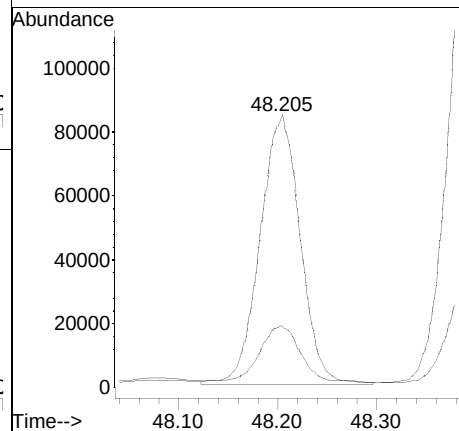
Tgt Ion	Ratio	Lower	Upper
252	100		
253	23.4	17.1	31.7

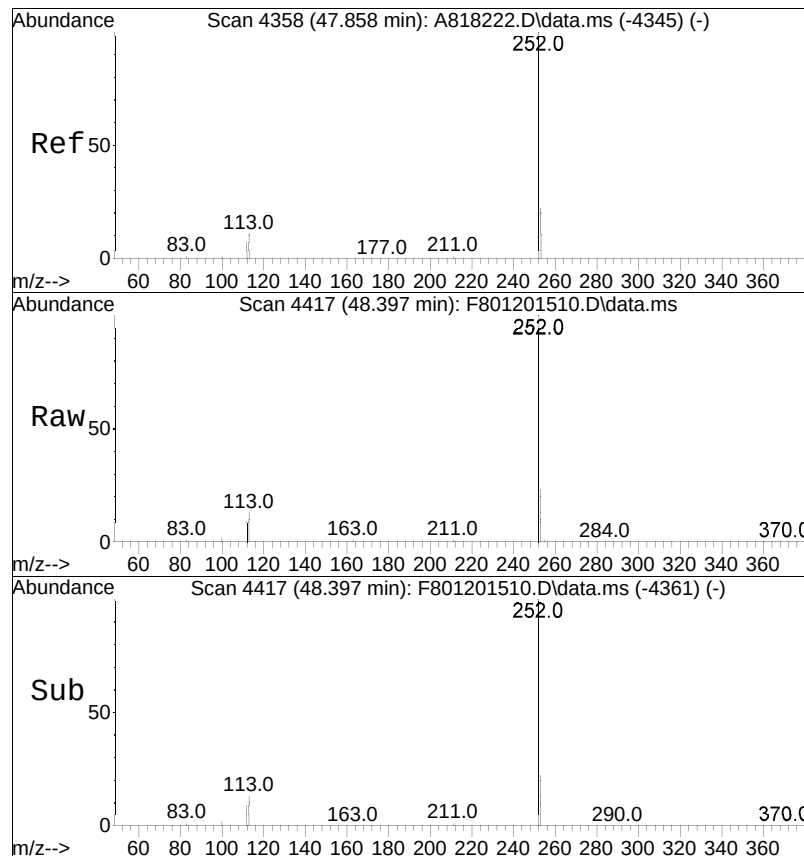




#87
 Benzo[e]pyrene
 Concen: 2726.68 ng/mL
 RT: 48.205 min Scan# 4396
 Delta R.T. 0.018 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

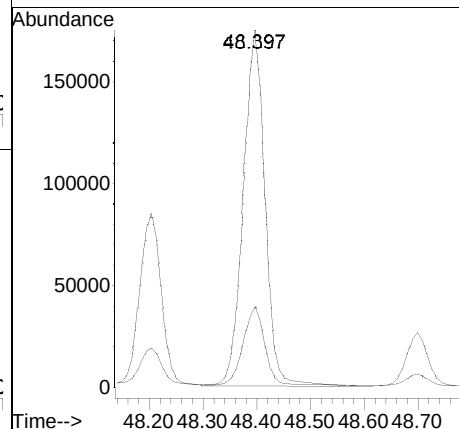
Tgt Ion	Ratio	Lower	Upper
252	100		
253	23.8	17.4	32.4

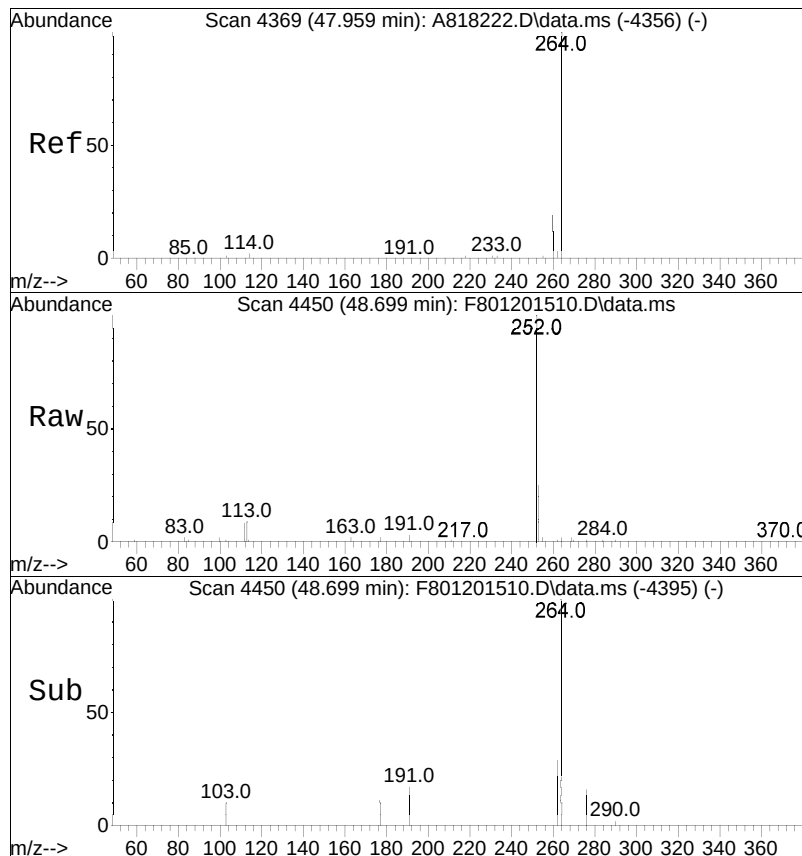




#89
 Benzo[a]pyrene
 Concen: 6117.25 ng/mL
 RT: 48.397 min Scan# 4417
 Delta R.T. 0.009 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

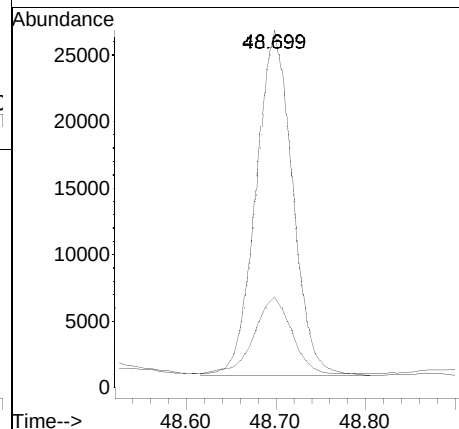
Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.6	18.1	33.7

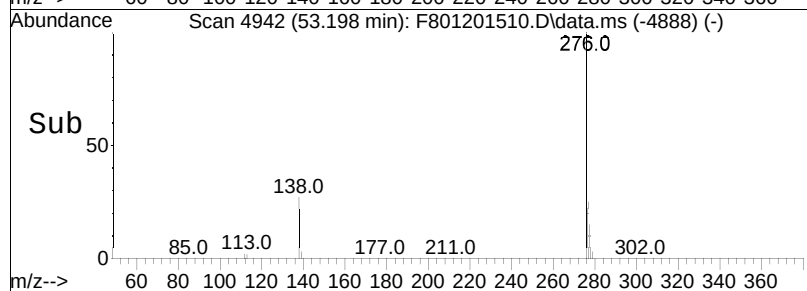
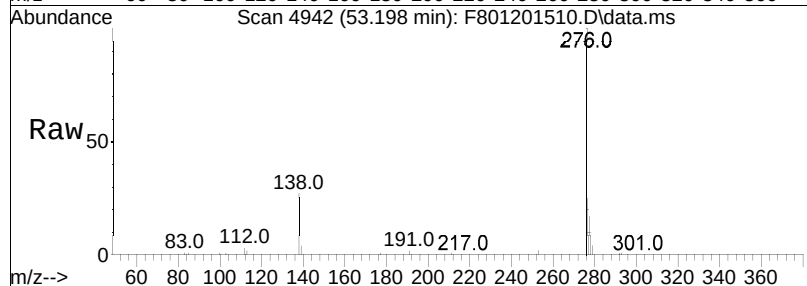
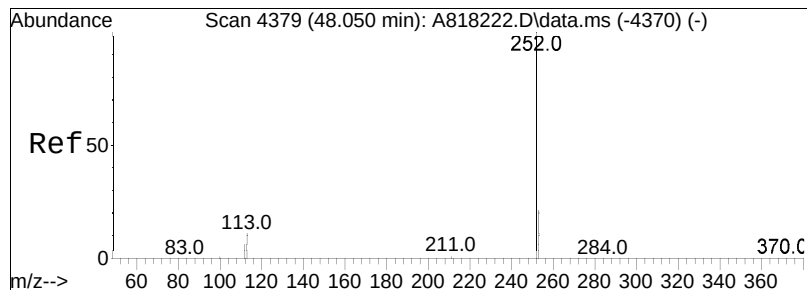




#90
Perylene
Concen: 873.72 ng/mL
RT: 48.699 min Scan# 4450
Delta R.T. 0.000 min
Lab File: F801201510.D
Acq: 20 Jan 2015 11:37 pm

Tgt	Ion	Ratio	Lower	Upper
252	100			
253	23.1	19.2	35.6	





#91

Indeno[1,2,3-cd]pyrene

Concen: 2015.74 ng/mL M4

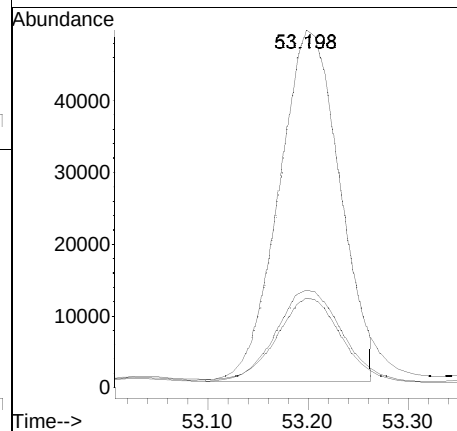
RT: 53.198 min Scan# 4942

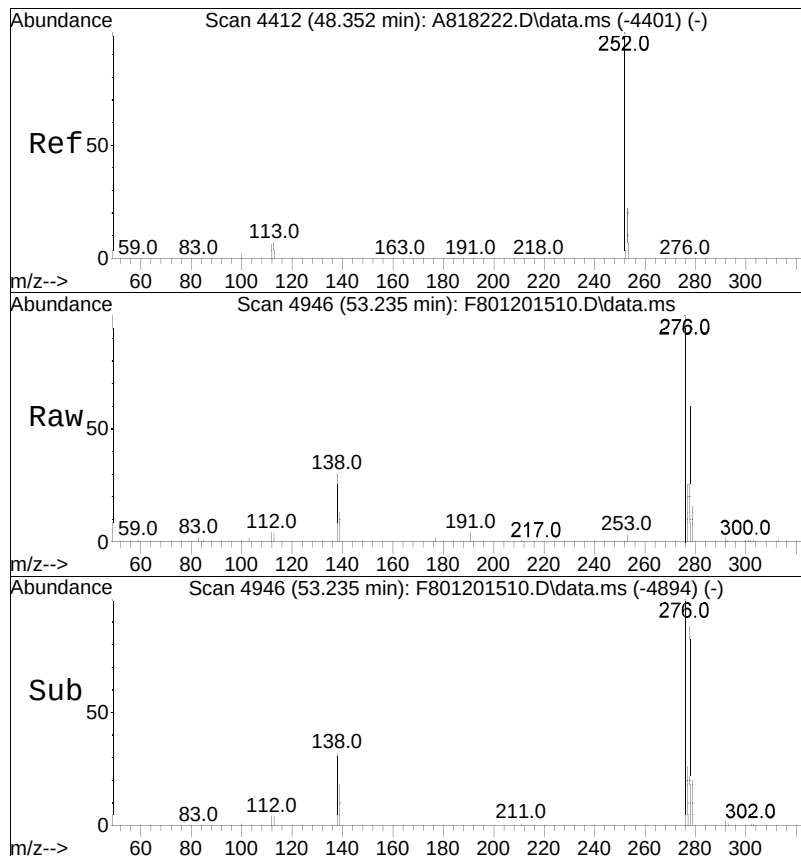
Delta R.T. -0.009 min

Lab File: F801201510.D

Acq: 20 Jan 2015 11:37 pm

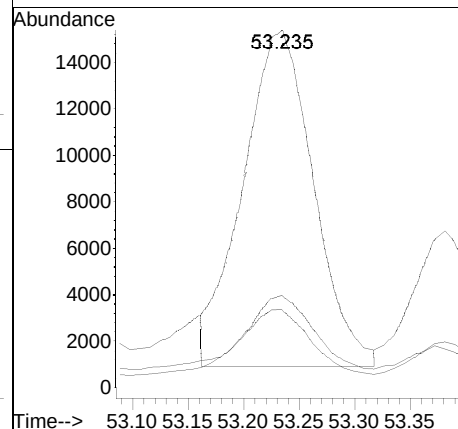
Tgt	Ion:276	Resp:	205622
Ion	Ratio	Lower	Upper
276	100		
138	29.4	21.6	40.2
277	26.3	17.5	32.5

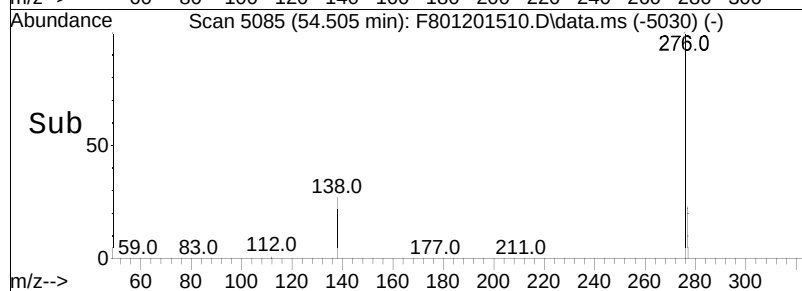
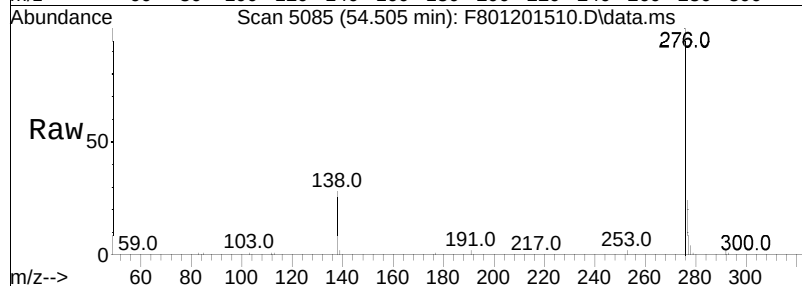
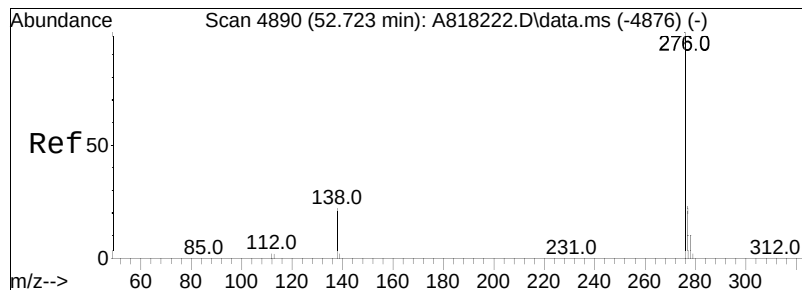




#92
 Dibenz[ah]+[ac]anthracene
 Concen: 740.31 ng/mL M4
 RT: 53.235 min Scan# 4946
 Delta R.T. -0.027 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

Tgt Ion:	278	Resp:	63888
Ion Ratio	Lower	Upper	
278	100		
139	21.4	16.6	30.8
279	24.0	17.1	31.9





#93

Benzo[g,h,i]perylene

Concen: 2009.52 ng/mL

RT: 54.505 min Scan# 5085

Delta R.T. 0.000 min

Lab File: F801201510.D

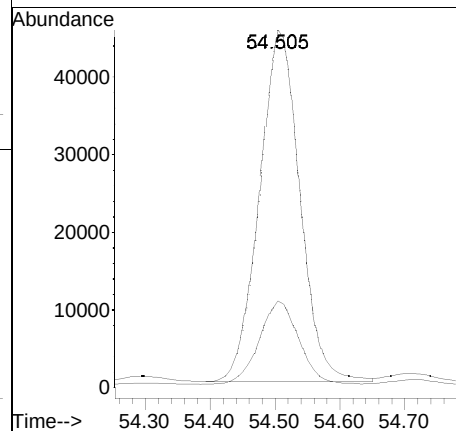
Acq: 20 Jan 2015 11:37 pm

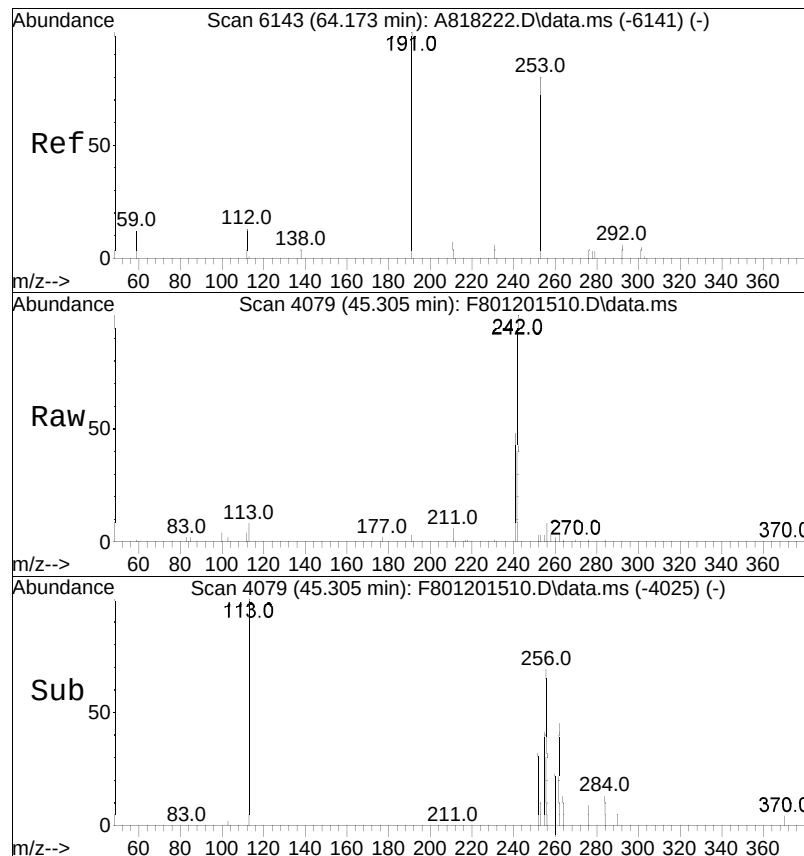
Tgt Ion: 276 Resp: 194510

Ion Ratio Lower Upper

276 100

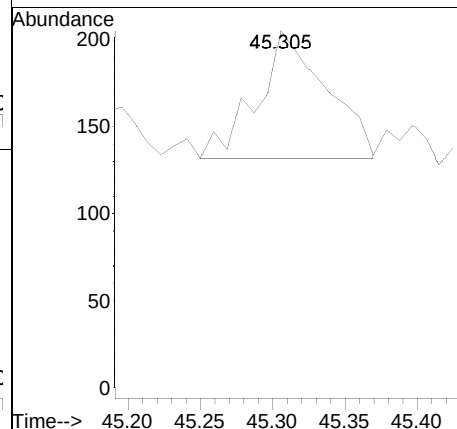
277 23.1 16.4 30.6





#130
 13b(H),17a(H)-20S-Diacholestan
 Concen: 18.49 ng/ml
 RT: 45.305 min Scan# 4079
 Delta R.T. -0.006 min
 Lab File: F801201510.D
 Acq: 20 Jan 2015 11:37 pm

Tgt Ion:217 Resp: 240



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2015\JAN15\JAN20\
 Data File : F801201513.D
 Acq On : 21 Jan 2015 10:48 am
 Operator : PAH8:AC
 Sample : L1501041-01D, 32, 20
 Misc : WG758803, WG756707
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 28 12:18:01 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Sun Jan 25 09:33:30 2015
 Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	26.803	164	29792	500.000	ng/mL	0.00
74) Chrysene-d12	43.223	240	41244	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	19.850	136	1715	14.227	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.42%#		
42) Phenanthrene-d10	32.661	188	1104	12.338	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.23%#		
83) Benzo[b]fluoranthene-d12	47.116	264	1053	13.087	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.31%#		
88) Benzo[a]pyrene-d12	48.296	264	885	12.501	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.25%#		
129) 5B(H)Cholane - Surr	43.817	217	196	12.866	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.29%#		
Target Compounds						
10) Naphthalene	19.923	128	2065254	15393.284	ng/mL	Qvalue 100
11) C1-Naphthalenes	22.606	142	774985M5	5776.318	ng/mL	
26) Acenaphthylene	26.192	152	301387M4	2400.725	ng/mL	
43) Phenanthrene	32.743	178	270300	2429.975	ng/mL	99

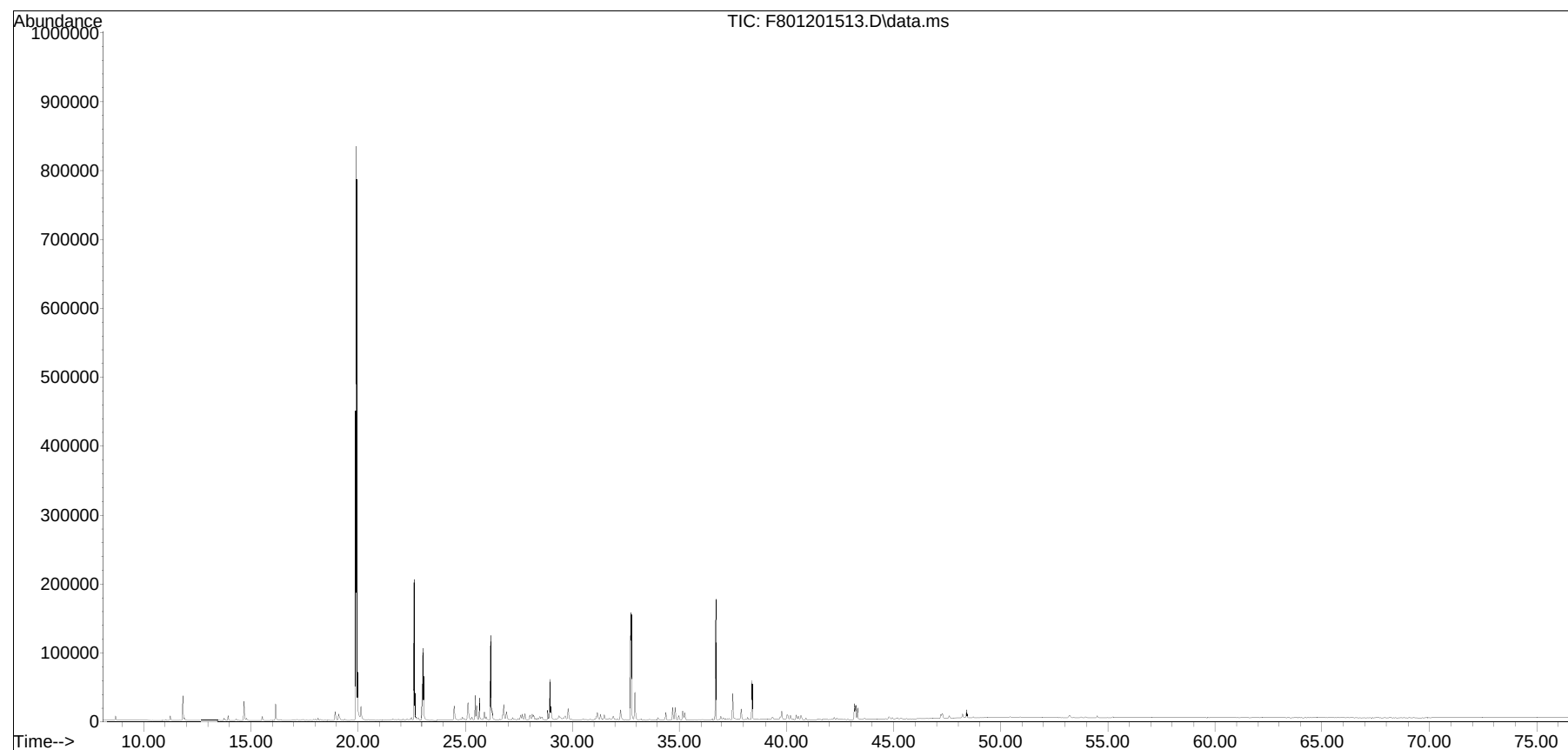
(#)= qualifier out of range (m) = manual integration (+) = signals summed						

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2015\JAN15\JAN20\
Data File : F801201513.D
Acq On : 21 Jan 2015 10:48 am
Operator : PAH8:AC
Sample : L1501041-01D,32,20
Misc : WG758803,WG756707
ALS Vial : 13 Sample Multiplier: 1

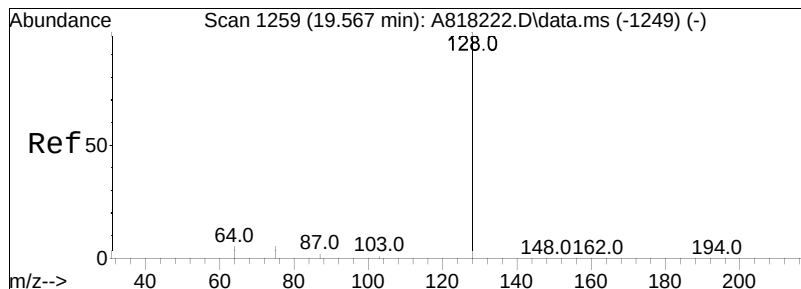
Quant Time: Jan 28 12:18:01 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Sun Jan 25 09:33:30 2015
Response via : Initial Calibration

Sub List : ALKPAHURS - ALKPAH and BIO



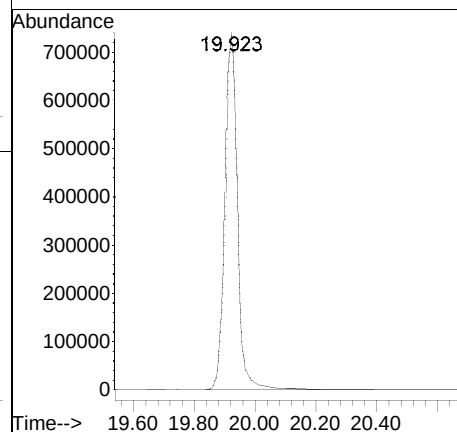
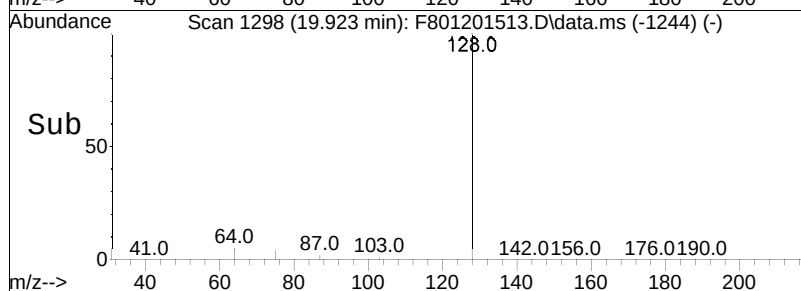
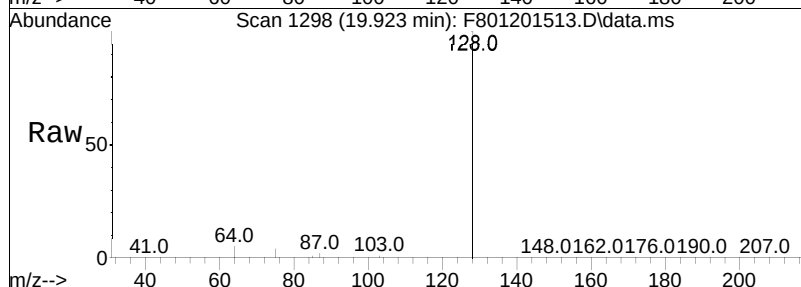
PAH8122314.M Wed Jan 28 12:29:54 2015

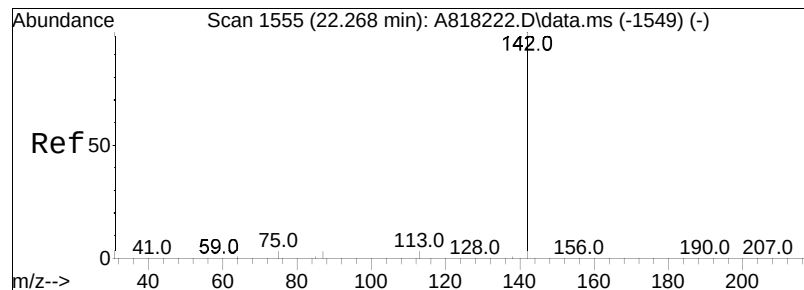
Page 2



#10
Naphthalene
Concen: 15393.28 ng/mL
RT: 19.923 min Scan# 1298
Delta R.T. -0.009 min
Lab File: F801201513.D
Acq: 21 Jan 2015 10:48 am

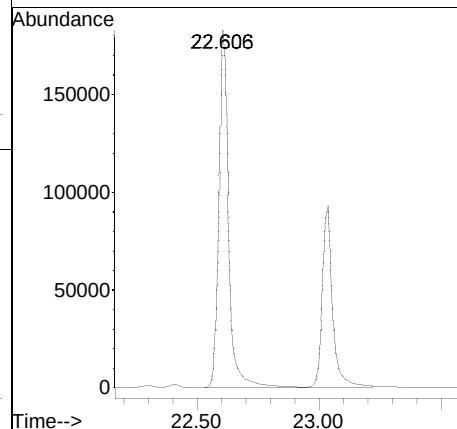
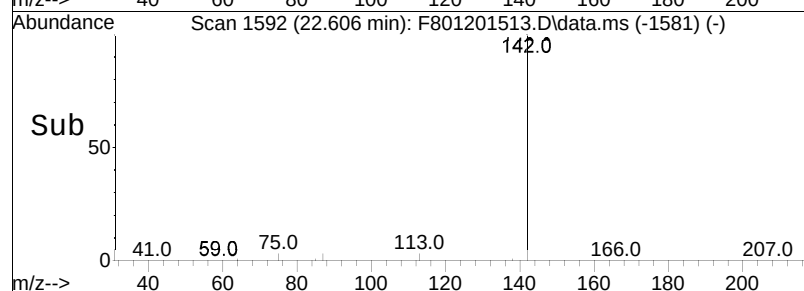
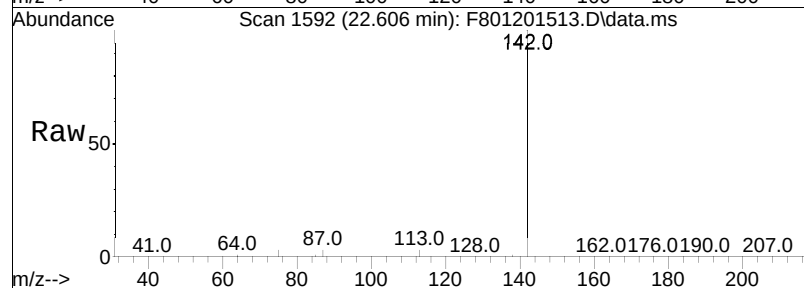
Tgt Ion:128 Resp: 2065254

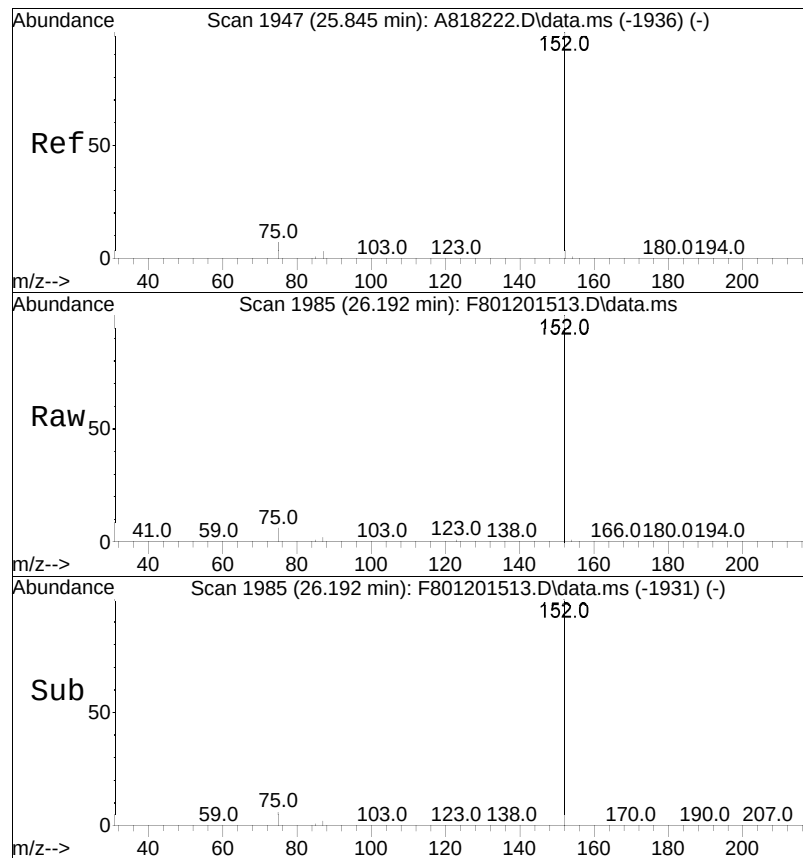




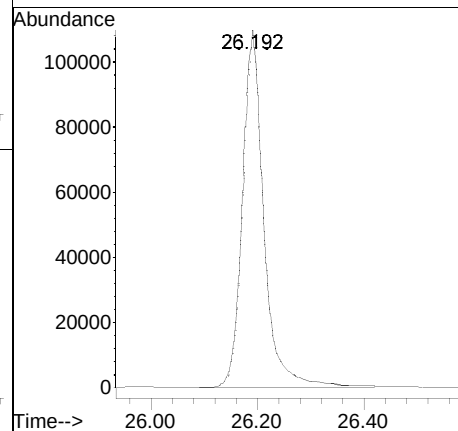
#11
 C1-Naphthalenes
 Concen: 5776.32 ng/mL M5
 RT: 22.606 min Scan# 1592
 Delta R.T. -0.002 min
 Lab File: F801201513.D
 Acq: 21 Jan 2015 10:48 am

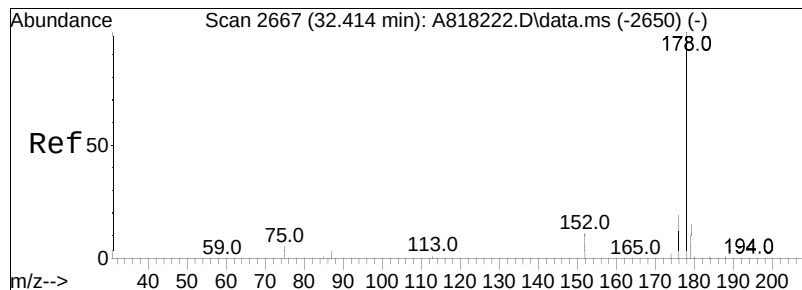
Tgt Ion:142 Resp: 774985





#26
Acenaphthylene
Concen: 2400.73 ng/mL M4
RT: 26.192 min Scan# 1985
Delta R.T. -0.009 min
Lab File: F801201513.D
Acq: 21 Jan 2015 10:48 am
Tgt Ion:152 Resp: 301387





#43

Phenanthrene

Concen: 2429.97 ng/mL

RT: 32.743 min Scan# 2703

Delta R.T. -0.018 min

Lab File: F801201513.D

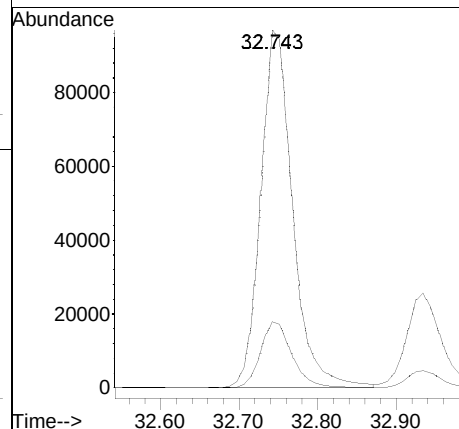
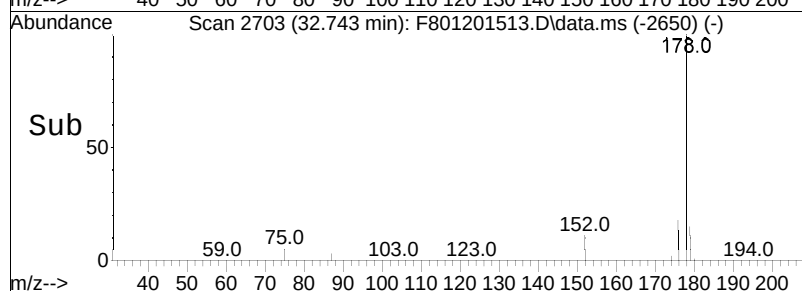
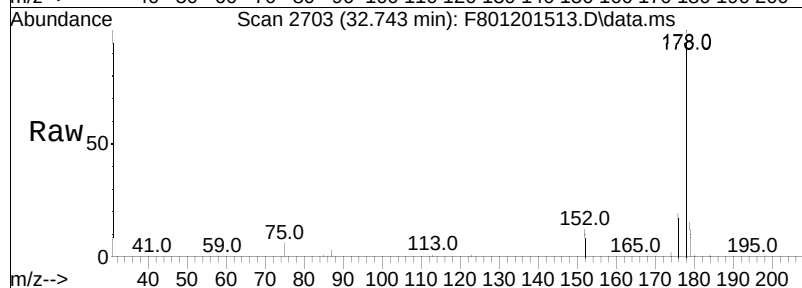
Acq: 21 Jan 2015 10:48 am

Tgt Ion:178 Resp: 270300

Ion Ratio Lower Upper

178 100

176 18.6 13.2 24.6



Semivolatiles Standards Data

Initial Calibration

6B
SEMIVOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1501041

Instrument ID: PAH8

Calibration Date(s): 12/23/14

12/23/14

Calibration Times: 14:50

23:29

Calibration Files

10 =F812221409.D 25 =F812221403.D 100 =F812221404.D 500 =F812221405.D 5000=F812221406.D
1e4 =F812221407.D 2e4 =F812221408.D

Compound	10	25	100	500	5000	1e4	2e4	Avg	%RSD
1) i Acenaphthene-d10	-----ISTD-----								
2) t 2-butoxyethanol	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.00
3) A1 trans-Decalin	0.470	0.454	0.478	0.433	0.430	0.445	0.418	0.447	4.87
4) t cis-Decalin	0.353	0.353	0.341	0.331	0.329	0.340	0.320	0.338	3.66
5) A2 C1-Decalins	0.470	0.454	0.478	0.433	0.430	0.445	0.418	0.447	4.87
6) A2 C2-Decalins	0.470	0.454	0.478	0.433	0.430	0.445	0.418	0.447	4.87
7) A2 C3-Decalins	0.470	0.454	0.478	0.433	0.430	0.445	0.418	0.447	4.87
8) A2 C4-Decalins	0.470	0.454	0.478	0.433	0.430	0.445	0.418	0.447	4.87
9) s Naphthalene-d8	2.225	2.215	2.246	2.100	1.900	1.847	1.629	2.023	11.69
10) A1 Naphthalene	2.463	2.543	2.619	2.481	2.022	1.926	1.708	2.252	15.93
11) A2 C1-Naphthalenes	2.463	2.543	2.619	2.481	2.022	1.926	1.708	2.252	15.93
12) A2 C2-Naphthalenes	2.463	2.543	2.619	2.481	2.022	1.926	1.708	2.252	15.93
13) A2 C3-Naphthalenes	2.463	2.543	2.619	2.481	2.022	1.926	1.708	2.252	15.93
14) A2 C4-Naphthalenes	2.463	2.543	2.619	2.481	2.022	1.926	1.708	2.252	15.93
15) t Glycol Ether I	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.00
16) t 2-Methylnaphthalene	1.562	1.480	1.532	1.499	1.424	1.384	1.259	1.449	7.14
17) t 1-Methylnaphthalene	1.486	1.483	1.473	1.448	1.311	1.275	1.163	1.377	9.29
18) A1 Benzothiophene	2.131	2.083	2.109	2.014	1.712	1.657	1.490	1.885	13.77
19) A2 C1-Benzo(b)thi	2.131	2.083	2.109	2.014	1.712	1.657	1.490	1.885	13.77
20) A2 C2-Benzo(b)thi	2.131	2.083	2.109	2.014	1.712	1.657	1.490	1.885	13.77
21) A2 C3-Benzo(b)thi	2.131	2.083	2.109	2.014	1.712	1.657	1.490	1.885	13.77
22) A2 C4-Benzo(b)thi	2.131	2.083	2.109	2.014	1.712	1.657	1.490	1.885	13.77
23) t Biphenyl	1.855	1.880	1.906	1.844	1.655	1.609	1.453	1.743	9.87
24) t 2,6-Dimethylnaphthalene	1.295	1.247	1.285	1.259	1.174	1.150	1.054	1.209	7.23
25) t Dibenzofuran	1.904	1.909	1.960	1.917	1.664	1.624	1.475	1.779	10.61
26) t Acenaphthylene	2.191	2.175	2.239	2.262	2.051	2.006	1.824	2.107	7.42
27) t Acenaphthene	1.377	1.434	1.413	1.382	1.201	1.160	1.045	1.287	11.72
28) t 2,3,5-Trimethylnaphthalen	1.076	1.055	1.059	1.052	0.963	0.958	0.879	1.006	7.29
29) A1 Fluorene	1.432	1.385	1.497	1.480	1.326	1.318	1.208	1.378	7.43
30) A2 C1-Fluorenes	1.432	1.385	1.497	1.480	1.326	1.318	1.208	1.378	7.43
31) A2 C2-Fluorenes	1.432	1.385	1.497	1.480	1.326	1.318	1.208	1.378	7.43
32) A2 C3-Fluorenes	1.432	1.385	1.497	1.480	1.326	1.318	1.208	1.378	7.43
33) A1 Dibenzothiophene	2.009	1.958	2.043	2.052	1.868	1.865	1.688	1.926	6.74
34) A2 4-Methyldibenz	2.009	1.958	2.043	2.052	1.868	1.865	1.688	1.926	6.74
35) A2 2/3-Methyldibe	2.009	1.958	2.043	2.052	1.868	1.865	1.688	1.926	6.74
36) A2 1-Methyldibenz	2.009	1.958	2.043	2.052	1.868	1.865	1.688	1.926	6.74
37) A2 OTP	2.009	1.958	2.043	2.052	1.868	1.865	1.688	1.926	6.74
38) A2 C1-Dibenzothio	2.009	1.958	2.043	2.052	1.868	1.865	1.688	1.926	6.74
39) A2 C2-Dibenzothio	2.009	1.958	2.043	2.052	1.868	1.865	1.688	1.926	6.74
40) A2 C3-Dibenzothio	2.009	1.958	2.043	2.052	1.868	1.865	1.688	1.926	6.74
41) A2 C4-Dibenzothio	2.009	1.958	2.043	2.052	1.868	1.865	1.688	1.926	6.74
42) s Phenanthrene-d10	1.607	1.625	1.654	1.534	1.390	1.402	1.300	1.502	9.17
43) A1 Phenanthrene	2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60

6B
SEMIVOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1501041

Instrument ID: PAH8

Calibration Date(s): 12/23/14

12/23/14

Calibration Times: 14:50

23:29

Compound	10	25	100	500	5000	1e4	2e4	Avg	%RSD
44) A2 3-Methylphenan	2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60
45) A2 2-Methylphenan	2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60
46) A2 2-Methylanthra	2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60
47) A2 9/4-Methylphen	2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60
48) A2 1-Methylphenan	2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60
49) A2 C1-Phenanthren	2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60
50) A2 C2-Phenanthren	2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60
51) A2 5AA IS BKGD	2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60
52) A2 C3-Phenanthren	2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60
53) A2 C4-Phenanthren	2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60
54) t Retene	0.427	0.409	0.428	0.449	0.455	0.474	0.438	0.440	4.86
55) t Anthracene	1.810	1.827	1.950	1.942	1.544	1.553	1.346	1.710	13.50
56) t Carbazole	1.909	1.805	1.845	1.955	1.793	1.822	1.673	1.829	4.92
57) t 1-Methylphenanthrene	1.250	1.330	1.324	1.369	1.311	1.336	1.224	1.306	3.92
58) A1 Fluoranthene	1.836	1.887	1.942	2.025	1.902	1.924	1.742	1.894	4.66
59) t Benzo(b)fluorene	1.101	1.079	1.091	1.159	1.095	1.119	1.035	1.097	3.45
60) A1 Pyrene	1.869	1.942	1.947	2.220	2.017	2.035	1.855	1.984	6.27
61) A2 C1-Fluoranthen	1.869	1.942	1.947	2.220	2.017	2.035	1.855	1.984	6.27
62) A2 C2-Fluoranthen	1.869	1.942	1.947	2.220	2.017	2.035	1.855	1.984	6.27
63) A2 C3-Fluoranthen	1.869	1.942	1.947	2.220	2.017	2.035	1.855	1.984	6.27
64) A2 C4-Fluoranthen	1.869	1.942	1.947	2.220	2.017	2.035	1.855	1.984	6.27
65) t Bis-(2-ethylhe	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.00
66) A1 Naphthobenzothiophene	1.714	1.706	1.766	1.813	1.765	1.807	1.646	1.745	3.43
67) A2 Naphthobenzothiophene-2,1	1.714	1.706	1.766	1.813	1.765	1.807	1.646	1.745	3.43
68) A2 Naphthobenzoth	1.714	1.706	1.766	1.813	1.765	1.807	1.646	1.745	3.43
69) A2 Naphthobenzoth	1.714	1.706	1.766	1.813	1.765	1.807	1.646	1.745	3.43
70) A2 C1-Naphthobenz	1.714	1.706	1.766	1.813	1.765	1.807	1.646	1.745	3.43
71) A2 C2-Naphthobenz	1.714	1.706	1.766	1.813	1.765	1.807	1.646	1.745	3.43
72) A2 C3-Naphthobenz	1.714	1.706	1.766	1.813	1.765	1.807	1.646	1.745	3.43
73) A2 C4-Naphthobenz	1.714	1.706	1.766	1.813	1.765	1.807	1.646	1.745	3.43
74) i Chrysene-d12	-----ISTD-----								
75) t Benz[a]anthracene	1.140	1.094	1.135	1.144	1.200	1.209	1.122	1.149	3.59
76) A1 Chrysene	1.100	1.102	1.117	1.137	1.099	1.103	1.040	1.100	2.69
77) A2 Chrysene/Triphenylene	1.100	1.102	1.117	1.137	1.099	1.103	1.040	1.100	2.69
78) A2 C1-Chrysenes	1.100	1.102	1.117	1.137	1.099	1.103	1.040	1.100	2.69
79) A2 C2-Chrysenes	1.100	1.102	1.117	1.137	1.099	1.103	1.040	1.100	2.69
80) A2 BBF-D12 Surr BKGD	1.100	1.102	1.117	1.137	1.099	1.103	1.040	1.100	2.69
81) A2 C3-Chrysenes	1.100	1.102	1.117	1.137	1.099	1.103	1.040	1.100	2.69
82) A2 C4-Chrysenes	1.100	1.102	1.117	1.137	1.099	1.103	1.040	1.100	2.69
83) s Benzo[b]fluoranthene-d12	0.940	0.953	0.949	0.918	1.020	1.050	0.997	0.975	4.89
84) t Benzo[b]fluoranthene	1.274	1.232	1.222	1.221	1.229	1.230	1.184	1.227	2.14
85) A1 Benzo[j]+[k]fluoranthene	1.242	1.270	1.268	1.204	1.176	1.200	1.100	1.209	4.93
86) A2 Benzo[a]fluora	1.242	1.270	1.268	1.204	1.176	1.200	1.100	1.209	4.93
87) t Benzo[e]pyrene	1.236	1.176	1.211	1.227	1.292	1.313	1.233	1.241	3.78
88) s Benzo[a]pyrene-d12	0.858	0.878	0.876	0.826	0.853	0.878	0.838	0.858	2.42
89) t Benzo[a]pyrene	1.141	1.130	1.141	1.174	1.147	1.152	1.058	1.135	3.20
90) t Perylene	1.212	1.190	1.195	1.160	1.209	1.234	1.141	1.192	2.67

6B
SEMIVOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1501041

Instrument ID: PAH8

Calibration Date(s): 12/23/14

12/23/14

Calibration Times: 14:50

23:29

Compound	10	25	100	500	5000	1e4	2e4	Avg	%RSD
91) t Indeno[1,2,3-cd]pyrene	1.600	1.452	1.462	1.368	1.466	1.438	1.377	1.452	5.26
92) t Dibenz[ah]+[ac]anthracene	1.367	1.191	1.240	1.235	1.213	1.208	1.142	1.228	5.65
93) t Benzo[g,h,i]perylene	1.412	1.393	1.342	1.322	1.413	1.431	1.331	1.378	3.26
94) A1 Hopane (T19)	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
95) A2 17a(H),21b(H)-hopane - C3	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
96) A2 C23 Tricyclic	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
97) A2 C24 Tricyclic	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
98) A2 C25 Tricyclic	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
99) A2 C24 Tetracycli	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
100) A2 C26 Tricyclic	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
101) A2 C26 Tricyclic	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
102) A2 C28 Tricyclic	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
103) A2 C28 Tricyclic	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
104) A2 C29 Tricyclic	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
105) A2 C29 Tricyclic	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
106) A2 18a-22,29,30-T	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
107) A2 C30 Tricyclic	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
108) A2 C30 Tricyclic	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
109) A2 17a(H)-22,29,3	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
110) A2 17a/b,21b/a 28	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
111) A2 17a(H),21b(H)-	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
112) A2 30-Norhopane (	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
113) A2 18a(H)-30-Norn	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
114) A2 17a(H)-Diahopa	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
115) A2 30-Normoretane	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
116) A2 18a(H)&18b(H)-	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
117) A2 Moretane (T20)	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
118) A2 30-Homohopane-	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
119) A2 30-Homohopane-	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
120) A2 Gammacerane/C3	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
121) A2 30,31-Bishomoh	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
122) A2 30,31-Bishomoh	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
123) A2 30,31-Trishomo	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
124) A2 30,31-Trishomo	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
125) A2 Tetrakishomoho	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
126) A2 Tetrakishomoho	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
127) A2 Pentakishomoho	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
128) A2 Pentakishomoho	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
129) SA1 5B(H)Cholane - Surr	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
130) A2 13b(H),17a(H)-	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
131) A2 13b(H),17a(H)-	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
132) A2 13b,17a-20S-Me	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
133) A2 14a,17a-20S-Ch	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
134) A2 14a,17a-20R-Ch	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
135) A2 Unknown Steran	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
136) A2 13a,17b-20S-Et	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
137) A2 14a,17a-20S-Me	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67

6B
SEMIVOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1501041

Instrument ID: PAH8

Calibration Date(s): 12/23/14

12/23/14

Calibration Times: 14:50

23:29

Compound	10	25	100	500	5000	1e4	2e4	Avg	%RSD
138) A2 14a, 17a-20R-Me	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
139) A2 14a(H), 17a(H)-	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
140) A2 14a(H), 17a(H)-	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
141) A2 14b(H), 17b(H)-	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
142) A2 14b(H), 17b(H)-	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
143) A2 14b, 17b-20R-Me	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
144) A2 14b, 17b-20S-Me	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
145) A2 14b(H), 17b(H)-	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
146) A2 14b(H), 17b(H)-	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
147) A2 C26, 20R- +C27,	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
148) A2 C28, 20S-triaro	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
149) A2 C27, 20R-triaro	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
150) A2 C28, 20R-triaro	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67

FORM VI-A2-ALKPAHBIOM

Response Factor Report PAH8

Method Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Method File : PAH8122314.M
 Title : Decalins & Alkylated PAH's
 Last Update : Wed Dec 24 12:33:02 2014
 Response Via : Initial Calibration

Calibration Files

10 =F812221409.D 25 =f812221403.D 100 =F812221404.D 500 =F812221405.D 5000=F812221406.D
 1e4 =F812221407.D 2e4 =F812221408.D

Compound		10	25	100	500	5000	1e4	2e4	Avg	%RSD
-----		-----								
1) i	Acenaphthene-d10	-----ISTD-----								
2) t	2-butoxyethanol	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.00
3) A1	trans-Decalin	0.470	0.454	0.478	0.433	0.430	0.445	0.418	0.447	4.87
4) t	cis-Decalin	0.353	0.353	0.341	0.331	0.329	0.340	0.320	0.338	3.66
5) A2	C1-Decalins	0.470	0.454	0.478	0.433	0.430	0.445	0.418	0.447	4.87
6) A2	C2-Decalins	0.470	0.454	0.478	0.433	0.430	0.445	0.418	0.447	4.87
7) A2	C3-Decalins	0.470	0.454	0.478	0.433	0.430	0.445	0.418	0.447	4.87
8) A2	C4-Decalins	0.470	0.454	0.478	0.433	0.430	0.445	0.418	0.447	4.87
9) s	Naphthalene-d8	2.225	2.215	2.246	2.100	1.900	1.847	1.629	2.023	11.69
10) A1	Naphthalene	2.463	2.543	2.619	2.481	2.022	1.926	1.708	2.252	15.93
11) A2	C1-Naphthalenes	2.463	2.543	2.619	2.481	2.022	1.926	1.708	2.252	15.93
12) A2	C2-Naphthalenes	2.463	2.543	2.619	2.481	2.022	1.926	1.708	2.252	15.93
13) A2	C3-Naphthalenes	2.463	2.543	2.619	2.481	2.022	1.926	1.708	2.252	15.93
14) A2	C4-Naphthalenes	2.463	2.543	2.619	2.481	2.022	1.926	1.708	2.252	15.93
15) t	Glycol Ether I...	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.00
16) t	2-Methylnaphth...	1.562	1.480	1.532	1.499	1.424	1.384	1.259	1.449	7.14
17) t	1-Methylnaphth...	1.486	1.483	1.473	1.448	1.311	1.275	1.163	1.377	9.29
18) A1	Benzothiophene	2.131	2.083	2.109	2.014	1.712	1.657	1.490	1.885	13.77
19) A2	C1-Benzo(b)thi...	2.131	2.083	2.109	2.014	1.712	1.657	1.490	1.885	13.77
20) A2	C2-Benzo(b)thi...	2.131	2.083	2.109	2.014	1.712	1.657	1.490	1.885	13.77
21) A2	C3-Benzo(b)thi...	2.131	2.083	2.109	2.014	1.712	1.657	1.490	1.885	13.77
22) A2	C4-Benzo(b)thi...	2.131	2.083	2.109	2.014	1.712	1.657	1.490	1.885	13.77
23) t	Biphenyl	1.855	1.880	1.906	1.844	1.655	1.609	1.453	1.743	9.87
24) t	2,6-Dimethylna...	1.295	1.247	1.285	1.259	1.174	1.150	1.054	1.209	7.23
25) t	Dibenzofuran	1.904	1.909	1.960	1.917	1.664	1.624	1.475	1.779	10.61
26) t	Acenaphthylene	2.191	2.175	2.239	2.262	2.051	2.006	1.824	2.107	7.42
27) t	Acenaphthene	1.377	1.434	1.413	1.382	1.201	1.160	1.045	1.287	11.72
28) t	2,3,5-Trimethy...	1.076	1.055	1.059	1.052	0.963	0.958	0.879	1.006	7.29
29) A1	Fluorene	1.432	1.385	1.497	1.480	1.326	1.318	1.208	1.378	7.43
30) A2	C1-Fluorenes	1.432	1.385	1.497	1.480	1.326	1.318	1.208	1.378	7.43
31) A2	C2-Fluorenes	1.432	1.385	1.497	1.480	1.326	1.318	1.208	1.378	7.43

Response Factor Report PAH8

Method Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Method File : PAH8122314.M
 Title : Decalins & Alkylated PAH's
 Last Update : Wed Dec 24 12:33:02 2014
 Response Via : Initial Calibration

Calibration Files

10 =F812221409.D 25 =f812221403.D 100 =F812221404.D 500 =F812221405.D 5000=F812221406.D
 1e4 =F812221407.D 2e4 =F812221408.D

	Compound	10	25	100	500	5000	1e4	2e4	Avg	%RSD
32)	A2 C3-Fluorenes	1.432	1.385	1.497	1.480	1.326	1.318	1.208	1.378	7.43
33)	A1 Dibenzothiophene	2.009	1.958	2.043	2.052	1.868	1.865	1.688	1.926	6.74
34)	A2 4-Methyldibenz...	2.009	1.958	2.043	2.052	1.868	1.865	1.688	1.926	6.74
35)	A2 2/3-Methyldibe...	2.009	1.958	2.043	2.052	1.868	1.865	1.688	1.926	6.74
36)	A2 1-Methyldibenz...	2.009	1.958	2.043	2.052	1.868	1.865	1.688	1.926	6.74
37)	A2 OTP	2.009	1.958	2.043	2.052	1.868	1.865	1.688	1.926	6.74
38)	A2 C1-Dibenzothio...	2.009	1.958	2.043	2.052	1.868	1.865	1.688	1.926	6.74
39)	A2 C2-Dibenzothio...	2.009	1.958	2.043	2.052	1.868	1.865	1.688	1.926	6.74
40)	A2 C3-Dibenzothio...	2.009	1.958	2.043	2.052	1.868	1.865	1.688	1.926	6.74
41)	A2 C4-Dibenzothio...	2.009	1.958	2.043	2.052	1.868	1.865	1.688	1.926	6.74
42)	s Phenanthrene-d10	1.607	1.625	1.654	1.534	1.390	1.402	1.300	1.502	9.17
43)	A1 Phenanthrene	2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60
44)	A2 3-Methylphenan...	2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60
45)	A2 2-Methylphenan...	2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60
46)	A2 2-Methylanthra...	2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60
47)	A2 9/4-Methylphen...	2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60
48)	A2 1-Methylphenan...	2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60
49)	A2 C1-Phenanthren...	2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60
50)	A2 C2-Phenanthren...	2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60
51)	A2 5AA IS BKGD	2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60
52)	A2 C3-Phenanthren...	2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60
53)	A2 C4-Phenanthren...	2.081	2.012	2.069	2.040	1.675	1.664	1.526	1.867	12.60
54)	t Retene	0.427	0.409	0.428	0.449	0.455	0.474	0.438	0.440	4.86
55)	t Anthracene	1.810	1.827	1.950	1.942	1.544	1.553	1.346	1.710	13.50
56)	t Carbazole	1.909	1.805	1.845	1.955	1.793	1.822	1.673	1.829	4.92
57)	t 1-Methylphenan...	1.250	1.330	1.324	1.369	1.311	1.336	1.224	1.306	3.92
58)	A1 Fluoranthene	1.836	1.887	1.942	2.025	1.902	1.924	1.742	1.894	4.66
59)	t Benzo(b)fluorene	1.101	1.079	1.091	1.159	1.095	1.119	1.035	1.097	3.45
60)	A1 Pyrene	1.869	1.942	1.947	2.220	2.017	2.035	1.855	1.984	6.27
61)	A2 C1-Fluoranthen...	1.869	1.942	1.947	2.220	2.017	2.035	1.855	1.984	6.27
62)	A2 C2-Fluoranthen...	1.869	1.942	1.947	2.220	2.017	2.035	1.855	1.984	6.27
63)	A2 C3-Fluoranthen...	1.869	1.942	1.947	2.220	2.017	2.035	1.855	1.984	6.27

Response Factor Report PAH8

Method Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Method File : PAH8122314.M
 Title : Decalins & Alkylated PAH's
 Last Update : Wed Dec 24 12:33:02 2014
 Response Via : Initial Calibration

Calibration Files

10 =F812221409.D 25 =f812221403.D 100 =F812221404.D 500 =F812221405.D 5000=F812221406.D
 1e4 =F812221407.D 2e4 =F812221408.D

	Compound	10	25	100	500	5000	1e4	2e4	Avg	%RSD
64)	A2 C4-Fluoranthene...	1.869	1.942	1.947	2.220	2.017	2.035	1.855	1.984	6.27
65)	t Bis-(2-ethylhe...	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.00
66)	A1 Naphthobenzoth...	1.714	1.706	1.766	1.813	1.765	1.807	1.646	1.745	3.43
67)	A2 Naphthobenzoth...	1.714	1.706	1.766	1.813	1.765	1.807	1.646	1.745	3.43
68)	A2 Naphthobenzoth...	1.714	1.706	1.766	1.813	1.765	1.807	1.646	1.745	3.43
69)	A2 Naphthobenzoth...	1.714	1.706	1.766	1.813	1.765	1.807	1.646	1.745	3.43
70)	A2 C1-Naphthobenz...	1.714	1.706	1.766	1.813	1.765	1.807	1.646	1.745	3.43
71)	A2 C2-Naphthobenz...	1.714	1.706	1.766	1.813	1.765	1.807	1.646	1.745	3.43
72)	A2 C3-Naphthobenz...	1.714	1.706	1.766	1.813	1.765	1.807	1.646	1.745	3.43
73)	A2 C4-Naphthobenz...	1.714	1.706	1.766	1.813	1.765	1.807	1.646	1.745	3.43
74)	i Chrysene-d12	-----ISTD-----								
75)	t Benz[a]anthracene	1.140	1.094	1.135	1.144	1.200	1.209	1.122	1.149	3.59
76)	A1 Chrysene	1.100	1.102	1.117	1.137	1.099	1.103	1.040	1.100	2.69
77)	A2 Chrysene/Triph...	1.100	1.102	1.117	1.137	1.099	1.103	1.040	1.100	2.69
78)	A2 C1-Chrysenes	1.100	1.102	1.117	1.137	1.099	1.103	1.040	1.100	2.69
79)	A2 C2-Chrysenes	1.100	1.102	1.117	1.137	1.099	1.103	1.040	1.100	2.69
80)	A2 BBF-D12 Surr BKGD	1.100	1.102	1.117	1.137	1.099	1.103	1.040	1.100	2.69
81)	A2 C3-Chrysenes	1.100	1.102	1.117	1.137	1.099	1.103	1.040	1.100	2.69
82)	A2 C4-Chrysenes	1.100	1.102	1.117	1.137	1.099	1.103	1.040	1.100	2.69
83)	s Benzo[b]fluora...	0.940	0.953	0.949	0.918	1.020	1.050	0.997	0.975	4.89
84)	t Benzo[b]fluora...	1.274	1.232	1.222	1.221	1.229	1.230	1.184	1.227	2.14
85)	A1 Benzo[j]+[k]fl...	1.242	1.270	1.268	1.204	1.176	1.200	1.100	1.209	4.93
86)	A2 Benzo[a]fluora...	1.242	1.270	1.268	1.204	1.176	1.200	1.100	1.209	4.93
87)	t Benzo[e]pyrene	1.236	1.176	1.211	1.227	1.292	1.313	1.233	1.241	3.78
88)	s Benzo[a]pyrene...	0.858	0.878	0.876	0.826	0.853	0.878	0.838	0.858	2.42
89)	t Benzo[a]pyrene	1.141	1.130	1.141	1.174	1.147	1.152	1.058	1.135	3.20
90)	t Perylene	1.212	1.190	1.195	1.160	1.209	1.234	1.141	1.192	2.67
91)	t Indeno[1,2,3-c...	1.600	1.452	1.462	1.368	1.466	1.438	1.377	1.452	5.26
92)	t Dibenz[ah]+[ac...	1.367	1.191	1.240	1.235	1.213	1.208	1.142	1.228	5.65
93)	t Benzo[g,h,i]pe...	1.412	1.393	1.342	1.322	1.413	1.431	1.331	1.378	3.26
94)	A1 Hopane (T19)	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62

Response Factor Report PAH8

Method Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Method File : PAH8122314.M
 Title : Decalins & Alkylated PAH's
 Last Update : Wed Dec 24 12:33:02 2014
 Response Via : Initial Calibration

Calibration Files

10 =F812221409.D 25 =f812221403.D 100 =F812221404.D 500 =F812221405.D 5000=F812221406.D
 1e4 =F812221407.D 2e4 =F812221408.D

	Compound	10	25	100	500	5000	1e4	2e4	Avg	%RSD
95)	A2 17a(H),21B(H)-...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
96)	A2 C23 Tricyclic ...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
97)	A2 C24 Tricyclic ...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
98)	A2 C25 Tricyclic ...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
99)	A2 C24 Tetracycli...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
100)	A2 C26 Tricyclic ...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
101)	A2 C26 Tricyclic ...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
102)	A2 C28 Tricyclic ...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
103)	A2 C28 Tricyclic ...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
104)	A2 C29 Tricyclic ...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
105)	A2 C29 Tricyclic ...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
106)	A2 18a-22,29,30-T...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
107)	A2 C30 Tricyclic ...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
108)	A2 C30 Tricyclic ...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
109)	A2 17a(H)-22,29,3...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
110)	A2 17a/b,21b/a 28...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
111)	A2 17a(H),21b(H)-...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
112)	A2 30-Norhopane (...)	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
113)	A2 18a(H)-30-Norn...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
114)	A2 17a(H)-Diahopa...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
115)	A2 30-Normoretane...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
116)	A2 18a(H)&18b(H)-...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
117)	A2 Moretane (T20)	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
118)	A2 30-Homohopane-...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
119)	A2 30-Homohopane-...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
120)	A2 Gammacerane/C3...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
121)	A2 30,31-Bishomoh...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
122)	A2 30,31-Bishomoh...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
123)	A2 30,31-Trishomo...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
124)	A2 30,31-Trishomo...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
125)	A2 Tetrakishomoho...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
126)	A2 Tetrakishomoho...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62

Response Factor Report PAH8

Method Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Method File : PAH8122314.M
 Title : Decalins & Alkylated PAH's
 Last Update : Wed Dec 24 12:33:02 2014
 Response Via : Initial Calibration

Calibration Files

10 =F812221409.D 25 =f812221403.D 100 =F812221404.D 500 =F812221405.D 5000=F812221406.D
 1e4 =F812221407.D 2e4 =F812221408.D

	Compound	10	25	100	500	5000	1e4	2e4	Avg	%RSD
127)	A2 Pentakishomoho...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
128)	A2 Pentakishomoho...	0.454	0.422	0.395	0.365	0.417	0.438		0.415	7.62
129)	SA1 5B(H)Cholane -...	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
130)	A2 13b(H),17a(H)-...	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
131)	A2 13b(H),17a(H)-...	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
132)	A2 13b,17a-20S-Me...	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
133)	A2 14a,17a-20S-Ch...	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
134)	A2 14a,17a-20R-Ch...	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
135)	A2 Unknown Steran...	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
136)	A2 13a,17b-20S-Et...	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
137)	A2 14a,17a-20S-Me...	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
138)	A2 14a,17a-20R-Me...	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
139)	A2 14a(H),17a(H)-...	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
140)	A2 14a(H),17a(H)-...	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
141)	A2 14b(H),17b(H)-...	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
142)	A2 14b(H),17b(H)-...	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
143)	A2 14b,17b-20R-Me...	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
144)	A2 14b,17b-20S-Me...	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
145)	A2 14b(H),17b(H)-...	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
146)	A2 14b(H),17b(H)-...	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
147)	A2 C26,20R- +C27,...	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
148)	A2 C28,20S-triaro...	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
149)	A2 C27,20R-triaro...	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67
150)	A2 C28,20R-triaro...	0.166	0.178	0.176	0.170	0.195	0.207	0.200	0.185	8.67

(#) = Out of Range

PFTBA Tune Raw Data

Tue Dec 23 10:16:49 2014
C:\MSDCHEM\1\5975\pftba.U

Instrument: PAH8
US92012831

Mass 69.00	Mass 219.00	Mass 502.00
Ab 896606	Ab 528652	Ab 94541
Pw50 0.52	Pw50 0.54	Pw50 0.52

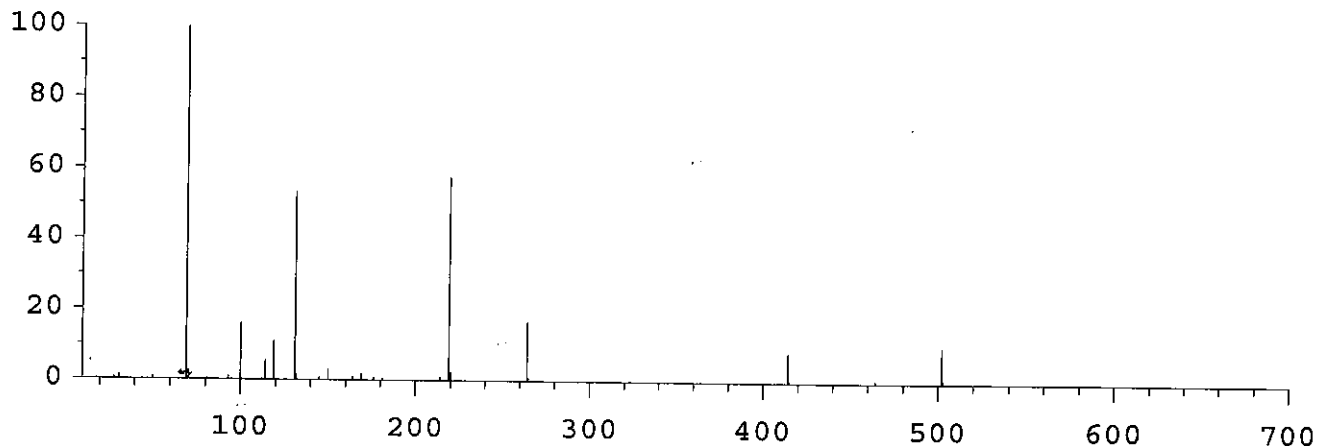
Ion Pol	Pos	MassGain	-492
		MassOffs	-41
Emission	34.6	AmuGain	2357
EIEnergy	69.9	AmuOffs	127.56
Filament	1	Wid219	-0.018
		DC Pol	Pos
Repeller	34.81		
IonFcus	90.2	HEDenab	On
EntLens	0.0	EMVolts	2600
EntOffs	Var		

	Samples	8
PFTBA	Open Averages	3
	Stepsize	0.10

Temperatures and Pressures:
MS Source 230 Foreline53.506
MS Quad 150 HiVac 0.00e00

66 71 216 221 500 505

Scan: 10.00 - 701.00 Samples: 8 Thresh: 100 Step: 0.10
153 peaks Base: 69.00 Abundance: 864320



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	864320	100.00	70.00	8827	1.02
219.00	498816	57.71	220.00	20960	4.20
502.10	89560	10.36	503.00	9113	10.18

Air/Water Check: H2O~0.46% N2~0.90% O2~0.42% CO2~0.08% N2/H2O~194.98%

Ramp Criteria:

Ion Focus Maximum	90	volts using ion	502;	EM Gain	338107
Repeller Maximum	35	volts using ion	219;	Gain Factor	3.38

MassGain Values(Samples): -485(3) -484(2) -478(1) -462(0) -418(FS)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset:	127.6	127.6	127.6	127.6	127.6	127.6	127.6
Entrance Lens Offset:	16.8	14.3	13.8	12.3	16.3	17.1	17.1
Target Abund(%)	1.0	100.0	50.0	50.0	7.5	8.0	
Actual Tune Abund(%)	1.0	100.0	53.4	57.7	8.7	10.4	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221409.D
 Acq On : 23 Dec 2014 11:29 pm
 Operator : PAH8:ML
 Sample : I812231401
 Misc : WG755323, FRAU66 10ng/ml
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 13 11:09:29 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.068	164	39973	500.000	ng/mL	0.00
74) Chrysene-d12	43.515	240	53977	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	20.105	136	1779	11.621	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.16%#		
42) Phenanthrene-d10	32.935	188	1285	11.005	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.10%#		
83) Benzo[b]fluoranthene-d12	47.417	264	1015	9.679	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.97%#		
88) Benzo[a]pyrene-d12	48.634	264	926	10.887	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.09%#		
129) 5B(H)Cholane - Surr	44.127	217	179	10.593	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	1.06%#		
Target Compounds						
						Qvalue
3) trans-Decalin	16.738	138	188	5.256	ng/mL	100
4) cis-Decalin	17.961	138	141M4	5.205	ng/mL	
10) Naphthalene	20.187	128	1969	11.937	ng/mL	100
16) 2-Methylnaphthalene	22.879	142	1249	11.330	ng/mL	100
17) 1-Methylnaphthalene	23.299	142	1188	11.142	ng/mL	100
18) Benzo[thiophene	20.397	134	1704	12.449	ng/mL	100
23) Biphenyl	24.759	154	1483	11.182	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.361	156	1035	11.461	ng/mL	100
25) Dibenzofuran	27.844	168	1522	11.207	ng/mL	99
26) Acenaphthylene	26.457	152	1752	11.764	ng/mL	100
27) Acenaphthene	27.196	153	1101	11.638	ng/mL	98
28) 2,3,5-Trimethylnaphthalen	28.756	170	860	11.571	ng/mL	95
29) Fluorene	29.212	166	1145	10.971	ng/mL	96
33) Dibenzothiophene	32.533	184	1606	10.991	ng/mL	100
43) Phenanthrene	33.026	178	1664	11.702	ng/mL	98
54) Retene	40.000	234	341	9.725	ng/mL	88
55) Anthracene	33.208	178	1447M4	11.520	ng/mL	
56) Carbazole	33.874	167	1526	11.528	ng/mL	100
57) 1-Methylphenanthrene	35.527	192	999	9.682	ng/mL	86
58) Fluoranthene	37.800	202	1468	9.984	ng/mL	94
59) Benzo(b)fluorene	40.311	216	880	11.082	ng/mL	94
60) Pyrene	38.685	202	1494	9.749	ng/mL	100
66) Naphthobenzothiophene	42.520	234	1370	9.667	ng/mL	96
67) Naphthobenzothiophene-2,1	42.520	234	1370	9.667	ng/mL	96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221409.D
 Acq On : 23 Dec 2014 11:29 pm
 Operator : PAH8:ML
 Sample : I812231401
 Misc : WG755323, FRAU66 10ng/ml
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 13 11:09:29 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.451	228	1231	11.235	ng/mL	96
76)	Chrysene	43.607	228	1188	10.769	ng/mL	97
77)	Chrysene/Triphenylene	43.607	228	1188	10.769	ng/mL	97
84)	Benzo[b]fluoranthene	47.500	252	1375M3	11.119	ng/mL	
85)	Benzo[j]+[k]fluoranthene	47.591	252	1341	11.473	ng/mL	87
87)	Benzo[e]pyrene	48.533	252	1334M4	10.621	ng/mL	
89)	Benzo[a]pyrene	48.725	252	1232M3	11.319	ng/mL	
90)	Perylene	49.045	252	1308	11.554	ng/mL	92
91)	Indeno[1,2,3-cd]pyrene	53.655	276	1727M3	12.028	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.728	278	1476M4	11.897	ng/mL	
93)	Benzo[g,h,i]perylene	55.016	276	1524	10.628	ng/mL	95
94)	Hopane (T19)	52.750	191	490M4	13.592	ng/mL	
95)	17a(H),21B(H)-hopane - C3	52.750	191	496M4	13.758	ng/mL	

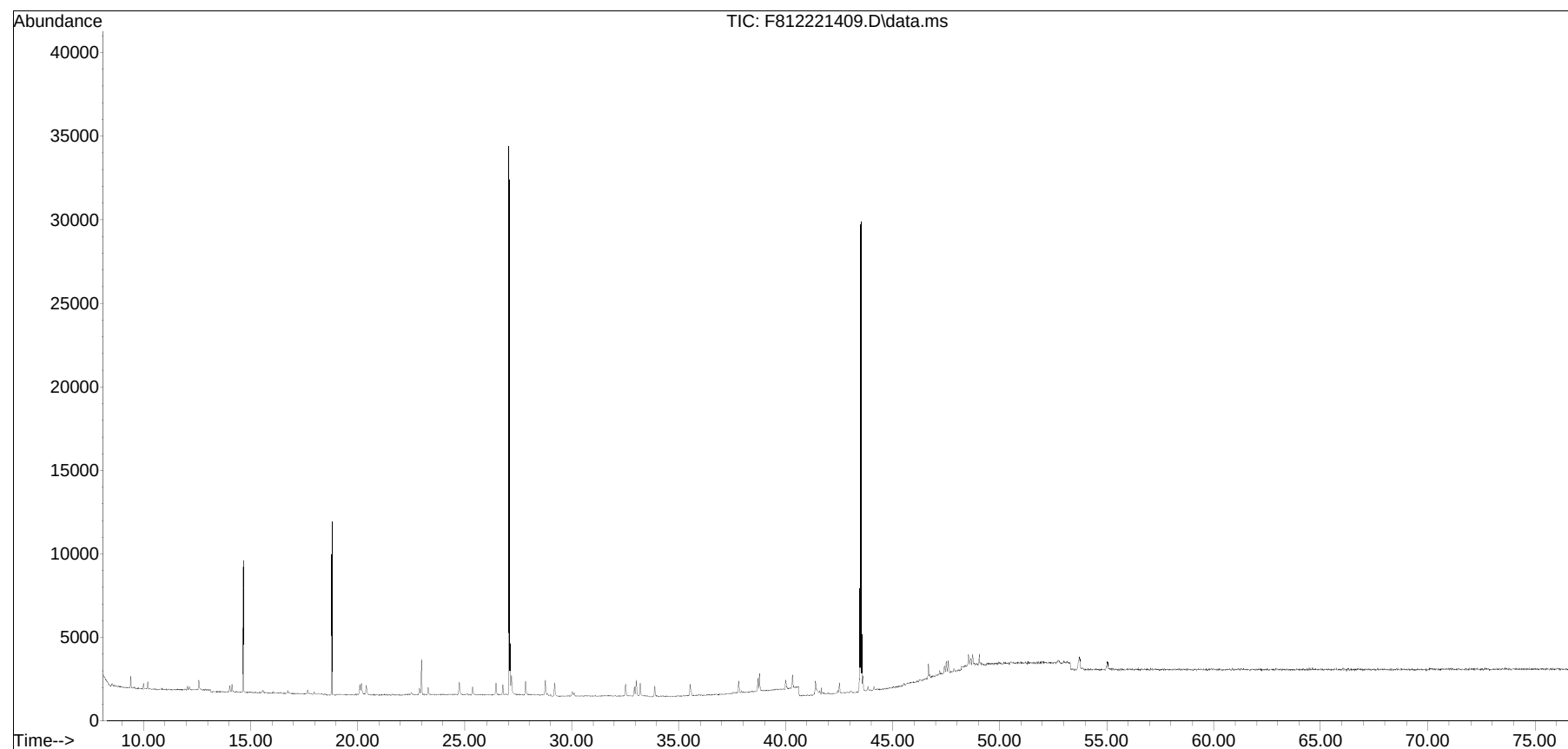
(#) = qualifier out of range (m) = manual integration (+) = signals summed

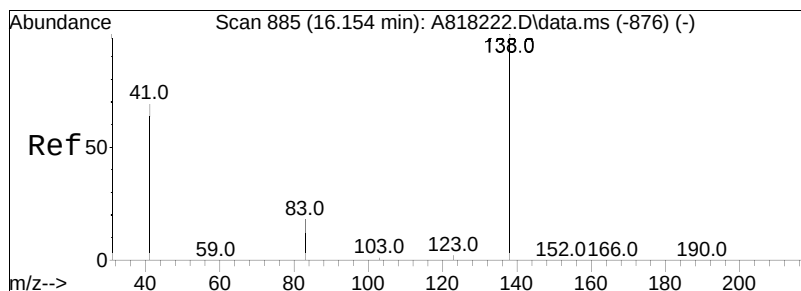
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC23\
Data File : F812221409.D
Acq On : 23 Dec 2014 11:29 pm
Operator : PAH8:ML
Sample : I812231401
Misc : WG755323, FRAU66 10ng/ml
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 13 11:09:29 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 23 07:51:27 2014
Response via : Initial Calibration

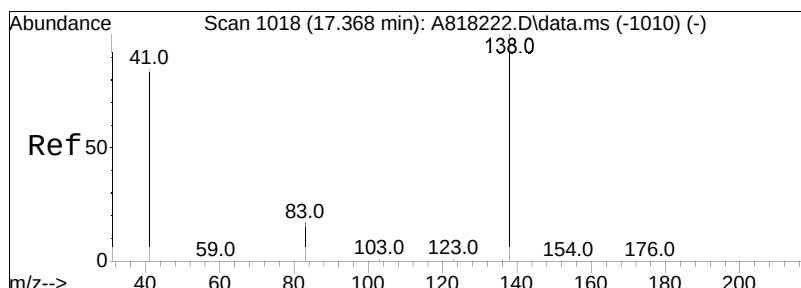
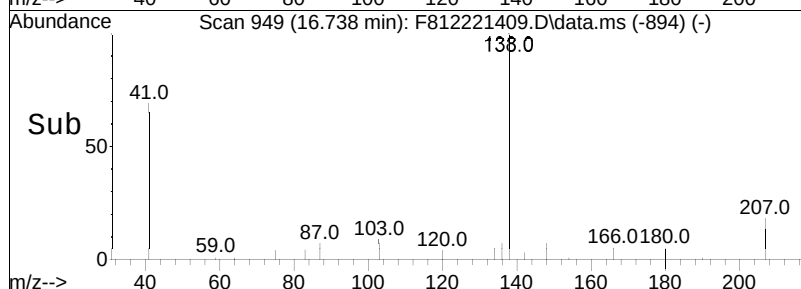
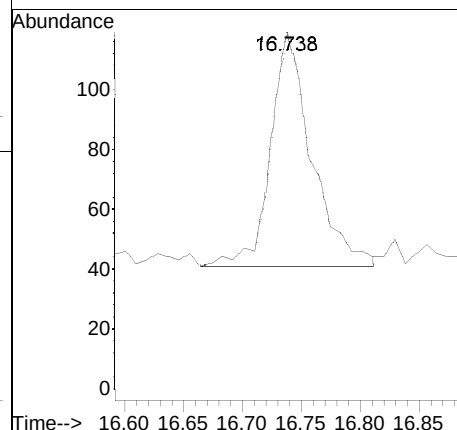
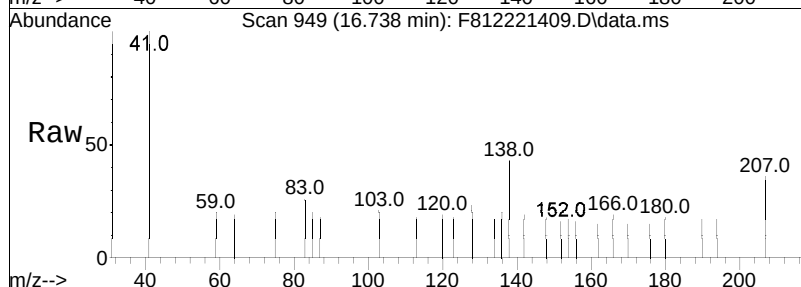
Sub List : ICAL_CCALT_REV2 - CC with five surrogates





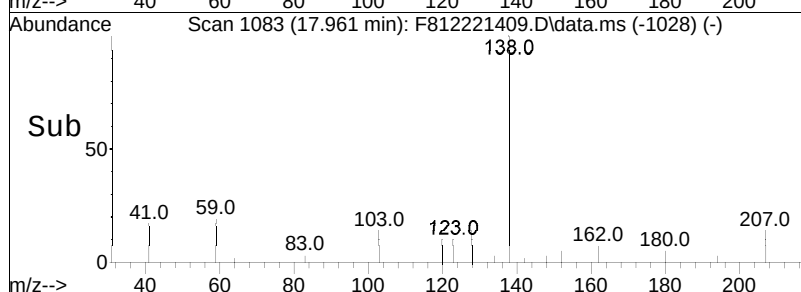
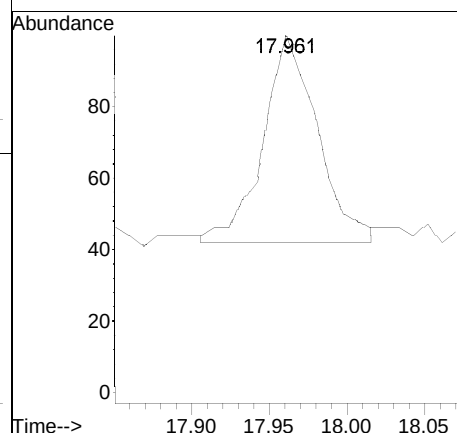
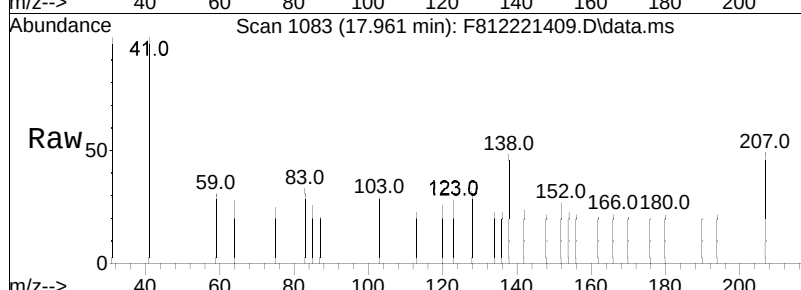
#3
 trans-Decalin
 Concen: 5.26 ng/mL
 RT: 16.738 min Scan# 949
 Delta R.T. -0.000 min
 Lab File: F812221409.D
 Acq: 23 Dec 2014 11:29 pm

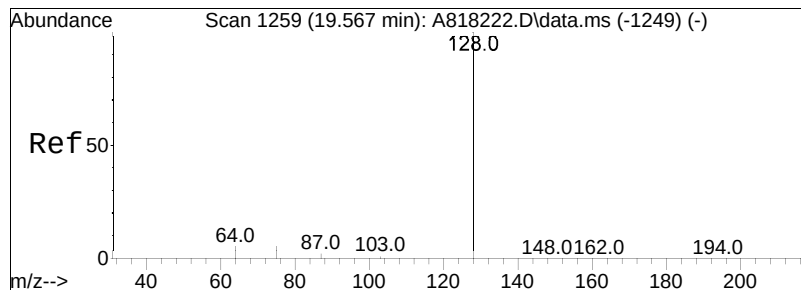
Tgt Ion:138 Resp: 188



#4
 cis-Decalin
 Concen: 5.21 ng/mL M4
 RT: 17.961 min Scan# 1083
 Delta R.T. -0.000 min
 Lab File: F812221409.D
 Acq: 23 Dec 2014 11:29 pm

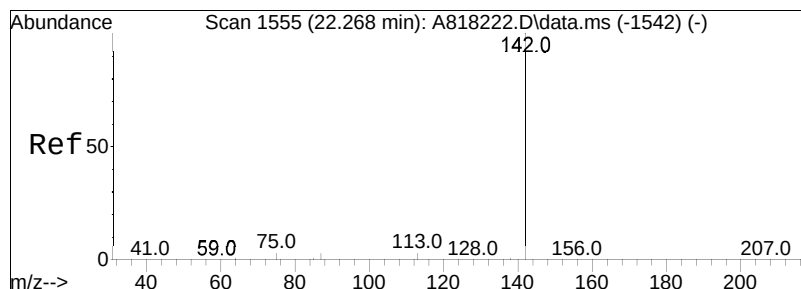
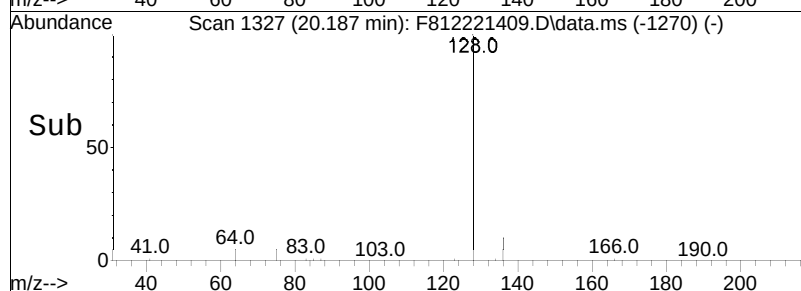
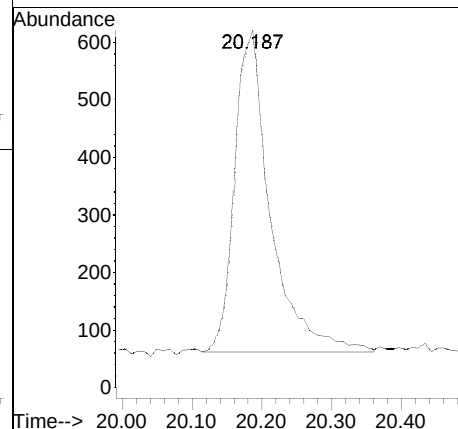
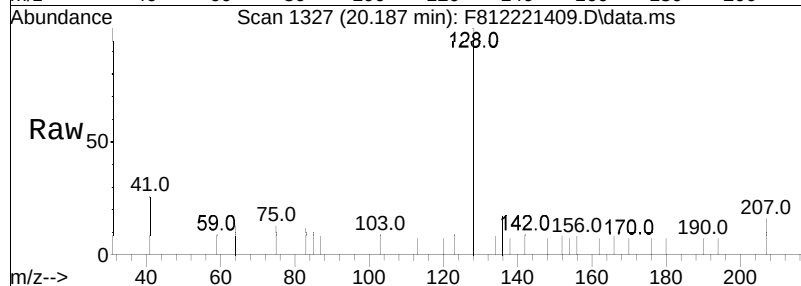
Tgt Ion:138 Resp: 141





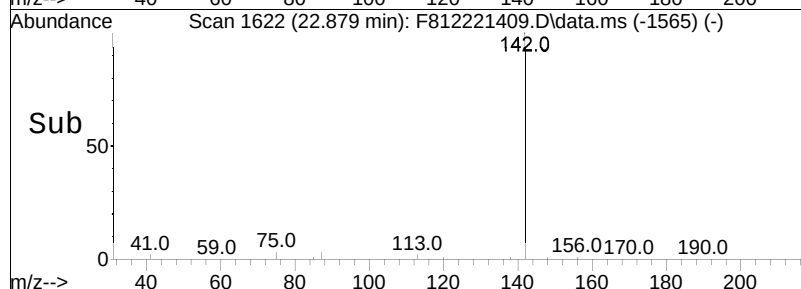
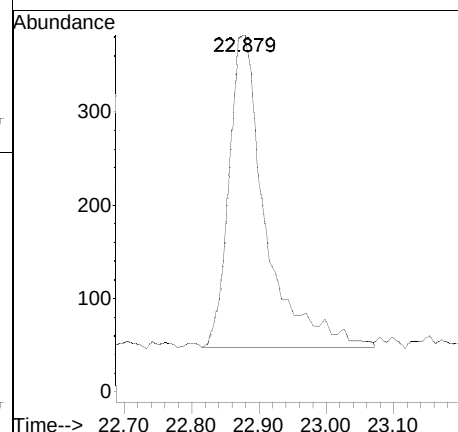
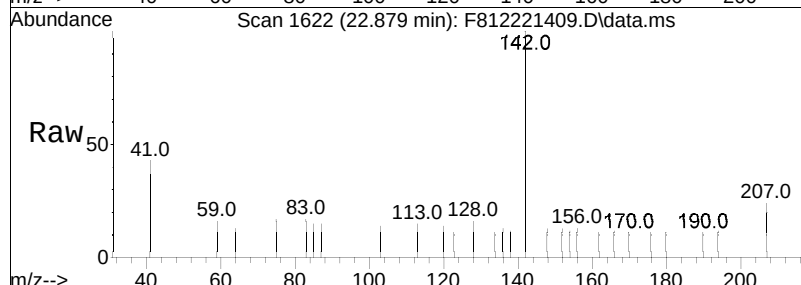
#10
Naphthalene
Concen: 11.94 ng/mL
RT: 20.187 min Scan# 1327
Delta R.T. 0.018 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

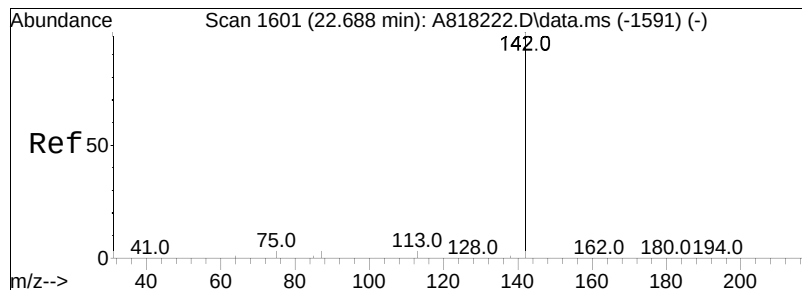
Tgt Ion:128 Resp: 1969



#16
2-Methylnaphthalene
Concen: 11.33 ng/mL
RT: 22.879 min Scan# 1622
Delta R.T. 0.018 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

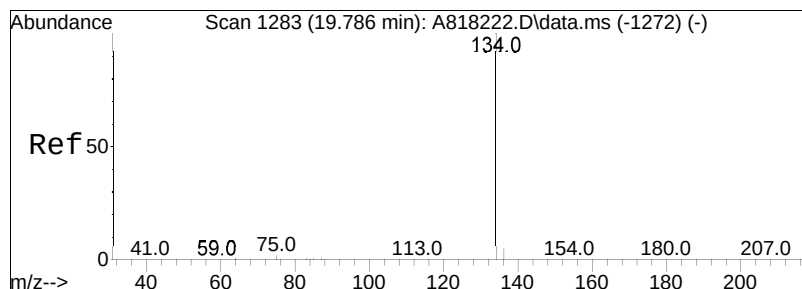
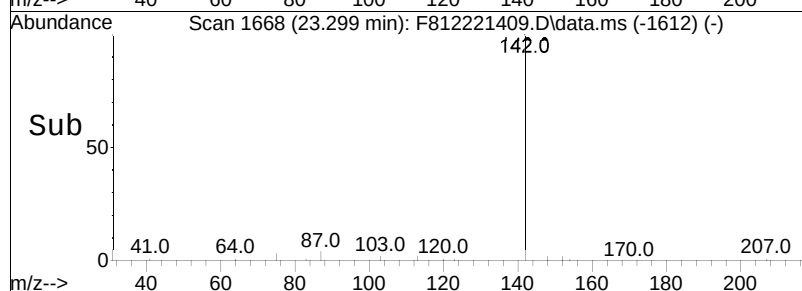
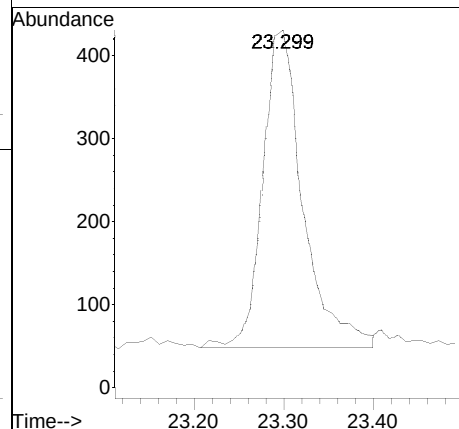
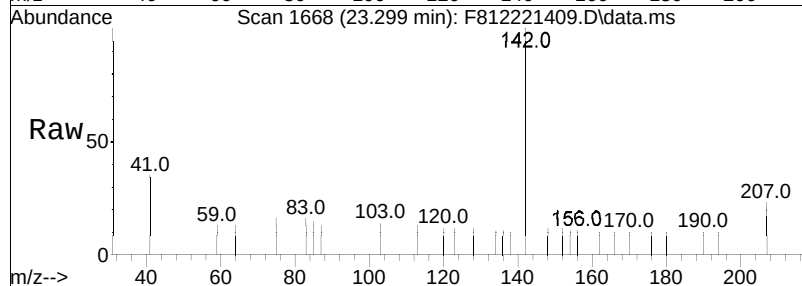
Tgt Ion:142 Resp: 1249





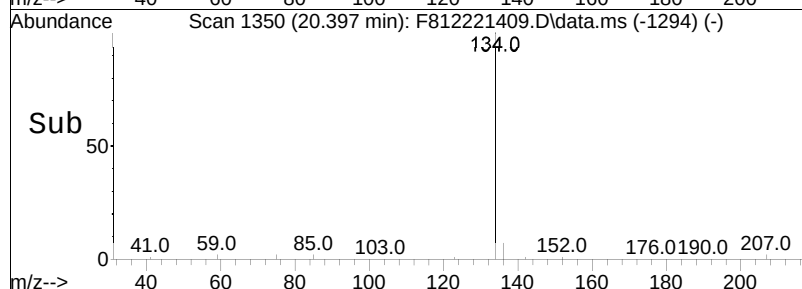
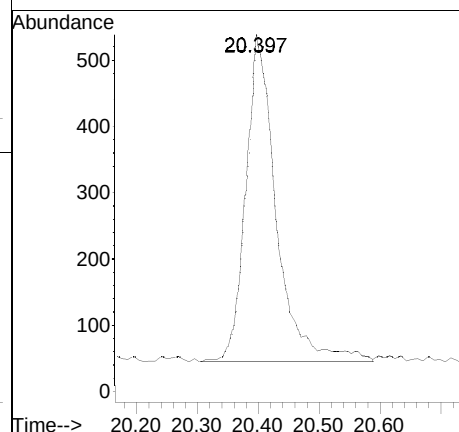
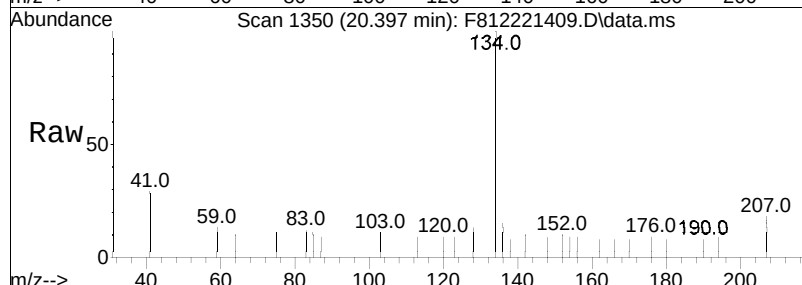
#17
1-Methylnaphthalene
Concen: 11.14 ng/mL
RT: 23.299 min Scan# 1668
Delta R.T. 0.009 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

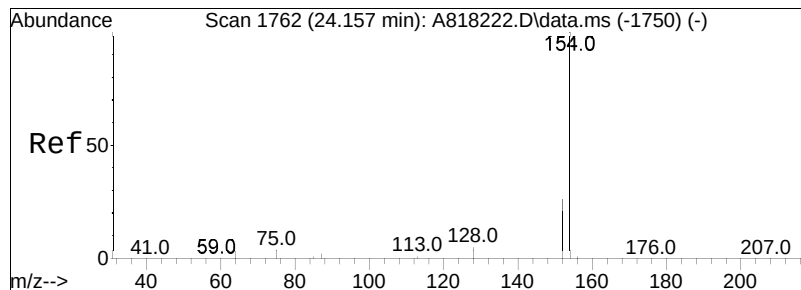
Tgt Ion:142 Resp: 1188



#18
Benzothiophene
Concen: 12.45 ng/mL
RT: 20.397 min Scan# 1350
Delta R.T. 0.009 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

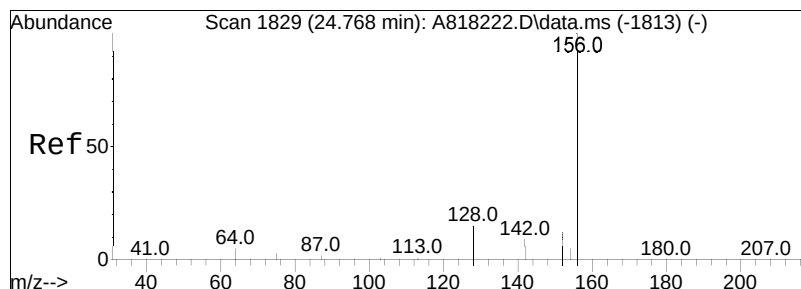
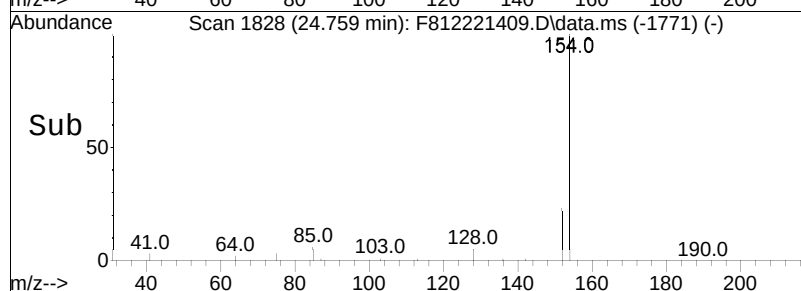
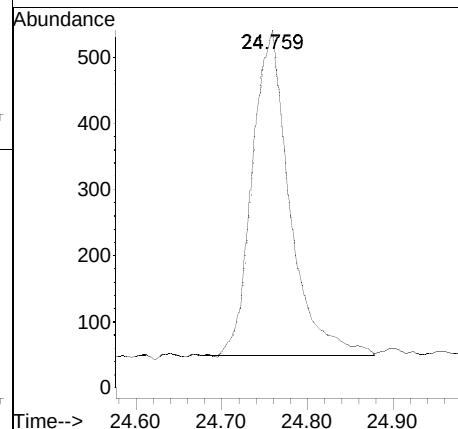
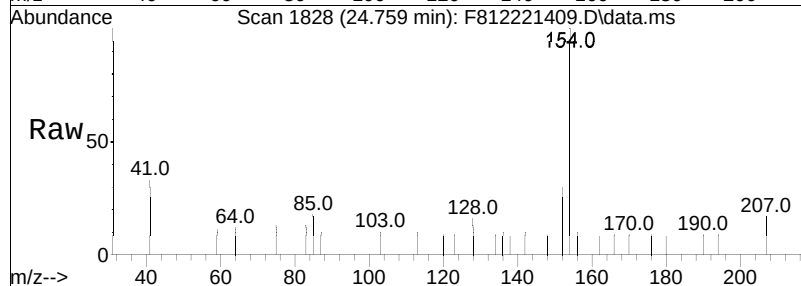
Tgt Ion:134 Resp: 1704





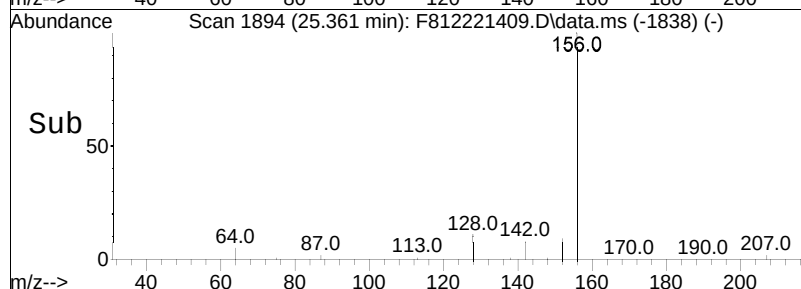
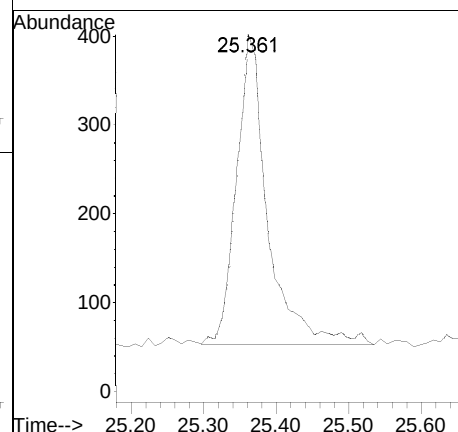
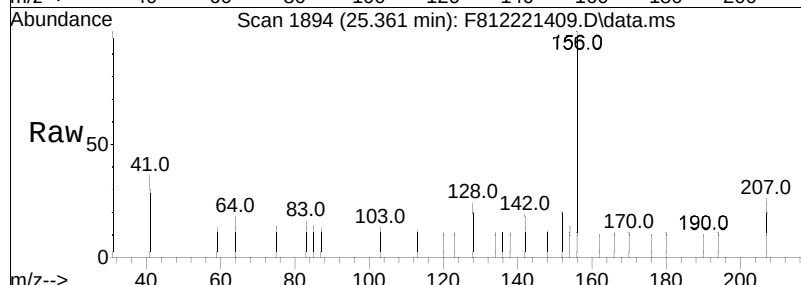
#23
Biphenyl
Concen: 11.18 ng/mL
RT: 24.759 min Scan# 1828
Delta R.T. 0.018 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

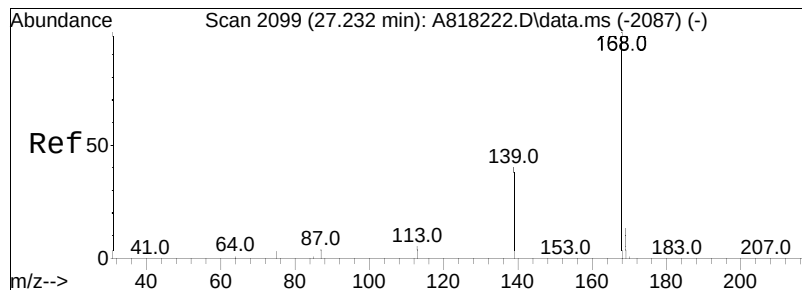
Tgt Ion:154 Resp: 1483



#24
2,6-Dimethylnaphthalene
Concen: 11.46 ng/mL
RT: 25.361 min Scan# 1894
Delta R.T. 0.009 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

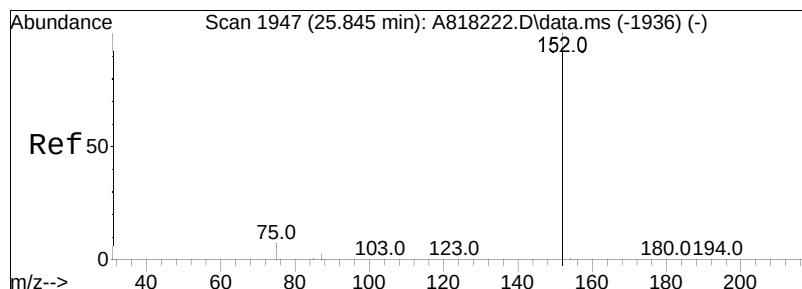
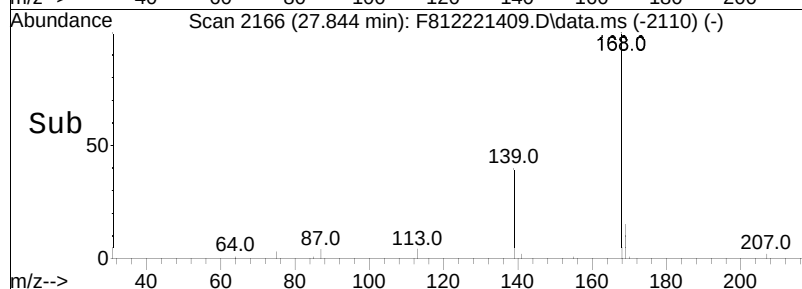
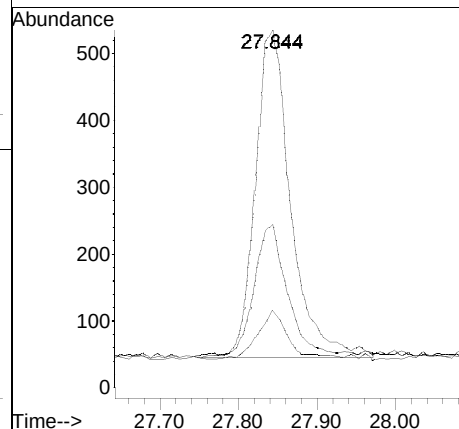
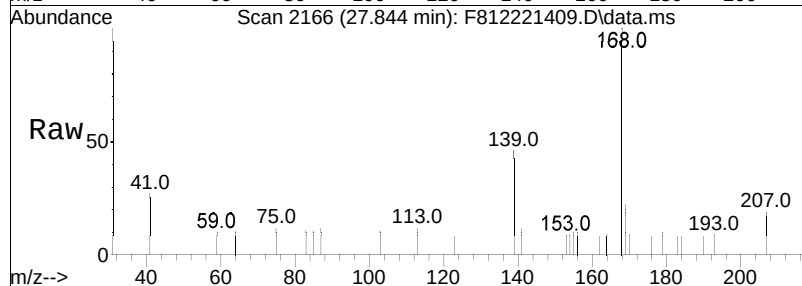
Tgt Ion:156 Resp: 1035





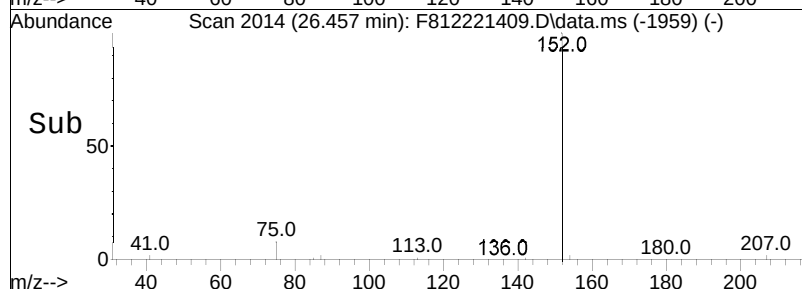
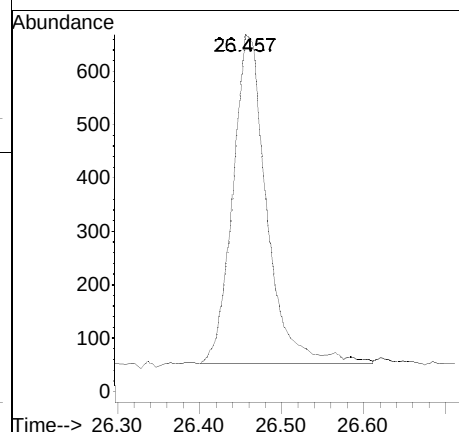
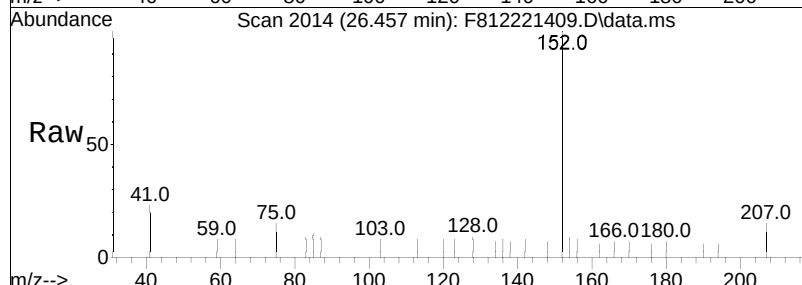
#25
Dibenzofuran
Concen: 11.21 ng/mL
RT: 27.844 min Scan# 2166
Delta R.T. 0.009 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

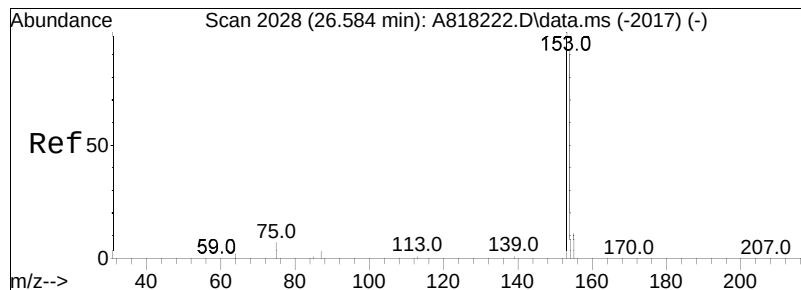
Tgt Ion	Ratio	Lower	Upper
168	100		
139	38.0	26.9	49.9
169	12.7	9.1	16.9



#26
Acenaphthylene
Concen: 11.76 ng/mL
RT: 26.457 min Scan# 2014
Delta R.T. -0.000 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

Tgt Ion	Ratio	Lower	Upper
152	100		





#27

Acenaphthene

Concen: 11.64 ng/mL

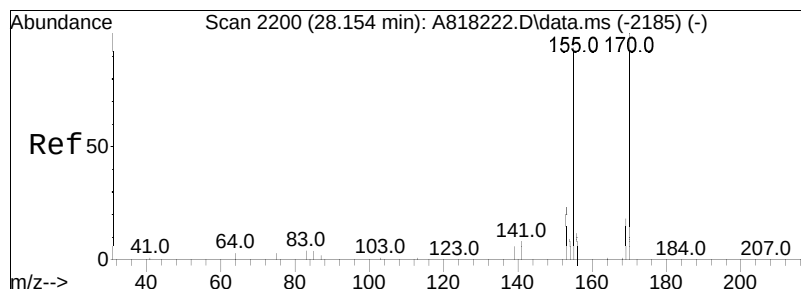
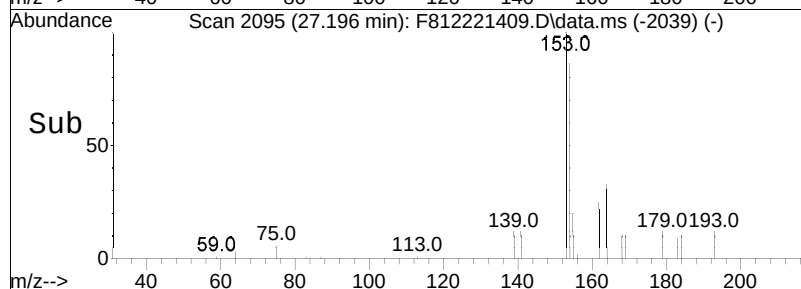
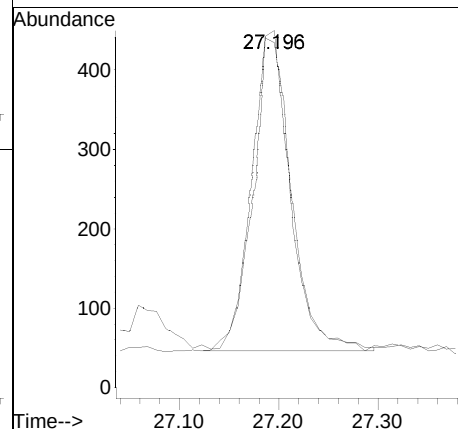
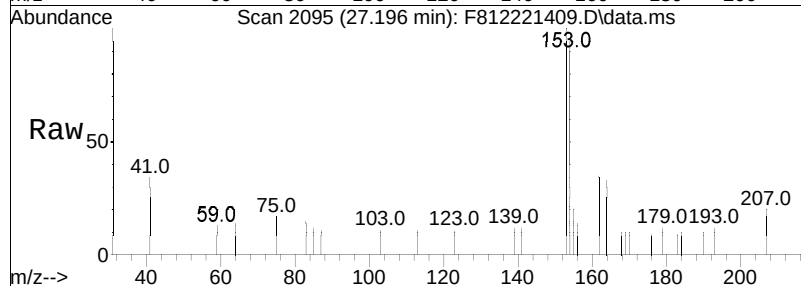
RT: 27.196 min Scan# 2095

Delta R.T. 0.009 min

Lab File: F812221409.D

Acq: 23 Dec 2014 11:29 pm

Tgt Ion	Ratio	Lower	Upper
153	100		
154	94.1	64.7	120.1



#28

2,3,5-Trimethylnaphthalene

Concen: 11.57 ng/mL

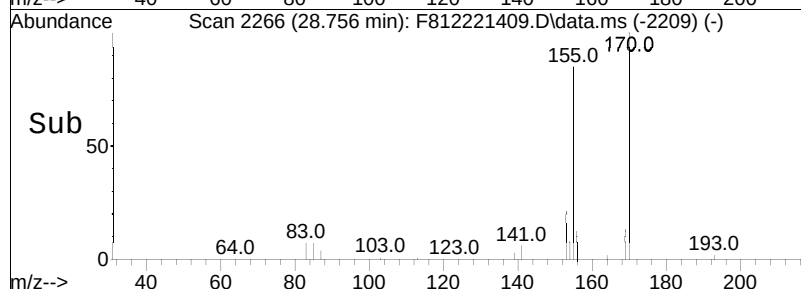
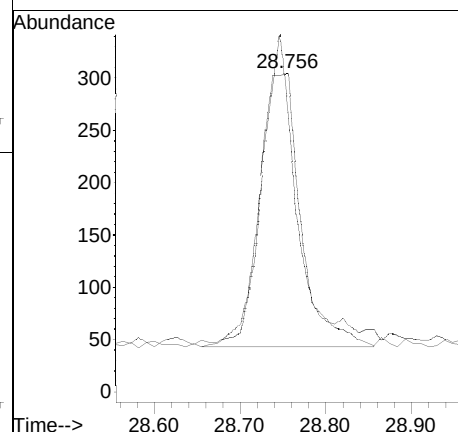
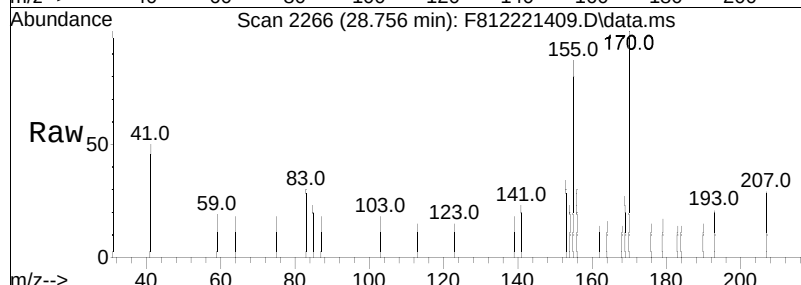
RT: 28.756 min Scan# 2266

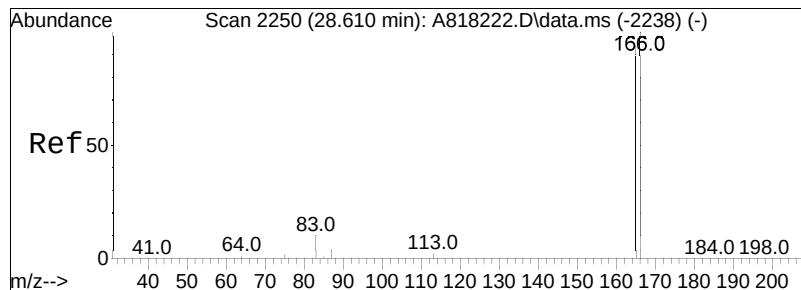
Delta R.T. 0.018 min

Lab File: F812221409.D

Acq: 23 Dec 2014 11:29 pm

Tgt Ion	Ratio	Lower	Upper
170	100		
155	99.4	73.5	136.5





#29

Fluorene

Concen: 10.97 ng/mL

RT: 29.212 min Scan# 2316

Delta R.T. 0.009 min

Lab File: F812221409.D

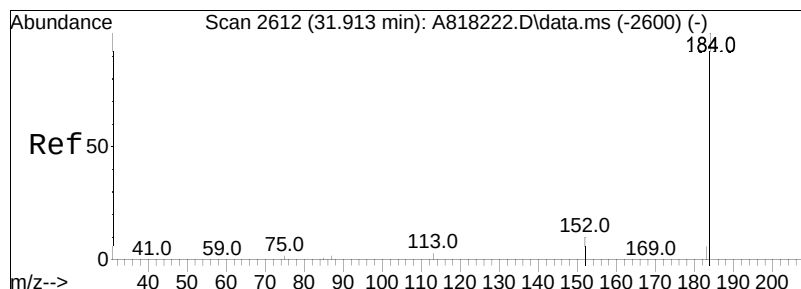
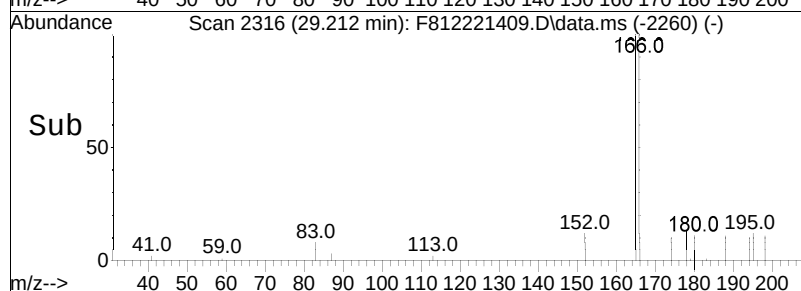
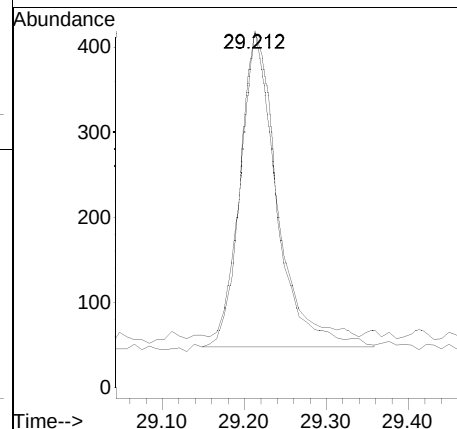
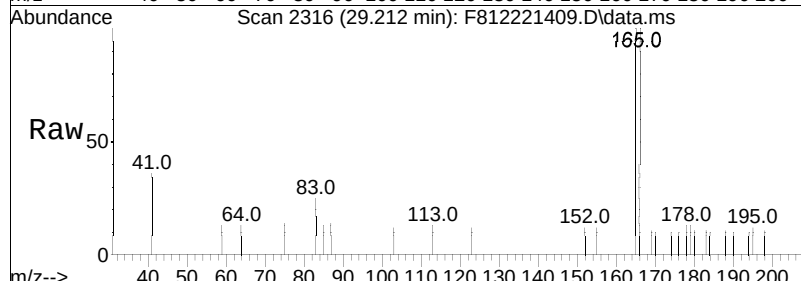
Acq: 23 Dec 2014 11:29 pm

Tgt Ion:166 Resp: 1145

Ion Ratio Lower Upper

166 100

165 91.6 66.7 123.9



#33

Dibenzothiophene

Concen: 10.99 ng/mL

RT: 32.533 min Scan# 2680

Delta R.T. 0.009 min

Lab File: F812221409.D

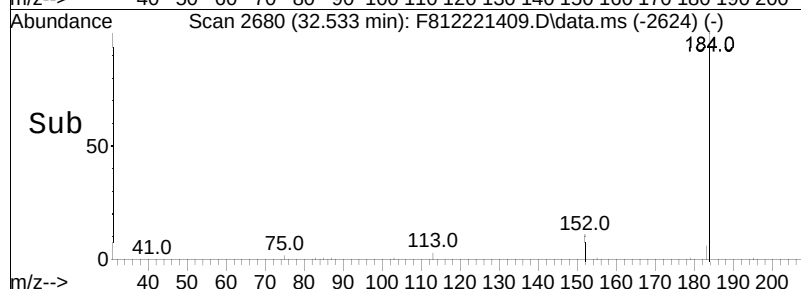
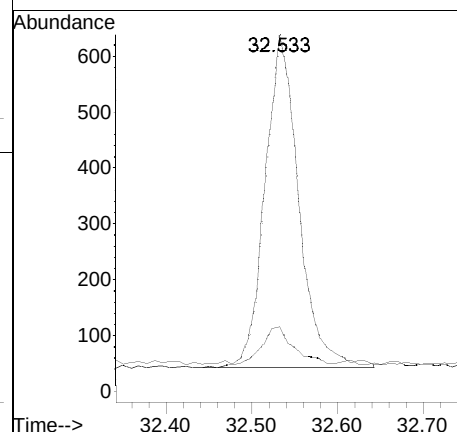
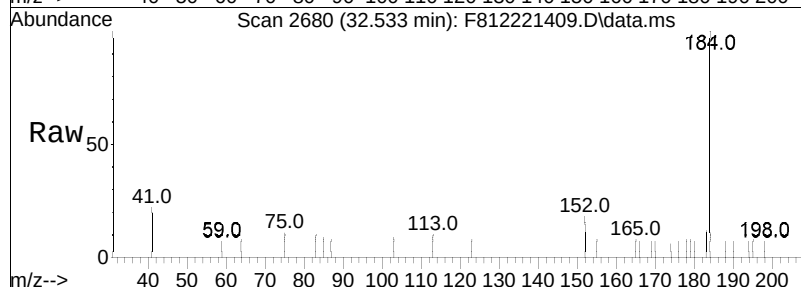
Acq: 23 Dec 2014 11:29 pm

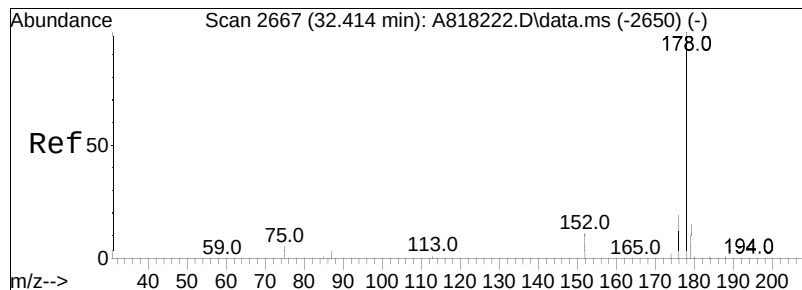
Tgt Ion:184 Resp: 1606

Ion Ratio Lower Upper

184 100

152 10.9 7.6 14.0





#43

Phenanthrene

Concen: 11.70 ng/mL

RT: 33.026 min Scan# 2734

Delta R.T. -0.000 min

Lab File: F812221409.D

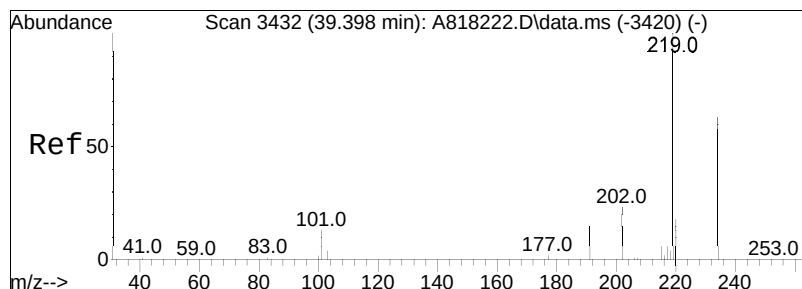
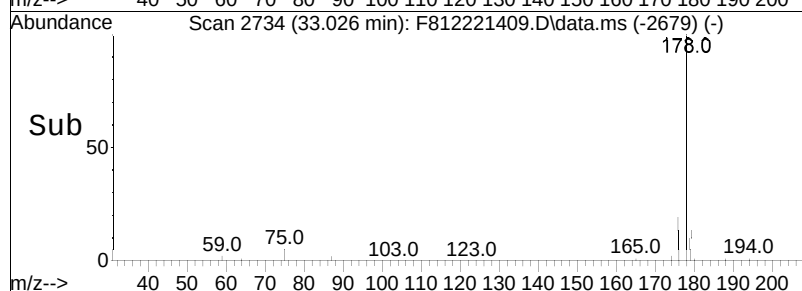
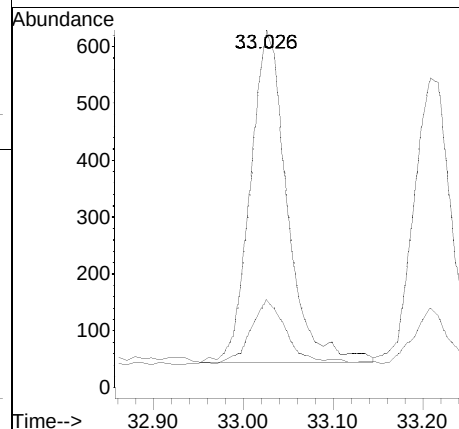
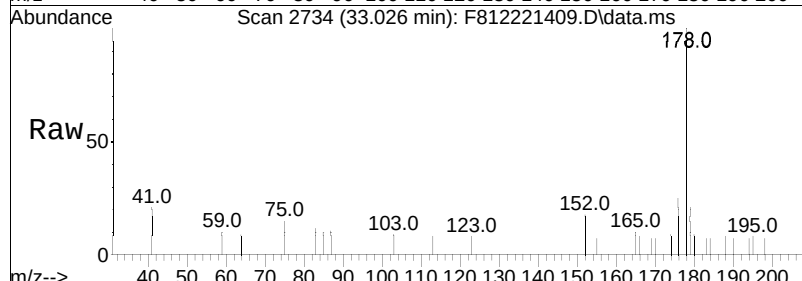
Acq: 23 Dec 2014 11:29 pm

Tgt Ion:178 Resp: 1664

Ion Ratio Lower Upper

178 100

176 19.9 13.4 24.8



#54

Retene

Concen: 9.73 ng/mL

RT: 40.000 min Scan# 3498

Delta R.T. -0.000 min

Lab File: F812221409.D

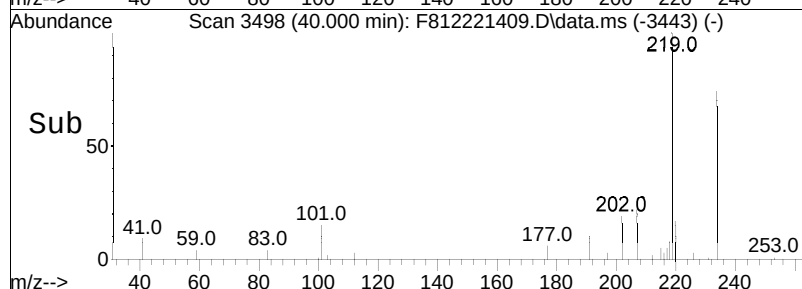
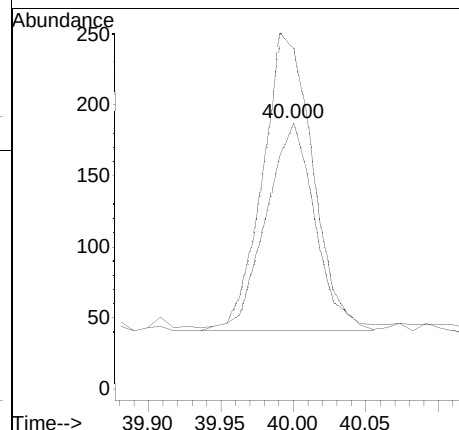
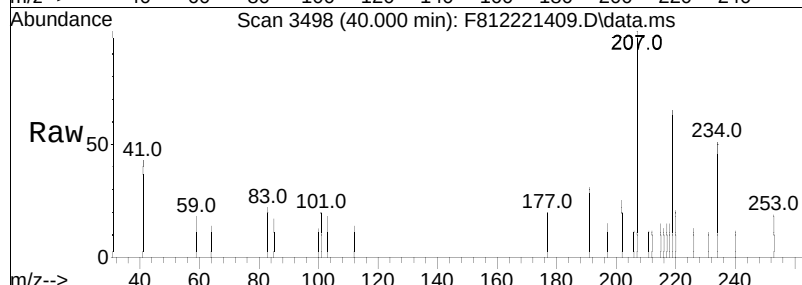
Acq: 23 Dec 2014 11:29 pm

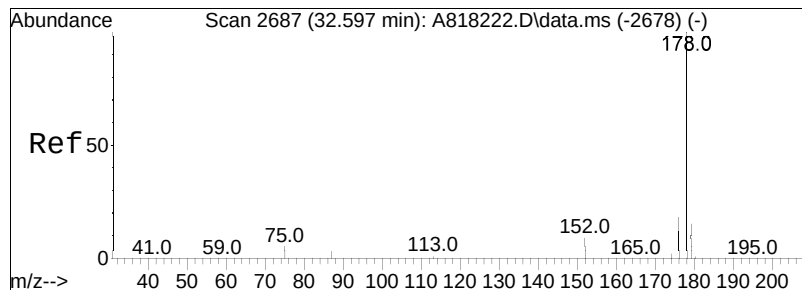
Tgt Ion:234 Resp: 341

Ion Ratio Lower Upper

234 100

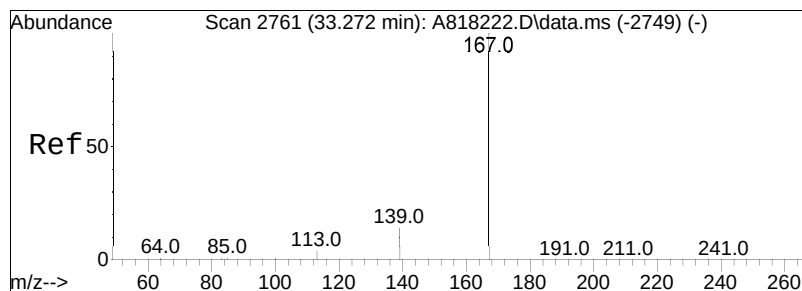
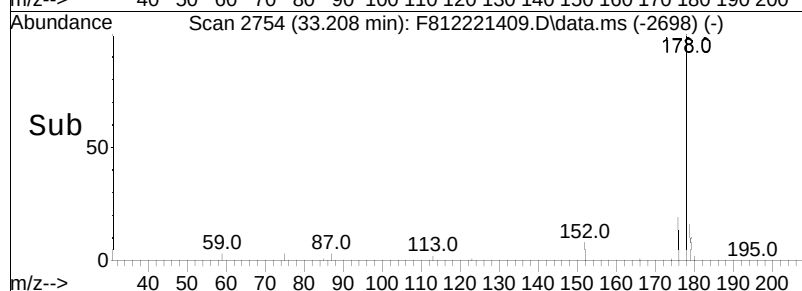
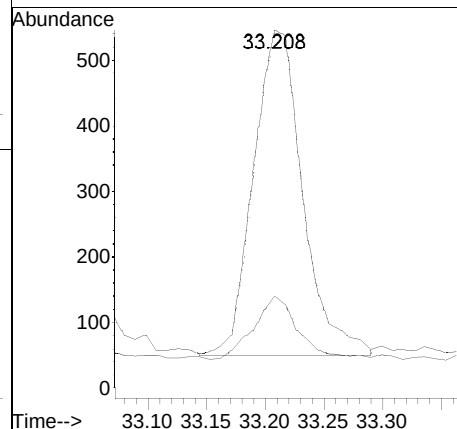
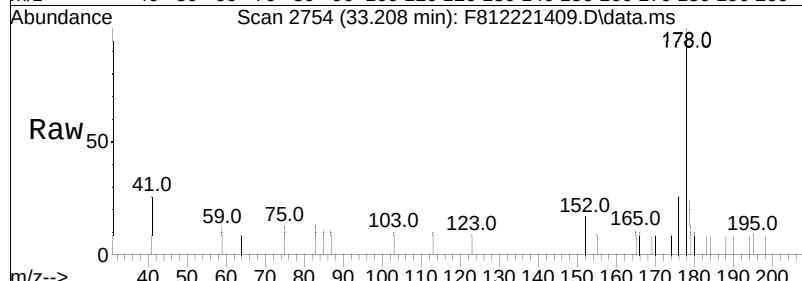
219 142.5 110.9 206.1





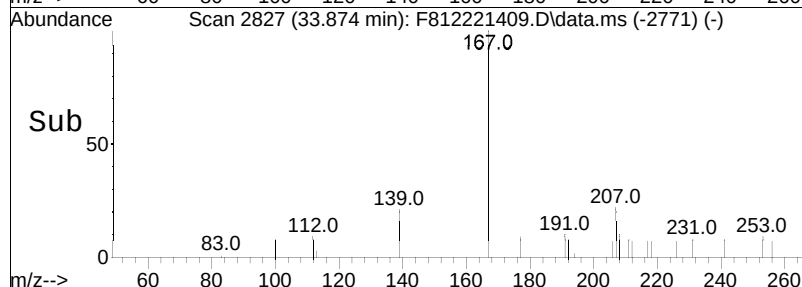
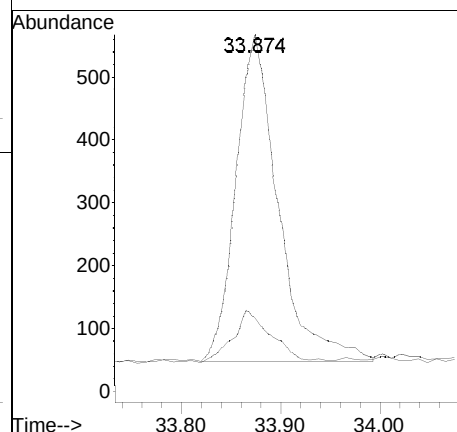
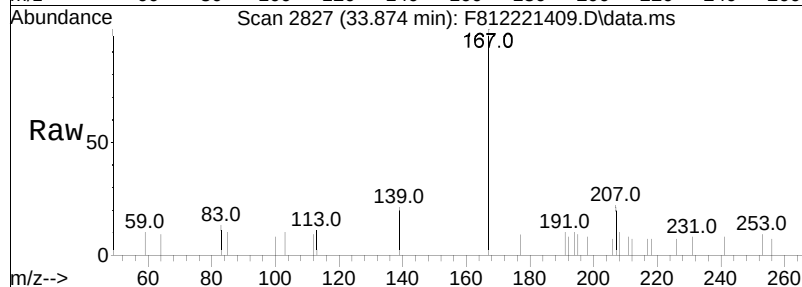
#55
 Anthracene
 Concen: 11.52 ng/mL M4
 RT: 33.208 min Scan# 2754
 Delta R.T. 0.009 min
 Lab File: F812221409.D
 Acq: 23 Dec 2014 11:29 pm

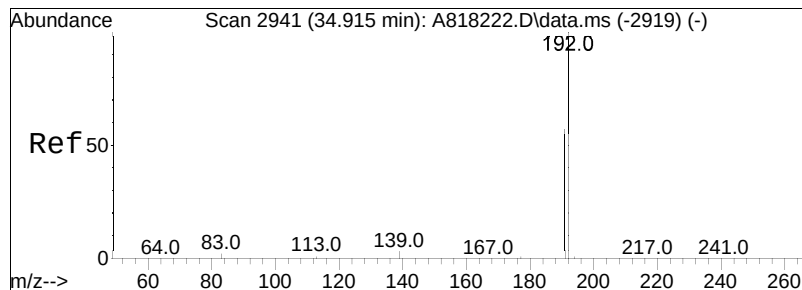
Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.0	12.5	23.3



#56
 Carbazole
 Concen: 11.53 ng/mL
 RT: 33.874 min Scan# 2827
 Delta R.T. 0.009 min
 Lab File: F812221409.D
 Acq: 23 Dec 2014 11:29 pm

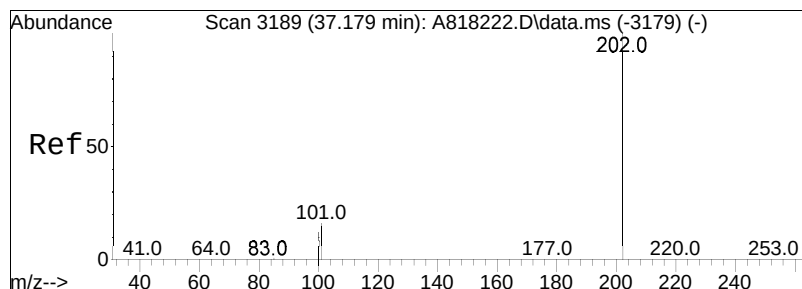
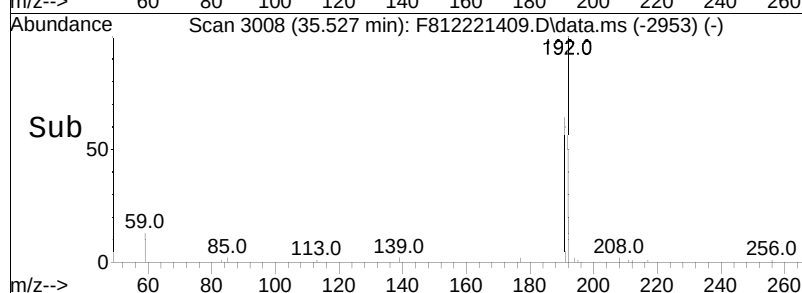
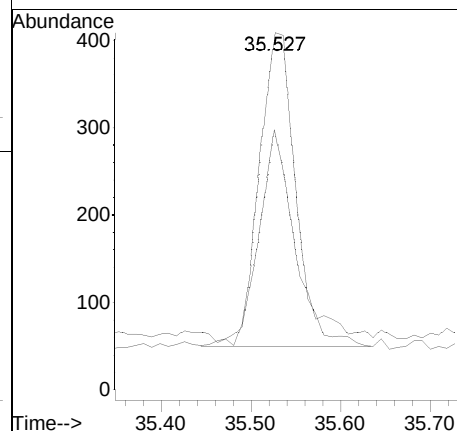
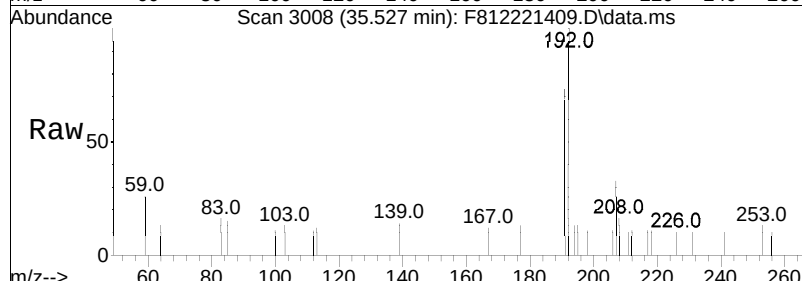
Tgt Ion	Ratio	Lower	Upper
167	100		
139	14.8	10.4	19.4





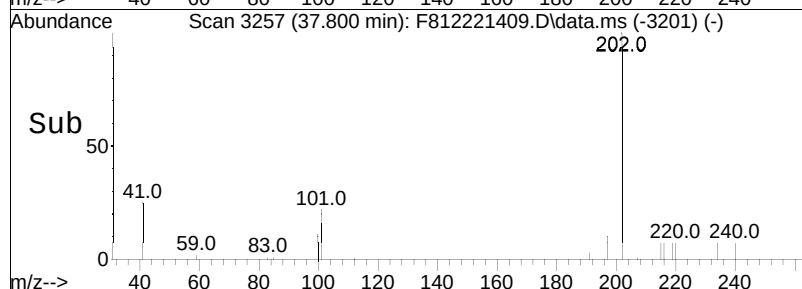
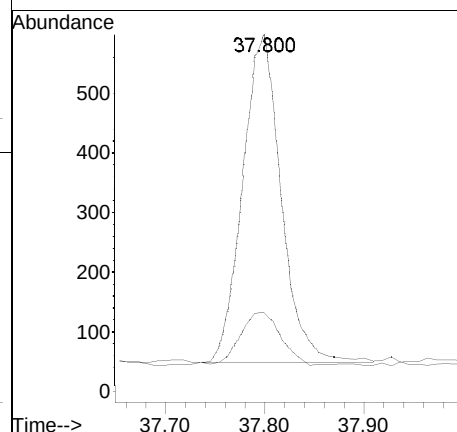
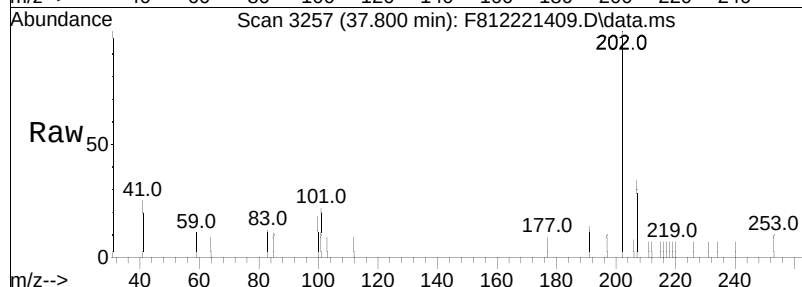
#57
 1-Methylphenanthrene
 Concen: 9.68 ng/mL
 RT: 35.527 min Scan# 3008
 Delta R.T. -0.000 min
 Lab File: F812221409.D
 Acq: 23 Dec 2014 11:29 pm

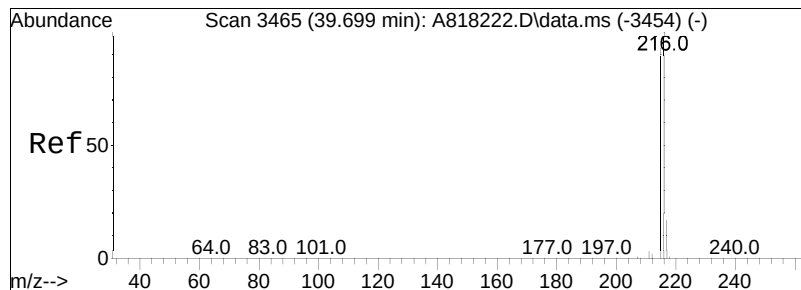
Tgt Ion	Ratio	Lower	Upper
192	100		
191	67.8	40.0	74.4



#58
 Fluoranthene
 Concen: 9.98 ng/mL
 RT: 37.800 min Scan# 3257
 Delta R.T. 0.009 min
 Lab File: F812221409.D
 Acq: 23 Dec 2014 11:29 pm

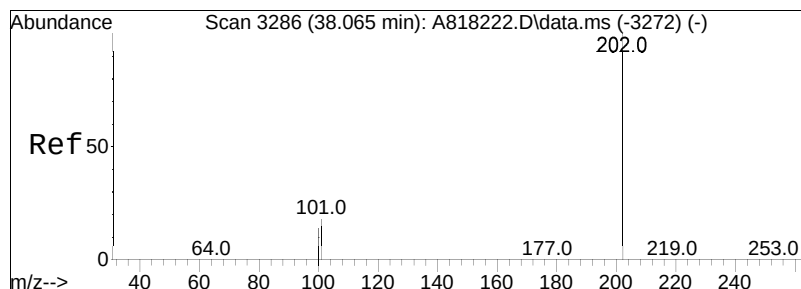
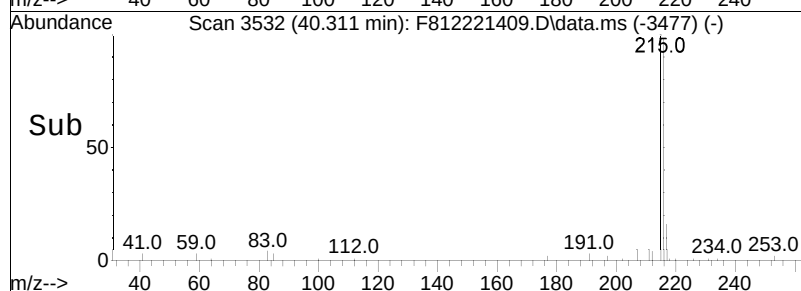
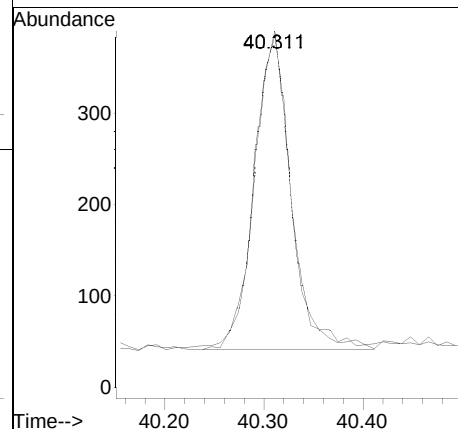
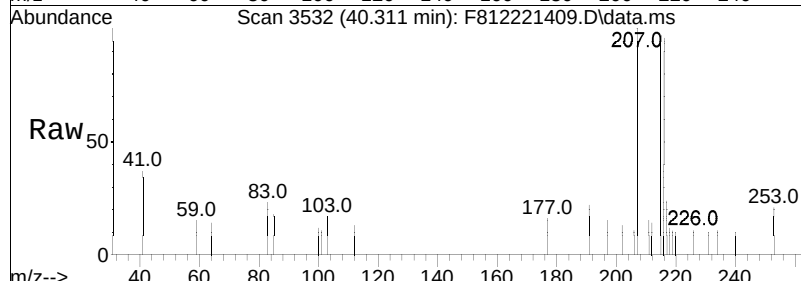
Tgt Ion	Ratio	Lower	Upper
202	100		
101	16.5	13.5	25.1





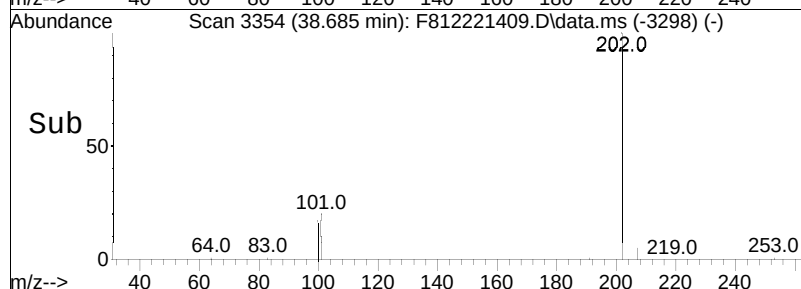
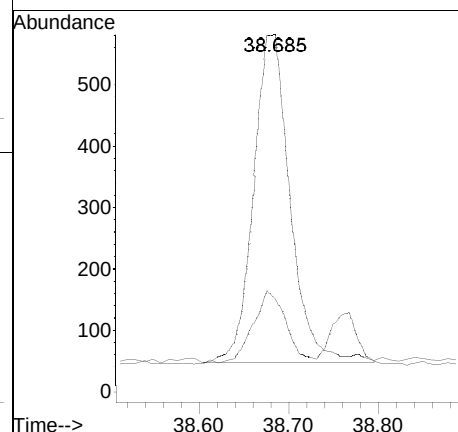
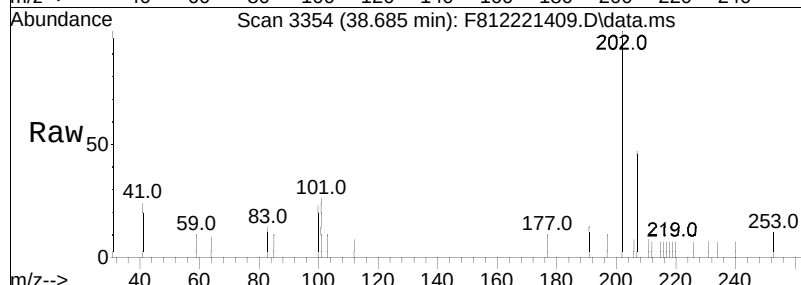
#59
Benzo(b)fluorene
Concen: 11.08 ng/mL
RT: 40.311 min Scan# 3532
Delta R.T. -0.000 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

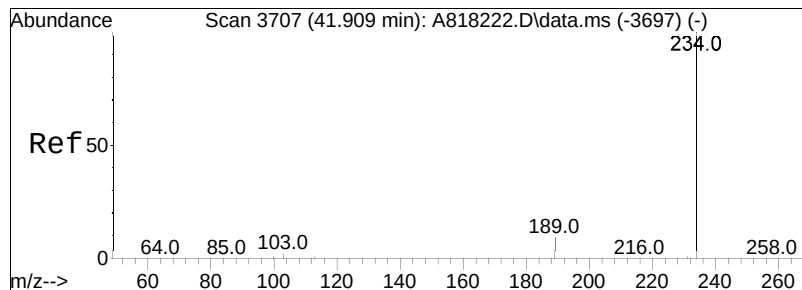
Tgt Ion	Ratio	Lower	Upper
216	100		
215	98.4	64.6	120.0



#60
Pyrene
Concen: 9.75 ng/mL
RT: 38.685 min Scan# 3354
Delta R.T. 0.009 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

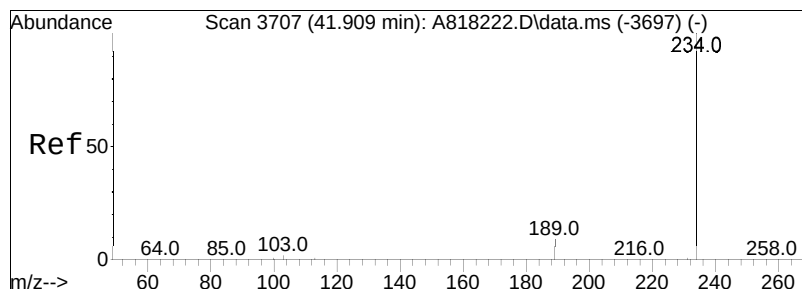
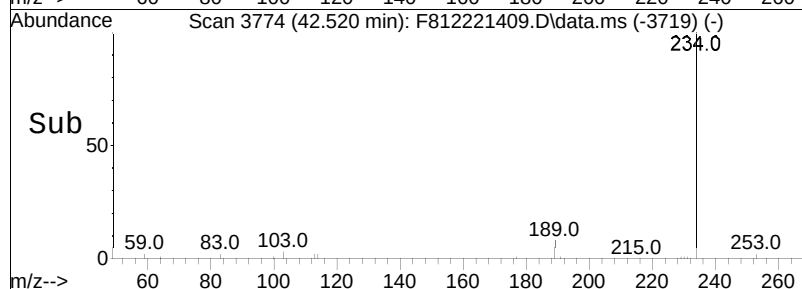
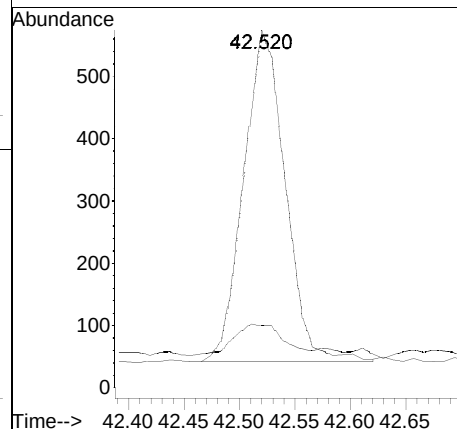
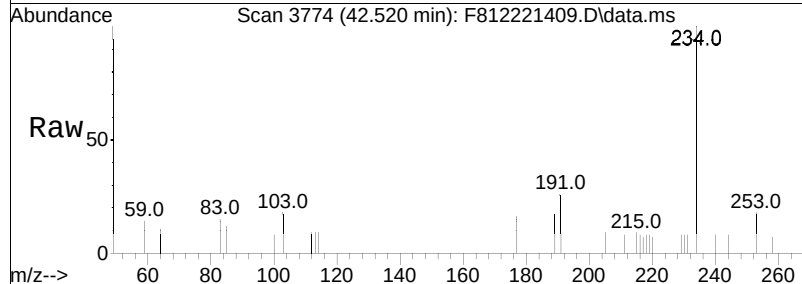
Tgt Ion	Ratio	Lower	Upper
202	100		
101	21.9	15.5	28.7





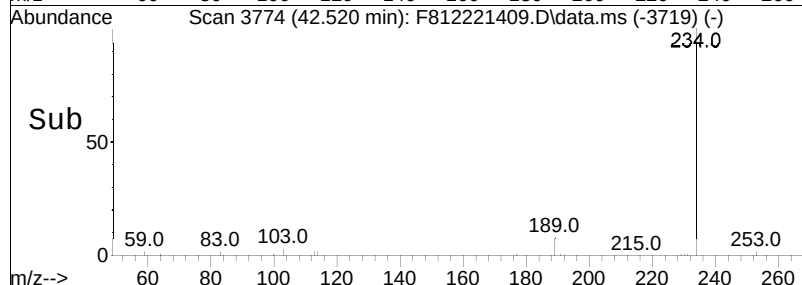
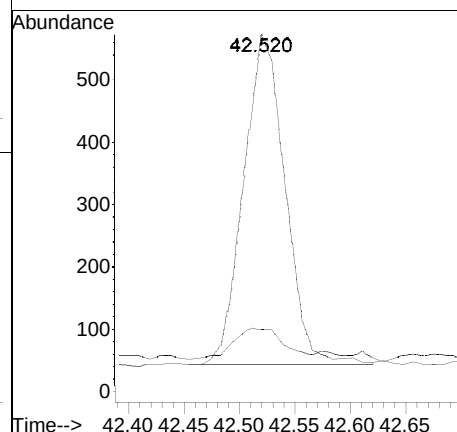
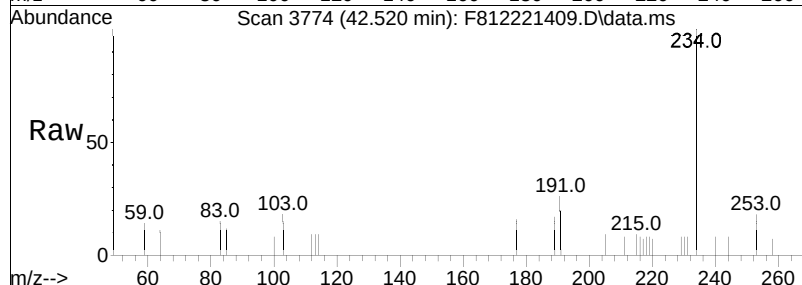
#66
 Naphthobenzothiophene
 Concen: 9.67 ng/ml
 RT: 42.520 min Scan# 3774
 Delta R.T. -0.000 min
 Lab File: F812221409.D
 Acq: 23 Dec 2014 11:29 pm

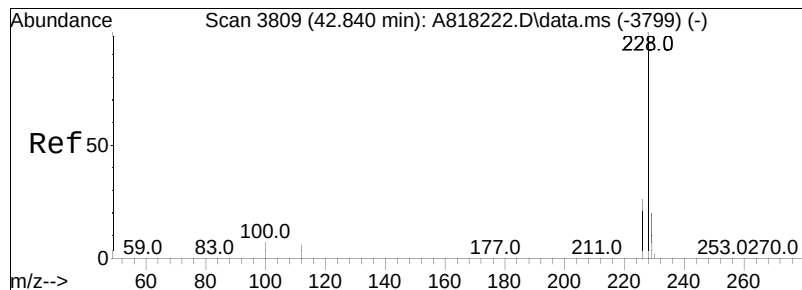
Tgt Ion	Ratio	Lower	Upper
234	100		
189	11.3	6.9	12.9



#67
 Naphthobenzothiophene-2,1-D
 Concen: 9.67 ng/mL
 RT: 42.520 min Scan# 3774
 Delta R.T. -0.000 min
 Lab File: F812221409.D
 Acq: 23 Dec 2014 11:29 pm

Tgt Ion	Ratio	Lower	Upper
234	100		
189	11.3	6.9	12.9





#75

Benz[a]anthracene

Concen: 11.23 ng/mL

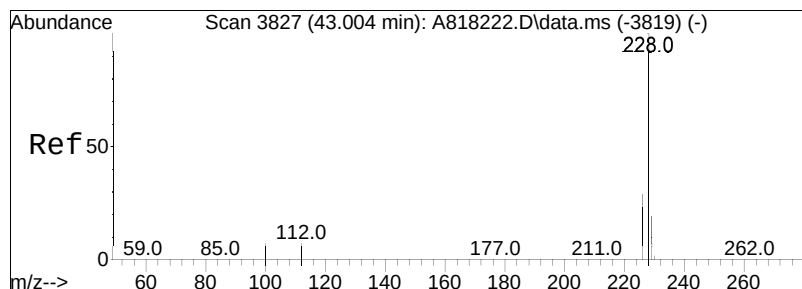
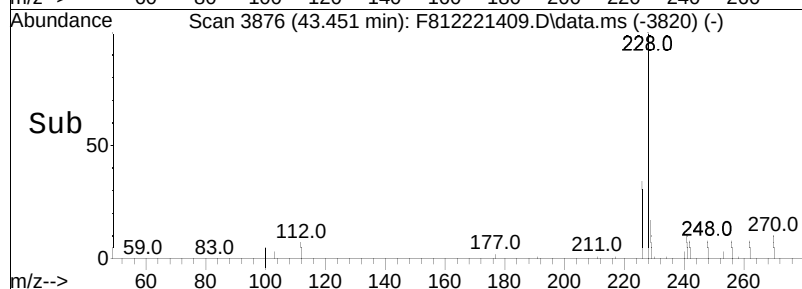
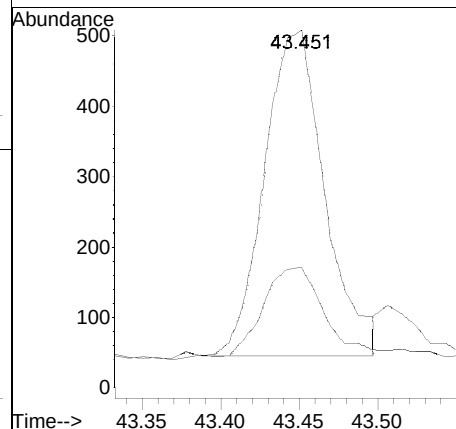
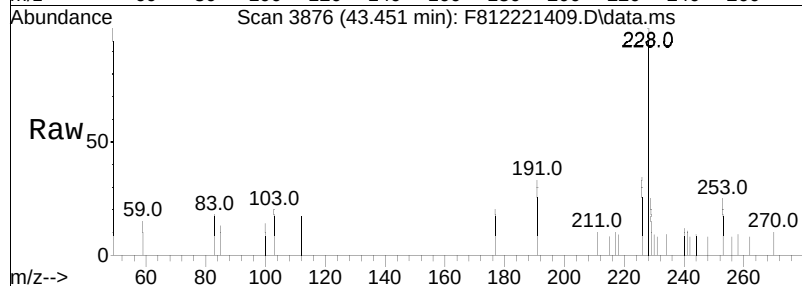
RT: 43.451 min Scan# 3876

Delta R.T. 0.009 min

Lab File: F812221409.D

Acq: 23 Dec 2014 11:29 pm

Tgt Ion	Ratio	Lower	Upper
228	100		
226	29.2	19.0	35.4



#76

Chrysene

Concen: 10.77 ng/mL

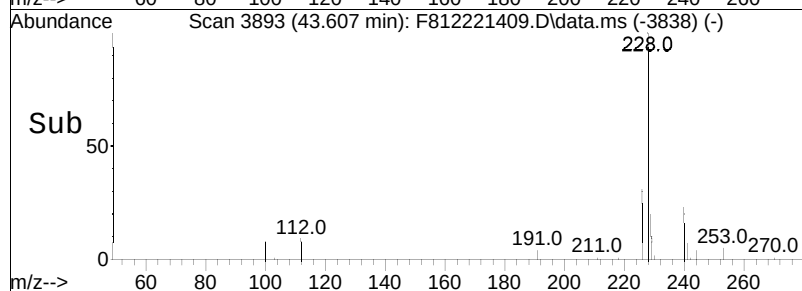
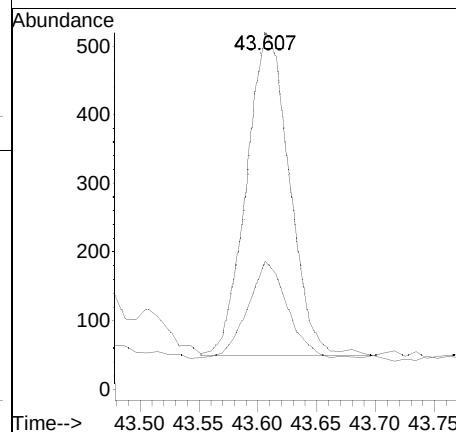
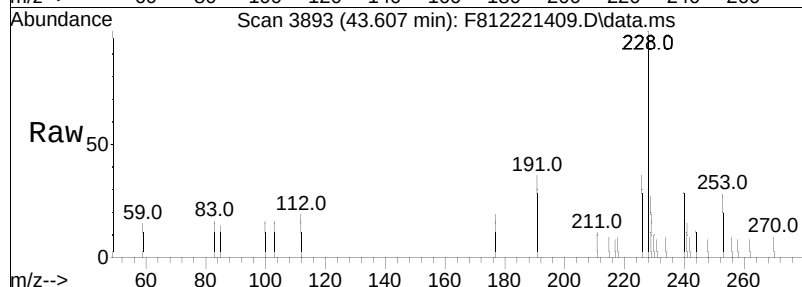
RT: 43.607 min Scan# 3893

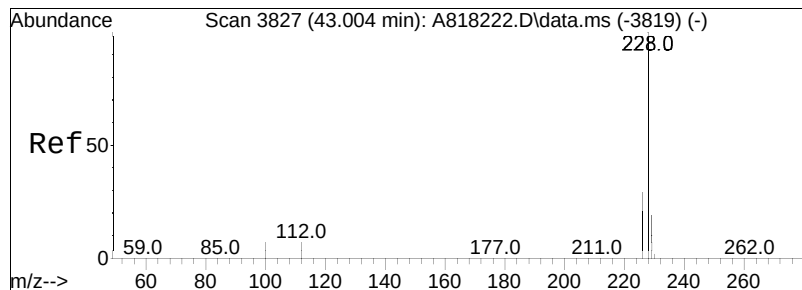
Delta R.T. -0.000 min

Lab File: F812221409.D

Acq: 23 Dec 2014 11:29 pm

Tgt Ion	Ratio	Lower	Upper
228	100		
226	31.5	20.7	38.5





#77

Chrysene/Triphenylene

Concen: 10.77 ng/mL

RT: 43.607 min Scan# 3893

Delta R.T. -0.000 min

Lab File: F812221409.D

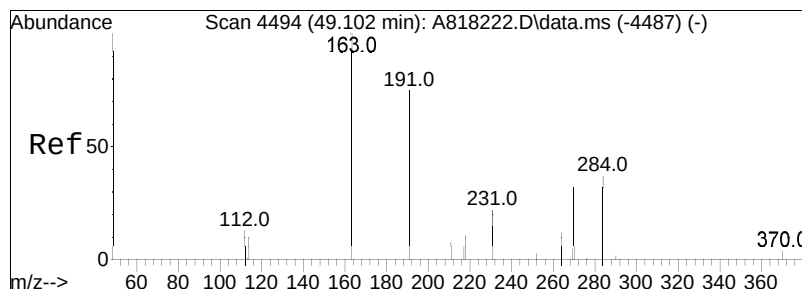
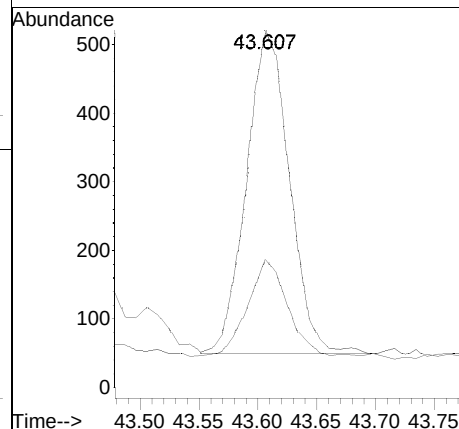
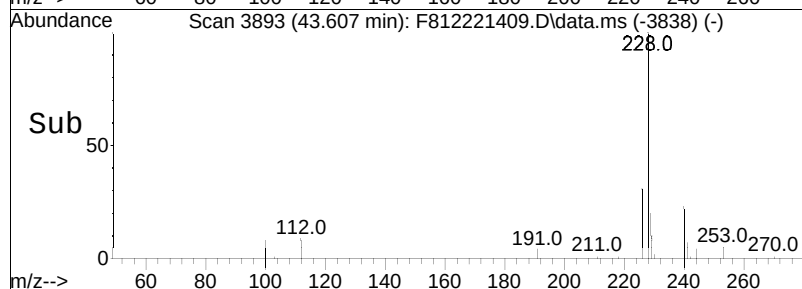
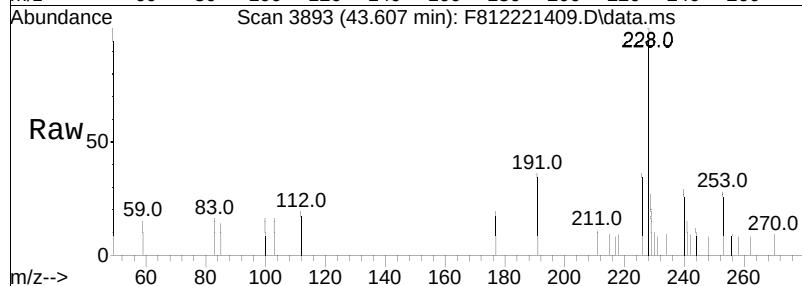
Acq: 23 Dec 2014 11:29 pm

Tgt Ion:228 Resp: 1188

Ion Ratio Lower Upper

228 100

226 31.5 20.7 38.5



#84

Benzo[b]fluoranthene

Concen: 11.12 ng/mL M3

RT: 47.500 min Scan# 4319

Delta R.T. -0.000 min

Lab File: F812221409.D

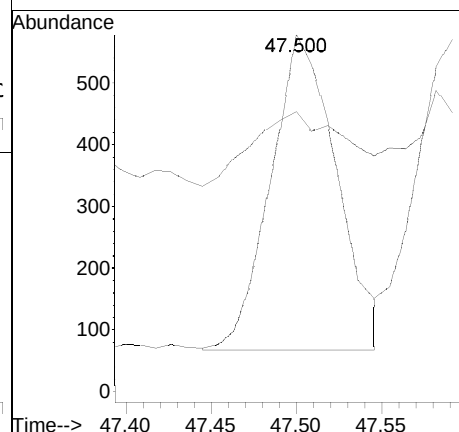
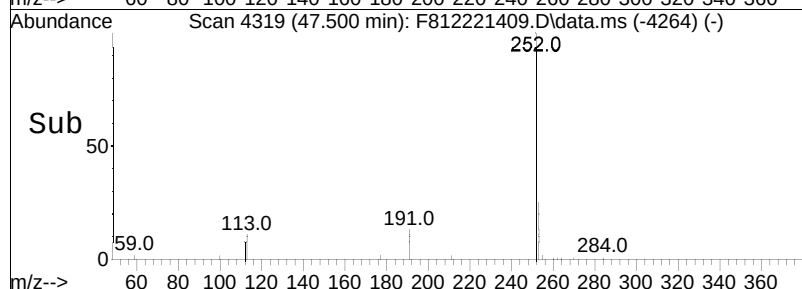
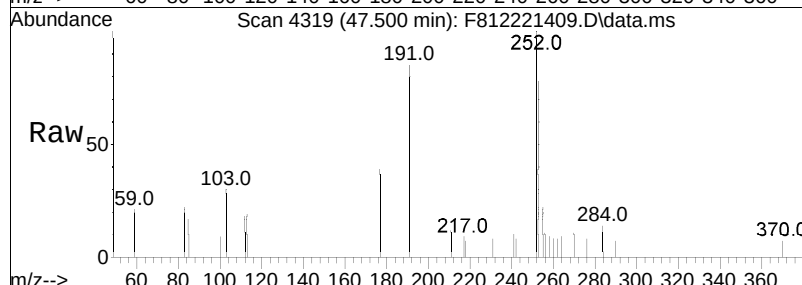
Acq: 23 Dec 2014 11:29 pm

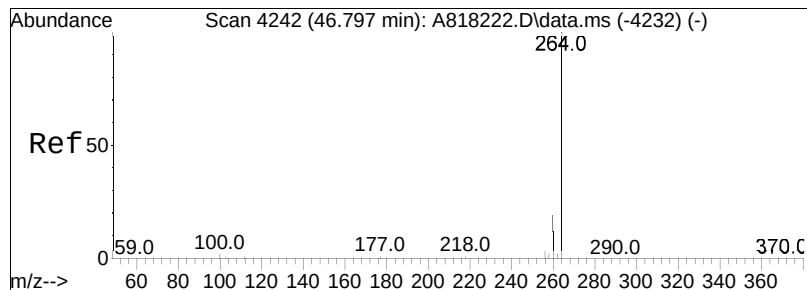
Tgt Ion:252 Resp: 1375

Ion Ratio Lower Upper

252 100

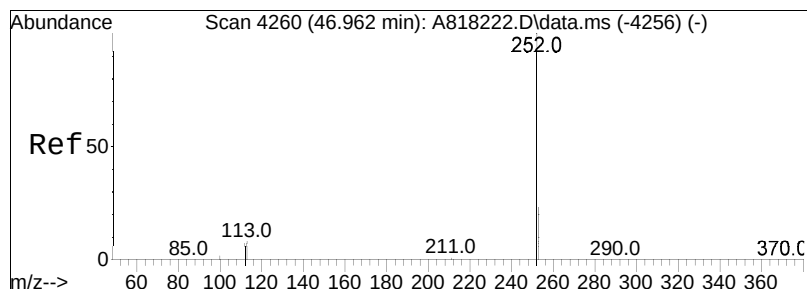
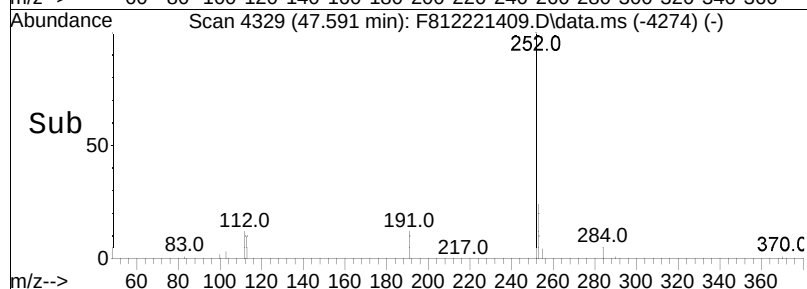
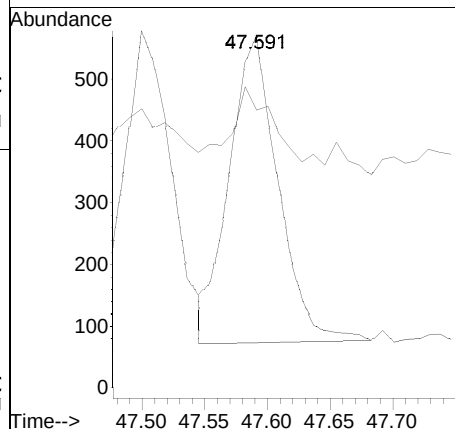
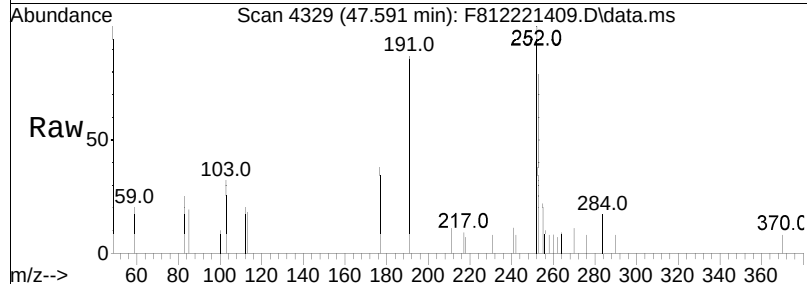
253 17.5 16.5 30.7





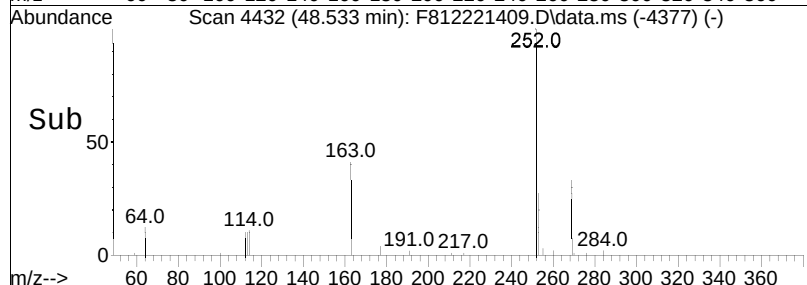
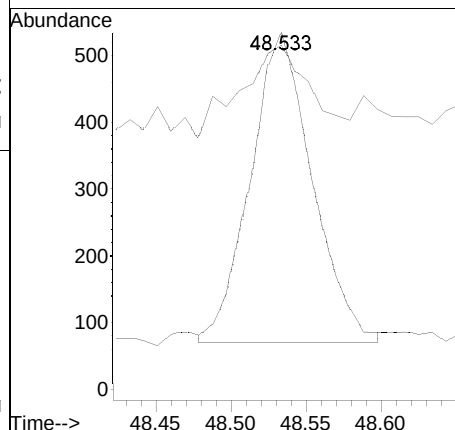
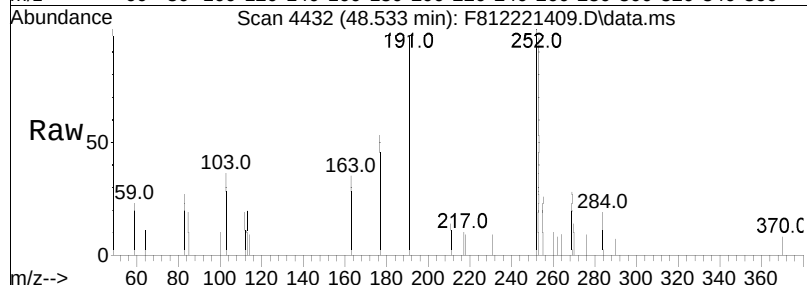
#85
Benzo[j]+[k]fluoranthene
Concen: 11.47 ng/mL
RT: 47.591 min Scan# 4329
Delta R.T. -0.000 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

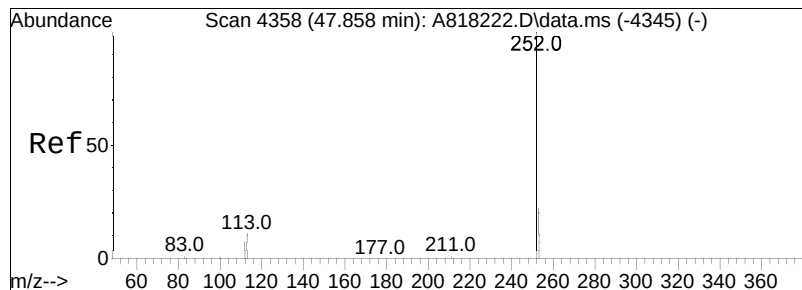
Tgt Ion	Ratio	Lower	Upper
252	100		
253	18.0	17.1	31.7



#87
Benzo[e]pyrene
Concen: 10.62 ng/mL M4
RT: 48.533 min Scan# 4432
Delta R.T. -0.000 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

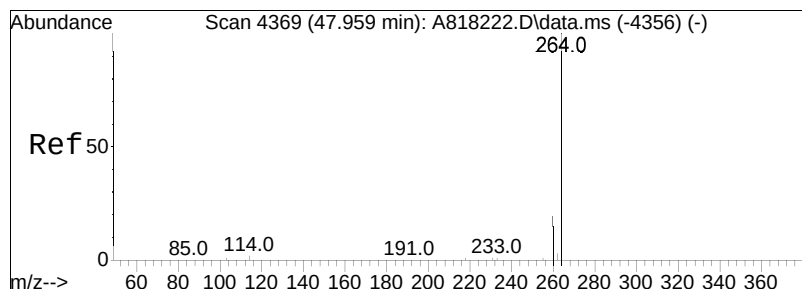
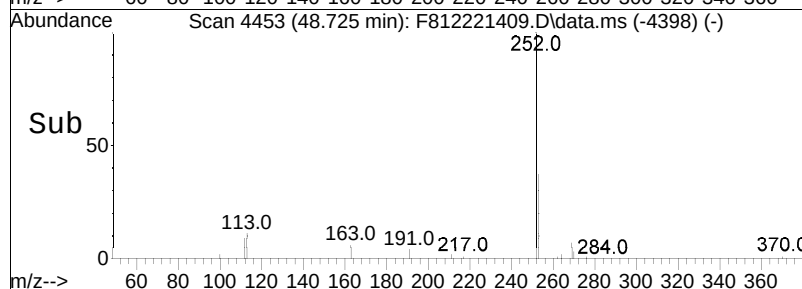
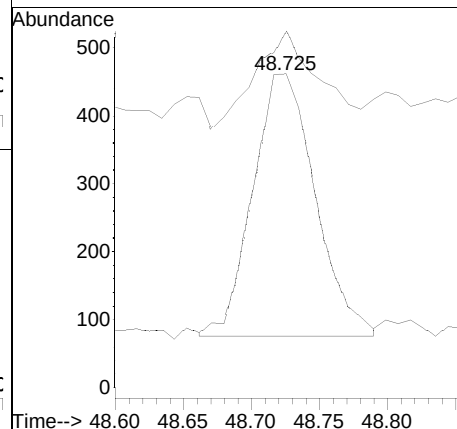
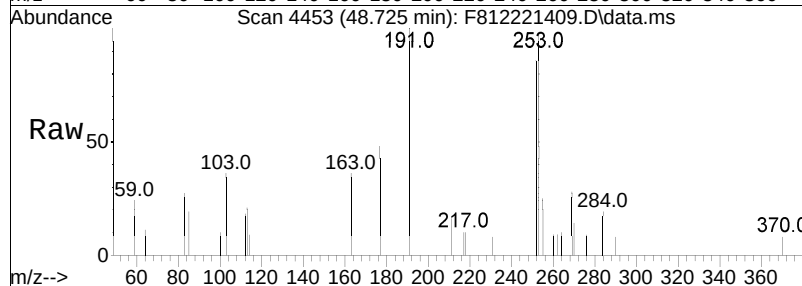
Tgt Ion	Ratio	Lower	Upper
252	100		
253	33.7	17.4	32.4#





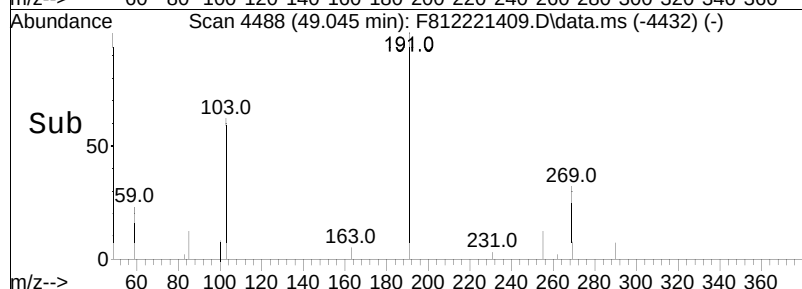
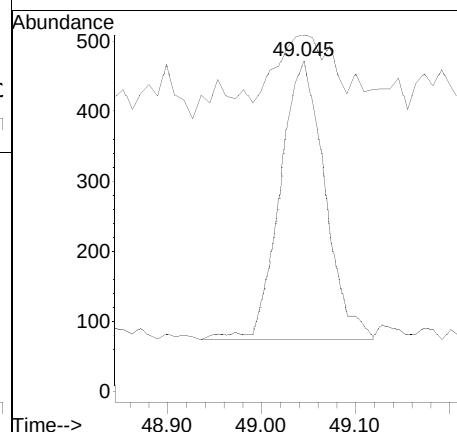
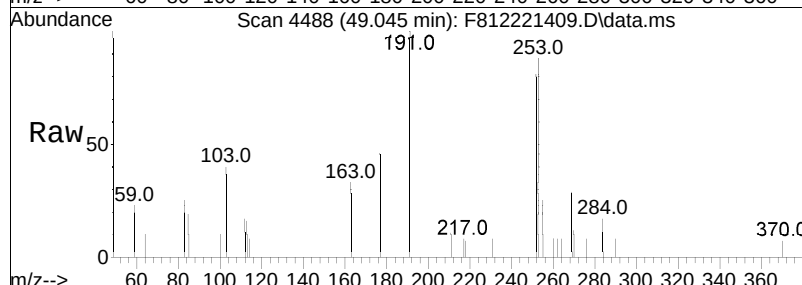
#89
Benzo[a]pyrene
Concen: 11.32 ng/mL M3
RT: 48.725 min Scan# 4453
Delta R.T. -0.000 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

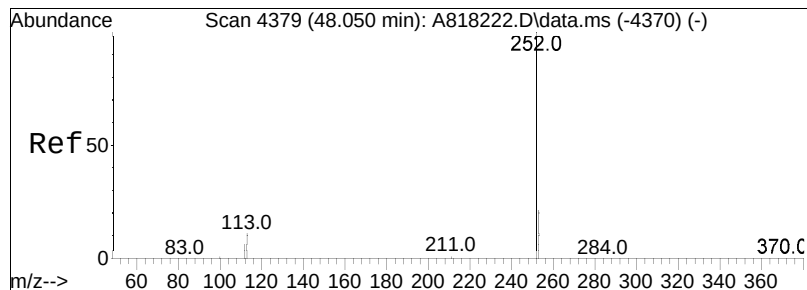
Tgt Ion: 252 Resp: 1232
Ion Ratio Lower Upper
252 100
253 36.4 16.9 31.3#



#90
Perylene
Concen: 11.55 ng/mL
RT: 49.045 min Scan# 4488
Delta R.T. 0.009 min
Lab File: F812221409.D
Acq: 23 Dec 2014 11:29 pm

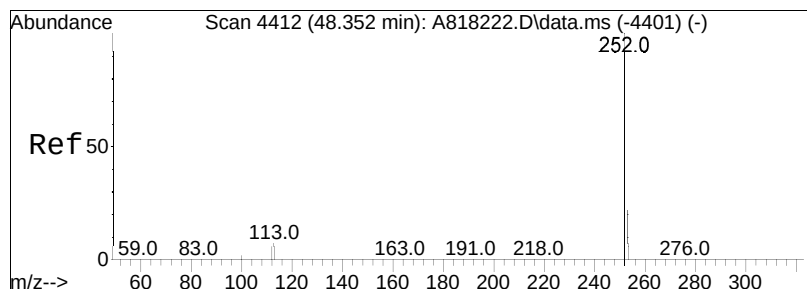
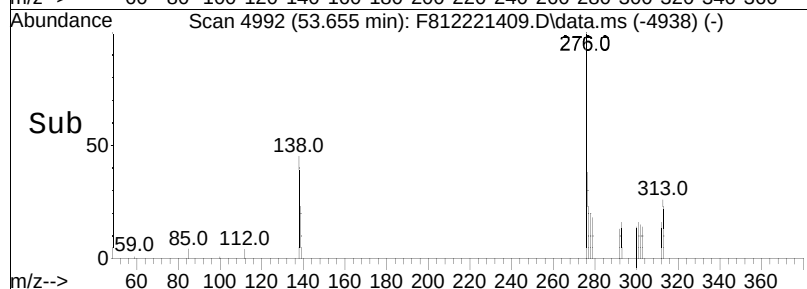
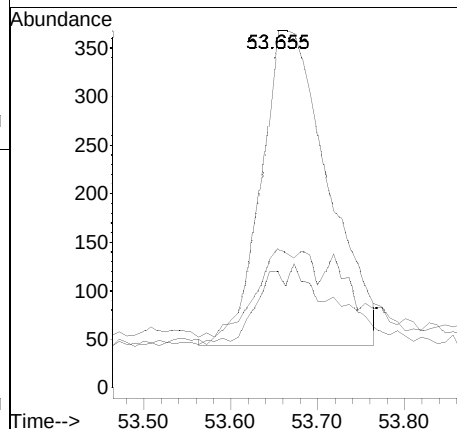
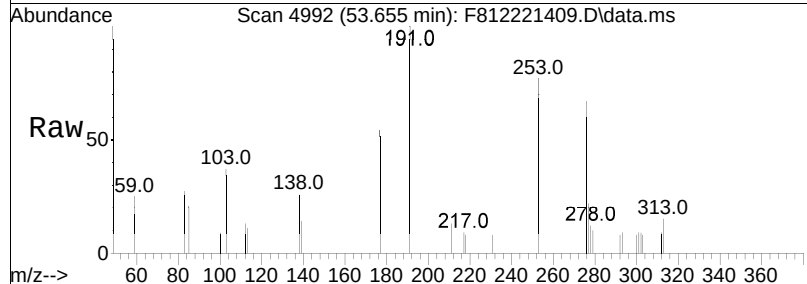
Tgt Ion: 252 Resp: 1308
Ion Ratio Lower Upper
252 100
253 28.6 17.3 32.1





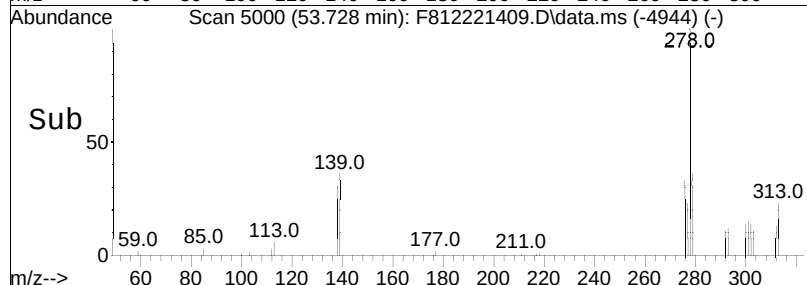
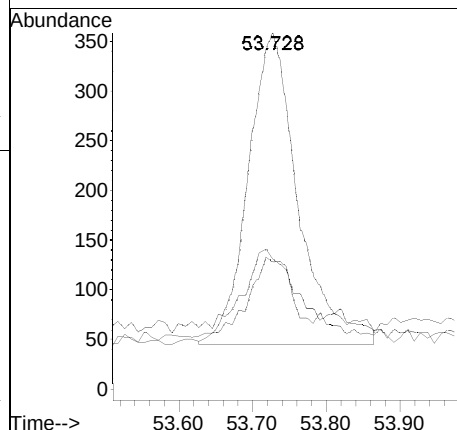
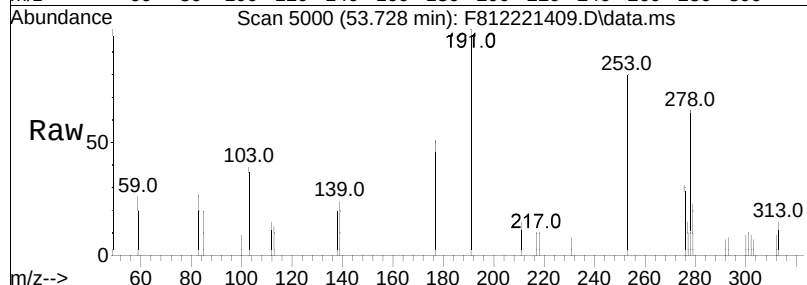
#91
 Indeno[1,2,3-cd]pyrene
 Concen: 12.03 ng/mL M3
 RT: 53.655 min Scan# 4992
 Delta R.T. -0.009 min
 Lab File: F812221409.D
 Acq: 23 Dec 2014 11:29 pm

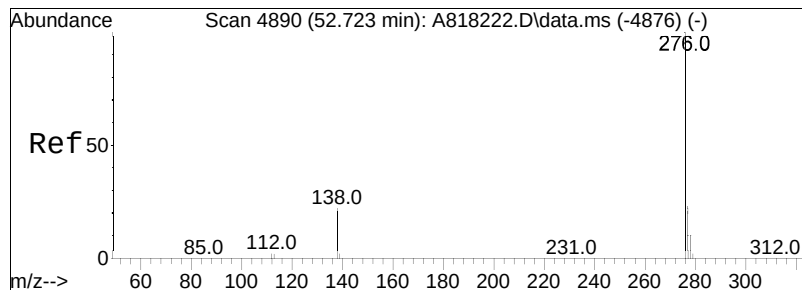
Tgt Ion	Ratio	Resp	Lower	Upper
276	100	1727		
138	23.5	19.3	35.9	
277	9.8	16.5	30.7#	



#92
 Dibenz[ah]+[ac]anthracene
 Concen: 11.90 ng/mL M4
 RT: 53.728 min Scan# 5000
 Delta R.T. 0.009 min
 Lab File: F812221409.D
 Acq: 23 Dec 2014 11:29 pm

Tgt Ion	Ratio	Resp	Lower	Upper
278	100	1476		
139	18.4	16.8	31.2	
279	18.8	17.2	32.0	





#93

Benzo[g,h,i]perylene

Concen: 10.63 ng/mL

RT: 55.016 min Scan# 5141

Delta R.T. 0.009 min

Lab File: F812221409.D

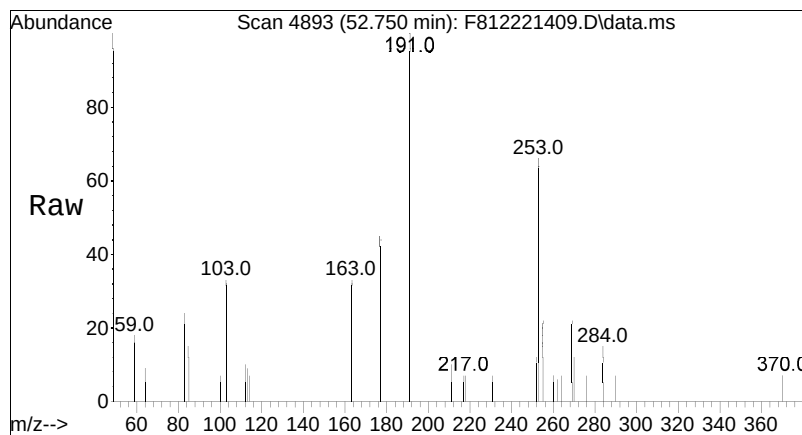
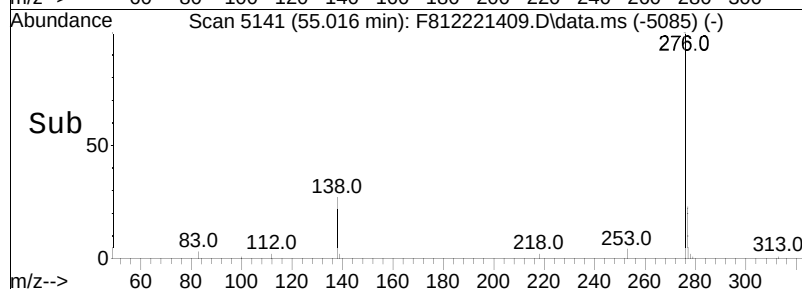
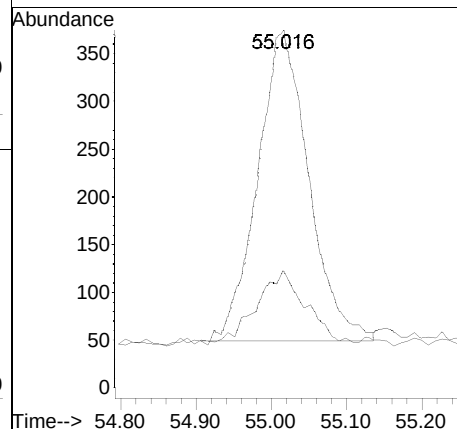
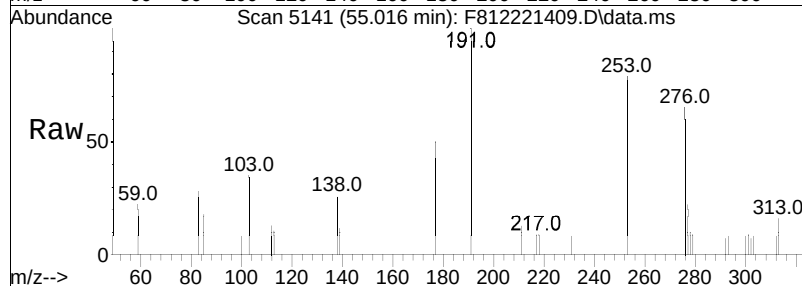
Acq: 23 Dec 2014 11:29 pm

Tgt Ion: 276 Resp: 1524

Ion Ratio Lower Upper

276 100

277 21.3 16.5 30.7



#94

Hopane (T19)

Concen: 13.59 ng/mL M4

RT: 52.750 min Scan# 4893

Delta R.T. 0.009 min

Lab File: F812221409.D

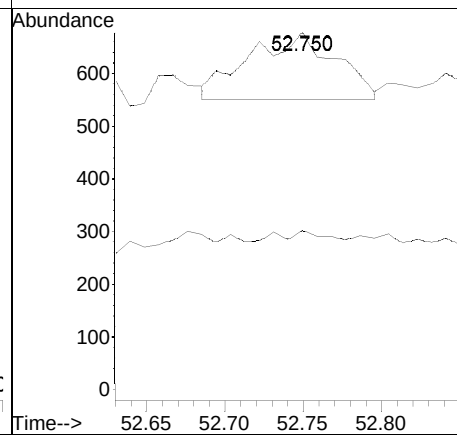
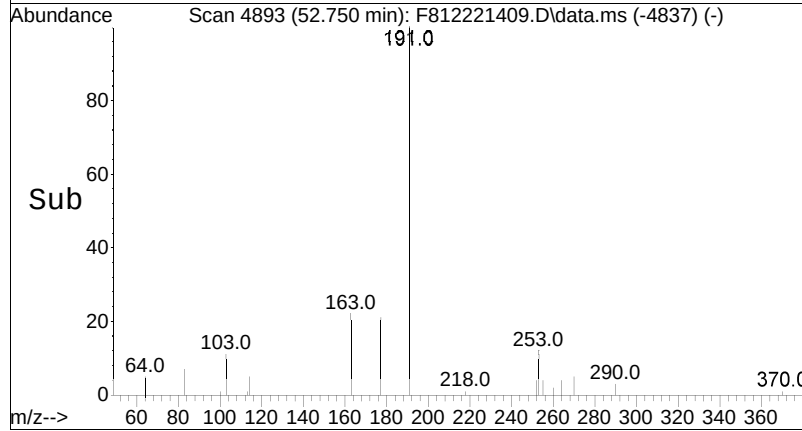
Acq: 23 Dec 2014 11:29 pm

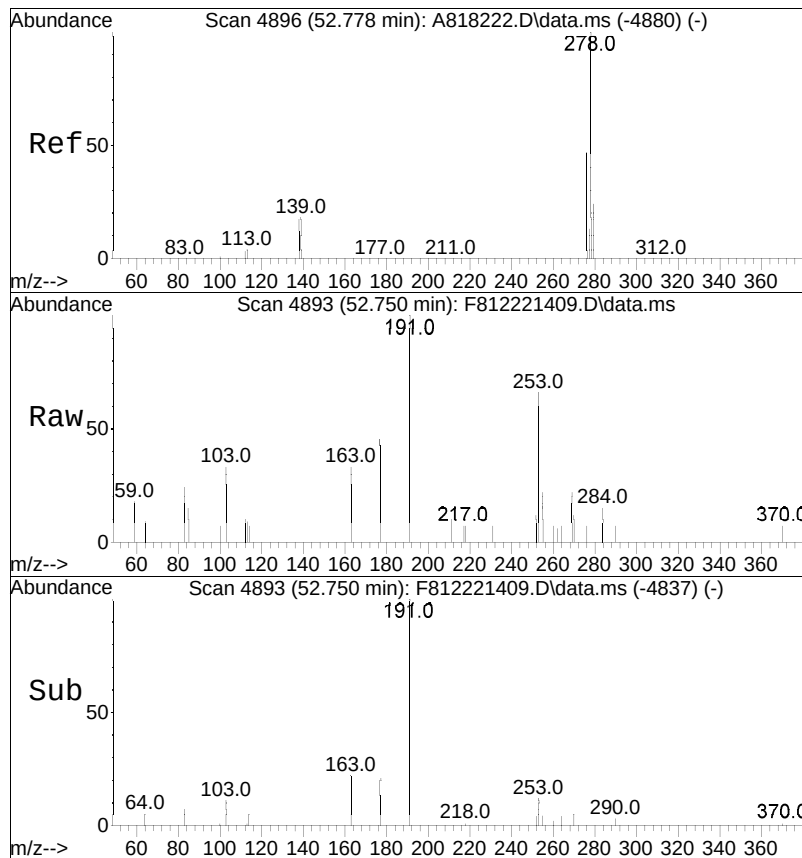
Tgt Ion: 191 Resp: 490

Ion Ratio Lower Upper

191 100

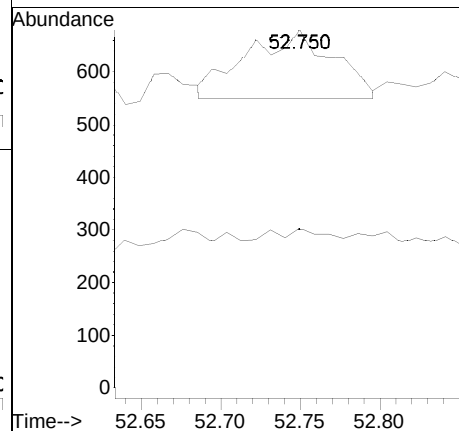
177 0.0 10.1 18.9#





#95
 17a(H),21B(H)-hopane - C₃₀H₅₂
 Concen: 13.76 ng/mL M4
 RT: 52.750 min Scan# 4893
 Delta R.T. 0.009 min
 Lab File: F812221409.D
 Acq: 23 Dec 2014 11:29 pm

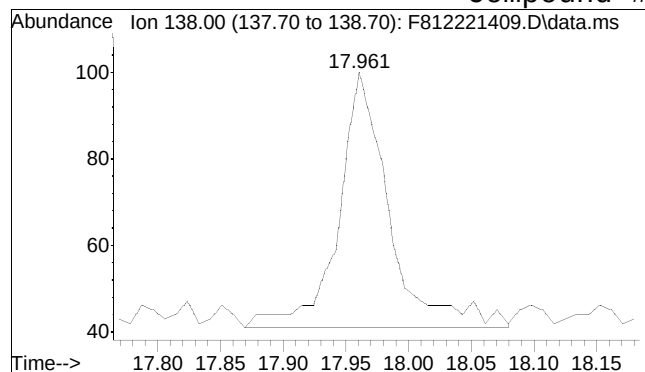
Tgt Ion:191 Resp: 496
 Ion Ratio Lower Upper
 191 100
 177 0.0 10.1 18.9#



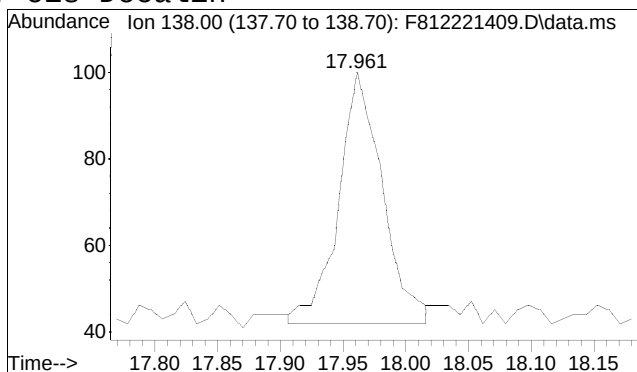
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221409.D Operator : PAH8:ML
 Date Inj'd : 12/23/2014 11:29 pm Instrument : PAH8
 Sample : I812231401 Quant Date : 12/24/2014 11:28 am

Compound #4: cis-Decalin



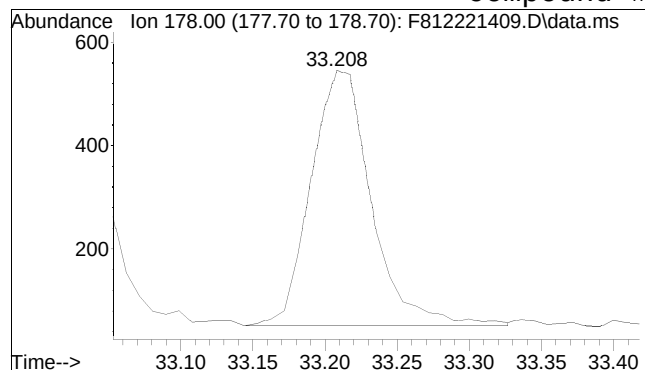
Original Peak Response = 168



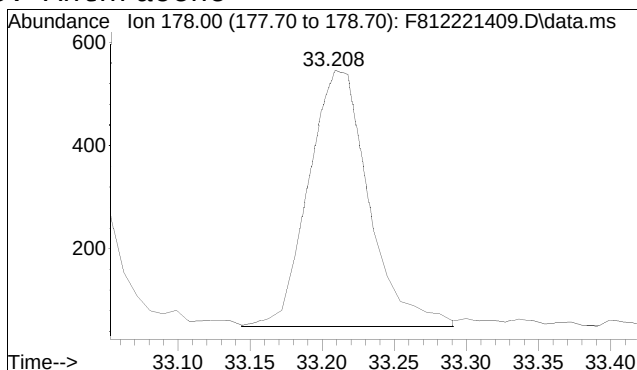
Manual Peak Response = 141 M4

M4 = Poor automated baseline construction.

Compound #55: Anthracene



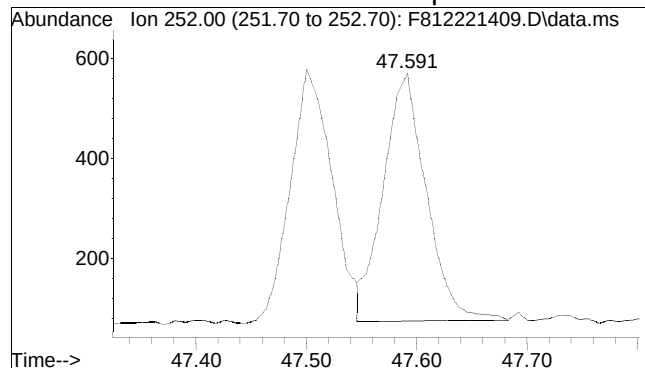
Original Peak Response = 1439



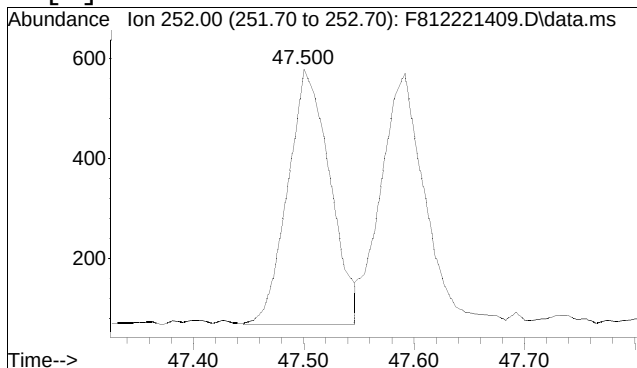
Manual Peak Response = 1447 M4

M4 = Poor automated baseline construction.

Compound #84: Benzo[b]fluoranthene



Original Peak Response = 1341



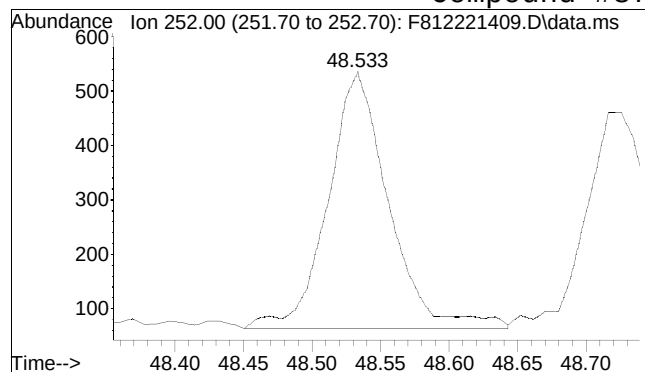
Manual Peak Response = 1375 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

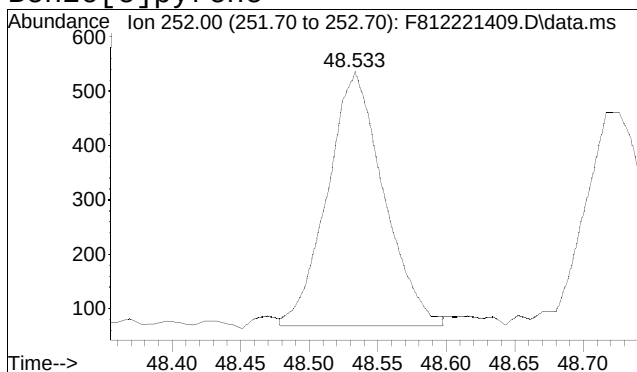
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221409.D Operator : PAH8:ML
 Date Inj'd : 12/23/2014 11:29 pm Instrument : PAH8
 Sample : I812231401 Quant Date : 12/24/2014 11:28 am

Compound #87: Benzo[e]pyrene



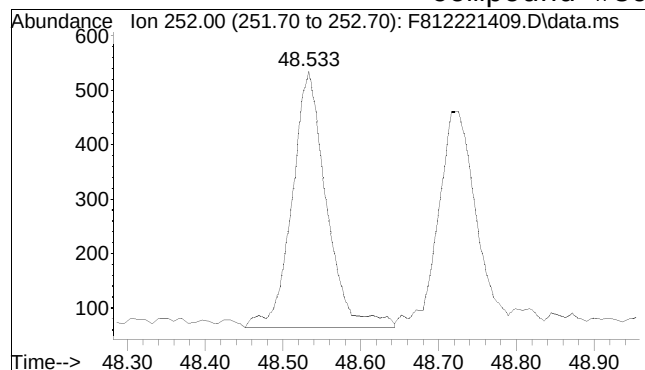
Original Peak Response = 1439



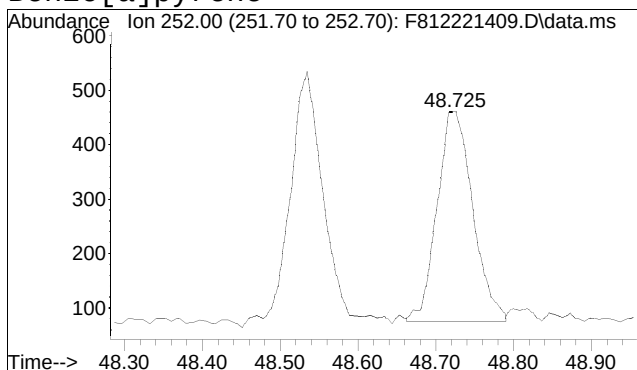
Manual Peak Response = 1334 M4

M4 = Poor automated baseline construction.

Compound #89: Benzo[a]pyrene



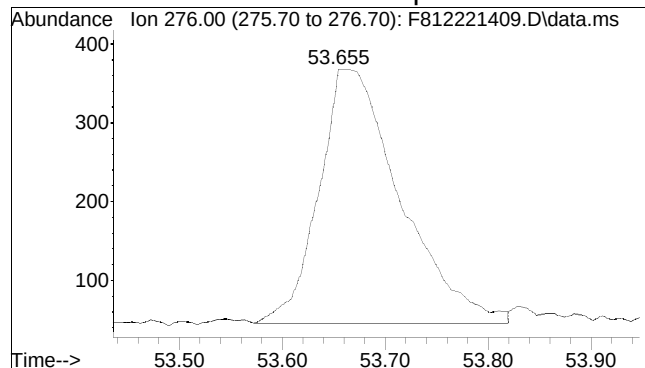
Original Peak Response = 1439



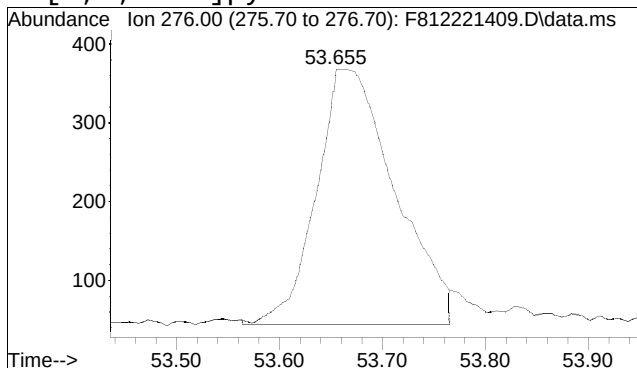
Manual Peak Response = 1232 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 1789



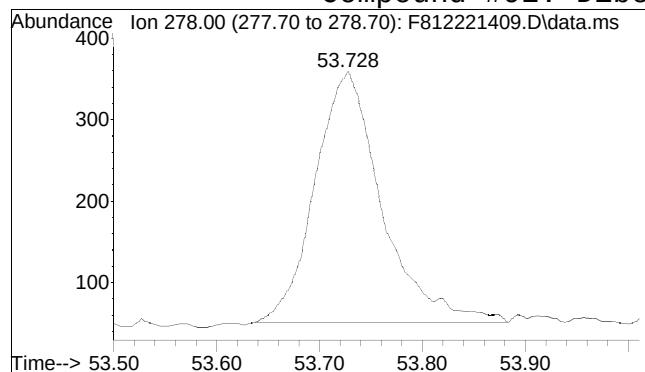
Manual Peak Response = 1727 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

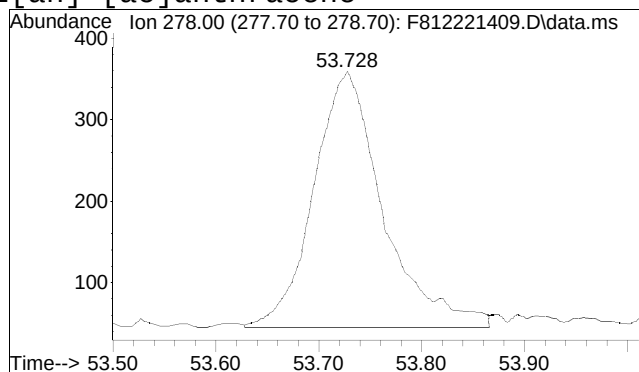
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221409.D Operator : PAH8:ML
 Date Inj'd : 12/23/2014 11:29 pm Instrument : PAH8
 Sample : I812231401 Quant Date : 12/24/2014 11:28 am

Compound #92: Dibenz[ah]+[ac]anthracene



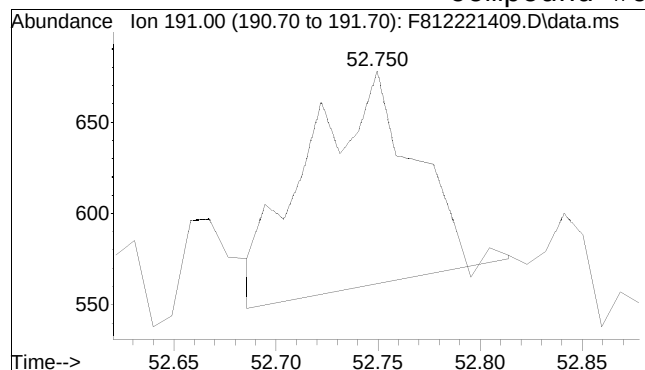
Original Peak Response = 1397

M4 = Poor automated baseline construction.



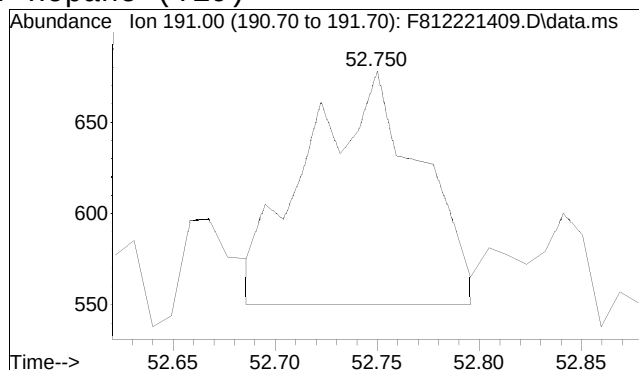
Manual Peak Response = 1476 M4

Compound #94: Hopane (T19)



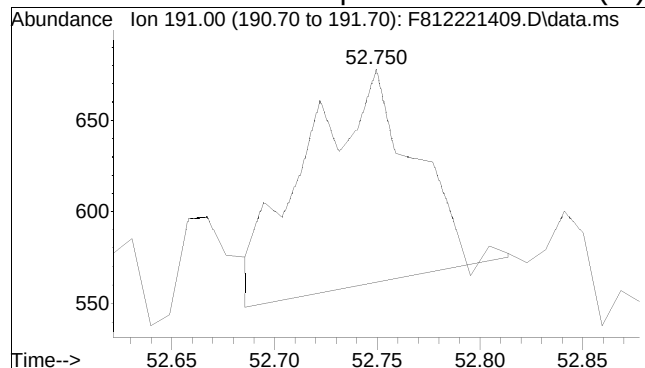
Original Peak Response = 433

M4 = Poor automated baseline construction.



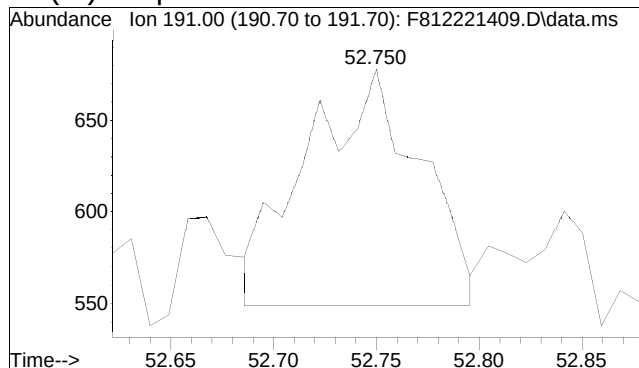
Manual Peak Response = 490 M4

Compound #95: 17a(H),21B(H)-hopane - C30H52



Original Peak Response = 433

M4 = Poor automated baseline construction.



Manual Peak Response = 496 M4

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : f812221403.D
 Acq On : 23 Dec 2014 2:50 pm
 Operator : PAH8:ML
 Sample : I812231402
 Misc : WG755323, FRAU67 25ng/ml
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 13 11:08:44 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.068	164	38402	500.000	ng/mL	0.00
74) Chrysene-d12	43.515	240	53110	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	20.105	136	4253	28.918	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	2.89%#		
42) Phenanthrene-d10	32.944	188	3121	27.823	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	2.78%#		
83) Benzo[b]fluoranthene-d12	47.417	264	2531	24.529	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	2.45%#		
88) Benzo[a]pyrene-d12	48.634	264	2332	27.865	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	2.79%#		
129) 5B(H)Cholane - Surr	44.127	217	472	28.389	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	2.84%#		
Target Compounds						
						Qvalue
3) trans-Decalin	16.738	138	436	12.688	ng/mL	100
4) cis-Decalin	17.961	138	339	13.026	ng/mL	100
10) Naphthalene	20.178	128	4882	30.809	ng/mL	100
16) 2-Methylnaphthalene	22.870	142	2842	26.835	ng/mL	100
17) 1-Methylnaphthalene	23.299	142	2848	27.805	ng/mL	100
18) Benzothiophene	20.397	134	3999	30.411	ng/mL	100
23) Biphenyl	24.750	154	3609	28.326	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.352	156	2395	27.605	ng/mL	100
25) Dibenzofuran	27.834	168	3665	28.090	ng/mL	97
26) Acenaphthylene	26.457	152	4177	29.195	ng/mL	100
27) Acenaphthene	27.196	153	2753	30.290	ng/mL	99
28) 2,3,5-Trimethylnaphthalen	28.747	170	2025	28.360	ng/mL	92
29) Fluorene	29.212	166	2660	26.529	ng/mL	97
33) Dibenzothiophene	32.533	184	3760	26.786	ng/mL	99
43) Phenanthrene	33.026	178	3864	28.286	ng/mL	98
54) Retene	40.000	234	786	23.333	ng/mL	97
55) Anthracene	33.208	178	3508M4	29.070	ng/mL	
56) Carbazole	33.874	167	3465	27.246	ng/mL	96
57) 1-Methylphenanthrene	35.527	192	2553	25.755	ng/mL	100
58) Fluoranthene	37.800	202	3624	25.656	ng/mL	97
59) Benzo(b)fluorene	40.311	216	2071	27.149	ng/mL	100
60) Pyrene	38.685	202	3728	25.323	ng/mL	98
66) Naphthobenzothiophene	42.529	234	3276	24.061	ng/mL	98
67) Naphthobenzothiophene-2,1	42.529	234	3276	24.061	ng/mL	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : f812221403.D
 Acq On : 23 Dec 2014 2:50 pm
 Operator : PAH8:ML
 Sample : I812231402
 Misc : WG755323,FRAU67 25ng/ml
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 13 11:08:44 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.451	228	2905M3	26.946	ng/mL	
76)	Chrysene	43.607	228	2926	26.956	ng/mL	100
77)	Chrysene/Triphenylene	43.607	228	2926	26.956	ng/mL	100
84)	Benzo[b]fluoranthene	47.500	252	3272	26.892	ng/mL	90
85)	Benzo[j]+[k]fluoranthene	47.591	252	3373	29.328	ng/mL	98
87)	Benzo[e]pyrene	48.533	252	3123	25.272	ng/mL	95
89)	Benzo[a]pyrene	48.725	252	3002	28.032	ng/mL	97
90)	Perylene	49.045	252	3161	28.379	ng/mL	95
91)	Indeno[1,2,3-cd]pyrene	53.673	276	3857M3	27.301	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.728	278	3164	25.920	ng/mL	92
93)	Benzo[g,h,i]perylene	55.016	276	3699	26.218	ng/mL	100
94)	Hopane (T19)	52.750	191	1120	31.575	ng/mL#	65
95)	17a(H),21B(H)-hopane - C3	52.750	191	1120	31.575	ng/mL#	65

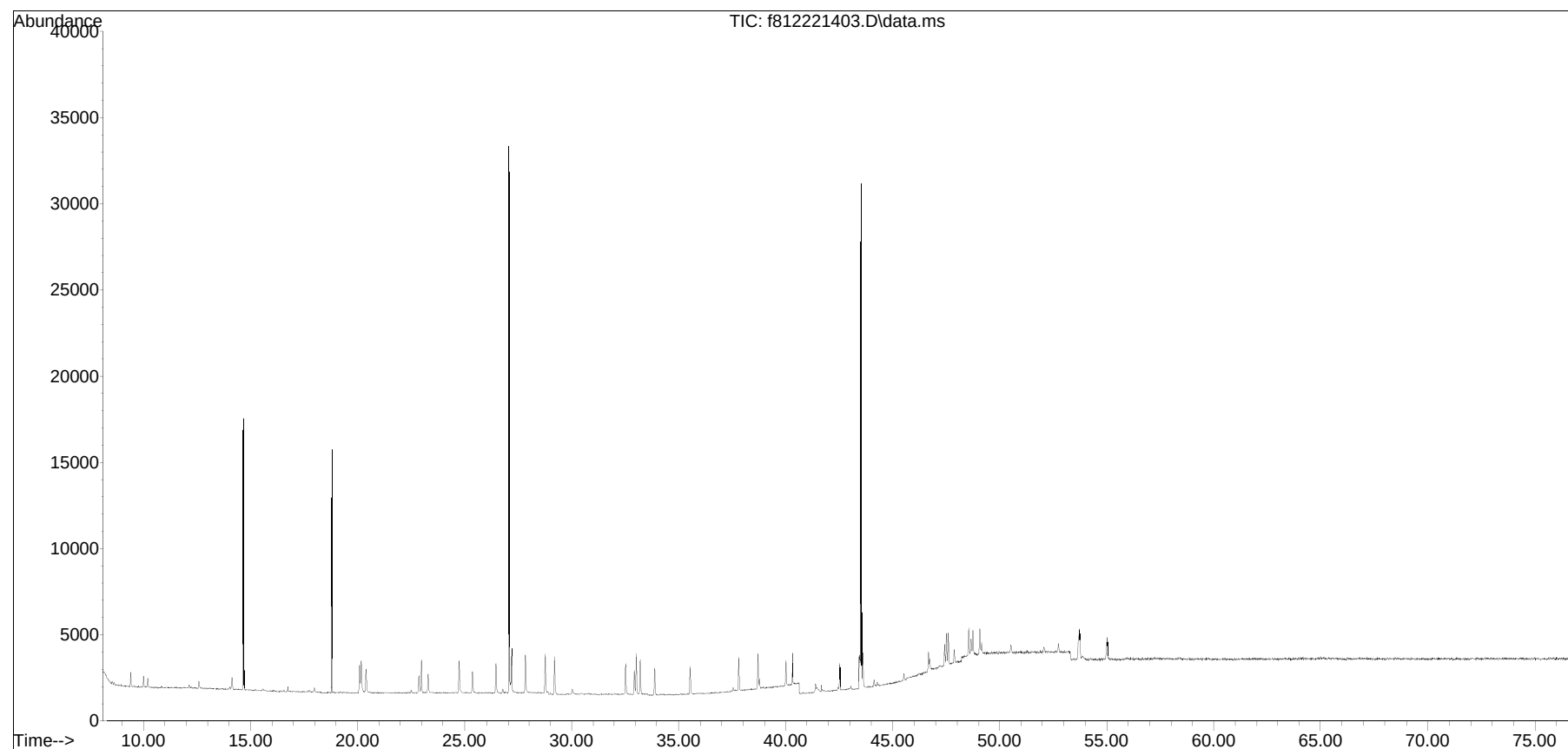
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC23\
Data File : f812221403.D
Acq On : 23 Dec 2014 2:50 pm
Operator : PAH8:ML
Sample : I812231402
Misc : WG755323, FRAU67 25ng/ml
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 13 11:08:44 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 23 07:51:27 2014
Response via : Initial Calibration

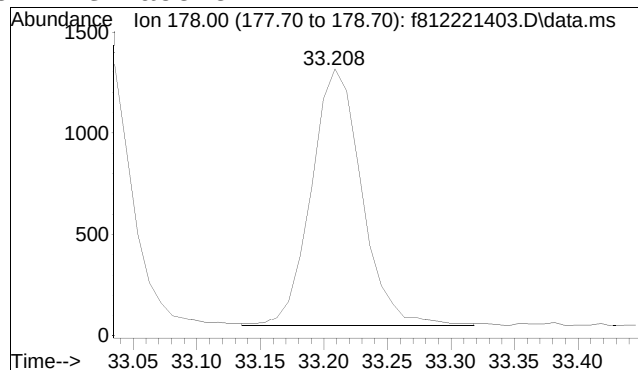
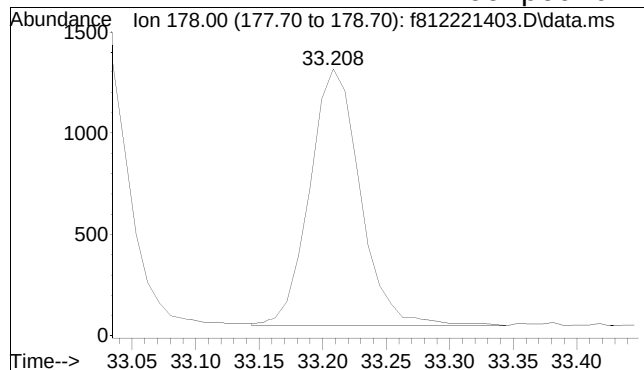
Sub List : ICAL_CCALT_REV2 - CC with five surrogates



Manual Integration/Negative Proof Report

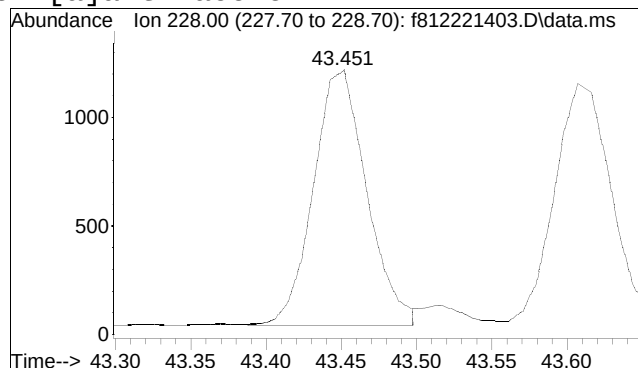
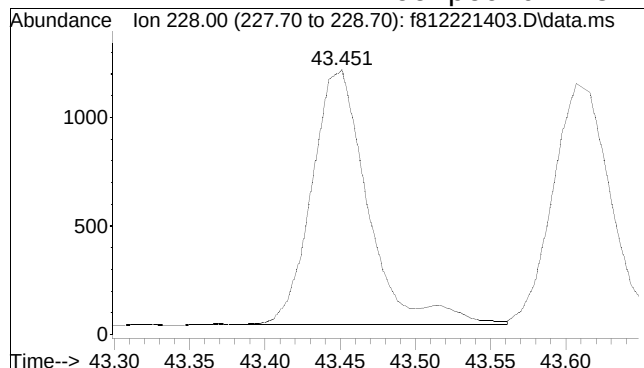
Data Path : O:\Forensics\Data\PAH8\2014Q Method : PAH8122314.M
 Data File : f812221403.D Operator : PAH8:ML
 Date Inj'd : 12/23/2014 2:50 pm Instrument : PAH8
 Sample : I812231402 Quant Date : 12/24/2014 11:28 am

Compound #55: Anthracene



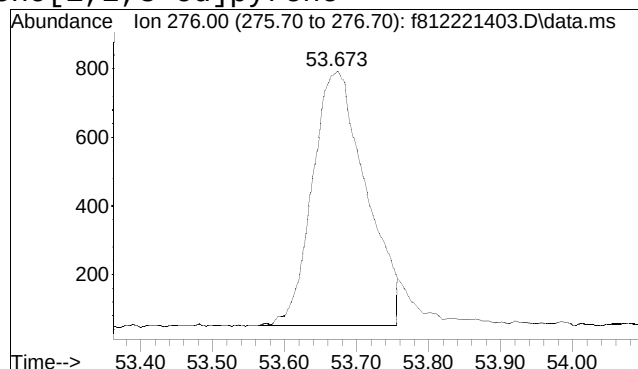
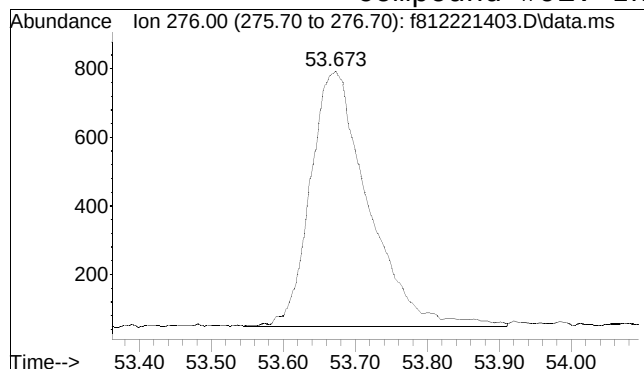
M4 = Poor automated baseline construction.

Compound #75: Benz[a]anthracene



M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Compound #91: Indeno[1,2,3-cd]pyrene



M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221404.D
 Acq On : 23 Dec 2014 4:17 pm
 Operator : PAH8:ML
 Sample : I812231403
 Misc : WG755323,FRAU68 100ng/ml
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 13 11:08:51 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.068	164	28054	500.000	ng/mL	0.00
74) Chrysene-d12	43.515	240	39000	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	20.096	136	12604	117.312	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	11.73%#		
42) Phenanthrene-d10	32.935	188	9279	113.234	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	11.32%#		
83) Benzo[b]fluoranthene-d12	47.417	264	7405	97.731	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	9.77%#		
88) Benzo[a]pyrene-d12	48.634	264	6834	111.202	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	11.12%#		
129) 5B(H)Cholane - Surr	44.127	217	1376	112.704	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	11.27%#		
Target Compounds						
						Qvalue
3) trans-Decalin	16.738	138	1340	53.379	ng/mL	100
4) cis-Decalin	17.961	138	957	50.337	ng/mL	100
10) Naphthalene	20.178	128	14697	126.959	ng/mL	100
16) 2-Methylnaphthalene	22.870	142	8598	111.131	ng/mL	100
17) 1-Methylnaphthalene	23.290	142	8266	110.467	ng/mL	100
18) Benzothiophene	20.397	134	11833	123.178	ng/mL	100
23) Biphenyl	24.750	154	10693	114.885	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.362	156	7212	113.789	ng/mL	100
25) Dibenzofuran	27.834	168	10998	115.385	ng/mL	99
26) Acenaphthylene	26.457	152	12563	120.199	ng/mL	100
27) Acenaphthene	27.196	153	7929	119.417	ng/mL	100
28) 2,3,5-Trimethylnaphthalen	28.747	170	5940	113.873	ng/mL	95
29) Fluorene	29.212	166	8401	114.693	ng/mL	99
33) Dibenzothiophene	32.533	184	11462	111.773	ng/mL	100
43) Phenanthrene	33.026	178	11608	116.319	ng/mL	99
54) Retene	40.000	234	2401	97.567	ng/mL	99
55) Anthracene	33.208	178	10939M4	124.084	ng/mL	
56) Carbazole	33.874	167	10351	111.413	ng/mL	100
57) 1-Methylphenanthrene	35.527	192	7428	102.573	ng/mL	98
58) Fluoranthene	37.800	202	10898	105.609	ng/mL	95
59) Benzo(b)fluorene	40.311	216	6121	109.837	ng/mL	98
60) Pyrene	38.685	202	10924	101.573	ng/mL	96
66) Naphthobenzothiophene	42.520	234	9907	99.604	ng/mL	99
67) Naphthobenzothiophene-2,1	42.520	234	9907	99.604	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221404.D
 Acq On : 23 Dec 2014 4:17 pm
 Operator : PAH8:ML
 Sample : I812231403
 Misc : WG755323,FRAU68 100ng/ml
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 13 11:08:51 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.451	228	8854	111.839	ng/mL	98
76)	Chrysene	43.607	228	8713	109.312	ng/mL	99
77)	Chrysene/Triphenylene	43.607	228	8713	109.312	ng/mL	99
84)	Benzo[b]fluoranthene	47.500	252	9532	106.686	ng/mL	95
85)	Benzo[j]+[k]fluoranthene	47.591	252	9887	117.068	ng/mL	93
87)	Benzo[e]pyrene	48.533	252	9449	104.125	ng/mL	95
89)	Benzo[a]pyrene	48.725	252	8898	113.150	ng/mL	98
90)	Perylene	49.045	252	9324	113.996	ng/mL	98
91)	Indeno[1,2,3-cd]pyrene	53.664	276	11400M3	109.888	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.728	278	9673	107.911	ng/mL	97
93)	Benzo[g,h,i]perylene	55.007	276	10465	101.009	ng/mL	99
94)	Hopane (T19)	52.740	191	3084	118.399	ng/mL	94
95)	17a(H),21B(H)-hopane - C3	52.740	191	3084	118.399	ng/mL	94

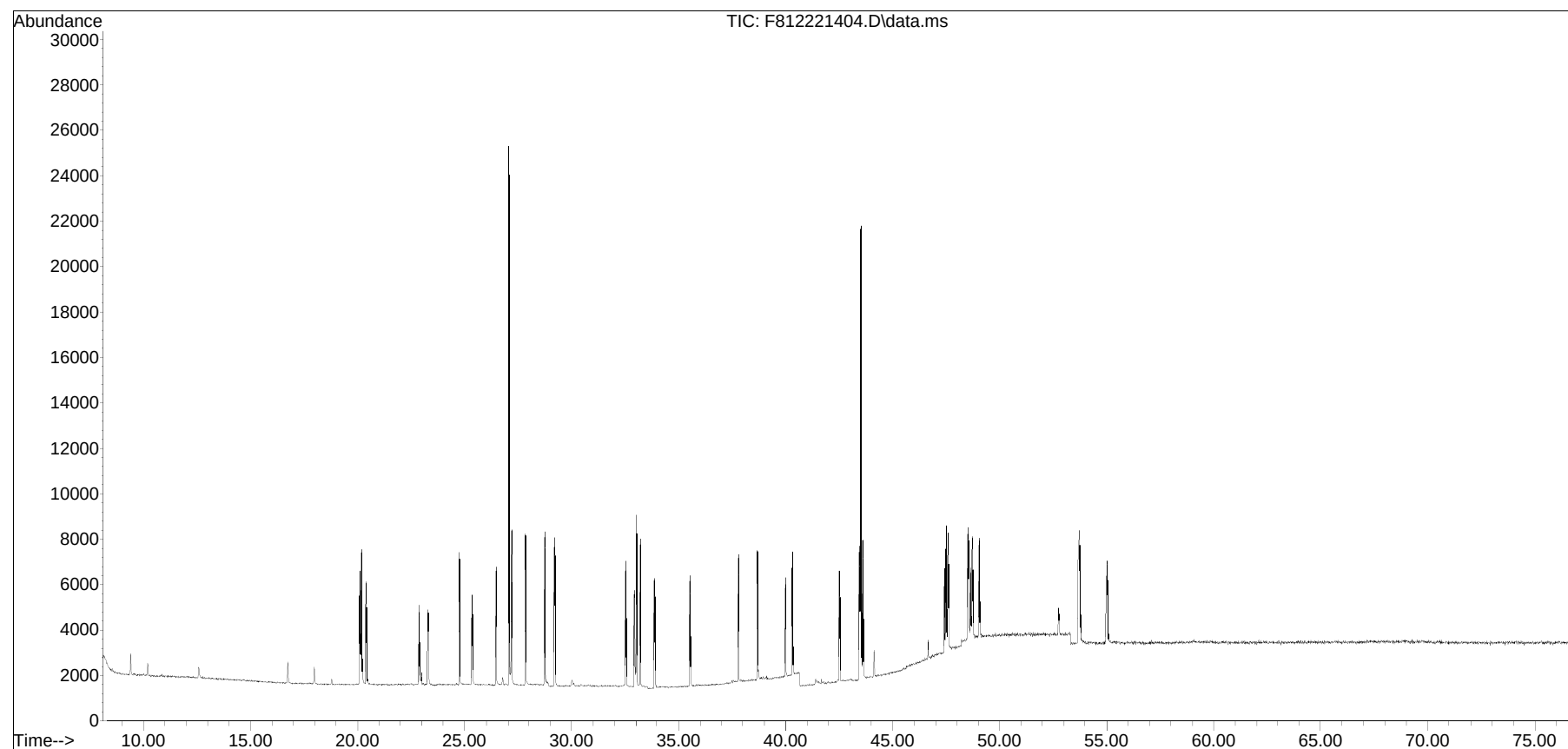
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC23\
Data File : F812221404.D
Acq On : 23 Dec 2014 4:17 pm
Operator : PAH8:ML
Sample : I812231403
Misc : WG755323,FRAU68 100ng/ml
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 13 11:08:51 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 23 07:51:27 2014
Response via : Initial Calibration

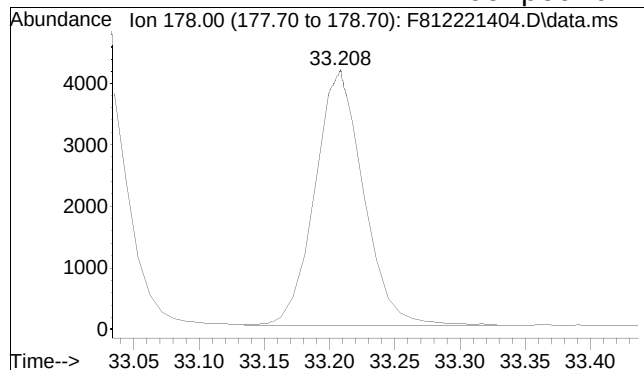
Sub List : ICAL_CCALT_REV2 - CC with five surrogates



Manual Integration/Negative Proof Report

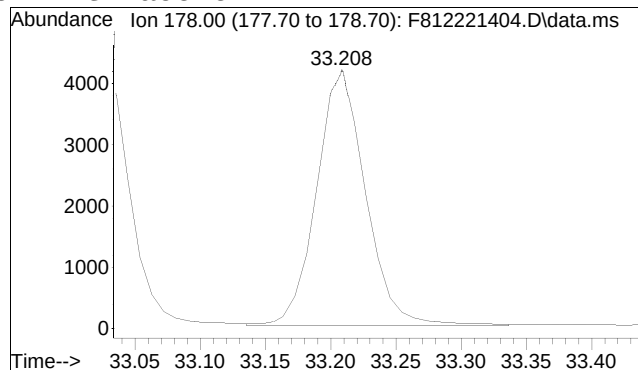
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
Data File : F812221404.D Operator : PAH8:ML
Date Inj'd : 12/23/2014 4:17 pm Instrument : PAH8
Sample : I812231403 Quant Date : 12/24/2014 11:28 am

Compound #55: Anthracene



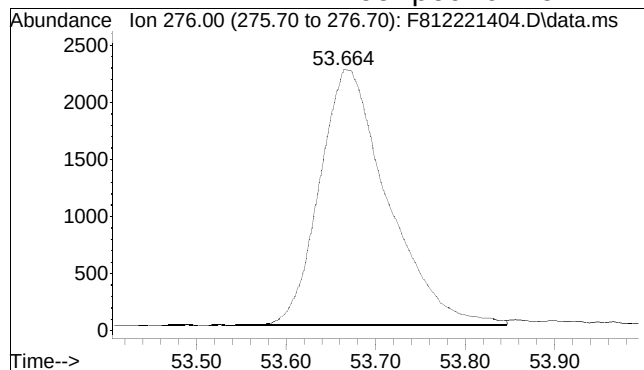
Original Peak Response = 10771

M4 = Poor automated baseline construction.



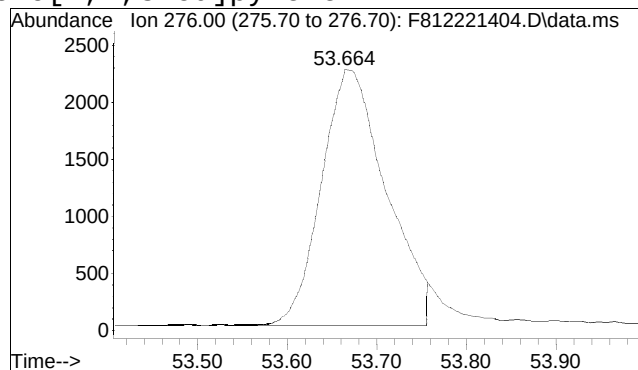
Manual Peak Response = 10939 M4

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 11894

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.



Manual Peak Response = 11400 M3

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221405.D
 Acq On : 23 Dec 2014 5:44 pm
 Operator : PAH8:ML
 Sample : I812231404
 Misc : WG755323, FRAV19 500ng/ml
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 13 11:08:59 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.068	164	36627	500.000	ng/mL	0.00
74) Chrysene-d12	43.515	240	52691	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	20.096	136	76901	548.225	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	54.82%		
42) Phenanthrene-d10	32.935	188	56185	525.157	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	52.52%		
83) Benzo[b]fluoranthene-d12	47.418	264	48396	472.763	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	47.28%#		
88) Benzo[a]pyrene-d12	48.634	264	43523	524.184	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	52.42%		
129) 5B(H)Cholane - Surr	44.127	217	8970	543.801	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	54.38%		
Target Compounds						
						Qvalue
3) trans-Decalin	16.738	138	7933	242.046	ng/mL	100
4) cis-Decalin	17.961	138	6060	244.141	ng/mL	100
10) Naphthalene	20.169	128	90882	601.321	ng/mL	100
16) 2-Methylnaphthalene	22.870	142	54921	543.713	ng/mL	100
17) 1-Methylnaphthalene	23.290	142	53034	542.854	ng/mL	100
18) Benzothiophene	20.388	134	73757	588.080	ng/mL	100
23) Biphenyl	24.741	154	67523	555.659	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.352	156	46098	557.084	ng/mL	100
25) Dibenzofuran	27.835	168	70200	564.112	ng/mL	98
26) Acenaphthylene	26.457	152	82836M4	607.046	ng/mL	
27) Acenaphthene	27.196	153	50602	583.724	ng/mL	99
28) 2,3,5-Trimethylnaphthalen	28.738	170	38528	565.725	ng/mL	96
29) Fluorene	29.212	166	54218	566.947	ng/mL	99
33) Dibenzothiophene	32.533	184	75174	561.484	ng/mL	99
43) Phenanthrene	33.026	178	74729	573.555	ng/mL	99
54) Retene	40.000	234	16461	512.343	ng/mL	99
55) Anthracene	33.208	178	71144M4	618.115	ng/mL	
56) Carbazole	33.865	167	71605	590.324	ng/mL	99
57) 1-Methylphenanthrene	35.527	192	50135	530.269	ng/mL	100
58) Fluoranthene	37.800	202	74157	550.426	ng/mL	95
59) Benzo(b)fluorene	40.311	216	42444	583.359	ng/mL	99
60) Pyrene	38.685	202	81330	579.217	ng/mL	96
66) Naphthobenzothiophene	42.520	234	66395	511.285	ng/mL	99
67) Naphthobenzothiophene-2,1	42.520	234	66395	511.285	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221405.D
 Acq On : 23 Dec 2014 5:44 pm
 Operator : PAH8:ML
 Sample : I812231404
 Misc : WG755323, FRAV19 500ng/ml
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 13 11:08:59 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.451	228	60268	563.465	ng/mL	98
76)	Chrysene	43.607	228	59928	556.489	ng/mL	99
77)	Chrysene/Triphenylene	43.607	228	59928	556.489	ng/mL	99
84)	Benzo[b]fluoranthene	47.500	252	64324	532.873	ng/mL	96
85)	Benzo[j]+[k]fluoranthene	47.591	252	63430	555.901	ng/mL	95
87)	Benzo[e]pyrene	48.533	252	64635	527.189	ng/mL	95
89)	Benzo[a]pyrene	48.725	252	61869	582.320	ng/mL	96
90)	Perylene	49.046	252	61139	553.266	ng/mL	95
91)	Indeno[1,2,3-cd]pyrene	53.673	276	72078M3	514.254	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.728	278	65062	537.232	ng/mL	97
93)	Benzo[g,h,i]perylene	55.016	276	69639	497.511	ng/mL	98
94)	Hopane (T19)	52.741	191	19212	545.926	ng/mL#	85
95)	17a(H),21B(H)-hopane - C3	52.741	191	19212	545.926	ng/mL#	85

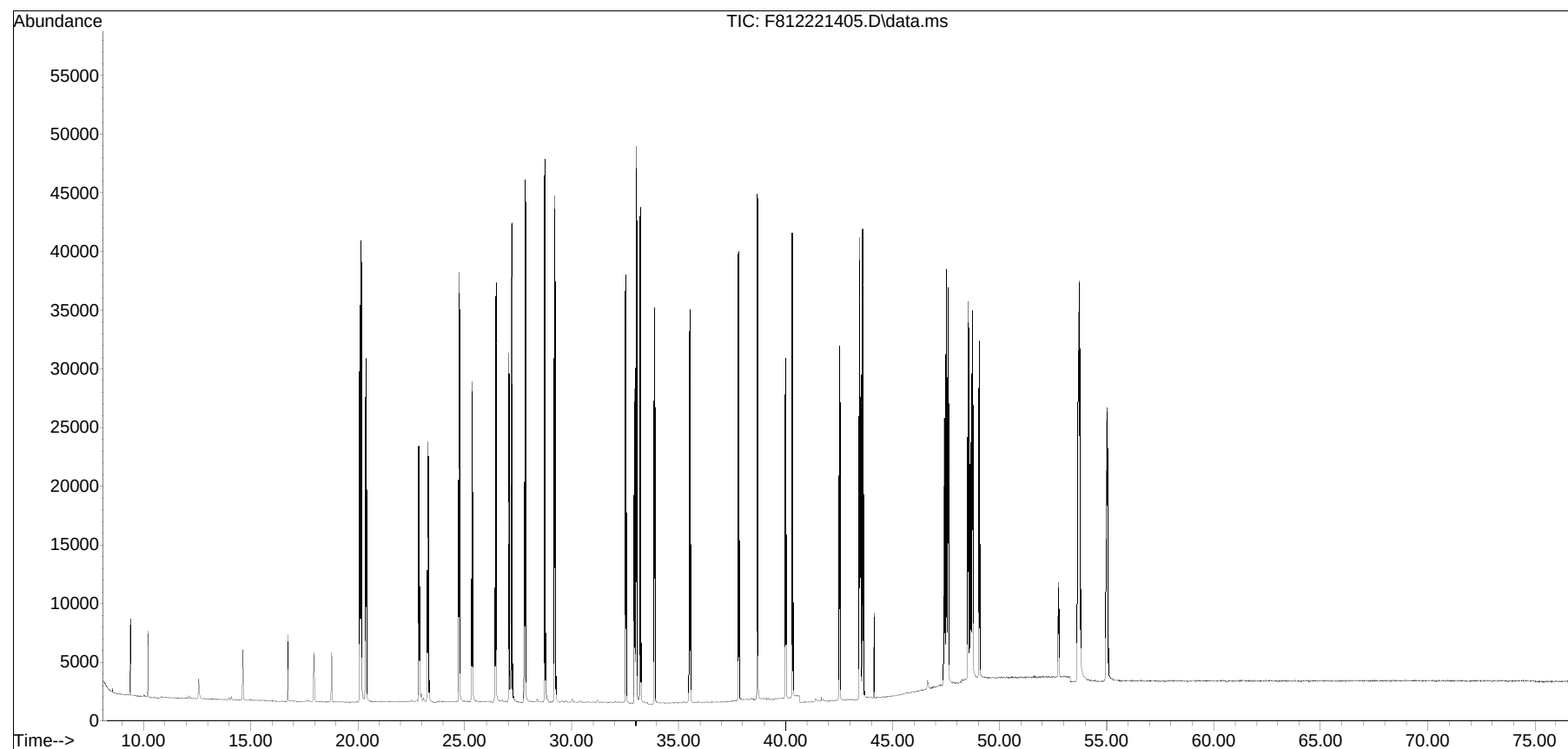
(#) = qualifier out of range (m) = manual integration (+) = signals summed

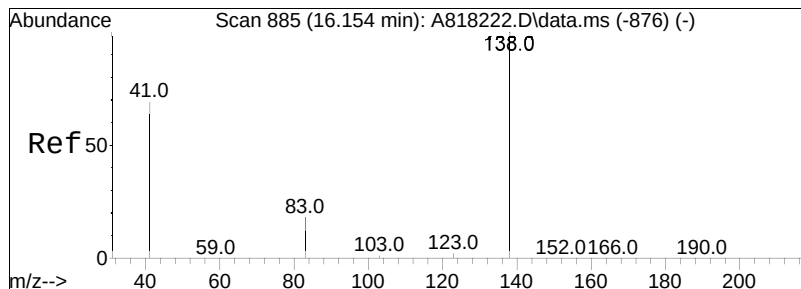
Quantitation Report (QT Reviewed)

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Data File : F812221405.D
Acq On : 23 Dec 2014 5:44 pm
Operator : PAH8:ML
Sample : I812231404
Misc : WG755323, FRAV19 500ng/ml
ALS Vial : 5 Sample Multiplier: 1

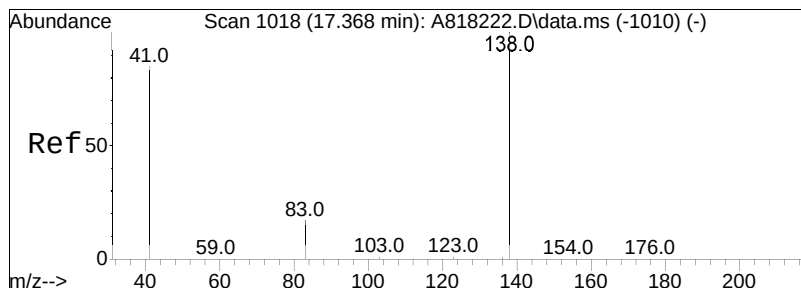
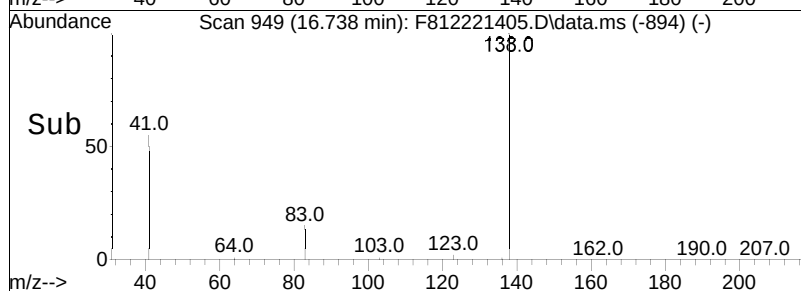
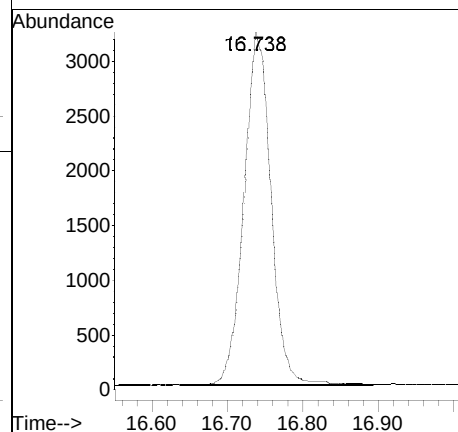
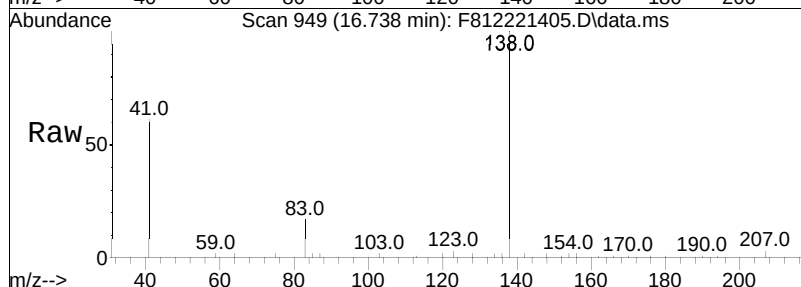
Quant Time: Jan 13 11:08:59 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 23 07:51:27 2014
Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

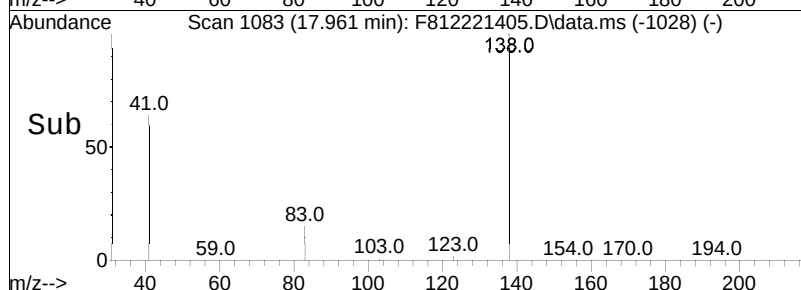
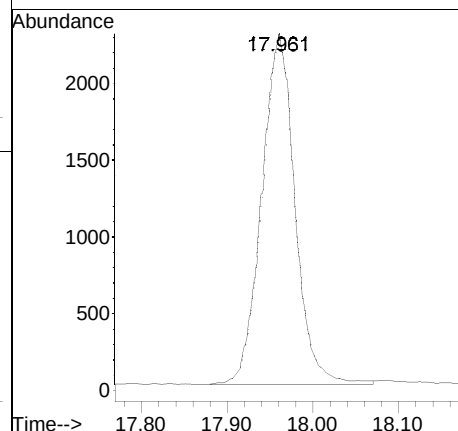
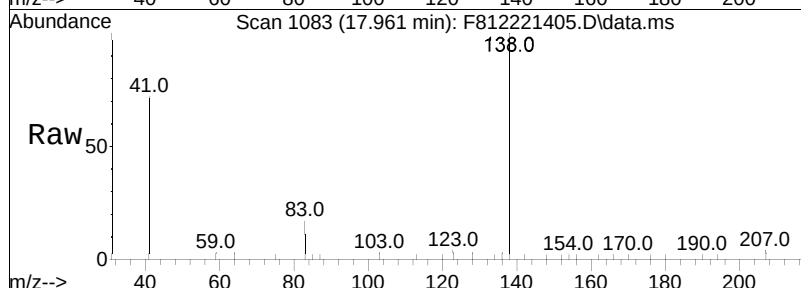


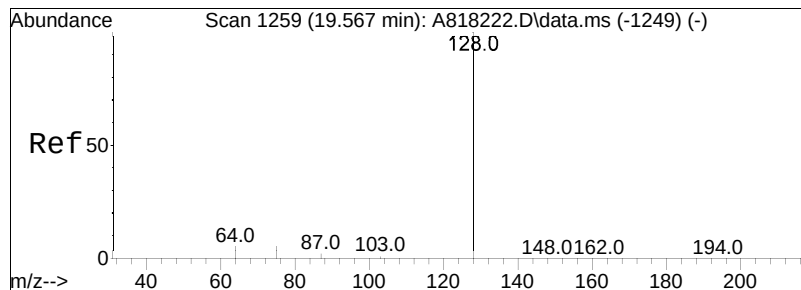


#3
trans-Decalin
Concen: 242.05 ng/mL
RT: 16.738 min Scan# 949
Delta R.T. 0.000 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm
Tgt Ion:138 Resp: 7933



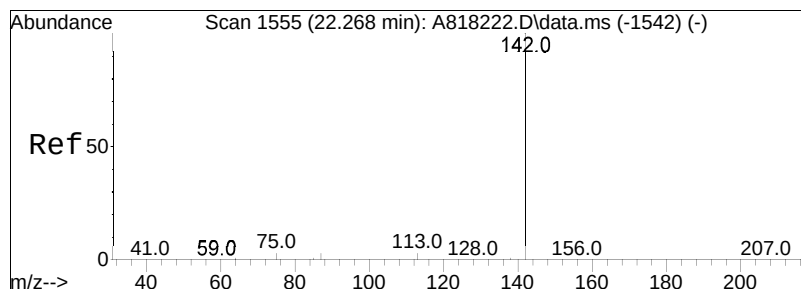
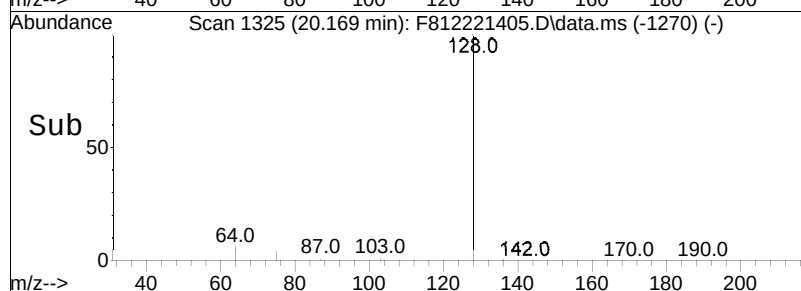
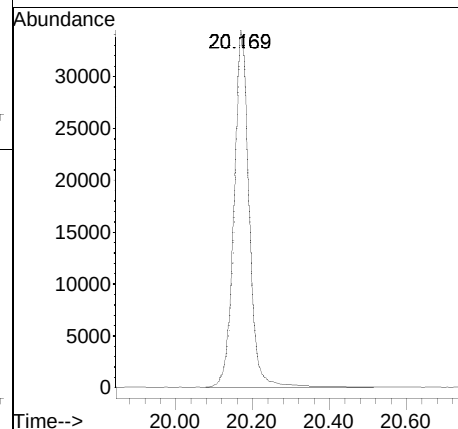
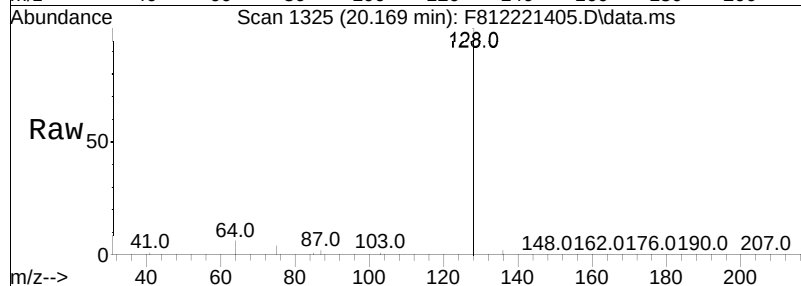
#4
cis-Decalin
Concen: 244.14 ng/mL
RT: 17.961 min Scan# 1083
Delta R.T. 0.000 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm
Tgt Ion:138 Resp: 6060





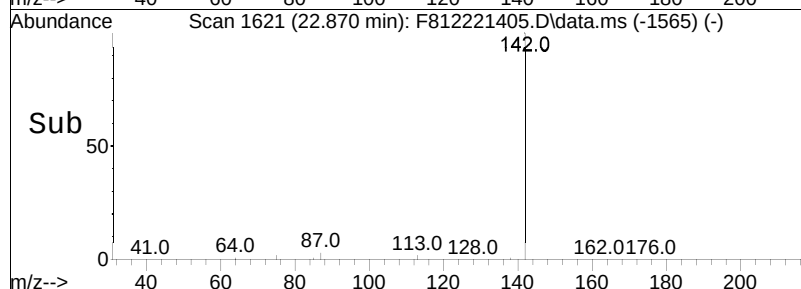
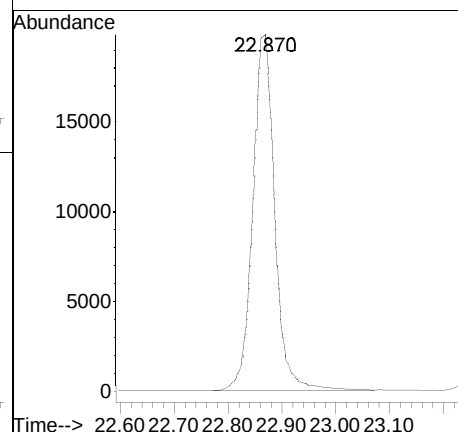
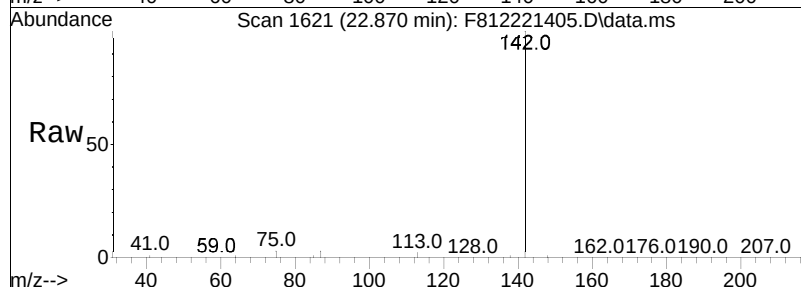
#10
Naphthalene
Concen: 601.32 ng/mL
RT: 20.169 min Scan# 1325
Delta R.T. 0.000 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm

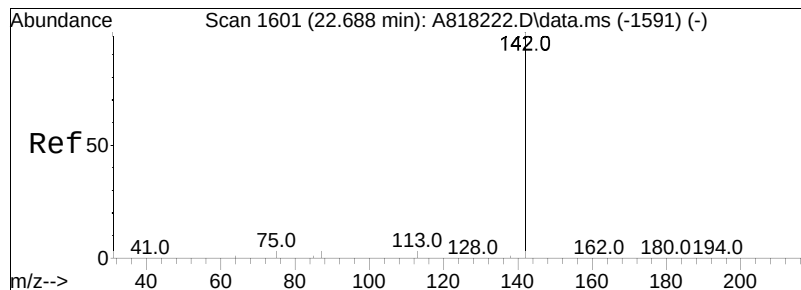
Tgt Ion:128 Resp: 90882



#16
2-Methylnaphthalene
Concen: 543.71 ng/mL
RT: 22.870 min Scan# 1621
Delta R.T. 0.009 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm

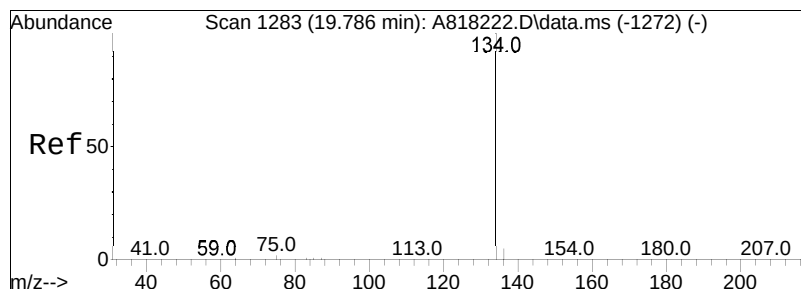
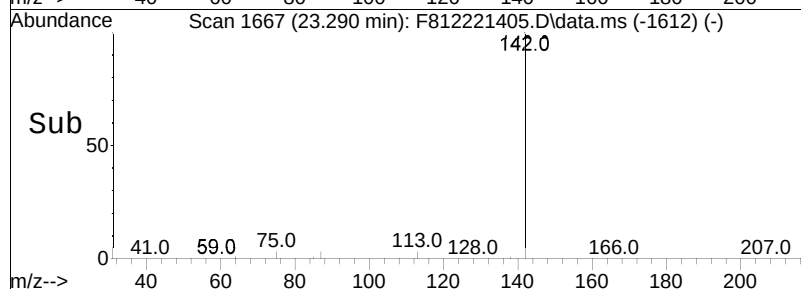
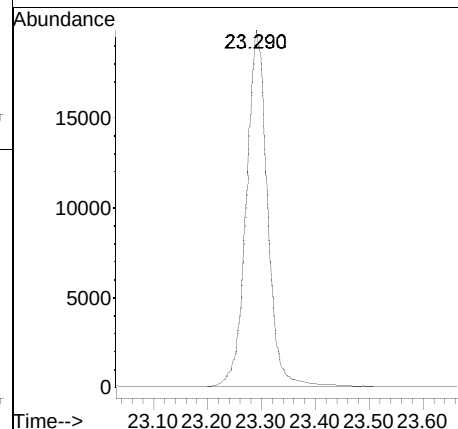
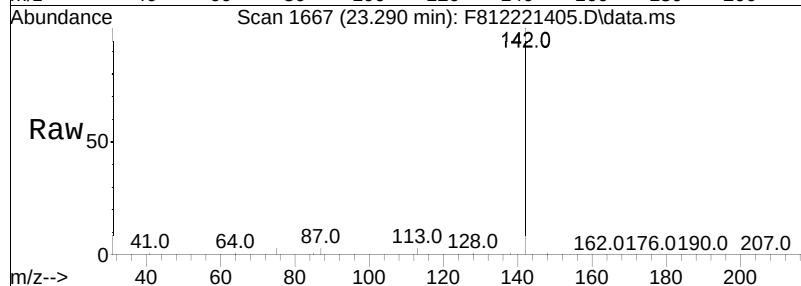
Tgt Ion:142 Resp: 54921





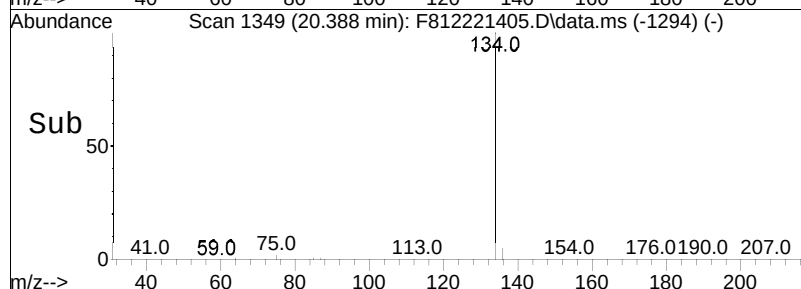
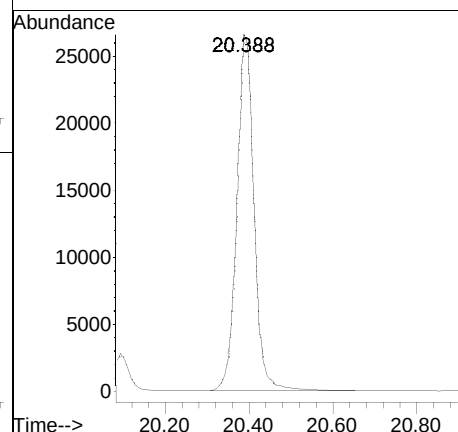
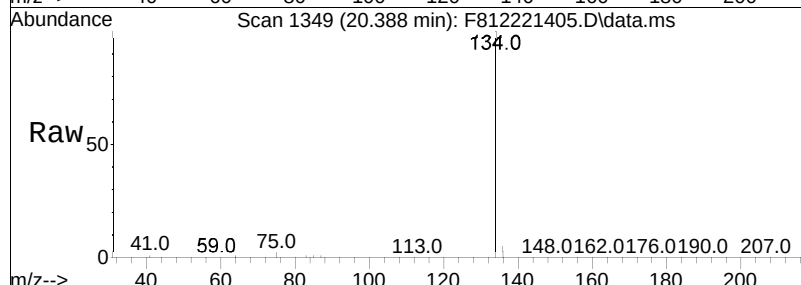
#17
 1-Methylnaphthalene
 Concen: 542.85 ng/mL
 RT: 23.290 min Scan# 1667
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

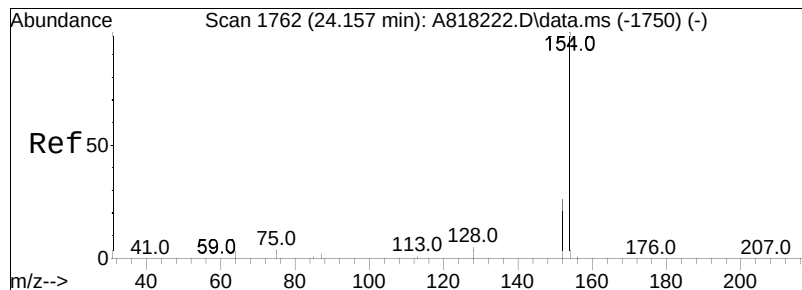
Tgt Ion:142 Resp: 53034



#18
 Benzothiophene
 Concen: 588.08 ng/mL
 RT: 20.388 min Scan# 1349
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

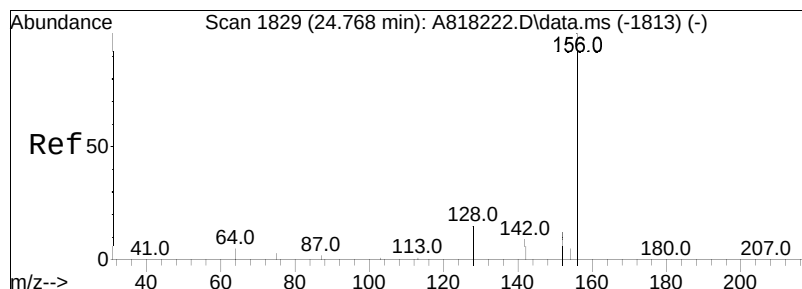
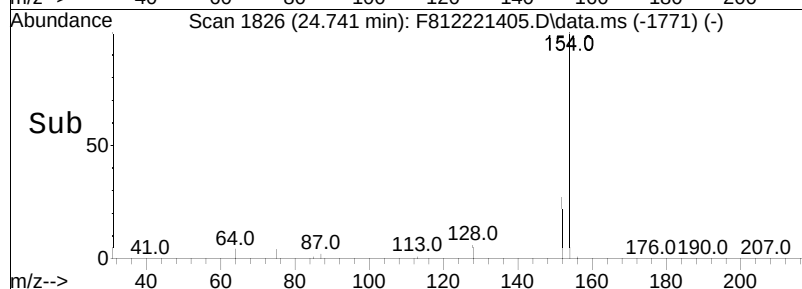
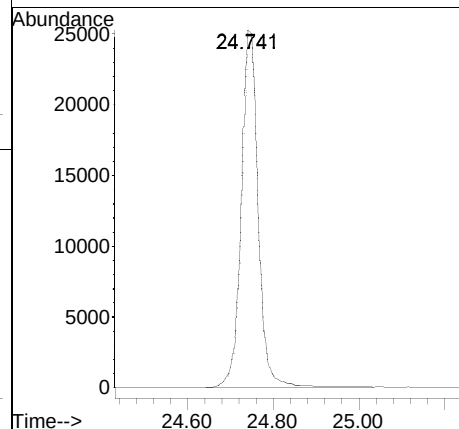
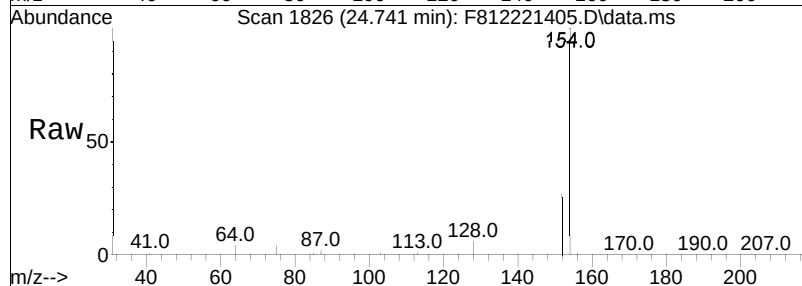
Tgt Ion:134 Resp: 73757





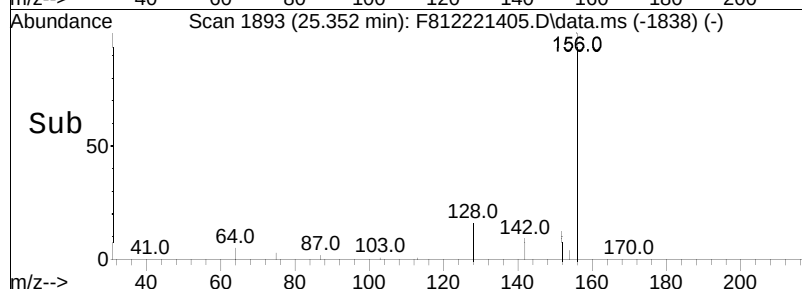
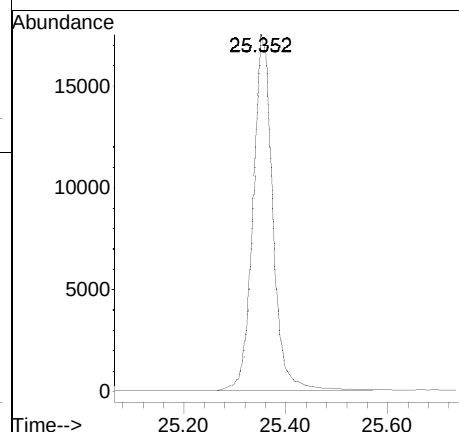
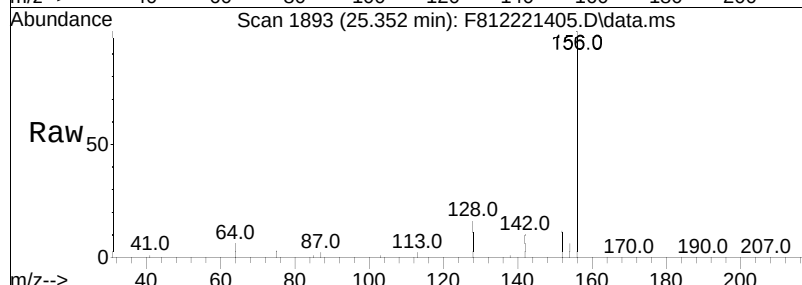
#23
Biphenyl
Concen: 555.66 ng/mL
RT: 24.741 min Scan# 1826
Delta R.T. 0.000 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm

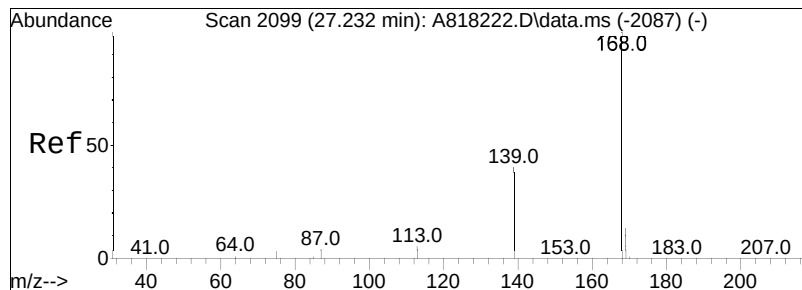
Tgt Ion:154 Resp: 67523



#24
2,6-Dimethylnaphthalene
Concen: 557.08 ng/mL
RT: 25.352 min Scan# 1893
Delta R.T. 0.000 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm

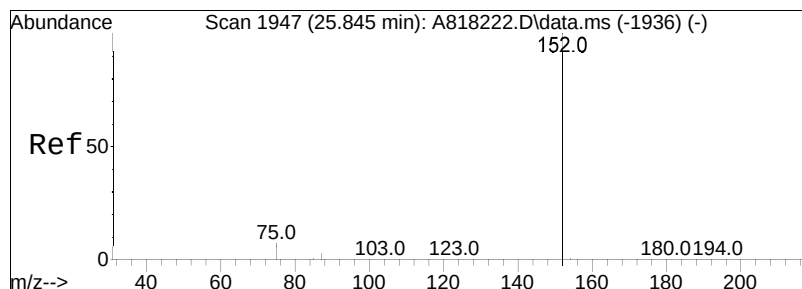
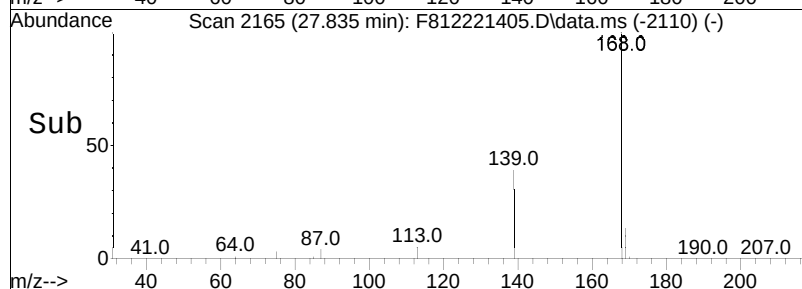
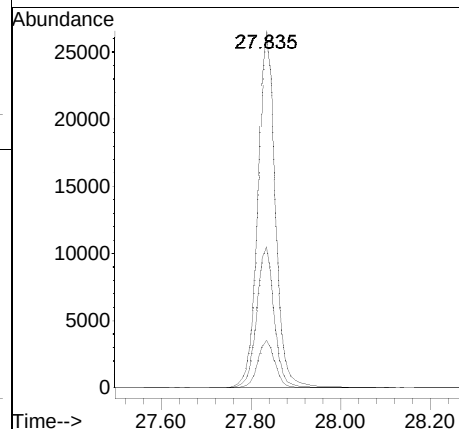
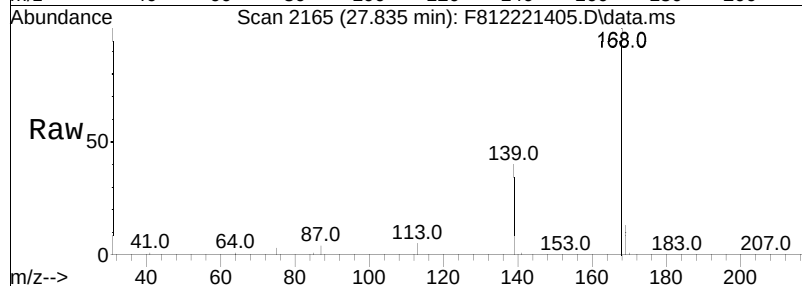
Tgt Ion:156 Resp: 46098





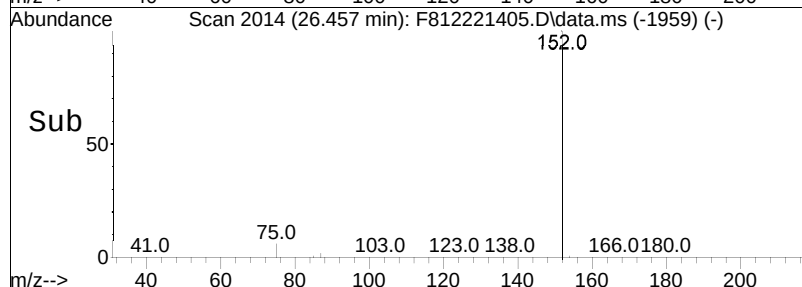
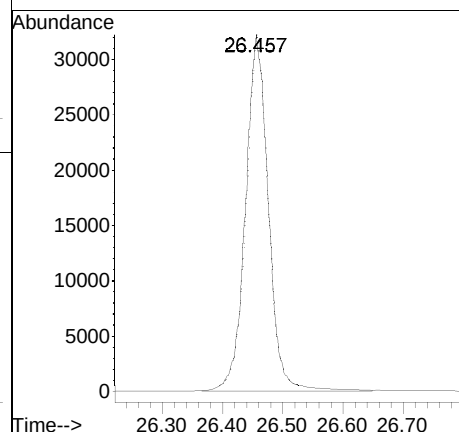
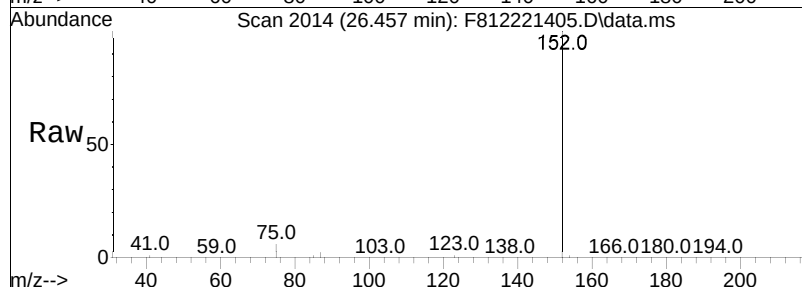
#25
 Dibenzenofuran
 Concen: 564.11 ng/mL
 RT: 27.835 min Scan# 2165
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

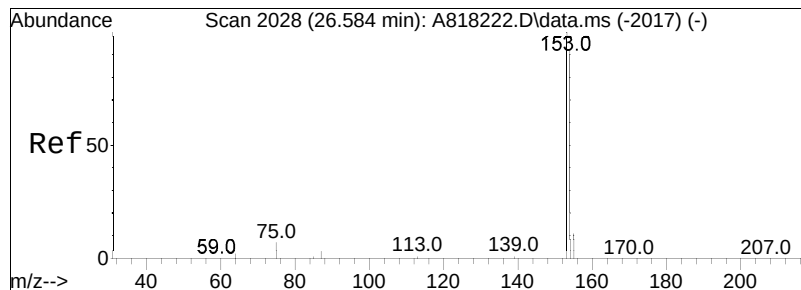
Tgt Ion	Ratio	Lower	Upper
168	100		
139	39.7	26.9	49.9
169	13.3	9.1	16.9



#26
 Acenaphthylene
 Concen: 607.05 ng/mL M4
 RT: 26.457 min Scan# 2014
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

Tgt Ion:152 Resp: 82836





#27

Acenaphthene

Concen: 583.72 ng/mL

RT: 27.196 min Scan# 2095

Delta R.T. 0.009 min

Lab File: F812221405.D

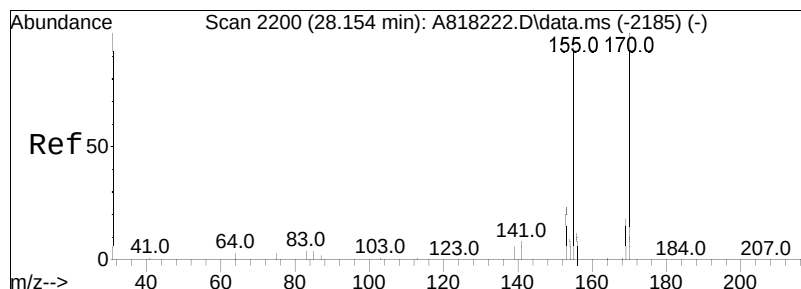
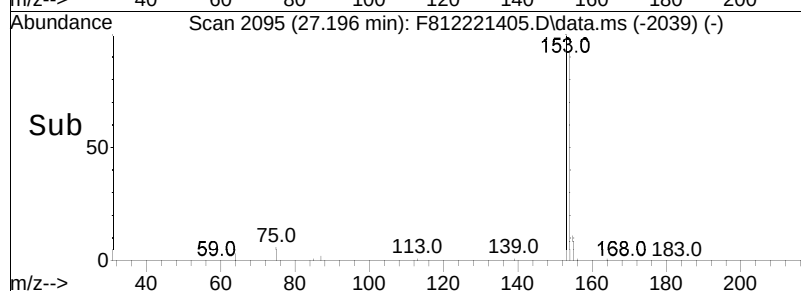
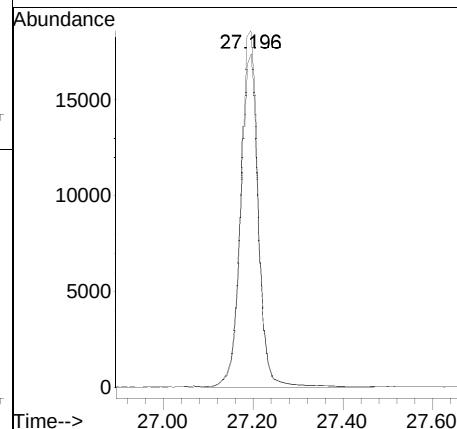
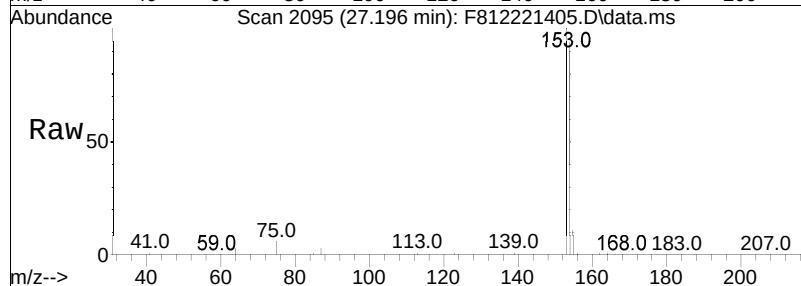
Acq: 23 Dec 2014 5:44 pm

Tgt Ion:153 Resp: 50602

Ion Ratio Lower Upper

153 100

154 91.8 64.7 120.1



#28

2,3,5-Trimethylnaphthalene

Concen: 565.72 ng/mL

RT: 28.738 min Scan# 2264

Delta R.T. 0.000 min

Lab File: F812221405.D

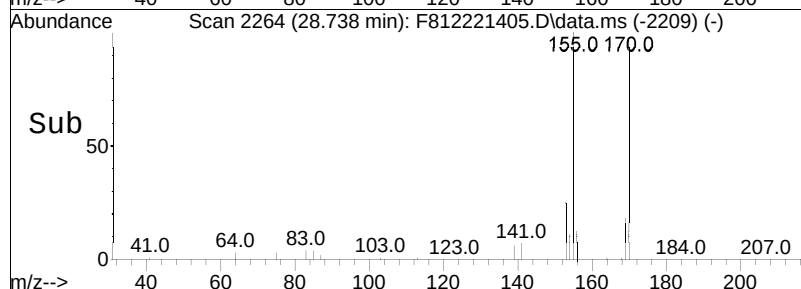
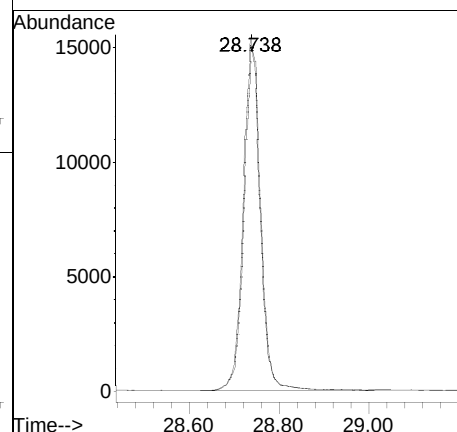
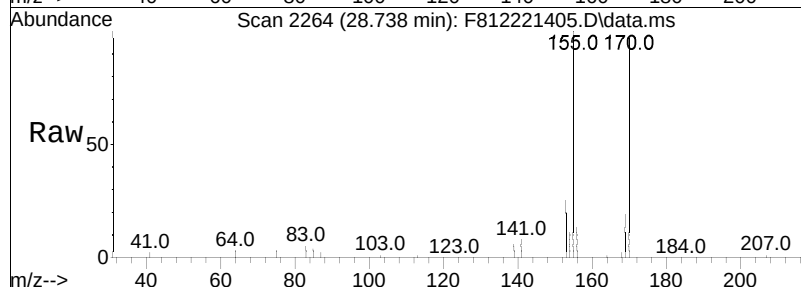
Acq: 23 Dec 2014 5:44 pm

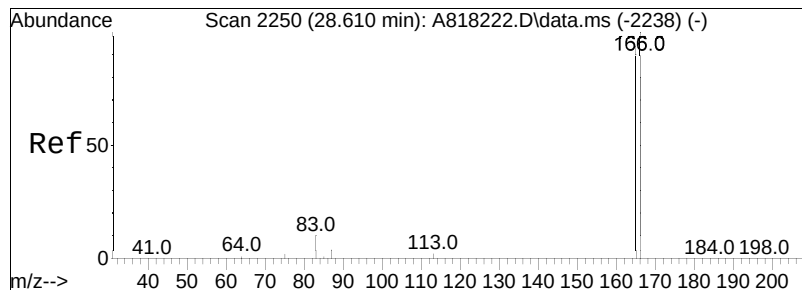
Tgt Ion:170 Resp: 38528

Ion Ratio Lower Upper

170 100

155 101.0 73.5 136.5





#29

Fluorene

Concen: 566.95 ng/mL

RT: 29.212 min Scan# 2316

Delta R.T. 0.009 min

Lab File: F812221405.D

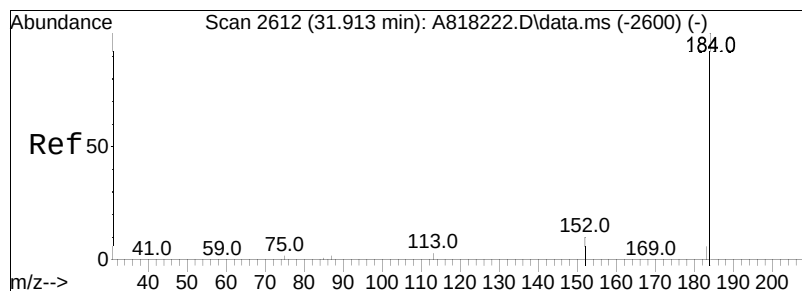
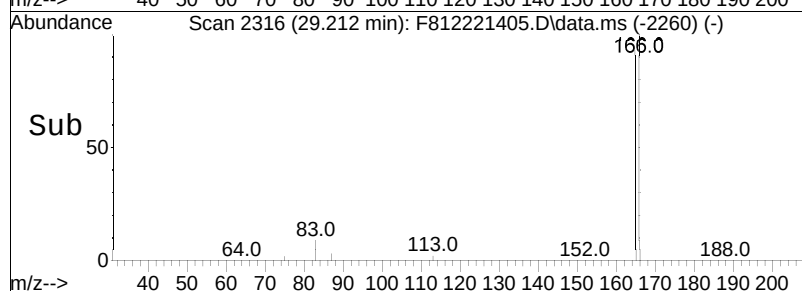
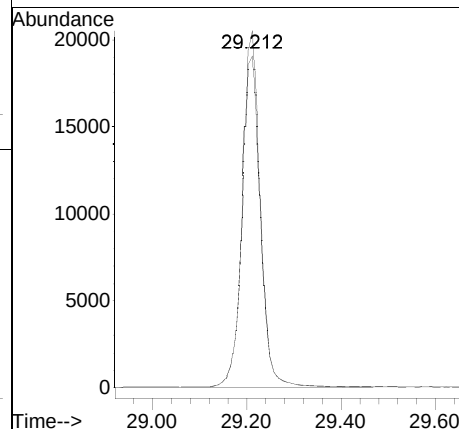
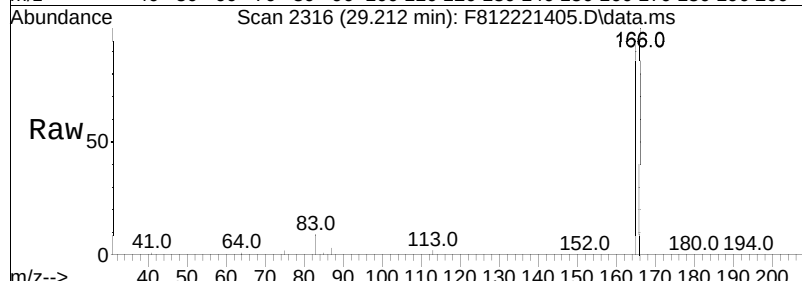
Acq: 23 Dec 2014 5:44 pm

Tgt Ion:166 Resp: 54218

Ion Ratio Lower Upper

166 100

165 94.1 66.7 123.9



#33

Dibenzothiophene

Concen: 561.48 ng/mL

RT: 32.533 min Scan# 2680

Delta R.T. 0.009 min

Lab File: F812221405.D

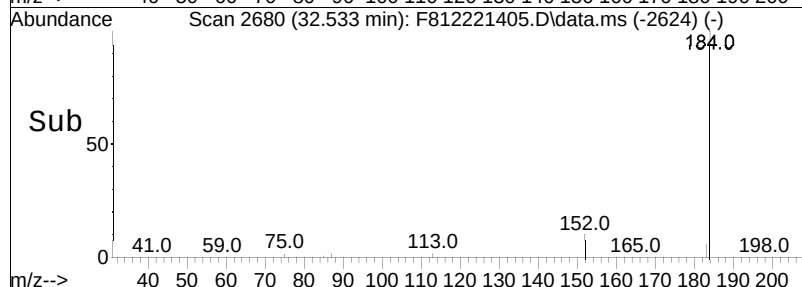
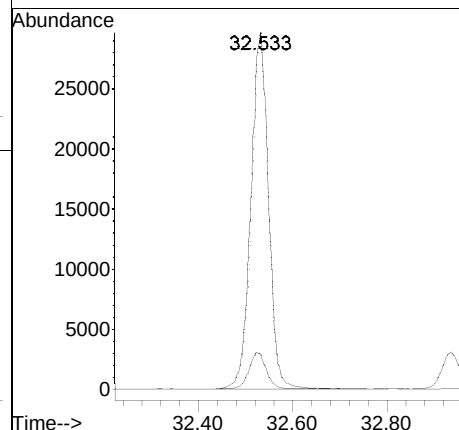
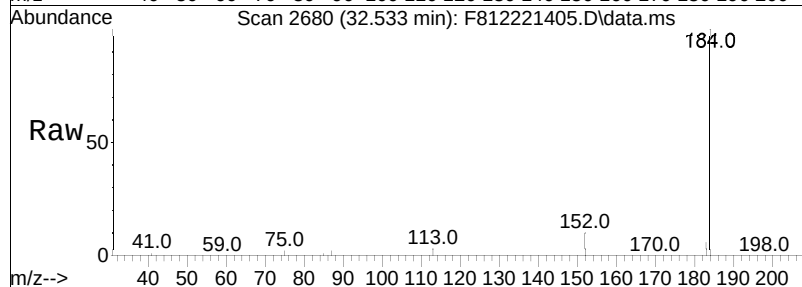
Acq: 23 Dec 2014 5:44 pm

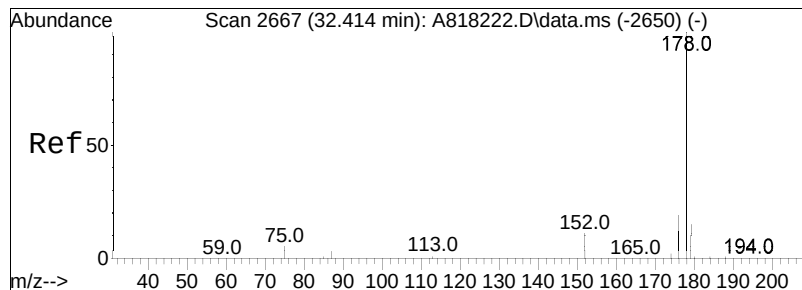
Tgt Ion:184 Resp: 75174

Ion Ratio Lower Upper

184 100

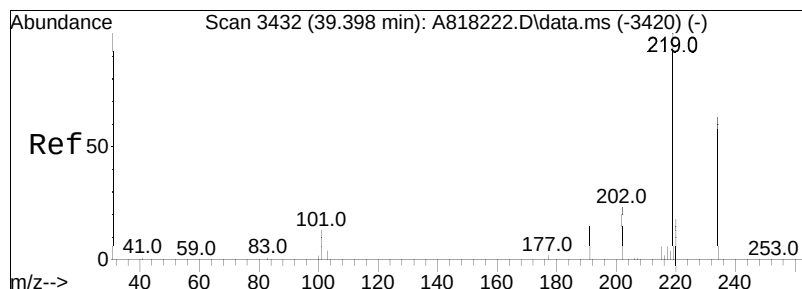
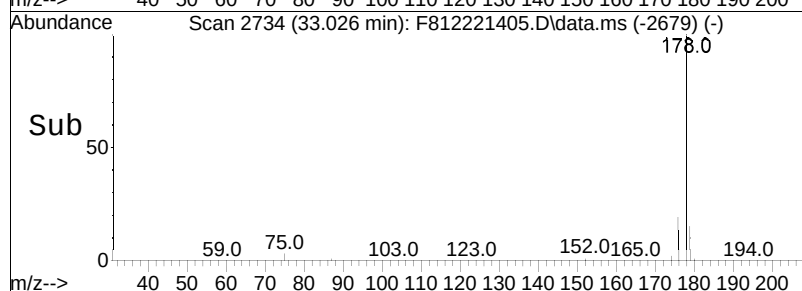
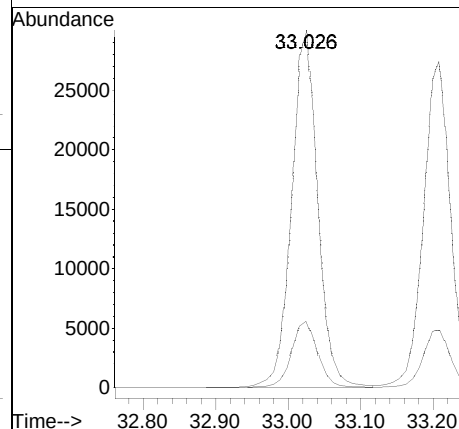
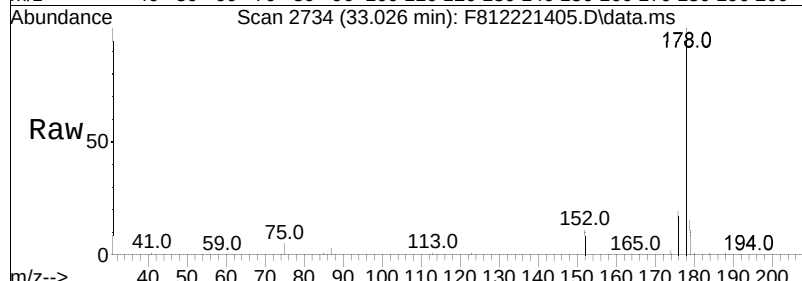
152 10.3 7.6 14.0





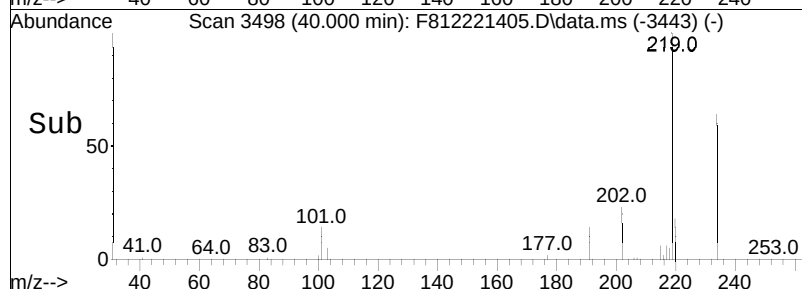
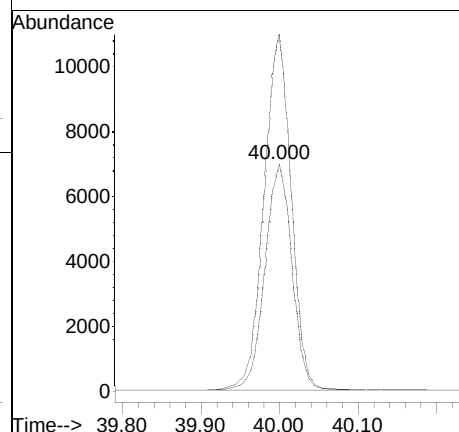
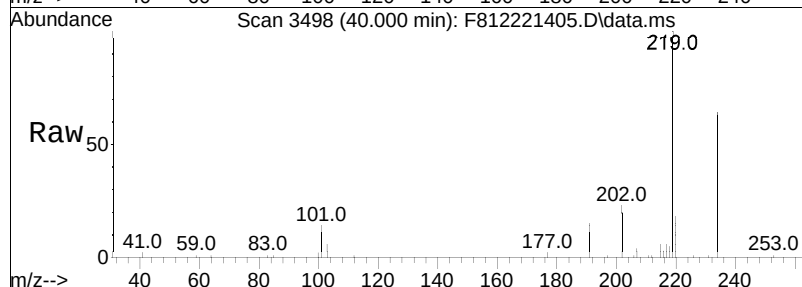
#43
Phenanthrene
Concen: 573.55 ng/mL
RT: 33.026 min Scan# 2734
Delta R.T. 0.000 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm

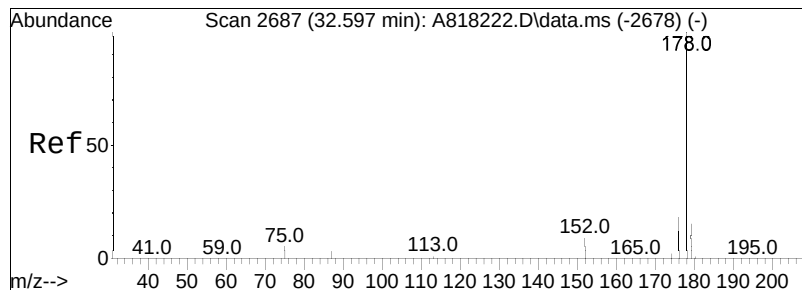
Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.6	13.4	24.8



#54
Retene
Concen: 512.34 ng/mL
RT: 40.000 min Scan# 3498
Delta R.T. 0.000 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm

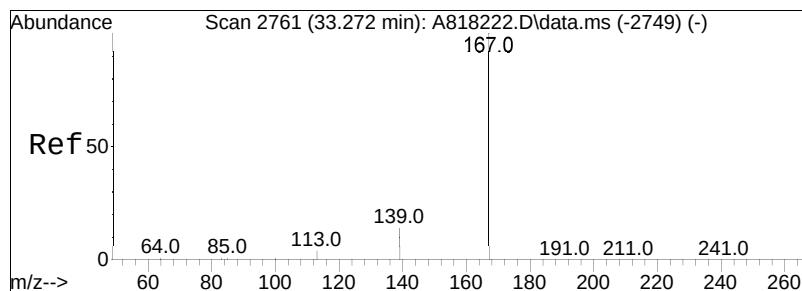
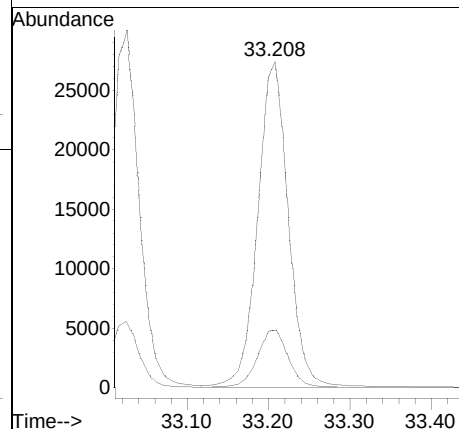
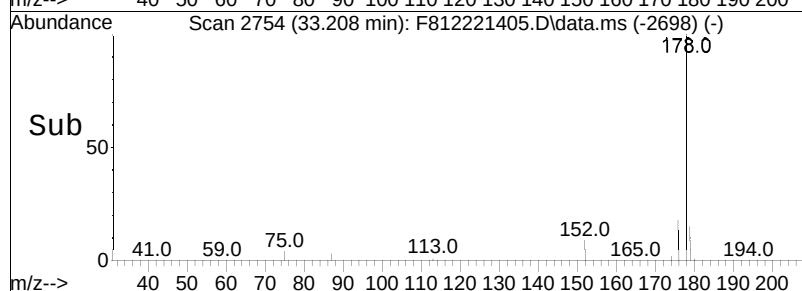
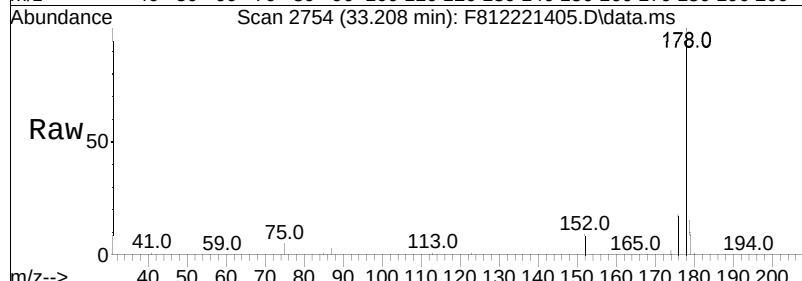
Tgt Ion	Ratio	Lower	Upper
234	100		
219	157.5	110.9	206.1





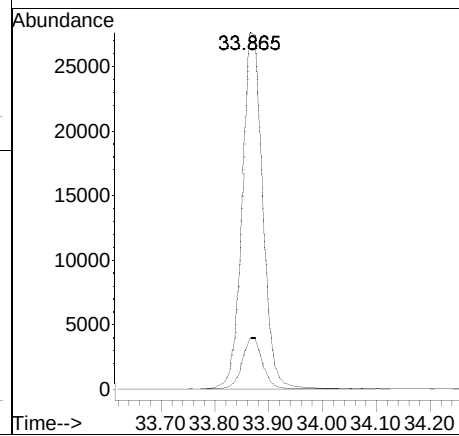
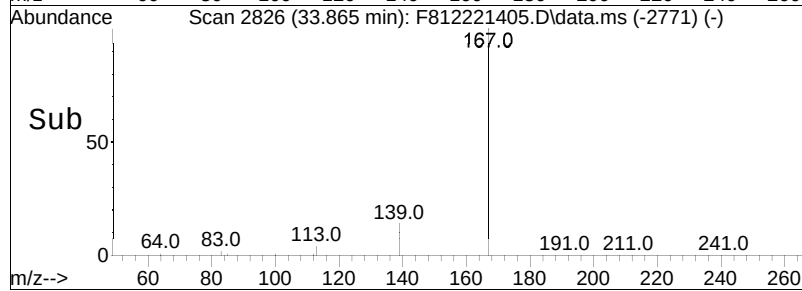
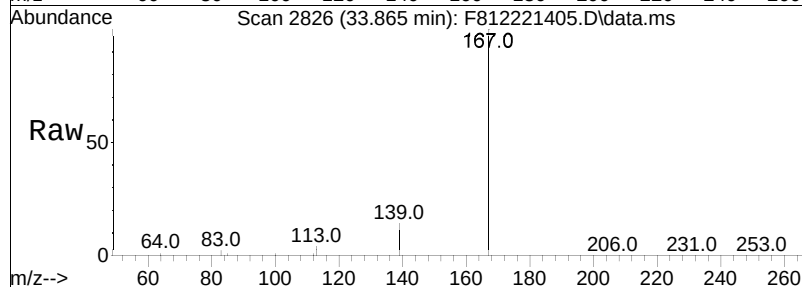
#55
 Anthracene
 Concen: 618.11 ng/mL M4
 RT: 33.208 min Scan# 2754
 Delta R.T. 0.009 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

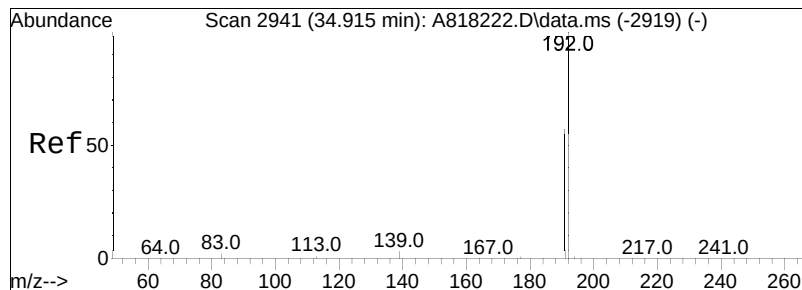
Tgt Ion	Ratio	Lower	Upper
178	100		
176	17.8	12.5	23.3



#56
 Carbazole
 Concen: 590.32 ng/mL
 RT: 33.865 min Scan# 2826
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

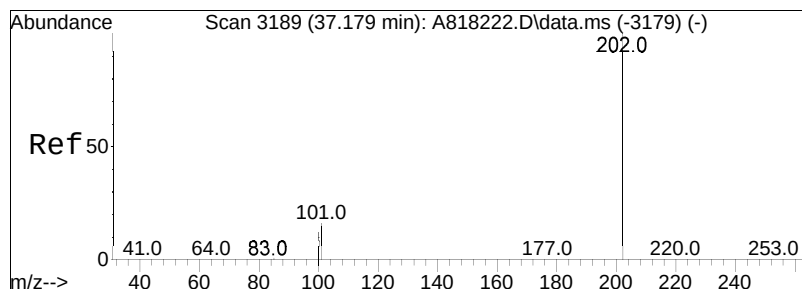
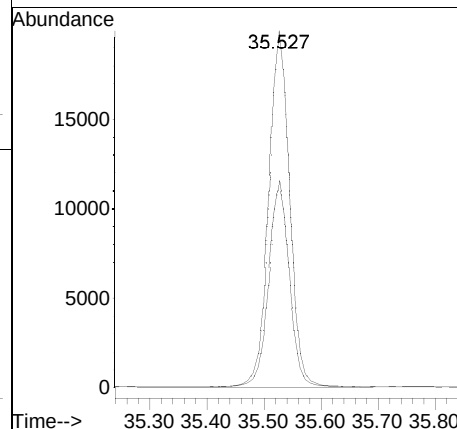
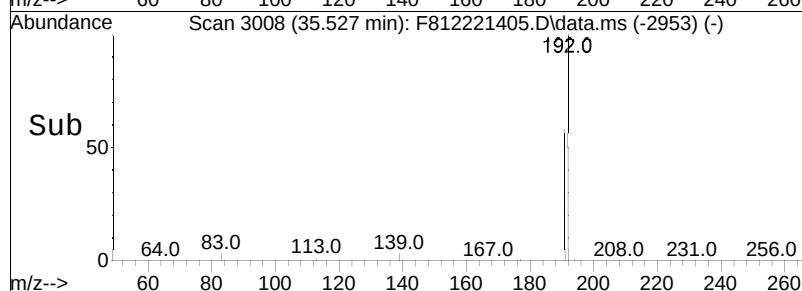
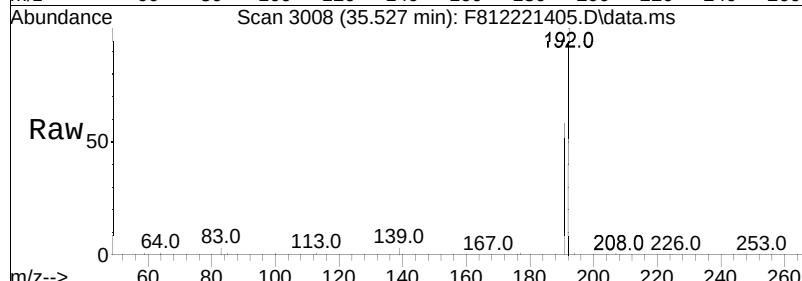
Tgt Ion	Ratio	Lower	Upper
167	100		
139	14.3	10.4	19.4





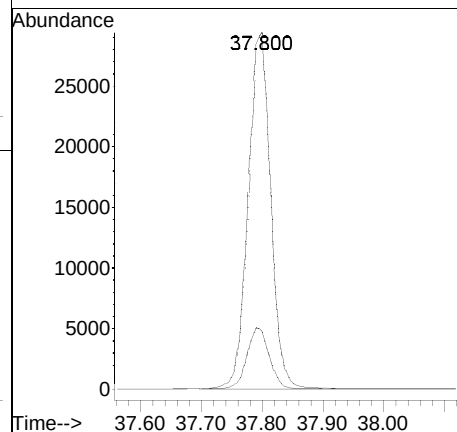
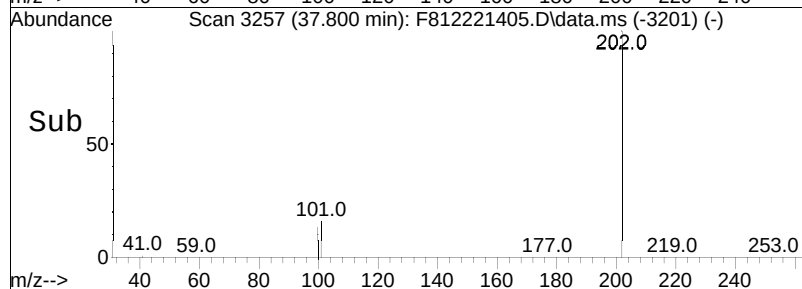
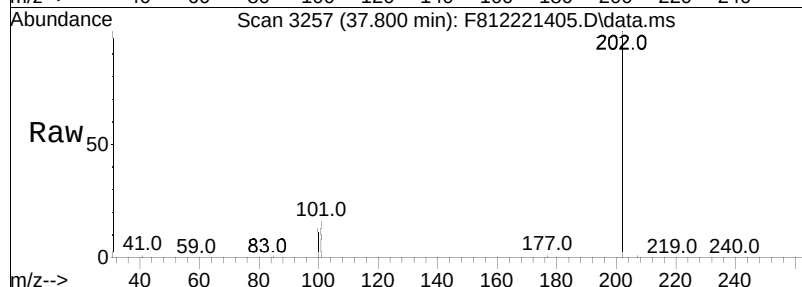
#57
1-Methylphenanthrene
Concen: 530.27 ng/mL
RT: 35.527 min Scan# 3008
Delta R.T. 0.000 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm

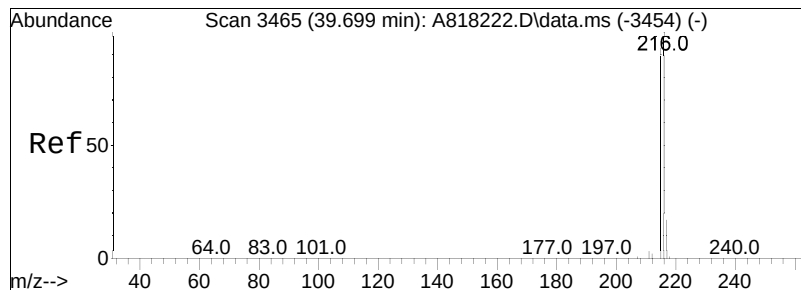
Tgt Ion	Ratio	Lower	Upper
192	100		
191	57.1	40.0	74.4



#58
Fluoranthene
Concen: 550.43 ng/mL
RT: 37.800 min Scan# 3257
Delta R.T. 0.009 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm

Tgt Ion	Ratio	Lower	Upper
202	100		
101	17.0	13.5	25.1





#59

Benzo(b)fluorene

Concen: 583.36 ng/mL

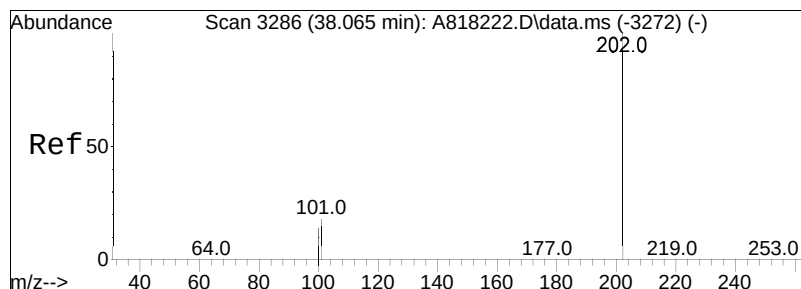
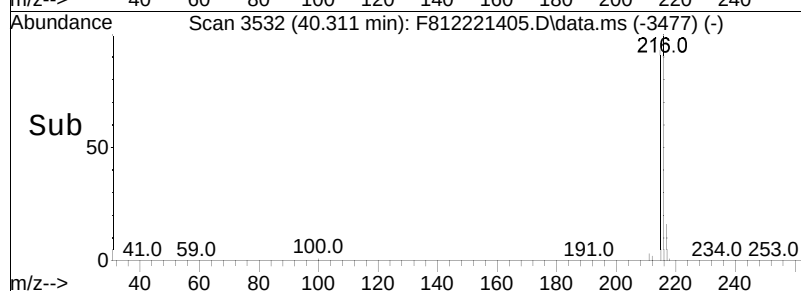
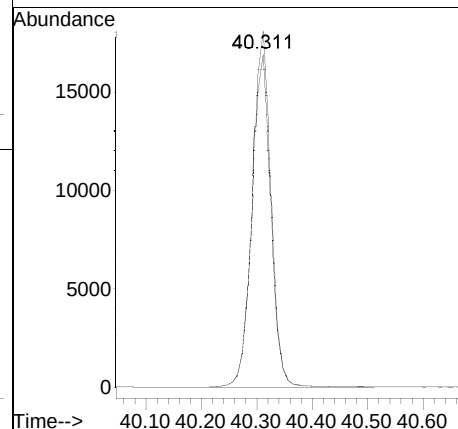
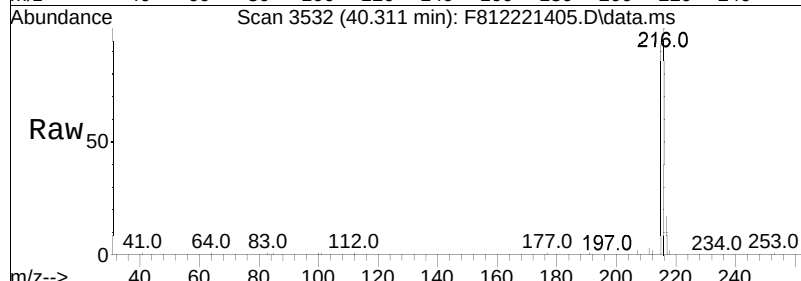
RT: 40.311 min Scan# 3532

Delta R.T. 0.000 min

Lab File: F812221405.D

Acq: 23 Dec 2014 5:44 pm

Tgt Ion	Ratio	Lower	Upper
216	100		
215	93.4	64.6	120.0



#60

Pyrene

Concen: 579.22 ng/mL

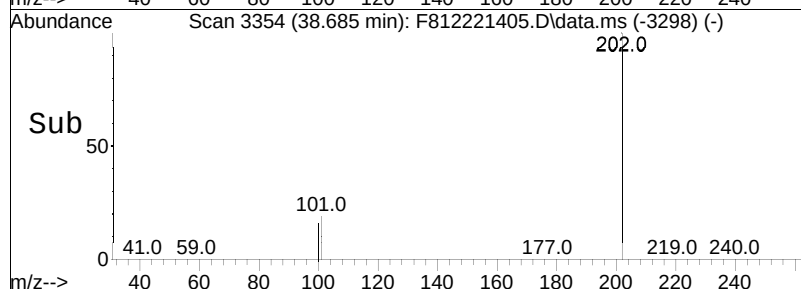
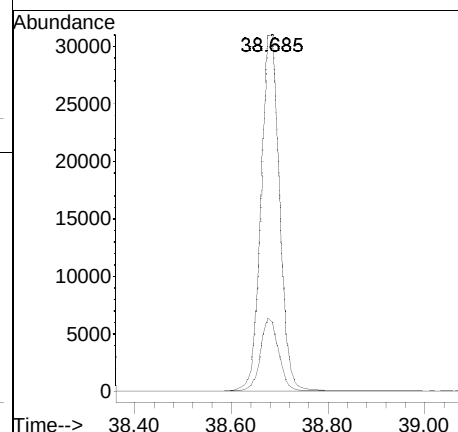
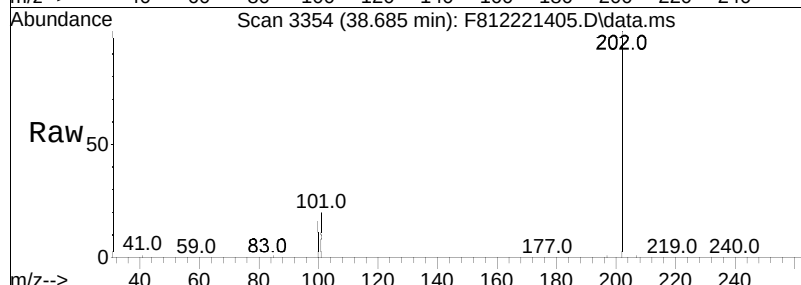
RT: 38.685 min Scan# 3354

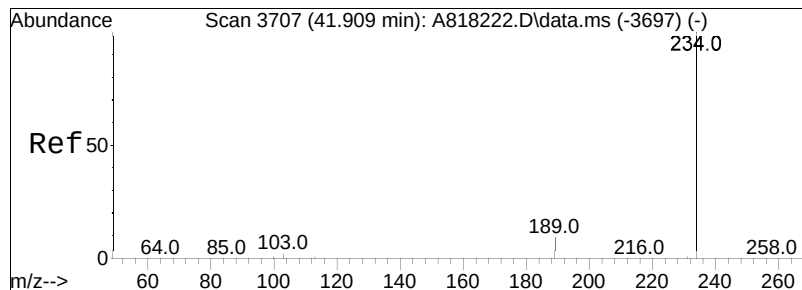
Delta R.T. 0.009 min

Lab File: F812221405.D

Acq: 23 Dec 2014 5:44 pm

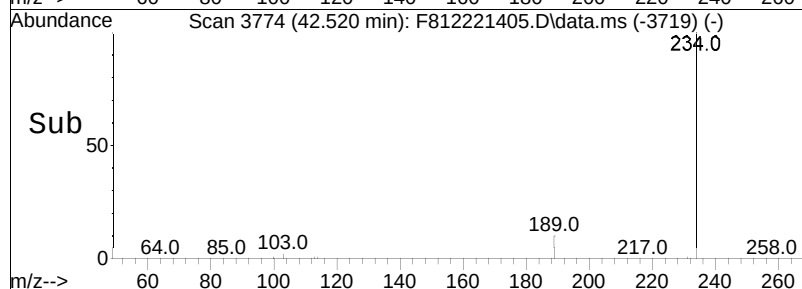
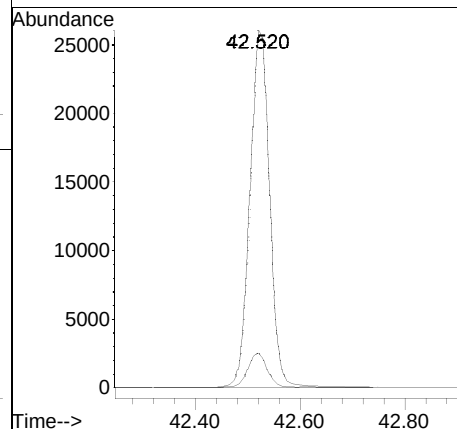
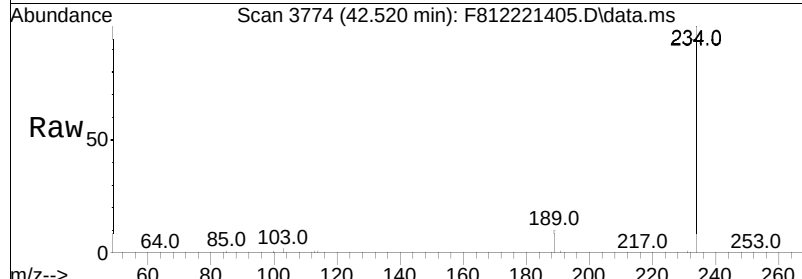
Tgt Ion	Ratio	Lower	Upper
202	100		
101	20.2	15.5	28.7





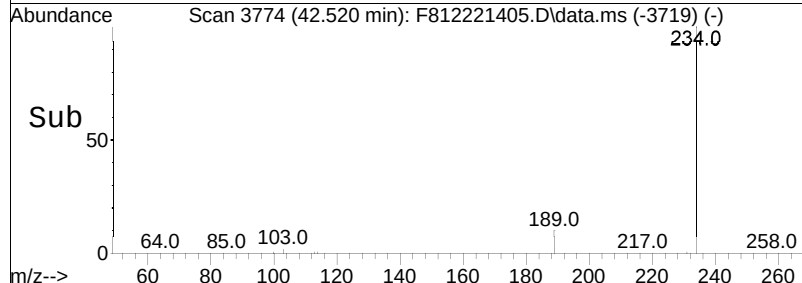
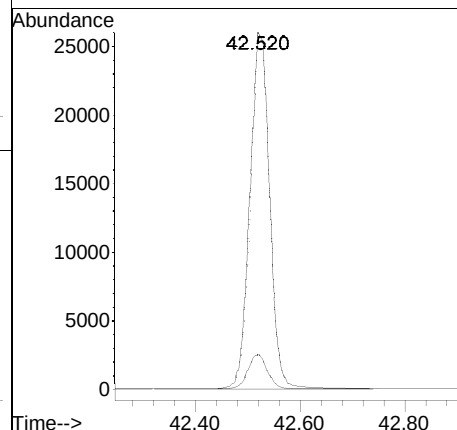
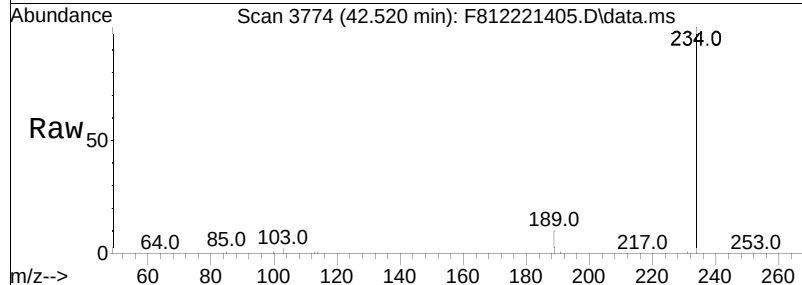
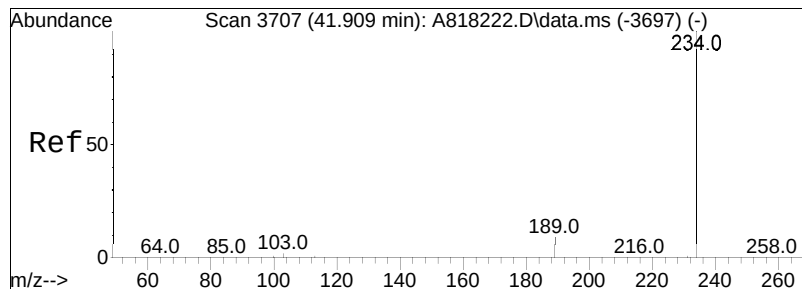
#66
 Naphthobenzothiophene
 Concen: 511.28 ng/ml
 RT: 42.520 min Scan# 3774
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

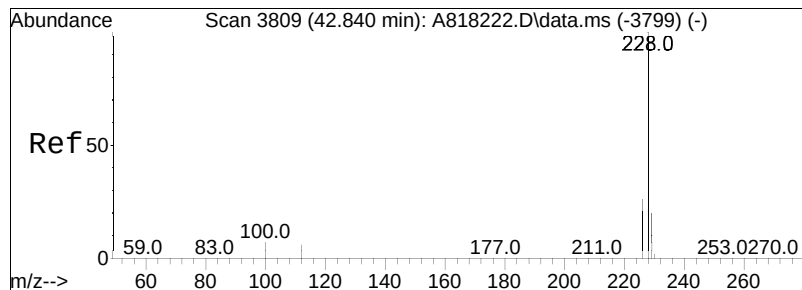
Tgt Ion	Ratio	Resp	Lower	Upper
234	100	66395		
189	9.4		6.9	12.9



#67
 Naphthobenzothiophene-2,1-D
 Concen: 511.28 ng/mL
 RT: 42.520 min Scan# 3774
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

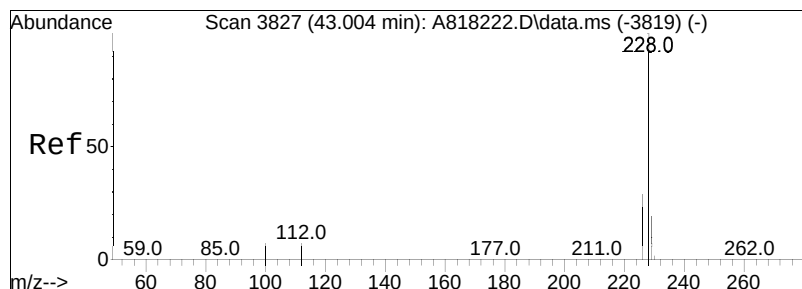
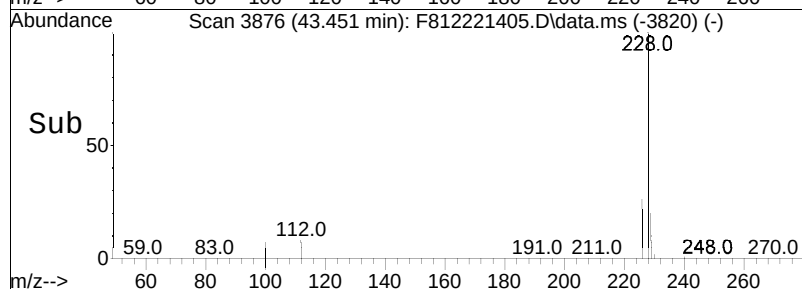
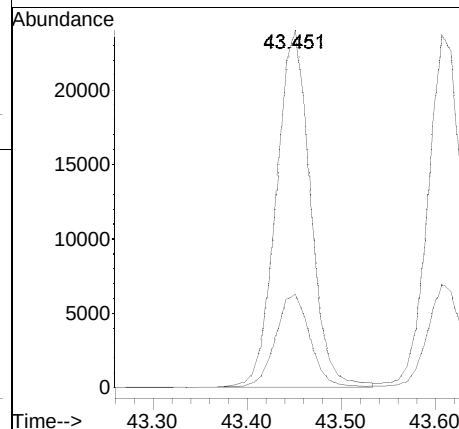
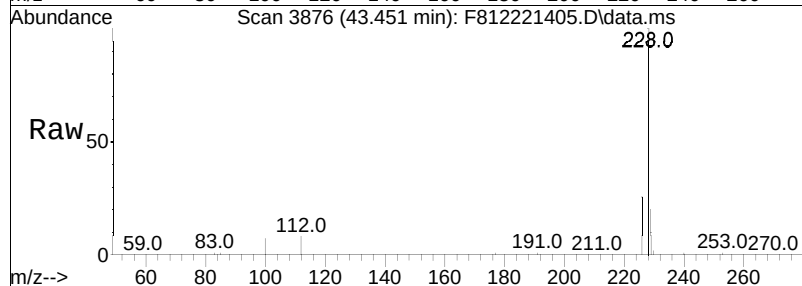
Tgt Ion	Ratio	Resp	Lower	Upper
234	100	66395		
189	9.4		6.9	12.9





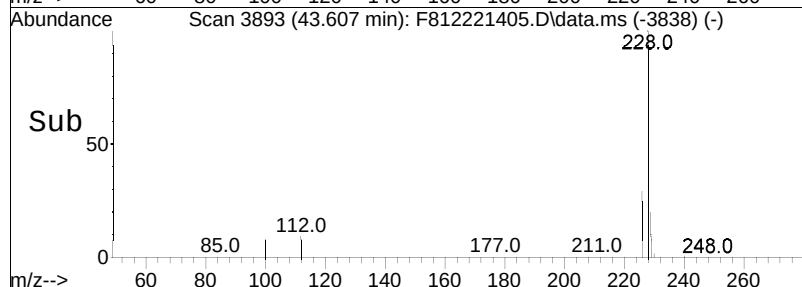
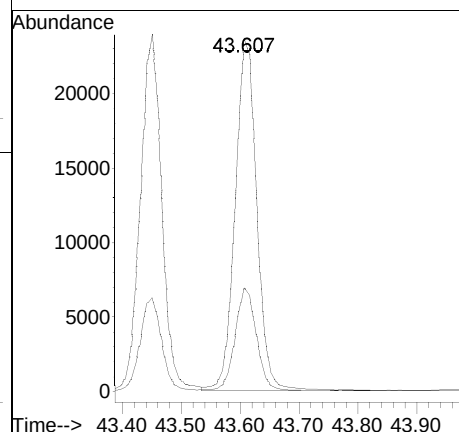
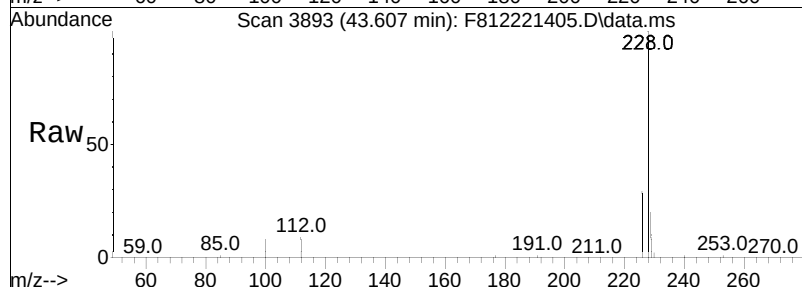
#75
Benz[a]anthracene
Concen: 563.47 ng/mL
RT: 43.451 min Scan# 3876
Delta R.T. 0.009 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm

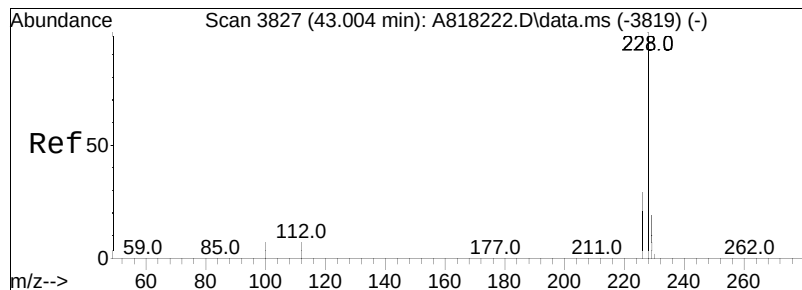
Tgt Ion	Ratio	Lower	Upper
228	100		
226	26.2	19.0	35.4



#76
Chrysene
Concen: 556.49 ng/mL
RT: 43.607 min Scan# 3893
Delta R.T. 0.000 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm

Tgt Ion	Ratio	Lower	Upper
228	100		
226	29.1	20.7	38.5





#77

Chrysene/Triphenylene

Concen: 556.49 ng/mL

RT: 43.607 min Scan# 3893

Delta R.T. 0.000 min

Lab File: F812221405.D

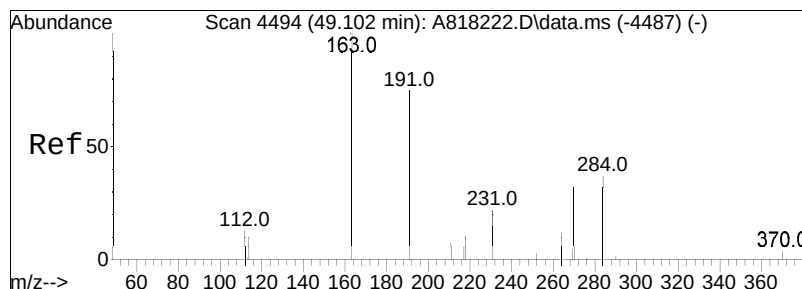
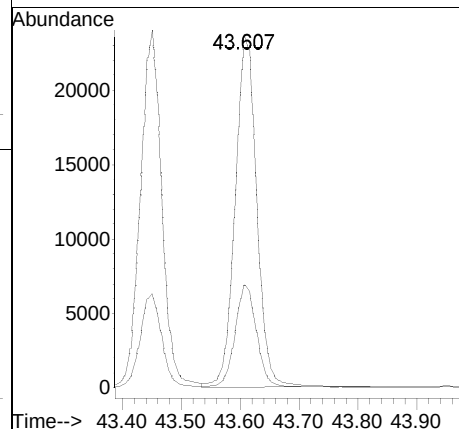
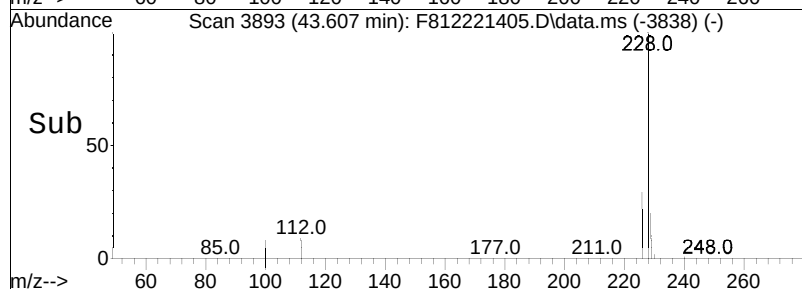
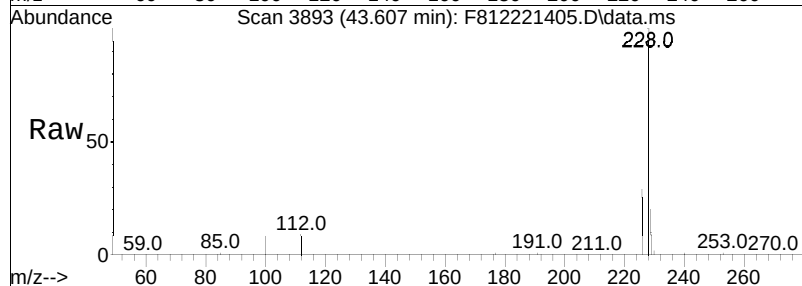
Acq: 23 Dec 2014 5:44 pm

Tgt Ion:228 Resp: 59928

Ion Ratio Lower Upper

228 100

226 29.1 20.7 38.5



#84

Benzo[b]fluoranthene

Concen: 532.87 ng/mL

RT: 47.500 min Scan# 4319

Delta R.T. 0.000 min

Lab File: F812221405.D

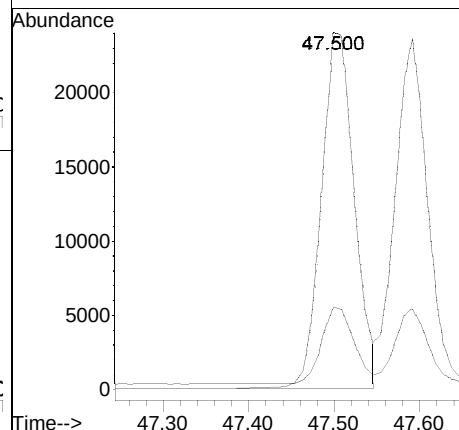
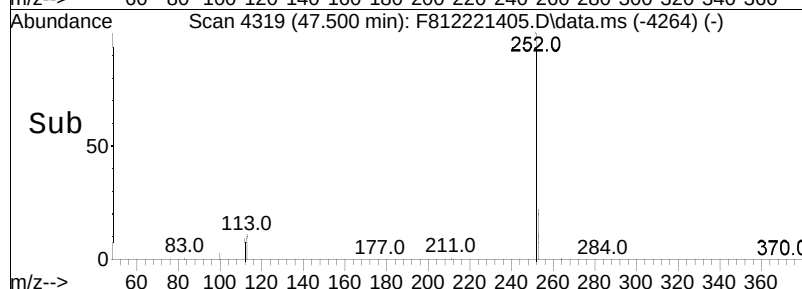
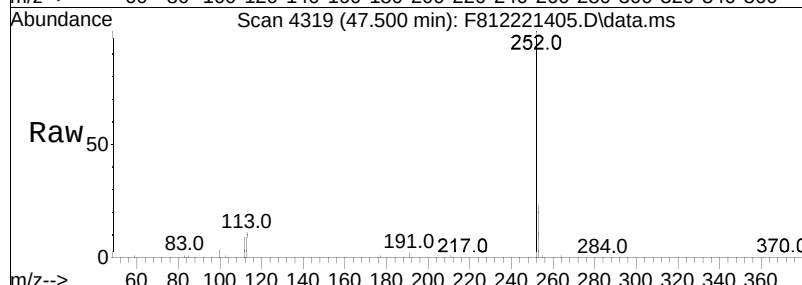
Acq: 23 Dec 2014 5:44 pm

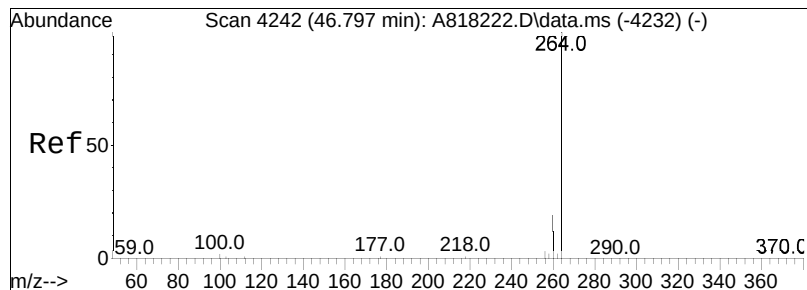
Tgt Ion:252 Resp: 64324

Ion Ratio Lower Upper

252 100

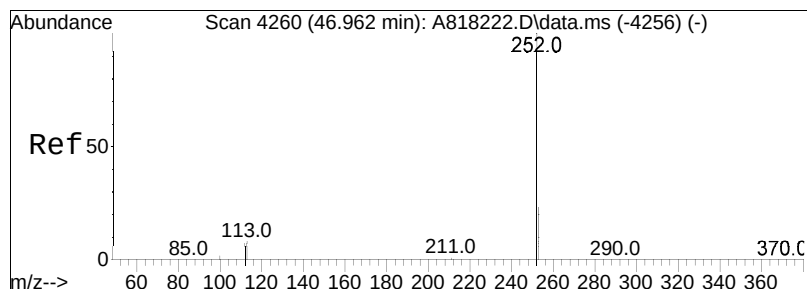
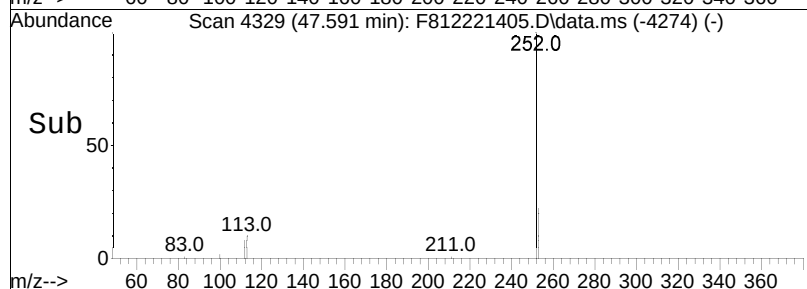
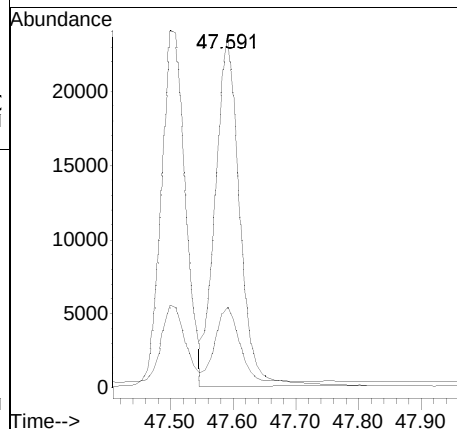
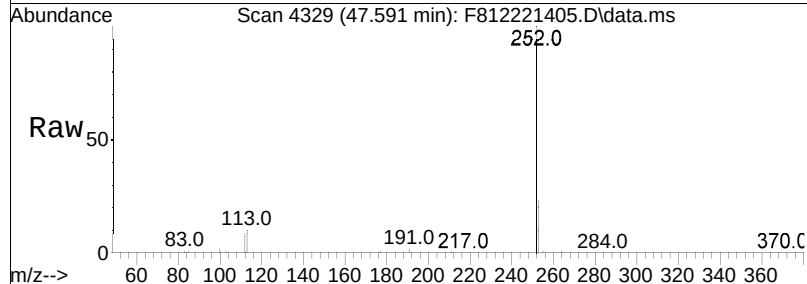
253 21.5 16.5 30.7





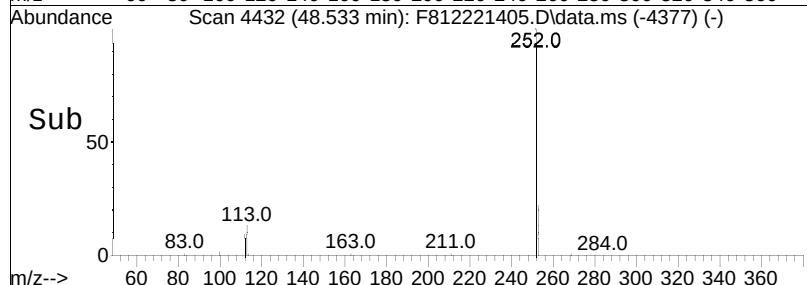
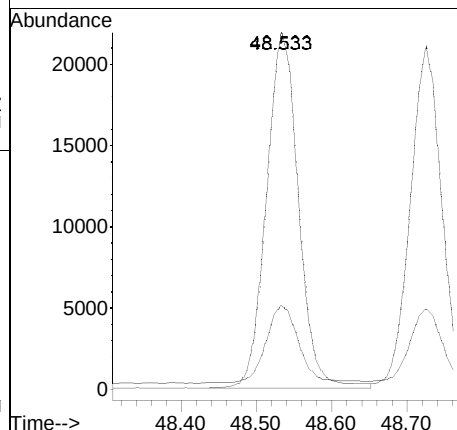
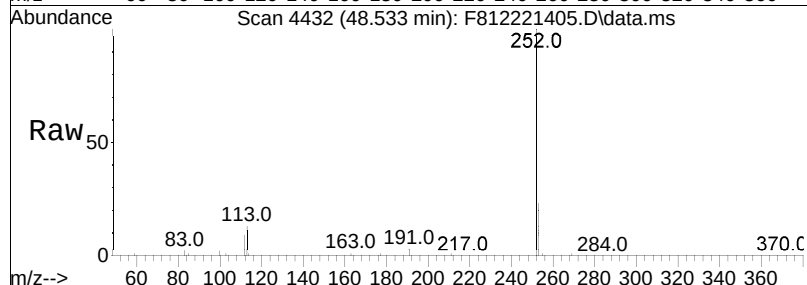
#85
 Benzo[j]+[k]fluoranthene
 Concen: 555.90 ng/mL
 RT: 47.591 min Scan# 4329
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

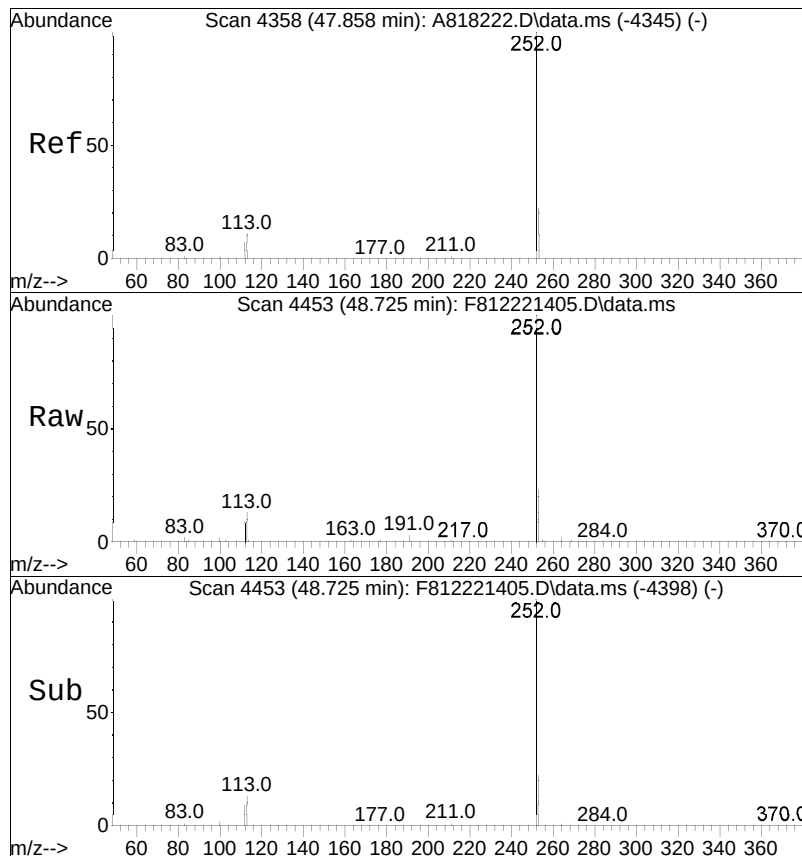
Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.7	17.1	31.7



#87
 Benzo[e]pyrene
 Concen: 527.19 ng/mL
 RT: 48.533 min Scan# 4432
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

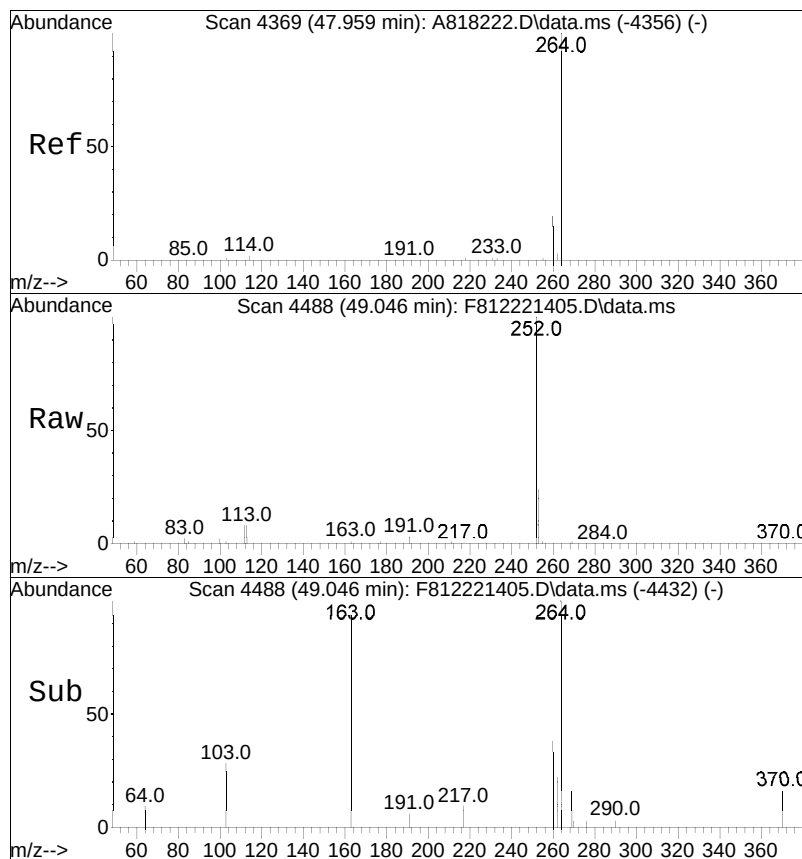
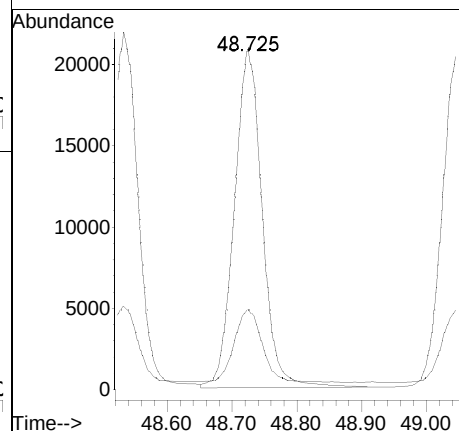
Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.2	17.4	32.4





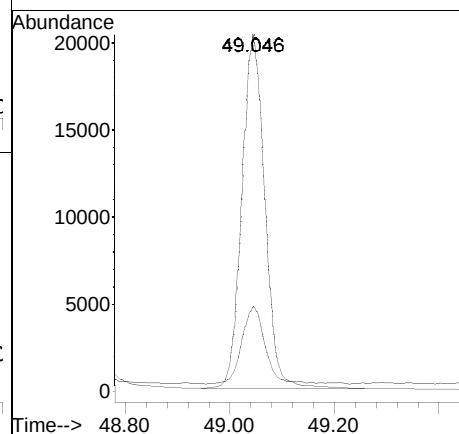
#89
Benzo[a]pyrene
Concen: 582.32 ng/mL
RT: 48.725 min Scan# 4453
Delta R.T. 0.000 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm

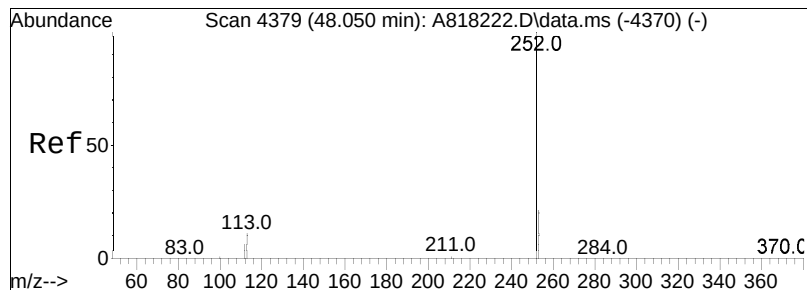
Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.9	16.9	31.3



#90
Perylene
Concen: 553.27 ng/mL
RT: 49.046 min Scan# 4488
Delta R.T. 0.009 min
Lab File: F812221405.D
Acq: 23 Dec 2014 5:44 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.3	17.3	32.1





#91

Indeno[1,2,3-cd]pyrene

Concen: 514.25 ng/mL M3

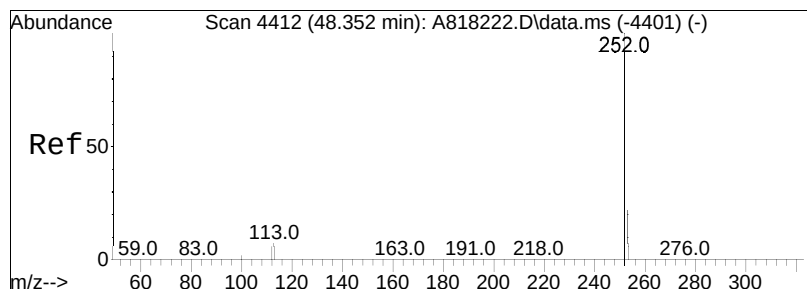
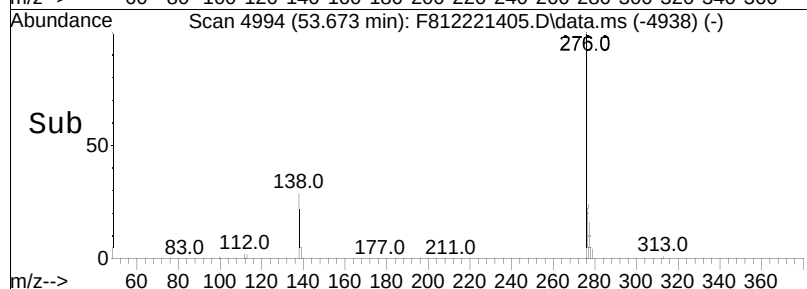
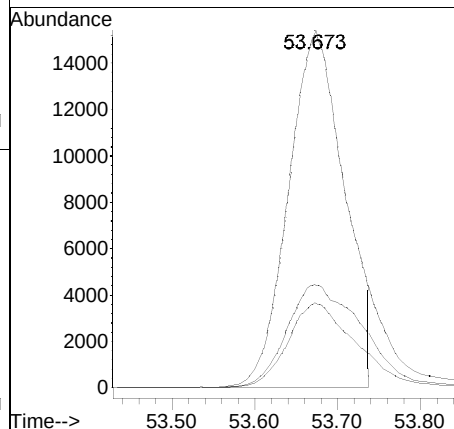
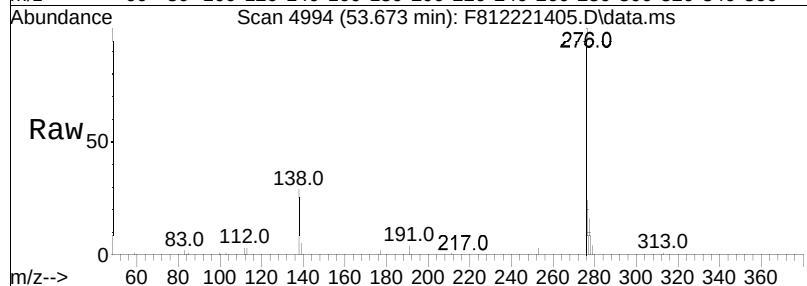
RT: 53.673 min Scan# 4994

Delta R.T. 0.009 min

Lab File: F812221405.D

Acq: 23 Dec 2014 5:44 pm

Tgt Ion:	276	Resp:	72078
Ion Ratio	Lower	Upper	
276	100		
138	38.7	19.3	35.9#
277	28.6	16.5	30.7



#92

Dibenz[ah]+[ac]anthracene

Concen: 537.23 ng/mL

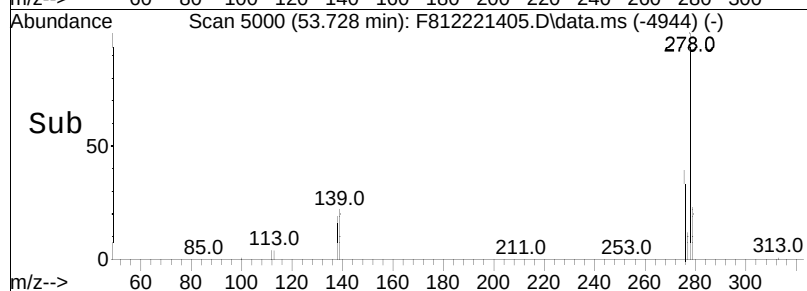
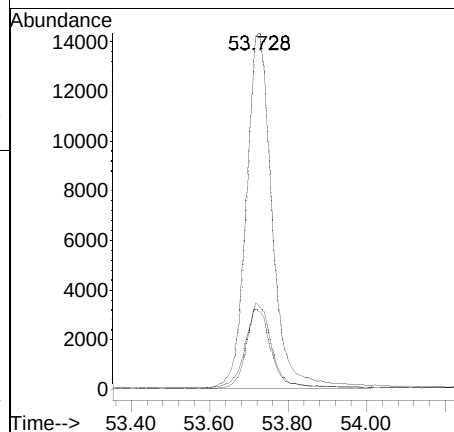
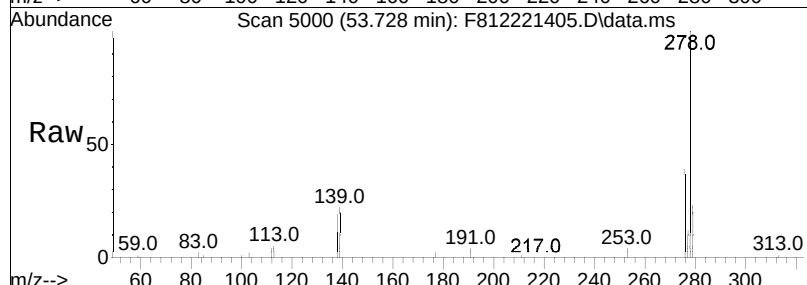
RT: 53.728 min Scan# 5000

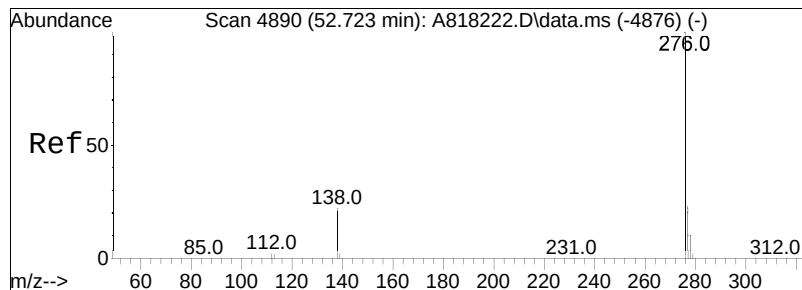
Delta R.T. 0.009 min

Lab File: F812221405.D

Acq: 23 Dec 2014 5:44 pm

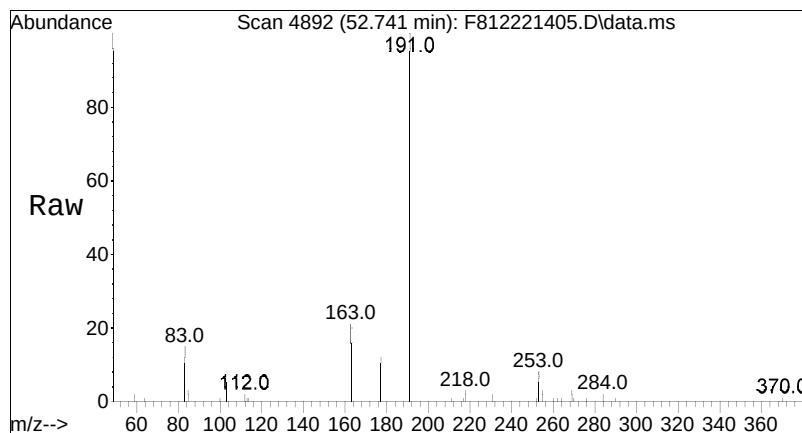
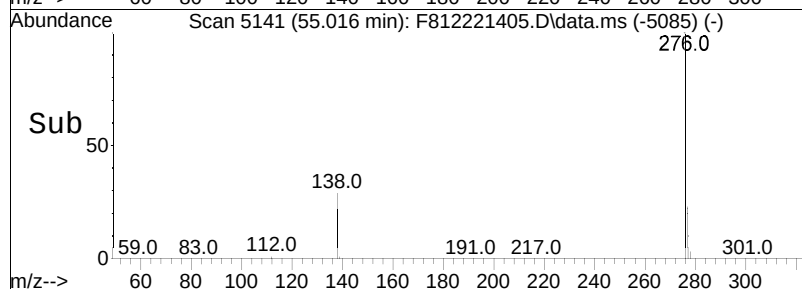
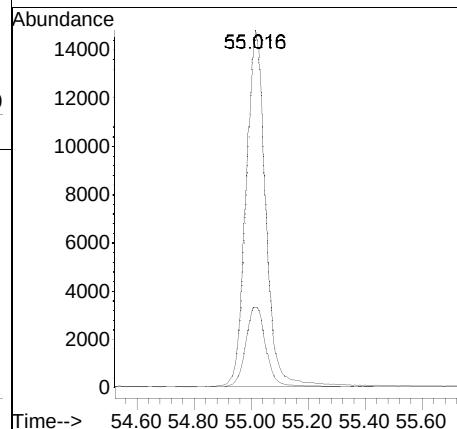
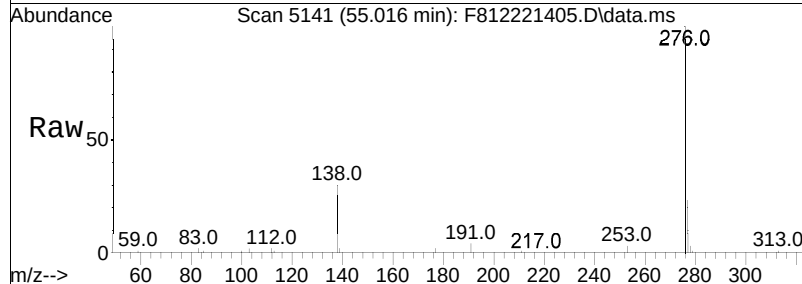
Tgt Ion:	278	Resp:	65062
Ion Ratio	Lower	Upper	
278	100		
139	22.2	16.8	31.2
279	23.1	17.2	32.0





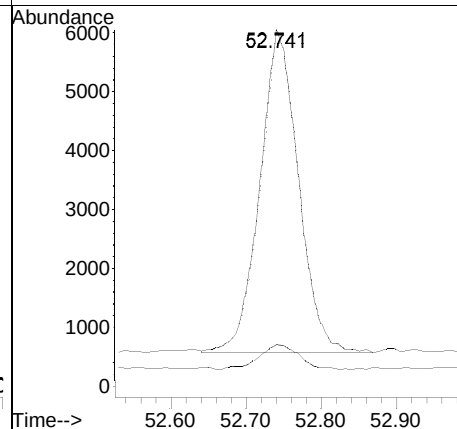
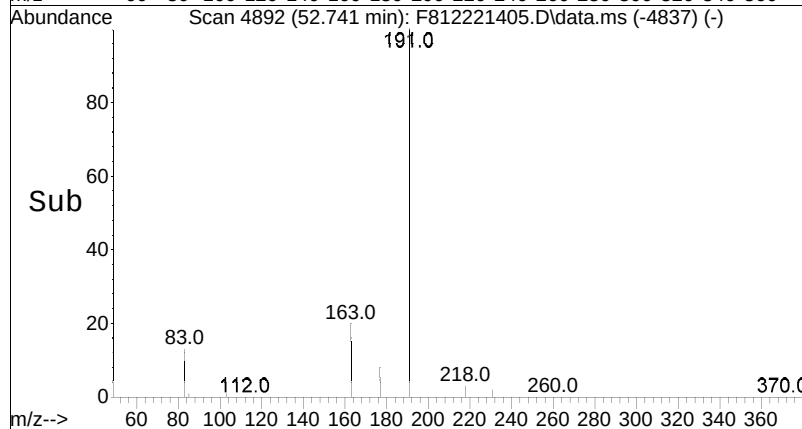
#93
 Benzo[g,h,i]perylene
 Concen: 497.51 ng/mL
 RT: 55.016 min Scan# 5141
 Delta R.T. 0.009 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

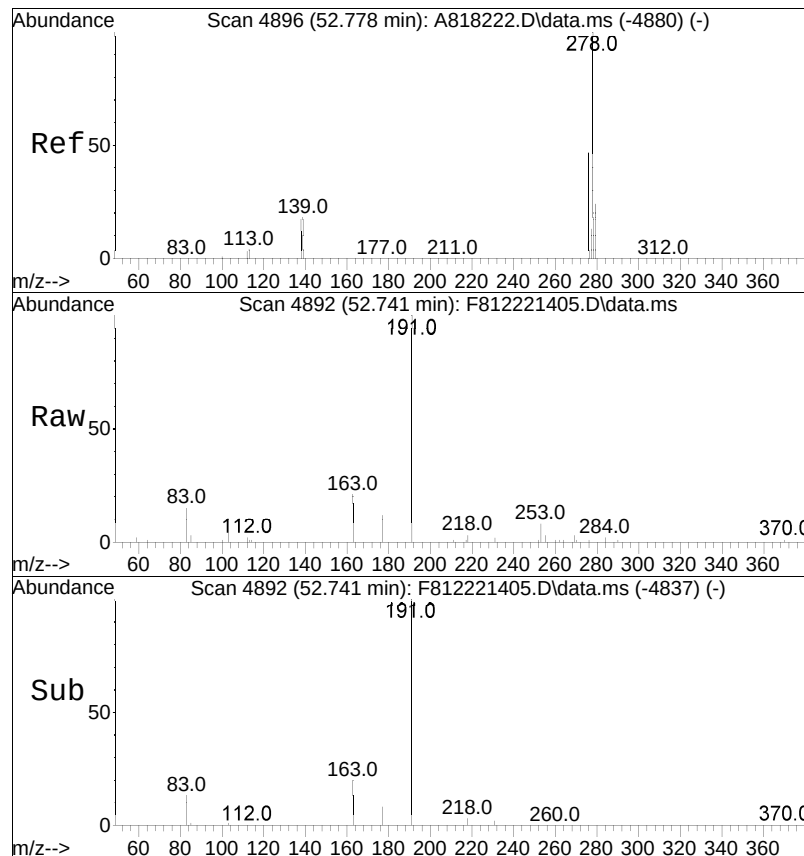
Tgt Ion	Ratio	Lower	Upper
276	100		
277	22.8	16.5	30.7



#94
 Hopane (T19)
 Concen: 545.93 ng/mL
 RT: 52.741 min Scan# 4892
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

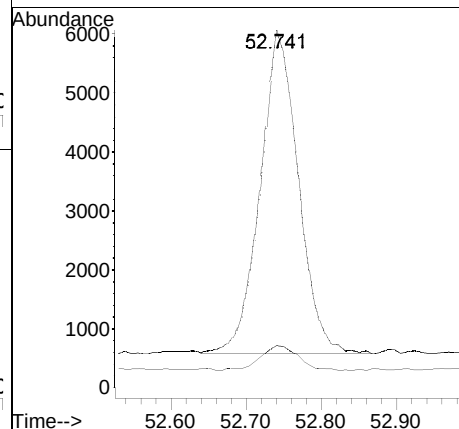
Tgt Ion	Ratio	Lower	Upper
191	100		
177	8.3	10.1	18.9#





#95
 17a(H),21B(H)-hopane - C₃₀H₅₂
 Concen: 545.93 ng/mL
 RT: 52.741 min Scan# 4892
 Delta R.T. 0.000 min
 Lab File: F812221405.D
 Acq: 23 Dec 2014 5:44 pm

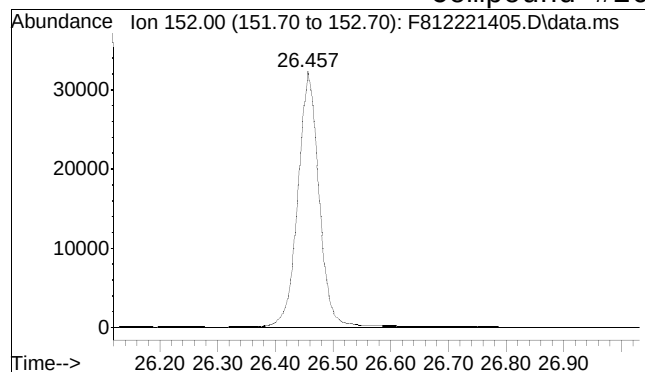
Tgt	Ion	Ratio	Lower	Upper
191	100			
177	8.3	10.1	18.9	



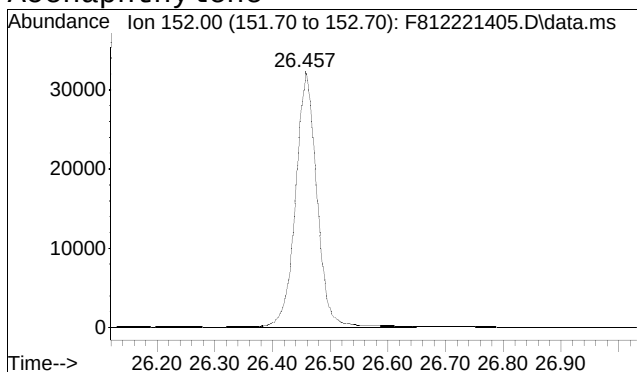
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
 Data File : F812221405.D Operator : PAH8:ML
 Date Inj'd : 12/23/2014 5:44 pm Instrument : PAH8
 Sample : I812231404 Quant Date : 12/24/2014 11:28 am

Compound #26: Acenaphthylene



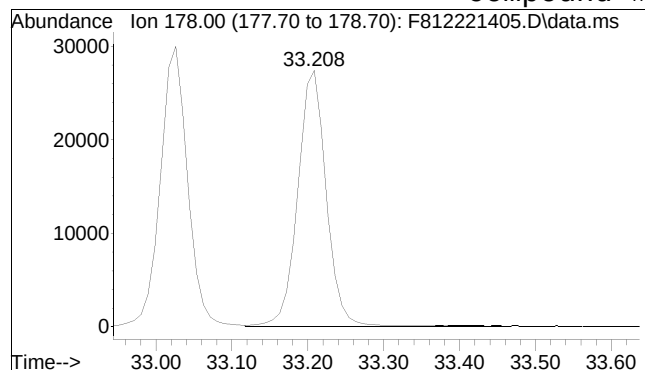
Original Peak Response = 84568



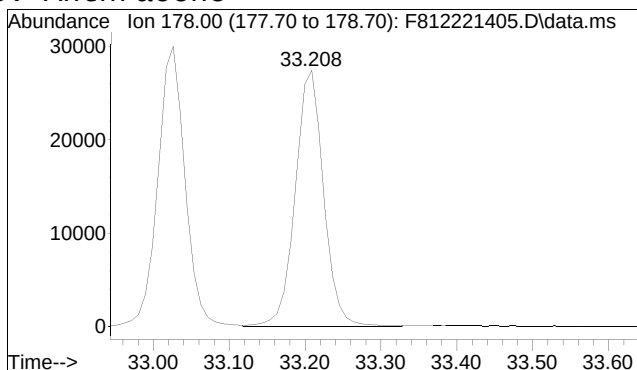
Manual Peak Response = 82836 M4

M4 = Poor automated baseline construction.

Compound #55: Anthracene



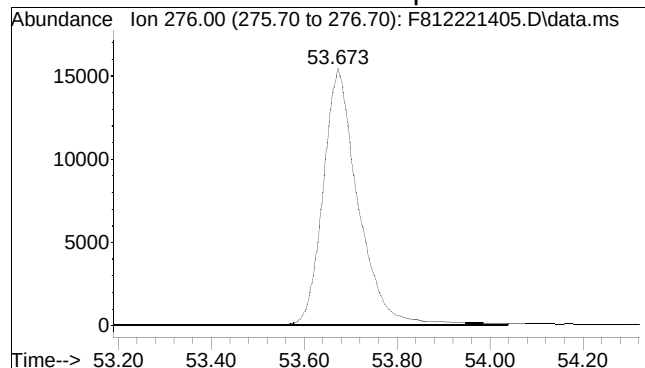
Original Peak Response = 71330



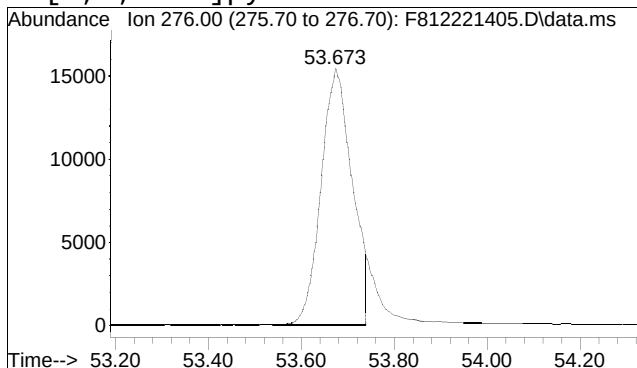
Manual Peak Response = 71144 M4

M4 = Poor automated baseline construction.

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 80857



Manual Peak Response = 72078 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221406.D
 Acq On : 23 Dec 2014 7:10 pm
 Operator : PAH8:ML
 Sample : I812231405
 Misc : WG755323, FRAU81 5000ng/ml
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 13 11:09:06 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.068	164	44809	500.000	ng/mL	0.00
74) Chrysene-d12	43.515	240	58530	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	20.096	136	851349	4961.018	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 496.10%#			
42) Phenanthrene-d10	32.944	188	622682	4757.417	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 475.74%#			
83) Benzo[b]fluoranthene-d12	47.436	264	597245	5252.243	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 525.22%#			
88) Benzo[a]pyrene-d12	48.652	264	499524	5416.008	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 541.60%#			
129) 5B(H)Cholane - Surr	44.136	217	114380	6242.454	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 624.25%#			
Target Compounds						
					Qvalue	
3) trans-Decalin	16.747	138	96330	2402.470	ng/mL	100
4) cis-Decalin	17.961	138	73704	2427.139	ng/mL	100
10) Naphthalene	20.178	128	906181	4900.945	ng/mL	100
16) 2-Methylnaphthalene	22.861	142	637909	5162.095	ng/mL	100
17) 1-Methylnaphthalene	23.290	142	587441	4915.063	ng/mL	100
18) Benzo[thiophene	20.388	134	767298	5000.728	ng/mL	100
23) Biphenyl	24.741	154	741531	4987.954	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.352	156	526200	5197.874	ng/mL	100
25) Dibenzofuran	27.834	168	745557	4897.169	ng/mL	99
26) Acenaphthylene	26.457	152	918929M4	5504.529	ng/mL	
27) Acenaphthene	27.196	153	538045	5073.346	ng/mL	97
28) 2,3,5-Trimethylnaphthalen	28.747	170	431296	5176.548	ng/mL	94
29) Fluorene	29.212	166	594126	5078.242	ng/mL	96
33) Dibenzothiophene	32.533	184	836969	5109.929	ng/mL	98
43) Phenanthrene	33.035	178	750736	4709.870	ng/mL	98
54) Retene	40.009	234	203806	5185.103	ng/mL	97
55) Anthracene	33.208	178	691805M4	4913.044	ng/mL	
56) Carbazole	33.874	167	803338	5413.542	ng/mL	98
57) 1-Methylphenanthrene	35.536	192	587246	5077.053	ng/mL	98
58) Fluoranthene	37.800	202	852103M4	5169.815	ng/mL	
59) Benzo(b)fluorene	40.320	216	490593	5511.596	ng/mL	99
60) Pyrene	38.685	202	903908	5262.002	ng/mL	96
66) Naphthobenzothiophene	42.529	234	790691	4977.031	ng/mL	99
67) Naphthobenzothiophene-2,1	42.529	234	790691	4977.031	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221406.D
 Acq On : 23 Dec 2014 7:10 pm
 Operator : PAH8:ML
 Sample : I812231405
 Misc : WG755323, FRAU81 5000ng/ml
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 13 11:09:06 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.461	228	702309	5911.078	ng/mL	97
76)	Chrysene	43.625	228	643359	5378.216	ng/mL	97
77)	Chrysene/Triphenylene	43.625	228	643359	5378.216	ng/mL	97
84)	Benzo[b]fluoranthene	47.527	252	719420	5365.266	ng/mL	97
85)	Benzo[j]+[k]fluoranthene	47.610	252	688322	5430.655	ng/mL	95
87)	Benzo[e]pyrene	48.552	252	756484	5554.649	ng/mL	95
89)	Benzo[a]pyrene	48.744	252	671165	5686.901	ng/mL	96
90)	Perylene	49.064	252	707905	5766.981	ng/mL	94
91)	Indeno[1,2,3-cd]pyrene	53.700	276	857938M3	5510.467	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.755	278	710250	5279.628	ng/mL	97
93)	Benzo[g,h,i]perylene	55.053	276	827096	5319.421	ng/mL	100
94)	Hopane (T19)	52.750	191	244202	6246.959	ng/mL#	84
95)	17a(H),21B(H)-hopane - C3	52.750	191	244202	6246.959	ng/mL#	84

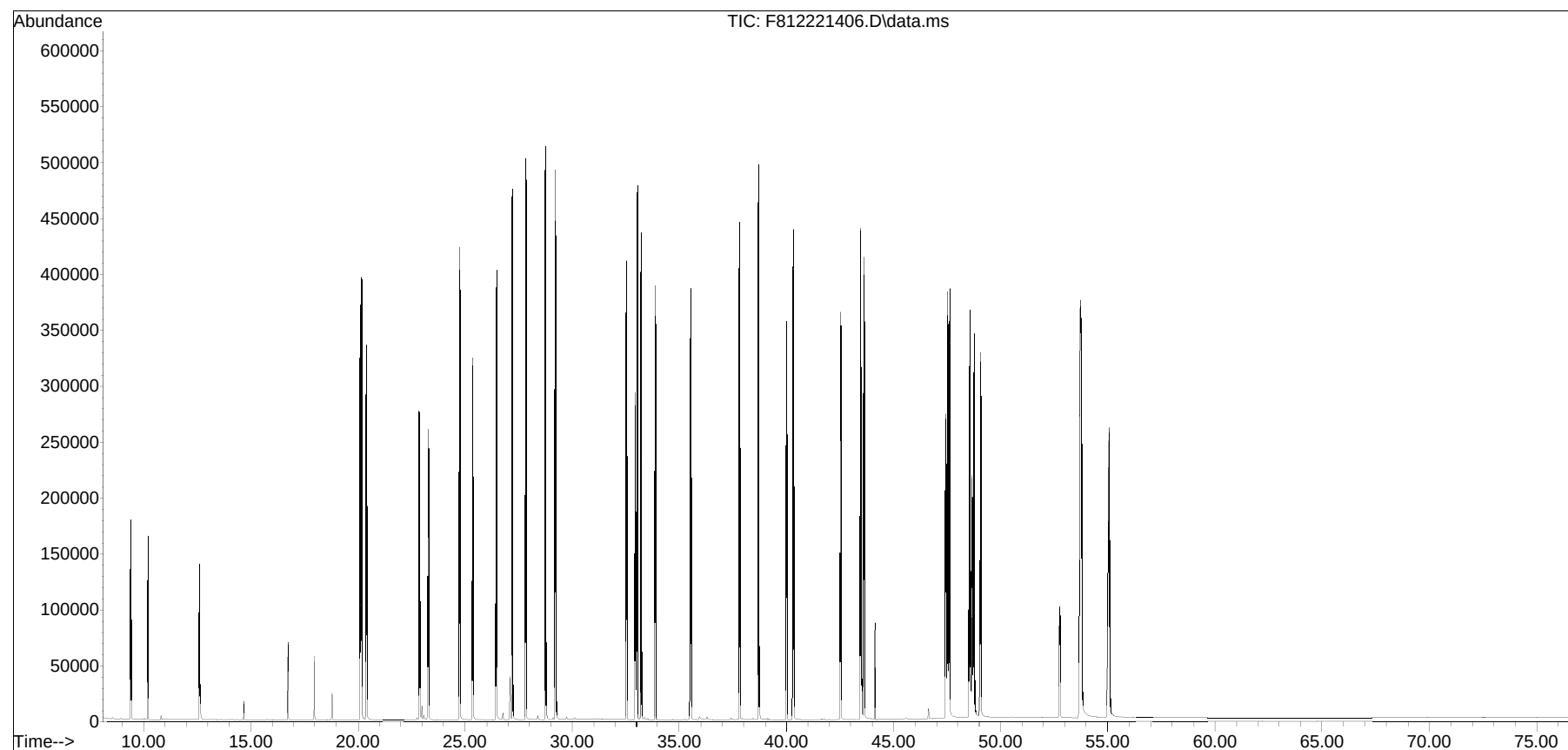
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC23\
Data File : F812221406.D
Acq On : 23 Dec 2014 7:10 pm
Operator : PAH8:ML
Sample : I812231405
Misc : WG755323, FRAU81 5000ng/ml
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 13 11:09:06 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 23 07:51:27 2014
Response via : Initial Calibration

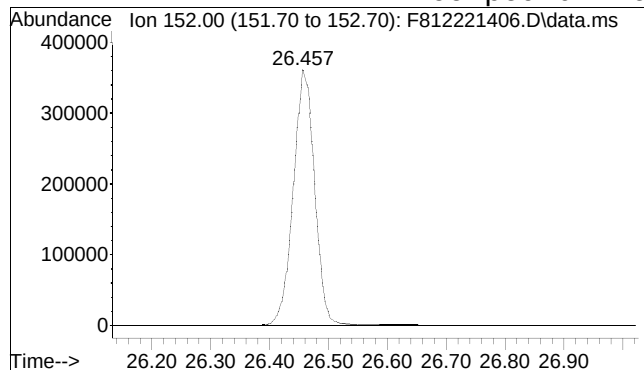
Sub List : ICAL_CCALT_REV2 - CC with five surrogates



Manual Integration/Negative Proof Report

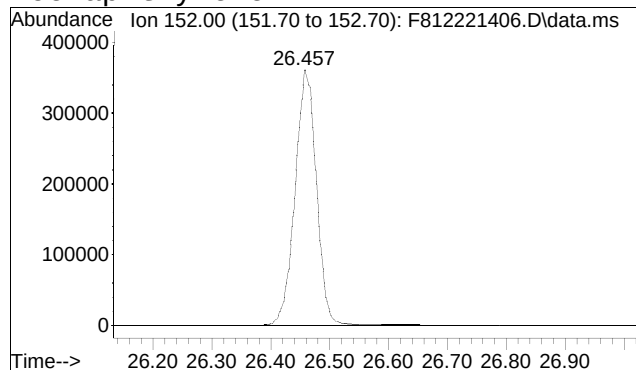
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
Data File : F812221406.D Operator : PAH8:ML
Date Inj'd : 12/23/2014 7:10 pm Instrument : PAH8
Sample : I812231405 Quant Date : 12/24/2014 11:28 am

Compound #26: Acenaphthylene



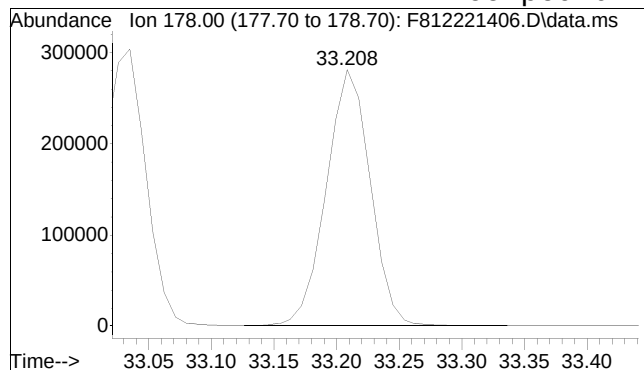
Original Peak Response = 922436

M4 = Poor automated baseline construction.



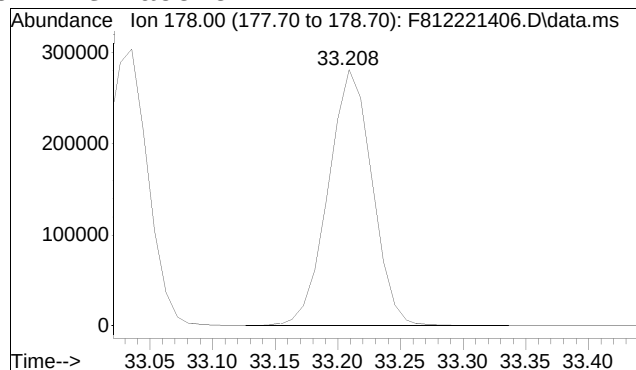
Manual Peak Response = 918929 M4

Compound #55: Anthracene



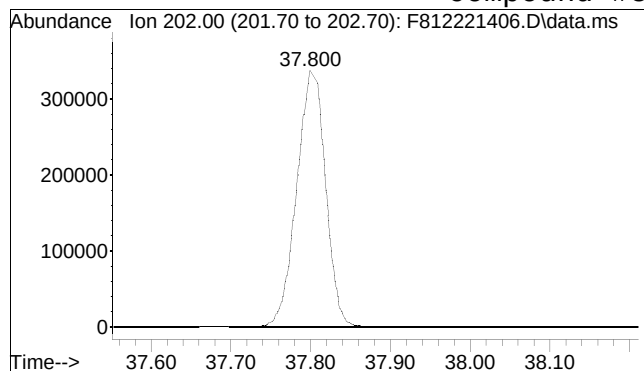
Original Peak Response = 690791

M4 = Poor automated baseline construction.



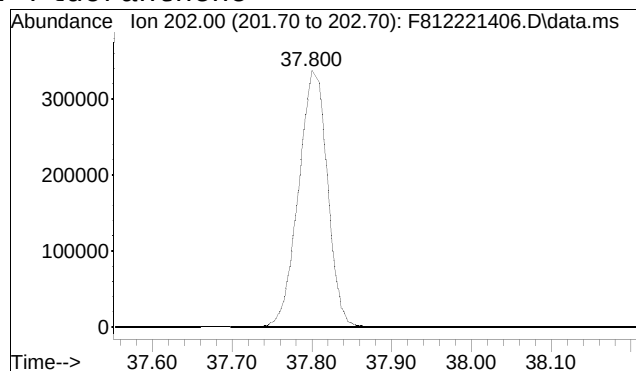
Manual Peak Response = 691805 M4

Compound #58: Fluoranthene



Original Peak Response = 851901

M4 = Poor automated baseline construction.

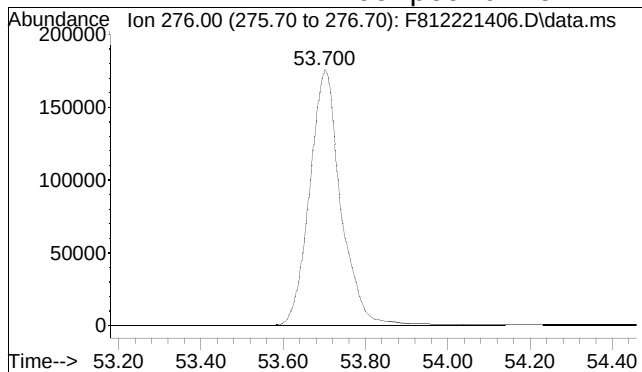


Manual Peak Response = 852103 M4

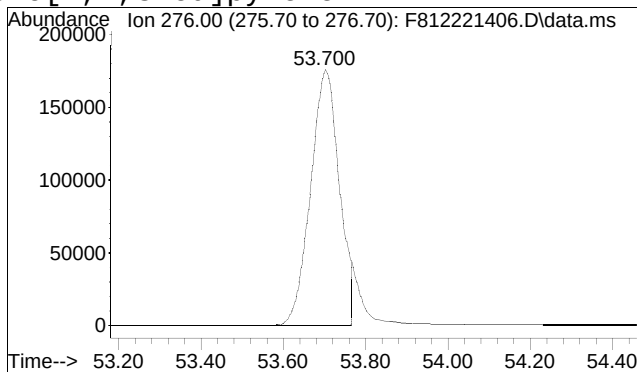
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
Data File : F812221406.D Operator : PAH8:ML
Date Inj'd : 12/23/2014 7:10 pm Instrument : PAH8
Sample : I812231405 Quant Date : 12/24/2014 11:28 am

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 937856



Manual Peak Response = 857938 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221407.D
 Acq On : 23 Dec 2014 8:36 pm
 Operator : PAH8:ML
 Sample : I812231406
 Misc : WG755323,FRAU82 10000ng/ml
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 13 11:09:15 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.068	164	38700	500.000	ng/mL	0.00
74) Chrysene-d12	43.525	240	51328	500.000	ng/mL	0.02
System Monitoring Compounds						
9) Naphthalene-d8	20.096	136	1429371	9644.116	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 964.41%#			
42) Phenanthrene-d10	32.944	188	1084861	9596.951	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 959.70%#			
83) Benzo[b]fluoranthene-d12	47.445	264	1077655	10806.778	ng/mL	0.03
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1080.68%#			
88) Benzo[a]pyrene-d12	48.671	264	901449	11145.211	ng/mL	0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1114.52%#			
129) 5B(H)Cholane - Surr	44.136	217	212944	13252.409	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1325.24%#			
Target Compounds						
					Qvalue	
3) trans-Decalin	16.738	138	172308	4975.723	ng/mL	100
4) cis-Decalin	17.961	138	131497	5013.877	ng/mL	100
10) Naphthalene	20.178	128	1490391	9332.959	ng/mL	100
16) 2-Methylnaphthalene	22.870	142	1071273	10037.410	ng/mL	100
17) 1-Methylnaphthalene	23.290	142	986830	9560.079	ng/mL	100
18) Benzothiophene	20.397	134	1282630	9678.874	ng/mL	100
23) Biphenyl	24.750	154	1245391	9699.584	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.362	156	890017	10179.524	ng/mL	100
25) Dibenzofuran	27.835	168	1256868	9558.906	ng/mL	99
26) Acenaphthylene	26.466	152	1552938M4	10770.767	ng/mL	
27) Acenaphthene	27.196	153	898226	9806.540	ng/mL	96
28) 2,3,5-Trimethylnaphthalen	28.747	170	741835	10309.236	ng/mL	92
29) Fluorene	29.212	166	1020017	10094.772	ng/mL	94
33) Dibenzothiophene	32.542	184	1443626	10205.034	ng/mL	98
43) Phenanthrene	33.035	178	1287948	9355.656	ng/mL	97
54) Retene	40.010	234	366923	10808.605	ng/mL	95
55) Anthracene	33.218	178	1202115M4	9884.786	ng/mL	
56) Carbazole	33.884	167	1410261	11003.655	ng/mL	97
57) 1-Methylphenanthrene	35.536	192	1034397	10354.596	ng/mL	97
58) Fluoranthene	37.809	202	1488946M4	10459.627	ng/mL	
59) Benzo(b)fluorene	40.329	216	866193	11267.433	ng/mL	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221407.D
 Acq On : 23 Dec 2014 8:36 pm
 Operator : PAH8:ML
 Sample : I812231406
 Misc : WG755323,FRAU82 10000ng/ml
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 13 11:09:15 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
60)	Pyrene	38.695	202	1574978	10615.868	ng/mL	95
66)	Naphthobenzothiophene	42.539	234	1398526	10192.681	ng/mL	99
67)	Naphthobenzothiophene-2,1	42.539	234	1398526	10192.681	ng/mL	99
75)	Benz[a]anthracene	43.470	228	1240792	11908.624	ng/mL	96
76)	Chrysene	43.634	228	1132402	10794.678	ng/mL	97
77)	Chrysene/Triphenylene	43.634	228	1132402	10794.678	ng/mL	97
84)	Benzo[b]fluoranthene	47.536	252	1262376	10735.484	ng/mL	98
85)	Benzo[j]+[k]fluoranthene	47.628	252	1231801	11082.182	ng/mL	96
87)	Benzo[e]pyrene	48.570	252	1347718	11284.442	ng/mL	95
89)	Benzo[a]pyrene	48.771	252	1182703	11427.370	ng/mL	97
90)	Perylene	49.082	252	1267253	11772.293	ng/mL	95
91)	Indeno[1,2,3-cd]pyrene	53.728	276	1476010M3	10810.505	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.783	278	1240354	10513.854	ng/mL	97
93)	Benzo[g,h,i]perylene	55.090	276	1468693	10771.189	ng/mL	99
94)	Hopane (T19)	52.759	191	449401	13109.244	ng/mL#	84
95)	17a(H),21B(H)-hopane - C3	52.759	191	449401	13109.244	ng/mL#	84

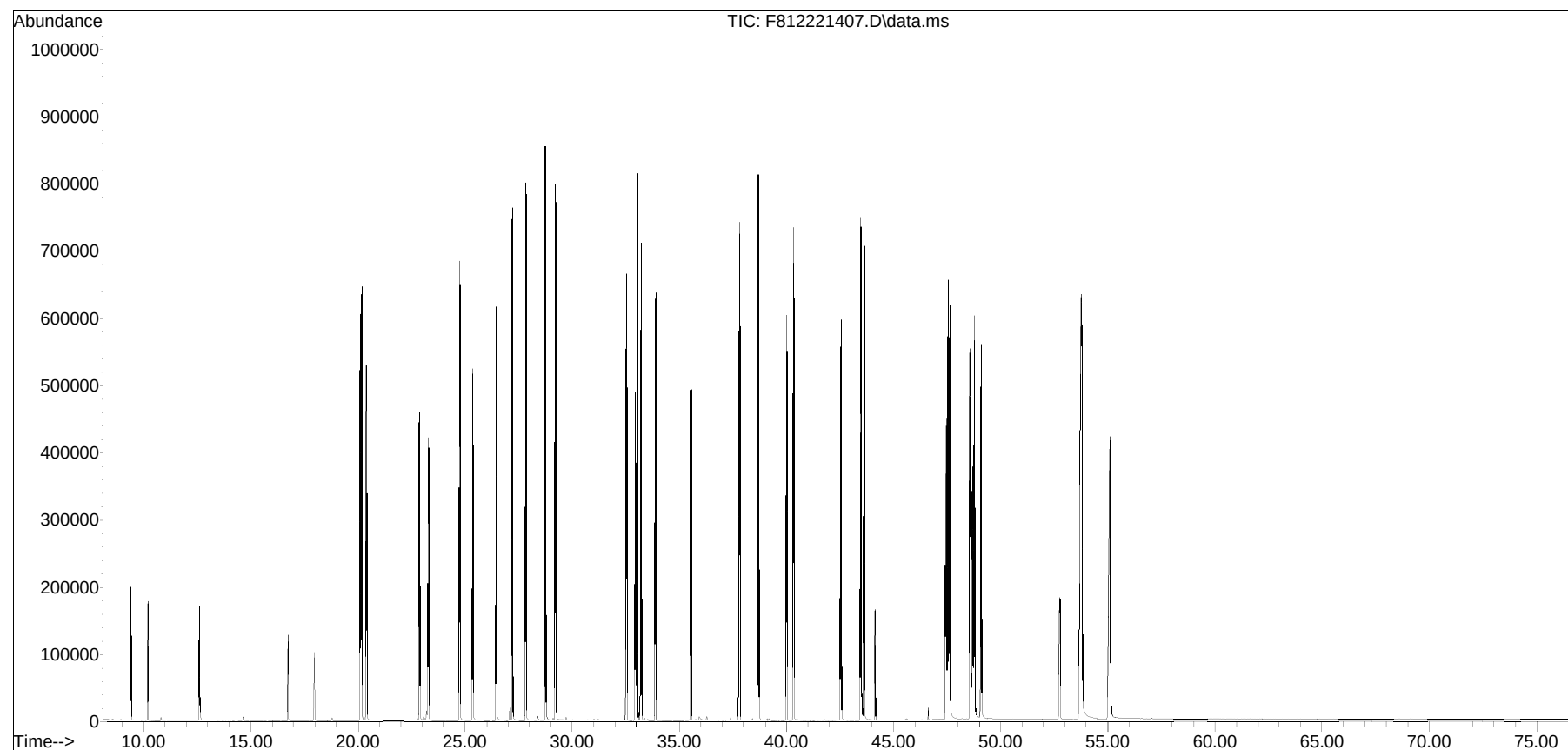
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC23\
Data File : F812221407.D
Acq On : 23 Dec 2014 8:36 pm
Operator : PAH8:ML
Sample : I812231406
Misc : WG755323,FRAU82 10000ng/ml
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 13 11:09:15 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 23 07:51:27 2014
Response via : Initial Calibration

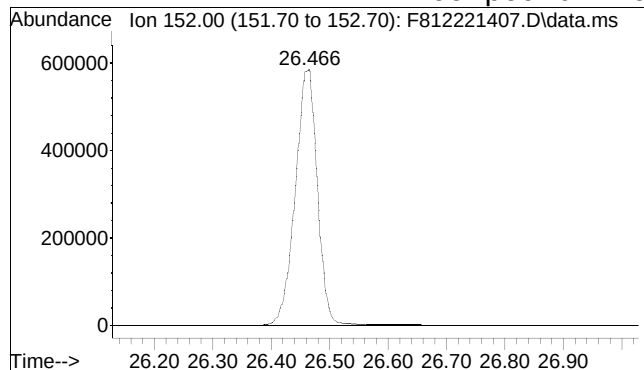
Sub List : ICAL_CCALT_REV2 - CC with five surrogates



Manual Integration/Negative Proof Report

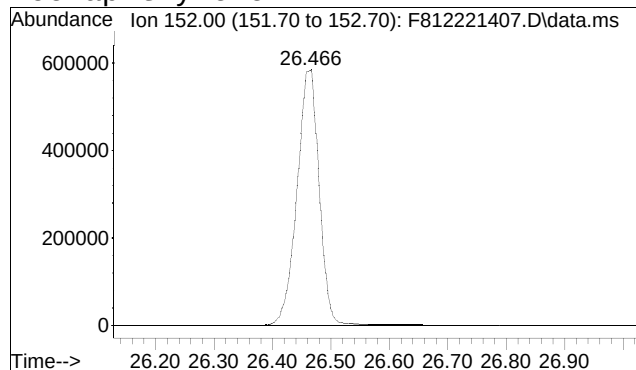
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
Data File : F812221407.D Operator : PAH8:ML
Date Inj'd : 12/23/2014 8:36 pm Instrument : PAH8
Sample : I812231406 Quant Date : 12/24/2014 11:28 am

Compound #26: Acenaphthylene



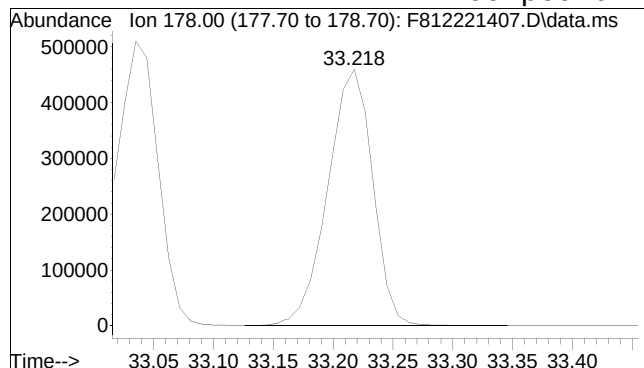
Original Peak Response = 1555898

M4 = Poor automated baseline construction.



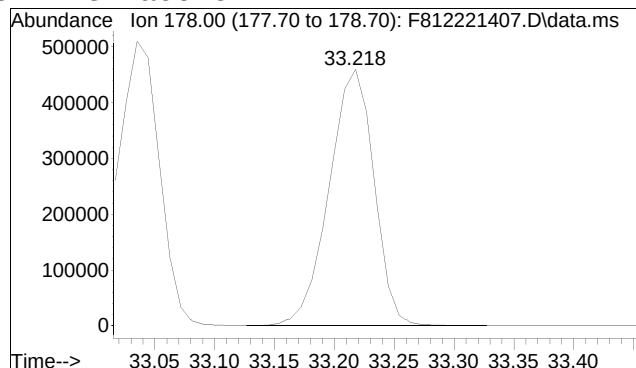
Manual Peak Response = 1552938 M4

Compound #55: Anthracene



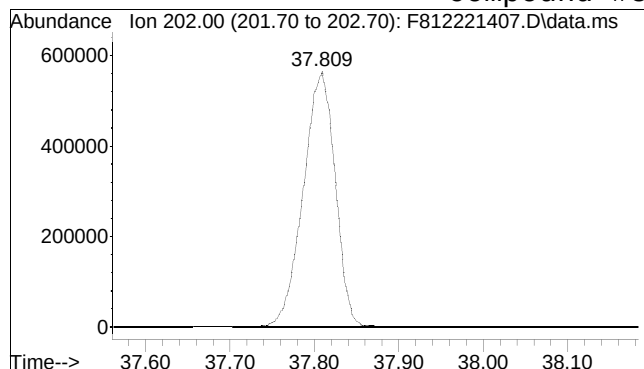
Original Peak Response = 1203945

M4 = Poor automated baseline construction.



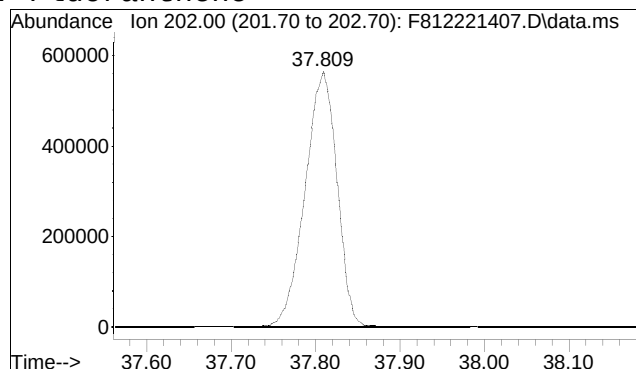
Manual Peak Response = 1202115 M4

Compound #58: Fluoranthene



Original Peak Response = 1488178

M4 = Poor automated baseline construction.

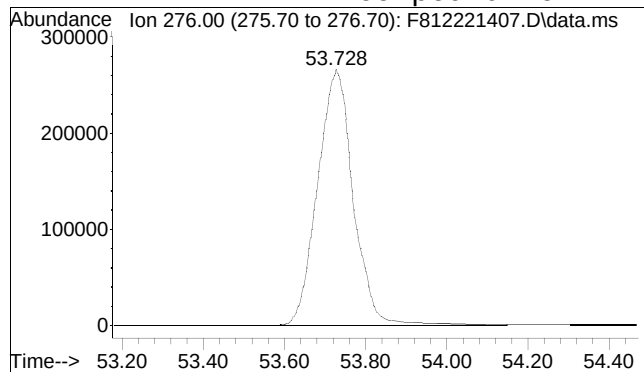


Manual Peak Response = 1488946 M4

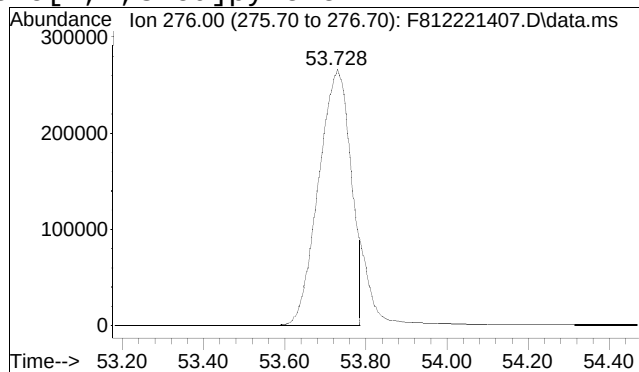
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
Data File : F812221407.D Operator : PAH8:ML
Date Inj'd : 12/23/2014 8:36 pm Instrument : PAH8
Sample : I812231406 Quant Date : 12/24/2014 11:28 am

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 1640680



Manual Peak Response = 1476010 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221408.D
 Acq On : 23 Dec 2014 10:03 pm
 Operator : PAH8:ML
 Sample : I812231407
 Misc : WG755323,FRAU83 20000ng/ml
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 13 11:09:23 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.068	164	37071	500.000	ng/mL	0.00
74) Chrysene-d12	43.534	240	47890	500.000	ng/mL	0.03
System Monitoring Compounds						
9) Naphthalene-d8	20.096	136	2414840	17009.145	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1700.91%#			
42) Phenanthrene-d10	32.953	188	1927840	17803.559	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 1780.36%#			
83) Benzo[b]fluoranthene-d12	47.463	264	1909369	20521.819	ng/mL	0.05
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2052.18%#			
88) Benzo[a]pyrene-d12	48.698	264	1604949	21267.570	ng/mL	0.07
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2126.76%#			
129) 5B(H)Cholane - Surr	44.145	217	382505	25513.853	ng/ml	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery = 2551.39%#			
Target Compounds						
						Qvalue
3) trans-Decalin	16.738	138	310082	9347.684	ng/mL	100
4) cis-Decalin	17.961	138	237208	9441.997	ng/mL	100
10) Naphthalene	20.178	128	2532541	16555.881	ng/mL	100
16) 2-Methylnaphthalene	22.870	142	1867040	18262.146	ng/mL	100
17) 1-Methylnaphthalene	23.299	142	1724165	17437.114	ng/mL	100
18) Benzothiophene	20.397	134	2209242	17403.773	ng/mL	100
23) Biphenyl	24.750	154	2154464	17517.143	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.362	156	1562486	18656.147	ng/mL	100
25) Dibenzofuran	27.844	168	2187631	17368.778	ng/mL	99
26) Acenaphthylene	26.466	152	2704504M4	19581.989	ng/mL	
27) Acenaphthene	27.205	153	1549611	17661.579	ng/mL	93
28) 2,3,5-Trimethylnaphthalen	28.756	170	1304145	18920.024	ng/mL	90
29) Fluorene	29.221	166	1791546	18509.460	ng/mL	92
33) Dibenzothiophene	32.542	184	2503448	18474.597	ng/mL	98
43) Phenanthrene	33.044	178	2262429	17156.455	ng/mL	97
54) Retene	40.019	234	649396	19970.135	ng/mL	93
55) Anthracene	33.227	178	1996096M4	17134.812	ng/mL	
56) Carbazole	33.893	167	2481391M4	20212.003	ng/mL	
57) 1-Methylphenanthrene	35.545	192	1814337	18960.096	ng/mL	95

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221408.D
 Acq On : 23 Dec 2014 10:03 pm
 Operator : PAH8:ML
 Sample : I812231407
 Misc : WG755323,FRAU83 20000ng/ml
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 13 11:09:23 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Tue Dec 23 07:51:27 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

58)	Fluoranthene	37.818	202	2583413M4	18945.573	ng/mL	
59)	Benzo(b)fluorene	40.338	216	1534199	20833.809	ng/mL	95
60)	Pyrene	38.704	202	2750836	19356.302	ng/mL	95
66)	Naphthobenzothiophene	42.547	234	2440537	18568.633	ng/mL	99
67)	Naphthobenzothiophene-2,1	42.547	234	2440537	18568.633	ng/mL	99
75)	Benz[a]anthracene	43.479	228	2149151	22107.470	ng/mL	96
76)	Chrysene	43.652	228	1992991	20362.162	ng/mL	96
77)	Chrysene/Triphenylene	43.652	228	1992991	20362.162	ng/mL	96
84)	Benzo[b]fluoranthene	47.555	252	2267778	20670.118	ng/mL	99
85)	Benzo[j]+[k]fluoranthene	47.646	252	2107809	20324.762	ng/mL	97
87)	Benzo[e]pyrene	48.588	252	2362444	21200.792	ng/mL	96
89)	Benzo[a]pyrene	48.799	252	2027351	20994.669	ng/mL	98
90)	Perylene	49.110	252	2186336	21768.281	ng/mL	96
91)	Indeno[1,2,3-cd]pyrene	53.764	276	2637516M3	20704.336	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.810	278	2187293	19871.597	ng/mL	97
93)	Benzo[g,h,i]perylene	55.135	276	2549687	20041.443	ng/mL	99
94)	Hopane (T19)	0.000		0	N.D.	d	
95)	17a(H),21B(H)-hopane - C3	0.000		0	N.D.	d	

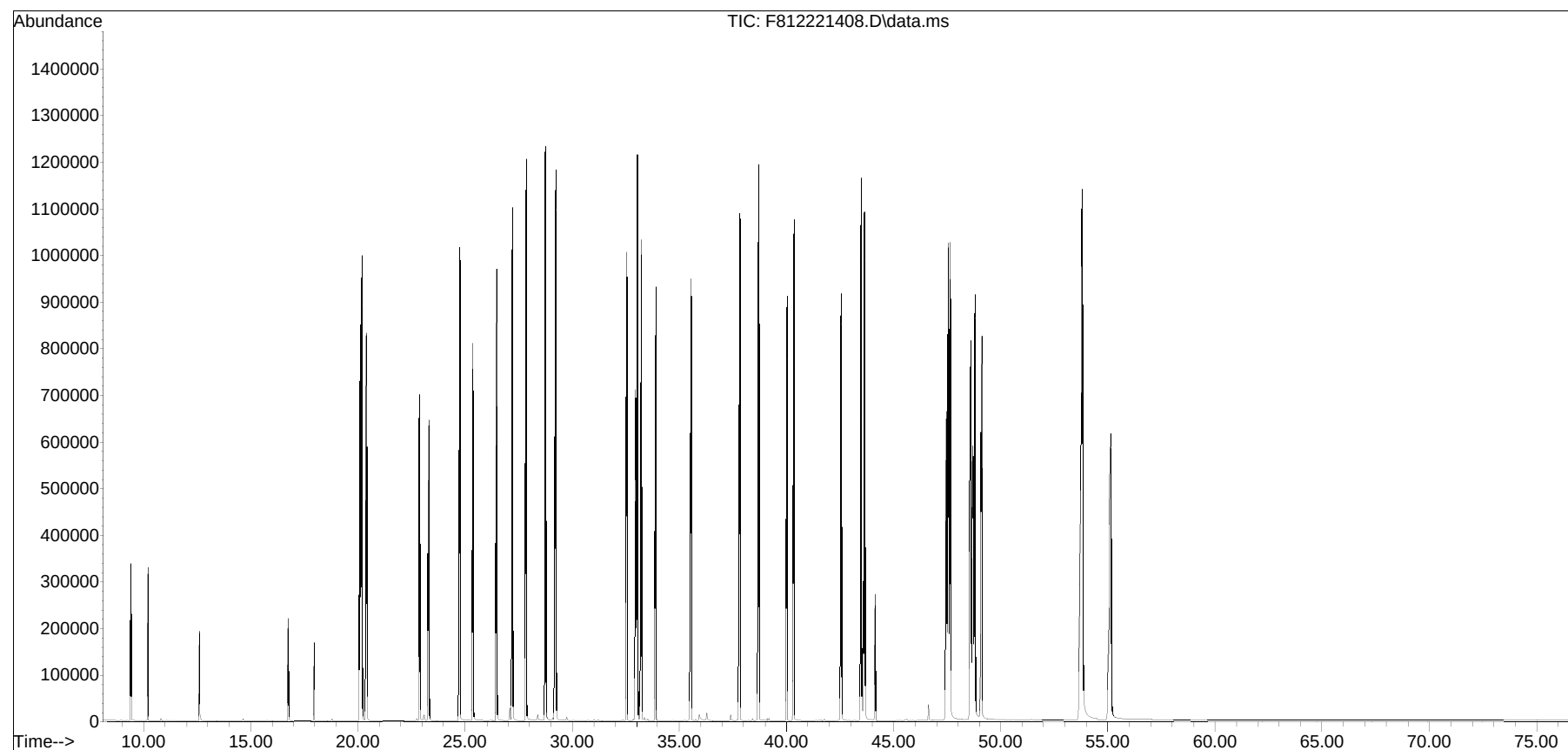
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC23\
Data File : F812221408.D
Acq On : 23 Dec 2014 10:03 pm
Operator : PAH8:ML
Sample : I812231407
Misc : WG755323,FRAU83 20000ng/ml
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 13 11:09:23 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Tue Dec 23 07:51:27 2014
Response via : Initial Calibration

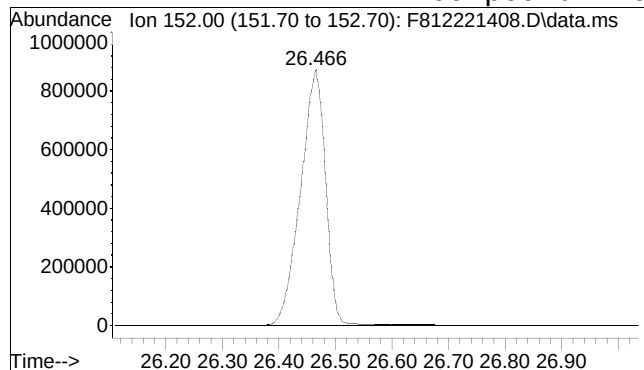
Sub List : ICAL_CCALT_REV2 - CC with five surrogates



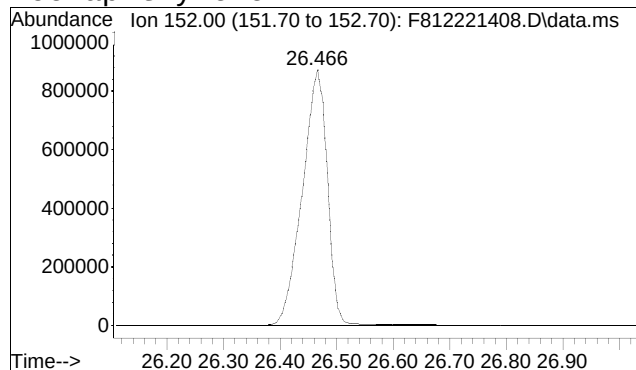
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
Data File : F812221408.D Operator : PAH8:ML
Date Inj'd : 12/23/2014 10:03 pm Instrument : PAH8
Sample : I812231407 Quant Date : 12/24/2014 11:28 am

Compound #26: Acenaphthylene

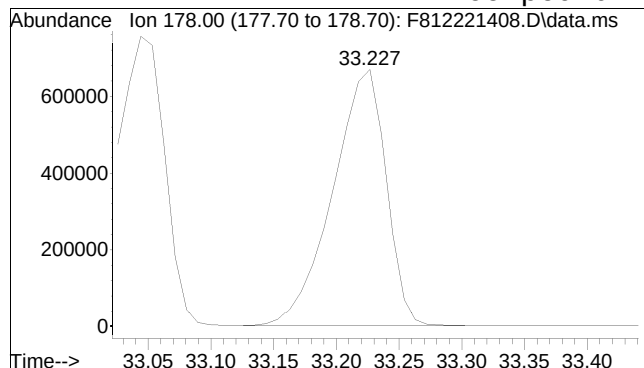


Original Peak Response = 2708811
M4 = Poor automated baseline construction.

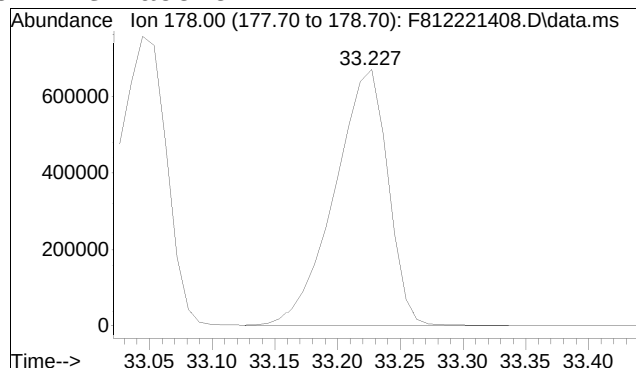


Manual Peak Response = 2704504 M4

Compound #55: Anthracene

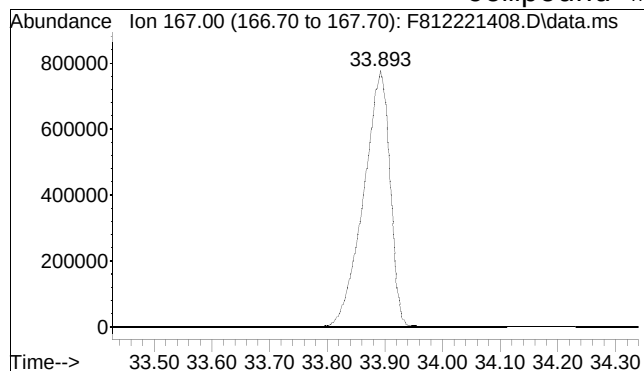


Original Peak Response = 1982555
M4 = Poor automated baseline construction.

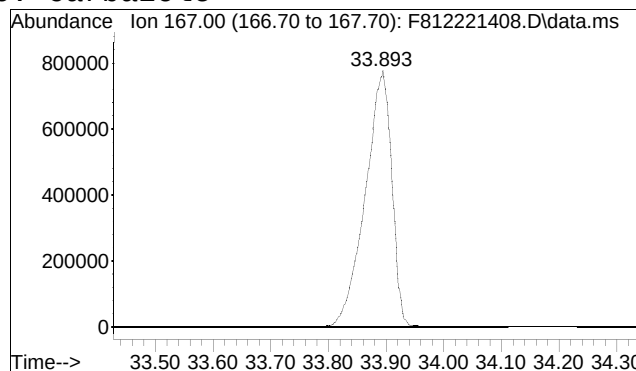


Manual Peak Response = 1996096 M4

Compound #56: Carbazole



Original Peak Response = 2482704
M4 = Poor automated baseline construction.

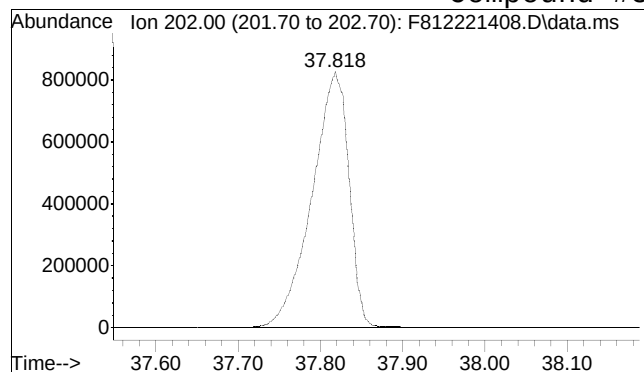


Manual Peak Response = 2481391 M4

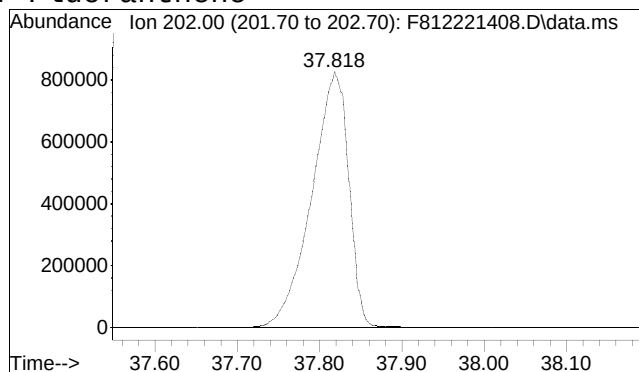
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
Data File : F812221408.D Operator : PAH8:ML
Date Inj'd : 12/23/2014 10:03 pm Instrument : PAH8
Sample : I812231407 Quant Date : 12/24/2014 11:28 am

Compound #58: Fluoranthene



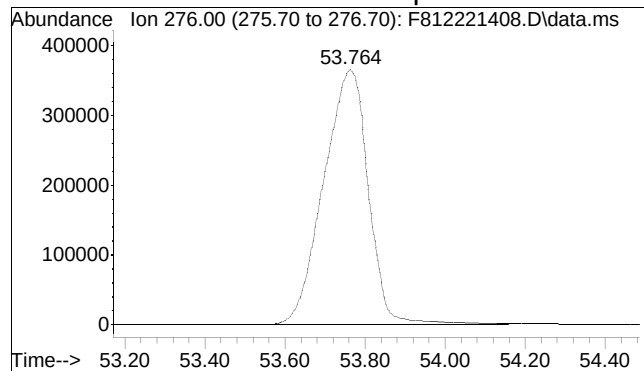
Original Peak Response = 2581583



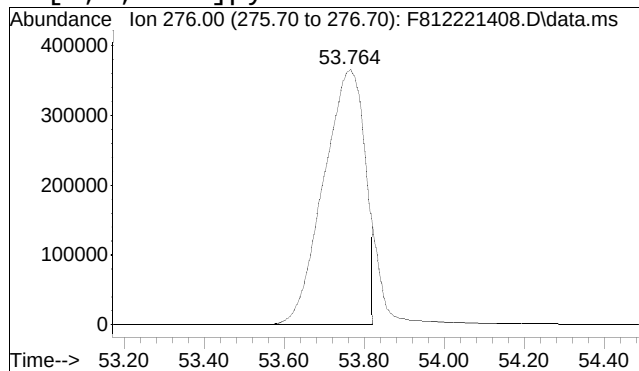
Manual Peak Response = 2583413 M4

M4 = Poor automated baseline construction.

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 2860980



Manual Peak Response = 2637516 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Initial Calibration Verification

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221410.D
 Acq On : 24 Dec 2014 12:55 am
 Operator : PAH8:ML
 Sample : CQ812231401
 Misc : WG755323,FRAU88 500ng/ml
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 13 11:09:38 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Dec 24 12:05:54 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 i	Acenaphthene-d10	1.000	1.000	0.0	102	0.26
3 A1	trans-Decalin	0.446	0.419	6.1	100	0.24
4 t	cis-Decalin	0.337	0.322	4.5	102	0.25
9 s	Naphthalene-d8	2.023	2.065	-2.1	100	0.25
10 A1	Naphthalene	2.245	2.515	-12.0	105	0.25
16 t	2-Methylnaphthalene	1.447	1.568	-8.4	107	0.26
17 t	1-Methylnaphthalene	1.372	1.440	-5.0	104	0.26
18 A1	Benzothiophene	1.874	2.019	-7.7	106	0.25
23 t	Biphenyl	1.743	1.870	-7.3	103	0.25
24 t	2,6-Dimethylnaphthalene	1.209	1.278	-5.7	104	0.26
25 t	Dibenzofuran	1.778	1.949	-9.6	104	0.26
26 t	Acenaphthylene	2.112	2.241	-6.1	100	0.26
27 t	Acenaphthene	1.286	1.390	-8.1	103	0.26
28 t	2,3,5-Trimethylnaphthalene	1.006	1.062	-5.6	103	0.26
29 A1	Fluorene	1.380	1.506	-9.1	103	0.27
33 A1	Dibenzothiophene	1.929	2.091	-8.4	103	0.28
42 s	Phenanthrene-d10	1.510	1.517	-0.5	97	0.27
43 A1	Phenanthrene	1.865	2.075	-11.3	104	0.28
54 t	Retene	0.443	0.498	-12.4	108	0.29
55 t	Anthracene	1.709	1.940	-13.5	102	0.28
56 t	Carbazole	1.834	1.946	-6.1	100	0.27
57 t	1-Methylphenanthrene	1.311	1.365	-4.1	99	0.28
58 A1	Fluoranthene	1.900	2.049	-7.8	101	0.28
59 t	Benzo(b)fluorene	1.101	1.158	-5.2	99	0.29
60 A1	Pyrene	1.988	2.276	-14.5	103	0.28
66 A1	Naphthobenzothiophene	1.757	1.904	-8.4	102	0.29
67 A2	Naphthobenzothiophene-2,1-D	1.757	1.904	-8.4	102	0.29
74 i	Chrysene-d12	1.000	1.000	0.0	98	0.30
75 t	Benz[a]anthracene	1.151	1.169	-1.6	99	0.30
76 A1	Chrysene	1.097	1.180	-7.6	103	0.30
77 A2	Chrysene/Triphenylene	1.097	1.180	-7.6	103	0.30
83 s	Benzo[b]fluoranthene-d12	0.992	0.919	7.4	87	0.32
84 t	Benzo[b]fluoranthene	1.223	1.262	-3.2	104	0.31
85 A1	Benzo[j]+[k]fluoranthene	1.203	1.250	-3.9	105	0.33
87 t	Benzo[e]pyrene	1.236	1.203	2.7	99	0.35
88 s	Benzo[a]pyrene-d12	0.861	0.815	5.3	94	0.35
89 t	Benzo[a]pyrene	1.127	1.236	-9.7	108	0.36
90 t	Perylene	1.184	1.179	0.4	104	0.36

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221410.D
 Acq On : 24 Dec 2014 12:55 am
 Operator : PAH8:ML
 Sample : CQ812231401
 Misc : WG755323, FRAU88 500ng/ml
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 13 11:09:38 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Dec 24 12:05:54 2014
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 t	Indeno[1,2,3-cd]pyrene	1.432	1.433	-0.1	114	0.49
92 t	Dibenz[ah]+[ac]anthracene	1.220	1.269	-4.0	105	0.50#
93 t	Benzo[g,h,i]perylene	1.375	1.357	1.3	102	0.54#
94 A1	Hopane (T19)	0.415	0.000#	100.0#	0#	-52.25#
95 A2	17a(H),21B(H)-hopane - C30H	0.415	0.000#	100.0#	0#	-52.25#
129 SA1	5B(H)Cholane - Surr	0.186	0.000#	100.0#	0#	-43.82#

* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Mass Discrimination (Concentration)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	0.89	0.70 - 1.30

Mass Discrimination (Response)	Ratio	Range Limits
Benzo[g,h,i]perylene to Phenanthrene	0.92	0.70 - 2.00

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221410.D
 Acq On : 24 Dec 2014 12:55 am
 Operator : PAH8:ML
 Sample : CQ812231401
 Misc : WG755323, FRAU88 500ng/ml
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 13 11:09:38 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Dec 24 12:05:54 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.068	164	43869	500.000	ng/mL	0.00
74) Chrysene-d12	43.515	240	61979	500.000	ng/mL	0.00
System Monitoring Compounds						
9) Naphthalene-d8	20.096	136	90572	510.268	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	51.03%		
42) Phenanthrene-d10	32.935	188	66548	505.085	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	50.51%		
83) Benzo[b]fluoranthene-d12	47.417	264	56954	471.029	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	47.10%#		
88) Benzo[a]pyrene-d12	48.634	264	50498	474.682	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	47.47%#		
129) 5B(H)Cholane - Surr	0.000	217	0	0.000	ng/ml	
Spiked Amount 1000.000	Range 50 - 130		Recovery =	0.00%#		
Target Compounds						
						Qvalue
3) trans-Decalin	16.738	138	9195	234.475	ng/mL	100
4) cis-Decalin	17.961	138	7052	237.741	ng/mL	100
10) Naphthalene	20.169	128	110310	558.360	ng/mL	100
16) 2-Methylnaphthalene	22.870	142	68777	541.089	ng/mL	100
17) 1-Methylnaphthalene	23.290	142	63187	522.997	ng/mL	100
18) Benzothiophene	20.388	134	88556	535.400	ng/mL	100
23) Biphenyl	24.741	154	82040	536.475	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.352	156	56072	528.554	ng/mL	100
25) Dibenzofuran	27.834	168	85487	547.722	ng/mL	99
26) Acenaphthylene	26.457	152	98312	531.822	ng/mL	100
27) Acenaphthene	27.187	153	60967	539.742	ng/mL	99
28) 2,3,5-Trimethylnaphthalen	28.738	170	46581	527.790	ng/mL	95
29) Fluorene	29.212	166	66067	546.386	ng/mL	99
33) Dibenzothiophene	32.533	184	91744	542.851	ng/mL	98
43) Phenanthrene	33.026	178	91036	555.790	ng/mL	99
54) Retene	40.000	234	21828	565.410	ng/mL	99
55) Anthracene	33.208	178	85124M4	567.271	ng/mL	
56) Carbazole	33.874	167	85353	531.949	ng/mL	98
57) 1-Methylphenanthrene	35.527	192	59878	522.536	ng/mL	99
58) Fluoranthene	37.791	202	89871	540.812	ng/mL	96
59) Benzo(b)fluorene	40.311	216	50789	527.776	ng/mL	99
60) Pyrene	38.676	202	99852	573.748	ng/mL	97
66) Naphthobenzothiophene	42.520	234	167045	1091.013	ng/ml	99
67) Naphthobenzothiophene-2,1	42.520	234	167045	1091.013	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221410.D
 Acq On : 24 Dec 2014 12:55 am
 Operator : PAH8:ML
 Sample : CQ812231401
 Misc : WG755323, FRAU88 500ng/ml
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 13 11:09:38 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Dec 24 12:05:54 2014
 Response via : Initial Calibration

Sub List : ICAL_CCALT_REV2 - CC with five surrogates

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
75)	Benz[a]anthracene	43.451	228	72427	508.473	ng/mL	98
76)	Chrysene	43.607	228	73164	536.614	ng/mL	98
77)	Chrysene/Triphenylene	43.607	228	73164	536.614	ng/mL	98
84)	Benzo[b]fluoranthene	47.500	252	78229	514.195	ng/mL	96
85)	Benzo[j]+[k]fluoranthene	47.591	252	77496	517.285	ng/mL	94
87)	Benzo[e]pyrene	48.533	252	74585	484.767	ng/mL	94
89)	Benzo[a]pyrene	48.725	252	76630	544.745	ng/mL	95
90)	Perylene	49.045	252	73059	494.511	ng/mL	94
91)	Indeno[1,2,3-cd]pyrene	53.664	276	88823M3	493.585	ng/mL	
92)	Dibenz[ah]+[ac]anthracene	53.728	278	78636	516.519	ng/mL	98
93)	Benzo[g,h,i]perylene	55.016	276	84120	492.628	ng/mL	99
94)	Hopane (T19)	0.000		0	N.D.	d	
95)	17a(H),21B(H)-hopane - C3	0.000		0	N.D.	d	

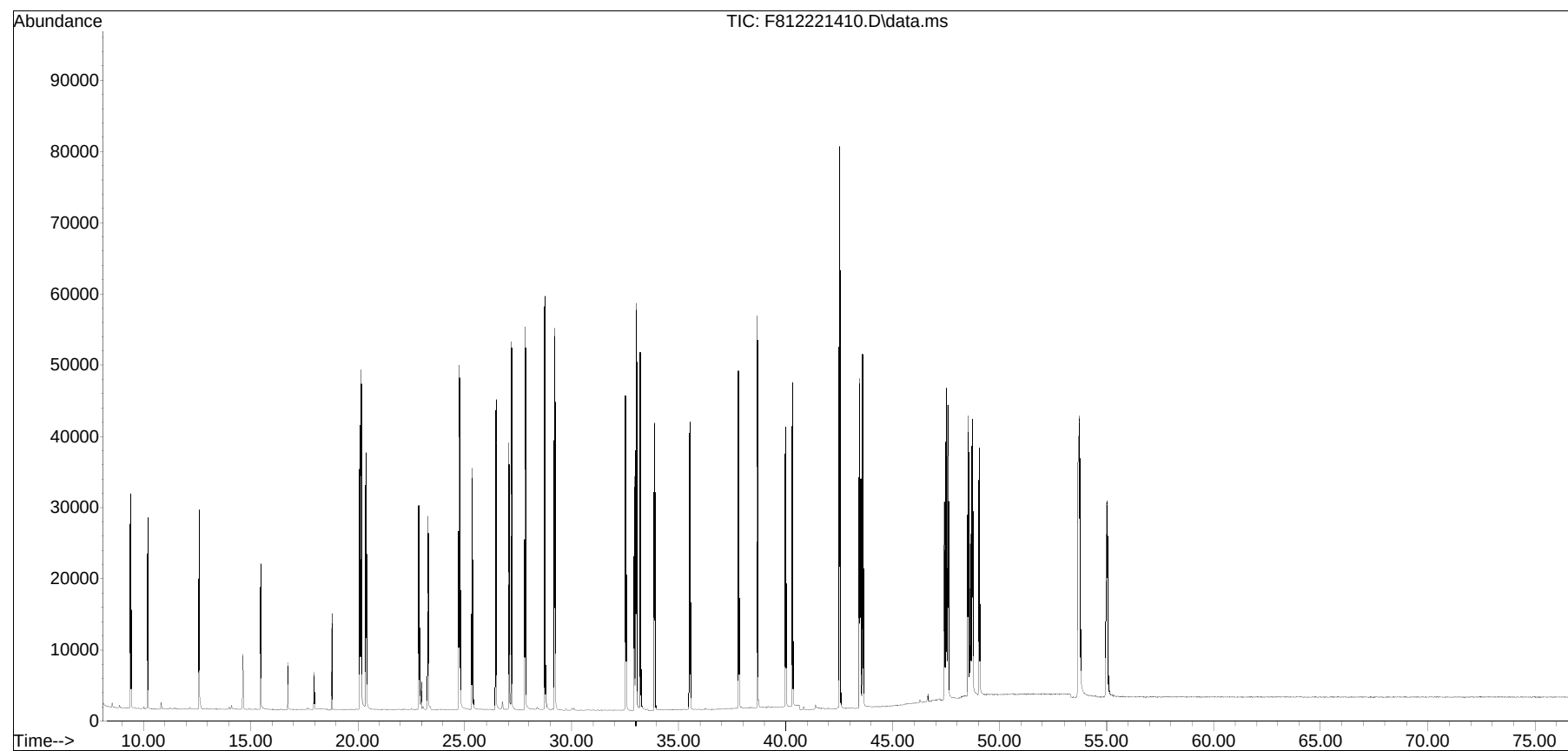
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\PAH8\2014\DEC14\DEC23\
Data File : F812221410.D
Acq On : 24 Dec 2014 12:55 am
Operator : PAH8:ML
Sample : CQ812231401
Misc : WG755323, FRAU88 500ng/ml
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 13 11:09:38 2015
Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
Quant Title : Decalins & Alkylated PAH's
QLast Update : Wed Dec 24 12:05:54 2014
Response via : Initial Calibration

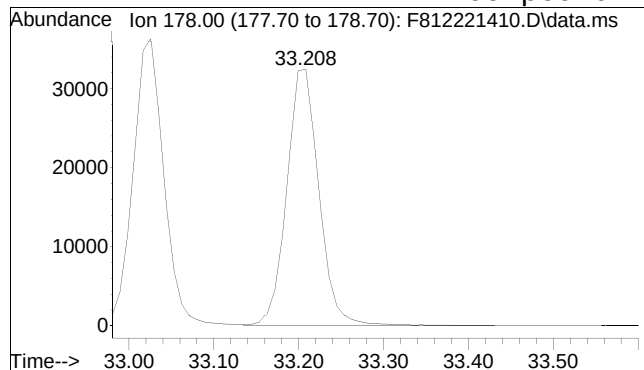
Sub List : ICAL_CCALT_REV2 - CC with five surrogates



Manual Integration/Negative Proof Report

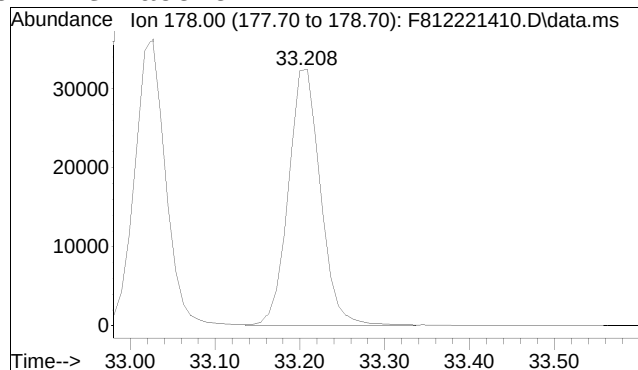
Data Path : O:\Forensics\Data\PAH8\2014QMethod : PAH8122314.M
Data File : F812221410.D Operator : PAH8:ML
Date Inj'd : 12/24/2014 12:55 am Instrument : PAH8
Sample : CQ812231401 Quant Date : 12/24/2014 12:16 pm

Compound #55: Anthracene



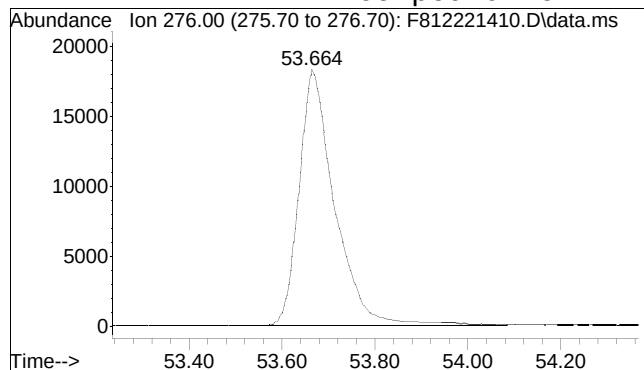
Original Peak Response = 85179

M4 = Poor automated baseline construction.



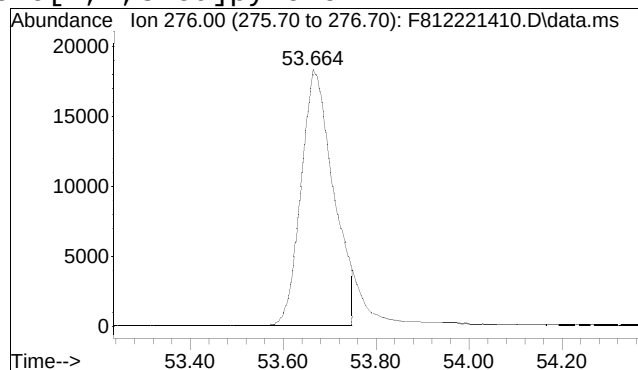
Manual Peak Response = 85124 M4

Compound #91: Indeno[1,2,3-cd]pyrene



Original Peak Response = 98201

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.



Manual Peak Response = 88823 M3

Alaska North Slope Crude (ANS)

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221412.D
 Acq On : 24 Dec 2014 3:47 am
 Operator : PAH8:ML
 Sample : WG755323-1,0.5055
 Misc : WG755323,FRAU91 5.055 SS011315ANC01
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 13 11:09:46 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Dec 24 12:33:02 2014
 Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Acenaphthene-d10	27.068	164	31047M3	500.000	ng/mL	0.00
74) Chrysene-d12	43.524	240	37527M4	500.000	ng/mL	0.02
System Monitoring Compounds						
9) Naphthalene-d8	20.096	136	117767	937.488	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	93.75%		
42) Phenanthrene-d10	32.944	188	73983	793.414	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	79.34%		
83) Benzo[b]fluoranthene-d12	47.427	264	61785	843.931	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	84.39%		
88) Benzo[a]pyrene-d12	48.643	264	55029	854.321	ng/mL	0.02
Spiked Amount 1000.000	Range 50 - 130		Recovery =	85.43%		
129) 5B(H)Cholane - Surr	44.136	217	16599	1197.555	ng/mL	0.00
Spiked Amount 1000.000	Range 50 - 130		Recovery =	119.76%		
Target Compounds						
						Qvalue
2) 2-butoxyethanol	0.000		0	N.D.	d	
3) trans-Decalin	16.747	138	61507	2216.190	ng/mL	100
4) cis-Decalin	17.961	138	2554M4	121.661	ng/mL	
5) C1-Decalins	18.682	152	100256M5	3612.375	ng/mL	
6) C2-Decalins	20.005	166	87637M5	3157.694	ng/mL	
7) C3-Decalins	22.478	180	44260M5	1594.755	ng/mL	
8) C4-Decalins	25.873	194	44567M5	1605.816	ng/mL	
10) Naphthalene	20.178	128	391823	2802.385	ng/mL	100
11) C1-Naphthalenes	22.870	142	941144M5	6731.222	ng/mL	
12) C2-Naphthalenes	25.708	156	1128265M5	8069.543	ng/mL	
13) C3-Naphthalenes	28.044	170	720059M5	5149.984	ng/mL	
14) C4-Naphthalenes	30.809	184	332853M5	2380.621	ng/mL	
15) Glycol Ether Isomers	0.000		0	N.D.	d	
16) 2-Methylnaphthalene	22.870	142	538863	5990.209	ng/mL	100
17) 1-Methylnaphthalene	23.290	142	403937	4724.148	ng/mL	100
18) Benzothiophene	20.379	134	3483M4	29.754	ng/mL	
19) C1-Benzo(b)thiophenes	22.423	148	19036M5	162.620	ng/mL	
20) C2-Benzo(b)thiophenes	25.909	162	31283M5	267.243	ng/mL	
21) C3-Benzo(b)thiophenes	27.880	176	60437M5	516.299	ng/mL	
22) C4-Benzo(b)thiophenes	29.623	190	43670M5	373.062	ng/mL	
23) Biphenyl	24.750	154	93940	867.986	ng/mL	100
24) 2,6-Dimethylnaphthalene	25.371	156	280587	3737.221	ng/mL	100
25) Dibenzofuran	27.834	168	34838	315.392	ng/mL#	82
26) Acenaphthylene	26.448	152	4642	35.482	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\PAH8\2014\DEC14\DEC23\
 Data File : F812221412.D
 Acq On : 24 Dec 2014 3:47 am
 Operator : PAH8:ML
 Sample : WG755323-1,0.5055
 Misc : WG755323,FRAU91 5.055 SS011315ANC01
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 13 11:09:46 2015
 Quant Method : C:\msdchem\1\METHODS\PAH8\PAH8122314.M
 Quant Title : Decalins & Alkylated PAH's
 QLast Update : Wed Dec 24 12:33:02 2014
 Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

27) Acenaphthene	27.205	153	8936M4	111.782	ng/mL	
28) 2,3,5-Trimethylnaphthalen	28.747	170	49091M3	785.945	ng/mL	
29) Fluorene	29.212	166	30998M4	362.232	ng/mL	
30) C1-Fluorenes	31.575	180	61824M5	722.454	ng/mL	
31) C2-Fluorenes	33.765	194	88201M5	1030.686	ng/mL	
32) C3-Fluorenes	35.600	208	76350M5	892.199	ng/mL	
33) Dibenzothiophene	32.533	184	70603	590.289	ng/mL#	78
34) 4-Methyldibenzothiophene(	34.304	198	65171	544.873	ng/mL	100
35) 2/3-Methyldibenzothiophen	34.650	198	49303	412.206	ng/mL	100
36) 1-Methyldibenzothiophene(	35.079	198	20679	172.890	ng/mL	100
37) OTP	34.714	198	8773	73.348	ng/mL	100
38) C1-Dibenzothiophenes	34.304	198	146554M5	1225.290	ng/mL	
38) C1-Dibenzothiophenes BS	34.304	198	137781M5	1151.942	ng/mL	
39) C2-Dibenzothiophenes	35.992	212	168644M5	1409.977	ng/mL	
40) C3-Dibenzothiophenes	37.791	226	163377M5	1365.942	ng/mL	
41) C4-Dibenzothiophenes	39.471	240	93852M5	784.666	ng/mL	
43) Phenanthrene	33.026	178	104421	900.790	ng/mL	96
44) 3-Methylphenanthrene(3MP)	34.988	192	41177	355.214	ng/mL	99
45) 2-Methylphenanthrene(2MP)	35.098	192	45803	395.121	ng/mL	98
46) 2-Methylanthracene(2MA)	35.262	192	1697	14.639	ng/mL	76
47) 9/4-Methylphenanthrene(9M	35.445	192	66173	570.843	ng/mL	99
48) 1-Methylphenanthrene(1MP)	35.536	192	46174M4	398.321	ng/mL	
49) C1-Phenanthrenes/Anthrace	35.445	192	203550M5	1755.928	ng/mL	
50) C2-Phenanthrenes/Anthrace	37.252	206	205687M5	1774.363	ng/mL	
50) C2-Phenanthrenes/Anthr BS	37.252	206	205687M5	1774.363	ng/mL	
51) 5AA IS BKGD	0.000		0	N.D.	d	
52) C3-Phenanthrenes/Anthrace	39.087	220	168250M5	1451.412	ng/mL	
53) C4-Phenanthrenes/Anthrace	41.260	234	68147M5	587.872	ng/mL	
54) Retene	0.000		0	N.D.	d	
55) Anthracene	0.000		0	N.D.	d	
56) Carbazole	33.865	167	3463M4	30.496	ng/mL	
57) 1-Methylphenanthrene	35.536	192	46174M4	569.357	ng/mL	
58) Fluoranthene	37.809	202	2065M4	17.558	ng/mL	
59) Benzo(b)fluorene	40.320	216	1824M4	26.782	ng/mL	
60) Pyrene	38.685	202	7731M4	62.768	ng/mL	
61) C1-Fluoranthenes/Pyrenes	40.073	216	34328M5	278.709	ng/mL	
62) C2-Fluoranthenes/Pyrenes	42.182	230	53541M5	434.700	ng/mL	
63) C3-Fluoranthenes/Pyrenes	43.881	244	71715M5	582.254	ng/mL	
64) C4-Fluoranthenes/Pyrenes	45.232	258	59334M5	481.733	ng/mL	
65) Bis-(2-ethylhexyl)fumarat	0.000		0	N.D.	d	
66) Naphthobenzothiophene	42.529	234	17333	159.959	ng/ml#	64