

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD062418\
 Data File : VD058374.D
 Acq On : 24 Jun 2018 16:22
 Operator : VA/AP
 Sample : J3671-16
 Misc : 6.22g/5ml/MSVOA D/SOIL
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :
 WP021SB481-13-15-180621

Manual Integrations
 APPROVED

apatel
 6/25/2018 6:21:05 PM

Quant Time: Jun 25 04:52:02 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D061918S.M
 Quant Title : SW846 8260
 QLast Update : Wed Jun 20 05:52:56 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.65	168	425788	50.00	ug/l	0.02
34) 1,4-Difluorobenzene	6.71	114	585781	50.00	ug/l	0.02
63) Chlorobenzene-d5	10.69	117	507922	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.91	152	279980	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	6.03	65	286101	66.52	ug/l	0.02
Spiked Amount			Recovery	=	133.04%	
35) Dibromofluoromethane	5.57	113	265381	55.66	ug/l	0.02
Spiked Amount			Recovery	=	111.32%	
50) Toluene-d8	8.72	98	582626	50.51	ug/l	0.00
Spiked Amount			Recovery	=	101.02%	
62) 4-Bromofluorobenzene	11.93	95	275702	58.51	ug/l	0.00
Spiked Amount			Recovery	=	117.02%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
4) Vinyl Chloride	1.56	62	100386	45.01	ug/l	93
6) Chloroethane	1.89	64	27155	31.55	ug/l	98
16) Acetone	2.62	43	66032	112.27	ug/l #	86
20) Methylene Chloride	3.08	84	9783	1.78	ug/l	86
21) trans-1,2-Dichloroethene	3.40	96	4623	2.89	ug/l #	73
27) cis-1,2-Dichloroethene	4.82	96	1210358	302.96	ug/l	90
39) Methylcyclohexane	7.30	83	17816	3.16	ug/l	90
40) Benzene	6.03	78	113165	8.20	ug/l	99
44) Trichloroethene	6.99	130	29938	7.22	ug/l	84
52) Toluene	8.81	92	17231	2.19	ug/l	91
65) Chlorobenzene	10.73	112	3429867	361.00	ug/l	98
67) Ethyl Benzene	10.86	91	19398	1.16	ug/l	91
73) Isopropylbenzene	11.78	105	25750	1.54	ug/l	92
78) n-propylbenzene	12.16	91	35893	1.66	ug/l	93
83) tert-Butylbenzene	12.58	119	44748	2.98	ug/l	93
85) sec-Butylbenzene	12.76	105	89666	5.09	ug/l	96
87) 1,3-Dichlorobenzene	12.85	146	117951	13.53	ug/l	97
88) 1,4-Dichlorobenzene	12.93	146	699154	82.14	ug/l	95
89) n-Butylbenzene	13.20	91	32925m	2.20	ug/l	
91) 1,2-Dichlorobenzene	13.20	146	3344592	450.91	ug/l	100
93) 1,2,4-Trichlorobenzene	14.35	180	40281	5.68	ug/l	93
95) Naphthalene	14.52	128	96697	10.35	ug/l	97
96) 1,2,3-Trichlorobenzene	14.66	180	10554	1.70	ug/l #	85

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

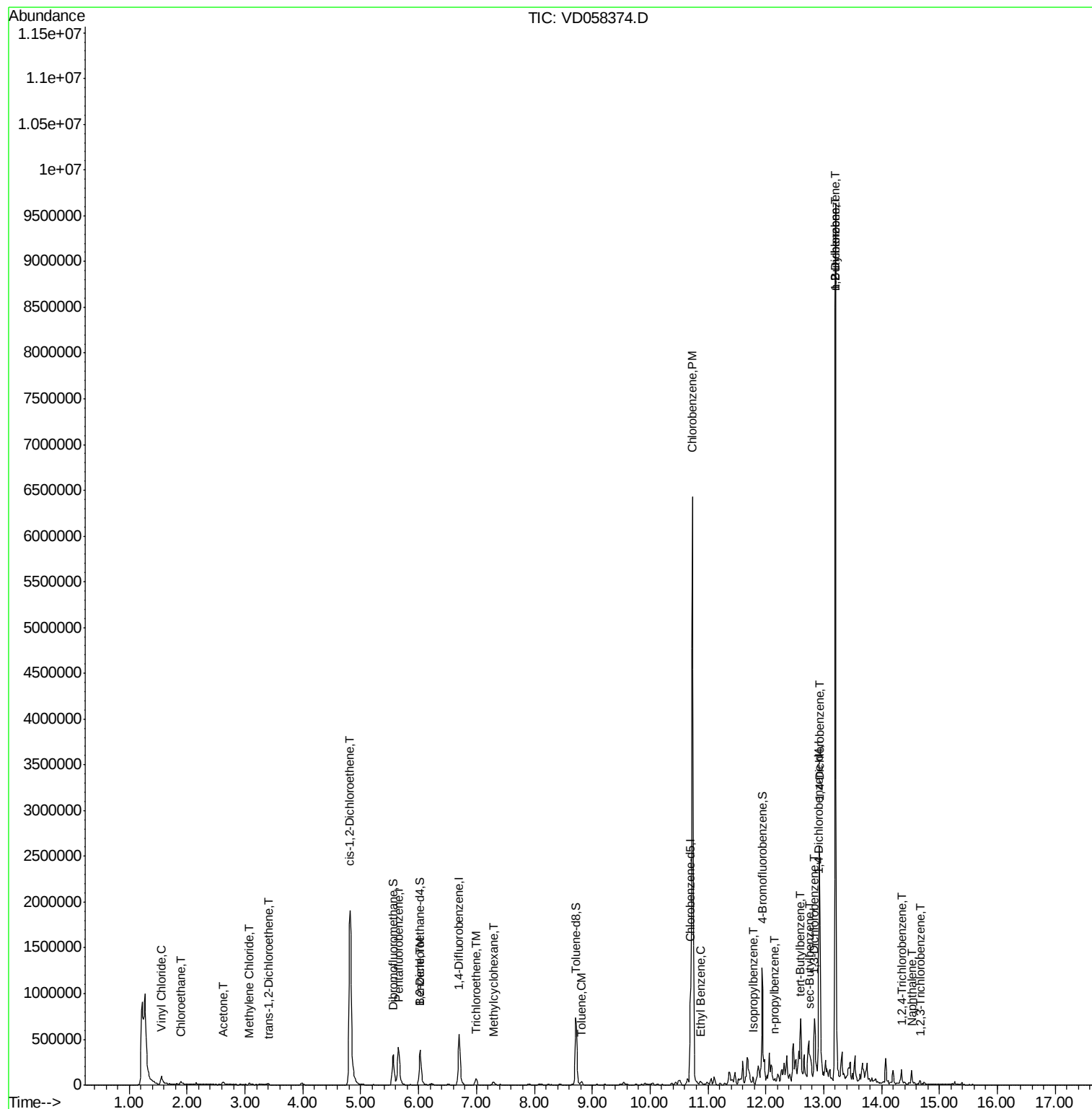
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD062418\
Data File : VD058374.D
Acq On : 24 Jun 2018 16:22
Operator : VA/AP
Sample : J3671-16
Misc : 6.22g/5ml/MSVOA D/SOIL
ALS Vial : 13 Sample Multiplier: 1

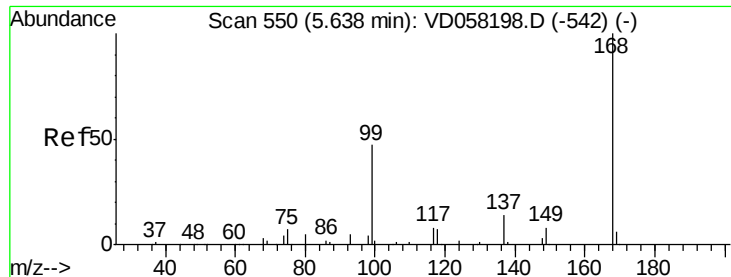
Instrument :
MSVOA_D
ClientSampleId :
WP021SB481-13-15-180621

Manual Integrations
APPROVED

apatel
6/25/2018 6:21:05 PM

Quant Time: Jun 25 04:52:02 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_D\METHOD\82D061918S.M
Quant Title : SW846 8260
QLast Update : Wed Jun 20 05:52:56 2018
Response via : Initial Calibration





#1

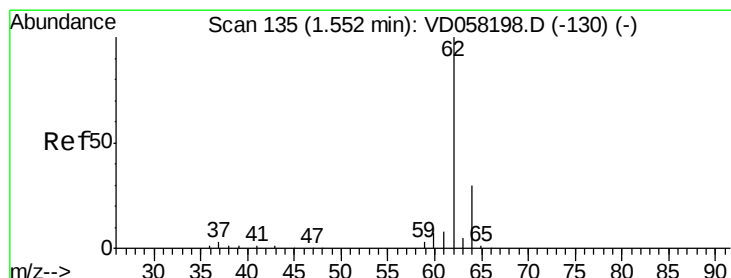
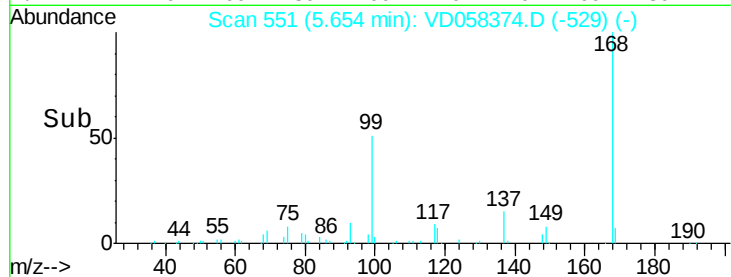
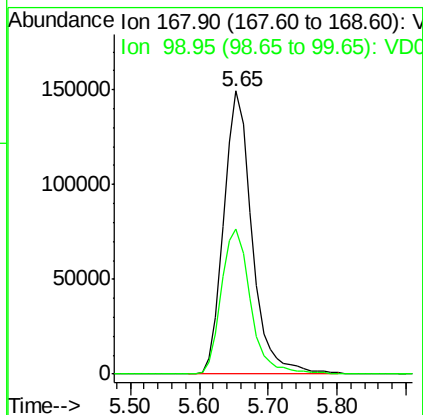
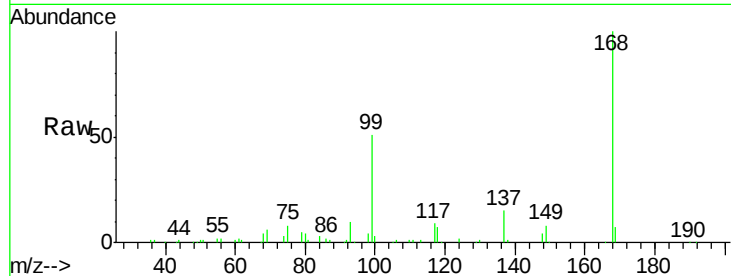
Pentafluorobenzene
 Concen: 50.00 ug/l
 RT: 5.65 min Scan# 551
 Delta R.T. 0.02 min
 Lab File: VD058374.D
 Acq: 24 Jun 2018 16:22

Instrument :
 MSVOA_D
 ClientSampleId :
 WP021SB481-13-15-180621

Tot Ion	Ratio	Lower	Upper
168	100		
99	51.4	41.1	61.7

Manual Integrations
 APPROVED

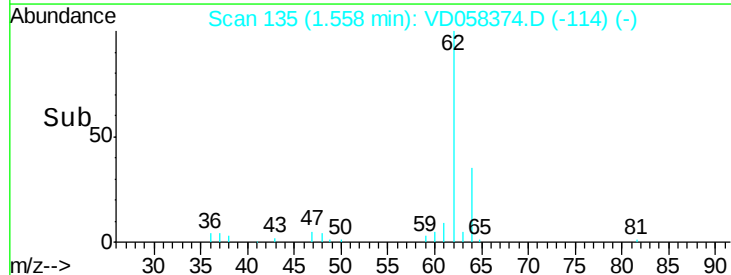
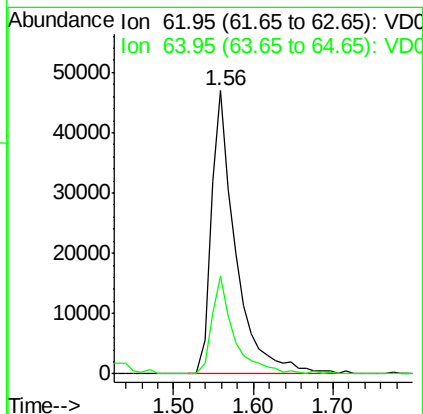
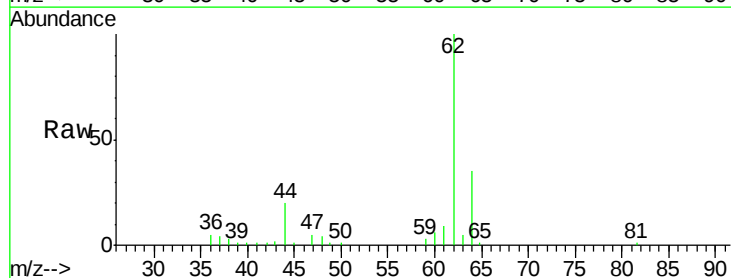
apatel
 6/25/2018 6:21:05 PM

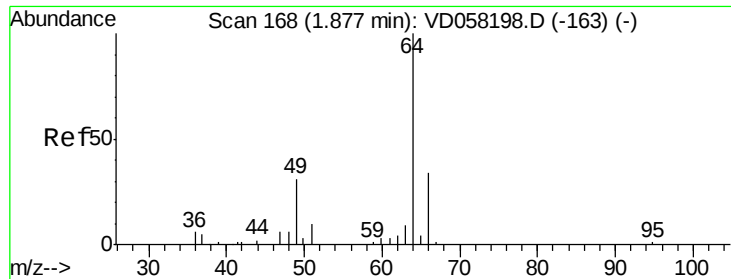


#4

Vinyl Chloride
 Concen: 45.01 ug/l
 RT: 1.56 min Scan# 135
 Delta R.T. 0.01 min
 Lab File: VD058374.D
 Acq: 24 Jun 2018 16:22

Tgt Ion	Ratio	Lower	Upper
62	100		
64	34.6	24.4	36.6





#6

Chloroethane

Concen: 31.55 ug/l

RT: 1.89 min Scan# 169

Delta R.T. 0.02 min

Lab File: VD058374.D

Acq: 24 Jun 2018 16:22

Instrument :

MSVOA_D

ClientSampleId :

WP021SB481-13-15-180621

Tot Ion: 64 Resp: 27155

Ion Ratio Lower Upper

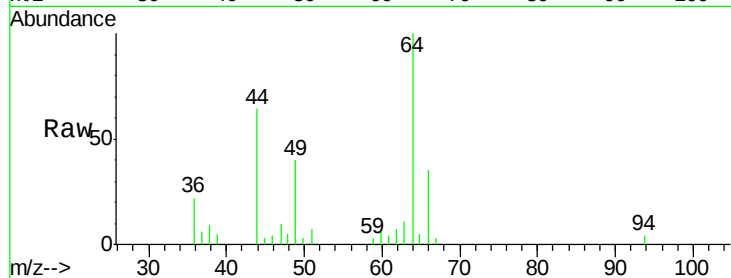
64 100

66 35.0 27.3 40.9

Manual Integrations
APPROVED

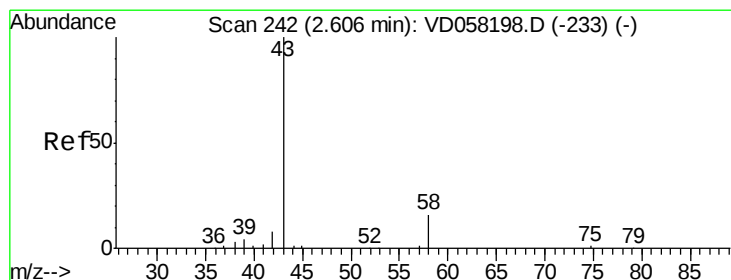
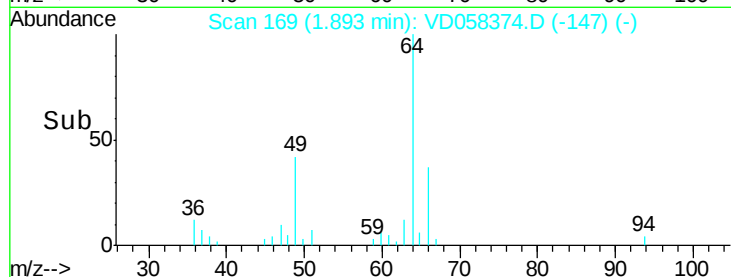
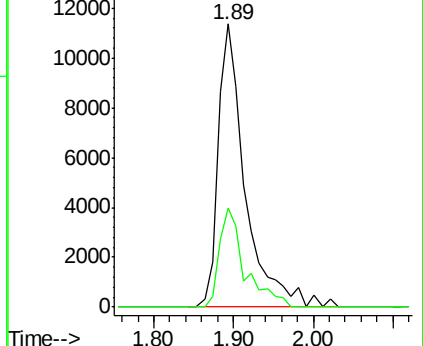
apatel

6/25/2018 6:21:05 PM



Abundance Ion 63.95 (63.65 to 64.65): VDC

Ion 65.90 (65.60 to 66.60): VDC



#16

Acetone

Concen: 112.27 ug/l

RT: 2.62 min Scan# 243

Delta R.T. 0.02 min

Lab File: VD058374.D

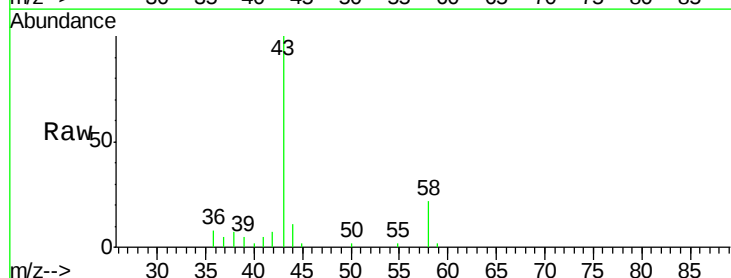
Acq: 24 Jun 2018 16:22

Tgt Ion: 43 Resp: 66032

Ion Ratio Lower Upper

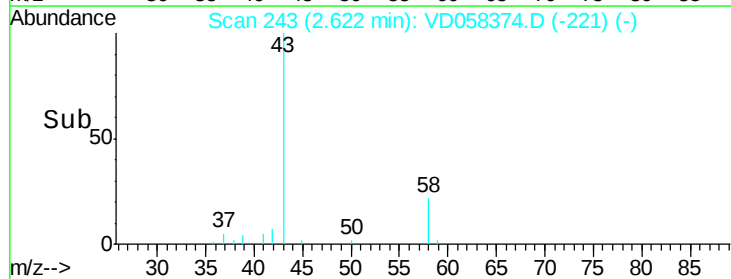
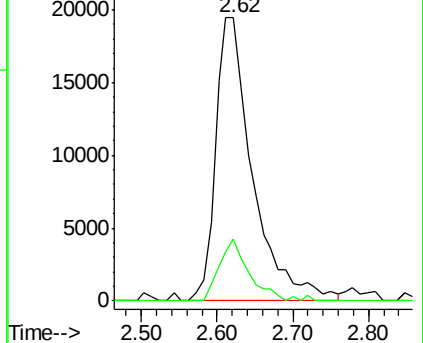
43 100

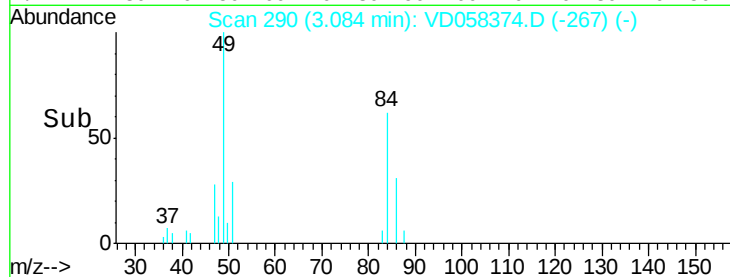
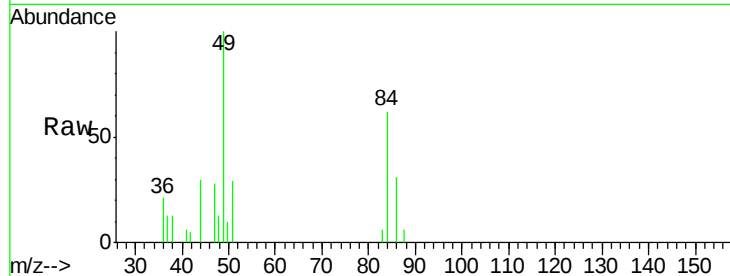
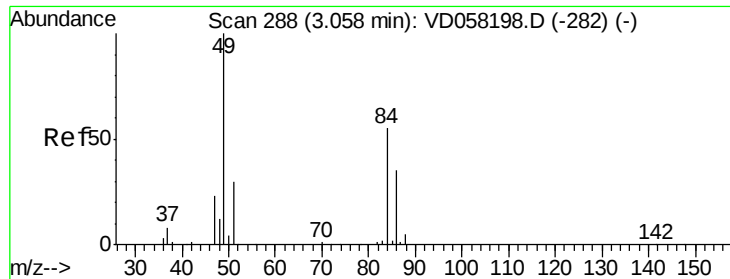
58 21.9 12.7 19.1#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 57.95 (57.65 to 58.65): VDC





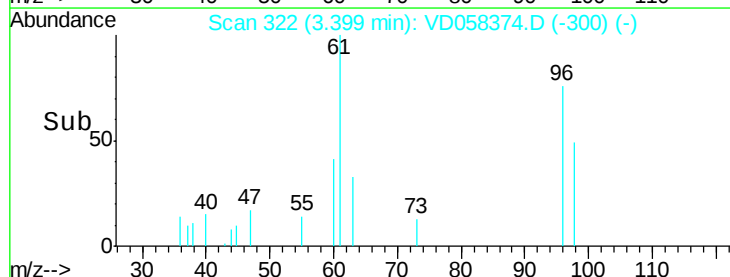
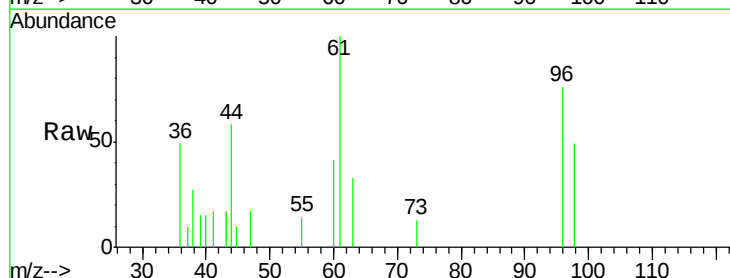
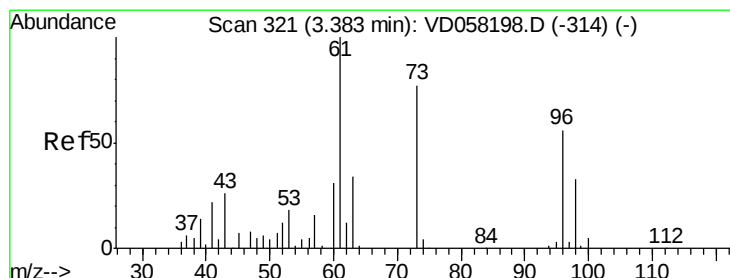
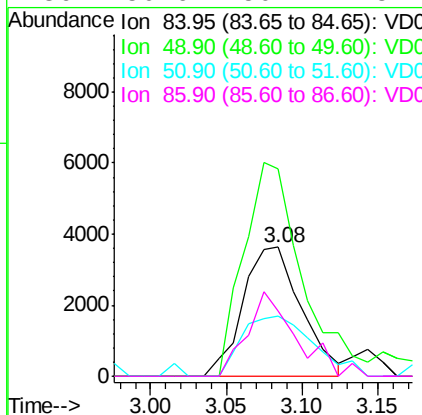
#20
Methvlene Chloride
Concen: 1.78 ug/l
RT: 3.08 min Scan# 290
Delta R.T. 0.03 min
Lab File: VD058374.D
Acq: 24 Jun 2018 16:22

Tot Ion:	84	Resp:	9783
Ion	Ratio	Lower	Upper
84	100		
49	160.7	145.0	217.6
51	46.5	42.9	64.3
86	50.6	50.1	75.1

Instrument :
MSVOA_D
ClientSampleId :
WP021SB481-13-15-180621

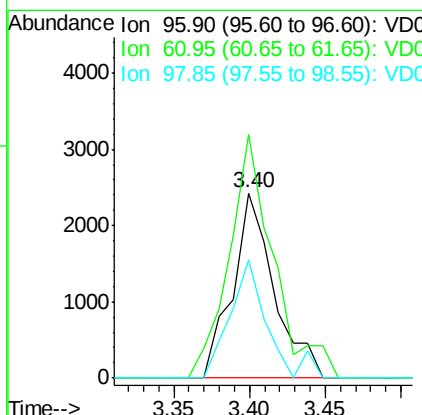
Manual Integrations
APPROVED

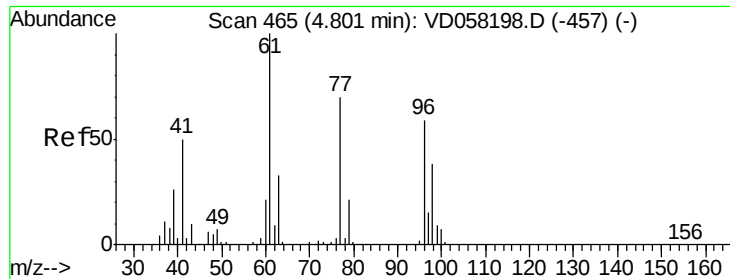
apatel
6/25/2018 6:21:05 PM



#21
trans-1,2-Dichloroethene
Concen: 2.89 ug/l
RT: 3.40 min Scan# 322
Delta R.T. 0.02 min
Lab File: VD058374.D
Acq: 24 Jun 2018 16:22

Tgt Ion:	96	Resp:	4623
Ion	Ratio	Lower	Upper
96	100		
61	131.6	143.8	215.6#
98	64.1	48.0	72.0





#27

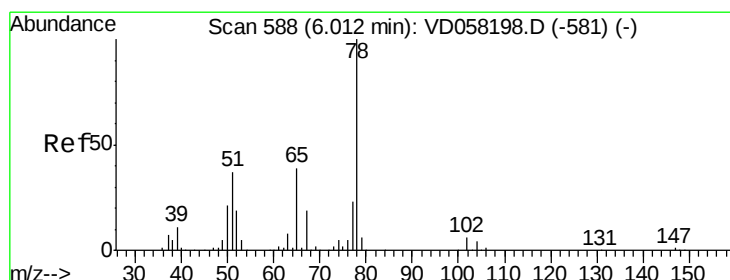
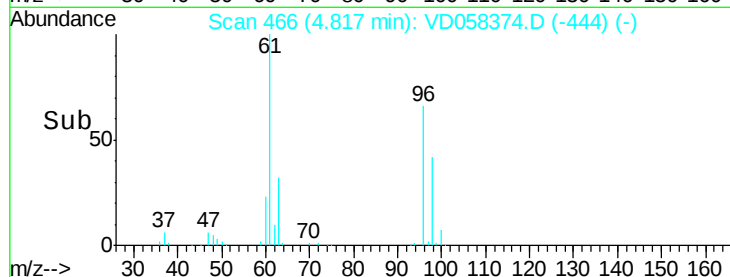
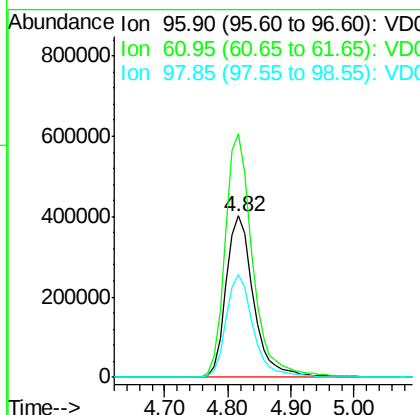
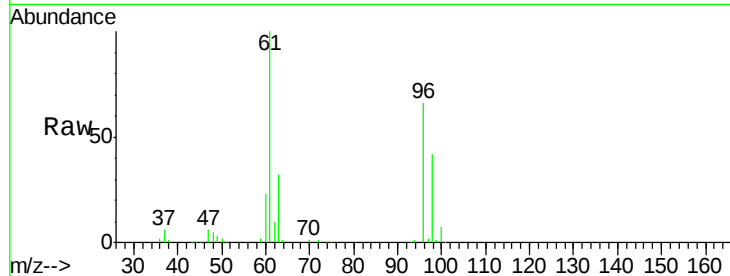
cis-1,2-Dichloroethene
 Concen: 302.96 ug/l
 RT: 4.82 min Scan# 466
 Delta R.T. 0.02 min
 Lab File: VD058374.D
 Acq: 24 Jun 2018 16:22

Instrument :
 MSVOA_D
 ClientSampleId :
 WP021SB481-13-15-180621

Tot Ion	Ratio	Lower	Upper
96	100		
61	150.6	0.0	338.6
98	64.0	0.0	130.2

Manual Integrations
 APPROVED

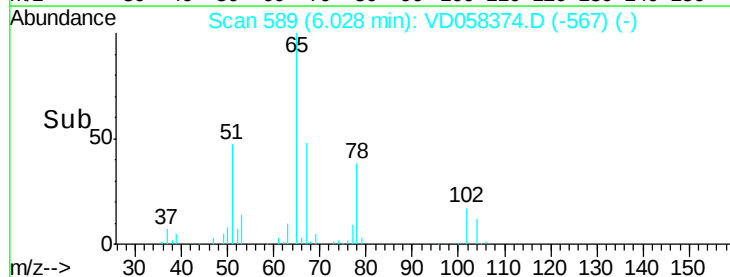
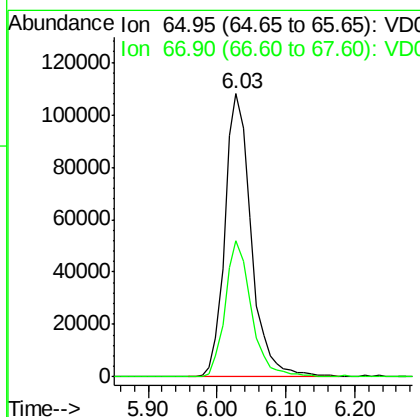
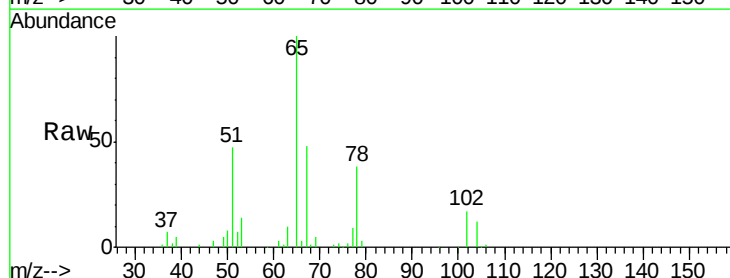
apatel
 6/25/2018 6:21:05 PM

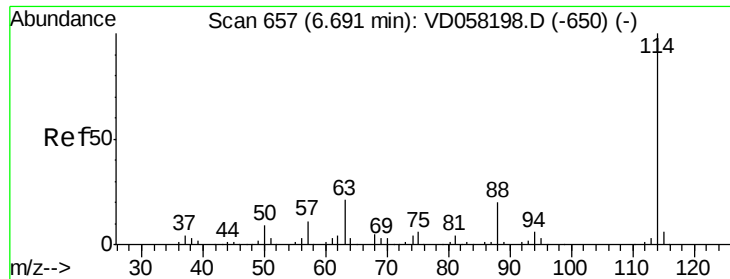


#33

1,2-Dichloroethane-d4
 Concen: N.D. ug/l
 RT: 6.03 min Scan# 589
 Delta R.T. 0.02 min
 Lab File: VD058374.D
 Acq: 24 Jun 2018 16:22

Tgt Ion	Ratio	Lower	Upper
65	100		
67	48.2	0.0	97.8





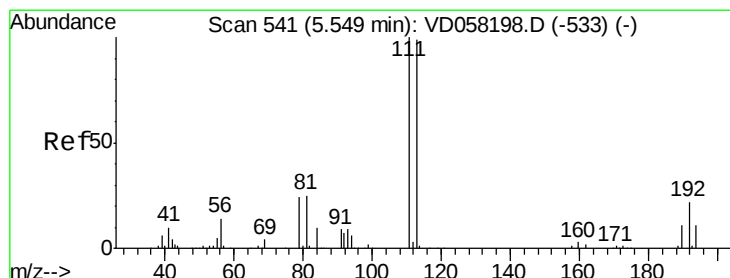
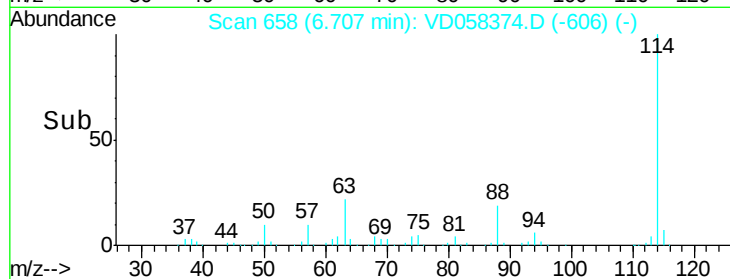
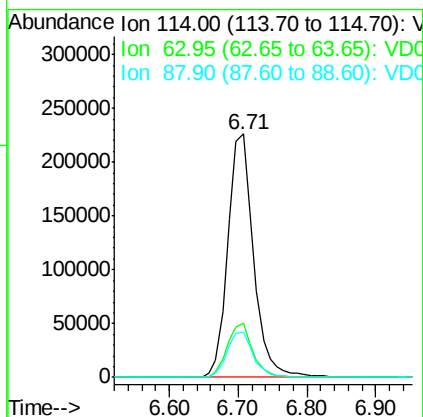
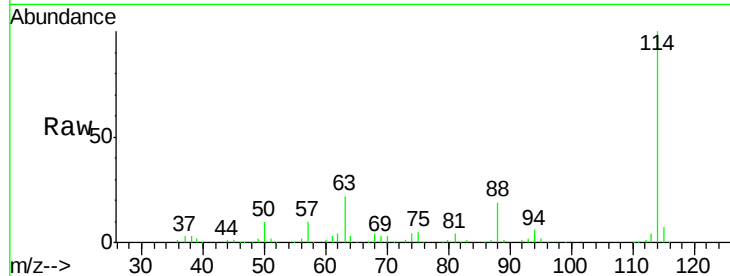
#34
 1,4-Difluorobenzene
 Concen: 50.00 ug/l
 RT: 6.71 min Scan# 658
 Delta R.T. 0.02 min
 Lab File: VD058374.D
 Acq: 24 Jun 2018 16:22

Instrument :
 MSVOA_D
 ClientSampleId :
 WP021SB481-13-15-180621

Tot Ion	Ratio	Resp Lower	Upper
114	100		
63	22.1	0.0	42.6
88	18.6	0.0	40.6

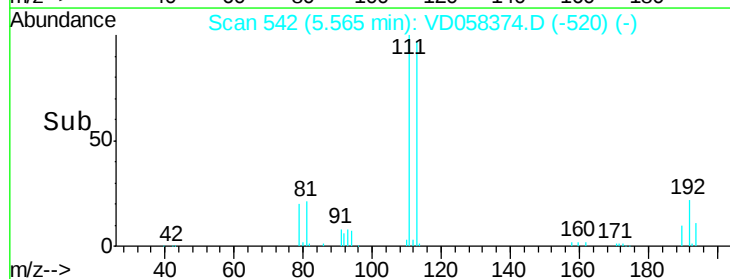
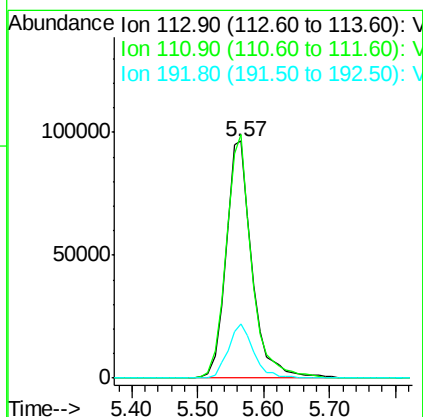
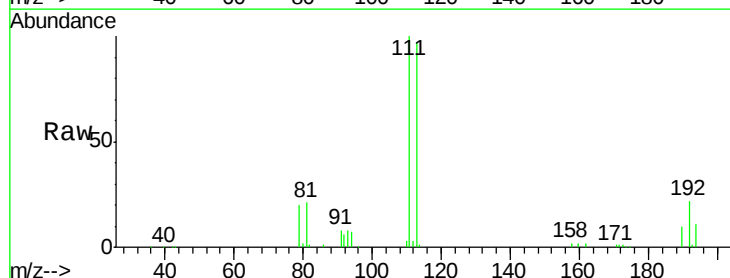
Manual Integrations
 APPROVED

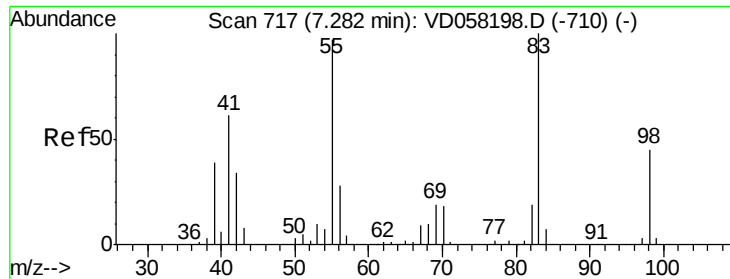
apatel
 6/25/2018 6:21:05 PM



#35
 Dibromofluoromethane
 Concen: 50.00 ug/l
 RT: 5.57 min Scan# 542
 Delta R.T. 0.02 min
 Lab File: VD058374.D
 Acq: 24 Jun 2018 16:22

Tgt Ion	Ratio	Resp Lower	Upper
113	100		
111	102.8	80.6	121.0
192	22.6	17.8	26.6





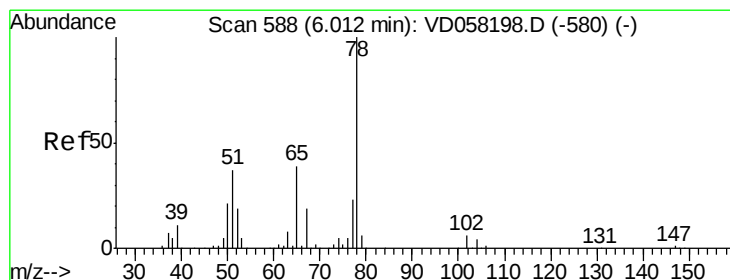
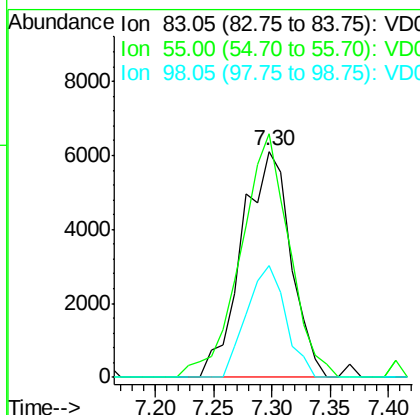
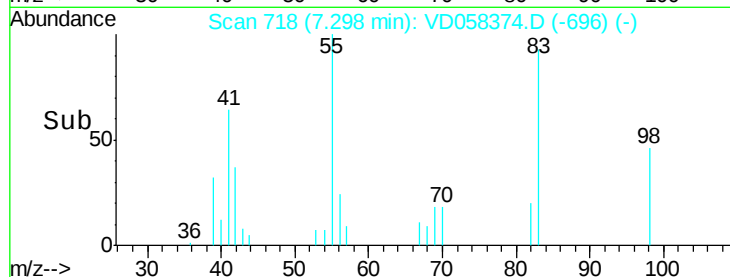
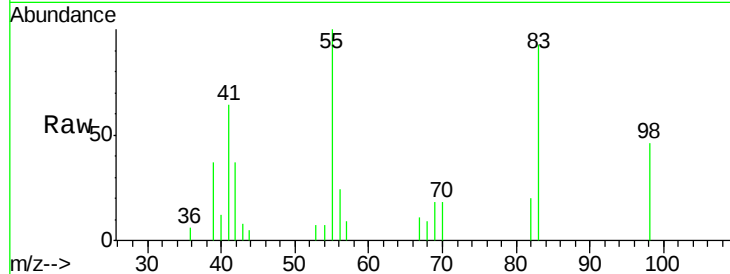
#39
Methylcyclohexane
Concen: 3.16 ug/l
RT: 7.30 min Scan# 718
Delta R.T. 0.02 min
Lab File: VD058374.D
Acq: 24 Jun 2018 16:22

Instrument :
MSVOA_D
ClientSampleId :
WP021SB481-13-15-180621

Tot Ion: 83 Resp: 17816
Ion Ratio Lower Upper
83 100
55 107.6 77.4 116.2
98 49.6 35.9 53.9

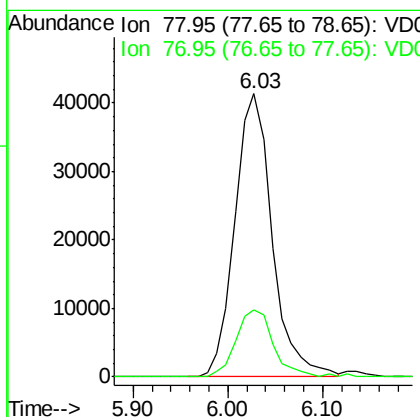
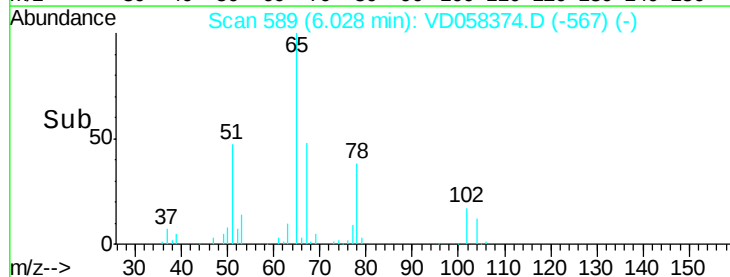
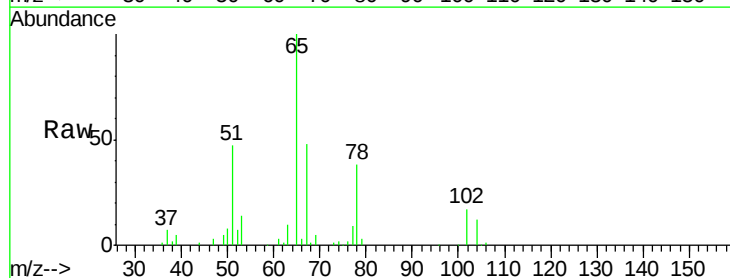
Manual Integrations
APPROVED

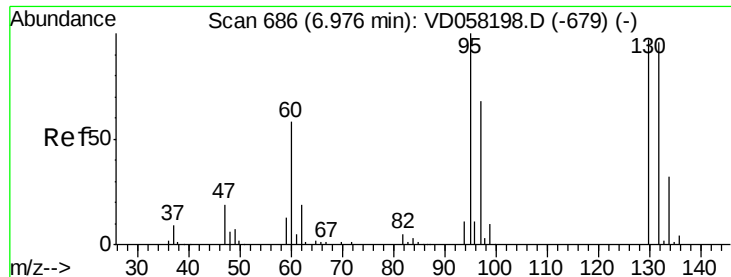
apatel
6/25/2018 6:21:05 PM



#40
Benzene
Concen: 8.20 ug/l
RT: 6.03 min Scan# 589
Delta R.T. 0.02 min
Lab File: VD058374.D
Acq: 24 Jun 2018 16:22

Tgt Ion: 78 Resp: 113165
Ion Ratio Lower Upper
78 100
77 23.5 18.5 27.7





#44

Trichloroethene

Concen: 7.22 ug/l

RT: 6.99 min Scan# 687

Delta R.T. 0.02 min

Lab File: VD058374.D

Acq: 24 Jun 2018 16:22

Instrument :

MSVOA_D

ClientSampleId :

WP021SB481-13-15-180621

Tot Ion:130 Resp: 29938

Ion Ratio Lower Upper

130 100

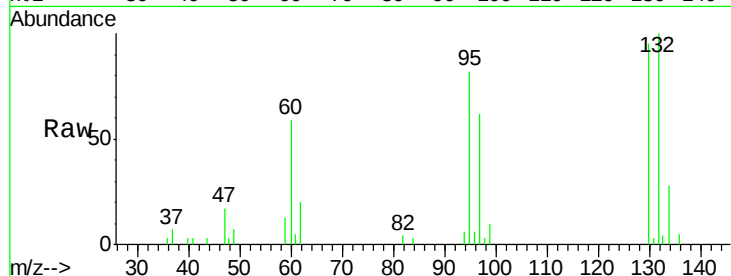
95 86.2 0.0 205.6

Manual Integrations

APPROVED

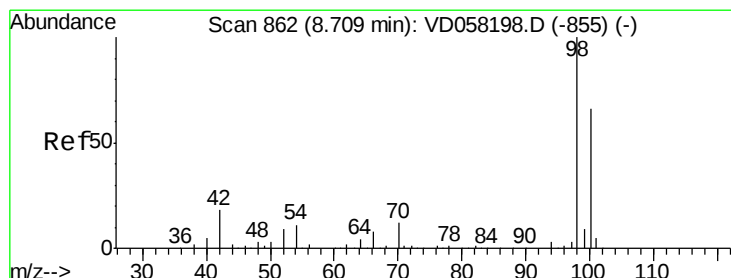
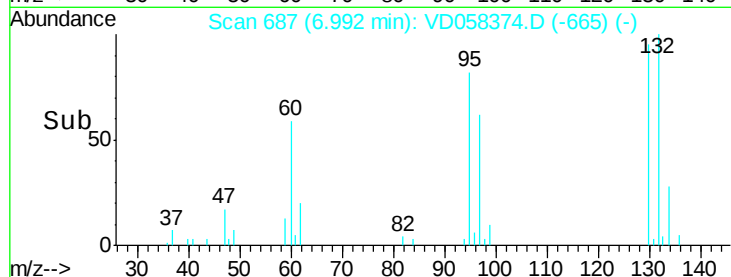
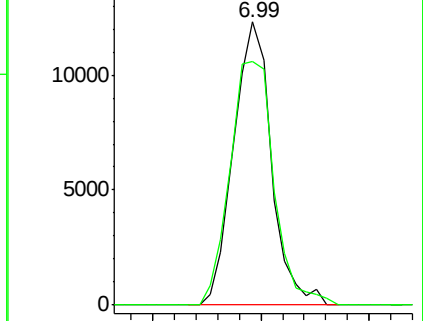
apatel

6/25/2018 6:21:05 PM



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VDC



#50

Toluene-d8

Concen: N.D. ug/l

RT: 8.72 min Scan# 862

Delta R.T. 0.01 min

Lab File: VD058374.D

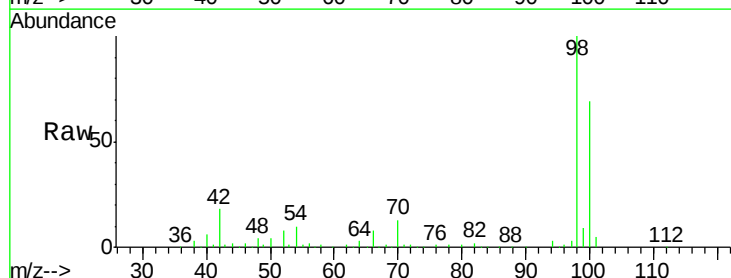
Acq: 24 Jun 2018 16:22

Tgt Ion: 98 Resp: 582626

Ion Ratio Lower Upper

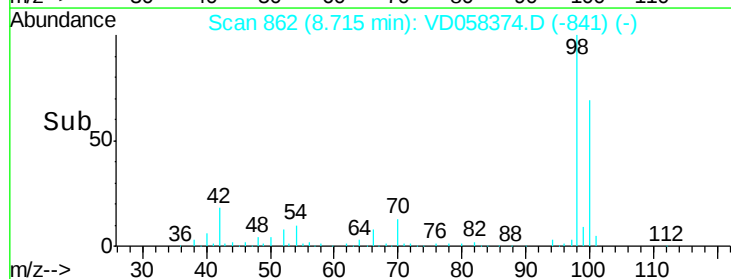
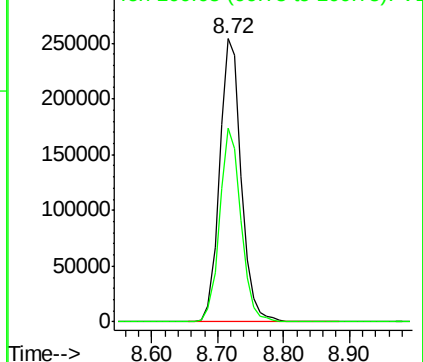
98 100

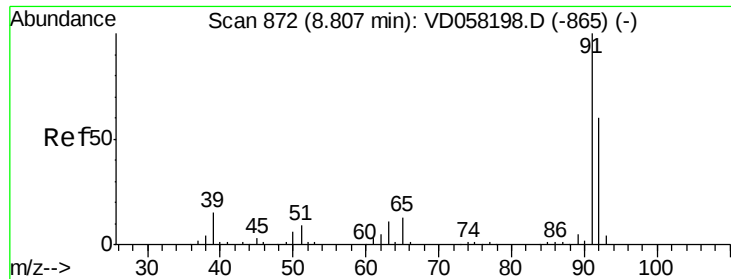
100 68.6 53.6 80.4



Abundance Ion 98.05 (97.75 to 98.75): VDC

Ion 100.05 (99.75 to 100.75): VDC





#52

Toluene

Concen: 2.19 ug/l

RT: 8.81 min Scan# 872

Delta R.T. 0.01 min

Lab File: VD058374.D

Acq: 24 Jun 2018 16:22

Instrument :

MSVOA_D

ClientSampleId :

WP021SB481-13-15-180621

Tot Ion: 92 Resp: 17231

Ion Ratio Lower Upper

92 100

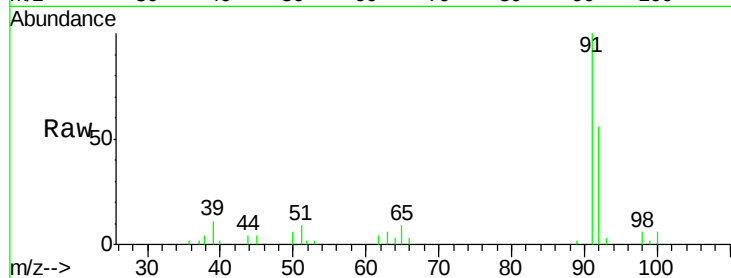
91 178.5 133.2 199.8

Manual Integrations

APPROVED

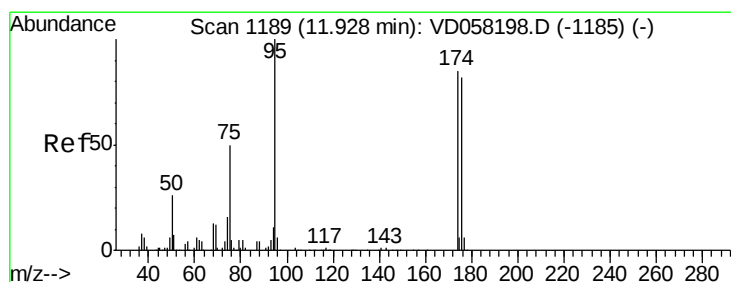
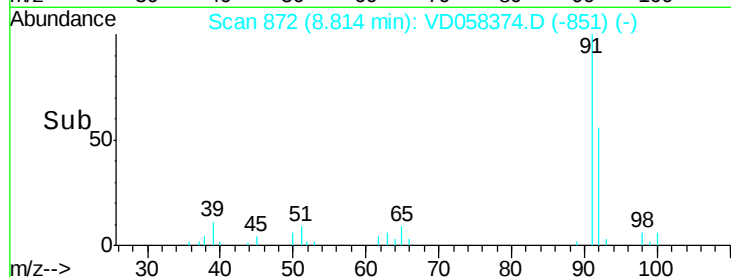
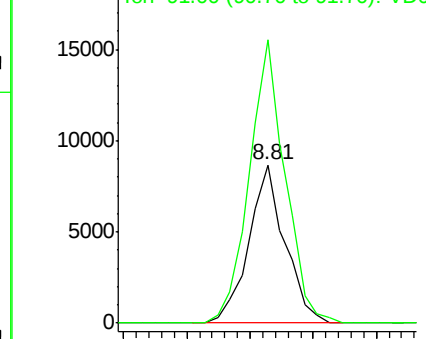
apatel

6/25/2018 6:21:05 PM



Abundance Ion 92.00 (91.70 to 92.70): VDC

Ion 91.00 (90.70 to 91.70): VDC



#62

4-Bromofluorobenzene

Concen: N.D. ug/l

RT: 11.93 min Scan# 1189

Delta R.T. 0.01 min

Lab File: VD058374.D

Acq: 24 Jun 2018 16:22

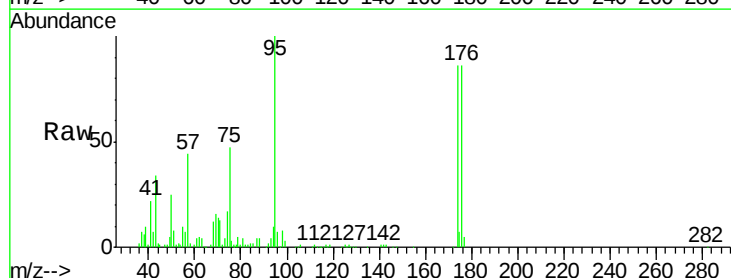
Tgt Ion: 95 Resp: 275702

Ion Ratio Lower Upper

95 100

174 86.4 0.0 170.2

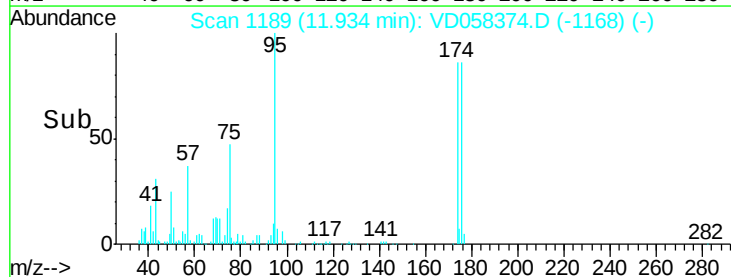
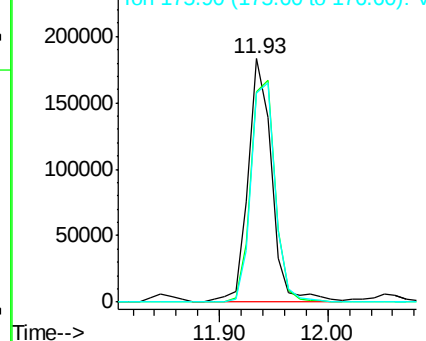
176 85.9 0.0 164.6

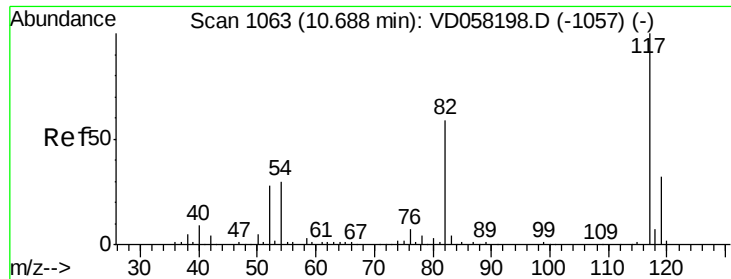


Abundance Ion 95.00 (94.70 to 95.70): VDC

Ion 173.90 (173.60 to 174.60): V

Ion 175.90 (175.60 to 176.60): V





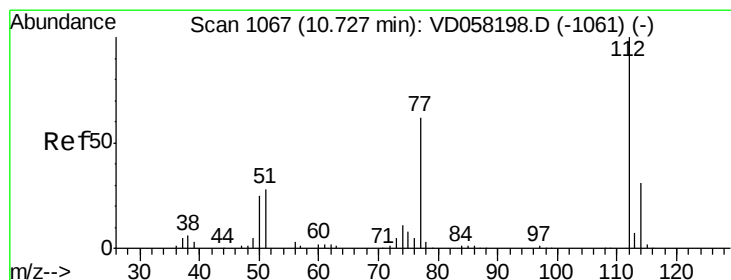
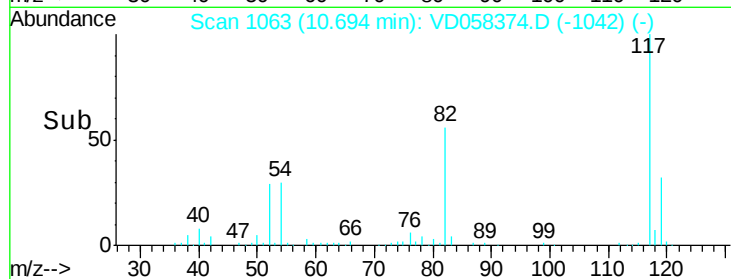
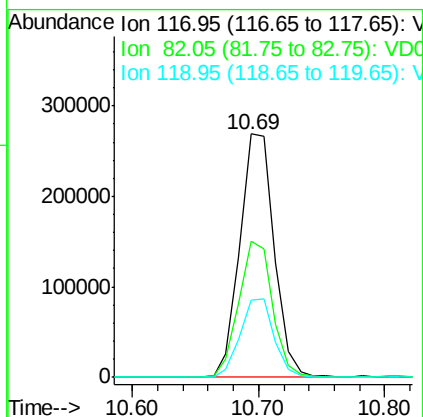
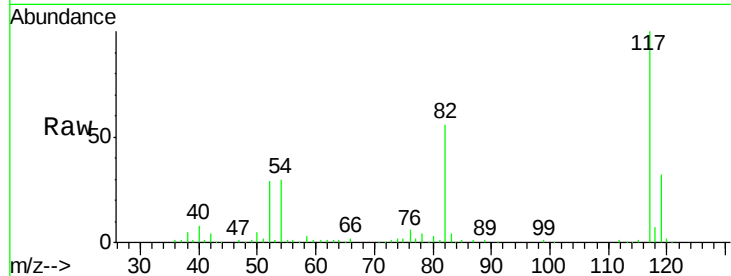
#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 10.69 min Scan# 1063
Delta R.T. 0.01 min
Lab File: VD058374.D
Acq: 24 Jun 2018 16:22

Instrument :
MSVOA_D
ClientSampleId :
WP021SB481-13-15-180621

Tot Ion	Ratio	Lower	Upper
117	100		
82	56.1	47.0	70.6
119	31.7	25.3	37.9

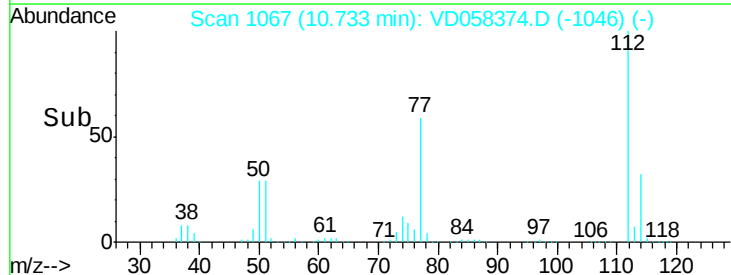
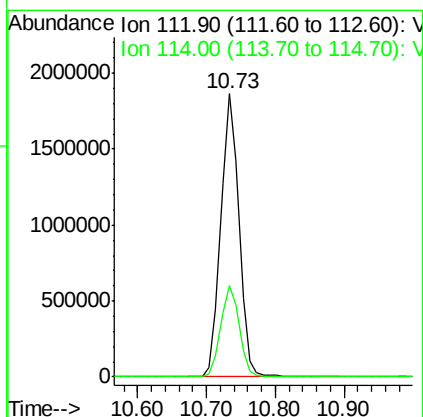
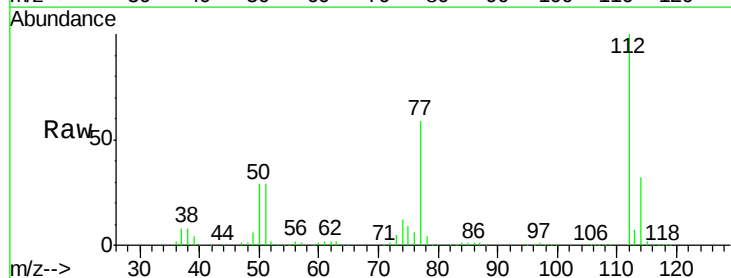
Manual Integrations
APPROVED

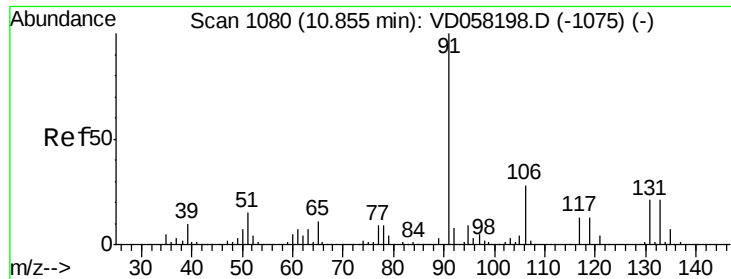
apatel
6/25/2018 6:21:05 PM



#65
Chlorobenzene
Concen: 361.00 ug/l
RT: 10.73 min Scan# 1067
Delta R.T. 0.01 min
Lab File: VD058374.D
Acq: 24 Jun 2018 16:22

Tgt Ion	Ratio	Lower	Upper
112	100		
114	32.4	25.0	37.4





#67

Ethyl Benzene

Concen: 1.16 ug/l

RT: 10.86 min Scan# 1080

Delta R.T. 0.01 min

Lab File: VD058374.D

Acq: 24 Jun 2018 16:22

Instrument :

MSVOA_D

ClientSampleId :

WP021SB481-13-15-180621

Tot Ion: 91 Resp: 19398

Ion Ratio Lower Upper

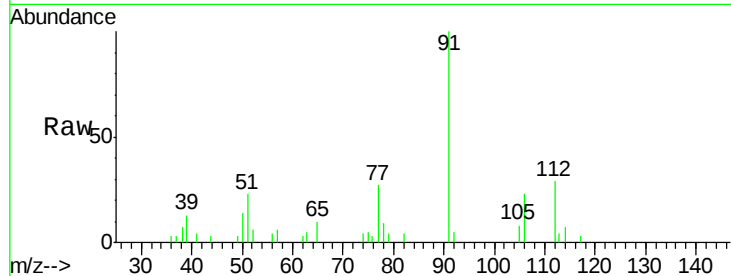
91 100

106 22.7 22.0 33.0

Manual Integrations
APPROVED

apatel

6/25/2018 6:21:05 PM



Abundance Ion 91.00 (90.70 to 91.70): VD058198.D (-1075) (-)

Ion 106.05 (105.75 to 106.75): VD058198.D (-1075) (-)

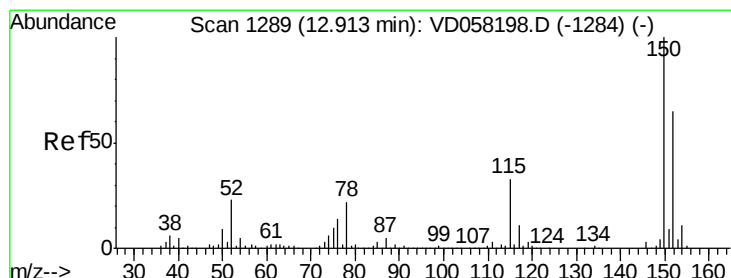
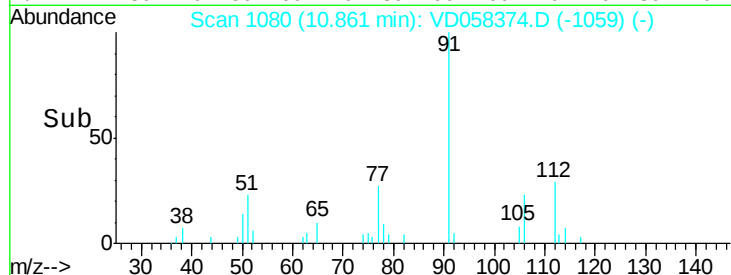
10.86

10000

5000

0

Time-->



#72

1,4-Dichlorobenzene-d4

Concen: 50.00 ug/l

RT: 12.91 min Scan# 1288

Delta R.T. -0.00 min

Lab File: VD058374.D

Acq: 24 Jun 2018 16:22

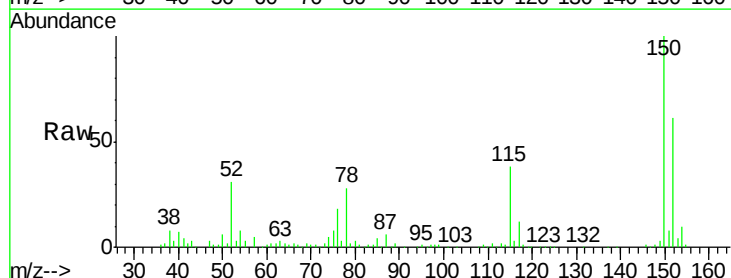
Tgt Ion: 152 Resp: 279980

Ion Ratio Lower Upper

152 100

115 61.2 25.1 75.3

150 163.1 0.0 308.8



Abundance Ion 151.90 (151.60 to 152.60): VD058198.D (-1284) (-)

Ion 115.00 (114.70 to 115.70): VD058198.D (-1284) (-)

Ion 149.90 (149.60 to 150.60): VD058198.D (-1284) (-)

12.91

400000

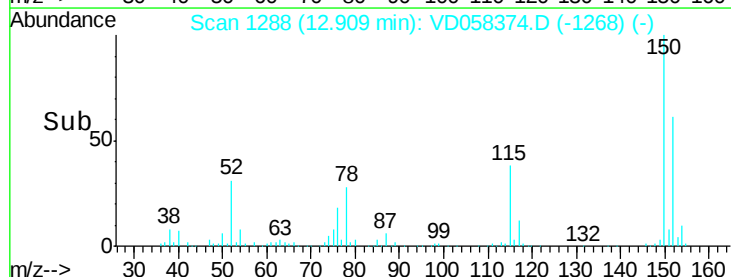
300000

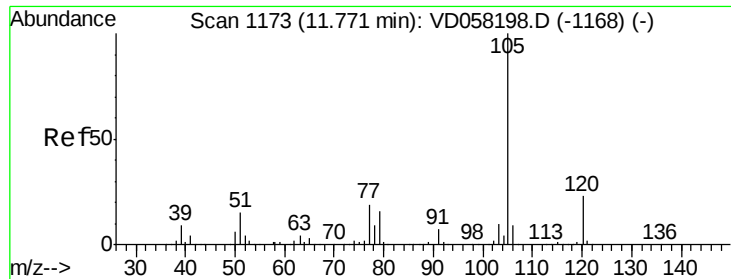
200000

100000

0

Time-->





#73

Isopropylbenzene

Concen: 1.54 ug/l

RT: 11.78 min Scan# 1173

Delta R.T. 0.01 min

Lab File: VD058374.D

Acq: 24 Jun 2018 16:22

Instrument :

MSVOA_D

ClientSampleId :

WP021SB481-13-15-180621

Tot Ion: 105 Resp: 25750

Ion Ratio Lower Upper

105 100

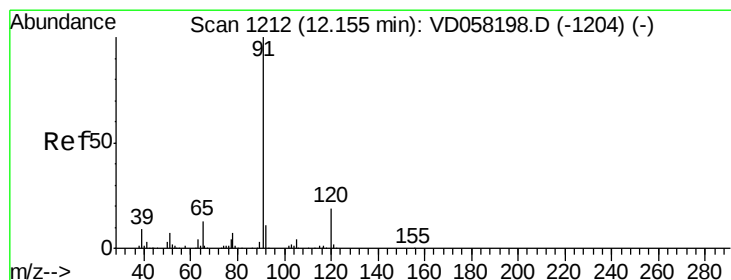
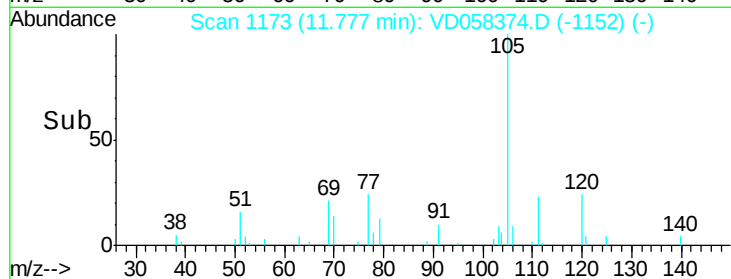
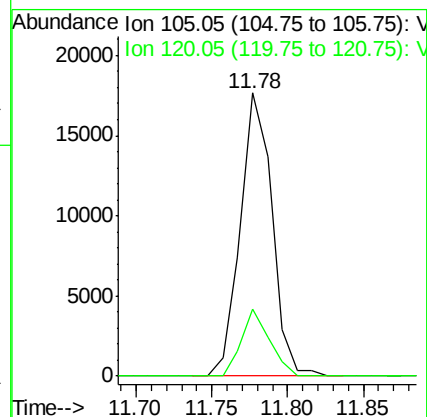
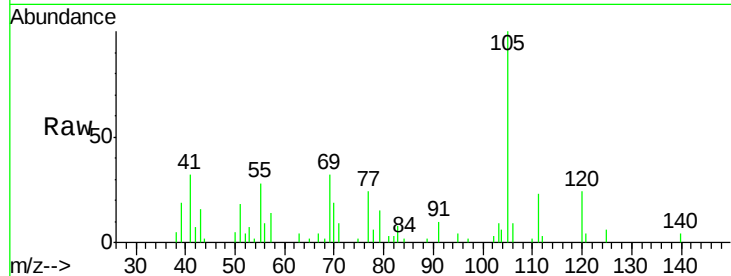
120 27.3 11.6 34.8

Manual Integrations

APPROVED

apatel

6/25/2018 6:21:05 PM



#78

n-propylbenzene

Concen: 1.66 ug/l

RT: 12.16 min Scan# 1212

Delta R.T. 0.01 min

Lab File: VD058374.D

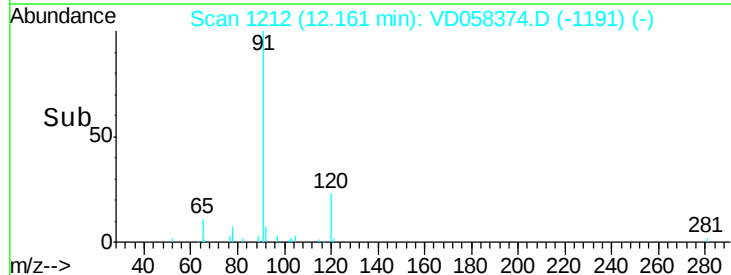
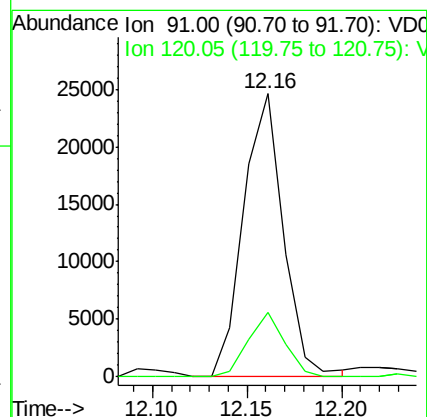
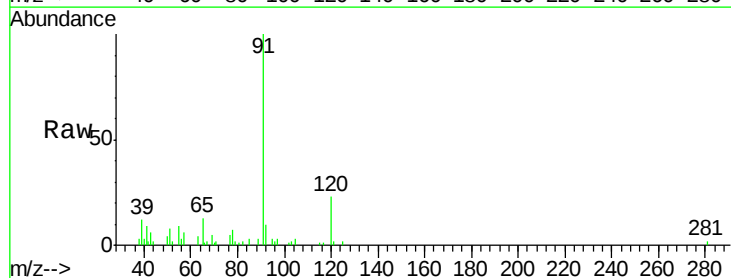
Acq: 24 Jun 2018 16:22

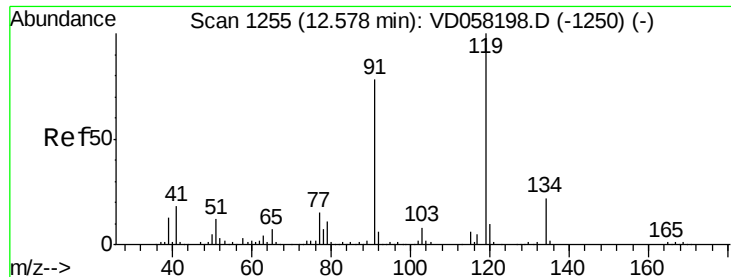
Tgt Ion: 91 Resp: 35893

Ion Ratio Lower Upper

91 100

120 22.7 9.7 29.1





#83

tert-Butylbenzene

Concen: 2.98 ug/l

RT: 12.58 min Scan# 1255

Delta R.T. 0.01 min

Lab File: VD058374.D

Acq: 24 Jun 2018 16:22

Instrument :

MSVOA_D

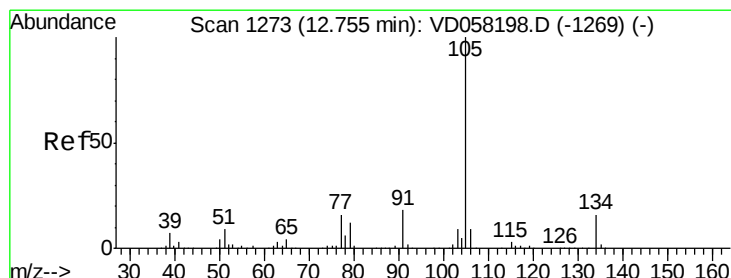
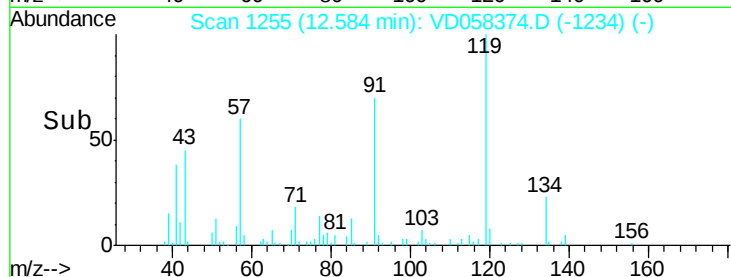
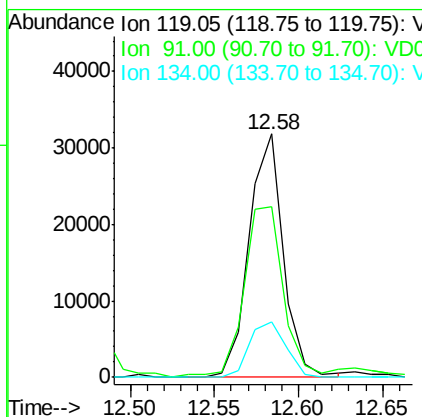
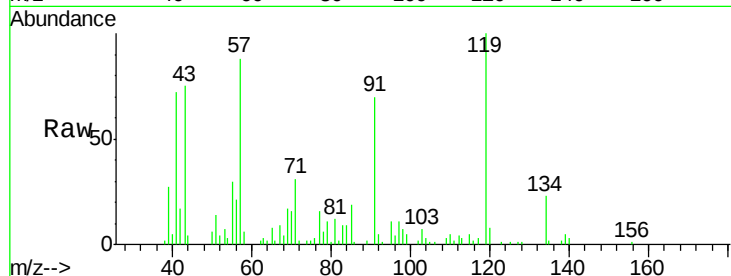
ClientSampleId :

WP021SB481-13-15-180621

Tot Ion	Ratio	Lower	Upper
119	100		
91	70.1	38.9	116.6
134	22.9	11.2	33.5

Manual Integrations
APPROVED

apatel
6/25/2018 6:21:05 PM



#85

sec-Butylbenzene

Concen: 5.09 ug/l

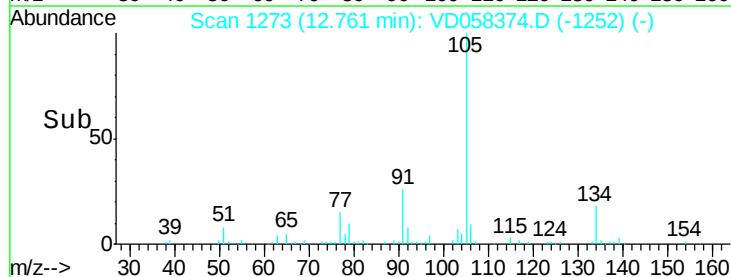
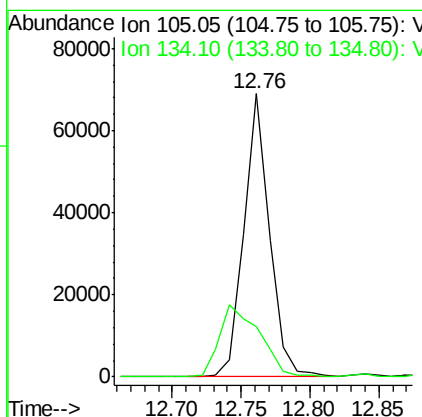
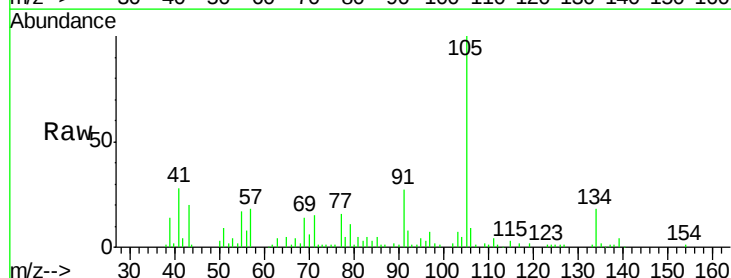
RT: 12.76 min Scan# 1273

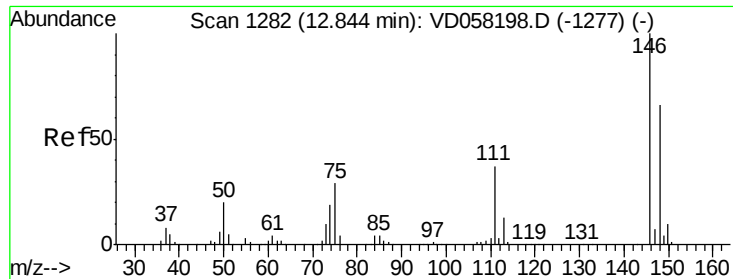
Delta R.T. 0.01 min

Lab File: VD058374.D

Acq: 24 Jun 2018 16:22

Tgt Ion	Ratio	Lower	Upper
105	100		
134	17.9	8.1	24.3





#87

1,3-Dichlorobenzene

Concen: 13.53 ug/l

RT: 12.85 min Scan# 1282

Delta R.T. 0.01 min

Lab File: VD058374.D

Acq: 24 Jun 2018 16:22

Instrument :

MSVOA_D

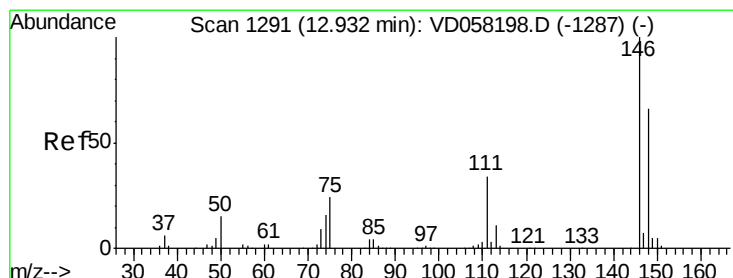
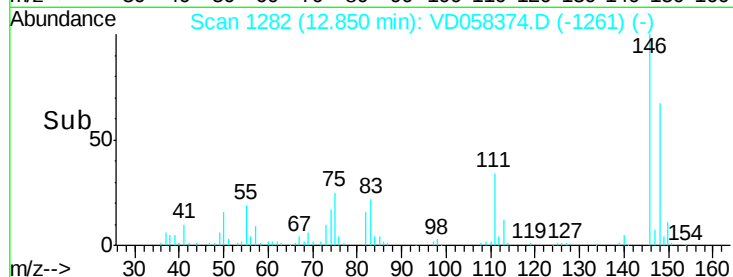
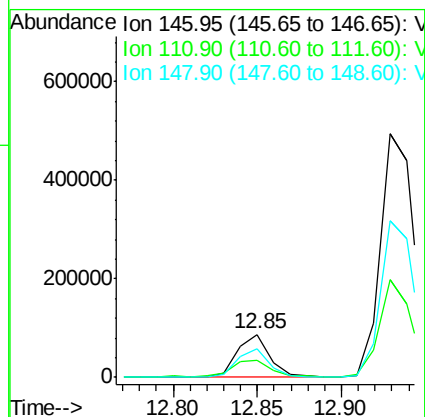
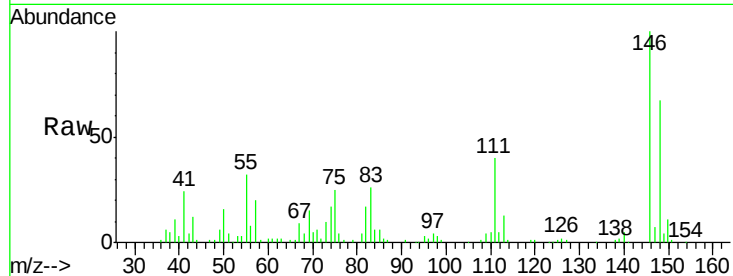
ClientSampleId :

WP021SB481-13-15-180621

Tot Ion:	146	Resp:	117951
Ion Ratio	Lower	Upper	
146	100		
111	39.7	18.4	55.0
148	66.6	32.8	98.4

Manual Integrations
APPROVED

apatel
6/25/2018 6:21:05 PM



#88

1,4-Dichlorobenzene

Concen: 82.14 ug/l

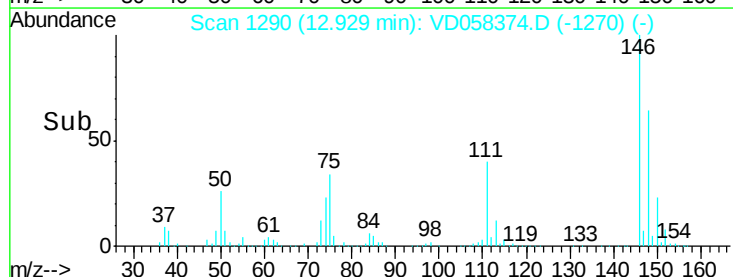
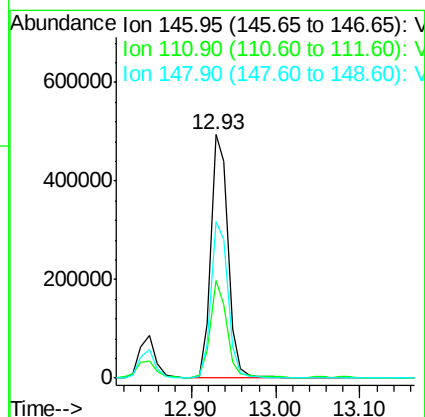
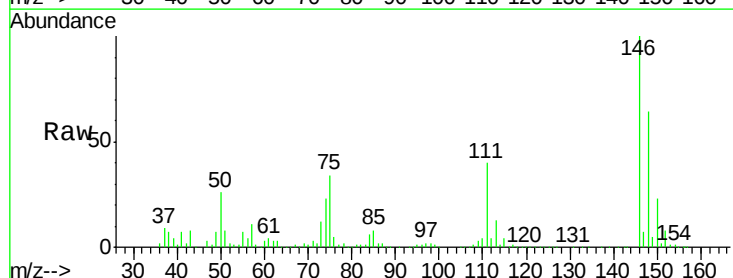
RT: 12.93 min Scan# 1290

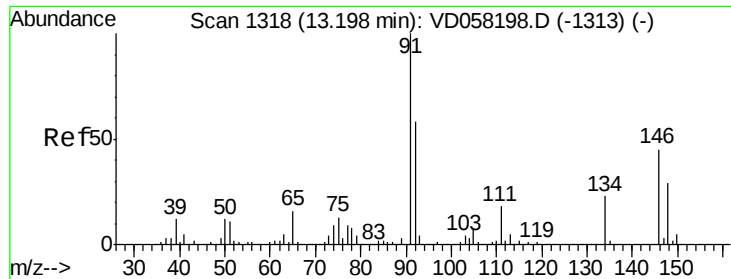
Delta R.T. -0.00 min

Lab File: VD058374.D

Acq: 24 Jun 2018 16:22

Tgt Ion:	146	Resp:	699154
Ion Ratio	Lower	Upper	
146	100		
111	40.4	17.2	51.5
148	64.5	33.1	99.3





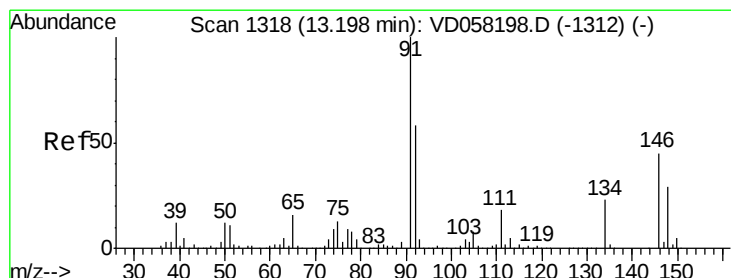
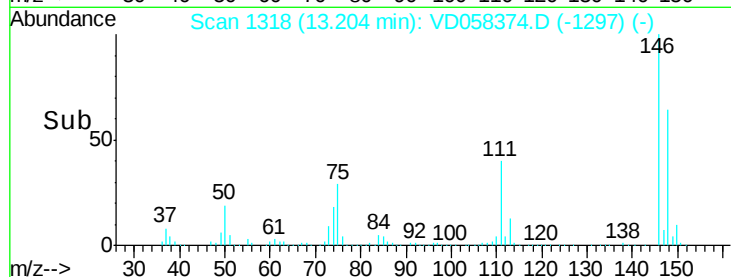
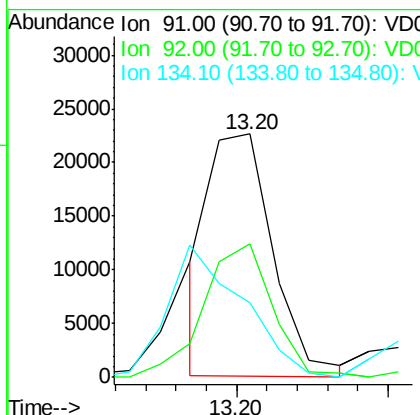
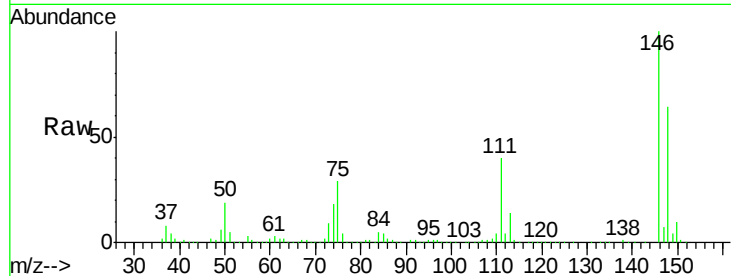
#89
n-Butylbenzene
Concen: 2.20 ug/l m
RT: 13.20 min Scan# 1318
Delta R.T. 0.01 min
Lab File: VD058374.D
Acq: 24 Jun 2018 16:22

Instrument :
MSVOA_D
ClientSampleId :
WP021SB481-13-15-180621

Tot Ion	Ratio	Lower	Upper
91	100		
92	55.0	29.2	87.6
134	30.7	11.3	33.8

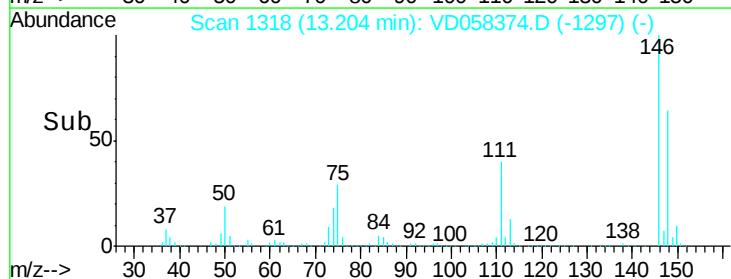
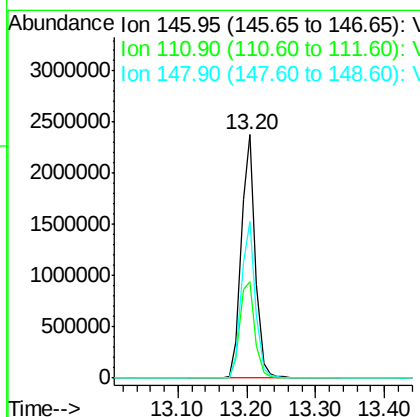
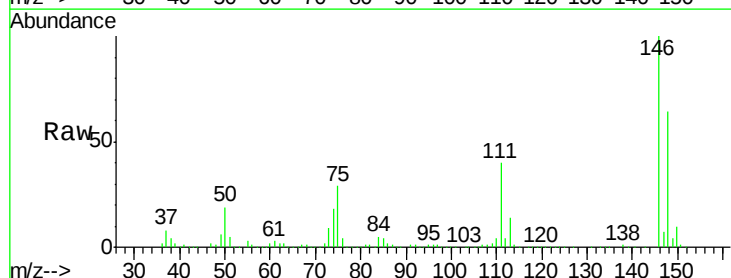
Manual Integrations
APPROVED

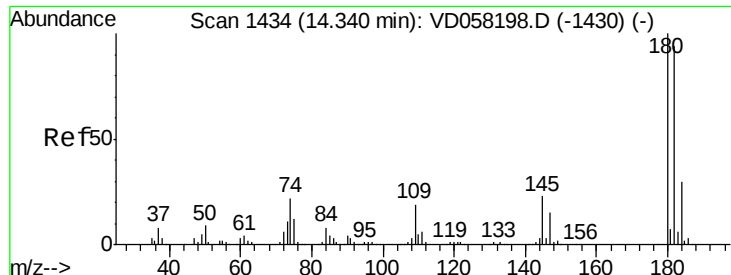
apatel
6/25/2018 6:21:05 PM



#91
1,2-Dichlorobenzene
Concen: 450.91 ug/l
RT: 13.20 min Scan# 1318
Delta R.T. 0.01 min
Lab File: VD058374.D
Acq: 24 Jun 2018 16:22

Tgt Ion	Ratio	Lower	Upper
146	100		
111	39.8	19.6	58.7
148	64.1	32.0	96.2





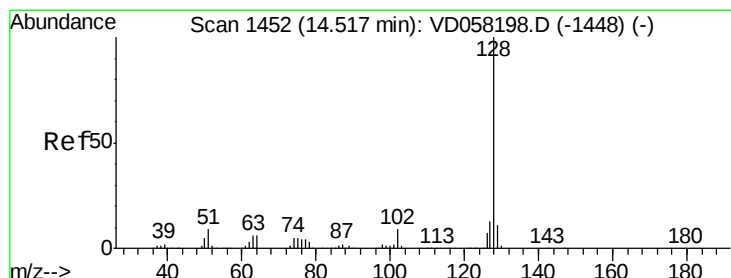
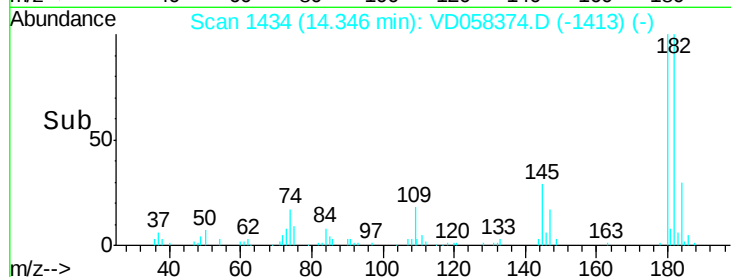
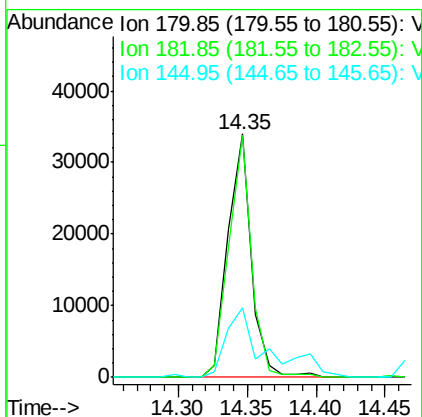
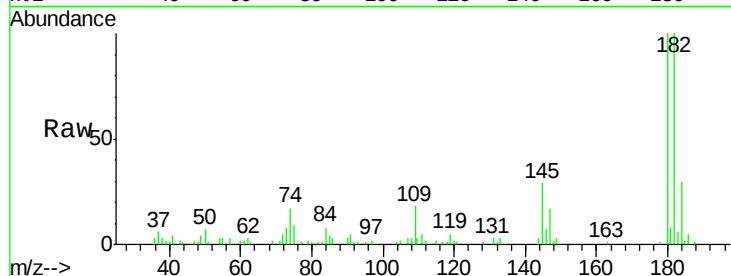
#93
 1,2,4-Trichlorobenzene
 Concen: 5.68 ug/l
 RT: 14.35 min Scan# 1434
 Delta R.T. 0.01 min
 Lab File: VD058374.D
 Acq: 24 Jun 2018 16:22

Instrument :
 MSVOA_D
 ClientSampleId :
 WP021SB481-13-15-180621

Tot Ion	Ratio	Lower	Upper
180	100		
182	99.6	47.1	141.3
145	28.8	11.7	35.0

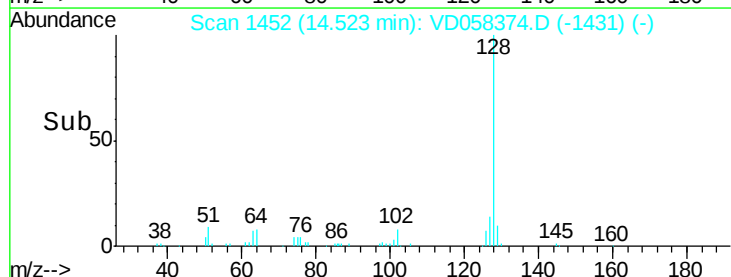
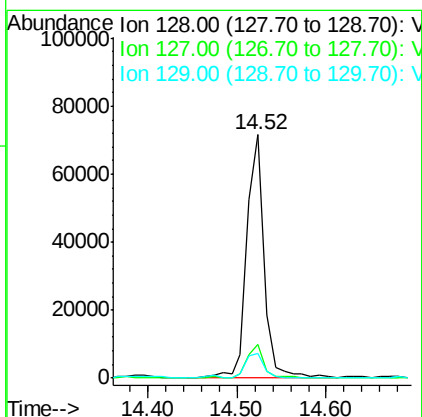
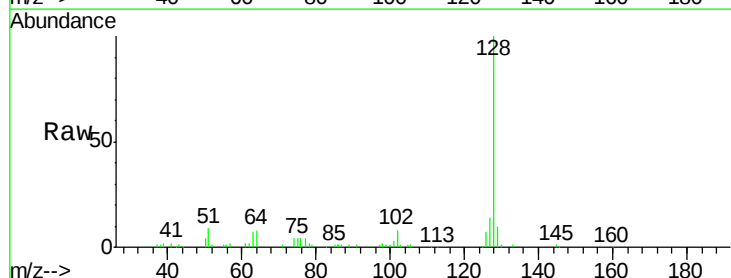
Manual Integrations
 APPROVED

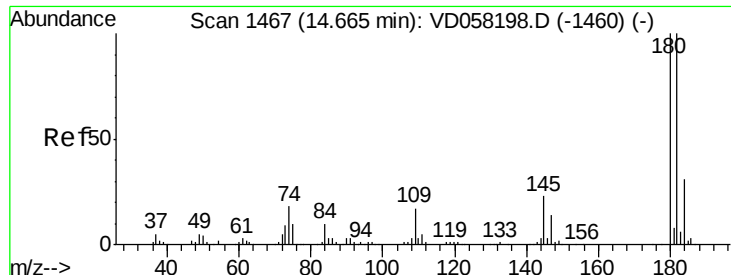
apatel
 6/25/2018 6:21:05 PM



#95
 Naphthalene
 Concen: 10.35 ug/l
 RT: 14.52 min Scan# 1452
 Delta R.T. 0.01 min
 Lab File: VD058374.D
 Acq: 24 Jun 2018 16:22

Tgt Ion	Ratio	Lower	Upper
128	100		
127	13.8	10.0	15.0
129	10.3	8.7	13.1





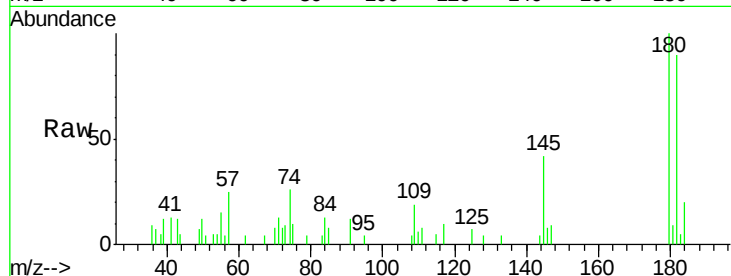
#96
 1,2,3-Trichlorobenzene
 Concen: 1.70 ug/l
 RT: 14.66 min Scan# 1466
 Delta R.T. -0.00 min
 Lab File: VD058374.D
 Acq: 24 Jun 2018 16:22

Instrument :
 MSVOA_D
 ClientSampleId :
 WP021SB481-13-15-180621

Tot Ion	Ratio	Lower	Upper
180	100		
182	89.7	49.9	149.6
145	41.5	11.7	35.1#

Manual Integrations
 APPROVED

apatel
 6/25/2018 6:21:05 PM



Abundance Ion 179.85 (179.55 to 180.55): V
 Ion 181.85 (181.55 to 182.55): V
 Ion 144.95 (144.65 to 145.65): V

