

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU090319\
 Data File : VU034199.D
 Acq On : 02 Sep 2019 14:02
 Operator : JC/SP
 Sample : K4544-33
 Misc : 5.0mL/MSVOA_U/WATER
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 T16-17-C3-(0)

Quant Time: Sep 03 05:54:25 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\82U082919W.M
 Quant Title : SW846 8260
 QLast Update : Thu Aug 29 04:11:12 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.96	168	438769	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	5.87	114	715952	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.07	117	710692	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	11.46	152	338893	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	5.29	65	279042	49.63	ug/l	0.00
Spiked Amount			Recovery	=	99.26%	
35) Dibromofluoromethane	4.86	113	234160	47.15	ug/l	0.00
Spiked Amount			Recovery	=	94.30%	
50) Toluene-d8	7.55	98	928109	49.92	ug/l	0.00
Spiked Amount			Recovery	=	99.84%	
62) 4-Bromofluorobenzene	10.29	95	320031	44.25	ug/l	0.00
Spiked Amount			Recovery	=	88.50%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chloromethane	1.33	50	413	Below Cal		96
5) Bromomethane	1.58	94	20	Below Cal		93
8) Diethyl Ether	2.10	74	611	0.210	ug/l	68
11) Tert butyl alcohol	2.83	59	4833	3.728	ug/l #	73
13) Acrolein	2.19	56	187	0.343	ug/l #	65
16) Acetone	2.31	43	12797	4.461	ug/l	100
18) Methyl Acetate	2.61	43	3680	0.496	ug/l	93
20) Methylene Chloride	2.69	84	7320	1.348	ug/l	97
31) Cyclohexane	4.96	56	8415	1.002	ug/l #	1
36) 1,1-Dichloropropene	4.96	75	31340	4.628	ug/l #	49
38) Carbon Tetrachloride	4.96	117	41195	6.302	ug/l #	16
43) Isopropyl Acetate	5.53	43	84939	7.362	ug/l	99
48) Methyl methacrylate	6.53	41	4546	0.817	ug/l #	14
49) 1,4-Dioxane	6.68	88	154	1.104	ug/l #	1
51) 4-Methyl-2-Pentanone	7.40	43	80173	10.062	ug/l #	45
54) cis-1,3-Dichloropropene	7.40	75	38273	4.441	ug/l #	65
56) Ethyl methacrylate	7.97	69	109	0.984	ug/l #	27
57) 1,3-Dichloropropane	8.40	76	6878	0.759	ug/l #	42
59) 2-Hexanone	8.40	43	88338	14.687	ug/l #	52
76) 1,2,3-Trichloropropane	10.29	75	156251	20.457	ug/l #	37
81) trans-1,4-Dichloro-2-buten	10.29	75	156251	68.883	ug/l #	100
95) Naphthalene	13.80	128	92	1.794	ug/l #	70

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.96 min Scan# 1204

Delta R.T. 0.00 min

Lab File: VU034199.D

Acq: 02 Sep 2019 14:02

Instrument :

MSVOA_U

ClientSampleId :

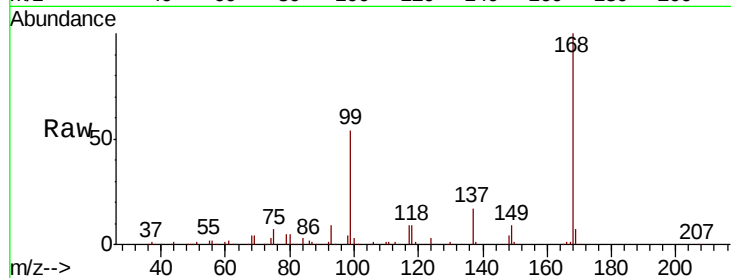
T16-17-C3-(0)

Tgt Ion:168 Resp: 438769

Ion Ratio Lower Upper

168 100

99 53.6 42.3 63.5



Abundance Ion 167.90 (167.60 to 168.60): VU034199.D

Ion 98.90 (98.60 to 99.60): VU034199.D

4.96

200000

150000

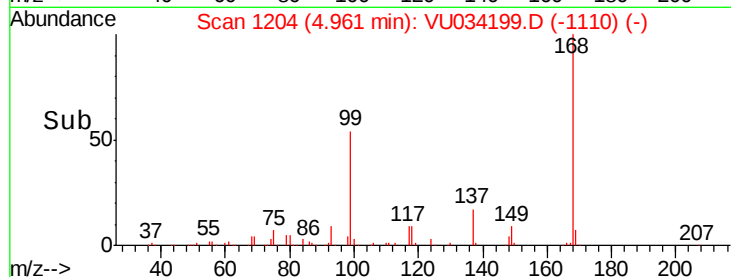
100000

50000

0

4.90 5.00 5.10

Time-->



#3

Chloromethane

Concen: Below Cal

RT: 1.33 min Scan# 74

Delta R.T. 0.01 min

Lab File: VU034199.D

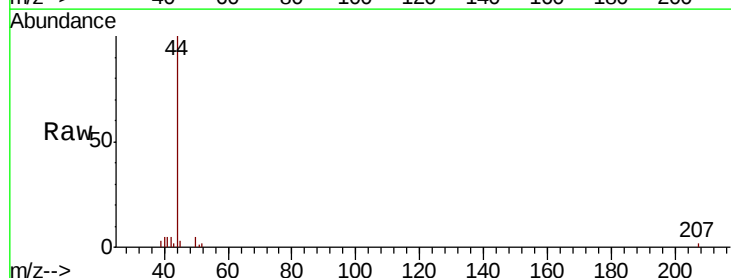
Acq: 02 Sep 2019 14:02

Tgt Ion: 50 Resp: 413

Ion Ratio Lower Upper

50 100

52 35.1 26.2 39.4



Abundance Ion 49.90 (49.60 to 50.60): VU034199.D

Ion 51.90 (51.60 to 52.60): VU034199.D

1.33

500

400

300

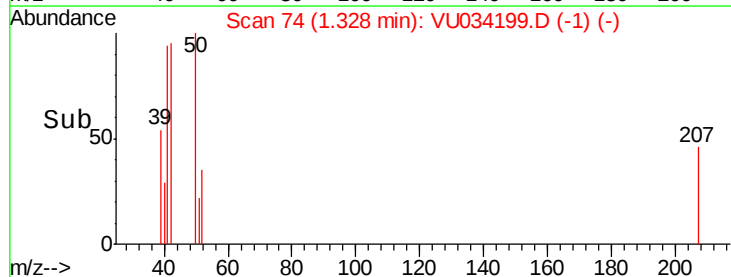
200

100

0

1.30 1.32 1.34

Time-->





#5

Bromomethane

Concen: Below Cal

RT: 1.58 min Scan# 152

Delta R.T. -0.02 min

Lab File: VU034199.D

Acq: 02 Sep 2019 14:02

Instrument :

MSVOA_U

ClientSampleId :

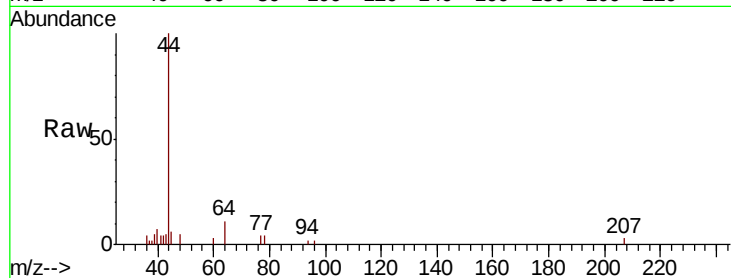
T16-17-C3-(0)

Tgt Ion: 94 Resp: 20

Ion Ratio Lower Upper

94 100

96 101.9 76.3 114.5

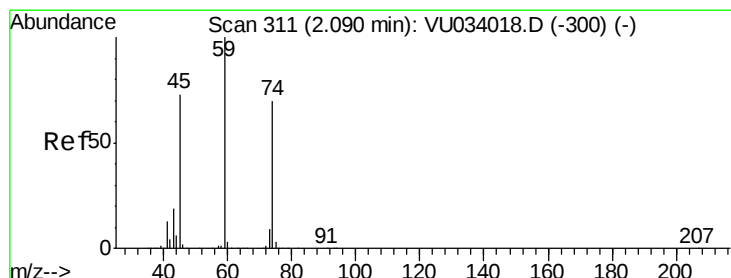
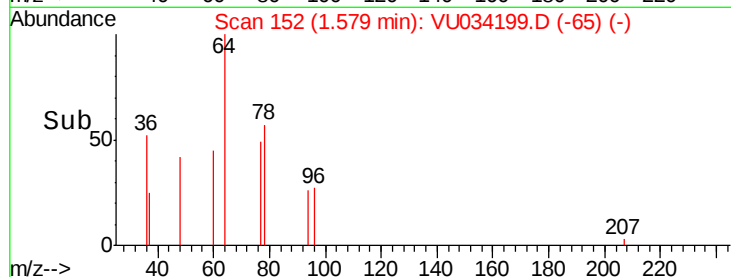


Abundance Ion 93.90 (93.60 to 94.60): VU034018.D (-143) (-)

Ion 95.90 (95.60 to 96.60): VU034018.D (-143) (-)

1.58

Time-->



#8

Diethyl Ether

Concen: 0.210 ug/l

RT: 2.10 min Scan# 313

Delta R.T. 0.01 min

Lab File: VU034199.D

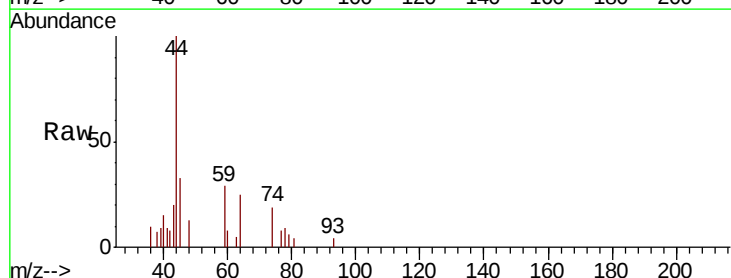
Acq: 02 Sep 2019 14:02

Tgt Ion: 74 Resp: 611

Ion Ratio Lower Upper

74 100

45 136.7 51.8 155.5

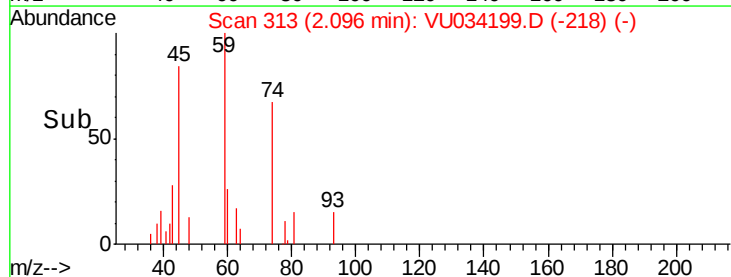


Abundance Ion 74.00 (73.70 to 74.70): VU034018.D (-300) (-)

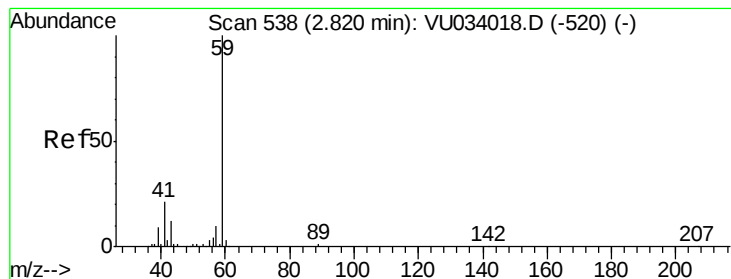
Ion 45.00 (44.70 to 45.70): VU034018.D (-300) (-)

2.10

Time-->



Time-->



#11

Tert butyl alcohol

Concen: 3.728 ug/l

RT: 2.83 min Scan# 540

Delta R.T. 0.01 min

Lab File: VU034199.D

Acq: 02 Sep 2019 14:02

Instrument :

MSVOA_U

ClientSampleId :

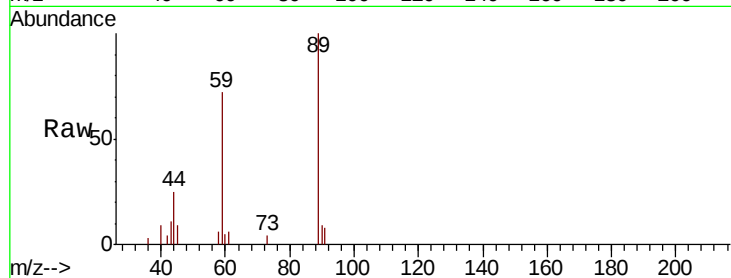
T16-17-C3-(0)

Tgt Ion: 59 Resp: 4833

Ion Ratio Lower Upper

59 100

57 0.0 8.0 12.0#



Abundance Ion 59.00 (58.70 to 59.70): VU034018.D (-520) (-)

Ion 57.00 (56.70 to 57.70): VU034018.D (-520) (-)

2.83

2500

2000

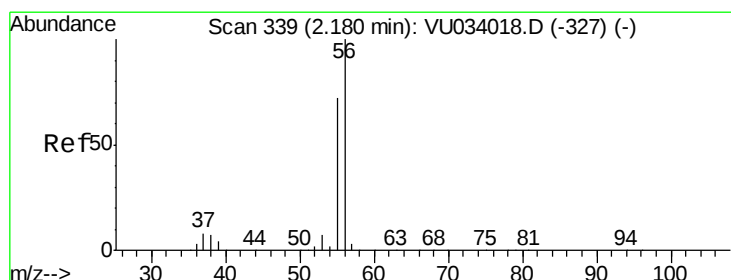
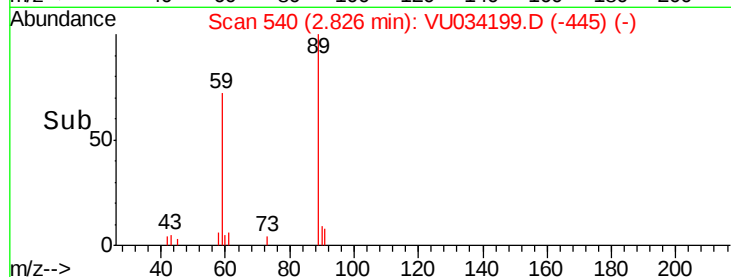
1500

1000

500

0

Time--> 2.75 2.80 2.85



#13

Acrolein

Concen: 0.343 ug/l

RT: 2.19 min Scan# 343

Delta R.T. 0.01 min

Lab File: VU034199.D

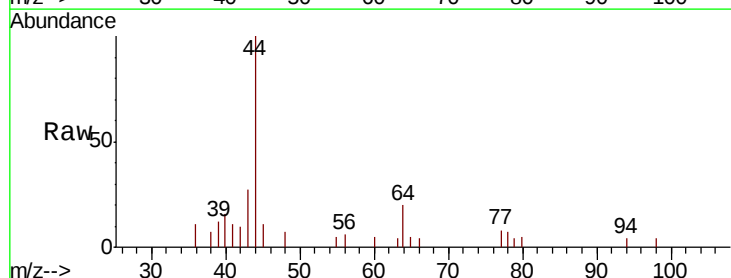
Acq: 02 Sep 2019 14:02

Tgt Ion: 56 Resp: 187

Ion Ratio Lower Upper

56 100

55 100.5 57.1 85.7#



Abundance Ion 56.00 (55.70 to 56.70): VU034018.D (-327) (-)

Ion 55.00 (54.70 to 55.70): VU034018.D (-327) (-)

2.19

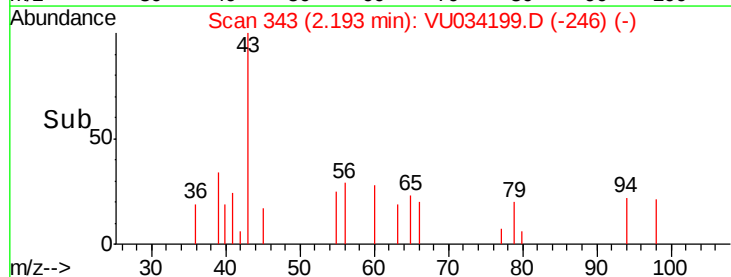
150

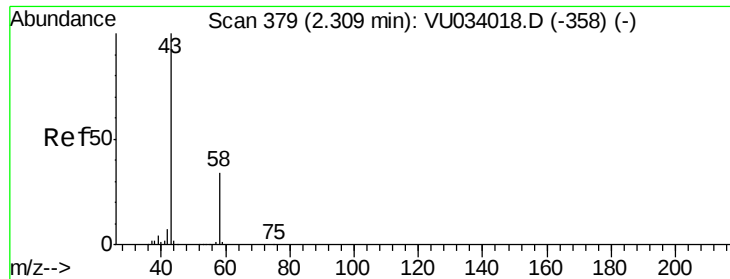
100

50

0

Time--> 2.16 2.18 2.20





#16

Acetone

Concen: 4.461 ug/l

RT: 2.31 min Scan# 380

Delta R.T. 0.00 min

Lab File: VU034199.D

Acq: 02 Sep 2019 14:02

Instrument :

MSVOA_U

ClientSampleId :

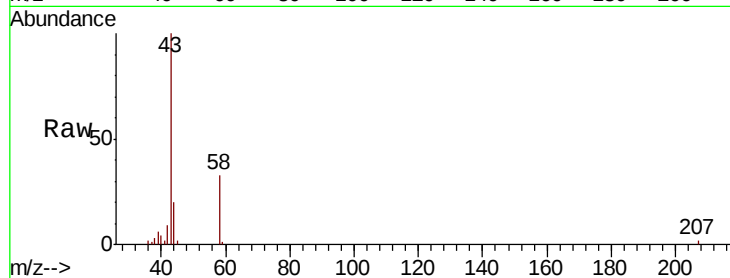
T16-17-C3-(0)

Tgt Ion: 43 Resp: 12797

Ion Ratio Lower Upper

43 100

58 33.6 26.8 40.2



Abundance Ion 43.00 (42.70 to 43.70): VU034018.D (-358) (-)

Ion 58.00 (57.70 to 58.70): VU034018.D (-358) (-)

2.31

8000

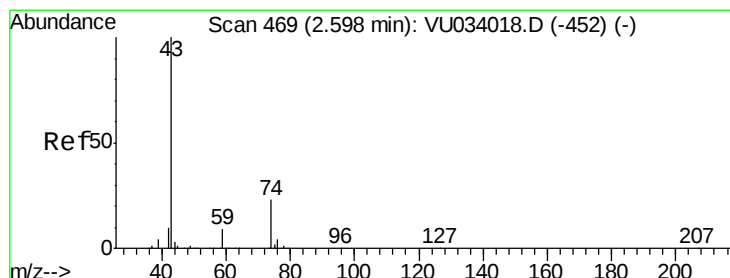
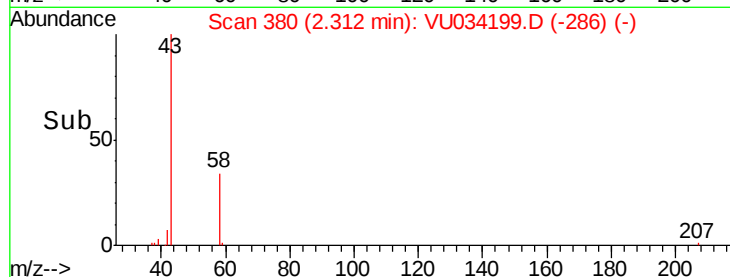
6000

4000

2000

0

Time-->



#18

Methyl Acetate

Concen: 0.496 ug/l

RT: 2.61 min Scan# 474

Delta R.T. 0.02 min

Lab File: VU034199.D

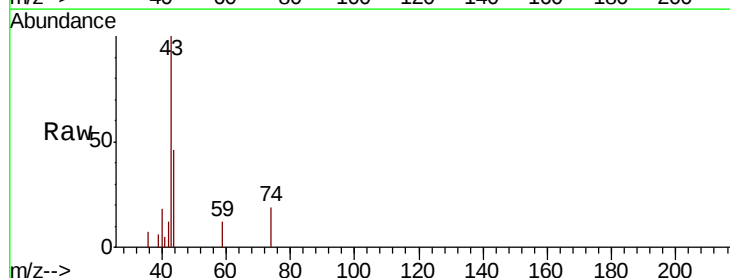
Acq: 02 Sep 2019 14:02

Tgt Ion: 43 Resp: 3680

Ion Ratio Lower Upper

43 100

74 20.5 19.2 28.8



Abundance Ion 43.00 (42.70 to 43.70): VU034018.D (-452) (-)

Ion 74.00 (73.70 to 74.70): VU034018.D (-452) (-)

2.61

2000

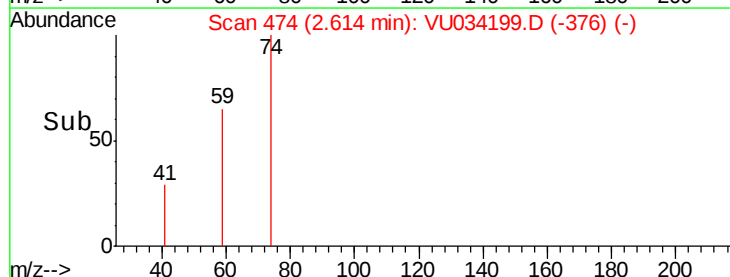
1500

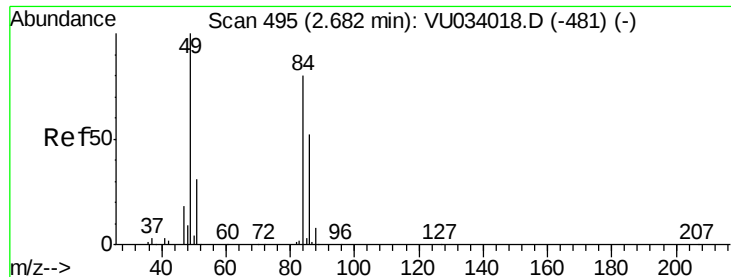
1000

500

0

Time-->

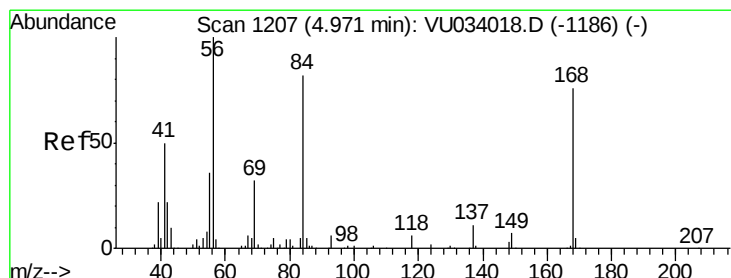
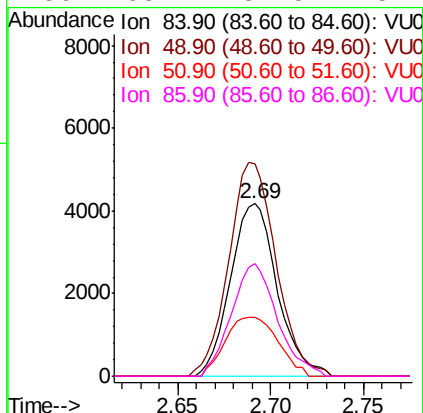
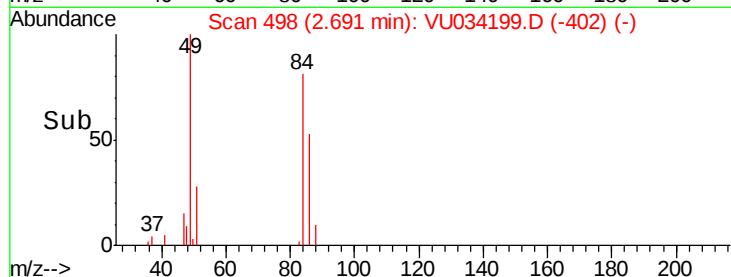
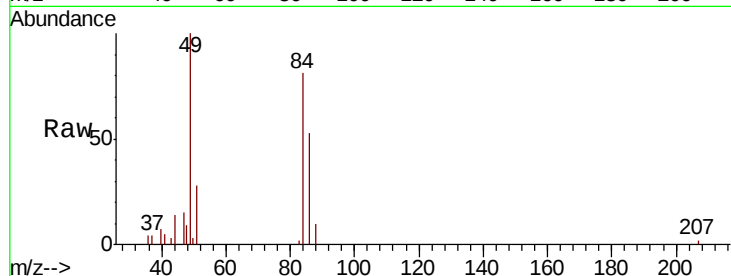




#20
Methylene Chloride
Concen: 1.348 ug/l
RT: 2.69 min Scan# 498
Delta R.T. 0.01 min
Lab File: VU034199.D
Acq: 02 Sep 2019 14:02

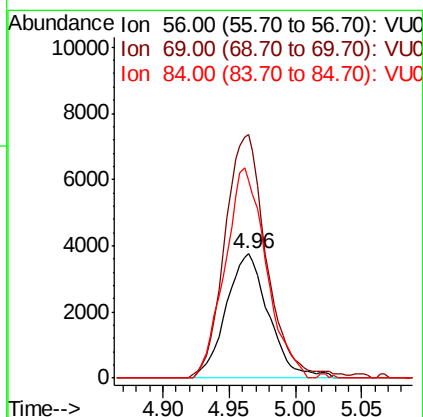
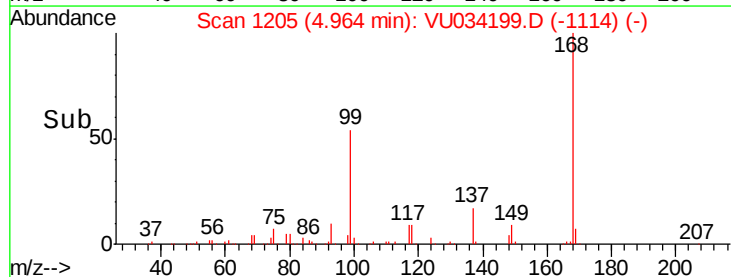
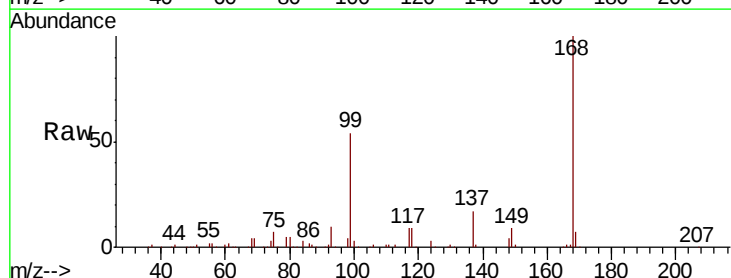
Instrument :
MSVOA_U
ClientSampleId :
T16-17-C3-(0)

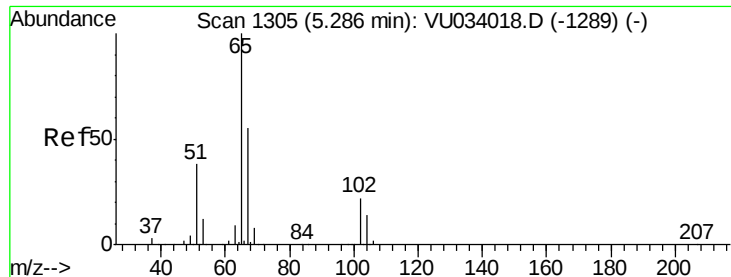
Tgt Ion: 84 Resp: 7320
Ion Ratio Lower Upper
84 100
49 122.7 100.2 150.4
51 33.8 30.8 46.2
86 65.2 52.5 78.7



#31
Cyclohexane
Concen: 1.002 ug/l
RT: 4.96 min Scan# 1205
Delta R.T. -0.01 min
Lab File: VU034199.D
Acq: 02 Sep 2019 14:02

Tgt Ion: 56 Resp: 8415
Ion Ratio Lower Upper
56 100
69 196.3 25.4 38.0#
84 159.6 65.8 98.8#





#33

1,2-Dichloroethane-d4

Concen: 49.633 ug/l

RT: 5.29 min Scan# 1306

Delta R.T. 0.00 min

Lab File: VU034199.D

Acq: 02 Sep 2019 14:02

Instrument :

MSVOA_U

ClientSampleId :

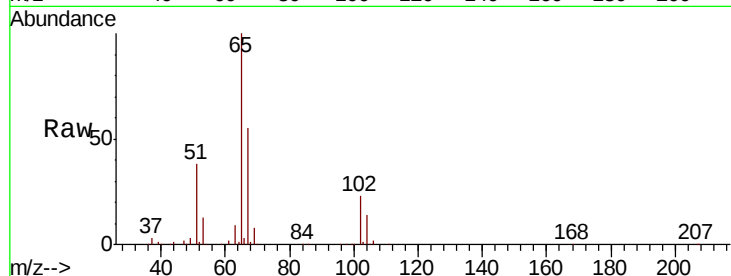
T16-17-C3-(0)

Tgt Ion: 65 Resp: 279042

Ion Ratio Lower Upper

65 100

67 54.6 0.0 110.6



Abundance Ion 64.90 (64.60 to 65.60): VU034199.D (-1289) (-)

Ion 66.90 (66.60 to 67.60): VU034199.D (-1289) (-)

5.29

150000

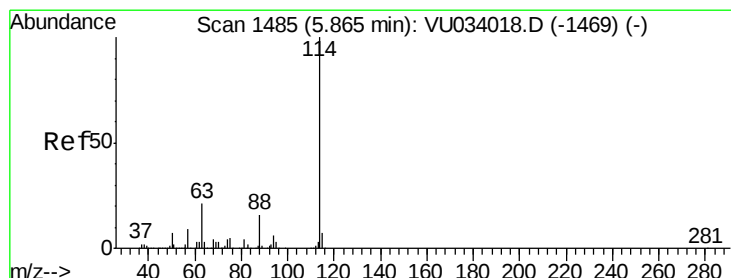
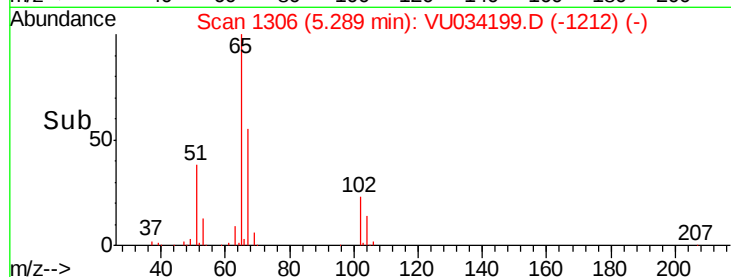
100000

50000

0

Time-->

5.20 5.30 5.40



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.87 min Scan# 1486

Delta R.T. 0.00 min

Lab File: VU034199.D

Acq: 02 Sep 2019 14:02

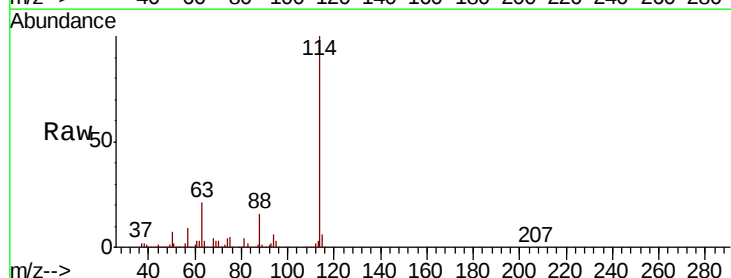
Tgt Ion: 114 Resp: 715952

Ion Ratio Lower Upper

114 100

63 20.9 0.0 42.0

88 15.9 0.0 32.0



Abundance Ion 113.90 (113.60 to 114.60): VU034199.D (-1469) (-)

Ion 63.00 (62.70 to 63.70): VU034199.D (-1469) (-)

Ion 87.90 (87.60 to 88.60): VU034199.D (-1469) (-)

5.87

400000

300000

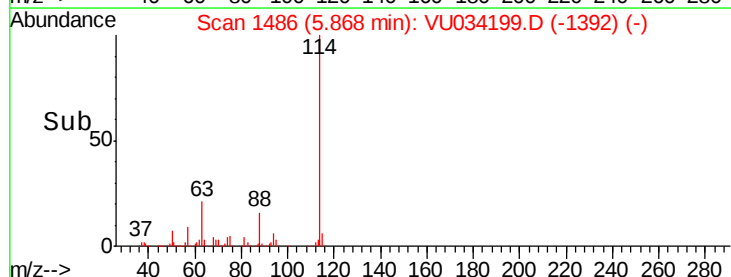
200000

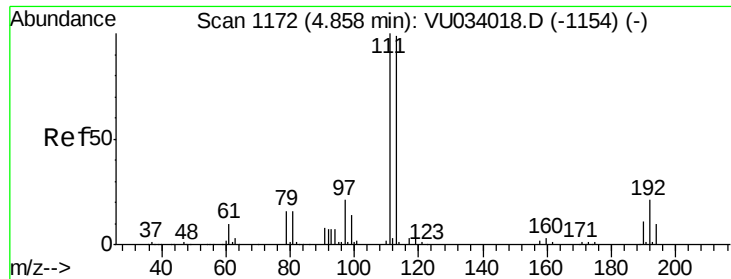
100000

0

Time-->

5.80 5.90 6.00 6.10





#35

Dibromofluoromethane

Concen: 47.155 ug/l

RT: 4.86 min Scan# 1173

Delta R.T. 0.00 min

Lab File: VU034199.D

Acq: 02 Sep 2019 14:02

Instrument :

MSVOA_U

ClientSampleId :

T16-17-C3-(0)

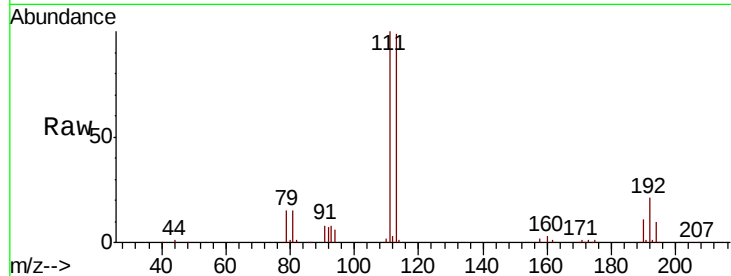
Tgt Ion:113 Resp: 234160

Ion Ratio Lower Upper

113 100

111 101.5 81.7 122.5

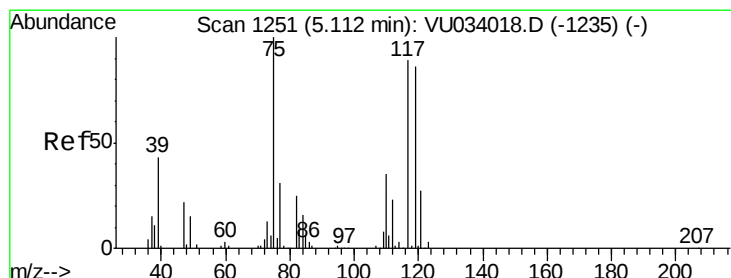
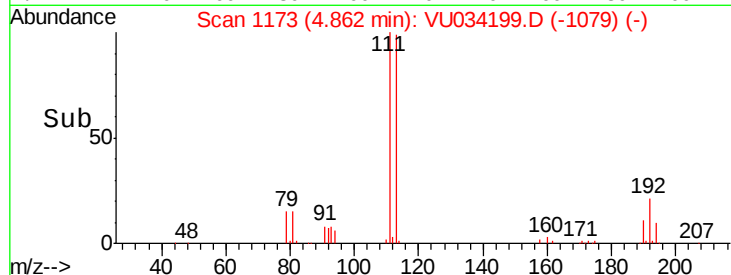
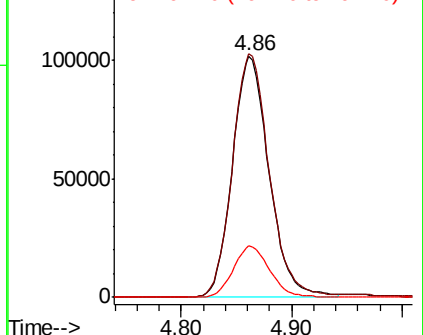
192 21.4 17.1 25.7



Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V



#36

1,1-Dichloropropene

Concen: 4.628 ug/l

RT: 4.96 min Scan# 1203

Delta R.T. -0.15 min

Lab File: VU034199.D

Acq: 02 Sep 2019 14:02

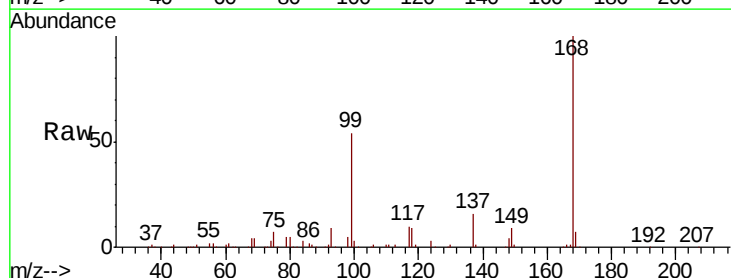
Tgt Ion: 75 Resp: 31340

Ion Ratio Lower Upper

75 100

110 8.4 17.8 53.5#

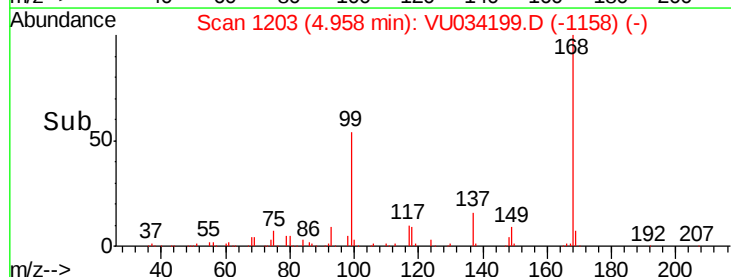
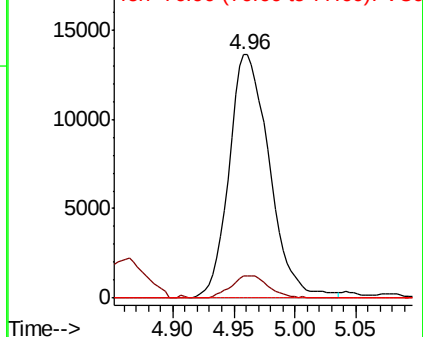
77 0.0 25.0 37.4#

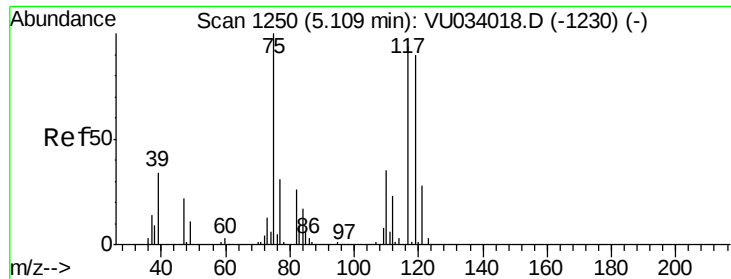


Abundance Ion 74.90 (74.60 to 75.60): VU0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VU0





#38

Carbon Tetrachloride

Concen: 6.302 ug/l

RT: 4.96 min Scan# 1204

Delta R.T. -0.15 min

Lab File: VU034199.D

Acq: 02 Sep 2019 14:02

Instrument :

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T16-17-C3-(0)

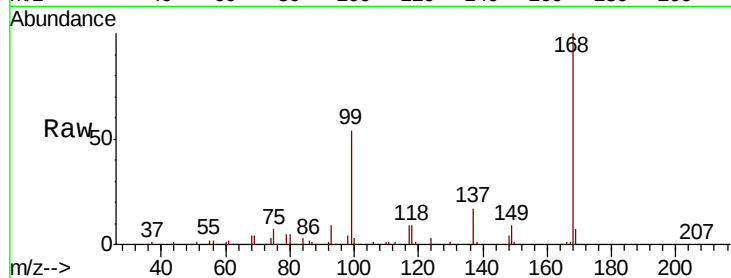
Tgt Ion:117 Resp: 41195

Ion Ratio Lower Upper

117 100

119 5.4 77.0 115.4#

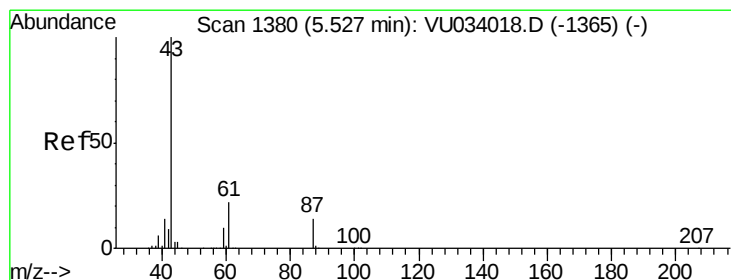
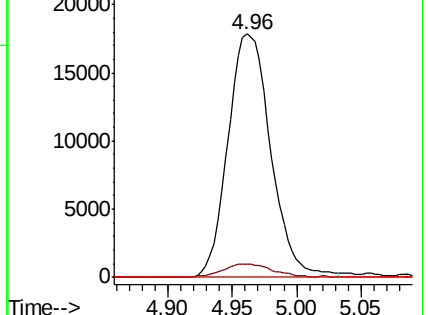
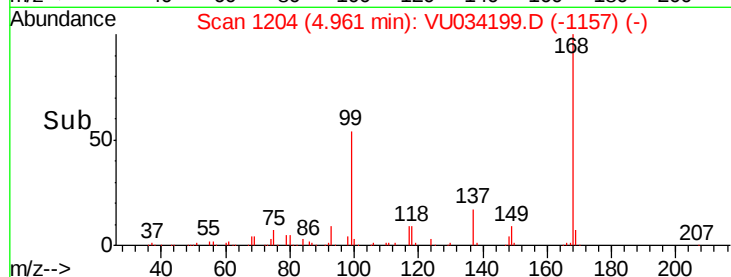
121 0.0 23.9 35.9#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#43

Isopropyl Acetate

Concen: 7.362 ug/l

RT: 5.53 min Scan# 1382

Delta R.T. 0.01 min

Lab File: VU034199.D

Acq: 02 Sep 2019 14:02

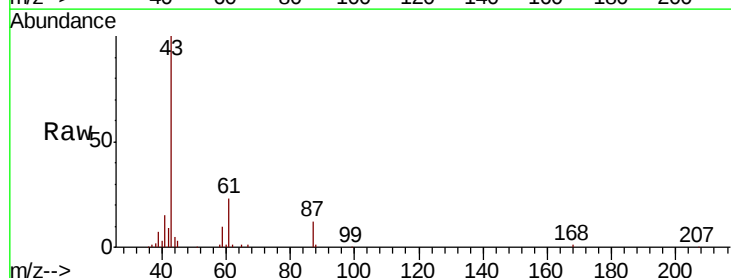
Tgt Ion: 43 Resp: 84939

Ion Ratio Lower Upper

43 100

61 21.4 17.2 25.8

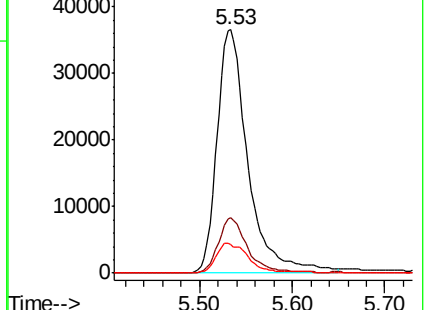
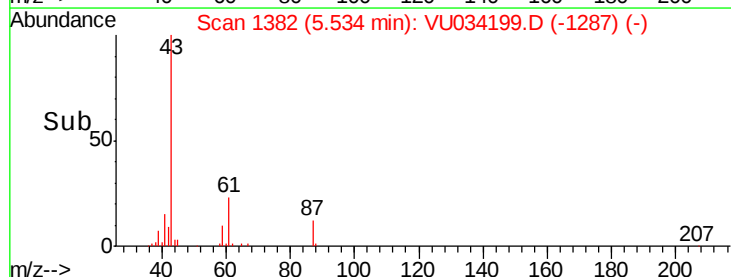
87 12.7 10.8 16.2

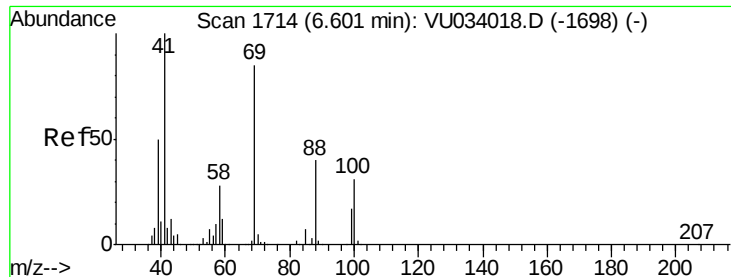


Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 61.00 (60.70 to 61.70): VU0

Ion 87.00 (86.70 to 87.70): VU0

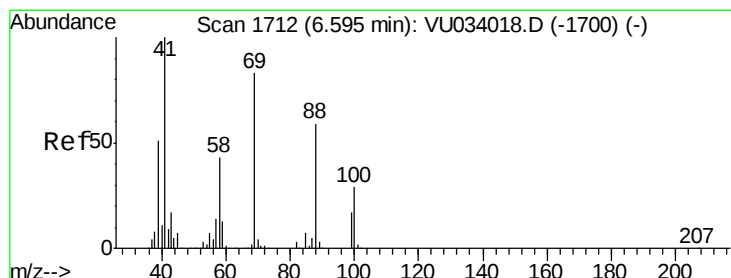
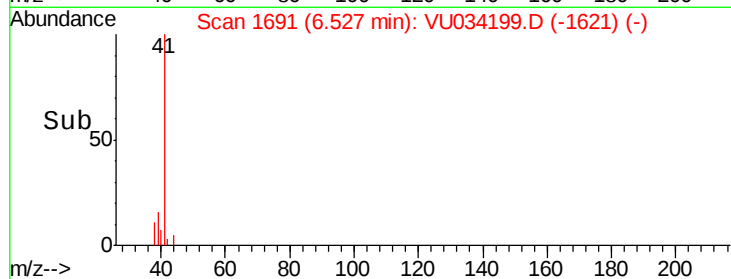
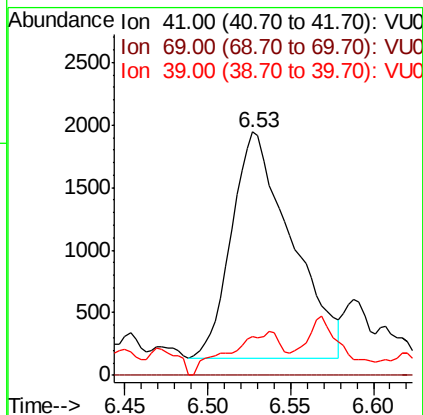
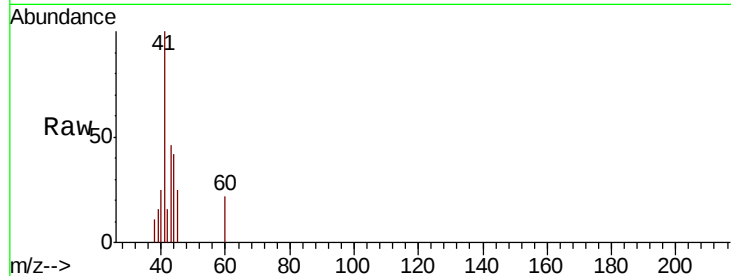




#48
Methyl methacrylate
Concen: 0.817 ug/l
RT: 6.53 min Scan# 1691
Delta R.T. -0.07 min
Lab File: VU034199.D
Acq: 02 Sep 2019 14:02

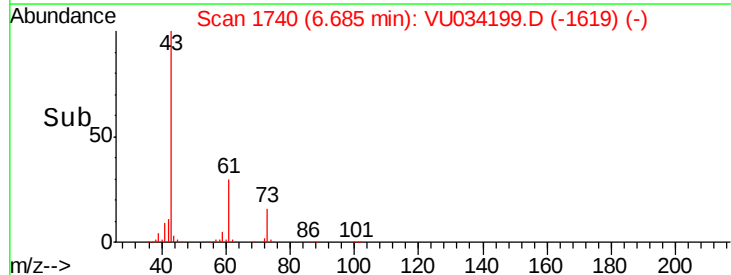
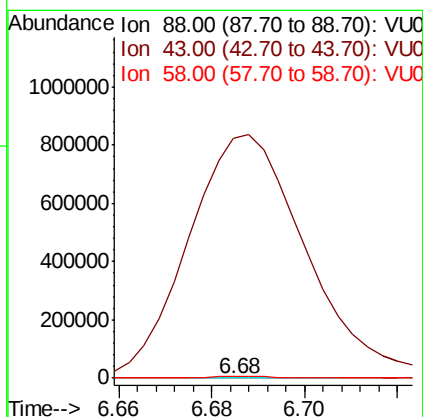
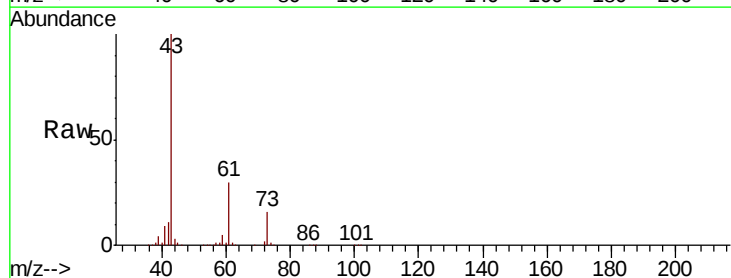
Instrument :
MSVOA_U
ClientSampleId :
T16-17-C3-(0)

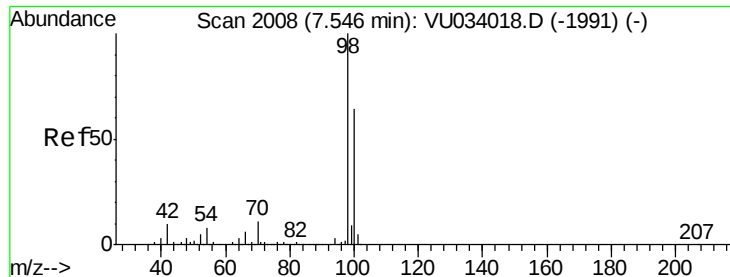
Tgt Ion: 41 Resp: 4546
Ion Ratio Lower Upper
41 100
69 0.0 69.5 104.3#
39 0.0 40.3 60.5#



#49
1,4-Dioxane
Concen: 1.104 ug/l
RT: 6.68 min Scan# 1740
Delta R.T. 0.09 min
Lab File: VU034199.D
Acq: 02 Sep 2019 14:02

Tgt Ion: 88 Resp: 154
Ion Ratio Lower Upper
88 100
43 996674.0 24.8 37.2#
58 5366.9 59.3 88.9#

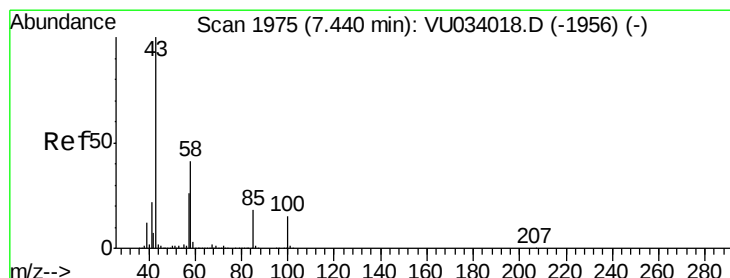
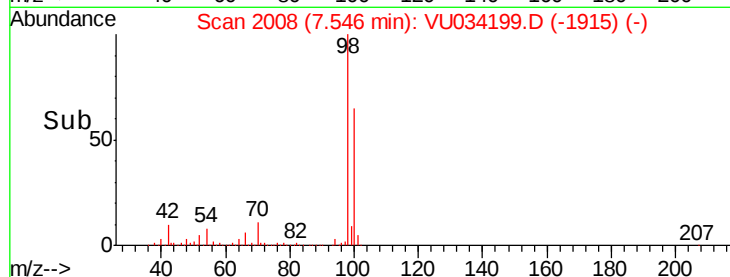
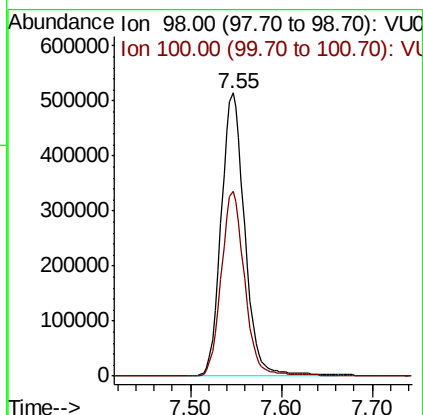
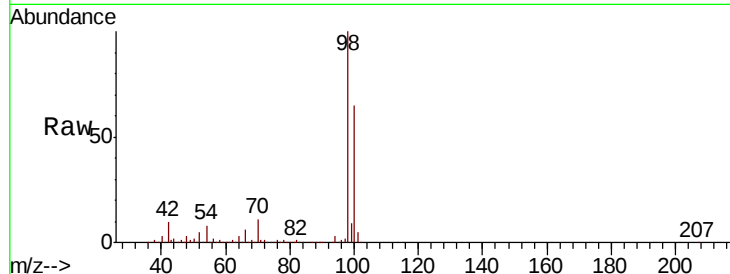




#50
Toluene-d8
Concen: 49.915 ug/l
RT: 7.55 min Scan# 2008
Delta R.T. 0.00 min
Lab File: VU034199.D
Acq: 02 Sep 2019 14:02

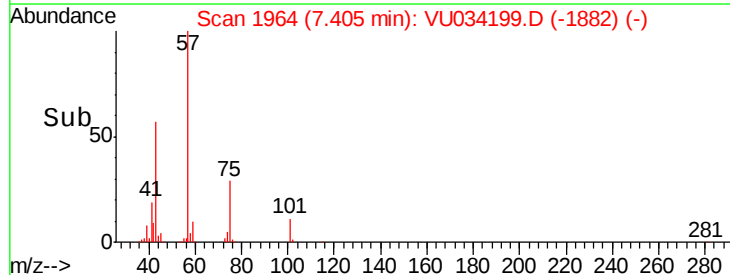
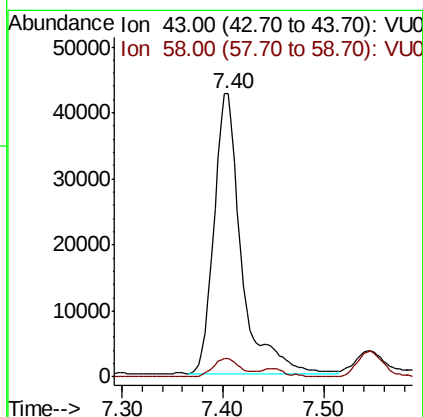
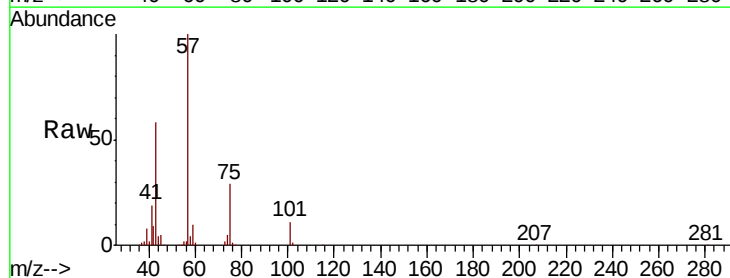
Instrument :
MSVOA_U
ClientSampleId :
T16-17-C3-(0)

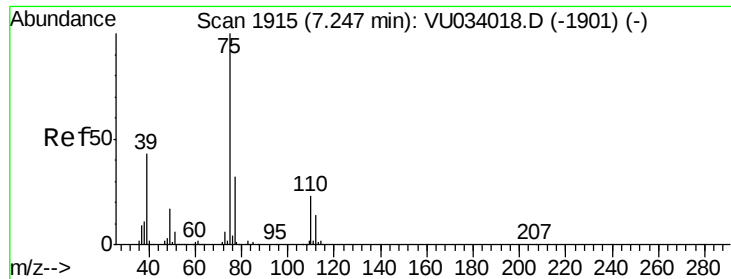
Tgt Ion: 98 Resp: 928109
Ion Ratio Lower Upper
98 100
100 64.0 50.3 75.5



#51
4-Methyl-2-Pentanone
Concen: 10.062 ug/l
RT: 7.40 min Scan# 1964
Delta R.T. -0.04 min
Lab File: VU034199.D
Acq: 02 Sep 2019 14:02

Tgt Ion: 43 Resp: 80173
Ion Ratio Lower Upper
43 100
58 6.4 32.2 48.4#



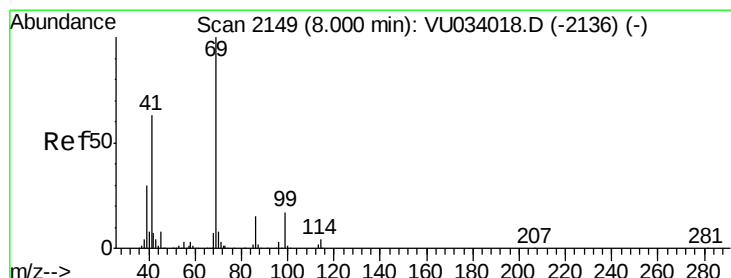
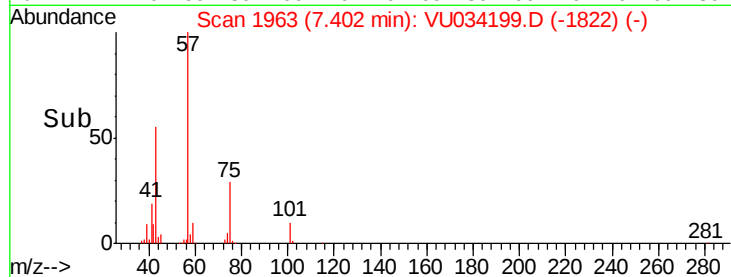
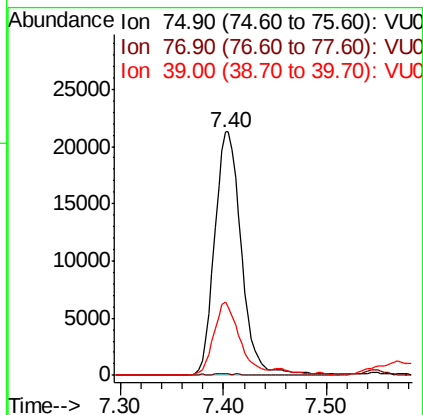
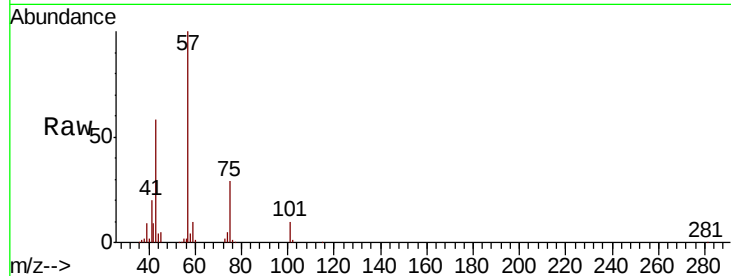


#54

cis-1,3-Dichloropropene
 Concen: 4.441 ug/l
 RT: 7.40 min Scan# 1963
 Delta R.T. 0.15 min
 Lab File: VU034199.D
 Acq: 02 Sep 2019 14:02

Instrument :
 MSVOA_U
 ClientSampleId :
 T16-17-C3-(0)

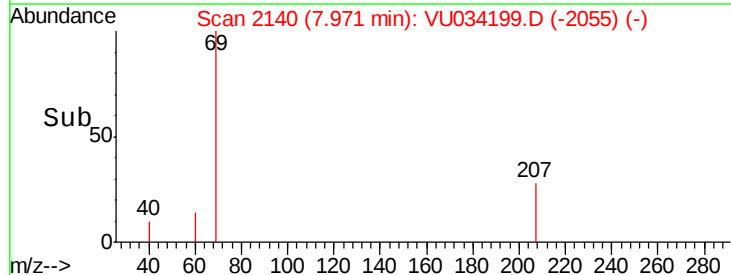
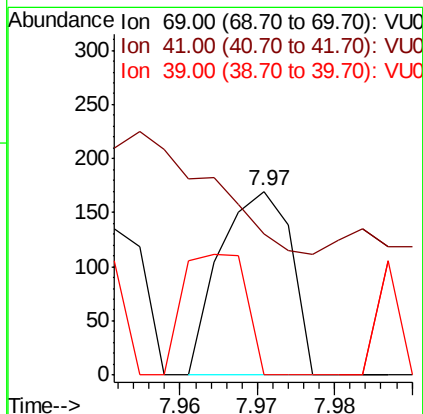
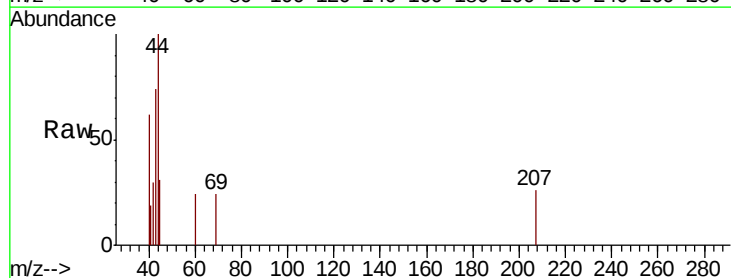
Tgt Ion: 75 Resp: 38273
 Ion Ratio Lower Upper
 75 100
 77 0.6 25.2 37.8#
 39 30.4 34.6 51.8#

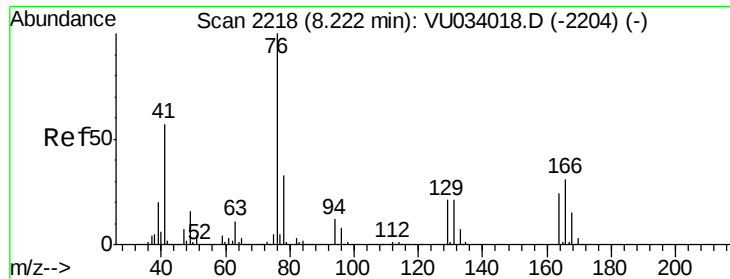


#56

Ethyl methacrylate
 Concen: 0.984 ug/l
 RT: 7.97 min Scan# 2140
 Delta R.T. -0.03 min
 Lab File: VU034199.D
 Acq: 02 Sep 2019 14:02

Tgt Ion: 69 Resp: 109
 Ion Ratio Lower Upper
 69 100
 41 0.0 50.7 76.1#
 39 0.0 24.2 36.2#





#57

1,3-Dichloropropane

Concen: 0.759 ug/l

RT: 8.40 min Scan# 2272

Delta R.T. 0.17 min

Lab File: VU034199.D

Acq: 02 Sep 2019 14:02

Instrument :

MSVOA_U

ClientSampleId :

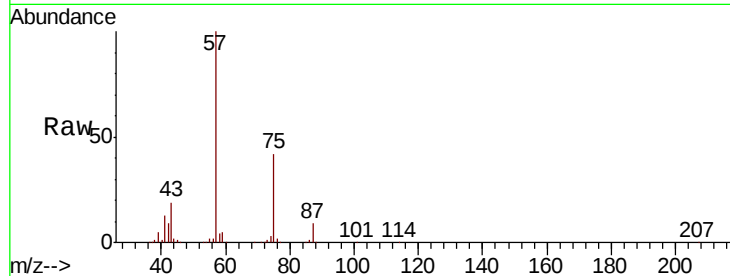
T16-17-C3-(0)

Tgt Ion: 76 Resp: 6878

Ion Ratio Lower Upper

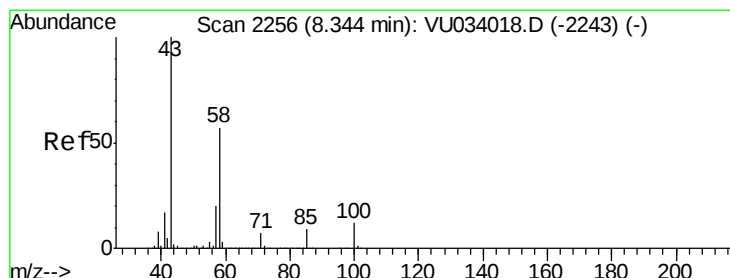
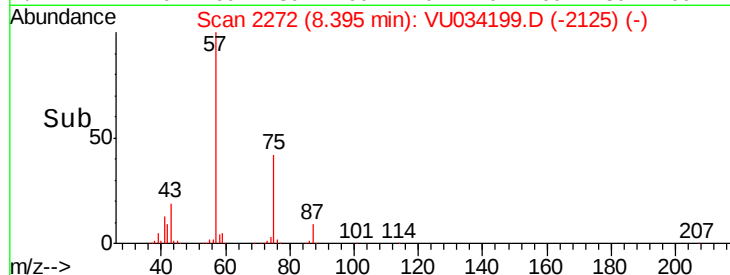
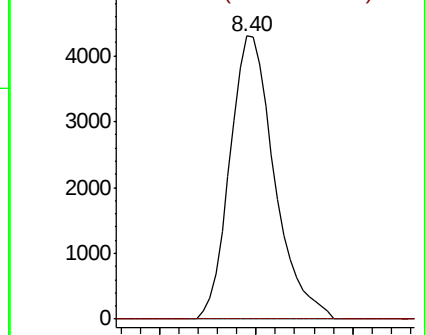
76 100

78 0.0 26.2 39.4#



Abundance Ion 75.90 (75.60 to 76.60): VU034199.D (-2125) (-)

Ion 77.90 (77.60 to 78.60): VU034199.D (-2125) (-)



#59

2-Hexanone

Concen: 14.687 ug/l

RT: 8.40 min Scan# 2273

Delta R.T. 0.05 min

Lab File: VU034199.D

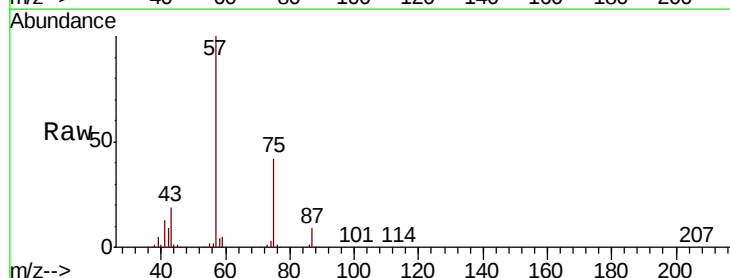
Acq: 02 Sep 2019 14:02

Tgt Ion: 43 Resp: 88338

Ion Ratio Lower Upper

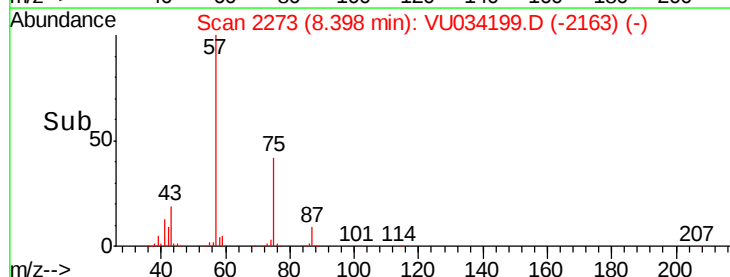
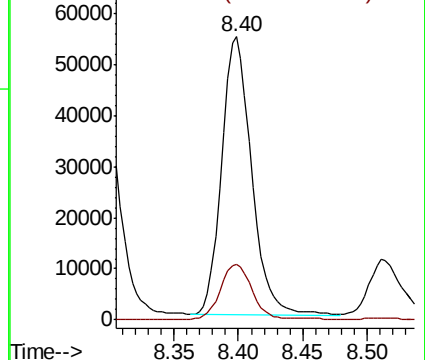
43 100

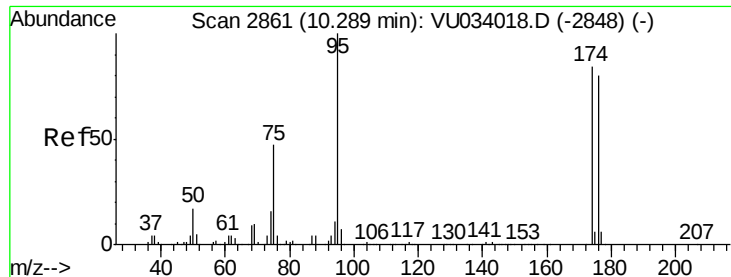
58 21.3 28.4 85.3#



Abundance Ion 43.00 (42.70 to 43.70): VU034199.D (-2163) (-)

Ion 58.00 (57.70 to 58.70): VU034199.D (-2163) (-)

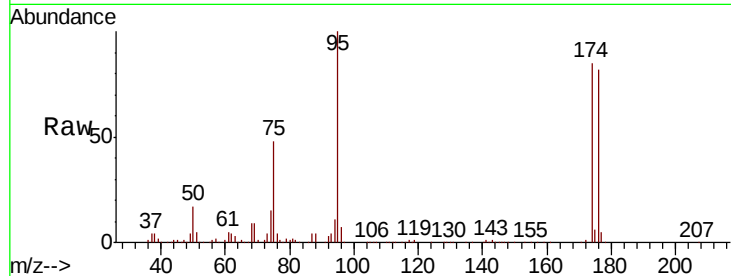




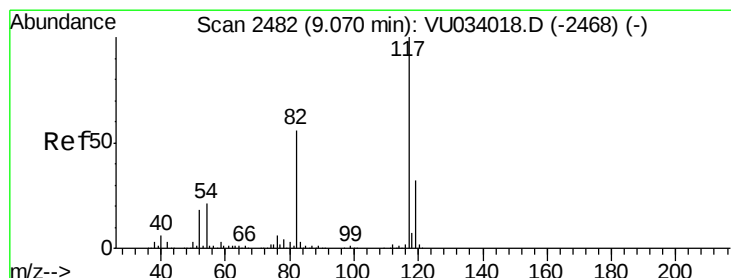
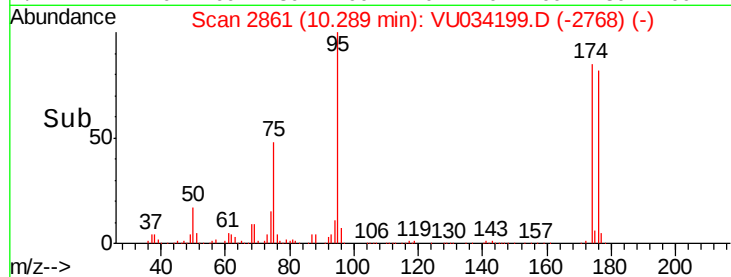
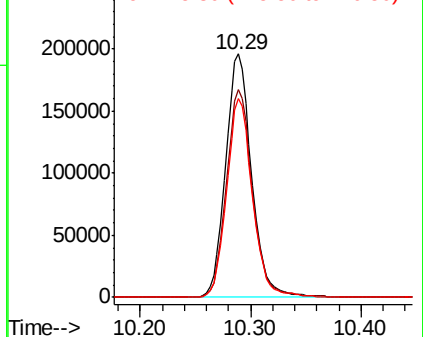
#62
4-Bromofluorobenzene
Concen: 44.247 ug/l
RT: 10.29 min Scan# 2861
Delta R.T. 0.00 min
Lab File: VU034199.D
Acq: 02 Sep 2019 14:02

Instrument :
MSVOA_U
ClientSampleId :
T16-17-C3-(0)

Tgt Ion: 95 Resp: 320031
Ion Ratio Lower Upper
95 100
174 86.3 0.0 168.8
176 81.4 0.0 161.8

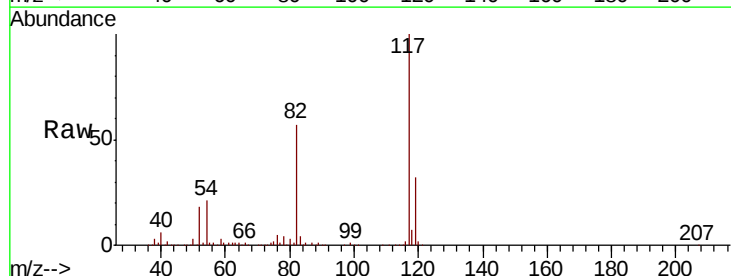


Abundance Ion 94.90 (94.60 to 95.60): VU0
Ion 173.80 (173.50 to 174.50): V
Ion 175.80 (175.50 to 176.50): V

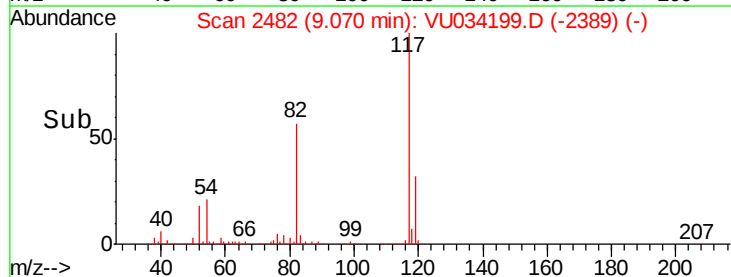
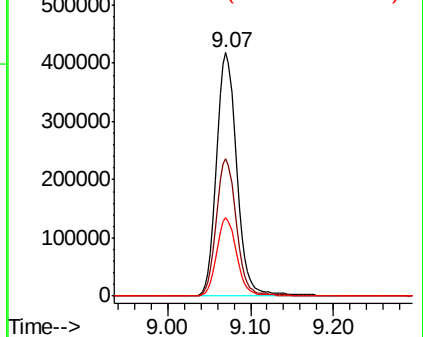


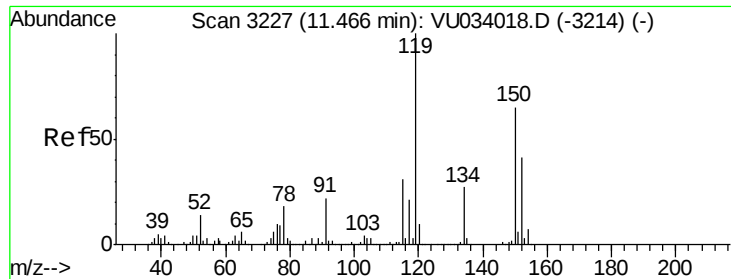
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 9.07 min Scan# 2482
Delta R.T. 0.00 min
Lab File: VU034199.D
Acq: 02 Sep 2019 14:02

Tgt Ion: 117 Resp: 710692
Ion Ratio Lower Upper
117 100
82 56.6 45.1 67.7
119 32.2 25.4 38.0



Abundance Ion 116.90 (116.60 to 117.60): V
Ion 82.00 (81.70 to 82.70): VU0
Ion 118.90 (118.60 to 119.60): V





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 11.46 min Scan# 3226

Delta R.T. -0.00 min

Lab File: VU034199.D

Acq: 02 Sep 2019 14:02

Instrument :

MSVOA_U

ClientSampleId :

T16-17-C3-(0)

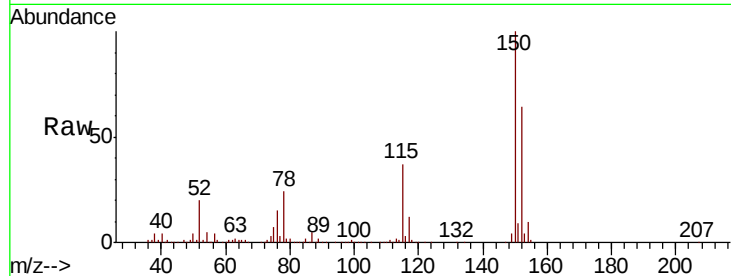
Tgt Ion:152 Resp: 338893

Ion Ratio Lower Upper

152 100

115 58.0 41.1 123.3

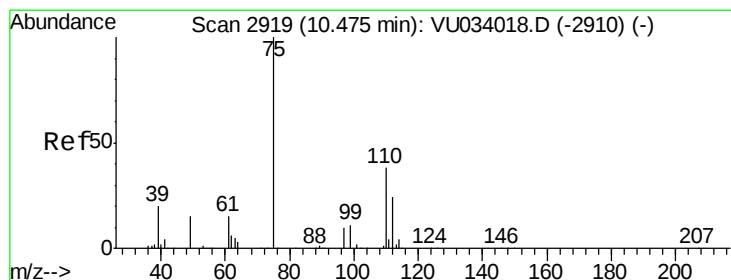
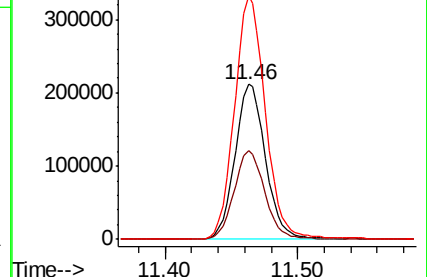
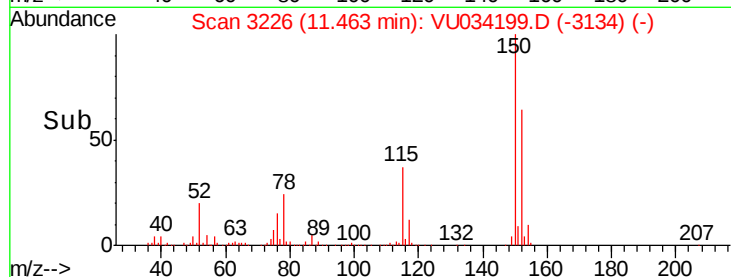
150 158.7 0.0 348.8



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 20.457 ug/l

RT: 10.29 min Scan# 2861

Delta R.T. -0.19 min

Lab File: VU034199.D

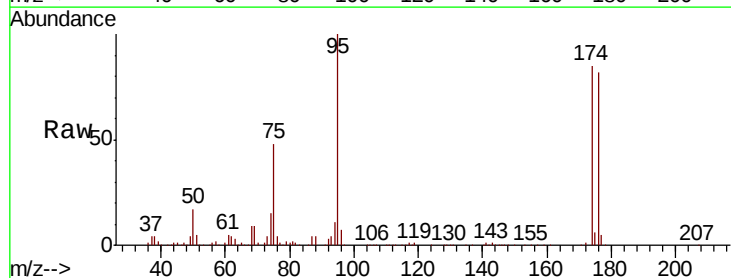
Acq: 02 Sep 2019 14:02

Tgt Ion: 75 Resp: 156251

Ion Ratio Lower Upper

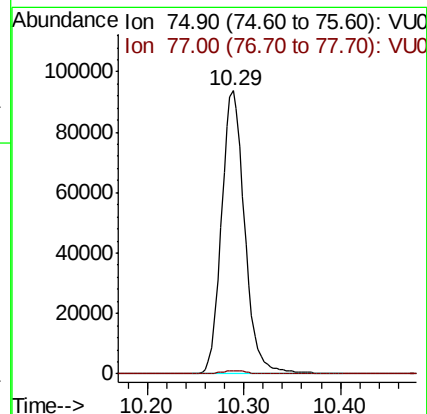
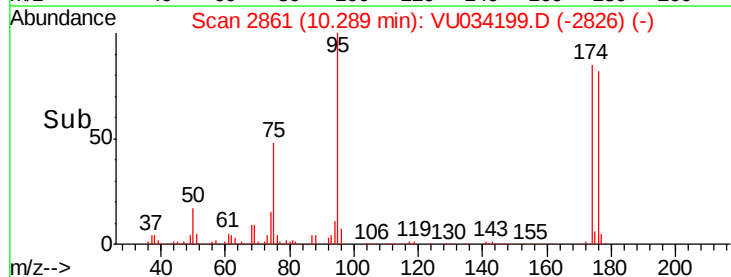
75 100

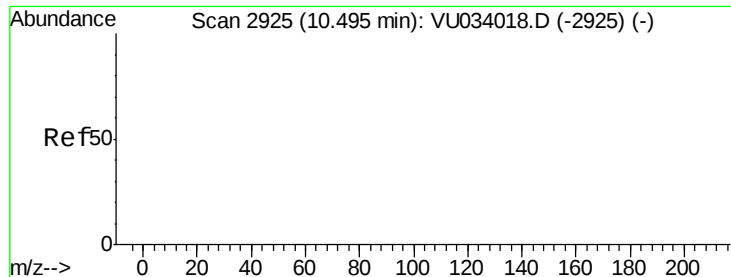
77 1.2 20.1 60.2#



Abundance Ion 74.90 (74.60 to 75.60): VU0

Ion 77.00 (76.70 to 77.70): VU0





#81

trans-1,4-Dichloro-2-butene

Concen: 68.883 ug/l

RT: 10.29 min Scan# 2861

Delta R.T. -0.21 min

Lab File: VU034199.D

Acq: 02 Sep 2019 14:02

Instrument :

MSVOA_U

ClientSampleId :

T16-17-C3-(0)

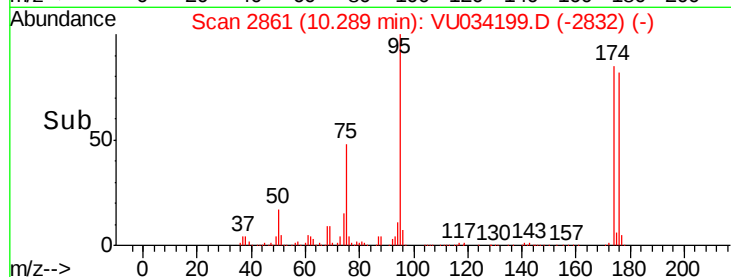
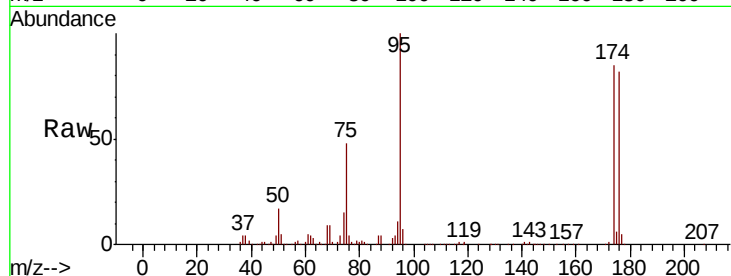
Tgt Ion: 75 Resp: 156251

Ion Ratio Lower Upper

75 100

53 0.2 0.0 0.0#

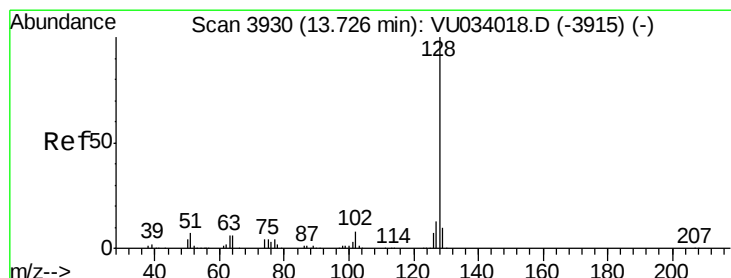
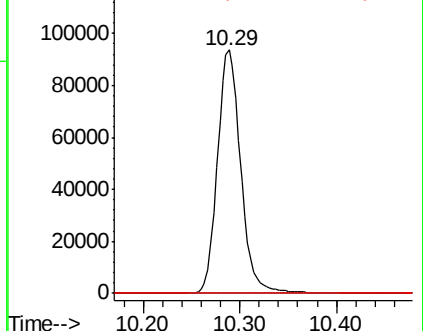
89 0.0 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VU034199.D

Ion 53.00 (52.70 to 53.70): VU034199.D

Ion 88.90 (88.60 to 89.60): VU034199.D



#95

Naphthalene

Concen: 1.794 ug/l

RT: 13.80 min Scan# 3954

Delta R.T. 0.08 min

Lab File: VU034199.D

Acq: 02 Sep 2019 14:02

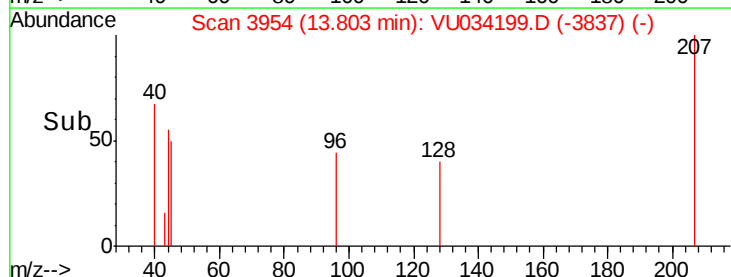
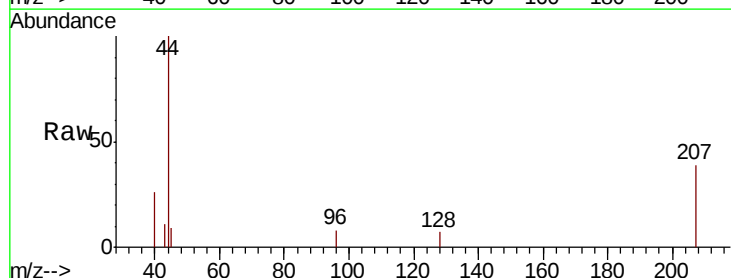
Tgt Ion: 128 Resp: 92

Ion Ratio Lower Upper

128 100

127 0.0 10.2 15.4#

129 0.0 8.4 12.6#



Abundance Ion 128.00 (127.70 to 128.70): VU034199.D

Ion 127.00 (126.70 to 127.70): VU034199.D

Ion 129.00 (128.70 to 129.70): VU034199.D

