

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD120820\
 Data File : VD067912.D
 Acq On : 08 Dec 2020 15:06
 Operator : VA/SY
 Sample : L4972-01
 Misc : 6.80G/5.00ml/MSVOA D/SOIL
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :
 SU-01-120820

Quant Time: Dec 09 04:27:51 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D120120S.M
 Quant Title : SW846 8260
 QLast Update : Wed Dec 02 08:05:58 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.98	168	237809	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.87	114	326439	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.65	117	261526	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.58	152	103861	50.00	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.33	65	113505	44.46	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	88.92%
35) Dibromofluoromethane	7.92	113	96727	44.28	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	88.56%
50) Toluene-d8	10.34	98	359309	45.69	ug/l	0.00
Spiked Amount	50.000	Range	49 - 140	Recovery	=	91.38%
62) 4-Bromofluorobenzene	12.64	95	104653	38.50	ug/l	0.00
Spiked Amount	50.000	Range	25 - 144	Recovery	=	77.00%

Target Compounds

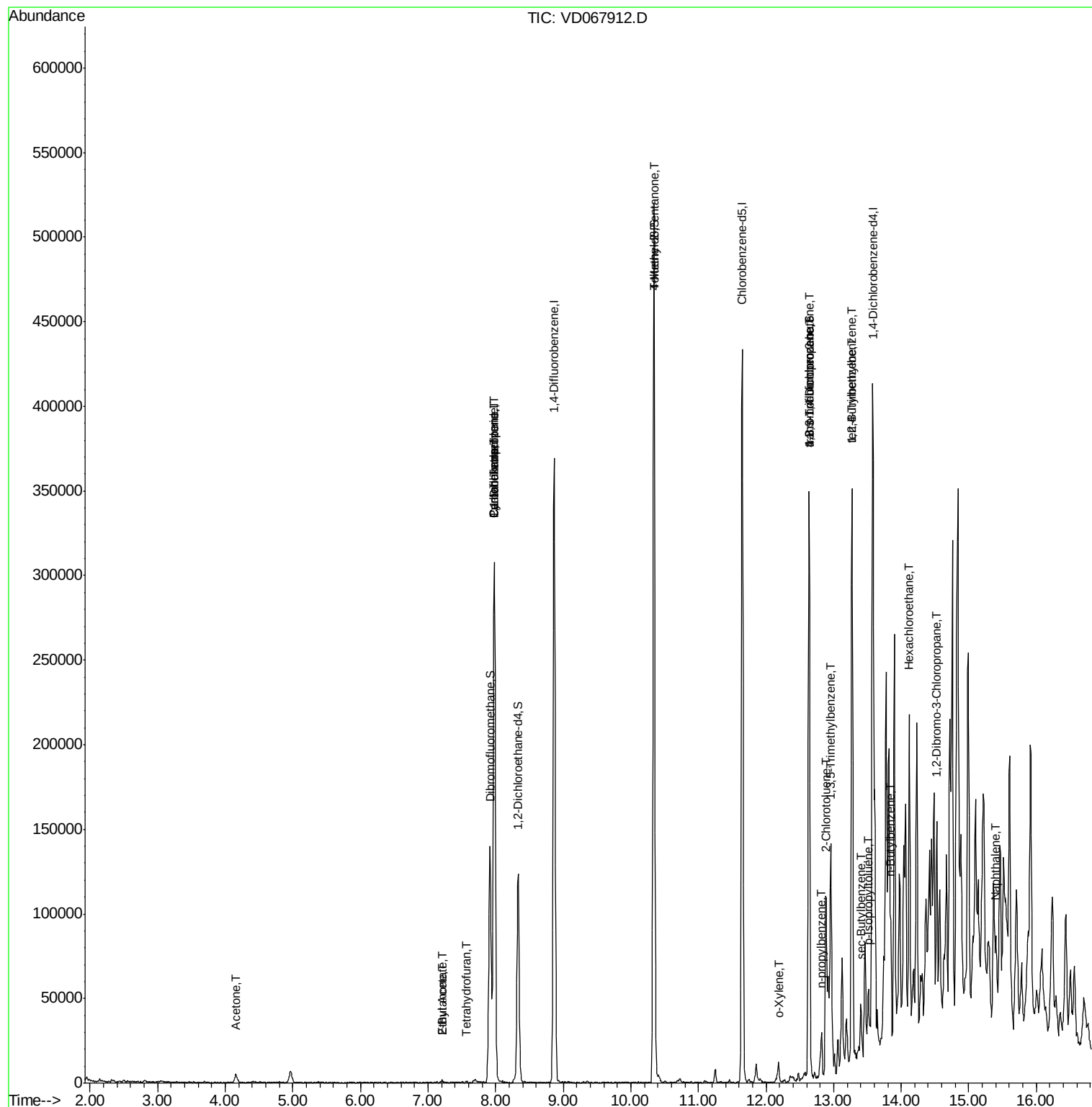
					Qvalue
16) Acetone	4.16	43	8761	27.771 ug/l	97
20) Methylene Chloride	4.98	84	6020	Below Cal	# 78
25) 2-Butanone	7.21	43	1620	4.882 ug/l	# 36
29) Tetrahydrofuran	7.56	42	570	3.017 ug/l	# 44
31) Cyclohexane	7.98	56	4545	1.690 ug/l	# 52
36) 1,1-Dichloropropene	7.99	75	16057	5.682 ug/l	# 54
37) Ethyl Acetate	7.21	43	1620	2.127 ug/l	# 65
38) Carbon Tetrachloride	7.98	117	25291	5.915 ug/l	# 15
41) Methacrylonitrile	7.56	41	407	Below Cal	# 22
51) 4-Methyl-2-Pentanone	10.34	43	1525	2.150 ug/l	# 1
69) o-Xylene	12.18	106	3658	1.137 ug/l	# 73
76) 1,2,3-Trichloropropane	12.64	75	57964	76.637 ug/l	# 1
78) n-propylbenzene	12.83	91	18754	2.369 ug/l	# 99
79) 2-Chlorotoluene	12.89	91	8981	1.928 ug/l	# 39
80) 1,3,5-Trimethylbenzene	12.96	105	40784	6.595 ug/l	# 98
81) trans-1,4-Dichloro-2-buten	12.64	75	57964	183.322 ug/l	# 7
83) tert-Butylbenzene	13.27	119	24641	4.683 ug/l	# 62
84) 1,2,4-Trimethylbenzene	13.27	105	186858	30.387 ug/l	# 96
85) sec-Butylbenzene	13.41	105	17915	2.551 ug/l	# 89
86) p-Isopropyltoluene	13.52	119	13226	1.921 ug/l	# 94
89) n-Butylbenzene	13.85	91	33137	5.794 ug/l	# 76
90) Hexachloroethane	14.12	117	9611	7.562 ug/l	# 6
92) 1,2-Dibromo-3-Chloropropan	14.52	75	346	1.758 ug/l	# 1
95) Naphthalene	15.41	128	19632	5.806 ug/l	# 89

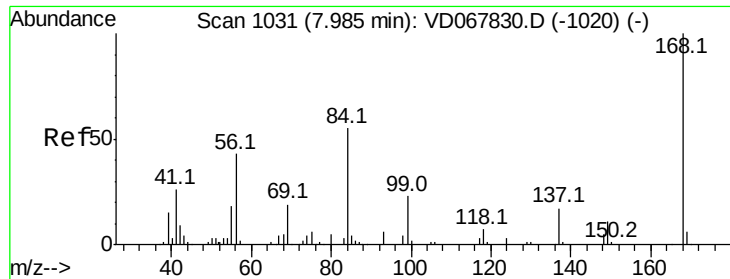
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260
QLast Update : Wed Dec 02 08:05:58 2020
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.98 min Scan# 1030

Delta R.T. -0.01 min

Lab File: VD067912.D

Acq: 08 Dec 2020 15:06

Instrument :

MSVOA_D

ClientSampleId :

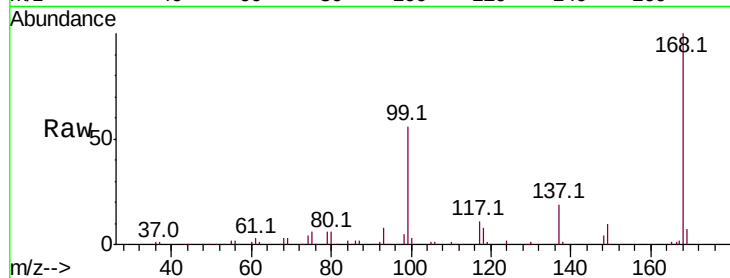
SU-01-120820

Tot Ion:168 Resp: 237809

Ion Ratio Lower Upper

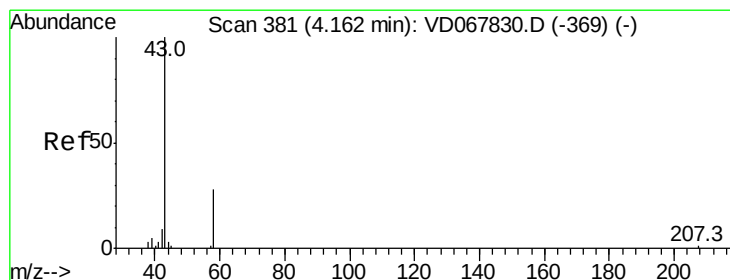
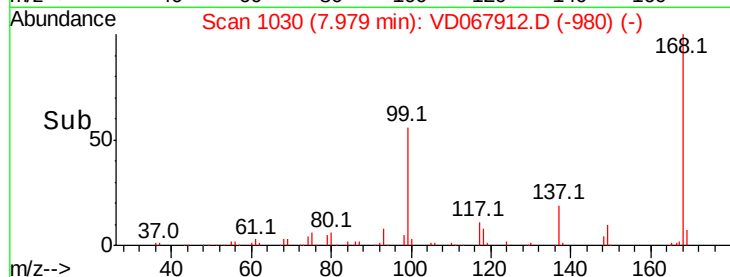
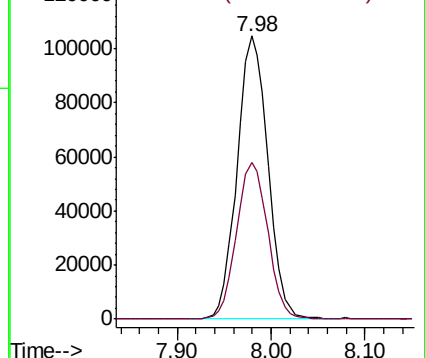
168 100

99 55.5 47.1 70.7



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VDC



#16

Acetone

Concen: 27.771 ug/l

RT: 4.16 min Scan# 380

Delta R.T. -0.01 min

Lab File: VD067912.D

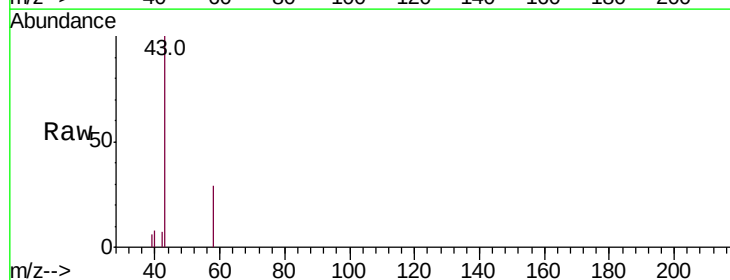
Acq: 08 Dec 2020 15:06

Tgt Ion: 43 Resp: 8761

Ion Ratio Lower Upper

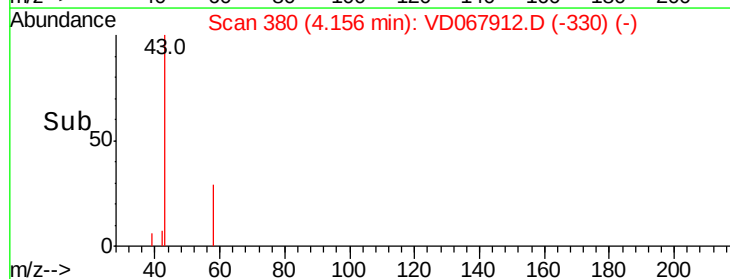
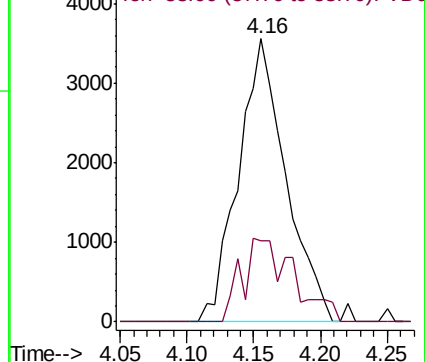
43 100

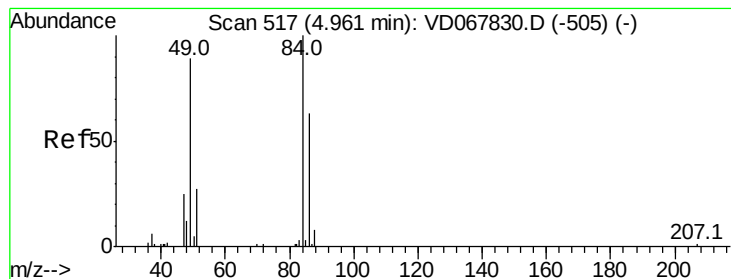
58 28.9 21.9 32.9



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 58.00 (57.70 to 58.70): VDC





#20

Methylene Chloride

Concen: Below Cal

RT: 4.98 min Scan# 520

Delta R.T. 0.02 min

Lab File: VD067912.D

Acq: 08 Dec 2020 15:06

Instrument :

MSVOA_D

ClientSampleId :

SU-01-120820

Tot Ion: 84 Resp: 6020

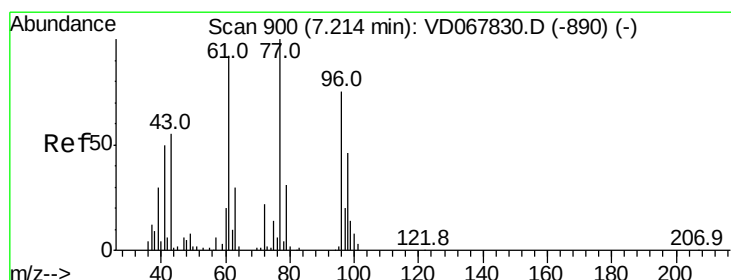
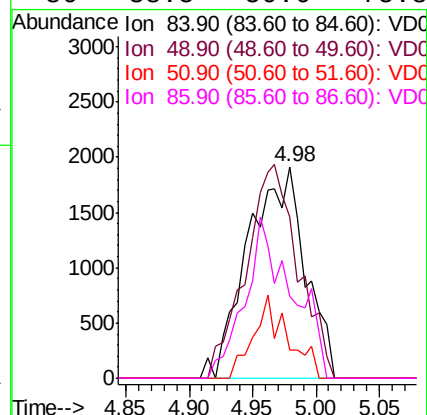
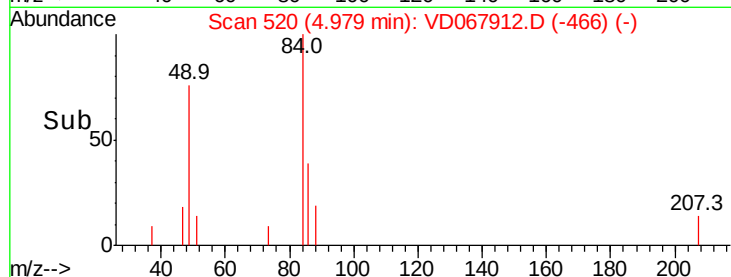
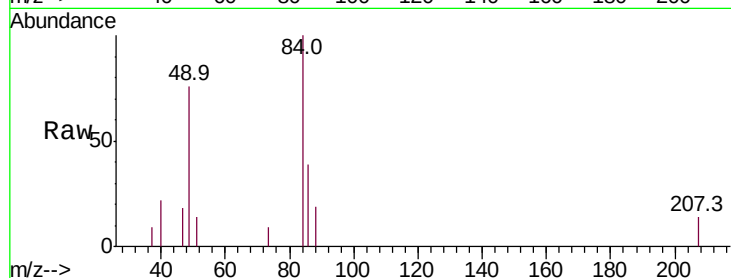
Ion Ratio Lower Upper

84 100

49 76.2 71.4 107.0

51 13.6 21.8 32.8#

86 38.5 50.6 75.8#



#25

2-Butanone

Concen: 4.882 ug/l

RT: 7.21 min Scan# 899

Delta R.T. -0.01 min

Lab File: VD067912.D

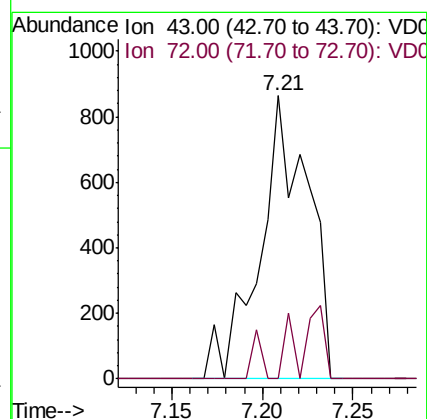
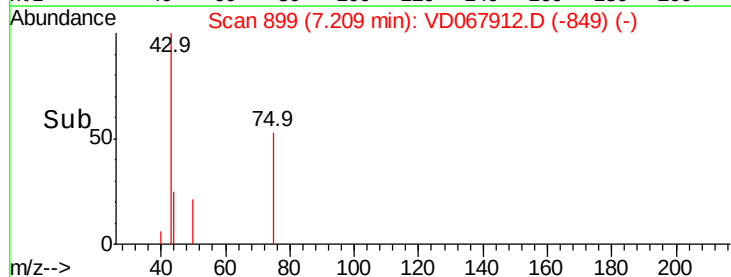
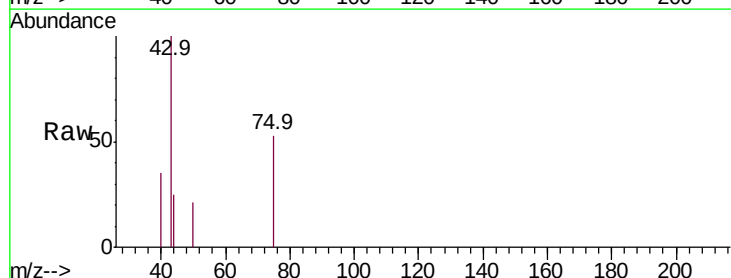
Acq: 08 Dec 2020 15:06

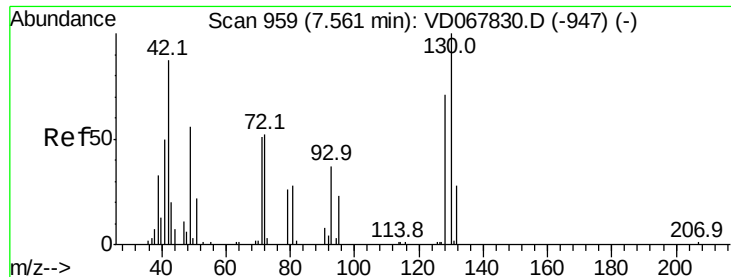
Tgt Ion: 43 Resp: 1620

Ion Ratio Lower Upper

43 100

72 0.0 31.3 46.9#

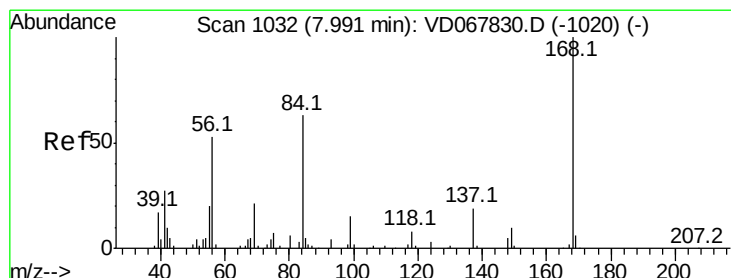
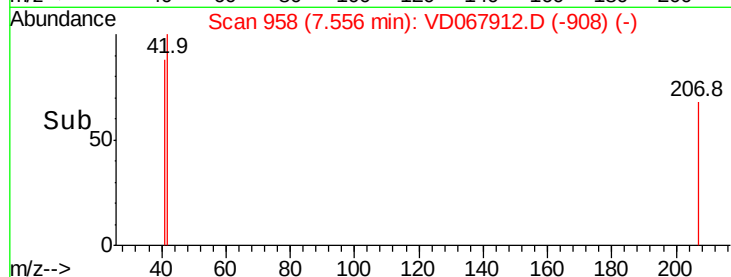
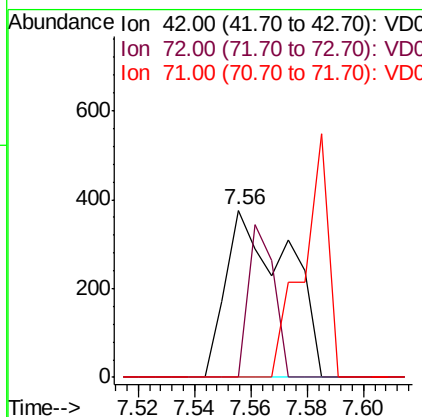
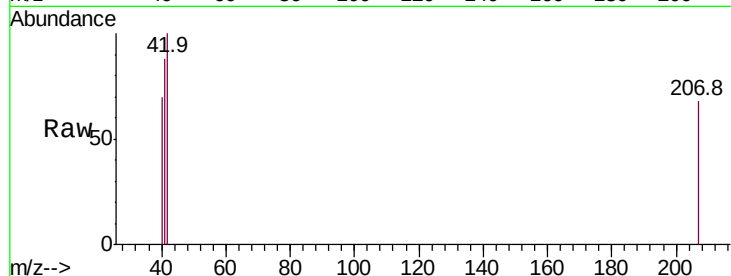




#29
Tetrahydrofuran
Concen: 3.017 ug/l
RT: 7.56 min Scan# 958
Delta R.T. -0.01 min
Lab File: VD067912.D
Acq: 08 Dec 2020 15:06

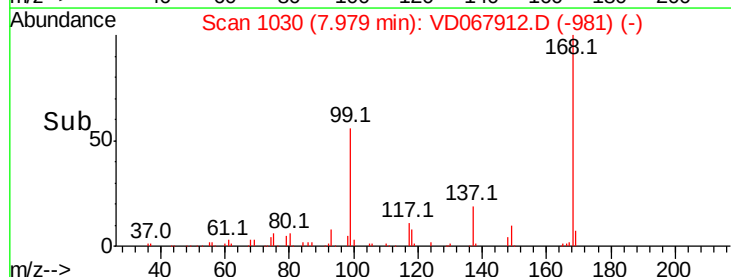
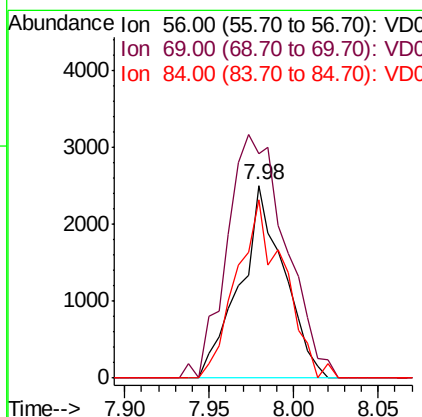
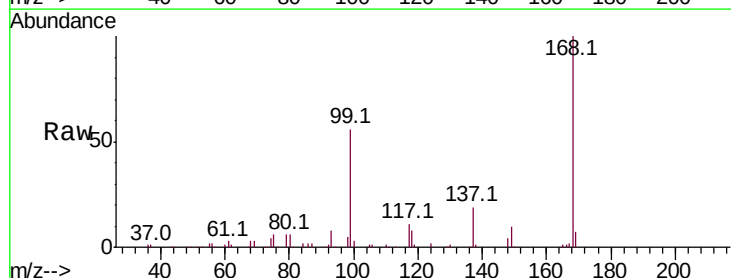
Instrument :
MSVOA_D
ClientSampleId :
SU-01-120820

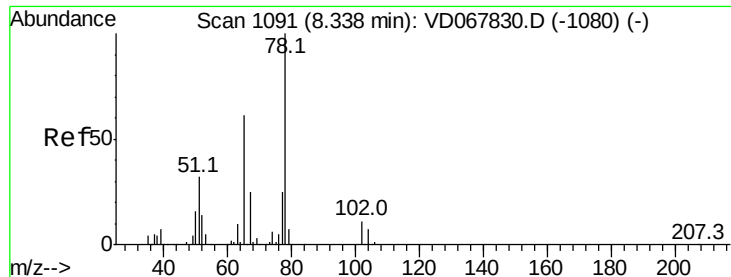
Tot Ion: 42 Resp: 570
Ion Ratio Lower Upper
42 100
72 37.7 51.9 77.9#
71 0.0 48.2 72.4#



#31
Cyclohexane
Concen: 1.690 ug/l
RT: 7.98 min Scan# 1030
Delta R.T. -0.01 min
Lab File: VD067912.D
Acq: 08 Dec 2020 15:06

Tgt Ion: 56 Resp: 4545
Ion Ratio Lower Upper
56 100
69 116.2 32.1 48.1#
84 92.2 93.2 139.8#





#33

1,2-Dichloroethane-d4

Concen: 44.460 ug/l

RT: 8.33 min Scan# 1090

Delta R.T. -0.01 min

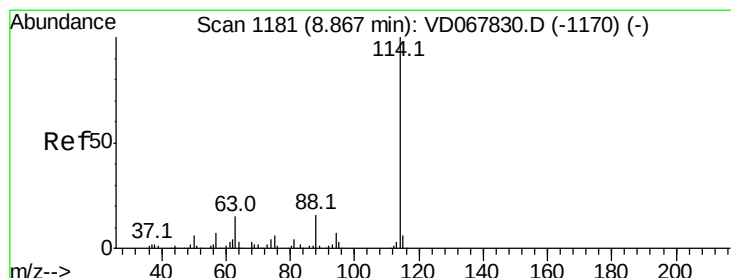
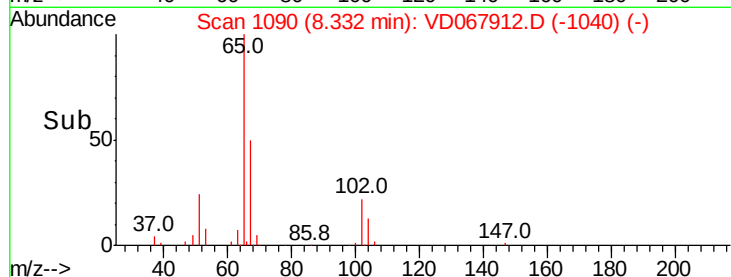
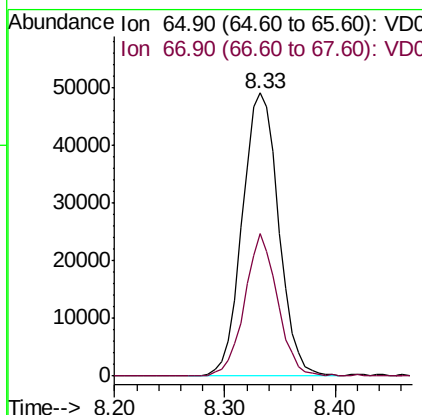
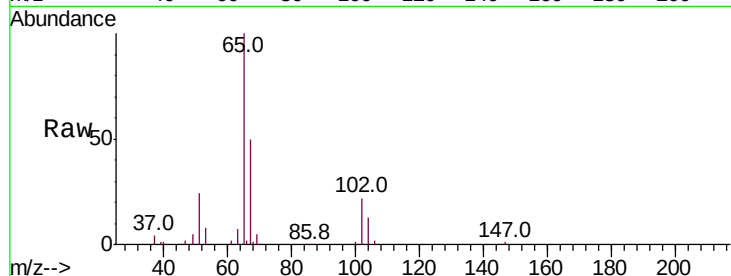
Lab File: VD067912.D

Acq: 08 Dec 2020 15:06

Instrument :
MSVOA_D
ClientSampleId :
SU-01-120820

Tot Ion: 65 Resp: 113505

Ion	Ratio	Lower	Upper
65	100		
67	45.3	0.0	92.0



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.87 min Scan# 1181

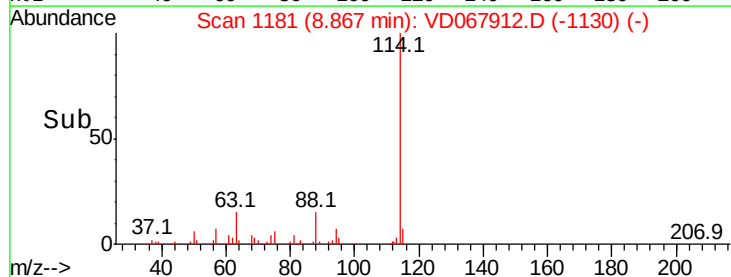
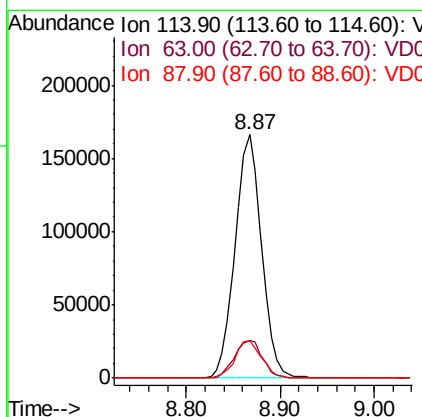
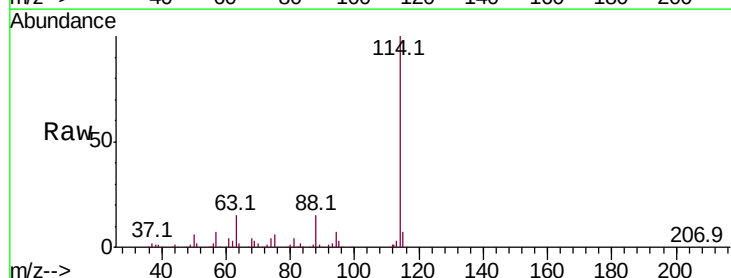
Delta R.T. 0.00 min

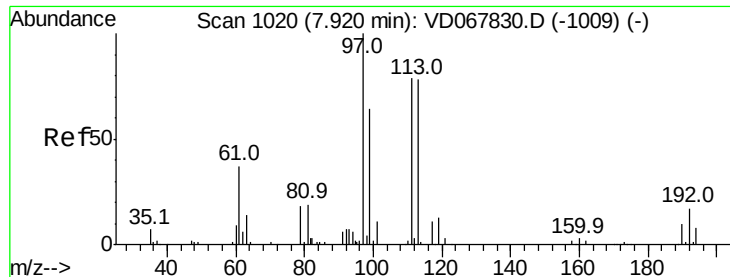
Lab File: VD067912.D

Acq: 08 Dec 2020 15:06

Tgt Ion: 114 Resp: 326439

Ion	Ratio	Lower	Upper
114	100		
63	15.3	0.0	30.8
88	15.4	0.0	31.8





#35

Dibromofluoromethane

Concen: 44.282 ug/l

RT: 7.92 min Scan# 1020

Delta R.T. 0.00 min

Lab File: VD067912.D

Acq: 08 Dec 2020 15:06

Instrument :

MSVOA_D

ClientSampleId :

SU-01-120820

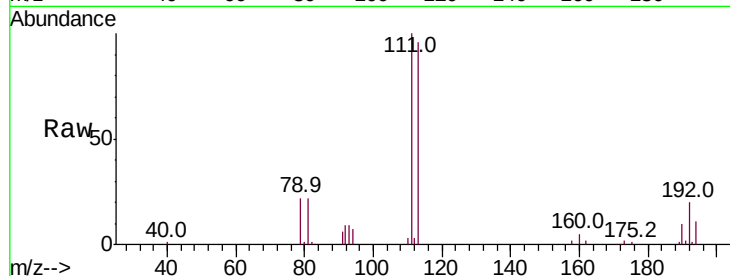
Tot Ion:113 Resp: 96727

Ion Ratio Lower Upper

113 100

111 104.8 81.2 121.8

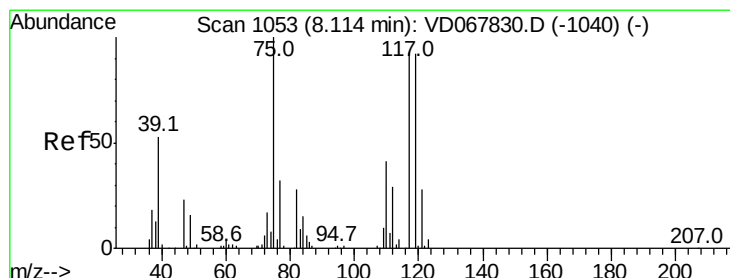
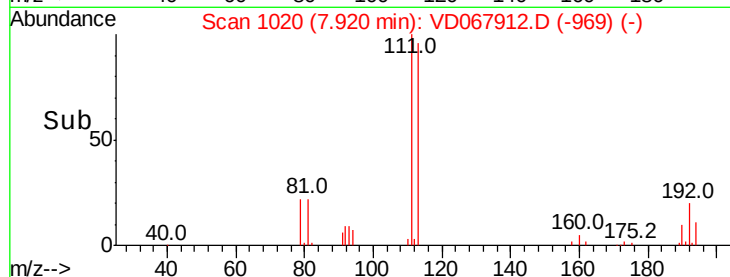
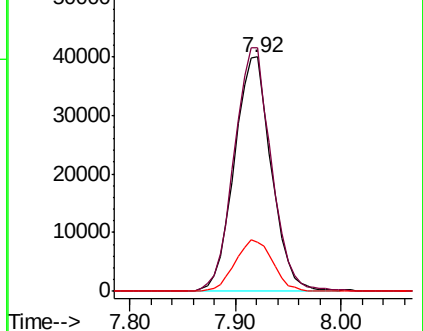
192 22.4 16.8 25.2



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: 5.682 ug/l

RT: 7.99 min Scan# 1031

Delta R.T. -0.13 min

Lab File: VD067912.D

Acq: 08 Dec 2020 15:06

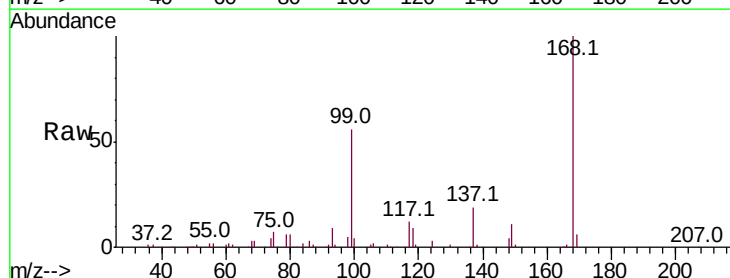
Tgt Ion: 75 Resp: 16057

Ion Ratio Lower Upper

75 100

110 16.8 20.3 61.0#

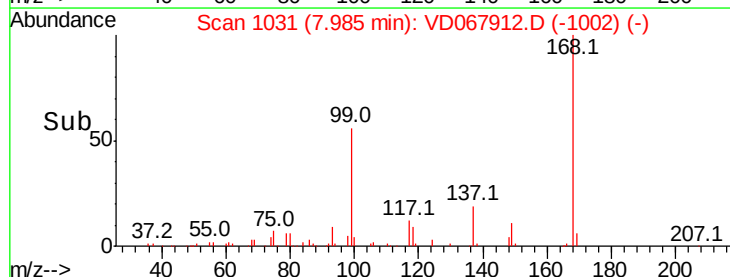
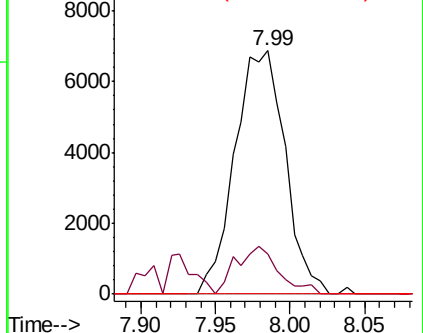
77 0.0 24.7 37.1#

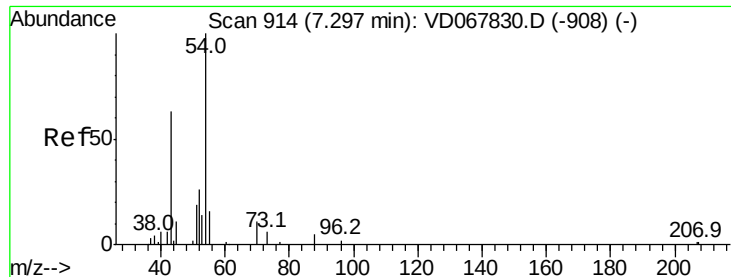


Abundance Ion 74.90 (74.60 to 75.60): V

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): V





#37

Ethyl Acetate

Concen: 2.127 ug/l

RT: 7.21 min Scan# 899

Delta R.T. -0.09 min

Lab File: VD067912.D

Acq: 08 Dec 2020 15:06

Instrument :

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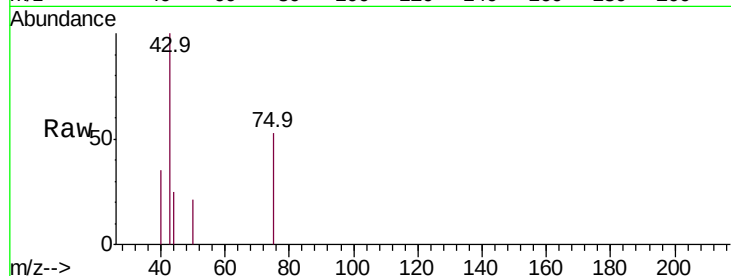
Tot Ion: 43 Resp: 1620

Ion Ratio Lower Upper

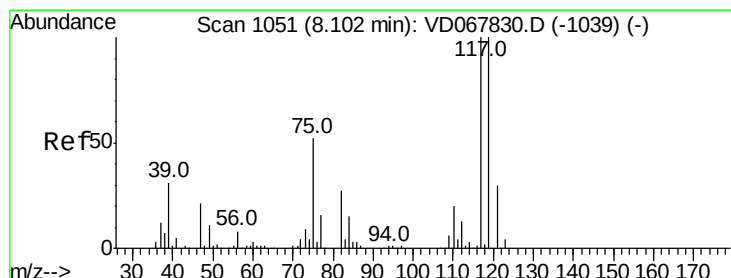
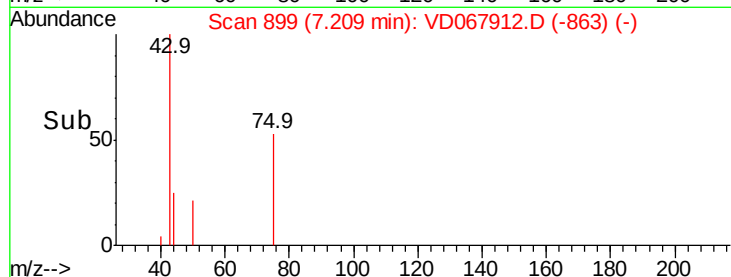
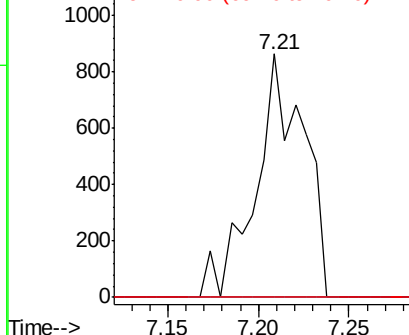
43 100

61 0.0 11.4 17.2#

70 0.0 11.5 17.3#



Abundance Ion 43.00 (42.70 to 43.70): VDC
Ion 60.90 (60.60 to 61.60): VDC
Ion 70.00 (69.70 to 70.70): VDC



#38

Carbon Tetrachloride

Concen: 5.915 ug/l

RT: 7.98 min Scan# 1030

Delta R.T. -0.12 min

Lab File: VD067912.D

Acq: 08 Dec 2020 15:06

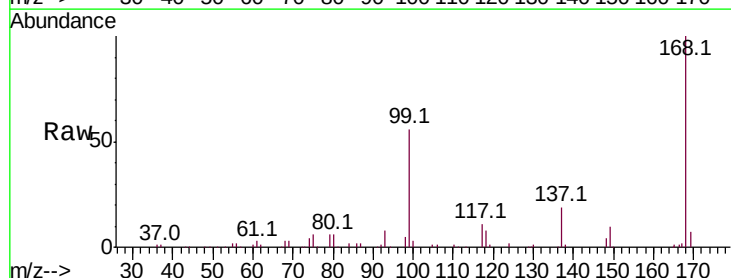
Tgt Ion: 117 Resp: 25291

Ion Ratio Lower Upper

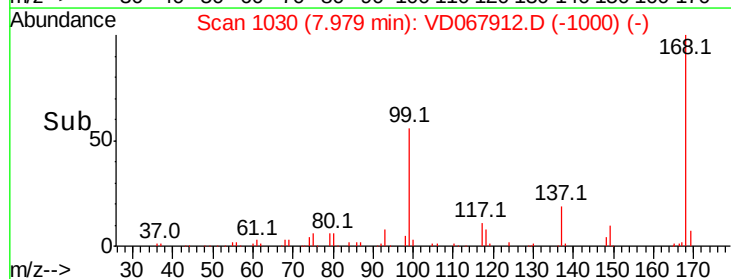
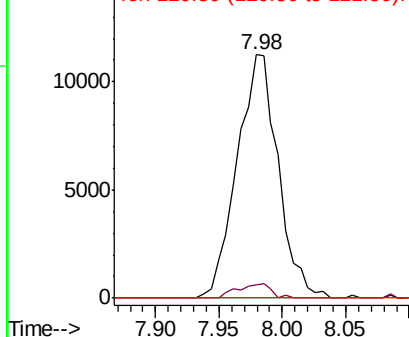
117 100

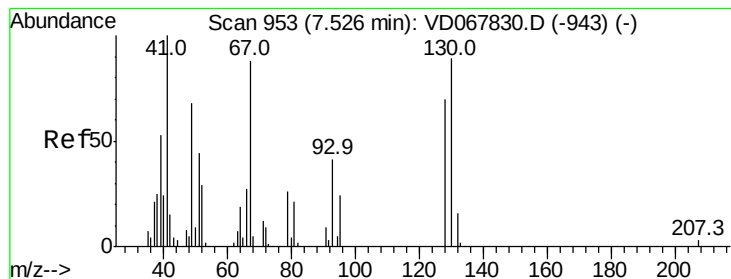
119 5.3 79.7 119.5#

121 0.0 23.8 35.6#



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





#41

Methacrylonitrile

Concen: Below Cal

RT: 7.56 min Scan# 958

Delta R.T. 0.03 min

Lab File: VD067912.D

Acq: 08 Dec 2020 15:06

Instrument :

MSVOA_D

ClientSampleId :

SU-01-120820

Tot Ion: 41 Resp: 407

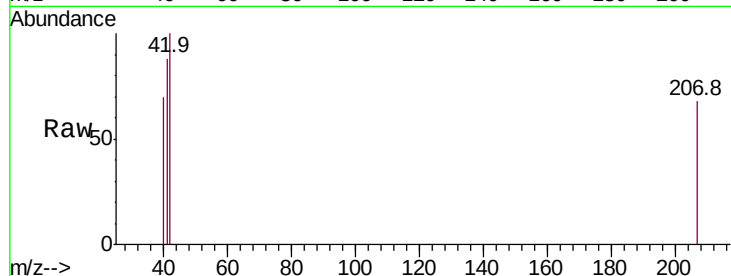
Ion Ratio Lower Upper

41 100

39 20.9 42.1 63.1#

67 0.0 82.4 123.6#

52 0.0 30.6 45.8#

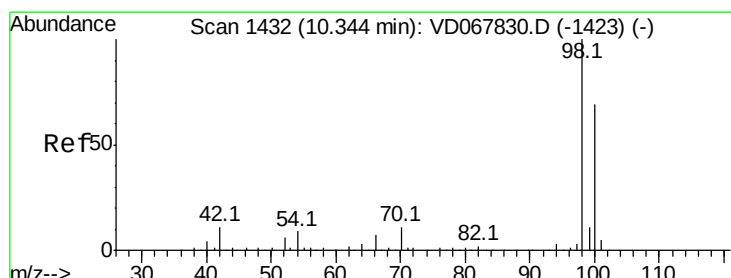
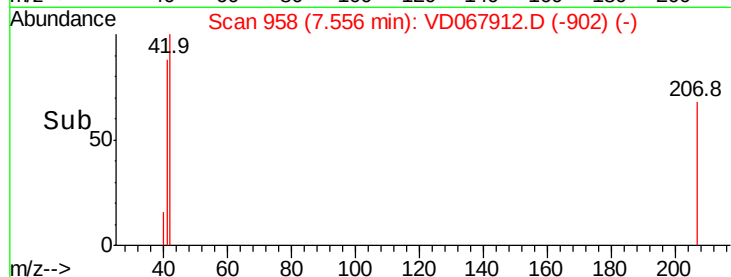
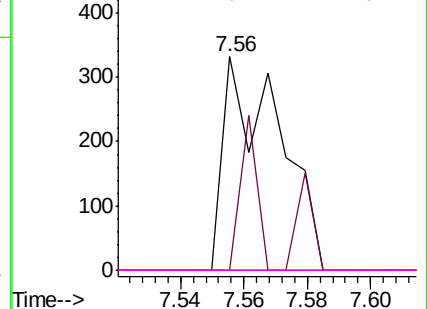


Abundance Ion 41.00 (40.70 to 41.70): VDC

Ion 39.00 (38.70 to 39.70): VDC

Ion 67.00 (66.70 to 67.70): VDC

Ion 52.00 (51.70 to 52.70): VDC



#50

Toluene-d8

Concen: 45.695 ug/l

RT: 10.34 min Scan# 1432

Delta R.T. 0.00 min

Lab File: VD067912.D

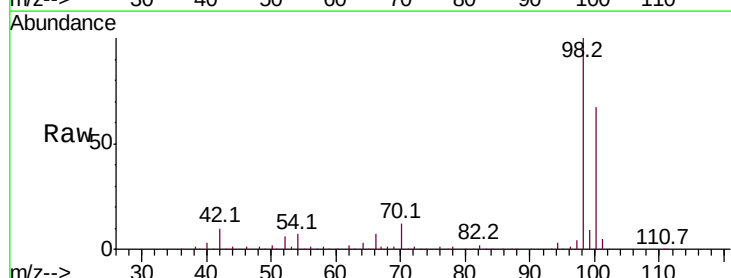
Acq: 08 Dec 2020 15:06

Tgt Ion: 98 Resp: 359309

Ion Ratio Lower Upper

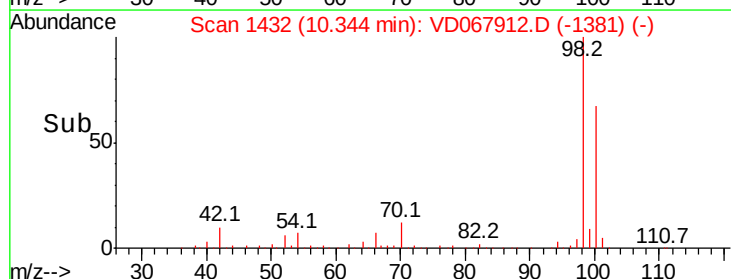
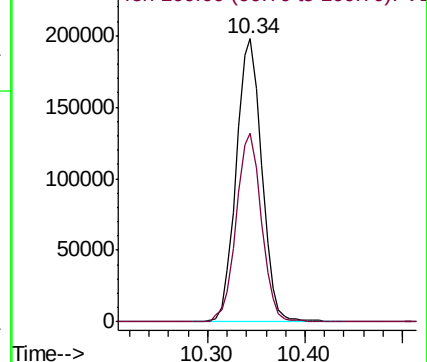
98 100

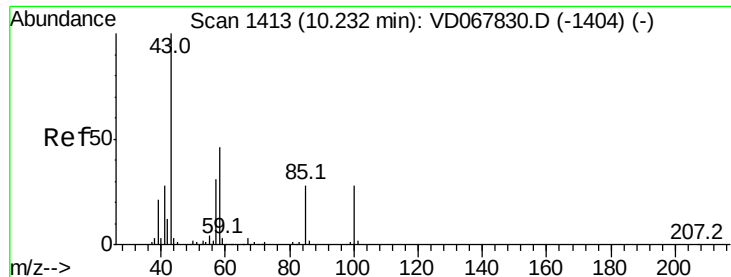
100 66.1 52.9 79.3



Abundance Ion 98.00 (97.70 to 98.70): VDC

Ion 100.00 (99.70 to 100.70): VDC

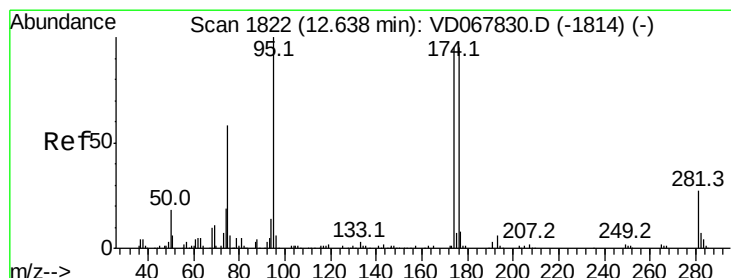
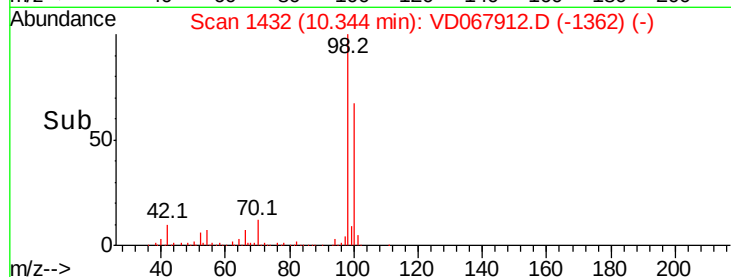
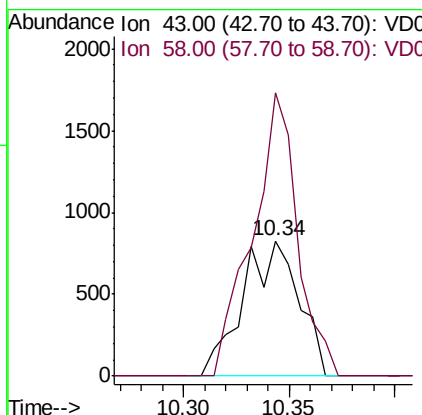
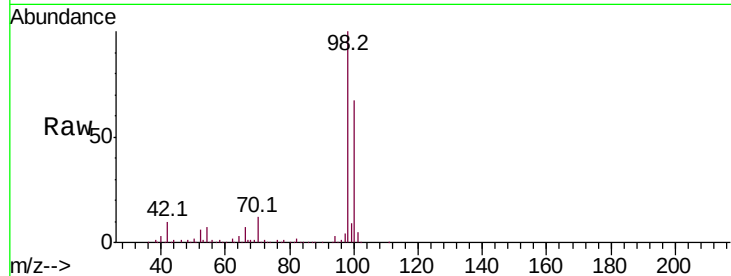




#51
4-Methyl-2-Pentanone
Concen: 2.150 ug/l
RT: 10.34 min Scan# 1432
Delta R.T. 0.11 min
Lab File: VD067912.D
Acq: 08 Dec 2020 15:06

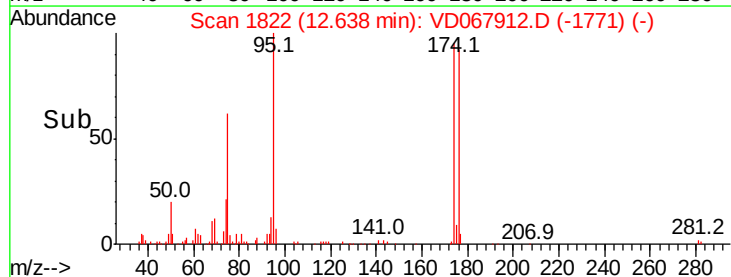
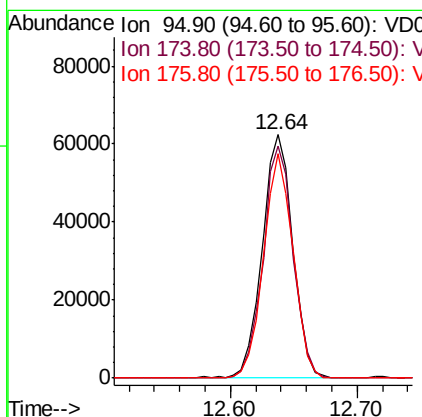
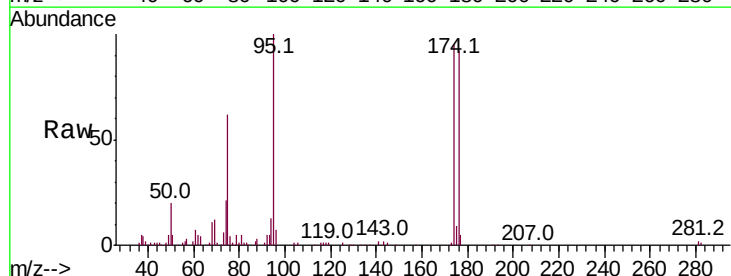
Instrument :
MSVOA_D
ClientSampleId :
SU-01-120820

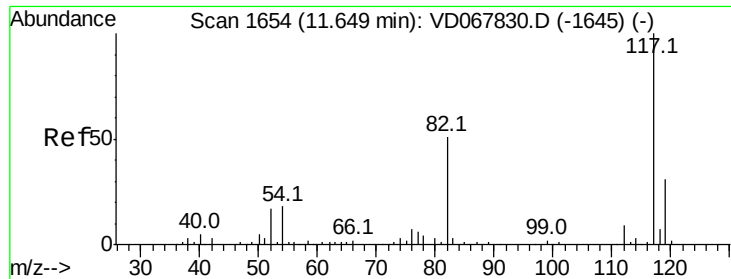
Tot Ion: 43 Resp: 1525
Ion Ratio Lower Upper
43 100
58 168.3 35.7 53.5#



#62
4-Bromofluorobenzene
Concen: 38.496 ug/l
RT: 12.64 min Scan# 1822
Delta R.T. 0.00 min
Lab File: VD067912.D
Acq: 08 Dec 2020 15:06

Tgt Ion: 95 Resp: 104653
Ion Ratio Lower Upper
95 100
174 93.4 0.0 186.0
176 88.9 0.0 184.2

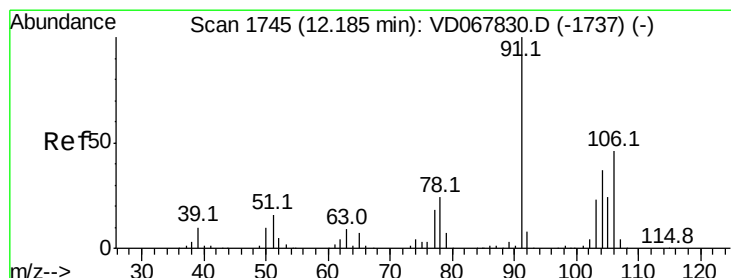
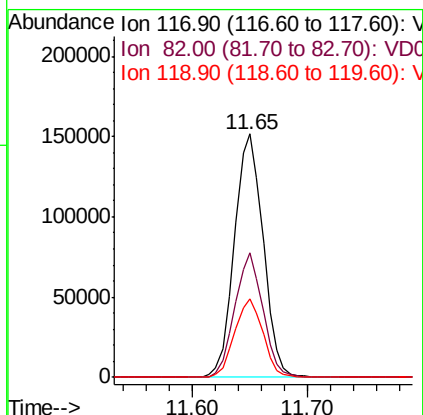
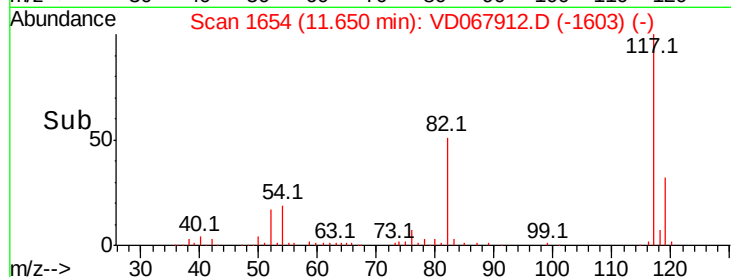
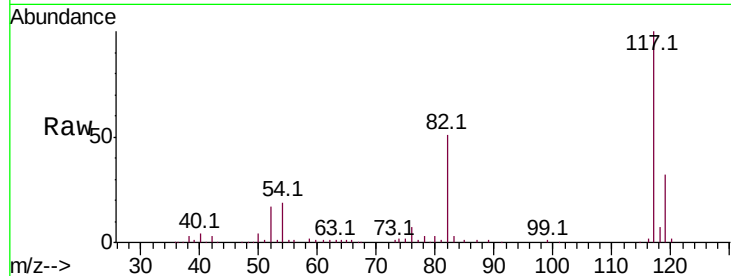




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.65 min Scan# 1654
Delta R.T. 0.00 min
Lab File: VD067912.D
Acq: 08 Dec 2020 15:06

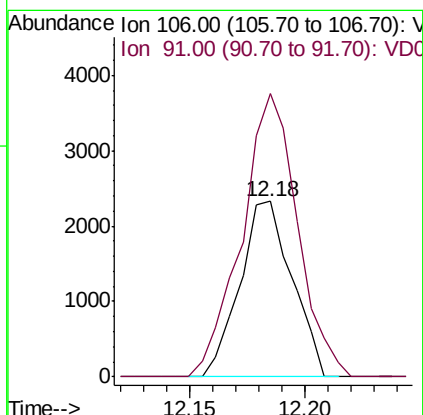
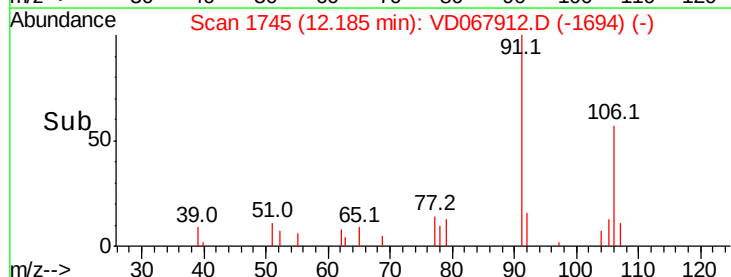
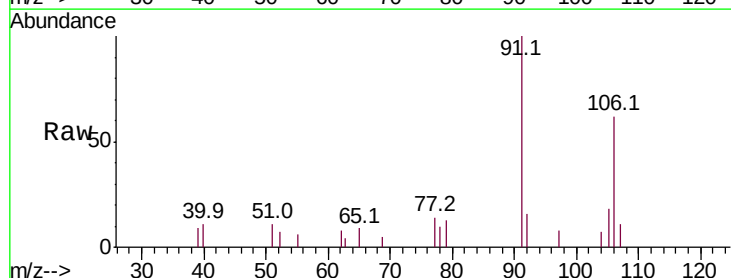
Instrument :
MSVOA_D
ClientSampleId :
SU-01-120820

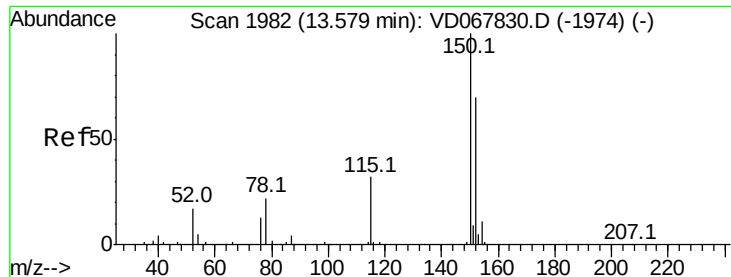
Tot Ion:117 Resp: 261526
Ion Ratio Lower Upper
117 100
82 51.2 40.6 60.8
119 32.1 25.1 37.7



#69
o-Xylene
Concen: 1.137 ug/l
RT: 12.18 min Scan# 1745
Delta R.T. 0.00 min
Lab File: VD067912.D
Acq: 08 Dec 2020 15:06

Tgt Ion:106 Resp: 3658
Ion Ratio Lower Upper
106 100
91 172.6 107.5 322.5





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.58 min Scan# 1982

Delta R.T. 0.00 min

Lab File: VD067912.D

Acq: 08 Dec 2020 15:06

Instrument :

MSVOA_D

ClientSampleId :

SU-01-120820

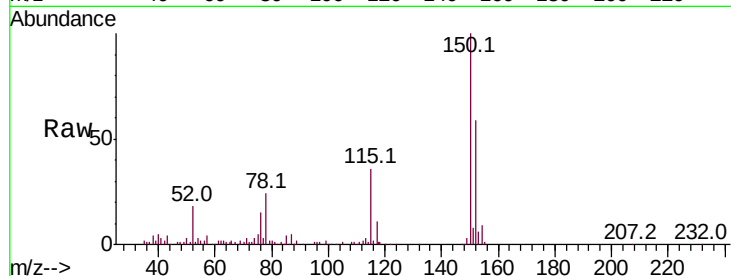
Tot Ion:152 Resp: 103861

Ion Ratio Lower Upper

152 100

115 62.4 29.1 87.4

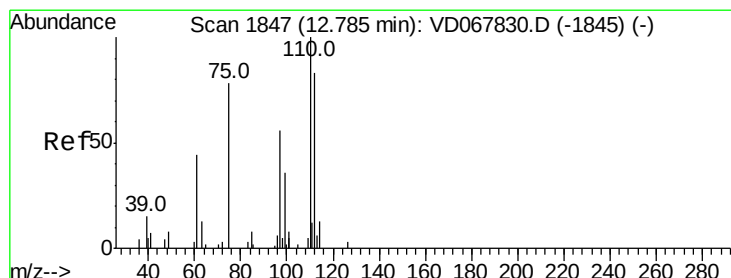
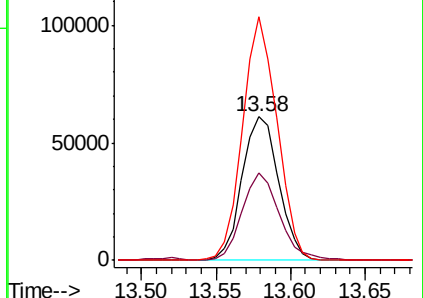
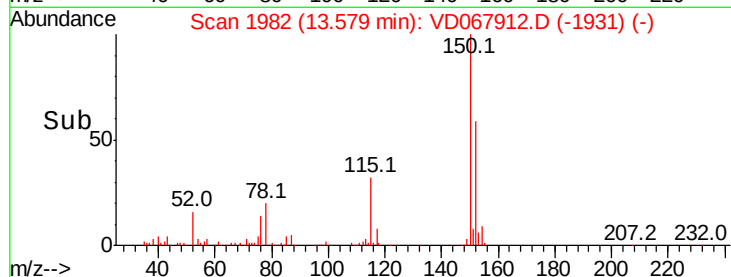
150 159.1 0.0 339.0



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: 76.637 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. -0.15 min

Lab File: VD067912.D

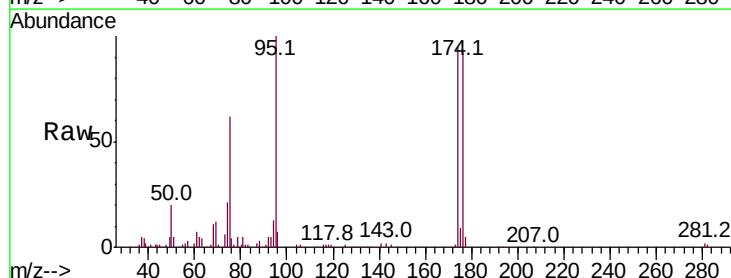
Acq: 08 Dec 2020 15:06

Tgt Ion: 75 Resp: 57964

Ion Ratio Lower Upper

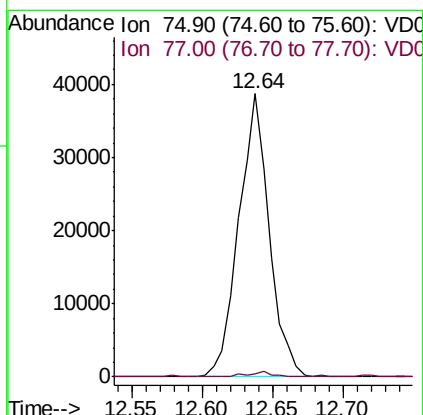
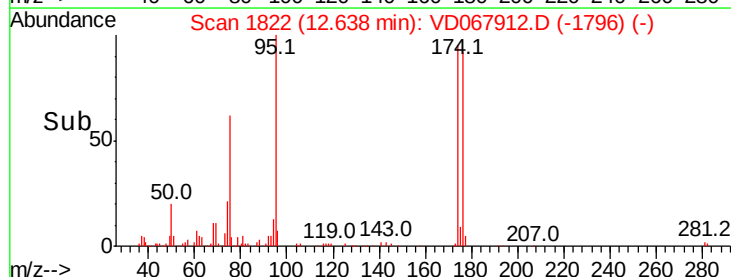
75 100

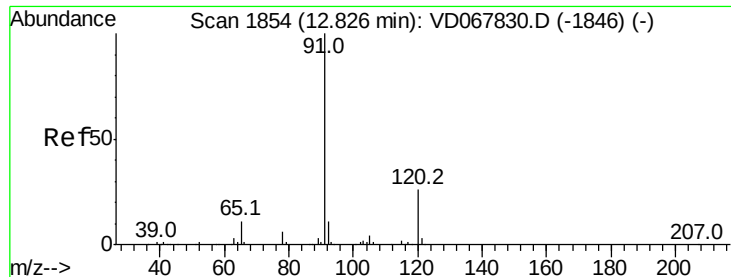
77 1.4 175.9 527.7#



Abundance Ion 74.90 (74.60 to 75.60): V

Ion 77.00 (76.70 to 77.70): V





#78

n-propylbenzene

Concen: 2.369 ug/l

RT: 12.83 min Scan# 1854

Delta R.T. 0.00 min

Lab File: VD067912.D

Acq: 08 Dec 2020 15:06

Instrument :

MSVOA_D

ClientSampleId :

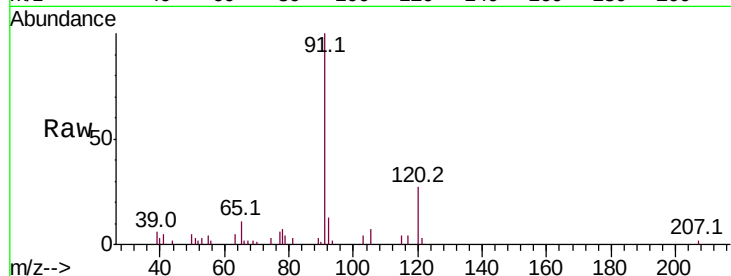
SU-01-120820

Tot Ion: 91 Resp: 18754

Ion Ratio Lower Upper

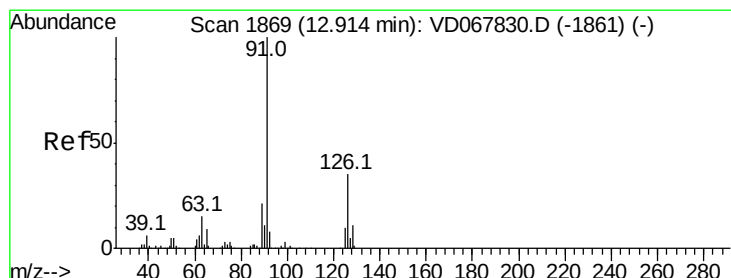
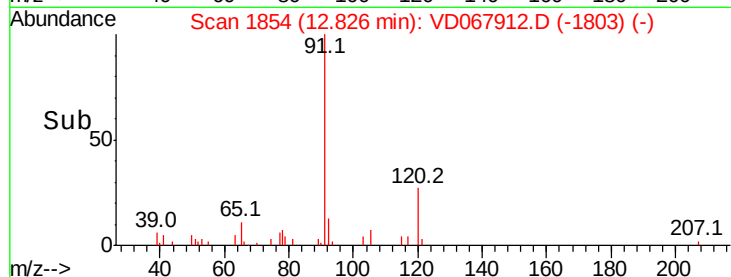
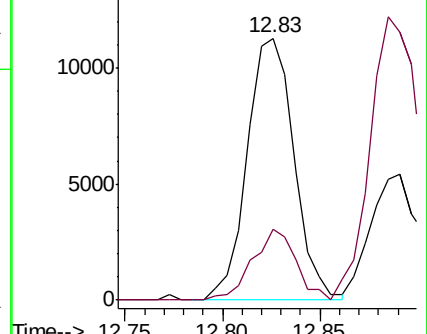
91 100

120 25.0 12.7 38.0



Abundance Ion 91.00 (90.70 to 91.70): VDC

Ion 120.00 (119.70 to 120.70): VDC



#79

2-Chlorotoluene

Concen: 1.928 ug/l

RT: 12.89 min Scan# 1865

Delta R.T. -0.02 min

Lab File: VD067912.D

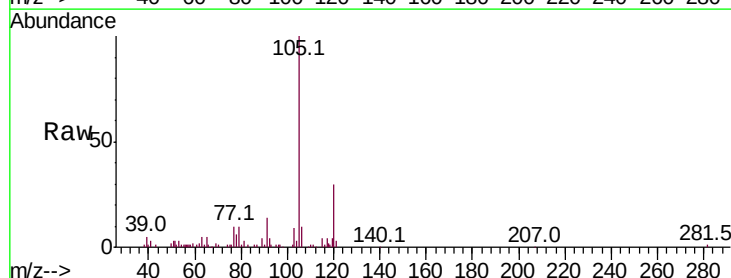
Acq: 08 Dec 2020 15:06

Tgt Ion: 91 Resp: 8981

Ion Ratio Lower Upper

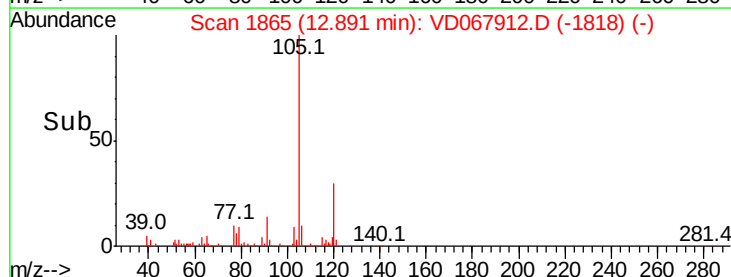
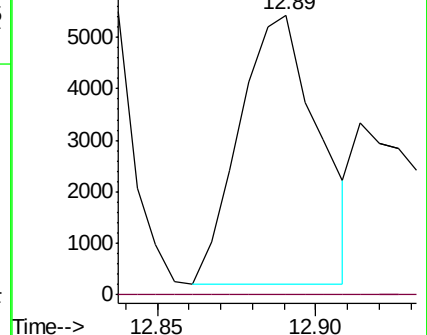
91 100

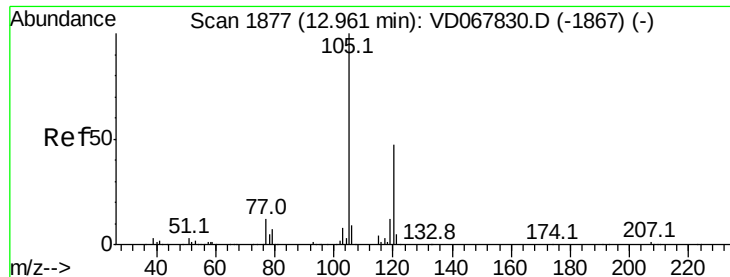
126 0.0 17.9 53.7#



Abundance Ion 91.00 (90.70 to 91.70): VDC

Ion 125.90 (125.60 to 126.60): VDC





#80

1,3,5-Trimethylbenzene

Concen: 6.595 ug/l

RT: 12.96 min Scan# 1877

Delta R.T. 0.00 min

Lab File: VD067912.D

Acq: 08 Dec 2020 15:06

Instrument :

MSVOA_D

ClientSampleId :

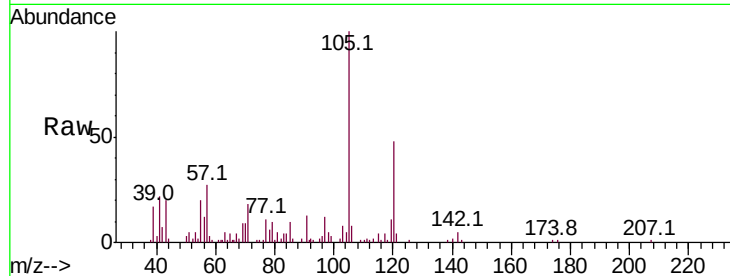
SU-01-120820

Tot Ion:105 Resp: 40784

Ion Ratio Lower Upper

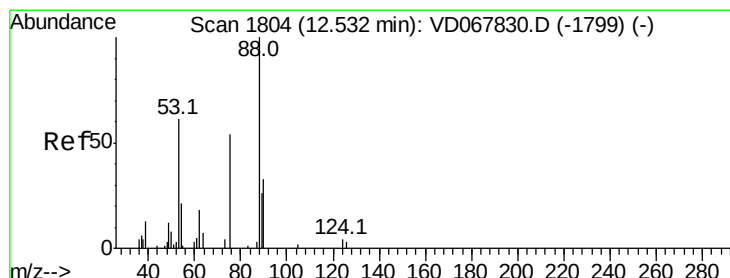
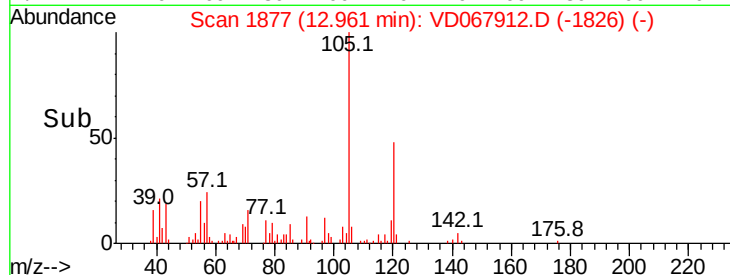
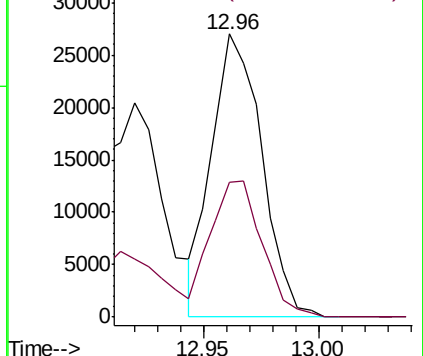
105 100

120 49.8 24.3 72.9



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#81

trans-1,4-Dichloro-2-butene

Concen: 183.322 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. 0.11 min

Lab File: VD067912.D

Acq: 08 Dec 2020 15:06

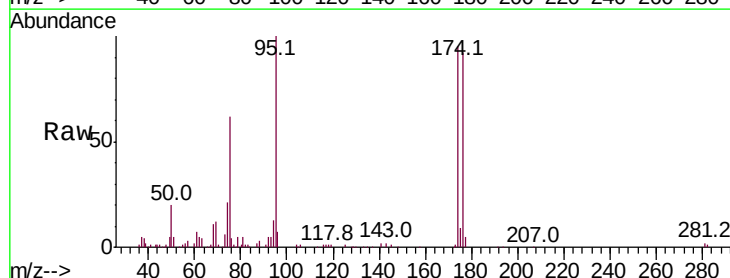
Tgt Ion: 75 Resp: 57964

Ion Ratio Lower Upper

75 100

53 0.4 84.6 127.0#

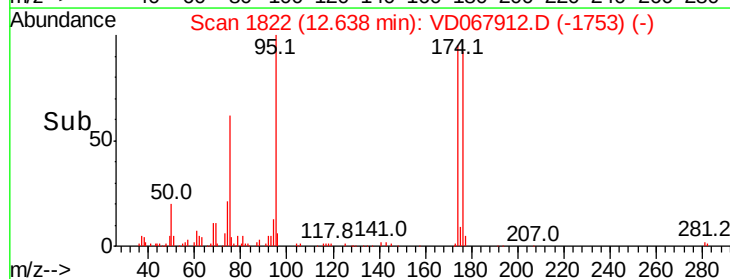
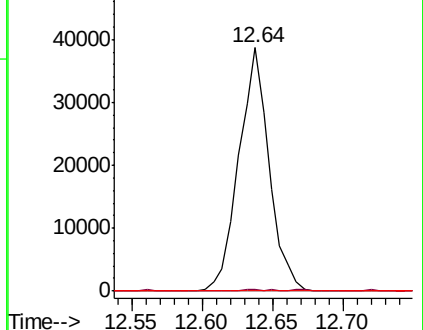
89 0.0 41.0 61.6#

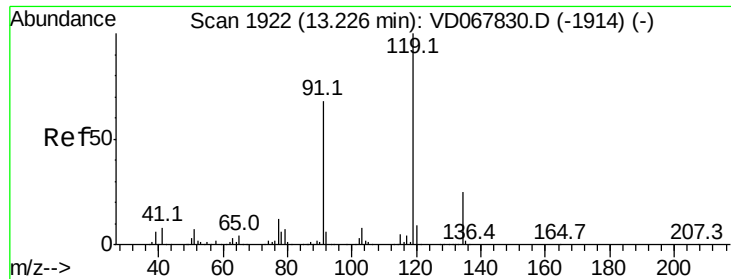


Abundance Ion 74.90 (74.60 to 75.60): VDC

Ion 53.00 (52.70 to 53.70): VDC

Ion 88.90 (88.60 to 89.60): VDC

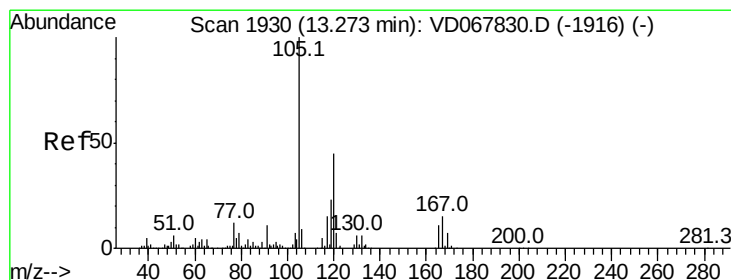
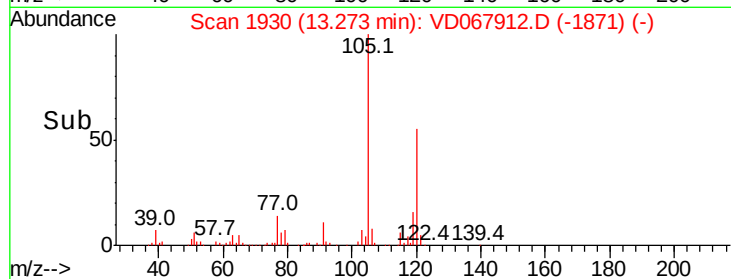
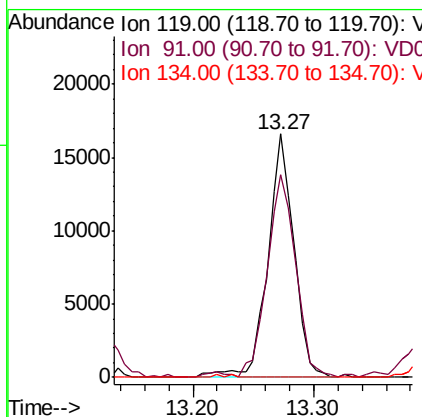
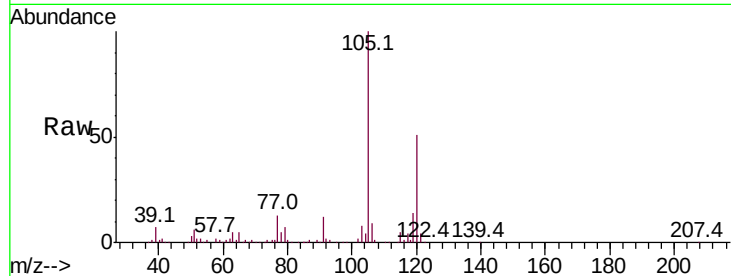




#83
 tert-Butylbenzene
 Concen: 4.683 ug/l
 RT: 13.27 min Scan# 1930
 Delta R.T. 0.05 min
 Lab File: VD067912.D
 Acq: 08 Dec 2020 15:06

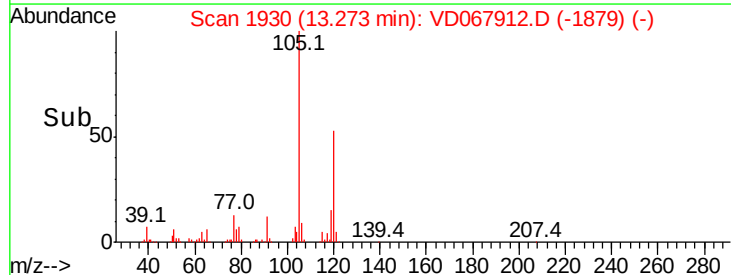
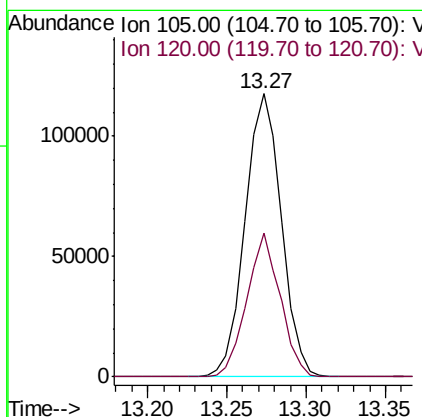
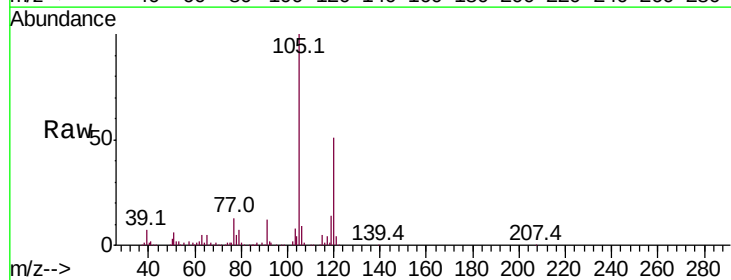
Instrument :
 MSVOA_D
 ClientSampleId :
 SU-01-120820

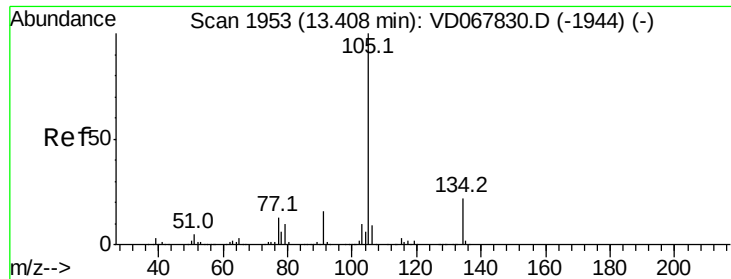
Tot Ion:119 Resp: 24641
 Ion Ratio Lower Upper
 119 100
 91 91.4 33.1 99.3
 134 0.0 13.6 40.8#



#84
 1,2,4-Trimethylbenzene
 Concen: 30.387 ug/l
 RT: 13.27 min Scan# 1930
 Delta R.T. 0.00 min
 Lab File: VD067912.D
 Acq: 08 Dec 2020 15:06

Tgt Ion:105 Resp: 186858
 Ion Ratio Lower Upper
 105 100
 120 46.8 22.1 66.5





#85

sec-Butylbenzene

Concen: 2.551 ug/l

RT: 13.41 min Scan# 1953

Delta R.T. 0.00 min

Lab File: VD067912.D

Acq: 08 Dec 2020 15:06

Instrument :

MSVOA_D

ClientSampleId :

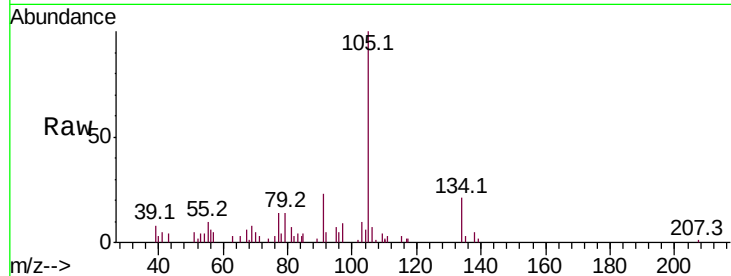
SU-01-120820

Tot Ion:105 Resp: 17915

Ion Ratio Lower Upper

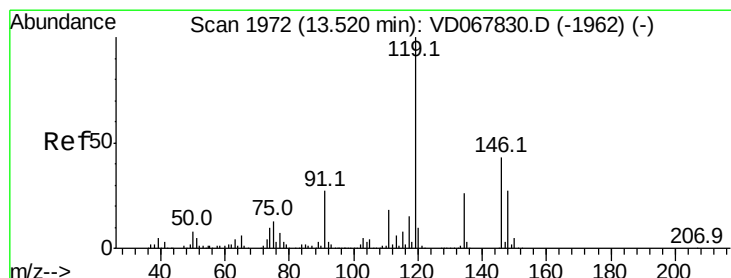
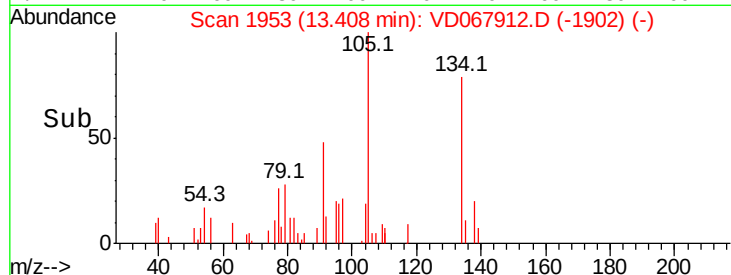
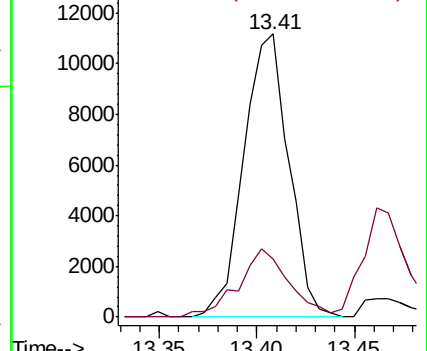
105 100

134 27.2 10.9 32.9



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 134.00 (133.70 to 134.70): V



#86

p-Isopropyltoluene

Concen: 1.921 ug/l

RT: 13.52 min Scan# 1972

Delta R.T. 0.00 min

Lab File: VD067912.D

Acq: 08 Dec 2020 15:06

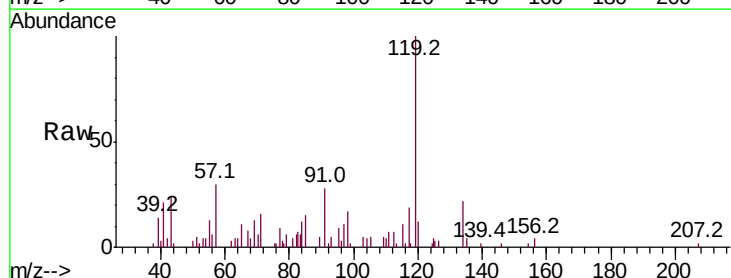
Tgt Ion:119 Resp: 13226

Ion Ratio Lower Upper

119 100

134 28.0 13.1 39.3

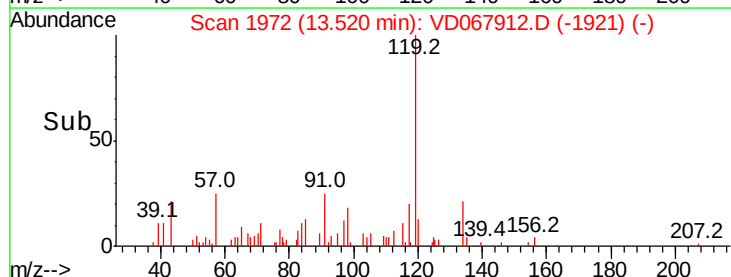
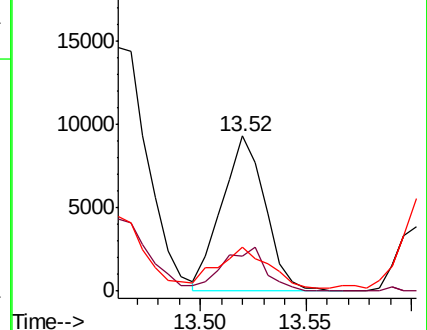
91 29.6 12.8 38.3

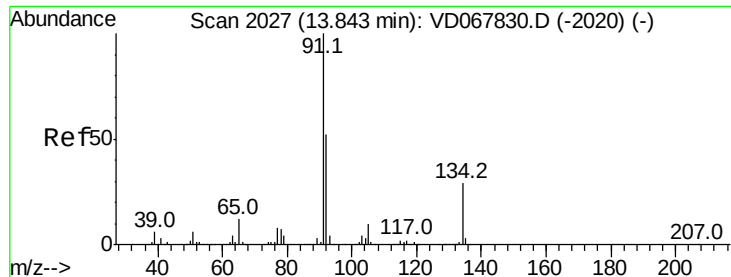


Abundance Ion 119.00 (118.70 to 119.70): V

Ion 134.00 (133.70 to 134.70): V

Ion 91.00 (90.70 to 91.70): V

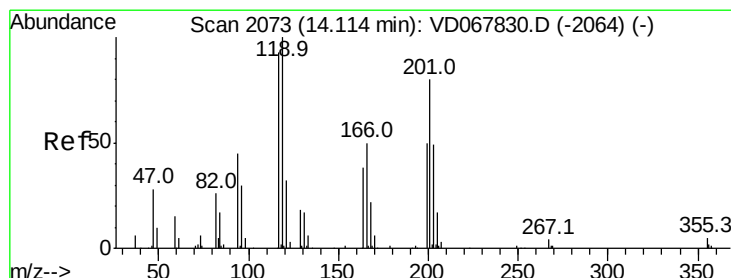
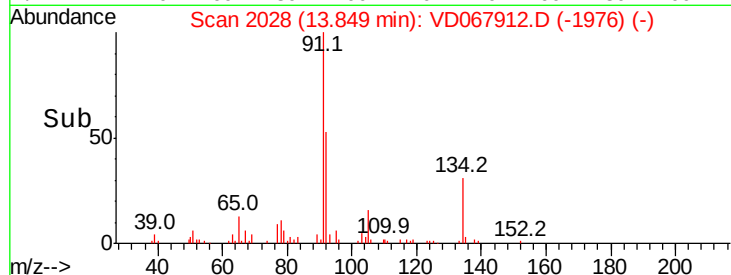
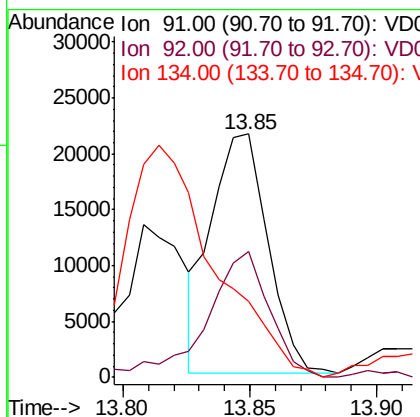
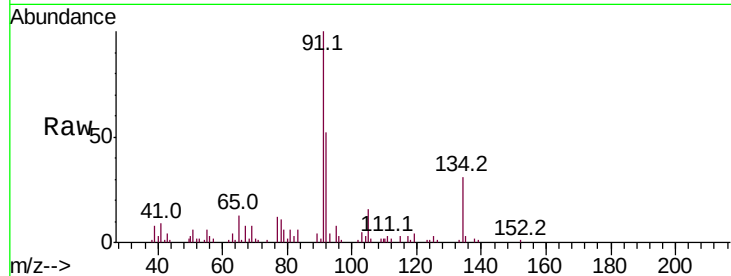




#89
n-Butylbenzene
Concen: 5.794 ug/l
RT: 13.85 min Scan# 2028
Delta R.T. 0.01 min
Lab File: VD067912.D
Acq: 08 Dec 2020 15:06

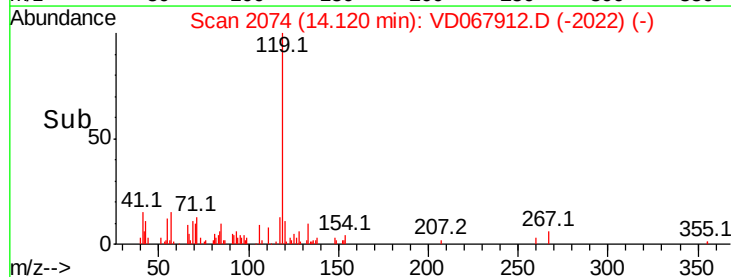
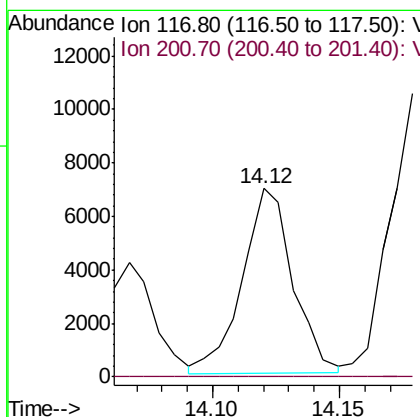
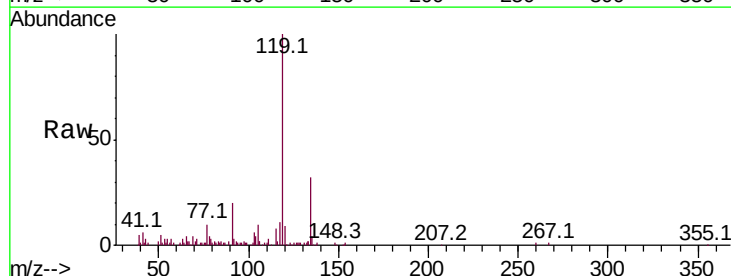
Instrument :
MSVOA_D
ClientSampleId :
SU-01-120820

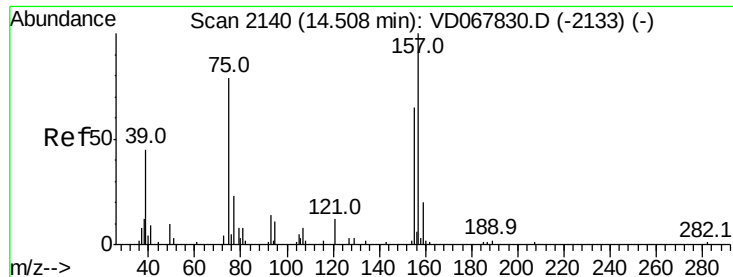
Tot Ion: 91 Resp: 33137
Ion Ratio Lower Upper
91 100
92 57.7 26.3 78.8
134 0.0 14.8 44.3#



#90
Hexachloroethane
Concen: 7.562 ug/l
RT: 14.12 min Scan# 2074
Delta R.T. 0.01 min
Lab File: VD067912.D
Acq: 08 Dec 2020 15:06

Tgt Ion: 117 Resp: 9611
Ion Ratio Lower Upper
117 100
201 0.0 43.9 131.6#





#92

1,2-Dibromo-3-Chloropropane

Concen: 1.758 ug/l

RT: 14.52 min Scan# 2142

Delta R.T. 0.01 min

Lab File: VD067912.D

Acq: 08 Dec 2020 15:06

Instrument :

MSVOA_D

ClientSampleId :

SU-01-120820

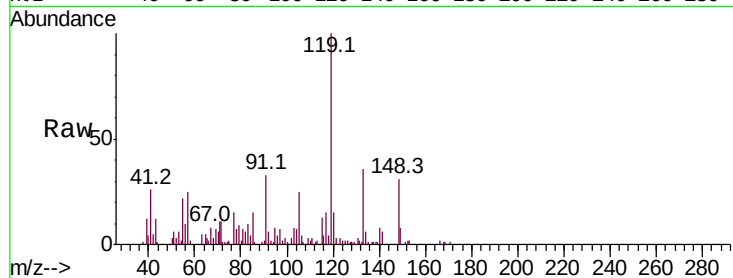
Tot Ion: 75 Resp: 346

Ion Ratio Lower Upper

75 100

155 0.0 44.1 132.4#

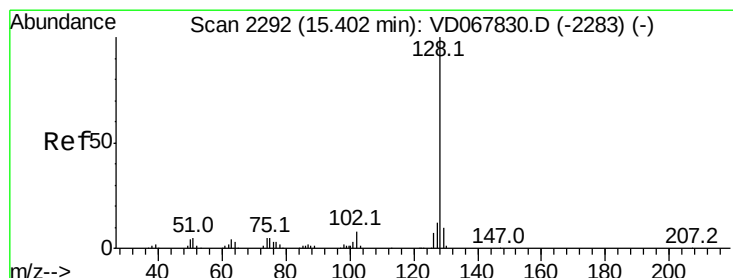
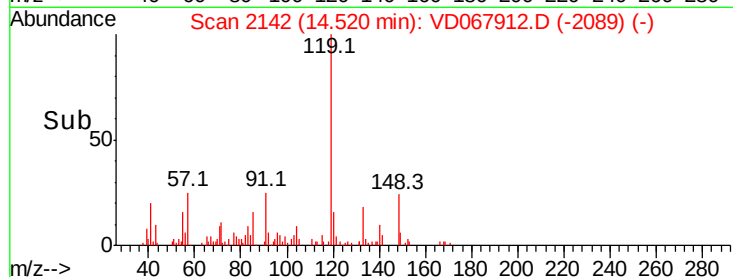
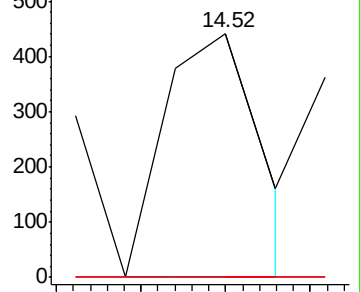
157 0.0 62.4 187.2#



Abundance Ion 74.90 (74.60 to 75.60): V

Ion 154.80 (154.50 to 155.50): V

Ion 156.80 (156.50 to 157.50): V



#95

Naphthalene

Concen: 5.806 ug/l

RT: 15.41 min Scan# 2293

Delta R.T. 0.01 min

Lab File: VD067912.D

Acq: 08 Dec 2020 15:06

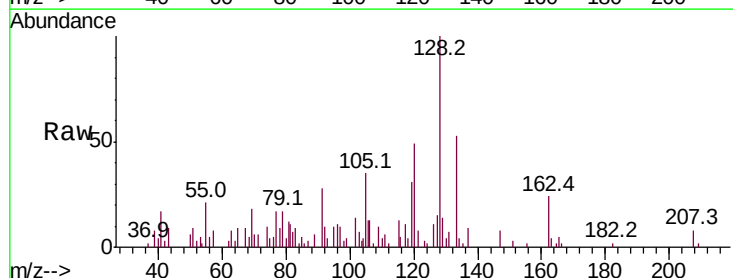
Tgt Ion: 128 Resp: 19632

Ion Ratio Lower Upper

128 100

127 16.1 10.6 15.8#

129 5.6 9.0 13.6#



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

