

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD080119\
 Data File : VD063294.D
 Acq On : 1 Aug 2019 16:01
 Operator : VA/AP
 Sample : K4120-04
 Misc : 5.00µl/5ml/MSVOA D/SOIL
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :
 T2-1

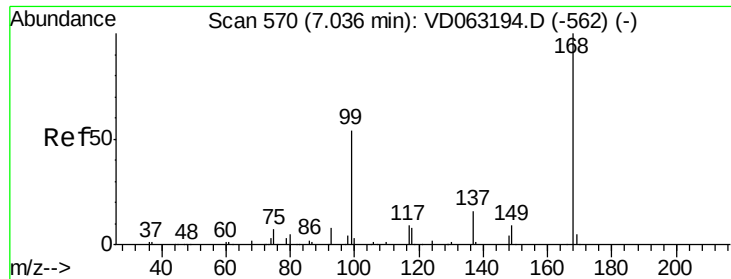
Quant Time: Aug 02 07:25:09 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D072919S.M
 Quant Title : SW846 8260
 QLast Update : Tue Jul 30 03:04:50 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.03	168	1032401	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.21	114	1466899	50.00	ug/l	0.00
63) Chlorobenzene-d5	12.36	117	1044013	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	14.52	152	331241	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	7.44	65	390597	34.10	ug/l	0.00
Spiked Amount			Recovery	=	68.20%	
35) Dibromofluoromethane	6.91	113	467298	37.31	ug/l	0.00
Spiked Amount			Recovery	=	74.62%	
50) Toluene-d8	10.40	98	947988	33.82	ug/l	0.00
Spiked Amount			Recovery	=	67.64%	
62) 4-Bromofluorobenzene	13.55	95	279479	21.88	ug/l	0.00
Spiked Amount			Recovery	=	43.76%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
11) Tert butyl alcohol	4.06	59	825	1.641	ug/l #	1
13) Acrolein	2.97	56	21631	44.709	ug/l #	1
15) Acrylonitrile	4.21	53	23700	18.184	ug/l #	51
16) Acetone	3.16	43	31086	13.928	ug/l #	79
20) Methylene Chloride	3.81	84	13893	1.540	ug/l #	30
29) Tetrahydrofuran	6.45	42	1736	1.637	ug/l #	66
30) Chloroform	6.61	83	40858	2.022	ug/l #	21
31) Cyclohexane	6.95	56	744876	72.998	ug/l	94
36) 1,1-Dichloropropene	7.03	75	76129	5.687	ug/l #	50
37) Ethyl Acetate	6.17	43	6369	1.059	ug/l #	8
38) Carbon Tetrachloride	7.03	117	97630	4.844	ug/l #	15
39) Methylcyclohexane	8.86	83	646528	57.964	ug/l	94
40) Benzene	7.45	78	1313176	46.803	ug/l	97
41) Methacrylonitrile	6.45	41	9682	1.346	ug/l #	83
45) 1,2-Dichloropropane	8.86	63	9706	1.361	ug/l #	1
48) Methyl methacrylate	9.15	41	38919	7.811	ug/l #	62
52) Toluene	10.50	92	100966	5.411	ug/l	89
56) Ethyl methacrylate	11.08	69	10064	1.458	ug/l #	4
67) Ethyl Benzene	12.52	91	348737	10.223	ug/l	98
68) m/p-Xylenes	12.66	106	196977	15.745	ug/l	92
69) o-Xylene	13.04	106	50068	4.358	ug/l	90
73) Isopropylbenzene	13.39	105	372191	17.903	ug/l	95
78) n-propylbenzene	13.77	91	141007	5.699	ug/l	94
81) trans-1,4-Dichloro-2-buten	13.39	75	4735	4.286	ug/l #	68
90) Hexachloroethane	15.09	117	67843	12.648	ug/l #	14

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.03 min Scan# 570

Delta R.T. -0.00 min

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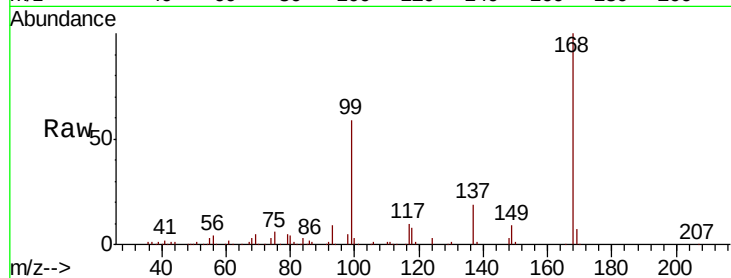
T2-1

Tot Ion:168 Resp: 1032401

Ion Ratio Lower Upper

168 100

99 59.0 43.7 65.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC

7.03

400000

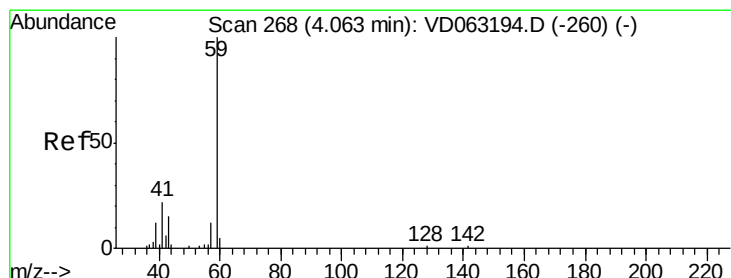
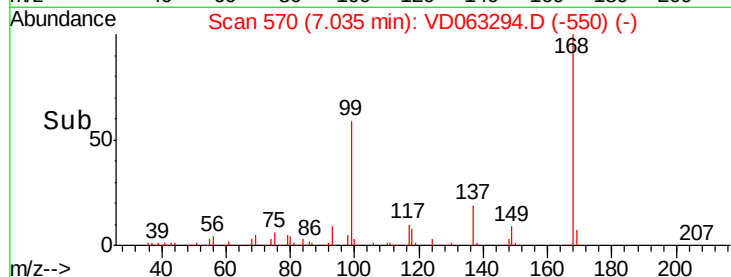
300000

200000

100000

0

Time-->



#11

Tert butyl alcohol

Concen: 1.641 ug/l

RT: 4.06 min Scan# 268

Delta R.T. -0.00 min

Lab File: VD063294.D

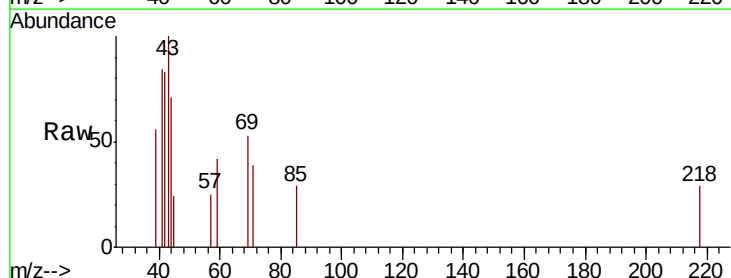
Acq: 1 Aug 2019 16:01

Tgt Ion: 59 Resp: 825

Ion Ratio Lower Upper

59 100

57 58.7 9.6 14.4#



Abundance Ion 58.95 (58.65 to 59.65): VDC

Ion 56.95 (56.65 to 57.65): VDC

4.06

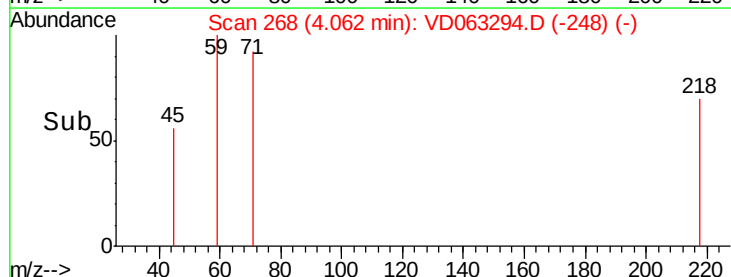
600

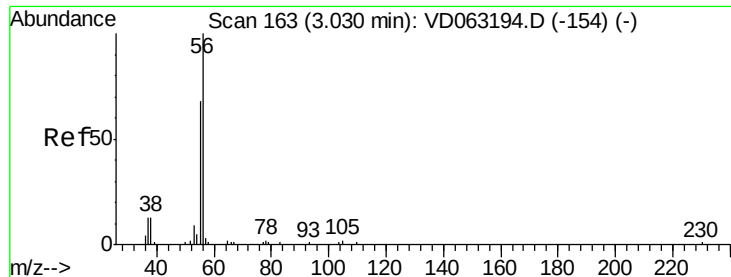
400

200

0

Time-->





#13

Acrolein

Concen: 44.709 ug/l

RT: 2.97 min Scan# 157

Delta R.T. -0.06 min

Lab File: VD063294.D

Acq: 1 Aug 2019 16:01

Instrument :

MSVOA_D

ClientSampleId :

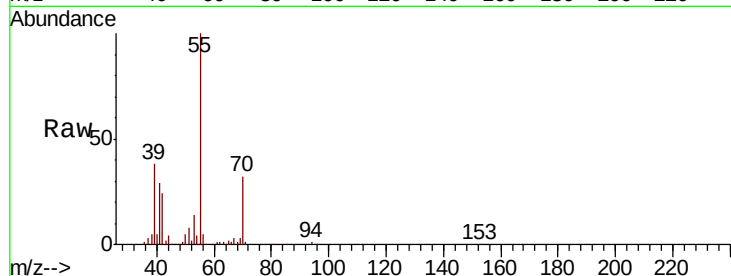
T2-1

Tot Ion: 56 Resp: 21631

Ion Ratio Lower Upper

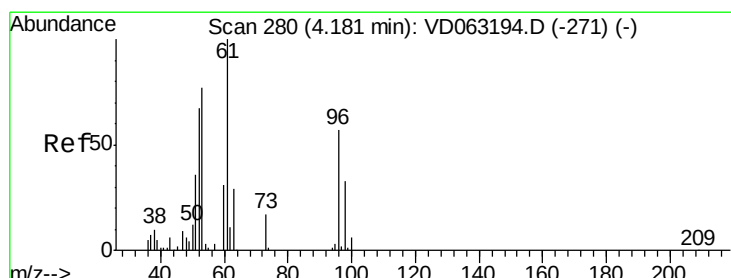
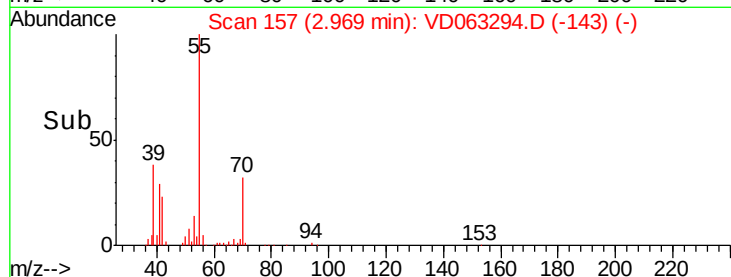
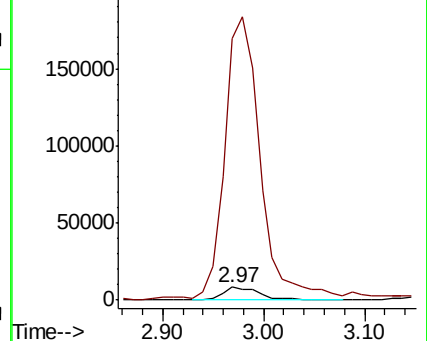
56 100

55 2001.5 55.3 82.9#



Abundance Ion 55.95 (55.65 to 56.65): VDC

Ion 55.00 (54.70 to 55.70): VDC



#15

Acrylonitrile

Concen: 18.184 ug/l

RT: 4.21 min Scan# 283

Delta R.T. 0.03 min

Lab File: VD063294.D

Acq: 1 Aug 2019 16:01

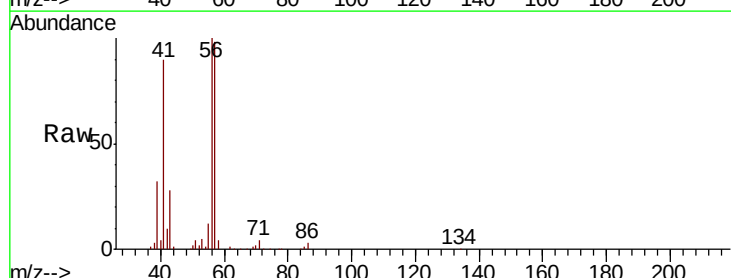
Tgt Ion: 53 Resp: 23700

Ion Ratio Lower Upper

53 100

52 34.8 69.7 104.5#

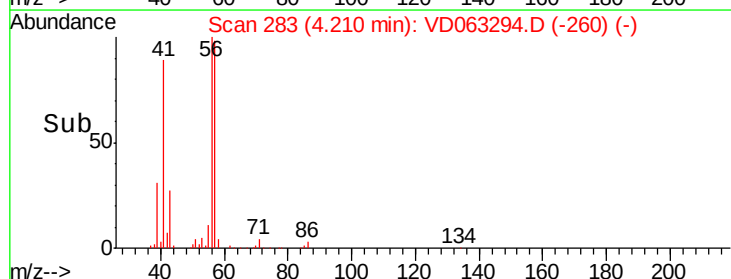
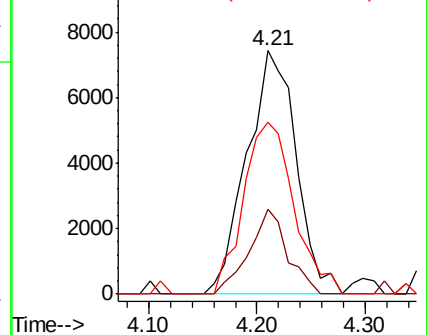
51 70.5 37.4 56.0#

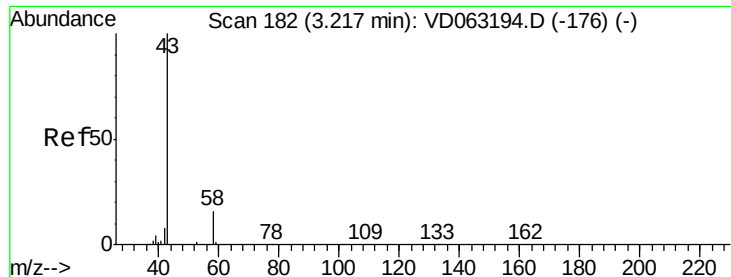


Abundance Ion 53.00 (52.70 to 53.70): VDC

Ion 52.00 (51.70 to 52.70): VDC

Ion 51.00 (50.70 to 51.70): VDC





#16

Acetone

Concen: 13.928 ug/l

RT: 3.16 min Scan# 176

Delta R.T. -0.06 min

Lab File: VD063294.D

Acq: 1 Aug 2019 16:01

Instrument :

MSVOA_D

ClientSampleId :

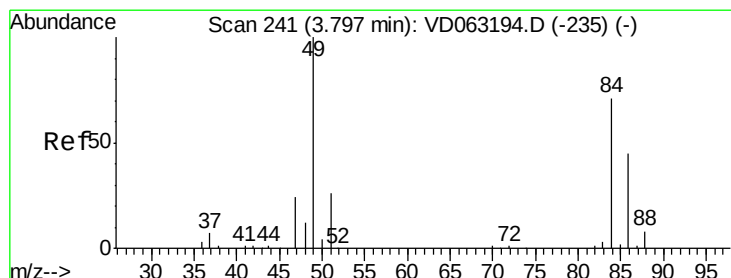
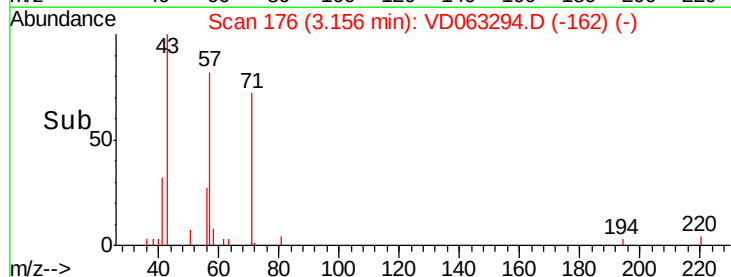
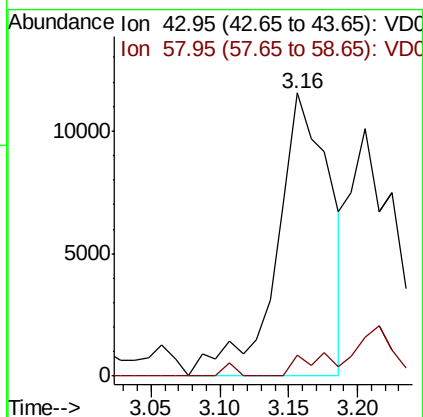
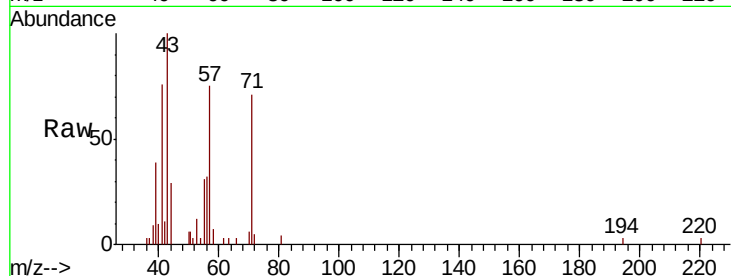
T2-1

Tot Ion: 43 Resp: 31086

Ion Ratio Lower Upper

43 100

58 7.3 13.0 19.4#



#20

Methylene Chloride

Concen: 1.540 ug/l

RT: 3.81 min Scan# 242

Delta R.T. 0.01 min

Lab File: VD063294.D

Acq: 1 Aug 2019 16:01

Tgt Ion: 84 Resp: 13893

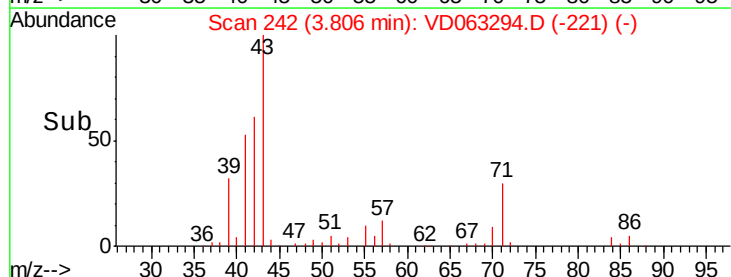
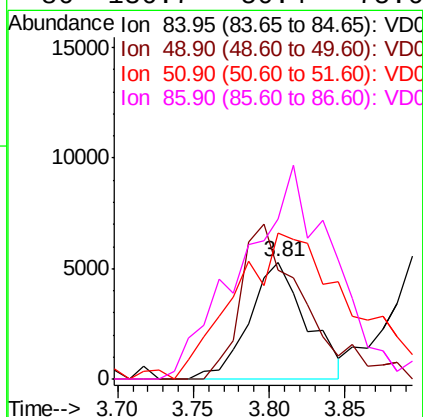
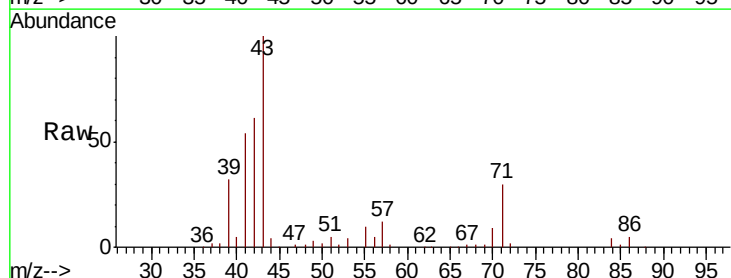
Ion Ratio Lower Upper

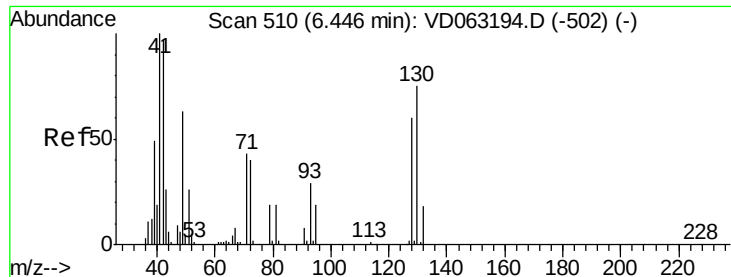
84 100

49 93.6 112.5 168.7#

51 124.4 29.6 44.4#

86 136.7 50.4 75.6#

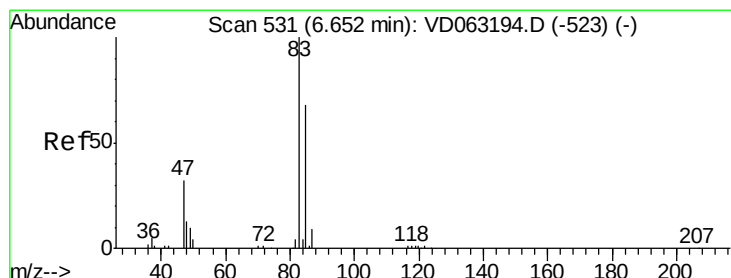
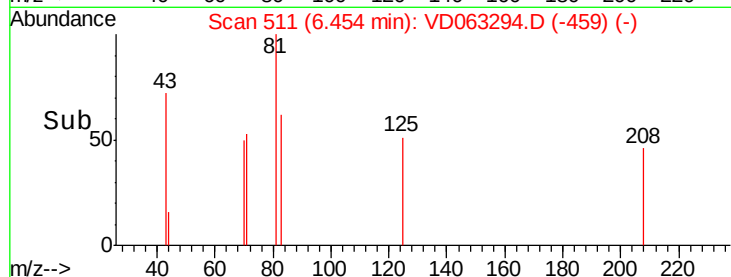
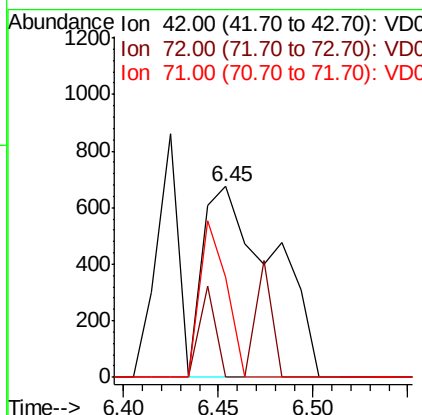
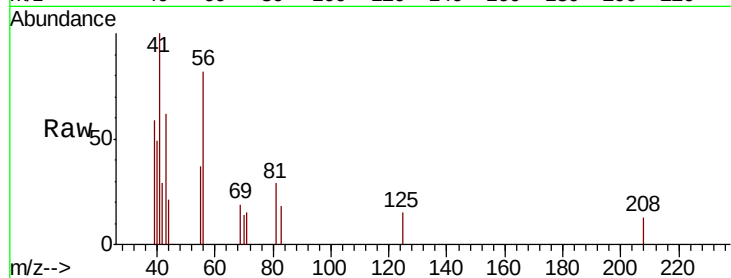




#29
Tetrahydrofuran
Concen: 1.637 ug/l
RT: 6.45 min Scan# 511
Delta R.T. 0.01 min
Lab File: VD063294.D
Acq: 1 Aug 2019 16:01

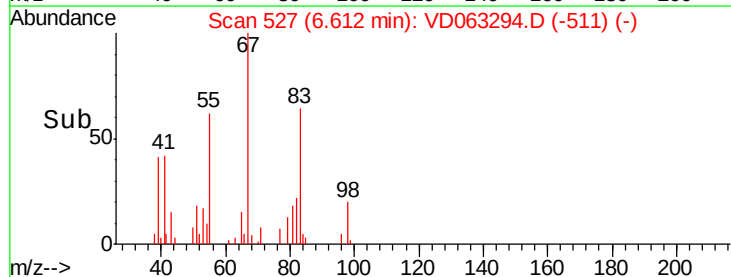
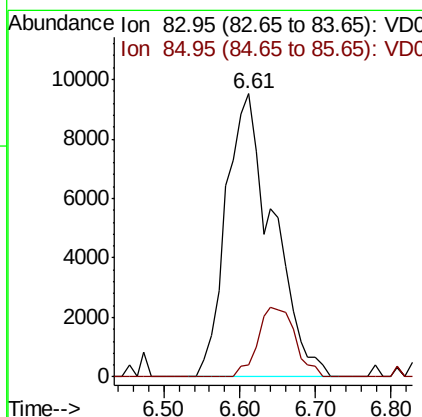
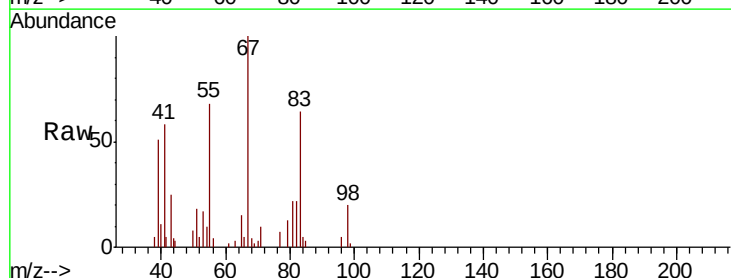
Instrument :
MSVOA_D
ClientSampleId :
T2-1

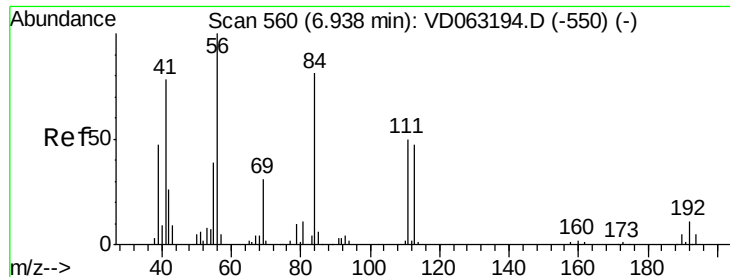
Tot Ion: 42 Resp: 1736
Ion Ratio Lower Upper
42 100
72 11.0 33.4 50.2#
71 31.0 35.7 53.5#



#30
Chloroform
Concen: 2.022 ug/l
RT: 6.61 min Scan# 527
Delta R.T. -0.04 min
Lab File: VD063294.D
Acq: 1 Aug 2019 16:01

Tgt Ion: 83 Resp: 40858
Ion Ratio Lower Upper
83 100
85 4.4 54.2 81.4#

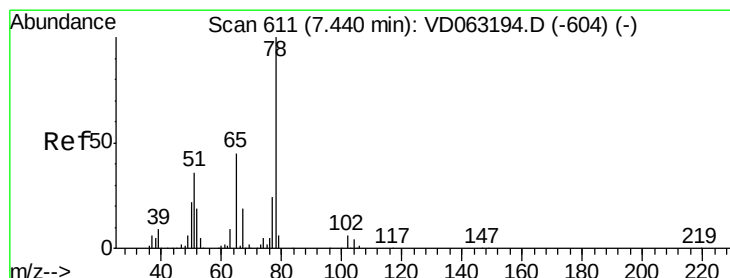
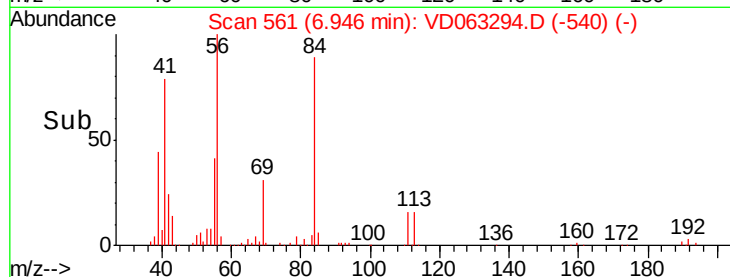
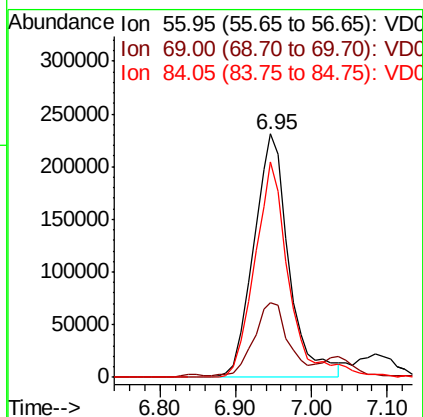
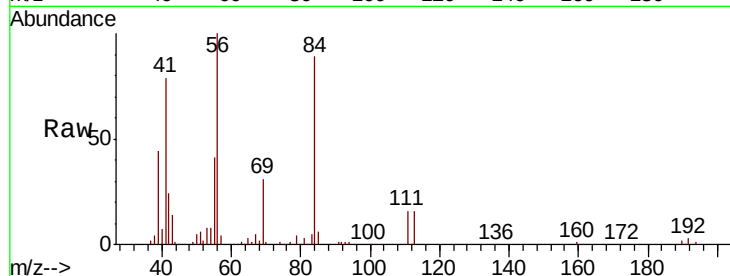




#31
Cyclohexane
Concen: 72.998 ug/l
RT: 6.95 min Scan# 561
Delta R.T. 0.01 min
Lab File: VD063294.D
Acq: 1 Aug 2019 16:01

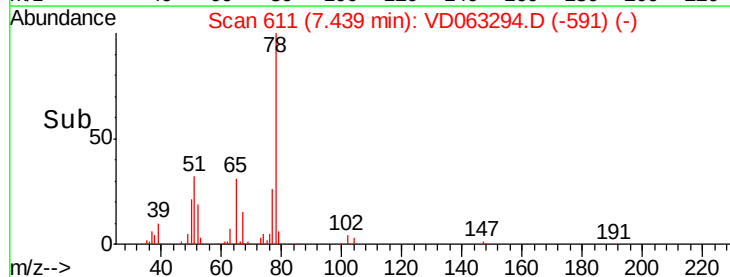
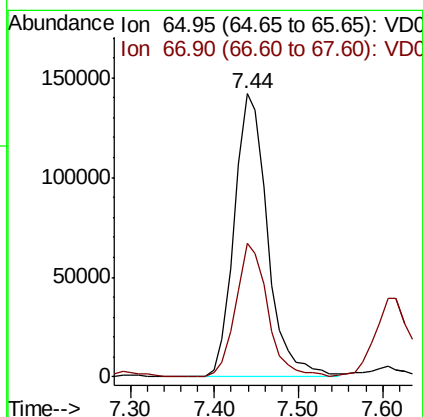
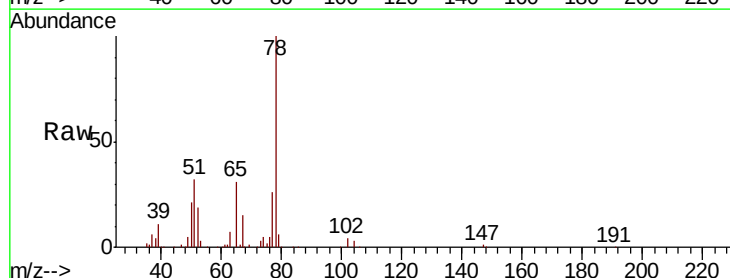
Instrument :
MSVOA_D
ClientSampleId :
T2-1

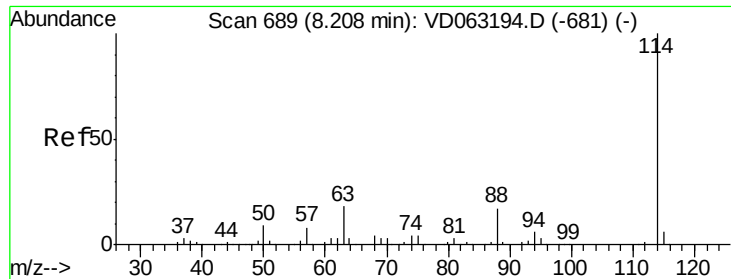
Tot Ion: 56 Resp: 744876
Ion Ratio Lower Upper
56 100
69 30.7 24.5 36.7
84 88.5 64.9 97.3



#33
1,2-Dichloroethane-d4
Concen: 34.097 ug/l
RT: 7.44 min Scan# 611
Delta R.T. -0.00 min
Lab File: VD063294.D
Acq: 1 Aug 2019 16:01

Tgt Ion: 65 Resp: 390597
Ion Ratio Lower Upper
65 100
67 47.1 0.0 85.8

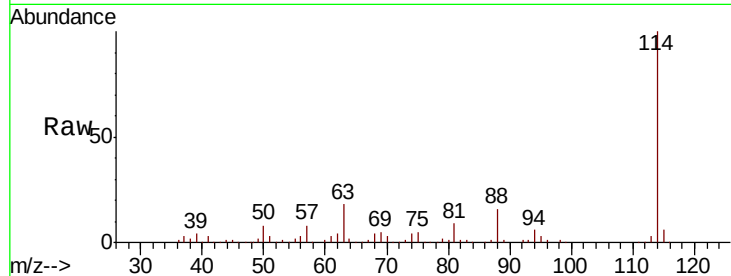




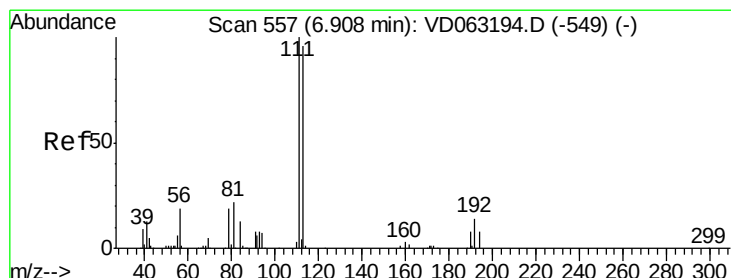
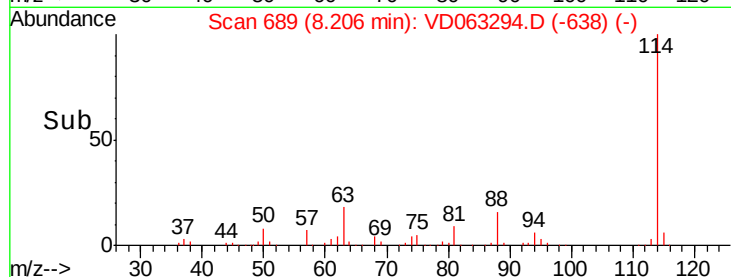
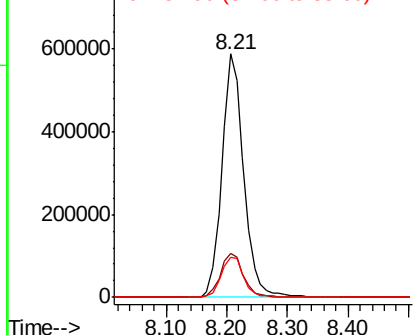
#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.21 min Scan# 689
 Delta R.T. -0.00 min
 Lab File: VD063294.D
 Acq: 1 Aug 2019 16:01

Instrument :
 MSVOA_D
 ClientSampleId :
 T2-1

Tot Ion:114 Resp: 1466899
 Ion Ratio Lower Upper
 114 100
 63 18.1 0.0 35.2
 88 16.4 0.0 34.6

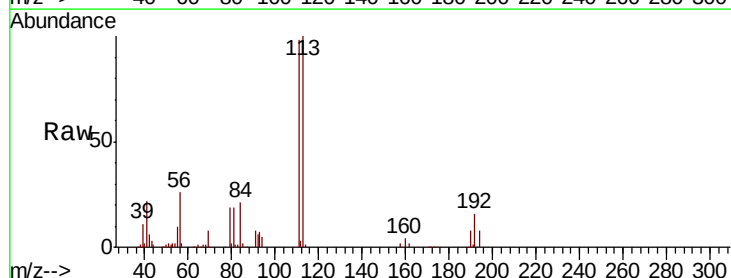


Abundance Ion 114.00 (113.70 to 114.70): V
 Ion 62.95 (62.65 to 63.65): V
 Ion 87.90 (87.60 to 88.60): V

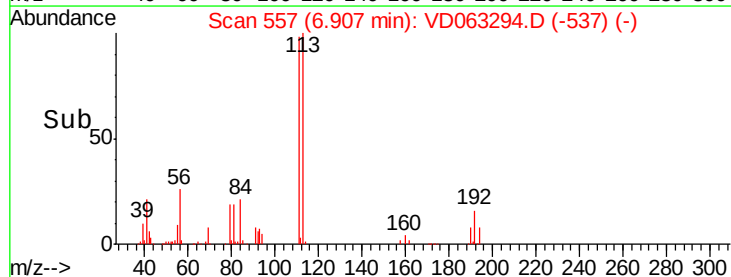
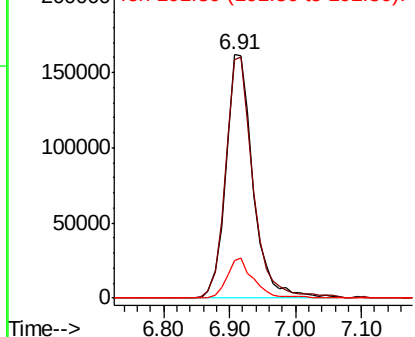


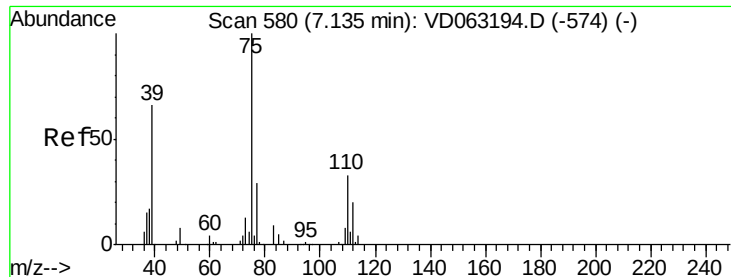
#35
 Dibromofluoromethane
 Concen: 37.312 ug/l
 RT: 6.91 min Scan# 557
 Delta R.T. -0.00 min
 Lab File: VD063294.D
 Acq: 1 Aug 2019 16:01

Tgt Ion:113 Resp: 467298
 Ion Ratio Lower Upper
 113 100
 111 97.7 83.2 124.8
 192 15.5 11.8 17.8



Abundance Ion 112.90 (112.60 to 113.60): V
 Ion 110.90 (110.60 to 111.60): V
 Ion 191.80 (191.50 to 192.50): V





#36

1,1-Dichloropropene

Concen: 5.687 ug/l

RT: 7.03 min Scan# 569

Delta R.T. -0.11 min

Lab File: VD063294.D

Acq: 1 Aug 2019 16:01

Instrument :

MSVOA_D

ClientSampleId :

T2-1

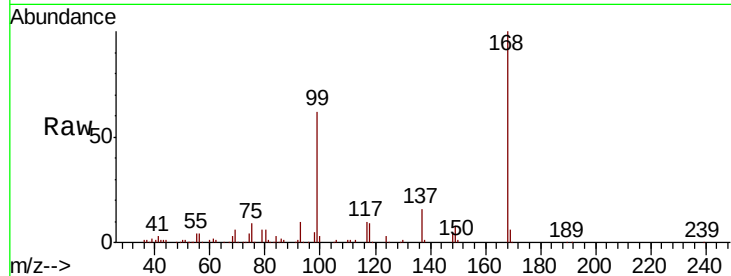
Tot Ion: 75 Resp: 76129

Ion Ratio Lower Upper

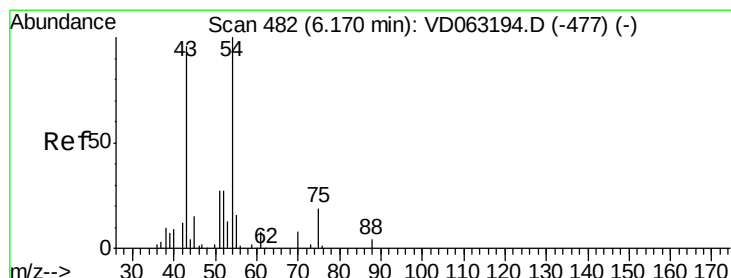
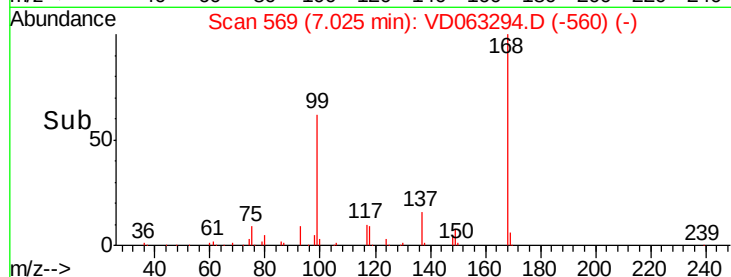
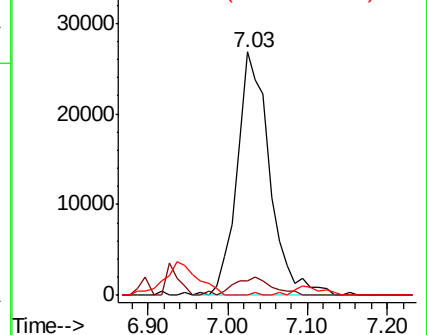
75 100

110 6.0 16.1 48.2#

77 0.0 22.7 34.1#



Abundance Ion 75.00 (74.70 to 75.70): VDC
Ion 109.90 (109.60 to 110.60): VDC
Ion 76.95 (76.65 to 77.65): VDC



#37

Ethyl Acetate

Concen: 1.059 ug/l

RT: 6.17 min Scan# 482

Delta R.T. -0.00 min

Lab File: VD063294.D

Acq: 1 Aug 2019 16:01

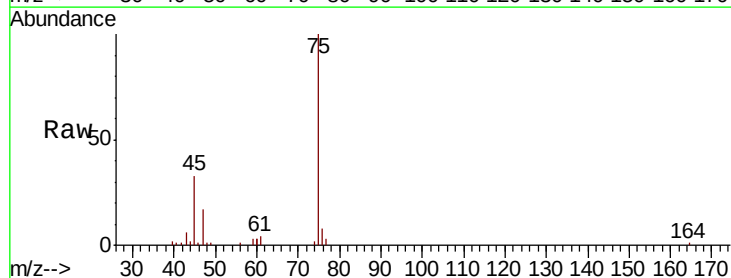
Tgt Ion: 43 Resp: 6369

Ion Ratio Lower Upper

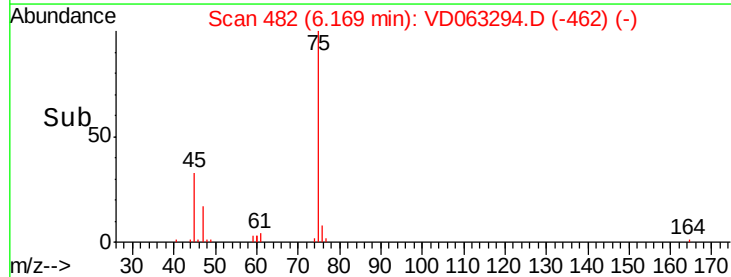
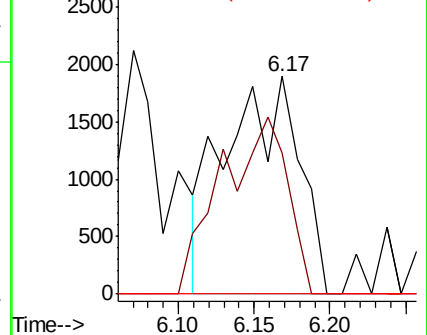
43 100

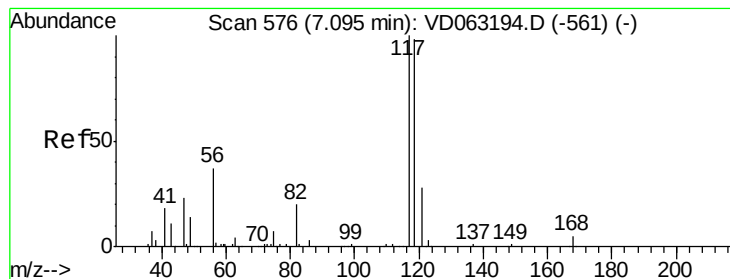
61 65.0 11.3 16.9#

70 0.0 5.1 7.7#



Abundance Ion 42.95 (42.65 to 43.65): VDC
Ion 60.95 (60.65 to 61.65): VDC
Ion 70.00 (69.70 to 70.70): VDC





#38

Carbon Tetrachloride

Concen: 4.844 ug/l

RT: 7.03 min Scan# 570

Delta R.T. -0.06 min

Lab File: VD063294.D

Acq: 1 Aug 2019 16:01

Instrument :

MSVOA_D

ClientSampleId :

T2-1

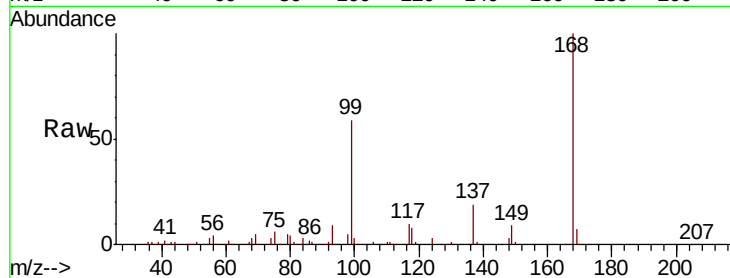
Tot Ion:117 Resp: 97630

Ion Ratio Lower Upper

117 100

119 5.3 78.2 117.2#

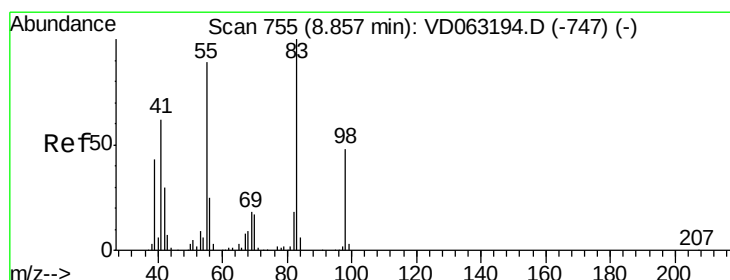
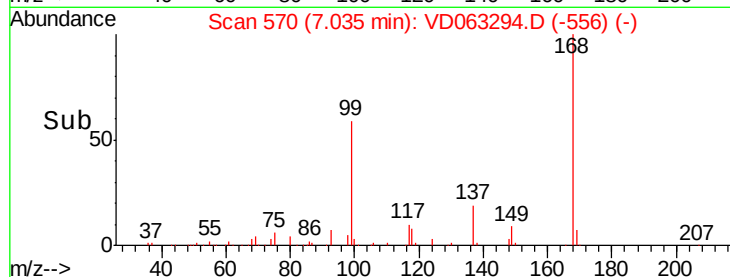
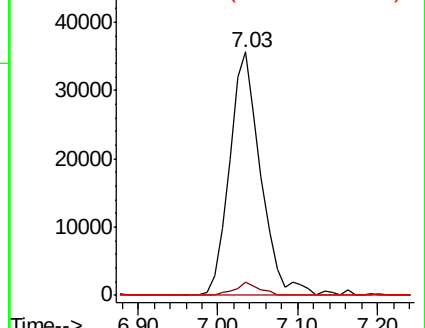
121 0.0 22.1 33.1#



Abundance Ion 116.85 (116.55 to 117.55): V

Ion 118.85 (118.55 to 119.55): V

Ion 120.85 (120.55 to 121.55): V



#39

Methylcyclohexane

Concen: 57.964 ug/l

RT: 8.86 min Scan# 755

Delta R.T. -0.00 min

Lab File: VD063294.D

Acq: 1 Aug 2019 16:01

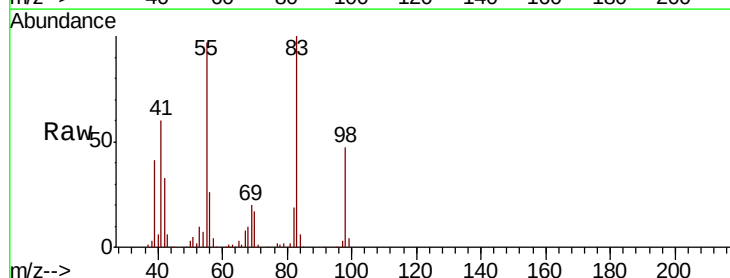
Tgt Ion: 83 Resp: 646528

Ion Ratio Lower Upper

83 100

55 97.2 71.1 106.7

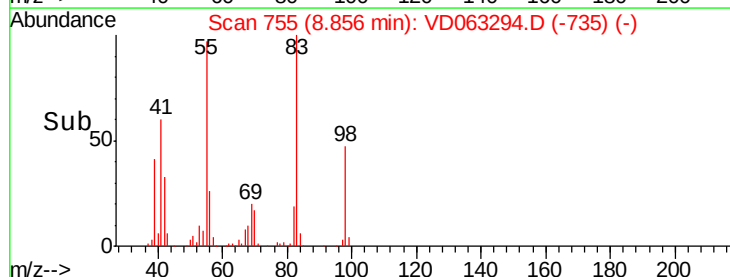
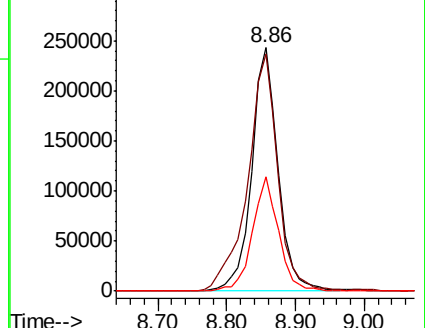
98 46.7 38.5 57.7

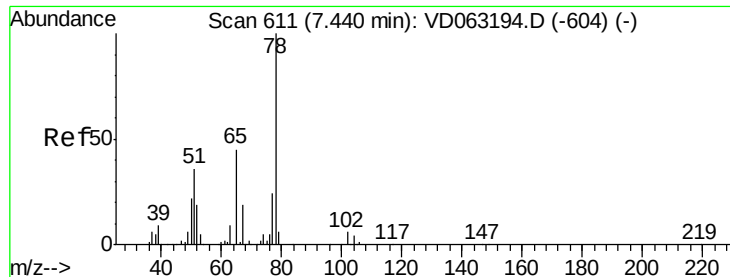


Abundance Ion 83.05 (82.75 to 83.75): V

Ion 55.00 (54.70 to 55.70): V

Ion 98.05 (97.75 to 98.75): V





#40

Benzene

Concen: 46.803 ug/l

RT: 7.45 min Scan# 612

Delta R.T. 0.01 min

Lab File: VD063294.D

Acq: 1 Aug 2019 16:01

Instrument :

MSVOA_D

ClientSampleId :

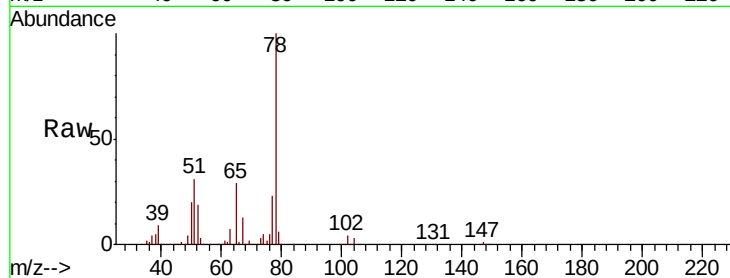
T2-1

Tot Ion: 78 Resp: 1313176

Ion Ratio Lower Upper

78 100

77 22.6 19.4 29.2



Abundance Ion 77.95 (77.65 to 78.65): VDC

Ion 76.95 (76.65 to 77.65): VDC

7.45

500000

400000

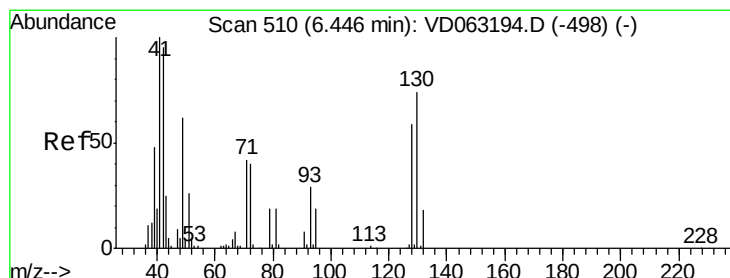
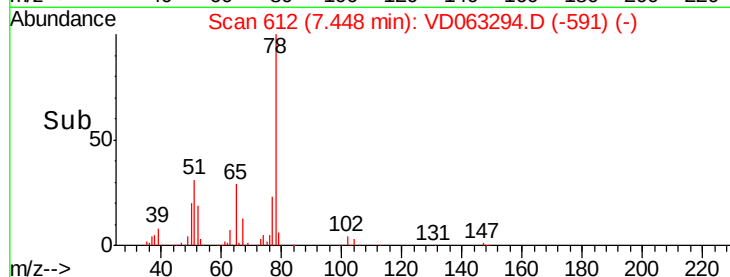
300000

200000

100000

0

Time-->



#41

Methacrylonitrile

Concen: 1.346 ug/l

RT: 6.45 min Scan# 511

Delta R.T. 0.01 min

Lab File: VD063294.D

Acq: 1 Aug 2019 16:01

Tgt Ion: 41 Resp: 9682

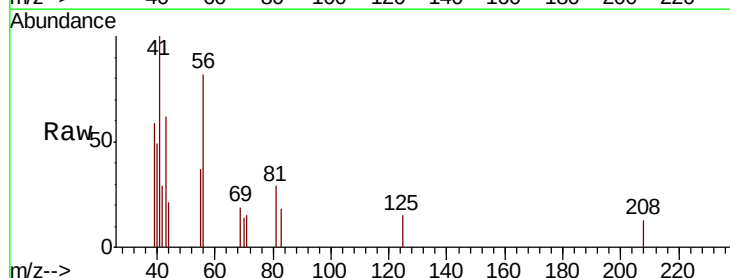
Ion Ratio Lower Upper

41 100

39 59.1 38.4 57.6#

67 0.0 6.7 10.1#

52 0.0 4.3 6.5#



Abundance Ion 40.95 (40.65 to 41.65): VDC

Ion 38.95 (38.65 to 39.65): VDC

Ion 67.00 (66.70 to 67.70): VDC

Ion 52.00 (51.70 to 52.70): VDC

8000

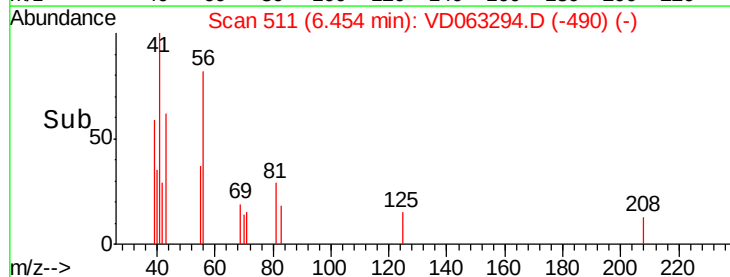
6000

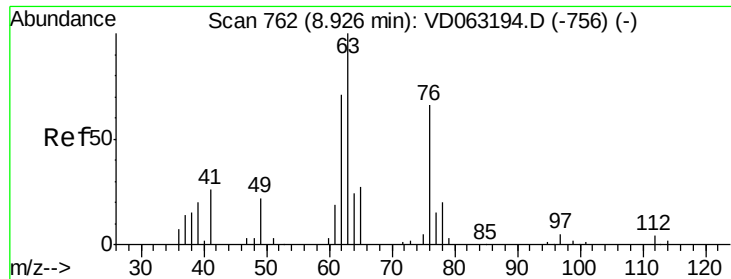
4000

2000

0

Time-->

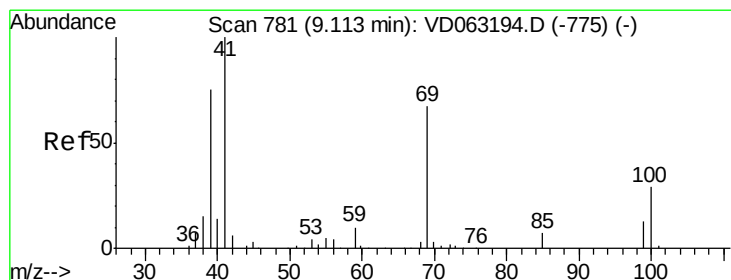
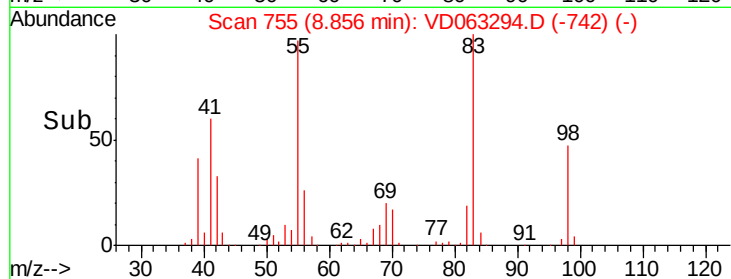
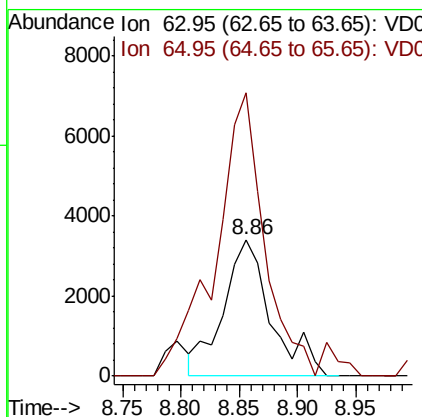
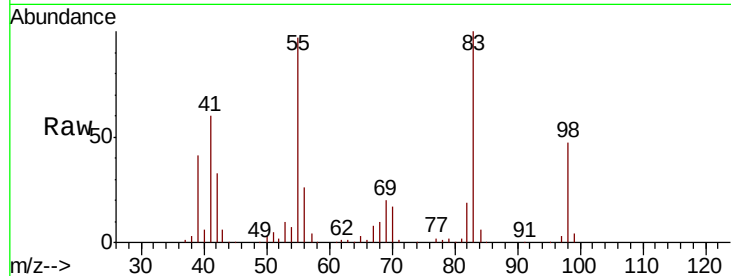




#45
 1,2-Dichloropropane
 Concen: 1.361 ug/l
 RT: 8.86 min Scan# 755
 Delta R.T. -0.07 min
 Lab File: VD063294.D
 Acq: 1 Aug 2019 16:01

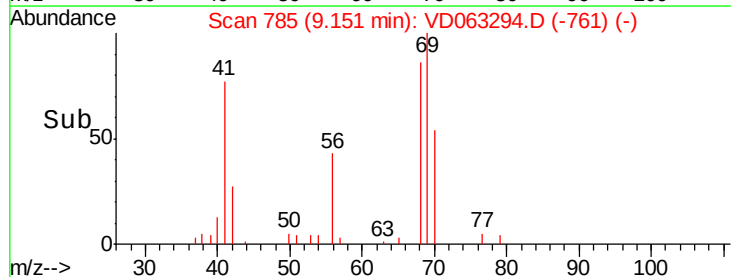
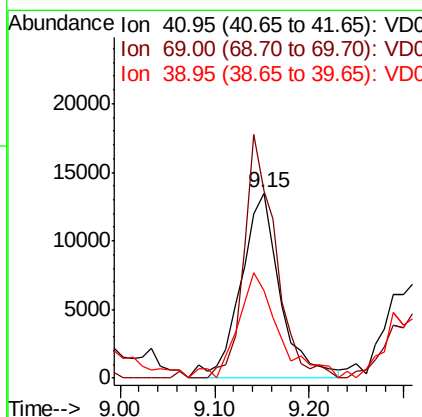
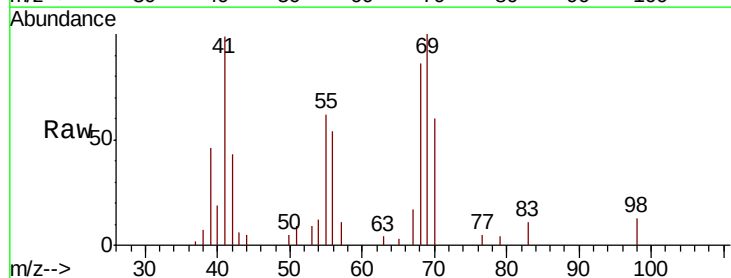
Instrument :
 MSVOA_D
 ClientSampleId :
 T2-1

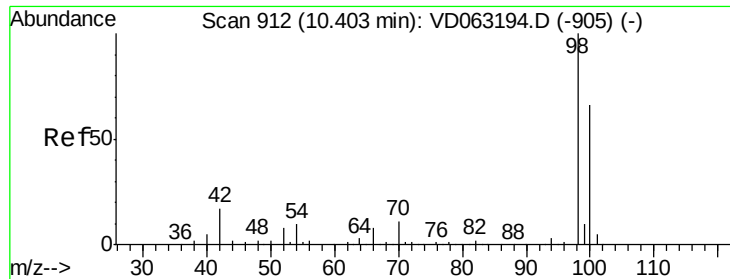
Tot Ion: 63 Resp: 9706
 Ion Ratio Lower Upper
 63 100
 65 207.4 23.6 35.4#



#48
 Methyl methacrylate
 Concen: 7.811 ug/l
 RT: 9.15 min Scan# 785
 Delta R.T. 0.04 min
 Lab File: VD063294.D
 Acq: 1 Aug 2019 16:01

Tgt Ion: 41 Resp: 38919
 Ion Ratio Lower Upper
 41 100
 69 101.2 53.4 80.0#
 39 47.0 60.3 90.5#

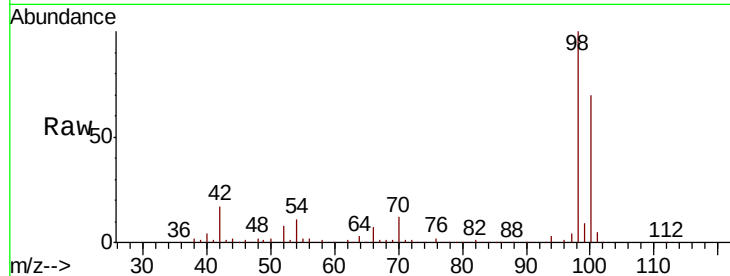




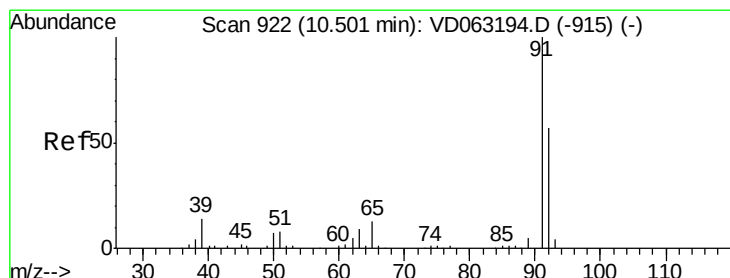
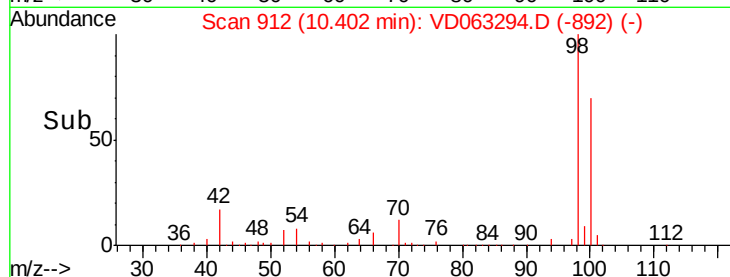
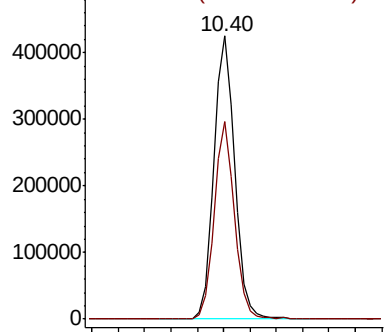
#50
Toluene-d8
Concen: 33.822 ug/l
RT: 10.40 min Scan# 912
Delta R.T. -0.00 min
Lab File: VD063294.D
Acq: 1 Aug 2019 16:01

Instrument :
MSVOA_D
ClientSampleId :
T2-1

Tot Ion: 98 Resp: 947988
Ion Ratio Lower Upper
98 100
100 69.6 53.2 79.8

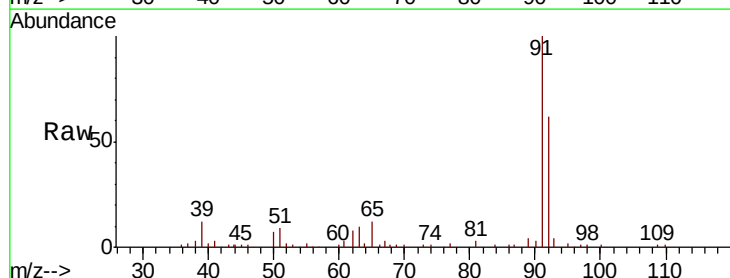


Abundance Ion 98.05 (97.75 to 98.75): VDC
Ion 100.05 (99.75 to 100.75): VDC

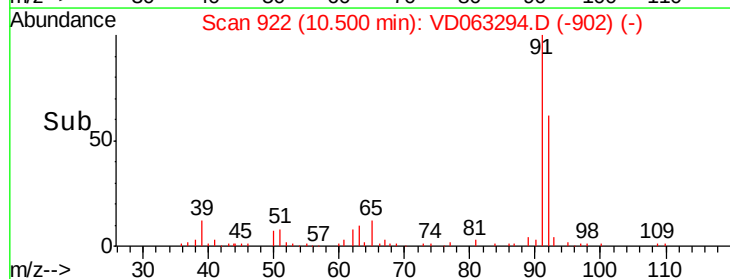
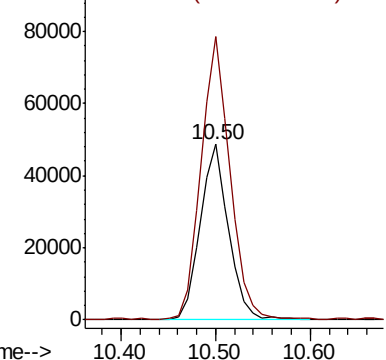


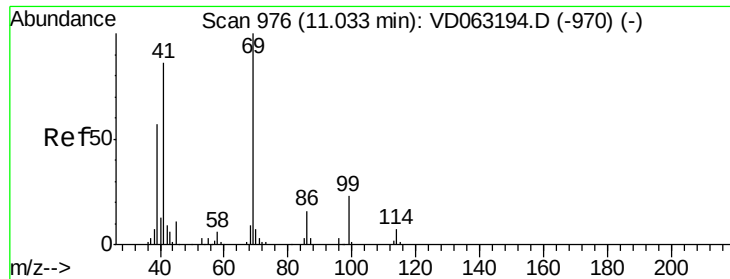
#52
Toluene
Concen: 5.411 ug/l
RT: 10.50 min Scan# 922
Delta R.T. -0.00 min
Lab File: VD063294.D
Acq: 1 Aug 2019 16:01

Tgt Ion: 92 Resp: 100966
Ion Ratio Lower Upper
92 100
91 161.1 140.8 211.2



Abundance Ion 92.00 (91.70 to 92.70): VDC
Ion 91.00 (90.70 to 91.70): VDC





#56

Ethyl methacrylate

Concen: 1.458 ug/l

RT: 11.08 min Scan# 981

Delta R.T. 0.05 min

Lab File: VD063294.D

Acq: 1 Aug 2019 16:01

Instrument :

MSVOA_D

ClientSampleId :

T2-1

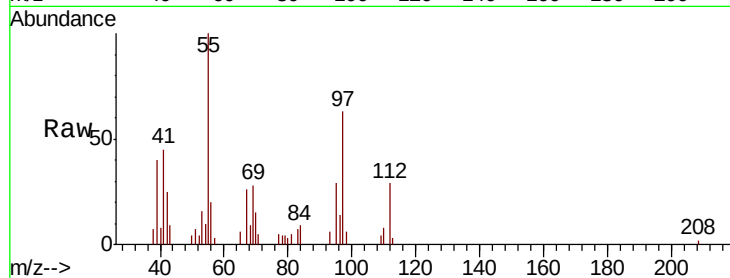
Tot Ion: 69 Resp: 10064

Ion Ratio Lower Upper

69 100

41 161.3 68.8 103.2#

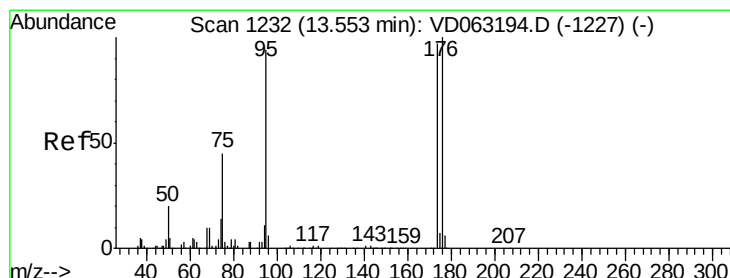
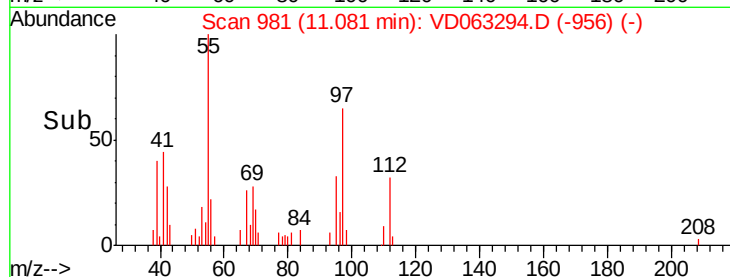
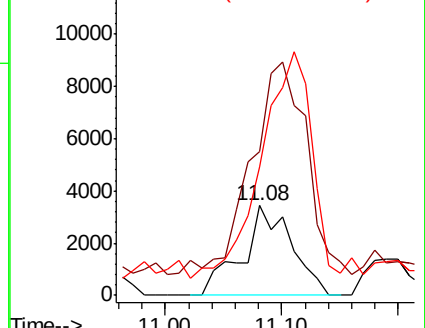
39 143.0 45.8 68.8#



Abundance Ion 69.00 (68.70 to 69.70): VDC

Ion 41.05 (40.75 to 41.75): VDC

Ion 38.95 (38.65 to 39.65): VDC



#62

4-Bromofluorobenzene

Concen: 21.881 ug/l

RT: 13.55 min Scan# 1232

Delta R.T. -0.00 min

Lab File: VD063294.D

Acq: 1 Aug 2019 16:01

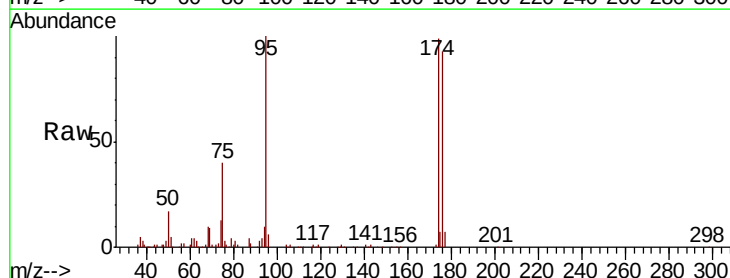
Tgt Ion: 95 Resp: 279479

Ion Ratio Lower Upper

95 100

174 98.8 0.0 205.4

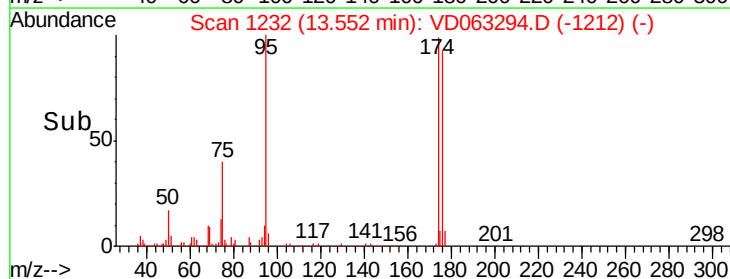
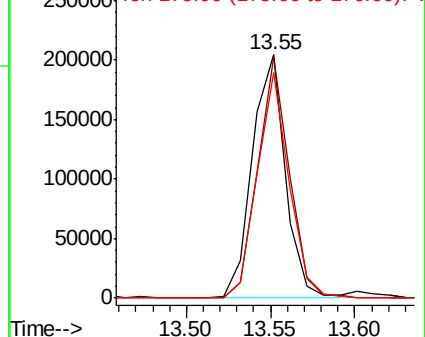
176 92.6 0.0 211.8

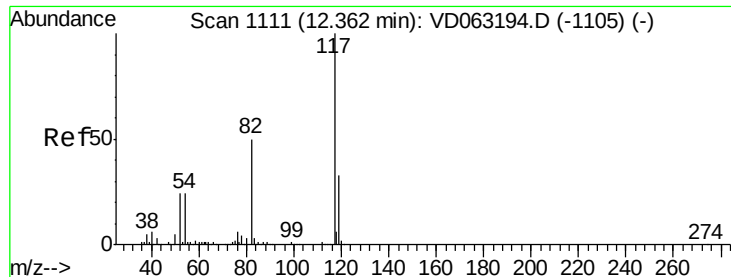


Abundance Ion 95.00 (94.70 to 95.70): VDC

Ion 173.90 (173.60 to 174.60): V

Ion 175.90 (175.60 to 176.60): V

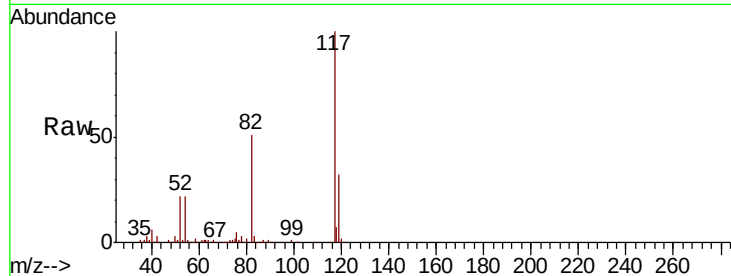




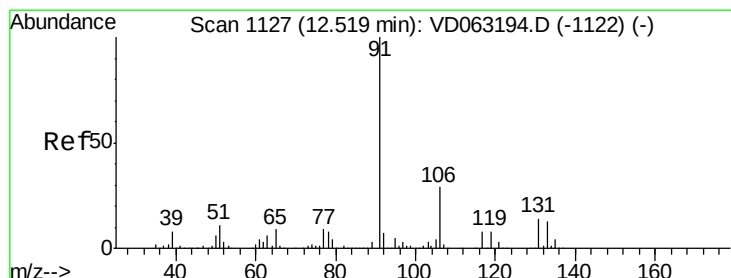
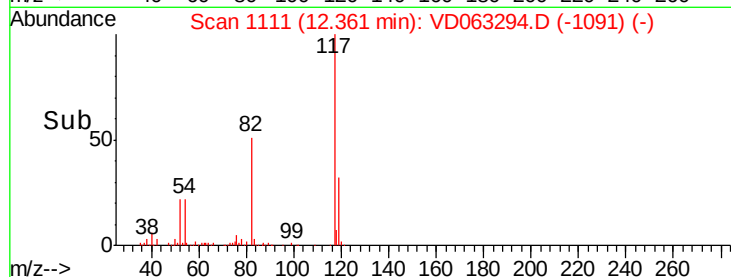
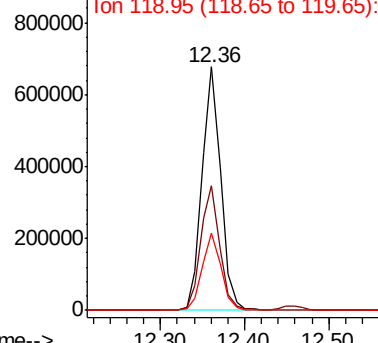
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 12.36 min Scan# 1111
Delta R.T. -0.00 min
Lab File: VD063294.D
Acq: 1 Aug 2019 16:01

Instrument :
MSVOA_D
ClientSampled :
T2-1

Tot Ion:117 Resp: 1044013
Ion Ratio Lower Upper
117 100
82 51.0 40.1 60.1
119 31.8 26.5 39.7

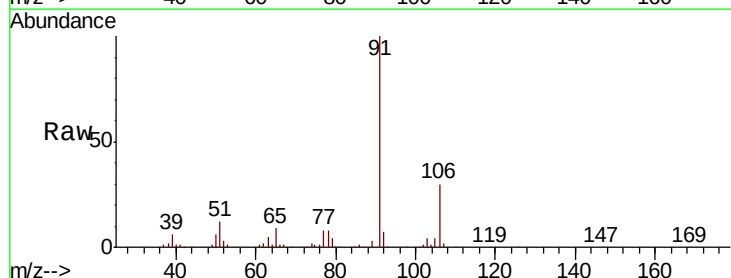


Abundance Ion 116.95 (116.65 to 117.65): V
Ion 82.05 (81.75 to 82.75): V
Ion 118.95 (118.65 to 119.65): V

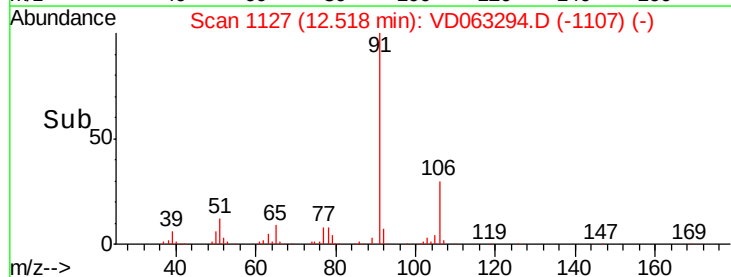
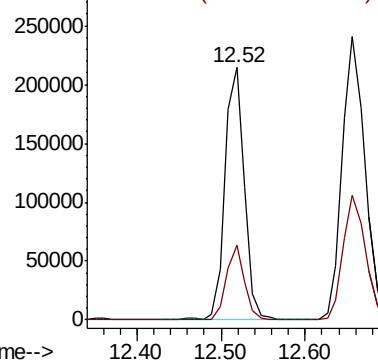


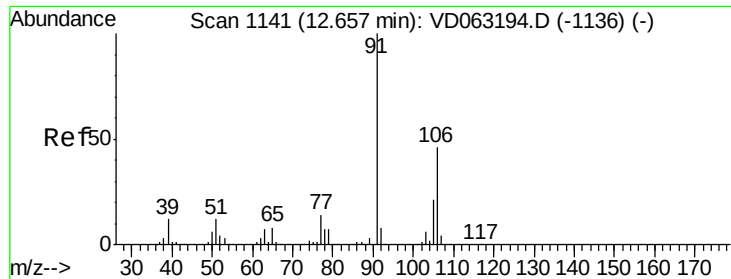
#67
Ethyl Benzene
Concen: 10.223 ug/l
RT: 12.52 min Scan# 1127
Delta R.T. -0.00 min
Lab File: VD063294.D
Acq: 1 Aug 2019 16:01

Tgt Ion: 91 Resp: 348737
Ion Ratio Lower Upper
91 100
106 29.7 22.9 34.3



Abundance Ion 91.00 (90.70 to 91.70): V
Ion 106.05 (105.75 to 106.75): V

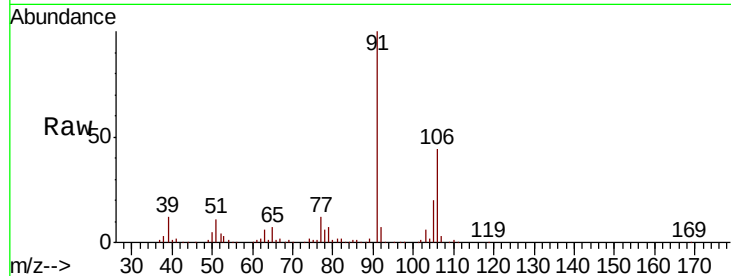




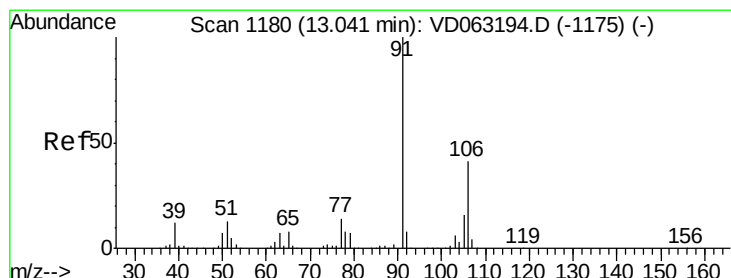
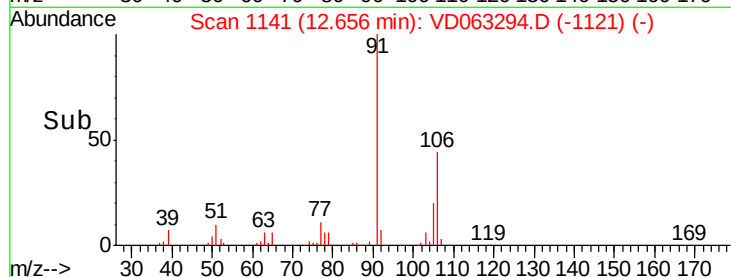
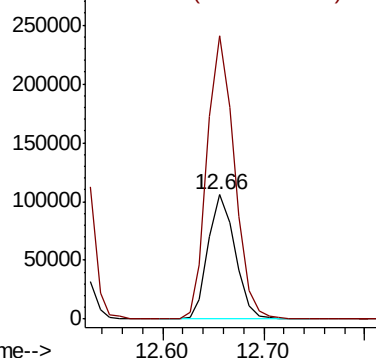
#68
m/p-Xylenes
Concen: 15.745 ug/l
RT: 12.66 min Scan# 1141
Delta R.T. -0.00 min
Lab File: VD063294.D
Acq: 1 Aug 2019 16:01

Instrument :
MSVOA_D
ClientSampled :
T2-1

Tot Ion:106 Resp: 196977
Ion Ratio Lower Upper
106 100
91 228.1 172.6 259.0

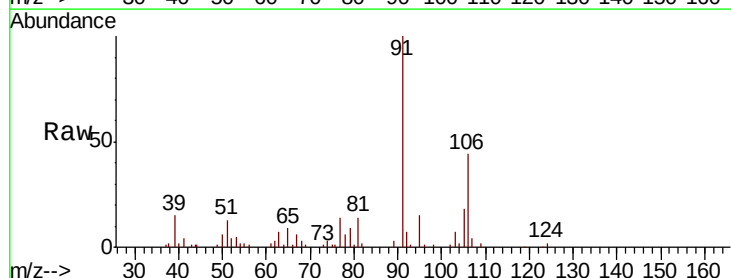


Abundance Ion 106.05 (105.75 to 106.75): V
Ion 91.00 (90.70 to 91.70): VDC

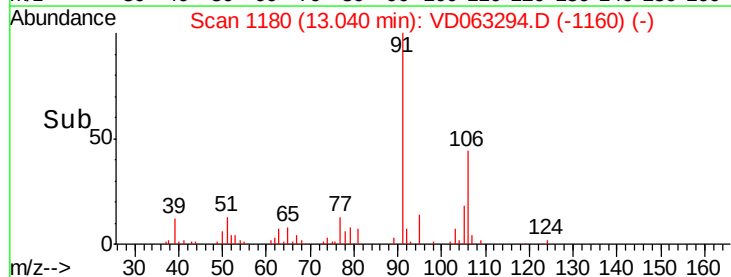
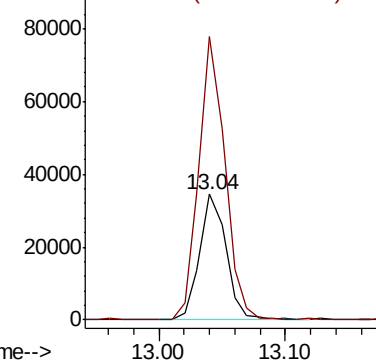


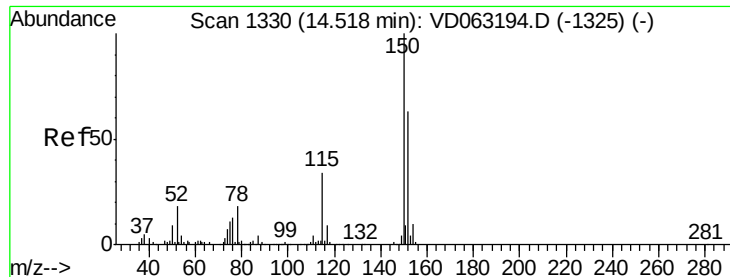
#69
o-Xylene
Concen: 4.358 ug/l
RT: 13.04 min Scan# 1180
Delta R.T. -0.00 min
Lab File: VD063294.D
Acq: 1 Aug 2019 16:01

Tgt Ion:106 Resp: 50068
Ion Ratio Lower Upper
106 100
91 224.9 121.3 363.9



Abundance Ion 106.05 (105.75 to 106.75): V
Ion 91.00 (90.70 to 91.70): VDC



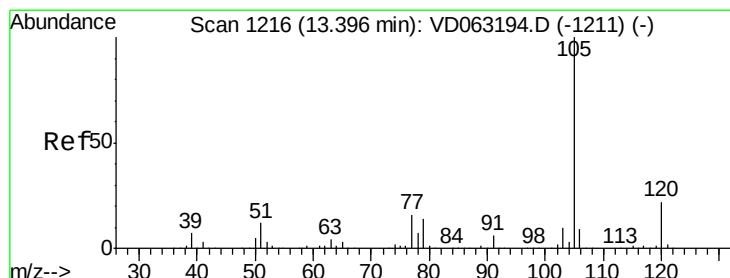
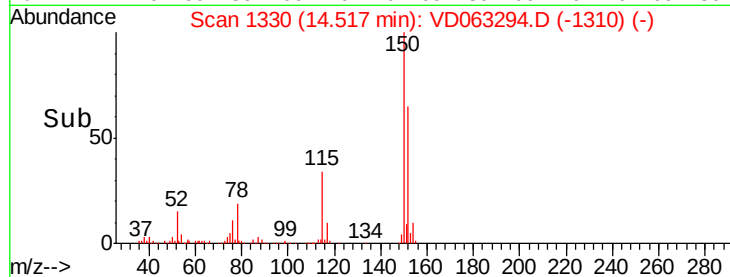
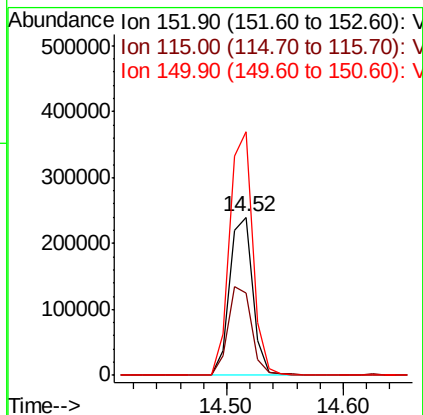
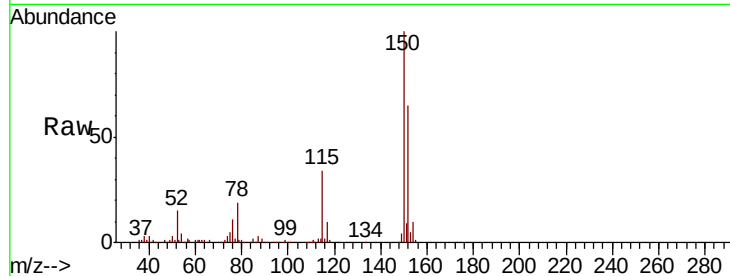


#72

1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 14.52 min Scan# 1330
Delta R.T. -0.00 min
Lab File: VD063294.D
Acq: 1 Aug 2019 16:01

Instrument :
MSVOA_D
ClientSampled :
T2-1

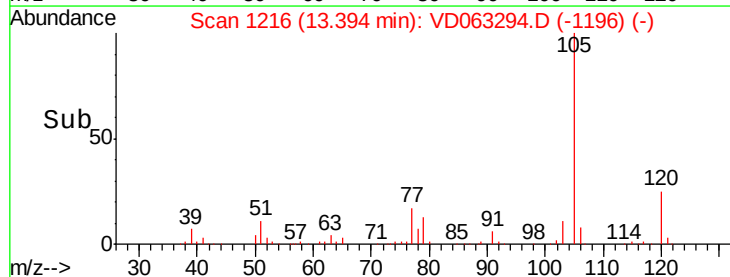
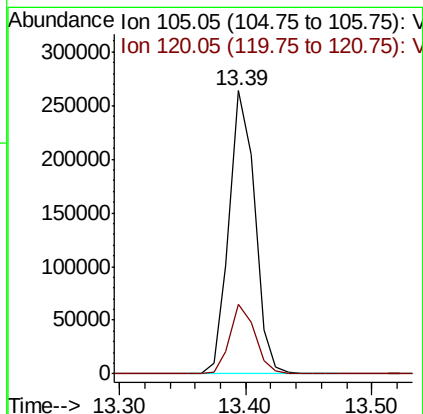
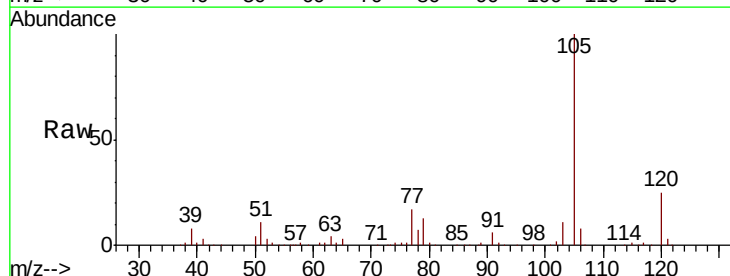
Tot Ion	Ratio	Lower	Upper
152	100		
115	52.4	27.5	82.4
150	154.0	0.0	320.6

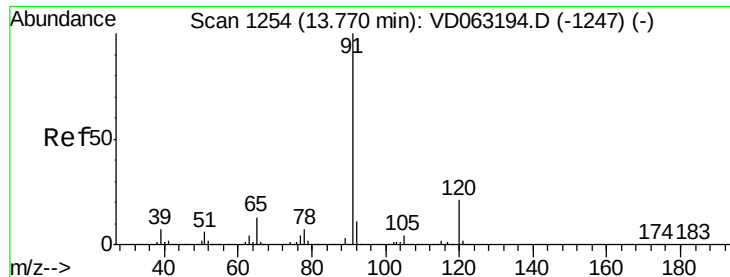


#73

Isopropylbenzene
Concen: 17.903 ug/l
RT: 13.39 min Scan# 1216
Delta R.T. -0.00 min
Lab File: VD063294.D
Acq: 1 Aug 2019 16:01

Tgt Ion	Ratio	Lower	Upper
105	100		
120	24.7	11.1	33.3





#78

n-propylbenzene

Concen: 5.699 ug/l

RT: 13.77 min Scan# 1254

Delta R.T. -0.00 min

Lab File: VD063294.D

Acq: 1 Aug 2019 16:01

Instrument :

MSVOA_D

ClientSampleId :

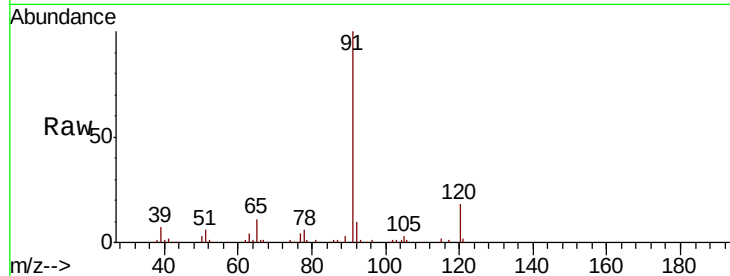
T2-1

Tot Ion: 91 Resp: 141007

Ion Ratio Lower Upper

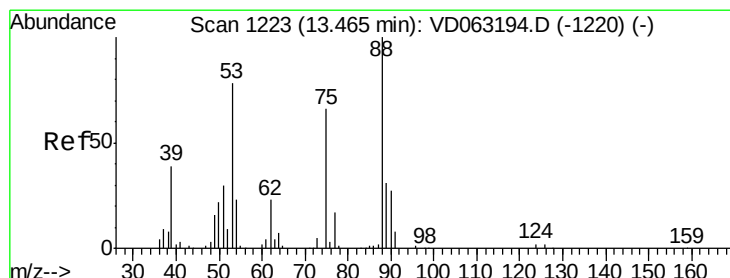
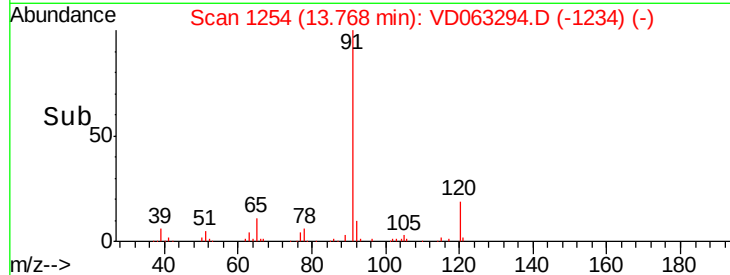
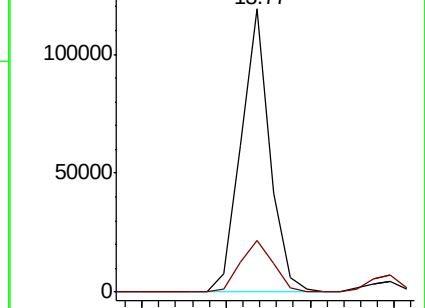
91 100

120 18.5 10.7 32.1



Abundance Ion 91.00 (90.70 to 91.70): VDC

Ion 120.05 (119.75 to 120.75): VDC



#81

trans-1,4-Dichloro-2-butene

Concen: 4.286 ug/l

RT: 13.39 min Scan# 1216

Delta R.T. -0.07 min

Lab File: VD063294.D

Acq: 1 Aug 2019 16:01

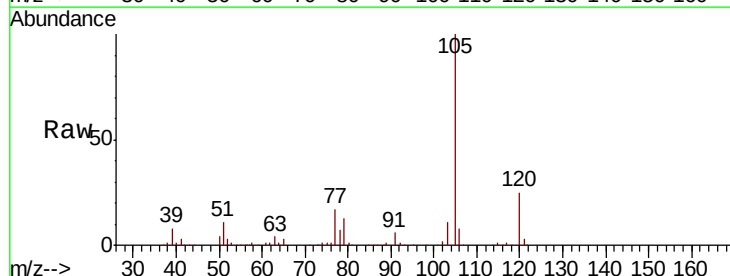
Tgt Ion: 75 Resp: 4735

Ion Ratio Lower Upper

75 100

53 109.9 94.9 142.3

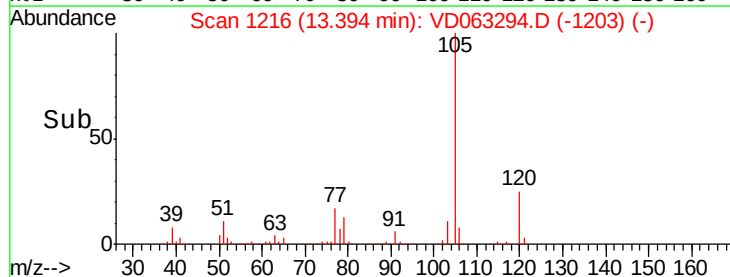
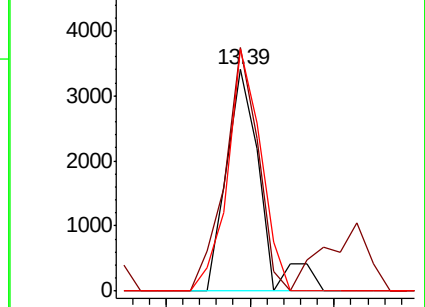
89 109.4 37.4 56.0#

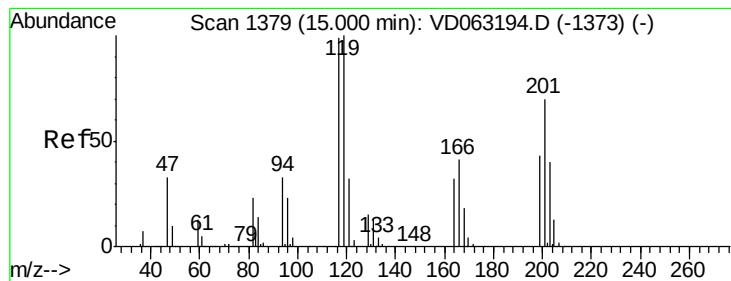


Abundance Ion 75.00 (74.70 to 75.70): VDC

Ion 53.00 (52.70 to 53.70): VDC

Ion 89.00 (88.70 to 89.70): VDC





#90

Hexachloroethane

Concen: 12.648 ug/l

RT: 15.09 min Scan# 1388

Delta R.T. 0.09 min

Lab File: VD063294.D

Acq: 1 Aug 2019 16:01

Instrument :

MSVOA_D

ClientSampleId :

T2-1

Tot Ion:117 Resp: 67843

Ion Ratio Lower Upper

117 100

201 0.0 35.2 105.6#

