

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_D\DATA\VD121719\
 Data File : VD064543.D
 Acq On : 17 Dec 2019 14:12
 Operator : VA/SY
 Sample : K6324-03
 Misc : 6.11G/5.00ml/MSVOA_D/SOIL
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :
 EP-11

Quant Time: Dec 18 00:48:12 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D112719S.M
 Quant Title : SW846 8260
 QLast Update : Fri Nov 29 07:18:03 2019
 Response via : Initial Calibration

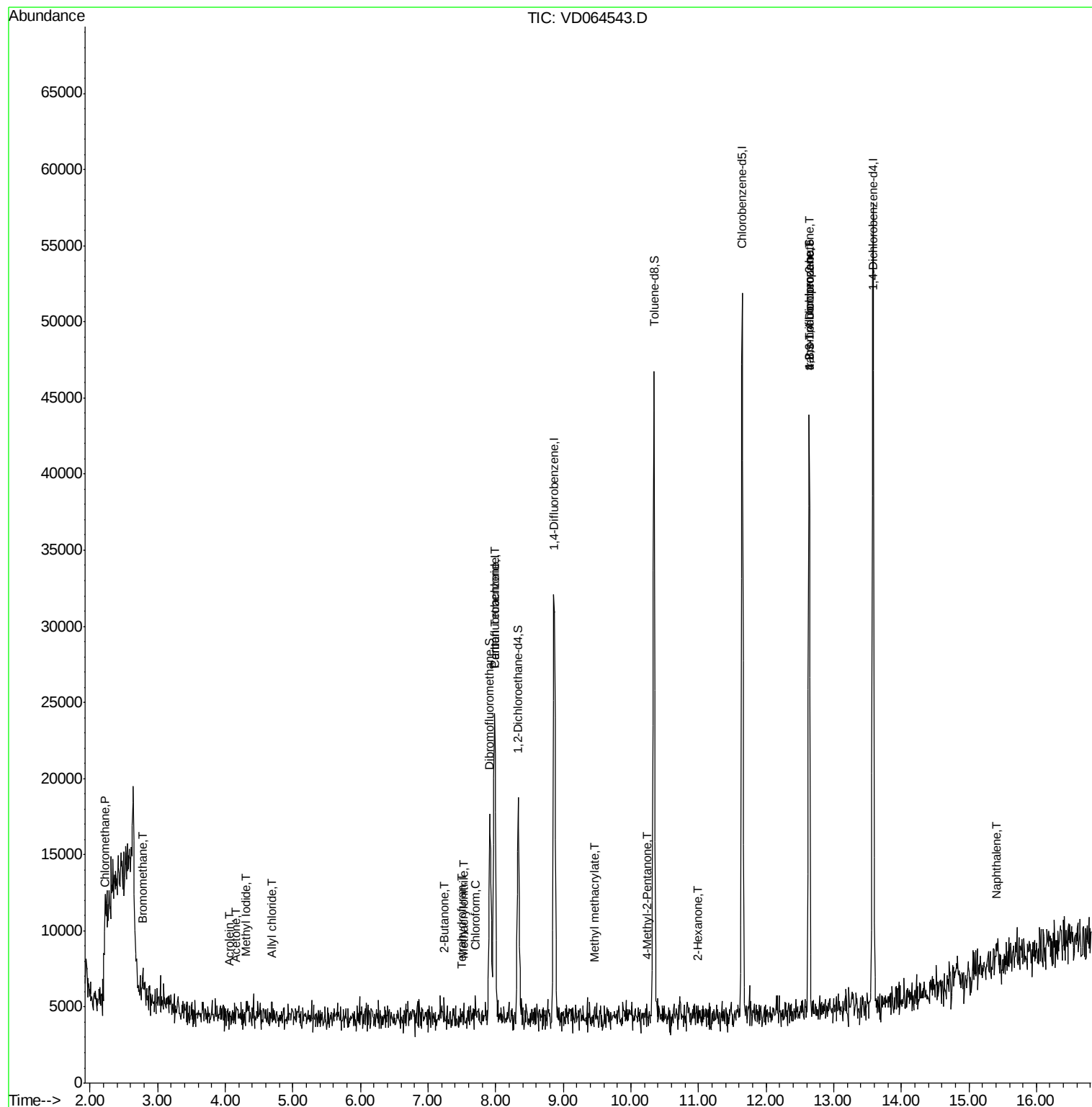
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.98	168	16210	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.86	114	25193	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.65	117	26744	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.58	152	14599	50.00	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.33	65	10015	68.26	ug/l	0.00
Spiked Amount	50.000		Recovery	=	136.52%	
35) Dibromofluoromethane	7.91	113	8687	54.73	ug/l	0.00
Spiked Amount	50.000		Recovery	=	109.46%	
50) Toluene-d8	10.34	98	29555	49.43	ug/l	0.00
Spiked Amount	50.000		Recovery	=	98.86%	
62) 4-Bromofluorobenzene	12.64	95	11447	59.57	ug/l	0.00
Spiked Amount	50.000		Recovery	=	119.14%	
Target Compounds						
					Qvalue	
3) Chloromethane	2.21	50	379	2.046	ug/l #	1
5) Bromomethane	2.79	94	885	5.595	ug/l #	80
10) Methyl Iodide	4.31	142	593	3.683	ug/l #	53
13) Acrolein	4.06	56	63	4.945	ug/l #	14
14) Allyl chloride	4.69	41	288	1.263	ug/l #	36
16) Acetone	4.17	43	319	10.759	ug/l #	47
20) Methylene Chloride	4.94	84	69	Below Cal	#	5
25) 2-Butanone	7.23	43	61	1.455	ug/l #	49
29) Tetrahydrofuran	7.50	42	146	5.473	ug/l #	33
30) Chloroform	7.71	83	399	1.423	ug/l #	18
31) Cyclohexane	7.99	56	295	Below Cal	#	70
38) Carbon Tetrachloride	7.98	117	1864	7.412	ug/l #	11
41) Methacrylonitrile	7.53	41	73	1.259	ug/l #	1
48) Methyl methacrylate	9.47	41	130	1.429	ug/l #	34
51) 4-Methyl-2-Pentanone	10.23	43	145	1.474	ug/l #	37
59) 2-Hexanone	10.98	43	236	3.458	ug/l	65
76) 1,2,3-Trichloropropane	12.64	75	6063	50.501	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.64	75	6063	110.118	ug/l #	9
92) 1,2-Dibromo-3-Chloropropan	14.73	75	68	Below Cal	#	1
95) Naphthalene	15.41	128	1441	2.681	ug/l #	76

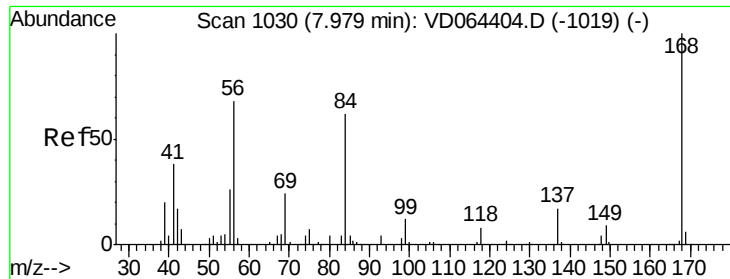
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Time: Dec 18 00:48:12 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_D\METHOD\82D112719S.M
Quant Title : SW846 8260
QLast Update : Fri Nov 29 07:18:03 2019
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.98 min Scan# 1031

Delta R.T. 0.01 min

Lab File: VD064543.D

Acq: 17 Dec 2019 14:12

Instrument :

MSVOA_D

ClientSampleId :

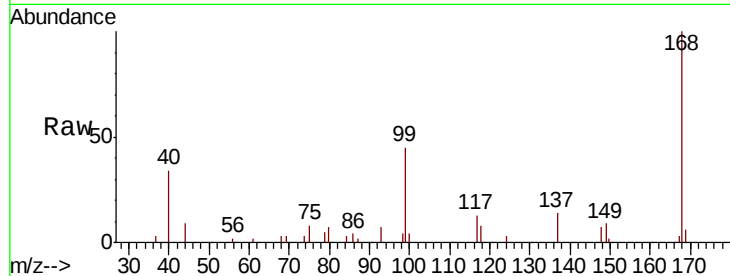
EP-11

Tgt Ion:168 Resp: 16210

Ion Ratio Lower Upper

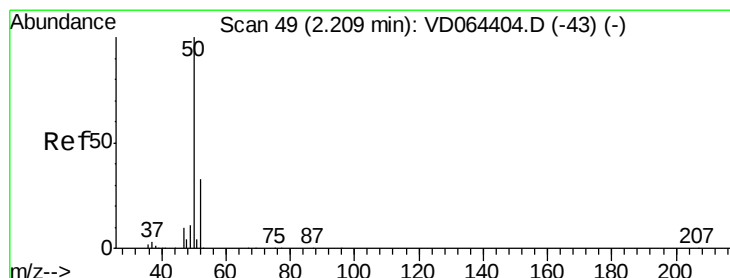
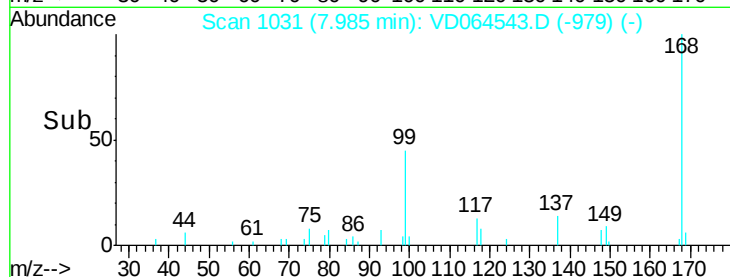
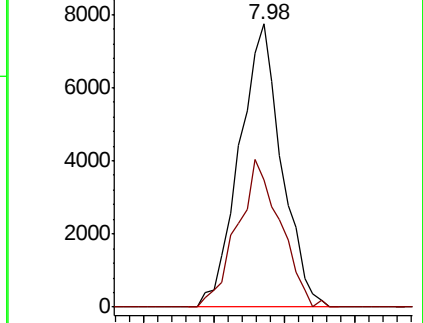
168 100

99 45.1 40.7 61.1



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VDC



#3

Chloromethane

Concen: 2.046 ug/l

RT: 2.21 min Scan# 49

Delta R.T. 0.00 min

Lab File: VD064543.D

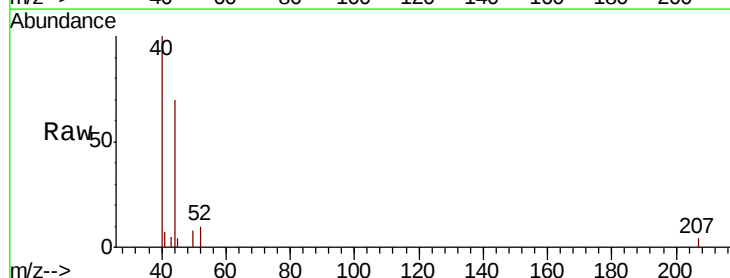
Acq: 17 Dec 2019 14:12

Tgt Ion: 50 Resp: 379

Ion Ratio Lower Upper

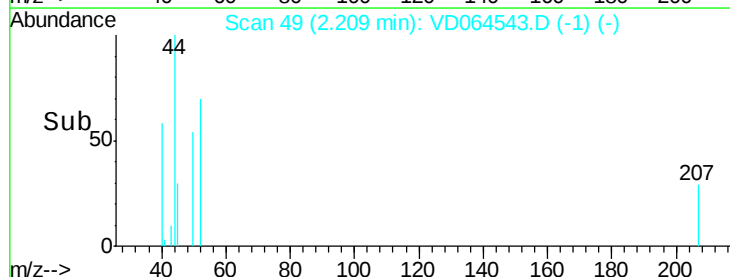
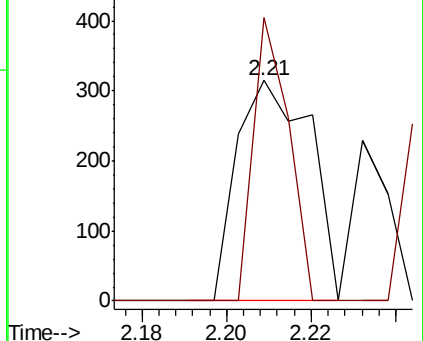
50 100

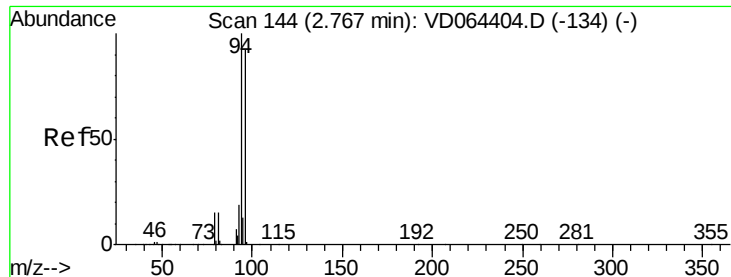
52 128.3 26.7 40.1#



Abundance Ion 49.90 (49.60 to 50.60): VDC

Ion 51.90 (51.60 to 52.60): VDC





#5

Bromomethane

Concen: 5.595 ug/l

RT: 2.79 min Scan# 147

Delta R.T. 0.02 min

Lab File: VD064543.D

Acq: 17 Dec 2019 14:12

Instrument :

MSVOA_D

ClientSampleId :

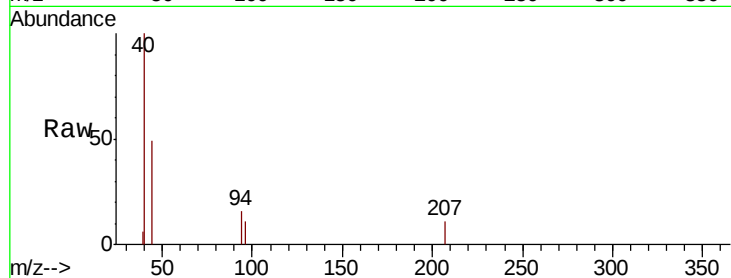
EP-11

Tgt Ion: 94 Resp: 885

Ion Ratio Lower Upper

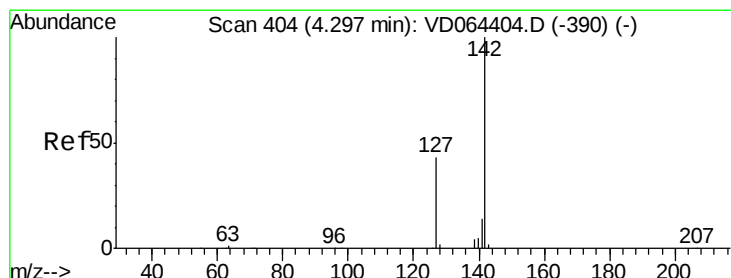
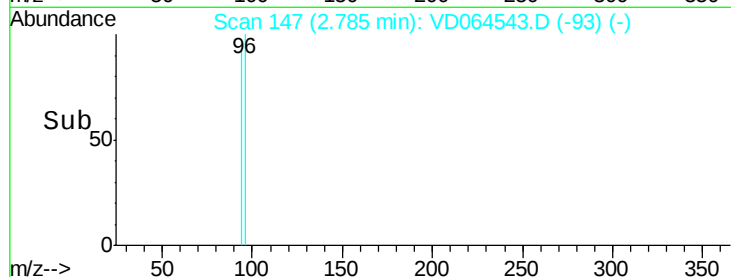
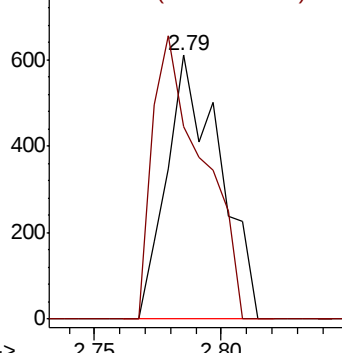
94 100

96 73.0 73.6 110.4#



Abundance Ion 93.90 (93.60 to 94.60): VDC

Ion 95.90 (95.60 to 96.60): VDC



#10

Methyl Iodide

Concen: 3.683 ug/l

RT: 4.31 min Scan# 406

Delta R.T. 0.01 min

Lab File: VD064543.D

Acq: 17 Dec 2019 14:12

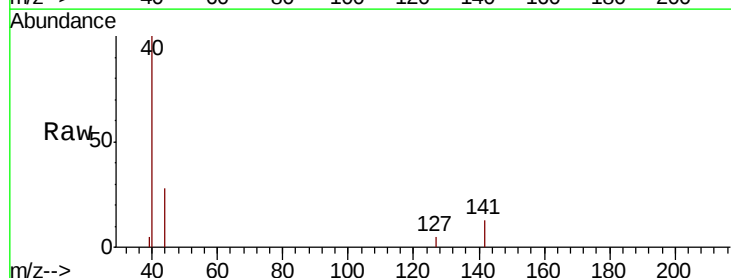
Tgt Ion: 142 Resp: 593

Ion Ratio Lower Upper

142 100

127 11.0 35.3 52.9#

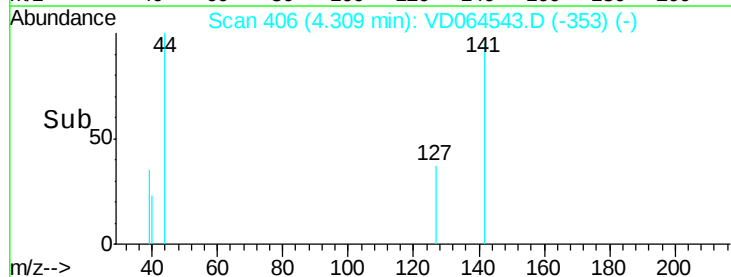
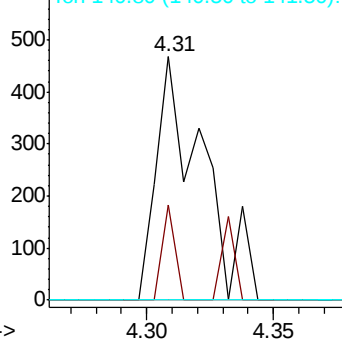
141 0.0 11.6 17.4#

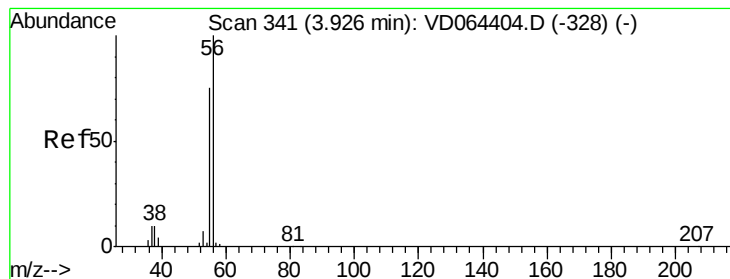


Abundance Ion 141.80 (141.50 to 142.50): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.80 (140.50 to 141.50): V





#13

Acrolein

Concen: 4.945 ug/l

RT: 4.06 min Scan# 364

Delta R.T. 0.14 min

Lab File: VD064543.D

Acq: 17 Dec 2019 14:12

Instrument :

MSVOA_D

ClientSampleId :

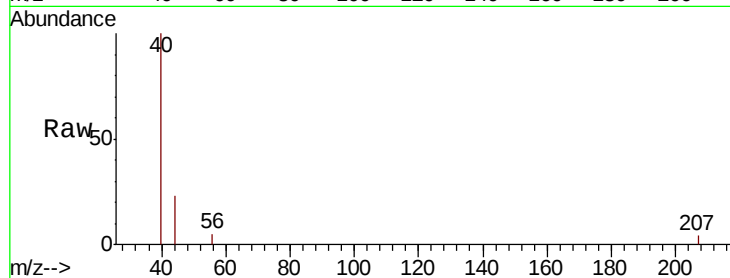
EP-11

Tgt Ion: 56 Resp: 63

Ion Ratio Lower Upper

56 100

55 0.0 56.9 85.3#



Abundance Ion 56.00 (55.70 to 56.70): VDC

Ion 55.00 (54.70 to 55.70): VDC

4.06

200

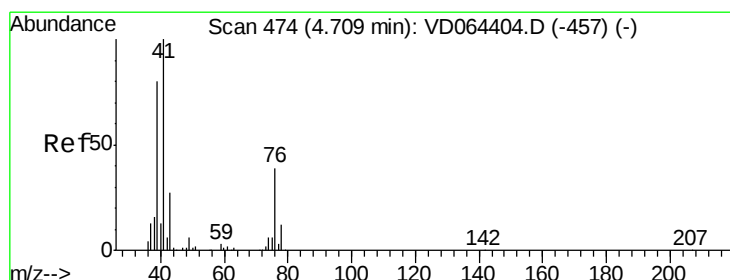
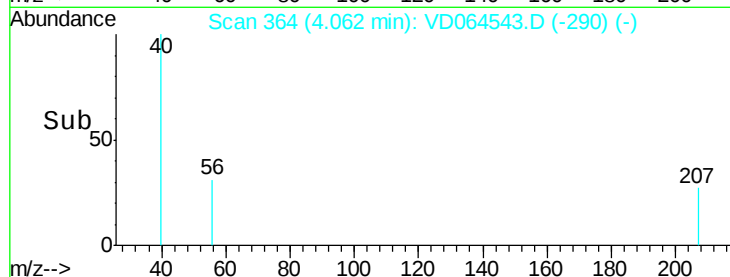
150

100

50

0

Time-->



#14

Allyl chloride

Concen: 1.263 ug/l

RT: 4.69 min Scan# 470

Delta R.T. -0.02 min

Lab File: VD064543.D

Acq: 17 Dec 2019 14:12

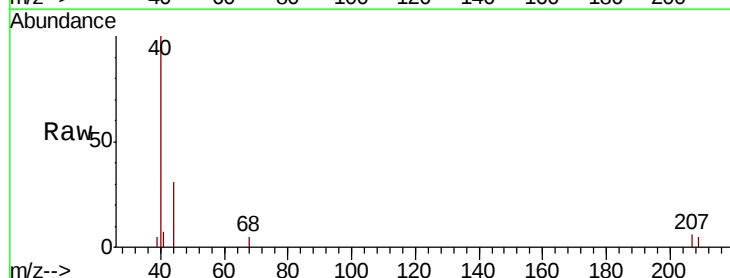
Tgt Ion: 41 Resp: 288

Ion Ratio Lower Upper

41 100

39 20.8 62.1 93.1#

76 0.0 29.8 44.8#



Abundance Ion 41.00 (40.70 to 41.70): VDC

Ion 39.00 (38.70 to 39.70): VDC

Ion 75.90 (75.60 to 76.60): VDC

4.69

300

250

200

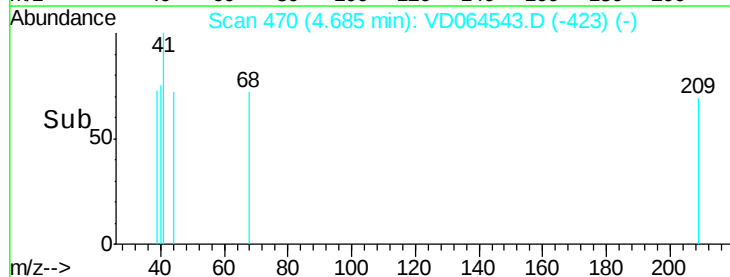
150

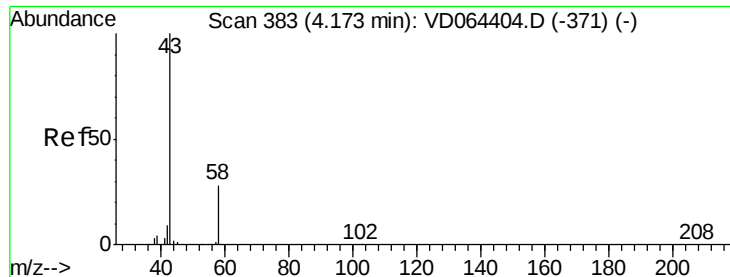
100

50

0

Time-->





#16

Acetone

Concen: 10.759 ug/l

RT: 4.17 min Scan# 382

Delta R.T. -0.01 min

Lab File: VD064543.D

Acq: 17 Dec 2019 14:12

Instrument :

MSVOA_D

ClientSampleId :

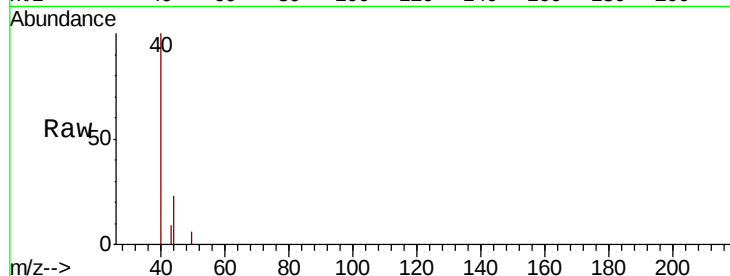
EP-11

Tgt Ion: 43 Resp: 319

Ion Ratio Lower Upper

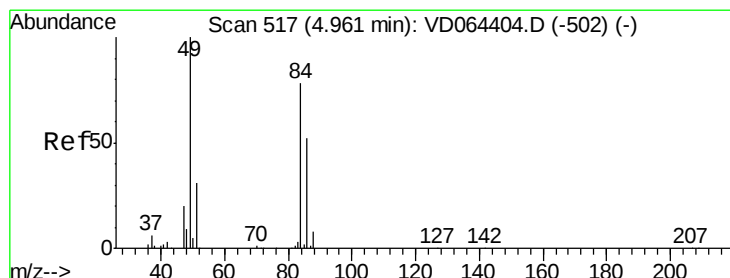
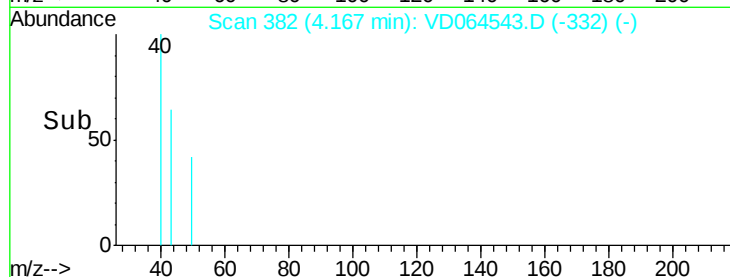
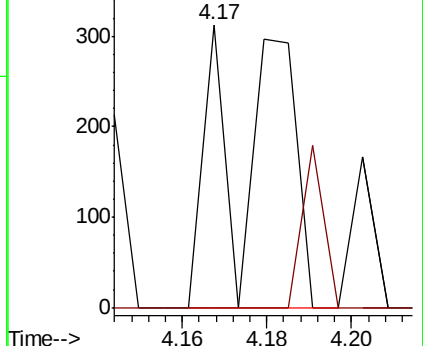
43 100

58 0.0 22.6 33.8#



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: 4.94 min Scan# 514

Delta R.T. -0.02 min

Lab File: VD064543.D

Acq: 17 Dec 2019 14:12

Tgt Ion: 84 Resp: 69

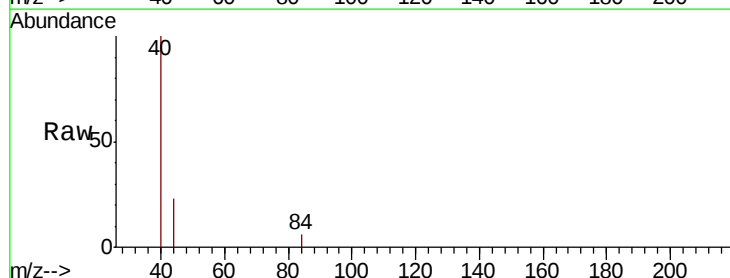
Ion Ratio Lower Upper

84 100

49 0.0 102.6 153.8#

51 0.0 32.0 48.0#

86 0.0 53.4 80.0#

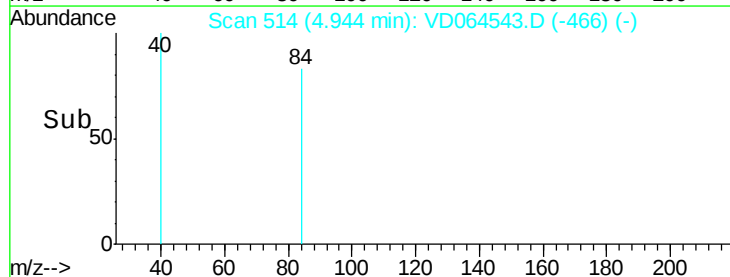
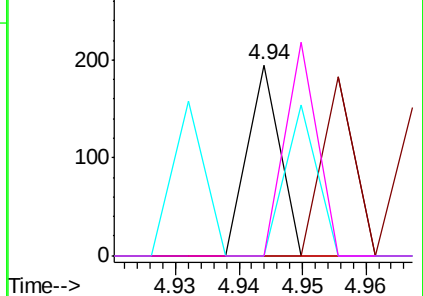


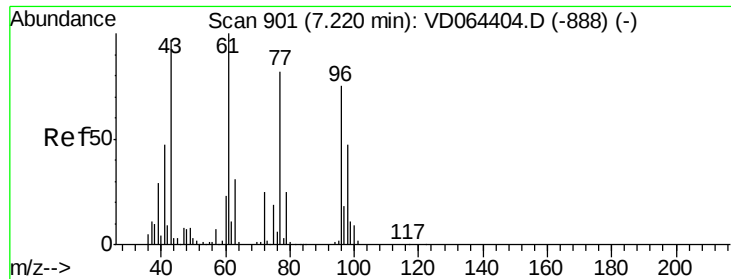
Abundance Ion 83.90 (83.60 to 84.60): VDC

Ion 48.90 (48.60 to 49.60): VDC

Ion 50.90 (50.60 to 51.60): VDC

Ion 85.90 (85.60 to 86.60): VDC





#25

2-Butanone

Concen: 1.455 ug/l

RT: 7.23 min Scan# 903

Delta R.T. 0.01 min

Lab File: VD064543.D

Acq: 17 Dec 2019 14:12

Instrument :

MSVOA_D

ClientSampleId :

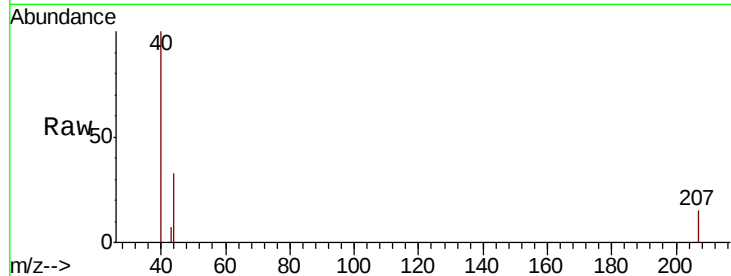
EP-11

Tgt Ion: 43 Resp: 61

Ion Ratio Lower Upper

43 100

72 0.0 21.0 31.4#



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 72.00 (71.70 to 72.70): VDC

7.23

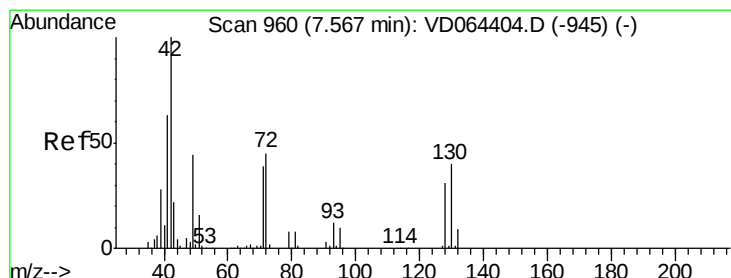
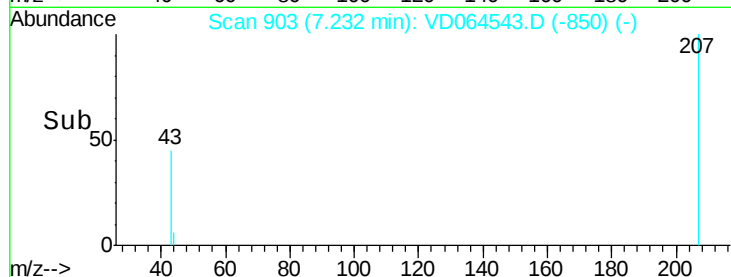
150

100

50

0

Time--> 7.21 7.22 7.23 7.24 7.25



#29

Tetrahydrofuran

Concen: 5.473 ug/l

RT: 7.50 min Scan# 948

Delta R.T. -0.07 min

Lab File: VD064543.D

Acq: 17 Dec 2019 14:12

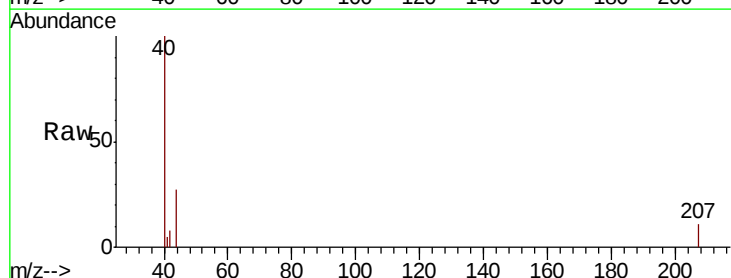
Tgt Ion: 42 Resp: 146

Ion Ratio Lower Upper

42 100

72 0.0 35.8 53.8#

71 0.0 32.7 49.1#



Abundance Ion 42.00 (41.70 to 42.70): VDC

Ion 72.00 (71.70 to 72.70): VDC

Ion 71.00 (70.70 to 71.70): VDC

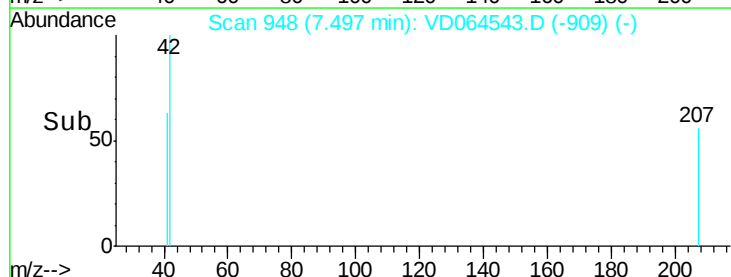
300

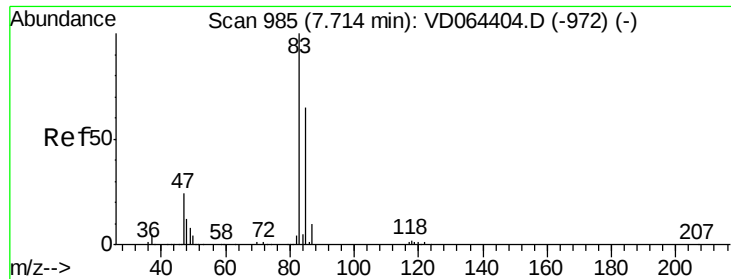
200

100

0

Time--> 7.48 7.50

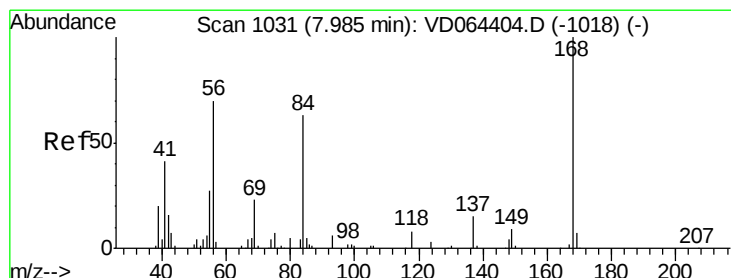
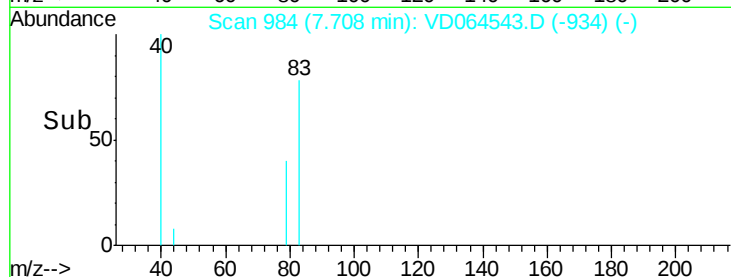
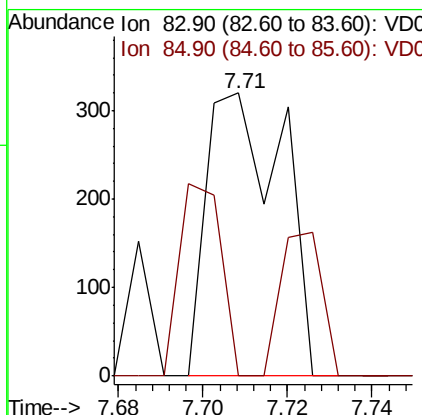
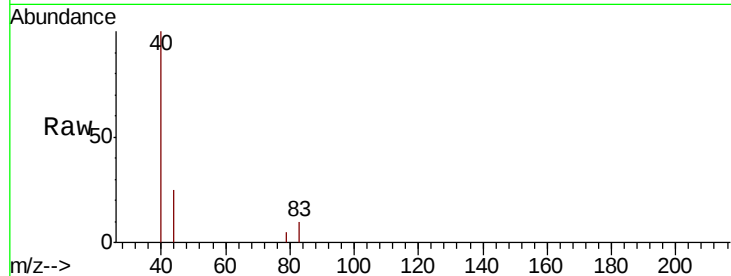




#30
Chloroform
Concen: 1.423 ug/l
RT: 7.71 min Scan# 984
Delta R.T. -0.01 min
Lab File: VD064543.D
Acq: 17 Dec 2019 14:12

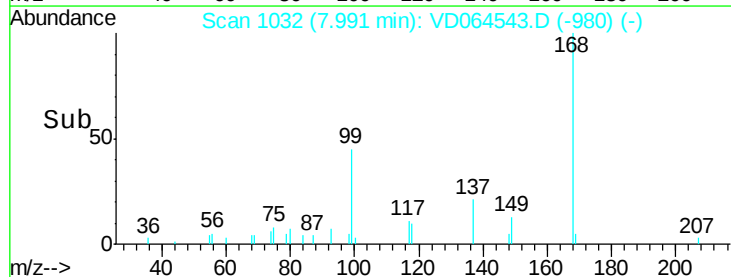
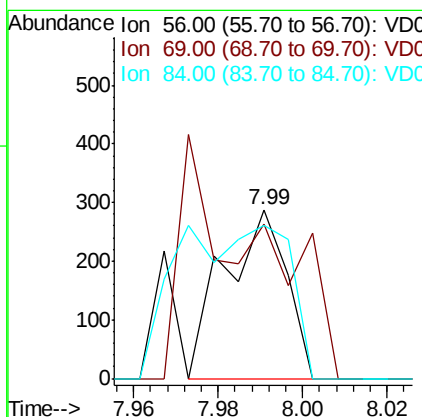
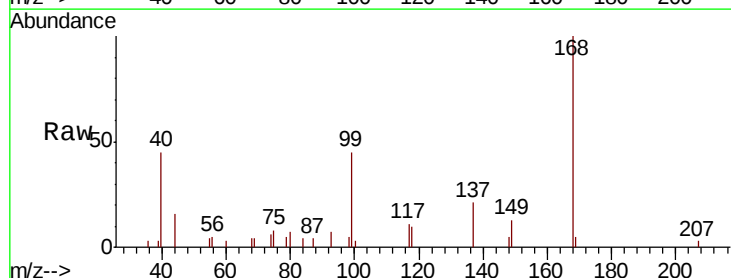
Instrument :
MSVOA_D
ClientSampled :
EP-11

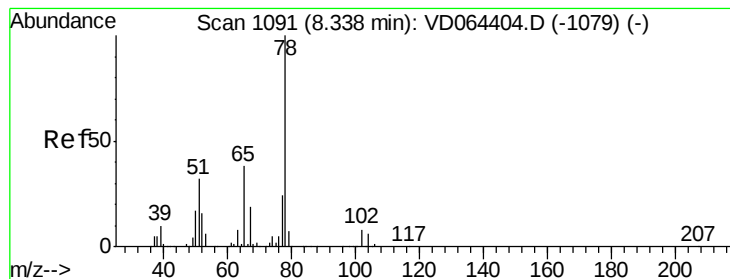
Tgt Ion: 83 Resp: 399
Ion Ratio Lower Upper
83 100
85 0.0 51.8 77.6#



#31
Cyclohexane
Concen: Below Cal
RT: 7.99 min Scan# 1032
Delta R.T. 0.01 min
Lab File: VD064543.D
Acq: 17 Dec 2019 14:12

Tgt Ion: 56 Resp: 295
Ion Ratio Lower Upper
56 100
69 91.3 26.2 39.4#
84 90.3 70.3 105.5





#33

1,2-Dichloroethane-d4

Concen: 68.257 ug/l

RT: 8.33 min Scan# 1090

Delta R.T. -0.01 min

Lab File: VD064543.D

Acq: 17 Dec 2019 14:12

Instrument :

MSVOA_D

ClientSampleId :

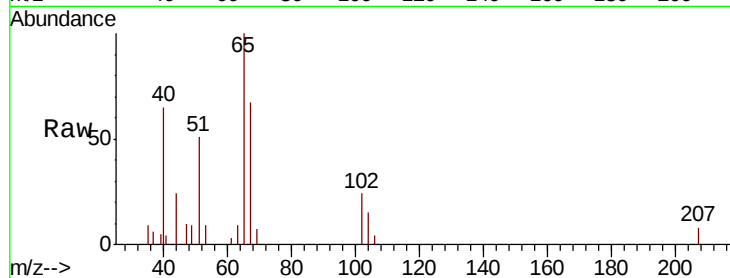
EP-11

Tgt Ion: 65 Resp: 10015

Ion Ratio Lower Upper

65 100

67 51.0 0.0 102.0



Abundance Ion 64.90 (64.60 to 65.60): VDC

Ion 66.90 (66.60 to 67.60): VDC

8.33

4000

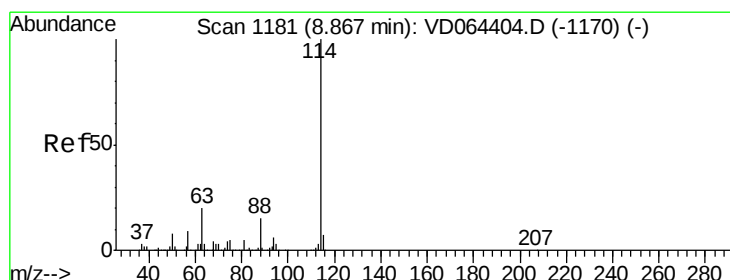
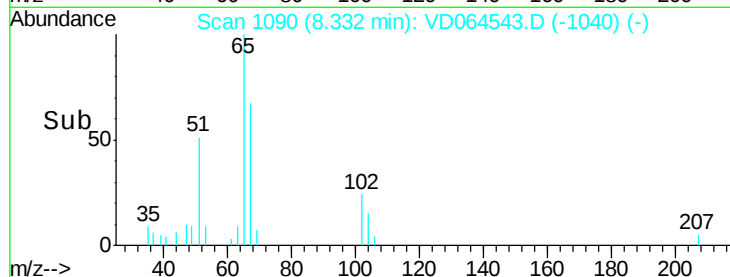
3000

2000

1000

0

Time--> 8.25 8.30 8.35 8.40



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.86 min Scan# 1180

Delta R.T. -0.01 min

Lab File: VD064543.D

Acq: 17 Dec 2019 14:12

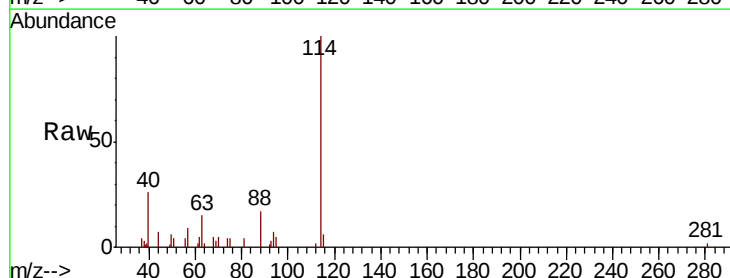
Tgt Ion: 114 Resp: 25193

Ion Ratio Lower Upper

114 100

63 15.4 0.0 40.0

88 16.8 0.0 29.2



Abundance Ion 113.90 (113.60 to 114.60): VDC

Ion 63.00 (62.70 to 63.70): VDC

Ion 87.90 (87.60 to 88.60): VDC

8.86

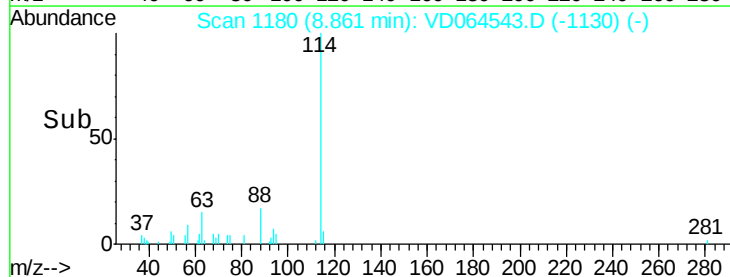
15000

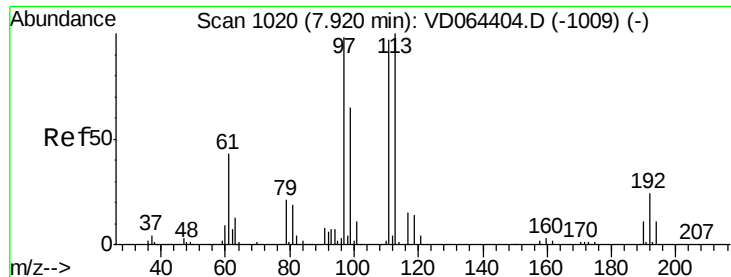
10000

5000

0

Time--> 8.80 8.85 8.90 8.95

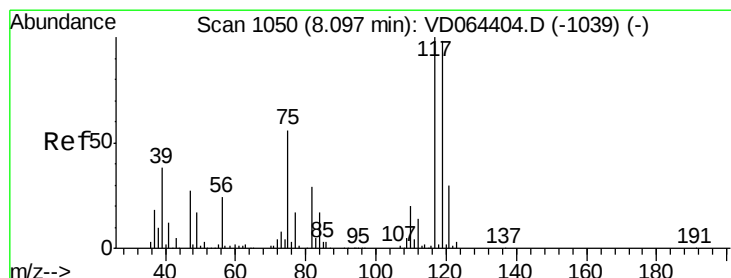
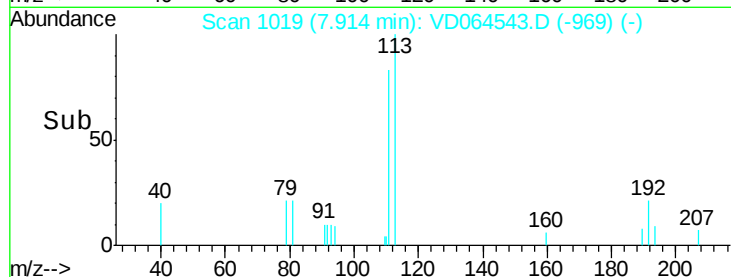
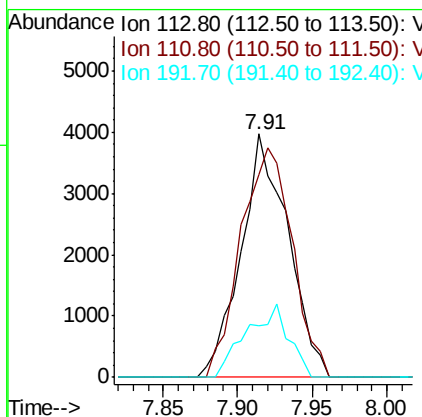
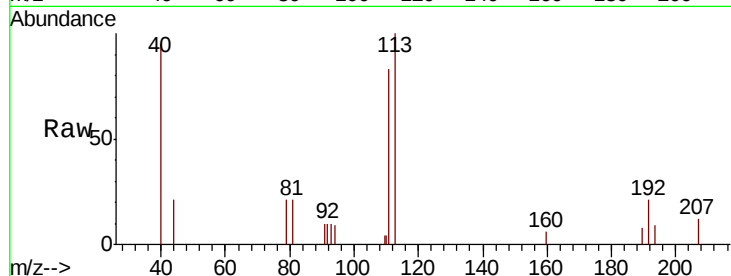




#35
 Dibromofluoromethane
 Concen: 54.729 ug/l
 RT: 7.91 min Scan# 1019
 Delta R.T. -0.01 min
 Lab File: VD064543.D
 Acq: 17 Dec 2019 14:12

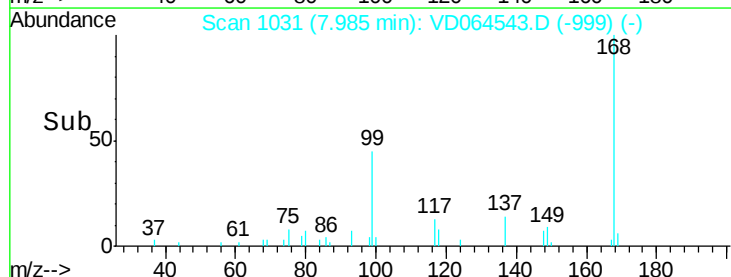
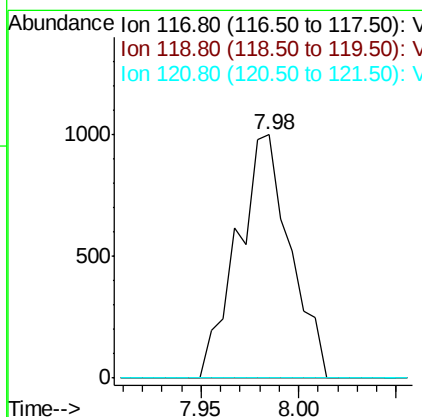
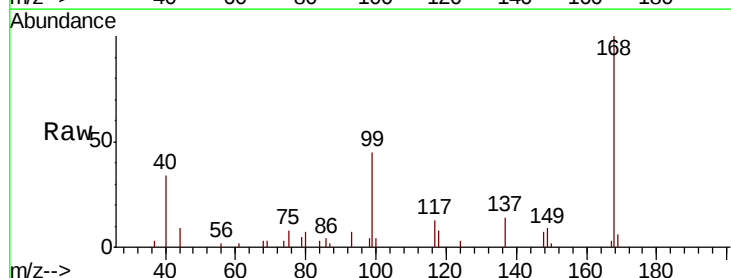
Instrument :
 MSVOA_D
 ClientSampleId :
 EP-11

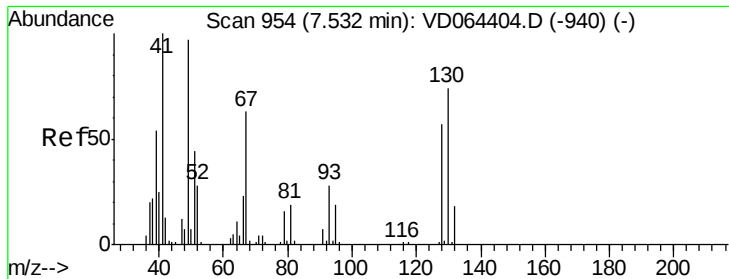
Tgt Ion:113 Resp: 8687
 Ion Ratio Lower Upper
 113 100
 111 103.4 79.4 119.2
 192 27.0 18.6 28.0



#38
 Carbon Tetrachloride
 Concen: 7.412 ug/l
 RT: 7.98 min Scan# 1031
 Delta R.T. -0.11 min
 Lab File: VD064543.D
 Acq: 17 Dec 2019 14:12

Tgt Ion:117 Resp: 1864
 Ion Ratio Lower Upper
 117 100
 119 0.0 78.8 118.2#
 121 0.0 24.2 36.2#





#41

Methacrylonitrile

Concen: 1.259 ug/l

RT: 7.53 min Scan# 954

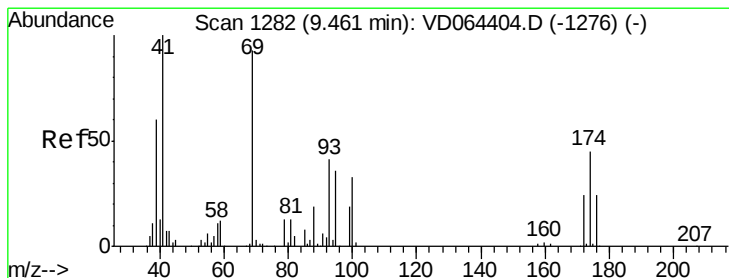
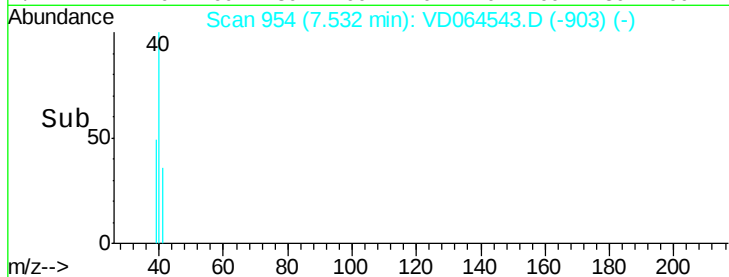
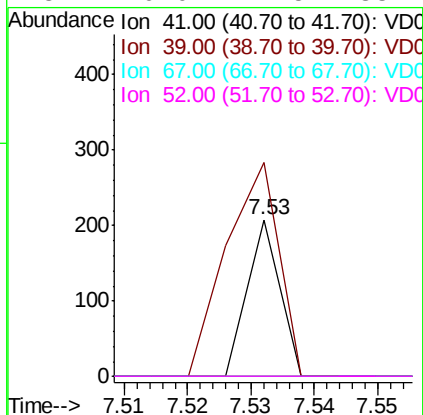
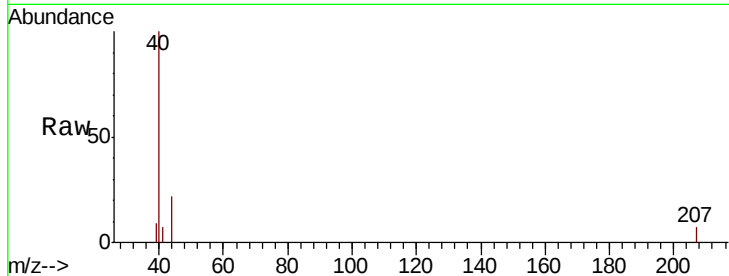
Delta R.T. 0.00 min

Lab File: VD064543.D

Acq: 17 Dec 2019 14:12

Instrument :
MSVOA_D
ClientSampleId :
EP-11

Tgt Ion:	41	Resp:	73
Ion	Ratio	Lower	Upper
41	100		
39	220.5	44.6	67.0#
67	0.0	50.9	76.3#
52	0.0	22.5	33.7#



#48

Methyl methacrylate

Concen: 1.429 ug/l

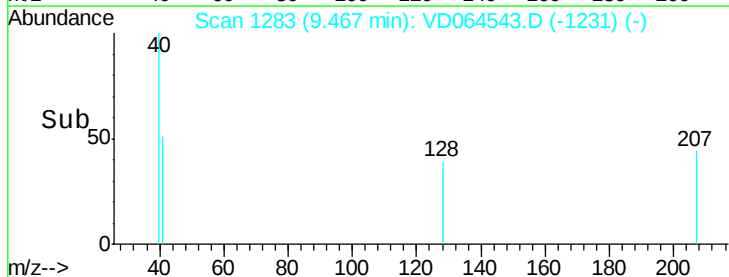
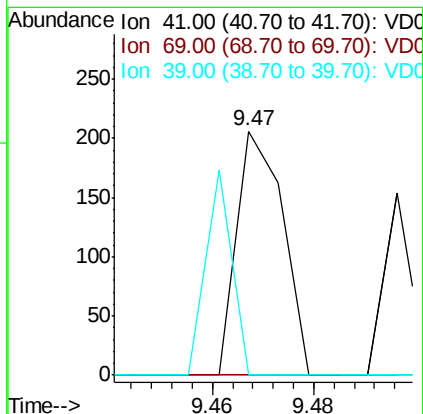
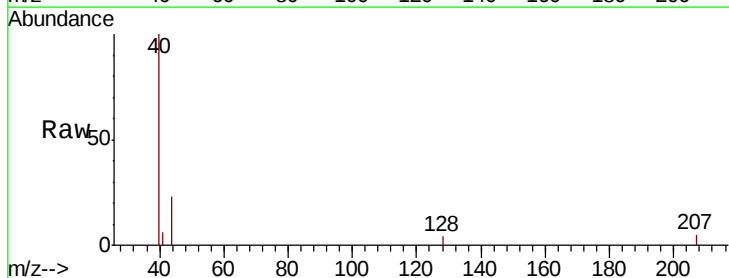
RT: 9.47 min Scan# 1283

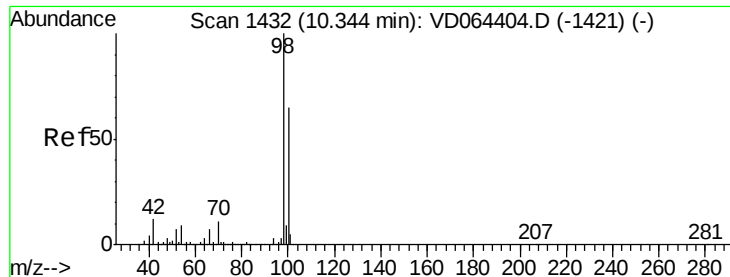
Delta R.T. 0.01 min

Lab File: VD064543.D

Acq: 17 Dec 2019 14:12

Tgt Ion:	41	Resp:	130
Ion	Ratio	Lower	Upper
41	100		
69	0.0	72.0	108.0#
39	46.9	55.2	82.8#





#50

Toluene-d8

Concen: 49.430 ug/l

RT: 10.34 min Scan# 1432

Delta R.T. 0.00 min

Lab File: VD064543.D

Acq: 17 Dec 2019 14:12

Instrument :

MSVOA_D

ClientSampleId :

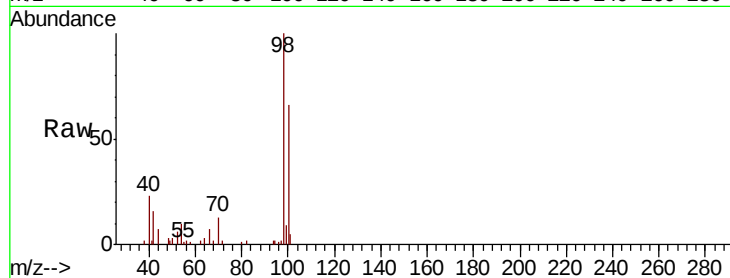
EP-11

Tgt Ion: 98 Resp: 29555

Ion Ratio Lower Upper

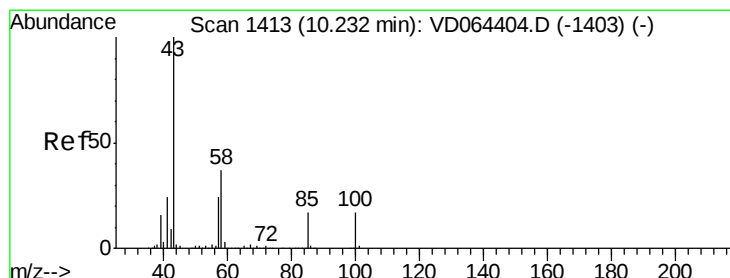
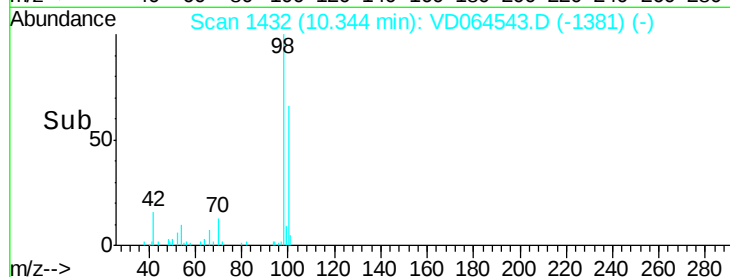
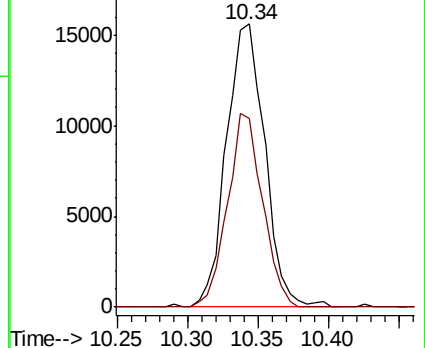
98 100

100 62.4 52.6 79.0



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: 1.474 ug/l

RT: 10.23 min Scan# 1413

Delta R.T. 0.00 min

Lab File: VD064543.D

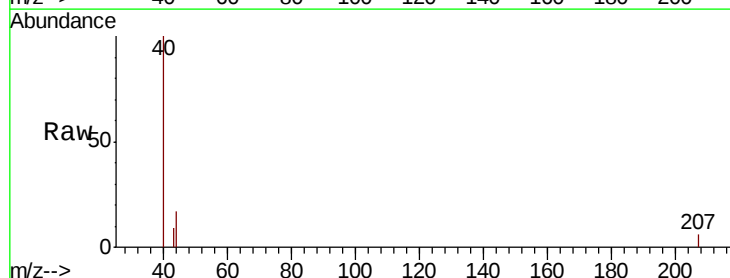
Acq: 17 Dec 2019 14:12

Tgt Ion: 43 Resp: 145

Ion Ratio Lower Upper

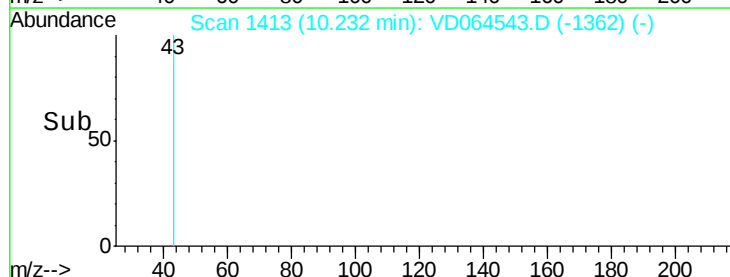
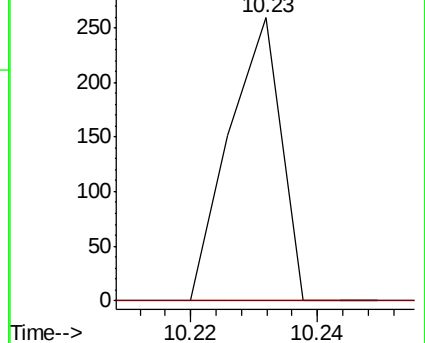
43 100

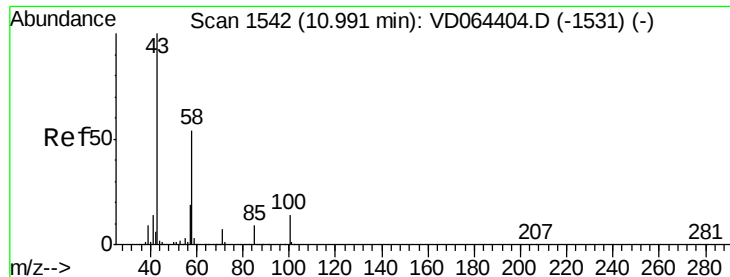
58 0.0 30.6 46.0#



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 58.00 (57.70 to 58.70): VDC

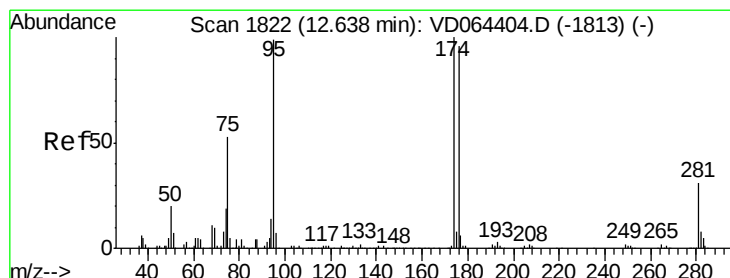
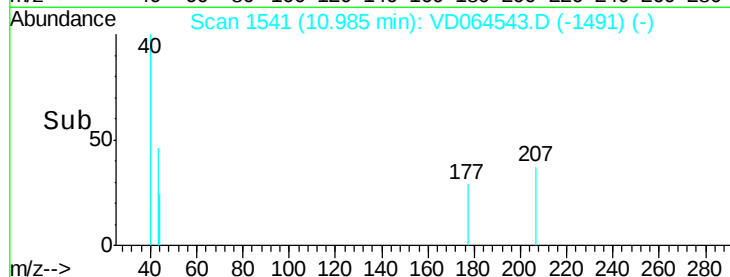
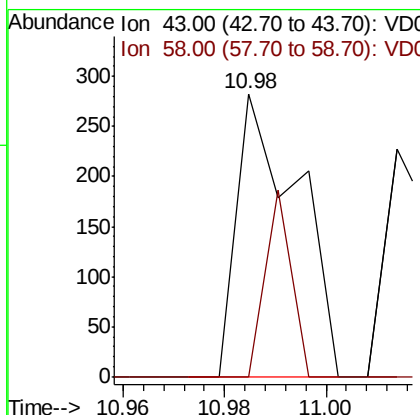
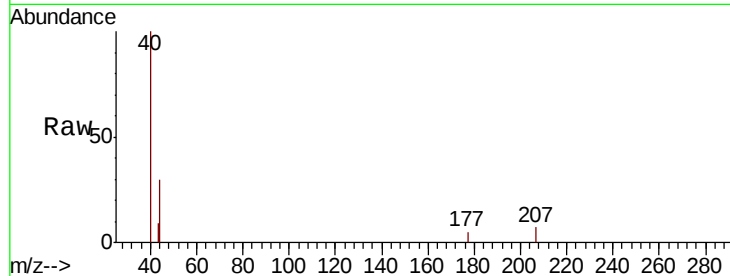




#59
2-Hexanone
Concen: 3.458 ug/l
RT: 10.98 min Scan# 1541
Delta R.T. -0.01 min
Lab File: VD064543.D
Acq: 17 Dec 2019 14:12

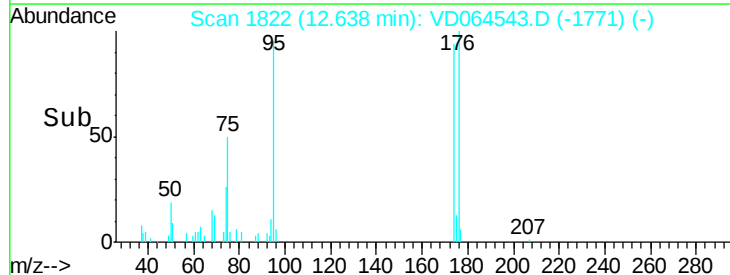
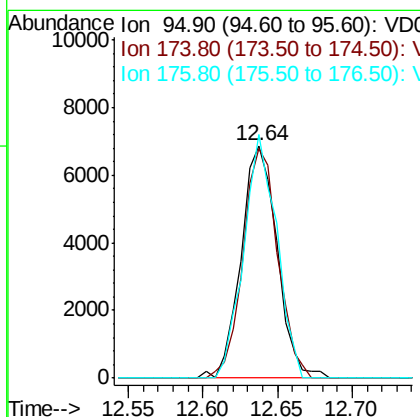
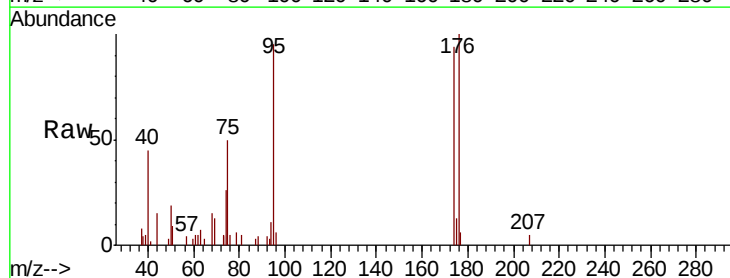
Instrument :
MSVOA_D
ClientSampled :
EP-11

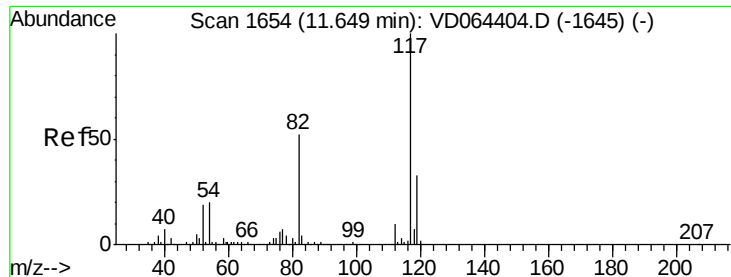
Tgt Ion: 43 Resp: 236
Ion Ratio Lower Upper
43 100
58 28.0 26.3 78.8



#62
4-Bromofluorobenzene
Concen: 59.572 ug/l
RT: 12.64 min Scan# 1822
Delta R.T. 0.00 min
Lab File: VD064543.D
Acq: 17 Dec 2019 14:12

Tgt Ion: 95 Resp: 11447
Ion Ratio Lower Upper
95 100
174 95.4 0.0 197.2
176 95.9 0.0 189.6

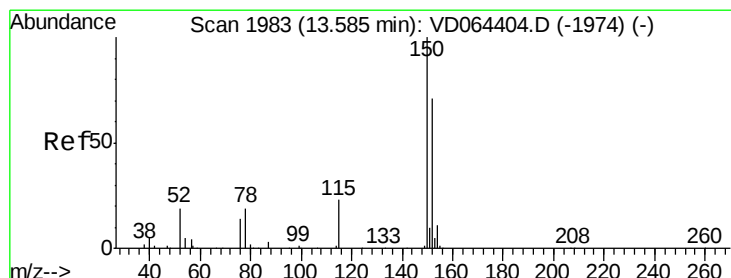
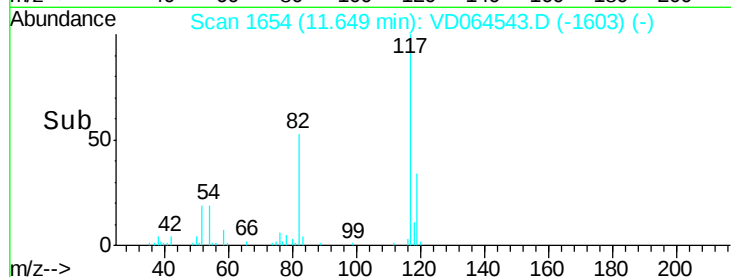
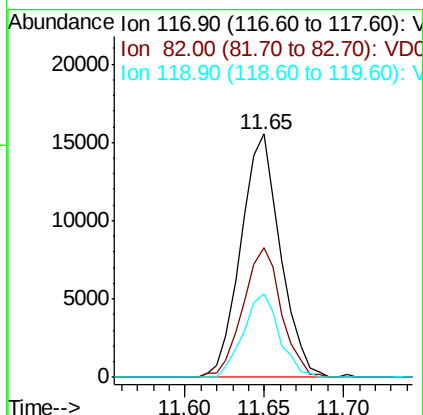
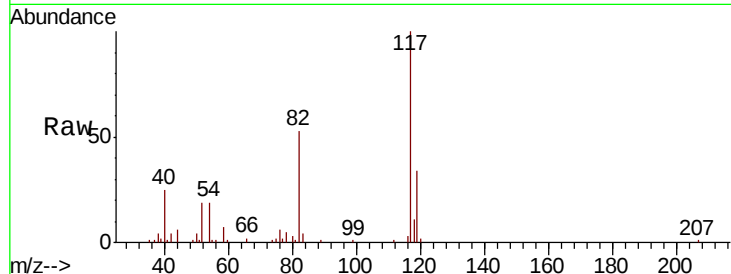




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.65 min Scan# 1654
Delta R.T. 0.00 min
Lab File: VD064543.D
Acq: 17 Dec 2019 14:12

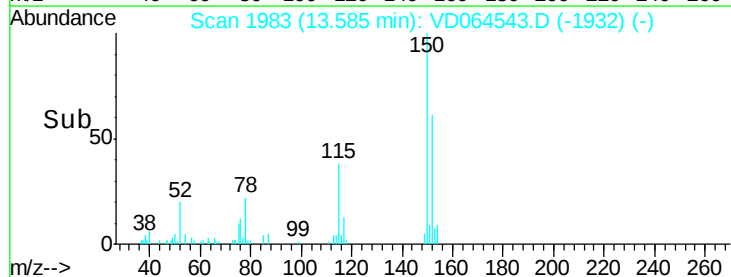
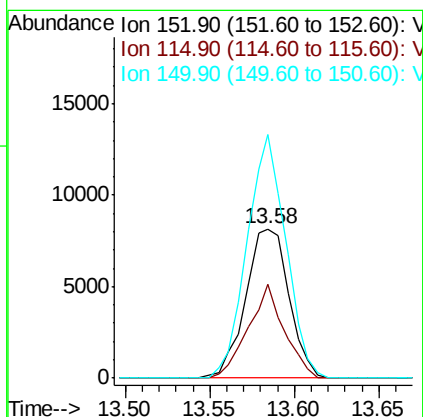
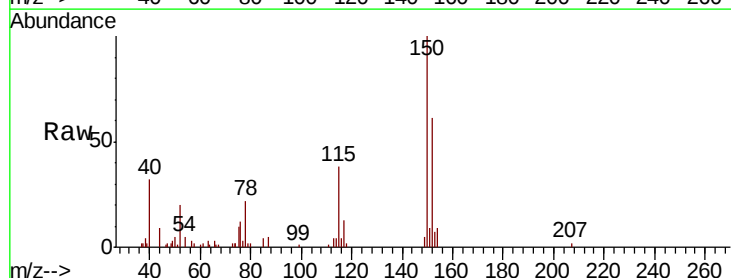
Instrument :
MSVOA_D
ClientSampleId :
EP-11

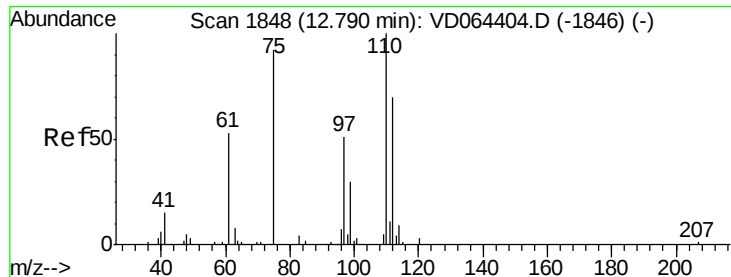
Tgt Ion:117 Resp: 26744
Ion Ratio Lower Upper
117 100
82 53.3 41.4 62.2
119 34.5 26.2 39.2



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.58 min Scan# 1983
Delta R.T. 0.00 min
Lab File: VD064543.D
Acq: 17 Dec 2019 14:12

Tgt Ion:152 Resp: 14599
Ion Ratio Lower Upper
152 100
115 52.1 26.7 80.1
150 145.4 0.0 347.2





#76

1,2,3-Trichloropropane

Concen: 50.501 ug/l

RT: 12.64 min Scan# 1823

Delta R.T. -0.15 min

Lab File: VD064543.D

Acq: 17 Dec 2019 14:12

Instrument :

MSVOA_D

ClientSampled :

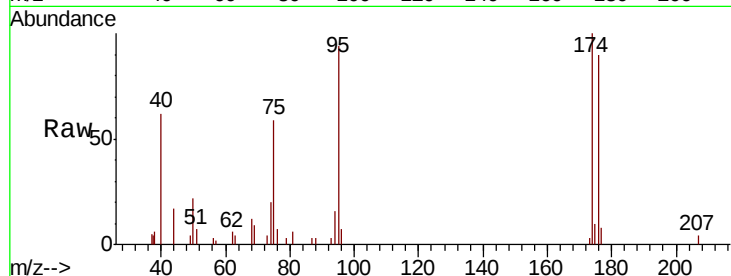
EP-11

Tgt Ion: 75 Resp: 6063

Ion Ratio Lower Upper

75 100

77 0.0 0.0 0.0



Abundance Ion 74.90 (74.60 to 75.60): VDC

Ion 77.00 (76.70 to 77.70): VDC

12.64

4000

3000

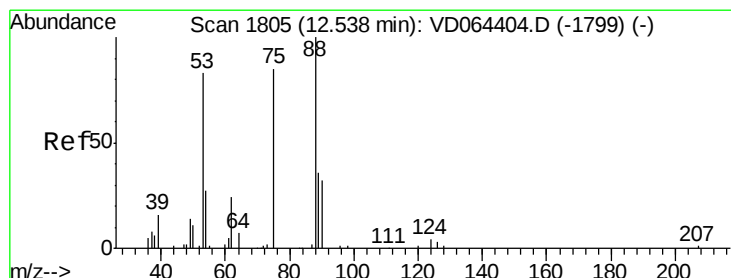
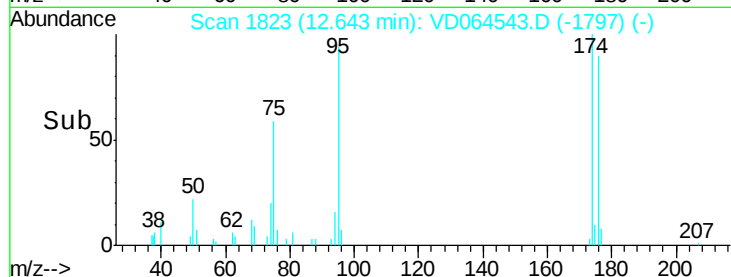
2000

1000

0

Time-->

12.60 12.65



#81

trans-1,4-Dichloro-2-butene

Concen: 110.118 ug/l

RT: 12.64 min Scan# 1823

Delta R.T. 0.11 min

Lab File: VD064543.D

Acq: 17 Dec 2019 14:12

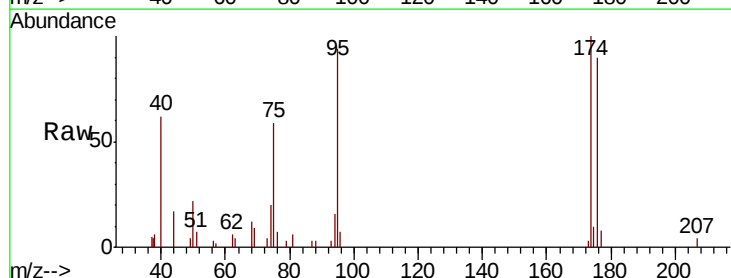
Tgt Ion: 75 Resp: 6063

Ion Ratio Lower Upper

75 100

53 0.0 81.0 121.6#

89 0.0 38.5 57.7#



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

5000

4000

3000

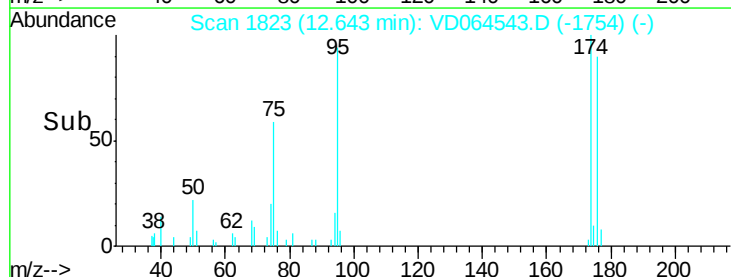
2000

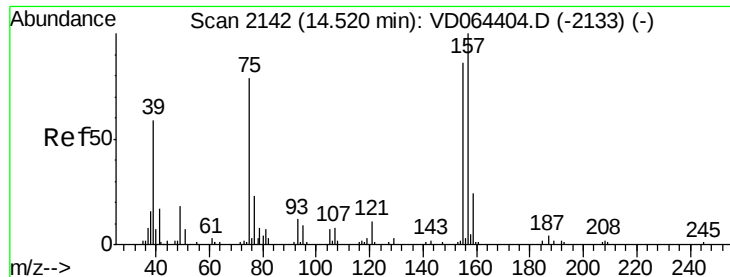
1000

0

Time-->

12.60 12.65





#92

1,2-Dibromo-3-Chloropropane

Concen: Below Cal

RT: 14.73 min Scan# 2178

Delta R.T. 0.21 min

Lab File: VD064543.D

Acq: 17 Dec 2019 14:12

Instrument :

MSVOA_D

ClientSampleId :

EP-11

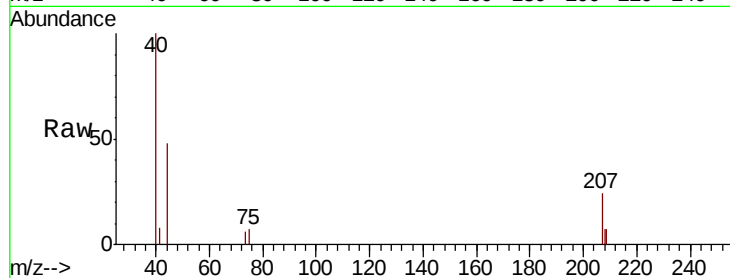
Tgt Ion: 75 Resp: 68

Ion Ratio Lower Upper

75 100

155 0.0 51.9 155.7#

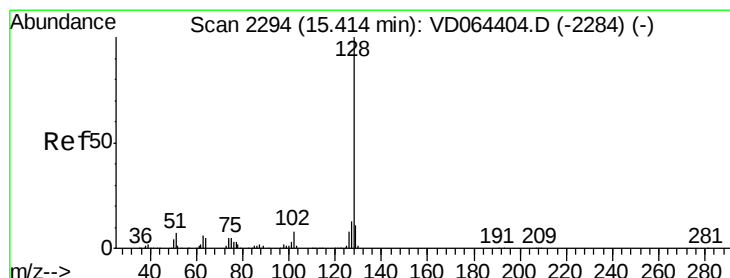
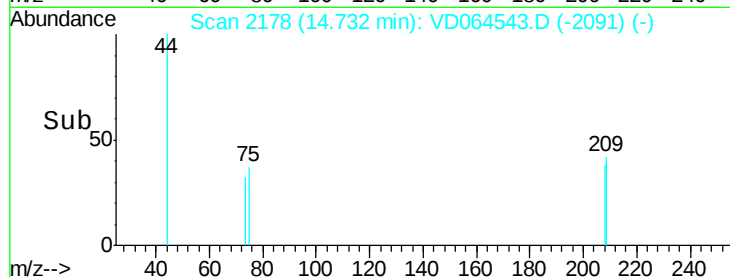
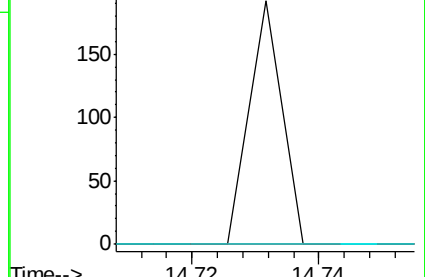
157 0.0 63.2 189.8#



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: 2.681 ug/l

RT: 15.41 min Scan# 2294

Delta R.T. 0.00 min

Lab File: VD064543.D

Acq: 17 Dec 2019 14:12

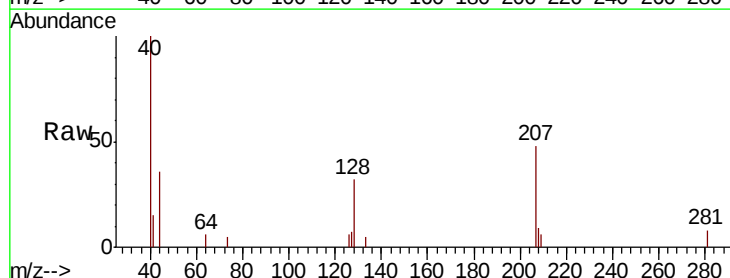
Tgt Ion: 128 Resp: 1441

Ion Ratio Lower Upper

128 100

127 5.4 10.5 15.7#

129 0.0 8.8 13.2#



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

