

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD123019\
 Data File : VD064678.D
 Acq On : 30 Dec 2019 15:09
 Operator : VA/SY
 Sample : K6439-16
 Misc : 4.42G/5.00ml/MSVOA D/SOIL
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :
 LIED-BF013-01

Quant Time: Dec 31 07:09:36 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D122419S.M
 Quant Title : SW846 8260
 QLast Update : Tue Dec 24 13:19:06 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.98	168	9924	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.87	114	14198	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.65	117	12589	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.58	152	5598	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	8.33	65	5497	62.82	ug/l	0.00
Spiked Amount			Recovery	=	125.64%	
35) Dibromofluoromethane	7.92	113	4424	50.79	ug/l	0.00
Spiked Amount			Recovery	=	101.58%	
50) Toluene-d8	10.34	98	15928	47.74	ug/l	0.00
Spiked Amount			Recovery	=	95.48%	
62) 4-Bromofluorobenzene	12.64	95	4860	46.07	ug/l	0.00
Spiked Amount			Recovery	=	92.14%	

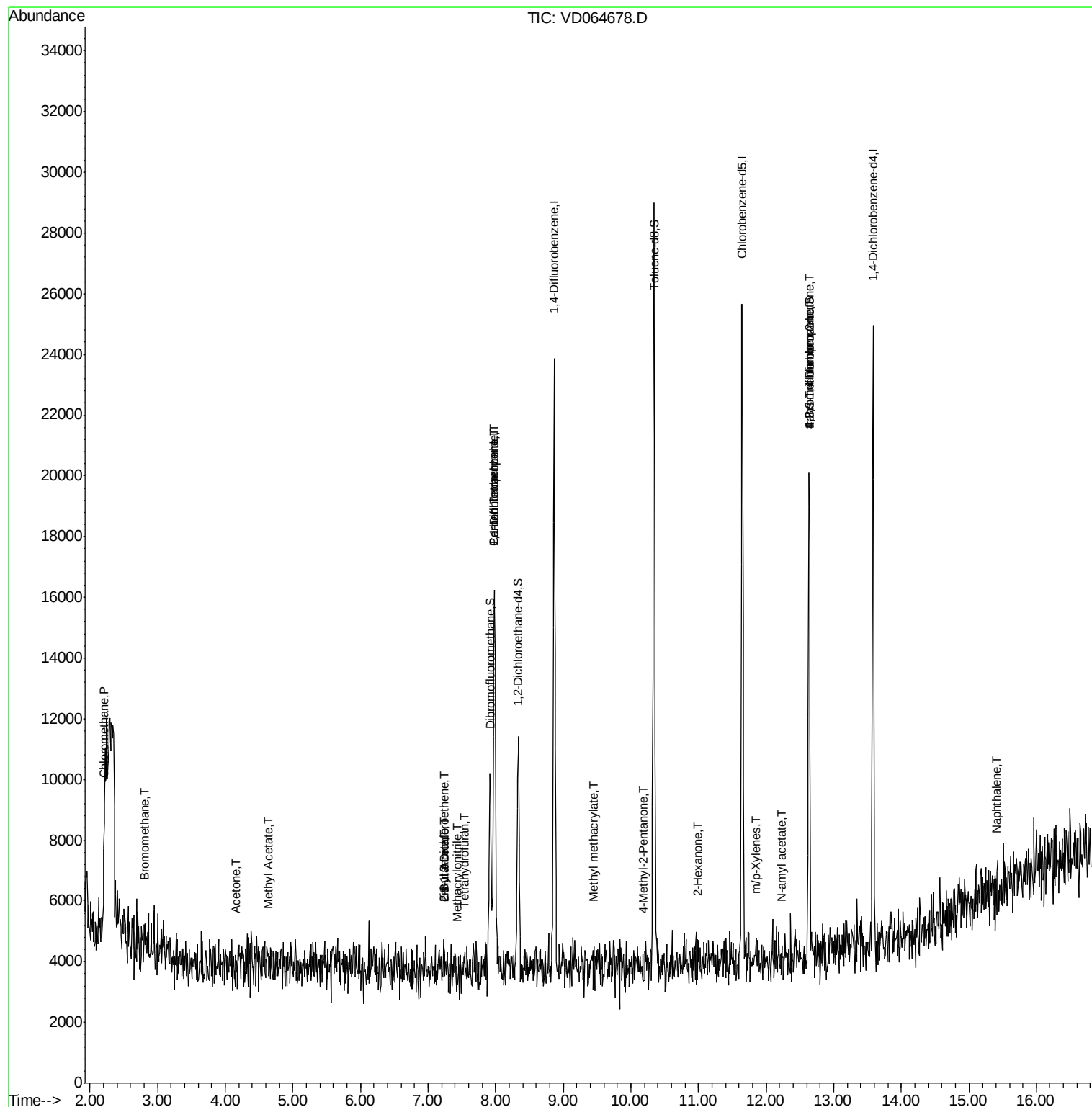
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chloromethane	2.20	50	118	1.094	ug/l #	42
5) Bromomethane	2.80	94	98	1.025	ug/l #	2
16) Acetone	4.16	43	60	7.055	ug/l #	42
18) Methyl Acetate	4.63	43	58	1.177	ug/l #	51
25) 2-Butanone	7.24	43	62	2.578	ug/l #	49
27) cis-1,2-Dichloroethene	7.24	96	132	1.230	ug/l #	1
29) Tetrahydrofuran	7.55	42	58	3.877	ug/l #	33
36) 1,1-Dichloropropene	7.98	75	720	5.269	ug/l #	41
37) Ethyl Acetate	7.24	43	62	1.155	ug/l #	70
38) Carbon Tetrachloride	7.98	117	1029	7.062	ug/l #	12
41) Methacrylonitrile	7.43	41	74	2.376	ug/l #	24
48) Methyl methacrylate	9.46	41	63	1.252	ug/l #	15
51) 4-Methyl-2-Pentanone	10.19	43	63	1.193	ug/l #	37
59) 2-Hexanone	10.99	43	100	2.790	ug/l #	26
68) m/p-Xylenes	11.86	106	209	1.142	ug/l #	67
74) N-amyl acetate	12.24	43	98	1.146	ug/l #	43
76) 1,2,3-Trichloropropane	12.63	75	2563	57.980	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.63	75	2563	121.262	ug/l #	10
95) Naphthalene	15.41	128	268	1.440	ug/l #	69

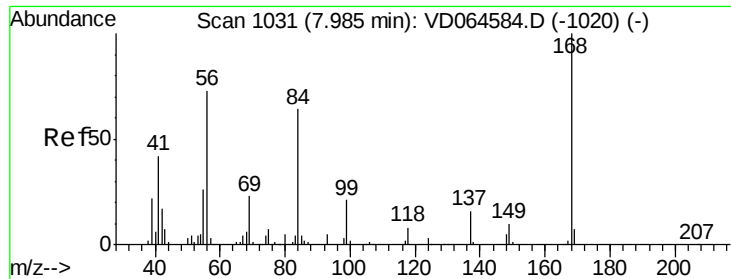
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.98 min Scan# 1031

Delta R.T. 0.00 min

Lab File: VD064678.D

Acq: 30 Dec 2019 15:09

Instrument :

MSVOA_D

ClientSampleId :

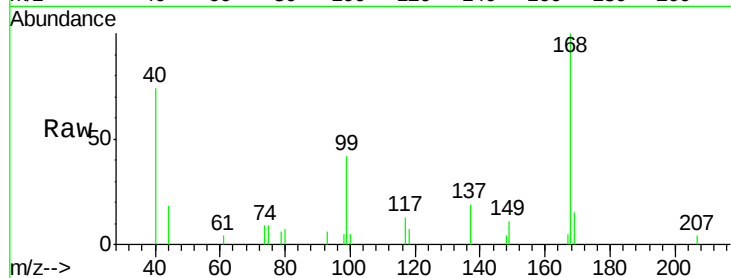
LIED-BF013-01

Tot Ion:168 Resp: 9924

Ion Ratio Lower Upper

168 100

99 41.7 41.8 62.6#

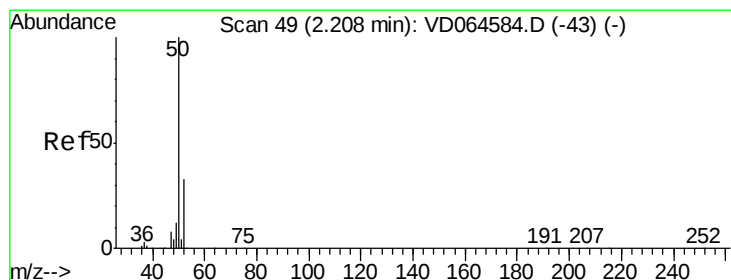
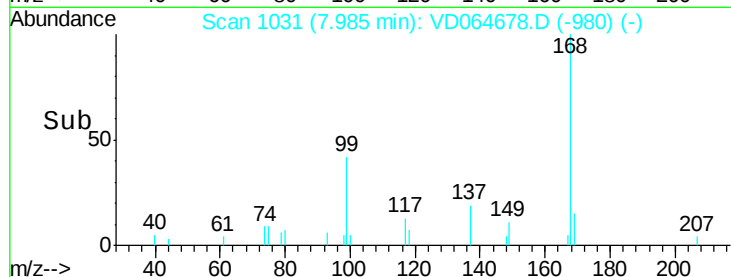


Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VDC

7.98

Time-->



#3

Chloromethane

Concen: 1.094 ug/l

RT: 2.20 min Scan# 48

Delta R.T. -0.01 min

Lab File: VD064678.D

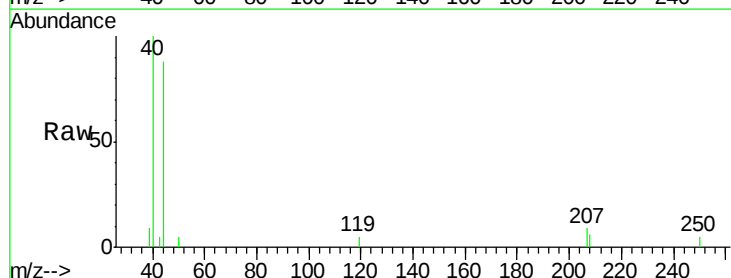
Acq: 30 Dec 2019 15:09

Tgt Ion: 50 Resp: 118

Ion Ratio Lower Upper

50 100

52 0.0 26.5 39.7#

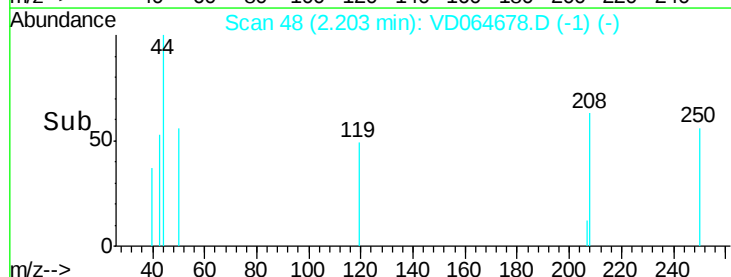


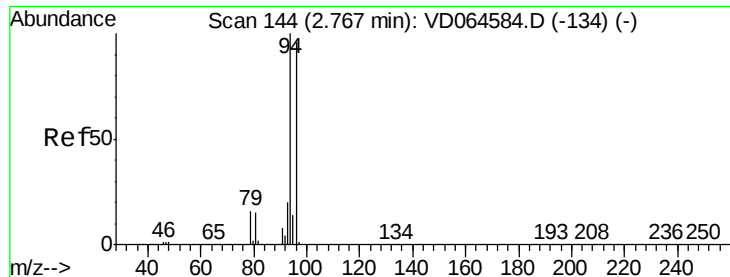
Abundance Ion 49.90 (49.60 to 50.60): VDC

Ion 51.90 (51.60 to 52.60): VDC

2.20

Time-->





#5

Bromomethane

Concen: 1.025 ug/l

RT: 2.80 min Scan# 149

Delta R.T. 0.03 min

Lab File: VD064678.D

Acq: 30 Dec 2019 15:09

Instrument :

MSVOA_D

ClientSampleId :

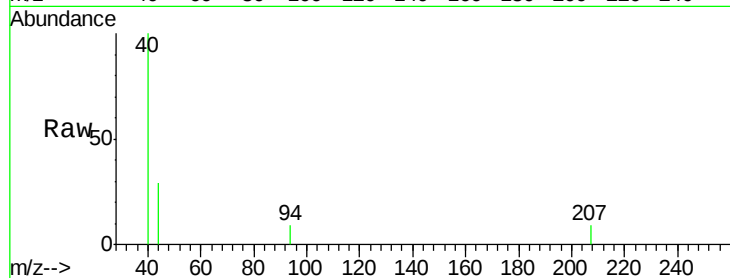
LIED-BF013-01

Tot Ion: 94 Resp: 98

Ion Ratio Lower Upper

94 100

96 0.0 77.2 115.8#



Abundance Ion 93.90 (93.60 to 94.60): VDC

Ion 95.90 (95.60 to 96.60): VDC

2.80

250

200

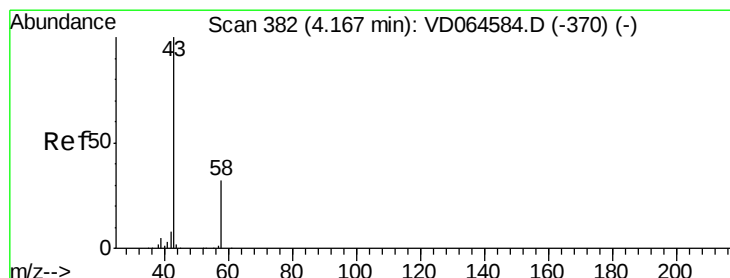
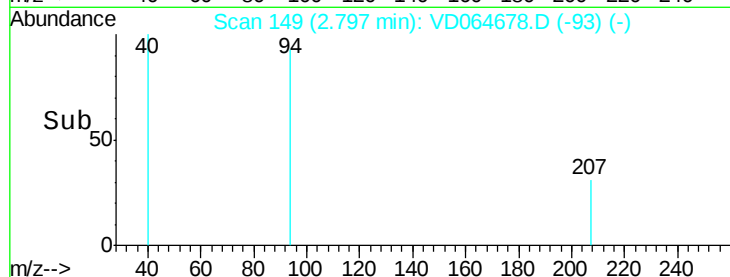
150

100

50

0

Time-->



#16

Acetone

Concen: 7.055 ug/l

RT: 4.16 min Scan# 381

Delta R.T. -0.01 min

Lab File: VD064678.D

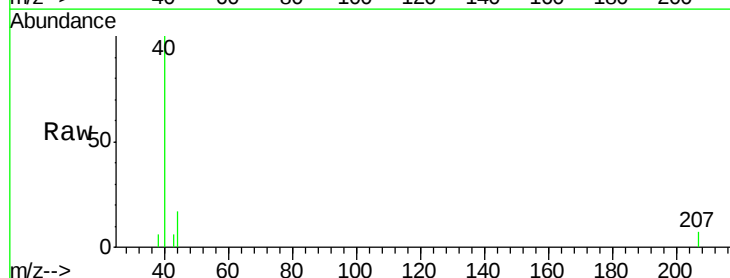
Acq: 30 Dec 2019 15:09

Tgt Ion: 43 Resp: 60

Ion Ratio Lower Upper

43 100

58 0.0 25.8 38.6#



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 58.00 (57.70 to 58.70): VDC

300

250

200

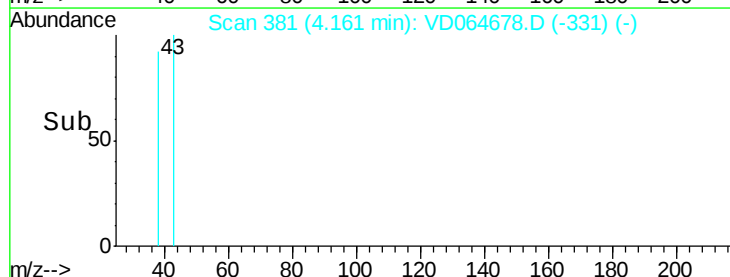
150

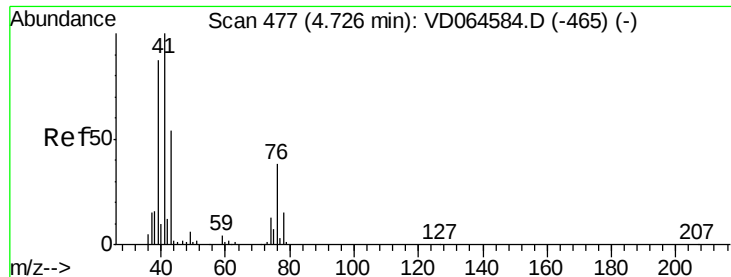
100

50

0

Time-->





#18

Methyl Acetate

Concen: 1.177 ug/l

RT: 4.63 min Scan# 461

Delta R.T. -0.09 min

Lab File: VD064678.D

Acq: 30 Dec 2019 15:09

Instrument :

MSVOA_D

ClientSampleId :

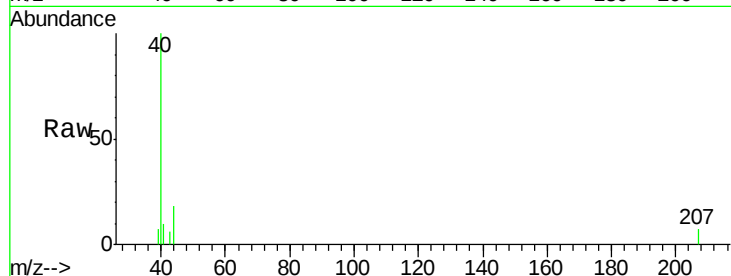
LIED-BF013-01

Tot Ion: 43 Resp: 58

Ion Ratio Lower Upper

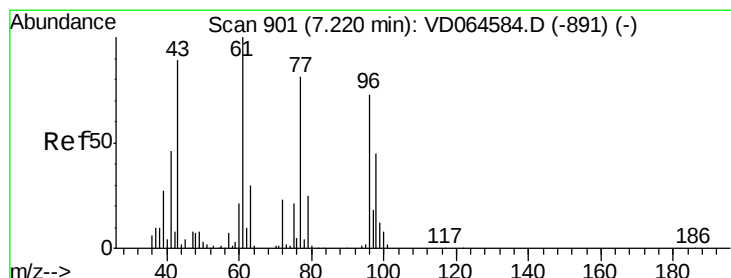
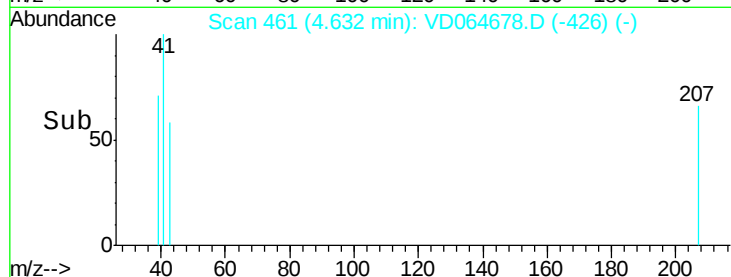
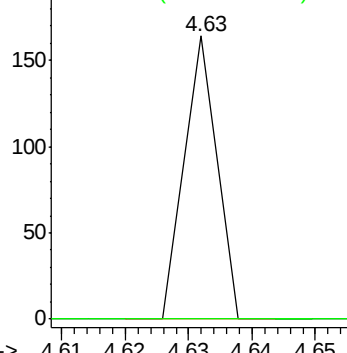
43 100

74 0.0 19.2 28.8#



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 74.00 (73.70 to 74.70): VDC



#25

2-Butanone

Concen: 2.578 ug/l

RT: 7.24 min Scan# 904

Delta R.T. 0.02 min

Lab File: VD064678.D

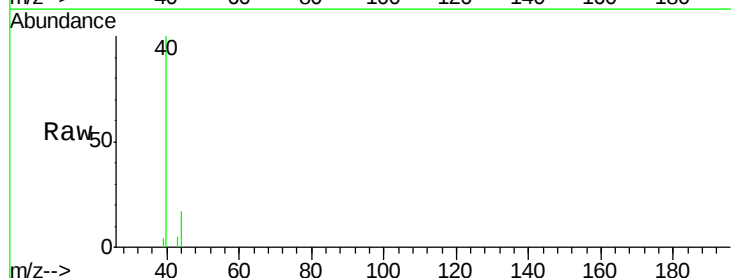
Acq: 30 Dec 2019 15:09

Tgt Ion: 43 Resp: 62

Ion Ratio Lower Upper

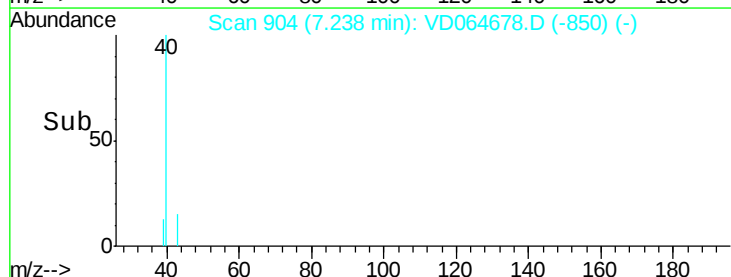
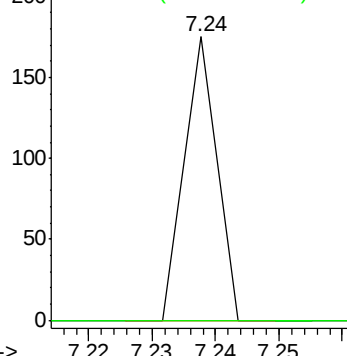
43 100

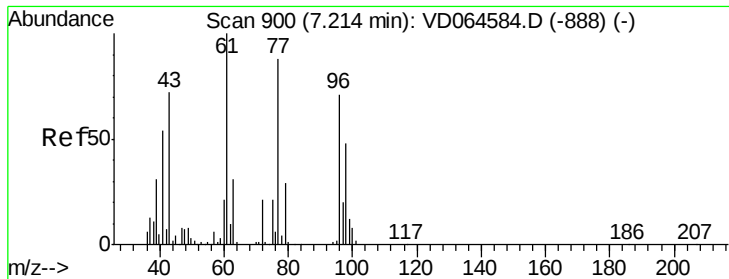
72 0.0 20.7 31.1#



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 72.00 (71.70 to 72.70): VDC





#27

cis-1,2-Dichloroethene

Concen: 1.230 ug/l

RT: 7.24 min Scan# 905

Delta R.T. 0.03 min

Lab File: VD064678.D

Acq: 30 Dec 2019 15:09

Instrument :

MSVOA_D

ClientSampleId :

LIED-BF013-01

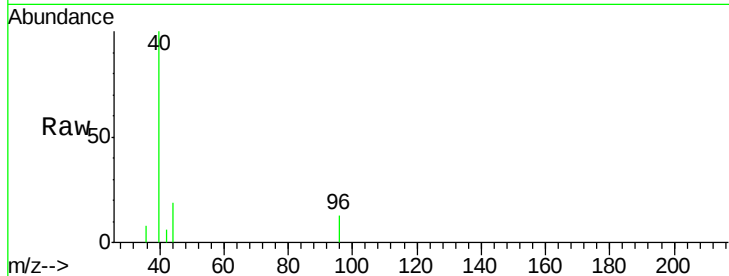
Tot Ion: 96 Resp: 132

Ion Ratio Lower Upper

96 100

61 0.0 0.0 282.6

98 0.0 0.0 130.8



Abundance Ion 95.90 (95.60 to 96.60): VDC

Ion 60.90 (60.60 to 61.60): VDC

Ion 97.90 (97.60 to 98.60): VDC

7.24

400

300

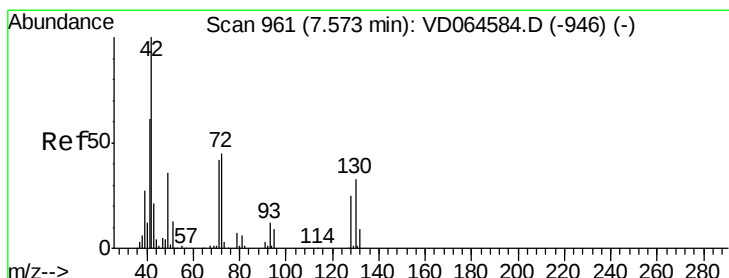
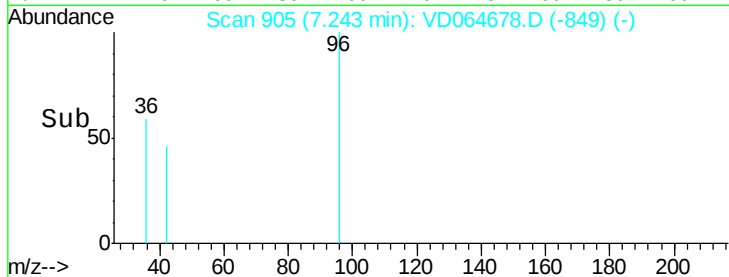
200

100

0

7.22 7.23 7.24 7.25 7.26

Time-->



#29

Tetrahydrofuran

Concen: 3.877 ug/l

RT: 7.55 min Scan# 957

Delta R.T. -0.02 min

Lab File: VD064678.D

Acq: 30 Dec 2019 15:09

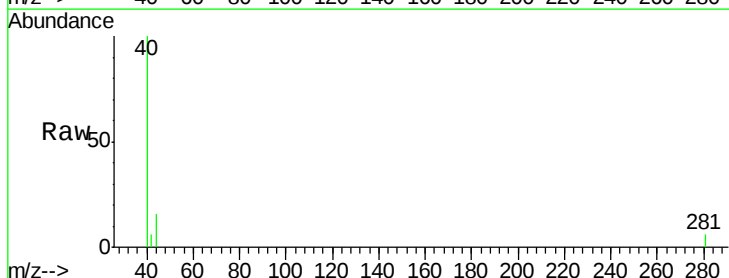
Tgt Ion: 42 Resp: 58

Ion Ratio Lower Upper

42 100

72 0.0 35.0 52.4#

71 0.0 32.9 49.3#



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

7.55

200

150

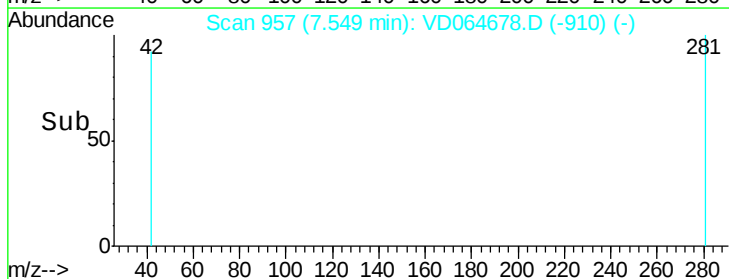
100

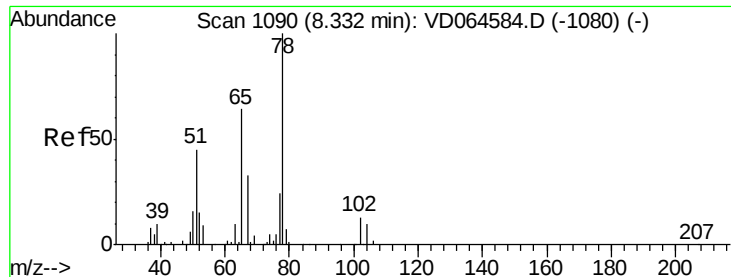
50

0

7.53 7.54 7.55 7.56

Time-->





#33

1,2-Dichloroethane-d4

Concen: 62.817 ug/l

RT: 8.33 min Scan# 1089

Delta R.T. -0.01 min

Lab File: VD064678.D

Acq: 30 Dec 2019 15:09

Instrument :

MSVOA_D

ClientSampleId :

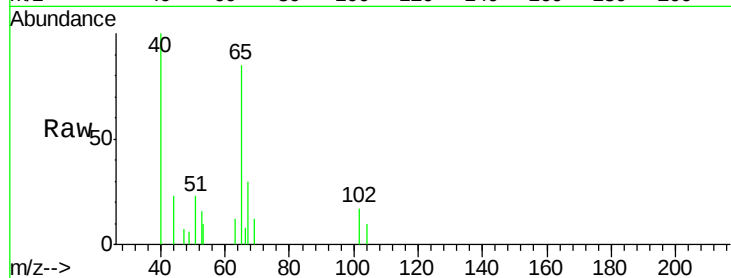
LIED-BF013-01

Tot Ion: 65 Resp: 5497

Ion Ratio Lower Upper

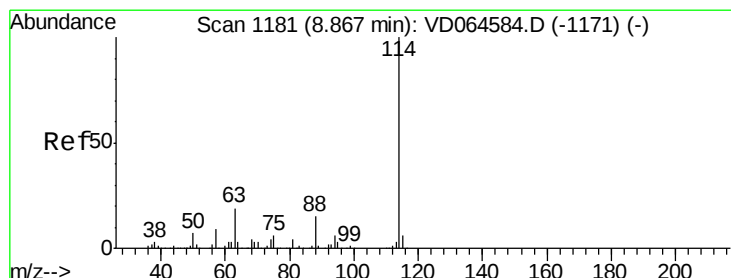
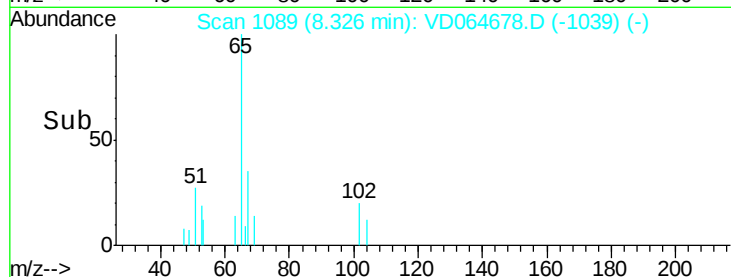
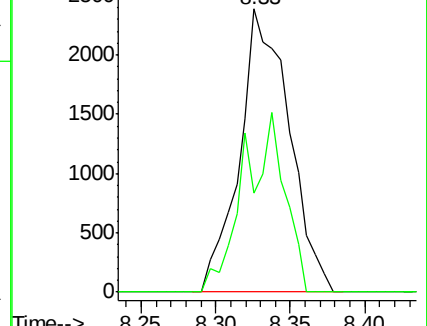
65 100

67 52.5 0.0 106.2



Abundance Ion 64.90 (64.60 to 65.60): VDC

Ion 66.90 (66.60 to 67.60): VDC



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.87 min Scan# 1181

Delta R.T. 0.00 min

Lab File: VD064678.D

Acq: 30 Dec 2019 15:09

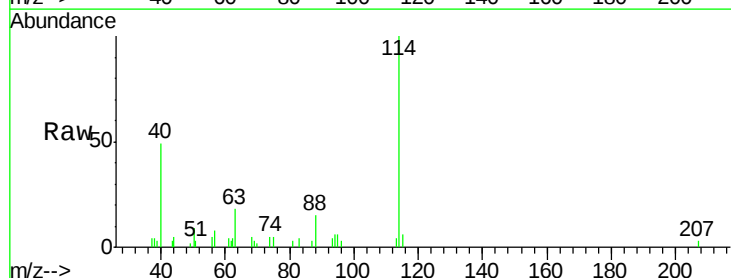
Tgt Ion: 114 Resp: 14198

Ion Ratio Lower Upper

114 100

63 17.6 0.0 38.0

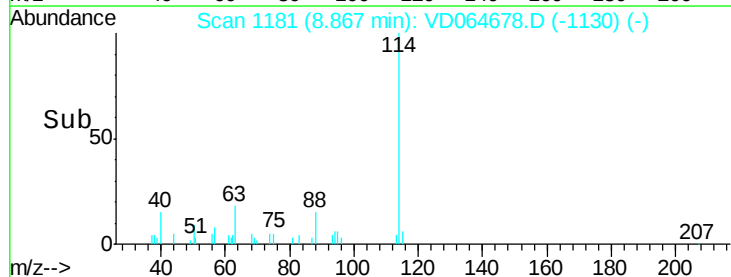
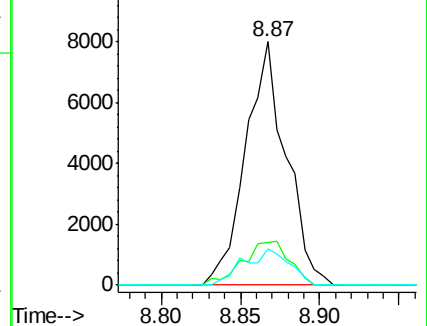
88 15.1 0.0 29.2

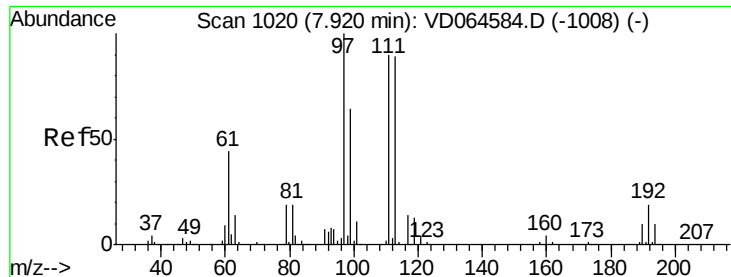


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VDC

Ion 87.90 (87.60 to 88.60): VDC





#35

Dibromofluoromethane

Concen: 50.788 ug/l

RT: 7.92 min Scan# 1020

Delta R.T. 0.00 min

Lab File: VD064678.D

Acq: 30 Dec 2019 15:09

Instrument :

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LIED-BF013-01

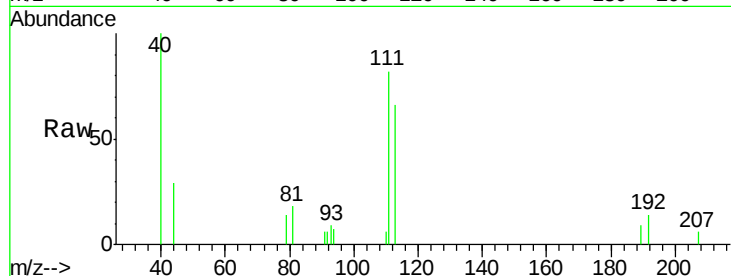
Tot Ion:113 Resp: 4424

Ion Ratio Lower Upper

113 100

111 108.6 80.6 121.0

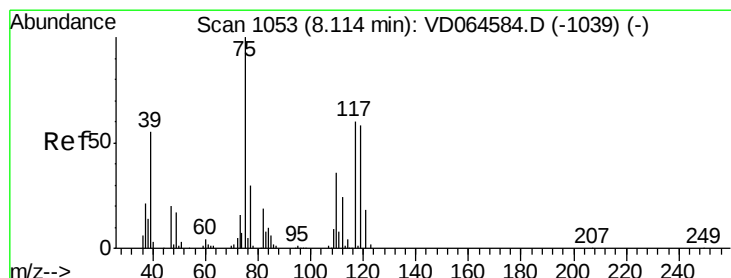
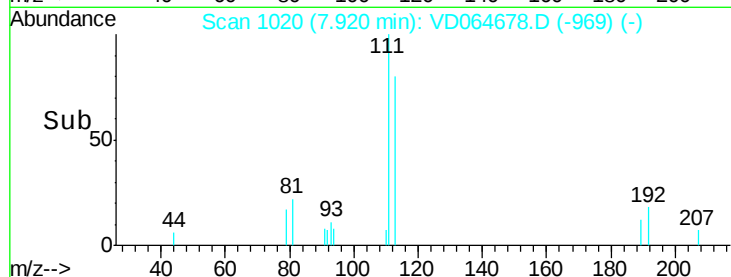
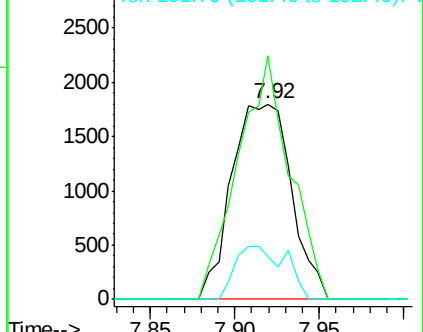
192 22.8 17.9 26.9



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: 5.269 ug/l

RT: 7.98 min Scan# 1030

Delta R.T. -0.14 min

Lab File: VD064678.D

Acq: 30 Dec 2019 15:09

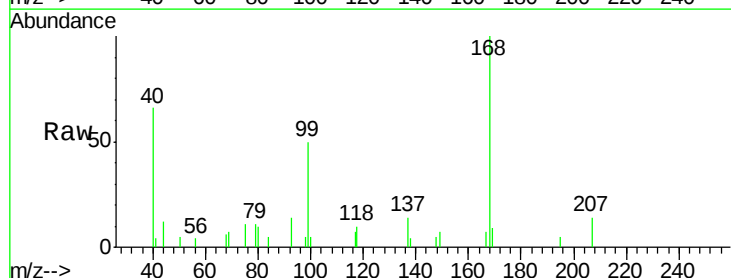
Tgt Ion: 75 Resp: 720

Ion Ratio Lower Upper

75 100

110 0.0 18.1 54.1#

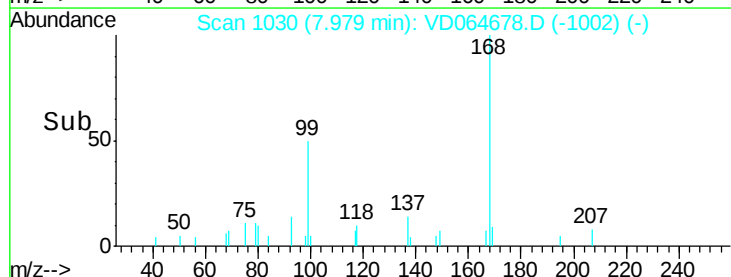
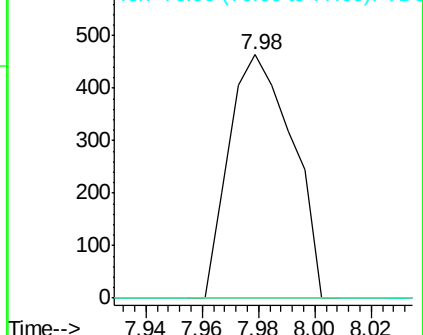
77 0.0 24.2 36.4#

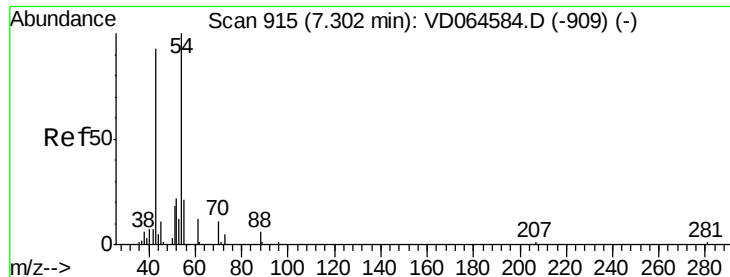


Abundance Ion 74.90 (74.60 to 75.60): V

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): V





#37

Ethyl Acetate

Concen: 1.155 ug/l

RT: 7.24 min Scan# 904

Delta R.T. -0.06 min

Lab File: VD064678.D

Acq: 30 Dec 2019 15:09

Instrument :

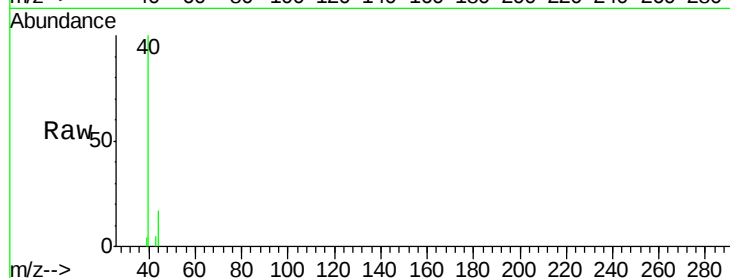
MSVOA_D

ClientSampleId :

LIED-BF013-01

Tot Ion: 43 Resp: 62

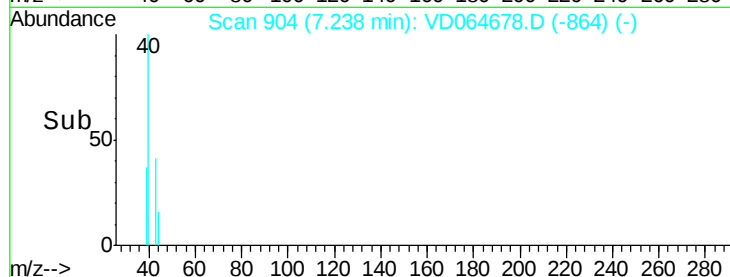
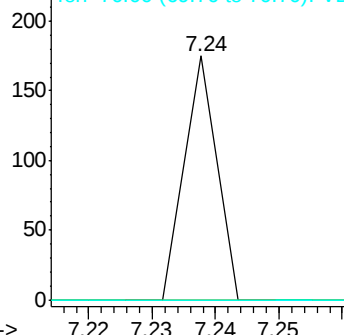
Ion	Ratio	Lower	Upper
43	100		
61	0.0	10.3	15.5#
70	0.0	7.6	11.4#



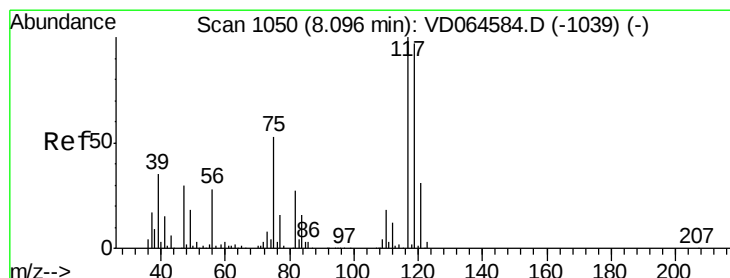
Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 60.90 (60.60 to 61.60): VDC

Ion 70.00 (69.70 to 70.70): VDC



Time-->



#38

Carbon Tetrachloride

Concen: 7.062 ug/l

RT: 7.98 min Scan# 1031

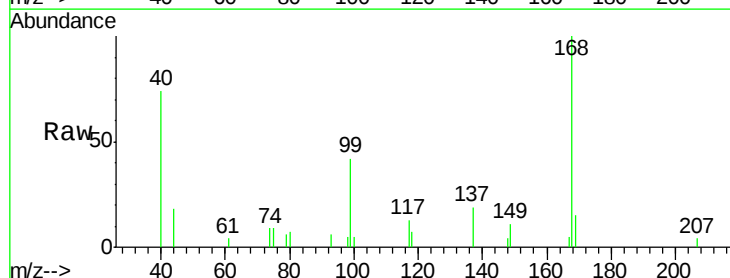
Delta R.T. -0.11 min

Lab File: VD064678.D

Acq: 30 Dec 2019 15:09

Tgt Ion: 117 Resp: 1029

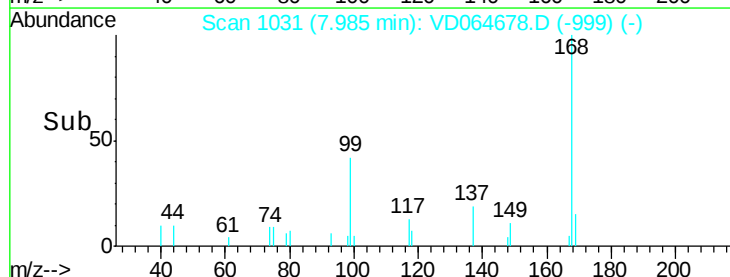
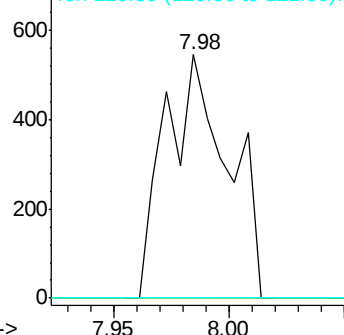
Ion	Ratio	Lower	Upper
117	100		
119	0.0	77.3	115.9#
121	0.0	25.0	37.6#



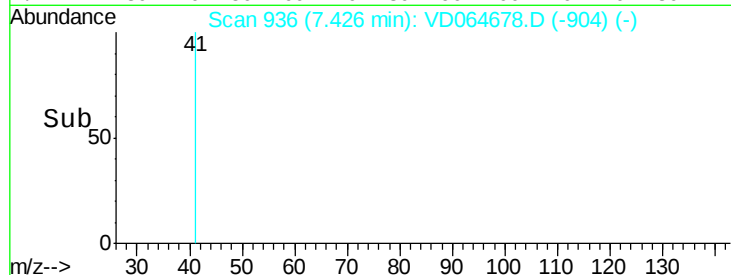
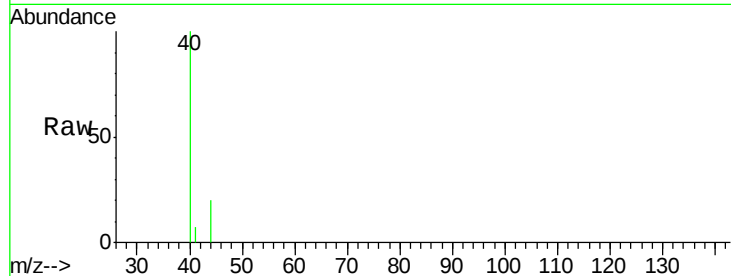
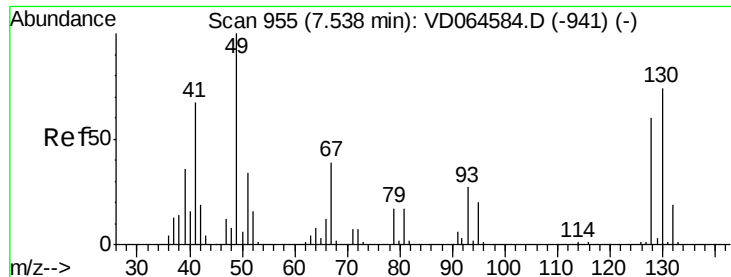
Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



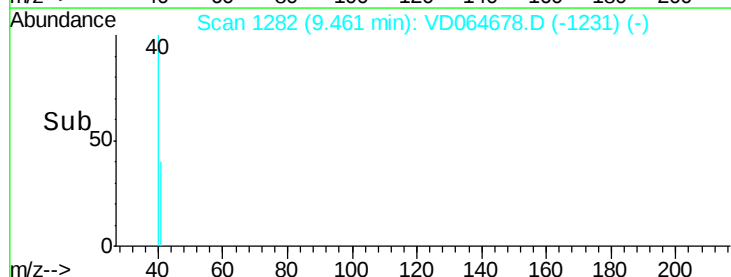
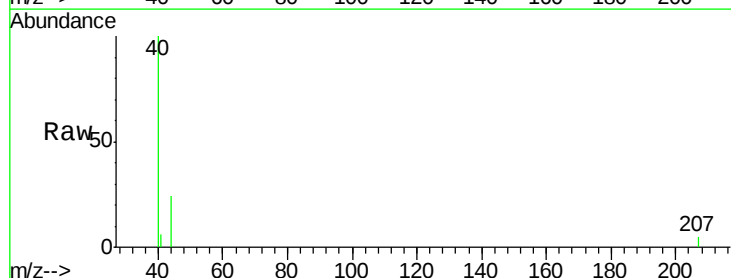
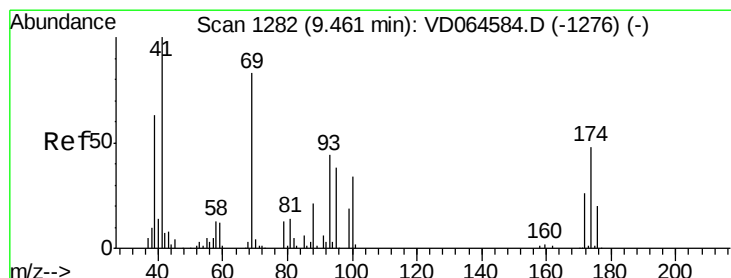
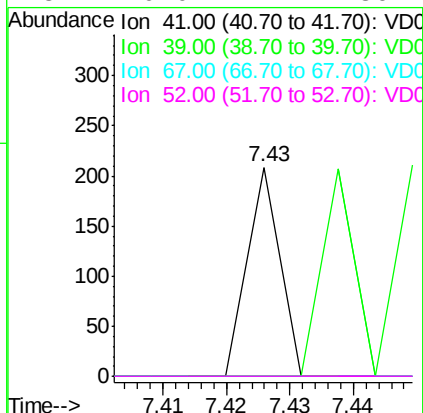
Time-->



#41
Methacrylonitrile
Concen: 2.376 ug/l
RT: 7.43 min Scan# 936
Delta R.T. -0.11 min
Lab File: VD064678.D
Acq: 30 Dec 2019 15:09

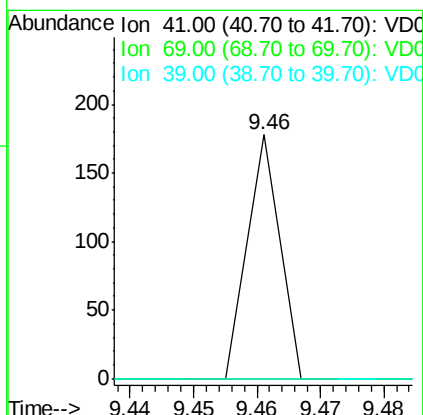
Instrument :
MSVOA_D
ClientSampleId :
LIED-BF013-01

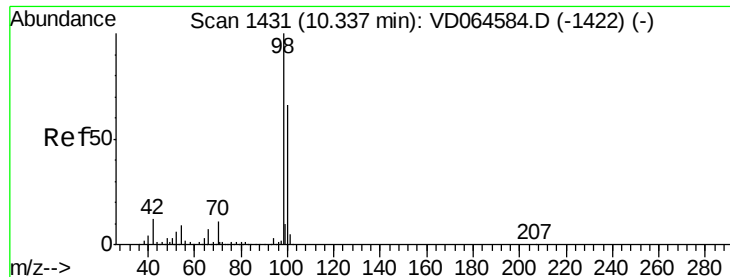
Tot Ion:	41	Resp:	74
Ion	Ratio	Lower	Upper
41	100		
39	0.0	46.7	70.1#
67	0.0	52.5	78.7#
52	0.0	24.1	36.1#



#48
Methyl methacrylate
Concen: 1.252 ug/l
RT: 9.46 min Scan# 1282
Delta R.T. 0.00 min
Lab File: VD064678.D
Acq: 30 Dec 2019 15:09

Tgt Ion:	41	Resp:	63
Ion	Ratio	Lower	Upper
41	100		
69	0.0	63.0	94.6#
39	0.0	47.4	71.2#





#50

Toluene-d8

Concen: 47.744 ug/l

RT: 10.34 min Scan# 1432

Delta R.T. 0.01 min

Lab File: VD064678.D

Acq: 30 Dec 2019 15:09

Instrument :

MSVOA_D

ClientSampleId :

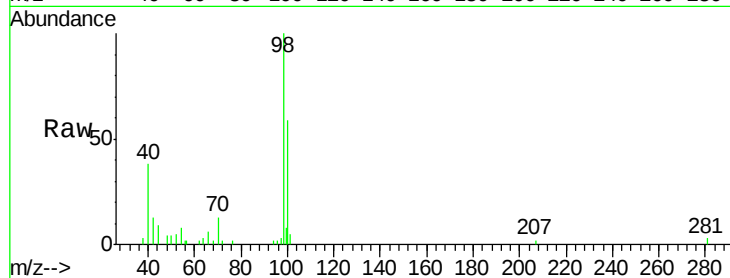
LIED-BF013-01

Tot Ion: 98 Resp: 15928

Ion Ratio Lower Upper

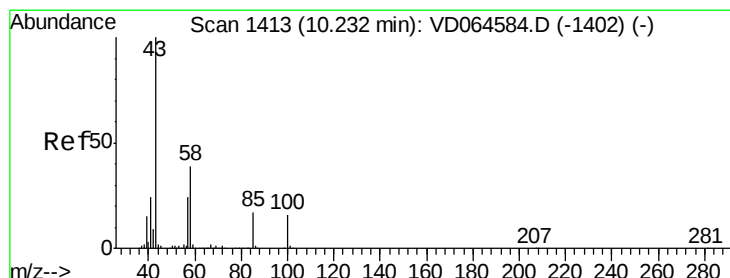
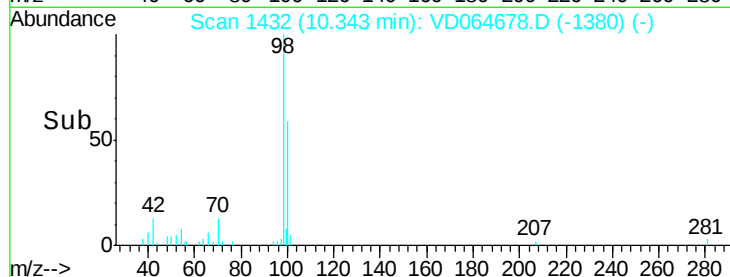
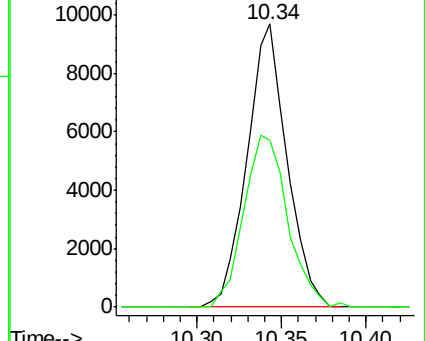
98 100

100 66.7 51.7 77.5



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: 1.193 ug/l

RT: 10.19 min Scan# 1406

Delta R.T. -0.04 min

Lab File: VD064678.D

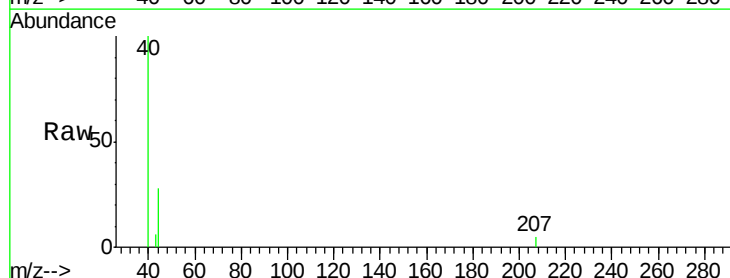
Acq: 30 Dec 2019 15:09

Tgt Ion: 43 Resp: 63

Ion Ratio Lower Upper

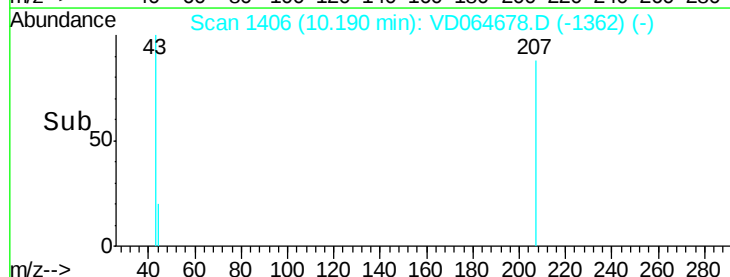
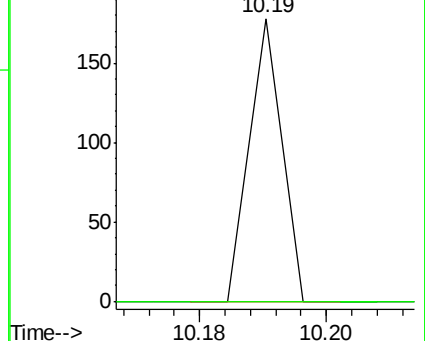
43 100

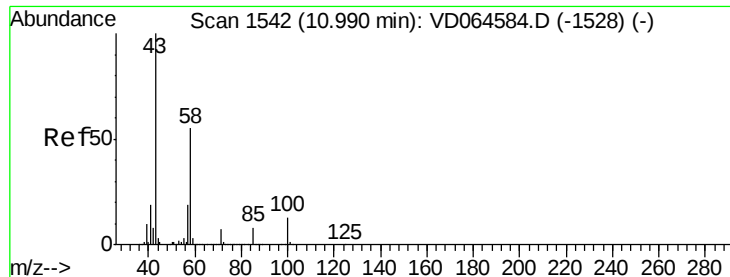
58 0.0 30.2 45.2#



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 58.00 (57.70 to 58.70): VDC

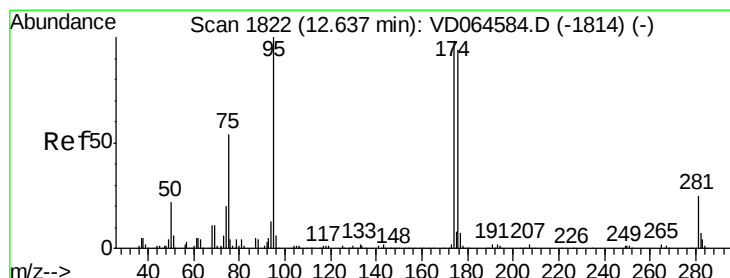
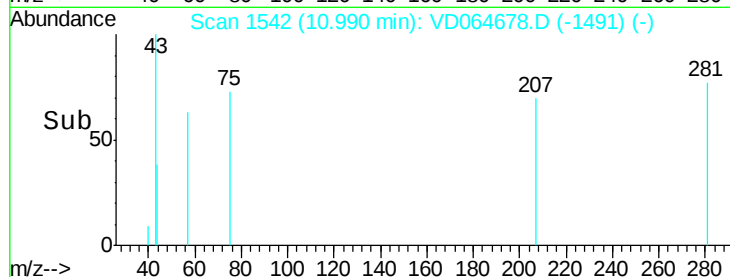
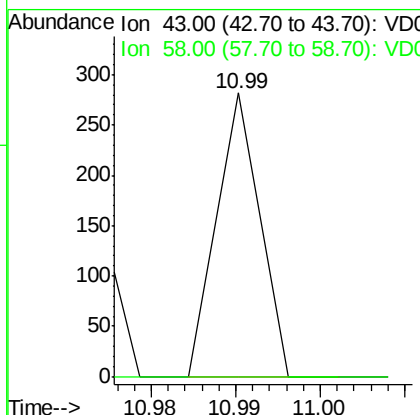
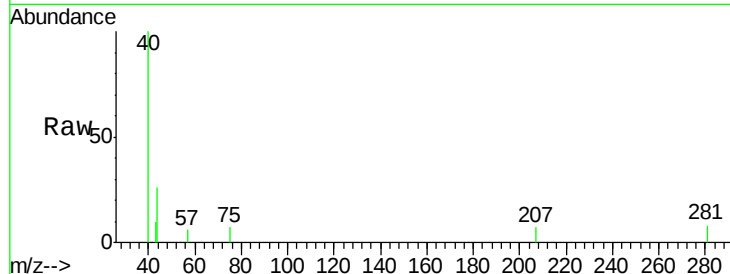




#59
2-Hexanone
Concen: 2.790 ug/l
RT: 10.99 min Scan# 1542
Delta R.T. 0.00 min
Lab File: VD064678.D
Acq: 30 Dec 2019 15:09

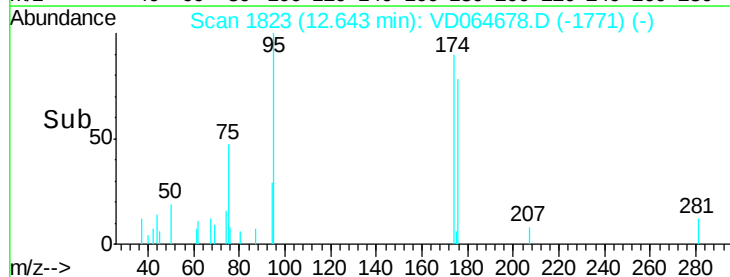
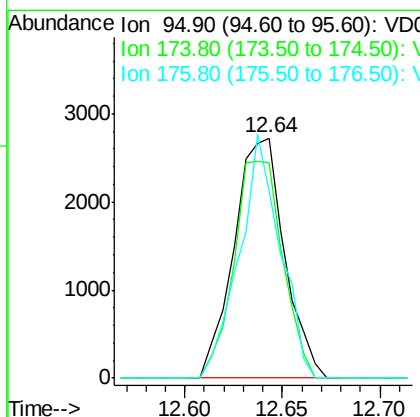
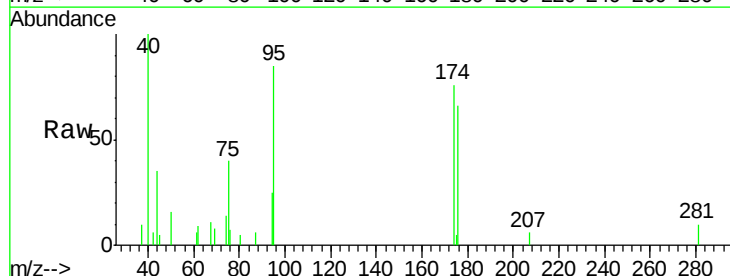
Instrument :
MSVOA_D
ClientSampleId :
LIED-BF013-01

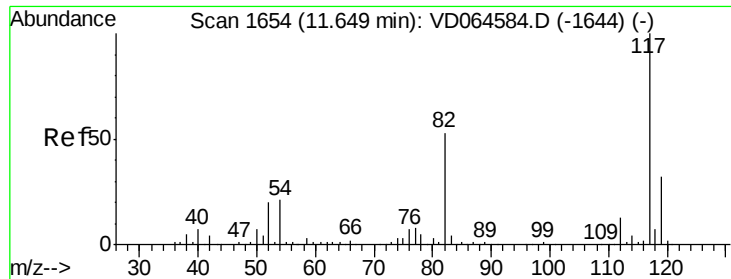
Tot Ion: 43 Resp: 100
Ion Ratio Lower Upper
43 100
58 0.0 26.4 79.0#



#62
4-Bromofluorobenzene
Concen: 46.070 ug/l
RT: 12.64 min Scan# 1823
Delta R.T. 0.01 min
Lab File: VD064678.D
Acq: 30 Dec 2019 15:09

Tgt Ion: 95 Resp: 4860
Ion Ratio Lower Upper
95 100
174 87.8 0.0 193.2
176 82.3 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: VD064678.D

Acq: 30 Dec 2019 15:09

Instrument :

MSVOA_D

ClientSampleId :

LIED-BF013-01

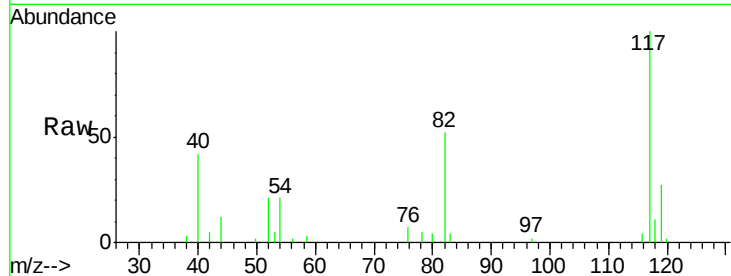
Tot Ion:117 Resp: 12589

Ion Ratio Lower Upper

117 100

82 51.8 42.2 63.4

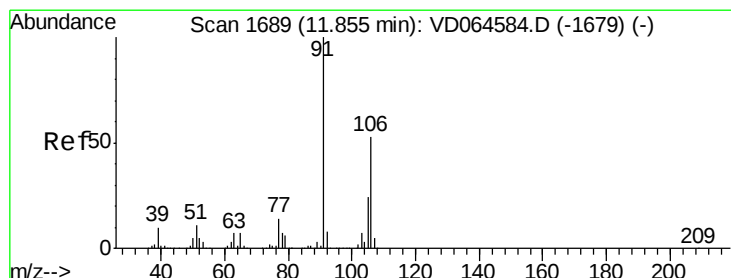
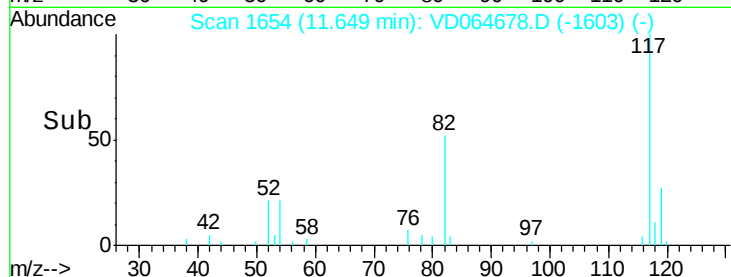
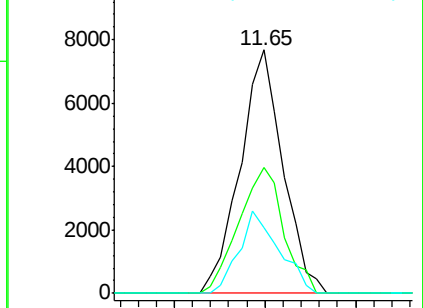
119 26.9 26.0 39.0



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): V

Ion 118.90 (118.60 to 119.60): V



#68

m/p-Xylenes

Concen: 1.142 ug/l

RT: 11.86 min Scan# 1689

Delta R.T. 0.00 min

Lab File: VD064678.D

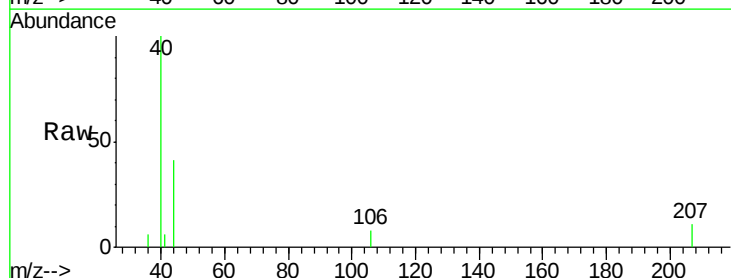
Acq: 30 Dec 2019 15:09

Tgt Ion:106 Resp: 209

Ion Ratio Lower Upper

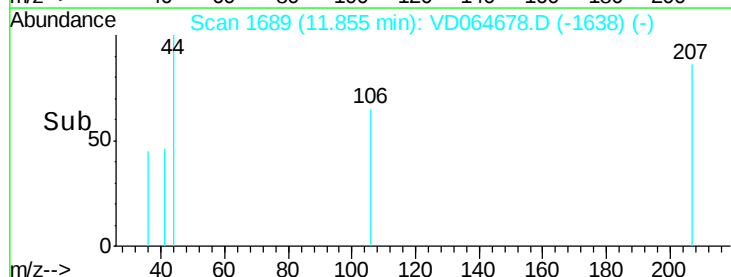
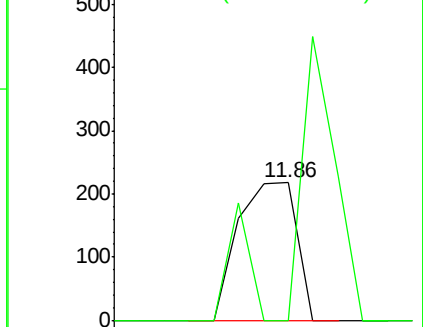
106 100

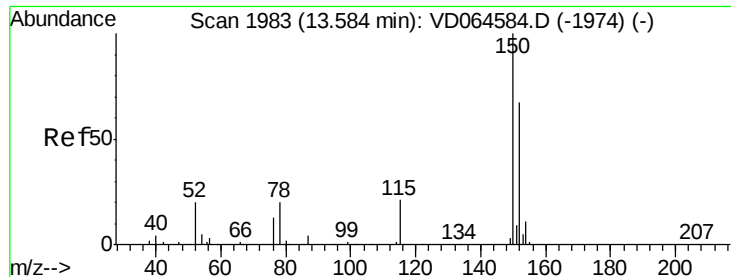
91 145.5 156.3 234.5#



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): V





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.58 min Scan# 1982

Delta R.T. -0.01 min

Lab File: VD064678.D

Acq: 30 Dec 2019 15:09

Instrument :

MSVOA_D

ClientSampleId :

LIED-BF013-01

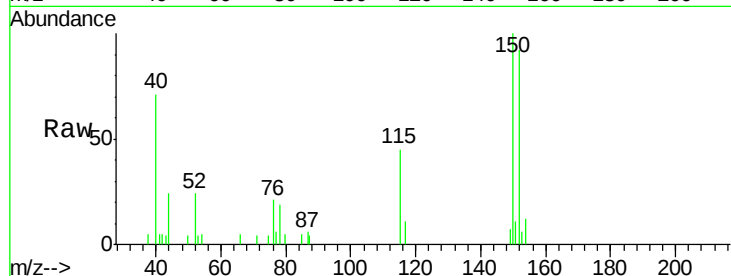
Tot Ion:152 Resp: 5598

Ion Ratio Lower Upper

152 100

115 60.5 27.8 83.4

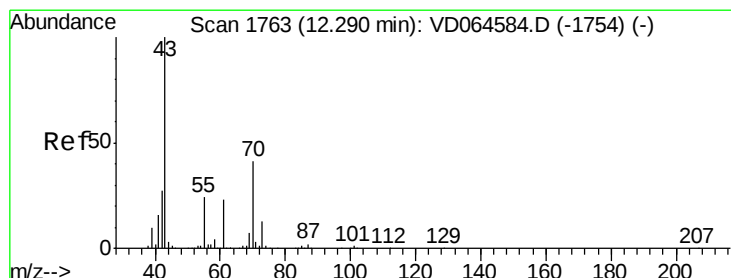
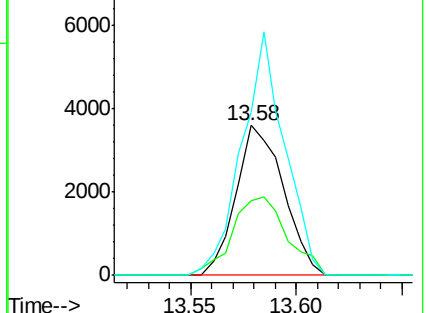
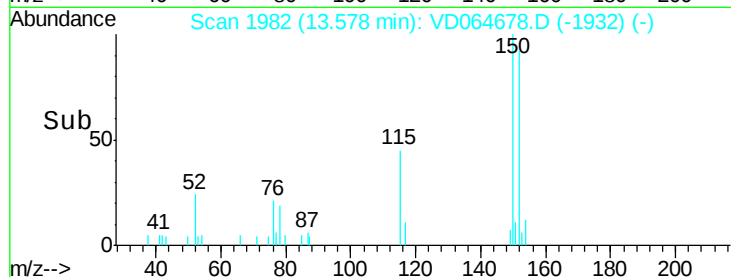
150 146.4 0.0 351.4



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



#74

N-ethyl acetate

Concen: 1.146 ug/l

RT: 12.24 min Scan# 1754

Delta R.T. -0.05 min

Lab File: VD064678.D

Acq: 30 Dec 2019 15:09

Tgt Ion: 43 Resp: 98

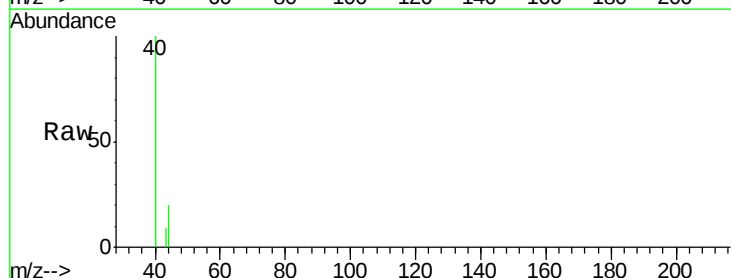
Ion Ratio Lower Upper

43 100

70 0.0 33.4 50.0#

55 0.0 19.4 29.0#

61 0.0 18.3 27.5#

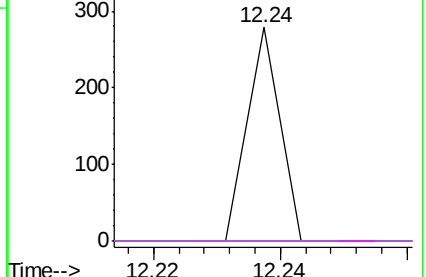
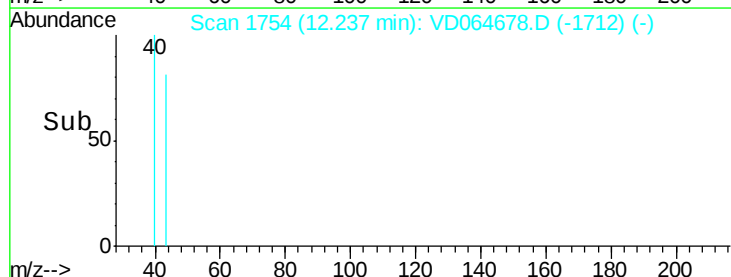


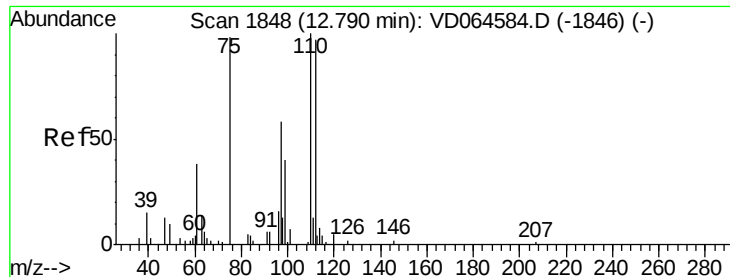
Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 70.00 (69.70 to 70.70): VDC

Ion 55.00 (54.70 to 55.70): VDC

Ion 61.00 (60.70 to 61.70): VDC

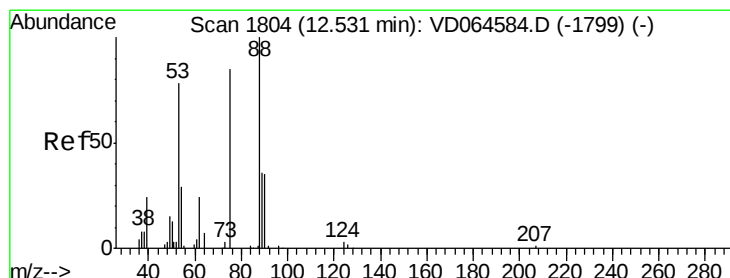
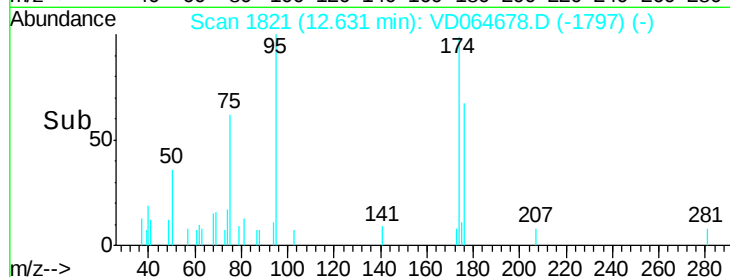
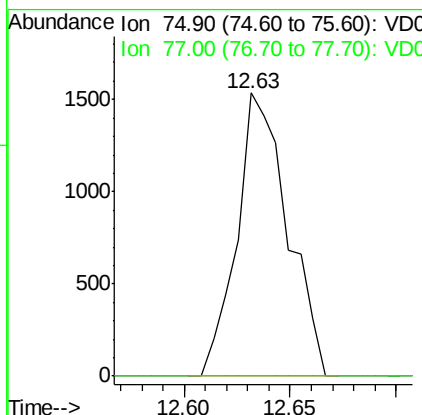
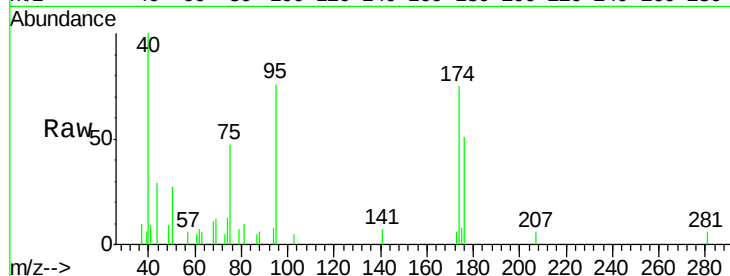




#76
 1,2,3-Trichloropropane
 Concen: 57.980 ug/l
 RT: 12.63 min Scan# 1821
 Delta R.T. -0.16 min
 Lab File: VD064678.D
 Acq: 30 Dec 2019 15:09

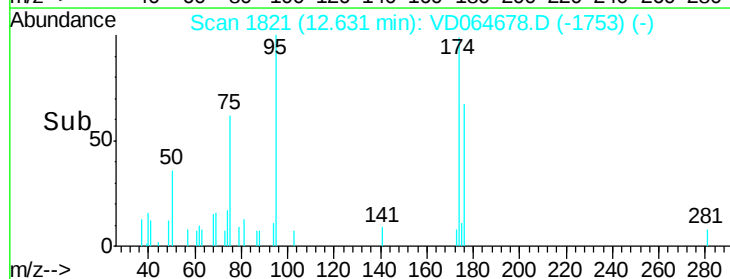
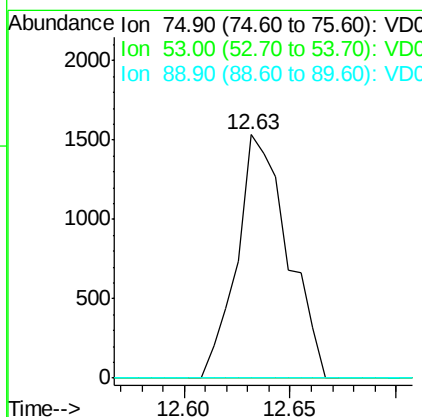
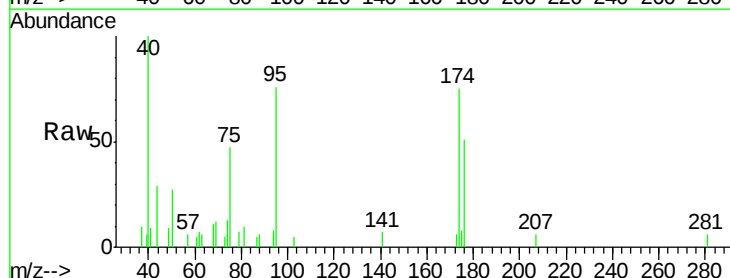
Instrument :
 MSVOA_D
 ClientSampleId :
 LIED-BF013-01

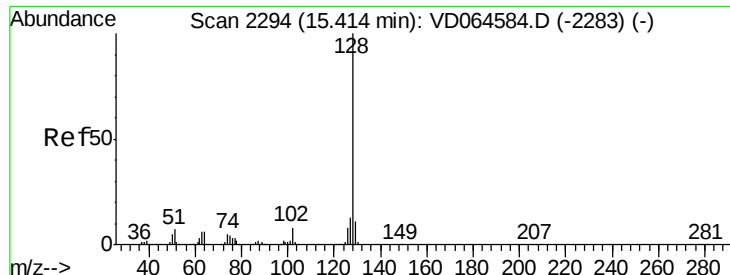
Tot Ion: 75 Resp: 2563
 Ion Ratio Lower Upper
 75 100
 77 0.0 0.0 0.0



#81
 trans-1,4-Dichloro-2-butene
 Concen: 121.262 ug/l
 RT: 12.63 min Scan# 1821
 Delta R.T. 0.10 min
 Lab File: VD064678.D
 Acq: 30 Dec 2019 15:09

Tgt Ion: 75 Resp: 2563
 Ion Ratio Lower Upper
 75 100
 53 0.0 78.8 118.2#
 89 0.0 38.3 57.5#





#95

Naphthalene

Concen: 1.440 ug/l

RT: 15.41 min Scan# 2293

Delta R.T. -0.01 min

Lab File: VD064678.D

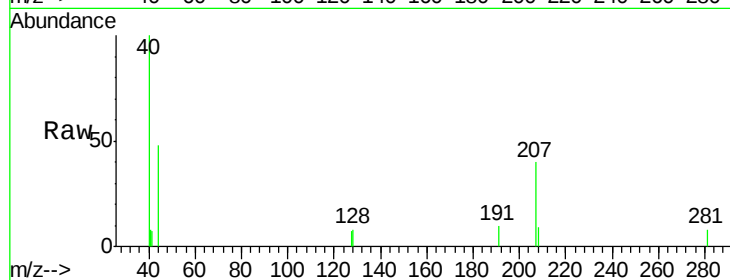
Acq: 30 Dec 2019 15:09

Instrument :

MSVOA_D

ClientSampleId :

LIED-BF013-01



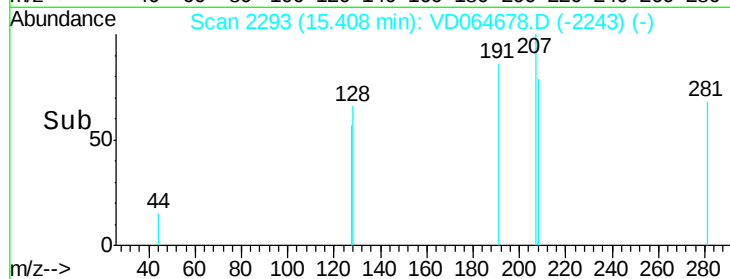
Tot Ion:128 Resp: 268

Ion Ratio Lower Upper

128 100

127 0.0 10.3 15.5#

129 0.0 8.5 12.7#



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

