

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL072320\
 Data File : VL035230.D
 Acq On : 23 Jul 2020 15:48
 Operator : SY/AP
 Sample : L3216-13 0.03 LOD
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Jul 24 05:57:13 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL070820AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Jul 08 07:05:23 2020
 QLast Update : Wed Jul 08 07:05:23 2020
 Response via : Initial Calibration

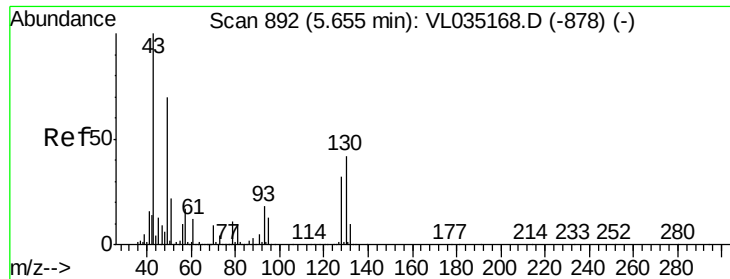
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1119218	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	2736260	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.11	117	2613252	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.45	95	2129198	10.03	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.30%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.01	85	12224	0.078 ppbv	95
3) Chlorodifluoromethane	2.94	51	8317	0.067 ppbv	98
5) Vinyl Chloride	3.21	62	3272	0.044 ppbv #	85
6) Bromomethane	3.43	94	1884	0.045 ppbv #	49
7) Chloroethane	3.51	64	915	0.035 ppbv #	87
8) Dichlorotetrafluoroethane	3.14	85	7681	0.045 ppbv #	67
11) Trichlorofluoromethane	3.91	101	7302	0.041 ppbv	89
14) Bromoethene	3.70	108	2410	0.047 ppbv #	46
15) Acetone	3.84	43	44959	0.297 ppbv #	65
16) 1,3-Butadiene	3.28	39	3056	0.053 ppbv #	7
20) Methylene Chloride	4.31	84	11338	0.172 ppbv #	77
21) Allyl Chloride	4.38	41	3028	0.034 ppbv #	19
22) trans-1,2-Dichloroethene	4.86	96	3261	0.059 ppbv #	39
23) Vinyl Acetate	5.06	43	6207	0.038 ppbv #	64
24) 1,1-Dichloroethane	4.99	63	7295	0.052 ppbv #	89
27) Carbon Disulfide	4.53	76	4905	0.034 ppbv #	64
29) Chloroform	5.74	83	6217	0.036 ppbv #	52
37) 1,2-Dichloroethane	6.30	62	6524	0.049 ppbv #	92
39) 1,2-Dichloropropane	7.18	63	760857	9.661 ppbv #	23
42) Bromodichloromethane	7.79	83	6181	0.035 ppbv #	62
63) 1,1,2,2-Tetrachloroethane	13.71	83	6689	0.031 ppbv #	24

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 892

Delta R.T. 0.00 min

Lab File: VL035230.D

Acq: 23 Jul 2020 15:48

Instrument :

MSVOA_L

ClientSampleId :

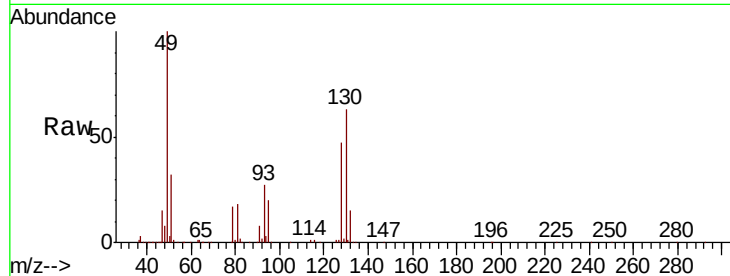
Tot Ion: 49 Resp: 1119218

Ion Ratio Lower Upper

49 100

128 49.6 23.8 71.4

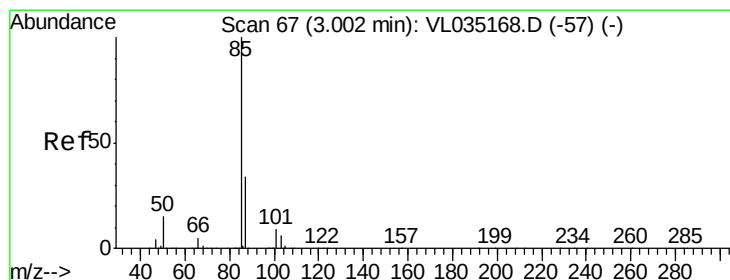
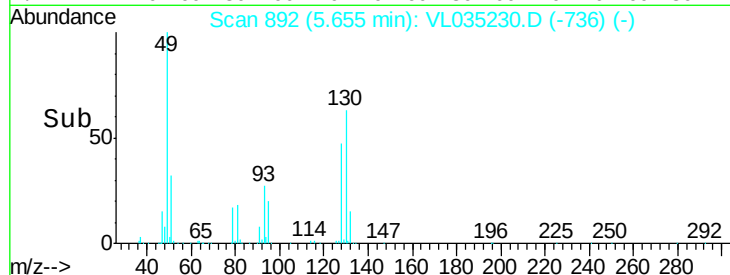
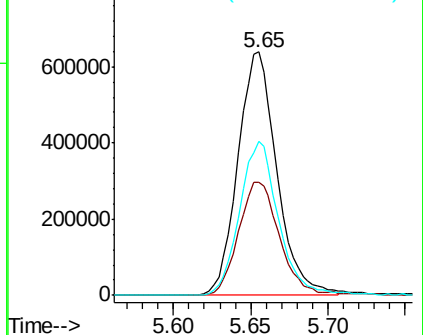
130 63.4 29.9 89.8



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.078 ppbv

RT: 3.01 min Scan# 68

Delta R.T. 0.00 min

Lab File: VL035230.D

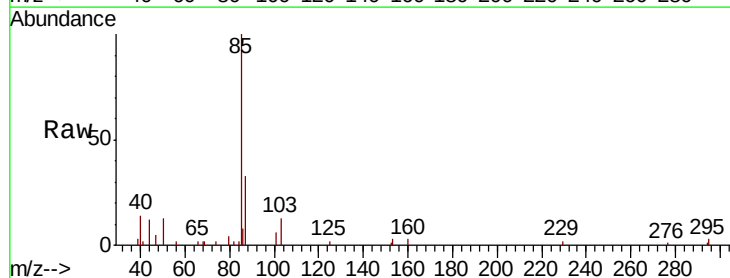
Acq: 23 Jul 2020 15:48

Tgt Ion: 85 Resp: 12224

Ion Ratio Lower Upper

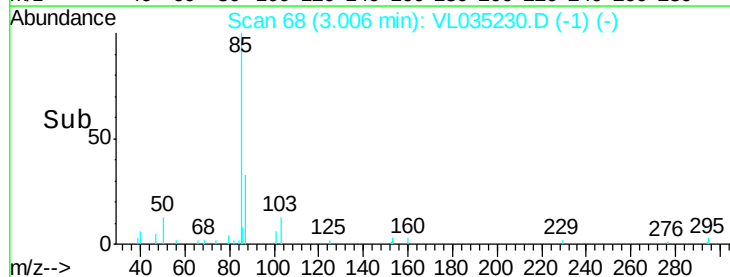
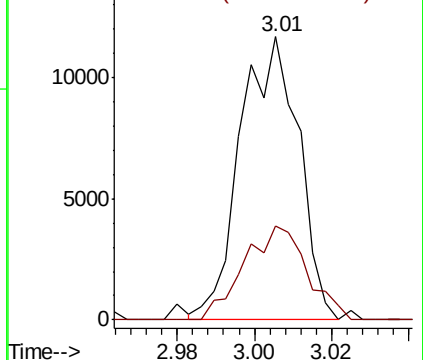
85 100

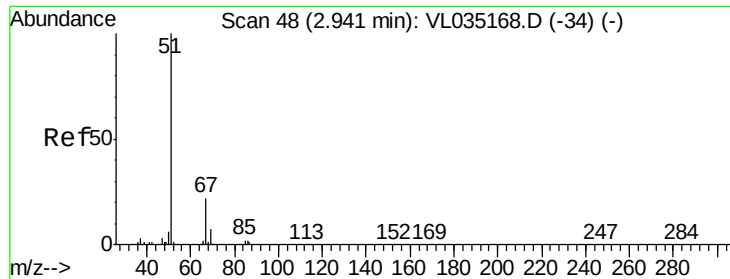
87 30.7 27.0 40.6



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

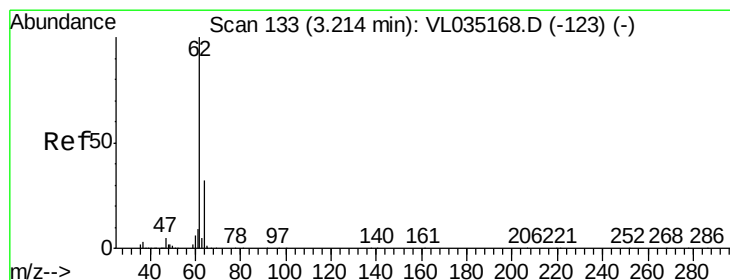
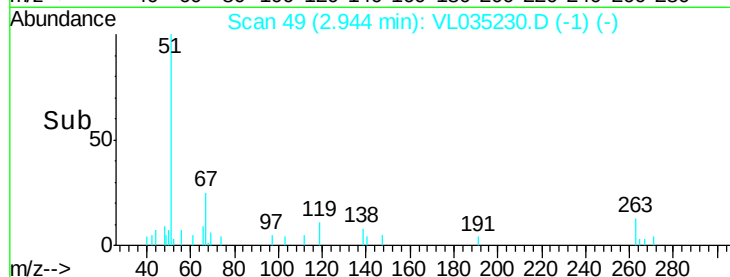
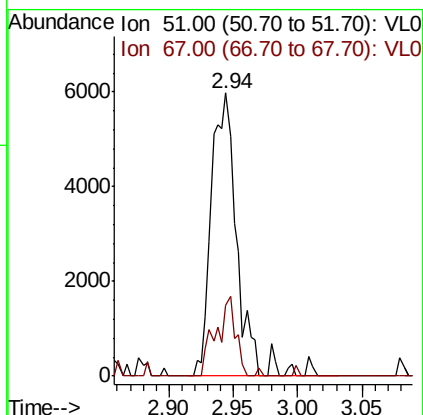
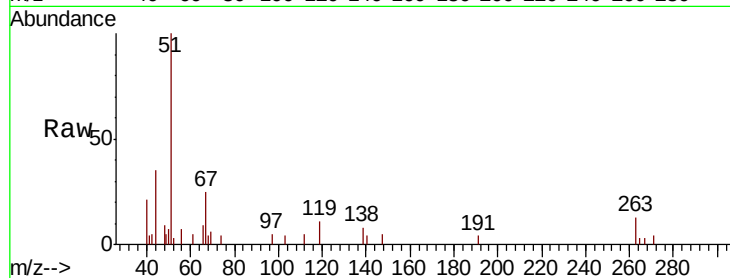




#3
 Chlorodifluoromethane
 Concen: 0.067 ppbv
 RT: 2.94 min Scan# 49
 Delta R.T. 0.00 min
 Lab File: VL035230.D
 Acq: 23 Jul 2020 15:48

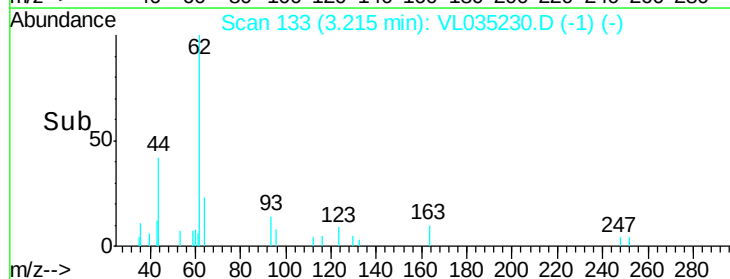
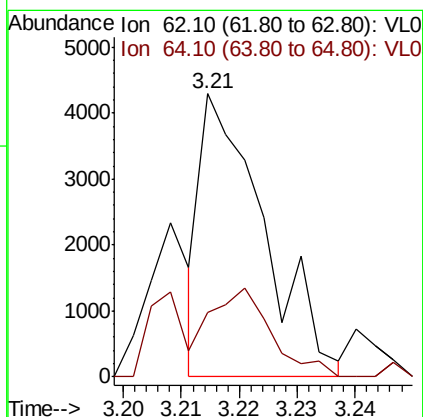
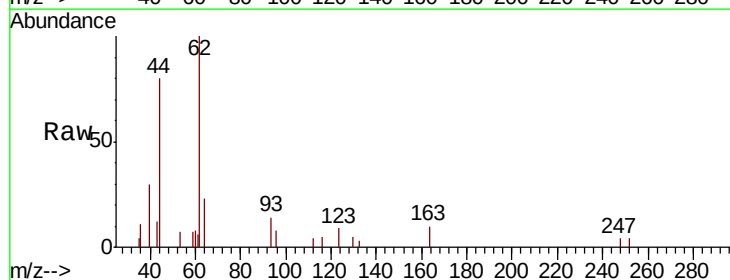
Instrument :
 MSVOA_L
 ClientSampleId :

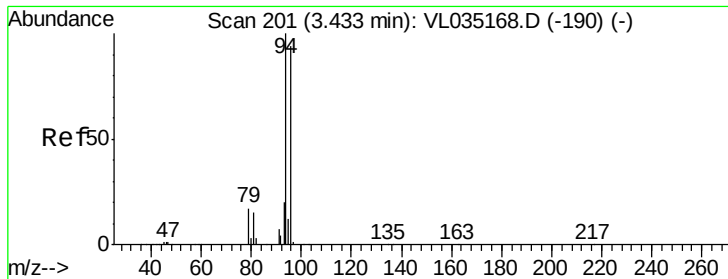
Tot Ion: 51 Resp: 8317
 Ion Ratio Lower Upper
 51 100
 67 21.7 16.6 24.8



#5
 Vinyl Chloride
 Concen: 0.044 ppbv
 RT: 3.21 min Scan# 133
 Delta R.T. 0.00 min
 Lab File: VL035230.D
 Acq: 23 Jul 2020 15:48

Tgt Ion: 62 Resp: 3272
 Ion Ratio Lower Upper
 62 100
 64 24.1 25.9 38.9#





#6

Bromomethane

Concen: 0.045 ppbv

RT: 3.43 min Scan# 201

Delta R.T. 0.00 min

Lab File: VL035230.D

Acq: 23 Jul 2020 15:48

Instrument :

MSVOA_L

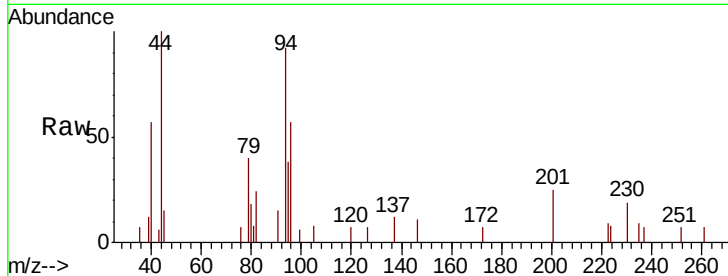
ClientSampleId :

Tot Ion: 94 Resp: 1884

Ion Ratio Lower Upper

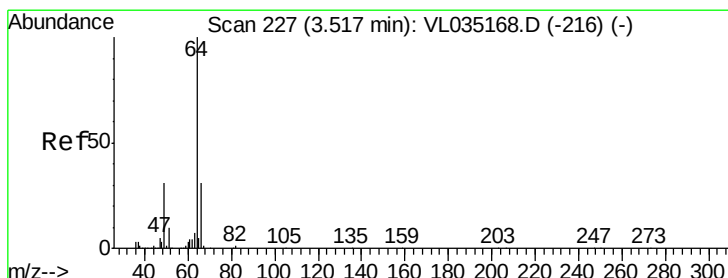
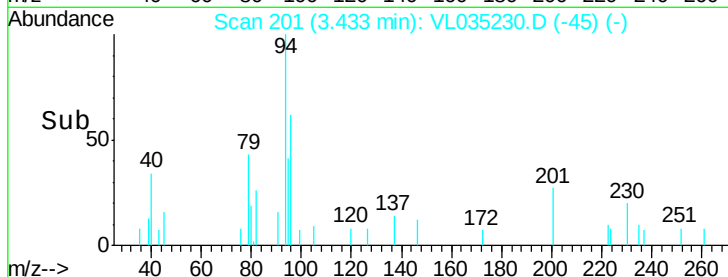
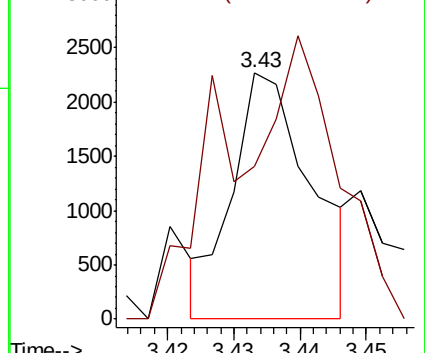
94 100

96 43.9 74.8 112.2#



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0



#7

Chloroethane

Concen: 0.035 ppbv

RT: 3.51 min Scan# 226

Delta R.T. -0.00 min

Lab File: VL035230.D

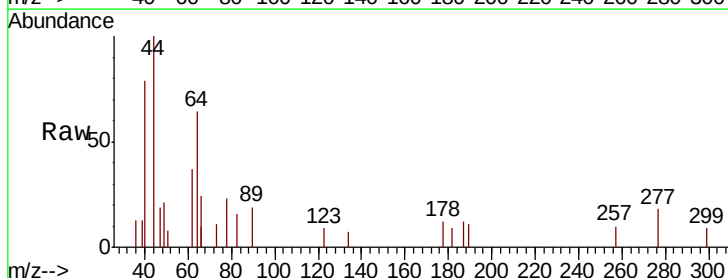
Acq: 23 Jul 2020 15:48

Tgt Ion: 64 Resp: 915

Ion Ratio Lower Upper

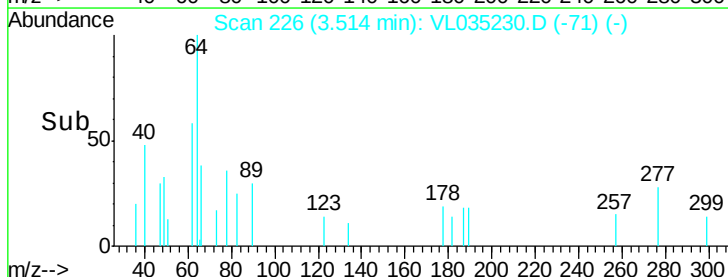
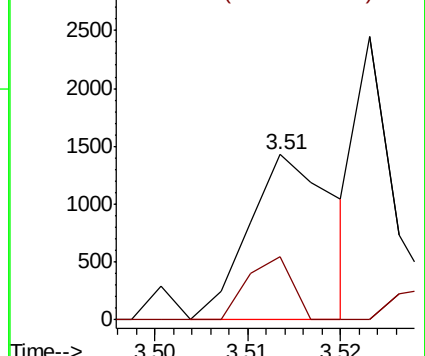
64 100

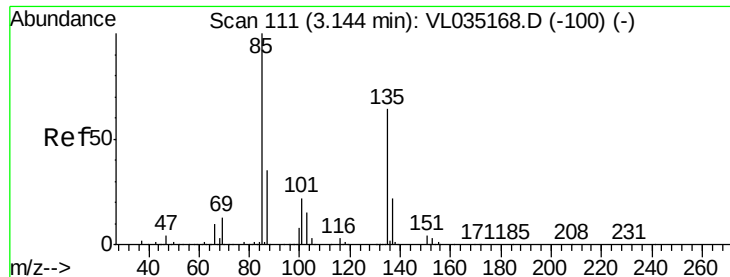
66 38.0 24.6 36.8#



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0





#8

Dichlorotetrafluoroethane

Concen: 0.045 ppbv

RT: 3.14 min Scan# 110

Delta R.T. -0.00 min

Lab File: VL035230.D

Acq: 23 Jul 2020 15:48

Instrument :

MSVOA_L

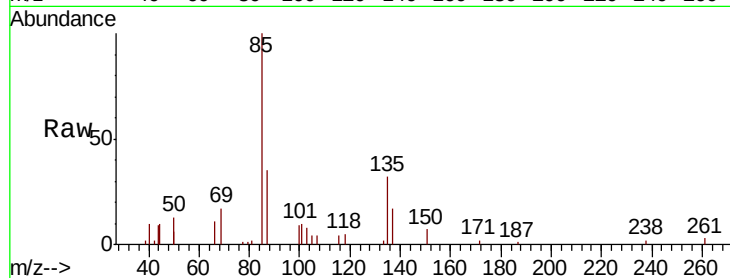
ClientSampleId :

Tot Ion: 85 Resp: 7681

Ion Ratio Lower Upper

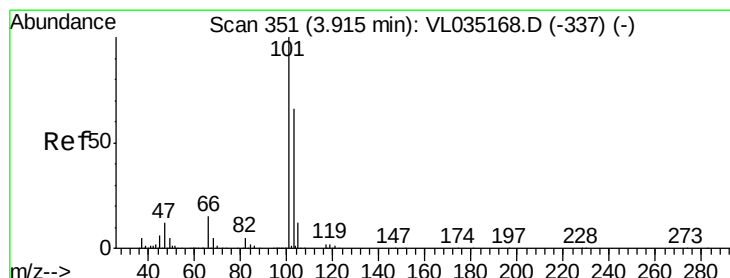
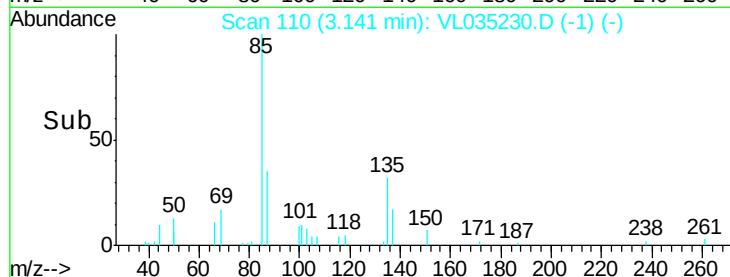
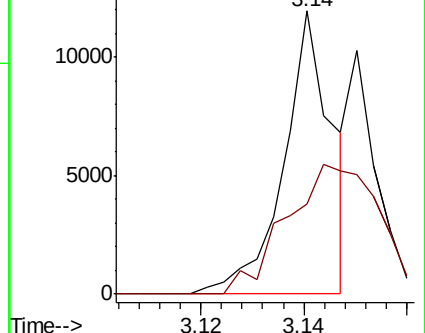
85 100

135 91.2 52.1 78.1#



Abundance Ion 85.00 (84.70 to 85.70): VL035168.D (-100) (-)

Ion 135.00 (134.70 to 135.70): VL035168.D (-100) (-)



#11

Trichlorofluoromethane

Concen: 0.041 ppbv

RT: 3.91 min Scan# 350

Delta R.T. -0.00 min

Lab File: VL035230.D

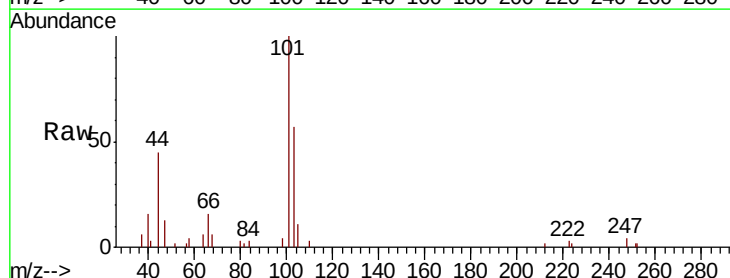
Acq: 23 Jul 2020 15:48

Tgt Ion: 101 Resp: 7302

Ion Ratio Lower Upper

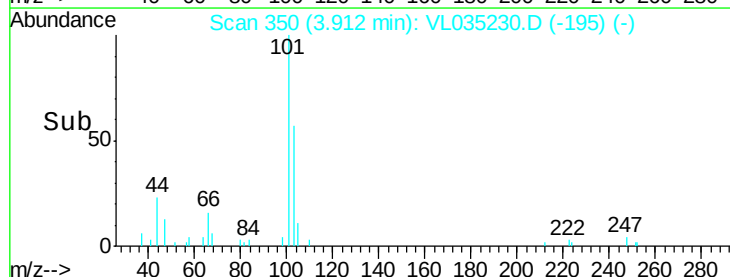
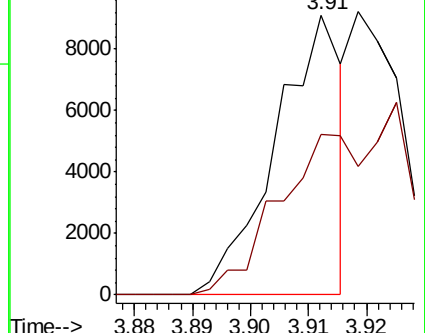
101 100

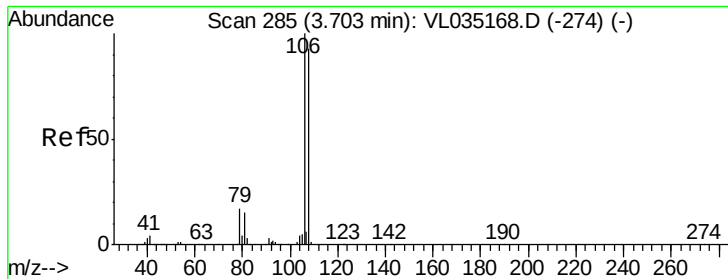
103 57.5 53.1 79.7



Abundance Ion 101.00 (100.70 to 101.70): VL035168.D (-337) (-)

Ion 103.00 (102.70 to 103.70): VL035168.D (-337) (-)

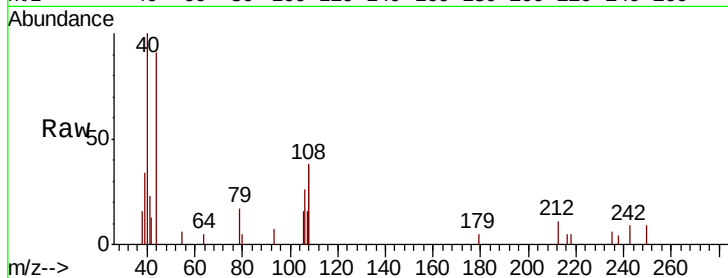




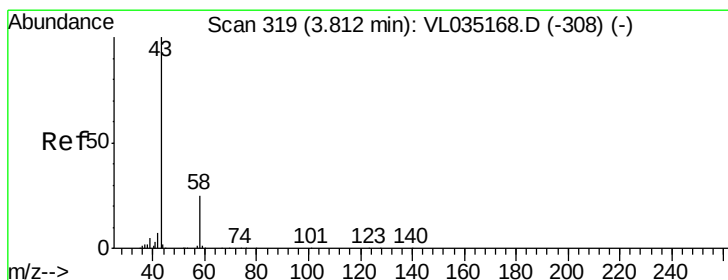
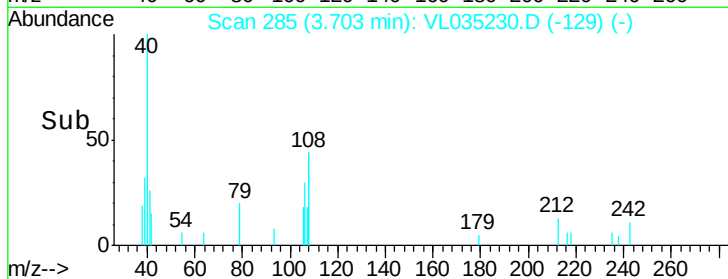
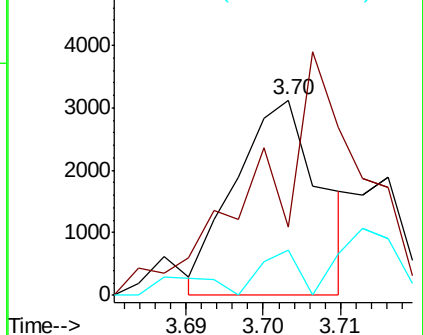
#14
Bromoethene
Concen: 0.047 ppbv
RT: 3.70 min Scan# 285
Delta R.T. 0.00 min
Lab File: VL035230.D
Acq: 23 Jul 2020 15:48

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion:108 Resp: 2410
Ion Ratio Lower Upper
108 100
106 166.3 86.2 129.2#
79 0.0 15.0 22.6#

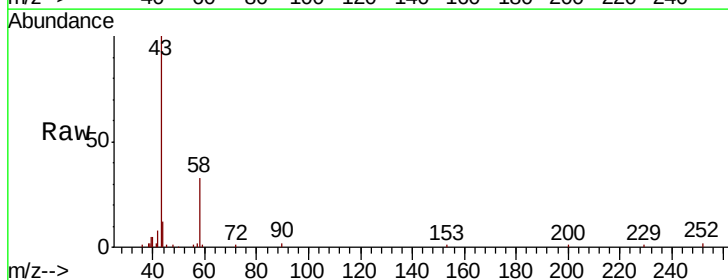


Abundance Ion 108.00 (107.70 to 108.70): V
Ion 106.00 (105.70 to 106.70): V
Ion 79.00 (78.70 to 79.70): VL0

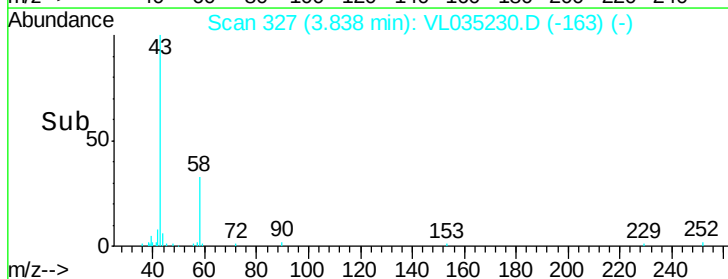
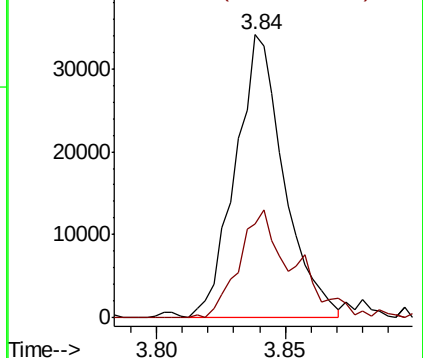


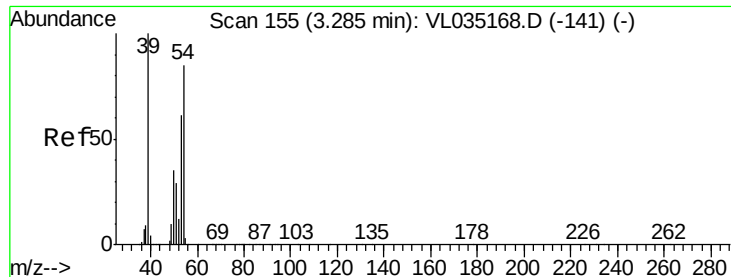
#15
Acetone
Concen: 0.297 ppbv
RT: 3.84 min Scan# 327
Delta R.T. 0.03 min
Lab File: VL035230.D
Acq: 23 Jul 2020 15:48

Tgt Ion: 43 Resp: 44959
Ion Ratio Lower Upper
43 100
58 44.4 21.3 31.9#



Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 58.10 (57.80 to 58.80): VL0

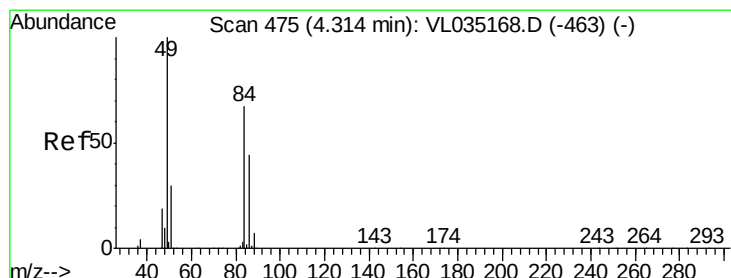
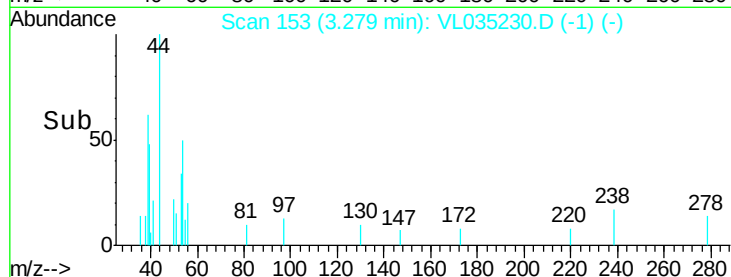
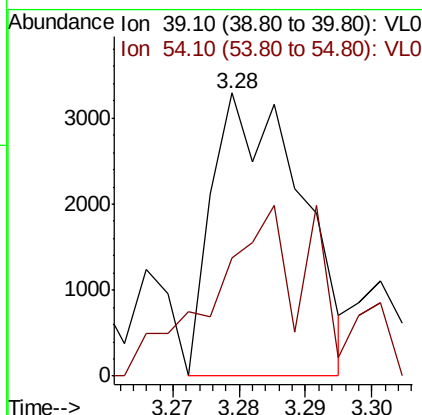
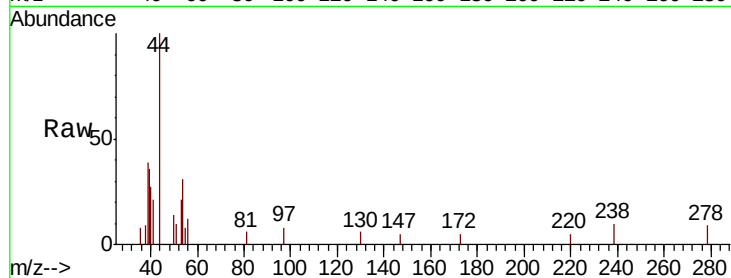




#16
 1,3-Butadiene
 Concen: 0.053 ppbv
 RT: 3.28 min Scan# 153
 Delta R.T. -0.01 min
 Lab File: VL035230.D
 Acq: 23 Jul 2020 15:48

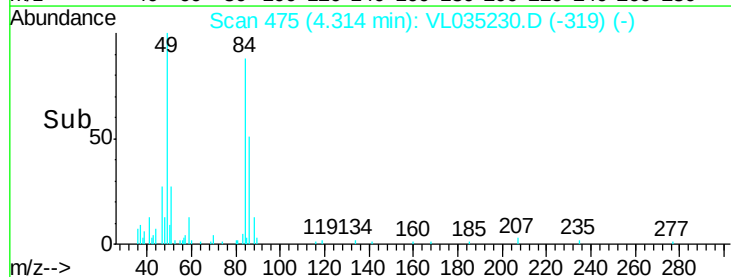
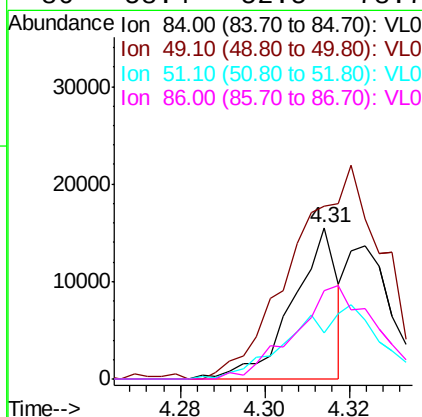
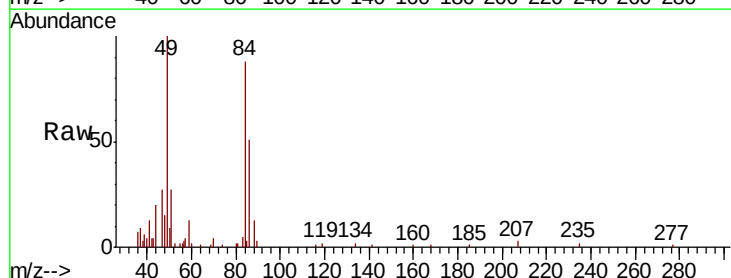
Instrument :
 MSVOA_L
 ClientSampleId :

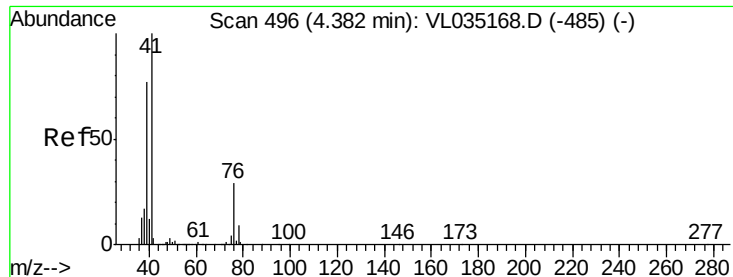
Tot Ion: 39 Resp: 3056
 Ion Ratio Lower Upper
 39 100
 54 0.0 67.2 100.8#



#20
 Methylene Chloride
 Concen: 0.172 ppbv
 RT: 4.31 min Scan# 475
 Delta R.T. 0.00 min
 Lab File: VL035230.D
 Acq: 23 Jul 2020 15:48

Tgt Ion: 84 Resp: 11338
 Ion Ratio Lower Upper
 84 100
 49 111.1 119.4 179.0#
 51 30.9 36.6 55.0#
 86 58.4 52.5 78.7





#21

Allvl Chloride

Concen: 0.034 ppbv

RT: 4.38 min Scan# 495

Delta R.T. -0.00 min

Lab File: VL035230.D

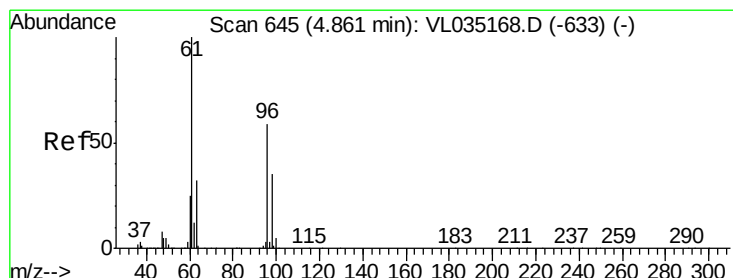
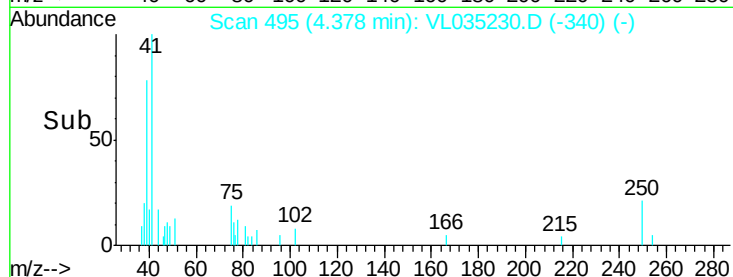
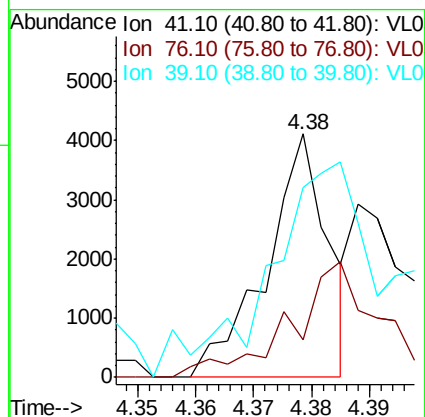
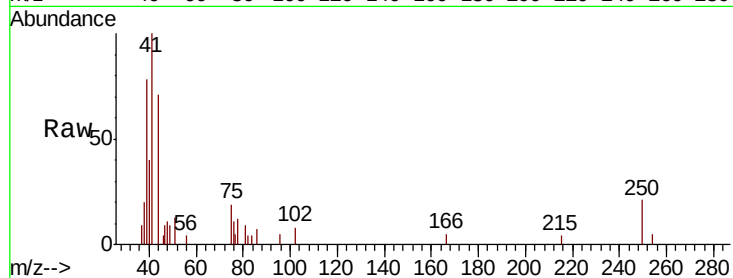
Acq: 23 Jul 2020 15:48

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion:	41	Resp:	3028
Ion	Ratio	Lower	Upper
41	100		
76	0.0	23.5	35.3#
39	0.0	63.4	95.0#



#22

trans-1,2-Dichloroethene

Concen: 0.059 ppbv

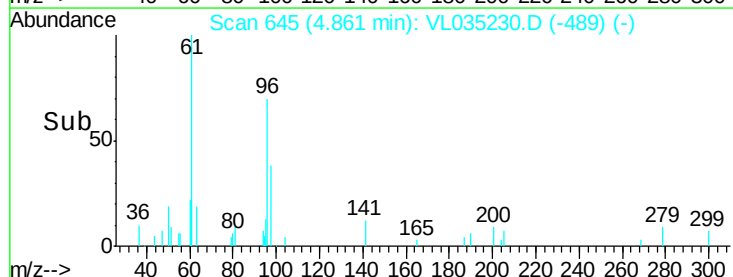
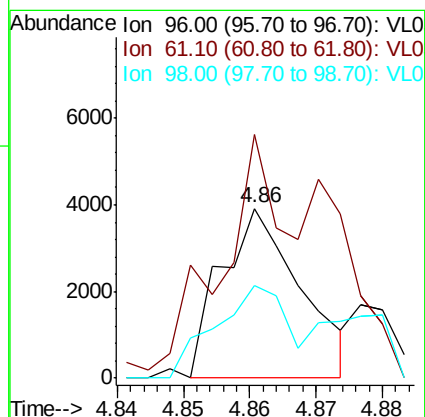
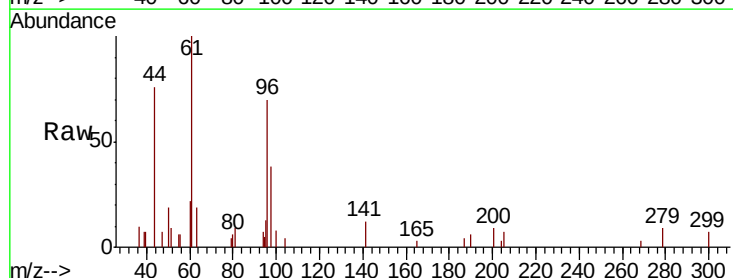
RT: 4.86 min Scan# 645

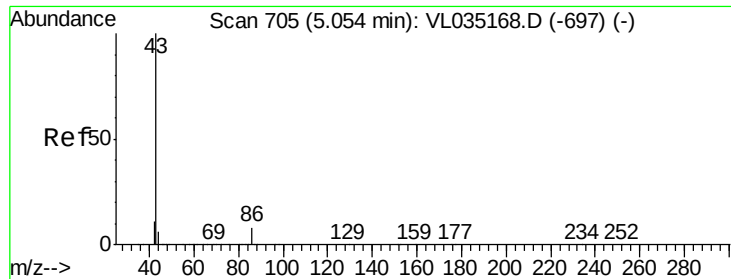
Delta R.T. 0.00 min

Lab File: VL035230.D

Acq: 23 Jul 2020 15:48

Tgt Ion:	96	Resp:	3261
Ion	Ratio	Lower	Upper
96	100		
61	76.8	136.5	204.7#
98	30.3	47.5	71.3#





#23

Vinyl Acetate

Concen: 0.038 ppbv

RT: 5.06 min Scan# 707

Delta R.T. 0.01 min

Lab File: VL035230.D

Acq: 23 Jul 2020 15:48

Instrument :

MSVOA_L

ClientSampled :

Tot Ion: 43 Resp: 6207

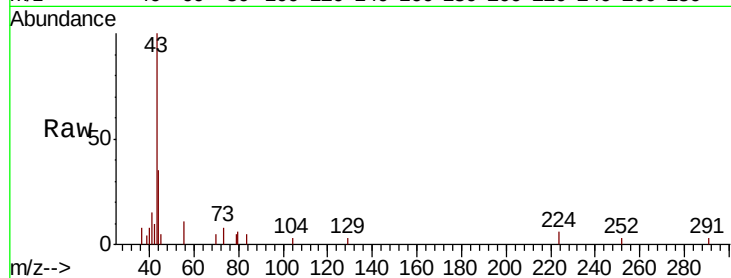
Ion Ratio Lower Upper

43 100

86 0.0 6.2 9.2#

42 11.9 9.1 13.7

44 46.8 4.6 6.8#

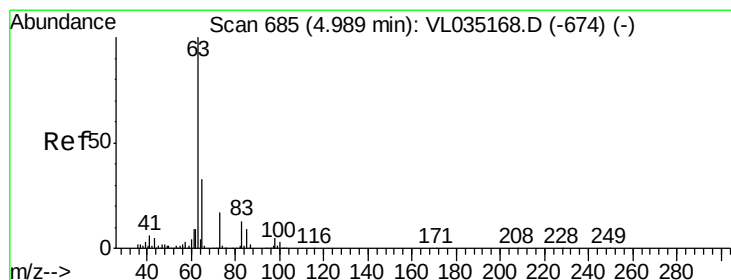
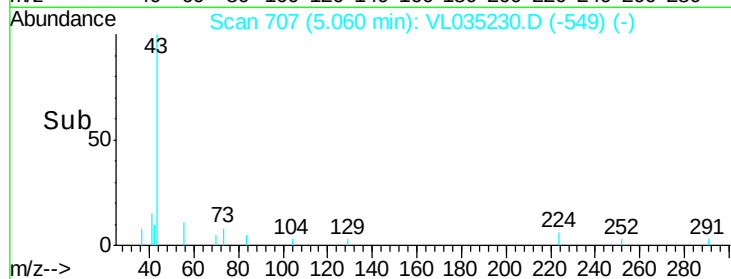
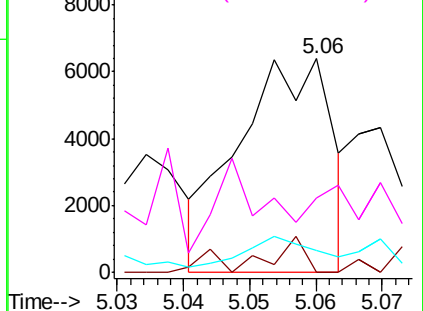


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

Ion 44.10 (43.80 to 44.80): VL0



#24

1,1-Dichloroethane

Concen: 0.052 ppbv

RT: 4.99 min Scan# 686

Delta R.T. 0.00 min

Lab File: VL035230.D

Acq: 23 Jul 2020 15:48

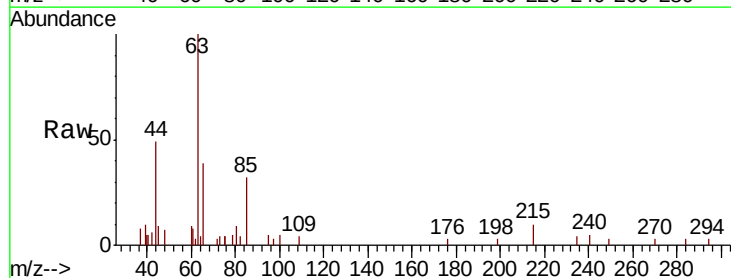
Tgt Ion: 63 Resp: 7295

Ion Ratio Lower Upper

63 100

98 0.0 2.4 7.1#

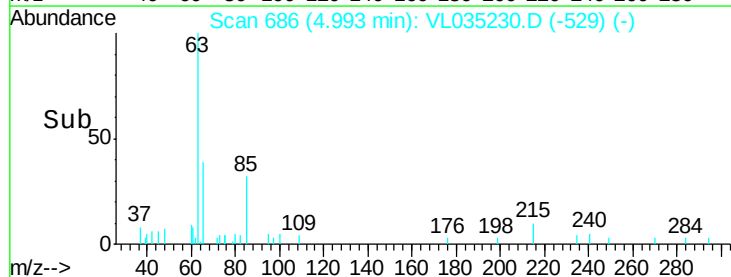
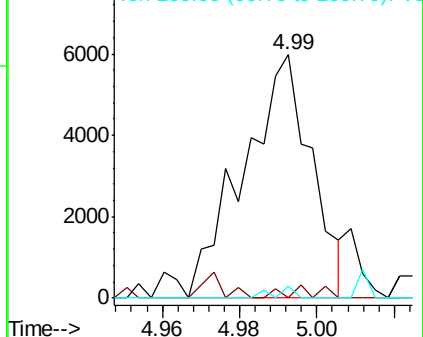
100 4.8 1.4 4.0#

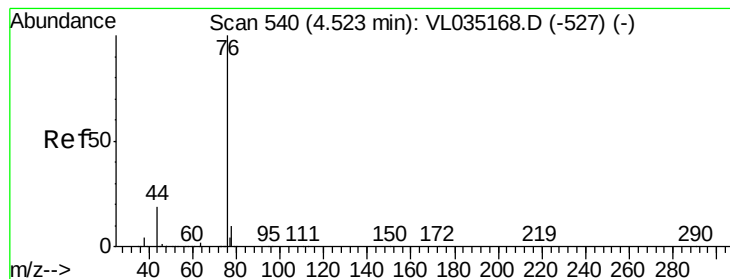


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0





#27

Carbon Disulfide

Concen: 0.034 ppbv

RT: 4.53 min Scan# 542

Delta R.T. 0.01 min

Lab File: VL035230.D

Acq: 23 Jul 2020 15:48

Instrument :

MSVOA_L

ClientSampleId :

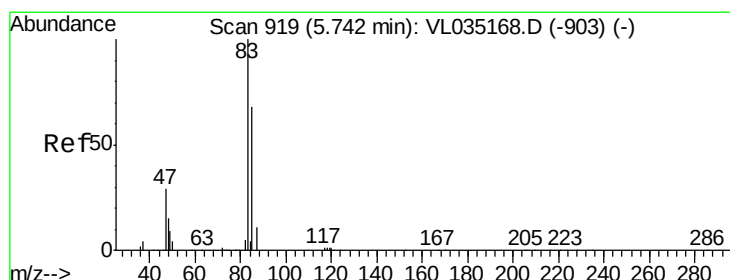
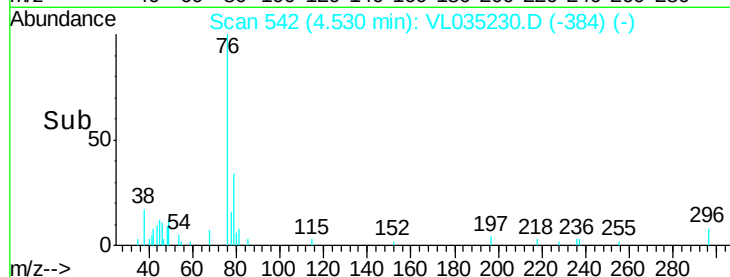
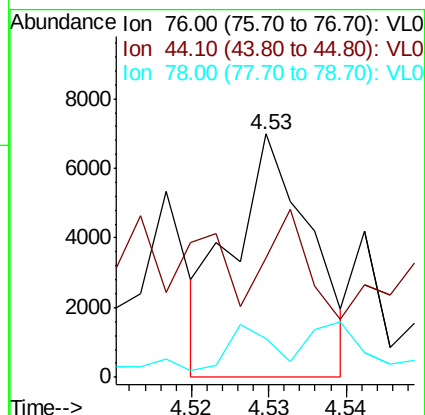
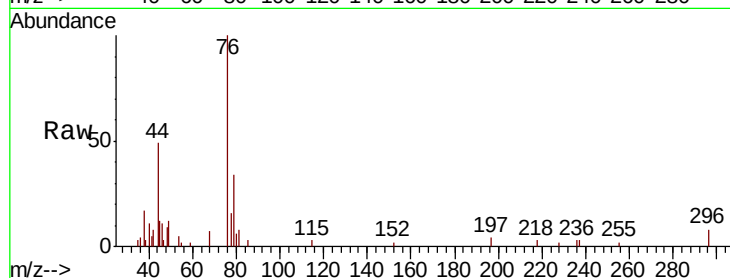
Tot Ion: 76 Resp: 4905

Ion Ratio Lower Upper

76 100

44 0.0 14.9 22.3#

78 0.0 7.5 11.3#



#29

Chloroform

Concen: 0.036 ppbv

RT: 5.74 min Scan# 918

Delta R.T. -0.00 min

Lab File: VL035230.D

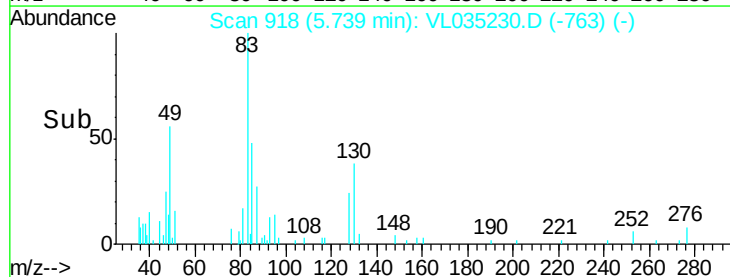
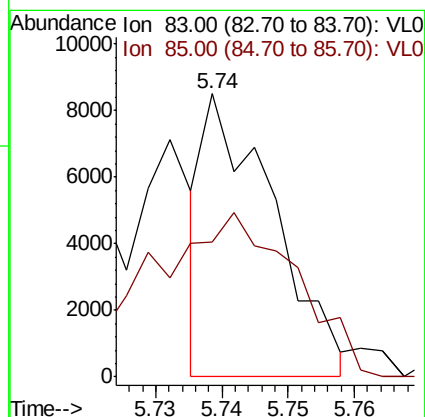
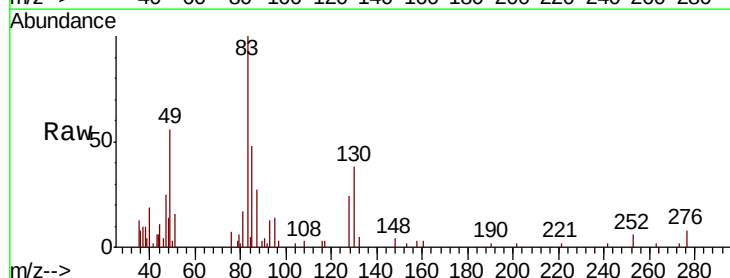
Acq: 23 Jul 2020 15:48

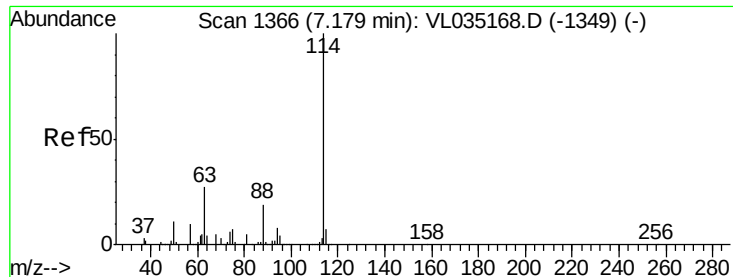
Tgt Ion: 83 Resp: 6217

Ion Ratio Lower Upper

83 100

85 29.1 54.3 81.5#

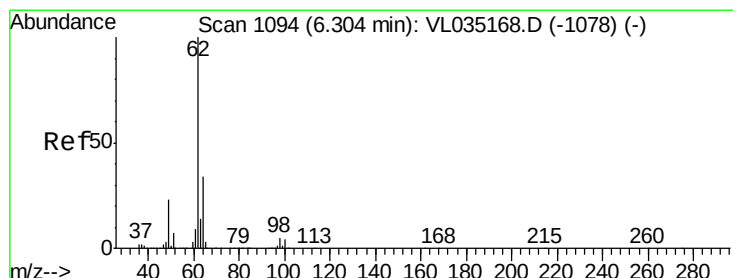
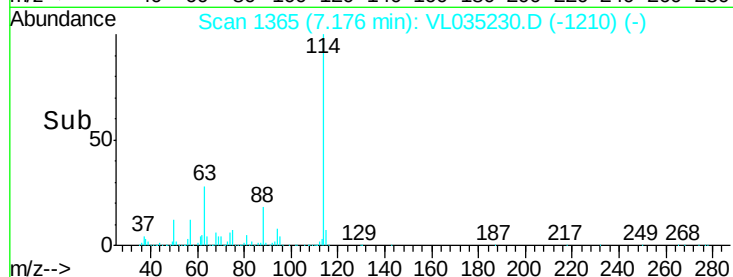
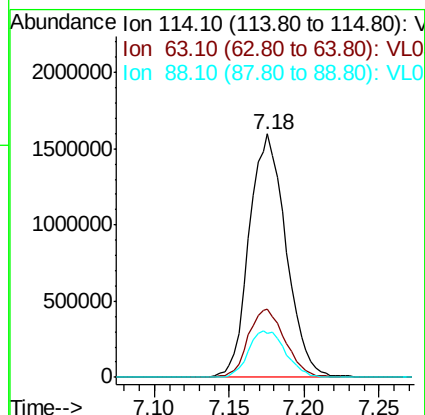
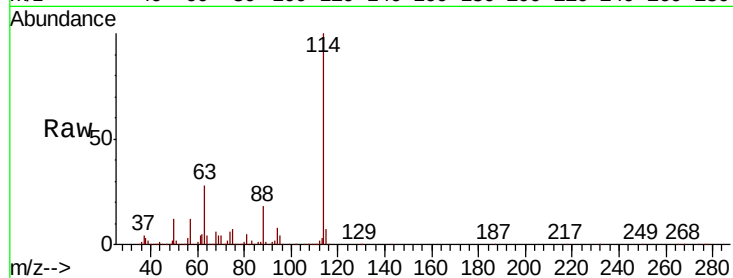




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.18 min Scan# 1365
 Delta R.T. -0.00 min
 Lab File: VL035230.D
 Acq: 23 Jul 2020 15:48

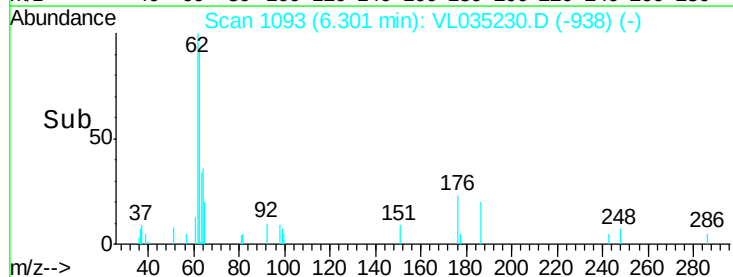
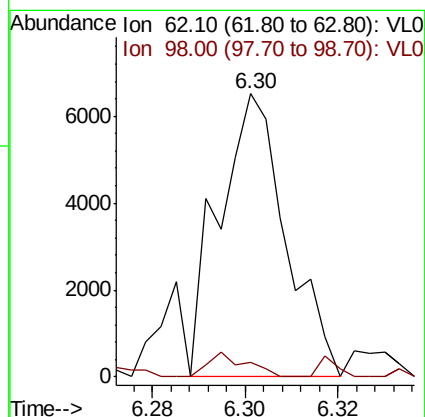
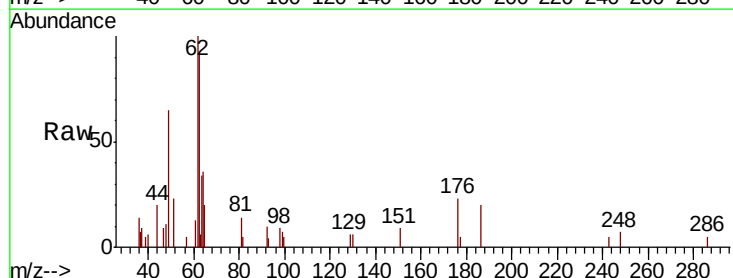
Instrument :
 MSVOA_L
 ClientSampleId :

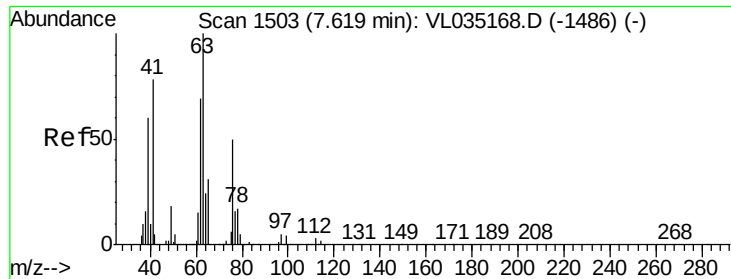
Tot Ion:114 Resp: 2736260
 Ion Ratio Lower Upper
 114 100
 63 28.1 22.0 33.0
 88 19.4 15.4 23.0



#37
 1,2-Dichloroethane
 Concen: 0.049 ppbv
 RT: 6.30 min Scan# 1093
 Delta R.T. -0.00 min
 Lab File: VL035230.D
 Acq: 23 Jul 2020 15:48

Tgt Ion: 62 Resp: 6524
 Ion Ratio Lower Upper
 62 100
 98 8.4 4.6 6.8#





#39

1,2-Dichloropropane

Concen: 9.661 ppbv

RT: 7.18 min Scan# 1365

Delta R.T. -0.44 min

Lab File: VL035230.D

Acq: 23 Jul 2020 15:48

Instrument :

MSVOA_L

ClientSampleId :

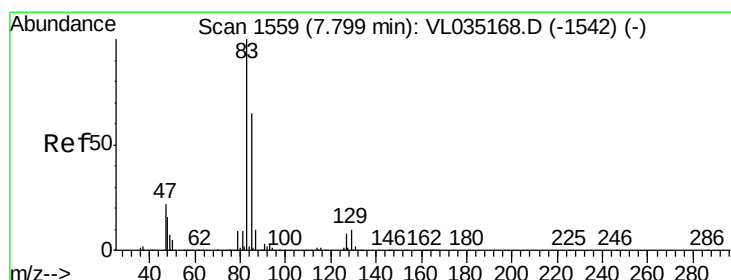
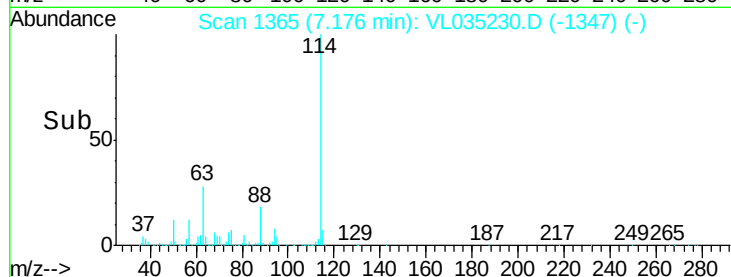
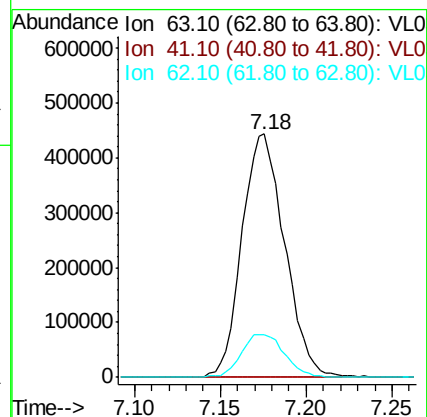
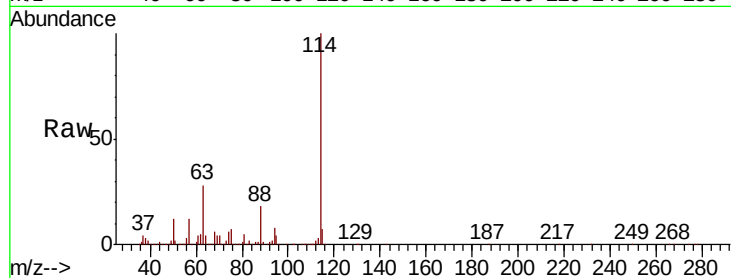
Tot Ion: 63 Resp: 760857

Ion Ratio Lower Upper

63 100

41 0.1 62.6 94.0#

62 17.4 55.0 82.6#



#42

Bromodichloromethane

Concen: 0.035 ppbv

RT: 7.79 min Scan# 1556

Delta R.T. -0.01 min

Lab File: VL035230.D

Acq: 23 Jul 2020 15:48

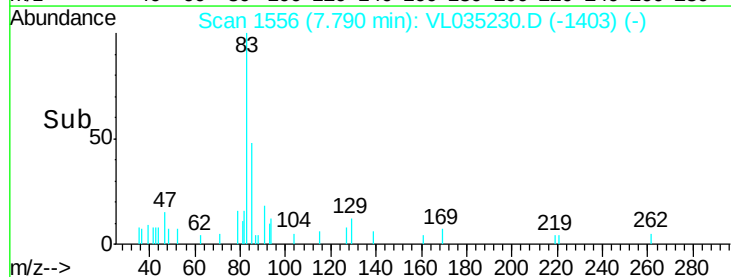
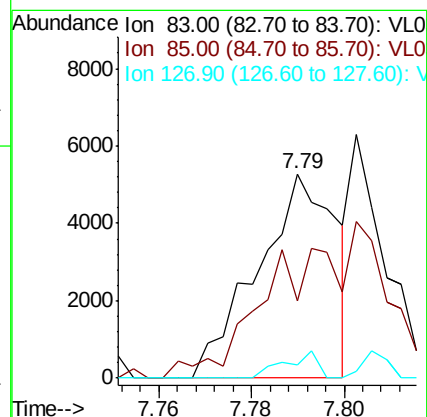
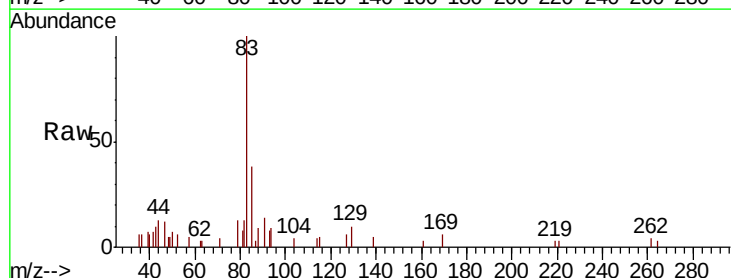
Tgt Ion: 83 Resp: 6181

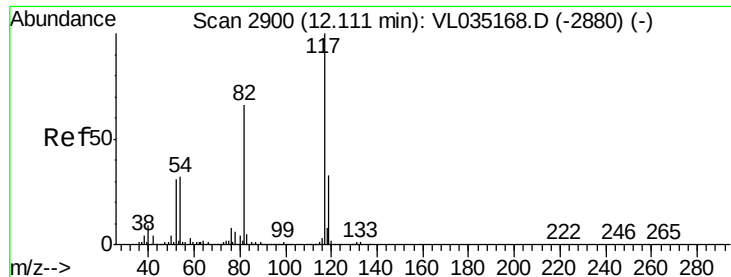
Ion Ratio Lower Upper

83 100

85 31.9 52.2 78.4#

127 6.2 6.3 9.5#

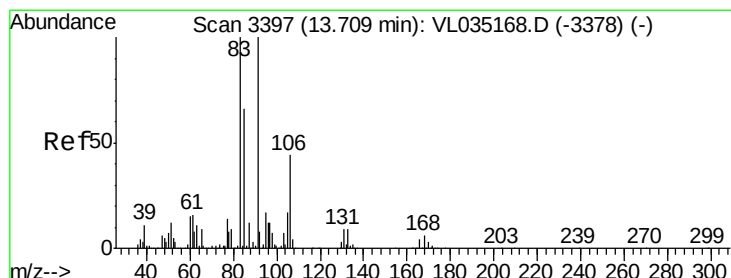
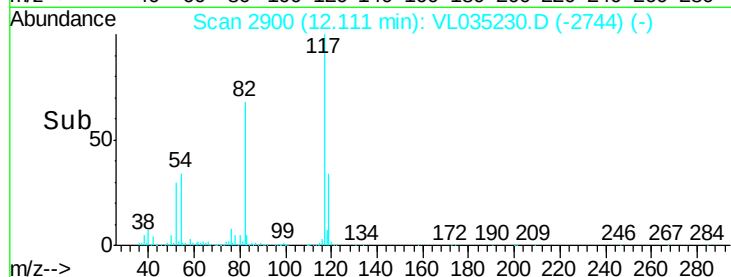
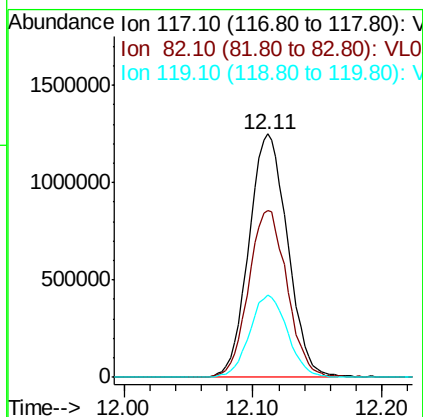
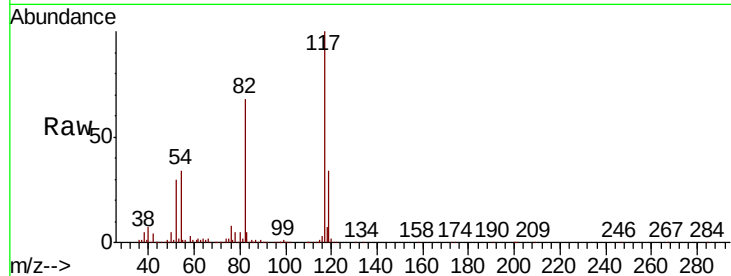




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.11 min Scan# 2900
Delta R.T. 0.00 min
Lab File: VL035230.D
Acq: 23 Jul 2020 15:48

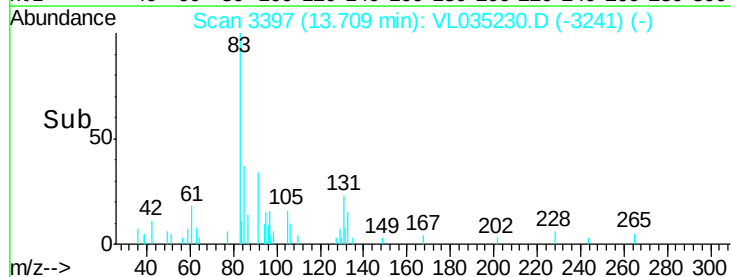
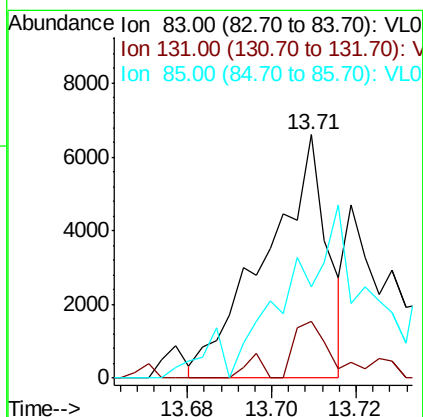
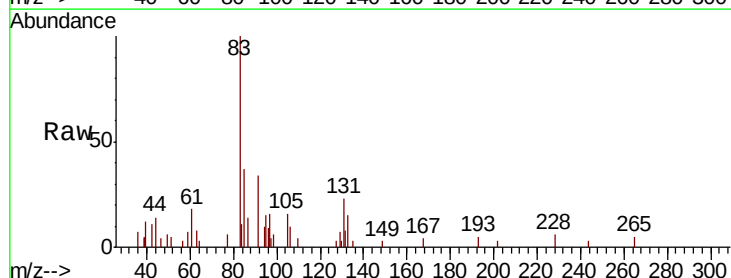
Instrument :
MSVOA_L
ClientSampleId :

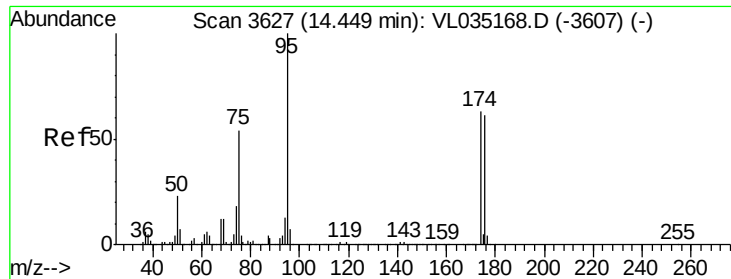
Tot Ion:117 Resp: 2613252
Ion Ratio Lower Upper
117 100
82 68.3 52.3 78.5
119 33.2 24.9 37.3



#63
1,1,2,2-Tetrachloroethane
Concen: 0.031 ppbv
RT: 13.71 min Scan# 3397
Delta R.T. 0.00 min
Lab File: VL035230.D
Acq: 23 Jul 2020 15:48

Tgt Ion: 83 Resp: 6689
Ion Ratio Lower Upper
83 100
131 19.6 4.7 14.0#
85 0.0 33.0 99.0#





#68

1-Bromo-4-Fluorobenzene

Concen: 10.030 ppbv

RT: 14.45 min Scan# 3627

Delta R.T. 0.00 min

Lab File: VL035230.D

Acq: 23 Jul 2020 15:48

Instrument :

MSVOA_L

ClientSampleId :

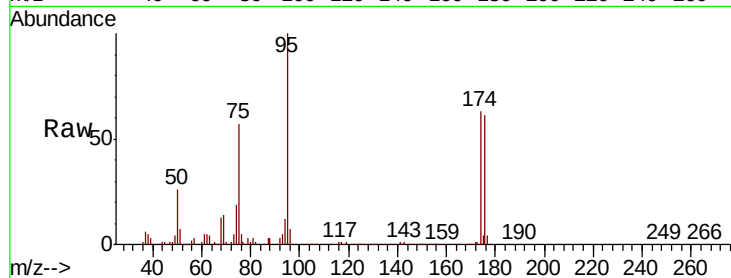
Tot Ion: 95 Resp: 2129198

Ion Ratio Lower Upper

95 100

174 64.2 52.2 78.2

175 4.6 4.0 6.0



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

