

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL110121\
 Data File : VL037953.D
 Acq On : 2 Nov 2021 00:51
 Operator : SY/AP
 Sample : M4425-01DL 10X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1DL

Quant Time: Nov 02 06:08:16 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL110121AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue Nov 02 05:54:07 2021
 QLast Update : Tue Nov 02 05:54:07 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1467778	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.16	114	4347424	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.07	117	3855369	10.00	ppbv	-0.01

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.39	95	2710993	9.67	ppbv	-0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	96.70%

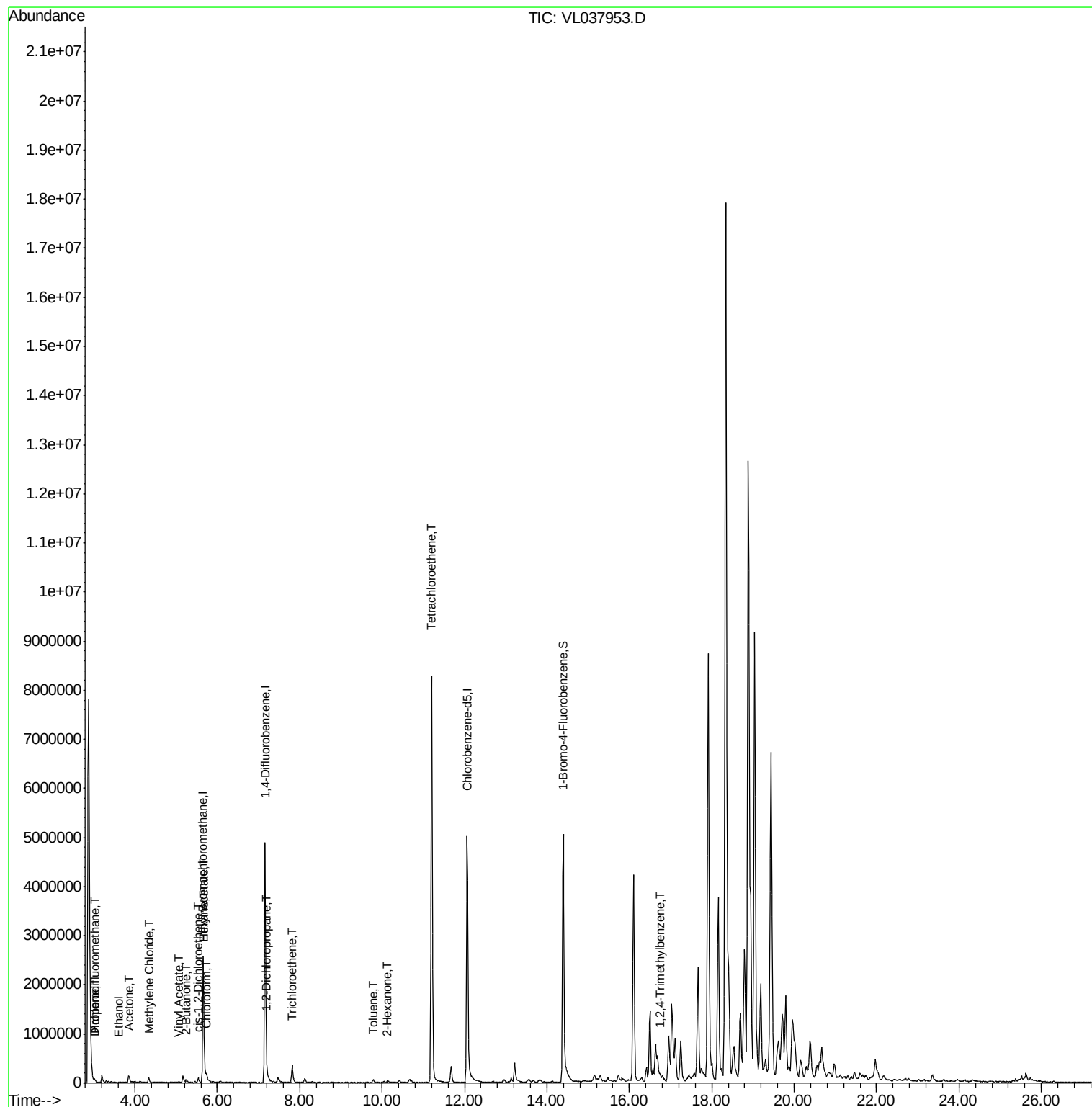
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	6533	0.032	ppbv #	74
9) Propene	3.01	41	8631	0.088	ppbv #	1
13) Ethanol	3.61	45	3870	0.392	ppbv #	32
15) Acetone	3.85	43	180311	1.487	ppbv #	69
20) Methylene Chloride	4.33	84	33888	0.509	ppbv	86
23) Vinyl Acetate	5.06	43	10739	0.059	ppbv #	85
25) Ethyl Acetate	5.67	43	20001	0.056	ppbv #	74
26) Hexane	5.67	57	24031	0.141	ppbv #	41
29) Chloroform	5.73	83	25032	0.098	ppbv	95
31) cis-1,2-Dichloroethene	5.54	61	20372	0.131	ppbv	95
34) 2-Butanone	5.25	43	88287	0.548	ppbv	97
38) Trichloroethene	7.82	130	116340	0.792	ppbv	95
39) 1,2-Dichloropropane	7.20	63	19064	0.143	ppbv #	30
51) 2-Hexanone	10.12	43	6034	0.068	ppbv #	30
52) Tetrachloroethene	11.20	164	2401239	17.879	ppbv	96
53) Toluene	9.79	91	46617	0.123	ppbv	90
74) 1,2,4-Trimethylbenzene	16.74	105	90957	0.205	ppbv #	74

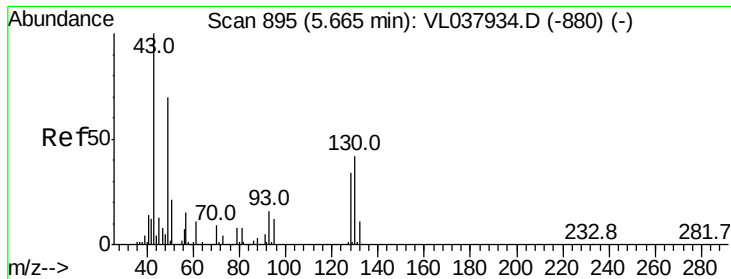
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: SV1DL

Acq: 2 Nov 2021 00:51

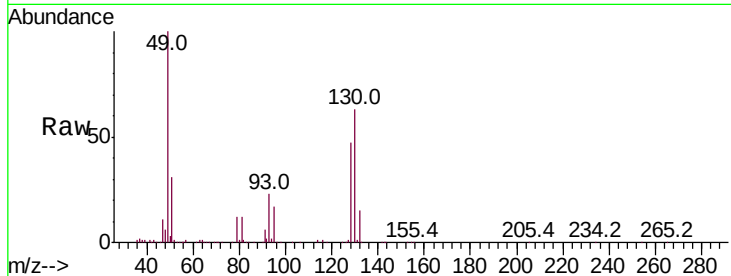
Tot Ion: 49 Resp: 1467778

Ion Ratio Lower Upper

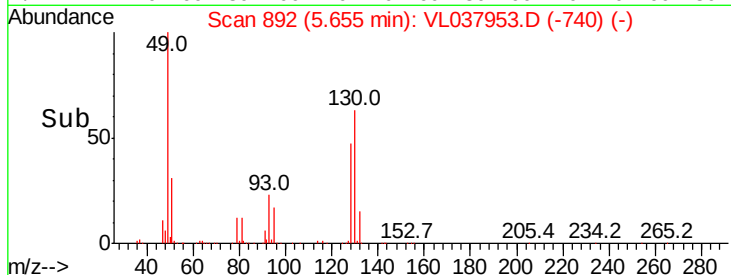
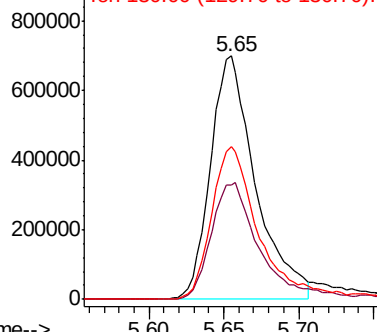
49 100

128 54.3 27.0 81.0

130 67.2 33.4 100.2



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: 0.032 ppbv

RT: 3.04 min Scan# 80

Delta R.T. -0.01 min

Lab File: VL037953.D

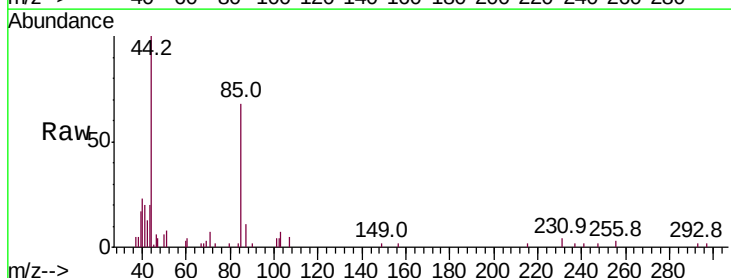
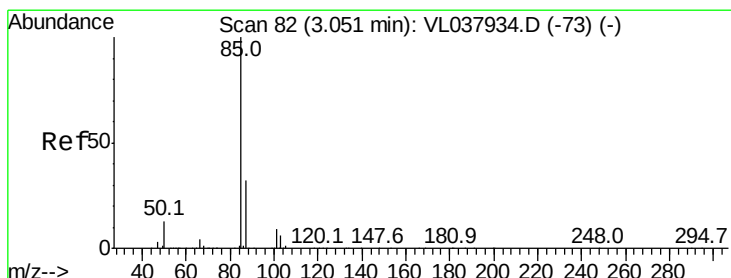
Acq: 2 Nov 2021 00:51

Tgt Ion: 85 Resp: 6533

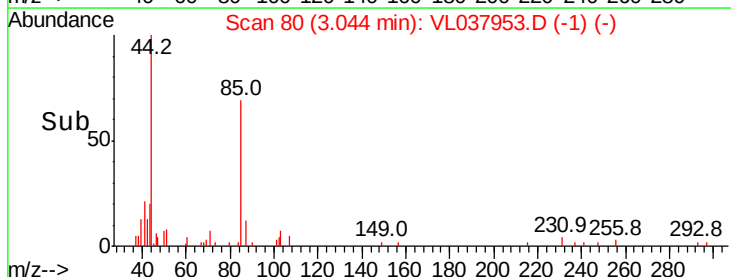
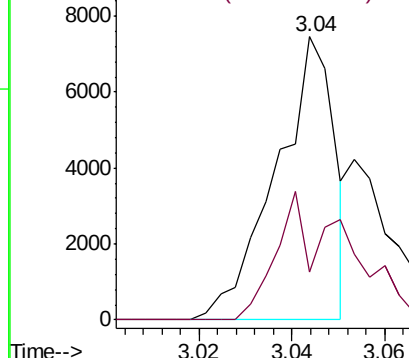
Ion Ratio Lower Upper

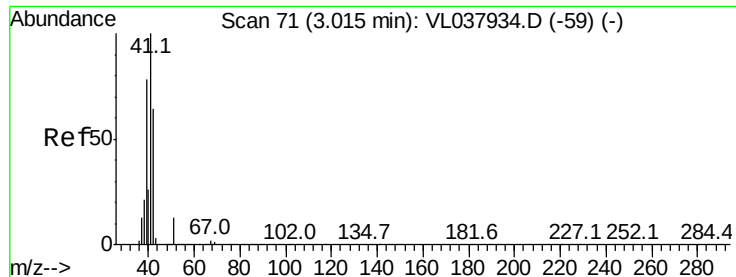
85 100

87 16.9 25.3 37.9#



Abundance Ion 85.00 (84.70 to 85.70): VL0
Ion 87.00 (86.70 to 87.70): VL0





#9

Propene

Concen: 0.088 ppbv

RT: 3.01 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

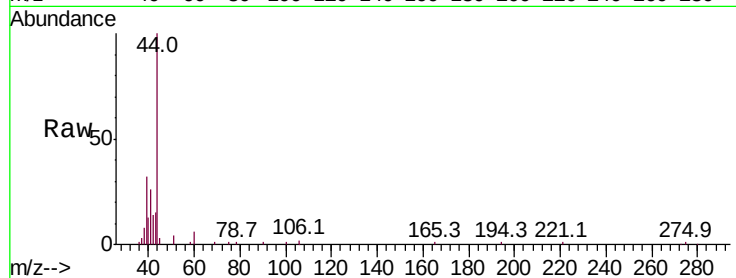
Acq: 2 Nov 2021 00:51 SV1DL

Tot Ion: 41 Resp: 8631

Ion Ratio Lower Upper

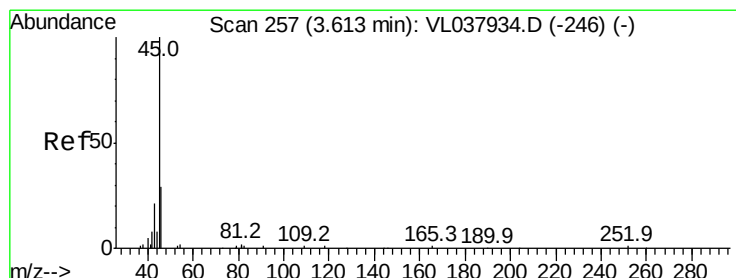
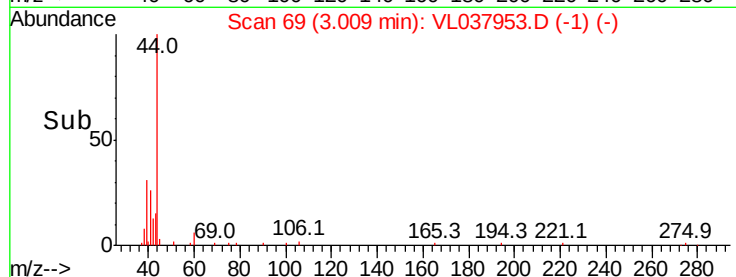
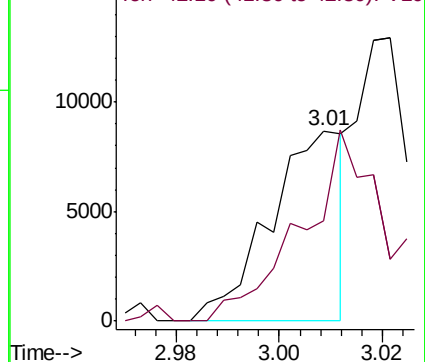
41 100

42 165.8 57.6 86.4#



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#13

Ethanol

Concen: 0.392 ppbv

RT: 3.61 min Scan# 255

Delta R.T. -0.01 min

Lab File: VL037953.D

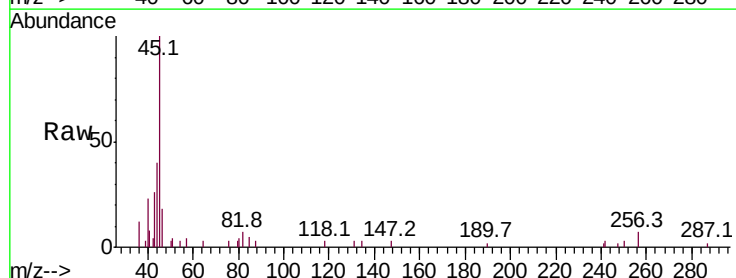
Acq: 2 Nov 2021 00:51

Tgt Ion: 45 Resp: 3870

Ion Ratio Lower Upper

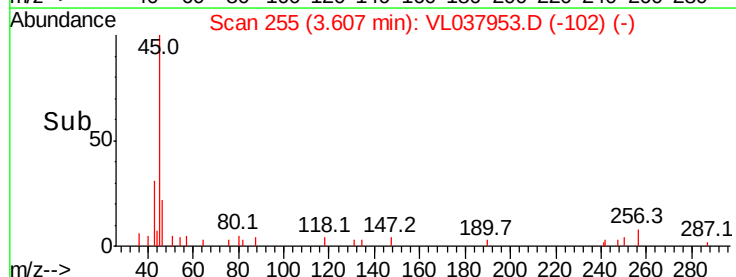
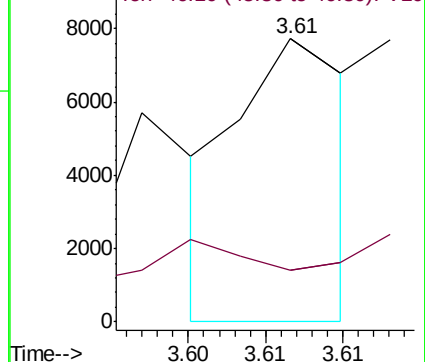
45 100

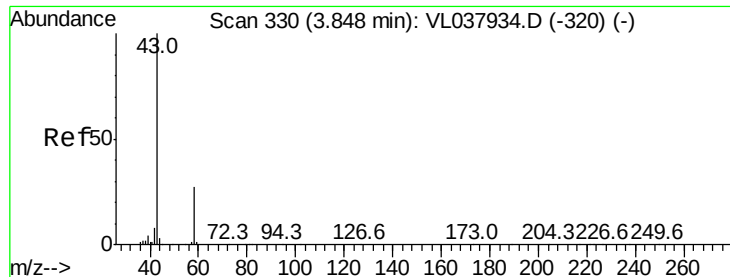
46 0.0 17.4 69.8#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 1.487 ppbv

RT: 3.85 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

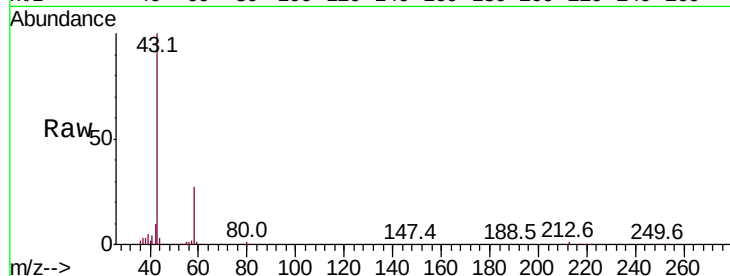
Acq: 2 Nov 2021 00:51 SV1DL

Tot Ion: 43 Resp: 180311

Ion Ratio Lower Upper

43 100

58 45.6 23.3 34.9#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

3.85

100000

80000

60000

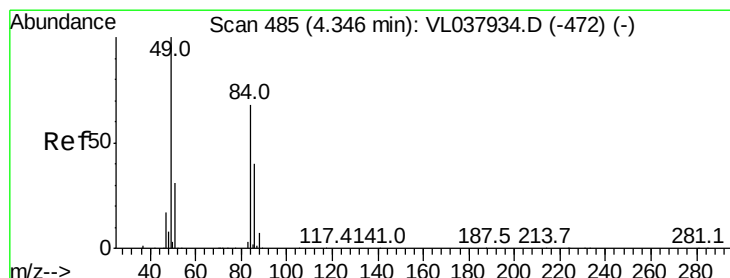
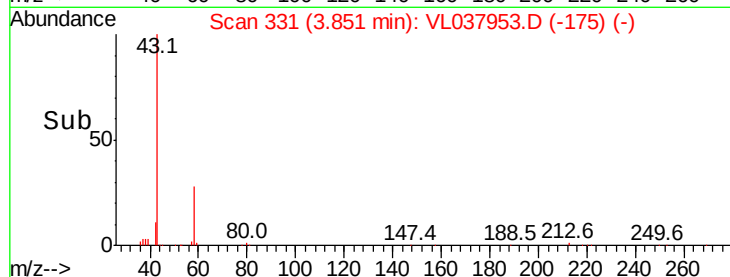
40000

20000

0

Time-->

3.80 3.85 3.90



#20

Methylene Chloride

Concen: 0.509 ppbv

RT: 4.33 min Scan# 481

Delta R.T. -0.01 min

Lab File: VL037953.D

Acq: 2 Nov 2021 00:51

Tgt Ion: 84 Resp: 33888

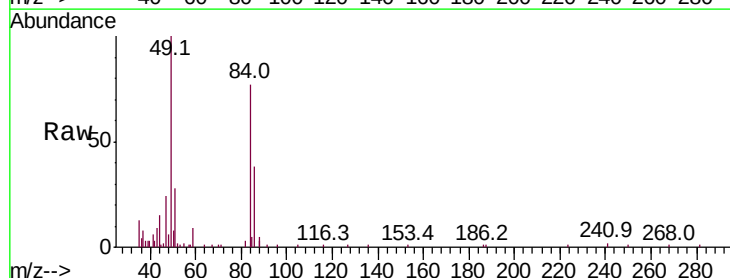
Ion Ratio Lower Upper

84 100

49 127.4 117.5 176.3

51 36.9 35.9 53.9

86 49.0 47.3 70.9



Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0

40000

30000

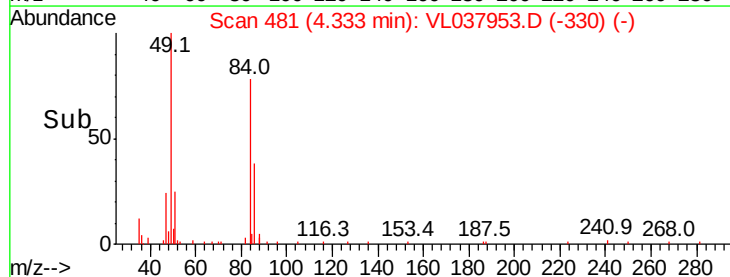
20000

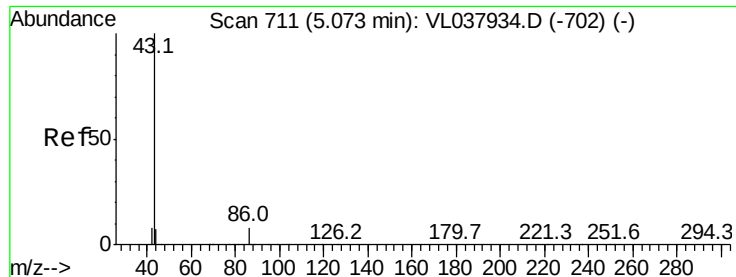
10000

0

Time-->

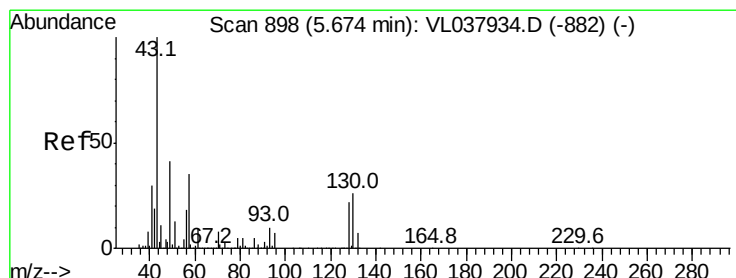
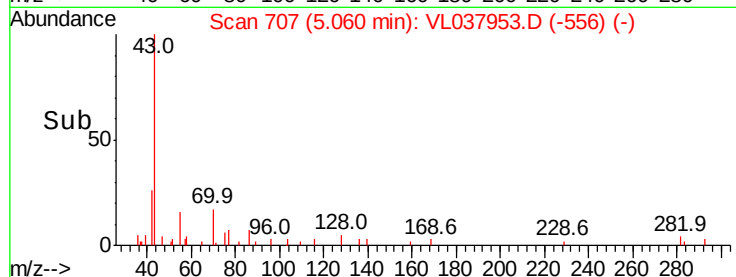
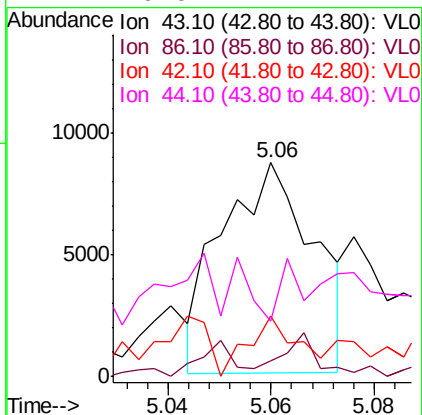
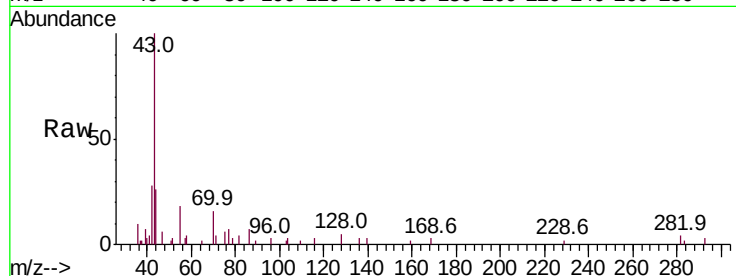
4.30 4.35





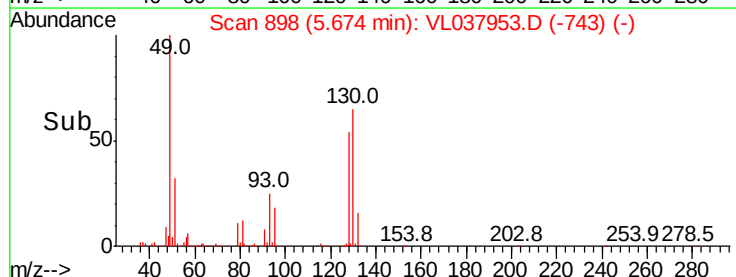
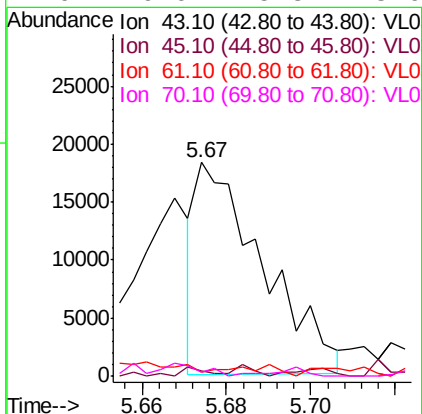
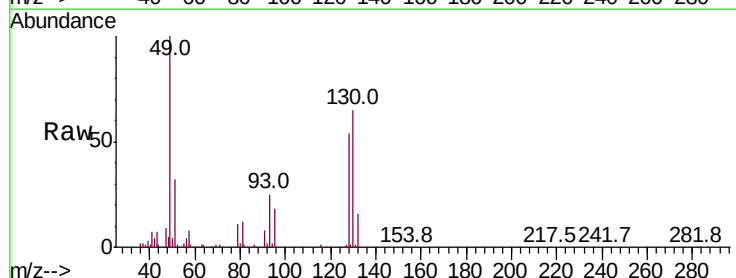
#23
 Vinyl Acetate
 Concen: 0.059 ppbv
 RT: 5.06
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 2 Nov 2021 00:51

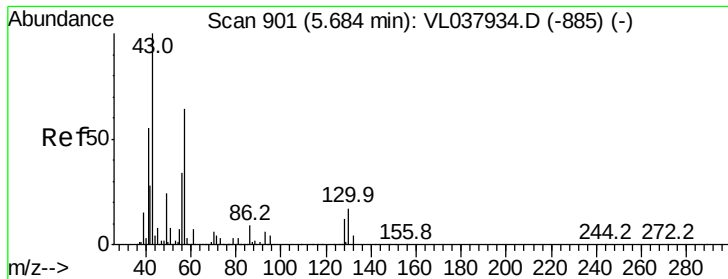
Tot Ion:	43	Resp:	10739
Ion	Ratio	Lower	Upper
43	100		
86	3.6	5.5	8.3#
42	15.2	7.4	11.2#
44	0.0	4.7	7.1#



#25
 Ethyl Acetate
 Concen: 0.056 ppbv
 RT: 5.67 min Scan# 898
 Delta R.T. -0.00 min
 Lab File: VL037953.D
 Acq: 2 Nov 2021 00:51

Tgt Ion:	43	Resp:	20001
Ion	Ratio	Lower	Upper
43	100		
45	0.0	8.1	12.1#
61	0.0	8.1	12.1#
70	0.0	5.8	8.6#





#26

Hexane

Concen: 0.141 ppbv

RT: 5.67 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 2 Nov 2021 00:51 SV1DL

Tot Ion: 57 Resp: 24031

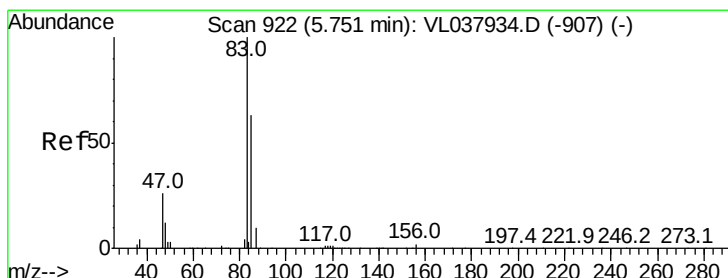
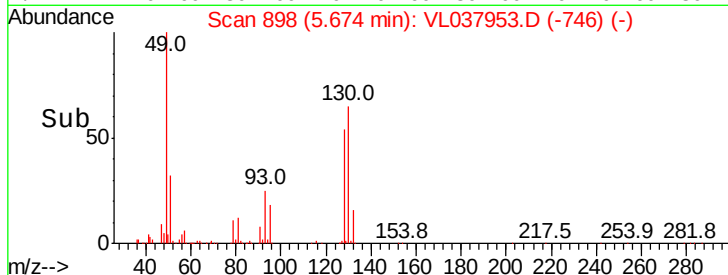
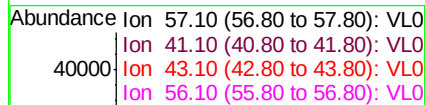
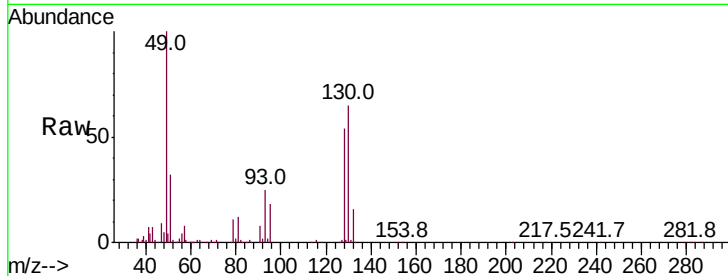
Ion Ratio Lower Upper

57 100

41 0.0 71.0 106.6#

43 156.2 173.0 259.6#

56 117.4 43.6 65.4#



#29

Chloroform

Concen: 0.098 ppbv

RT: 5.73 min Scan# 916

Delta R.T. -0.02 min

Lab File: VL037953.D

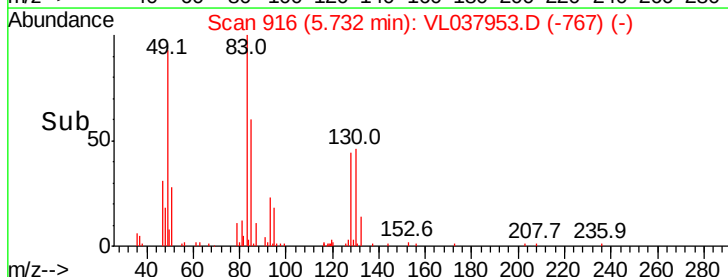
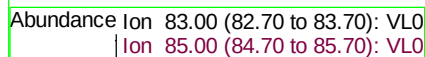
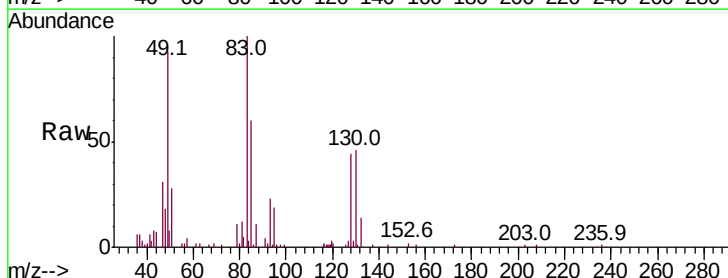
Acq: 2 Nov 2021 00:51

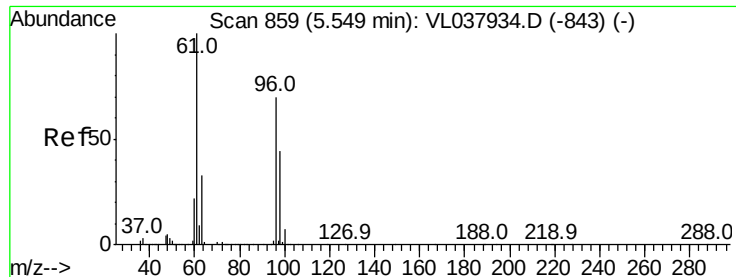
Tgt Ion: 83 Resp: 25032

Ion Ratio Lower Upper

83 100

85 59.7 50.6 76.0





#31

cis-1,2-Dichloroethene

Concen: 0.131 ppbv

RT: 5.54 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 2 Nov 2021 00:51 SV1DL

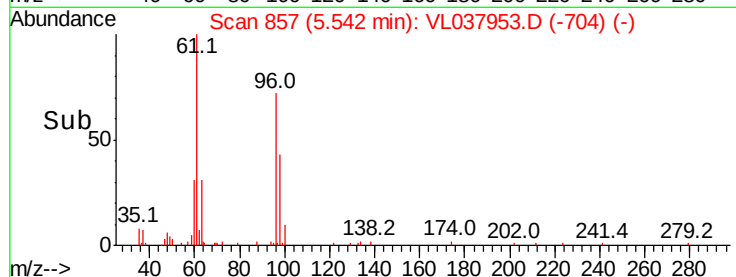
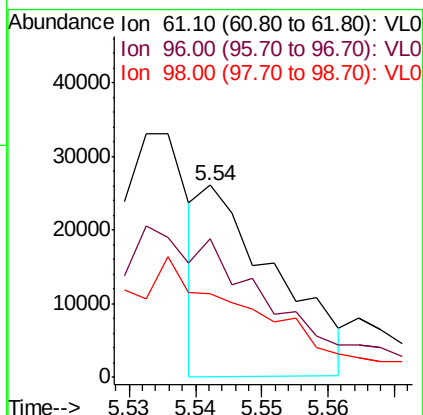
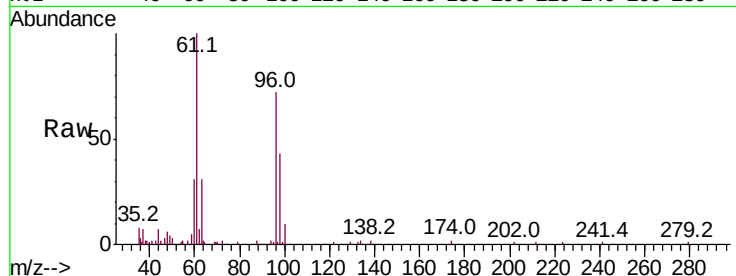
Tot Ion: 61 Resp: 20372

Ion Ratio Lower Upper

61 100

96 74.5 55.6 83.4

98 42.0 34.9 52.3



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.16 min Scan# 1360

Delta R.T. -0.01 min

Lab File: VL037953.D

Acq: 2 Nov 2021 00:51

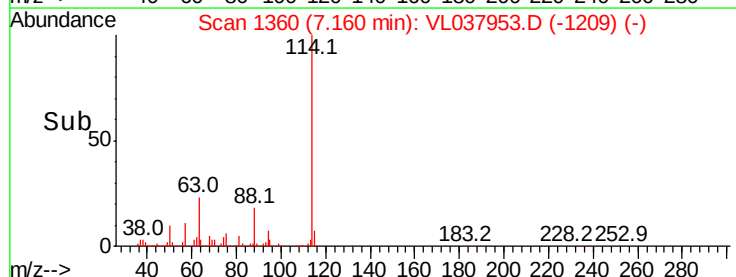
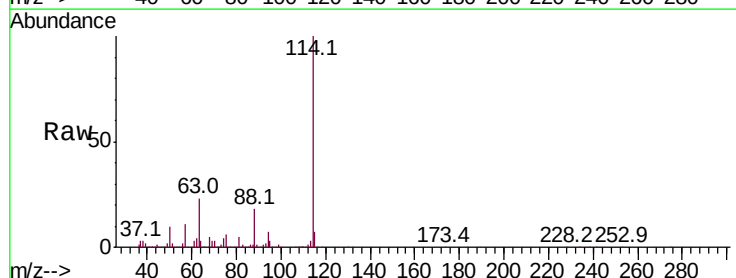
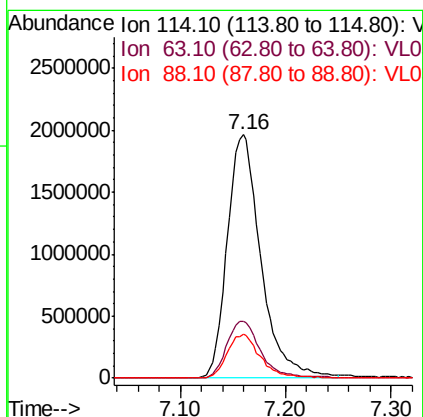
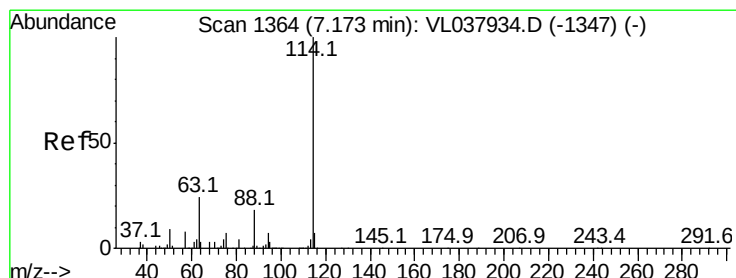
Tgt Ion: 114 Resp: 4347424

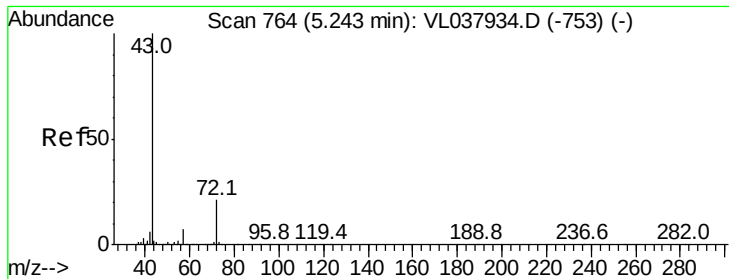
Ion Ratio Lower Upper

114 100

63 23.9 19.4 29.0

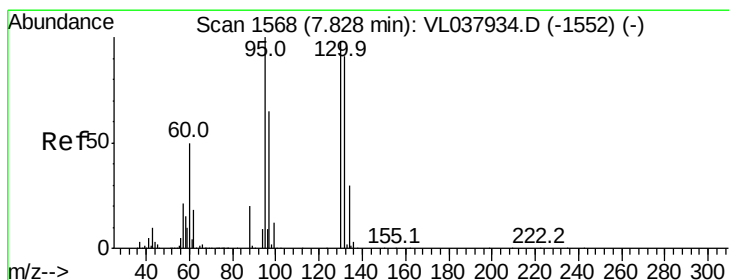
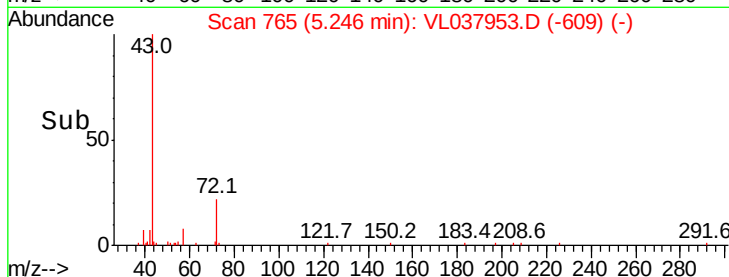
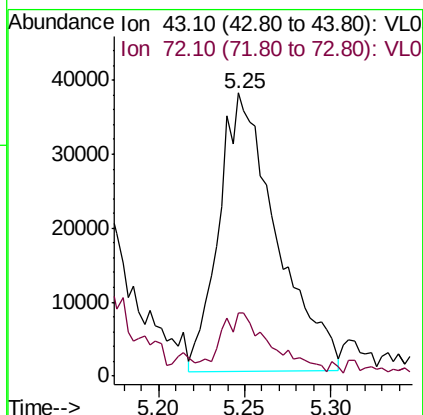
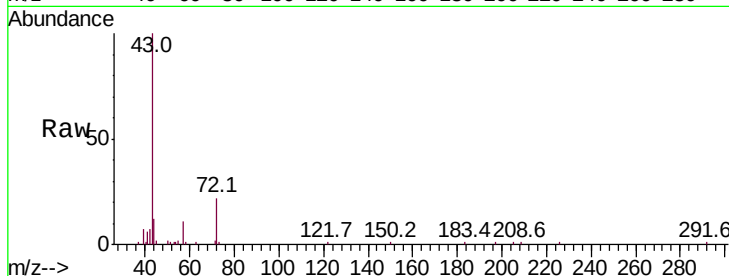
88 18.0 14.2 21.4





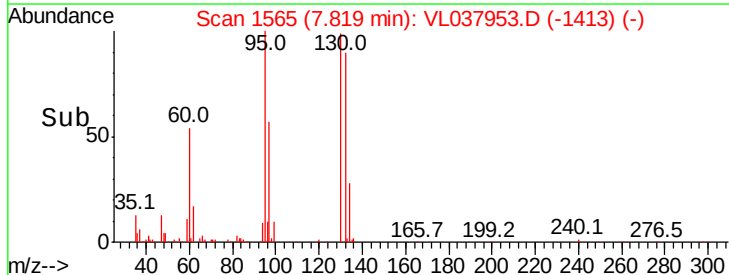
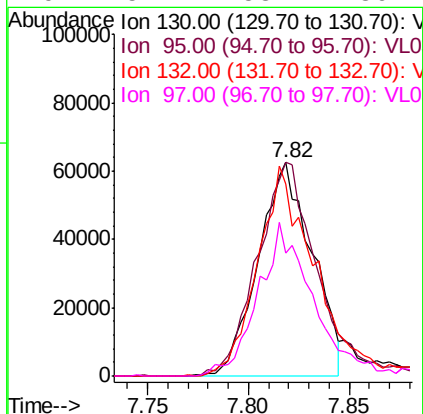
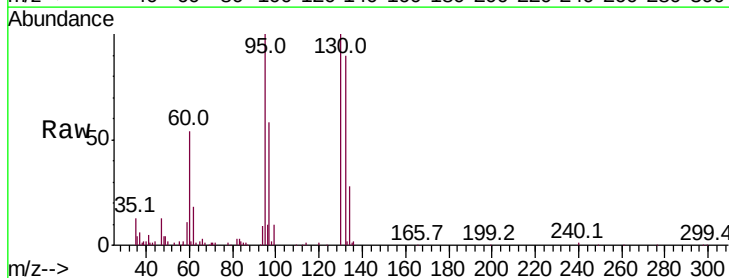
#34
 2-Butanone
 Concen: 0.548 ppbv
 RT: 5.25
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 SV1DL
 Acq: 2 Nov 2021 00:51

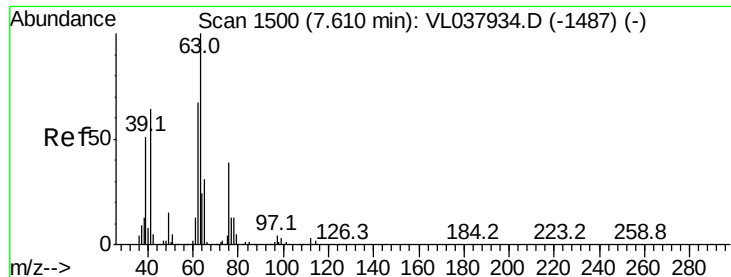
Tot Ion: 43 Resp: 88287
 Ion Ratio Lower Upper
 43 100
 72 24.2 18.3 27.5



#38
 Trichloroethene
 Concen: 0.792 ppbv
 RT: 7.82 min Scan# 1565
 Delta R.T. -0.01 min
 Lab File: VL037953.D
 Acq: 2 Nov 2021 00:51

Tgt Ion:130 Resp: 116340
 Ion Ratio Lower Upper
 130 100
 95 99.8 81.8 122.8
 132 89.5 74.2 111.2
 97 57.7 53.4 80.2





#39

1,2-Dichloropropane

Concen: 0.143 ppbv

RT: 7.20 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 2 Nov 2021 00:51 SV1DL

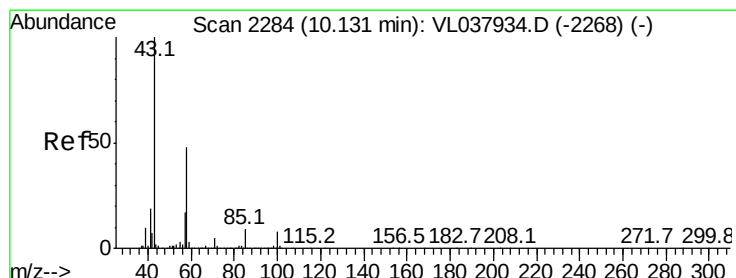
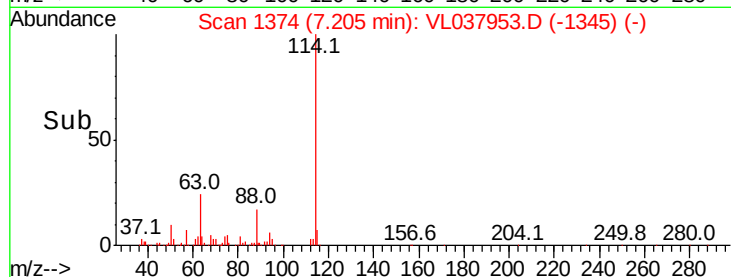
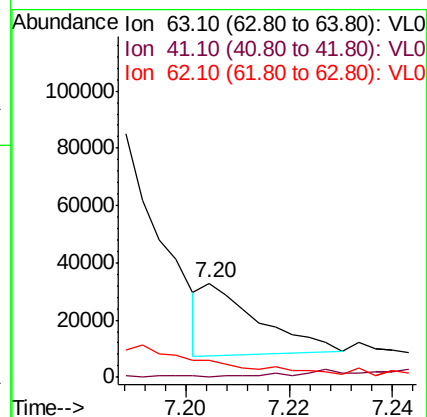
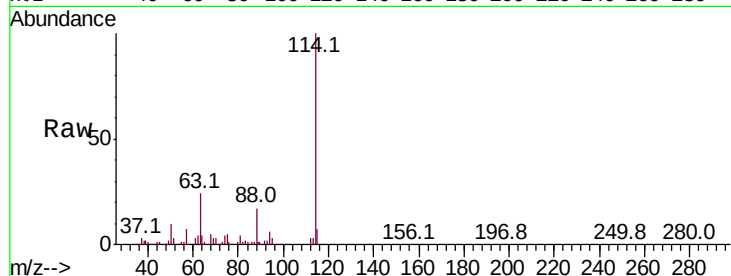
Tot Ion: 63 Resp: 19064

Ion Ratio Lower Upper

63 100

41 0.0 51.6 77.4#

62 20.0 53.5 80.3#



#51

2-Hexanone

Concen: 0.068 ppbv

RT: 10.12 min Scan# 2280

Delta R.T. -0.01 min

Lab File: VL037953.D

Acq: 2 Nov 2021 00:51

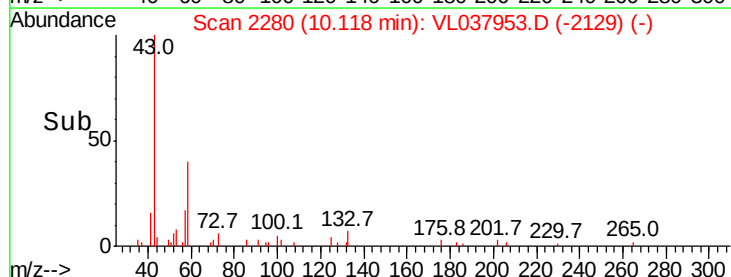
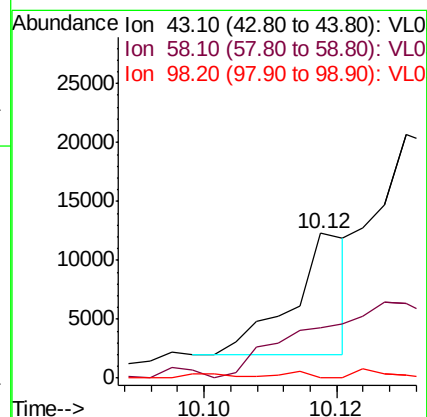
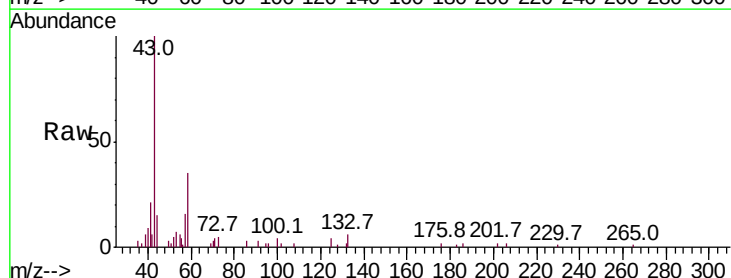
Tgt Ion: 43 Resp: 6034

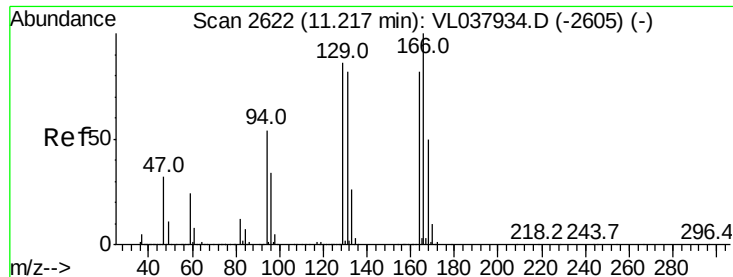
Ion Ratio Lower Upper

43 100

58 0.0 38.6 57.8#

98 10.4 1.0 1.4#





#52

Tetrachloroethene

Concen: 17.879 ppbv

RT: 11.20

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 2 Nov 2021 00:51

Tot Ion:164 Resp: 2401239

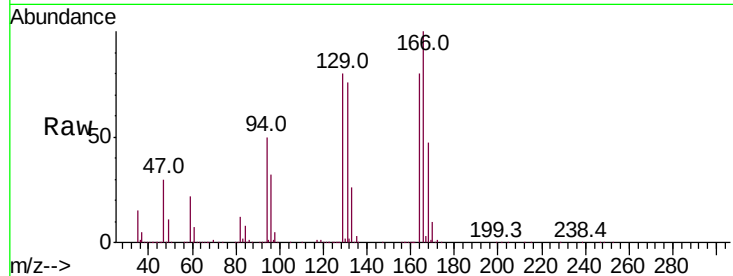
Ion Ratio Lower Upper

164 100

166 125.6 97.6 146.4

129 100.7 84.2 126.2

131 95.7 79.6 119.4

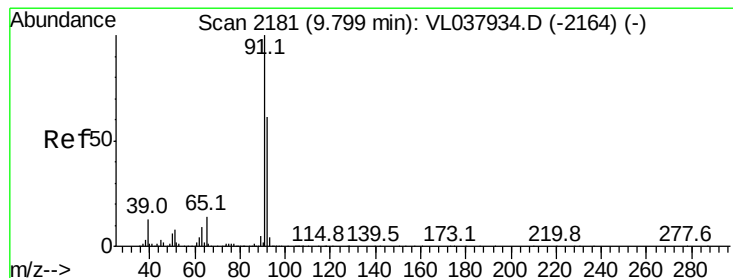
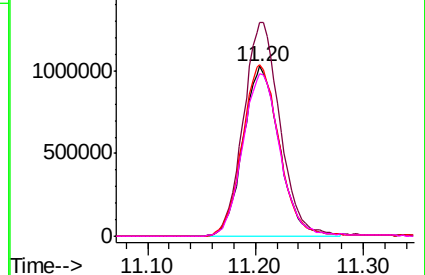
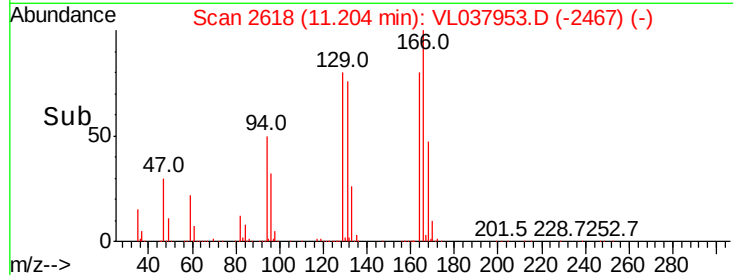


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 0.123 ppbv

RT: 9.79 min Scan# 2178

Delta R.T. -0.01 min

Lab File: VL037953.D

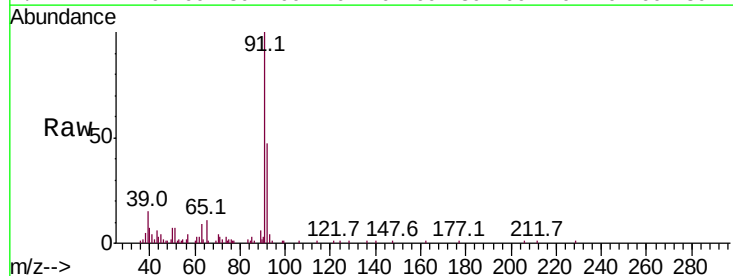
Acq: 2 Nov 2021 00:51

Tgt Ion: 91 Resp: 46617

Ion Ratio Lower Upper

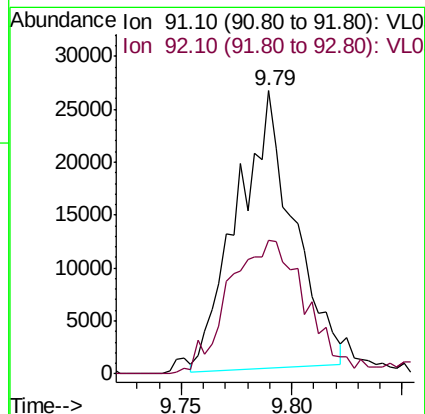
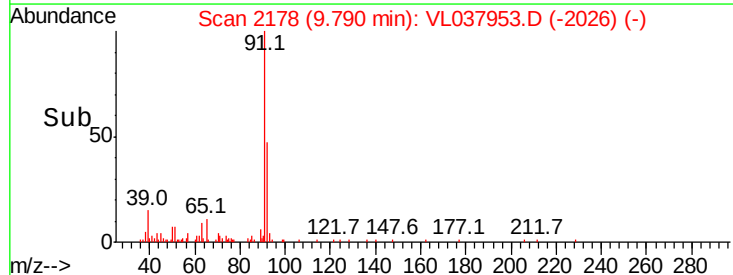
91 100

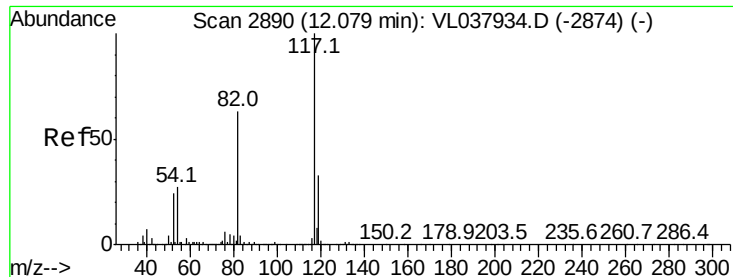
92 67.9 48.2 72.4



Abundance Ion 91.10 (90.80 to 91.80): VL0

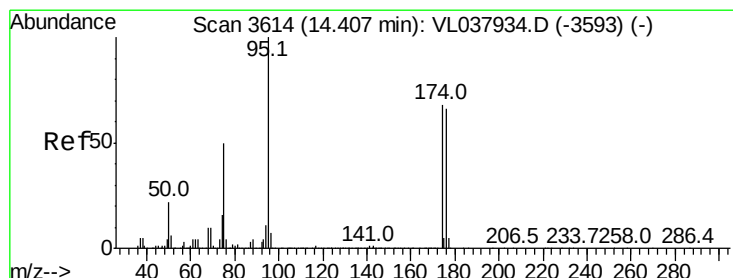
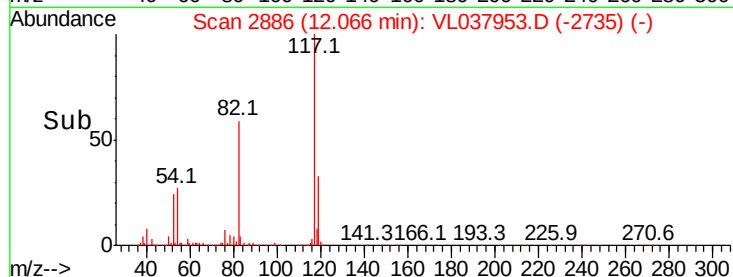
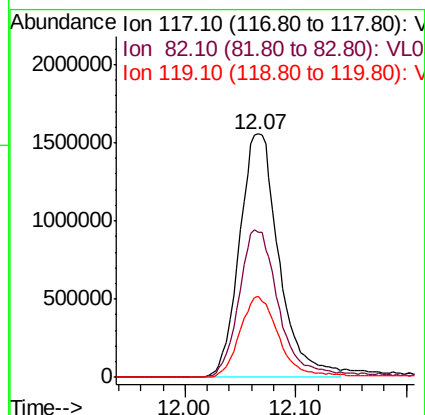
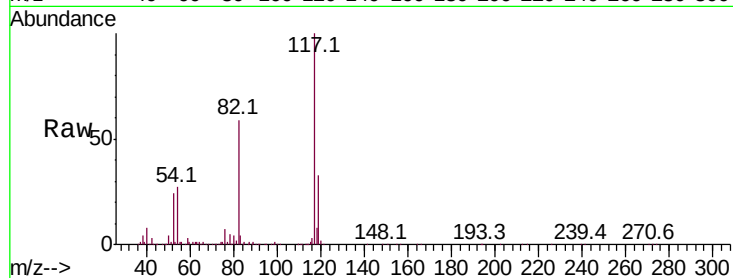
Ion 92.10 (91.80 to 92.80): VL0





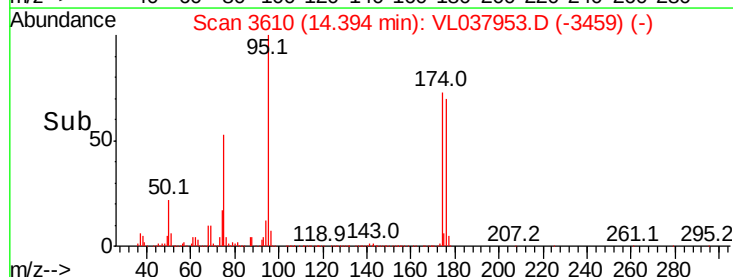
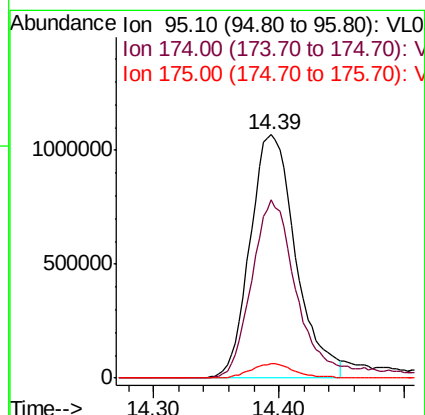
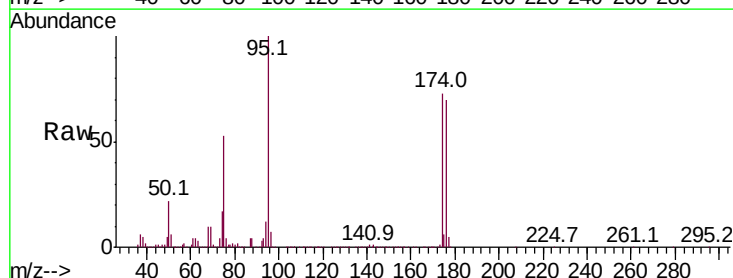
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.07 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
SV1DL
Acq: 2 Nov 2021 00:51

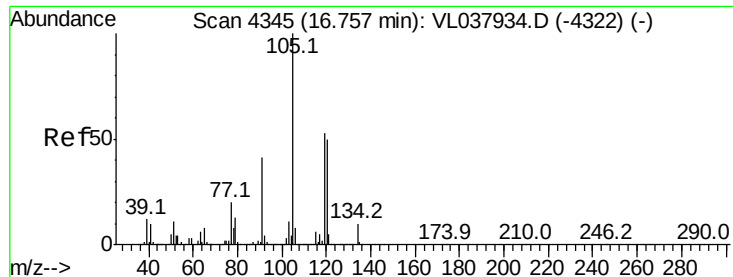
Tot Ion:117 Resp: 3855369
Ion Ratio Lower Upper
117 100
82 63.7 51.0 76.6
119 34.3 26.9 40.3



#68
1-Bromo-4-Fluorobenzene
Concen: 9.674 ppbv
RT: 14.39 min Scan# 3610
Delta R.T.: -0.01 min
Lab File: VL037953.D
Acq: 2 Nov 2021 00:51

Tgt Ion: 95 Resp: 2710993
Ion Ratio Lower Upper
95 100
174 78.2 58.3 87.5
175 5.9 4.6 6.8





#74
 1,2,4-Trimethylbenzene
 Concen: 0.205 ppbv
 RT: 16.74
 Delta R.T: MSVOA_1
 Lab File: ClientSampleId :
 SV1DL
 Acq: 2 Nov 2021 00:31

Tot Ion:	105	Resp:	90957
Ion Ratio	Lower	Upper	
105	100		
120	38.4	40.0	60.0#
91	13.8	32.6	49.0#
77	13.0	15.8	23.8#

