

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL070221\
 Data File : VL037272.D
 Acq On : 2 Jul 2021 13:14
 Operator : SY/AP
 Sample : M2911-01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 1

Quant Time: Jul 03 07:17:04 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL061621AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Jun 16 14:06:32 2021
 QLast Update : Wed Jun 16 14:06:32 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.68	49	1260808	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	3619792	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	3158514	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.44	95	2457239	10.27	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.70%

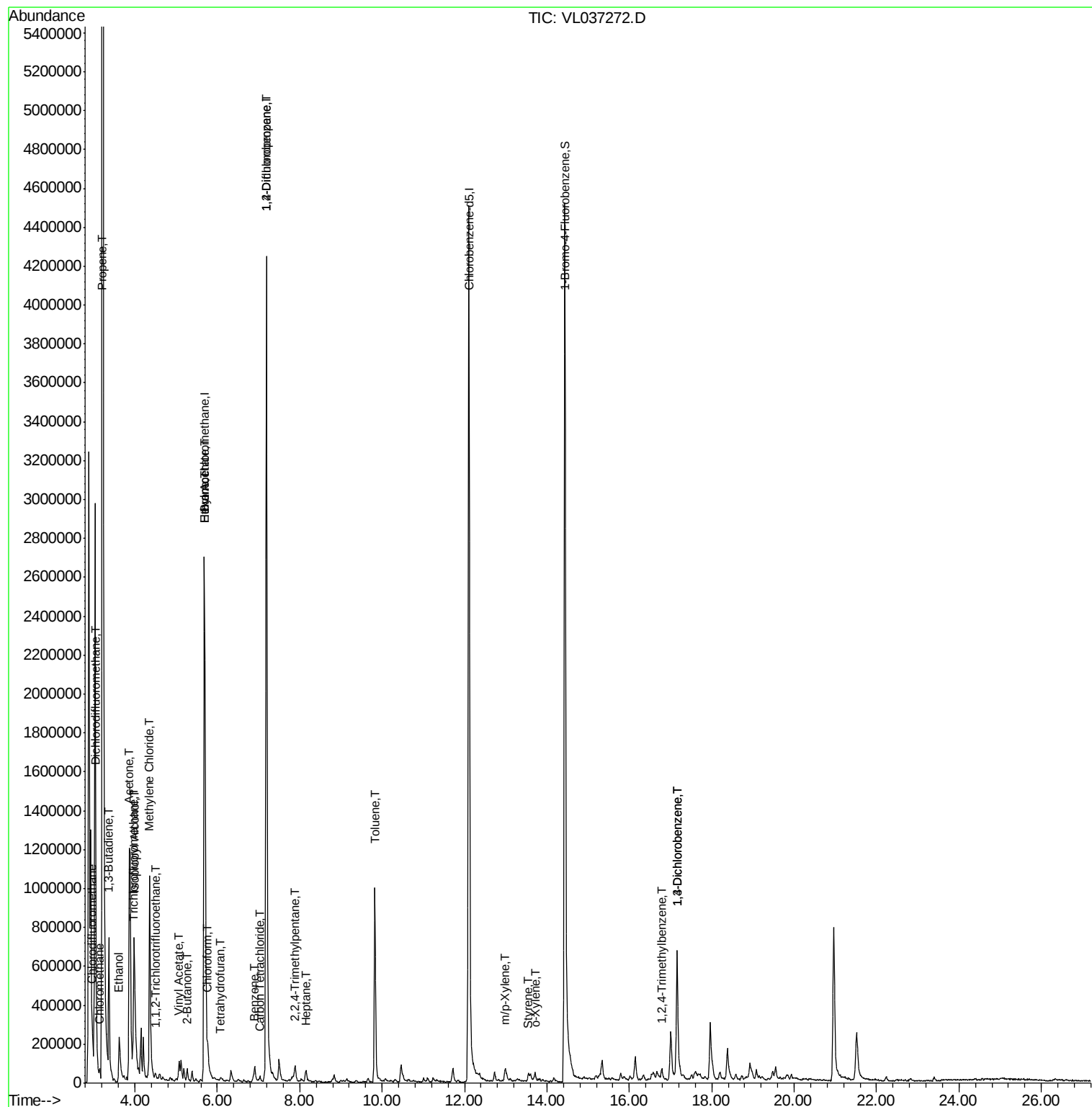
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.05	85	61646	0.281	ppbv 94
3) Chlorodifluoromethane	2.97	51	186090	0.759	ppbv # 75
4) Chloromethane	3.15	50	41448	0.507	ppbv # 86
9) Propene	3.21	41	6187569	78.935	ppbv 95
10) Heptane	8.14	43	10068	0.053	ppbv # 58
11) Trichlorofluoromethane	3.96	101	158886	0.679	ppbv 95
12) 1,1,2-Trichlorotrifluoroet	4.50	101	5845	0.035	ppbv # 19
13) Ethanol	3.62	45	382610	31.553	ppbv 49
15) Acetone	3.86	43	1851460	13.022	ppbv 89
16) 1,3-Butadiene	3.37	39	102138	1.215	ppbv # 23
19) Isopropyl Alcohol	3.98	45	898658	10.436	ppbv # 96
20) Methylene Chloride	4.36	84	445909	5.239	ppbv 96
23) Vinyl Acetate	5.08	43	26230	0.129	ppbv # 36
25) Ethyl Acetate	5.70	43	461061	1.498	ppbv # 90
26) Hexane	5.70	57	443161	2.849	ppbv # 60
29) Chloroform	5.76	83	60670	0.252	ppbv 100
34) 2-Butanone	5.27	43	80030	0.568	ppbv 92
35) Carbon Tetrachloride	7.03	117	10147	0.042	ppbv # 79
36) Benzene	6.91	78	30722	0.105	ppbv # 89
39) 1,2-Dichloropropane	7.19	63	882323	8.112	ppbv # 22
41) Tetrahydrofuran	6.08	42	2105	0.032	ppbv # 35
44) 2,2,4-Trimethylpentane	7.89	57	61316	0.124	ppbv # 72
53) Toluene	9.83	91	833695	2.384	ppbv 99
59) m/p-Xylene	13.00	91	34800	0.094	ppbv # 30
60) o-Xylene	13.71	91	22718	0.065	ppbv 70
61) Styrene	13.55	104	13625	0.075	ppbv # 25
74) 1,2,4-Trimethylbenzene	16.79	105	16883	0.043	ppbv # 69
75) 1,3-Dichlorobenzene	17.16	146	380351	1.576	ppbv 96
76) 1,4-Dichlorobenzene	17.16	146	380351	1.578	ppbv 99

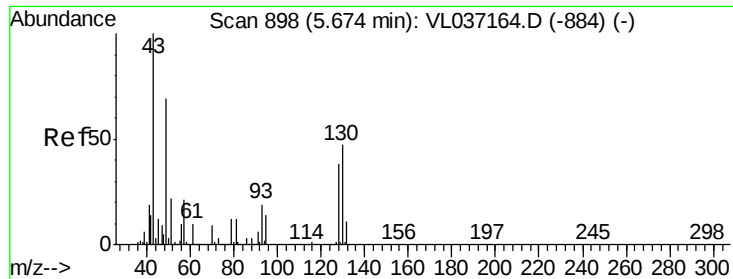
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.68 min Scan# 900

Delta R.T. 0.01 min

Lab File: VL037272.D

Acq: 2 Jul 2021 13:14

Instrument :
MSVOA_L
ClientSampleId :
1

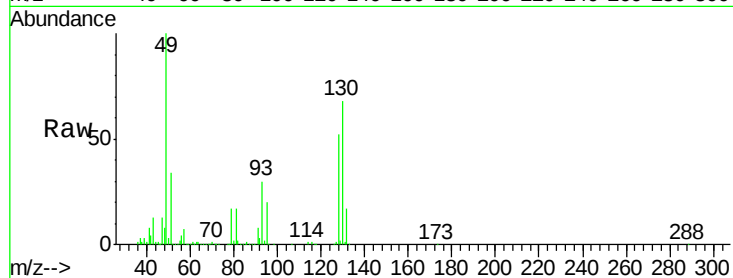
Tgt Ion: 49 Resp: 1260808

Ion Ratio Lower Upper

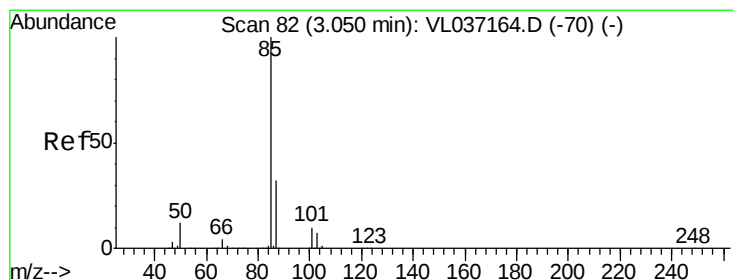
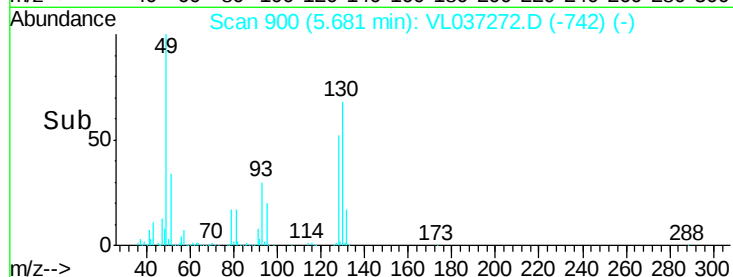
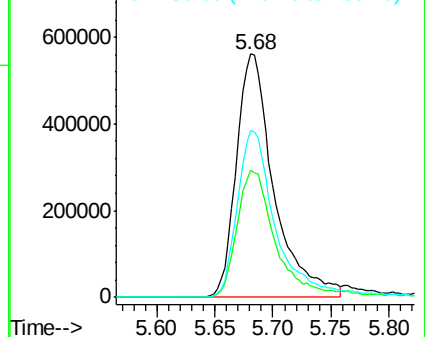
49 100

128 55.9 29.3 88.0

130 71.1 35.9 107.8



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: 0.281 ppbv

RT: 3.05 min Scan# 83

Delta R.T. 0.00 min

Lab File: VL037272.D

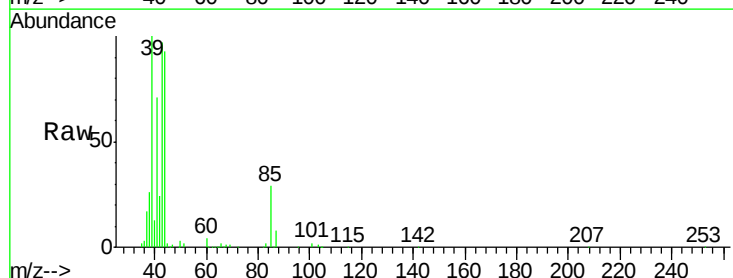
Acq: 2 Jul 2021 13:14

Tgt Ion: 85 Resp: 61646

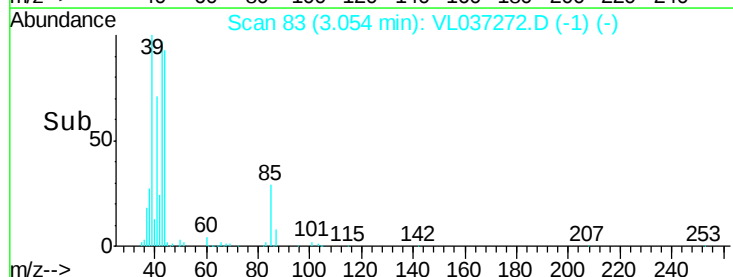
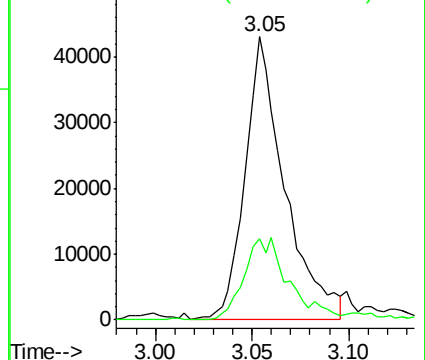
Ion Ratio Lower Upper

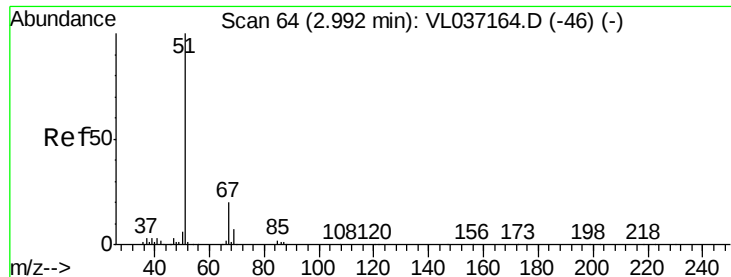
85 100

87 28.6 25.8 38.6



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





#3

Chlorodifluoromethane

Concen: 0.759 ppbv

RT: 2.97 min Scan# 57

Delta R.T. -0.02 min

Lab File: VL037272.D

Acq: 2 Jul 2021 13:14

Instrument :

MSVOA_L

ClientSampleId :

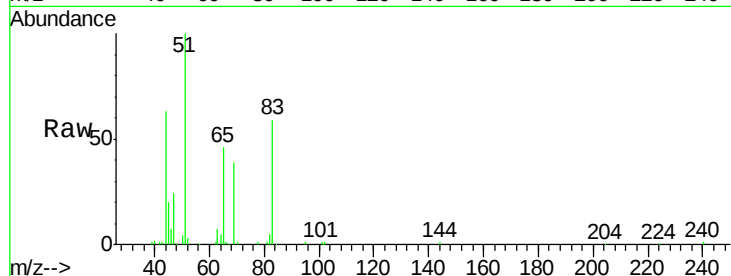
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Tgt Ion: 51 Resp: 186090

Ion Ratio Lower Upper

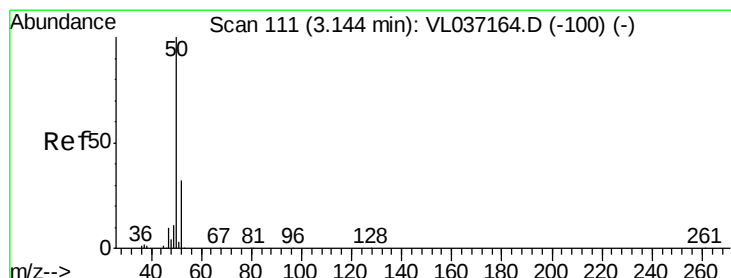
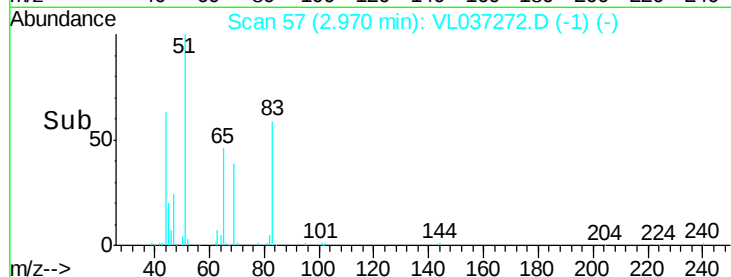
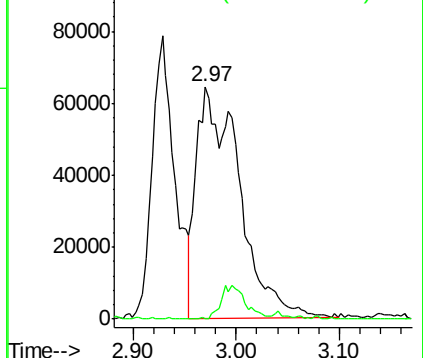
51 100

67 8.4 15.8 23.6#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.507 ppbv

RT: 3.15 min Scan# 113

Delta R.T. 0.01 min

Lab File: VL037272.D

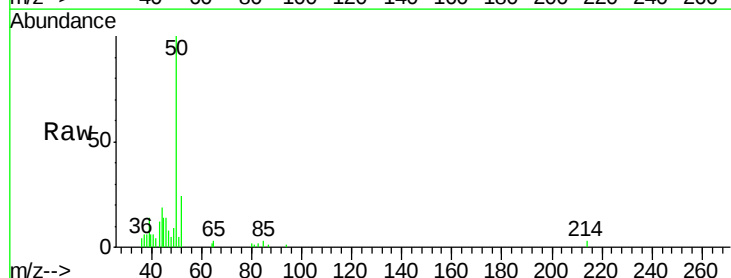
Acq: 2 Jul 2021 13:14

Tgt Ion: 50 Resp: 41448

Ion Ratio Lower Upper

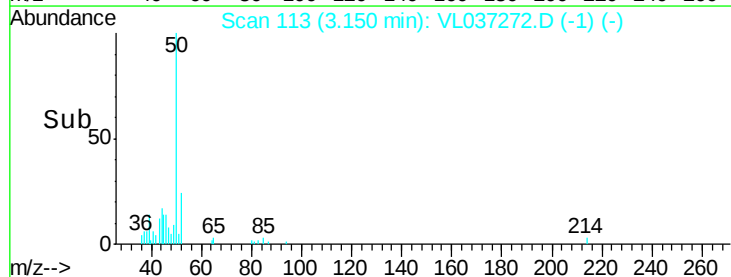
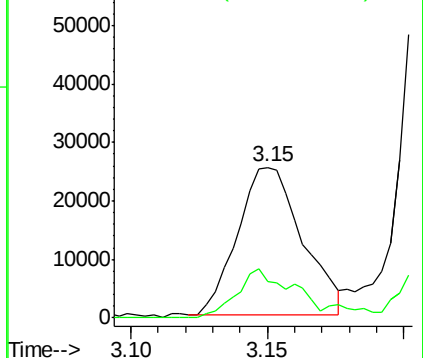
50 100

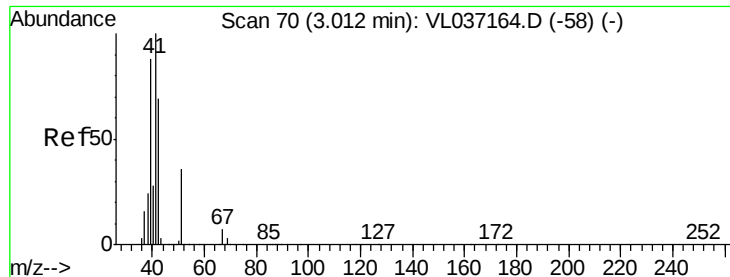
52 24.4 25.8 38.8#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 78.935 ppbv

RT: 3.21 min Scan# 132

Delta R.T. 0.20 min

Lab File: VL037272.D

Acq: 2 Jul 2021 13:14

Instrument :

MSVOA_L

ClientSampleId :

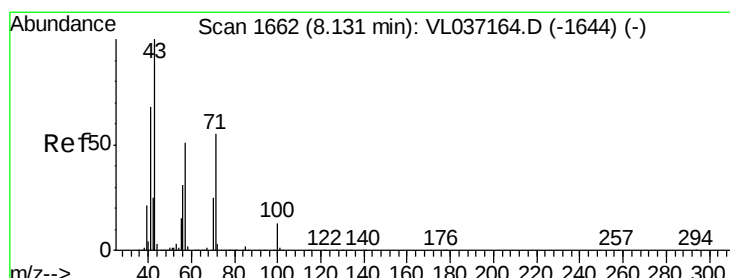
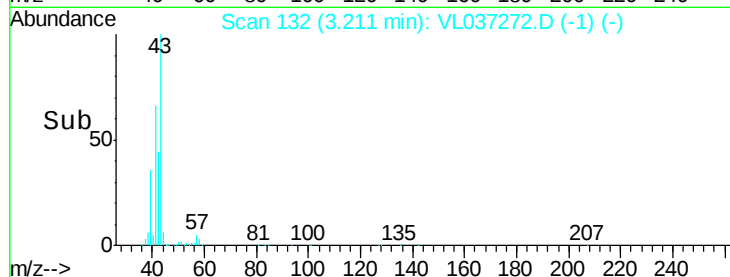
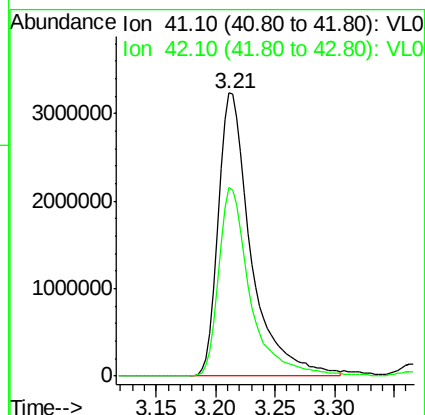
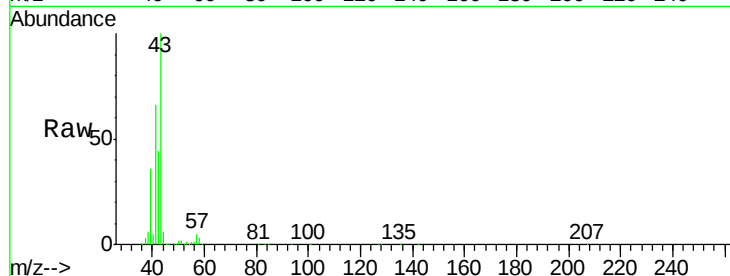
1

Tgt Ion: 41 Resp: 6187569

Ion Ratio Lower Upper

41 100

42 64.4 54.5 81.7



#10

Heptane

Concen: 0.053 ppbv

RT: 8.14 min Scan# 1664

Delta R.T. 0.01 min

Lab File: VL037272.D

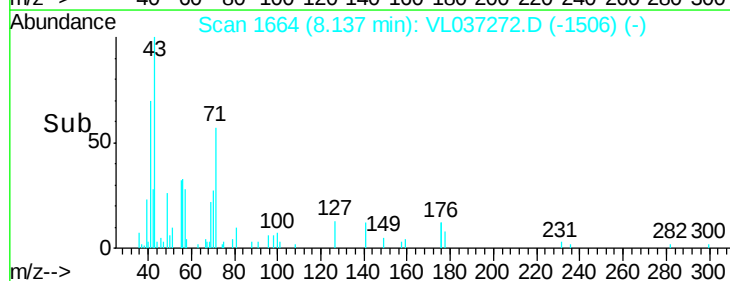
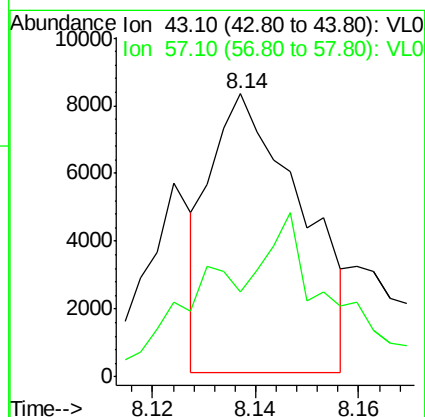
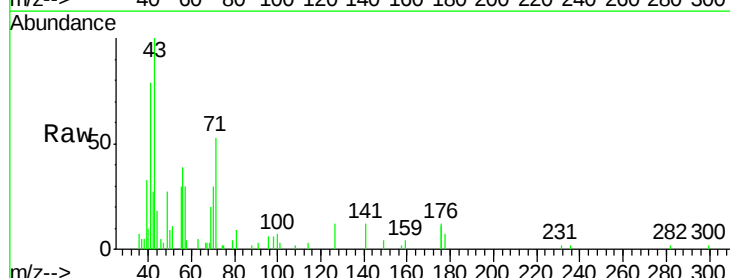
Acq: 2 Jul 2021 13:14

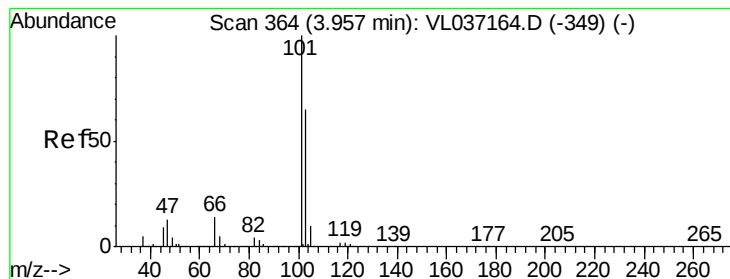
Tgt Ion: 43 Resp: 10068

Ion Ratio Lower Upper

43 100

57 79.7 40.6 61.0#





#11

Trichlorofluoromethane

Concen: 0.679 ppbv

RT: 3.96 min Scan# 365

Delta R.T. 0.00 min

Lab File: VL037272.D

Acq: 2 Jul 2021 13:14

Instrument :

MSVOA_L

ClientSampleId :

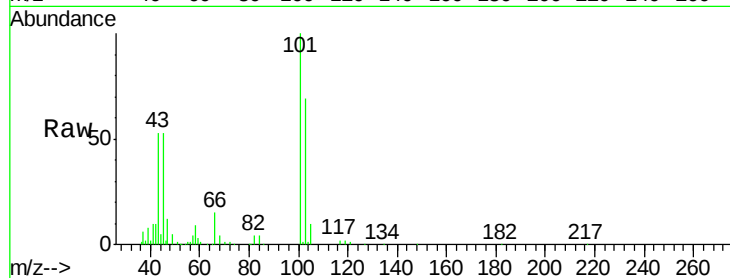
1

Tgt Ion:101 Resp: 158886

Ion Ratio Lower Upper

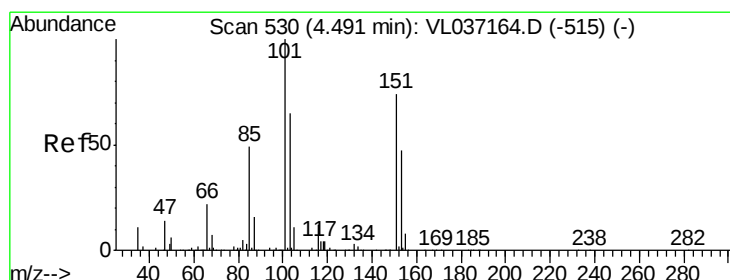
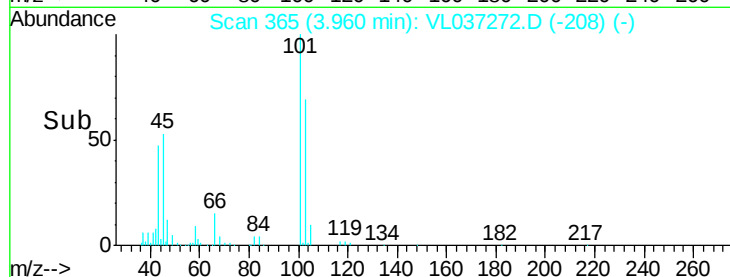
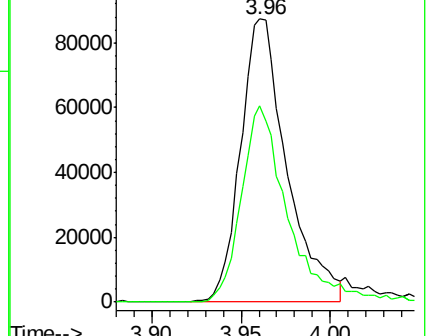
101 100

103 69.4 52.2 78.4



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.035 ppbv

RT: 4.50 min Scan# 532

Delta R.T. 0.01 min

Lab File: VL037272.D

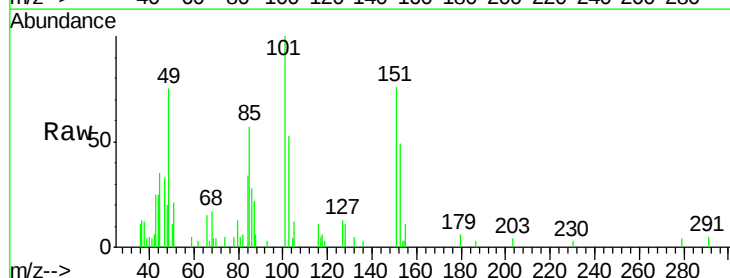
Acq: 2 Jul 2021 13:14

Tgt Ion:101 Resp: 5845

Ion Ratio Lower Upper

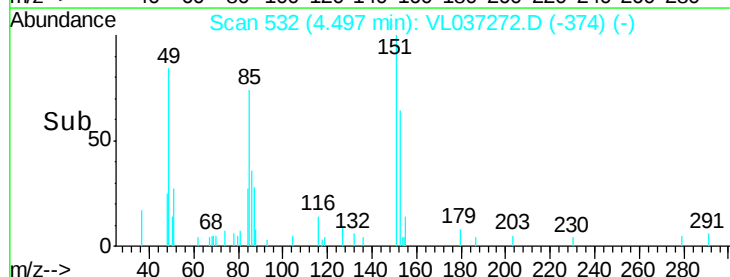
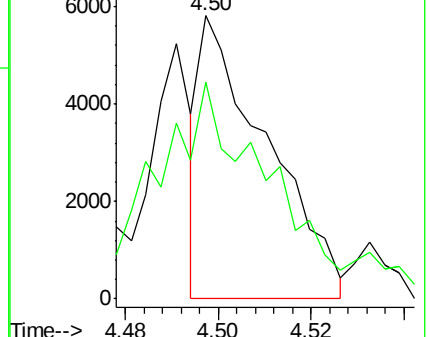
101 100

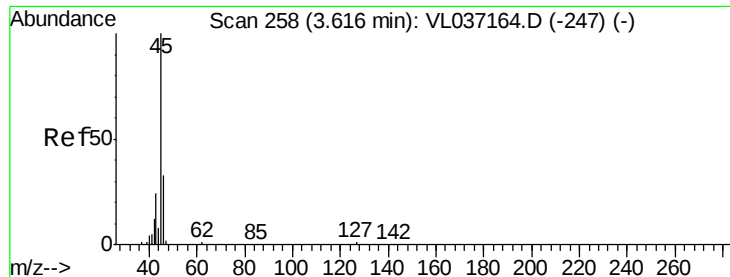
151 142.0 59.1 88.7#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





#13

Ethanol

Concen: 31.553 ppbv

RT: 3.62 min Scan# 259

Delta R.T. 0.00 min

Lab File: VL037272.D

Acq: 2 Jul 2021 13:14

Instrument :

MSVOA_L

ClientSampleId :

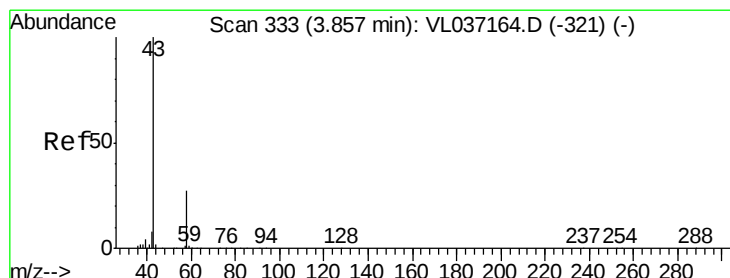
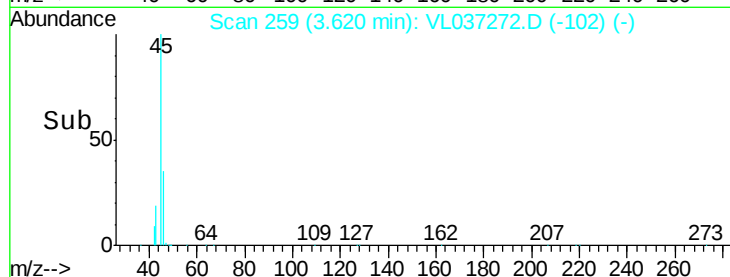
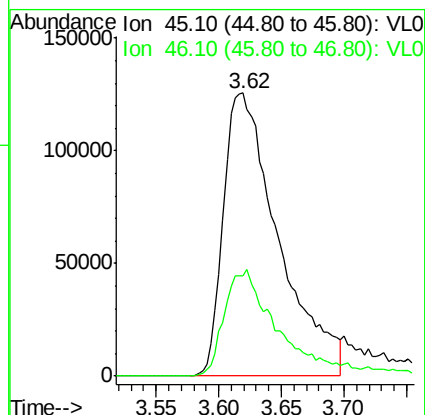
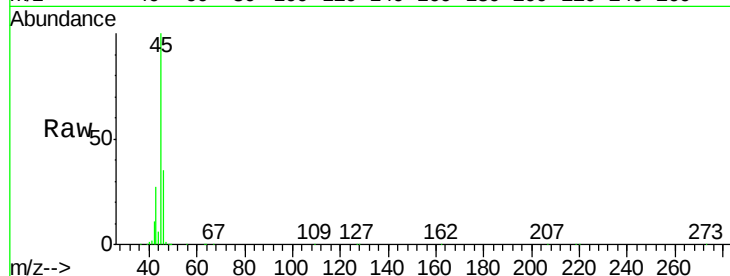
1

Tgt Ion: 45 Resp: 382610

Ion Ratio Lower Upper

45 100

46 39.1 34.2 137.0



#15

Acetone

Concen: 13.022 ppbv

RT: 3.86 min Scan# 334

Delta R.T. 0.00 min

Lab File: VL037272.D

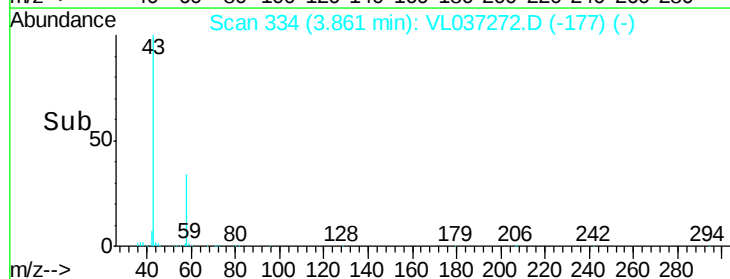
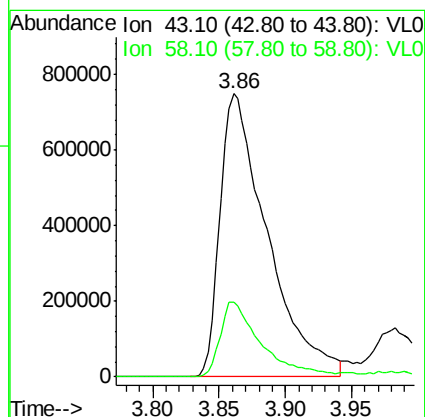
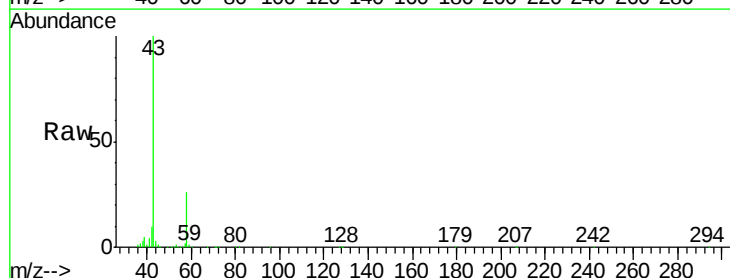
Acq: 2 Jul 2021 13:14

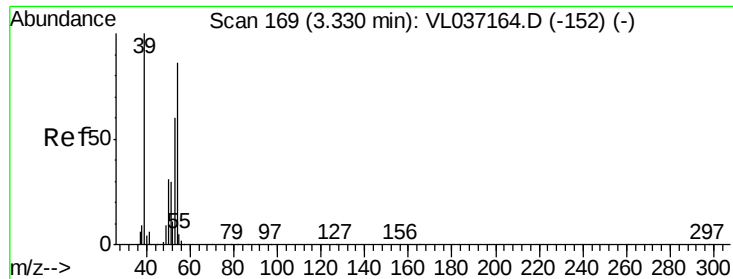
Tgt Ion: 43 Resp: 1851460

Ion Ratio Lower Upper

43 100

58 23.8 23.7 35.5

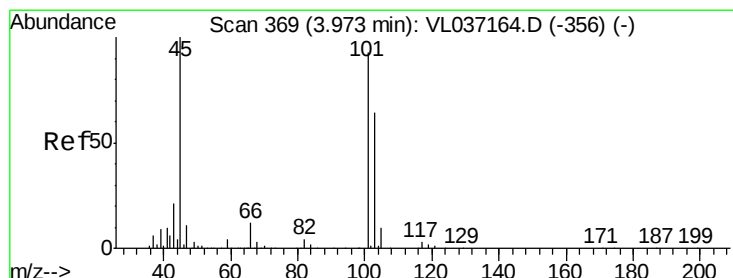
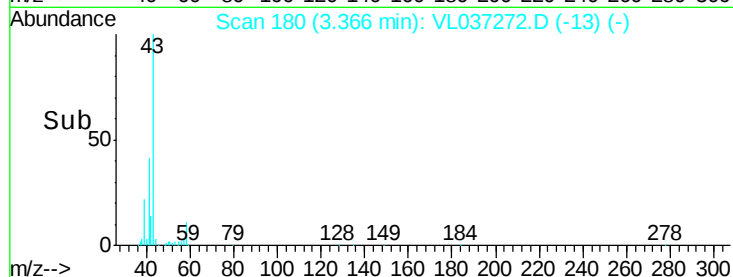
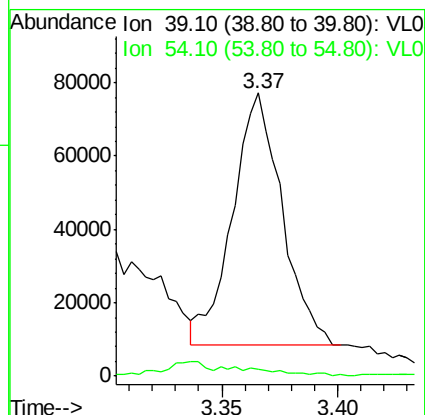
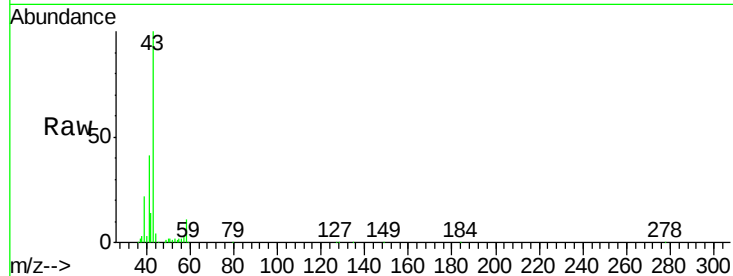




#16
 1,3-Butadiene
 Concen: 1.215 ppbv
 RT: 3.37 min Scan# 180
 Delta R.T. 0.04 min
 Lab File: VL037272.D
 Acq: 2 Jul 2021 13:14

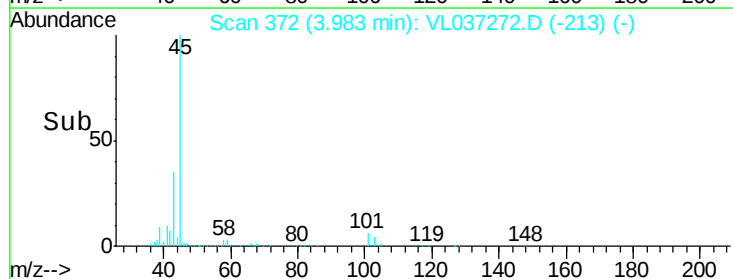
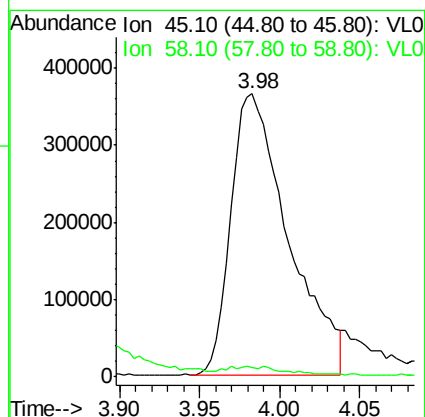
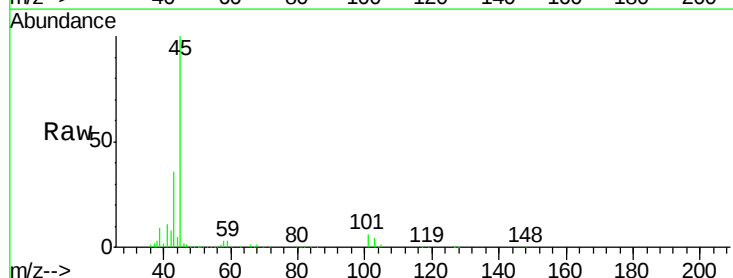
Instrument :
 MSVOA_L
 ClientSampleId :
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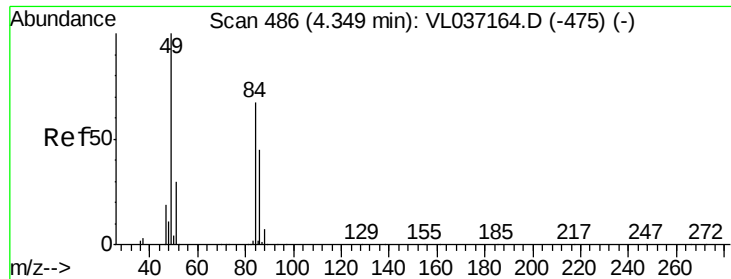
Tgt Ion: 39 Resp: 102138
 Ion Ratio Lower Upper
 39 100
 54 10.4 61.2 91.8#



#19
 Isopropyl Alcohol
 Concen: 10.436 ppbv
 RT: 3.98 min Scan# 372
 Delta R.T. 0.01 min
 Lab File: VL037272.D
 Acq: 2 Jul 2021 13:14

Tgt Ion: 45 Resp: 898658
 Ion Ratio Lower Upper
 45 100
 58 4.3 2.4 3.6#





#20

Methylene Chloride

Concen: 5.239 ppbv

RT: 4.36 min Scan# 489

Delta R.T. 0.01 min

Lab File: VL037272.D

Acq: 2 Jul 2021 13:14

Instrument :
MSVOA_L
ClientSampleId :
1

Tgt Ion: 84 Resp: 445909

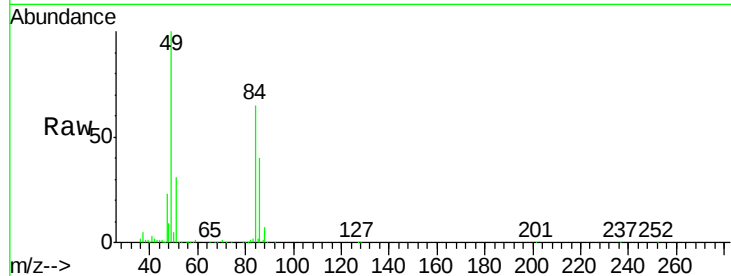
Ion Ratio Lower Upper

84 100

49 153.7 119.7 179.5

51 47.7 36.1 54.1

86 61.2 53.7 80.5

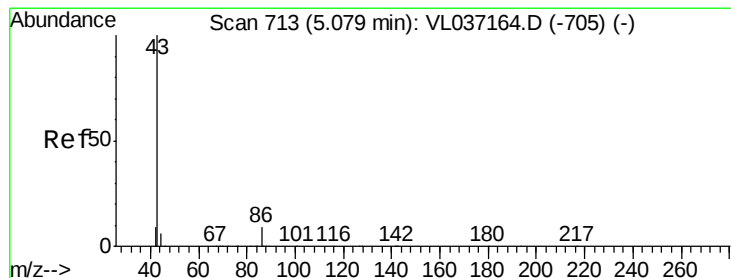
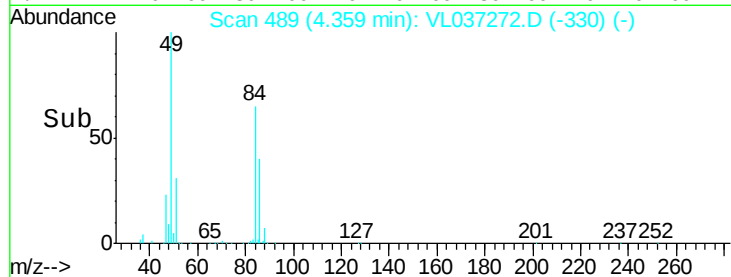
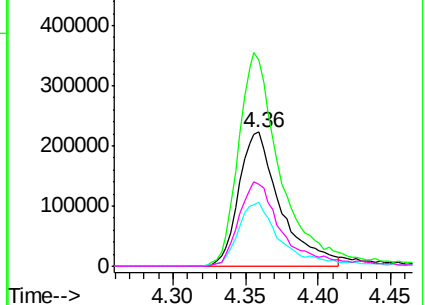


Abundance Ion 84.00 (83.70 to 84.70): VL0

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



#23

Vinyl Acetate

Concen: 0.129 ppbv

RT: 5.08 min Scan# 713

Delta R.T. 0.00 min

Lab File: VL037272.D

Acq: 2 Jul 2021 13:14

Tgt Ion: 43 Resp: 26230

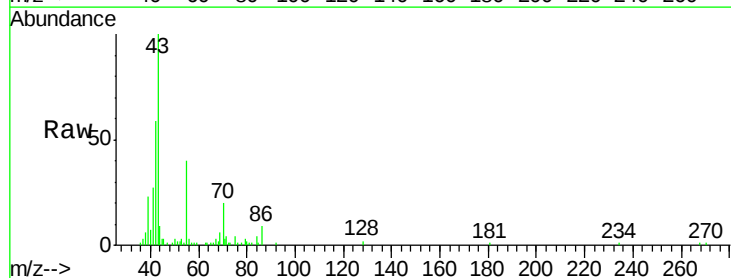
Ion Ratio Lower Upper

43 100

86 8.3 5.8 8.8

42 59.3 8.2 12.2#

44 0.0 4.2 6.4#

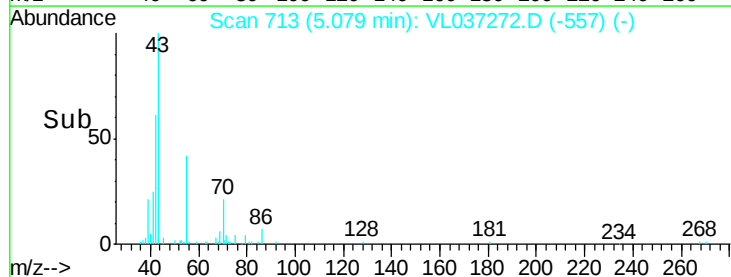
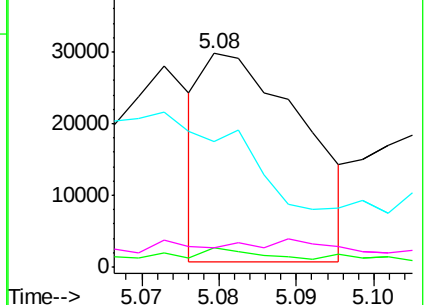


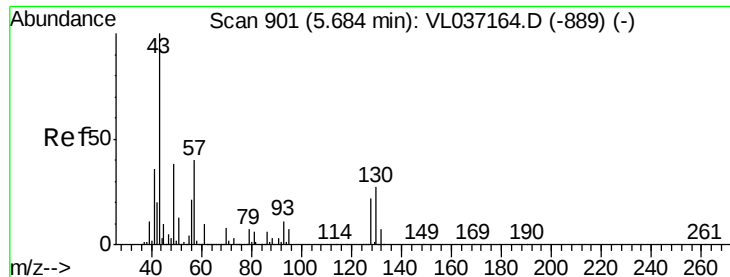
Abundance Ion 43.10 (42.80 to 43.80): VL0

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

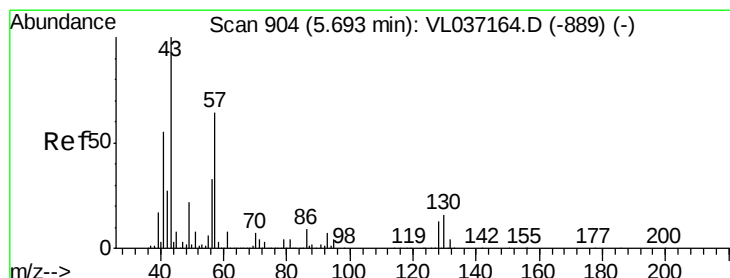
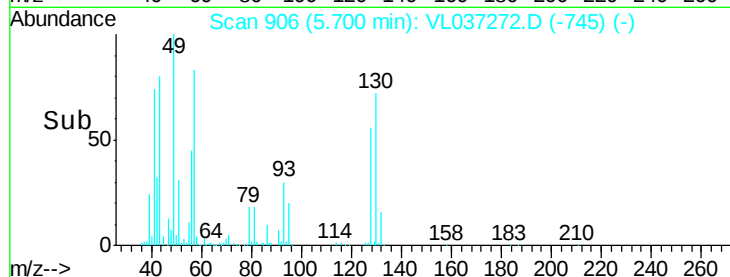
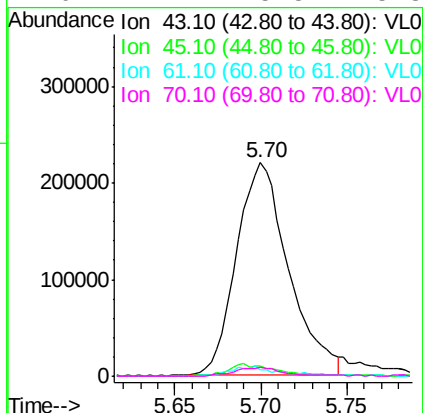
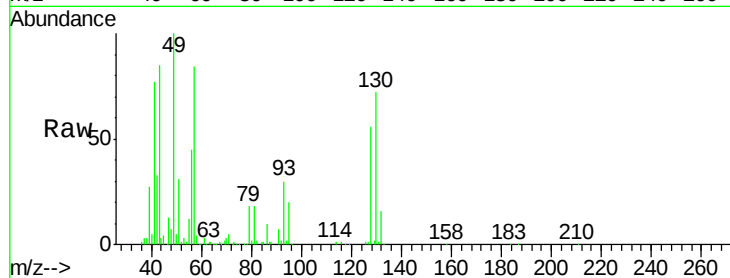




#25
Ethyl Acetate
Concen: 1.498 ppbv
RT: 5.70 min Scan# 906
Delta R.T. 0.02 min
Lab File: VL037272.D
Acq: 2 Jul 2021 13:14

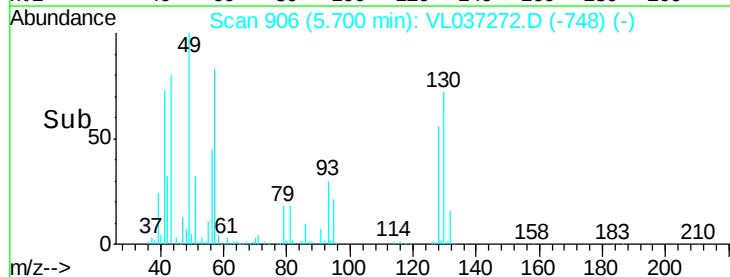
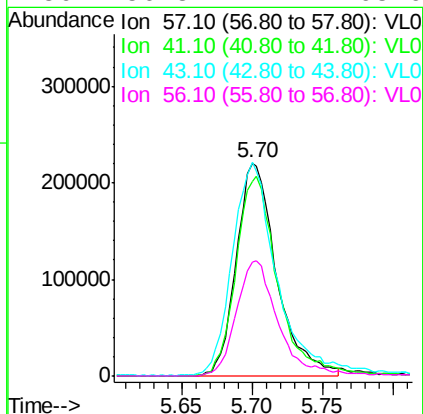
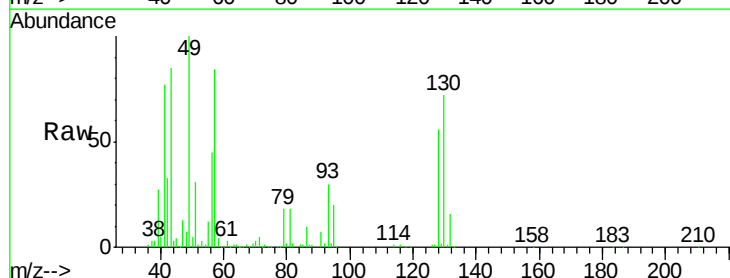
Instrument :
MSVOA_L
ClientSampleId :
1

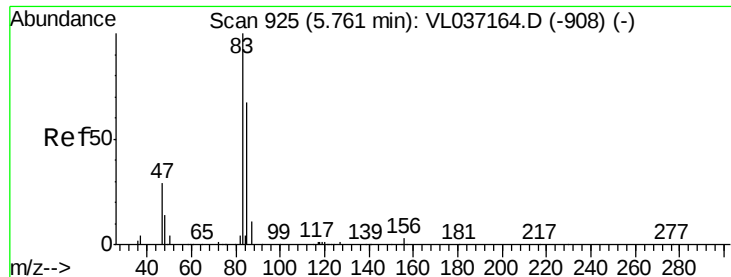
Tgt Ion:	43	Resp:	461061
Ion	Ratio	Lower	Upper
43	100		
45	6.8	8.0	12.0#
61	4.9	8.1	12.1#
70	4.7	5.5	8.3#



#26
Hexane
Concen: 2.849 ppbv
RT: 5.70 min Scan# 906
Delta R.T. 0.01 min
Lab File: VL037272.D
Acq: 2 Jul 2021 13:14

Tgt Ion:	57	Resp:	443161
Ion	Ratio	Lower	Upper
57	100		
41	97.8	73.5	110.3
43	112.4	170.7	256.1#
56	56.8	42.4	63.6





#29

Chloroform

Concen: 0.252 ppbv

RT: 5.76 min Scan# 926

Delta R.T. 0.00 min

Lab File: VL037272.D

Acq: 2 Jul 2021 13:14

Instrument :

MSVOA_L

ClientSampleId :

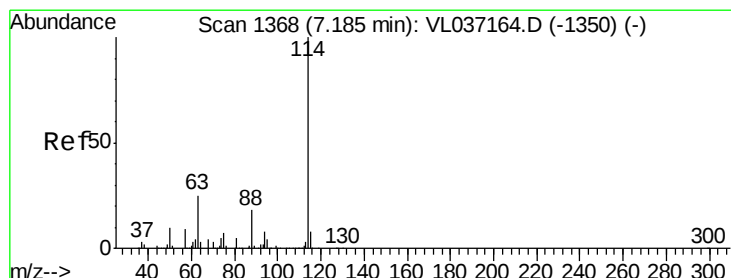
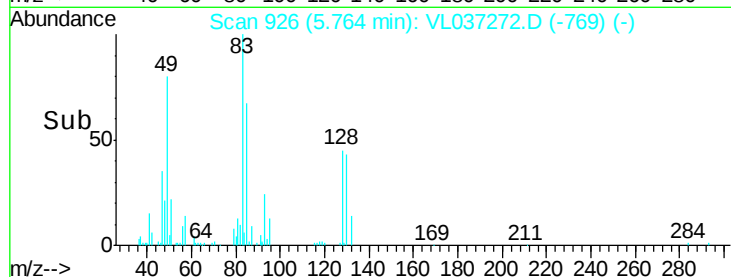
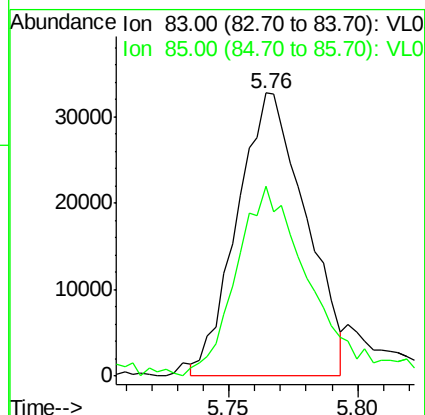
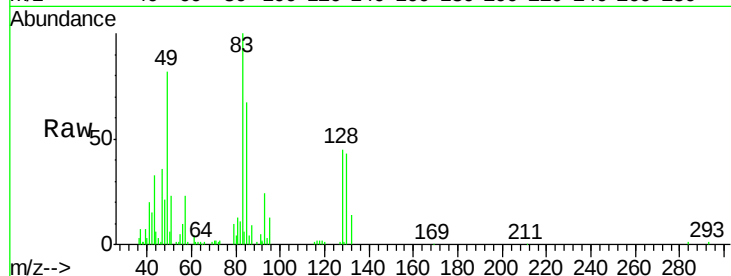
1

Tgt Ion: 83 Resp: 60670

Ion Ratio Lower Upper

83 100

85 67.2 53.6 80.4



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.19 min Scan# 1370

Delta R.T. 0.01 min

Lab File: VL037272.D

Acq: 2 Jul 2021 13:14

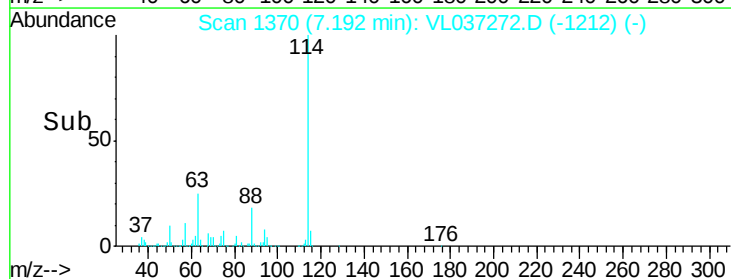
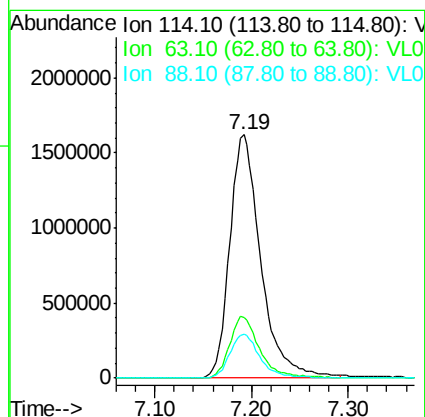
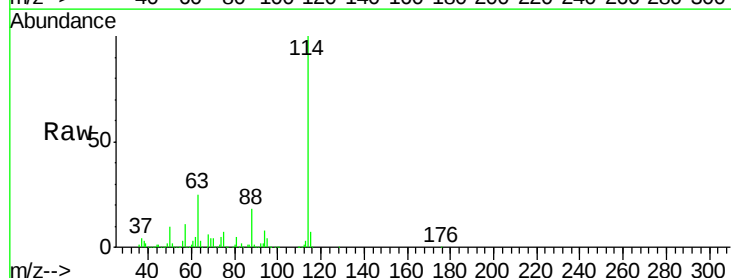
Tgt Ion: 114 Resp: 3619792

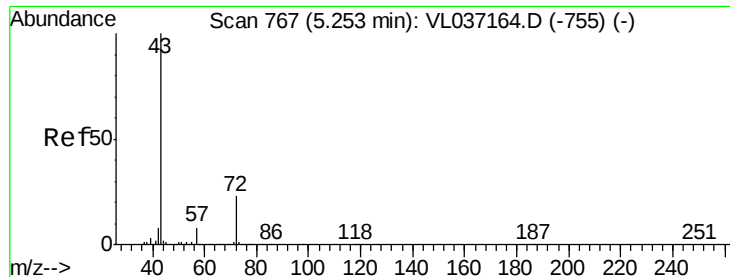
Ion Ratio Lower Upper

114 100

63 25.1 19.6 29.4

88 18.1 14.2 21.2





#34

2-Butanone

Concen: 0.568 ppbv

RT: 5.27 min Scan# 771

Delta R.T. 0.01 min

Lab File: VL037272.D

Acq: 2 Jul 2021 13:14

Instrument :

MSVOA_L

ClientSampleId :

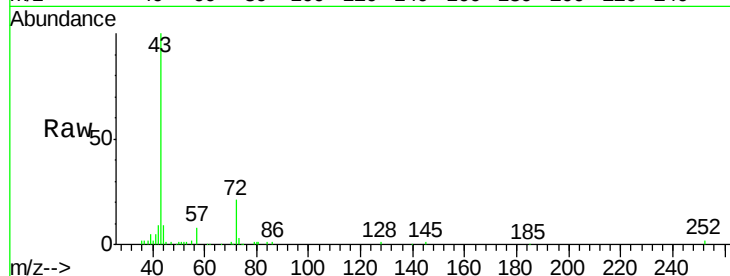
1

Tgt Ion: 43 Resp: 80030

Ion Ratio Lower Upper

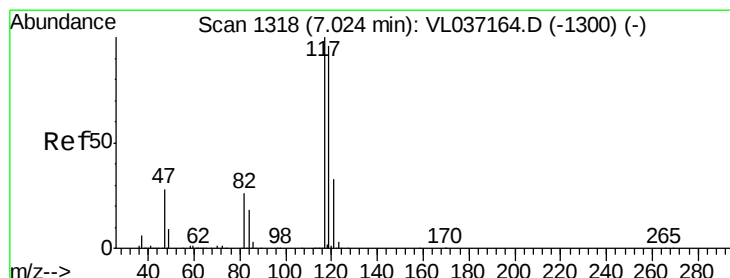
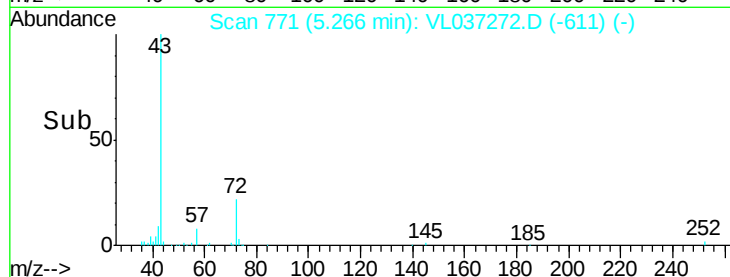
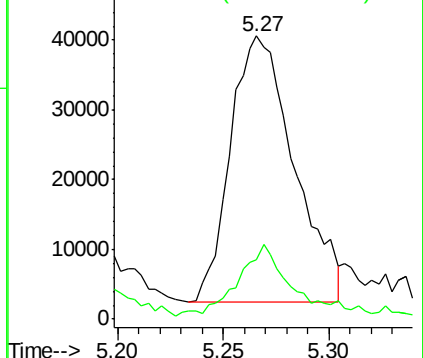
43 100

72 27.5 18.9 28.3



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0



#35

Carbon Tetrachloride

Concen: 0.042 ppbv

RT: 7.03 min Scan# 1319

Delta R.T. 0.00 min

Lab File: VL037272.D

Acq: 2 Jul 2021 13:14

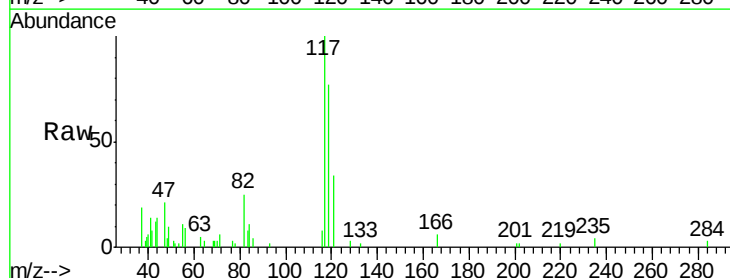
Tgt Ion: 117 Resp: 10147

Ion Ratio Lower Upper

117 100

119 69.7 76.6 114.8#

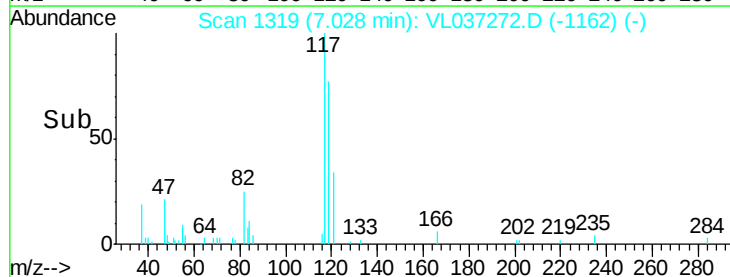
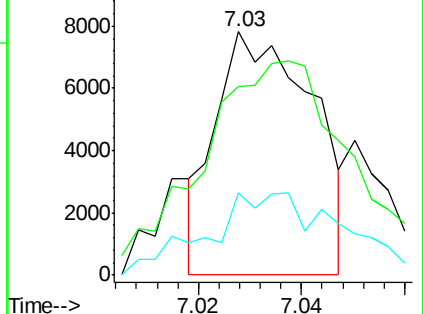
121 34.4 26.4 39.6

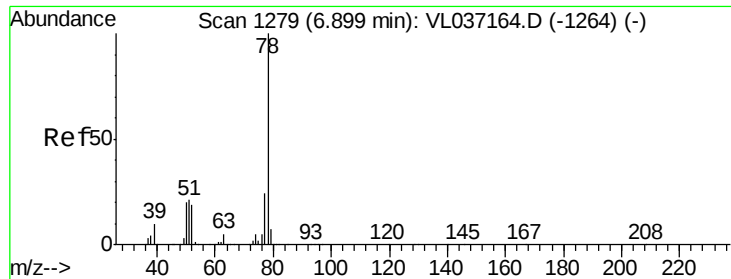


Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V

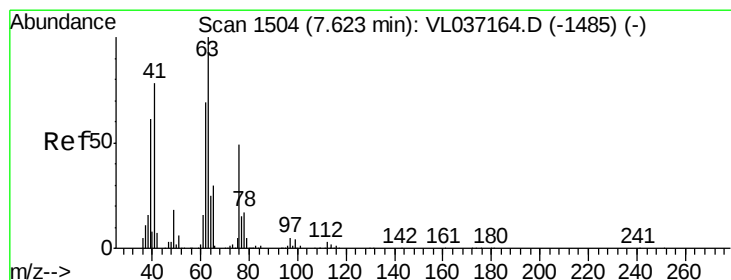
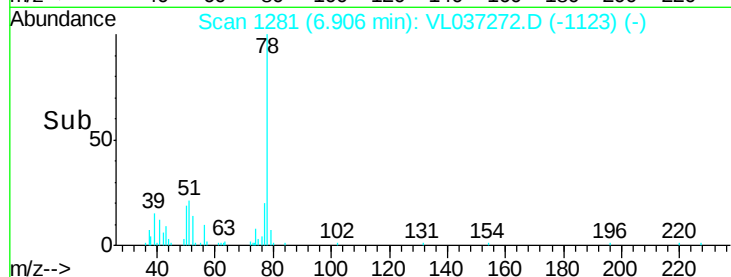
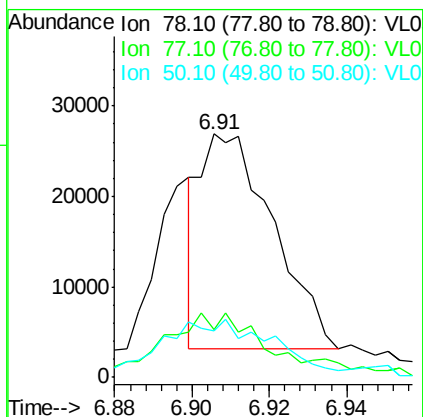
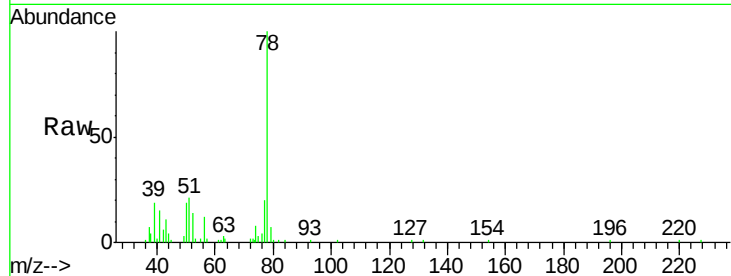




#36
Benzene
Concen: 0.105 ppbv
RT: 6.91 min Scan# 1281
Delta R.T. 0.01 min
Lab File: VL037272.D
Acq: 2 Jul 2021 13:14

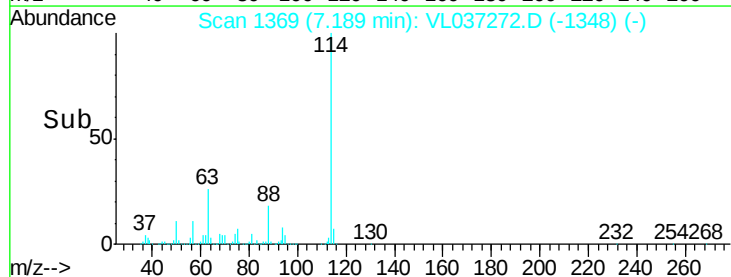
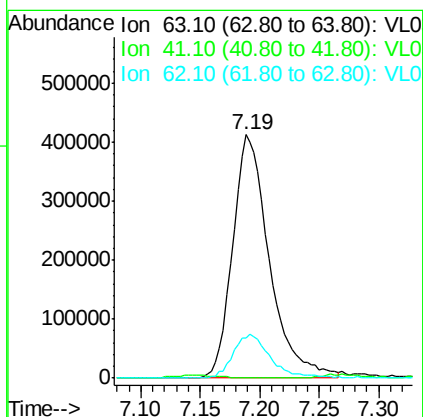
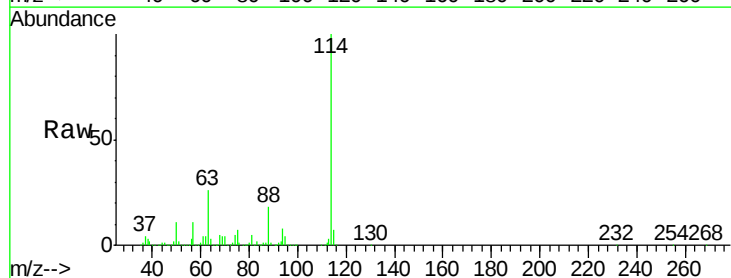
Instrument :
MSVOA_L
ClientSampleId :
1

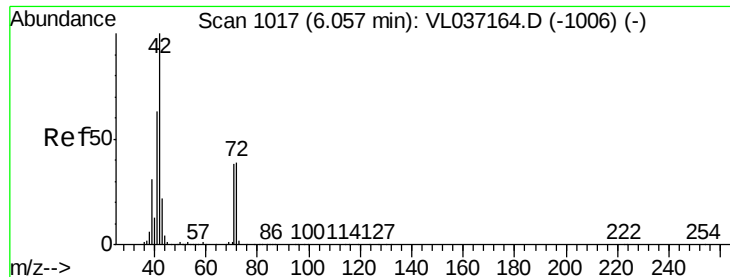
Tgt Ion: 78 Resp: 30722
Ion Ratio Lower Upper
78 100
77 15.4 19.0 28.6#
50 18.1 15.7 23.5



#39
1,2-Dichloropropane
Concen: 8.112 ppbv
RT: 7.19 min Scan# 1369
Delta R.T. -0.43 min
Lab File: VL037272.D
Acq: 2 Jul 2021 13:14

Tgt Ion: 63 Resp: 882323
Ion Ratio Lower Upper
63 100
41 0.0 62.0 93.0#
62 16.3 54.9 82.3#

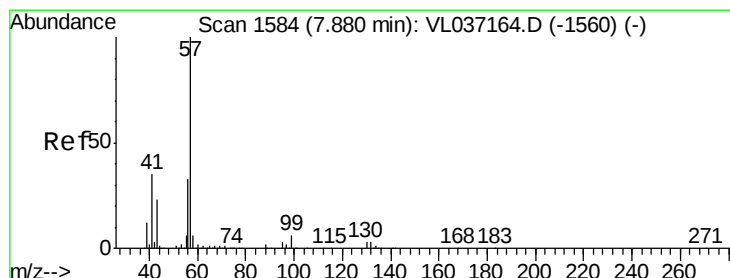
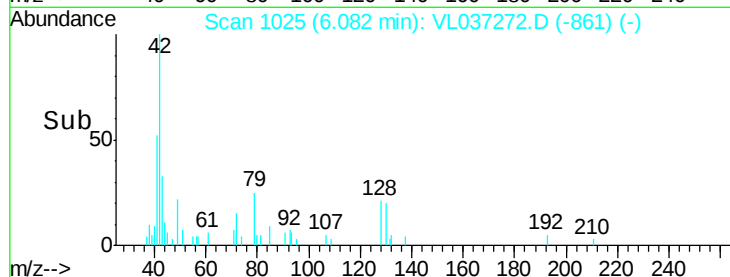
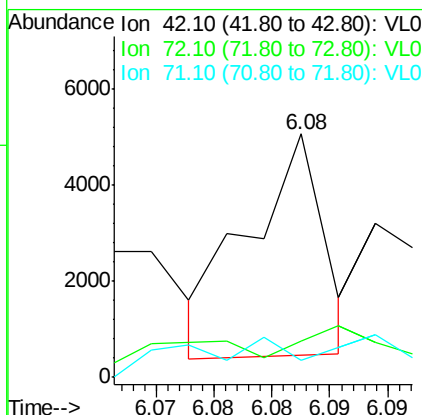
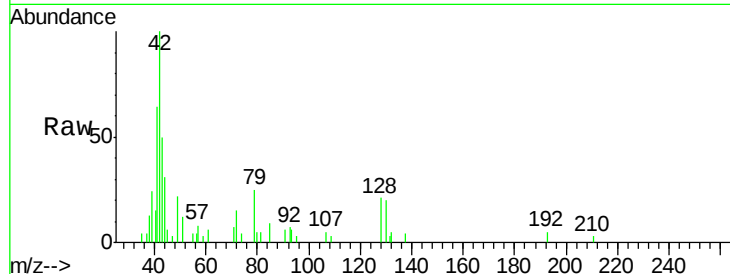




#41
Tetrahydrofuran
Concen: 0.032 ppbv
RT: 6.08 min Scan# 1025
Delta R.T. 0.03 min
Lab File: VL037272.D
Acq: 2 Jul 2021 13:14

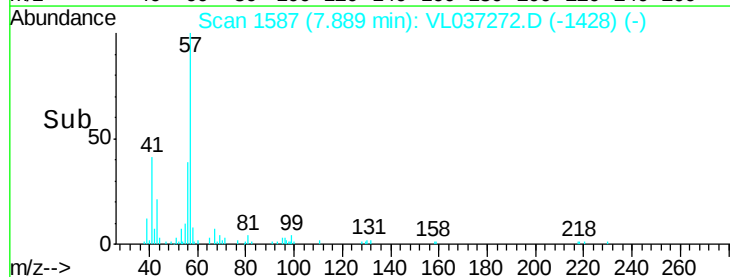
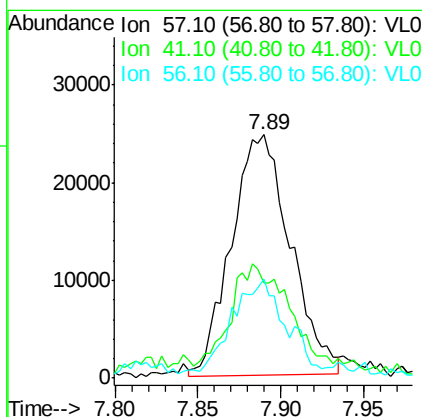
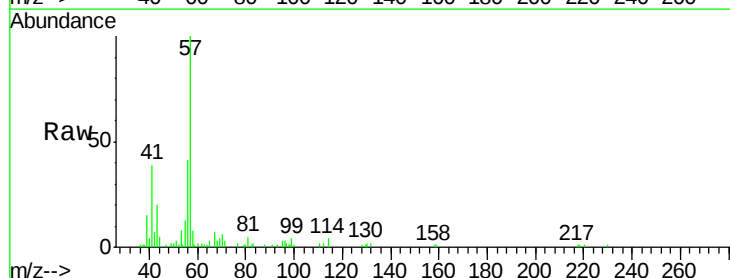
Instrument :
MSVOA_L
ClientSampleId :
1

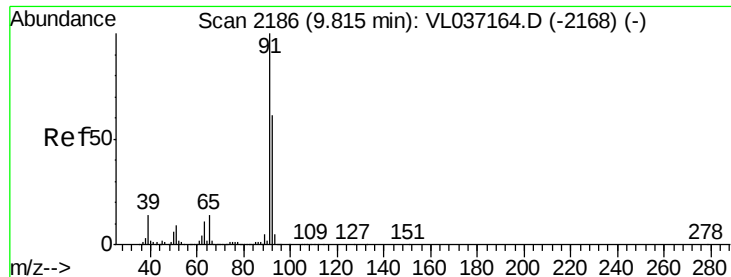
Tgt Ion: 42 Resp: 2105
Ion Ratio Lower Upper
42 100
72 0.0 33.0 49.4#
71 0.0 31.0 46.6#



#44
2,2,4-Trimethylpentane
Concen: 0.124 ppbv
RT: 7.89 min Scan# 1587
Delta R.T. 0.01 min
Lab File: VL037272.D
Acq: 2 Jul 2021 13:14

Tgt Ion: 57 Resp: 61316
Ion Ratio Lower Upper
57 100
41 53.0 27.6 41.4#
56 44.6 25.3 37.9#





#53

Toluene

Concen: 2.384 ppbv

RT: 9.83 min Scan# 2189

Delta R.T. 0.01 min

Lab File: VL037272.D

Acq: 2 Jul 2021 13:14

Instrument :

MSVOA_L

ClientSampled :

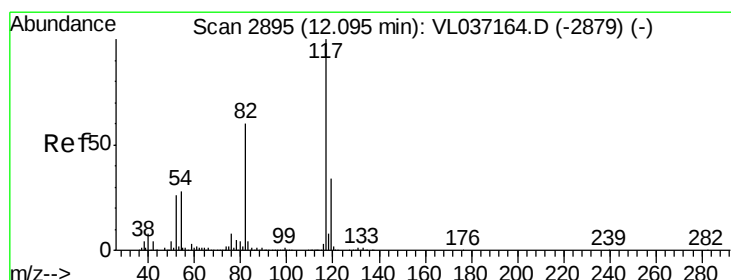
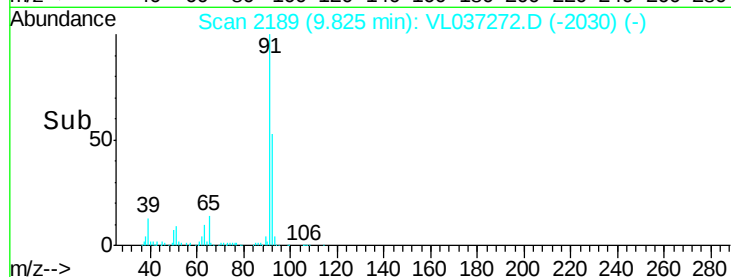
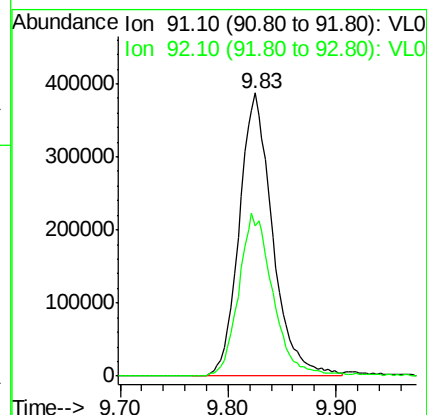
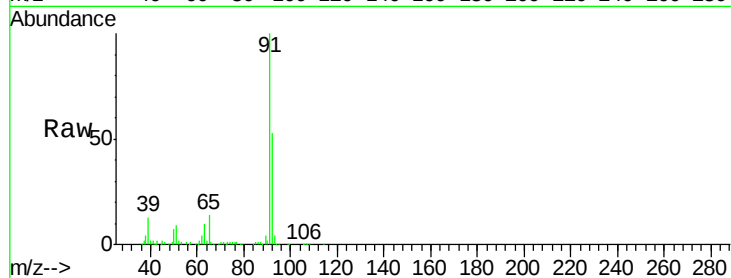
1

Tgt Ion: 91 Resp: 833695

Ion Ratio Lower Upper

91 100

92 59.9 48.3 72.5



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.10 min Scan# 2898

Delta R.T. 0.01 min

Lab File: VL037272.D

Acq: 2 Jul 2021 13:14

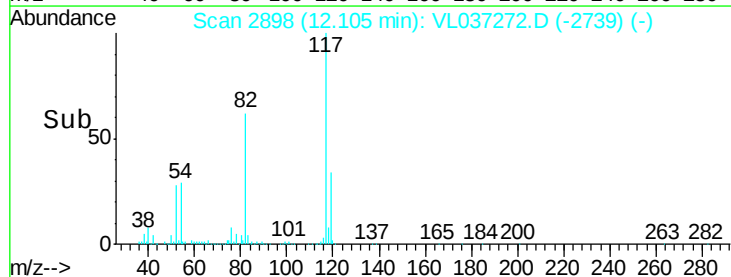
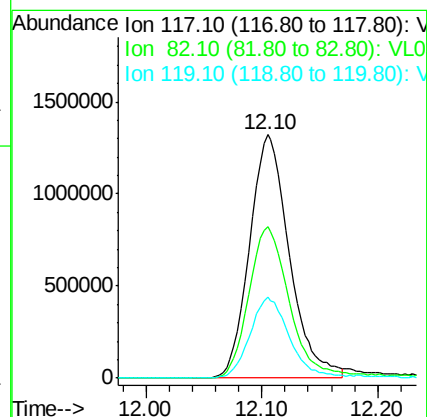
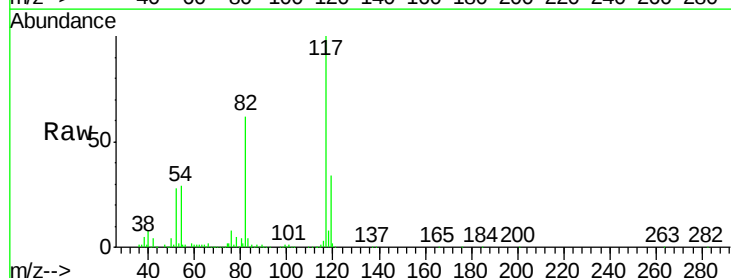
Tgt Ion: 117 Resp: 3158514

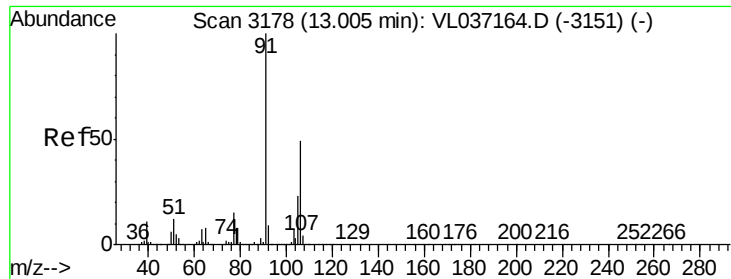
Ion Ratio Lower Upper

117 100

82 66.1 51.7 77.5

119 34.0 47.6 71.4#

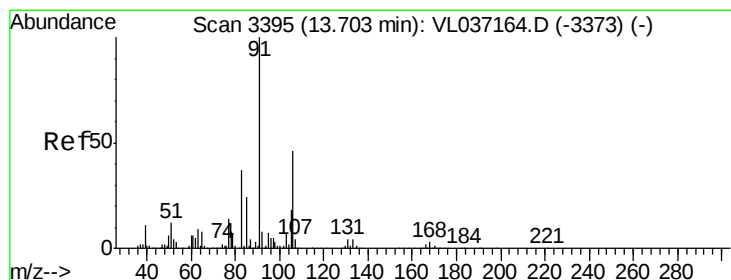
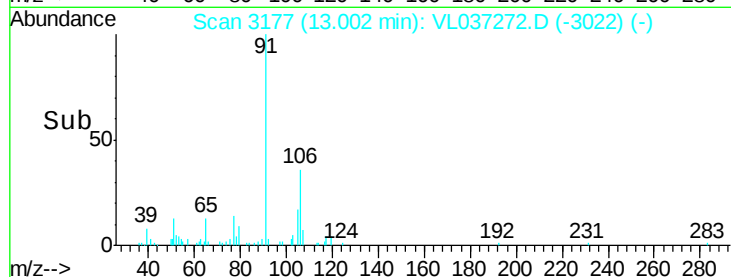
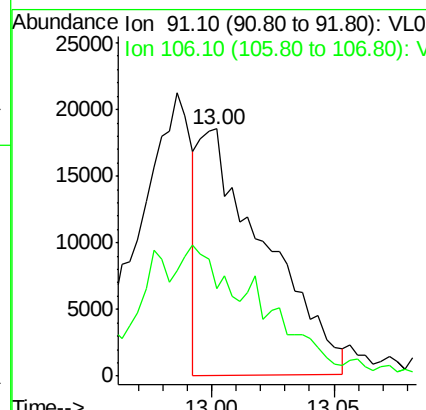
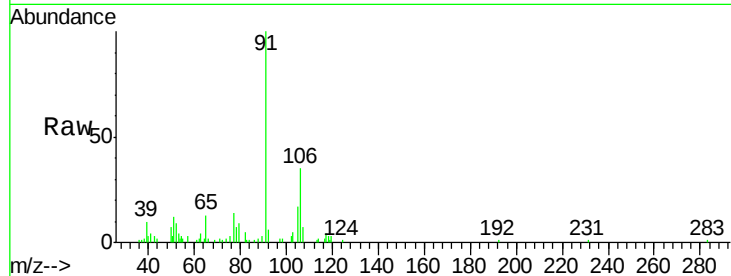




#59
m/p-Xylene
Concen: 0.094 ppbv
RT: 13.00 min Scan# 3177
Delta R.T. -0.00 min
Lab File: VL037272.D
Acq: 2 Jul 2021 13:14

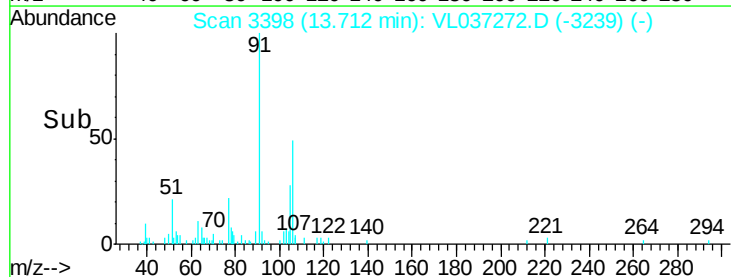
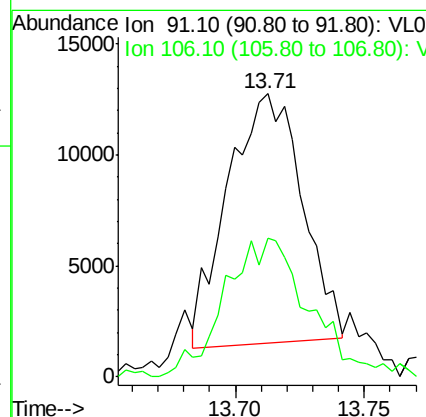
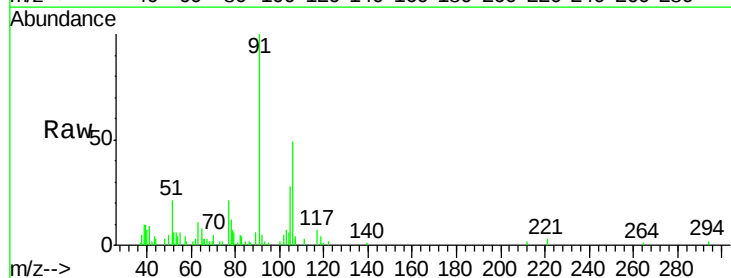
Instrument :
MSVOA_L
ClientSampleId :
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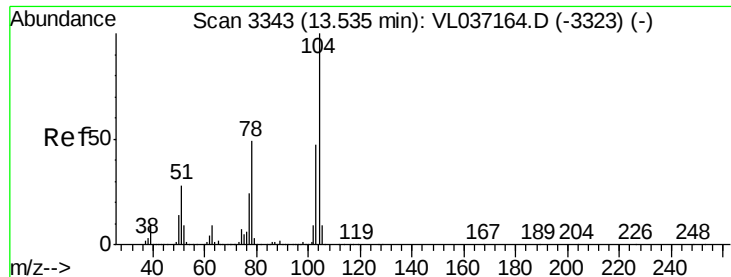
Tgt Ion: 91 Resp: 34800
Ion Ratio Lower Upper
91 100
106 0.0 37.0 55.4#



#60
o-Xylene
Concen: 0.065 ppbv
RT: 13.71 min Scan# 3398
Delta R.T. 0.01 min
Lab File: VL037272.D
Acq: 2 Jul 2021 13:14

Tgt Ion: 91 Resp: 22718
Ion Ratio Lower Upper
91 100
106 65.7 23.0 69.0

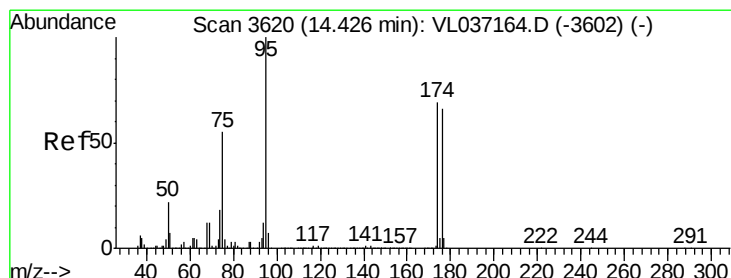
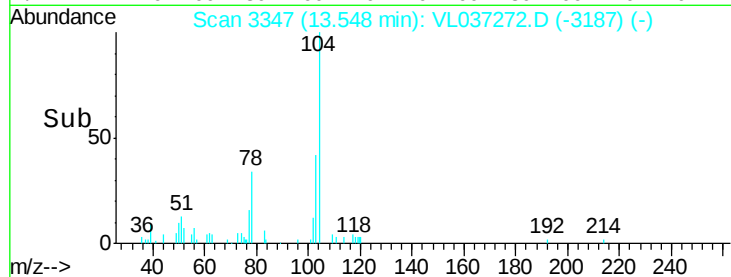
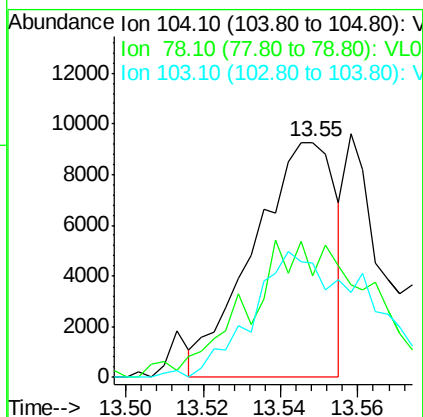
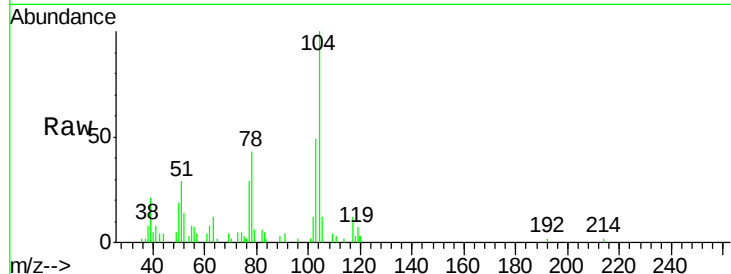




#61
Styrene
Concen: 0.075 ppbv
RT: 13.55 min Scan# 3347
Delta R.T. 0.01 min
Lab File: VL037272.D
Acq: 2 Jul 2021 13:14

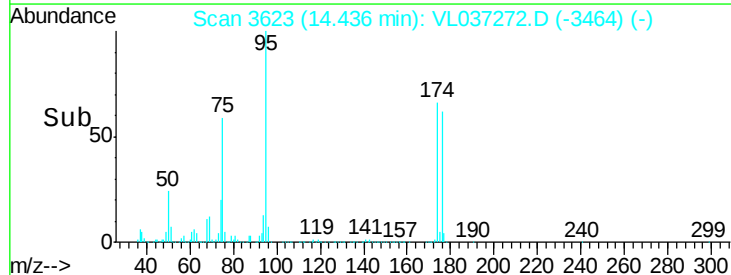
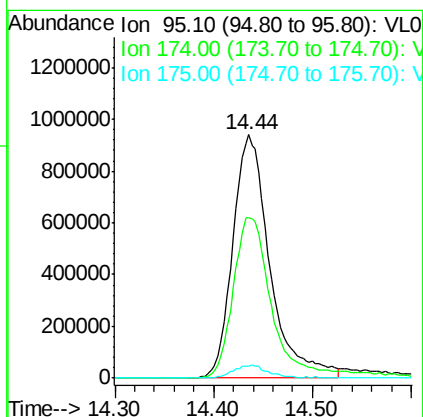
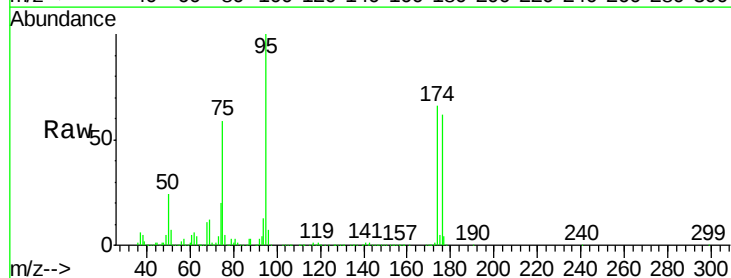
Instrument :
MSVOA_L
ClientSampleId :
1

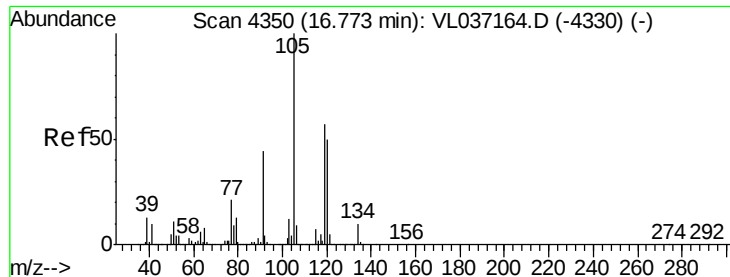
Tgt Ion: 104 Resp: 13625
Ion Ratio Lower Upper
104 100
78 106.0 39.7 59.5#
103 91.3 37.6 56.4#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.267 ppbv
RT: 14.44 min Scan# 3623
Delta R.T. 0.01 min
Lab File: VL037272.D
Acq: 2 Jul 2021 13:14

Tgt Ion: 95 Resp: 2457239
Ion Ratio Lower Upper
95 100
174 71.9 57.0 85.4
175 5.2 4.4 6.6





#74

1,2,4-Trimethylbenzene

Concen: 0.043 ppbv

RT: 16.79 min Scan# 4354

Delta R.T. 0.01 min

Lab File: VL037272.D

Acq: 2 Jul 2021 13:14

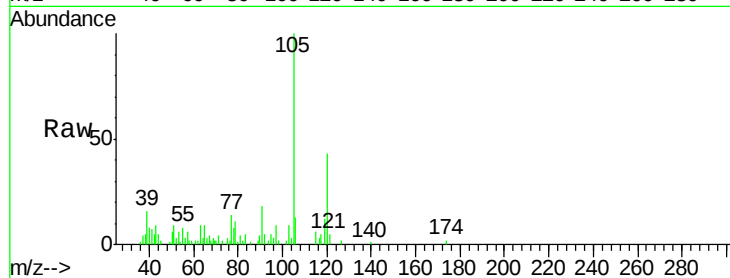
Instrument :

MSVOA_L

ClientSampleId :

1

Tgt Ion:	105	Resp:	16883
Ion Ratio	Lower	Upper	
105	100		
120	35.4	39.8	59.8#
91	15.2	37.0	55.4#
77	11.6	17.0	25.4#

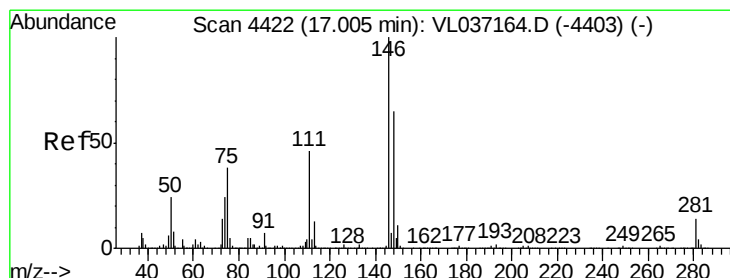
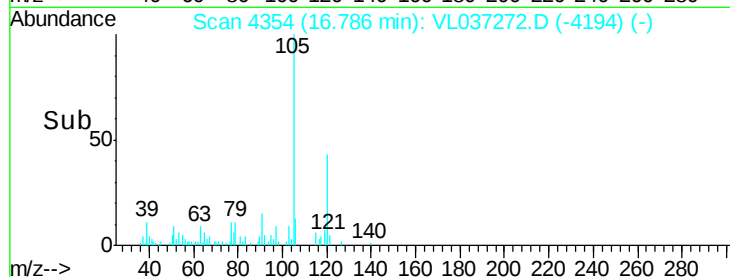
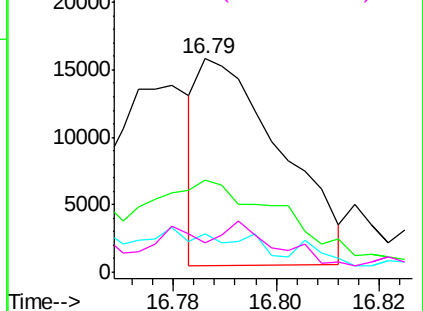


Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#75

1,3-Dichlorobenzene

Concen: 1.576 ppbv

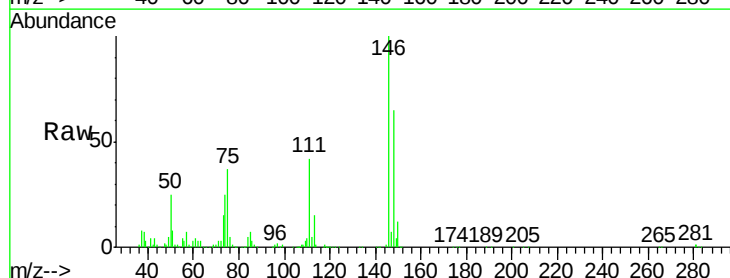
RT: 17.16 min Scan# 4471

Delta R.T. 0.16 min

Lab File: VL037272.D

Acq: 2 Jul 2021 13:14

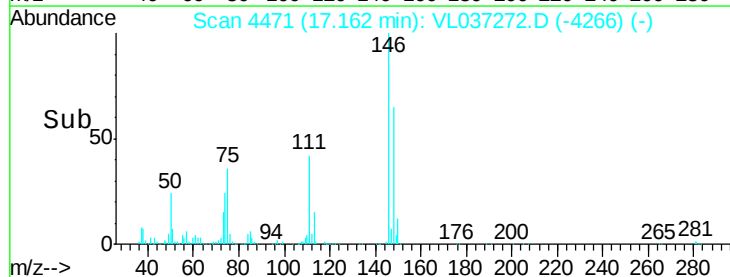
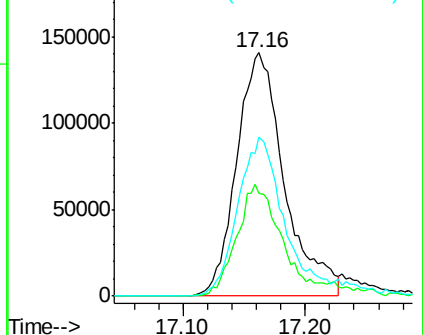
Tgt Ion:	146	Resp:	380351
Ion Ratio	Lower	Upper	
146	100		
111	47.0	22.2	66.6
148	67.9	32.4	97.2

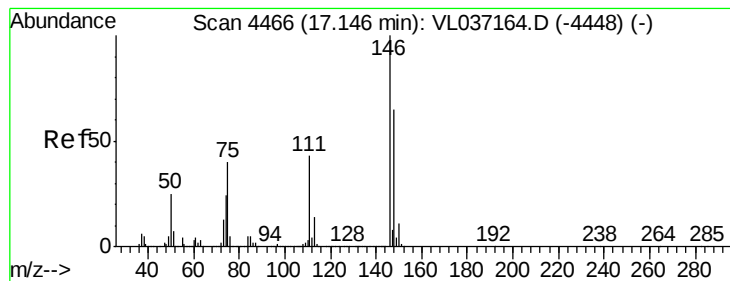


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V





#76

1,4-Dichlorobenzene

Concen: 1.578 ppbv

RT: 17.16 min Scan# 4471

Delta R.T. 0.02 min

Lab File: VL037272.D

Acq: 2 Jul 2021 13:14

Instrument :

MSVOA_L

ClientSampleId :

1

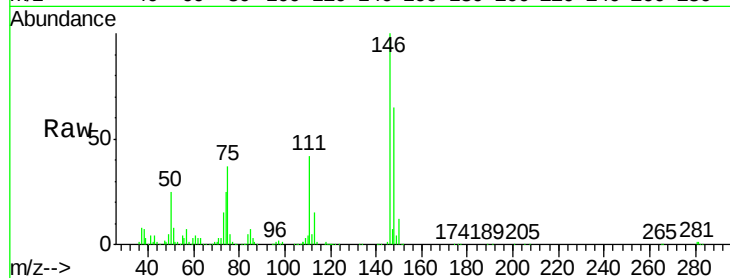
Tgt Ion:146 Resp: 380351

Ion Ratio Lower Upper

146 100

111 47.0 22.7 68.0

148 67.7 33.7 101.1



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V

