

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL041922\
 Data File : VL038950.D
 Acq On : 19 Apr 2022 15:13
 Operator : SY/AP
 Sample : N2465-03
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 OA-1

Quant Time: Apr 20 04:25:02 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL040522AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Apr 06 06:12:53 2022
 QLast Update : Wed Apr 06 06:12:53 2022
 Response via : Initial Calibration

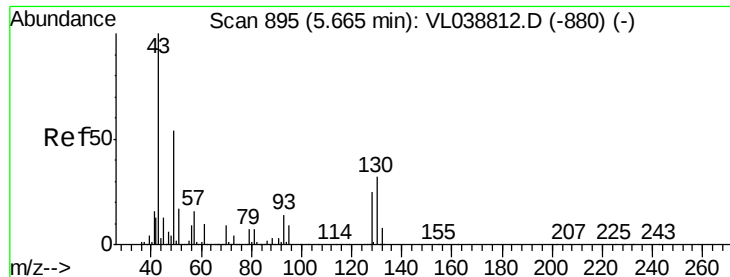
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.68	49	1087197	10.00	ppbv	0.02
33) 1,4-Difluorobenzene	7.19	114	2782566	10.00	ppbv	0.01
55) Chlorobenzene-d5	12.10	117	2375544	10.00	ppbv	0.02

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	1884385	10.46	ppbv	0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.06	85	103592	0.672	ppbv	97
3) Chlorodifluoromethane	3.00	51	56223	0.424	ppbv	94
4) Chloromethane	3.15	50	34130	0.497	ppbv	95
9) Propene	3.03	41	30820	0.439	ppbv	93
11) Trichlorofluoromethane	3.96	101	29458	0.238	ppbv	88
12) 1,1,2-Trichlorotrifluoroet	4.50	101	2924	0.031	ppbv #	12
13) Ethanol	3.62	45	82193	19.266	ppbv #	100
15) Acetone	3.87	43	303432	2.803	ppbv	98
19) Isopropyl Alcohol	3.99	45	73770	1.333	ppbv #	100
20) Methylene Chloride	4.36	84	185801	4.733	ppbv	93
23) Vinyl Acetate	5.09	43	11530	0.109	ppbv #	53
25) Ethyl Acetate	5.70	43	79330	0.289	ppbv #	80
26) Hexane	5.70	57	104941	0.839	ppbv #	42
34) 2-Butanone	5.27	43	48637	0.442	ppbv	91
35) Carbon Tetrachloride	7.03	117	6451	0.039	ppbv #	85
36) Benzene	6.90	78	32790	0.130	ppbv #	92
39) 1,2-Dichloropropane	7.19	63	718471	7.421	ppbv #	26
53) Toluene	9.81	91	52352	0.179	ppbv	99

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.68 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 19 Apr 2022 15:13

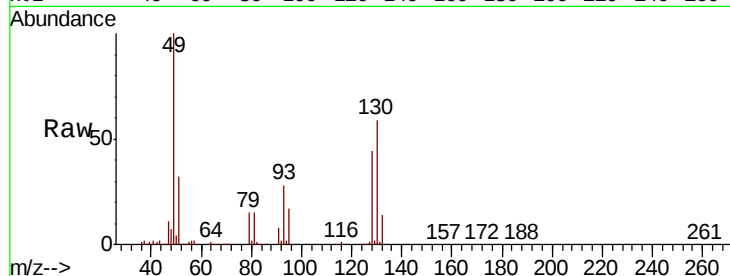
Tot Ion: 49 Resp: 1087197

Ion Ratio Lower Upper

49 100

128 47.5 24.1 72.3

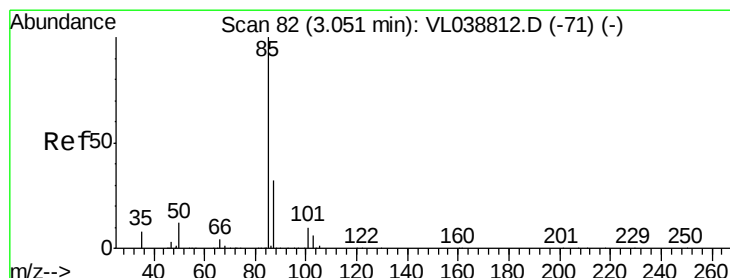
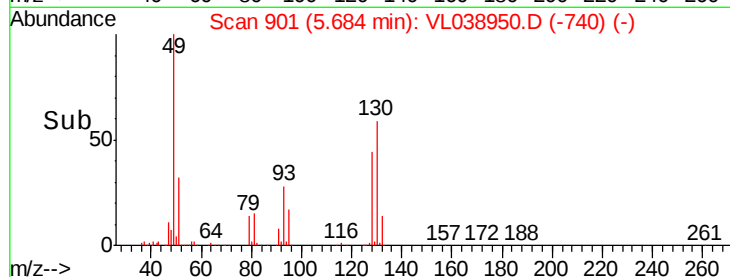
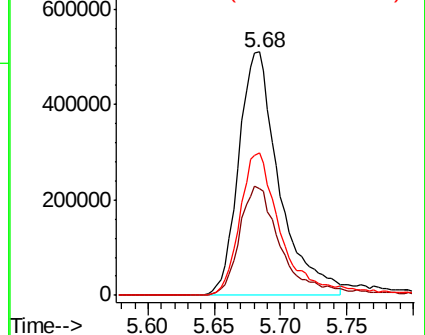
130 61.9 30.9 92.8



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: 0.672 ppbv

RT: 3.06 min Scan# 85

Delta R.T. 0.01 min

Lab File: VL038950.D

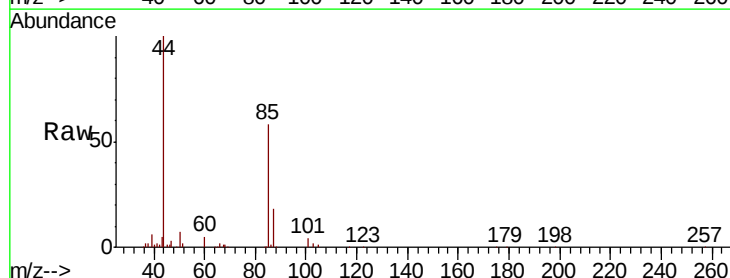
Acq: 19 Apr 2022 15:13

Tgt Ion: 85 Resp: 103592

Ion Ratio Lower Upper

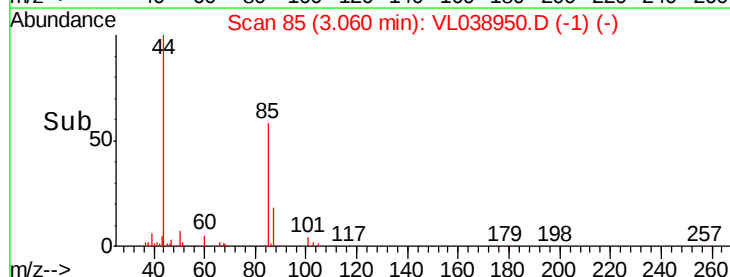
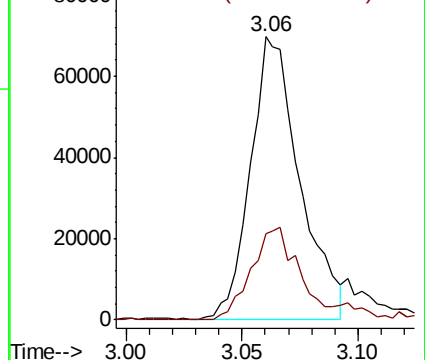
85 100

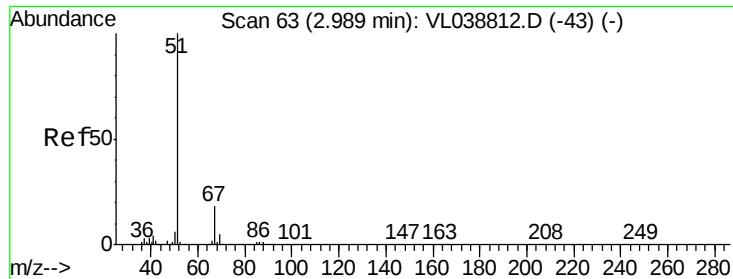
87 30.7 25.9 38.9



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.424 ppbv

RT: 3.00 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

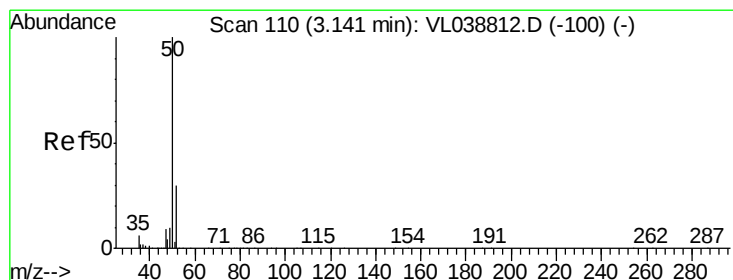
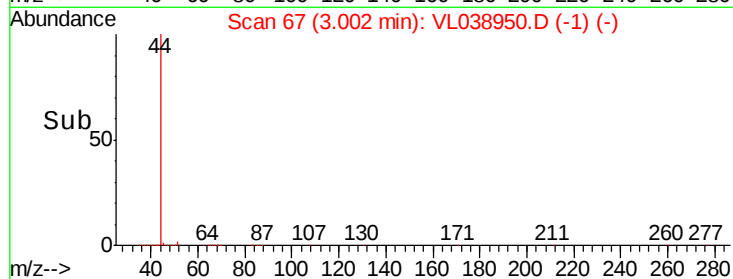
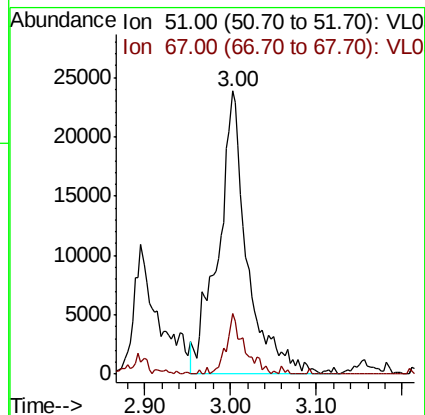
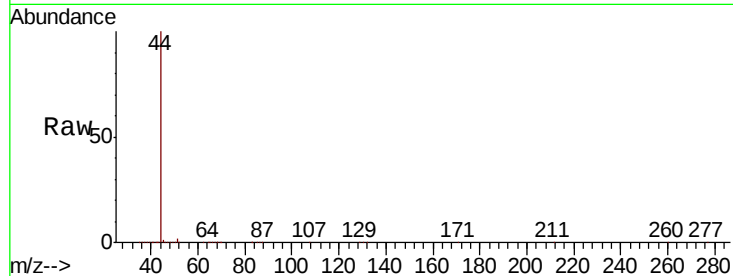
Acq: 19 Apr 2022 15:13

Tot Ion: 51 Resp: 56223

Ion Ratio Lower Upper

51 100

67 14.0 13.4 20.0



#4

Chloromethane

Concen: 0.497 ppbv

RT: 3.15 min Scan# 114

Delta R.T. 0.01 min

Lab File: VL038950.D

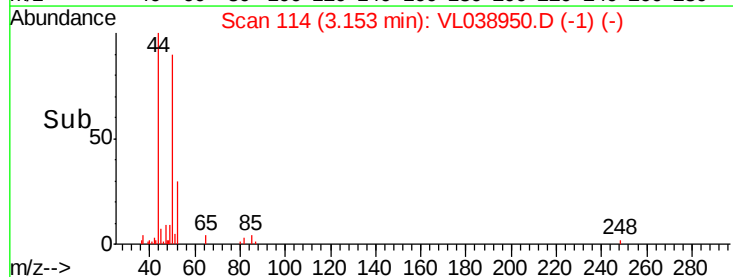
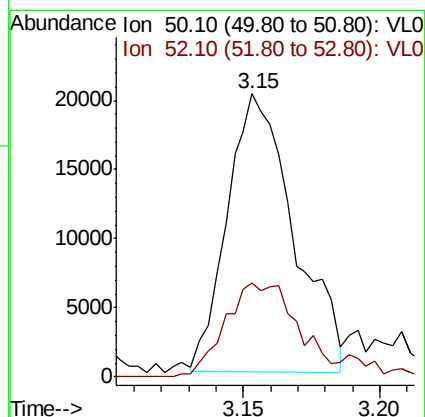
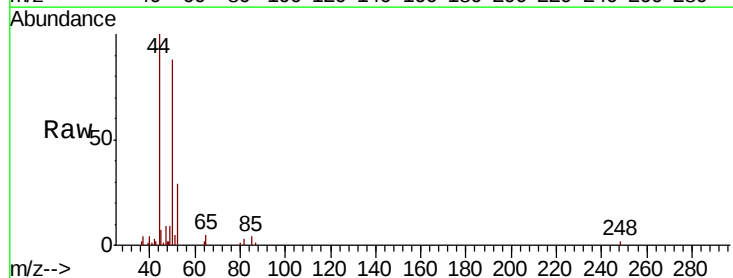
Acq: 19 Apr 2022 15:13

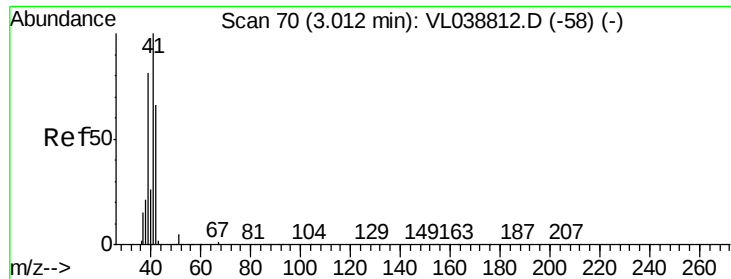
Tgt Ion: 50 Resp: 34130

Ion Ratio Lower Upper

50 100

52 33.1 24.3 36.5





#9

Propene

Concen: 0.439 ppbv

RT: 3.03 Instrument :

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

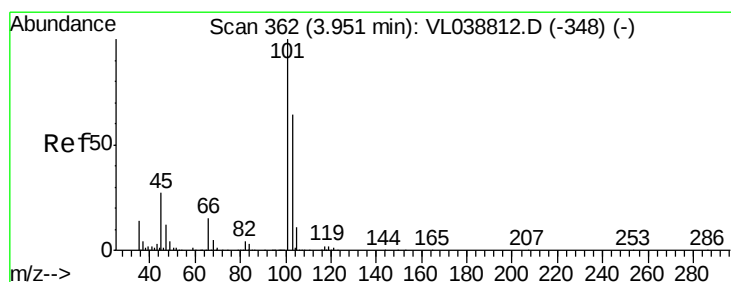
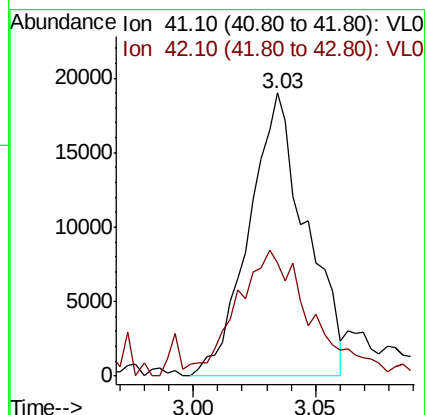
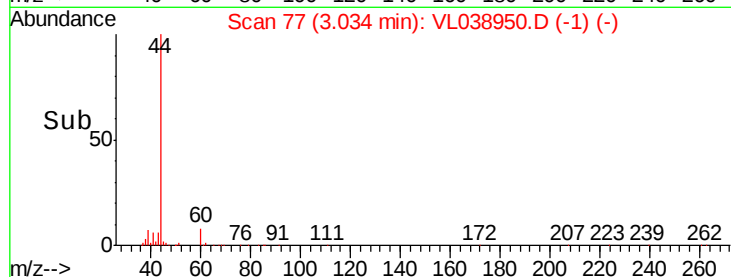
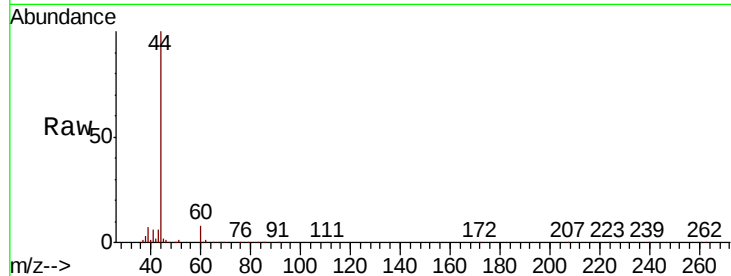
Acq: 19 Apr 2022 15:13

Tot Ion: 41 Resp: 30820

Ion Ratio Lower Upper

41 100

42 61.8 54.2 81.4



#11

Trichlorofluoromethane

Concen: 0.238 ppbv

RT: 3.96 min Scan# 366

Delta R.T. 0.01 min

Lab File: VL038950.D

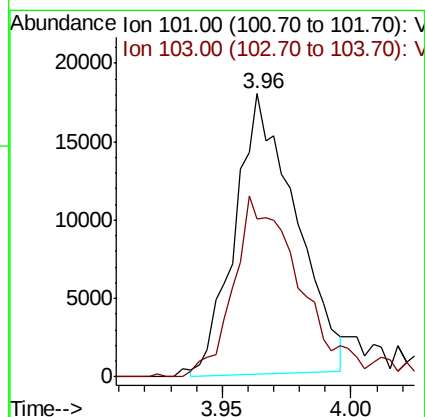
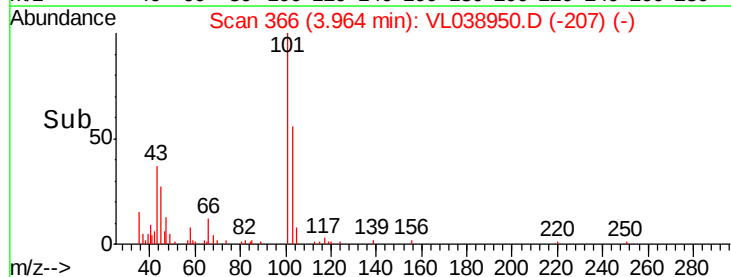
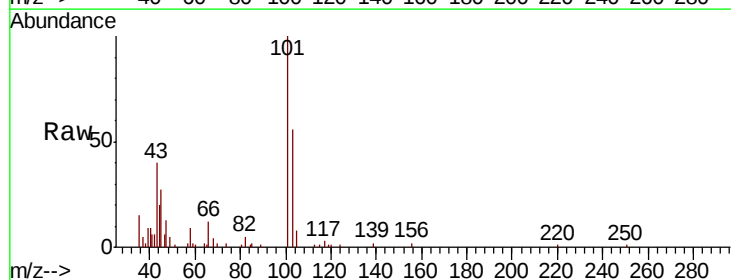
Acq: 19 Apr 2022 15:13

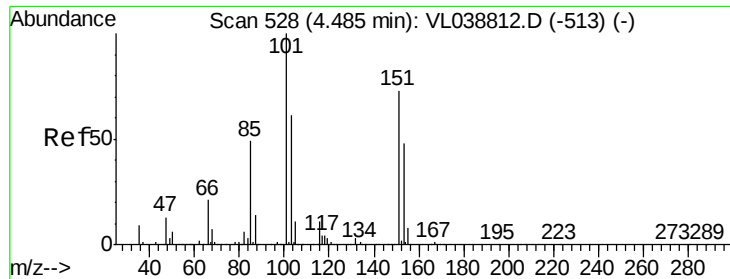
Tgt Ion: 101 Resp: 29458

Ion Ratio Lower Upper

101 100

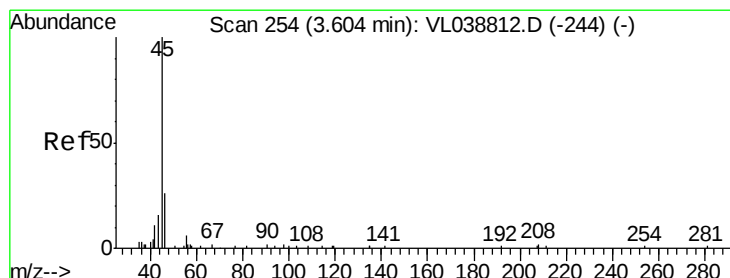
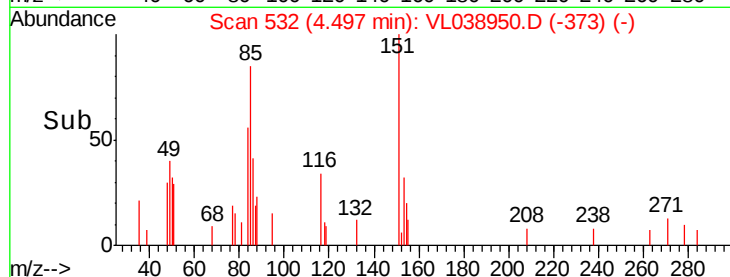
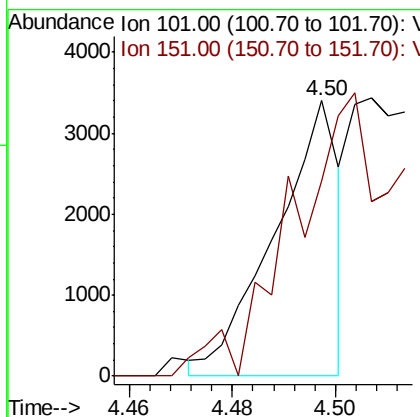
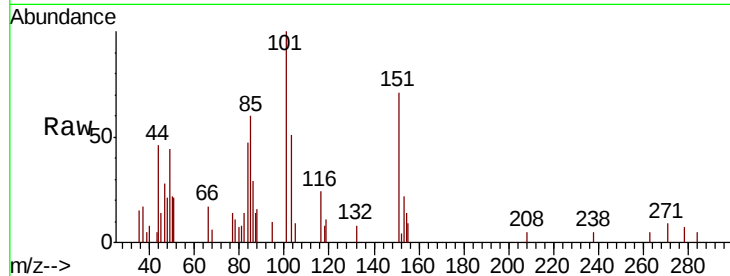
103 54.9 51.4 77.0





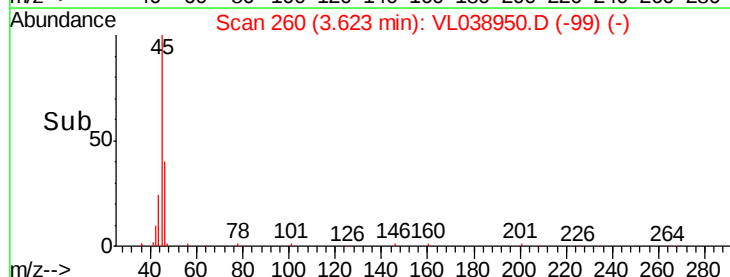
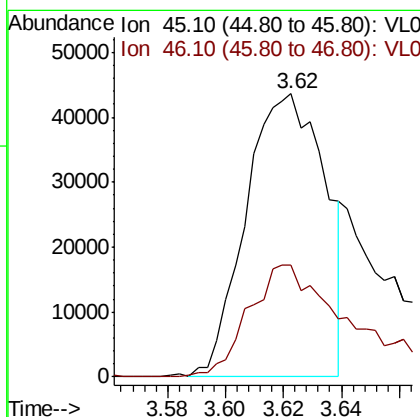
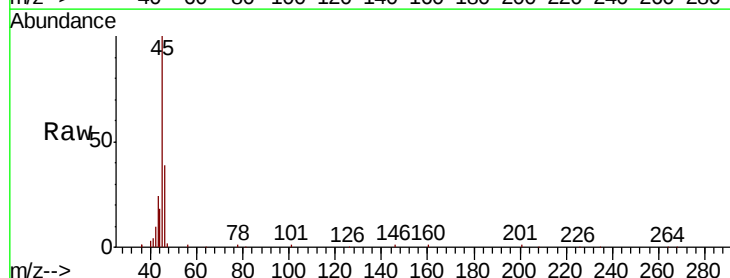
#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.031 ppbv
 RT: 4.50
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 19 Apr 2022 15:13

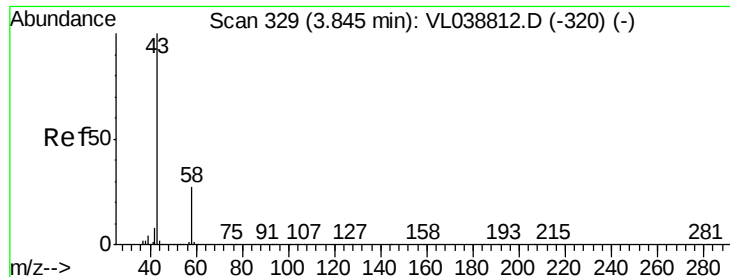
Tot Ion: 101 Resp: 2924
 Ion Ratio Lower Upper
 101 100
 151 0.0 59.9 89.9#



#13
 Ethanol
 Concen: 19.266 ppbv
 RT: 3.62 min Scan# 260
 Delta R.T. 0.02 min
 Lab File: VL038950.D
 Acq: 19 Apr 2022 15:13

Tgt Ion: 45 Resp: 82193
 Ion Ratio Lower Upper
 45 100
 46 60.2 0.0 0.0#





#15

Acetone

Concen: 2.803 ppbv

RT: 3.87

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

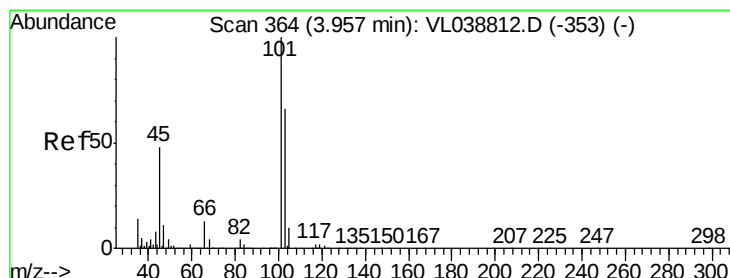
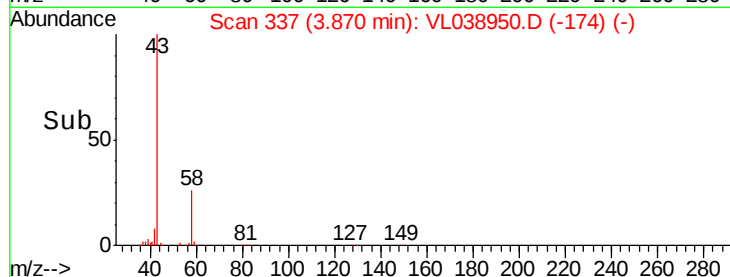
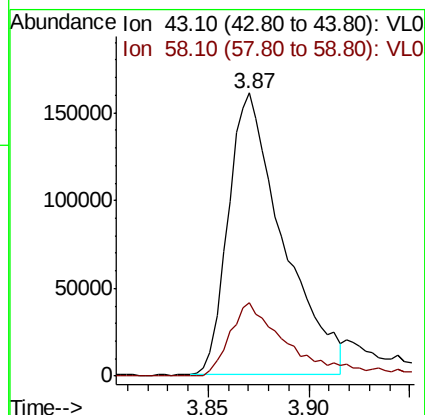
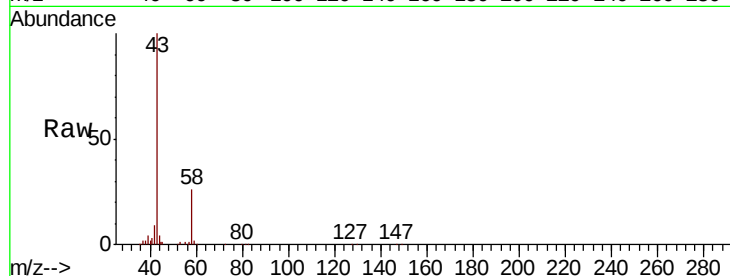
Acq: 19 Apr 2022 15:13

Tot Ion: 43 Resp: 303432

Ion Ratio Lower Upper

43 100

58 29.2 22.5 33.7



#19

Isopropyl Alcohol

Concen: 1.333 ppbv

RT: 3.99 min Scan# 374

Delta R.T. 0.03 min

Lab File: VL038950.D

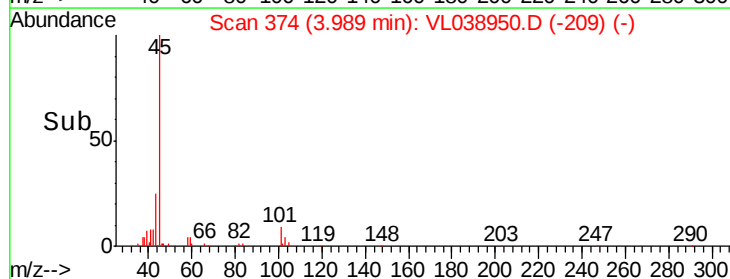
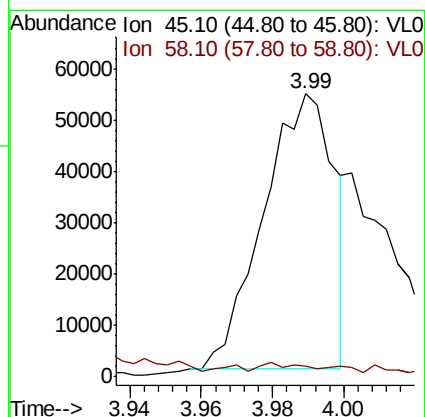
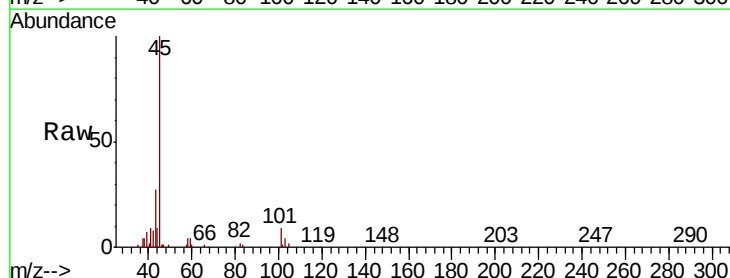
Acq: 19 Apr 2022 15:13

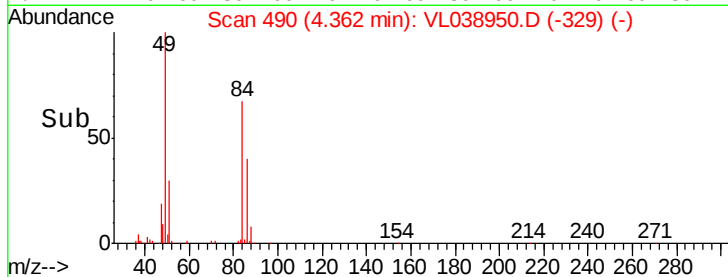
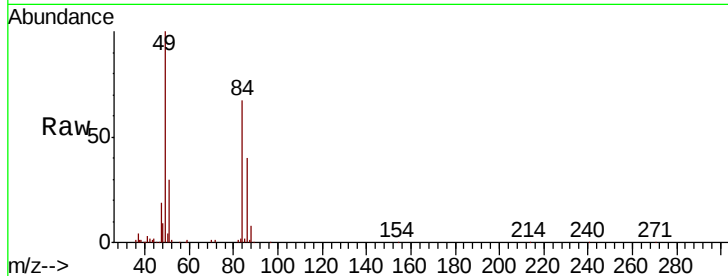
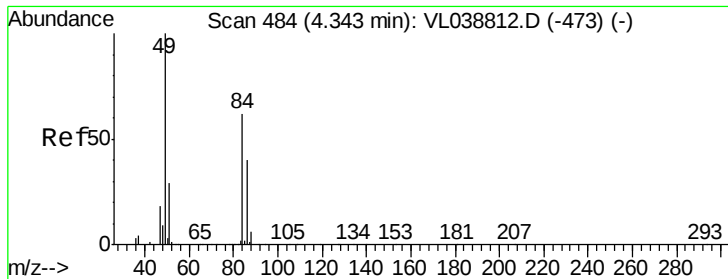
Tgt Ion: 45 Resp: 73770

Ion Ratio Lower Upper

45 100

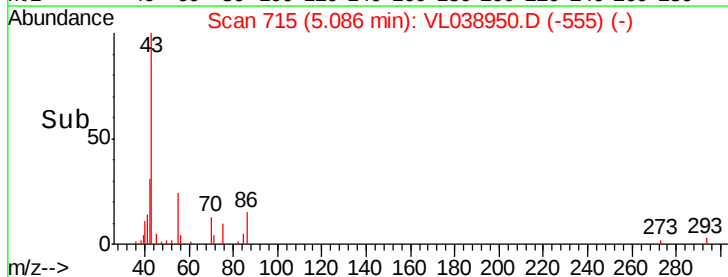
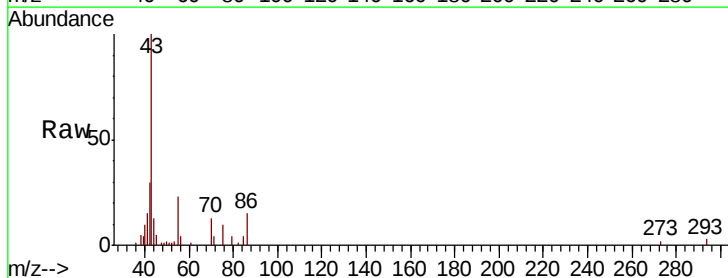
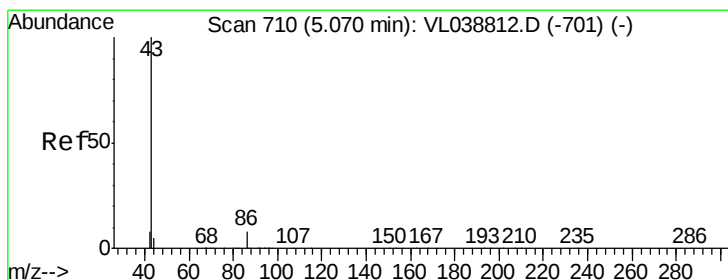
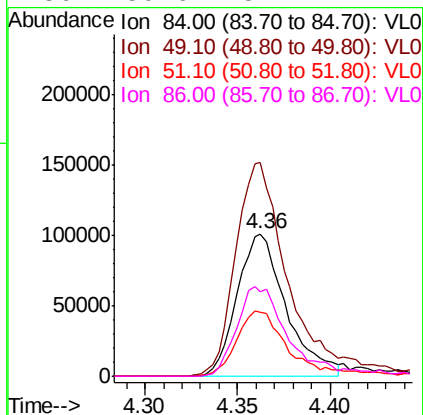
58 12.6 0.0 0.0#





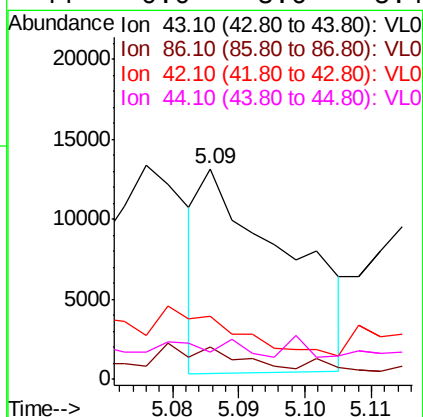
#20
Methylene Chloride
Concen: 4.733 ppbv
RT: 4.36
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 19 Apr 2022 15:13

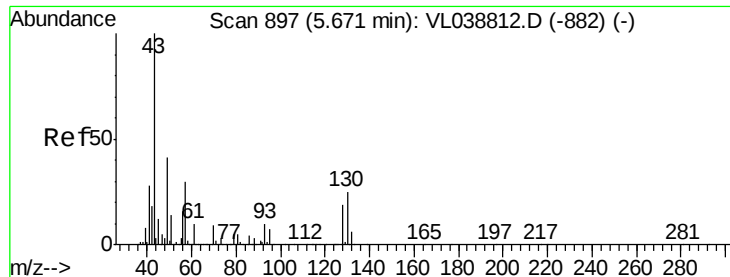
Tot Ion:	84	Resp:	185801
Ion	Ratio	Lower	Upper
84	100		
49	149.8	129.4	194.0
51	44.9	37.4	56.2
86	59.6	51.4	77.2



#23
Vinyl Acetate
Concen: 0.109 ppbv
RT: 5.09 min Scan# 715
Delta R.T. 0.02 min
Lab File: VL038950.D
Acq: 19 Apr 2022 15:13

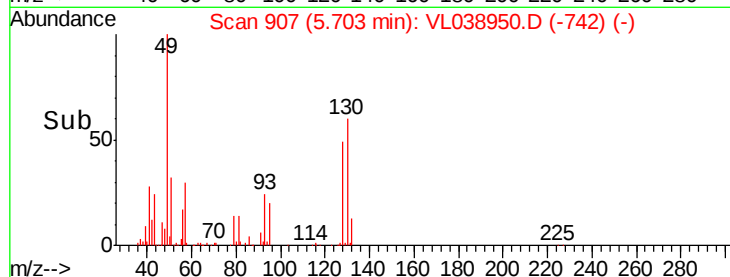
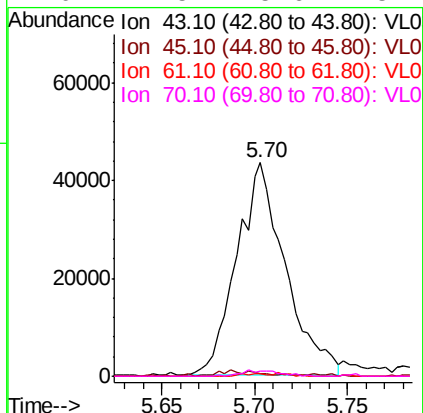
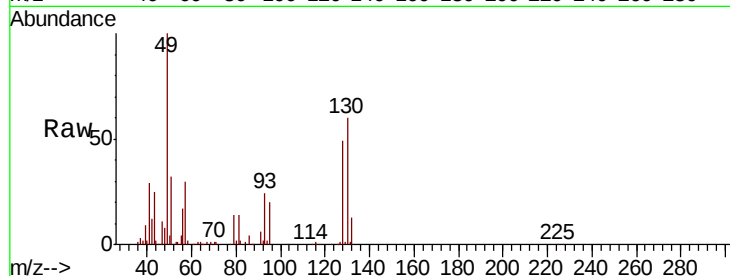
Tgt Ion:	43	Resp:	11530
Ion	Ratio	Lower	Upper
43	100		
86	18.1	5.8	8.6#
42	37.0	7.8	11.6#
44	0.0	3.6	5.4#





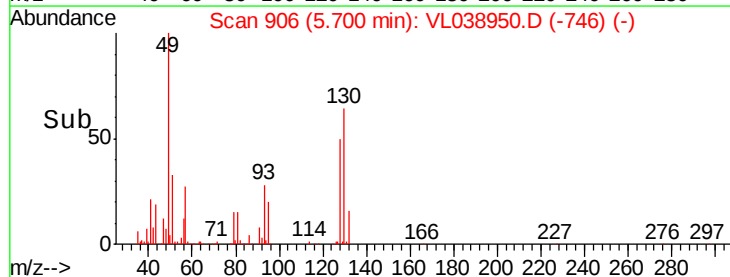
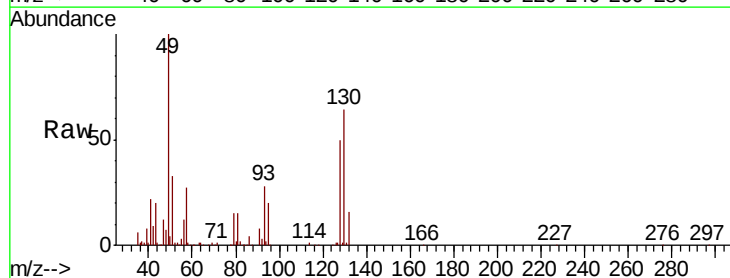
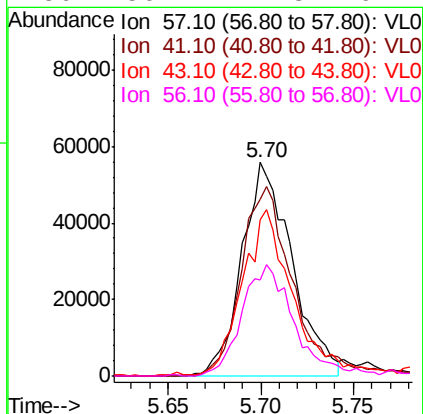
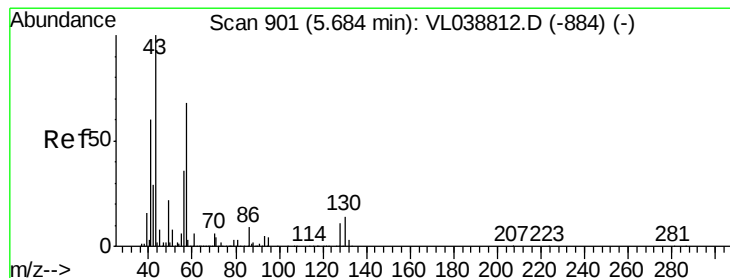
#25
Ethyl Acetate
Concen: 0.289 ppbv
RT: 5.70 min
Delta R.T.: 0.02 min
Lab File: VL038812.D
Acq: 19 Apr 2022 15:13

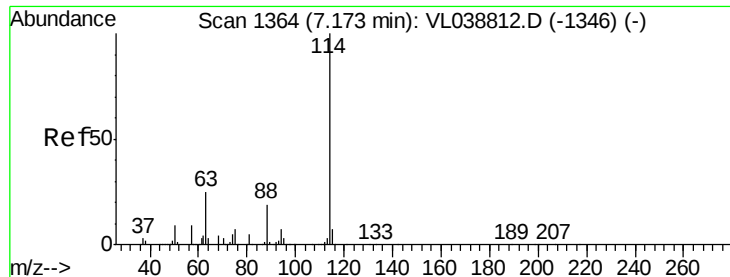
Tot Ion:	43	Resp:	79330
Ion	Ratio	Lower	Upper
43	100		
45	2.9	8.4	12.6#
61	1.1	7.9	11.9#
70	2.5	5.6	8.4#



#26
Hexane
Concen: 0.839 ppbv
RT: 5.70 min Scan# 906
Delta R.T.: 0.02 min
Lab File: VL038950.D
Acq: 19 Apr 2022 15:13

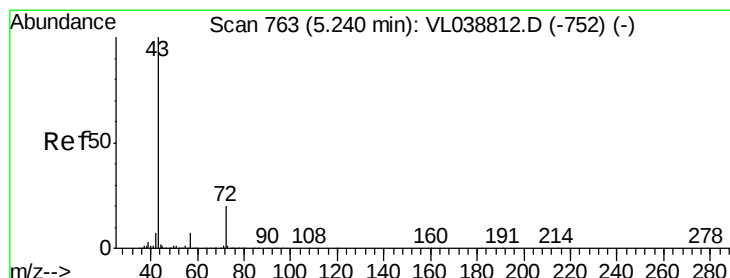
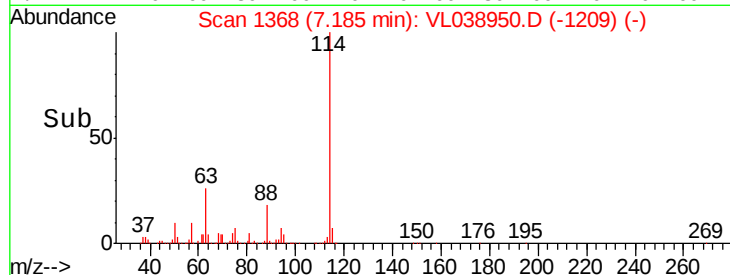
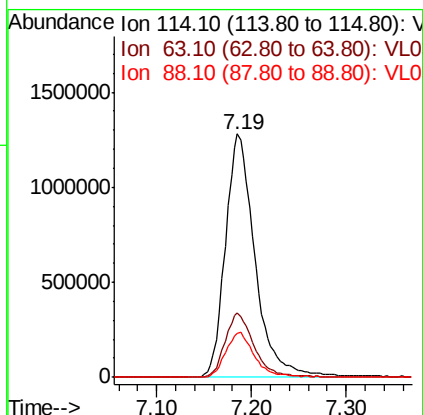
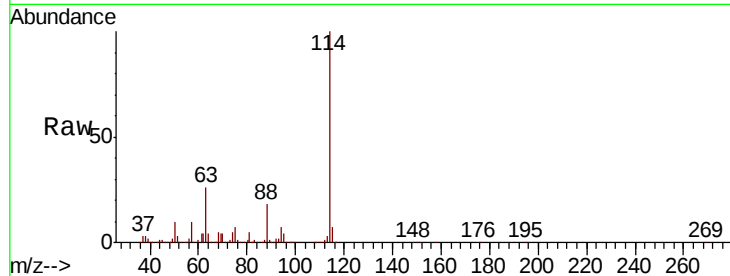
Tgt Ion:	57	Resp:	104941
Ion	Ratio	Lower	Upper
57	100		
41	94.0	72.0	108.0
43	81.5	186.6	280.0#
56	56.4	42.8	64.2





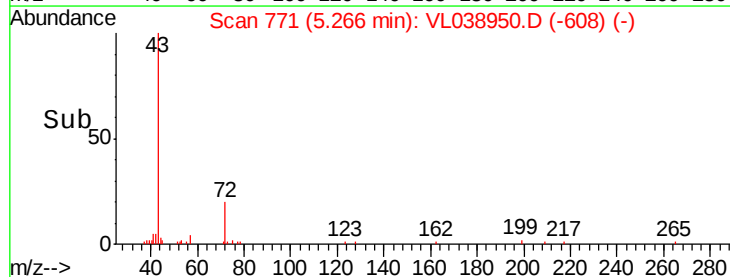
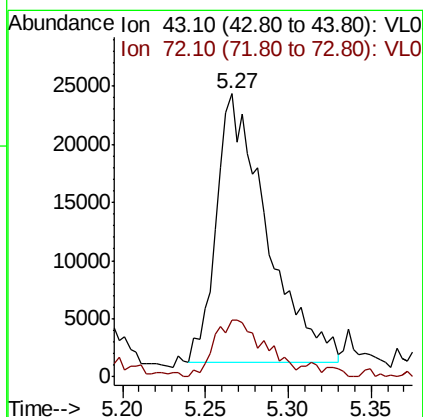
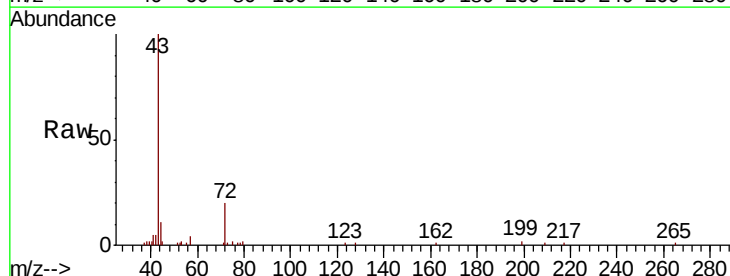
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.19
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId :
 Acq: 19 Apr 2022 15:13

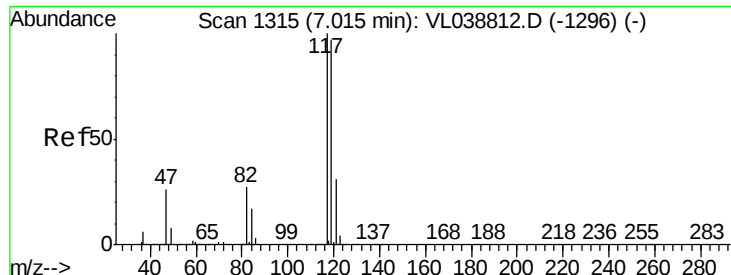
Tot Ion:114 Resp: 2782566
 Ion Ratio Lower Upper
 114 100
 63 26.4 19.8 29.8
 88 18.2 14.2 21.4



#34
 2-Butanone
 Concen: 0.442 ppbv
 RT: 5.27 min Scan# 771
 Delta R.T.: 0.03 min
 Lab File: VL038950.D
 Acq: 19 Apr 2022 15:13

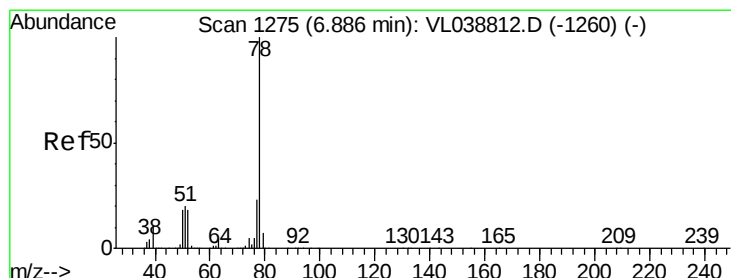
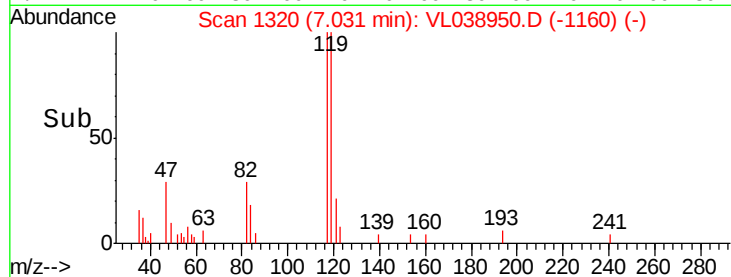
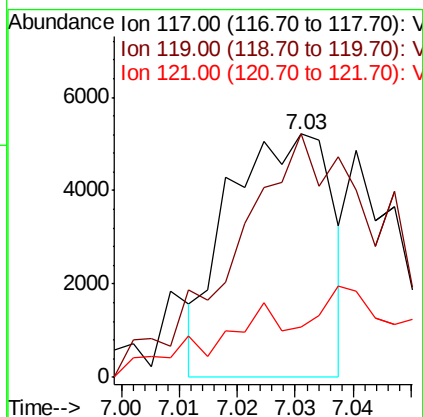
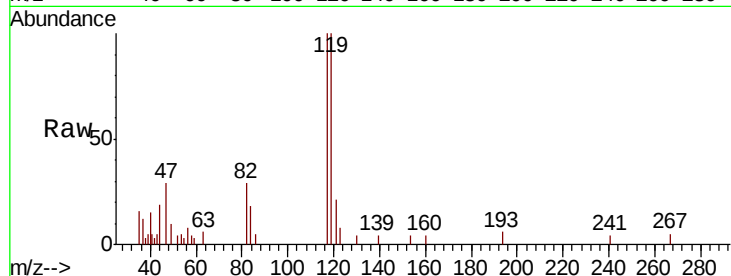
Tgt Ion: 43 Resp: 48637
 Ion Ratio Lower Upper
 43 100
 72 25.1 16.9 25.3





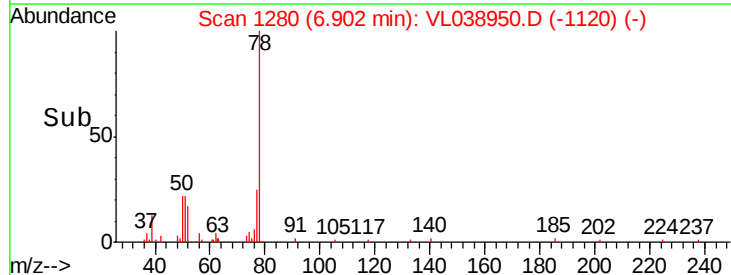
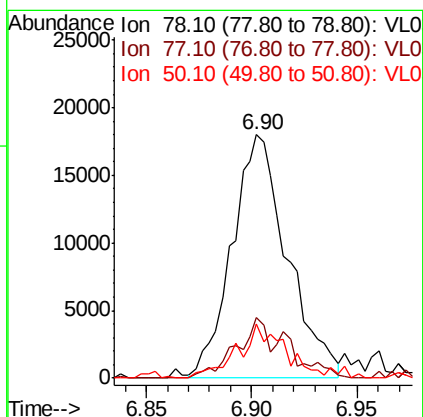
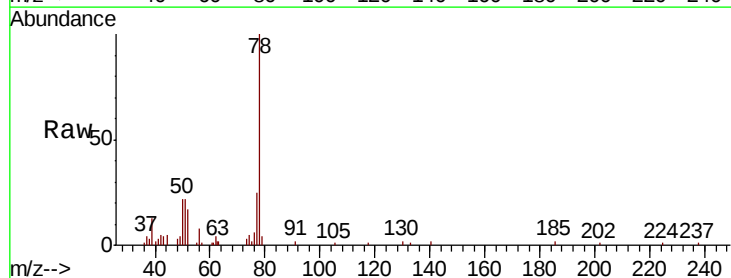
#35
Carbon Tetrachloride
Concen: 0.039 ppbv
RT: 7.03
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 19 Apr 2022 15:13

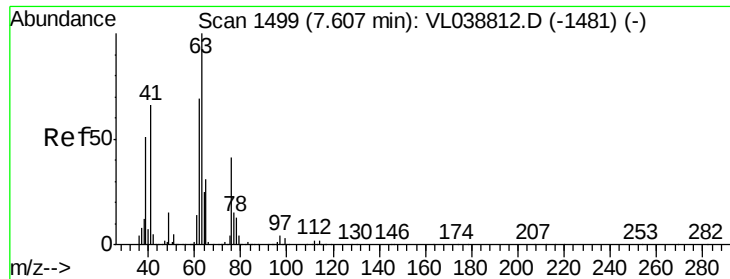
Tot Ion: 117 Resp: 6451
Ion Ratio Lower Upper
117 100
119 92.4 77.7 116.5
121 5.7 24.5 36.7#



#36
Benzene
Concen: 0.130 ppbv
RT: 6.90 min Scan# 1280
Delta R.T. 0.02 min
Lab File: VL038950.D
Acq: 19 Apr 2022 15:13

Tgt Ion: 78 Resp: 32790
Ion Ratio Lower Upper
78 100
77 25.1 18.2 27.2
50 22.7 14.0 21.0#





#39

1,2-Dichloropropane

Concen: 7.421 ppbv

RT: 7.19 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 19 Apr 2022 15:13

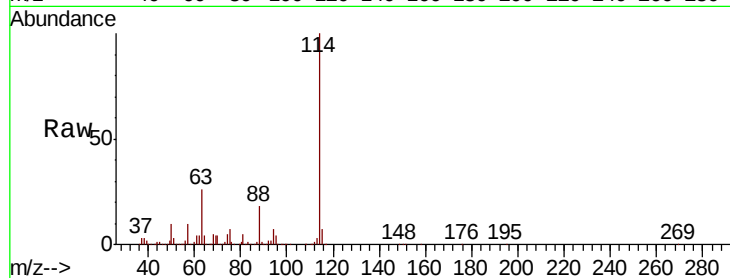
Tot Ion: 63 Resp: 718471

Ion Ratio Lower Upper

63 100

41 0.0 53.0 79.6#

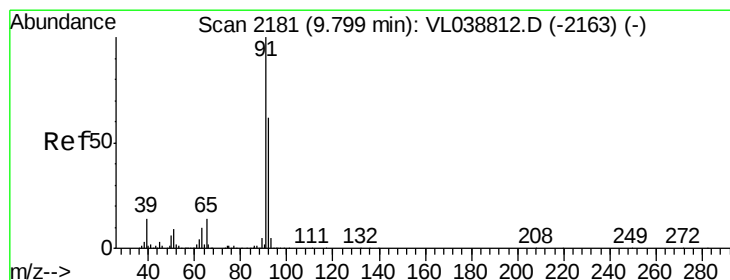
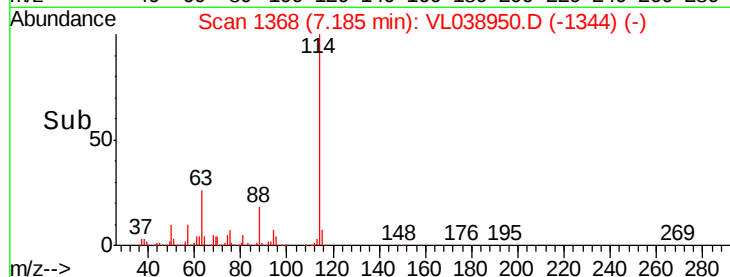
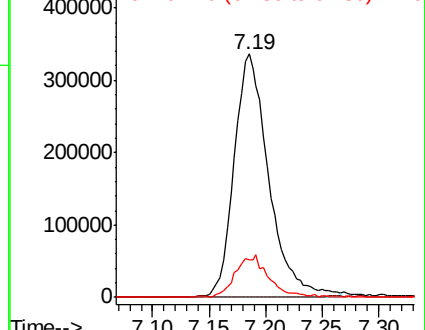
62 15.4 55.0 82.4#



Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0



#53

Toluene

Concen: 0.179 ppbv

RT: 9.81 min Scan# 2185

Delta R.T. 0.01 min

Lab File: VL038950.D

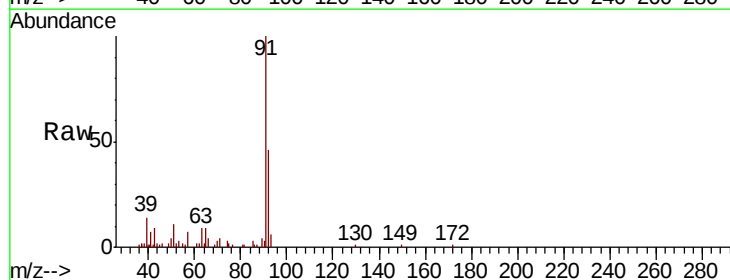
Acq: 19 Apr 2022 15:13

Tgt Ion: 91 Resp: 52352

Ion Ratio Lower Upper

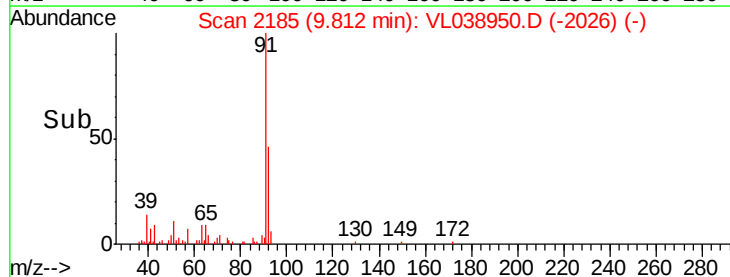
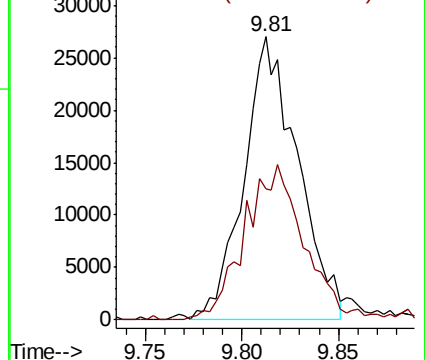
91 100

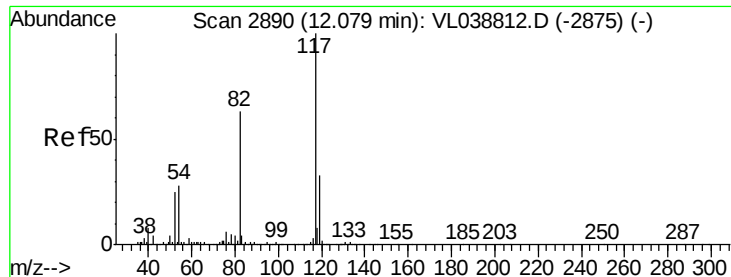
92 62.1 49.2 73.8



Abundance Ion 91.10 (90.80 to 91.80): VL0

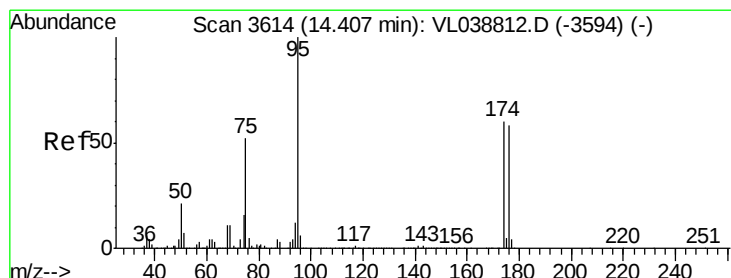
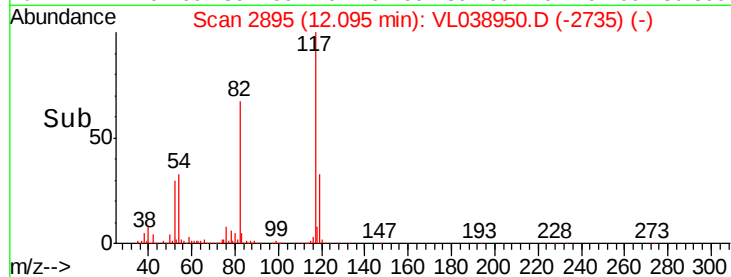
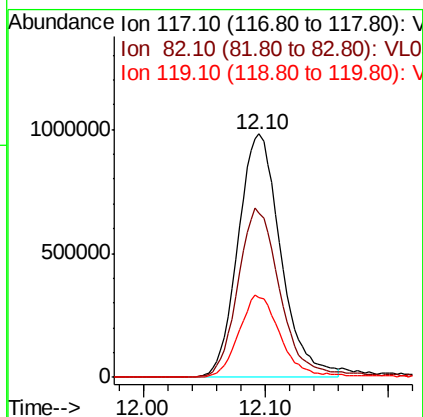
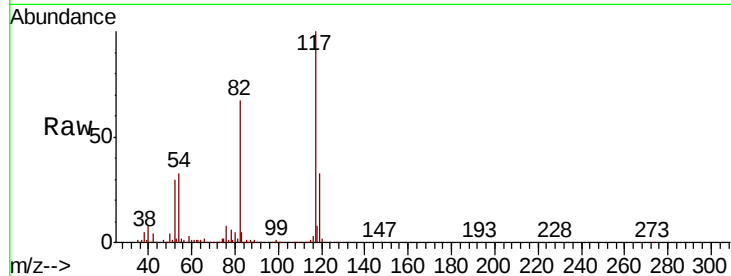
Ion 92.10 (91.80 to 92.80): VL0





#55
 Chlorobenzene-d5
 Concen: 10.000 ppbv
 RT: 12.10 min
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId :
 Acq: 19 Apr 2022 15:13

Tot Ion:117 Resp: 2375544
 Ion Ratio Lower Upper
 117 100
 82 71.2 53.0 79.6
 119 33.5 24.9 37.3



#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.458 ppbv
 RT: 14.42 min Scan# 3619
 Delta R.T.: 0.02 min
 Lab File: VL038950.D
 Acq: 19 Apr 2022 15:13

Tgt Ion: 95 Resp: 1884385
 Ion Ratio Lower Upper
 95 100
 174 63.2 52.0 78.0
 175 4.7 4.0 6.0

