

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL061422\
 Data File : VL039293.D
 Acq On : 15 Jun 2022 10:30
 Operator : SY/AP
 Sample : N3326-05DUP
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA L
 ClientSampleId :
 OA1DUP

Quant Time: Jun 16 01:15:00 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL053122AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Jun 01 01:22:18 2022
 QLast Update : Wed Jun 01 01:22:18 2022
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1370036	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.17	114	3628793	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.07	117	3007894	10.00	ppbv	-0.02

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.40	95	2365916	9.51	ppbv	-0.02	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	95.10%	

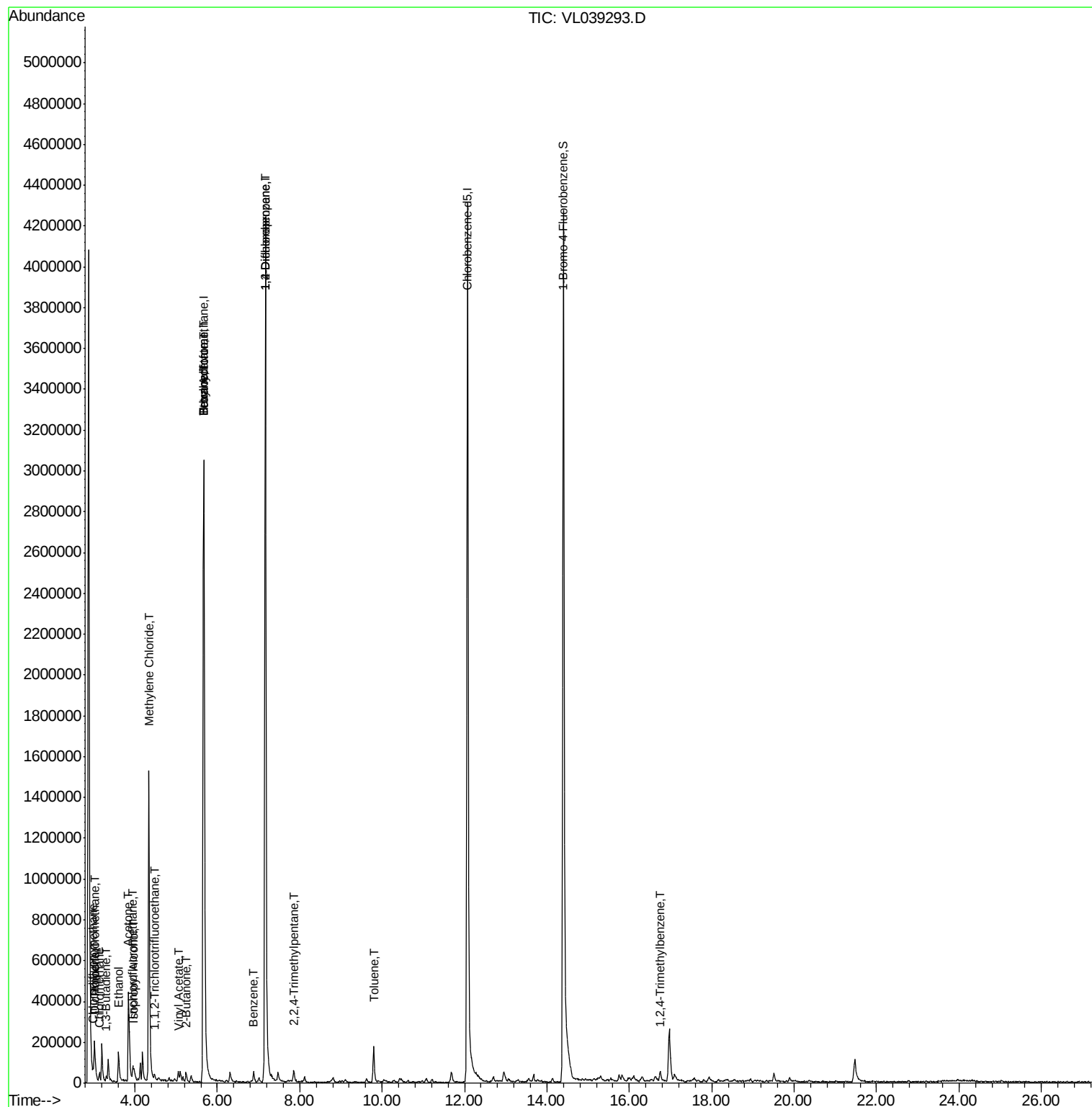
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	51665	0.215	ppbv	97
3) Chlorodifluoromethane	2.98	51	68113	0.391	ppbv #	84
4) Chloromethane	3.14	50	41256	0.461	ppbv	97
9) Propene	3.02	41	49488	0.651	ppbv	84
11) Trichlorofluoromethane	3.95	101	40149	0.184	ppbv	89
12) 1,1,2-Trichlorotrifluoroet	4.48	101	9113	0.063	ppbv	97
13) Ethanol	3.60	45	168021	40.533	ppbv #	100
15) Acetone	3.84	43	583668	4.090	ppbv	97
16) 1,3-Butadiene	3.31	39	2364	0.031	ppbv #	13
19) Isopropyl Alcohol	3.97	45	69985	1.046	ppbv #	1
20) Methylene Chloride	4.34	84	653726	10.870	ppbv	92
23) Vinyl Acetate	5.08	43	3588	0.030	ppbv #	77
25) Ethyl Acetate	5.68	43	573795	1.784	ppbv #	79
26) Hexane	5.68	57	796074	5.632	ppbv #	41
34) 2-Butanone	5.24	43	55571	0.282	ppbv	94
36) Benzene	6.88	78	34050	0.116	ppbv #	85
39) 1,2-Dichloropropane	7.17	63	881468	7.522	ppbv #	24
41) Tetrahydrofuran	5.68	42	295594	2.493	ppbv #	49
44) 2,2,4-Trimethylpentane	7.86	57	24342	0.047	ppbv #	43
53) Toluene	9.80	91	132197	0.390	ppbv	98
74) 1,2,4-Trimethylbenzene	16.75	105	31358	0.078	ppbv #	51

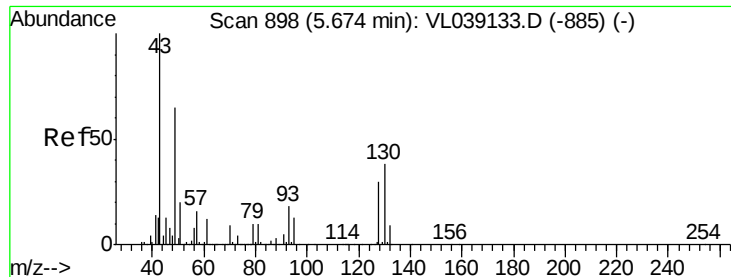
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 15 Jun 2022 10:30

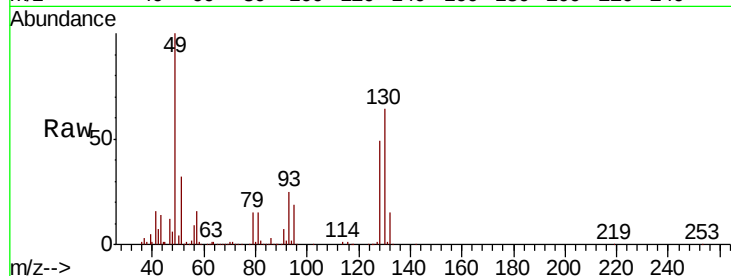
Tot Ion: 49 Resp: 1370036

Ion Ratio Lower Upper

49 100

128 50.8 24.7 74.1

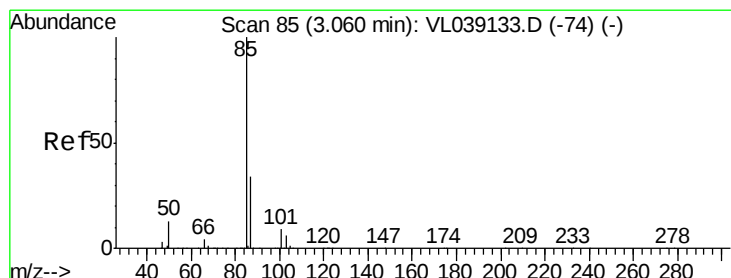
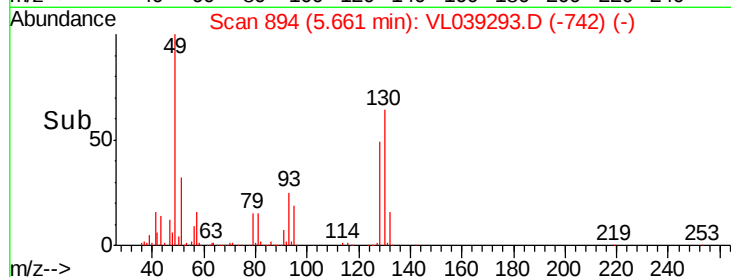
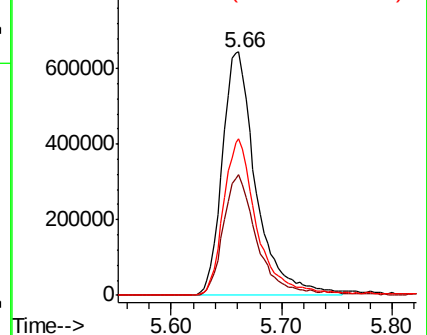
130 65.1 31.4 94.0



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: 0.215 ppbv

RT: 3.04 min Scan# 80

Delta R.T. -0.02 min

Lab File: VL039293.D

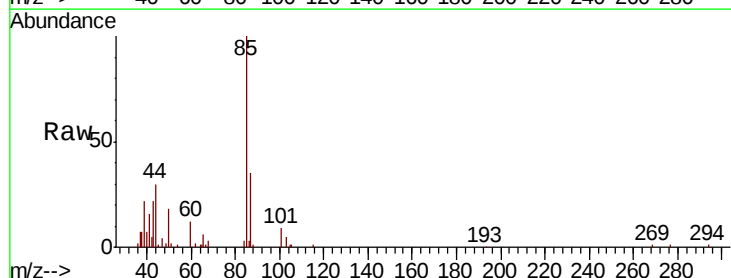
Acq: 15 Jun 2022 10:30

Tgt Ion: 85 Resp: 51665

Ion Ratio Lower Upper

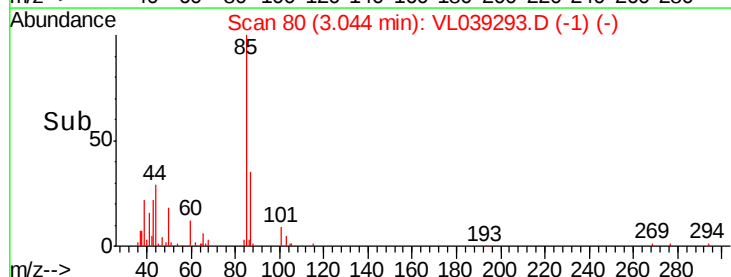
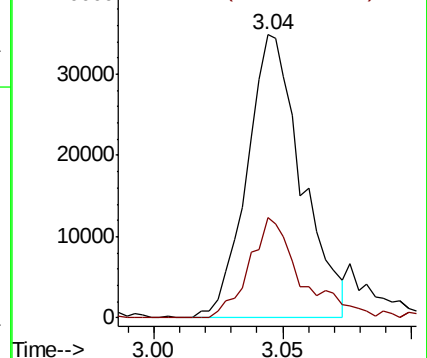
85 100

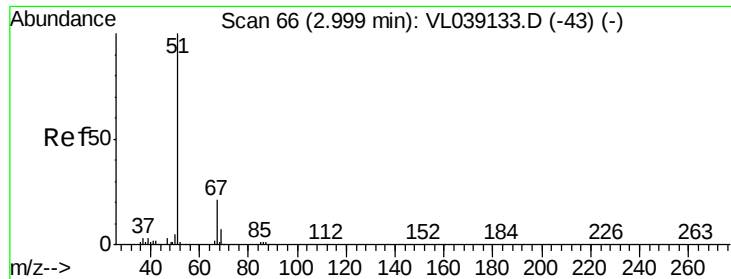
87 35.4 26.9 40.3



Abundance Ion 85.00 (84.70 to 85.70): VL0

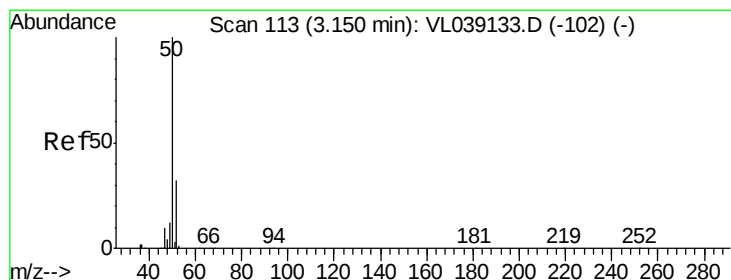
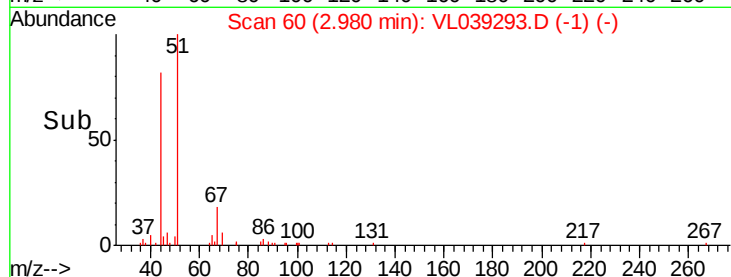
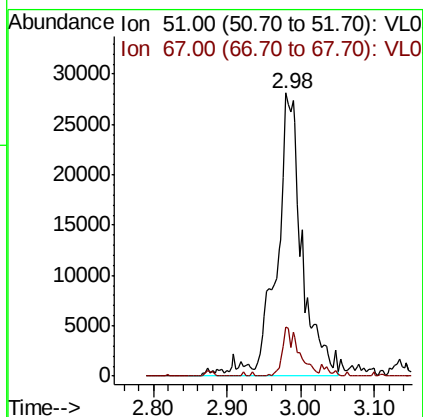
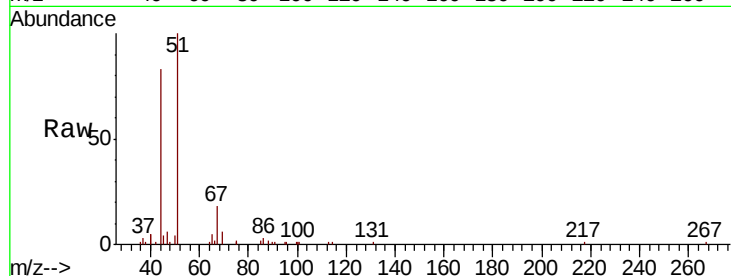
Ion 87.00 (86.70 to 87.70): VL0





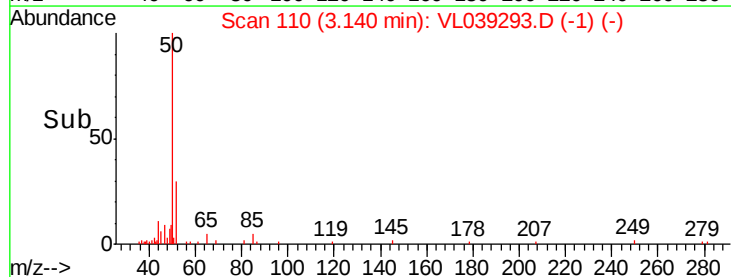
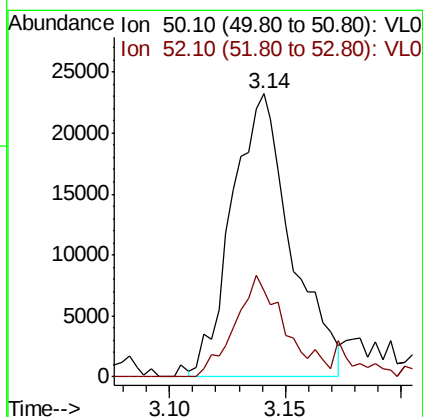
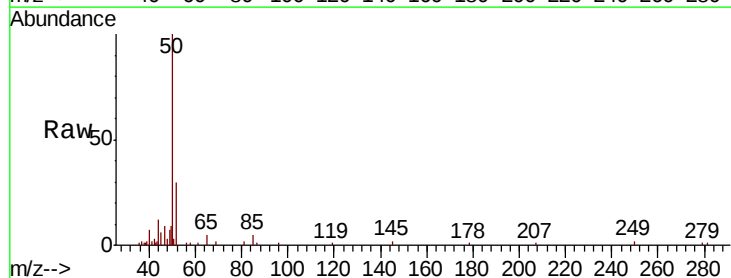
#3
 Chlorodifluoromethane
 Concen: 0.391 ppbv
 RT: 2.98
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 15 Jun 2022 10:30

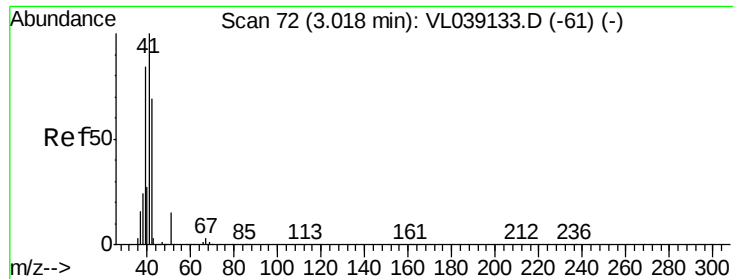
Tot Ion: 51 Resp: 68113
 Ion Ratio Lower Upper
 51 100
 67 12.7 16.2 24.4#



#4
 Chloromethane
 Concen: 0.461 ppbv
 RT: 3.14 min Scan# 110
 Delta R.T. -0.01 min
 Lab File: VL039293.D
 Acq: 15 Jun 2022 10:30

Tgt Ion: 50 Resp: 41256
 Ion Ratio Lower Upper
 50 100
 52 30.6 25.9 38.9





#9

Propene

Concen: 0.651 ppbv

RT: 3.02 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

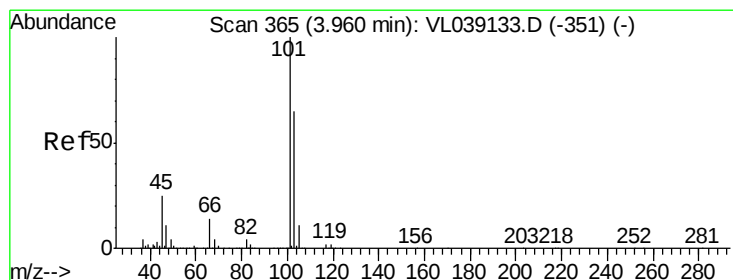
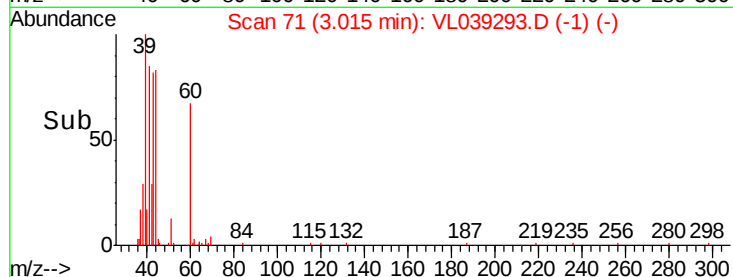
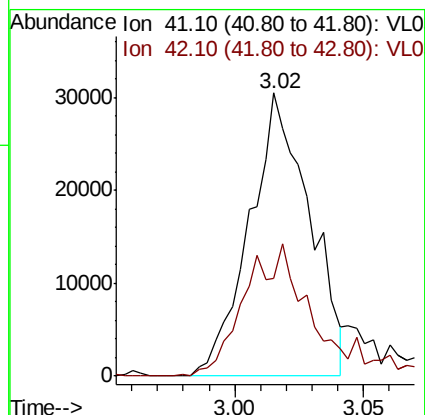
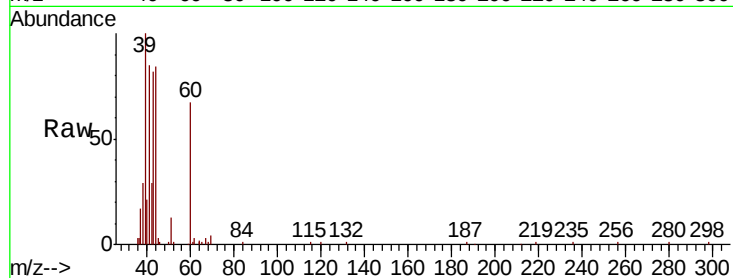
Acq: 15 Jun 2022 10:30 OA1DUP

Tot Ion: 41 Resp: 49488

Ion Ratio Lower Upper

41 100

42 56.1 55.4 83.2



#11

Trichlorofluoromethane

Concen: 0.184 ppbv

RT: 3.95 min Scan# 361

Delta R.T. -0.01 min

Lab File: VL039293.D

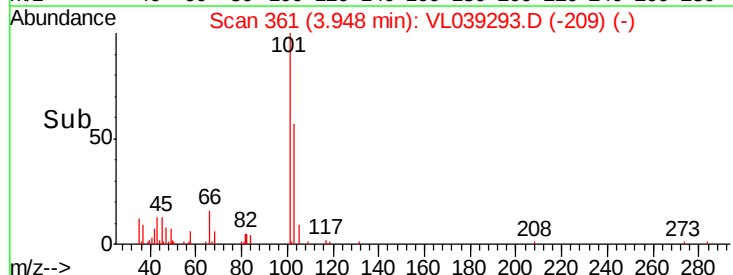
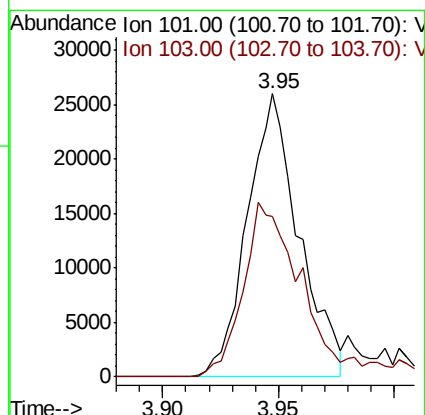
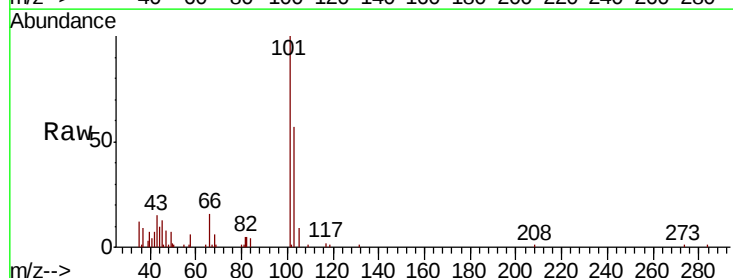
Acq: 15 Jun 2022 10:30

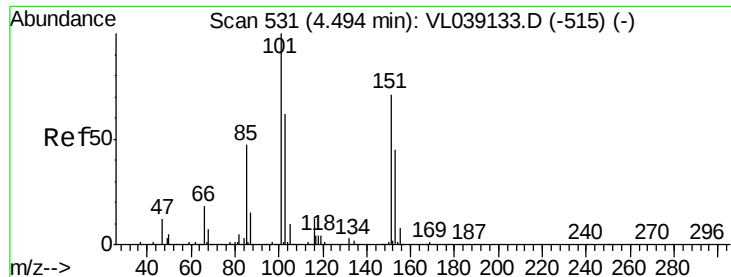
Tgt Ion: 101 Resp: 40149

Ion Ratio Lower Upper

101 100

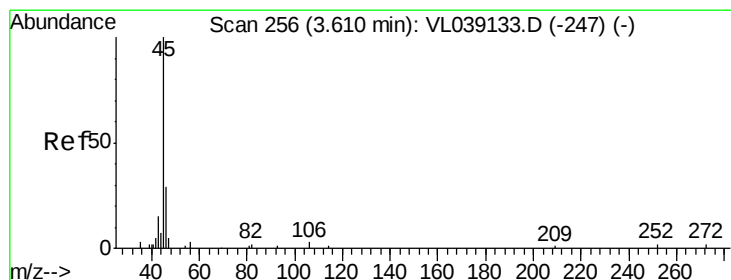
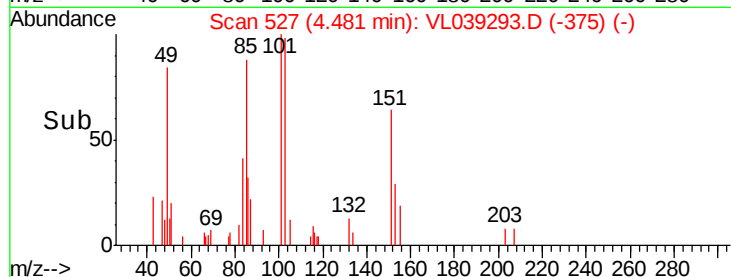
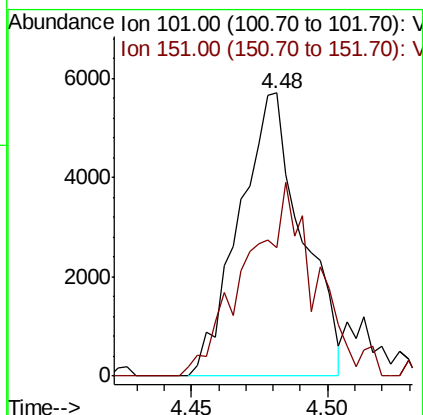
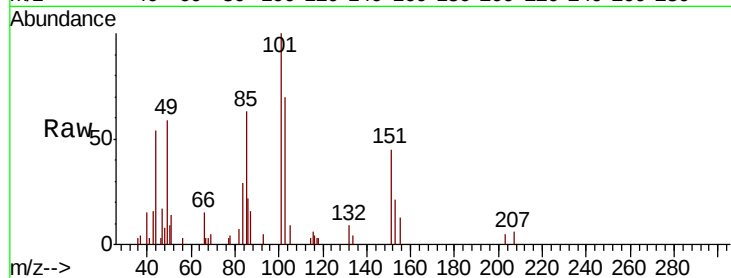
103 55.9 51.7 77.5





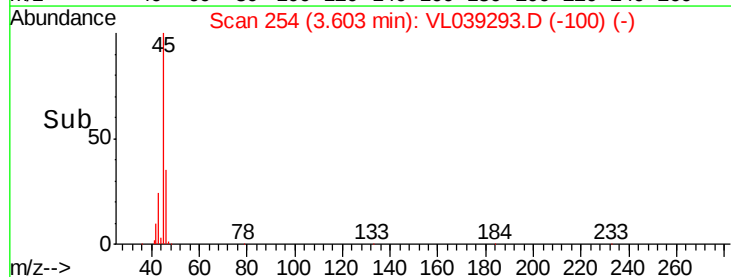
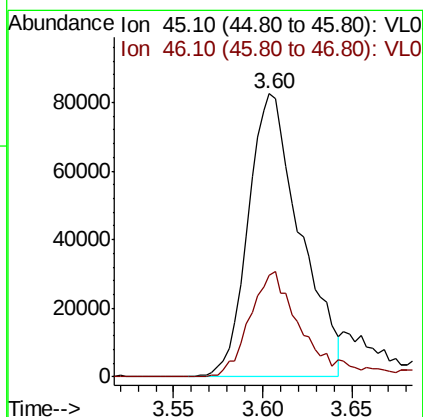
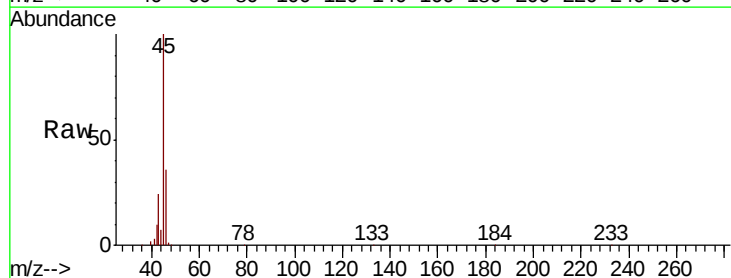
#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.063 ppbv
 RT: 4.48
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 15 Jun 2022 10:30

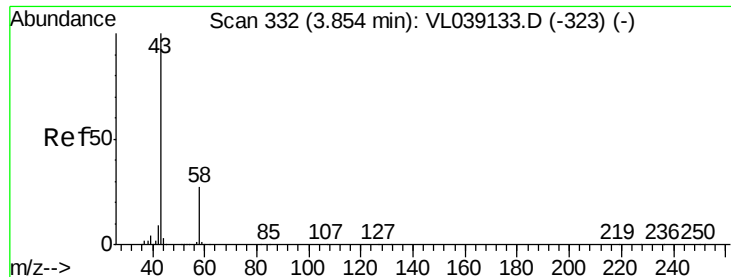
Tot Ion: 101 Resp: 9113
 Ion Ratio Lower Upper
 101 100
 151 76.6 59.4 89.0



#13
 Ethanol
 Concen: 40.533 ppbv
 RT: 3.60 min Scan# 254
 Delta R.T. -0.01 min
 Lab File: VL039293.D
 Acq: 15 Jun 2022 10:30

Tgt Ion: 45 Resp: 168021
 Ion Ratio Lower Upper
 45 100
 46 39.3 0.0 0.0#





#15

Acetone

Concen: 4.090 ppbv

RT: 3.84 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

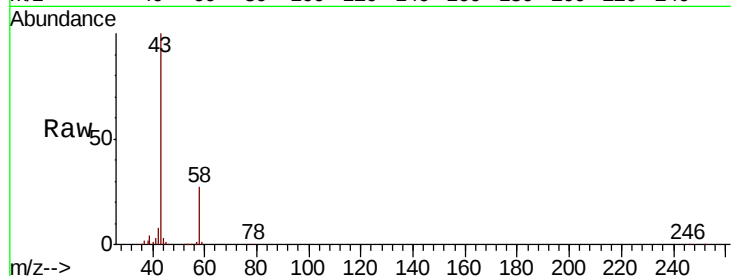
Acq: 15 Jun 2022 10:30

Tot Ion: 43 Resp: 583668

Ion Ratio Lower Upper

43 100

58 26.5 22.5 33.7



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

3.84

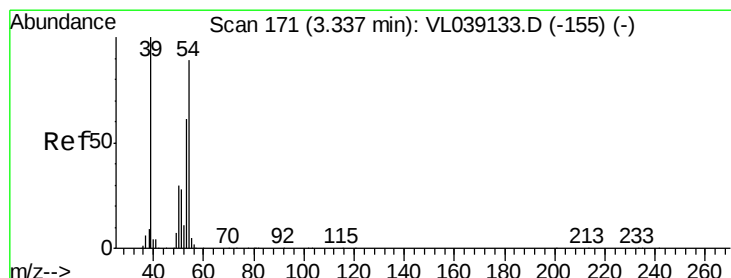
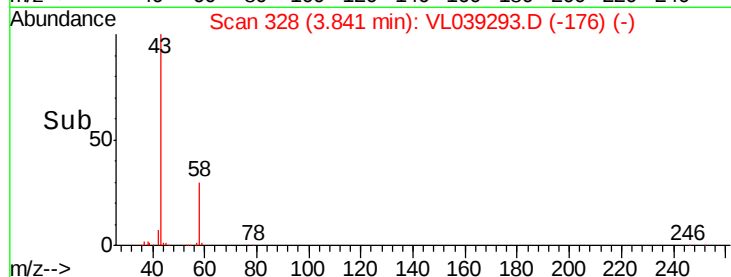
300000

200000

100000

0

Time--> 3.75 3.80 3.85 3.90 3.95



#16

1,3-Butadiene

Concen: 0.031 ppbv

RT: 3.31 min Scan# 162

Delta R.T. -0.03 min

Lab File: VL039293.D

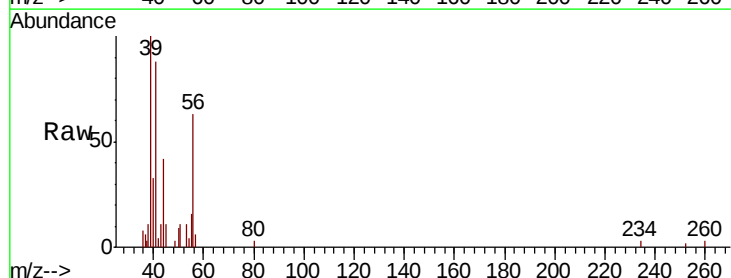
Acq: 15 Jun 2022 10:30

Tgt Ion: 39 Resp: 2364

Ion Ratio Lower Upper

39 100

54 159.8 65.8 98.6#



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0

3.31

8000

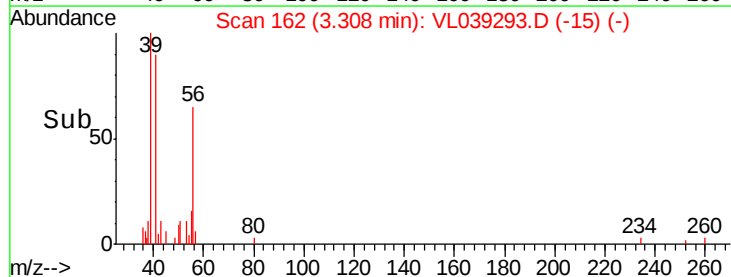
6000

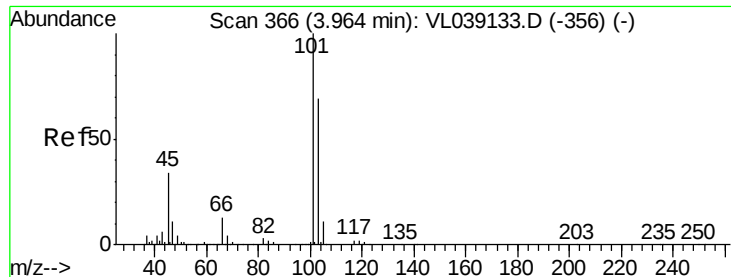
4000

2000

0

Time--> 3.30 3.31 3.32





#19

Isopropyl Alcohol

Concen: 1.046 ppbv

RT: 3.97 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

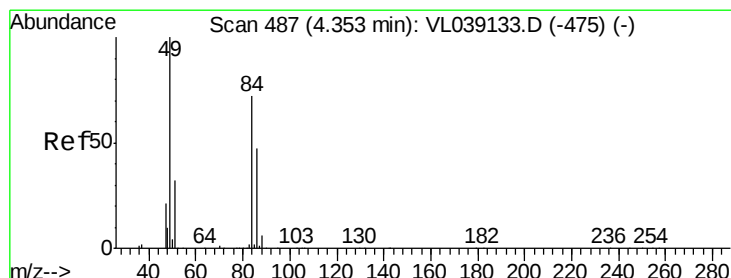
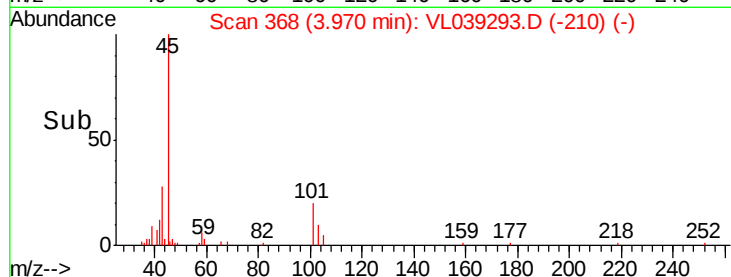
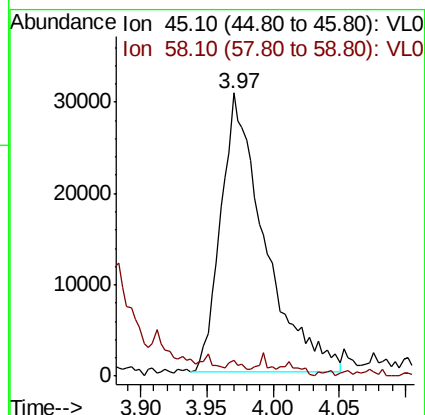
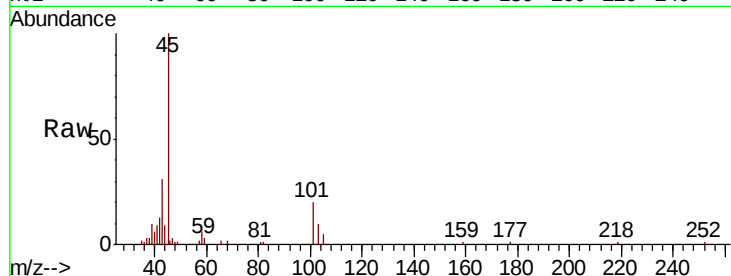
Acq: 15 Jun 2022 10:30

Tot Ion: 45 Resp: 69985

Ion Ratio Lower Upper

45 100

58 228.1 1.8 2.8#



#20

Methylene Chloride

Concen: 10.870 ppbv

RT: 4.34 min Scan# 483

Delta R.T. -0.01 min

Lab File: VL039293.D

Acq: 15 Jun 2022 10:30

Tgt Ion: 84 Resp: 653726

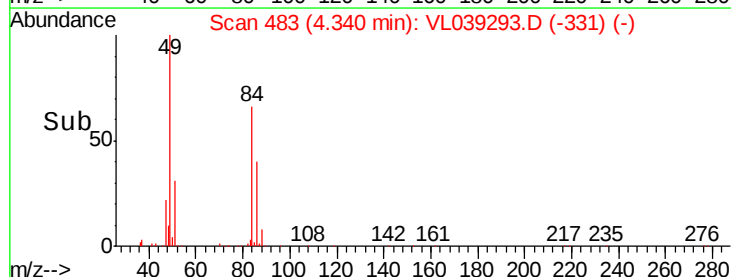
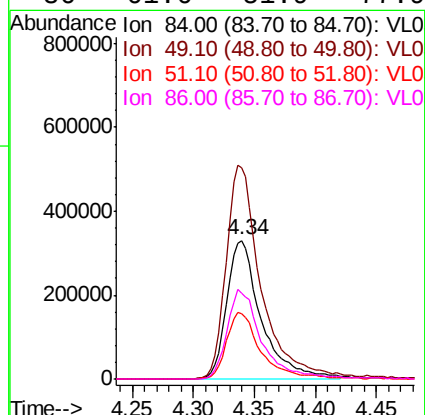
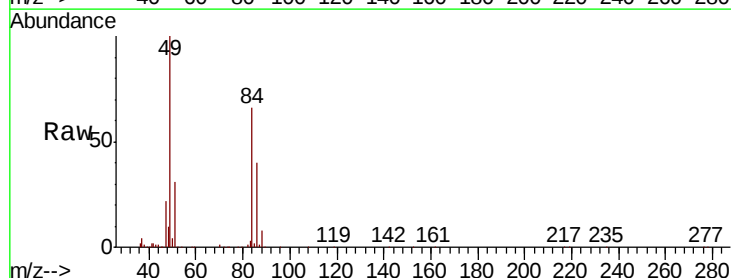
Ion Ratio Lower Upper

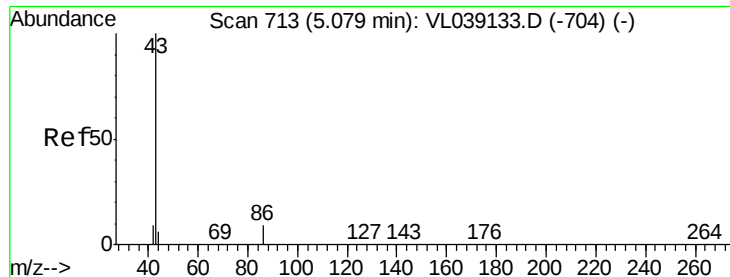
84 100

49 152.1 111.1 166.7

51 46.8 35.3 52.9

86 61.6 51.9 77.9





#23

Vinyl Acetate

Concen: 0.030 ppbv

RT: 5.08 Instrument: MSVOA_1

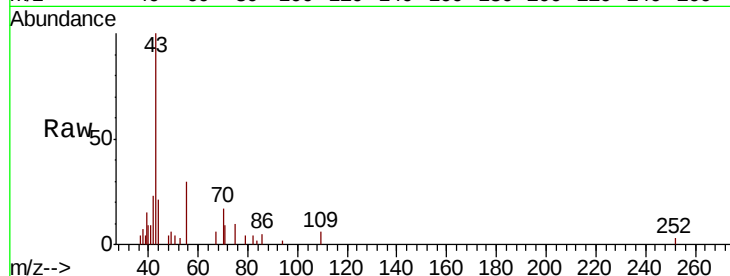
Delta R.T. ClientSampleId:

Lab File: OA1DUP

Acq: 15 Jun 2022 10:30

Tot Ion: 43 Resp: 3588

Ion	Ratio	Lower	Upper
43	100		
86	0.1	6.0	9.0#
42	0.0	8.2	12.4#
44	0.0	4.3	6.5#

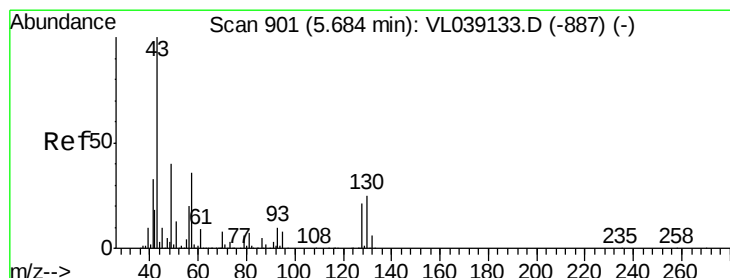
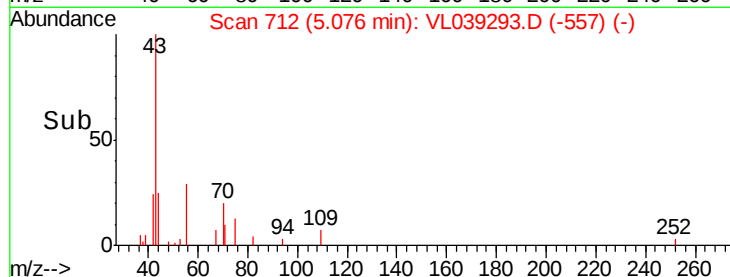
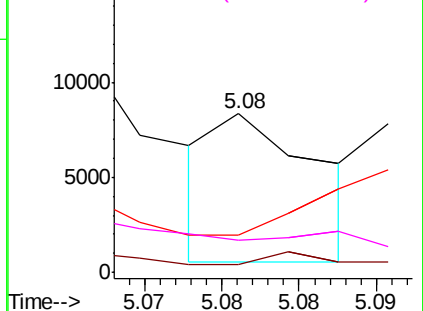


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 1.784 ppbv

RT: 5.68 min Scan# 900

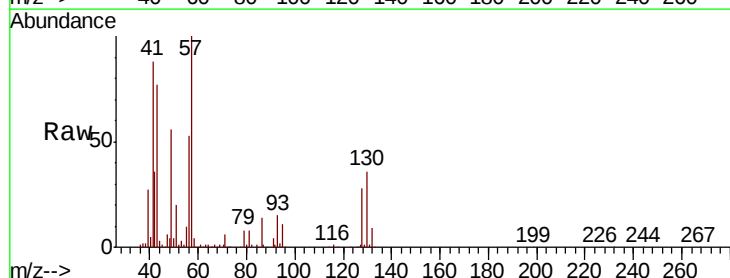
Delta R.T. -0.00 min

Lab File: VL039293.D

Acq: 15 Jun 2022 10:30

Tgt Ion: 43 Resp: 573795

Ion	Ratio	Lower	Upper
43	100		
45	1.9	8.2	12.2#
61	1.2	8.4	12.6#
70	2.3	5.6	8.4#

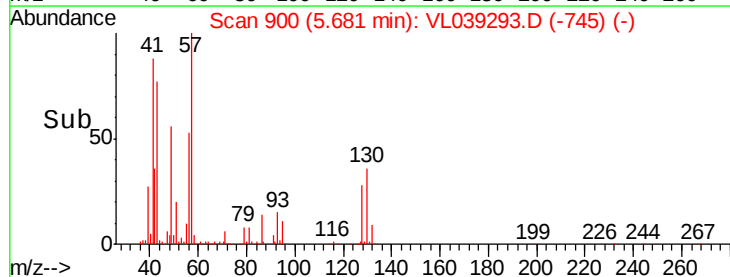
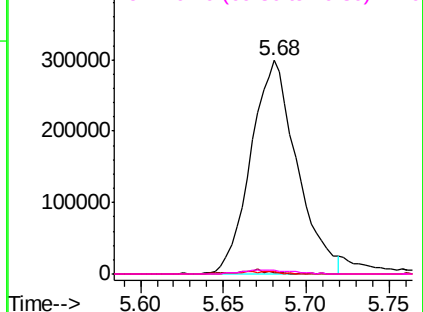


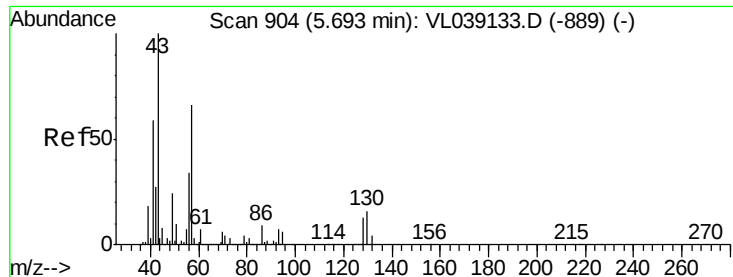
Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

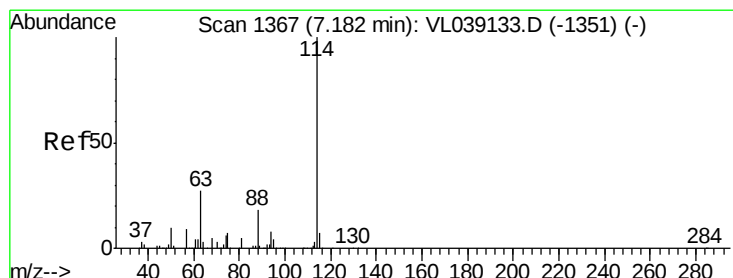
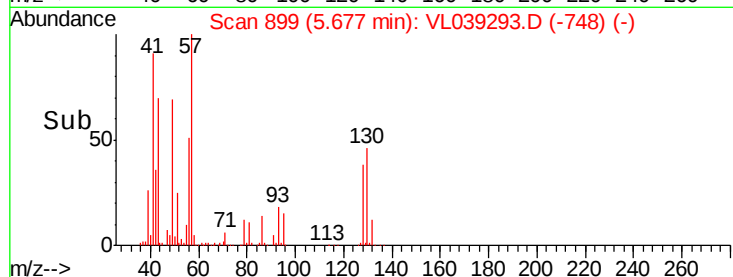
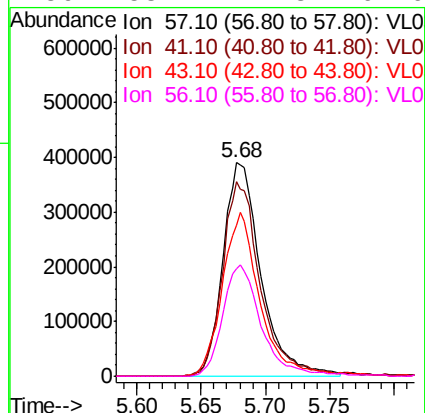
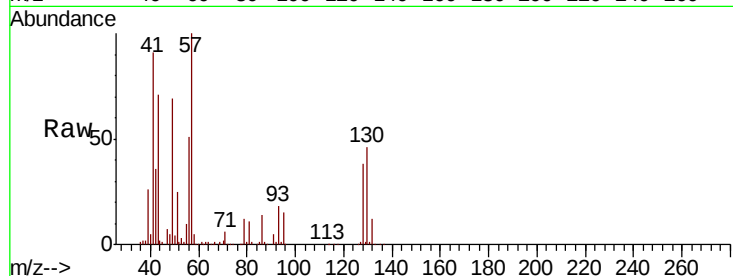
Ion 70.10 (69.80 to 70.80): VL0





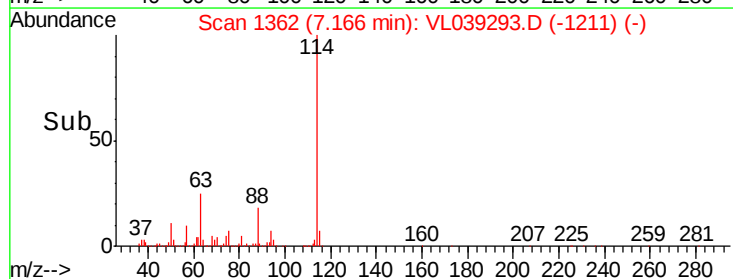
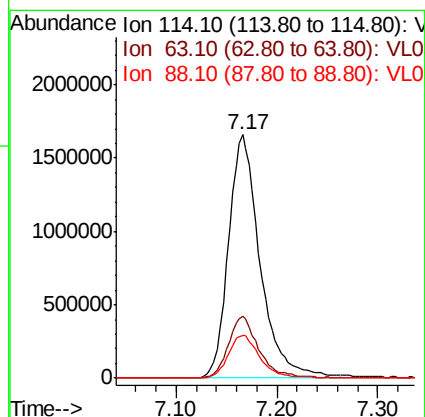
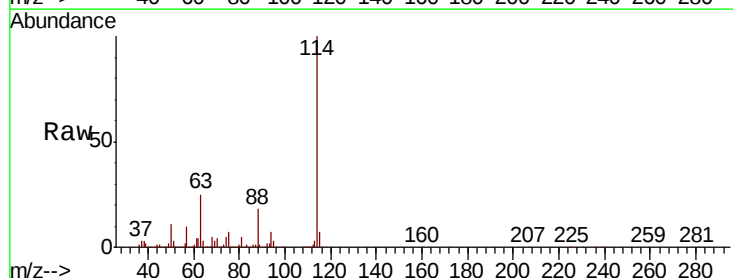
#26
Hexane
Concen: 5.632 ppbv
RT: 5.68
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 15 Jun 2022 10:30

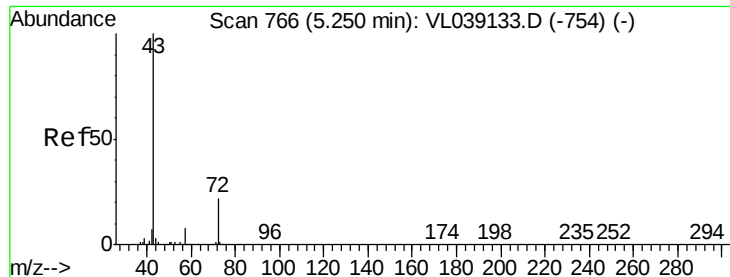
Tot Ion:	57	Resp:	796074
Ion	Ratio	Lower	Upper
57	100		
41	92.7	72.4	108.6
43	77.4	187.0	280.6#
56	53.7	41.8	62.6



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.17 min Scan# 1362
Delta R.T. -0.02 min
Lab File: VL039293.D
Acq: 15 Jun 2022 10:30

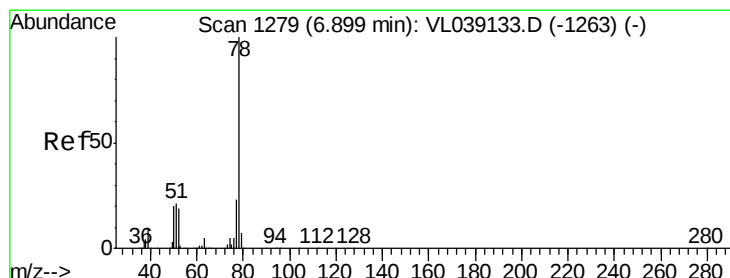
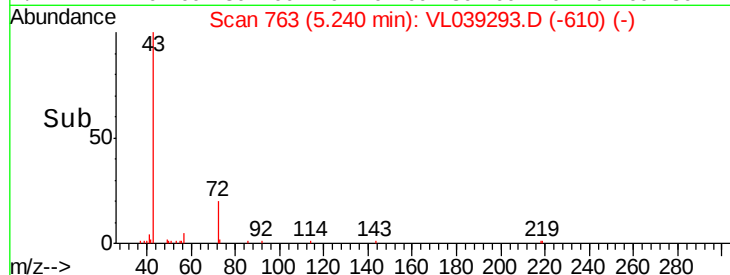
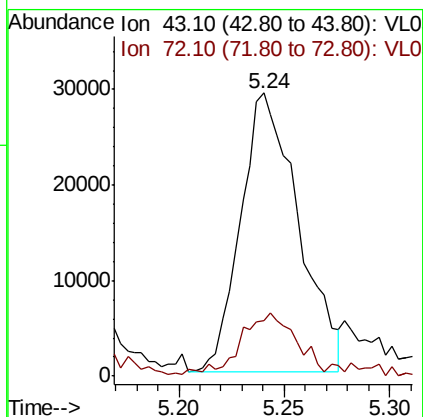
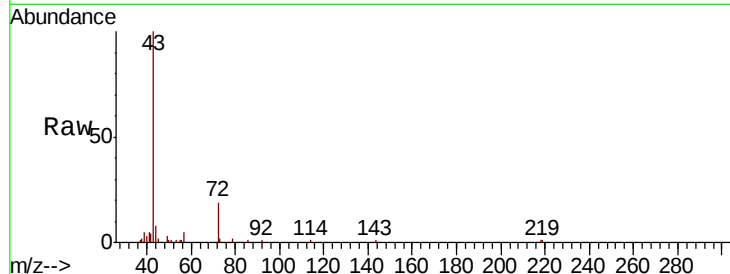
Tgt Ion:	114	Resp:	3628793
Ion	Ratio	Lower	Upper
114	100		
63	24.8	21.7	32.5
88	17.9	14.8	22.2





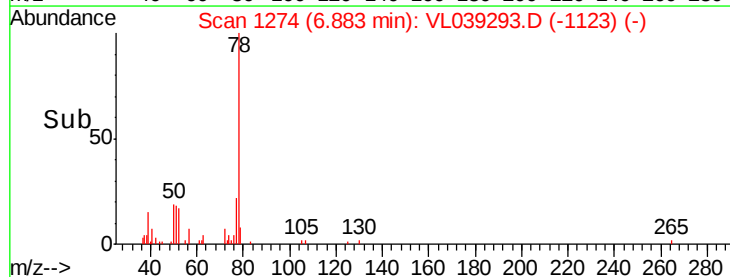
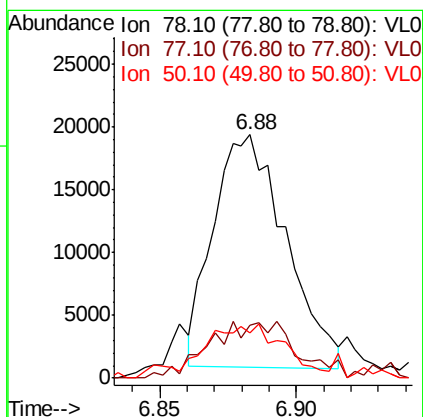
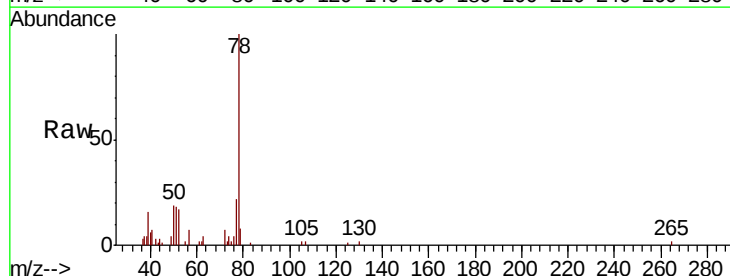
#34
2-Butanone
Concen: 0.282 ppbv
RT: 5.24
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 15 Jun 2022 10:30

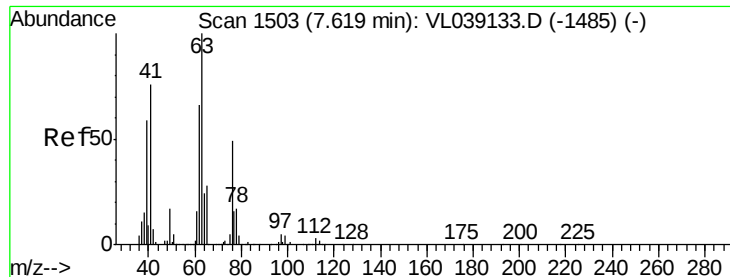
Tot Ion: 43 Resp: 55571
Ion Ratio Lower Upper
43 100
72 25.4 18.2 27.2



#36
Benzene
Concen: 0.116 ppbv
RT: 6.88 min Scan# 1274
Delta R.T. -0.02 min
Lab File: VL039293.D
Acq: 15 Jun 2022 10:30

Tgt Ion: 78 Resp: 34050
Ion Ratio Lower Upper
78 100
77 16.1 18.6 27.8#
50 12.2 15.8 23.8#





#39

1,2-Dichloropropane

Concen: 7.522 ppbv

RT: 7.17

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 15 Jun 2022 10:30

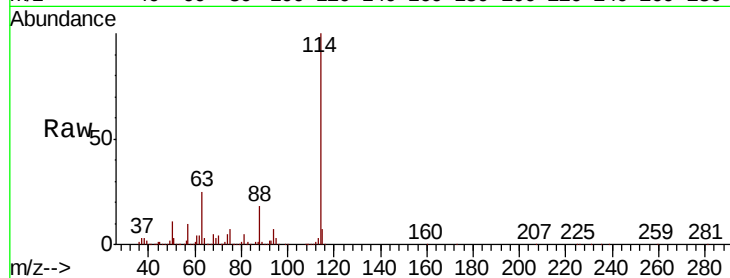
Tot Ion: 63 Resp: 881468

Ion Ratio Lower Upper

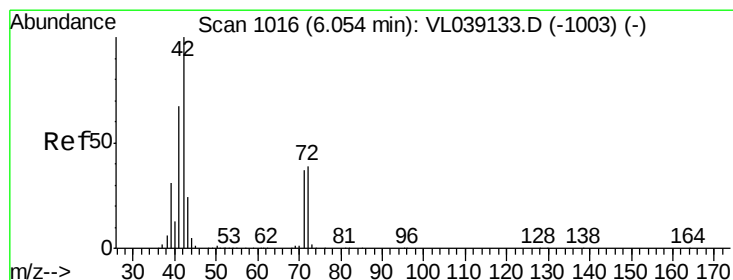
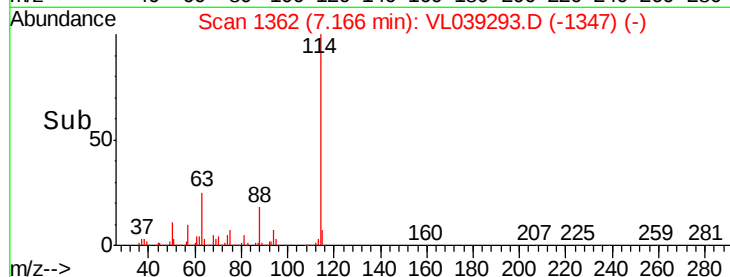
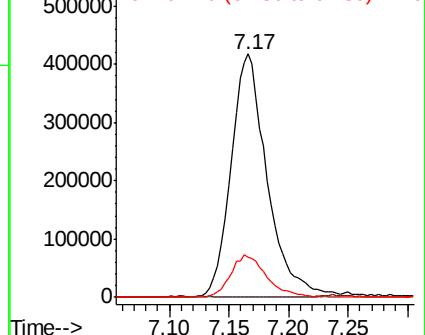
63 100

41 0.0 60.8 91.2#

62 16.4 52.9 79.3#



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



#41

Tetrahydrofuran

Concen: 2.493 ppbv

RT: 5.68 min Scan# 899

Delta R.T. -0.38 min

Lab File: VL039293.D

Acq: 15 Jun 2022 10:30

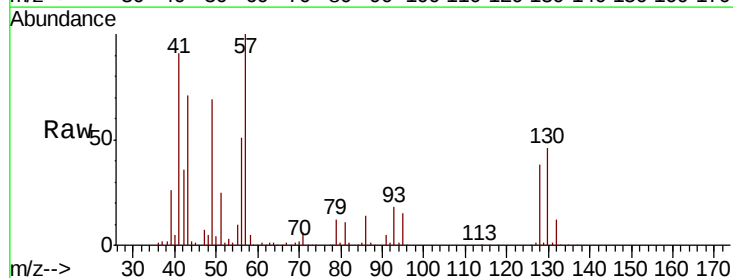
Tgt Ion: 42 Resp: 295594

Ion Ratio Lower Upper

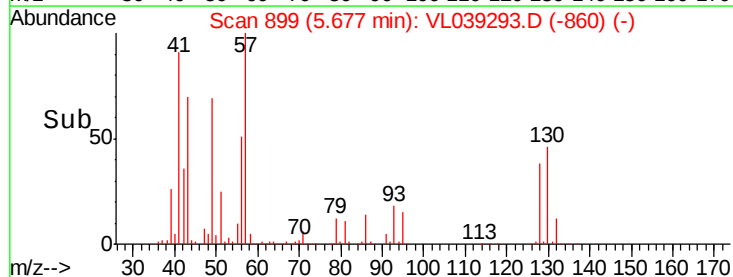
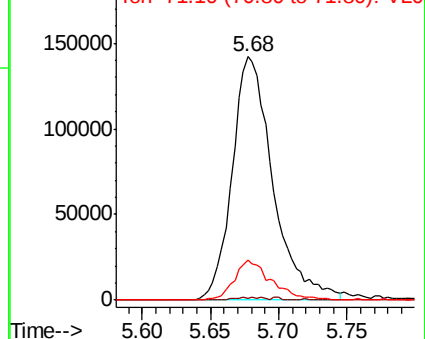
42 100

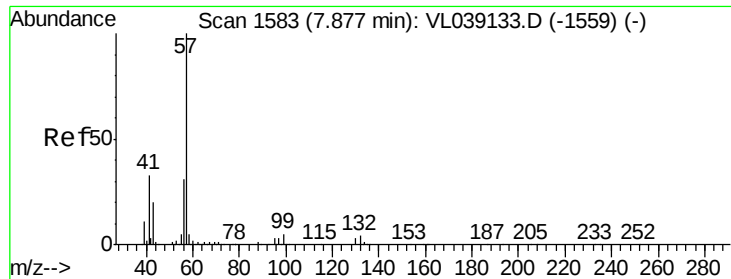
72 1.1 32.0 48.0#

71 15.0 31.1 46.7#



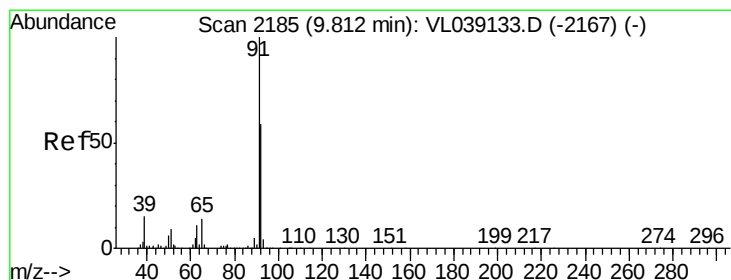
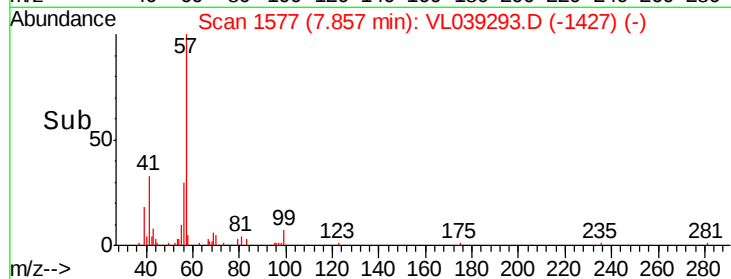
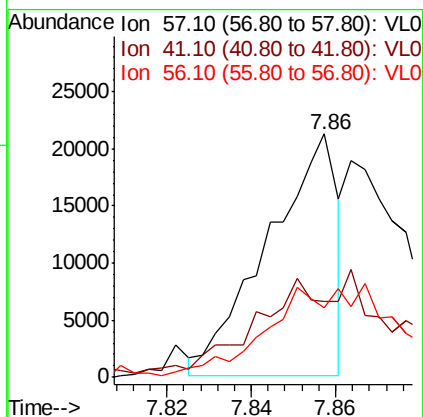
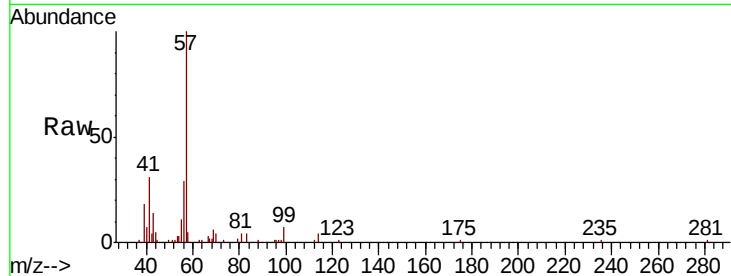
Abundance Ion 42.10 (41.80 to 42.80): VL0
Ion 72.10 (71.80 to 72.80): VL0
Ion 71.10 (70.80 to 71.80): VL0





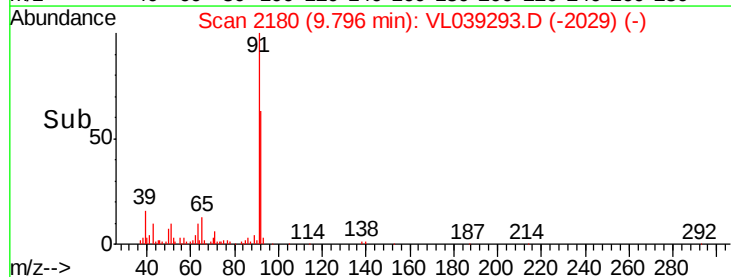
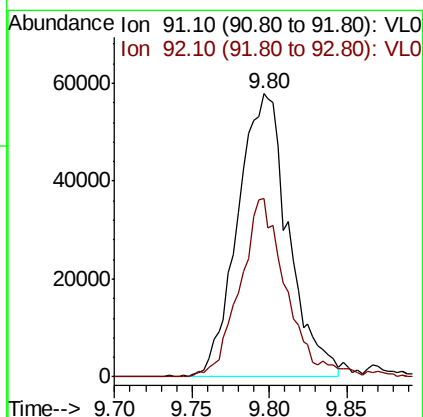
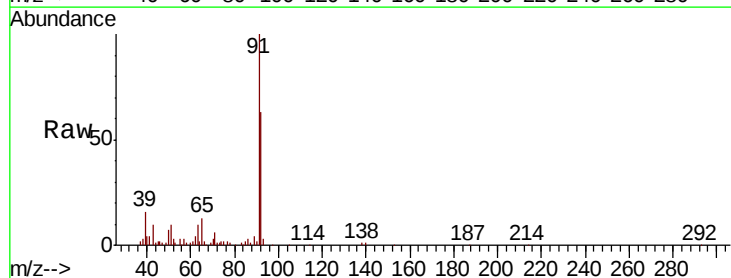
#44
 2,2,4-Trimethylpentane
 Concen: 0.047 ppbv
 RT: 7.86
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 15 Jun 2022 10:30

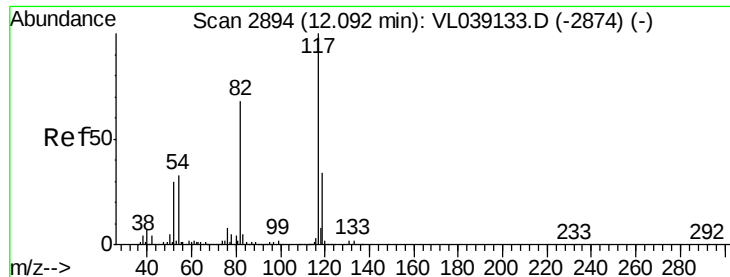
Tot Ion	57	Resp	24342
Ion Ratio	Lower	Upper	
57	100		
41	0.0	26.2	39.4#
56	0.0	24.7	37.1#



#53
 Toluene
 Concen: 0.390 ppbv
 RT: 9.80 min Scan# 2180
 Delta R.T. -0.02 min
 Lab File: VL039293.D
 Acq: 15 Jun 2022 10:30

Tgt Ion	91	Resp	132197
Ion Ratio	Lower	Upper	
91	100		
92	58.2	48.1	72.1

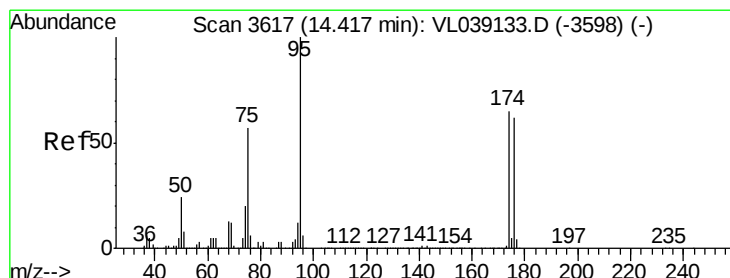
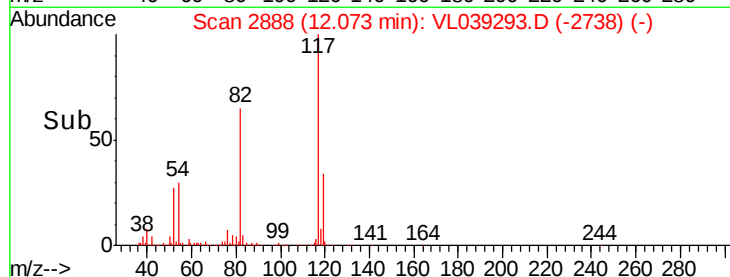
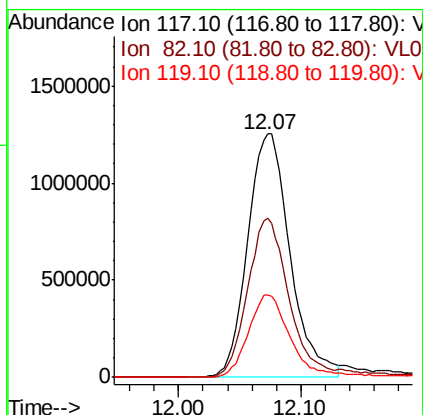
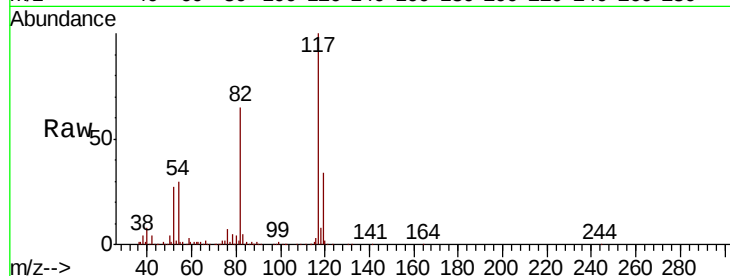




#55
 Chlorobenzene-d5
 Concen: 10.000 ppbv
 RT: 12.07 min
 Instrument: MSVOA_L
 Delta R.T.:
 Lab File: ClientSampleId :
 Acq: 15 Jun 2022 10:30

Tot Ion: 117 Resp: 3007894

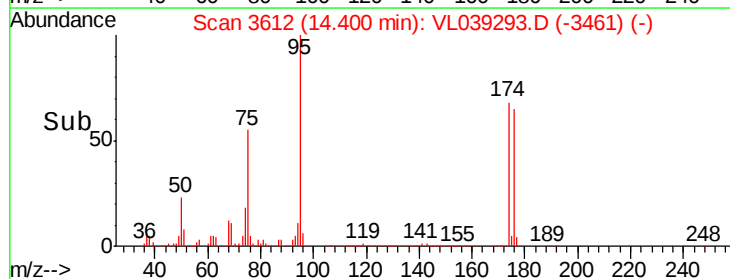
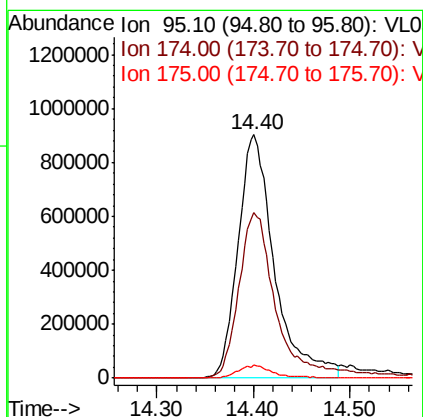
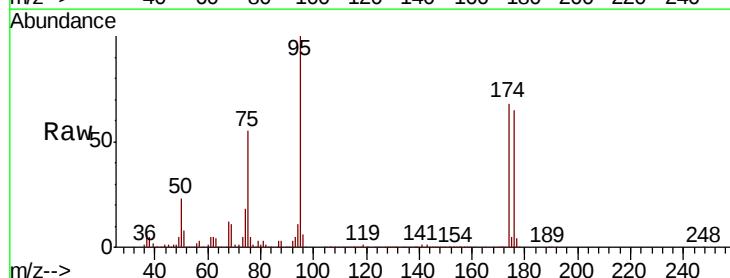
Ion	Ratio	Lower	Upper
117	100		
82	68.7	55.1	82.7
119	34.9	24.7	37.1

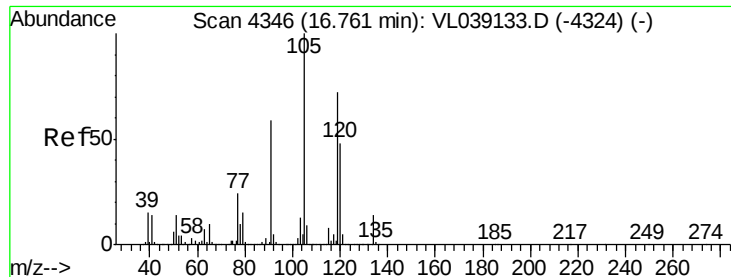


#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.514 ppbv
 RT: 14.40 min Scan# 3612
 Delta R.T.: -0.02 min
 Lab File: VL039293.D
 Acq: 15 Jun 2022 10:30

Tgt Ion: 95 Resp: 2365916

Ion	Ratio	Lower	Upper
95	100		
174	72.4	53.8	80.8
175	5.4	4.1	6.1





#74
 1,2,4-Trimethylbenzene
 Concen: 0.078 ppbv
 RT: 16.75
 Delta R.T: MSVOA_L
 Lab File: ClientSampleId :
 OA1DUP
 Acq: 15 Jun 2022 10:30

Tot Ion:	105	Resp:	31358
Ion	Ratio	Lower	Upper
105	100		
120	25.0	38.1	57.1#
91	10.0	47.4	71.0#
77	6.2	19.5	29.3#

