

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL050922\
 Data File : VL039017.D
 Acq On : 10 May 2022 12:43
 Operator : SY/AP
 Sample : N2696-02DL2 20X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV2DL2

Quant Time: May 11 01:45:25 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL050522AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LThu May 05 10:12:15 2022
 QLast Update : Thu May 05 10:12:15 2022
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.64	49	1042843	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.14	114	2934818	10.00	ppbv	-0.03
55) Chlorobenzene-d5	12.05	117	2523523	10.00	ppbv	-0.03

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.38	95	1888628	9.45	ppbv	-0.03	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	94.50%	

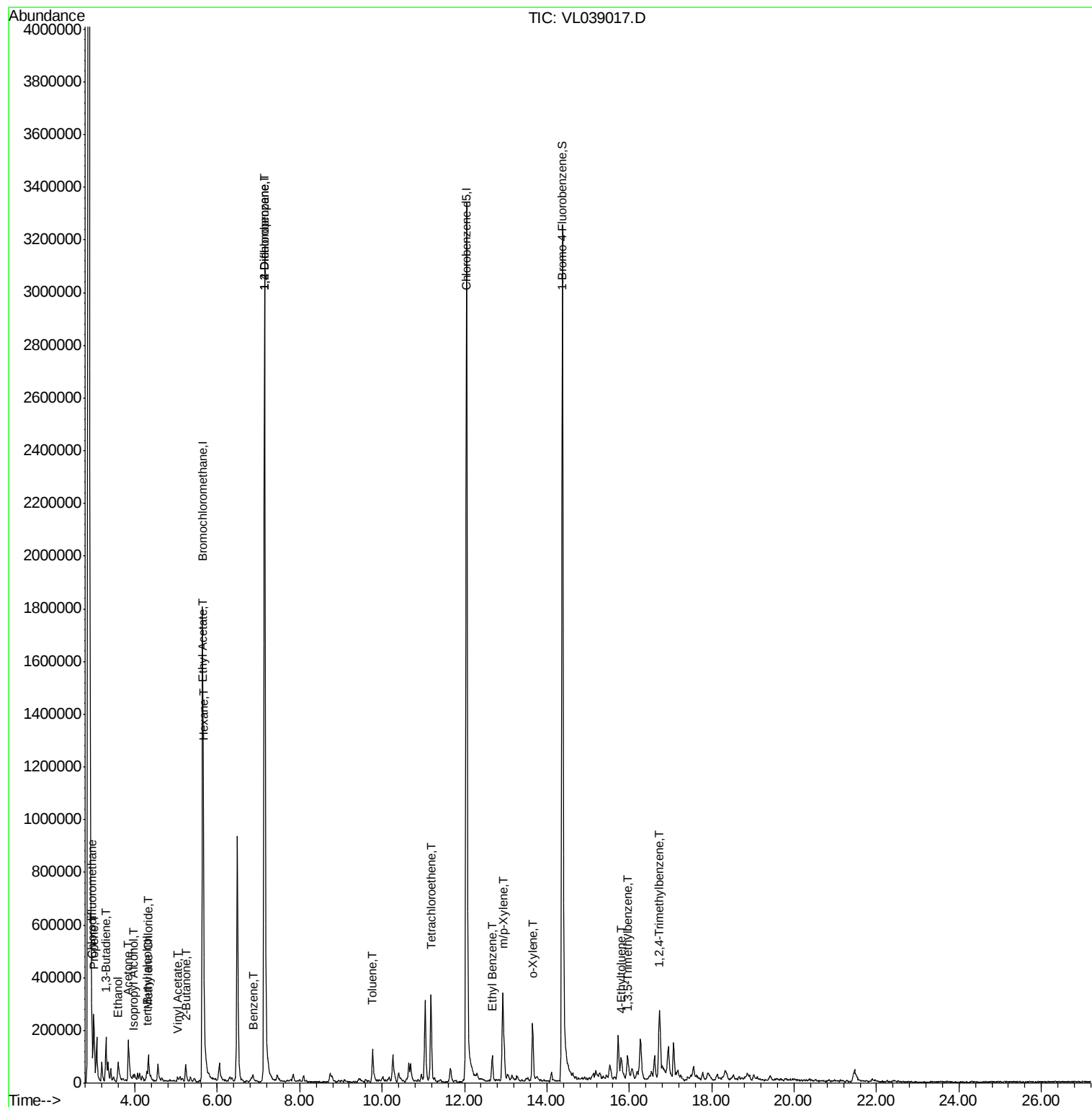
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
3) Chlorodifluoromethane	2.96	51	7385	0.057	ppbv #	60
9) Propene	3.00	41	123577	2.187	ppbv	92
13) Ethanol	3.59	45	74430	18.611	ppbv	76
15) Acetone	3.84	43	209245	2.127	ppbv	95
16) 1,3-Butadiene	3.30	39	66086	1.169	ppbv #	31
17) tert-Butyl alcohol	4.28	59	24926	0.330	ppbv #	90
19) Isopropyl Alcohol	3.96	45	16092	0.344	ppbv #	62
20) Methylene Chloride	4.33	84	37801	1.020	ppbv	95
23) Vinyl Acetate	5.05	43	3259	0.042	ppbv #	28
25) Ethyl Acetate	5.66	43	52656	0.224	ppbv #	95
26) Hexane	5.67	57	46395	0.443	ppbv #	57
34) 2-Butanone	5.23	43	85463	0.571	ppbv #	90
36) Benzene	6.86	78	15999	0.064	ppbv #	87
39) 1,2-Dichloropropane	7.14	63	677113	6.929	ppbv #	25
52) Tetrachloroethene	11.19	164	90574	1.009	ppbv #	81
53) Toluene	9.77	91	94926	0.337	ppbv	95
58) Ethyl Benzene	12.67	91	92449	0.255	ppbv	91
59) m/p-Xylene	12.93	91	358764	1.157	ppbv	92
60) o-Xylene	13.65	91	188120	0.645	ppbv	98
72) 4-Ethyltoluene	15.81	105	52003	0.156	ppbv #	90
73) 1,3,5-Trimethylbenzene	15.95	105	25024	0.084	ppbv	87
74) 1,2,4-Trimethylbenzene	16.72	105	146955	0.448	ppbv #	65

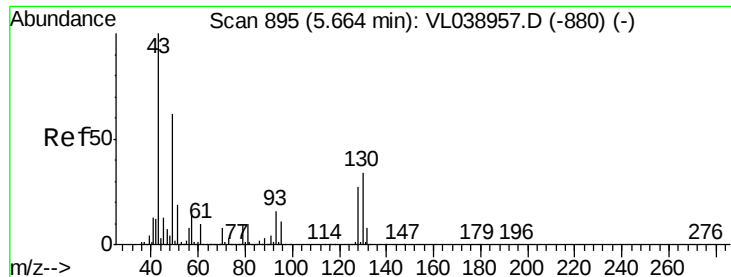
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Thu May 05 10:12:15 2022
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.64 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: SV2DL2

Acq: 10 May 2022 12:43

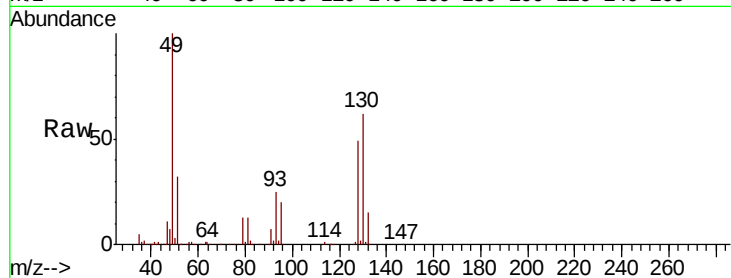
Tot Ion: 49 Resp: 1042843

Ion Ratio Lower Upper

49 100

128 50.6 23.3 69.8

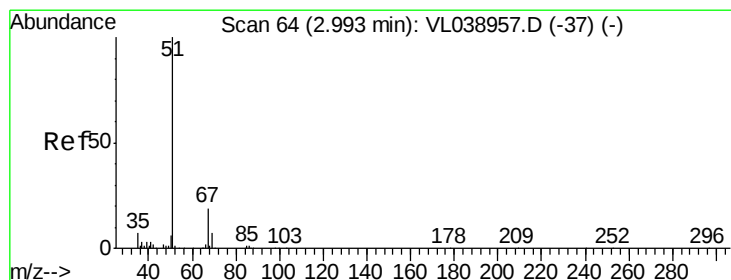
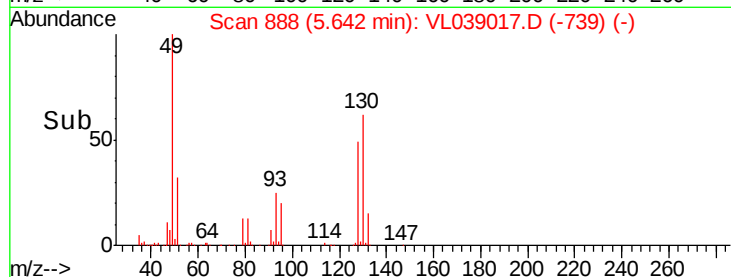
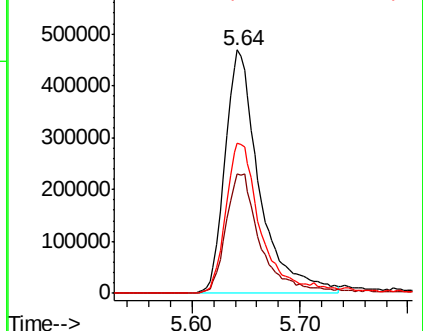
130 65.2 29.8 89.3



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



#3

Chlorodifluoromethane

Concen: 0.057 ppbv

RT: 2.96 min Scan# 53

Delta R.T. -0.04 min

Lab File: VL039017.D

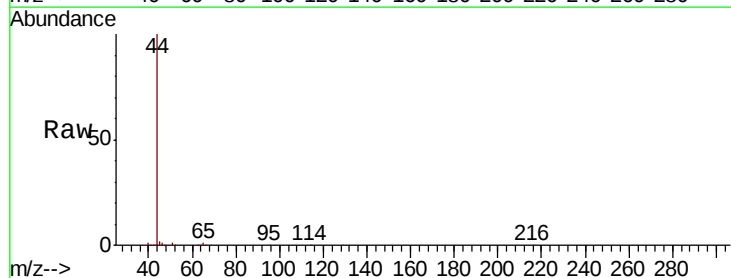
Acq: 10 May 2022 12:43

Tgt Ion: 51 Resp: 7385

Ion Ratio Lower Upper

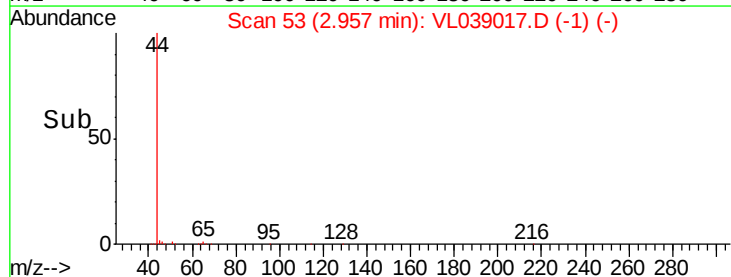
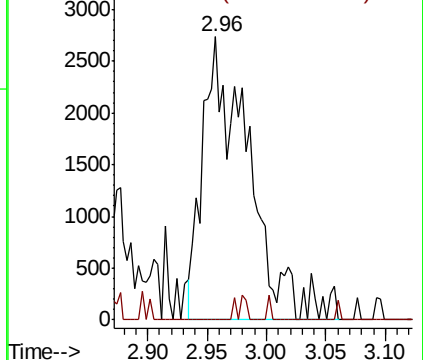
51 100

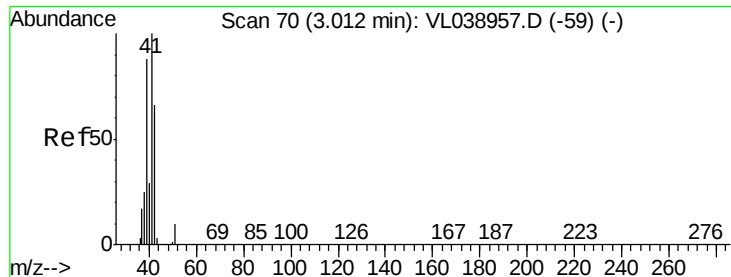
67 1.7 15.8 23.8#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#9

Propene

Concen: 2.187 ppbv

RT: 3.00 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

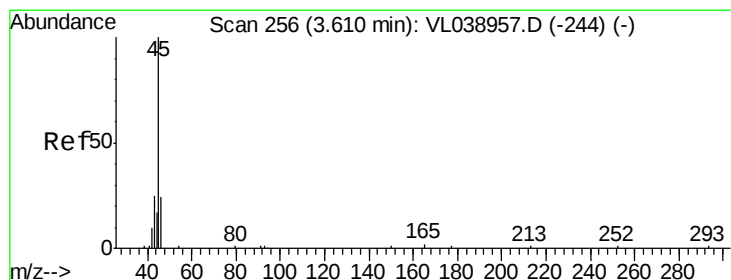
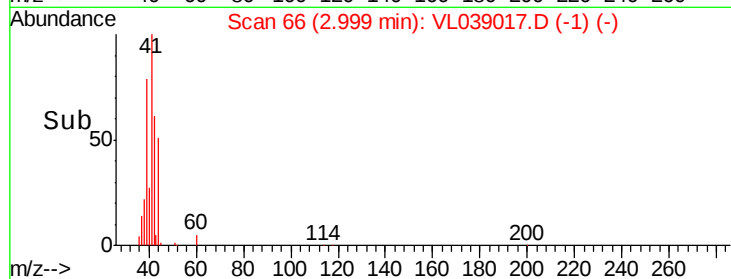
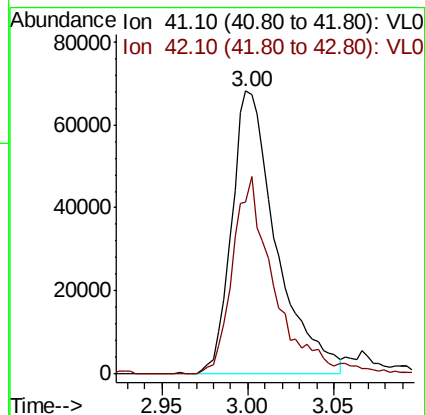
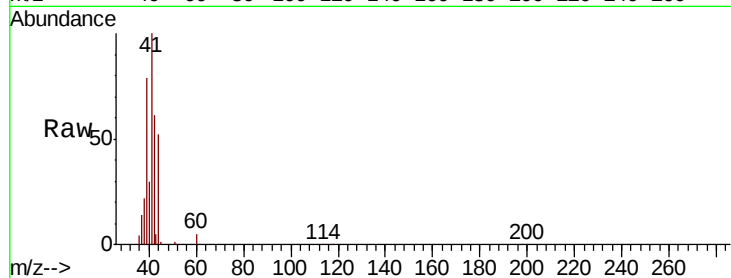
Acq: 10 May 2022 12:43 SV2DL2

Tot Ion: 41 Resp: 123577

Ion Ratio Lower Upper

41 100

42 66.1 58.3 87.5



#13

Ethanol

Concen: 18.611 ppbv

RT: 3.59 min Scan# 250

Delta R.T. -0.02 min

Lab File: VL039017.D

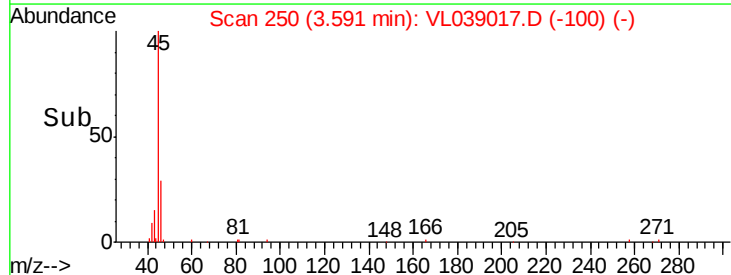
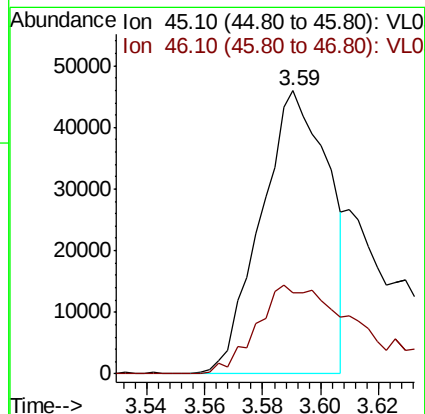
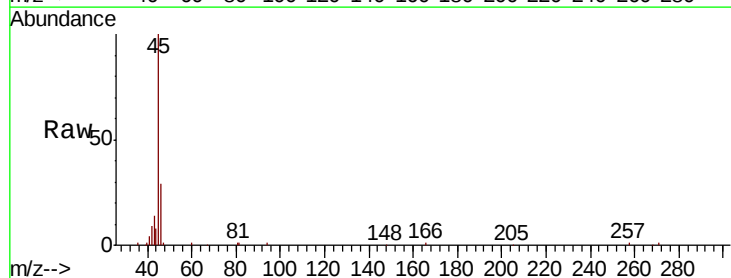
Acq: 10 May 2022 12:43

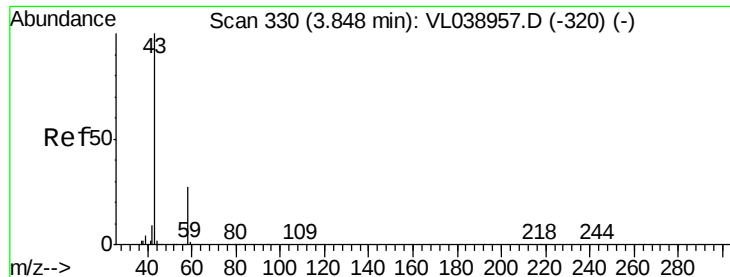
Tgt Ion: 45 Resp: 74430

Ion Ratio Lower Upper

45 100

46 61.1 18.0 72.2





#15

Acetone

Concen: 2.127 ppbv

RT: 3.84 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

SV2DL2

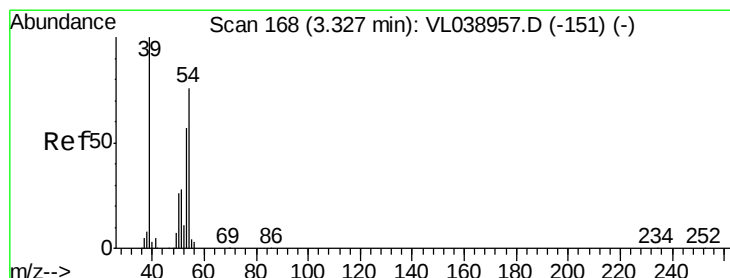
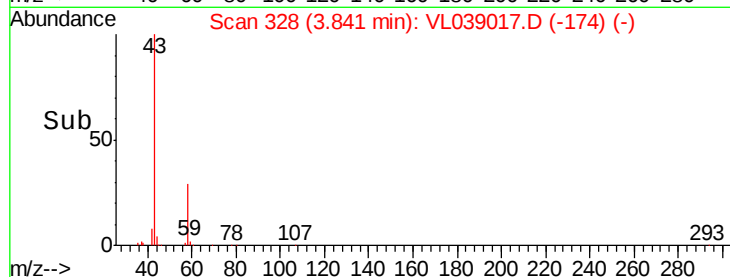
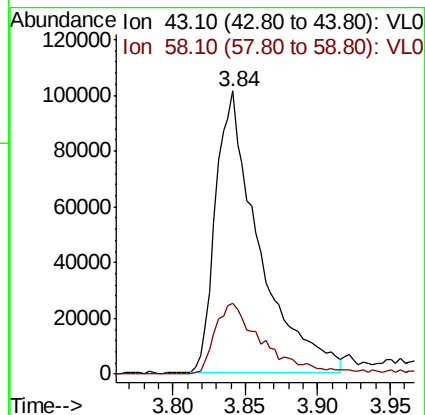
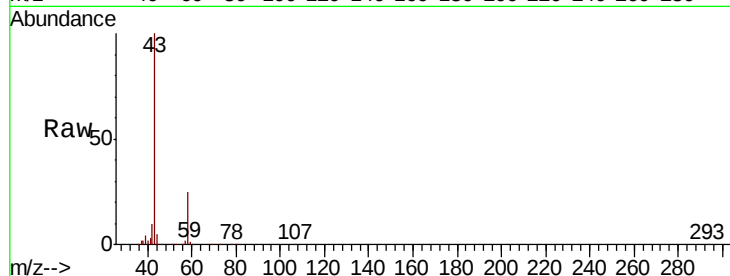
Acq: 10 May 2022 12:43

Tot Ion: 43 Resp: 209245

Ion Ratio Lower Upper

43 100

58 29.2 21.3 31.9



#16

1,3-Butadiene

Concen: 1.169 ppbv

RT: 3.30 min Scan# 159

Delta R.T. -0.03 min

Lab File: VL039017.D

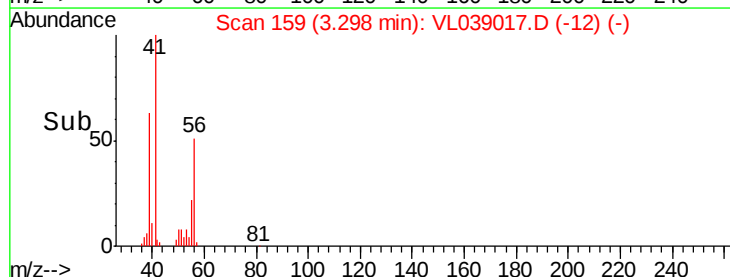
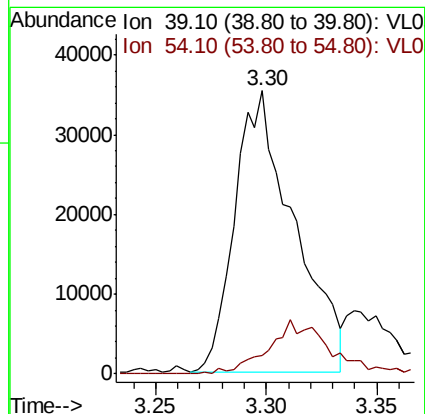
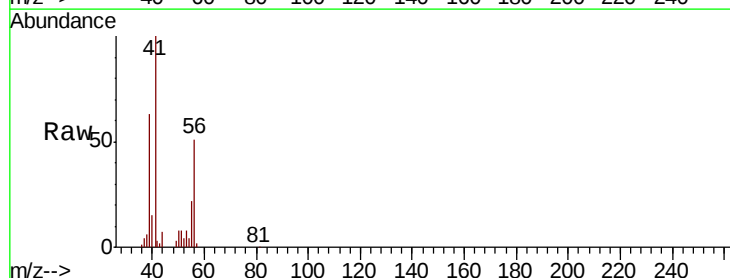
Acq: 10 May 2022 12:43

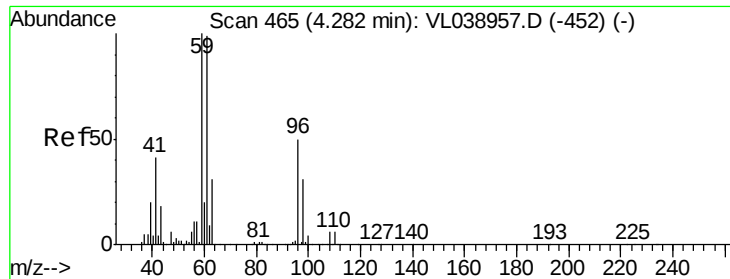
Tgt Ion: 39 Resp: 66086

Ion Ratio Lower Upper

39 100

54 20.0 65.2 97.8#





#17

tert-Butyl alcohol

Concen: 0.330 ppbv

RT: 4.28 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: SV2DL2

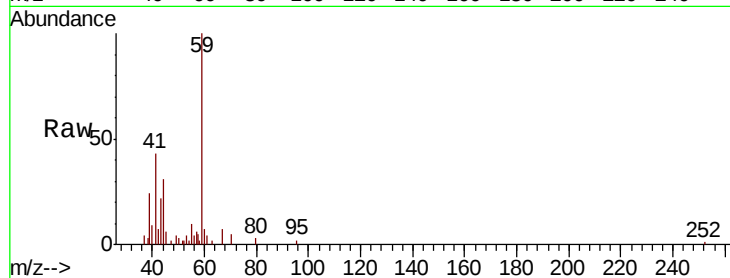
Acq: 10 May 2022 12:43

Tot Ion: 59 Resp: 24926

Ion Ratio Lower Upper

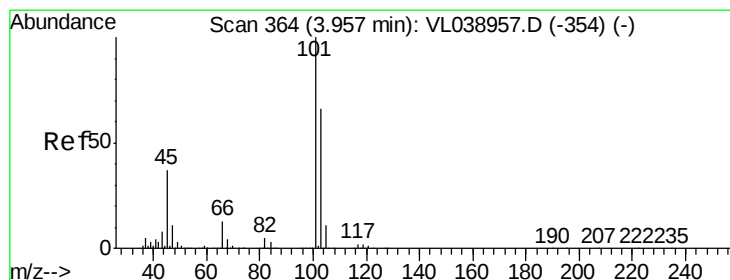
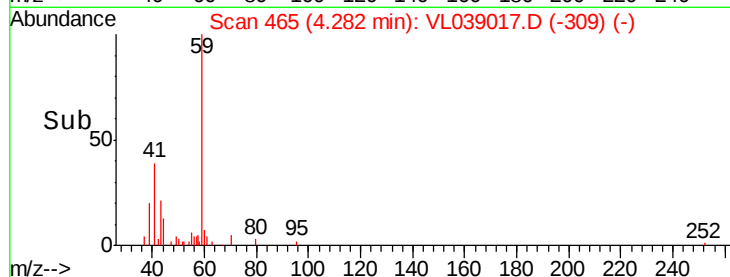
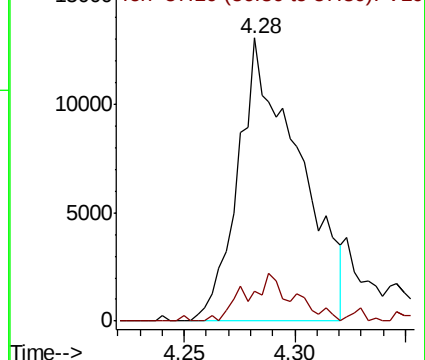
59 100

57 15.4 9.2 13.8#



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0



#19

Isopropyl Alcohol

Concen: 0.344 ppbv

RT: 3.96 min Scan# 366

Delta R.T. 0.01 min

Lab File: VL039017.D

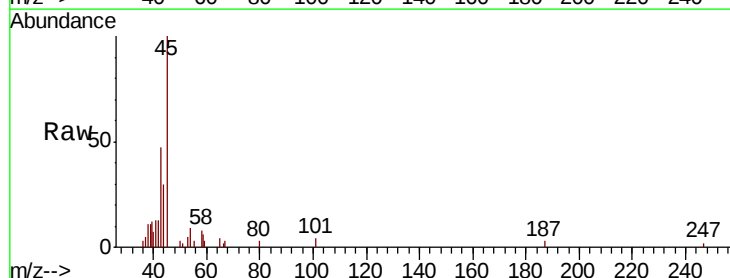
Acq: 10 May 2022 12:43

Tgt Ion: 45 Resp: 16092

Ion Ratio Lower Upper

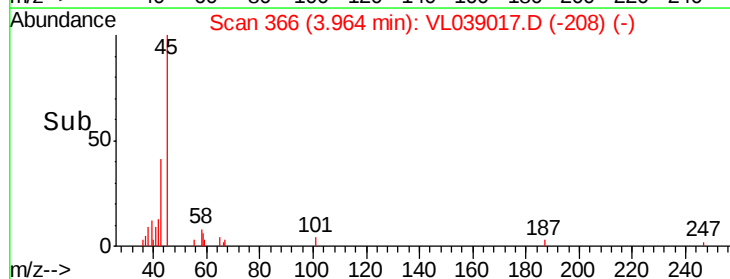
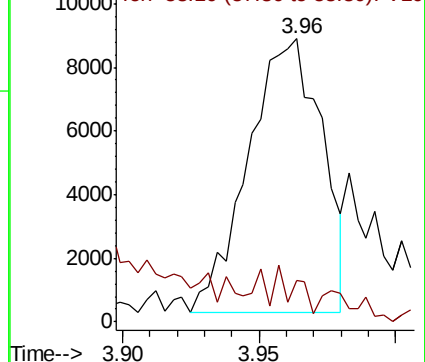
45 100

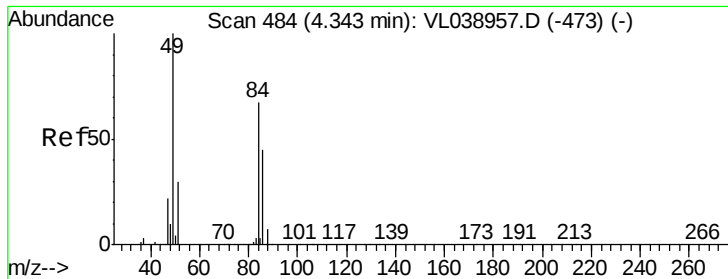
58 15.6 1.4 2.2#



Abundance Ion 45.10 (44.80 to 45.80): VL0

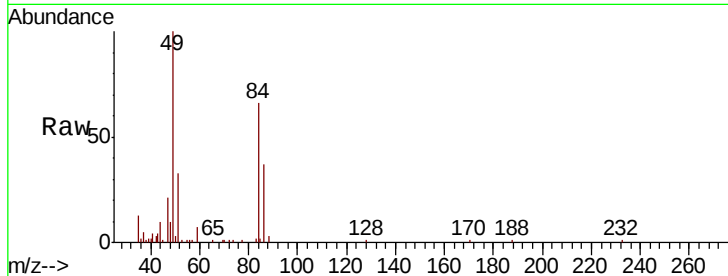
Ion 58.10 (57.80 to 58.80): VL0





#20
Methvlene Chloride
Concen: 1.020 ppbv
RT: 4.33
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
SV2DL2
Acq: 10 May 2022 12:43

Tot Ion:	84	Resp:	37801
Ion	Ratio	Lower	Upper
84	100		
49	150.9	119.9	179.9
51	47.5	35.7	53.5
86	55.6	53.8	80.6



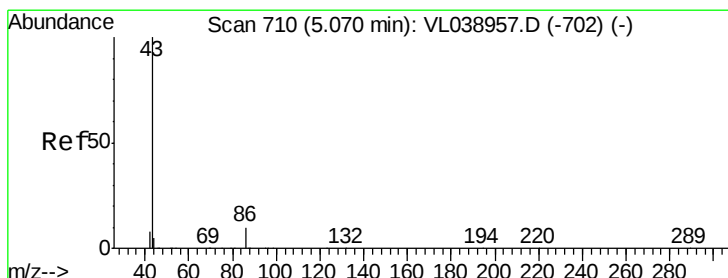
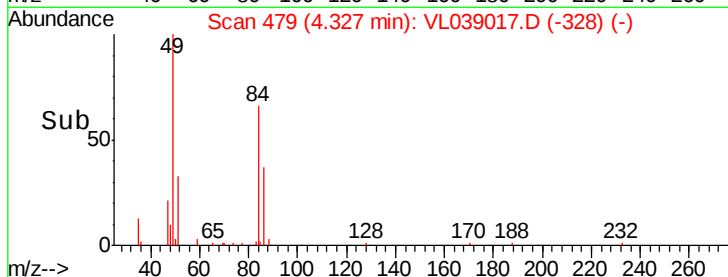
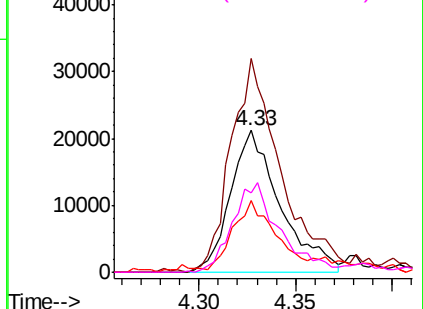
Abundance

Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

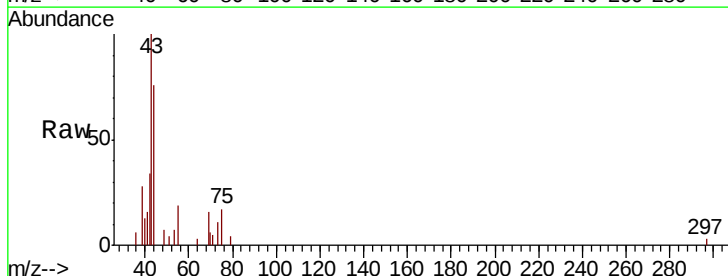
Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0



#23
Vinyl Acetate
Concen: 0.042 ppbv
RT: 5.05 min Scan# 704
Delta R.T. -0.02 min
Lab File: VL039017.D
Acq: 10 May 2022 12:43

Tgt Ion:	43	Resp:	3259
Ion	Ratio	Lower	Upper
43	100		
86	0.0	6.6	9.8#
42	42.4	8.1	12.1#
44	46.9	3.5	5.3#



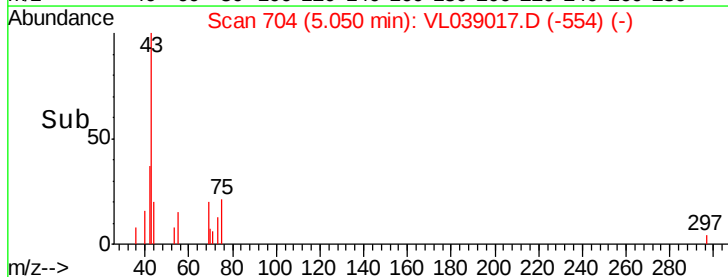
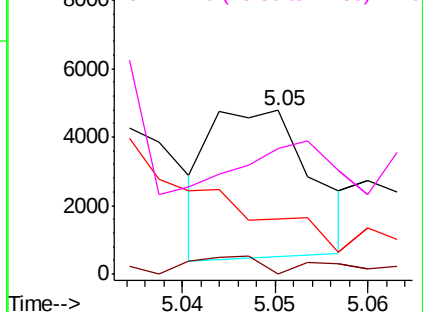
Abundance

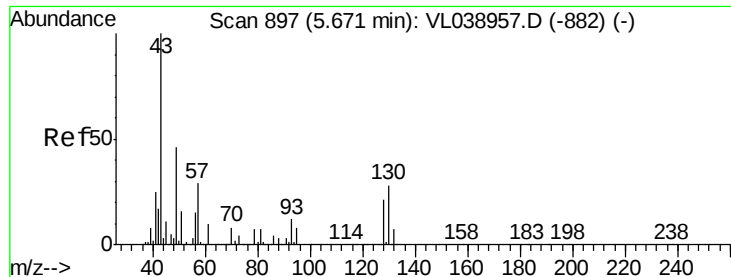
Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

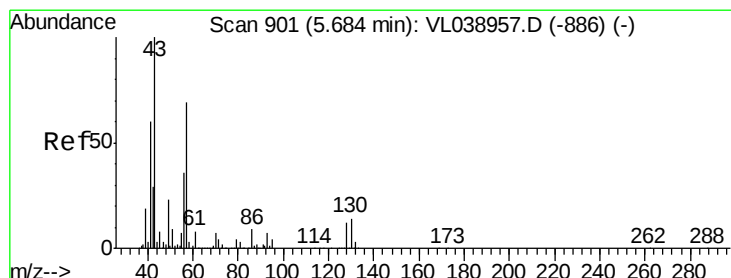
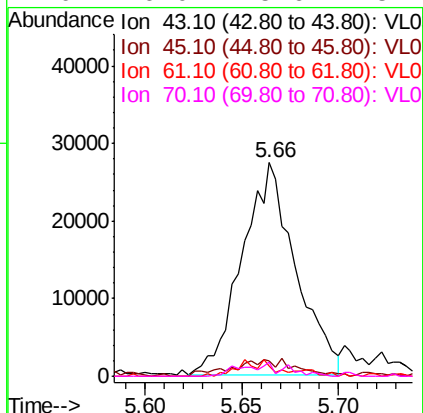
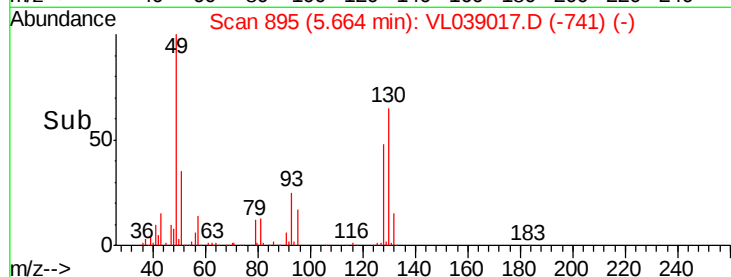
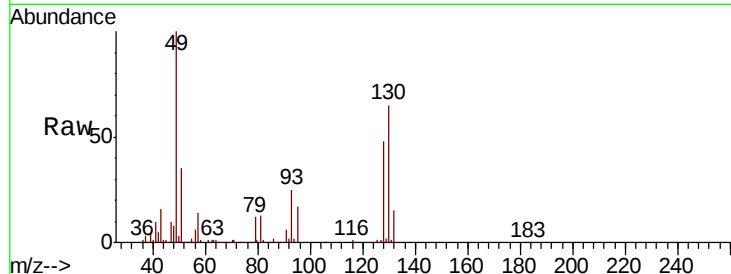
Ion 44.10 (43.80 to 44.80): VL0





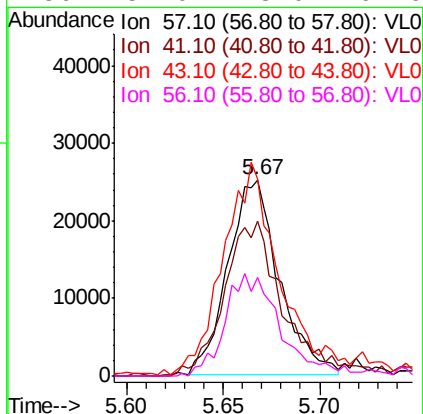
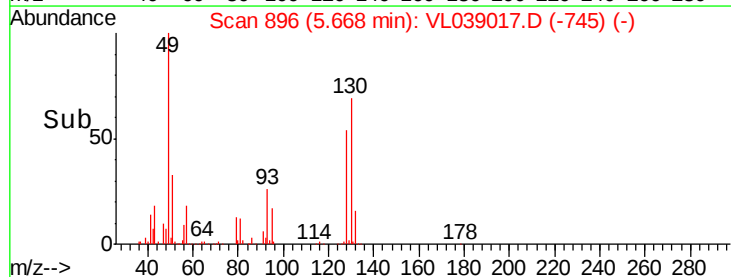
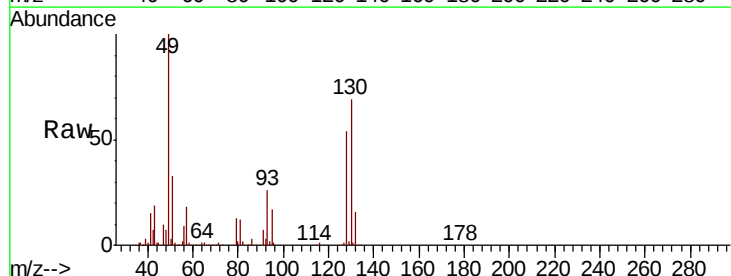
#25
Ethyl Acetate
Concen: 0.224 ppbv
RT: 5.66
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
SV2DL2
Acq: 10 May 2022 12:43

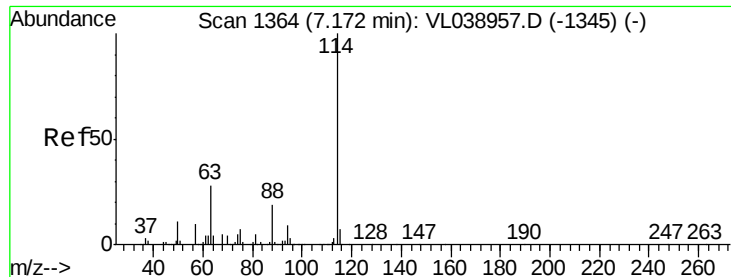
Tot Ion:	43	Resp:	52656
Ion	Ratio	Lower	Upper
43	100		
45	9.6	8.1	12.1
61	6.0	7.8	11.6#
70	6.0	5.6	8.4



#26
Hexane
Concen: 0.443 ppbv
RT: 5.67 min Scan# 896
Delta R.T. -0.02 min
Lab File: VL039017.D
Acq: 10 May 2022 12:43

Tgt Ion:	57	Resp:	46395
Ion	Ratio	Lower	Upper
57	100		
41	97.9	75.2	112.8
43	125.0	190.8	286.2#
56	57.0	43.0	64.6





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.14 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: SV2DL2

Acq: 10 May 2022 12:43

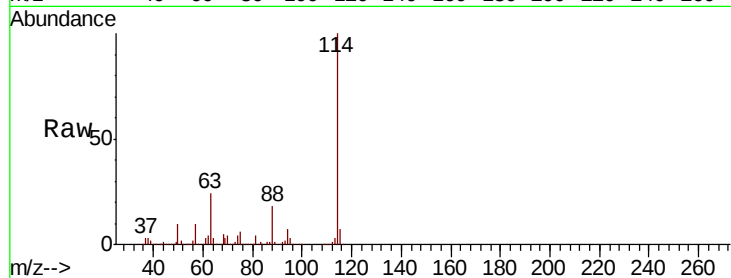
Tot Ion:114 Resp: 2934818

Ion Ratio Lower Upper

114 100

63 24.0 22.6 33.8

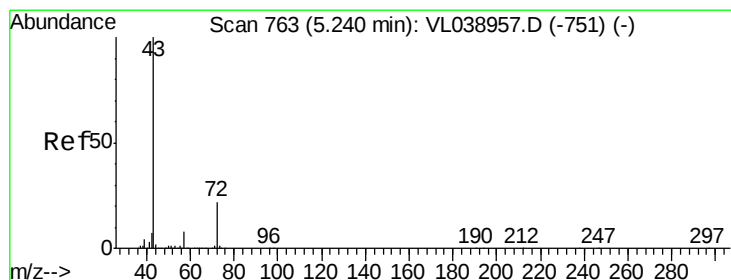
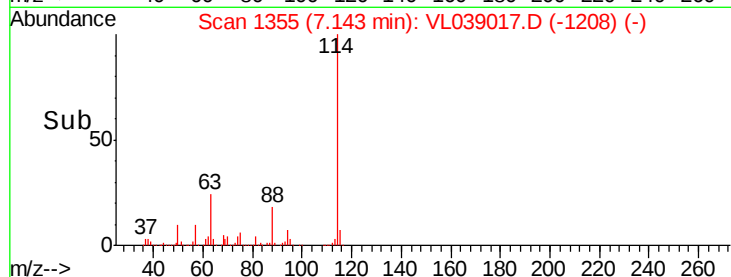
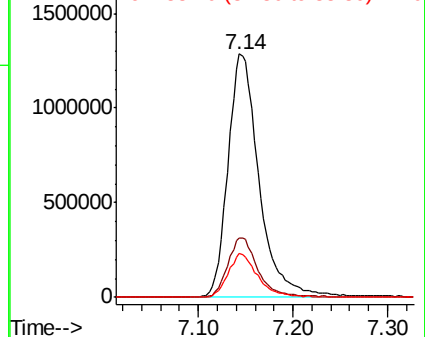
88 17.5 15.4 23.0



Abundance Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 0.571 ppbv

RT: 5.23 min Scan# 760

Delta R.T. -0.01 min

Lab File: VL039017.D

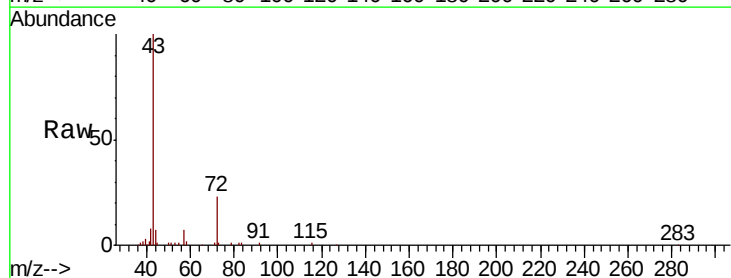
Acq: 10 May 2022 12:43

Tgt Ion: 43 Resp: 85463

Ion Ratio Lower Upper

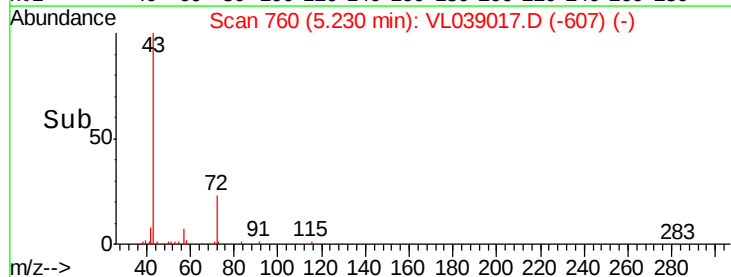
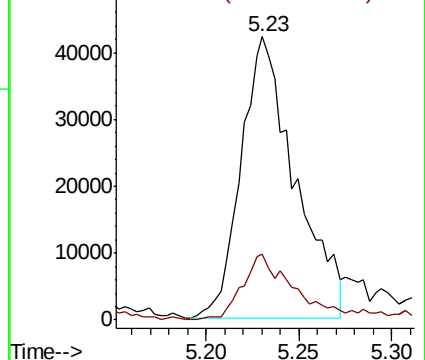
43 100

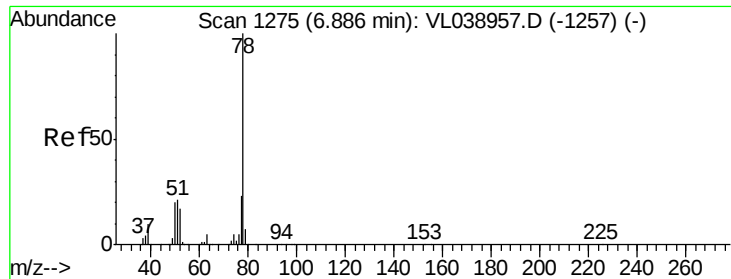
72 26.8 17.8 26.6#



Abundance Ion 43.10 (42.80 to 43.80): VL0

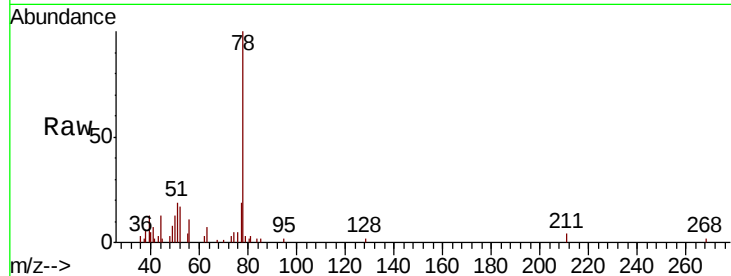
Ion 72.10 (71.80 to 72.80): VL0



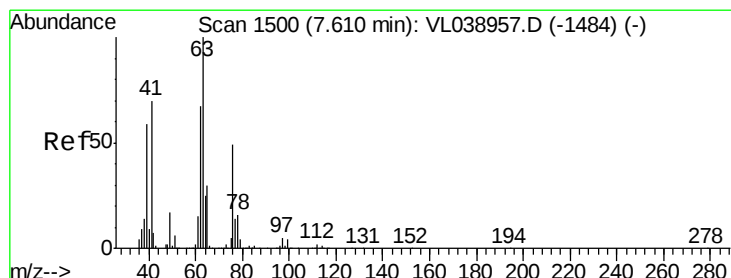
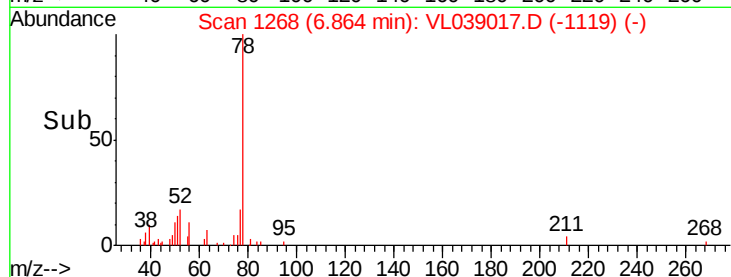
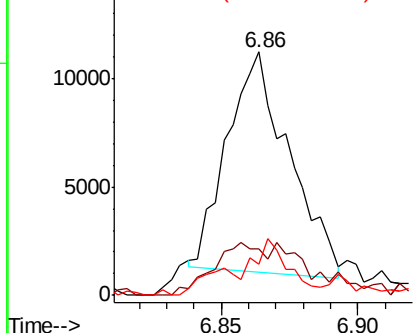


#36
Benzene
Concen: 0.064 ppbv
RT: 6.86
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
SV2DL2
Acq: 10 May 2022 12:43

Tot Ion	78	Resp	15999
Ion Ratio	Lower	Upper	
78	100		
77	18.7	18.6	28.0
50	11.2	15.6	23.4#

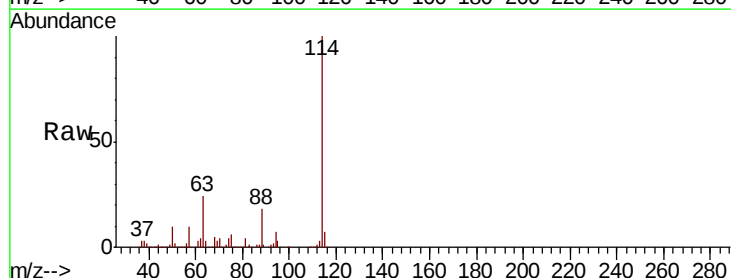


Abundance Ion 78.10 (77.80 to 78.80): VL0
Ion 77.10 (76.80 to 77.80): VL0
Ion 50.10 (49.80 to 50.80): VL0

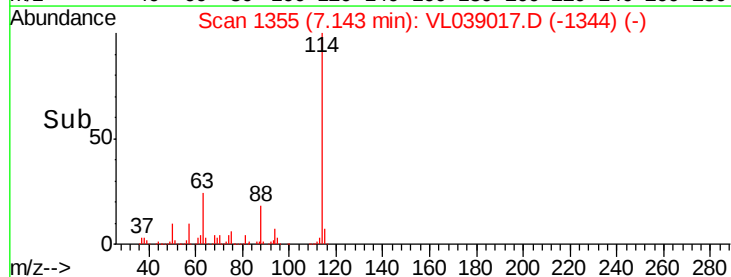
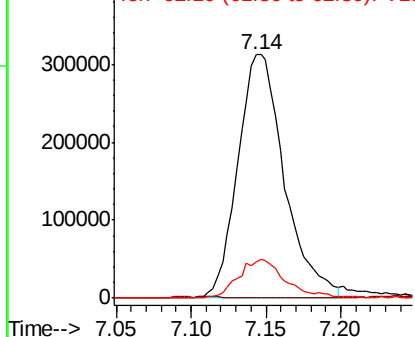


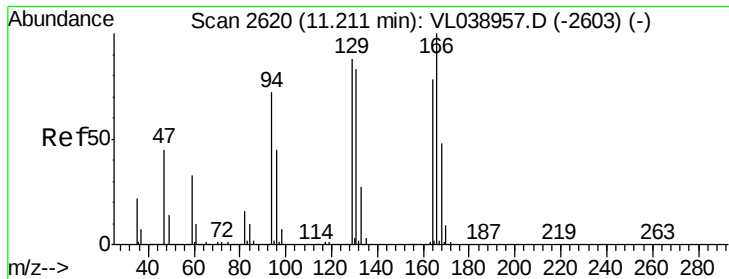
#39
1,2-Dichloropropane
Concen: 6.929 ppbv
RT: 7.14 min Scan# 1355
Delta R.T. -0.47 min
Lab File: VL039017.D
Acq: 10 May 2022 12:43

Tgt Ion	63	Resp	677113
Ion Ratio	Lower	Upper	
63	100		
41	0.0	55.9	83.9#
62	14.9	53.8	80.6#



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





#52

Tetrachloroethene

Concen: 1.009 ppbv

RT: 11.19

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

SV2DL2

Acq: 10 May 2022 12:43

Tot Ion:164 Resp: 90574

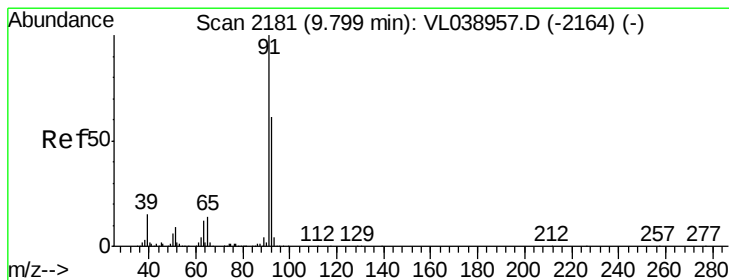
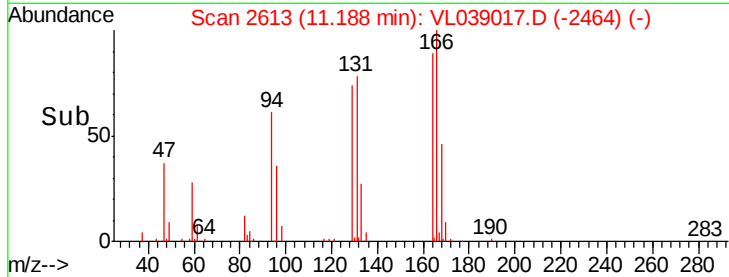
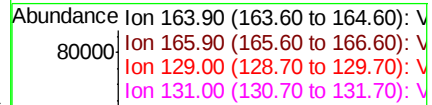
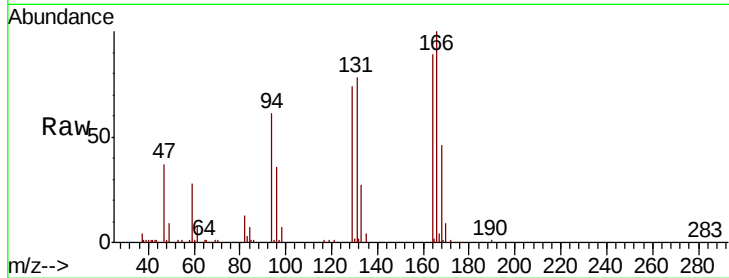
Ion Ratio Lower Upper

164 100

166 112.5 102.5 153.7

129 83.5 90.1 135.1#

131 87.3 84.8 127.2



#53

Toluene

Concen: 0.337 ppbv

RT: 9.77 min Scan# 2172

Delta R.T. -0.03 min

Lab File: VL039017.D

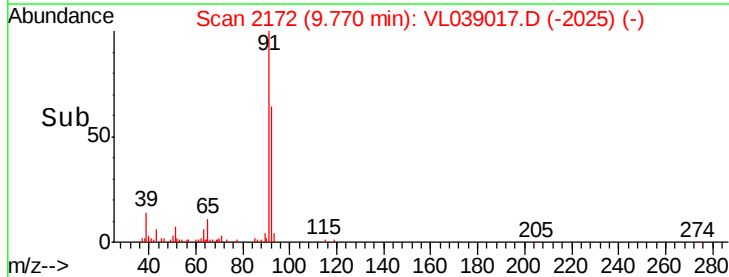
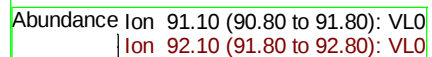
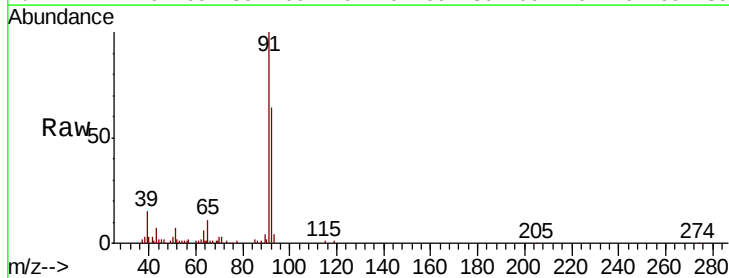
Acq: 10 May 2022 12:43

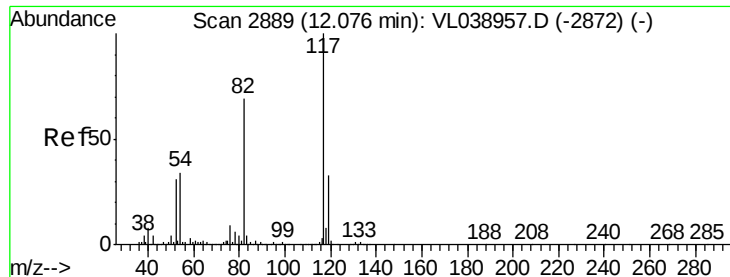
Tgt Ion: 91 Resp: 94926

Ion Ratio Lower Upper

91 100

92 64.1 48.2 72.2

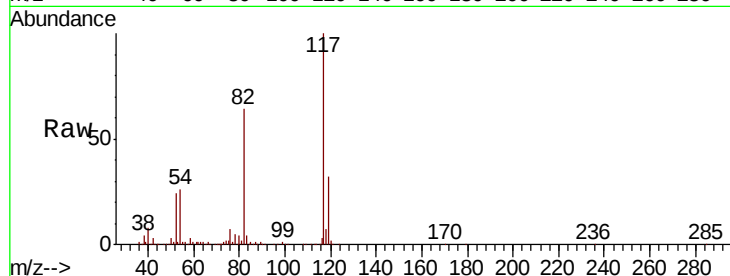




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.05 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
SV2DL2
Acq: 10 May 2022 12:43

Tot Ion:117 Resp: 2523523

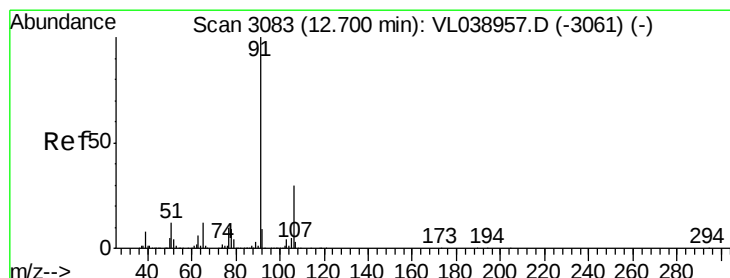
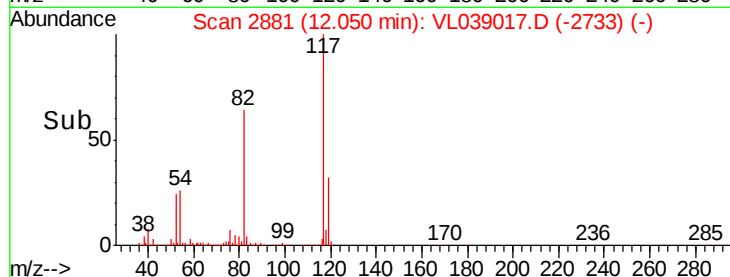
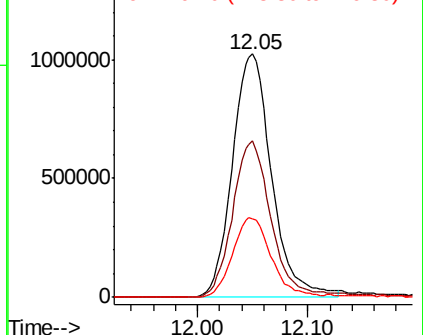
Ion	Ratio	Lower	Upper
117	100		
82	64.8	57.0	85.6
119	33.0	27.2	40.8



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

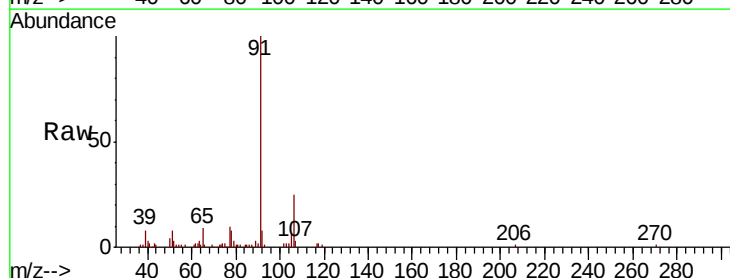
Ion 119.10 (118.80 to 119.80): V



#58
Ethyl Benzene
Concen: 0.255 ppbv
RT: 12.67 min Scan# 3075
Delta R.T. -0.03 min
Lab File: VL039017.D
Acq: 10 May 2022 12:43

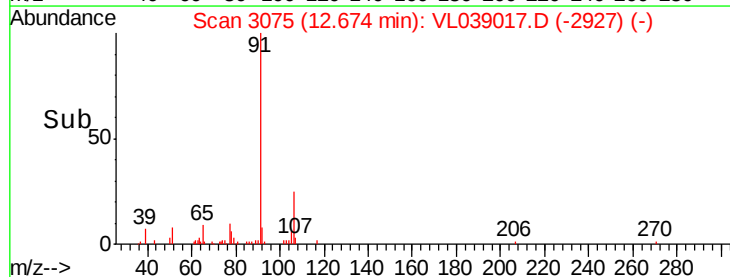
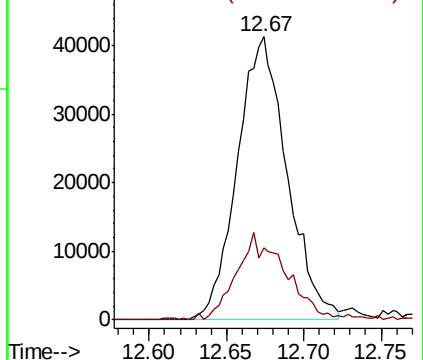
Tgt Ion: 91 Resp: 92449

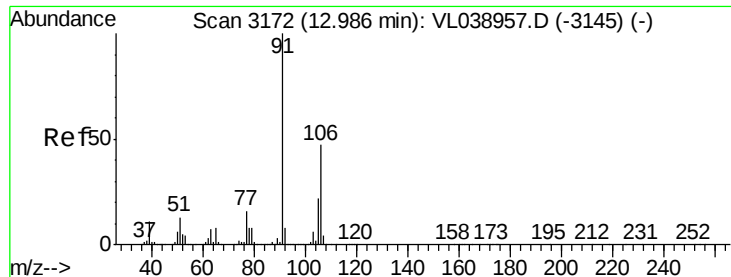
Ion	Ratio	Lower	Upper
91	100		
106	25.4	24.2	36.4



Abundance Ion 91.10 (90.80 to 91.80): VL0

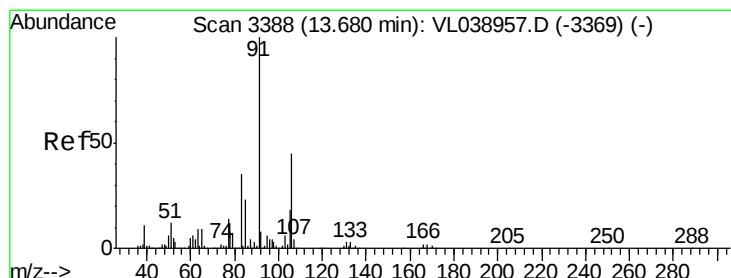
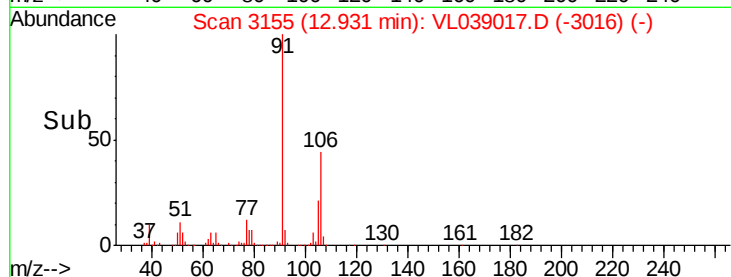
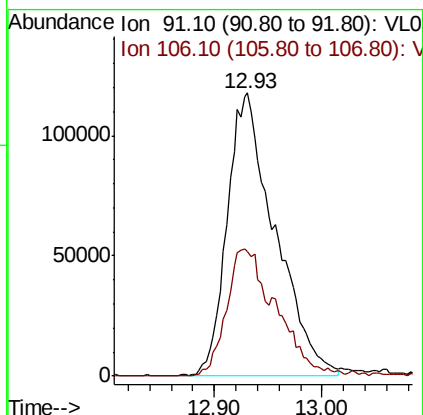
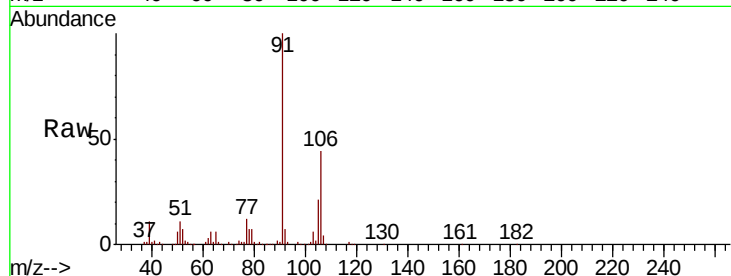
Ion 106.10 (105.80 to 106.80): V





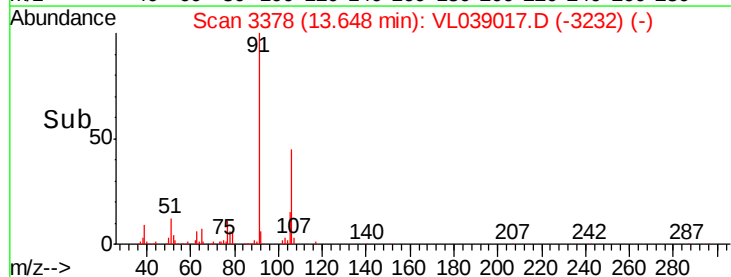
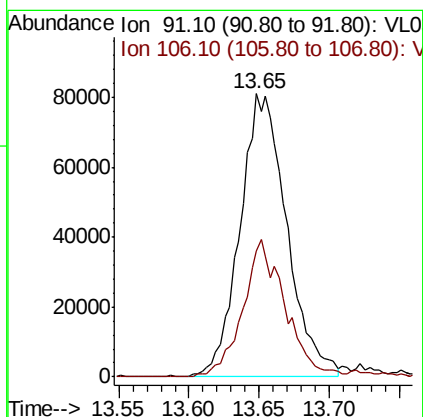
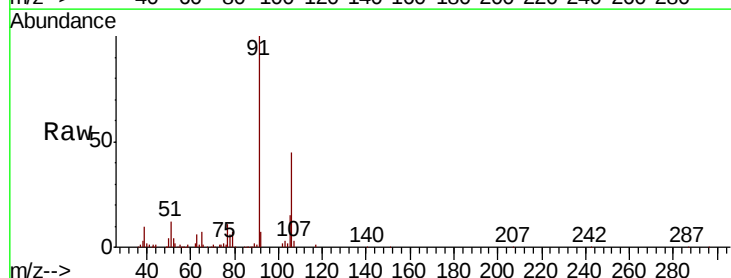
#59
m/p-Xylene
Concen: 1.157 ppbv
RT: 12.93
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
SV2DL2
Acq: 10 May 2022 12:43

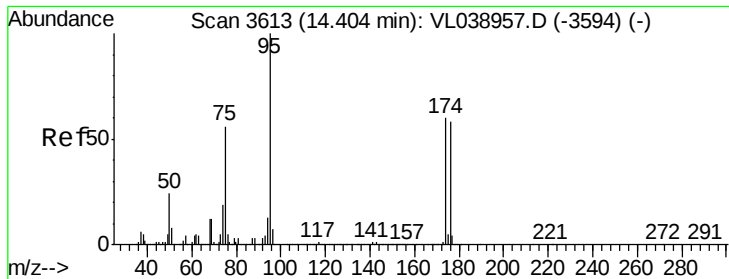
Tot Ion: 91 Resp: 358764
Ion Ratio Lower Upper
91 100
106 48.3 34.6 52.0



#60
o-Xylene
Concen: 0.645 ppbv
RT: 13.65 min Scan# 3378
Delta R.T. -0.03 min
Lab File: VL039017.D
Acq: 10 May 2022 12:43

Tgt Ion: 91 Resp: 188120
Ion Ratio Lower Upper
91 100
106 45.7 22.2 66.6

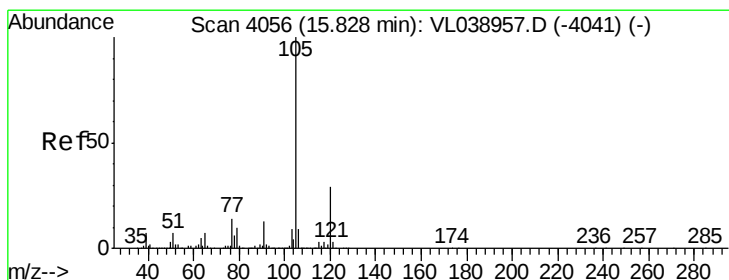
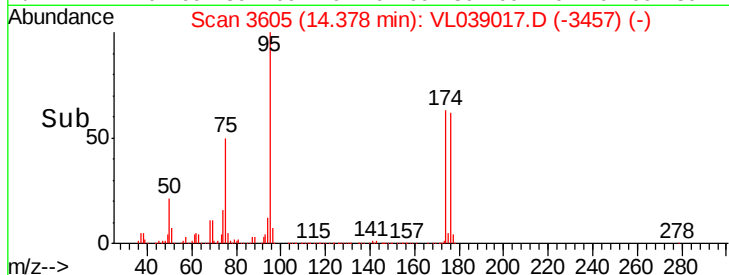
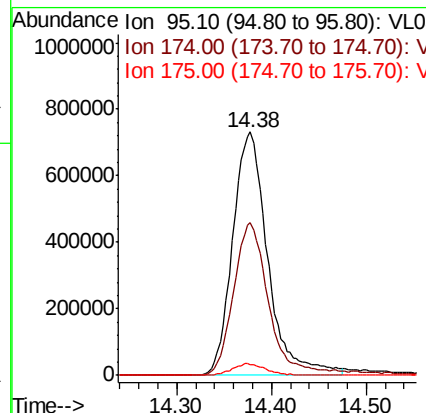
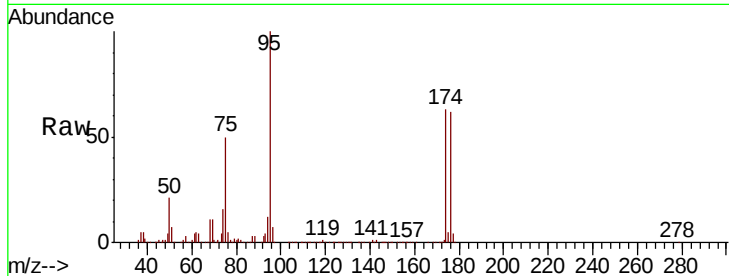




#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.450 ppbv
 RT: 14.38 min
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId : SV2DL2
 Acq: 10 May 2022 12:43

Tot Ion: 95 Resp: 1888628

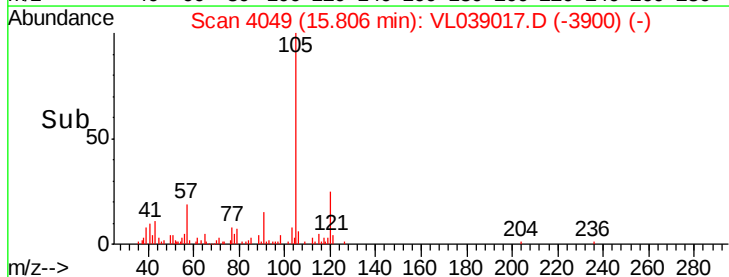
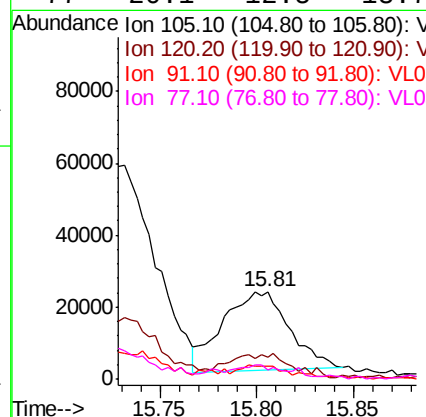
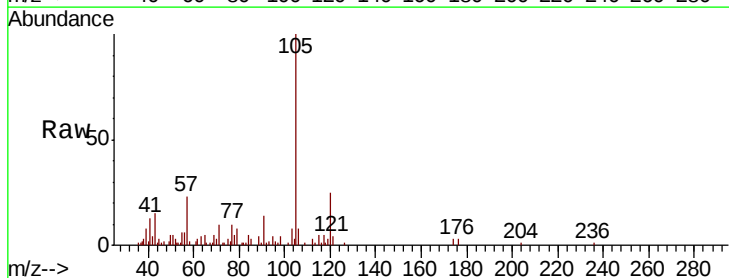
Ion	Ratio	Lower	Upper
95	100		
174	64.4	50.8	76.2
175	4.7	3.8	5.6

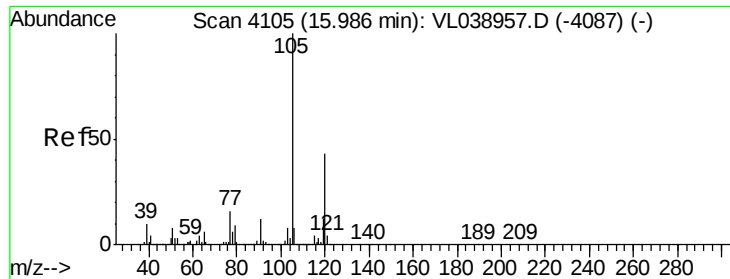


#72
 4-Ethyltoluene
 Concen: 0.156 ppbv
 RT: 15.81 min Scan# 4049
 Delta R.T. -0.02 min
 Lab File: VL039017.D
 Acq: 10 May 2022 12:43

Tgt Ion: 105 Resp: 52003

Ion	Ratio	Lower	Upper
105	100		
120	32.2	23.4	35.0
91	20.0	10.6	16.0#
77	20.1	12.5	18.7#





#73

1,3,5-Trimethylbenzene

Concen: 0.084 ppbv

RT: 15.95

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

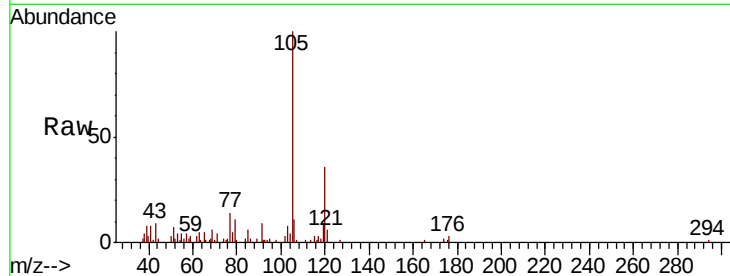
Acq: 10 May 2022 12:43

Tot Ion:105 Resp: 25024

Ion Ratio Lower Upper

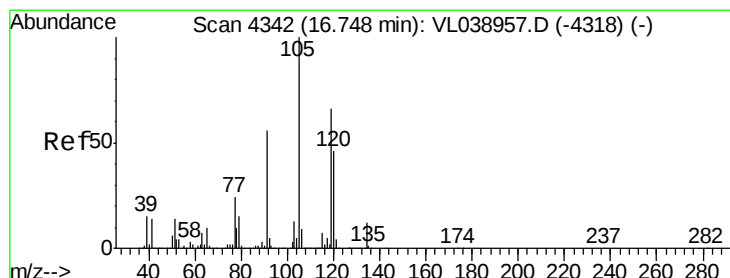
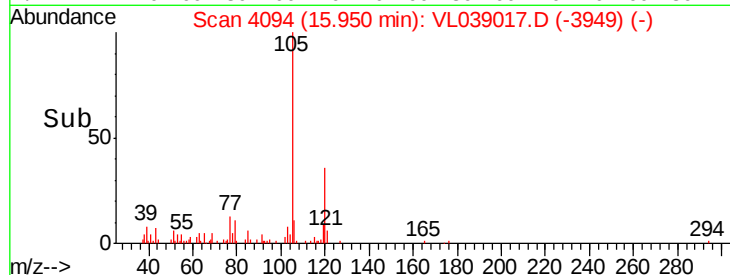
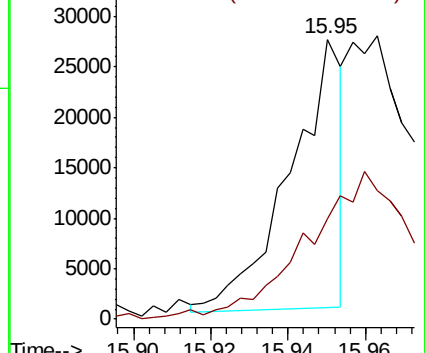
105 100

120 34.7 34.4 51.6



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 0.448 ppbv

RT: 16.72 min Scan# 4334

Delta R.T. -0.03 min

Lab File: VL039017.D

Acq: 10 May 2022 12:43

Tgt Ion:105 Resp: 146955

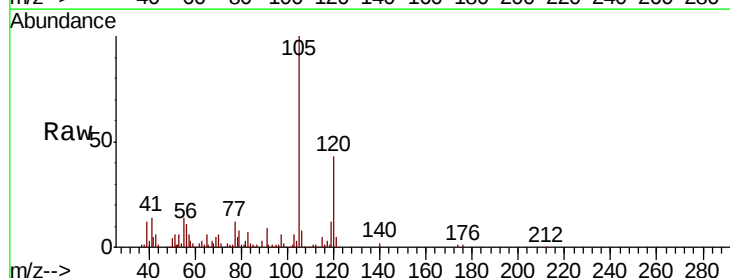
Ion Ratio Lower Upper

105 100

120 43.3 36.9 55.3

91 8.5 45.0 67.4#

77 12.1 19.2 28.8#



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

