

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL052322\
 Data File : VL039092.D
 Acq On : 23 May 2022 20:24
 Operator : SY/AP
 Sample : N2956-02
 Misc : 400mL/MSVOA L
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 AP-2

Quant Time: May 24 06:00:38 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL050522AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu 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	5.65	49	1024919	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.16	114	2283883	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.06	117	1821220	10.00	ppbv	-0.01

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.39	95	1585276	10.99	ppbv	-0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	109.90%

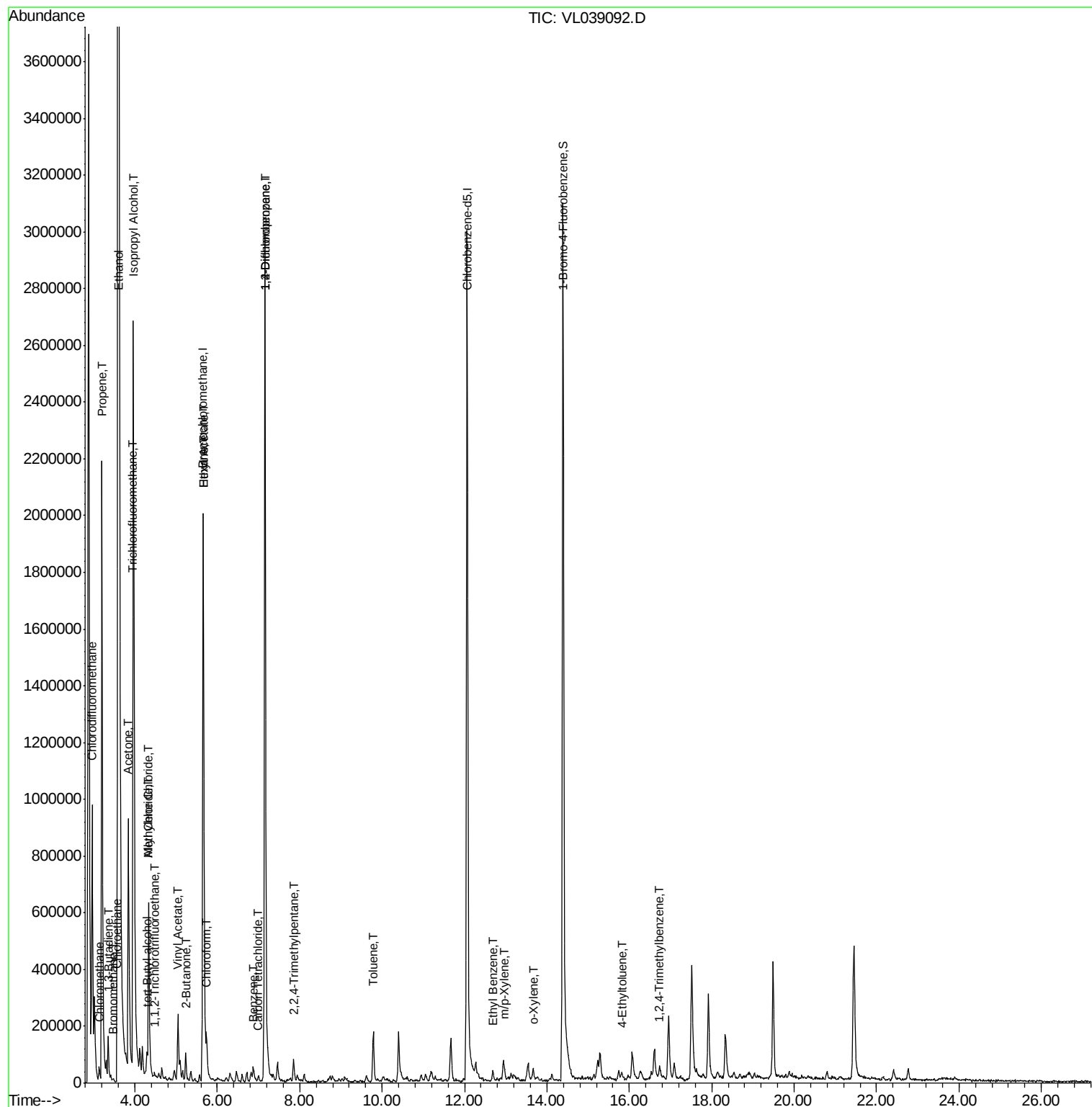
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
3) Chlorodifluoromethane	2.96	51	778475	6.121	ppbv #	60
4) Chloromethane	3.13	50	46480	0.730	ppbv	93
6) Bromomethane	3.47	94	1402	0.051	ppbv	85
7) Chloroethane	3.56	64	1107	0.057	ppbv #	45
9) Propene	3.20	41	730518	13.153	ppbv	97
11) Trichlorofluoromethane	3.94	101	22624	0.164	ppbv	93
12) 1,1,2-Trichlorotrifluoroet	4.47	101	3568	0.038	ppbv #	9
13) Ethanol	3.60	45	11708287	2978.866	ppbv	91
15) Acetone	3.84	43	1111664	11.498	ppbv	97
16) 1,3-Butadiene	3.35	39	14028	0.253	ppbv #	15
17) tert-Butyl alcohol	4.29	59	21945	0.295	ppbv #	70
19) Isopropyl Alcohol	3.96	45	3616751	78.680	ppbv	100
20) Methylene Chloride	4.33	84	257507	7.067	ppbv	94
21) Allyl Chloride	4.33	41	4591	0.070	ppbv #	19
23) Vinyl Acetate	5.05	43	134427	1.757	ppbv #	25
25) Ethyl Acetate	5.67	43	175630	0.759	ppbv #	92
26) Hexane	5.67	57	156057	1.518	ppbv #	53
29) Chloroform	5.74	83	47842	0.288	ppbv	87
34) 2-Butanone	5.23	43	110522	0.949	ppbv	92
35) Carbon Tetrachloride	7.00	117	4640	0.031	ppbv #	79
36) Benzene	6.88	78	32141	0.164	ppbv #	90
39) 1,2-Dichloropropane	7.16	63	651126	8.562	ppbv #	26
44) 2,2,4-Trimethylpentane	7.85	57	60332	0.176	ppbv #	82
53) Toluene	9.78	91	68886	0.314	ppbv #	31
58) Ethyl Benzene	12.69	91	23238	0.089	ppbv #	80
59) m/p-Xylene	12.97	91	10050	0.045	ppbv #	33
60) o-Xylene	13.67	91	12732	0.060	ppbv #	31
72) 4-Ethyltoluene	15.82	105	8310	0.035	ppbv #	81
74) 1,2,4-Trimethylbenzene	16.72	105	10714	0.045	ppbv #	65

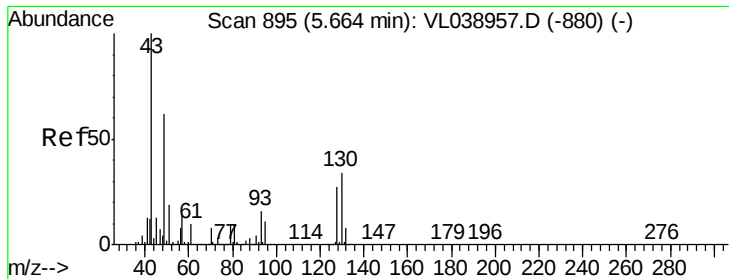
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 23 May 2022 20:24

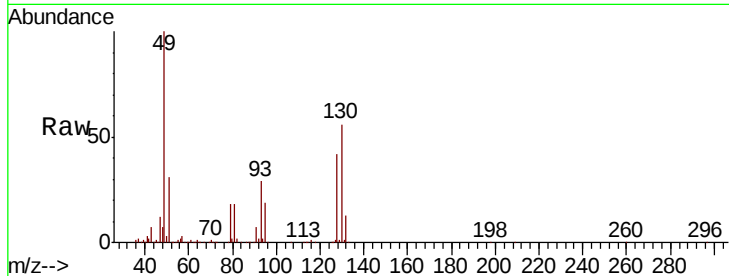
Tot Ion: 49 Resp: 1024919

Ion	Ratio	Lower	Upper
49	100		
128	45.8	23.3	69.8
130	58.4	29.8	89.3

49 100

128 45.8 23.3 69.8

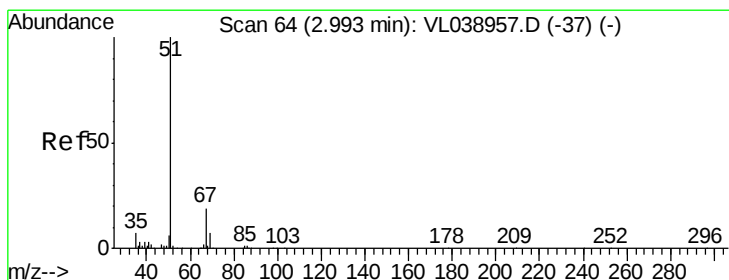
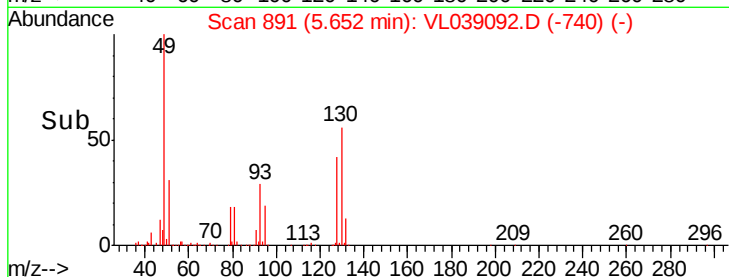
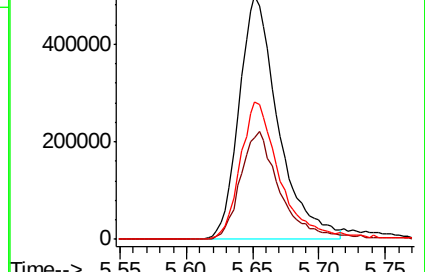
130 58.4 29.8 89.3



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: 6.121 ppbv

RT: 2.96 min Scan# 54

Delta R.T. -0.03 min

Lab File: VL039092.D

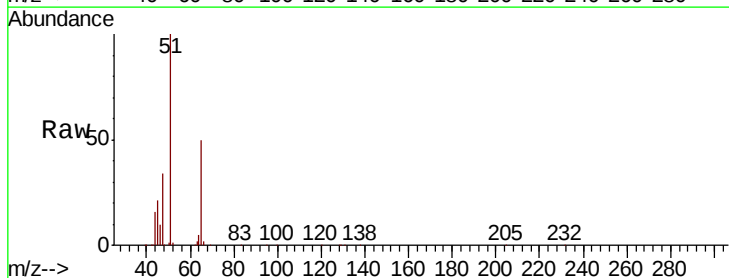
Acq: 23 May 2022 20:24

Tgt Ion: 51 Resp: 778475

Ion	Ratio	Lower	Upper
51	100		
67	1.5	15.8	23.8

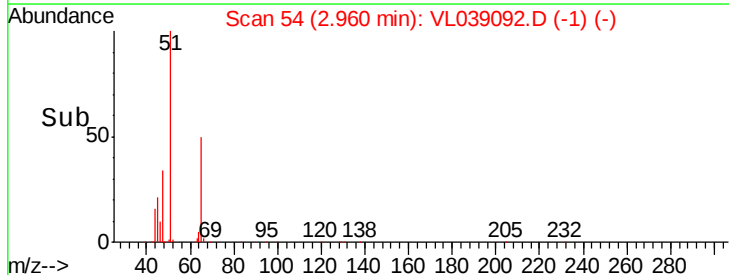
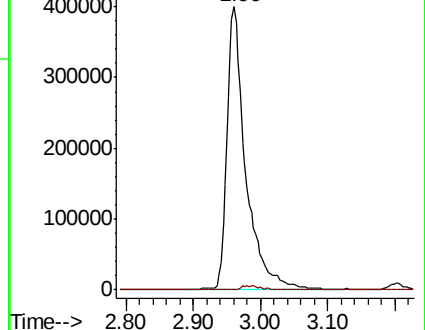
51 100

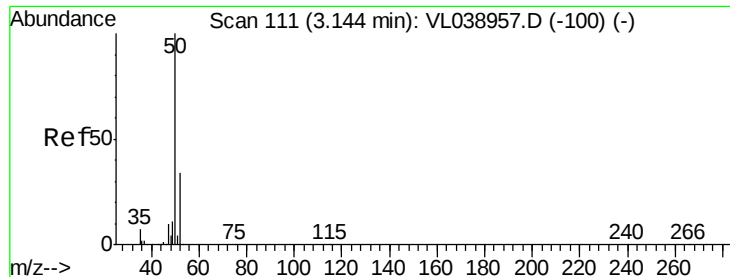
67 1.5 15.8 23.8



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#4

Chloromethane

Concen: 0.730 ppbv

RT: 3.13 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

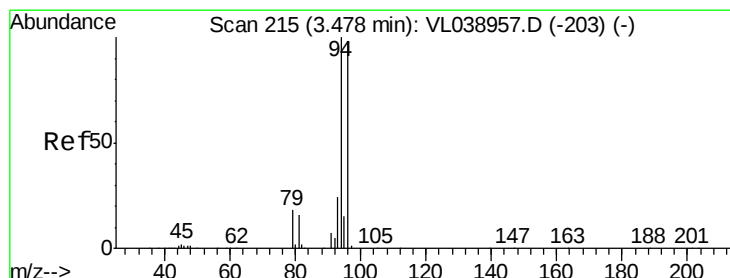
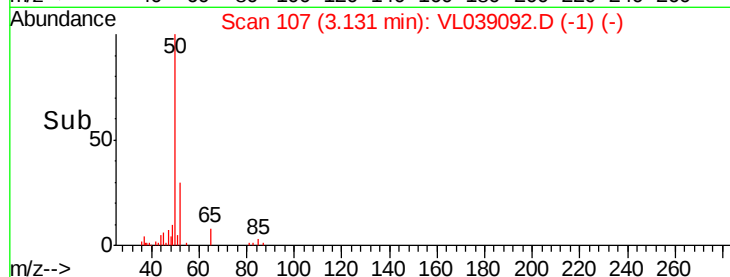
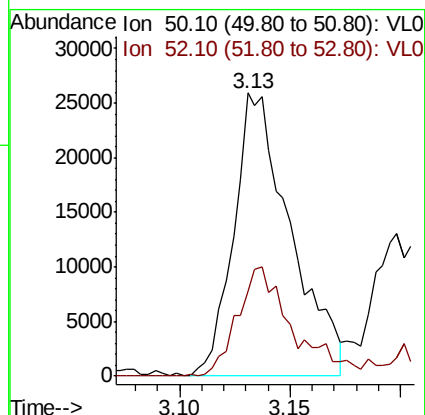
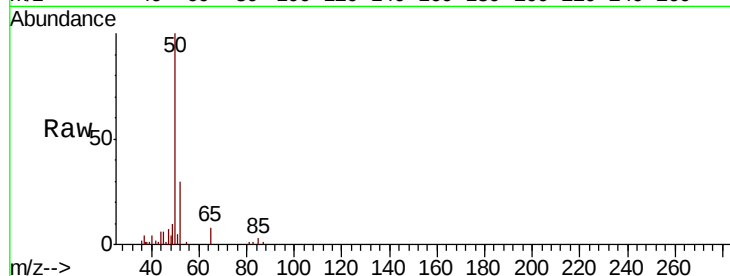
Acq: 23 May 2022 20:24

Tot Ion: 50 Resp: 46480

Ion Ratio Lower Upper

50 100

52 29.8 27.3 40.9



#6

Bromomethane

Concen: 0.051 ppbv

RT: 3.47 min Scan# 212

Delta R.T. -0.01 min

Lab File: VL039092.D

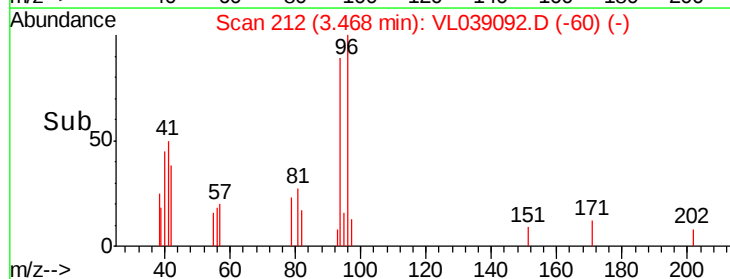
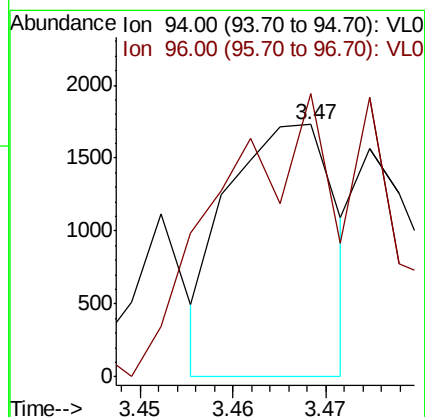
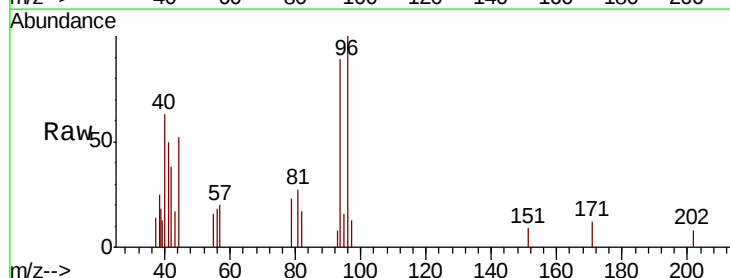
Acq: 23 May 2022 20:24

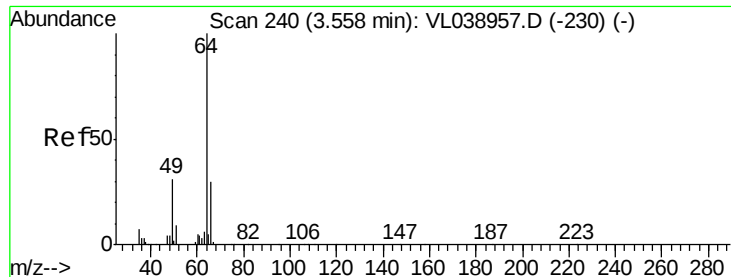
Tgt Ion: 94 Resp: 1402

Ion Ratio Lower Upper

94 100

96 83.0 78.1 117.1





#7

Chloroethane

Concen: 0.057 ppbv

RT: 3.56 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

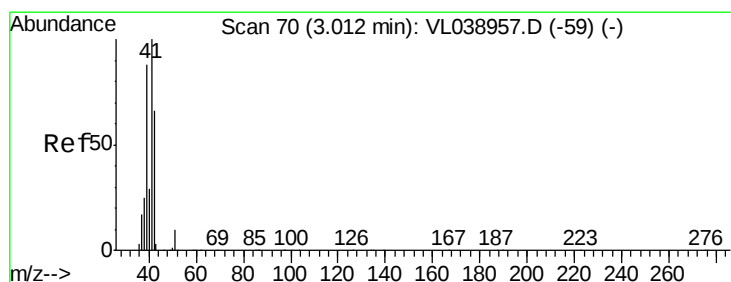
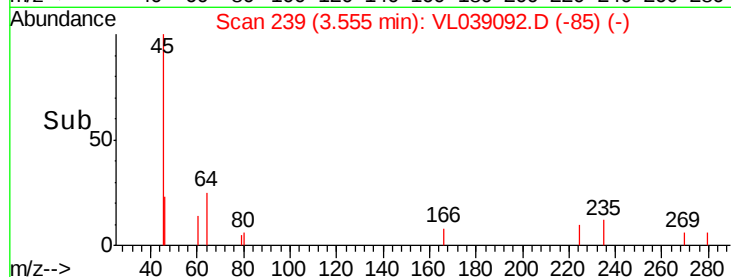
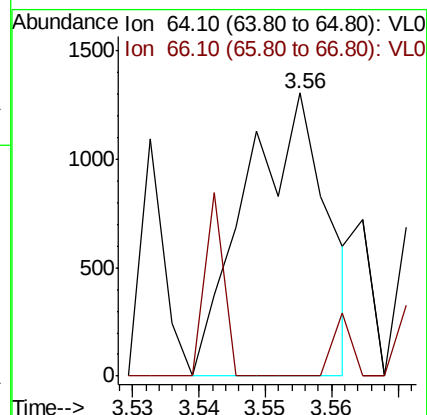
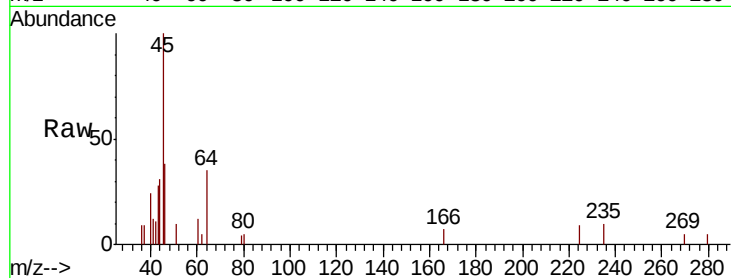
Acq: 23 May 2022 20:24

Tot Ion: 64 Resp: 1107

Ion Ratio Lower Upper

64 100

66 0.0 23.8 35.8#



#9

Propene

Concen: 13.153 ppbv

RT: 3.20 min Scan# 128

Delta R.T. 0.19 min

Lab File: VL039092.D

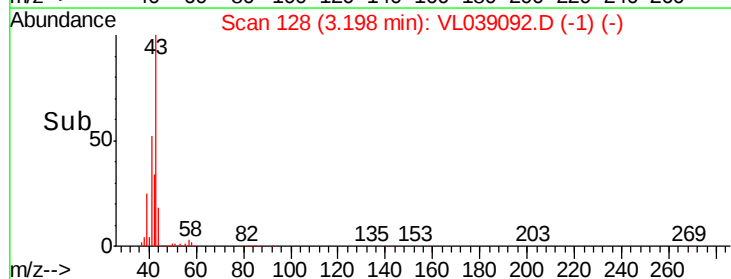
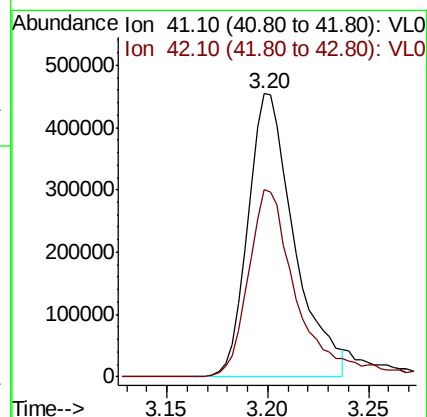
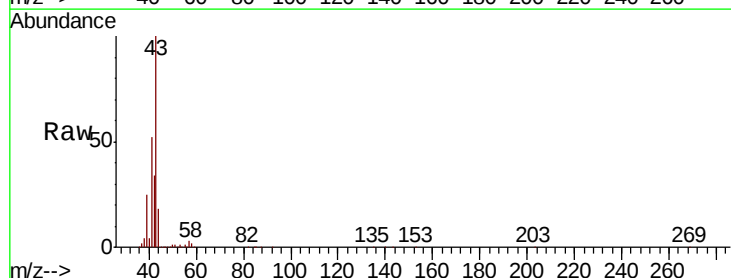
Acq: 23 May 2022 20:24

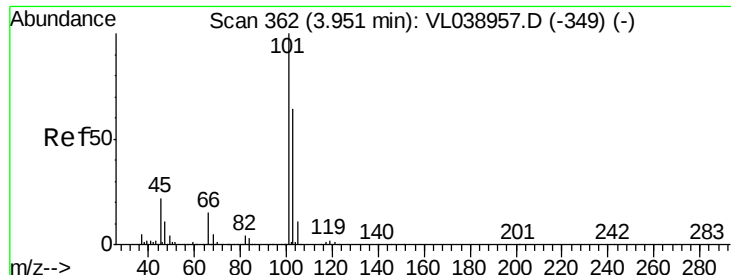
Tgt Ion: 41 Resp: 730518

Ion Ratio Lower Upper

41 100

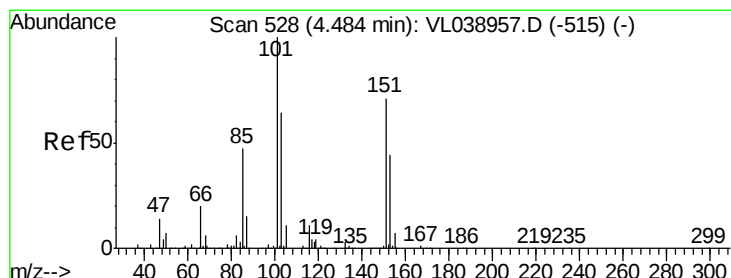
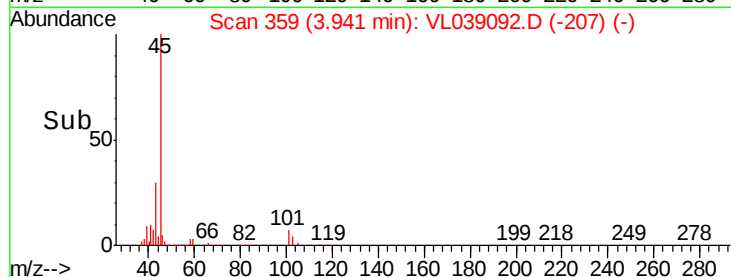
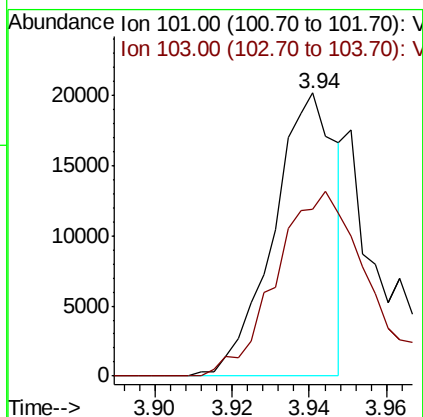
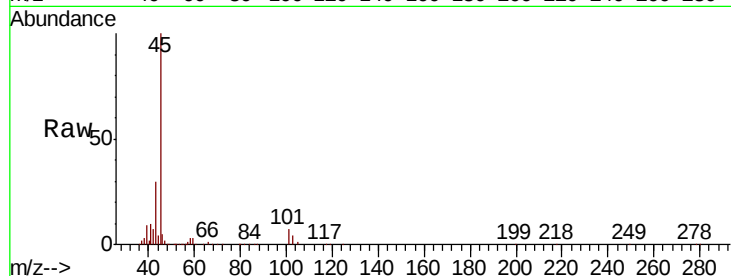
42 70.8 58.3 87.5





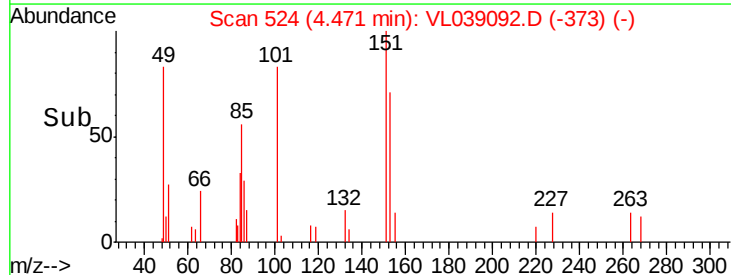
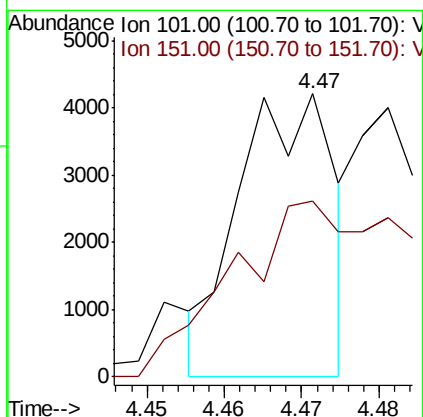
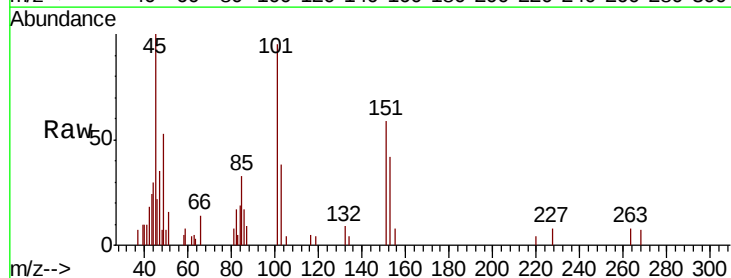
#11
 Trichlorofluoromethane
 Concen: 0.164 ppbv
 RT: 3.94
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 AP-2
 Acq: 23 May 2022 20:24

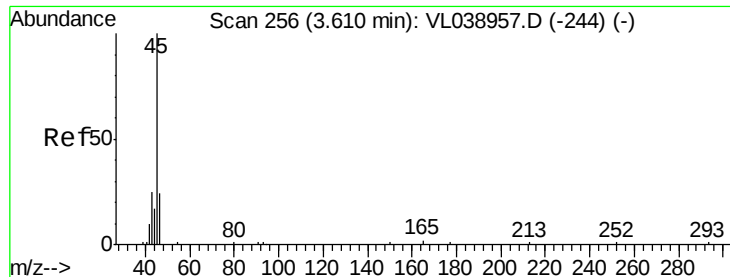
Tot Ion:101 Resp: 22624
 Ion Ratio Lower Upper
 101 100
 103 58.8 51.5 77.3



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.038 ppbv
 RT: 4.47 min Scan# 524
 Delta R.T. -0.01 min
 Lab File: VL039092.D
 Acq: 23 May 2022 20:24

Tgt Ion:101 Resp: 3568
 Ion Ratio Lower Upper
 101 100
 151 143.5 55.4 83.0#





#13

Ethanol

Concen: 2978.866 ppbv

RT: 3.60

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

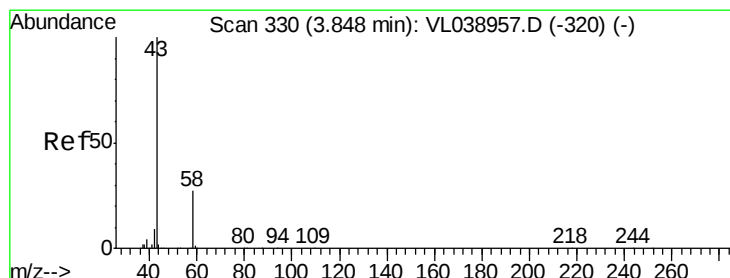
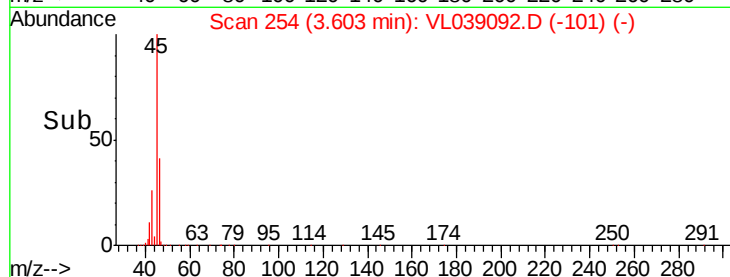
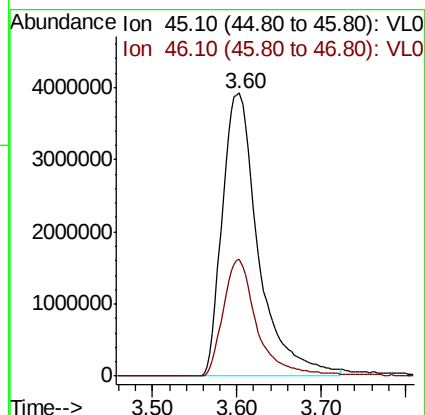
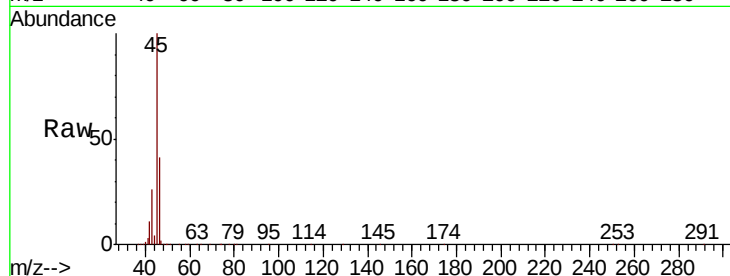
Acq: 23 May 2022 20:24

Tot Ion: 45 Resp: 11708287

Ion Ratio Lower Upper

45 100

46 39.5 18.0 72.2



#15

Acetone

Concen: 11.498 ppbv

RT: 3.84 min Scan# 327

Delta R.T. -0.01 min

Lab File: VL039092.D

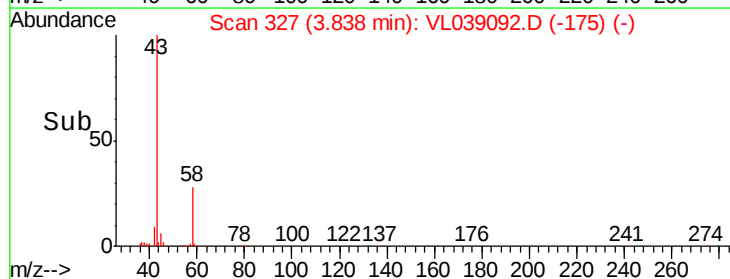
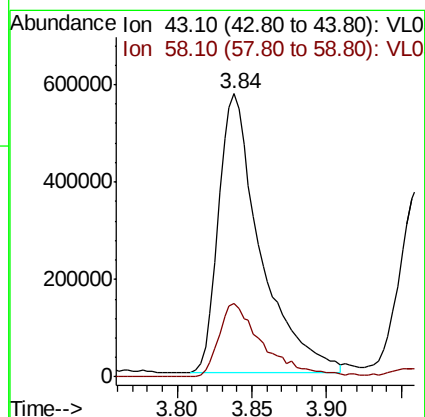
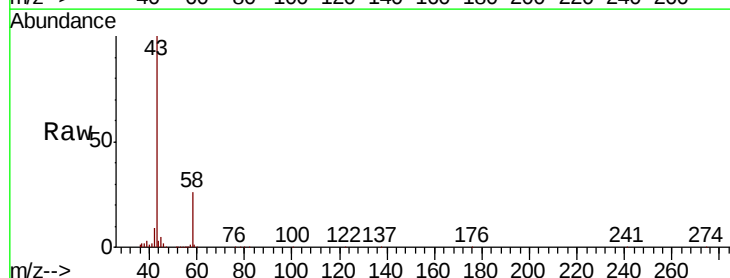
Acq: 23 May 2022 20:24

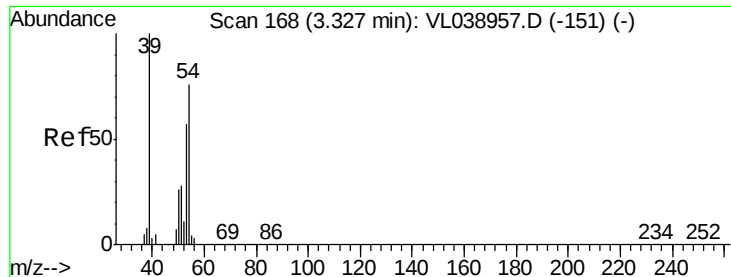
Tgt Ion: 43 Resp: 1111664

Ion Ratio Lower Upper

43 100

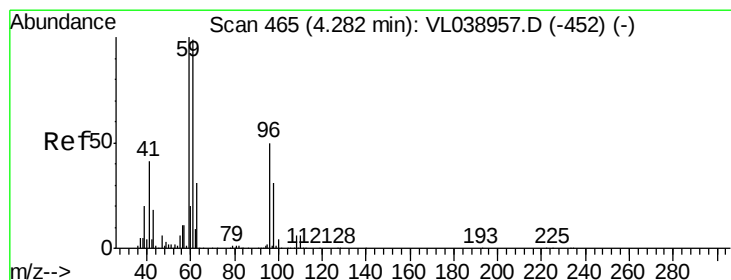
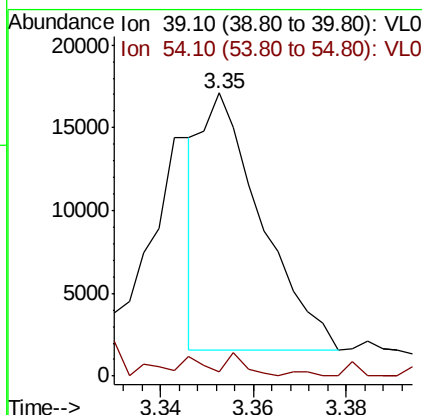
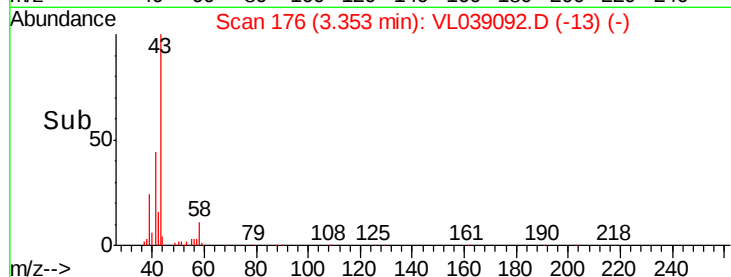
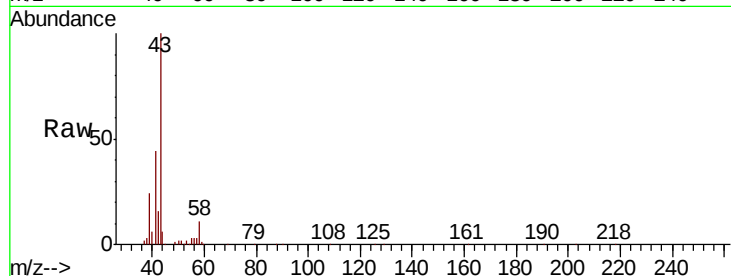
58 28.3 21.3 31.9





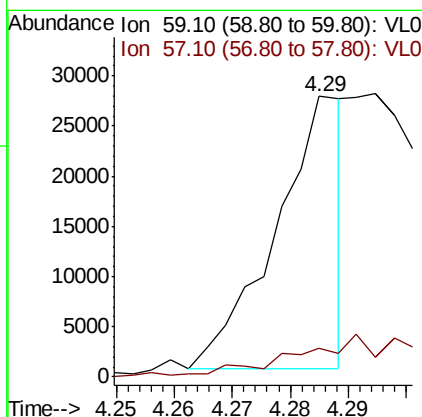
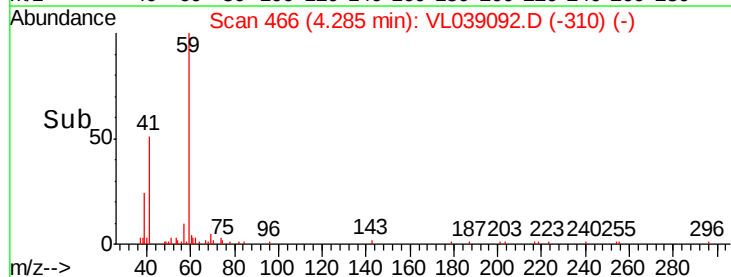
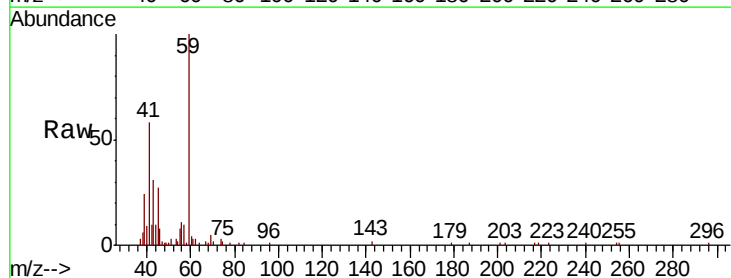
#16
 1,3-Butadiene
 Concen: 0.253 ppbv
 RT: 3.35
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 AP-2
 Acq: 23 May 2022 20:24

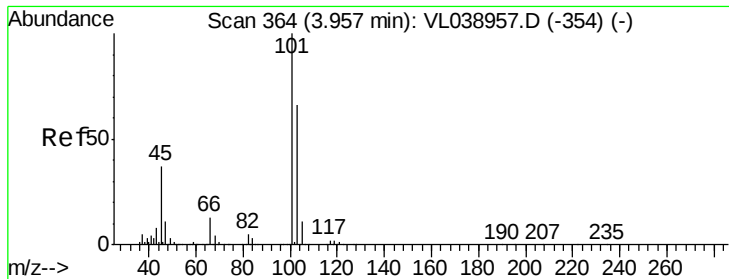
Tot Ion: 39 Resp: 14028
 Ion Ratio Lower Upper
 39 100
 54 6.1 65.2 97.8#



#17
 tert-Butyl alcohol
 Concen: 0.295 ppbv
 RT: 4.29 min Scan# 466
 Delta R.T. 0.00 min
 Lab File: VL039092.D
 Acq: 23 May 2022 20:24

Tgt Ion: 59 Resp: 21945
 Ion Ratio Lower Upper
 59 100
 57 0.0 9.2 13.8#





#19

Isopropyl Alcohol

Concen: 78.680 ppbv

RT: 3.96 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: AP-2

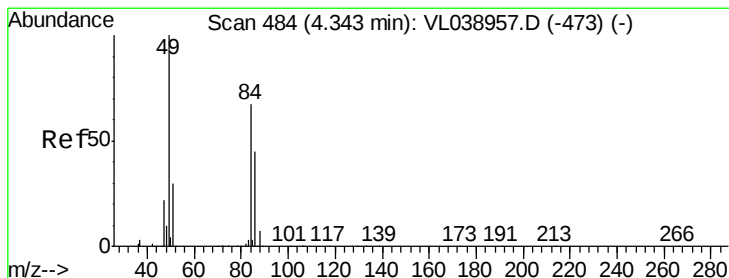
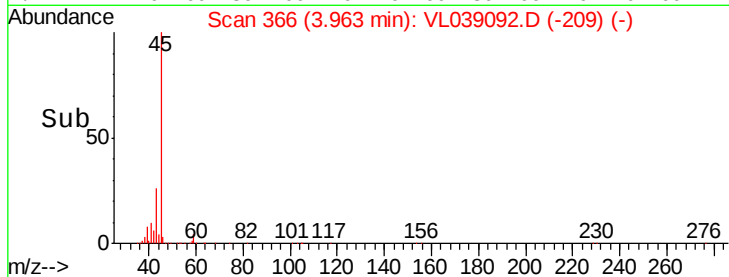
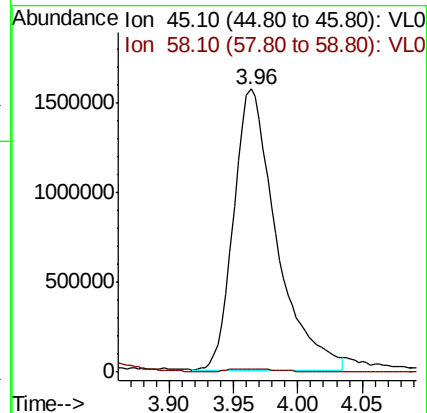
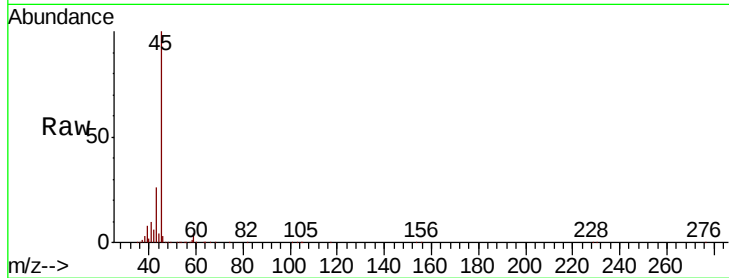
Acq: 23 May 2022 20:24

Tot Ion: 45 Resp: 3616751

Ion Ratio Lower Upper

45 100

58 1.9 1.4 2.2



#20

Methylene Chloride

Concen: 7.067 ppbv

RT: 4.33 min Scan# 481

Delta R.T. -0.01 min

Lab File: VL039092.D

Acq: 23 May 2022 20:24

Tgt Ion: 84 Resp: 257507

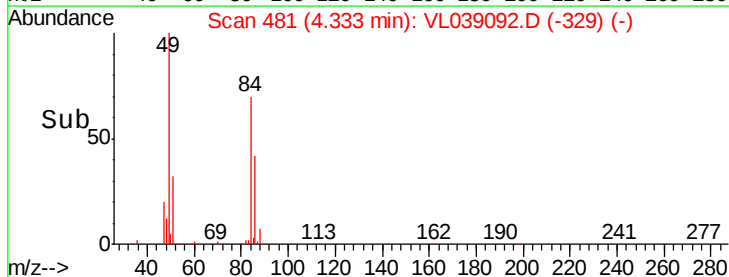
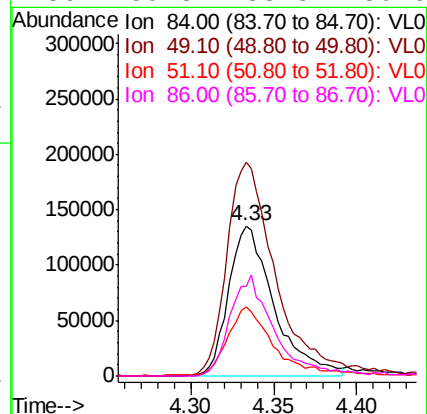
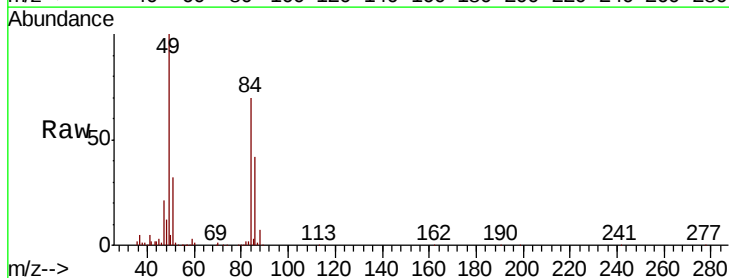
Ion Ratio Lower Upper

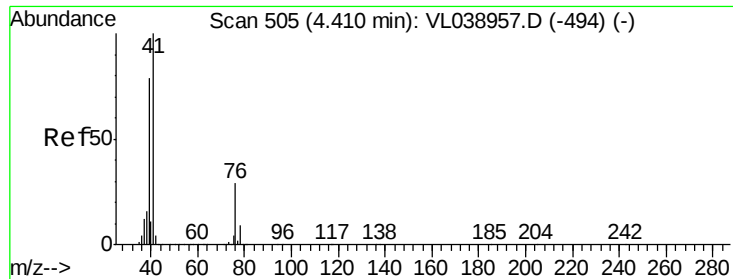
84 100

49 141.5 119.9 179.9

51 45.9 35.7 53.5

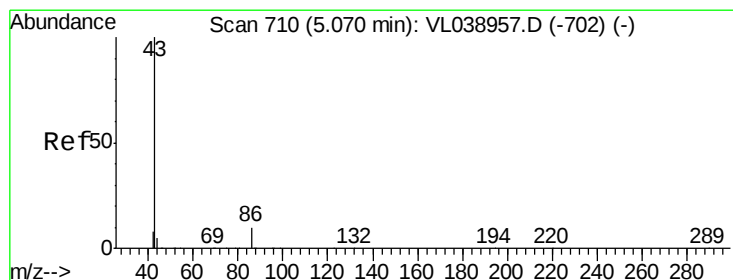
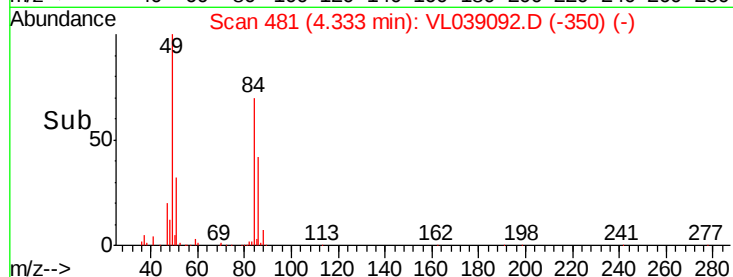
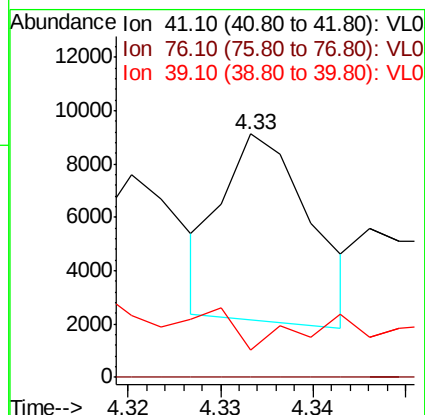
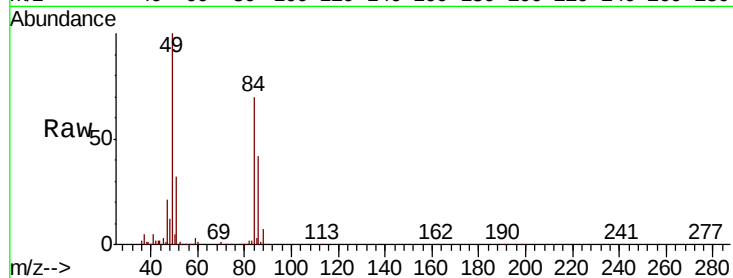
86 59.8 53.8 80.6





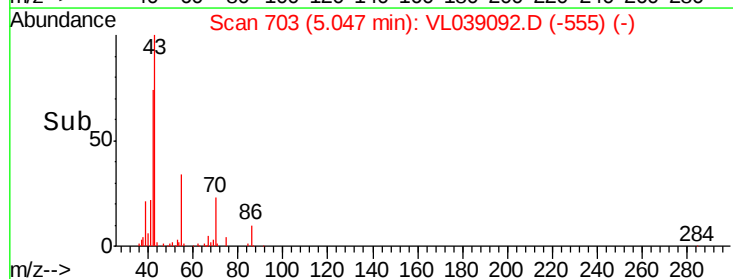
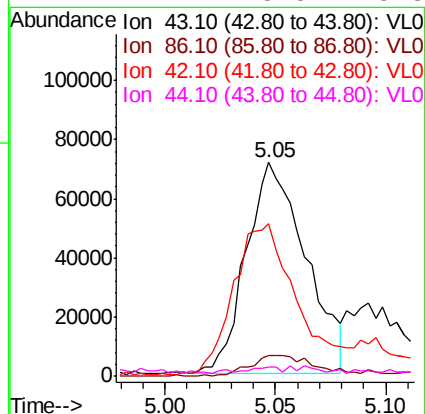
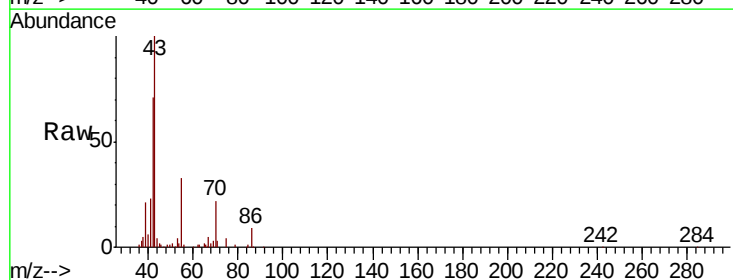
#21
 Allvl Chloride
 Concen: 0.070 ppbv
 RT: 4.33
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 AP-2
 Acq: 23 May 2022 20:24

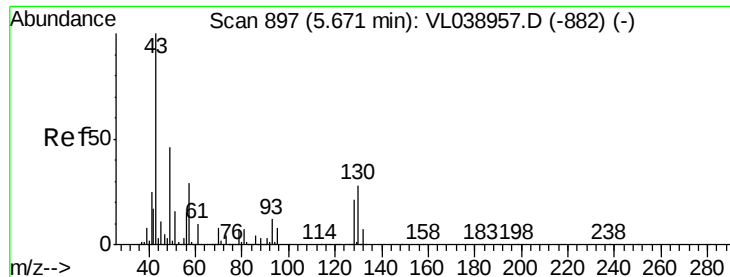
Tot Ion:	41	Resp:	4591
Ion	Ratio	Lower	Upper
41	100		
76	0.0	24.2	36.4#
39	0.0	63.8	95.8#



#23
 Vinyl Acetate
 Concen: 1.757 ppbv
 RT: 5.05 min Scan# 703
 Delta R.T. -0.02 min
 Lab File: VL039092.D
 Acq: 23 May 2022 20:24

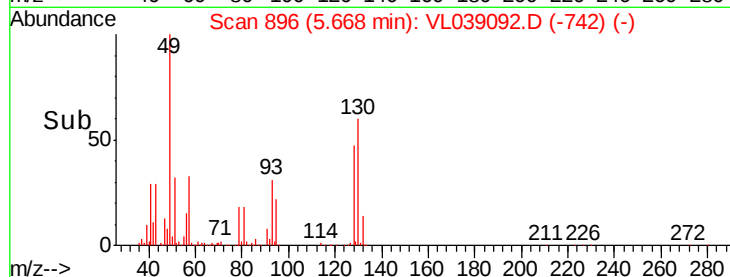
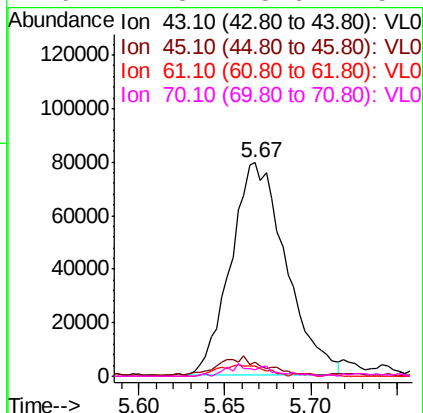
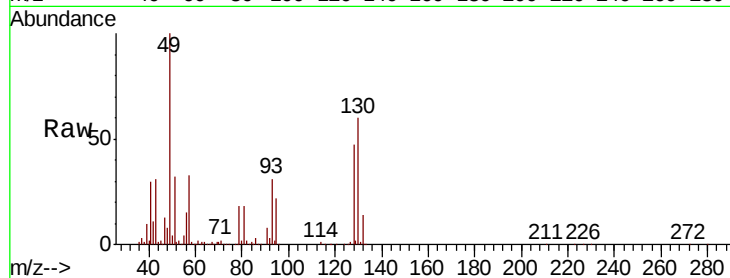
Tgt Ion:	43	Resp:	134427
Ion	Ratio	Lower	Upper
43	100		
86	9.5	6.6	9.8
42	70.6	8.1	12.1#
44	1.7	3.5	5.3#





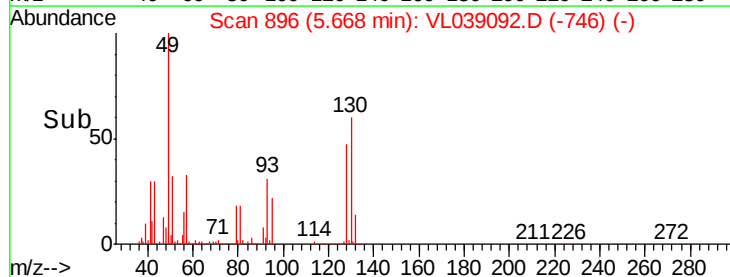
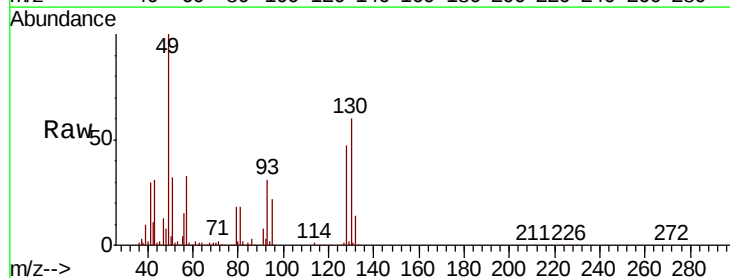
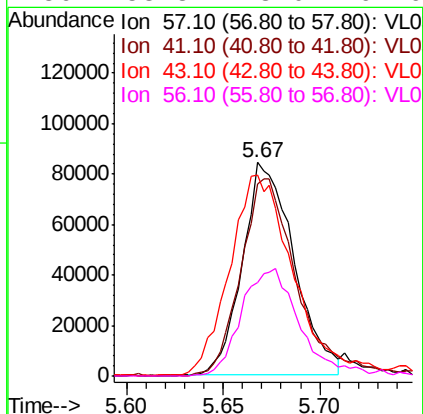
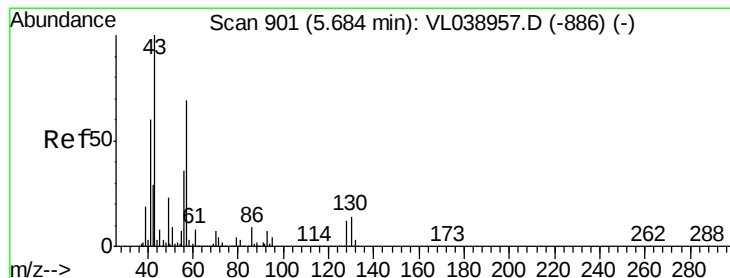
#25
Ethyl Acetate
Concen: 0.759 ppbv
RT: 5.67 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 23 May 2022 20:24

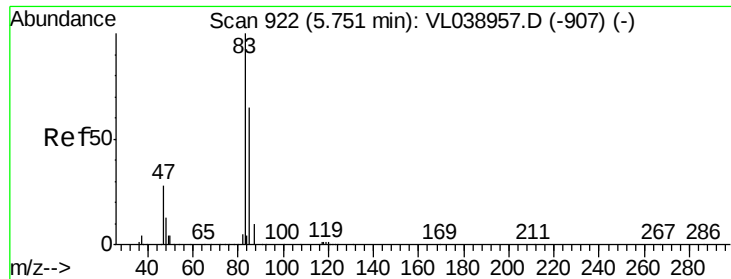
Tot Ion:	43	Resp:	175630
Ion	Ratio	Lower	Upper
43	100		
45	8.7	8.1	12.1
61	5.2	7.8	11.6#
70	4.3	5.6	8.4#



#26
Hexane
Concen: 1.518 ppbv
RT: 5.67 min Scan# 896
Delta R.T. -0.02 min
Lab File: VL039092.D
Acq: 23 May 2022 20:24

Tgt Ion:	57	Resp:	156057
Ion	Ratio	Lower	Upper
57	100		
41	103.1	75.2	112.8
43	119.0	190.8	286.2#
56	58.8	43.0	64.6





#29

Chloroform

Concen: 0.288 ppbv

RT: 5.74 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

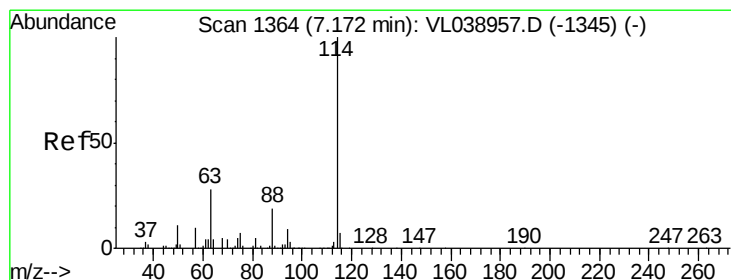
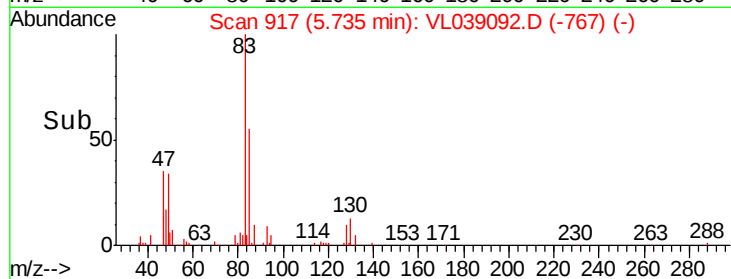
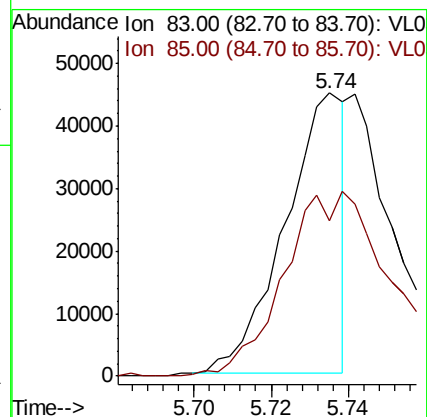
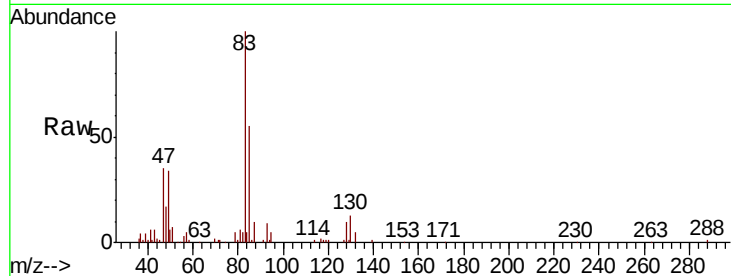
Acq: 23 May 2022 20:24

Tot Ion: 83 Resp: 47842

Ion Ratio Lower Upper

83 100

85 54.8 51.8 77.6



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.16 min Scan# 1359

Delta R.T. -0.02 min

Lab File: VL039092.D

Acq: 23 May 2022 20:24

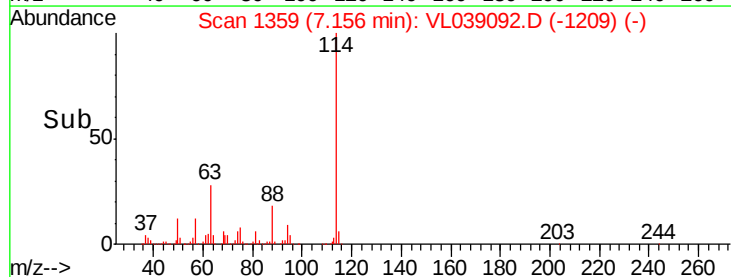
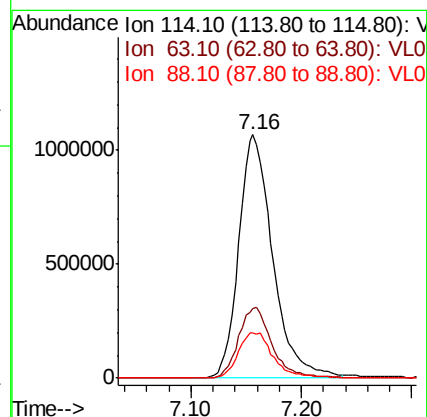
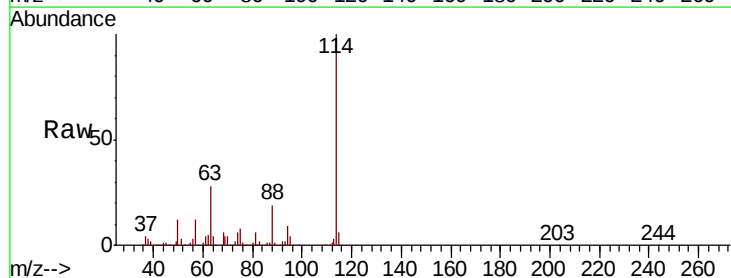
Tgt Ion: 114 Resp: 2283883

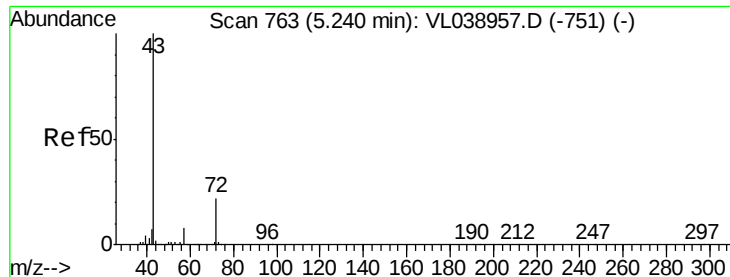
Ion Ratio Lower Upper

114 100

63 28.9 22.6 33.8

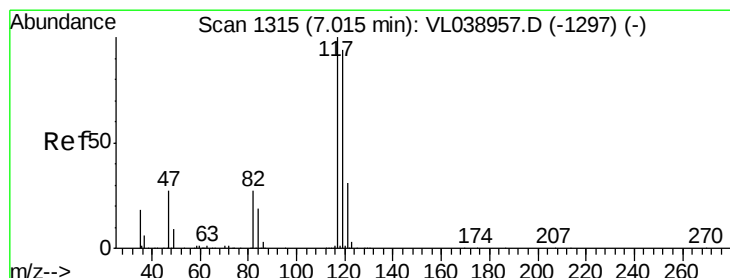
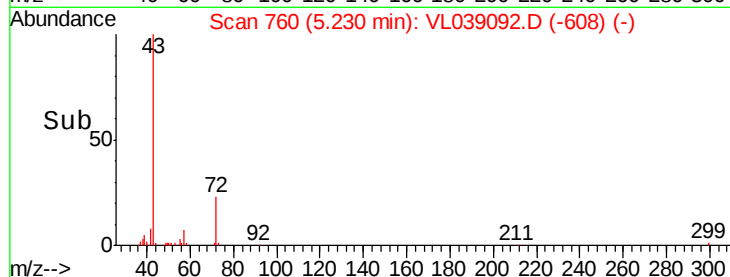
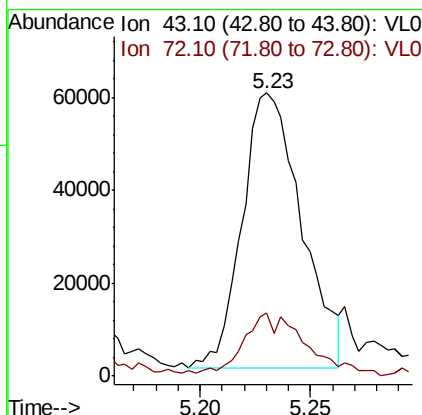
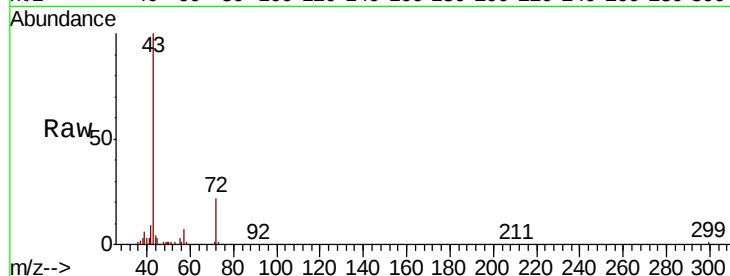
88 19.4 15.4 23.0





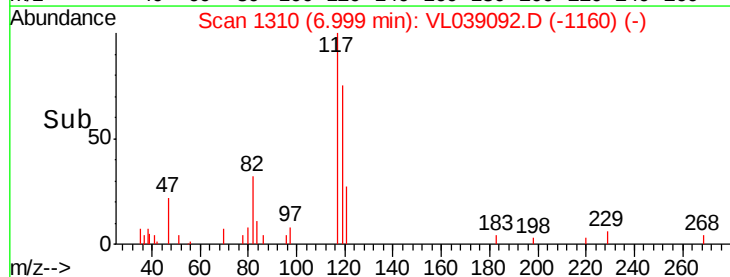
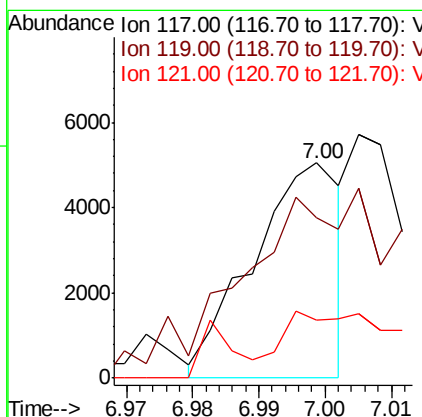
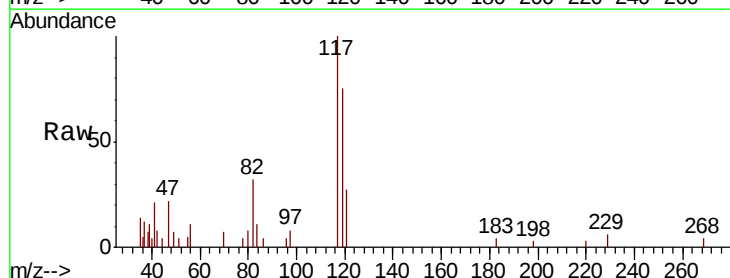
#34
 2-Butanone
 Concen: 0.949 ppbv
 RT: 5.23
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 AP-2
 Acq: 23 May 2022 20:24

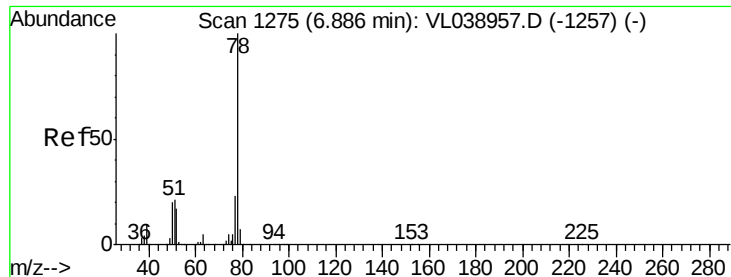
Tot Ion: 43 Resp: 110522
 Ion Ratio Lower Upper
 43 100
 72 25.8 17.8 26.6



#35
 Carbon Tetrachloride
 Concen: 0.031 ppbv
 RT: 7.00 min Scan# 1310
 Delta R.T. -0.02 min
 Lab File: VL039092.D
 Acq: 23 May 2022 20:24

Tgt Ion: 117 Resp: 4640
 Ion Ratio Lower Upper
 117 100
 119 68.5 75.2 112.8#
 121 28.8 24.6 37.0





#36

Benzene

Concen: 0.164 ppbv

RT: 6.88 Instrument: MSVOA_1

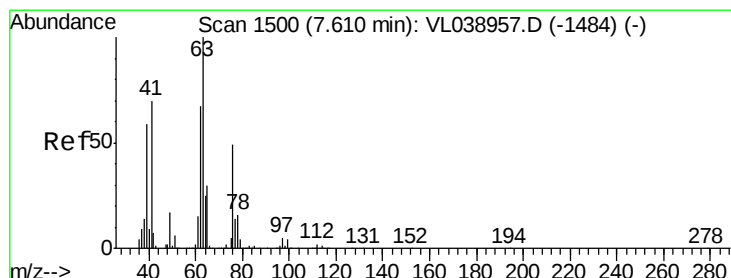
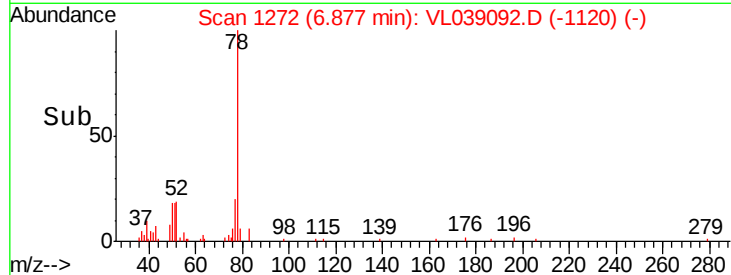
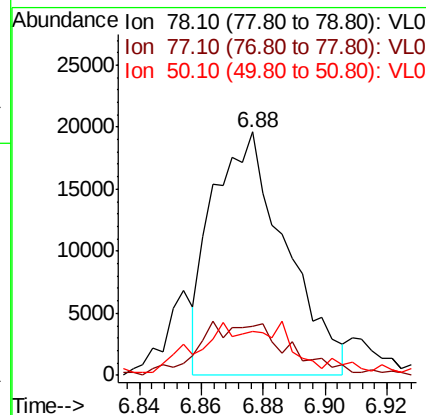
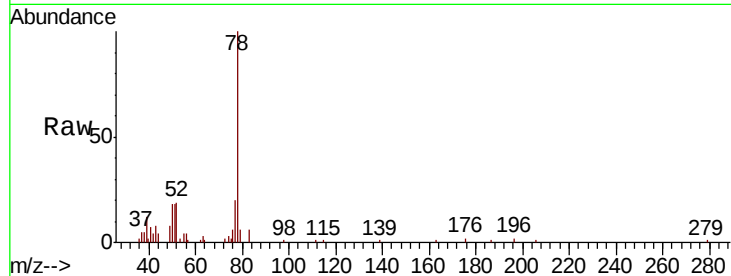
Delta R.T. ClientSampleId:

Lab File: AP-2

Acq: 23 May 2022 20:24

Tot Ion: 78 Resp: 32141

Ion	Ratio	Lower	Upper
78	100		
77	18.4	18.6	28.0#
50	15.4	15.6	23.4#



#39

1,2-Dichloropropane

Concen: 8.562 ppbv

RT: 7.16 min Scan# 1360

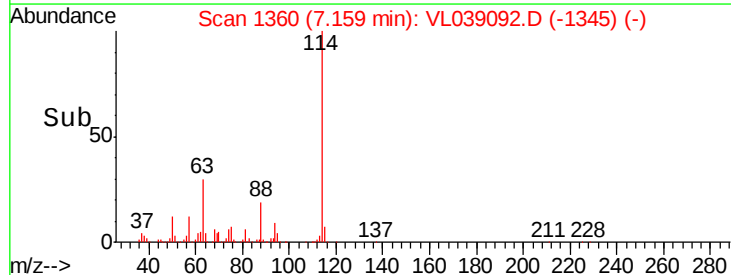
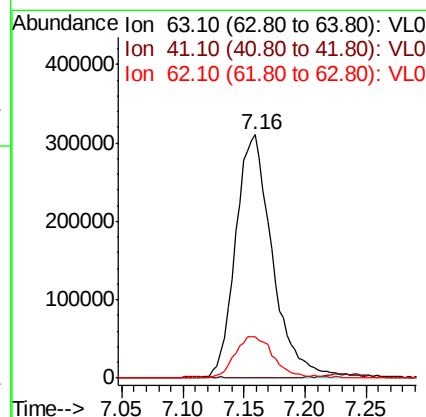
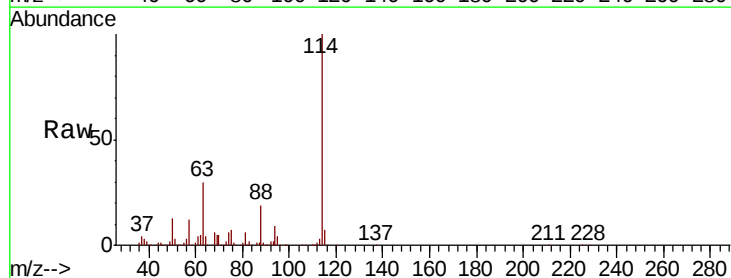
Delta R.T. -0.45 min

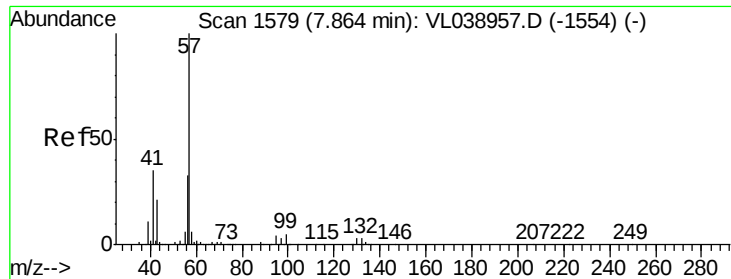
Lab File: VL039092.D

Acq: 23 May 2022 20:24

Tgt Ion: 63 Resp: 651126

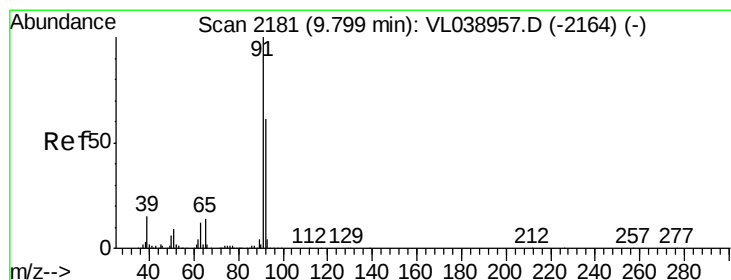
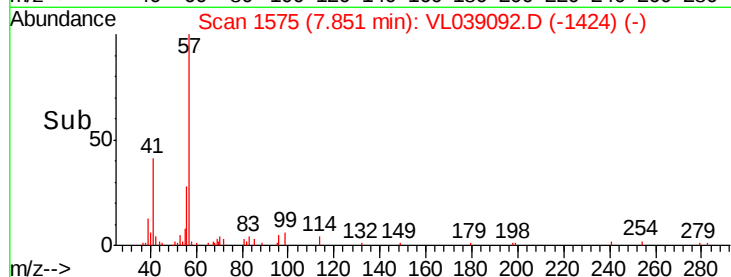
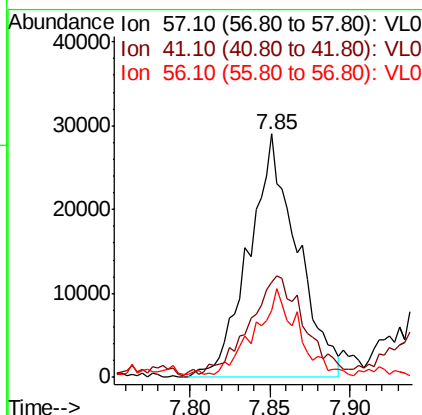
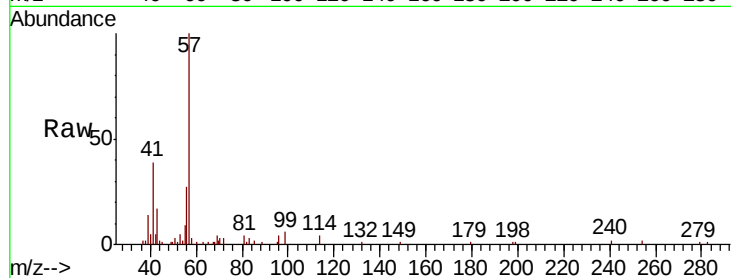
Ion	Ratio	Lower	Upper
63	100		
41	0.0	55.9	83.9#
62	16.9	53.8	80.6#





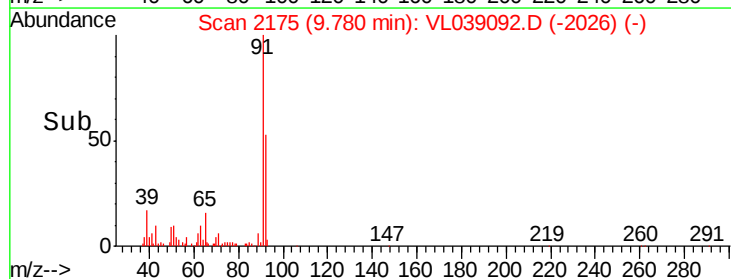
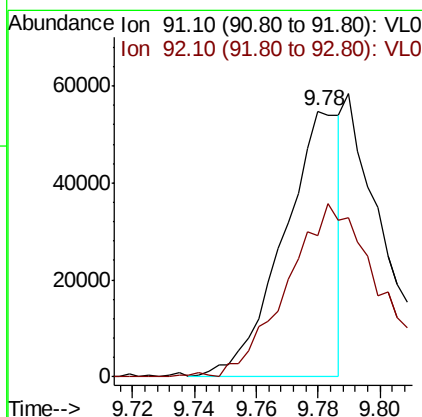
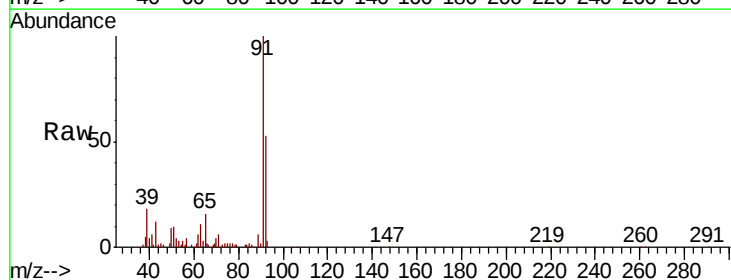
#44
 2,2,4-Trimethylpentane
 Concen: 0.176 ppbv
 RT: 7.85
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 AP-2
 Acq: 23 May 2022 20:24

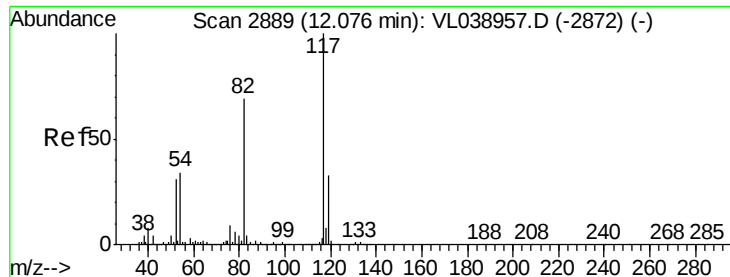
Tot Ion: 57 Resp: 60332
 Ion Ratio Lower Upper
 57 100
 41 47.1 26.3 39.5#
 56 36.4 24.6 37.0



#53
 Toluene
 Concen: 0.314 ppbv
 RT: 9.78 min Scan# 2175
 Delta R.T. -0.02 min
 Lab File: VL039092.D
 Acq: 23 May 2022 20:24

Tgt Ion: 91 Resp: 68886
 Ion Ratio Lower Upper
 91 100
 92 112.5 48.2 72.2#

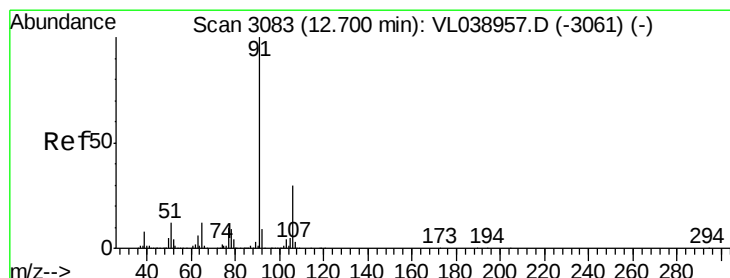
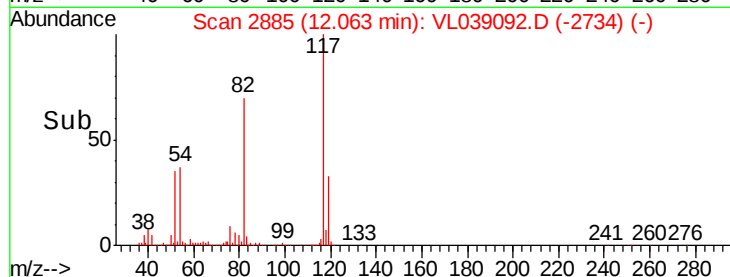
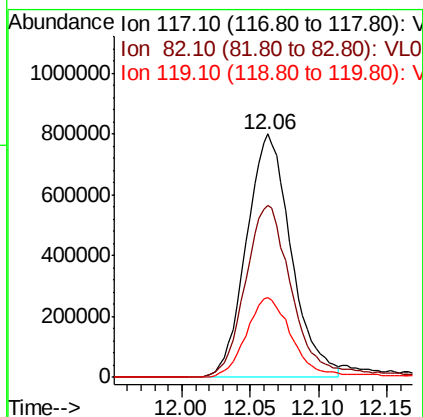
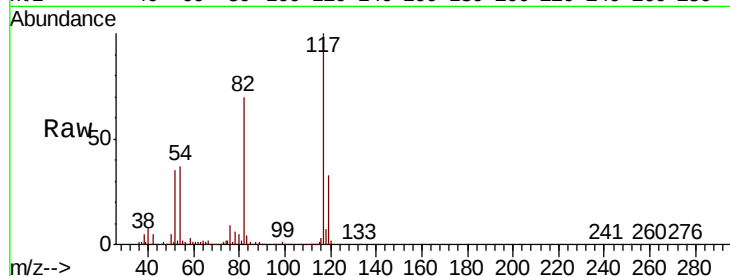




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.06 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 23 May 2022 20:24

Tot Ion:117 Resp: 1821220

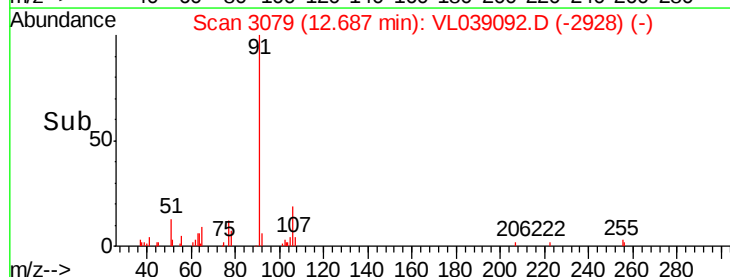
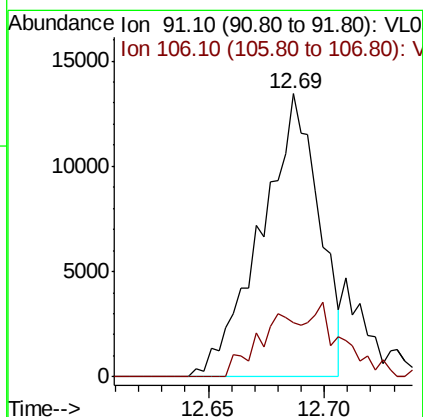
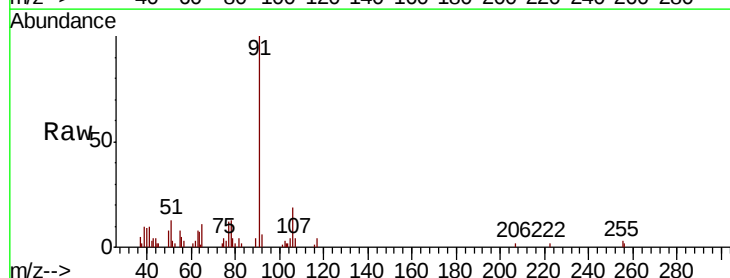
Ion	Ratio	Lower	Upper
117	100		
82	77.6	57.0	85.6
119	35.1	27.2	40.8

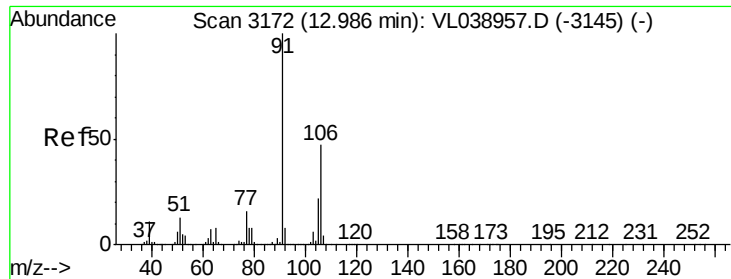


#58
Ethyl Benzene
Concen: 0.089 ppbv
RT: 12.69 min Scan# 3079
Delta R.T. -0.01 min
Lab File: VL039092.D
Acq: 23 May 2022 20:24

Tgt Ion: 91 Resp: 23238

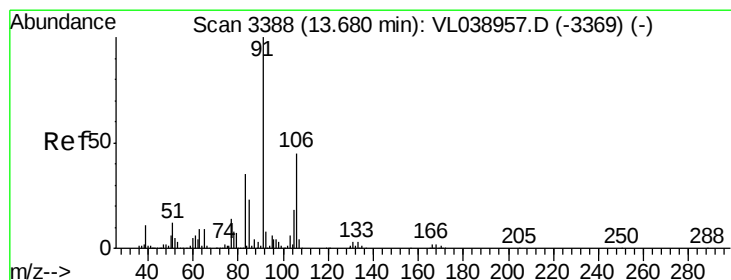
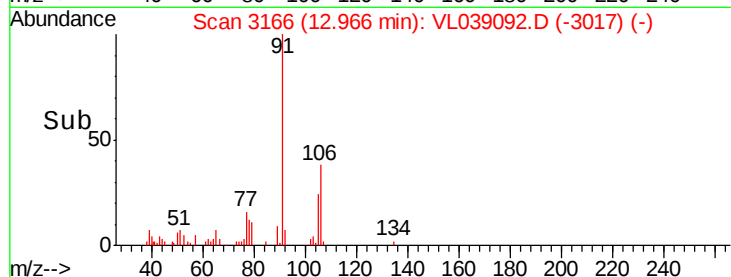
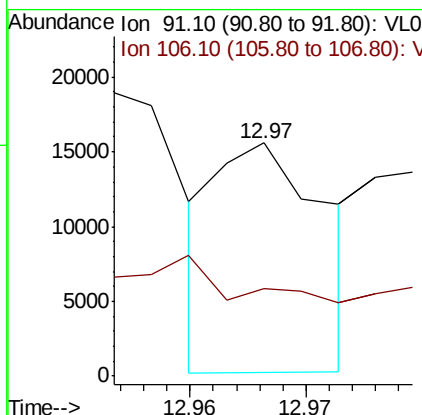
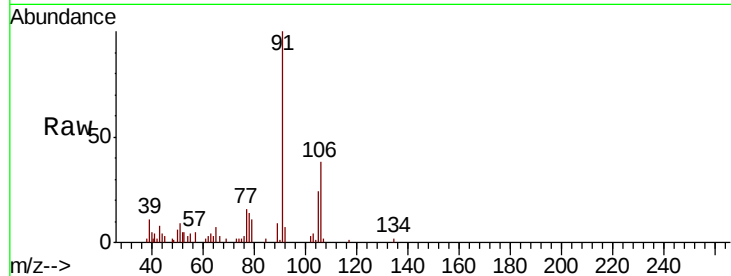
Ion	Ratio	Lower	Upper
91	100		
106	19.3	24.2	36.4#





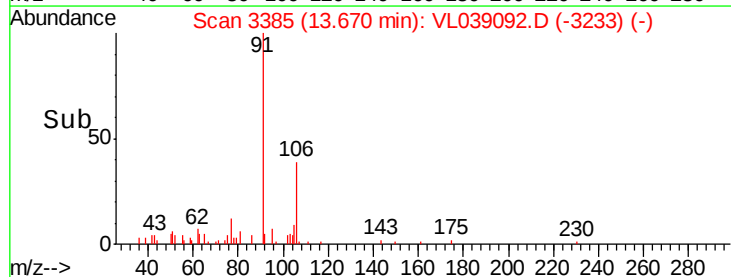
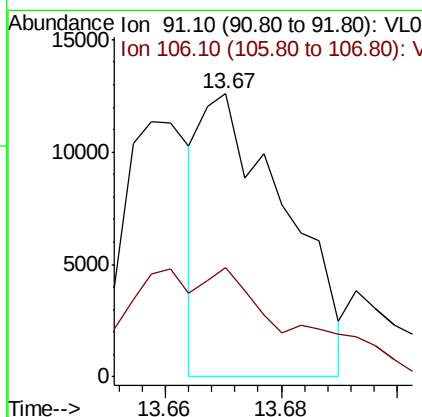
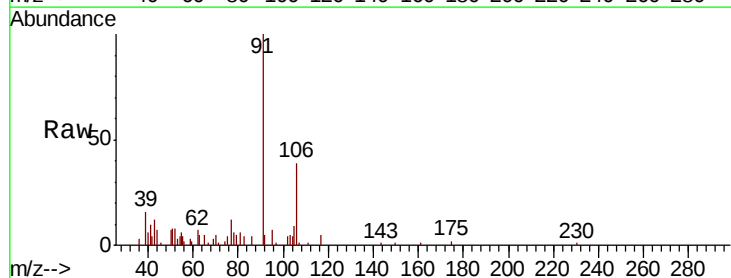
#59
m/p-Xylene
Concen: 0.045 ppbv
RT: 12.97
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 23 May 2022 20:24

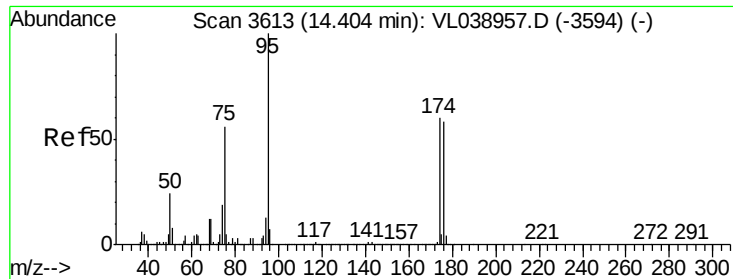
Tot Ion: 91 Resp: 10050
Ion Ratio Lower Upper
91 100
106 0.0 34.6 52.0#



#60
o-Xylene
Concen: 0.060 ppbv
RT: 13.67 min Scan# 3385
Delta R.T.: -0.01 min
Lab File: VL039092.D
Acq: 23 May 2022 20:24

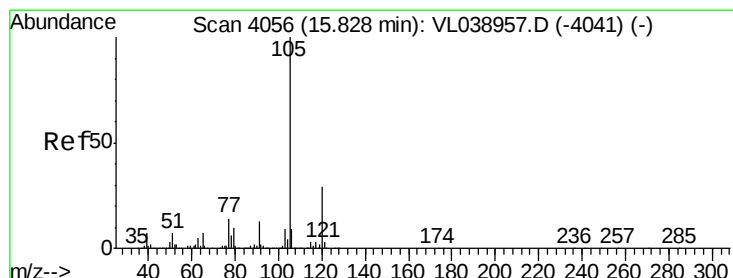
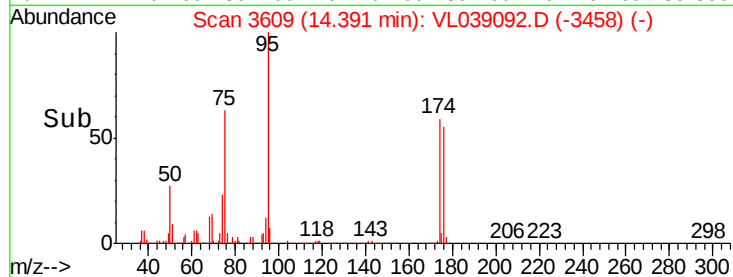
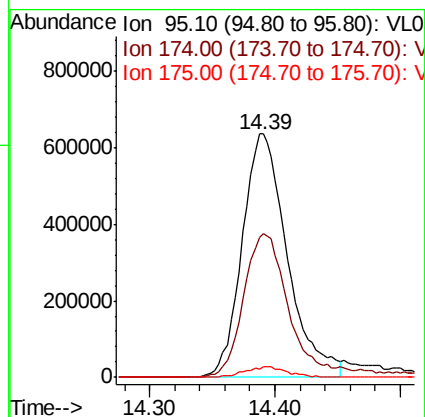
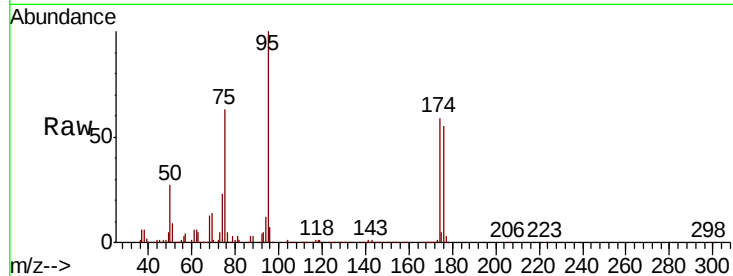
Tgt Ion: 91 Resp: 12732
Ion Ratio Lower Upper
91 100
106 89.5 22.2 66.6#





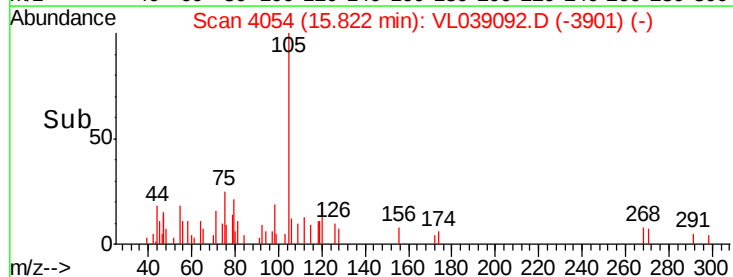
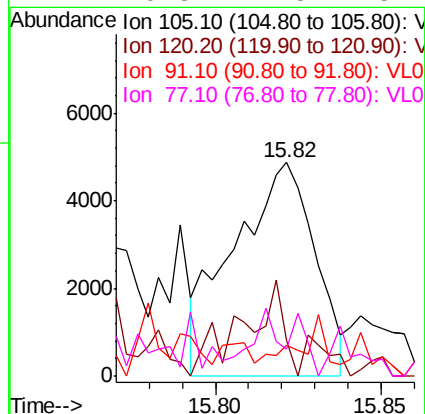
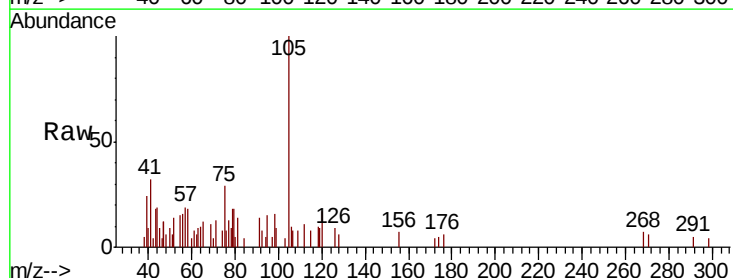
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.991 ppbv
 RT: 14.39
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 AP-2
 Acq: 23 May 2022 20:24

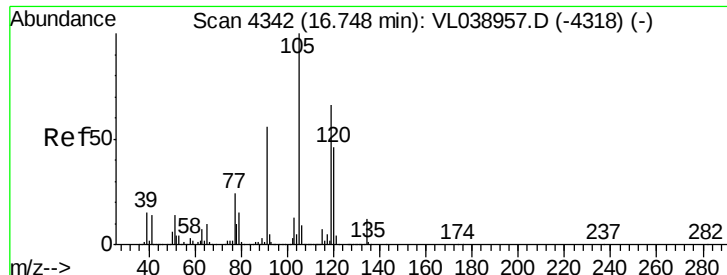
Tot Ion: 95 Resp: 1585276
 Ion Ratio Lower Upper
 95 100
 174 63.6 50.8 76.2
 175 4.6 3.8 5.6



#72
 4-Ethyltoluene
 Concen: 0.035 ppbv
 RT: 15.82 min Scan# 4054
 Delta R.T. -0.01 min
 Lab File: VL039092.D
 Acq: 23 May 2022 20:24

Tgt Ion: 105 Resp: 8310
 Ion Ratio Lower Upper
 105 100
 120 31.6 23.4 35.0
 91 0.0 10.6 16.0#
 77 29.3 12.5 18.7#





#74

1,2,4-Trimethylbenzene

Concen: 0.045 ppbv

RT: 16.72 Instrument:

Delta R.T MSVOA_L

Lab File: ClientSampleId:

Acq: 23 May 2022 20:24

Tot Ion:105 Resp: 10714

Ion Ratio Lower Upper

105 100

120 34.9 36.9 55.3#

91 15.4 45.0 67.4#

77 14.3 19.2 28.8#

