

Data File : VL037937.D

Acq On : 1 Nov 2021 11:17

Operator : SY/AP

Sample : VSTDICC0.5

Misc : 400mL/MSVOA_L

ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA_L

ClientSampleId :

VSTDICC0.5

Quant Time: Nov 01 11:46:36 2021

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL110121AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Nov 01 11:08:47 2021

QLast Update : Mon Nov 01 11:08:47 2021

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1508448	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	4585240	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	4010442	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.40	95	2957792	10.55	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.50%

Target Compounds

						Qvalue
3) Chlorodifluoromethane	2.99	51	159043	0.549	ppbv	97
4) Chloromethane	3.14	50	59078	0.557	ppbv	96
5) Vinyl Chloride	3.26	62	56701	0.583	ppbv	89
6) Bromomethane	3.47	94	29318	0.557	ppbv	92
7) Chloroethane	3.56	64	21331	0.596	ppbv #	85
8) Dichlorotetrafluoroethane	3.19	85	147883	0.621	ppbv	96
9) Propene	3.02	41	51316	0.481	ppbv	100
10) Heptane	8.11	43	111788	0.462	ppbv	98
11) Trichlorofluoromethane	3.95	101	112440	0.523	ppbv	100
12) 1,1,2-Trichlorotrifluoroet	4.48	101	90162	0.554	ppbv	89
13) Ethanol	3.61	45	1598	0.183	ppbv #	32
14) Bromoethene	3.74	108	21973	0.307	ppbv #	17
15) Acetone	3.87	43	65170	0.481	ppbv #	88
16) 1,3-Butadiene	3.33	39	40115	0.407	ppbv #	76
18) 1,1-Dichloroethene	4.29	96	36297	0.490	ppbv	95
19) Isopropyl Alcohol	3.99	45	34136	0.405	ppbv #	82
20) Methylene Chloride	4.35	84	37679	0.551	ppbv	85
21) Allyl Chloride	4.41	41	58821	0.490	ppbv	87
22) trans-1,2-Dichloroethene	4.88	96	33170	0.446	ppbv	90
23) Vinyl Acetate	5.08	43	73017	0.360	ppbv #	86
24) 1,1-Dichloroethane	5.01	63	87124	0.590	ppbv #	93
25) Ethyl Acetate	5.68	43	188123	0.495	ppbv	98
26) Hexane	5.68	57	79982	0.427	ppbv #	76
27) Carbon Disulfide	4.55	76	81876	0.494	ppbv #	92
28) Methyl tert-Butyl Ether	5.05	73	48756	0.313	ppbv #	66
29) Chloroform	5.74	83	141278	0.528	ppbv	94
30) Cyclohexane	7.12	84	68283	0.430	ppbv #	24
31) cis-1,2-Dichloroethene	5.54	61	80398	0.473	ppbv	97
32) 1,1,1-Trichloroethane	6.51	97	76003	0.300	ppbv #	40
34) 2-Butanone	5.26	43	66645	0.360	ppbv #	84
35) Carbon Tetrachloride	7.01	117	133700	0.513	ppbv	93
36) Benzene	6.88	78	177258	0.453	ppbv	97
37) 1,2-Dichloroethane	6.30	62	82435	0.447	ppbv	96
38) Trichloroethene	7.83	130	44110	0.285	ppbv	90
39) 1,2-Dichloropropane	7.60	63	70800	0.481	ppbv	85
41) Tetrahydrofuran	6.07	42	22341	0.246	ppbv #	69
42) Bromodichloromethane	7.78	83	78560	0.290	ppbv	92
43) Methyl Methacrylate	8.01	69	31124	0.243	ppbv #	28
44) 2,2,4-Trimethylpentane	7.86	57	296239	0.450	ppbv	92
45) t-1,3-Dichloropropene	9.27	75	14601	0.166	ppbv	92
46) cis-1,3-Dichloropropene	8.70	75	27366	0.224	ppbv #	77

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Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Nov 01 11:08:47 2021

QLast Update : Mon Nov 01 11:08:47 2021

Response via : Initial Calibration

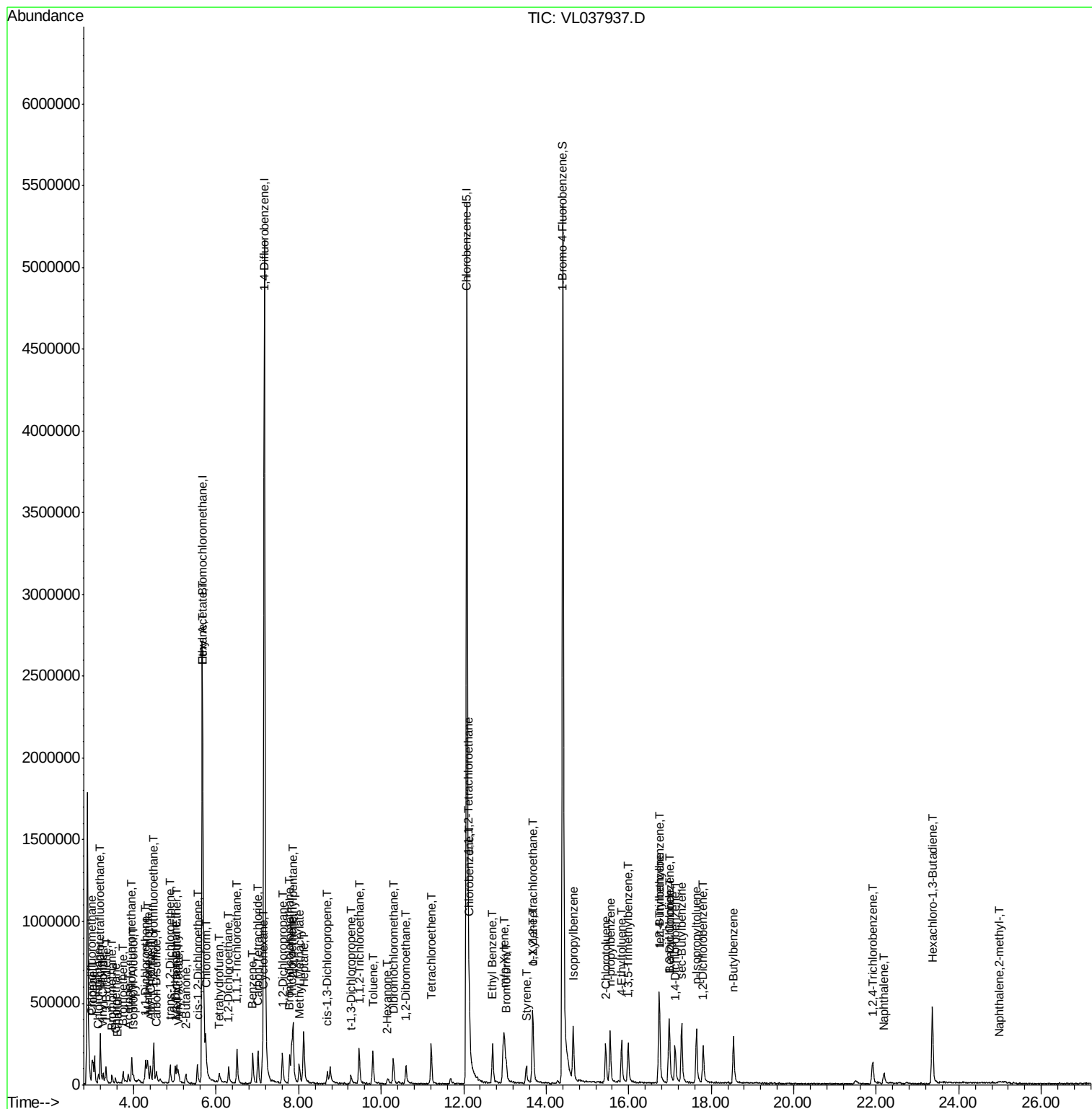
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) 1,1,2-Trichloroethane	9.47	97	46854	0.293	ppbv	90
48) Dibromochloromethane	10.29	129	51007	0.223	ppbv #	9
49) Bromoform	13.03	173	71819	0.411	ppbv	95
51) 2-Hexanone	10.14	43	5987	0.056	ppbv #	30
52) Tetrachloroethene	11.21	164	35932	0.236	ppbv	99
53) Toluene	9.80	91	162832	0.375	ppbv	100
54) 1,2-Dibromoethane	10.60	107	91853	0.425	ppbv	97
56) 1,1,1,2-Tetrachloroethane	12.12	131	88583	0.534	ppbv #	1
57) Chlorobenzene	12.13	112	173847	0.528	ppbv	97
58) Ethyl Benzene	12.70	91	104664	0.194	ppbv	89
59) m/p-Xylene	12.98	91	397010	0.859	ppbv	97
60) o-Xylene	13.68	91	96338	0.217	ppbv #	30
61) Styrene	13.52	104	36951	0.172	ppbv #	35
62) Isopropylbenzene	14.65	105	278333	0.450	ppbv	100
63) 1,1,2,2-Tetrachloroethane	13.66	83	100252	0.293	ppbv #	40
64) n-propylbenzene	15.55	120	35319	0.229	ppbv #	1
65) tert-Butylbenzene	16.73	119	248664	0.457	ppbv	95
66) Benzyl Chloride	16.98	91	5768	0.215	ppbv #	29
67) sec-Butylbenzene	17.28	105	343870	0.462	ppbv	100
69) p-Isopropyltoluene	17.64	119	256128	0.426	ppbv	97
70) n-Butylbenzene	18.55	91	222770	0.390	ppbv	99
71) 2-Chlorotoluene	15.44	91	83359	0.191	ppbv #	41
72) 4-Ethyltoluene	15.83	105	202639	0.403	ppbv #	97
73) 1,3,5-Trimethylbenzene	15.99	105	90729	0.199	ppbv	89
74) 1,2,4-Trimethylbenzene	16.75	105	227481	0.474	ppbv	94
75) 1,3-Dichlorobenzene	16.99	146	123463	0.415	ppbv	83
76) 1,4-Dichlorobenzene	17.13	146	84331	0.297	ppbv #	48
77) 1,2-Dichlorobenzene	17.80	146	16494	0.058	ppbv #	23
78) Hexachloro-1,3-Butadiene	23.36	225	129132	0.554	ppbv	94
79) Naphthalene	22.17	128	21276	0.072	ppbv	98
80) Naphthalene,2-methyl-	24.98	142	7925	0.100	ppbv #	51
81) 1,2,4-Trichlorobenzene	21.91	180	8165	0.043	ppbv #	11

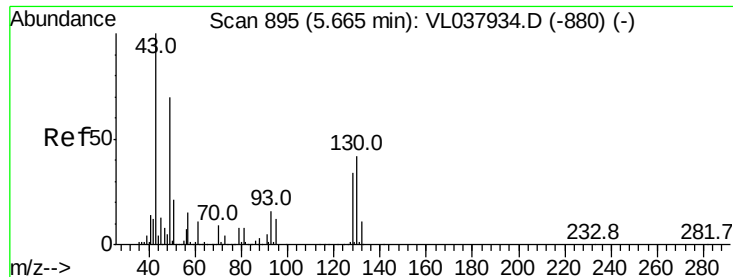
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ALS Vial : 1 Sample Multiplier: 1

VSTDICC0.5

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: VSTDIC0.5

Acq: 1 Nov 2021 11:17

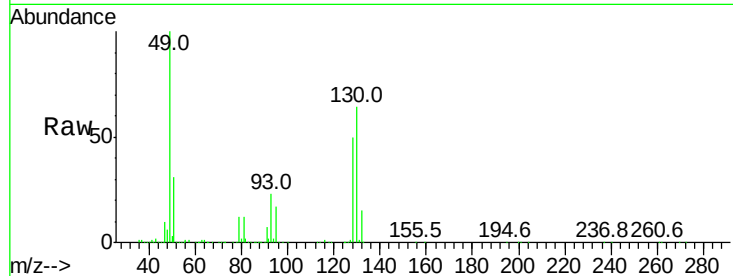
Tgt Ion: 49 Resp: 1508448

Ion Ratio Lower Upper

49 100

128 55.4 27.0 81.0

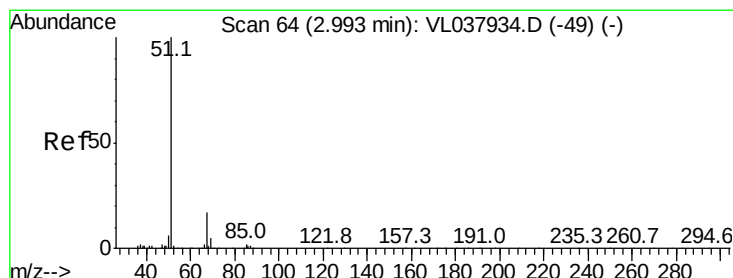
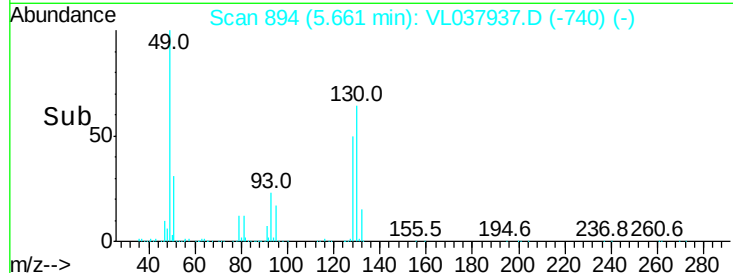
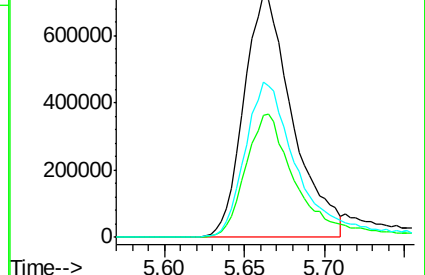
130 72.0 33.4 100.2



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#3

Chlorodifluoromethane

Concen: 0.549 ppbv

RT: 2.99 min Scan# 63

Delta R.T. -0.00 min

Lab File: VL037937.D

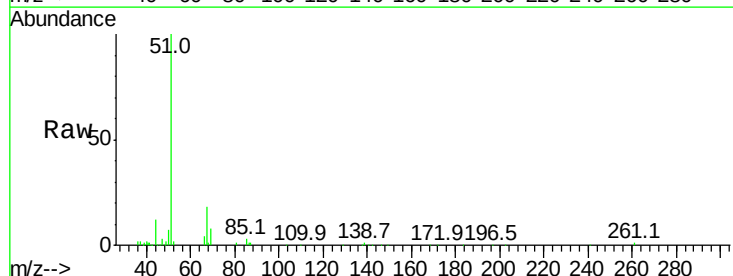
Acq: 1 Nov 2021 11:17

Tgt Ion: 51 Resp: 159043

Ion Ratio Lower Upper

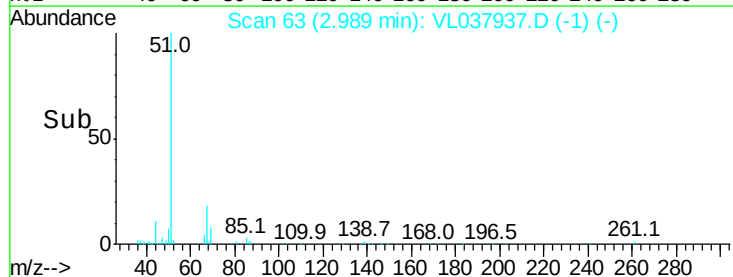
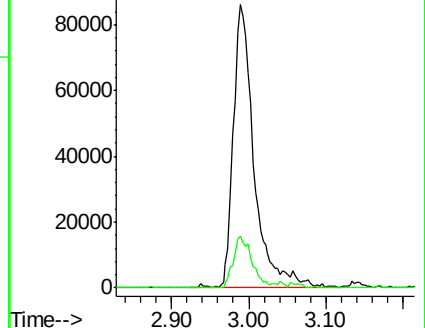
51 100

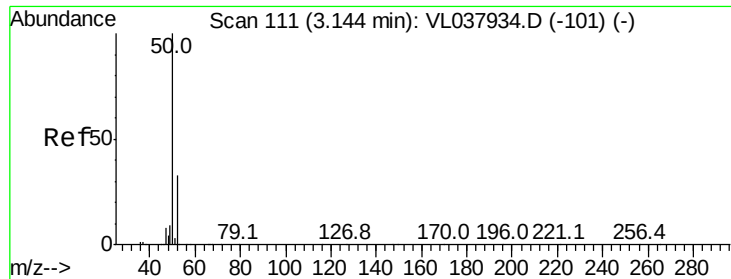
67 18.0 13.4 20.0



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#4

Chloromethane

Concen: 0.557 ppbv

RT: 3.14 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

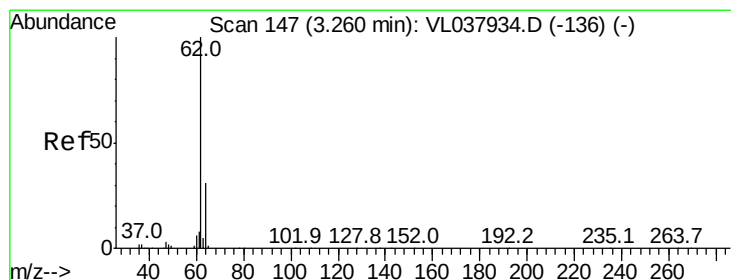
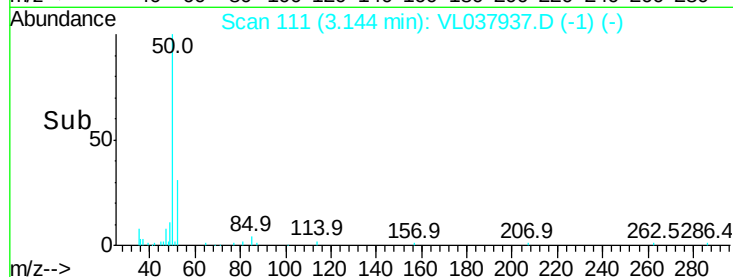
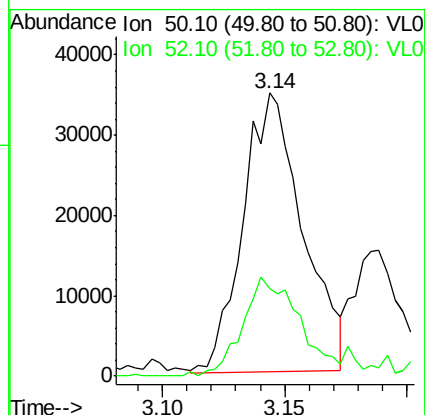
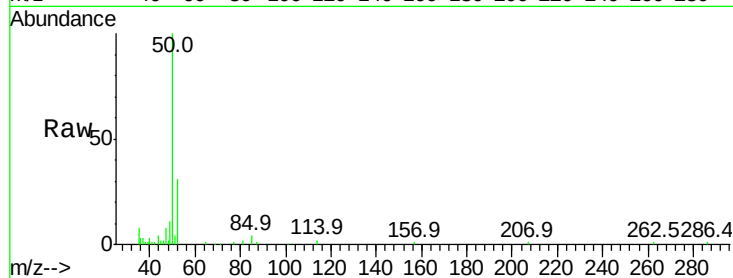
Acq: 1 Nov 2021 11:17

Tgt Ion: 50 Resp: 59078

Ion Ratio Lower Upper

50 100

52 30.4 26.3 39.5



#5

Vinyl Chloride

Concen: 0.583 ppbv

RT: 3.26 min Scan# 148

Delta R.T. 0.00 min

Lab File: VL037937.D

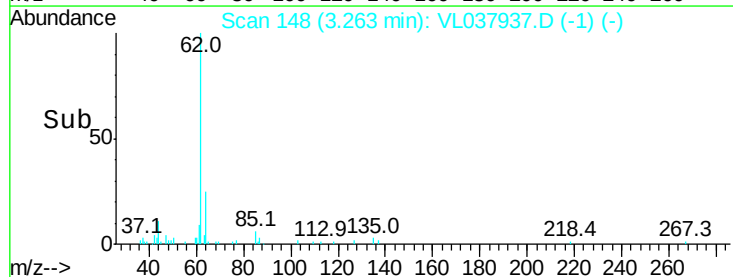
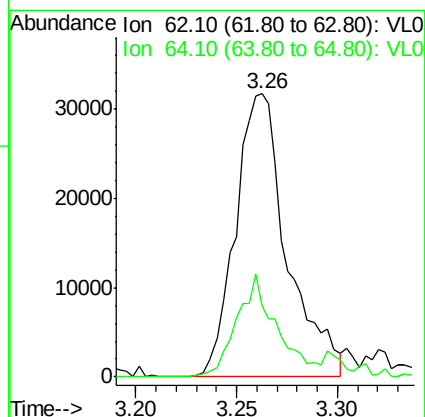
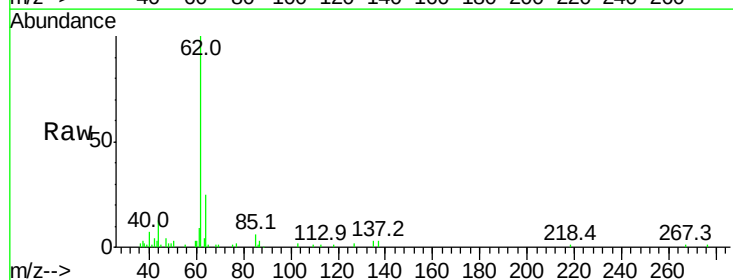
Acq: 1 Nov 2021 11:17

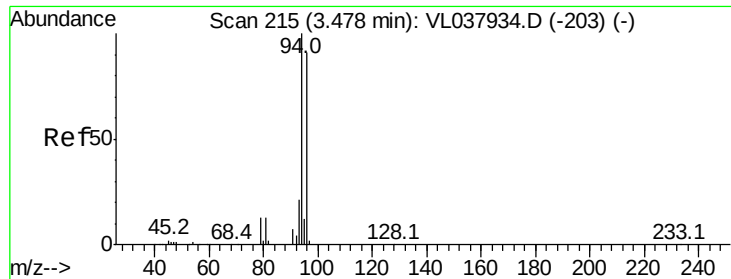
Tgt Ion: 62 Resp: 56701

Ion Ratio Lower Upper

62 100

64 25.0 24.7 37.1





#6

Bromomethane

Concen: 0.557 ppbv

RT: 3.47 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

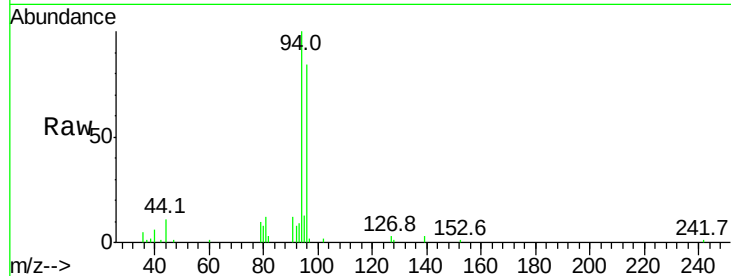
Acq: 1 Nov 2021 11:17

Tgt Ion: 94 Resp: 29318

Ion Ratio Lower Upper

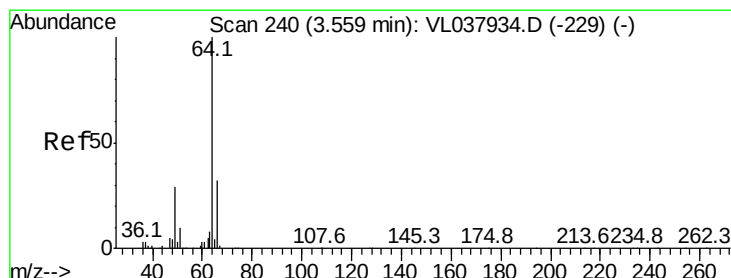
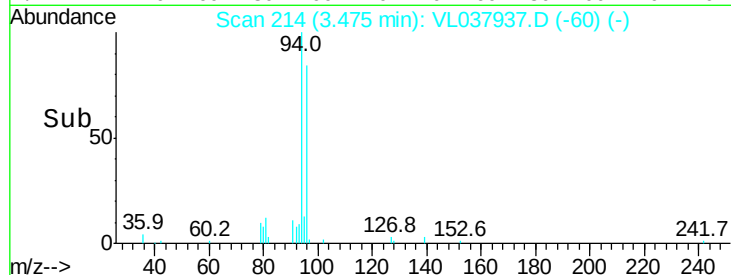
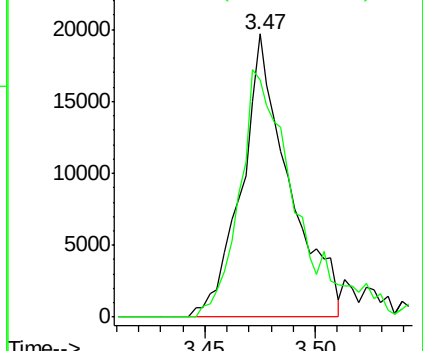
94 100

96 84.0 73.0 109.4



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0



#7

Chloroethane

Concen: 0.596 ppbv

RT: 3.56 min Scan# 239

Delta R.T. -0.00 min

Lab File: VL037937.D

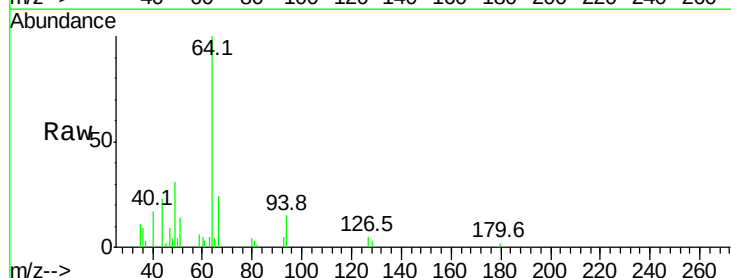
Acq: 1 Nov 2021 11:17

Tgt Ion: 64 Resp: 21331

Ion Ratio Lower Upper

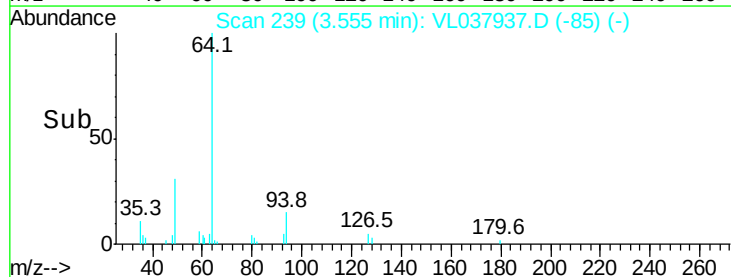
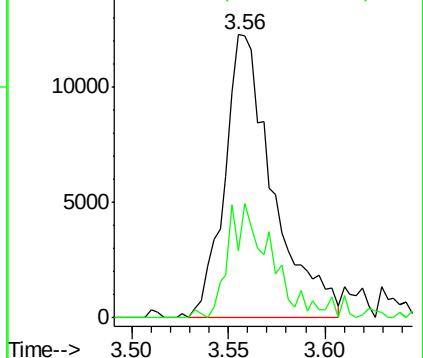
64 100

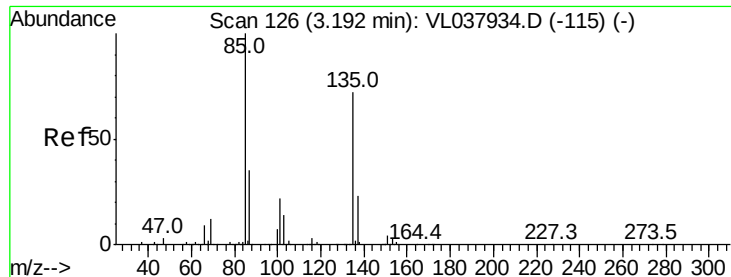
66 23.6 25.5 38.3#



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0





#8

Dichlorotetrafluoroethane

Concen: 0.621 ppbv

RT: 3.19 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

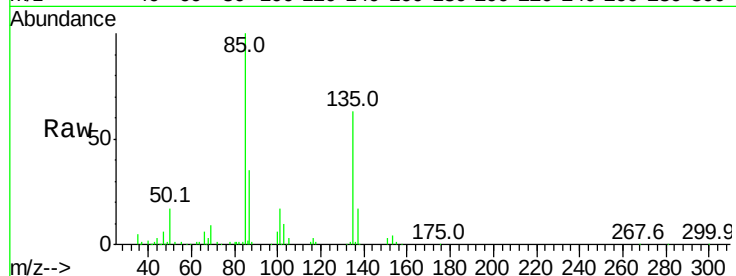
Acq: 1 Nov 2021 11:17 VSTDIC0.5

Tgt Ion: 85 Resp: 147883

Ion Ratio Lower Upper

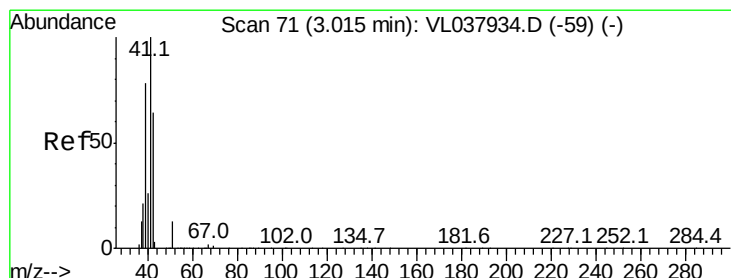
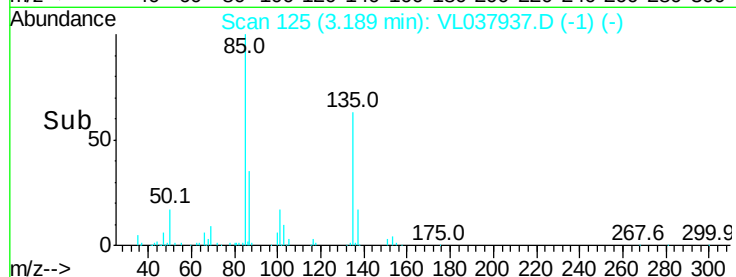
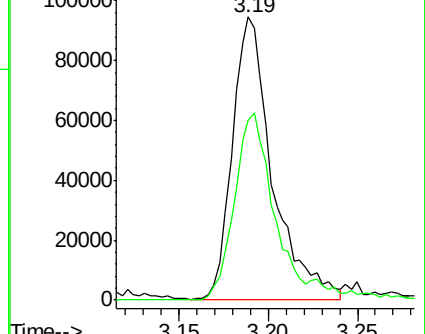
85 100

135 70.2 58.8 88.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): VL0



#9

Propene

Concen: 0.481 ppbv

RT: 3.02 min Scan# 71

Delta R.T. -0.00 min

Lab File: VL037937.D

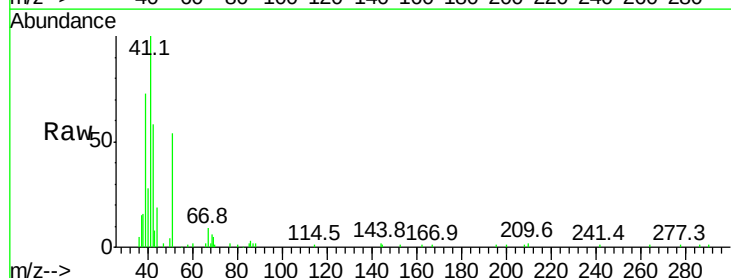
Acq: 1 Nov 2021 11:17

Tgt Ion: 41 Resp: 51316

Ion Ratio Lower Upper

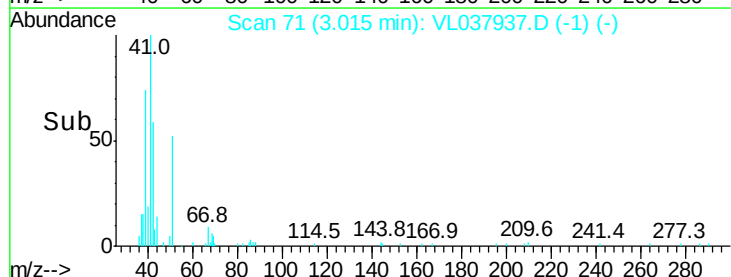
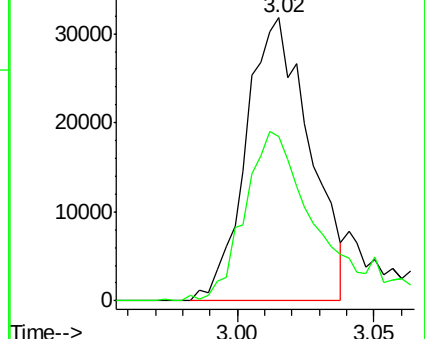
41 100

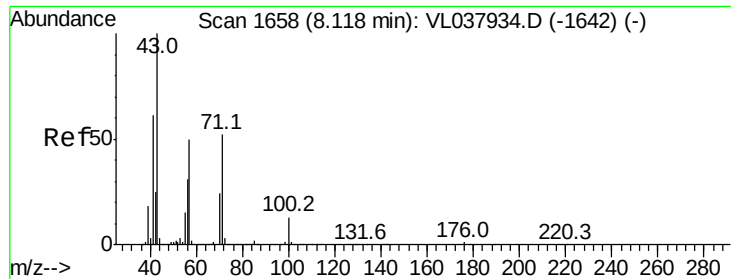
42 72.1 57.6 86.4



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





#10

Heptane

Concen: 0.462 ppbv

RT: 8.11 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

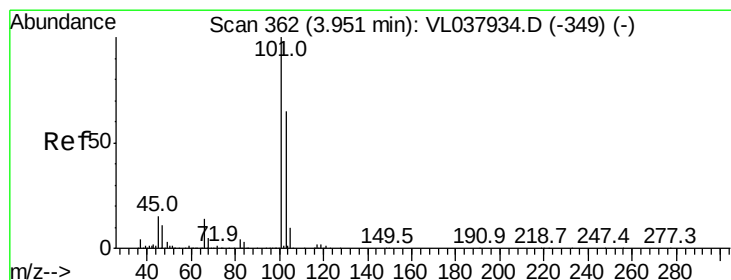
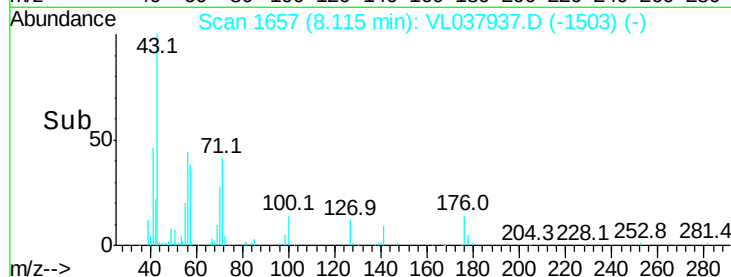
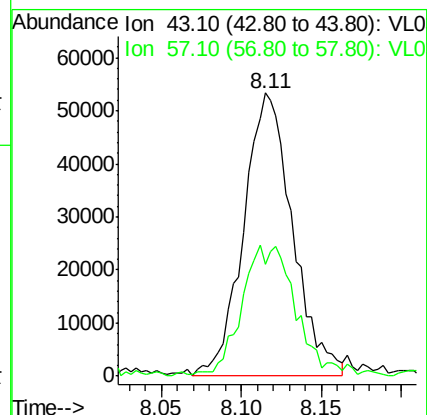
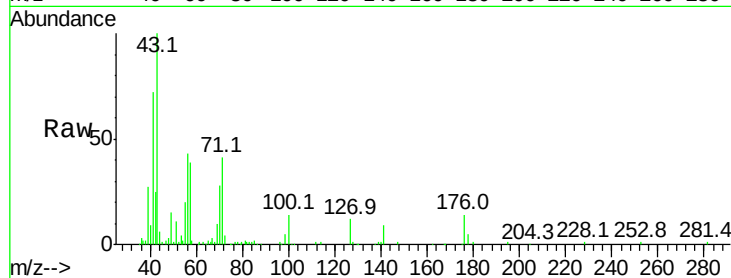
Acq: 1 Nov 2021 11:17 VSTDIC0.5

Tgt Ion: 43 Resp: 111788

Ion Ratio Lower Upper

43 100

57 51.3 39.8 59.8



#11

Trichlorofluoromethane

Concen: 0.523 ppbv

RT: 3.95 min Scan# 362

Delta R.T. -0.00 min

Lab File: VL037937.D

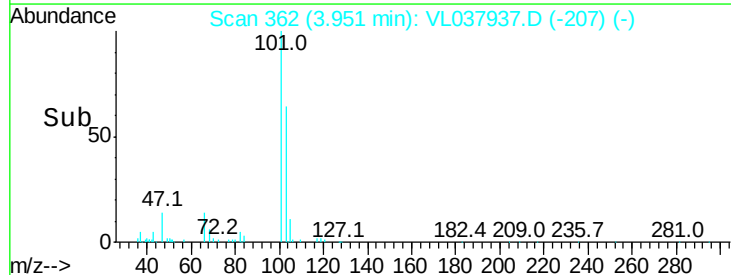
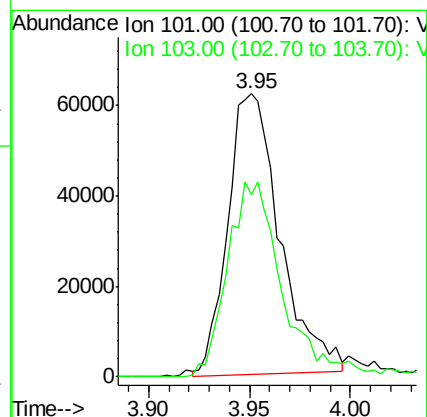
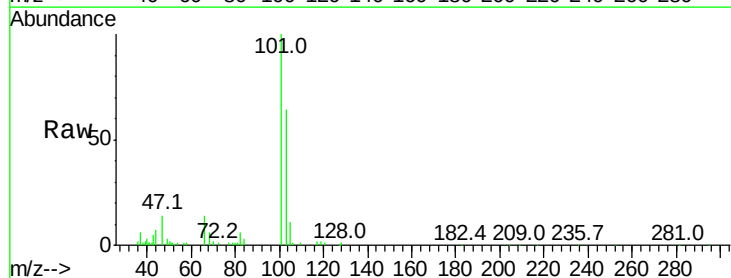
Acq: 1 Nov 2021 11:17

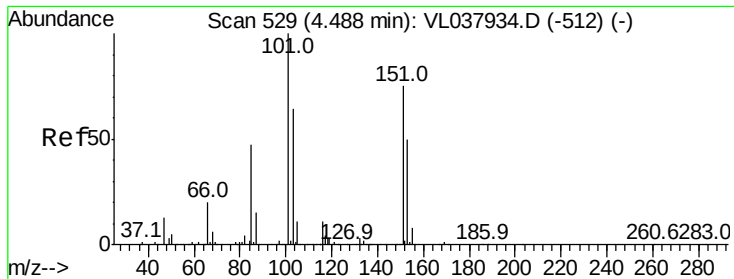
Tgt Ion: 101 Resp: 112440

Ion Ratio Lower Upper

101 100

103 64.8 52.0 78.0





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.554 ppbv

RT: 4.48 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

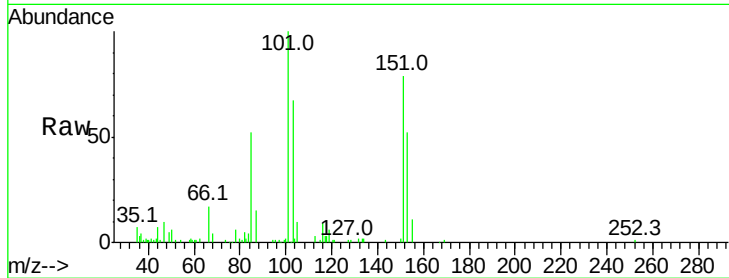
Acq: 1 Nov 2021 11:17 VSTDIC0.5

Tgt Ion: 101 Resp: 90162

Ion Ratio Lower Upper

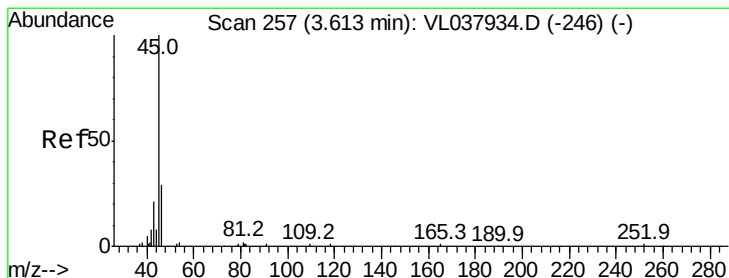
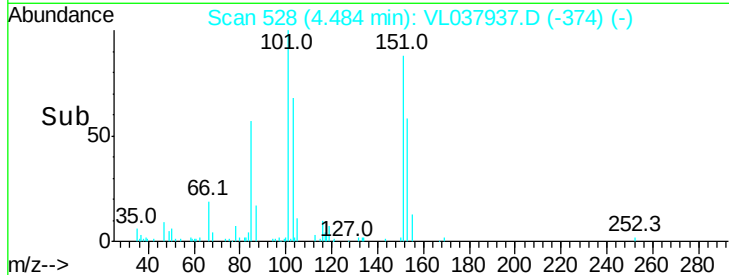
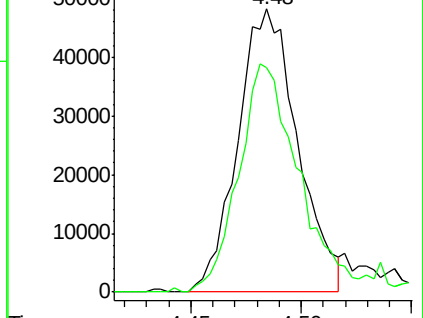
101 100

151 86.7 61.8 92.8



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V



#13

Ethanol

Concen: 0.183 ppbv

RT: 3.61 min Scan# 257

Delta R.T. -0.00 min

Lab File: VL037937.D

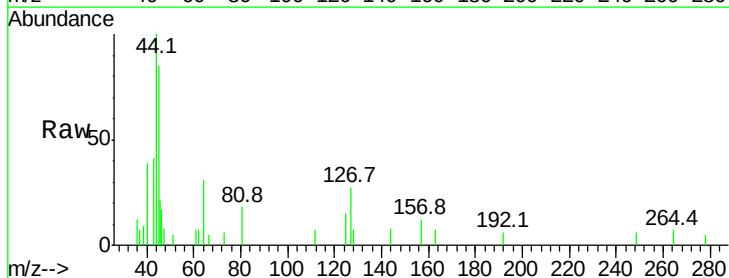
Acq: 1 Nov 2021 11:17

Tgt Ion: 45 Resp: 1598

Ion Ratio Lower Upper

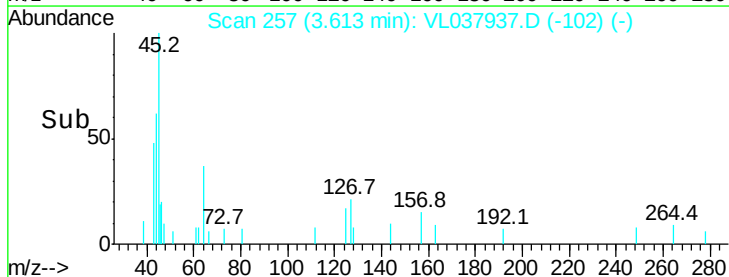
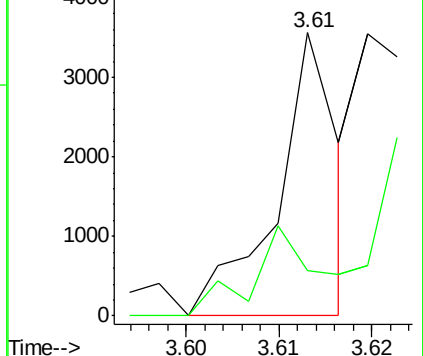
45 100

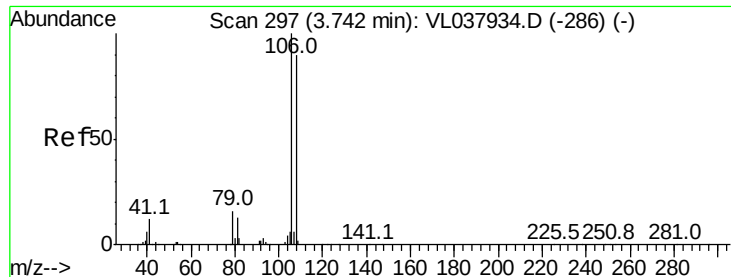
46 0.0 17.4 69.8#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#14

Bromoethene

Concen: 0.307 ppbv

RT: 3.74 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 1 Nov 2021 11:17 VSTDIC0.5

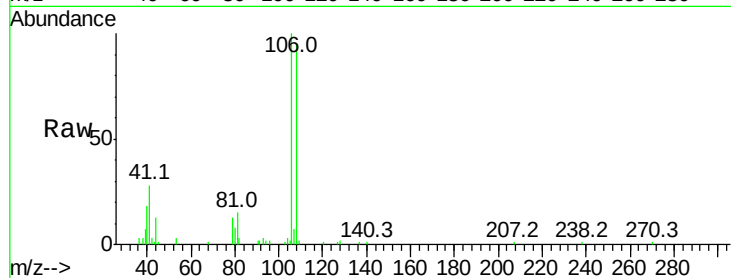
Tgt Ion: 108 Resp: 21973

Ion Ratio Lower Upper

108 100

106 203.7 88.4 132.6#

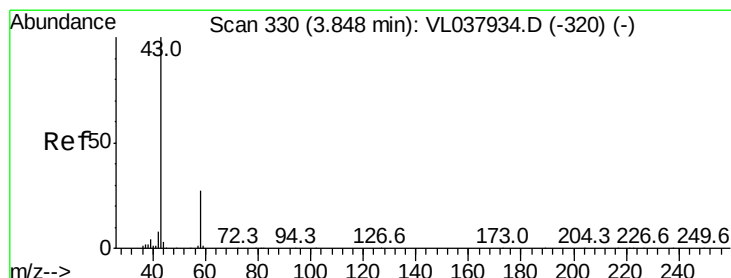
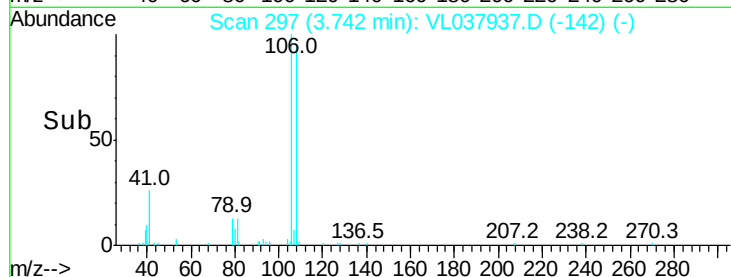
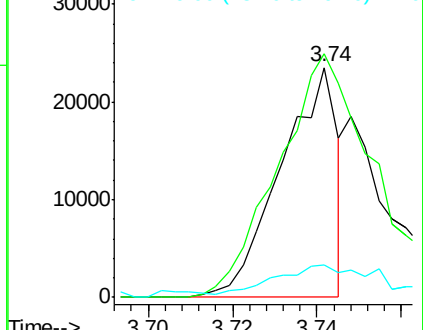
79 34.9 12.4 18.6#



Abundance Ion 108.00 (107.70 to 108.70): V

Ion 106.00 (105.70 to 106.70): V

Ion 79.00 (78.70 to 79.70): VL0



#15

Acetone

Concen: 0.481 ppbv

RT: 3.87 min Scan# 338

Delta R.T. 0.03 min

Lab File: VL037937.D

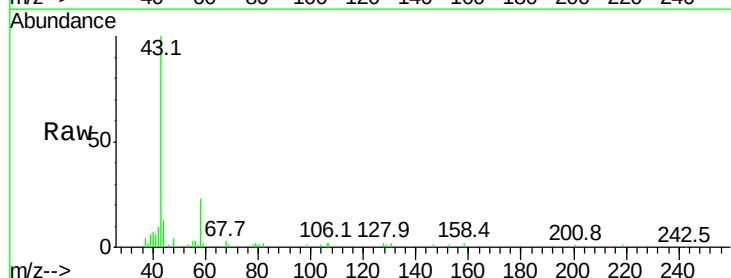
Acq: 1 Nov 2021 11:17

Tgt Ion: 43 Resp: 65170

Ion Ratio Lower Upper

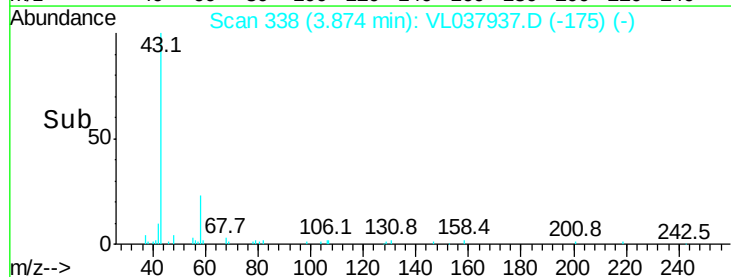
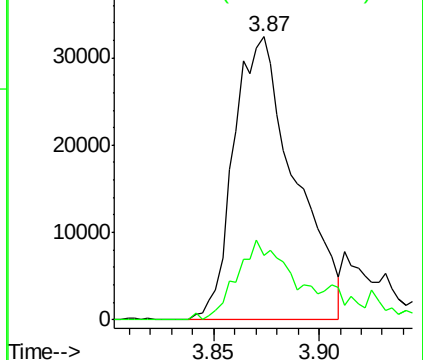
43 100

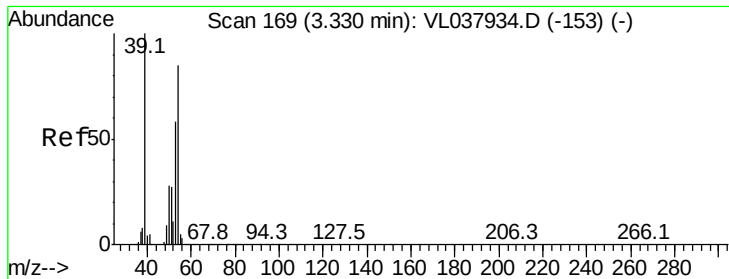
58 35.6 23.3 34.9#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





#16

1,3-Butadiene

Concen: 0.407 ppbv

RT: 3.33 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

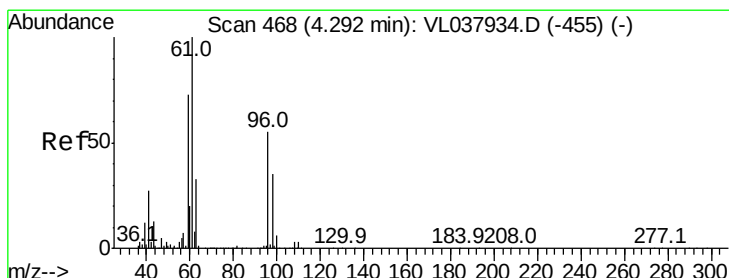
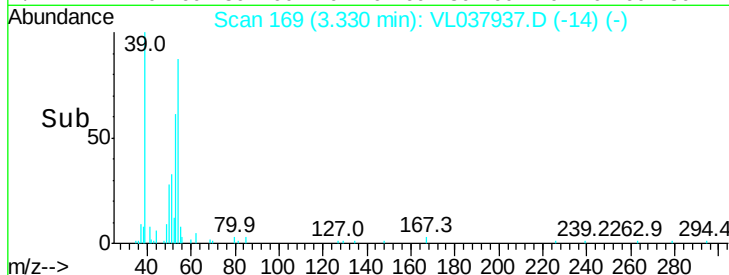
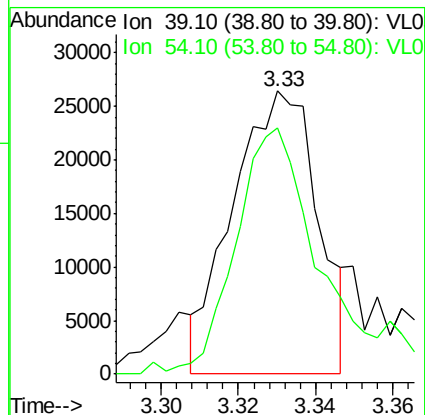
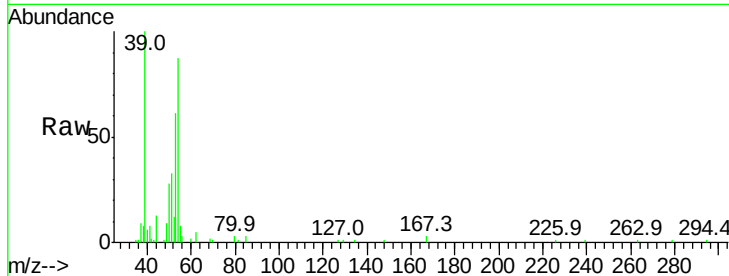
Acq: 1 Nov 2021 11:17

Tgt Ion: 39 Resp: 40115

Ion Ratio Lower Upper

39 100

54 98.7 62.6 93.8#



#18

1,1-Dichloroethene

Concen: 0.490 ppbv

RT: 4.29 min Scan# 466

Delta R.T. -0.01 min

Lab File: VL037937.D

Acq: 1 Nov 2021 11:17

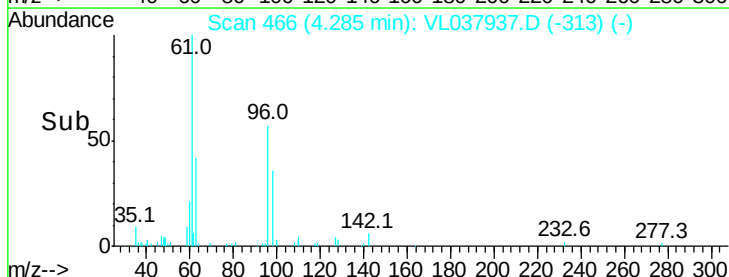
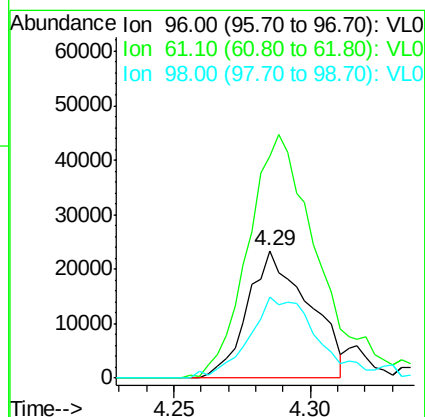
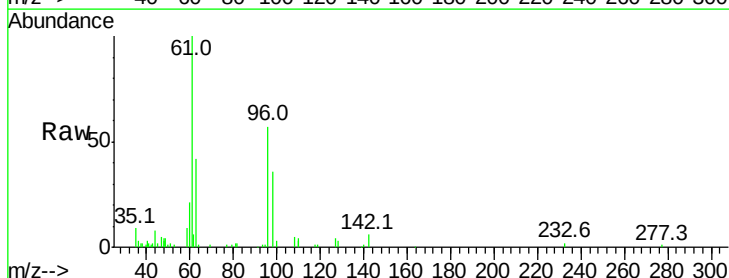
Tgt Ion: 96 Resp: 36297

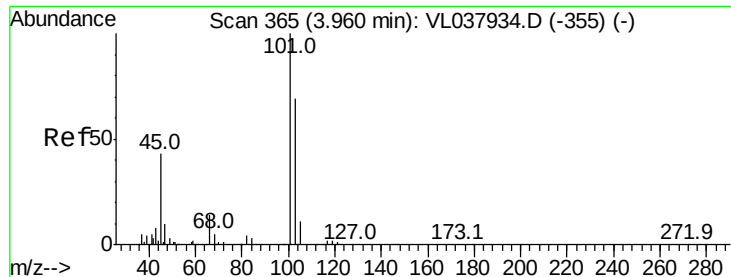
Ion Ratio Lower Upper

96 100

61 171.5 144.3 216.5

98 63.4 50.5 75.7





#19

Isopropyl Alcohol

Concen: 0.405 ppbv

RT: 3.99 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: VSTDIC0.5

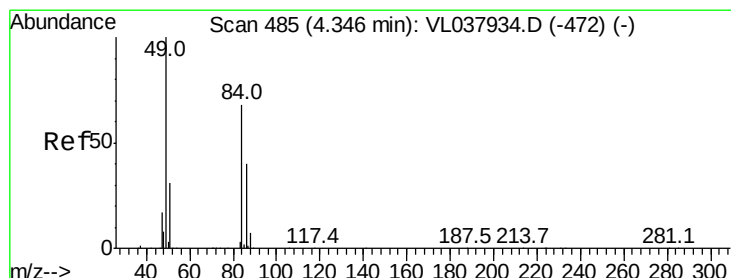
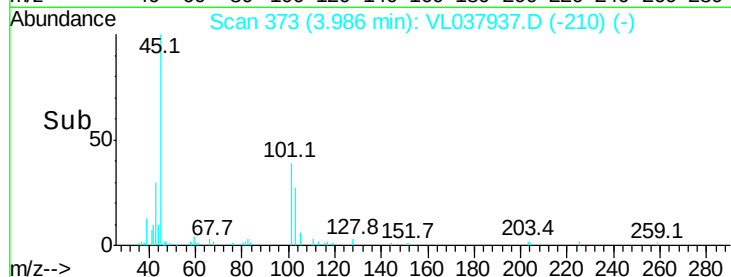
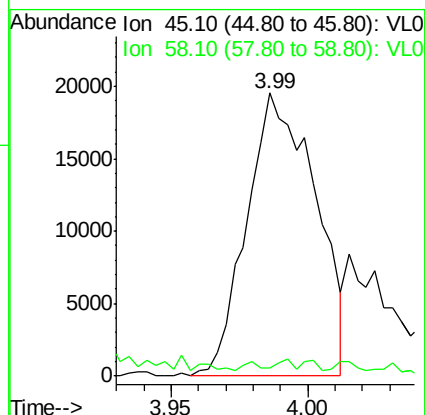
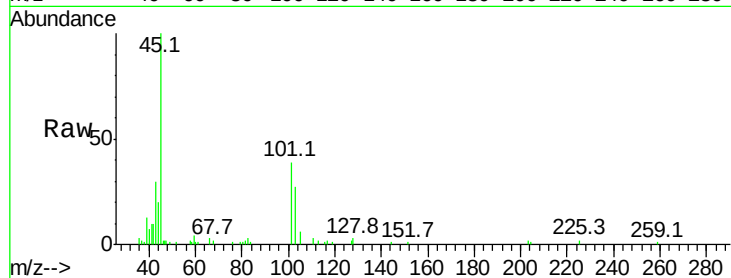
Acq: 1 Nov 2021 11:17

Tgt Ion: 45 Resp: 34136

Ion Ratio Lower Upper

45 100

58 11.0 4.0 6.0#



#20

Methylene Chloride

Concen: 0.551 ppbv

RT: 4.35 min Scan# 485

Delta R.T. -0.00 min

Lab File: VL037937.D

Acq: 1 Nov 2021 11:17

Tgt Ion: 84 Resp: 37679

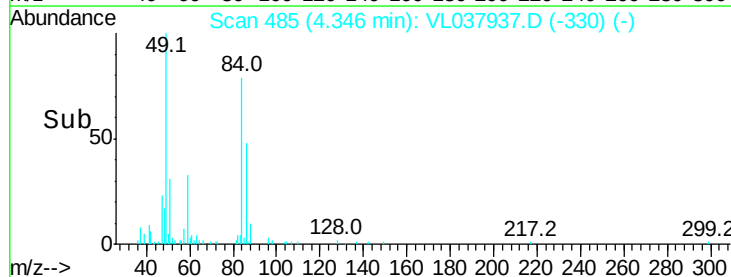
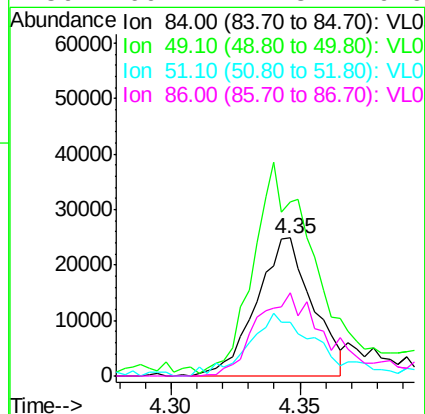
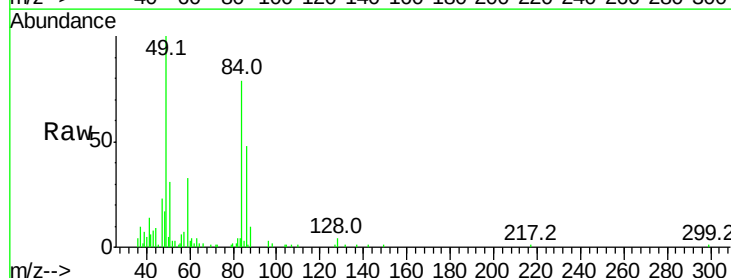
Ion Ratio Lower Upper

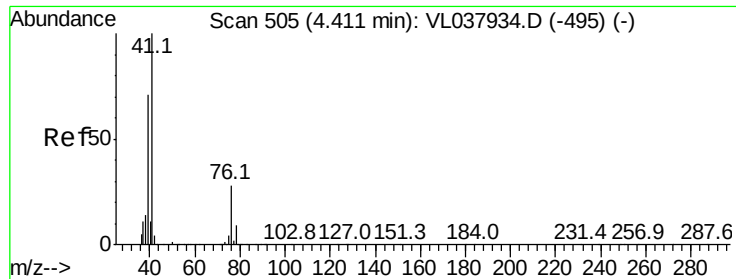
84 100

49 119.7 117.5 176.3

51 39.5 35.9 53.9

86 60.1 47.3 70.9





#21

Allyl Chloride

Concen: 0.490 ppbv

RT: 4.41

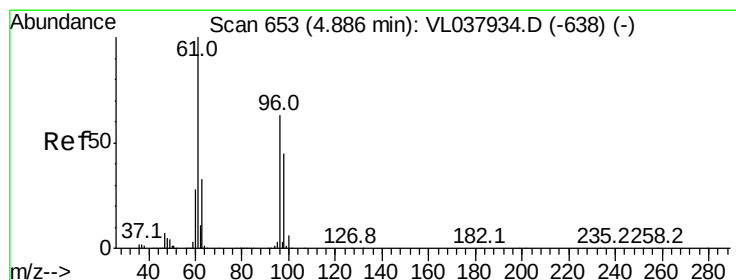
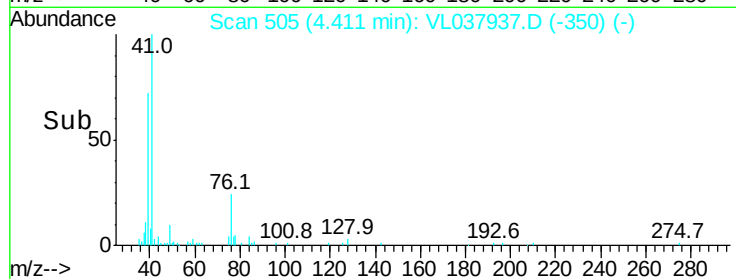
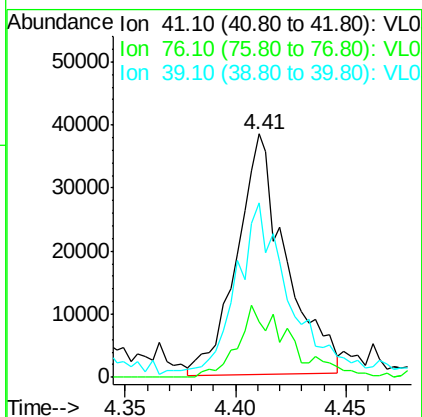
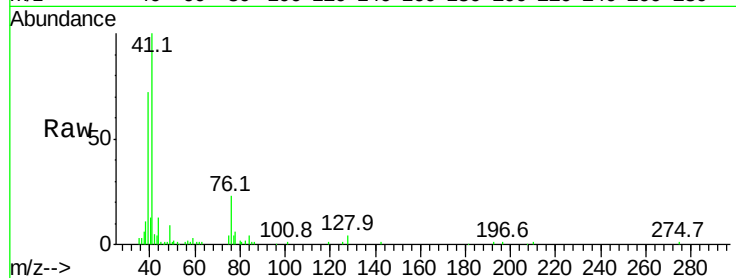
Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 1 Nov 2021 11:17

Tgt Ion: 41 Resp: 58821

Ion	Ratio	Lower	Upper
41	100		
76	32.8	23.6	35.4
39	87.5	59.7	89.5



#22

trans-1,2-Dichloroethene

Concen: 0.446 ppbv

RT: 4.88 min Scan# 652

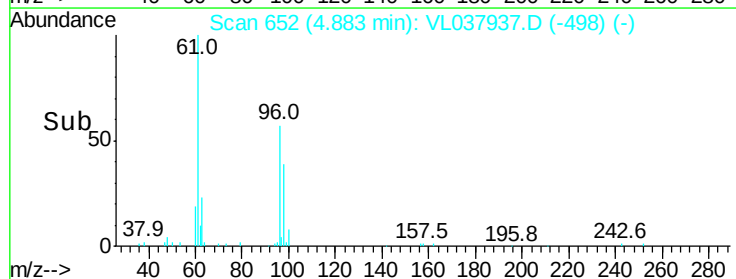
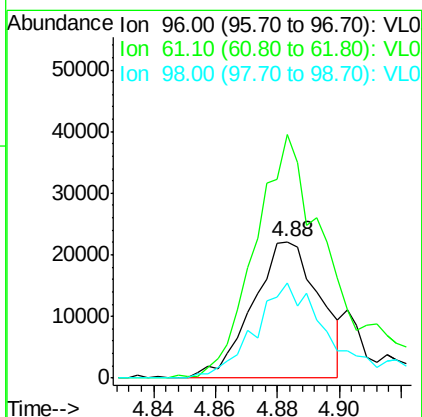
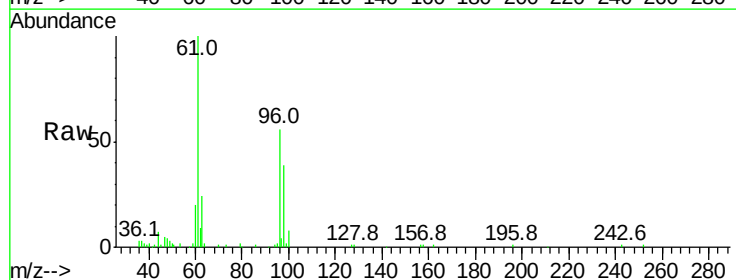
Delta R.T. -0.00 min

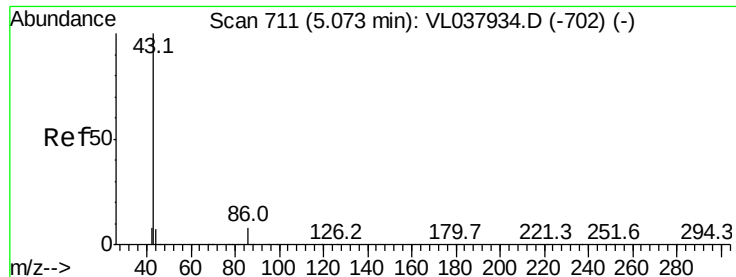
Lab File: VL037937.D

Acq: 1 Nov 2021 11:17

Tgt Ion: 96 Resp: 33170

Ion	Ratio	Lower	Upper
96	100		
61	176.7	127.8	191.6
98	69.3	56.9	85.3





#23

Vinyl Acetate

Concen: 0.360 ppbv

RT: 5.08 Instrument: MSVOA_1

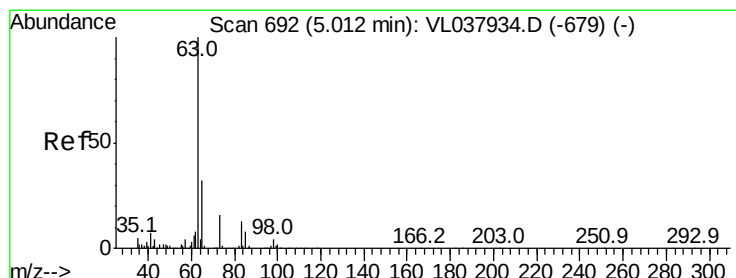
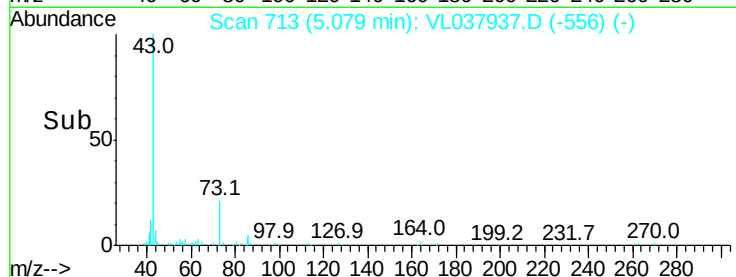
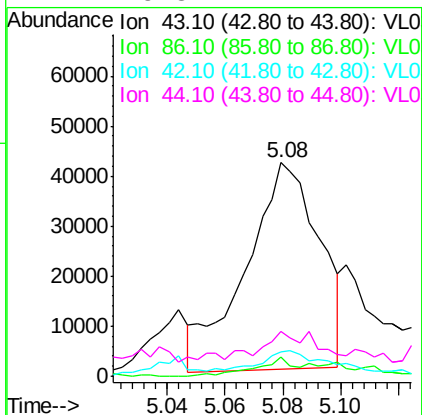
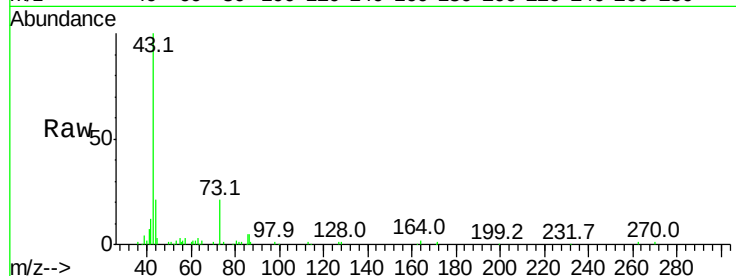
Delta R.T. ClientSampleId:

Lab File: VSTDIC0.5

Acq: 1 Nov 2021 11:17

Tgt Ion: 43 Resp: 73017

Ion	Ratio	Lower	Upper
43	100		
86	12.2	5.5	8.3#
42	11.0	7.4	11.2
44	15.3	4.7	7.1#



#24

1,1-Dichloroethane

Concen: 0.590 ppbv

RT: 5.01 min Scan# 692

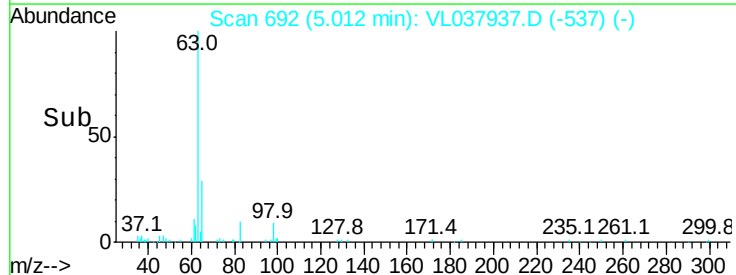
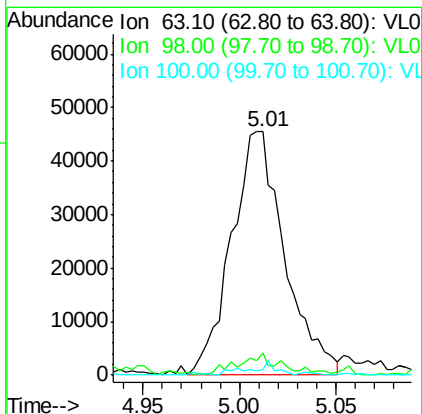
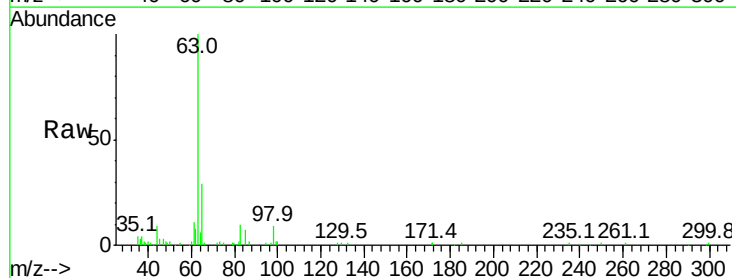
Delta R.T. -0.00 min

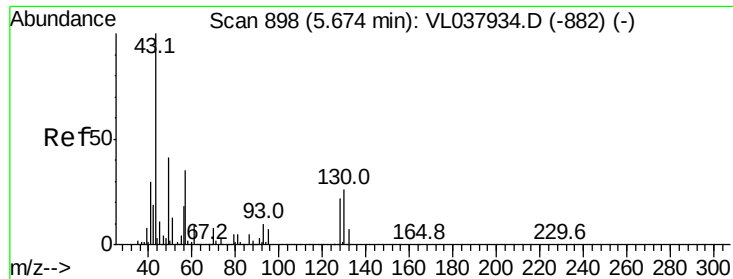
Lab File: VL037937.D

Acq: 1 Nov 2021 11:17

Tgt Ion: 63 Resp: 87124

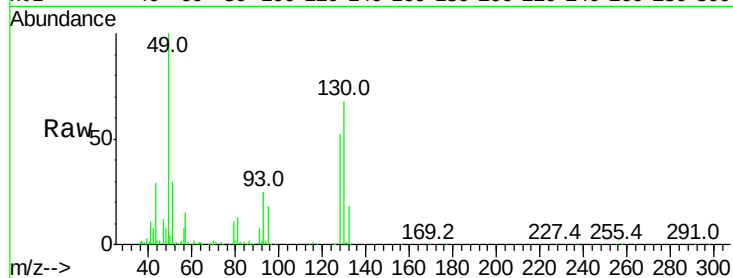
Ion	Ratio	Lower	Upper
63	100		
98	8.3	2.3	6.9#
100	2.4	1.2	3.6



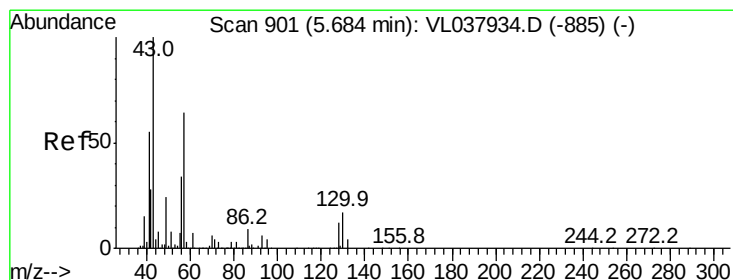
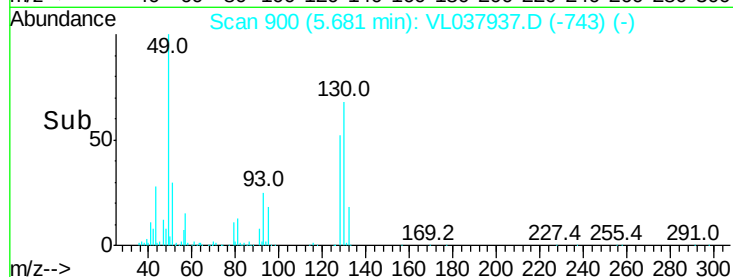
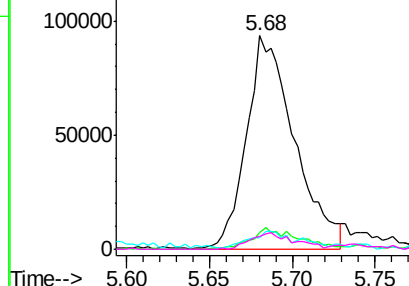


#25
Ethyl Acetate
Concen: 0.495 ppbv
RT: 5.68
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
VSTDIC0.5
Acq: 1 Nov 2021 11:17

Tgt Ion:	43	Resp:	188123
Ion	Ratio	Lower	Upper
43	100		
45	11.7	8.1	12.1
61	10.0	8.1	12.1
70	7.2	5.8	8.6

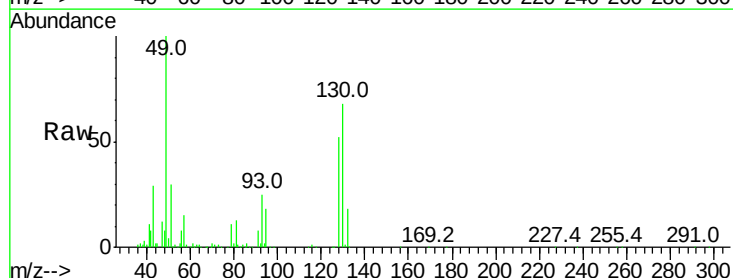


Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 45.10 (44.80 to 45.80): VL0
Ion 61.10 (60.80 to 61.80): VL0
Ion 70.10 (69.80 to 70.80): VL0

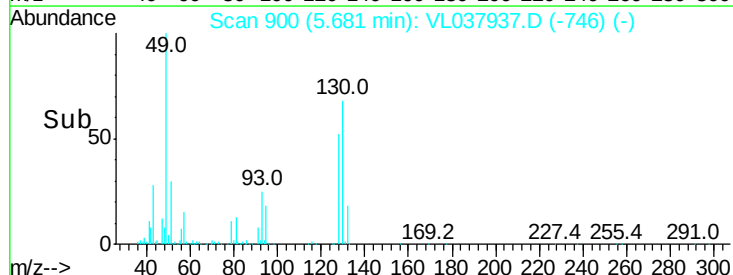
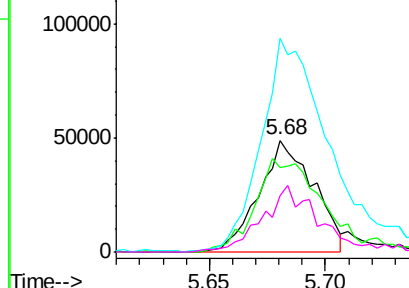


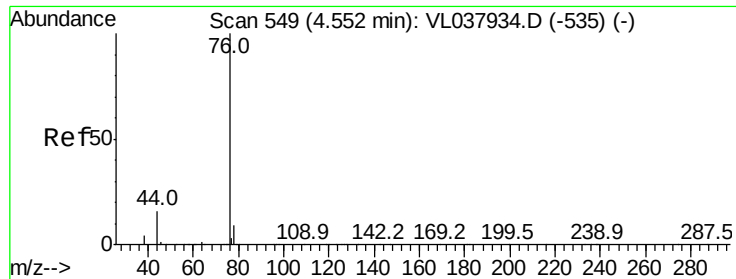
#26
Hexane
Concen: 0.427 ppbv
RT: 5.68 min Scan# 900
Delta R.T.: -0.00 min
Lab File: VL037937.D
Acq: 1 Nov 2021 11:17

Tgt Ion:	57	Resp:	79982
Ion	Ratio	Lower	Upper
57	100		
41	110.8	71.0	106.6#
43	258.9	173.0	259.6
56	64.6	43.6	65.4



Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0





#27

Carbon Disulfide

Concen: 0.494 ppbv

RT: 4.55 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 1 Nov 2021 11:17 VSTDIC0.5

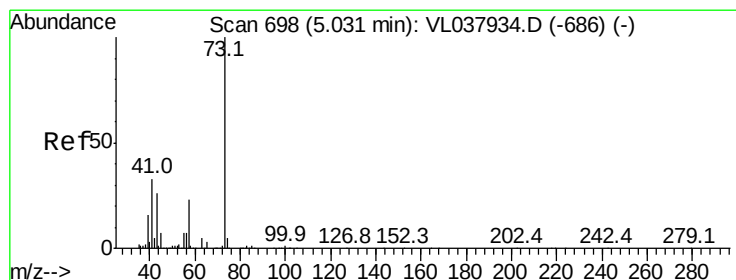
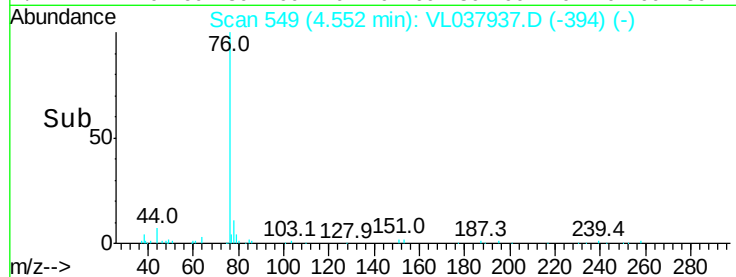
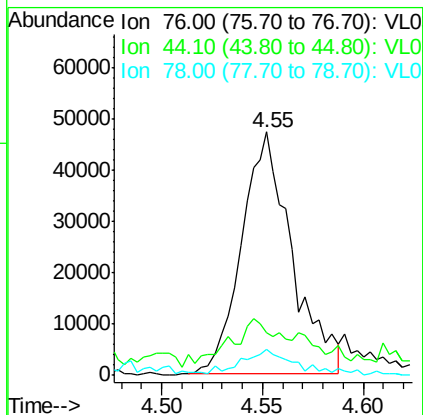
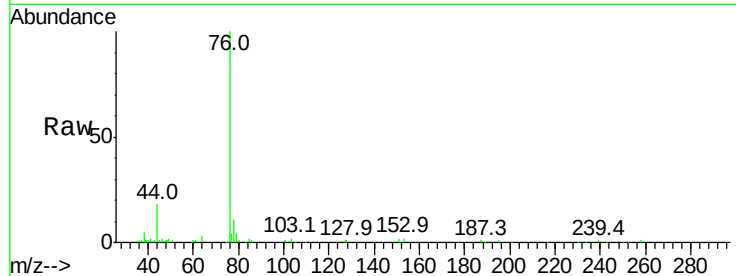
Tgt Ion: 76 Resp: 81876

Ion Ratio Lower Upper

76 100

44 19.4 13.2 19.8

78 12.4 7.2 10.8#



#28

Methyl tert-Butyl Ether

Concen: 0.313 ppbv

RT: 5.05 min Scan# 703

Delta R.T. 0.02 min

Lab File: VL037937.D

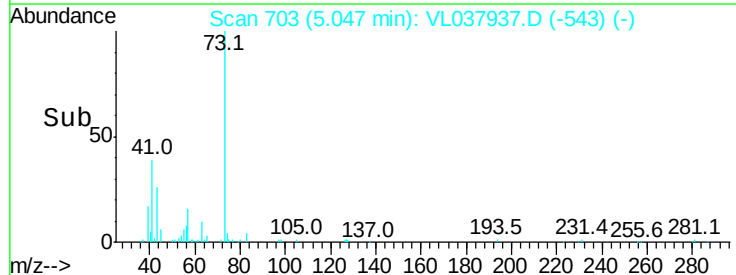
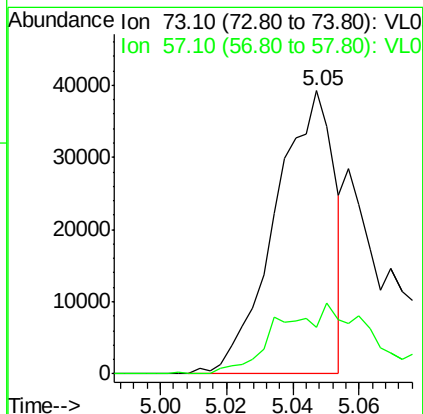
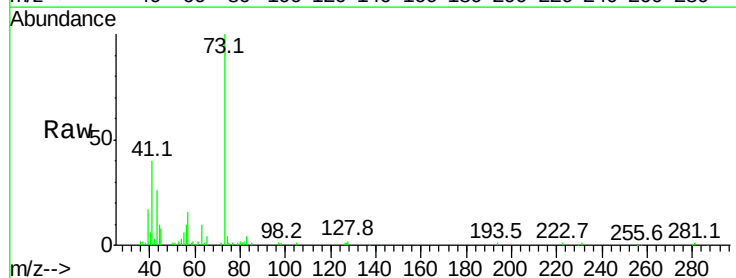
Acq: 1 Nov 2021 11:17

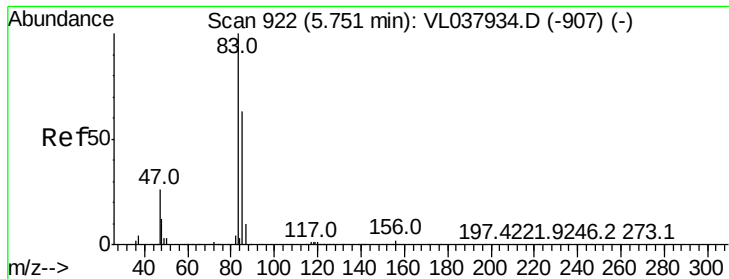
Tgt Ion: 73 Resp: 48756

Ion Ratio Lower Upper

73 100

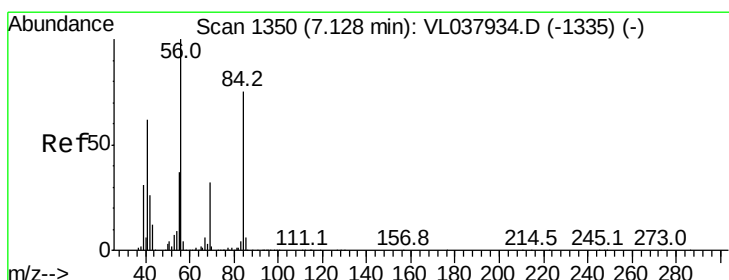
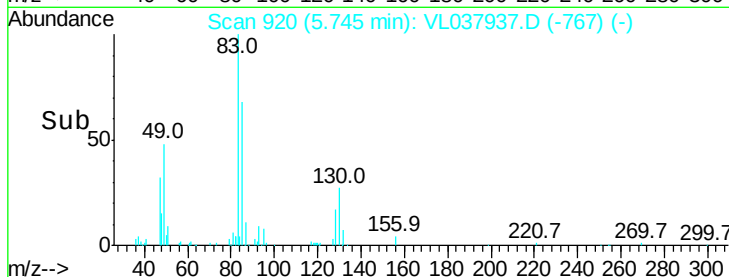
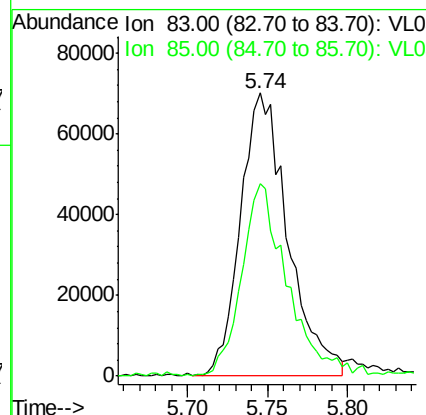
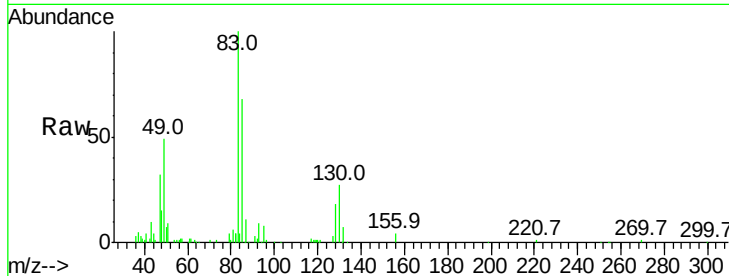
57 42.1 20.1 30.1#





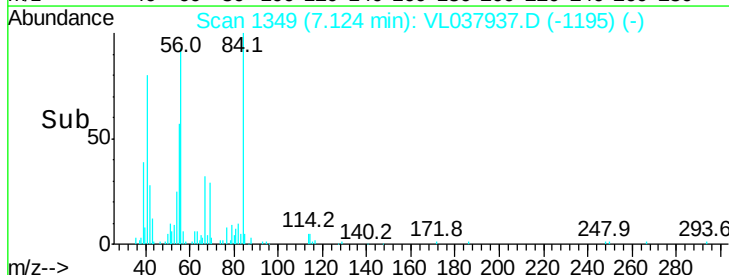
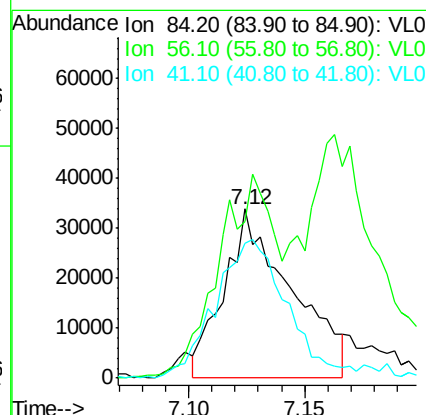
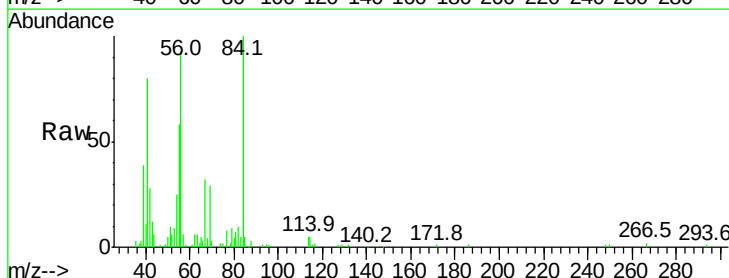
#29
Chloroform
Concen: 0.528 ppbv
RT: 5.74
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 1 Nov 2021 11:17

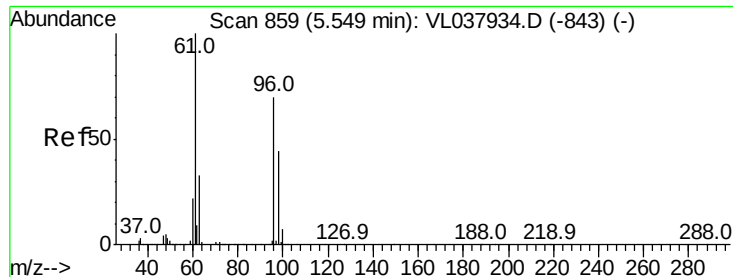
Tgt Ion: 83 Resp: 141278
Ion Ratio Lower Upper
83 100
85 67.7 50.6 76.0



#30
Cyclohexane
Concen: 0.430 ppbv
RT: 7.12 min Scan# 1349
Delta R.T. -0.00 min
Lab File: VL037937.D
Acq: 1 Nov 2021 11:17

Tgt Ion: 84 Resp: 68283
Ion Ratio Lower Upper
84 100
56 0.0 114.0 171.0#
41 93.0 68.3 102.5





#31

cis-1,2-Dichloroethene

Concen: 0.473 ppbv

RT: 5.54

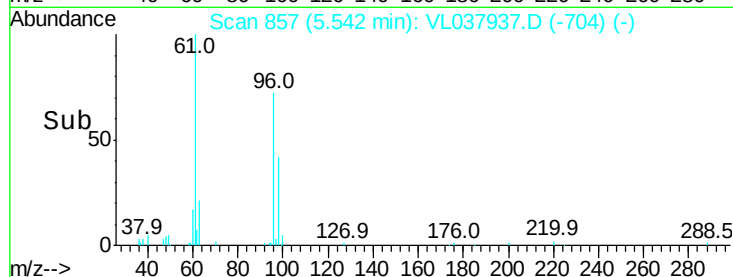
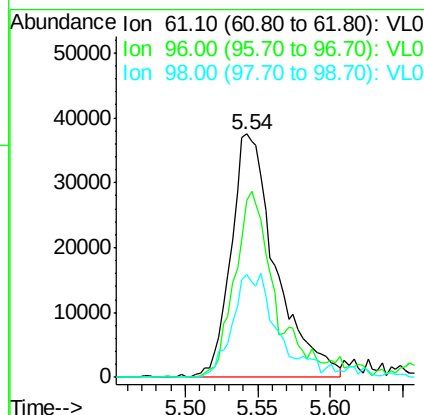
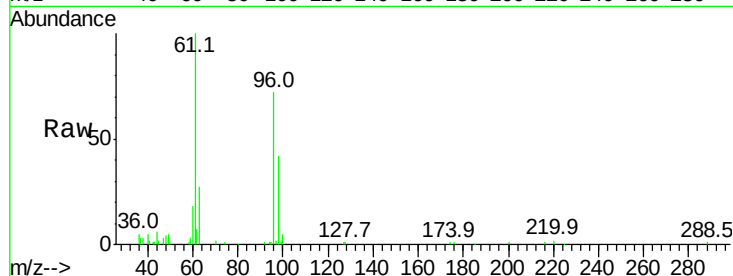
Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 1 Nov 2021 11:17

Tgt Ion: 61 Resp: 80398

Ion	Ratio	Lower	Upper
61	100		
96	72.5	55.6	83.4
98	42.4	34.9	52.3



#32

1,1,1-Trichloroethane

Concen: 0.300 ppbv

RT: 6.51 min Scan# 1157

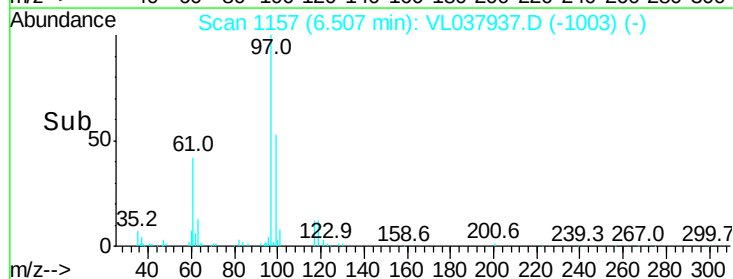
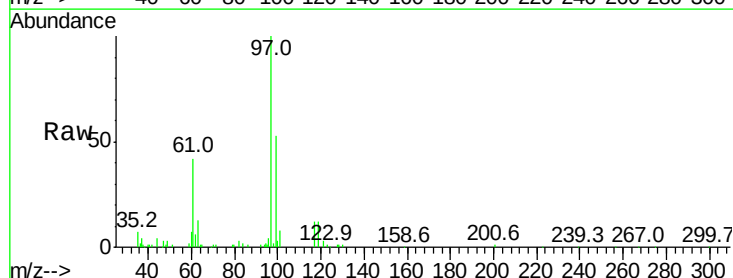
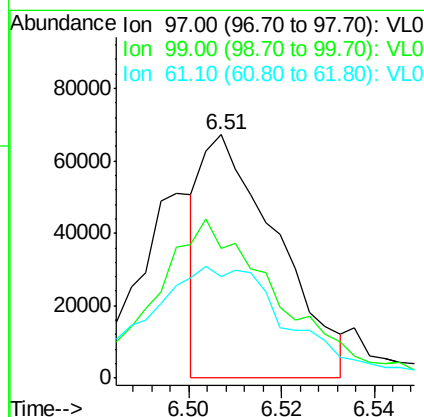
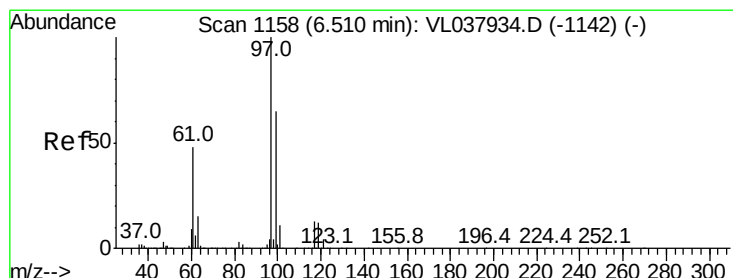
Delta R.T. -0.00 min

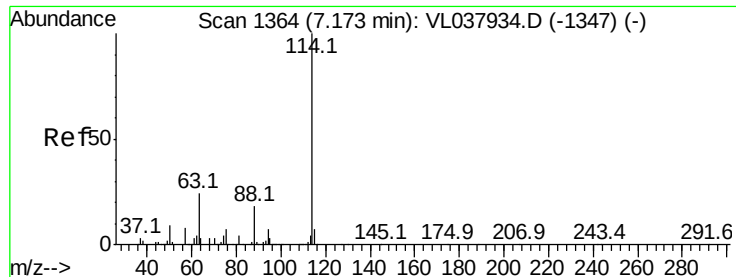
Lab File: VL037937.D

Acq: 1 Nov 2021 11:17

Tgt Ion: 97 Resp: 76003

Ion	Ratio	Lower	Upper
97	100		
99	113.2	52.2	78.4#
61	90.7	39.8	59.6#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.17

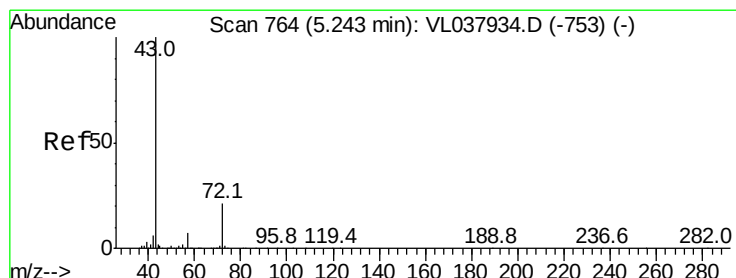
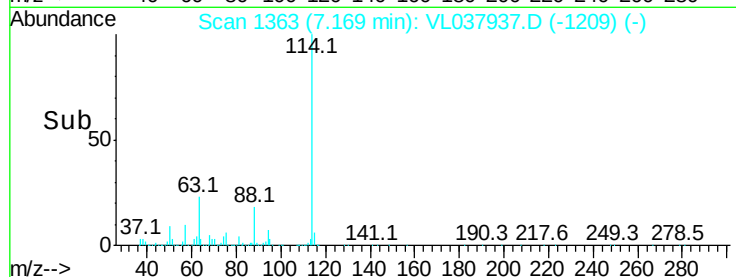
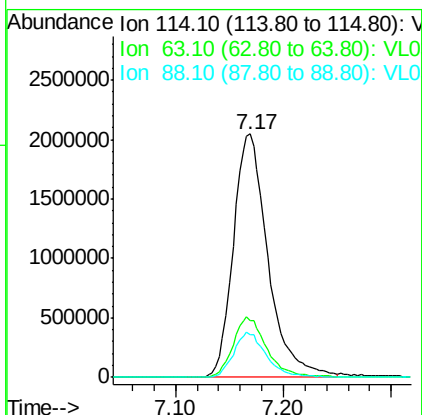
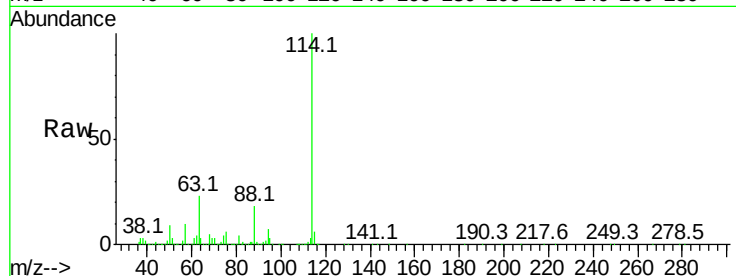
Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 1 Nov 2021 11:17

Tgt Ion: 114 Resp: 4585240

Ion	Ratio	Lower	Upper
114	100		
63	24.5	19.4	29.0
88	17.9	14.2	21.4



#34

2-Butanone

Concen: 0.360 ppbv

RT: 5.26 min Scan# 770

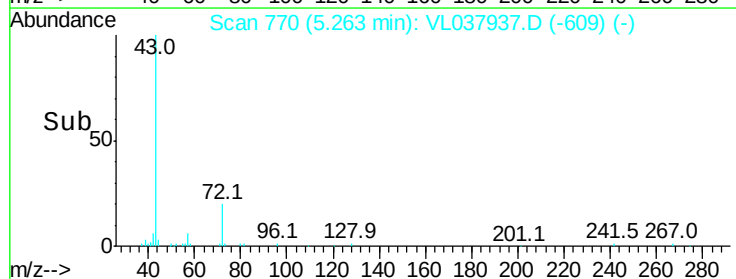
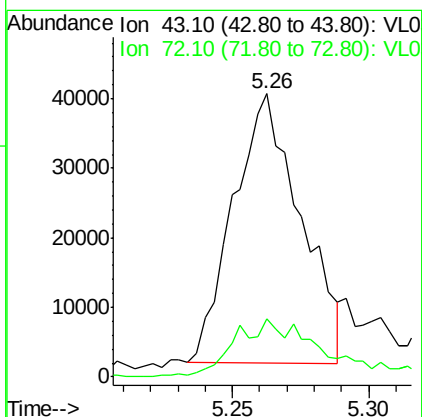
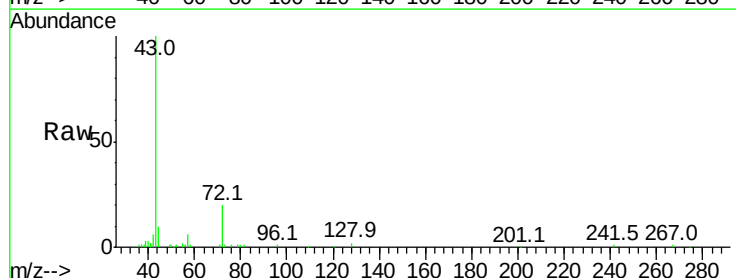
Delta R.T. 0.02 min

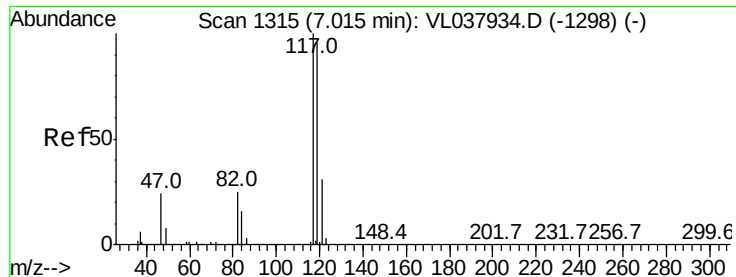
Lab File: VL037937.D

Acq: 1 Nov 2021 11:17

Tgt Ion: 43 Resp: 66645

Ion	Ratio	Lower	Upper
43	100		
72	30.4	18.3	27.5#





#35

Carbon Tetrachloride

Concen: 0.513 ppbv

RT: 7.01 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 1 Nov 2021 11:17 VSTDIC0.5

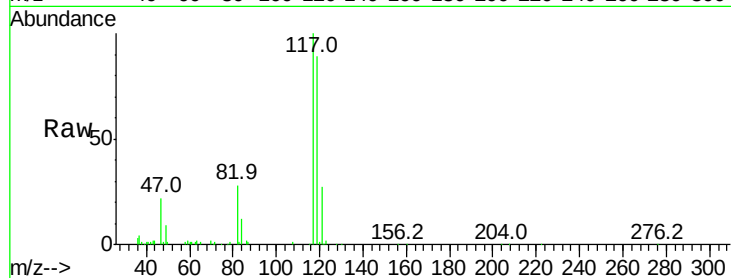
Tgt Ion: 117 Resp: 133700

Ion Ratio Lower Upper

117 100

119 89.1 76.6 114.8

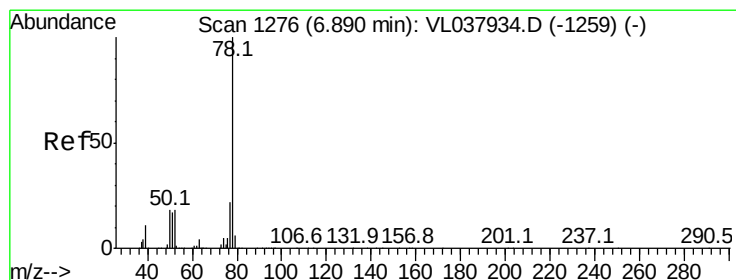
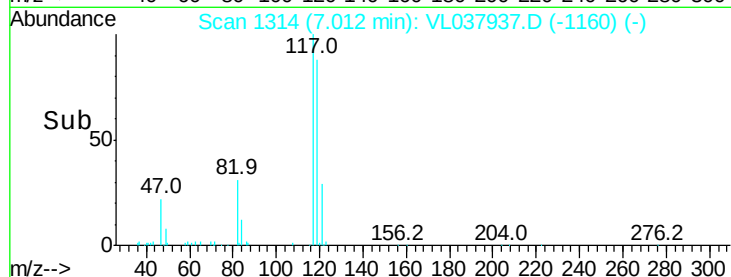
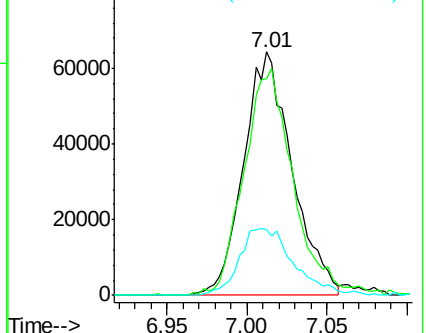
121 27.0 25.1 37.7



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 0.453 ppbv

RT: 6.88 min Scan# 1274

Delta R.T. -0.01 min

Lab File: VL037937.D

Acq: 1 Nov 2021 11:17

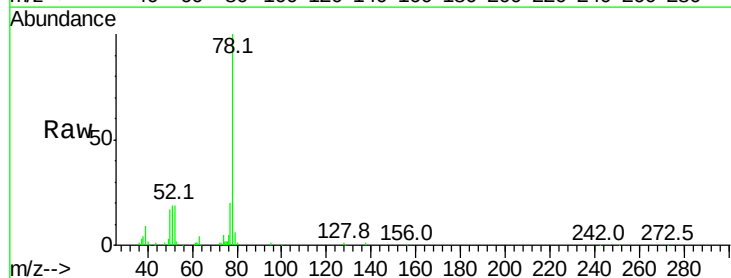
Tgt Ion: 78 Resp: 177258

Ion Ratio Lower Upper

78 100

77 20.2 17.9 26.9

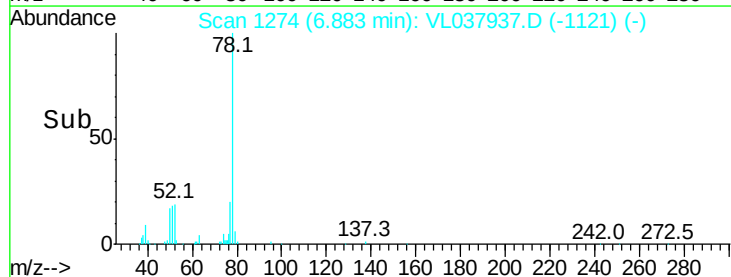
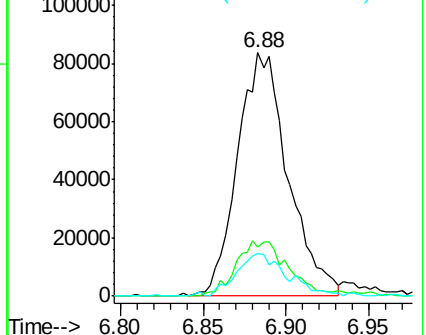
50 17.3 14.4 21.6

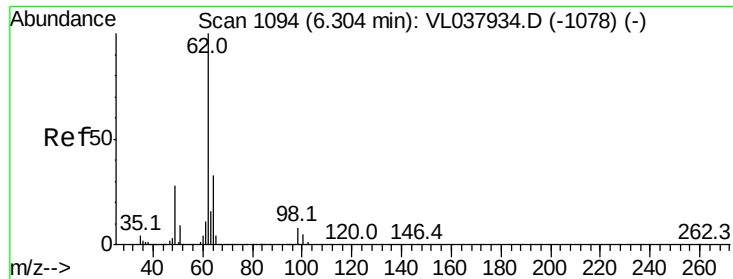


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





#37

1,2-Dichloroethane

Concen: 0.447 ppbv

RT: 6.30

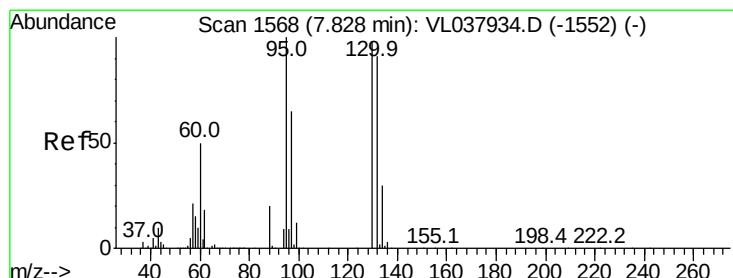
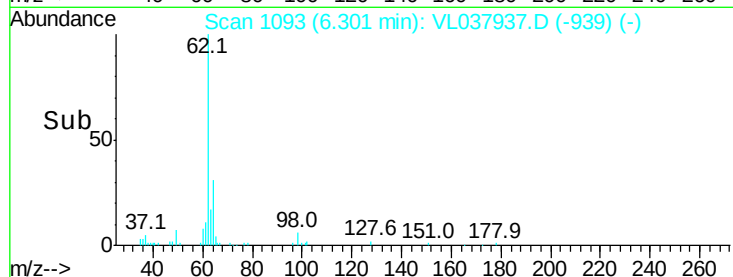
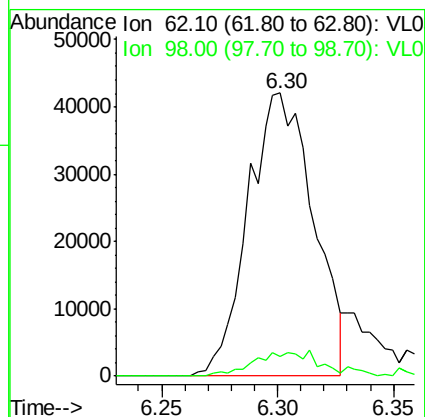
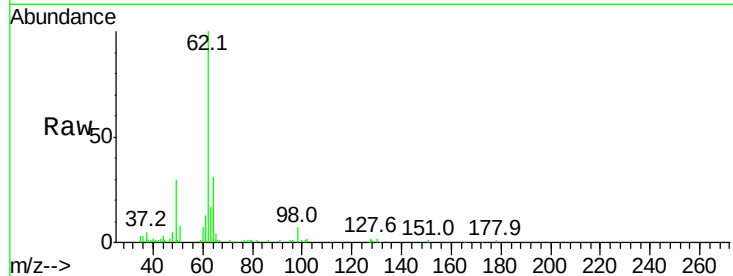
Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 1 Nov 2021 11:17

Tgt Ion: 62 Resp: 82435

Ion	Ratio	Lower	Upper
62	100		
98	9.6	6.5	9.7



#38

Trichloroethene

Concen: 0.285 ppbv

RT: 7.83 min Scan# 1567

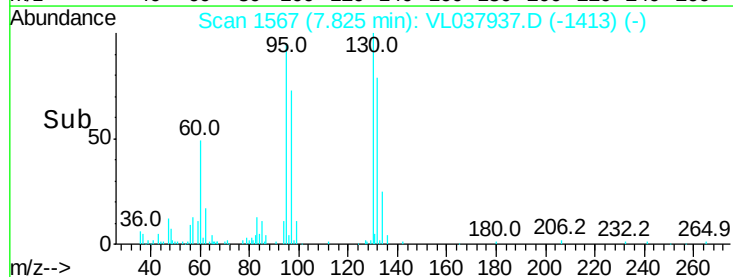
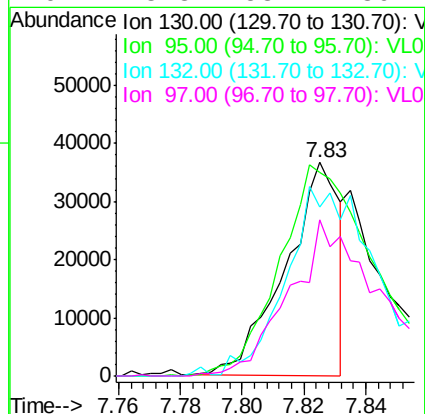
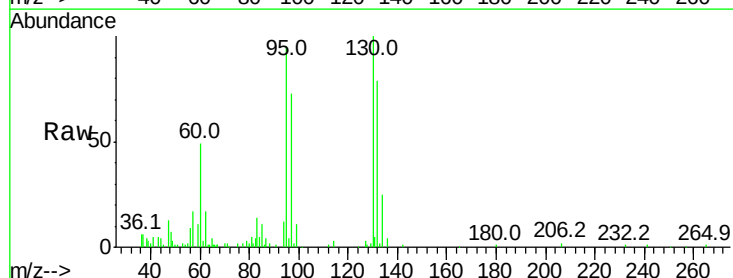
Delta R.T. -0.00 min

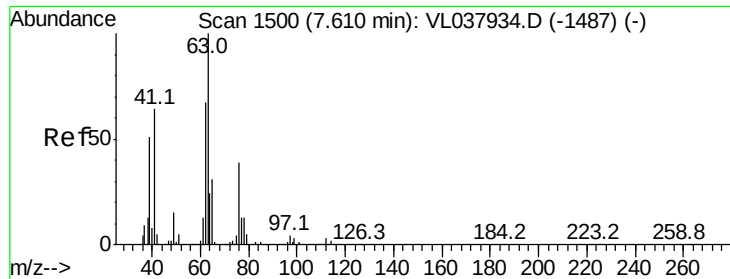
Lab File: VL037937.D

Acq: 1 Nov 2021 11:17

Tgt Ion: 130 Resp: 44110

Ion	Ratio	Lower	Upper
130	100		
95	95.1	81.8	122.8
132	78.4	74.2	111.2
97	73.3	53.4	80.2





#39

1,2-Dichloropropane

Concen: 0.481 ppbv

RT: 7.60 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 1 Nov 2021 11:17 VSTDIC0.5

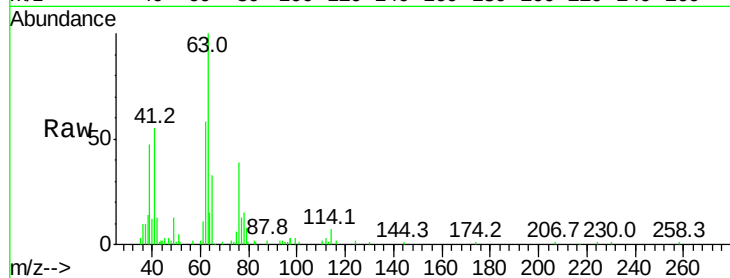
Tgt Ion: 63 Resp: 70800

Ion Ratio Lower Upper

63 100

41 54.0 51.6 77.4

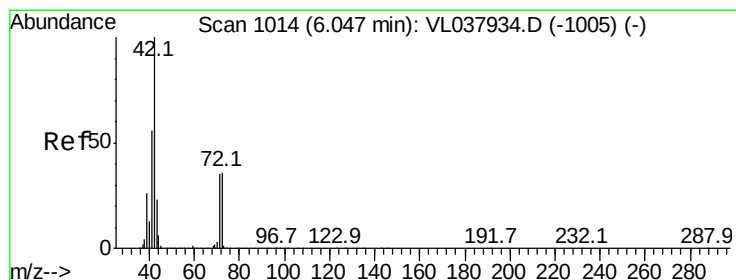
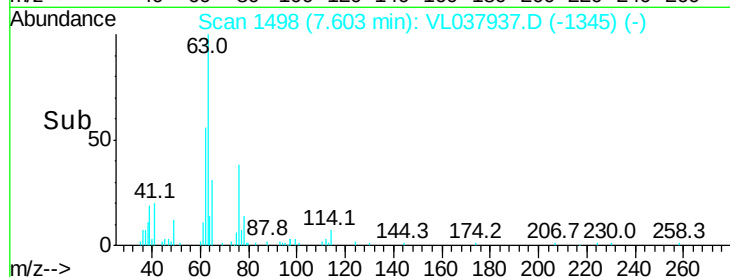
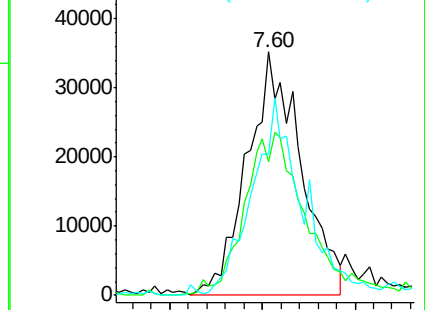
62 53.8 53.5 80.3



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: 0.246 ppbv

RT: 6.07 min Scan# 1022

Delta R.T. 0.03 min

Lab File: VL037937.D

Acq: 1 Nov 2021 11:17

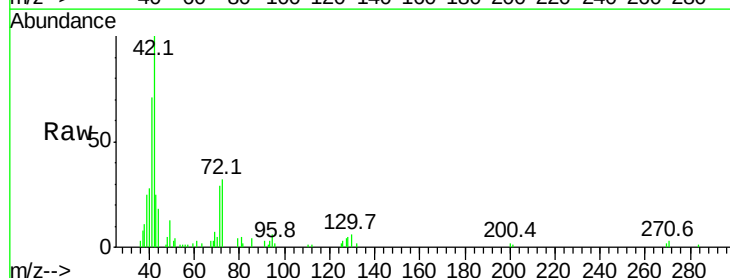
Tgt Ion: 42 Resp: 22341

Ion Ratio Lower Upper

42 100

72 55.1 31.5 47.3#

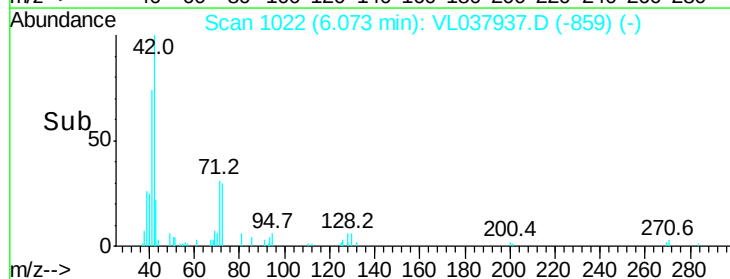
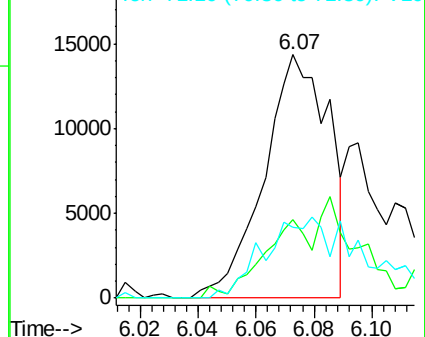
71 60.5 30.5 45.7#

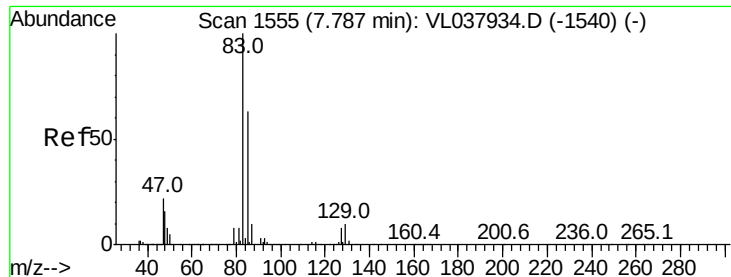


Abundance Ion 42.10 (41.80 to 42.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

Ion 71.10 (70.80 to 71.80): VL0





#42

Bromodichloromethane

Concen: 0.290 ppbv

RT: 7.78 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 1 Nov 2021 11:17 VSTDIC0.5

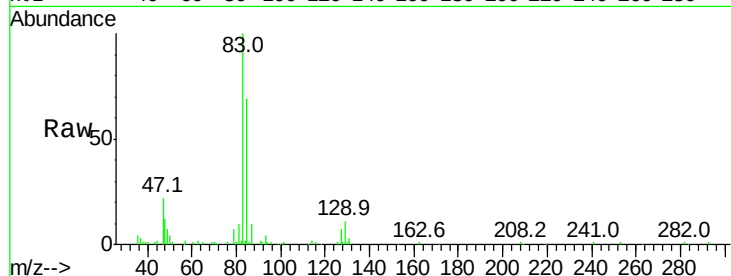
Tgt Ion: 83 Resp: 78560

Ion Ratio Lower Upper

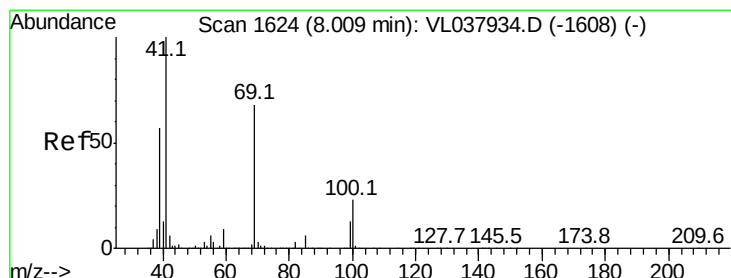
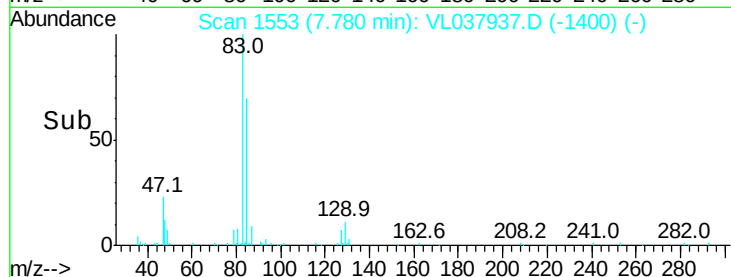
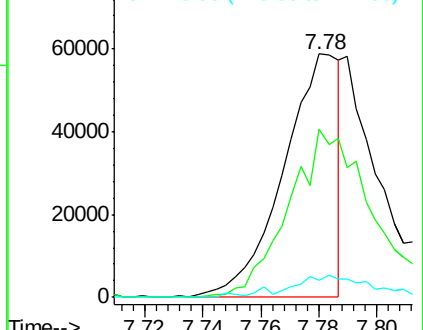
83 100

85 69.2 50.1 75.1

127 8.3 6.1 9.1



Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0
Ion 126.90 (126.60 to 127.60): VL0



#43

Methyl Methacrylate

Concen: 0.243 ppbv

RT: 8.01 min Scan# 1625

Delta R.T. 0.00 min

Lab File: VL037937.D

Acq: 1 Nov 2021 11:17

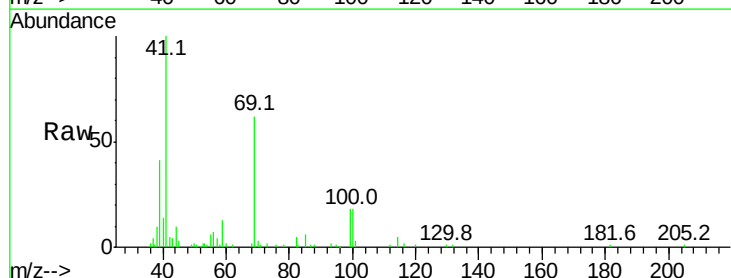
Tgt Ion: 69 Resp: 31124

Ion Ratio Lower Upper

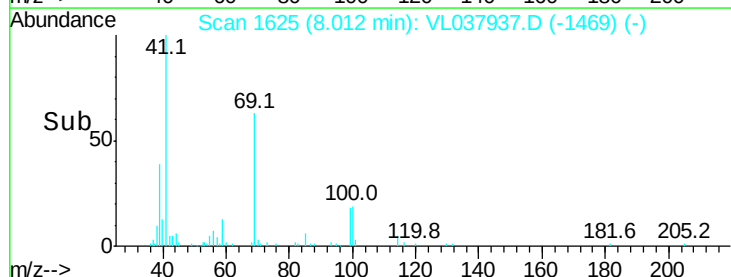
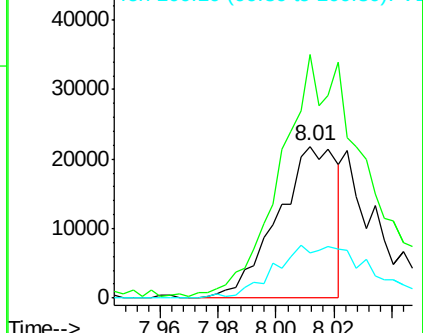
69 100

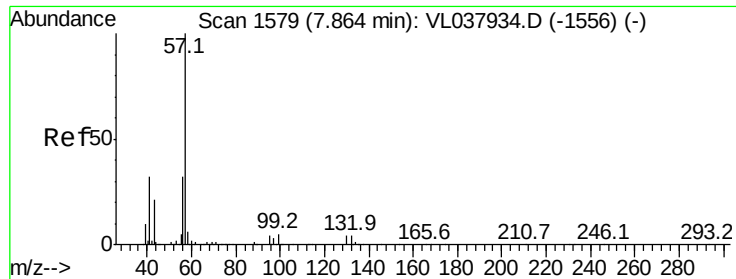
41 246.2 117.4 176.2#

100 59.8 27.8 41.6#



Abundance Ion 69.10 (68.80 to 69.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 100.10 (99.80 to 100.80): VL0





#44

2,2,4-Trimethylpentane

Concen: 0.450 ppbv

RT: 7.86 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: VSTDIC0.5

Acq: 1 Nov 2021 11:17

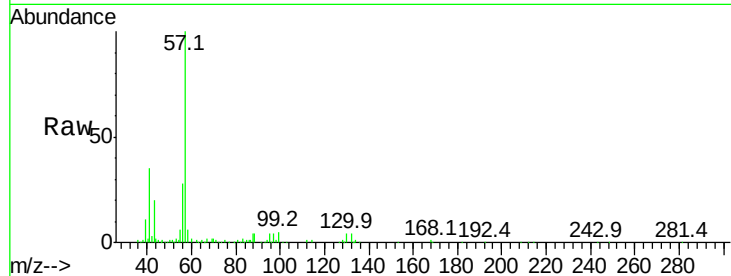
Tgt Ion: 57 Resp: 296239

Ion Ratio Lower Upper

57 100

41 38.3 25.8 38.8

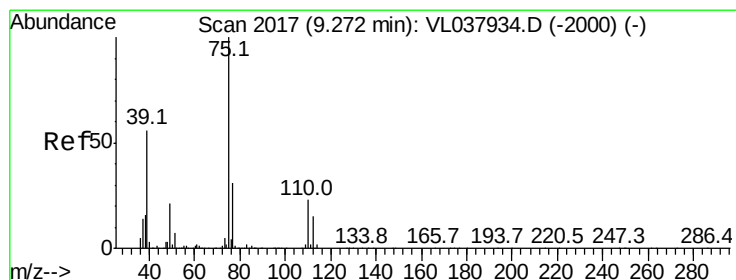
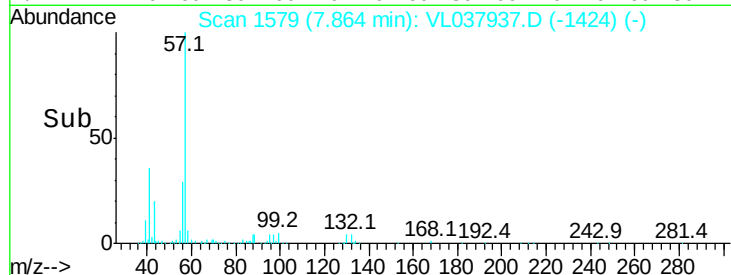
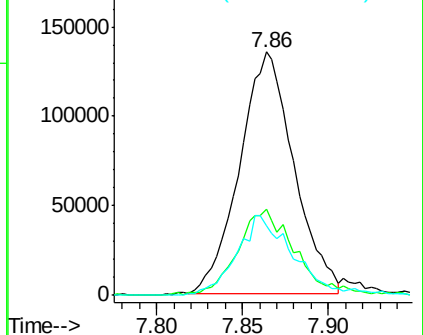
56 34.9 25.9 38.9



Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



#45

t-1,3-Dichloropropene

Concen: 0.166 ppbv

RT: 9.27 min Scan# 2015

Delta R.T. -0.01 min

Lab File: VL037937.D

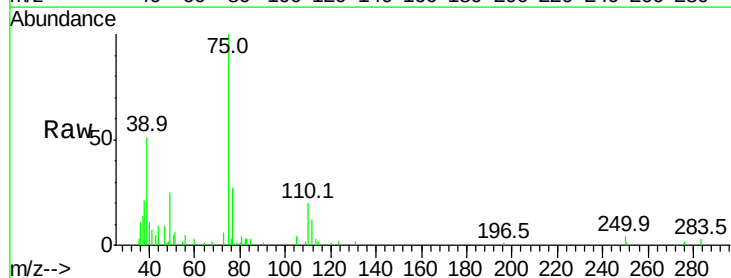
Acq: 1 Nov 2021 11:17

Tgt Ion: 75 Resp: 14601

Ion Ratio Lower Upper

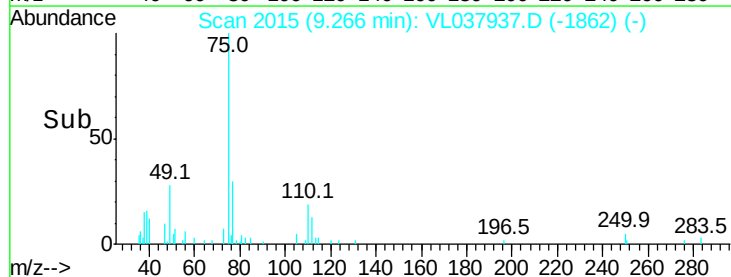
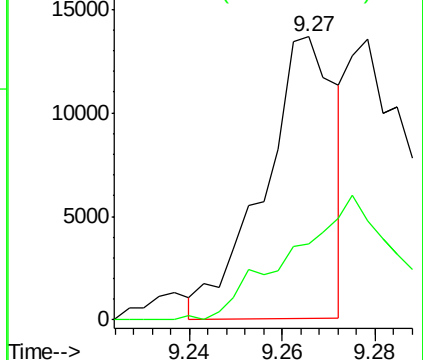
75 100

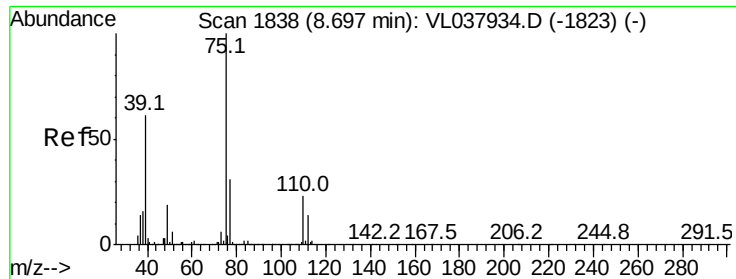
77 26.9 25.2 37.8



Abundance Ion 75.10 (74.80 to 75.80): VL0

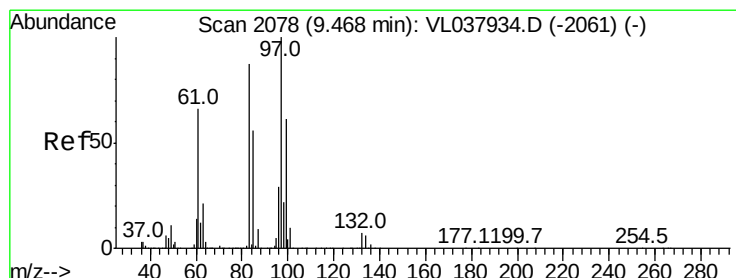
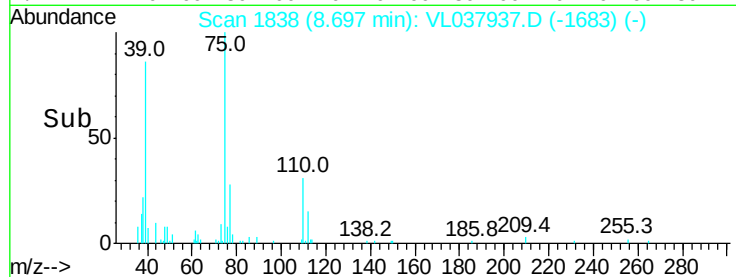
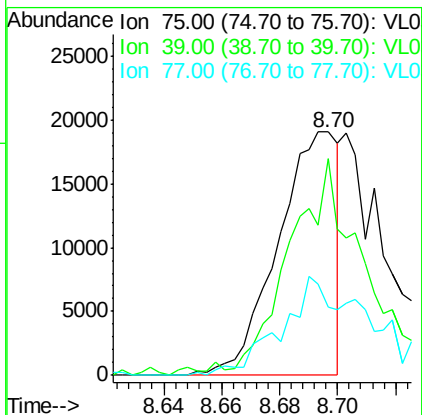
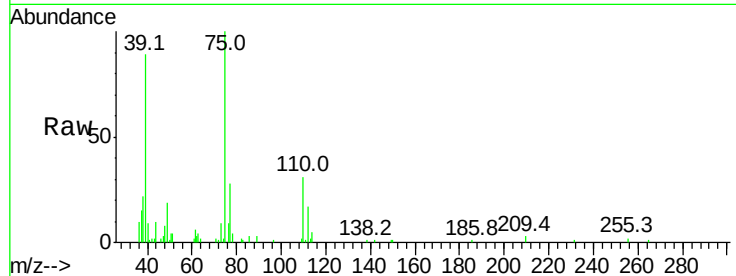
Ion 77.10 (76.80 to 77.80): VL0





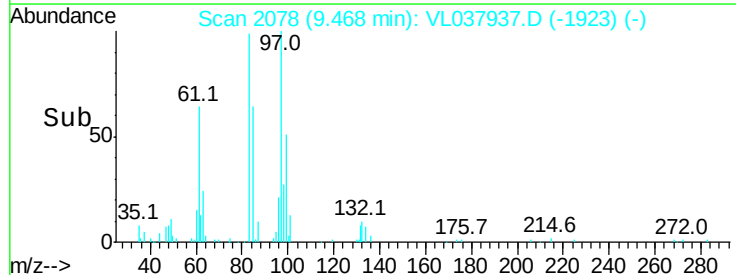
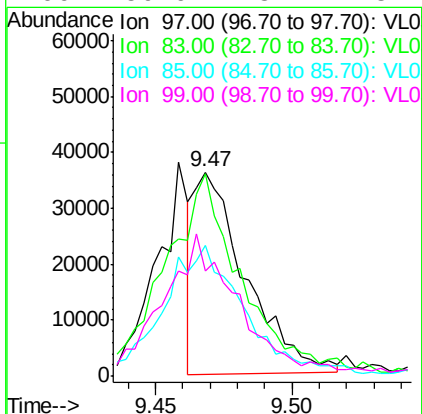
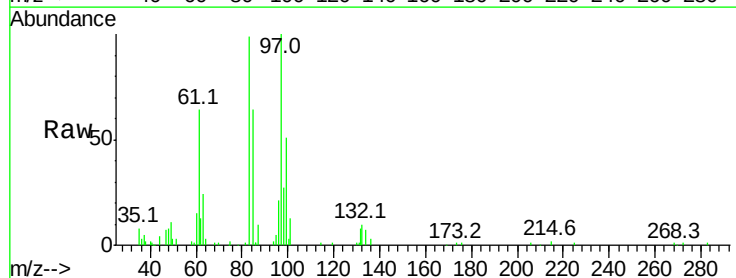
#46
 cis-1,3-Dichloropropene
 Concen: 0.224 ppbv
 RT: 8.70
 Delta R.T. MSVOA_1
 Lab File: ClientSampleId :
 Acq: 1 Nov 2021 11:17

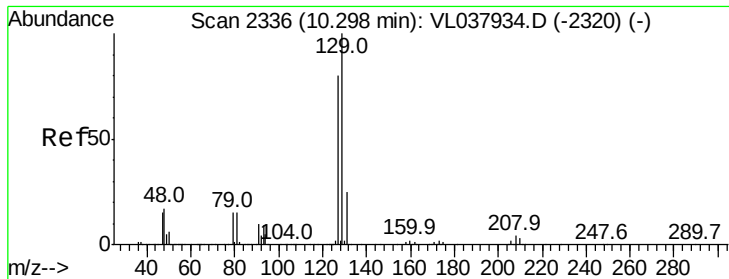
Tgt Ion: 75 Resp: 27366
 Ion Ratio Lower Upper
 75 100
 39 85.6 48.8 73.2#
 77 28.0 24.6 36.8



#47
 1,1,2-Trichloroethane
 Concen: 0.293 ppbv
 RT: 9.47 min Scan# 2078
 Delta R.T. -0.00 min
 Lab File: VL037937.D
 Acq: 1 Nov 2021 11:17

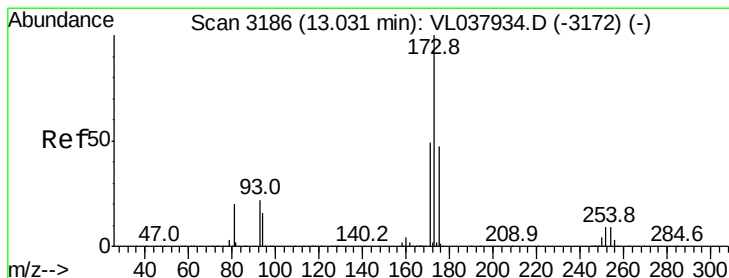
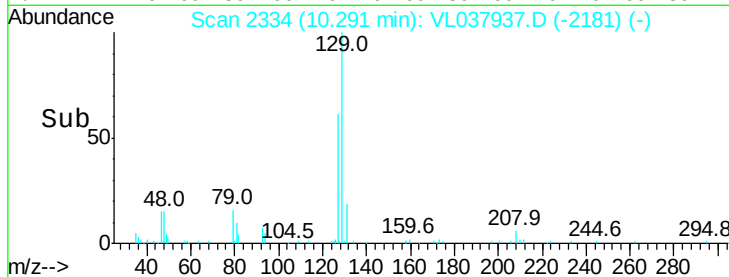
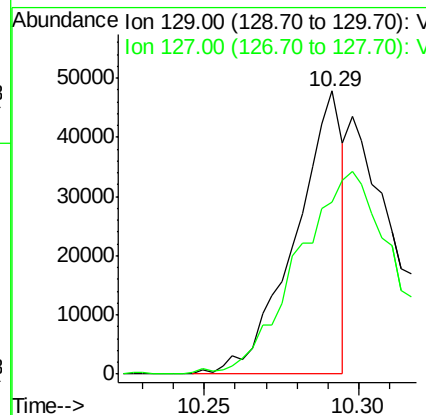
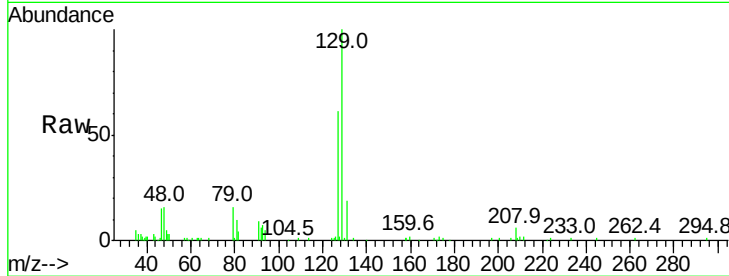
Tgt Ion: 97 Resp: 46854
 Ion Ratio Lower Upper
 97 100
 83 95.0 69.4 104.2
 85 62.2 45.0 67.6
 99 50.9 48.7 73.1





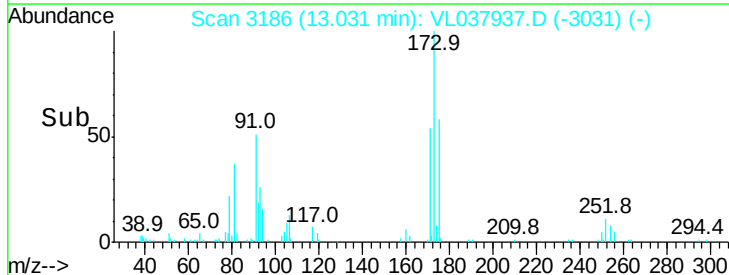
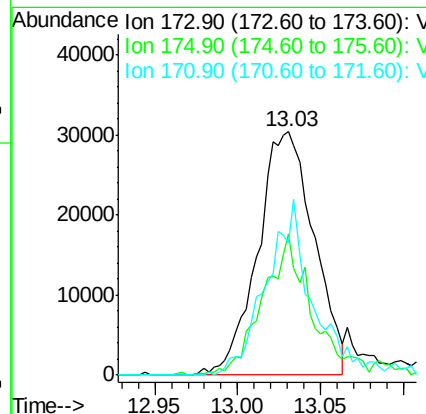
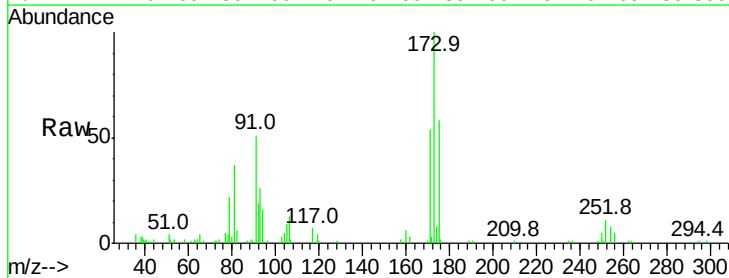
#48
 Dibromochloromethane
 Concen: 0.223 ppbv
 RT: 10.29
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 VSTDIC0.5
 Acq: 1 Nov 2021 11:17

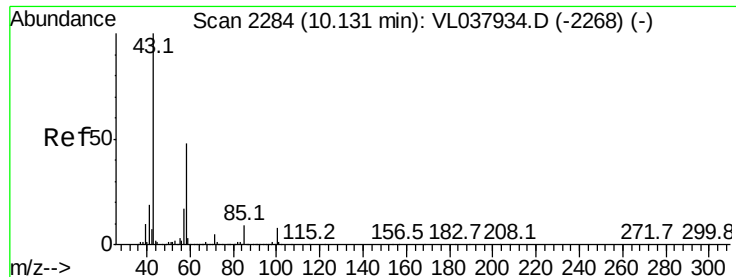
Tgt Ion:129 Resp: 51007
 Ion Ratio Lower Upper
 129 100
 127 0.0 40.3 120.9#



#49
 Bromoform
 Concen: 0.411 ppbv
 RT: 13.03 min Scan# 3186
 Delta R.T. -0.00 min
 Lab File: VL037937.D
 Acq: 1 Nov 2021 11:17

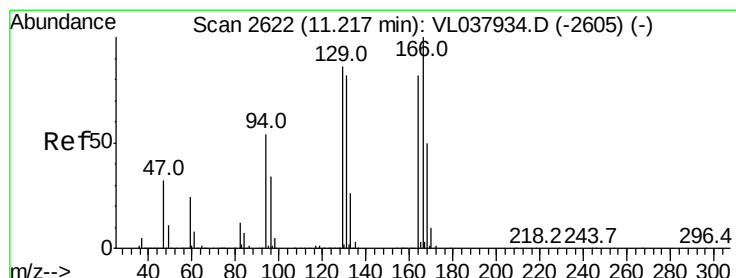
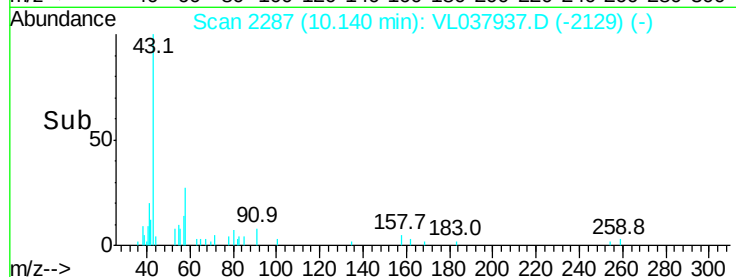
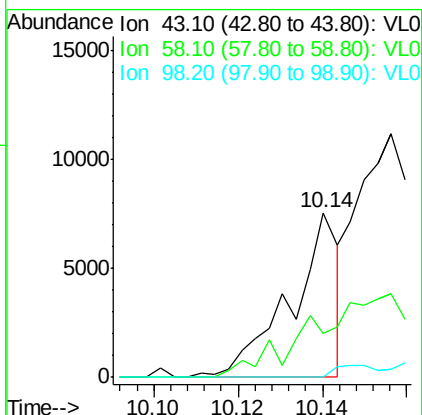
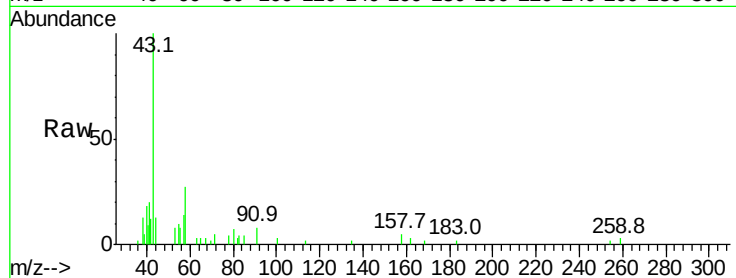
Tgt Ion:173 Resp: 71819
 Ion Ratio Lower Upper
 173 100
 175 52.6 39.5 59.3
 171 58.5 43.6 65.4





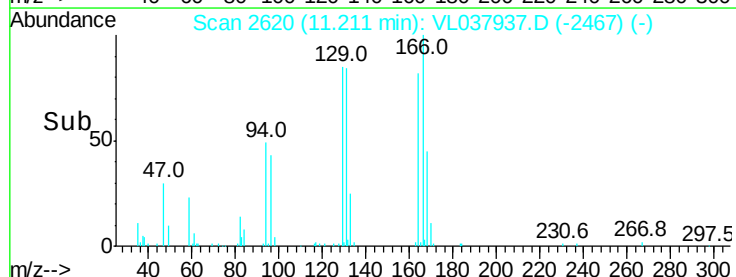
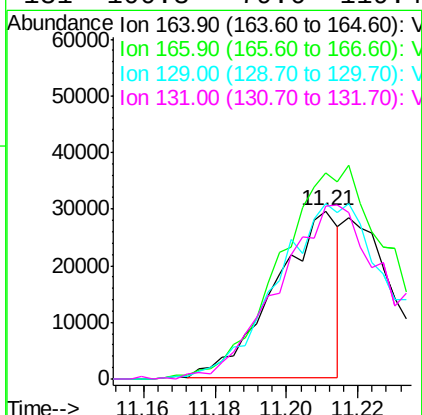
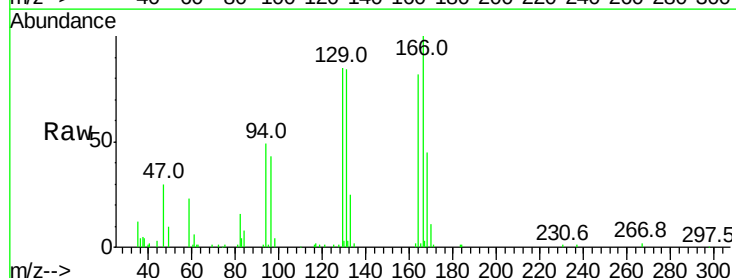
#51
2-Hexanone
Concen: 0.056 ppbv
RT: 10.14 min
Delta R.T.: MSVOA_1
Lab File: ClientSampleId :
Acq: 1 Nov 2021 11:17

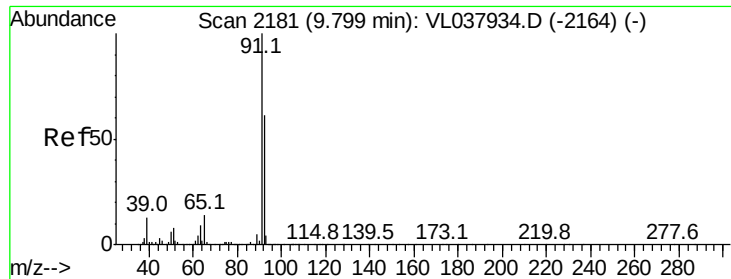
Tgt Ion:	43	Resp:	5987
Ion	Ratio	Lower	Upper
43	100		
58	0.0	38.6	57.8#
98	0.0	1.0	1.4#



#52
Tetrachloroethene
Concen: 0.236 ppbv
RT: 11.21 min Scan# 2620
Delta R.T.: -0.01 min
Lab File: VL037937.D
Acq: 1 Nov 2021 11:17

Tgt Ion:	164	Resp:	35932
Ion	Ratio	Lower	Upper
164	100		
166	121.7	97.6	146.4
129	103.7	84.2	126.2
131	100.3	79.6	119.4





#53

Toluene

Concen: 0.375 ppbv

RT: 9.80 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

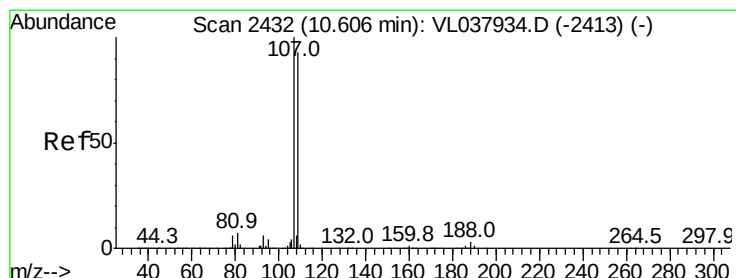
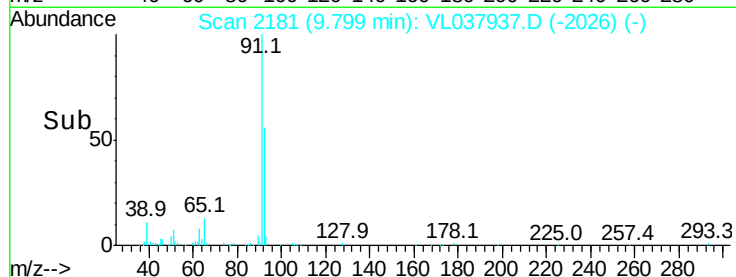
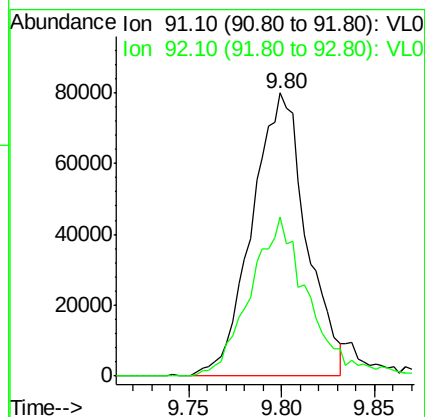
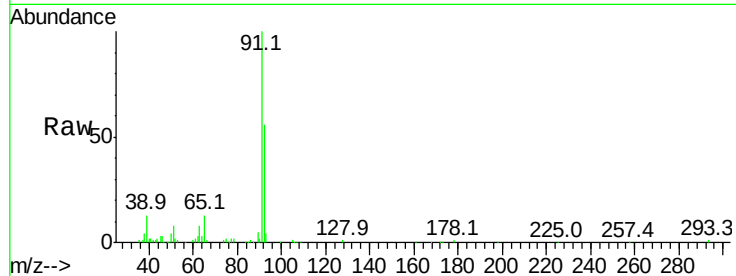
Acq: 1 Nov 2021 11:17 VSTDIC0.5

Tgt Ion: 91 Resp: 162832

Ion Ratio Lower Upper

91 100

92 60.6 48.2 72.4



#54

1,2-Dibromoethane

Concen: 0.425 ppbv

RT: 10.60 min Scan# 2430

Delta R.T. -0.01 min

Lab File: VL037937.D

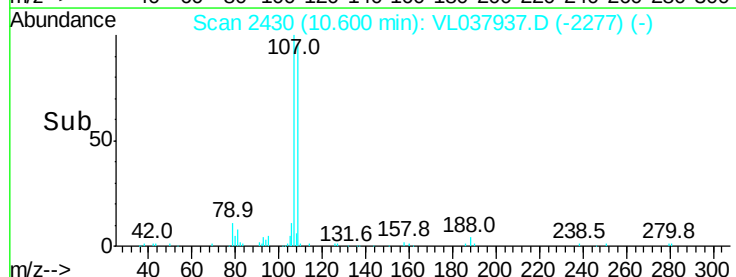
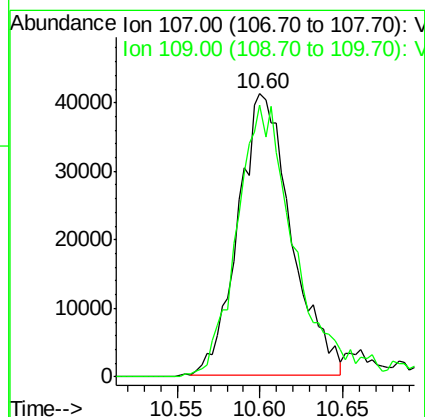
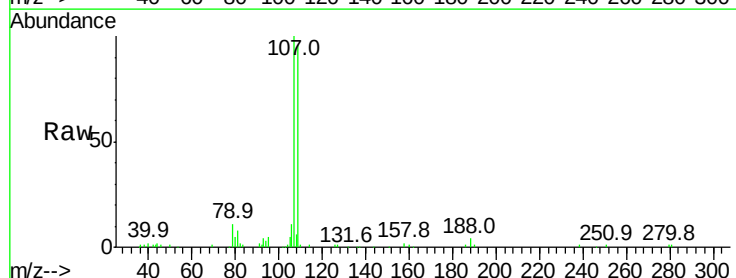
Acq: 1 Nov 2021 11:17

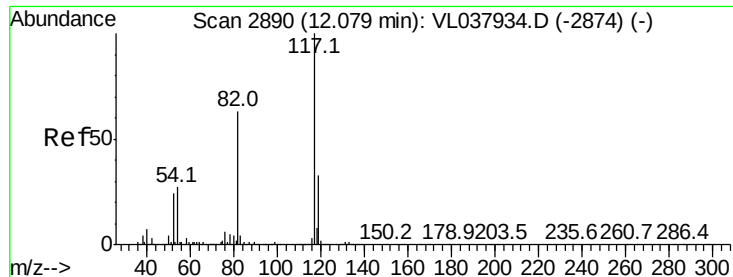
Tgt Ion: 107 Resp: 91853

Ion Ratio Lower Upper

107 100

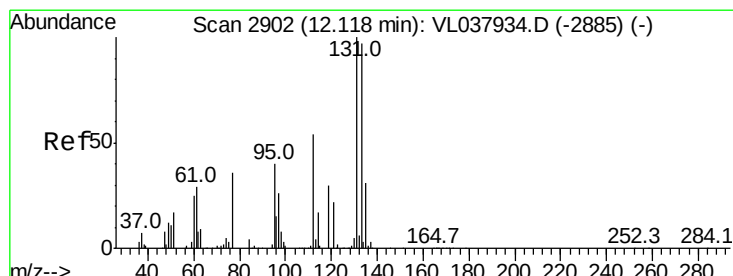
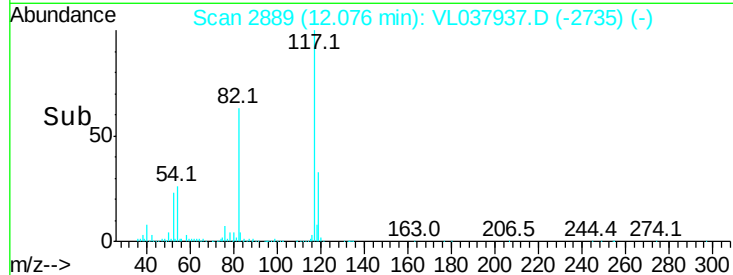
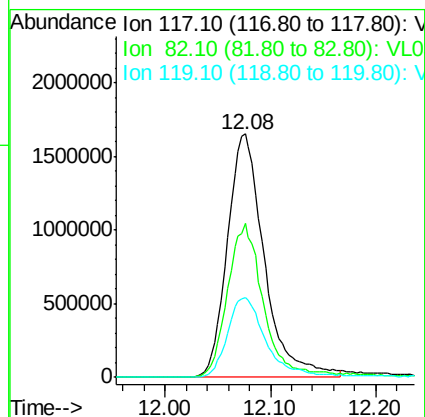
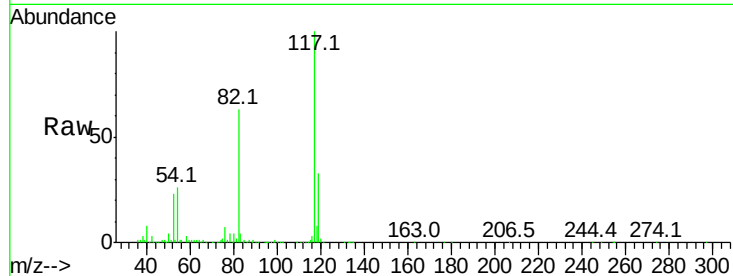
109 95.9 74.5 111.7





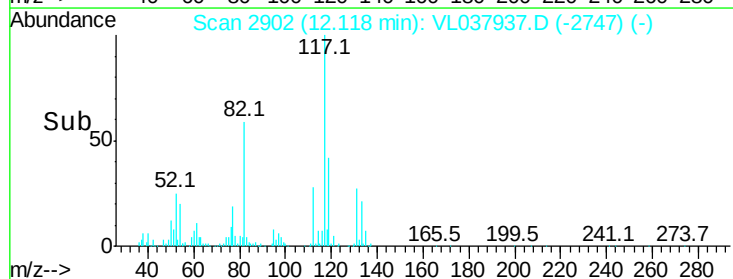
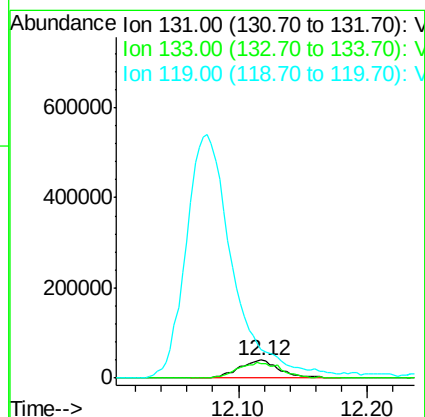
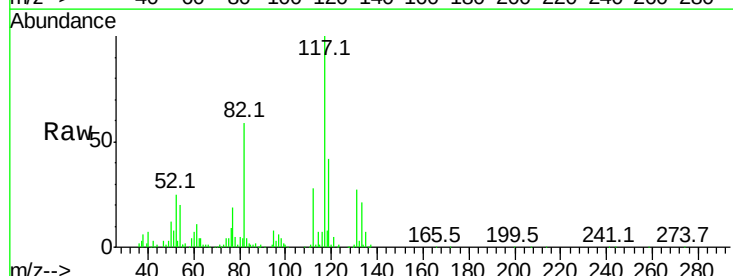
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.08 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 1 Nov 2021 11:17

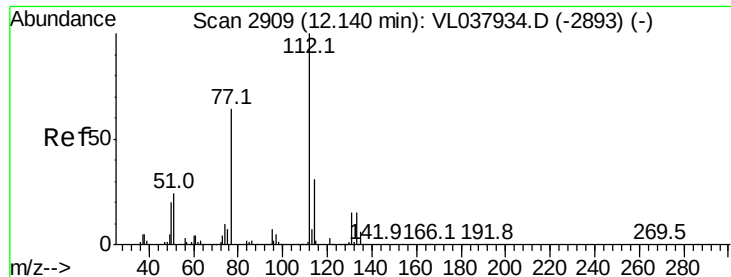
Tgt Ion:117 Resp: 4010442
Ion Ratio Lower Upper
117 100
82 62.6 51.0 76.6
119 35.3 26.9 40.3



#56
1,1,1,2-Tetrachloroethane
Concen: 0.534 ppbv
RT: 12.12 min Scan# 2902
Delta R.T.: -0.00 min
Lab File: VL037937.D
Acq: 1 Nov 2021 11:17

Tgt Ion:131 Resp: 88583
Ion Ratio Lower Upper
131 100
133 93.1 79.6 119.4
119 1598.3 125.4 188.2#





#57

Chlorobenzene

Concen: 0.528 ppbv

RT: 12.13

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 1 Nov 2021 11:17

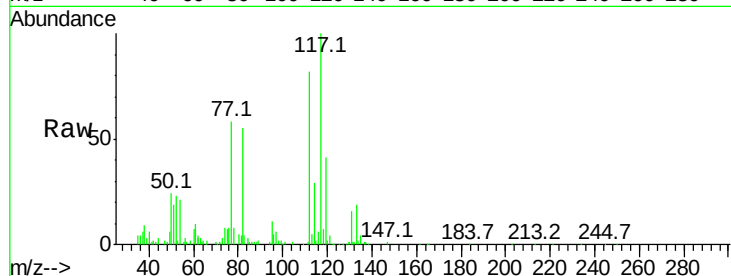
Tgt Ion: 112 Resp: 173847

Ion Ratio Lower Upper

112 100

77 65.3 51.1 76.7

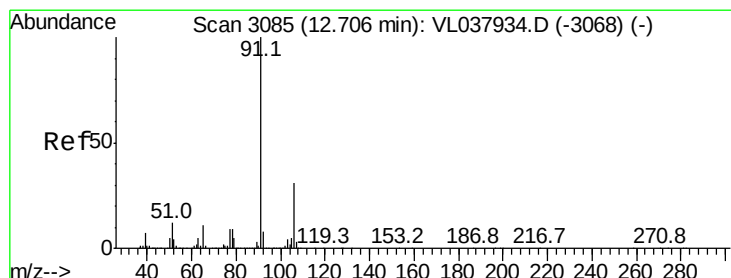
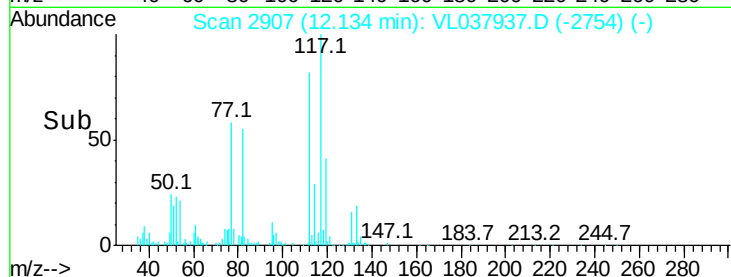
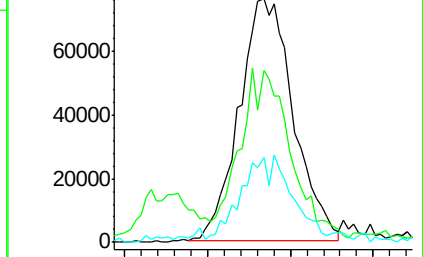
114 33.3 27.9 34.1



Abundance Ion 112.10 (111.80 to 112.80): V

Ion 77.10 (76.80 to 77.80): VL0

Ion 114.10 (113.80 to 114.80): V



#58

Ethyl Benzene

Concen: 0.194 ppbv

RT: 12.70 min Scan# 3084

Delta R.T. -0.00 min

Lab File: VL037937.D

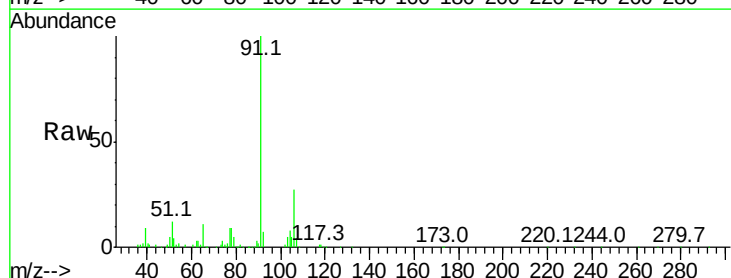
Acq: 1 Nov 2021 11:17

Tgt Ion: 91 Resp: 104664

Ion Ratio Lower Upper

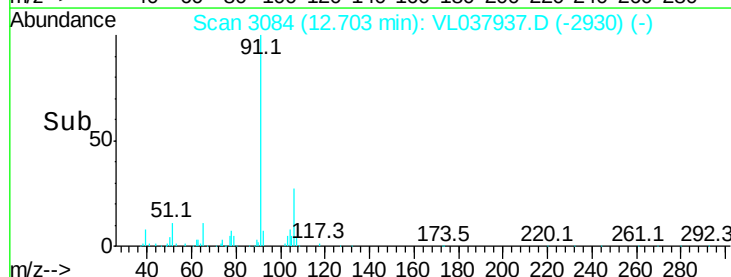
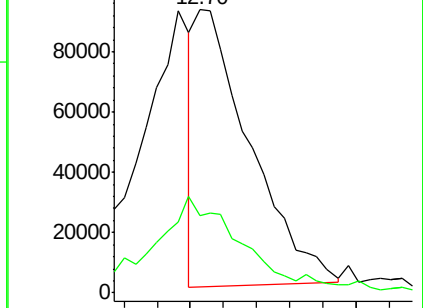
91 100

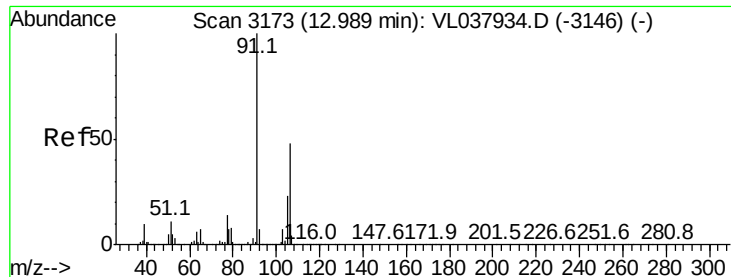
106 25.6 25.1 37.7



Abundance Ion 91.10 (90.80 to 91.80): VL0

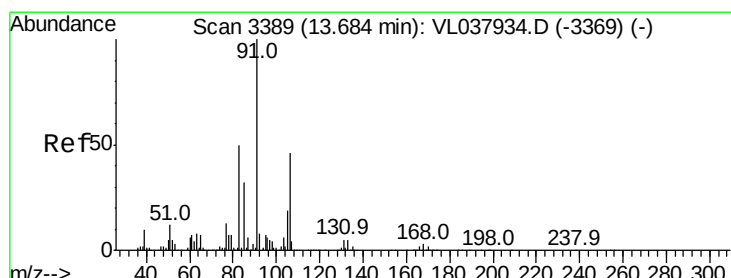
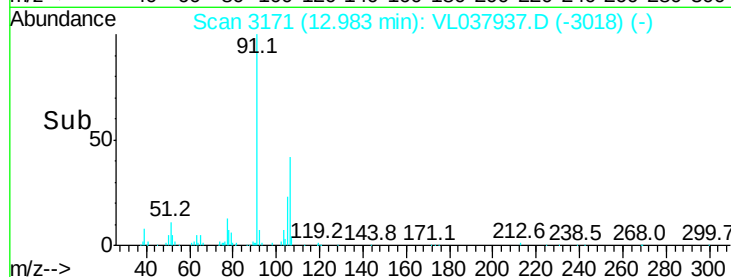
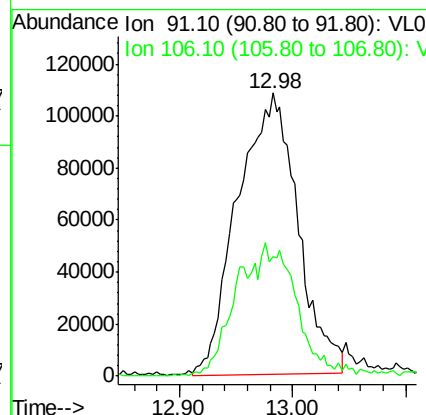
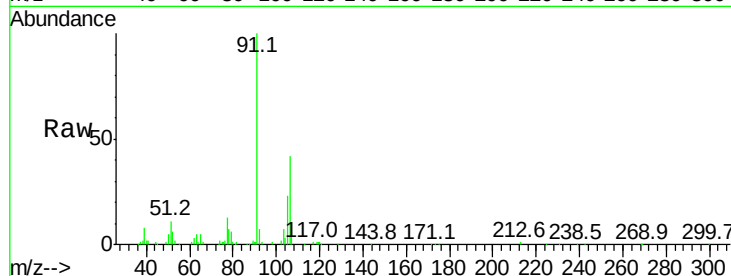
Ion 106.10 (105.80 to 106.80): V





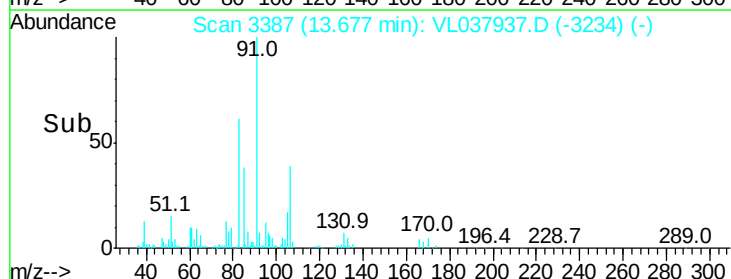
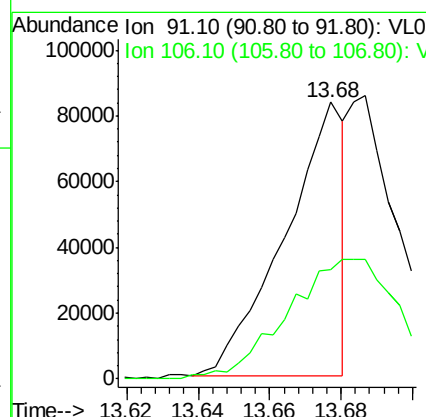
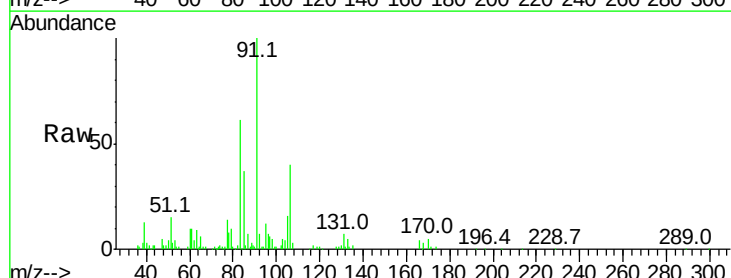
#59
m/p-Xylene
Concen: 0.859 ppbv
RT: 12.98 min
Delta R.T.: MSVOA_1
Lab File: ClientSampleId :
Acq: 1 Nov 2021 11:17

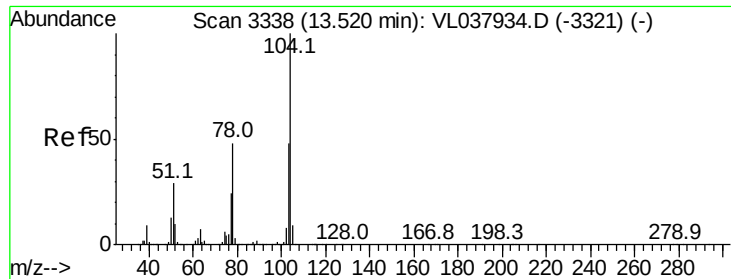
Tgt Ion: 91 Resp: 397010
Ion Ratio Lower Upper
91 100
106 48.6 37.1 55.7



#60
o-Xylene
Concen: 0.217 ppbv
RT: 13.68 min Scan# 3387
Delta R.T.: -0.01 min
Lab File: VL037937.D
Acq: 1 Nov 2021 11:17

Tgt Ion: 91 Resp: 96338
Ion Ratio Lower Upper
91 100
106 0.0 23.5 70.6#





#61

Styrene

Concen: 0.172 ppbv

RT: 13.52

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 1 Nov 2021 11:17

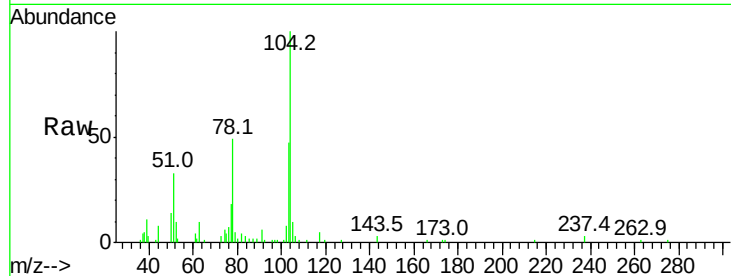
Tgt Ion:104 Resp: 36951

Ion Ratio Lower Upper

104 100

78 101.2 39.3 58.9#

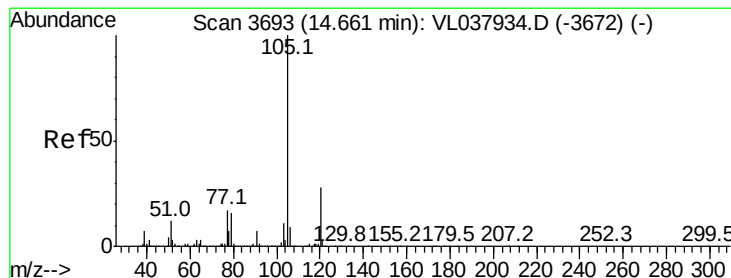
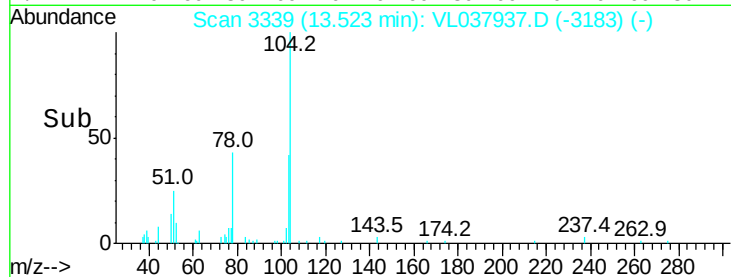
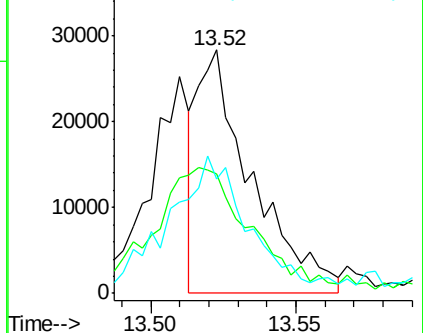
103 87.1 39.6 59.4#



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V



#62

Isopropylbenzene

Concen: 0.450 ppbv

RT: 14.65 min Scan# 3691

Delta R.T. -0.01 min

Lab File: VL037937.D

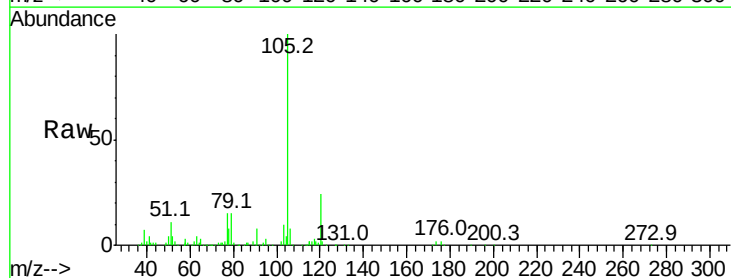
Acq: 1 Nov 2021 11:17

Tgt Ion:105 Resp: 278333

Ion Ratio Lower Upper

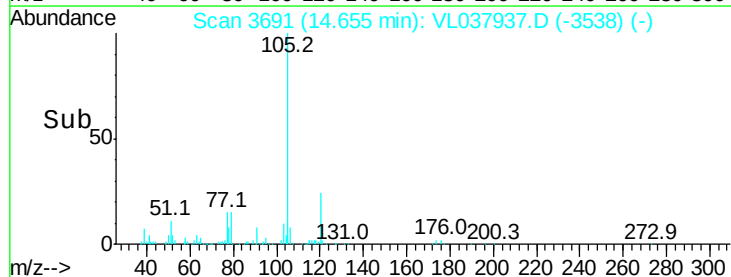
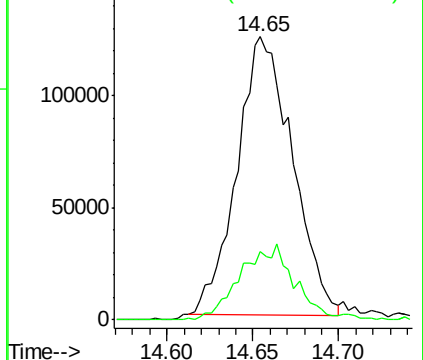
105 100

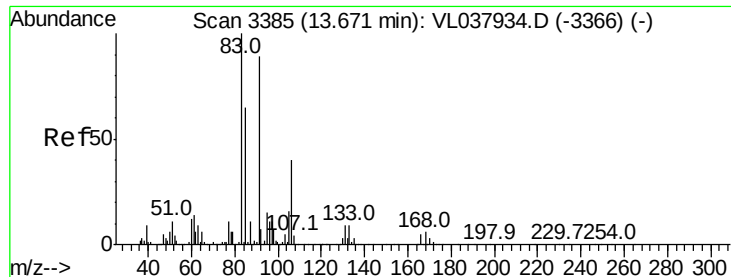
120 27.0 21.8 32.6



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





#63

1,1,2,2-Tetrachloroethane

Concen: 0.293 ppbv

RT: 13.66

Delta R.T. MSVOA_1

Lab File: ClientSampleId :

Acq: 1 Nov 2021 11:17

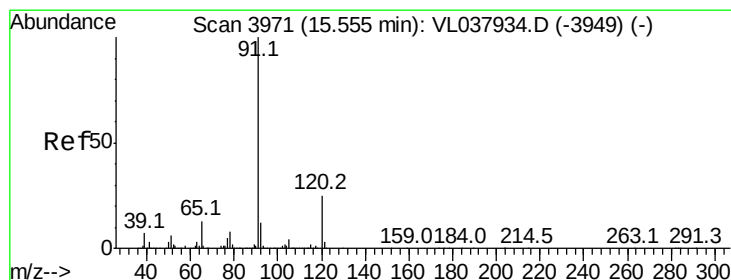
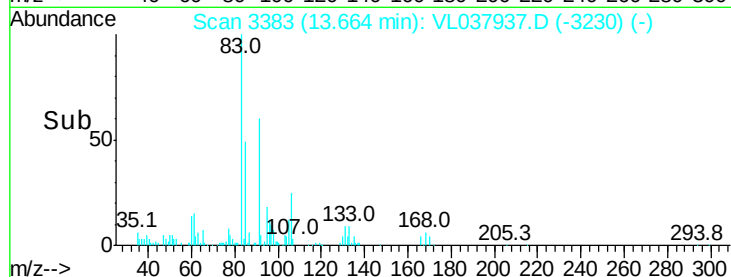
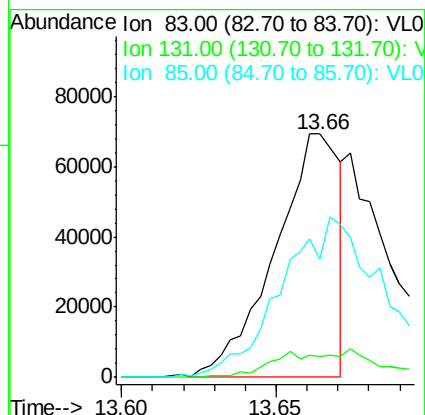
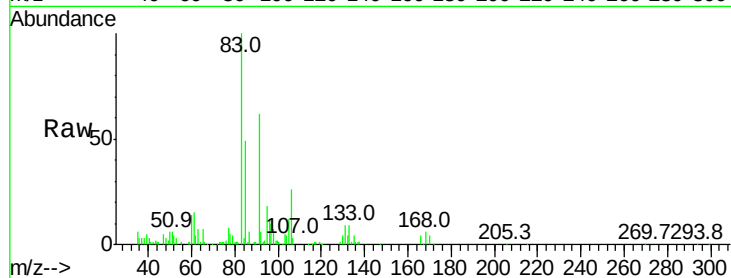
Tgt Ion: 83 Resp: 100252

Ion Ratio Lower Upper

83 100

131 0.0 4.8 14.4#

85 116.0 32.5 97.5#



#64

n-propylbenzene

Concen: 0.229 ppbv

RT: 15.55 min Scan# 3970

Delta R.T. -0.00 min

Lab File: VL037937.D

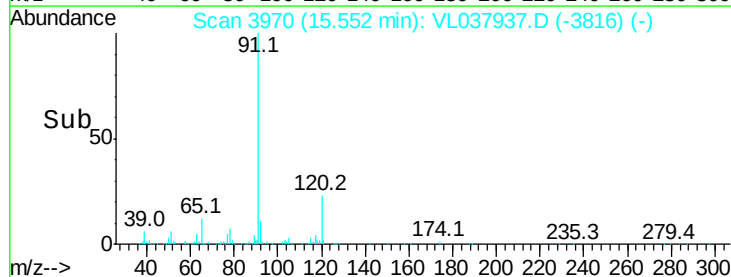
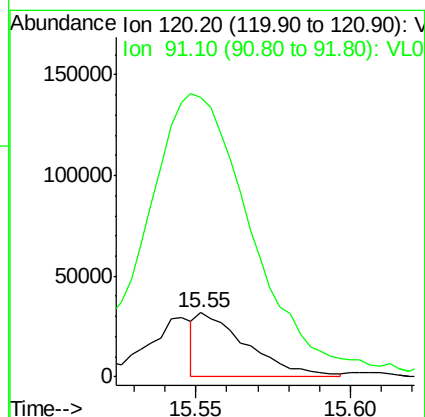
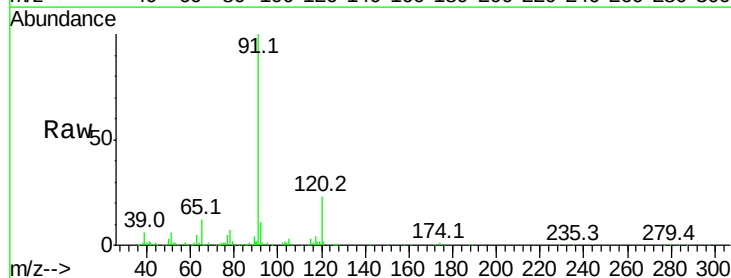
Acq: 1 Nov 2021 11:17

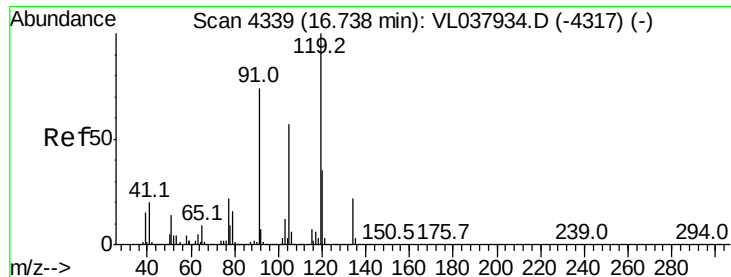
Tgt Ion:120 Resp: 35319

Ion Ratio Lower Upper

120 100

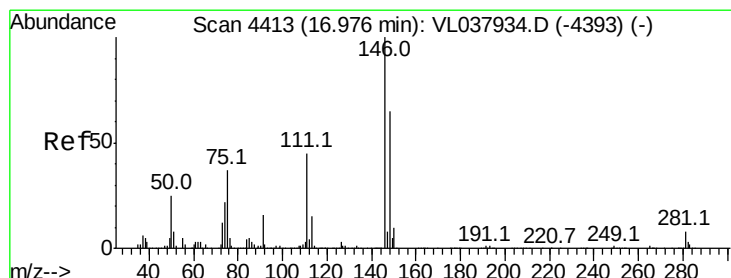
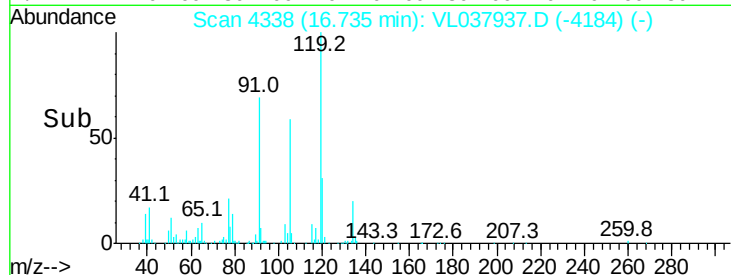
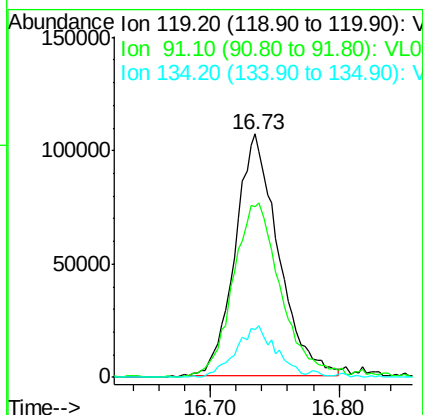
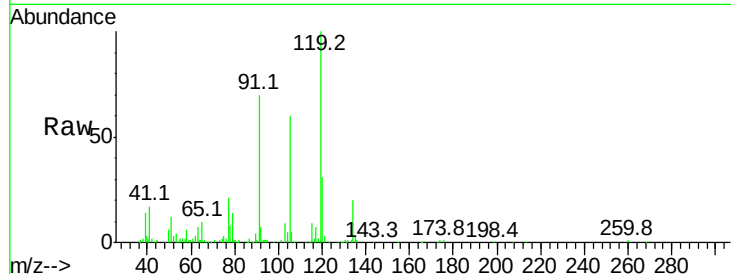
91 972.8 363.3 544.9#





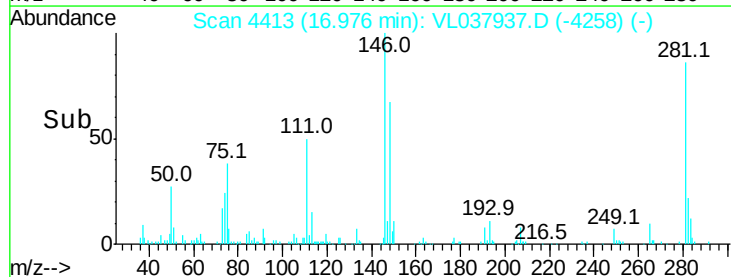
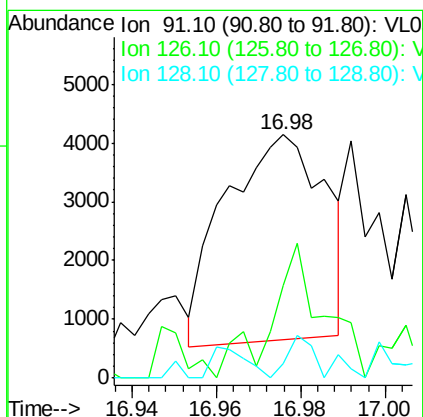
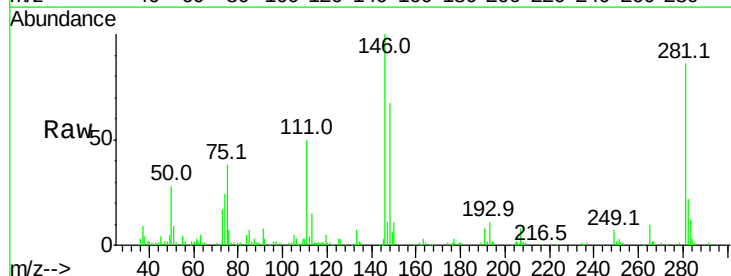
#65
 tert-Butylbenzene
 Concen: 0.457 ppbv
 RT: 16.73 min
 Delta R.T. MSVOA_1
 Lab File: ClientSampleId :
 Acq: 1 Nov 2021 11:17

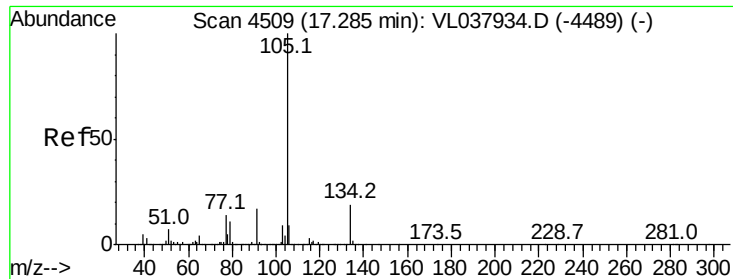
Tgt Ion:	119	Resp:	248664
Ion Ratio	Lower	Upper	
119	100		
91	82.6	61.8	92.6
134	21.1	16.6	25.0



#66
 Benzyl Chloride
 Concen: 0.215 ppbv
 RT: 16.98 min Scan# 4413
 Delta R.T. -0.00 min
 Lab File: VL037937.D
 Acq: 1 Nov 2021 11:17

Tgt Ion:	91	Resp:	5768
Ion Ratio	Lower	Upper	
91	100		
126	59.4	13.8	20.6#
128	7.0	5.1	7.7





#67

sec-Butylbenzene

Concen: 0.462 ppbv

RT: 17.28

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

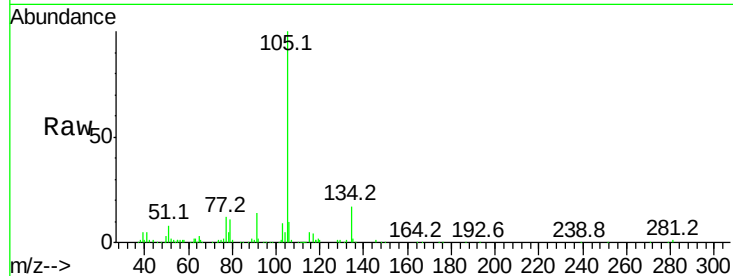
Acq: 1 Nov 2021 11:17

Tgt Ion: 105 Resp: 343870

Ion Ratio Lower Upper

105 100

134 19.4 15.4 23.0



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V

17.28

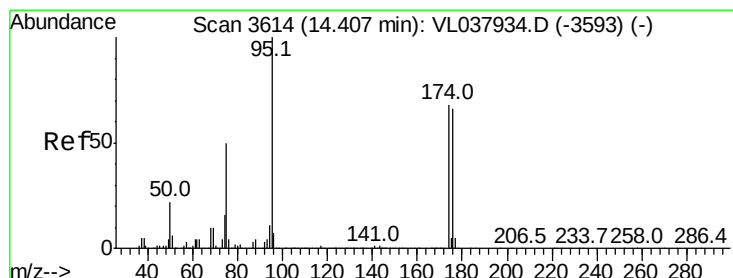
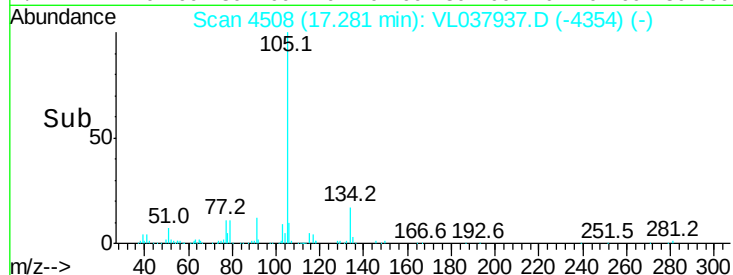
150000

100000

50000

0

Time-->



#68

1-Bromo-4-Fluorobenzene

Concen: 10.547 ppbv

RT: 14.40 min Scan# 3613

Delta R.T. -0.00 min

Lab File: VL037937.D

Acq: 1 Nov 2021 11:17

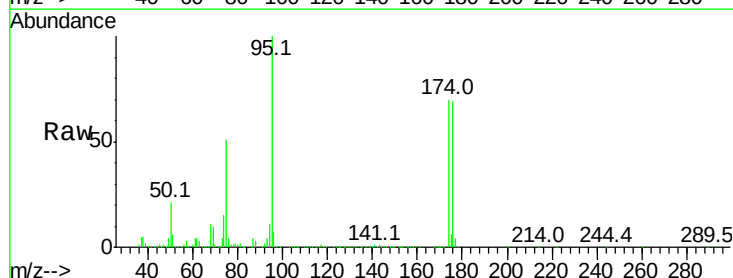
Tgt Ion: 95 Resp: 2957792

Ion Ratio Lower Upper

95 100

174 74.2 58.3 87.5

175 5.6 4.6 6.8



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

14.40

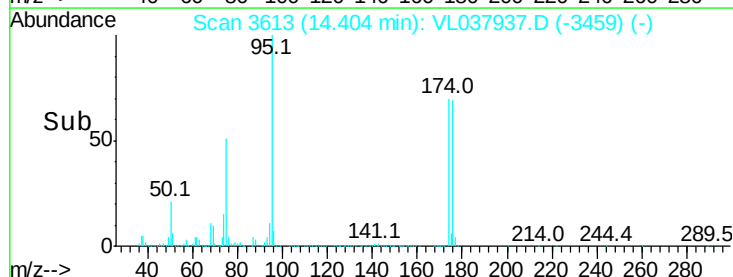
1500000

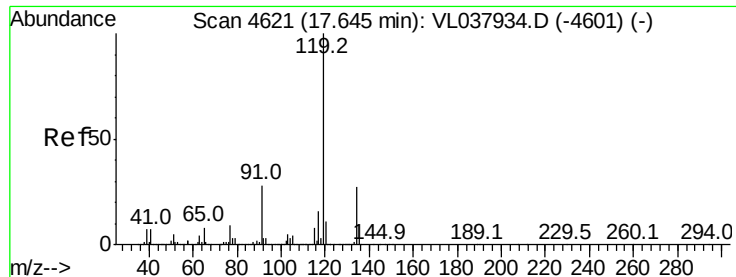
1000000

500000

0

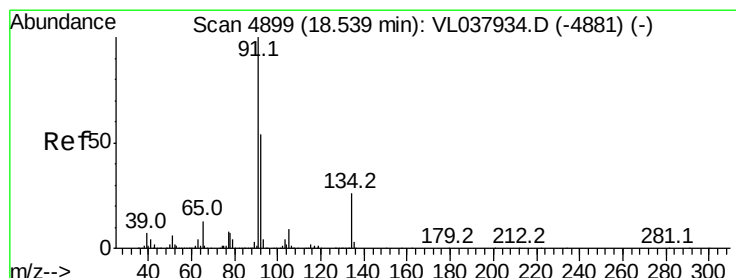
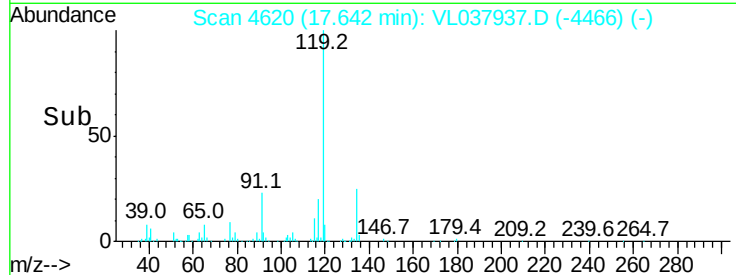
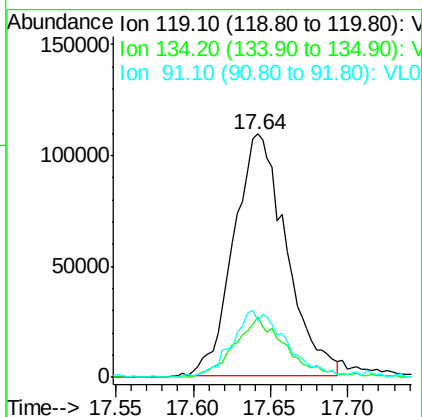
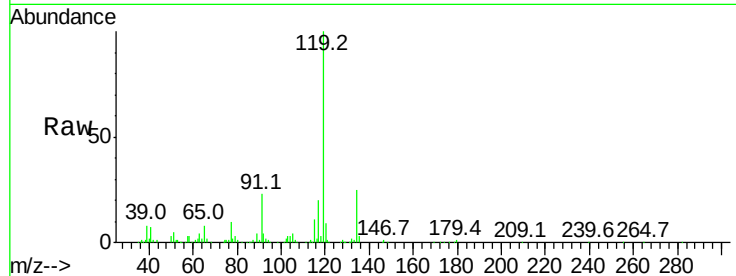
Time-->





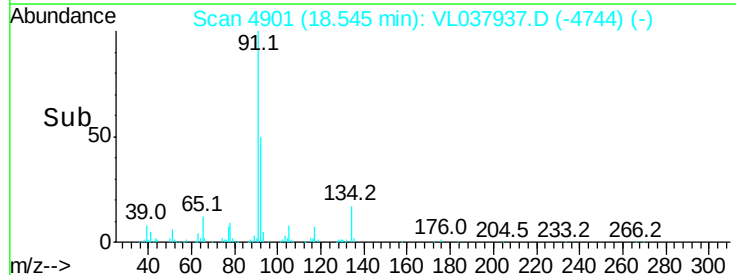
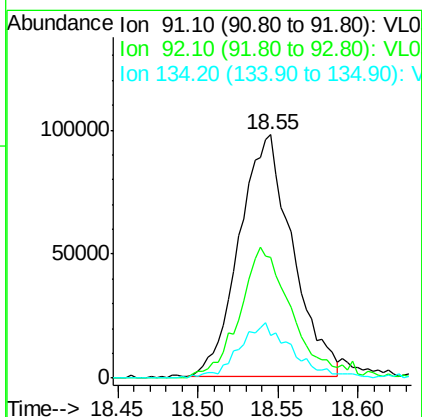
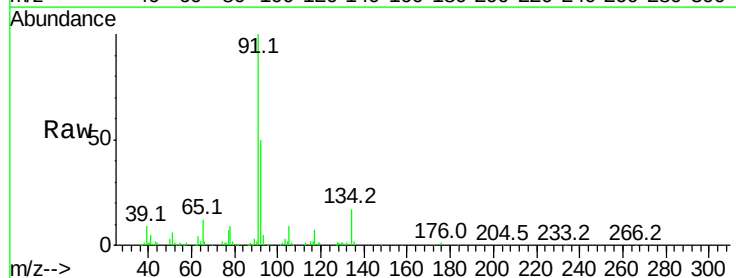
#69
 p-Isopropyltoluene
 Concen: 0.426 ppbv
 RT: 17.64 min
 Delta R.T.: 0.01 min
 Lab File: VSTDIC05
 Acq: 1 Nov 2021 11:17

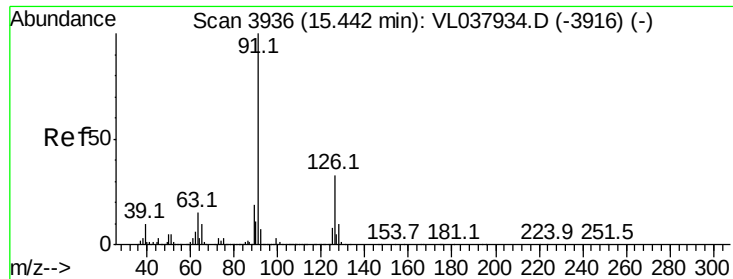
Tgt Ion:	119	Resp:	256128
Ion	Ratio	Lower	Upper
119	100		
134	25.2	21.0	31.4
91	29.4	21.8	32.8



#70
 n-Butylbenzene
 Concen: 0.390 ppbv
 RT: 18.55 min Scan# 4901
 Delta R.T.: 0.01 min
 Lab File: VL037937.D
 Acq: 1 Nov 2021 11:17

Tgt Ion:	91	Resp:	222770
Ion	Ratio	Lower	Upper
91	100		
92	54.3	43.6	65.4
134	23.6	19.8	29.6





#71

2-Chlorotoluene

Concen: 0.191 ppbv

RT: 15.44

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

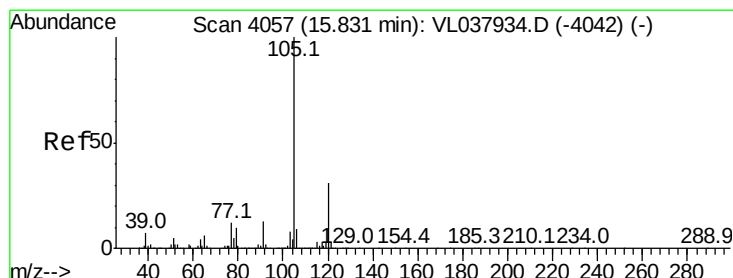
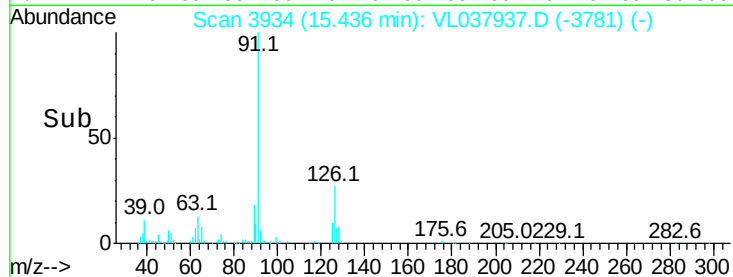
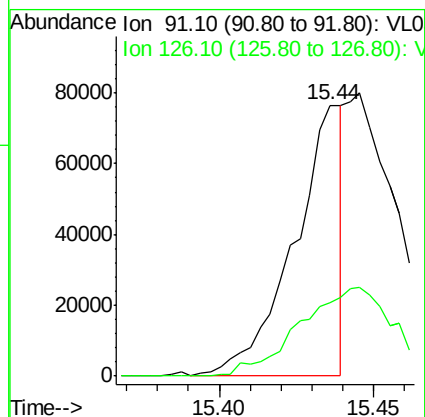
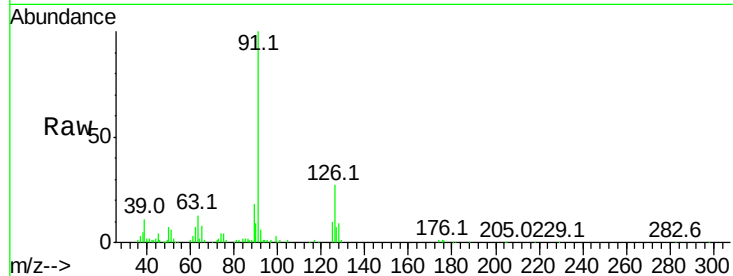
Acq: 1 Nov 2021 11:17

Tgt Ion: 91 Resp: 83359

Ion Ratio Lower Upper

91 100

126 0.0 13.3 53.3#



#72

4-Ethyltoluene

Concen: 0.403 ppbv

RT: 15.83 min Scan# 4056

Delta R.T. -0.00 min

Lab File: VL037937.D

Acq: 1 Nov 2021 11:17

Tgt Ion: 105 Resp: 202639

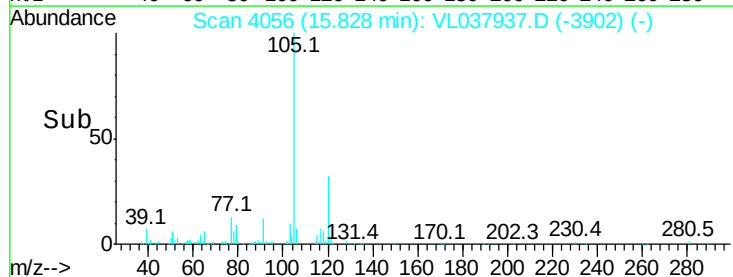
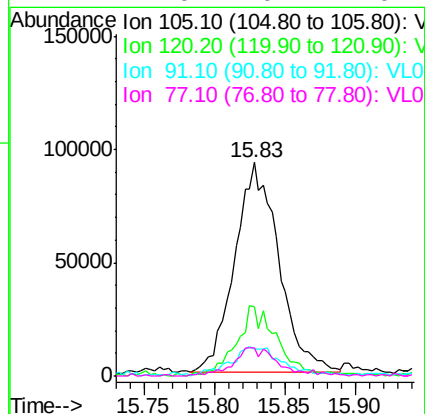
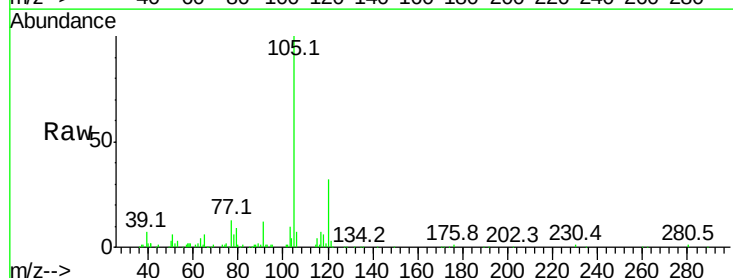
Ion Ratio Lower Upper

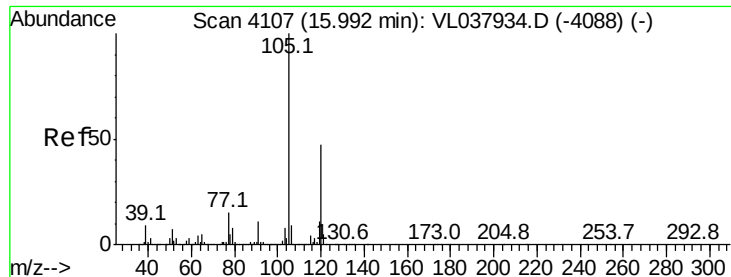
105 100

120 30.6 25.3 37.9

91 15.0 9.9 14.9#

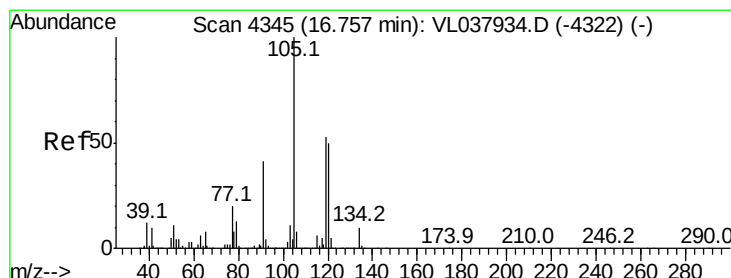
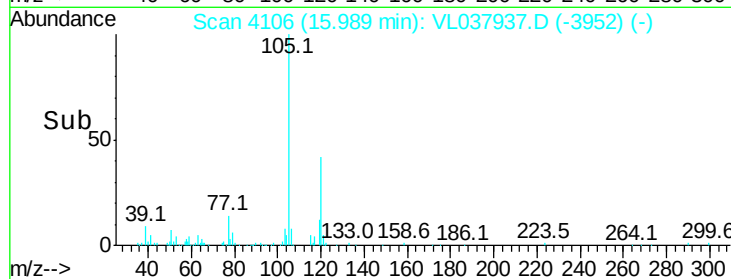
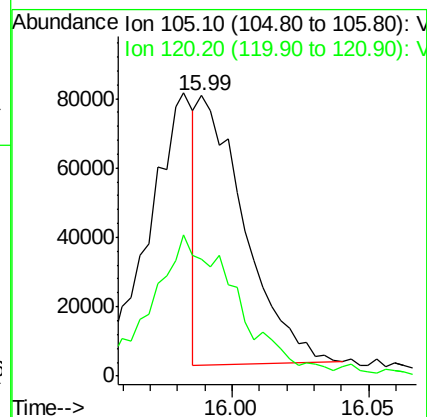
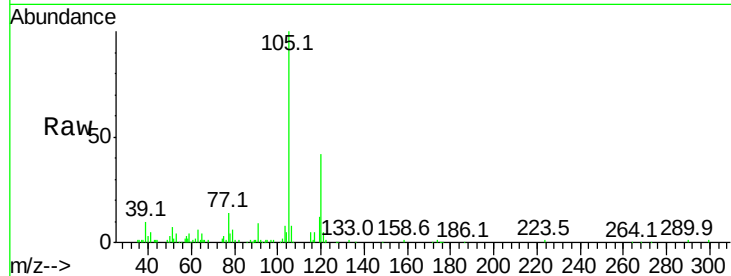
77 14.0 10.7 16.1





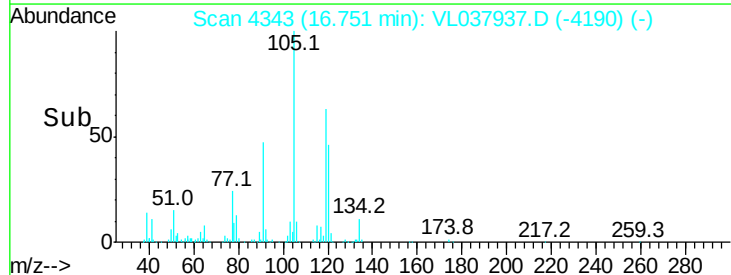
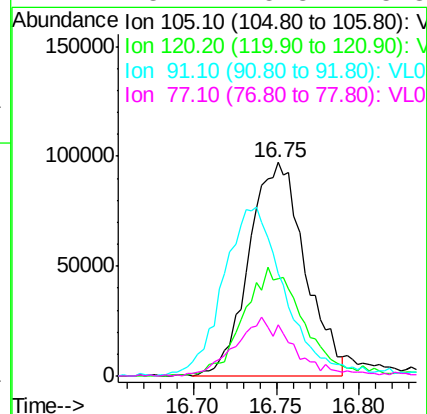
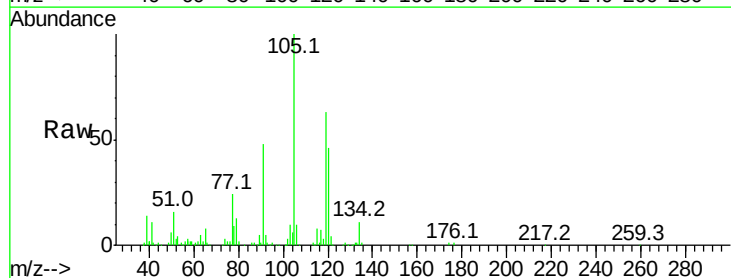
#73
 1,3,5-Trimethylbenzene
 Concen: 0.199 ppbv
 RT: 15.99 min
 Delta R.T. MSVOA_1
 Lab File: ClientSampleId :
 Acq: 1 Nov 2021 11:17

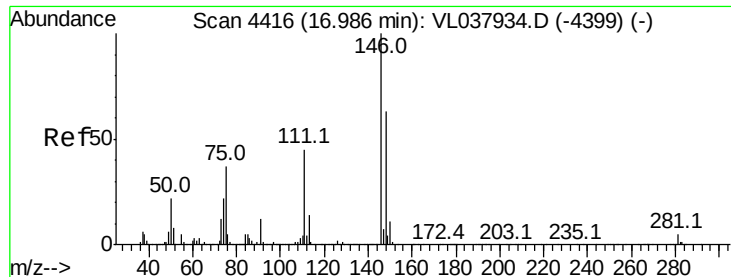
Tgt Ion:105 Resp: 90729
 Ion Ratio Lower Upper
 105 100
 120 40.1 37.9 56.9



#74
 1,2,4-Trimethylbenzene
 Concen: 0.474 ppbv
 RT: 16.75 min Scan# 4343
 Delta R.T. -0.01 min
 Lab File: VL037937.D
 Acq: 1 Nov 2021 11:17

Tgt Ion:105 Resp: 227481
 Ion Ratio Lower Upper
 105 100
 120 44.5 40.0 60.0
 91 42.9 32.6 49.0
 77 23.1 15.8 23.8





#75

1,3-Dichlorobenzene

Concen: 0.415 ppbv

RT: 16.99

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 1 Nov 2021 11:17

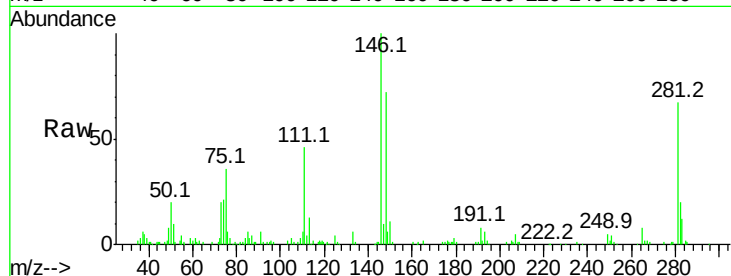
Tgt Ion:146 Resp: 123463

Ion Ratio Lower Upper

146 100

111 57.6 22.7 68.1

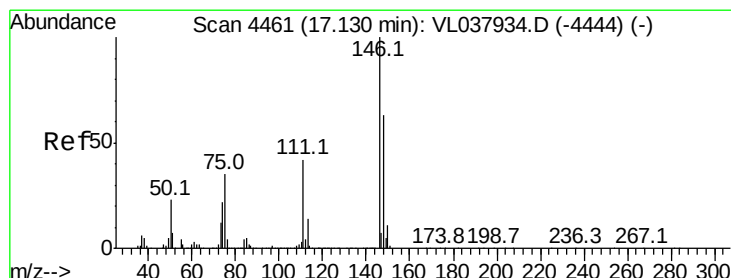
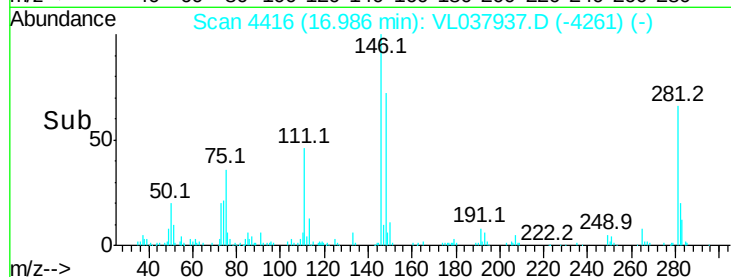
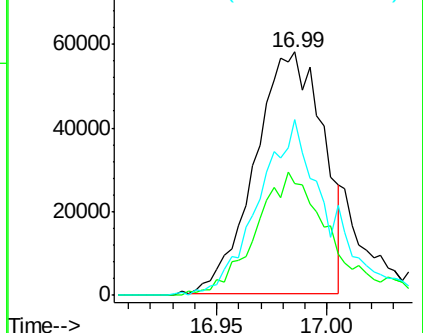
148 77.6 32.4 97.0



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V



#76

1,4-Dichlorobenzene

Concen: 0.297 ppbv

RT: 17.13 min Scan# 4460

Delta R.T. -0.00 min

Lab File: VL037937.D

Acq: 1 Nov 2021 11:17

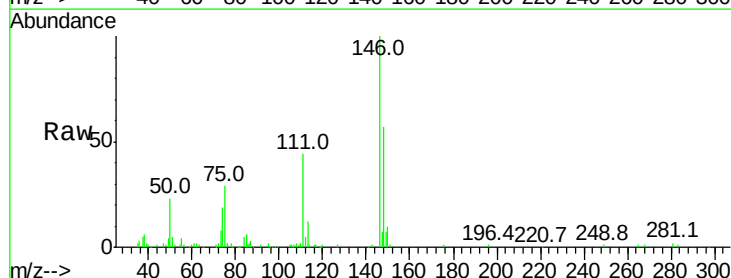
Tgt Ion:146 Resp: 84331

Ion Ratio Lower Upper

146 100

111 72.6 22.7 68.1#

148 114.3 33.5 100.4#



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V

