

Data File : VL037934.D

Acq On : 1 Nov 2021 9:22

Operator : SY/AP

Sample : VSTDICCC010

Misc : 400mL/MSVOA_L

ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA_L

ClientSampleId :

VSTDICCC010

Quant Time: Nov 01 11:05:18 2021

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

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Oct 04 17:43:54 2021

QLast Update : Mon Oct 04 17:43:54 2021

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1626788	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	4767484	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	5371426	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.41	95	3282762	8.74	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	87.40%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	3.05	85	2163434	8.326	ppbv	99
3) Chlorodifluoromethane	2.99	51	2689921	8.606	ppbv	100
4) Chloromethane	3.14	50	1032168	9.016	ppbv	96
5) Vinyl Chloride	3.26	62	1036085	9.872	ppbv	100
6) Bromomethane	3.48	94	569392	10.030	ppbv	99
7) Chloroethane	3.56	64	362886	9.404	ppbv	96
8) Dichlorotetrafluoroethane	3.19	85	2343967	9.127	ppbv	99
9) Propene	3.02	41	948106	8.243	ppbv	95
10) Heptane	8.12	43	2495268	9.553	ppbv	100
11) Trichlorofluoromethane	3.95	101	2123305	9.159	ppbv	99
12) 1,1,2-Trichlorotrifluoroet	4.49	101	1656831	9.432	ppbv	99
13) Ethanol	3.61	45	73673	7.833	ppbv	89
14) Bromoethene	3.74	108	721478	9.341	ppbv	96
15) Acetone	3.85	43	1146722	7.852	ppbv	99
16) 1,3-Butadiene	3.33	39	997324	9.386	ppbv	99
17) tert-Butyl alcohol	4.29	59	1282778	8.529	ppbv	99
18) 1,1-Dichloroethene	4.29	96	741100	9.284	ppbv	99
19) Isopropyl Alcohol	3.96	45	809716	8.912	ppbv #	91
20) Methylene Chloride	4.35	84	629259	8.528	ppbv	97
21) Allyl Chloride	4.41	41	1172657	9.064	ppbv	97
22) trans-1,2-Dichloroethene	4.89	96	758432	9.450	ppbv	97
23) Vinyl Acetate	5.07	43	1866037	8.527	ppbv #	98
24) 1,1-Dichloroethane	5.01	63	1537083	9.648	ppbv	100
25) Ethyl Acetate	5.67	43	3785069	9.236	ppbv	99
26) Hexane	5.68	57	1786985	8.856	ppbv	98
27) Carbon Disulfide	4.55	76	1926825	10.774	ppbv	97
28) Methyl tert-Butyl Ether	5.03	73	1486592	8.849	ppbv	99
29) Chloroform	5.75	83	2560593	8.877	ppbv	98
30) Cyclohexane	7.13	84	1505779	8.800	ppbv	99
31) cis-1,2-Dichloroethene	5.55	61	1693742	9.246	ppbv	97
32) 1,1,1-Trichloroethane	6.51	97	2422917	8.860	ppbv	99
34) 2-Butanone	5.24	43	1630074	8.469	ppbv	100
35) Carbon Tetrachloride	7.01	117	2537562	9.372	ppbv	100
36) Benzene	6.89	78	3751528	9.213	ppbv	98
37) 1,2-Dichloroethane	6.30	62	1774740	9.256	ppbv	99
38) Trichloroethene	7.83	130	1476189	9.176	ppbv	95
39) 1,2-Dichloropropane	7.61	63	1405486	9.176	ppbv	98
40) 1,4-Dioxane	7.83	88	356640	9.305	ppbv #	100
41) Tetrahydrofuran	6.05	42	850789	9.027	ppbv	99
42) Bromodichloromethane	7.79	83	2694026	9.566	ppbv	99
43) Methyl Methacrylate	8.01	69	1336706	10.050	ppbv	97

Data File : VL037934.D

Acq On : 1 Nov 2021 9:22

Operator : SY/AP

Sample : VSTDICCC010

Misc : 400mL/MSVOA_L

ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA_L

ClientSampleId :

VSTDICCC010

Quant Time: Nov 01 11:05:18 2021

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

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Oct 04 17:43:54 2021

QLast Update : Mon Oct 04 17:43:54 2021

Response via : Initial Calibration

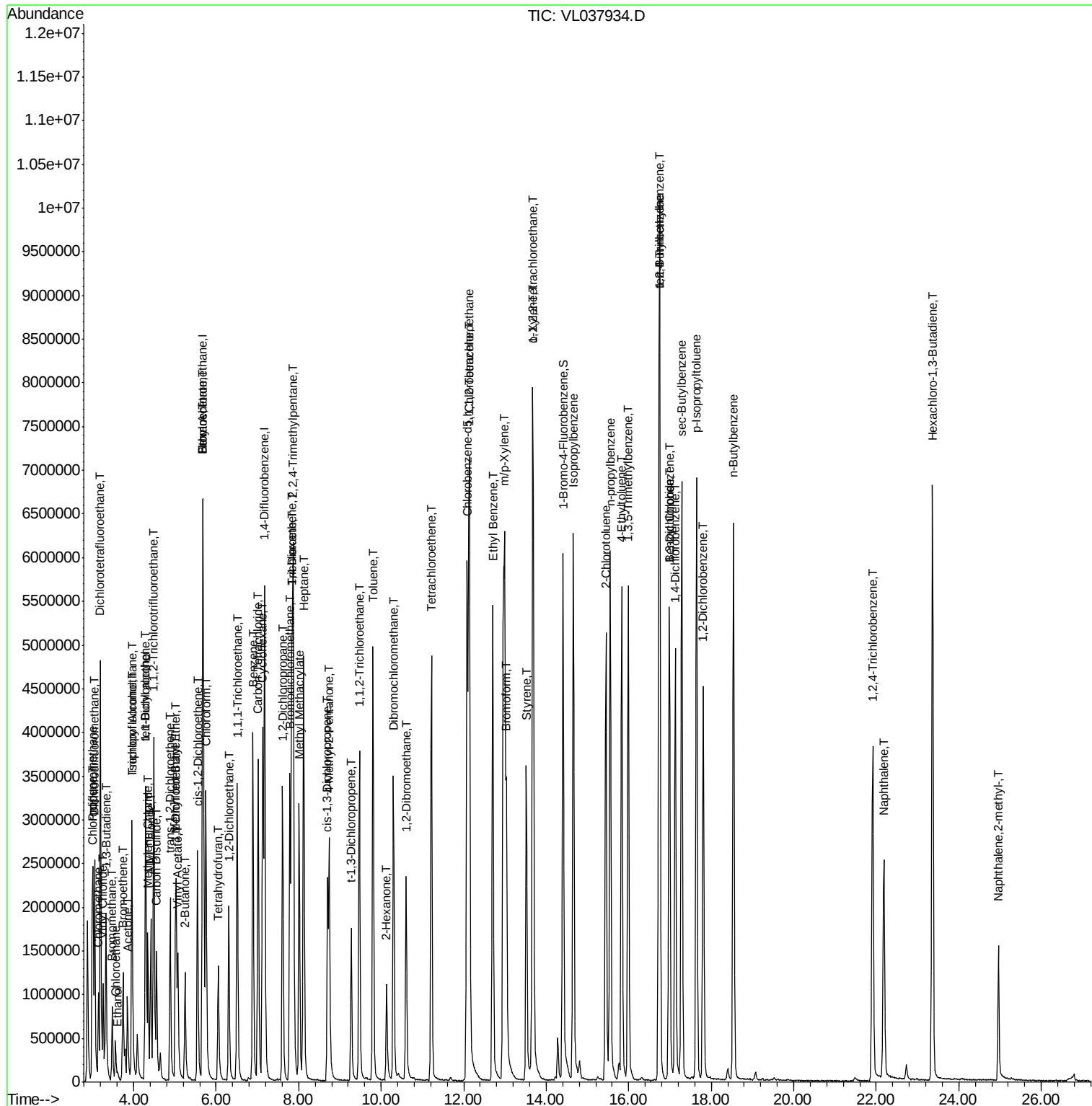
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,2,4-Trimethylpentane	7.86	57	6271513	9.167	ppbv	99
45) t-1,3-Dichloropropene	9.27	75	1083160	11.836	ppbv	100
46) cis-1,3-Dichloropropene	8.70	75	1458492	11.498	ppbv	98
47) 1,1,2-Trichloroethane	9.47	97	1530555	9.192	ppbv	98
48) Dibromochloromethane	10.30	129	2361012	9.946	ppbv	98
49) Bromoform	13.03	173	1895990	10.439	ppbv	99
50) 4-Methyl-2-Pentanone	8.74	43	2400467	9.581	ppbv	99
51) 2-Hexanone	10.13	43	1049279	9.381	ppbv #	99
52) Tetrachloroethene	11.22	164	1351305	8.529	ppbv	98
53) Toluene	9.80	91	4306289	9.542	ppbv	100
54) 1,2-Dibromoethane	10.61	107	2120189	9.427	ppbv	99
56) 1,1,1,2-Tetrachloroethane	12.12	131	1625111	7.308	ppbv #	53
57) Chlorobenzene	12.14	112	3169906	7.194	ppbv	99
58) Ethyl Benzene	12.71	91	5385326	7.466	ppbv	100
59) m/p-Xylene	12.99	91	4702011	7.594	ppbv #	32
60) o-Xylene	13.68	91	4311323	7.266	ppbv	100
61) Styrene	13.52	104	2370787	8.260	ppbv	99
62) Isopropylbenzene	14.66	105	5932424	7.168	ppbv	99
63) 1,1,2,2-Tetrachloroethane	13.67	83	3127431	6.830	ppbv	98
64) n-propylbenzene	15.55	120	1605253	7.778	ppbv	94
65) tert-Butylbenzene	16.74	119	5146494	7.066	ppbv	99
66) Benzyl Chloride	16.98	91	165752	4.612	ppbv #	80
67) sec-Butylbenzene	17.28	105	7139803	7.168	ppbv	100
69) p-Isopropyltoluene	17.64	119	5883742	7.307	ppbv	99
70) n-Butylbenzene	18.54	91	5627310	7.356	ppbv	100
71) 2-Chlorotoluene	15.44	91	4367404	7.473	ppbv	99
72) 4-Ethyltoluene	15.83	105	5068667	7.523	ppbv	98
73) 1,3,5-Trimethylbenzene	15.99	105	4633751	7.572	ppbv	97
74) 1,2,4-Trimethylbenzene	16.76	105	4718306	7.342	ppbv	98
75) 1,3-Dichlorobenzene	16.99	146	2857343	7.177	ppbv	99
76) 1,4-Dichlorobenzene	17.13	146	2769381	7.291	ppbv	99
77) 1,2-Dichlorobenzene	17.81	146	2649897	6.928	ppbv	99
78) Hexachloro-1,3-Butadiene	23.36	225	2008929	6.433	ppbv	99
79) Naphthalene	22.18	128	3484482	8.853	ppbv	100
80) Naphthalene,2-methyl-	24.96	142	992767	9.394	ppbv	98
81) 1,2,4-Trichlorobenzene	21.91	180	1964335	7.804	ppbv	98

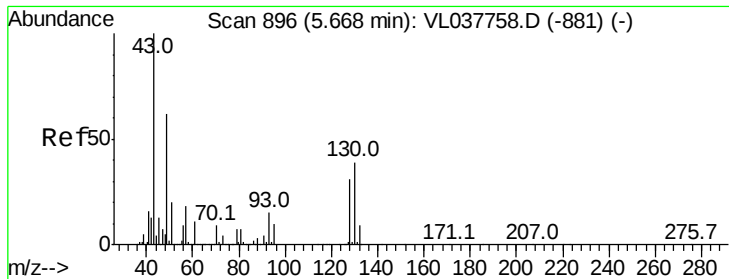
(#)=qualifier out of range (m)=manual integration (+)=signals summed

ALS Vial : 1 Sample Multiplier: 1

VSTDICCC010

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 Instrument: MSVOA_1

Delta R.T. 0.00

Lab File: ClientSampleId: VSTDICCC010

Acq: 1 Nov 2021 9:22

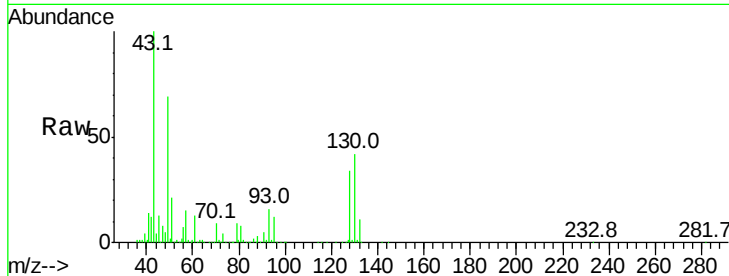
Tgt Ion: 49 Resp: 1626788

Ion Ratio Lower Upper

49 100

128 54.0 27.1 81.3

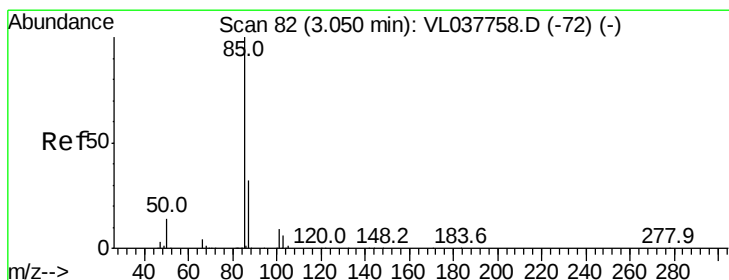
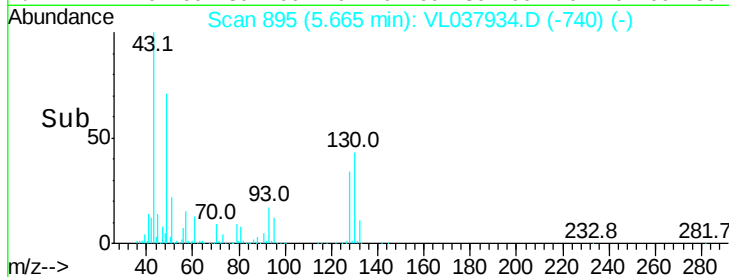
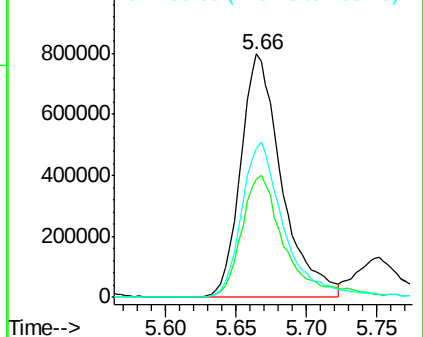
130 66.8 33.2 99.6



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



#2

Dichlorodifluoromethane

Concen: 8.326 ppbv

RT: 3.05 min Scan# 82

Delta R.T. 0.00 min

Lab File: VL037934.D

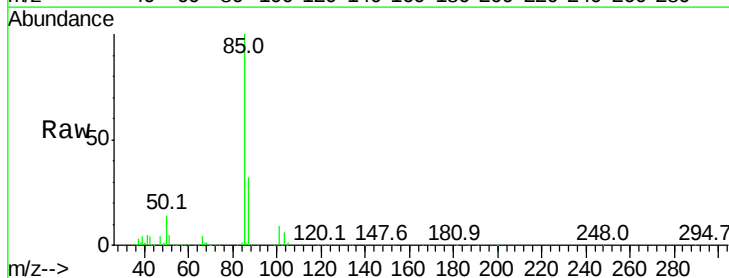
Acq: 1 Nov 2021 9:22

Tgt Ion: 85 Resp: 2163434

Ion Ratio Lower Upper

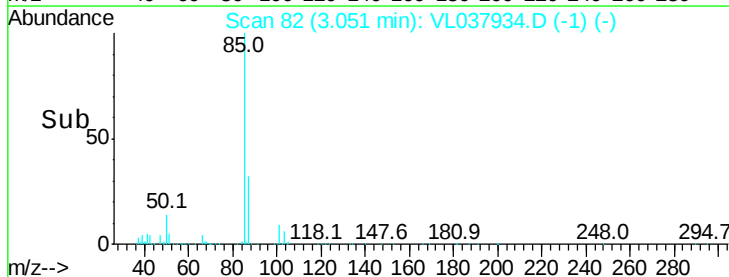
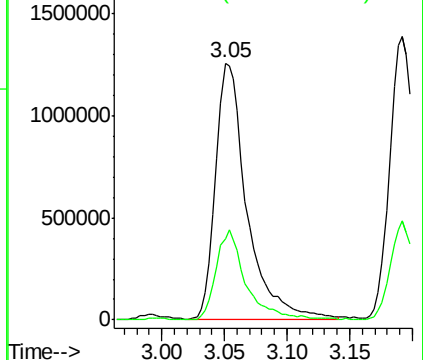
85 100

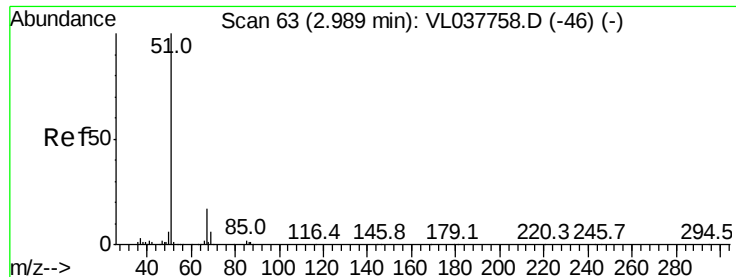
87 31.6 25.7 38.5



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 8.606 ppbv

RT: 2.99 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: VSTDICCC010

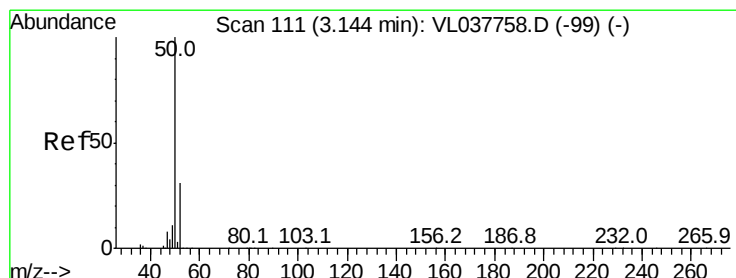
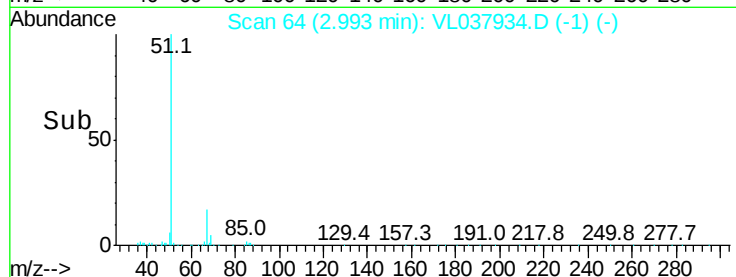
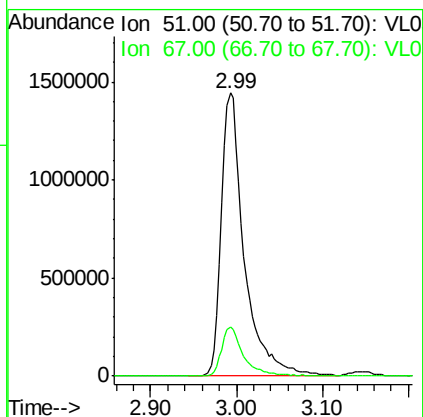
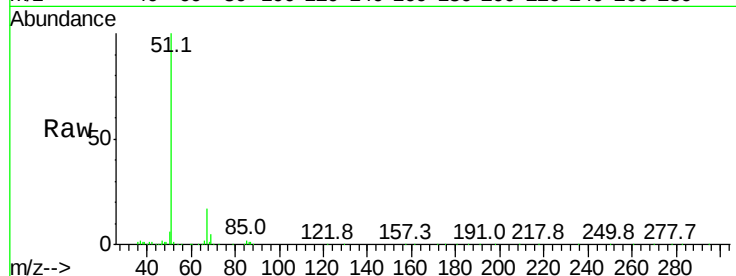
Acq: 1 Nov 2021 9:22

Tgt Ion: 51 Resp: 2689921

Ion Ratio Lower Upper

51 100

67 16.7 13.5 20.3



#4

Chloromethane

Concen: 9.016 ppbv

RT: 3.14 min Scan# 111

Delta R.T. 0.00 min

Lab File: VL037934.D

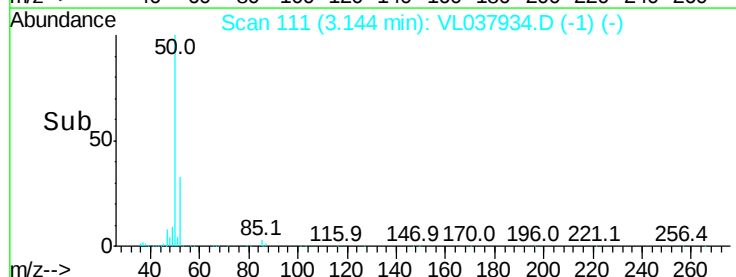
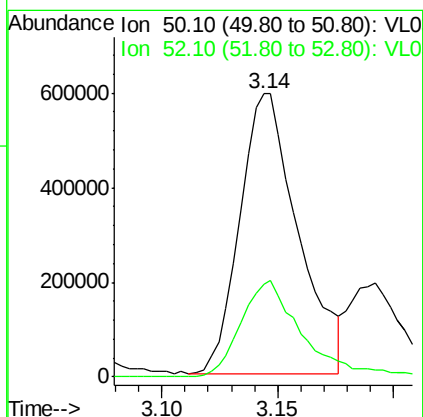
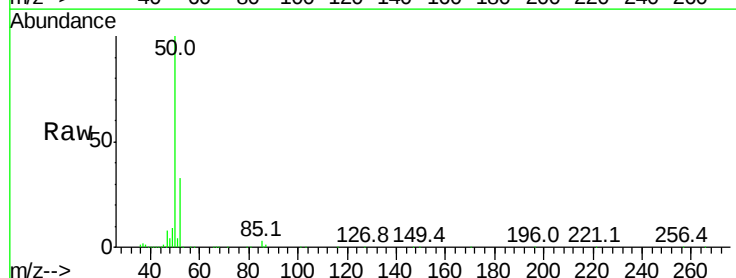
Acq: 1 Nov 2021 9:22

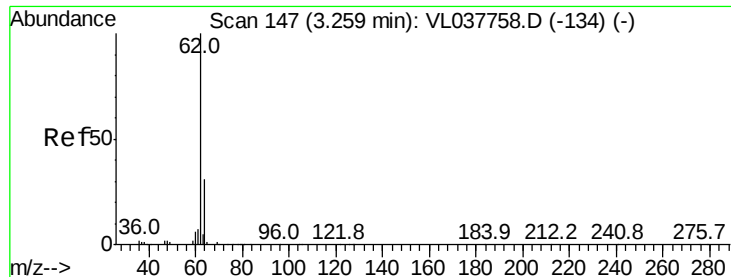
Tgt Ion: 50 Resp: 1032168

Ion Ratio Lower Upper

50 100

52 32.9 24.4 36.6





#5

Vinyl Chloride

Concen: 9.872 ppbv

RT: 3.26 Instrument: MSVOA_1

Delta R.T.

Lab File: ClientSampleId:

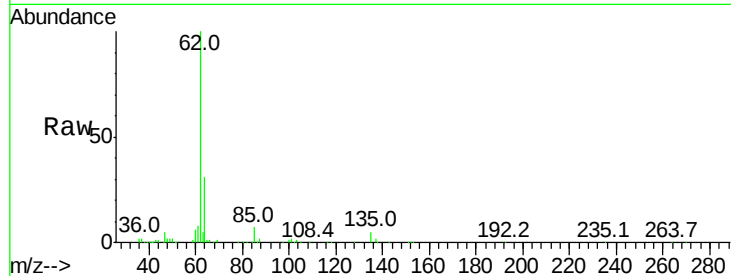
Acq: 1 Nov 2021 9:22 VSTDICCC010

Tgt Ion: 62 Resp: 1036085

Ion Ratio Lower Upper

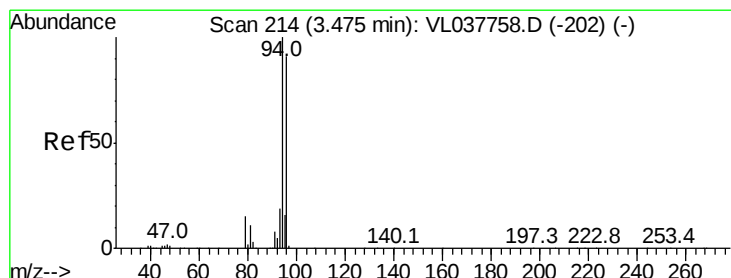
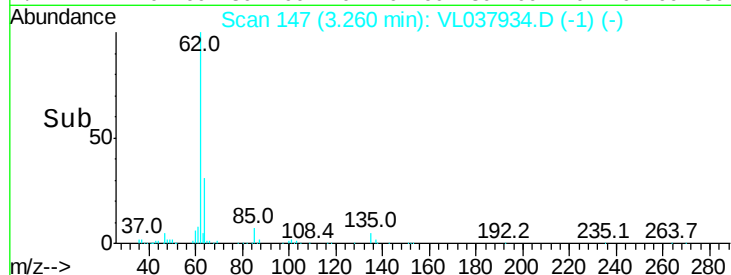
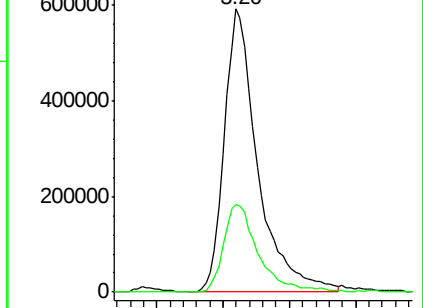
62 100

64 30.9 24.9 37.3



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#6

Bromomethane

Concen: 10.030 ppbv

RT: 3.48 min Scan# 215

Delta R.T. 0.00 min

Lab File: VL037934.D

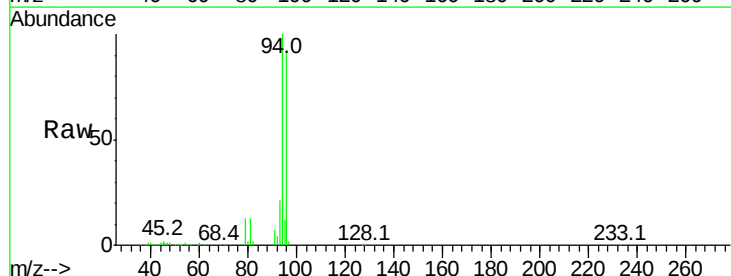
Acq: 1 Nov 2021 9:22

Tgt Ion: 94 Resp: 569392

Ion Ratio Lower Upper

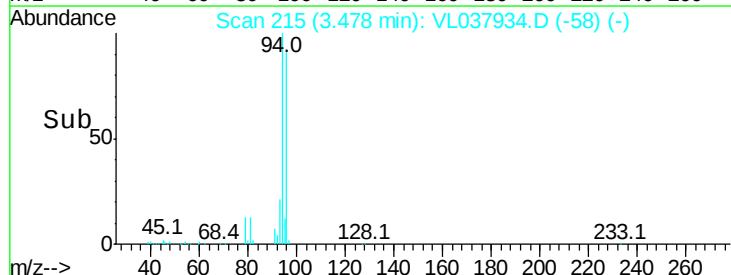
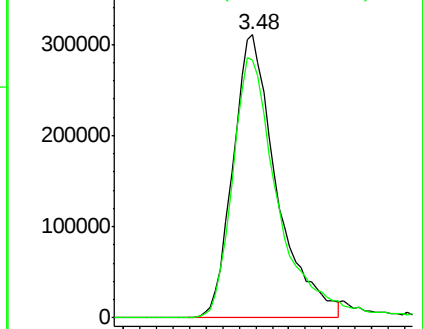
94 100

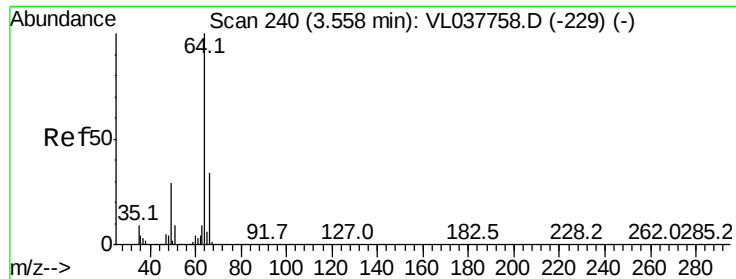
96 91.2 72.5 108.7



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0





#7

Chloroethane

Concen: 9.404 ppbv

RT: 3.56 Instrument: MSVOA_1

Delta R.T. 0.00 min

Lab File: ClientSampleId: VSTDICCC010

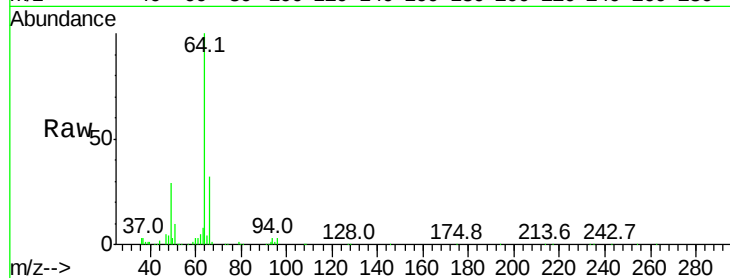
Acq: 1 Nov 2021 9:22

Tgt Ion: 64 Resp: 362886

Ion Ratio Lower Upper

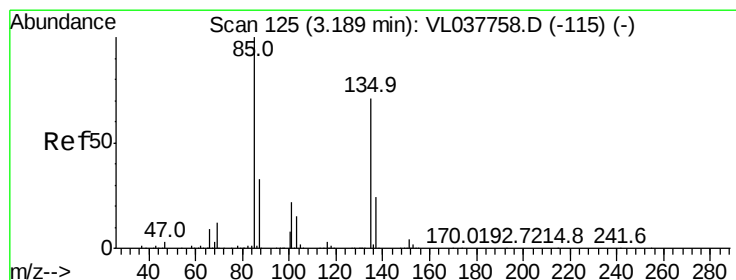
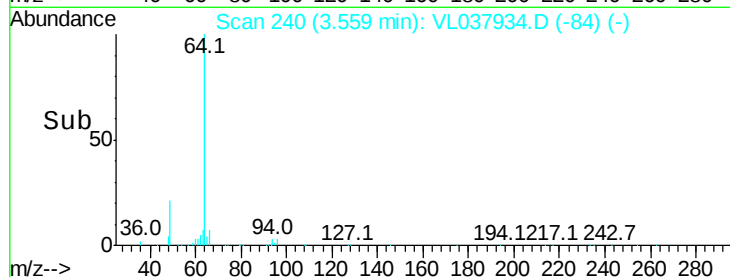
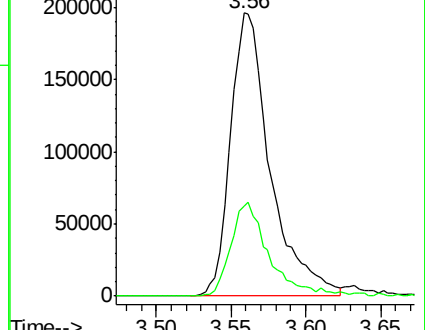
64 100

66 31.9 27.5 41.3



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



#8

Dichlorotetrafluoroethane

Concen: 9.127 ppbv

RT: 3.19 min Scan# 126

Delta R.T. 0.00 min

Lab File: VL037934.D

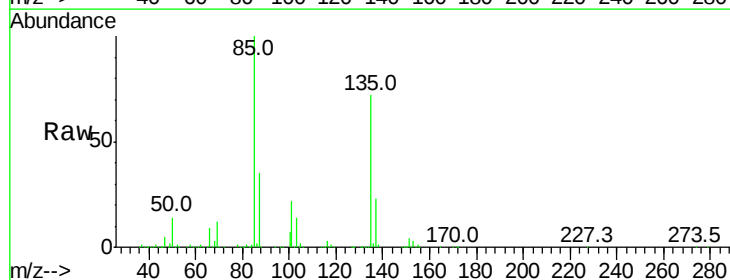
Acq: 1 Nov 2021 9:22

Tgt Ion: 85 Resp: 2343967

Ion Ratio Lower Upper

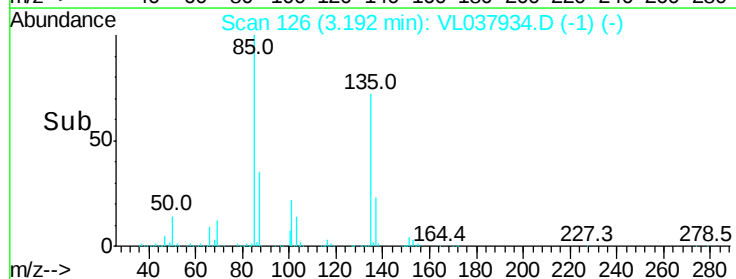
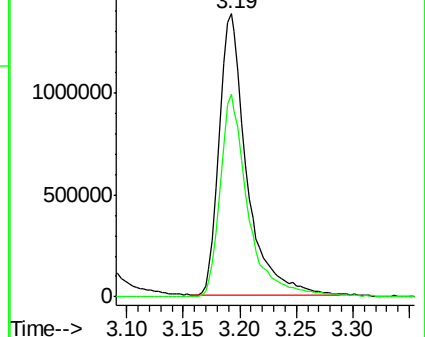
85 100

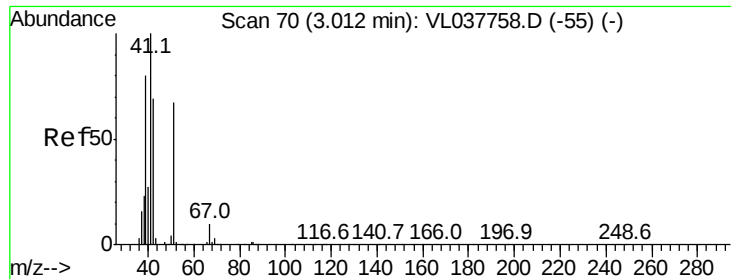
135 73.5 59.5 89.3



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): VL0





#9

Propene

Concen: 8.243 ppbv

RT: 3.02 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: VSTDICCC010

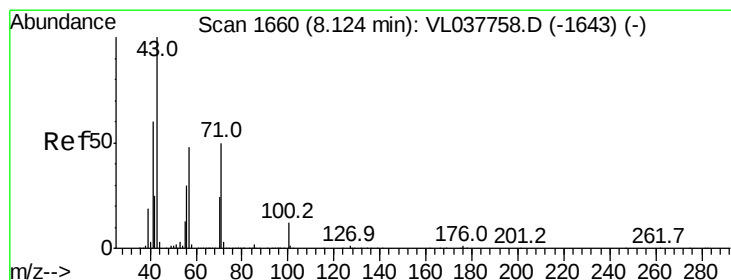
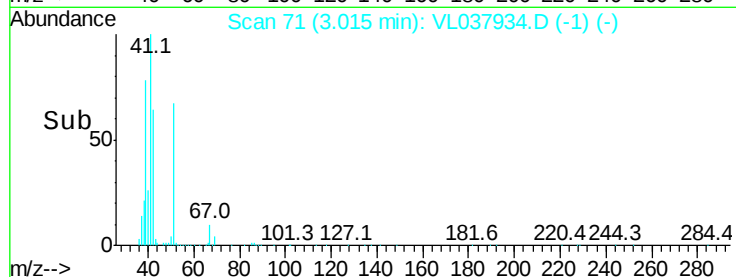
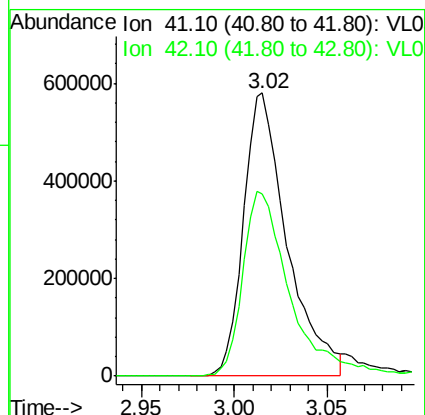
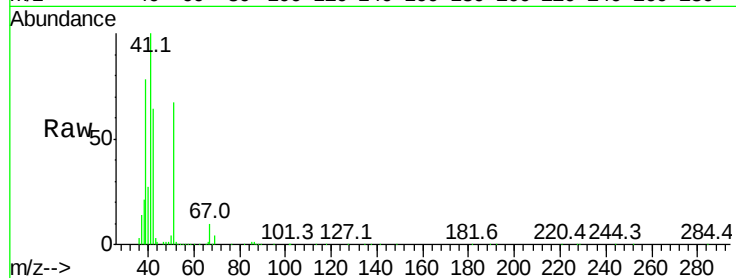
Acq: 1 Nov 2021 9:22

Tgt Ion: 41 Resp: 948106

Ion Ratio Lower Upper

41 100

42 72.0 54.2 81.2



#10

Heptane

Concen: 9.553 ppbv

RT: 8.12 min Scan# 1658

Delta R.T. -0.01 min

Lab File: VL037934.D

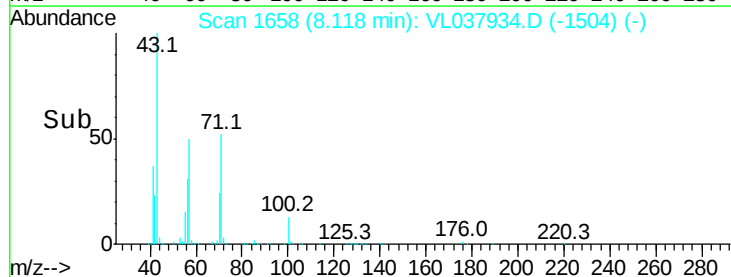
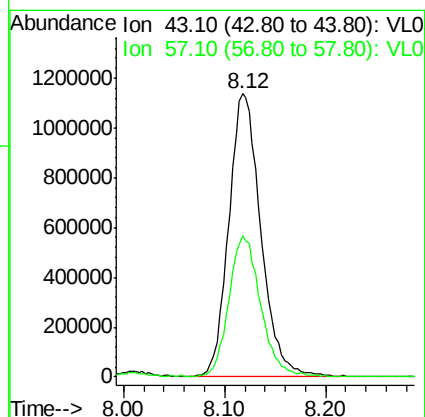
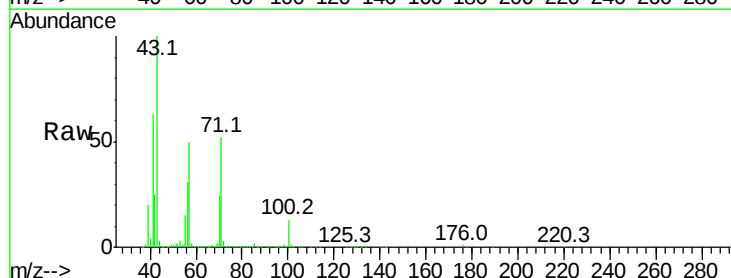
Acq: 1 Nov 2021 9:22

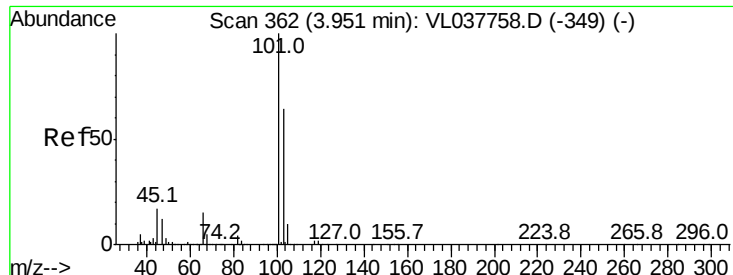
Tgt Ion: 43 Resp: 2495268

Ion Ratio Lower Upper

43 100

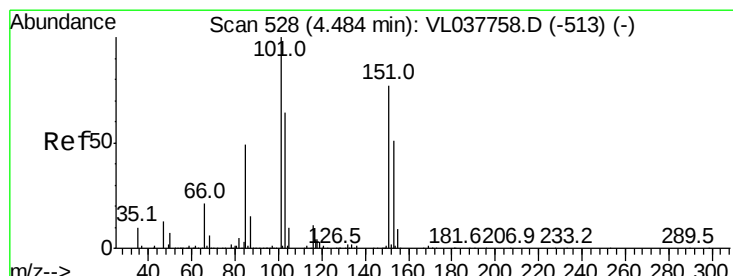
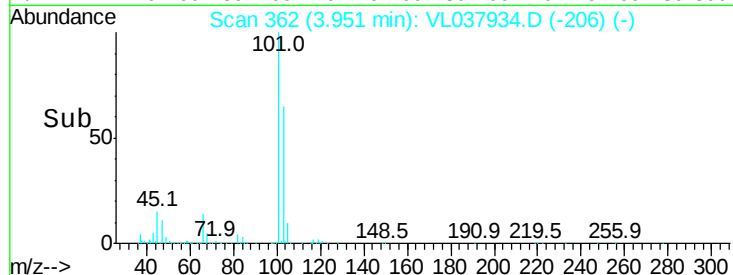
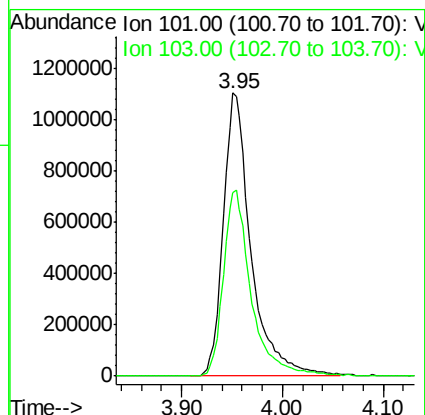
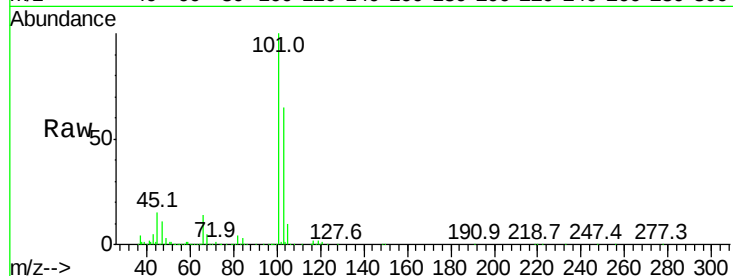
57 49.8 40.0 60.0





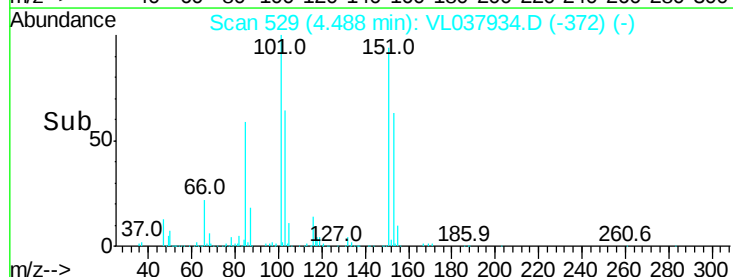
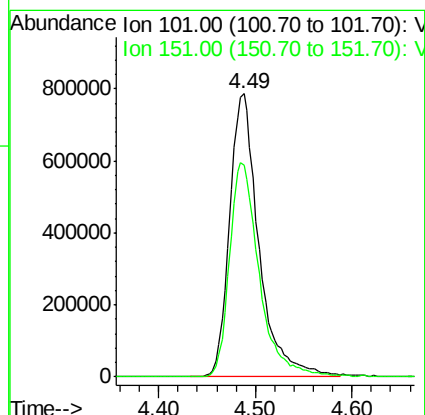
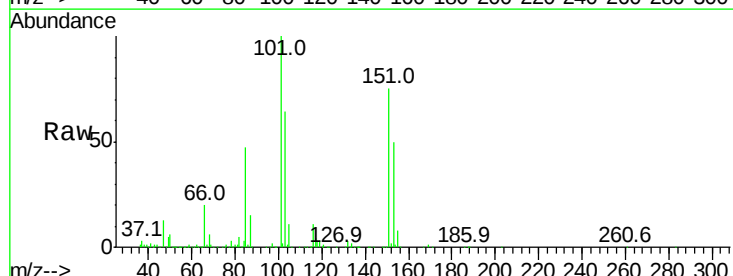
#11
 Trichlorofluoromethane
 Concen: 9.159 ppbv
 RT: 3.95 min
 Delta R.T.: 0.00 min
 Lab File: VSTDICCC010
 Acq: 1 Nov 2021 9:22

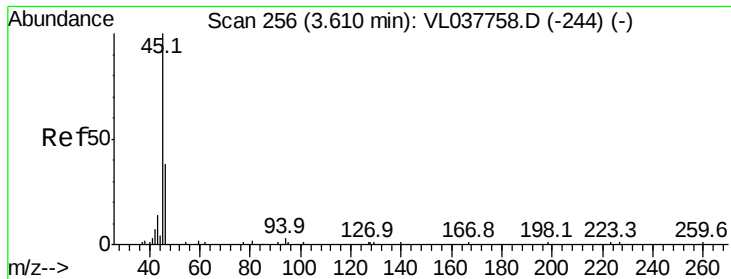
Tgt Ion:101 Resp: 2123305
 Ion Ratio Lower Upper
 101 100
 103 65.0 51.5 77.3



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 9.432 ppbv
 RT: 4.49 min Scan# 529
 Delta R.T.: 0.00 min
 Lab File: VL037934.D
 Acq: 1 Nov 2021 9:22

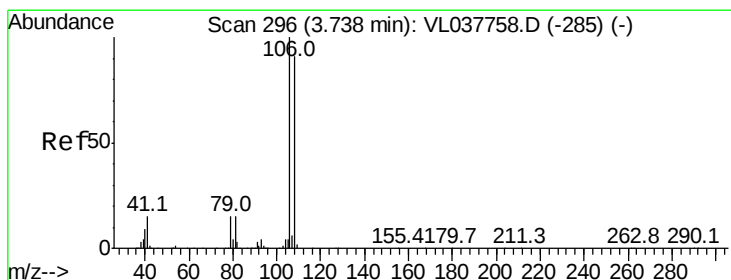
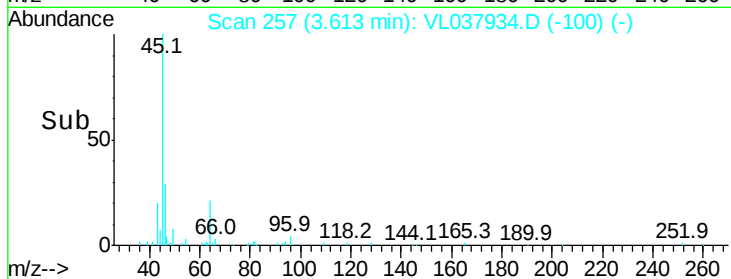
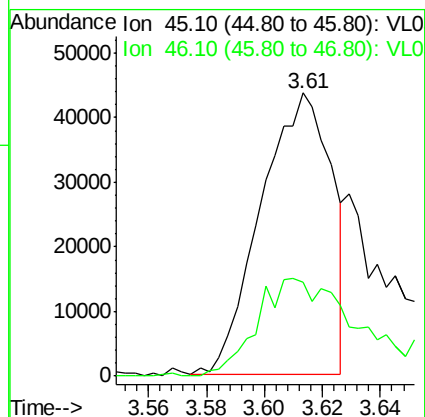
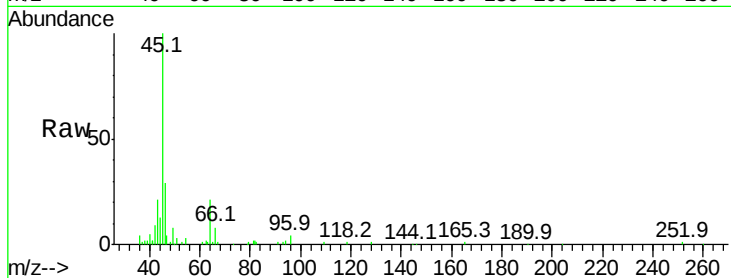
Tgt Ion:101 Resp: 1656831
 Ion Ratio Lower Upper
 101 100
 151 77.3 62.9 94.3





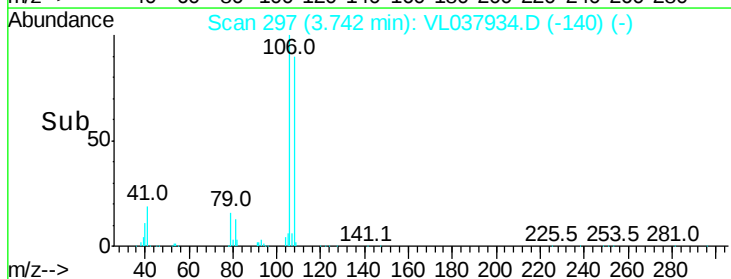
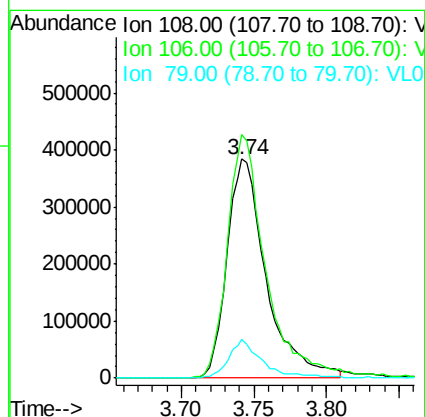
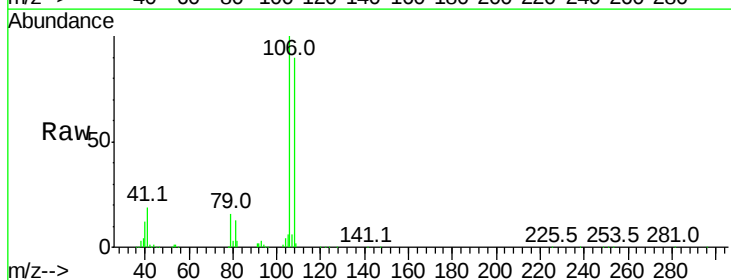
#13
 Ethanol
 Concen: 7.833 ppbv
 RT: 3.61
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 1 Nov 2021 9:22

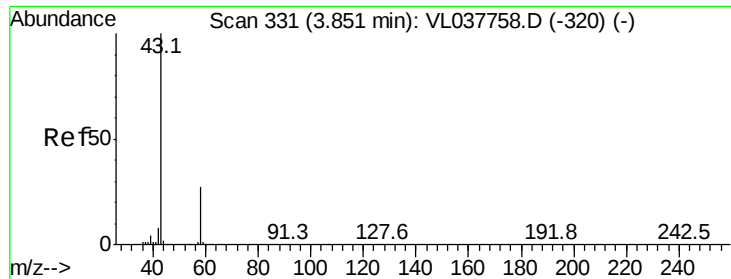
Tgt Ion: 45 Resp: 73673
 Ion Ratio Lower Upper
 45 100
 46 58.4 20.2 81.0



#14
 Bromoethene
 Concen: 9.341 ppbv
 RT: 3.74 min Scan# 297
 Delta R.T. 0.00 min
 Lab File: VL037934.D
 Acq: 1 Nov 2021 9:22

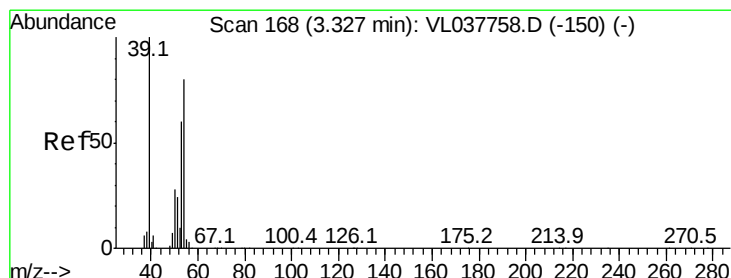
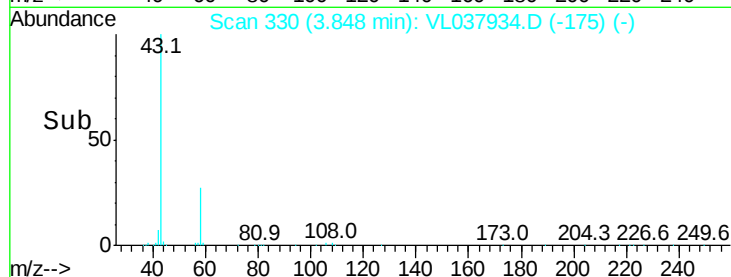
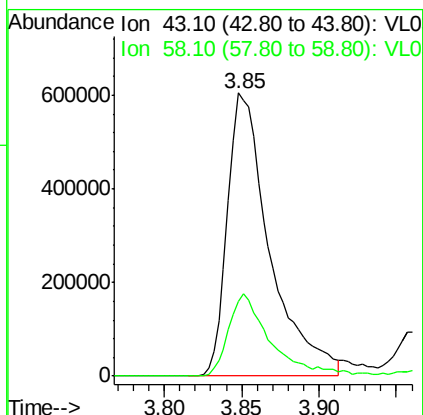
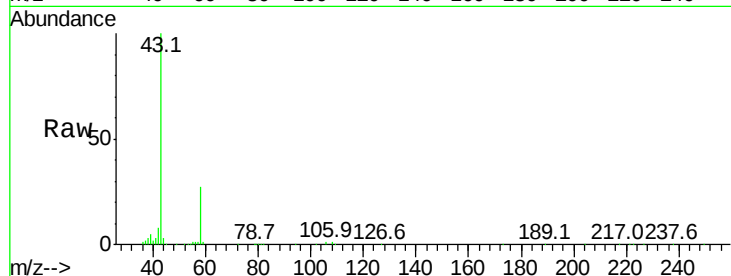
Tgt Ion: 108 Resp: 721478
 Ion Ratio Lower Upper
 108 100
 106 110.5 91.9 137.9
 79 15.5 13.9 20.9





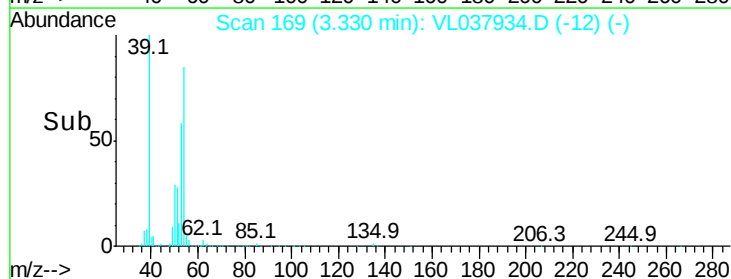
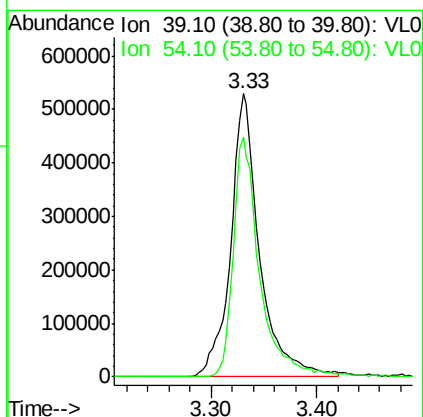
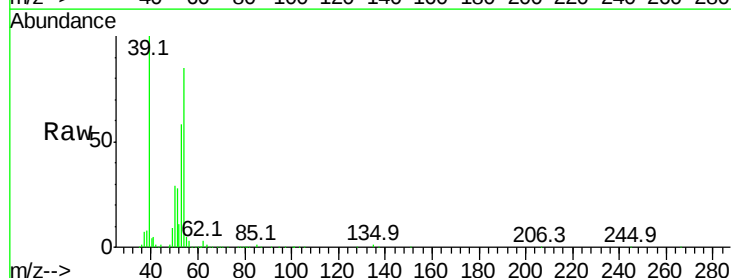
#15
Acetone
Concen: 7.852 ppbv
RT: 3.85
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 1 Nov 2021 9:22

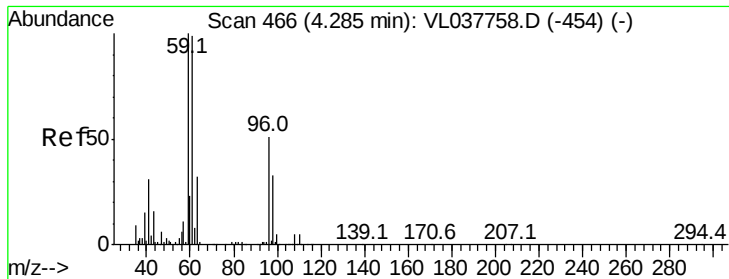
Tgt Ion: 43 Resp: 1146722
Ion Ratio Lower Upper
43 100
58 29.1 23.0 34.6



#16
1,3-Butadiene
Concen: 9.386 ppbv
RT: 3.33 min Scan# 169
Delta R.T. 0.00 min
Lab File: VL037934.D
Acq: 1 Nov 2021 9:22

Tgt Ion: 39 Resp: 997324
Ion Ratio Lower Upper
39 100
54 78.2 61.7 92.5





#17

tert-Butyl alcohol

Concen: 8.529 ppbv

RT: 4.29 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

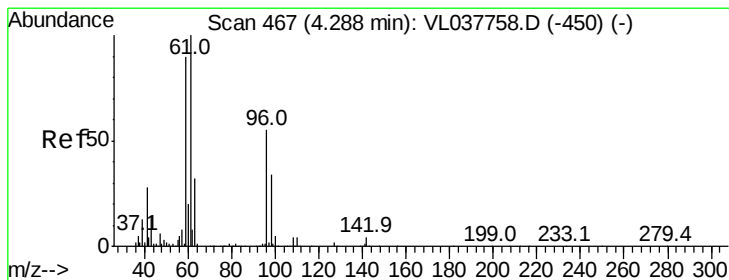
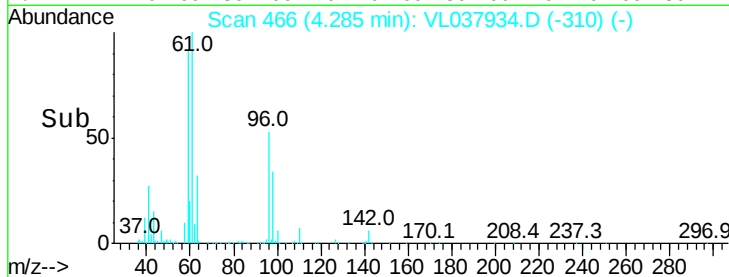
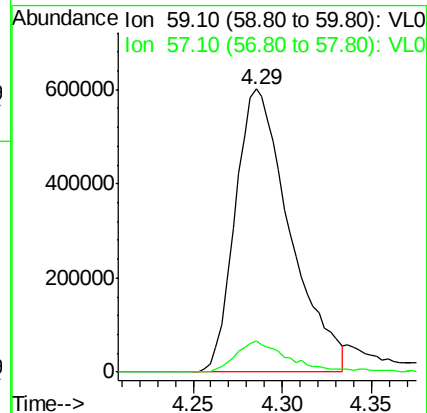
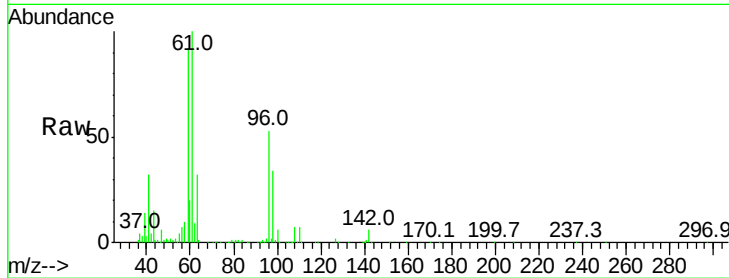
Acq: 1 Nov 2021 9:22

Tgt Ion: 59 Resp: 1282778

Ion Ratio Lower Upper

59 100

57 11.1 8.6 13.0



#18

1,1-Dichloroethene

Concen: 9.284 ppbv

RT: 4.29 min Scan# 468

Delta R.T. 0.00 min

Lab File: VL037934.D

Acq: 1 Nov 2021 9:22

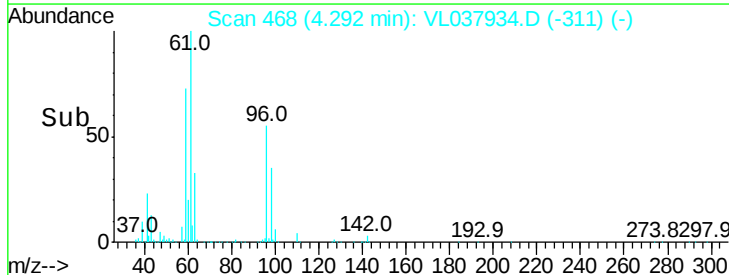
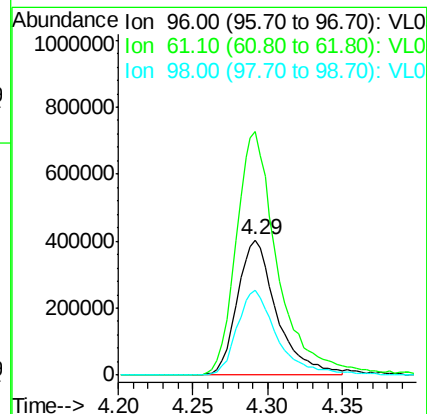
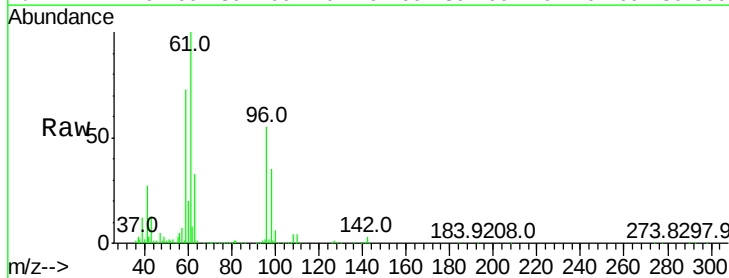
Tgt Ion: 96 Resp: 741100

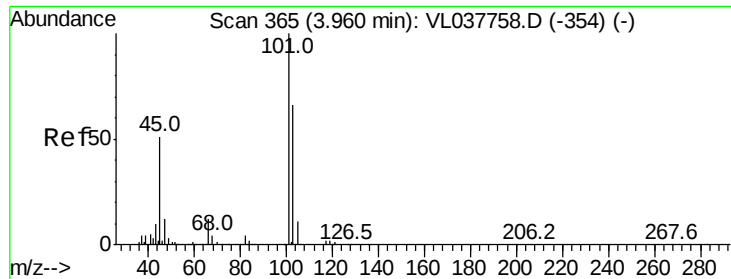
Ion Ratio Lower Upper

96 100

61 180.4 146.2 219.4

98 63.1 50.0 75.0





#19

Isopropyl Alcohol

Concen: 8.912 ppbv

RT: 3.96 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

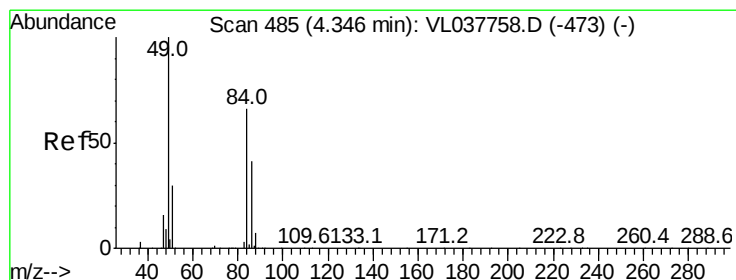
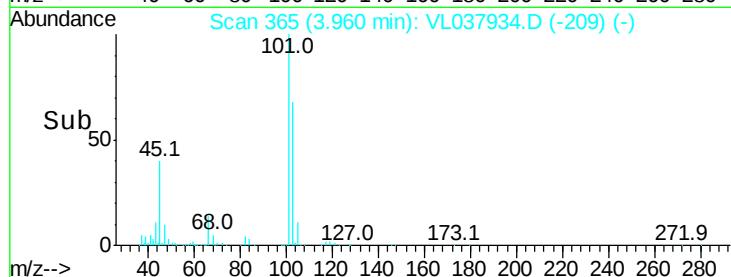
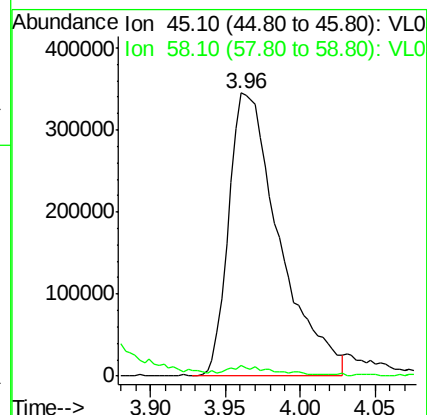
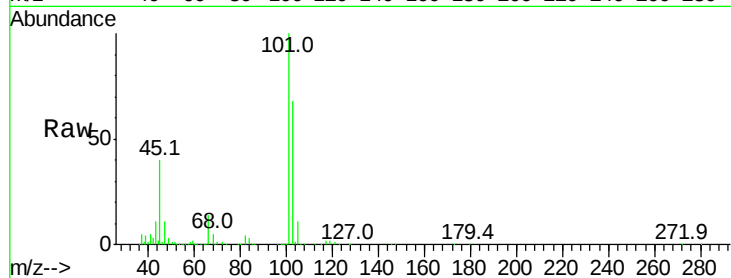
Acq: 1 Nov 2021 9:22 VSTDICCC010

Tgt Ion: 45 Resp: 809716

Ion Ratio Lower Upper

45 100

58 5.0 1.1 1.7#



#20

Methylene Chloride

Concen: 8.528 ppbv

RT: 4.35 min Scan# 485

Delta R.T. 0.00 min

Lab File: VL037934.D

Acq: 1 Nov 2021 9:22

Tgt Ion: 84 Resp: 629259

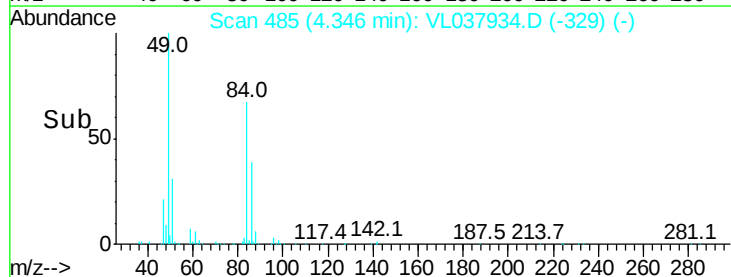
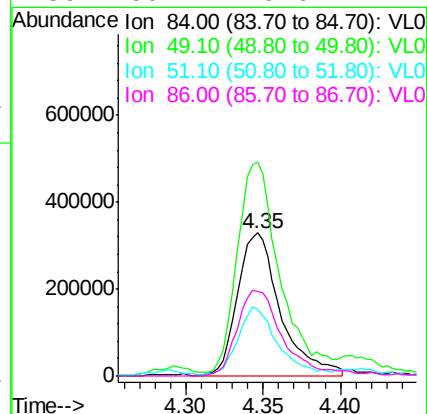
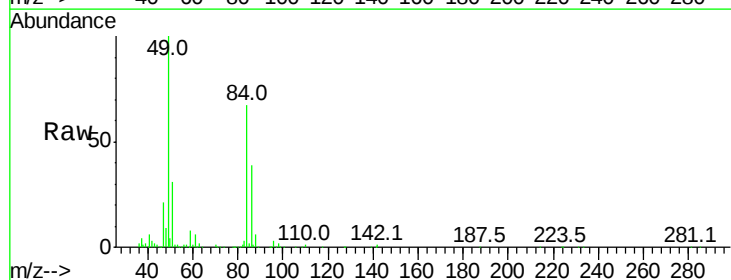
Ion Ratio Lower Upper

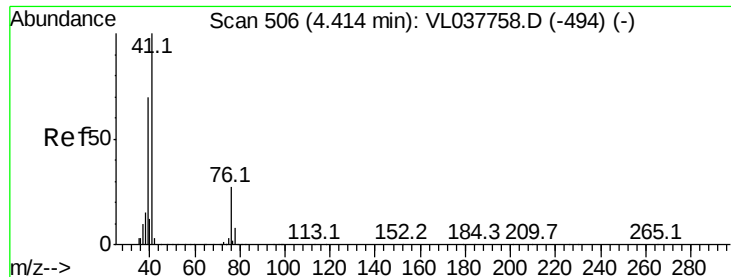
84 100

49 146.9 120.7 181.1

51 44.9 36.2 54.4

86 59.1 49.6 74.4

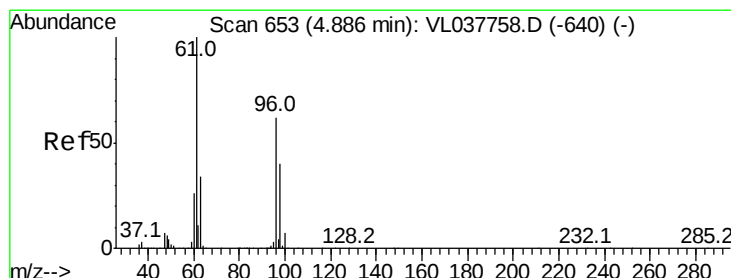
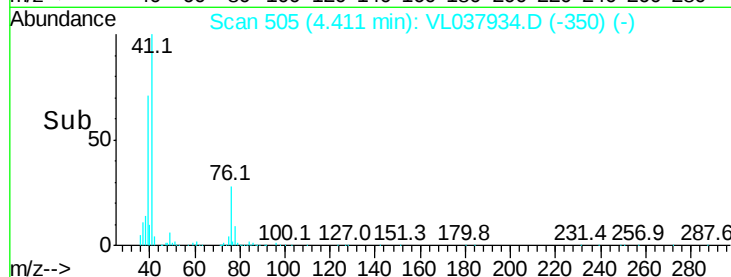
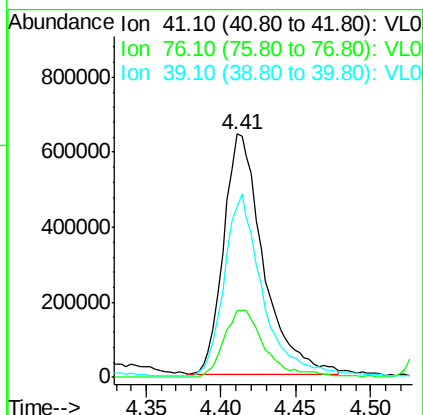
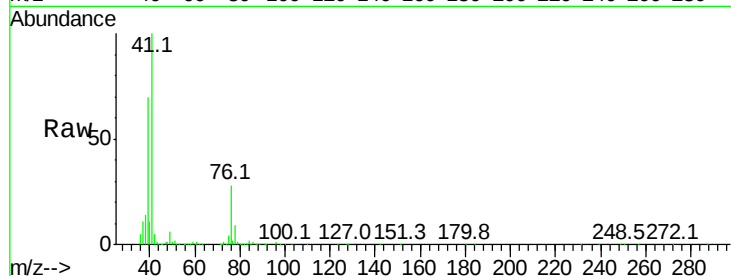




#21
 Allyl Chloride
 Concen: 9.064 ppbv
 RT: 4.41 min
 Delta R.T. MSVOA_1
 Lab File: ClientSampleId :
 VSTDICCC010
 Acq: 1 Nov 2021 9:22

Tgt Ion: 41 Resp: 1172657

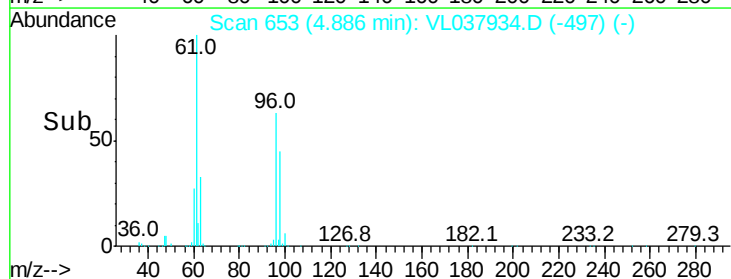
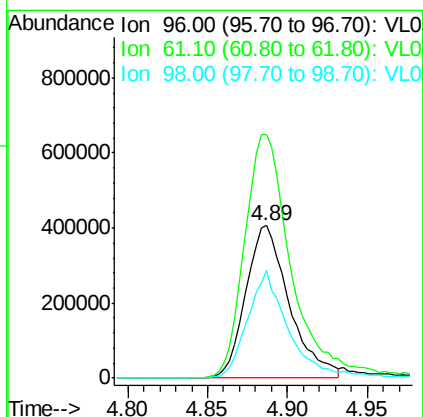
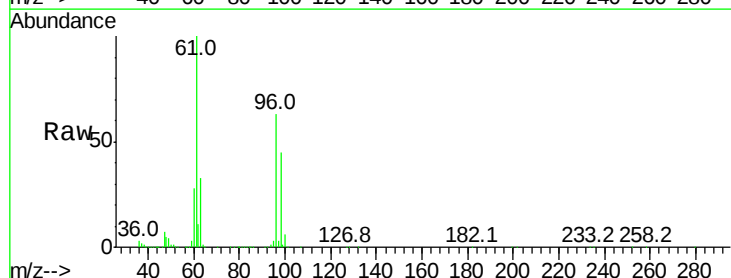
Ion	Ratio	Lower	Upper
41	100		
76	29.5	22.4	33.6
39	74.6	58.0	87.0

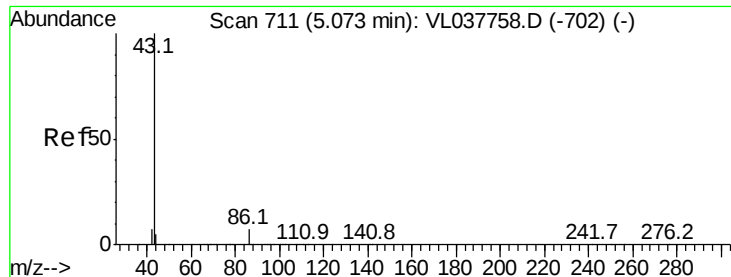


#22
 trans-1,2-Dichloroethene
 Concen: 9.450 ppbv
 RT: 4.89 min Scan# 653
 Delta R.T. 0.00 min
 Lab File: VL037934.D
 Acq: 1 Nov 2021 9:22

Tgt Ion: 96 Resp: 758432

Ion	Ratio	Lower	Upper
96	100		
61	159.7	129.0	193.6
98	71.1	51.7	77.5





#23

Vinyl Acetate

Concen: 8.527 ppbv

RT: 5.07 Instrument: MSVOA_1

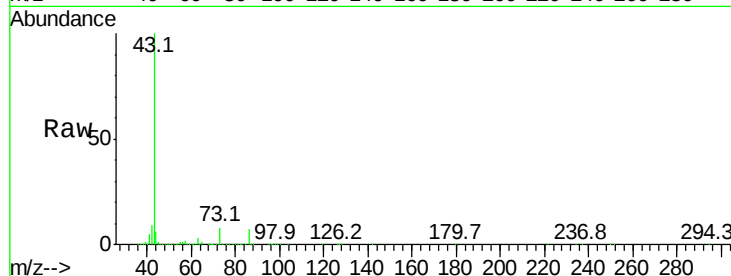
Delta R.T. ClientSampleId:

Lab File: VSTDICCC010

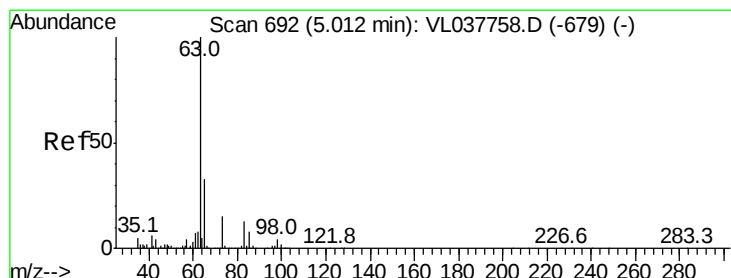
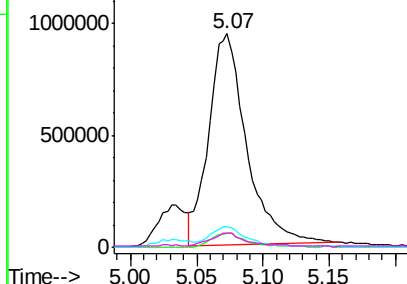
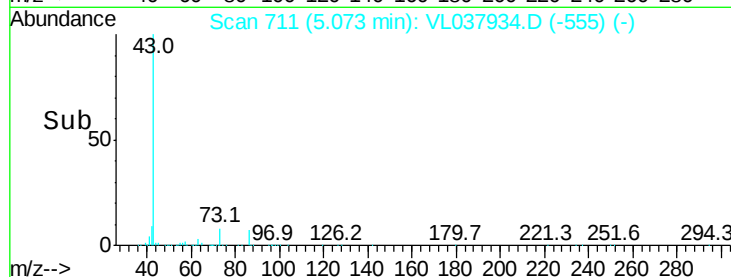
Acq: 1 Nov 2021 9:22

Tgt Ion: 43 Resp: 1866037

Ion	Ratio	Lower	Upper
43	100		
86	6.9	5.0	7.4
42	9.3	7.4	11.0
44	5.9	3.8	5.6#



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 86.10 (85.80 to 86.80): VL0
 Ion 42.10 (41.80 to 42.80): VL0
 Ion 44.10 (43.80 to 44.80): VL0



#24

1,1-Dichloroethane

Concen: 9.648 ppbv

RT: 5.01 min Scan# 692

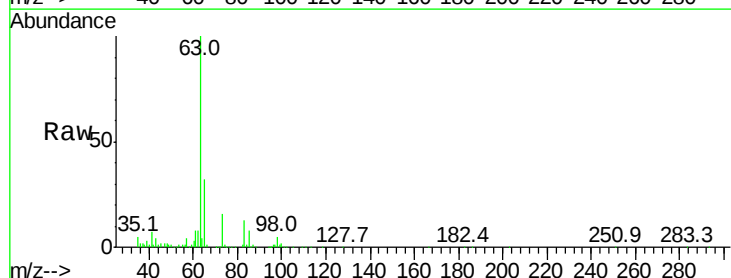
Delta R.T. 0.00 min

Lab File: VL037934.D

Acq: 1 Nov 2021 9:22

Tgt Ion: 63 Resp: 1537083

Ion	Ratio	Lower	Upper
63	100		
98	4.6	2.3	6.9
100	2.4	1.1	3.1



Abundance Ion 63.10 (62.80 to 63.80): VL0
 Ion 98.00 (97.70 to 98.70): VL0
 Ion 100.00 (99.70 to 100.70): VL0

