

Data File : VL037764.D

Acq On : 4 Oct 2021 16:38

Operator : SY/AP

Sample : VSTDICC015

Misc : 400mL/MSVOA_L

ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA_L

ClientSampleId :

VSTDICC015

Quant Time: Oct 04 17:32:33 2021

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL100421AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Oct 04 12:52:19 2021

QLast Update : Mon Oct 04 12:52:19 2021

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1461998	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	4332965	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	4070410	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	2845444	9.67	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	96.70%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	3.05	85	2522232	9.534	ppbv	97
3) Chlorodifluoromethane	2.99	51	3761589	13.641	ppbv	98
4) Chloromethane	3.14	50	1428600	14.022	ppbv	94
5) Vinyl Chloride	3.26	62	1439278	15.040	ppbv	96
6) Bromomethane	3.47	94	734034	13.197	ppbv	99
7) Chloroethane	3.56	64	495842	13.864	ppbv	97
8) Dichlorotetrafluoroethane	3.19	85	3090034	13.540	ppbv	100
9) Propene	3.01	41	1387528	14.264	ppbv	100
10) Heptane	8.12	43	3466207	15.271	ppbv	99
11) Trichlorofluoromethane	3.95	101	2911777	13.709	ppbv	99
12) 1,1,2-Trichlorotrifluoroet	4.49	101	2188212	13.957	ppbv	99
13) Ethanol	3.60	45	49367	5.188	ppbv #	30
14) Bromoethene	3.74	108	1000780	14.024	ppbv	95
15) Acetone	3.85	43	1719779	11.322	ppbv	99
16) 1,3-Butadiene	3.33	39	1402161	14.773	ppbv	100
17) tert-Butyl alcohol	4.29	59	1771304	13.752	ppbv	100
18) 1,1-Dichloroethene	4.29	96	1006876	13.787	ppbv	94
19) Isopropyl Alcohol	3.96	45	1089478	13.182	ppbv #	96
20) Methylene Chloride	4.35	84	865975	11.941	ppbv	96
21) Allyl Chloride	4.41	41	1624033	14.311	ppbv	97
22) trans-1,2-Dichloroethene	4.89	96	1060748	14.436	ppbv	96
23) Vinyl Acetate	5.07	43	2631264	12.518	ppbv	98
24) 1,1-Dichloroethane	5.01	63	2076374	13.789	ppbv	99
25) Ethyl Acetate	5.68	43	5304272	14.418	ppbv	99
26) Hexane	5.69	57	2511803	14.373	ppbv	99
27) Carbon Disulfide	4.55	76	2584102	16.163	ppbv	99
28) Methyl tert-Butyl Ether	5.03	73	2129761	13.836	ppbv	98
29) Chloroform	5.75	83	3589458	14.066	ppbv	97
30) Cyclohexane	7.14	84	2123558	14.208	ppbv	99
31) cis-1,2-Dichloroethene	5.55	61	2426105	15.292	ppbv	98
32) 1,1,1-Trichloroethane	6.52	97	3480562	14.650	ppbv	99
34) 2-Butanone	5.25	43	2437268	13.842	ppbv	100
35) Carbon Tetrachloride	7.02	117	3600046	14.688	ppbv	98
36) Benzene	6.90	78	5251338	14.534	ppbv	99
37) 1,2-Dichloroethane	6.31	62	2545133	14.323	ppbv	100
38) Trichloroethene	7.84	130	2072055	13.729	ppbv	96
39) 1,2-Dichloropropane	7.62	63	2023680	14.623	ppbv	94
40) 1,4-Dioxane	7.84	88	251483	7.471	ppbv #	100
41) Tetrahydrofuran	6.05	42	1278121	15.441	ppbv	99
42) Bromodichloromethane	7.80	83	3803732	14.935	ppbv	97
43) Methyl Methacrylate	8.02	69	1942266	16.158	ppbv	98

Data File : VL037764.D

Acq On : 4 Oct 2021 16:38

Operator : SY/AP

Sample : VSTDIC015

Misc : 400mL/MSVOA_L

ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Quant Time: Oct 04 17:32:33 2021

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL100421AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Oct 04 12:52:19 2021

QLast Update : Mon Oct 04 12:52:19 2021

Response via : Initial Calibration

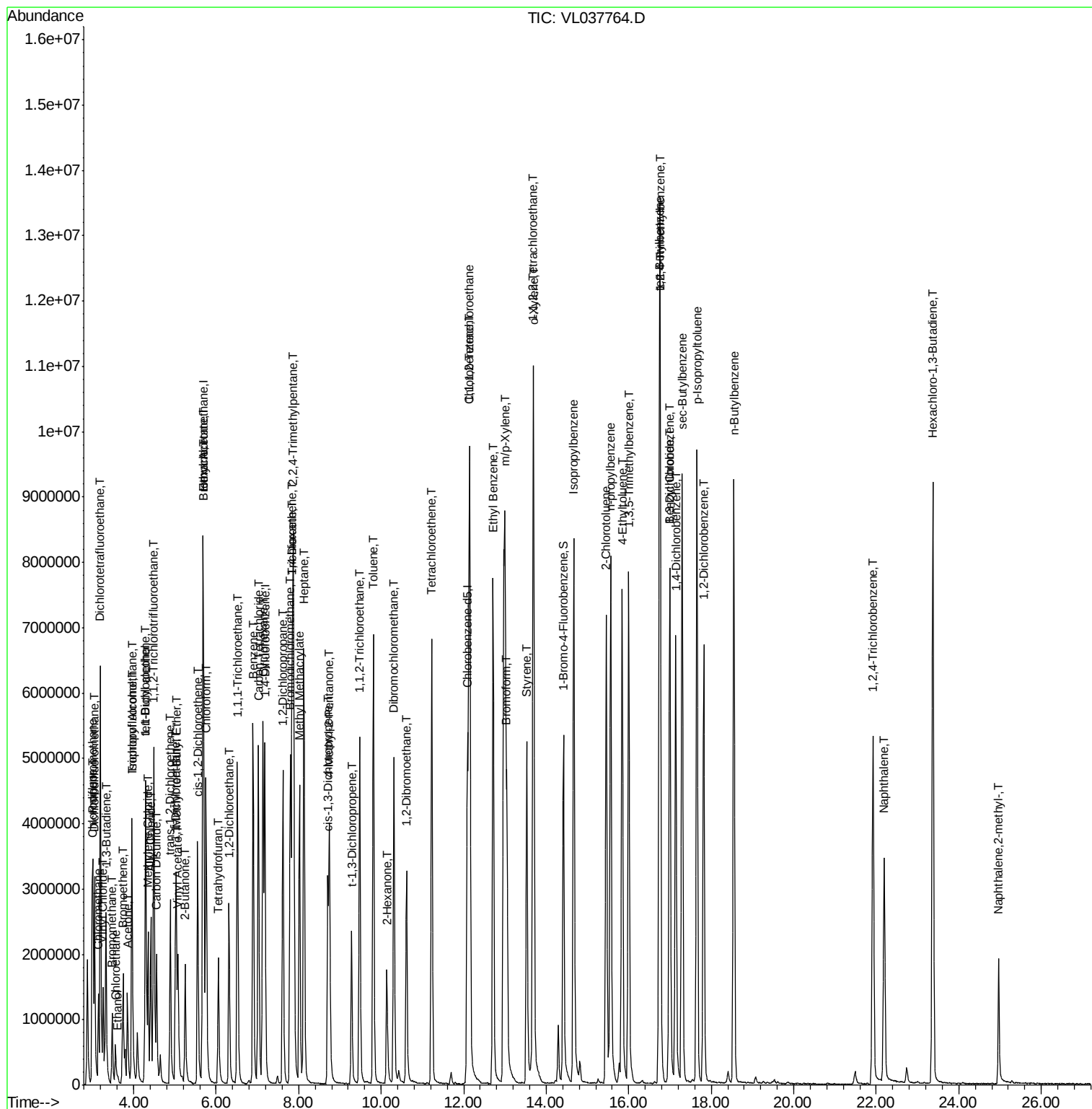
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,2,4-Trimethylpentane	7.87	57	8523257	14.032	ppbv	98
45) t-1,3-Dichloropropene	9.28	75	1516908	16.066	ppbv	98
46) cis-1,3-Dichloropropene	8.71	75	1965538	15.412	ppbv	98
47) 1,1,2-Trichloroethane	9.48	97	2135106	13.947	ppbv	98
48) Dibromochloromethane	10.31	129	3399314	15.917	ppbv	100
49) Bromoform	13.04	173	2765634	16.180	ppbv	97
50) 4-Methyl-2-Pentanone	8.74	43	3565127	15.952	ppbv	100
51) 2-Hexanone	10.14	43	1720005	17.443	ppbv #	99
52) Tetrachloroethene	11.23	164	1921114	13.850	ppbv	97
53) Toluene	9.81	91	6111375	15.217	ppbv	100
54) 1,2-Dibromoethane	10.61	107	3023884	14.426	ppbv	97
56) 1,1,1,2-Tetrachloroethane	12.13	131	2304796	13.651	ppbv #	71
57) Chlorobenzene	12.15	112	4375827	12.931	ppbv	99
58) Ethyl Benzene	12.71	91	7696619	14.244	ppbv	98
59) m/p-Xylene	13.00	91	7010923	14.889	ppbv #	41
60) o-Xylene	13.70	91	5999291	13.386	ppbv	100
61) Styrene	13.53	104	3489751	15.791	ppbv	100
62) Isopropylbenzene	14.67	105	8343611	13.327	ppbv	99
63) 1,1,2,2-Tetrachloroethane	13.68	83	4272565	12.181	ppbv	99
64) n-propylbenzene	15.56	120	2270873	14.056	ppbv	92
65) tert-Butylbenzene	16.74	119	7138434	12.646	ppbv	100
66) Benzyl Chloride	16.99	91	444813	14.419	ppbv #	99
67) sec-Butylbenzene	17.29	105	9985869	13.039	ppbv	99
69) p-Isopropyltoluene	17.65	119	8282580	13.237	ppbv	99
70) n-Butylbenzene	18.55	91	8077105	13.643	ppbv	98
71) 2-Chlorotoluene	15.46	91	6109206	13.616	ppbv	99
72) 4-Ethyltoluene	15.84	105	7369232	14.324	ppbv	99
73) 1,3,5-Trimethylbenzene	16.00	105	6514581	13.585	ppbv	96
74) 1,2,4-Trimethylbenzene	16.77	105	6530534	12.930	ppbv	98
75) 1,3-Dichlorobenzene	17.00	146	4082408	13.009	ppbv	99
76) 1,4-Dichlorobenzene	17.14	146	3912140	12.640	ppbv	99
77) 1,2-Dichlorobenzene	17.82	146	3897014	13.093	ppbv	100
78) Hexachloro-1,3-Butadiene	23.37	225	2707753	10.809	ppbv	99
79) Naphthalene	22.19	128	4672627	15.067	ppbv	98
80) Naphthalene,2-methyl-	24.97	142	1229440	17.344	ppbv	97
81) 1,2,4-Trichlorobenzene	21.92	180	2816887	14.147	ppbv	99

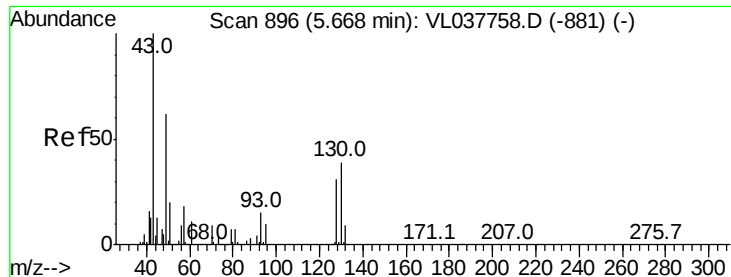
(#)=qualifier out of range (m)=manual integration (+)=signals summed

ALS Vial : 1 Sample Multiplier: 1

VSTDICC015

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 Instrument: MSVOA_1

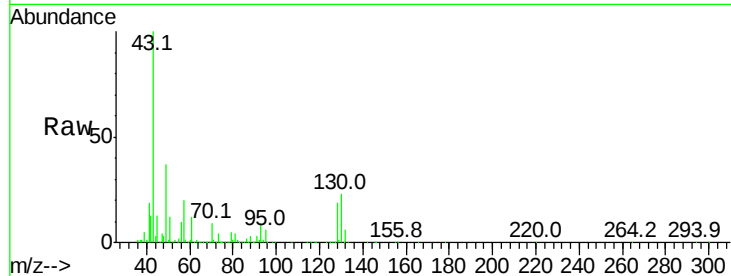
Delta R.T. 0.00

Lab File: ClientSampleId: VSTDIC015

Acq: 4 Oct 2021 16:38

Tgt Ion: 49 Resp: 1461998

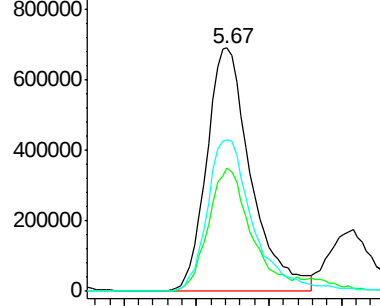
Ion	Ratio	Lower	Upper
49	100		
128	54.6	27.1	81.3
130	65.7	33.2	99.6



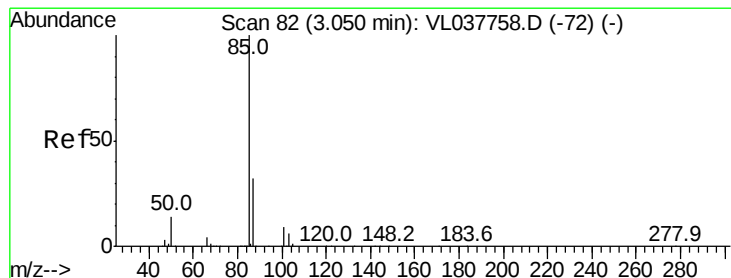
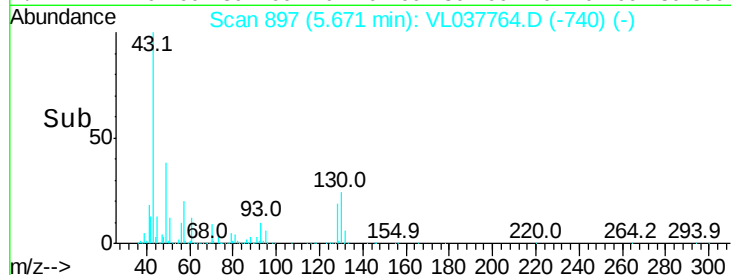
Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



Time-->



#2

Dichlorodifluoromethane

Concen: 9.534 ppbv

RT: 3.05 min Scan# 82

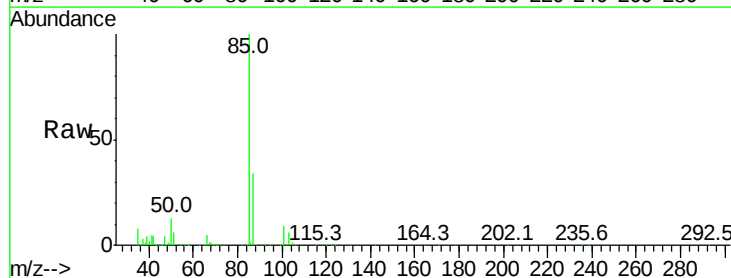
Delta R.T. 0.00 min

Lab File: VL037764.D

Acq: 4 Oct 2021 16:38

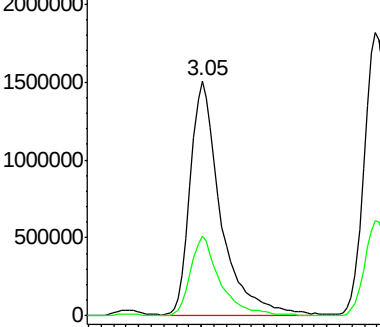
Tgt Ion: 85 Resp: 2522232

Ion	Ratio	Lower	Upper
85	100		
87	34.0	25.7	38.5

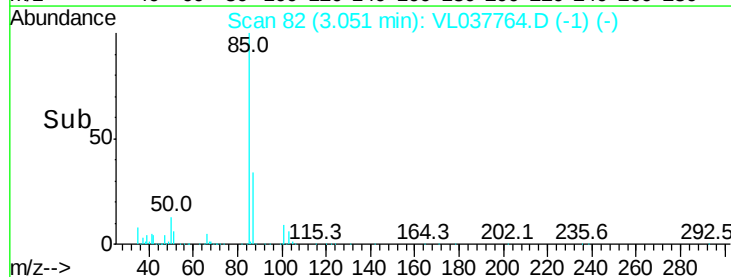


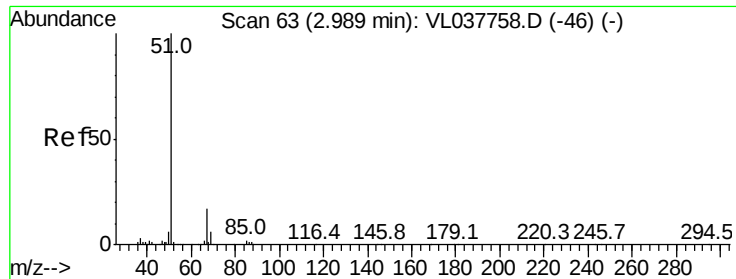
Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0



Time-->





#3

Chlorodifluoromethane

Concen: 13.641 ppbv

RT: 2.99 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

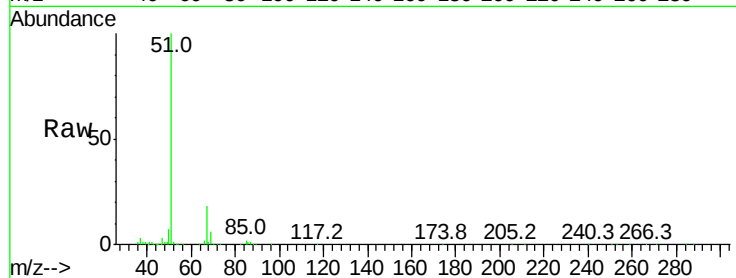
Acq: 4 Oct 2021 16:38 VSTDIC015

Tgt Ion: 51 Resp: 3761589

Ion Ratio Lower Upper

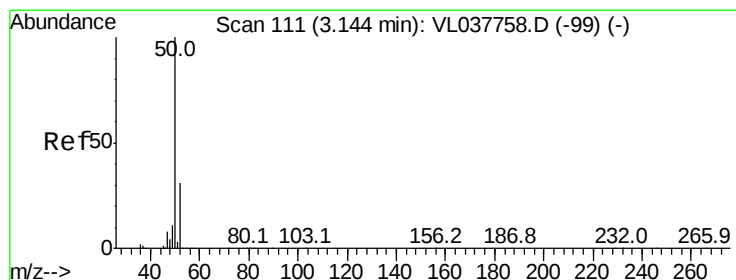
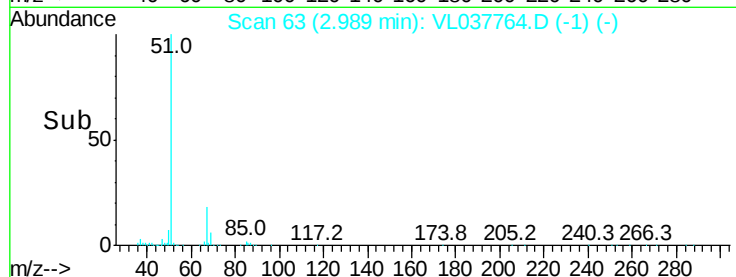
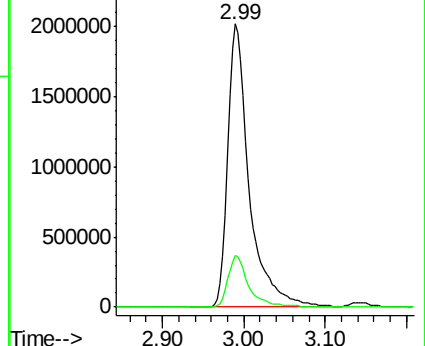
51 100

67 17.8 13.5 20.3



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 14.022 ppbv

RT: 3.14 min Scan# 111

Delta R.T. 0.00 min

Lab File: VL037764.D

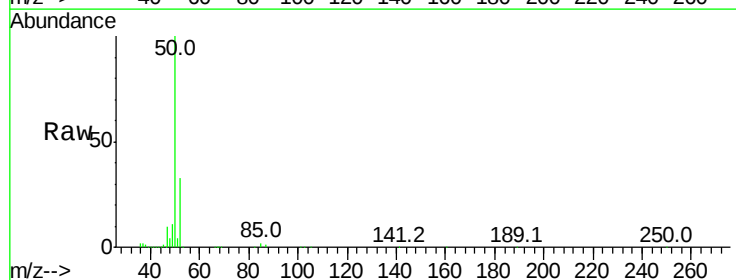
Acq: 4 Oct 2021 16:38

Tgt Ion: 50 Resp: 1428600

Ion Ratio Lower Upper

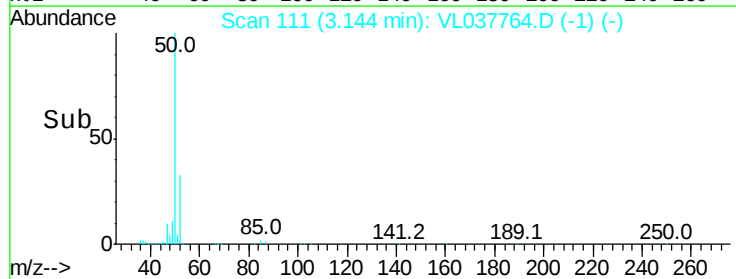
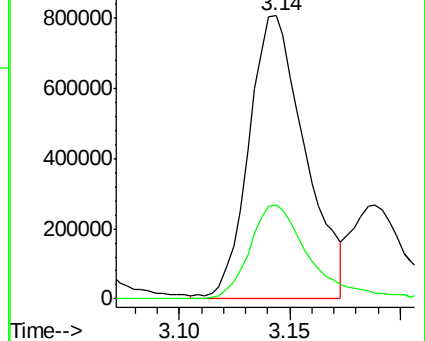
50 100

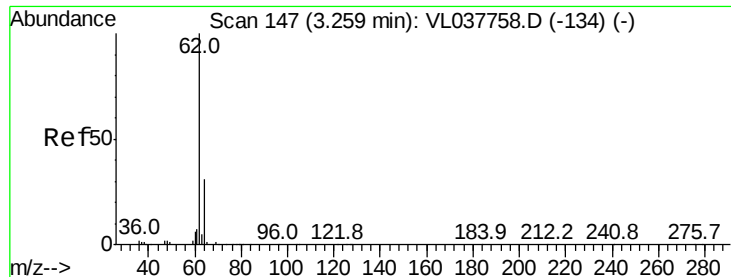
52 33.7 24.4 36.6



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 15.040 ppbv

RT: 3.26 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

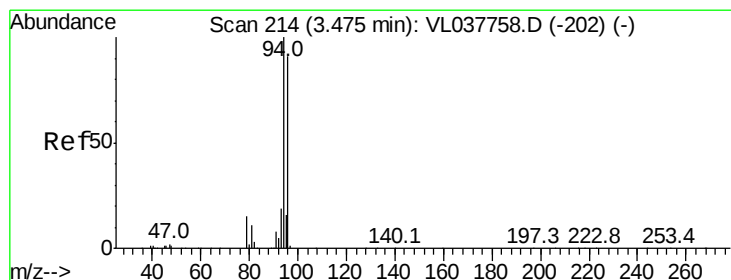
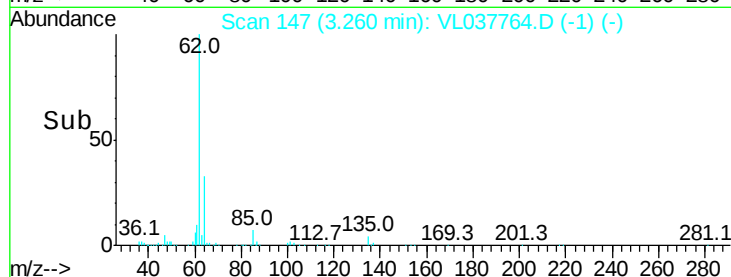
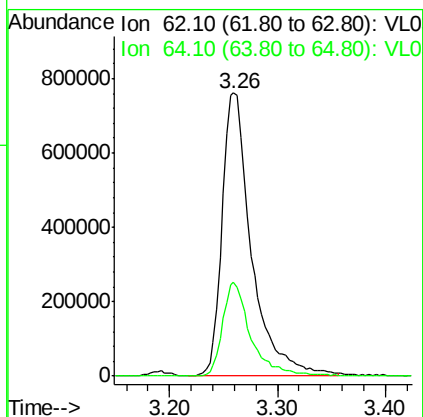
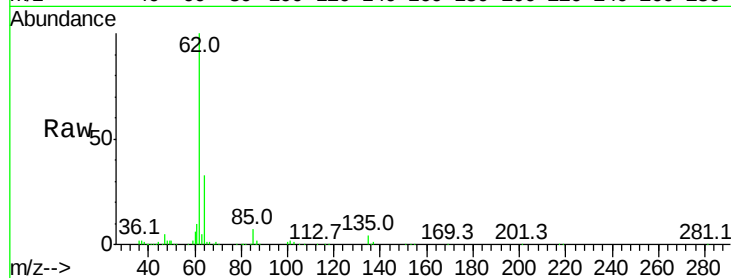
Acq: 4 Oct 2021 16:38 VSTDIC015

Tgt Ion: 62 Resp: 1439278

Ion Ratio Lower Upper

62 100

64 33.3 24.9 37.3



#6

Bromomethane

Concen: 13.197 ppbv

RT: 3.47 min Scan# 214

Delta R.T. 0.00 min

Lab File: VL037764.D

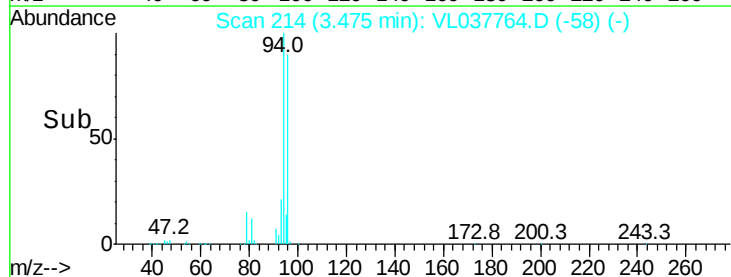
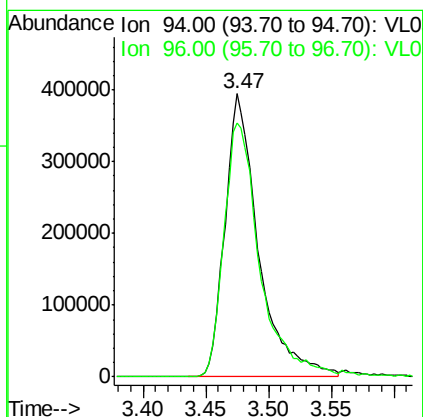
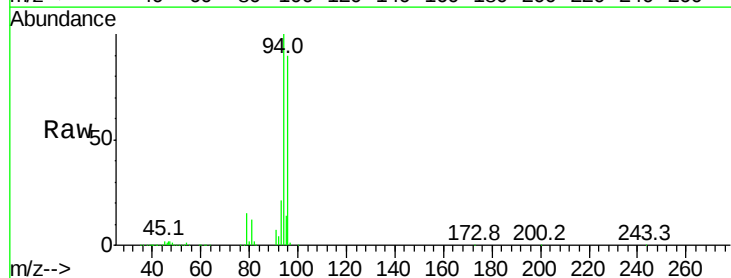
Acq: 4 Oct 2021 16:38

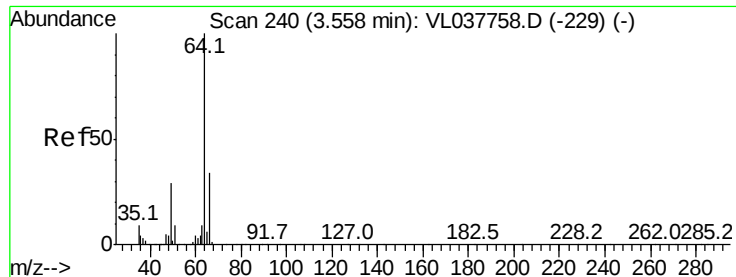
Tgt Ion: 94 Resp: 734034

Ion Ratio Lower Upper

94 100

96 89.8 72.5 108.7





#7

Chloroethane

Concen: 13.864 ppbv

RT: 3.56 Instrument: MSVOA_1

Delta R.T.

Lab File: ClientSampleId:

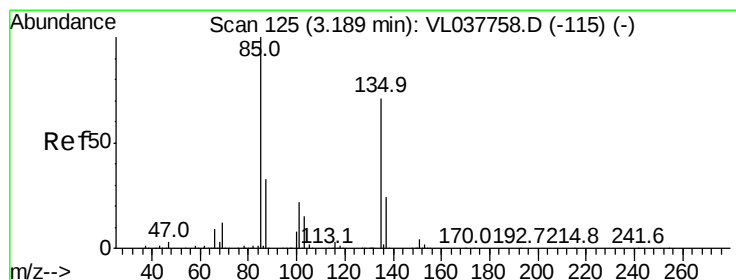
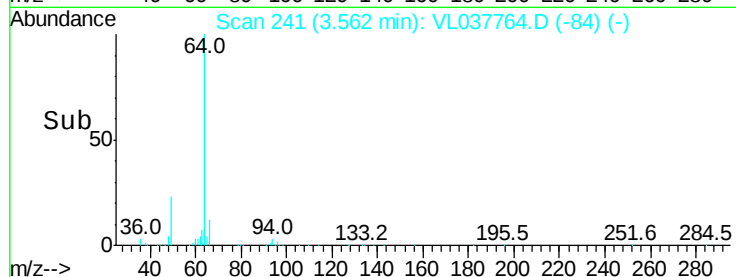
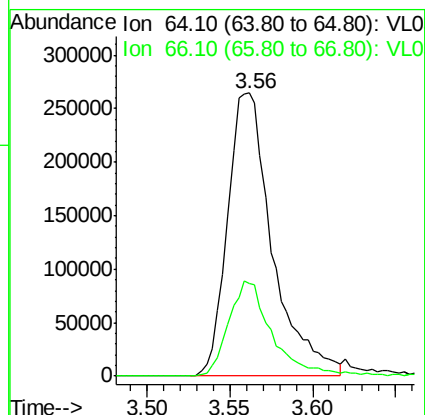
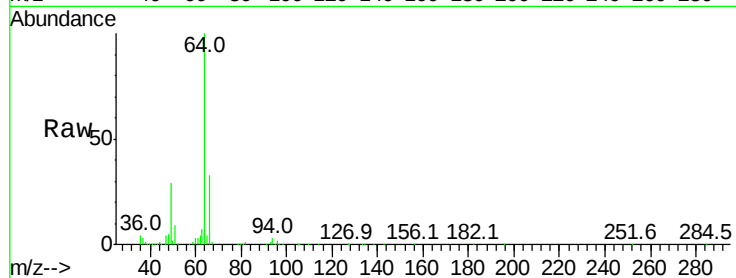
Acq: 4 Oct 2021 16:38 VSTDIC015

Tgt Ion: 64 Resp: 495842

Ion Ratio Lower Upper

64 100

66 32.5 27.5 41.3



#8

Dichlorotetrafluoroethane

Concen: 13.540 ppbv

RT: 3.19 min Scan# 125

Delta R.T. 0.00 min

Lab File: VL037764.D

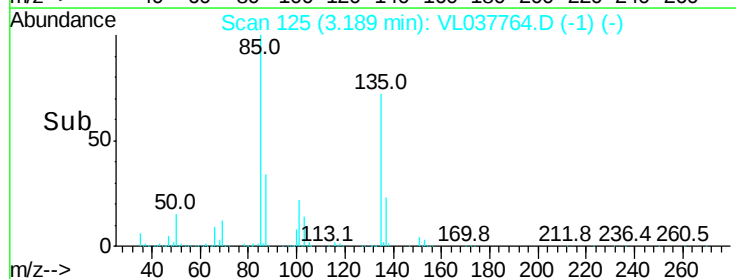
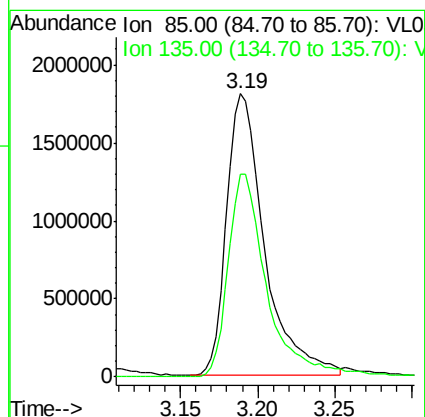
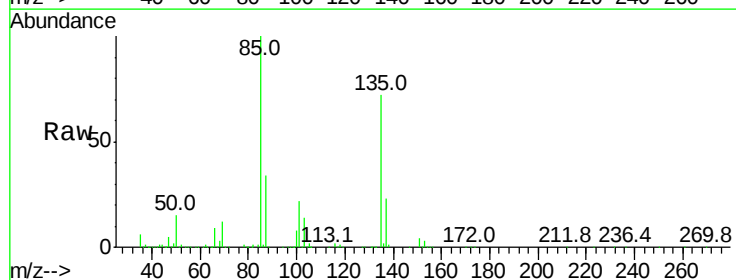
Acq: 4 Oct 2021 16:38

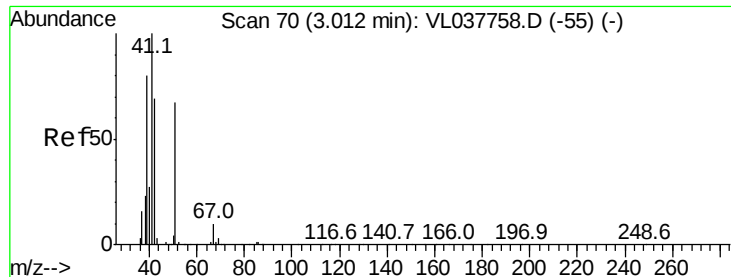
Tgt Ion: 85 Resp: 3090034

Ion Ratio Lower Upper

85 100

135 74.5 59.5 89.3





#9

Propene

Concen: 14.264 ppbv

RT: 3.01 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

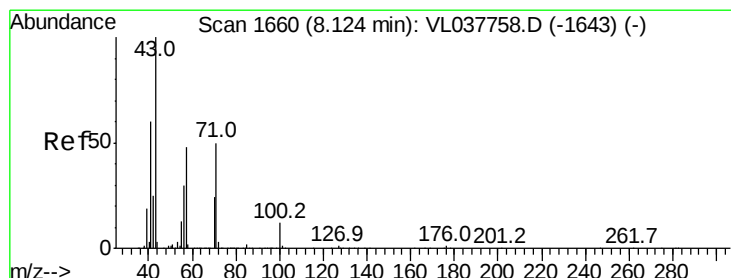
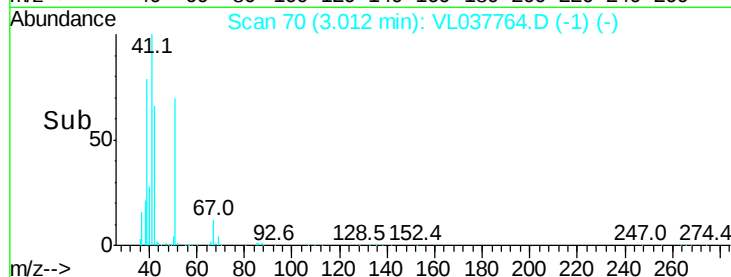
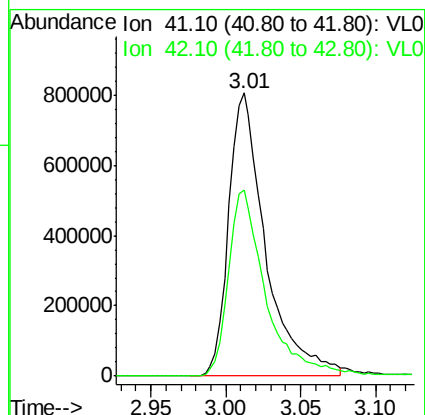
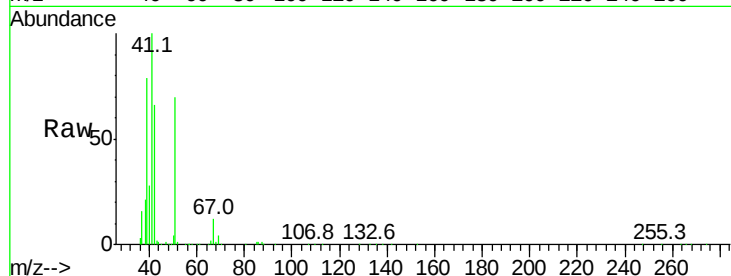
Acq: 4 Oct 2021 16:38 VSTDIC015

Tgt Ion: 41 Resp: 1387528

Ion Ratio Lower Upper

41 100

42 67.3 54.2 81.2



#10

Heptane

Concen: 15.271 ppbv

RT: 8.12 min Scan# 1660

Delta R.T. 0.00 min

Lab File: VL037764.D

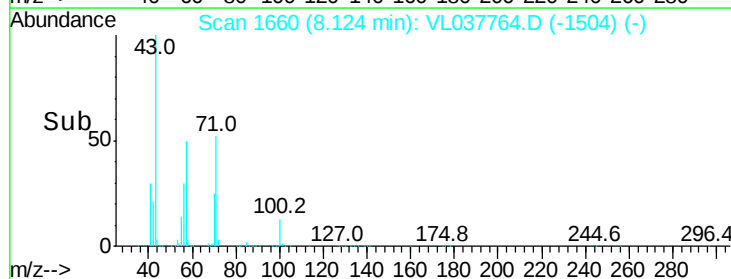
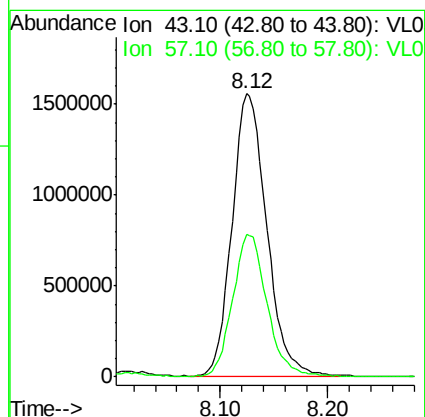
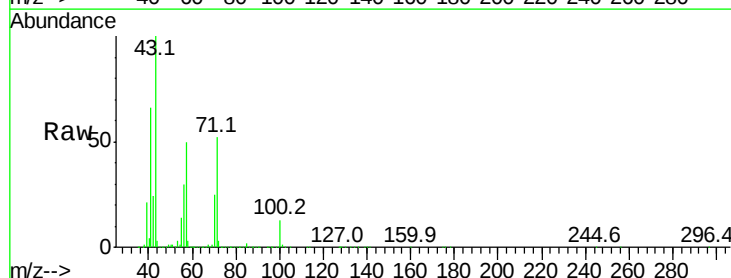
Acq: 4 Oct 2021 16:38

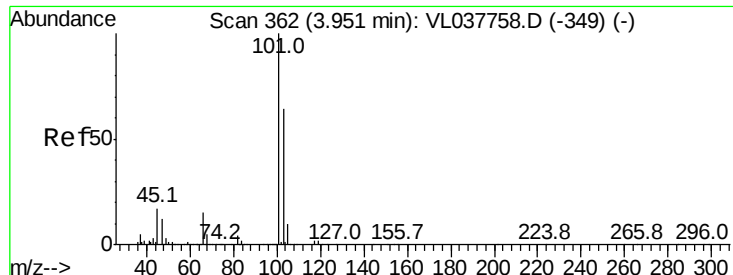
Tgt Ion: 43 Resp: 3466207

Ion Ratio Lower Upper

43 100

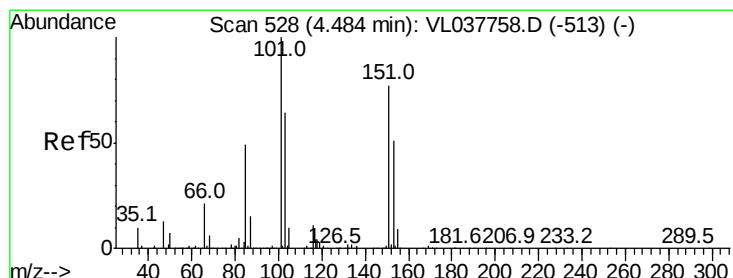
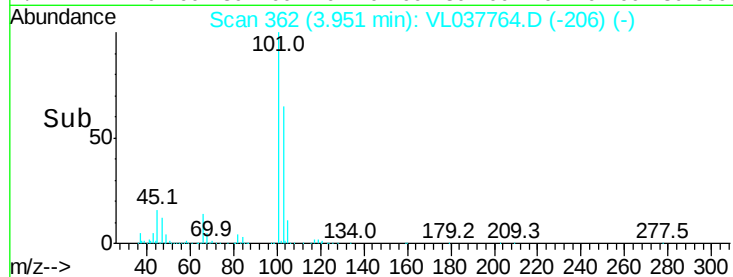
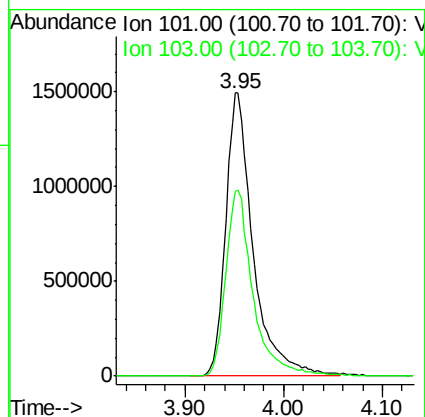
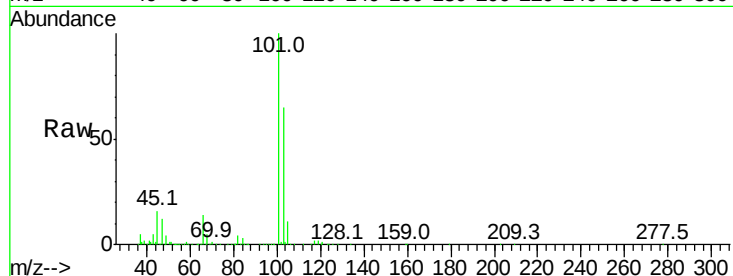
57 50.5 40.0 60.0





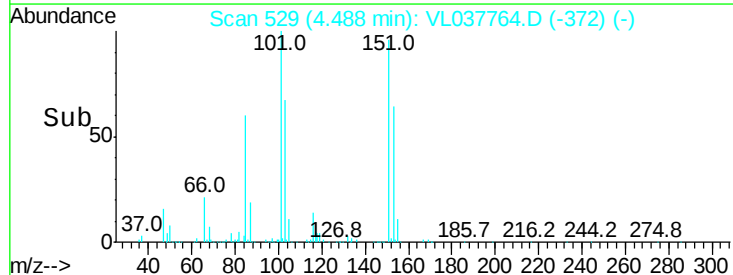
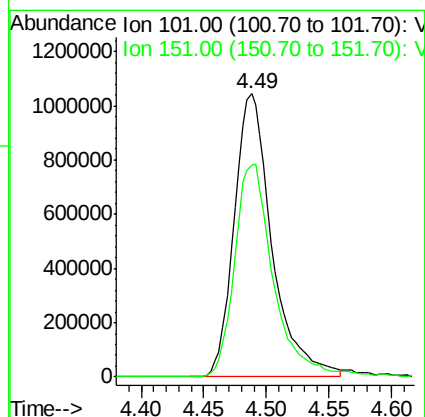
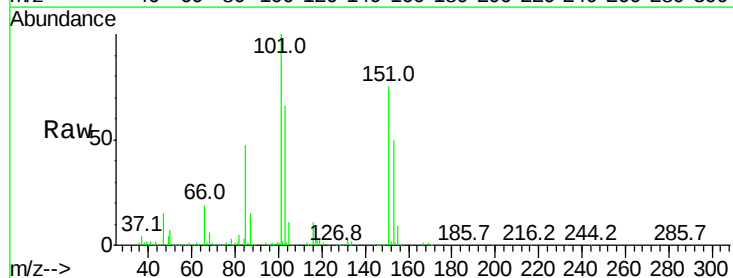
#11
 Trichlorofluoromethane
 Concen: 13.709 ppbv
 RT: 3.95
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 VSTDIC015
 Acq: 4 Oct 2021 16:38

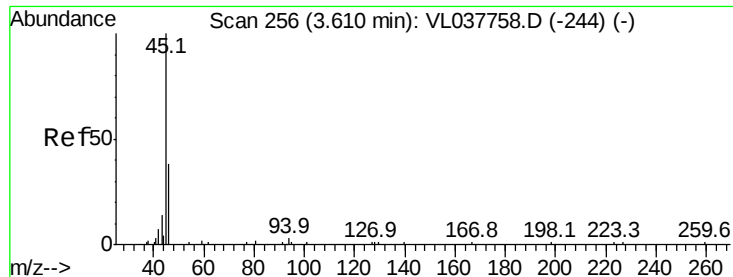
Tgt Ion:101 Resp: 2911777
 Ion Ratio Lower Upper
 101 100
 103 65.3 51.5 77.3



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 13.957 ppbv
 RT: 4.49 min Scan# 529
 Delta R.T. 0.00 min
 Lab File: VL037764.D
 Acq: 4 Oct 2021 16:38

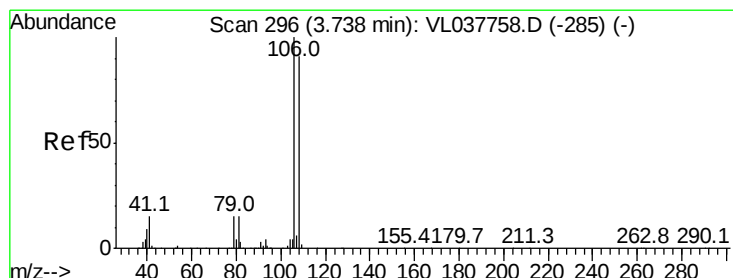
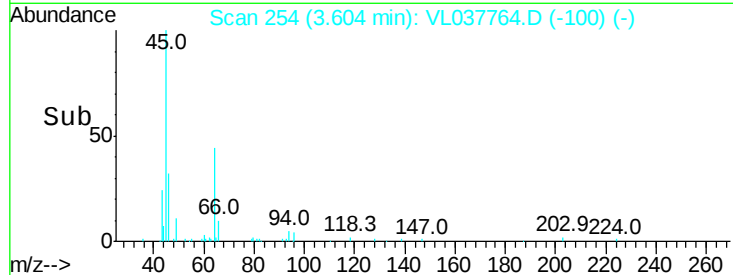
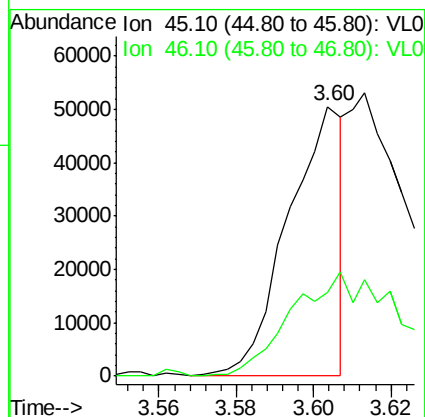
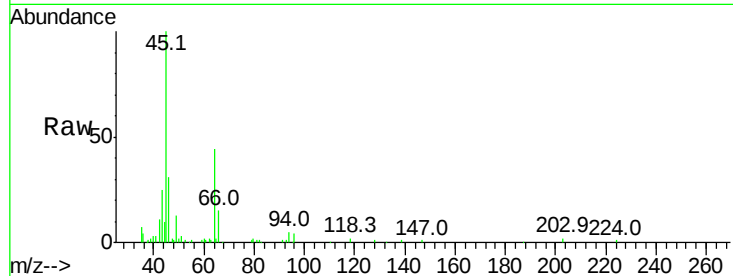
Tgt Ion:101 Resp: 2188212
 Ion Ratio Lower Upper
 101 100
 151 77.8 62.9 94.3





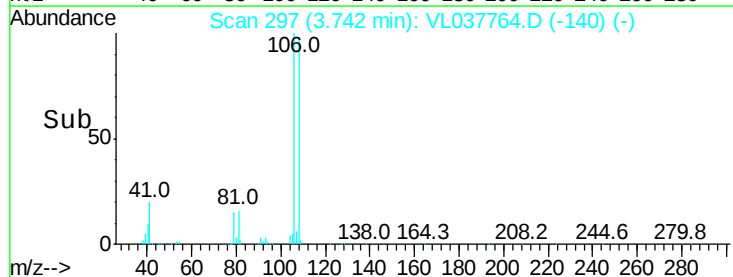
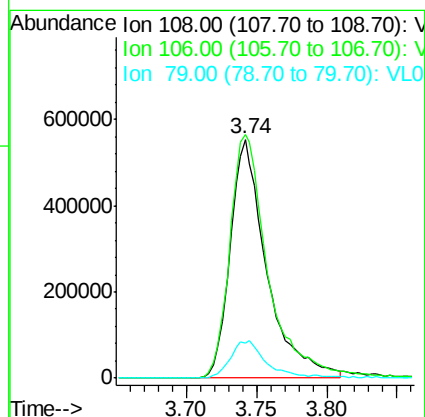
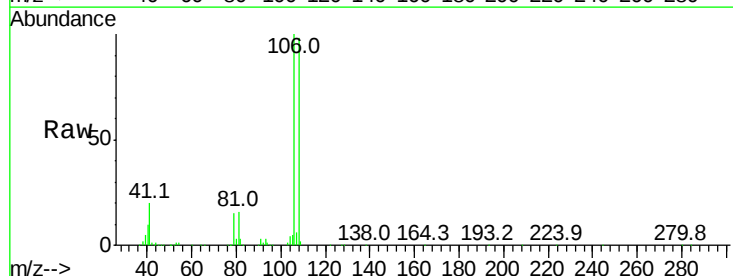
#13
 Ethanol
 Concen: 5.188 ppbv
 RT: 3.60
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 VSTDIC015
 Acq: 4 Oct 2021 16:38

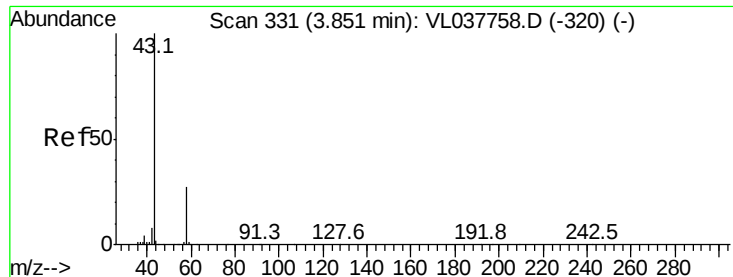
Tgt Ion: 45 Resp: 49367
 Ion Ratio Lower Upper
 45 100
 46 99.2 20.2 81.0#



#14
 Bromoethene
 Concen: 14.024 ppbv
 RT: 3.74 min Scan# 297
 Delta R.T. 0.00 min
 Lab File: VL037764.D
 Acq: 4 Oct 2021 16:38

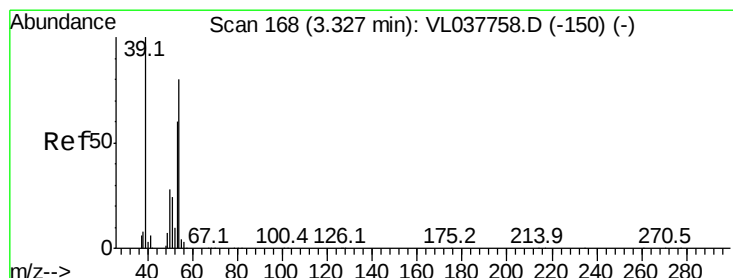
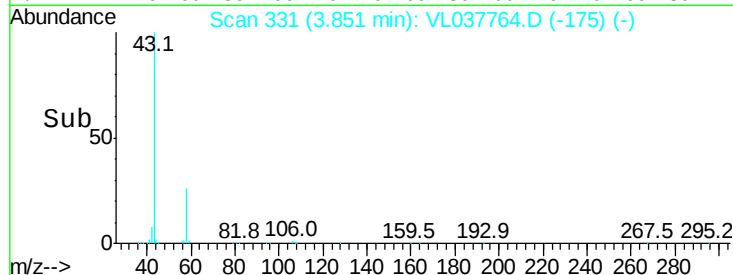
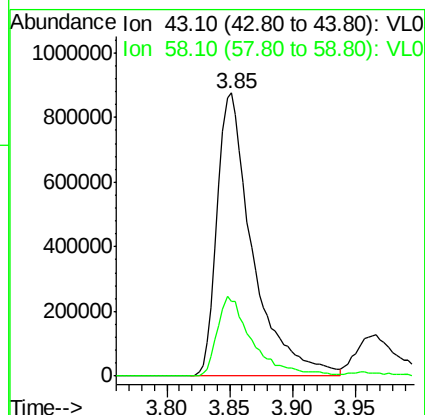
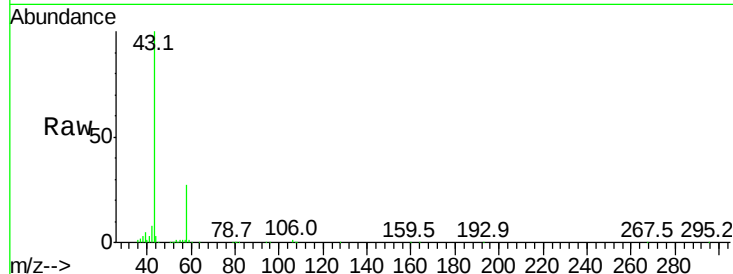
Tgt Ion: 108 Resp: 1000780
 Ion Ratio Lower Upper
 108 100
 106 108.8 91.9 137.9
 79 16.3 13.9 20.9





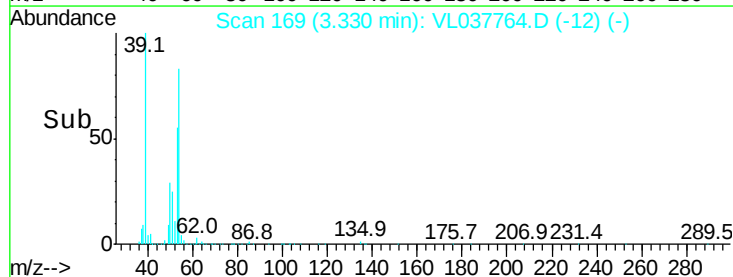
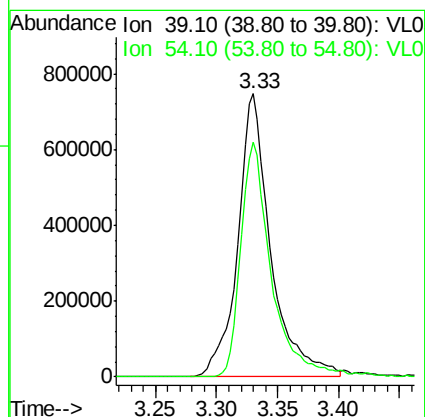
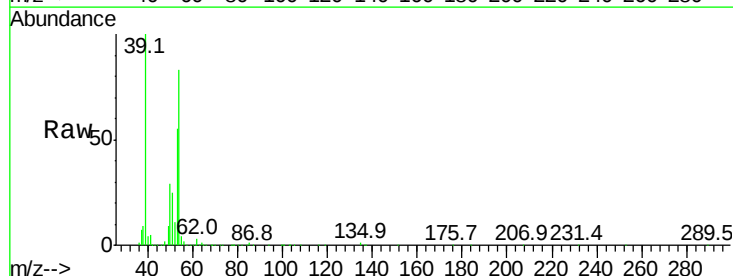
#15
Acetone
Concen: 11.322 ppbv
RT: 3.85
Delta R.T. MSVOA_1
Lab File: ClientSampleId :
VSTDIC015
Acq: 4 Oct 2021 16:38

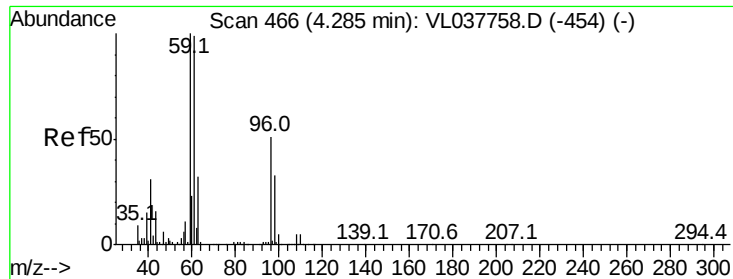
Tgt Ion: 43 Resp: 1719779
Ion Ratio Lower Upper
43 100
58 28.1 23.0 34.6



#16
1,3-Butadiene
Concen: 14.773 ppbv
RT: 3.33 min Scan# 169
Delta R.T. 0.00 min
Lab File: VL037764.D
Acq: 4 Oct 2021 16:38

Tgt Ion: 39 Resp: 1402161
Ion Ratio Lower Upper
39 100
54 77.5 61.7 92.5





#17

tert-Butyl alcohol

Concen: 13.752 ppbv

RT: 4.29 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

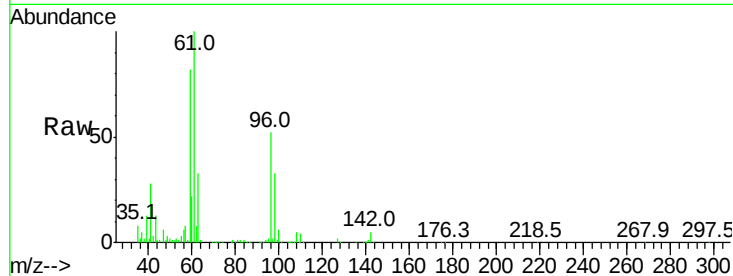
Acq: 4 Oct 2021 16:38 VSTDIC015

Tgt Ion: 59 Resp: 1771304

Ion Ratio Lower Upper

59 100

57 10.8 8.6 13.0



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

800000 4.29

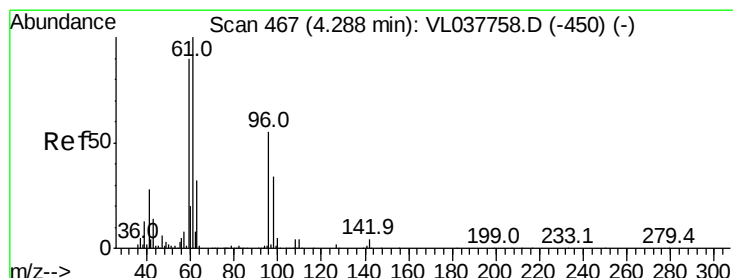
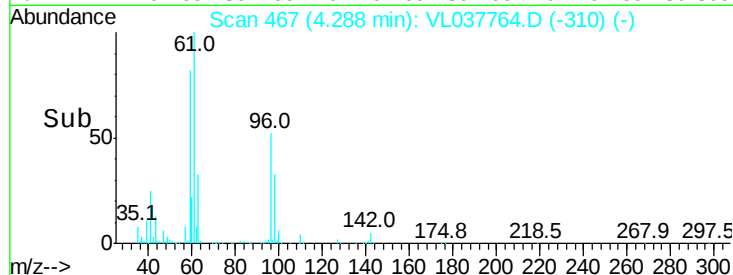
600000

400000

200000

0

Time--> 4.20 4.25 4.30 4.35



#18

1,1-Dichloroethene

Concen: 13.787 ppbv

RT: 4.29 min Scan# 468

Delta R.T. 0.00 min

Lab File: VL037764.D

Acq: 4 Oct 2021 16:38

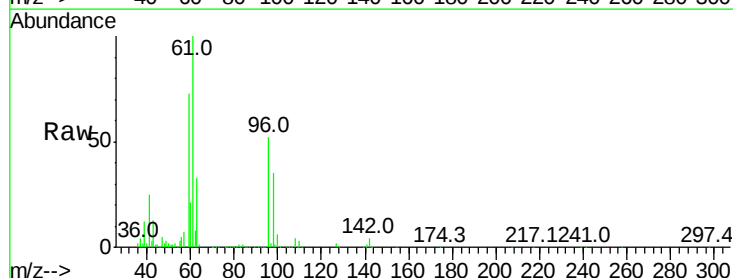
Tgt Ion: 96 Resp: 1006876

Ion Ratio Lower Upper

96 100

61 191.7 146.2 219.4

98 67.4 50.0 75.0



Abundance Ion 96.00 (95.70 to 96.70): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

1000000 4.29

500000

0

Time--> 4.20 4.25 4.30 4.35 4.40

