

Data File : VL037762.D

Acq On : 4 Oct 2021 15:20

Operator : SY/AP

Sample : VSTDIC0.1

Misc : 400mL/MSVOA_L

ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

Quant Time: Oct 04 17:31:02 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	1422846	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	4122795	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	3482125	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.41	95	2348991	9.33	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	93.30%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	3.05	85	29546	0.115	ppbv	91
3) Chlorodifluoromethane	2.99	51	30489	0.114	ppbv	94
4) Chloromethane	3.14	50	3697	0.037	ppbv #	84
5) Vinyl Chloride	3.26	62	4435	0.048	ppbv #	72
6) Bromomethane	3.48	94	4281	0.079	ppbv #	51
7) Chloroethane	3.56	64	1875	0.054	ppbv	93
8) Dichlorotetrafluoroethane	3.19	85	26492	0.119	ppbv	97
9) Propene	3.01	41	9548	0.101	ppbv #	16
10) Heptane	8.13	43	7545	0.034	ppbv #	27
11) Trichlorofluoromethane	3.95	101	10774	0.052	ppbv #	80
12) 1,1,2-Trichlorotrifluoroet	4.49	101	14622	0.096	ppbv	91
13) Ethanol	3.62	45	386	0.042	ppbv #	27
14) Bromoethene	3.74	108	2991	0.043	ppbv #	3
15) Acetone	3.87	43	9532	0.064	ppbv #	46
16) 1,3-Butadiene	3.33	39	6762	0.073	ppbv #	64
18) 1,1-Dichloroethene	4.29	96	2503	0.035	ppbv #	47
20) Methylene Chloride	4.35	84	4085	0.058	ppbv #	59
21) Allyl Chloride	4.42	41	5200	0.047	ppbv #	1
22) trans-1,2-Dichloroethene	4.89	96	2540	0.036	ppbv #	75
26) Hexane	5.69	57	13248	0.078	ppbv #	44
28) Methyl tert-Butyl Ether	5.06	73	10094	0.067	ppbv #	70
30) Cyclohexane	7.13	84	5869	0.040	ppbv #	1
31) cis-1,2-Dichloroethene	5.54	61	6444	0.042	ppbv	91
32) 1,1,1-Trichloroethane	6.51	97	14926	0.065	ppbv #	38
35) Carbon Tetrachloride	7.02	117	13342	0.057	ppbv #	64
36) Benzene	6.89	78	28900	0.084	ppbv #	92
37) 1,2-Dichloroethane	6.31	62	10944	0.065	ppbv #	82
38) Trichloroethene	7.83	130	4880	0.034	ppbv #	56
39) 1,2-Dichloropropane	7.17	63	967683	7.349	ppbv #	28
42) Bromodichloromethane	7.79	83	16732	0.069	ppbv #	93
44) 2,2,4-Trimethylpentane	7.87	57	25344	0.044	ppbv #	35
47) 1,1,2-Trichloroethane	9.47	97	5429	0.037	ppbv #	84
52) Tetrachloroethene	11.22	164	4345	0.033	ppbv #	43
56) 1,1,1,2-Tetrachloroethane	12.12	131	4687	0.032	ppbv #	8
60) o-Xylene	13.69	91	13026	0.034	ppbv #	30
62) Isopropylbenzene	14.67	105	29583	0.055	ppbv #	66
66) Benzyl Chloride	16.98	91	1103	0.042	ppbv #	81
67) sec-Butylbenzene	17.29	105	30348	0.046	ppbv #	66
69) p-Isopropyltoluene	17.65	119	16627	0.031	ppbv #	48
70) n-Butylbenzene	18.56	91	30294	0.060	ppbv	94
73) 1,3,5-Trimethylbenzene	16.00	105	14754	0.036	ppbv	92

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL100421\
Quantitation Report (Not Reviewed)

Data File : VL037762.D
Acq On : 4 Oct 2021 15:20
Operator : SY/AP
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Quant Time: Oct 04 17:31:02 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

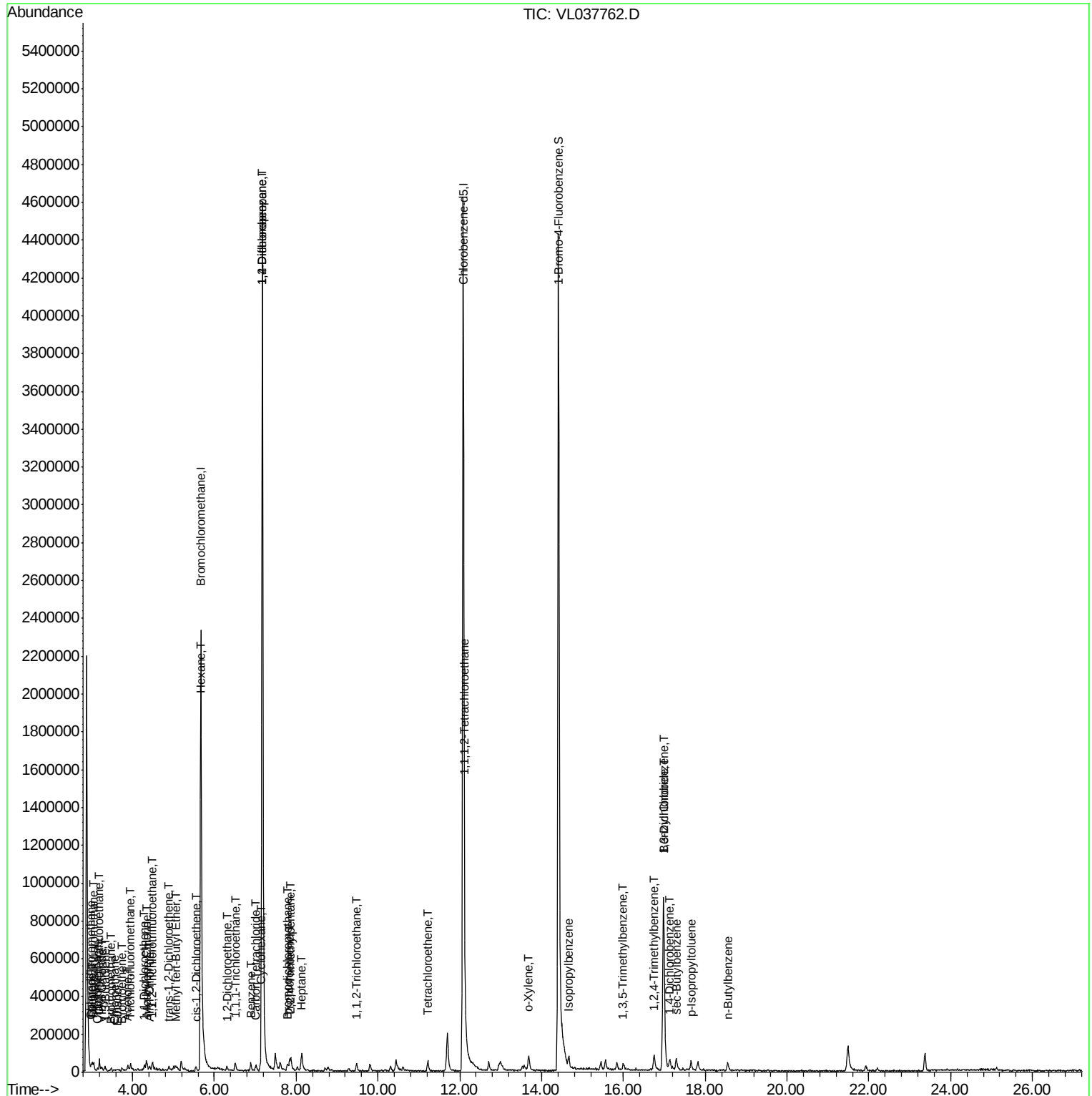
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
74) 1,2,4-Trimethylbenzene	16.76	105	27409	0.063	ppbv #	83
75) 1,3-Dichlorobenzene	16.99	146	10129	0.038	ppbv #	1
76) 1,4-Dichlorobenzene	17.13	146	10217	0.039	ppbv #	23

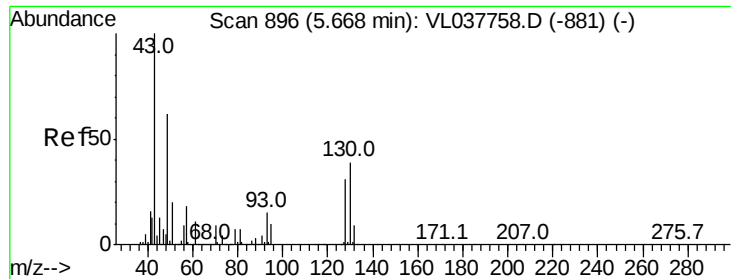
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ALS Vial : 1 Sample Multiplier: 1

VSTDICC0.1

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: VSTDIC0.1

Acq: 4 Oct 2021 15:20

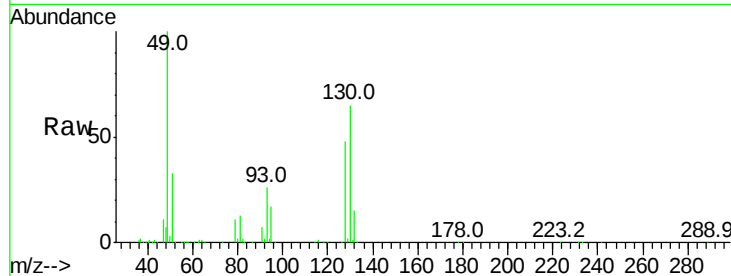
Tgt Ion: 49 Resp: 1422846

Ion Ratio Lower Upper

49 100

128 53.1 27.1 81.3

130 68.6 33.2 99.6



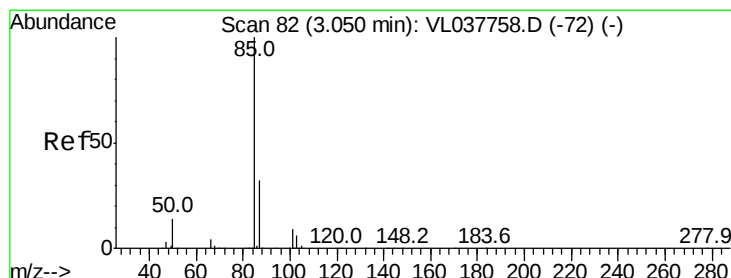
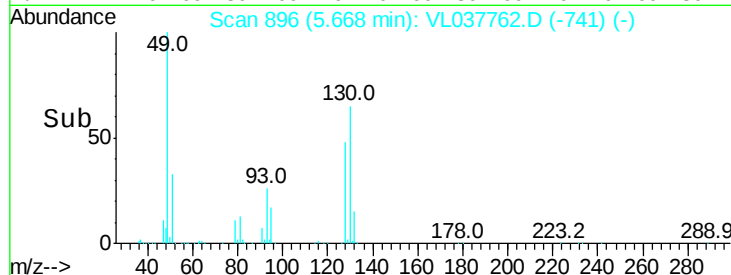
Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0

5.67

Time-->



#2

Dichlorodifluoromethane

Concen: 0.115 ppbv

RT: 3.05 min Scan# 82

Delta R.T. -0.00 min

Lab File: VL037762.D

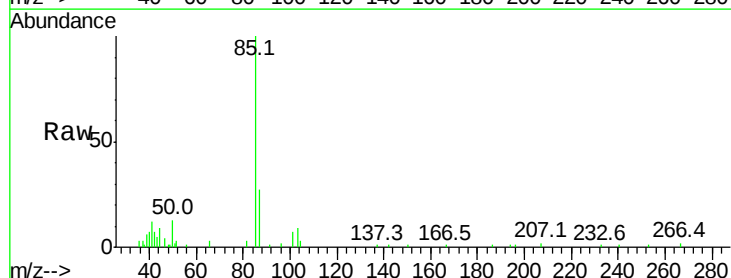
Acq: 4 Oct 2021 15:20

Tgt Ion: 85 Resp: 29546

Ion Ratio Lower Upper

85 100

87 27.0 25.7 38.5

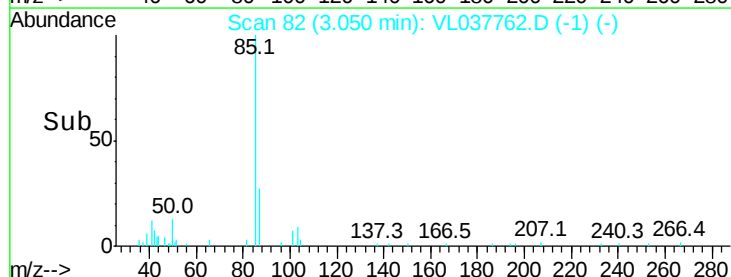


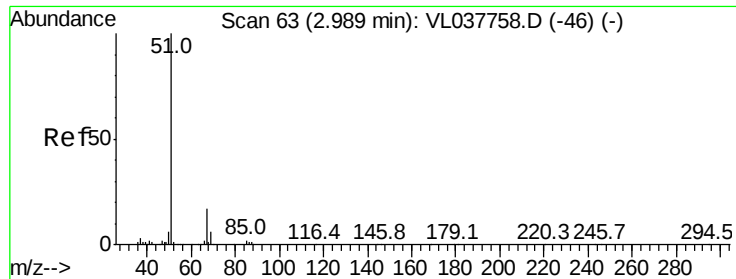
Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

3.05

Time-->





#3

Chlorodifluoromethane

Concen: 0.114 ppbv

RT: 2.99 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: VSTDIC001

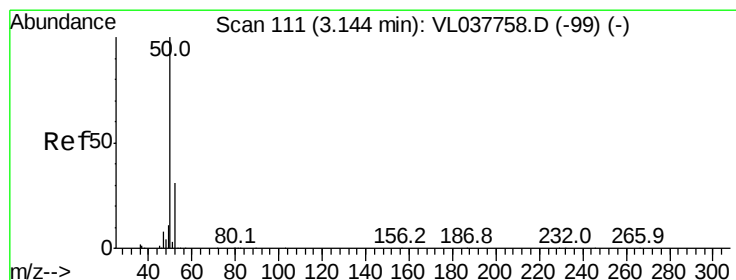
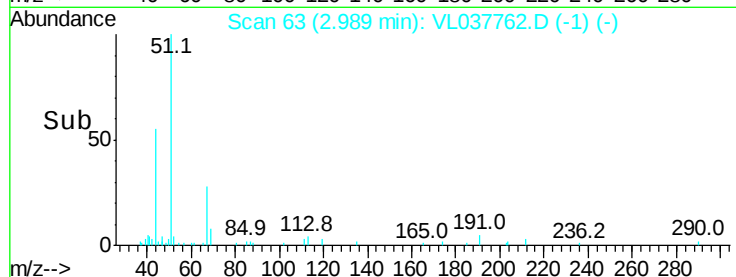
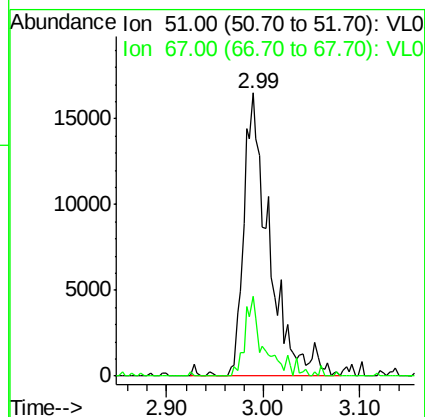
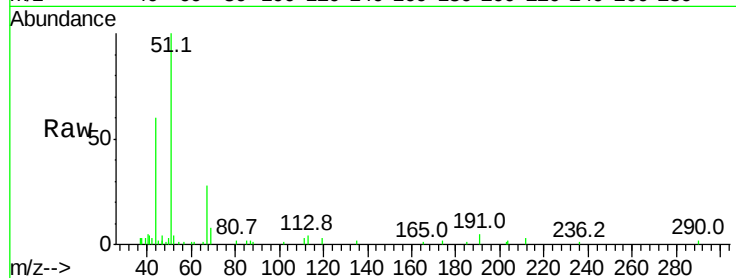
Acq: 4 Oct 2021 15:20

Tgt Ion: 51 Resp: 30489

Ion Ratio Lower Upper

51 100

67 19.7 13.5 20.3



#4

Chloromethane

Concen: 0.037 ppbv

RT: 3.14 min Scan# 111

Delta R.T. -0.00 min

Lab File: VL037762.D

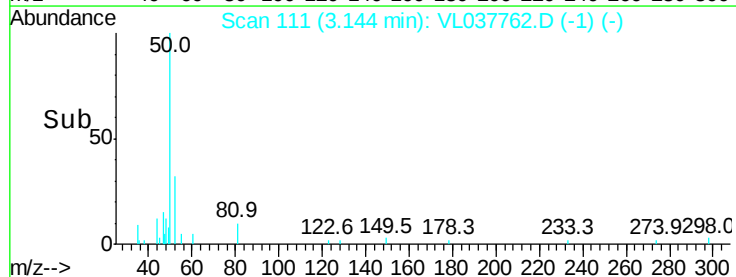
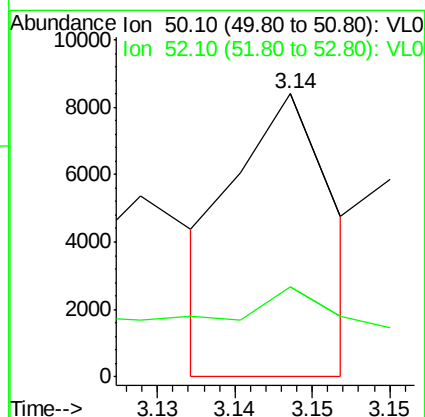
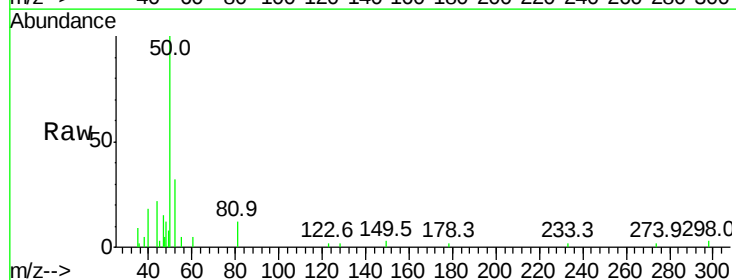
Acq: 4 Oct 2021 15:20

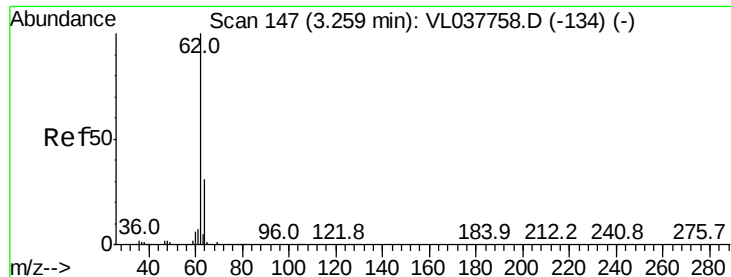
Tgt Ion: 50 Resp: 3697

Ion Ratio Lower Upper

50 100

52 21.8 24.4 36.6#





#5

Vinyl Chloride

Concen: 0.048 ppbv

RT: 3.26 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

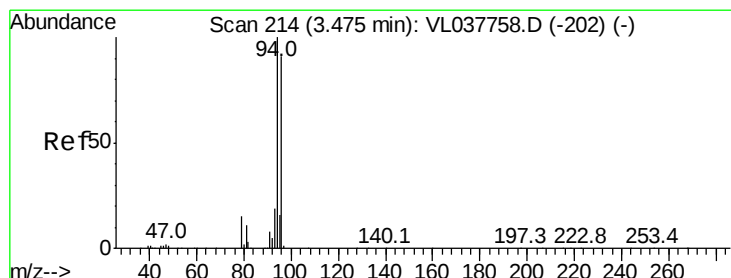
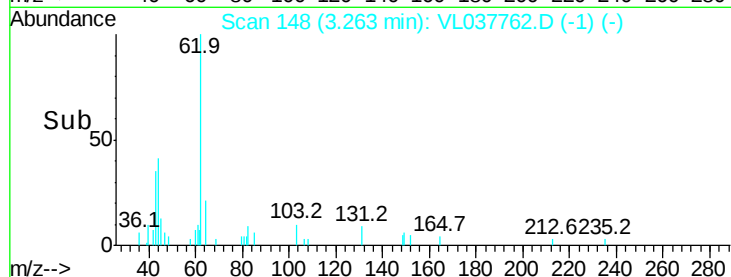
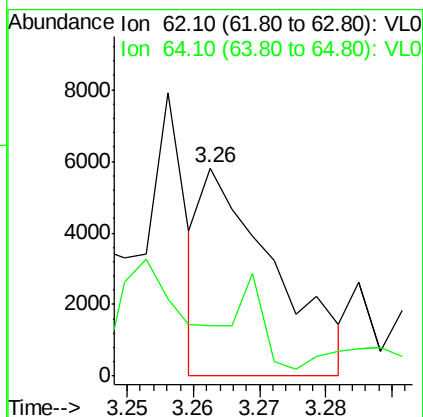
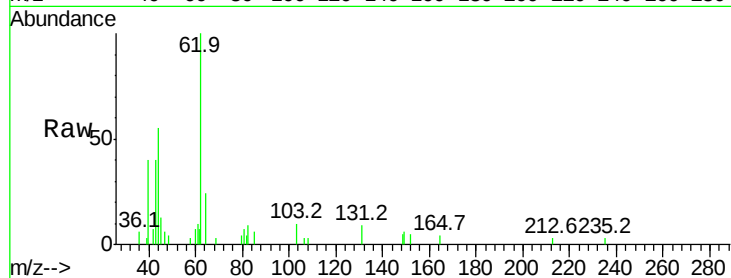
Acq: 4 Oct 2021 15:20 VSTDIC0.1

Tgt Ion: 62 Resp: 4435

Ion Ratio Lower Upper

62 100

64 15.6 24.9 37.3#



#6

Bromomethane

Concen: 0.079 ppbv

RT: 3.48 min Scan# 215

Delta R.T. 0.00 min

Lab File: VL037762.D

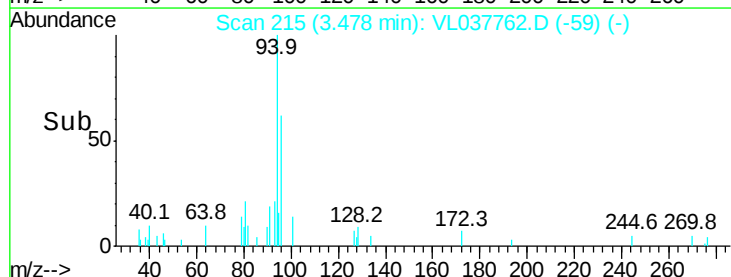
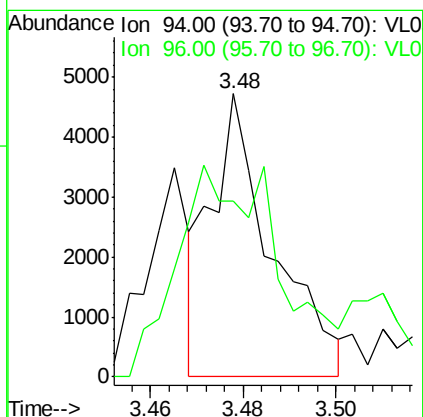
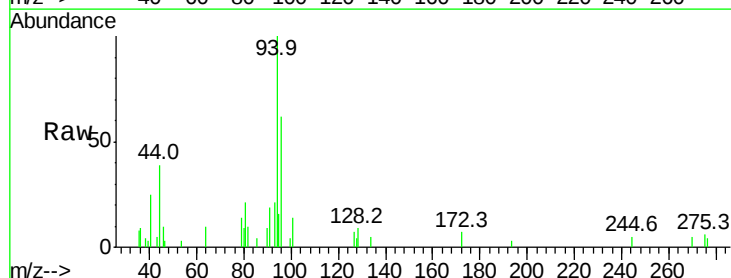
Acq: 4 Oct 2021 15:20

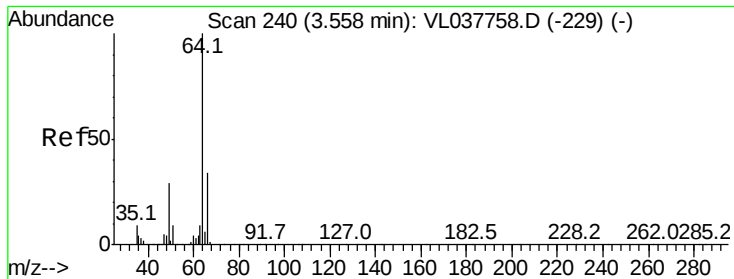
Tgt Ion: 94 Resp: 4281

Ion Ratio Lower Upper

94 100

96 44.1 72.5 108.7#





#7

Chloroethane

Concen: 0.054 ppbv

RT: 3.56 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: VSTDIC001

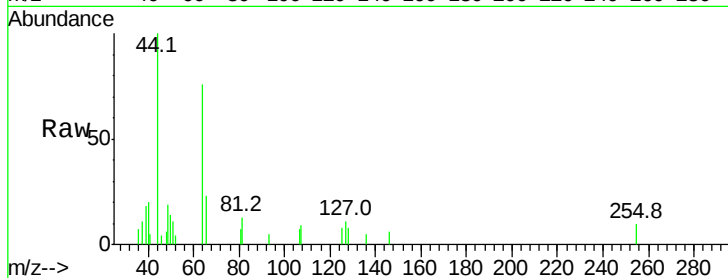
Acq: 4 Oct 2021 15:20

Tgt Ion: 64 Resp: 1875

Ion Ratio Lower Upper

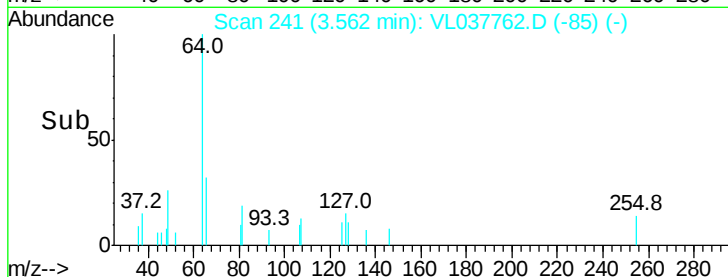
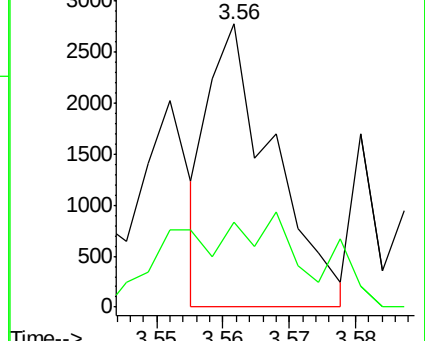
64 100

66 30.1 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: 0.119 ppbv

RT: 3.19 min Scan# 124

Delta R.T. -0.00 min

Lab File: VL037762.D

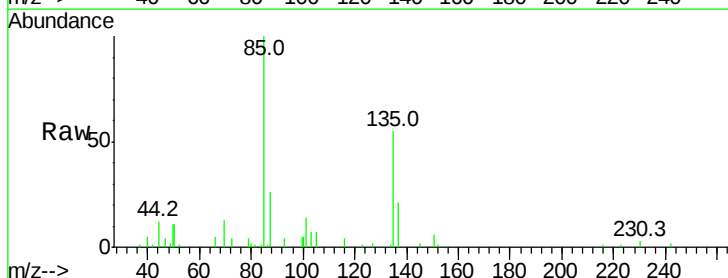
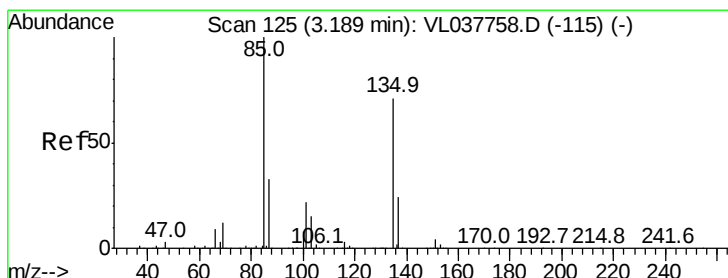
Acq: 4 Oct 2021 15:20

Tgt Ion: 85 Resp: 26492

Ion Ratio Lower Upper

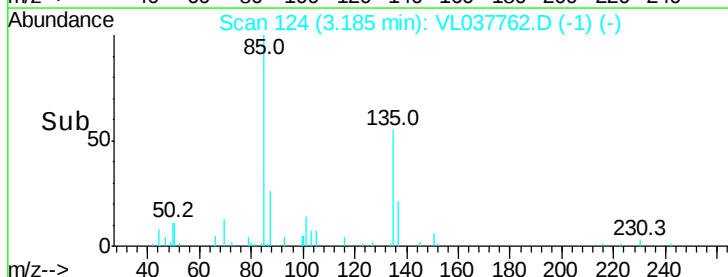
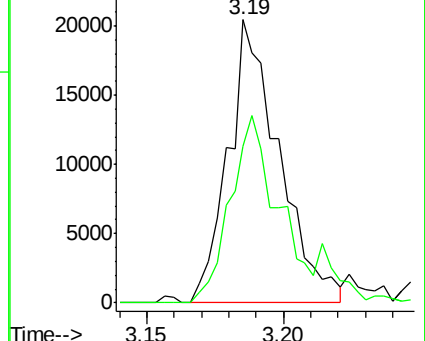
85 100

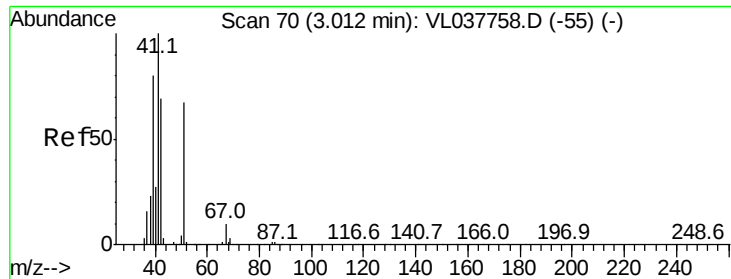
135 71.6 59.5 89.3



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V





#9

Propene

Concen: 0.101 ppbv

RT: 3.01 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

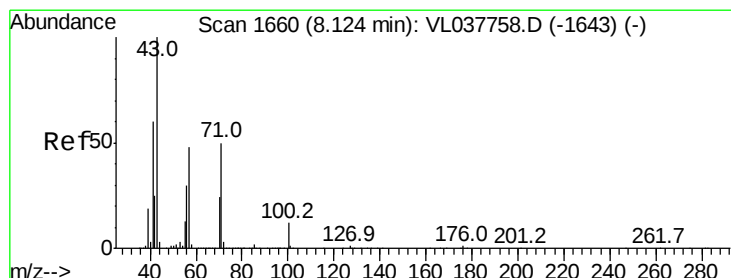
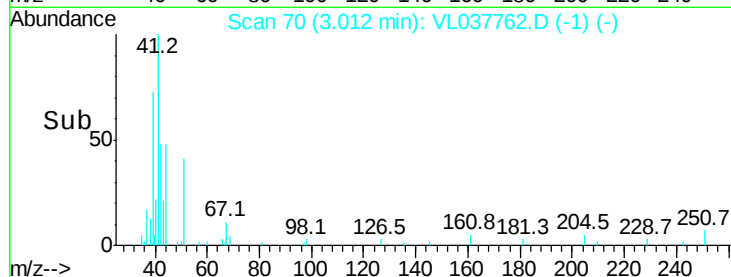
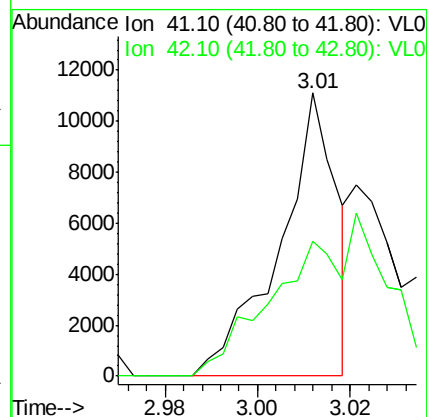
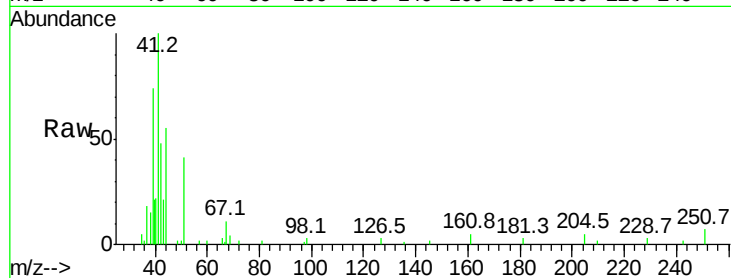
Acq: 4 Oct 2021 15:20 VSTDIC001

Tgt Ion: 41 Resp: 9548

Ion Ratio Lower Upper

41 100

42 0.0 54.2 81.2#



#10

Heptane

Concen: 0.034 ppbv

RT: 8.13 min Scan# 1661

Delta R.T. 0.00 min

Lab File: VL037762.D

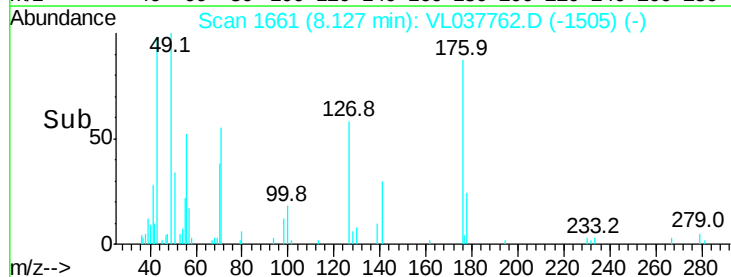
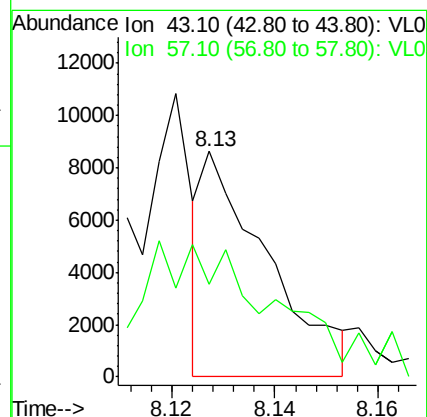
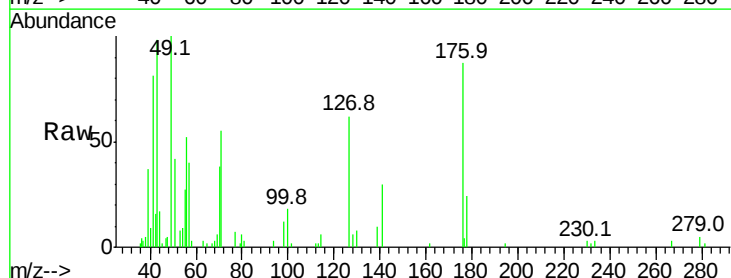
Acq: 4 Oct 2021 15:20

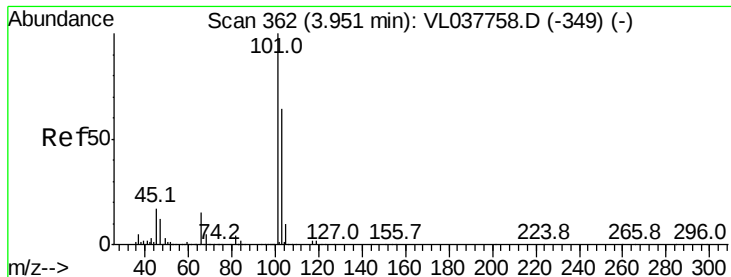
Tgt Ion: 43 Resp: 7545

Ion Ratio Lower Upper

43 100

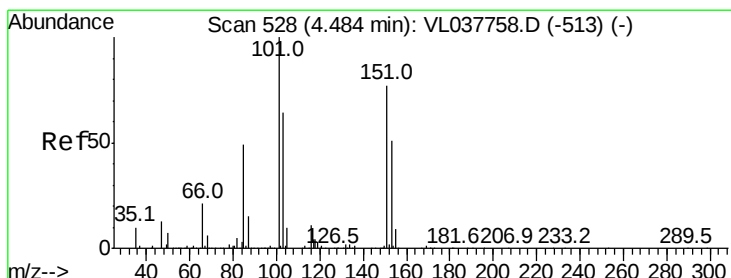
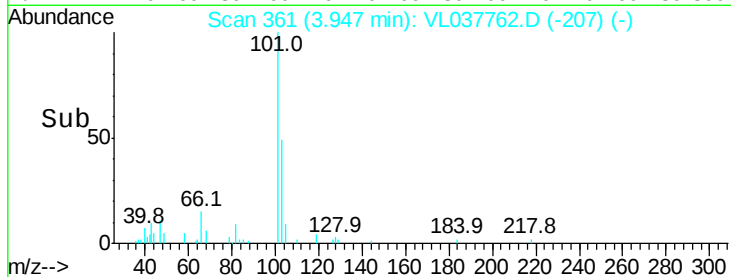
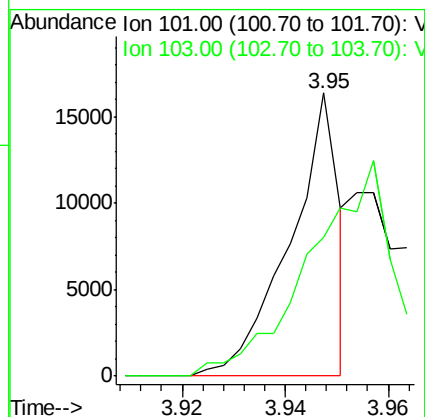
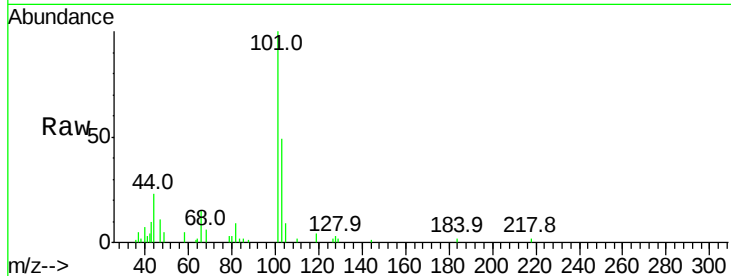
57 0.0 40.0 60.0#





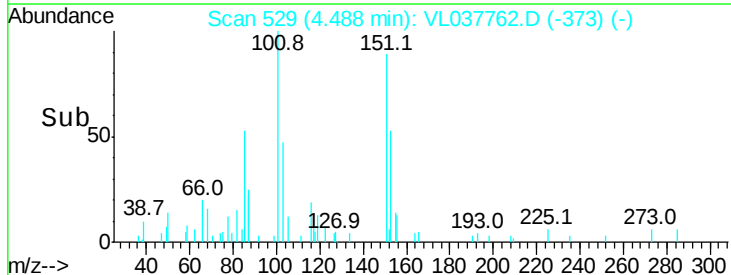
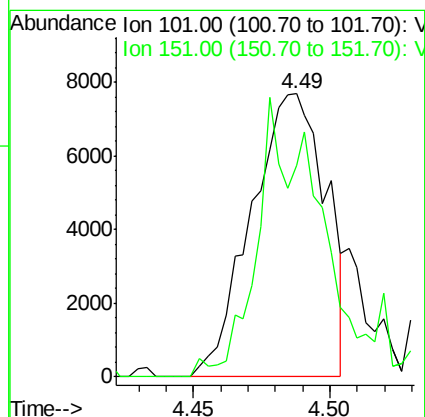
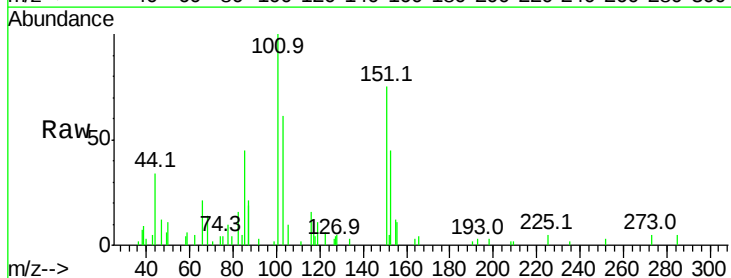
#11
 Trichlorofluoromethane
 Concen: 0.052 ppbv
 RT: 3.95
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 VSTDIC0.1
 Acq: 4 Oct 2021 15:20

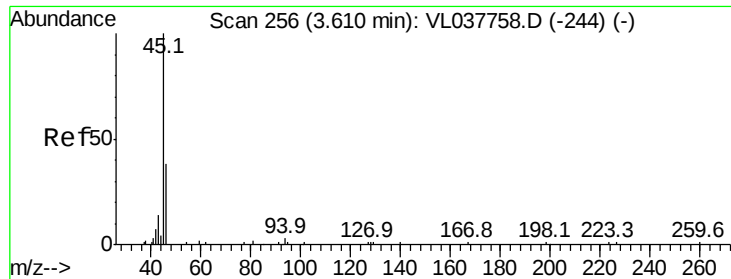
Tgt Ion:101 Resp: 10774
 Ion Ratio Lower Upper
 101 100
 103 48.9 51.5 77.3#



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.096 ppbv
 RT: 4.49 min Scan# 529
 Delta R.T. 0.00 min
 Lab File: VL037762.D
 Acq: 4 Oct 2021 15:20

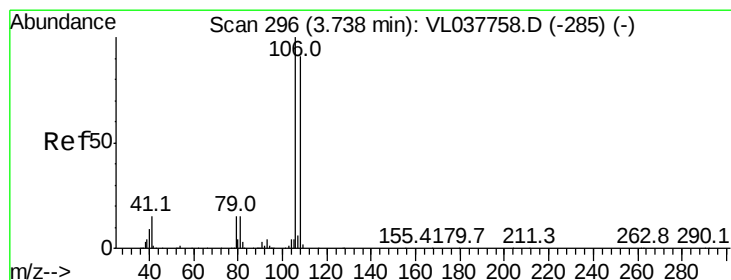
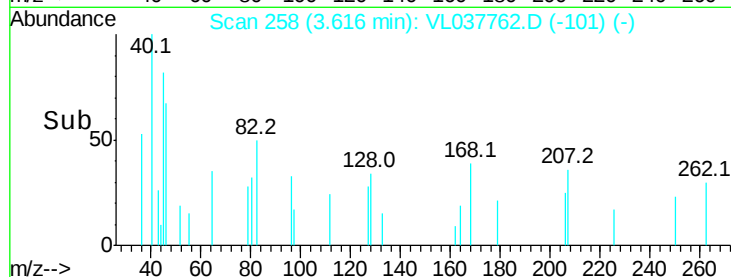
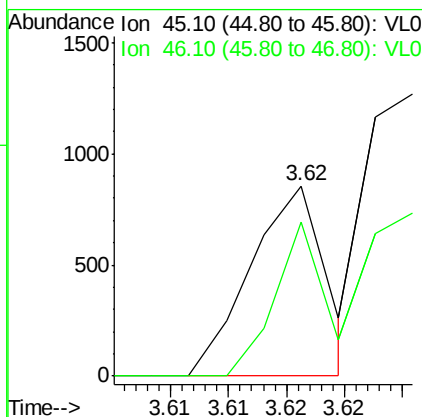
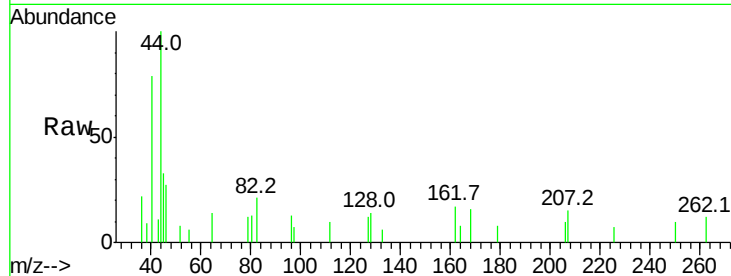
Tgt Ion:101 Resp: 14622
 Ion Ratio Lower Upper
 101 100
 151 86.5 62.9 94.3





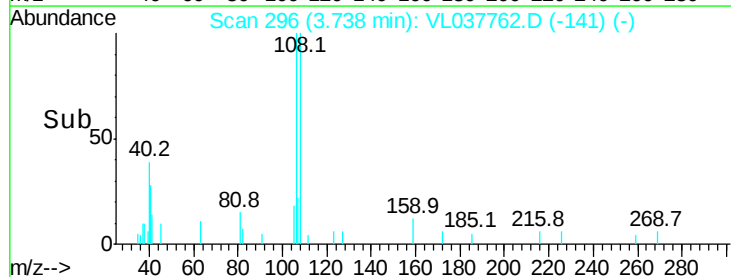
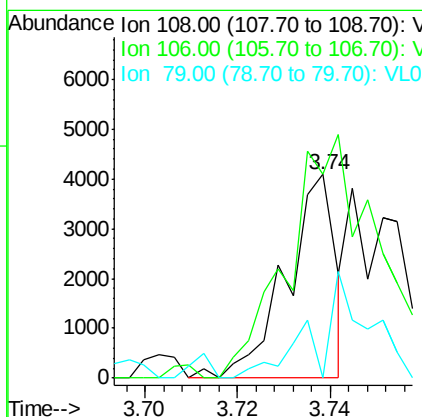
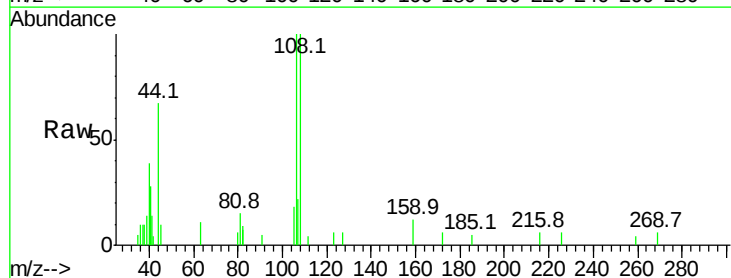
#13
Ethanol
Concen: 0.042 ppbv
RT: 3.62
Delta R.T. MSVOA_1
Lab File: ClientSampleId:
Acq: 4 Oct 2021 15:20

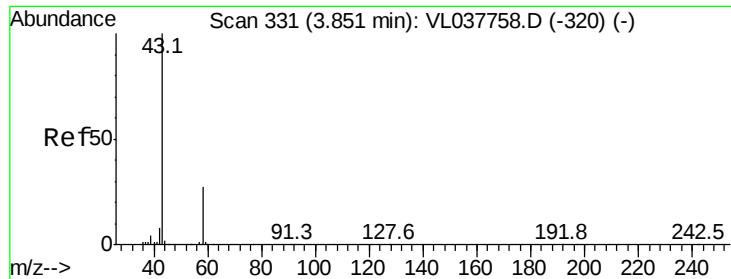
Tgt Ion: 45 Resp: 386
Ion Ratio Lower Upper
45 100
46 0.0 20.2 81.0#



#14
Bromoethene
Concen: 0.043 ppbv
RT: 3.74 min Scan# 296
Delta R.T. -0.00 min
Lab File: VL037762.D
Acq: 4 Oct 2021 15:20

Tgt Ion: 108 Resp: 2991
Ion Ratio Lower Upper
108 100
106 0.0 91.9 137.9#
79 0.0 13.9 20.9#





#15

Acetone

Concen: 0.064 ppbv

RT: 3.87 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

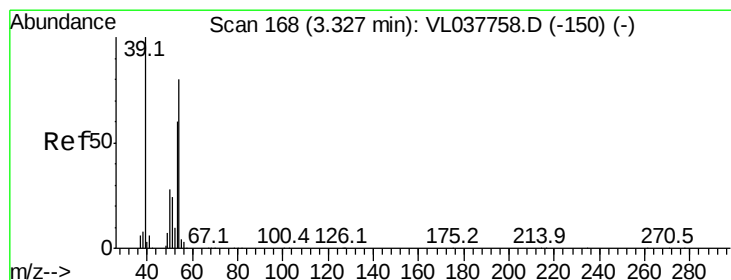
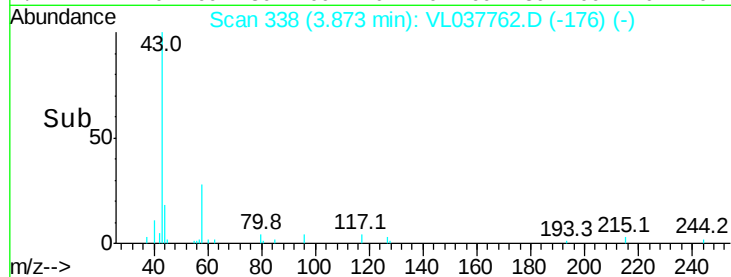
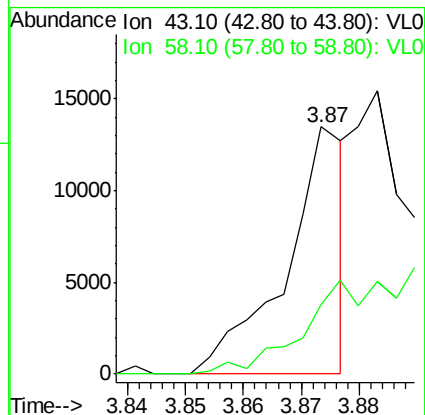
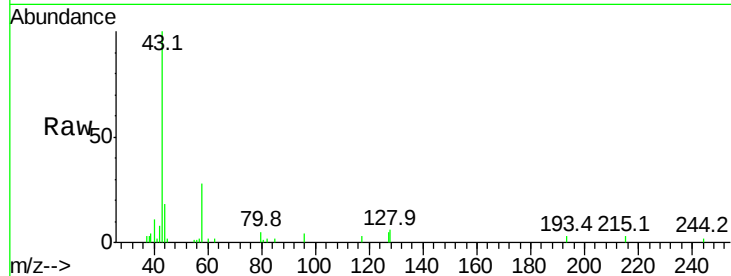
Acq: 4 Oct 2021 15:20 VSTDIC0.1

Tgt Ion: 43 Resp: 9532

Ion Ratio Lower Upper

43 100

58 0.0 23.0 34.6#



#16

1,3-Butadiene

Concen: 0.073 ppbv

RT: 3.33 min Scan# 169

Delta R.T. 0.00 min

Lab File: VL037762.D

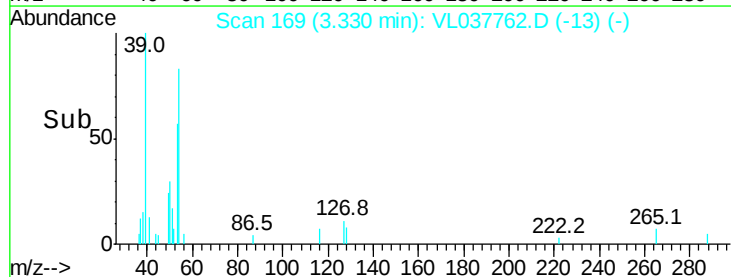
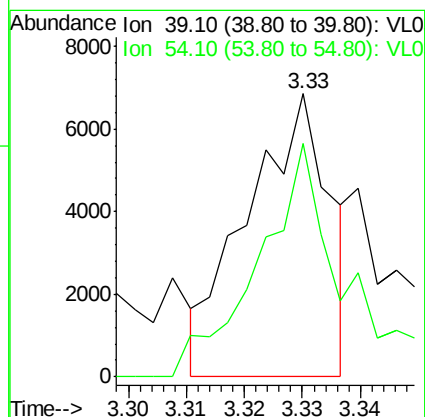
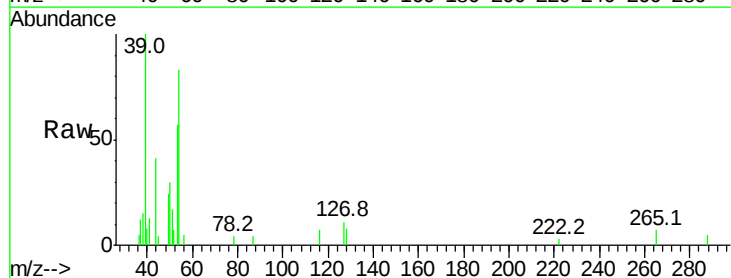
Acq: 4 Oct 2021 15:20

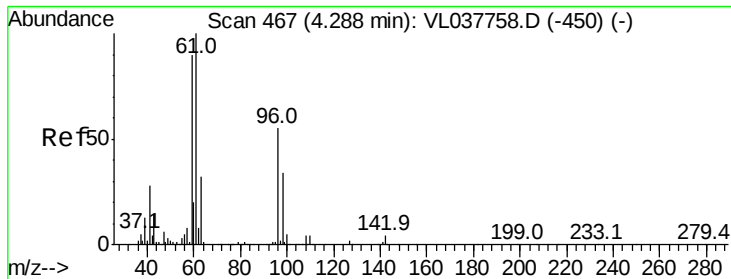
Tgt Ion: 39 Resp: 6762

Ion Ratio Lower Upper

39 100

54 107.9 61.7 92.5#





#18

1,1-Dichloroethene

Concen: 0.035 ppbv

RT: 4.29

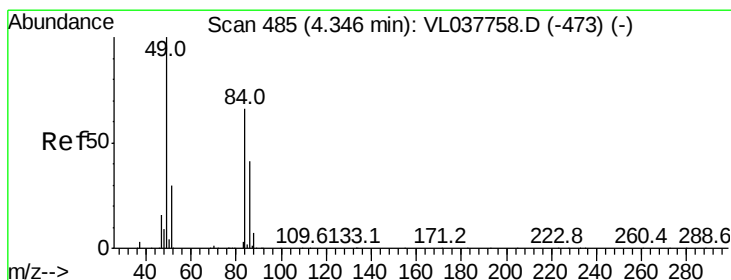
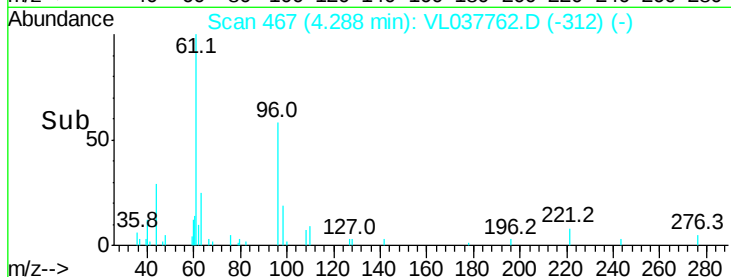
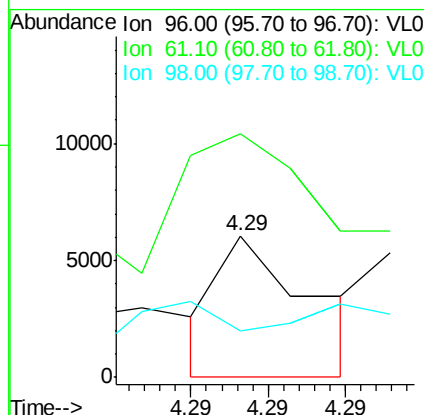
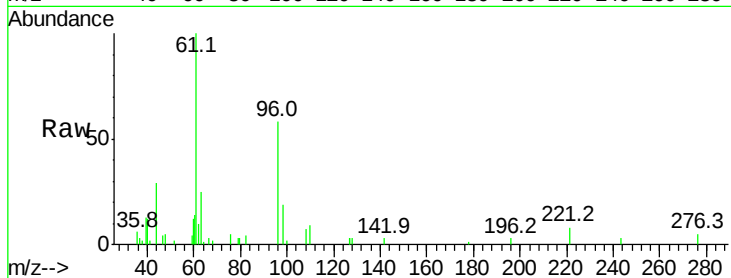
Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 4 Oct 2021 15:20

Tgt Ion: 96 Resp: 2503

Ion	Ratio	Lower	Upper
96	100		
61	120.5	146.2	219.4#
98	0.0	50.0	75.0#



#20

Methylene Chloride

Concen: 0.058 ppbv

RT: 4.35 min Scan# 486

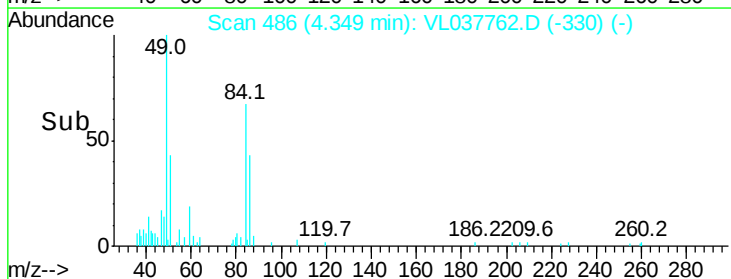
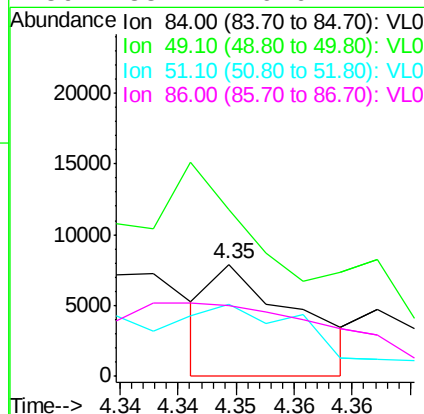
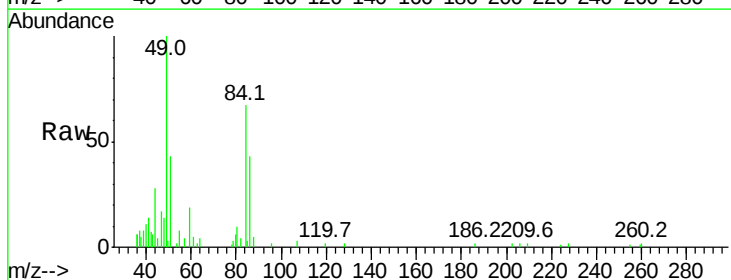
Delta R.T. 0.00 min

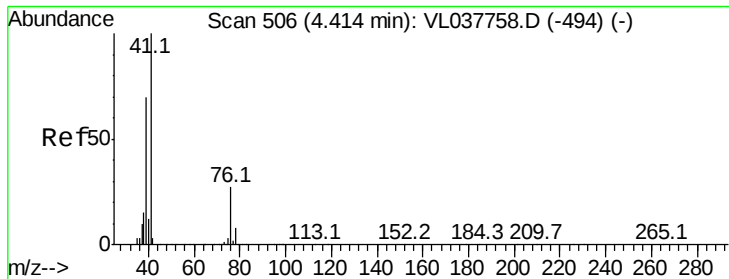
Lab File: VL037762.D

Acq: 4 Oct 2021 15:20

Tgt Ion: 84 Resp: 4085

Ion	Ratio	Lower	Upper
84	100		
49	100.5	120.7	181.1#
51	86.1	36.2	54.4#
86	38.1	49.6	74.4#





#21

Allyl Chloride

Concen: 0.047 ppbv

RT: 4.42 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 4 Oct 2021 15:20 VSTDIC0.1

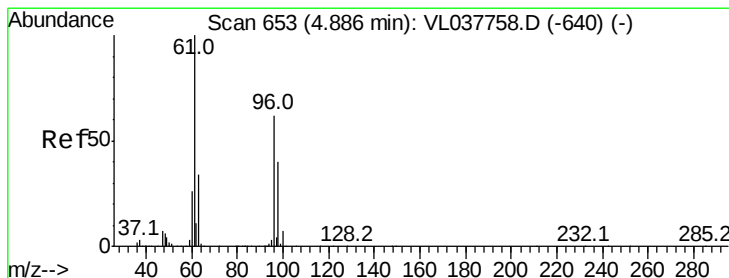
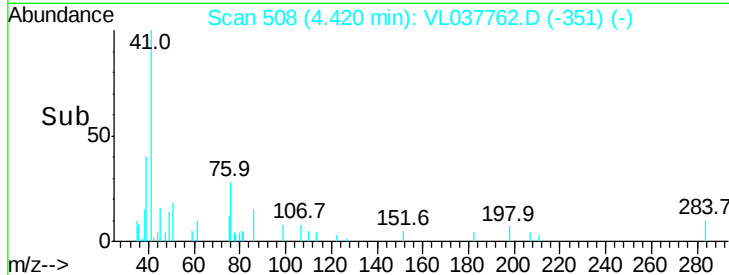
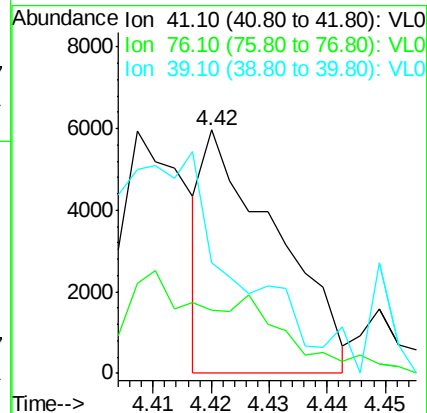
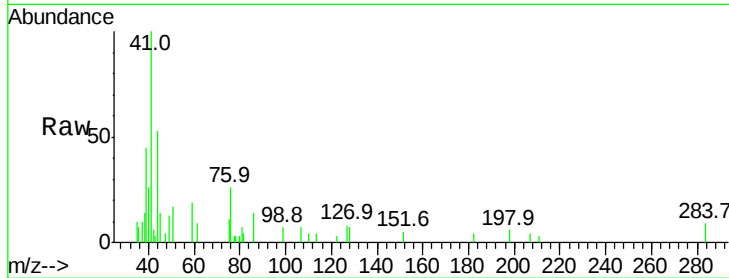
Tgt Ion: 41 Resp: 5200

Ion Ratio Lower Upper

41 100

76 0.0 22.4 33.6#

39 222.6 58.0 87.0#



#22

trans-1,2-Dichloroethene

Concen: 0.036 ppbv

RT: 4.89 min Scan# 654

Delta R.T. 0.00 min

Lab File: VL037762.D

Acq: 4 Oct 2021 15:20

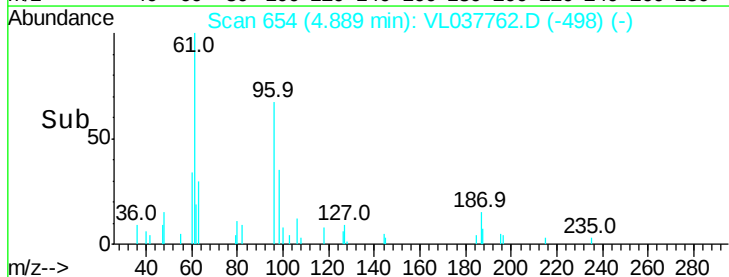
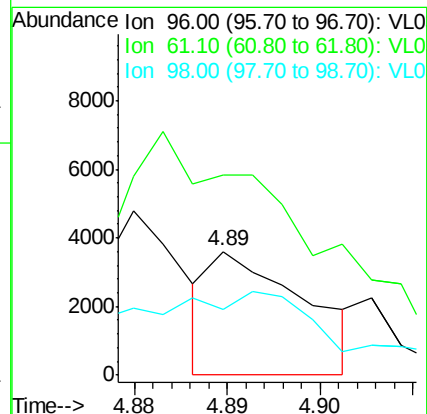
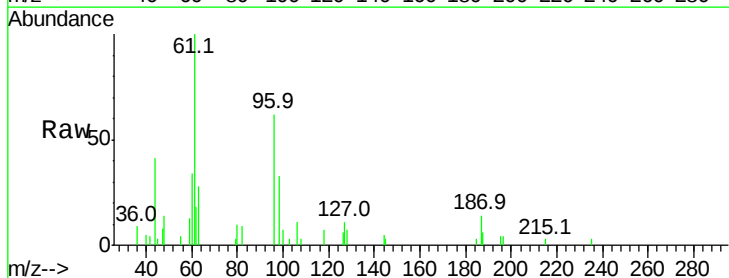
Tgt Ion: 96 Resp: 2540

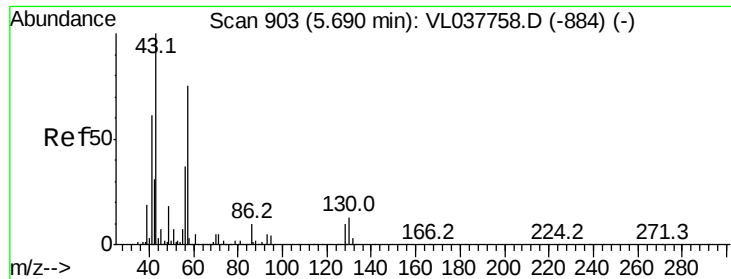
Ion Ratio Lower Upper

96 100

61 119.3 129.0 193.6#

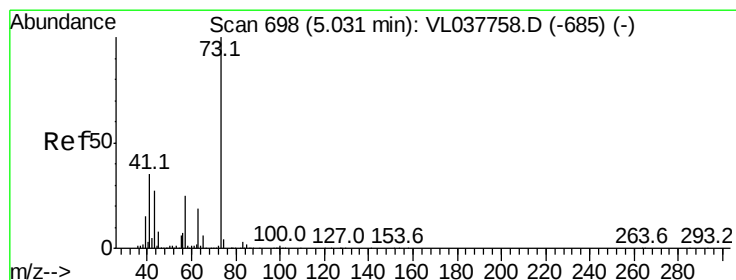
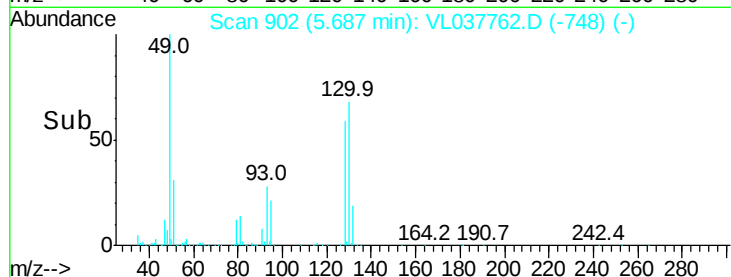
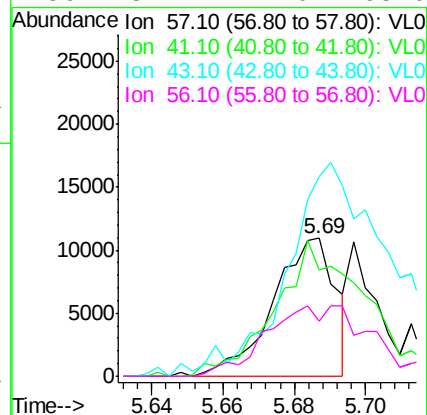
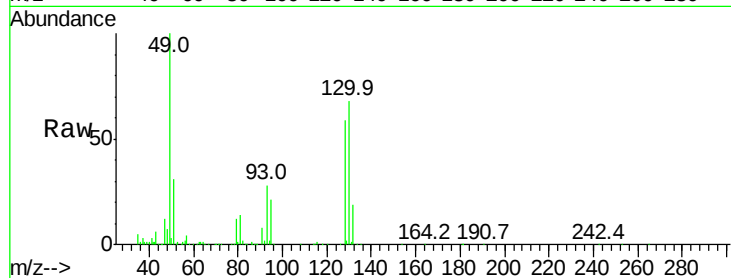
98 71.8 51.7 77.5





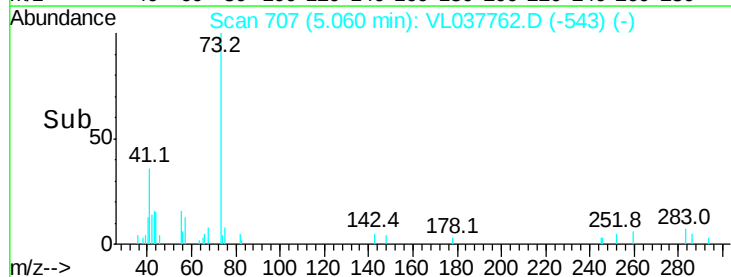
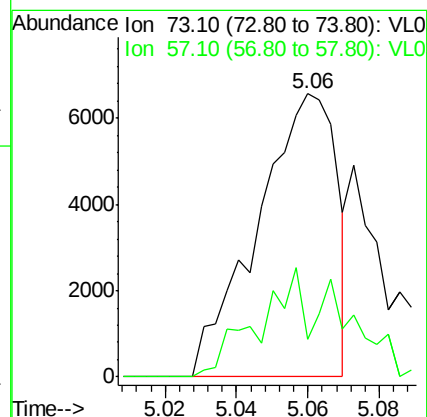
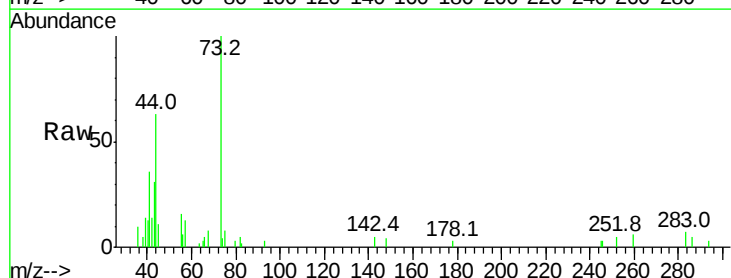
#26
Hexane
Concen: 0.078 ppbv
RT: 5.69
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 4 Oct 2021 15:20

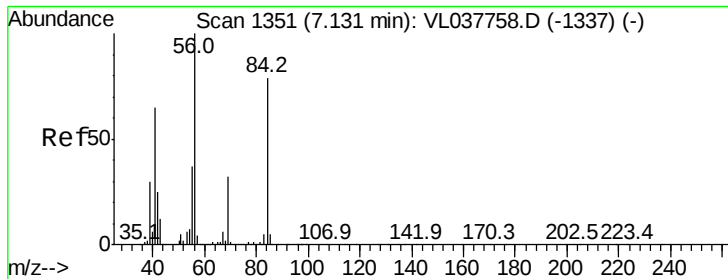
Tgt Ion: 57 Resp: 13248
Ion Ratio Lower Upper
57 100
41 163.5 69.6 104.4#
43 287.9 171.4 257.0#
56 87.4 42.0 63.0#



#28
Methyl tert-Butyl Ether
Concen: 0.067 ppbv
RT: 5.06 min Scan# 707
Delta R.T. 0.03 min
Lab File: VL037762.D
Acq: 4 Oct 2021 15:20

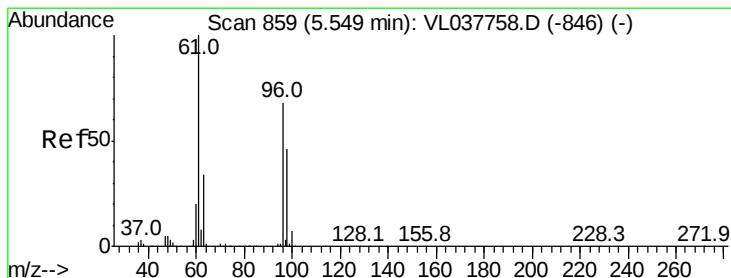
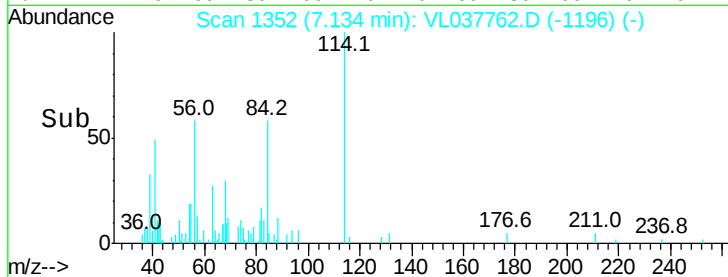
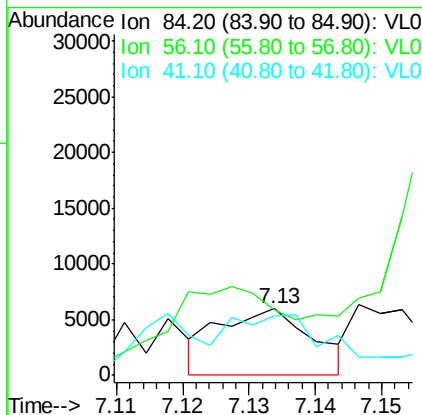
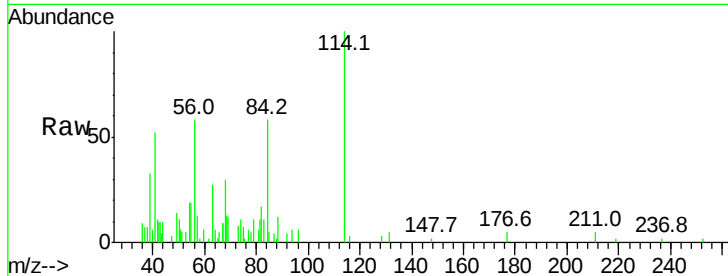
Tgt Ion: 73 Resp: 10094
Ion Ratio Lower Upper
73 100
57 40.7 20.4 30.6#





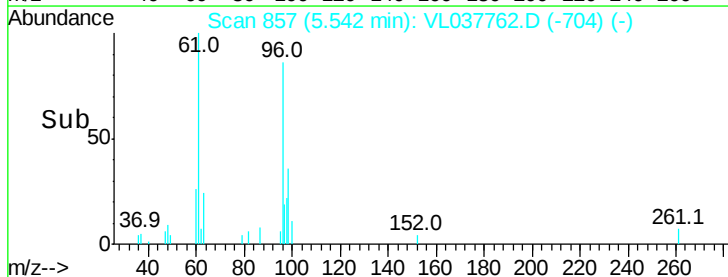
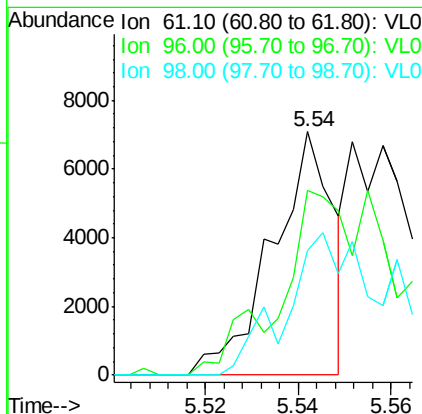
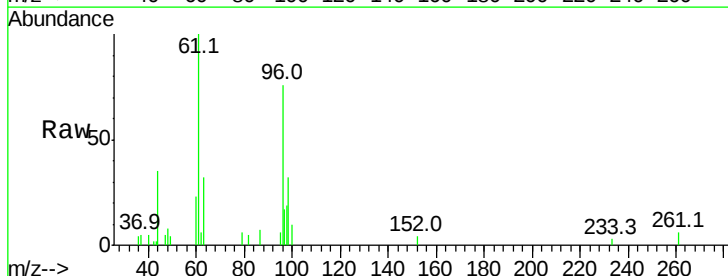
#30
Cyclohexane
Concen: 0.040 ppbv
RT: 7.13
Delta R.T. MSVOA_1
Lab File: ClientSampleId :
Acq: 4 Oct 2021 15:20

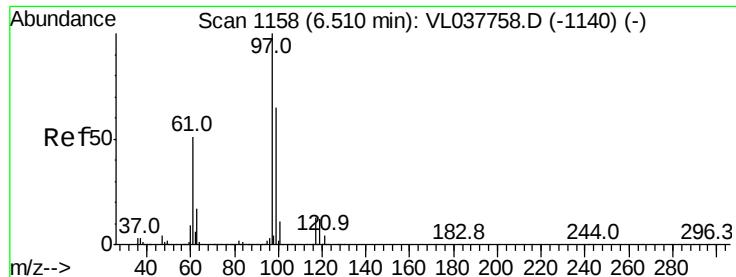
Tgt Ion: 84 Resp: 5869
Ion Ratio Lower Upper
84 100
56 0.0 113.0 169.4#
41 0.0 69.1 103.7#



#31
cis-1,2-Dichloroethene
Concen: 0.042 ppbv
RT: 5.54 min Scan# 857
Delta R.T. -0.01 min
Lab File: VL037762.D
Acq: 4 Oct 2021 15:20

Tgt Ion: 61 Resp: 6444
Ion Ratio Lower Upper
61 100
96 75.7 54.2 81.2
98 51.4 36.6 54.8





#32

1,1,1-Trichloroethane

Concen: 0.065 ppbv

RT: 6.51 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: VSTDIC0.1

Acq: 4 Oct 2021 15:20

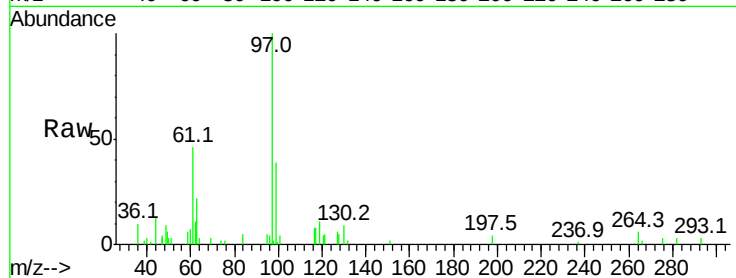
Tgt Ion: 97 Resp: 14926

Ion Ratio Lower Upper

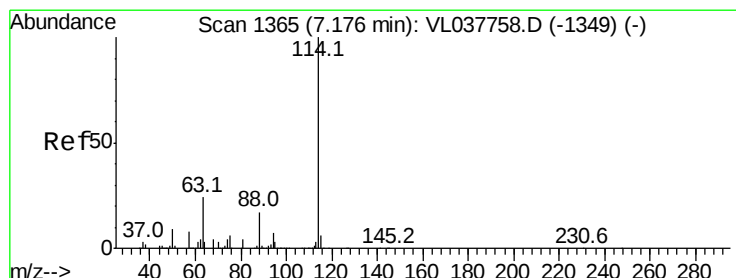
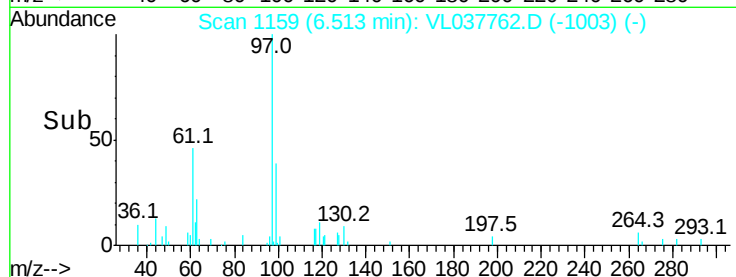
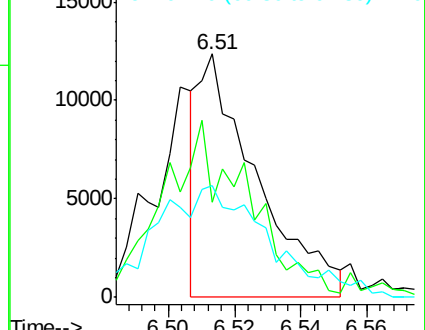
97 100

99 115.0 52.6 78.8#

61 92.5 40.2 60.4#



Abundance Ion 97.00 (96.70 to 97.70): VL0
Ion 99.00 (98.70 to 99.70): VL0
Ion 61.10 (60.80 to 61.80): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.17 min Scan# 1364

Delta R.T. -0.00 min

Lab File: VL037762.D

Acq: 4 Oct 2021 15:20

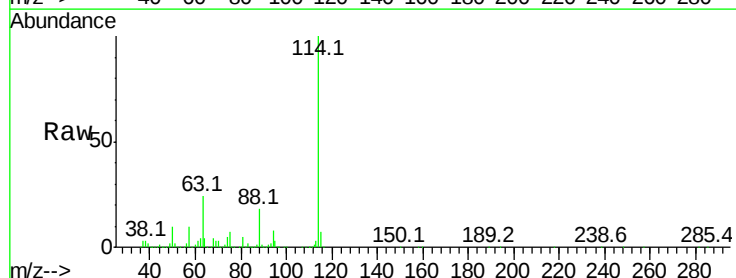
Tgt Ion: 114 Resp: 4122795

Ion Ratio Lower Upper

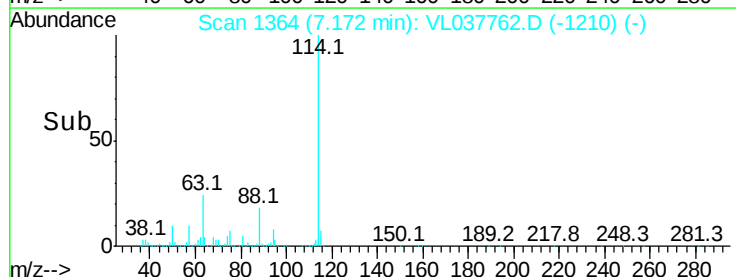
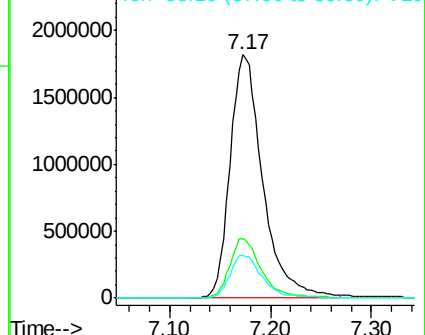
114 100

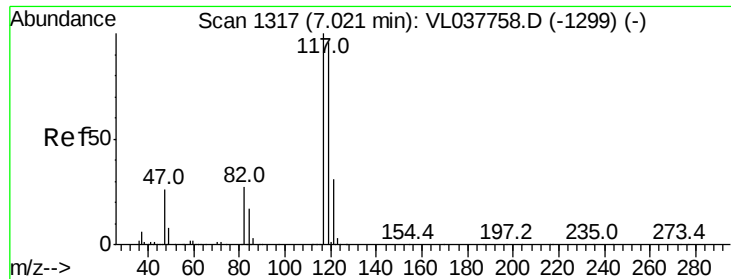
63 24.1 19.4 29.2

88 17.8 14.4 21.6



Abundance Ion 114.10 (113.80 to 114.80): V
Ion 63.10 (62.80 to 63.80): VL0
Ion 88.10 (87.80 to 88.80): VL0





#35

Carbon Tetrachloride

Concen: 0.057 ppbv

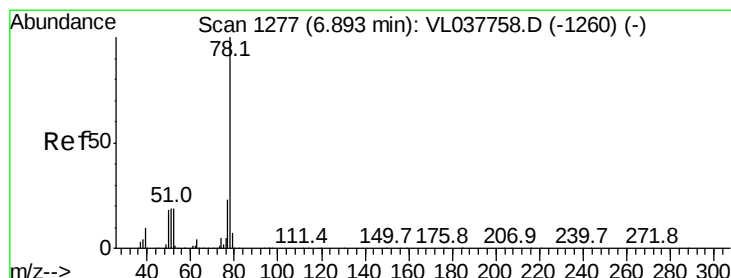
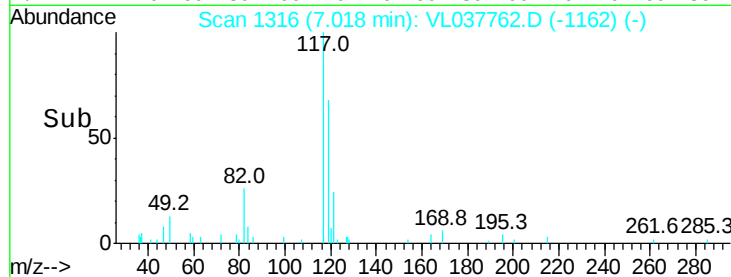
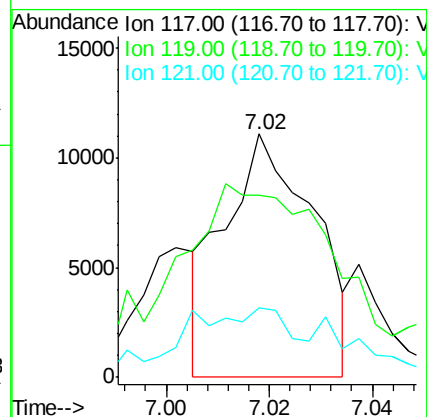
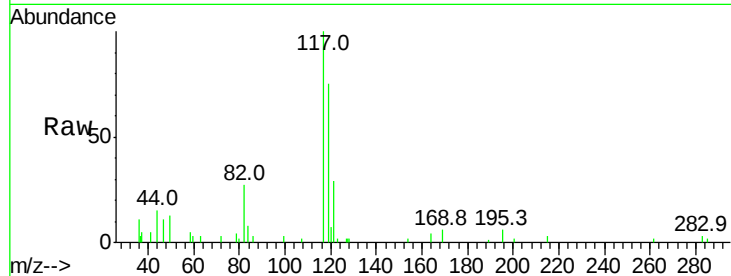
RT: 7.02 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: VSTDIC0.1

Acq: 4 Oct 2021 15:20

Tgt Ion:	117	Resp:	13342
Ion Ratio	Lower	Upper	
117	100		
119	52.0	76.5	114.7#
121	26.1	24.9	37.3



#36

Benzene

Concen: 0.084 ppbv

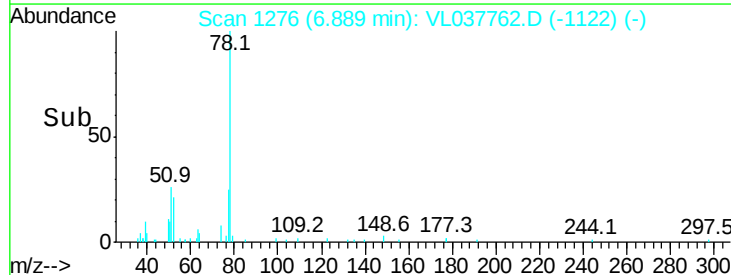
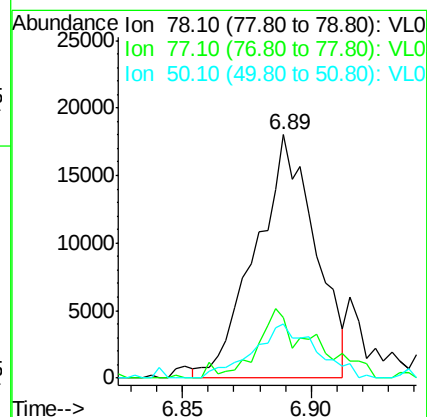
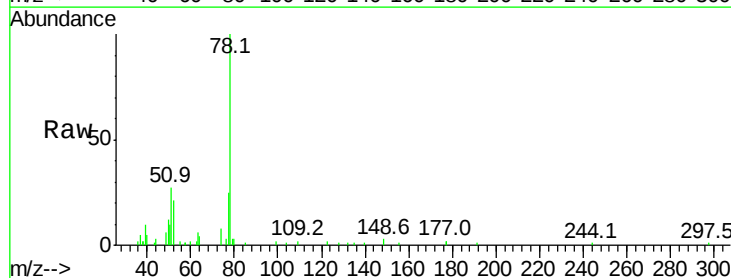
RT: 6.89 min Scan# 1276

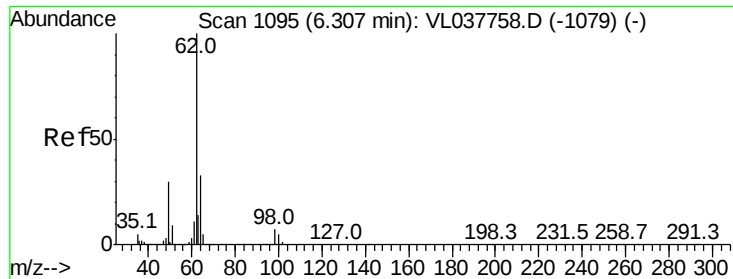
Delta R.T. -0.00 min

Lab File: VL037762.D

Acq: 4 Oct 2021 15:20

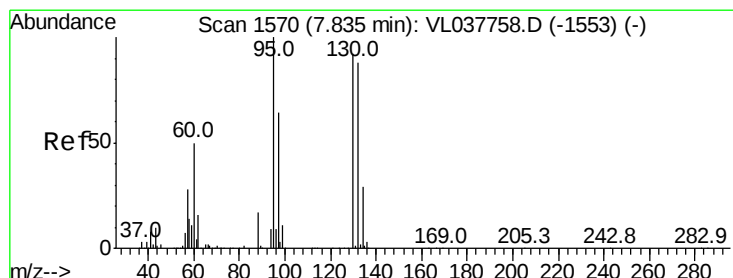
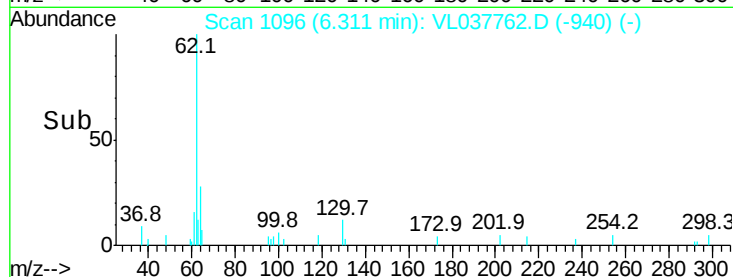
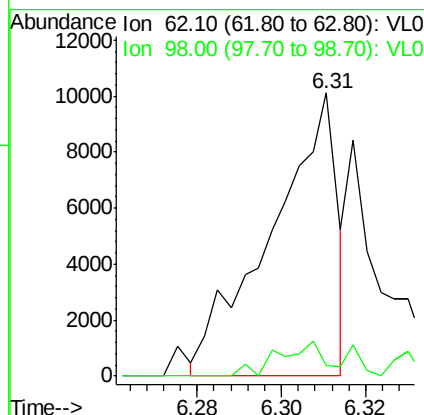
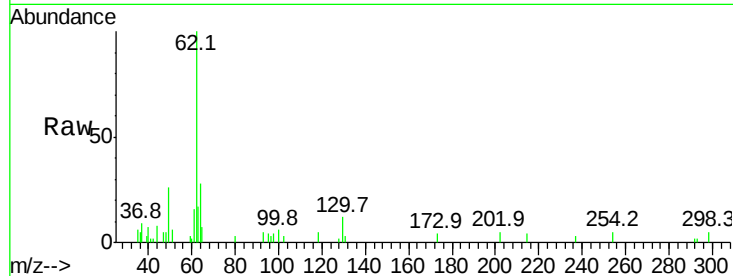
Tgt Ion:	78	Resp:	28900
Ion Ratio	Lower	Upper	
78	100		
77	26.0	18.8	28.2
50	23.3	14.7	22.1#





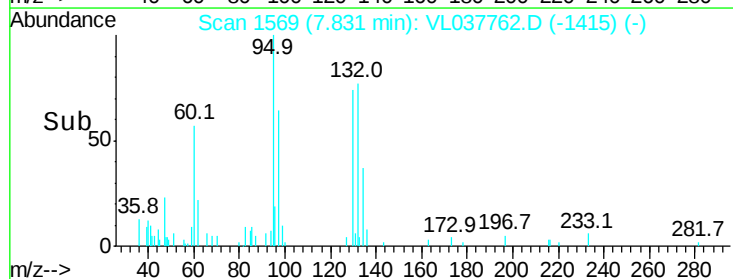
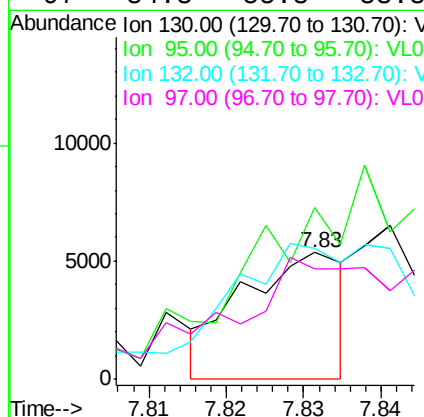
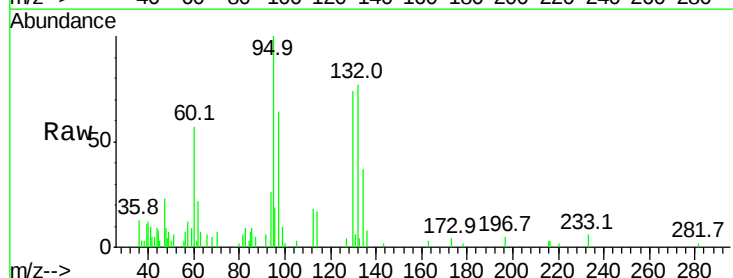
#37
 1,2-Dichloroethane
 Concen: 0.065 ppbv
 RT: 6.31
 Delta R.T. MSVOA_1
 Lab File: ClientSampleId:
 VSTDIC0.1
 Acq: 4 Oct 2021 15:20

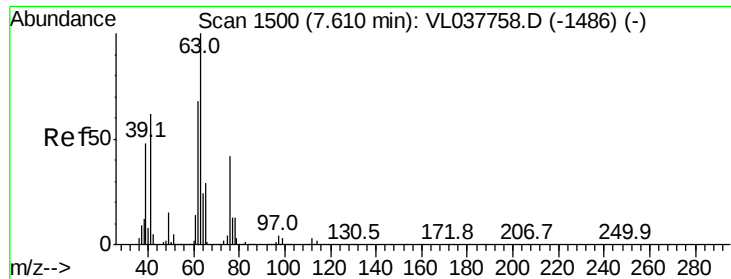
Tgt Ion: 62 Resp: 10944
 Ion Ratio Lower Upper
 62 100
 98 14.0 6.1 9.1#



#38
 Trichloroethene
 Concen: 0.034 ppbv
 RT: 7.83 min Scan# 1569
 Delta R.T. -0.00 min
 Lab File: VL037762.D
 Acq: 4 Oct 2021 15:20

Tgt Ion: 130 Resp: 4880
 Ion Ratio Lower Upper
 130 100
 95 190.4 87.4 131.0#
 132 121.8 76.8 115.2#
 97 84.3 55.8 83.8#





#39

1,2-Dichloropropane

Concen: 7.349 ppbv

RT: 7.17

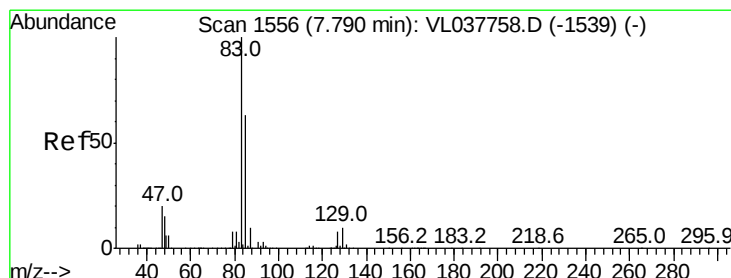
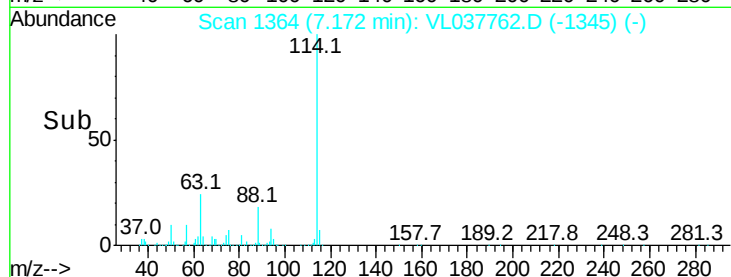
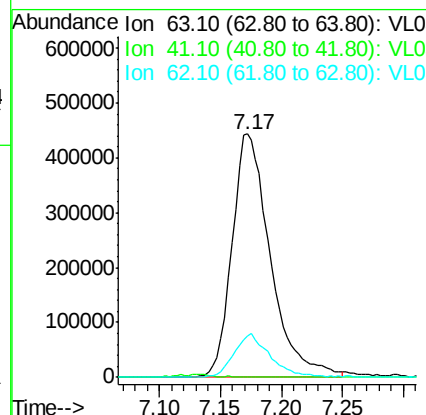
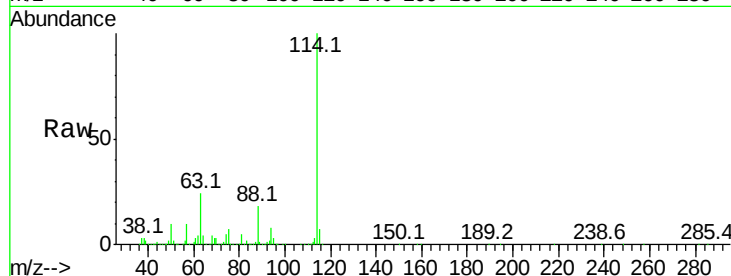
Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 4 Oct 2021 15:20

Tgt Ion: 63 Resp: 967683

Ion	Ratio	Lower	Upper
63	100		
41	0.3	49.8	74.6#
62	16.8	54.6	82.0#



#42

Bromodichloromethane

Concen: 0.069 ppbv

RT: 7.79 min Scan# 1556

Delta R.T. -0.00 min

Lab File: VL037762.D

Acq: 4 Oct 2021 15:20

Tgt Ion: 83 Resp: 16732

Ion	Ratio	Lower	Upper
83	100		
85	68.3	50.6	75.8
127	4.3	6.2	9.4#

