

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL071222\
 Data File : VL039446.D
 Acq On : 12 Jul 2022 13:11
 Operator : SY/AP
 Sample : N3614-01DUP
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-9DDUP

Quant Time: Jul 13 01:31:27 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL062922AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Jul 06 02:15:38 2022
 QLast Update : Wed Jul 06 02:15:38 2022
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.68	49	1234337	10.00	ppbv	0.03
33) 1,4-Difluorobenzene	7.19	114	3430956	10.00	ppbv	0.04
55) Chlorobenzene-d5	12.10	117	3125150	10.00	ppbv	0.04

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.43	95	2459193	10.61	ppbv	0.04
Spiked Amount	10.000	Range	65 - 135	Recovery	=	106.10%

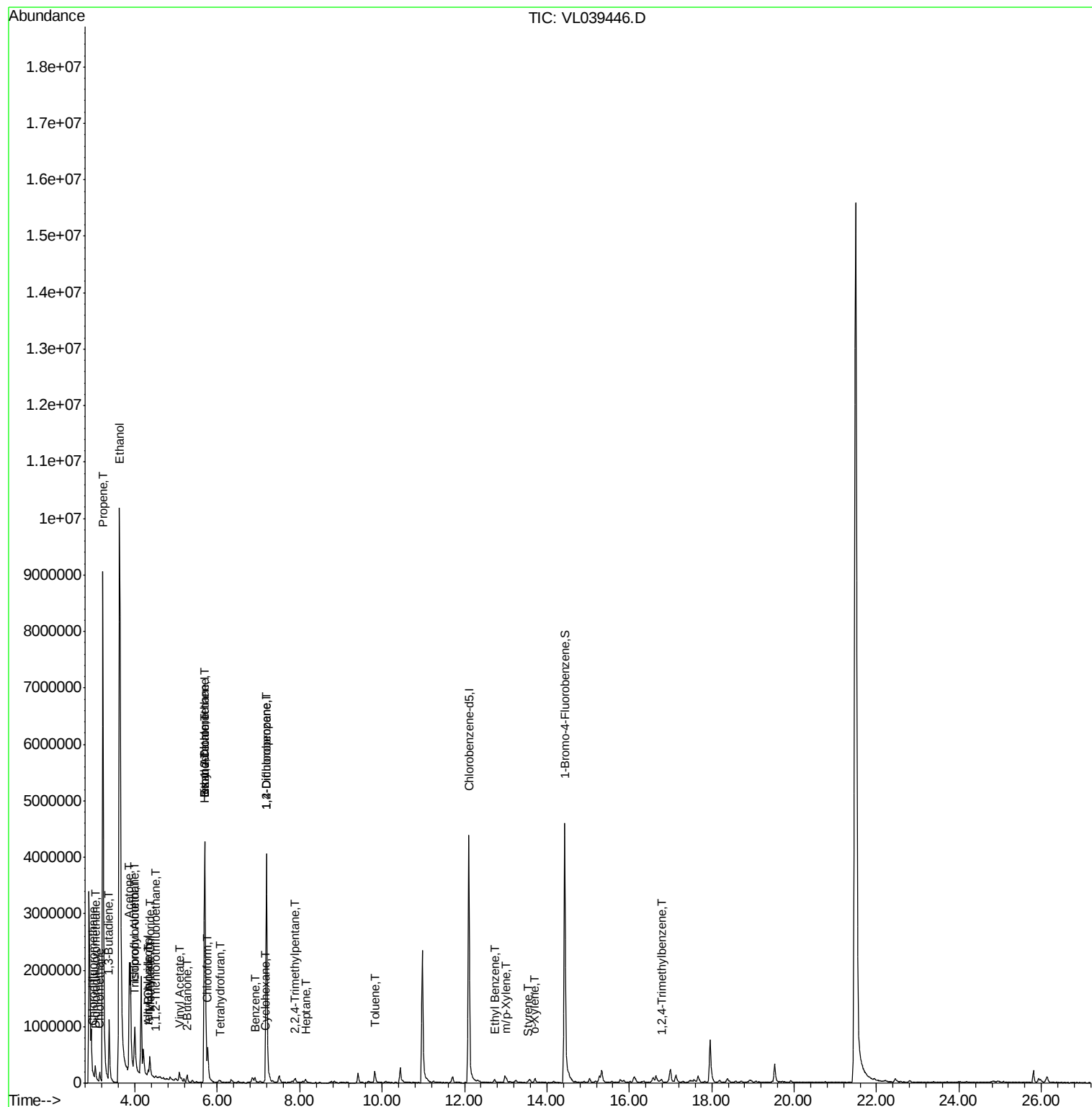
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.06	85	35252	0.20	ppbv	98
3) Chlorodifluoromethane	2.98	51	157335	1.00	ppbv #	71
4) Chloromethane	3.15	50	49382	0.58	ppbv	99
9) Propene	3.22	41	3629995	51.33	ppbv	96
10) Heptane	8.15	43	24229	0.15	ppbv	86
11) Trichlorofluoromethane	3.97	101	44072	0.22	ppbv	94
12) 1,1,2-Trichlorotrifluoroet	4.50	101	5701	0.04	ppbv #	13
13) Ethanol	3.63	45	17454619	4254.05	ppbv	81
15) Acetone	3.86	43	3016437	20.66	ppbv	94
16) 1,3-Butadiene	3.38	39	162253	2.14	ppbv #	18
17) tert-Butyl alcohol	4.32	59	66110	0.53	ppbv #	71
19) Isopropyl Alcohol	4.00	45	1118053	14.35	ppbv #	95
20) Methylene Chloride	4.36	84	136895	2.35	ppbv	95
21) Allyl Chloride	4.33	41	6230	0.06	ppbv #	22
23) Vinyl Acetate	5.08	43	111834	1.15	ppbv #	72
25) Ethyl Acetate	5.69	43	2340897	7.82	ppbv	98
26) Hexane	5.70	57	780567	6.47	ppbv #	72
29) Chloroform	5.77	83	365960	1.74	ppbv	92
30) Cyclohexane	7.15	84	3841	0.03	ppbv #	1
31) cis-1,2-Dichloroethene	5.69	61	228094	1.78	ppbv #	23
34) 2-Butanone	5.26	43	155262	0.90	ppbv #	90
36) Benzene	6.91	78	65119	0.25	ppbv	98
39) 1,2-Dichloropropane	7.19	63	830888	8.38	ppbv #	25
41) Tetrahydrofuran	6.08	42	5057	0.05	ppbv #	1
44) 2,2,4-Trimethylpentane	7.89	57	64599	0.14	ppbv #	80
53) Toluene	9.82	91	154767	0.51	ppbv	99
58) Ethyl Benzene	12.73	91	43489	0.11	ppbv	94
59) m/p-Xylene	13.01	91	29807	0.08	ppbv #	32
60) o-Xylene	13.70	91	51530	0.15	ppbv	97
61) Styrene	13.54	104	9848	0.05	ppbv #	57
74) 1,2,4-Trimethylbenzene	16.78	105	20026	0.05	ppbv #	72

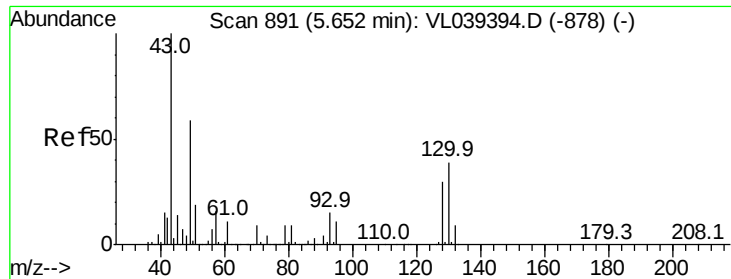
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_L\DATA\VL071222\
Data File : VL039446.D
Acq On : 12 Jul 2022 13:11
Operator : SY/AP
Sample : N3614-01DUP
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-9DDUP

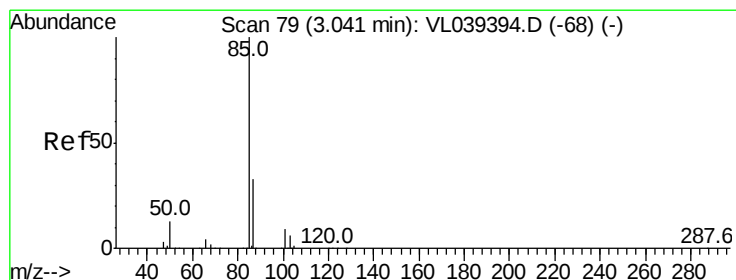
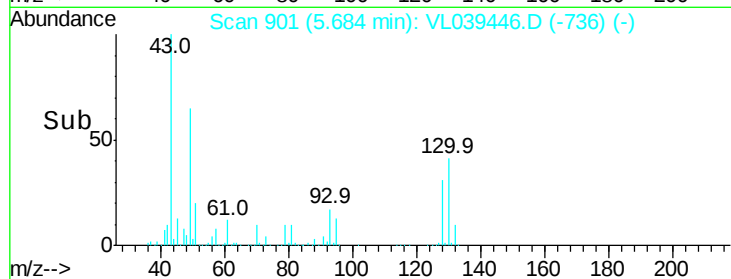
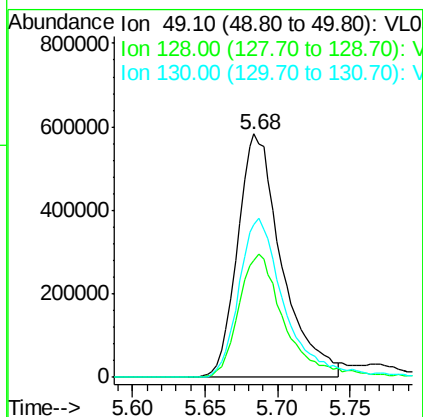
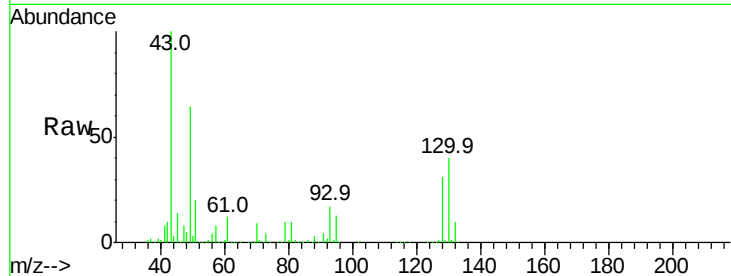
Quant Time: Jul 13 01:31:27 2022
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_L\METHODS\VL062922AIR.M
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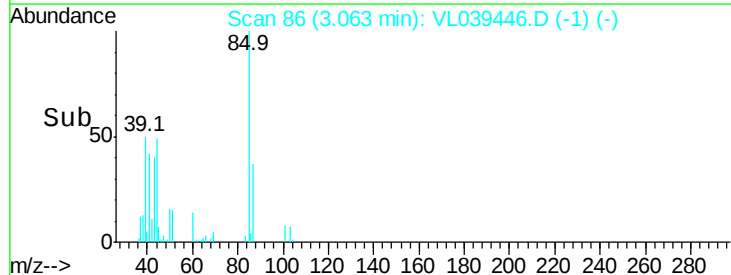
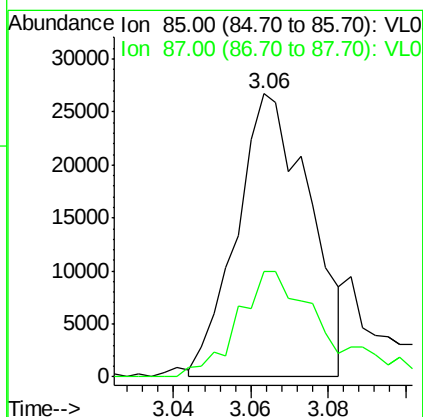
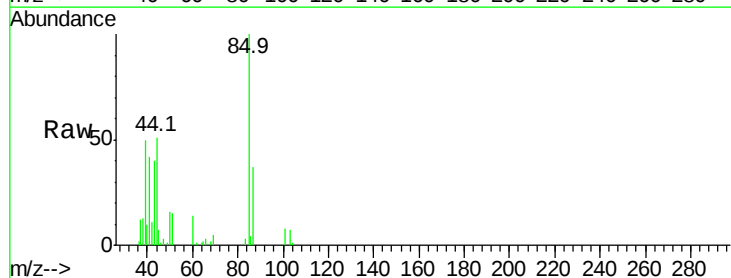
#1
 Bromochloromethane
 Concen: 10.00 ppbv
 RT: 5.68
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 12 Jul 2022 13:11

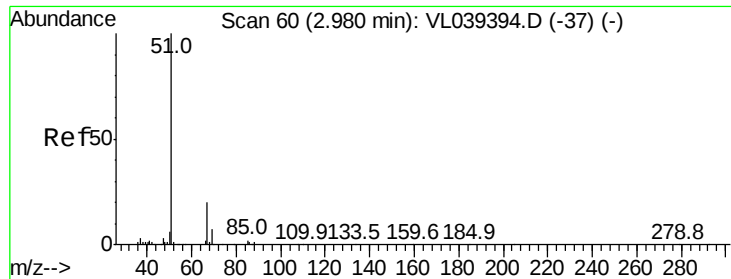
Tgt Ion: 49 Resp: 1234337
 Ion Ratio Lower Upper
 49 100
 128 54.0 26.7 80.0
 130 69.7 34.3 102.8



#2
 Dichlorodifluoromethane
 Concen: 0.20 ppbv
 RT: 3.06 min Scan# 86
 Delta R.T. 0.02 min
 Lab File: VL039446.D
 Acq: 12 Jul 2022 13:11

Tgt Ion: 85 Resp: 35252
 Ion Ratio Lower Upper
 85 100
 87 34.6 26.7 40.1





#3

Chlorodifluoromethane

Concen: 1.00 ppbv

RT: 2.98 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: IA-9DDUP

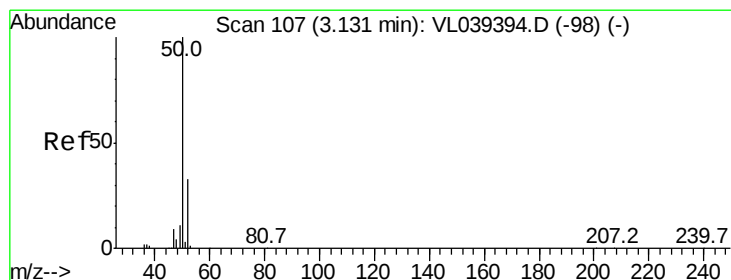
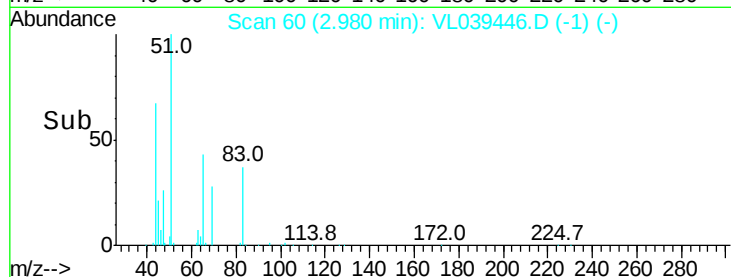
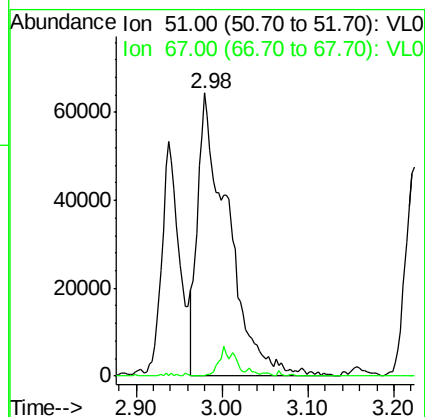
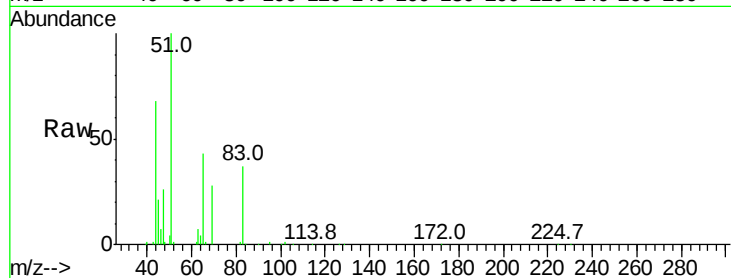
Acq: 12 Jul 2022 13:11

Tgt Ion: 51 Resp: 157335

Ion Ratio Lower Upper

51 100

67 6.6 15.7 23.5#



#4

Chloromethane

Concen: 0.58 ppbv

RT: 3.15 min Scan# 114

Delta R.T. 0.02 min

Lab File: VL039446.D

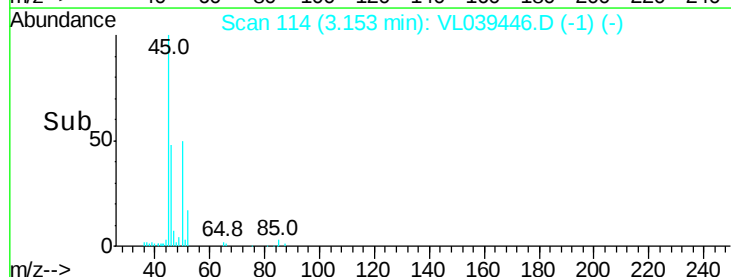
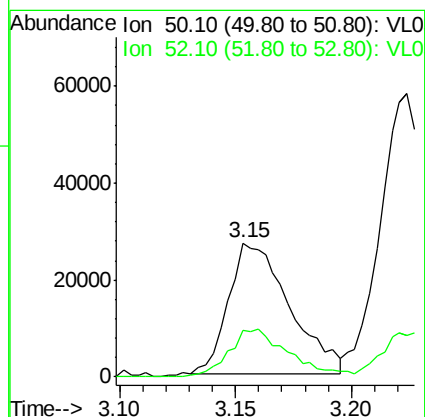
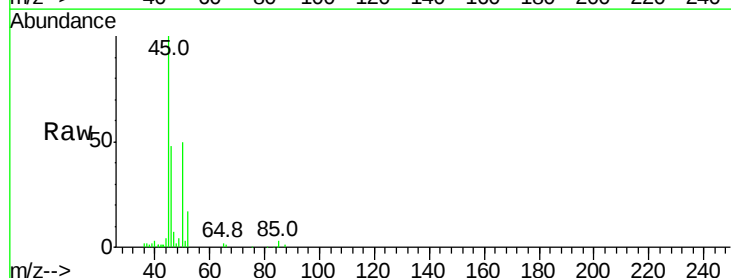
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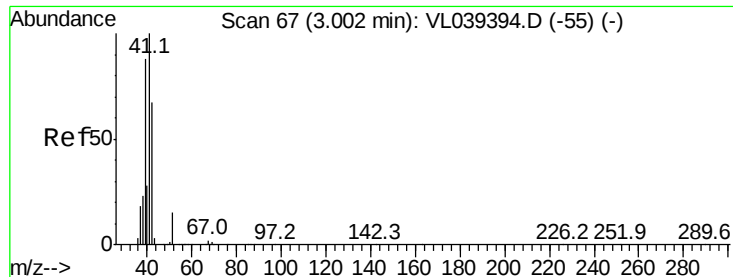
Tgt Ion: 50 Resp: 49382

Ion Ratio Lower Upper

50 100

52 33.9 26.5 39.7





#9

Propene

Concen: 51.33 ppbv

RT: 3.22 Instrument: MSVOA_1

Delta R.T. 0.04 min

Lab File: ClientSampleId: IA-9DDUP

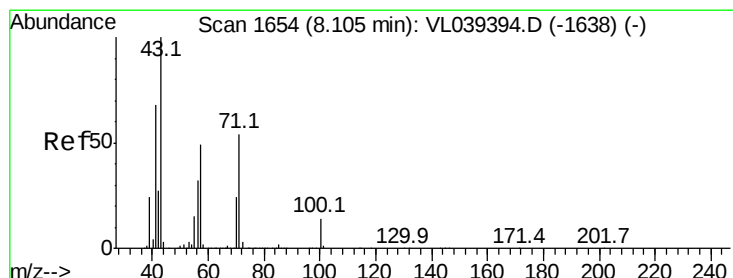
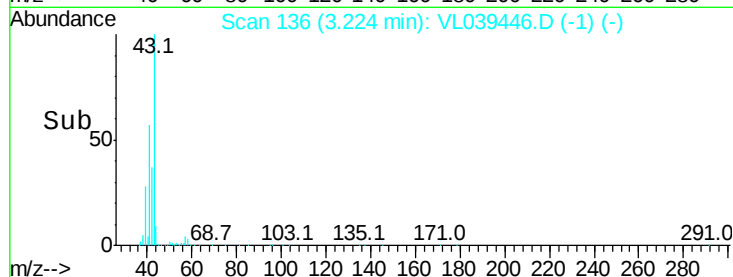
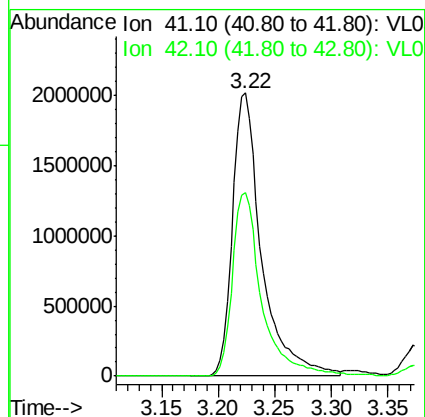
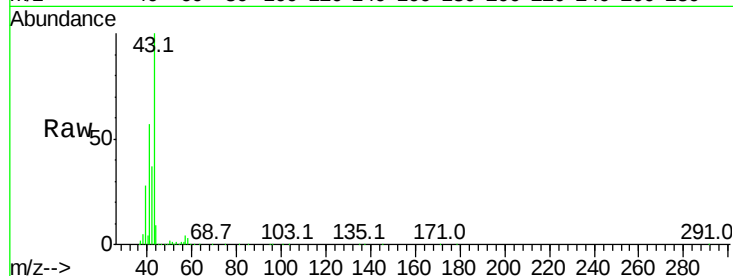
Acq: 12 Jul 2022 13:11

Tgt Ion: 41 Resp: 3629995

Ion Ratio Lower Upper

41 100

42 65.5 55.2 82.8



#10

Heptane

Concen: 0.15 ppbv

RT: 8.15 min Scan# 1667

Delta R.T. 0.04 min

Lab File: VL039446.D

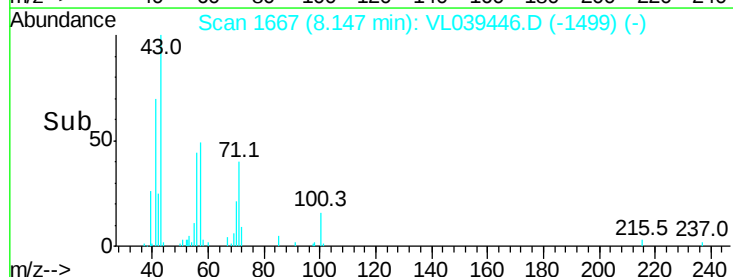
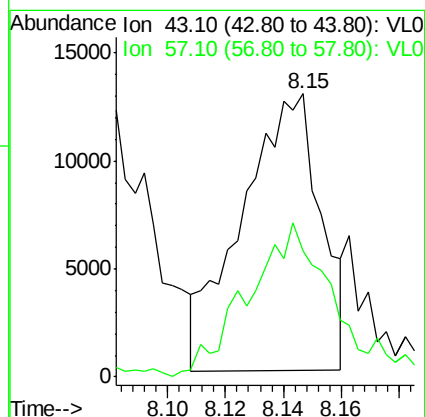
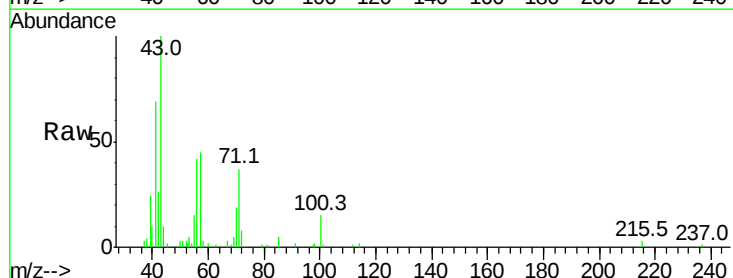
Acq: 12 Jul 2022 13:11

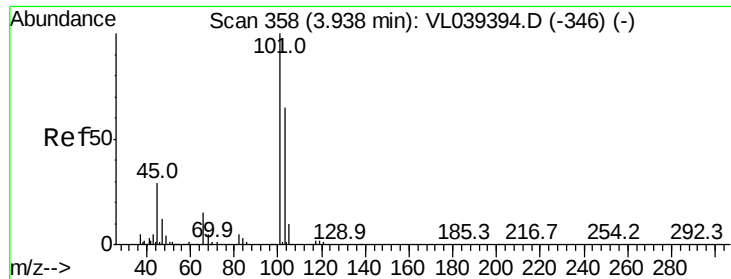
Tgt Ion: 43 Resp: 24229

Ion Ratio Lower Upper

43 100

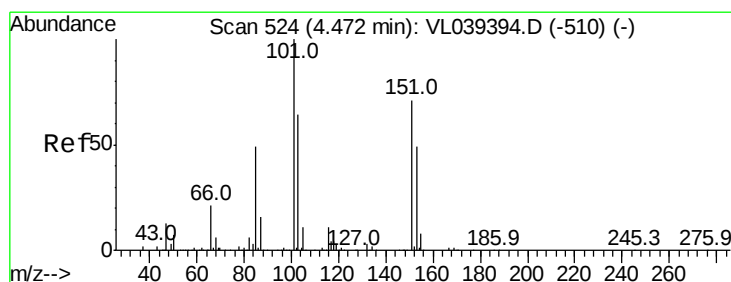
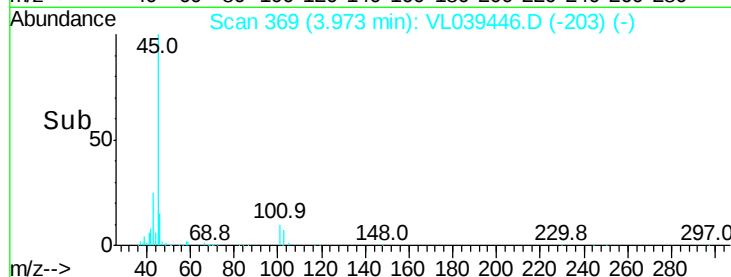
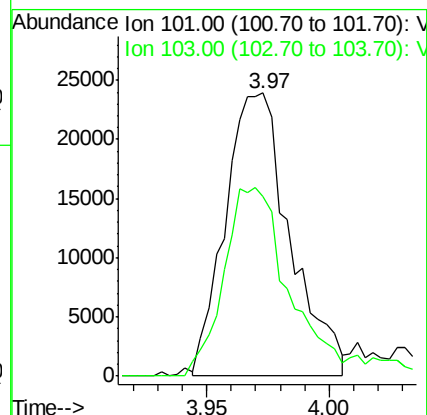
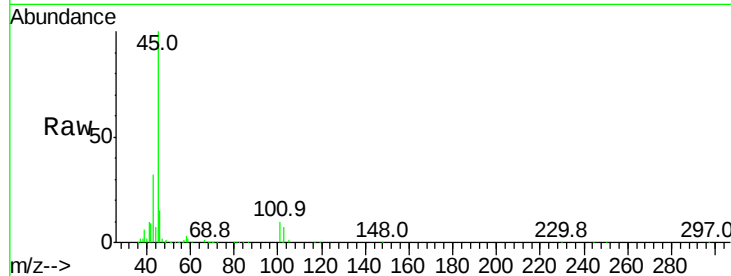
57 60.2 40.5 60.7





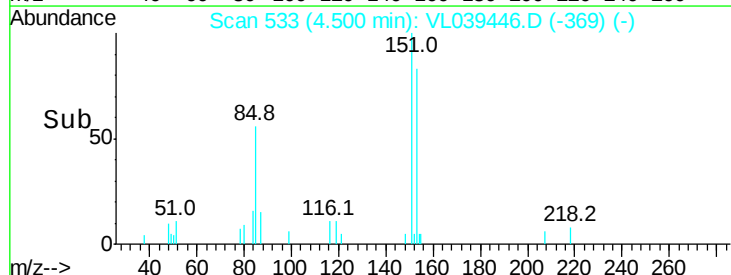
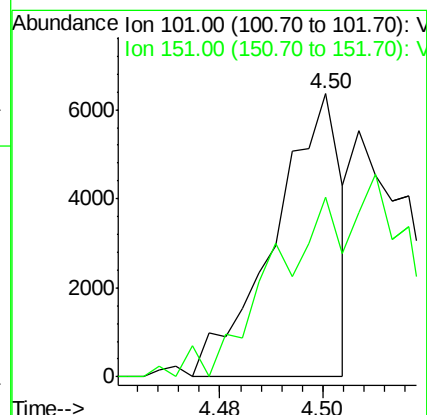
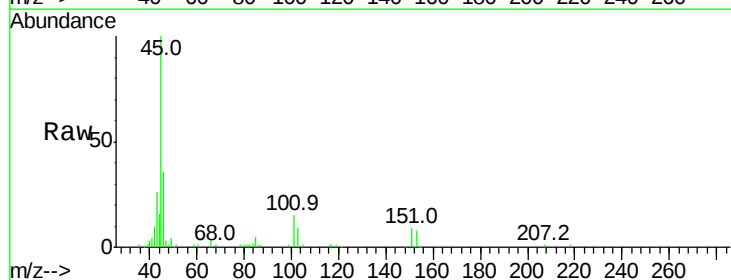
#11
 Trichlorofluoromethane
 Concen: 0.22 ppbv
 RT: 3.97
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 12 Jul 2022 13:11

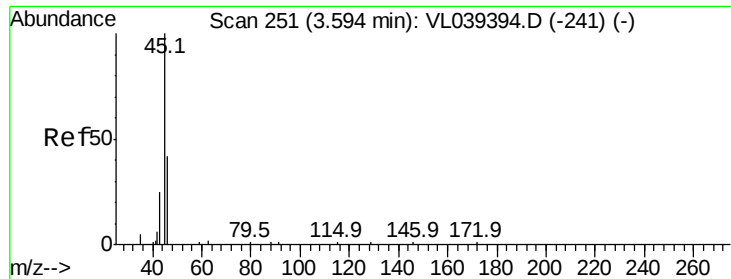
Tgt Ion:101 Resp: 44072
 Ion Ratio Lower Upper
 101 100
 103 59.7 51.8 77.8



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.04 ppbv
 RT: 4.50 min Scan# 533
 Delta R.T. 0.03 min
 Lab File: VL039446.D
 Acq: 12 Jul 2022 13:11

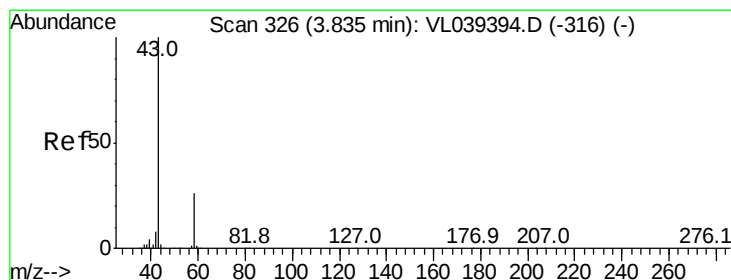
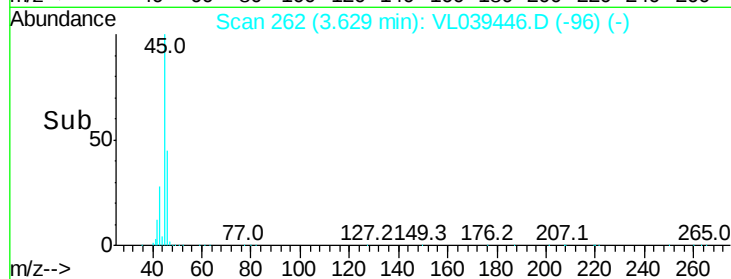
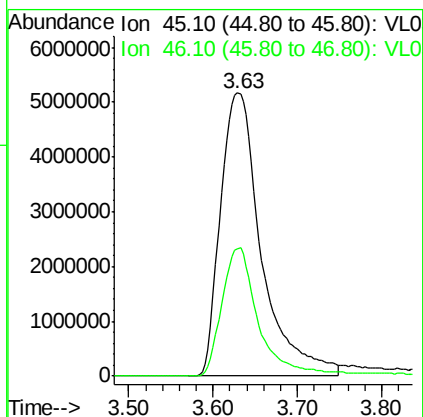
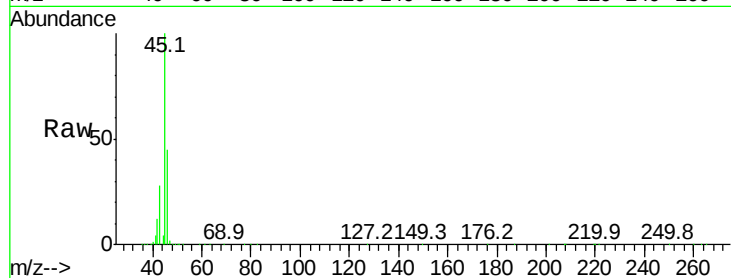
Tgt Ion:101 Resp: 5701
 Ion Ratio Lower Upper
 101 100
 151 0.0 58.9 88.3#





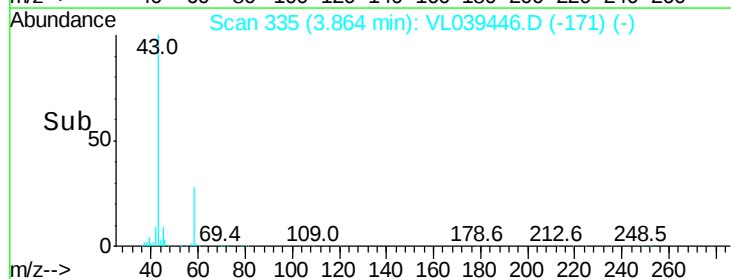
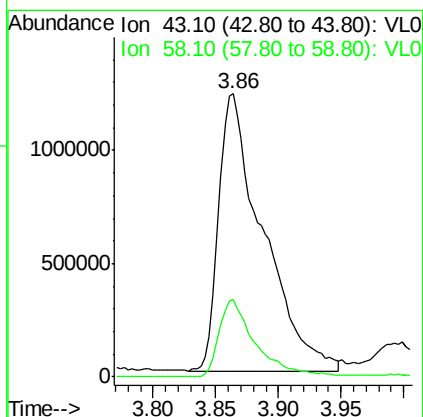
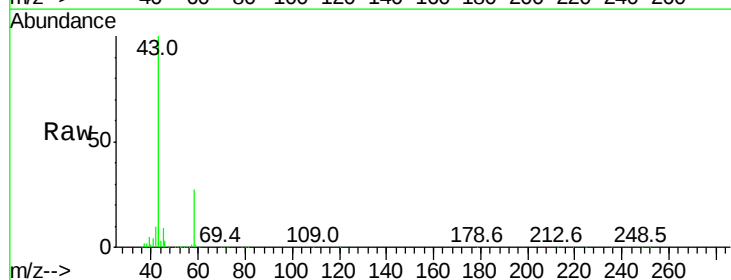
#13
Ethanol
Concen: 4254.05 ppbv
RT: 3.63
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 12 Jul 2022 13:11

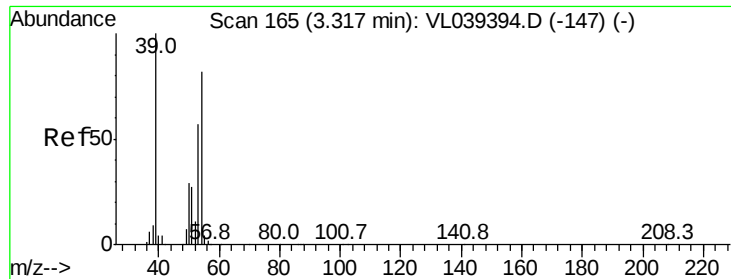
Tgt Ion: 45 Resp: 17454619
Ion Ratio Lower Upper
45 100
46 42.7 22.8 91.2



#15
Acetone
Concen: 20.66 ppbv
RT: 3.86 min Scan# 335
Delta R.T. 0.03 min
Lab File: VL039446.D
Acq: 12 Jul 2022 13:11

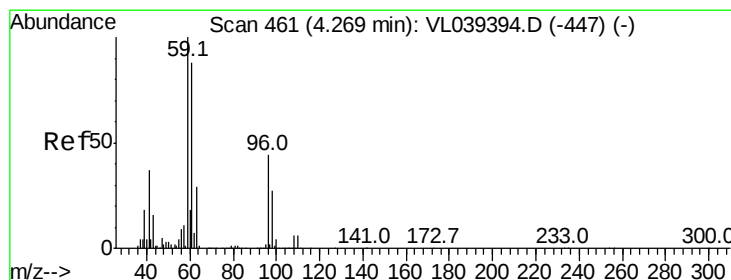
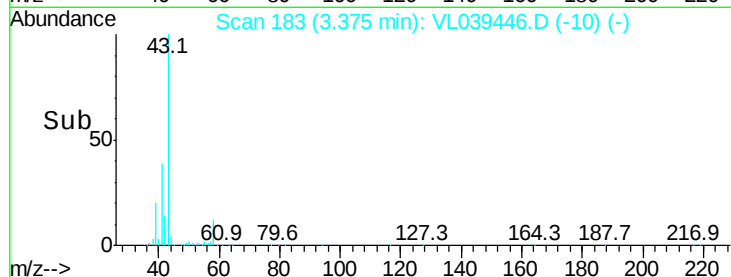
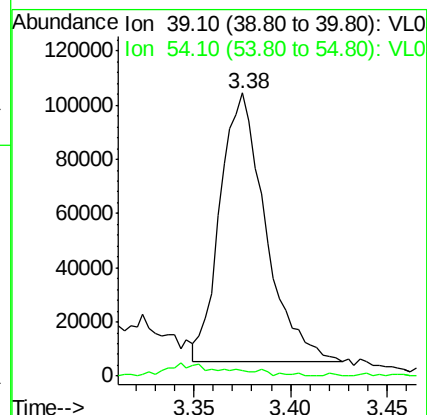
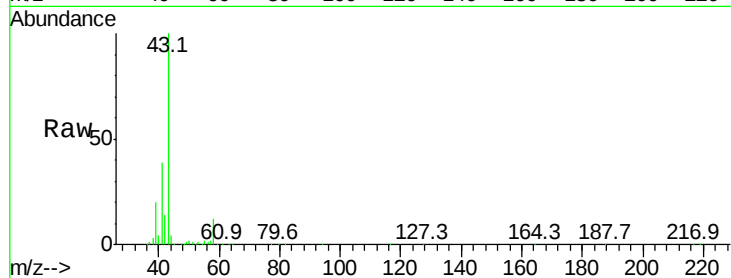
Tgt Ion: 43 Resp: 3016437
Ion Ratio Lower Upper
43 100
58 23.3 21.0 31.6





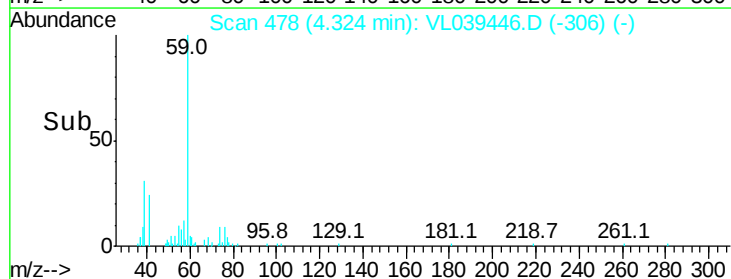
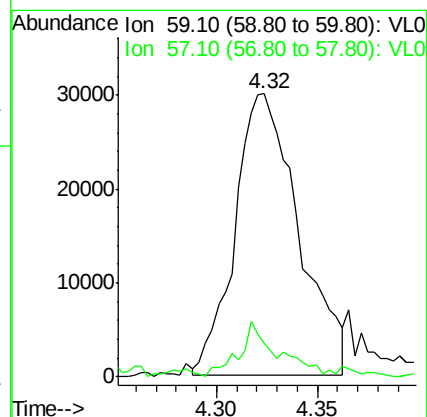
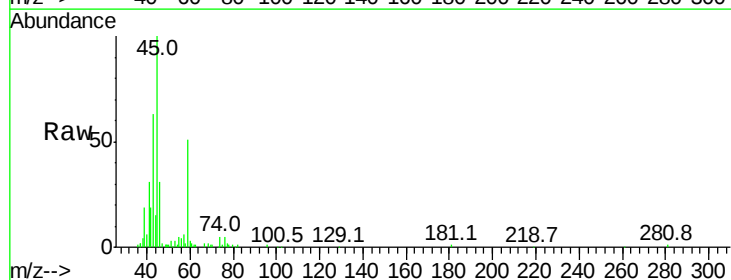
#16
 1,3-Butadiene
 Concen: 2.14 ppbv
 RT: 3.38
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 12 Jul 2022 13:11

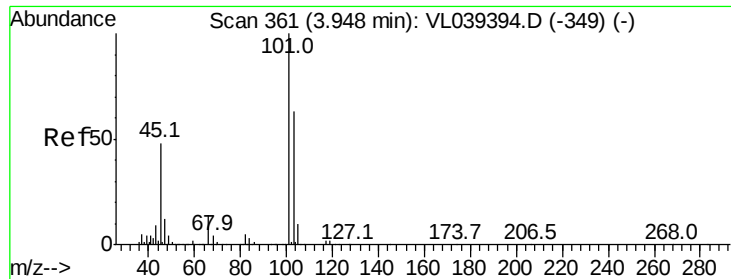
Tgt Ion: 39 Resp: 162253
 Ion Ratio Lower Upper
 39 100
 54 7.5 63.7 95.5#



#17
 tert-Butyl alcohol
 Concen: 0.53 ppbv
 RT: 4.32 min Scan# 478
 Delta R.T. 0.05 min
 Lab File: VL039446.D
 Acq: 12 Jul 2022 13:11

Tgt Ion: 59 Resp: 66110
 Ion Ratio Lower Upper
 59 100
 57 0.0 8.7 13.1#





#19

Isopropyl Alcohol

Concen: 14.35 ppbv

RT: 4.00 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

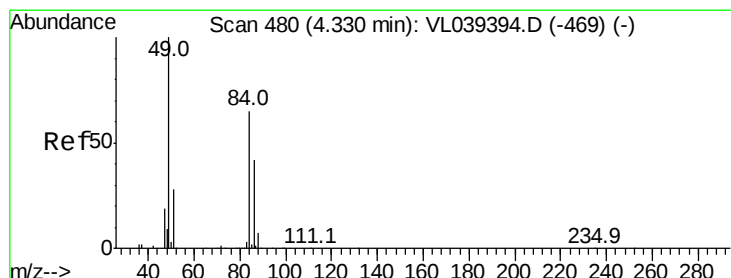
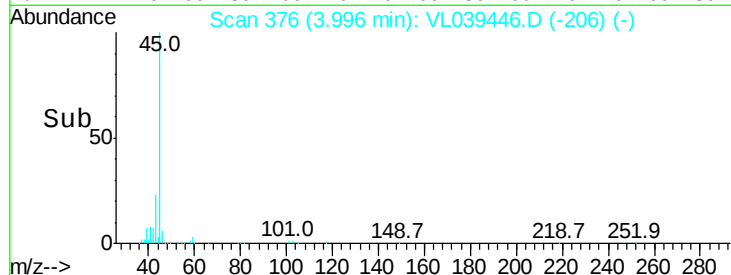
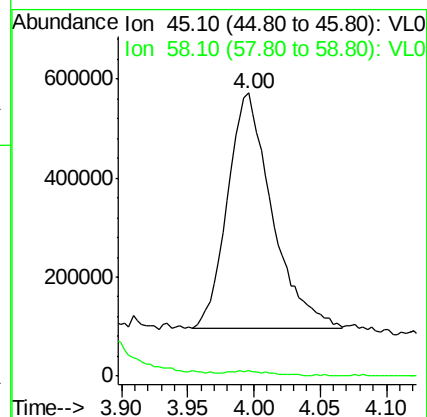
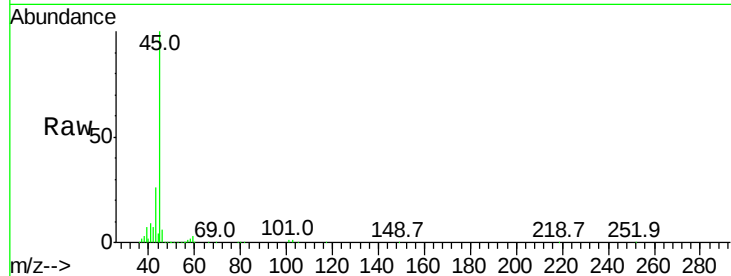
Acq: 12 Jul 2022 13:11

Tgt Ion: 45 Resp: 1118053

Ion Ratio Lower Upper

45 100

58 2.2 3.2 4.8#



#20

Methylene Chloride

Concen: 2.35 ppbv

RT: 4.36 min Scan# 489

Delta R.T. 0.03 min

Lab File: VL039446.D

Acq: 12 Jul 2022 13:11

Tgt Ion: 84 Resp: 136895

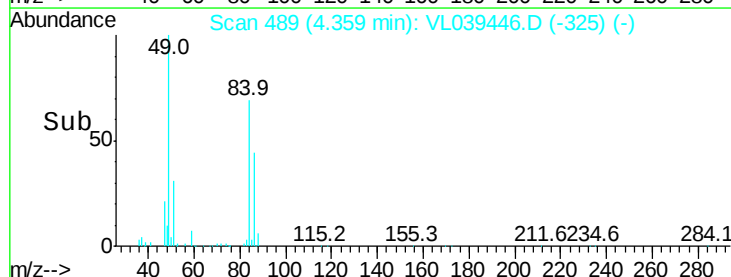
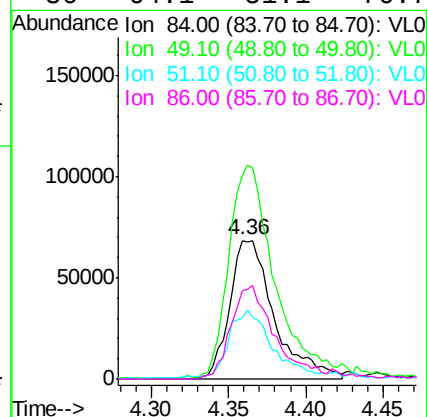
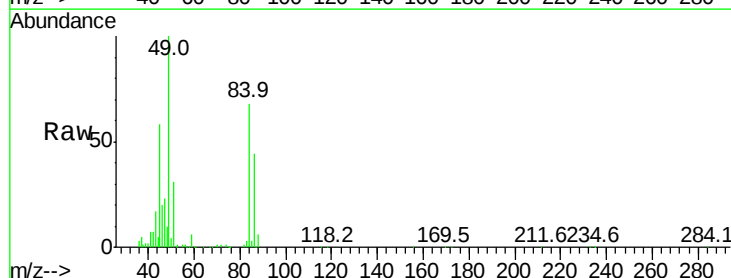
Ion Ratio Lower Upper

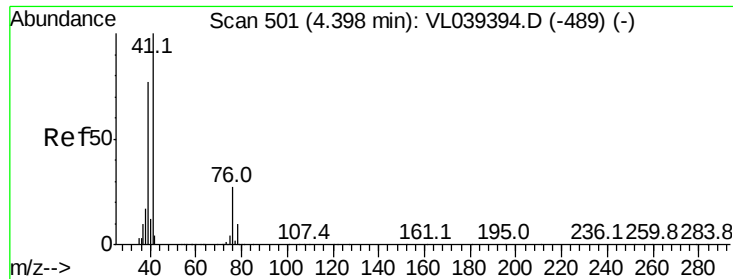
84 100

49 143.9 123.1 184.7

51 42.5 34.4 51.6

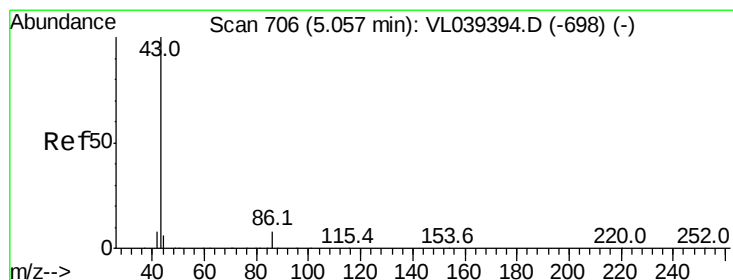
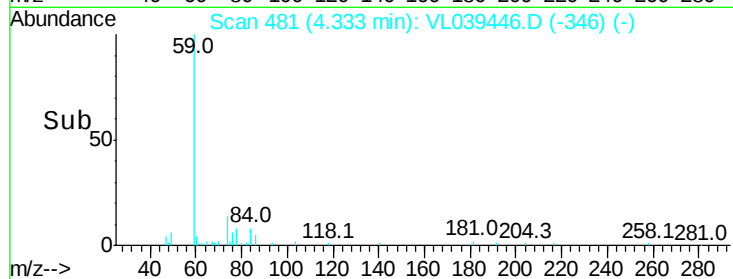
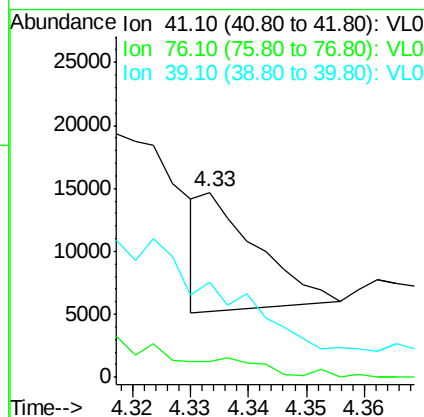
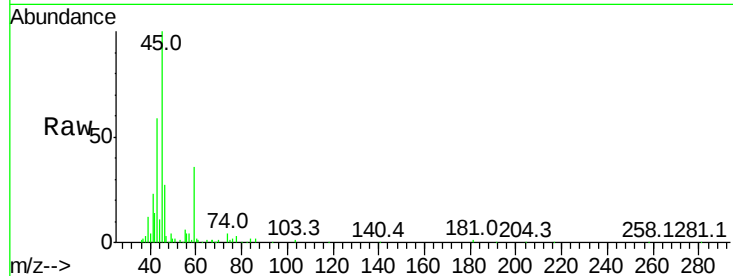
86 64.1 51.1 76.7





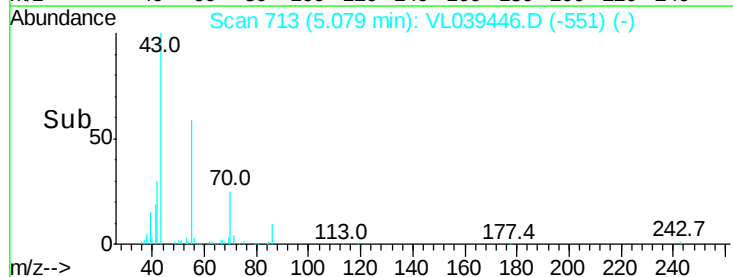
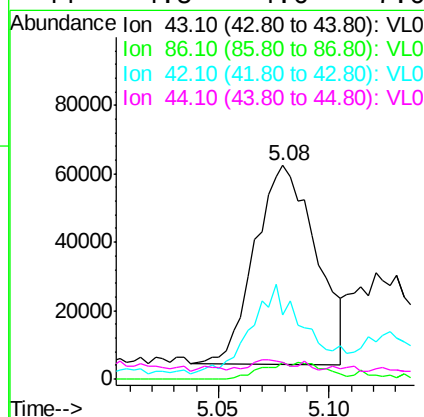
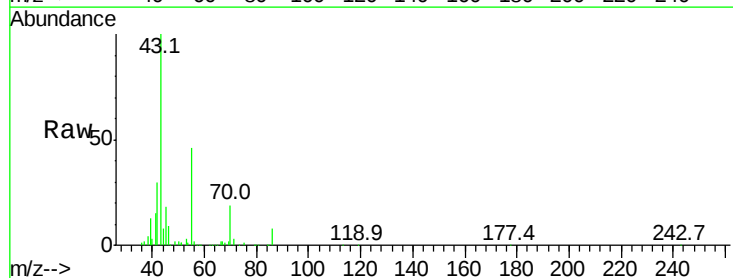
#21
 Allyl Chloride
 Concen: 0.06 ppbv
 RT: 4.33
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 12 Jul 2022 13:11

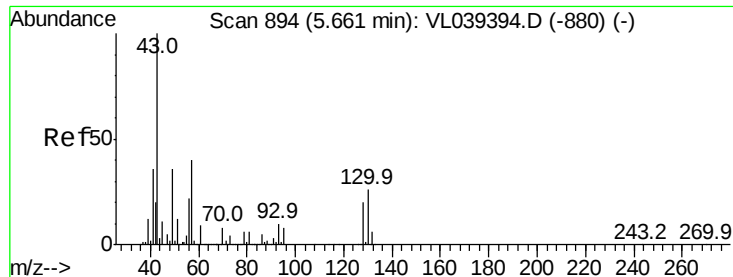
Tgt Ion	Ratio	Lower	Upper
41	100		
76	4.7	24.4	36.6#
39	0.0	63.5	95.3#



#23
 Vinyl Acetate
 Concen: 1.15 ppbv
 RT: 5.08 min Scan# 713
 Delta R.T. 0.02 min
 Lab File: VL039446.D
 Acq: 12 Jul 2022 13:11

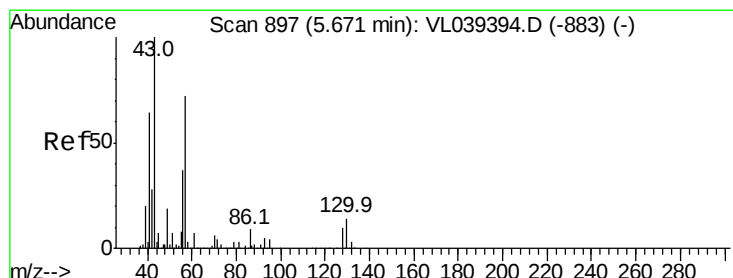
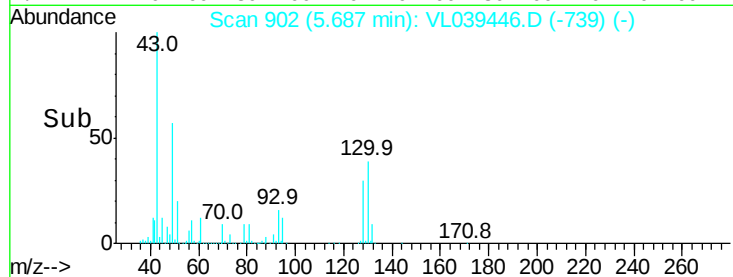
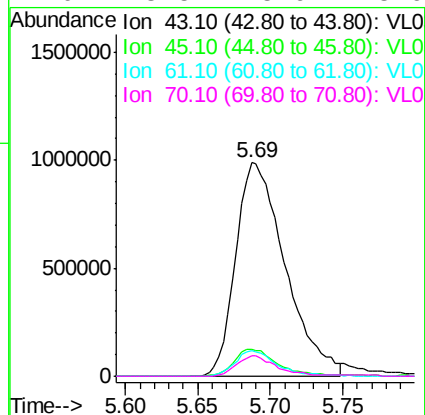
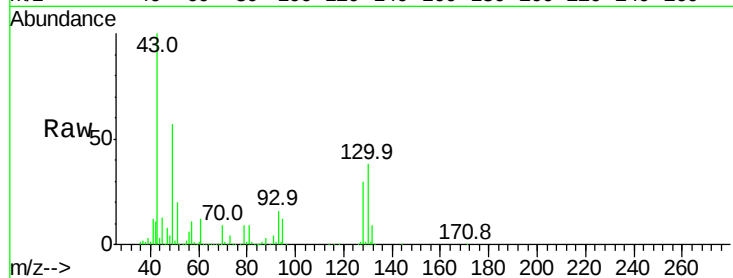
Tgt Ion	Ratio	Lower	Upper
43	100		
86	8.7	5.0	7.6#
42	29.9	7.7	11.5#
44	4.5	4.6	7.0#





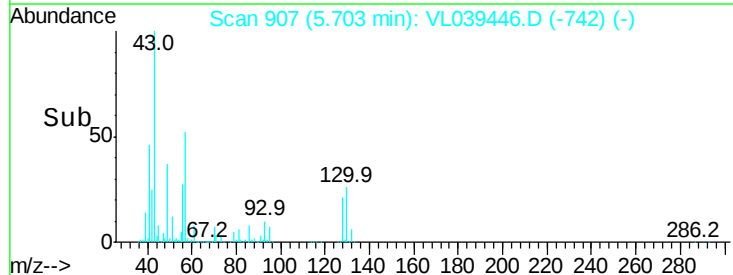
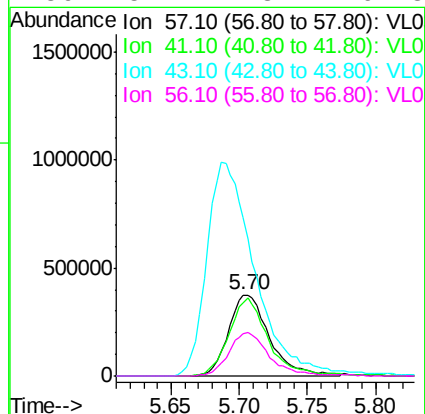
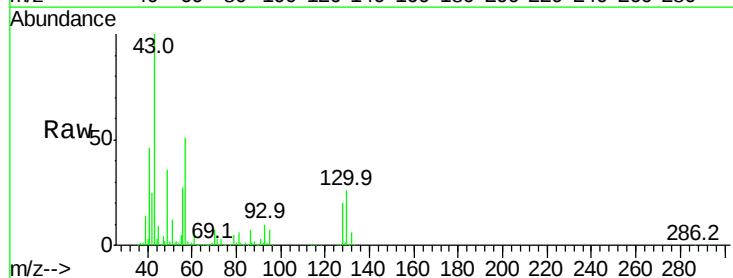
#25
Ethyl Acetate
Concen: 7.82 ppbv
RT: 5.69
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 12 Jul 2022 13:11

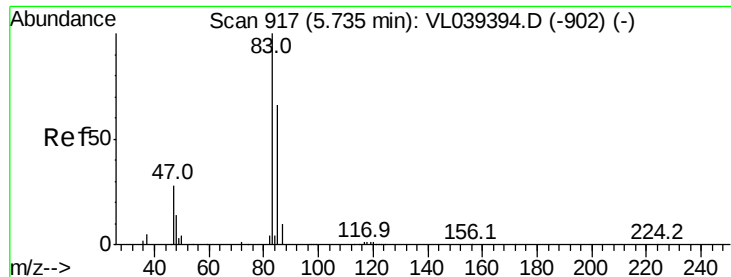
Tgt Ion:	43	Resp:	2340897
Ion	Ratio	Lower	Upper
43	100		
45	11.7	8.2	12.4
61	10.6	8.3	12.5
70	8.5	5.9	8.9



#26
Hexane
Concen: 6.47 ppbv
RT: 5.70 min Scan# 907
Delta R.T. 0.03 min
Lab File: VL039446.D
Acq: 12 Jul 2022 13:11

Tgt Ion:	57	Resp:	780567
Ion	Ratio	Lower	Upper
57	100		
41	93.6	76.9	115.3
43	314.3	191.0	286.6#
56	54.1	43.2	64.8





#29

Chloroform

Concen: 1.74 ppbv

RT: 5.77 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

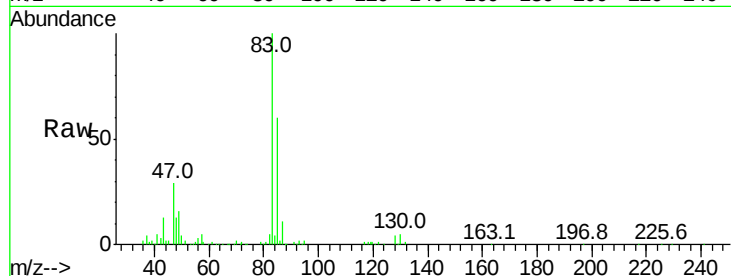
Acq: 12 Jul 2022 13:11

Tgt Ion: 83 Resp: 365960

Ion Ratio Lower Upper

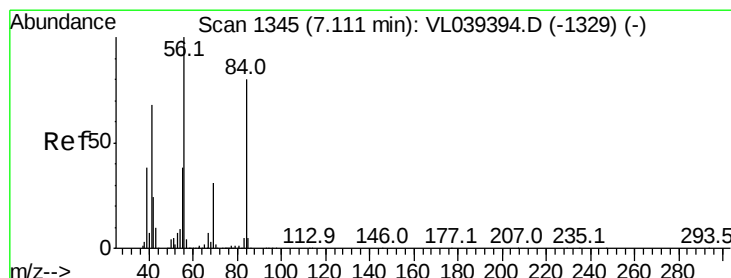
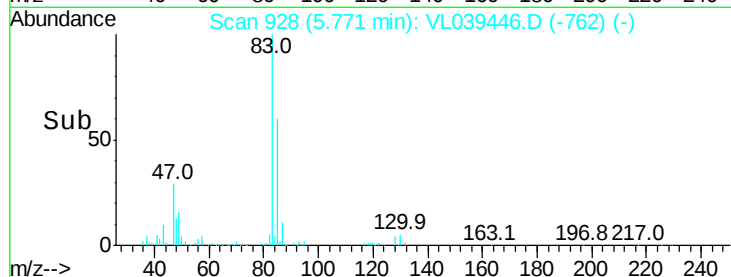
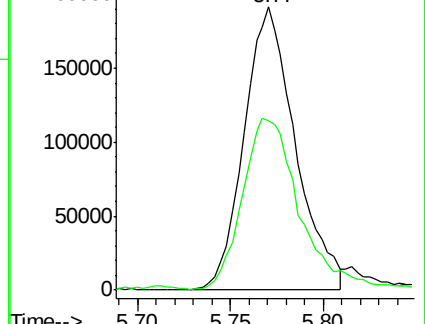
83 100

85 59.9 52.8 79.2



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0



#30

Cyclohexane

Concen: 0.03 ppbv

RT: 7.15 min Scan# 1357

Delta R.T. 0.04 min

Lab File: VL039446.D

Acq: 12 Jul 2022 13:11

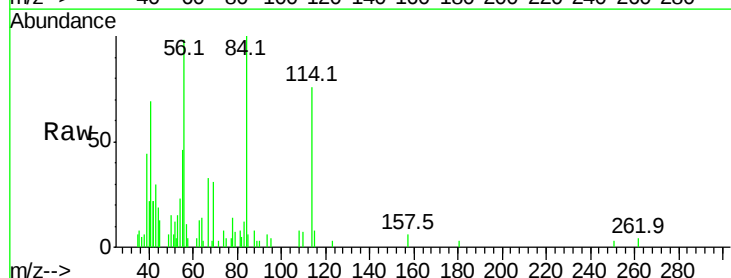
Tgt Ion: 84 Resp: 3841

Ion Ratio Lower Upper

84 100

56 0.0 107.7 161.5#

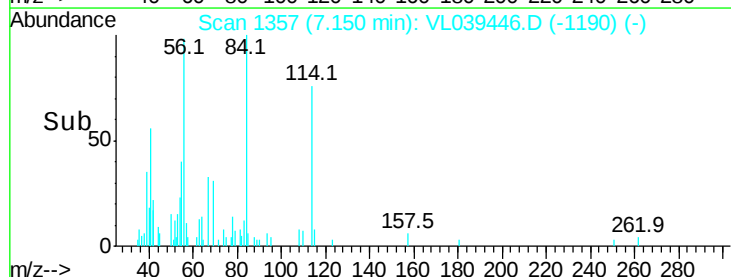
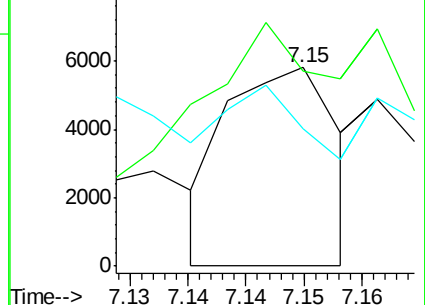
41 317.8 67.7 101.5#

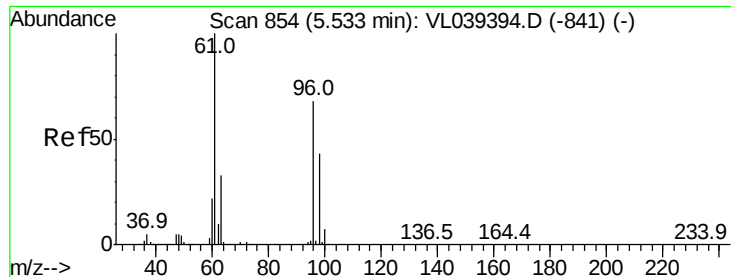


Abundance Ion 84.20 (83.90 to 84.90): VL0

Ion 56.10 (55.80 to 56.80): VL0

Ion 41.10 (40.80 to 41.80): VL0





#31

cis-1,2-Dichloroethene

Concen: 1.78 ppbv

RT: 5.69 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 12 Jul 2022 13:11

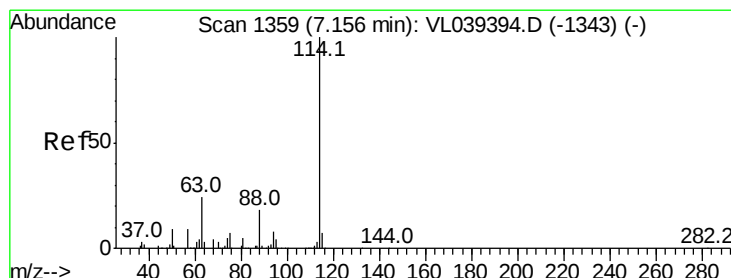
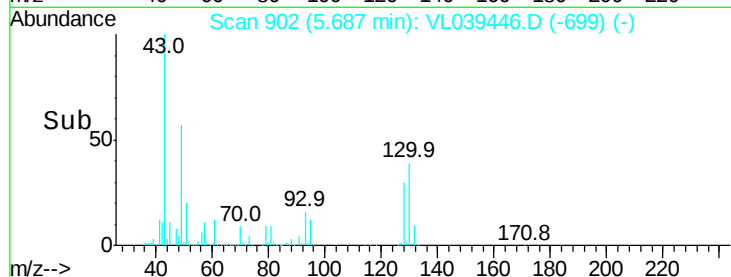
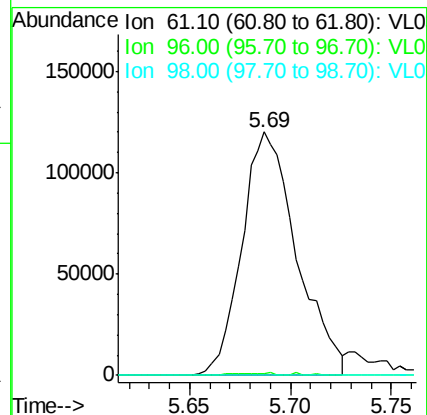
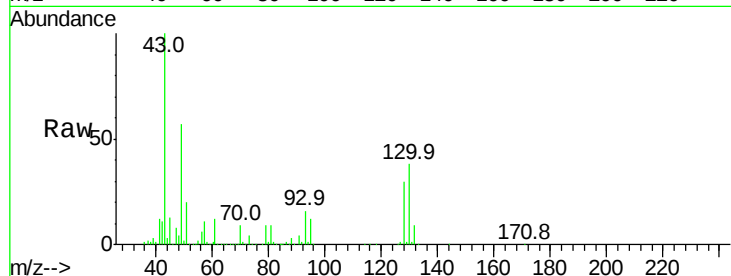
Tgt Ion: 61 Resp: 228094

Ion Ratio Lower Upper

61 100

96 0.8 54.1 81.1#

98 0.0 34.6 52.0#



#33

1,4-Difluorobenzene

Concen: 10.00 ppbv

RT: 7.19 min Scan# 1371

Delta R.T. 0.04 min

Lab File: VL039446.D

Acq: 12 Jul 2022 13:11

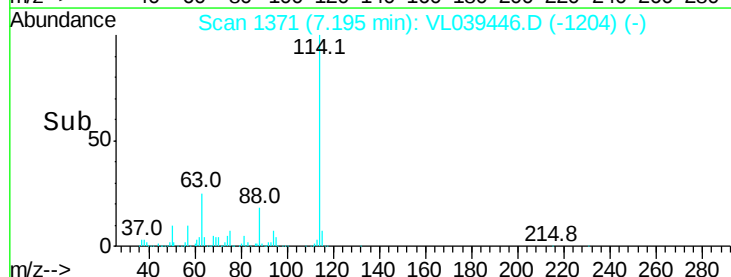
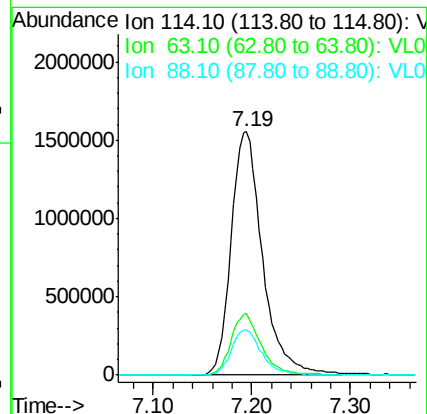
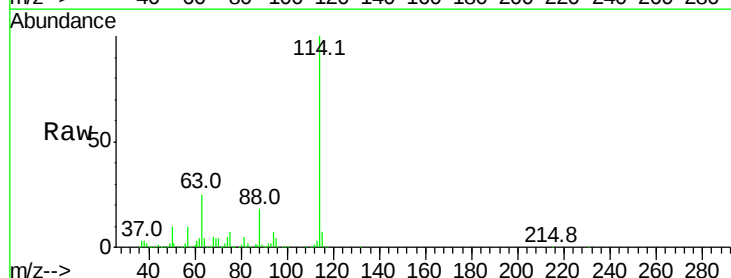
Tgt Ion: 114 Resp: 3430956

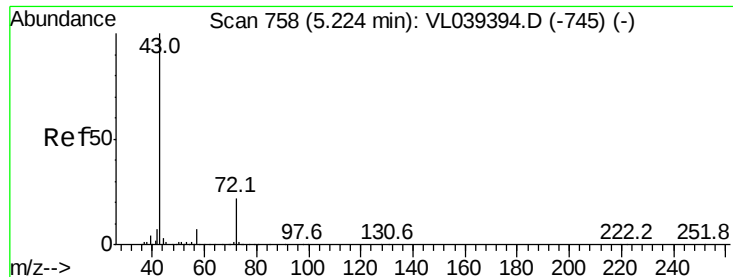
Ion Ratio Lower Upper

114 100

63 24.7 20.2 30.4

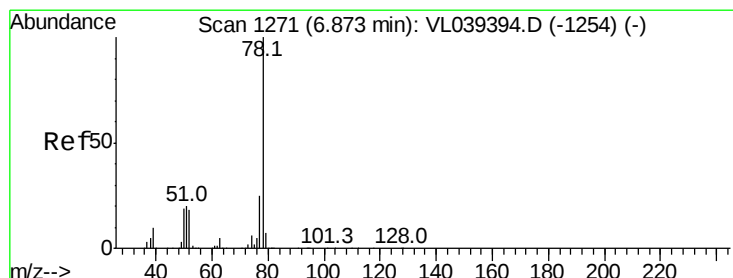
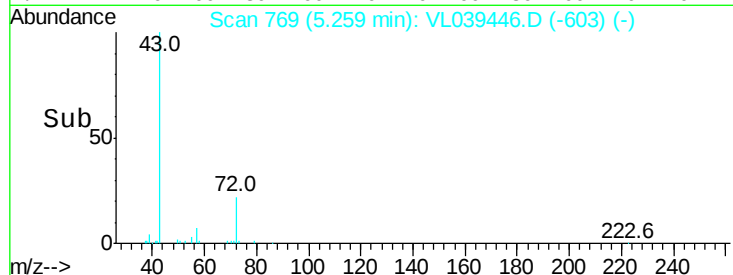
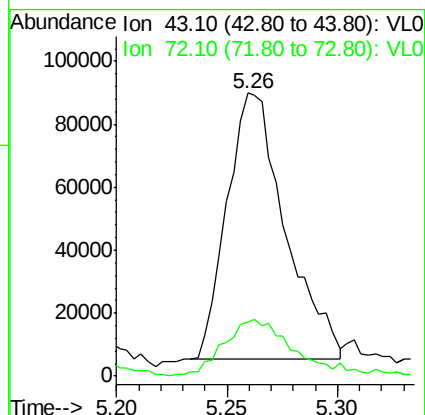
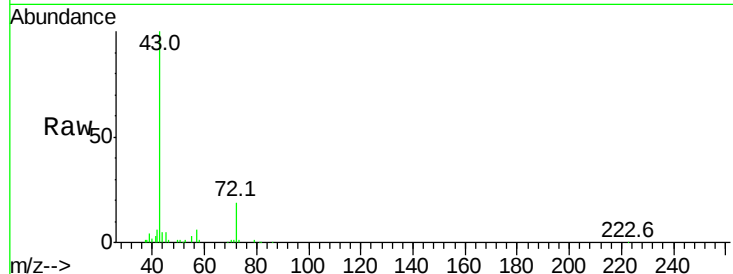
88 18.4 14.5 21.7





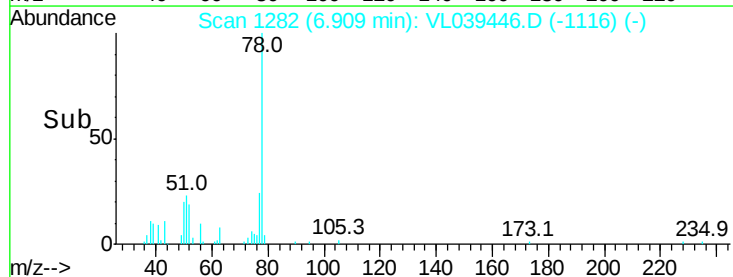
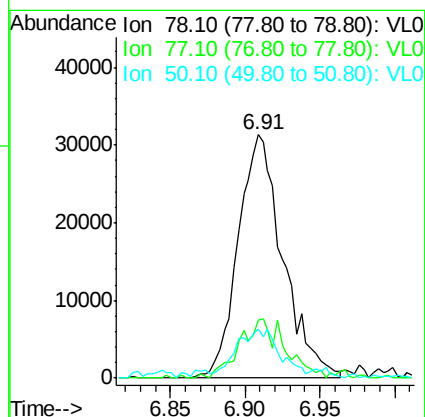
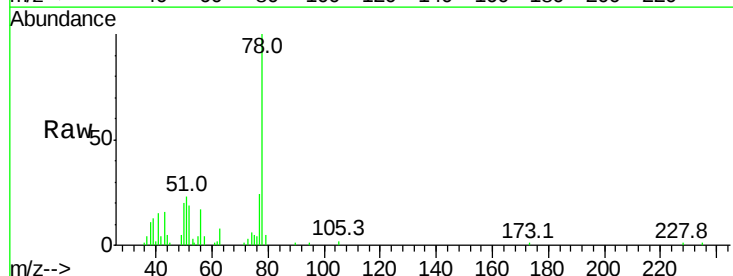
#34
 2-Butanone
 Concen: 0.90 ppbv
 RT: 5.26
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 12 Jul 2022 13:11

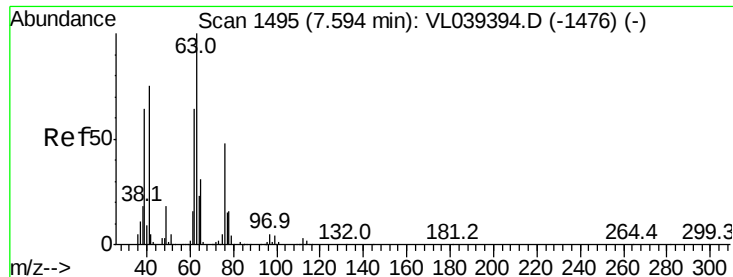
Tgt Ion: 43 Resp: 155262
 Ion Ratio Lower Upper
 43 100
 72 27.3 17.9 26.9#



#36
 Benzene
 Concen: 0.25 ppbv
 RT: 6.91 min Scan# 1282
 Delta R.T. 0.04 min
 Lab File: VL039446.D
 Acq: 12 Jul 2022 13:11

Tgt Ion: 78 Resp: 65119
 Ion Ratio Lower Upper
 78 100
 77 23.9 20.3 30.5
 50 19.5 15.5 23.3





#39

1,2-Dichloropropane

Concen: 8.38 ppbv

RT: 7.19 Instrument: MSVOA_1

Delta R.T.

Lab File: ClientSampleId:

Acq: 12 Jul 2022 13:11

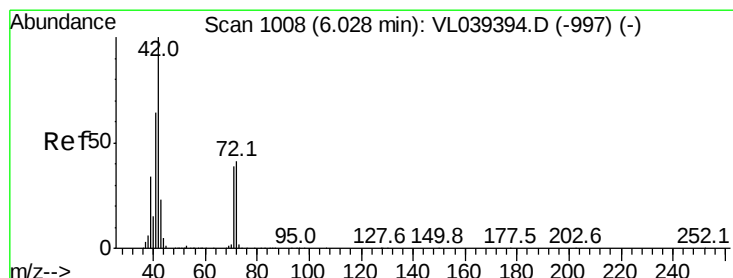
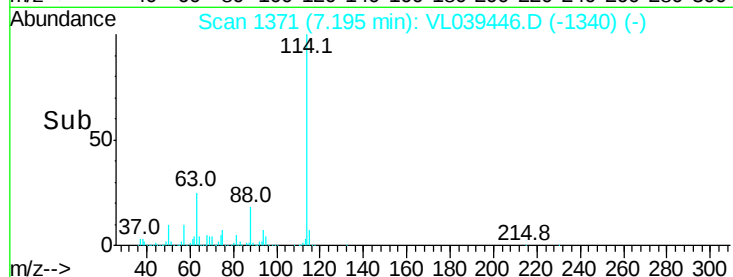
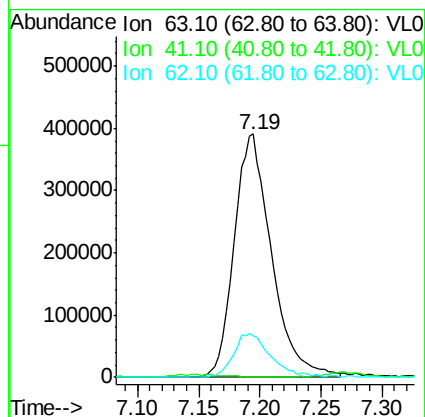
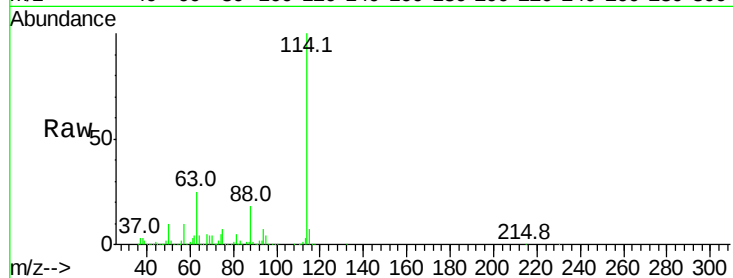
Tgt Ion: 63 Resp: 830888

Ion Ratio Lower Upper

63 100

41 0.0 59.6 89.4#

62 17.0 51.4 77.0#



#41

Tetrahydrofuran

Concen: 0.05 ppbv

RT: 6.08 min Scan# 1024

Delta R.T. 0.05 min

Lab File: VL039446.D

Acq: 12 Jul 2022 13:11

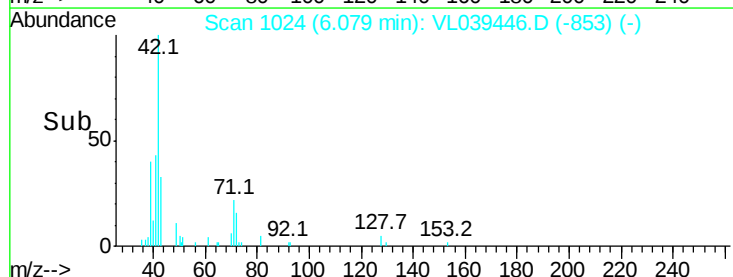
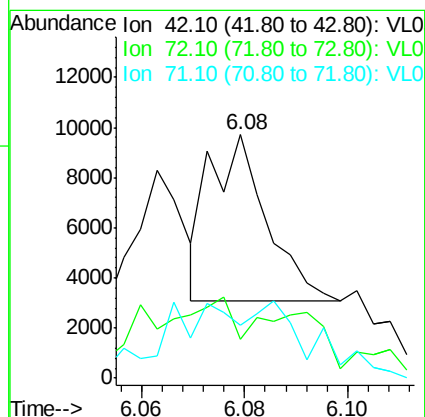
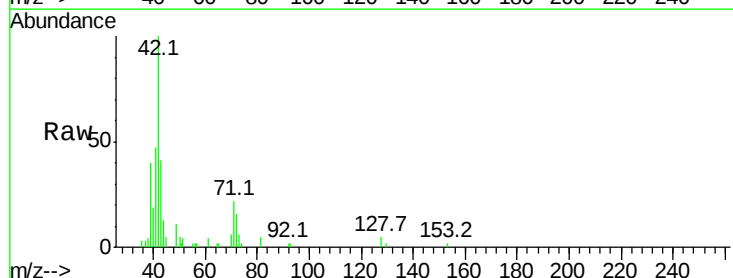
Tgt Ion: 42 Resp: 5057

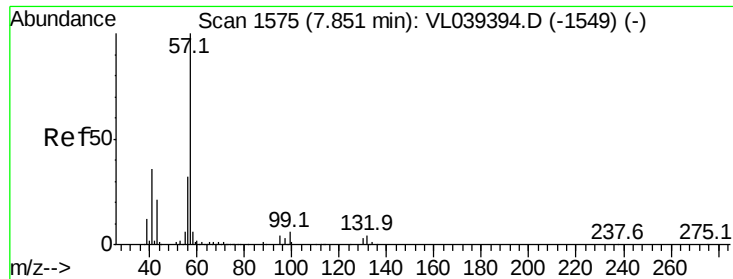
Ion Ratio Lower Upper

42 100

72 149.5 31.8 47.8#

71 118.6 31.8 47.8#





#44

2,2,4-Trimethylpentane

Concen: 0.14 ppbv

RT: 7.89 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 12 Jul 2022 13:11

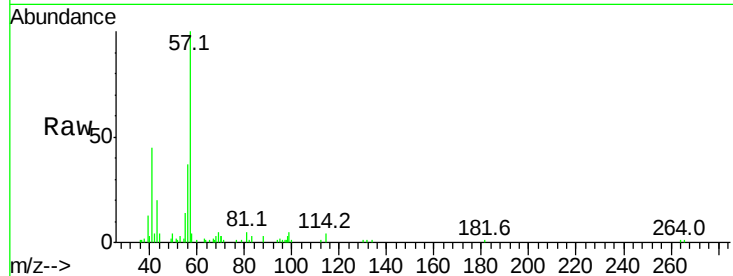
Tgt Ion: 57 Resp: 64599

Ion Ratio Lower Upper

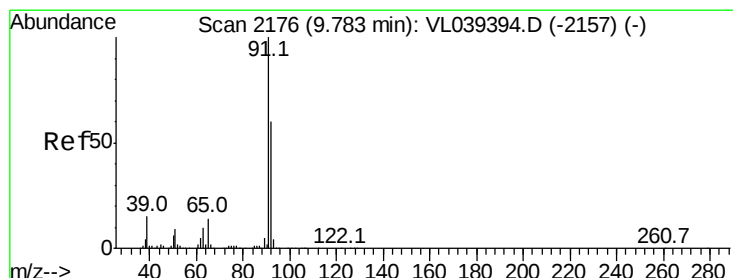
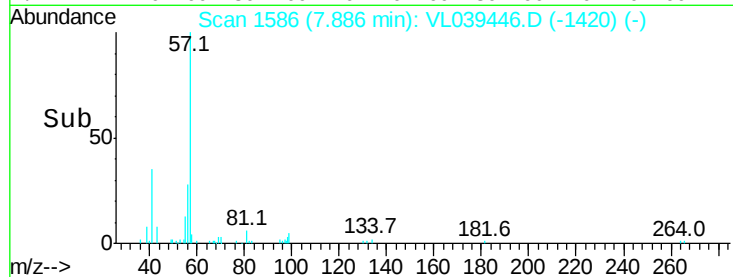
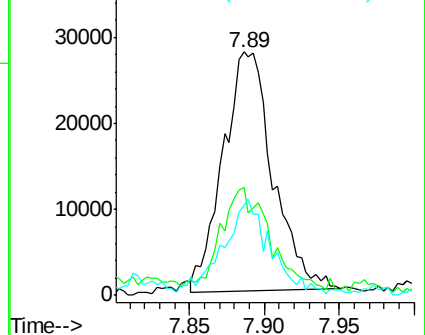
57 100

41 47.1 27.4 41.2#

56 40.0 24.5 36.7#



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



#53

Toluene

Concen: 0.51 ppbv

RT: 9.82 min Scan# 2188

Delta R.T. 0.04 min

Lab File: VL039446.D

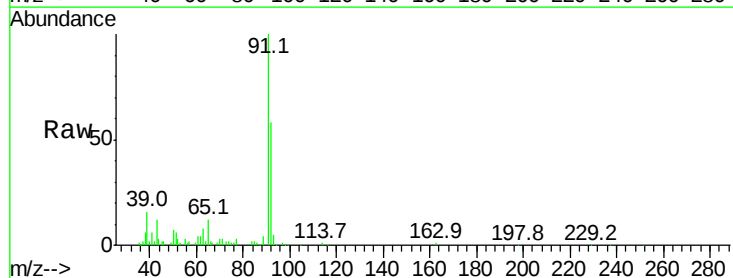
Acq: 12 Jul 2022 13:11

Tgt Ion: 91 Resp: 154767

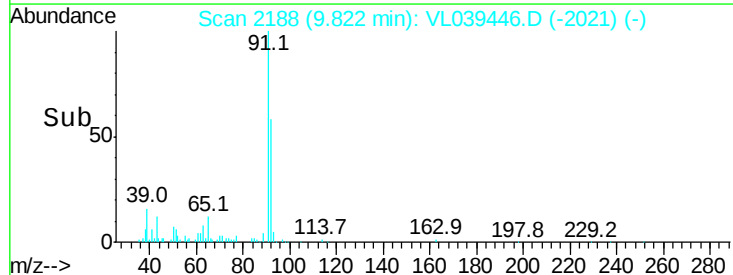
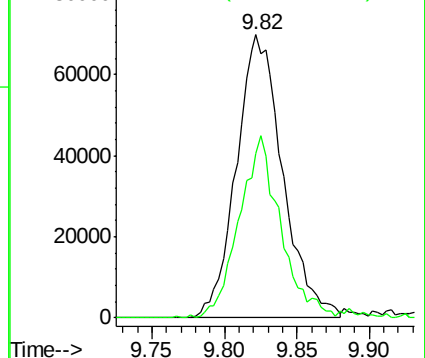
Ion Ratio Lower Upper

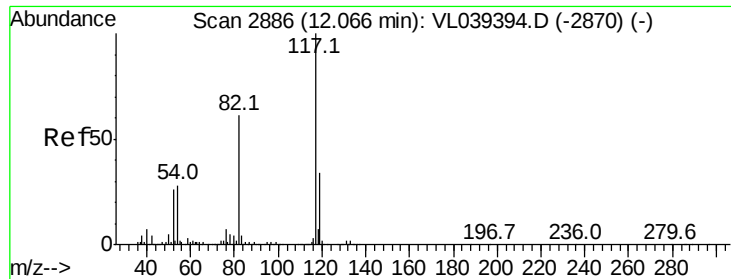
91 100

92 59.2 48.2 72.2



Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 92.10 (91.80 to 92.80): VL0

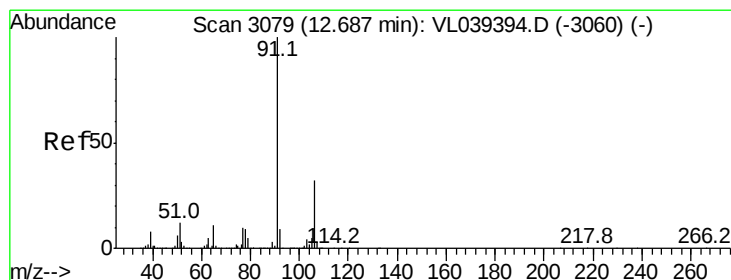
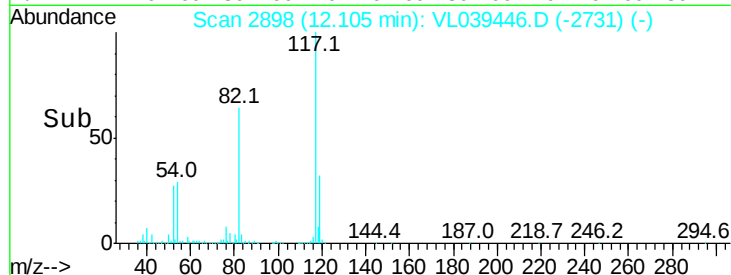
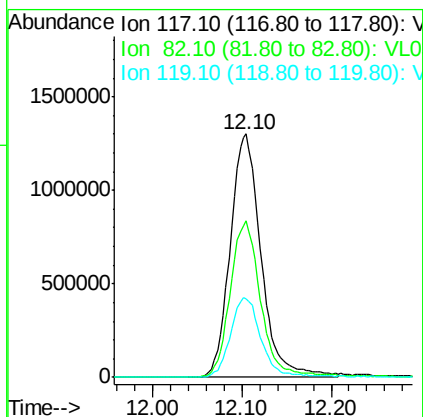
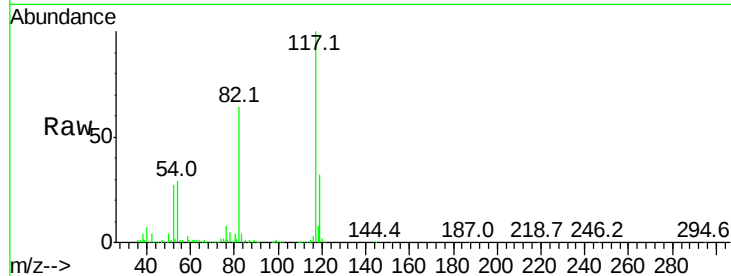




#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 12.10 min
Instrument: MSVOA_1
Delta R.T.: 0.04 min
Lab File: VL039446.D
Client Sample ID: 1A-9DDUP
Acq: 12 Jul 2022 13:11

Tgt Ion: 117 Resp: 3125150

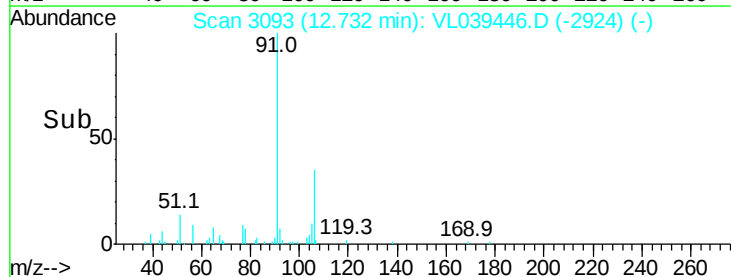
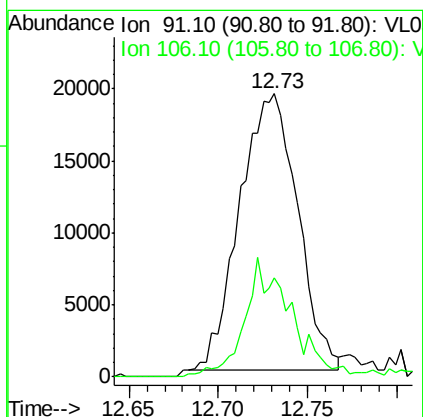
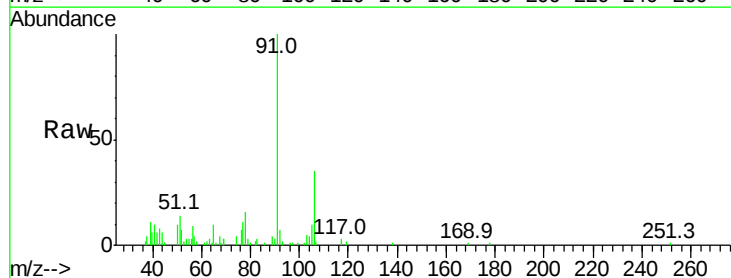
Ion	Ratio	Lower	Upper
117	100		
82	64.4	50.8	76.2
119	32.6	24.1	36.1

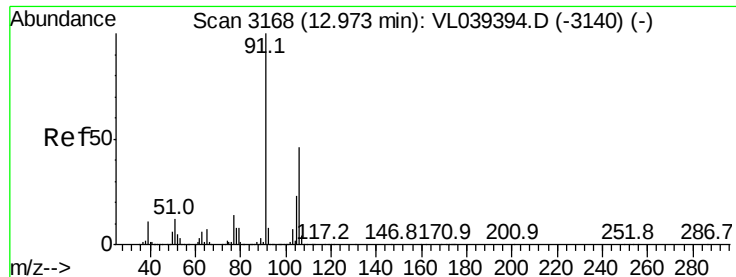


#58
Ethyl Benzene
Concen: 0.11 ppbv
RT: 12.73 min Scan# 3093
Delta R.T.: 0.04 min
Lab File: VL039446.D
Acq: 12 Jul 2022 13:11

Tgt Ion: 91 Resp: 43489

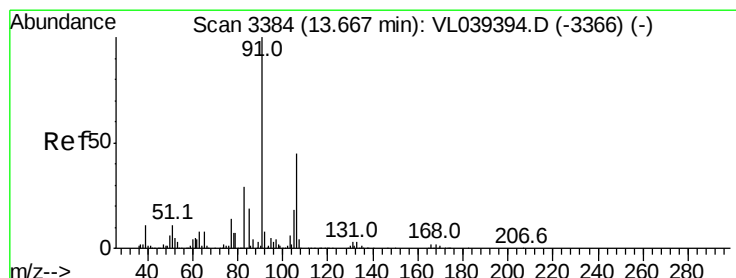
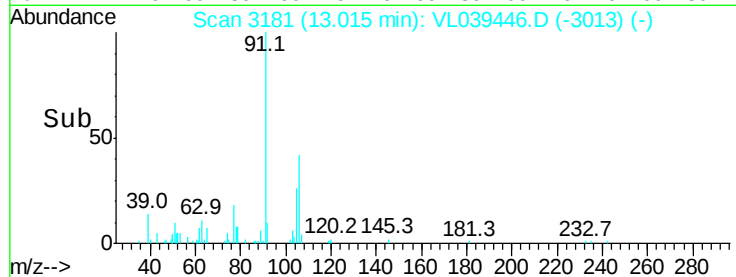
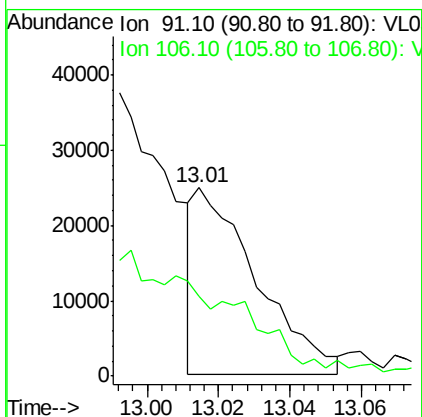
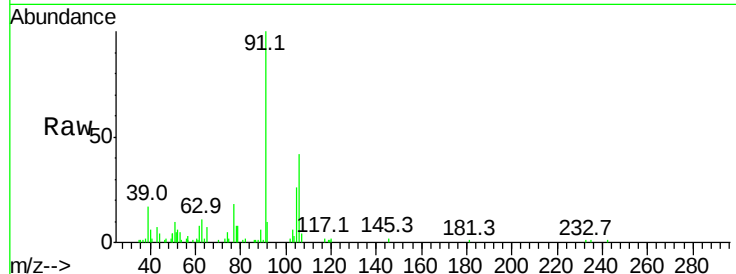
Ion	Ratio	Lower	Upper
91	100		
106	34.9	25.4	38.0





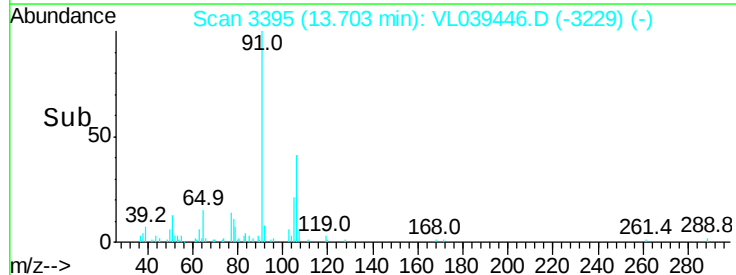
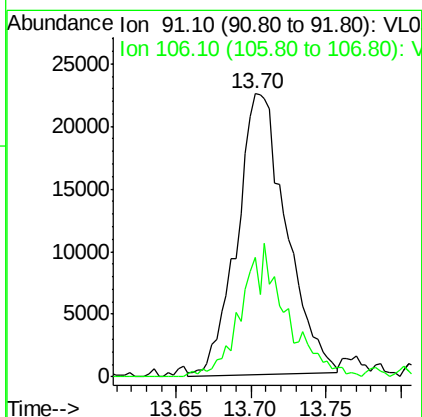
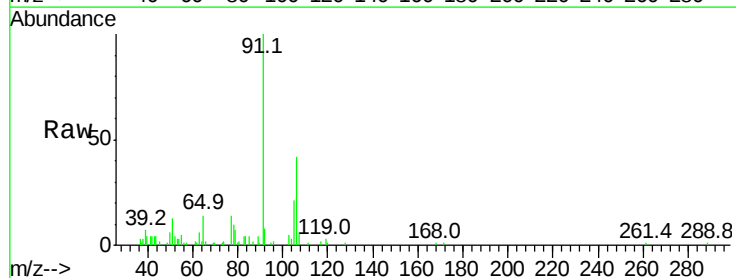
#59
m/p-Xylene
Concen: 0.08 ppbv
RT: 13.01 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 12 Jul 2022 13:11

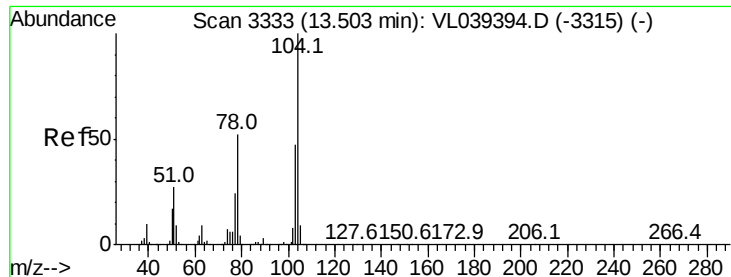
Tgt Ion: 91 Resp: 29807
Ion Ratio Lower Upper
91 100
106 0.0 35.4 53.2#



#60
o-Xylene
Concen: 0.15 ppbv
RT: 13.70 min Scan# 3395
Delta R.T. 0.04 min
Lab File: VL039446.D
Acq: 12 Jul 2022 13:11

Tgt Ion: 91 Resp: 51530
Ion Ratio Lower Upper
91 100
106 42.7 22.4 67.3





#61

Styrene

Concen: 0.05 ppbv

RT: 13.54 Instrument: MSVOA_1

Delta R.T. 0.04 min

Lab File: ClientSampleId: VL039446.D

Acq: 12 Jul 2022 13:11

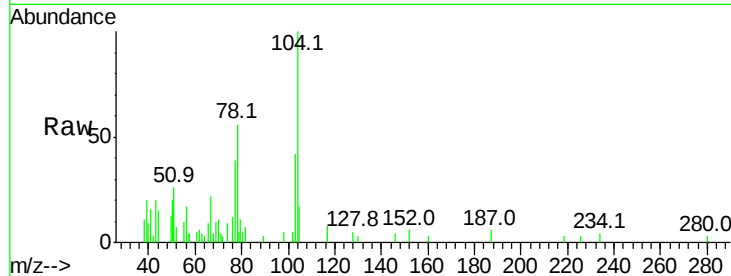
Tgt Ion: 104 Resp: 9848

Ion Ratio Lower Upper

104 100

78 88.9 41.2 61.8#

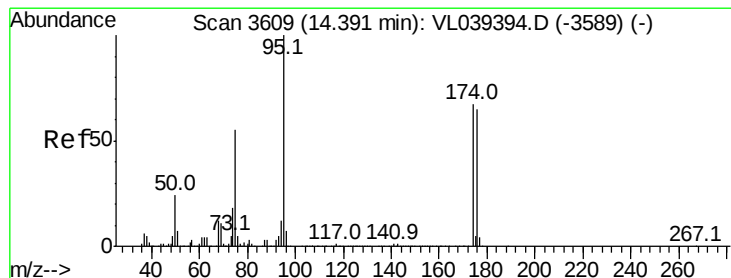
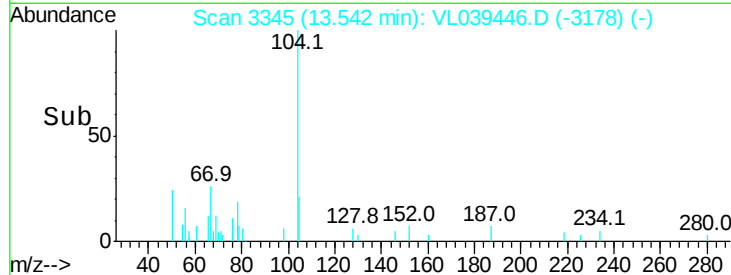
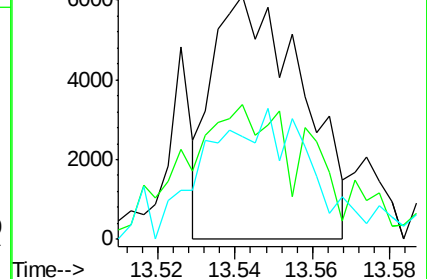
103 69.8 38.7 58.1#



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): V

Ion 103.10 (102.80 to 103.80): V



#68

1-Bromo-4-Fluorobenzene

Concen: 10.61 ppbv

RT: 14.43 min Scan# 3622

Delta R.T. 0.04 min

Lab File: VL039446.D

Acq: 12 Jul 2022 13:11

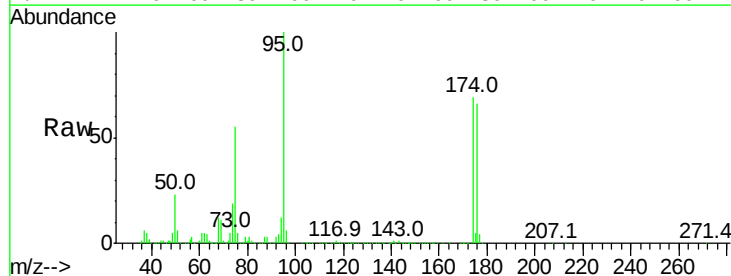
Tgt Ion: 95 Resp: 2459193

Ion Ratio Lower Upper

95 100

174 70.5 55.9 83.9

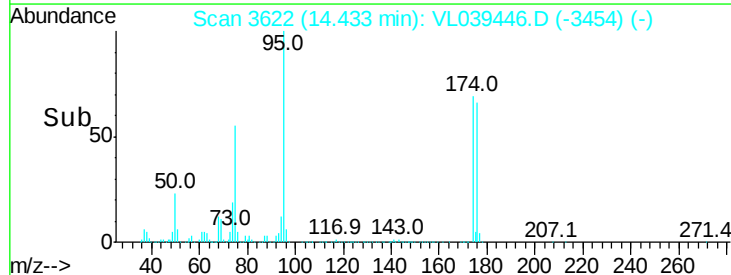
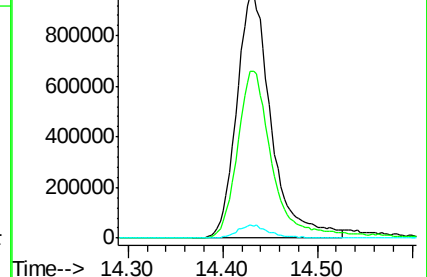
175 5.4 4.2 6.4

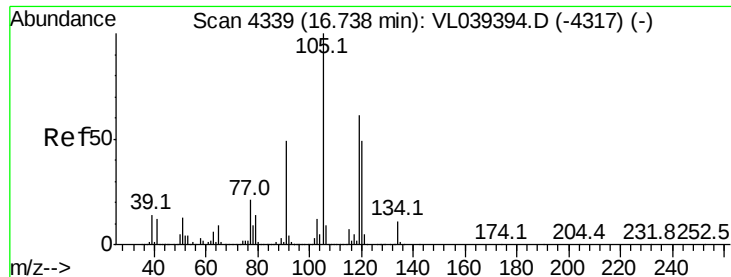


Abundance Ion 95.10 (94.80 to 95.80): V

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





#74
 1,2,4-Trimethylbenzene
 Concen: 0.05 ppbv
 RT: 16.78
 Delta R.T: MSVOA_L
 Lab File: ClientSampleId :
 Acq: 12 Jul 2022 15:11

Tgt Ion:	105	Resp:	20026
Ion Ratio	Lower	Upper	
105	100		
120	40.6	39.5	59.3
91	15.0	39.2	58.8#
77	14.8	17.2	25.8#

