

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL100719\
 Data File : VL034241.D
 Acq On : 8 Oct 2019 3:38
 Operator : SY/AP
 Sample : K5222-03
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 V-3

Quant Time: Oct 09 02:23:52 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL091719AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Sep 18 12:53:31 2019
 QLast Update : Wed Sep 18 12:53:31 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.70	49	1088250	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.22	114	1894985	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.18	117	1884481	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.50	95	1727894	10.55	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.50%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.03	85	100753	0.627	ppbv #	86
3) Chlorodifluoromethane	2.86	51	16613	0.130	ppbv	92
4) Chloromethane	3.12	50	38884	0.519	ppbv #	82
5) Vinyl Chloride	3.24	62	283785	4.141	ppbv	95
7) Chloroethane	3.55	64	1029	0.043	ppbv #	63
9) Propene	2.99	41	1206362	19.163	ppbv	93
10) Heptane	8.17	43	929405	5.665	ppbv	98
11) Trichlorofluoromethane	3.95	101	42211	0.288	ppbv	94
12) 1,1,2-Trichlorotrifluoroet	4.49	101	6669	0.070	ppbv	85
13) Ethanol	3.62	45	6184027	405.666	ppbv	96
15) Acetone	3.85	43	12495879	85.673	ppbv #	49
16) 1,3-Butadiene	3.29	39	2078108	32.648	ppbv #	24
17) tert-Butyl alcohol	4.32	59	1406729	15.222	ppbv	98
18) 1,1-Dichloroethene	4.29	96	9254	0.222	ppbv #	54
19) Isopropyl Alcohol	4.00	45	697301	7.774	ppbv #	1
20) Methylene Chloride	4.36	84	525085	12.486	ppbv	94
21) Allyl Chloride	4.38	41	288174	3.498	ppbv #	63
22) trans-1,2-Dichloroethene	4.90	96	31103	0.744	ppbv #	94
23) Vinyl Acetate	5.07	43	864878	4.024	ppbv #	1
25) Ethyl Acetate	5.71	43	1053533	3.820	ppbv #	79
26) Hexane	5.71	57	1310574	11.423	ppbv #	41
27) Carbon Disulfide	4.56	76	505510	4.777	ppbv	94
28) Methyl tert-Butyl Ether	5.05	73	39582	0.232	ppbv #	50
29) Chloroform	5.79	83	686776	4.189	ppbv	100
30) Cyclohexane	7.18	84	429940	5.190	ppbv	97
31) cis-1,2-Dichloroethene	5.58	61	6785736	58.018	ppbv #	62
34) 2-Butanone	5.27	43	3555450	18.375	ppbv	96
36) Benzene	6.94	78	1568498	7.494	ppbv	99
38) Trichloroethene	7.89	130	2934417	39.241	ppbv	97
39) 1,2-Dichloropropane	7.89	63	8675	0.092	ppbv #	1
40) 1,4-Dioxane	7.89	88	1036	0.034	ppbv #	1
41) Tetrahydrofuran	6.09	42	79226	0.727	ppbv #	89
42) Bromodichloromethane	7.84	83	17711	0.099	ppbv #	58
44) 2,2,4-Trimethylpentane	7.92	57	1603405	3.980	ppbv #	81
50) 4-Methyl-2-Pentanone	8.80	43	3550970	12.610	ppbv	100
51) 2-Hexanone	10.20	43	1469005	6.216	ppbv #	98
52) Tetrachloroethene	11.39	164	28127849	406.787	ppbv	90
53) Toluene	9.87	91	5279541	23.082	ppbv	96
58) Ethyl Benzene	12.80	91	591399	1.945	ppbv	94
59) m/p-Xylene	13.05	91	3736513	14.836	ppbv	99
60) o-Xylene	13.78	91	1512038	6.004	ppbv	97

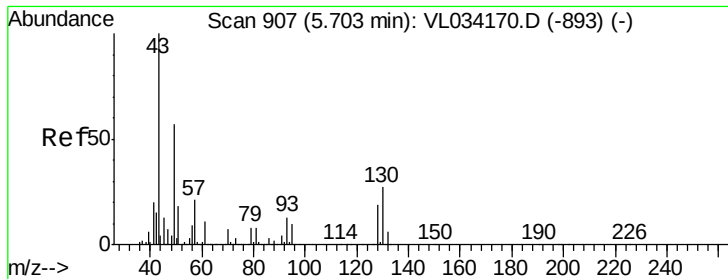
Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL100719\
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Quant Time: Oct 09 02:23:52 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL091719AIR.M
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 QLast Update : Wed Sep 18 12:53:31 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
61) Styrene	13.62	104	127500	0.707	ppbv	94
62) Isopropylbenzene	14.76	105	43997	0.135	ppbv #	22
64) n-propylbenzene	15.65	120	105384	1.278	ppbv	76
65) tert-Butylbenzene	16.86	119	169088	0.594	ppbv #	58
67) sec-Butylbenzene	17.38	105	28067	0.069	ppbv	94
69) p-Isopropyltoluene	17.74	119	62664	0.190	ppbv #	23
70) n-Butylbenzene	18.67	91	360483	0.939	ppbv #	81
71) 2-Chlorotoluene	15.86	91	79668	0.299	ppbv	73
72) 4-Ethyltoluene	15.92	105	575219	2.022	ppbv	97
73) 1,3,5-Trimethylbenzene	16.09	105	501030	1.823	ppbv	97
74) 1,2,4-Trimethylbenzene	16.85	105	1666397	5.710	ppbv #	70
75) 1,3-Dichlorobenzene	17.10	146	7020	0.045	ppbv #	21
79) Naphthalene	22.33	128	152758	0.595	ppbv #	93

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.70 min Scan# 907

Delta R.T. 0.00 min

Lab File: VL034241.D

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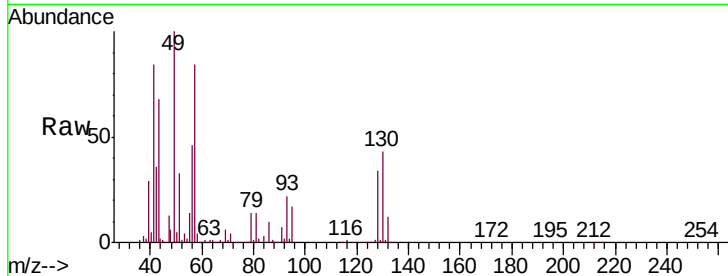
Tgt Ion: 49 Resp: 1088250

Ion Ratio Lower Upper

49 100

128 35.7 17.6 52.9

130 44.8 22.3 66.9



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V

800000

600000

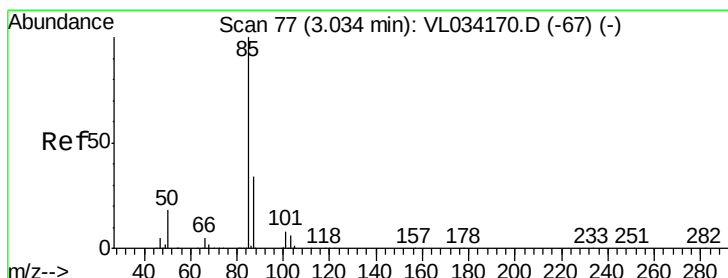
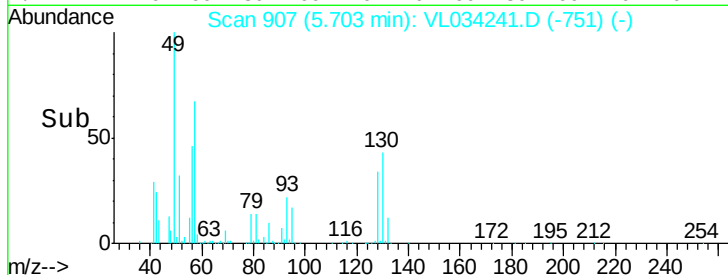
400000

200000

0

5.65 5.70 5.75

Time-->



#2

Dichlorodifluoromethane

Concen: 0.627 ppbv

RT: 3.03 min Scan# 75

Delta R.T. -0.01 min

Lab File: VL034241.D

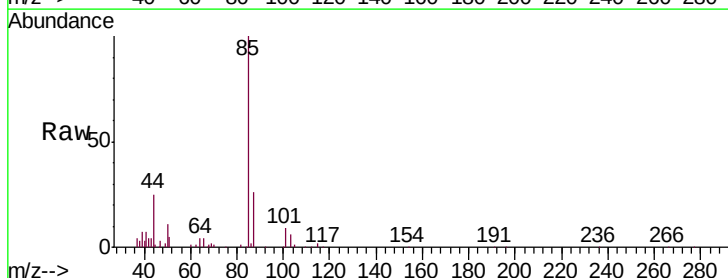
Acq: 8 Oct 2019 3:38

Tgt Ion: 85 Resp: 100753

Ion Ratio Lower Upper

85 100

87 26.2 27.2 40.8#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

100000

80000

60000

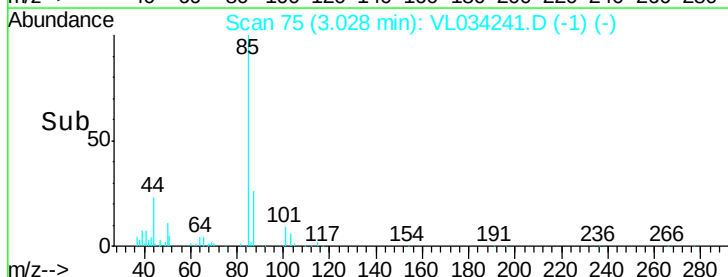
40000

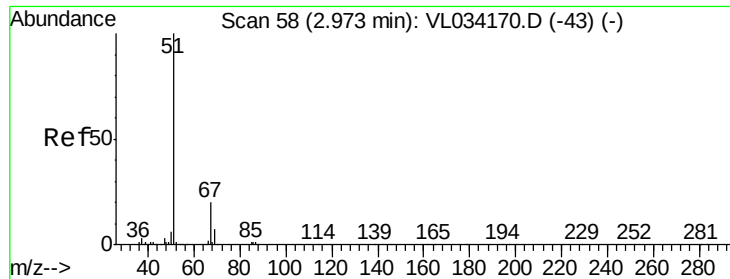
20000

0

3.00 3.03 3.05

Time-->

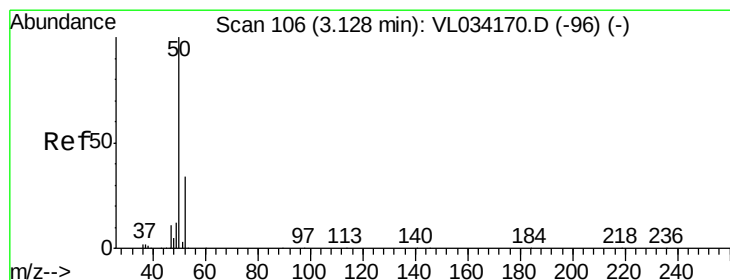
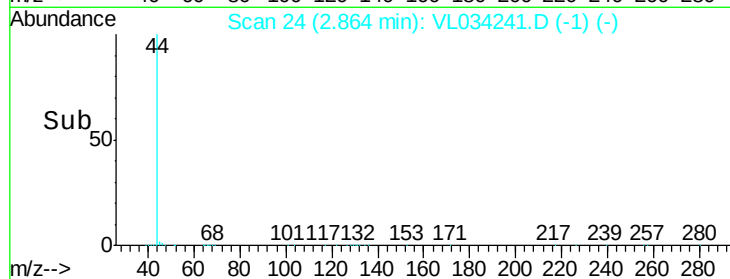
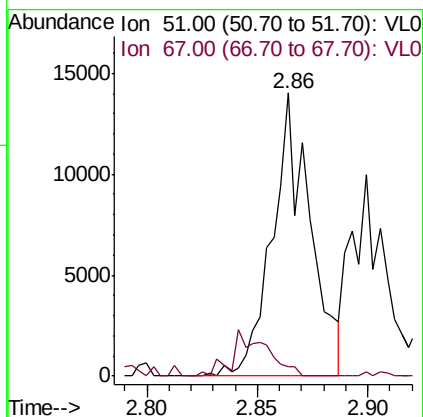
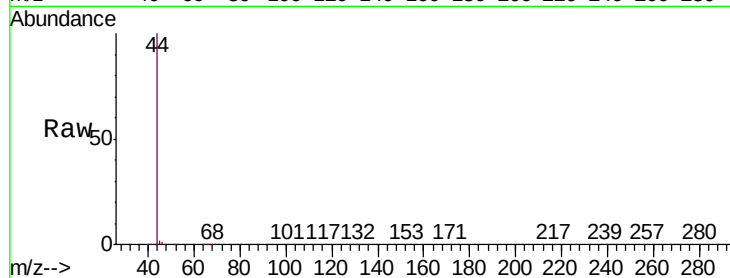




#3
Chlorodifluoromethane
Concen: 0.130 ppbv
RT: 2.86 min Scan# 24
Delta R.T. -0.11 min
Lab File: VL034241.D
Acq: 8 Oct 2019 3:38

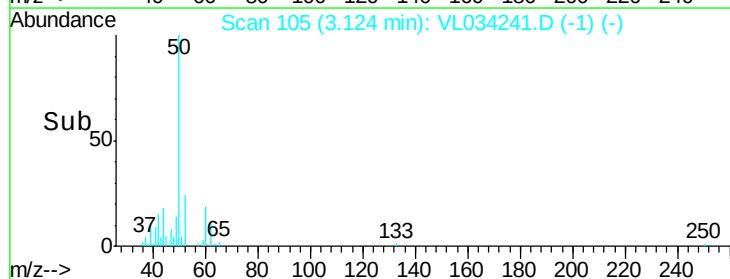
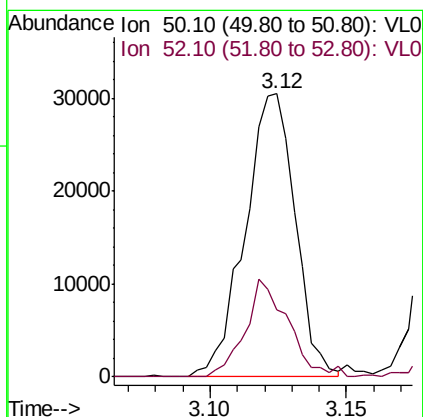
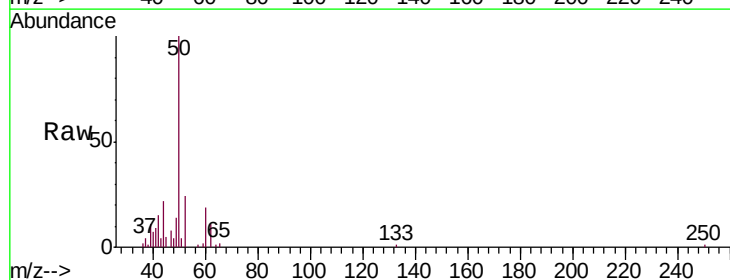
Instrument :
MSVOA_L
ClientSampleId :
V-3

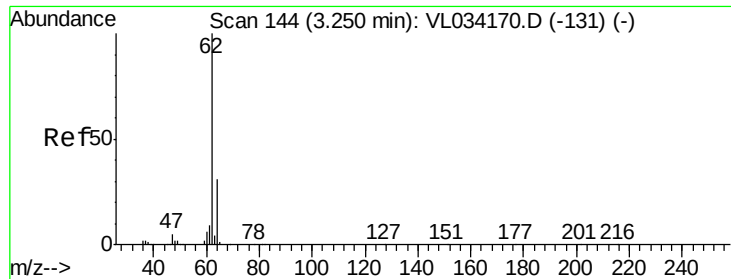
Tgt Ion: 51 Resp: 16613
Ion Ratio Lower Upper
51 100
67 14.9 14.8 22.2



#4
Chloromethane
Concen: 0.519 ppbv
RT: 3.12 min Scan# 105
Delta R.T. -0.00 min
Lab File: VL034241.D
Acq: 8 Oct 2019 3:38

Tgt Ion: 50 Resp: 38884
Ion Ratio Lower Upper
50 100
52 23.8 27.1 40.7#





#5

Vinyl Chloride

Concen: 4.141 ppbv

RT: 3.24 min Scan# 141

Delta R.T. -0.01 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

Instrument :

MSVOA_L

ClientSampleId :

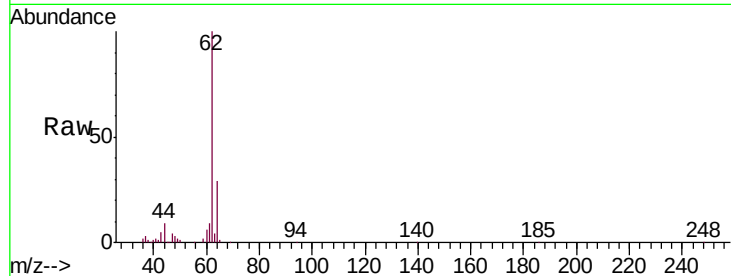
V-3

Tgt Ion: 62 Resp: 283785

Ion Ratio Lower Upper

62 100

64 29.0 25.2 37.8



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0

250000

200000

150000

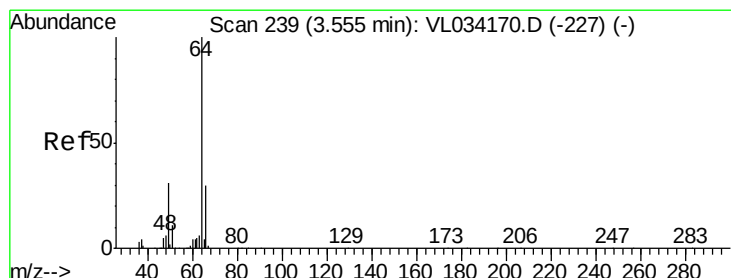
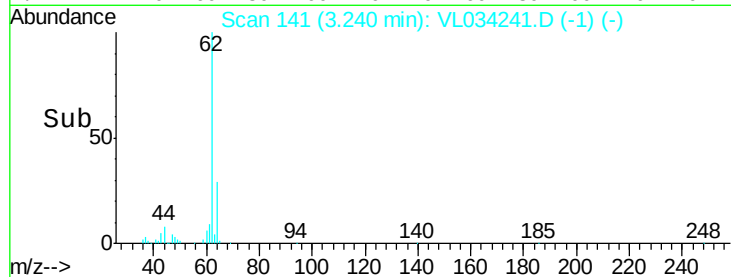
100000

50000

0

3.24

Time-->



#7

Chloroethane

Concen: 0.043 ppbv

RT: 3.55 min Scan# 236

Delta R.T. -0.01 min

Lab File: VL034241.D

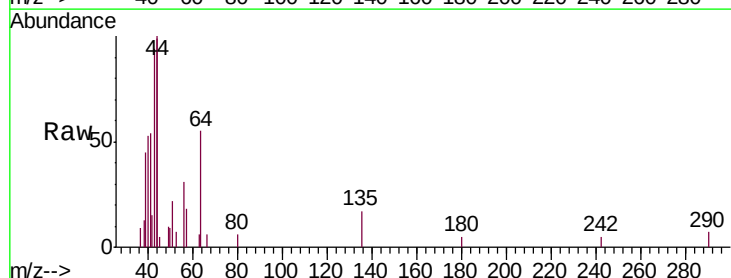
Acq: 8 Oct 2019 3:38

Tgt Ion: 64 Resp: 1029

Ion Ratio Lower Upper

64 100

66 10.4 24.2 36.4#



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0

2500

2000

1500

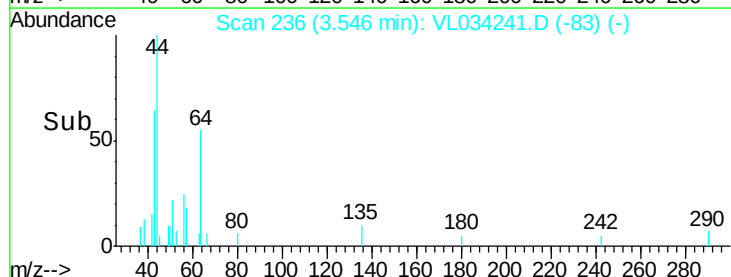
1000

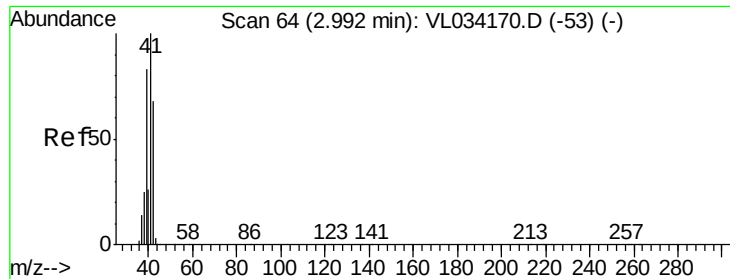
500

0

3.55

Time-->





#9

Propene

Concen: 19.163 ppbv

RT: 2.99 min Scan# 63

Delta R.T. -0.00 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

Instrument :

MSVOA_L

ClientSampleId :

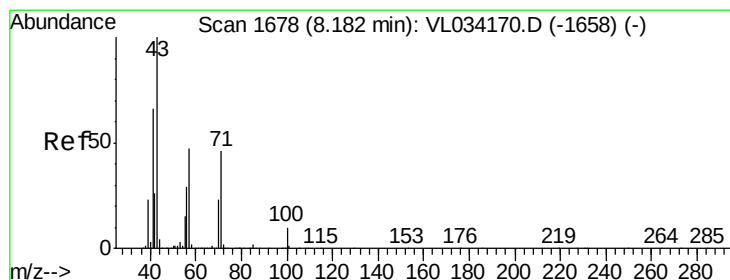
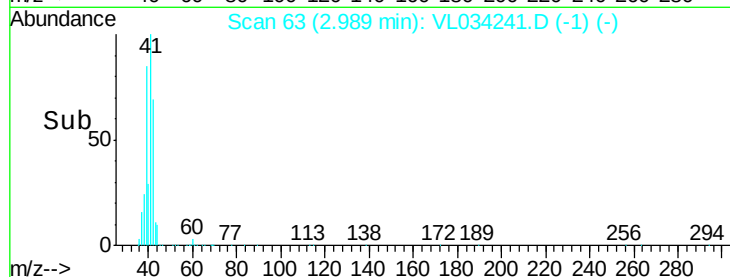
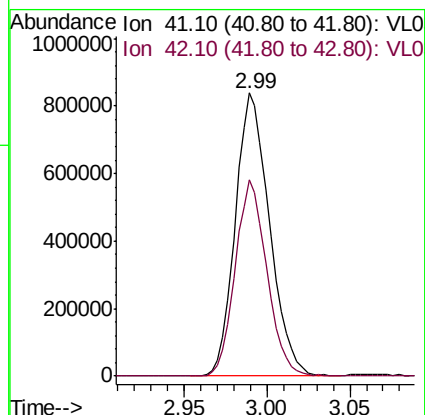
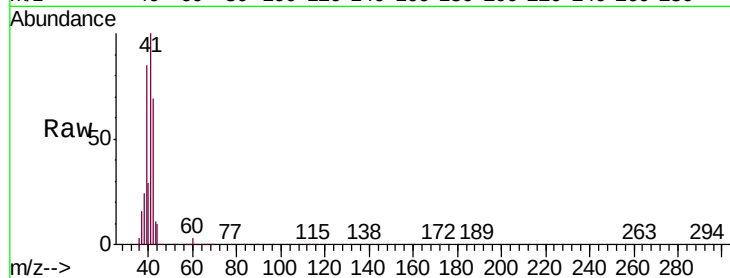
V-3

Tgt Ion: 41 Resp: 1206362

Ion Ratio Lower Upper

41 100

42 64.0 55.8 83.6



#10

Heptane

Concen: 5.665 ppbv

RT: 8.17 min Scan# 1675

Delta R.T. -0.01 min

Lab File: VL034241.D

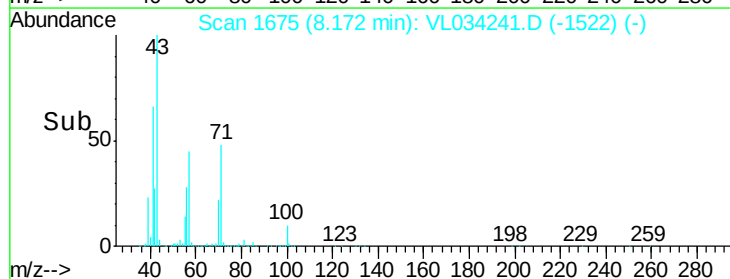
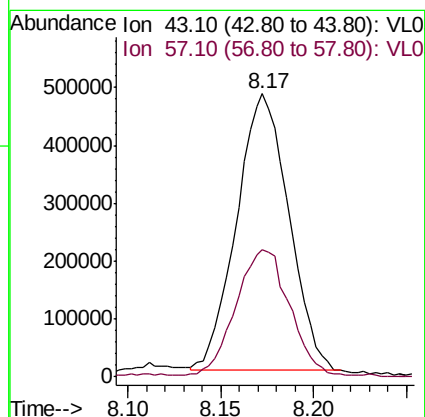
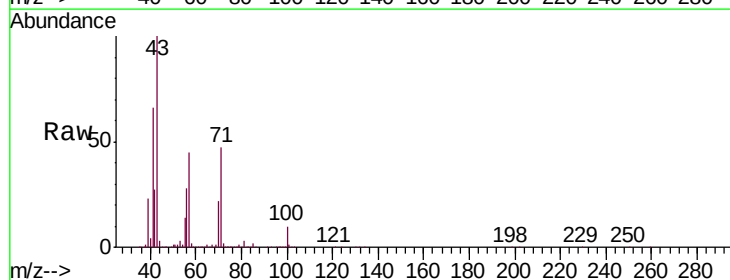
Acq: 8 Oct 2019 3:38

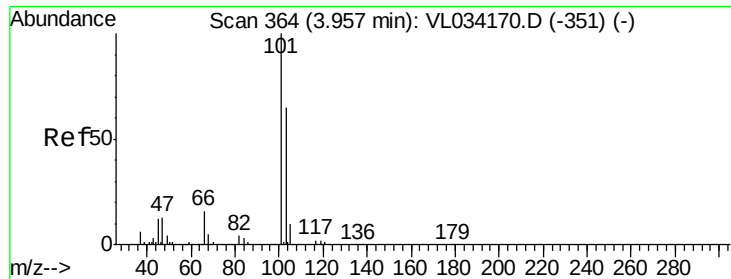
Tgt Ion: 43 Resp: 929405

Ion Ratio Lower Upper

43 100

57 48.0 37.5 56.3





#11

Trichlorofluoromethane

Concen: 0.288 ppbv

RT: 3.95 min Scan# 362

Delta R.T. -0.01 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

Instrument :

MSVOA_L

ClientSampleId :

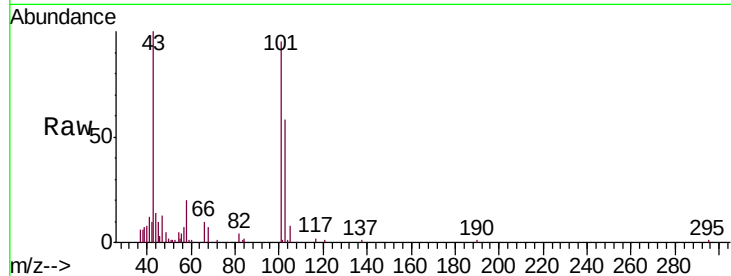
V-3

Tgt Ion:101 Resp: 42211

Ion Ratio Lower Upper

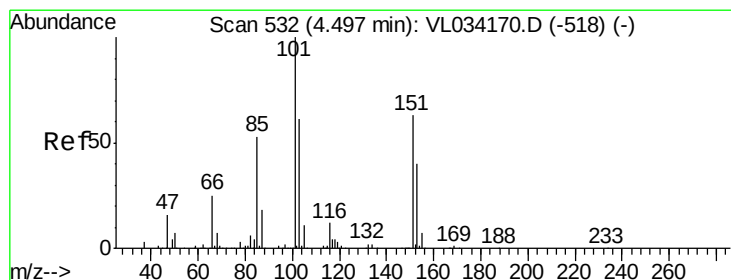
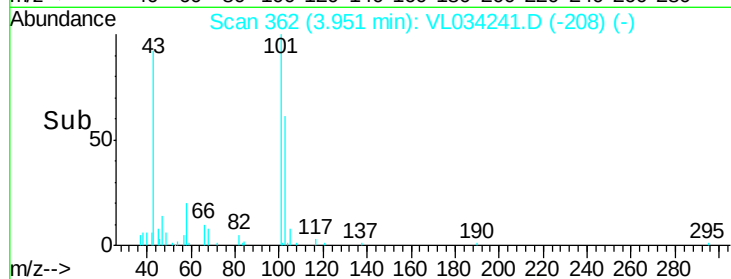
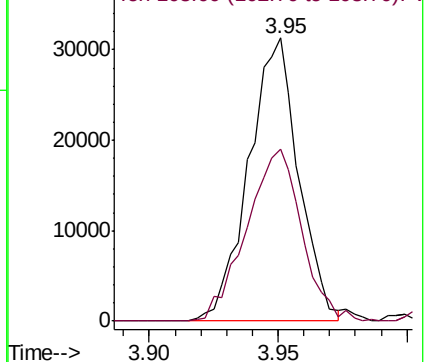
101 100

103 60.6 52.1 78.1



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.070 ppbv

RT: 4.49 min Scan# 529

Delta R.T. -0.01 min

Lab File: VL034241.D

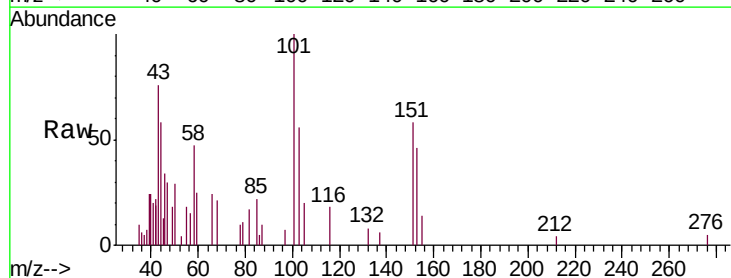
Acq: 8 Oct 2019 3:38

Tgt Ion:101 Resp: 6669

Ion Ratio Lower Upper

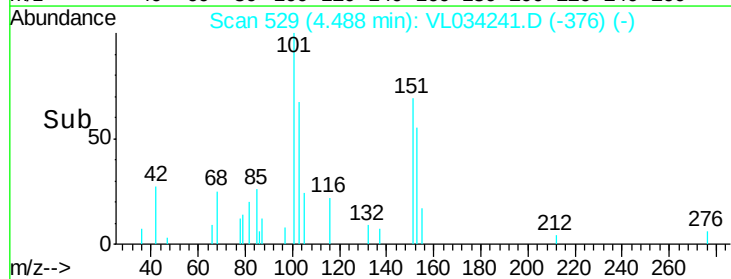
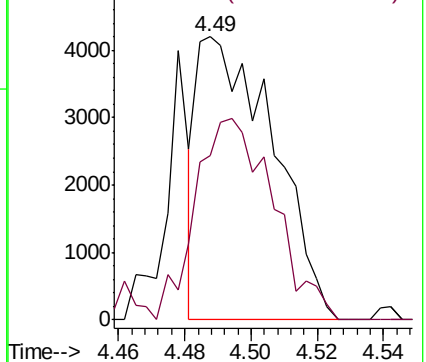
101 100

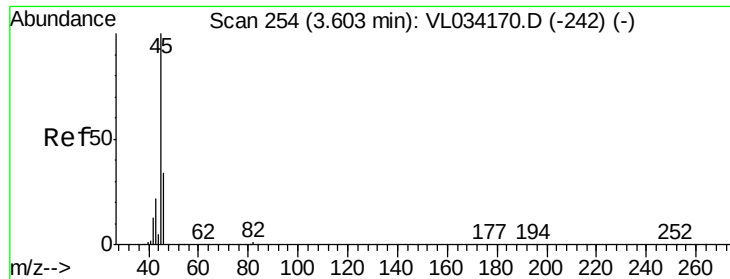
151 76.4 51.8 77.8



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V

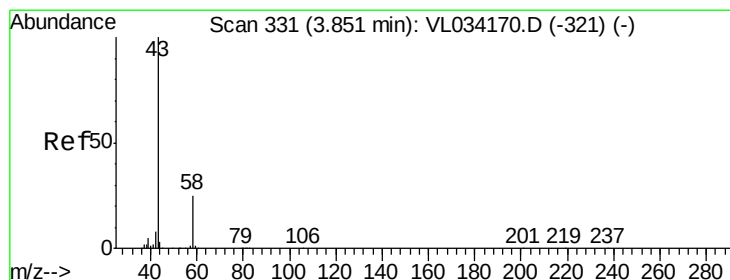
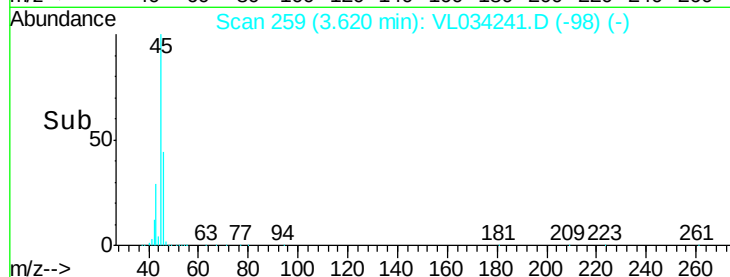
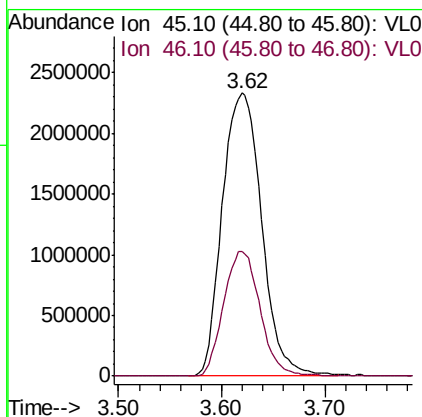
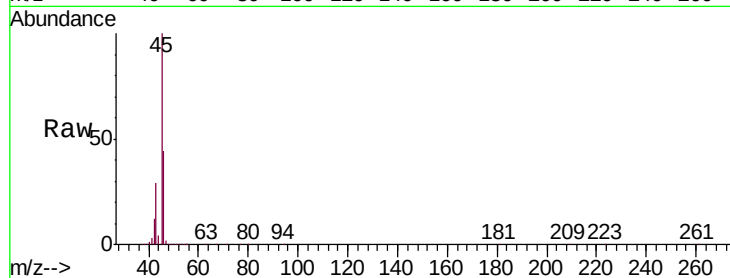




#13
Ethanol
Concen: 405.666 ppbv
RT: 3.62 min Scan# 259
Delta R.T. 0.02 min
Lab File: VL034241.D
Acq: 8 Oct 2019 3:38

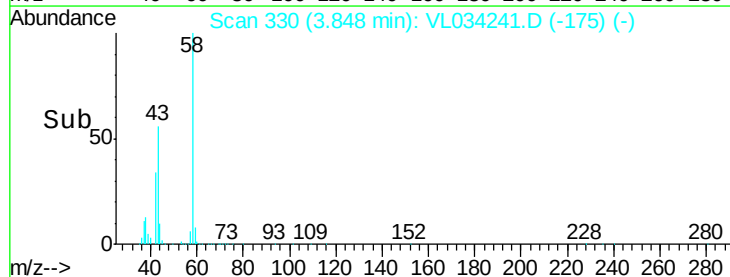
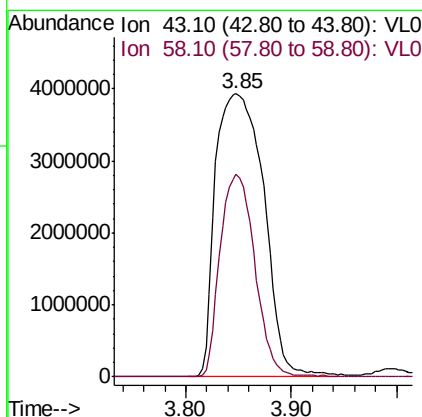
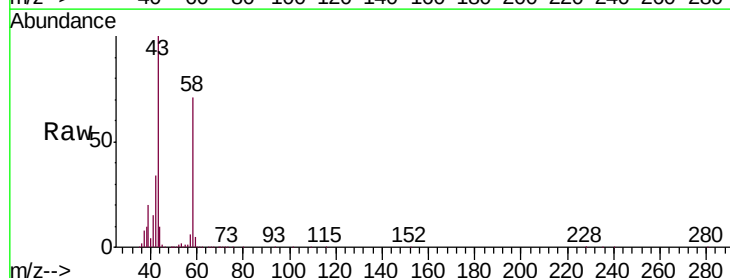
Instrument :
MSVOA_L
ClientSampleId :
V-3

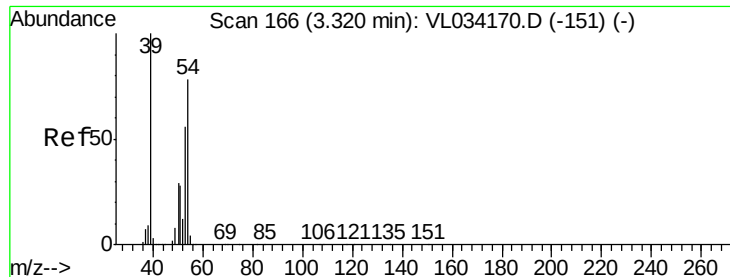
Tgt Ion: 45 Resp: 6184027
Ion Ratio Lower Upper
45 100
46 41.1 15.5 61.9



#15
Acetone
Concen: 85.673 ppbv
RT: 3.85 min Scan# 330
Delta R.T. -0.00 min
Lab File: VL034241.D
Acq: 8 Oct 2019 3:38

Tgt Ion: 43 Resp: 12495879
Ion Ratio Lower Upper
43 100
58 51.4 20.5 30.7#

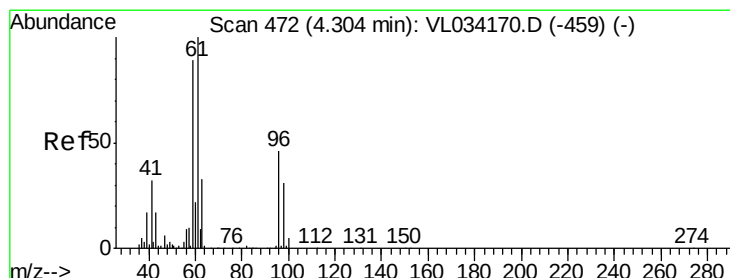
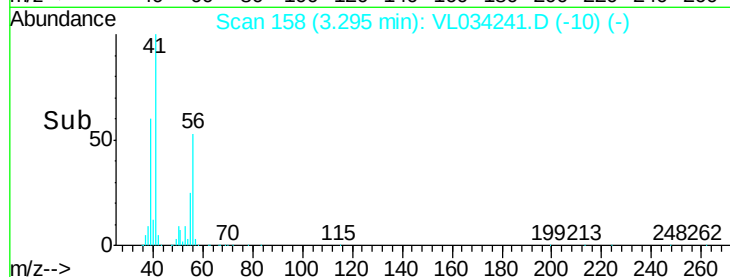
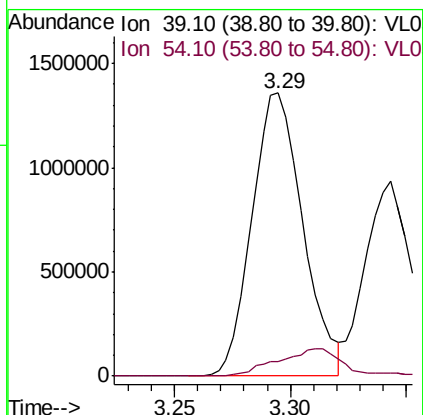
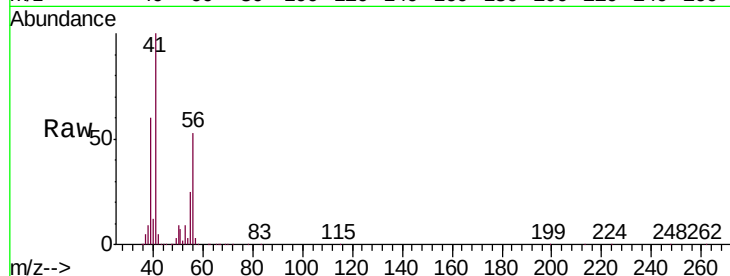




#16
1,3-Butadiene
Concen: 32.648 ppbv
RT: 3.29 min Scan# 158
Delta R.T. -0.03 min
Lab File: VL034241.D
Acq: 8 Oct 2019 3:38

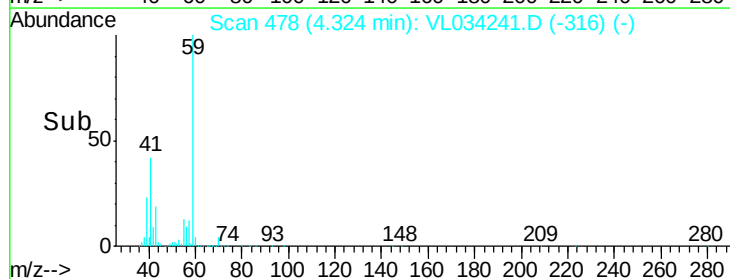
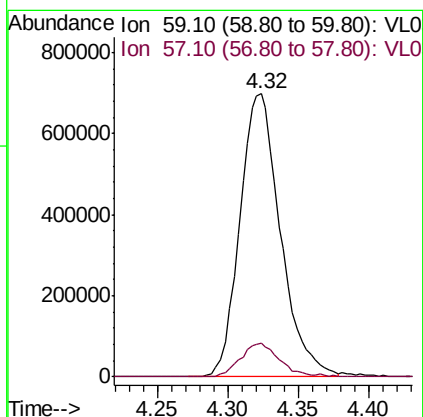
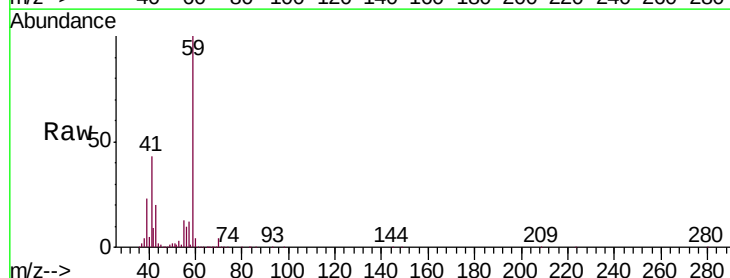
Instrument :
MSVOA_L
ClientSampleId :
V-3

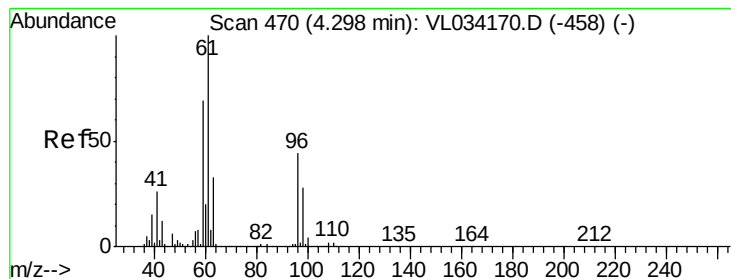
Tgt Ion: 39 Resp: 2078108
Ion Ratio Lower Upper
39 100
54 12.7 63.4 95.0#



#17
tert-Butyl alcohol
Concen: 15.222 ppbv
RT: 4.32 min Scan# 478
Delta R.T. 0.02 min
Lab File: VL034241.D
Acq: 8 Oct 2019 3:38

Tgt Ion: 59 Resp: 1406729
Ion Ratio Lower Upper
59 100
57 11.8 8.7 13.1





#18

1,1-Dichloroethene

Concen: 0.222 ppbv

RT: 4.29 min Scan# 469

Delta R.T. -0.00 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

Instrument :

MSVOA_L

ClientSampled :

V-3

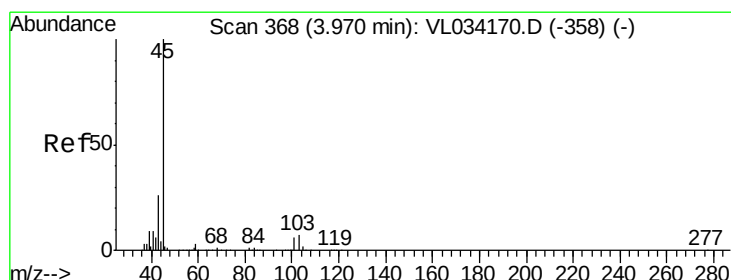
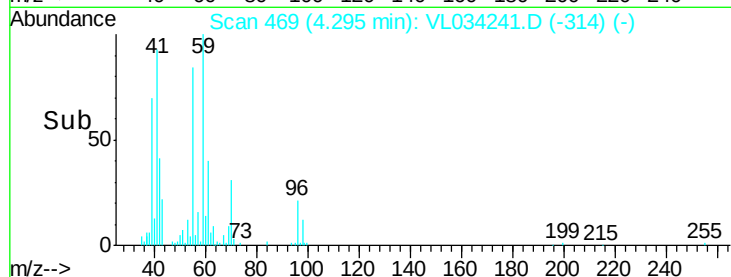
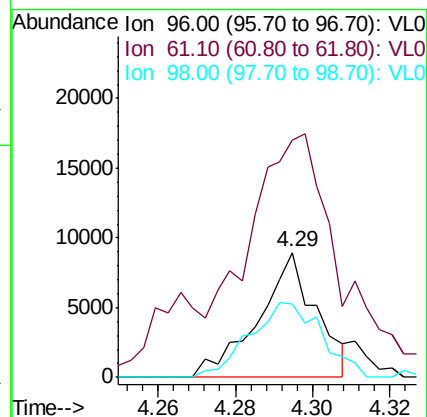
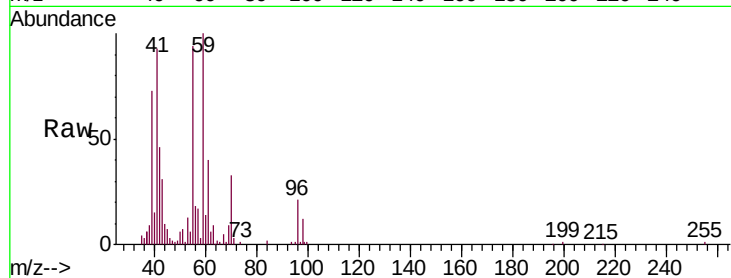
Tgt Ion: 96 Resp: 9254

Ion Ratio Lower Upper

96 100

61 135.1 183.3 274.9#

98 59.1 51.4 77.2



#19

Isopropyl Alcohol

Concen: 7.774 ppbv

RT: 4.00 min Scan# 376

Delta R.T. 0.03 min

Lab File: VL034241.D

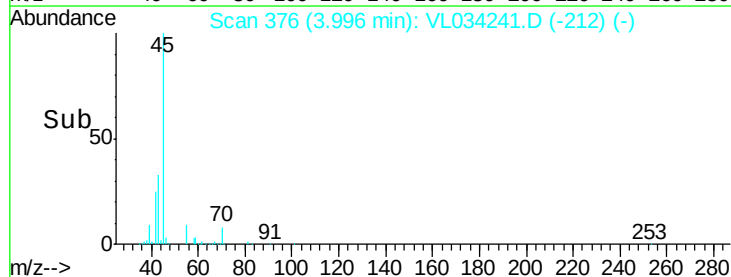
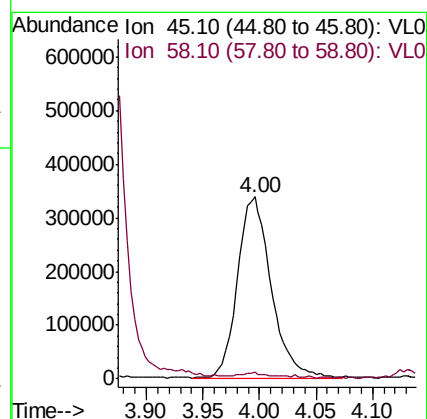
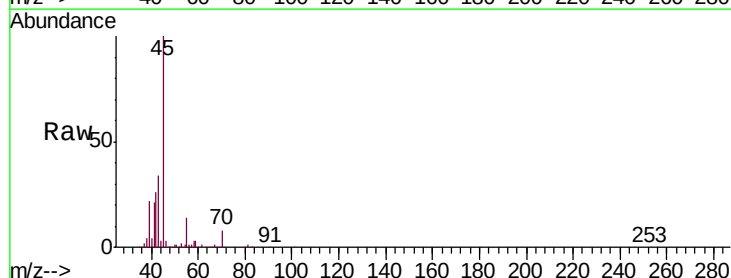
Acq: 8 Oct 2019 3:38

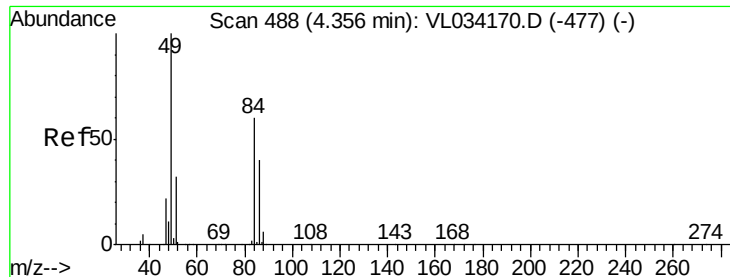
Tgt Ion: 45 Resp: 697301

Ion Ratio Lower Upper

45 100

58 922.0 1.4 2.0#

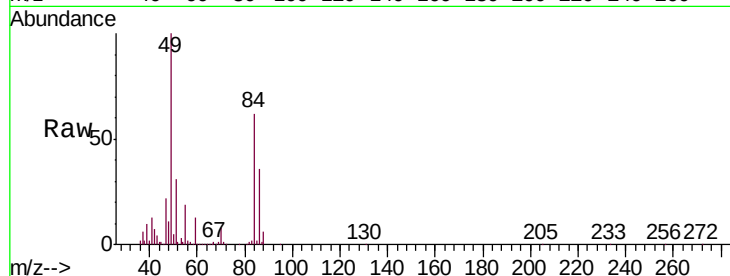




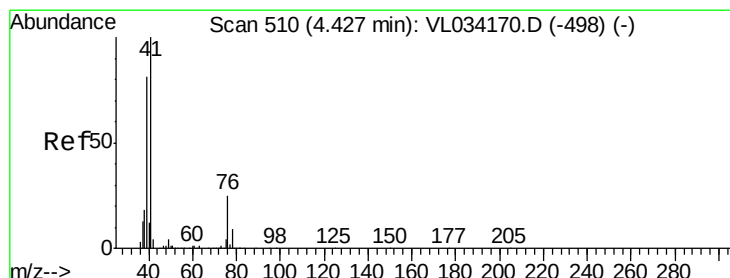
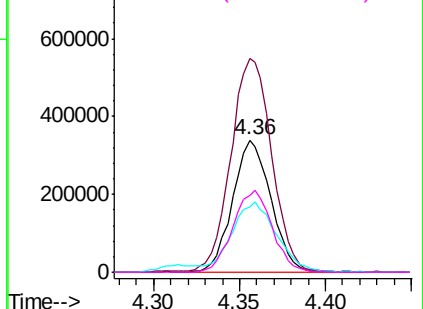
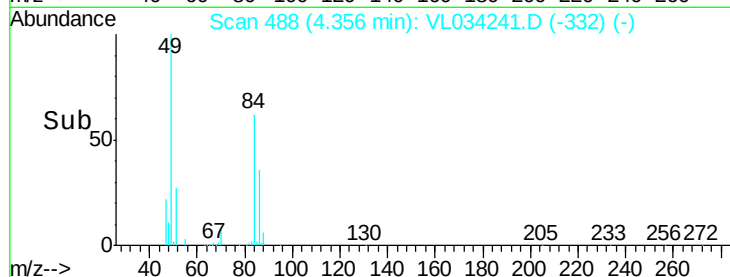
#20
Methylene Chloride
Concen: 12.486 ppbv
RT: 4.36 min Scan# 488
Delta R.T. 0.00 min
Lab File: VL034241.D
Acq: 8 Oct 2019 3:38

Instrument :
MSVOA_L
ClientSampleId :
V-3

Tgt Ion: 84 Resp: 525085
Ion Ratio Lower Upper
84 100
49 161.5 133.8 200.8
51 49.1 43.6 65.4
86 58.4 53.1 79.7

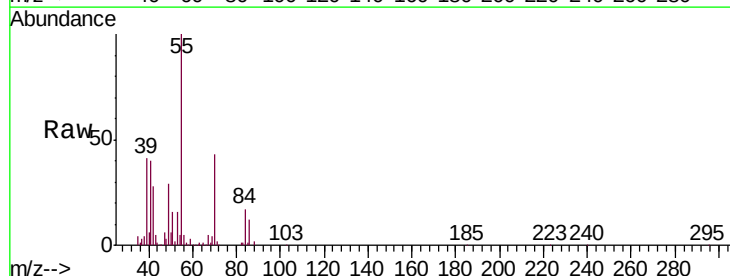


Abundance Ion 84.00 (83.70 to 84.70): VL0
Ion 49.10 (48.80 to 49.80): VL0
Ion 51.10 (50.80 to 51.80): VL0
Ion 86.00 (85.70 to 86.70): VL0

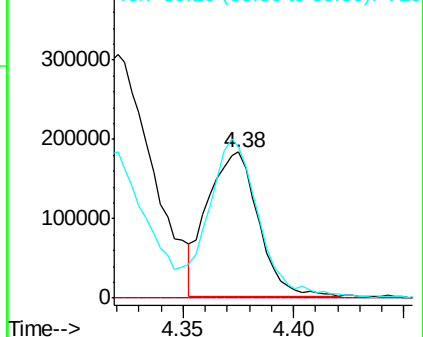
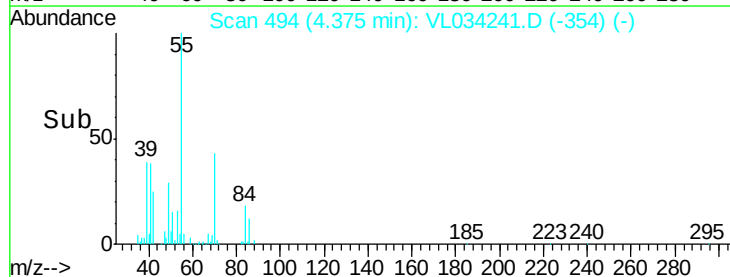


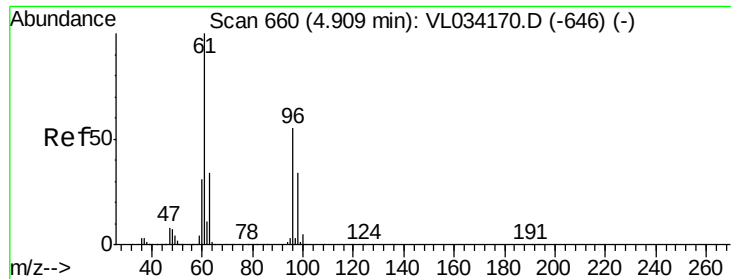
#21
Allyl Chloride
Concen: 3.498 ppbv
RT: 4.38 min Scan# 494
Delta R.T. -0.05 min
Lab File: VL034241.D
Acq: 8 Oct 2019 3:38

Tgt Ion: 41 Resp: 288174
Ion Ratio Lower Upper
41 100
76 0.0 21.8 32.6#
39 109.8 64.8 97.2#



Abundance Ion 41.10 (40.80 to 41.80): VL0
Ion 76.10 (75.80 to 76.80): VL0
Ion 39.10 (38.80 to 39.80): VL0





#22

trans-1,2-Dichloroethene

Concen: 0.744 ppbv

RT: 4.90 min Scan# 658

Delta R.T. -0.01 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

Instrument :

MSVOA_L

ClientSampleId :

V-3

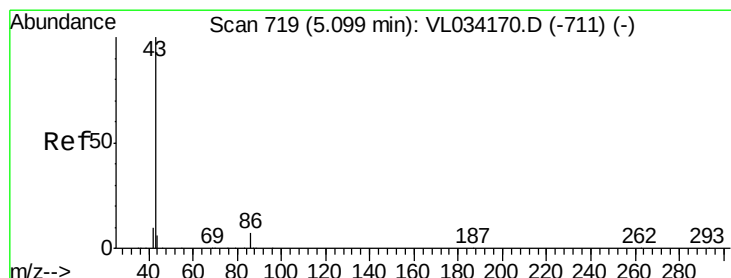
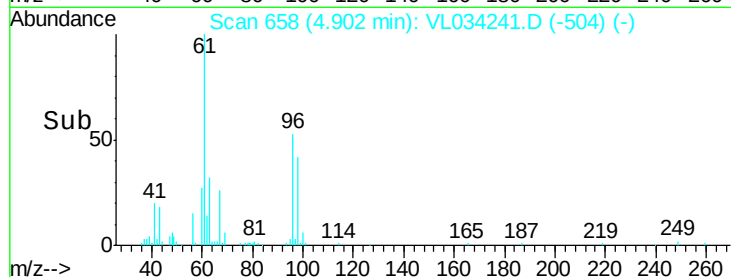
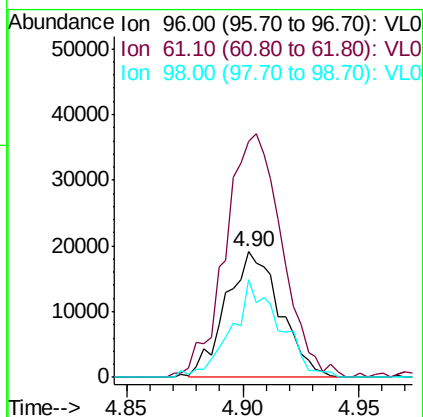
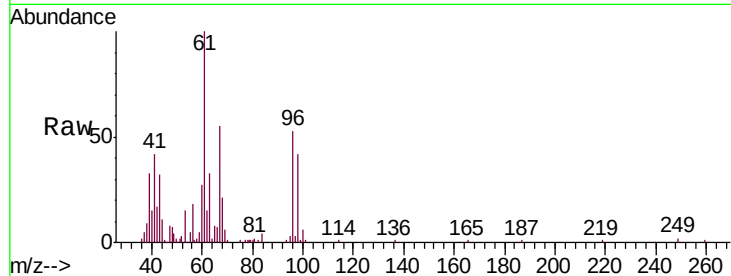
Tgt Ion: 96 Resp: 31103

Ion Ratio Lower Upper

96 100

61 183.2 145.5 218.3

98 78.0 49.9 74.9#



#23

Vinyl Acetate

Concen: 4.024 ppbv

RT: 5.07 min Scan# 711

Delta R.T. -0.03 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

Tgt Ion: 43 Resp: 864878

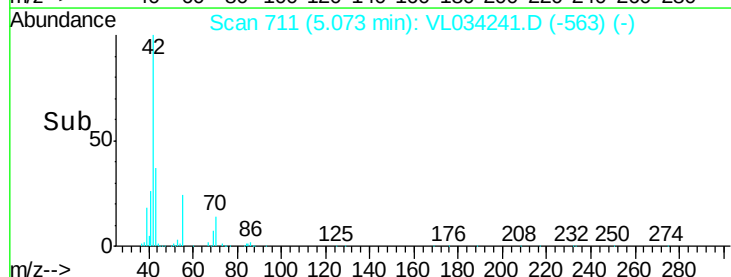
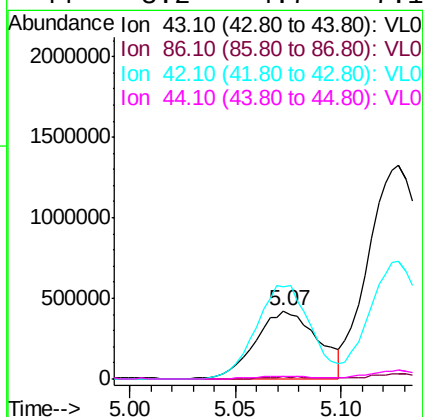
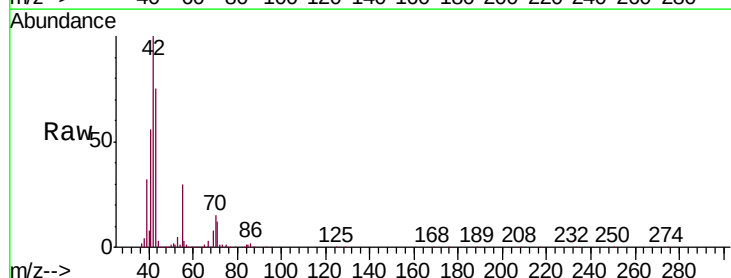
Ion Ratio Lower Upper

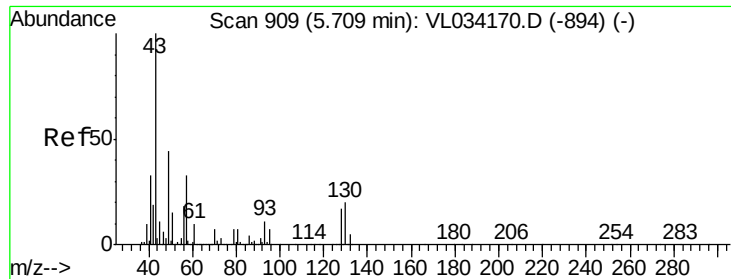
43 100

86 3.0 5.1 7.7#

42 134.8 8.6 12.8#

44 3.2 4.7 7.1#

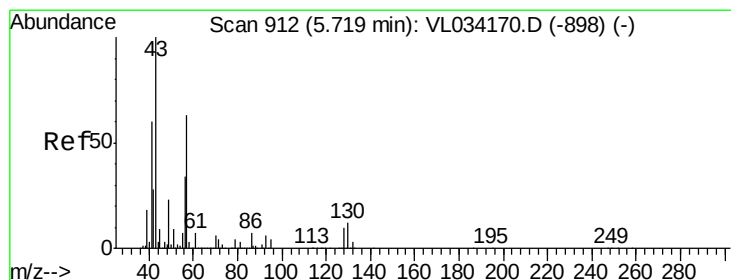
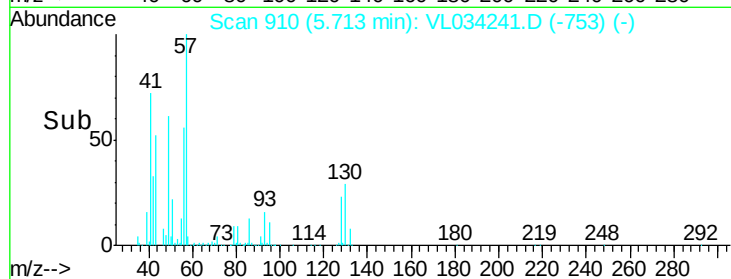
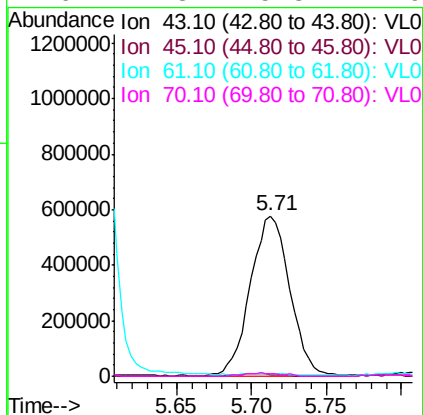
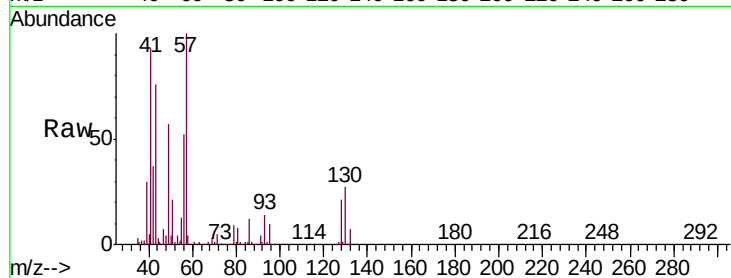




#25
Ethyl Acetate
Concen: 3.820 ppbv
RT: 5.71 min Scan# 910
Delta R.T. 0.00 min
Lab File: VL034241.D
Acq: 8 Oct 2019 3:38

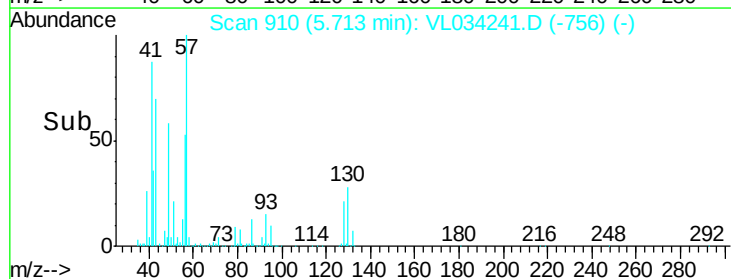
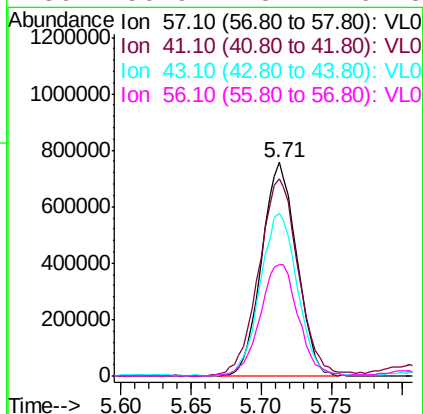
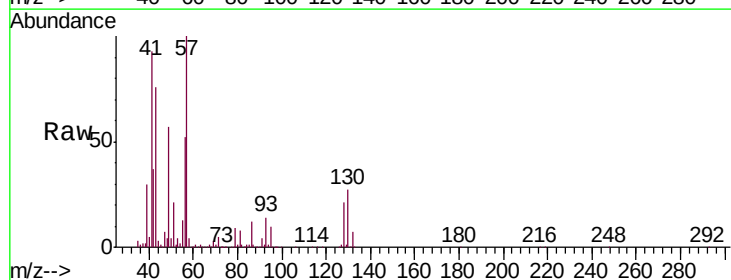
Instrument :
MSVOA_L
ClientSampled :
V-3

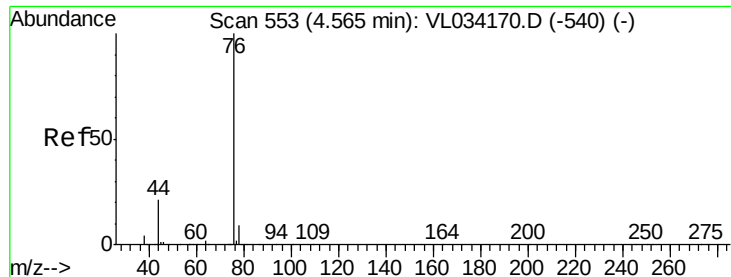
Tgt Ion: 43 Resp: 1053533
Ion Ratio Lower Upper
43 100
45 1.7 8.4 12.6#
61 0.0 7.2 10.8#
70 2.3 5.3 7.9#



#26
Hexane
Concen: 11.423 ppbv
RT: 5.71 min Scan# 910
Delta R.T. -0.01 min
Lab File: VL034241.D
Acq: 8 Oct 2019 3:38

Tgt Ion: 57 Resp: 1310574
Ion Ratio Lower Upper
57 100
41 103.8 78.5 117.7
43 80.5 189.5 284.3#
56 56.9 43.2 64.8





#27

Carbon Disulfide

Concen: 4.777 ppbv

RT: 4.56 min Scan# 551

Delta R.T. -0.01 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

Instrument :

MSVOA_L

ClientSampleId :

V-3

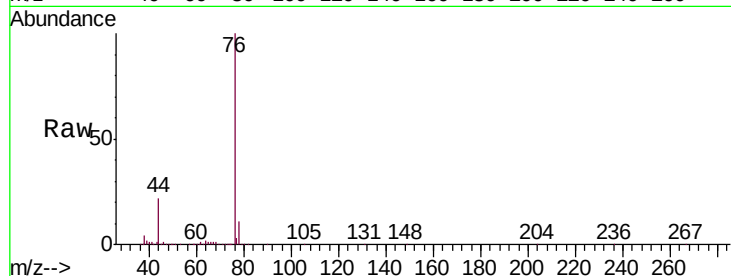
Tgt Ion: 76 Resp: 505510

Ion Ratio Lower Upper

76 100

44 26.0 17.6 26.4

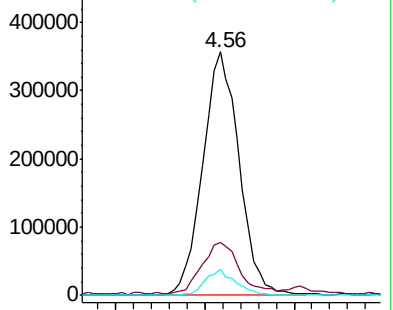
78 9.1 7.6 11.4



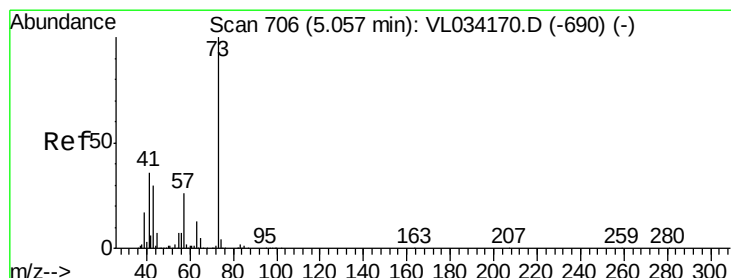
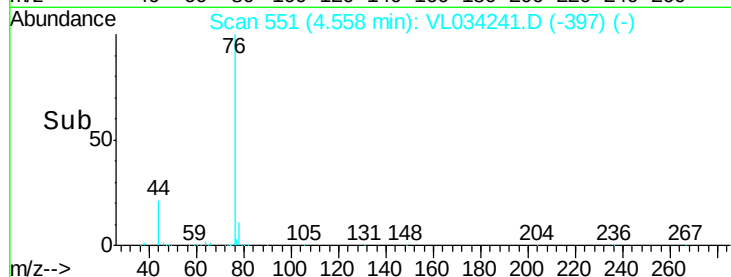
Abundance Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0



Time-->



#28

Methyl tert-Butyl Ether

Concen: 0.232 ppbv

RT: 5.05 min Scan# 705

Delta R.T. -0.00 min

Lab File: VL034241.D

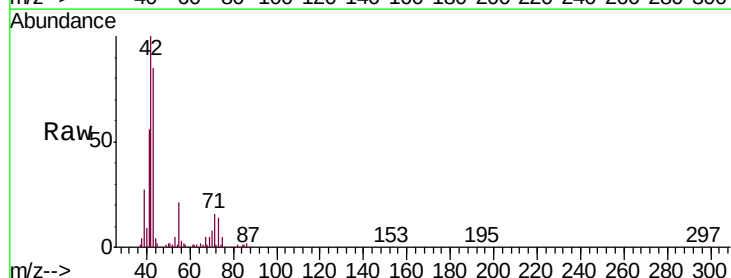
Acq: 8 Oct 2019 3:38

Tgt Ion: 73 Resp: 39582

Ion Ratio Lower Upper

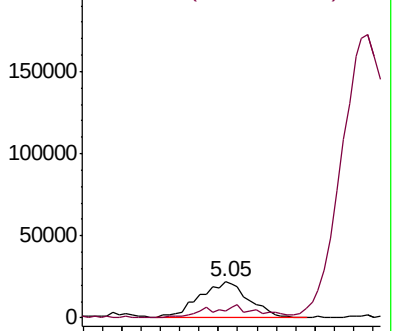
73 100

57 0.0 20.2 30.2#

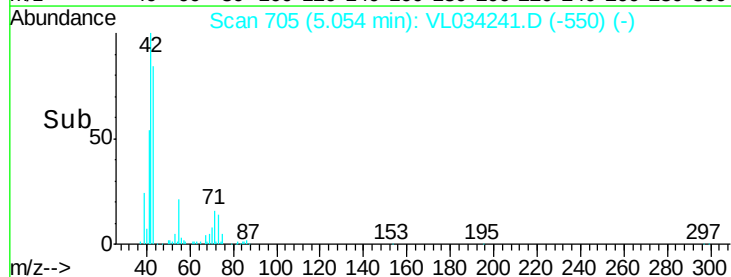


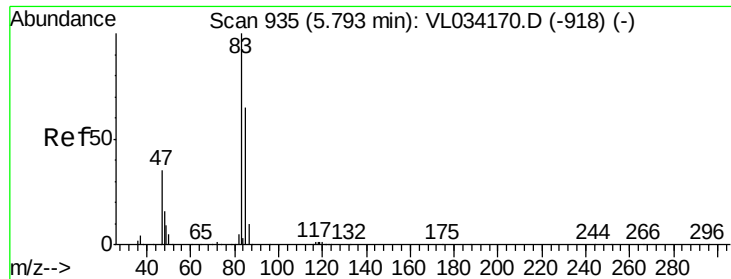
Abundance Ion 73.10 (72.80 to 73.80): VL0

Ion 57.10 (56.80 to 57.80): VL0



Time-->

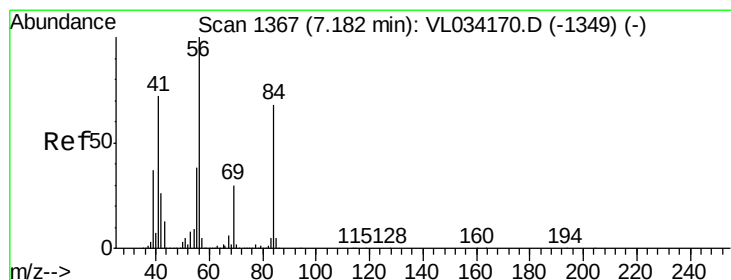
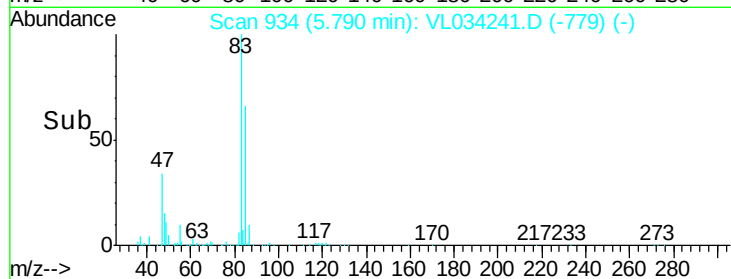
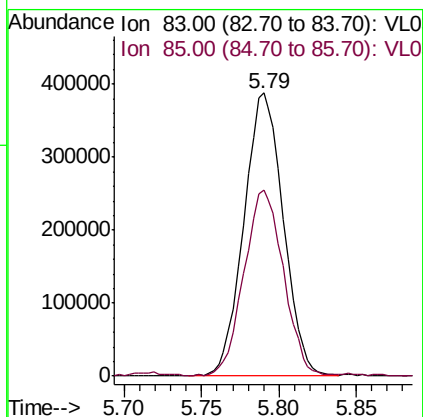
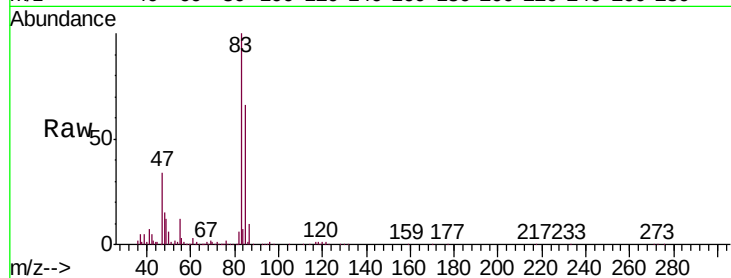




#29
Chloroform
Concen: 4.189 ppbv
RT: 5.79 min Scan# 934
Delta R.T. -0.00 min
Lab File: VL034241.D
Acq: 8 Oct 2019 3:38

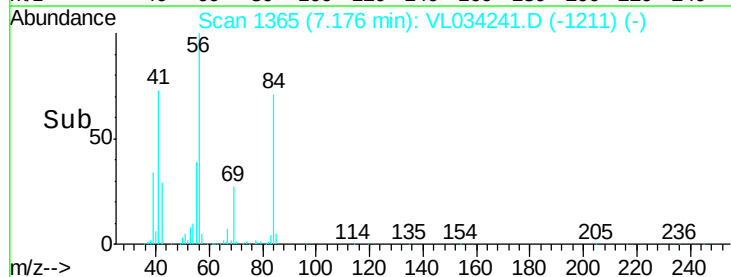
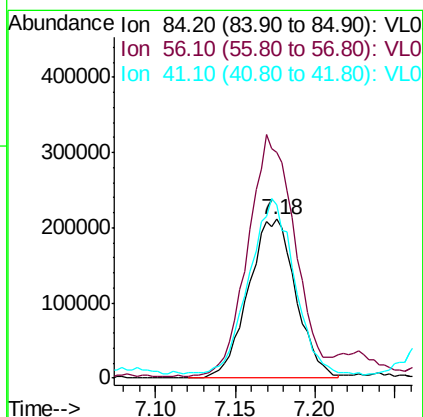
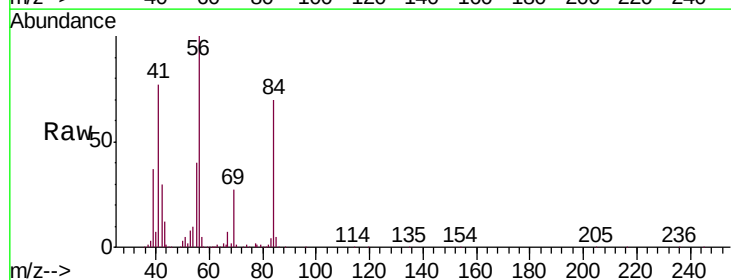
Instrument :
MSVOA_L
ClientSampleId :
V-3

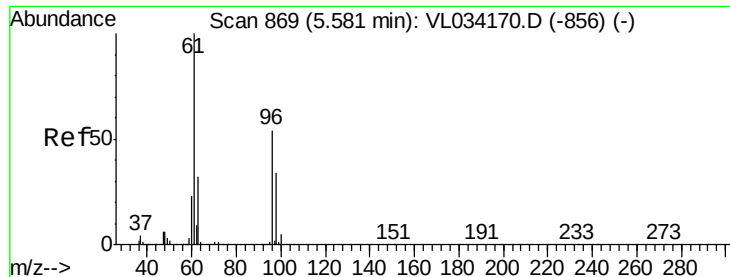
Tgt Ion: 83 Resp: 686776
Ion Ratio Lower Upper
83 100
85 65.7 52.3 78.5



#30
Cyclohexane
Concen: 5.190 ppbv
RT: 7.18 min Scan# 1365
Delta R.T. -0.01 min
Lab File: VL034241.D
Acq: 8 Oct 2019 3:38

Tgt Ion: 84 Resp: 429940
Ion Ratio Lower Upper
84 100
56 163.5 126.2 189.2
41 107.0 85.8 128.8





#31

cis-1,2-Dichloroethene

Concen: 58.018 ppbv

RT: 5.58 min Scan# 869

Delta R.T. 0.00 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

Instrument :

MSVOA_L

ClientSampleId :

V-3

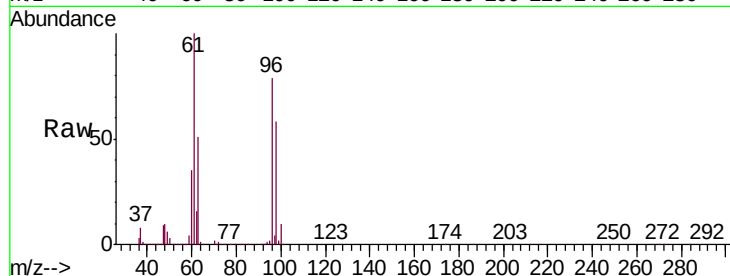
Tgt Ion: 61 Resp: 6785736

Ion Ratio Lower Upper

61 100

96 78.6 43.0 64.4#

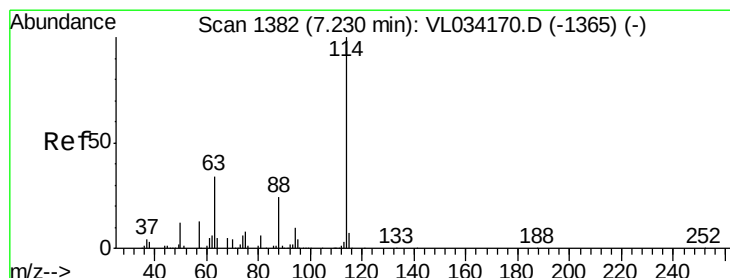
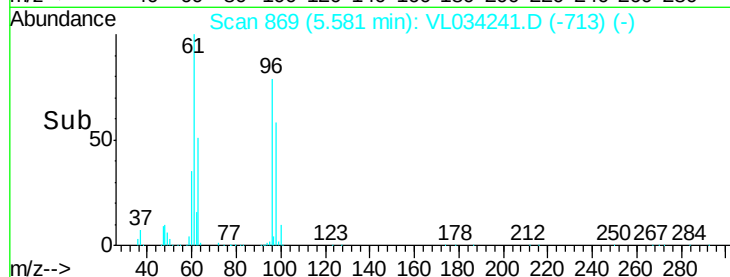
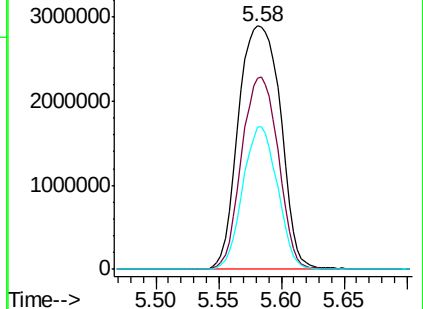
98 58.3 27.2 40.8#



Abundance Ion 61.10 (60.80 to 61.80): VL0

Ion 96.00 (95.70 to 96.70): VL0

Ion 98.00 (97.70 to 98.70): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.22 min Scan# 1380

Delta R.T. -0.01 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

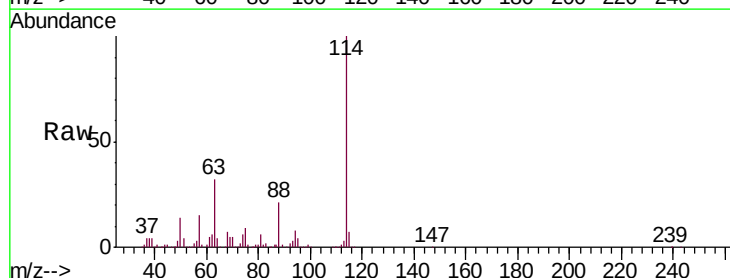
Tgt Ion: 114 Resp: 1894985

Ion Ratio Lower Upper

114 100

63 33.6 27.8 41.6

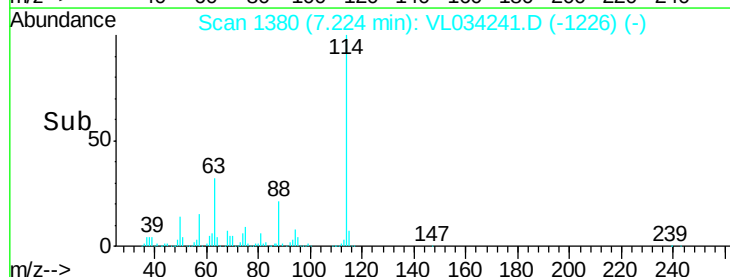
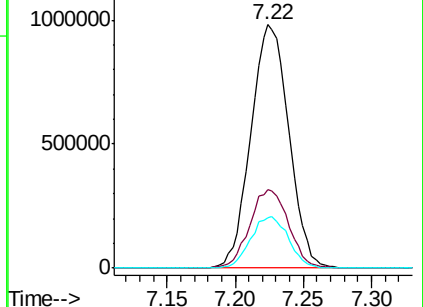
88 21.3 17.1 25.7

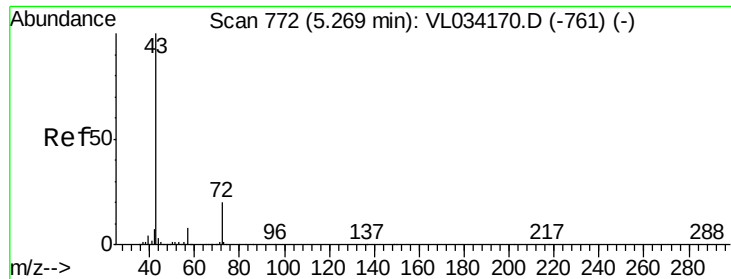


Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0





#34

2-Butanone

Concen: 18.375 ppbv

RT: 5.27 min Scan# 772

Delta R.T. 0.00 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

Instrument :

MSVOA_L

ClientSampleId :

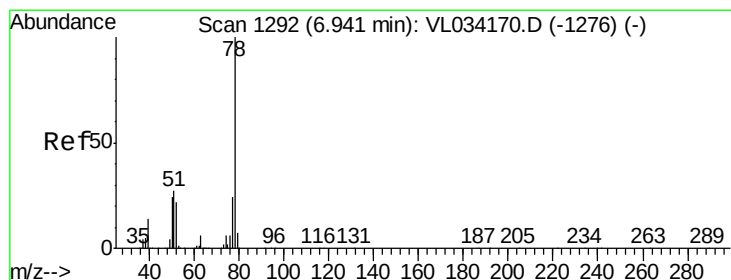
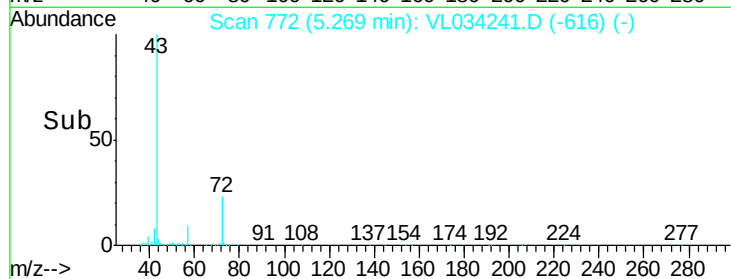
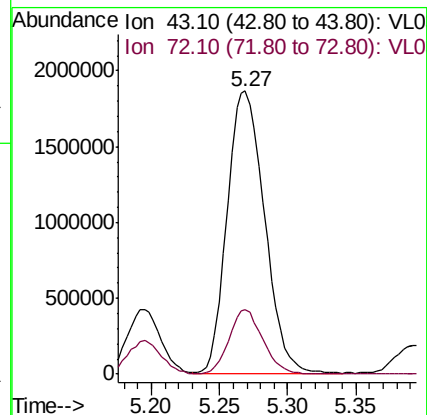
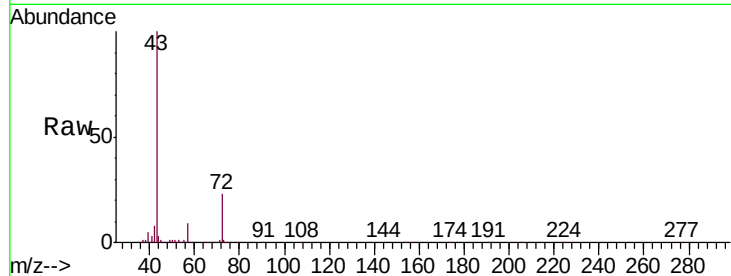
V-3

Tgt Ion: 43 Resp: 3555450

Ion Ratio Lower Upper

43 100

72 20.7 15.0 22.6



#36

Benzene

Concen: 7.494 ppbv

RT: 6.94 min Scan# 1291

Delta R.T. -0.00 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

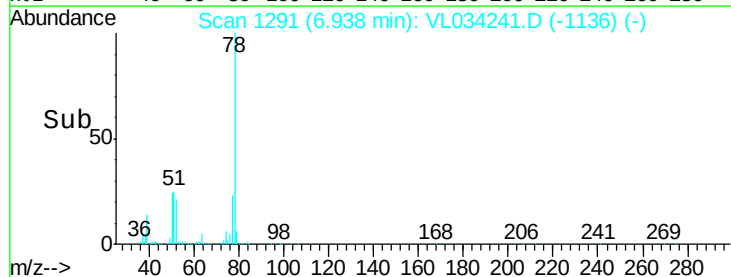
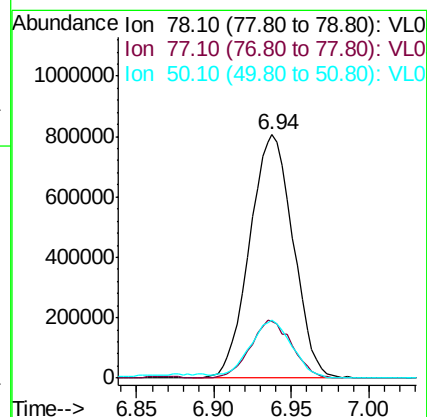
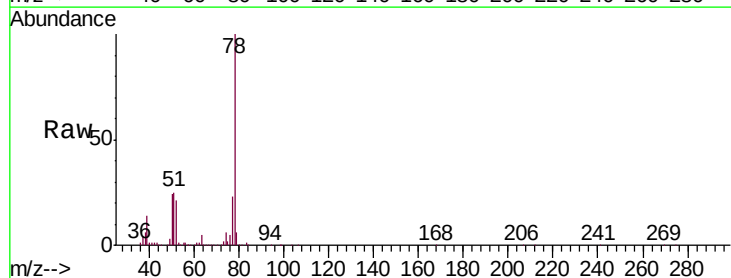
Tgt Ion: 78 Resp: 1568498

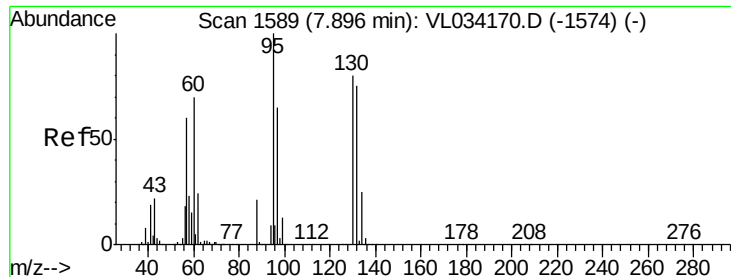
Ion Ratio Lower Upper

78 100

77 23.3 19.0 28.4

50 23.7 18.9 28.3





#38

Trichloroethene

Concen: 39.241 ppbv

RT: 7.89 min Scan# 1587

Delta R.T. -0.01 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

Instrument :

MSVOA_L

ClientSampleId :

V-3

Tgt Ion:130 Resp: 2934417

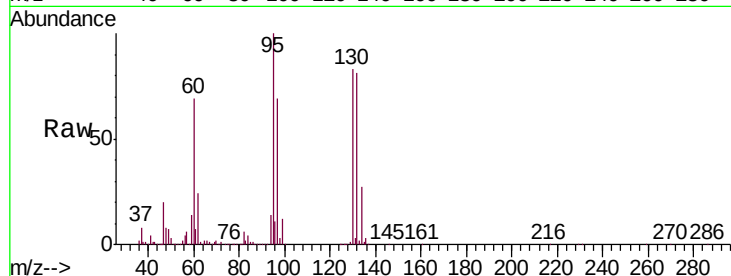
Ion Ratio Lower Upper

130 100

95 120.1 99.8 149.6

132 97.5 75.2 112.8

97 82.9 65.0 97.4

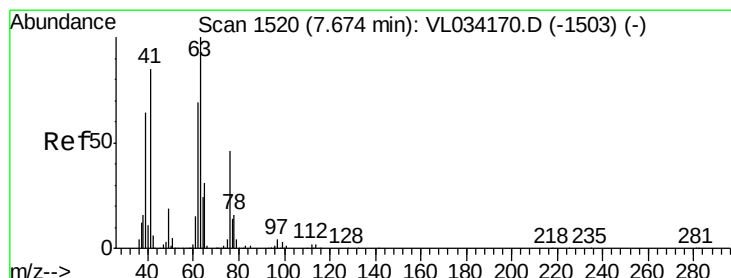
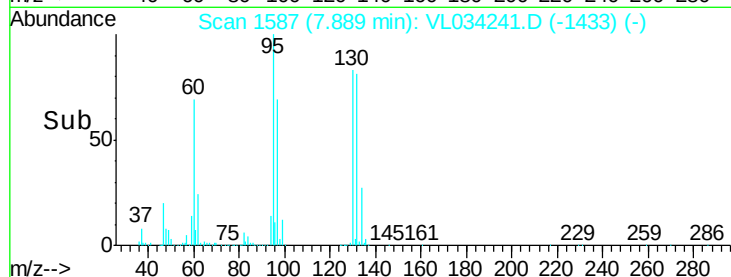
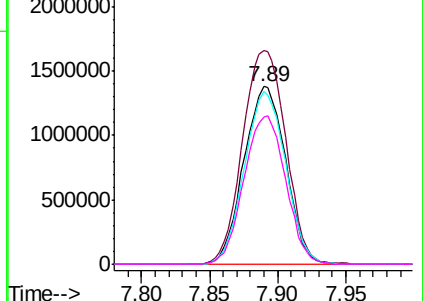


Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0



#39

1,2-Dichloropropane

Concen: 0.092 ppbv

RT: 7.89 min Scan# 1587

Delta R.T. 0.22 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

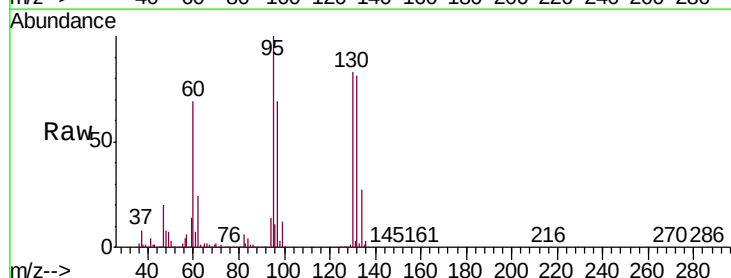
Tgt Ion: 63 Resp: 8675

Ion Ratio Lower Upper

63 100

41 136.8 68.4 102.6#

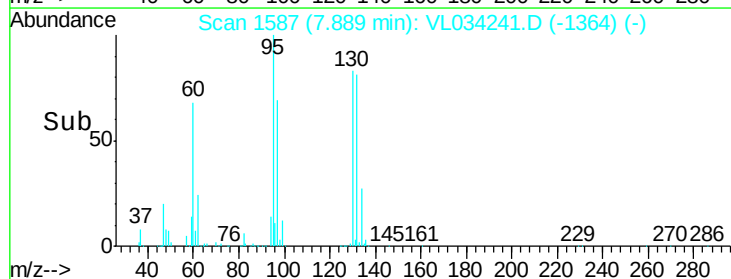
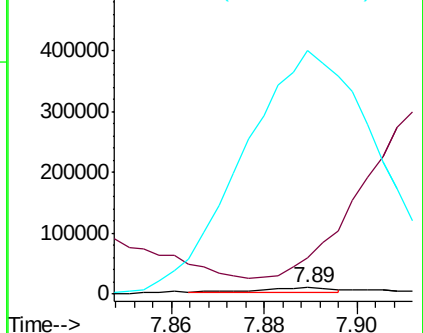
62 4417.9 55.4 83.2#

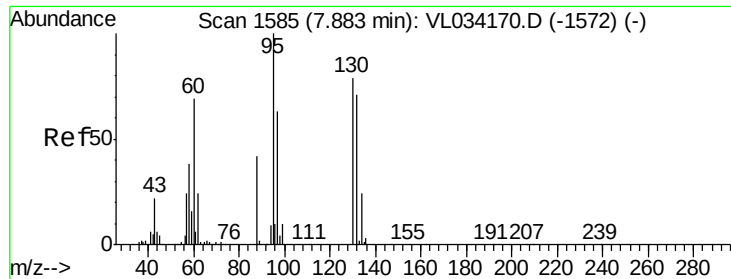


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0

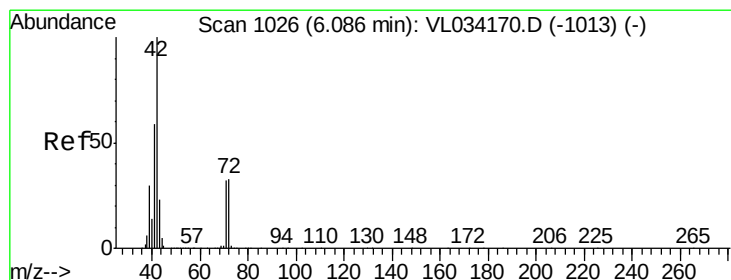
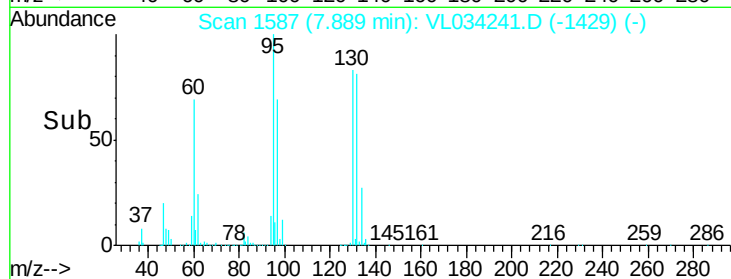
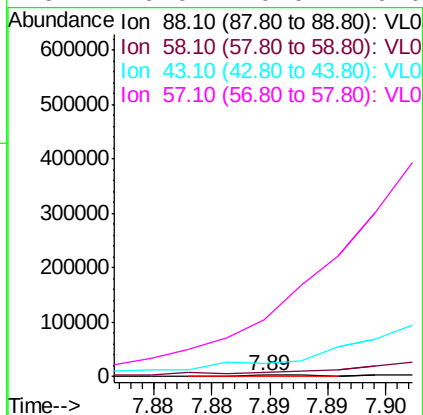
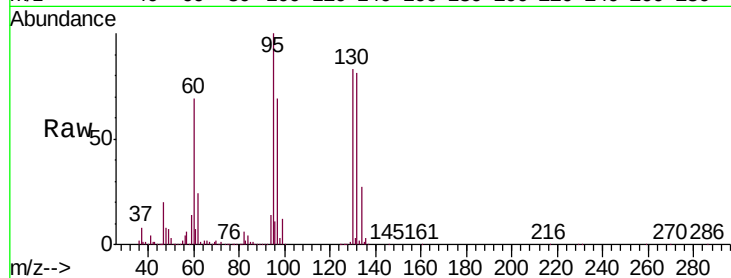




#40
1,4-Dioxane
Concen: 0.034 ppbv
RT: 7.89 min Scan# 1587
Delta R.T. 0.01 min
Lab File: VL034241.D
Acq: 8 Oct 2019 3:38

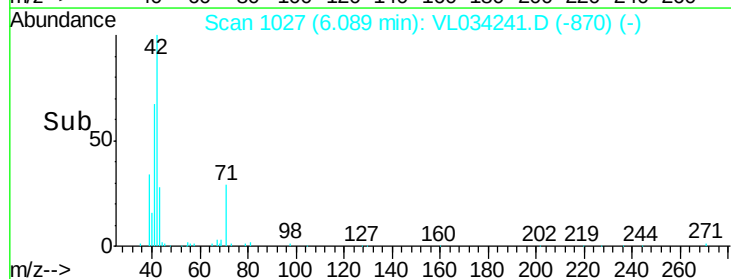
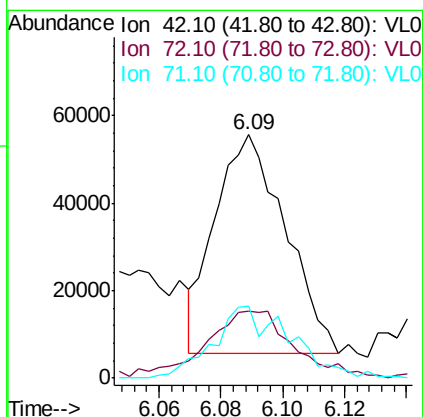
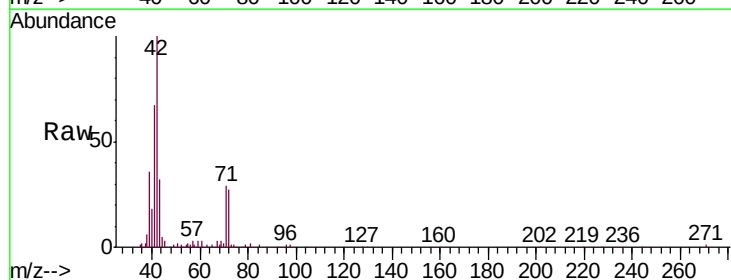
Instrument :
MSVOA_L
ClientSampleId :
V-3

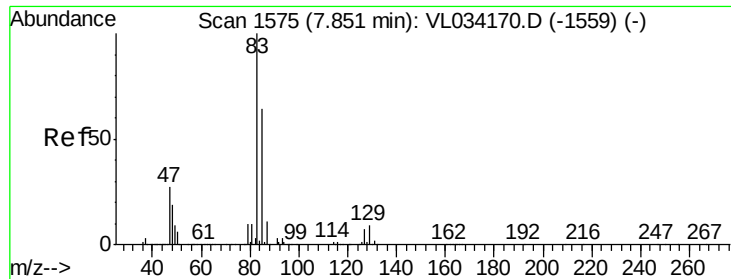
Tgt Ion: 88 Resp: 1036
Ion Ratio Lower Upper
88 100
58 0.0 131.8 197.6#
43 0.0 0.0 0.0
57 0.0 0.0 0.0



#41
Tetrahydrofuran
Concen: 0.727 ppbv
RT: 6.09 min Scan# 1027
Delta R.T. 0.00 min
Lab File: VL034241.D
Acq: 8 Oct 2019 3:38

Tgt Ion: 42 Resp: 79226
Ion Ratio Lower Upper
42 100
72 40.4 26.6 40.0#
71 36.1 25.1 37.7





#42

Bromodichloromethane

Concen: 0.099 ppbv

RT: 7.84 min Scan# 1572

Delta R.T. -0.01 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

Instrument :

MSVOA_L

ClientSampleId :

V-3

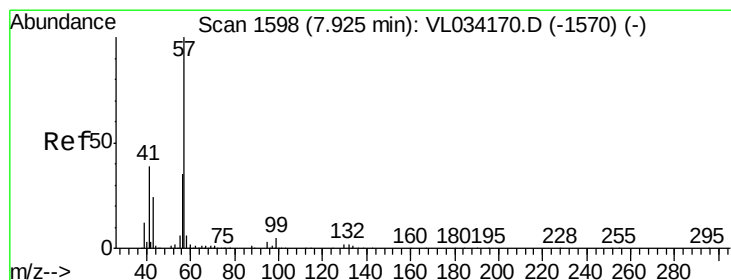
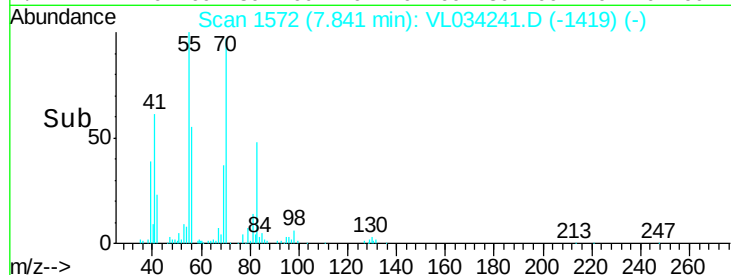
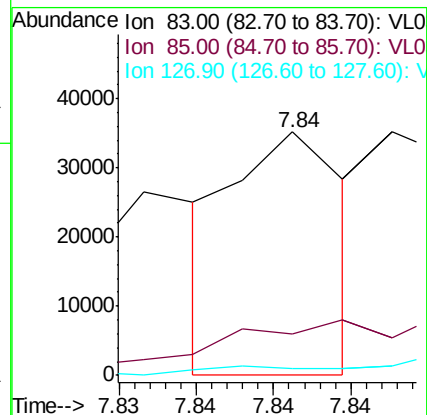
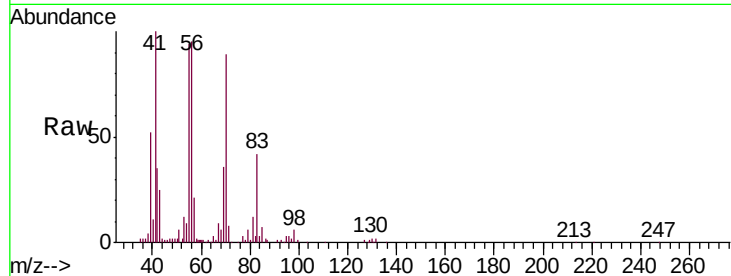
Tgt Ion: 83 Resp: 17711

Ion Ratio Lower Upper

83 100

85 28.4 51.4 77.0#

127 2.6 5.5 8.3#



#44

2,2,4-Trimethylpentane

Concen: 3.980 ppbv

RT: 7.92 min Scan# 1595

Delta R.T. -0.01 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

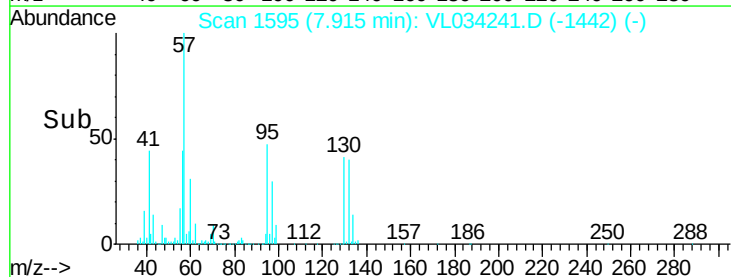
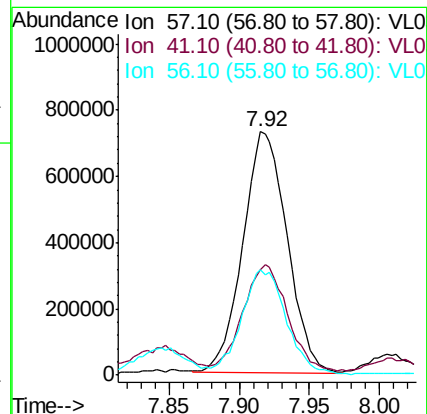
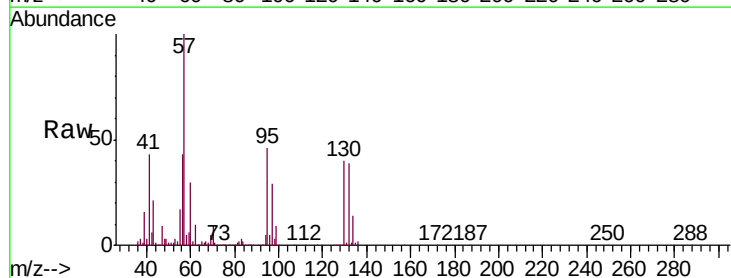
Tgt Ion: 57 Resp: 1603405

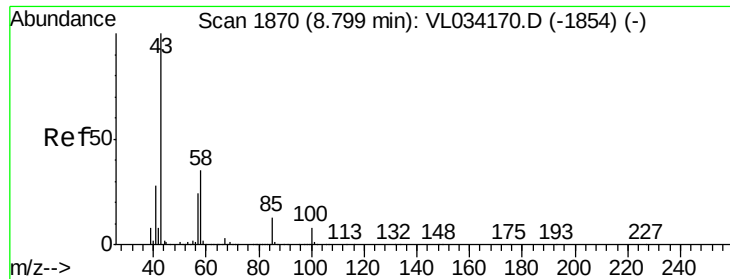
Ion Ratio Lower Upper

57 100

41 47.7 29.8 44.6#

56 44.0 25.9 38.9#





#50

4-Methyl-2-Pentanone

Concen: 12.610 ppbv

RT: 8.80 min Scan# 1870

Delta R.T. 0.00 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

Instrument :

MSVOA_L

ClientSampled :

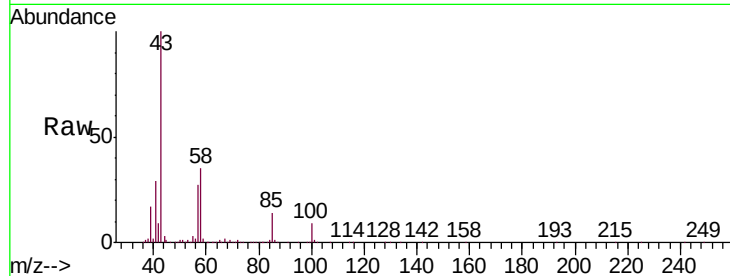
V-3

Tgt Ion: 43 Resp: 3550970

Ion Ratio Lower Upper

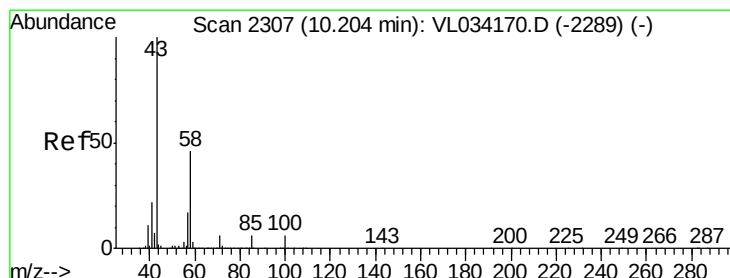
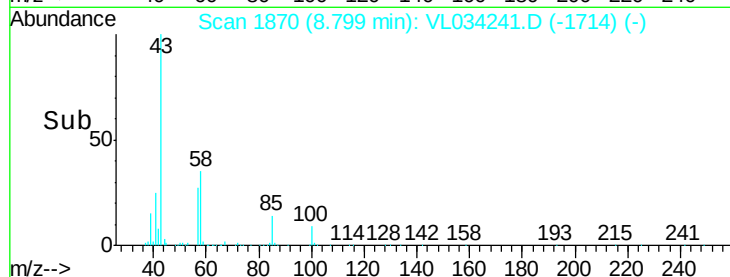
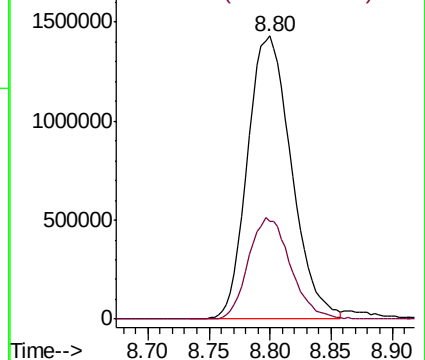
43 100

58 34.5 27.6 41.4



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#51

2-Hexanone

Concen: 6.216 ppbv

RT: 10.20 min Scan# 2306

Delta R.T. -0.00 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

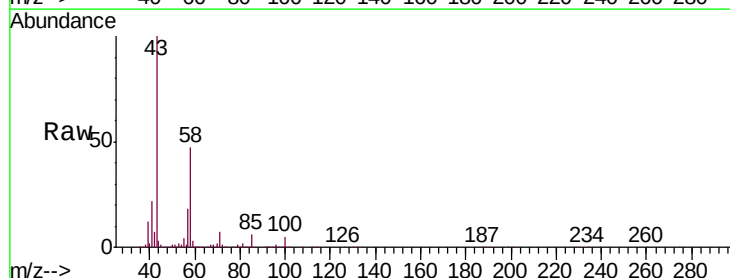
Tgt Ion: 43 Resp: 1469005

Ion Ratio Lower Upper

43 100

58 43.8 36.2 54.4

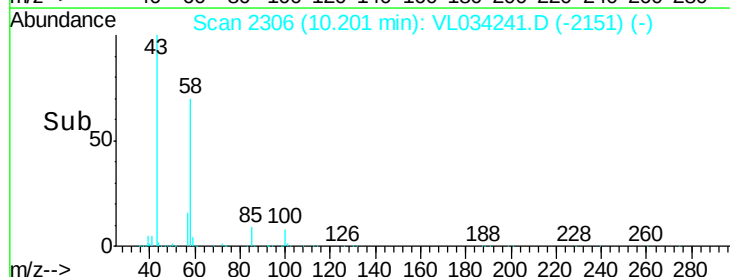
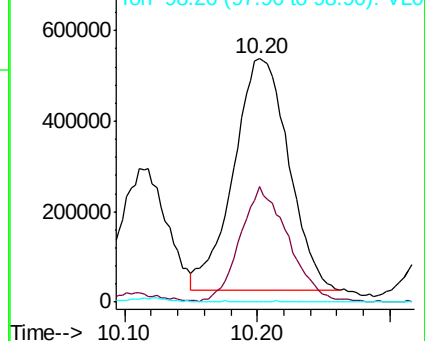
98 0.3 0.2 0.2#

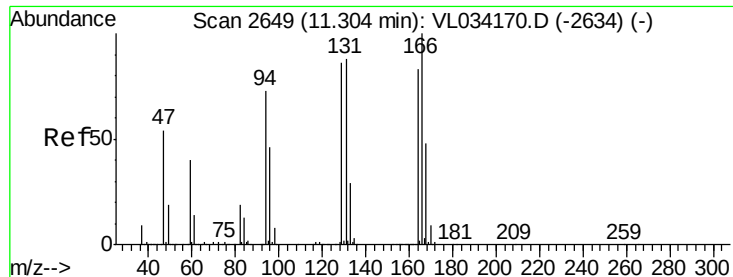


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

Ion 98.20 (97.90 to 98.90): VL0





#52

Tetrachloroethene

Concen: 406.787 ppbv

RT: 11.39 min Scan# 2676

Delta R.T. 0.09 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

Instrument :

MSVOA_L

ClientSampleId :

V-3

Tgt Ion:164 Resp:28127849

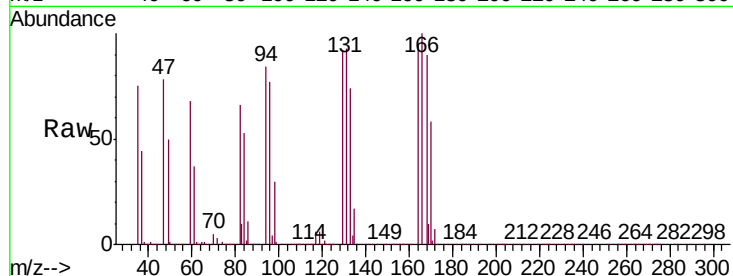
Ion Ratio Lower Upper

164 100

166 105.2 96.7 145.1

129 97.2 82.8 124.2

131 98.0 85.0 127.6



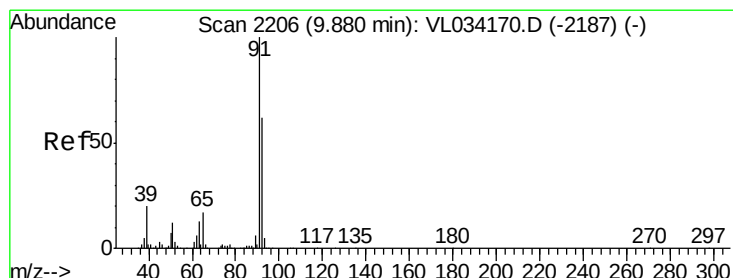
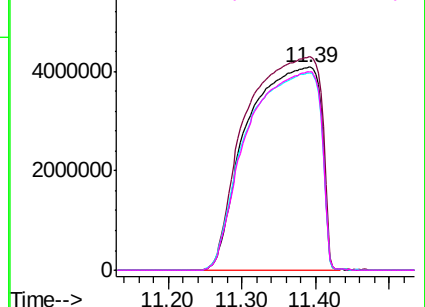
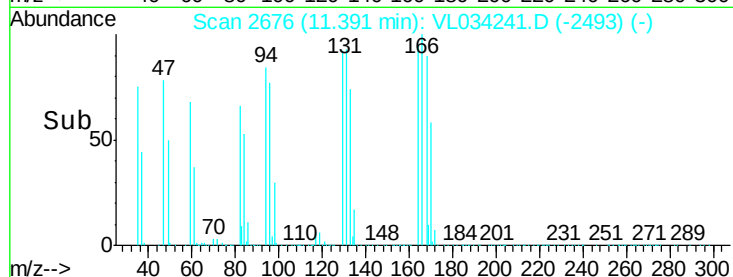
Abundance

Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 23.082 ppbv

RT: 9.87 min Scan# 2204

Delta R.T. -0.01 min

Lab File: VL034241.D

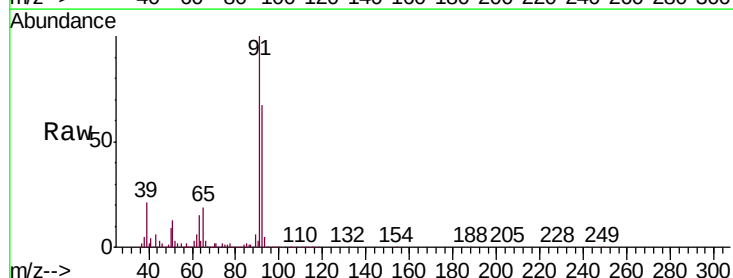
Acq: 8 Oct 2019 3:38

Tgt Ion: 91 Resp: 5279541

Ion Ratio Lower Upper

91 100

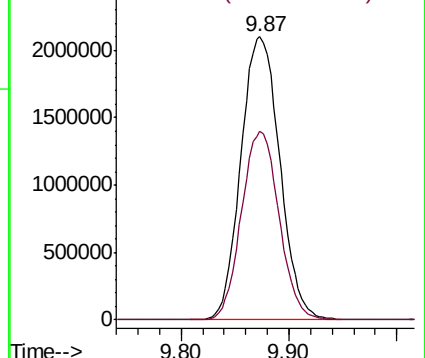
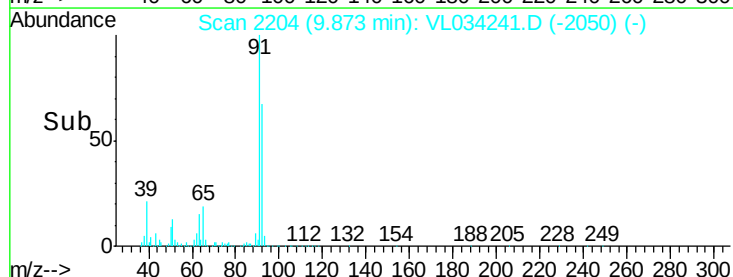
92 64.5 49.0 73.6

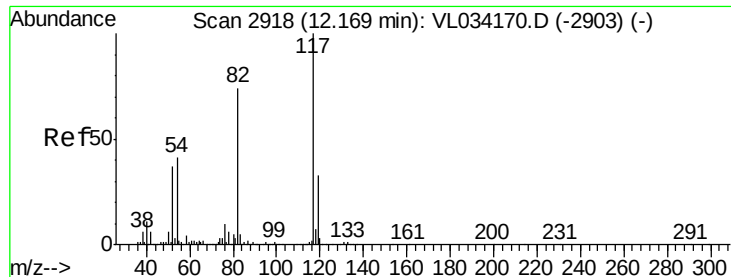


Abundance

Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

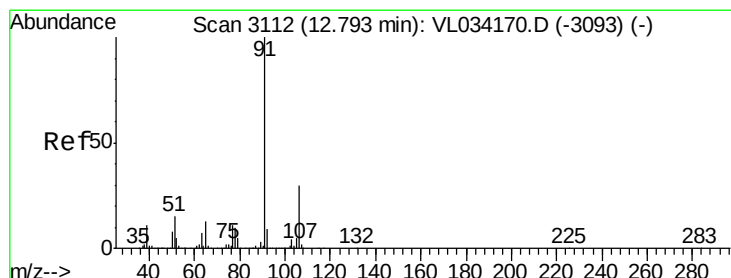
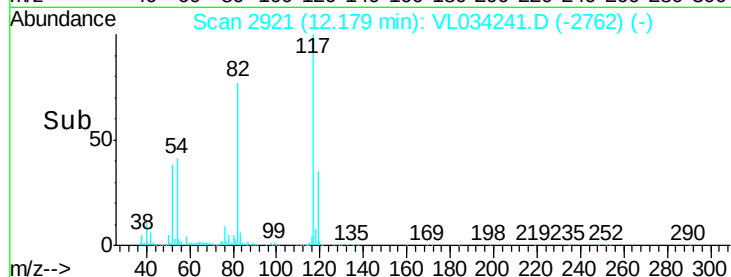
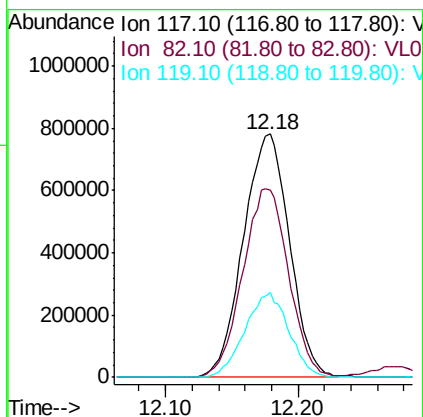
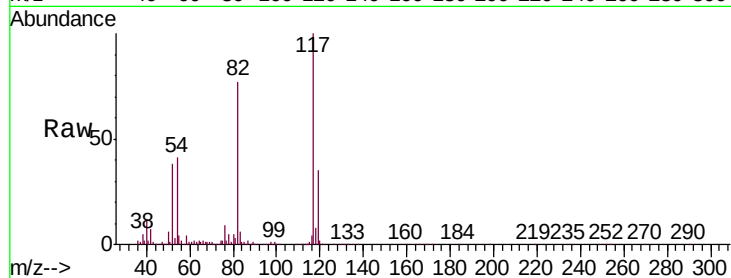




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.18 min Scan# 2921
Delta R.T. 0.01 min
Lab File: VL034241.D
Acq: 8 Oct 2019 3:38

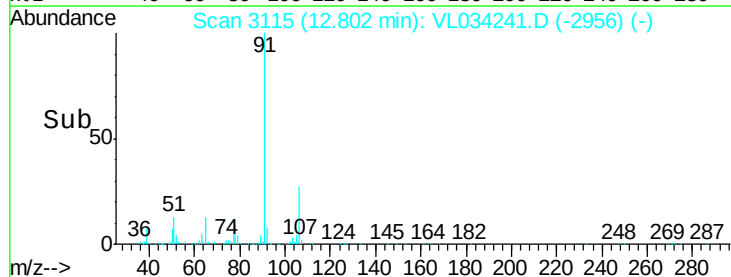
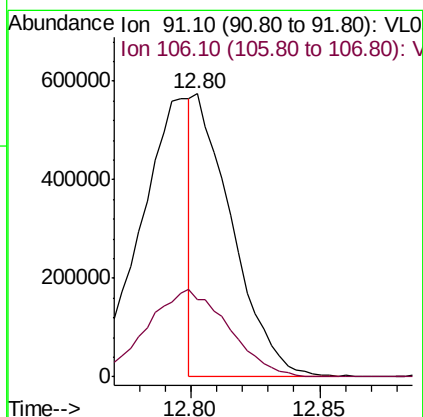
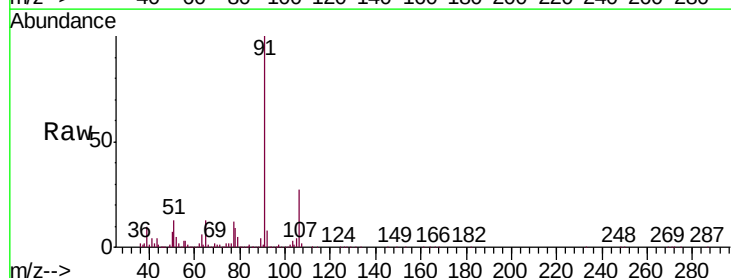
Instrument :
MSVOA_L
ClientSampled :
V-3

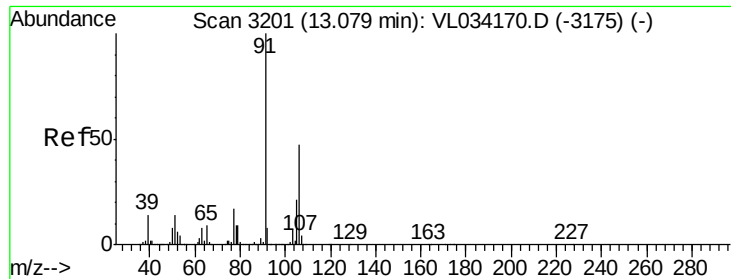
Tgt Ion:117 Resp: 1884481
Ion Ratio Lower Upper
117 100
82 77.5 58.2 87.4
119 33.3 23.7 35.5



#58
Ethyl Benzene
Concen: 1.945 ppbv
RT: 12.80 min Scan# 3115
Delta R.T. 0.01 min
Lab File: VL034241.D
Acq: 8 Oct 2019 3:38

Tgt Ion: 91 Resp: 591399
Ion Ratio Lower Upper
91 100
106 27.1 24.2 36.4

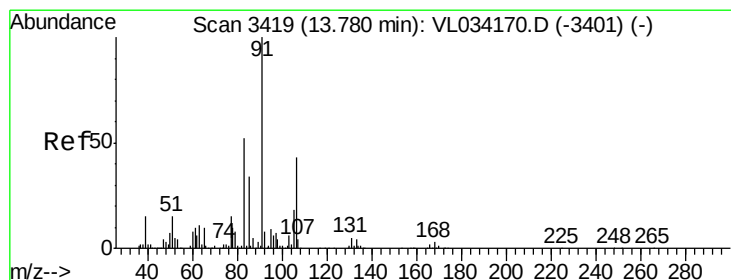
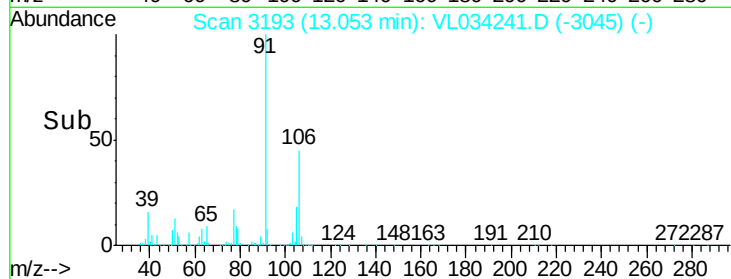
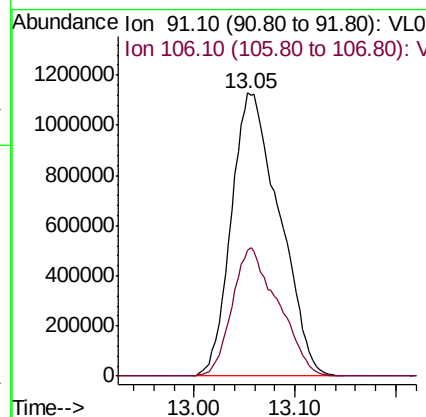
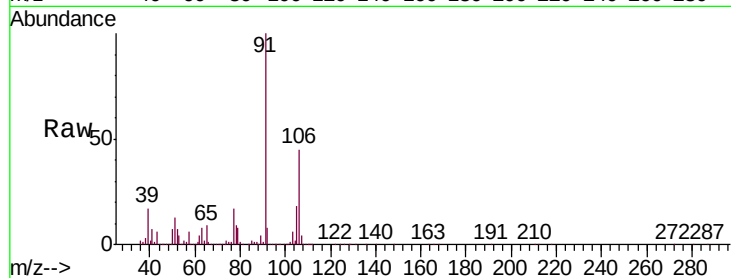




#59
m/p-Xylene
Concen: 14.836 ppbv
RT: 13.05 min Scan# 3193
Delta R.T. -0.03 min
Lab File: VL034241.D
Acq: 8 Oct 2019 3:38

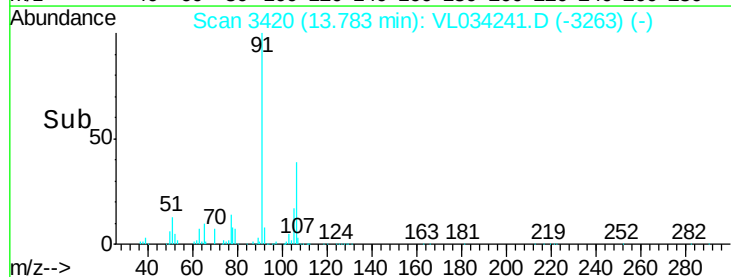
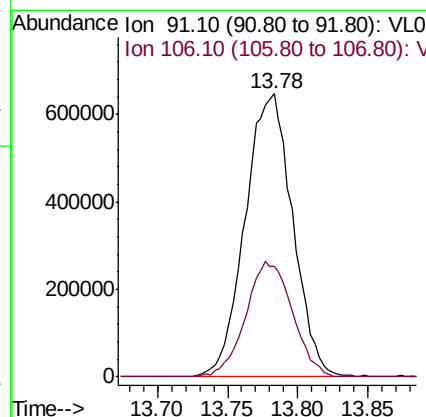
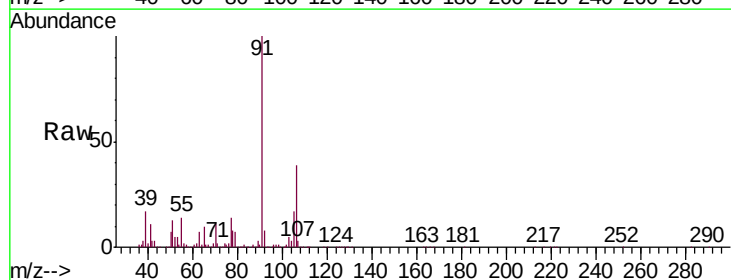
Instrument :
MSVOA_L
ClientSampleId :
V-3

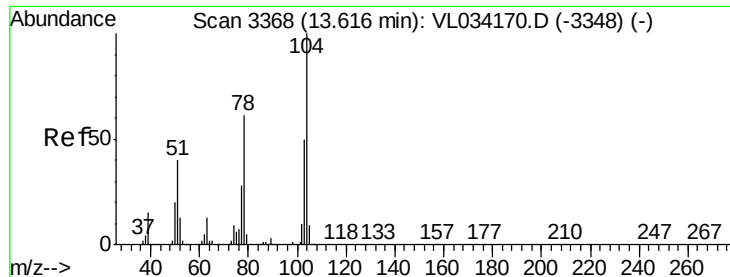
Tgt Ion: 91 Resp: 3736513
Ion Ratio Lower Upper
91 100
106 43.7 35.5 53.3



#60
o-Xylene
Concen: 6.004 ppbv
RT: 13.78 min Scan# 3420
Delta R.T. 0.00 min
Lab File: VL034241.D
Acq: 8 Oct 2019 3:38

Tgt Ion: 91 Resp: 1512038
Ion Ratio Lower Upper
91 100
106 40.5 21.2 63.6





#61

Styrene

Concen: 0.707 ppbv

RT: 13.62 min Scan# 3368

Delta R.T. 0.00 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

Instrument :

MSVOA_L

ClientSampleId :

V-3

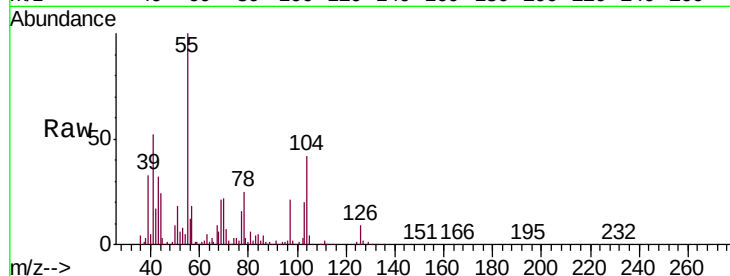
Tgt Ion:104 Resp: 127500

Ion Ratio Lower Upper

104 100

78 67.3 49.7 74.5

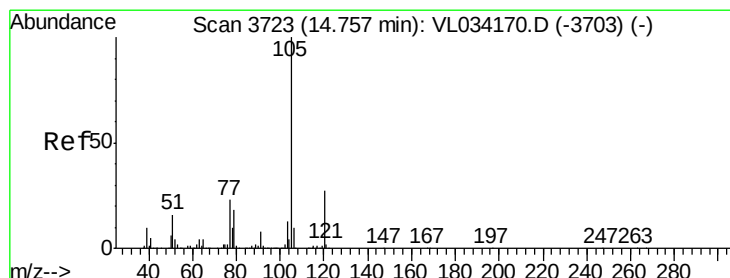
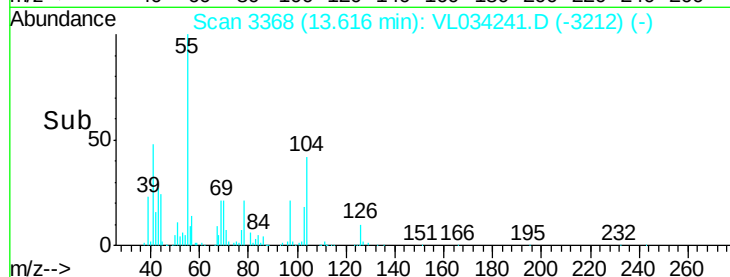
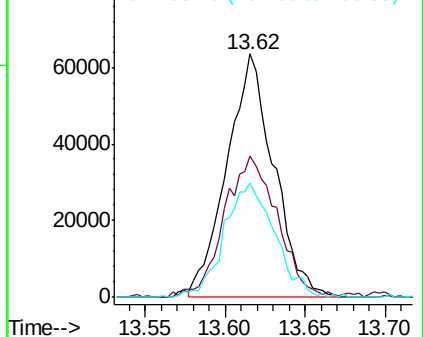
103 50.7 38.4 57.6



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V



#62

Isopropylbenzene

Concen: 0.135 ppbv

RT: 14.76 min Scan# 3724

Delta R.T. 0.00 min

Lab File: VL034241.D

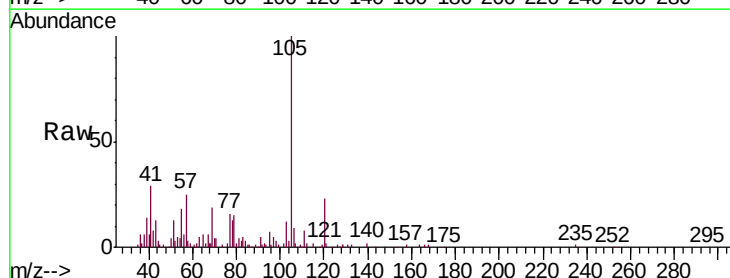
Acq: 8 Oct 2019 3:38

Tgt Ion:105 Resp: 43997

Ion Ratio Lower Upper

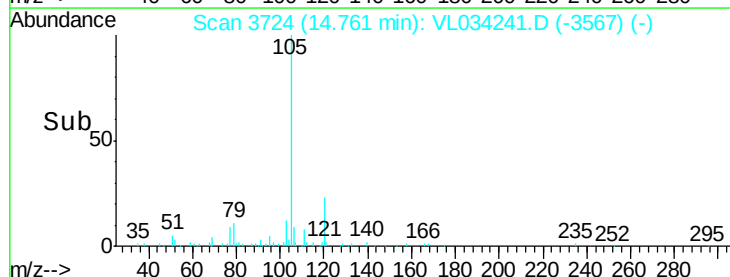
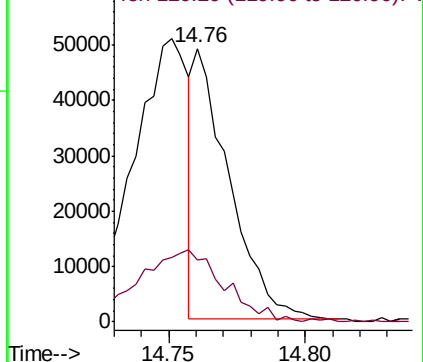
105 100

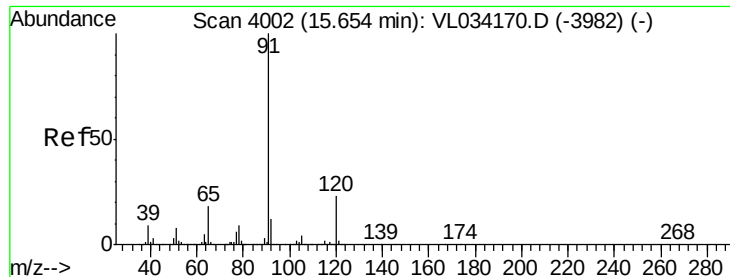
120 65.8 20.7 31.1#



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





#64

n-propylbenzene

Concen: 1.278 ppbv

RT: 15.65 min Scan# 4001

Delta R.T. -0.00 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

Instrument :

MSVOA_L

ClientSampled :

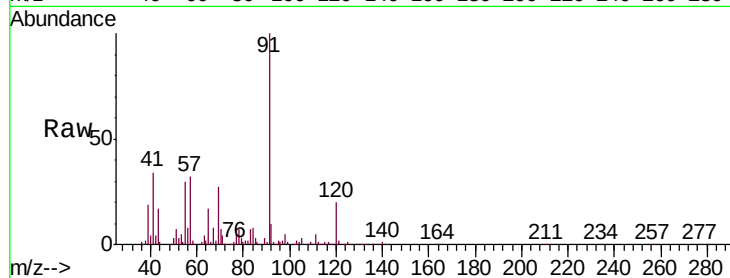
V-3

Tgt Ion:120 Resp: 105384

Ion Ratio Lower Upper

120 100

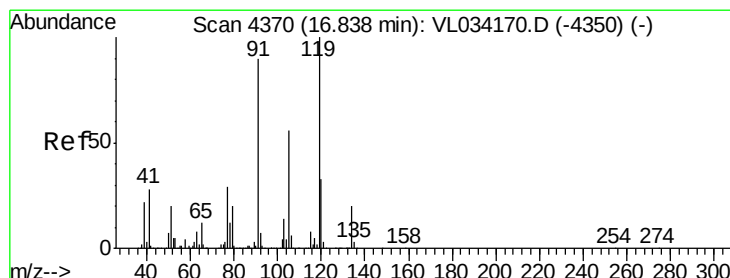
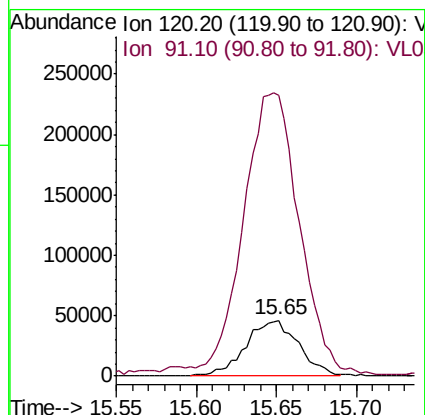
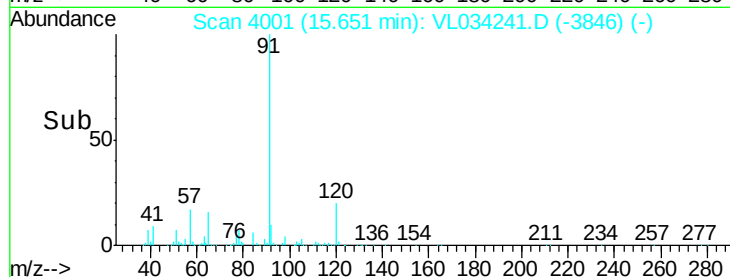
91 536.5 378.2 567.2



Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Time--> 15.55 15.60 15.65 15.70



#65

tert-Butylbenzene

Concen: 0.594 ppbv

RT: 16.86 min Scan# 4377

Delta R.T. 0.02 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

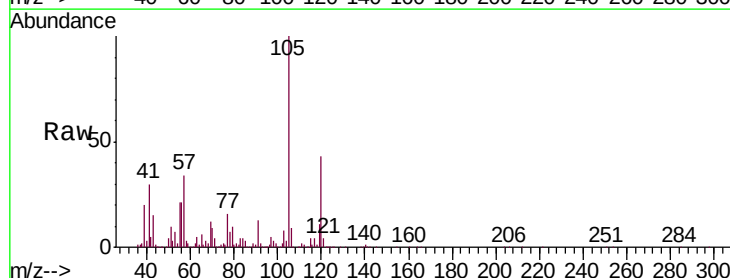
Tgt Ion:119 Resp: 169088

Ion Ratio Lower Upper

119 100

91 133.9 74.9 112.3#

134 0.9 15.8 23.6#

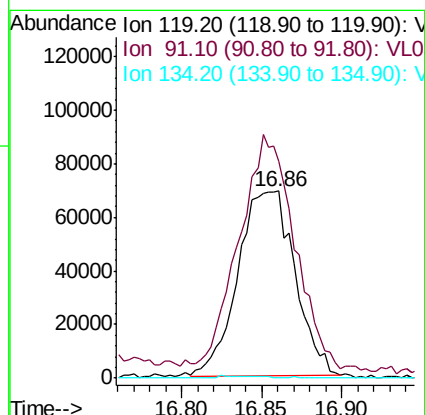
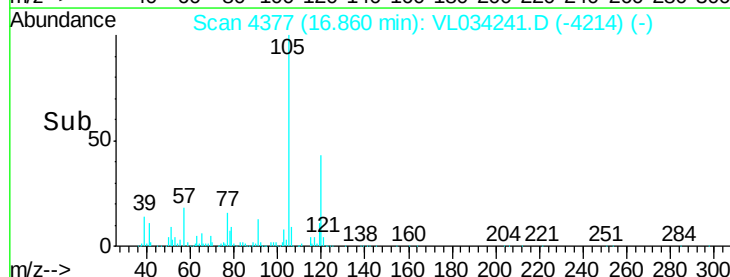


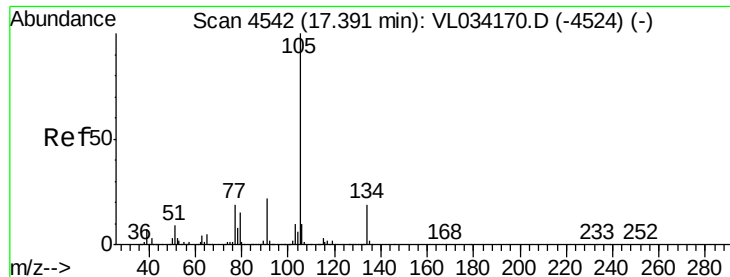
Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V

Time--> 16.80 16.85 16.90





#67

sec-Butylbenzene

Concen: 0.069 ppbv

RT: 17.38 min Scan# 4538

Delta R.T. -0.01 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

Instrument :

MSVOA_L

ClientSampleId :

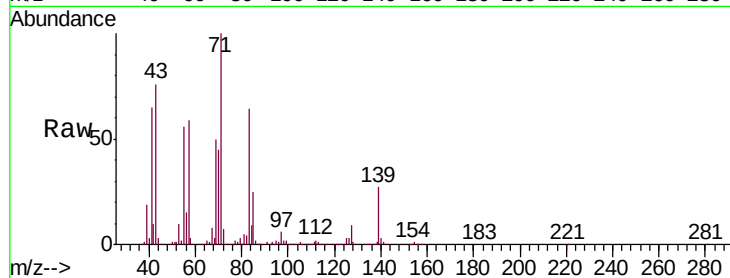
V-3

Tgt Ion:105 Resp: 28067

Ion Ratio Lower Upper

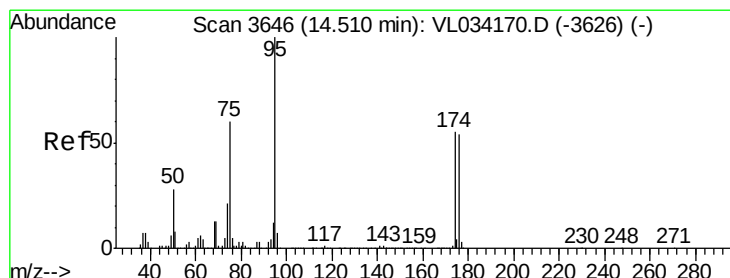
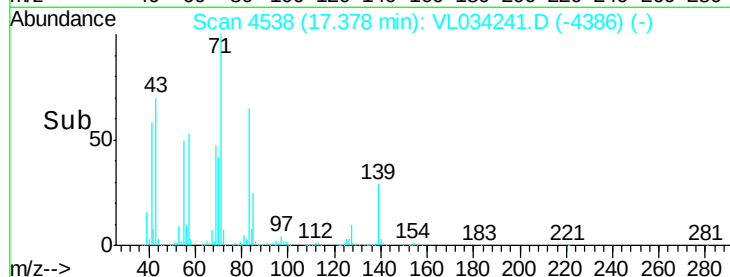
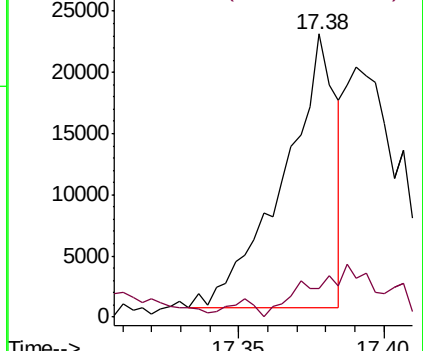
105 100

134 20.9 14.6 22.0



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V



#68

1-Bromo-4-Fluorobenzene

Concen: 10.552 ppbv

RT: 14.50 min Scan# 3644

Delta R.T. -0.01 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

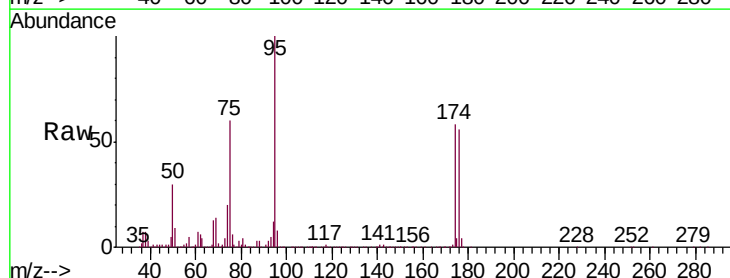
Tgt Ion: 95 Resp: 1727894

Ion Ratio Lower Upper

95 100

174 57.2 45.1 67.7

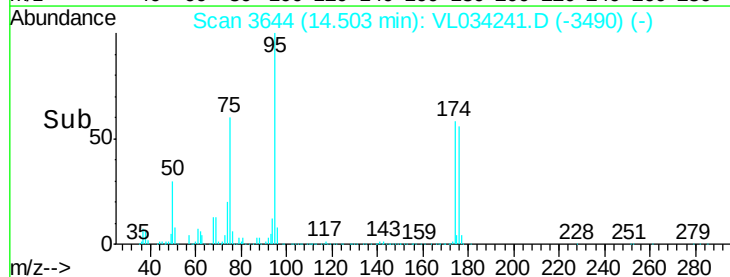
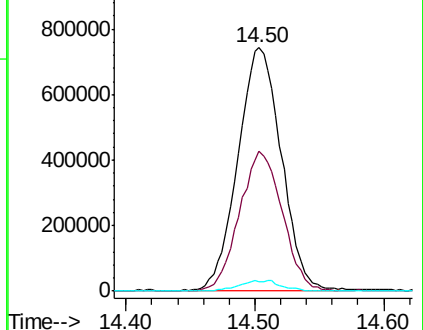
175 4.2 3.3 4.9

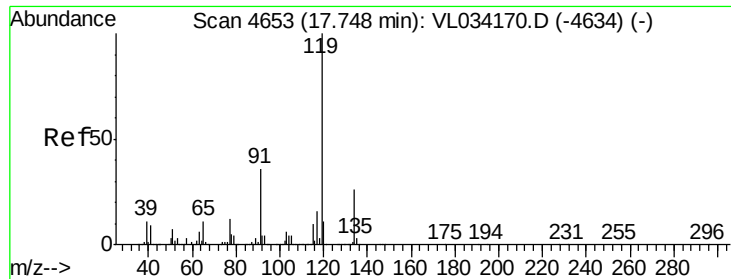


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

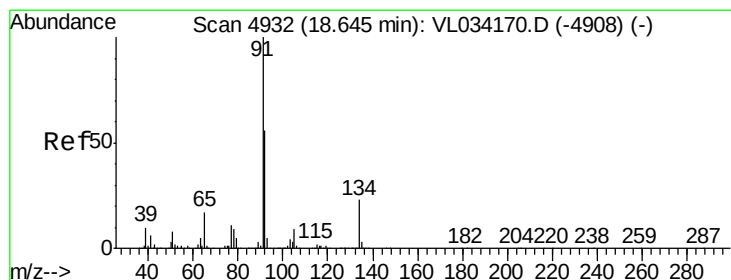
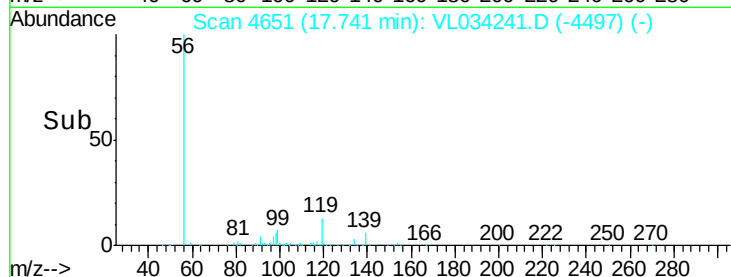
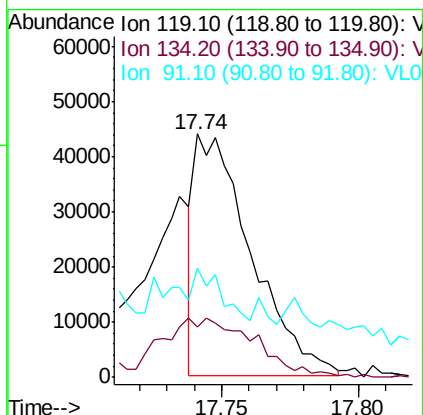
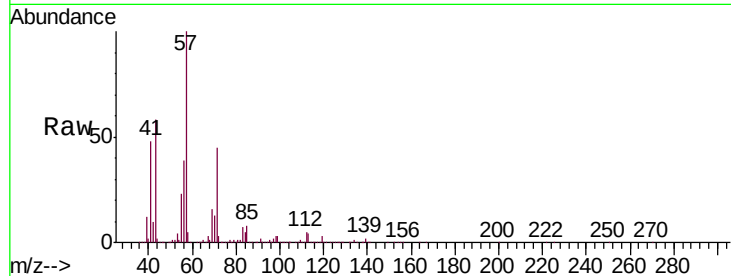




#69
 p-Isopropyltoluene
 Concen: 0.190 ppbv
 RT: 17.74 min Scan# 4651
 Delta R.T. -0.01 min
 Lab File: VL034241.D
 Acq: 8 Oct 2019 3:38

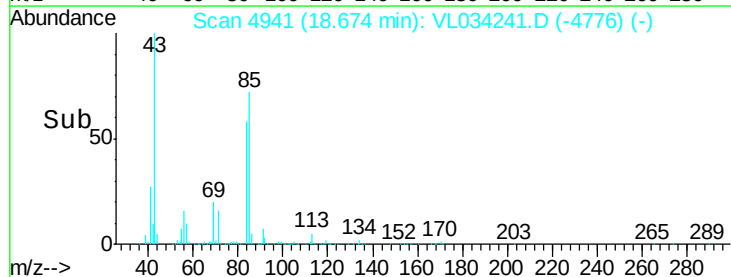
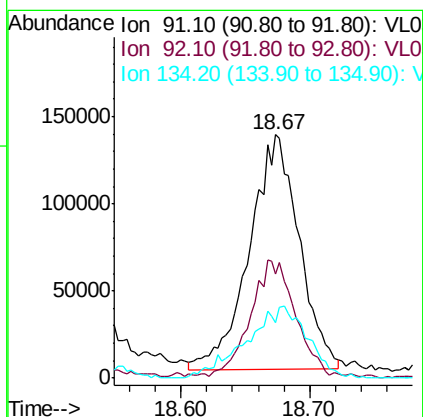
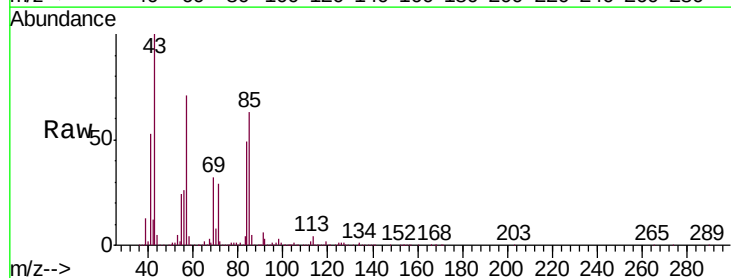
Instrument :
 MSVOA_L
 ClientSampleId :
 V-3

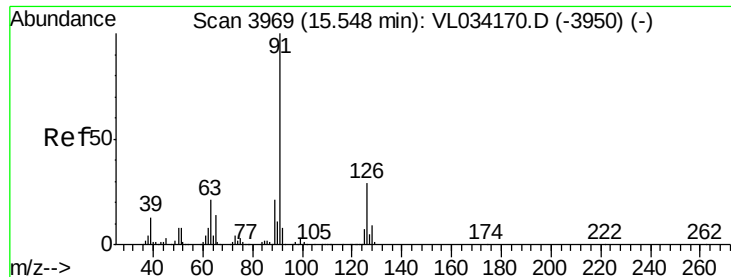
Tgt Ion	Ratio	Lower	Upper
119	100		
134	43.7	20.6	30.8#
91	96.5	27.6	41.4#



#70
 n-Butylbenzene
 Concen: 0.939 ppbv
 RT: 18.67 min Scan# 4941
 Delta R.T. 0.03 min
 Lab File: VL034241.D
 Acq: 8 Oct 2019 3:38

Tgt Ion	Ratio	Lower	Upper
91	100		
92	46.3	44.8	67.2
134	37.8	17.3	25.9#





#71

2-Chlorotoluene

Concen: 0.299 ppbv

RT: 15.86 min Scan# 4066

Delta R.T. 0.31 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

Instrument :

MSVOA_L

ClientSampleId :

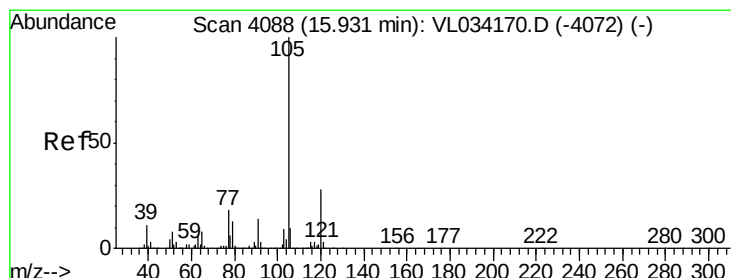
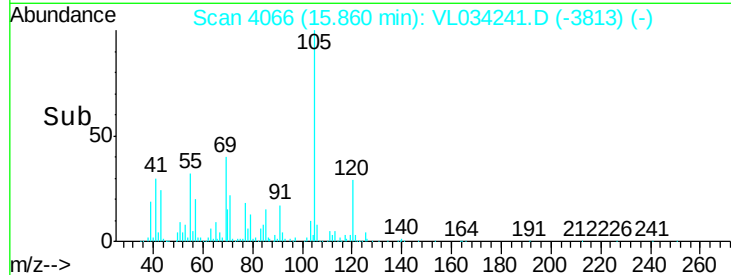
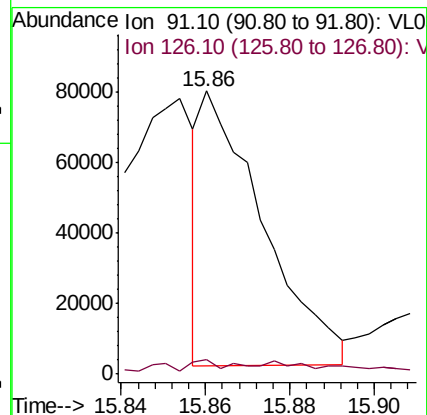
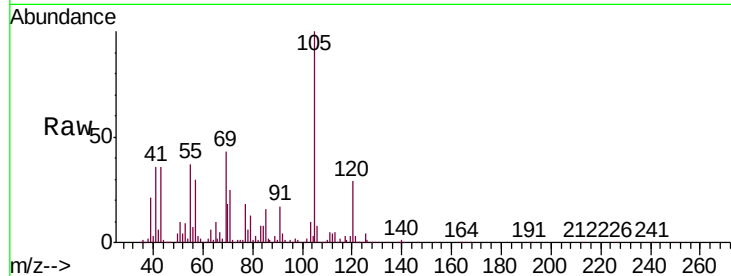
V-3

Tgt Ion: 91 Resp: 79668

Ion Ratio Lower Upper

91 100

126 14.0 11.2 45.0



#72

4-Ethyltoluene

Concen: 2.022 ppbv

RT: 15.92 min Scan# 4086

Delta R.T. -0.01 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

Tgt Ion: 105 Resp: 575219

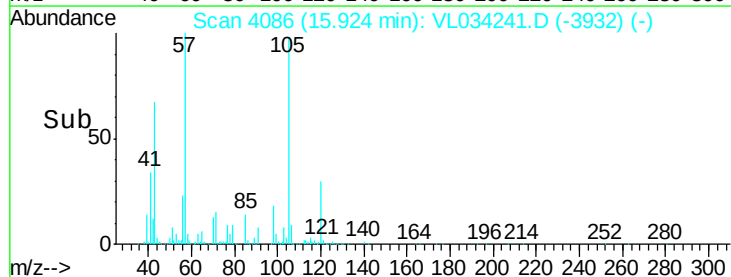
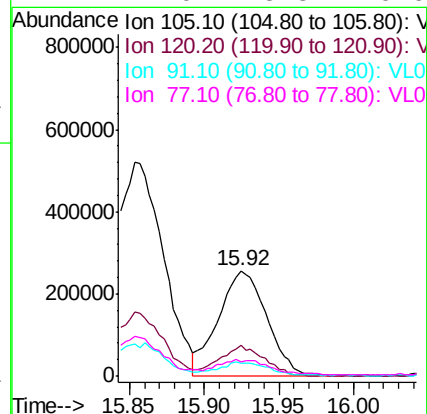
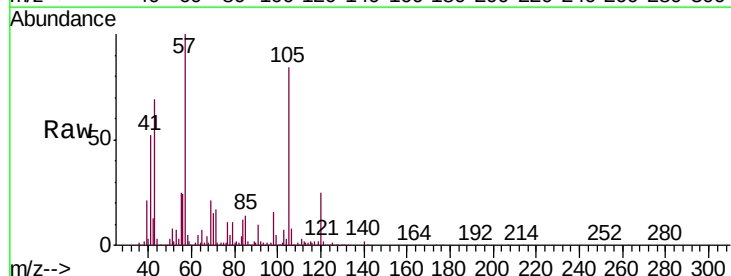
Ion Ratio Lower Upper

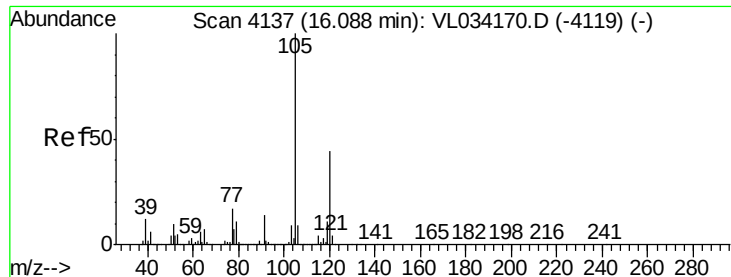
105 100

120 26.8 23.3 34.9

91 13.3 11.4 17.2

77 17.0 13.3 19.9





#73

1,3,5-Trimethylbenzene

Concen: 1.823 ppbv

RT: 16.09 min Scan# 4136

Delta R.T. -0.00 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

Instrument :

MSVOA_L

ClientSampleId :

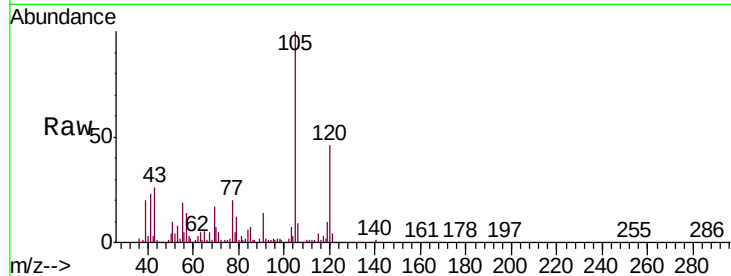
V-3

Tgt Ion:105 Resp: 501030

Ion Ratio Lower Upper

105 100

120 46.5 35.6 53.4



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

16.09

200000

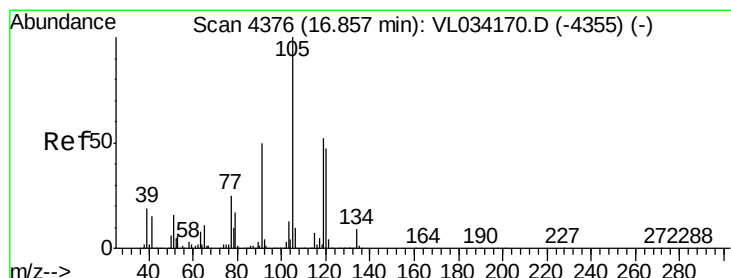
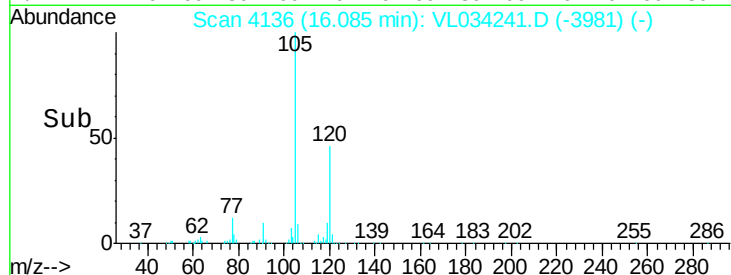
150000

100000

50000

0

Time-->



#74

1,2,4-Trimethylbenzene

Concen: 5.710 ppbv

RT: 16.85 min Scan# 4375

Delta R.T. -0.00 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

Tgt Ion:105 Resp: 1666397

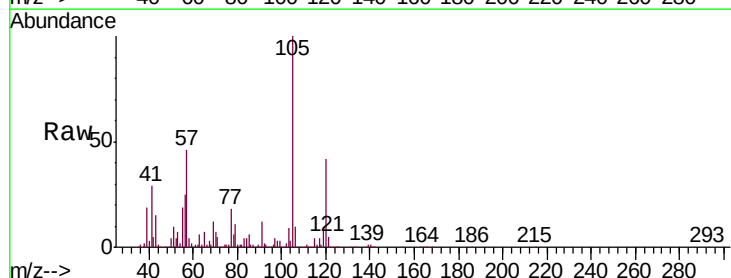
Ion Ratio Lower Upper

105 100

120 41.8 37.5 56.3

91 12.1 41.1 61.7#

77 16.9 19.9 29.9#



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

1000000

800000

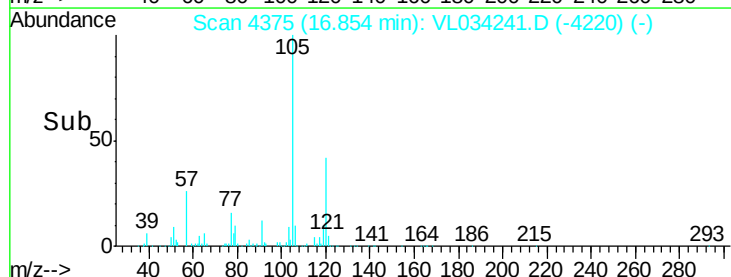
600000

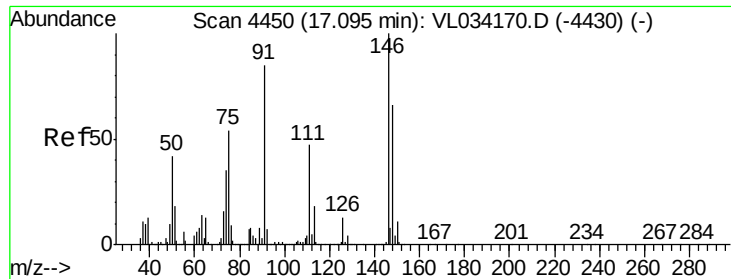
400000

200000

0

Time-->





#75

1,3-Dichlorobenzene

Concen: 0.045 ppbv

RT: 17.10 min Scan# 4452

Delta R.T. 0.01 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

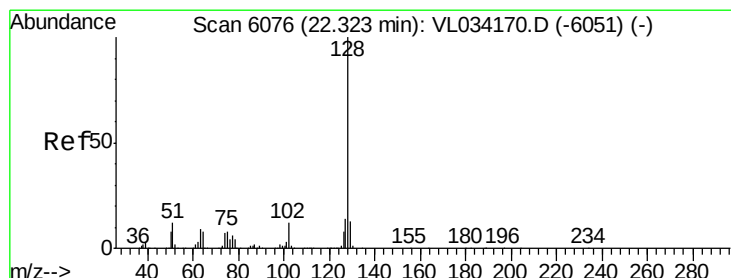
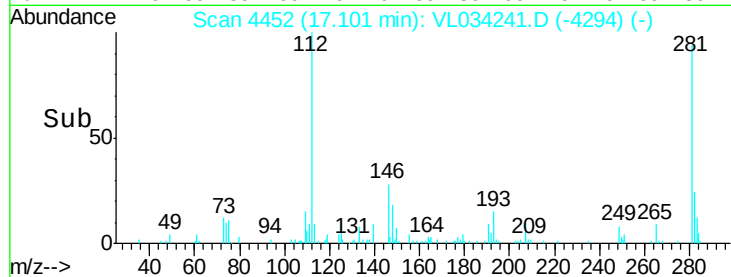
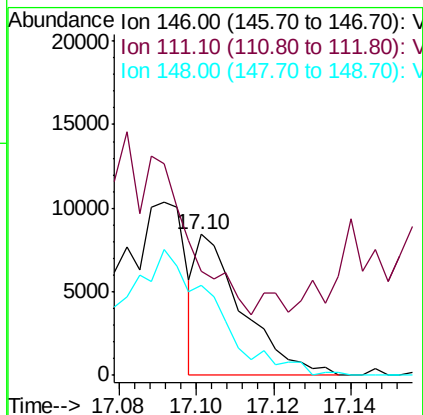
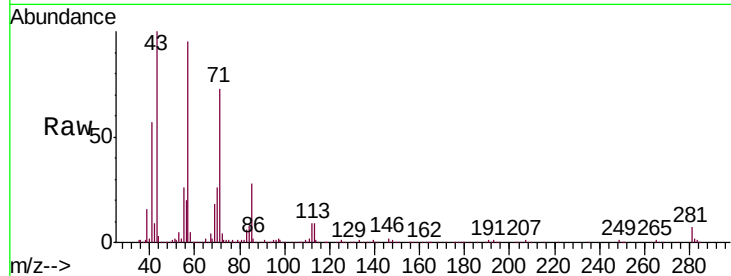
Instrument :

MSVOA_L

ClientSampleId :

V-3

Tgt Ion:	146	Resp:	7020
Ion	Ratio	Lower	Upper
146	100		
111	0.0	25.9	77.8#
148	0.0	32.6	97.7#



#79

Naphthalene

Concen: 0.595 ppbv

RT: 22.33 min Scan# 6078

Delta R.T. 0.01 min

Lab File: VL034241.D

Acq: 8 Oct 2019 3:38

Tgt Ion:	128	Resp:	152758
Ion	Ratio	Lower	Upper
128	100		
127	11.4	11.1	16.7
129	9.5	10.2	15.4#

