

Data File : VL033691.D

Acq On : 14 May 2019 14:59

Operator : SY/AP

Sample : K2730-01

Misc : 400ml/MSVOA_L

ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SS01

Quant Time: May 15 02:33:36 2019

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL050619AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon May 06 15:19:01 2019

QLast Update : Mon May 06 15:19:01 2019

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	910849	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	2254898	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	2361268	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	2164784	11.18	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	111.80%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	3.08	85	61787	0.289	ppbv	93
3) Chlorodifluoromethane	3.01	51	38821	0.295	ppbv	94
4) Chloromethane	3.17	50	18411	0.269	ppbv	98
5) Vinyl Chloride	3.29	62	982	0.015	ppbv #	72
7) Chloroethane	3.60	64	1089	0.045	ppbv #	43
8) Dichlorotetrafluoroethane	3.22	85	3272	0.019	ppbv	93
9) Propene	3.24	41	1662513	33.152	ppbv	96
10) Heptane	8.25	43	357023	2.885	ppbv	94
11) Trichlorofluoromethane	4.00	101	38317	0.192	ppbv	98
12) 1,1,2-Trichlorotrifluoroet	4.55	101	34578	0.258	ppbv	98
13) Ethanol	3.70	45	1083651	71.993	ppbv	98
15) Acetone	3.90	43	19181556	141.555	ppbv #	72
16) 1,3-Butadiene	3.34	39	255123	4.390	ppbv #	40
17) tert-Butyl alcohol	4.41	59	158232	1.537	ppbv #	72
19) Isopropyl Alcohol	4.07	45	1380583	16.584	ppbv #	93
20) Methylene Chloride	4.42	84	133242	2.590	ppbv	97
21) Allyl Chloride	4.40	41	64541	0.787	ppbv #	78
23) Vinyl Acetate	5.19	43	1017722	5.780	ppbv #	44
25) Ethyl Acetate	5.78	43	317598	1.441	ppbv #	77
26) Hexane	5.78	57	466095	4.919	ppbv #	39
27) Carbon Disulfide	4.62	76	820454	6.330	ppbv	99
28) Methyl tert-Butyl Ether	5.12	73	3567	0.022	ppbv #	54
29) Chloroform	5.86	83	17588	0.103	ppbv	98
30) Cyclohexane	7.25	84	633646	7.962	ppbv	95
32) 1,1,1-Trichloroethane	6.62	97	12588	0.072	ppbv #	83
34) 2-Butanone	5.33	43	1749036	12.113	ppbv	99
35) Carbon Tetrachloride	7.14	117	2806	0.015	ppbv #	40
36) Benzene	7.01	78	509795	2.521	ppbv	99
37) 1,2-Dichloroethane	6.41	62	1694	0.012	ppbv #	83
39) 1,2-Dichloropropane	7.30	63	568591	7.545	ppbv #	22
41) Tetrahydrofuran	6.14	42	100053	1.341	ppbv #	48
42) Bromodichloromethane	7.91	83	20952	0.115	ppbv #	24
43) Methyl Methacrylate	8.23	69	3383	0.044	ppbv #	1
44) 2,2,4-Trimethylpentane	7.99	57	72948	0.211	ppbv #	1
47) 1,1,2-Trichloroethane	9.67	97	1122	0.013	ppbv #	50
50) 4-Methyl-2-Pentanone	8.88	43	75310	0.344	ppbv #	39
51) 2-Hexanone	10.25	43	226947	1.340	ppbv #	51
52) Tetrachloroethene	11.38	164	4768	0.067	ppbv #	78
53) Toluene	9.95	91	989269	4.528	ppbv	100
57) Chlorobenzene	12.29	112	4872	0.025	ppbv #	68
58) Ethyl Benzene	12.87	91	391789	1.272	ppbv	99

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SS01

Quant Time: May 15 02:33:36 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL050619AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon May 06 15:19:01 2019
QLast Update : Mon May 06 15:19:01 2019
Response via : Initial Calibration

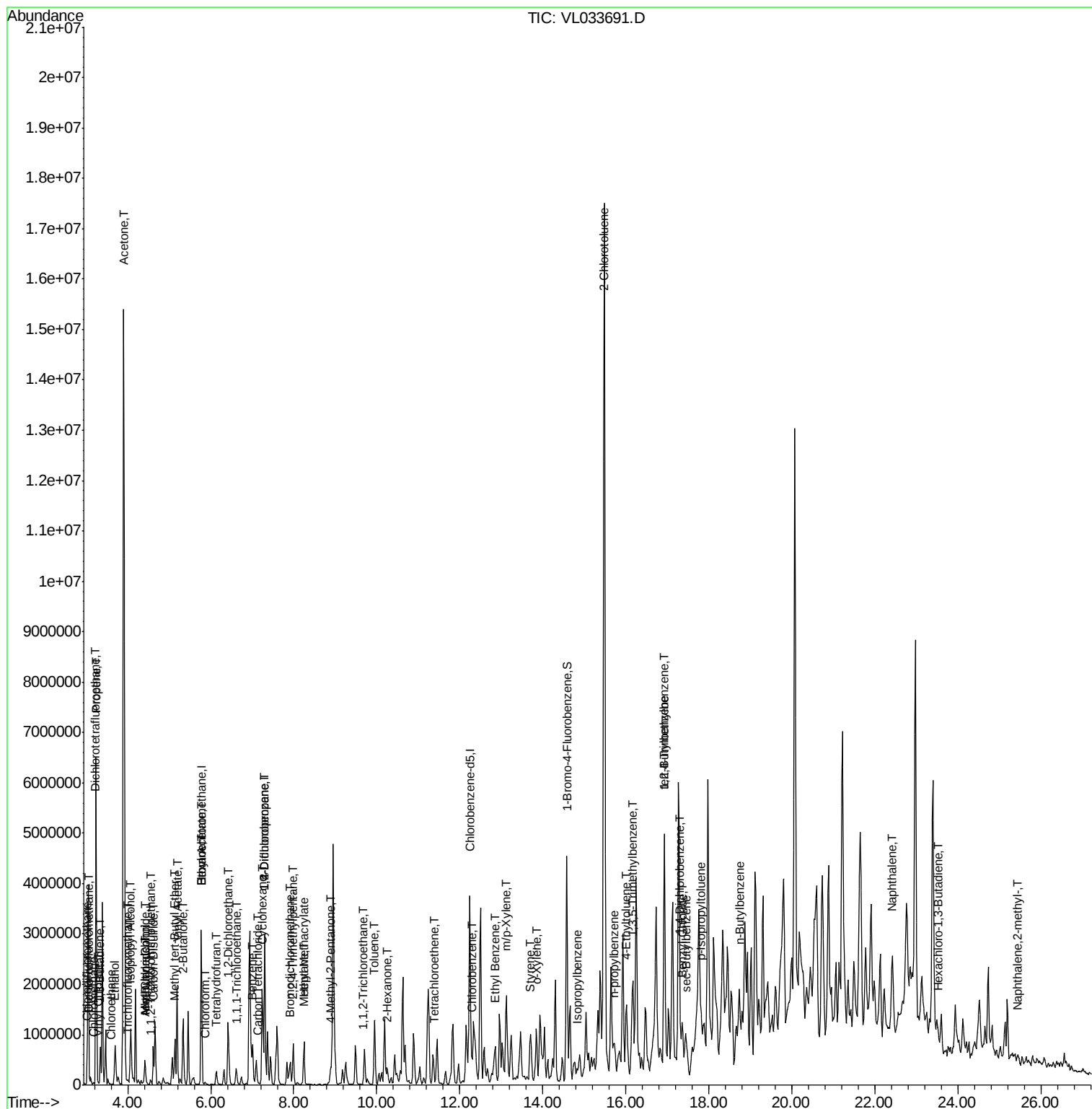
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

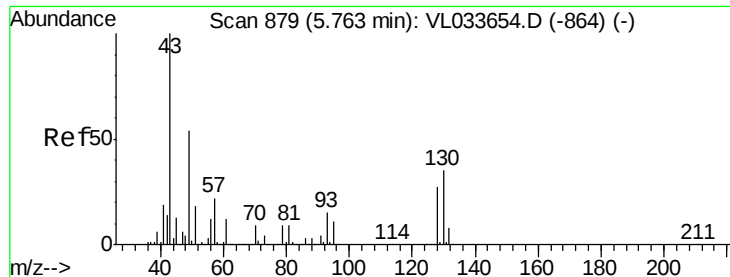
59) m/p-Xylene	13.12	91	1475128	5.439	ppbv	99
60) o-Xylene	13.85	91	821519	2.993	ppbv	99
61) Styrene	13.69	104	6637	0.036	ppbv #	1
62) Isopropylbenzene	14.82	105	163912	0.437	ppbv	99
64) n-propylbenzene	15.72	120	24637	0.254	ppbv #	1
65) tert-Butylbenzene	16.92	119	214080	0.623	ppbv #	12
66) Benzyl Chloride	17.37	91	67109	0.429	ppbv #	68
67) sec-Butylbenzene	17.46	105	156127	0.325	ppbv	100
69) p-Isopropyltoluene	17.81	119	101745	0.257	ppbv #	48
70) n-Butylbenzene	18.72	91	170766	0.407	ppbv #	74
71) 2-Chlorotoluene	15.48	91	4813166	17.383	ppbv #	45
72) 4-Ethyltoluene	16.00	105	268986	0.834	ppbv #	88
73) 1,3,5-Trimethylbenzene	16.16	105	1187546	3.807	ppbv	99
74) 1,2,4-Trimethylbenzene	16.93	105	3017148	8.701	ppbv #	77
76) 1,4-Dichlorobenzene	17.31	146	2248	0.011	ppbv #	24
78) Hexachloro-1,3-Butadiene	23.54	225	2215	0.014	ppbv #	1
79) Naphthalene	22.41	128	289654	0.915	ppbv	99
80) Naphthalene,2-methyl-	25.43	142	50137	0.419	ppbv	97

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

ALS Vial : 1 Sample Multiplier: 1

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 881

Delta R.T. 0.01 min

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ClientSampleId :
SS01

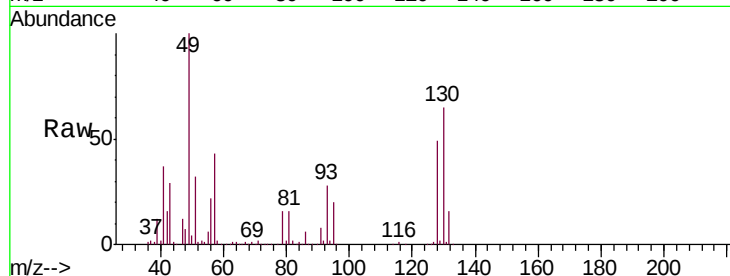
Tgt Ion: 49 Resp: 910849

Ion Ratio Lower Upper

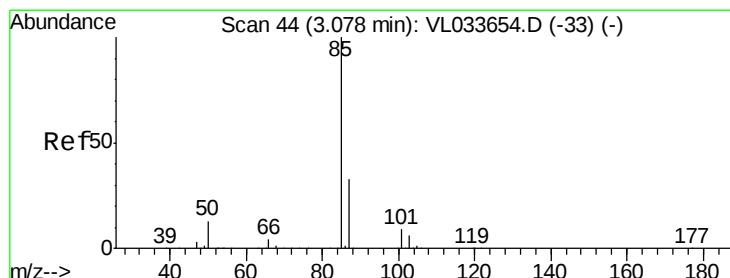
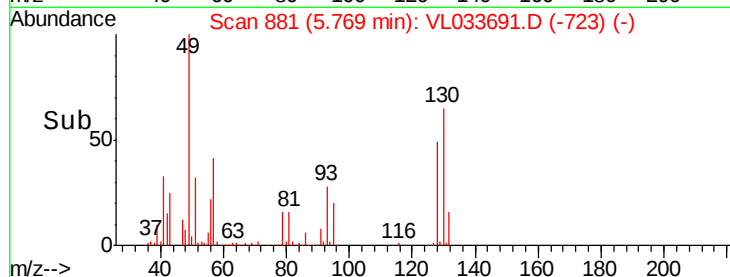
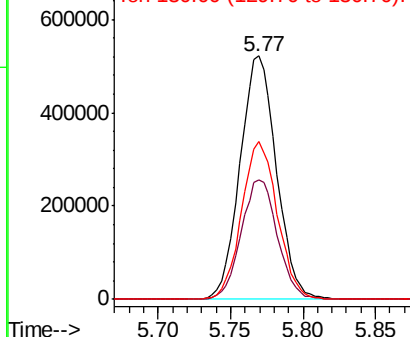
49 100

128 49.2 24.8 74.3

130 64.0 32.1 96.5



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



#2

Dichlorodifluoromethane

Concen: 0.289 ppbv

RT: 3.08 min Scan# 43

Delta R.T. -0.00 min

Lab File: VL033691.D

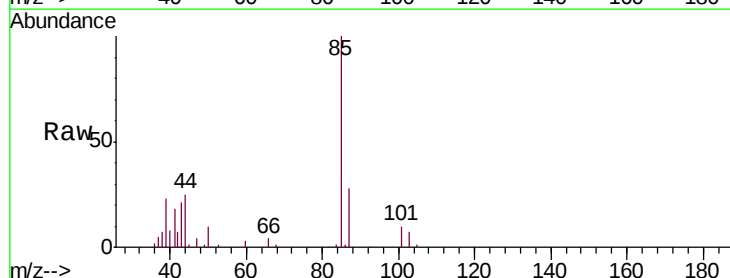
Acq: 14 May 2019 14:59

Tgt Ion: 85 Resp: 61787

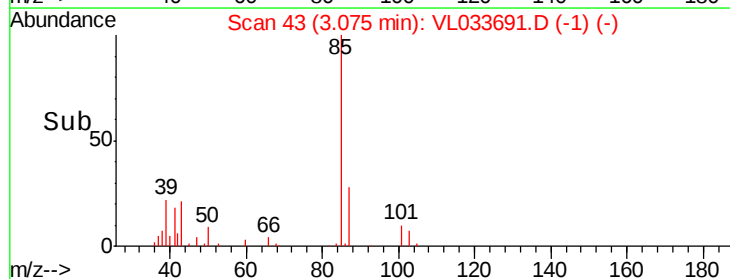
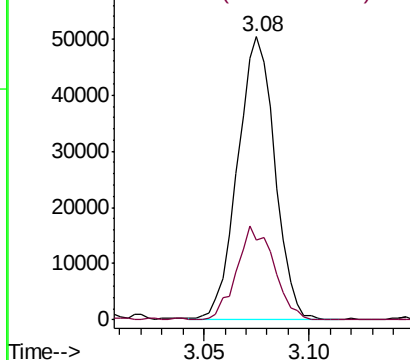
Ion Ratio Lower Upper

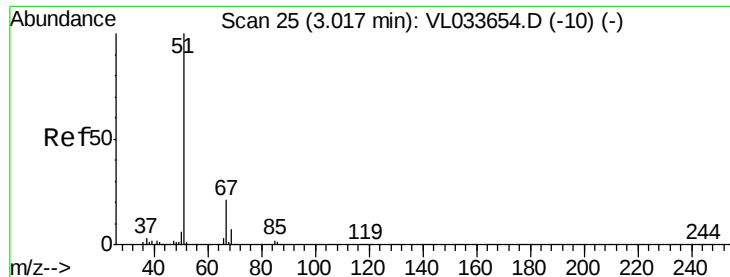
85 100

87 28.4 26.0 39.0



Abundance Ion 85.00 (84.70 to 85.70): VL0
Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.295 ppbv

RT: 3.01 min Scan# 23

Delta R.T. -0.01 min

Lab File: VL033691.D

Acq: 14 May 2019 14:59

Instrument :

MSVOA_L

ClientSampleId :

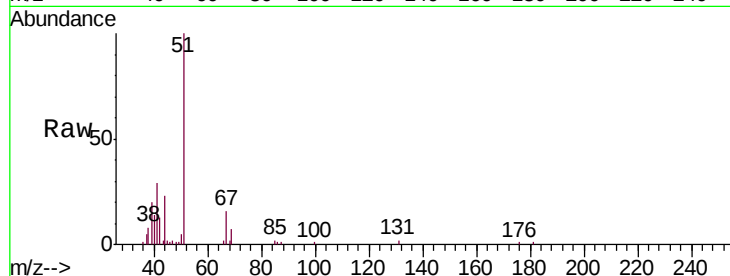
SS01

Tgt Ion: 51 Resp: 38821

Ion Ratio Lower Upper

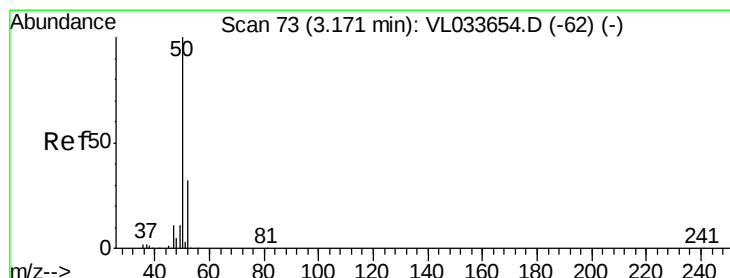
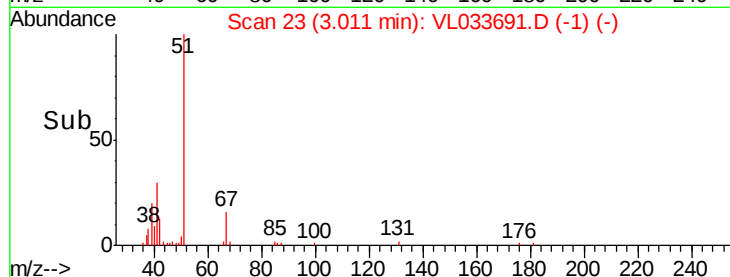
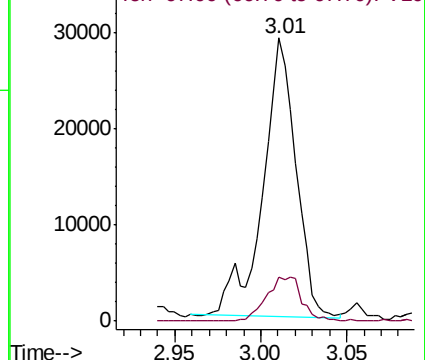
51 100

67 17.1 15.7 23.5



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.269 ppbv

RT: 3.17 min Scan# 72

Delta R.T. -0.00 min

Lab File: VL033691.D

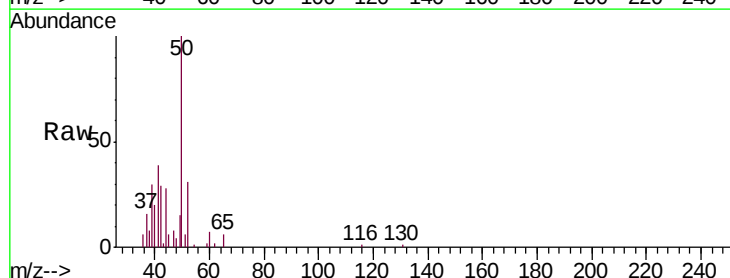
Acq: 14 May 2019 14:59

Tgt Ion: 50 Resp: 18411

Ion Ratio Lower Upper

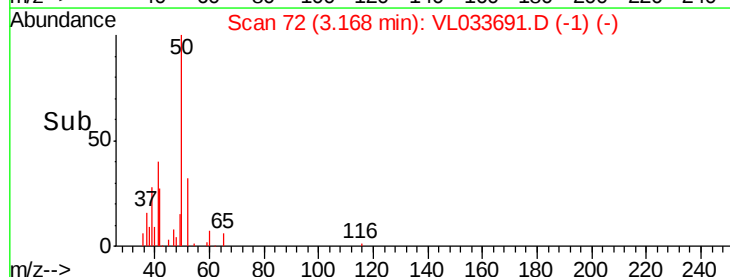
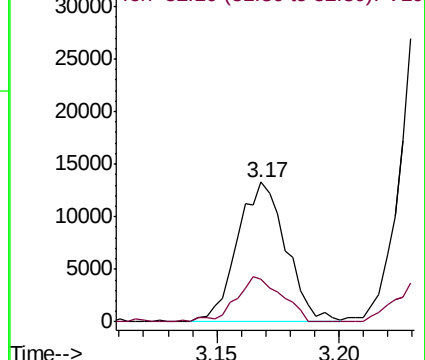
50 100

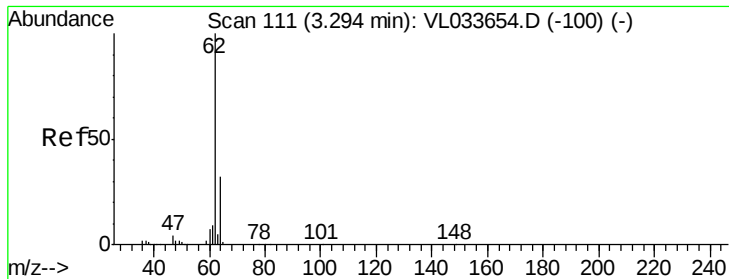
52 31.4 25.8 38.8



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 0.015 ppbv

RT: 3.29 min Scan# 110

Delta R.T. -0.00 min

Lab File: VL033691.D

Acq: 14 May 2019 14:59

Instrument :

MSVOA_L

ClientSampleId :

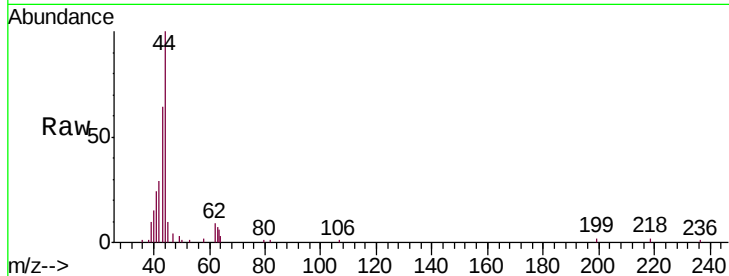
SS01

Tgt Ion: 62 Resp: 982

Ion Ratio Lower Upper

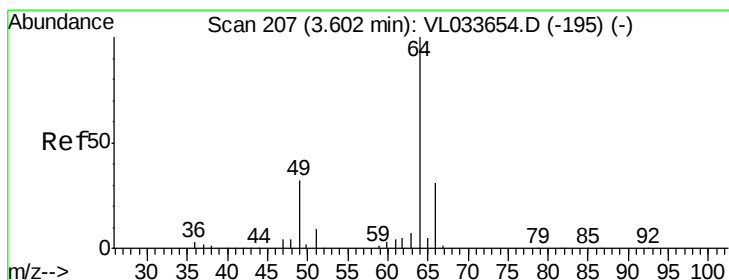
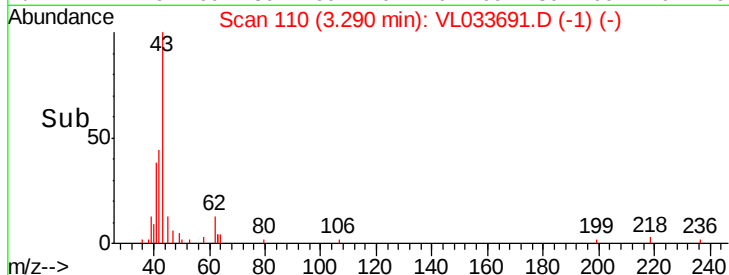
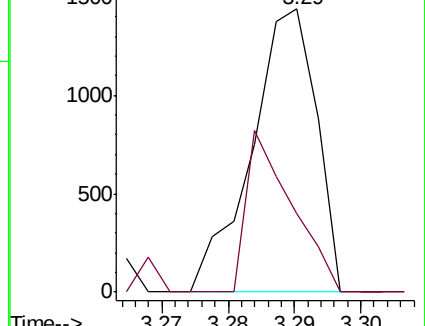
62 100

64 16.3 25.6 38.4#



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#7

Chloroethane

Concen: 0.045 ppbv

RT: 3.60 min Scan# 207

Delta R.T. 0.00 min

Lab File: VL033691.D

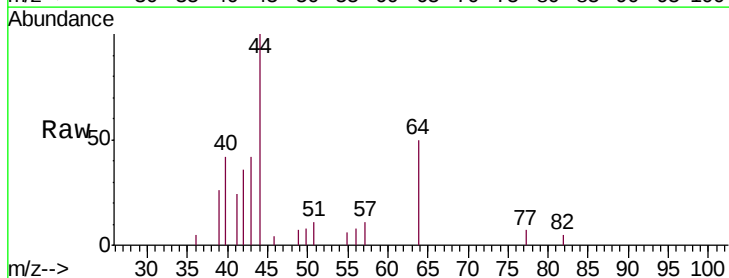
Acq: 14 May 2019 14:59

Tgt Ion: 64 Resp: 1089

Ion Ratio Lower Upper

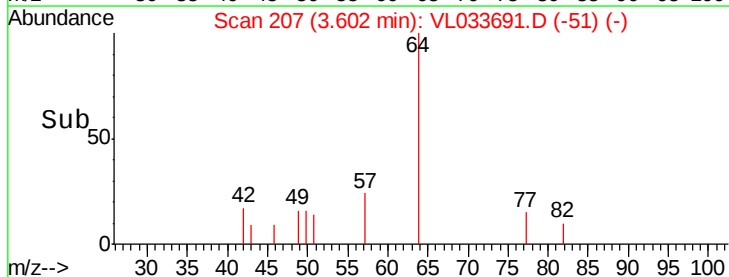
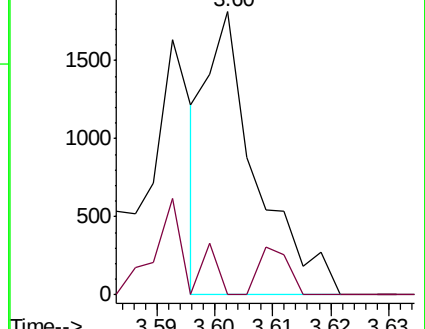
64 100

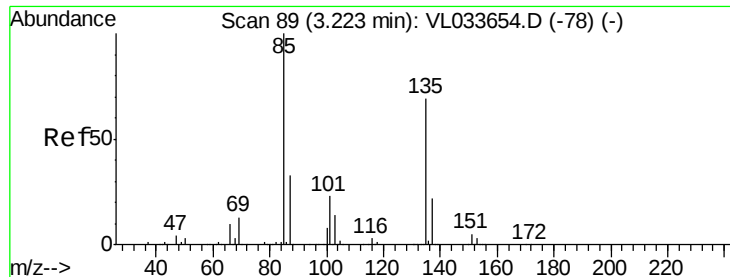
66 0.0 25.1 37.7#



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0





#8

Dichlorotetrafluoroethane

Concen: 0.019 ppbv

RT: 3.22 min Scan# 88

Delta R.T. -0.00 min

Lab File: VL033691.D

Acq: 14 May 2019 14:59

Instrument :

MSVOA_L

ClientSampleId :

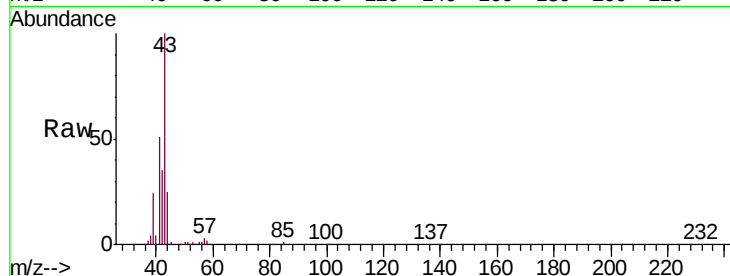
SS01

Tgt Ion: 85 Resp: 3272

Ion Ratio Lower Upper

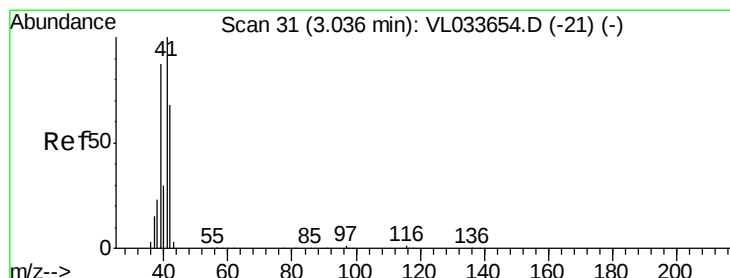
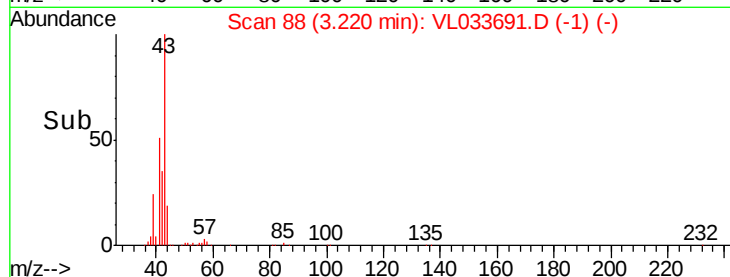
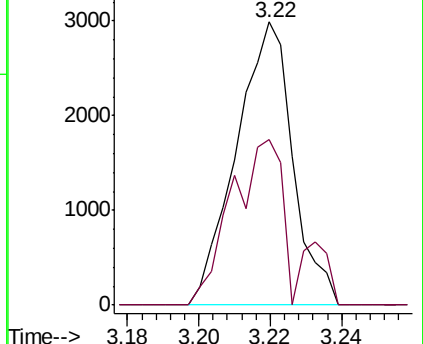
85 100

135 62.4 54.3 81.5



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V



#9

Propene

Concen: 33.152 ppbv

RT: 3.24 min Scan# 93

Delta R.T. 0.20 min

Lab File: VL033691.D

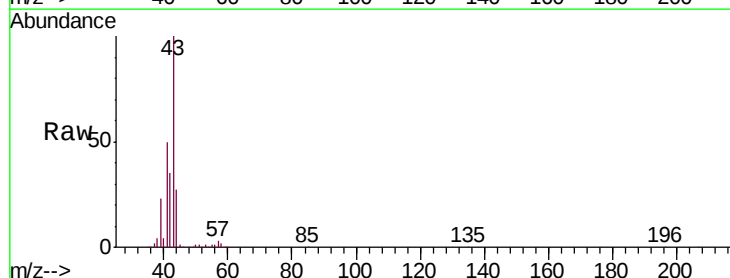
Acq: 14 May 2019 14:59

Tgt Ion: 41 Resp: 1662513

Ion Ratio Lower Upper

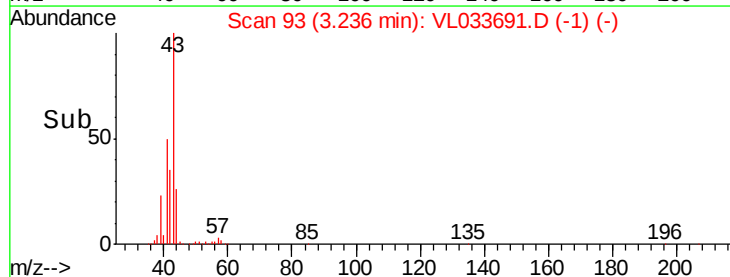
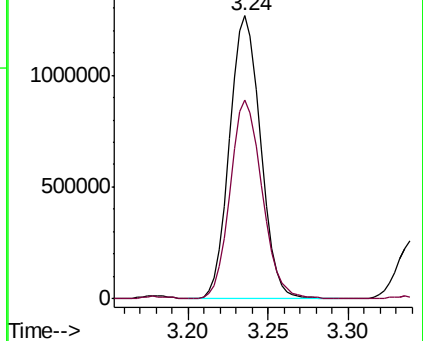
41 100

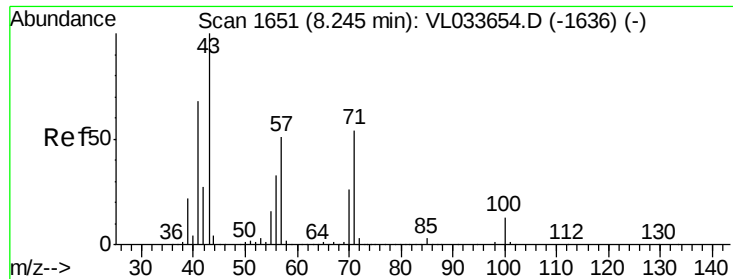
42 72.7 55.6 83.4



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

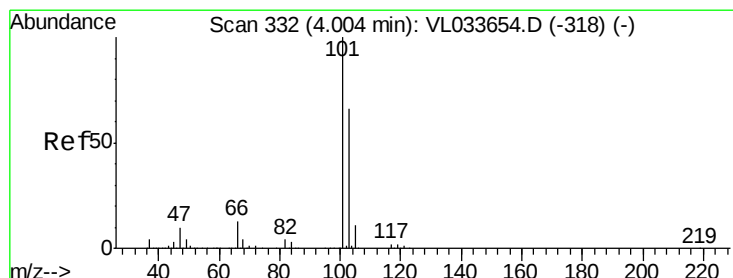
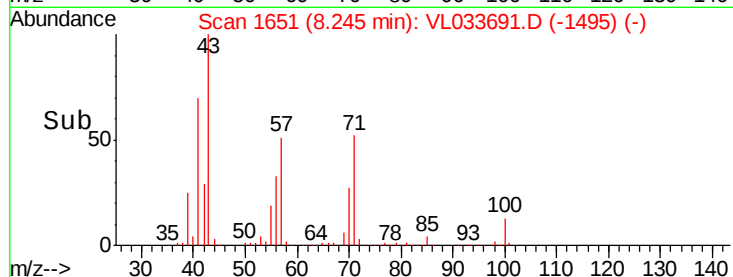
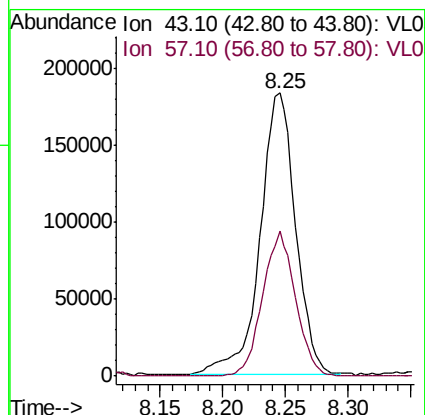
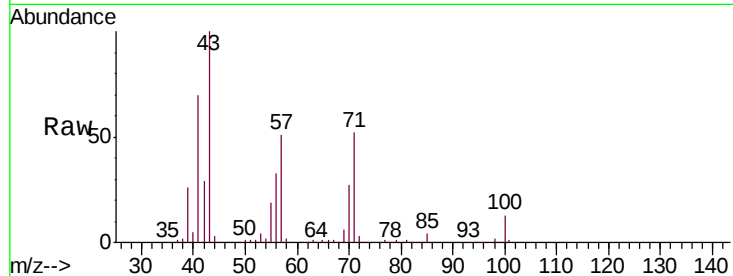




#10
 Heptane
 Concen: 2.885 ppbv
 RT: 8.25 min Scan# 1651
 Delta R.T. 0.00 min
 Lab File: VL033691.D
 Acq: 14 May 2019 14:59

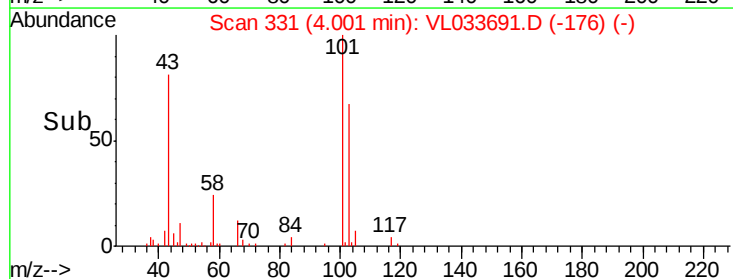
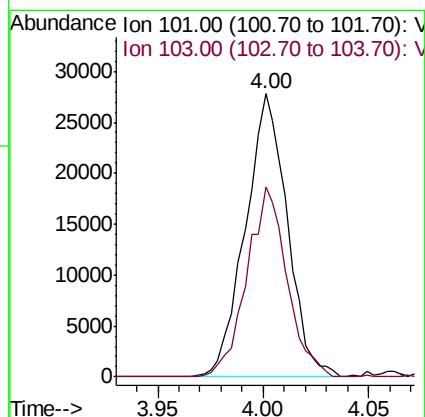
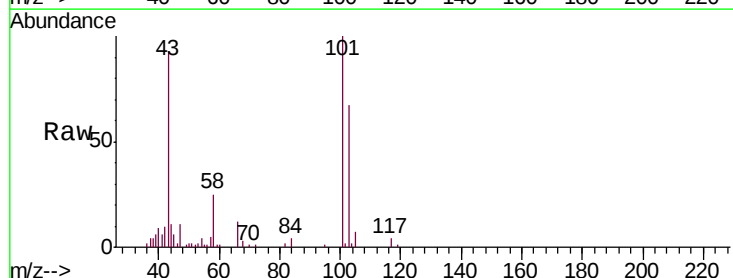
Instrument :
 MSVOA_L
 ClientSampleId :
 SS01

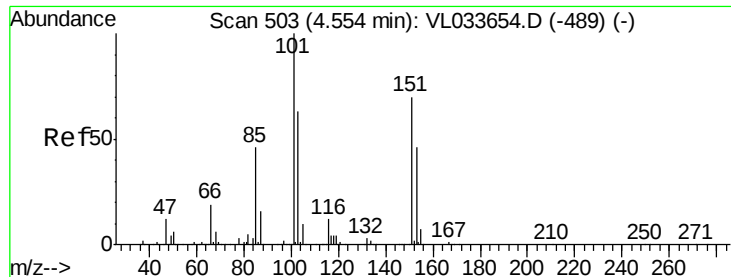
Tgt Ion: 43 Resp: 357023
 Ion Ratio Lower Upper
 43 100
 57 48.2 41.8 62.6



#11
 Trichlorofluoromethane
 Concen: 0.192 ppbv
 RT: 4.00 min Scan# 331
 Delta R.T. -0.00 min
 Lab File: VL033691.D
 Acq: 14 May 2019 14:59

Tgt Ion: 101 Resp: 38317
 Ion Ratio Lower Upper
 101 100
 103 67.2 52.7 79.1





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.258 ppbv

RT: 4.55 min Scan# 502

Delta R.T. -0.00 min

Lab File: VL033691.D

Acq: 14 May 2019 14:59

Instrument :

MSVOA_L

ClientSampleId :

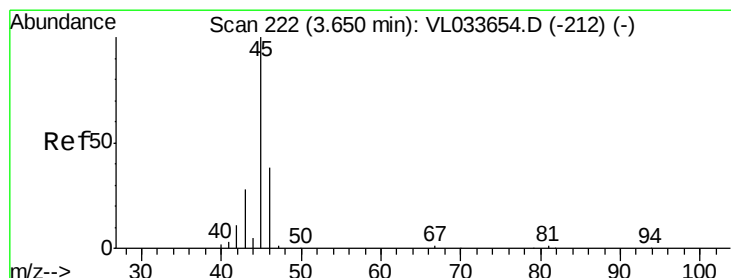
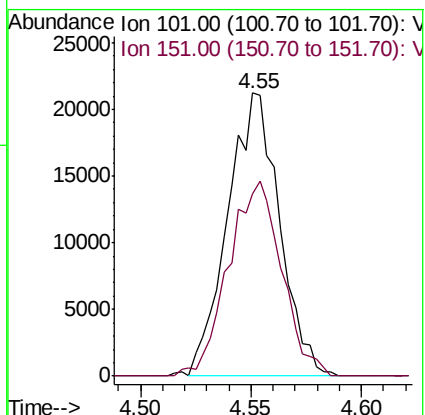
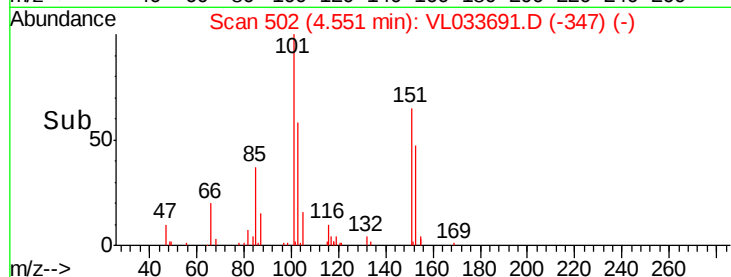
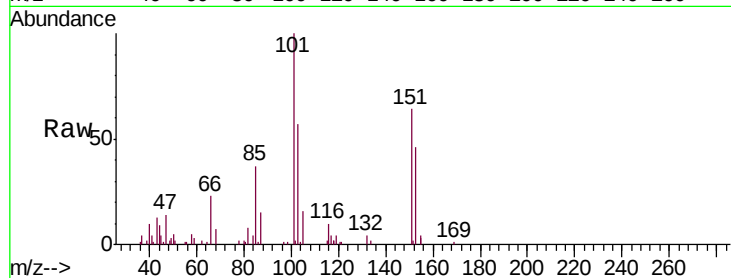
SS01

Tgt Ion: 101 Resp: 34578

Ion Ratio Lower Upper

101 100

151 70.8 58.0 87.0



#13

Ethanol

Concen: 71.993 ppbv

RT: 3.70 min Scan# 236

Delta R.T. 0.05 min

Lab File: VL033691.D

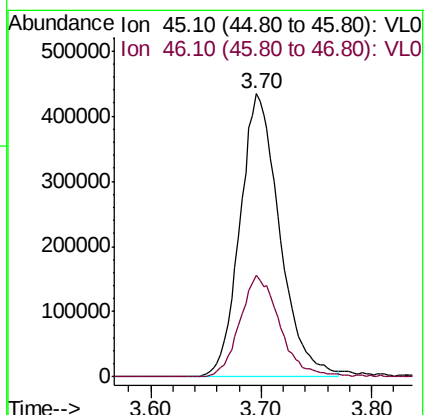
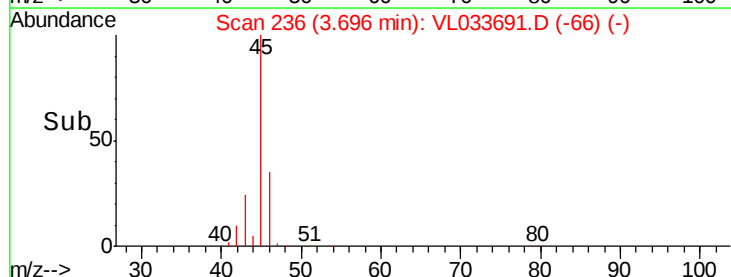
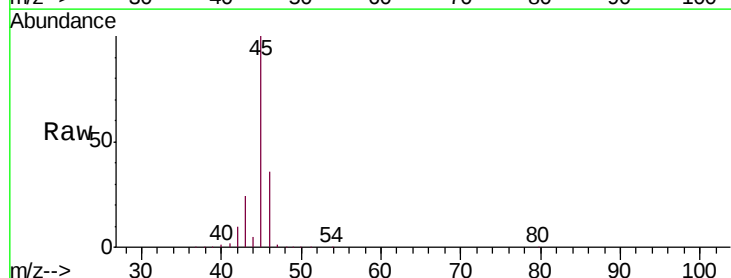
Acq: 14 May 2019 14:59

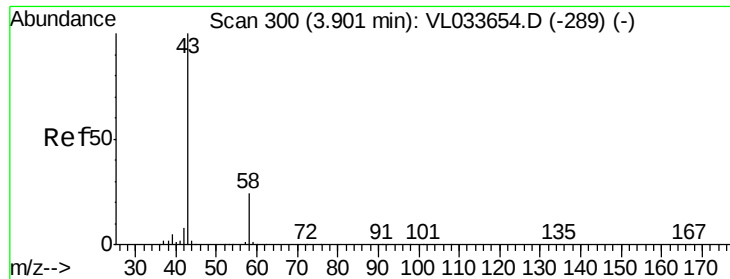
Tgt Ion: 45 Resp: 1083651

Ion Ratio Lower Upper

45 100

46 36.4 14.9 59.7





#15

Acetone

Concen: 141.555 ppbv

RT: 3.90 min Scan# 300

Delta R.T. 0.00 min

Lab File: VL033691.D

Acq: 14 May 2019 14:59

Instrument :

MSVOA_L

ClientSampleId :

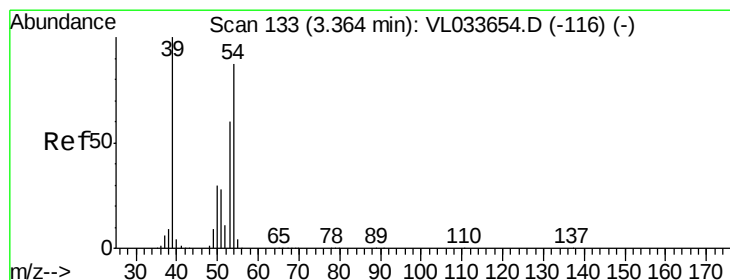
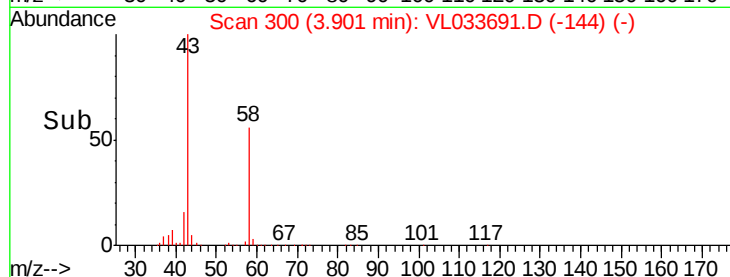
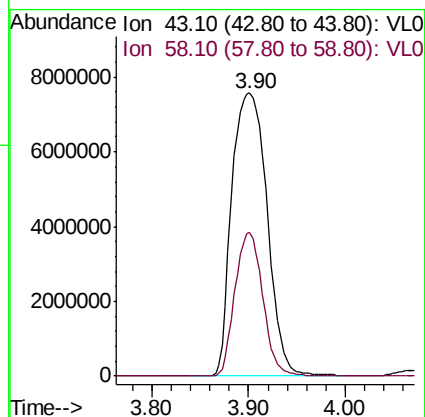
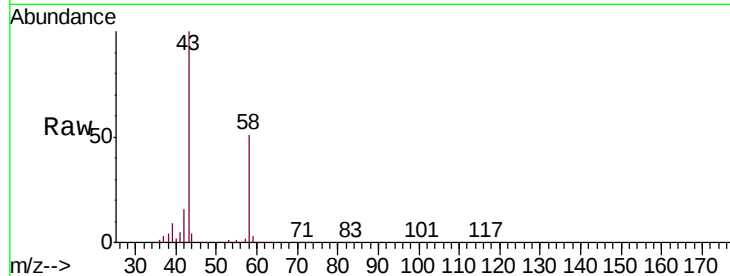
SS01

Tgt Ion: 43 Resp:19181556

Ion Ratio Lower Upper

43 100

58 40.3 20.9 31.3#



#16

1,3-Butadiene

Concen: 4.390 ppbv

RT: 3.34 min Scan# 126

Delta R.T. -0.02 min

Lab File: VL033691.D

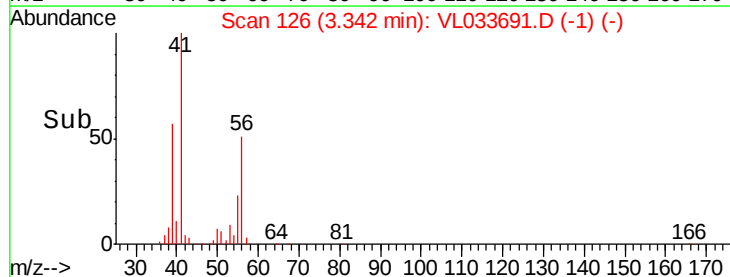
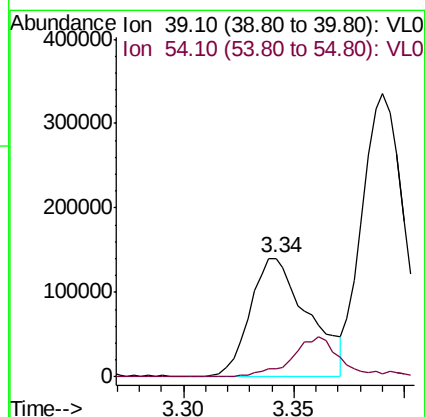
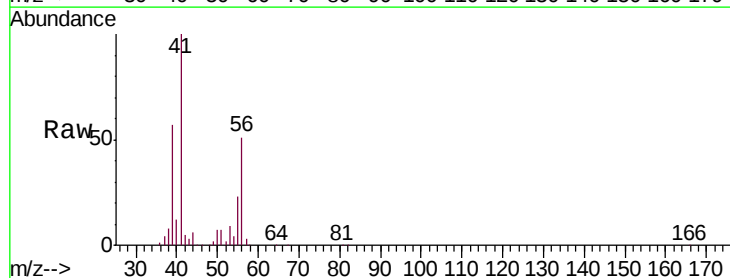
Acq: 14 May 2019 14:59

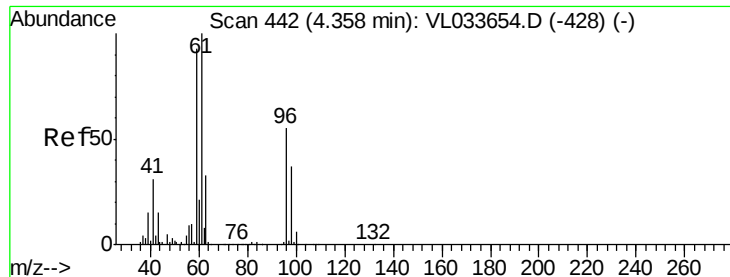
Tgt Ion: 39 Resp: 255123

Ion Ratio Lower Upper

39 100

54 29.8 67.0 100.4#



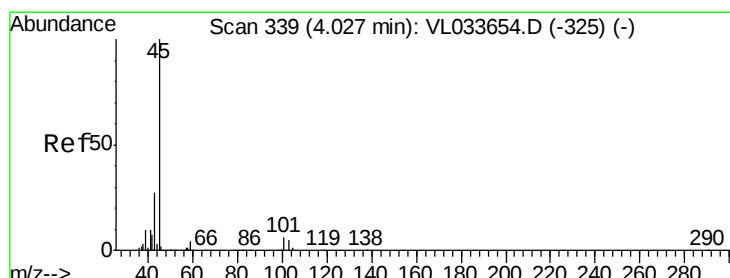
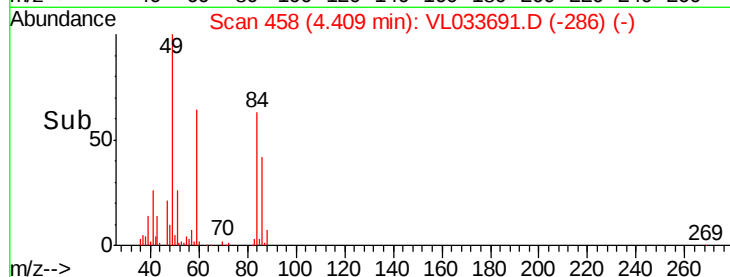
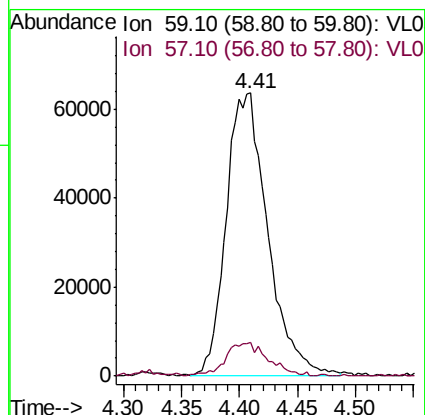
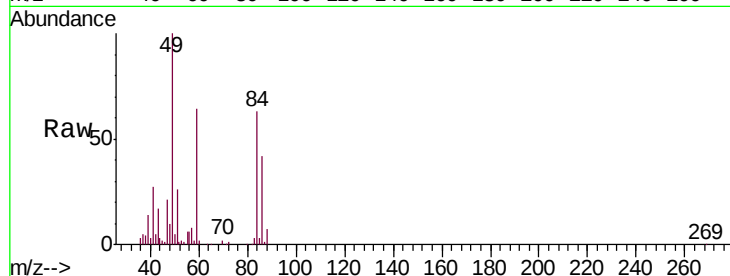


#17

tert-Butyl alcohol
 Concen: 1.537 ppbv
 RT: 4.41 min Scan# 458
 Delta R.T. 0.05 min
 Lab File: VL033691.D
 Acq: 14 May 2019 14:59

Instrument :
 MSVOA_L
 ClientSampleId :
 SS01

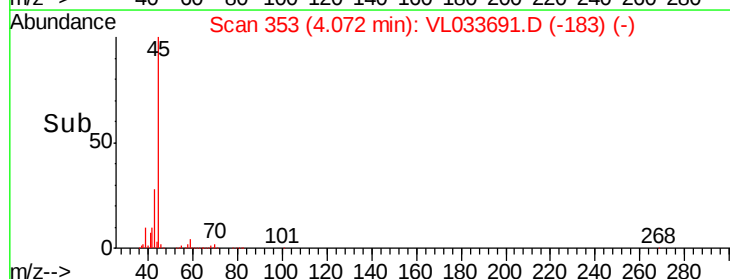
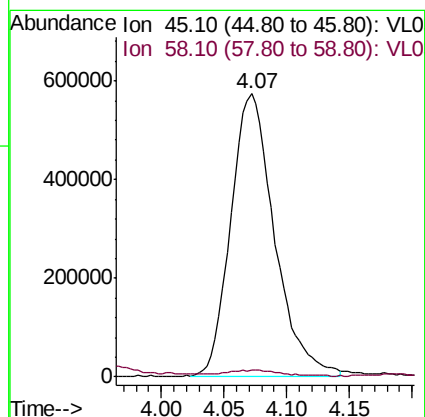
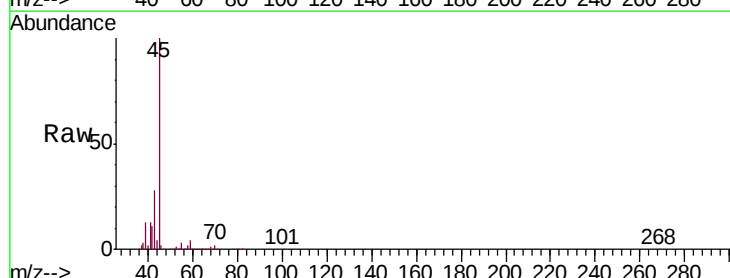
Tgt Ion: 59 Resp: 158232
 Ion Ratio Lower Upper
 59 100
 57 0.0 8.4 12.6#

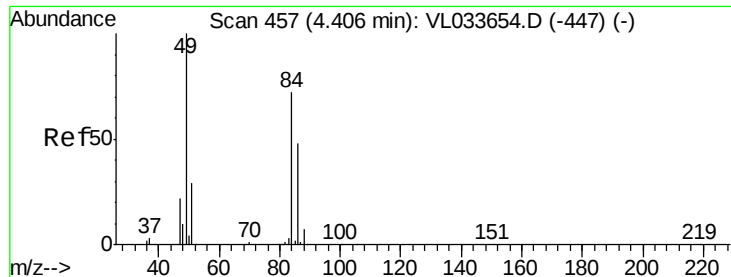


#19

Isopropyl Alcohol
 Concen: 16.584 ppbv
 RT: 4.07 min Scan# 353
 Delta R.T. 0.05 min
 Lab File: VL033691.D
 Acq: 14 May 2019 14:59

Tgt Ion: 45 Resp: 1380583
 Ion Ratio Lower Upper
 45 100
 58 0.0 2.0 3.0#

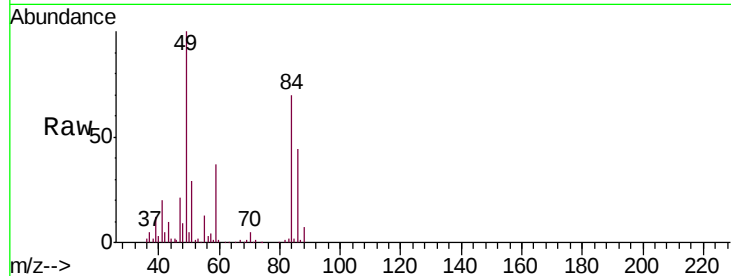




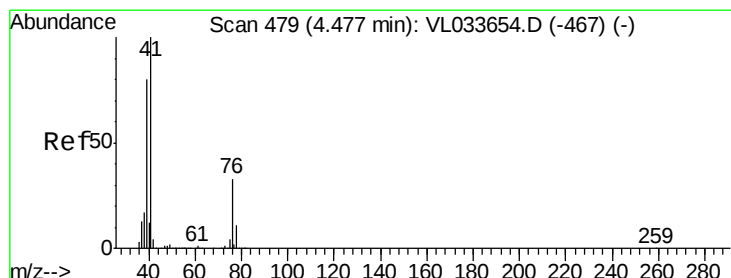
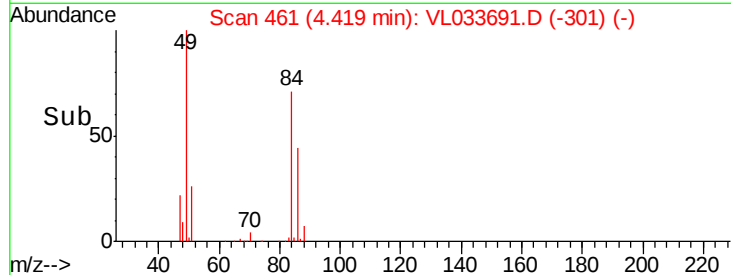
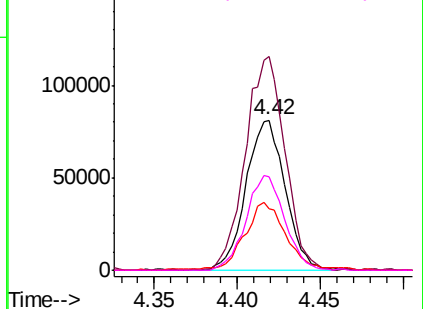
#20
Methylene Chloride
Concen: 2.590 ppbv
RT: 4.42 min Scan# 461
Delta R.T. 0.01 min
Lab File: VL033691.D
Acq: 14 May 2019 14:59

Instrument :
MSVOA_L
ClientSampled :
SS01

Tgt Ion: 84 Resp: 133242
Ion Ratio Lower Upper
84 100
49 141.8 111.8 167.6
51 39.9 32.3 48.5
86 62.2 53.9 80.9

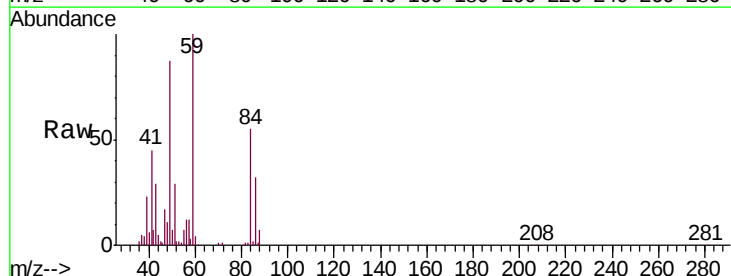


Abundance Ion 84.00 (83.70 to 84.70): VL0
Ion 49.10 (48.80 to 49.80): VL0
Ion 51.10 (50.80 to 51.80): VL0
Ion 86.00 (85.70 to 86.70): VL0

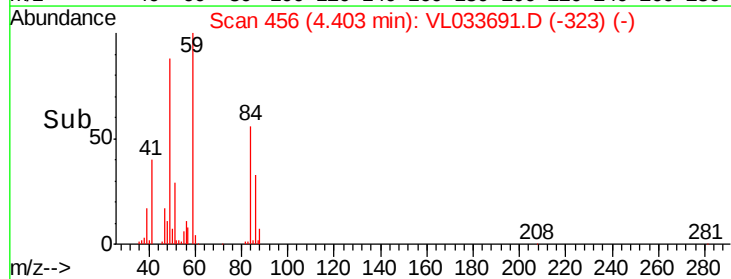
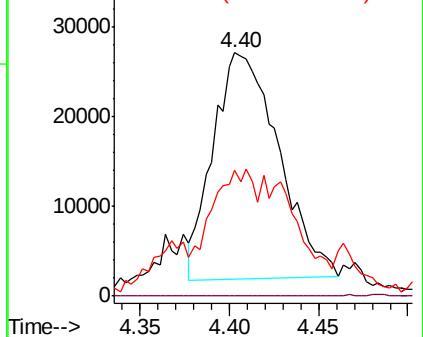


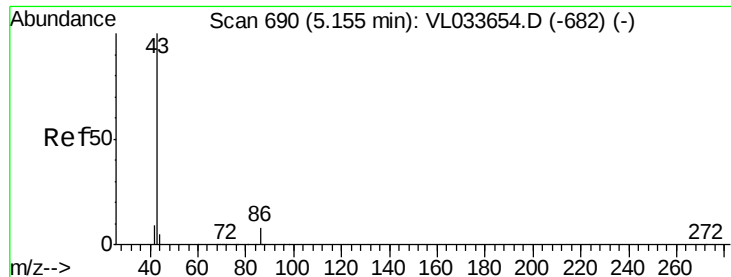
#21
Allyl Chloride
Concen: 0.787 ppbv
RT: 4.40 min Scan# 456
Delta R.T. -0.07 min
Lab File: VL033691.D
Acq: 14 May 2019 14:59

Tgt Ion: 41 Resp: 64541
Ion Ratio Lower Upper
41 100
76 0.0 26.0 39.0#
39 87.5 64.4 96.6



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





#23

Vinyl Acetate

Concen: 5.780 ppbv

RT: 5.19 min Scan# 700

Delta R.T. 0.03 min

Lab File: VL033691.D

Acq: 14 May 2019 14:59

Instrument :

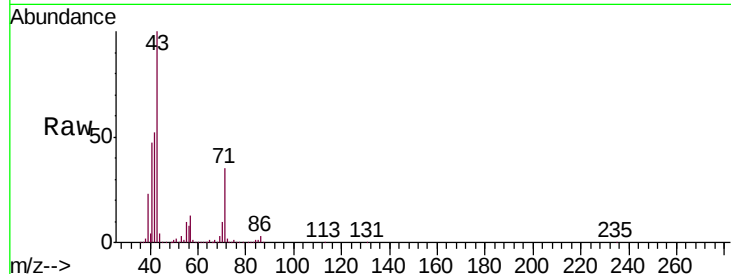
MSVOA_L

ClientSampleId :

SS01

Tgt Ion: 43 Resp: 1017722

Ion	Ratio	Lower	Upper
43	100		
86	2.9	6.0	9.0#
42	51.9	8.0	12.0#
44	3.4	3.9	5.9#

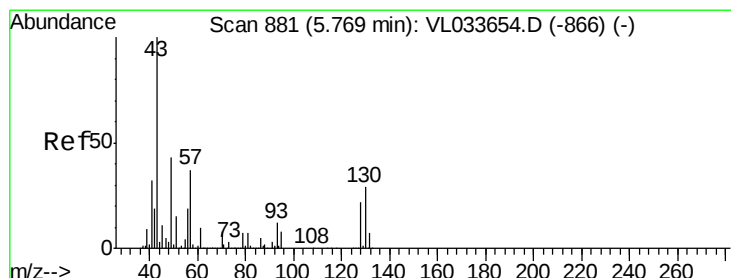
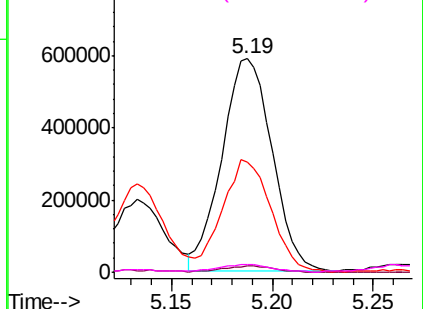
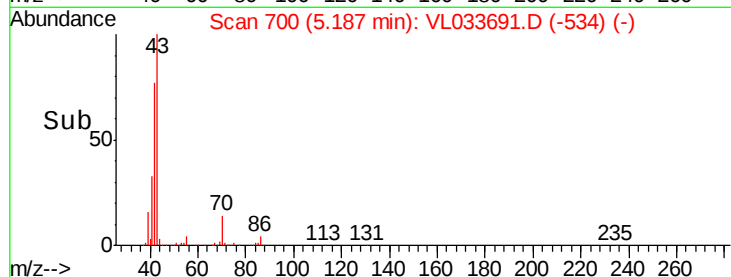


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

Ion 44.10 (43.80 to 44.80): VL0



#25

Ethyl Acetate

Concen: 1.441 ppbv

RT: 5.78 min Scan# 884

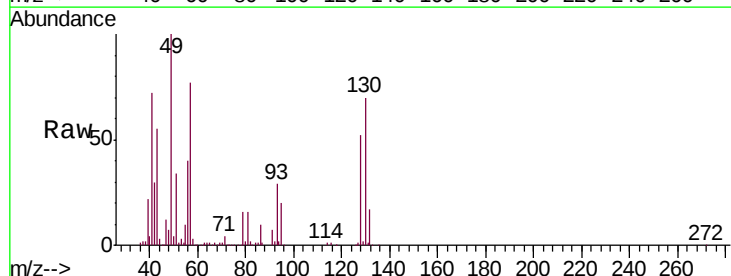
Delta R.T. 0.01 min

Lab File: VL033691.D

Acq: 14 May 2019 14:59

Tgt Ion: 43 Resp: 317598

Ion	Ratio	Lower	Upper
43	100		
45	0.0	8.0	12.0#
61	0.5	7.5	11.3#
70	1.9	5.8	8.8#

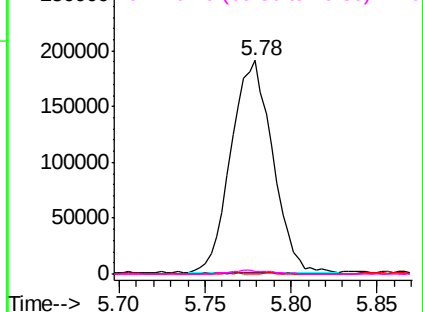
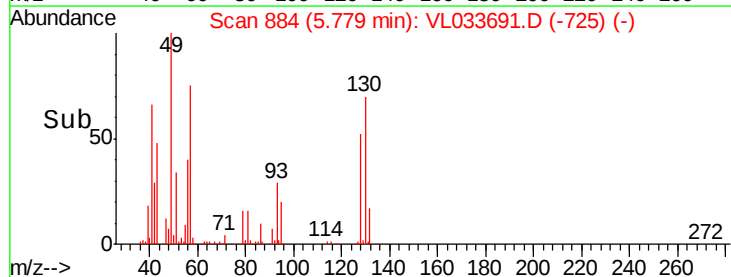


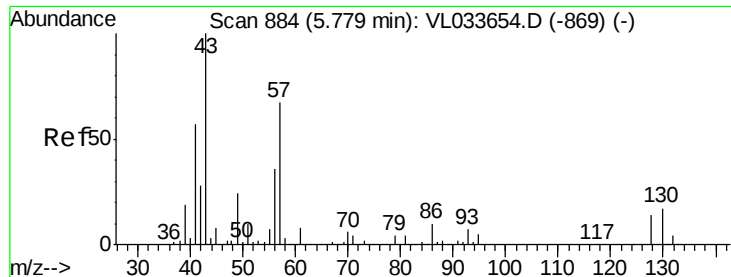
Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0

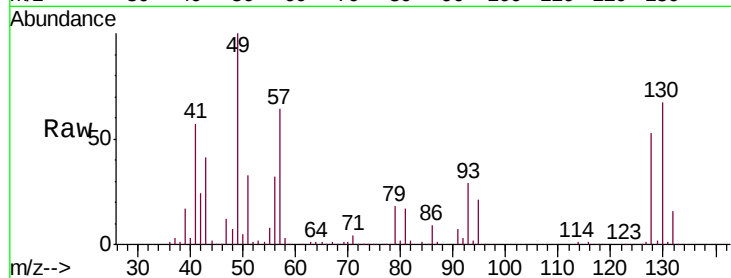




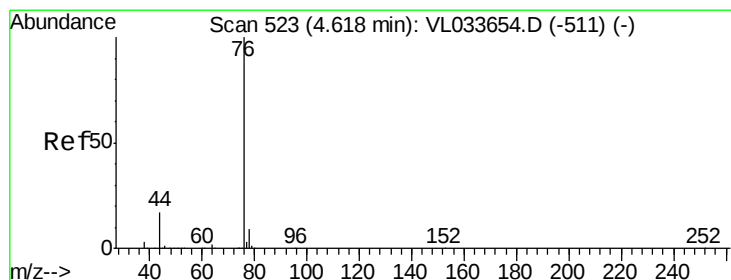
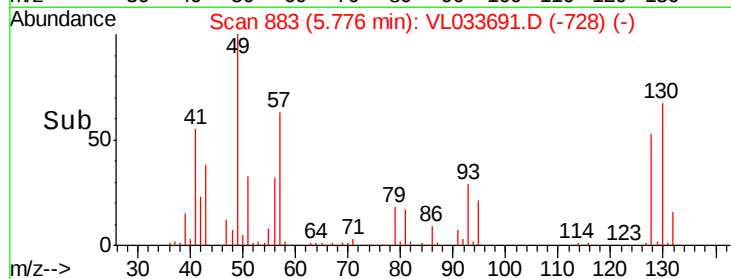
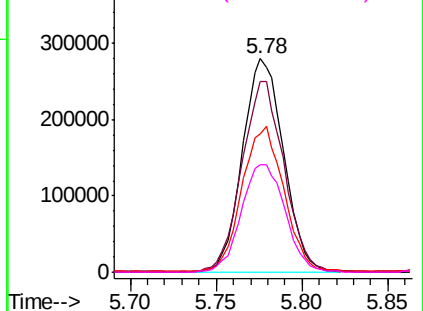
#26
Hexane
Concen: 4.919 ppbv
RT: 5.78 min Scan# 883
Delta R.T. -0.00 min
Lab File: VL033691.D
Acq: 14 May 2019 14:59

Instrument :
MSVOA_L
ClientSampled :
SS01

Tgt Ion: 57 Resp: 466095
Ion Ratio Lower Upper
57 100
41 91.0 69.7 104.5
43 69.4 181.9 272.9#
56 53.8 42.5 63.7

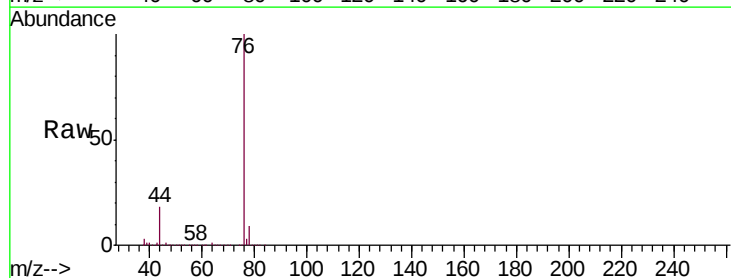


Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0

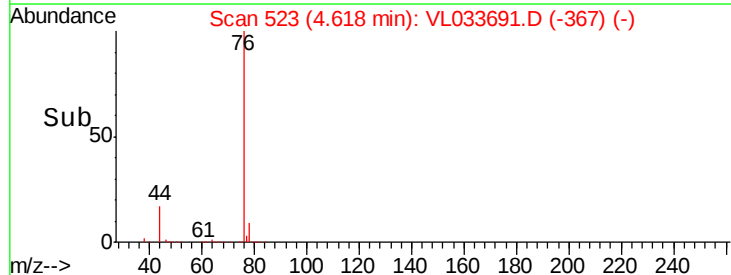
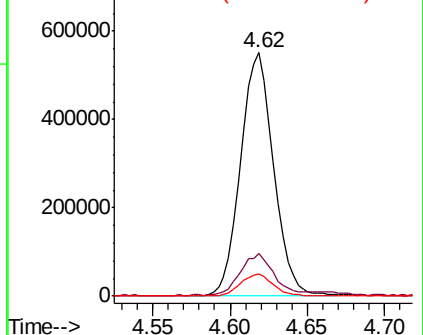


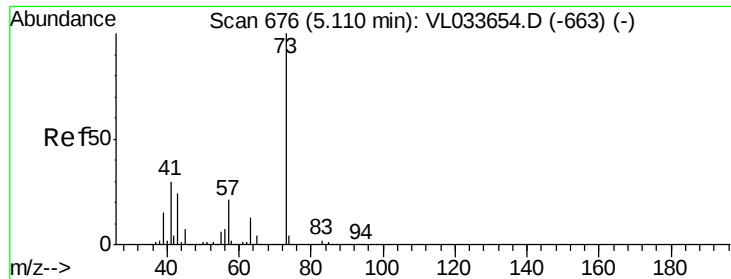
#27
Carbon Disulfide
Concen: 6.330 ppbv
RT: 4.62 min Scan# 523
Delta R.T. 0.00 min
Lab File: VL033691.D
Acq: 14 May 2019 14:59

Tgt Ion: 76 Resp: 820454
Ion Ratio Lower Upper
76 100
44 18.9 14.4 21.6
78 9.1 7.4 11.2



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



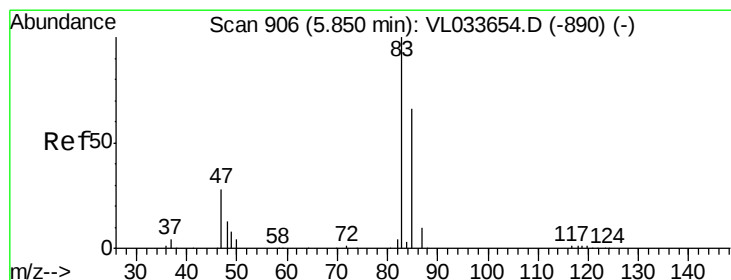
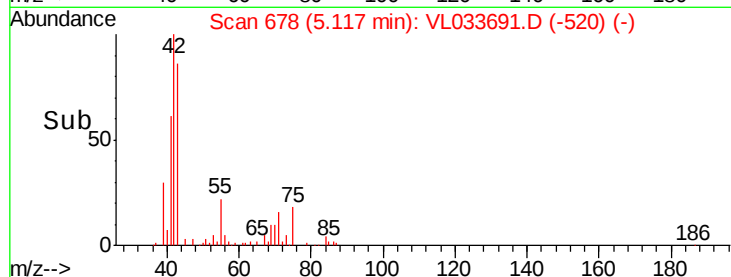
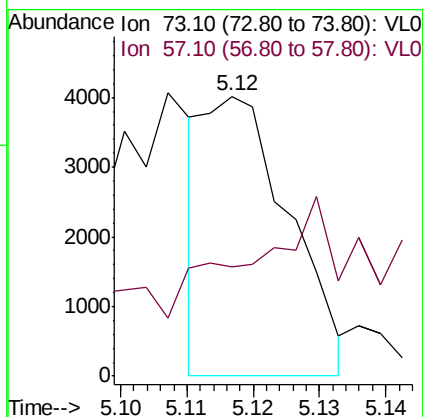
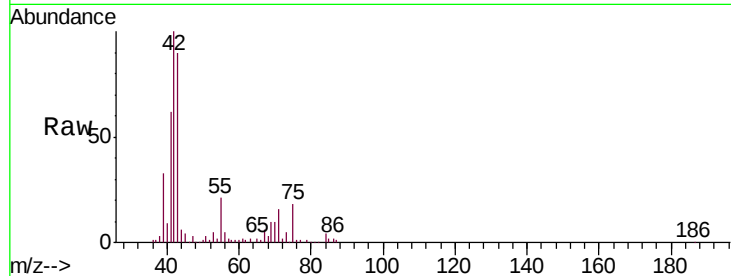


#28

Methyl tert-Butyl Ether
 Concen: 0.022 ppbv
 RT: 5.12 min Scan# 678
 Delta R.T. 0.01 min
 Lab File: VL033691.D
 Acq: 14 May 2019 14:59

Instrument :
 MSVOA_L
 ClientSampleId :
 SS01

Tgt Ion: 73 Resp: 3567
 Ion Ratio Lower Upper
 73 100
 57 0.0 17.4 26.0#



#29

Chloroform
 Concen: 0.103 ppbv
 RT: 5.86 min Scan# 909
 Delta R.T. 0.01 min
 Lab File: VL033691.D
 Acq: 14 May 2019 14:59

Tgt Ion: 83 Resp: 17588
 Ion Ratio Lower Upper
 83 100
 85 67.5 52.6 78.8

