

Data File : VL034631.D
Acq On : 18 Feb 2020 19:40
Operator : SY/AP
Sample : L1532-07
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IR-PRSS

Quant Time: Feb 19 06:05:17 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL013020AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LThu Jan 30 17:16:44 2020
QLast Update : Thu Jan 30 17:16:44 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	920416	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	1905041	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.11	117	1946990	10.00	ppbv	0.00

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.45 95 1718064 10.44 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 104.40%

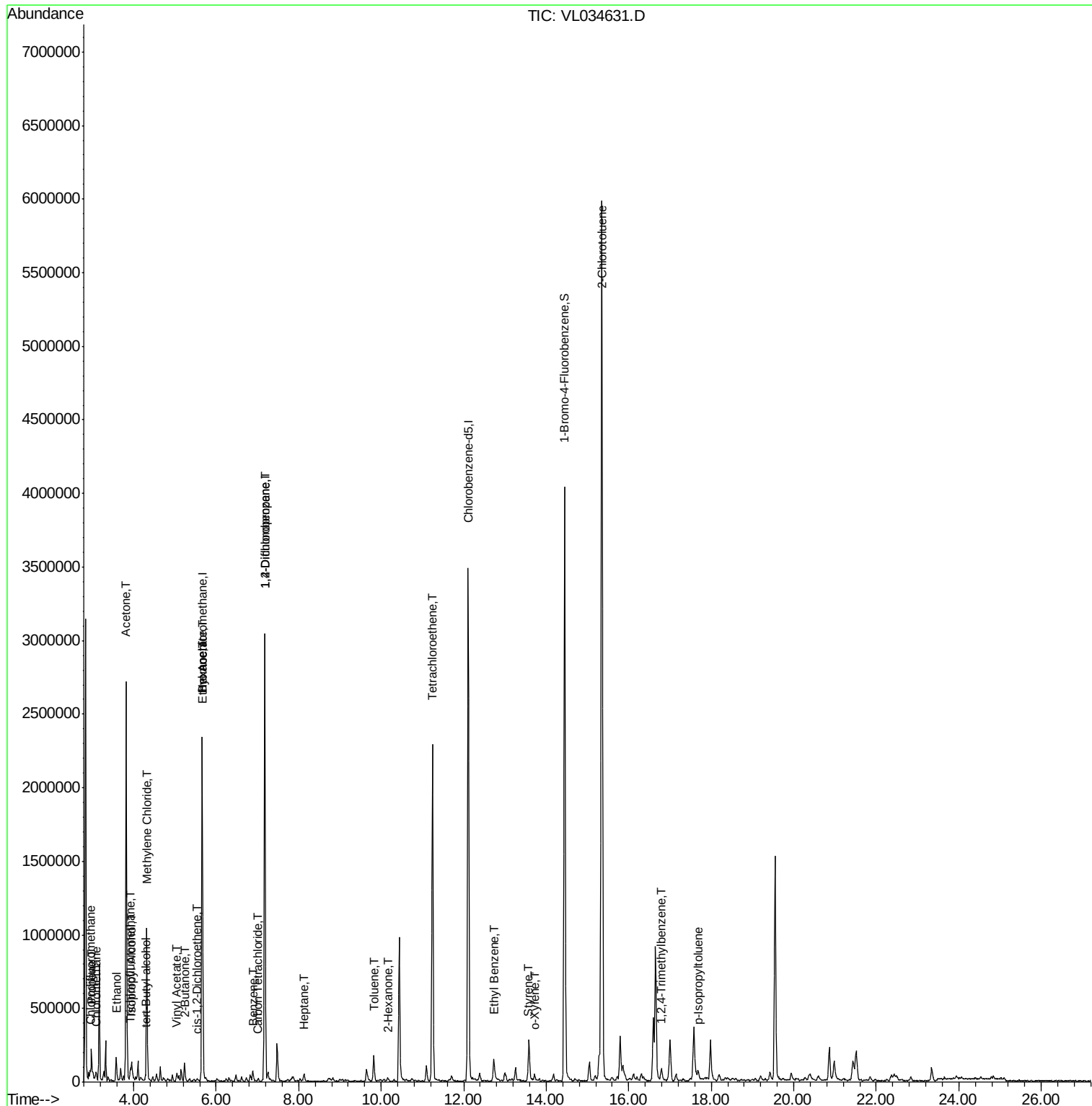
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chlorodifluoromethane	2.95	51	56183	0.505	ppbv #	83
4) Chloromethane	3.10	50	23827	0.350	ppbv	97
9) Propene	2.98	41	50410	1.164	ppbv #	79
10) Heptane	8.12	43	7080	0.065	ppbv #	26
11) Trichlorofluoromethane	3.92	101	46235	0.251	ppbv	85
13) Ethanol	3.57	45	157181	13.551	ppbv	97
15) Acetone	3.82	43	2636894	19.493	ppbv	93
17) tert-Butyl alcohol	4.29	59	6829	0.069	ppbv #	71
19) Isopropyl Alcohol	3.95	45	112353	1.423	ppbv #	94
20) Methylene Chloride	4.32	84	338393	6.570	ppbv	96
23) Vinyl Acetate	5.05	43	42012	0.272	ppbv #	90
25) Ethyl Acetate	5.67	43	47680	0.218	ppbv #	82
26) Hexane	5.67	57	49747	0.542	ppbv #	1
31) cis-1,2-Dichloroethene	5.54	61	4075	0.043	ppbv #	57
34) 2-Butanone	5.23	43	134825	0.975	ppbv	99
35) Carbon Tetrachloride	7.02	117	9558	0.052	ppbv #	62
36) Benzene	6.89	78	52656	0.311	ppbv	97
39) 1,2-Dichloropropane	7.18	63	562598	8.011	ppbv #	19
51) 2-Hexanone	10.16	43	11515	0.074	ppbv #	72
52) Tetrachloroethene	11.24	164	493927	7.258	ppbv	97
53) Toluene	9.82	91	115813	0.622	ppbv	98
58) Ethyl Benzene	12.73	91	20155	0.077	ppbv	92
60) o-Xylene	13.72	91	17891	0.077	ppbv #	33
61) Styrene	13.55	104	7016	0.045	ppbv #	22
69) p-Isopropyltoluene	17.68	119	18281	0.060	ppbv #	17
71) 2-Chlorotoluene	15.35	91	1538645	6.763	ppbv #	45
74) 1,2,4-Trimethylbenzene	16.80	105	23812	0.087	ppbv #	66

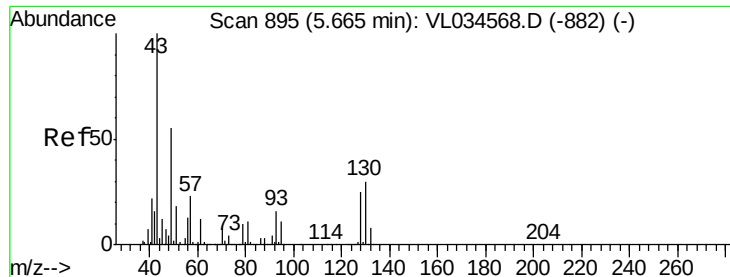
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 892

Delta R.T. -0.01 min

Lab File: VL034631.D

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Instrument :

MSVOA_L

ClientSampleId :

IR-PRSS

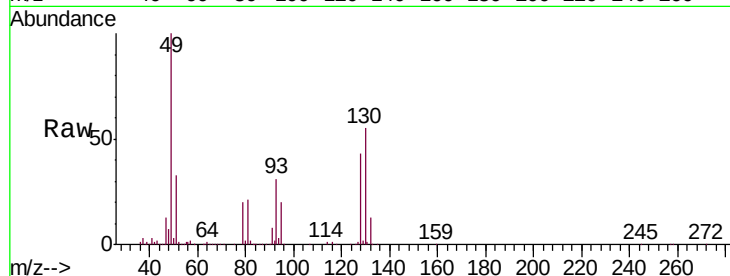
Tgt Ion: 49 Resp: 920416

Ion Ratio Lower Upper

49 100

128 45.9 22.7 68.1

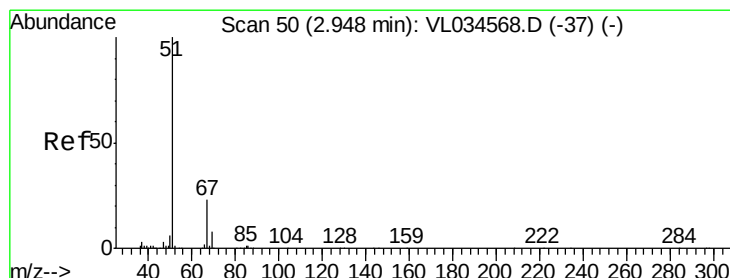
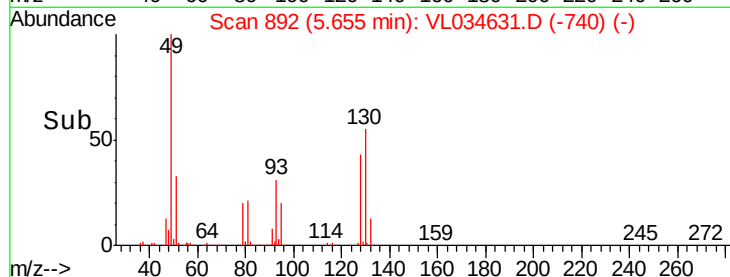
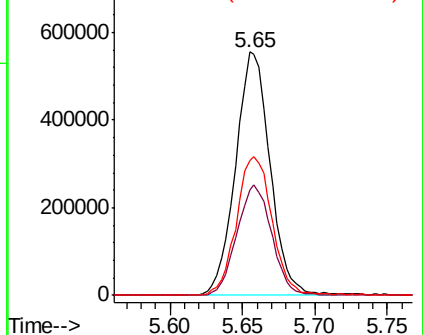
130 59.3 28.6 85.8



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



#3

Chlorodifluoromethane

Concen: 0.505 ppbv

RT: 2.95 min Scan# 51

Delta R.T. 0.00 min

Lab File: VL034631.D

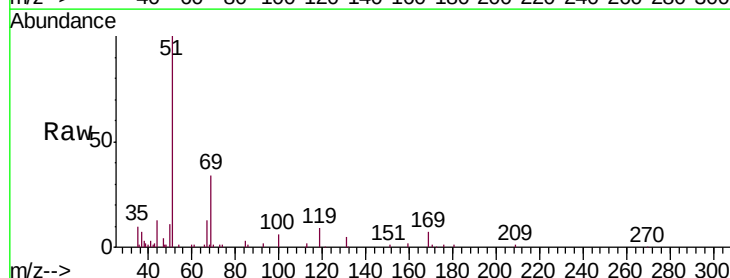
Acq: 18 Feb 2020 19:40

Tgt Ion: 51 Resp: 56183

Ion Ratio Lower Upper

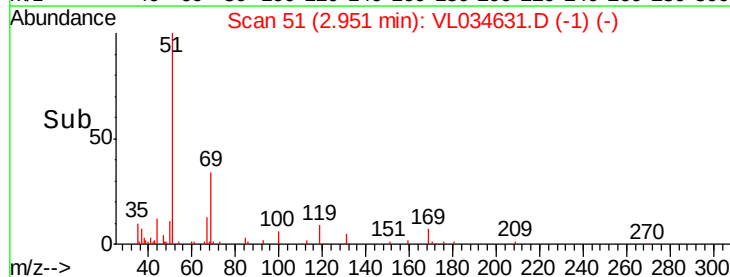
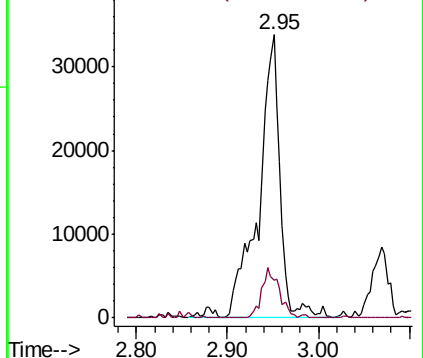
51 100

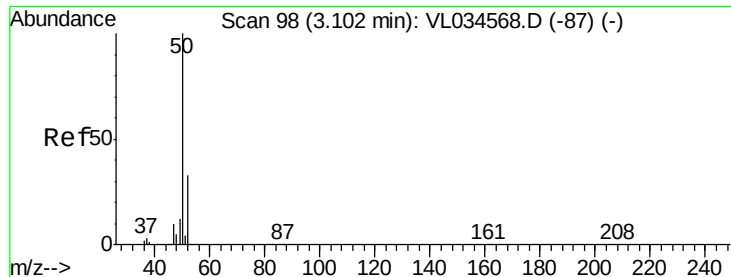
67 14.2 17.8 26.8#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#4

Chloromethane

Concen: 0.350 ppbv

RT: 3.10 min Scan# 97

Delta R.T. -0.00 min

Lab File: VL034631.D

Acq: 18 Feb 2020 19:40

Instrument :

MSVOA_L

ClientSampleId :

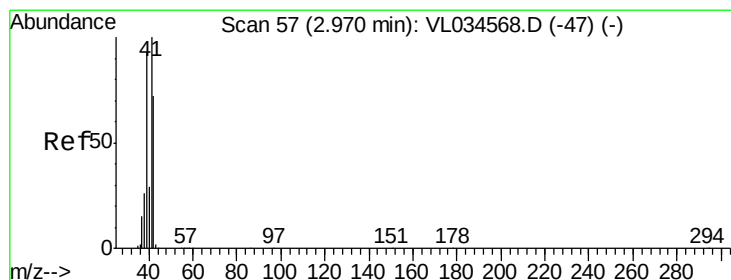
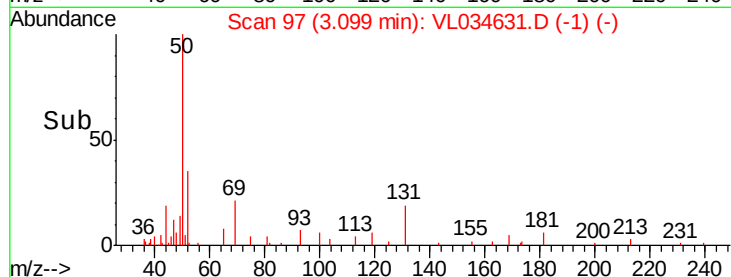
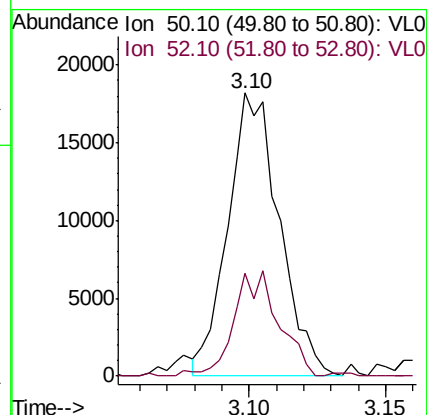
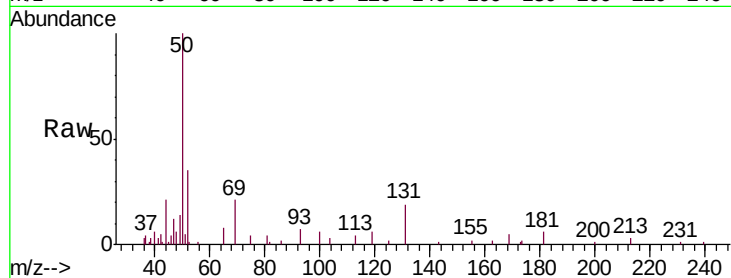
IR-PRSS

Tgt Ion: 50 Resp: 23827

Ion Ratio Lower Upper

50 100

52 35.2 26.6 39.8



#9

Propene

Concen: 1.164 ppbv

RT: 2.98 min Scan# 59

Delta R.T. 0.01 min

Lab File: VL034631.D

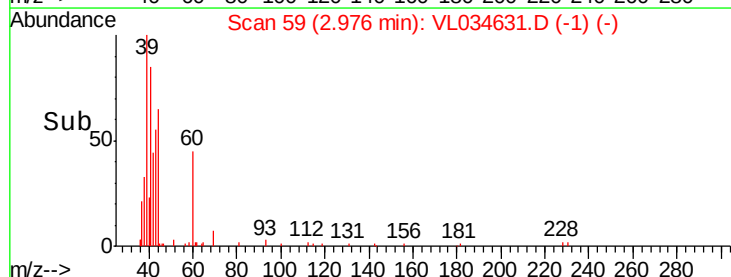
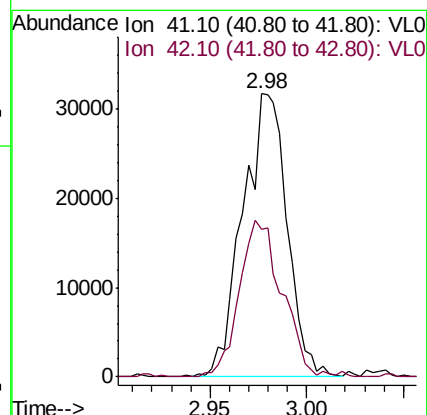
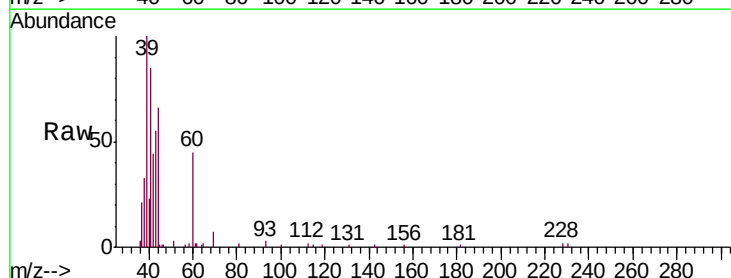
Acq: 18 Feb 2020 19:40

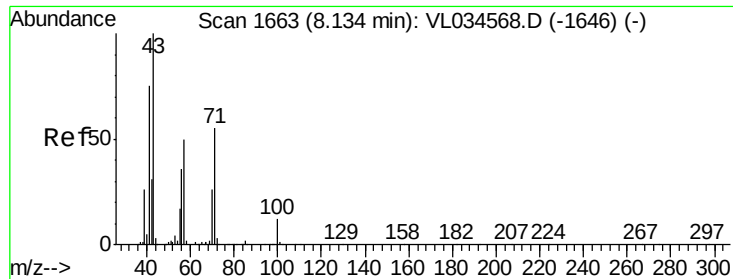
Tgt Ion: 41 Resp: 50410

Ion Ratio Lower Upper

41 100

42 53.5 57.0 85.4#

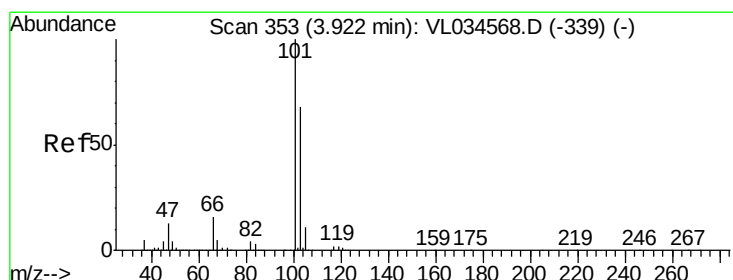
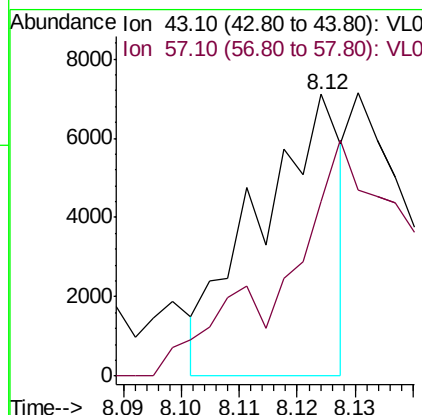
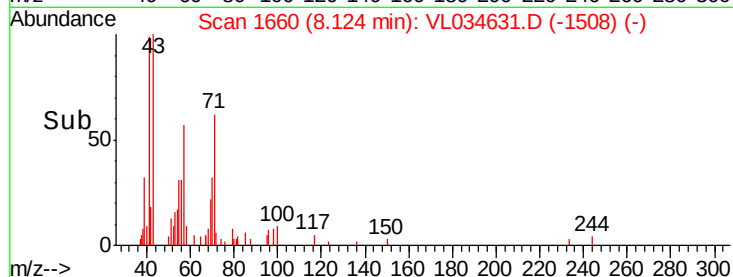
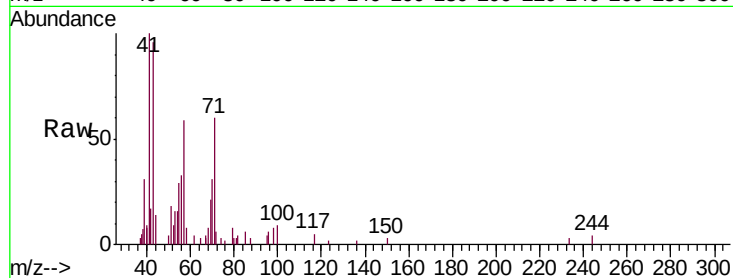




#10
Heptane
Concen: 0.065 ppbv
RT: 8.12 min Scan# 1660
Delta R.T. -0.01 min
Lab File: VL034631.D
Acq: 18 Feb 2020 19:40

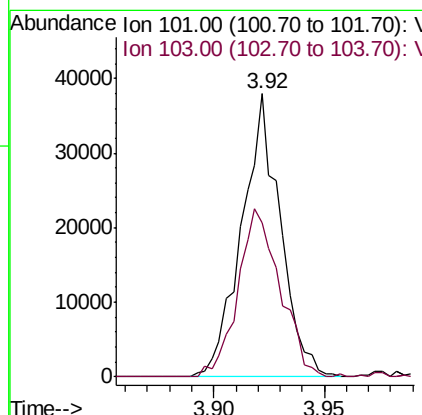
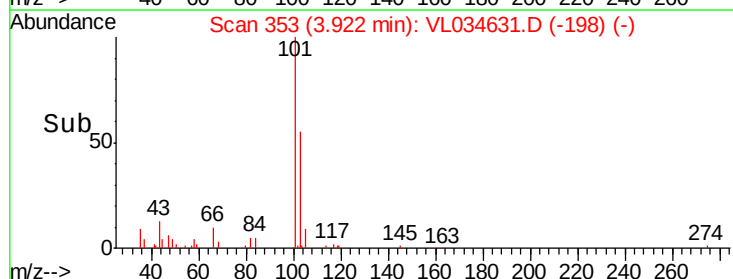
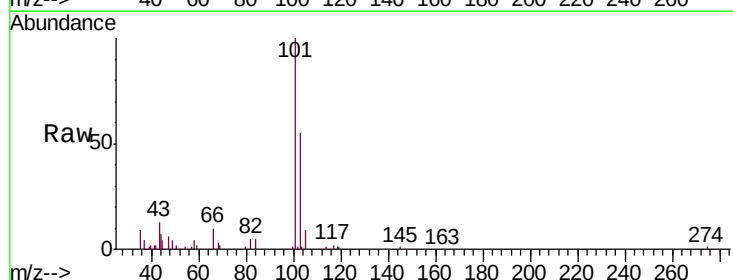
Instrument :
MSVOA_L
ClientSampleId :
IR-PRSS

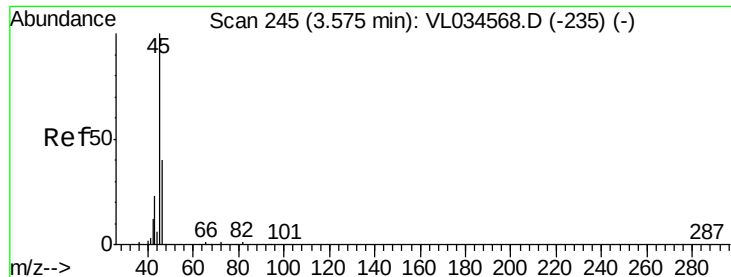
Tgt Ion: 43 Resp: 7080
Ion Ratio Lower Upper
43 100
57 0.0 41.2 61.8#



#11
Trichlorofluoromethane
Concen: 0.251 ppbv
RT: 3.92 min Scan# 353
Delta R.T. -0.00 min
Lab File: VL034631.D
Acq: 18 Feb 2020 19:40

Tgt Ion: 101 Resp: 46235
Ion Ratio Lower Upper
101 100
103 55.8 54.4 81.6





#13

Ethanol

Concen: 13.551 ppbv

RT: 3.57 min Scan# 245

Delta R.T. -0.00 min

Lab File: VL034631.D

Acq: 18 Feb 2020 19:40

Instrument :

MSVOA_L

ClientSampleId :

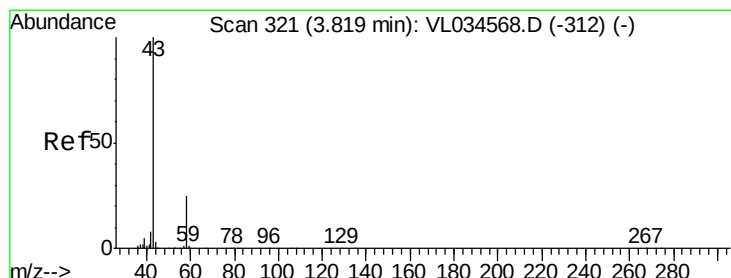
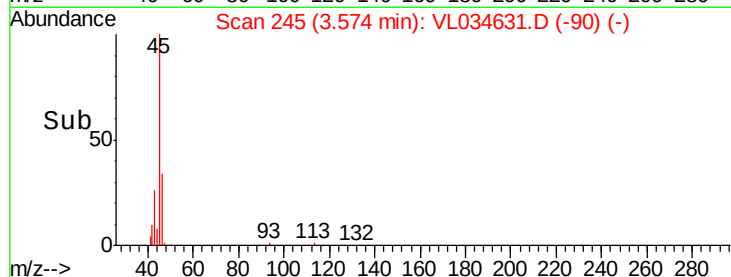
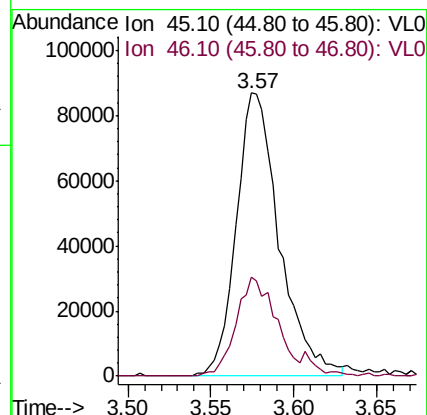
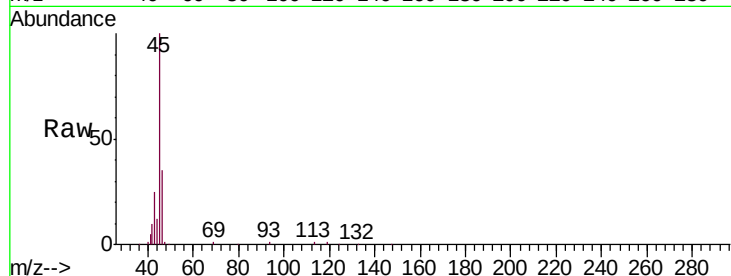
IR-PRSS

Tgt Ion: 45 Resp: 157181

Ion Ratio Lower Upper

45 100

46 35.4 14.8 59.2



#15

Acetone

Concen: 19.493 ppbv

RT: 3.82 min Scan# 320

Delta R.T. -0.00 min

Lab File: VL034631.D

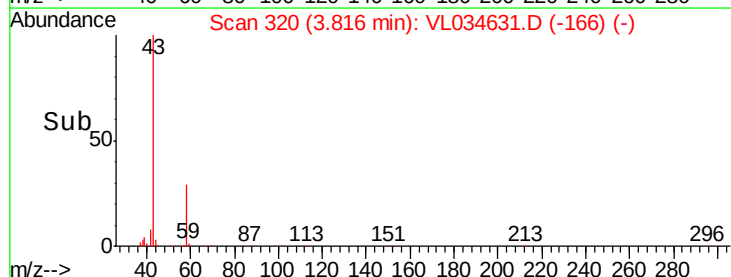
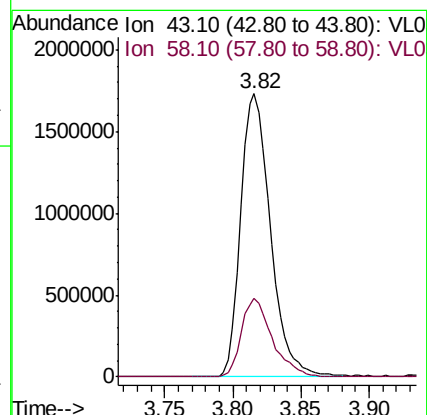
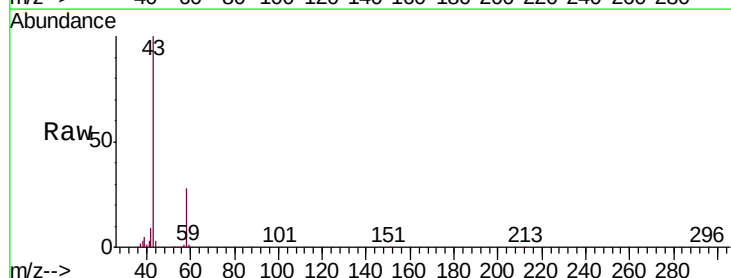
Acq: 18 Feb 2020 19:40

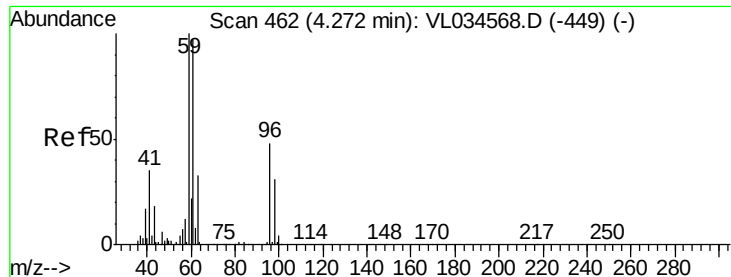
Tgt Ion: 43 Resp: 2636894

Ion Ratio Lower Upper

43 100

58 28.8 20.3 30.5





#17

tert-Butyl alcohol

Concen: 0.069 ppbv

RT: 4.29 min Scan# 466

Delta R.T. 0.01 min

Lab File: VL034631.D

Acq: 18 Feb 2020 19:40

Instrument :

MSVOA_L

ClientSampleId :

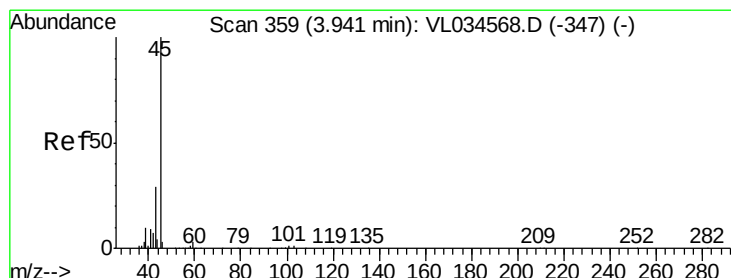
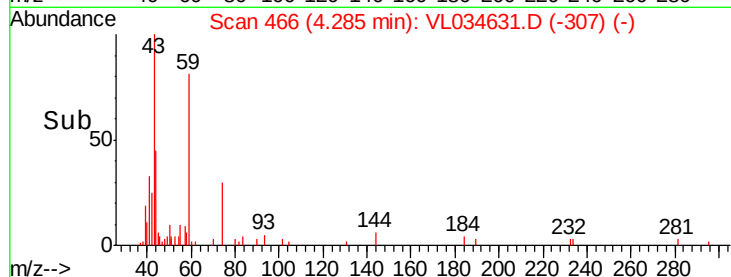
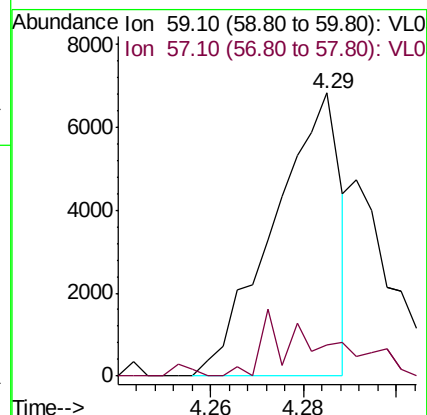
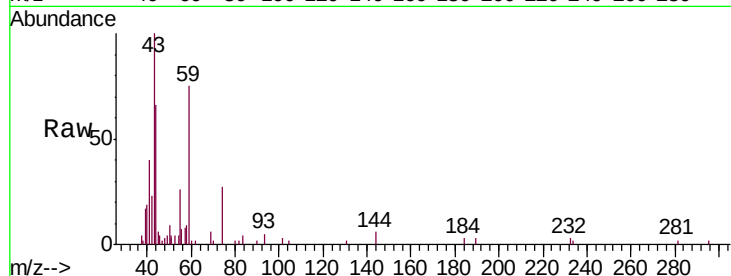
IR-PRSS

Tgt Ion: 59 Resp: 6829

Ion Ratio Lower Upper

59 100

57 0.0 8.7 13.1#



#19

Isopropyl Alcohol

Concen: 1.423 ppbv

RT: 3.95 min Scan# 361

Delta R.T. 0.01 min

Lab File: VL034631.D

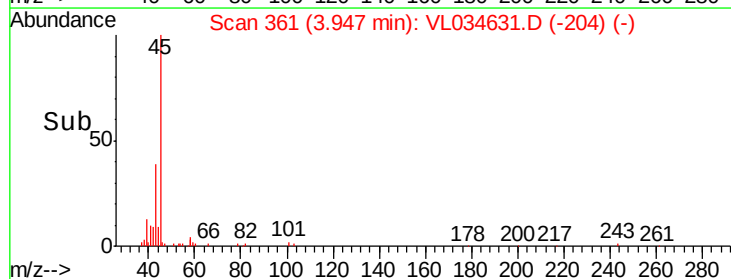
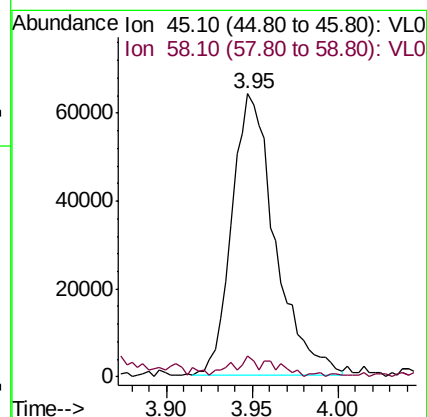
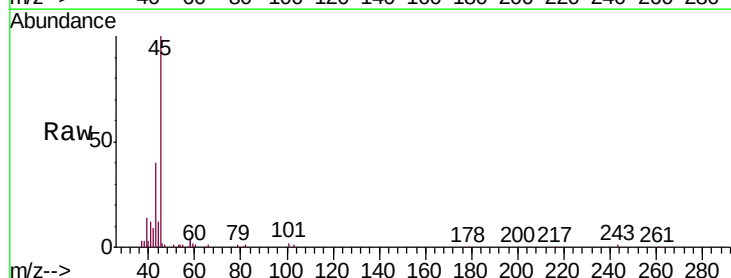
Acq: 18 Feb 2020 19:40

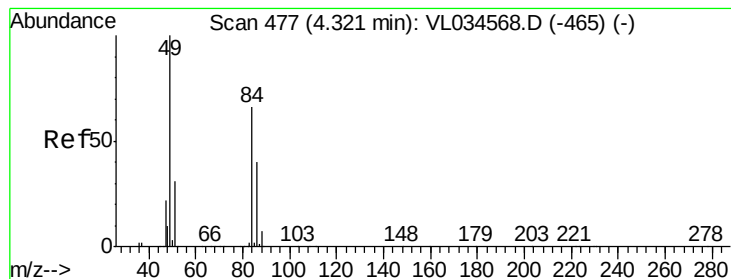
Tgt Ion: 45 Resp: 112353

Ion Ratio Lower Upper

45 100

58 0.0 1.7 2.5#





#20

Methylene Chloride

Concen: 6.570 ppbv

RT: 4.32 min Scan# 477

Delta R.T. -0.00 min

Lab File: VL034631.D

Acq: 18 Feb 2020 19:40

Instrument :

MSVOA_L

ClientSampleId :

IR-PRSS

Tgt Ion: 84 Resp: 338393

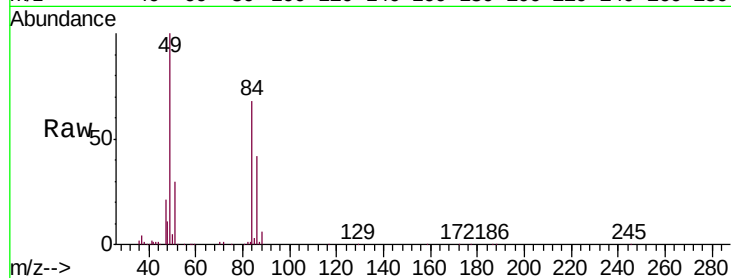
Ion Ratio Lower Upper

84 100

49 147.2 122.4 183.6

51 44.5 38.6 57.8

86 62.2 49.0 73.6

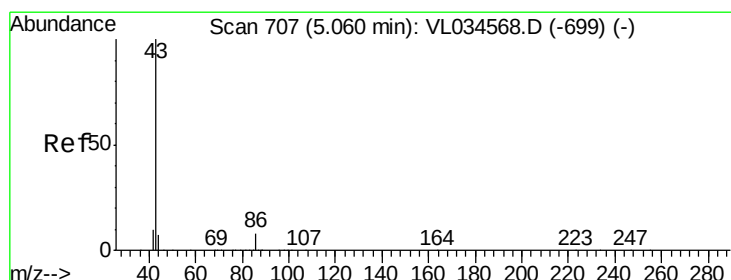
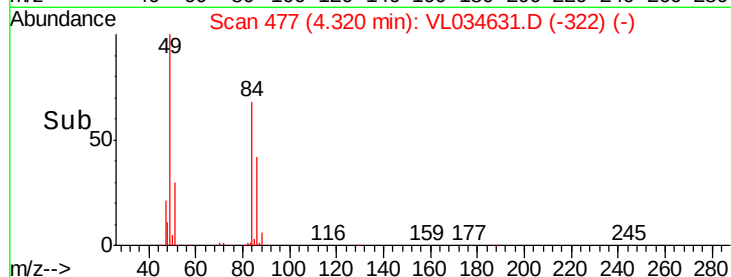
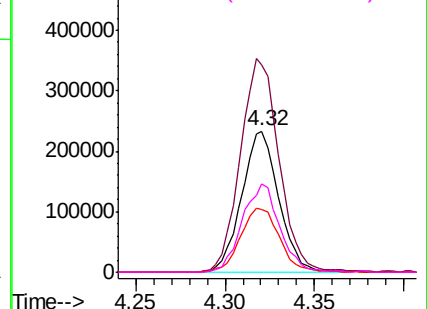


Abundance Ion 84.00 (83.70 to 84.70): VL0

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



#23

Vinyl Acetate

Concen: 0.272 ppbv

RT: 5.05 min Scan# 704

Delta R.T. -0.01 min

Lab File: VL034631.D

Acq: 18 Feb 2020 19:40

Tgt Ion: 43 Resp: 42012

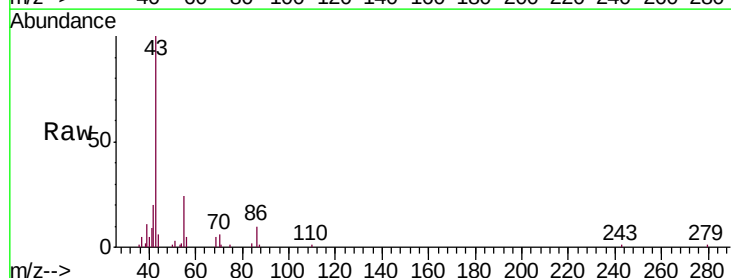
Ion Ratio Lower Upper

43 100

86 10.6 5.9 8.9#

42 13.1 8.8 13.2

44 0.2 5.0 7.6#

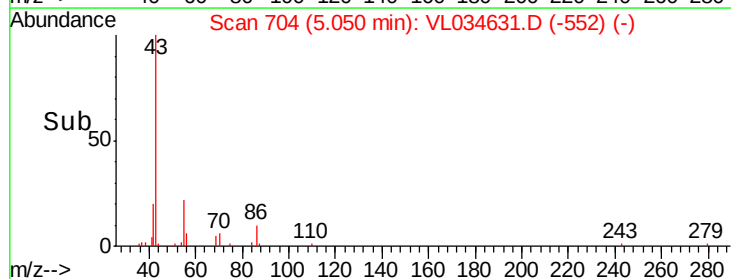
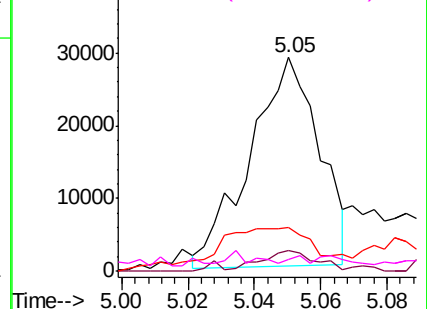


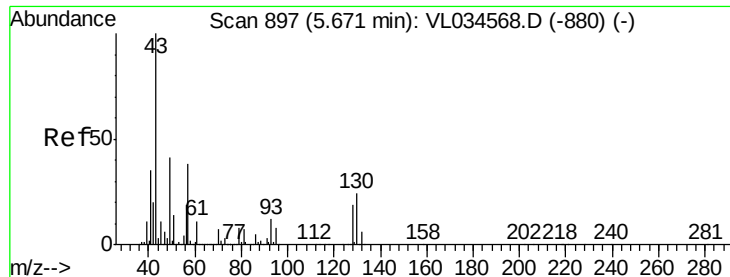
Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.218 ppbv

RT: 5.67 min Scan# 897

Delta R.T. -0.00 min

Lab File: VL034631.D

Acq: 18 Feb 2020 19:40

Instrument :

MSVOA_L

ClientSampleId :

IR-PRSS

Tgt Ion: 43 Resp: 47680

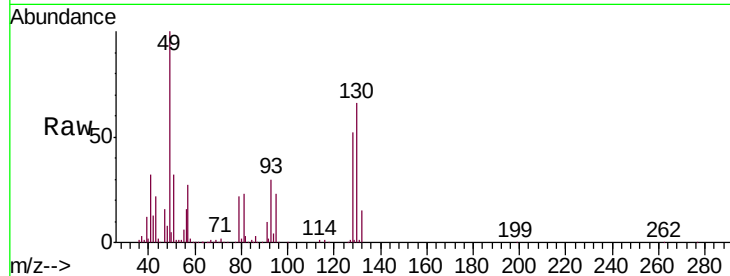
Ion Ratio Lower Upper

43 100

45 2.7 8.5 12.7#

61 1.5 7.8 11.6#

70 4.5 5.8 8.8#

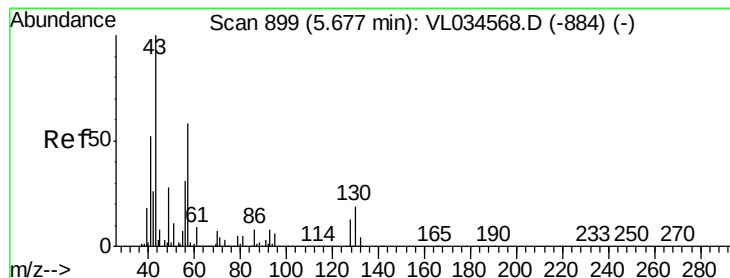
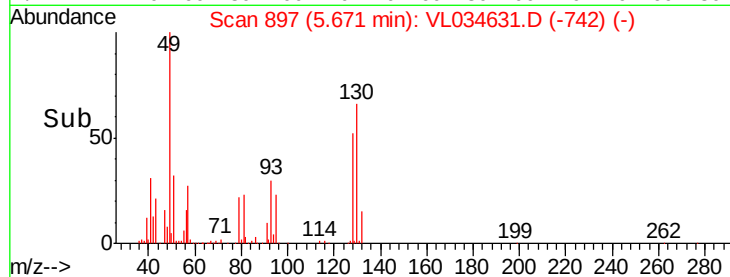
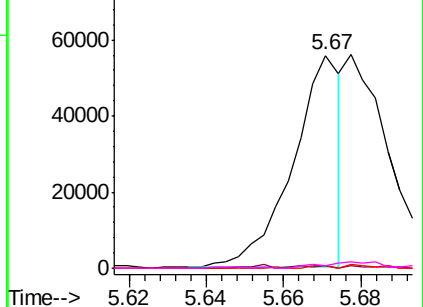


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.542 ppbv

RT: 5.67 min Scan# 896

Delta R.T. -0.01 min

Lab File: VL034631.D

Acq: 18 Feb 2020 19:40

Tgt Ion: 57 Resp: 49747

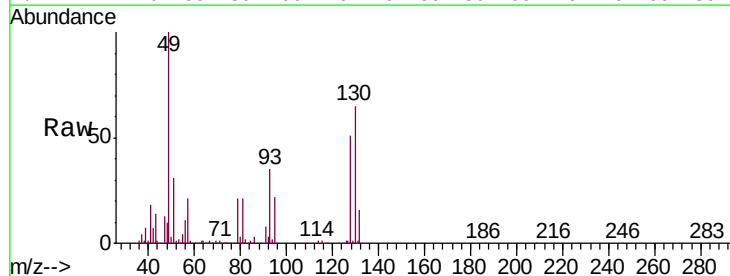
Ion Ratio Lower Upper

57 100

41 0.0 76.2 114.2#

43 0.0 189.9 284.9#

56 0.0 43.6 65.4#

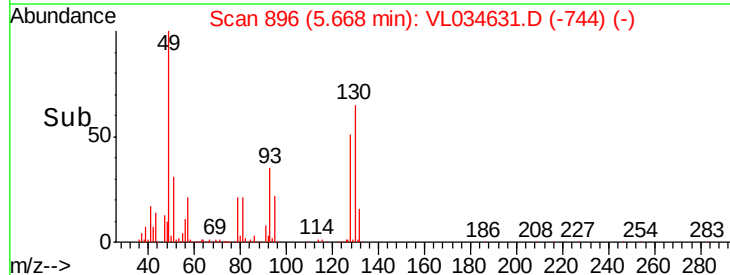
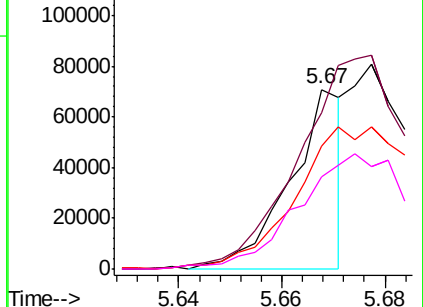


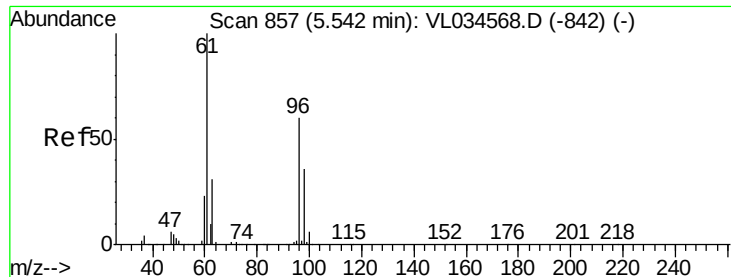
Abundance Ion 57.10 (56.80 to 57.80): VL0

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





#31

cis-1,2-Dichloroethene

Concen: 0.043 ppbv

RT: 5.54 min Scan# 855

Delta R.T. -0.01 min

Lab File: VL034631.D

Acq: 18 Feb 2020 19:40

Instrument :

MSVOA_L

ClientSampleId :

IR-PRSS

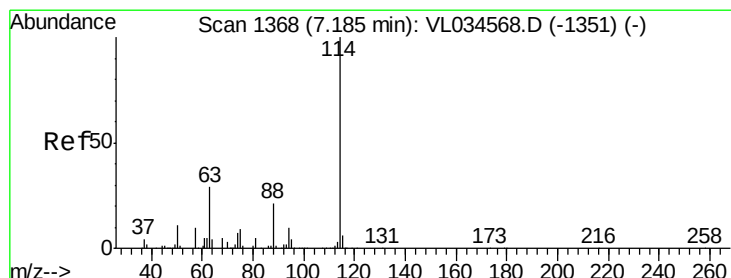
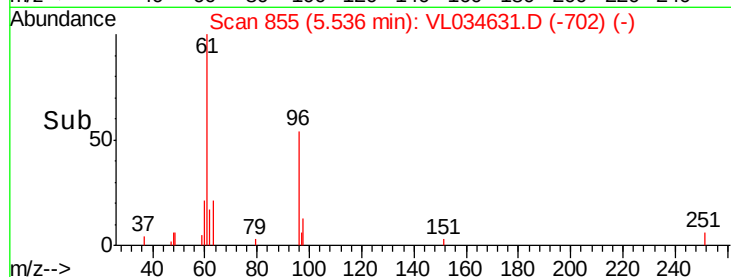
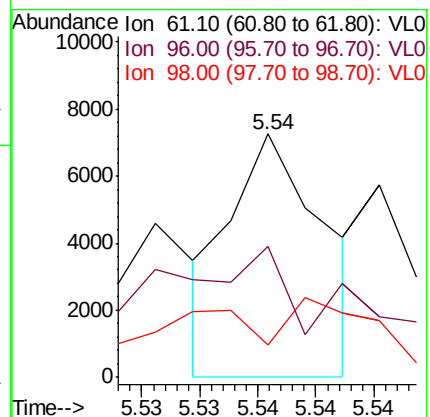
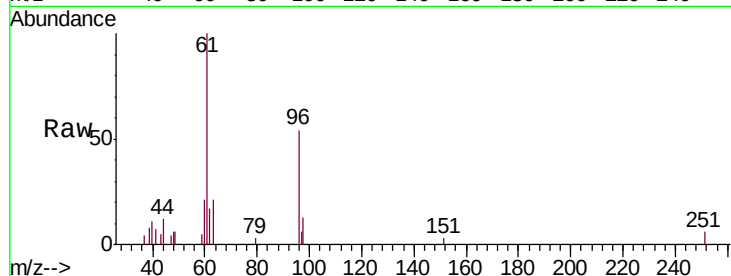
Tgt Ion: 61 Resp: 4075

Ion Ratio Lower Upper

61 100

96 35.9 48.0 72.0#

98 0.0 28.6 43.0#



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.18 min Scan# 1365

Delta R.T. -0.01 min

Lab File: VL034631.D

Acq: 18 Feb 2020 19:40

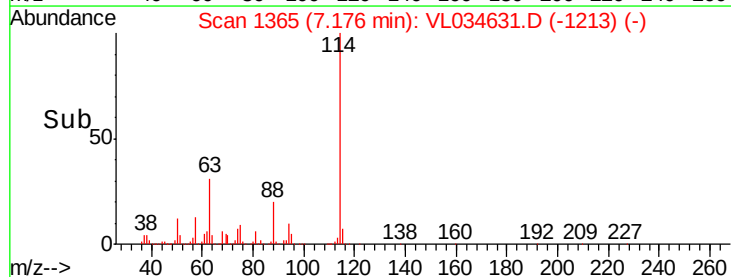
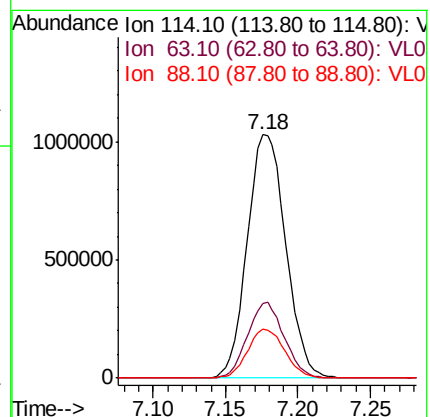
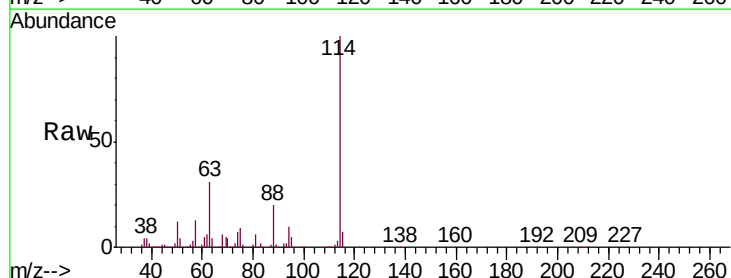
Tgt Ion: 114 Resp: 1905041

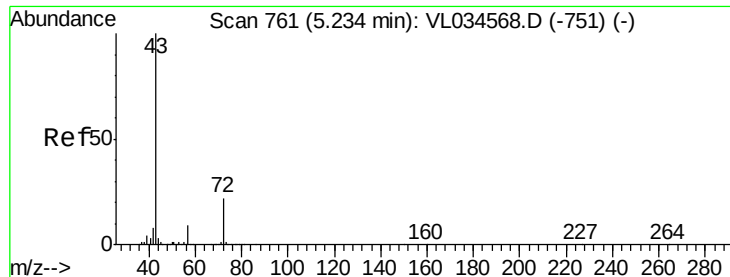
Ion Ratio Lower Upper

114 100

63 29.8 24.1 36.1

88 19.6 15.9 23.9

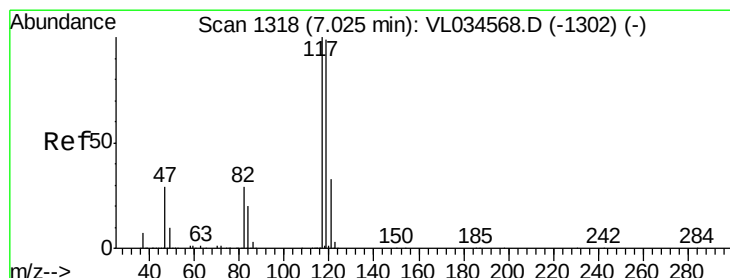
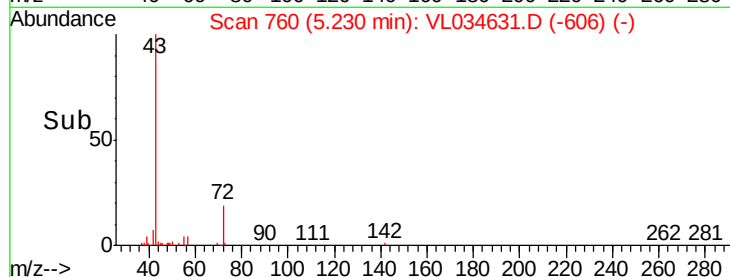
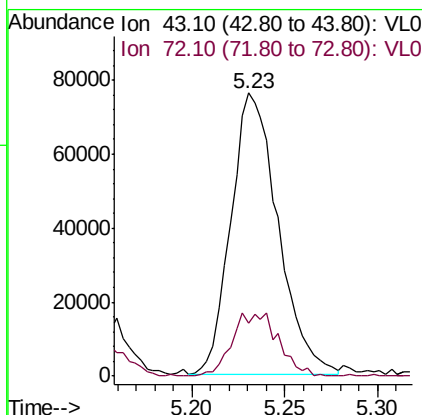
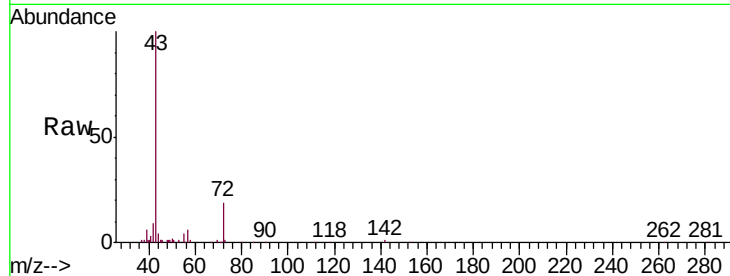




#34
2-Butanone
Concen: 0.975 ppbv
RT: 5.23 min Scan# 760
Delta R.T. -0.00 min
Lab File: VL034631.D
Acq: 18 Feb 2020 19:40

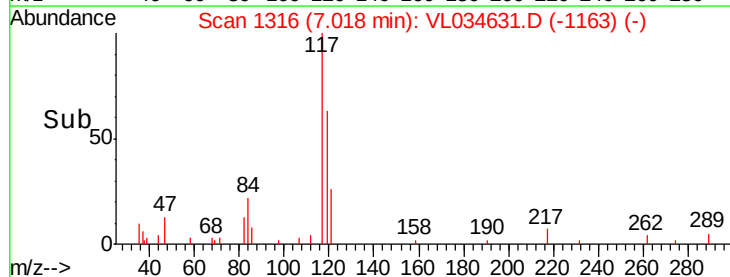
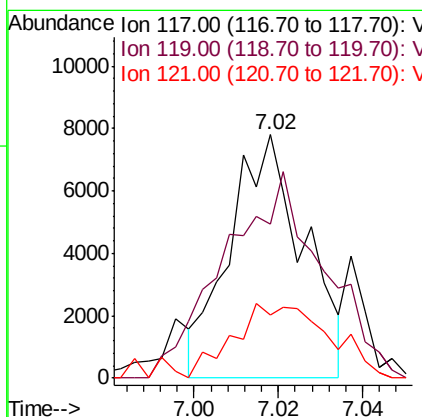
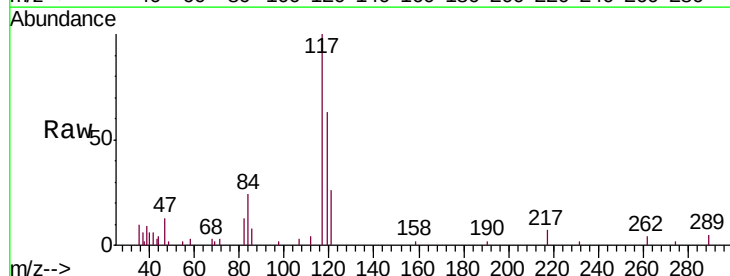
Instrument :
MSVOA_L
ClientSampleId :
IR-PRSS

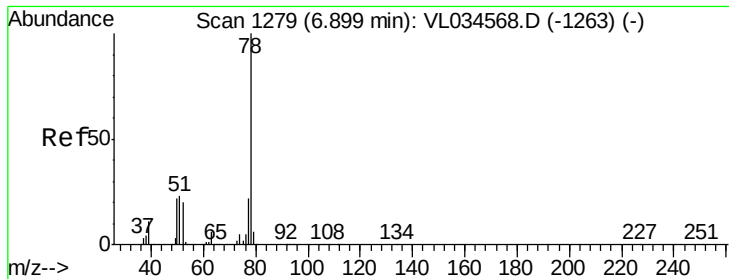
Tgt Ion: 43 Resp: 134825
Ion Ratio Lower Upper
43 100
72 22.0 17.2 25.8



#35
Carbon Tetrachloride
Concen: 0.052 ppbv
RT: 7.02 min Scan# 1316
Delta R.T. -0.01 min
Lab File: VL034631.D
Acq: 18 Feb 2020 19:40

Tgt Ion: 117 Resp: 9558
Ion Ratio Lower Upper
117 100
119 49.9 79.5 119.3#
121 32.3 26.2 39.2





#36

Benzene

Concen: 0.311 ppbv

RT: 6.89 min Scan# 1276

Delta R.T. -0.01 min

Lab File: VL034631.D

Acq: 18 Feb 2020 19:40

Instrument :

MSVOA_L

ClientSampleId :

IR-PRSS

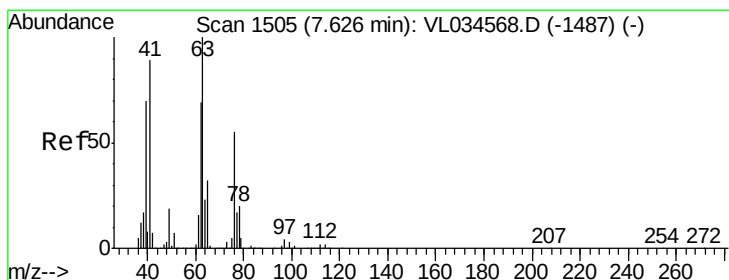
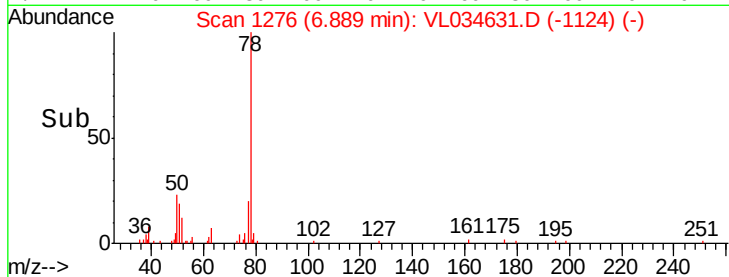
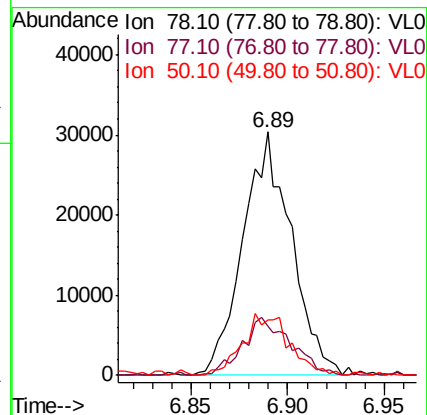
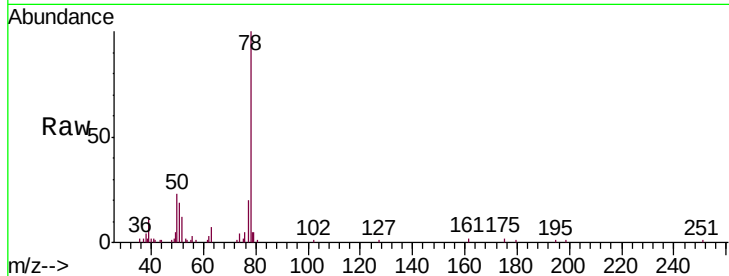
Tgt Ion: 78 Resp: 52656

Ion Ratio Lower Upper

78 100

77 19.9 17.3 25.9

50 22.8 17.4 26.2



#39

1,2-Dichloropropane

Concen: 8.011 ppbv

RT: 7.18 min Scan# 1366

Delta R.T. -0.45 min

Lab File: VL034631.D

Acq: 18 Feb 2020 19:40

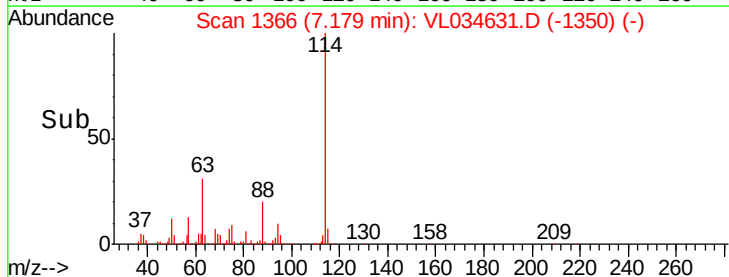
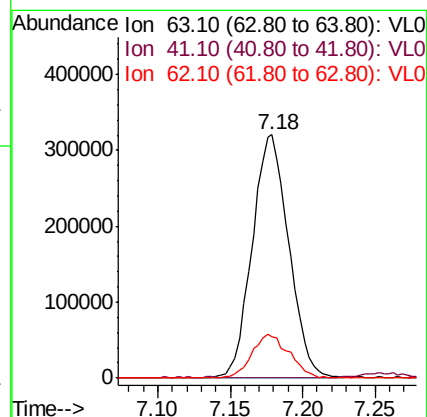
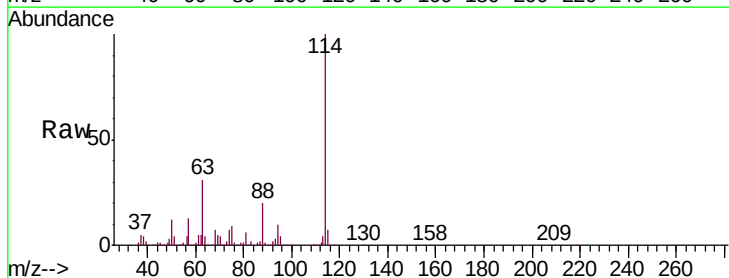
Tgt Ion: 63 Resp: 562598

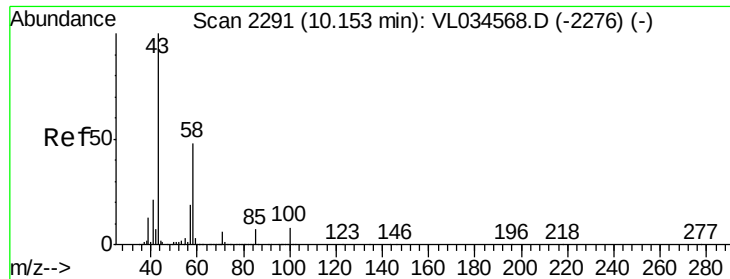
Ion Ratio Lower Upper

63 100

41 0.0 71.0 106.4#

62 17.0 55.4 83.0#

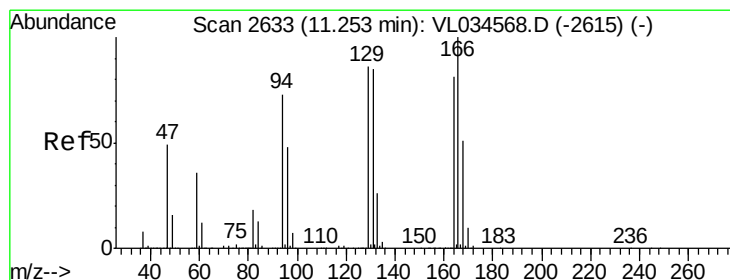
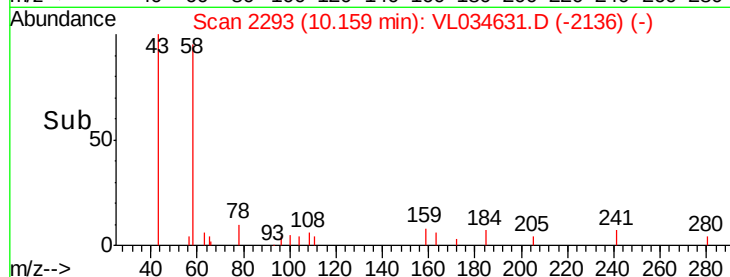
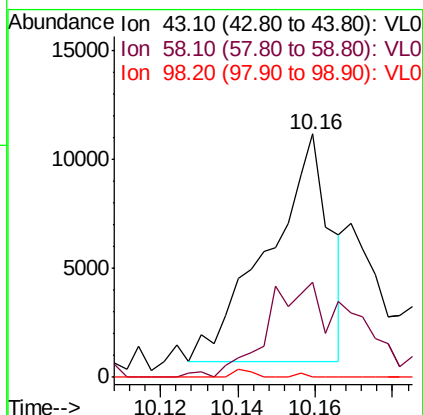
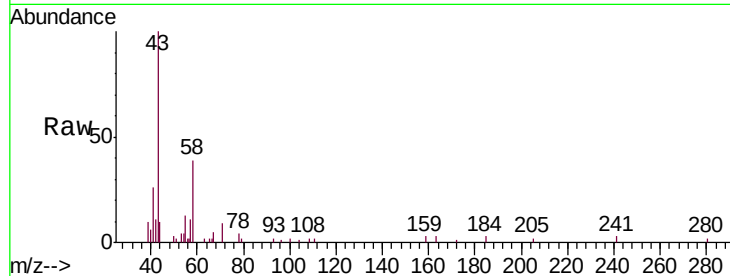




#51
2-Hexanone
Concen: 0.074 ppbv
RT: 10.16 min Scan# 2293
Delta R.T. 0.01 min
Lab File: VL034631.D
Acq: 18 Feb 2020 19:40

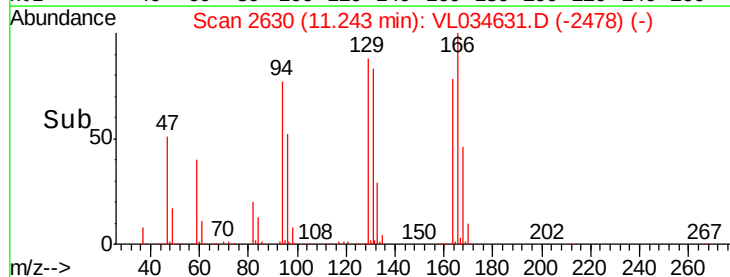
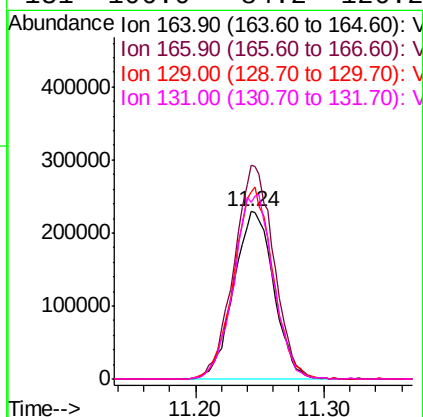
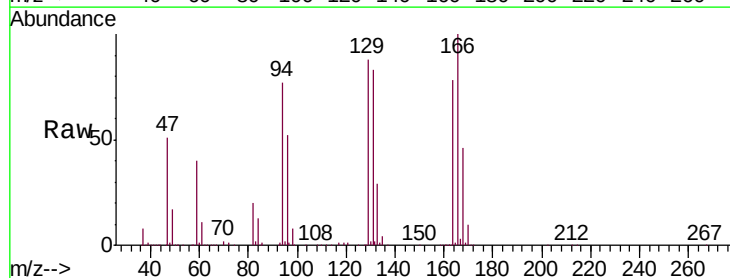
Instrument :
MSVOA_L
ClientSampled :
IR-PRSS

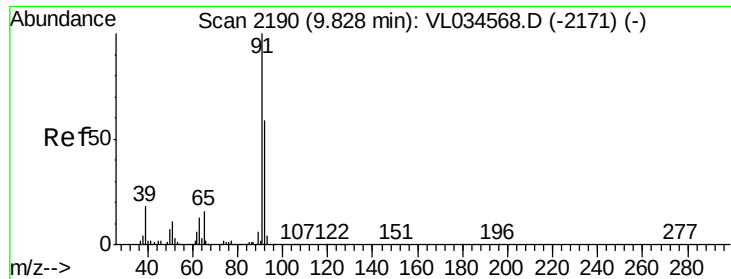
Tgt Ion: 43 Resp: 11515
Ion Ratio Lower Upper
43 100
58 66.6 37.9 56.9#
98 1.4 0.3 0.5#



#52
Tetrachloroethene
Concen: 7.258 ppbv
RT: 11.24 min Scan# 2630
Delta R.T. -0.01 min
Lab File: VL034631.D
Acq: 18 Feb 2020 19:40

Tgt Ion: 164 Resp: 493927
Ion Ratio Lower Upper
164 100
166 127.6 99.0 148.4
129 111.8 85.3 127.9
131 106.0 84.2 126.2





#53

Toluene

Concen: 0.622 ppbv

RT: 9.82 min Scan# 2187

Delta R.T. -0.01 min

Lab File: VL034631.D

Acq: 18 Feb 2020 19:40

Instrument :

MSVOA_L

ClientSampleId :

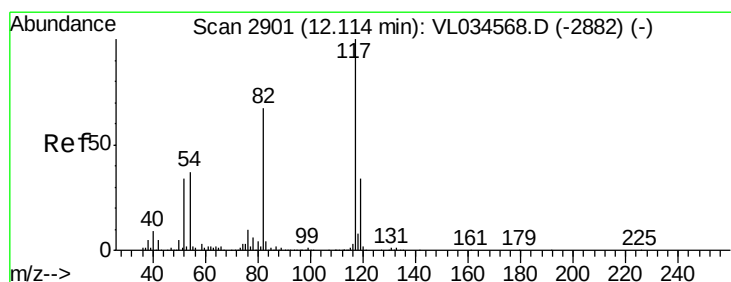
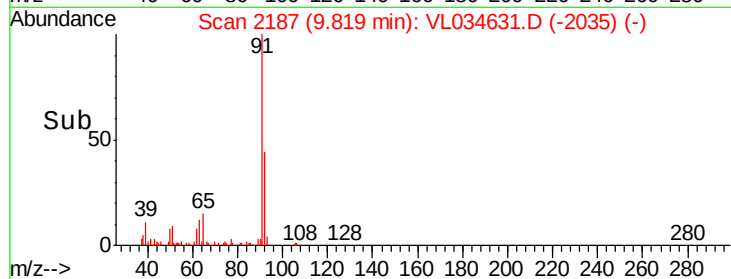
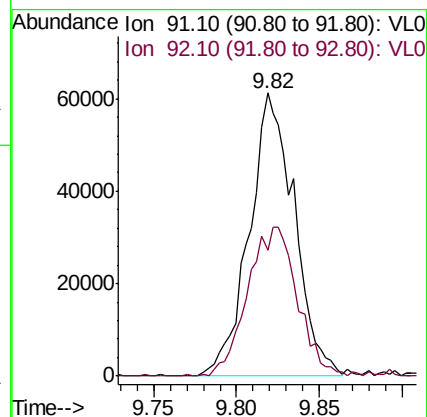
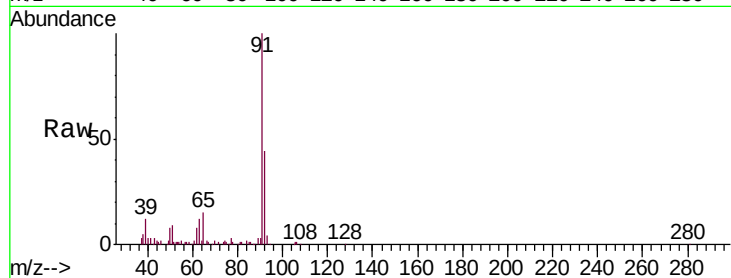
IR-PRSS

Tgt Ion: 91 Resp: 115813

Ion Ratio Lower Upper

91 100

92 58.4 48.2 72.2



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.11 min Scan# 2899

Delta R.T. -0.01 min

Lab File: VL034631.D

Acq: 18 Feb 2020 19:40

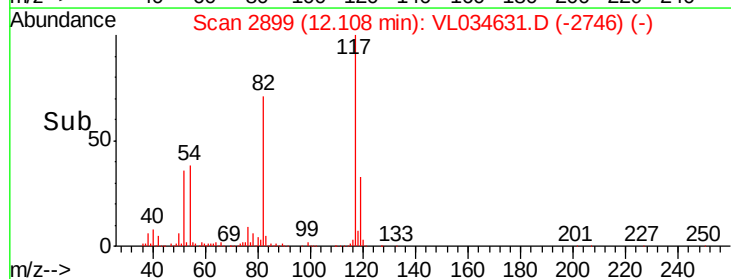
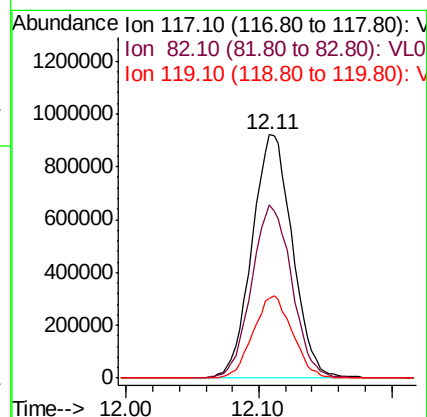
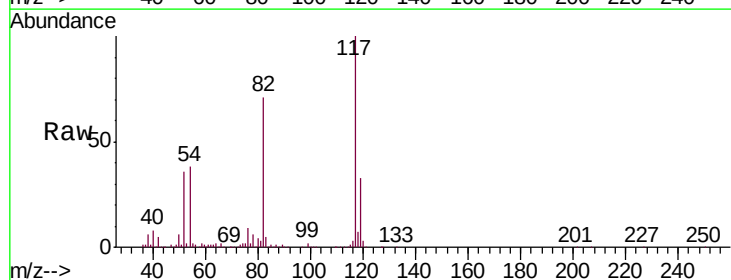
Tgt Ion: 117 Resp: 1946990

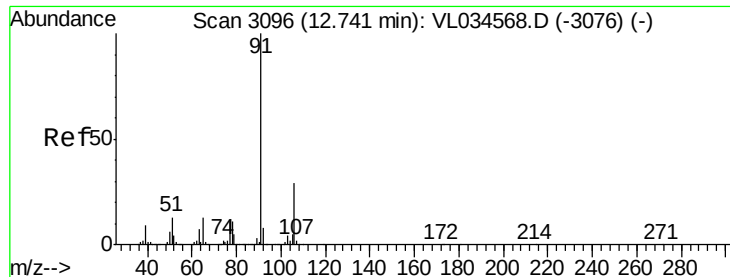
Ion Ratio Lower Upper

117 100

82 71.2 54.2 81.4

119 33.2 26.1 39.1





#58

Ethyl Benzene

Concen: 0.077 ppbv

RT: 12.73 min Scan# 3094

Delta R.T. -0.01 min

Lab File: VL034631.D

Acq: 18 Feb 2020 19:40

Instrument :

MSVOA_L

ClientSampleId :

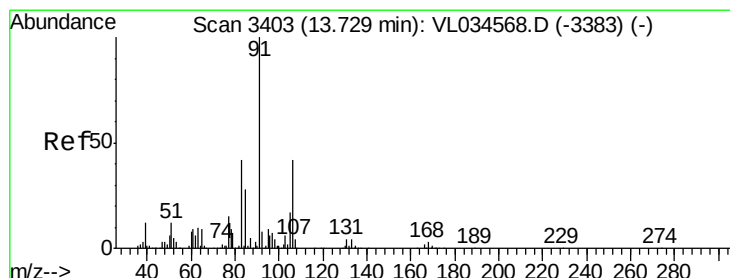
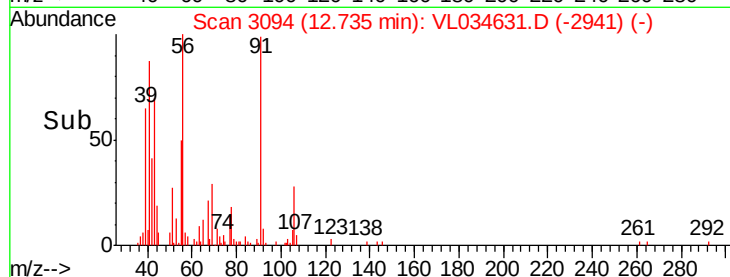
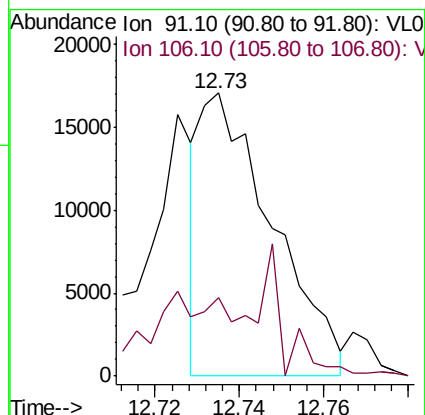
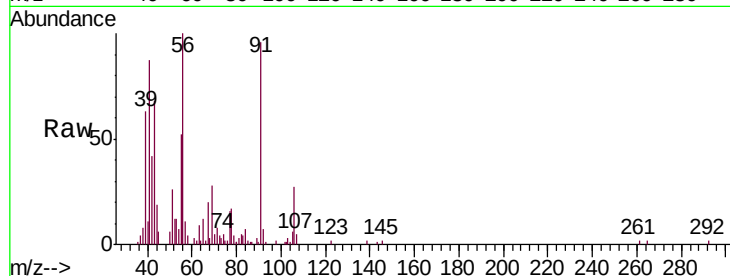
IR-PRSS

Tgt Ion: 91 Resp: 20155

Ion Ratio Lower Upper

91 100

106 25.0 23.3 34.9



#60

o-Xylene

Concen: 0.077 ppbv

RT: 13.72 min Scan# 3400

Delta R.T. -0.01 min

Lab File: VL034631.D

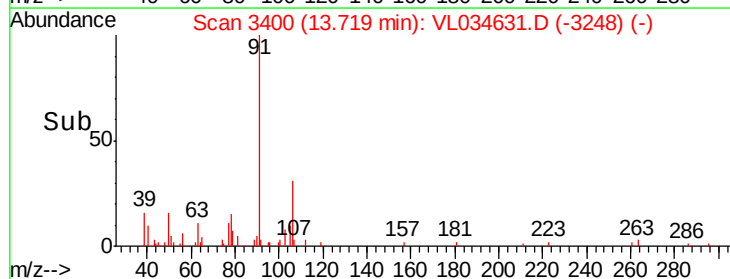
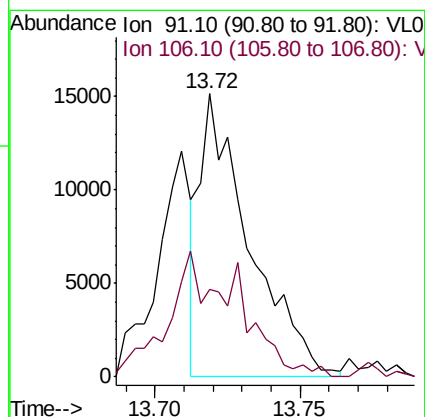
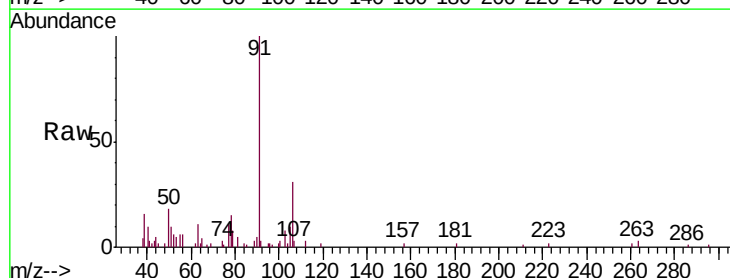
Acq: 18 Feb 2020 19:40

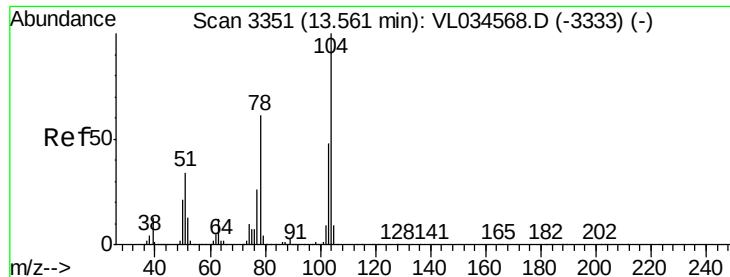
Tgt Ion: 91 Resp: 17891

Ion Ratio Lower Upper

91 100

106 0.0 21.6 65.0#





#61

Styrene

Concen: 0.045 ppbv

RT: 13.55 min Scan# 3349

Delta R.T. -0.01 min

Lab File: VL034631.D

Acq: 18 Feb 2020 19:40

Instrument :

MSVOA_L

ClientSampleId :

IR-PRSS

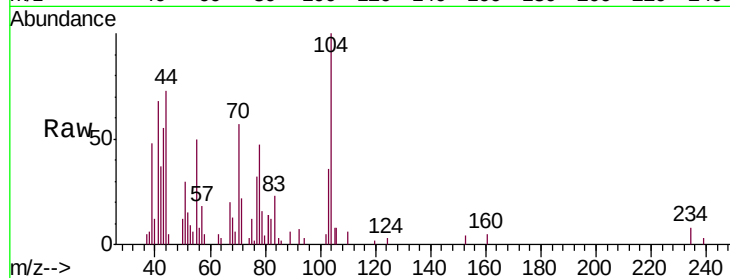
Tgt Ion: 104 Resp: 7016

Ion Ratio Lower Upper

104 100

78 0.0 47.0 70.6#

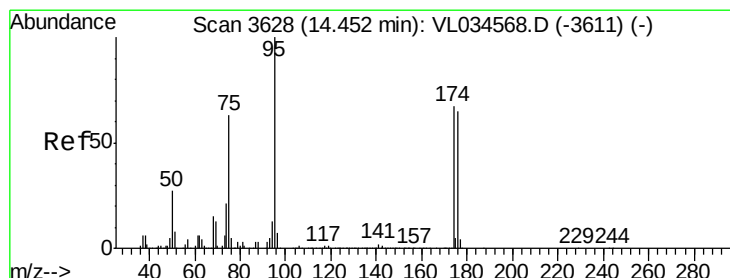
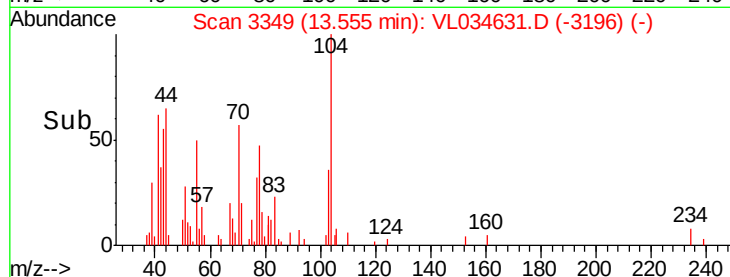
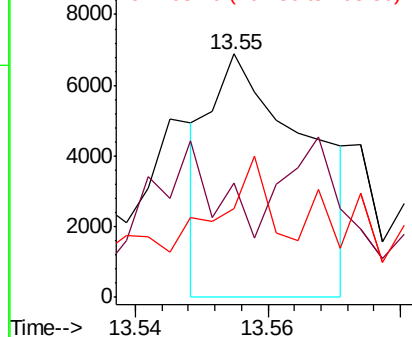
103 99.6 38.5 57.7#



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



#68

1-Bromo-4-Fluorobenzene

Concen: 10.441 ppbv

RT: 14.45 min Scan# 3626

Delta R.T. -0.01 min

Lab File: VL034631.D

Acq: 18 Feb 2020 19:40

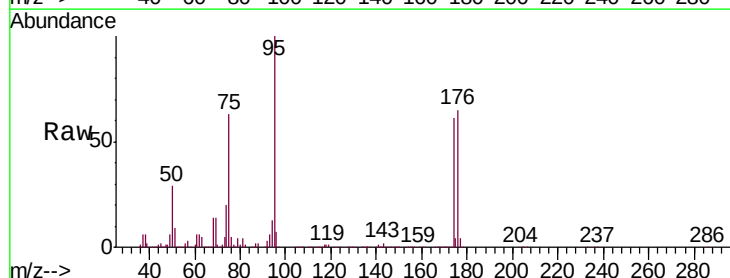
Tgt Ion: 95 Resp: 1718064

Ion Ratio Lower Upper

95 100

174 64.5 52.3 78.5

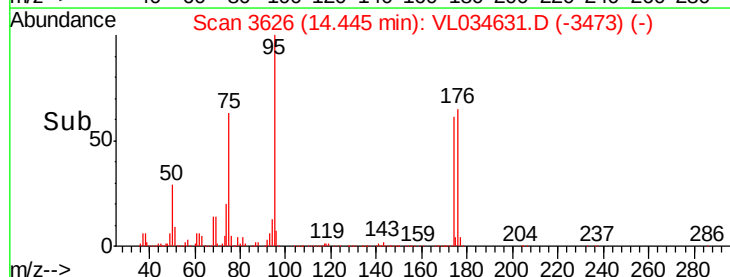
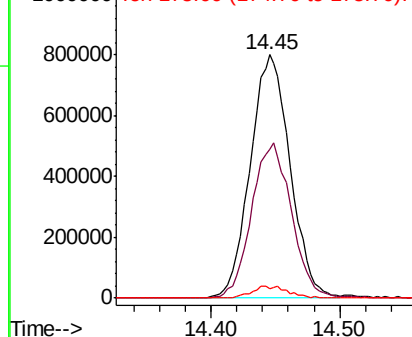
175 4.7 3.8 5.6

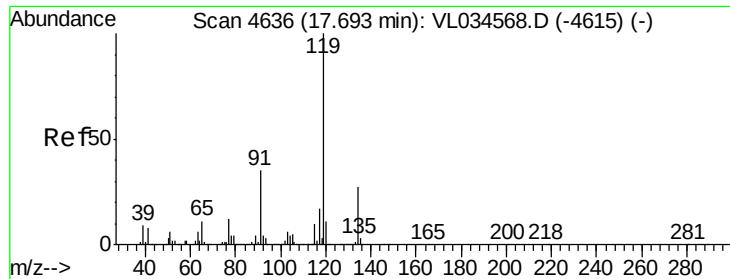


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

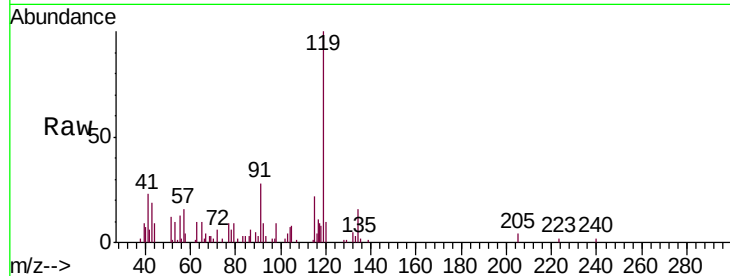




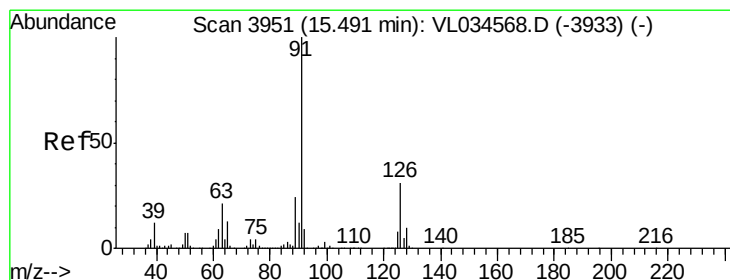
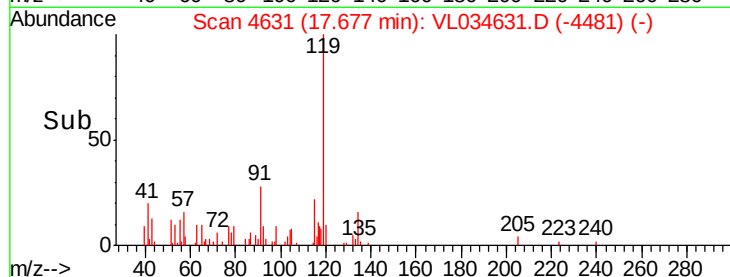
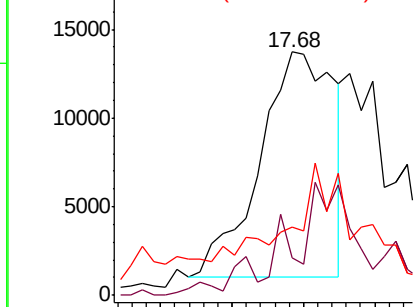
#69
p-Isopropyltoluene
Concen: 0.060 ppbv
RT: 17.68 min Scan# 4631
Delta R.T. -0.02 min
Lab File: VL034631.D
Acq: 18 Feb 2020 19:40

Instrument :
MSVOA_L
ClientSampleId :
IR-PRSS

Tgt Ion: 119 Resp: 18281
Ion Ratio Lower Upper
119 100
134 54.6 20.7 31.1#
91 92.1 26.9 40.3#

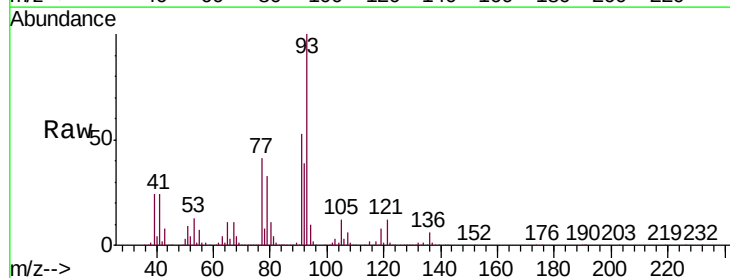


Abundance Ion 119.10 (118.80 to 119.80): V
Ion 134.20 (133.90 to 134.90): V
Ion 91.10 (90.80 to 91.80): V

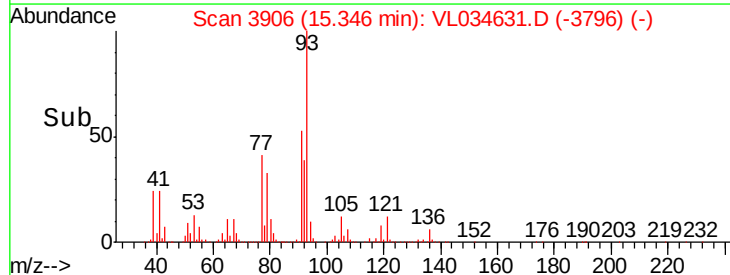
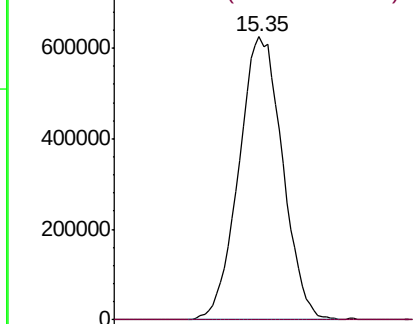


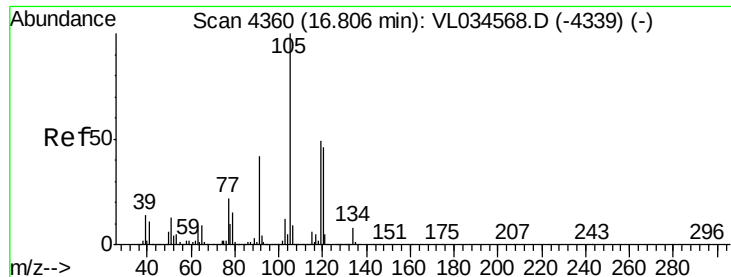
#71
2-Chlorotoluene
Concen: 6.763 ppbv
RT: 15.35 min Scan# 3906
Delta R.T. -0.14 min
Lab File: VL034631.D
Acq: 18 Feb 2020 19:40

Tgt Ion: 91 Resp: 1538645
Ion Ratio Lower Upper
91 100
126 0.1 12.0 47.8#



Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 126.10 (125.80 to 126.80): V





#74
 1,2,4-Trimethylbenzene
 Concen: 0.087 ppbv
 RT: 16.80 min Scan# 4357
 Delta R.T. -0.01 min
 Lab File: VL034631.D
 Acq: 18 Feb 2020 19:40

Instrument :
 MSVOA_L
 ClientSampleId :
 IR-PRSS

Tgt Ion:	105	Resp:	23812
Ion	Ratio	Lower	Upper
105	100		
120	35.1	37.1	55.7#
91	9.8	34.3	51.5#
77	4.0	17.5	26.3#

