

Data File : VL034596.D
Acq On : 5 Feb 2020 1:48
Operator : SY/AP
Sample : L1391-01
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SV-1

Quant Time: Feb 05 05:47:16 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL013020AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu 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	5.66	49	913045	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	1868733	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.12	117	1824772	10.00	ppbv	0.00

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.46 95 1634379 10.60 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 106.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.02	85	46044	0.229	ppbv #	81
3) Chlorodifluoromethane	2.95	51	54741	0.496	ppbv #	86
4) Chloromethane	3.11	50	32715	0.485	ppbv #	82
9) Propene	2.98	41	277151	6.452	ppbv	90
10) Heptane	8.13	43	6073	0.056	ppbv #	26
11) Trichlorofluoromethane	3.92	101	23765	0.130	ppbv	97
12) 1,1,2-Trichlorotrifluoroet	4.47	101	6033	0.051	ppbv #	61
13) Ethanol	3.58	45	147620	12.830	ppbv	100
15) Acetone	3.83	43	535792	3.993	ppbv	93
16) 1,3-Butadiene	3.28	39	170218	3.194	ppbv #	31
17) tert-Butyl alcohol	4.30	59	10557	0.107	ppbv #	76
19) Isopropyl Alcohol	3.96	45	66460	0.849	ppbv #	1
20) Methylene Chloride	4.33	84	116716	2.284	ppbv	96
23) Vinyl Acetate	5.06	43	5805	0.038	ppbv #	78
25) Ethyl Acetate	5.68	43	58714	0.270	ppbv #	81
26) Hexane	5.68	57	78740	0.865	ppbv #	37
30) Cyclohexane	7.14	84	4164	0.062	ppbv #	1
34) 2-Butanone	5.25	43	69460	0.512	ppbv	98
35) Carbon Tetrachloride	7.02	117	12272	0.069	ppbv #	64
36) Benzene	6.90	78	50917	0.306	ppbv #	80
39) 1,2-Dichloropropane	7.18	63	553315	8.032	ppbv #	21
44) 2,2,4-Trimethylpentane	7.88	57	11748	0.039	ppbv #	1
53) Toluene	9.83	91	136413	0.747	ppbv	97
58) Ethyl Benzene	12.74	91	18230	0.075	ppbv	94
59) m/p-Xylene	13.04	91	12459	0.058	ppbv #	32
60) o-Xylene	13.73	91	28892	0.133	ppbv	95
74) 1,2,4-Trimethylbenzene	16.81	105	20390	0.079	ppbv #	73

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

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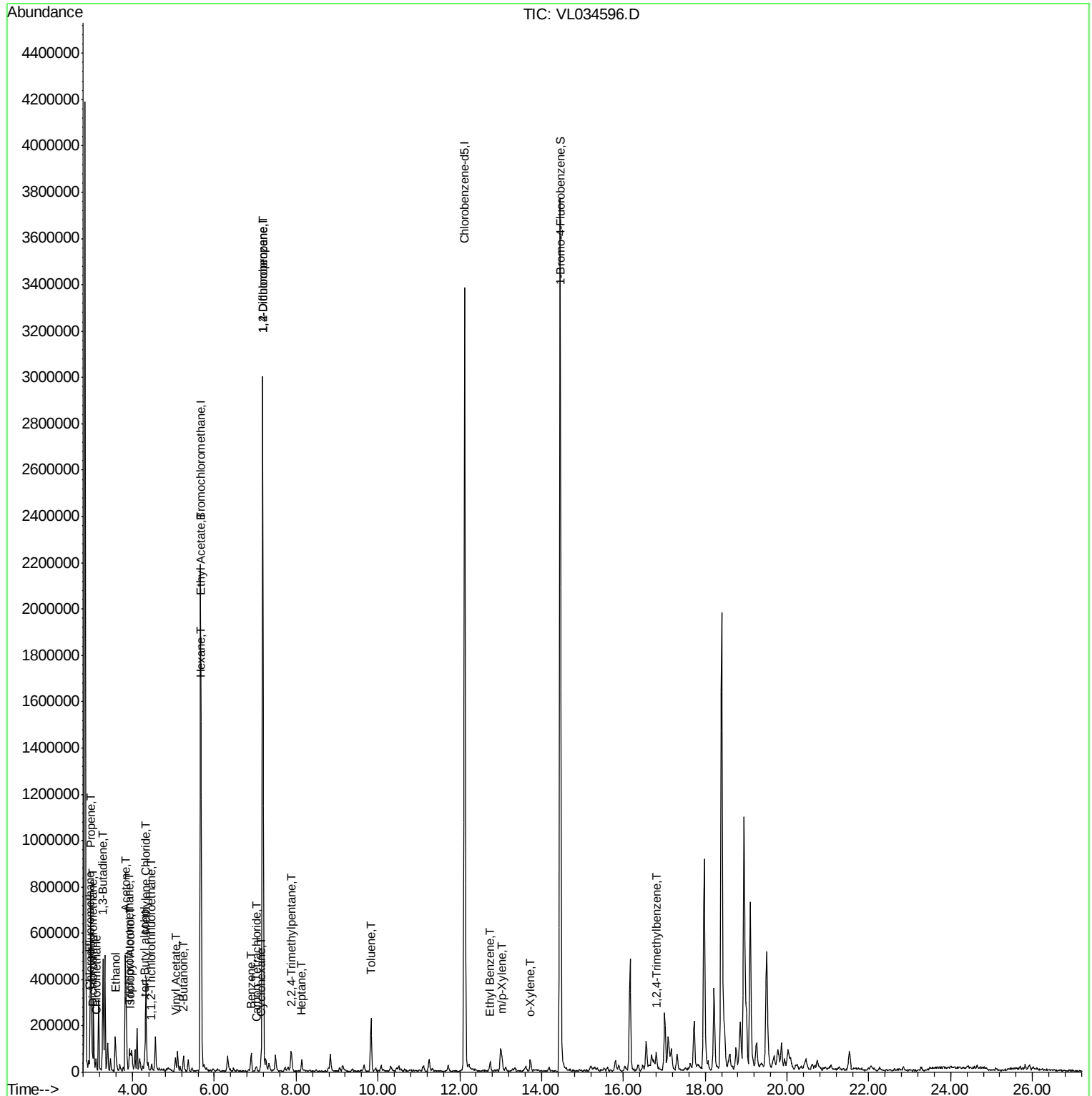
Quant Time: Feb 05 05:47:16 2020

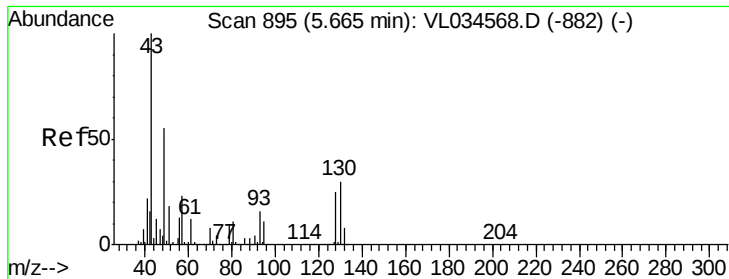
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL013020AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Jan 30 17:16:44 2020

QLast Update : Thu Jan 30 17:16:44 2020

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 895

Delta R.T. 0.00 min

Lab File: VL034596.D

Acq: 5 Feb 2020 1:48

Instrument :

MSVOA_L

ClientSampleId :

SV-1

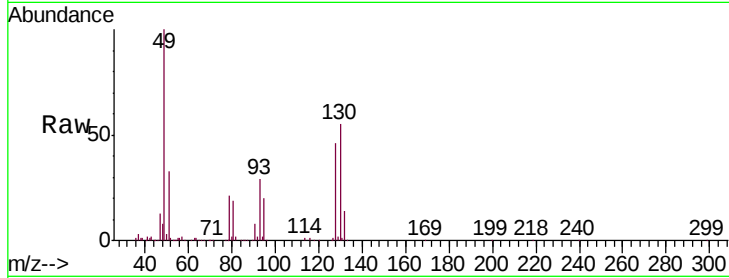
Tgt Ion: 49 Resp: 913045

Ion Ratio Lower Upper

49 100

128 45.1 22.7 68.1

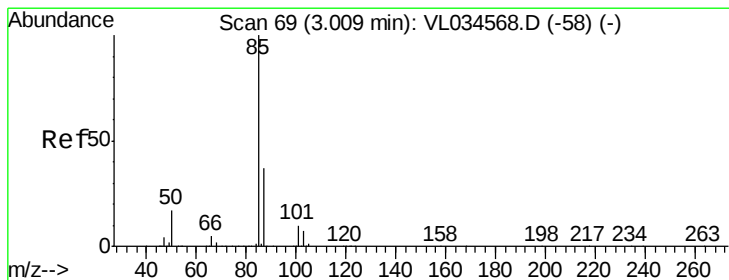
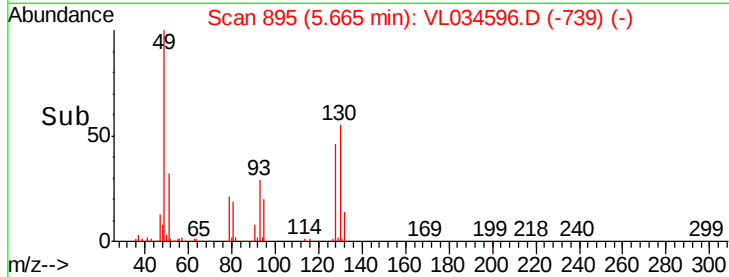
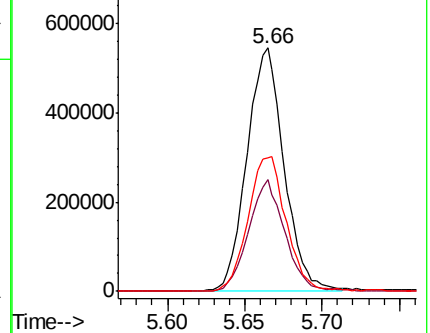
130 57.1 28.6 85.8



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



#2

Dichlorodifluoromethane

Concen: 0.229 ppbv

RT: 3.02 min Scan# 71

Delta R.T. 0.01 min

Lab File: VL034596.D

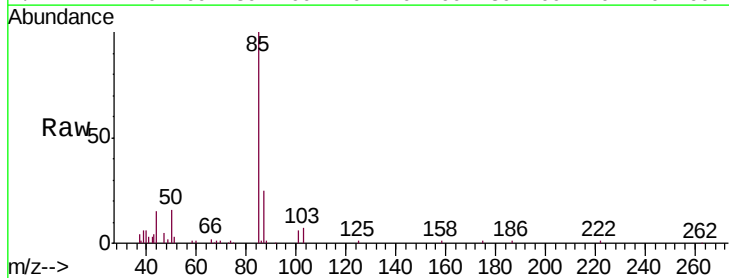
Acq: 5 Feb 2020 1:48

Tgt Ion: 85 Resp: 46044

Ion Ratio Lower Upper

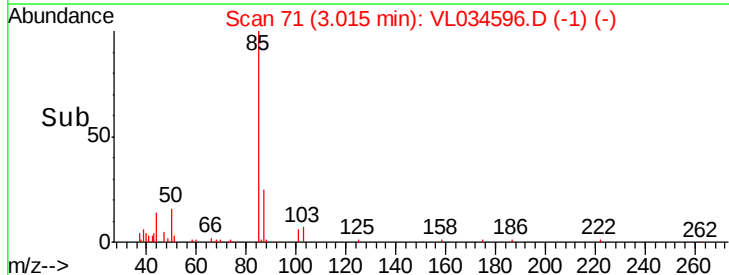
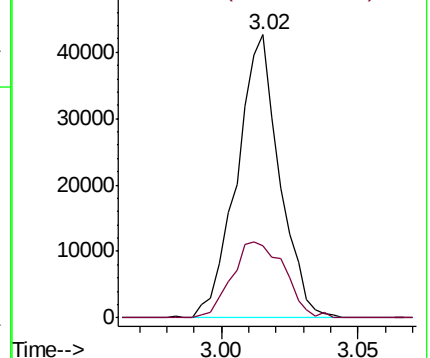
85 100

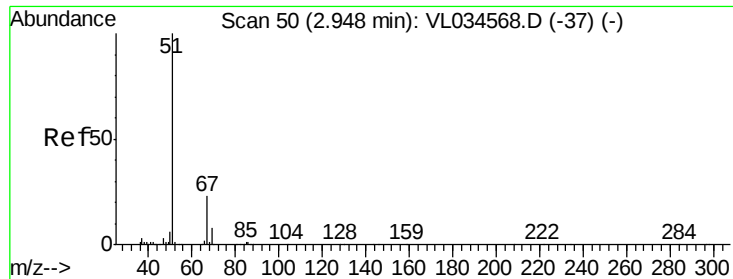
87 25.4 29.5 44.3#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

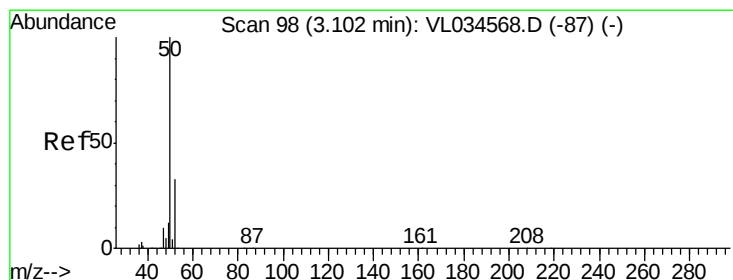
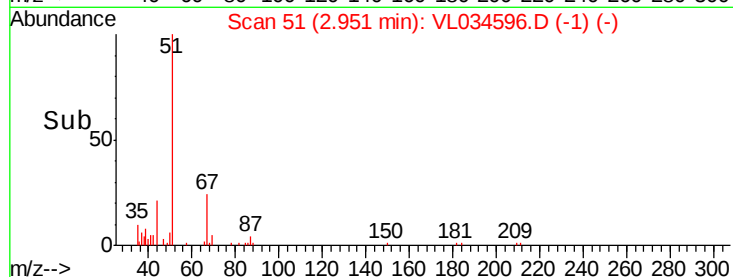
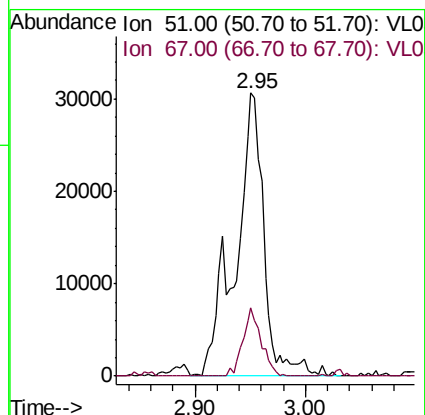
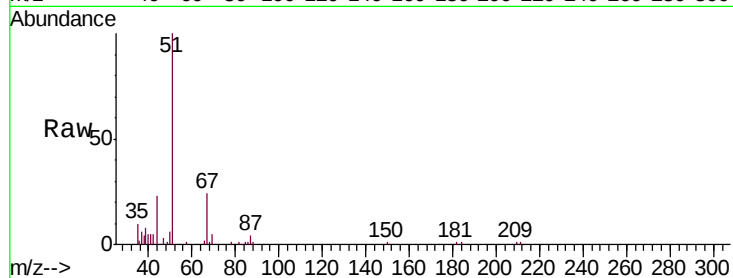




#3
Chlorodifluoromethane
Concen: 0.496 ppbv
RT: 2.95 min Scan# 51
Delta R.T. 0.00 min
Lab File: VL034596.D
Acq: 5 Feb 2020 1:48

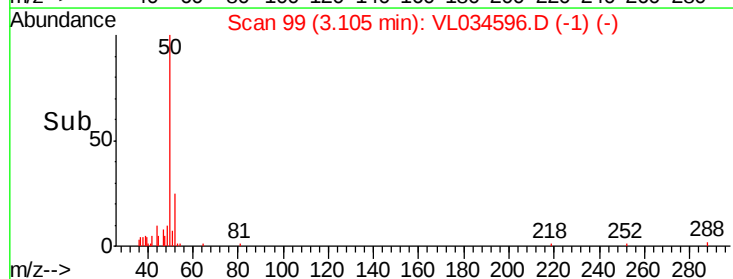
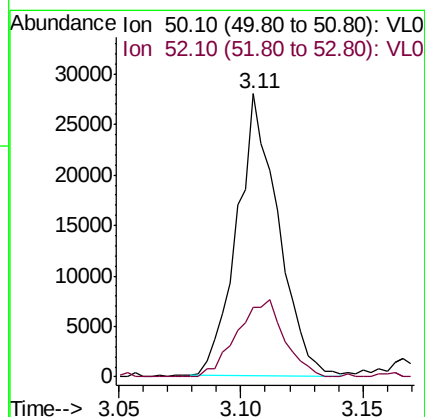
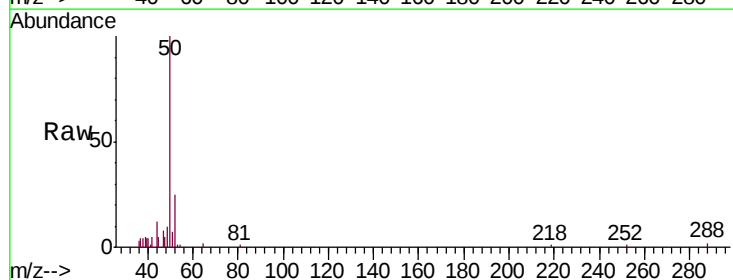
Instrument :
MSVOA_L
ClientSampleId :
SV-1

Tgt Ion: 51 Resp: 54741
Ion Ratio Lower Upper
51 100
67 15.4 17.8 26.8#



#4
Chloromethane
Concen: 0.485 ppbv
RT: 3.11 min Scan# 99
Delta R.T. 0.00 min
Lab File: VL034596.D
Acq: 5 Feb 2020 1:48

Tgt Ion: 50 Resp: 32715
Ion Ratio Lower Upper
50 100
52 23.2 26.6 39.8#





#9

Propene

Concen: 6.452 ppbv

RT: 2.98 min Scan# 59

Delta R.T. 0.01 min

Lab File: VL034596.D

Acq: 5 Feb 2020 1:48

Instrument :

MSVOA_L

ClientSampleId :

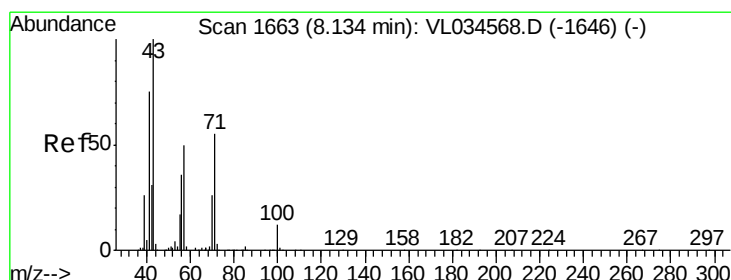
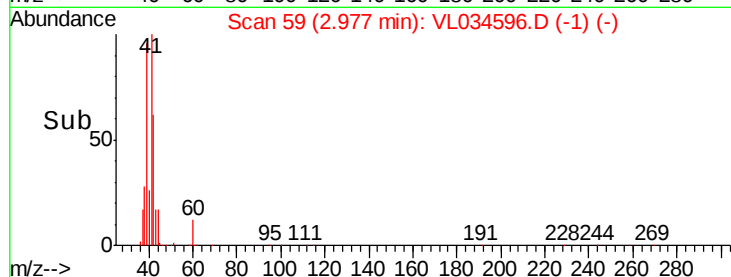
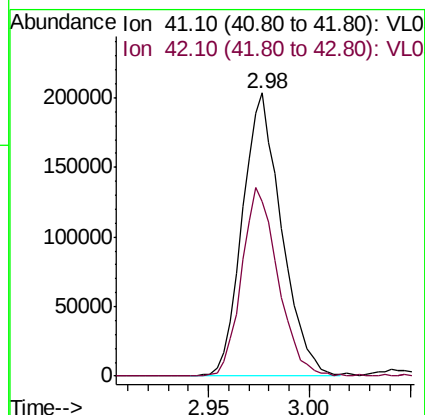
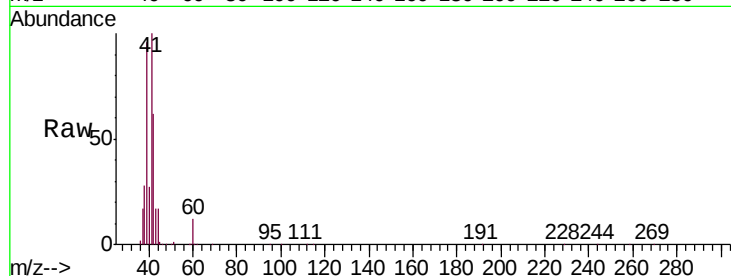
SV-1

Tgt Ion: 41 Resp: 277151

Ion Ratio Lower Upper

41 100

42 62.6 57.0 85.4



#10

Heptane

Concen: 0.056 ppbv

RT: 8.13 min Scan# 1662

Delta R.T. -0.00 min

Lab File: VL034596.D

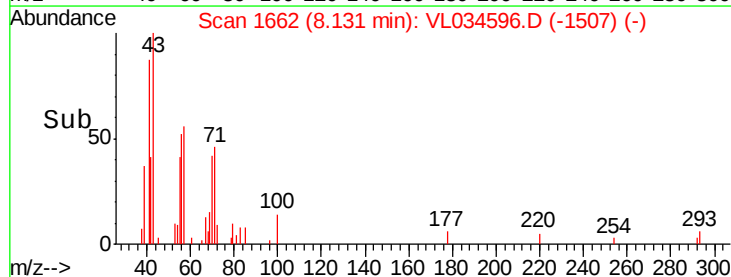
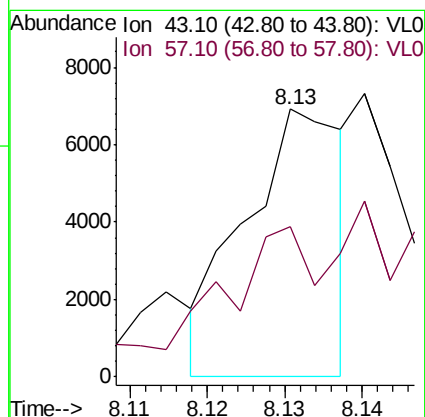
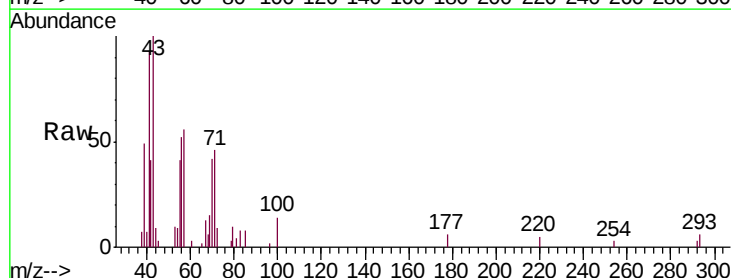
Acq: 5 Feb 2020 1:48

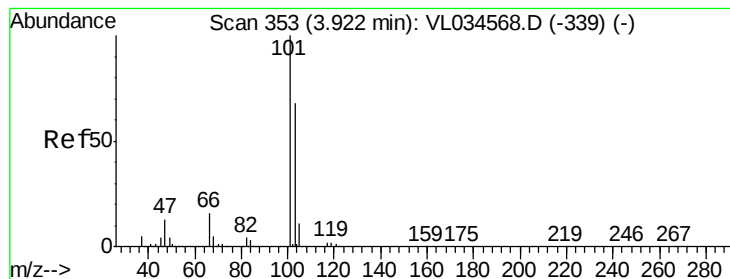
Tgt Ion: 43 Resp: 6073

Ion Ratio Lower Upper

43 100

57 0.0 41.2 61.8#





#11

Trichlorofluoromethane

Concen: 0.130 ppbv

RT: 3.92 min Scan# 353

Delta R.T. -0.00 min

Lab File: VL034596.D

Acq: 5 Feb 2020 1:48

Instrument :

MSVOA_L

ClientSampleId :

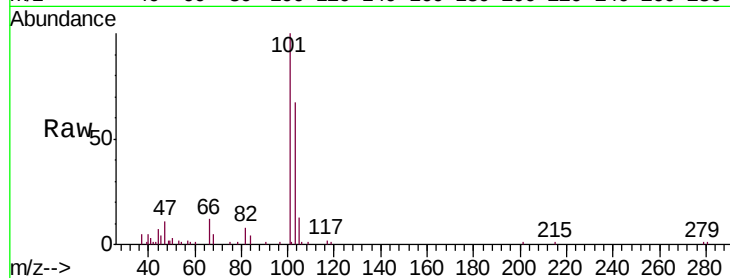
SV-1

Tgt Ion:101 Resp: 23765

Ion Ratio Lower Upper

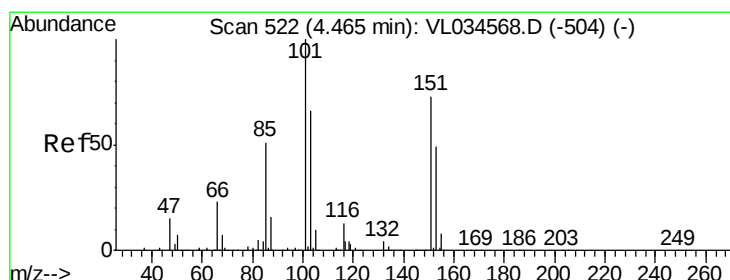
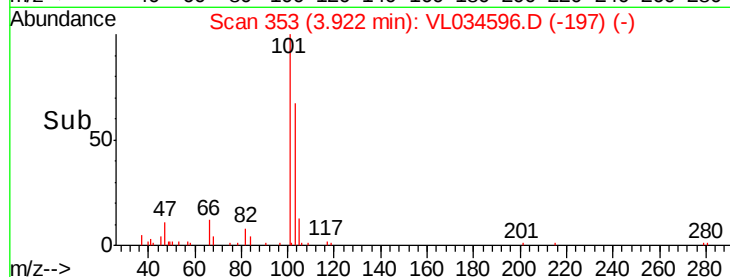
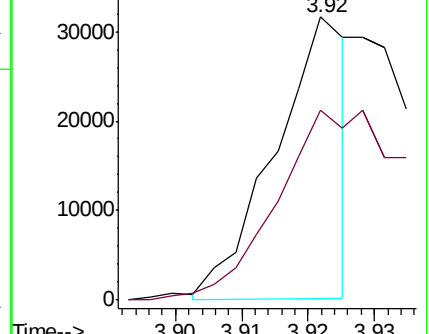
101 100

103 65.7 54.4 81.6



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: 0.051 ppbv

RT: 4.47 min Scan# 522

Delta R.T. -0.00 min

Lab File: VL034596.D

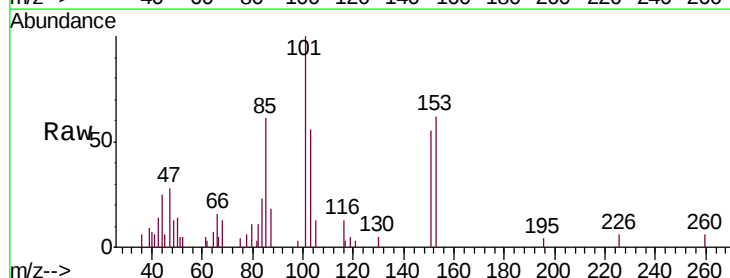
Acq: 5 Feb 2020 1:48

Tgt Ion:101 Resp: 6033

Ion Ratio Lower Upper

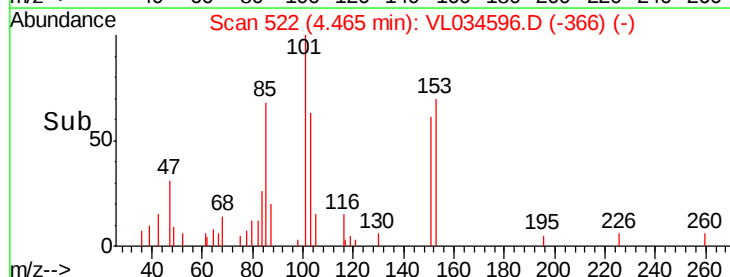
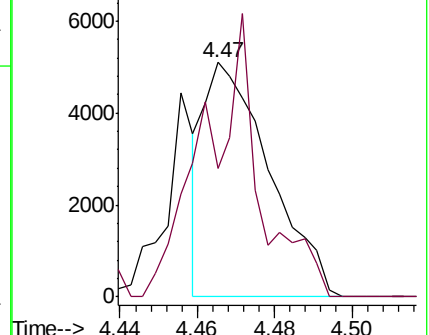
101 100

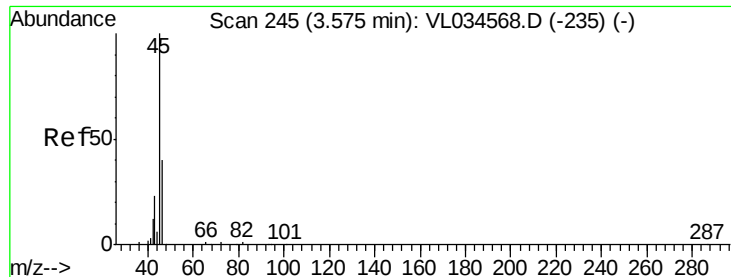
151 103.4 57.0 85.6#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





#13

Ethanol

Concen: 12.830 ppbv

RT: 3.58 min Scan# 246

Delta R.T. 0.00 min

Lab File: VL034596.D

Acq: 5 Feb 2020 1:48

Instrument :

MSVOA_L

ClientSampleId :

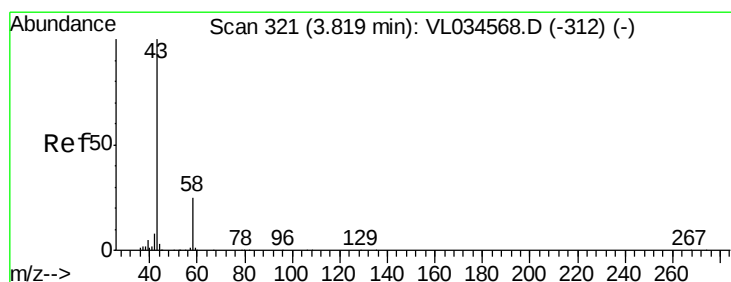
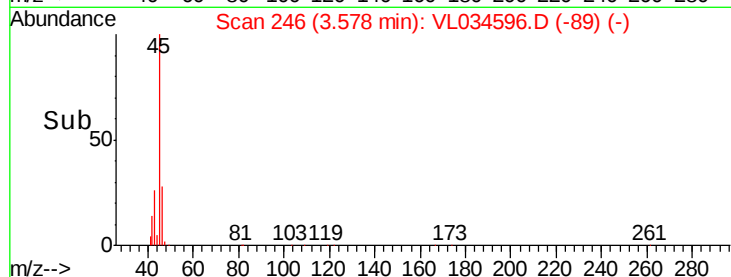
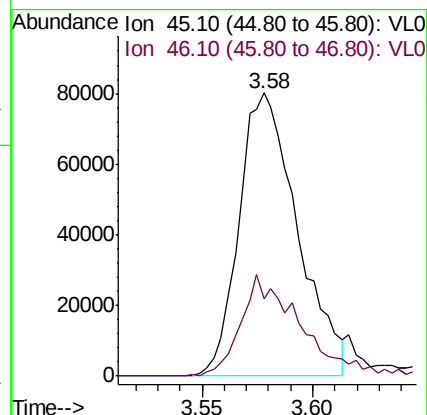
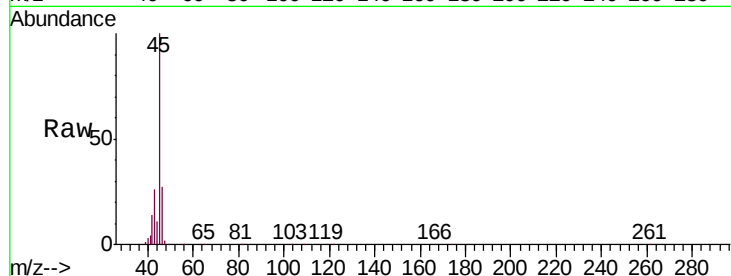
SV-1

Tgt Ion: 45 Resp: 147620

Ion Ratio Lower Upper

45 100

46 36.8 14.8 59.2



#15

Acetone

Concen: 3.993 ppbv

RT: 3.83 min Scan# 323

Delta R.T. 0.01 min

Lab File: VL034596.D

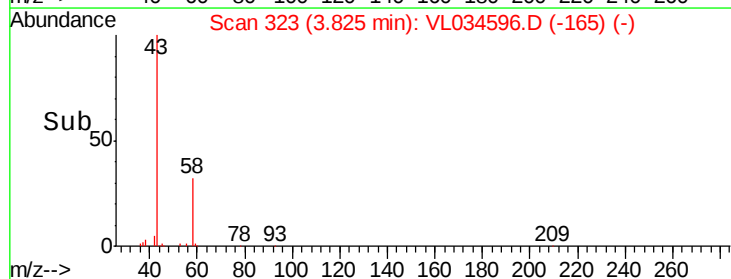
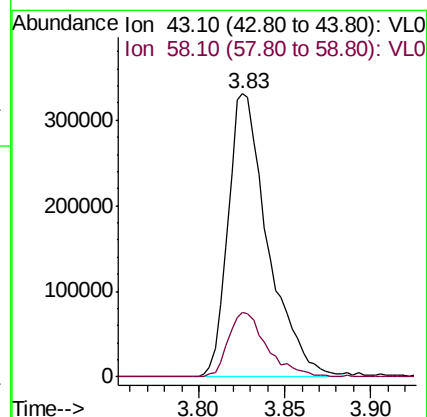
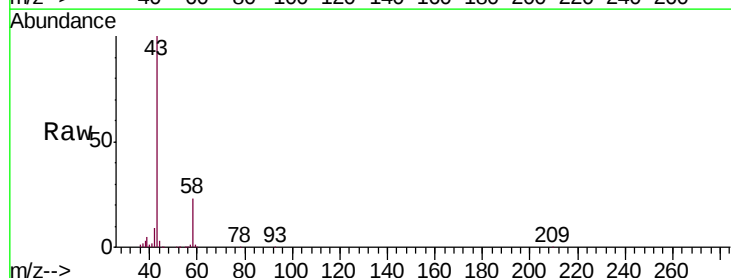
Acq: 5 Feb 2020 1:48

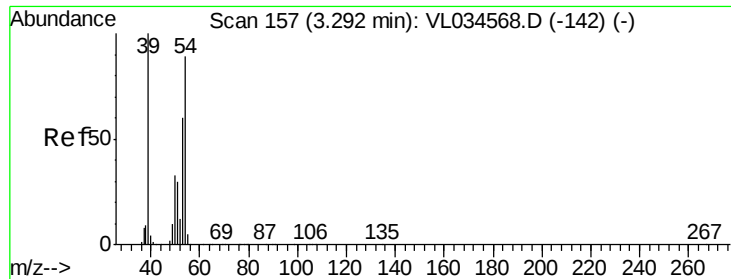
Tgt Ion: 43 Resp: 535792

Ion Ratio Lower Upper

43 100

58 22.1 20.3 30.5

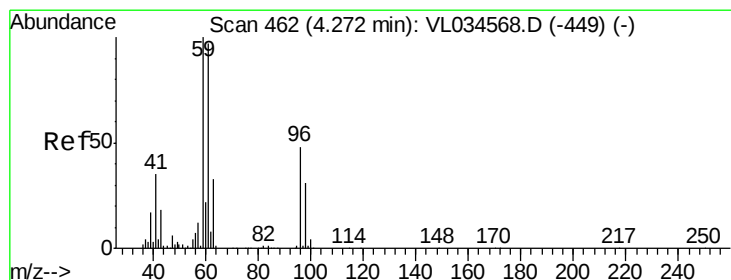
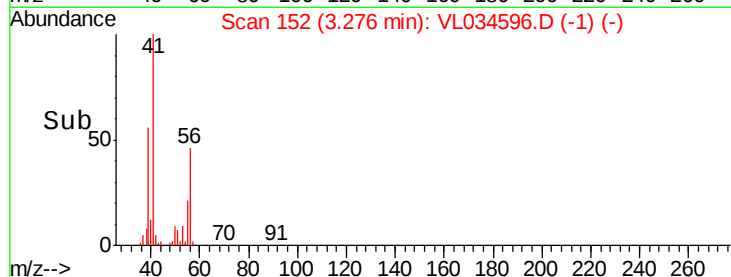
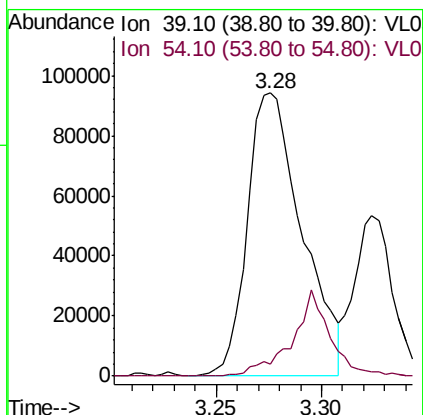
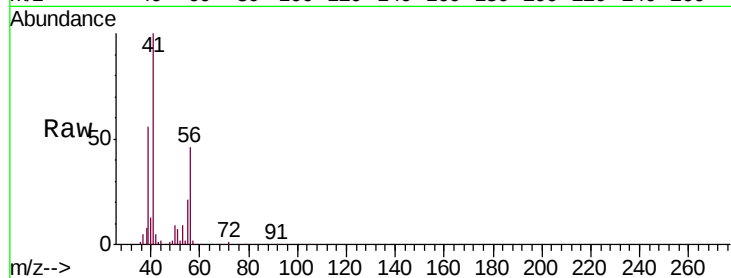




#16
 1,3-Butadiene
 Concen: 3.194 ppbv
 RT: 3.28 min Scan# 152
 Delta R.T. -0.02 min
 Lab File: VL034596.D
 Acq: 5 Feb 2020 1:48

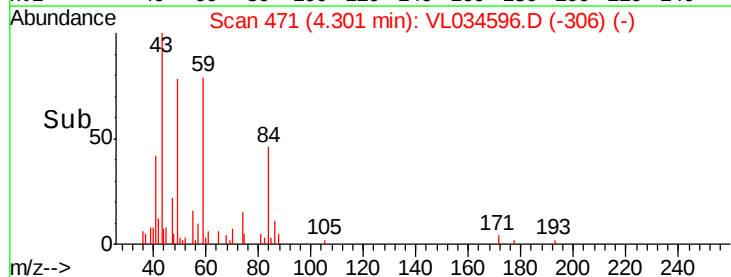
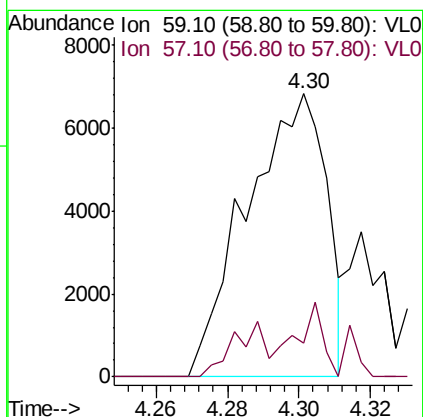
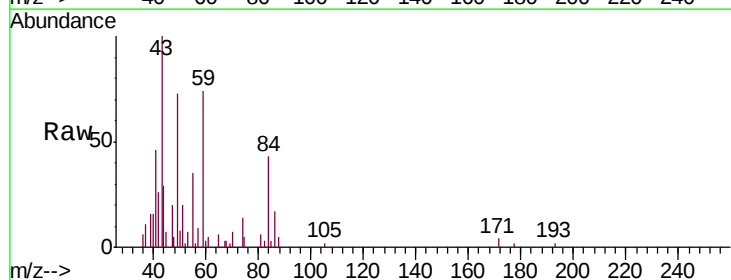
Instrument :
 MSVOA_L
 ClientSampleId :
 SV-1

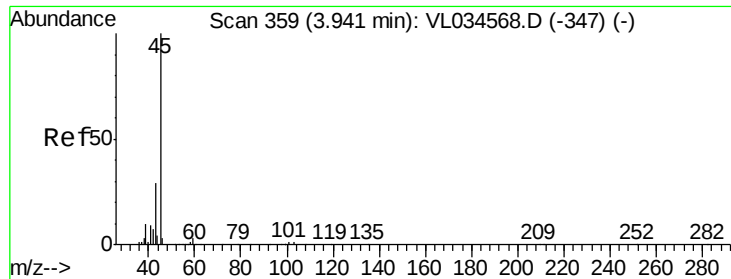
Tgt Ion: 39 Resp: 170218
 Ion Ratio Lower Upper
 39 100
 54 21.3 66.7 100.1#



#17
 tert-Butyl alcohol
 Concen: 0.107 ppbv
 RT: 4.30 min Scan# 471
 Delta R.T. 0.03 min
 Lab File: VL034596.D
 Acq: 5 Feb 2020 1:48

Tgt Ion: 59 Resp: 10557
 Ion Ratio Lower Upper
 59 100
 57 19.9 8.7 13.1#

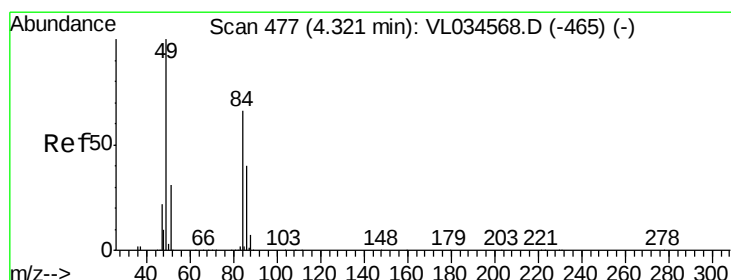
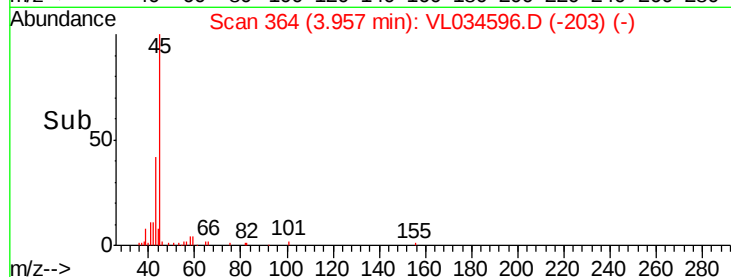
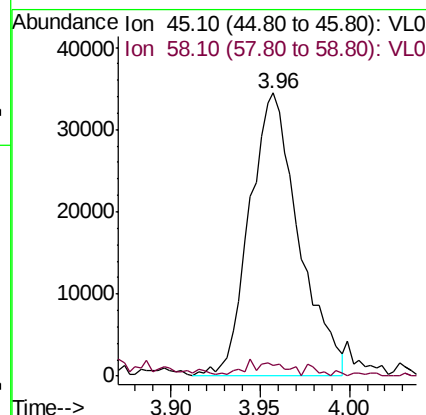
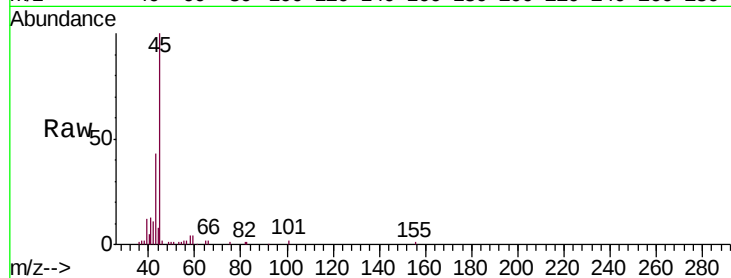




#19
Isopropyl Alcohol
Concen: 0.849 ppbv
RT: 3.96 min Scan# 364
Delta R.T. 0.02 min
Lab File: VL034596.D
Acq: 5 Feb 2020 1:48

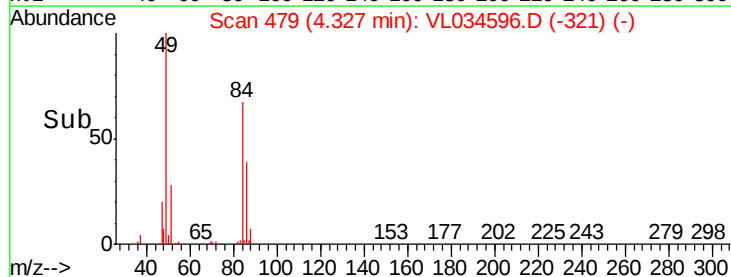
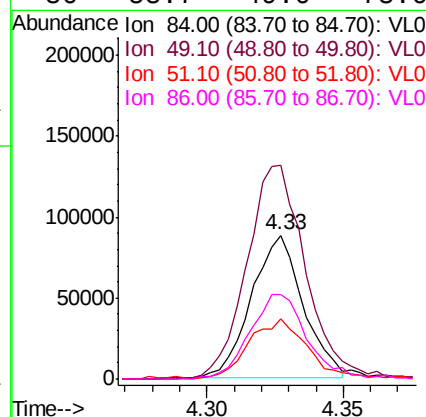
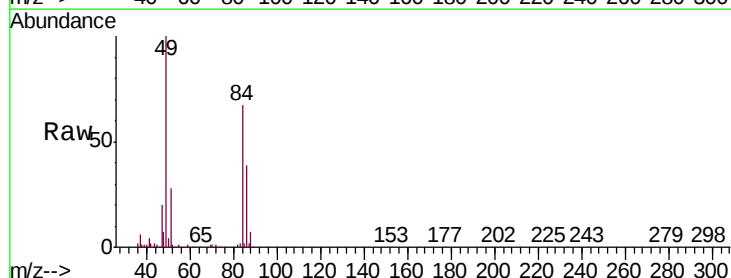
Instrument :
MSVOA_L
ClientSampleId :
SV-1

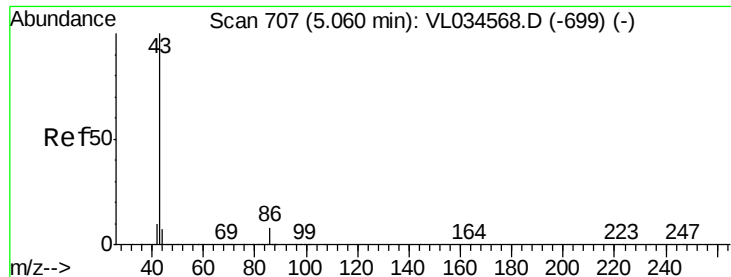
Tgt Ion: 45 Resp: 66460
Ion Ratio Lower Upper
45 100
58 181.7 1.7 2.5#



#20
Methylene Chloride
Concen: 2.284 ppbv
RT: 4.33 min Scan# 479
Delta R.T. 0.01 min
Lab File: VL034596.D
Acq: 5 Feb 2020 1:48

Tgt Ion: 84 Resp: 116716
Ion Ratio Lower Upper
84 100
49 149.0 122.4 183.6
51 41.6 38.6 57.8
86 58.7 49.0 73.6

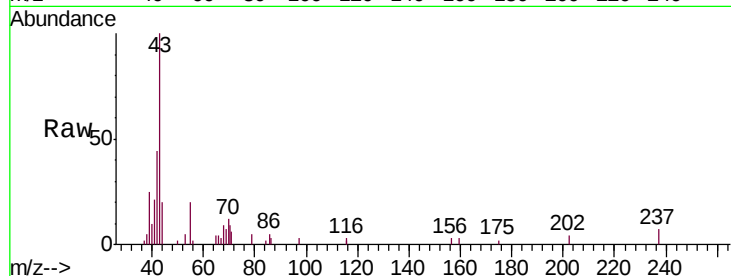




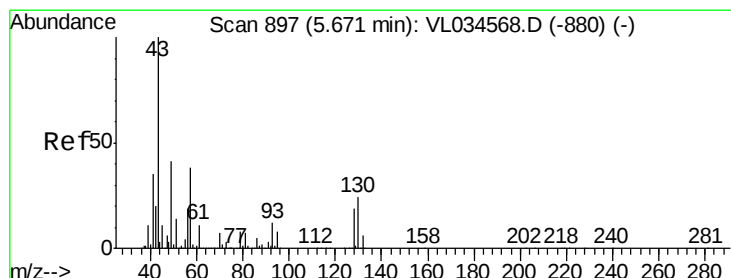
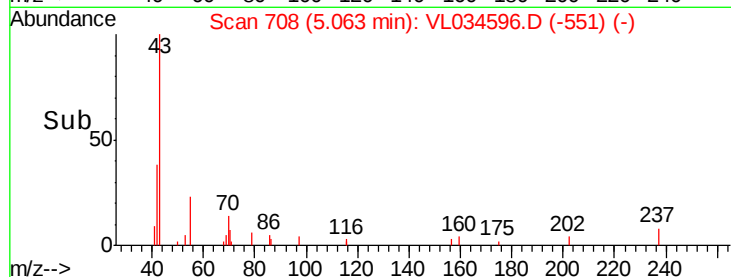
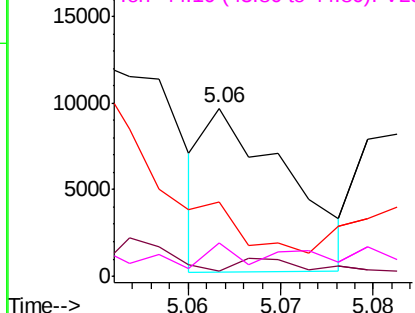
#23
 Vinyl Acetate
 Concen: 0.038 ppbv
 RT: 5.06 min Scan# 708
 Delta R.T. 0.00 min
 Lab File: VL034596.D
 Acq: 5 Feb 2020 1:48

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-1

Tgt Ion:	43	Resp:	5805
Ion	Ratio	Lower	Upper
43	100		
86	0.0	5.9	8.9#
42	16.6	8.8	13.2#
44	17.8	5.0	7.6#

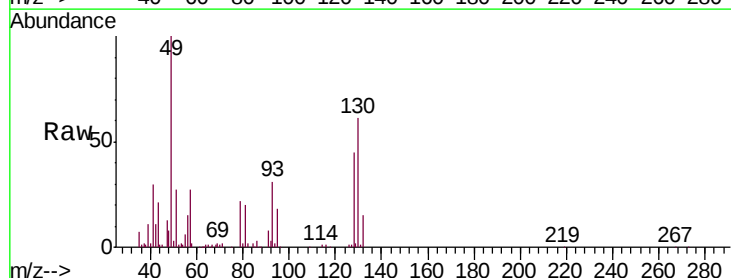


Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 86.10 (85.80 to 86.80): VL0
 Ion 42.10 (41.80 to 42.80): VL0
 Ion 44.10 (43.80 to 44.80): VL0

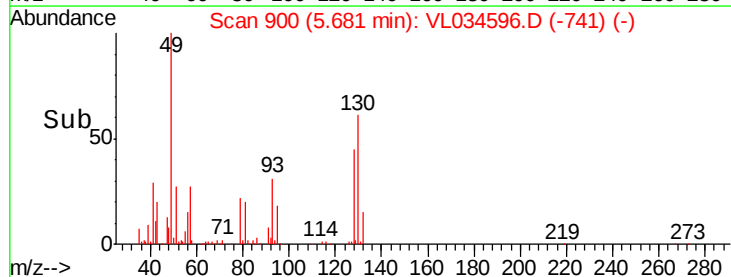
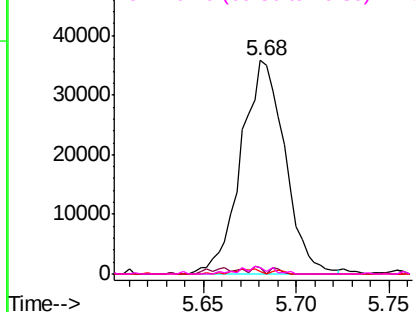


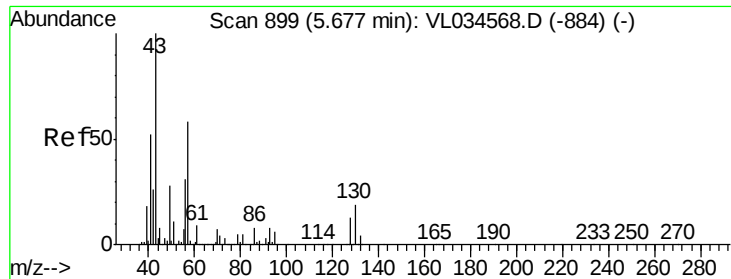
#25
 Ethyl Acetate
 Concen: 0.270 ppbv
 RT: 5.68 min Scan# 900
 Delta R.T. 0.01 min
 Lab File: VL034596.D
 Acq: 5 Feb 2020 1:48

Tgt Ion:	43	Resp:	58714
Ion	Ratio	Lower	Upper
43	100		
45	3.4	8.5	12.7#
61	1.8	7.8	11.6#
70	2.5	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

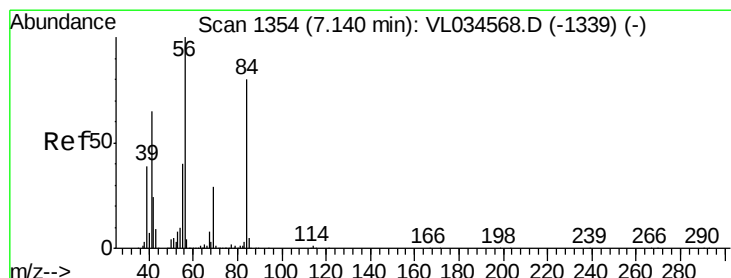
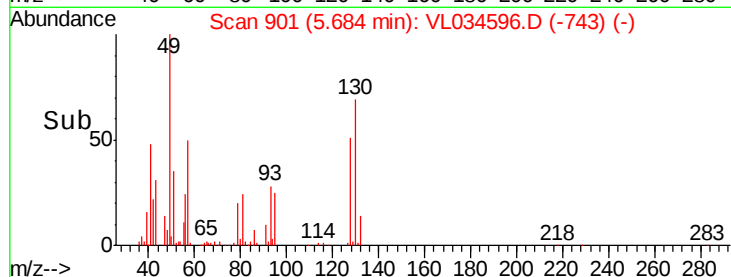
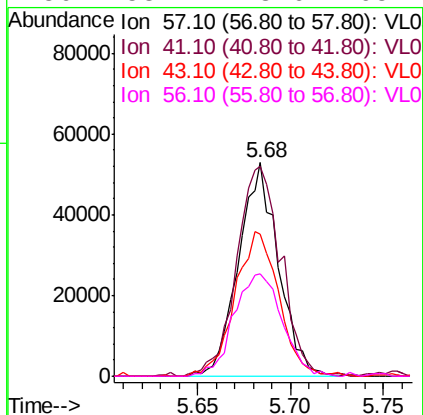
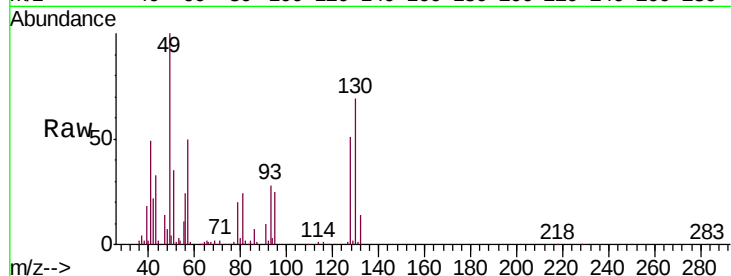




#26
Hexane
Concen: 0.865 ppbv
RT: 5.68 min Scan# 901
Delta R.T. 0.01 min
Lab File: VL034596.D
Acq: 5 Feb 2020 1:48

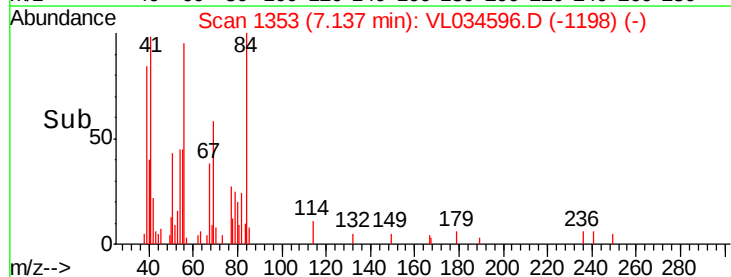
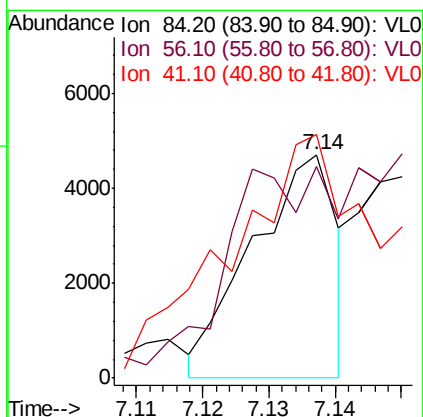
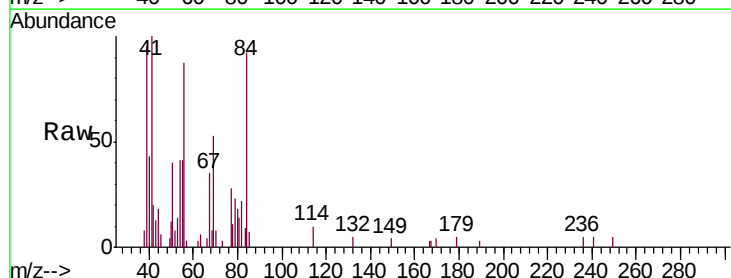
Instrument :
MSVOA_L
ClientSampled :
SV-1

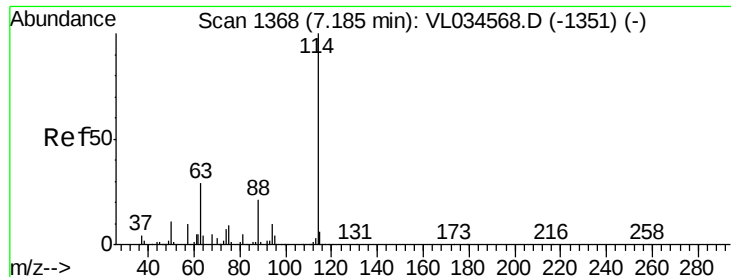
Tgt Ion: 57 Resp: 78740
Ion Ratio Lower Upper
57 100
41 109.8 76.2 114.2
43 75.1 189.9 284.9#
56 58.4 43.6 65.4



#30
Cyclohexane
Concen: 0.062 ppbv
RT: 7.14 min Scan# 1353
Delta R.T. -0.00 min
Lab File: VL034596.D
Acq: 5 Feb 2020 1:48

Tgt Ion: 84 Resp: 4164
Ion Ratio Lower Upper
84 100
56 0.0 110.5 165.7#
41 268.8 71.9 107.9#

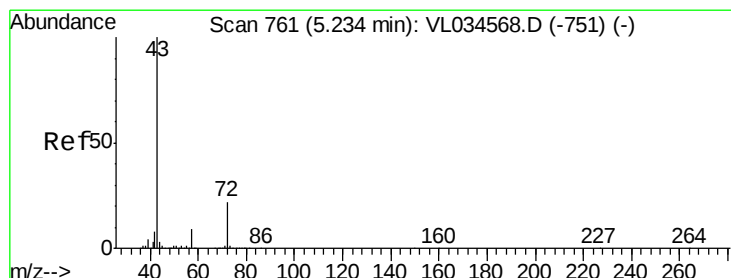
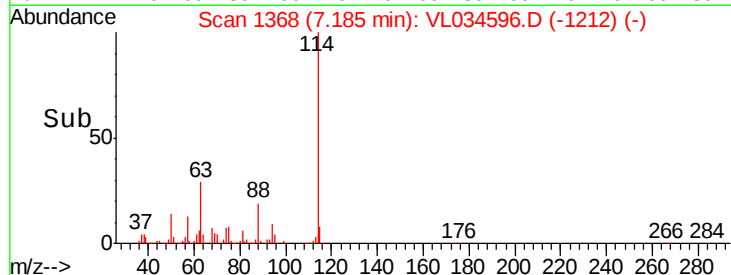
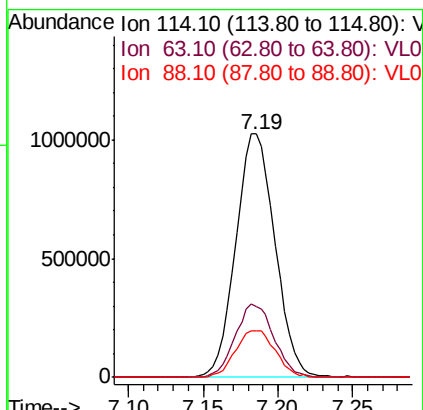
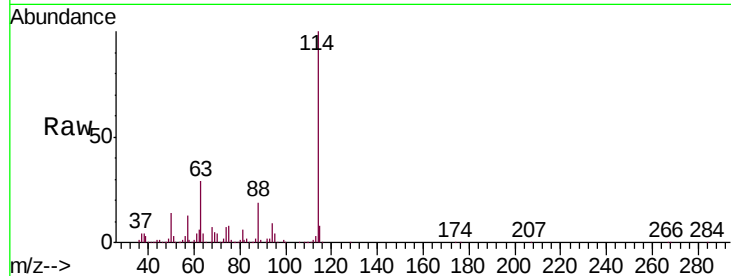




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.19 min Scan# 1368
 Delta R.T. -0.00 min
 Lab File: VL034596.D
 Acq: 5 Feb 2020 1:48

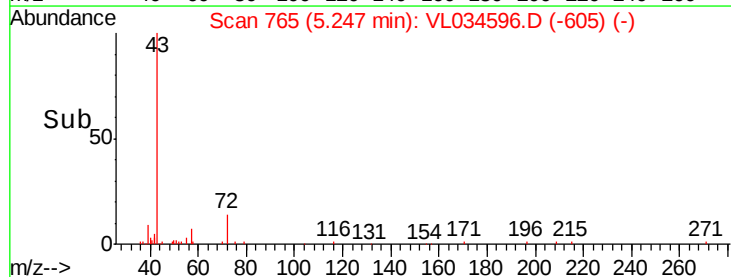
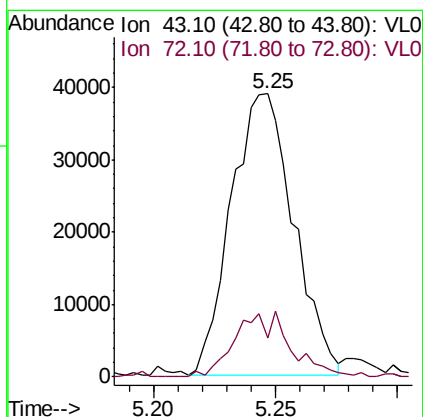
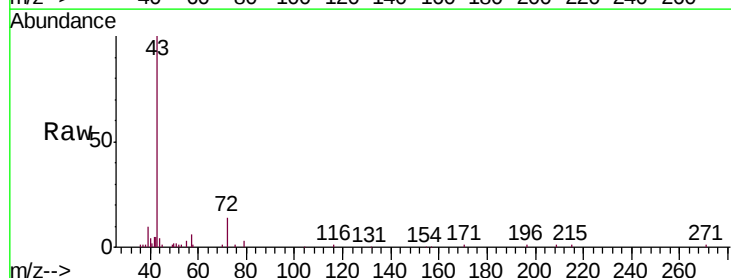
Instrument :
 MSVOA_L
 ClientSampleId :
 SV-1

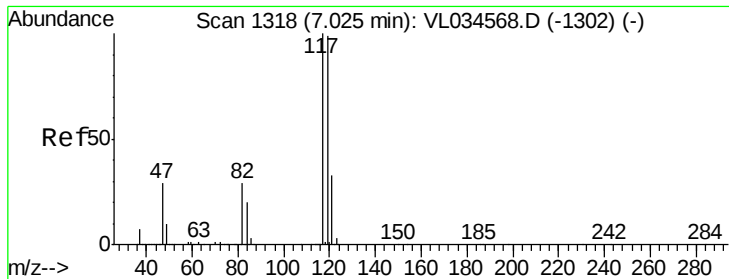
Tgt Ion:114 Resp: 1868733
 Ion Ratio Lower Upper
 114 100
 63 29.8 24.1 36.1
 88 19.7 15.9 23.9



#34
 2-Butanone
 Concen: 0.512 ppbv
 RT: 5.25 min Scan# 765
 Delta R.T. 0.01 min
 Lab File: VL034596.D
 Acq: 5 Feb 2020 1:48

Tgt Ion: 43 Resp: 69460
 Ion Ratio Lower Upper
 43 100
 72 20.6 17.2 25.8





#35

Carbon Tetrachloride

Concen: 0.069 ppbv

RT: 7.02 min Scan# 1318

Delta R.T. -0.00 min

Lab File: VL034596.D

Acq: 5 Feb 2020 1:48

Instrument :

MSVOA_L

ClientSampleId :

SV-1

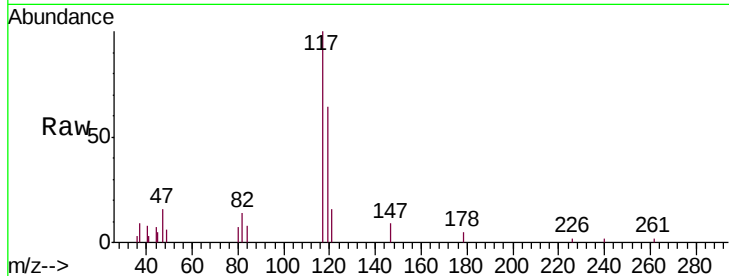
Tgt Ion: 117 Resp: 12272

Ion Ratio Lower Upper

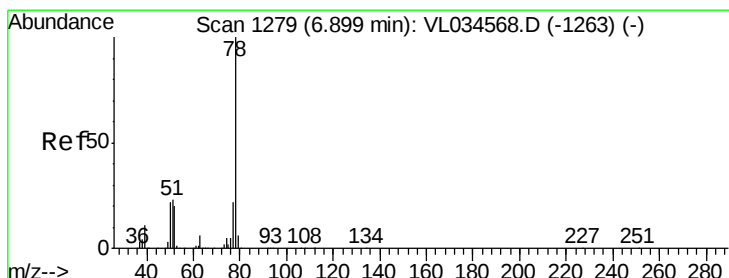
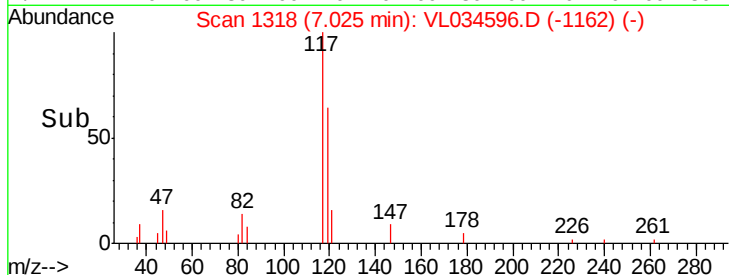
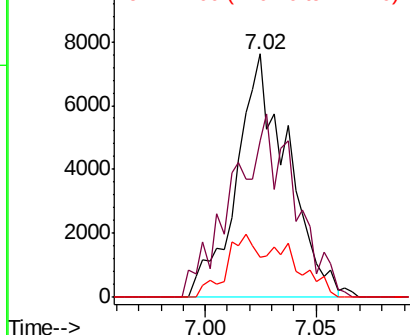
117 100

119 61.1 79.5 119.3#

121 16.5 26.2 39.2#



Abundance Ion 117.00 (116.70 to 117.70): V
Ion 119.00 (118.70 to 119.70): V
Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 0.306 ppbv

RT: 6.90 min Scan# 1279

Delta R.T. -0.00 min

Lab File: VL034596.D

Acq: 5 Feb 2020 1:48

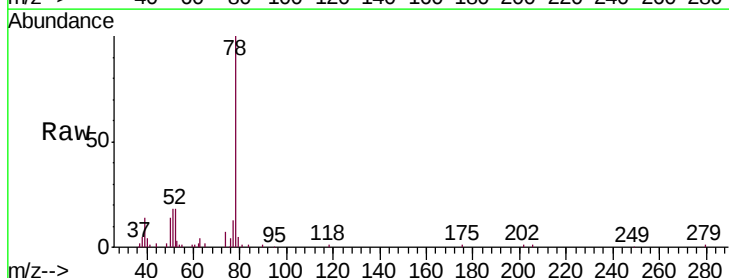
Tgt Ion: 78 Resp: 50917

Ion Ratio Lower Upper

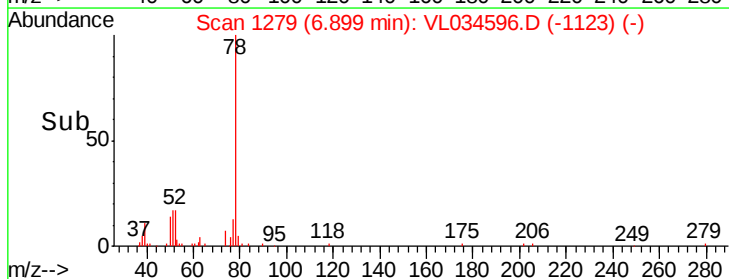
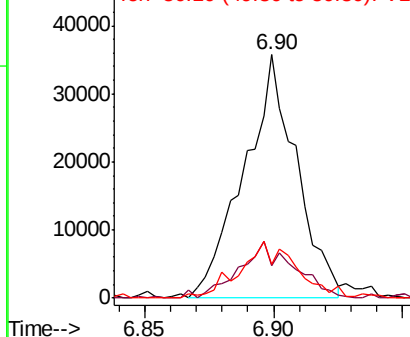
78 100

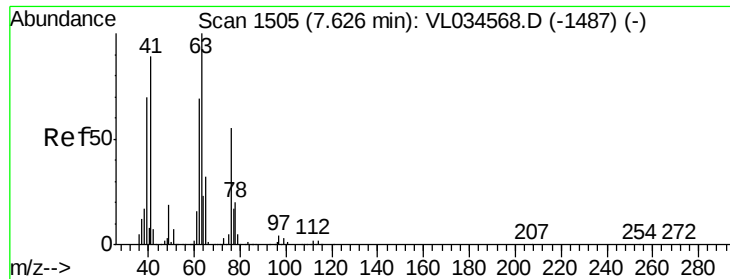
77 12.2 17.3 25.9#

50 12.4 17.4 26.2#



Abundance Ion 78.10 (77.80 to 78.80): VL0
Ion 77.10 (76.80 to 77.80): VL0
Ion 50.10 (49.80 to 50.80): VL0

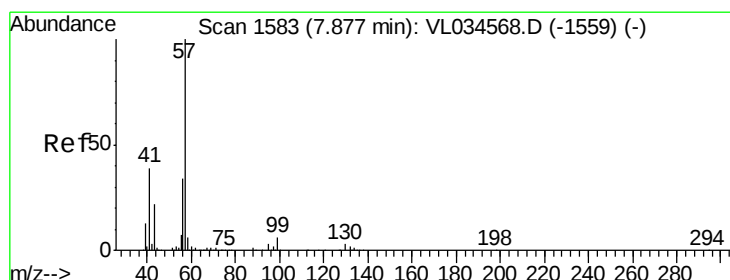
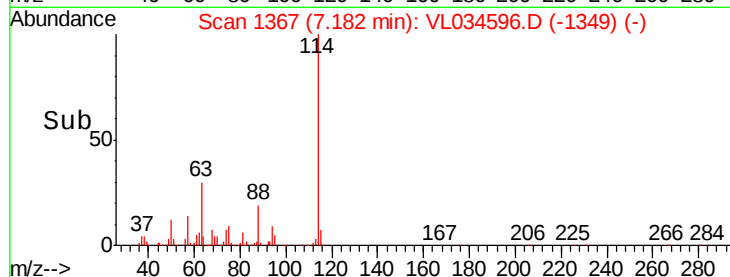
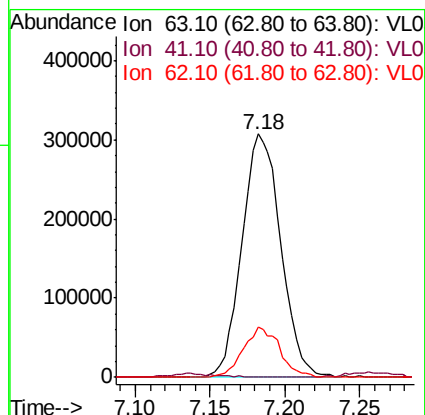
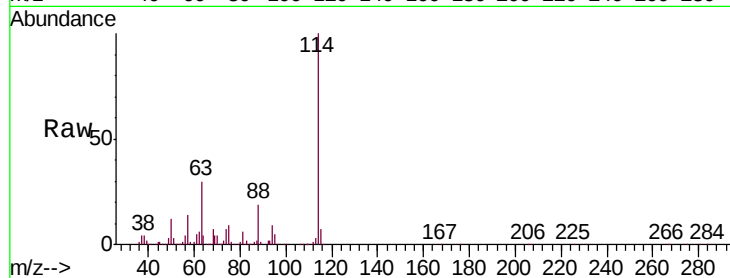




#39
 1,2-Dichloropropane
 Concen: 8.032 ppbv
 RT: 7.18 min Scan# 1367
 Delta R.T. -0.44 min
 Lab File: VL034596.D
 Acq: 5 Feb 2020 1:48

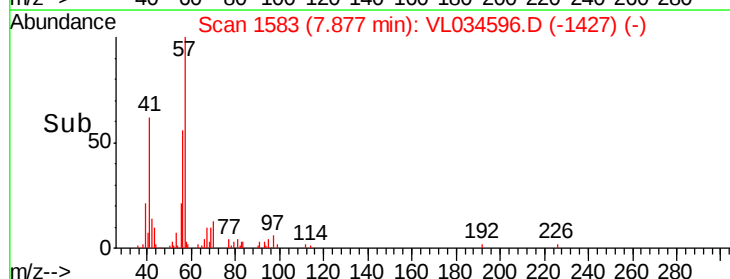
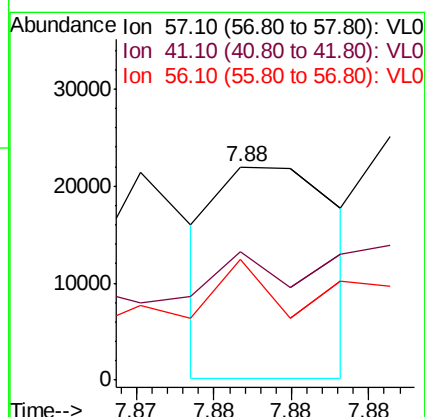
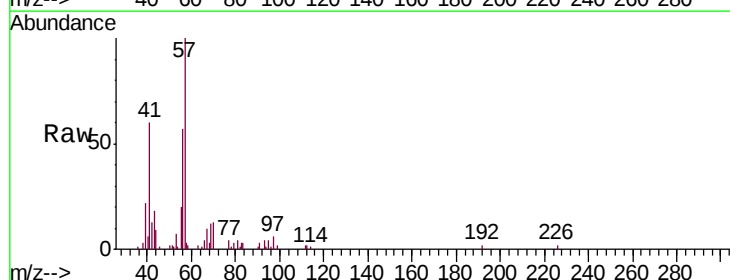
Instrument :
 MSVOA_L
 ClientSampleId :
 SV-1

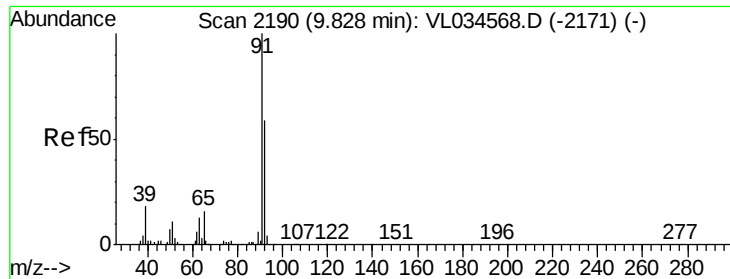
Tgt Ion: 63 Resp: 553315
 Ion Ratio Lower Upper
 63 100
 41 0.0 71.0 106.4#
 62 20.8 55.4 83.0#



#44
 2,2,4-Trimethylpentane
 Concen: 0.039 ppbv
 RT: 7.88 min Scan# 1583
 Delta R.T. 0.00 min
 Lab File: VL034596.D
 Acq: 5 Feb 2020 1:48

Tgt Ion: 57 Resp: 11748
 Ion Ratio Lower Upper
 57 100
 41 0.0 28.9 43.3#
 56 199.6 25.5 38.3#





#53

Toluene

Concen: 0.747 ppbv

RT: 9.83 min Scan# 2191

Delta R.T. 0.00 min

Lab File: VL034596.D

Acq: 5 Feb 2020 1:48

Instrument :

MSVOA_L

ClientSampleId :

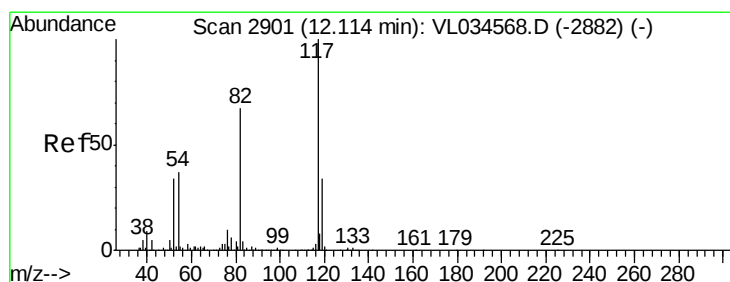
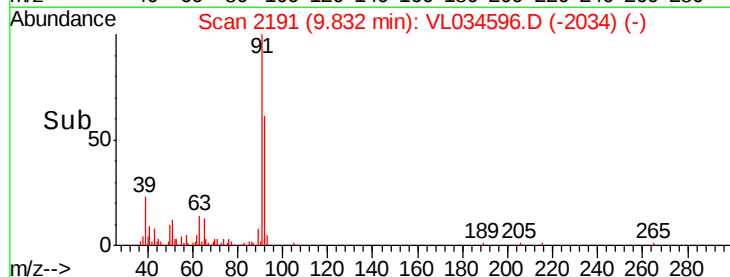
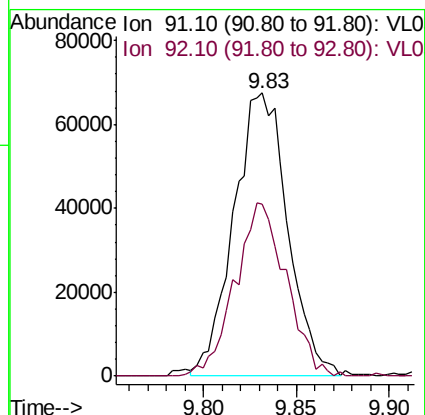
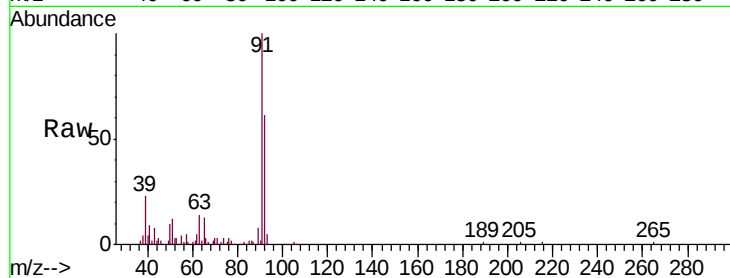
SV-1

Tgt Ion: 91 Resp: 136413

Ion Ratio Lower Upper

91 100

92 58.0 48.2 72.2



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.12 min Scan# 2903

Delta R.T. 0.01 min

Lab File: VL034596.D

Acq: 5 Feb 2020 1:48

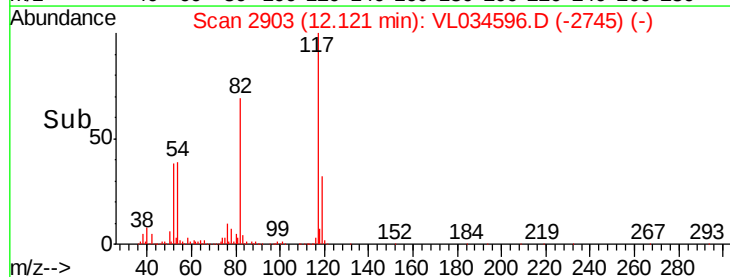
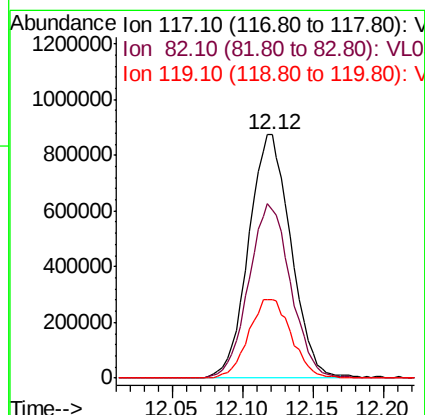
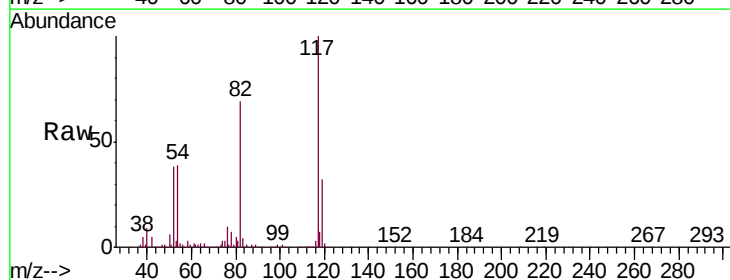
Tgt Ion: 117 Resp: 1824772

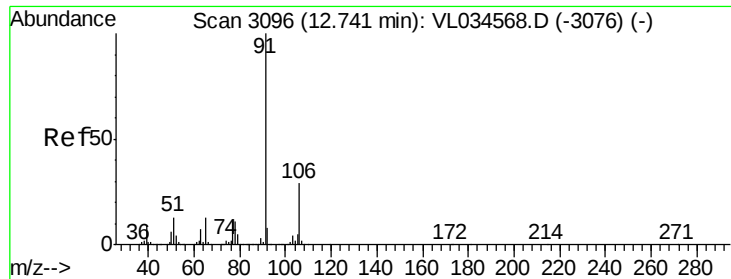
Ion Ratio Lower Upper

117 100

82 71.9 54.2 81.4

119 32.7 26.1 39.1





#58

Ethyl Benzene

Concen: 0.075 ppbv

RT: 12.74 min Scan# 3096

Delta R.T. -0.00 min

Lab File: VL034596.D

Acq: 5 Feb 2020 1:48

Instrument :

MSVOA_L

ClientSampled :

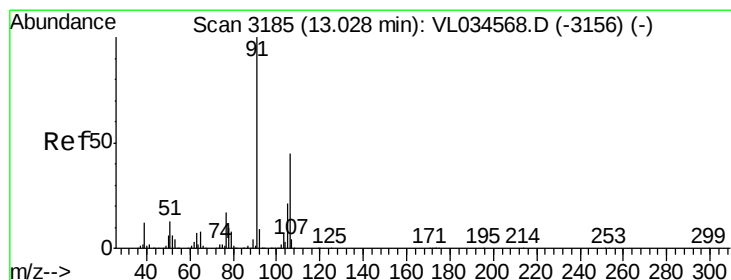
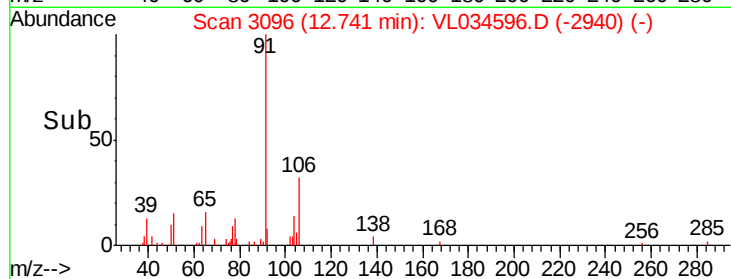
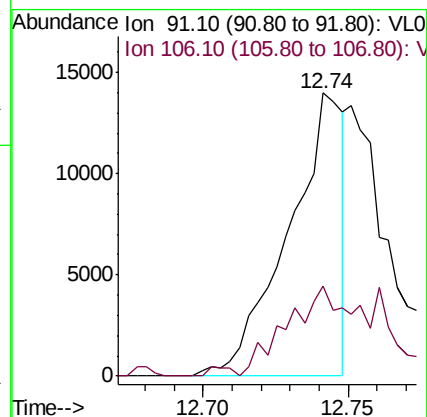
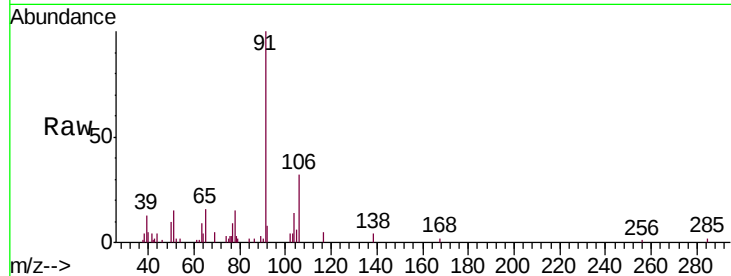
SV-1

Tgt Ion: 91 Resp: 18230

Ion Ratio Lower Upper

91 100

106 32.0 23.3 34.9



#59

m/p-Xylene

Concen: 0.058 ppbv

RT: 13.04 min Scan# 3189

Delta R.T. 0.01 min

Lab File: VL034596.D

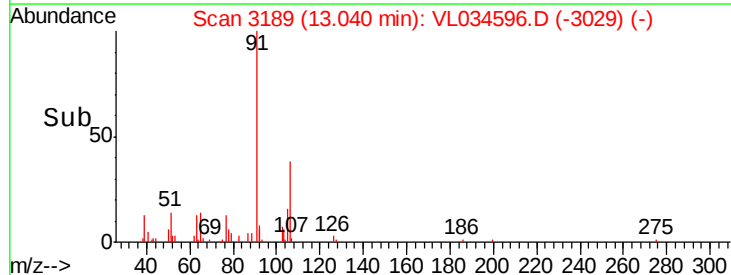
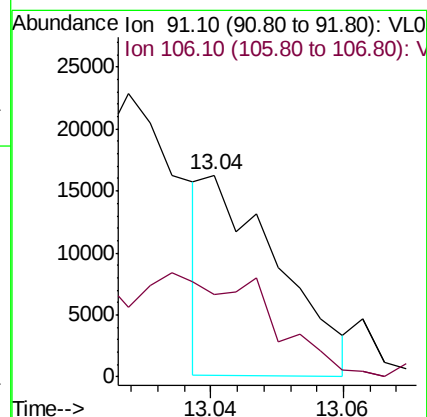
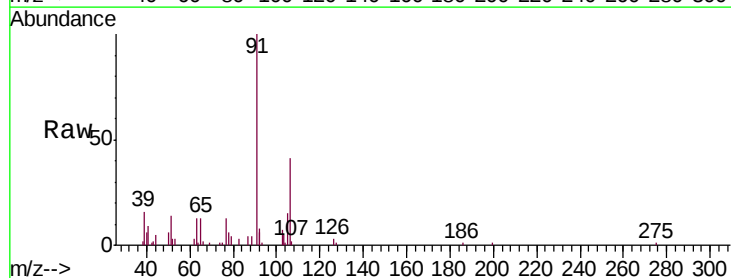
Acq: 5 Feb 2020 1:48

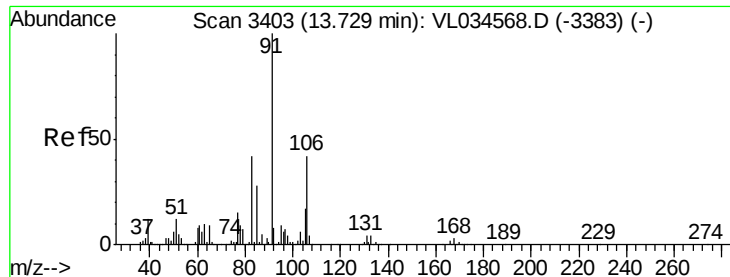
Tgt Ion: 91 Resp: 12459

Ion Ratio Lower Upper

91 100

106 0.0 35.3 52.9#

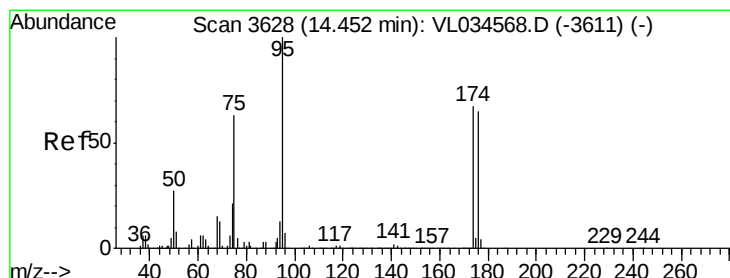
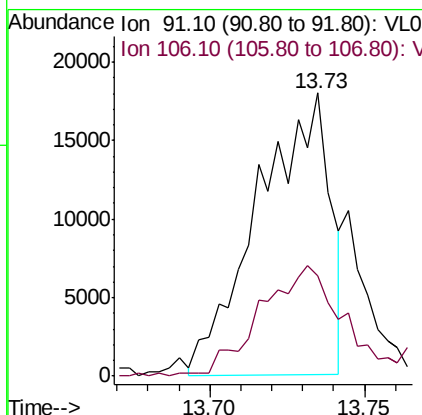
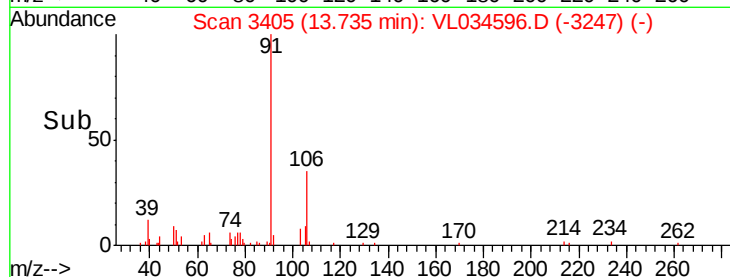
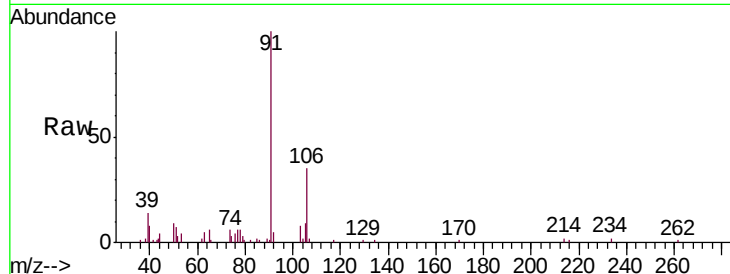




#60
o-Xylene
Concen: 0.133 ppbv
RT: 13.73 min Scan# 3405
Delta R.T. 0.01 min
Lab File: VL034596.D
Acq: 5 Feb 2020 1:48

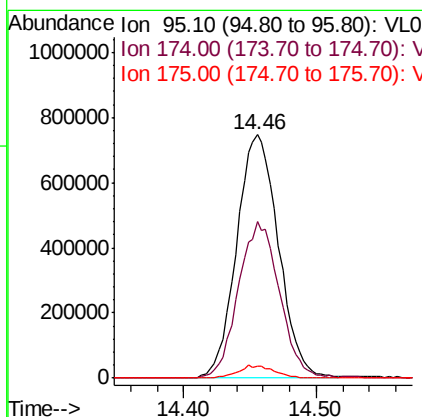
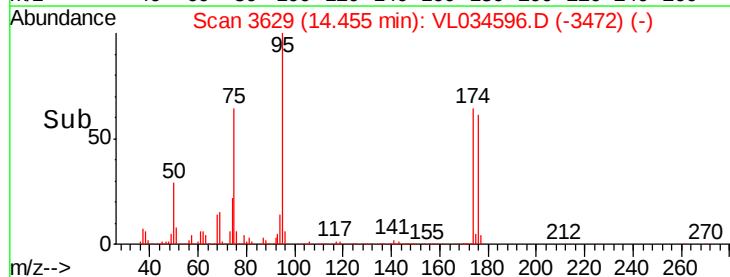
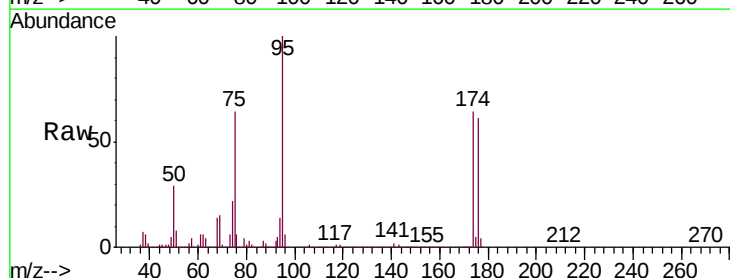
Instrument :
MSVOA_L
ClientSampled :
SV-1

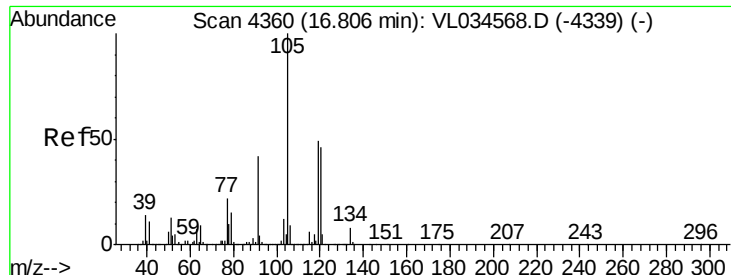
Tgt Ion: 91 Resp: 28892
Ion Ratio Lower Upper
91 100
106 46.7 21.6 65.0



#68
1-Bromo-4-Fluorobenzene
Concen: 10.598 ppbv
RT: 14.46 min Scan# 3629
Delta R.T. 0.00 min
Lab File: VL034596.D
Acq: 5 Feb 2020 1:48

Tgt Ion: 95 Resp: 1634379
Ion Ratio Lower Upper
95 100
174 63.6 52.3 78.5
175 4.7 3.8 5.6





#74
 1,2,4-Trimethylbenzene
 Concen: 0.079 ppbv
 RT: 16.81 min Scan# 4362
 Delta R.T. 0.01 min
 Lab File: VL034596.D
 Acq: 5 Feb 2020 1:48

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-1

Tgt Ion:	105	Resp:	20390
Ion	Ratio	Lower	Upper
105	100		
120	38.0	37.1	55.7
91	11.6	34.3	51.5#
77	15.7	17.5	26.3#

