

Data File : VL034583.D
Acq On : 4 Feb 2020 17:15
Operator : SY/AP
Sample : L1356-02
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-2

Quant Time: Feb 05 05:44:39 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	5.66	49	926080	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	1869928	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.12	117	1791223	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.46	95	1611641	10.65	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	106.50%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chlorodifluoromethane	2.93	51	602525	5.384	ppbv #	58
4) Chloromethane	3.11	50	106697	1.558	ppbv	90
7) Chloroethane	3.53	64	895	0.037	ppbv #	43
9) Propene	3.17	41	466762	10.713	ppbv	94
10) Heptane	8.14	43	10579	0.096	ppbv #	26
11) Trichlorofluoromethane	3.93	101	54944	0.297	ppbv	85
12) 1,1,2-Trichlorotrifluoroet	4.46	101	4122	0.034	ppbv #	14
13) Ethanol	3.59	45	7009345	600.611	ppbv	93
15) Acetone	3.83	43	867222	6.372	ppbv	98
16) 1,3-Butadiene	3.27	39	10382	0.192	ppbv #	79
19) Isopropyl Alcohol	3.97	45	246687	3.106	ppbv #	96
20) Methylene Chloride	4.33	84	120182	2.319	ppbv	92
23) Vinyl Acetate	5.06	43	16347	0.105	ppbv #	92
25) Ethyl Acetate	5.68	43	365083	1.657	ppbv #	93
26) Hexane	5.68	57	267823	2.902	ppbv #	62
29) Chloroform	5.75	83	65458	0.401	ppbv #	82
31) cis-1,2-Dichloroethene	5.67	61	23402	0.244	ppbv #	34
34) 2-Butanone	5.24	43	77066	0.568	ppbv	99
35) Carbon Tetrachloride	7.02	117	9361	0.052	ppbv #	83
36) Benzene	6.90	78	67557	0.406	ppbv	97
39) 1,2-Dichloropropane	7.19	63	550949	7.992	ppbv #	20
44) 2,2,4-Trimethylpentane	7.88	57	16282	0.054	ppbv #	1
53) Toluene	9.83	91	247357	1.354	ppbv	99
59) m/p-Xylene	13.03	91	9742	0.046	ppbv #	32

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

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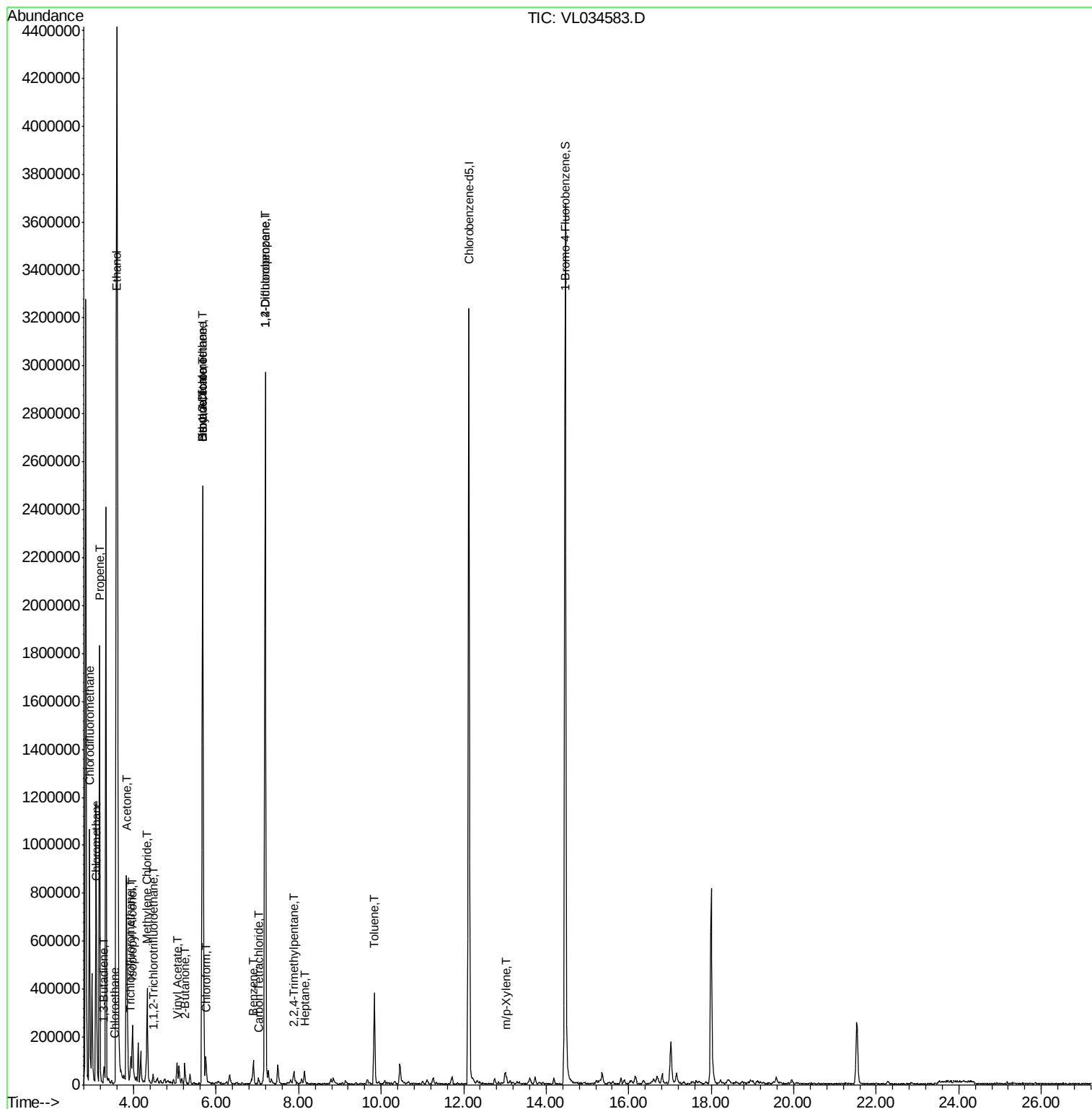
Quant Time: Feb 05 05:44:39 2020

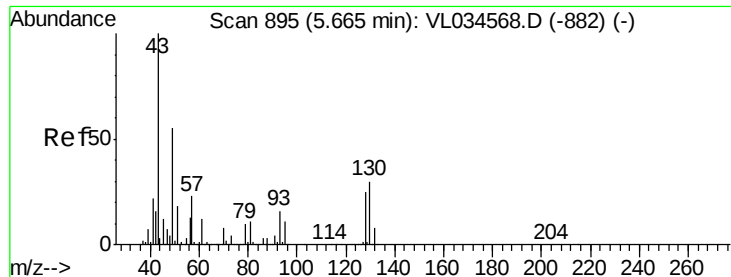
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A_L\METHODS\VL013020AIR.M

Quant Title : AIR ANALYSIS BY METHOD T0-15 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: VL034583.D

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IA-2

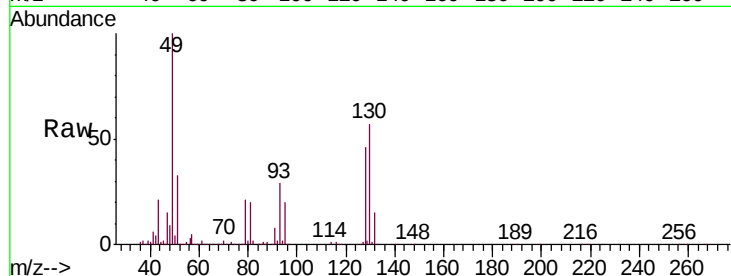
Tgt Ion: 49 Resp: 926080

Ion Ratio Lower Upper

49 100

128 45.7 22.7 68.1

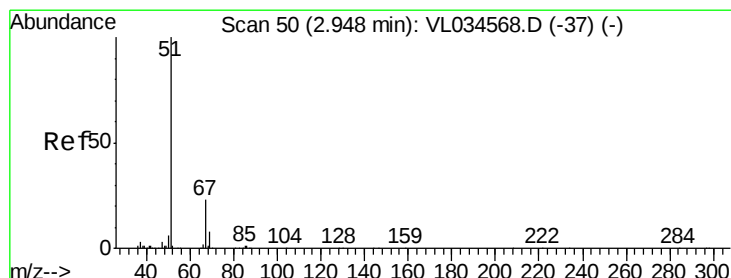
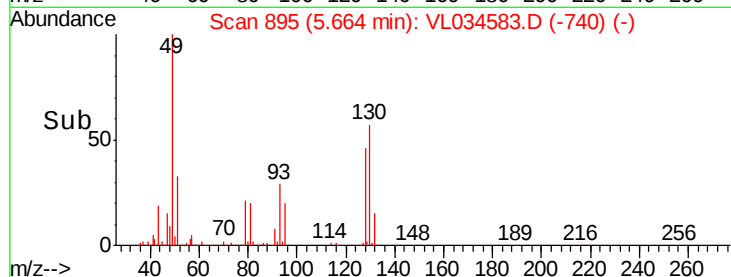
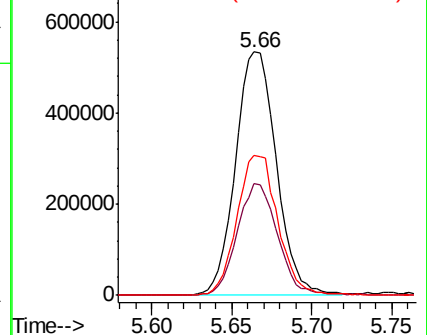
130 57.9 28.6 85.8



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#3

Chlorodifluoromethane

Concen: 5.384 ppbv

RT: 2.93 min Scan# 44

Delta R.T. -0.02 min

Lab File: VL034583.D

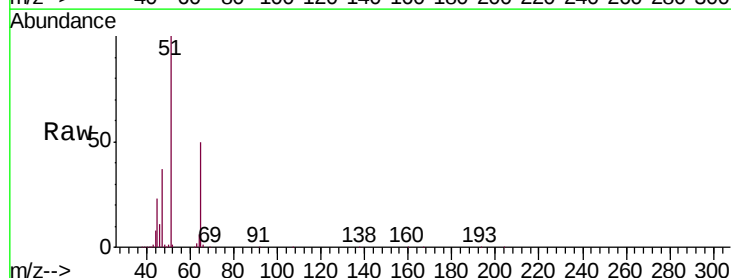
Acq: 4 Feb 2020 17:15

Tgt Ion: 51 Resp: 602525

Ion Ratio Lower Upper

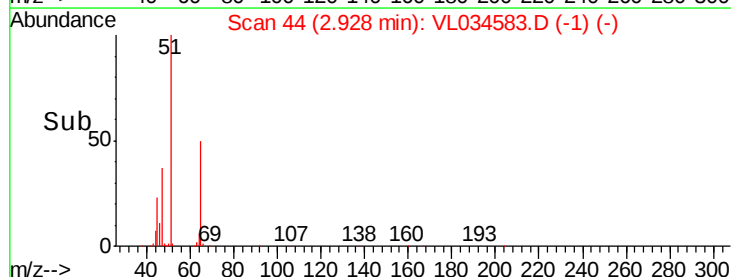
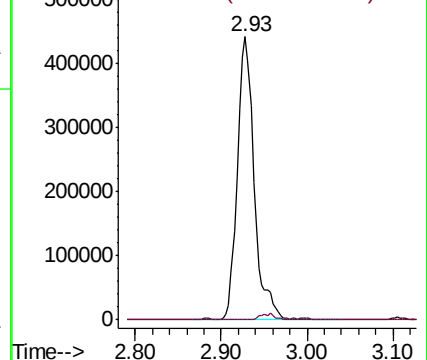
51 100

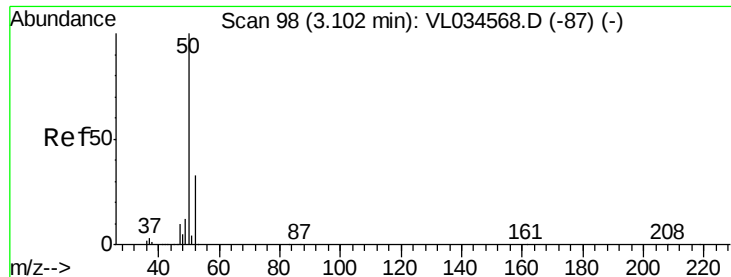
67 1.9 17.8 26.8#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#4

Chloromethane

Concen: 1.558 ppbv

RT: 3.11 min Scan# 100

Delta R.T. 0.01 min

Lab File: VL034583.D

Acq: 4 Feb 2020 17:15

Instrument :

MSVOA_L

ClientSampleId :

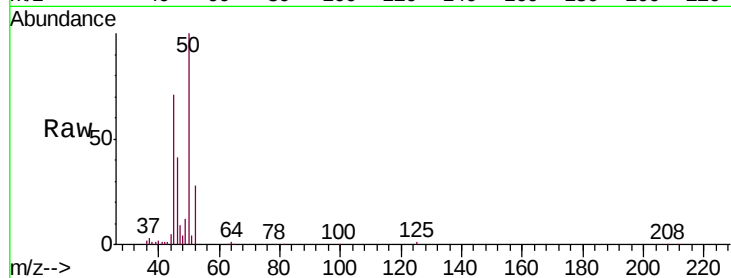
IA-2

Tgt Ion: 50 Resp: 106697

Ion Ratio Lower Upper

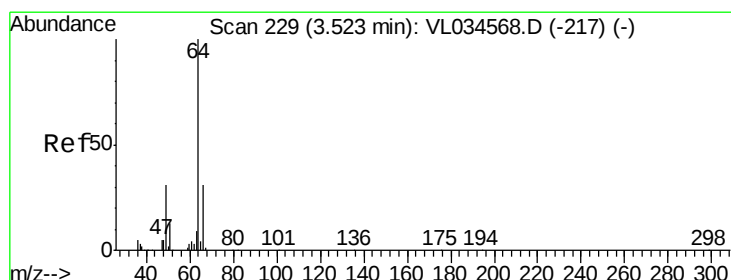
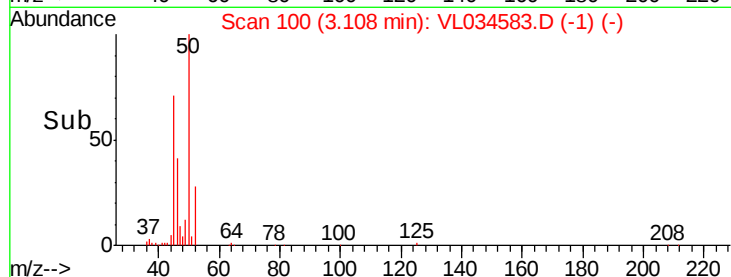
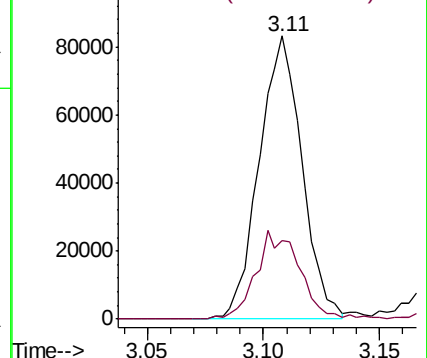
50 100

52 27.8 26.6 39.8



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0



#7

Chloroethane

Concen: 0.037 ppbv

RT: 3.53 min Scan# 231

Delta R.T. 0.01 min

Lab File: VL034583.D

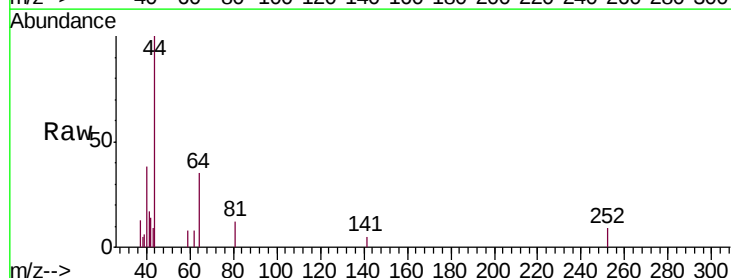
Acq: 4 Feb 2020 17:15

Tgt Ion: 64 Resp: 895

Ion Ratio Lower Upper

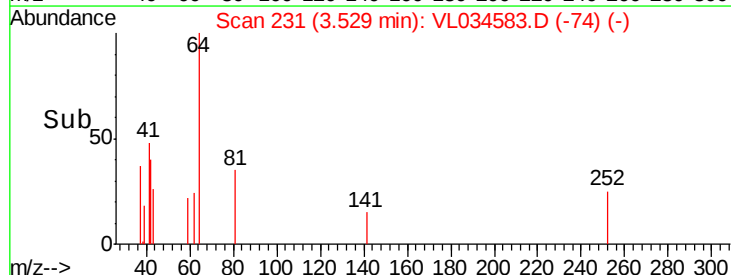
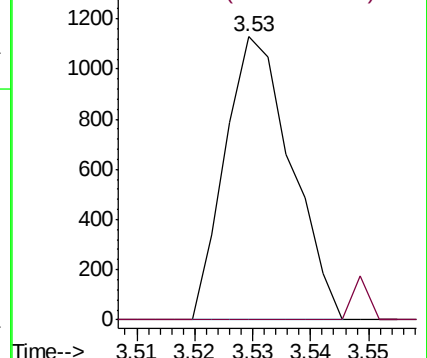
64 100

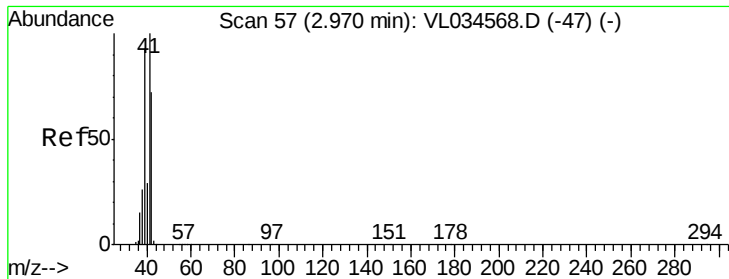
66 0.0 25.0 37.4#



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0





#9

Propene

Concen: 10.713 ppbv

RT: 3.17 min Scan# 120

Delta R.T. 0.20 min

Lab File: VL034583.D

Acq: 4 Feb 2020 17:15

Instrument :

MSVOA_L

ClientSampleId :

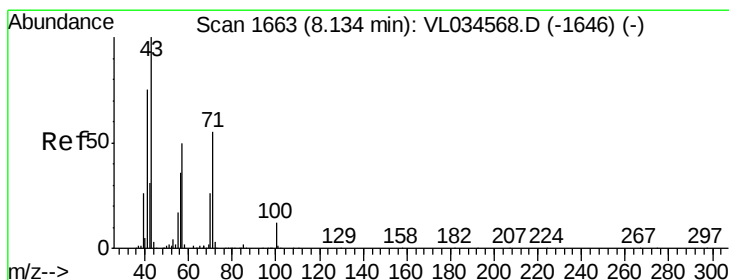
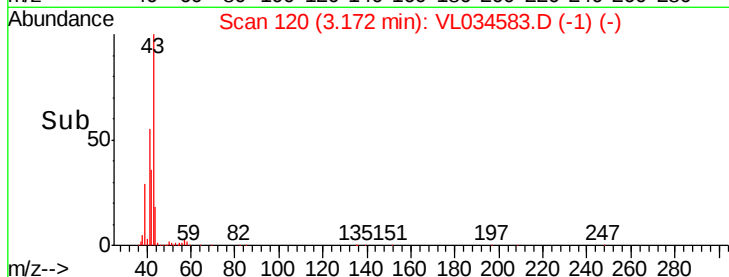
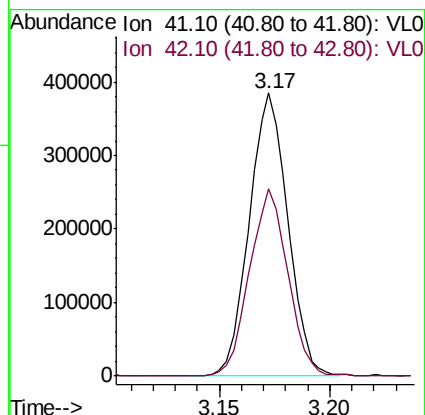
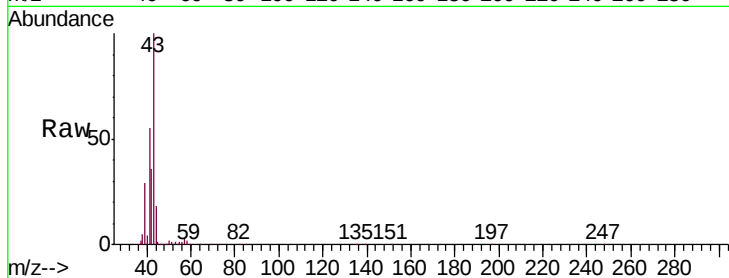
IA-2

Tgt Ion: 41 Resp: 466762

Ion Ratio Lower Upper

41 100

42 66.3 57.0 85.4



#10

Heptane

Concen: 0.096 ppbv

RT: 8.14 min Scan# 1664

Delta R.T. 0.00 min

Lab File: VL034583.D

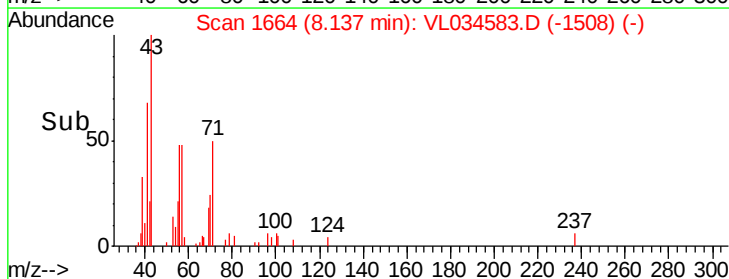
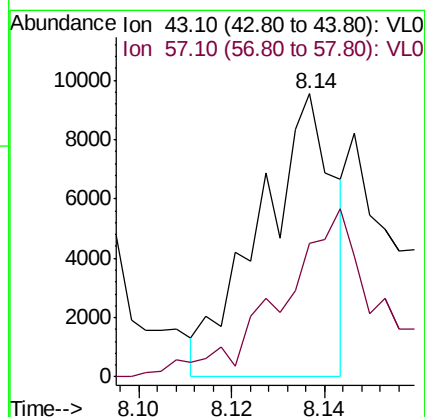
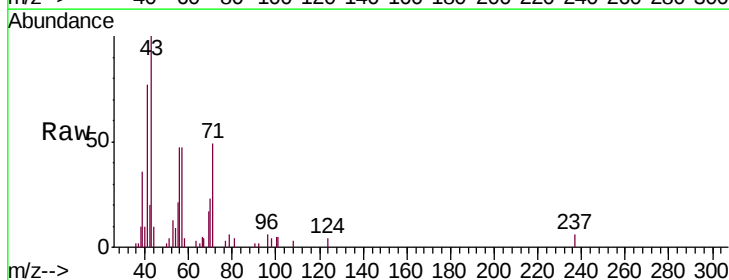
Acq: 4 Feb 2020 17:15

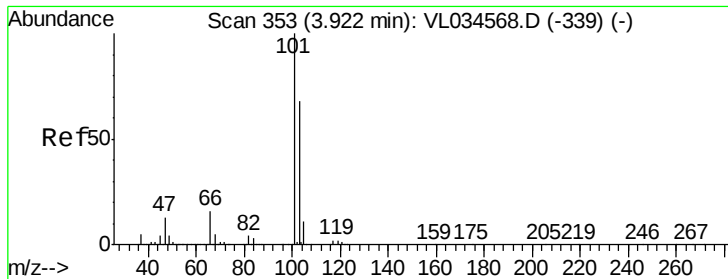
Tgt Ion: 43 Resp: 10579

Ion Ratio Lower Upper

43 100

57 0.0 41.2 61.8#

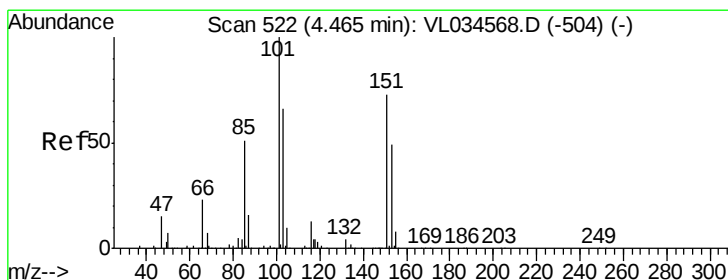
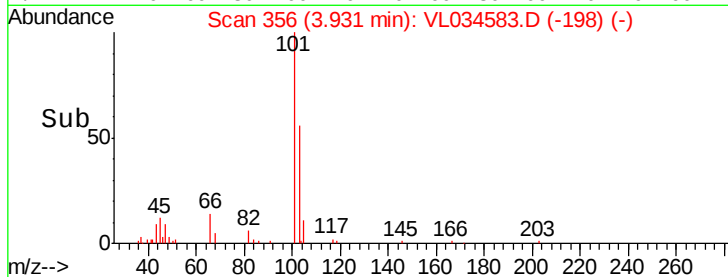
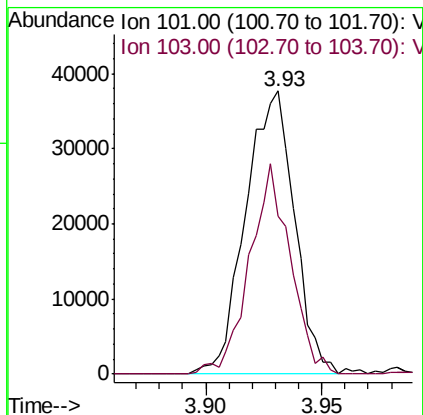
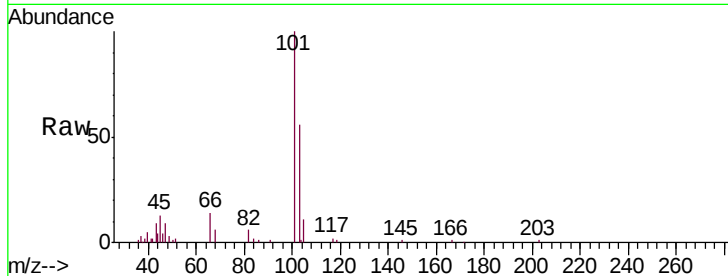




#11
 Trichlorofluoromethane
 Concen: 0.297 ppbv
 RT: 3.93 min Scan# 356
 Delta R.T. 0.01 min
 Lab File: VL034583.D
 Acq: 4 Feb 2020 17:15

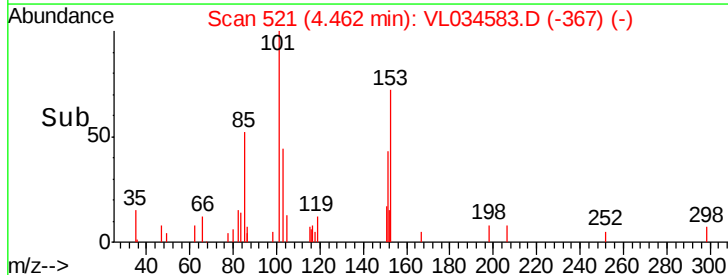
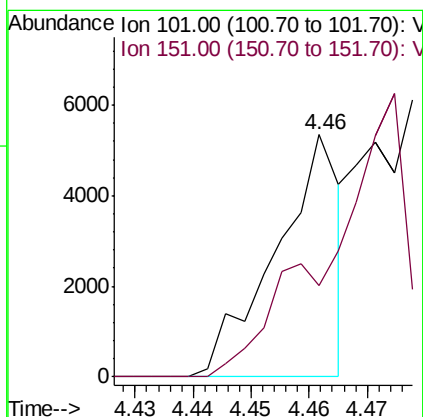
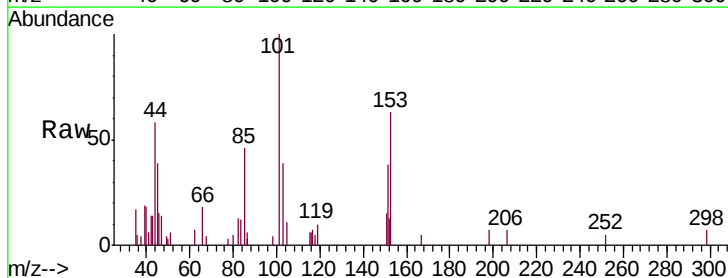
Instrument :
 MSVOA_L
 ClientSampleId :
 IA-2

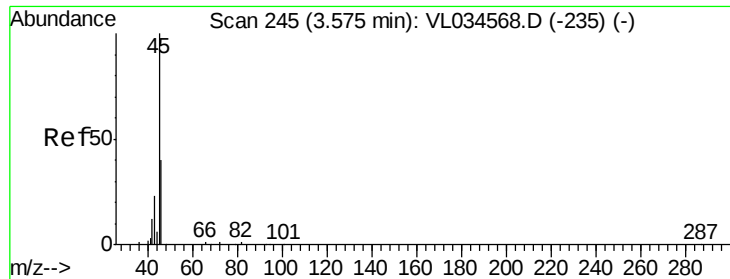
Tgt Ion:101 Resp: 54944
 Ion Ratio Lower Upper
 101 100
 103 55.9 54.4 81.6



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.034 ppbv
 RT: 4.46 min Scan# 521
 Delta R.T. -0.00 min
 Lab File: VL034583.D
 Acq: 4 Feb 2020 17:15

Tgt Ion:101 Resp: 4122
 Ion Ratio Lower Upper
 101 100
 151 0.0 57.0 85.6#





#13

Ethanol

Concen: 600.611 ppbv

RT: 3.59 min Scan# 251

Delta R.T. 0.02 min

Lab File: VL034583.D

Acq: 4 Feb 2020 17:15

Instrument :

MSVOA_L

ClientSampleId :

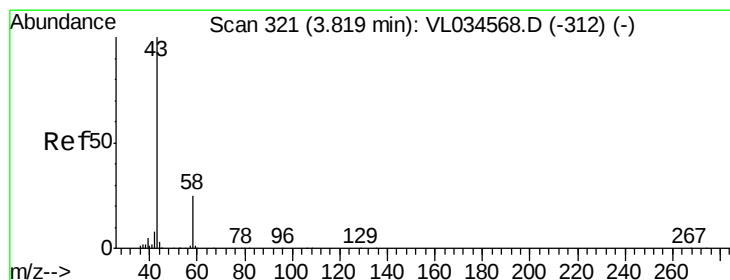
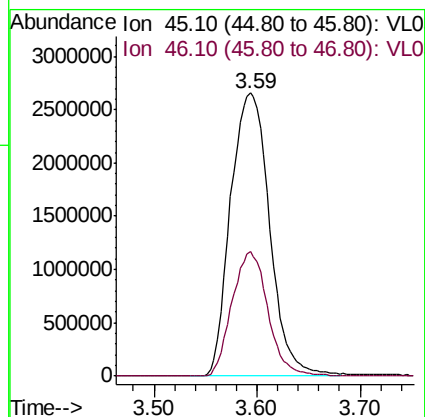
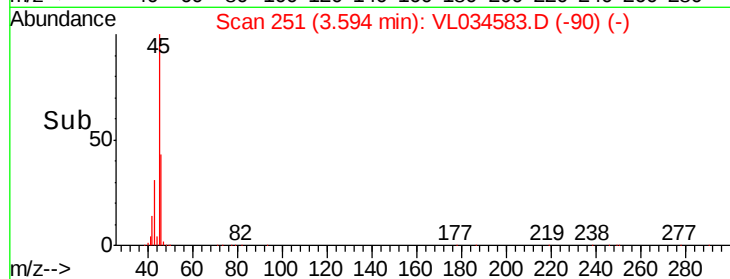
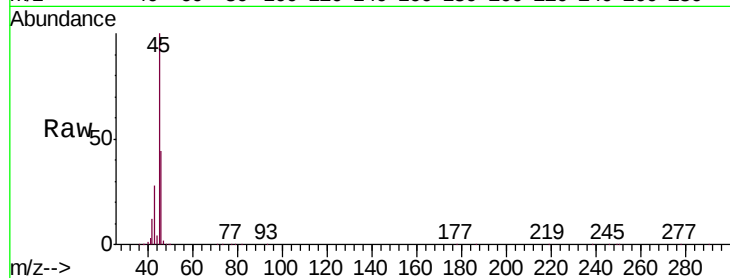
IA-2

Tgt Ion: 45 Resp: 7009345

Ion Ratio Lower Upper

45 100

46 40.9 14.8 59.2



#15

Acetone

Concen: 6.372 ppbv

RT: 3.83 min Scan# 323

Delta R.T. 0.01 min

Lab File: VL034583.D

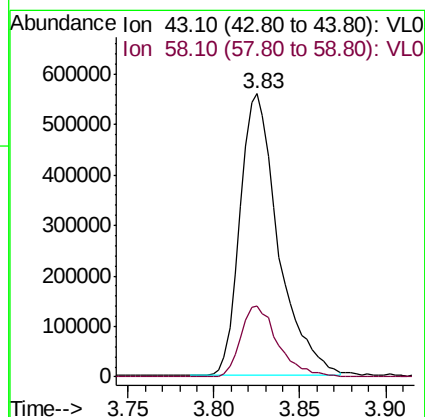
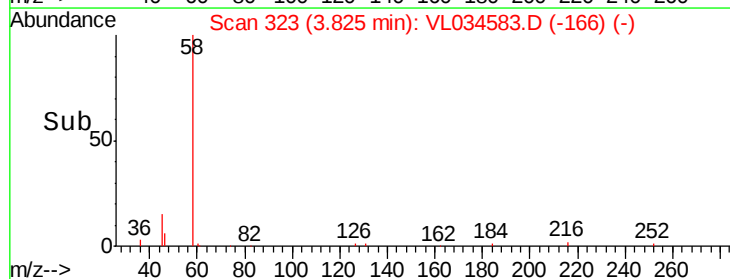
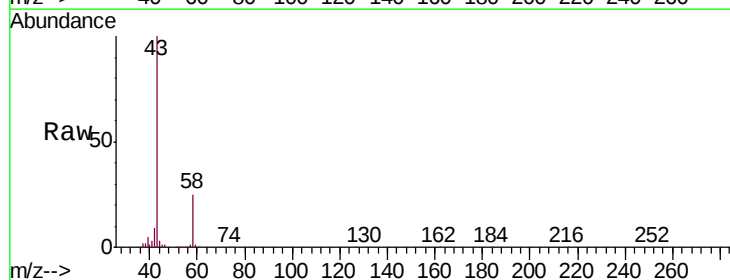
Acq: 4 Feb 2020 17:15

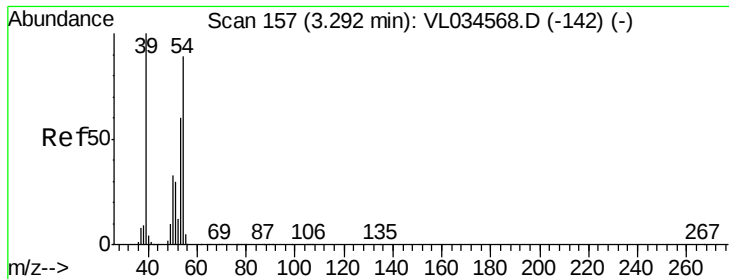
Tgt Ion: 43 Resp: 867222

Ion Ratio Lower Upper

43 100

58 24.6 20.3 30.5

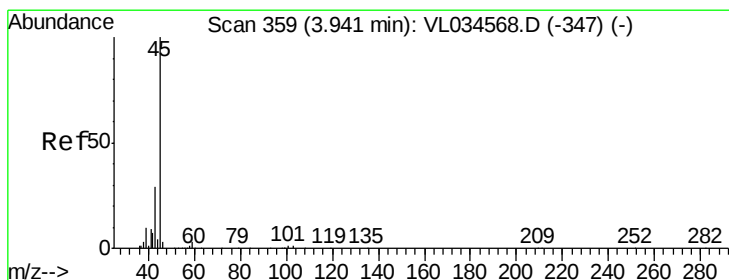
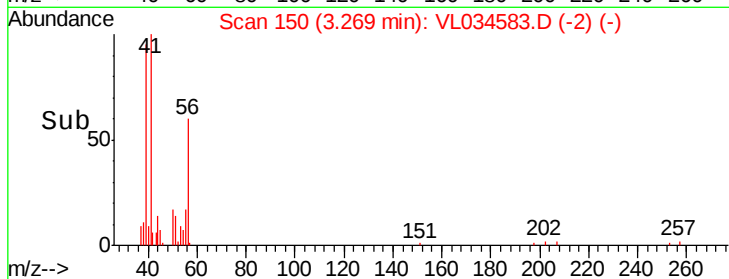
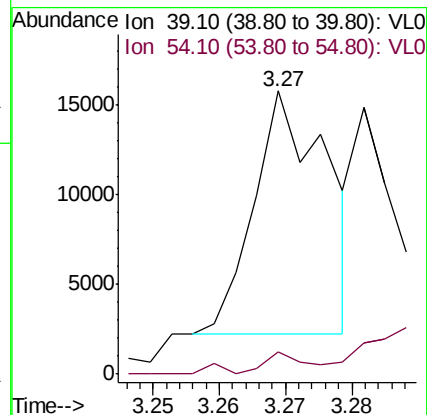
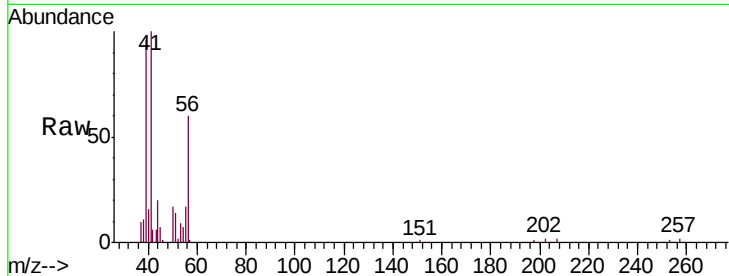




#16
 1,3-Butadiene
 Concen: 0.192 ppbv
 RT: 3.27 min Scan# 150
 Delta R.T. -0.02 min
 Lab File: VL034583.D
 Acq: 4 Feb 2020 17:15

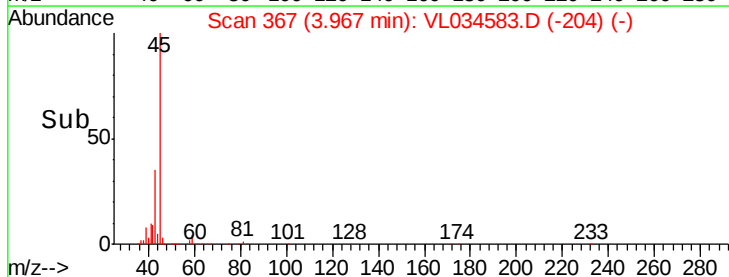
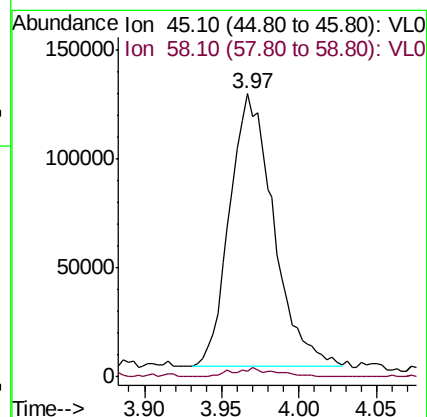
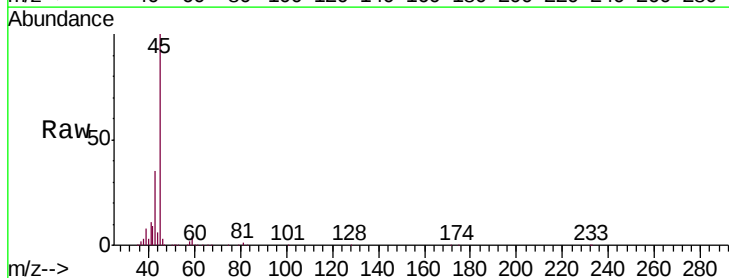
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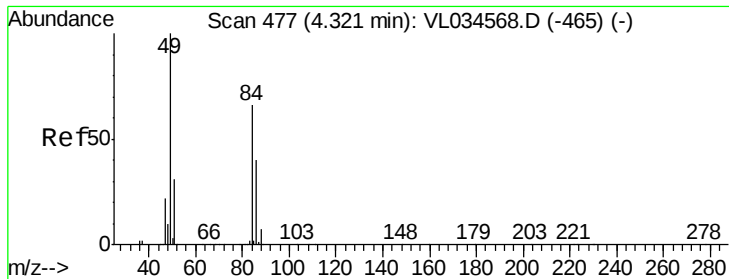
Tgt Ion: 39 Resp: 10382
 Ion Ratio Lower Upper
 39 100
 54 64.2 66.7 100.1#



#19
 Isopropyl Alcohol
 Concen: 3.106 ppbv
 RT: 3.97 min Scan# 367
 Delta R.T. 0.03 min
 Lab File: VL034583.D
 Acq: 4 Feb 2020 17:15

Tgt Ion: 45 Resp: 246687
 Ion Ratio Lower Upper
 45 100
 58 3.5 1.7 2.5#

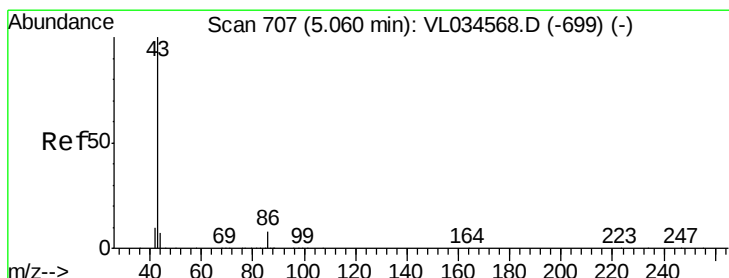
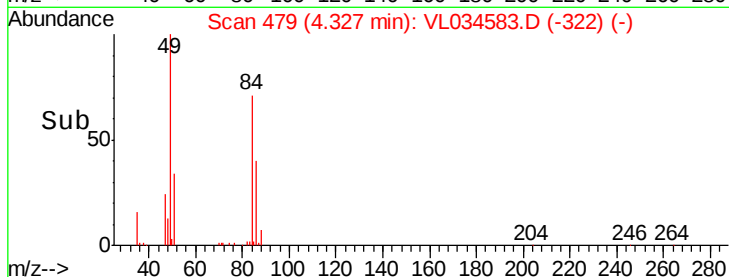
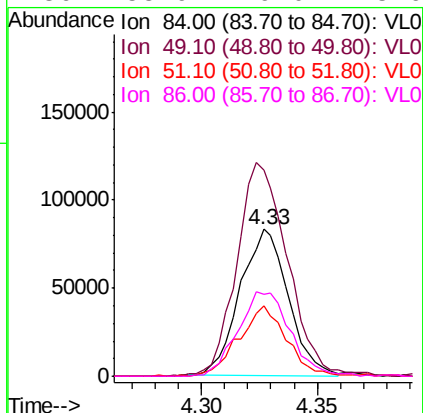
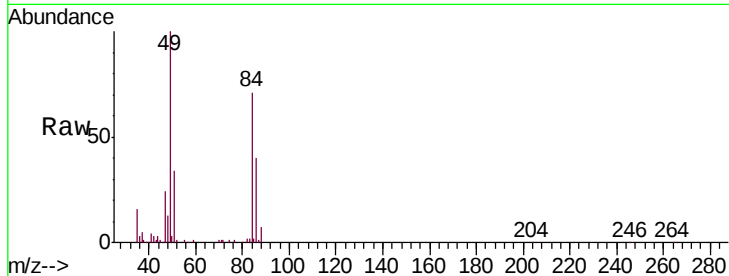




#20
Methylene Chloride
Concen: 2.319 ppbv
RT: 4.33 min Scan# 479
Delta R.T. 0.01 min
Lab File: VL034583.D
Acq: 4 Feb 2020 17:15

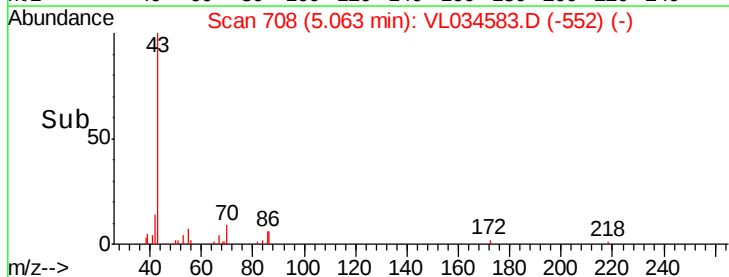
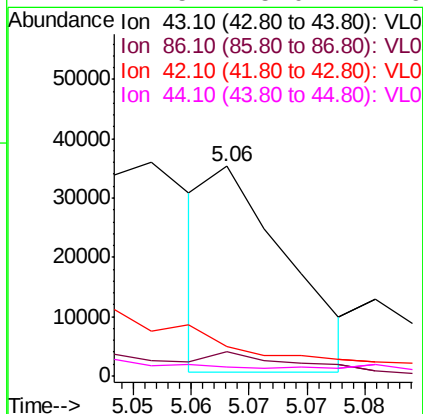
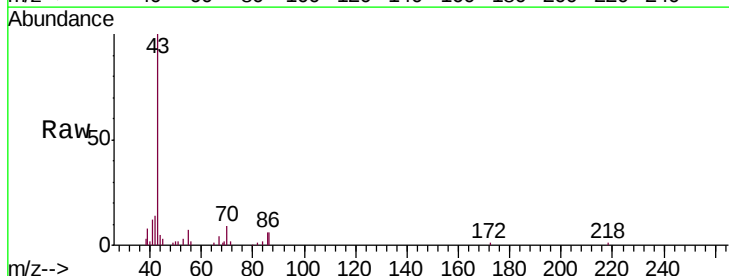
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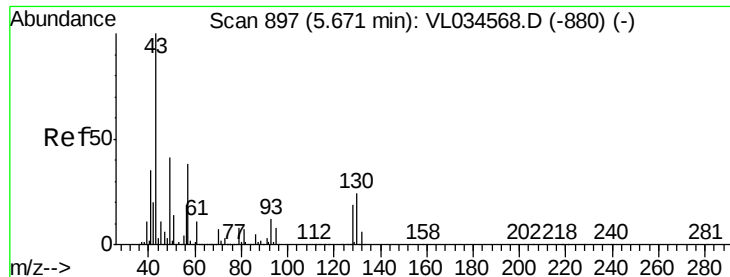
Tgt Ion:	84	Resp:	120182
Ion	Ratio	Lower	Upper
84	100		
49	139.1	122.4	183.6
51	48.0	38.6	57.8
86	55.9	49.0	73.6



#23
Vinyl Acetate
Concen: 0.105 ppbv
RT: 5.06 min Scan# 708
Delta R.T. 0.00 min
Lab File: VL034583.D
Acq: 4 Feb 2020 17:15

Tgt Ion:	43	Resp:	16347
Ion	Ratio	Lower	Upper
43	100		
86	8.9	5.9	8.9#
42	8.4	8.8	13.2#
44	1.5	5.0	7.6#

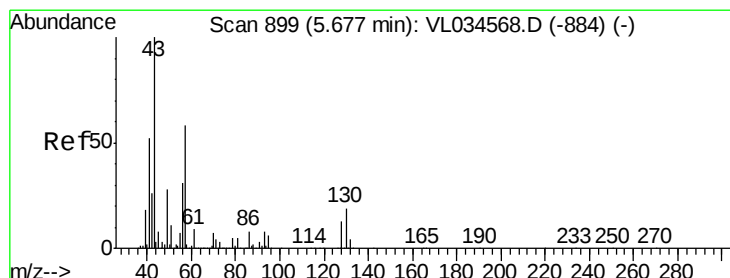
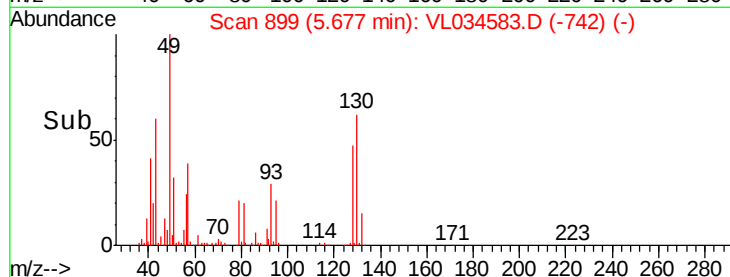
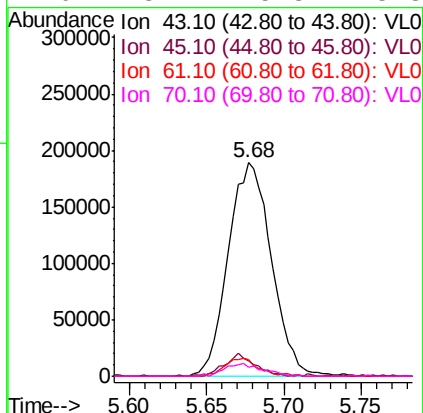
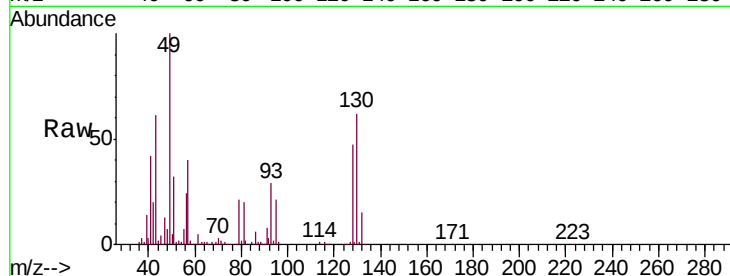




#25
Ethyl Acetate
Concen: 1.657 ppbv
RT: 5.68 min Scan# 899
Delta R.T. 0.01 min
Lab File: VL034583.D
Acq: 4 Feb 2020 17:15

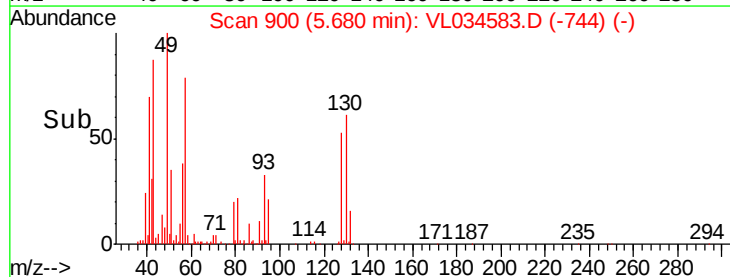
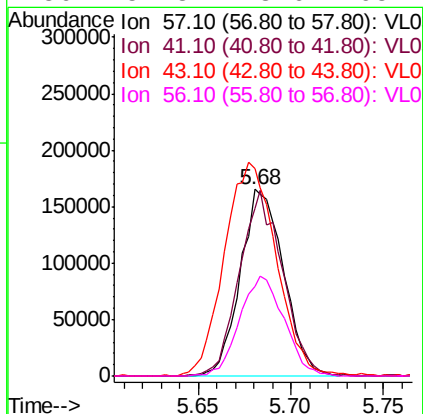
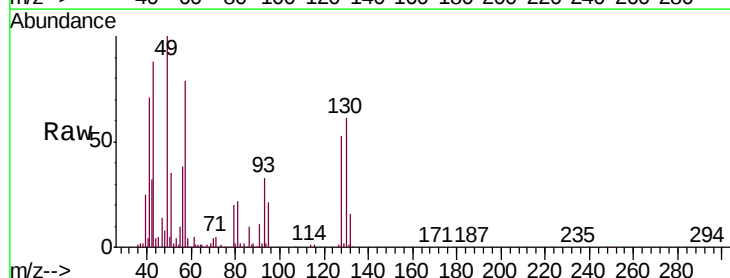
Instrument :
MSVOA_L
ClientSampled :
IA-2

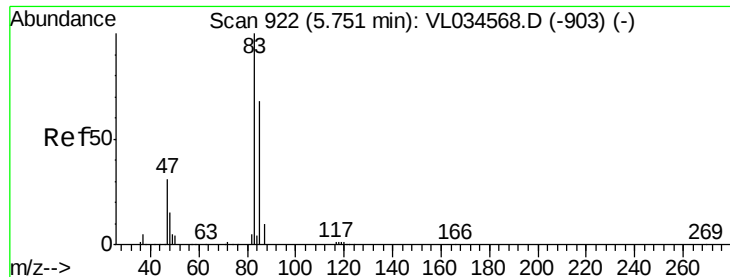
Tgt Ion:	43	Resp:	365083
Ion	Ratio	Lower	Upper
43	100		
45	7.8	8.5	12.7#
61	6.8	7.8	11.6#
70	5.4	5.8	8.8#



#26
Hexane
Concen: 2.902 ppbv
RT: 5.68 min Scan# 900
Delta R.T. 0.00 min
Lab File: VL034583.D
Acq: 4 Feb 2020 17:15

Tgt Ion:	57	Resp:	267823
Ion	Ratio	Lower	Upper
57	100		
41	99.1	76.2	114.2
43	136.8	189.9	284.9#
56	54.8	43.6	65.4

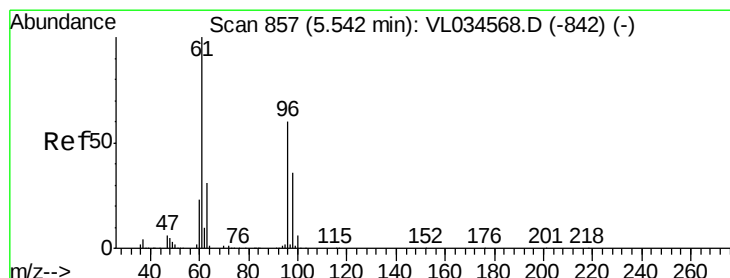
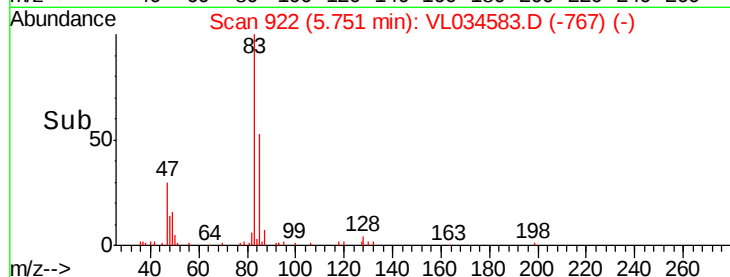
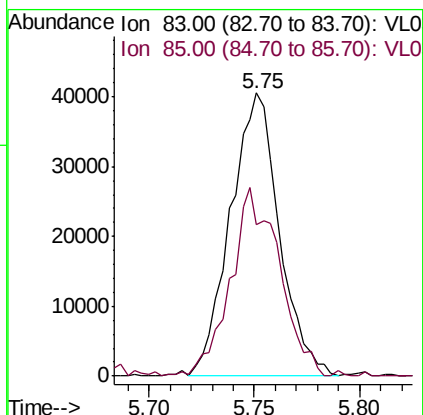
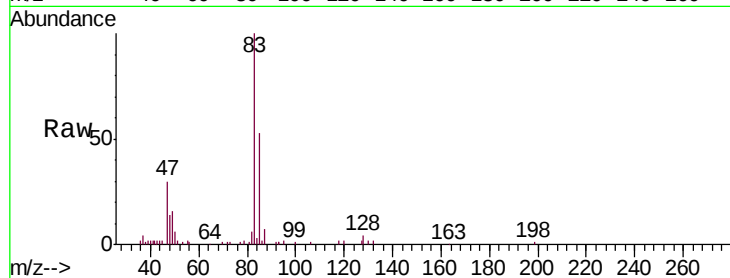




#29
Chloroform
Concen: 0.401 ppbv
RT: 5.75 min Scan# 922
Delta R.T. -0.00 min
Lab File: VL034583.D
Acq: 4 Feb 2020 17:15

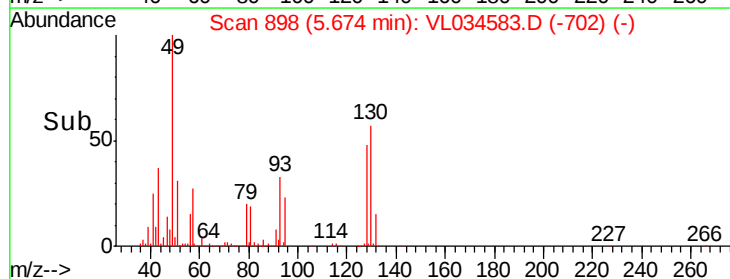
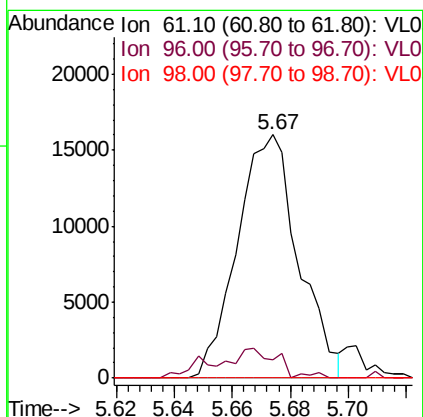
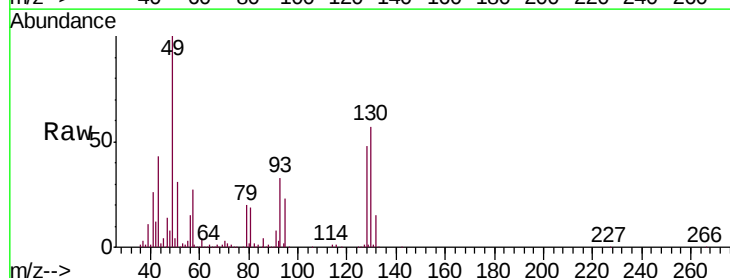
Instrument :
MSVOA_L
ClientSampleId :
IA-2

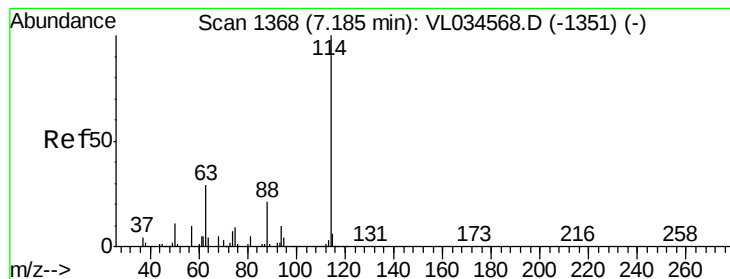
Tgt Ion: 83 Resp: 65458
Ion Ratio Lower Upper
83 100
85 52.7 54.0 81.0#



#31
cis-1,2-Dichloroethene
Concen: 0.244 ppbv
RT: 5.67 min Scan# 898
Delta R.T. 0.13 min
Lab File: VL034583.D
Acq: 4 Feb 2020 17:15

Tgt Ion: 61 Resp: 23402
Ion Ratio Lower Upper
61 100
96 7.4 48.0 72.0#
98 0.0 28.6 43.0#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.19 min Scan# 1369

Delta R.T. 0.00 min

Lab File: VL034583.D

Acq: 4 Feb 2020 17:15

Instrument :

MSVOA_L

ClientSampleId :

IA-2

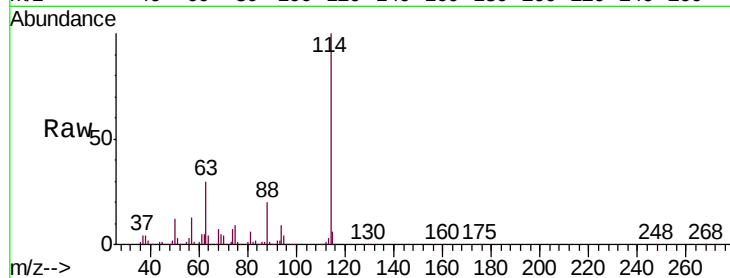
Tgt Ion:114 Resp: 1869928

Ion Ratio Lower Upper

114 100

63 29.8 24.1 36.1

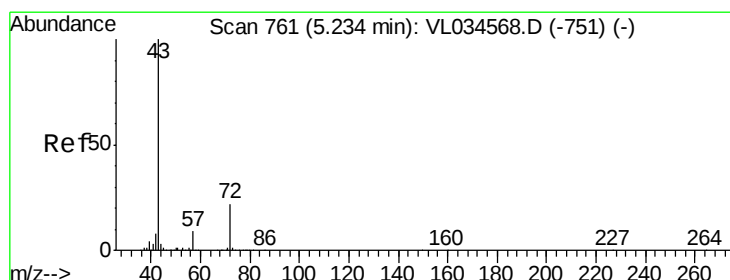
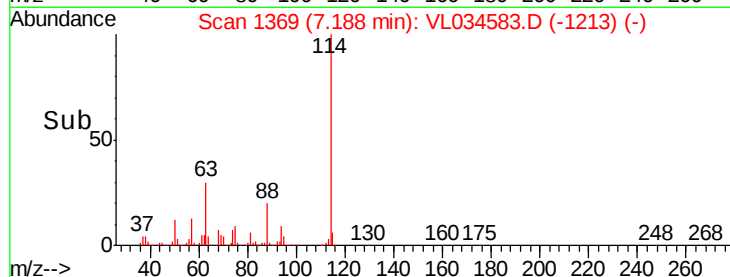
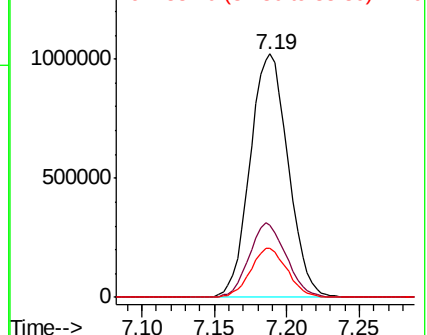
88 19.6 15.9 23.9



Abundance Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 0.568 ppbv

RT: 5.24 min Scan# 763

Delta R.T. 0.01 min

Lab File: VL034583.D

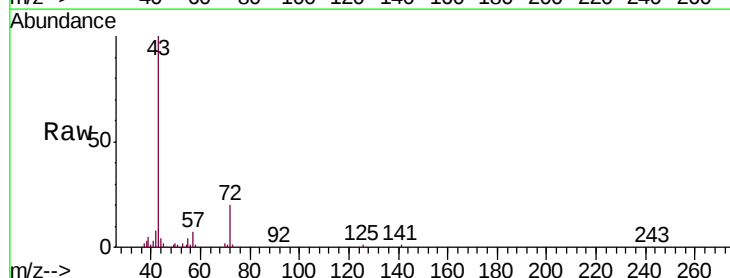
Acq: 4 Feb 2020 17:15

Tgt Ion: 43 Resp: 77066

Ion Ratio Lower Upper

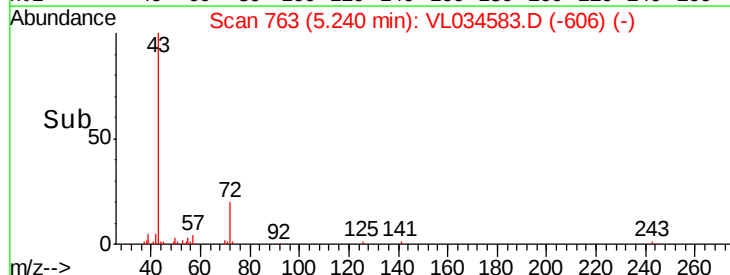
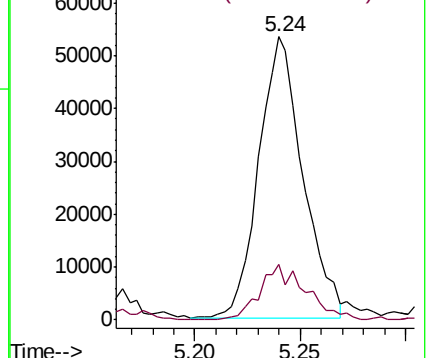
43 100

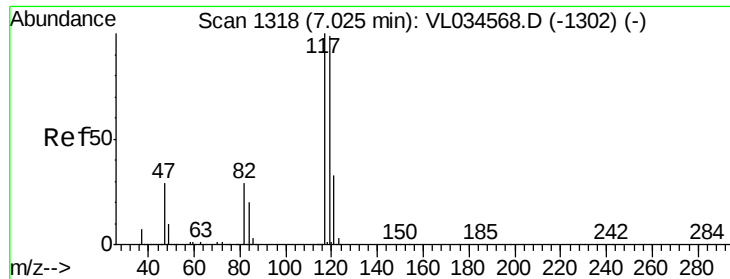
72 20.8 17.2 25.8



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

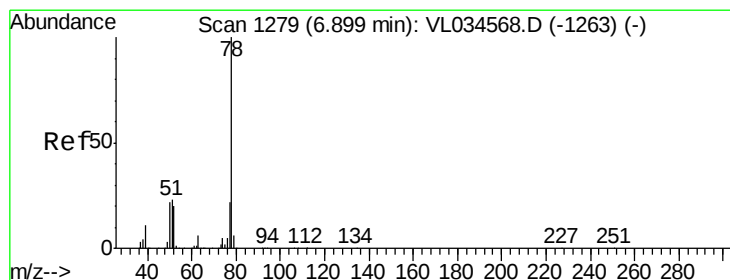
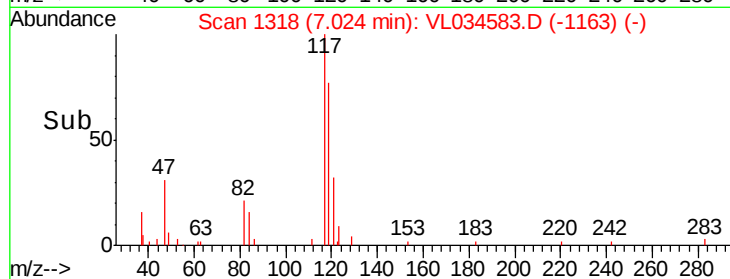
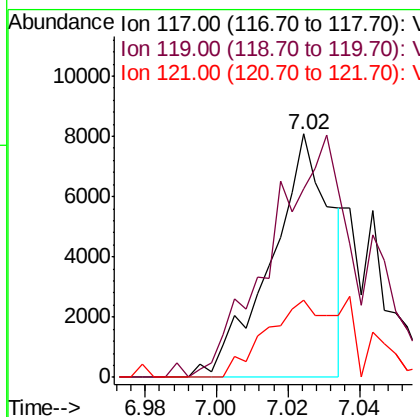
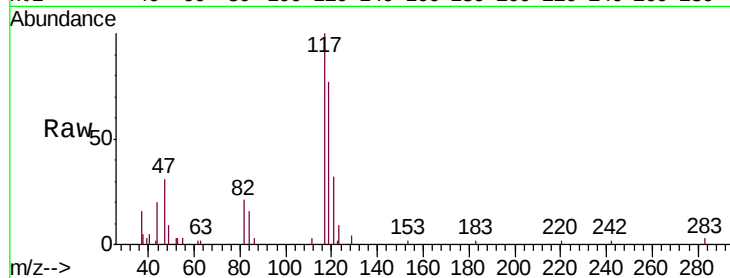




#35
Carbon Tetrachloride
Concen: 0.052 ppbv
RT: 7.02 min Scan# 1318
Delta R.T. -0.00 min
Lab File: VL034583.D
Acq: 4 Feb 2020 17:15

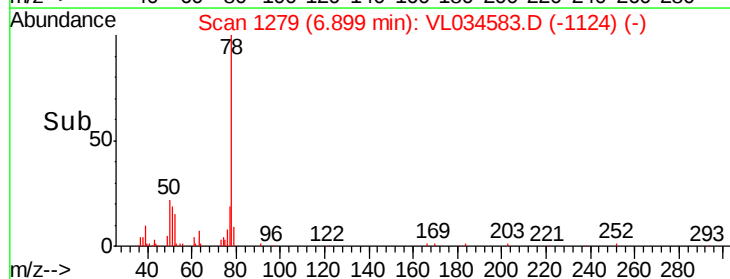
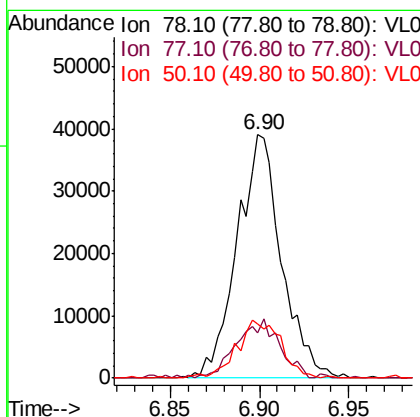
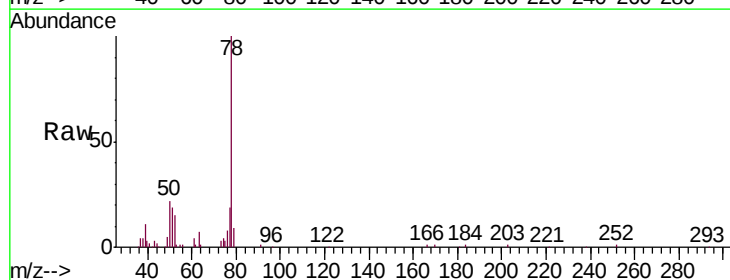
Instrument :
MSVOA_L
ClientSampled :
IA-2

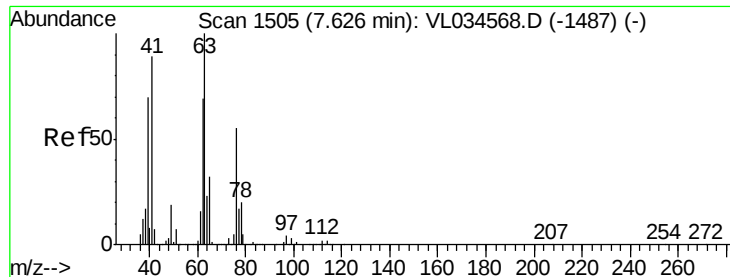
Tgt Ion: 117 Resp: 9361
Ion Ratio Lower Upper
117 100
119 77.5 79.5 119.3#
121 31.5 26.2 39.2



#36
Benzene
Concen: 0.406 ppbv
RT: 6.90 min Scan# 1279
Delta R.T. -0.00 min
Lab File: VL034583.D
Acq: 4 Feb 2020 17:15

Tgt Ion: 78 Resp: 67557
Ion Ratio Lower Upper
78 100
77 18.8 17.3 25.9
50 22.1 17.4 26.2





#39

1,2-Dichloropropane

Concen: 7.992 ppbv

RT: 7.19 min Scan# 1368

Delta R.T. -0.44 min

Lab File: VL034583.D

Acq: 4 Feb 2020 17:15

Instrument :

MSVOA_L

ClientSampleId :

IA-2

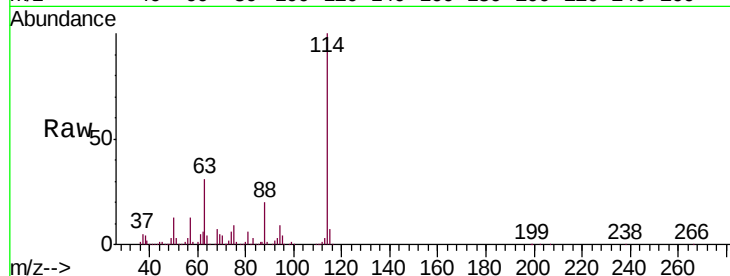
Tgt Ion: 63 Resp: 550949

Ion Ratio Lower Upper

63 100

41 0.0 71.0 106.4#

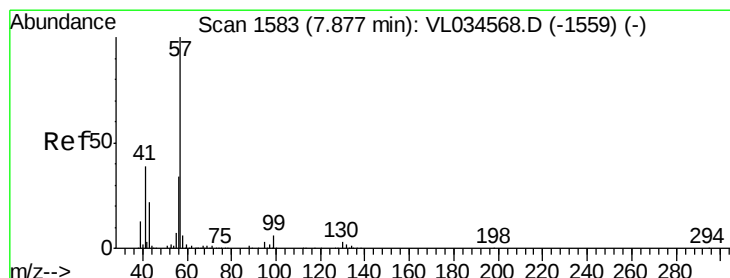
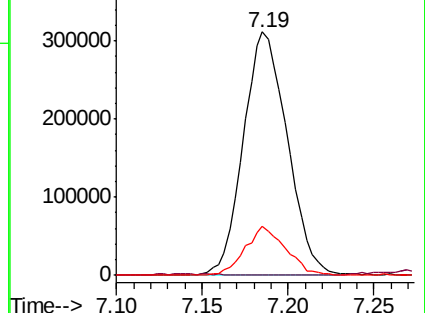
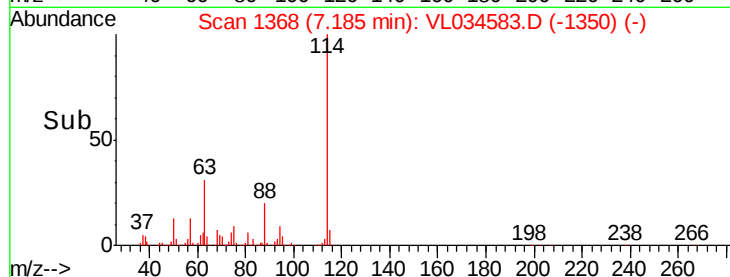
62 19.9 55.4 83.0#



Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0



#44

2,2,4-Trimethylpentane

Concen: 0.054 ppbv

RT: 7.88 min Scan# 1584

Delta R.T. 0.00 min

Lab File: VL034583.D

Acq: 4 Feb 2020 17:15

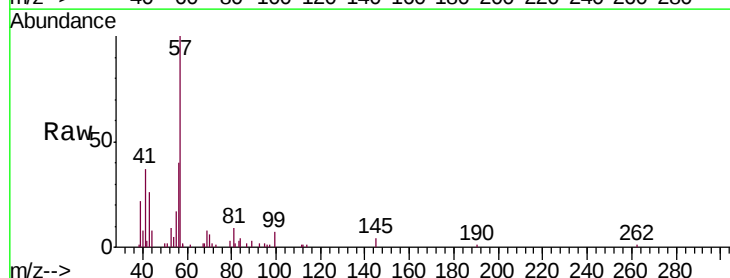
Tgt Ion: 57 Resp: 16282

Ion Ratio Lower Upper

57 100

41 122.9 28.9 43.3#

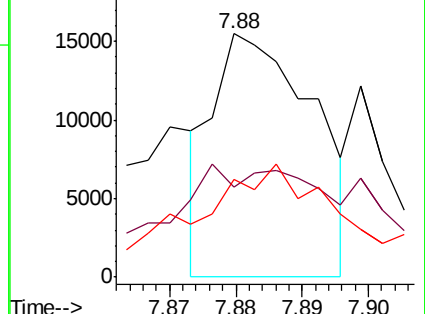
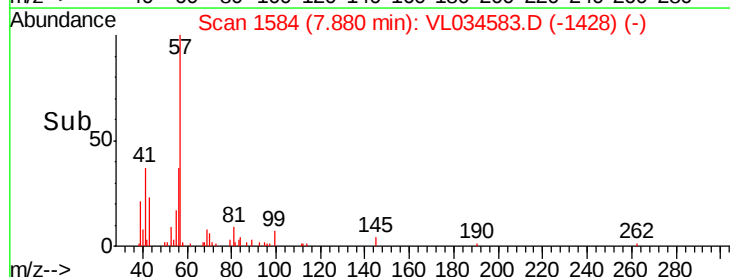
56 94.4 25.5 38.3#

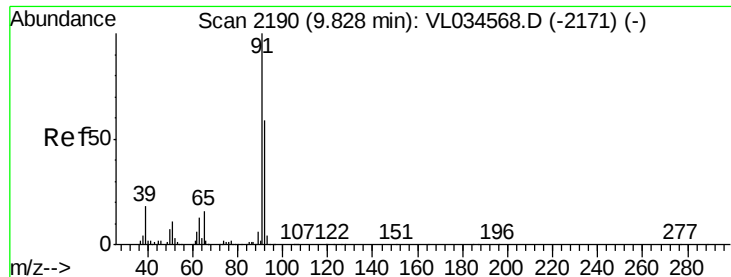


Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 56.10 (55.80 to 56.80): VL0





#53

Toluene

Concen: 1.354 ppbv

RT: 9.83 min Scan# 2191

Delta R.T. 0.00 min

Lab File: VL034583.D

Acq: 4 Feb 2020 17:15

Instrument :

MSVOA_L

ClientSampleId :

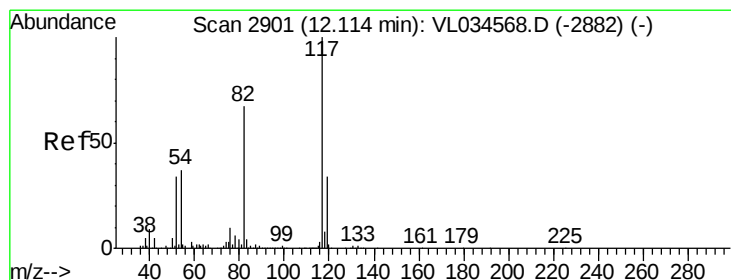
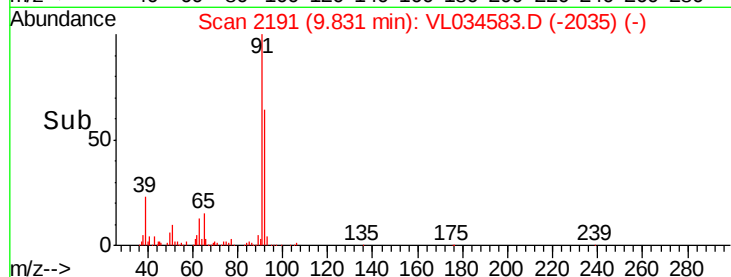
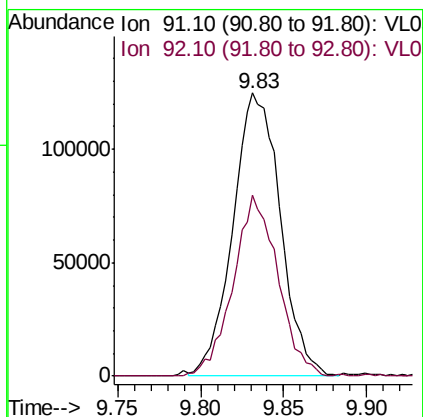
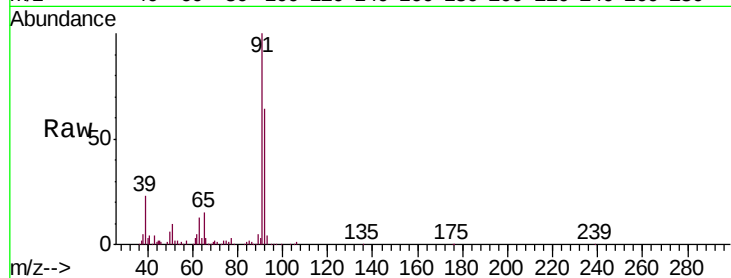
IA-2

Tgt Ion: 91 Resp: 247357

Ion Ratio Lower Upper

91 100

92 60.7 48.2 72.2



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.12 min Scan# 2904

Delta R.T. 0.01 min

Lab File: VL034583.D

Acq: 4 Feb 2020 17:15

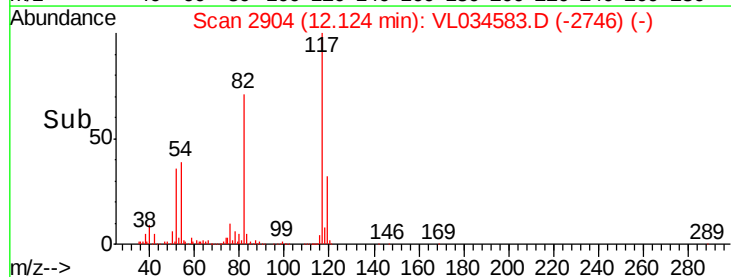
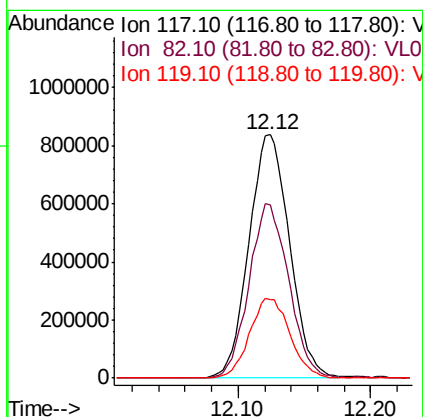
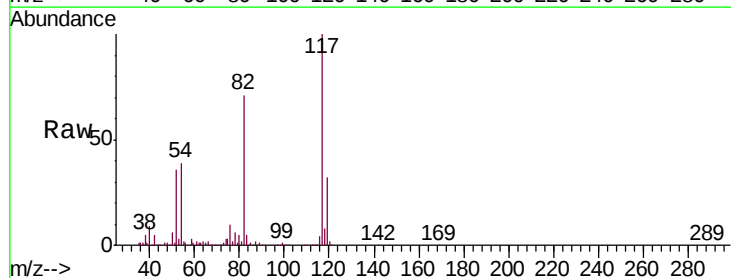
Tgt Ion: 117 Resp: 1791223

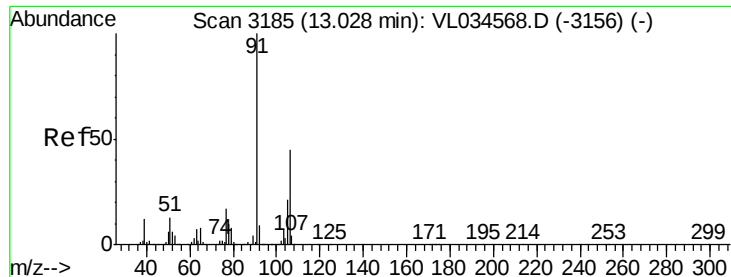
Ion Ratio Lower Upper

117 100

82 70.7 54.2 81.4

119 33.0 26.1 39.1

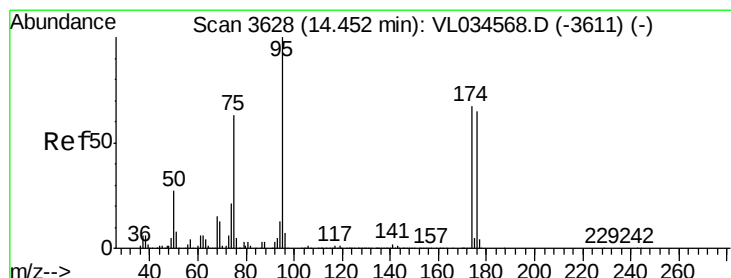
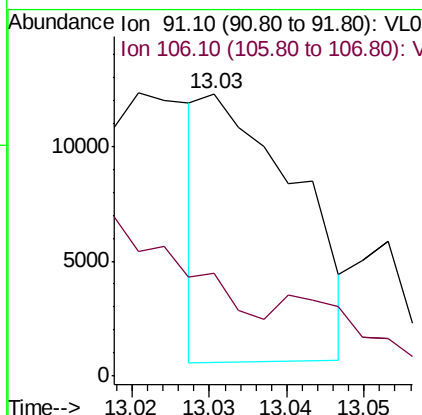
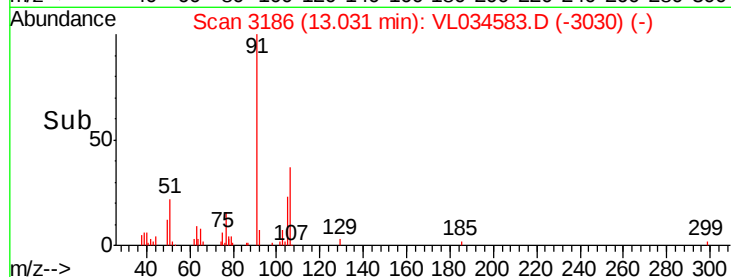
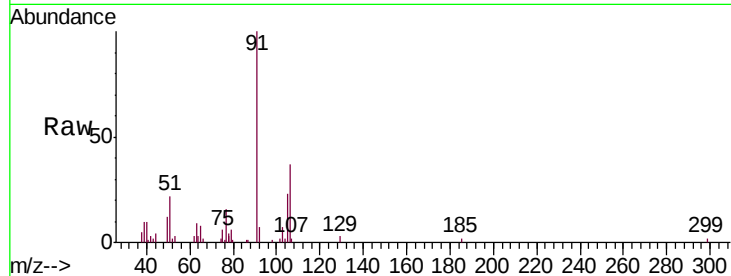




#59
m/p-Xylene
Concen: 0.046 ppbv
RT: 13.03 min Scan# 3186
Delta R.T. 0.00 min
Lab File: VL034583.D
Acq: 4 Feb 2020 17:15

Instrument :
MSVOA_L
ClientSampled :
IA-2

Tgt Ion: 91 Resp: 9742
Ion Ratio Lower Upper
91 100
106 0.0 35.3 52.9#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.646 ppbv
RT: 14.46 min Scan# 3631
Delta R.T. 0.01 min
Lab File: VL034583.D
Acq: 4 Feb 2020 17:15

Tgt Ion: 95 Resp: 1611641
Ion Ratio Lower Upper
95 100
174 64.2 52.3 78.5
175 4.6 3.8 5.6

