

Data File : VL034581.D
Acq On : 4 Feb 2020 15:55
Operator : SY/AP
Sample : L1356-01DUP
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-1DUP

Quant Time: Feb 05 05:44:12 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	5.67	49	905117	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	1864699	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.13	117	1795834	10.00	ppbv	0.01

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.46 95 1602872 10.56 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 105.60%

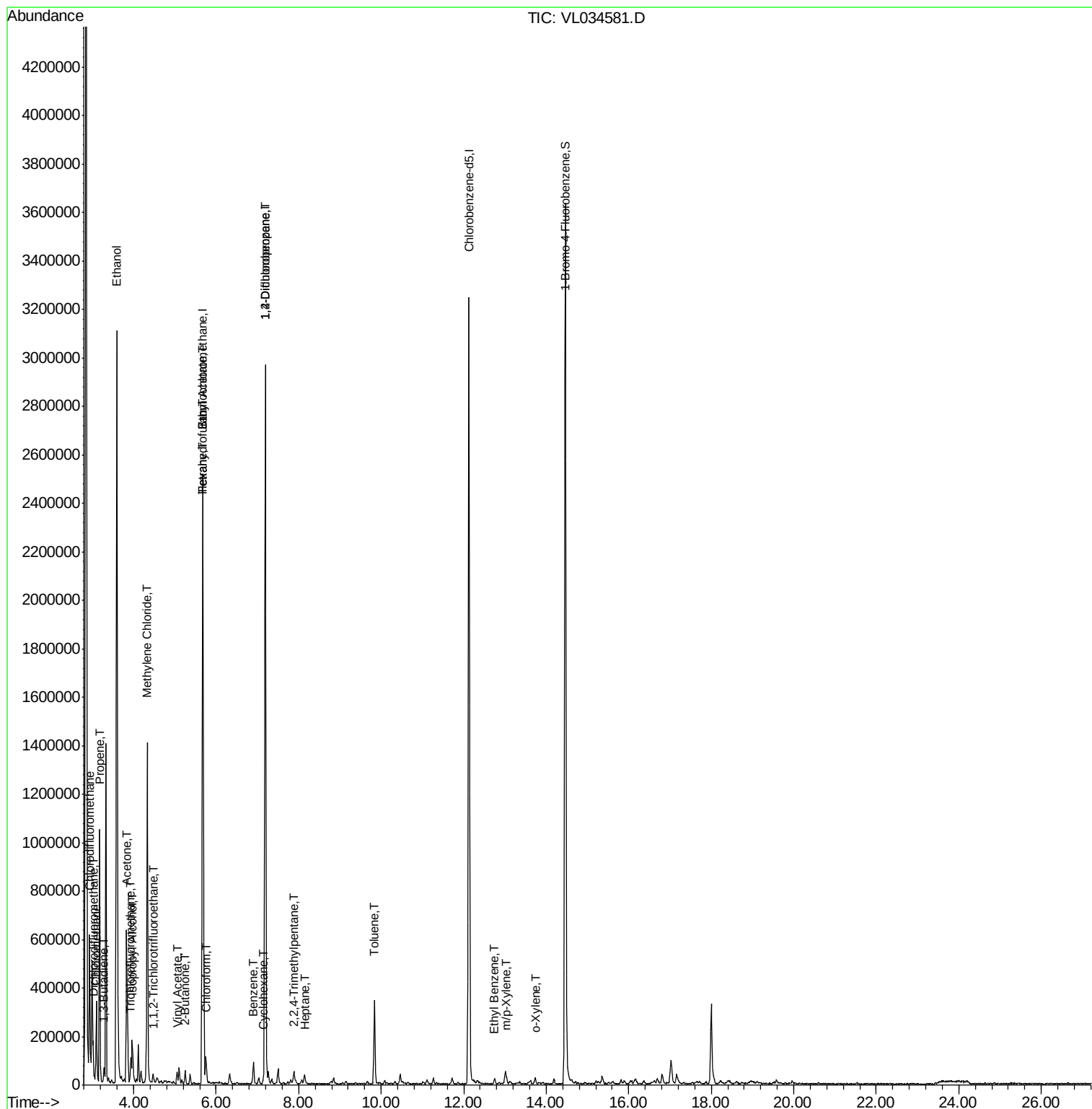
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.02	85	96909	0.486	ppbv	90
3) Chlorodifluoromethane	2.93	51	358464	3.278	ppbv #	60
4) Chloromethane	3.11	50	30247	0.452	ppbv	93
9) Propene	3.18	41	273874	6.432	ppbv	90
10) Heptane	8.14	43	3490	0.033	ppbv #	26
11) Trichlorofluoromethane	3.93	101	60071	0.332	ppbv	88
12) 1,1,2-Trichlorotrifluoroet	4.47	101	8123	0.069	ppbv #	68
13) Ethanol	3.59	45	3378000	296.155	ppbv	99
15) Acetone	3.83	43	643882	4.840	ppbv	97
16) 1,3-Butadiene	3.28	39	17375	0.329	ppbv #	69
19) Isopropyl Alcohol	3.96	45	177725	2.289	ppbv #	93
20) Methylene Chloride	4.33	84	447068	8.826	ppbv	94
23) Vinyl Acetate	5.06	43	21906	0.144	ppbv #	16
25) Ethyl Acetate	5.68	43	364480	1.692	ppbv #	89
26) Hexane	5.69	57	321901	3.569	ppbv #	54
29) Chloroform	5.75	83	67080	0.421	ppbv	84
30) Cyclohexane	7.14	84	2457	0.037	ppbv #	1
34) 2-Butanone	5.25	43	56919	0.420	ppbv	98
36) Benzene	6.90	78	38409	0.232	ppbv	97
39) 1,2-Dichloropropane	7.19	63	546516	7.950	ppbv #	19
41) Tetrahydrofuran	5.69	42	136100	1.927	ppbv #	48
44) 2,2,4-Trimethylpentane	7.88	57	22366	0.074	ppbv #	16
53) Toluene	9.83	91	131006	0.719	ppbv #	21
58) Ethyl Benzene	12.74	91	8204	0.034	ppbv	93
59) m/p-Xylene	13.04	91	9259	0.044	ppbv #	32
60) o-Xylene	13.73	91	10196	0.048	ppbv #	59

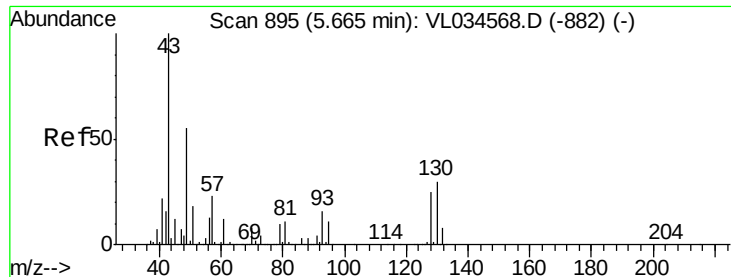
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 896

Delta R.T. 0.00 min

Lab File: VL034581.D

Acq: 4 Feb 2020 15:55

Instrument :

MSVOA_L

ClientSampleId :

IA-1DUP

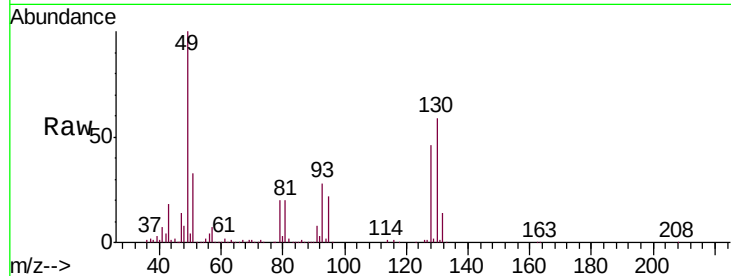
Tgt Ion: 49 Resp: 905117

Ion Ratio Lower Upper

49 100

128 45.5 22.7 68.1

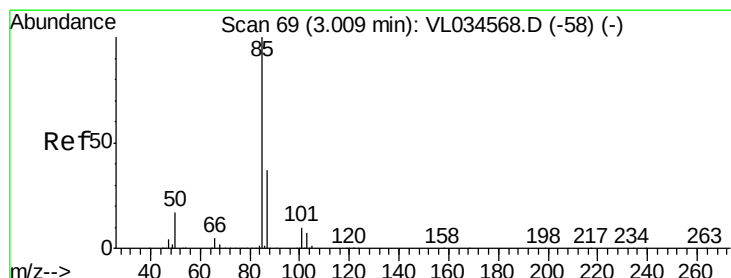
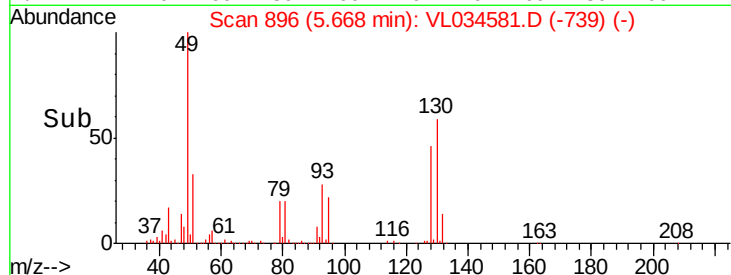
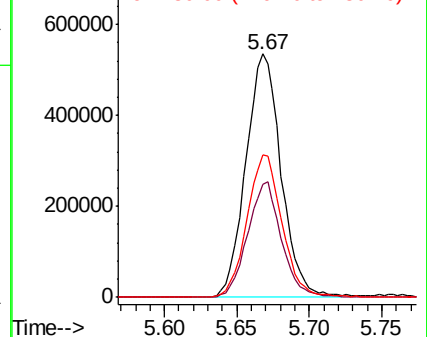
130 58.6 28.6 85.8



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: 0.486 ppbv

RT: 3.02 min Scan# 71

Delta R.T. 0.01 min

Lab File: VL034581.D

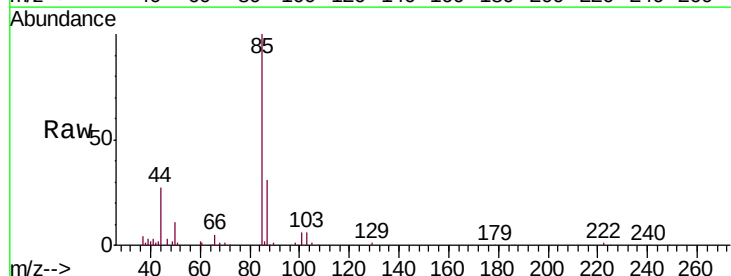
Acq: 4 Feb 2020 15:55

Tgt Ion: 85 Resp: 96909

Ion Ratio Lower Upper

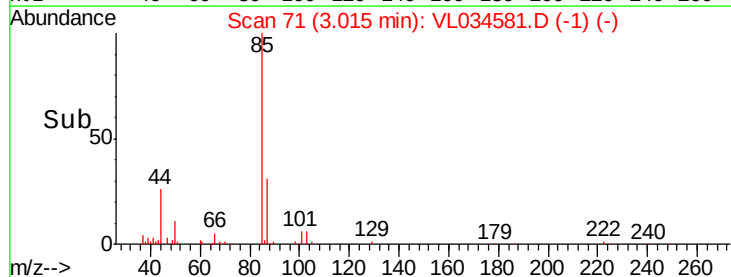
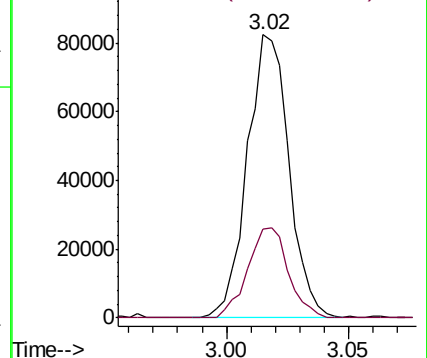
85 100

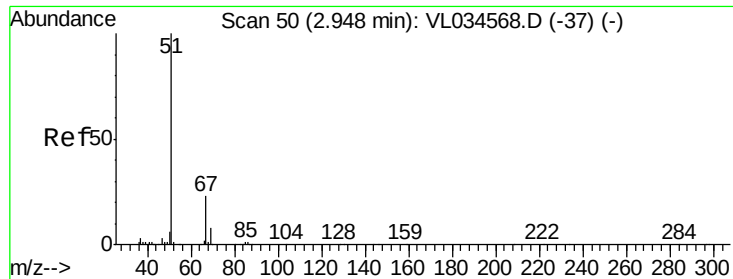
87 31.2 29.5 44.3



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 3.278 ppbv

RT: 2.93 min Scan# 45

Delta R.T. -0.02 min

Lab File: VL034581.D

Acq: 4 Feb 2020 15:55

Instrument :

MSVOA_L

ClientSampled :

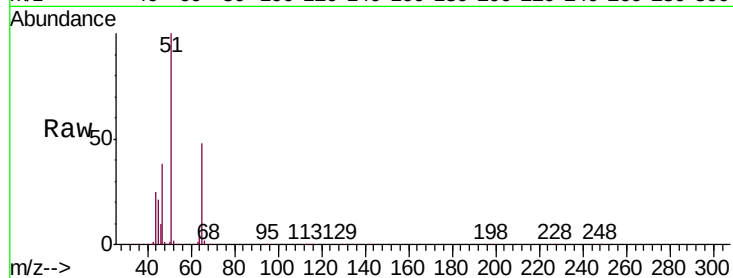
IA-1DUP

Tgt Ion: 51 Resp: 358464

Ion Ratio Lower Upper

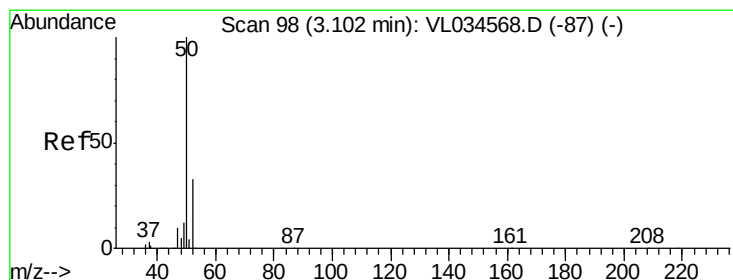
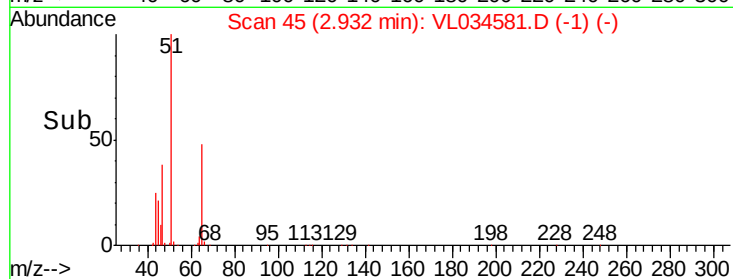
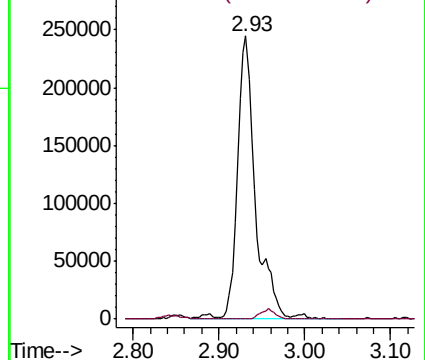
51 100

67 3.0 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: 0.452 ppbv

RT: 3.11 min Scan# 101

Delta R.T. 0.01 min

Lab File: VL034581.D

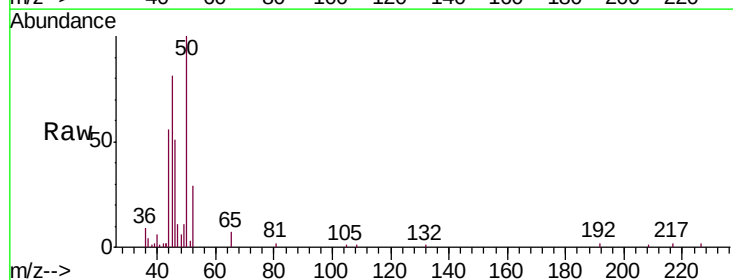
Acq: 4 Feb 2020 15:55

Tgt Ion: 50 Resp: 30247

Ion Ratio Lower Upper

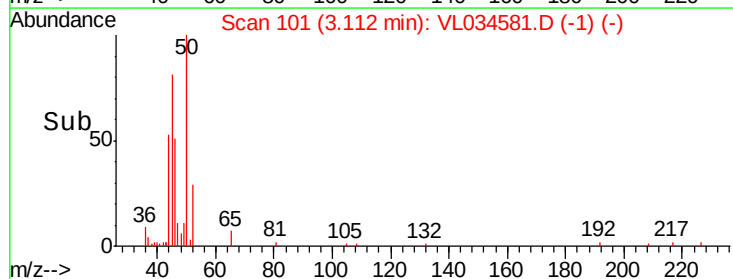
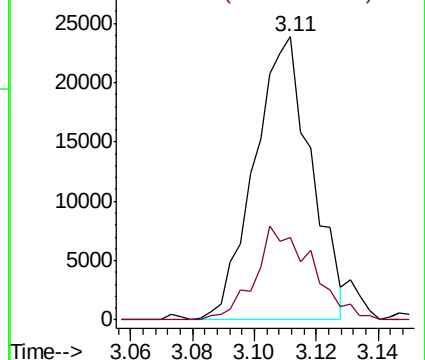
50 100

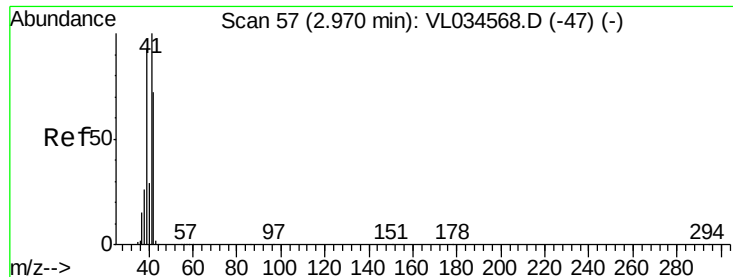
52 29.3 26.6 39.8



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 6.432 ppbv

RT: 3.18 min Scan# 121

Delta R.T. 0.21 min

Lab File: VL034581.D

Acq: 4 Feb 2020 15:55

Instrument :

MSVOA_L

ClientSampleId :

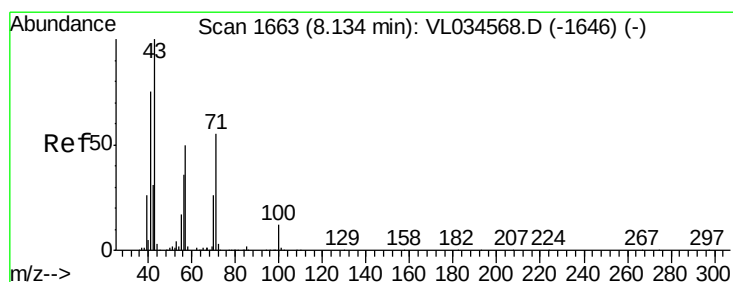
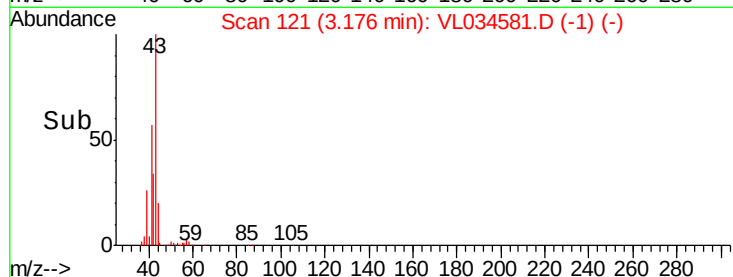
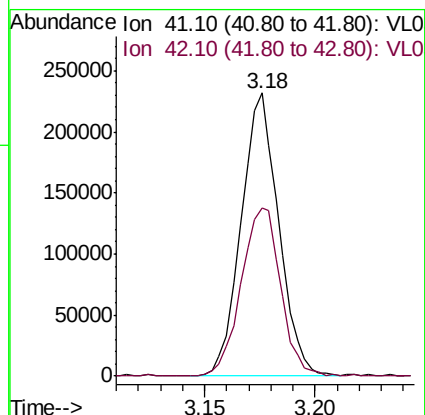
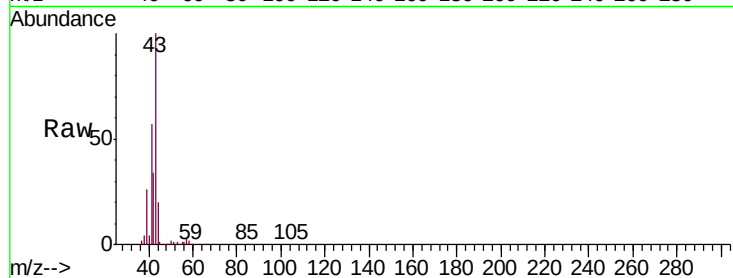
IA-1DUP

Tgt Ion: 41 Resp: 273874

Ion Ratio Lower Upper

41 100

42 62.7 57.0 85.4



#10

Heptane

Concen: 0.033 ppbv

RT: 8.14 min Scan# 1665

Delta R.T. 0.01 min

Lab File: VL034581.D

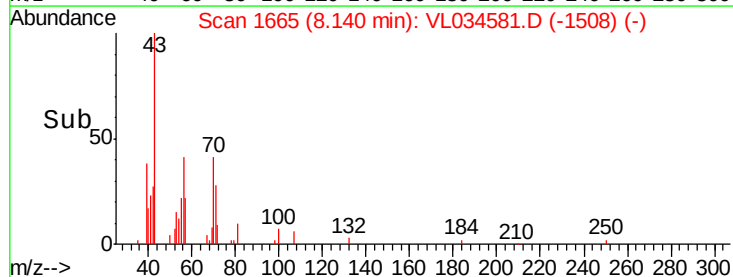
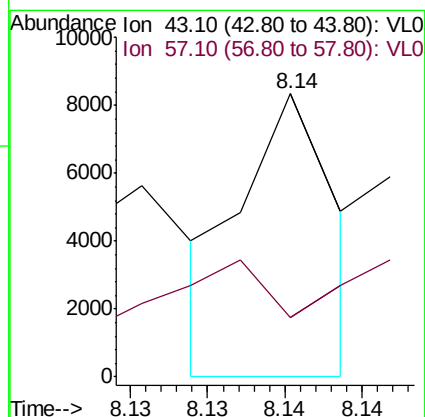
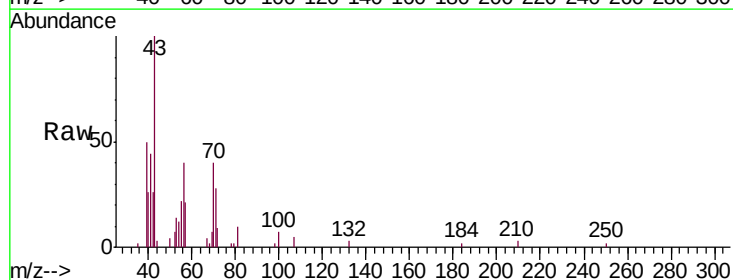
Acq: 4 Feb 2020 15:55

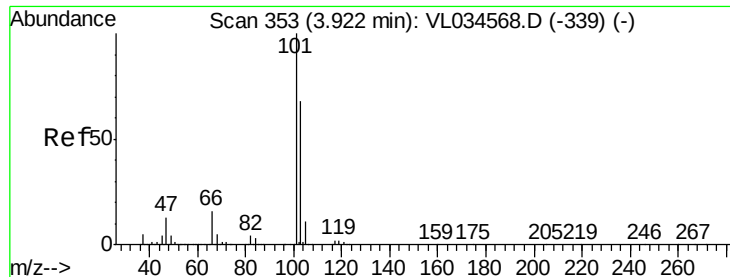
Tgt Ion: 43 Resp: 3490

Ion Ratio Lower Upper

43 100

57 0.0 41.2 61.8#

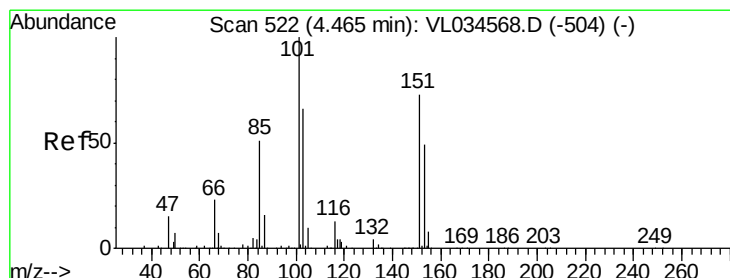
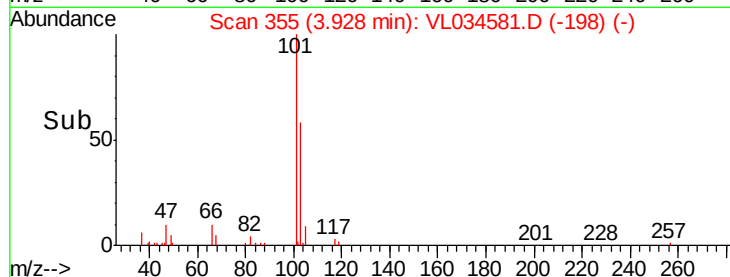
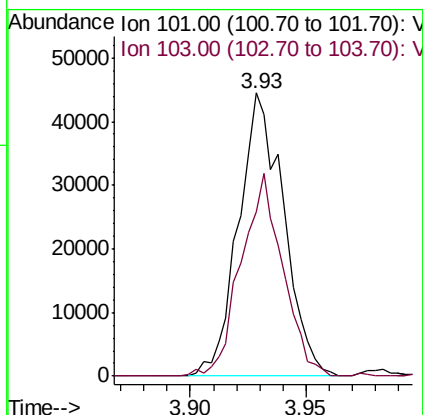
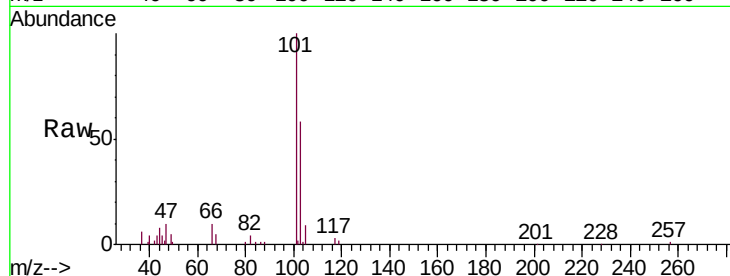




#11
 Trichlorofluoromethane
 Concen: 0.332 ppbv
 RT: 3.93 min Scan# 355
 Delta R.T. 0.01 min
 Lab File: VL034581.D
 Acq: 4 Feb 2020 15:55

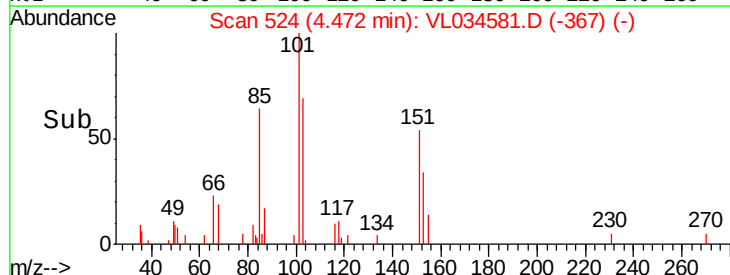
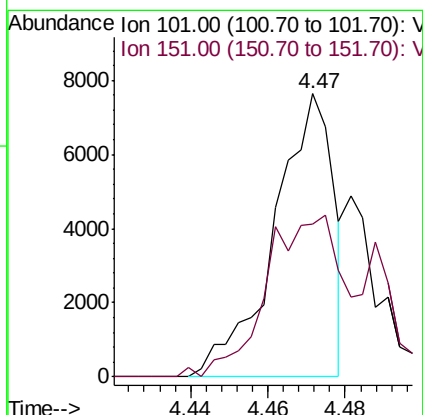
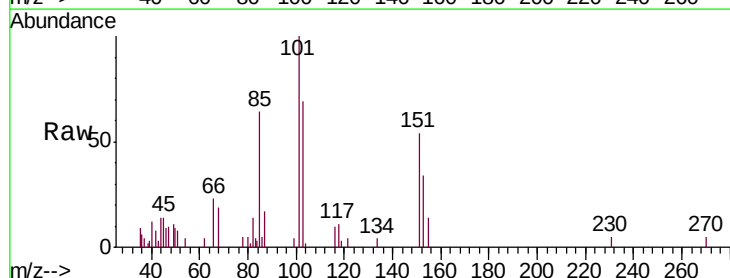
Instrument :
 MSVOA_L
 ClientSampleId :
 IA-1DUP

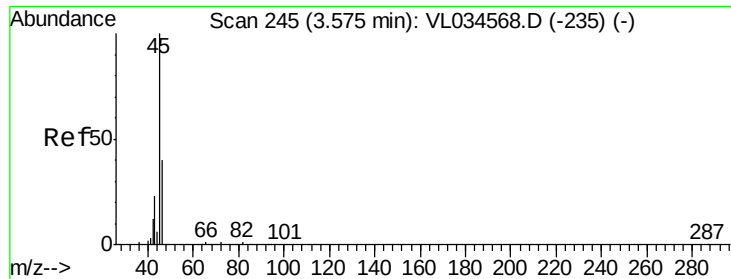
Tgt Ion:101 Resp: 60071
 Ion Ratio Lower Upper
 101 100
 103 58.2 54.4 81.6



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.069 ppbv
 RT: 4.47 min Scan# 524
 Delta R.T. 0.01 min
 Lab File: VL034581.D
 Acq: 4 Feb 2020 15:55

Tgt Ion:101 Resp: 8123
 Ion Ratio Lower Upper
 101 100
 151 97.8 57.0 85.6#

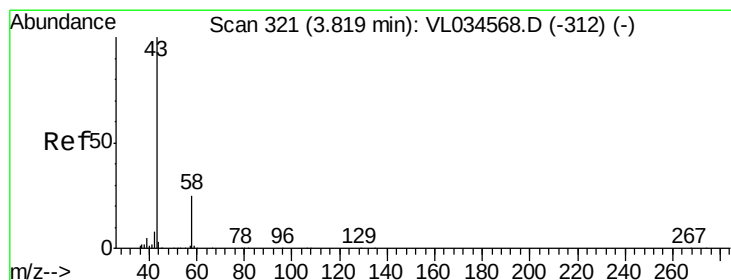
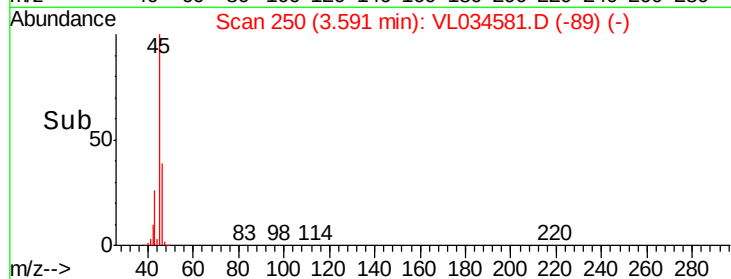
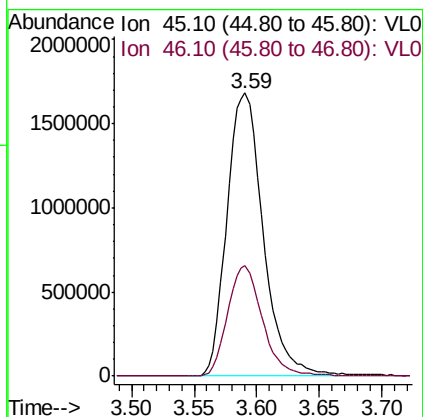
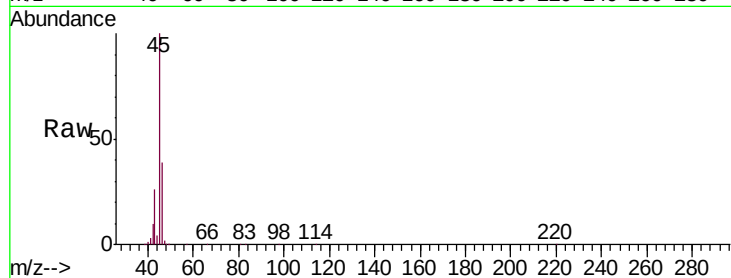




#13
Ethanol
Concen: 296.155 ppbv
RT: 3.59 min Scan# 250
Delta R.T. 0.02 min
Lab File: VL034581.D
Acq: 4 Feb 2020 15:55

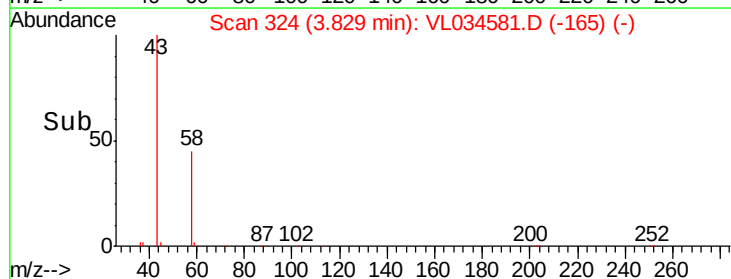
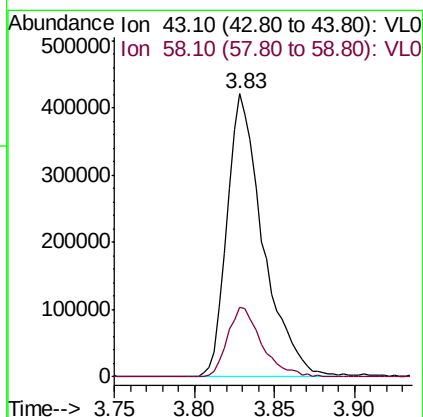
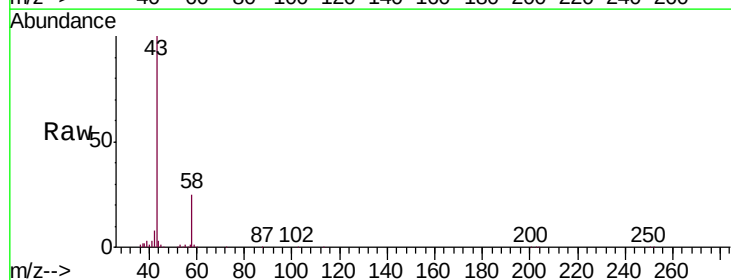
Instrument :
MSVOA_L
ClientSampleId :
IA-1DUP

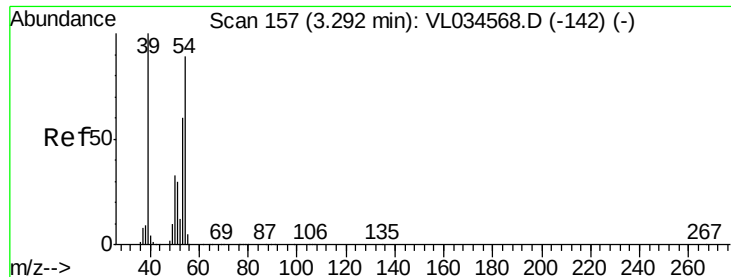
Tgt Ion: 45 Resp: 3378000
Ion Ratio Lower Upper
45 100
46 37.8 14.8 59.2



#15
Acetone
Concen: 4.840 ppbv
RT: 3.83 min Scan# 324
Delta R.T. 0.01 min
Lab File: VL034581.D
Acq: 4 Feb 2020 15:55

Tgt Ion: 43 Resp: 643882
Ion Ratio Lower Upper
43 100
58 23.8 20.3 30.5

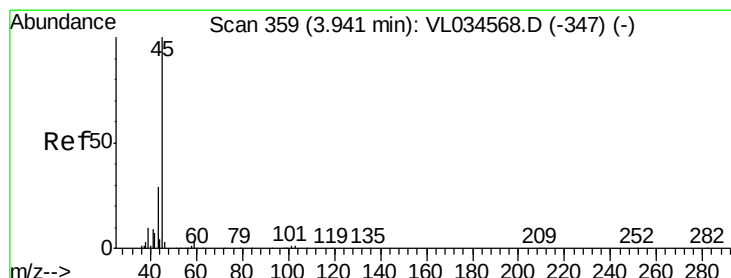
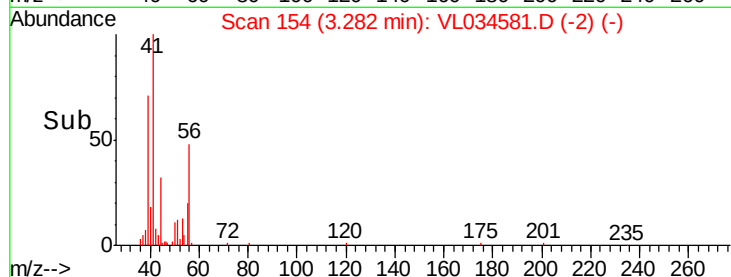
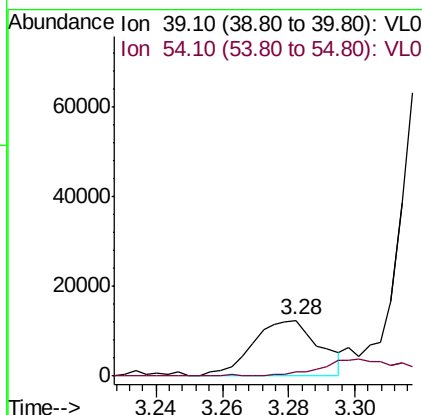
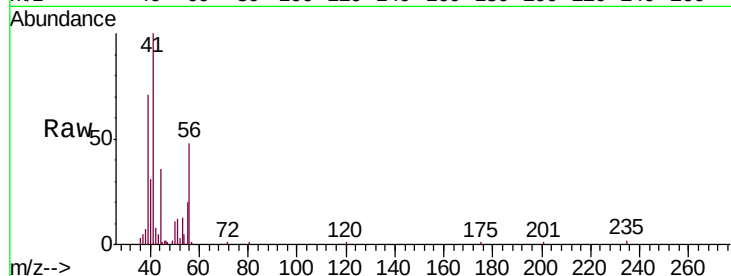




#16
 1,3-Butadiene
 Concen: 0.329 ppbv
 RT: 3.28 min Scan# 154
 Delta R.T. -0.01 min
 Lab File: VL034581.D
 Acq: 4 Feb 2020 15:55

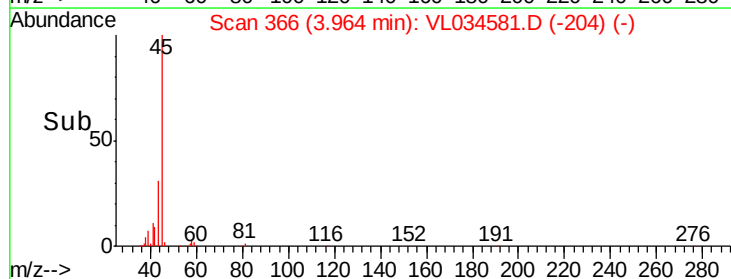
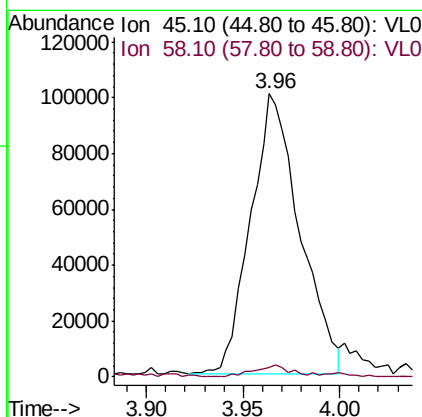
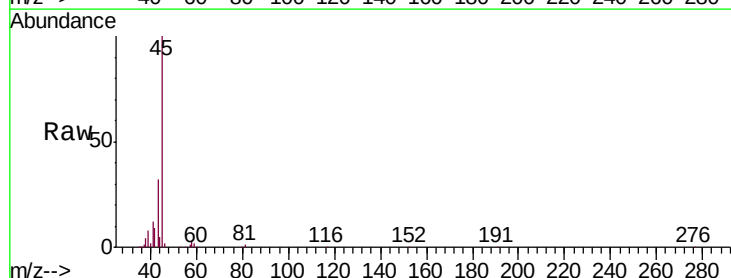
Instrument :
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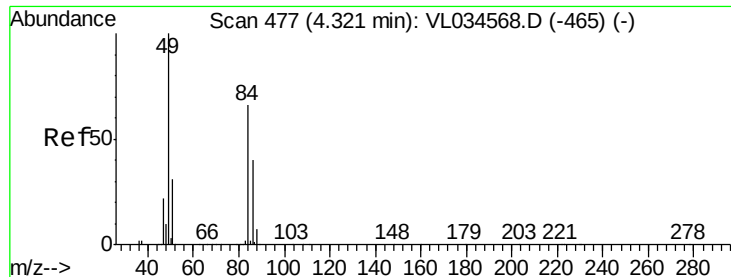
Tgt Ion: 39 Resp: 17375
 Ion Ratio Lower Upper
 39 100
 54 55.8 66.7 100.1#



#19
 Isopropyl Alcohol
 Concen: 2.289 ppbv
 RT: 3.96 min Scan# 366
 Delta R.T. 0.02 min
 Lab File: VL034581.D
 Acq: 4 Feb 2020 15:55

Tgt Ion: 45 Resp: 177725
 Ion Ratio Lower Upper
 45 100
 58 4.4 1.7 2.5#

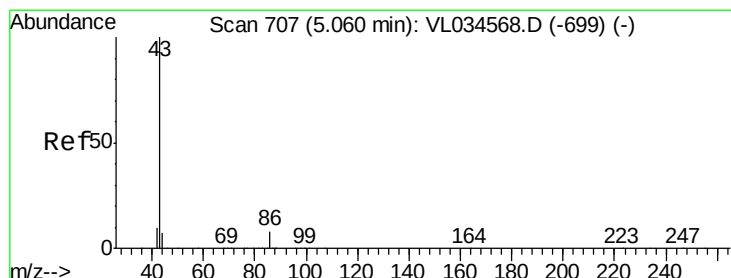
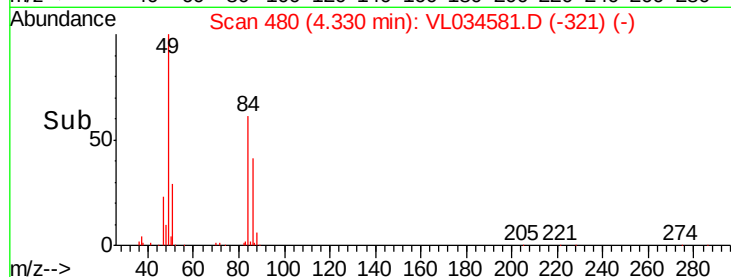
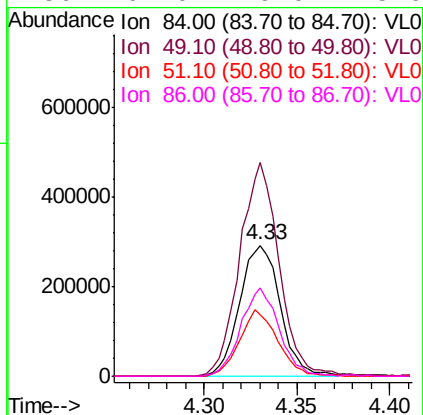
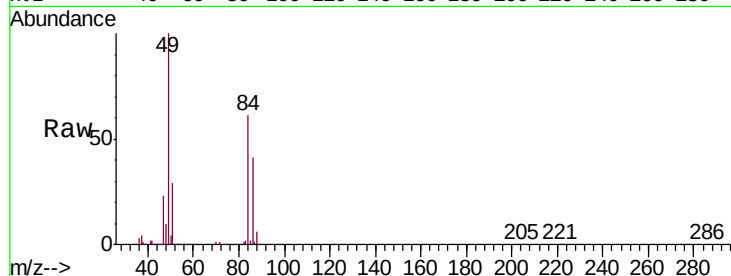




#20
Methylene Chloride
Concen: 8.826 ppbv
RT: 4.33 min Scan# 480
Delta R.T. 0.01 min
Lab File: VL034581.D
Acq: 4 Feb 2020 15:55

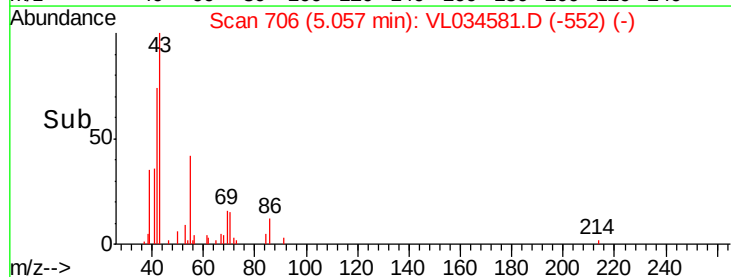
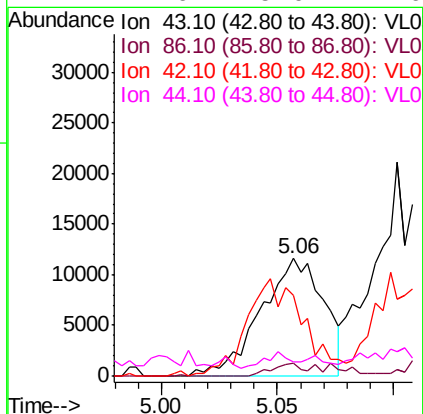
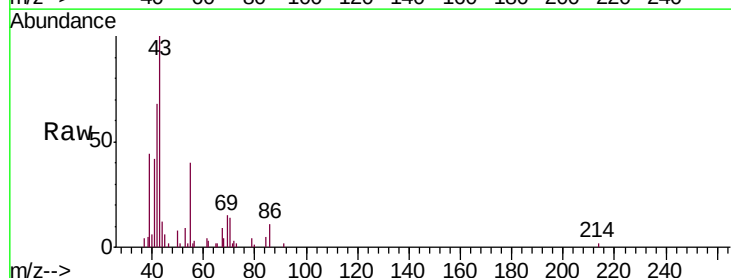
Instrument :
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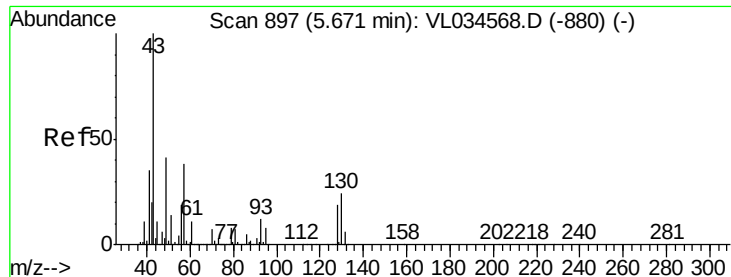
Tgt Ion:	84	Resp:	447068
Ion	Ratio	Lower	Upper
84	100		
49	162.7	122.4	183.6
51	46.9	38.6	57.8
86	67.0	49.0	73.6



#23
Vinyl Acetate
Concen: 0.144 ppbv
RT: 5.06 min Scan# 706
Delta R.T. -0.00 min
Lab File: VL034581.D
Acq: 4 Feb 2020 15:55

Tgt Ion:	43	Resp:	21906
Ion	Ratio	Lower	Upper
43	100		
86	12.5	5.9	8.9#
42	76.0	8.8	13.2#
44	2.6	5.0	7.6#

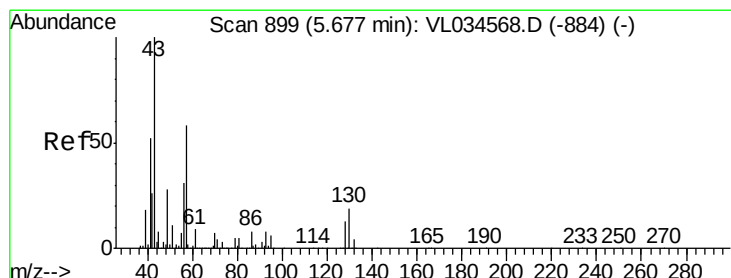
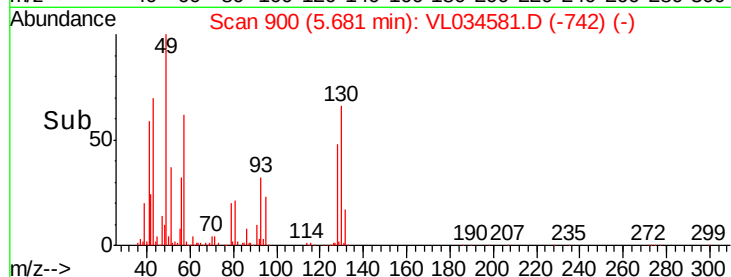
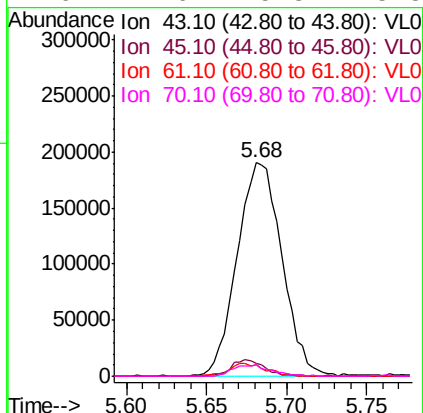
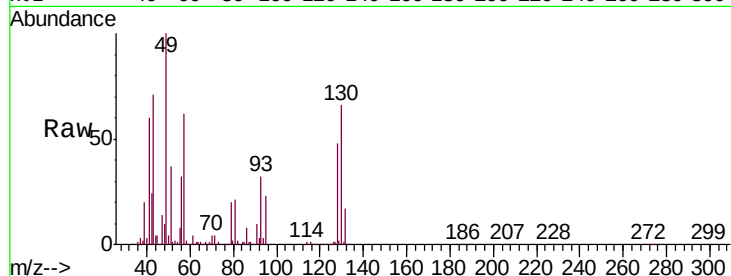




#25
Ethyl Acetate
Concen: 1.692 ppbv
RT: 5.68 min Scan# 900
Delta R.T. 0.01 min
Lab File: VL034581.D
Acq: 4 Feb 2020 15:55

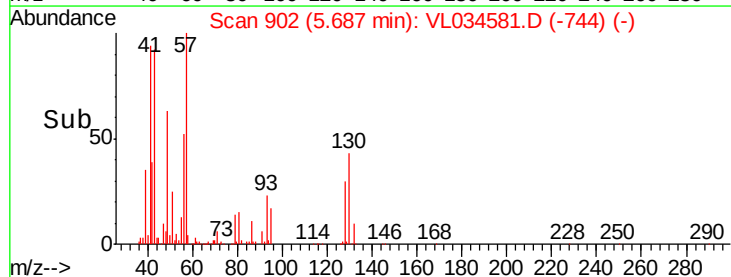
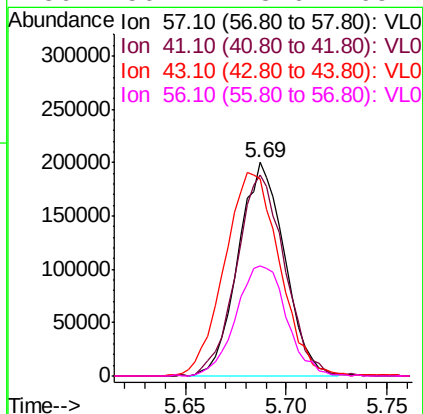
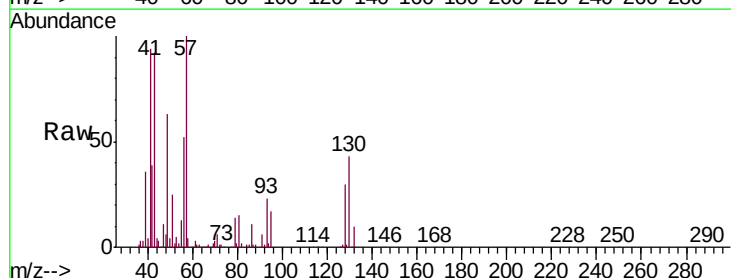
Instrument :
MSVOA_L
ClientSampled :
IA-1DUP

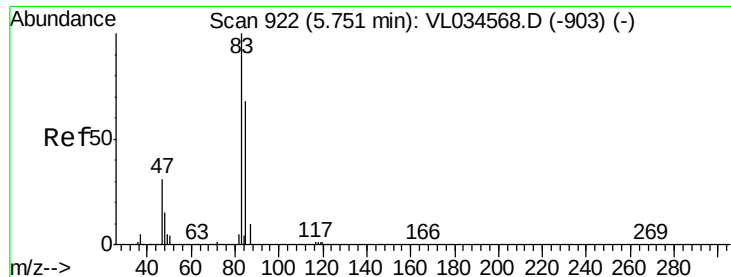
Tgt Ion:	43	Resp:	364480
Ion	Ratio	Lower	Upper
43	100		
45	6.0	8.5	12.7#
61	5.1	7.8	11.6#
70	4.6	5.8	8.8#



#26
Hexane
Concen: 3.569 ppbv
RT: 5.69 min Scan# 902
Delta R.T. 0.01 min
Lab File: VL034581.D
Acq: 4 Feb 2020 15:55

Tgt Ion:	57	Resp:	321901
Ion	Ratio	Lower	Upper
57	100		
41	98.3	76.2	114.2
43	114.0	189.9	284.9#
56	56.1	43.6	65.4

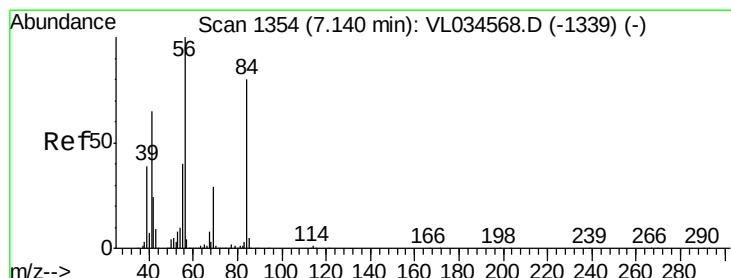
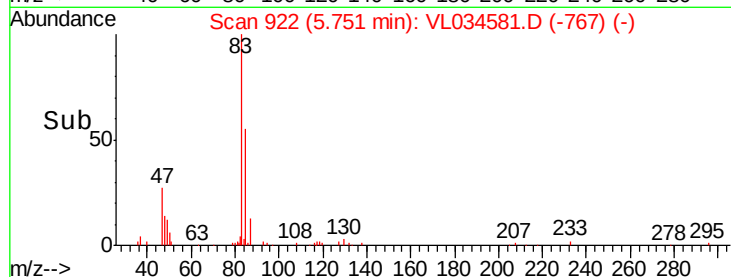
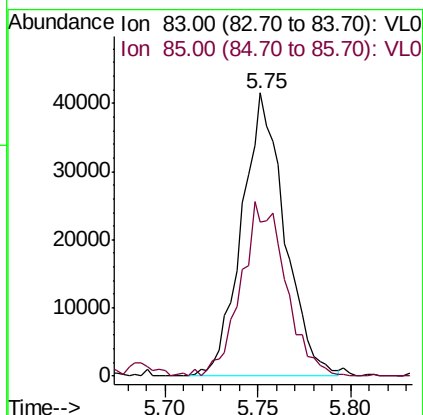
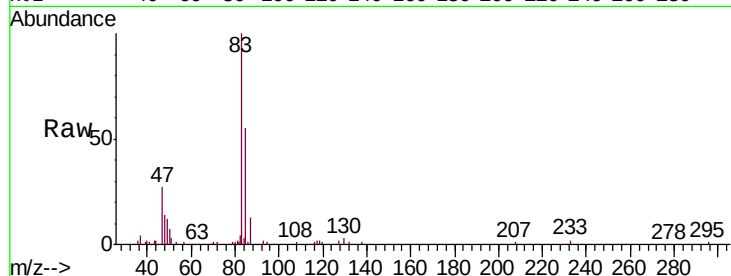




#29
Chloroform
Concen: 0.421 ppbv
RT: 5.75 min Scan# 922
Delta R.T. -0.00 min
Lab File: VL034581.D
Acq: 4 Feb 2020 15:55

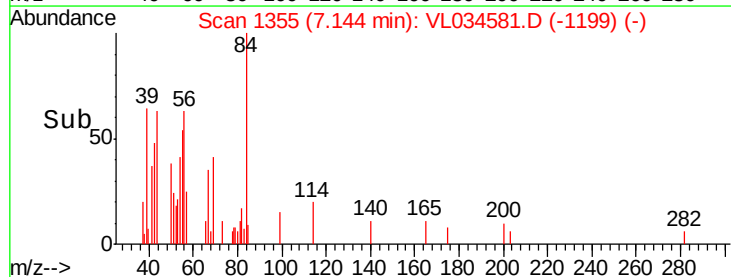
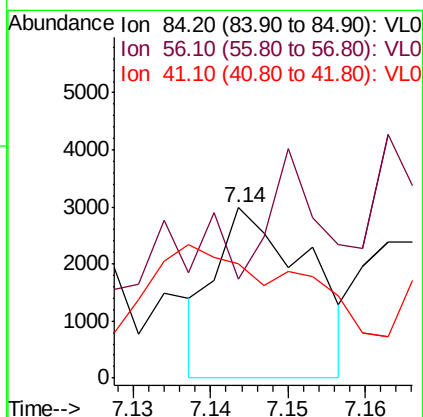
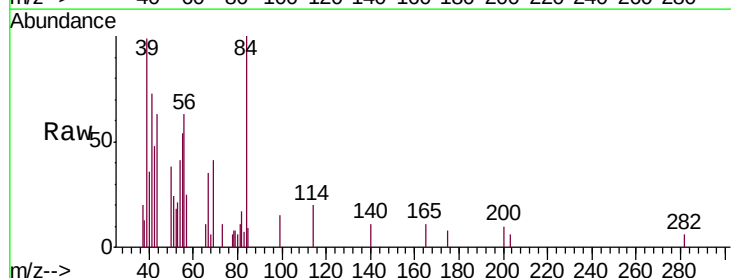
Instrument :
MSVOA_L
ClientSampleId :
IA-1DUP

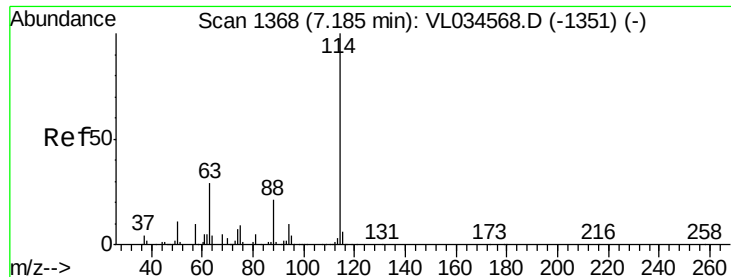
Tgt Ion: 83 Resp: 67080
Ion Ratio Lower Upper
83 100
85 54.6 54.0 81.0



#30
Cyclohexane
Concen: 0.037 ppbv
RT: 7.14 min Scan# 1355
Delta R.T. 0.00 min
Lab File: VL034581.D
Acq: 4 Feb 2020 15:55

Tgt Ion: 84 Resp: 2457
Ion Ratio Lower Upper
84 100
56 0.0 110.5 165.7#
41 0.0 71.9 107.9#

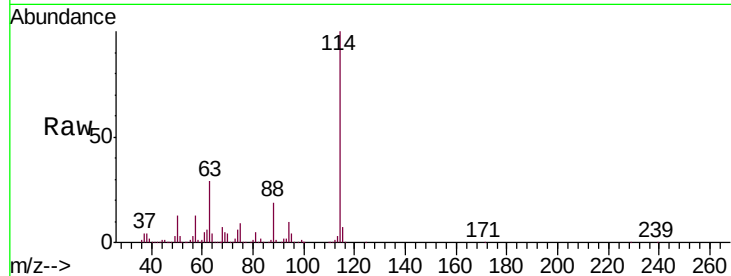




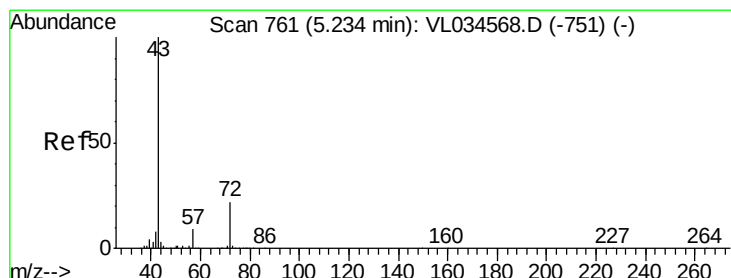
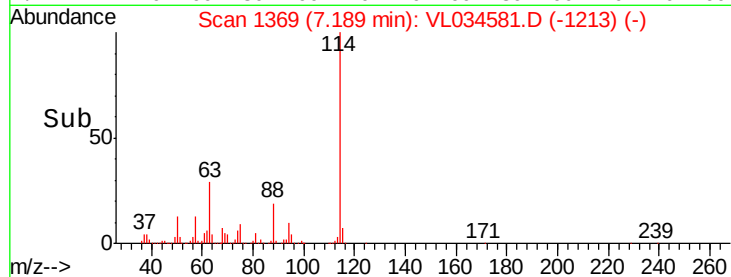
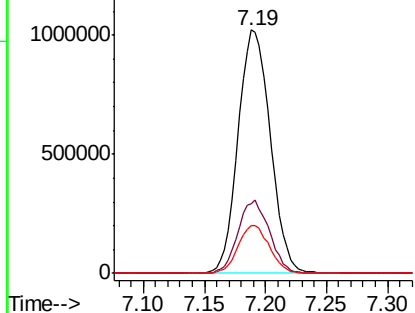
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.19 min Scan# 1369
 Delta R.T. 0.00 min
 Lab File: VL034581.D
 Acq: 4 Feb 2020 15:55

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-1DUP

Tgt Ion:114 Resp: 1864699
 Ion Ratio Lower Upper
 114 100
 63 29.4 24.1 36.1
 88 19.1 15.9 23.9

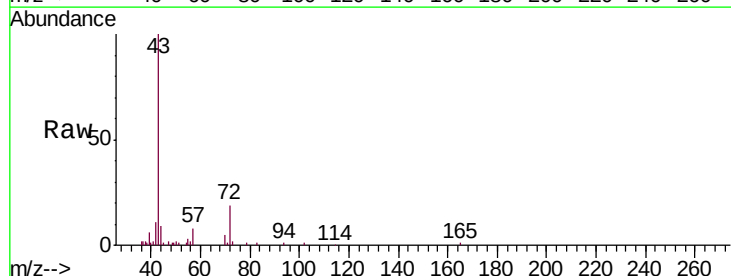


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

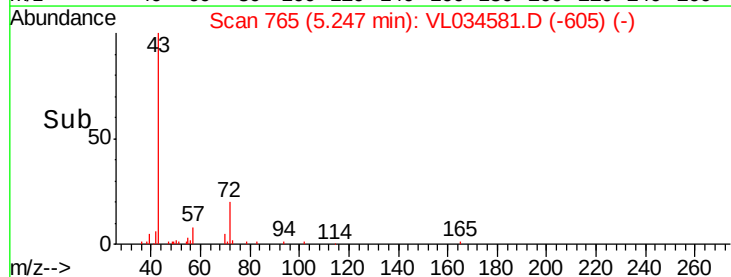
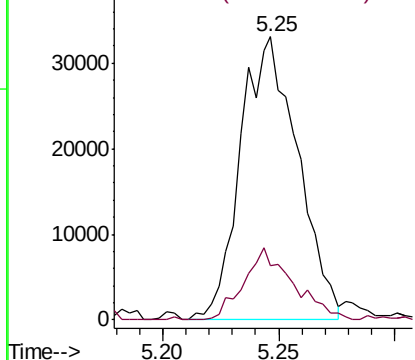


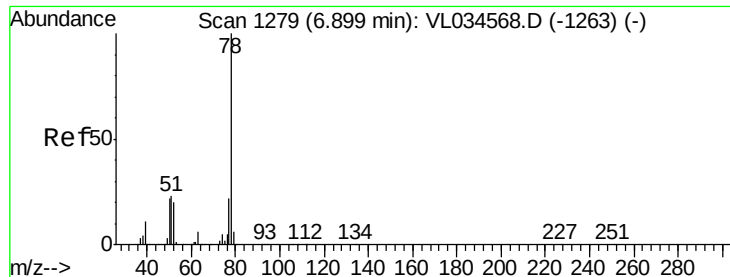
#34
 2-Butanone
 Concen: 0.420 ppbv
 RT: 5.25 min Scan# 765
 Delta R.T. 0.01 min
 Lab File: VL034581.D
 Acq: 4 Feb 2020 15:55

Tgt Ion: 43 Resp: 56919
 Ion Ratio Lower Upper
 43 100
 72 22.5 17.2 25.8



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0





#36

Benzene

Concen: 0.232 ppbv

RT: 6.90 min Scan# 1280

Delta R.T. 0.00 min

Lab File: VL034581.D

Acq: 4 Feb 2020 15:55

Instrument :

MSVOA_L

ClientSampleId :

IA-1DUP

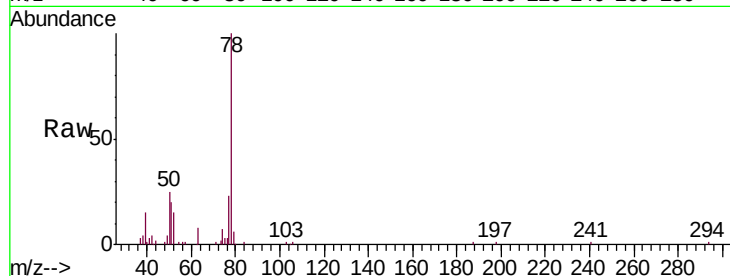
Tgt Ion: 78 Resp: 38409

Ion Ratio Lower Upper

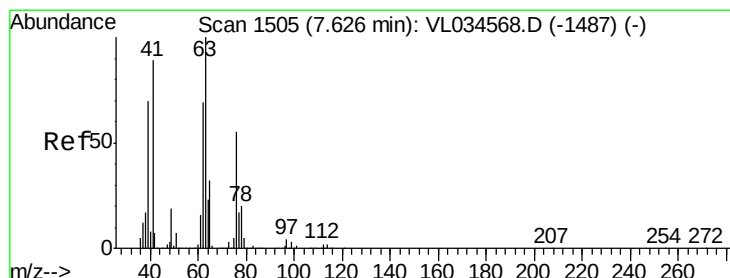
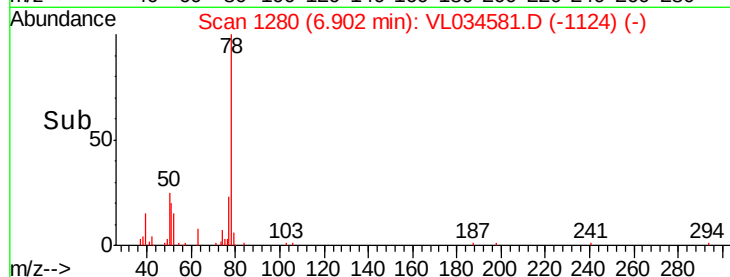
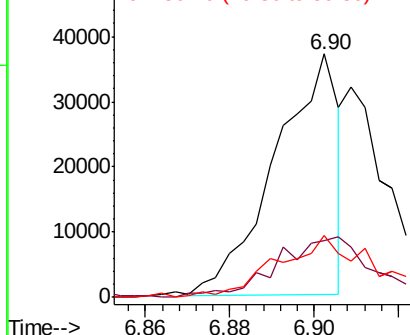
78 100

77 21.9 17.3 25.9

50 24.5 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: 7.950 ppbv

RT: 7.19 min Scan# 1370

Delta R.T. -0.43 min

Lab File: VL034581.D

Acq: 4 Feb 2020 15:55

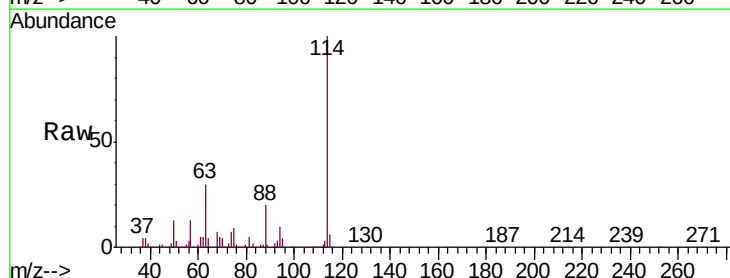
Tgt Ion: 63 Resp: 546516

Ion Ratio Lower Upper

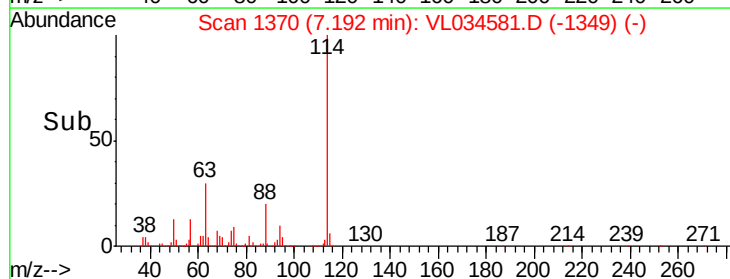
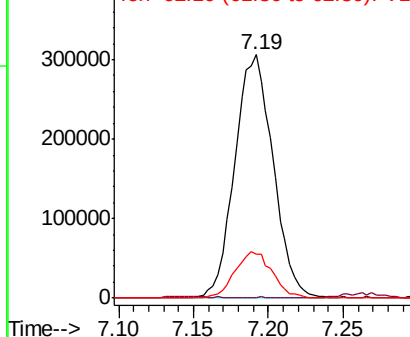
63 100

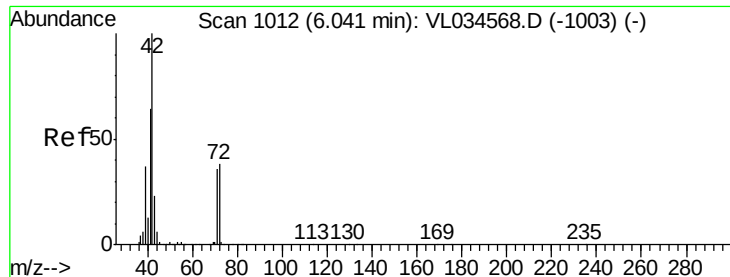
41 0.0 71.0 106.4#

62 18.1 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





#41

Tetrahydrofuran

Concen: 1.927 ppbv

RT: 5.69 min Scan# 902

Delta R.T. -0.35 min

Lab File: VL034581.D

Acq: 4 Feb 2020 15:55

Instrument :

MSVOA_L

ClientSampled :

IA-1DUP

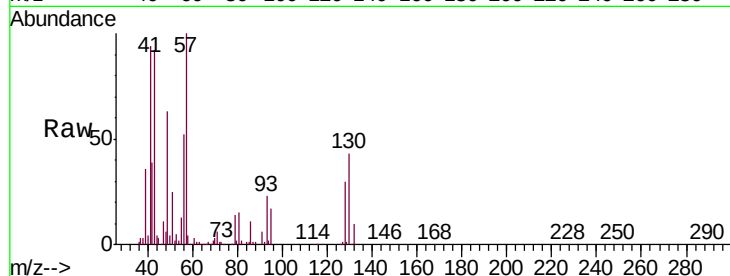
Tgt Ion: 42 Resp: 136100

Ion Ratio Lower Upper

42 100

72 1.0 31.8 47.8#

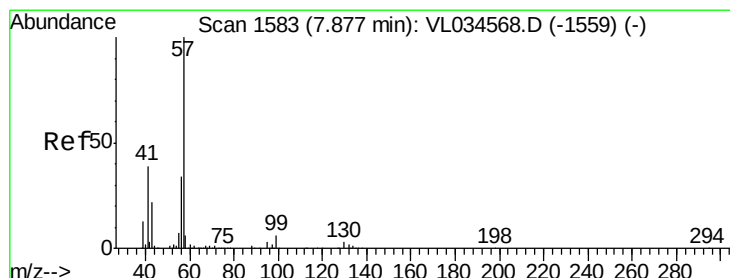
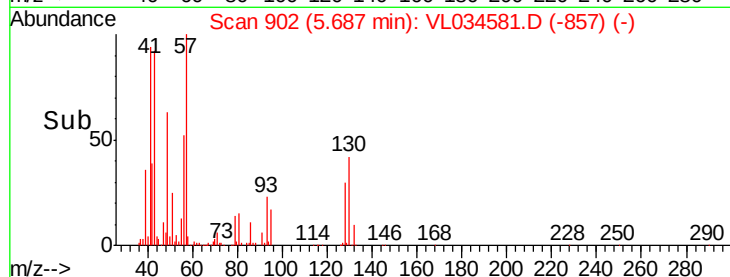
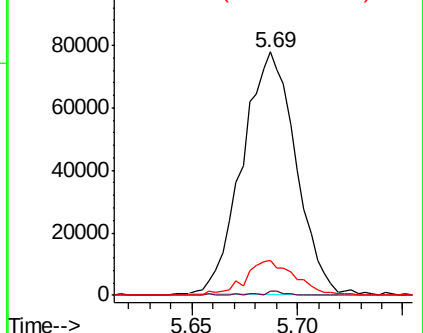
71 13.7 30.2 45.4#



Abundance Ion 42.10 (41.80 to 42.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

Ion 71.10 (70.80 to 71.80): VL0



#44

2,2,4-Trimethylpentane

Concen: 0.074 ppbv

RT: 7.88 min Scan# 1585

Delta R.T. 0.01 min

Lab File: VL034581.D

Acq: 4 Feb 2020 15:55

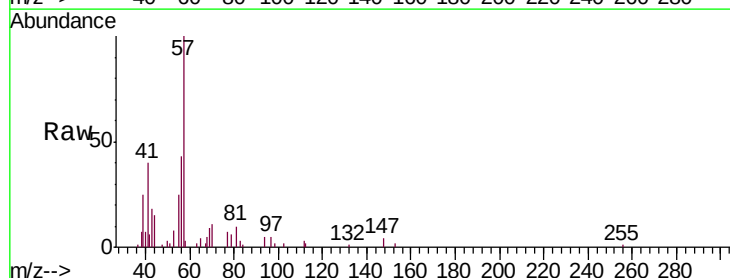
Tgt Ion: 57 Resp: 22366

Ion Ratio Lower Upper

57 100

41 92.1 28.9 43.3#

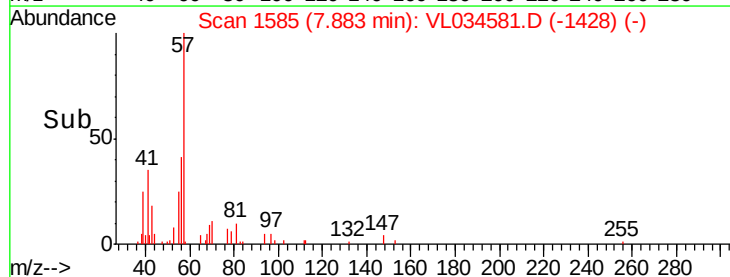
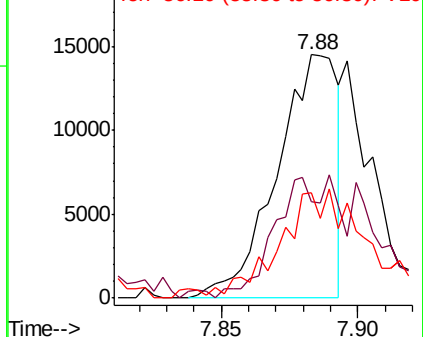
56 71.7 25.5 38.3#

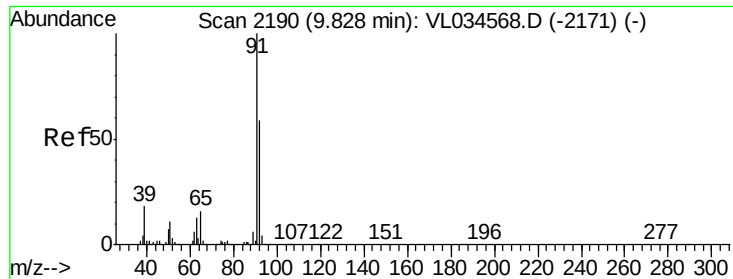


Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 56.10 (55.80 to 56.80): VL0





#53

Toluene

Concen: 0.719 ppbv

RT: 9.83 min Scan# 2192

Delta R.T. 0.01 min

Lab File: VL034581.D

Acq: 4 Feb 2020 15:55

Instrument :

MSVOA_L

ClientSampleId :

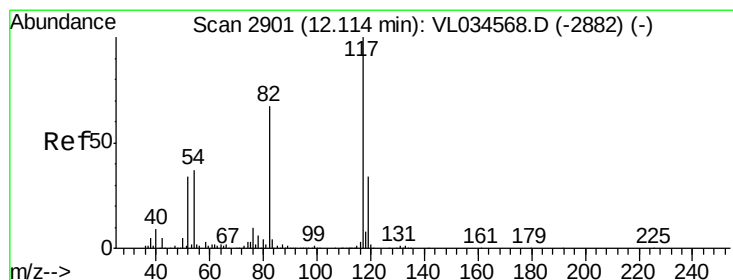
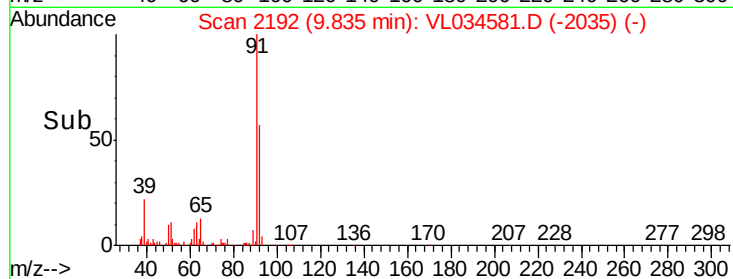
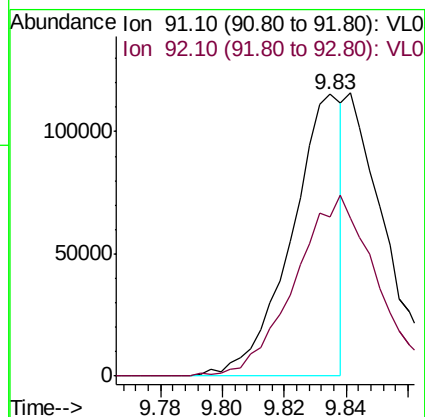
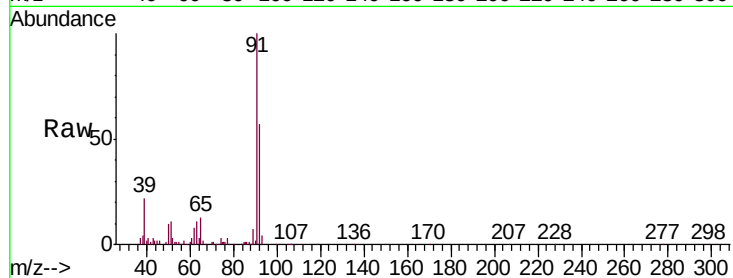
IA-1DUP

Tgt Ion: 91 Resp: 131006

Ion Ratio Lower Upper

91 100

92 0.0 48.2 72.2#



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.13 min Scan# 2905

Delta R.T. 0.01 min

Lab File: VL034581.D

Acq: 4 Feb 2020 15:55

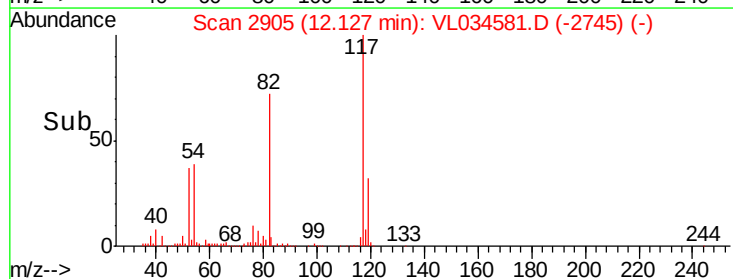
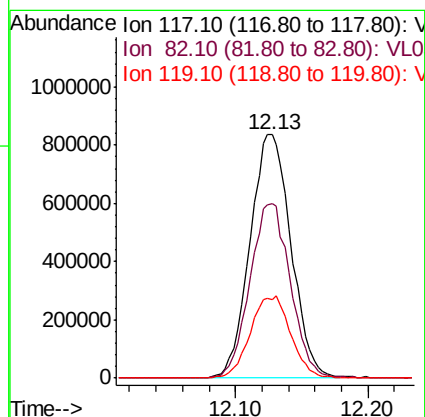
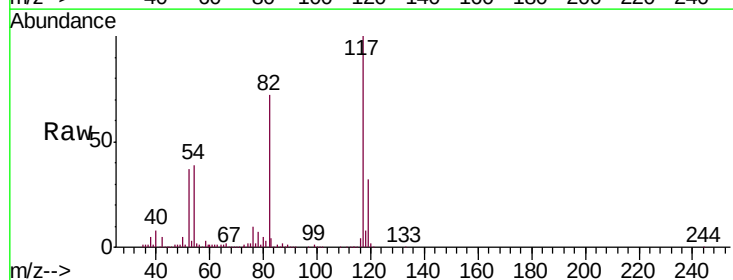
Tgt Ion: 117 Resp: 1795834

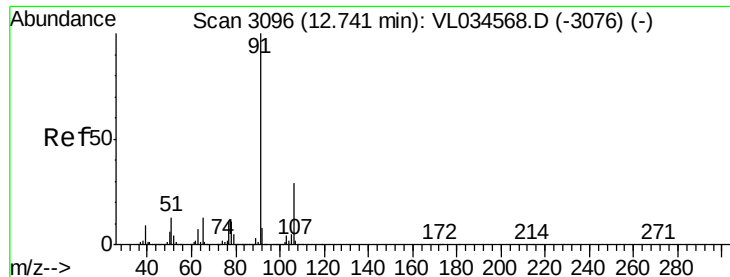
Ion Ratio Lower Upper

117 100

82 71.1 54.2 81.4

119 33.2 26.1 39.1





#58

Ethyl Benzene

Concen: 0.034 ppbv

RT: 12.74 min Scan# 3097

Delta R.T. 0.00 min

Lab File: VL034581.D

Acq: 4 Feb 2020 15:55

Instrument :

MSVOA_L

ClientSampleId :

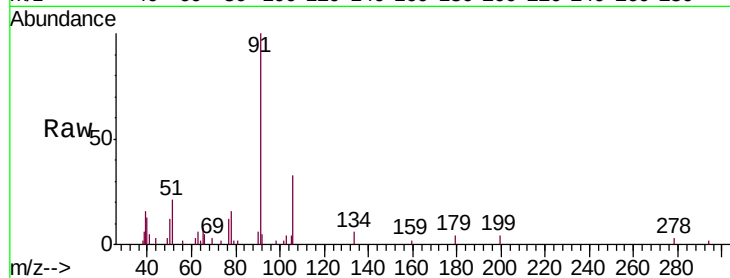
IA-1DUP

Tgt Ion: 91 Resp: 8204

Ion Ratio Lower Upper

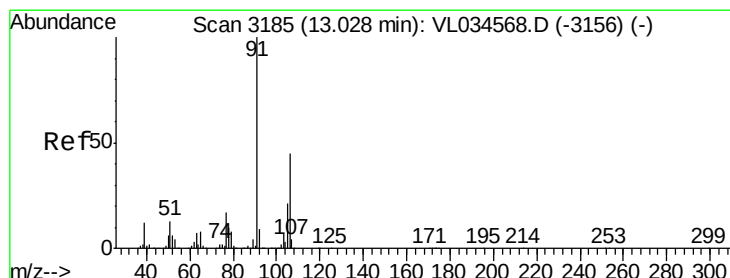
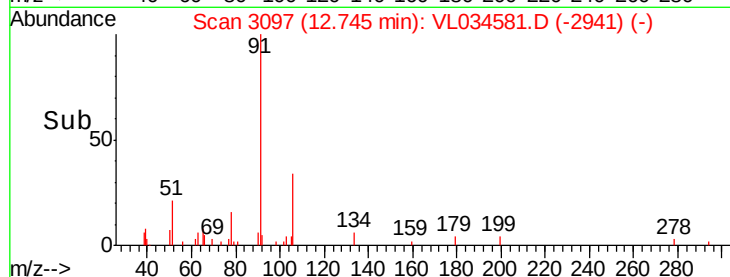
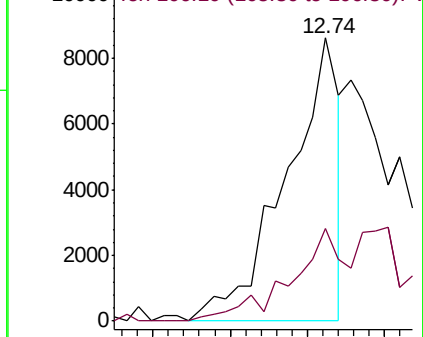
91 100

106 32.8 23.3 34.9



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#59

m/p-Xylene

Concen: 0.044 ppbv

RT: 13.04 min Scan# 3188

Delta R.T. 0.01 min

Lab File: VL034581.D

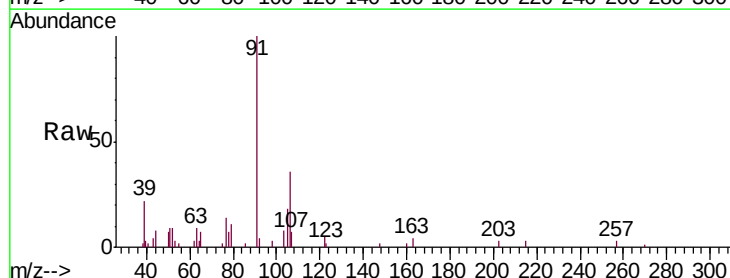
Acq: 4 Feb 2020 15:55

Tgt Ion: 91 Resp: 9259

Ion Ratio Lower Upper

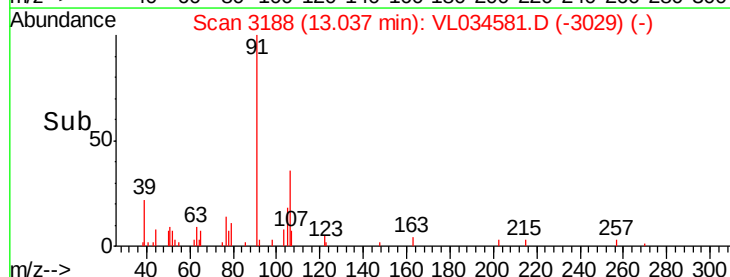
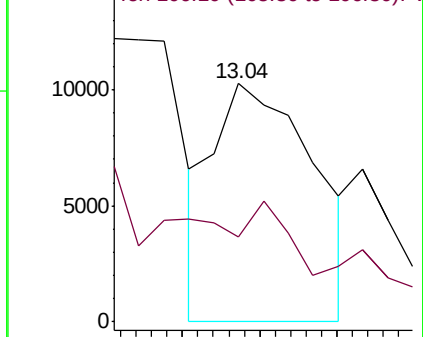
91 100

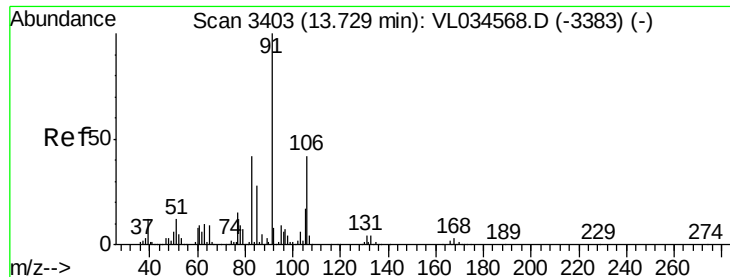
106 0.0 35.3 52.9#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

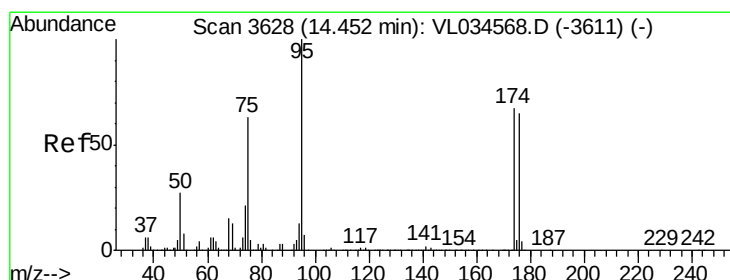
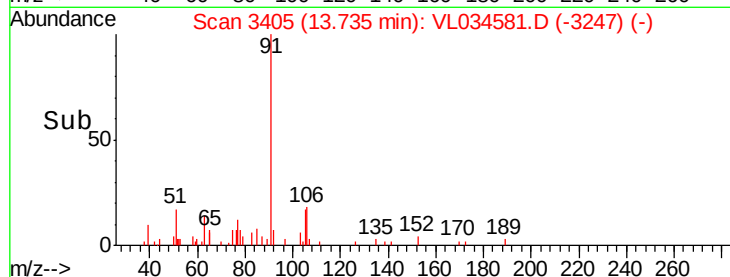
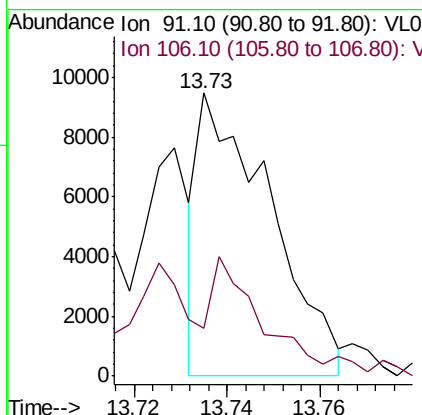
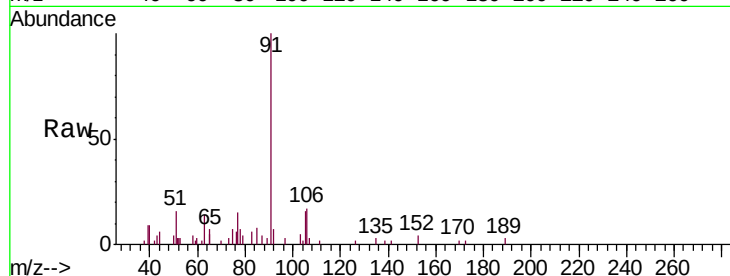




#60
o-Xylene
Concen: 0.048 ppbv
RT: 13.73 min Scan# 3405
Delta R.T. 0.01 min
Lab File: VL034581.D
Acq: 4 Feb 2020 15:55

Instrument :
MSVOA_L
ClientSampleId :
IA-1DUP

Tgt Ion: 91 Resp: 10196
Ion Ratio Lower Upper
91 100
106 69.5 21.6 65.0#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.561 ppbv
RT: 14.46 min Scan# 3631
Delta R.T. 0.01 min
Lab File: VL034581.D
Acq: 4 Feb 2020 15:55

Tgt Ion: 95 Resp: 1602872
Ion Ratio Lower Upper
95 100
174 64.4 52.3 78.5
175 4.5 3.8 5.6

