

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL112519\
 Data File : VL034407.D
 Acq On : 25 Nov 2019 15:43
 Operator : SY/AP
 Sample : K5971-02
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 2

Manual Integrations
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 12/2/2019 10:03:36 AM

Quant Time: Nov 29 12:01:00 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111919AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue Nov 19 14:15:35 2019
 QLast Update : Tue Nov 19 14:15:35 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.68	49	983939	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.20	114	2002962	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.13	117	1911633	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.47	95	1648214	10.25	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.50%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.02	85	92781	0.521	ppbv	89
3) Chlorodifluoromethane	2.96	51	33962m	0.277	ppbv	
4) Chloromethane	3.11	50	54887	0.758	ppbv	91
9) Propene	2.99	41	42299	0.776	ppbv #	80
10) Heptane	8.15	43	113188	0.805	ppbv	98
11) Trichlorofluoromethane	3.94	101	39767	0.224	ppbv #	68
13) Ethanol	3.60	45	2052078	135.160	ppbv	96
15) Acetone	3.83	43	2409642	17.103	ppbv	96
17) tert-Butyl alcohol	4.32	59	44240m	0.374	ppbv	
19) Isopropyl Alcohol	3.98	45	15710691m	173.962	ppbv	
20) Methylene Chloride	4.34	84	58709	1.175	ppbv	98
26) Hexane	5.69	57	68727	0.636	ppbv #	14
29) Chloroform	5.76	83	55879	0.319	ppbv	98
30) Cyclohexane	7.14	84	14152m	0.173	ppbv	
34) 2-Butanone	5.25	43	139519	0.846	ppbv	99
35) Carbon Tetrachloride	7.03	117	9778m	0.057	ppbv	
36) Benzene	6.91	78	46386	0.232	ppbv	97
52) Tetrachloroethene	11.27	164	6645m	0.077	ppbv	
53) Toluene	9.85	91	187258	0.823	ppbv	100
59) m/p-Xylene	13.02	91	85245m	0.332	ppbv	
60) o-Xylene	13.74	91	34950m	0.138	ppbv	
74) 1,2,4-Trimethylbenzene	16.82	105	33982m	0.112	ppbv	
76) 1,4-Dichlorobenzene	17.20	146	68560	0.403	ppbv	95
79) Naphthalene	22.28	128	70357m	0.266	ppbv	

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

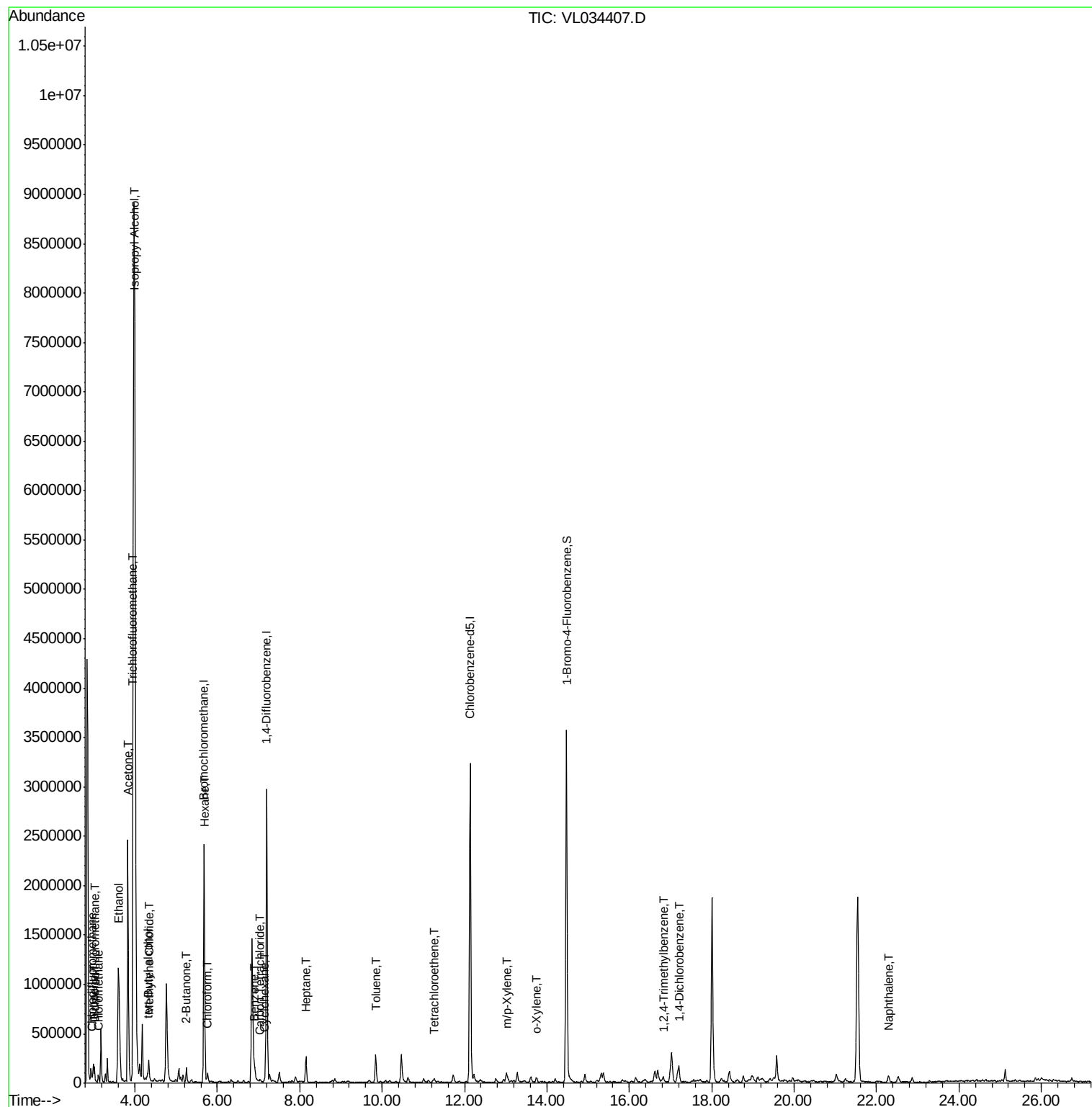
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL112519\
Data File : VL034407.D
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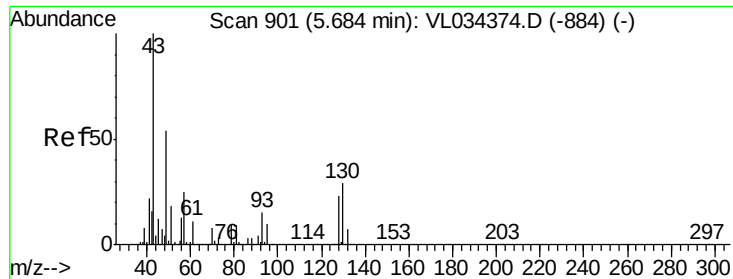
Instrument :
MSVOA_L
ClientSampleId :
2

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Quant Time: Nov 29 12:01:00 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL111919AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue Nov
QLast Update : Tue Nov 19 14:15:35 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.68 min Scan# 899

Delta R.T. -0.01 min

Lab File: VL034407.D

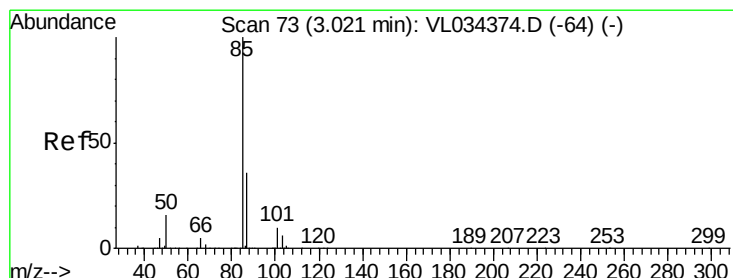
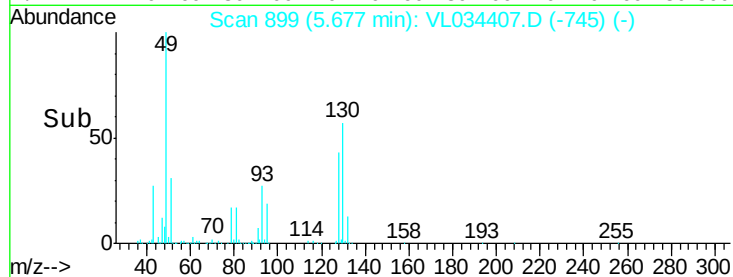
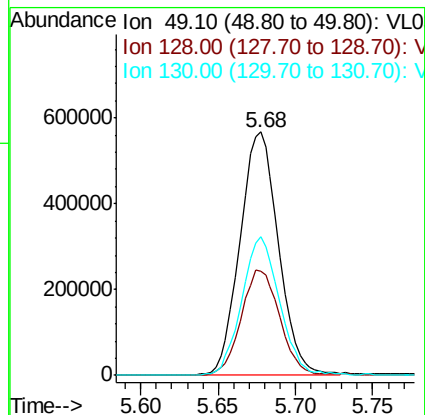
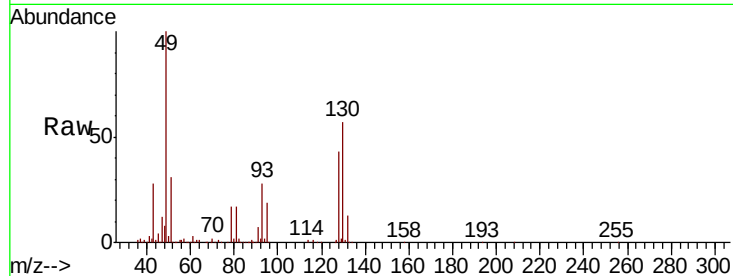
Acq: 25 Nov 2019 15:43

Instrument :
MSVOA_L
ClientSampled :
2

Tot Ion:	49	Resp:	983939
Ion	Ratio	Lower	Upper
49	100		
128	43.6	21.8	65.3
130	56.2	28.0	84.0

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#2

Dichlorodifluoromethane

Concen: 0.521 ppbv

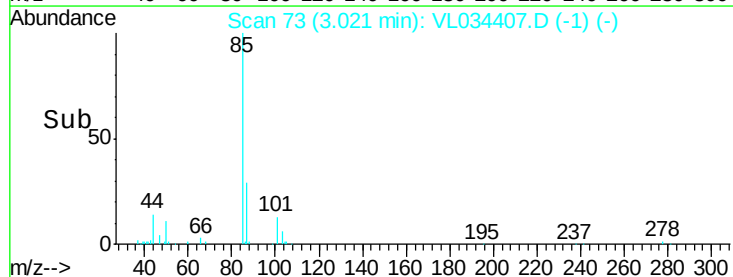
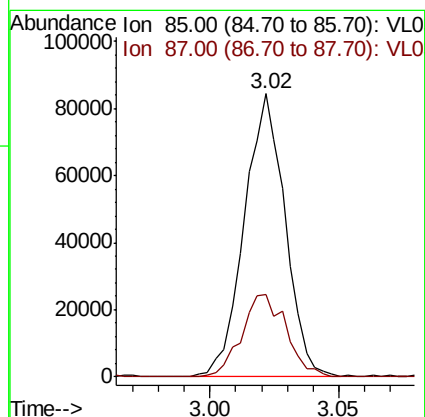
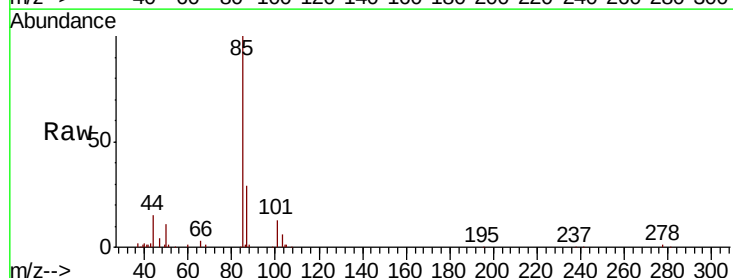
RT: 3.02 min Scan# 73

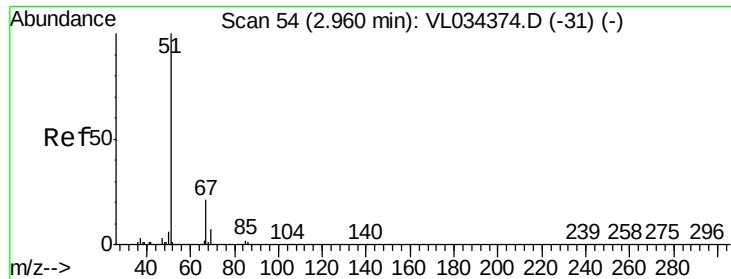
Delta R.T. 0.00 min

Lab File: VL034407.D

Acq: 25 Nov 2019 15:43

Tgt Ion:	85	Resp:	92781
Ion	Ratio	Lower	Upper
85	100		
87	29.3	28.5	42.7





#3

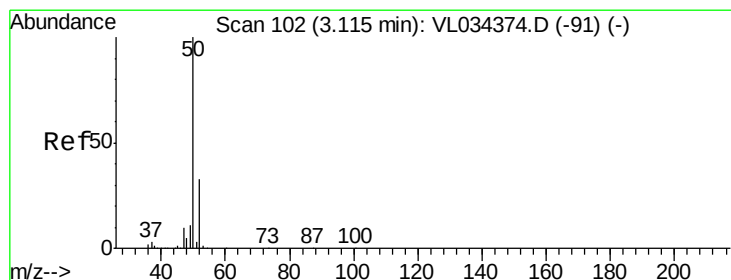
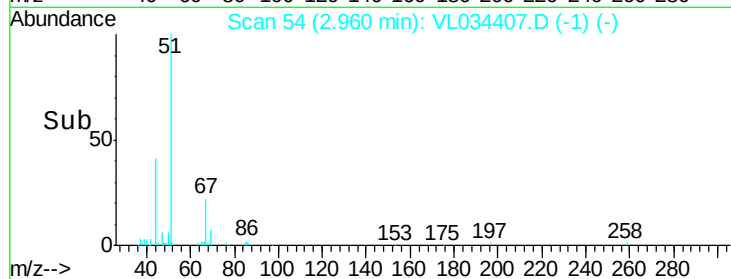
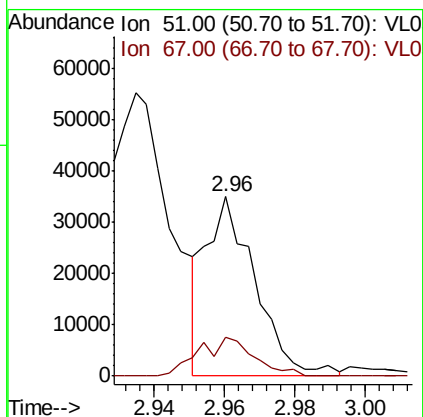
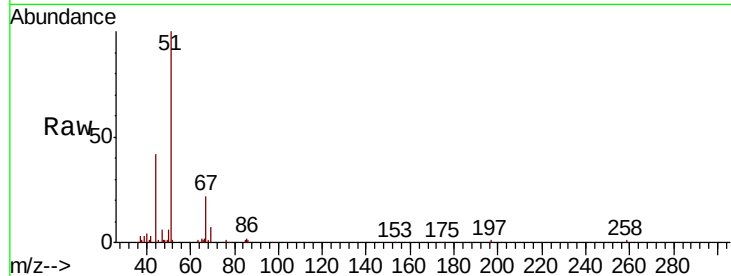
Chlorodifluoromethane
 Concen: 0.277 ppbv
 RT: 2.96 min Scan# 54
 Delta R.T. 0.00 min
 Lab File: VL034407.D
 Acq: 25 Nov 2019 15:43

Instrument :
 MSVOA_L
 ClientSampled :
 2

Tot Ion	51	Resp	33962
Ion Ratio	100	Lower	Upper
51	100		
67	24.3	16.2	24.2#

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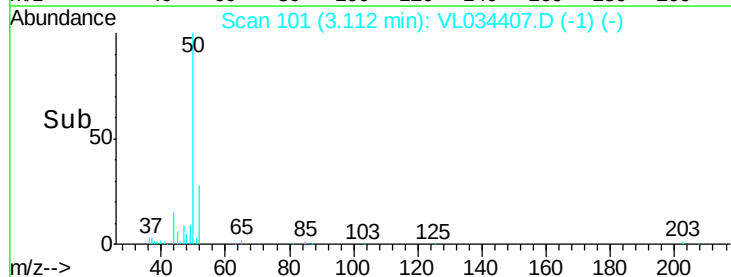
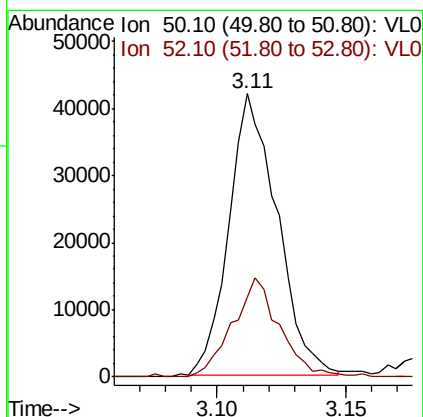
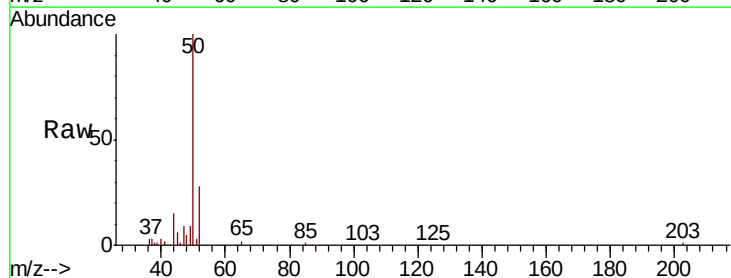
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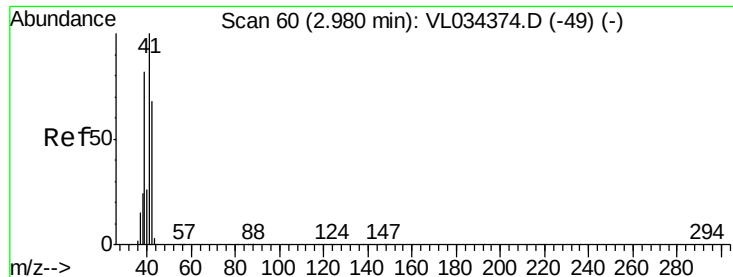


#4

Chloromethane
 Concen: 0.758 ppbv
 RT: 3.11 min Scan# 101
 Delta R.T. -0.00 min
 Lab File: VL034407.D
 Acq: 25 Nov 2019 15:43

Tgt Ion	50	Resp	54887
Ion Ratio	100	Lower	Upper
50	100		
52	28.5	26.8	40.2





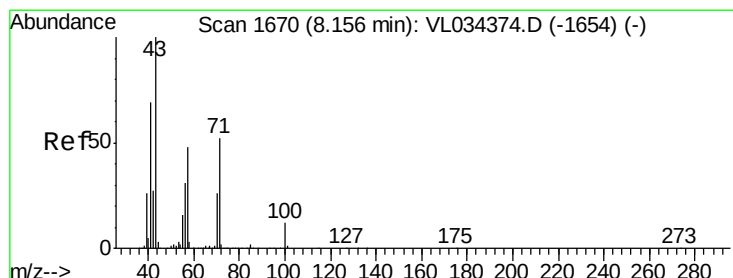
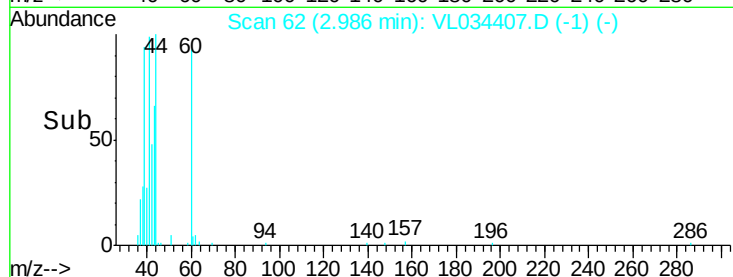
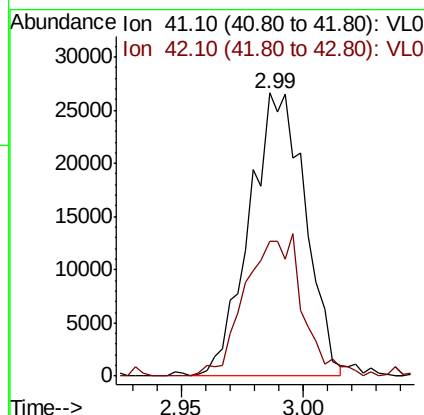
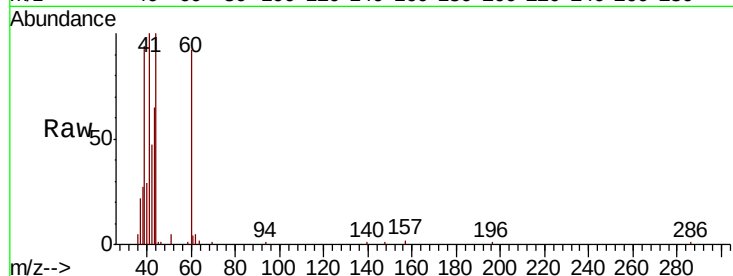
#9
 Propene
 Concen: 0.776 ppbv
 RT: 2.99 min Scan# 62
 Delta R.T. 0.01 min
 Lab File: VL034407.D
 Acq: 25 Nov 2019 15:43

Instrument :
 MSVOA_L
 ClientSampled :
 2

Tot Ion: 41 Resp: 42299
 Ion Ratio Lower Upper
 41 100
 42 52.5 54.6 82.0#

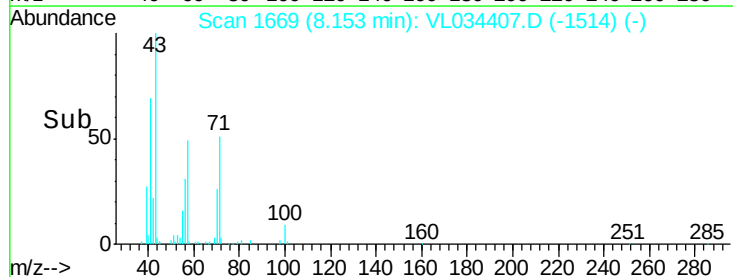
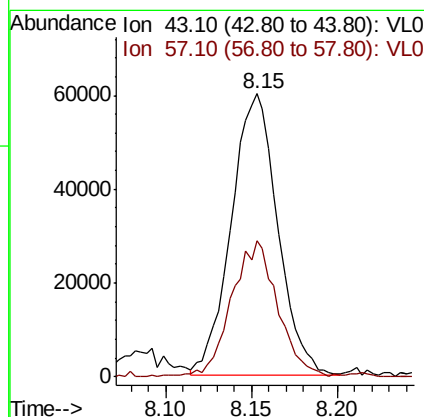
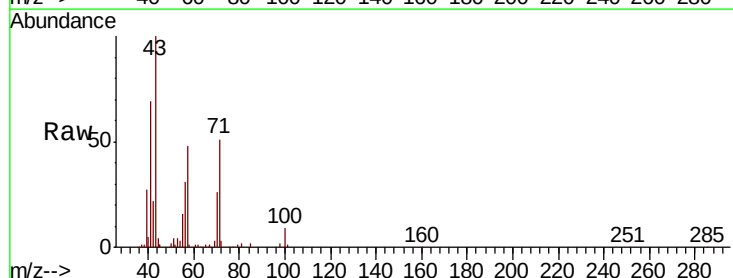
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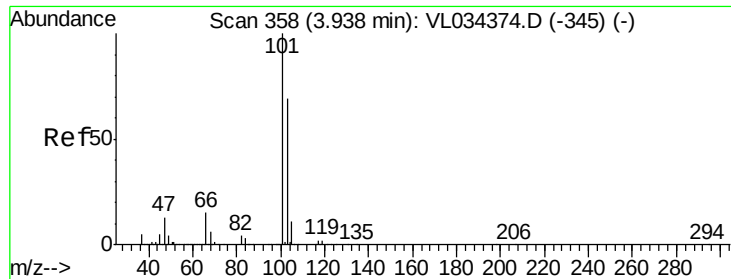
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#10
 Heptane
 Concen: 0.805 ppbv
 RT: 8.15 min Scan# 1669
 Delta R.T. -0.00 min
 Lab File: VL034407.D
 Acq: 25 Nov 2019 15:43

Tgt Ion: 43 Resp: 113188
 Ion Ratio Lower Upper
 43 100
 57 48.6 40.2 60.2





#11

Trichlorofluoromethane

Concen: 0.224 ppbv

RT: 3.94 min Scan# 358

Delta R.T. 0.00 min

Lab File: VL034407.D

Acq: 25 Nov 2019 15:43

Instrument :

MSVOA_L

ClientSampleId :

2

Tot Ion:101 Resp: 39767

Ion Ratio Lower Upper

101 100

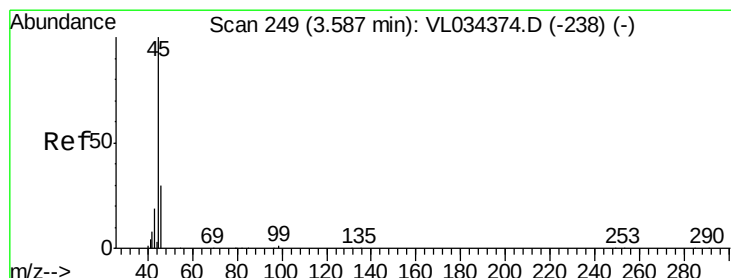
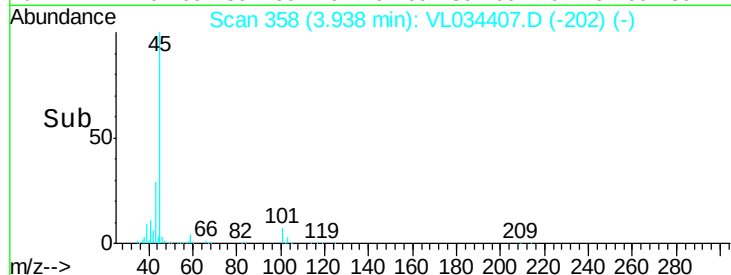
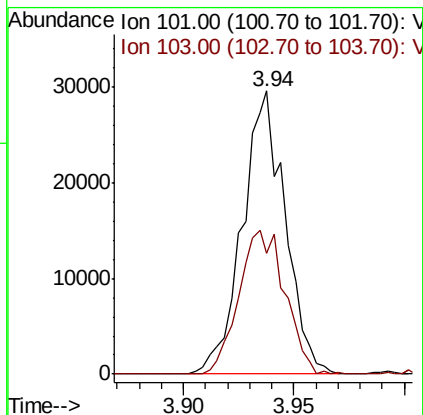
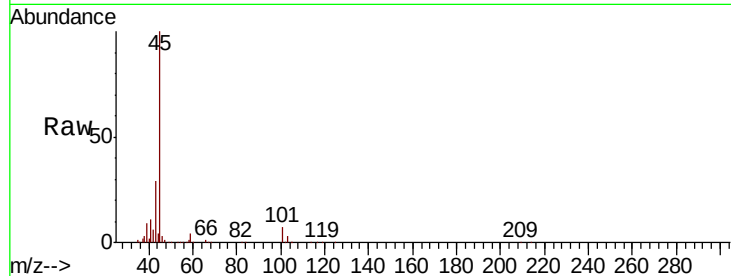
103 42.7 55.4 83.0#

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#13

Ethanol

Concen: 135.160 ppbv

RT: 3.60 min Scan# 254

Delta R.T. 0.02 min

Lab File: VL034407.D

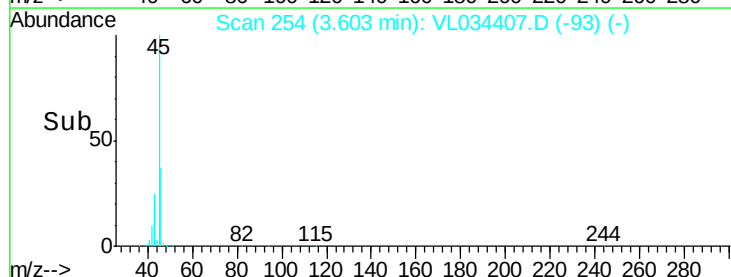
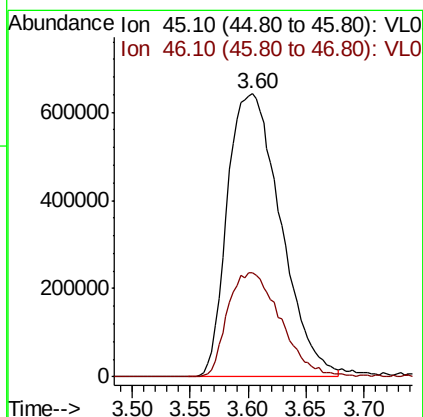
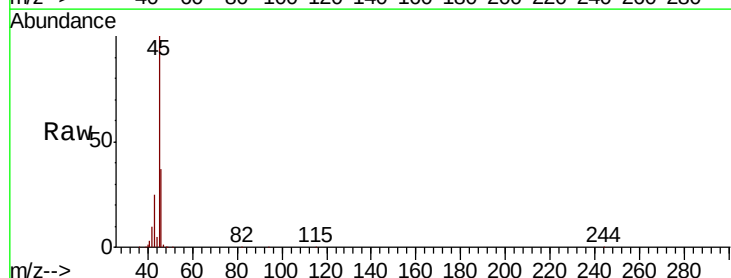
Acq: 25 Nov 2019 15:43

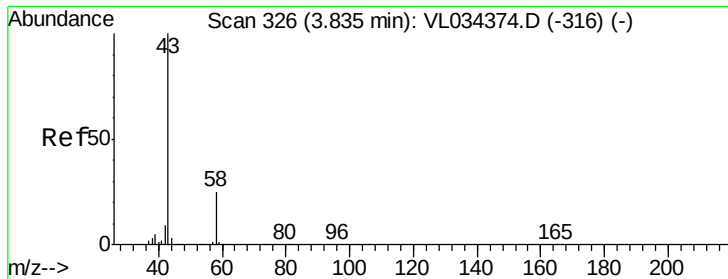
Tgt Ion: 45 Resp: 2052078

Ion Ratio Lower Upper

45 100

46 37.1 13.8 55.4





#15

Acetone

Concen: 17.103 ppbv

RT: 3.83 min Scan# 324

Delta R.T. -0.01 min

Lab File: VL034407.D

Acq: 25 Nov 2019 15:43

Tot Ion: 43 Resp: 2409642

Ion Ratio Lower Upper

43 100

58 27.4 20.2 30.4

Instrument :

MSVOA_L

ClientSampleId :

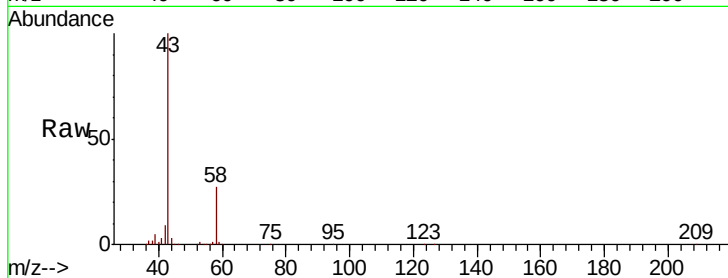
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Manual Integrations

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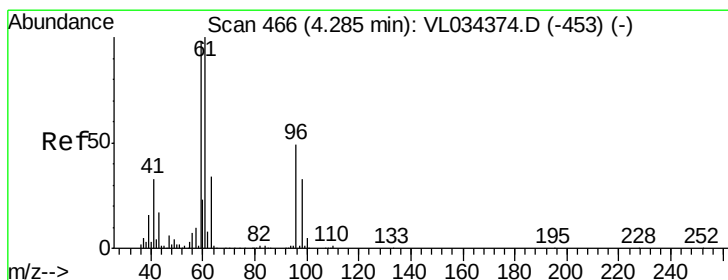
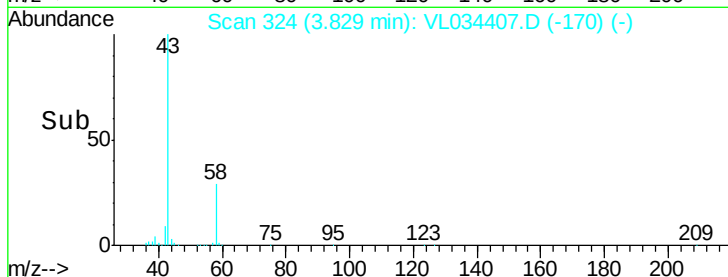
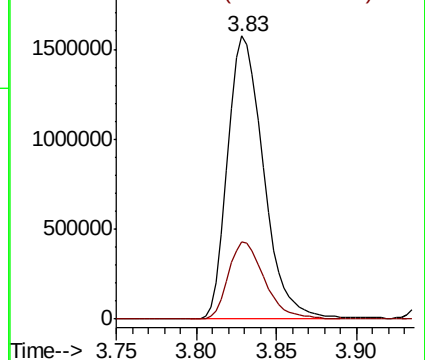
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#17

tert-Butyl alcohol

Concen: 0.374 ppbv m

RT: 4.32 min Scan# 477

Delta R.T. 0.04 min

Lab File: VL034407.D

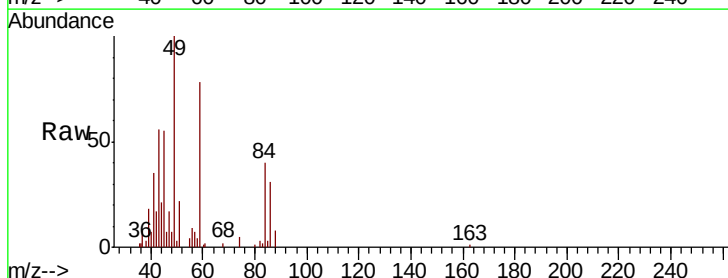
Acq: 25 Nov 2019 15:43

Tgt Ion: 59 Resp: 44240

Ion Ratio Lower Upper

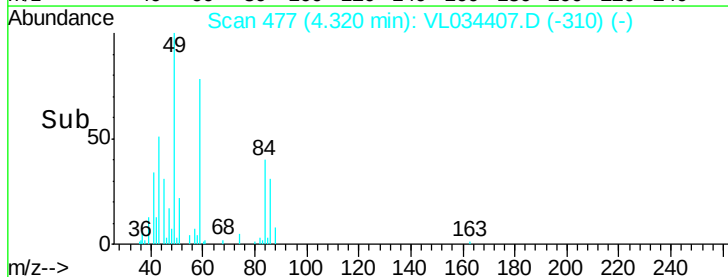
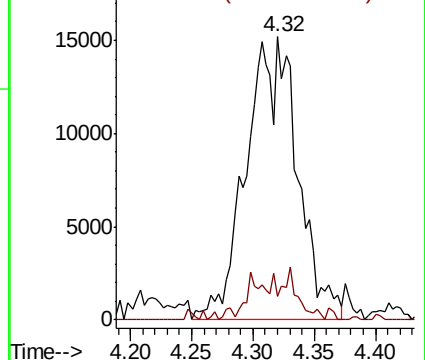
59 100

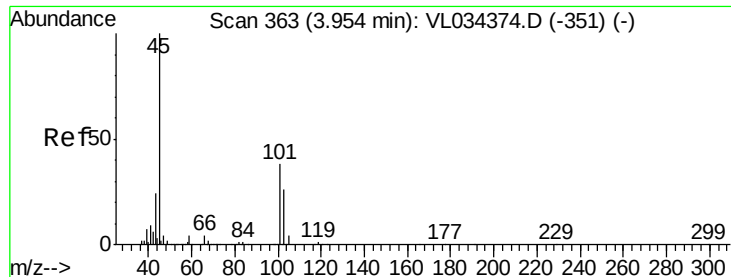
57 14.8 8.8 13.2#



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





#19

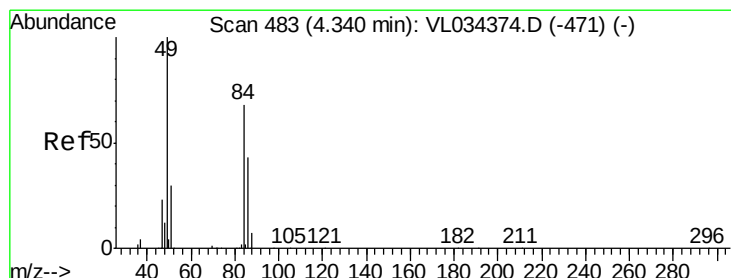
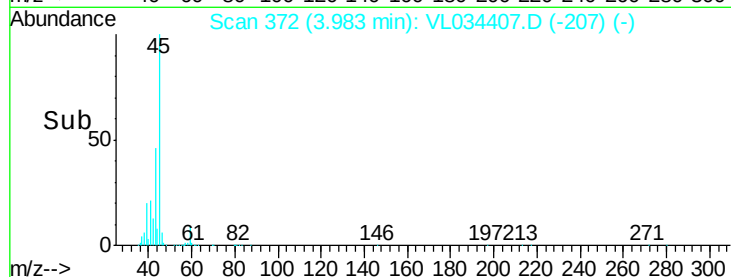
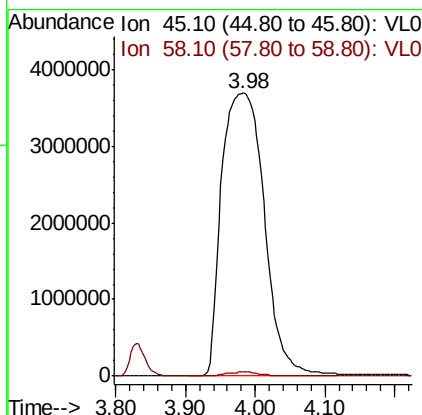
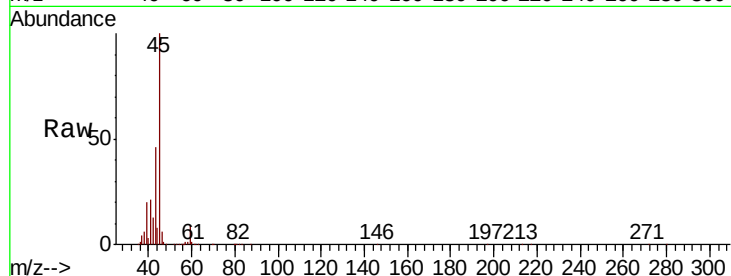
Isopropyl Alcohol
 Concen: 173.962 ppbv m
 RT: 3.98 min Scan# 372
 Delta R.T. 0.03 min
 Lab File: VL034407.D
 Acq: 25 Nov 2019 15:43

Instrument :
 MSVOA_L
 ClientSampleId :
 2

Tot Ion: 45 Resp:15710691
 Ion Ratio Lower Upper
 45 100
 58 0.0 1.3 1.9#

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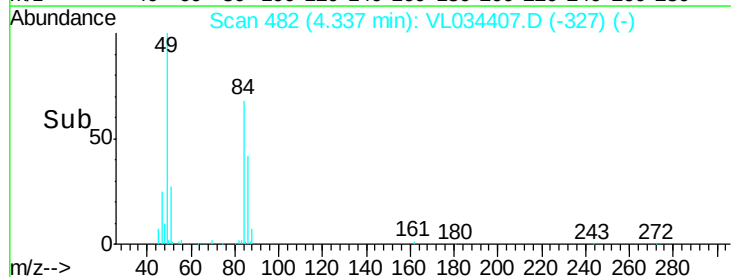
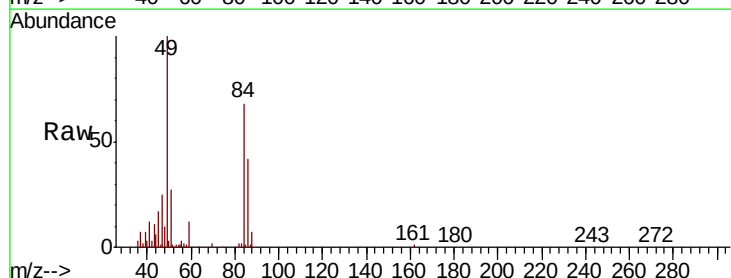
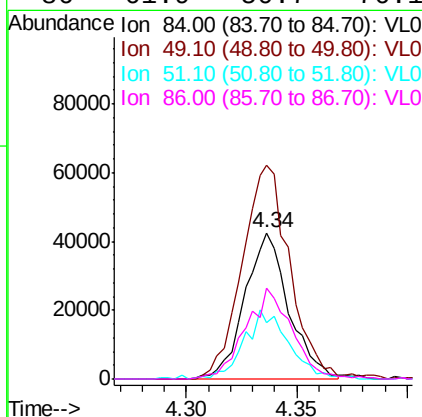
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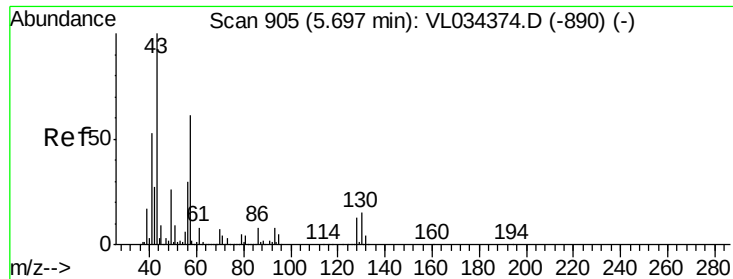


#20

Methylene Chloride
 Concen: 1.175 ppbv
 RT: 4.34 min Scan# 482
 Delta R.T. -0.00 min
 Lab File: VL034407.D
 Acq: 25 Nov 2019 15:43

Tgt Ion: 84 Resp: 58709
 Ion Ratio Lower Upper
 84 100
 49 146.3 116.8 175.2
 51 39.8 35.6 53.4
 86 61.9 50.7 76.1





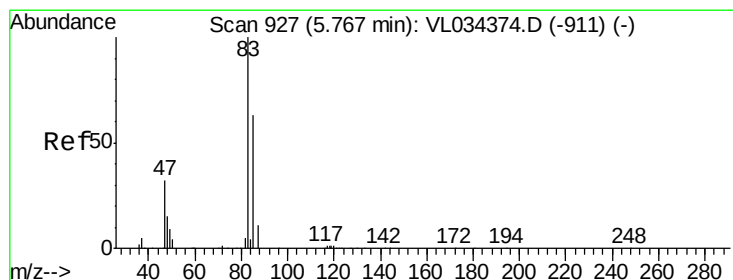
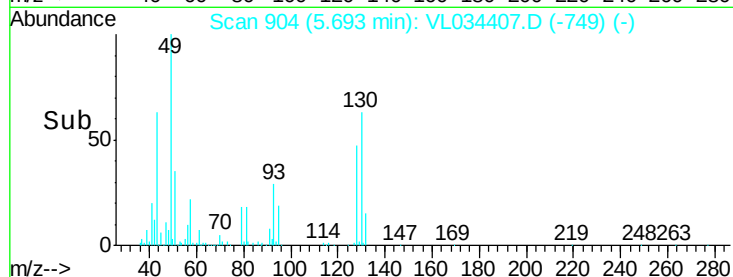
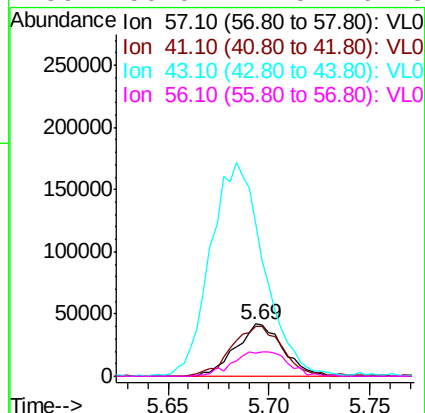
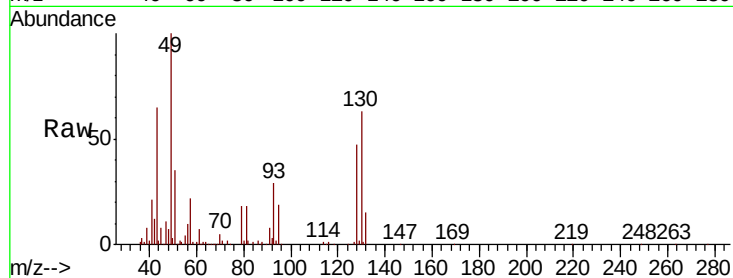
#26
Hexane
Concen: 0.636 ppbv
RT: 5.69 min Scan# 904
Delta R.T. -0.00 min
Lab File: VL034407.D
Acq: 25 Nov 2019 15:43

Instrument :
MSVOA_L
ClientSampled :
2

Tot Ion	Ratio	Lower	Upper
57	100		
41	107.0	75.0	112.4
43	455.9	186.6	279.8
56	56.0	41.5	62.3

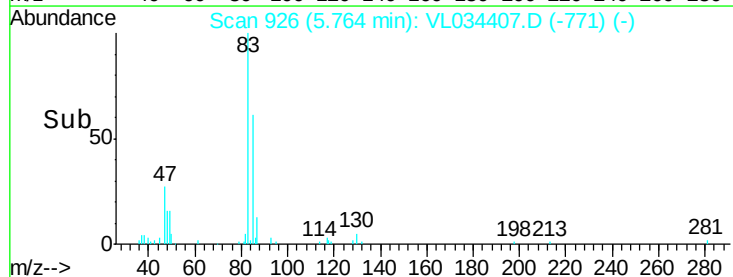
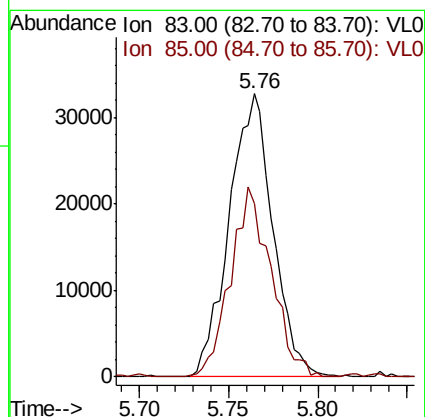
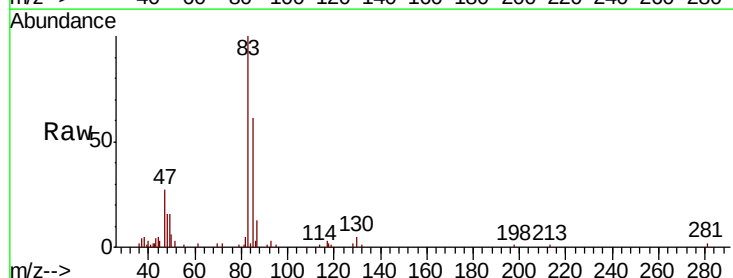
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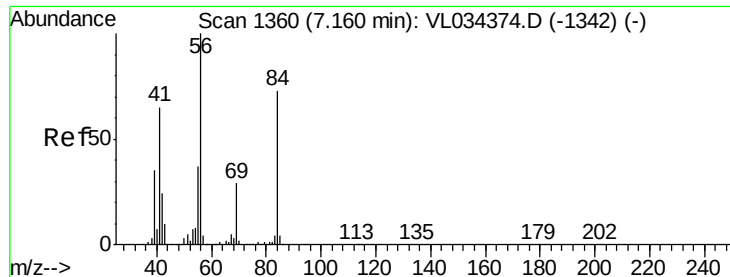
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#29
Chloroform
Concen: 0.319 ppbv
RT: 5.76 min Scan# 926
Delta R.T. -0.00 min
Lab File: VL034407.D
Acq: 25 Nov 2019 15:43

Tgt Ion	Ratio	Lower	Upper
83	100		
85	61.4	50.4	75.6





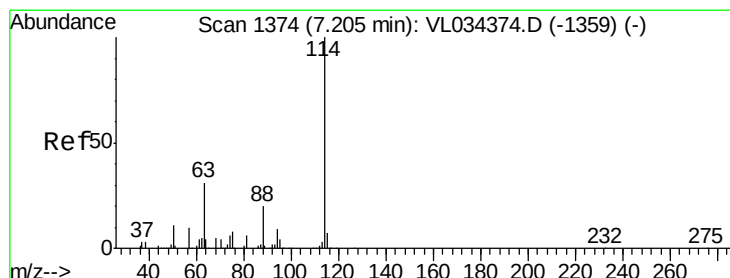
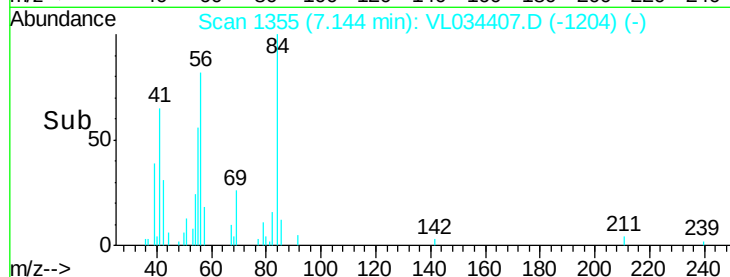
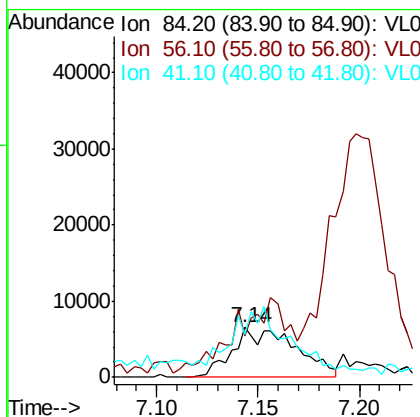
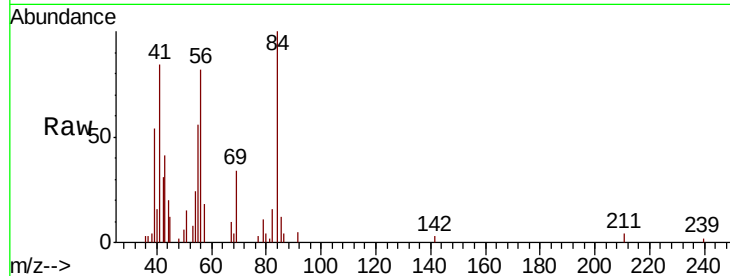
#30
Cyclohexane
Concen: 0.173 ppbv m
RT: 7.14 min Scan# 1355
Delta R.T. -0.02 min
Lab File: VL034407.D
Acq: 25 Nov 2019 15:43

Instrument :
MSVOA_L
ClientSampleId :
2

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	112.6	169.0#
41	0.0	73.4	110.2#

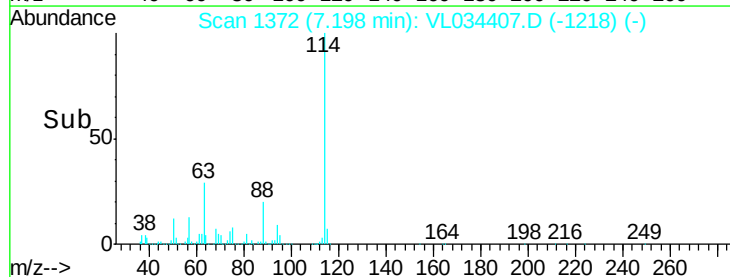
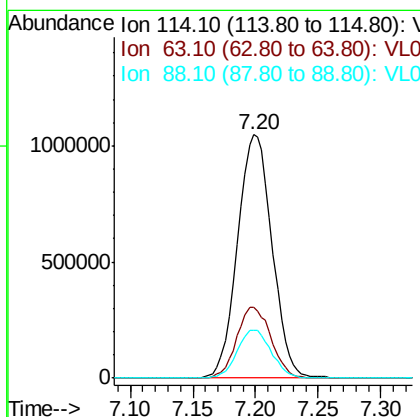
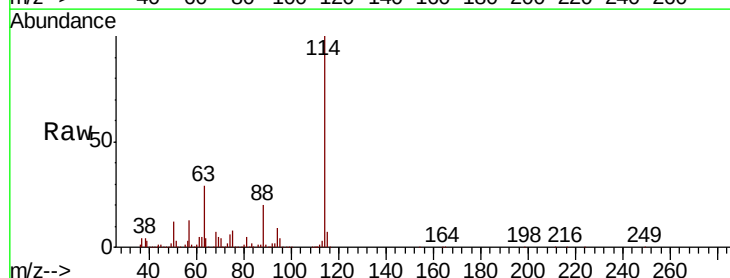
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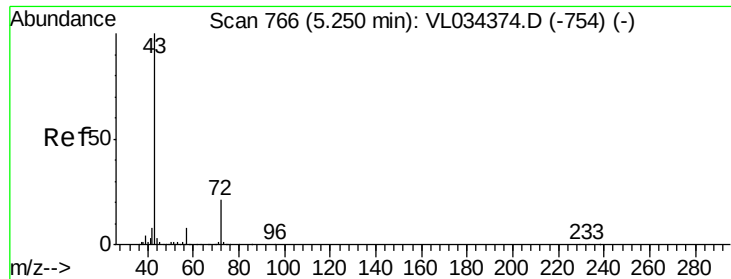
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.20 min Scan# 1372
Delta R.T. -0.01 min
Lab File: VL034407.D
Acq: 25 Nov 2019 15:43

Tgt Ion	Ratio	Lower	Upper
114	100		
63	29.1	24.2	36.4
88	19.5	15.9	23.9





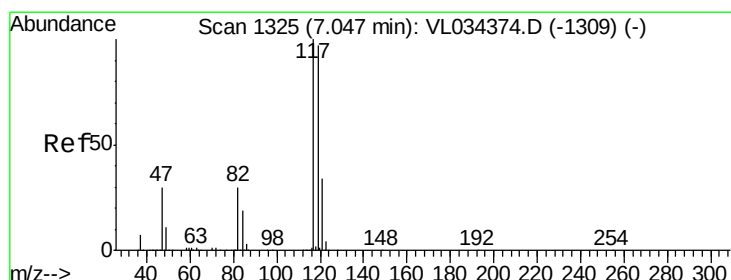
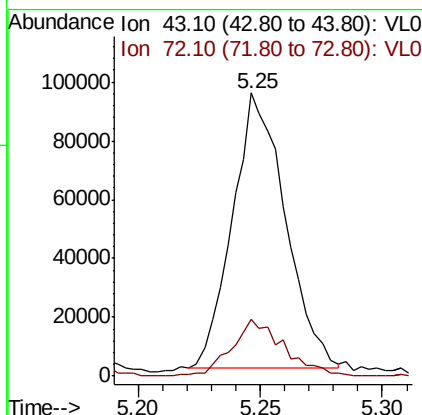
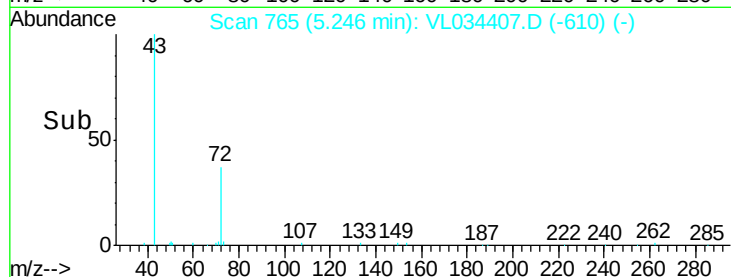
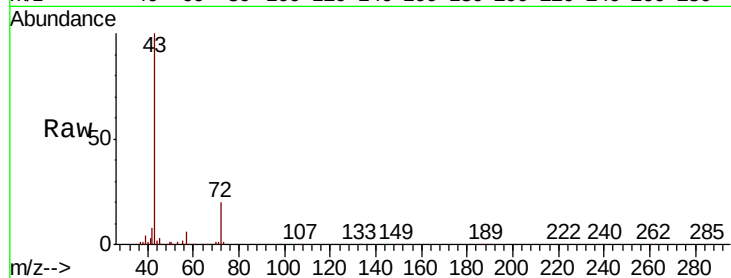
#34
2-Butanone
Concen: 0.846 ppbv
RT: 5.25 min Scan# 765
Delta R.T. -0.00 min
Lab File: VL034407.D
Acq: 25 Nov 2019 15:43

Instrument :
MSVOA_L
ClientSampled :
2

Tot Ion: 43 Resp: 139519
Ion Ratio Lower Upper
43 100
72 20.9 17.0 25.6

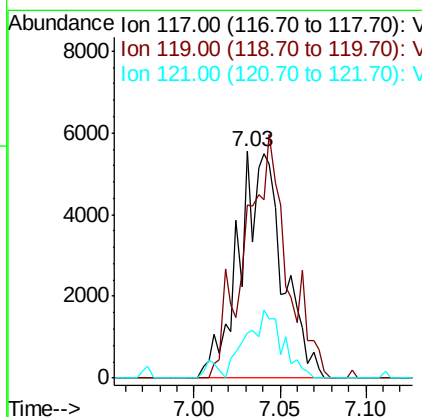
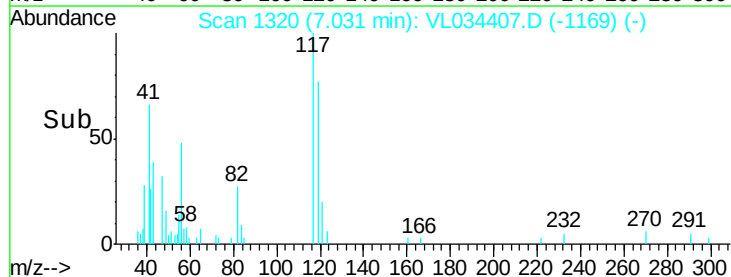
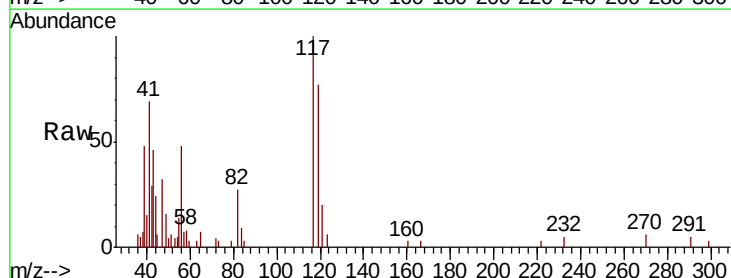
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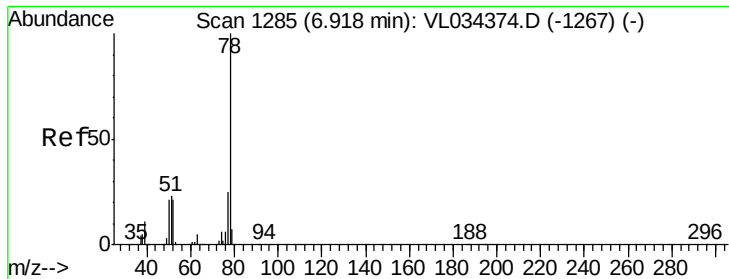
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#35
Carbon Tetrachloride
Concen: 0.057 ppbv m
RT: 7.03 min Scan# 1320
Delta R.T. -0.02 min
Lab File: VL034407.D
Acq: 25 Nov 2019 15:43

Tgt Ion: 117 Resp: 9778
Ion Ratio Lower Upper
117 100
119 76.6 77.3 115.9#
121 19.7 27.4 41.2#





#36

Benzene

Concen: 0.232 ppbv

RT: 6.91 min Scan# 1283

Delta R.T. -0.01 min

Lab File: VL034407.D

Acq: 25 Nov 2019 15:43

Instrument :

MSVOA_L

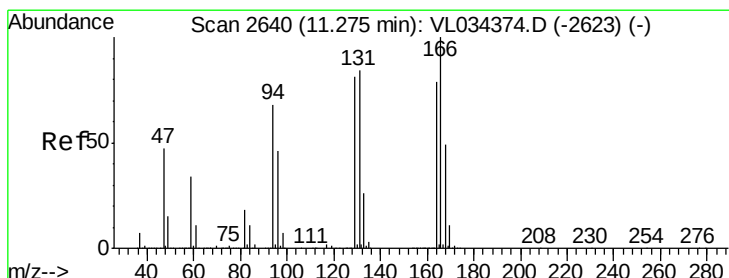
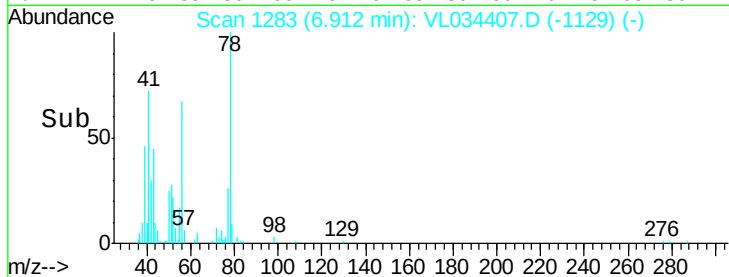
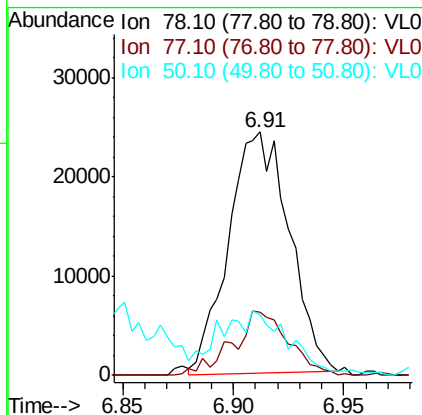
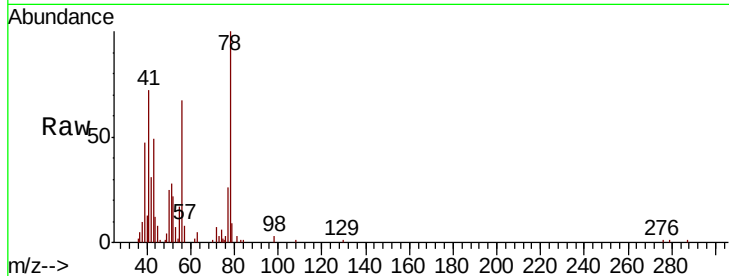
ClientSampled :

2

Tot Ion:	78	Resp:	46386
Ion	Ratio	Lower	Upper
78	100		
77	26.7	20.2	30.4
50	23.4	17.1	25.7

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#52

Tetrachloroethene

Concen: 0.077 ppbv m

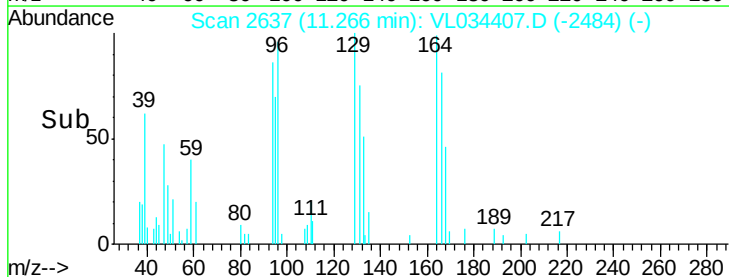
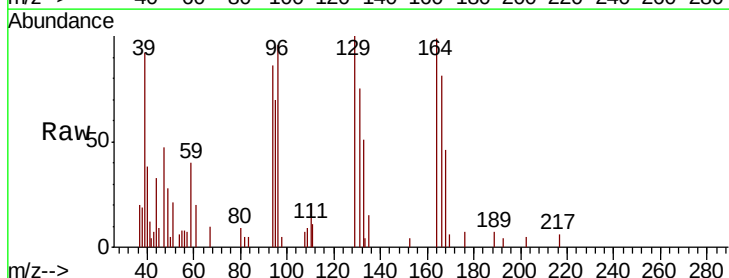
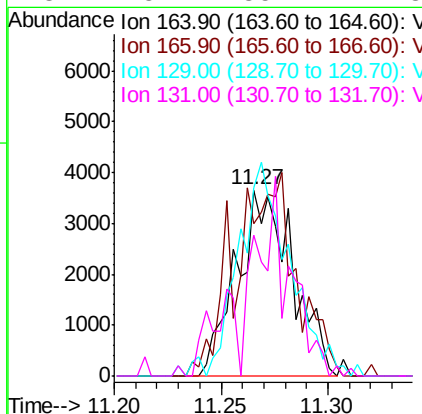
RT: 11.27 min Scan# 2637

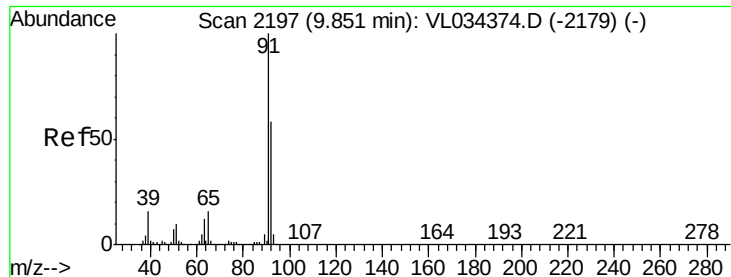
Delta R.T. -0.01 min

Lab File: VL034407.D

Acq: 25 Nov 2019 15:43

Tgt Ion:	164	Resp:	6645
Ion	Ratio	Lower	Upper
164	100		
166	82.3	101.7	152.5#
129	101.0	82.6	123.8
131	75.7	85.2	127.8#





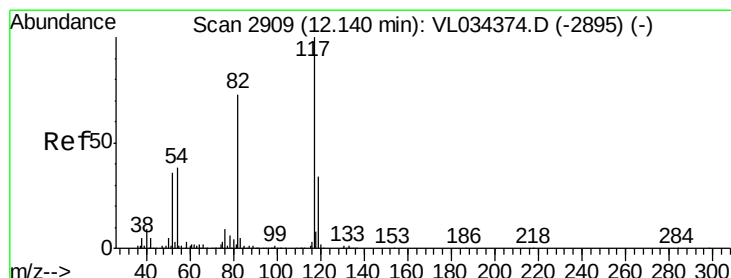
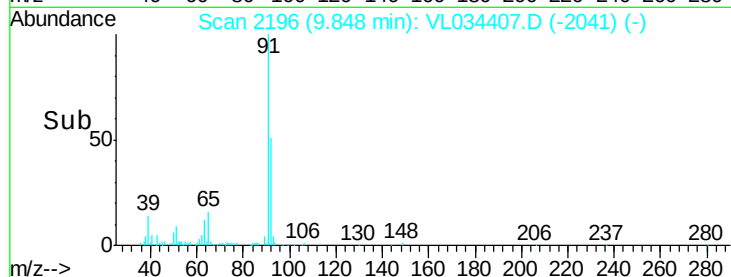
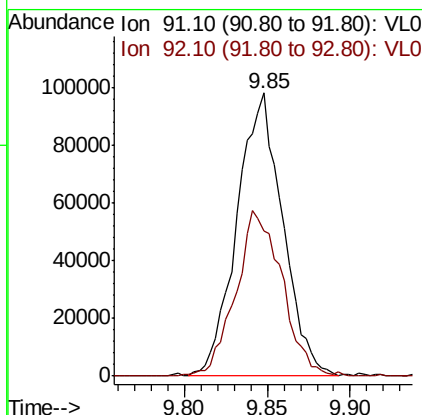
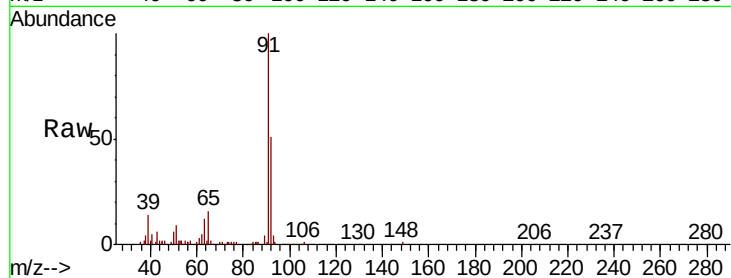
#53
Toluene
Concen: 0.823 ppbv
RT: 9.85 min Scan# 2196
Delta R.T. -0.00 min
Lab File: VL034407.D
Acq: 25 Nov 2019 15:43

Instrument :
MSVOA_L
ClientSampled :
2

Tot Ion: 91 Resp: 187258
Ion Ratio Lower Upper
91 100
92 59.9 47.9 71.9

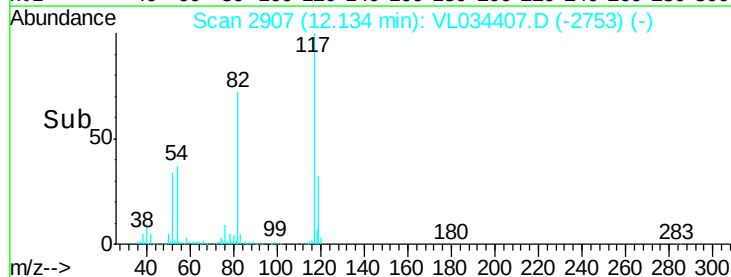
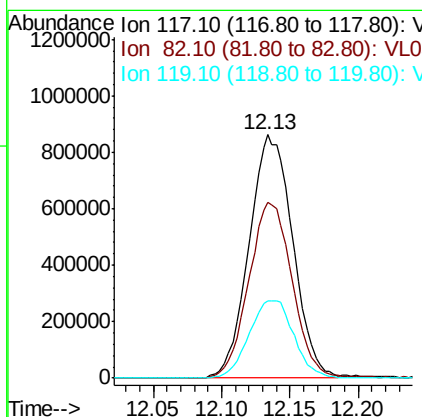
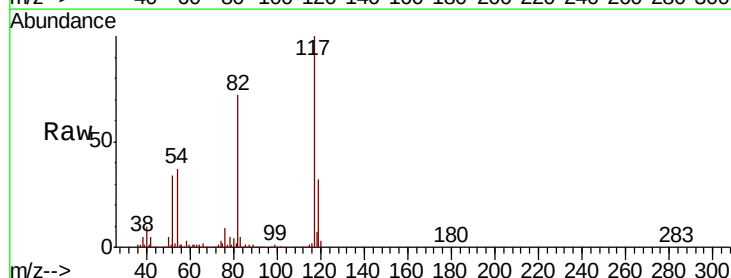
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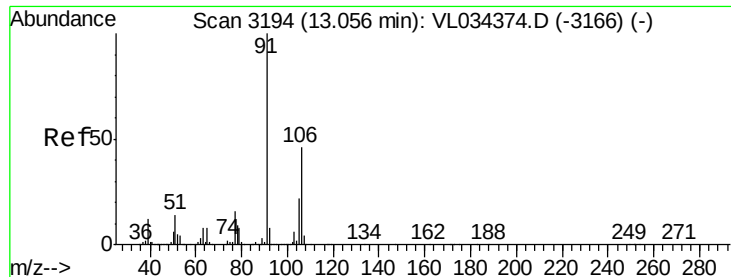
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#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.13 min Scan# 2907
Delta R.T. -0.01 min
Lab File: VL034407.D
Acq: 25 Nov 2019 15:43

Tgt Ion: 117 Resp: 1911633
Ion Ratio Lower Upper
117 100
82 73.1 57.5 86.3
119 33.2 25.4 38.2





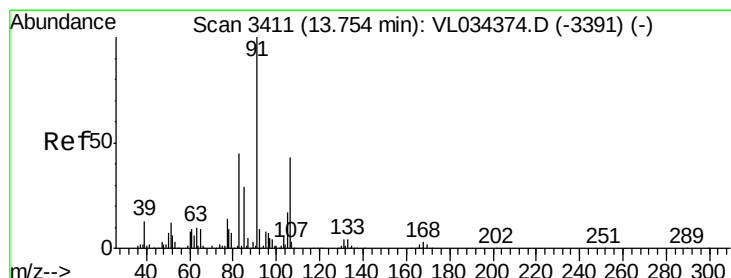
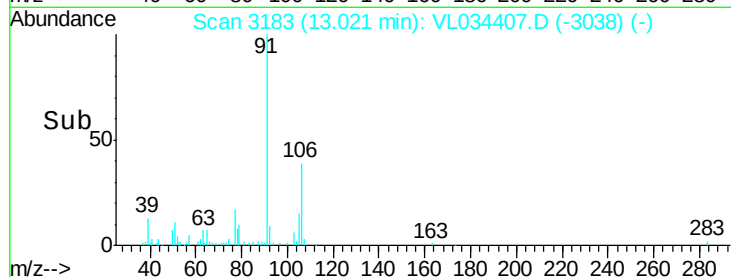
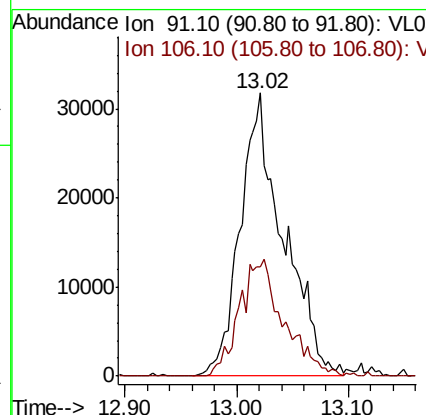
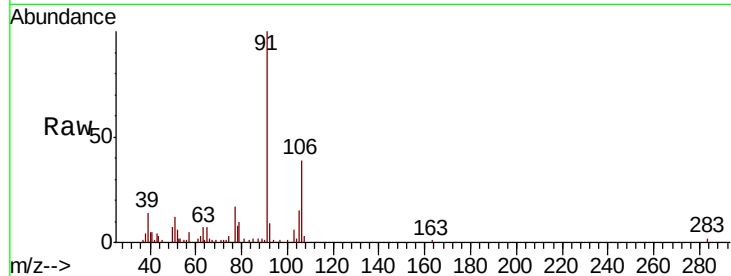
#59
m/p-Xylene
Concen: 0.332 ppbv m
RT: 13.02 min Scan# 3183
Delta R.T. -0.04 min
Lab File: VL034407.D
Acq: 25 Nov 2019 15:43

Instrument :
MSVOA_L
ClientSampled :
2

Tot Ion: 91 Resp: 85245
Ion Ratio Lower Upper
91 100
106 0.0 34.6 51.8#

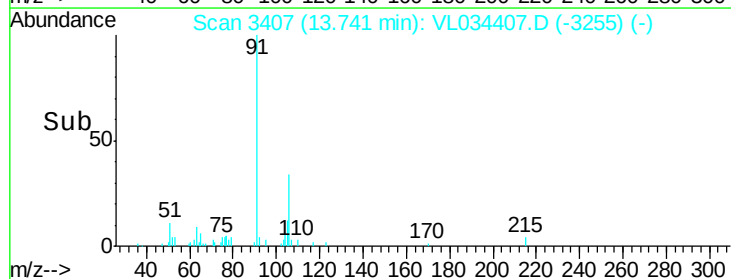
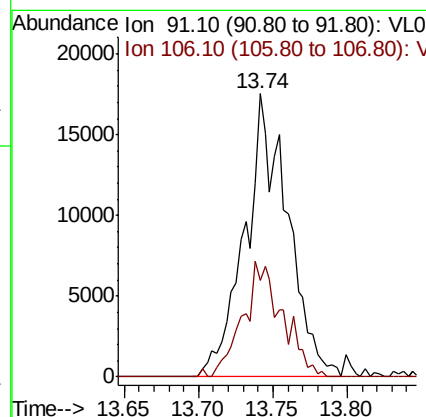
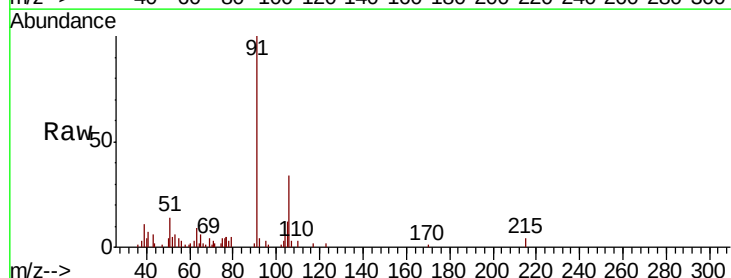
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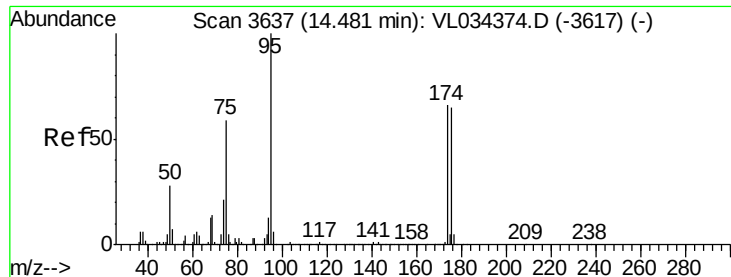
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#60
o-Xylene
Concen: 0.138 ppbv m
RT: 13.74 min Scan# 3407
Delta R.T. -0.01 min
Lab File: VL034407.D
Acq: 25 Nov 2019 15:43

Tgt Ion: 91 Resp: 34950
Ion Ratio Lower Upper
91 100
106 37.8 21.3 64.0





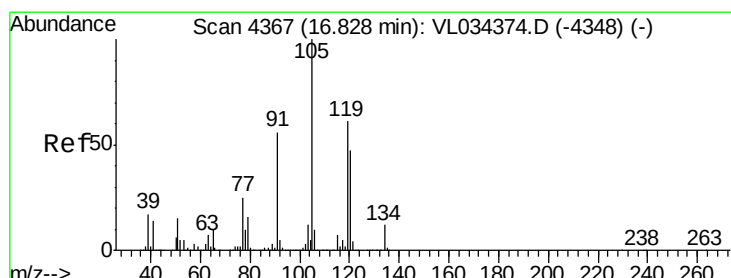
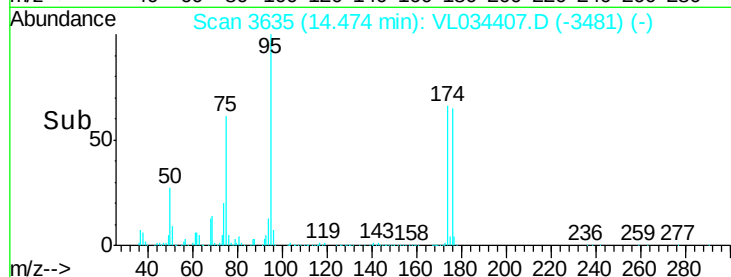
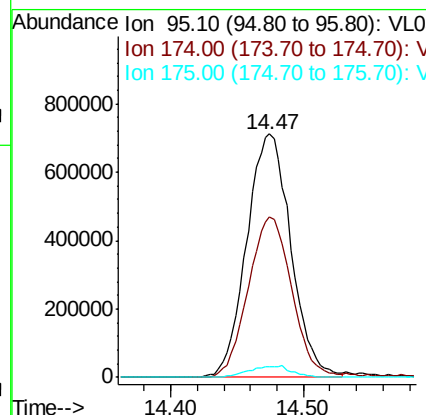
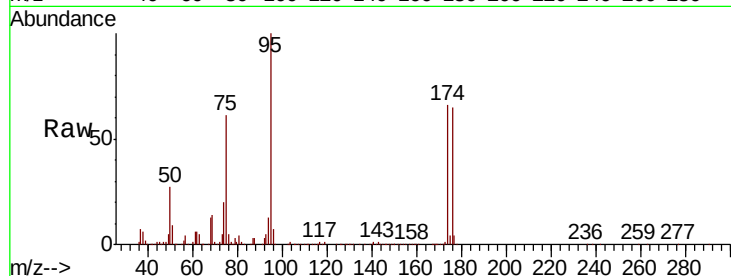
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.249 ppbv
 RT: 14.47 min Scan# 3635
 Delta R.T. -0.01 min
 Lab File: VL034407.D
 Acq: 25 Nov 2019 15:43

Instrument :
 MSVOA_L
 ClientSampled :
 2

Tot Ion: 95 Resp: 1648214
 Ion Ratio Lower Upper
 95 100
 174 66.5 52.2 78.2
 175 4.7 3.8 5.8

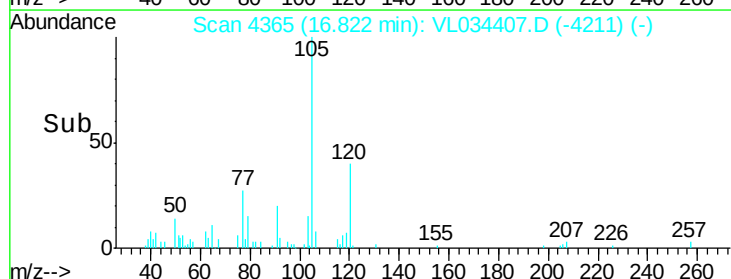
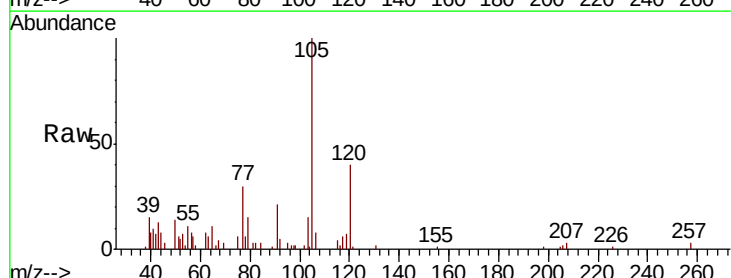
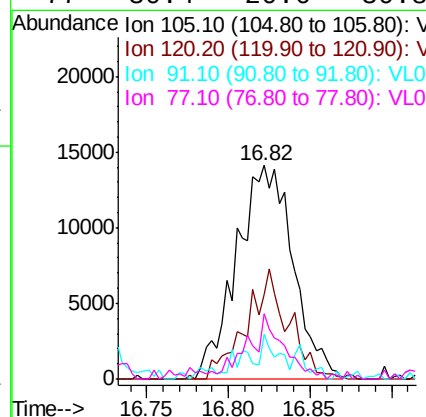
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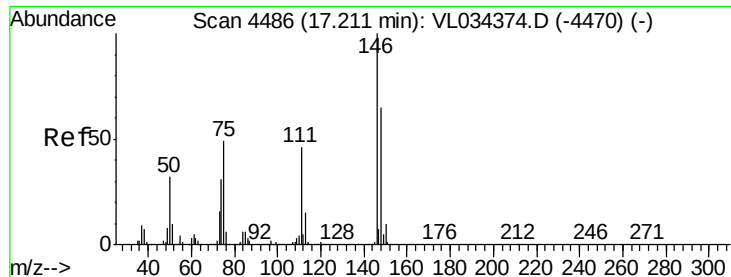
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#74
 1,2,4-Trimethylbenzene
 Concen: 0.112 ppbv m
 RT: 16.82 min Scan# 4365
 Delta R.T. -0.01 min
 Lab File: VL034407.D
 Acq: 25 Nov 2019 15:43

Tgt Ion: 105 Resp: 33982
 Ion Ratio Lower Upper
 105 100
 120 39.6 37.4 56.0
 91 20.8 46.3 69.5#
 77 30.4 20.6 30.8





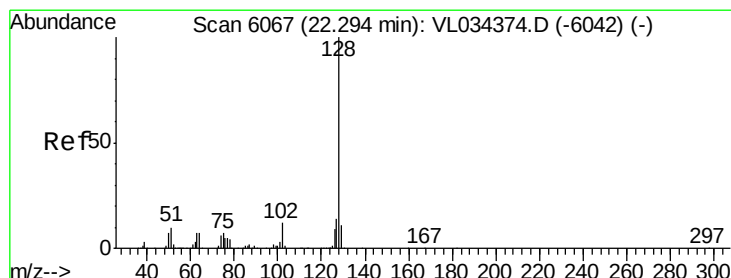
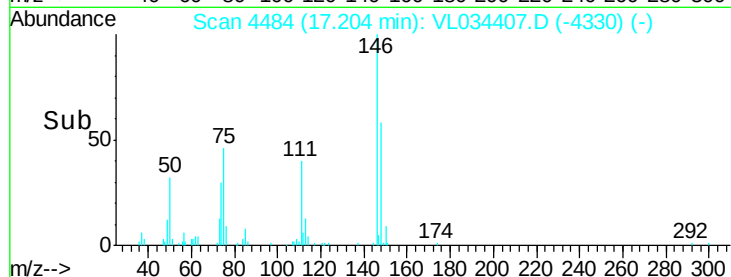
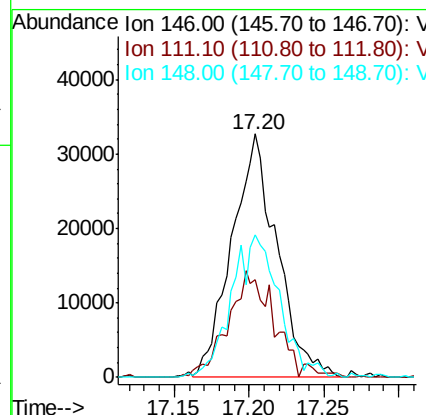
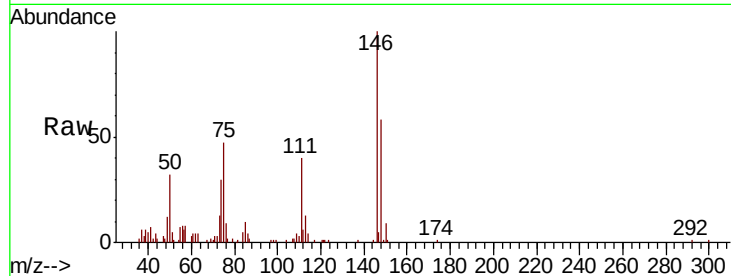
#76
1,4-Dichlorobenzene
Concen: 0.403 ppbv
RT: 17.20 min Scan# 4484
Delta R.T. -0.01 min
Lab File: VL034407.D
Acq: 25 Nov 2019 15:43

Instrument :
MSVOA_L
ClientSampled :
2

Tot Ion	Ratio	Lower	Upper
146	100		
111	45.4	24.1	72.3
148	61.9	32.9	98.6

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#79
Naphthalene
Concen: 0.266 ppbv m
RT: 22.28 min Scan# 6064
Delta R.T. -0.01 min
Lab File: VL034407.D
Acq: 25 Nov 2019 15:43

Tgt Ion	Ratio	Lower	Upper
128	100		
127	14.5	11.0	16.6
129	9.1	8.9	13.3

