

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL101620\
 Data File : VL035786.D
 Acq On : 16 Oct 2020 15:14
 Operator : SY/AP
 Sample : L4450-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 AIR-01

Manual Integrations
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 10/19/2020 11:09:57 AM

Quant Time: Oct 17 23:53:23 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL092320AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Sep 23 2020
 QLast Update : Wed Sep 23 07:38:05 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	997156	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.18	114	3963079	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.09	117	3935439	10.00	ppbv	-0.02

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	2991166	10.14	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.40%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	38322	0.234	ppbv	98
3) Chlorodifluoromethane	2.98	51	1030483m	9.606	ppbv	
4) Chloromethane	3.13	50	28151	0.488	ppbv	93
9) Propene	3.00	41	100437	2.579	ppbv	87
10) Heptane	8.13	43	85858	0.791	ppbv	100
11) Trichlorofluoromethane	3.94	101	261326	1.119	ppbv	94
12) 1,1,2-Trichlorotrifluoroet	4.48	101	17652	0.101	ppbv	99
13) Ethanol	3.60	45	935022	97.344	ppbv	100
15) Acetone	3.84	43	2010296	18.736	ppbv	100
17) tert-Butyl alcohol	4.29	59	239441	2.049	ppbv	99
19) Isopropyl Alcohol	3.96	45	991262	16.983	ppbv	98
20) Methylene Chloride	4.33	84	1158367	14.697	ppbv	97
22) trans-1,2-Dichloroethene	4.88	96	65506	0.814	ppbv	98
26) Hexane	5.69	57	5402720	51.066	ppbv #	48
27) Carbon Disulfide	4.54	76	1830881	11.610	ppbv	100
29) Chloroform	5.74	83	290247	1.351	ppbv	96
30) Cyclohexane	7.13	84	18156	0.174	ppbv #	19
31) cis-1,2-Dichloroethene	5.54	61	73672	0.721	ppbv	93
35) Carbon Tetrachloride	7.02	117	13542m	0.066	ppbv	
36) Benzene	6.89	78	60851	0.236	ppbv	92
38) Trichloroethene	7.84	130	8408721	65.274	ppbv	95
47) 1,1,2-Trichloroethane	9.48	97	18112m	0.135	ppbv	
52) Tetrachloroethene	11.23	164	95538	0.769	ppbv	97
53) Toluene	9.81	91	185932	0.611	ppbv	97
59) m/p-Xylene	12.97	91	86882m	0.252	ppbv	
61) Styrene	13.53	104	106891	0.443	ppbv	99
62) Isopropylbenzene	14.68	105	75768	0.140	ppbv	96
78) Hexachloro-1,3-Butadiene	23.40	225	24865m	0.159	ppbv	

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

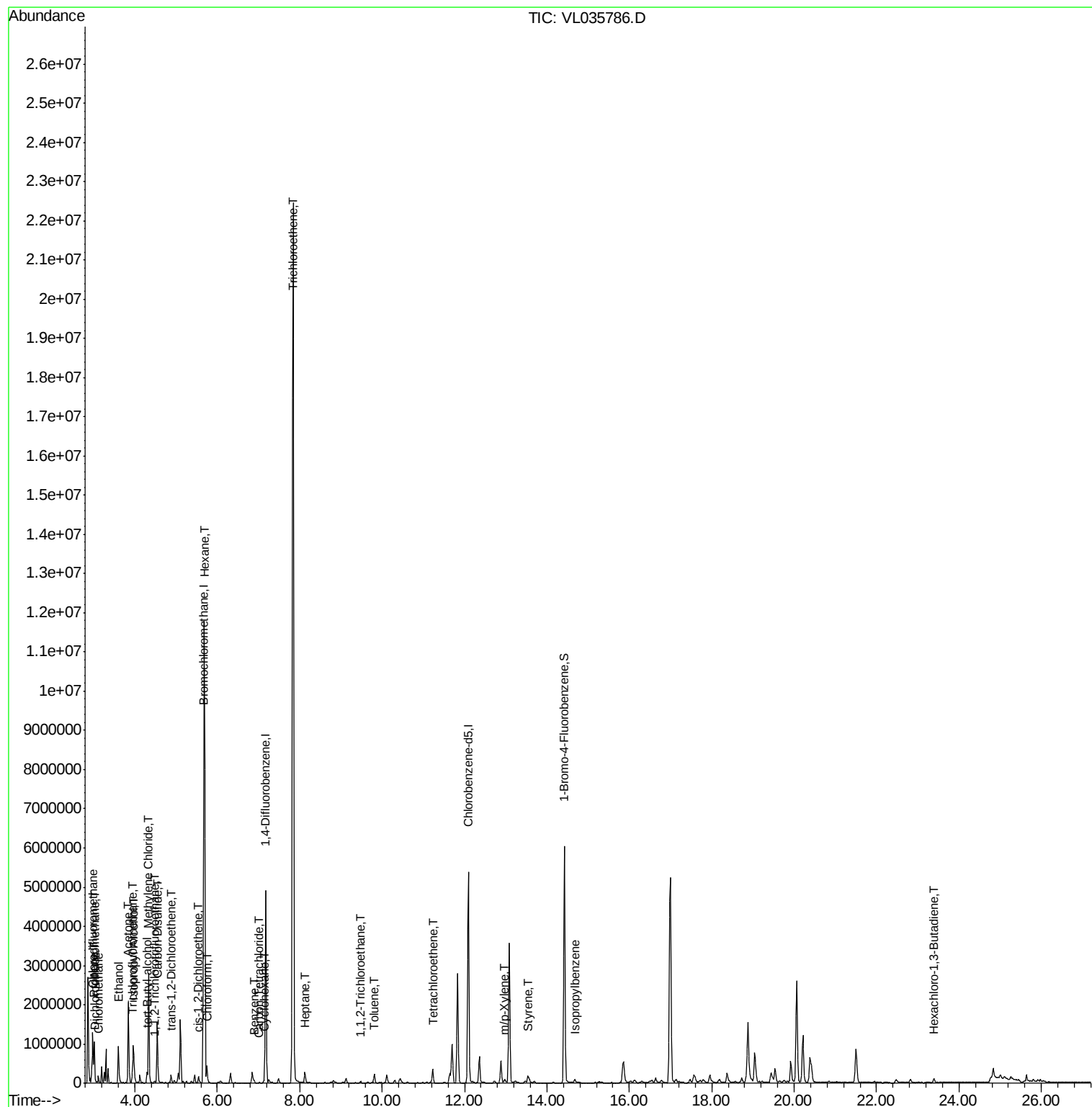
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL101620\
Data File : VL035786.D
Acq On : 16 Oct 2020 15:14
Operator : SY/AP
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Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

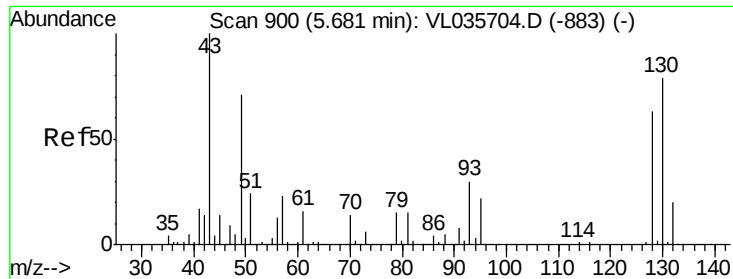
Instrument :
MSVOA_L
ClientSampleId :
AIR-01

Manual Integrations
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10/19/2020 11:09:57 AM

Quant Time: Oct 17 23:53:23 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL092320AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Sep
QLast Update : Wed Sep 23 07:38:05 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 894

Delta R.T. -0.02 min

Lab File: VL035786.D

Acq: 16 Oct 2020 15:14

Instrument :

MSVOA_L

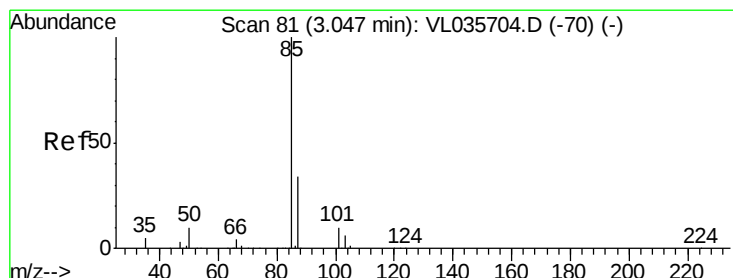
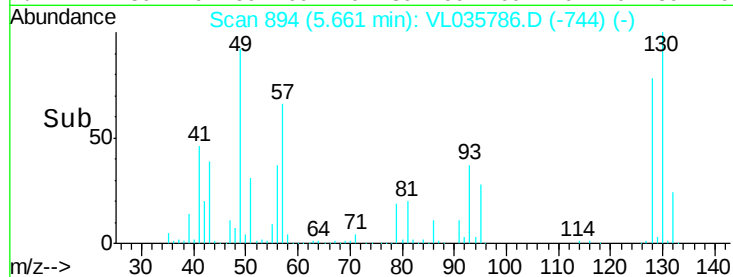
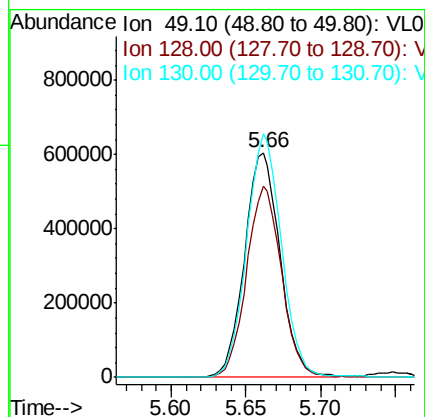
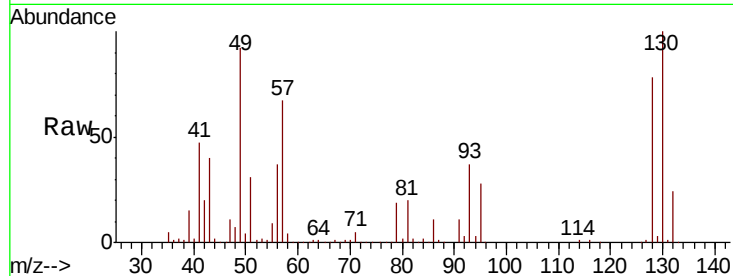
ClientSampled :

AIR-01

Tot Ion:	49	Resp:	997156
Ion Ratio	Lower	Upper	
49	100		
128	84.4	43.1	129.4
130	107.5	54.9	164.7

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#2

Dichlorodifluoromethane

Concen: 0.234 ppbv

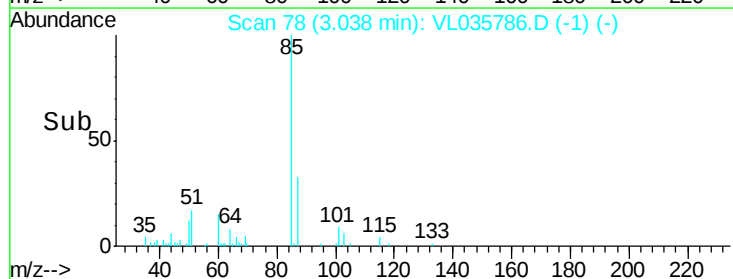
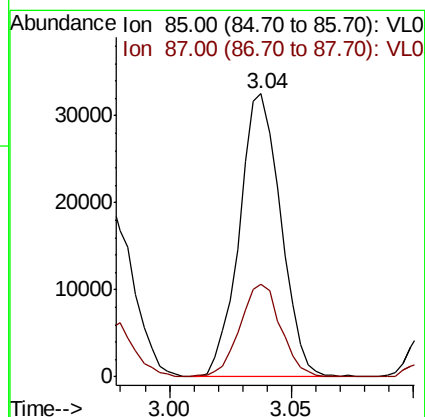
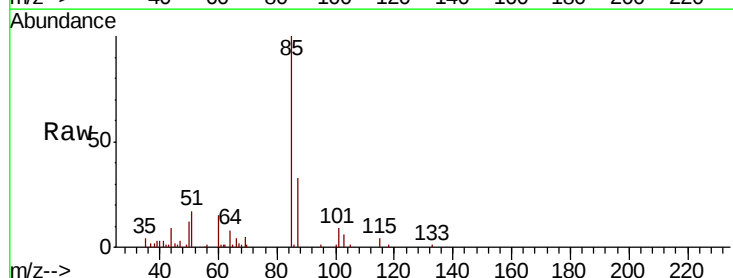
RT: 3.04 min Scan# 78

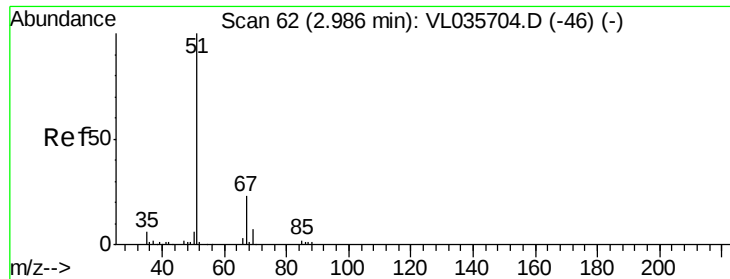
Delta R.T. -0.01 min

Lab File: VL035786.D

Acq: 16 Oct 2020 15:14

Tgt Ion:	85	Resp:	38322
Ion Ratio	Lower	Upper	
85	100		
87	32.9	27.3	40.9





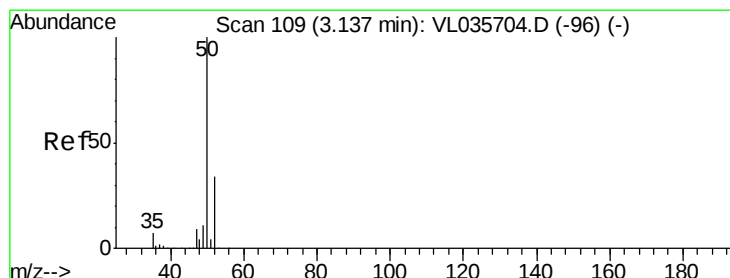
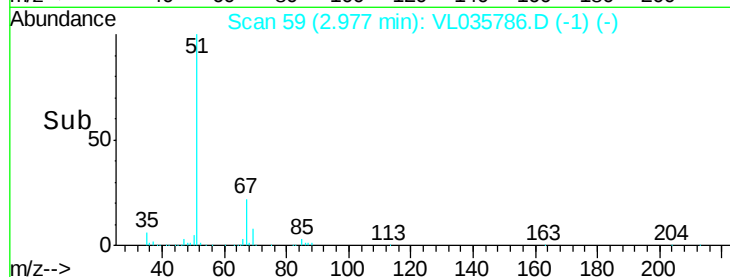
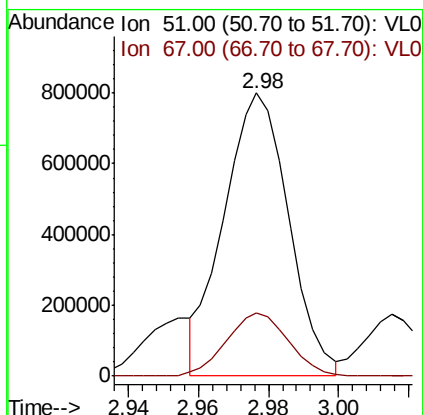
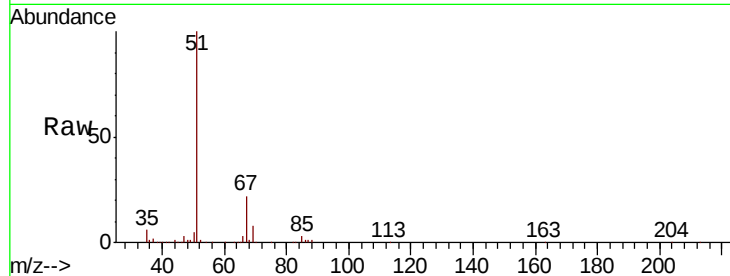
#3
Chlorodifluoromethane
Concen: 9.606 ppbv
RT: 2.98 min Scan# 59
Delta R.T. -0.01 min
Lab File: VL035786.D
Acq: 16 Oct 2020 15:14

Instrument :
MSVOA_L
ClientSampled :
AIR-01

Tot Ion: 51 Resp: 1030483
Ion Ratio Lower Upper
51 100
67 21.5 17.8 26.8

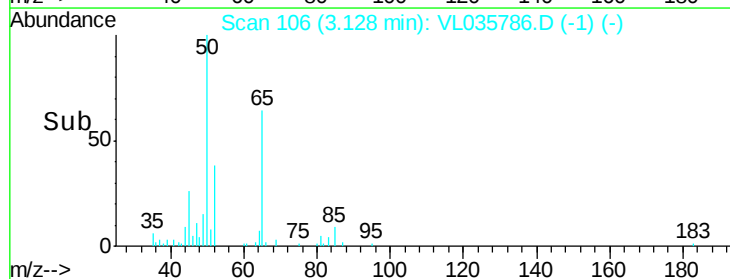
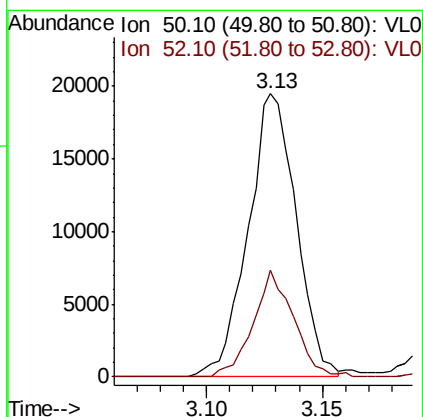
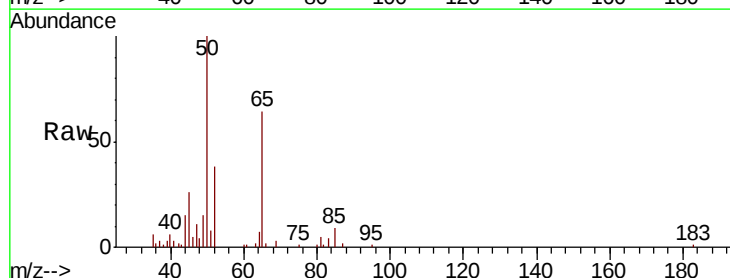
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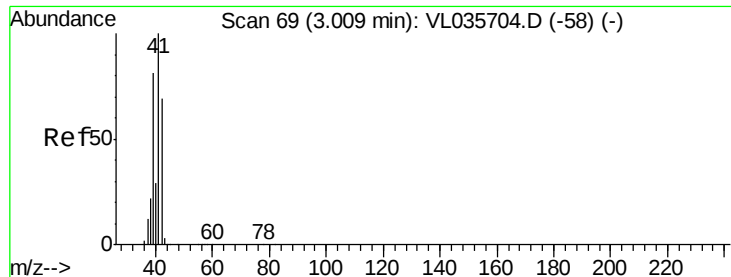
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#4
Chloromethane
Concen: 0.488 ppbv
RT: 3.13 min Scan# 106
Delta R.T. -0.01 min
Lab File: VL035786.D
Acq: 16 Oct 2020 15:14

Tgt Ion: 50 Resp: 28151
Ion Ratio Lower Upper
50 100
52 37.7 26.8 40.2





#9

Propene

Concen: 2.579 ppbv

RT: 3.00 min Scan# 67

Delta R.T. -0.01 min

Lab File: VL035786.D

Acq: 16 Oct 2020 15:14

Instrument :

MSVOA_L

ClientSampleId :

AIR-01

Tot Ion: 41 Resp: 100437

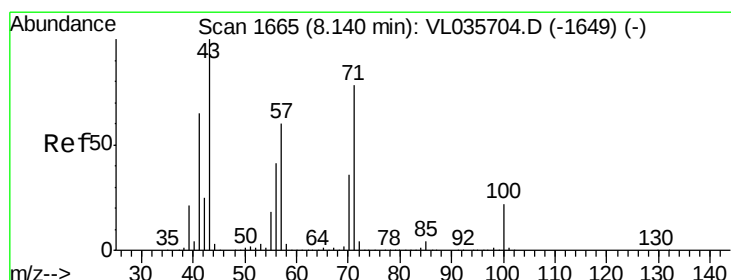
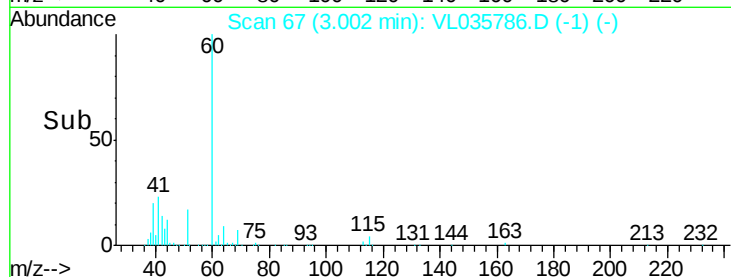
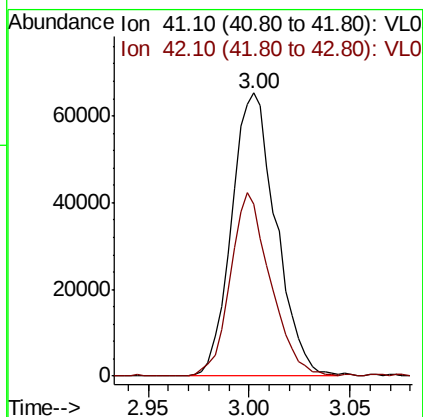
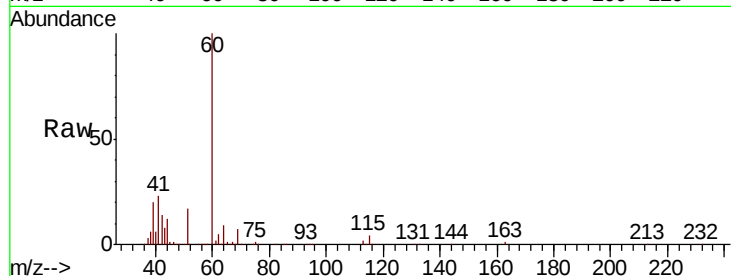
Ion Ratio Lower Upper

41 100

42 59.8 56.2 84.4

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#10

Heptane

Concen: 0.791 ppbv

RT: 8.13 min Scan# 1661

Delta R.T. -0.01 min

Lab File: VL035786.D

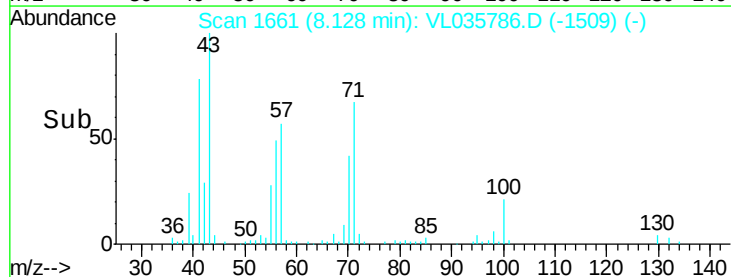
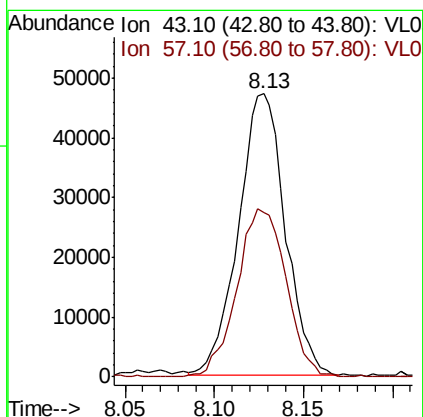
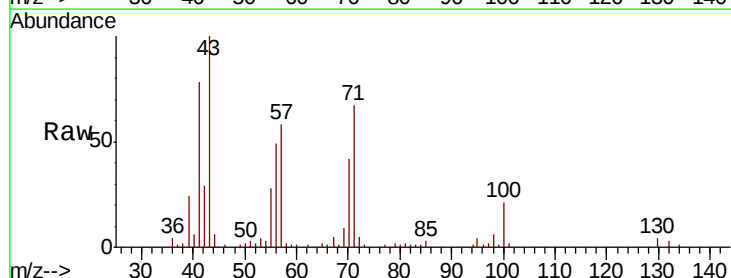
Acq: 16 Oct 2020 15:14

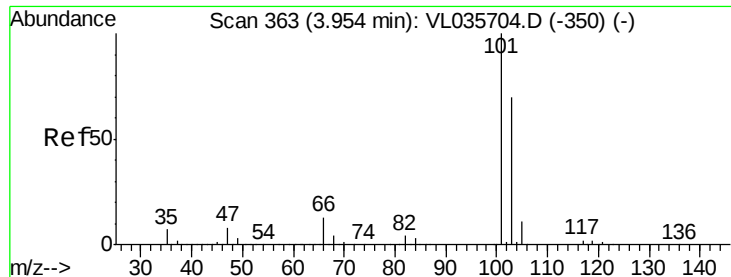
Tgt Ion: 43 Resp: 85858

Ion Ratio Lower Upper

43 100

57 62.9 50.4 75.6





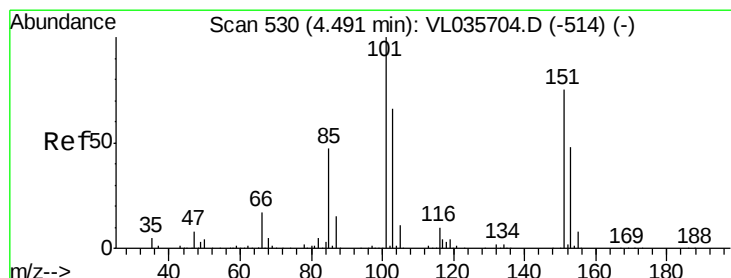
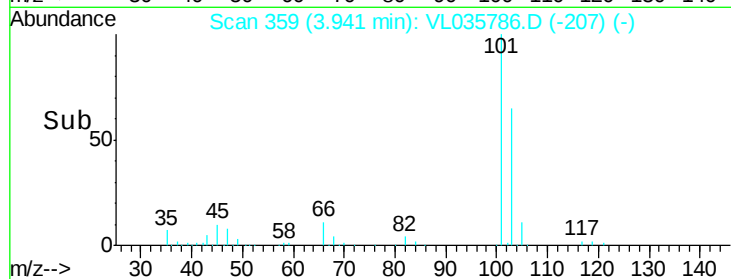
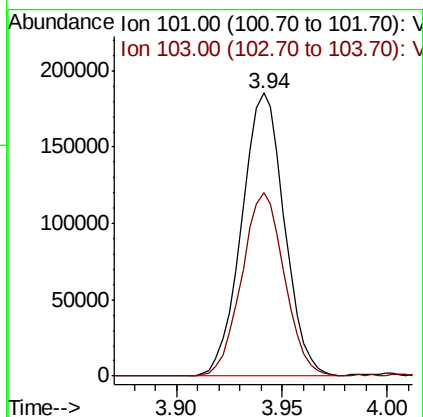
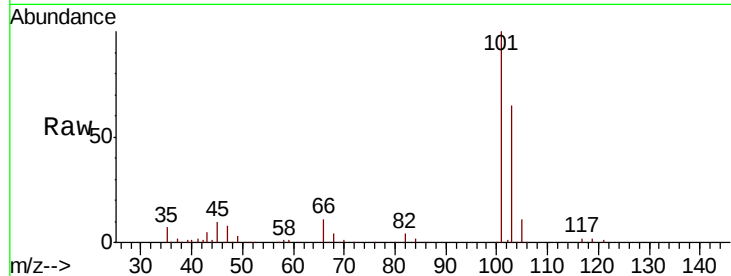
#11
 Trichlorofluoromethane
 Concen: 1.119 ppbv
 RT: 3.94 min Scan# 359
 Delta R.T. -0.01 min
 Lab File: VL035786.D
 Acq: 16 Oct 2020 15:14

Instrument :
 MSVOA_L
 ClientSampleId :
 AIR-01

Tot Ion	Ratio	Lower	Upper
101	100		
103	64.6	55.6	83.4

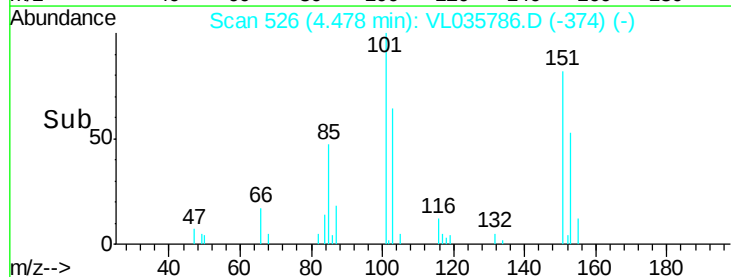
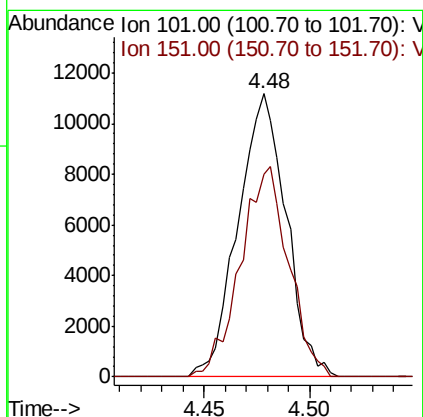
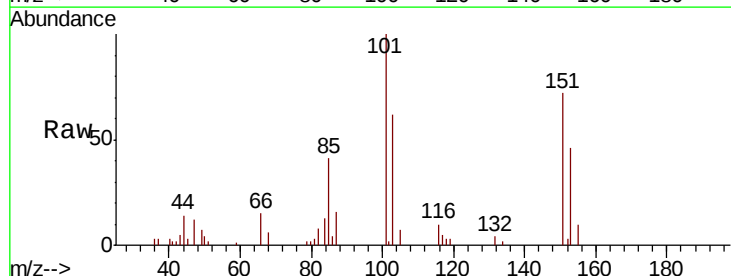
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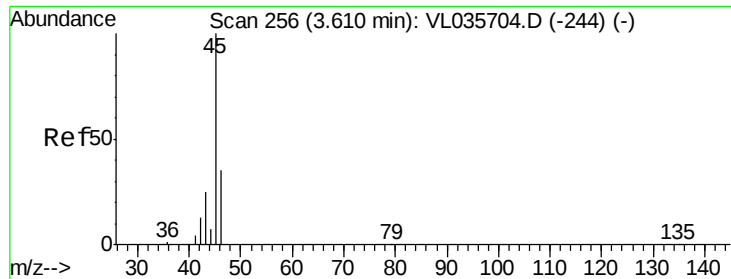
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#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.101 ppbv
 RT: 4.48 min Scan# 526
 Delta R.T. -0.01 min
 Lab File: VL035786.D
 Acq: 16 Oct 2020 15:14

Tgt Ion	Ratio	Lower	Upper
101	100		
151	74.9	59.1	88.7





#13

Ethanol

Concen: 97.344 ppbv

RT: 3.60 min Scan# 252

Delta R.T. -0.01 min

Lab File: VL035786.D

Acq: 16 Oct 2020 15:14

Instrument :

MSVOA_L

ClientSampled :

AIR-01

Tot Ion: 45 Resp: 935022

Ion Ratio Lower Upper

45 100

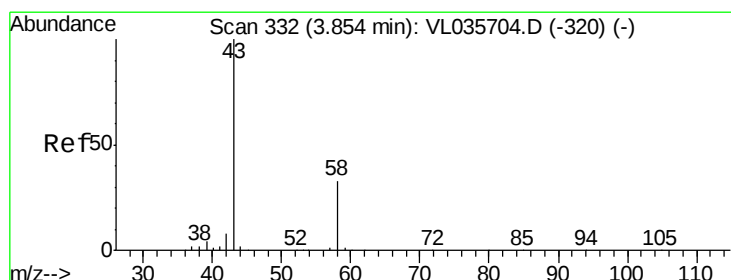
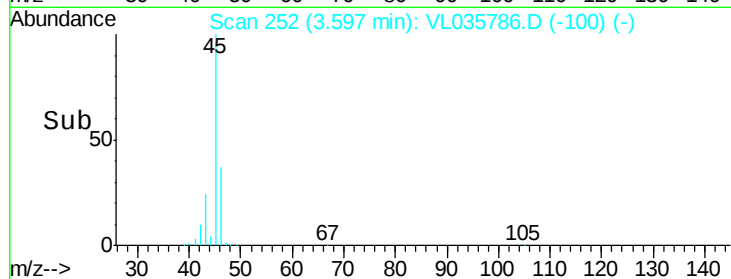
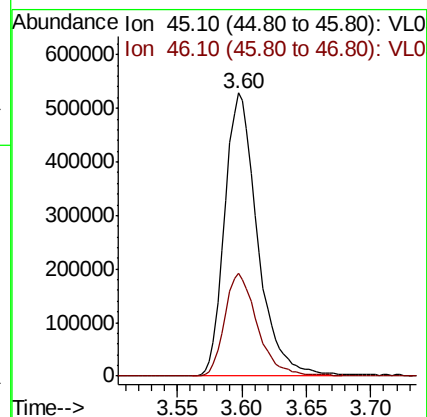
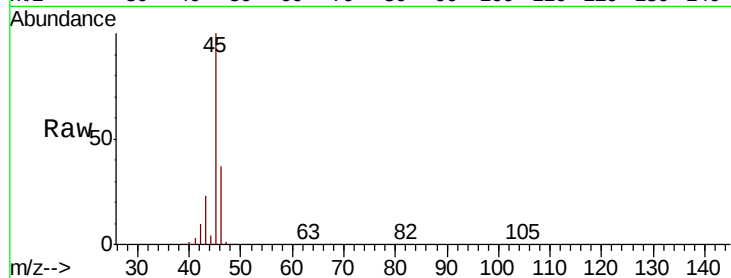
46 36.4 14.7 58.7

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#15

Acetone

Concen: 18.736 ppbv

RT: 3.84 min Scan# 327

Delta R.T. -0.02 min

Lab File: VL035786.D

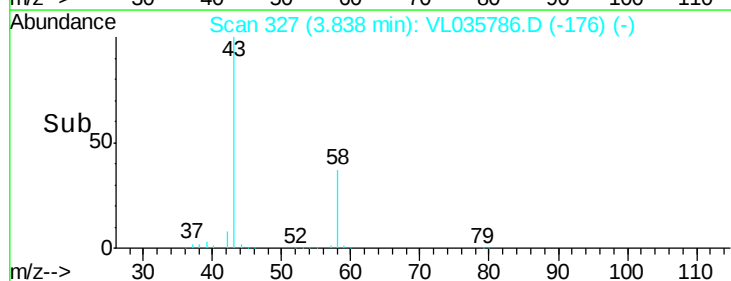
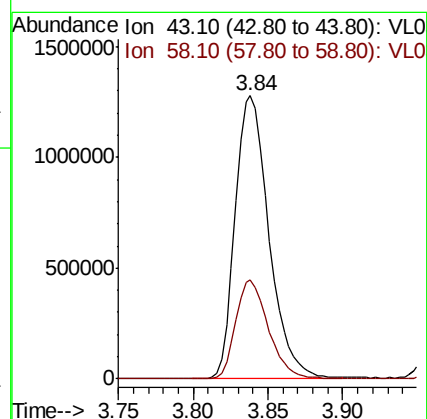
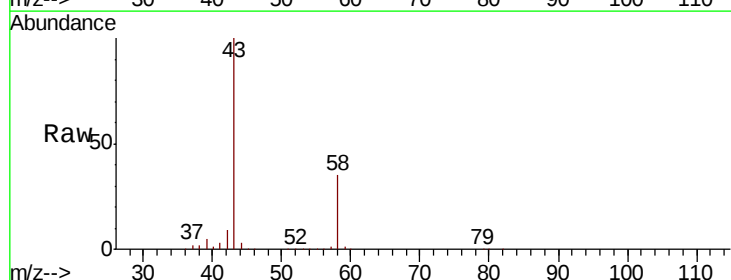
Acq: 16 Oct 2020 15:14

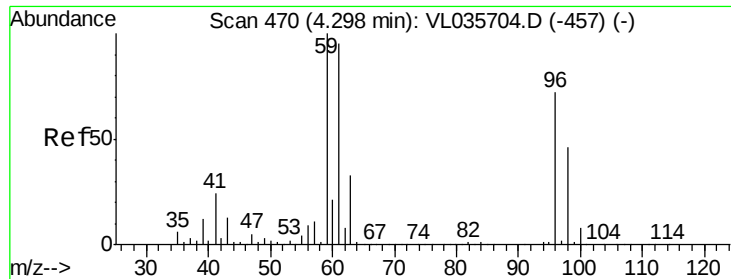
Tgt Ion: 43 Resp: 2010296

Ion Ratio Lower Upper

43 100

58 34.0 27.3 40.9





#17

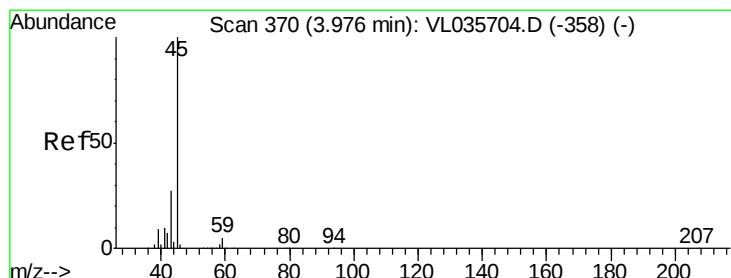
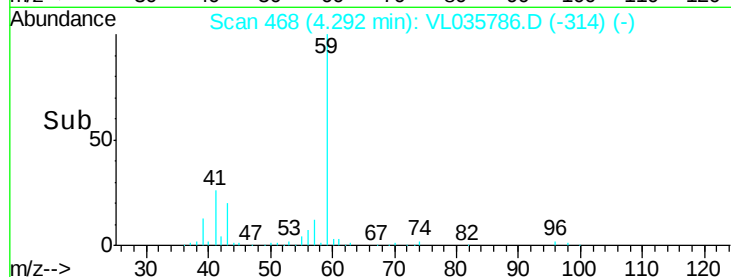
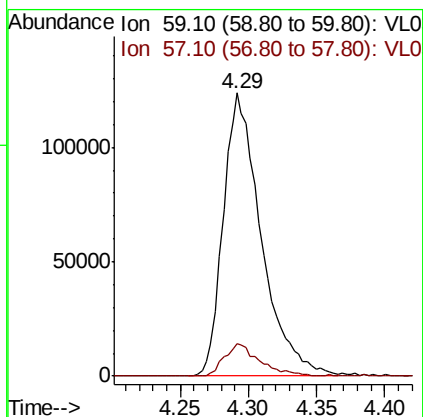
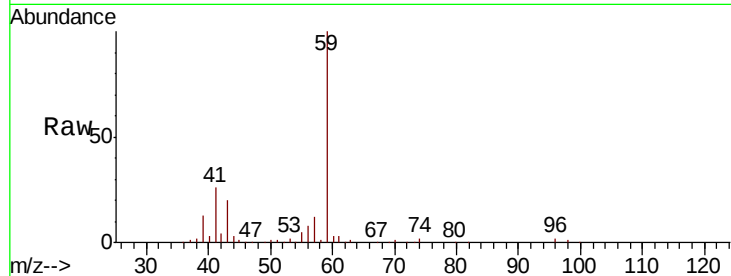
tert-Butyl alcohol
Concen: 2.049 ppbv
RT: 4.29 min Scan# 468
Delta R.T. -0.01 min
Lab File: VL035786.D
Acq: 16 Oct 2020 15:14

Instrument :
MSVOA_L
ClientSampled :
AIR-01

Tot Ion	Ratio	Lower	Upper
59	100		
57	11.0	8.5	12.7

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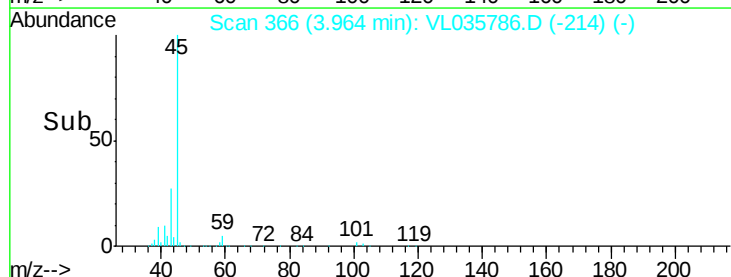
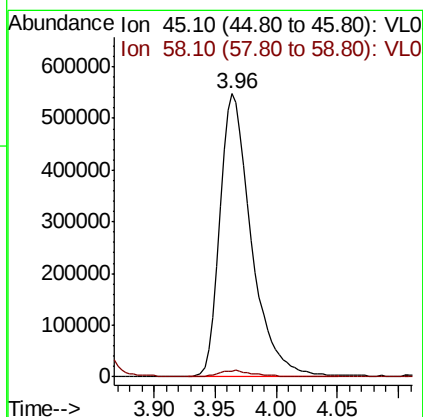
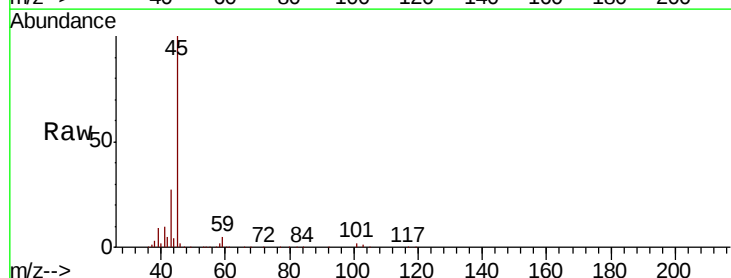
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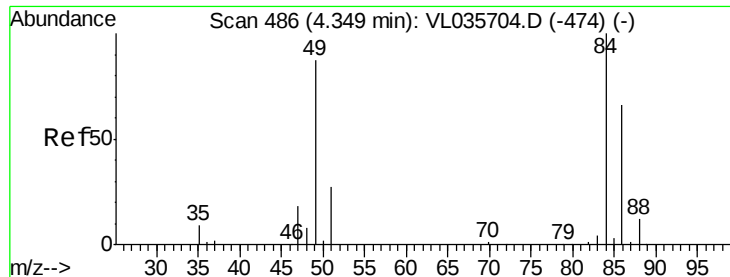


#19

Isopropyl Alcohol
Concen: 16.983 ppbv
RT: 3.96 min Scan# 366
Delta R.T. -0.01 min
Lab File: VL035786.D
Acq: 16 Oct 2020 15:14

Tgt Ion	Ratio	Lower	Upper
45	100		
58	3.0	2.8	4.2





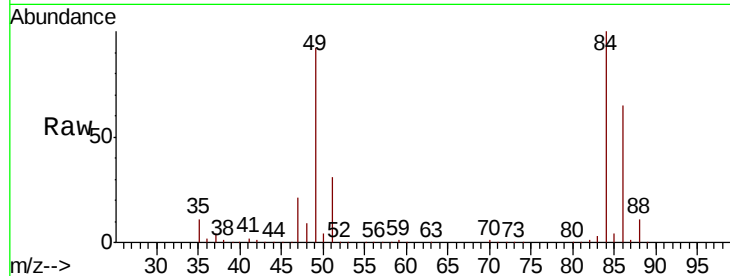
#20
Methvlene Chloride
Concen: 14.697 ppbv
RT: 4.33 min Scan# 481
Delta R.T. -0.02 min
Lab File: VL035786.D
Acq: 16 Oct 2020 15:14

Instrument :
MSVOA_L
ClientSampled :
AIR-01

Tot Ion:	84	Resp:	1158367
Ion	Ratio	Lower	Upper
84	100		
49	91.6	69.8	104.6
51	30.3	21.8	32.8
86	65.5	52.6	78.8

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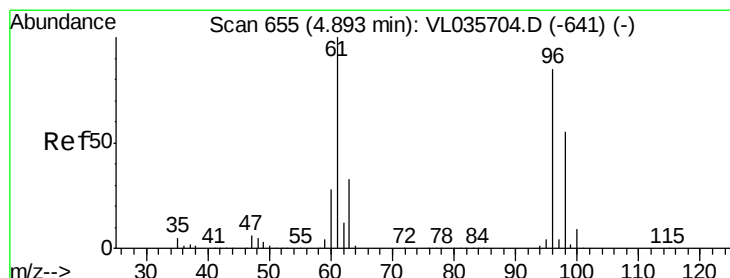
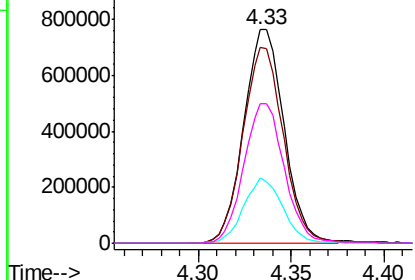
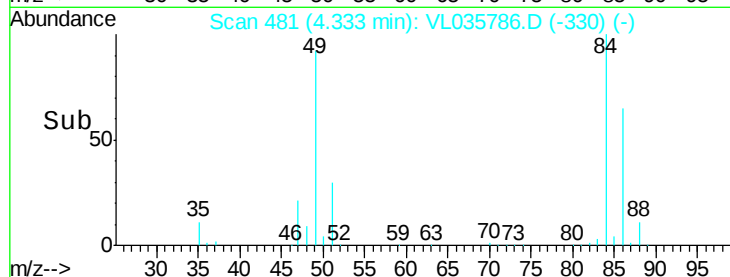
Abundance

Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

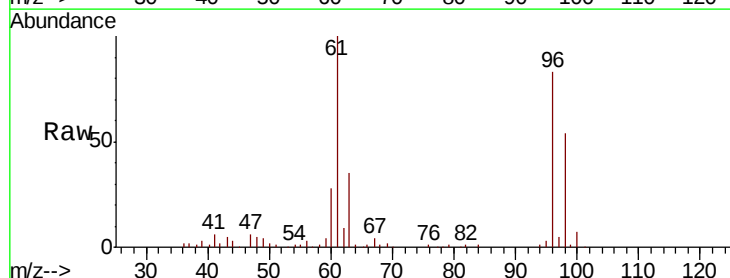
Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0



#22
trans-1,2-Dichloroethene
Concen: 0.814 ppbv
RT: 4.88 min Scan# 650
Delta R.T. -0.02 min
Lab File: VL035786.D
Acq: 16 Oct 2020 15:14

Tgt Ion:	96	Resp:	65506
Ion	Ratio	Lower	Upper
96	100		
61	120.2	93.7	140.5
98	65.0	51.2	76.8

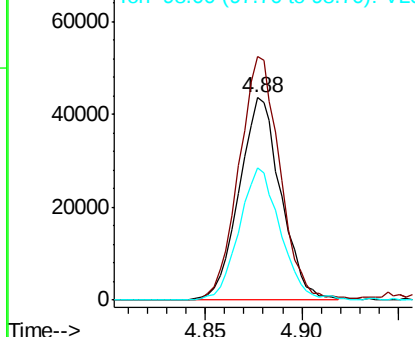
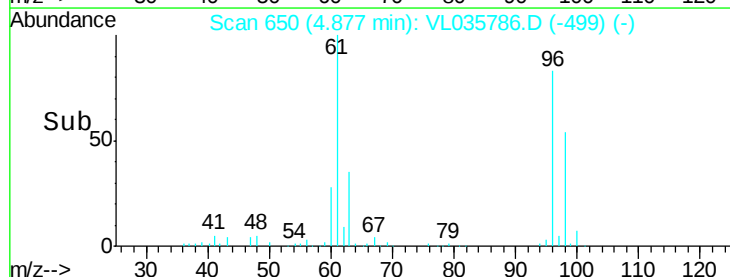


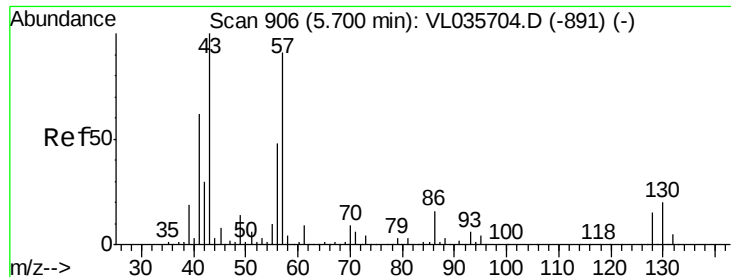
Abundance

Ion 96.00 (95.70 to 96.70): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 98.00 (97.70 to 98.70): VL0





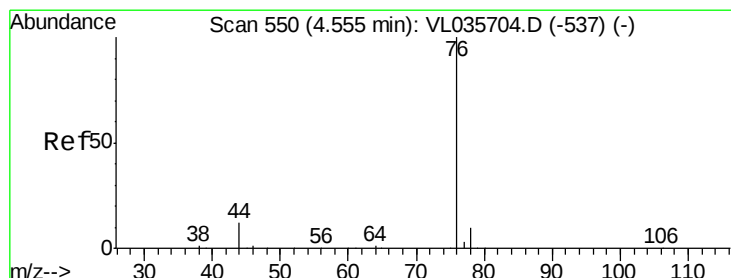
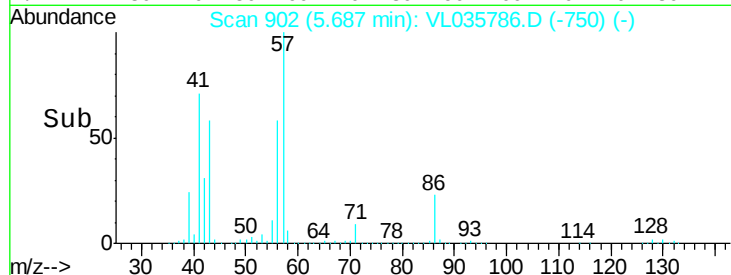
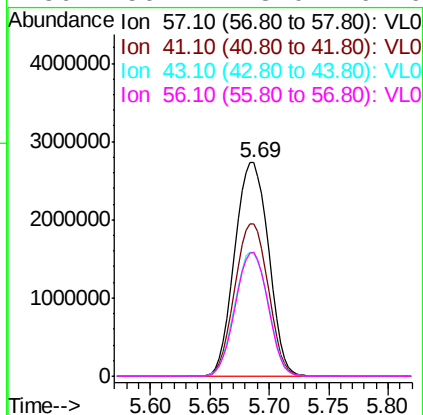
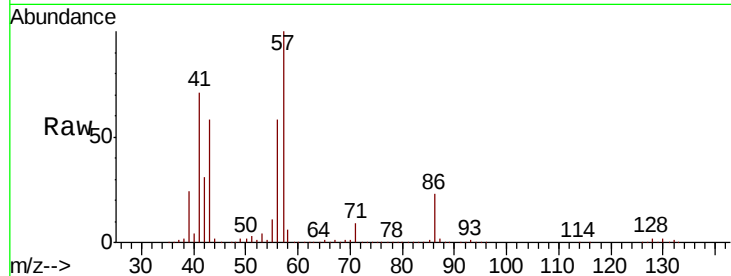
#26
Hexane
Concen: 51.066 ppbv
RT: 5.69 min Scan# 902
Delta R.T. -0.01 min
Lab File: VL035786.D
Acq: 16 Oct 2020 15:14

Instrument :
MSVOA_L
ClientSampled :
AIR-01

Tot Ion: 57 Resp: 5402720
Ion Ratio Lower Upper
57 100
41 70.6 57.9 86.9
43 57.4 143.8 215.6#
56 56.1 43.0 64.6

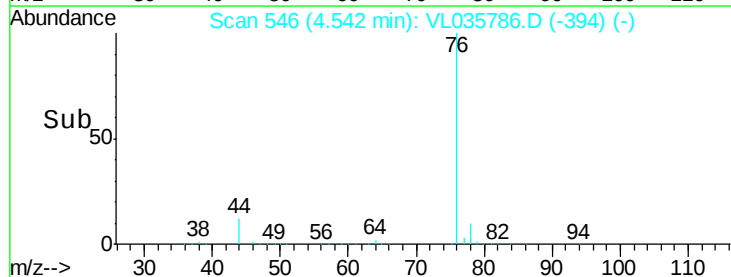
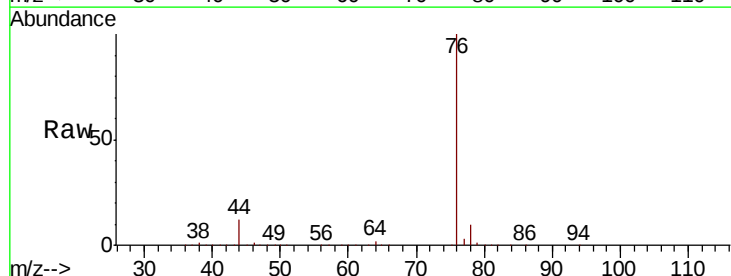
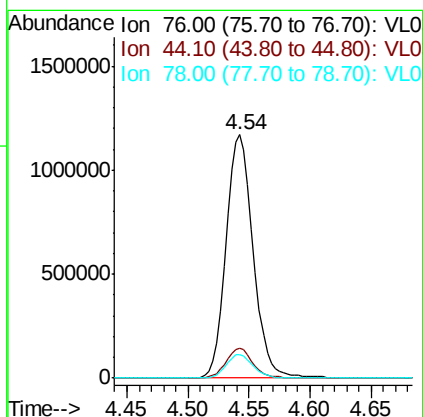
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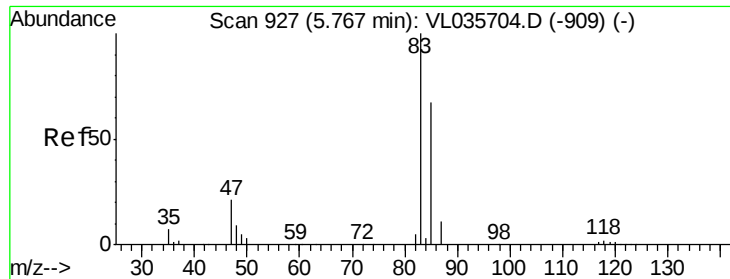
MMDadoda
10/19/2020 11:09:57 AM



#27
Carbon Disulfide
Concen: 11.610 ppbv
RT: 4.54 min Scan# 546
Delta R.T. -0.01 min
Lab File: VL035786.D
Acq: 16 Oct 2020 15:14

Tgt Ion: 76 Resp: 1830881
Ion Ratio Lower Upper
76 100
44 12.1 9.7 14.5
78 9.7 7.8 11.8





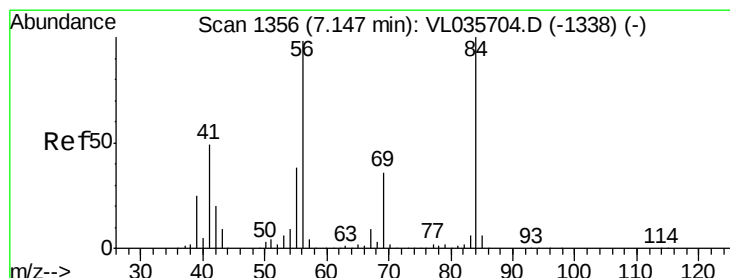
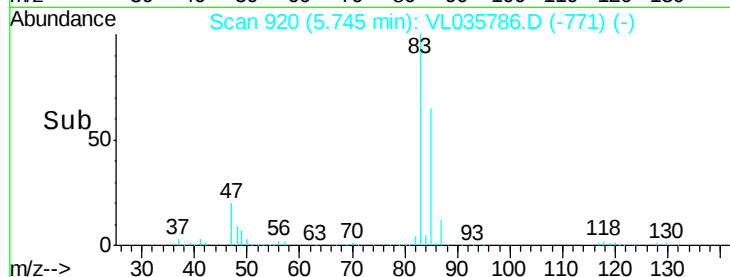
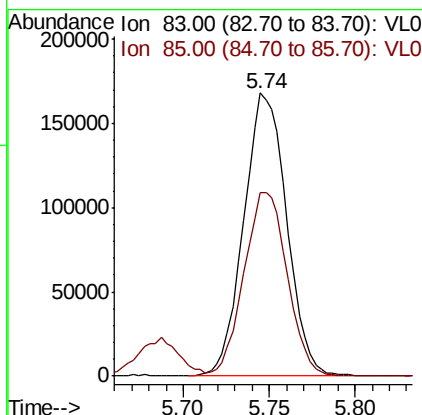
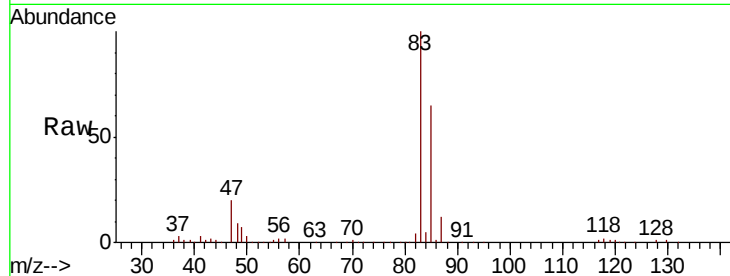
#29
Chloroform
Concen: 1.351 ppbv
RT: 5.74 min Scan# 920
Delta R.T. -0.02 min
Lab File: VL035786.D
Acq: 16 Oct 2020 15:14

Instrument :
MSVOA_L
ClientSampled :
AIR-01

Tot Ion	83	85	Ratio	Lower	Upper
290247	100	64.5		54.0	81.0

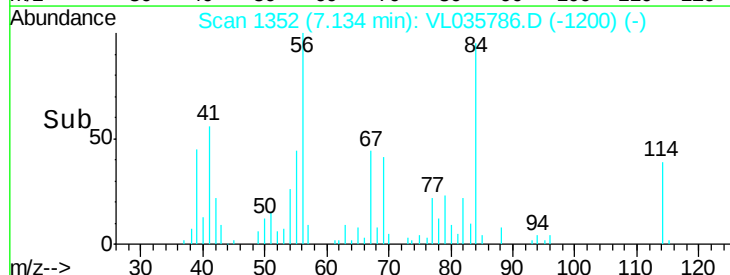
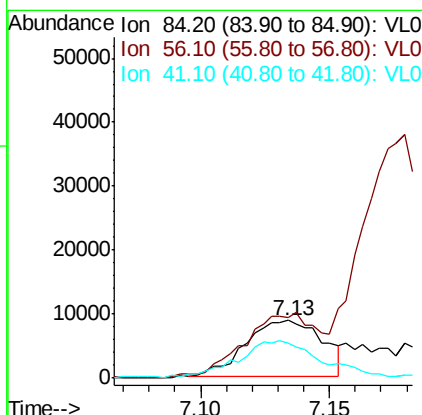
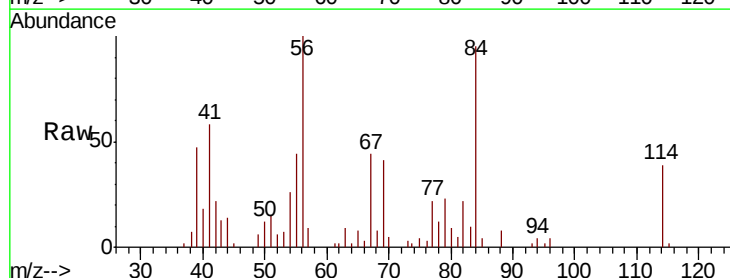
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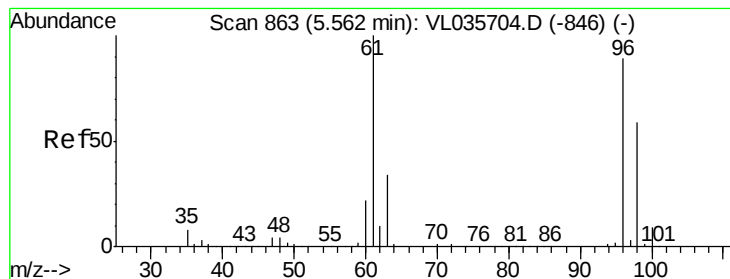
MMDadoda
10/19/2020 11:09:57 AM



#30
Cyclohexane
Concen: 0.174 ppbv
RT: 7.13 min Scan# 1352
Delta R.T. -0.01 min
Lab File: VL035786.D
Acq: 16 Oct 2020 15:14

Tgt Ion	84	56	41	Ratio	Lower	Upper
18156	100	0.0	78.0		84.6	127.0#
					41.1	61.7#





#31

cis-1,2-Dichloroethene

Concen: 0.721 ppbv

RT: 5.54 min Scan# 857

Delta R.T. -0.02 min

Lab File: VL035786.D

Acq: 16 Oct 2020 15:14

Instrument :

MSVOA_L

ClientSampleId :

AIR-01

Tot Ion: 61 Resp: 73672

Ion Ratio Lower Upper

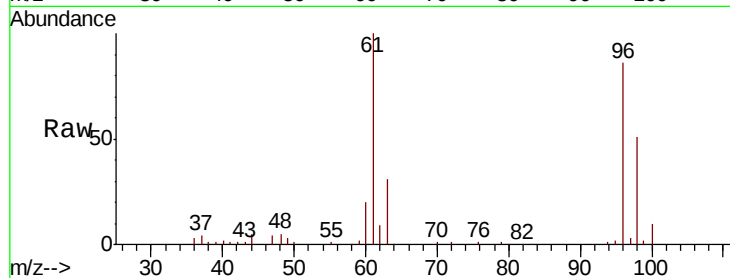
61 100

96 86.0 71.4 107.2

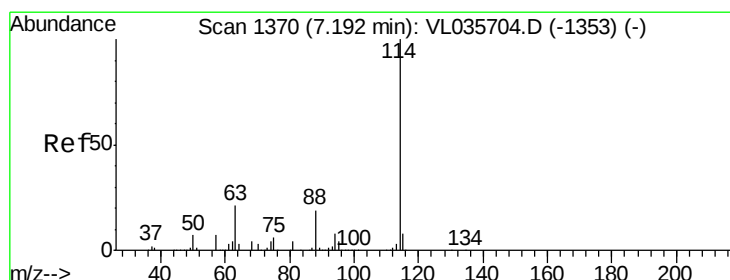
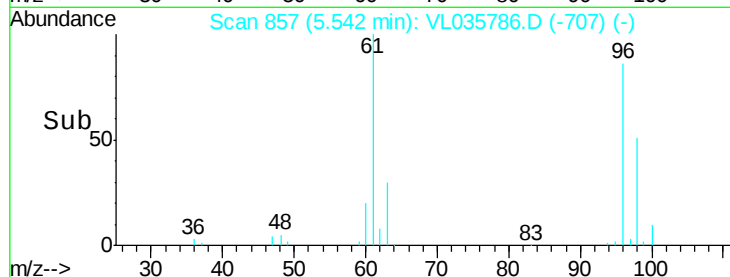
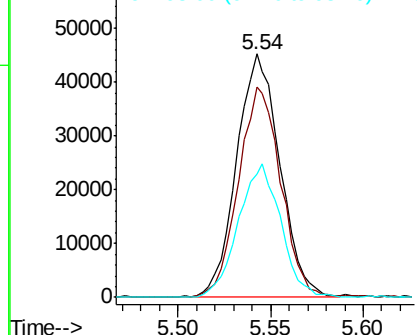
98 50.5 47.4 71.2

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Abundance Ion 61.10 (60.80 to 61.80): VL0
Ion 96.00 (95.70 to 96.70): VL0
Ion 98.00 (97.70 to 98.70): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.18 min Scan# 1365

Delta R.T. -0.02 min

Lab File: VL035786.D

Acq: 16 Oct 2020 15:14

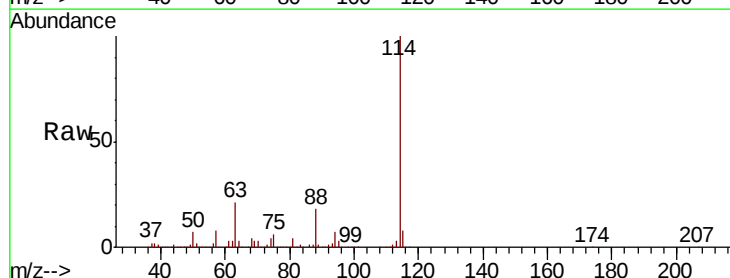
Tgt Ion: 114 Resp: 3963079

Ion Ratio Lower Upper

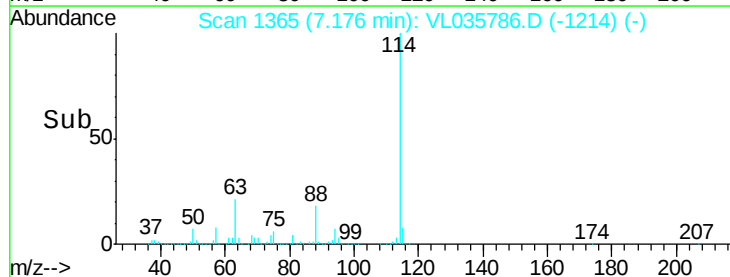
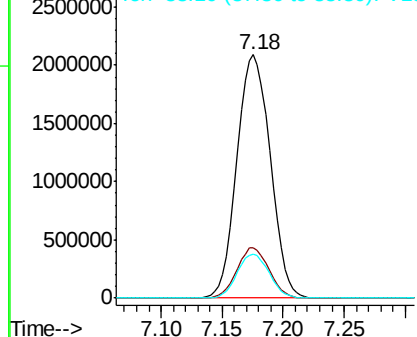
114 100

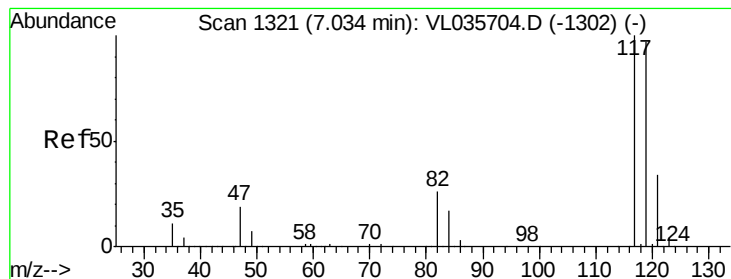
63 20.1 16.1 24.1

88 17.4 14.1 21.1



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





#35

Carbon Tetrachloride

Concen: 0.066 ppbv m

RT: 7.02 min Scan# 1315

Delta R.T. -0.02 min

Lab File: VL035786.D

Acq: 16 Oct 2020 15:14

Instrument :

MSVOA_L

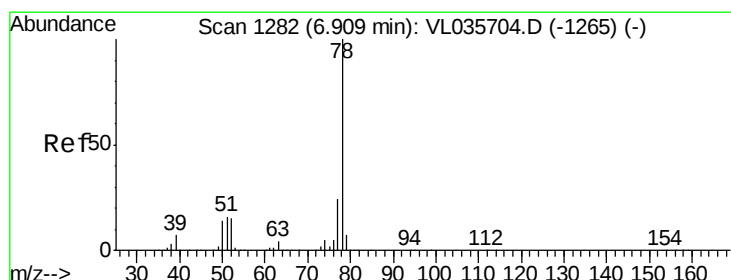
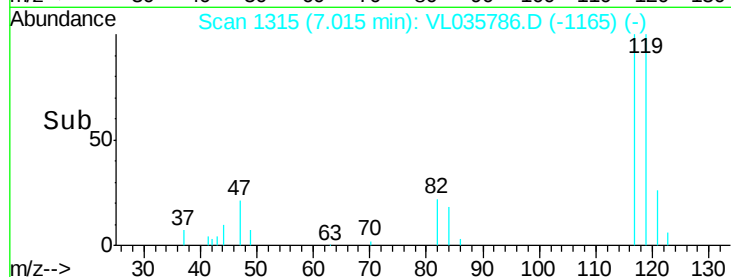
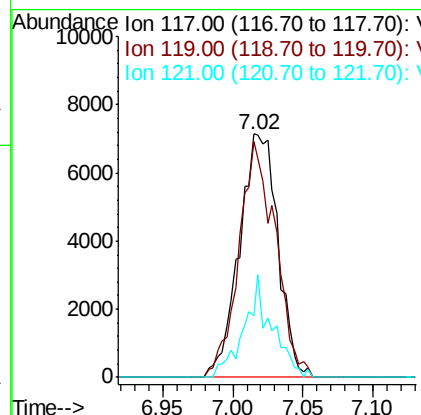
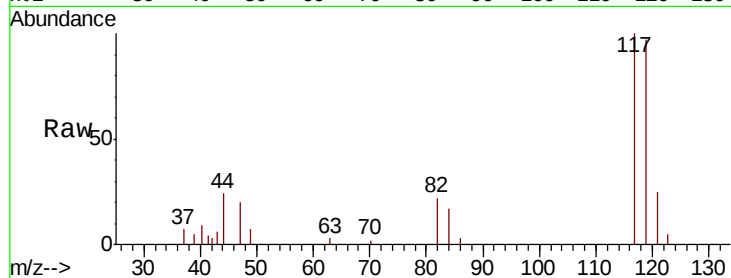
ClientSampleId :

AIR-01

Tot Ion	Ratio	Lower	Upper
117	100		
119	96.7	77.7	116.5
121	25.3	26.9	40.3#

Manual Integrations
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#36

Benzene

Concen: 0.236 ppbv

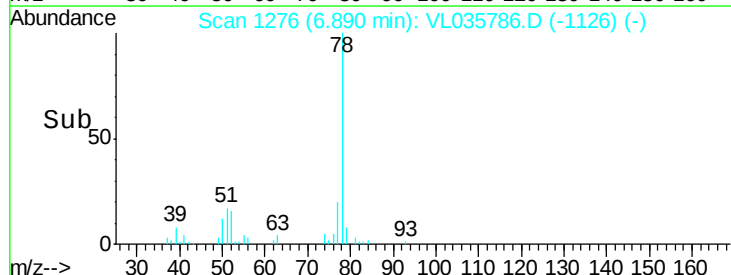
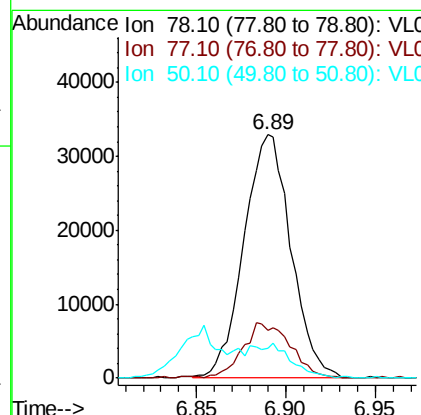
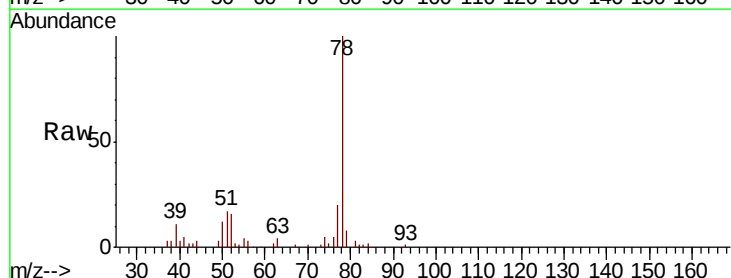
RT: 6.89 min Scan# 1276

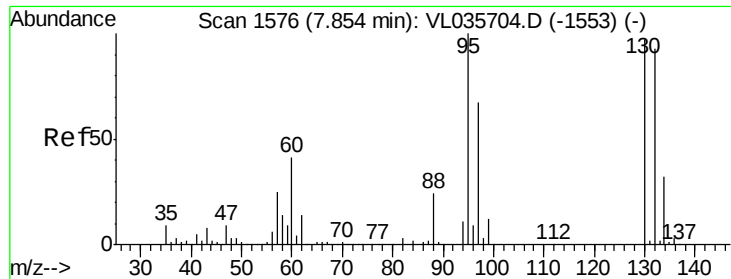
Delta R.T. -0.02 min

Lab File: VL035786.D

Acq: 16 Oct 2020 15:14

Tgt Ion	Ratio	Lower	Upper
78	100		
77	19.7	19.3	28.9
50	11.9	11.6	17.4





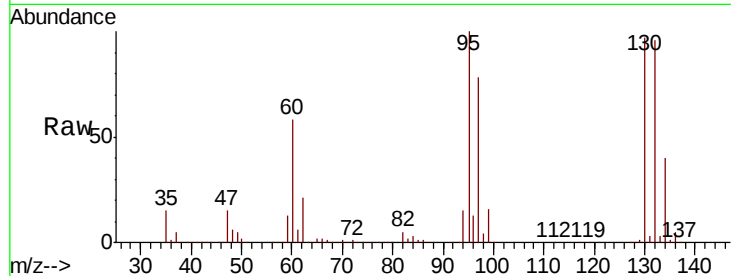
#38
 Trichloroethene
 Concen: 65.274 ppbv
 RT: 7.84 min Scan# 1571
 Delta R.T. -0.02 min
 Lab File: VL035786.D
 Acq: 16 Oct 2020 15:14

Instrument :
 MSVOA_L
 ClientSampled :
 AIR-01

Tot Ion	130	Resp	8408721
Ion	Ratio	Lower	Upper
130	100		
95	103.0	82.4	123.6
132	98.5	76.8	115.2
97	80.7	55.4	83.2

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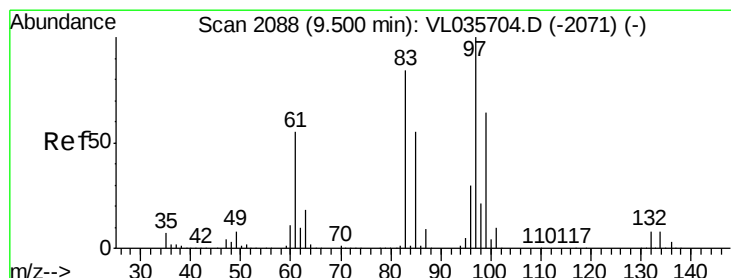
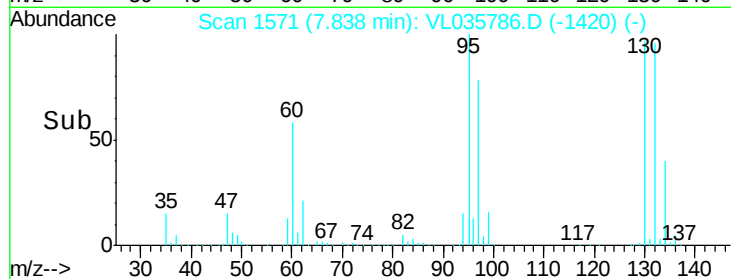
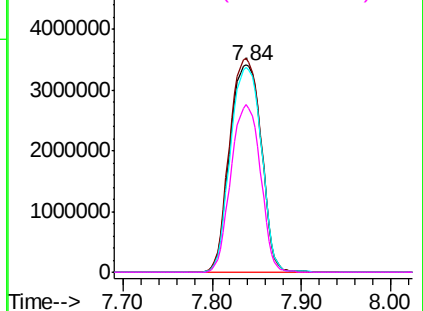
Abundance

Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0



#47
 1,1,2-Trichloroethane
 Concen: 0.135 ppbv m
 RT: 9.48 min Scan# 2081
 Delta R.T. -0.02 min
 Lab File: VL035786.D
 Acq: 16 Oct 2020 15:14

Tgt Ion	97	Resp	18112
Ion	Ratio	Lower	Upper
97	100		
83	67.7	67.1	100.7
85	50.7	43.9	65.9
99	59.0	51.3	76.9

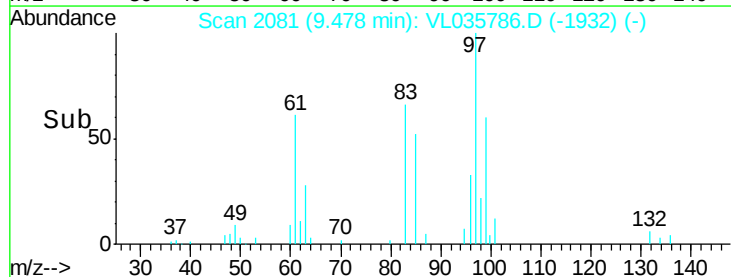
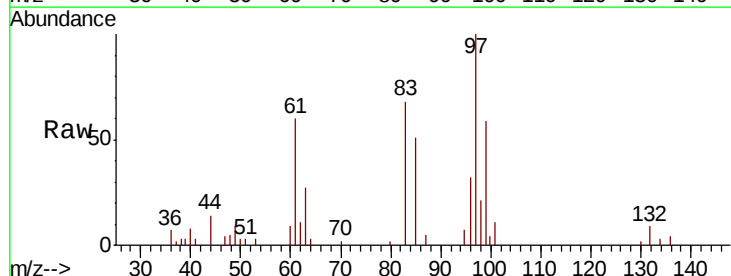
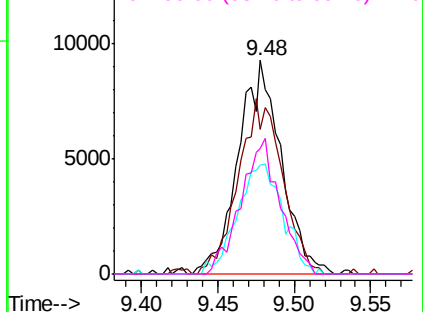
Abundance

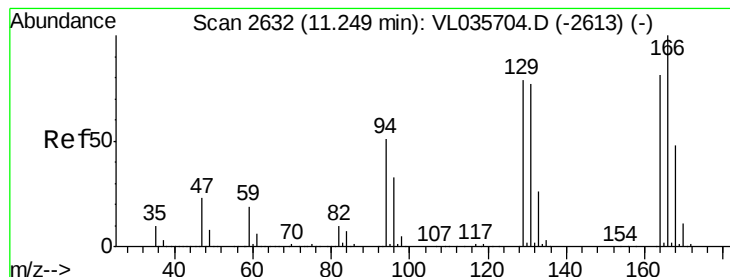
Ion 97.00 (96.70 to 97.70): VL0

Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 99.00 (98.70 to 99.70): VL0





#52

Tetrachloroethene

Concen: 0.769 ppbv

RT: 11.23 min Scan# 2626

Delta R.T. -0.02 min

Lab File: VL035786.D

Acq: 16 Oct 2020 15:14

Instrument :

MSVOA_L

ClientSampleId :

AIR-01

Tot Ion:164 Resp: 95538

Ion Ratio Lower Upper

164 100

166 118.8 98.7 148.1

129 95.2 78.4 117.6

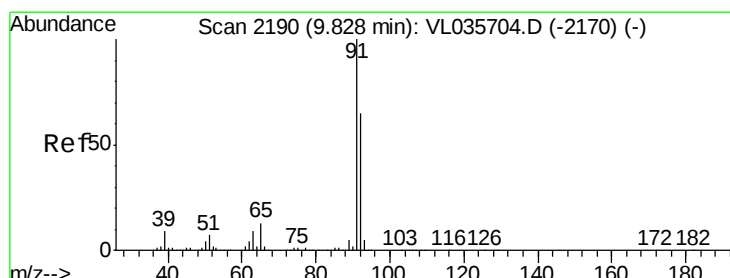
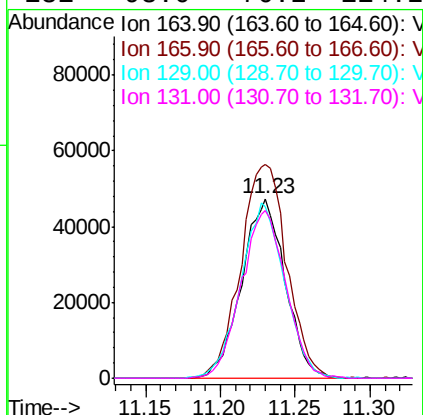
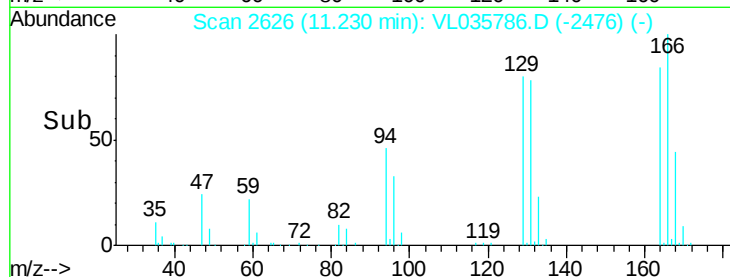
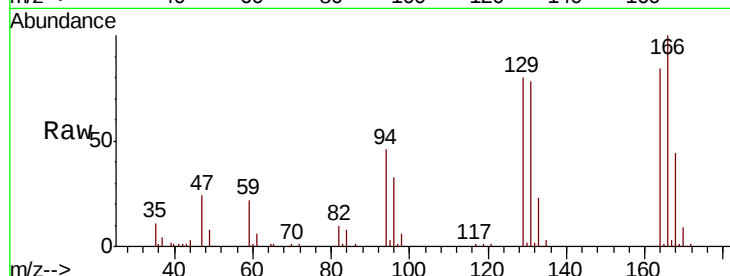
131 93.0 76.2 114.2

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#53

Toluene

Concen: 0.611 ppbv

RT: 9.81 min Scan# 2185

Delta R.T. -0.02 min

Lab File: VL035786.D

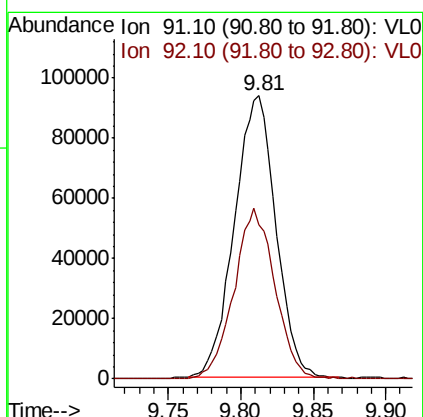
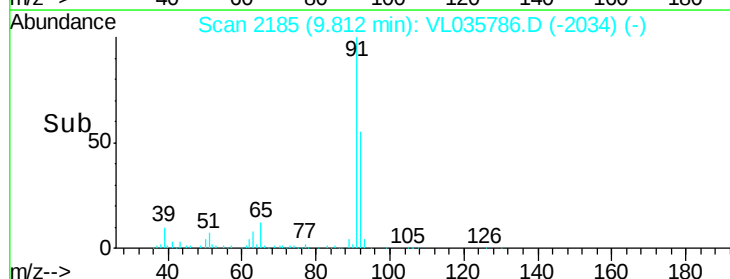
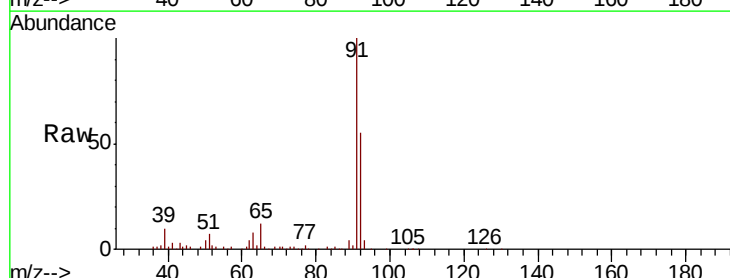
Acq: 16 Oct 2020 15:14

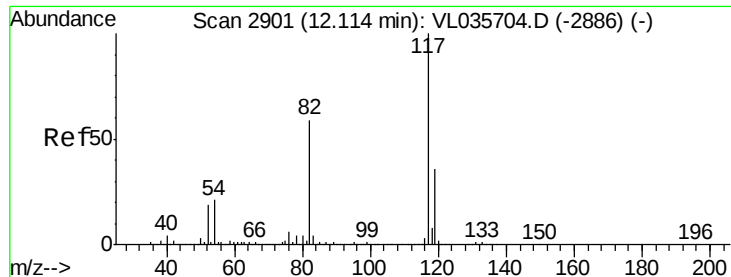
Tgt Ion: 91 Resp: 185932

Ion Ratio Lower Upper

91 100

92 59.9 50.0 75.0





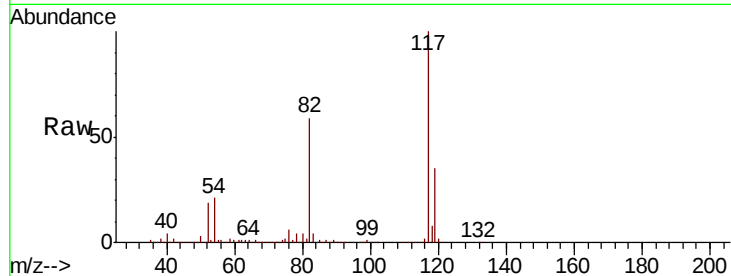
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.09 min Scan# 2894
Delta R.T. -0.02 min
Lab File: VL035786.D
Acq: 16 Oct 2020 15:14

Instrument :
MSVOA_L
ClientSampleId :
AIR-01

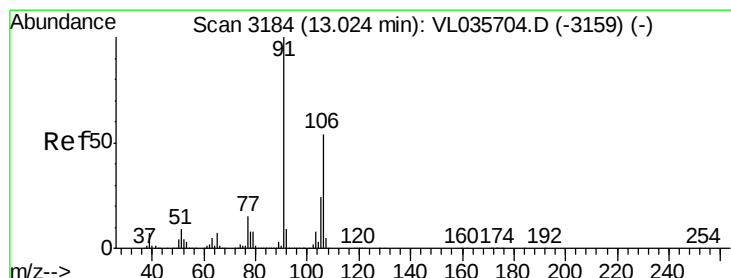
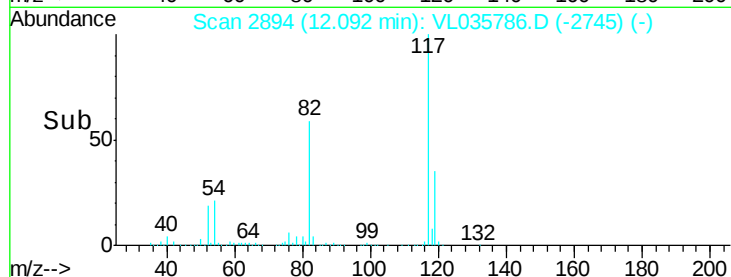
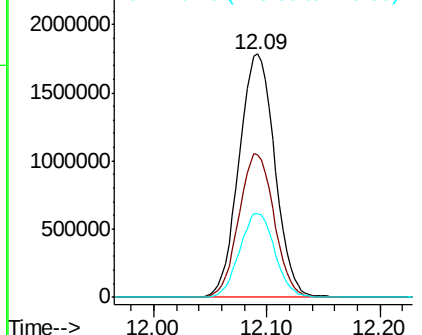
Tot Ion:117 Resp: 3935439
Ion Ratio Lower Upper
117 100
82 58.2 46.1 69.1
119 34.0 28.0 42.0

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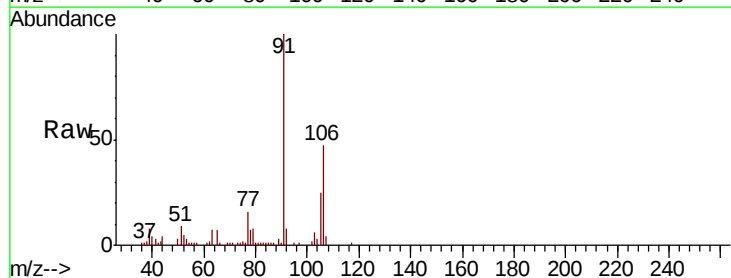


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V

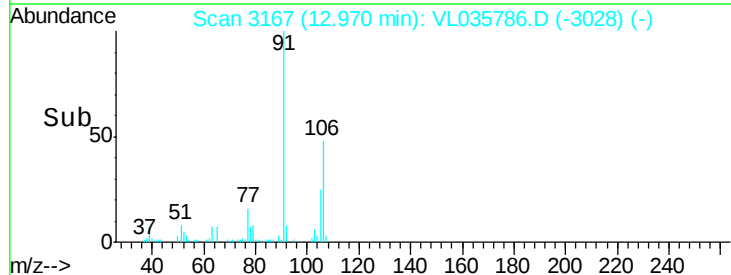
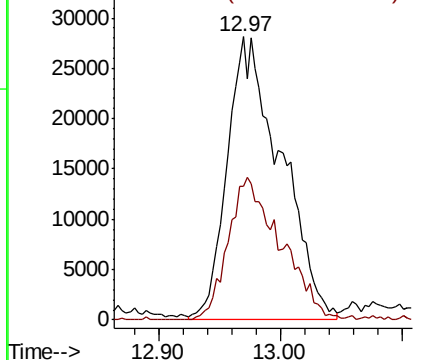


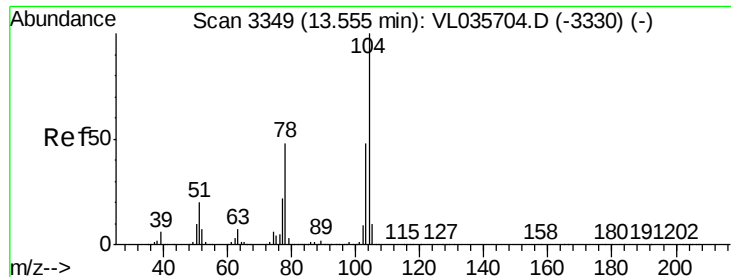
#59
m/p-Xylene
Concen: 0.252 ppbv m
RT: 12.97 min Scan# 3167
Delta R.T. -0.05 min
Lab File: VL035786.D
Acq: 16 Oct 2020 15:14

Tgt Ion: 91 Resp: 86882
Ion Ratio Lower Upper
91 100
106 0.0 41.4 62.0#



Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 106.10 (105.80 to 106.80): V





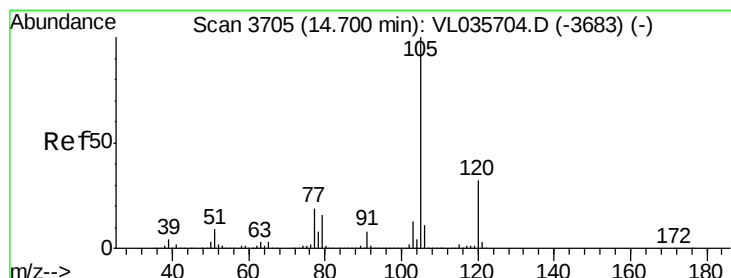
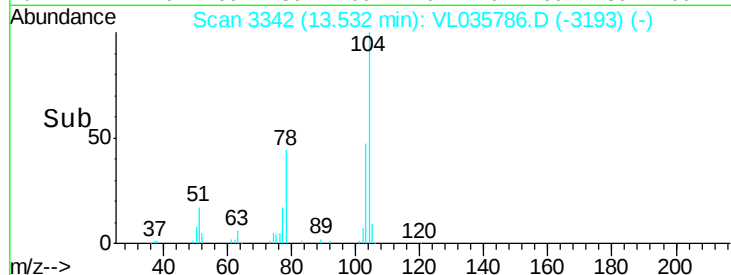
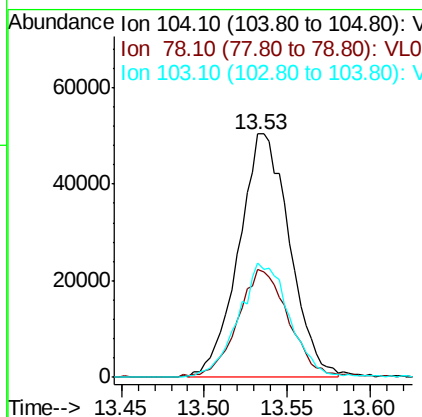
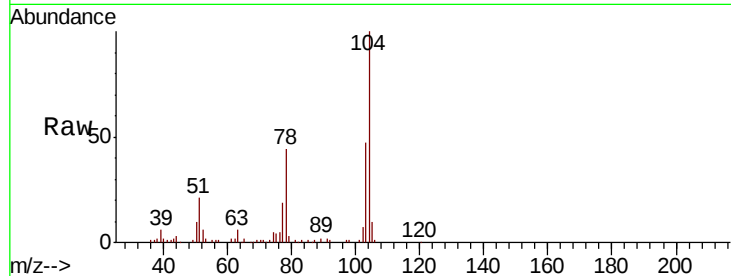
#61
Stvrene
Concen: 0.443 ppbv
RT: 13.53 min Scan# 3342
Delta R.T. -0.02 min
Lab File: VL035786.D
Acq: 16 Oct 2020 15:14

Instrument :
MSVOA_L
ClientSampleId :
AIR-01

Tot Ion	Ratio	Resp	Lower	Upper
104	100	106891		
78	45.5		37.2	55.8
103	47.8		38.2	57.2

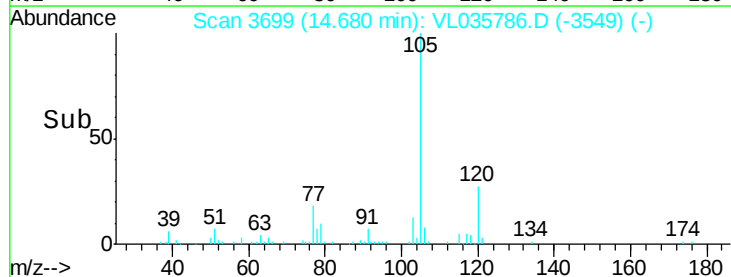
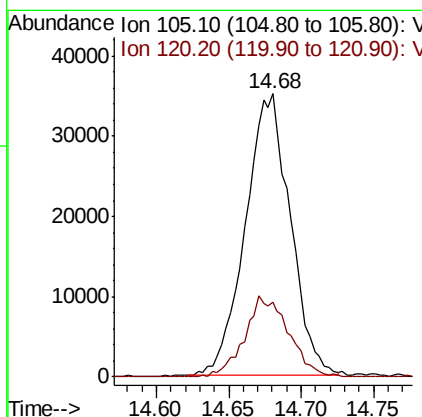
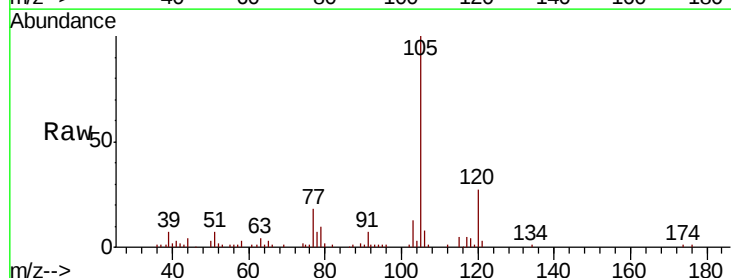
Manual Integrations
APPROVED

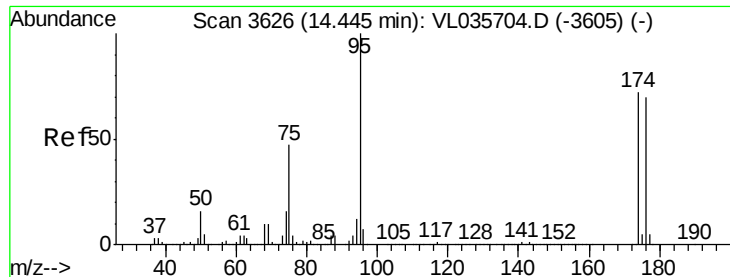
MMDadoda
10/19/2020 11:09:57 AM



#62
Isopropylbenzene
Concen: 0.140 ppbv
RT: 14.68 min Scan# 3699
Delta R.T. -0.02 min
Lab File: VL035786.D
Acq: 16 Oct 2020 15:14

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	75768		
120	27.8		24.1	36.1





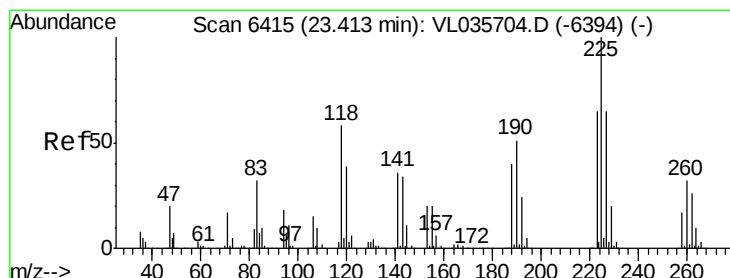
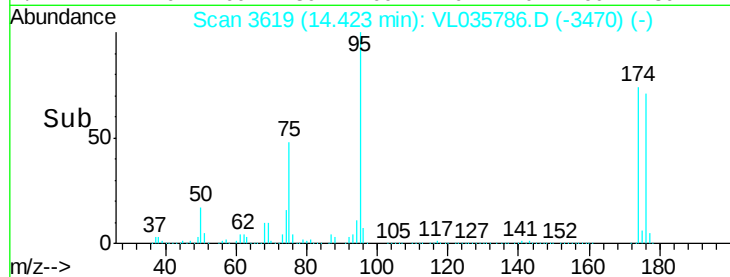
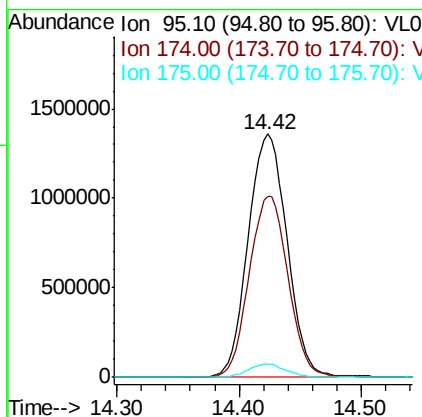
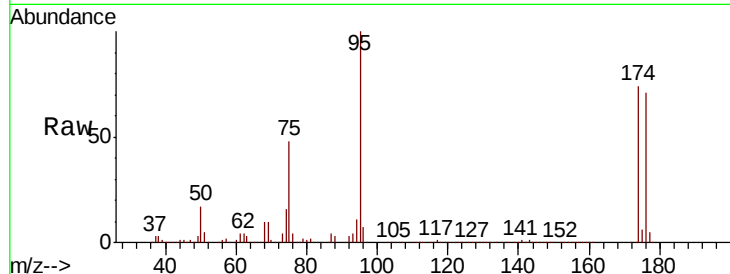
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.143 ppbv
 RT: 14.42 min Scan# 3619
 Delta R.T. -0.02 min
 Lab File: VL035786.D
 Acq: 16 Oct 2020 15:14

Instrument :
 MSVOA_L
 ClientSampled :
 AIR-01

Tot Ion	Ratio	Lower	Upper
95	100		
174	75.2	59.6	89.4
175	5.4	4.2	6.4

Manual Integrations
 APPROVED

MMDadoda
 10/19/2020 11:09:57 AM



#78
 Hexachloro-1,3-Butadiene
 Concen: 0.159 ppbv m
 RT: 23.40 min Scan# 6411
 Delta R.T. -0.01 min
 Lab File: VL035786.D
 Acq: 16 Oct 2020 15:14

Tgt Ion	Ratio	Lower	Upper
225	100		
223	65.3	51.3	76.9
227	0.0	51.6	77.4

