

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL091620\
 Data File : VL035647.D
 Acq On : 17 Sep 2020 3:35
 Operator : SY/AP
 Sample : L4016-02 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-14

Manual Integrations
 APPROVED

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 9/17/2020 1:53:02 PM

Quant Time: Sep 17 12:05:00 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL082720AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Sep 14 2020
 QLast Update : Mon Sep 14 15:19:50 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1271754	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	5013472	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	5002797	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.43	95	3793715	10.68	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	106.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	15329m	0.070	ppbv	
3) Chlorodifluoromethane	2.98	51	15065	0.107	ppbv #	90
4) Chloromethane	3.13	50	8320	0.110	ppbv	90
9) Propene	3.01	41	185633	3.423	ppbv	89
10) Heptane	8.13	43	53765	0.369	ppbv #	18
13) Ethanol	3.60	45	37337	2.777	ppbv	99
15) Acetone	3.84	43	8104662	57.782	ppbv #	77
17) tert-Butyl alcohol	4.29	59	118646	0.695	ppbv	97
19) Isopropyl Alcohol	3.97	45	46416	0.555	ppbv #	93
20) Methylene Chloride	4.34	84	64626	0.619	ppbv	95
27) Carbon Disulfide	4.55	76	206941	1.027	ppbv	98
29) Chloroform	5.76	83	829530	2.900	ppbv	98
30) Cyclohexane	7.13	84	568608	3.781	ppbv	89
31) cis-1,2-Dichloroethene	5.56	61	42364m	0.294	ppbv	
34) 2-Butanone	5.24	43	1009677	6.786	ppbv	98
36) Benzene	6.90	78	117168	0.361	ppbv	96
38) Trichloroethene	7.84	130	806333	4.277	ppbv	94
44) 2,2,4-Trimethylpentane	7.89	57	17437526	40.837	ppbv #	63
52) Tetrachloroethene	11.24	164	9710401m	51.218	ppbv	
53) Toluene	9.82	91	930182m	2.279	ppbv	
58) Ethyl Benzene	12.73	91	253563	0.492	ppbv	89
59) m/p-Xylene	12.98	91	749154	1.738	ppbv	96
60) o-Xylene	13.71	91	287247	0.662	ppbv	95
72) 4-Ethyltoluene	15.86	105	113147	0.205	ppbv #	94
73) 1,3,5-Trimethylbenzene	16.01	105	71683	0.140	ppbv #	83
74) 1,2,4-Trimethylbenzene	16.78	105	275920	0.492	ppbv #	71

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

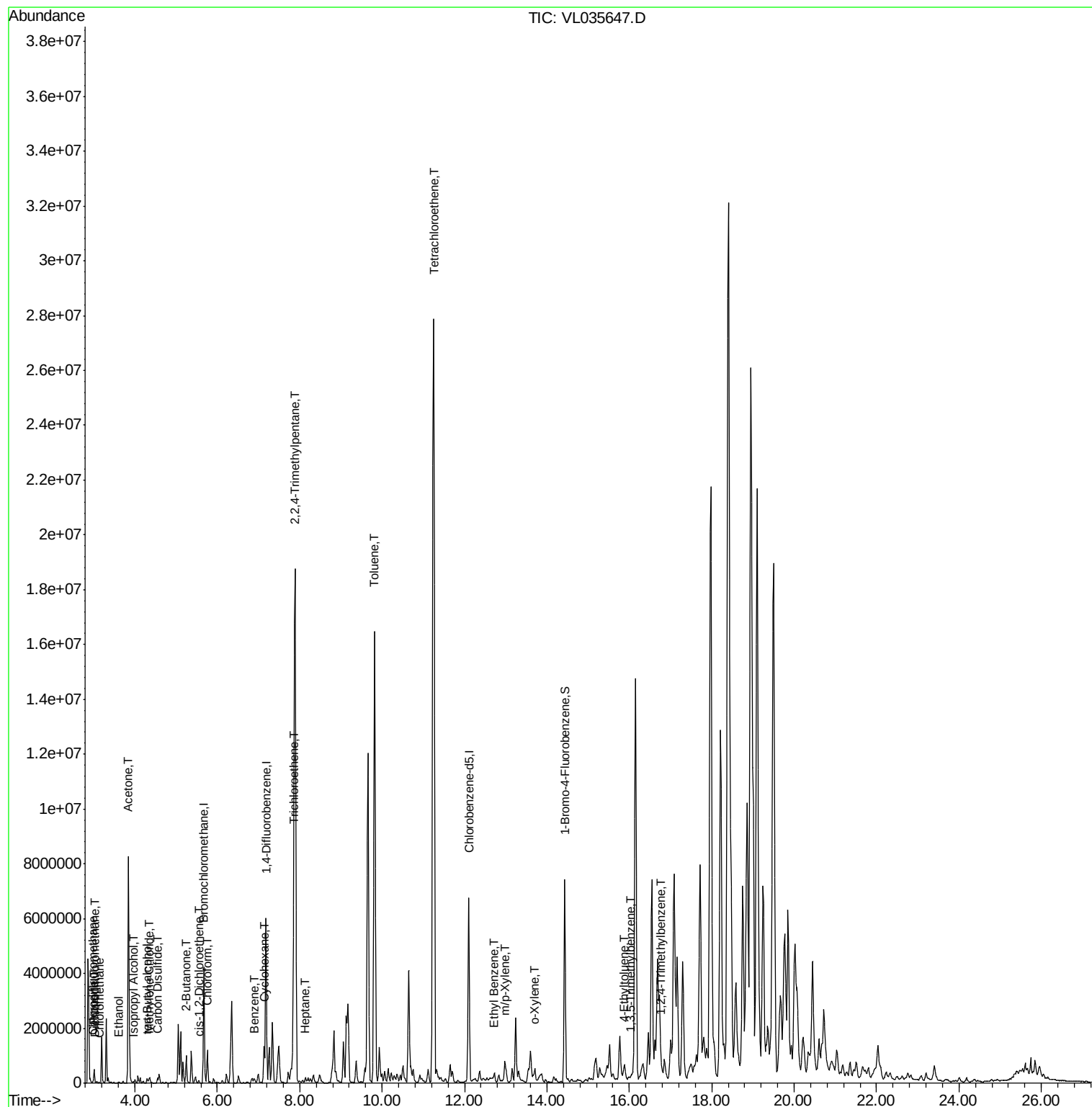
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL091620\
Data File : VL035647.D
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Operator : SY/AP
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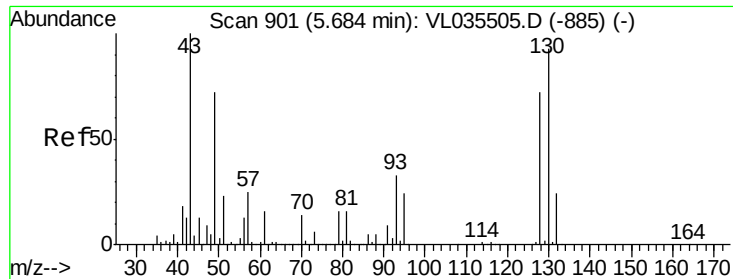
Instrument :
MSVOA_L
ClientSampleId :
SV-14

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Quant Time: Sep 17 12:05:00 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL082720AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Sep
QLast Update : Mon Sep 14 15:19:50 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 897

Delta R.T. 0.01 min

Lab File: VL035647.D

Acq: 17 Sep 2020 3:35

Instrument :

MSVOA_L

ClientSampled :

SV-14

Tot Ion: 49 Resp: 1271754

Ion Ratio Lower Upper

49 100

128 88.1 50.0 150.1

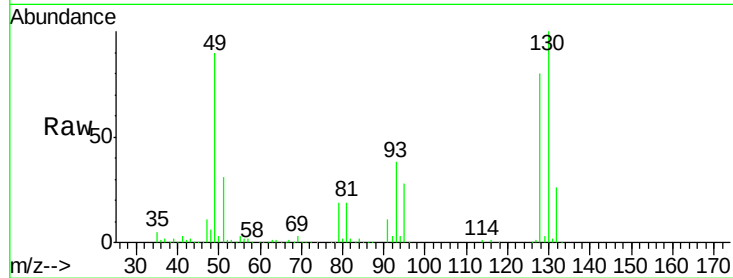
130 111.3 64.4 193.2

Manual Integrations

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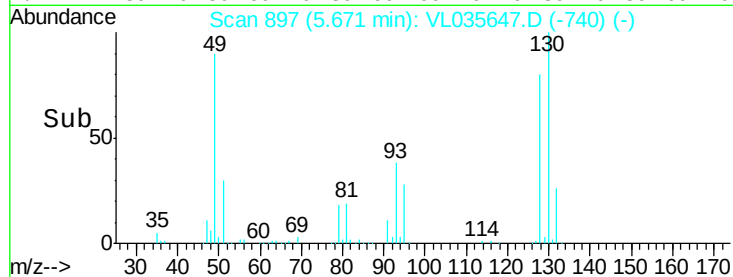


Abundance Ion 49.10 (48.80 to 49.80): VL0

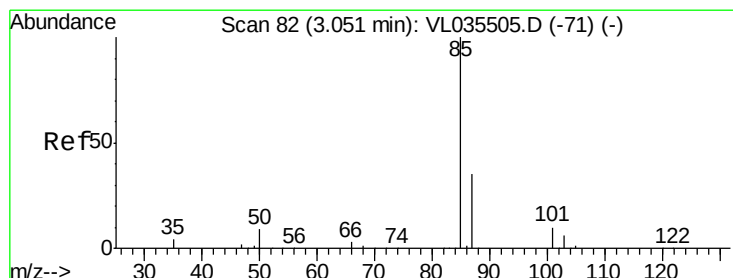
Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0

Time-->



Time-->



#2

Dichlorodifluoromethane

Concen: 0.070 ppbv m

RT: 3.04 min Scan# 79

Delta R.T. 0.01 min

Lab File: VL035647.D

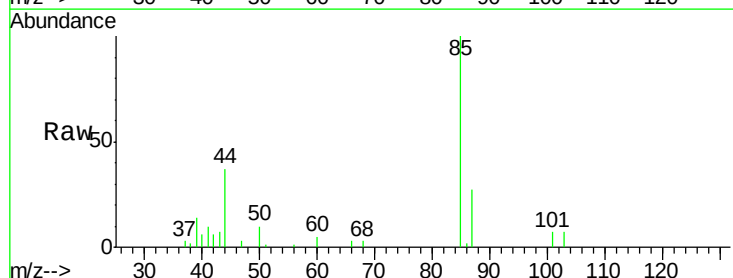
Acq: 17 Sep 2020 3:35

Tgt Ion: 85 Resp: 15329

Ion Ratio Lower Upper

85 100

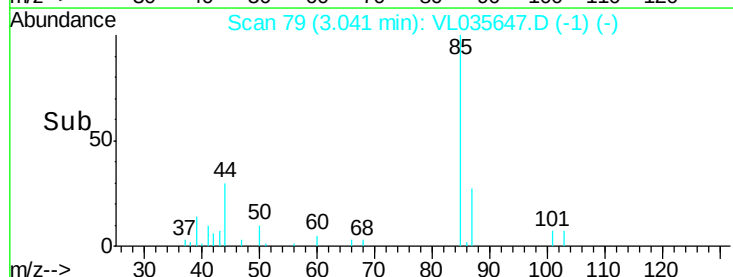
87 26.8 28.0 42.0#



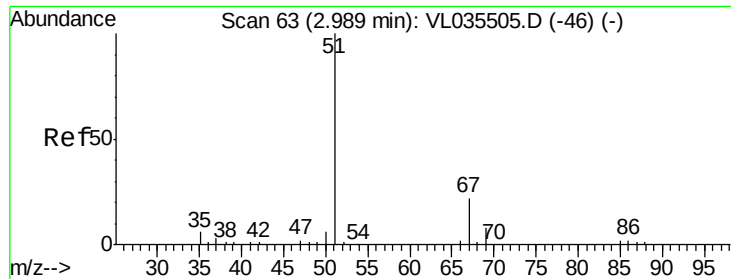
Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

Time-->



Time-->



#3

Chlorodifluoromethane

Concen: 0.107 ppbv

RT: 2.98 min Scan# 60

Delta R.T. 0.01 min

Lab File: VL035647.D

Acq: 17 Sep 2020 3:35

Instrument :

MSVOA_L

ClientSampleId :

SV-14

Tot Ion: 51 Resp: 15065

Ion Ratio Lower Upper

51 100

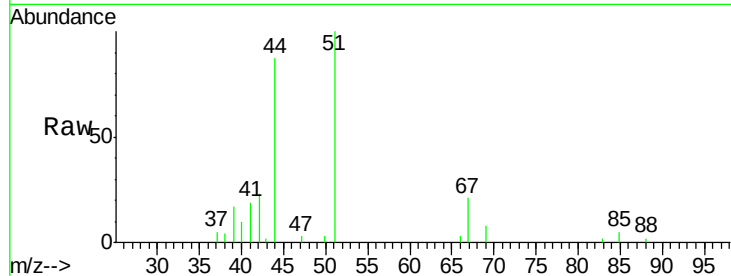
67 17.7 17.8 26.8#

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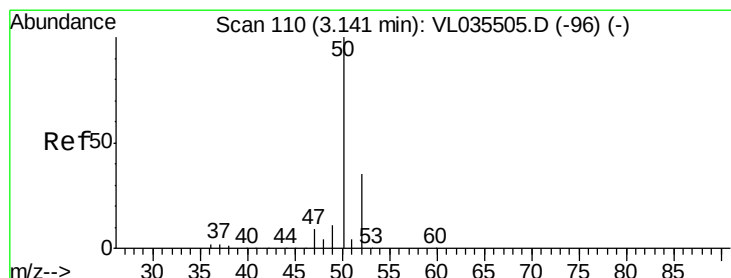
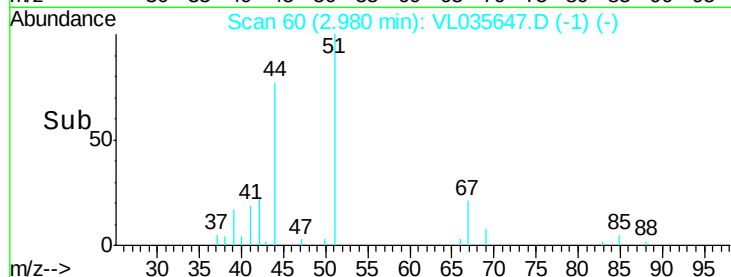
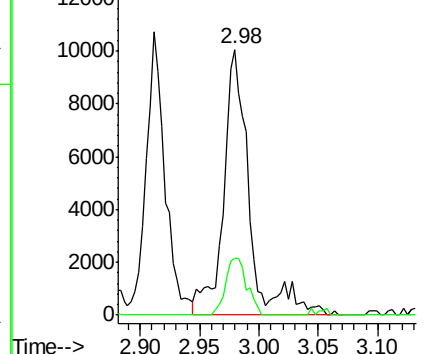
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.110 ppbv

RT: 3.13 min Scan# 108

Delta R.T. 0.01 min

Lab File: VL035647.D

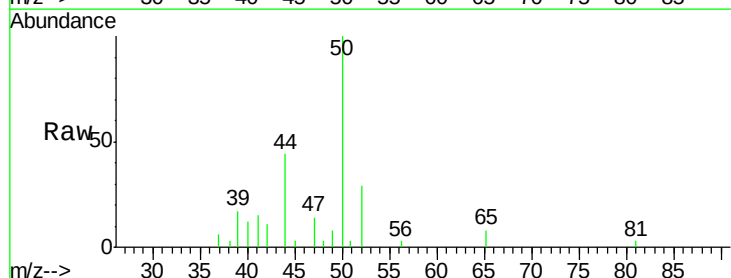
Acq: 17 Sep 2020 3:35

Tgt Ion: 50 Resp: 8320

Ion Ratio Lower Upper

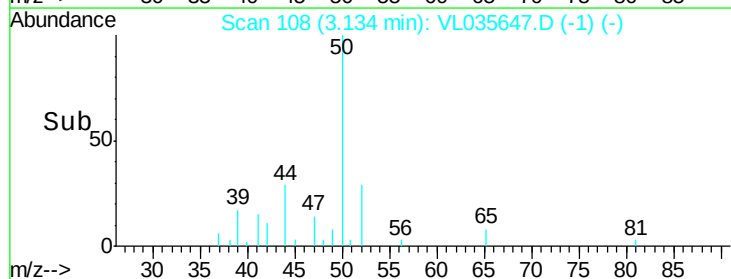
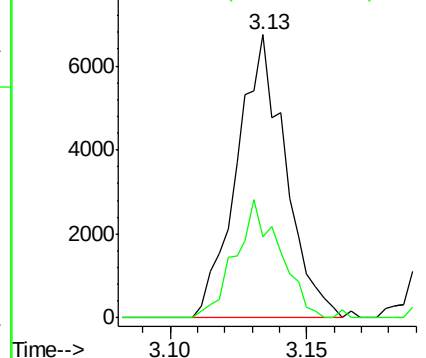
50 100

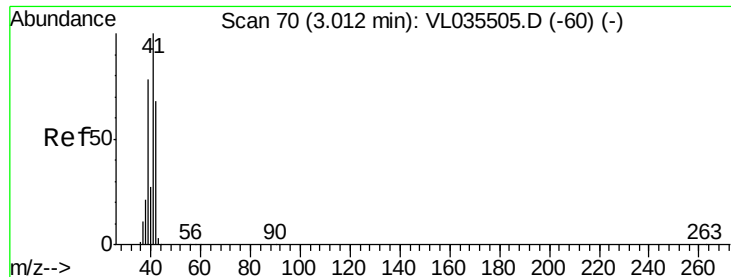
52 28.8 27.7 41.5



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 3.423 ppbv

RT: 3.01 min Scan# 68

Delta R.T. 0.01 min

Lab File: VL035647.D

Acq: 17 Sep 2020 3:35

Instrument :

MSVOA_L

ClientSampleId :

SV-14

Tot Ion: 41 Resp: 185633

Ion Ratio Lower Upper

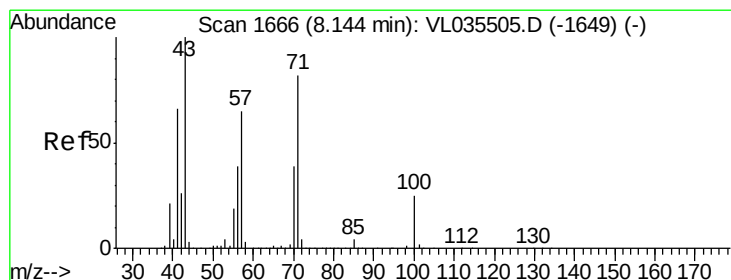
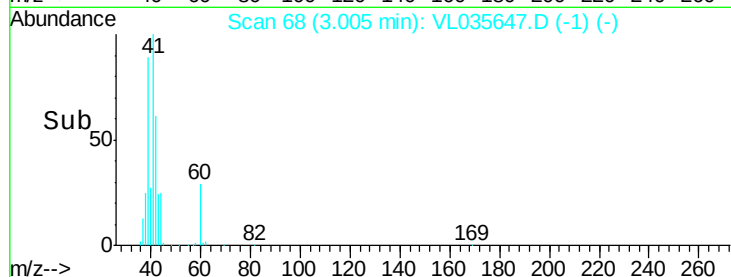
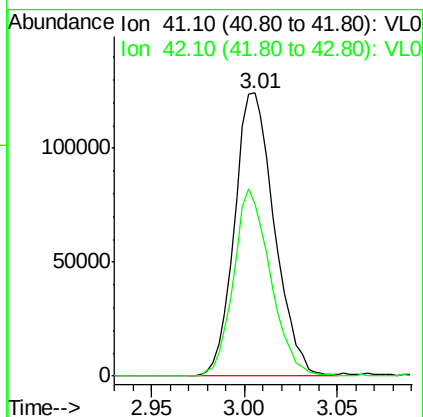
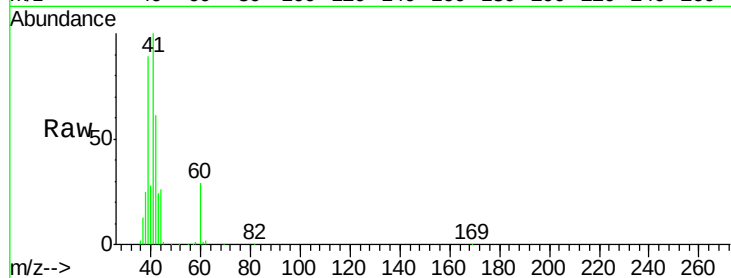
41 100

42 61.3 56.3 84.5

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#10

Heptane

Concen: 0.369 ppbv

RT: 8.13 min Scan# 1663

Delta R.T. 0.01 min

Lab File: VL035647.D

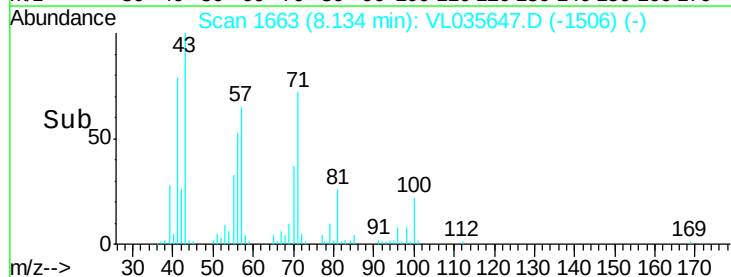
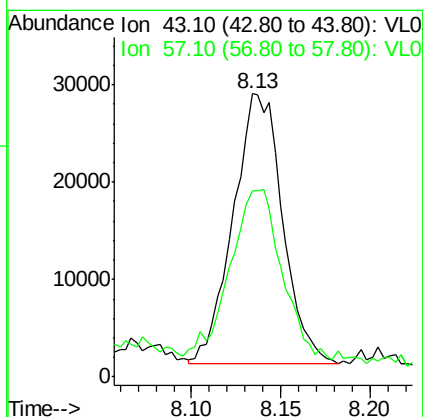
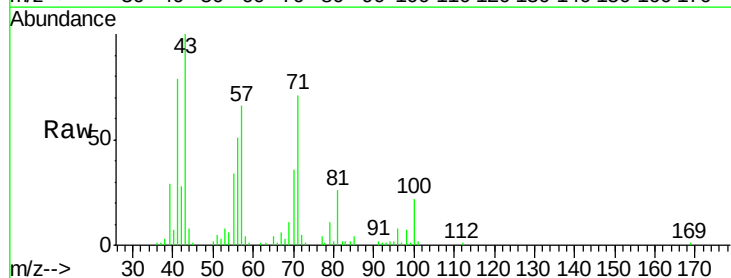
Acq: 17 Sep 2020 3:35

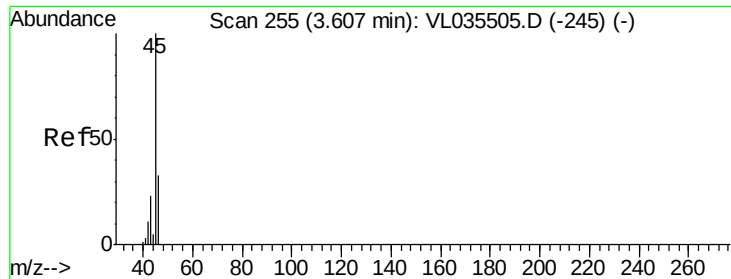
Tgt Ion: 43 Resp: 53765

Ion Ratio Lower Upper

43 100

57 0.0 51.4 77.0#





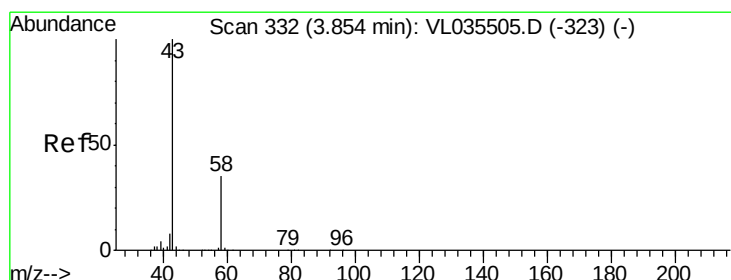
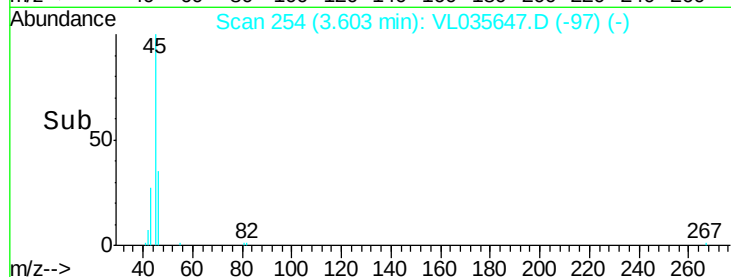
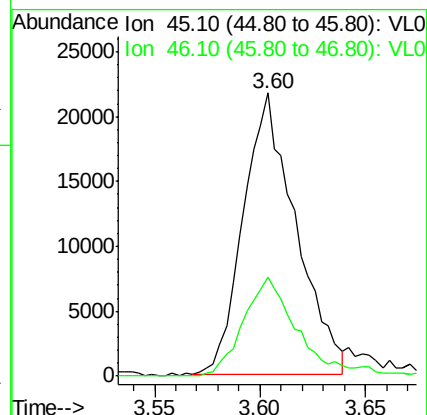
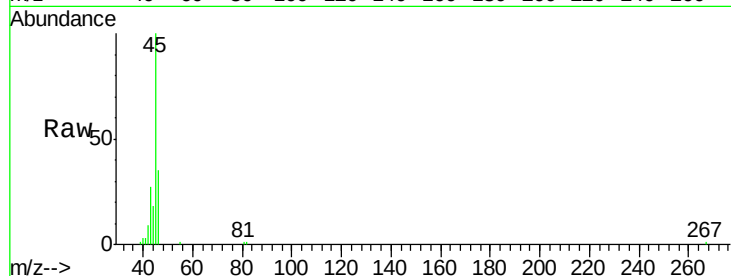
#13
Ethanol
Concen: 2.777 ppbv
RT: 3.60 min Scan# 254
Delta R.T. 0.01 min
Lab File: VL035647.D
Acq: 17 Sep 2020 3:35

Instrument :
MSVOA_L
ClientSampled :
SV-14

Tot Ion: 45 Resp: 37337
Ion Ratio Lower Upper
45 100
46 37.2 15.2 60.6

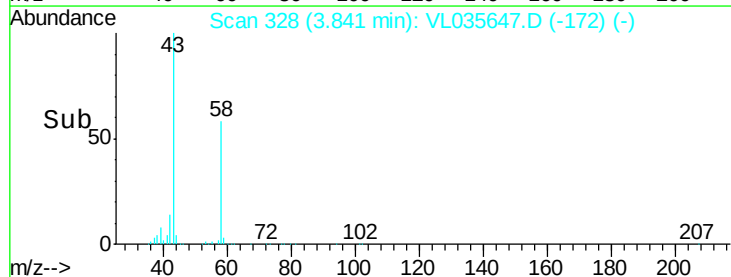
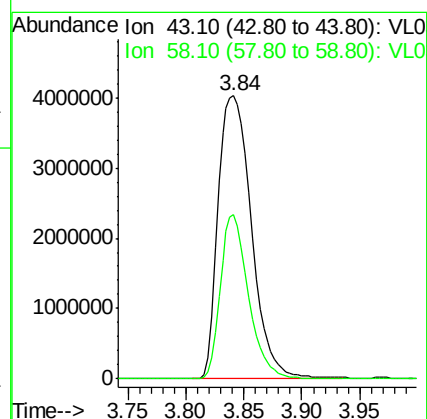
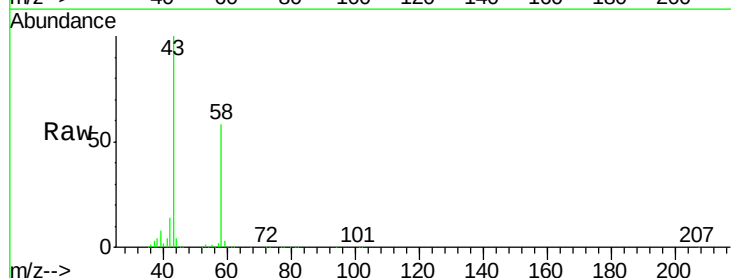
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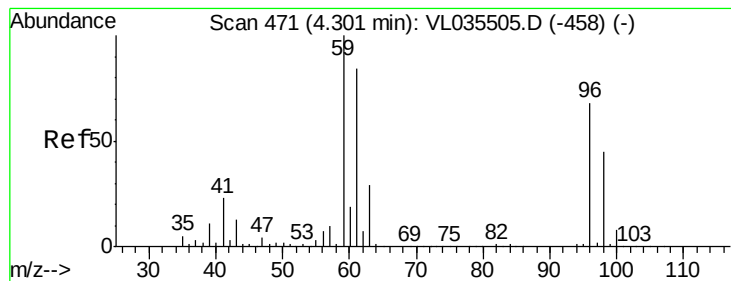
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#15
Acetone
Concen: 57.782 ppbv
RT: 3.84 min Scan# 328
Delta R.T. 0.00 min
Lab File: VL035647.D
Acq: 17 Sep 2020 3:35

Tgt Ion: 43 Resp: 8104662
Ion Ratio Lower Upper
43 100
58 49.1 28.4 42.6#





#17

tert-Butyl alcohol

Concen: 0.695 ppbv

RT: 4.29 min Scan# 469

Delta R.T. 0.01 min

Lab File: VL035647.D

Acq: 17 Sep 2020 3:35

Instrument :

MSVOA_L

ClientSampled :

SV-14

Tot Ion: 59 Resp: 118646

Ion Ratio Lower Upper

59 100

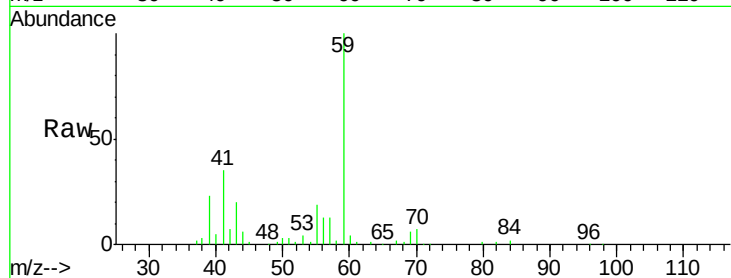
57 11.6 8.4 12.6

Manual Integrations

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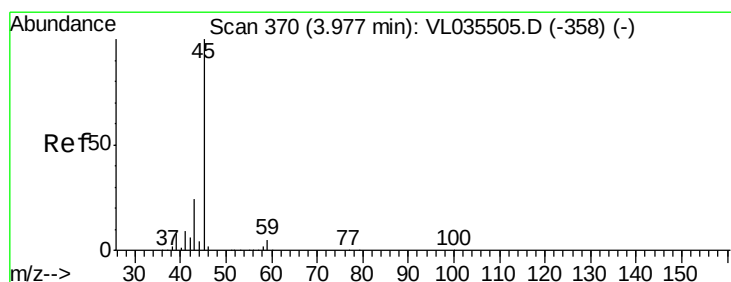
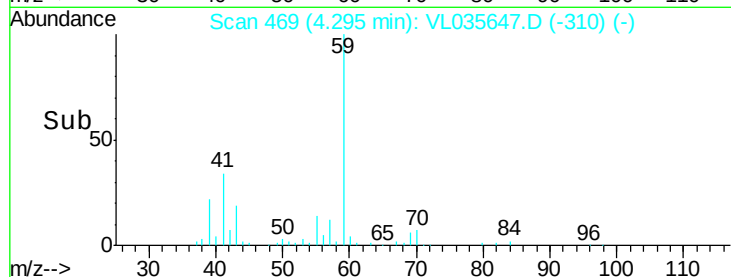
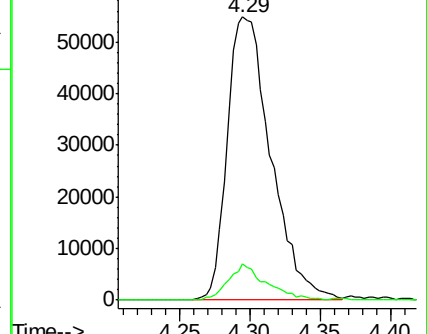
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Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0



#19

Isopropyl Alcohol

Concen: 0.555 ppbv

RT: 3.97 min Scan# 367

Delta R.T. 0.01 min

Lab File: VL035647.D

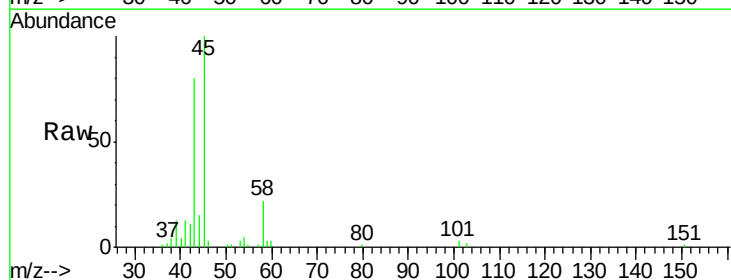
Acq: 17 Sep 2020 3:35

Tgt Ion: 45 Resp: 46416

Ion Ratio Lower Upper

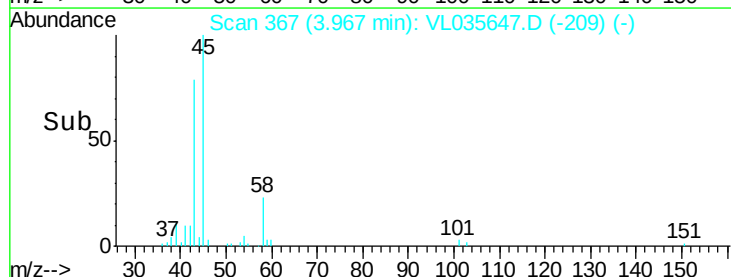
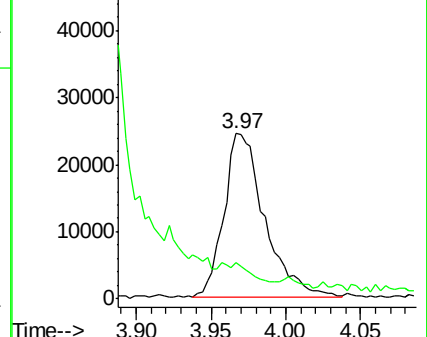
45 100

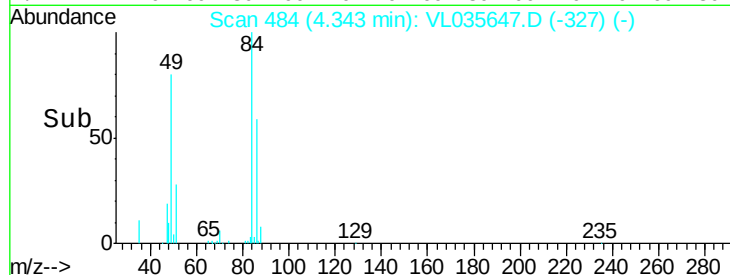
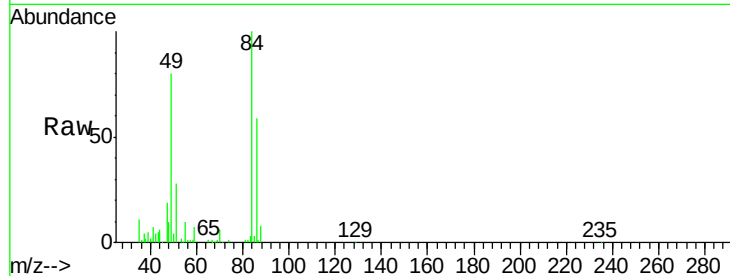
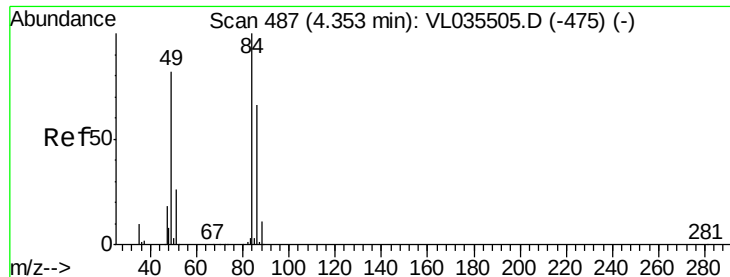
58 0.0 2.0 3.0#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





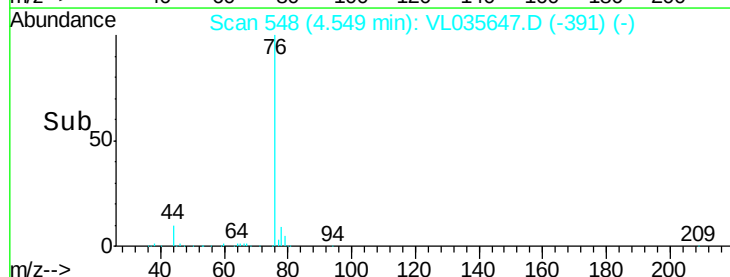
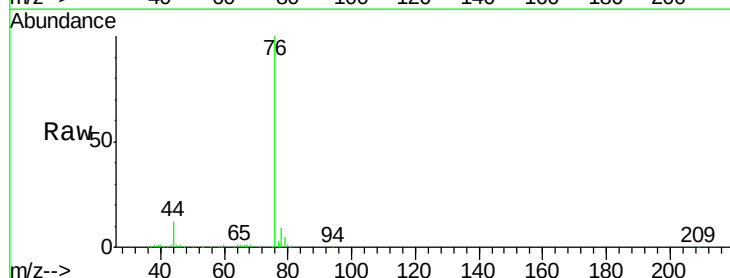
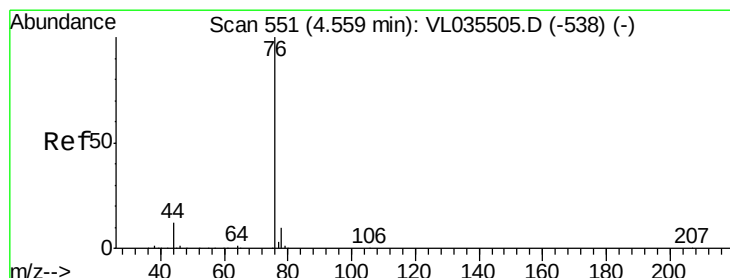
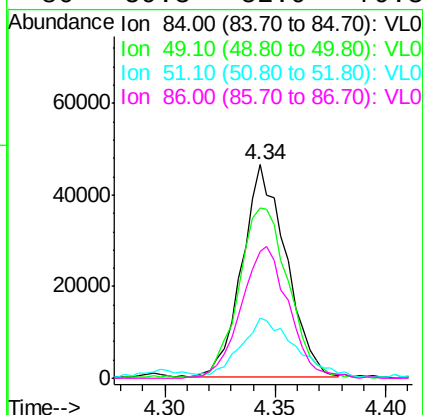
#20
Methylene Chloride
Concen: 0.619 ppbv
RT: 4.34 min Scan# 484
Delta R.T. 0.01 min
Lab File: VL035647.D
Acq: 17 Sep 2020 3:35

Tot Ion:	84	Resp:	64626
Ion Ratio	Lower	Upper	
84	100		
49	79.1	65.4	98.0
51	25.8	21.5	32.3
86	59.3	52.9	79.3

Instrument :
MSVOA_L
ClientSampled :
SV-14

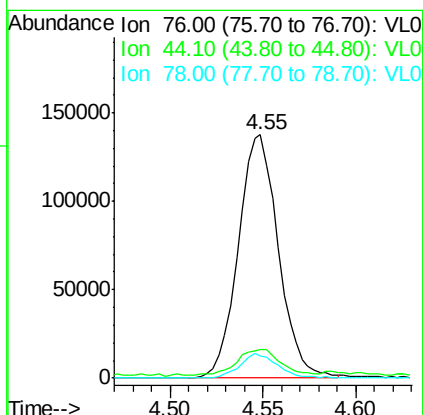
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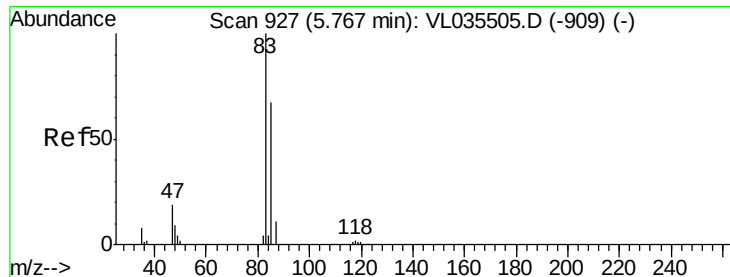
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#27
Carbon Disulfide
Concen: 1.027 ppbv
RT: 4.55 min Scan# 548
Delta R.T. 0.01 min
Lab File: VL035647.D
Acq: 17 Sep 2020 3:35

Tgt Ion:	76	Resp:	206941
Ion Ratio	Lower	Upper	
76	100		
44	13.1	9.3	13.9
78	9.6	7.8	11.6





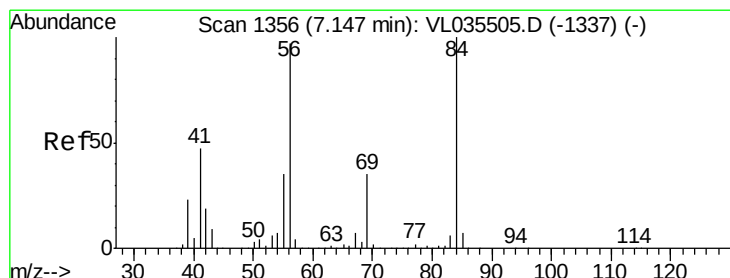
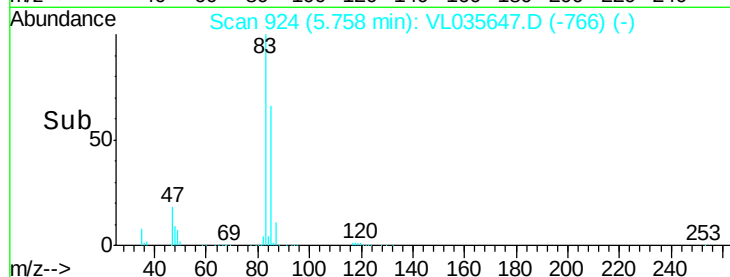
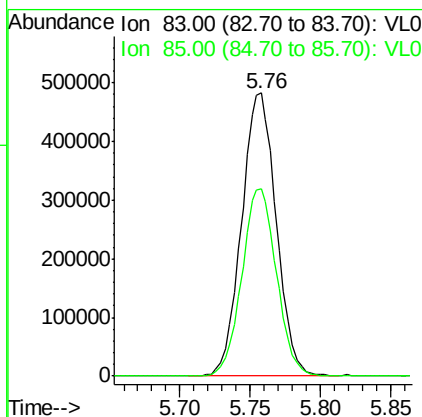
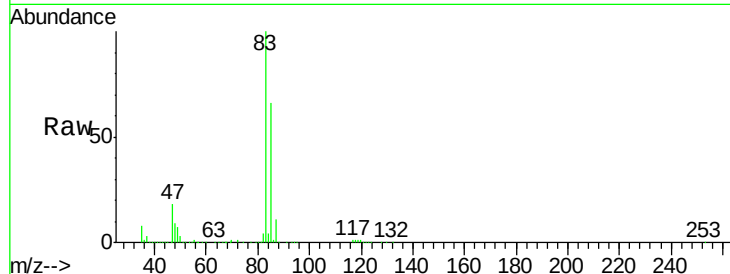
#29
Chloroform
Concen: 2.900 ppbv
RT: 5.76 min Scan# 924
Delta R.T. 0.01 min
Lab File: VL035647.D
Acq: 17 Sep 2020 3:35

Instrument :
MSVOA_L
ClientSampled :
SV-14

Tot Ion	83	Resp	829530
Ion Ratio	100	Lower	Upper
83	100		
85	66.2	53.9	80.9

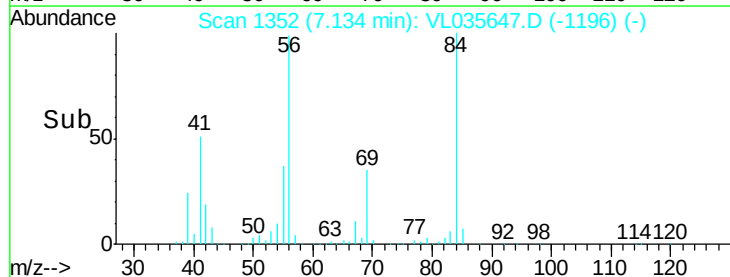
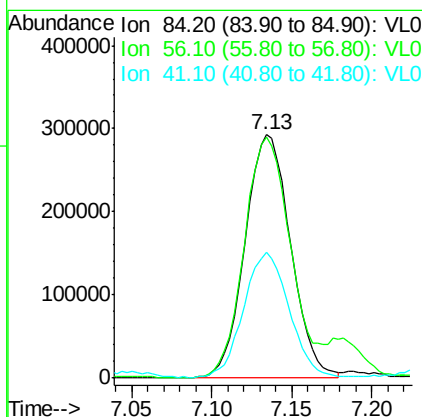
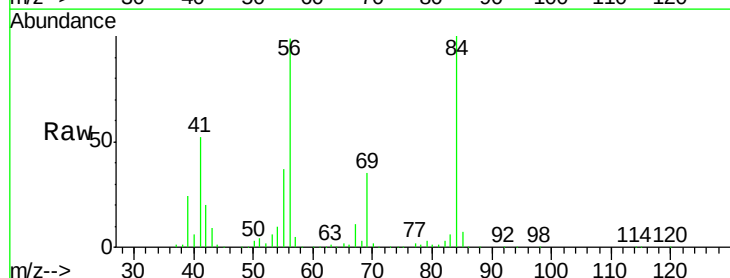
Manual Integrations
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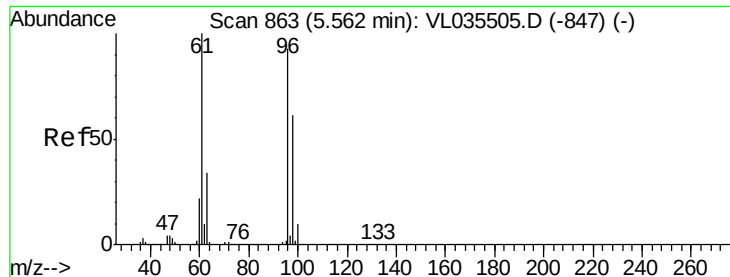
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#30
Cyclohexane
Concen: 3.781 ppbv
RT: 7.13 min Scan# 1352
Delta R.T. 0.00 min
Lab File: VL035647.D
Acq: 17 Sep 2020 3:35

Tgt Ion	84	Resp	568608
Ion Ratio	100	Lower	Upper
84	100		
56	113.7	80.1	120.1
41	50.6	38.1	57.1





#31

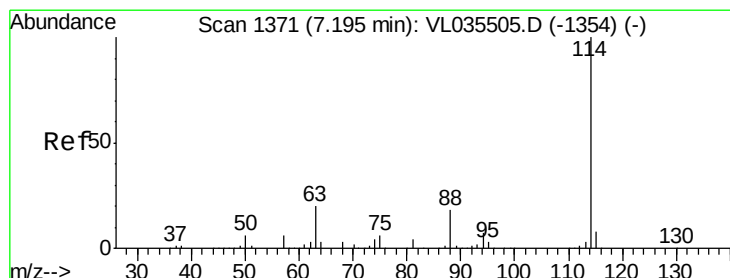
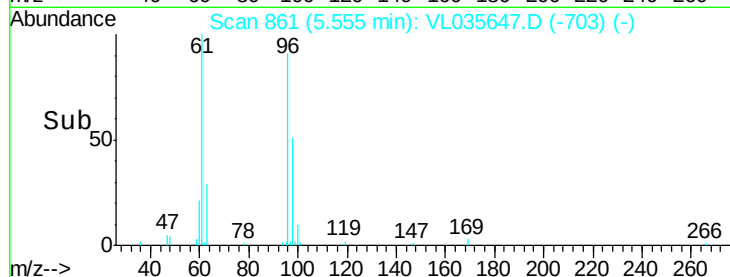
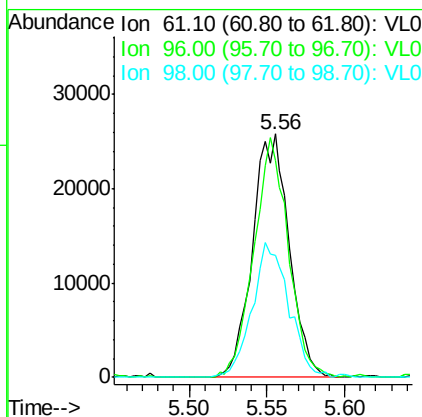
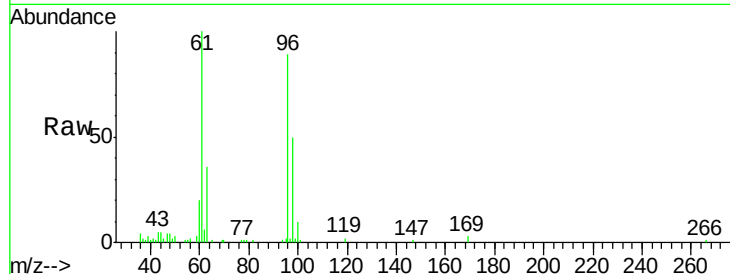
cis-1,2-Dichloroethene
Concen: 0.294 ppbv m
RT: 5.56 min Scan# 861
Delta R.T. 0.01 min
Lab File: VL035647.D
Acq: 17 Sep 2020 3:35

Instrument :
MSVOA_L
ClientSampled :
SV-14

Tot Ion	Ratio	Lower	Upper
61	100		
96	89.1	74.4	111.6
98	50.1	49.2	73.8

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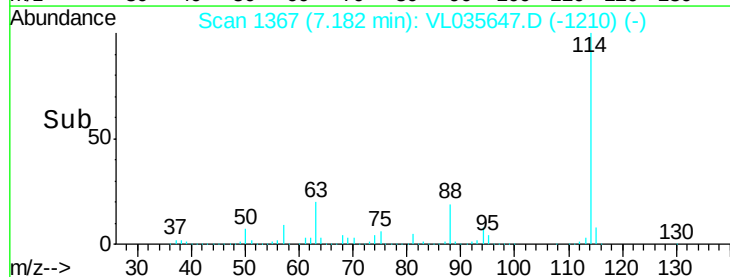
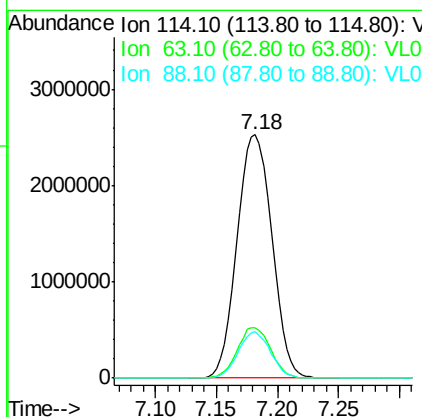
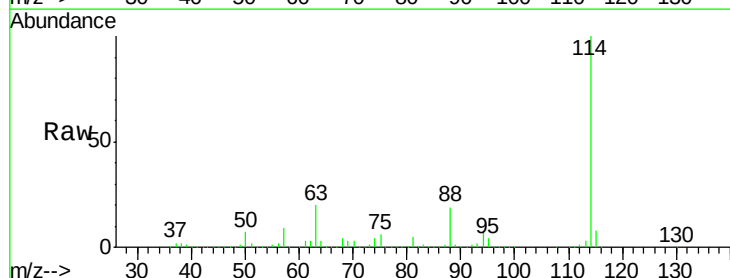
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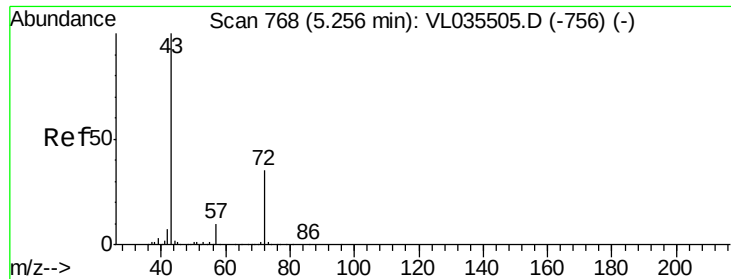


#33

1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.18 min Scan# 1367
Delta R.T. 0.01 min
Lab File: VL035647.D
Acq: 17 Sep 2020 3:35

Tgt Ion	Ratio	Lower	Upper
114	100		
63	20.0	14.7	22.1
88	17.7	13.4	20.2





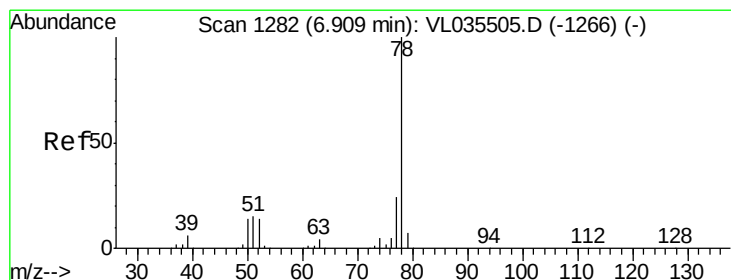
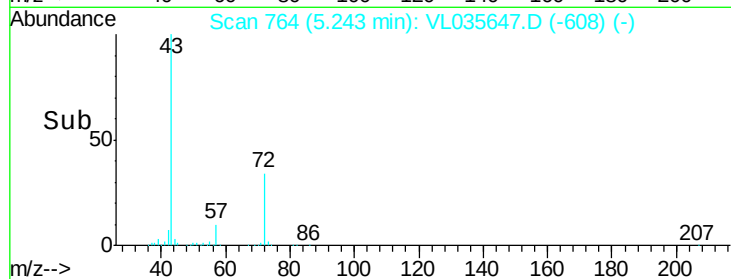
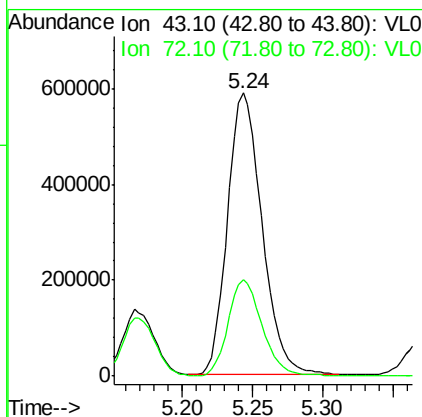
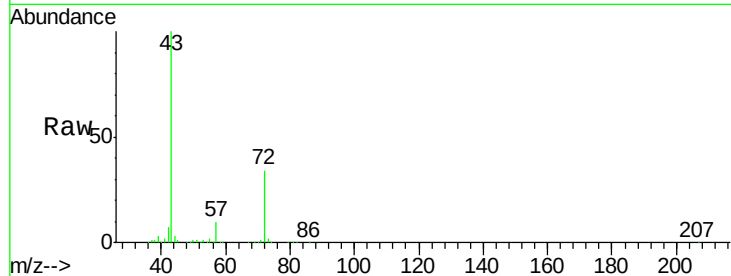
#34
 2-Butanone
 Concen: 6.786 ppbv
 RT: 5.24 min Scan# 764
 Delta R.T. 0.00 min
 Lab File: VL035647.D
 Acq: 17 Sep 2020 3:35

Instrument :
 MSVOA_L
 ClientSampled :
 SV-14

Tot Ion: 43 Resp: 1009677
 Ion Ratio Lower Upper
 43 100
 72 33.6 27.7 41.5

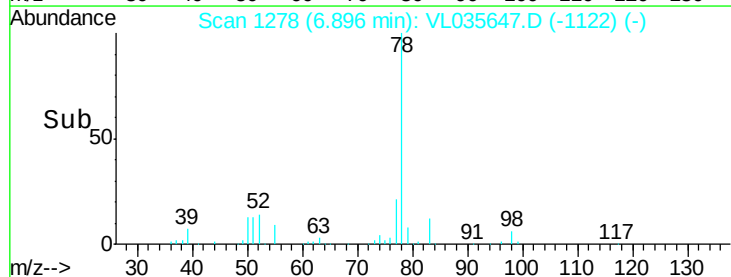
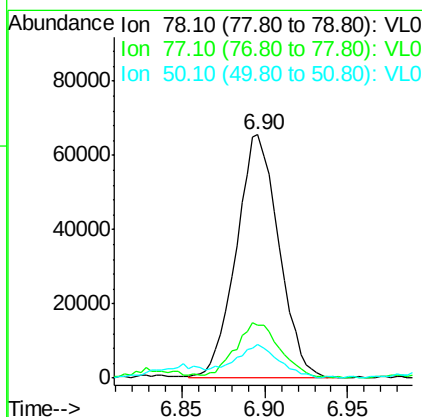
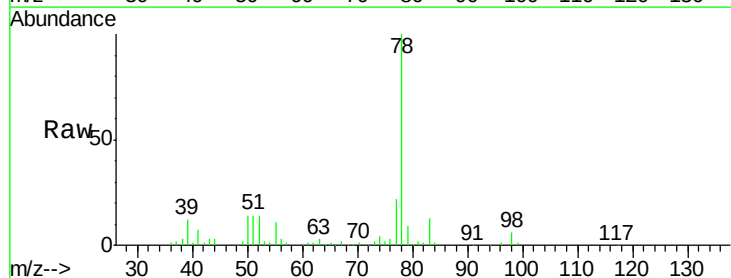
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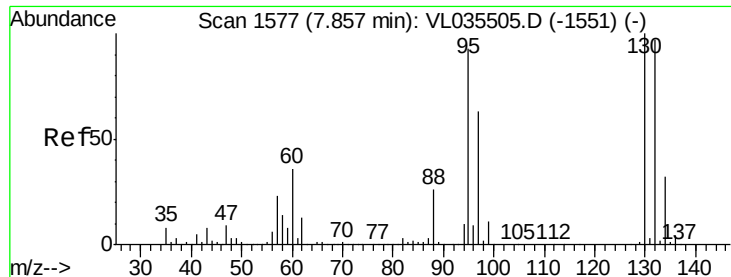
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#36
 Benzene
 Concen: 0.361 ppbv
 RT: 6.90 min Scan# 1278
 Delta R.T. 0.00 min
 Lab File: VL035647.D
 Acq: 17 Sep 2020 3:35

Tgt Ion: 78 Resp: 117168
 Ion Ratio Lower Upper
 78 100
 77 21.1 19.3 28.9
 50 14.0 11.0 16.6





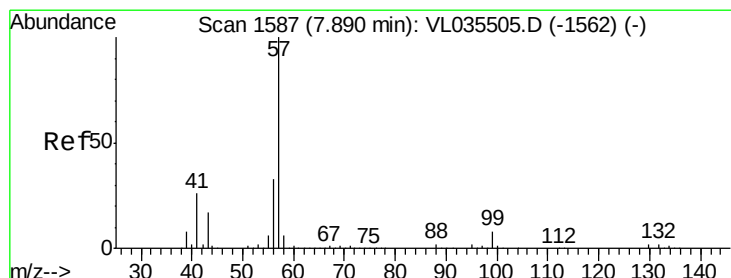
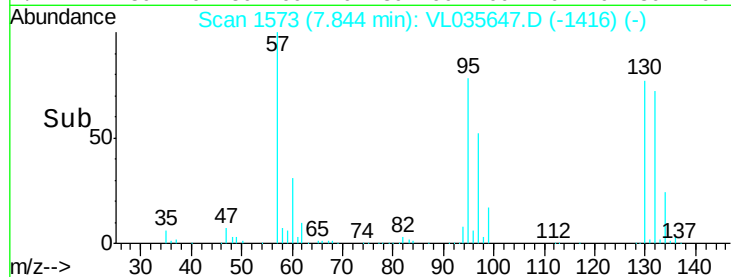
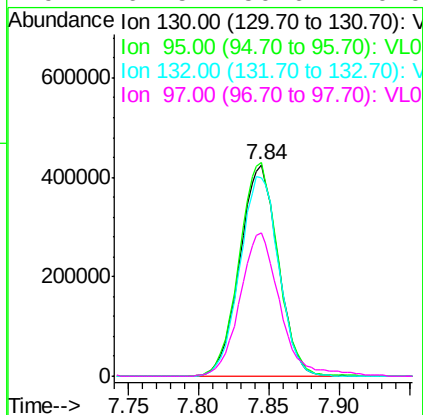
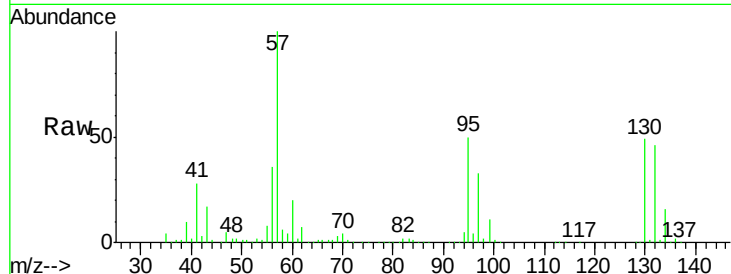
#38
 Trichloroethene
 Concen: 4.277 ppbv
 RT: 7.84 min Scan# 1573
 Delta R.T. 0.01 min
 Lab File: VL035647.D
 Acq: 17 Sep 2020 3:35

Instrument :
 MSVOA_L
 ClientSampled :
 SV-14

Tot Ion	Ion	Ratio	Resp	Lower	Upper
130	100		806333		
95	100.8	74.6	112.0		
132	93.5	77.6	116.4		
97	67.5	50.6	76.0		

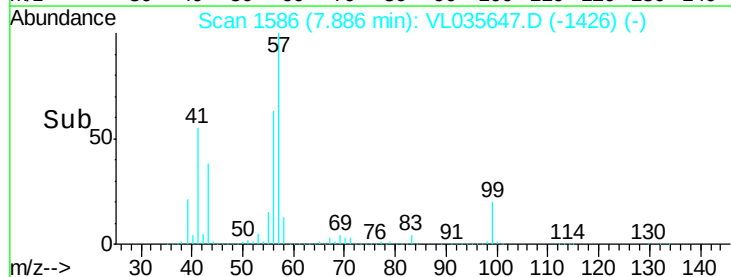
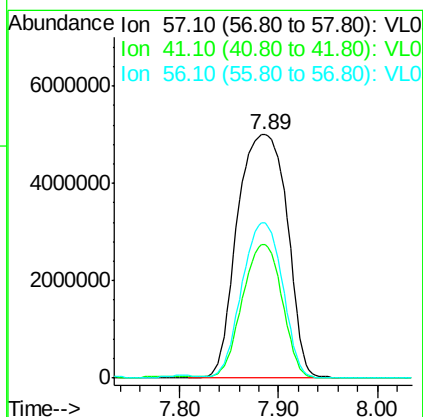
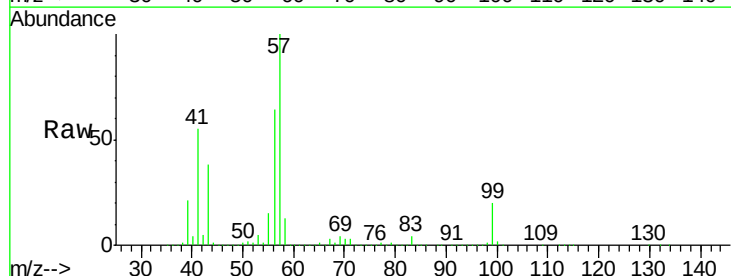
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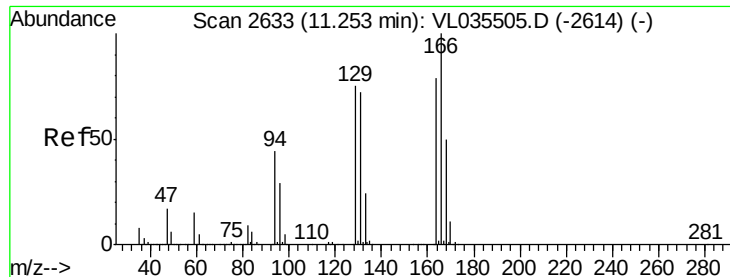
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#44
 2,2,4-Trimethylpentane
 Concen: 40.837 ppbv
 RT: 7.89 min Scan# 1586
 Delta R.T. 0.02 min
 Lab File: VL035647.D
 Acq: 17 Sep 2020 3:35

Tgt Ion	Ion	Ratio	Lower	Upper
57	100			
41	43.7	20.5	30.7#	
56	52.3	25.3	37.9#	





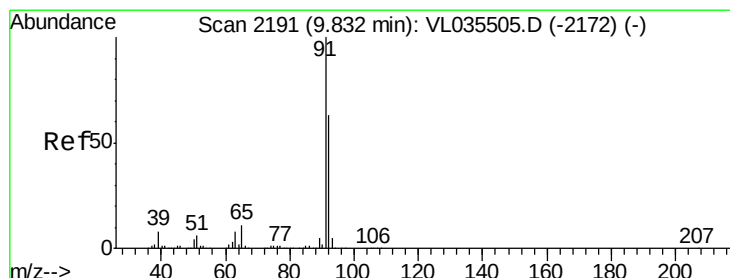
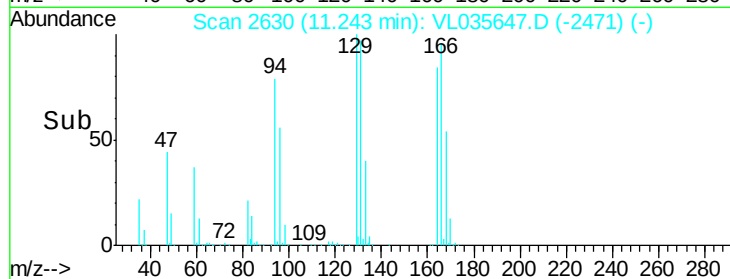
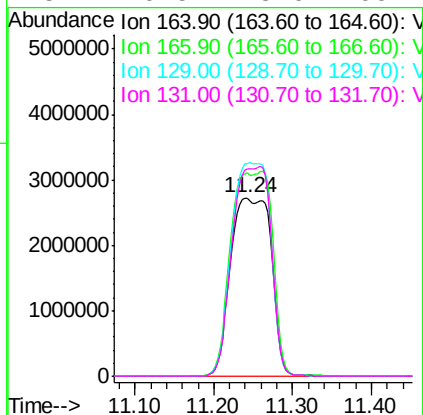
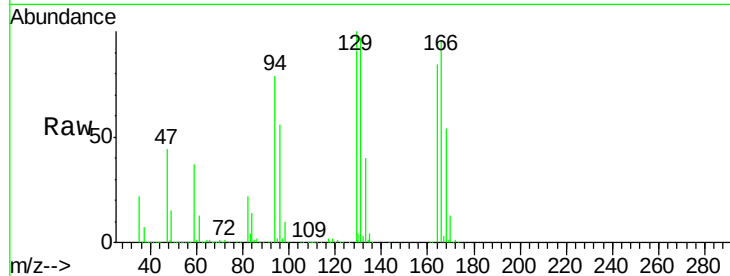
#52
Tetrachloroethene
Concen: 51.218 ppbv m
RT: 11.24 min Scan# 2630
Delta R.T. 0.01 min
Lab File: VL035647.D
Acq: 17 Sep 2020 3:35

Instrument :
MSVOA_L
ClientSampled :
SV-14

Tot Ion	Ratio	Lower	Upper
164	100		
166	114.2	100.9	151.3
129	119.5	75.3	112.9#
131	116.5	73.0	109.4#

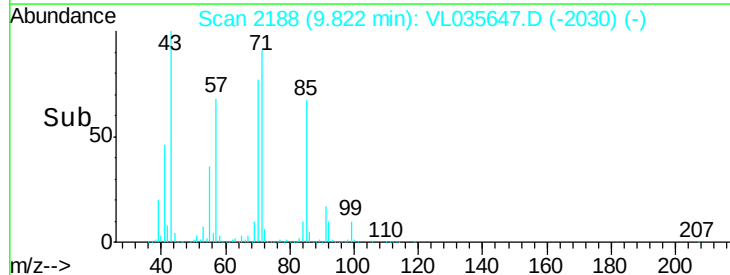
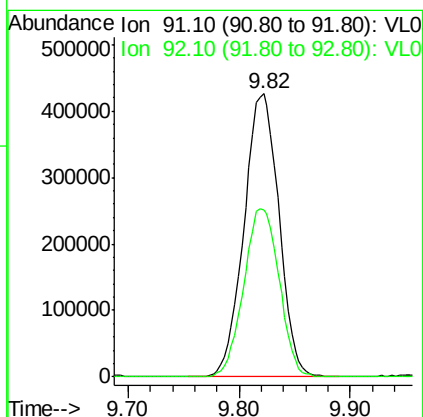
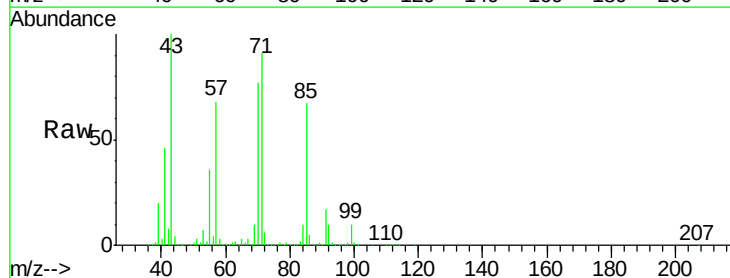
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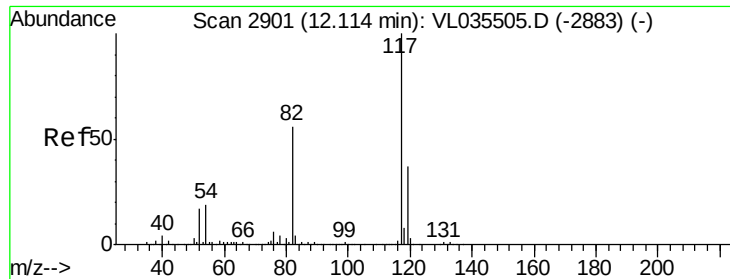
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#53
Toluene
Concen: 2.279 ppbv m
RT: 9.82 min Scan# 2188
Delta R.T. 0.01 min
Lab File: VL035647.D
Acq: 17 Sep 2020 3:35

Tgt Ion	Ratio	Lower	Upper
91	100		
92	0.0	49.8	74.8#





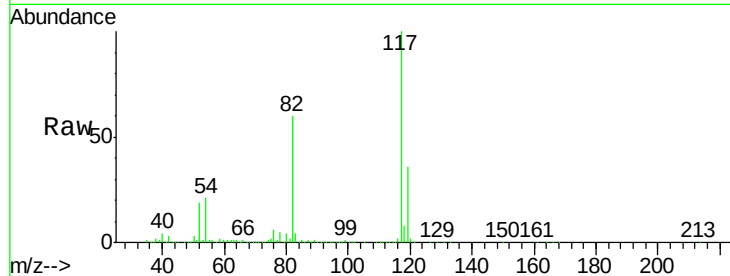
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.10 min Scan# 2897
Delta R.T. 0.01 min
Lab File: VL035647.D
Acq: 17 Sep 2020 3:35

Instrument :
MSVOA_L
ClientSampled :
SV-14

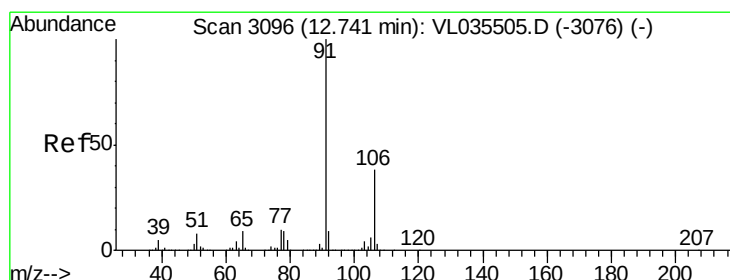
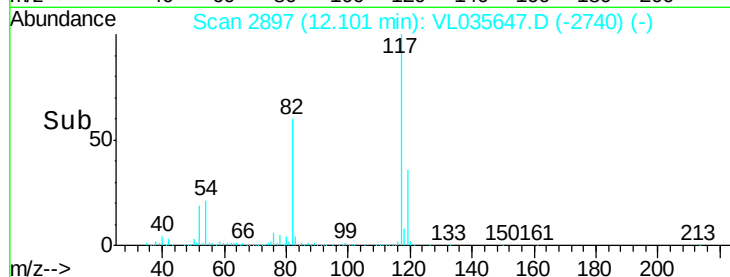
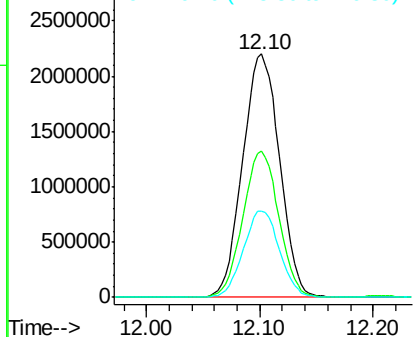
Tot Ion	Ratio	Lower	Upper
117	100		
82	58.4	41.6	62.4
119	34.8	29.3	43.9

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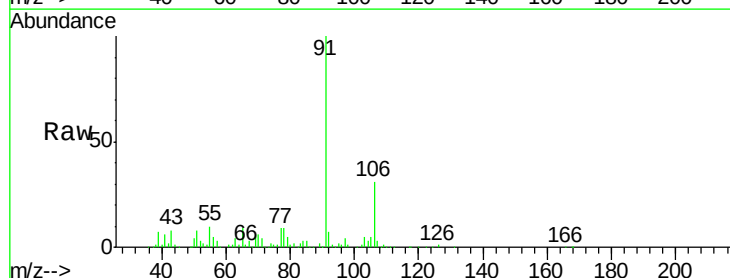


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V

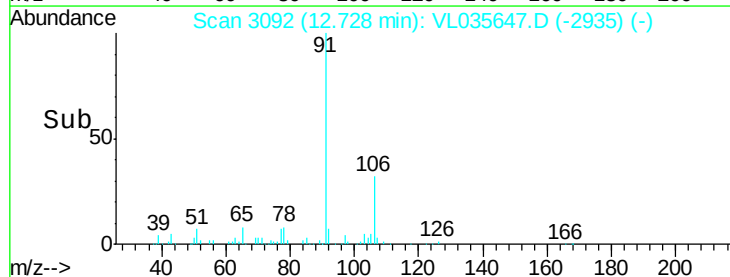
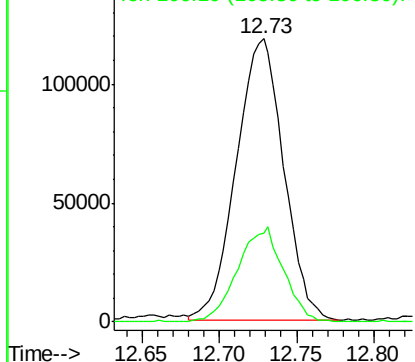


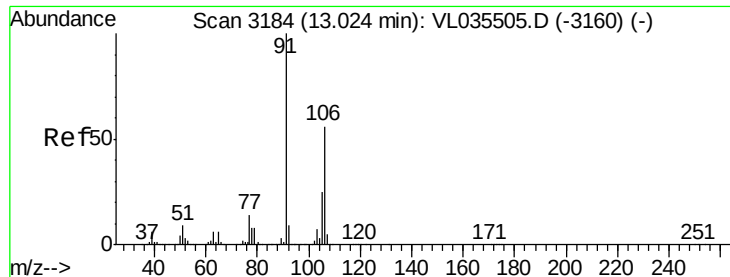
#58
Ethyl Benzene
Concen: 0.492 ppbv
RT: 12.73 min Scan# 3092
Delta R.T. 0.01 min
Lab File: VL035647.D
Acq: 17 Sep 2020 3:35

Tgt Ion	Ratio	Lower	Upper
91	100		
106	31.3	30.3	45.5



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





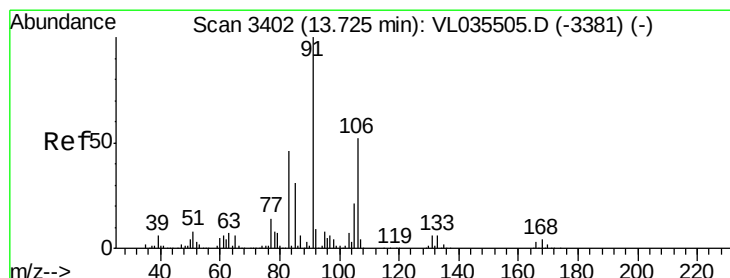
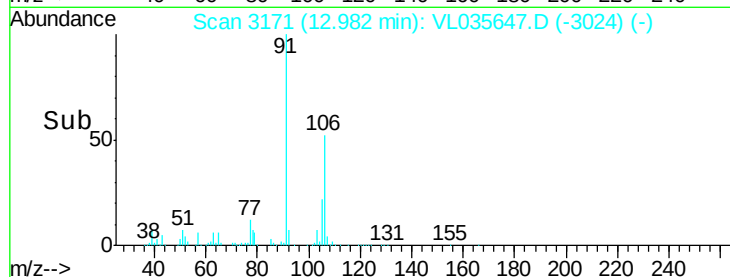
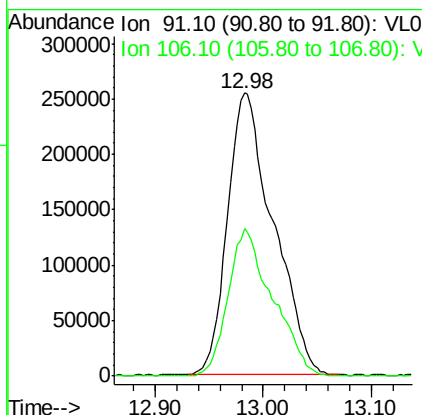
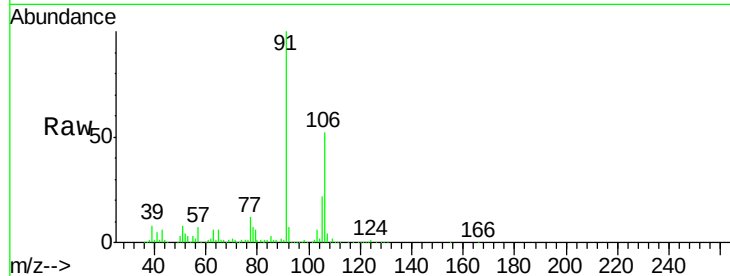
#59
m/p-Xylene
Concen: 1.738 ppbv
RT: 12.98 min Scan# 3171
Delta R.T. -0.03 min
Lab File: VL035647.D
Acq: 17 Sep 2020 3:35

Instrument :
MSVOA_L
ClientSampled :
SV-14

Tot Ion	91	Resp	749154
Ion Ratio	Lower	Upper	
91	100		
106	51.2	43.4	65.2

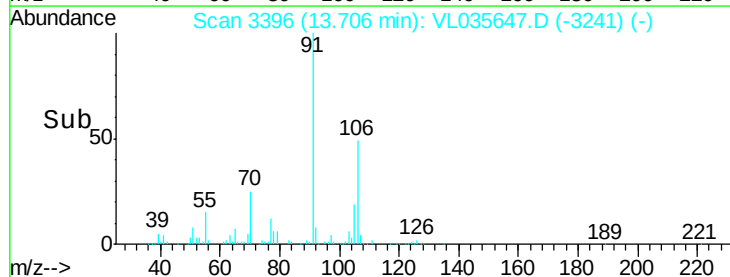
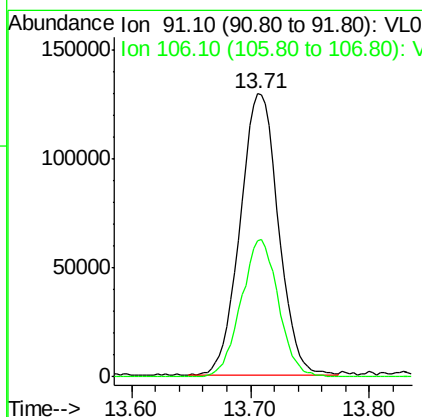
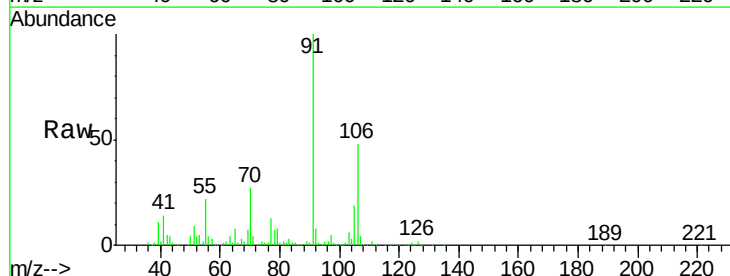
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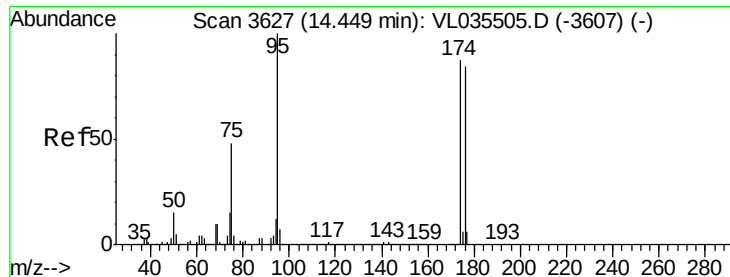
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#60
o-Xylene
Concen: 0.662 ppbv
RT: 13.71 min Scan# 3396
Delta R.T. -0.00 min
Lab File: VL035647.D
Acq: 17 Sep 2020 3:35

Tgt Ion	91	Resp	287247
Ion Ratio	Lower	Upper	
91	100		
106	48.0	25.8	77.4





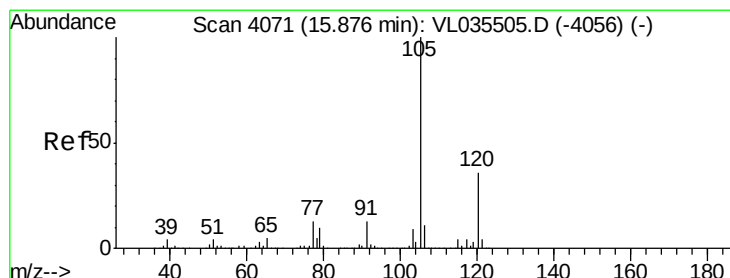
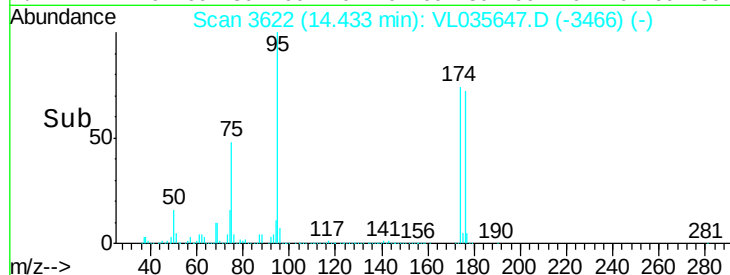
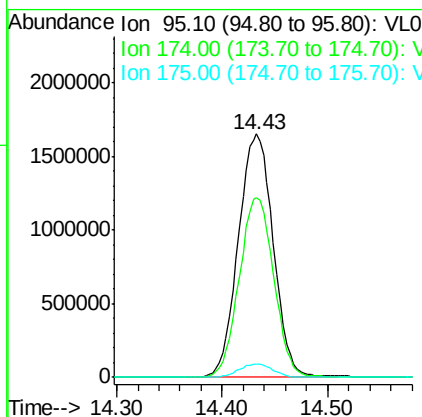
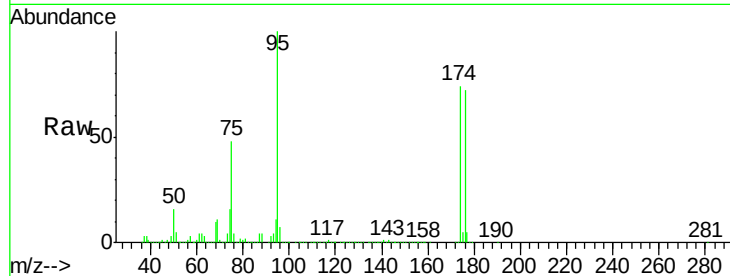
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.678 ppbv
 RT: 14.43 min Scan# 3622
 Delta R.T. 0.00 min
 Lab File: VL035647.D
 Acq: 17 Sep 2020 3:35

Instrument :
 MSVOA_L
 ClientSampled :
 SV-14

Tot Ion: 95 Resp: 3793715
 Ion Ratio Lower Upper
 95 100
 174 73.7 69.6 104.4
 175 5.4 5.1 7.7

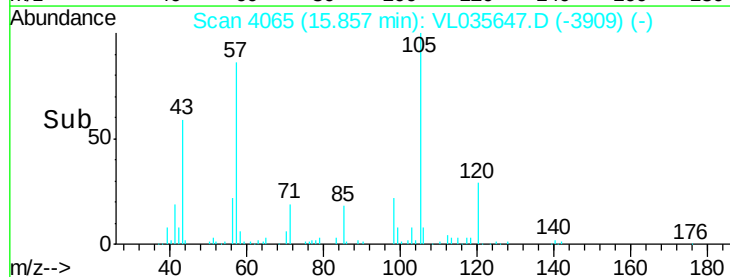
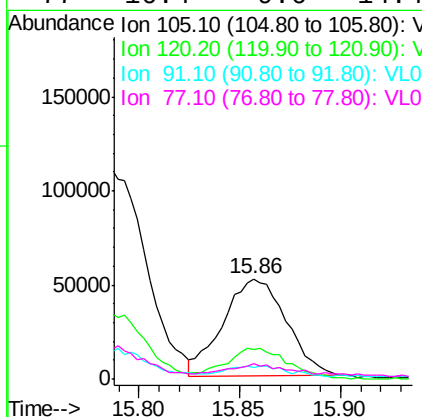
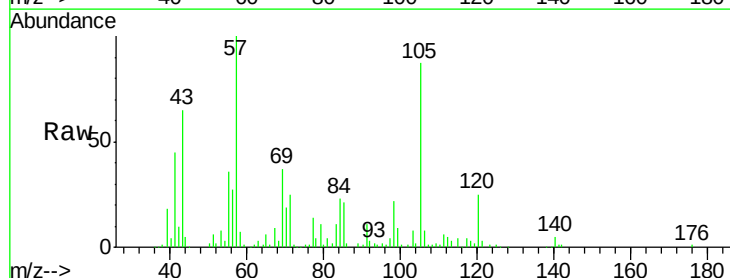
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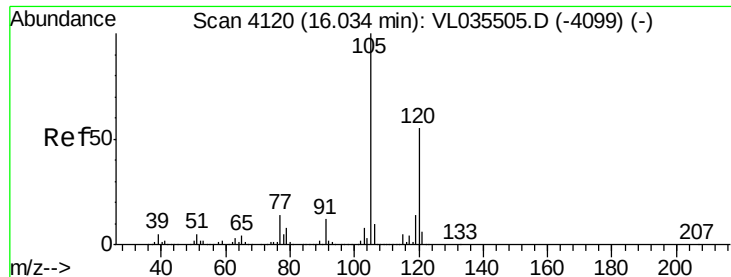
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#72
 4-Ethyltoluene
 Concen: 0.205 ppbv
 RT: 15.86 min Scan# 4065
 Delta R.T. 0.00 min
 Lab File: VL035647.D
 Acq: 17 Sep 2020 3:35

Tgt Ion: 105 Resp: 113147
 Ion Ratio Lower Upper
 105 100
 120 31.6 27.4 41.2
 91 12.9 9.7 14.5
 77 16.4 9.6 14.4#





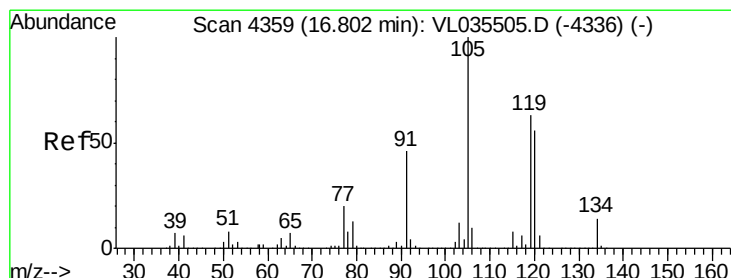
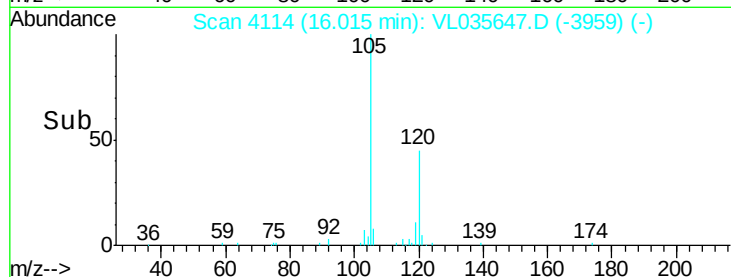
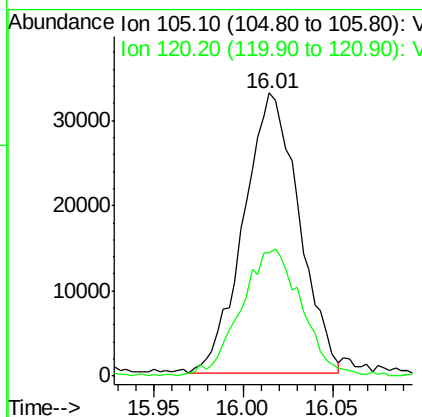
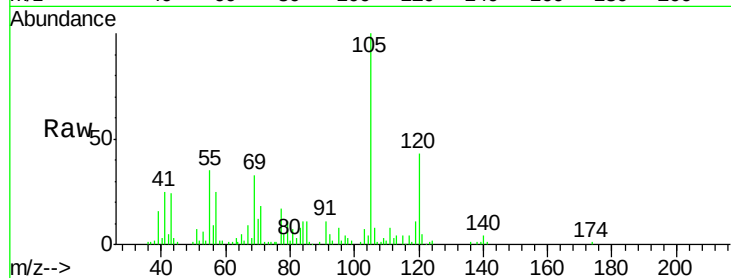
#73
 1,3,5-Trimethylbenzene
 Concen: 0.140 ppbv
 RT: 16.01 min Scan# 4114
 Delta R.T. -0.00 min
 Lab File: VL035647.D
 Acq: 17 Sep 2020 3:35

Instrument :
 MSVOA_L
 ClientSampled :
 SV-14

Tot Ion	Ratio	Lower	Upper
105	100		
120	42.9	44.2	66.2#

Manual Integrations
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#74
 1,2,4-Trimethylbenzene
 Concen: 0.492 ppbv
 RT: 16.78 min Scan# 4352
 Delta R.T. -0.00 min
 Lab File: VL035647.D
 Acq: 17 Sep 2020 3:35

Tgt Ion	Ratio	Lower	Upper
105	100		
120	48.4	44.4	66.6
91	10.6	37.1	55.7#
77	9.8	16.0	24.0#

