

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040621\
 Data File : VL036706.D
 Acq On : 6 Apr 2021 20:27
 Operator : SY/AP
 Sample : M1945-01 2X
 Misc : 400mL/MSVOA L
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

Manual Integrations
 APPROVED

MMDadoda
 4/12/2021 11:11:07 AM

Quant Time: Apr 08 12:35:07 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar 25 2021
 QLast Update : Thu Mar 25 09:42:40 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1259085	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	2975022	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	2891106	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	2365175	10.26	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	34916	0.170	ppbv	89
9) Propene	3.02	41	63693	0.849	ppbv	84
10) Heptane	8.13	43	27127m	0.142	ppbv	
11) Trichlorofluoromethane	3.95	101	23925m	0.114	ppbv	
13) Ethanol	3.61	45	49816m	5.578	ppbv	
15) Acetone	3.85	43	2944725	23.762	ppbv	100
17) tert-Butyl alcohol	4.31	59	28599m	0.265	ppbv	
20) Methylene Chloride	4.34	84	41203	0.710	ppbv #	79
26) Hexane	5.69	57	268089	1.961	ppbv #	44
27) Carbon Disulfide	4.56	76	24560m	0.182	ppbv	
29) Chloroform	5.75	83	88997m	0.407	ppbv	
34) 2-Butanone	5.25	43	161315	1.111	ppbv	95
51) 2-Hexanone	10.15	43	92939m	0.876	ppbv	
52) Tetrachloroethene	11.23	164	9929m	0.098	ppbv	
53) Toluene	9.81	91	207849	0.711	ppbv	99
58) Ethyl Benzene	12.72	91	181683	0.432	ppbv	98
59) m/p-Xylene	12.97	91	461559	1.258	ppbv	90
60) o-Xylene	13.70	91	211404	0.596	ppbv	100
62) Isopropylbenzene	14.68	105	44214m	0.093	ppbv	
64) n-propylbenzene	15.57	120	54552m	0.467	ppbv	
65) tert-Butylbenzene	16.77	119	103115m	0.249	ppbv	
67) sec-Butylbenzene	17.30	105	117544	0.201	ppbv	98
69) p-Isopropyltoluene	17.66	119	86870m	0.190	ppbv	
70) n-Butylbenzene	18.57	91	243340m	0.514	ppbv	
72) 4-Ethyltoluene	15.85	105	218922	0.563	ppbv #	96
73) 1,3,5-Trimethylbenzene	16.01	105	203297	0.560	ppbv	95
74) 1,2,4-Trimethylbenzene	16.77	105	888503	2.289	ppbv #	68

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

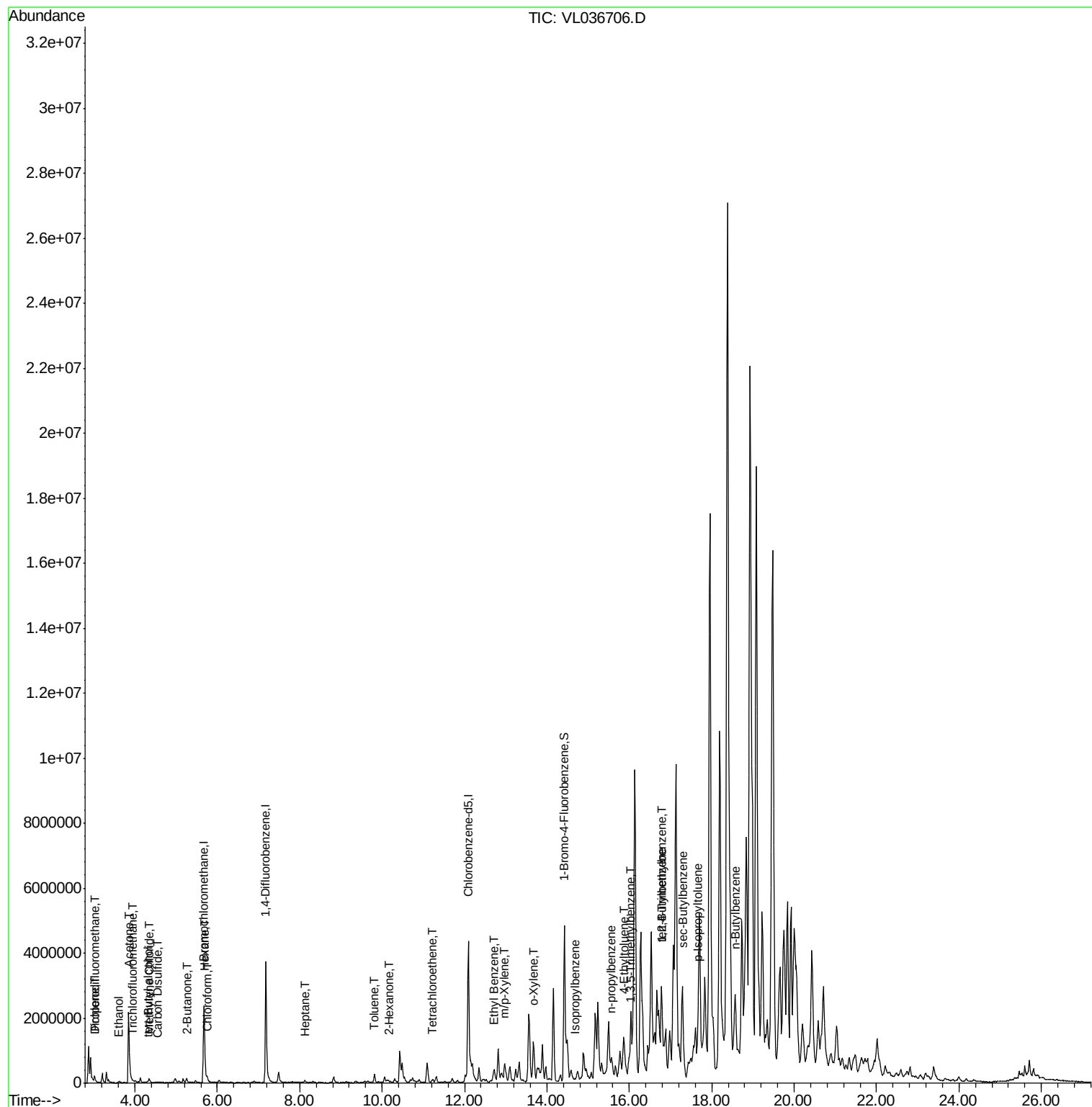
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040621\
Data File : VL036706.D
Acq On : 6 Apr 2021 20:27
Operator : SY/AP
Sample : M1945-01 2X
Misc : 400mL/MSVOA L
ALS Vial : 8 Sample Multiplier: 1

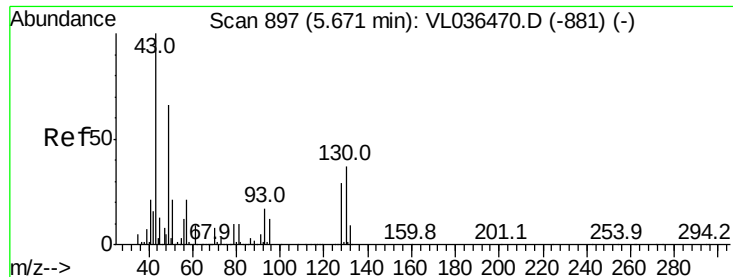
Instrument :
MSVOA_L
ClientSampleId :
SV1

Manual Integrations
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Quant Time: Apr 08 12:35:07 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar
QLast Update : Thu Mar 25 09:42:40 2021
Response via : Initial Calibration





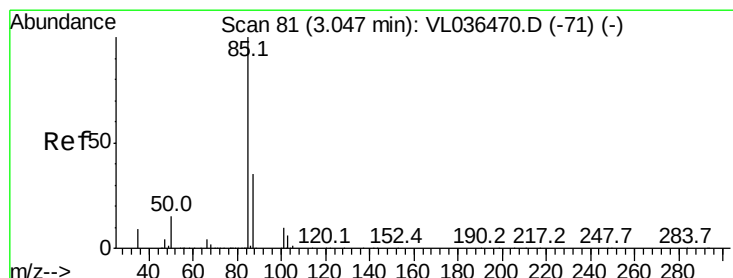
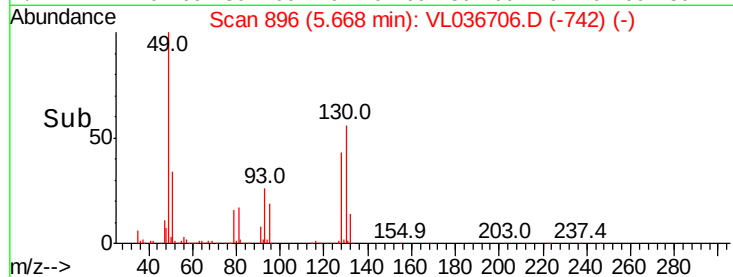
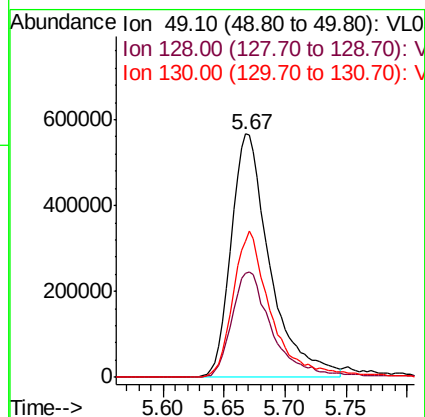
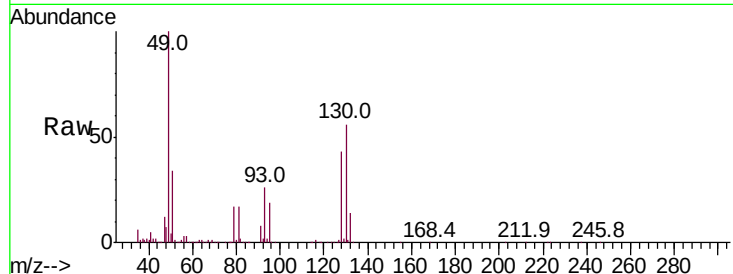
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.67 min Scan# 896
Delta R.T. -0.00 min
Lab File: VL036706.D
Acq: 6 Apr 2021 20:27

Instrument :
MSVOA_L
ClientSampled :
SV1

Tot Ion: 49 Resp: 1259085
Ion Ratio Lower Upper
49 100
128 46.5 23.5 70.6
130 59.6 29.1 87.4

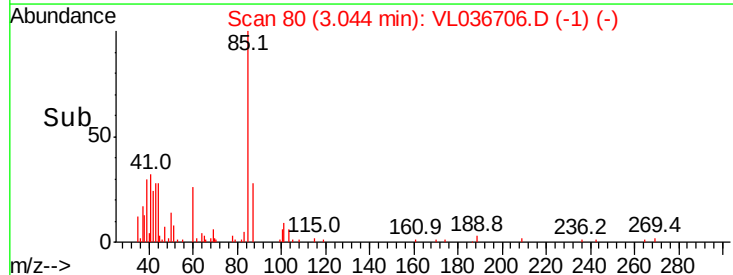
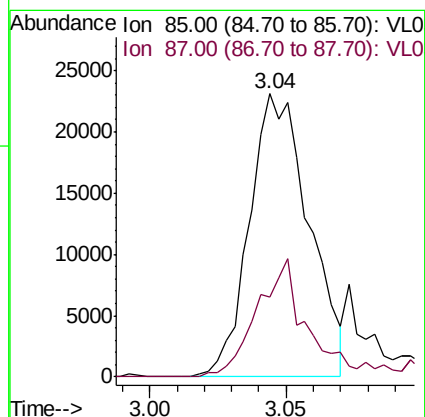
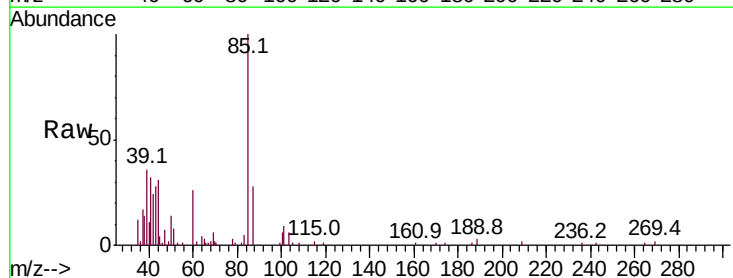
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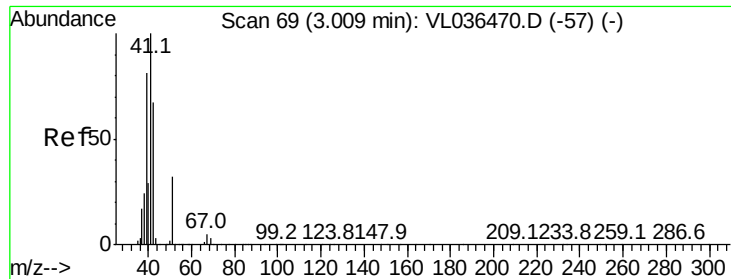
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#2
Dichlorodifluoromethane
Concen: 0.170 ppbv
RT: 3.04 min Scan# 80
Delta R.T. -0.00 min
Lab File: VL036706.D
Acq: 6 Apr 2021 20:27

Tgt Ion: 85 Resp: 34916
Ion Ratio Lower Upper
85 100
87 28.5 27.8 41.8





#9

Propene

Concen: 0.849 ppbv

RT: 3.02 min Scan# 73

Delta R.T. 0.01 min

Lab File: VL036706.D

Acq: 6 Apr 2021 20:27

Instrument :

MSVOA_L

ClientSampleId :

SV1

Tot Ion: 41 Resp: 63693

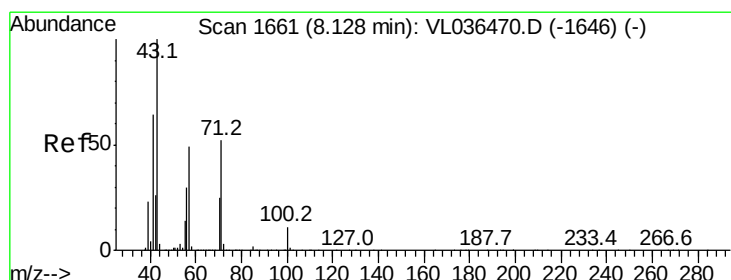
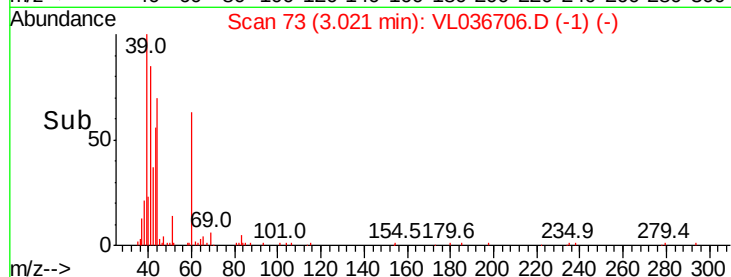
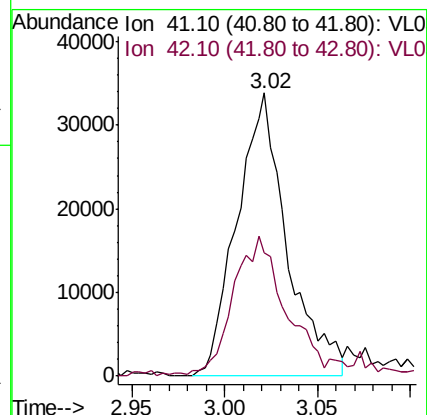
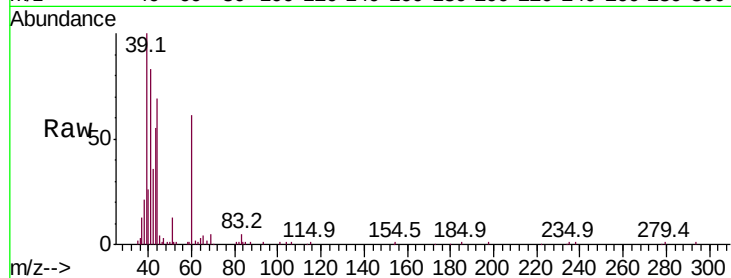
Ion Ratio Lower Upper

41 100

42 57.6 57.0 85.4

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#10

Heptane

Concen: 0.142 ppbv m

RT: 8.13 min Scan# 1663

Delta R.T. 0.01 min

Lab File: VL036706.D

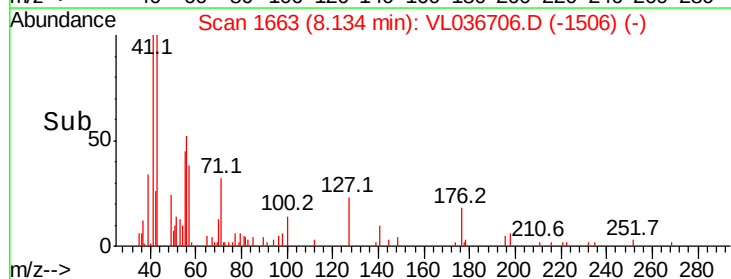
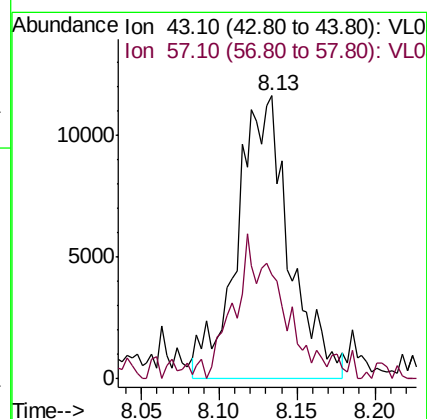
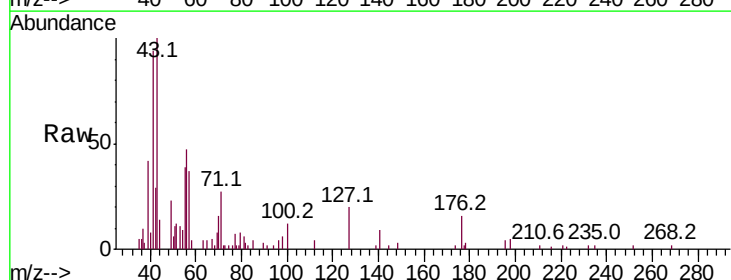
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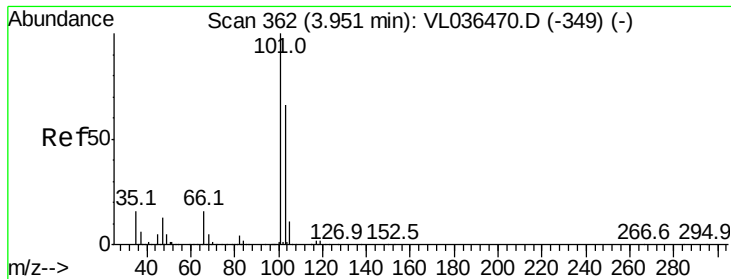
Tgt Ion: 43 Resp: 27127

Ion Ratio Lower Upper

43 100

57 49.1 39.0 58.6





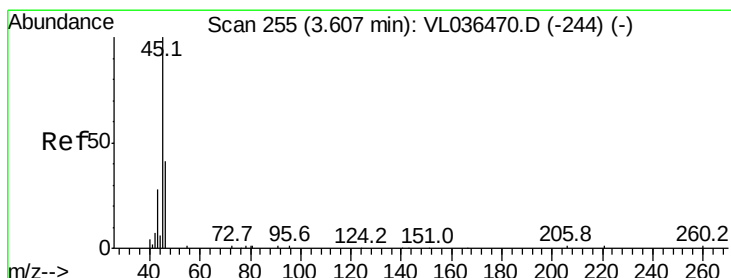
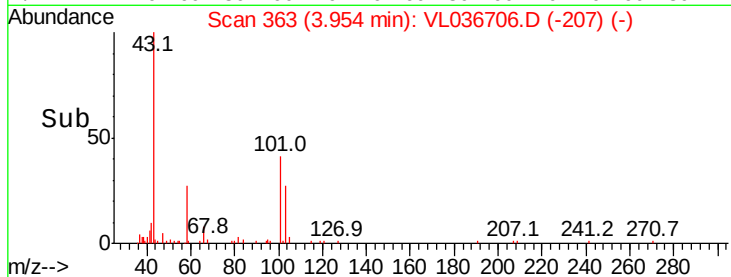
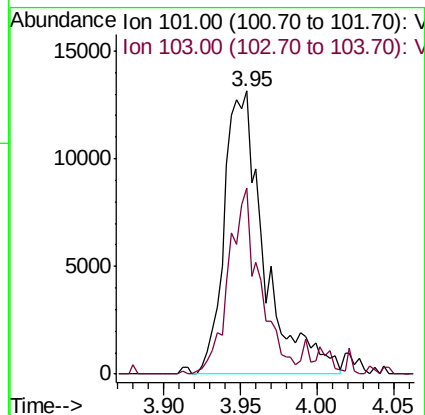
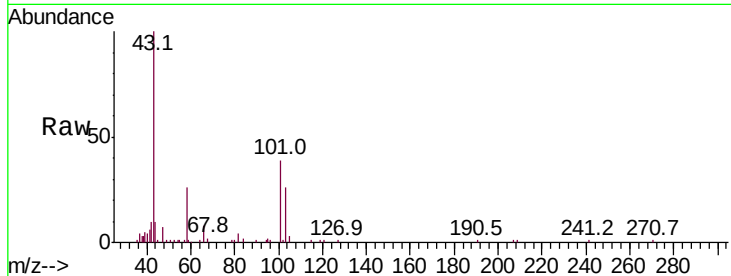
#11
 Trichlorofluoromethane
 Concen: 0.114 ppbv m
 RT: 3.95 min Scan# 363
 Delta R.T. 0.00 min
 Lab File: VL036706.D
 Acq: 6 Apr 2021 20:27

Instrument :
 MSVOA_L
 ClientSampled :
 SV1

Tot Ion:101 Resp: 23925
 Ion Ratio Lower Upper
 101 100
 103 65.7 52.5 78.7

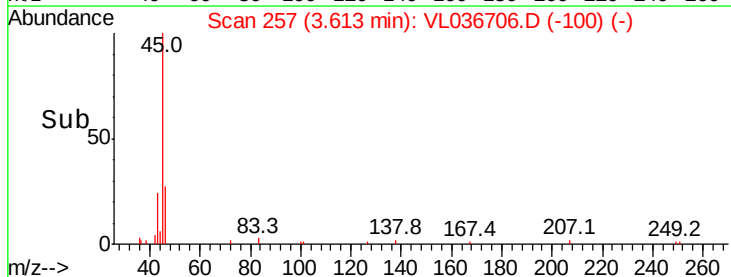
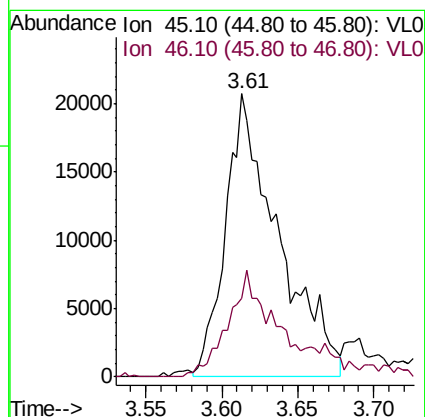
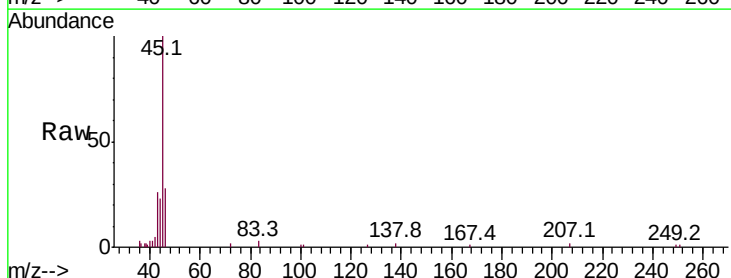
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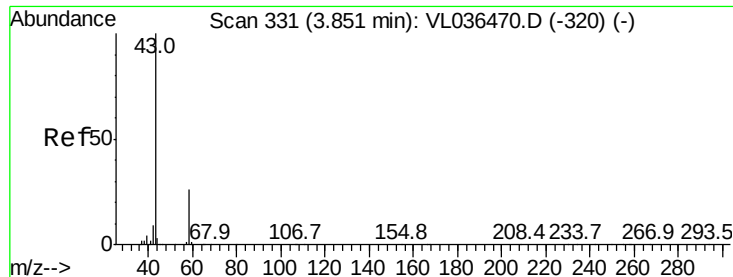
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#13
 Ethanol
 Concen: 5.578 ppbv m
 RT: 3.61 min Scan# 257
 Delta R.T. 0.01 min
 Lab File: VL036706.D
 Acq: 6 Apr 2021 20:27

Tgt Ion: 45 Resp: 49816
 Ion Ratio Lower Upper
 45 100
 46 40.5 16.6 66.2





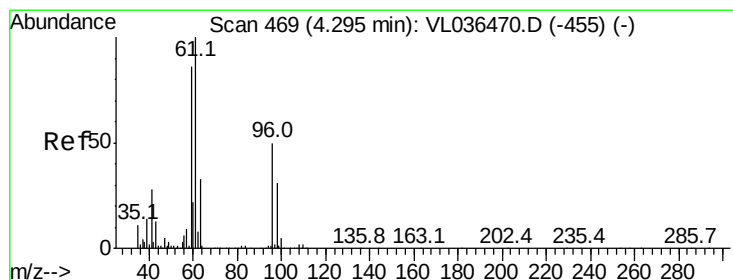
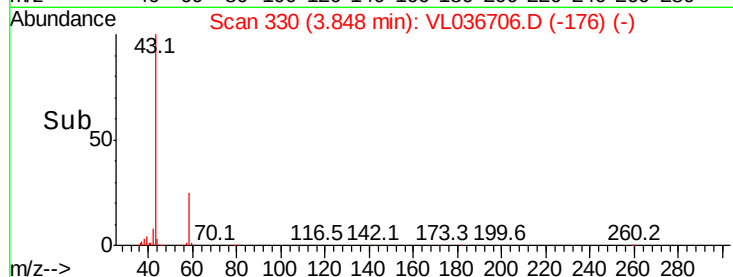
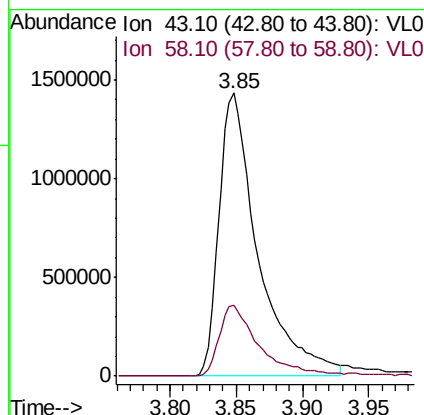
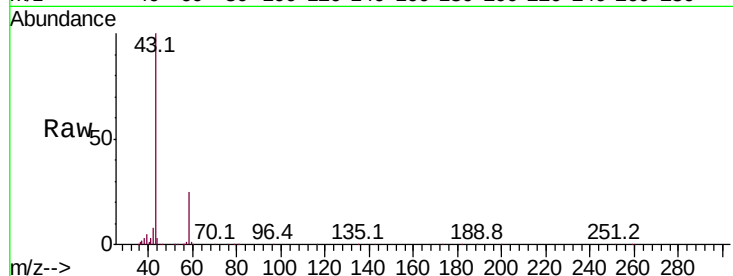
#15
Acetone
Concen: 23.762 ppbv
RT: 3.85 min Scan# 330
Delta R.T. -0.00 min
Lab File: VL036706.D
Acq: 6 Apr 2021 20:27

Instrument :
MSVOA_L
ClientSampleId :
SV1

Tot Ion: 43 Resp: 2944725
Ion Ratio Lower Upper
43 100
58 26.6 21.2 31.8

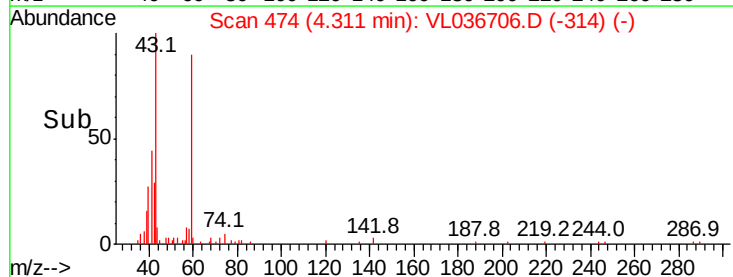
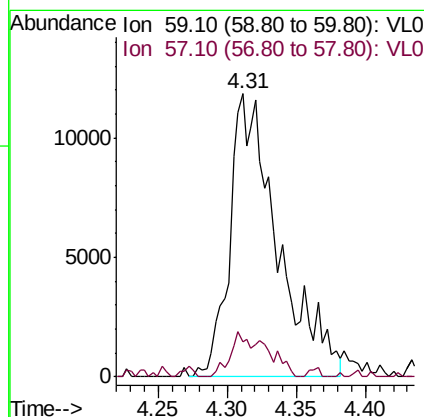
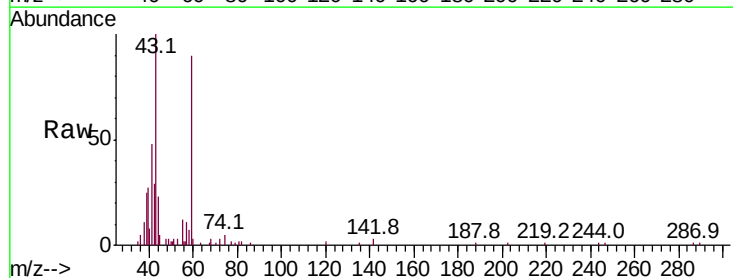
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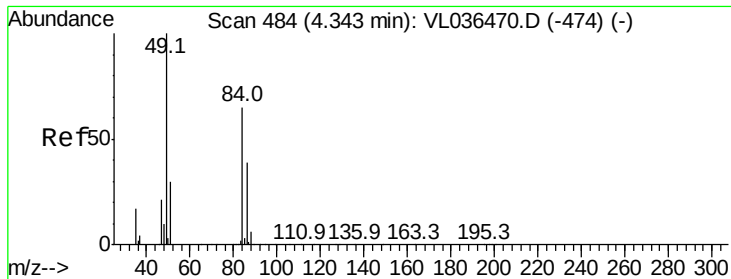
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#17
tert-Butyl alcohol
Concen: 0.265 ppbv m
RT: 4.31 min Scan# 474
Delta R.T. 0.02 min
Lab File: VL036706.D
Acq: 6 Apr 2021 20:27

Tgt Ion: 59 Resp: 28599
Ion Ratio Lower Upper
59 100
57 13.3 8.6 12.8#





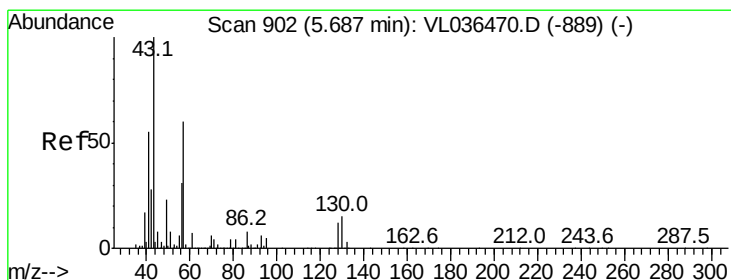
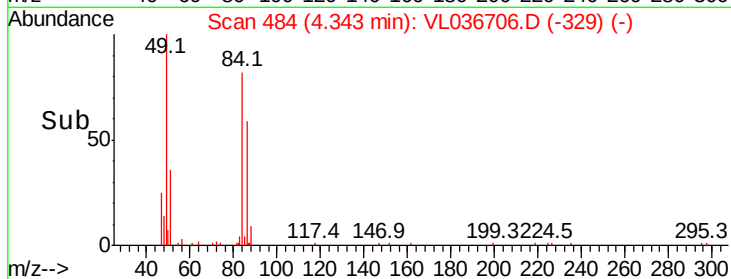
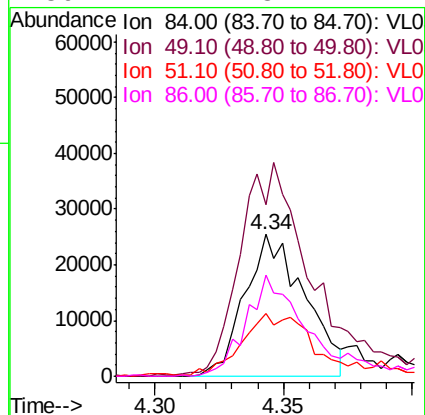
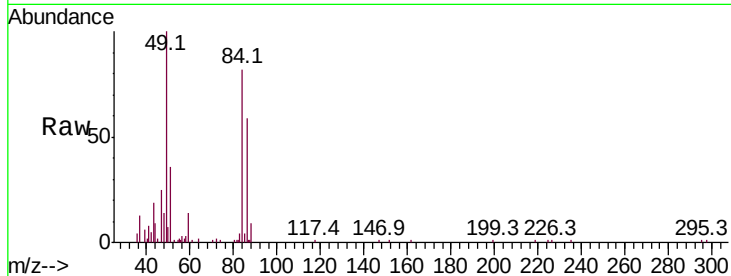
#20
Methvlene Chloride
Concen: 0.710 ppbv
RT: 4.34 min Scan# 484
Delta R.T. -0.00 min
Lab File: VL036706.D
Acq: 6 Apr 2021 20:27

Instrument :
MSVOA_L
ClientSampled :
SV1

Tot Ion	Ion	Ratio	Lower	Upper
84	100			
49	117.7	122.9	184.3#	
51	43.3	36.9	55.3	
86	71.7	48.2	72.4	

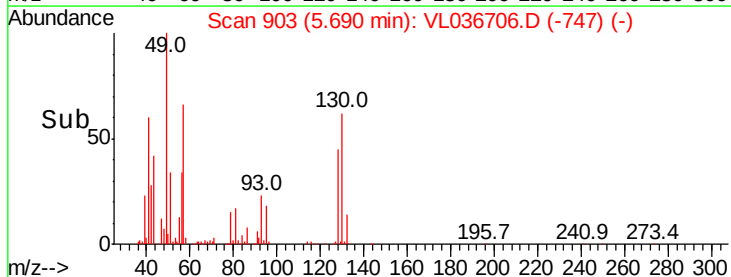
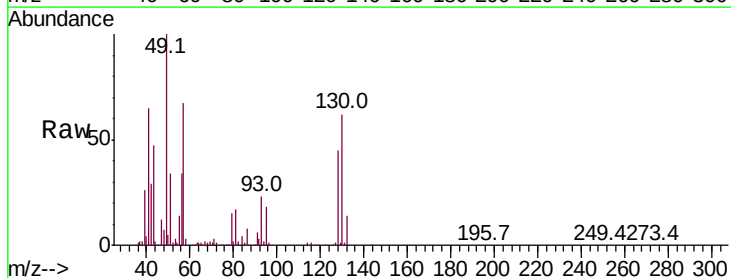
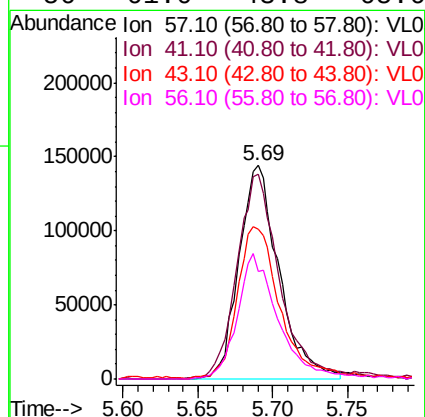
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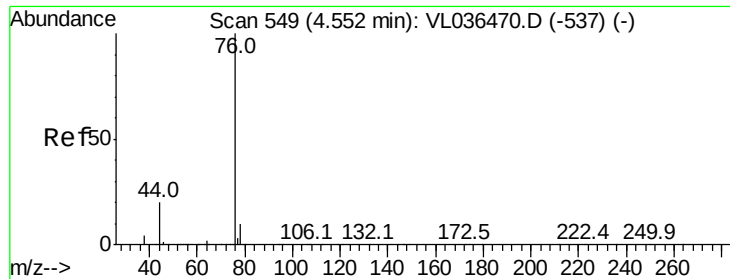
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#26
Hexane
Concen: 1.961 ppbv
RT: 5.69 min Scan# 903
Delta R.T. 0.00 min
Lab File: VL036706.D
Acq: 6 Apr 2021 20:27

Tgt Ion	Ion	Ratio	Lower	Upper
57	100			
41	105.6	77.2	115.8	
43	76.8	173.8	260.6#	
56	61.0	43.8	65.6	





#27

Carbon Disulfide

Concen: 0.182 ppbv m

RT: 4.56 min Scan# 550

Delta R.T. 0.00 min

Lab File: VL036706.D

Acq: 6 Apr 2021 20:27

Instrument :

MSVOA_L

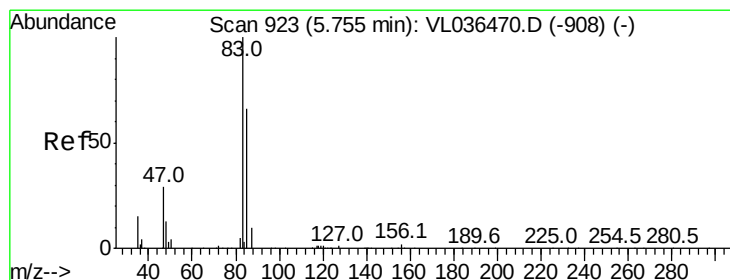
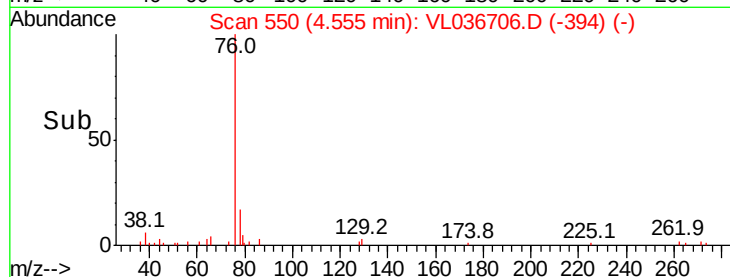
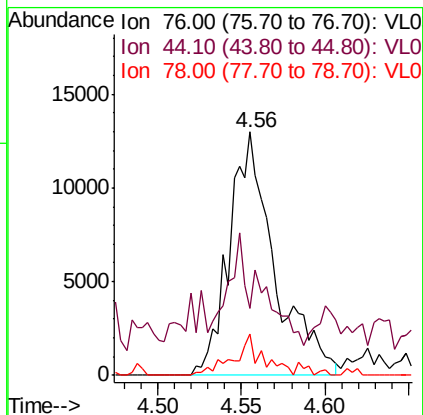
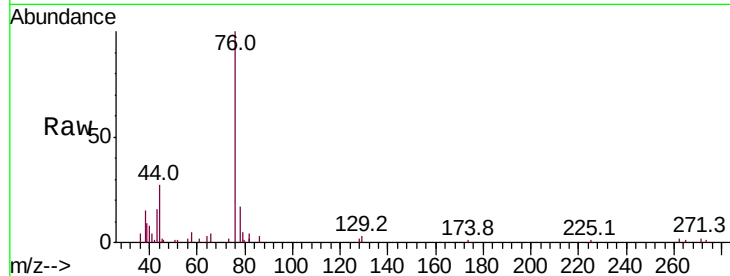
ClientSampled :

SV1

Tot Ion:	76	Resp:	24560
Ion Ratio	Lower	Upper	
76	100		
44	38.3	17.5	26.3#
78	0.0	8.6	13.0#

Manual Integrations
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#29

Chloroform

Concen: 0.407 ppbv m

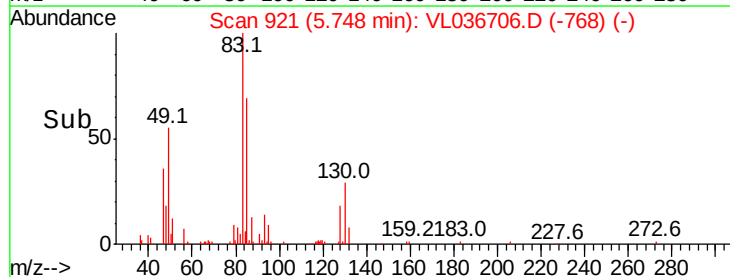
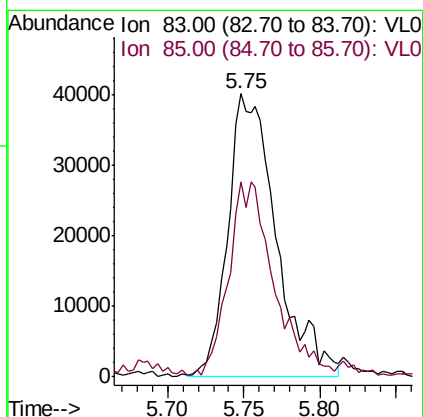
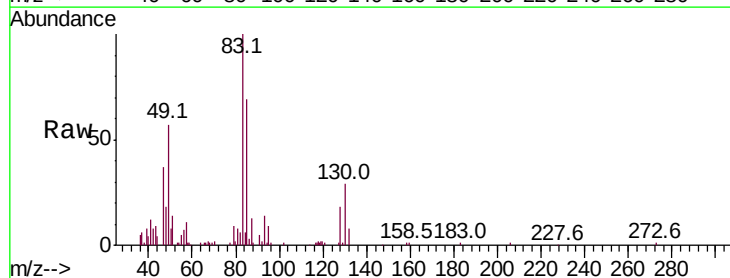
RT: 5.75 min Scan# 921

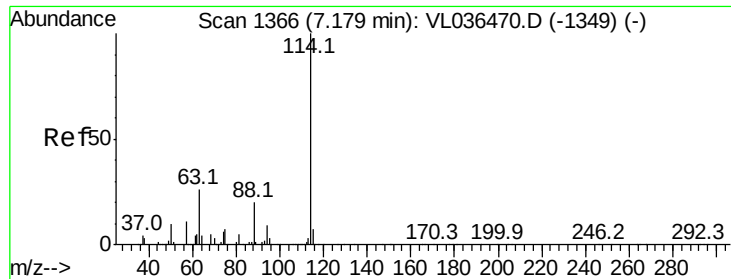
Delta R.T. -0.01 min

Lab File: VL036706.D

Acq: 6 Apr 2021 20:27

Tgt Ion:	83	Resp:	88997
Ion Ratio	Lower	Upper	
83	100		
85	69.0	52.6	78.8





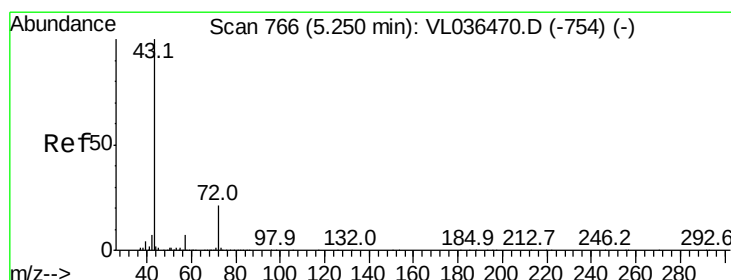
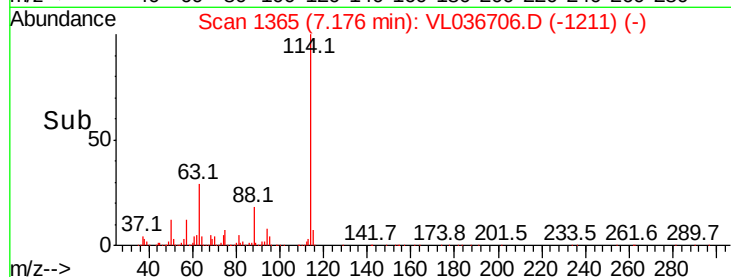
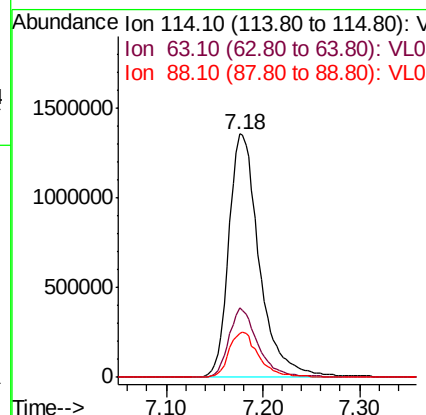
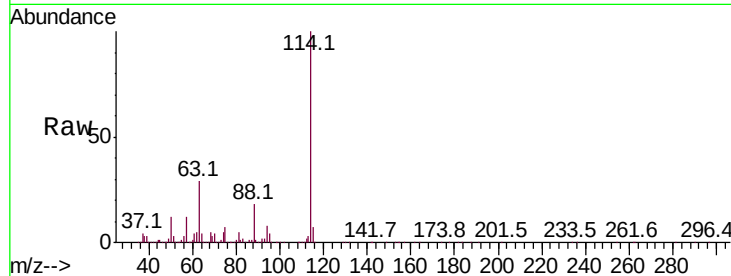
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1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.18 min Scan# 1365
Delta R.T. -0.00 min
Lab File: VL036706.D
Acq: 6 Apr 2021 20:27

Instrument :
MSVOA_L
ClientSampled :
SV1

Tot Ion	Ratio	Lower	Upper
114	100		
63	27.3	22.4	33.6
88	18.5	15.4	23.0

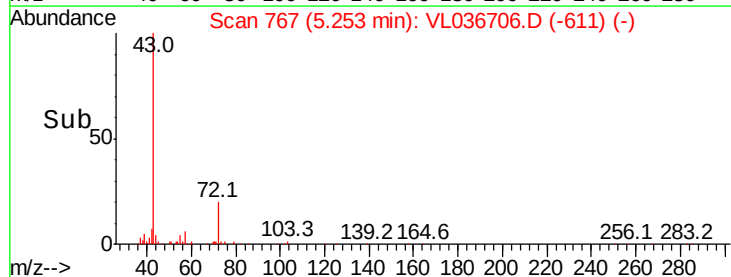
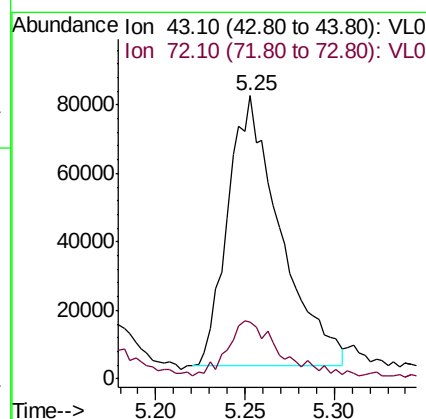
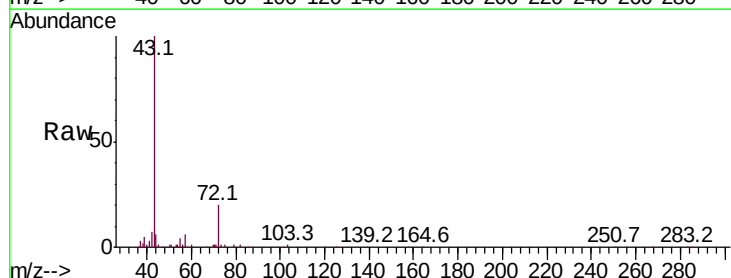
Manual Integrations
APPROVED

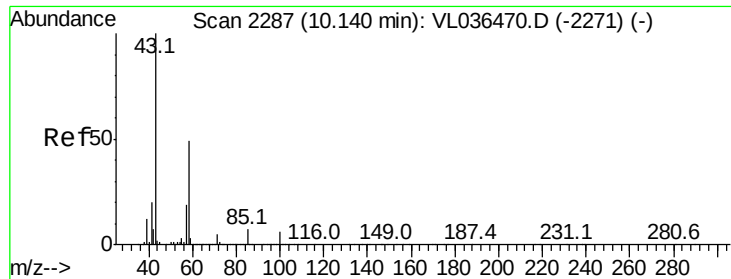
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#34
2-Butanone
Concen: 1.111 ppbv
RT: 5.25 min Scan# 767
Delta R.T. 0.00 min
Lab File: VL036706.D
Acq: 6 Apr 2021 20:27

Tgt Ion	Ratio	Lower	Upper
43	100		
72	23.6	17.0	25.6





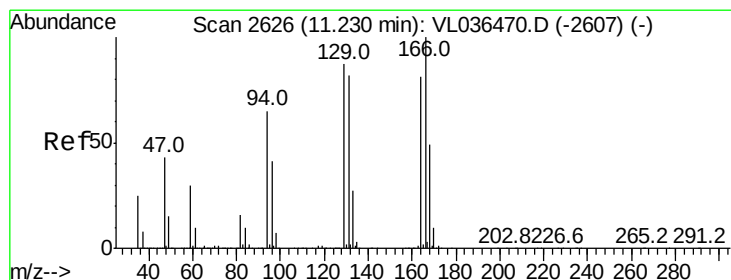
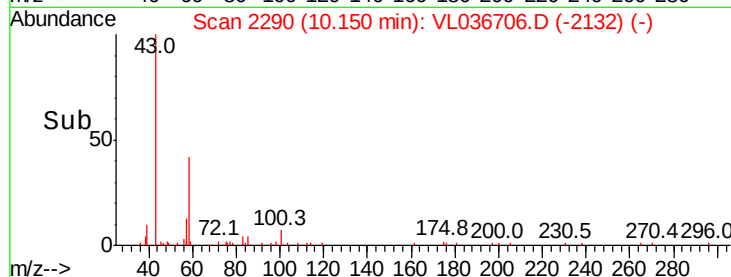
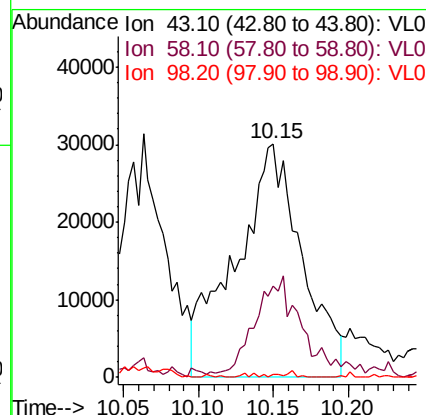
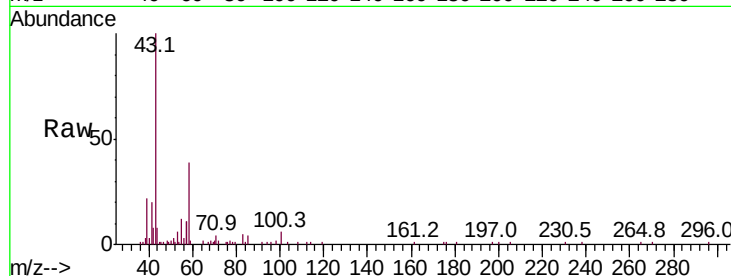
#51
2-Hexanone
Concen: 0.876 ppbv m
RT: 10.15 min Scan# 2290
Delta R.T. 0.01 min
Lab File: VL036706.D
Acq: 6 Apr 2021 20:27

Instrument :
MSVOA_L
ClientSampled :
SV1

Tot Ion	Ratio	Lower	Upper
43	100		
58	0.0	37.7	56.5#
98	0.0	0.2	0.2#

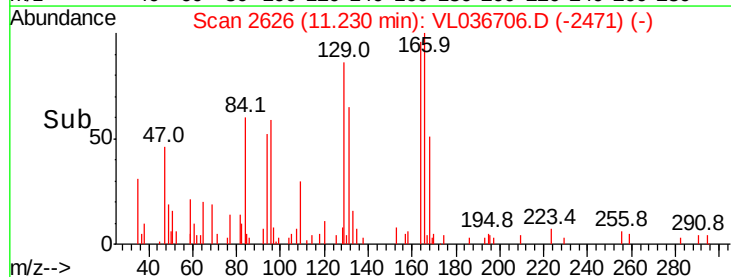
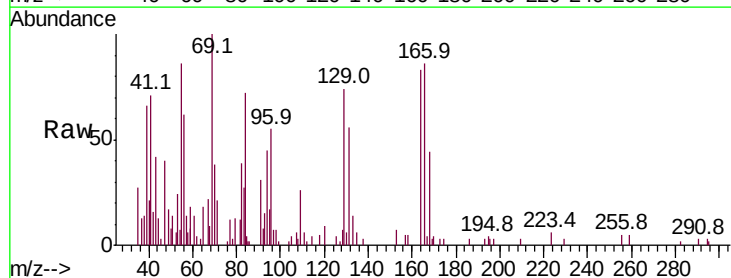
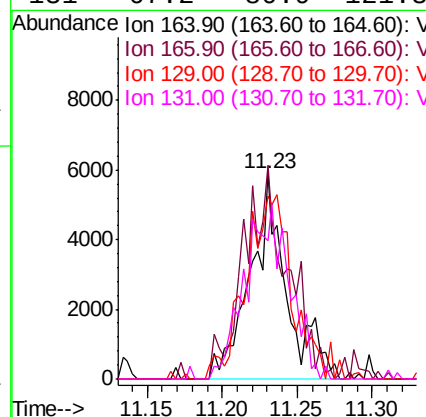
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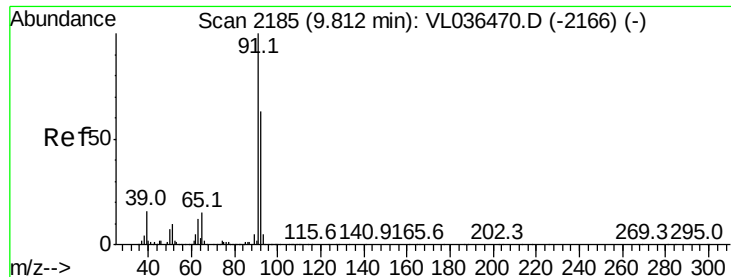
MMDadoda
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#52
Tetrachloroethene
Concen: 0.098 ppbv m
RT: 11.23 min Scan# 2626
Delta R.T. -0.00 min
Lab File: VL036706.D
Acq: 6 Apr 2021 20:27

Tgt Ion	Ratio	Lower	Upper
164	100		
166	103.8	98.3	147.5
129	89.3	85.8	128.8
131	67.2	80.9	121.3#





#53

Toluene

Concen: 0.711 ppbv

RT: 9.81 min Scan# 2184

Delta R.T. -0.00 min

Lab File: VL036706.D

Acq: 6 Apr 2021 20:27

Instrument :

MSVOA_L

ClientSampled :

SV1

Tot Ion: 91 Resp: 207849

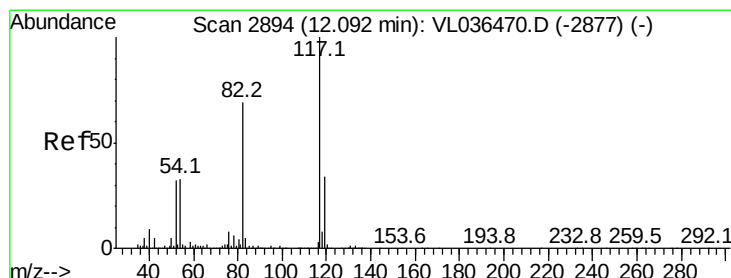
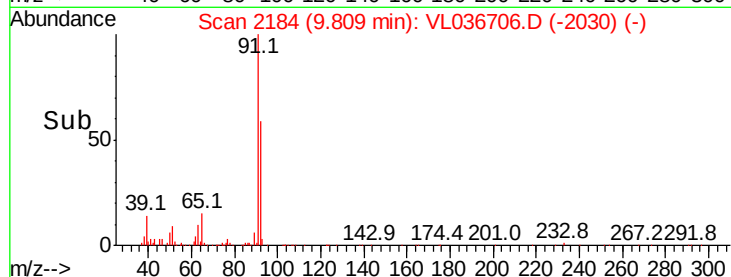
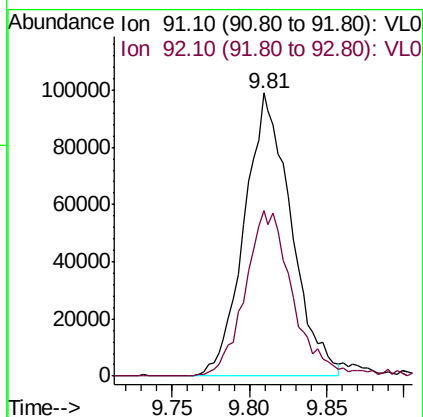
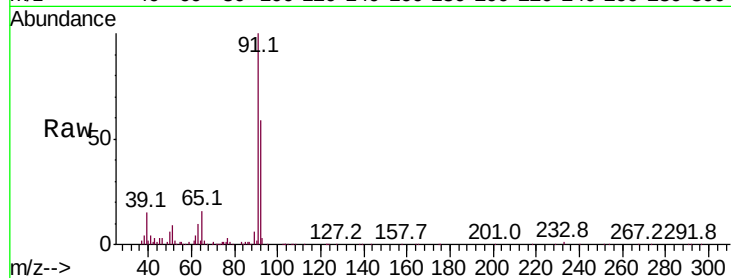
Ion Ratio Lower Upper

91 100

92 60.6 48.8 73.2

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.09 min Scan# 2894

Delta R.T. -0.00 min

Lab File: VL036706.D

Acq: 6 Apr 2021 20:27

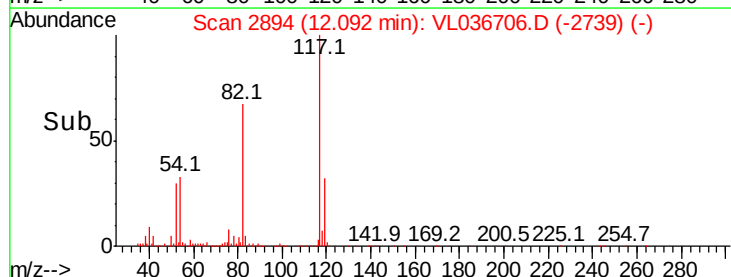
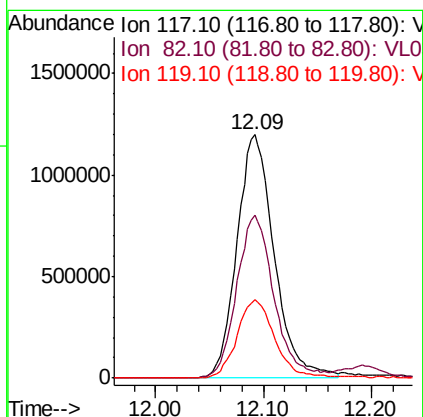
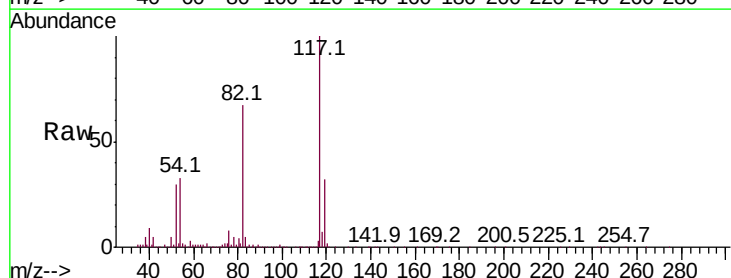
Tgt Ion: 117 Resp: 2891106

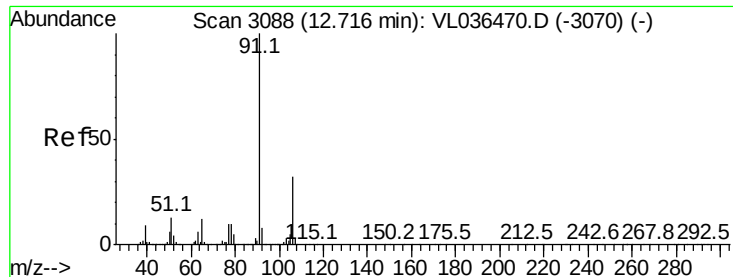
Ion Ratio Lower Upper

117 100

82 66.9 57.4 86.0

119 33.2 47.4 71.0#





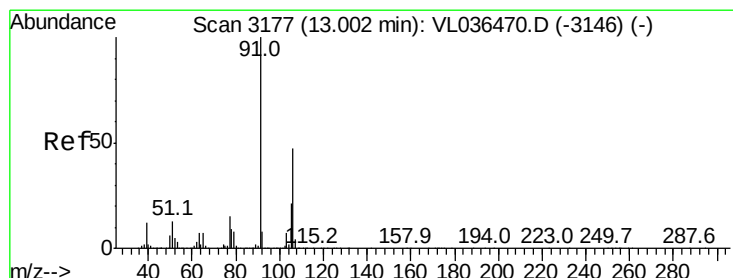
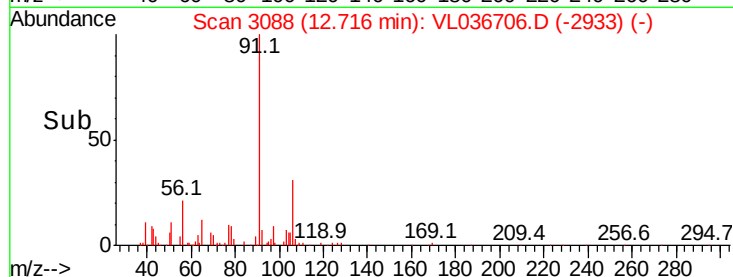
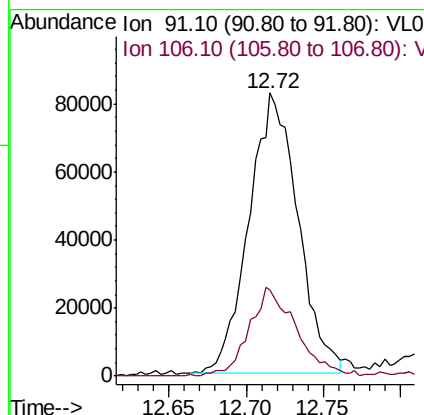
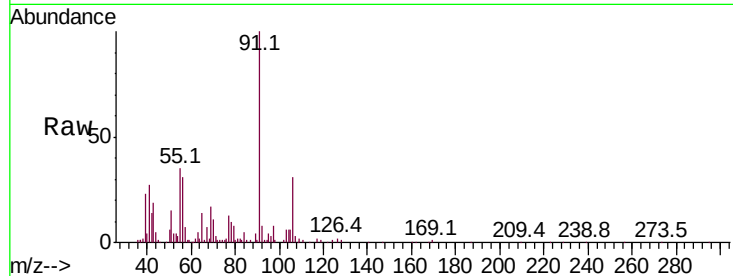
#58
Ethyl Benzene
Concen: 0.432 ppbv
RT: 12.72 min Scan# 3088
Delta R.T. -0.00 min
Lab File: VL036706.D
Acq: 6 Apr 2021 20:27

Instrument :
MSVOA_L
ClientSampled :
SV1

Tot Ion: 91 Resp: 181683
Ion Ratio Lower Upper
91 100
106 30.4 25.3 37.9

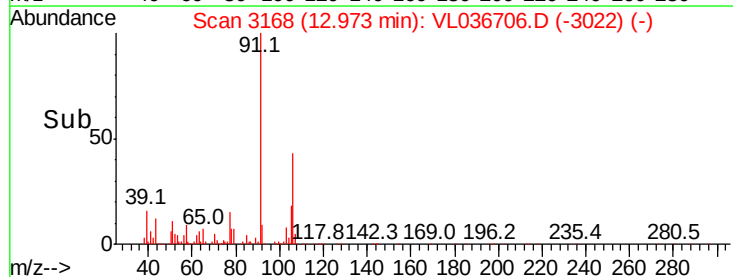
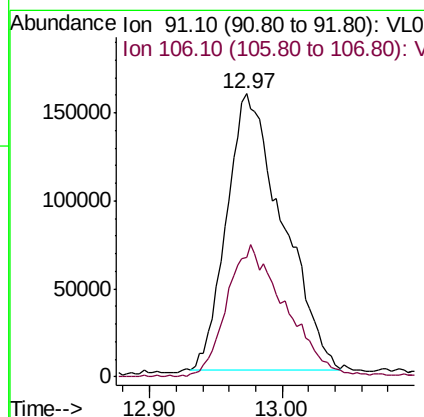
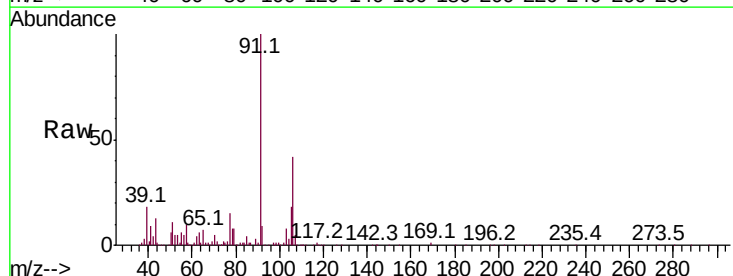
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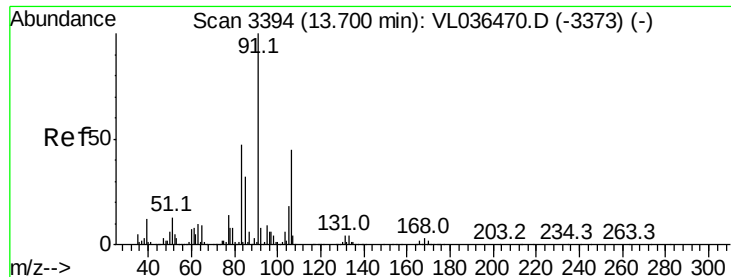
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#59
m/p-Xylene
Concen: 1.258 ppbv
RT: 12.97 min Scan# 3168
Delta R.T. -0.03 min
Lab File: VL036706.D
Acq: 6 Apr 2021 20:27

Tgt Ion: 91 Resp: 461559
Ion Ratio Lower Upper
91 100
106 50.3 35.3 52.9





#60

o-Xylene

Concen: 0.596 ppbv

RT: 13.70 min Scan# 3393

Delta R.T. -0.00 min

Lab File: VL036706.D

Acq: 6 Apr 2021 20:27

Instrument :

MSVOA_L

ClientSampleId :

SV1

Tot Ion: 91 Resp: 211404

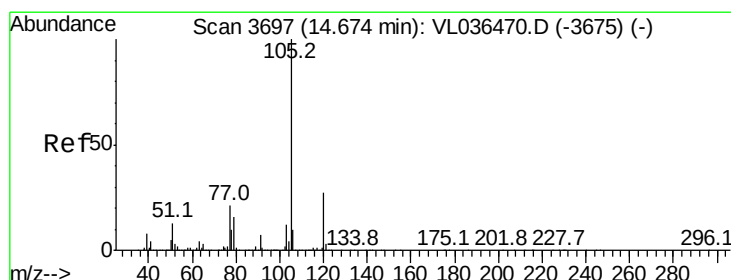
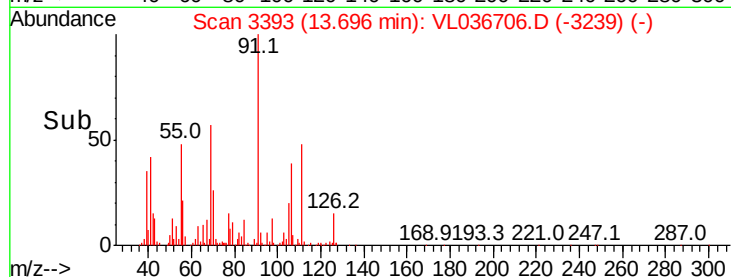
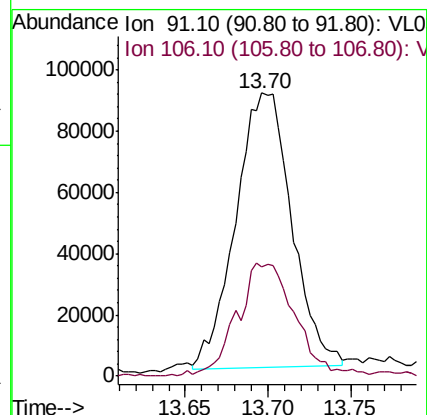
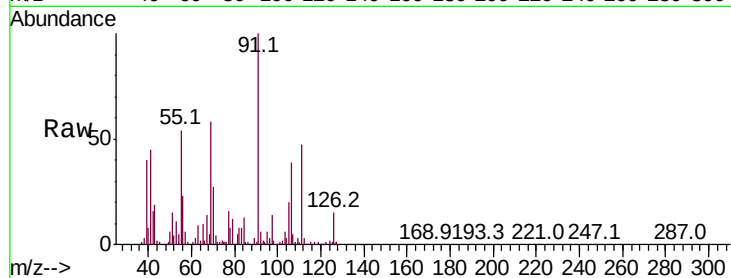
Ion Ratio Lower Upper

91 100

106 44.4 22.3 66.9

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#62

Isopropylbenzene

Concen: 0.093 ppbv m

RT: 14.68 min Scan# 3699

Delta R.T. 0.01 min

Lab File: VL036706.D

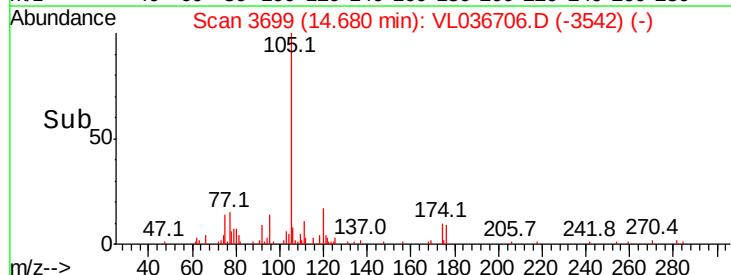
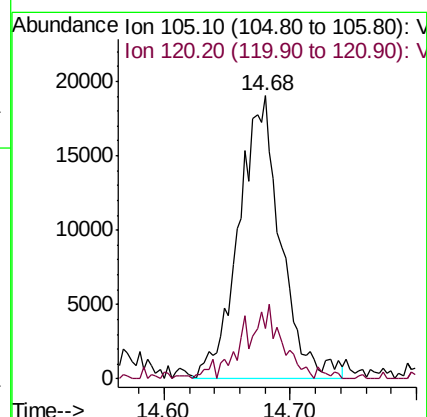
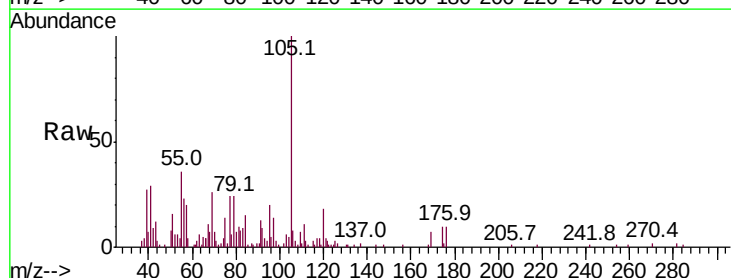
Acq: 6 Apr 2021 20:27

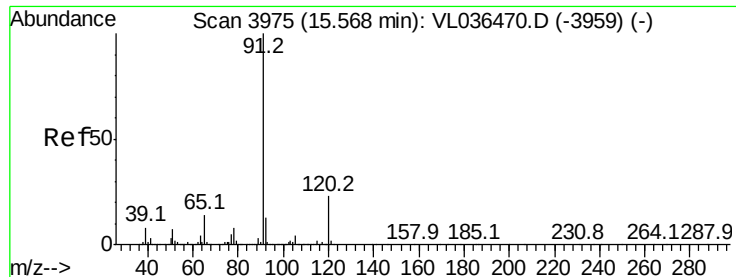
Tgt Ion: 105 Resp: 44214

Ion Ratio Lower Upper

105 100

120 0.0 20.6 31.0#





#64

n-propylbenzene

Concen: 0.467 ppbv m

RT: 15.57 min Scan# 3975

Delta R.T. -0.00 min

Lab File: VL036706.D

Acq: 6 Apr 2021 20:27

Instrument :

MSVOA_L

ClientSampleId :

SV1

Tot Ion:120 Resp: 54552

Ion Ratio Lower Upper

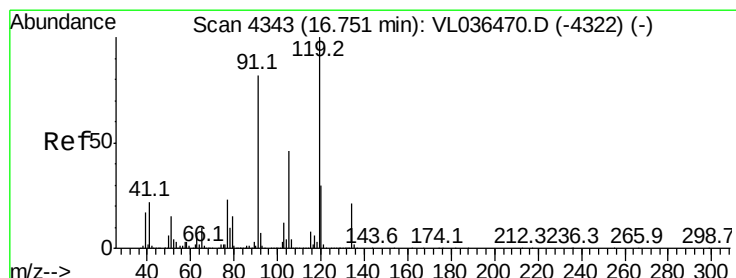
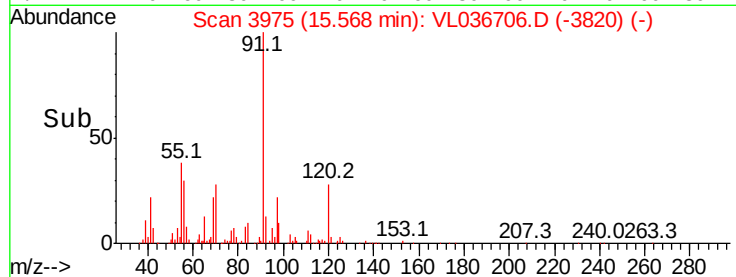
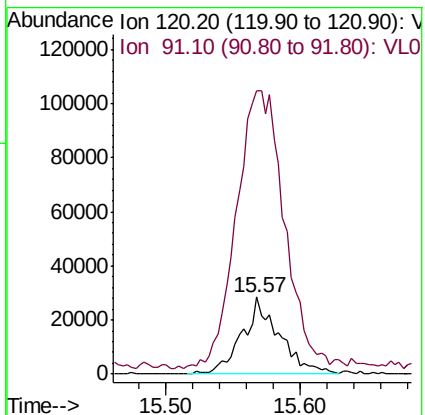
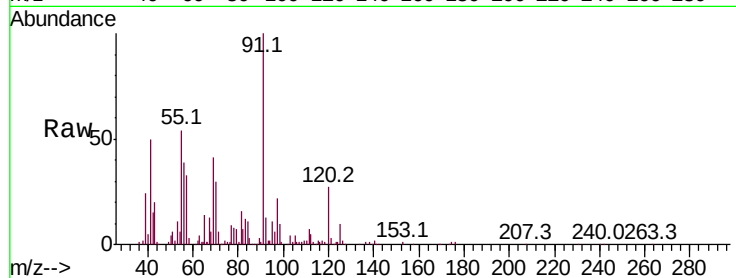
120 100

91 482.6 377.4 566.2

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#65

tert-Butylbenzene

Concen: 0.249 ppbv m

RT: 16.77 min Scan# 4350

Delta R.T. 0.02 min

Lab File: VL036706.D

Acq: 6 Apr 2021 20:27

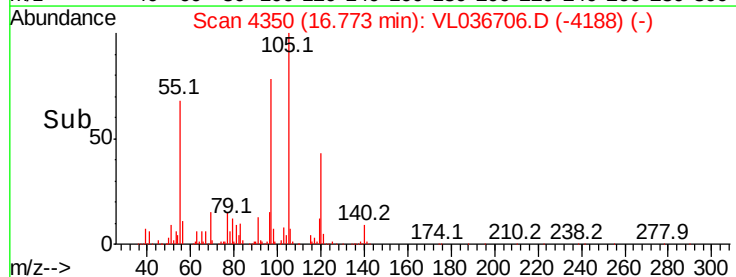
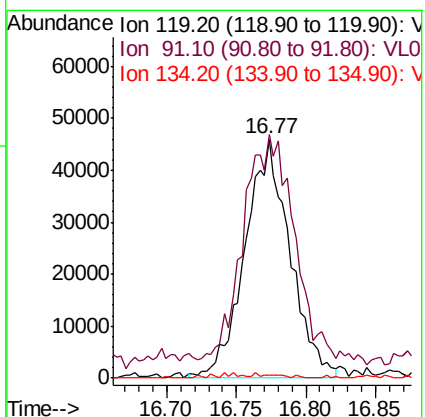
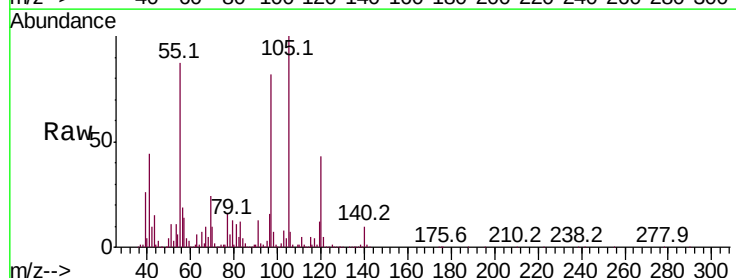
Tgt Ion:119 Resp: 103115

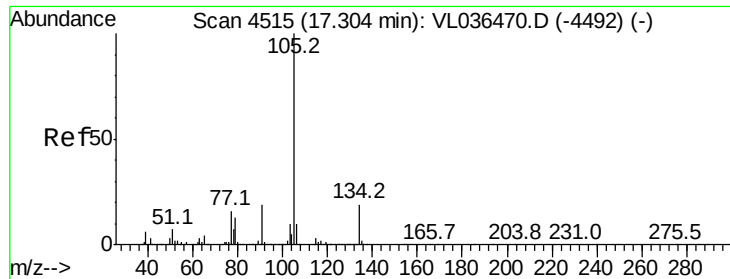
Ion Ratio Lower Upper

119 100

91 0.0 67.5 101.3#

134 1.1 15.8 23.8#





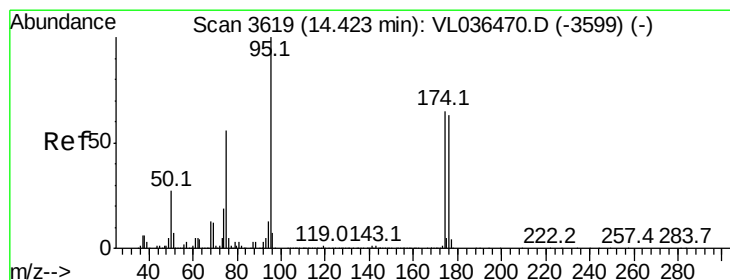
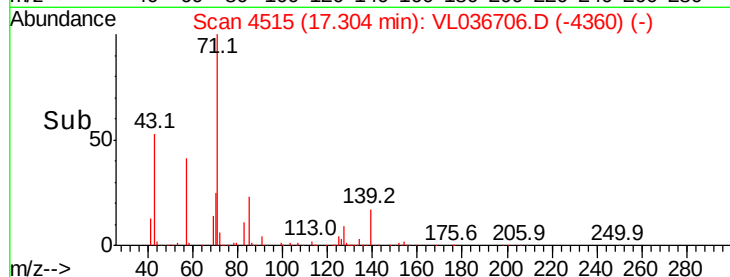
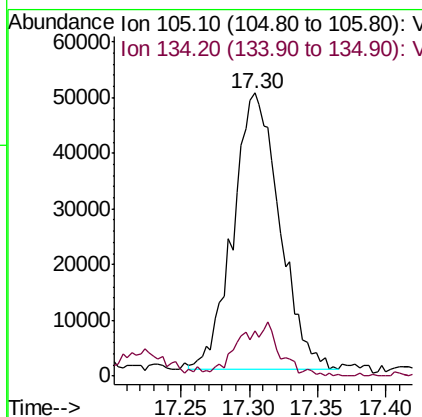
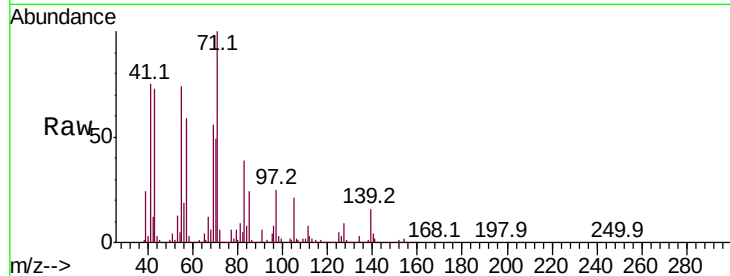
#67
 sec-Butylbenzene
 Concen: 0.201 ppbv
 RT: 17.30 min Scan# 4515
 Delta R.T. -0.00 min
 Lab File: VL036706.D
 Acq: 6 Apr 2021 20:27

Instrument :
 MSVOA_L
 ClientSampled :
 SV1

Tot Ion	Ratio	Lower	Upper
105	100		
134	17.6	14.7	22.1

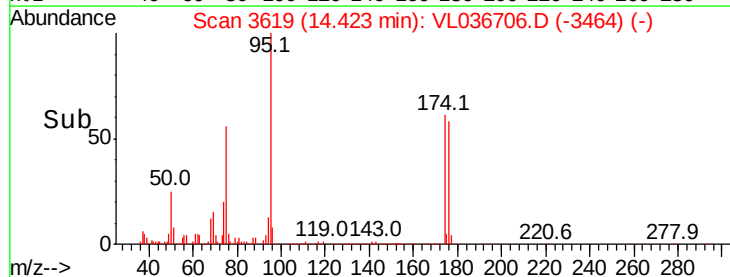
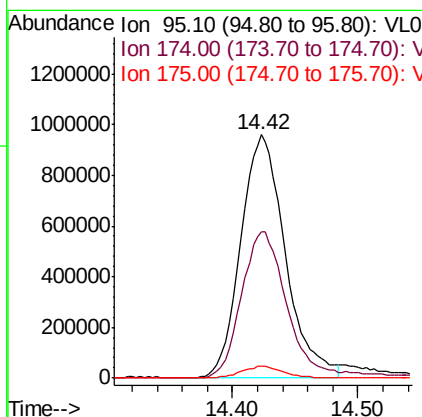
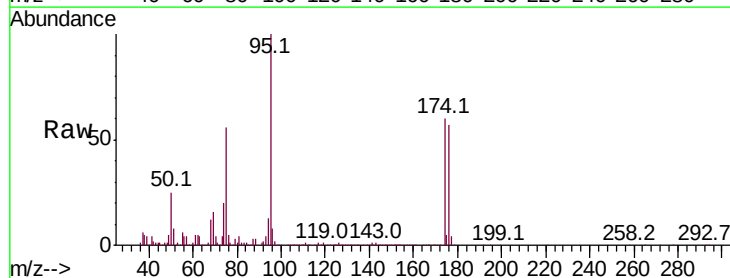
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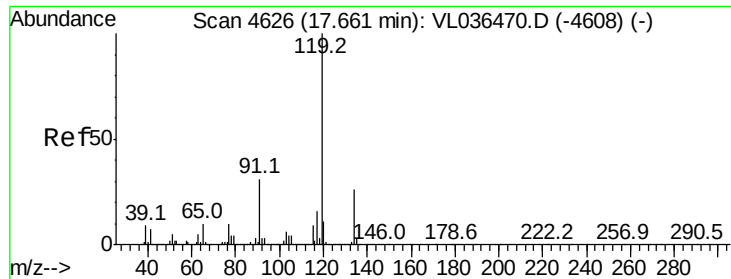
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#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.264 ppbv
 RT: 14.42 min Scan# 3619
 Delta R.T. -0.00 min
 Lab File: VL036706.D
 Acq: 6 Apr 2021 20:27

Tgt Ion	Ratio	Lower	Upper
95	100		
174	64.5	51.0	76.6
175	4.7	3.9	5.9





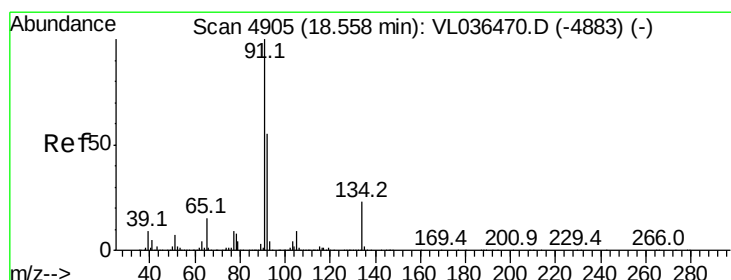
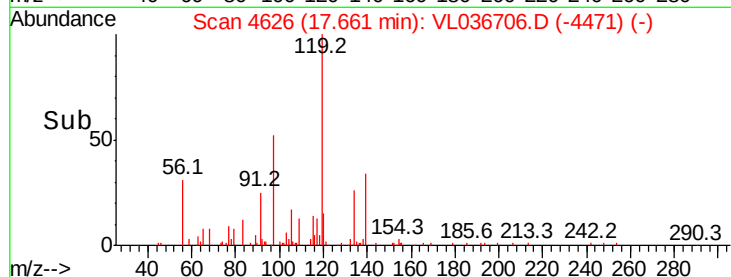
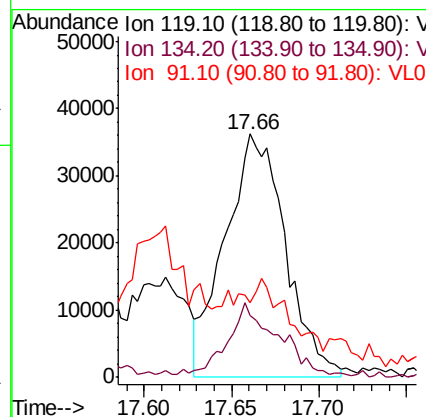
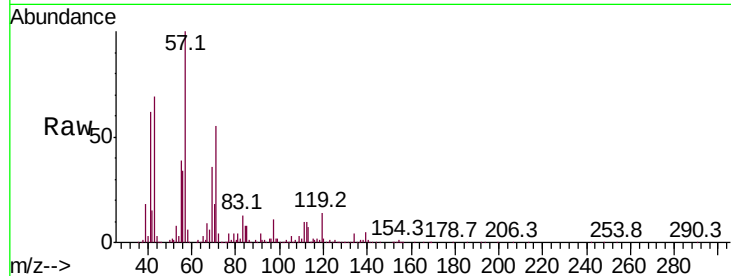
#69
 p-Isopropyltoluene
 Concen: 0.190 ppbv m
 RT: 17.66 min Scan# 4626
 Delta R.T. -0.00 min
 Lab File: VL036706.D
 Acq: 6 Apr 2021 20:27

Instrument :
 MSVOA_L
 ClientSampled :
 SV1

Tot Ion	Ratio	Lower	Upper
119	100		
134	27.5	20.6	30.8
91	0.0	25.0	37.6#

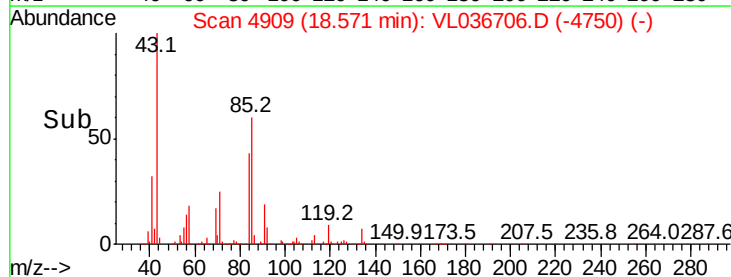
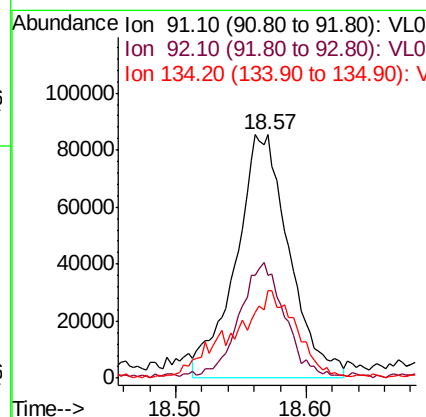
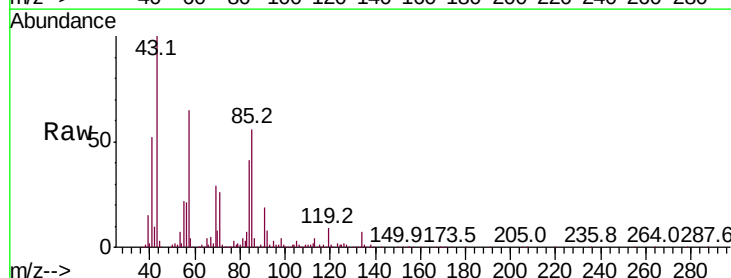
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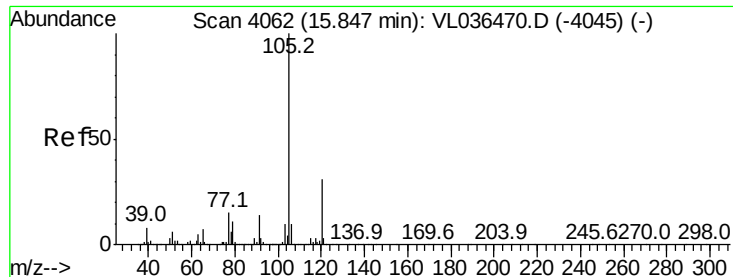
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#70
 n-Butylbenzene
 Concen: 0.514 ppbv m
 RT: 18.57 min Scan# 4909
 Delta R.T. 0.01 min
 Lab File: VL036706.D
 Acq: 6 Apr 2021 20:27

Tgt Ion	Ratio	Lower	Upper
91	100		
92	0.0	43.8	65.8#
134	0.0	18.0	27.0#





#72

4-Ethyltoluene

Concen: 0.563 ppbv

RT: 15.85 min Scan# 4063

Delta R.T. 0.00 min

Lab File: VL036706.D

Acq: 6 Apr 2021 20:27

Instrument :

MSVOA_L

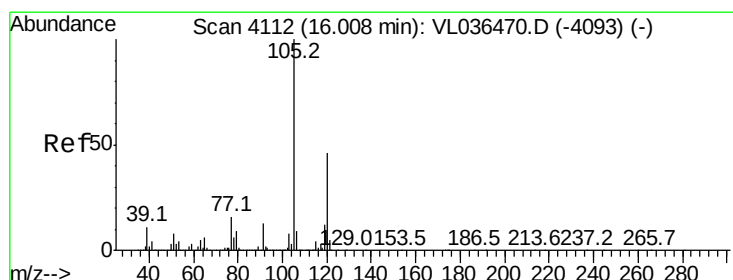
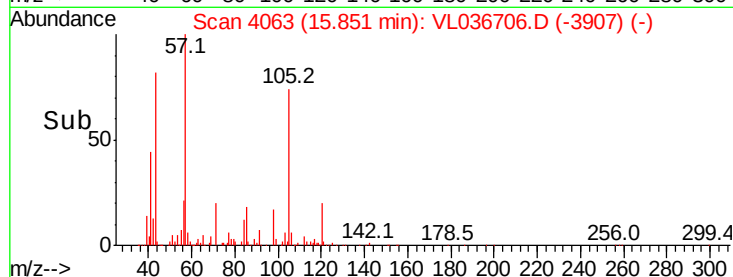
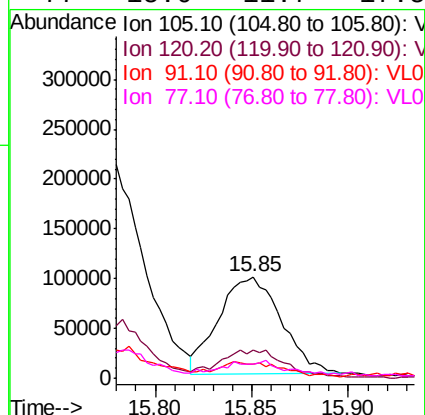
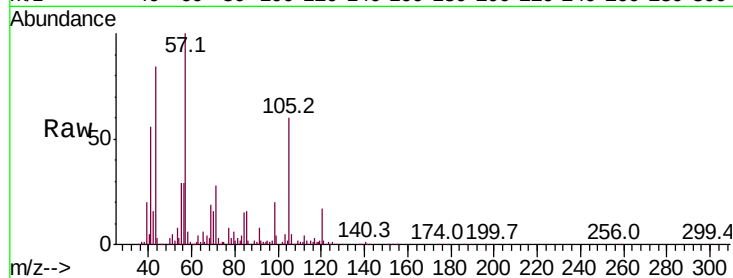
ClientSampleId :

SV1

Tot Ion	Ratio	Resp Lower	Upper
105	100		
120	32.1	24.0	36.0
91	16.8	11.0	16.4
77	15.0	11.7	17.5

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#73

1,3,5-Trimethylbenzene

Concen: 0.560 ppbv

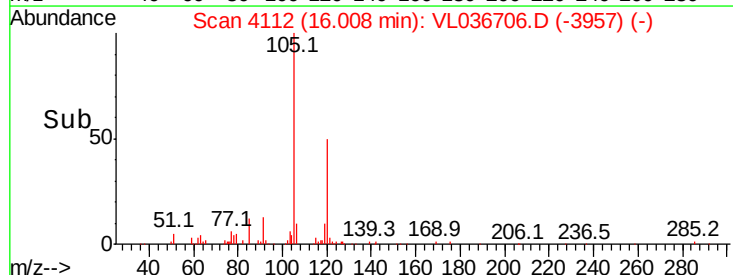
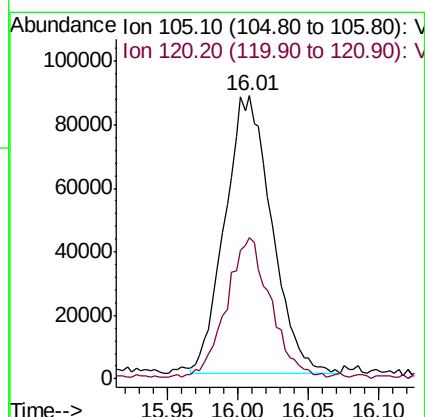
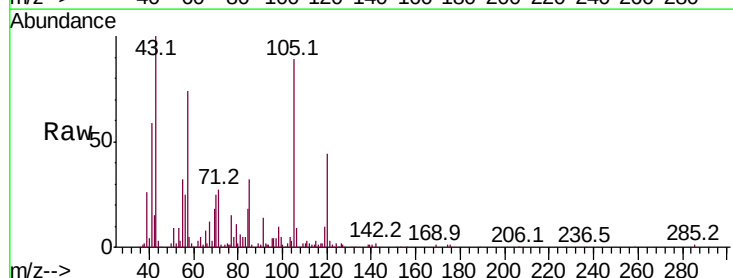
RT: 16.01 min Scan# 4112

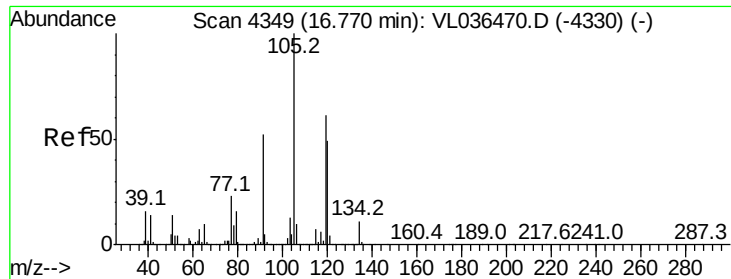
Delta R.T. -0.00 min

Lab File: VL036706.D

Acq: 6 Apr 2021 20:27

Tgt Ion	Ratio	Resp Lower	Upper
105	100		
120	48.8	36.6	54.8





#74

1,2,4-Trimethylbenzene

Concen: 2.289 ppbv

RT: 16.77 min Scan# 4350

Delta R.T. 0.00 min

Lab File: VL036706.D

Acq: 6 Apr 2021 20:27

Instrument :

MSVOA_L

ClientSampleId :

SV1

Tot Ion:	105	Resp:	888503
Ion Ratio	Lower	Upper	
105	100		
120	43.1	39.2	58.8
91	11.5	42.6	64.0#
77	14.4	18.6	28.0#

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