

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL090320\
 Data File : VL035532.D
 Acq On : 3 Sep 2020 15:53
 Operator : SY/AP
 Sample : L3898-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-1

Manual Integrations
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 9/8/2020 4:06:16 PM

Quant Time: Sep 04 07:11:22 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL082720AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Aug 27 2020
 QLast Update : Thu Aug 27 06:46:28 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.68	49	974136	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.20	114	4168249	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.12	117	4144522	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.45	95	3074319	10.45	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.50%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.05	85	48516	0.287	ppbv	95
3) Chlorodifluoromethane	2.99	51	50617m	0.470	ppbv	
4) Chloromethane	3.15	50	32088	0.556	ppbv	94
9) Propene	3.02	41	30163	0.726	ppbv #	81
10) Heptane	8.15	43	56516	0.507	ppbv	96
11) Trichlorofluoromethane	3.96	101	68147	0.277	ppbv	97
13) Ethanol	3.63	45	3966715	385.186	ppbv	99
15) Acetone	3.86	43	1065141	9.914	ppbv	96
17) tert-Butyl alcohol	4.33	59	43446m	0.332	ppbv	
19) Isopropyl Alcohol	4.00	45	1751126	27.321	ppbv	100
20) Methylene Chloride	4.36	84	727607	9.093	ppbv	97
26) Hexane	5.71	57	442326	4.113	ppbv #	54
30) Cyclohexane	7.15	84	33770m	0.293	ppbv	
34) 2-Butanone	5.26	43	716228	5.790	ppbv	99
35) Carbon Tetrachloride	7.04	117	15380m	0.073	ppbv	
36) Benzene	6.91	78	117561	0.436	ppbv #	91
43) Methyl Methacrylate	8.05	69	19202m	0.184	ppbv	
44) 2,2,4-Trimethylpentane	7.90	57	225789	0.636	ppbv	90
50) 4-Methyl-2-Pentanone	8.78	43	39894m	0.223	ppbv	
52) Tetrachloroethene	11.26	164	9167m	0.058	ppbv	
53) Toluene	9.83	91	1208337	3.561	ppbv	98
58) Ethyl Benzene	12.74	91	161146	0.377	ppbv	89
59) m/p-Xylene	13.00	91	502027m	1.406	ppbv	
60) o-Xylene	13.73	91	175052	0.487	ppbv	96
72) 4-Ethyltoluene	15.88	105	92464	0.202	ppbv #	95
73) 1,3,5-Trimethylbenzene	16.04	105	80214	0.190	ppbv	92
74) 1,2,4-Trimethylbenzene	16.80	105	310208	0.668	ppbv #	72
79) Naphthalene	22.26	128	1533352	2.975	ppbv	96
80) Naphthalene,2-methyl-	25.02	142	64775	0.368	ppbv	98

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

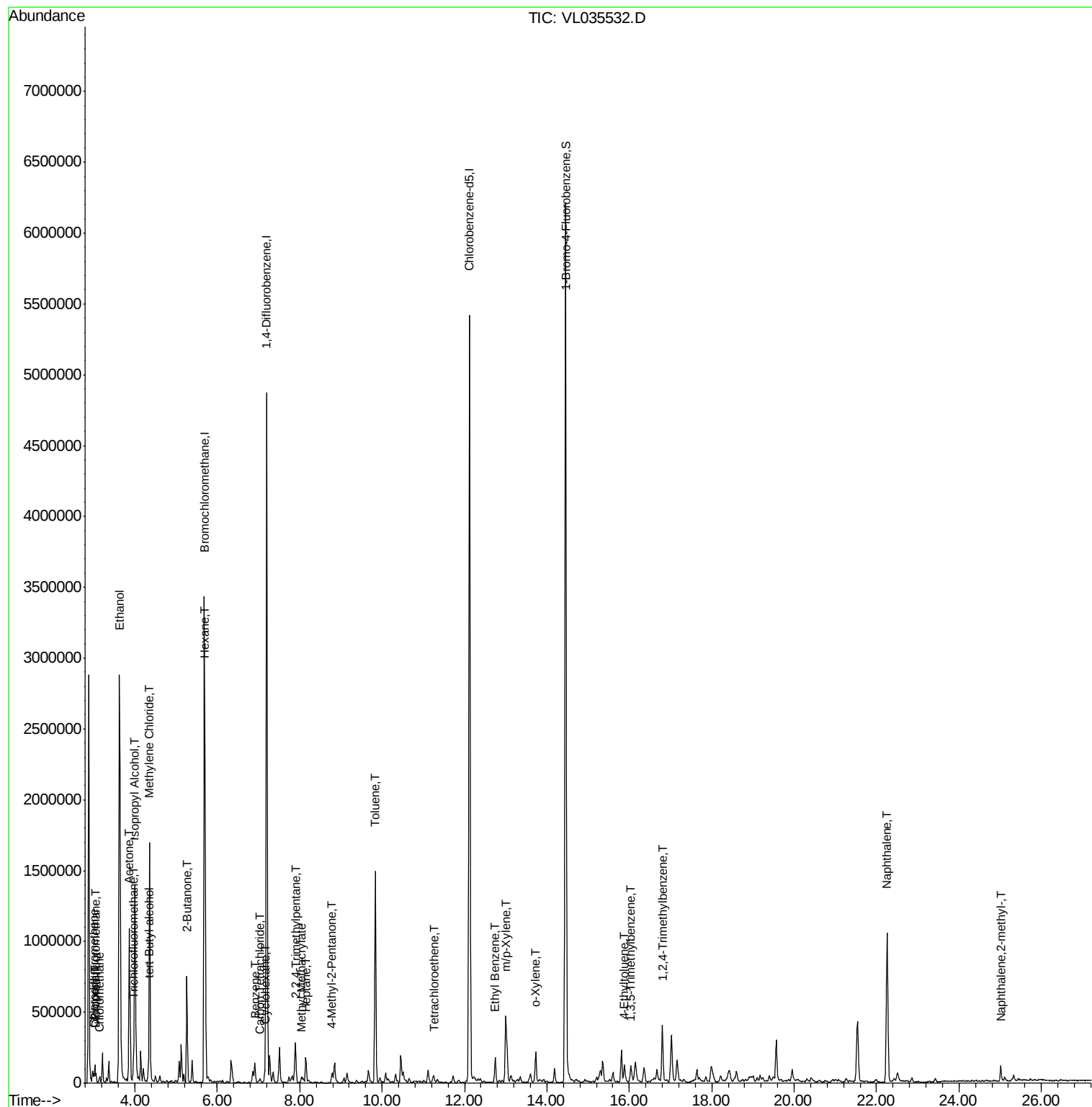
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL090320\
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Operator : SY/AP
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Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

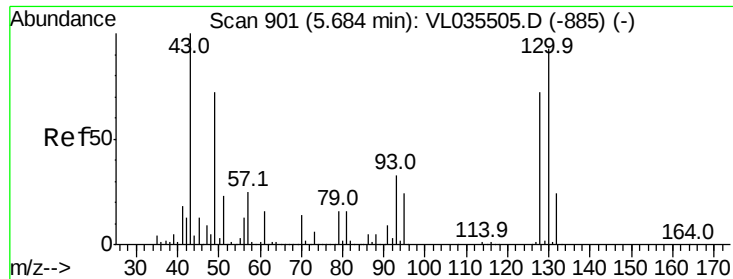
Instrument :
MSVOA_L
ClientSampleId :
IA-1

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Quant Time: Sep 04 07:11:22 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL082720AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Aug
QLast Update : Thu Aug 27 06:46:28 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.68 min Scan# 901

Delta R.T. 0.00 min

Lab File: VL035532.D

Acq: 3 Sep 2020 15:53

Instrument :

MSVOA_L

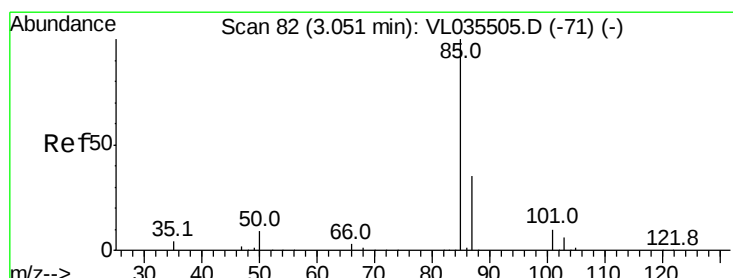
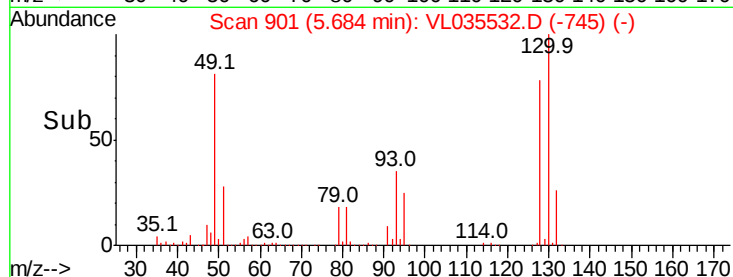
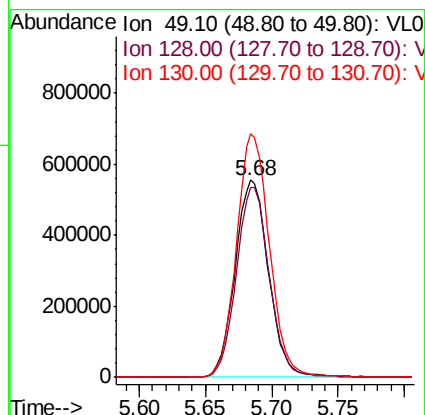
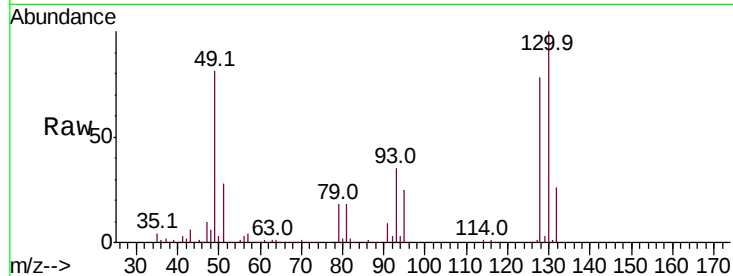
ClientSampleId :

IA-1

Tot Ion: 49 Resp: 974136
 Ion Ratio Lower Upper
 49 100
 128 95.5 50.0 150.1
 130 122.8 64.4 193.2

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#2

Dichlorodifluoromethane

Concen: 0.287 ppbv

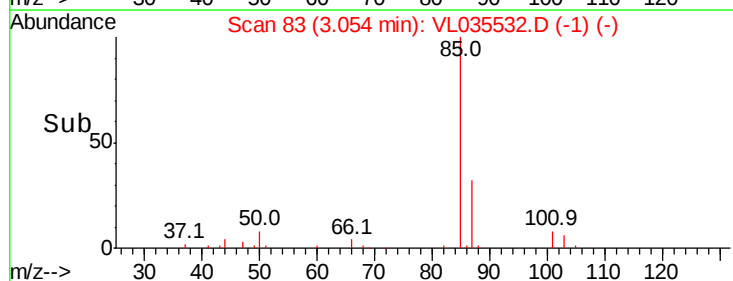
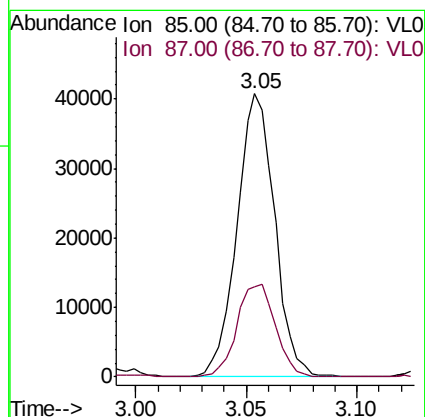
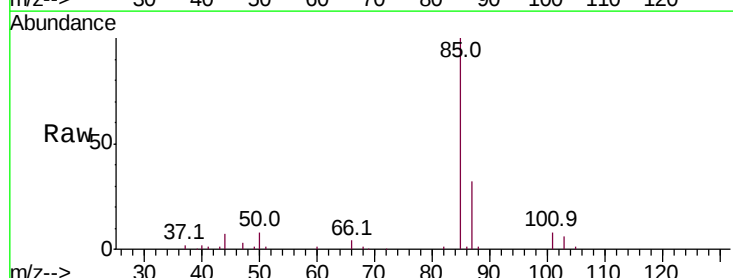
RT: 3.05 min Scan# 83

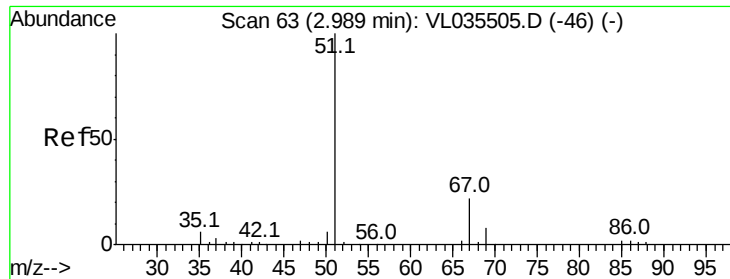
Delta R.T. 0.00 min

Lab File: VL035532.D

Acq: 3 Sep 2020 15:53

Tgt Ion: 85 Resp: 48516
 Ion Ratio Lower Upper
 85 100
 87 31.9 28.0 42.0





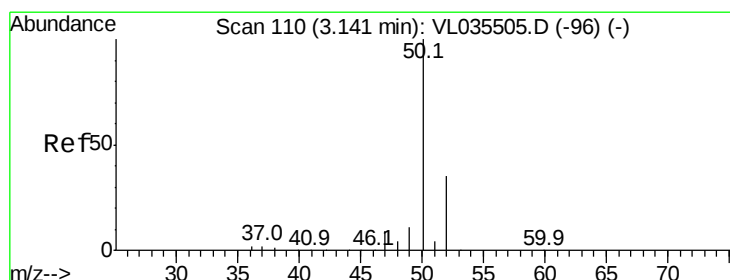
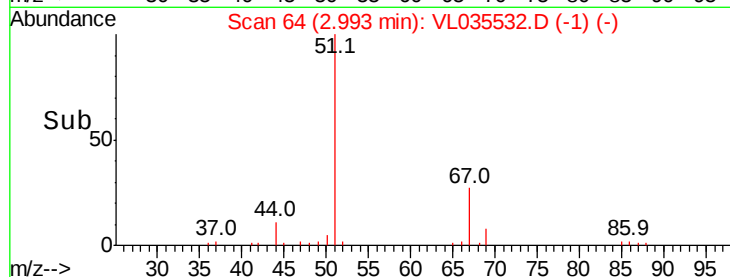
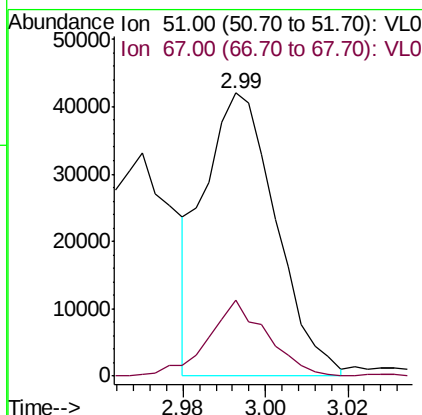
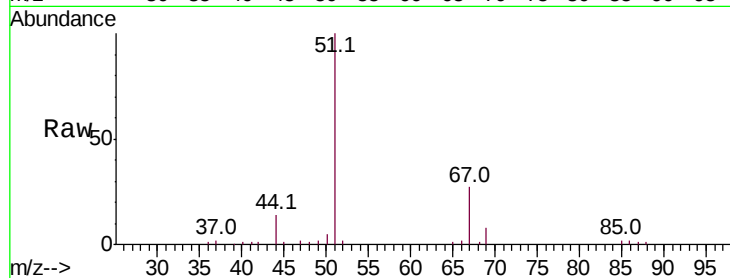
#3
Chlorodifluoromethane
Concen: 0.470 ppbv
RT: 2.99 min Scan# 64
Delta R.T. 0.00 min
Lab File: VL035532.D
Acq: 3 Sep 2020 15:53

Instrument :
MSVOA_L
ClientSampleId :
IA-1

Tot Ion	51	Resp	50617
Ion Ratio	100	Lower	Upper
67	22.4	17.8	26.8

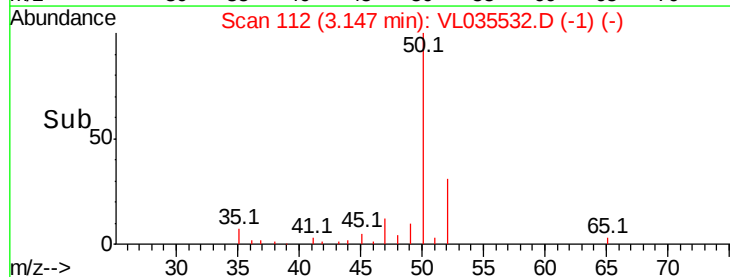
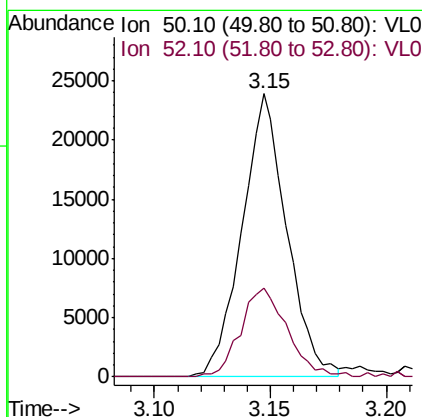
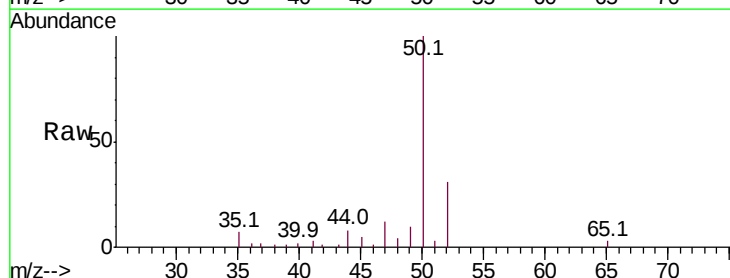
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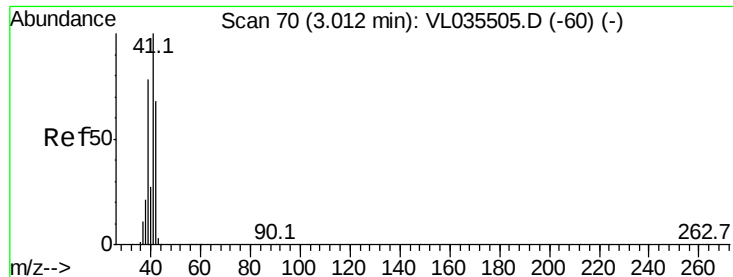
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#4
Chloromethane
Concen: 0.556 ppbv
RT: 3.15 min Scan# 112
Delta R.T. 0.01 min
Lab File: VL035532.D
Acq: 3 Sep 2020 15:53

Tgt Ion	50	Resp	32088
Ion Ratio	100	Lower	Upper
52	31.2	27.7	41.5





#9

Propene

Concen: 0.726 ppbv

RT: 3.02 min Scan# 74

Delta R.T. 0.01 min

Lab File: VL035532.D

Acq: 3 Sep 2020 15:53

Instrument :

MSVOA_L

ClientSampled :

IA-1

Tot Ion: 41 Resp: 30163

Ion Ratio Lower Upper

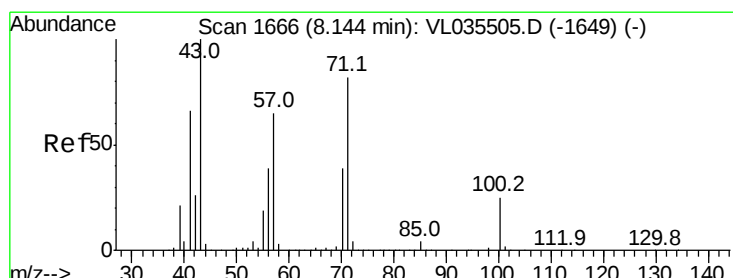
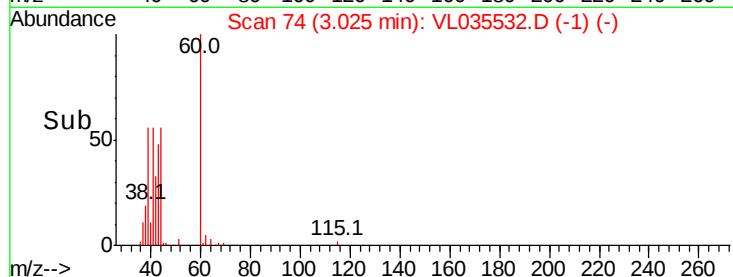
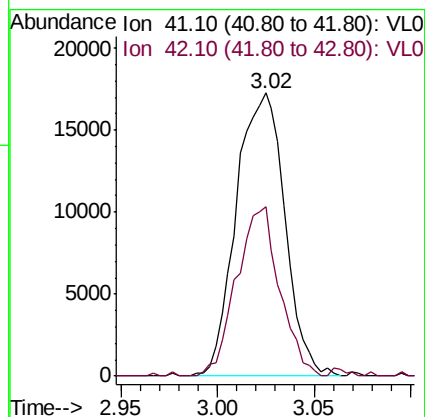
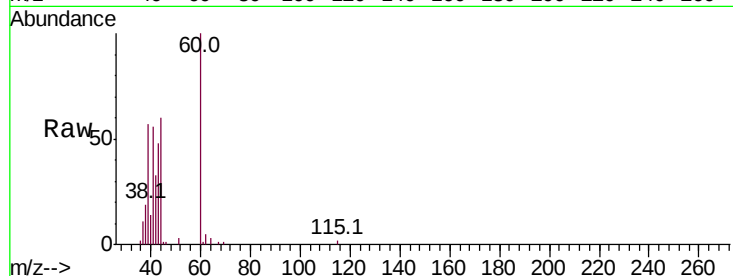
41 100

42 54.6 56.3 84.5#

Manual Integrations
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#10

Heptane

Concen: 0.507 ppbv

RT: 8.15 min Scan# 1668

Delta R.T. 0.01 min

Lab File: VL035532.D

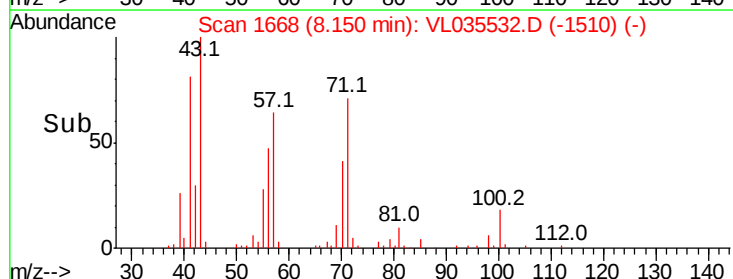
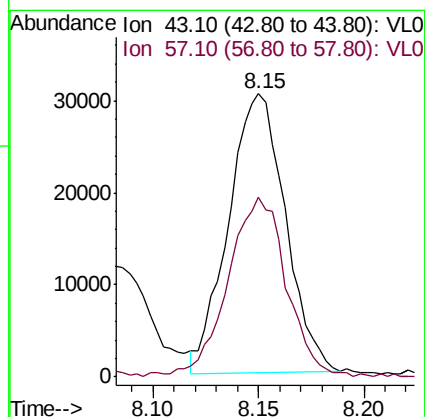
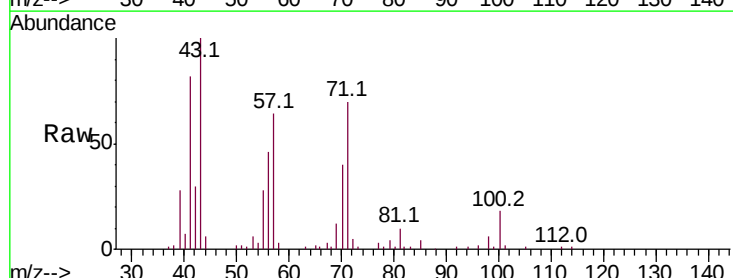
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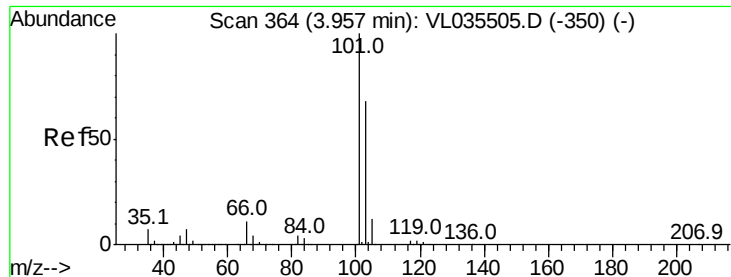
Tgt Ion: 43 Resp: 56516

Ion Ratio Lower Upper

43 100

57 67.1 51.4 77.0





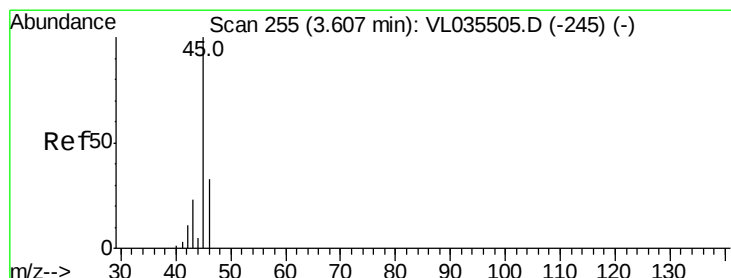
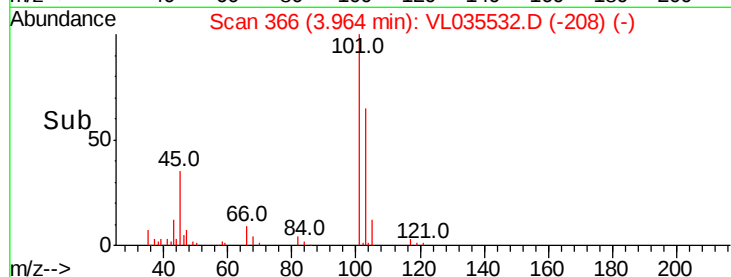
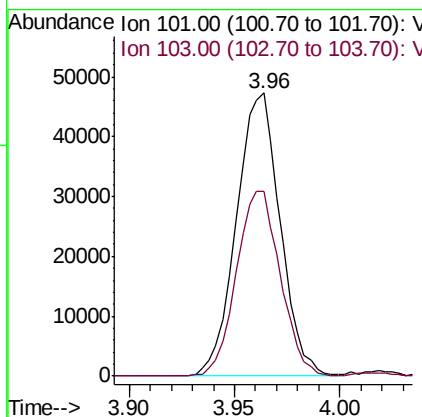
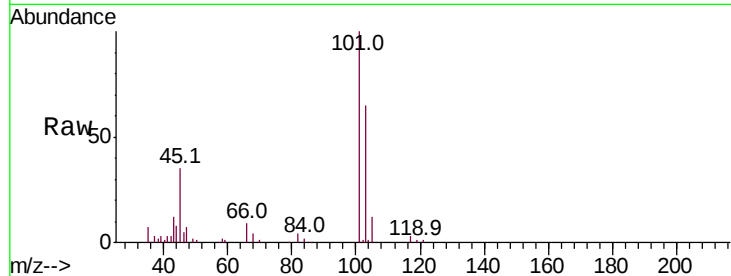
#11
 Trichlorofluoromethane
 Concen: 0.277 ppbv
 RT: 3.96 min Scan# 366
 Delta R.T. 0.01 min
 Lab File: VL035532.D
 Acq: 3 Sep 2020 15:53

Instrument :
 MSVOA_L
 ClientSampled :
 IA-1

Tot Ion:101 Resp: 68147
 Ion Ratio Lower Upper
 101 100
 103 65.4 54.5 81.7

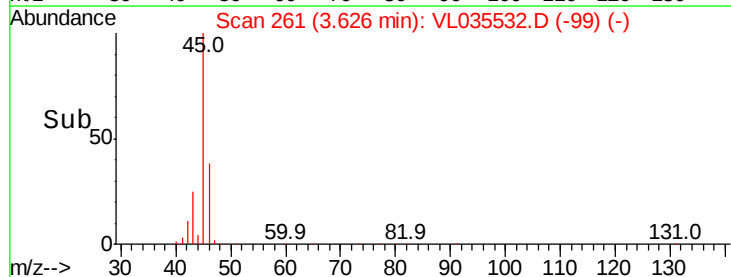
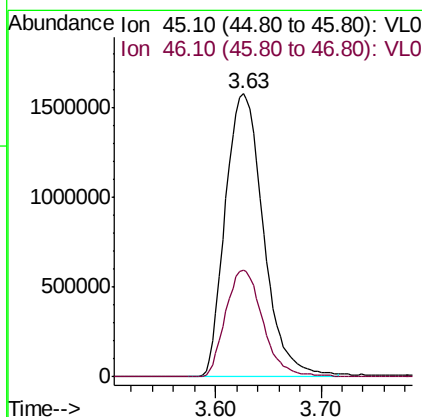
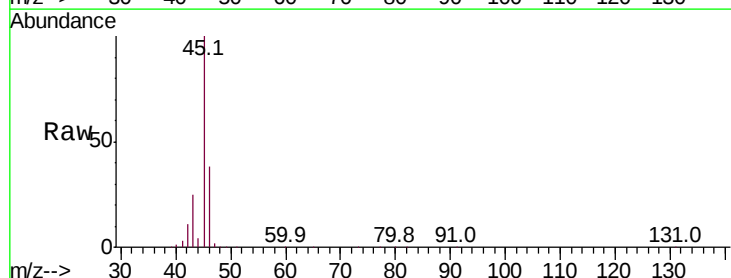
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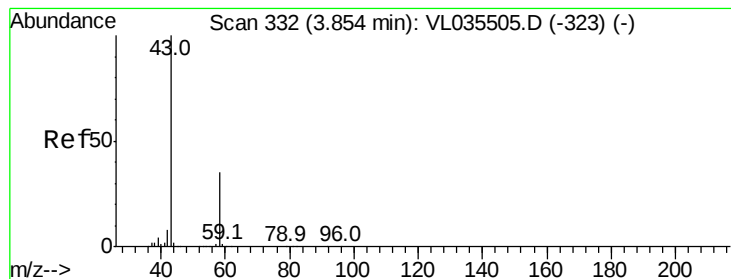
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#13
 Ethanol
 Concen: 385.186 ppbv
 RT: 3.63 min Scan# 261
 Delta R.T. 0.02 min
 Lab File: VL035532.D
 Acq: 3 Sep 2020 15:53

Tgt Ion: 45 Resp: 3966715
 Ion Ratio Lower Upper
 45 100
 46 37.6 15.2 60.6





#15

Acetone

Concen: 9.914 ppbv

RT: 3.86 min Scan# 333

Delta R.T. 0.00 min

Lab File: VL035532.D

Acq: 3 Sep 2020 15:53

Instrument :

MSVOA_L

ClientSampled :

IA-1

Tot Ion: 43 Resp: 1065141

Ion Ratio Lower Upper

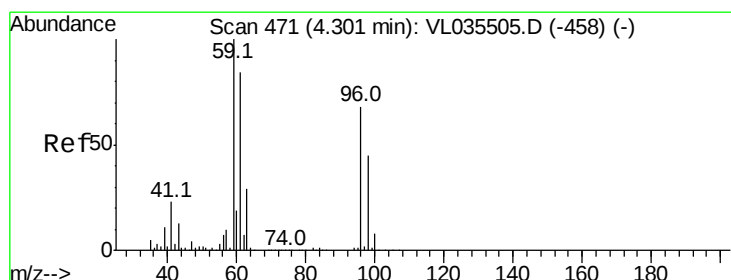
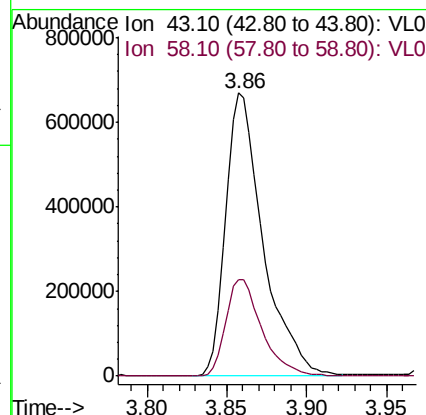
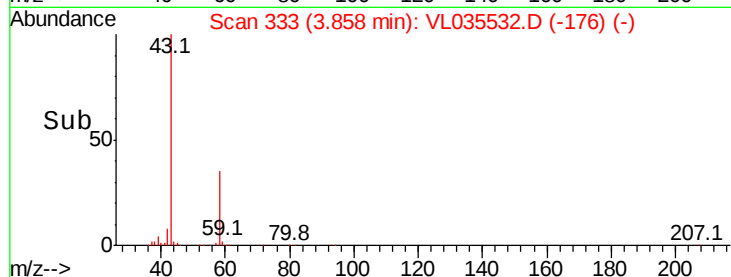
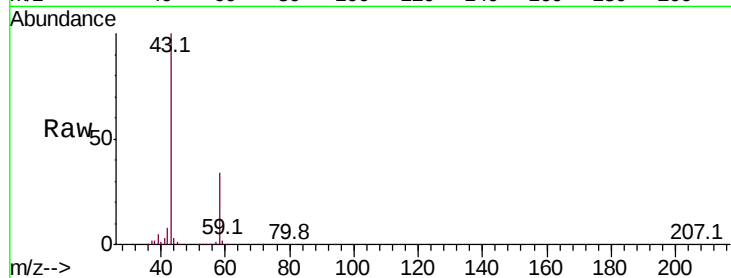
43 100

58 33.2 28.4 42.6

Manual Integrations
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#17

tert-Butyl alcohol

Concen: 0.332 ppbv m

RT: 4.33 min Scan# 480

Delta R.T. 0.03 min

Lab File: VL035532.D

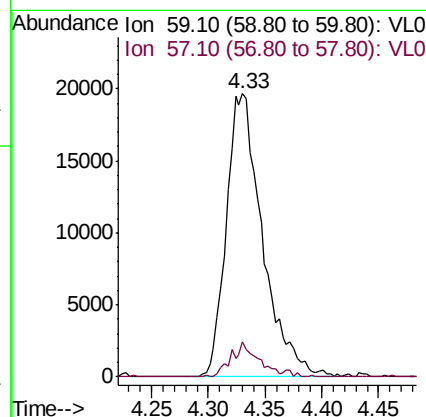
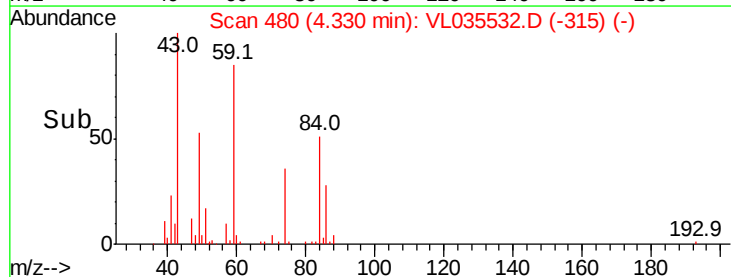
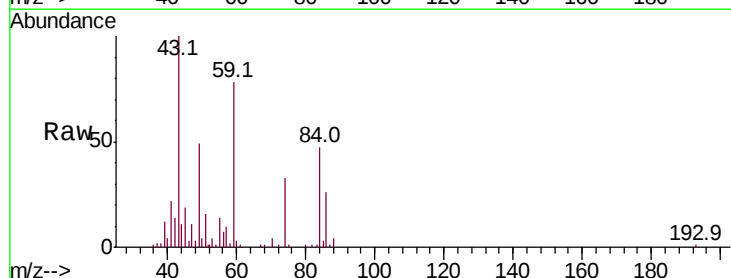
Acq: 3 Sep 2020 15:53

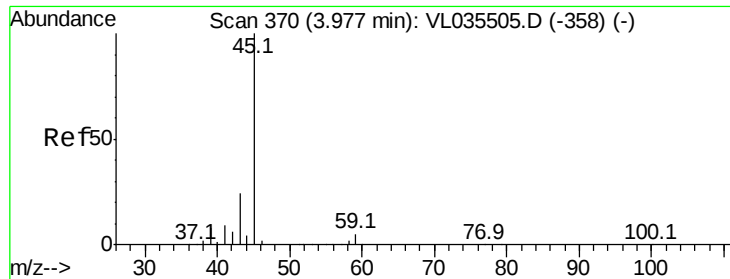
Tgt Ion: 59 Resp: 43446

Ion Ratio Lower Upper

59 100

57 17.7 8.4 12.6#





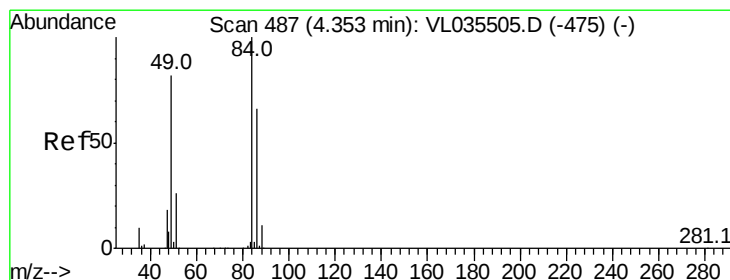
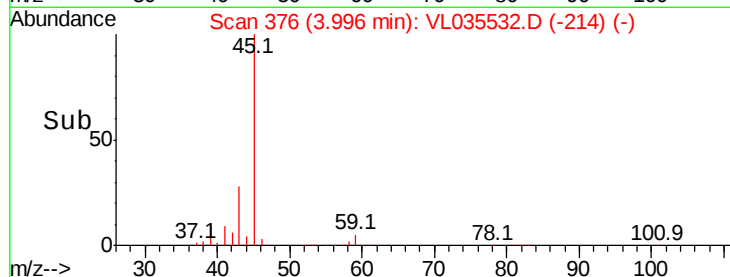
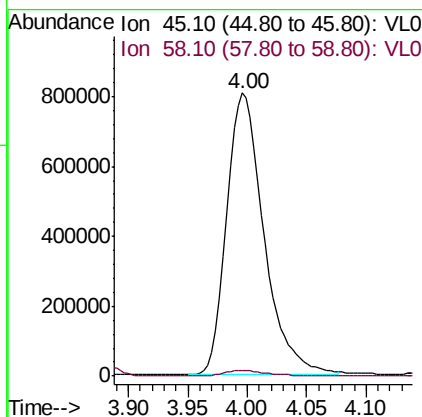
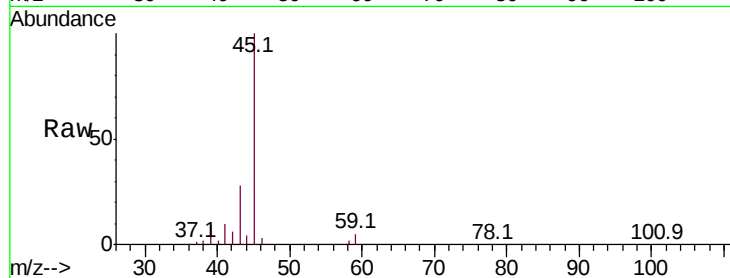
#19
Isopropyl Alcohol
Concen: 27.321 ppbv
RT: 4.00 min Scan# 376
Delta R.T. 0.02 min
Lab File: VL035532.D
Acq: 3 Sep 2020 15:53

Instrument :
MSVOA_L
ClientSampleId :
IA-1

Tot Ion: 45 Resp: 1751126
Ion Ratio Lower Upper
45 100
58 2.4 2.0 3.0

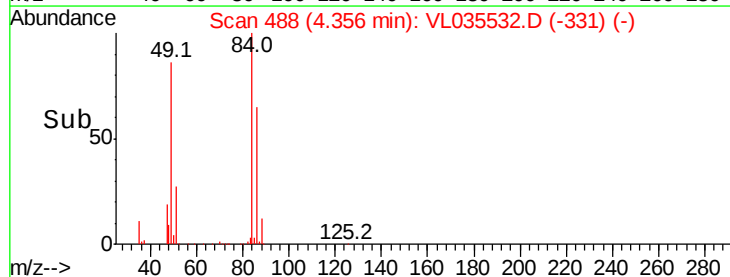
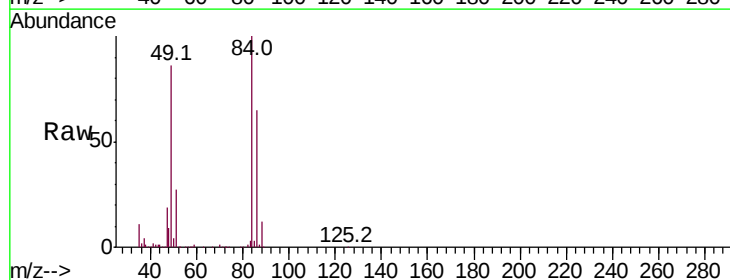
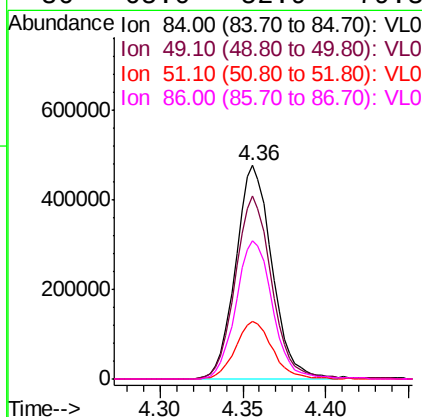
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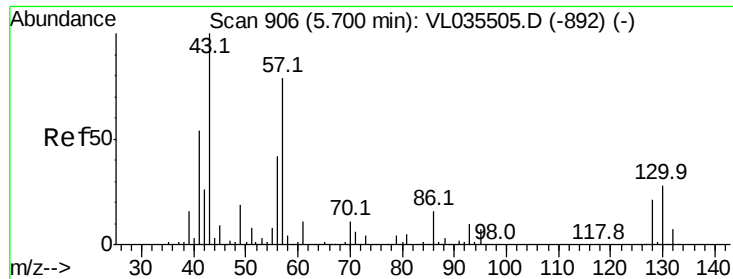
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#20
Methylene Chloride
Concen: 9.093 ppbv
RT: 4.36 min Scan# 488
Delta R.T. 0.00 min
Lab File: VL035532.D
Acq: 3 Sep 2020 15:53

Tgt Ion: 84 Resp: 727607
Ion Ratio Lower Upper
84 100
49 85.5 65.4 98.0
51 26.7 21.5 32.3
86 65.0 52.9 79.3





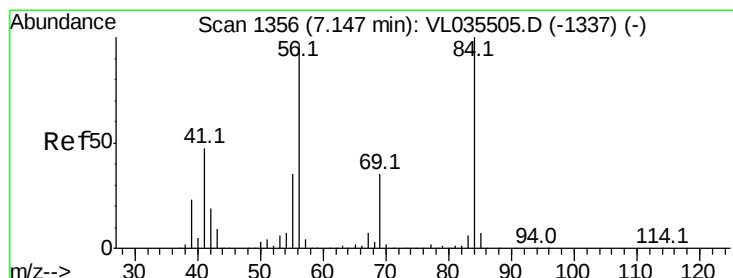
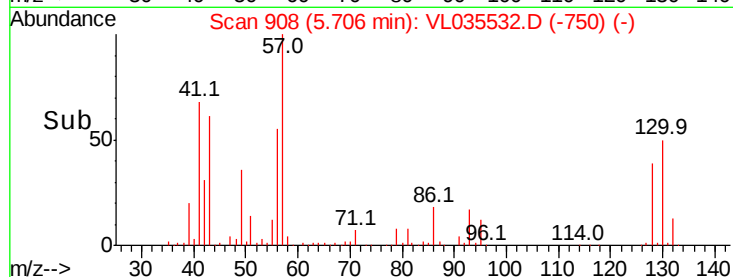
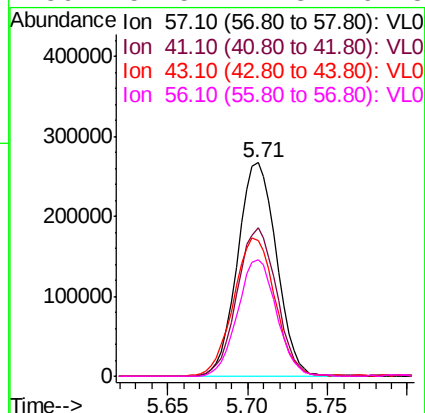
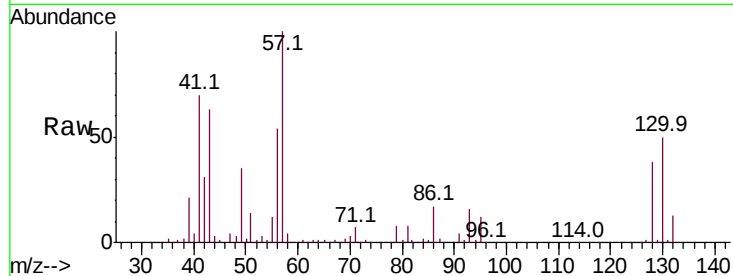
#26
Hexane
Concen: 4.113 ppbv
RT: 5.71 min Scan# 908
Delta R.T. 0.01 min
Lab File: VL035532.D
Acq: 3 Sep 2020 15:53

Instrument :
MSVOA_L
ClientSampled :
IA-1

Tot Ion	Ratio	Lower	Upper
57	100		
41	70.5	55.9	83.9
43	68.9	141.8	212.8#
56	54.5	41.8	62.8

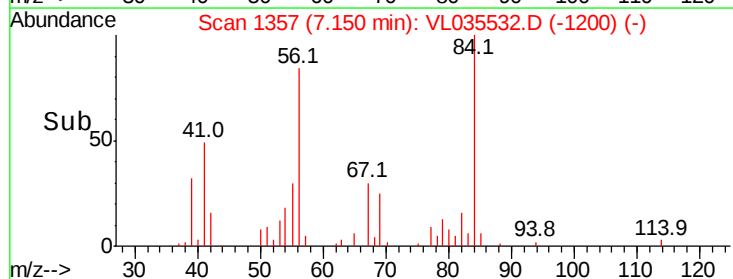
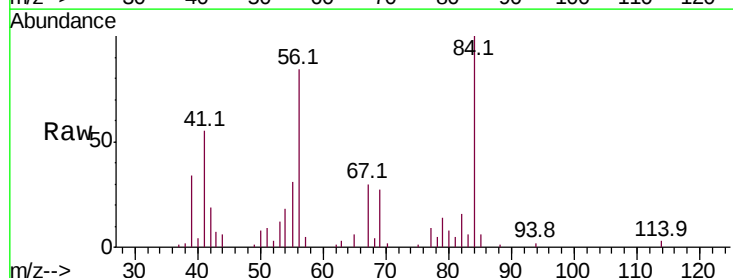
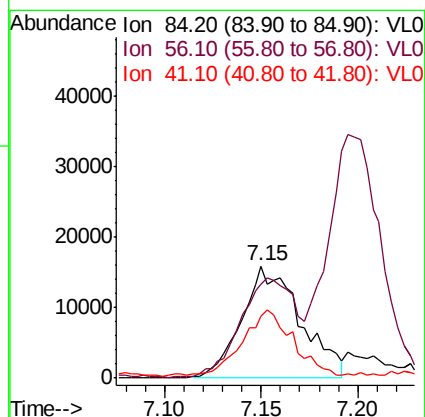
Manual Integrations
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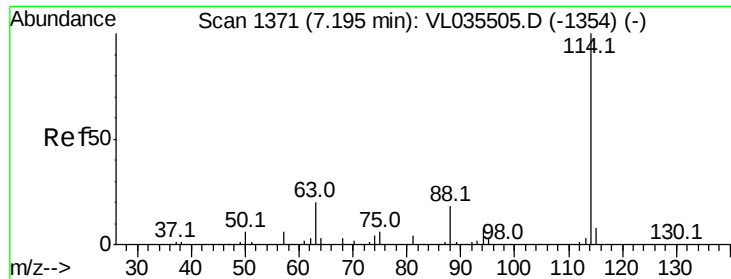
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#30
Cyclohexane
Concen: 0.293 ppbv m
RT: 7.15 min Scan# 1357
Delta R.T. 0.00 min
Lab File: VL035532.D
Acq: 3 Sep 2020 15:53

Tgt Ion	Ratio	Lower	Upper
84	100		
56	0.0	80.1	120.1#
41	55.0	38.1	57.1





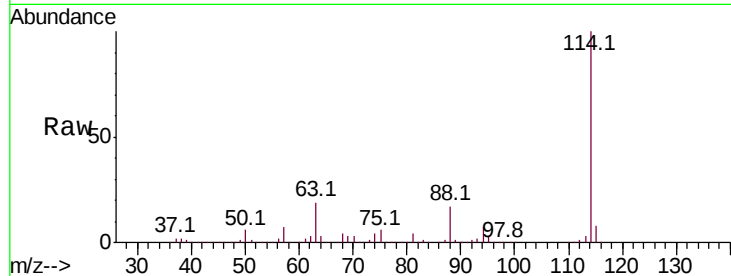
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.20 min Scan# 1372
 Delta R.T. 0.00 min
 Lab File: VL035532.D
 Acq: 3 Sep 2020 15:53

Instrument :
 MSVOA_L
 ClientSampled :
 IA-1

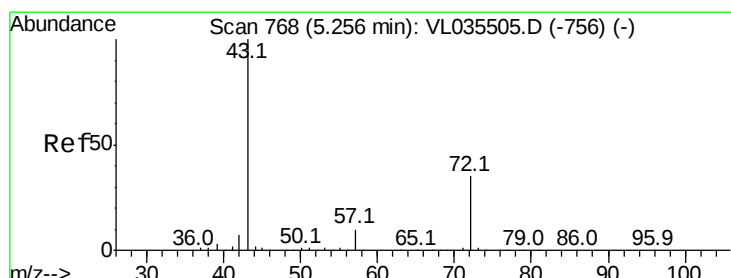
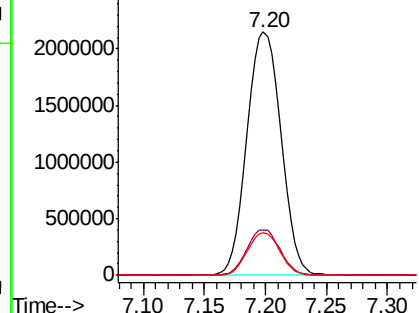
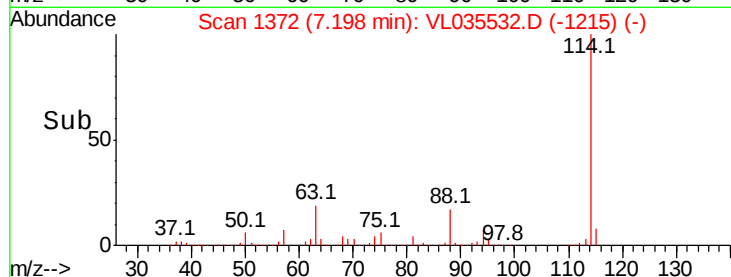
Tot Ion	Ratio	Lower	Upper
114	100		
63	18.2	14.7	22.1
88	16.6	13.4	20.2

Manual Integrations
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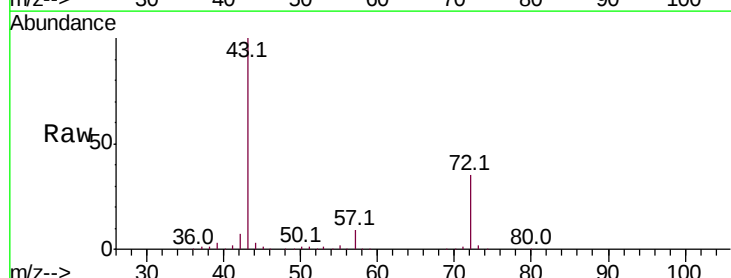


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

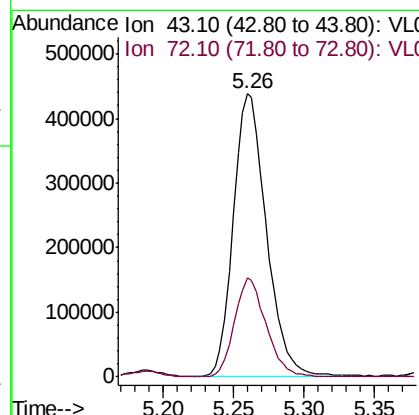
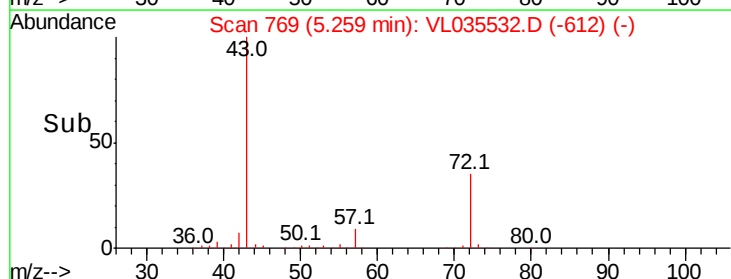


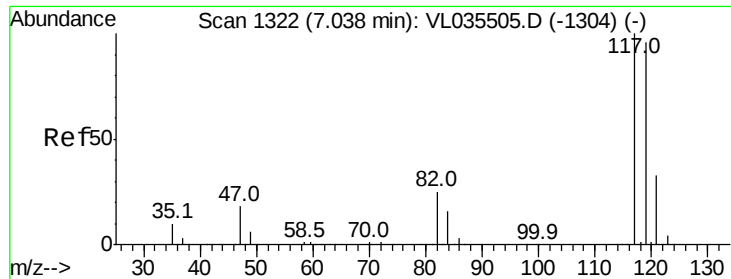
#34
 2-Butanone
 Concen: 5.790 ppbv
 RT: 5.26 min Scan# 769
 Delta R.T. 0.00 min
 Lab File: VL035532.D
 Acq: 3 Sep 2020 15:53

Tgt Ion	Ratio	Lower	Upper
43	100		
72	34.1	27.7	41.5



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





#35

Carbon Tetrachloride

Concen: 0.073 ppbv m

RT: 7.04 min Scan# 1322

Delta R.T. 0.00 min

Lab File: VL035532.D

Acq: 3 Sep 2020 15:53

Instrument :

MSVOA_L

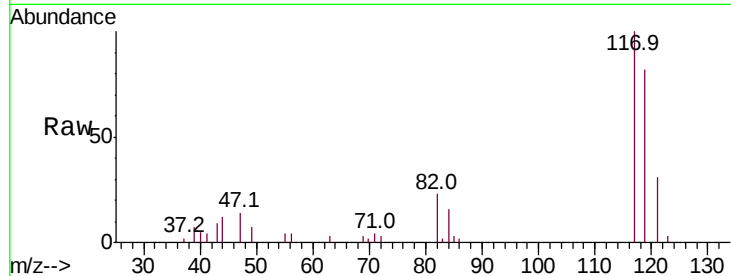
ClientSampled :

IA-1

Tot Ion	Ratio	Lower	Upper
117	100		
119	82.2	77.2	115.8
121	30.7	26.1	39.1

Manual Integrations
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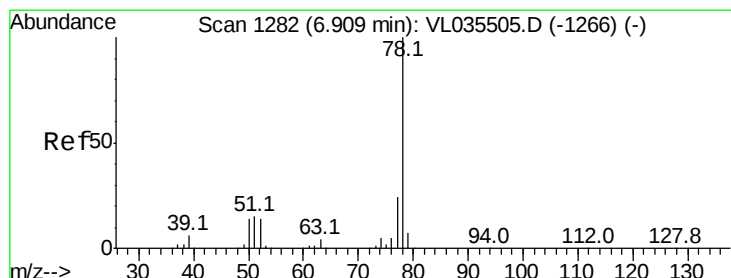
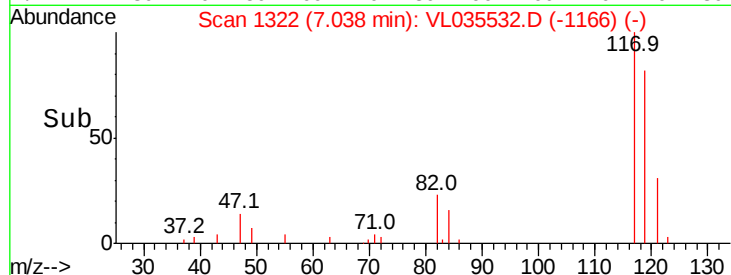
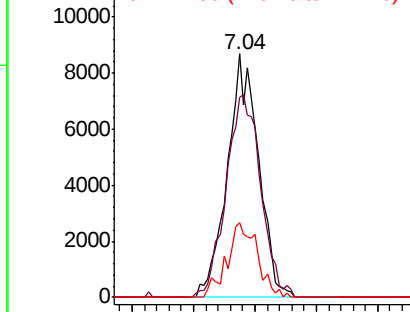


Abundance

Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 0.436 ppbv

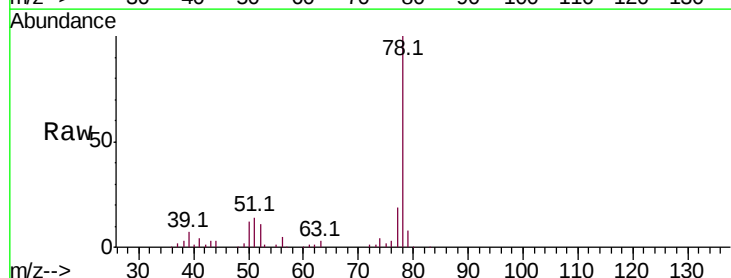
RT: 6.91 min Scan# 1282

Delta R.T. 0.00 min

Lab File: VL035532.D

Acq: 3 Sep 2020 15:53

Tgt Ion	Ratio	Lower	Upper
78	100		
77	18.9	19.3	28.9#
50	11.6	11.0	16.6

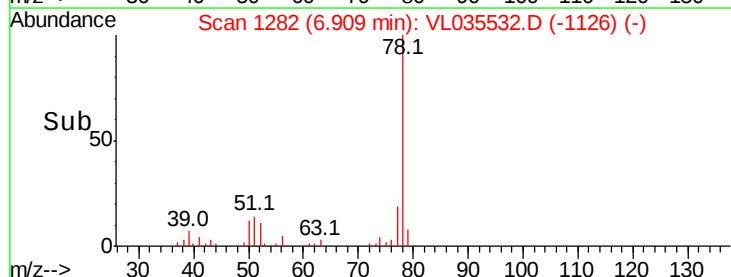
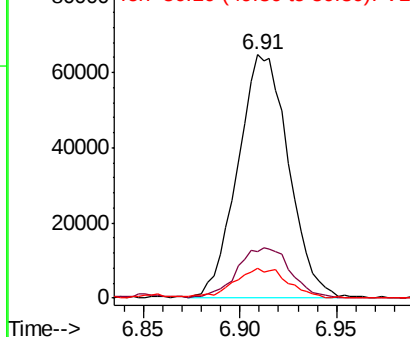


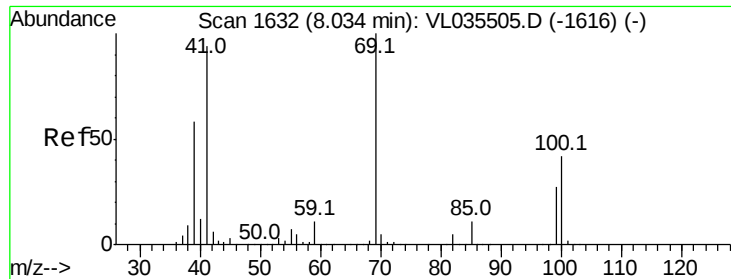
Abundance

Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





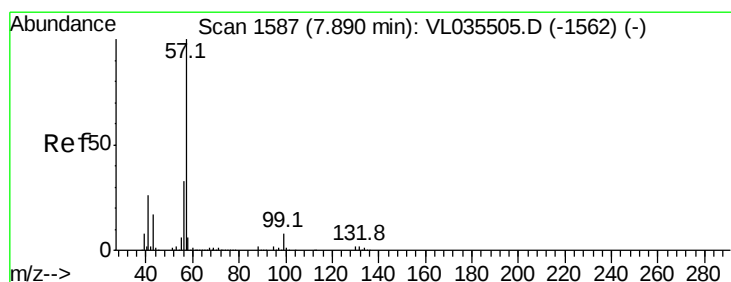
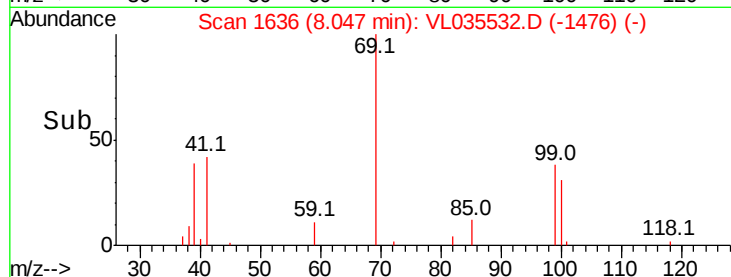
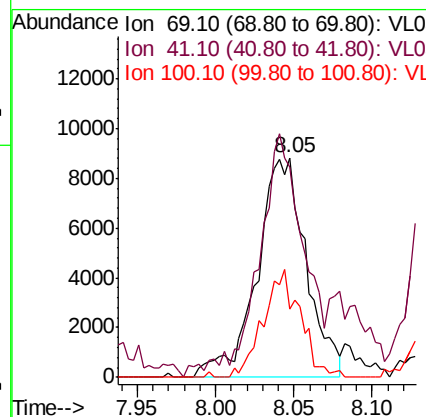
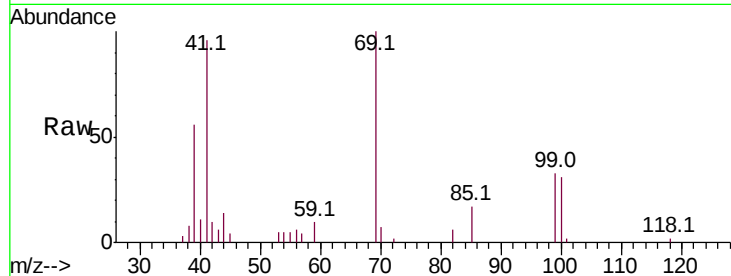
#43
Methvl Methacrilate
Concen: 0.184 ppbv m
RT: 8.05 min Scan# 1636
Delta R.T. 0.01 min
Lab File: VL035532.D
Acq: 3 Sep 2020 15:53

Instrument :
MSVOA_L
ClientSampled :
IA-1

Tot Ion: 69 Resp: 19202
Ion Ratio Lower Upper
69 100
41 119.4 76.6 114.8#
100 0.0 33.8 50.6#

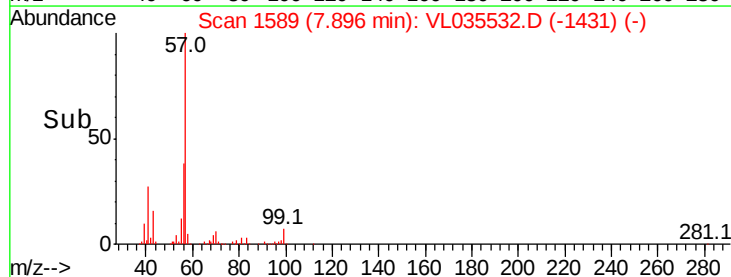
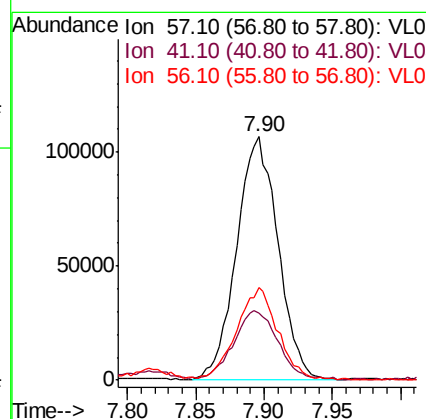
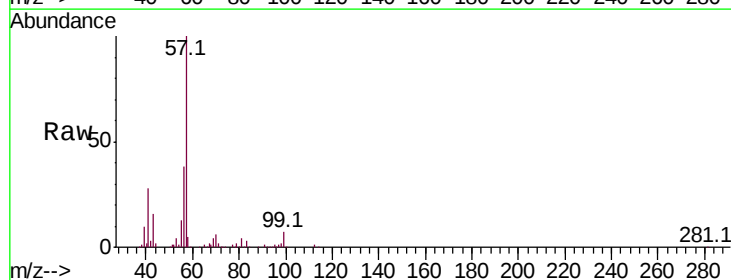
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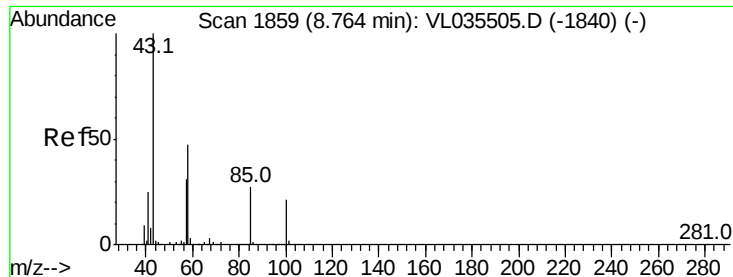
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#44
2,2,4-Trimethylpentane
Concen: 0.636 ppbv
RT: 7.90 min Scan# 1589
Delta R.T. 0.01 min
Lab File: VL035532.D
Acq: 3 Sep 2020 15:53

Tgt Ion: 57 Resp: 225789
Ion Ratio Lower Upper
57 100
41 30.3 20.5 30.7
56 37.3 25.3 37.9





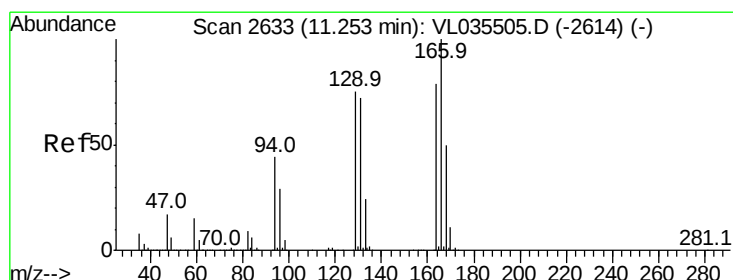
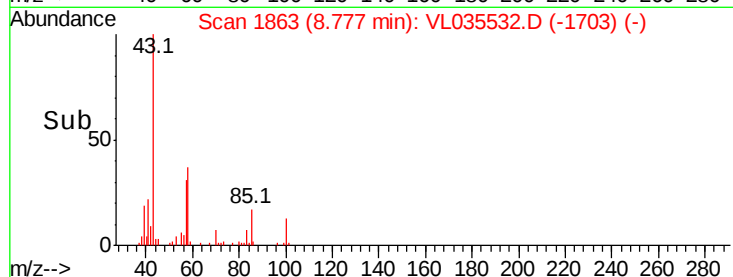
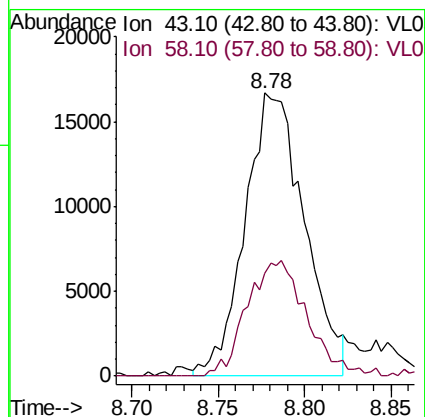
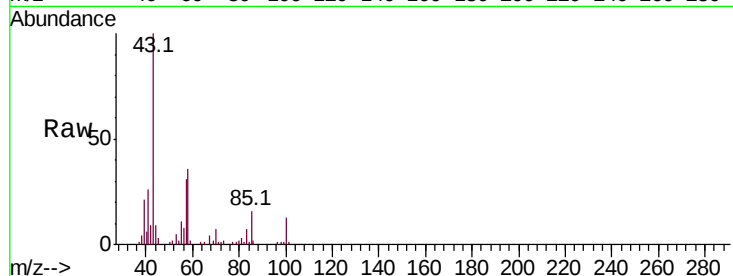
#50
4-Methyl-2-Pentanone
Concen: 0.223 ppbv m
RT: 8.78 min Scan# 1863
Delta R.T. 0.01 min
Lab File: VL035532.D
Acq: 3 Sep 2020 15:53

Instrument :
MSVOA_L
ClientSampled :
IA-1

Tot Ion	Ratio	Lower	Upper
43	100		
58	41.3	37.4	56.0

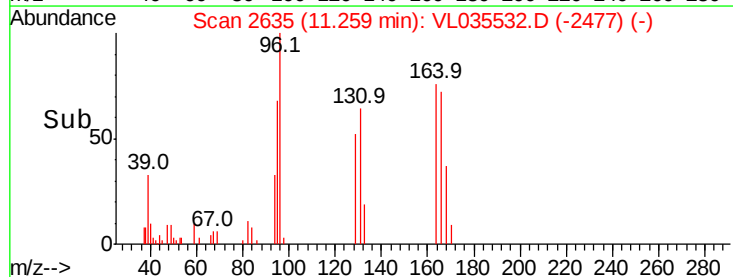
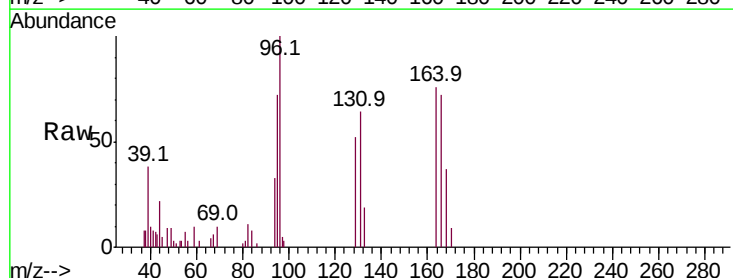
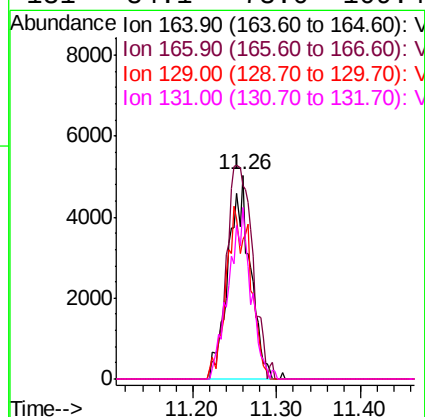
Manual Integrations
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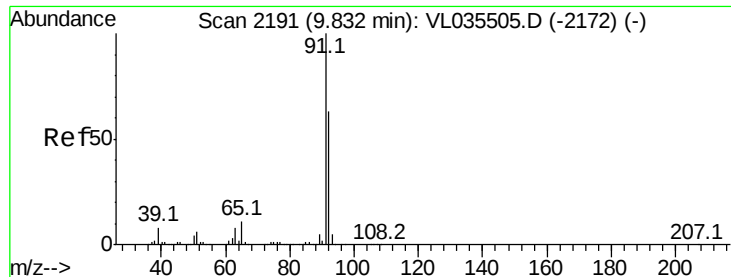
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#52
Tetrachloroethene
Concen: 0.058 ppbv m
RT: 11.26 min Scan# 2635
Delta R.T. 0.01 min
Lab File: VL035532.D
Acq: 3 Sep 2020 15:53

Tgt Ion	Ratio	Lower	Upper
164	100		
166	95.2	100.9	151.3#
129	68.5	75.3	112.9#
131	84.1	73.0	109.4





#53

Toluene

Concen: 3.561 ppbv

RT: 9.83 min Scan# 2192

Delta R.T. 0.00 min

Lab File: VL035532.D

Acq: 3 Sep 2020 15:53

Instrument :

MSVOA_L

ClientSampled :

IA-1

Tot Ion: 91 Resp: 1208337

Ion Ratio Lower Upper

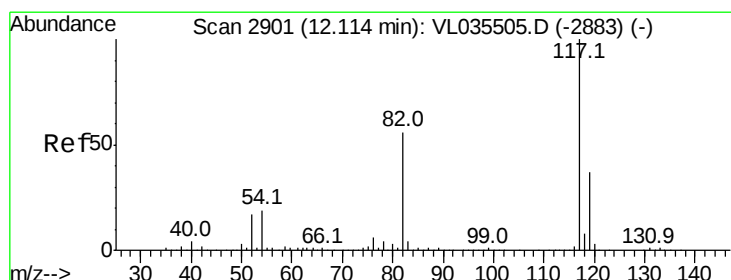
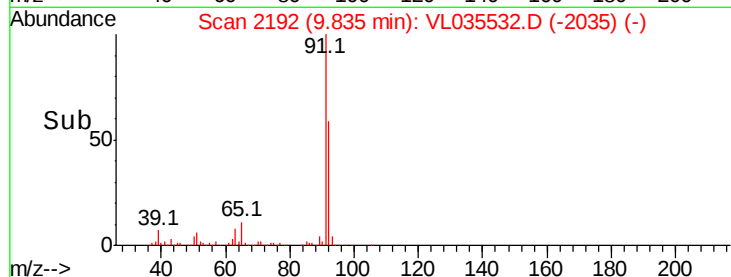
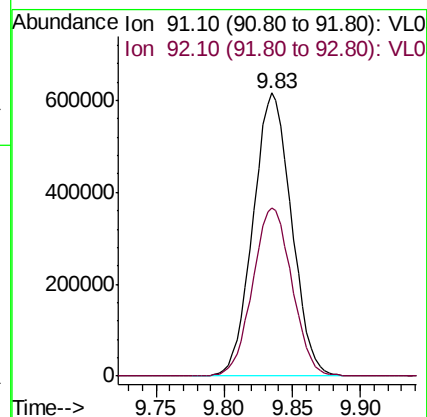
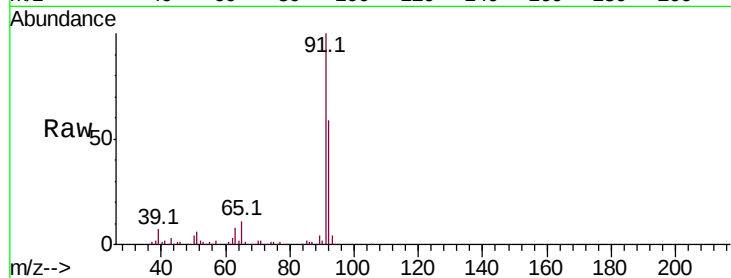
91 100

92 60.8 49.8 74.8

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.12 min Scan# 2903

Delta R.T. 0.01 min

Lab File: VL035532.D

Acq: 3 Sep 2020 15:53

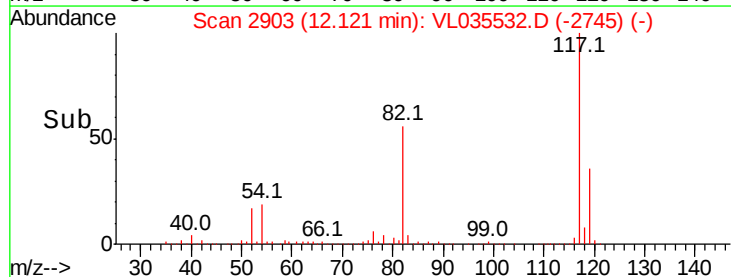
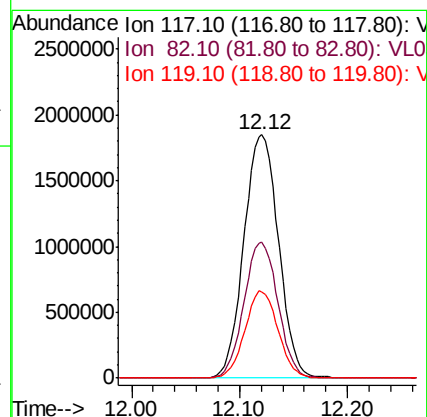
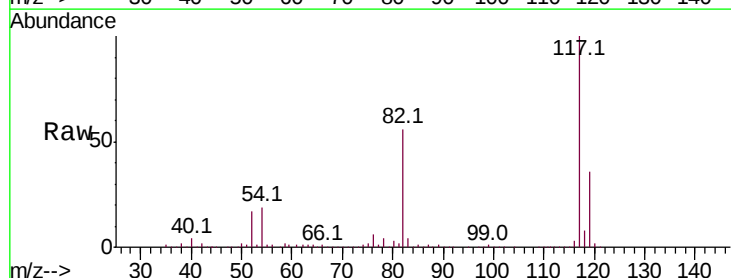
Tgt Ion: 117 Resp: 4144522

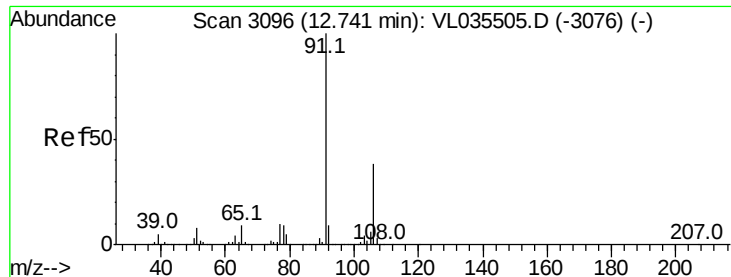
Ion Ratio Lower Upper

117 100

82 54.7 41.6 62.4

119 34.4 29.3 43.9





#58

Ethyl Benzene

Concen: 0.377 ppbv

RT: 12.74 min Scan# 3097

Delta R.T. 0.00 min

Lab File: VL035532.D

Acq: 3 Sep 2020 15:53

Instrument :

MSVOA_L

ClientSampleId :

IA-1

Tot Ion: 91 Resp: 161146

Ion Ratio Lower Upper

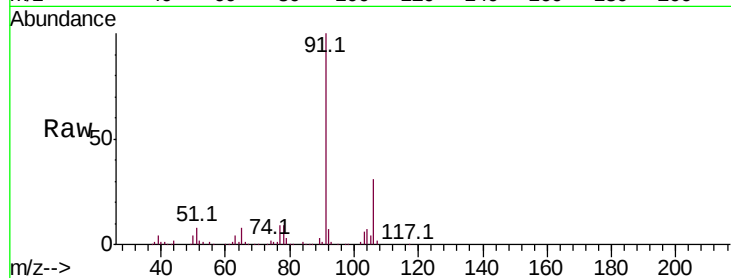
91 100

106 31.4 30.3 45.5

Manual Integrations
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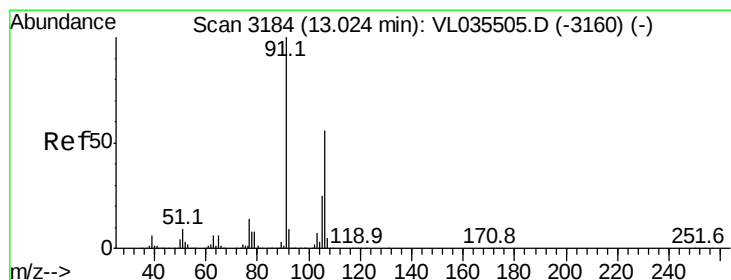
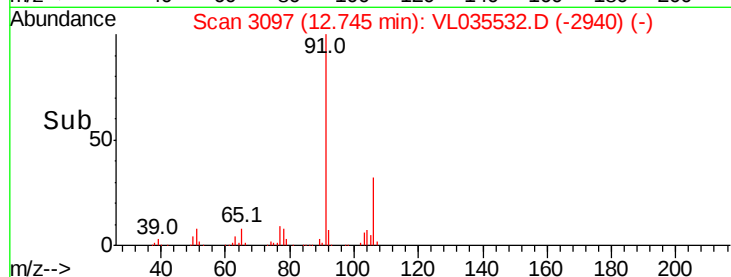
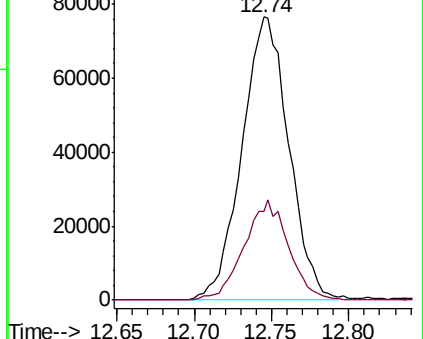
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#59

m/p-Xylene

Concen: 1.406 ppbv m

RT: 13.00 min Scan# 3177

Delta R.T. -0.02 min

Lab File: VL035532.D

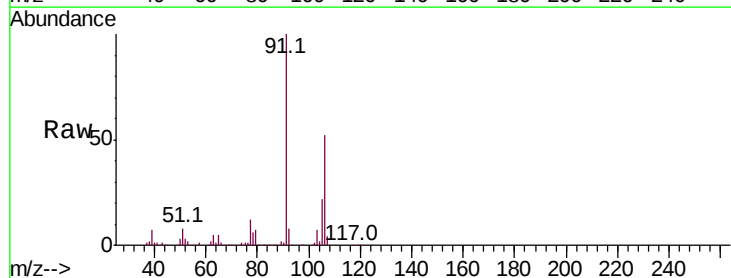
Acq: 3 Sep 2020 15:53

Tgt Ion: 91 Resp: 502027

Ion Ratio Lower Upper

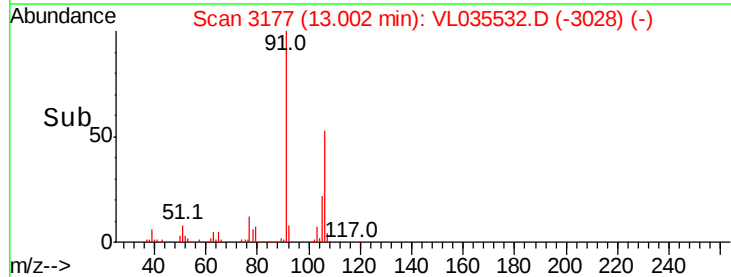
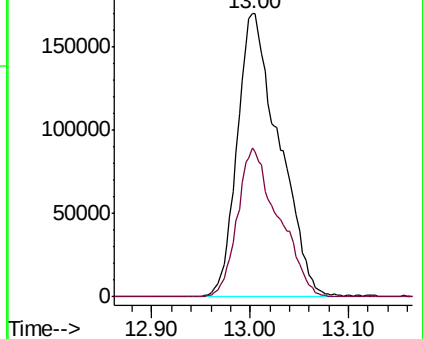
91 100

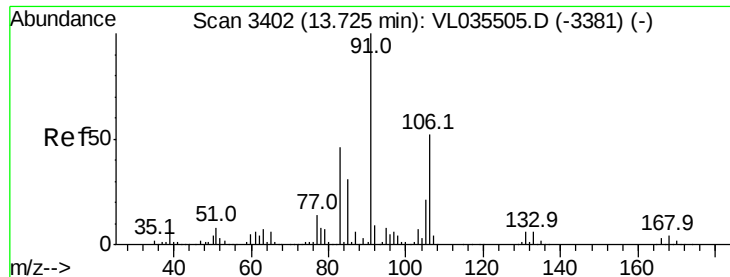
106 51.4 43.4 65.2



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





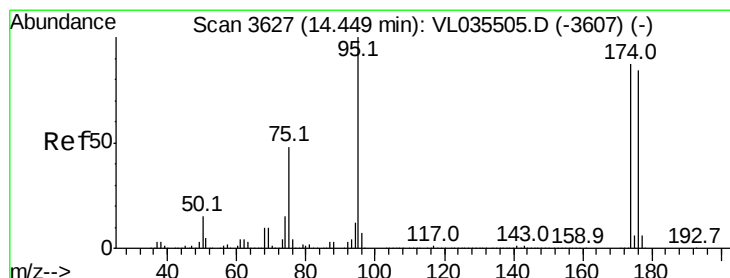
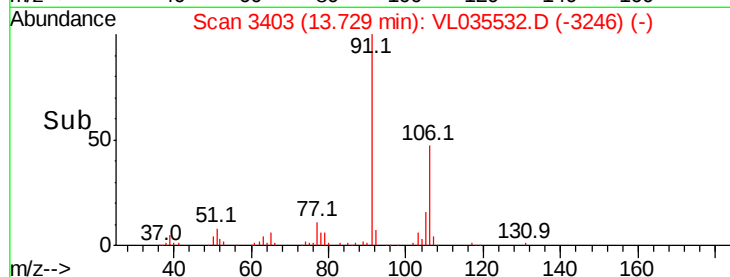
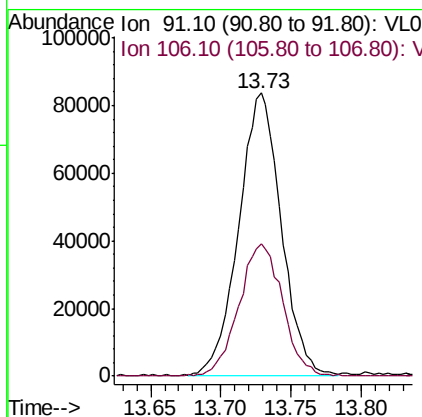
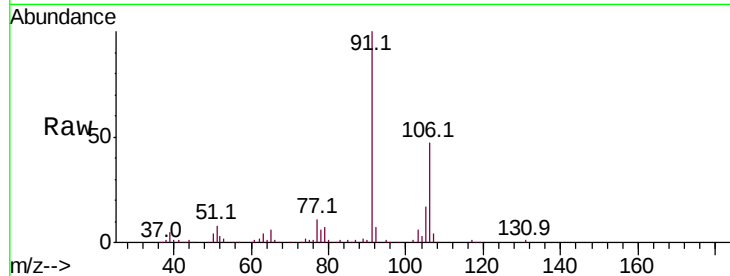
#60
o-Xylene
Concen: 0.487 ppbv
RT: 13.73 min Scan# 3403
Delta R.T. 0.00 min
Lab File: VL035532.D
Acq: 3 Sep 2020 15:53

Instrument :
MSVOA_L
ClientSampled :
IA-1

Tot Ion: 91 Resp: 175052
Ion Ratio Lower Upper
91 100
106 48.6 25.8 77.4

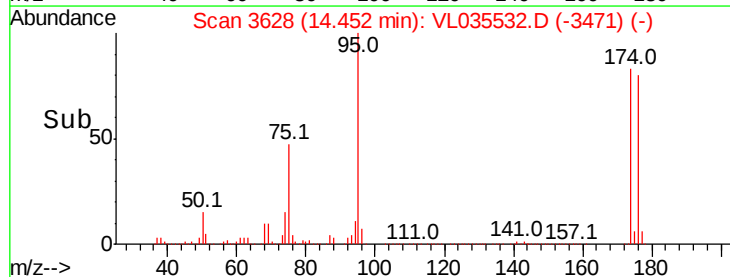
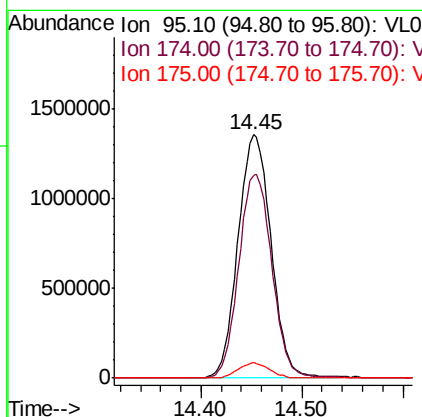
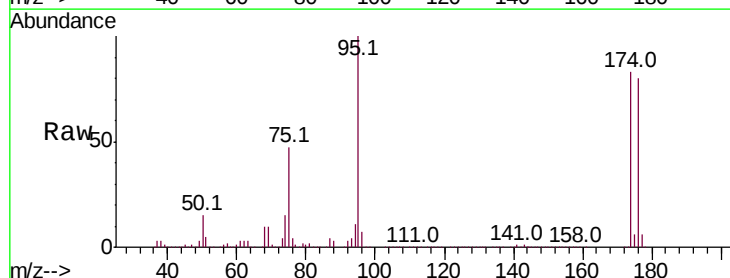
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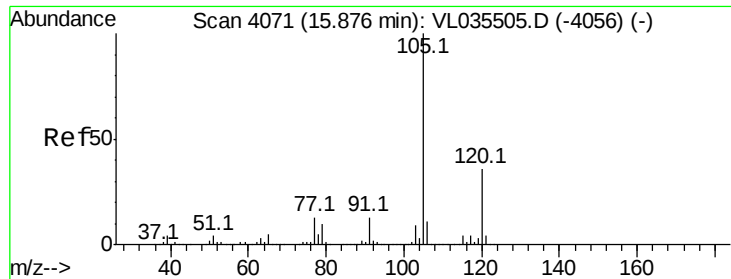
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.445 ppbv
RT: 14.45 min Scan# 3628
Delta R.T. 0.00 min
Lab File: VL035532.D
Acq: 3 Sep 2020 15:53

Tgt Ion: 95 Resp: 3074319
Ion Ratio Lower Upper
95 100
174 84.0 69.6 104.4
175 6.1 5.1 7.7





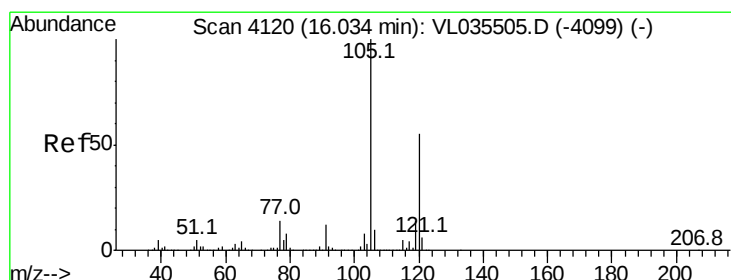
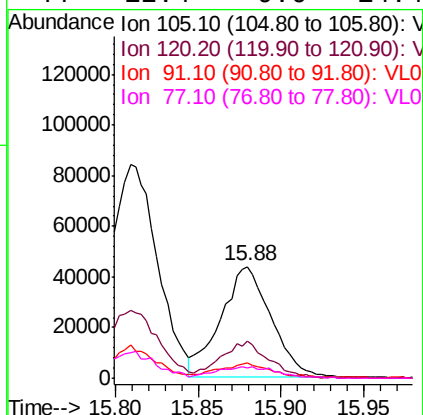
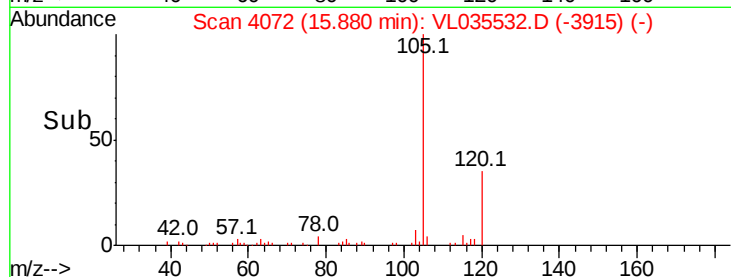
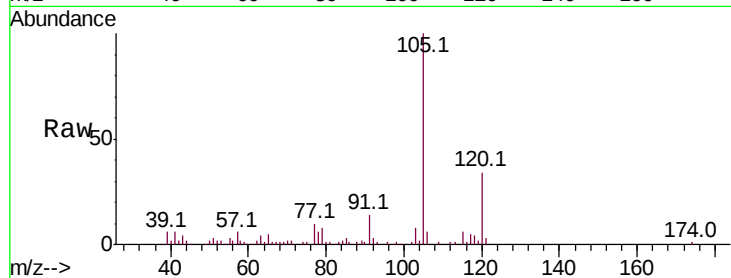
#72
4-Ethyltoluene
Concen: 0.202 ppbv
RT: 15.88 min Scan# 4072
Delta R.T. 0.00 min
Lab File: VL035532.D
Acq: 3 Sep 2020 15:53

Instrument :
MSVOA_L
ClientSampled :
IA-1

Tot Ion	Ratio	Lower	Upper
105	100		
120	31.4	27.4	41.2
91	15.3	9.7	14.5
77	12.4	9.6	14.4

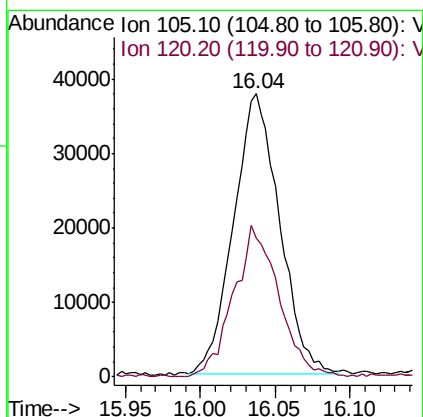
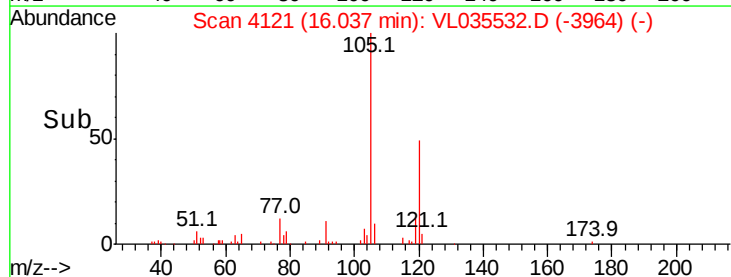
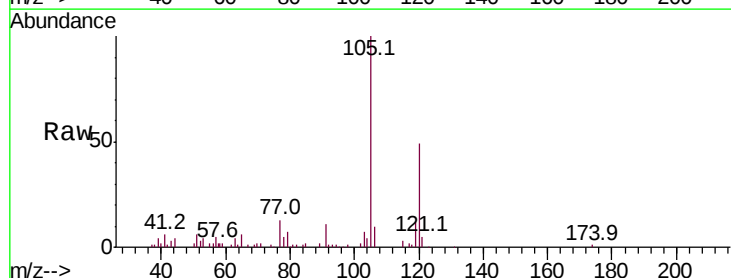
Manual Integrations
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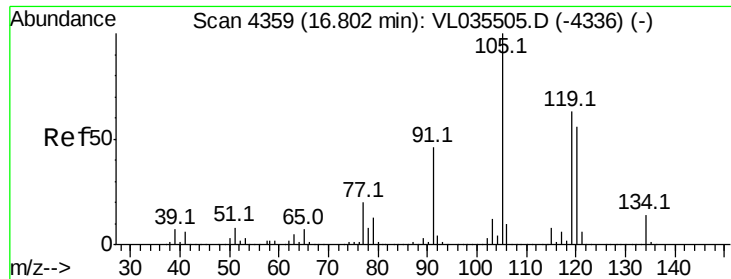
MMDadoda
9/8/2020 4:06:16 PM



#73
1,3,5-Trimethylbenzene
Concen: 0.190 ppbv
RT: 16.04 min Scan# 4121
Delta R.T. 0.00 min
Lab File: VL035532.D
Acq: 3 Sep 2020 15:53

Tgt Ion	Ratio	Lower	Upper
105	100		
120	49.6	44.2	66.2





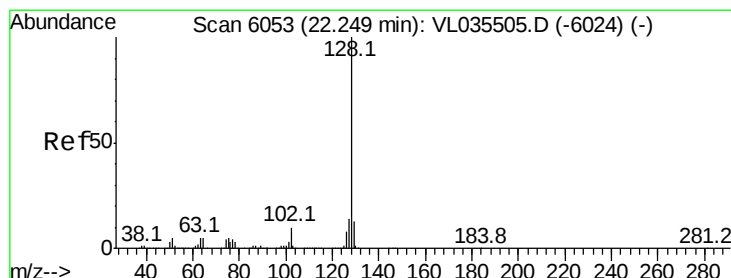
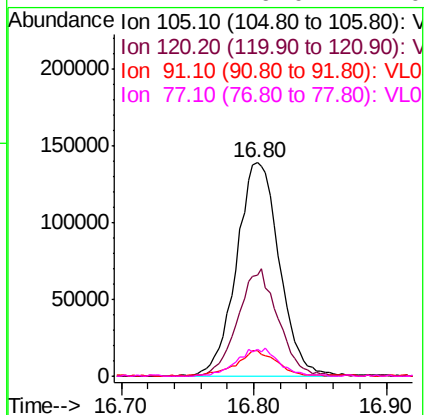
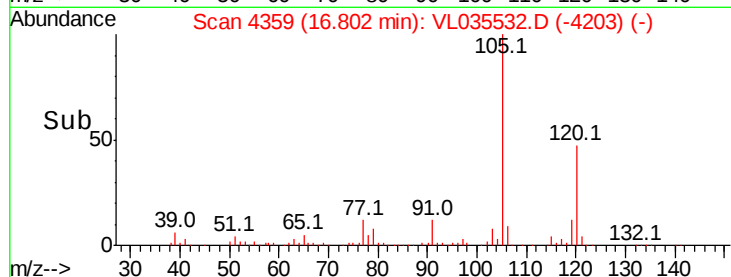
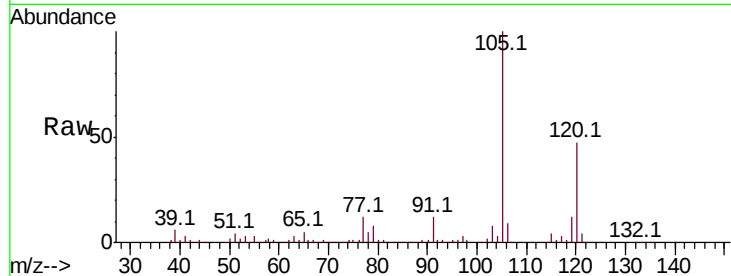
#74
 1,2,4-Trimethylbenzene
 Concen: 0.668 ppbv
 RT: 16.80 min Scan# 4359
 Delta R.T. 0.00 min
 Lab File: VL035532.D
 Acq: 3 Sep 2020 15:53

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-1

Tot Ion	Ratio	Lower	Upper
105	100		
120	47.1	44.4	66.6
91	11.5	37.1	55.7#
77	12.2	16.0	24.0#

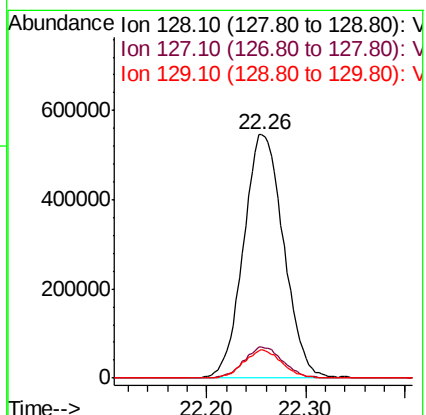
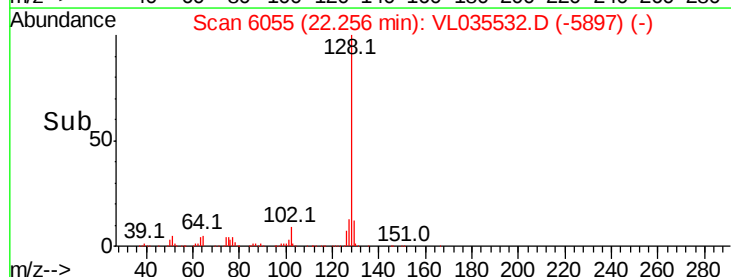
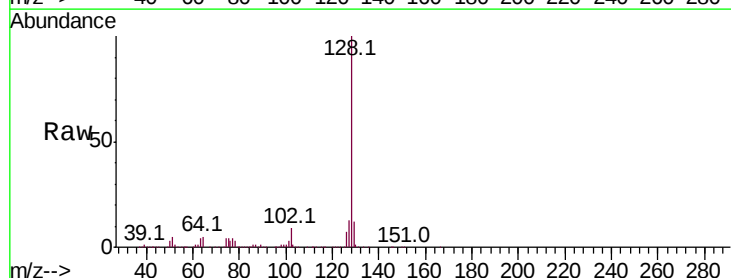
Manual Integrations
 APPROVED

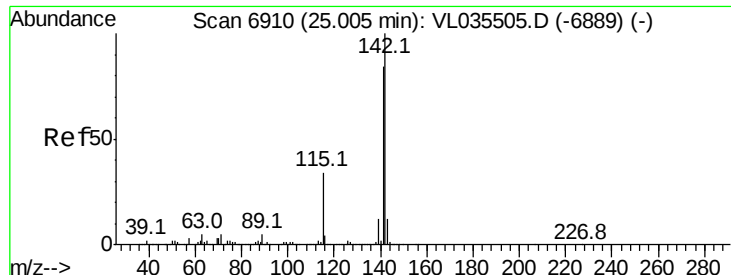
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#79
 Naphthalene
 Concen: 2.975 ppbv
 RT: 22.26 min Scan# 6055
 Delta R.T. 0.01 min
 Lab File: VL035532.D
 Acq: 3 Sep 2020 15:53

Tgt Ion	Ratio	Lower	Upper
128	100		
127	12.8	11.4	17.2
129	11.6	10.5	15.7





#80
 Naphthalene, 2-methyl-
 Concen: 0.368 ppbv
 RT: 25.02 min Scan# 6914
 Delta R.T. 0.01 min
 Lab File: VL035532.D
 Acq: 3 Sep 2020 15:53

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-1

Tot Ion:	142	Resp:	64775
Ion Ratio	Lower	Upper	
142	100		
141	86.3	67.6	101.4
115	33.7	25.8	38.8

Manual Integrations
 APPROVED

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