

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL081820\
 Data File : VL035463.D
 Acq On : 19 Aug 2020 10:23
 Operator : SY/AP
 Sample : L3730-04DUP
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 AADUP

Manual Integrations
 APPROVED

MMDadoda
 8/20/2020 11:07:48 AM

Quant Time: Aug 20 03:19:10 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL081720AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Aug 1
 QLast Update : Mon Aug 17 19:28:30 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1048731	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	5000691	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	4988964	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.44	95	3613361	10.35	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.50%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.05	85	55067	0.283	ppbv	94
3) Chlorodifluoromethane	2.99	51	87286m	0.664	ppbv	
4) Chloromethane	3.14	50	36306	0.530	ppbv	96
9) Propene	3.02	41	73344	1.388	ppbv #	68
10) Heptane	8.14	43	16040	0.116	ppbv #	68
11) Trichlorofluoromethane	3.95	101	75172	0.246	ppbv	91
13) Ethanol	3.60	45	289342	14.942	ppbv	98
15) Acetone	3.85	43	1495356	12.388	ppbv #	82
17) tert-Butyl alcohol	4.31	59	15060	0.097	ppbv	94
19) Isopropyl Alcohol	3.97	45	258274	3.104	ppbv #	1
20) Methylene Chloride	4.35	84	1152803	11.837	ppbv #	64
26) Hexane	5.70	57	1042429	7.864	ppbv #	29
30) Cyclohexane	7.15	84	50732	0.345	ppbv #	62
34) 2-Butanone	5.26	43	75981	0.455	ppbv #	70
35) Carbon Tetrachloride	7.03	117	17028	0.064	ppbv	92
36) Benzene	6.90	78	54020	0.147	ppbv #	92
44) 2,2,4-Trimethylpentane	7.88	57	150179	0.313	ppbv	93
50) 4-Methyl-2-Pentanone	8.77	43	189728	0.792	ppbv #	83
52) Tetrachloroethene	11.24	164	13198m	0.059	ppbv	
53) Toluene	9.82	91	423643	0.896	ppbv	98
58) Ethyl Benzene	12.73	91	110771	0.184	ppbv	94
59) m/p-Xylene	12.99	91	350362	0.688	ppbv #	84
60) o-Xylene	13.71	91	106181	0.215	ppbv	86
61) Styrene	13.55	104	68474m	0.171	ppbv	
74) 1,2,4-Trimethylbenzene	16.79	105	79419	0.121	ppbv #	70

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

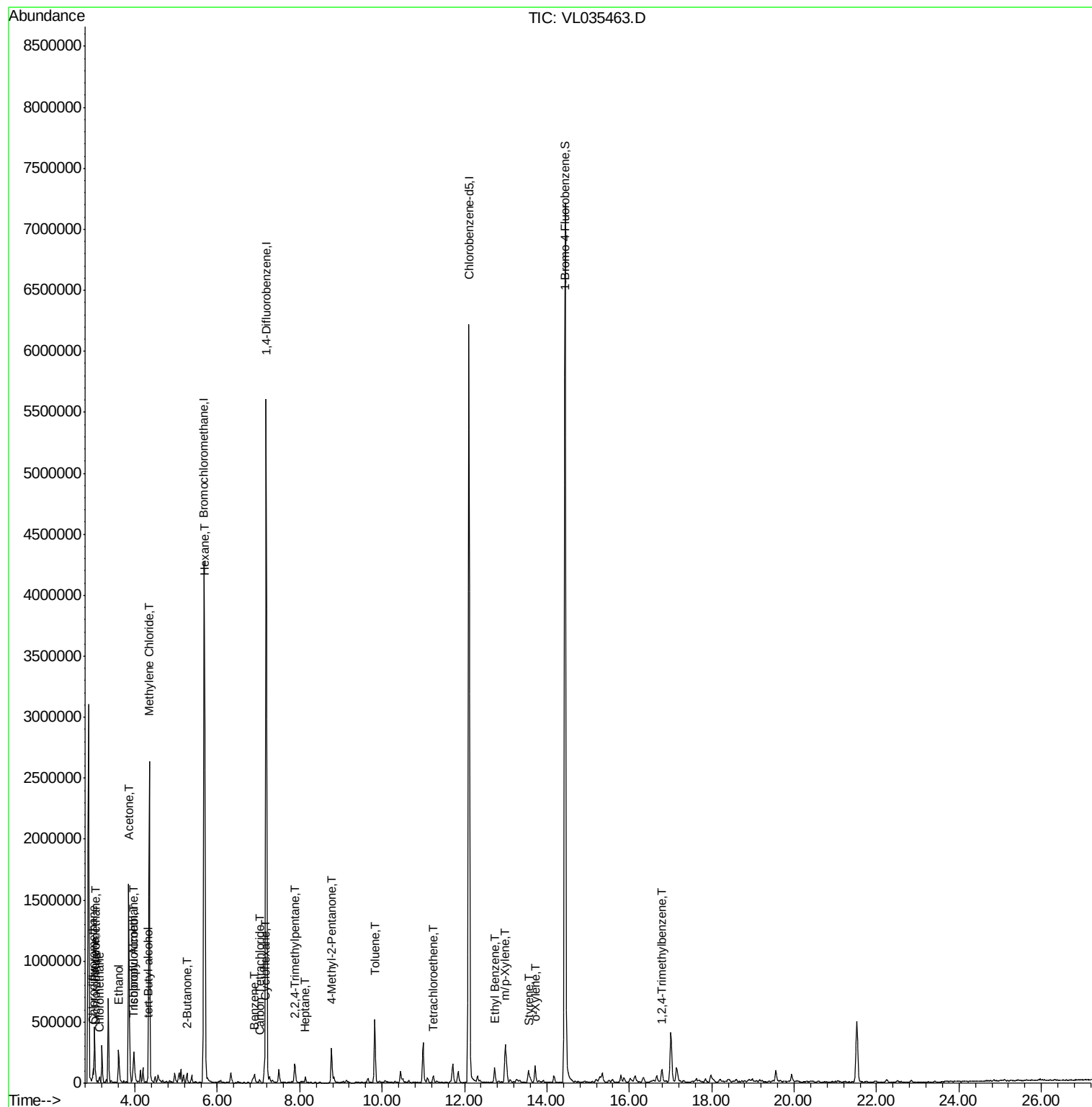
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL081820\
Data File : VL035463.D
Acq On : 19 Aug 2020 10:23
Operator : SY/AP
Sample : L3730-04DUP
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

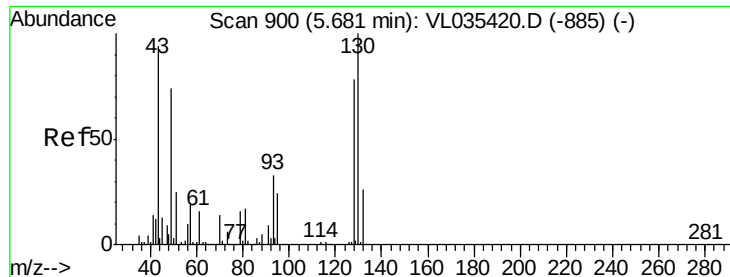
Instrument :
MSVOA_L
ClientSampleId :
AADUP

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8/20/2020 11:07:48 AM

Quant Time: Aug 20 03:19:10 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL081720AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Aug
QLast Update : Mon Aug 17 19:28:30 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 898

Delta R.T. 0.00 min

Lab File: VL035463.D

Acq: 19 Aug 2020 10:23

Instrument :

MSVOA_L

ClientSampleId :

AADUP

Tot Ion: 49 Resp: 1048731

Ion Ratio Lower Upper

49 100

128 106.6 20.9 62.7#

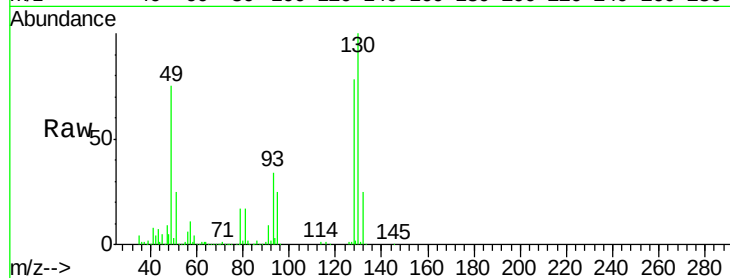
130 136.1 26.7 80.1#

Manual Integrations

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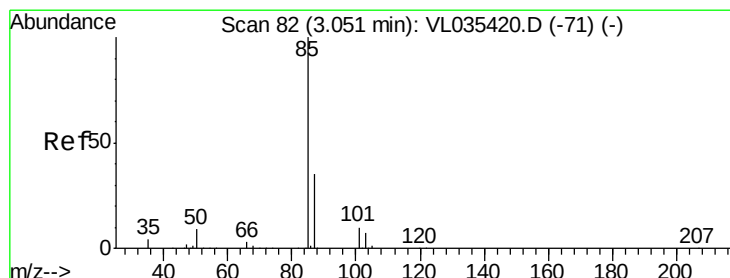
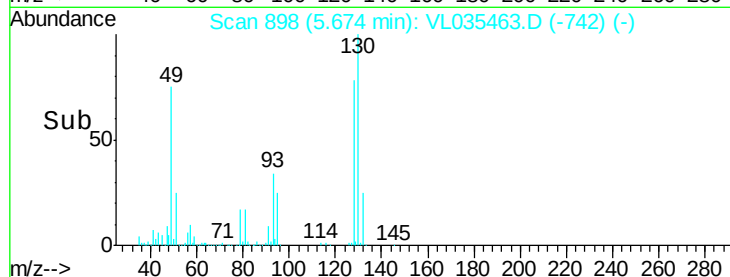
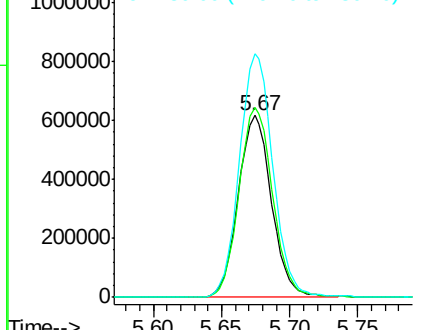
8/20/2020 11:07:48 AM



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



#2

Dichlorodifluoromethane

Concen: 0.283 ppbv

RT: 3.05 min Scan# 81

Delta R.T. 0.00 min

Lab File: VL035463.D

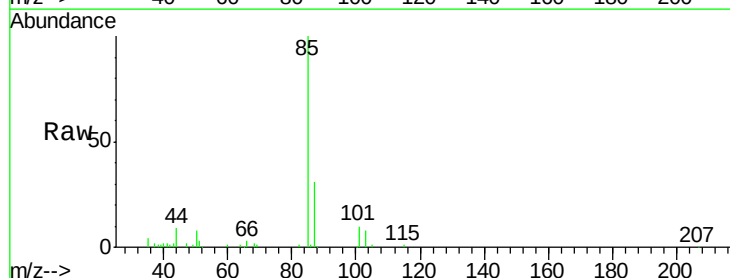
Acq: 19 Aug 2020 10:23

Tgt Ion: 85 Resp: 55067

Ion Ratio Lower Upper

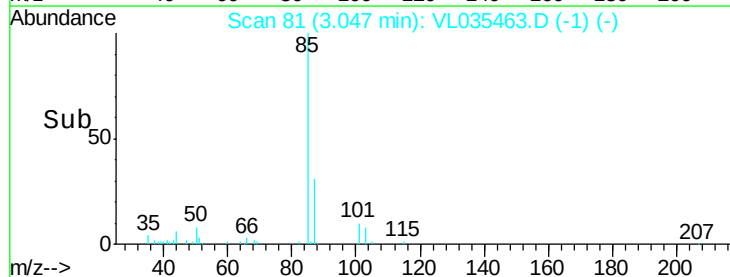
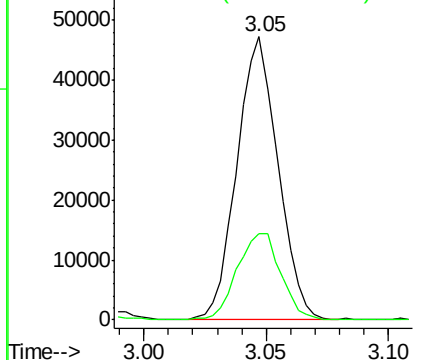
85 100

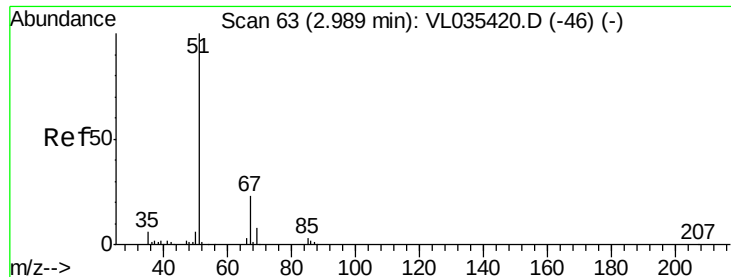
87 30.5 27.1 40.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.664 ppbv

RT: 2.99 min Scan# 62

Delta R.T. 0.00 min

Lab File: VL035463.D

Acq: 19 Aug 2020 10:23

Instrument :

MSVOA_L

ClientSampleId :

AADUP

Tot Ion: 51 Resp: 87286

Ion Ratio Lower Upper

51 100

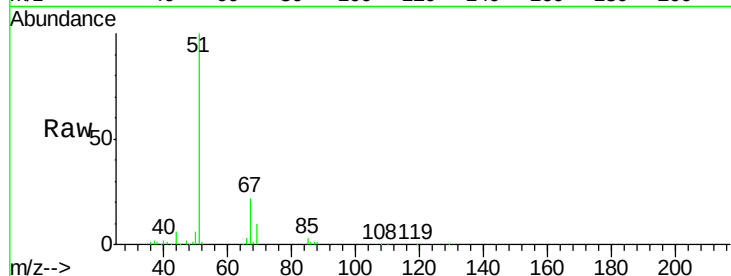
67 21.4 15.0 22.6

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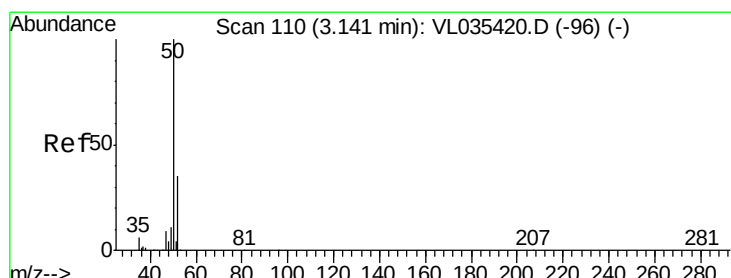
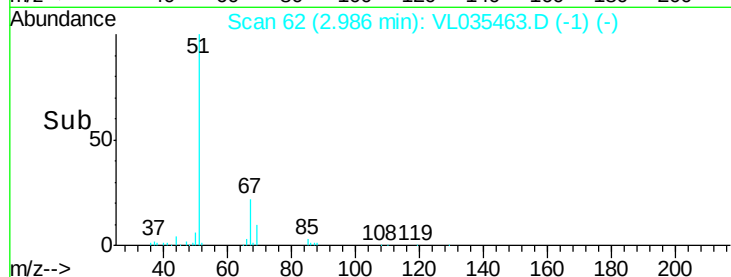
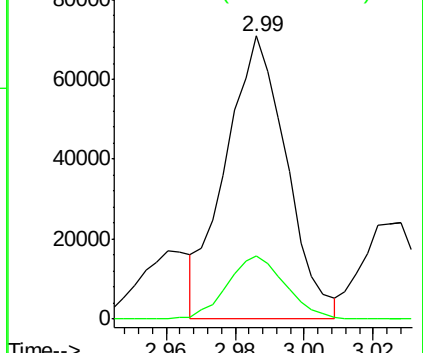
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.530 ppbv

RT: 3.14 min Scan# 110

Delta R.T. 0.01 min

Lab File: VL035463.D

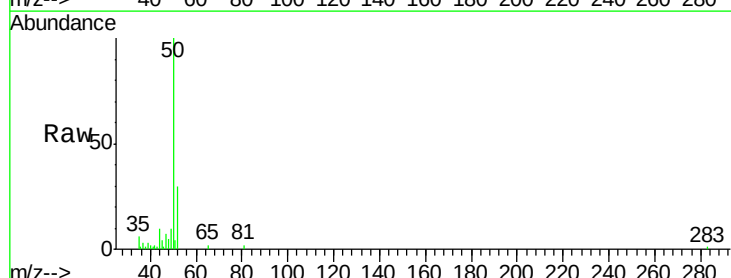
Acq: 19 Aug 2020 10:23

Tgt Ion: 50 Resp: 36306

Ion Ratio Lower Upper

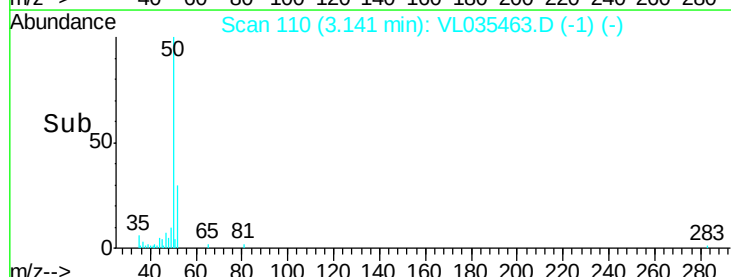
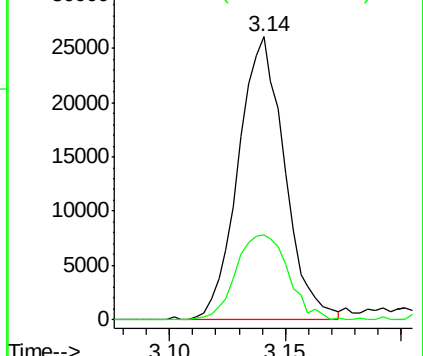
50 100

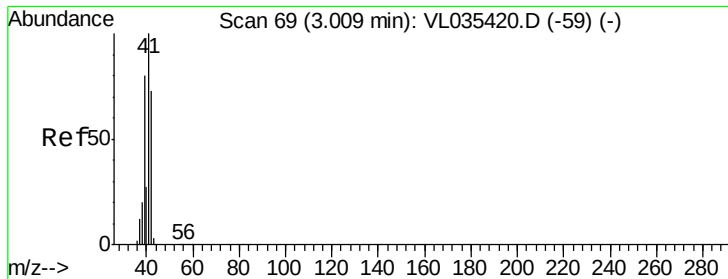
52 30.0 25.9 38.9



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 1.388 ppbv

RT: 3.02 min Scan# 73

Delta R.T. 0.02 min

Lab File: VL035463.D

Acq: 19 Aug 2020 10:23

Instrument :

MSVOA_L

ClientSampleId :

AADUP

Tot Ion: 41 Resp: 73344

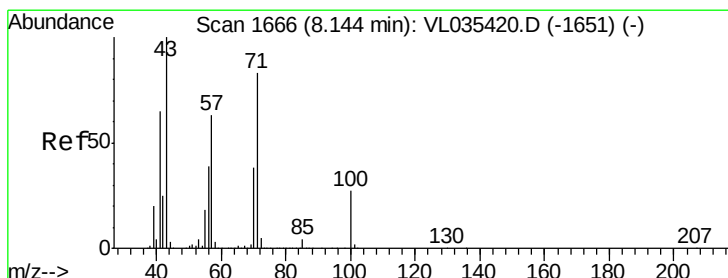
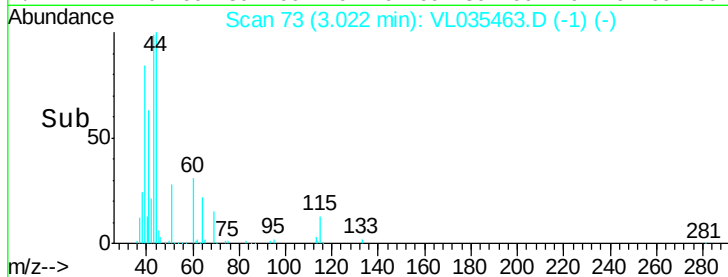
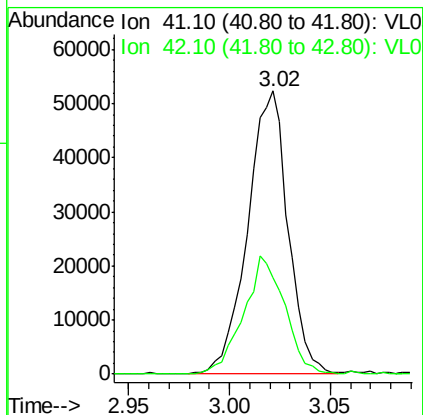
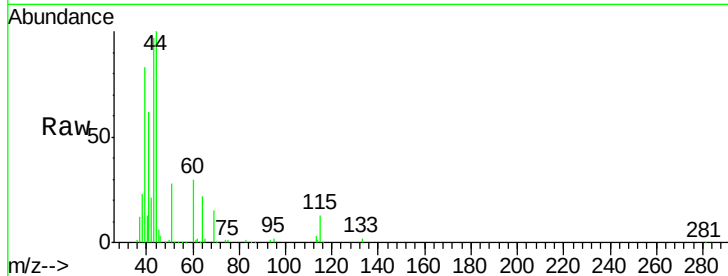
Ion Ratio Lower Upper

41 100

42 43.0 55.5 83.3#

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#10

Heptane

Concen: 0.116 ppbv

RT: 8.14 min Scan# 1664

Delta R.T. 0.00 min

Lab File: VL035463.D

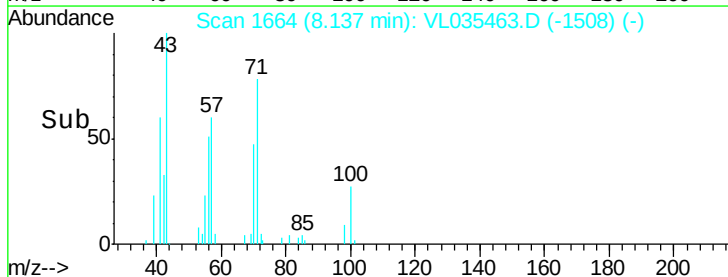
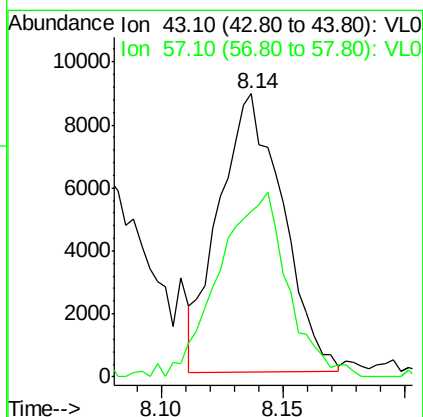
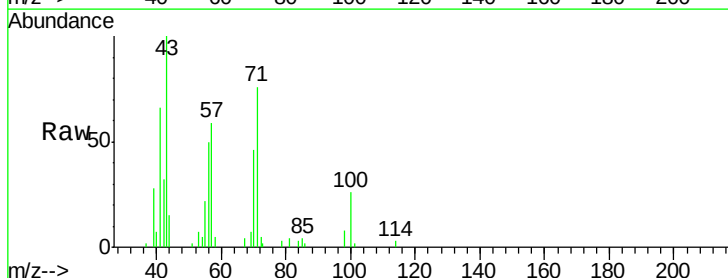
Acq: 19 Aug 2020 10:23

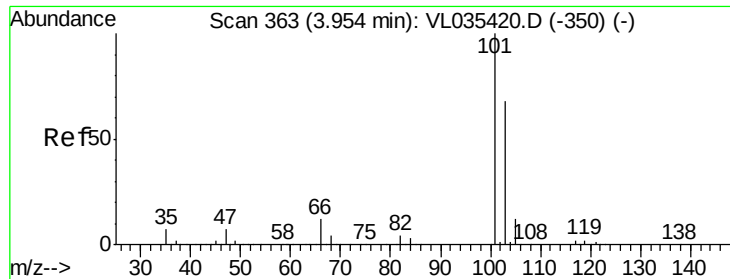
Tgt Ion: 43 Resp: 16040

Ion Ratio Lower Upper

43 100

57 71.6 39.8 59.6#





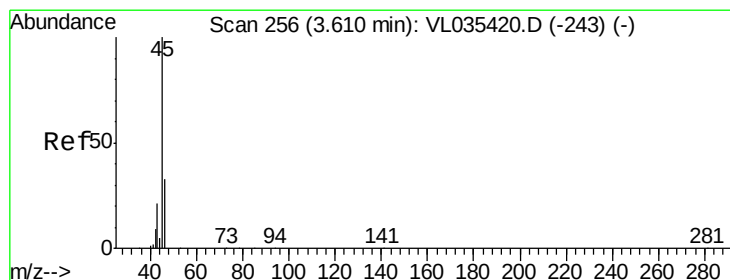
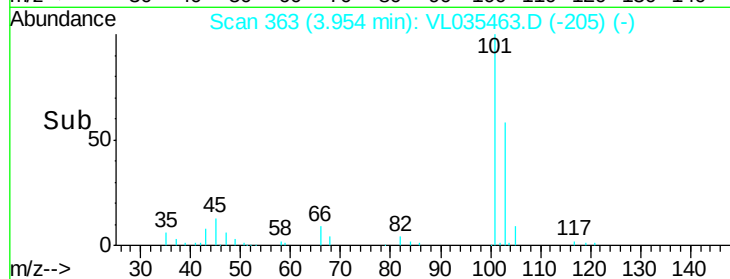
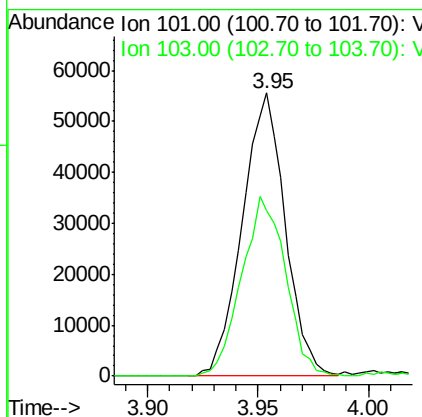
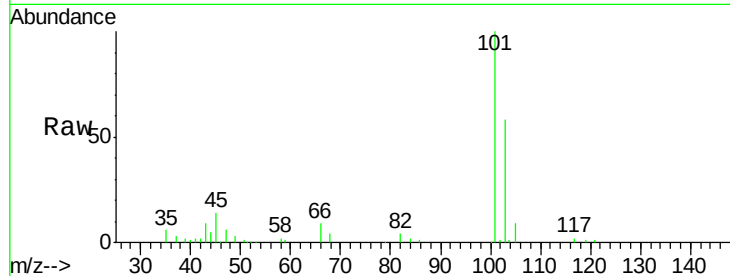
#11
 Trichlorofluoromethane
 Concen: 0.246 ppbv
 RT: 3.95 min Scan# 363
 Delta R.T. 0.01 min
 Lab File: VL035463.D
 Acq: 19 Aug 2020 10:23

Instrument :
 MSVOA_L
 ClientSampleId :
 AADUP

Tot Ion:101 Resp: 75172
 Ion Ratio Lower Upper
 101 100
 103 58.3 52.6 78.8

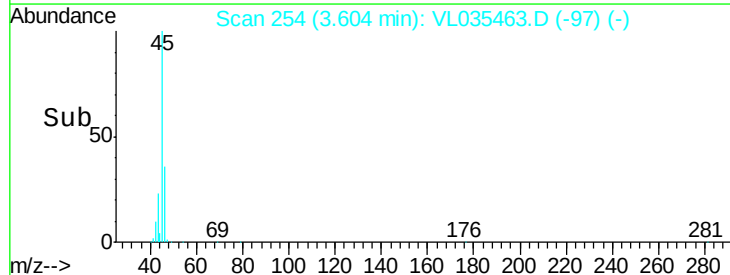
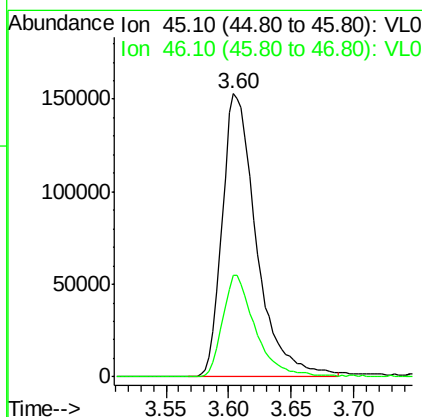
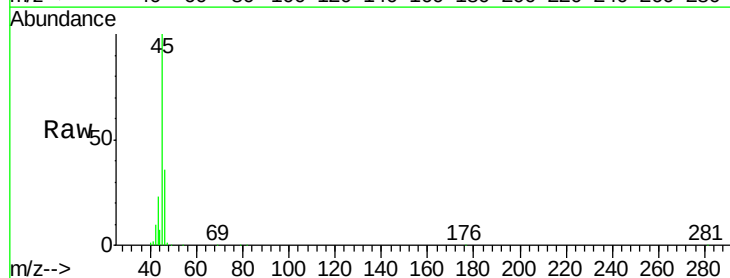
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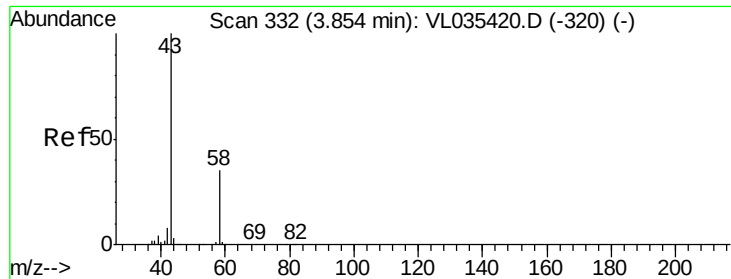
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#13
 Ethanol
 Concen: 14.942 ppbv
 RT: 3.60 min Scan# 254
 Delta R.T. 0.00 min
 Lab File: VL035463.D
 Acq: 19 Aug 2020 10:23

Tgt Ion: 45 Resp: 289342
 Ion Ratio Lower Upper
 45 100
 46 34.5 14.2 56.6





#15

Acetone

Concen: 12.388 ppbv

RT: 3.85 min Scan# 331

Delta R.T. 0.00 min

Lab File: VL035463.D

Acq: 19 Aug 2020 10:23

Instrument :

MSVOA_L

ClientSampled :

AADUP

Tot Ion: 43 Resp: 1495356

Ion Ratio Lower Upper

43 100

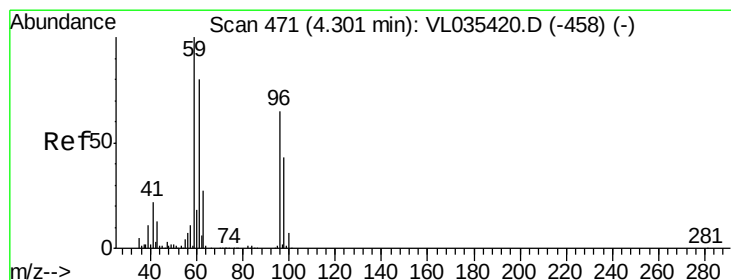
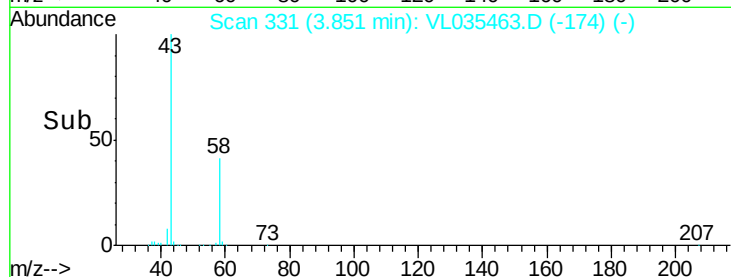
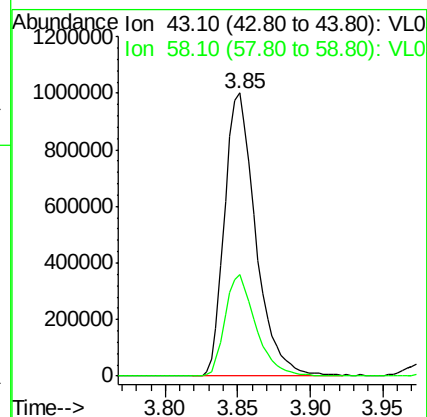
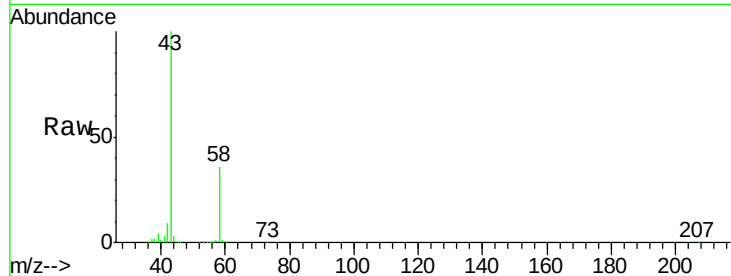
58 35.4 21.0 31.6#

Manual Integrations

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#17

tert-Butyl alcohol

Concen: 0.097 ppbv

RT: 4.31 min Scan# 475

Delta R.T. 0.02 min

Lab File: VL035463.D

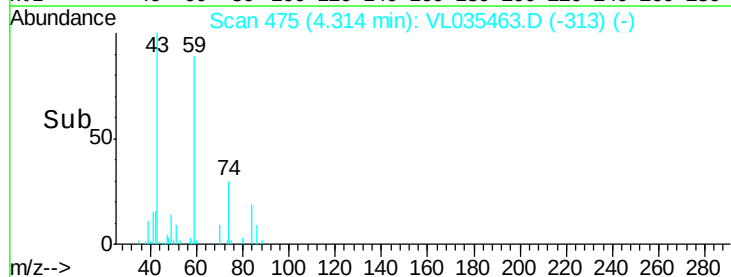
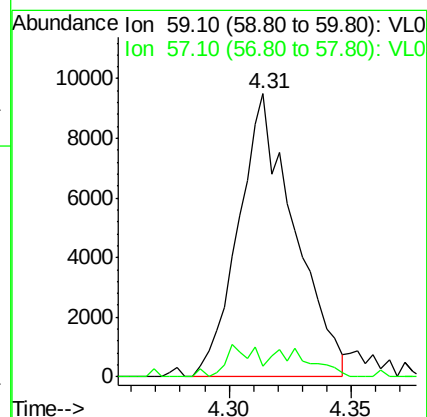
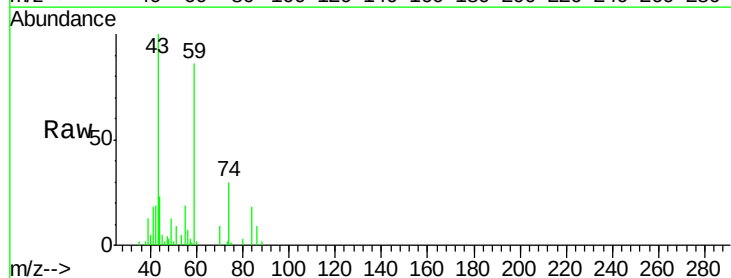
Acq: 19 Aug 2020 10:23

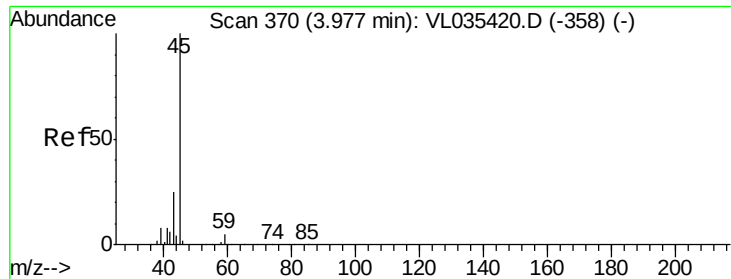
Tgt Ion: 59 Resp: 15060

Ion Ratio Lower Upper

59 100

57 13.2 8.9 13.3





#19

Isopropyl Alcohol

Concen: 3.104 ppbv

RT: 3.97 min Scan# 369

Delta R.T. 0.00 min

Lab File: VL035463.D

Acq: 19 Aug 2020 10:23

Instrument :

MSVOA_L

ClientSampleId :

AADUP

Tot Ion: 45 Resp: 258274

Ion Ratio Lower Upper

45 100

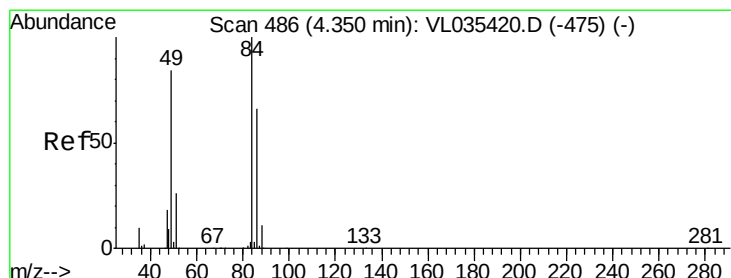
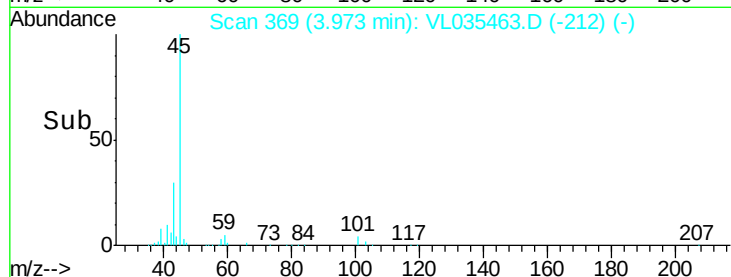
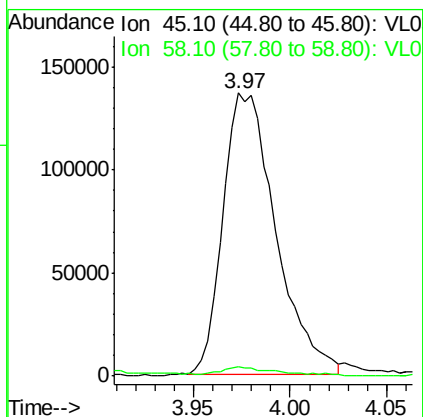
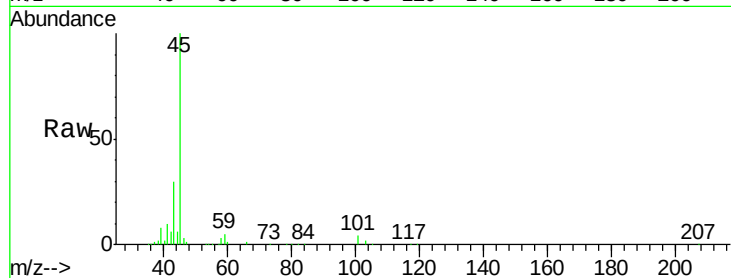
58 205.1 1.0 1.6#

Manual Integrations

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#20

Methylene Chloride

Concen: 11.837 ppbv

RT: 4.35 min Scan# 485

Delta R.T. 0.00 min

Lab File: VL035463.D

Acq: 19 Aug 2020 10:23

Tgt Ion: 84 Resp: 1152803

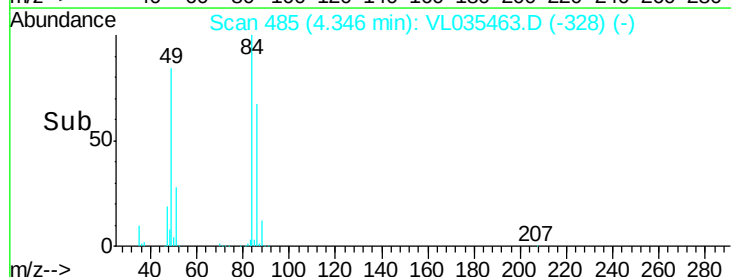
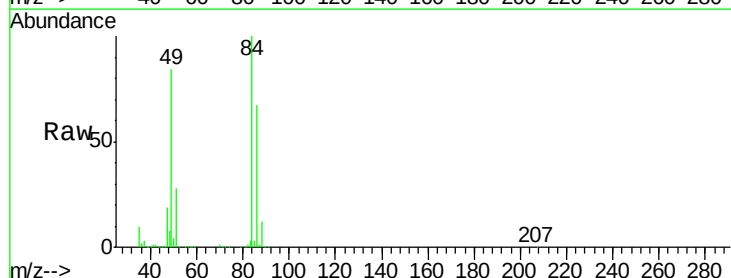
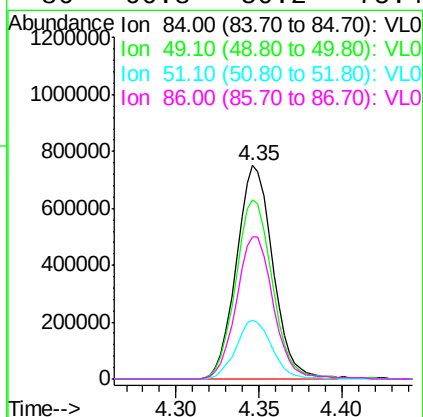
Ion Ratio Lower Upper

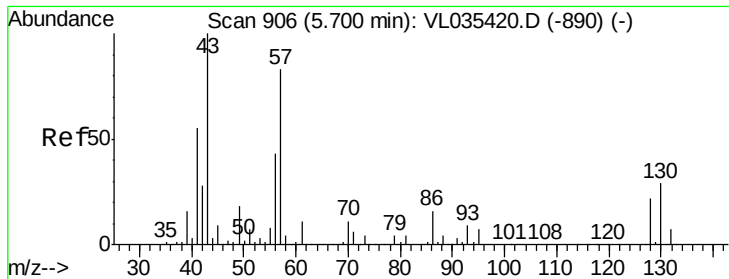
84 100

49 83.8 118.6 177.8#

51 27.7 36.4 54.6#

86 66.8 50.2 75.4





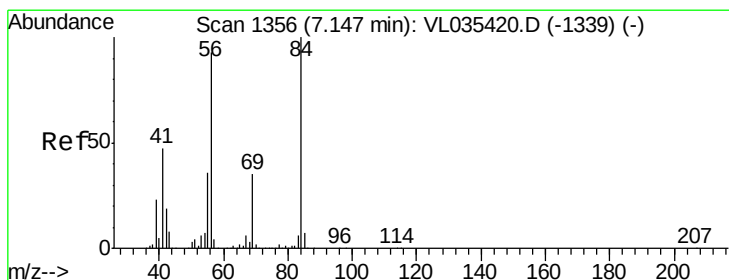
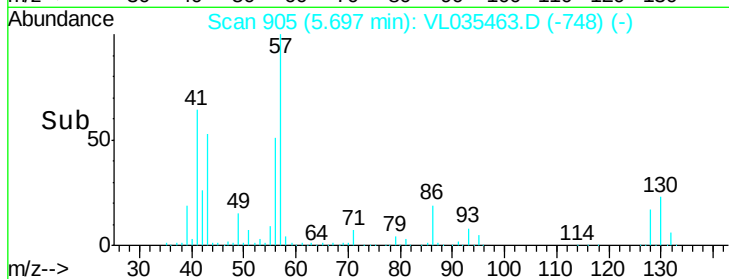
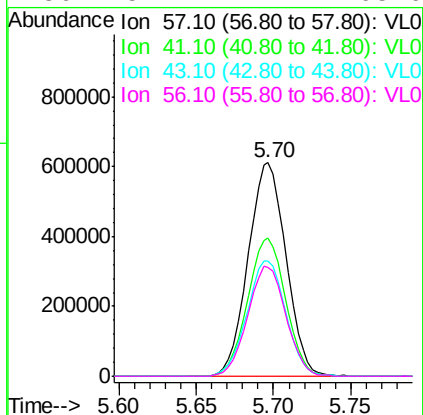
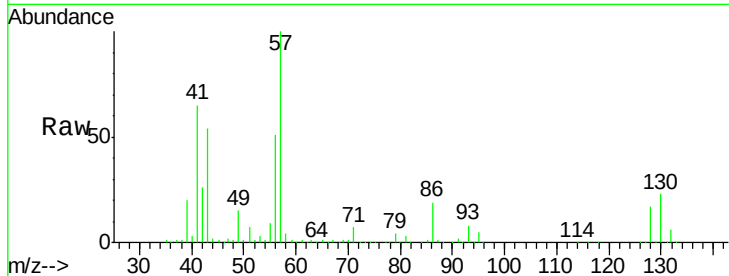
#26
Hexane
Concen: 7.864 ppbv
RT: 5.70 min Scan# 906
Delta R.T. 0.00 min
Lab File: VL035463.D
Acq: 19 Aug 2020 10:23

Instrument :
MSVOA_L
ClientSampled :
AADUP

Tot Ion: 57 Resp: 1042429
Ion Ratio Lower Upper
57 100
41 65.3 75.5 113.3#
43 55.5 181.7 272.5#
56 52.2 42.4 63.6

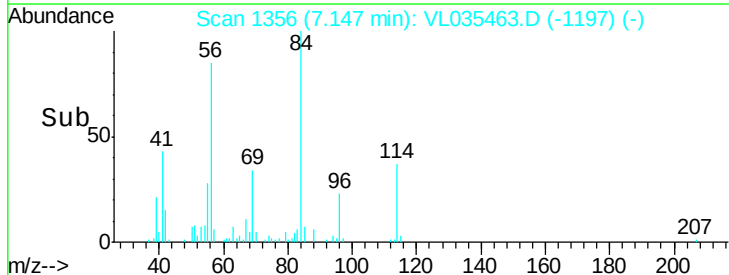
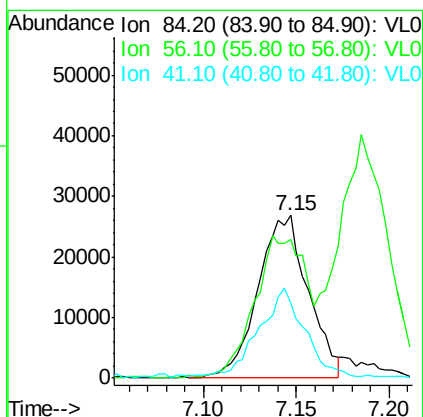
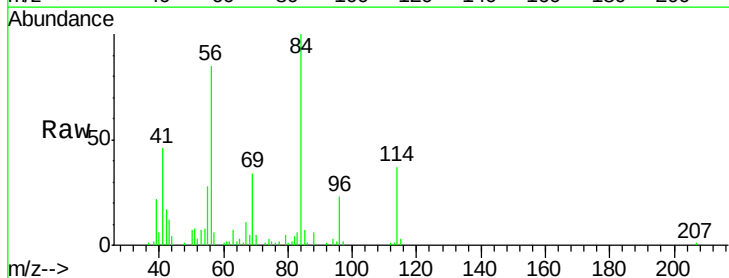
Manual Integrations
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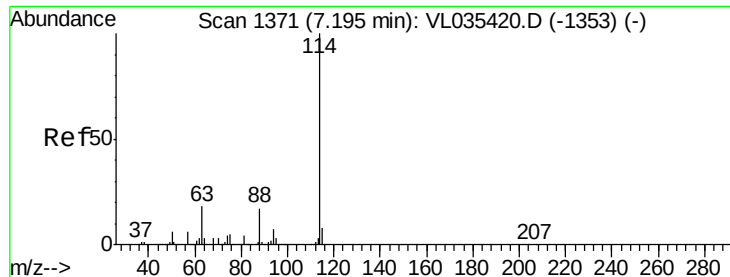
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#30
Cyclohexane
Concen: 0.345 ppbv
RT: 7.15 min Scan# 1356
Delta R.T. 0.01 min
Lab File: VL035463.D
Acq: 19 Aug 2020 10:23

Tgt Ion: 84 Resp: 50732
Ion Ratio Lower Upper
84 100
56 100.1 114.9 172.3#
41 49.4 72.3 108.5#





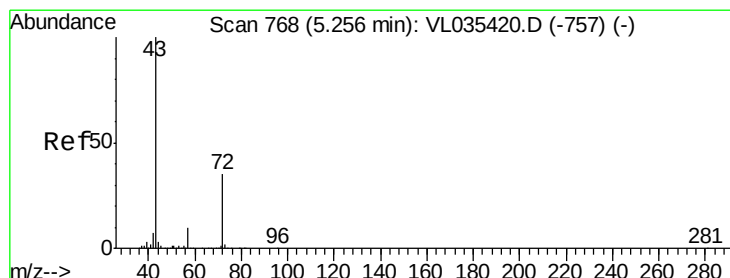
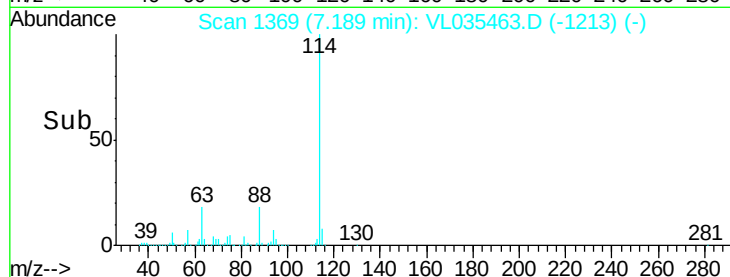
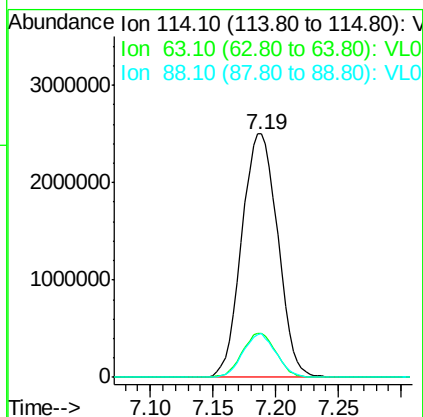
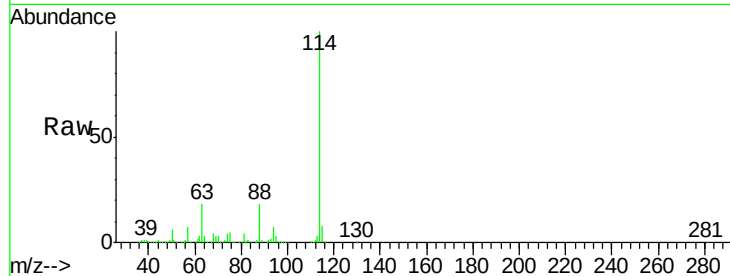
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.19 min Scan# 1369
 Delta R.T. 0.00 min
 Lab File: VL035463.D
 Acq: 19 Aug 2020 10:23

Instrument :
 MSVOA_L
 ClientSampleId :
 AADUP

Tot Ion	Ratio	Lower	Upper
114	100		
63	17.2	23.1	34.7#
88	16.5	15.9	23.9

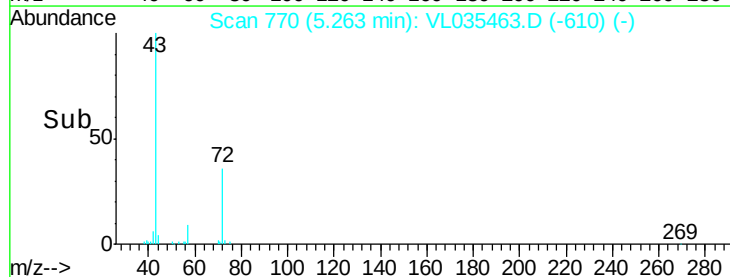
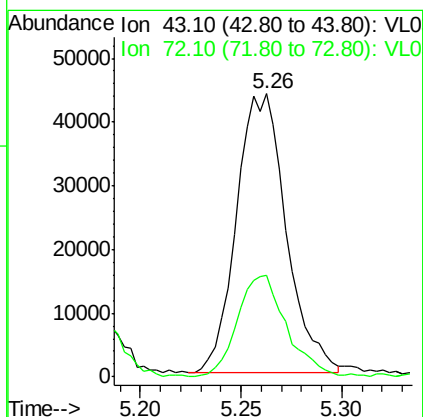
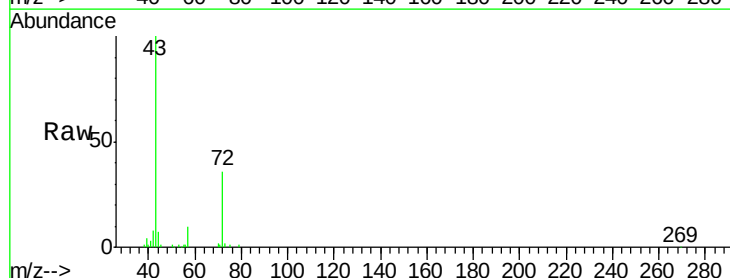
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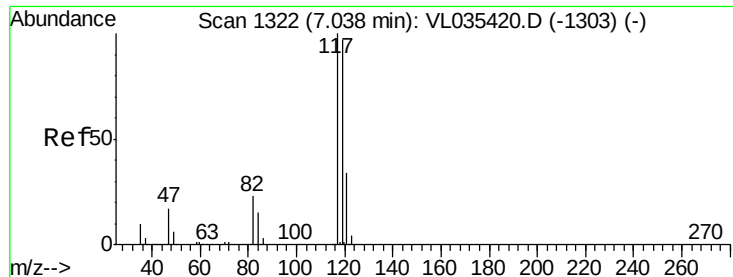
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#34
 2-Butanone
 Concen: 0.455 ppbv
 RT: 5.26 min Scan# 770
 Delta R.T. 0.01 min
 Lab File: VL035463.D
 Acq: 19 Aug 2020 10:23

Tgt Ion	Ratio	Lower	Upper
43	100		
72	36.5	17.6	26.4#





#35

Carbon Tetrachloride

Concen: 0.064 ppbv

RT: 7.03 min Scan# 1319

Delta R.T. 0.00 min

Lab File: VL035463.D

Acq: 19 Aug 2020 10:23

Instrument :

MSVOA_L

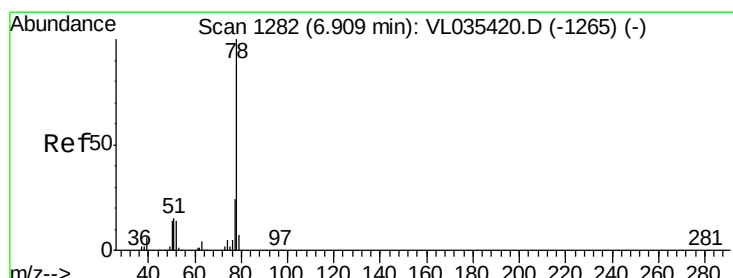
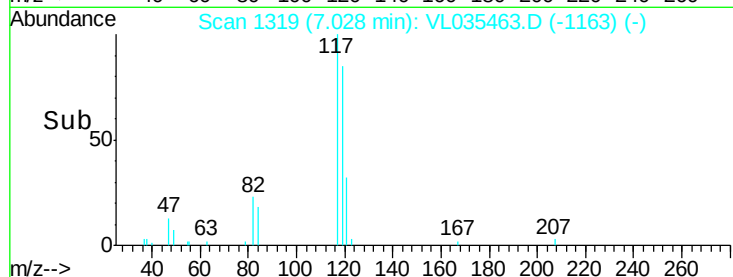
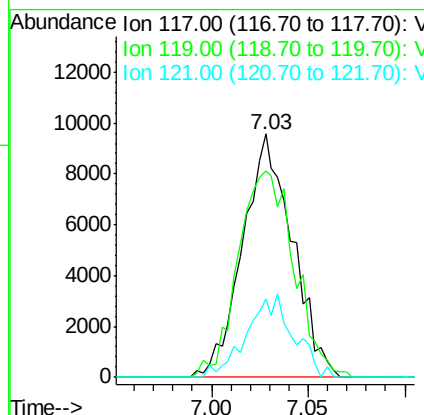
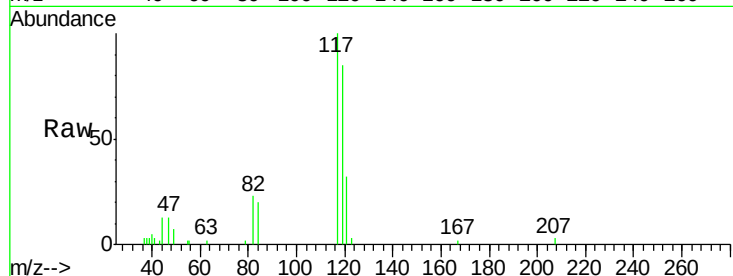
ClientSampleId :

AADUP

Tot Ion:	117	Resp:	17028
Ion	Ratio	Lower	Upper
117	100		
119	84.9	76.1	114.1
121	32.2	25.5	38.3

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#36

Benzene

Concen: 0.147 ppbv

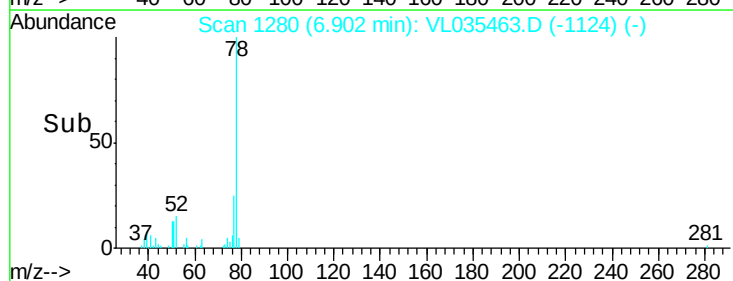
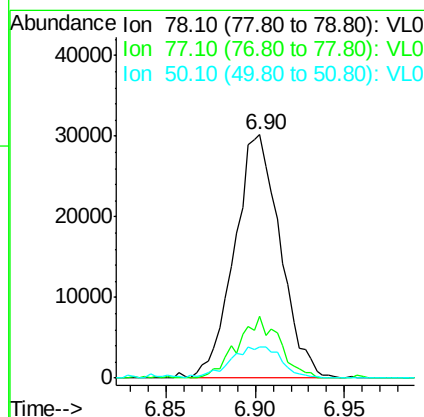
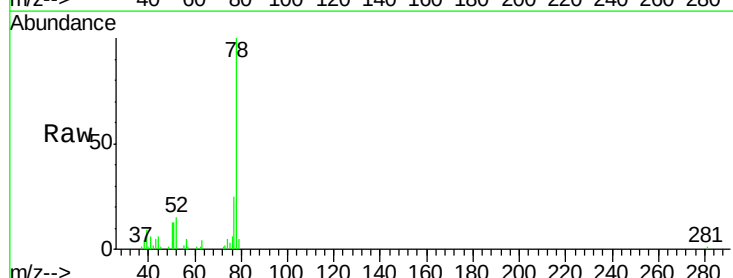
RT: 6.90 min Scan# 1280

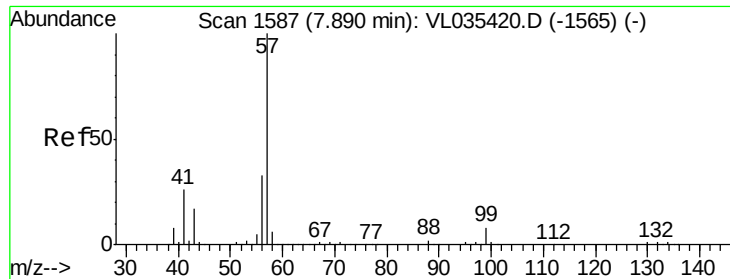
Delta R.T. 0.00 min

Lab File: VL035463.D

Acq: 19 Aug 2020 10:23

Tgt Ion:	78	Resp:	54020
Ion	Ratio	Lower	Upper
78	100		
77	25.3	19.6	29.4
50	12.9	16.3	24.5#





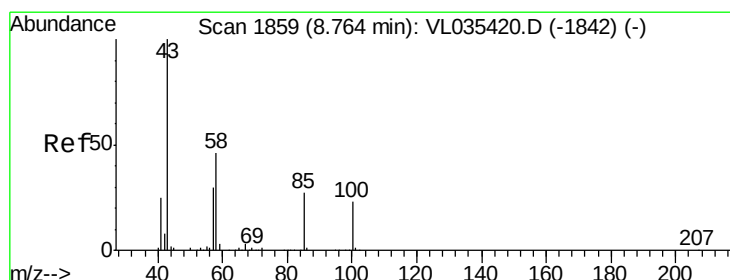
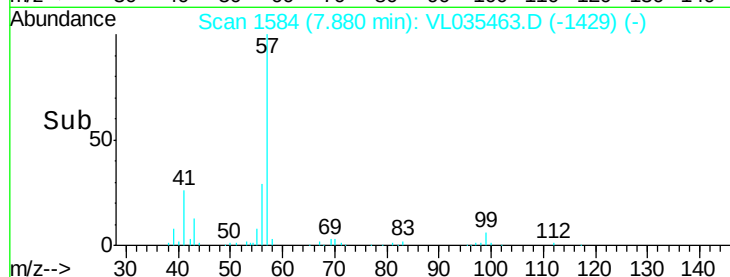
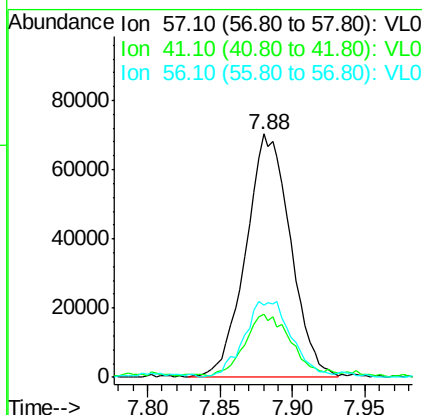
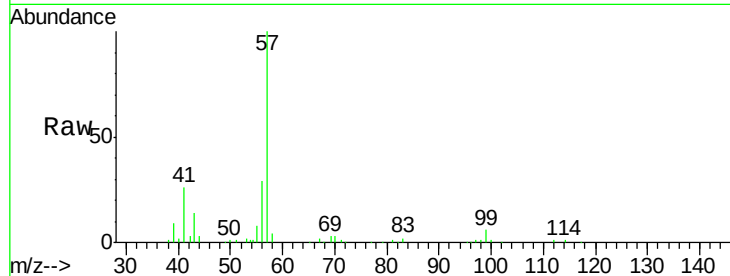
#44
 2,2,4-Trimethylpentane
 Concen: 0.313 ppbv
 RT: 7.88 min Scan# 1584
 Delta R.T. -0.00 min
 Lab File: VL035463.D
 Acq: 19 Aug 2020 10:23

Instrument :
 MSVOA_L
 ClientSampleId :
 AADUP

Tot Ion	Ratio	Lower	Upper
57	100		
41	28.4	27.2	40.8
56	33.5	25.4	38.0

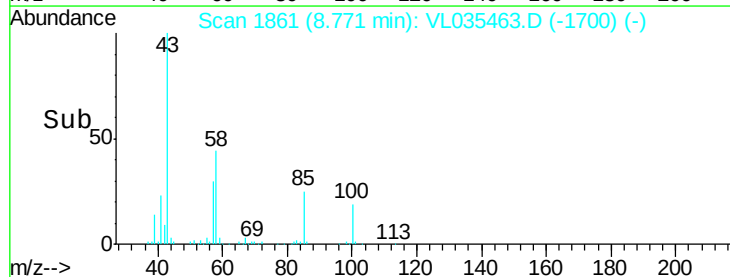
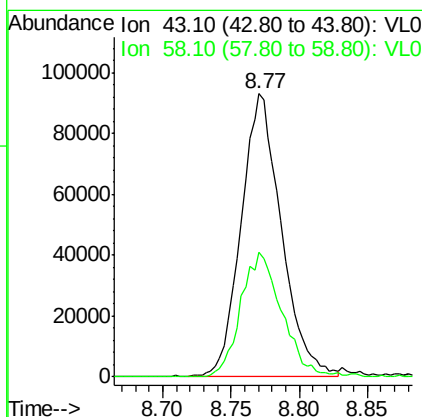
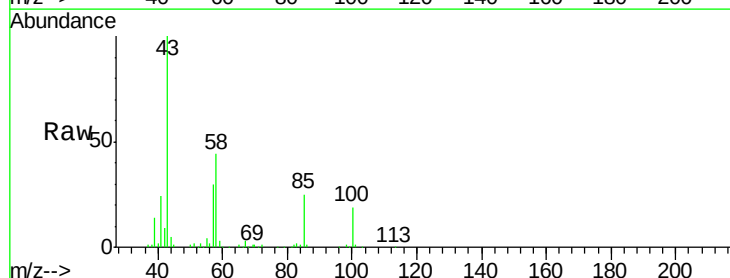
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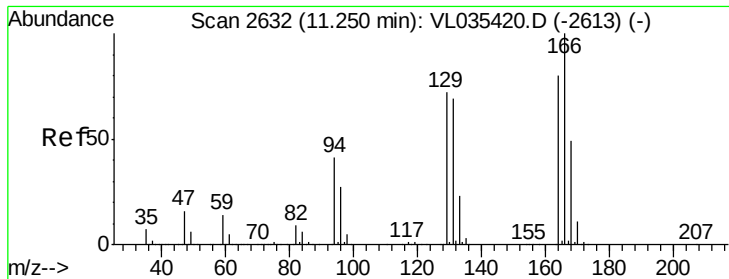
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#50
 4-Methyl-2-Pentanone
 Concen: 0.792 ppbv
 RT: 8.77 min Scan# 1861
 Delta R.T. 0.02 min
 Lab File: VL035463.D
 Acq: 19 Aug 2020 10:23

Tgt Ion	Ratio	Lower	Upper
43	100		
58	45.8	28.7	43.1#





#52

Tetrachloroethene

Concen: 0.059 ppbv m

RT: 11.24 min Scan# 2629

Delta R.T. -0.00 min

Lab File: VL035463.D

Acq: 19 Aug 2020 10:23

Instrument :

MSVOA_L

ClientSampleId :

AADUP

Tot Ion:164 Resp: 13198

Ion Ratio Lower Upper

164 100

166 117.2 103.4 155.0

129 75.6 90.2 135.4#

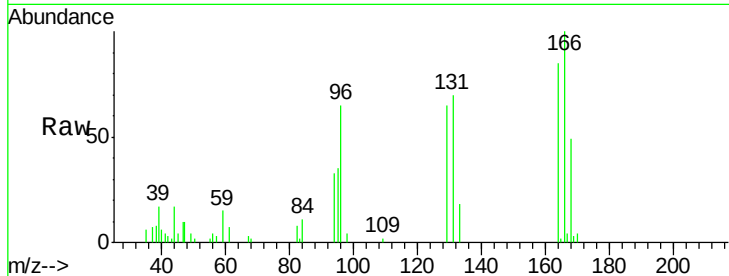
131 82.6 91.7 137.5#

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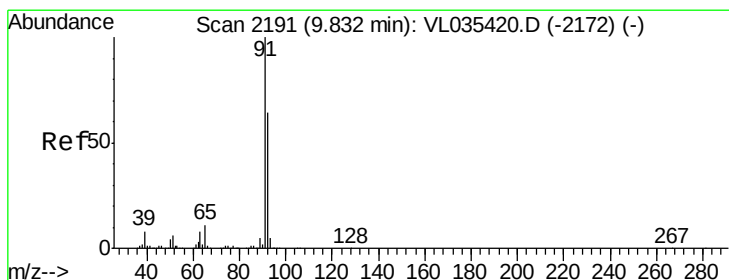
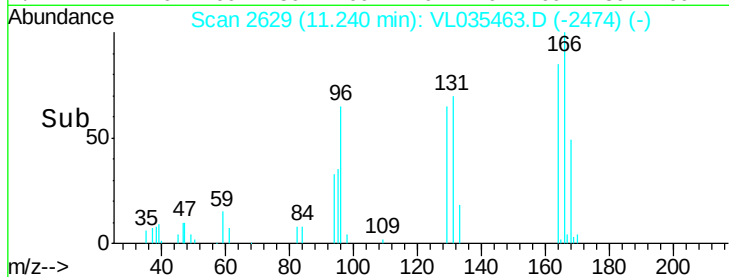
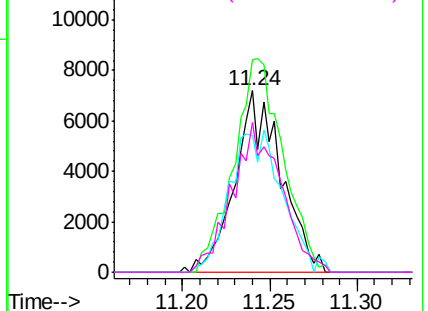


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 0.896 ppbv

RT: 9.82 min Scan# 2188

Delta R.T. 0.00 min

Lab File: VL035463.D

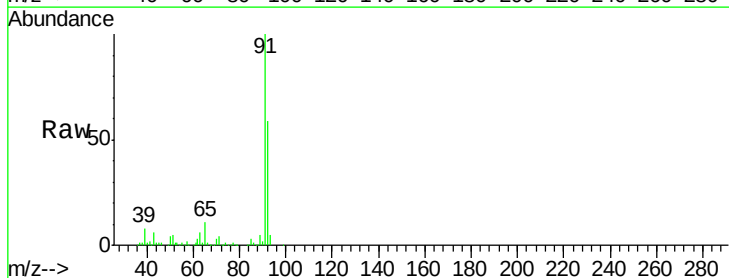
Acq: 19 Aug 2020 10:23

Tgt Ion: 91 Resp: 423643

Ion Ratio Lower Upper

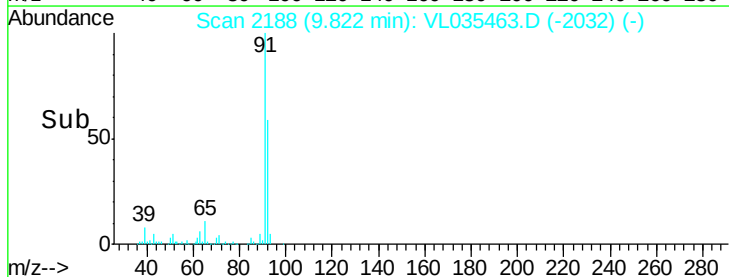
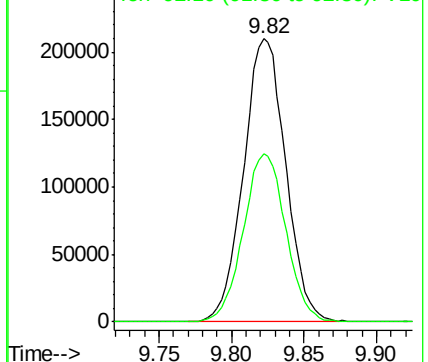
91 100

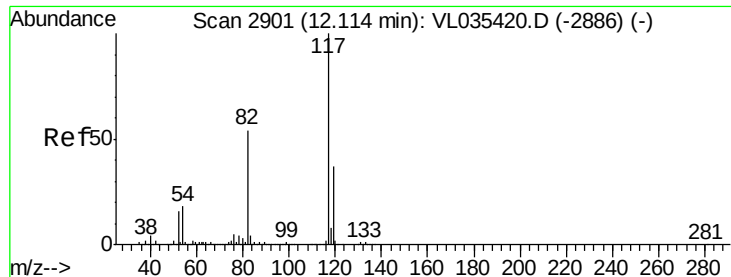
92 60.1 49.1 73.7



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





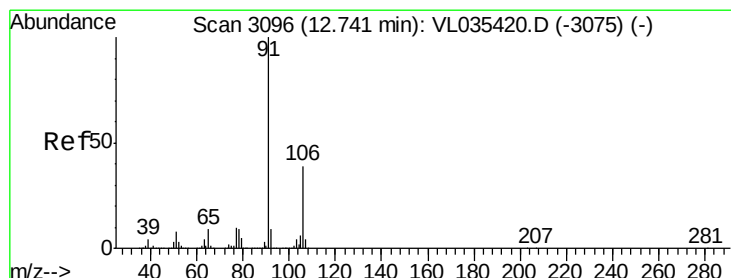
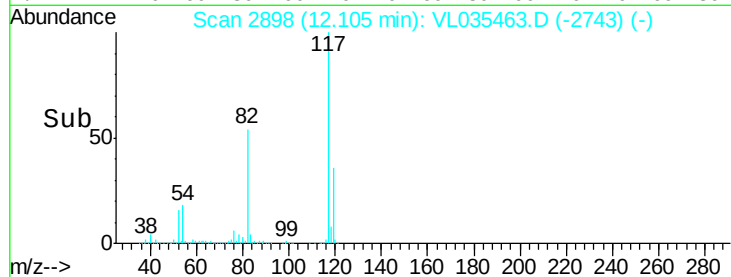
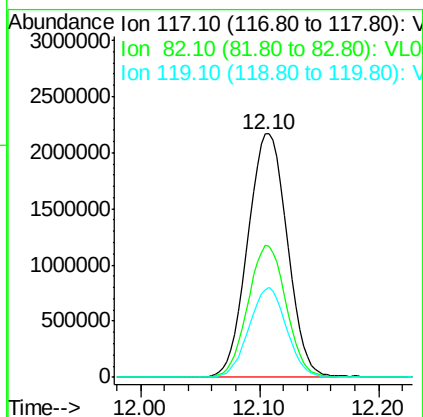
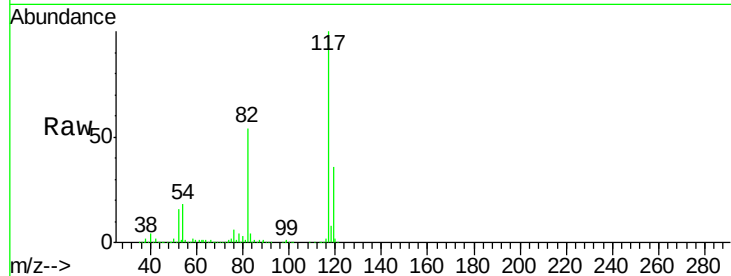
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.10 min Scan# 2898
Delta R.T. -0.00 min
Lab File: VL035463.D
Acq: 19 Aug 2020 10:23

Instrument :
MSVOA_L
ClientSampled :
AADUP

Tot Ion	Ratio	Lower	Upper
117	100		
82	52.9	57.4	86.0#
119	35.1	28.4	42.6

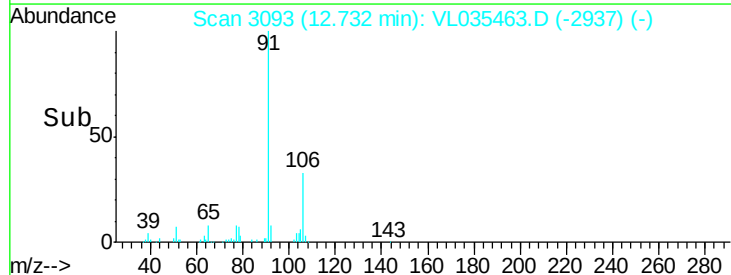
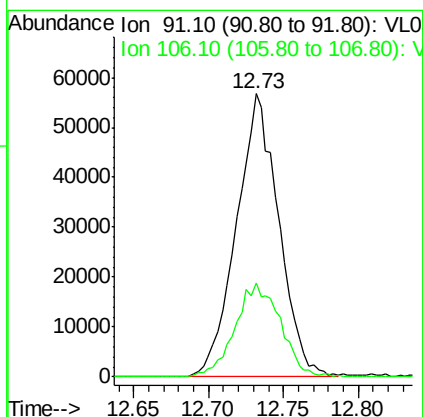
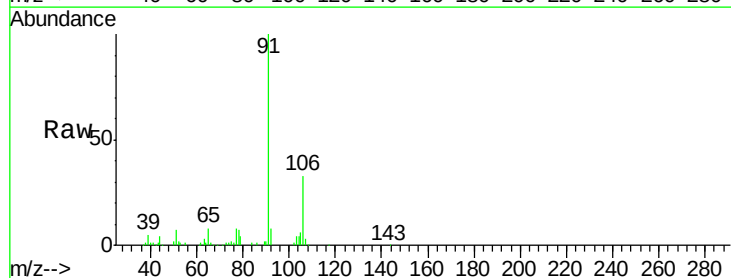
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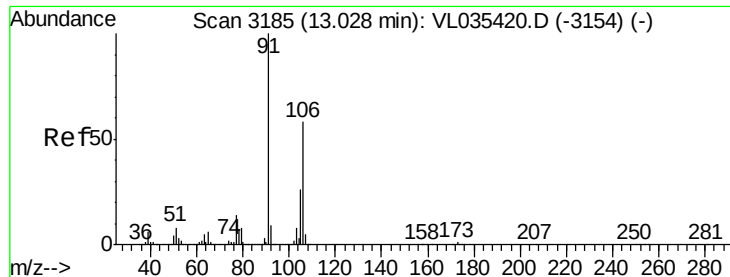
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#58
Ethyl Benzene
Concen: 0.184 ppbv
RT: 12.73 min Scan# 3093
Delta R.T. 0.00 min
Lab File: VL035463.D
Acq: 19 Aug 2020 10:23

Tgt Ion	Ratio	Lower	Upper
91	100		
106	33.2	24.1	36.1





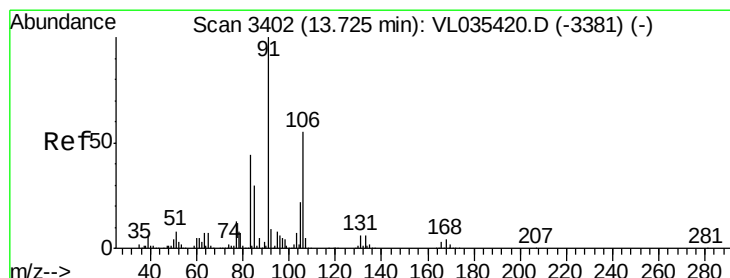
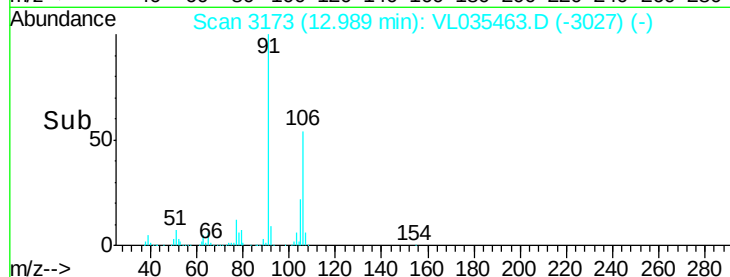
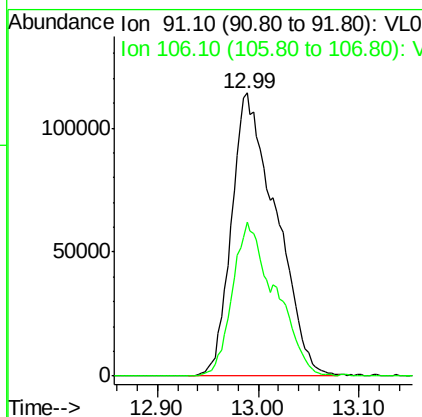
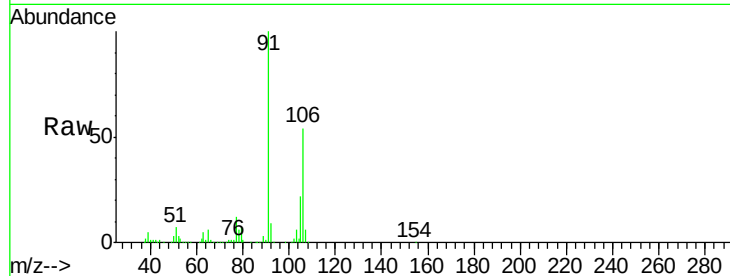
#59
m/p-Xylene
Concen: 0.688 ppbv
RT: 12.99 min Scan# 3173
Delta R.T. -0.03 min
Lab File: VL035463.D
Acq: 19 Aug 2020 10:23

Instrument :
MSVOA_L
ClientSampled :
AADUP

Tot Ion: 91 Resp: 350362
Ion Ratio Lower Upper
91 100
106 52.5 34.0 51.0#

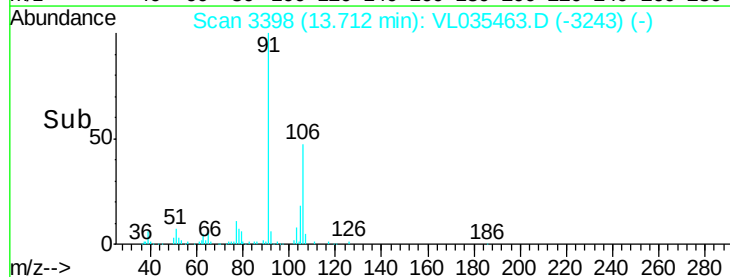
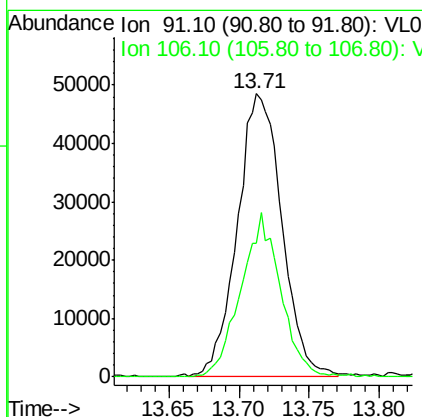
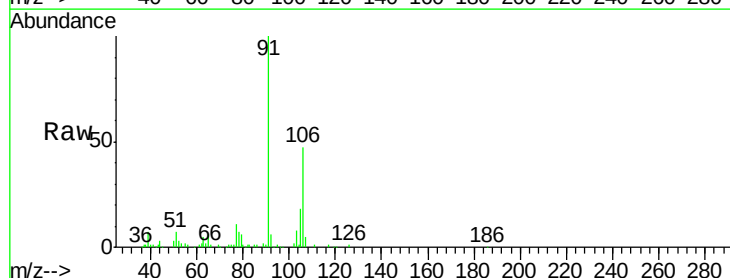
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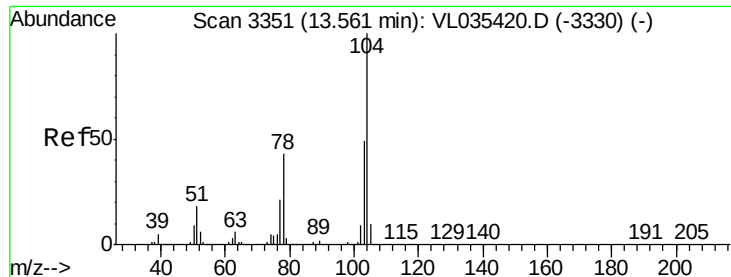
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#60
o-Xylene
Concen: 0.215 ppbv
RT: 13.71 min Scan# 3398
Delta R.T. -0.00 min
Lab File: VL035463.D
Acq: 19 Aug 2020 10:23

Tgt Ion: 91 Resp: 106181
Ion Ratio Lower Upper
91 100
106 52.2 21.8 65.3





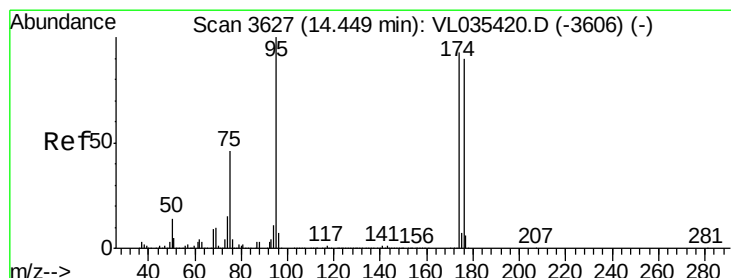
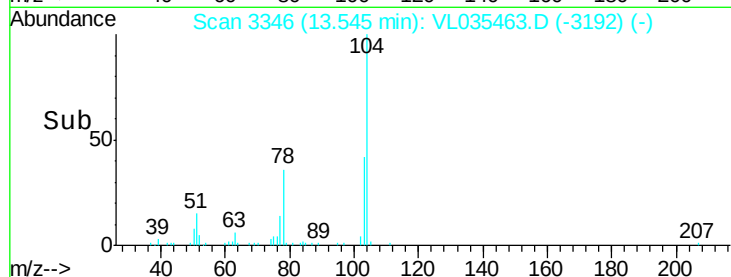
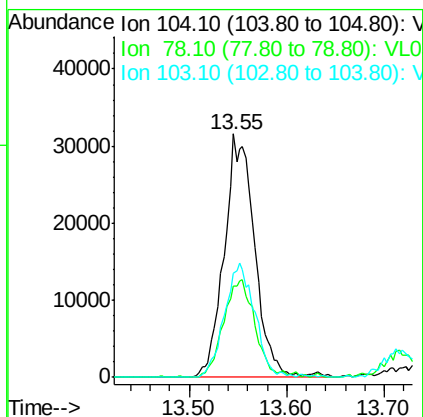
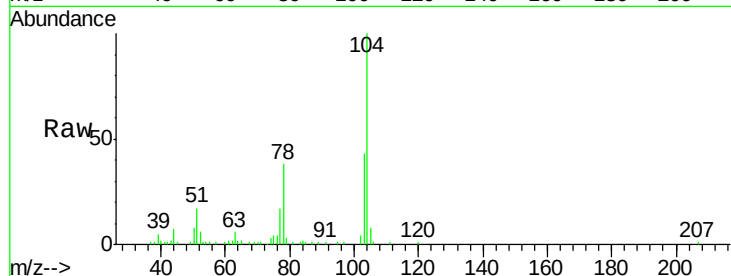
#61
Stvrene
Concen: 0.171 ppbv m
RT: 13.55 min Scan# 3346
Delta R.T. -0.01 min
Lab File: VL035463.D
Acq: 19 Aug 2020 10:23

Instrument :
MSVOA_L
ClientSampleId :
AADUP

Tot Ion	Ratio	Lower	Upper
104	100		
78	0.0	45.4	68.2#
103	0.0	37.8	56.8#

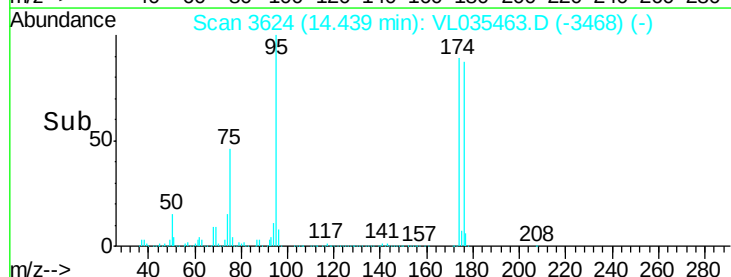
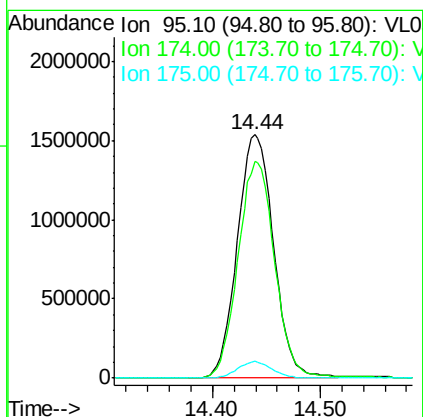
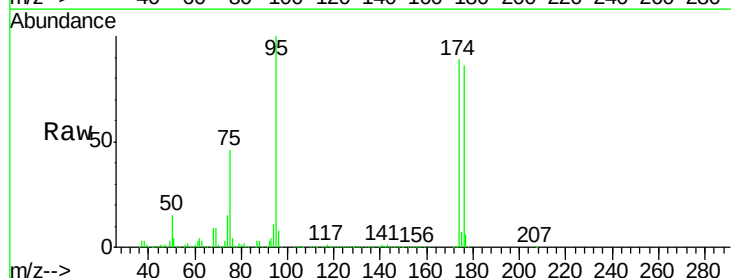
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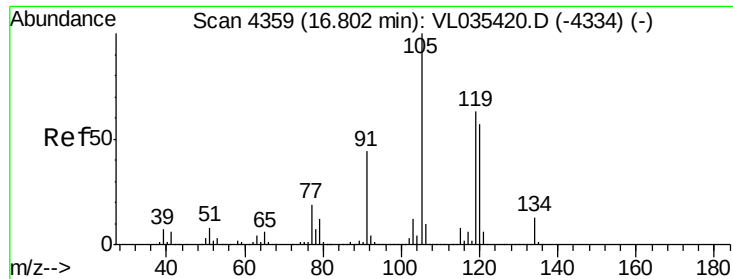
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.345 ppbv
RT: 14.44 min Scan# 3624
Delta R.T. 0.00 min
Lab File: VL035463.D
Acq: 19 Aug 2020 10:23

Tgt Ion	Ratio	Lower	Upper
95	100		
174	90.5	44.0	66.0#
175	6.6	3.2	4.8#





#74
 1,2,4-Trimethylbenzene
 Concen: 0.121 ppbv
 RT: 16.79 min Scan# 4355
 Delta R.T. -0.00 min
 Lab File: VL035463.D
 Acq: 19 Aug 2020 10:23

Instrument :
 MSVOA_L
 ClientSampleId :
 AADUP

Tot Ion:	105	Resp:	79419
Ion Ratio	Lower	Upper	
105	100		
120	49.3	37.8	56.8
91	11.8	40.0	60.0#
77	9.8	18.8	28.2#

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