

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL092320\
 Data File : VL035717.D
 Acq On : 23 Sep 2020 13:45
 Operator : SY/AP
 Sample : L4079-02
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 B-2

Manual Integrations
 APPROVED

MMDadoda
 9/24/2020 1:35:36 PM

Quant Time: Sep 24 11:34:44 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL092320AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Sep 23 2020
 QLast Update : Wed Sep 23 07:38:05 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.68	49	1134794	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	4336181	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.11	117	4351294	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.44	95	3292448	10.10	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.05	85	55426	0.298	ppbv	90
3) Chlorodifluoromethane	2.99	51	40739m	0.334	ppbv	
4) Chloromethane	3.14	50	31944	0.487	ppbv #	86
9) Propene	3.02	41	63254m	1.427	ppbv	
10) Heptane	8.14	43	182687	1.478	ppbv #	19
11) Trichlorofluoromethane	3.95	101	66015	0.248	ppbv	91
13) Ethanol	3.61	45	128593	11.764	ppbv	100
15) Acetone	3.85	43	1353203	11.082	ppbv	89
19) Isopropyl Alcohol	3.97	45	173013	2.605	ppbv #	89
20) Methylene Chloride	4.35	84	226584	2.526	ppbv	95
26) Hexane	5.70	57	446019	3.704	ppbv #	50
30) Cyclohexane	7.15	84	99313	0.836	ppbv	98
34) 2-Butanone	5.26	43	71793	0.501	ppbv	98
35) Carbon Tetrachloride	7.03	117	13905m	0.062	ppbv	
36) Benzene	6.90	78	58196	0.206	ppbv #	90
44) 2,2,4-Trimethylpentane	7.89	57	4413208	10.885	ppbv	96
52) Tetrachloroethene	11.25	164	40430	0.298	ppbv	95
53) Toluene	9.83	91	341811	1.026	ppbv	98
58) Ethyl Benzene	12.74	91	193687	0.443	ppbv	92
59) m/p-Xylene	12.99	91	182650m	0.479	ppbv	
60) o-Xylene	13.72	91	50278	0.130	ppbv	100
62) Isopropylbenzene	14.70	105	146256	0.244	ppbv	93
64) n-propylbenzene	15.59	120	119767	0.684	ppbv	69
70) n-Butylbenzene	18.58	91	62892	0.100	ppbv #	75
74) 1,2,4-Trimethylbenzene	16.79	105	106609	0.219	ppbv #	74
79) Naphthalene	22.25	128	584841	1.259	ppbv	96

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

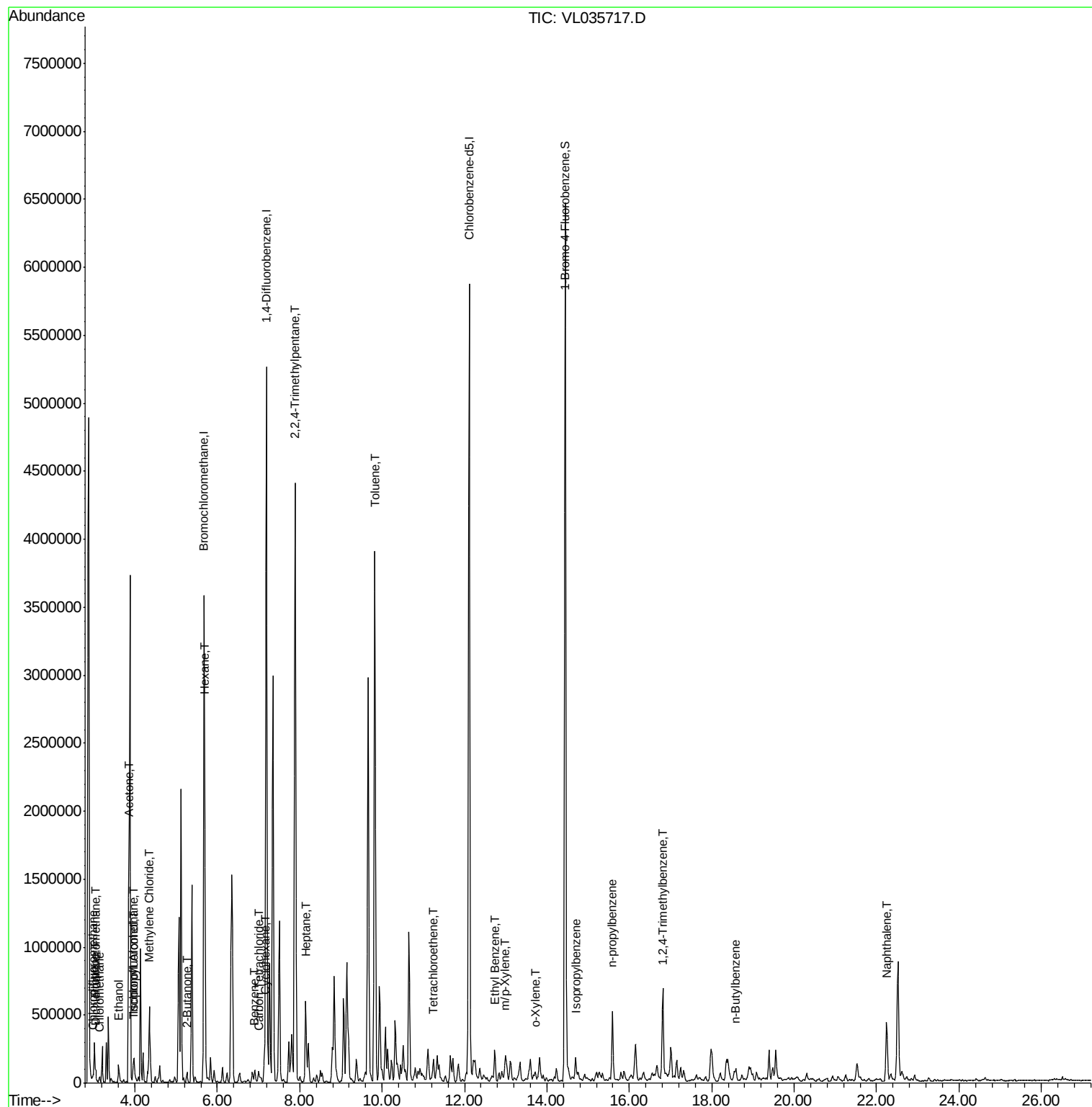
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL092320\
Data File : VL035717.D
Acq On : 23 Sep 2020 13:45
Operator : SY/AP
Sample : L4079-02
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

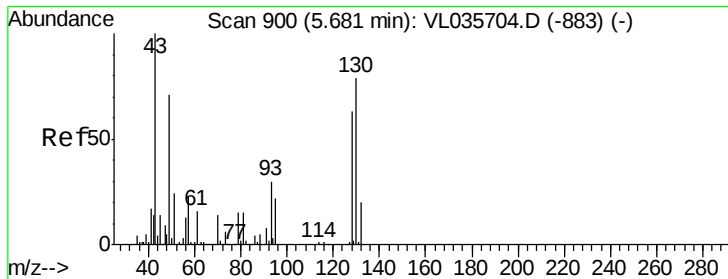
Instrument :
MSVOA_L
ClientSampleId :
B-2

Manual Integrations
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Quant Time: Sep 24 11:34:44 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL092320AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Sep
QLast Update : Wed Sep 23 07:38:05 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.68 min Scan# 899

Delta R.T. -0.00 min

Lab File: VL035717.D

Acq: 23 Sep 2020 13:45

Instrument :

MSVOA_L

ClientSampleId :

B-2

Tot Ion: 49 Resp: 1134794

Ion Ratio Lower Upper

49 100

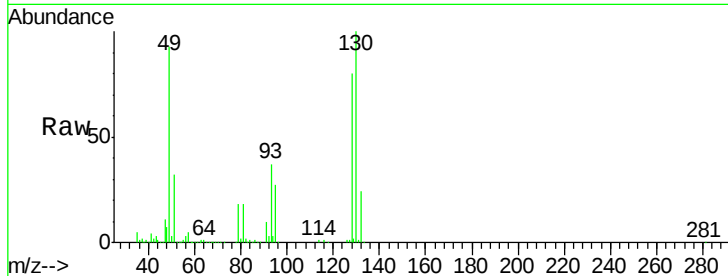
128 84.2 43.1 129.4

130 107.3 54.9 164.7

Manual Integrations
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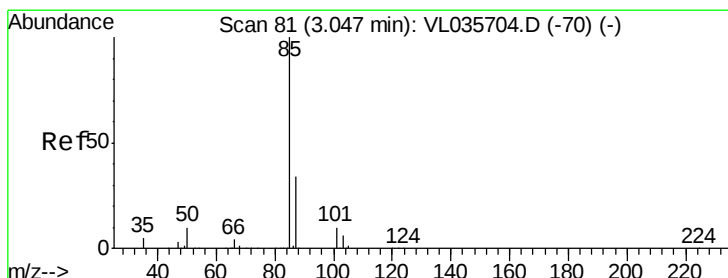
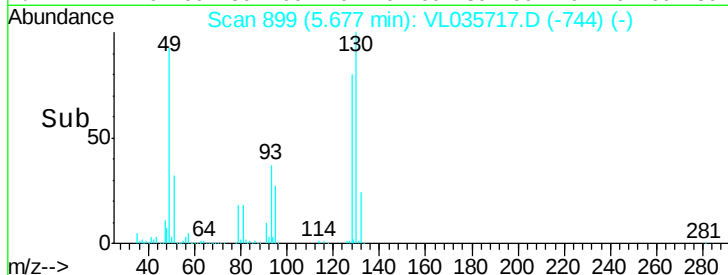
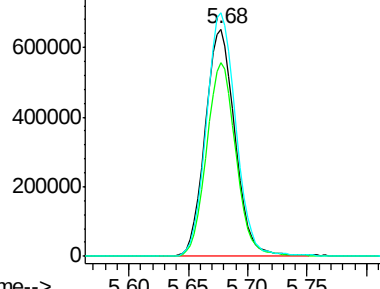
9/24/2020 1:35:36 PM



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: 0.298 ppbv

RT: 3.05 min Scan# 81

Delta R.T. 0.00 min

Lab File: VL035717.D

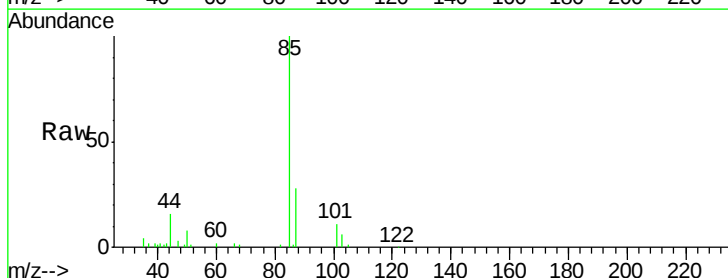
Acq: 23 Sep 2020 13:45

Tgt Ion: 85 Resp: 55426

Ion Ratio Lower Upper

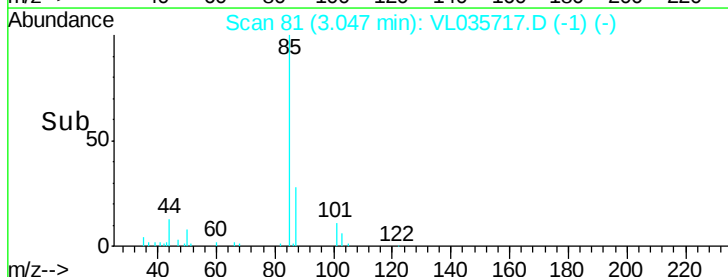
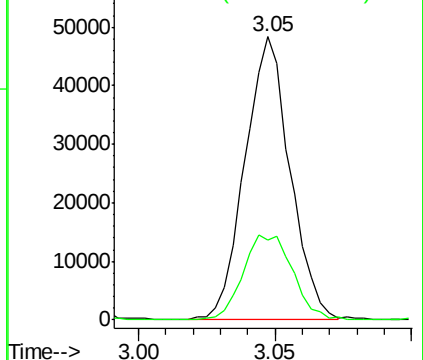
85 100

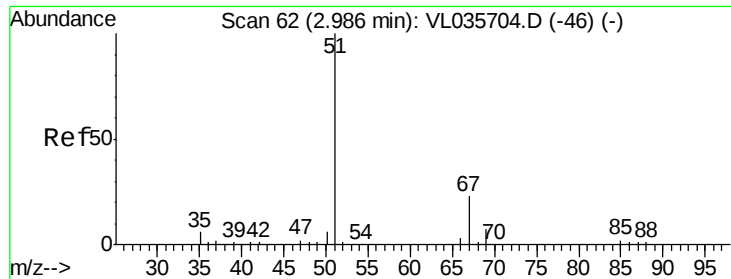
87 28.2 27.3 40.9



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

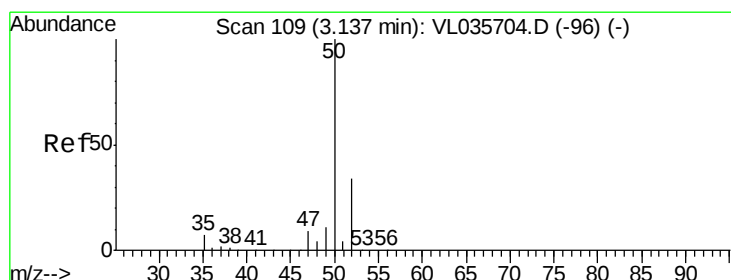
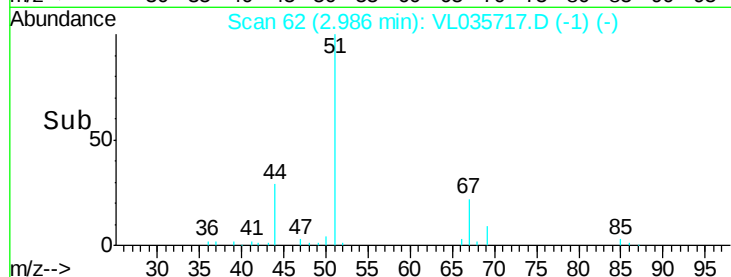
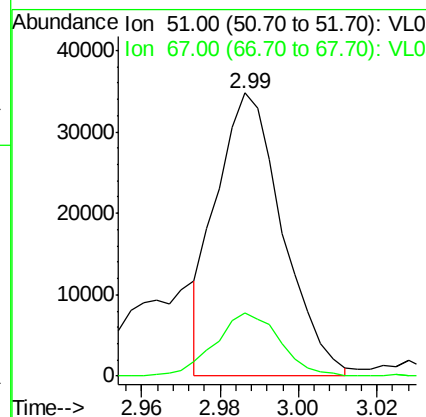
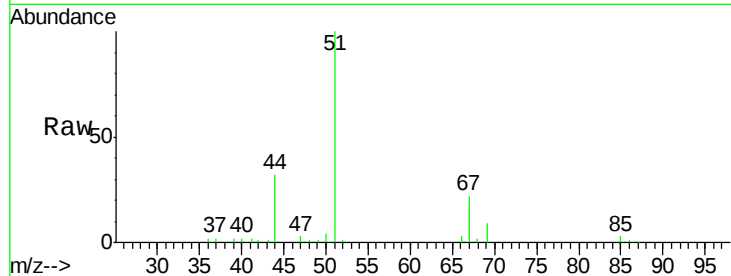
Chlorodifluoromethane
Concen: 0.334 ppbv
RT: 2.99 min Scan# 62
Delta R.T. 0.00 min
Lab File: VL035717.D
Acq: 23 Sep 2020 13:45

Instrument :
MSVOA_L
ClientSampled :
B-2

Tot Ion	51	Resp	40739
Ion Ratio	100	Lower	Upper
67	1.1	17.8	26.8#

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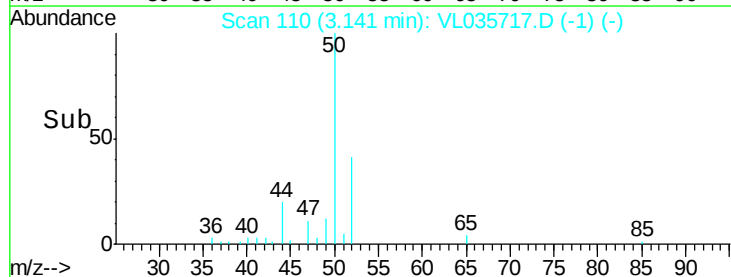
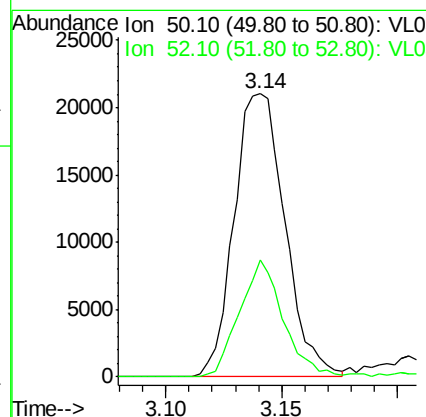
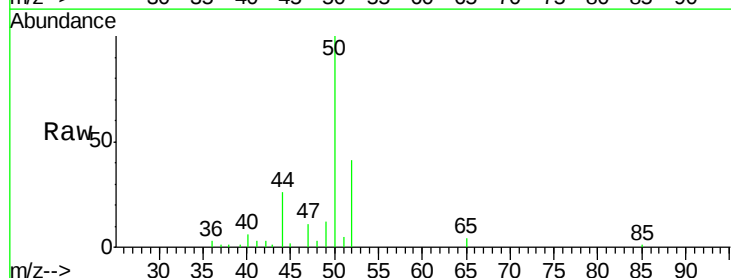
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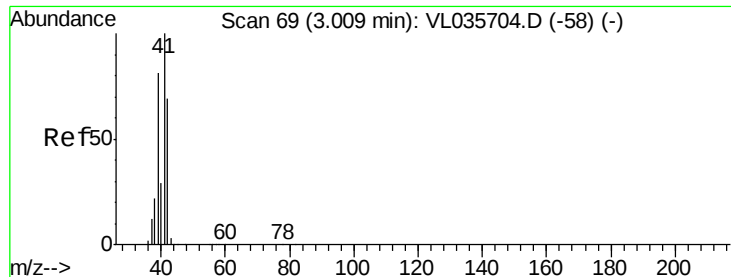


#4

Chloromethane
Concen: 0.487 ppbv
RT: 3.14 min Scan# 110
Delta R.T. 0.00 min
Lab File: VL035717.D
Acq: 23 Sep 2020 13:45

Tgt Ion	50	Resp	31944
Ion Ratio	100	Lower	Upper
52	41.3	26.8	40.2#





#9

Propene

Concen: 1.427 ppbv m

RT: 3.02 min Scan# 72

Delta R.T. 0.01 min

Lab File: VL035717.D

Acq: 23 Sep 2020 13:45

Instrument :

MSVOA_L

ClientSampled :

B-2

Tot Ion: 41 Resp: 63254

Ion Ratio Lower Upper

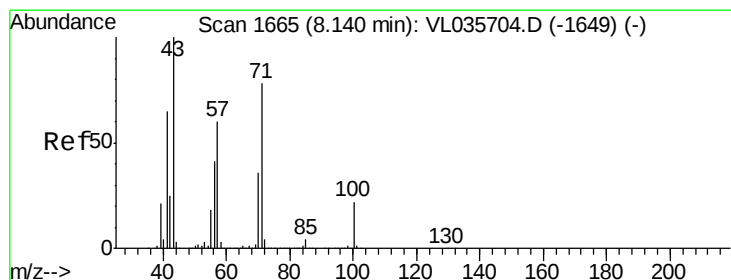
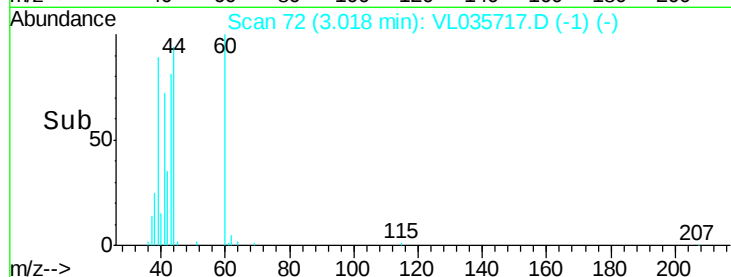
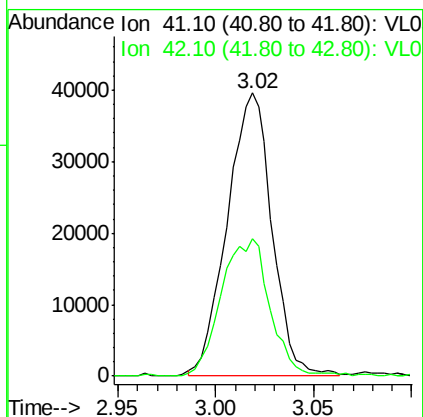
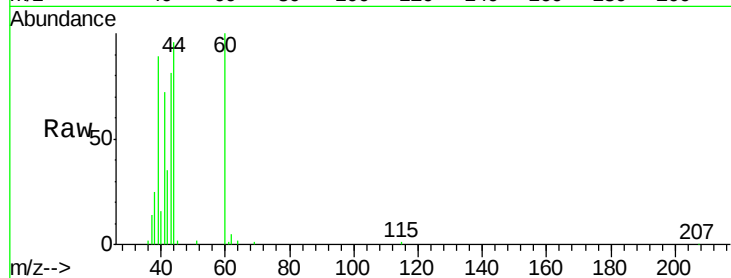
41 100

42 67.3 56.2 84.4

Manual Integrations
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#10

Heptane

Concen: 1.478 ppbv

RT: 8.14 min Scan# 1666

Delta R.T. 0.00 min

Lab File: VL035717.D

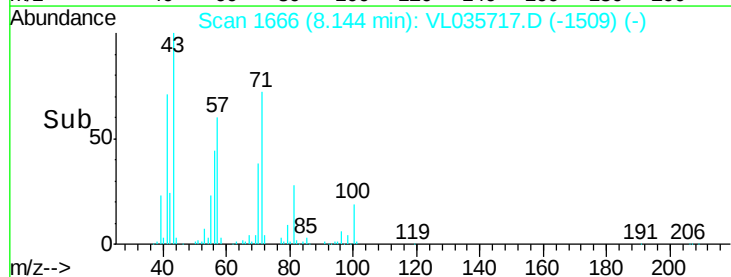
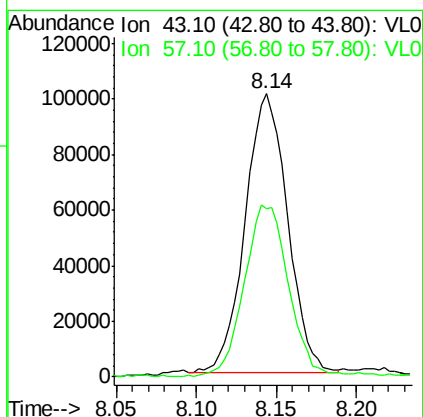
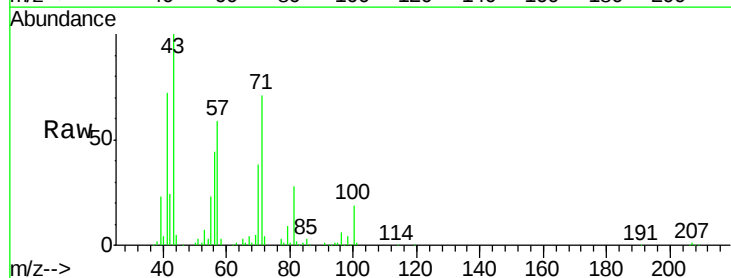
Acq: 23 Sep 2020 13:45

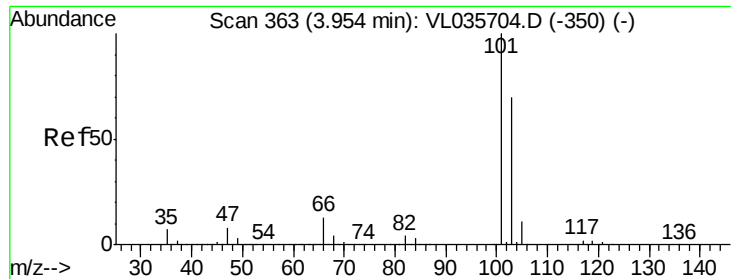
Tgt Ion: 43 Resp: 182687

Ion Ratio Lower Upper

43 100

57 0.0 50.4 75.6#





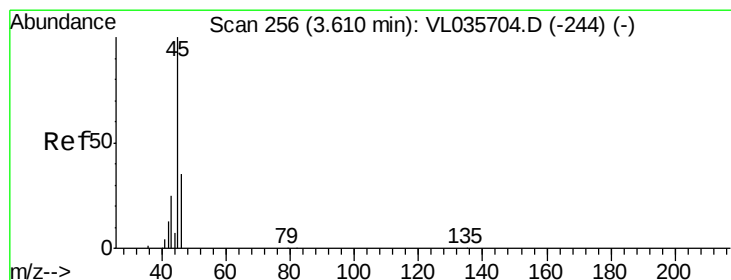
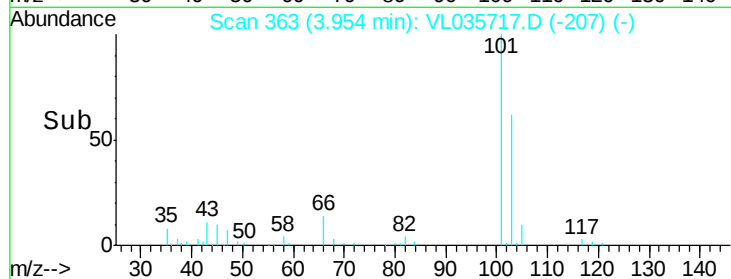
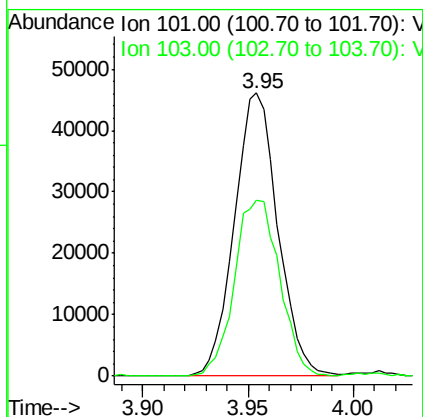
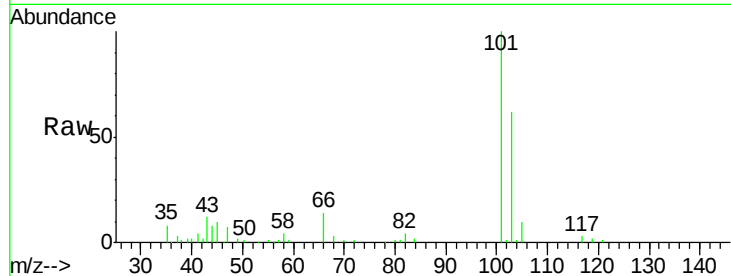
#11
 Trichlorofluoromethane
 Concen: 0.248 ppbv
 RT: 3.95 min Scan# 363
 Delta R.T. 0.00 min
 Lab File: VL035717.D
 Acq: 23 Sep 2020 13:45

Instrument :
 MSVOA_L
 ClientSampleId :
 B-2

Tot Ion:101 Resp: 66015
 Ion Ratio Lower Upper
 101 100
 103 62.2 55.6 83.4

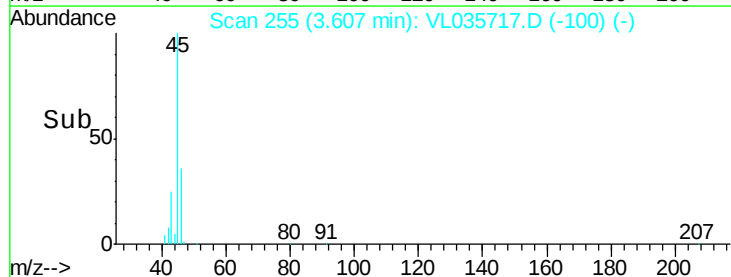
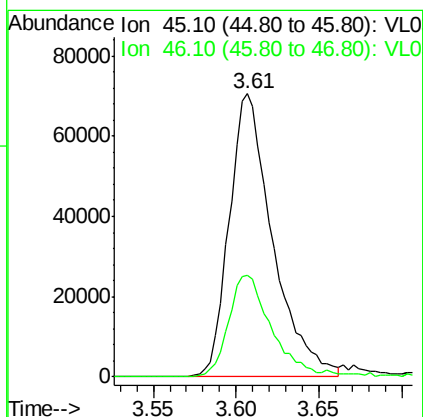
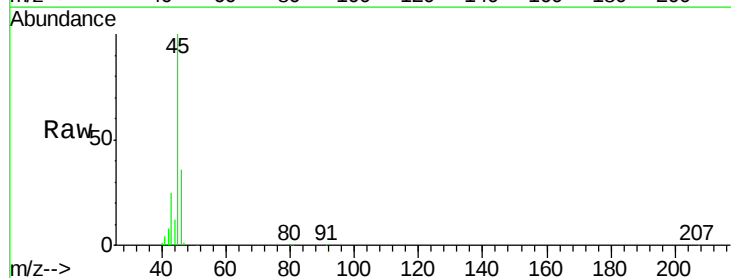
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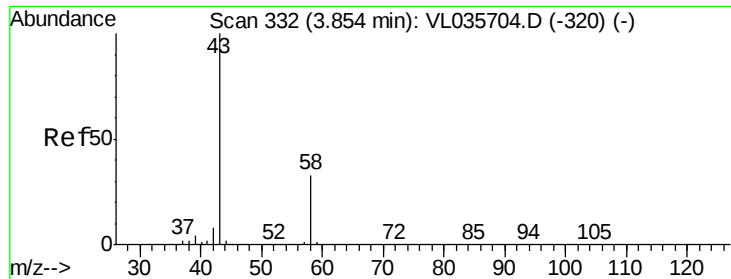
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#13
 Ethanol
 Concen: 11.764 ppbv
 RT: 3.61 min Scan# 255
 Delta R.T. -0.00 min
 Lab File: VL035717.D
 Acq: 23 Sep 2020 13:45

Tgt Ion: 45 Resp: 128593
 Ion Ratio Lower Upper
 45 100
 46 36.9 14.7 58.7





#15

Acetone

Concen: 11.082 ppbv

RT: 3.85 min Scan# 331

Delta R.T. -0.00 min

Lab File: VL035717.D

Acq: 23 Sep 2020 13:45

Instrument :

MSVOA_L

ClientSampled :

B-2

Tot Ion: 43 Resp: 1353203

Ion Ratio Lower Upper

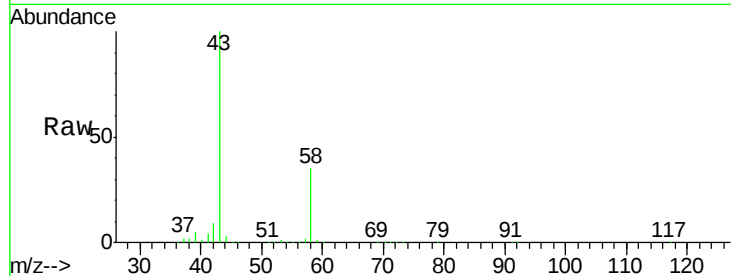
43 100

58 40.4 27.3 40.9

Manual Integrations
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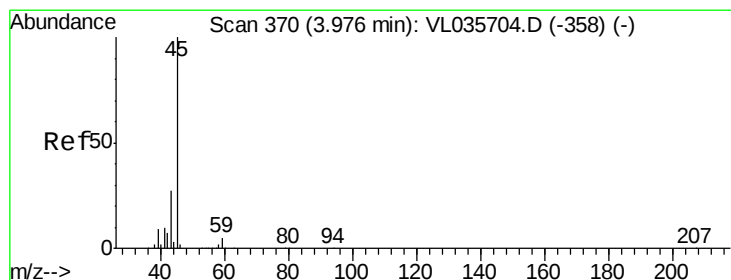
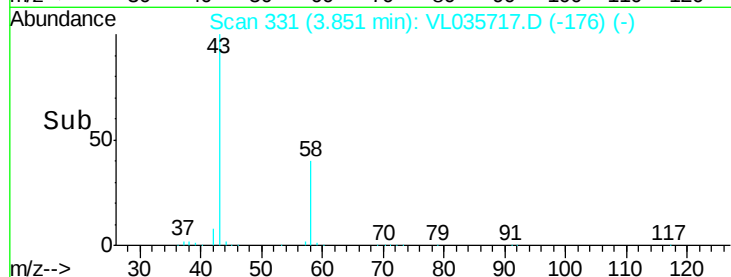
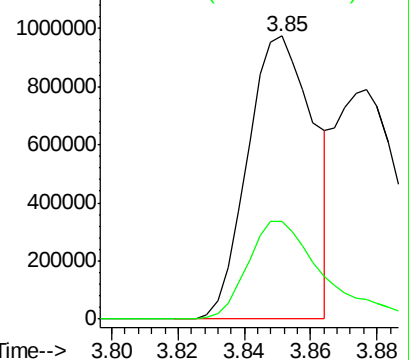
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#19

Isopropyl Alcohol

Concen: 2.605 ppbv

RT: 3.97 min Scan# 369

Delta R.T. -0.00 min

Lab File: VL035717.D

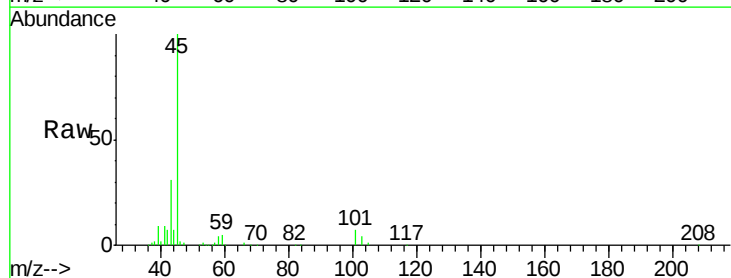
Acq: 23 Sep 2020 13:45

Tgt Ion: 45 Resp: 173013

Ion Ratio Lower Upper

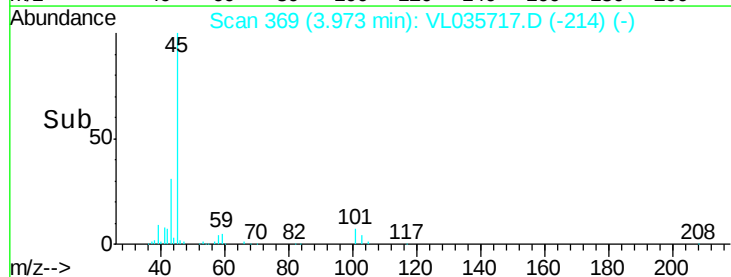
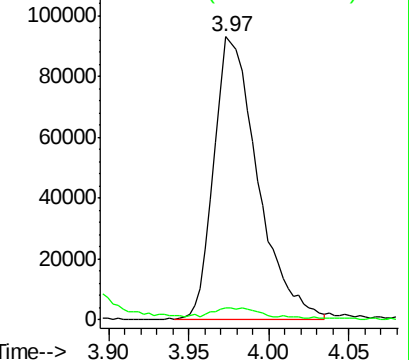
45 100

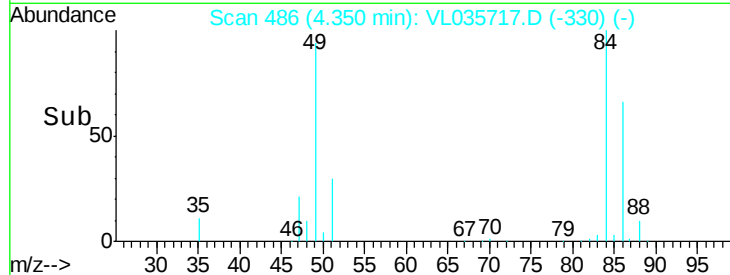
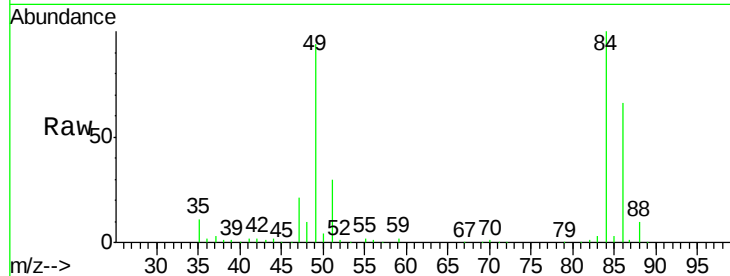
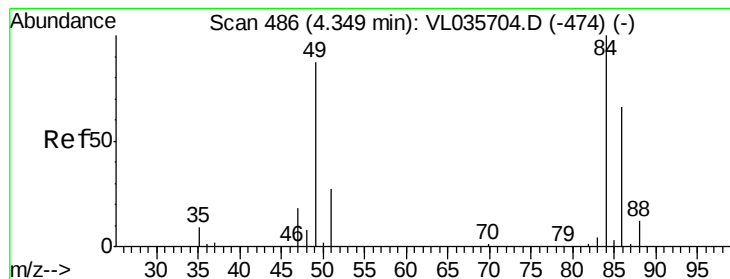
58 0.0 2.8 4.2#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





#20

Methylene Chloride

Concen: 2.526 ppbv

RT: 4.35 min Scan# 486

Delta R.T. 0.00 min

Lab File: VL035717.D

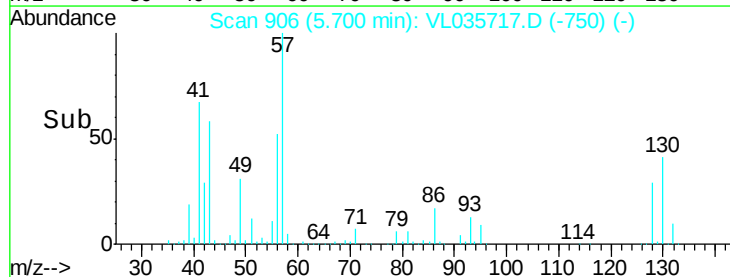
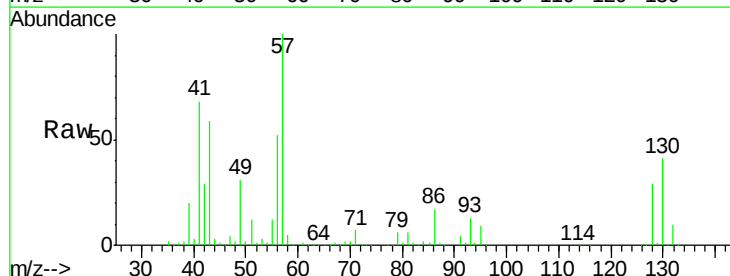
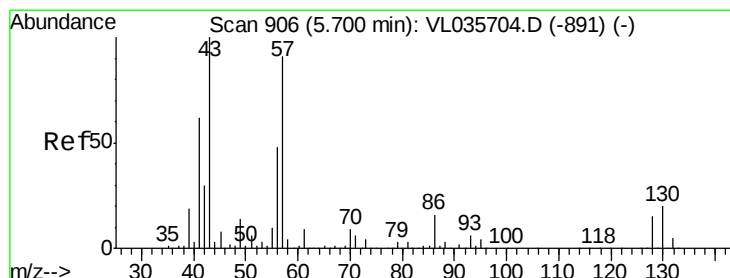
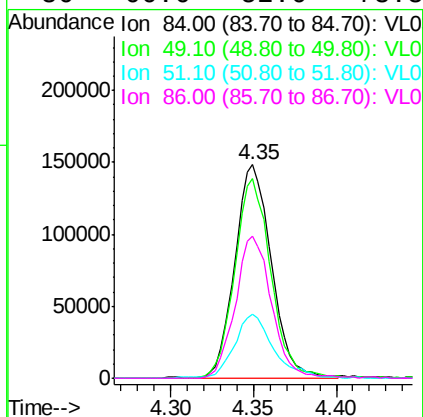
Acq: 23 Sep 2020 13:45

Tot Ion	84	Resp	226584
Ion	Ratio	Lower	Upper
84	100		
49	93.7	69.8	104.6
51	29.6	21.8	32.8
86	66.6	52.6	78.8

Instrument :
MSVOA_L
ClientSampled :
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Manual Integrations
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#26

Hexane

Concen: 3.704 ppbv

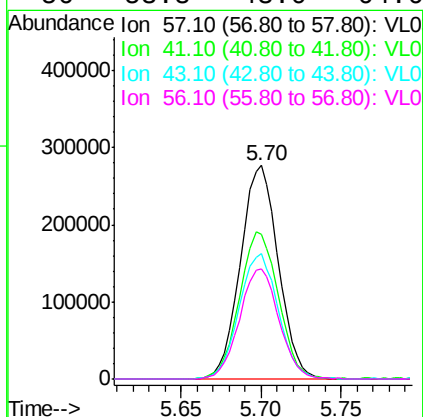
RT: 5.70 min Scan# 906

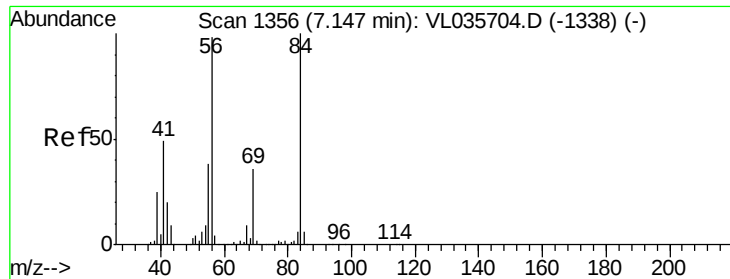
Delta R.T. 0.00 min

Lab File: VL035717.D

Acq: 23 Sep 2020 13:45

Tgt Ion	57	Resp	446019
Ion	Ratio	Lower	Upper
57	100		
41	71.1	57.9	86.9
43	60.5	143.8	215.6
56	53.8	43.0	64.6





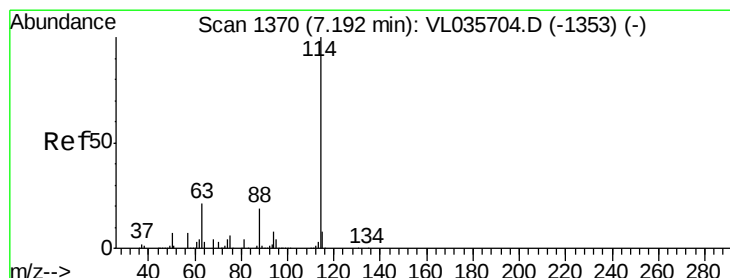
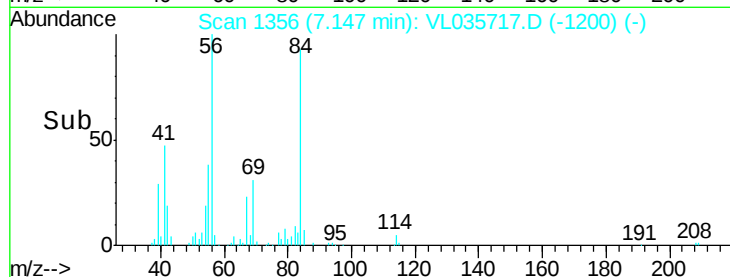
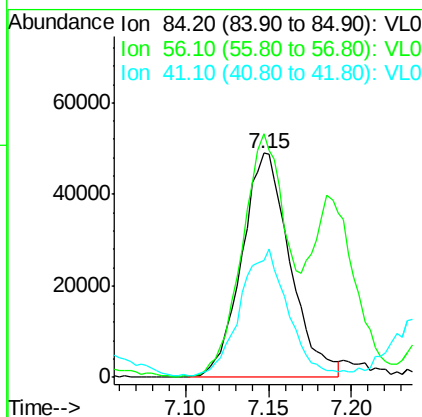
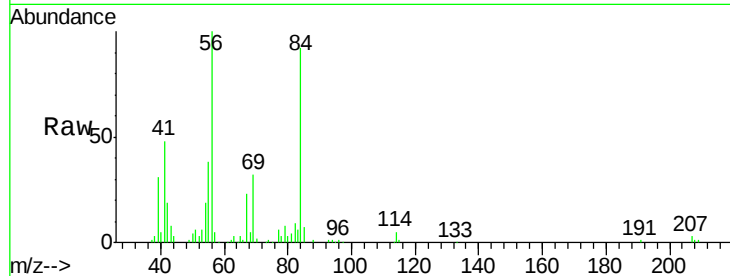
#30
Cyclohexane
Concen: 0.836 ppbv
RT: 7.15 min Scan# 1356
Delta R.T. 0.00 min
Lab File: VL035717.D
Acq: 23 Sep 2020 13:45

Instrument :
MSVOA_L
ClientSampled :
B-2

Tot Ion	Ratio	Lower	Upper
84	100		
56	105.4	84.6	127.0
41	55.2	41.1	61.7

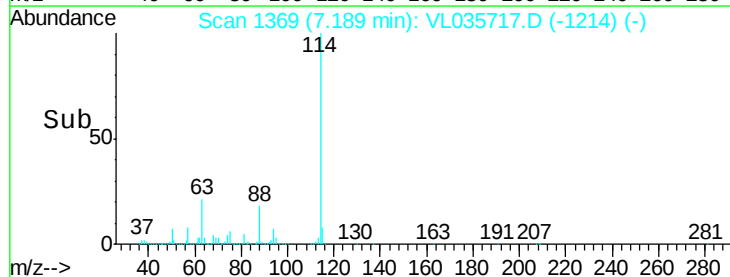
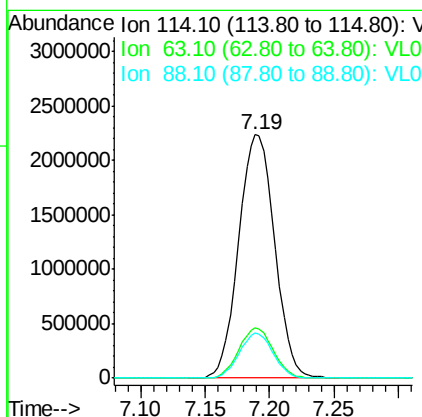
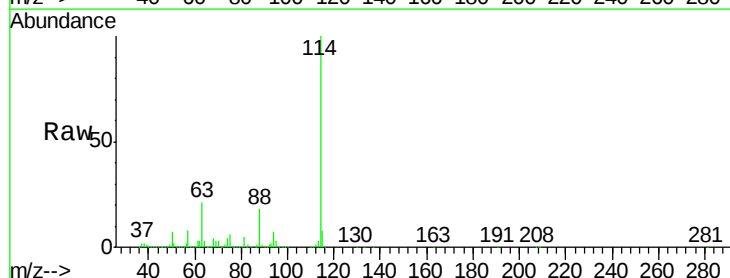
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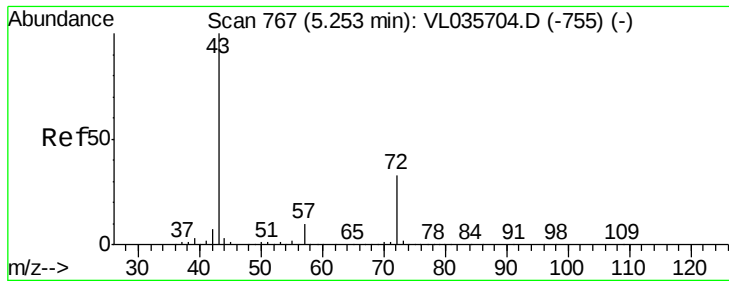
MMDadoda
9/24/2020 1:35:36 PM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.19 min Scan# 1369
Delta R.T. -0.00 min
Lab File: VL035717.D
Acq: 23 Sep 2020 13:45

Tgt Ion	Ratio	Lower	Upper
114	100		
63	19.8	16.1	24.1
88	17.5	14.1	21.1





#34

2-Butanone

Concen: 0.501 ppbv

RT: 5.26 min Scan# 770

Delta R.T. 0.01 min

Lab File: VL035717.D

Acq: 23 Sep 2020 13:45

Instrument :

MSVOA_L

ClientSampled :

B-2

Tot Ion: 43 Resp: 71793

Ion Ratio Lower Upper

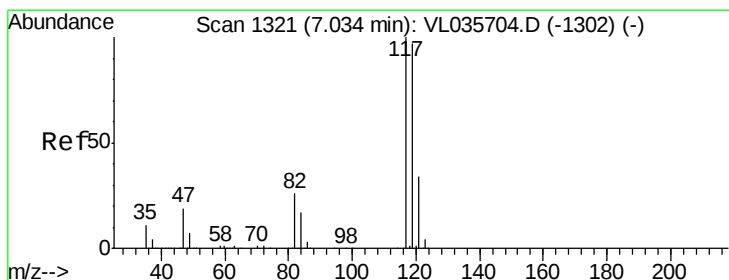
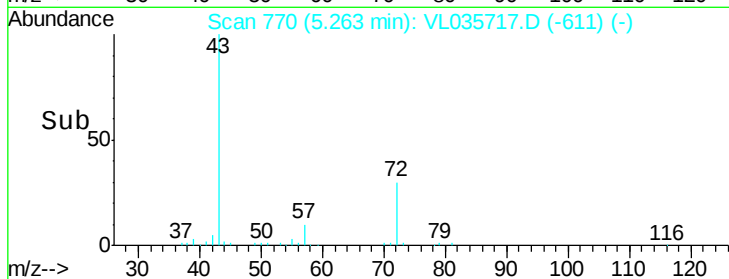
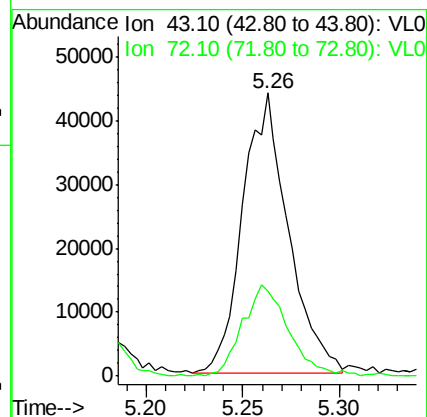
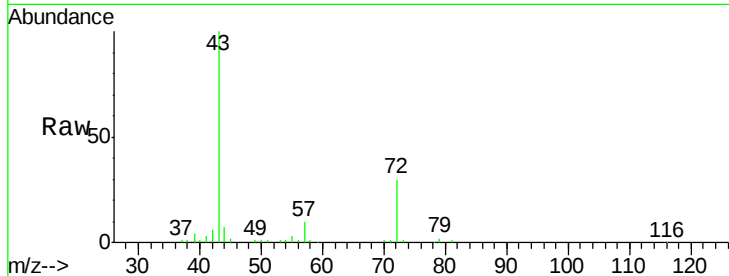
43 100

72 33.4 26.1 39.1

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#35

Carbon Tetrachloride

Concen: 0.062 ppbv m

RT: 7.03 min Scan# 1319

Delta R.T. -0.01 min

Lab File: VL035717.D

Acq: 23 Sep 2020 13:45

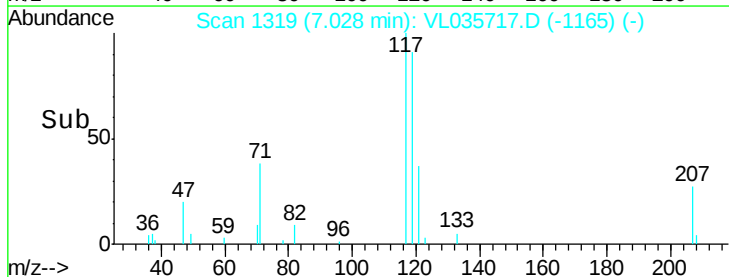
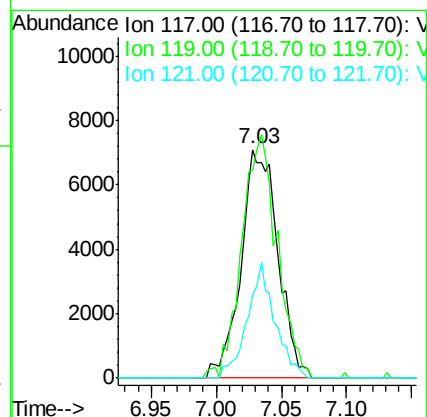
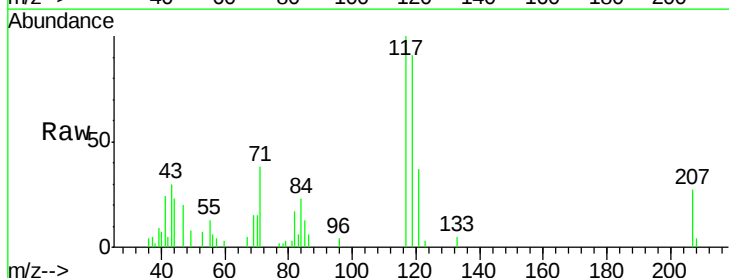
Tgt Ion: 117 Resp: 13905

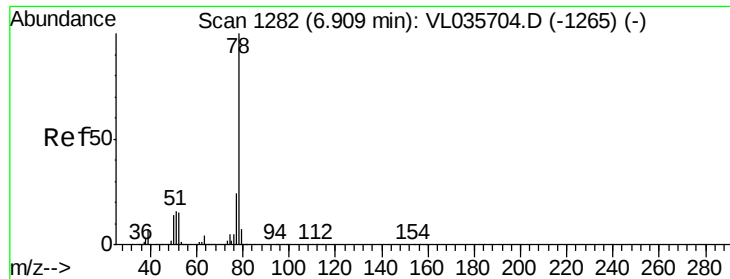
Ion Ratio Lower Upper

117 100

119 90.9 77.7 116.5

121 36.5 26.9 40.3





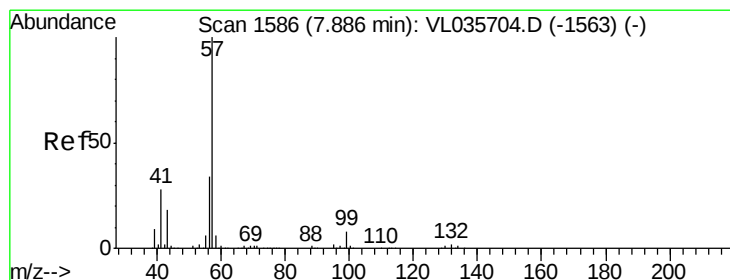
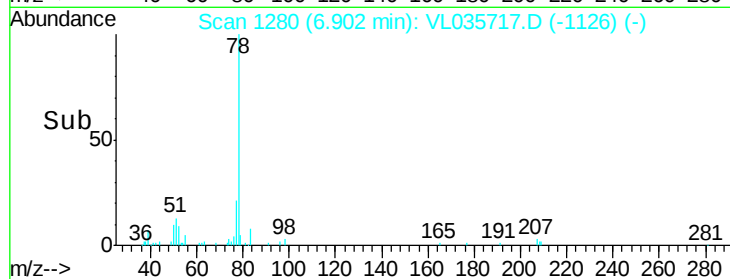
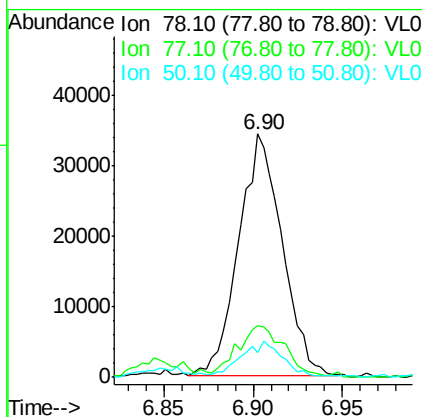
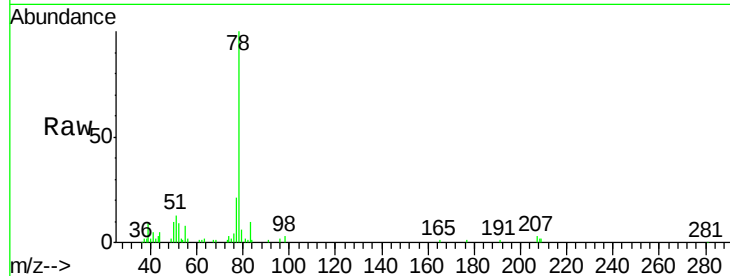
#36
Benzene
Concen: 0.206 ppbv
RT: 6.90 min Scan# 1280
Delta R.T. -0.01 min
Lab File: VL035717.D
Acq: 23 Sep 2020 13:45

Instrument :
MSVOA_L
ClientSampleId :
B-2

Tot Ion	Ratio	Lower	Upper
78	100		
77	19.4	19.3	28.9
50	9.5	11.6	17.4#

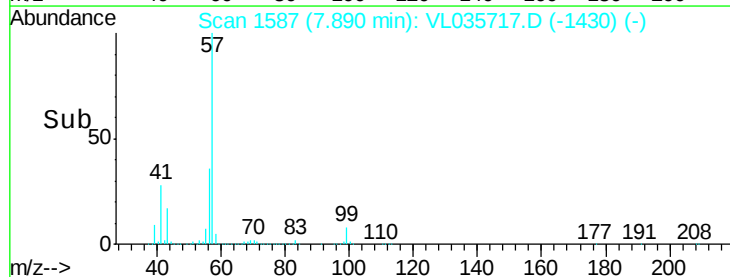
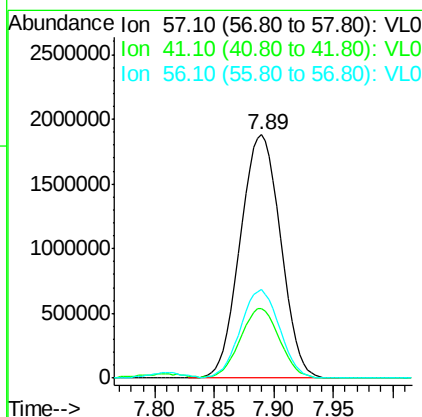
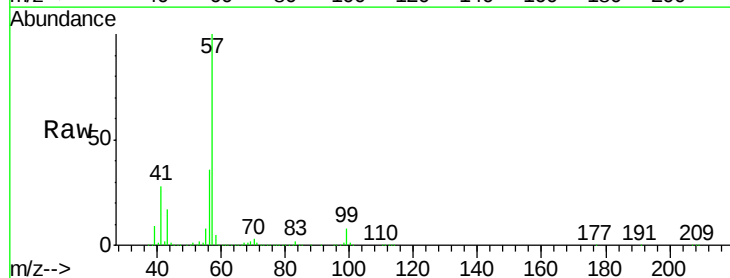
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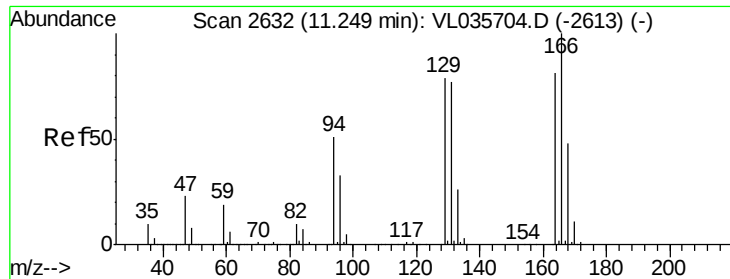
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#44
2,2,4-Trimethylpentane
Concen: 10.885 ppbv
RT: 7.89 min Scan# 1587
Delta R.T. 0.00 min
Lab File: VL035717.D
Acq: 23 Sep 2020 13:45

Tgt Ion	Ratio	Lower	Upper
57	100		
41	27.9	21.2	31.8
56	35.3	25.8	38.8





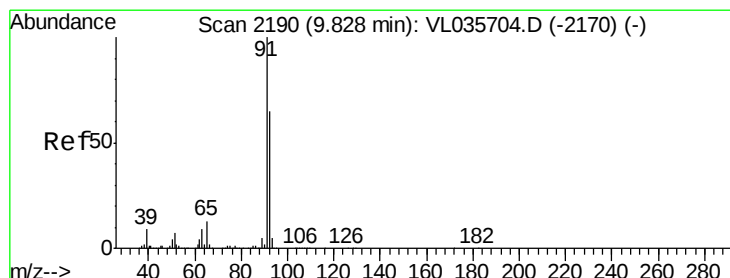
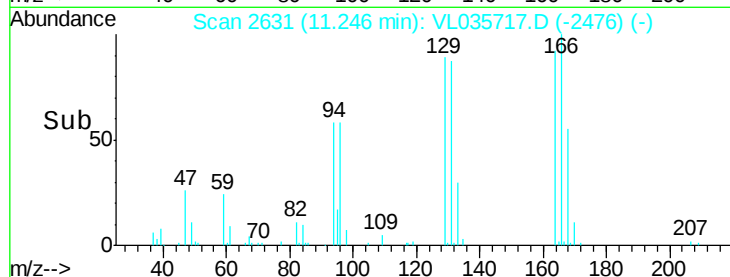
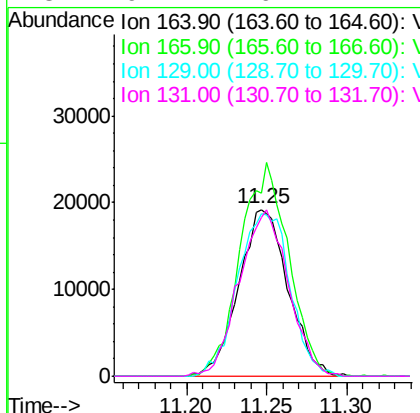
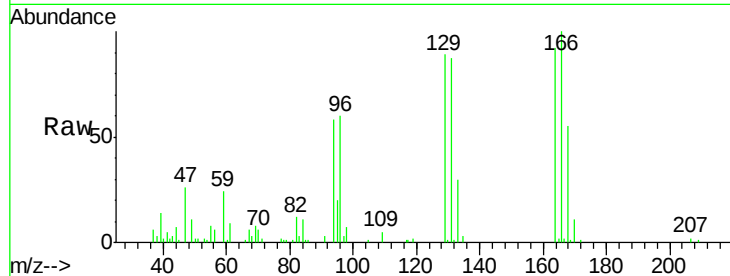
#52
Tetrachloroethene
Concen: 0.298 ppbv
RT: 11.25 min Scan# 2631
Delta R.T. -0.00 min
Lab File: VL035717.D
Acq: 23 Sep 2020 13:45

Instrument :
MSVOA_L
ClientSampled :
B-2

Tot Ion	Ratio	Lower	Upper
164	100		
166	109.3	98.7	148.1
129	97.2	78.4	117.6
131	94.1	76.2	114.2

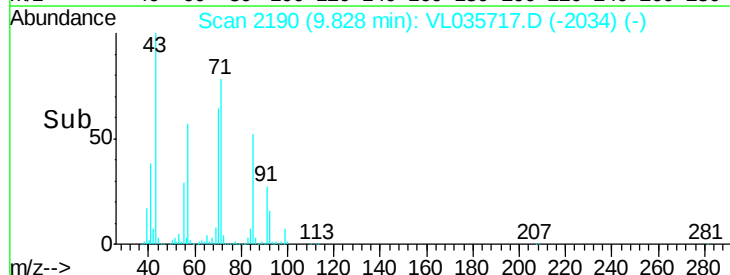
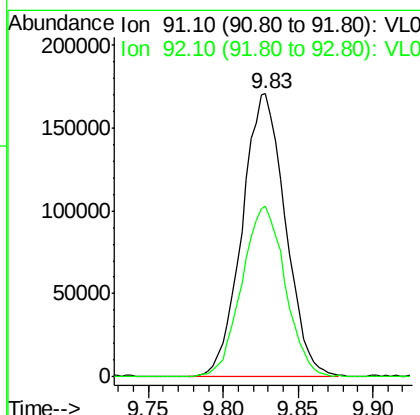
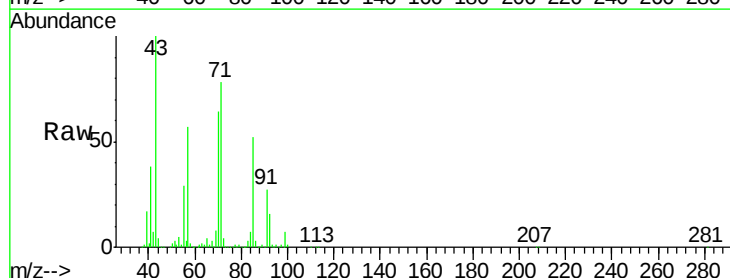
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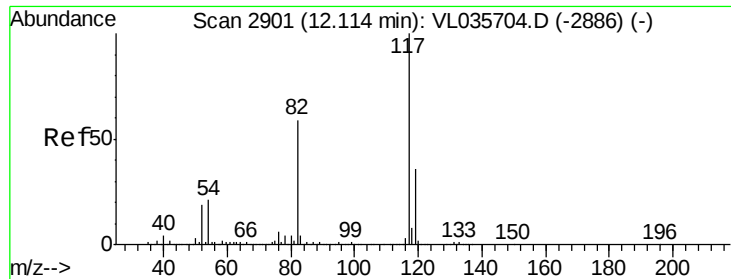
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#53
Toluene
Concen: 1.026 ppbv
RT: 9.83 min Scan# 2190
Delta R.T. 0.00 min
Lab File: VL035717.D
Acq: 23 Sep 2020 13:45

Tgt Ion	Ratio	Lower	Upper
91	100		
92	60.7	50.0	75.0





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.11 min Scan# 2900

Delta R.T. -0.00 min

Lab File: VL035717.D

Acq: 23 Sep 2020 13:45

Instrument :

MSVOA_L

ClientSampled :

B-2

Tot Ion:117 Resp: 4351294

Ion Ratio Lower Upper

117 100

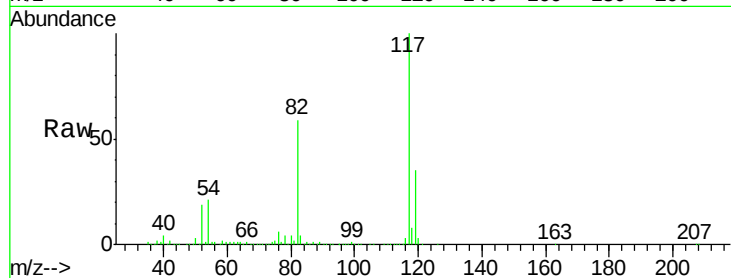
82 58.1 46.1 69.1

119 34.3 28.0 42.0

Manual Integrations
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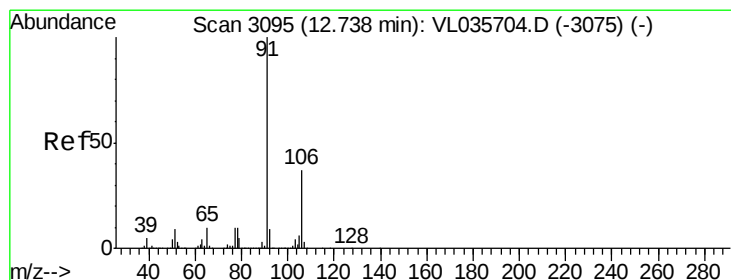
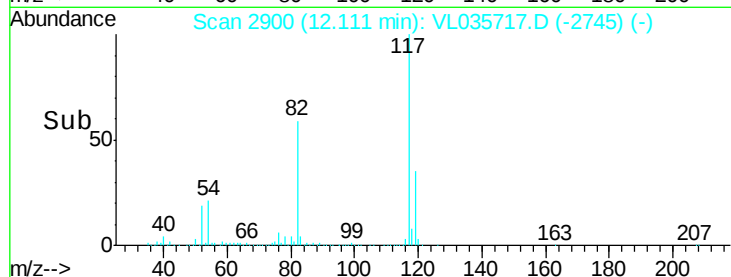
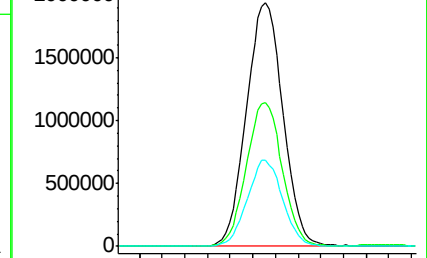
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Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#58

Ethyl Benzene

Concen: 0.443 ppbv

RT: 12.74 min Scan# 3095

Delta R.T. 0.00 min

Lab File: VL035717.D

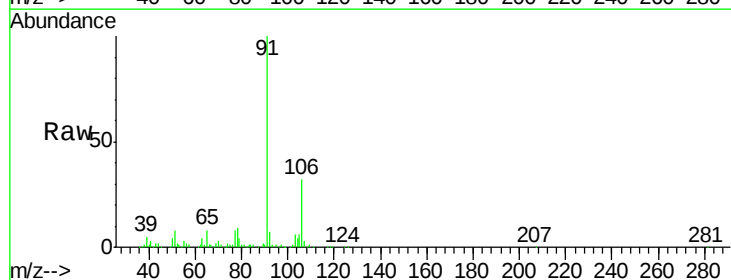
Acq: 23 Sep 2020 13:45

Tgt Ion: 91 Resp: 193687

Ion Ratio Lower Upper

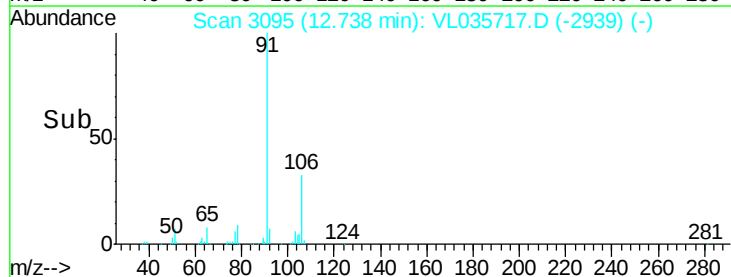
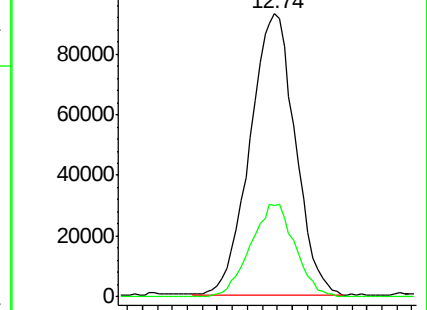
91 100

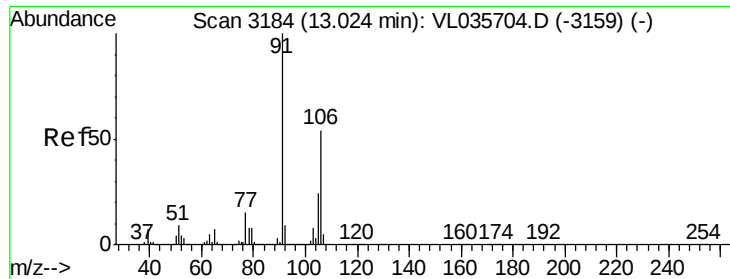
106 32.6 29.7 44.5



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





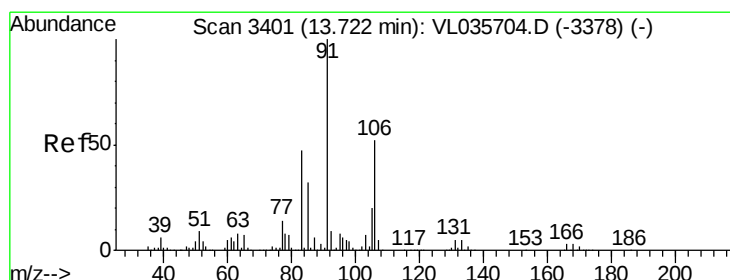
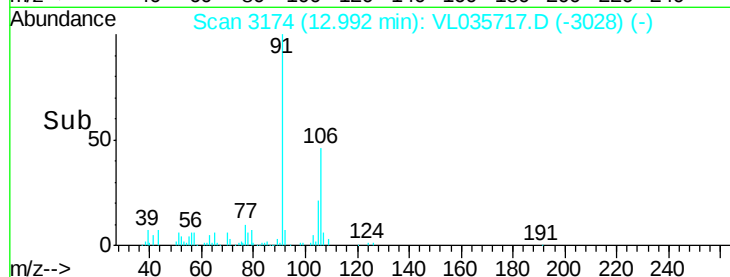
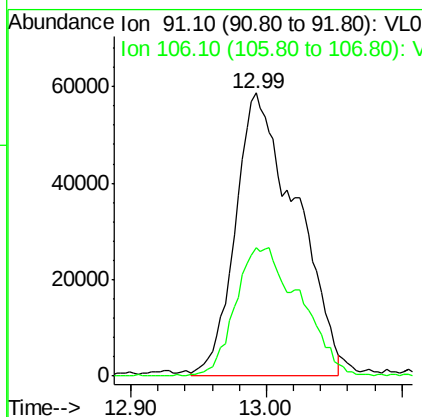
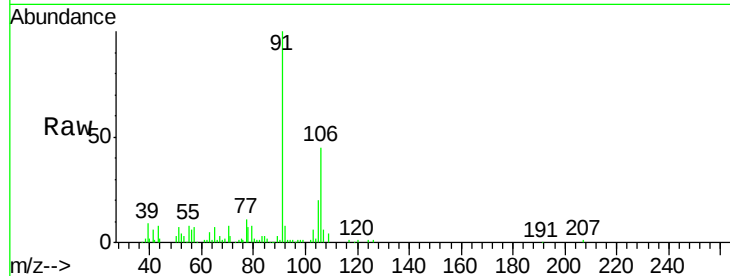
#59
m/p-Xylene
Concen: 0.479 ppbv m
RT: 12.99 min Scan# 3174
Delta R.T. -0.03 min
Lab File: VL035717.D
Acq: 23 Sep 2020 13:45

Instrument :
MSVOA_L
ClientSampled :
B-2

Tot Ion: 91 Resp: 182650
Ion Ratio Lower Upper
91 100
106 0.0 41.4 62.0#

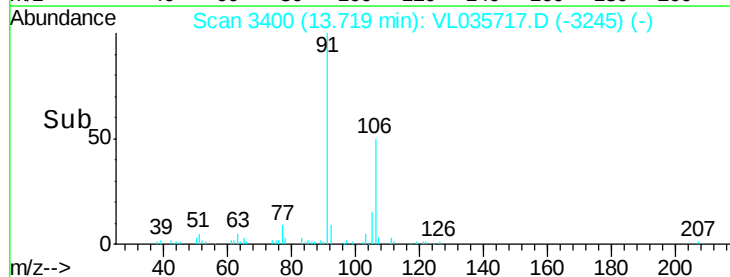
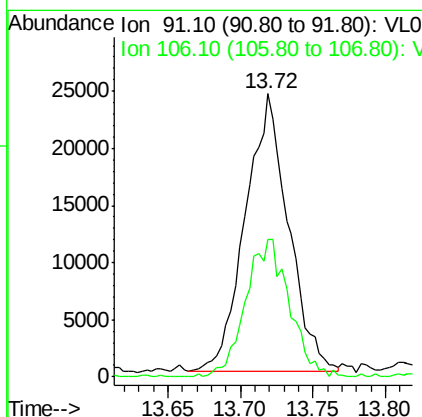
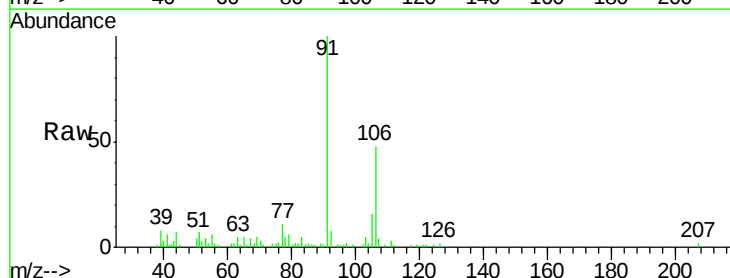
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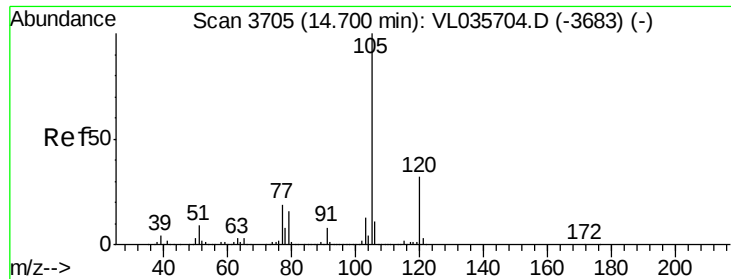
MMDadoda
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#60
o-Xylene
Concen: 0.130 ppbv
RT: 13.72 min Scan# 3400
Delta R.T. -0.00 min
Lab File: VL035717.D
Acq: 23 Sep 2020 13:45

Tgt Ion: 91 Resp: 50278
Ion Ratio Lower Upper
91 100
106 50.2 25.0 75.0





#62

Isopropylbenzene

Concen: 0.244 ppbv

RT: 14.70 min Scan# 3705

Delta R.T. 0.00 min

Lab File: VL035717.D

Acq: 23 Sep 2020 13:45

Instrument :

MSVOA_L

ClientSampled :

B-2

Tot Ion:105 Resp: 146256

Ion Ratio Lower Upper

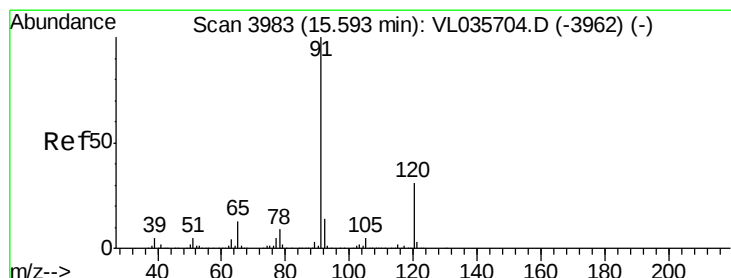
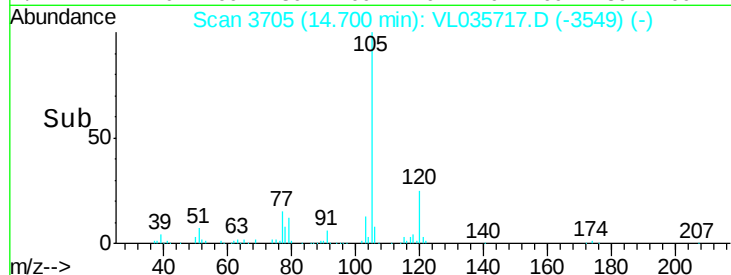
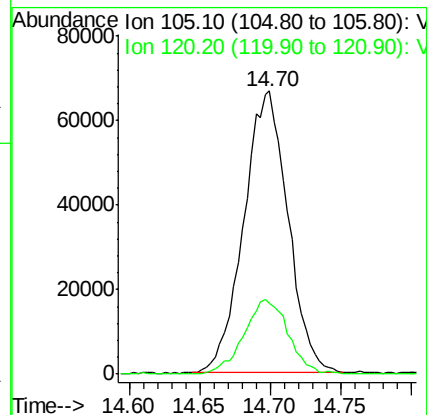
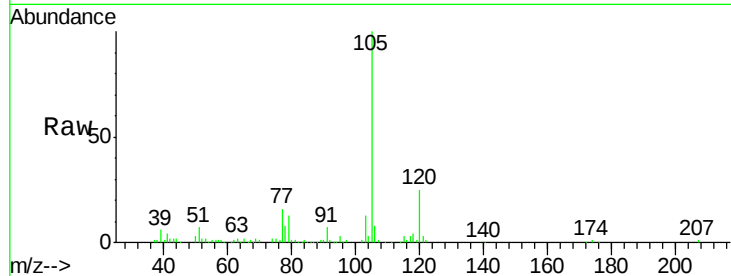
105 100

120 26.5 24.1 36.1

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#64

n-propylbenzene

Concen: 0.684 ppbv

RT: 15.59 min Scan# 3983

Delta R.T. 0.00 min

Lab File: VL035717.D

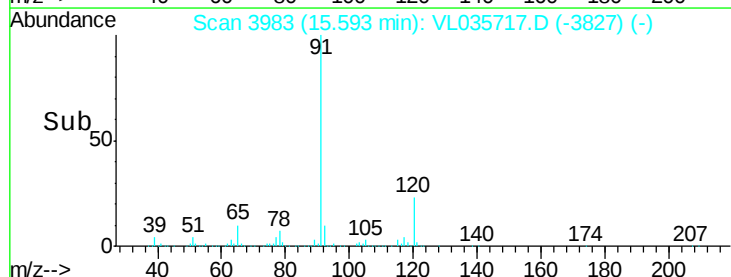
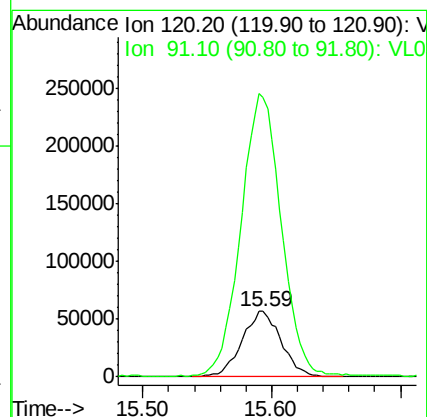
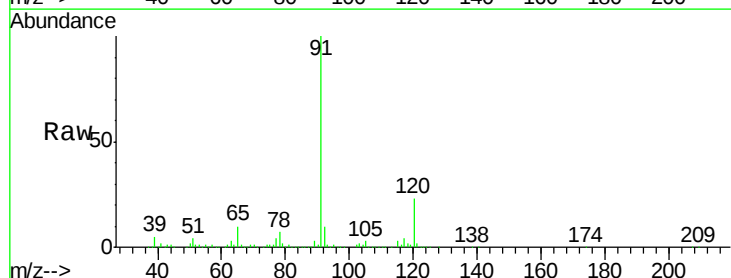
Acq: 23 Sep 2020 13:45

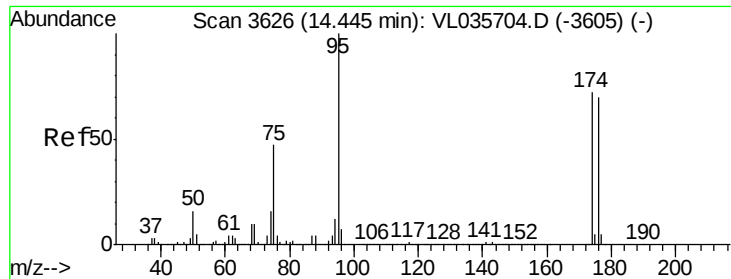
Tgt Ion:120 Resp: 119767

Ion Ratio Lower Upper

120 100

91 445.8 300.4 450.6





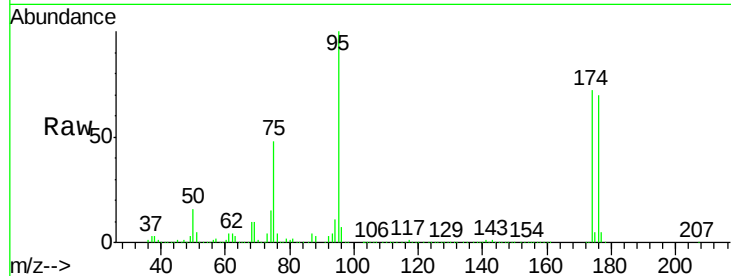
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.098 ppbv
 RT: 14.44 min Scan# 3625
 Delta R.T. -0.00 min
 Lab File: VL035717.D
 Acq: 23 Sep 2020 13:45

Instrument :
 MSVOA_L
 ClientSampleId :
 B-2

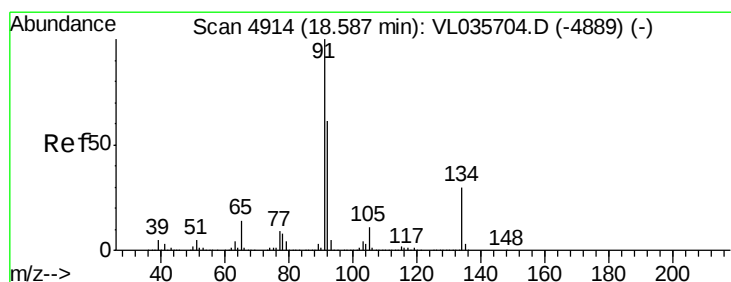
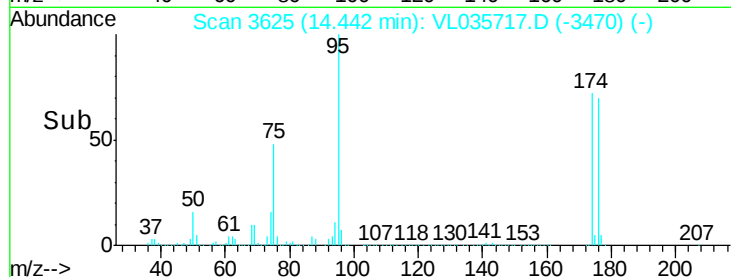
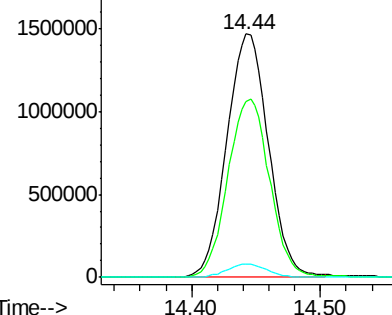
Tot Ion: 95 Resp: 3292448
 Ion Ratio Lower Upper
 95 100
 174 74.5 59.6 89.4
 175 5.4 4.2 6.4

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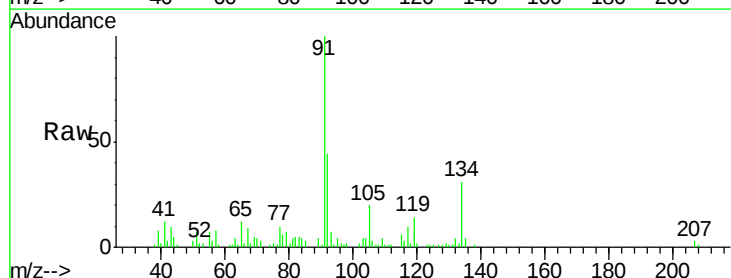


Abundance Ion 95.10 (94.80 to 95.80): VL0
 Ion 174.00 (173.70 to 174.70): V
 Ion 175.00 (174.70 to 175.70): V

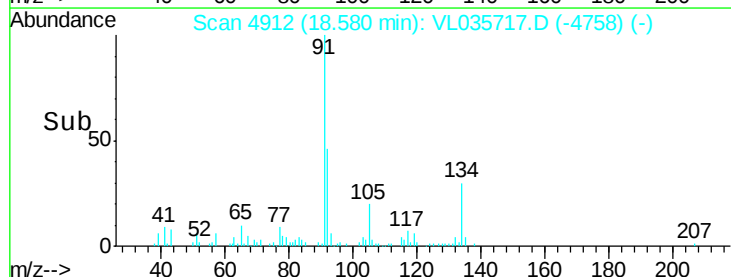
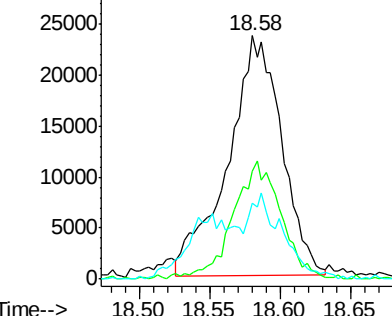


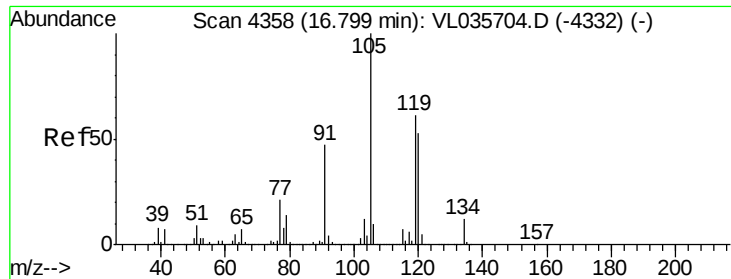
#70
 n-Butylbenzene
 Concen: 0.100 ppbv
 RT: 18.58 min Scan# 4912
 Delta R.T. -0.01 min
 Lab File: VL035717.D
 Acq: 23 Sep 2020 13:45

Tgt Ion: 91 Resp: 62892
 Ion Ratio Lower Upper
 91 100
 92 44.2 47.0 70.4#
 134 46.6 21.9 32.9#



Abundance Ion 91.10 (90.80 to 91.80): VL0
 Ion 92.10 (91.80 to 92.80): VL0
 Ion 134.20 (133.90 to 134.90): V





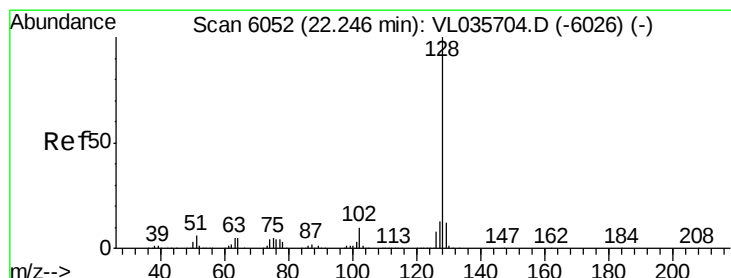
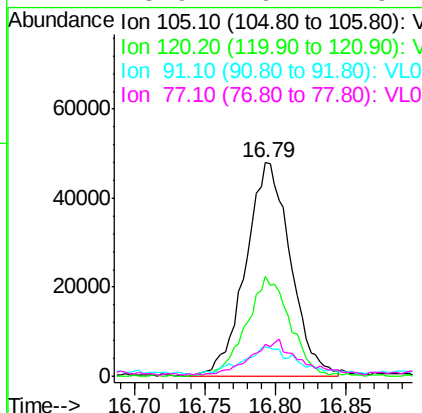
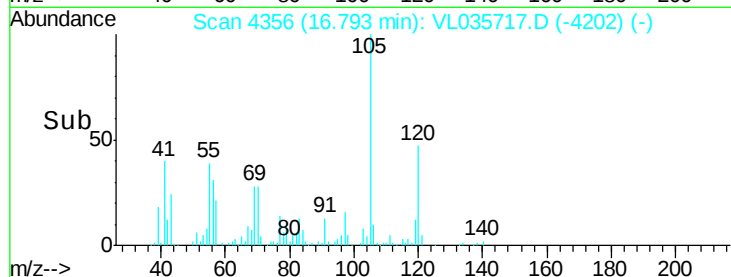
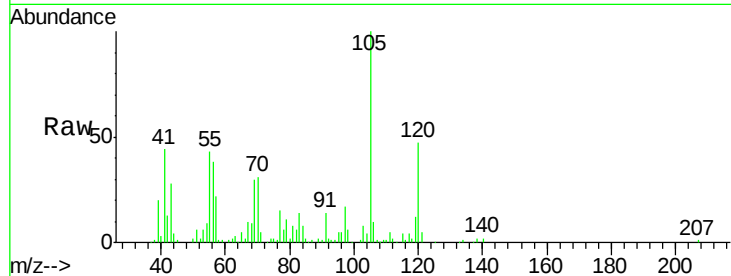
#74
 1,2,4-Trimethylbenzene
 Concen: 0.219 ppbv
 RT: 16.79 min Scan# 4356
 Delta R.T. -0.01 min
 Lab File: VL035717.D
 Acq: 23 Sep 2020 13:45

Instrument :
 MSVOA_L
 ClientSampleId :
 B-2

Tot Ion	Ratio	Resp	Lower	Upper
105	100			
120	46.7		42.5	63.7
91	12.8		37.7	56.5#
77	13.9		16.7	25.1#

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#79
 Naphthalene
 Concen: 1.259 ppbv
 RT: 22.25 min Scan# 6052
 Delta R.T. 0.00 min
 Lab File: VL035717.D
 Acq: 23 Sep 2020 13:45

Tgt Ion	Ratio	Resp	Lower	Upper
128	100			
127	11.4		10.6	15.8
129	10.2		9.4	14.0

