

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL051220\
 Data File : VL035009.D
 Acq On : 13 May 2020 5:17
 Operator : SY/AP
 Sample : L2566-05 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-1

Manual Integrations
 APPROVED

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 5/18/2020 2:08:43 PM

Quant Time: May 18 10:16:05 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL050620AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed May 0
 QLast Update : Wed May 06 14:49:39 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	923496	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	2181645	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.16	117	1839852	10.00	ppbv	0.04

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.47	95	1494128	10.03	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.30%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
5) Vinyl Chloride	3.21	62	29144	0.494	ppbv	98
9) Propene	2.97	41	351894m	7.691	ppbv	
10) Heptane	8.16	43	39689m	0.346	ppbv	
13) Ethanol	3.57	45	60628	4.016	ppbv	96
15) Acetone	3.82	43	3603880m	29.518	ppbv	
18) 1,1-Dichloroethene	4.25	96	178296	4.271	ppbv	99
19) Isopropyl Alcohol	3.95	45	64044m	0.787	ppbv	
20) Methylene Chloride	4.31	84	17628	0.436	ppbv #	86
22) trans-1,2-Dichloroethene	4.85	96	1405929	33.997	ppbv	99
26) Hexane	5.67	57	66531	0.748	ppbv #	15
29) Chloroform	5.74	83	8666288	59.574	ppbv	87
30) Cyclohexane	7.13	84	20073m	0.293	ppbv	
31) cis-1,2-Dichloroethene	5.53	61	13233306	152.548	ppbv #	63
32) 1,1,1-Trichloroethane	6.51	97	71419	0.544	ppbv #	86
35) Carbon Tetrachloride	7.01	117	6222m	0.045	ppbv	
36) Benzene	6.90	78	371825	2.067	ppbv	97
38) Trichloroethene	7.94	130	42414095	608.681	ppbv #	86
47) 1,1,2-Trichloroethane	9.51	97	42444m	0.558	ppbv	
50) 4-Methyl-2-Pentanone	8.78	43	624177	3.228	ppbv	99
52) Tetrachloroethene	11.42	164	61173684m	956.472	ppbv	
53) Toluene	9.85	91	1635221m	8.576	ppbv	
58) Ethyl Benzene	12.77	91	910625	4.003	ppbv	99
59) m/p-Xylene	13.03	91	2305972	11.520	ppbv #	59
60) o-Xylene	13.75	91	577089	2.922	ppbv	97
61) Styrene	13.58	104	44134m	0.353	ppbv	
62) Isopropylbenzene	14.72	105	442171	1.499	ppbv	98
74) 1,2,4-Trimethylbenzene	16.81	105	37332m	0.159	ppbv	

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

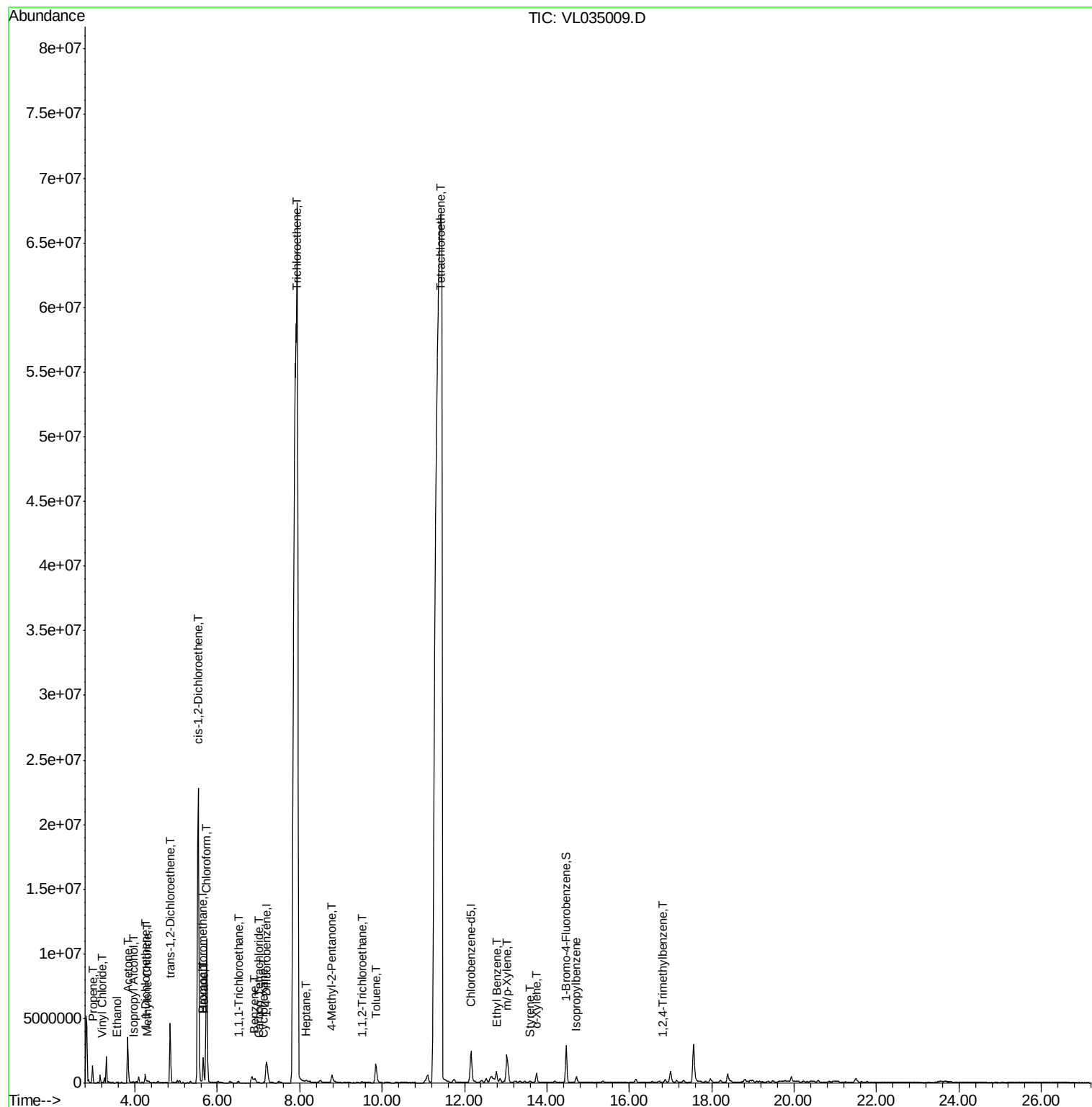
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL051220\
Data File : VL035009.D
Acq On : 13 May 2020 5:17
Operator : SY/AP
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Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

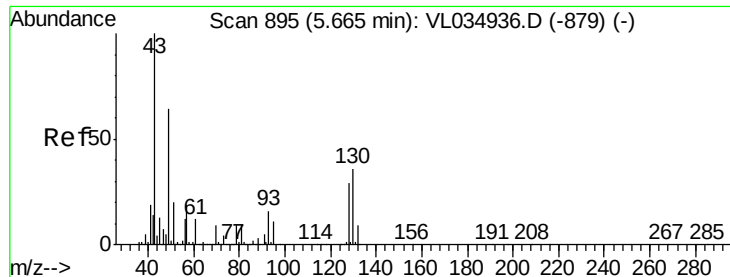
Instrument :
MSVOA_L
ClientSampleId :
SG-1

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Quant Time: May 18 10:16:05 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL050620AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed May
QLast Update : Wed May 06 14:49:39 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 892

Delta R.T. -0.01 min

Lab File: VL035009.D

Acq: 13 May 2020 5:17

Instrument :

MSVOA_L

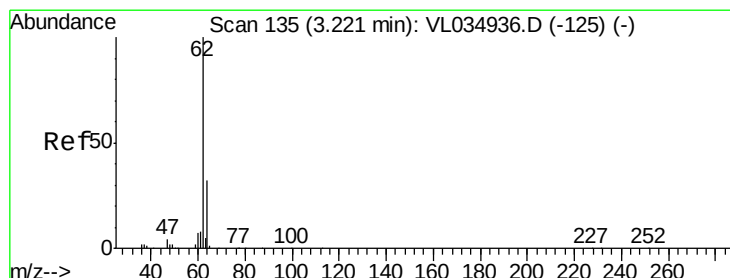
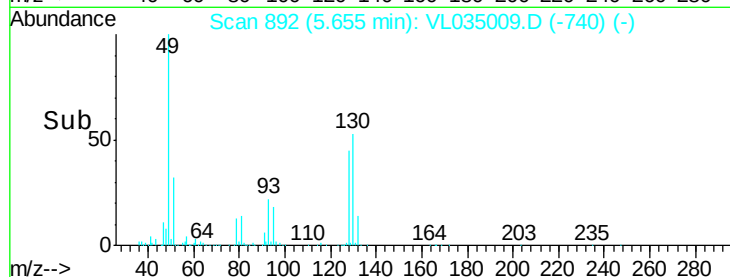
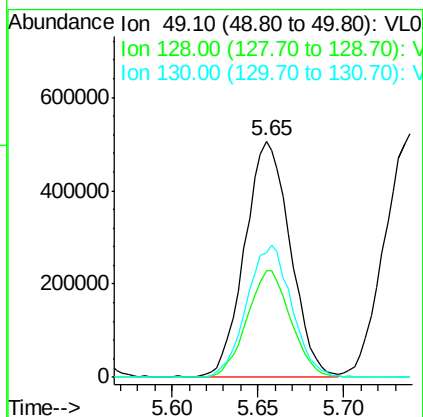
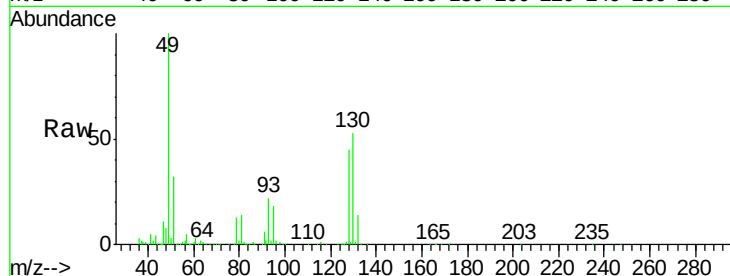
ClientSampled :

SG-1

Tot Ion:	49	Resp:	923496
Ion	Ratio	Lower	Upper
49	100		
128	43.9	22.1	66.5
130	55.8	29.1	87.3

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#5

Vinyl Chloride

Concen: 0.494 ppbv

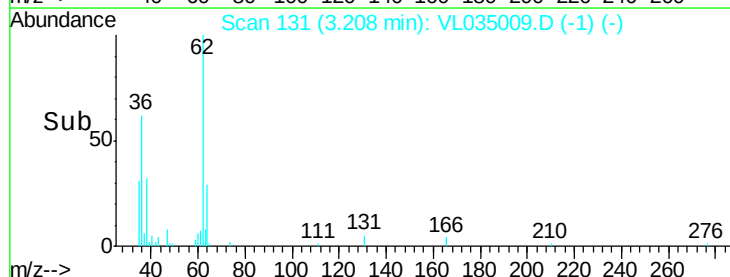
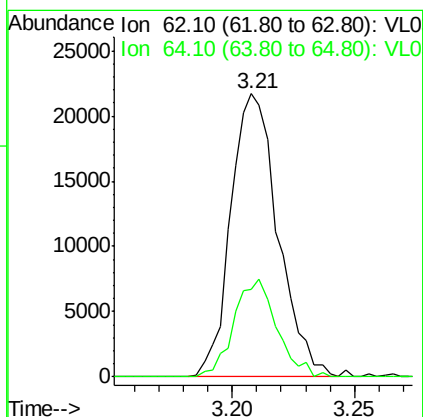
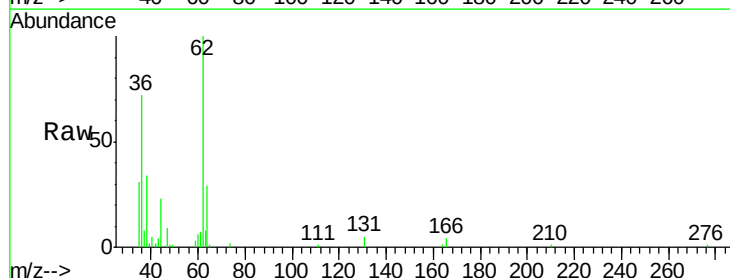
RT: 3.21 min Scan# 131

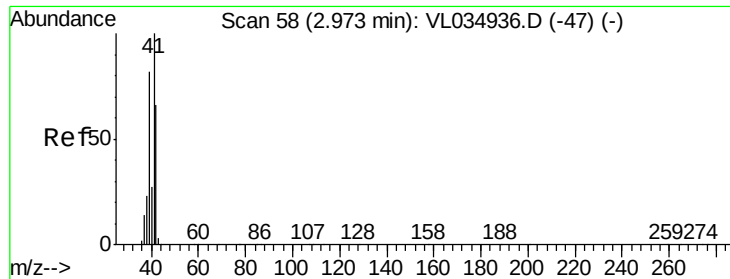
Delta R.T. -0.01 min

Lab File: VL035009.D

Acq: 13 May 2020 5:17

Tgt Ion:	62	Resp:	29144
Ion	Ratio	Lower	Upper
62	100		
64	30.8	25.7	38.5





#9

Propene

Concen: 7.691 ppbv m

RT: 2.97 min Scan# 57

Delta R.T. -0.00 min

Lab File: VL035009.D

Acq: 13 May 2020 5:17

Instrument :

MSVOA_L

ClientSampled :

SG-1

Tot Ion: 41 Resp: 351894

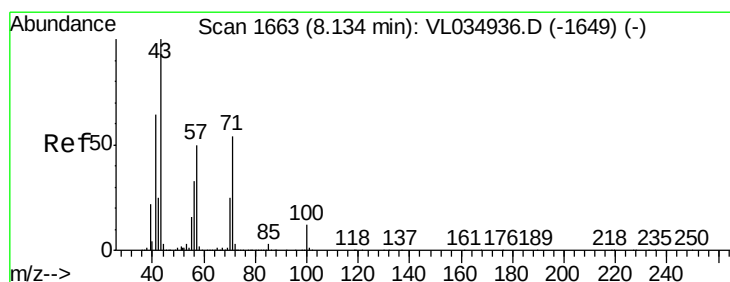
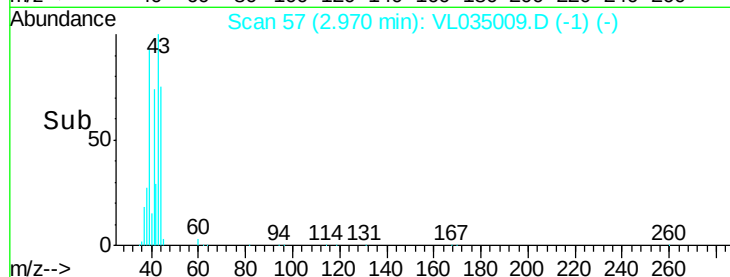
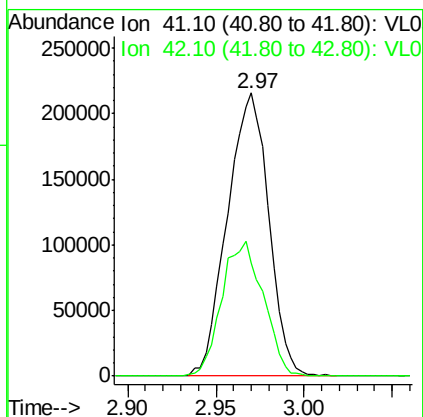
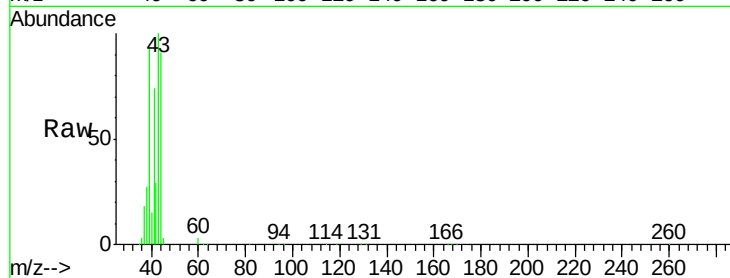
Ion Ratio Lower Upper

41 100

42 31.6 54.5 81.7#

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#10

Heptane

Concen: 0.346 ppbv m

RT: 8.16 min Scan# 1671

Delta R.T. 0.03 min

Lab File: VL035009.D

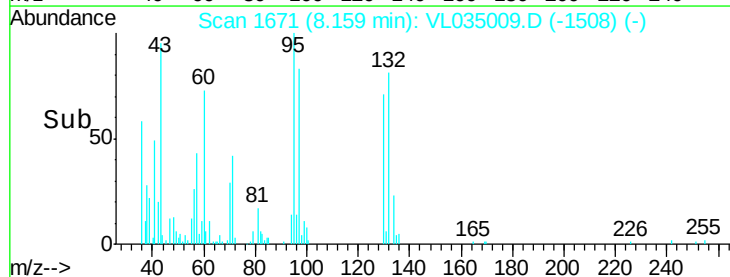
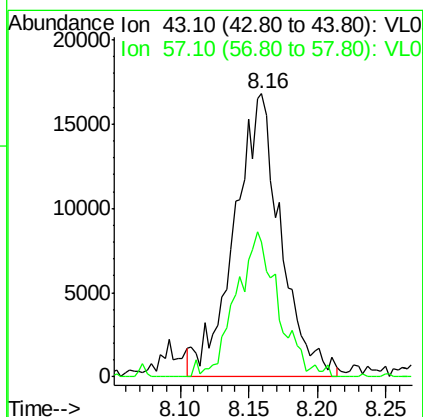
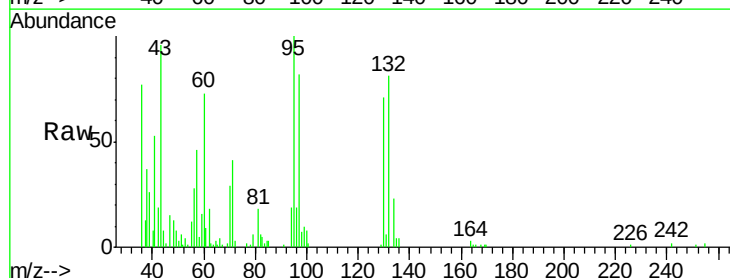
Acq: 13 May 2020 5:17

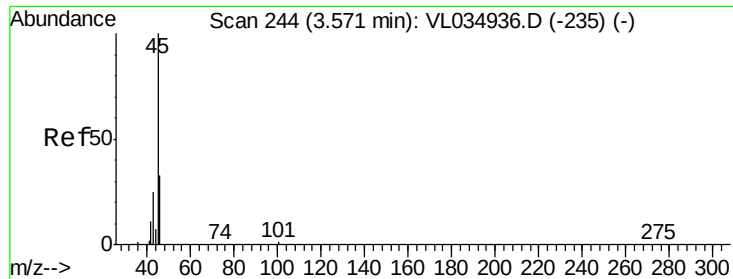
Tgt Ion: 43 Resp: 39689

Ion Ratio Lower Upper

43 100

57 0.0 41.1 61.7#





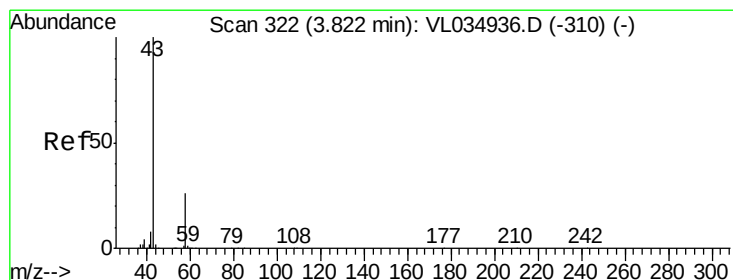
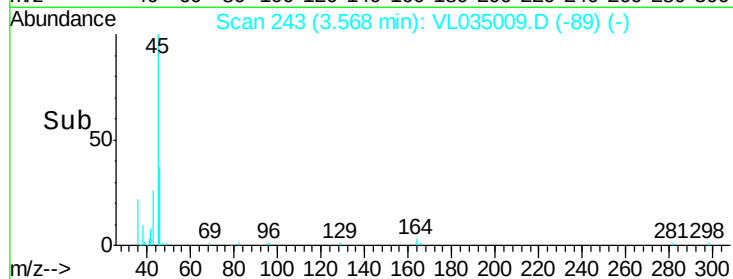
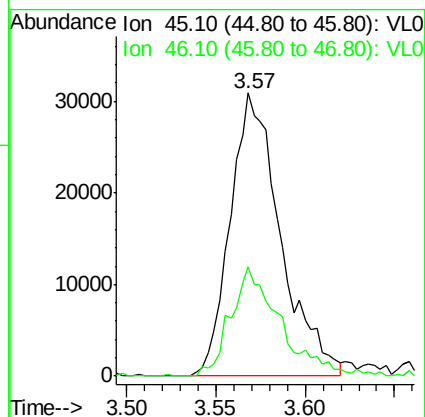
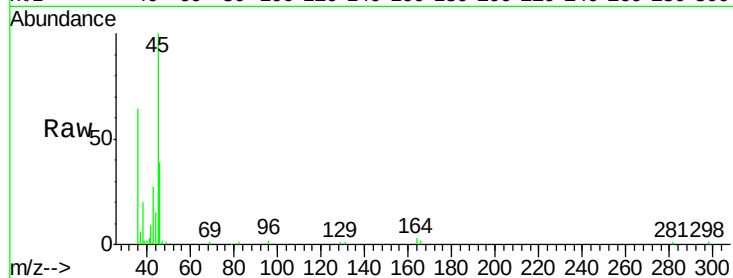
#13
Ethanol
Concen: 4.016 ppbv
RT: 3.57 min Scan# 243
Delta R.T. -0.00 min
Lab File: VL035009.D
Acq: 13 May 2020 5:17

Instrument :
MSVOA_L
ClientSampled :
SG-1

Tot Ion	45	Resp	60628
Ion Ratio	100	Lower	Upper
46	38.3	14.3	57.3

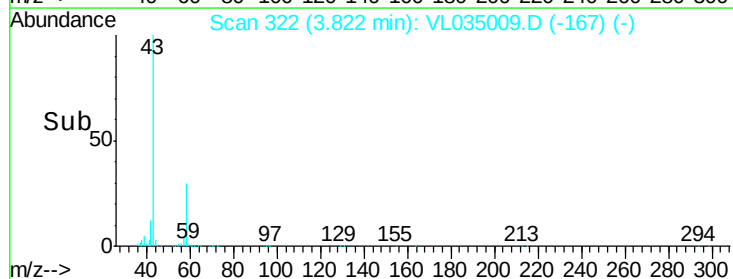
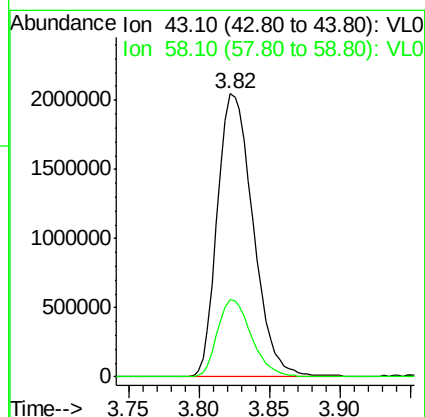
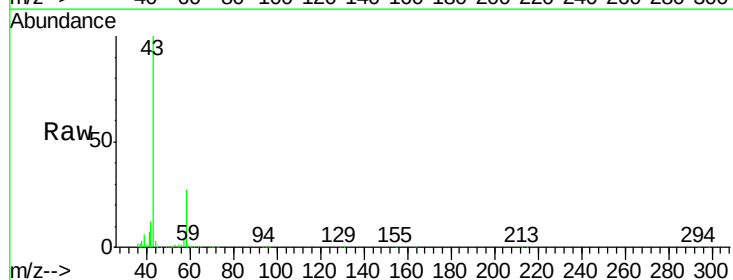
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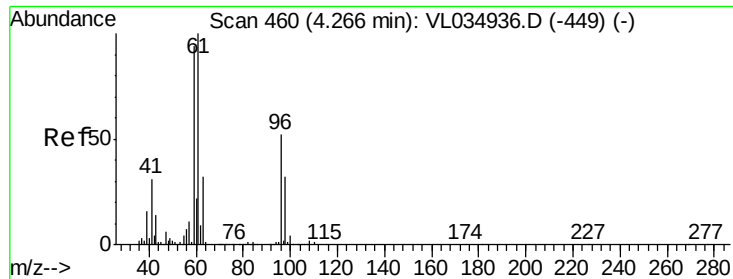
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#15
Acetone
Concen: 29.518 ppbv m
RT: 3.82 min Scan# 322
Delta R.T. -0.00 min
Lab File: VL035009.D
Acq: 13 May 2020 5:17

Tgt Ion	43	Resp	3603880
Ion Ratio	100	Lower	Upper
58	0.0	21.7	32.5#





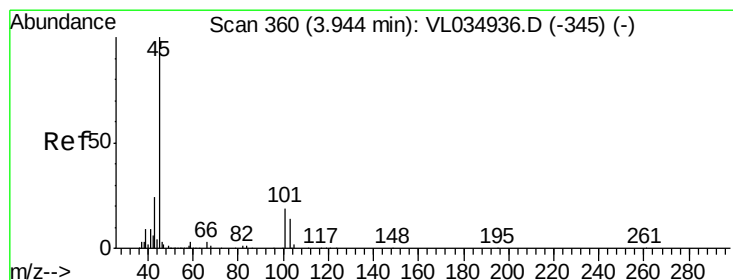
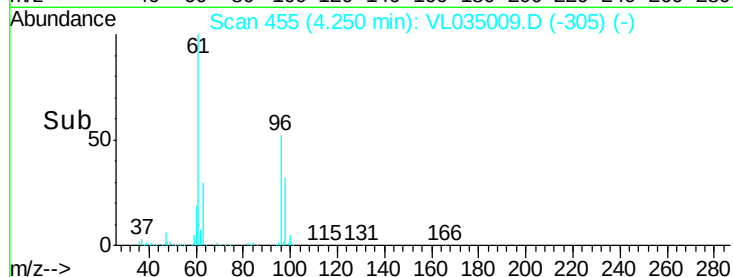
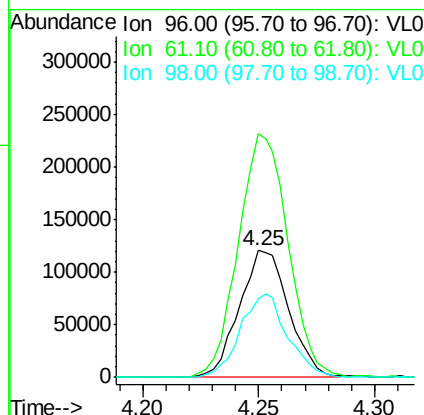
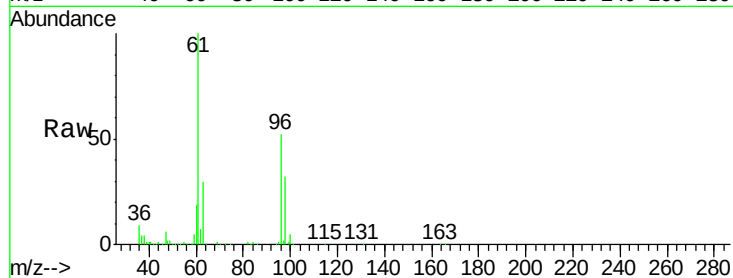
#18
 1,1-Dichloroethene
 Concen: 4.271 ppbv
 RT: 4.25 min Scan# 455
 Delta R.T. -0.02 min
 Lab File: VL035009.D
 Acq: 13 May 2020 5:17

Instrument :
 MSVOA_L
 ClientSampled :
 SG-1

Tot Ion	Ratio	Lower	Upper
96	100		
61	191.5	152.4	228.6
98	61.8	48.8	73.2

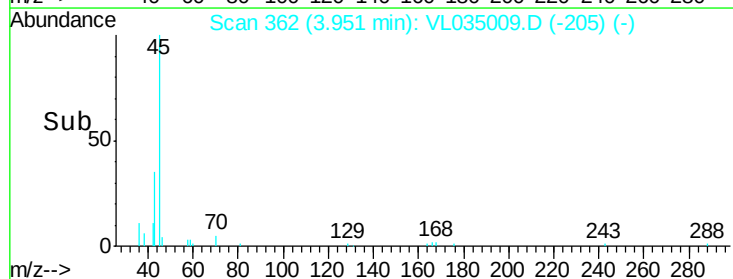
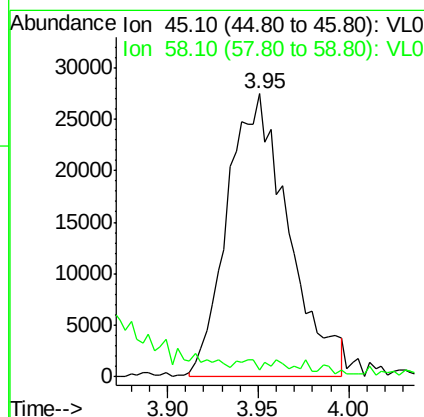
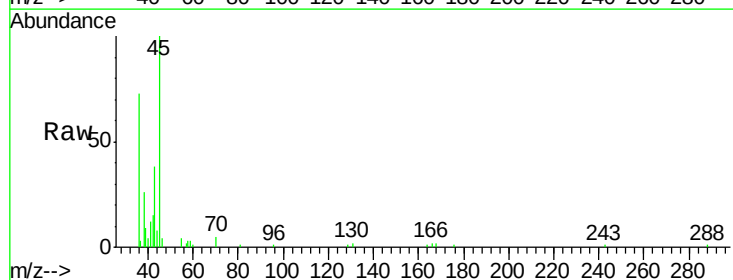
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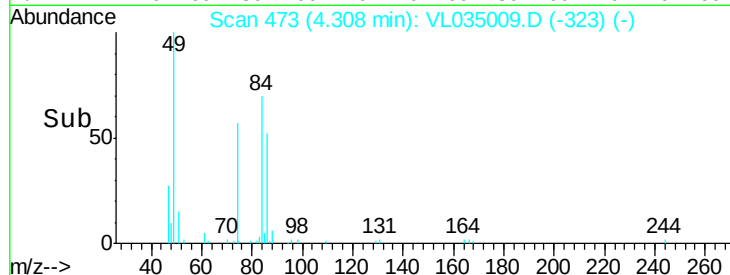
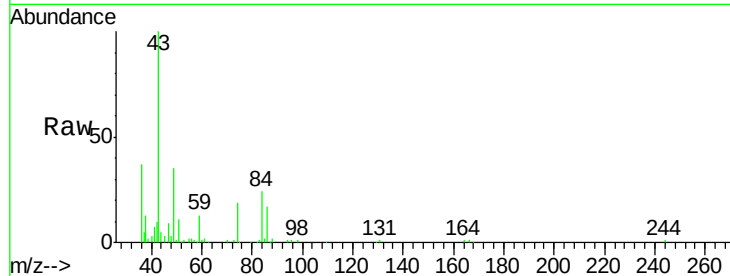
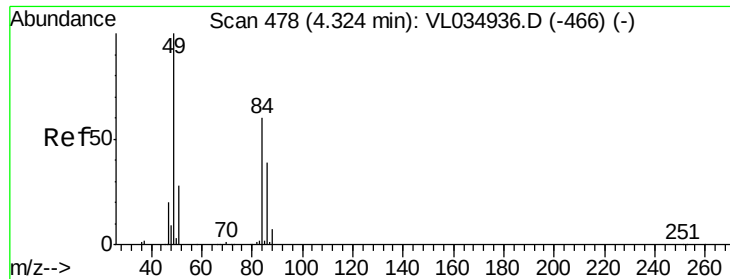
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#19
 Isopropyl Alcohol
 Concen: 0.787 ppbv m
 RT: 3.95 min Scan# 362
 Delta R.T. 0.01 min
 Lab File: VL035009.D
 Acq: 13 May 2020 5:17

Tgt Ion	Ratio	Lower	Upper
45	100		
58	0.0	1.7	2.5#





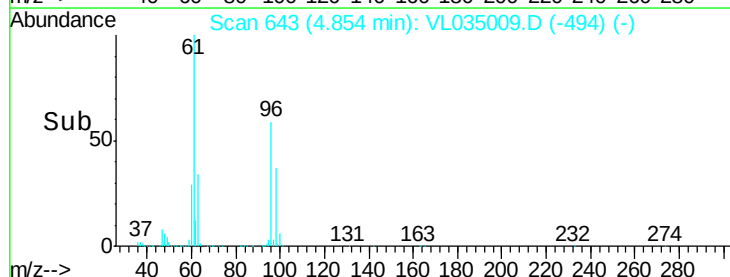
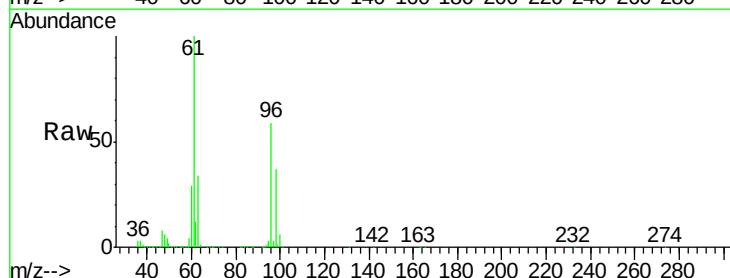
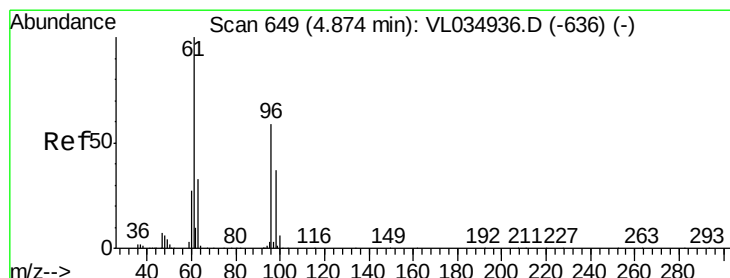
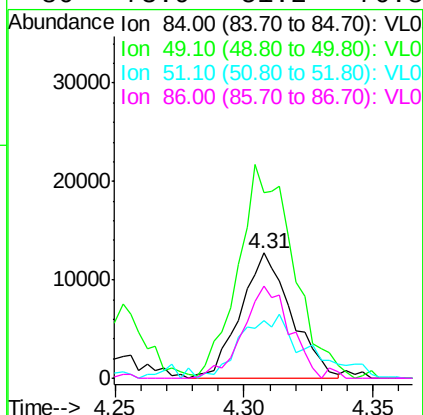
#20
Methvlene Chloride
Concen: 0.436 ppbv
RT: 4.31 min Scan# 473
Delta R.T. -0.02 min
Lab File: VL035009.D
Acq: 13 May 2020 5:17

Tot Ion:	84	Resp:	17628
Ion Ratio	Lower	Upper	
84	100		
49	146.3	132.5	198.7
51	38.0	38.4	57.6#
86	73.9	51.2	76.8

Instrument :
MSVOA_L
ClientSampled :
SG-1

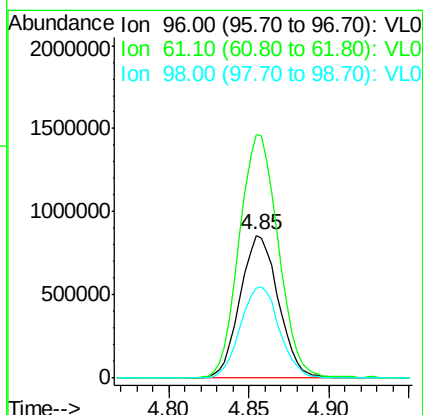
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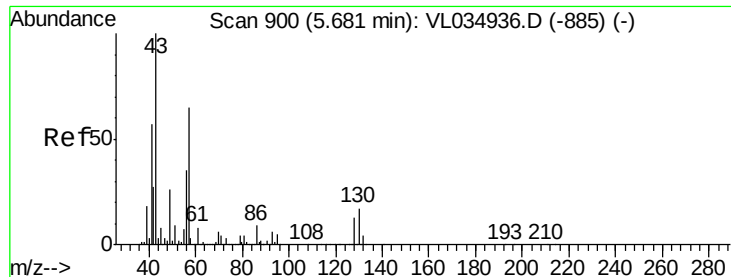
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#22
trans-1,2-Dichloroethene
Concen: 33.997 ppbv
RT: 4.85 min Scan# 643
Delta R.T. -0.02 min
Lab File: VL035009.D
Acq: 13 May 2020 5:17

Tgt Ion:	96	Resp:	1405929
Ion Ratio	Lower	Upper	
96	100		
61	170.1	135.3	202.9
98	62.7	50.4	75.6





#26

Hexane

Concen: 0.748 ppbv

RT: 5.67 min Scan# 896

Delta R.T. -0.01 min

Lab File: VL035009.D

Acq: 13 May 2020 5:17

Instrument :

MSVOA_L

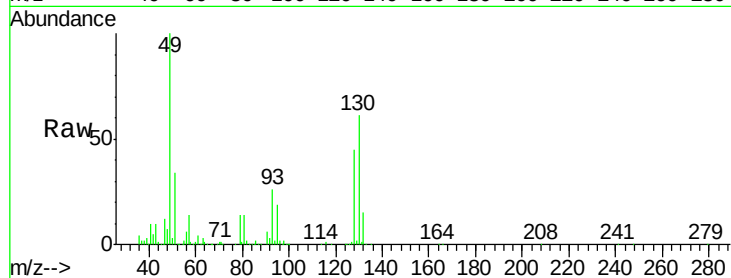
ClientSampled :

SG-1

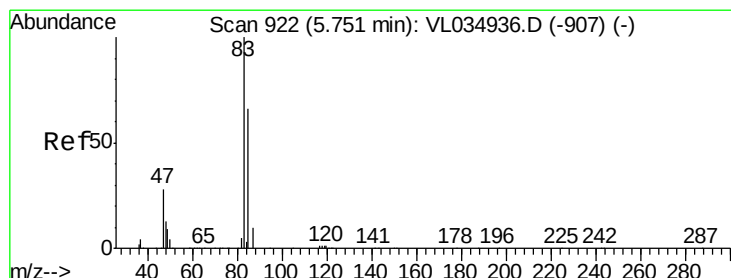
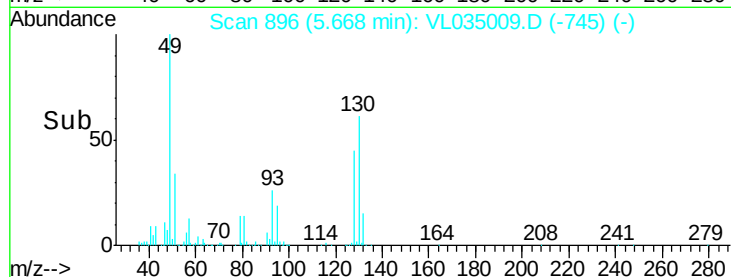
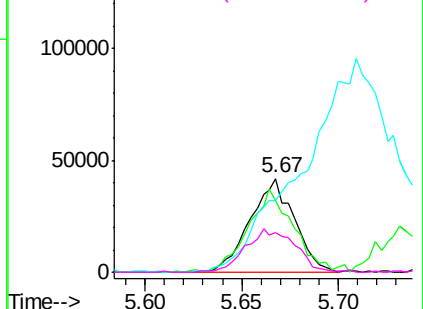
Tot Ion	57	Resp	66531
Ion	Ratio	Lower	Upper
57	100		
41	92.3	72.7	109.1
43	0.0	182.1	273.1#
56	52.0	42.2	63.2

Manual Integrations
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Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0



#29

Chloroform

Concen: 59.574 ppbv

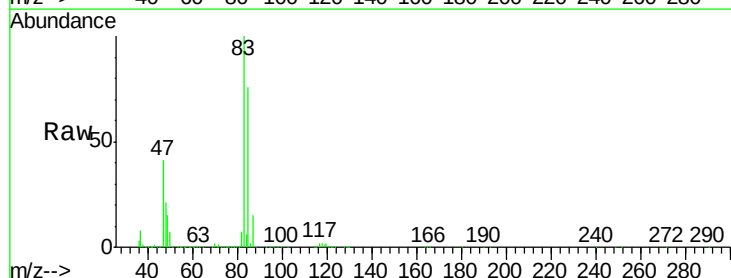
RT: 5.74 min Scan# 918

Delta R.T. -0.01 min

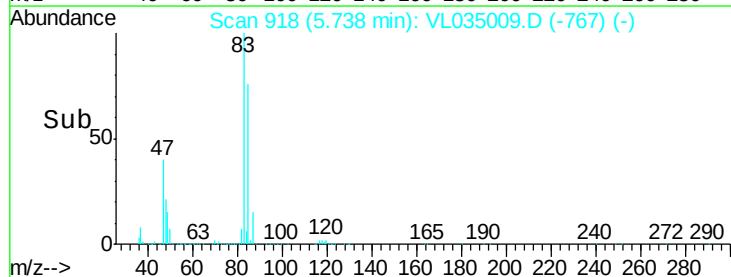
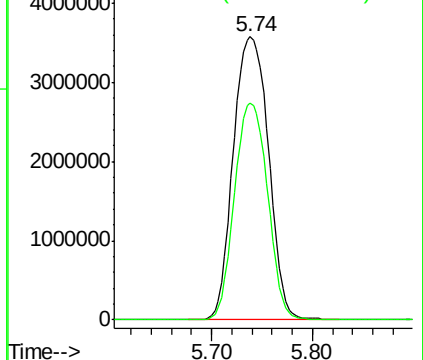
Lab File: VL035009.D

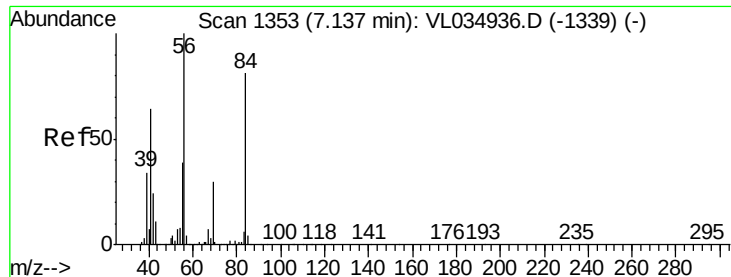
Acq: 13 May 2020 5:17

Tgt Ion	83	Resp	8666288
Ion	Ratio	Lower	Upper
83	100		
85	76.4	53.0	79.6



Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0





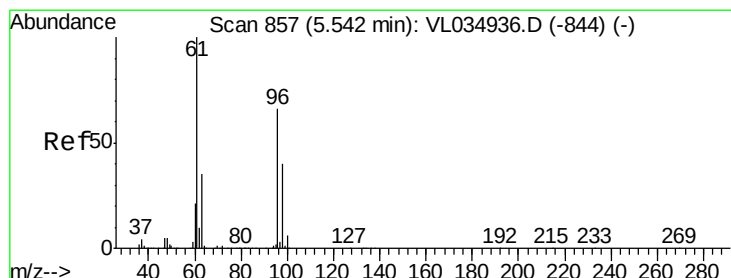
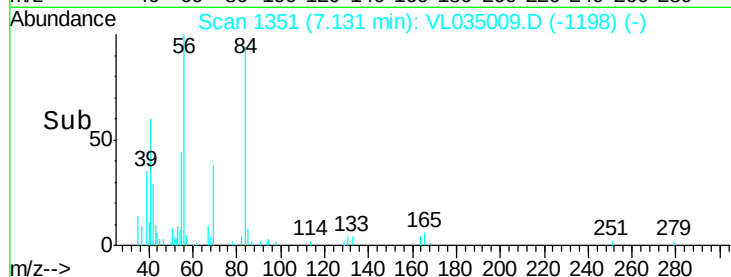
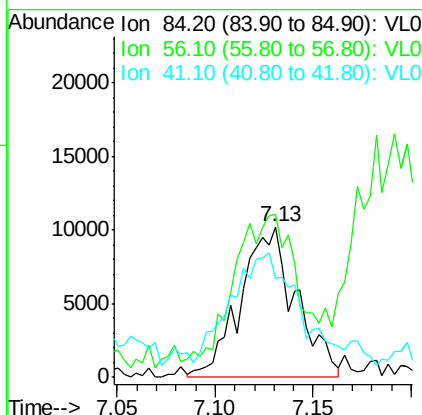
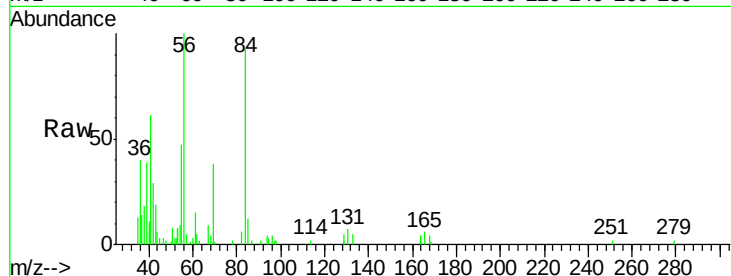
#30
Cyclohexane
Concen: 0.293 ppbv m
RT: 7.13 min Scan# 1351
Delta R.T. -0.01 min
Lab File: VL035009.D
Acq: 13 May 2020 5:17

Instrument :
MSVOA_L
ClientSampled :
SG-1

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	111.4	167.2#
41	0.0	66.7	100.1#

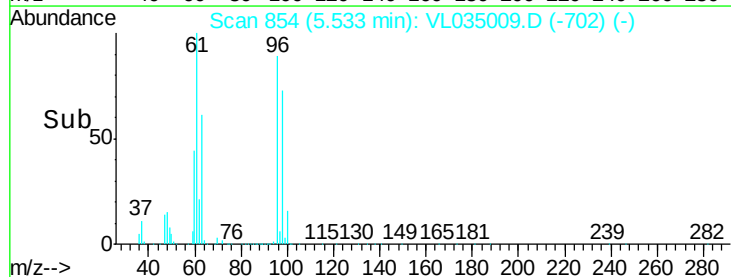
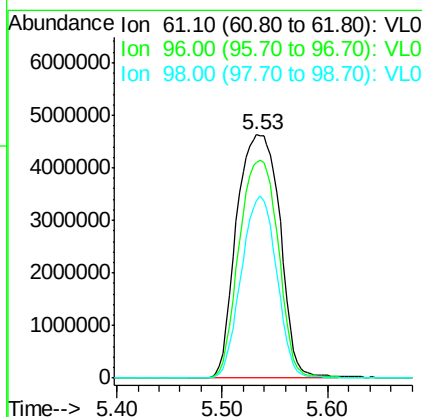
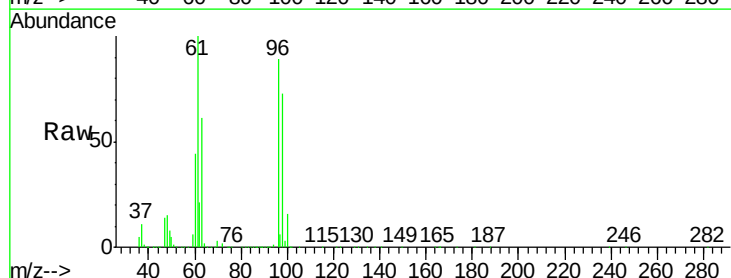
Manual Integrations
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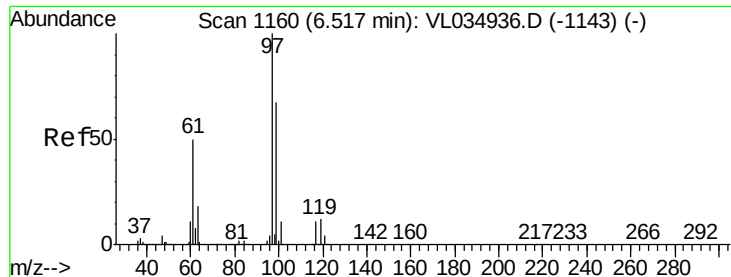
MMDadoda
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#31
cis-1,2-Dichloroethene
Concen: 152.548 ppbv
RT: 5.53 min Scan# 854
Delta R.T. -0.01 min
Lab File: VL035009.D
Acq: 13 May 2020 5:17

Tgt Ion	Ratio	Lower	Upper
61	100		
96	88.7	53.0	79.6#
98	72.7	32.2	48.2#





#32

1,1,1-Trichloroethane

Concen: 0.544 ppbv

RT: 6.51 min Scan# 1158

Delta R.T. -0.01 min

Lab File: VL035009.D

Acq: 13 May 2020 5:17

Instrument :

MSVOA_L

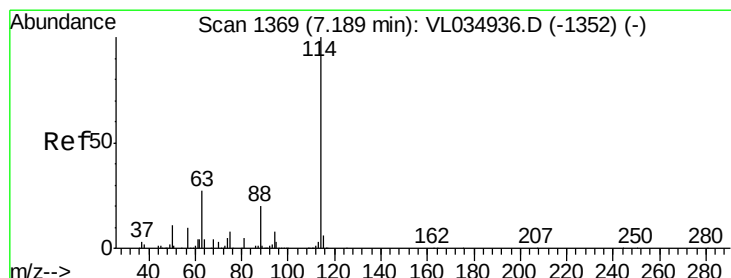
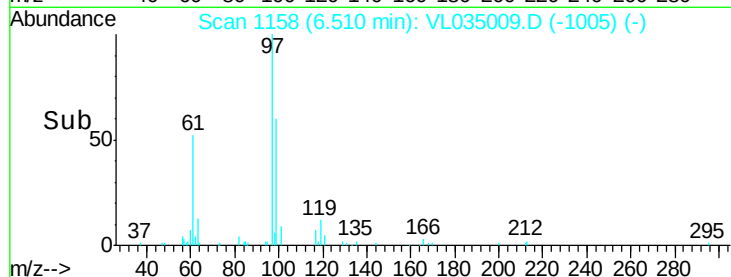
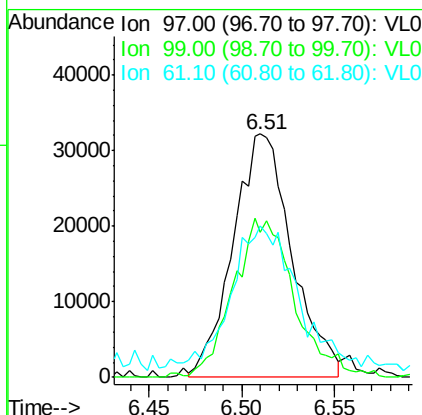
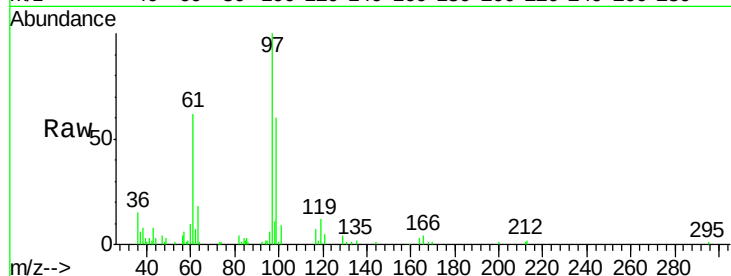
ClientSampled :

SG-1

Tot Ion:	97	Resp:	71419
Ion Ratio	Lower	Upper	
97	100		
99	68.4	52.1	78.1
61	70.1	41.8	62.8#

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#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

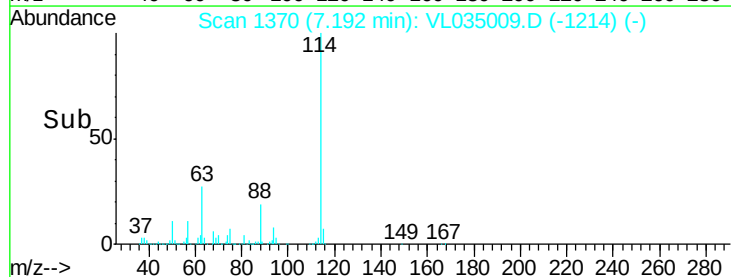
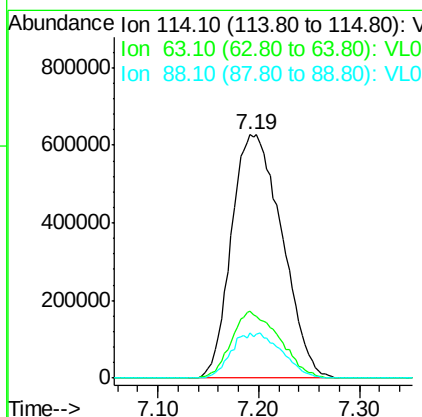
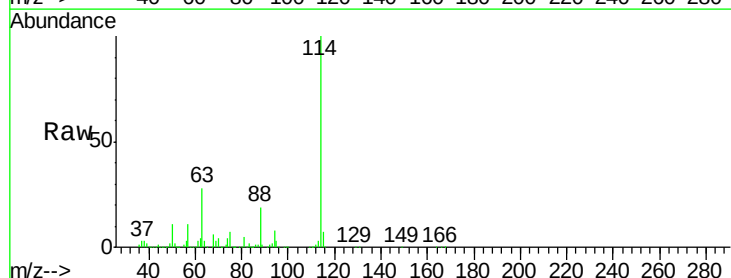
RT: 7.19 min Scan# 1370

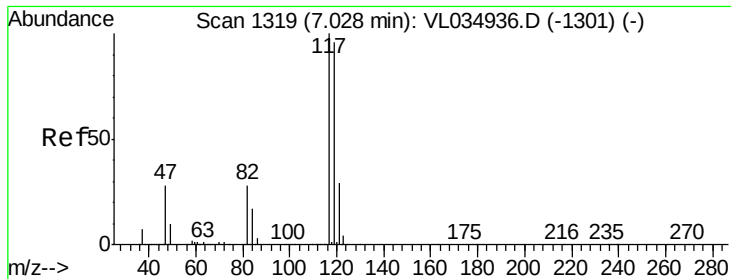
Delta R.T. 0.00 min

Lab File: VL035009.D

Acq: 13 May 2020 5:17

Tgt Ion:	114	Resp:	2181645
Ion Ratio	Lower	Upper	
114	100		
63	26.0	22.2	33.4
88	18.6	15.5	23.3





#35

Carbon Tetrachloride

Concen: 0.045 ppbv m

RT: 7.01 min Scan# 1315

Delta R.T. -0.01 min

Lab File: VL035009.D

Acq: 13 May 2020 5:17

Instrument :

MSVOA_L

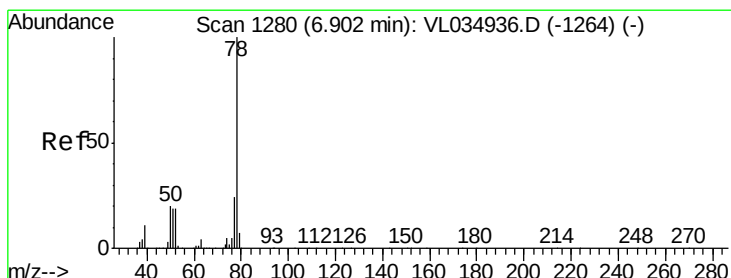
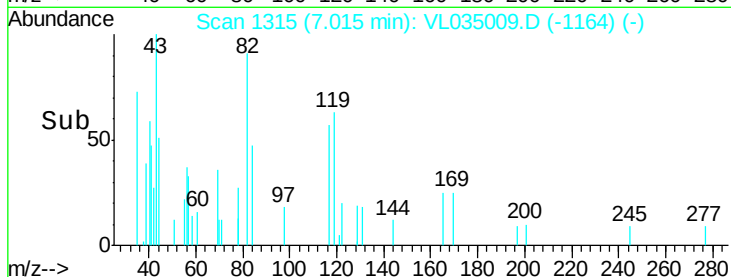
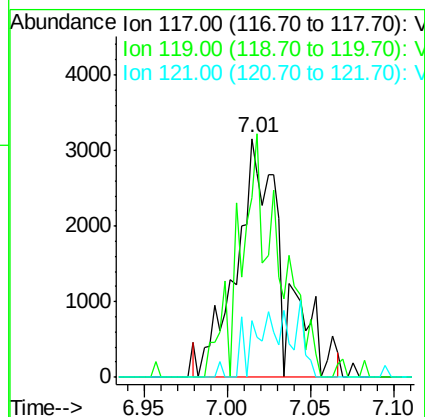
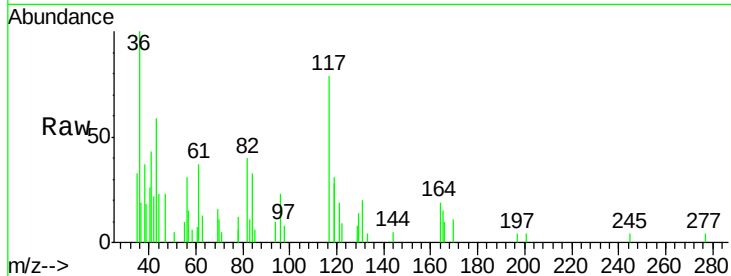
ClientSampled :

SG-1

Tot Ion	Ratio	Lower	Upper
117	100		
119	39.2	77.0	115.6#
121	23.8	23.0	34.6

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#36

Benzene

Concen: 2.067 ppbv

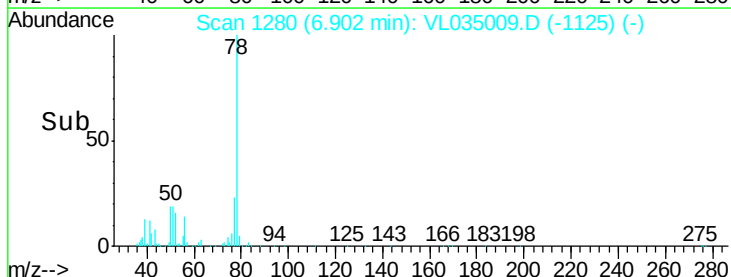
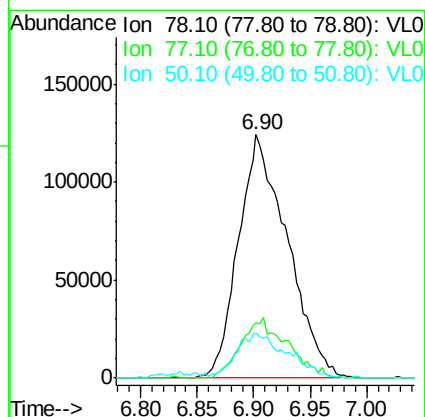
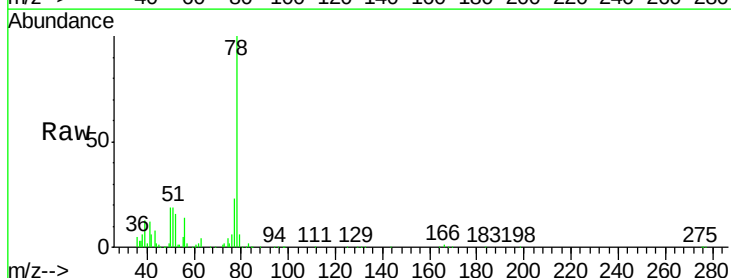
RT: 6.90 min Scan# 1280

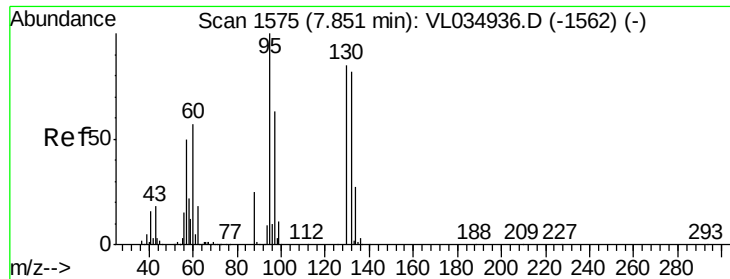
Delta R.T. -0.00 min

Lab File: VL035009.D

Acq: 13 May 2020 5:17

Tgt Ion	Ratio	Lower	Upper
78	100		
77	22.4	19.0	28.6
50	18.4	15.8	23.8





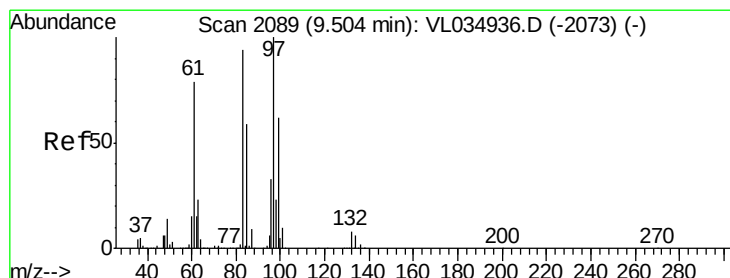
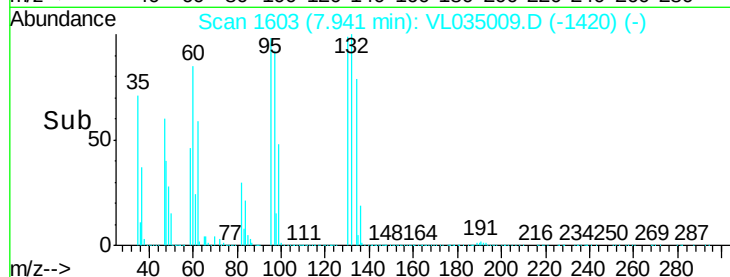
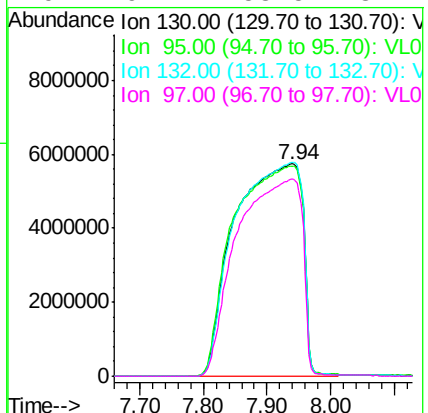
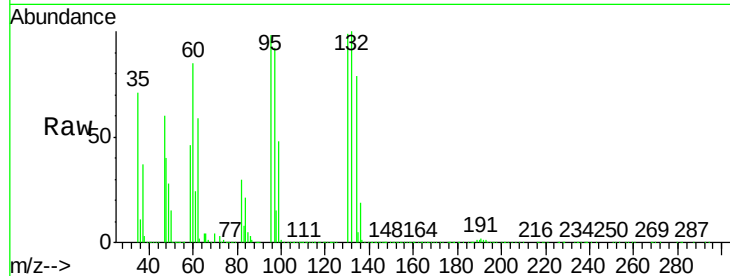
#38
 Trichloroethene
 Concen: 608.681 ppbv
 RT: 7.94 min Scan# 1603
 Delta R.T. 0.09 min
 Lab File: VL035009.D
 Acq: 13 May 2020 5:17

Instrument :
 MSVOA_L
 ClientSampled :
 SG-1

Tot Ion:130 Resp:42414095
 Ion Ratio Lower Upper
 130 100
 95 98.9 93.4 140.0
 132 100.6 76.4 114.6
 97 92.7 58.5 87.7#

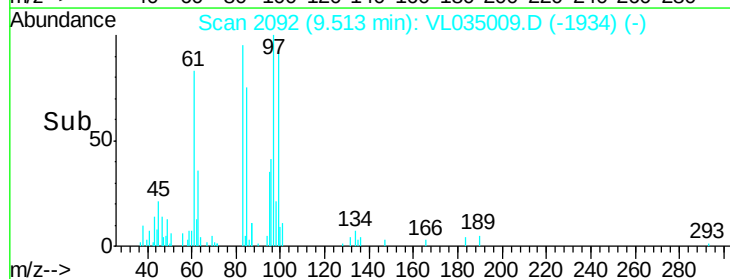
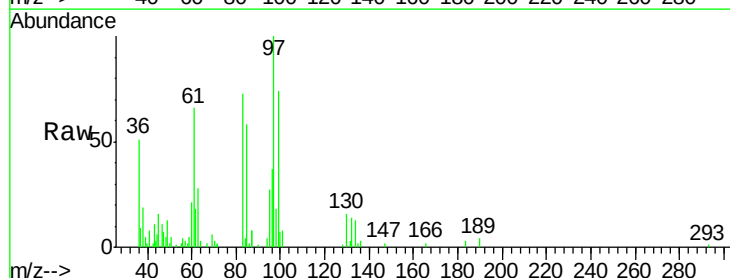
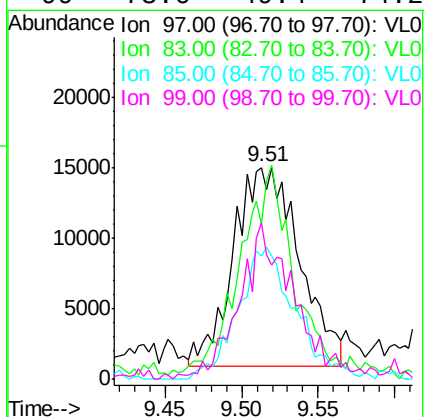
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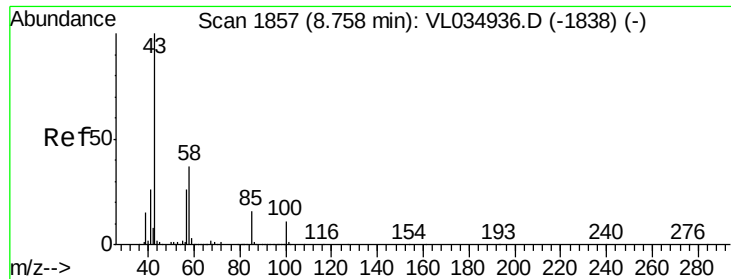
MMDadoda
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#47
 1,1,2-Trichloroethane
 Concen: 0.558 ppbv m
 RT: 9.51 min Scan# 2092
 Delta R.T. 0.01 min
 Lab File: VL035009.D
 Acq: 13 May 2020 5:17

Tgt Ion: 97 Resp: 42444
 Ion Ratio Lower Upper
 97 100
 83 73.3 75.6 113.4#
 85 58.2 47.0 70.6
 99 73.6 49.4 74.2





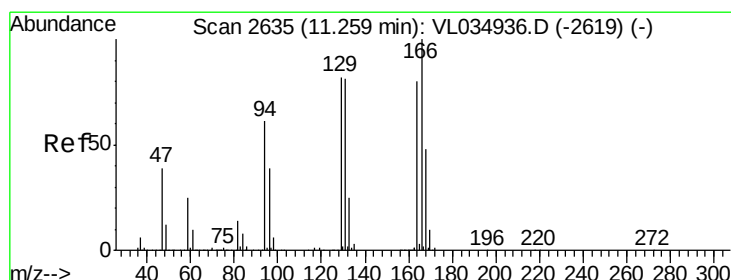
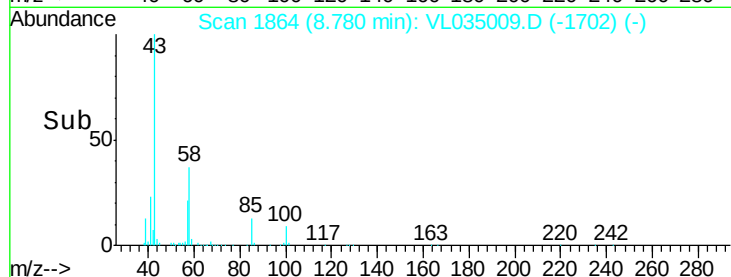
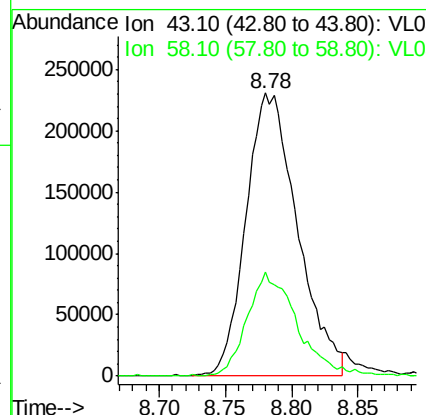
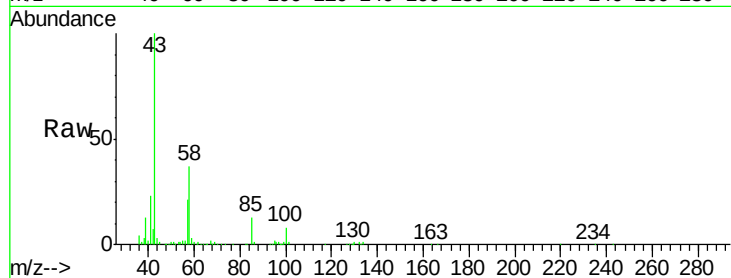
#50
4-Methyl-2-Pentanone
Concen: 3.228 ppbv
RT: 8.78 min Scan# 1864
Delta R.T. 0.02 min
Lab File: VL035009.D
Acq: 13 May 2020 5:17

Instrument :
MSVOA_L
ClientSampled :
SG-1

Tot Ion: 43 Resp: 624177
Ion Ratio Lower Upper
43 100
58 36.0 29.1 43.7

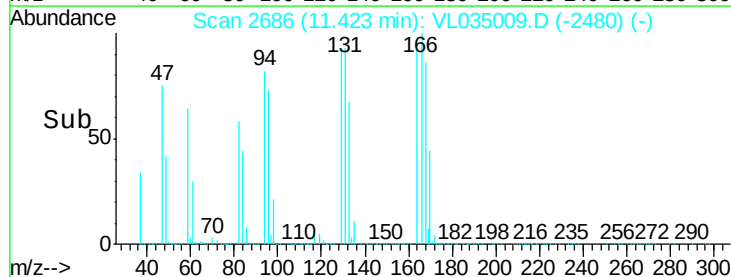
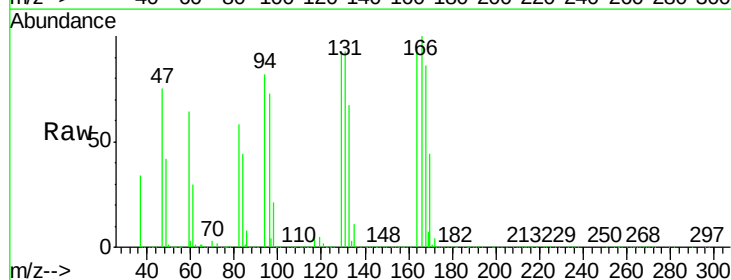
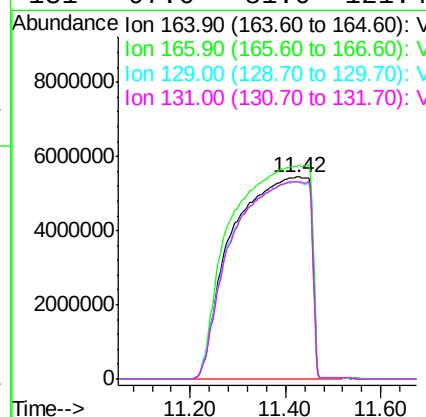
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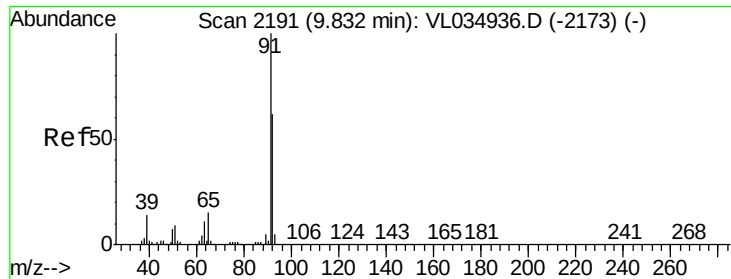
MMDadoda
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#52
Tetrachloroethene
Concen: 956.472 ppbv m
RT: 11.42 min Scan# 2686
Delta R.T. 0.16 min
Lab File: VL035009.D
Acq: 13 May 2020 5:17

Tgt Ion: 164 Resp: 61173684
Ion Ratio Lower Upper
164 100
166 105.5 100.7 151.1
129 97.3 83.0 124.4
131 97.6 81.0 121.4





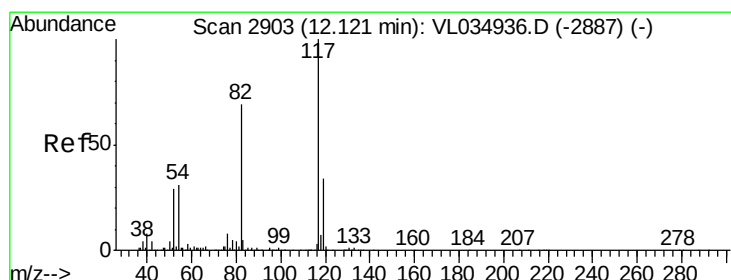
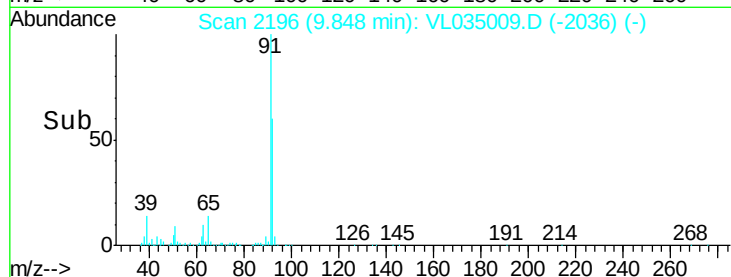
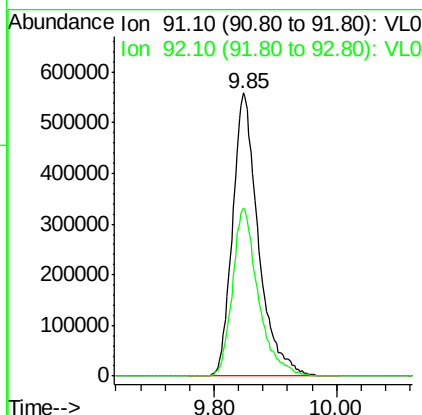
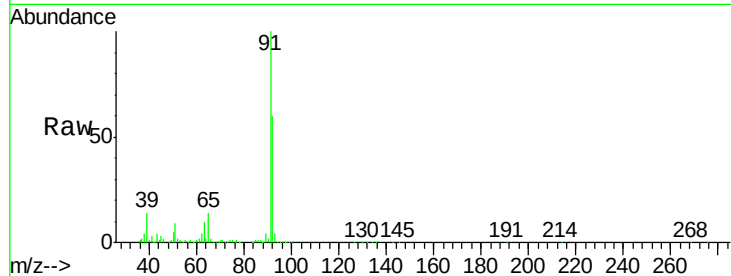
#53
Toluene
Concen: 8.576 ppbv m
RT: 9.85 min Scan# 2196
Delta R.T. 0.02 min
Lab File: VL035009.D
Acq: 13 May 2020 5:17

Instrument :
MSVOA_L
ClientSampleId :
SG-1

Tot Ion: 91 Resp: 1635221
Ion Ratio Lower Upper
91 100
92 59.4 48.6 73.0

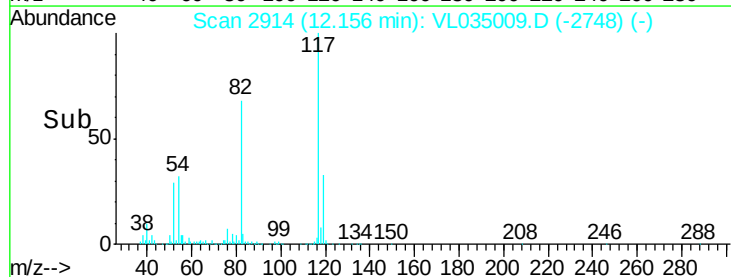
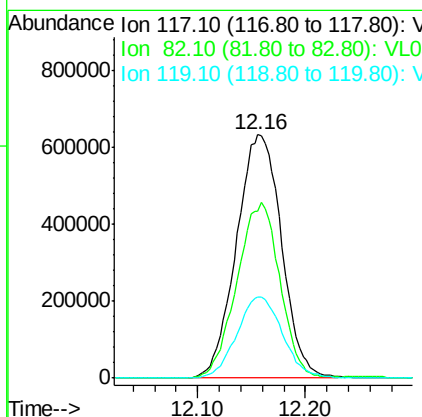
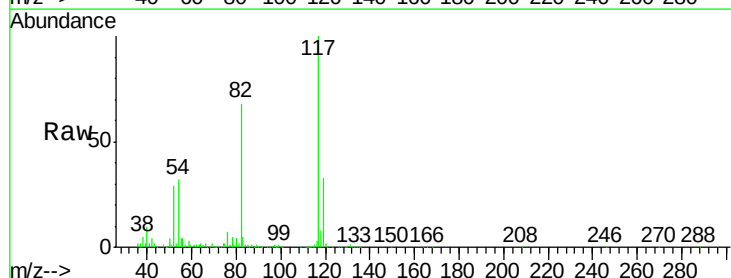
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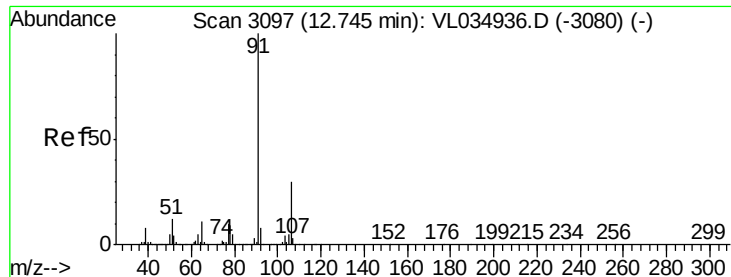
MMDadoda
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#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.16 min Scan# 2914
Delta R.T. 0.04 min
Lab File: VL035009.D
Acq: 13 May 2020 5:17

Tgt Ion: 117 Resp: 1839852
Ion Ratio Lower Upper
117 100
82 68.8 53.1 79.7
119 33.8 26.7 40.1





#58

Ethyl Benzene

Concen: 4.003 ppbv

RT: 12.77 min Scan# 3106

Delta R.T. 0.03 min

Lab File: VL035009.D

Acq: 13 May 2020 5:17

Instrument :

MSVOA_L

ClientSampled :

SG-1

Tot Ion: 91 Resp: 910625

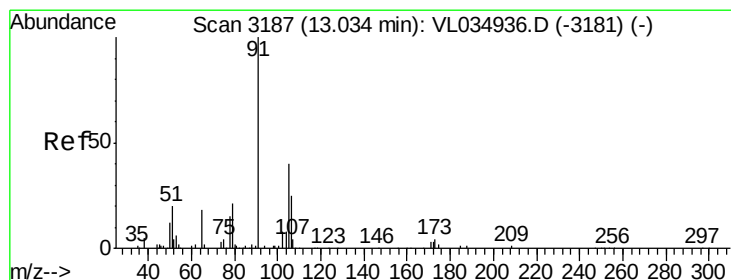
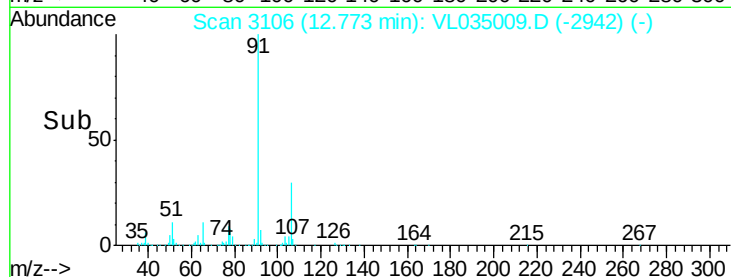
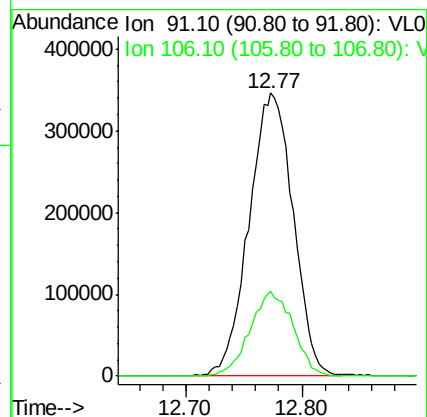
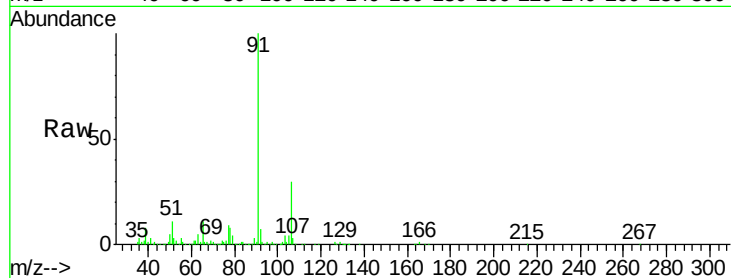
Ion Ratio Lower Upper

91 100

106 29.9 24.2 36.4

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#59

m/p-Xylene

Concen: 11.520 ppbv

RT: 13.03 min Scan# 3186

Delta R.T. -0.00 min

Lab File: VL035009.D

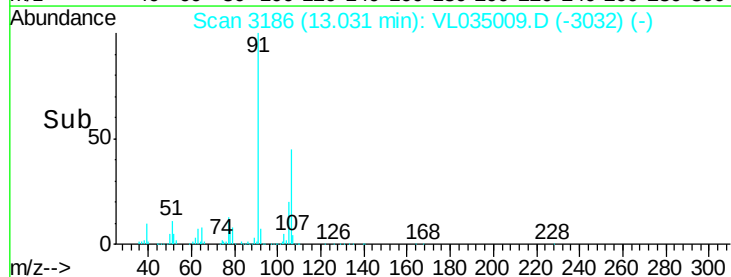
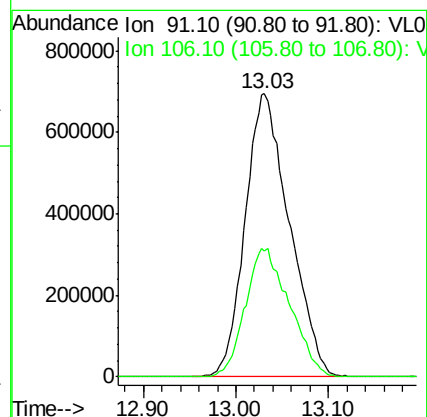
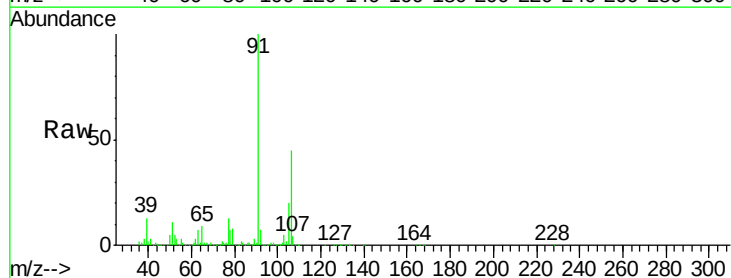
Acq: 13 May 2020 5:17

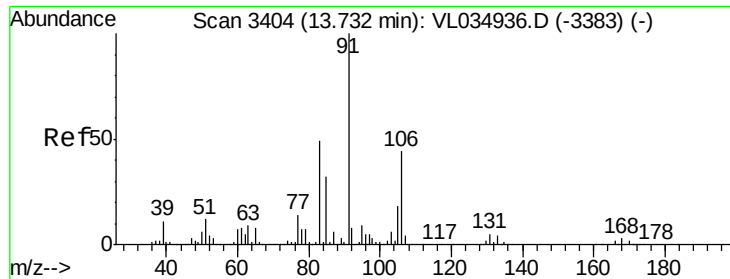
Tgt Ion: 91 Resp: 2305972

Ion Ratio Lower Upper

91 100

106 45.5 66.0 99.0#





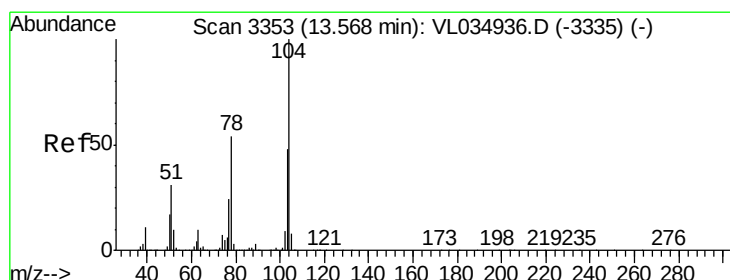
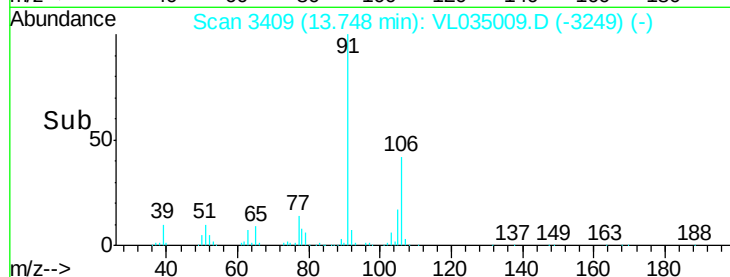
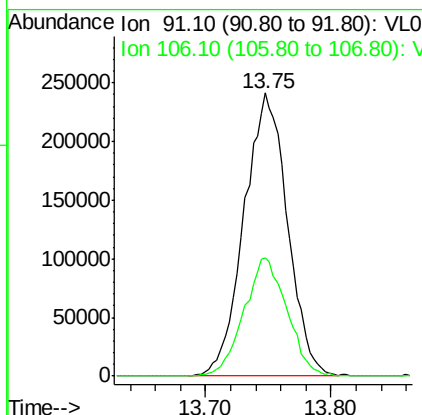
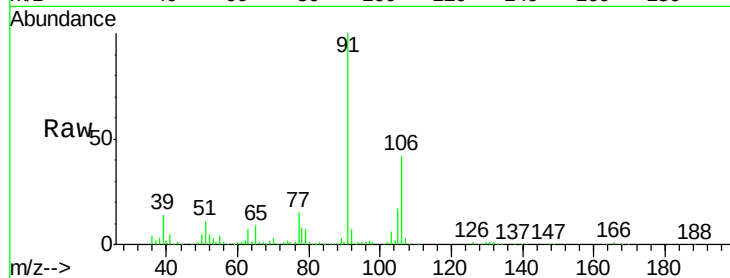
#60
o-Xylene
Concen: 2.922 ppbv
RT: 13.75 min Scan# 3409
Delta R.T. 0.02 min
Lab File: VL035009.D
Acq: 13 May 2020 5:17

Instrument :
MSVOA_L
ClientSampled :
SG-1

Tot Ion: 91 Resp: 577089
Ion Ratio Lower Upper
91 100
106 41.9 21.9 65.5

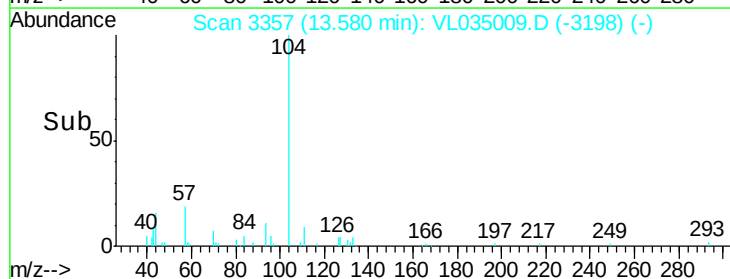
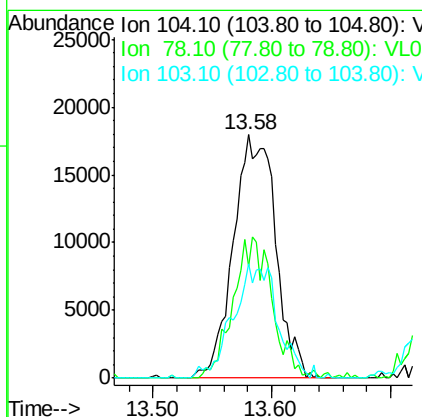
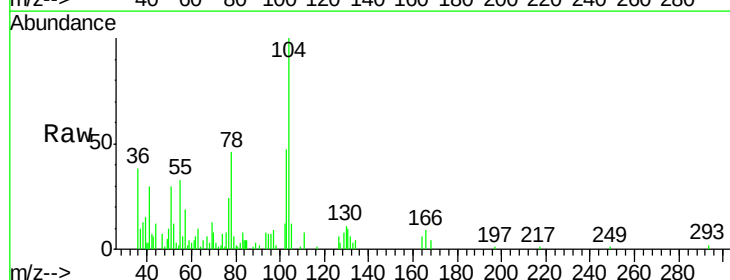
Manual Integrations
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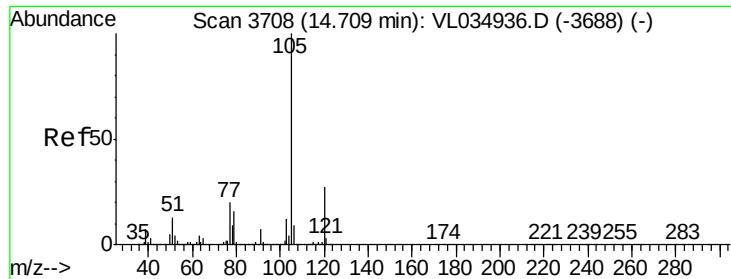
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#61
Styrene
Concen: 0.353 ppbv m
RT: 13.58 min Scan# 3357
Delta R.T. 0.01 min
Lab File: VL035009.D
Acq: 13 May 2020 5:17

Tgt Ion: 104 Resp: 44134
Ion Ratio Lower Upper
104 100
78 0.0 43.7 65.5#
103 0.0 38.8 58.2#





#62

Isopropylbenzene

Concen: 1.499 ppbv

RT: 14.72 min Scan# 3710

Delta R.T. 0.01 min

Lab File: VL035009.D

Acq: 13 May 2020 5:17

Instrument :

MSVOA_L

ClientSampleId :

SG-1

Tot Ion: 105 Resp: 442171

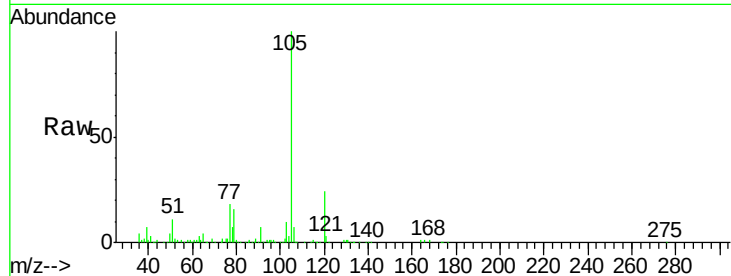
Ion Ratio Lower Upper

105 100

120 24.6 20.6 31.0

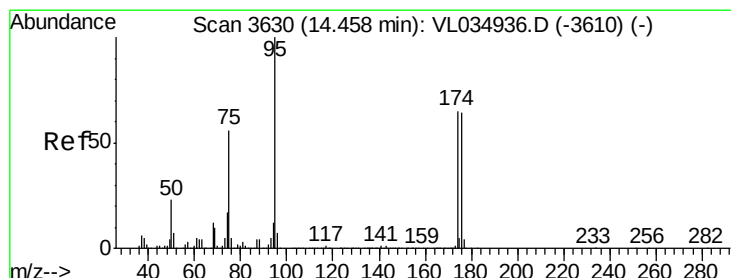
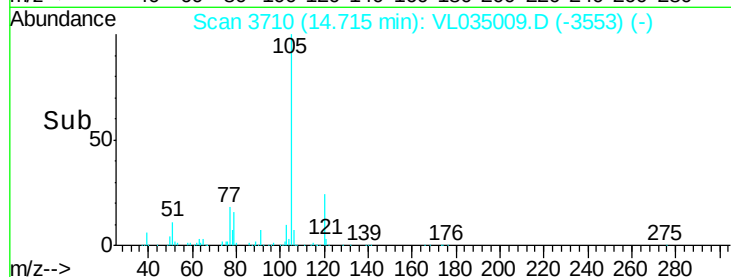
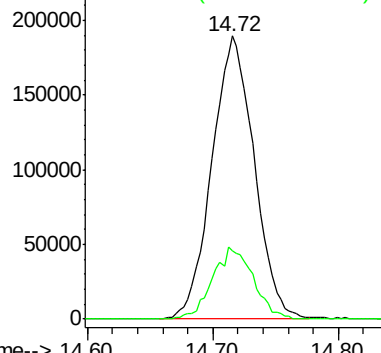
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#68

1-Bromo-4-Fluorobenzene

Concen: 10.033 ppbv

RT: 14.47 min Scan# 3633

Delta R.T. 0.01 min

Lab File: VL035009.D

Acq: 13 May 2020 5:17

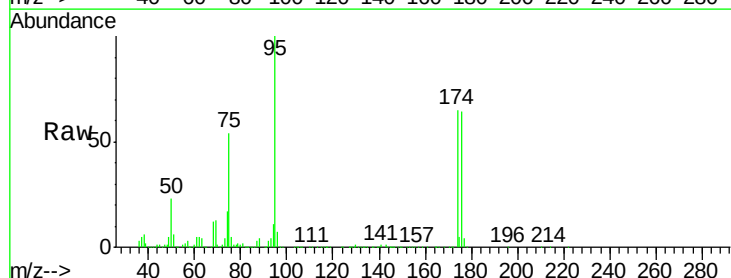
Tgt Ion: 95 Resp: 1494128

Ion Ratio Lower Upper

95 100

174 65.0 51.5 77.3

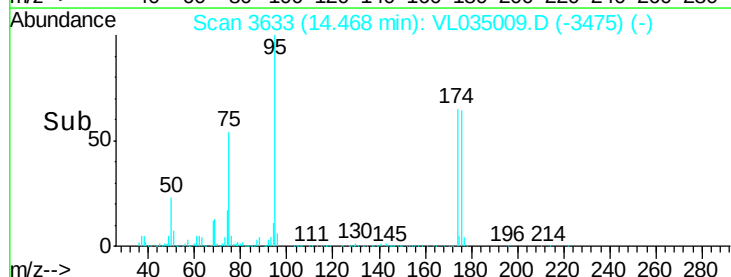
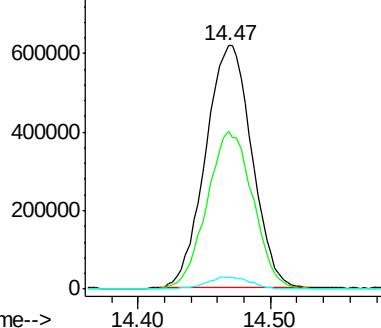
175 4.8 3.8 5.8

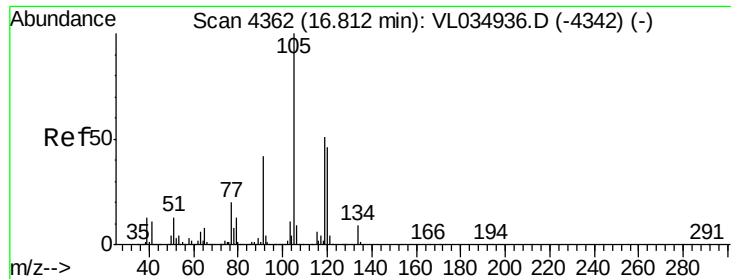


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





#74
 1,2,4-Trimethylbenzene
 Concen: 0.159 ppbv m
 RT: 16.81 min Scan# 4361
 Delta R.T. -0.00 min
 Lab File: VL035009.D
 Acq: 13 May 2020 5:17

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-1

Tot Ion	Ratio	Resp Lower	Resp Upper
105	100		
120	35.8	36.8	55.2#
91	14.0	35.4	53.0#
77	18.3	16.2	24.2

Manual Integrations
 APPROVED

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