

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL051220\
 Data File : VL035003.D
 Acq On : 13 May 2020 1:29
 Operator : SY/AP
 Sample : L2566-02 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-4

Manual Integrations
 APPROVED

MMDadoda
 5/18/2020 2:08:36 PM

Quant Time: May 18 11:05:46 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	1040960	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.19	114	2467660m	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.36	117	2779171	10.00	ppbv	0.24

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene		14.57	95	1780850	7.92	ppbv	0.12
Spiked Amount	10.000	Range	65 - 135	Recovery	=	79.20%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
5) Vinyl Chloride	3.21	62	10155	0.153	ppbv	92
9) Propene	2.97	41	195839m	3.797	ppbv	
10) Heptane	8.19	43	95120m	0.736	ppbv	
13) Ethanol	3.56	45	201303	11.829	ppbv	96
15) Acetone	3.82	43	214762m	1.561	ppbv	
18) 1,1-Dichloroethene	4.25	96	542004	11.518	ppbv	98
19) Isopropyl Alcohol	3.94	45	324028	3.531	ppbv #	97
20) Methylene Chloride	4.31	84	38185	0.838	ppbv	93
22) trans-1,2-Dichloroethene	4.86	96	226023	4.849	ppbv	93
26) Hexane	5.67	57	153393	1.531	ppbv #	44
28) Methyl tert-Butyl Ether	5.02	73	31299m	0.205	ppbv	
29) Chloroform	5.73	83	2416869	14.739	ppbv	100
30) Cyclohexane	7.12	84	69949	0.904	ppbv	95
31) cis-1,2-Dichloroethene	5.53	61	6129930	62.690	ppbv	91
32) 1,1,1-Trichloroethane	6.50	97	270128	1.824	ppbv	99
35) Carbon Tetrachloride	7.02	117	13426m	0.086	ppbv	
36) Benzene	6.90	78	577008m	2.836	ppbv	
38) Trichloroethene	7.98	130	65400999m	829.779	ppbv	
47) 1,1,2-Trichloroethane	9.54	97	231810m	2.693	ppbv	
52) Tetrachloroethene	11.44	164	174977963m	2418.742	ppbv	
53) Toluene	9.88	91	1042304m	4.833	ppbv	
56) 1,1,1,2-Tetrachloroethane	12.39	131	1031398	8.229	ppbv #	63
58) Ethyl Benzene	12.94	91	126788m	0.369	ppbv	
59) m/p-Xylene	13.18	91	291623m	0.964	ppbv	
60) o-Xylene	13.88	91	103708m	0.348	ppbv	
61) Styrene	13.71	104	34316m	0.182	ppbv	
62) Isopropylbenzene	14.81	105	365862	0.821	ppbv	97
74) 1,2,4-Trimethylbenzene	16.86	105	61880m	0.175	ppbv	

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

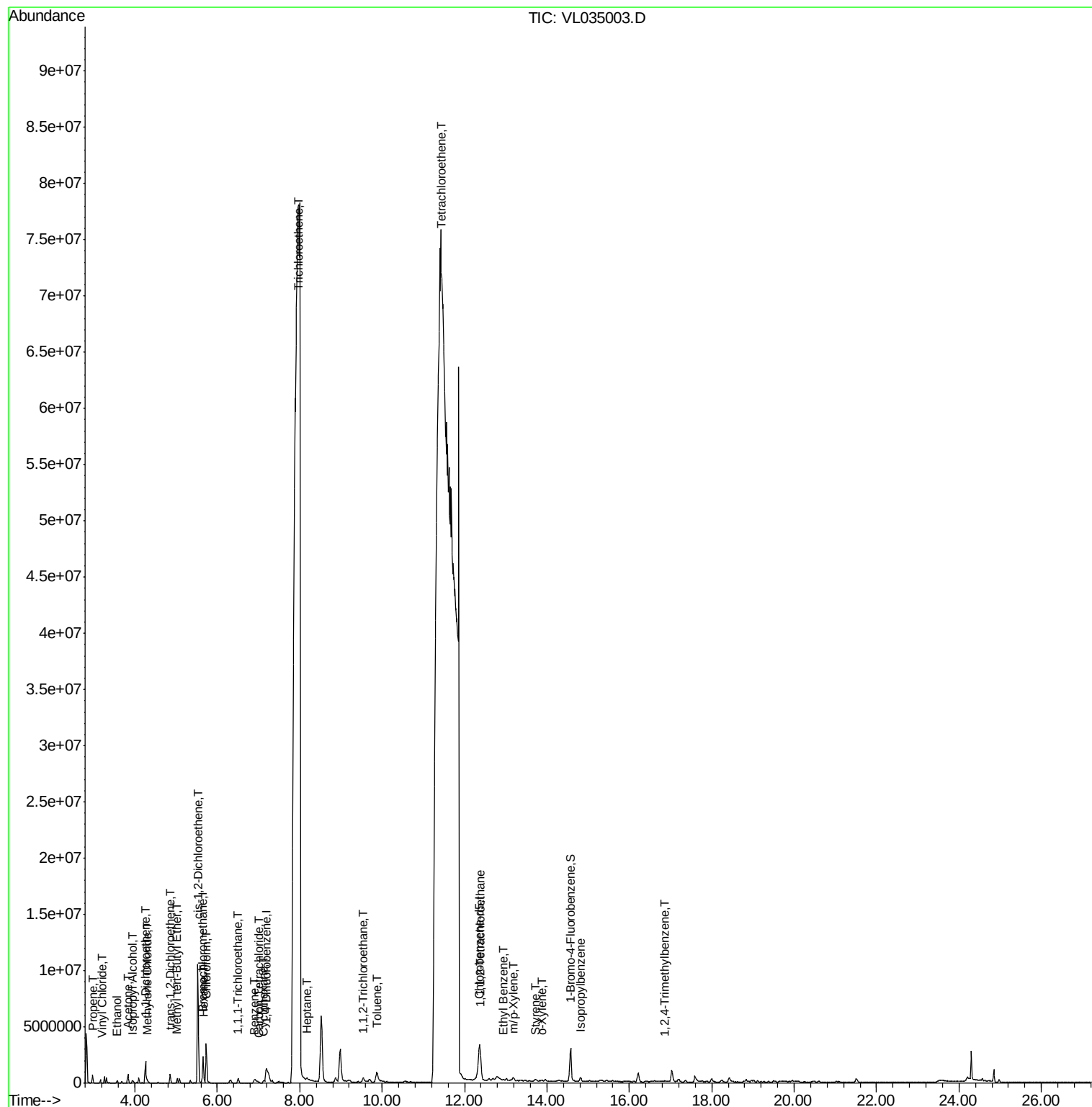
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL051220\
Data File : VL035003.D
Acq On : 13 May 2020 1:29
Operator : SY/AP
Sample : L2566-02 10X
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

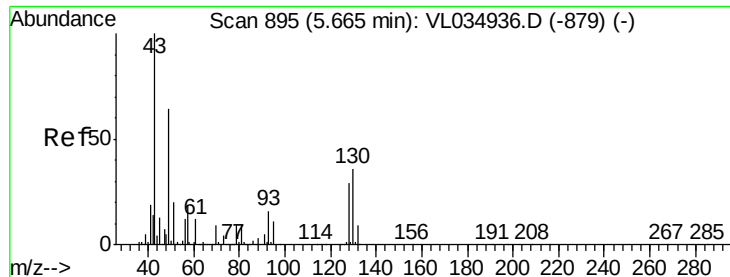
Instrument :
MSVOA_L
ClientSampled :
SG-4

Manual Integrations
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5/18/2020 2:08:36 PM

Quant Time: May 18 11:05:46 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL050620AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed 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# 890

Delta R.T. -0.02 min

Lab File: VL035003.D

Acq: 13 May 2020 1:29

Instrument :

MSVOA_L

ClientSampled :

SG-4

Tot Ion: 49 Resp: 1040960

Ion Ratio Lower Upper

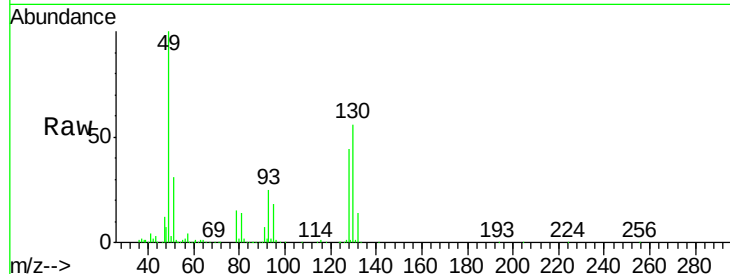
49 100

128 45.1 22.1 66.5

130 57.7 29.1 87.3

Manual Integrations
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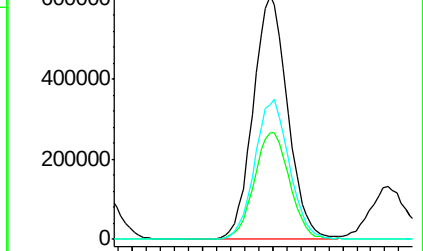
MMDadoda
5/18/2020 2:08:36 PM



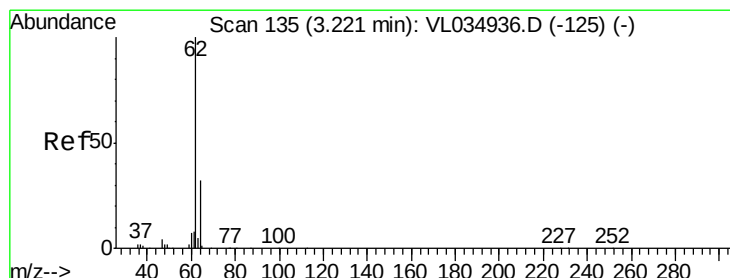
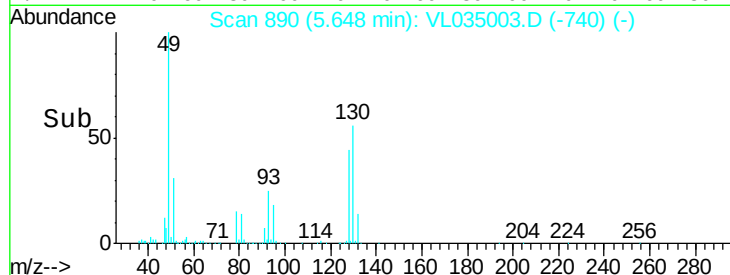
Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



Time-->



#5

Vinyl Chloride

Concen: 0.153 ppbv

RT: 3.21 min Scan# 131

Delta R.T. -0.01 min

Lab File: VL035003.D

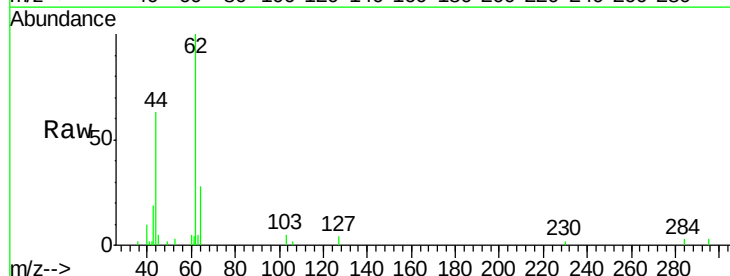
Acq: 13 May 2020 1:29

Tgt Ion: 62 Resp: 10155

Ion Ratio Lower Upper

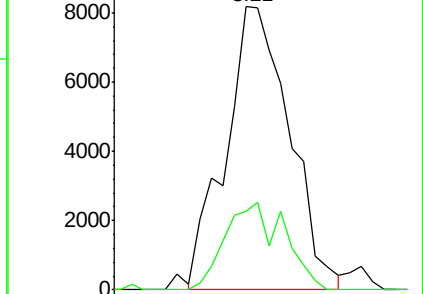
62 100

64 27.6 25.7 38.5

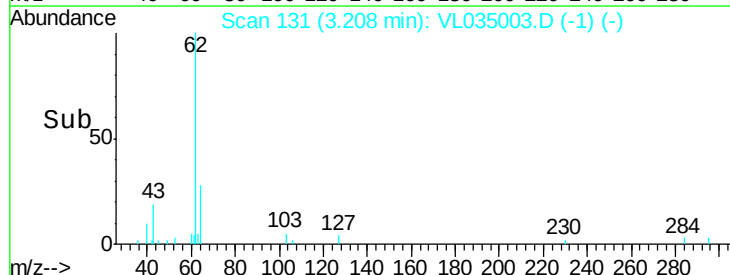


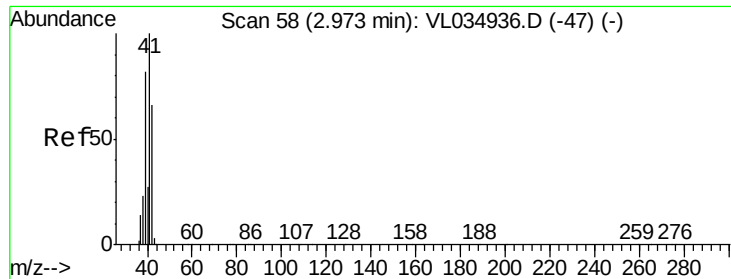
Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



Time-->





#9

Propene

Concen: 3.797 ppbv m

RT: 2.97 min Scan# 56

Delta R.T. -0.01 min

Lab File: VL035003.D

Acq: 13 May 2020 1:29

Instrument :

MSVOA_L

ClientSampled :

SG-4

Tot Ion: 41 Resp: 195839

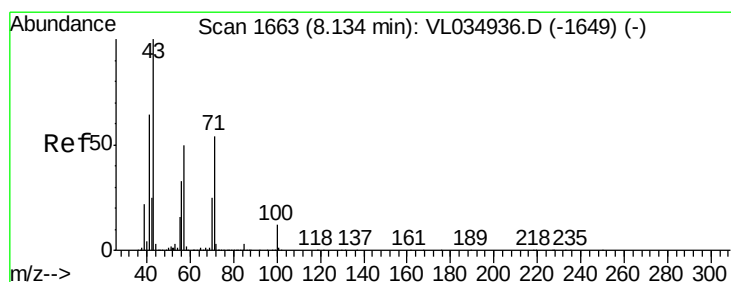
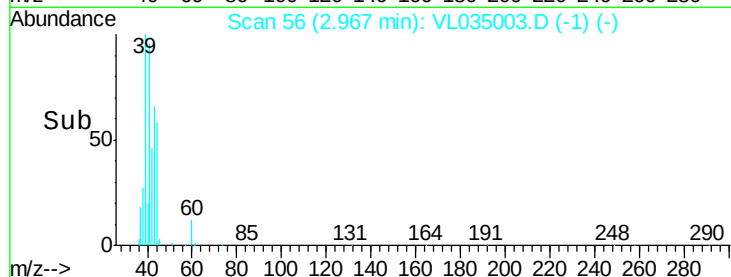
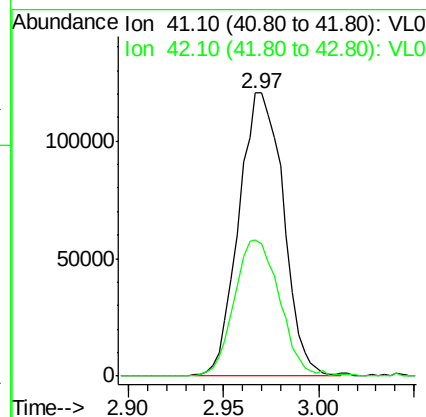
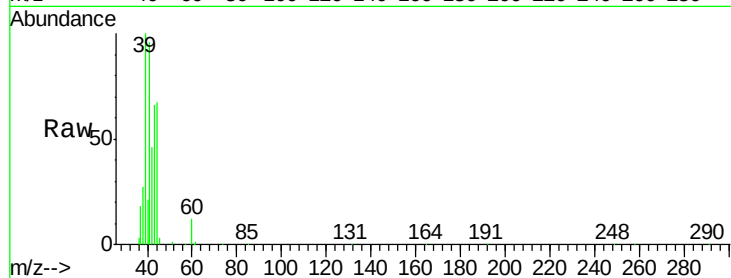
Ion Ratio Lower Upper

41 100

42 25.3 54.5 81.7#

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#10

Heptane

Concen: 0.736 ppbv m

RT: 8.19 min Scan# 1680

Delta R.T. 0.05 min

Lab File: VL035003.D

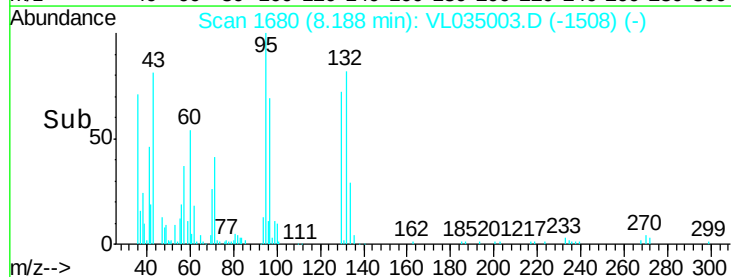
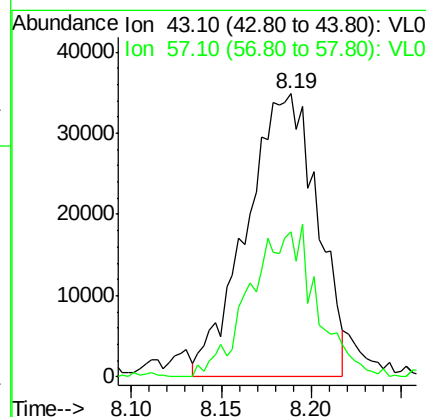
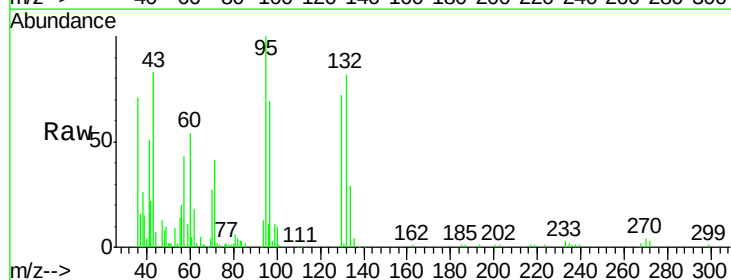
Acq: 13 May 2020 1:29

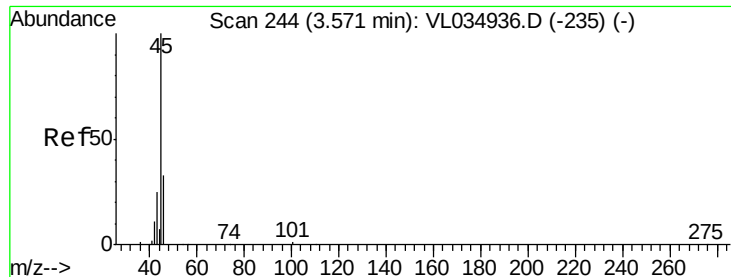
Tgt Ion: 43 Resp: 95120

Ion Ratio Lower Upper

43 100

57 0.0 41.1 61.7#





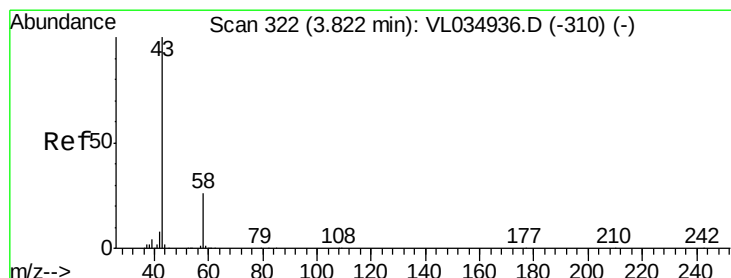
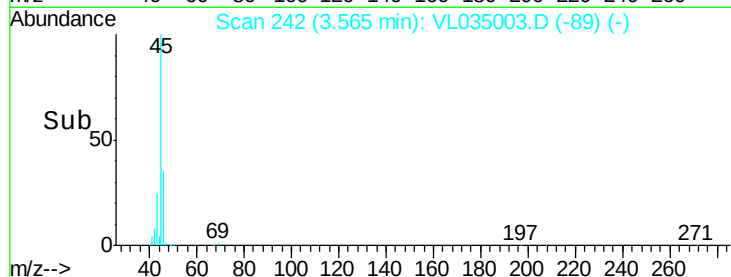
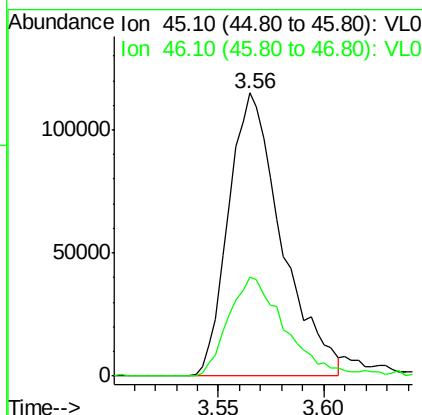
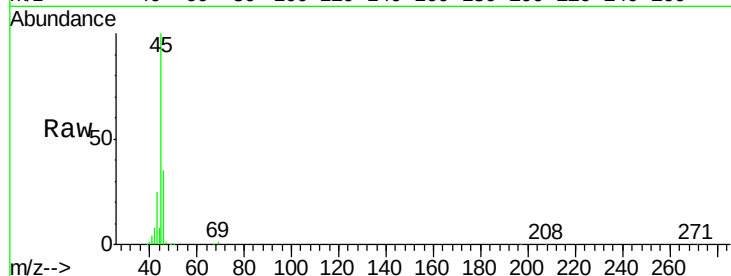
#13
Ethanol
Concen: 11.829 ppbv
RT: 3.56 min Scan# 242
Delta R.T. -0.01 min
Lab File: VL035003.D
Acq: 13 May 2020 1:29

Instrument :
MSVOA_L
ClientSampled :
SG-4

Tot Ion: 45 Resp: 201303
Ion Ratio Lower Upper
45 100
46 38.0 14.3 57.3

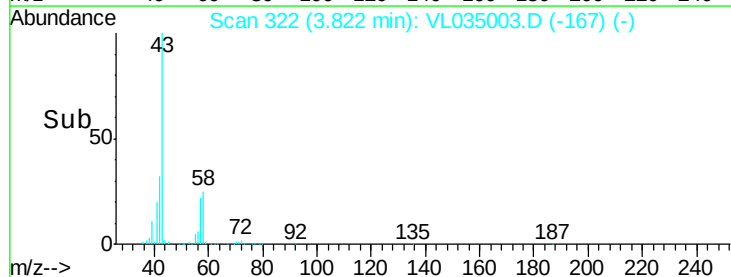
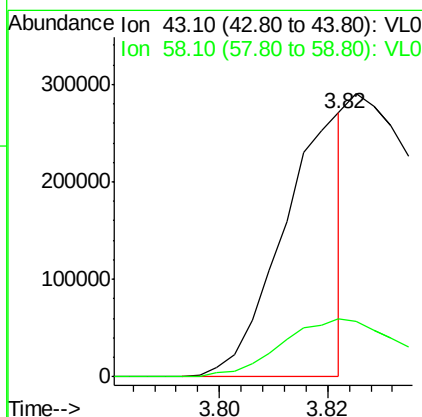
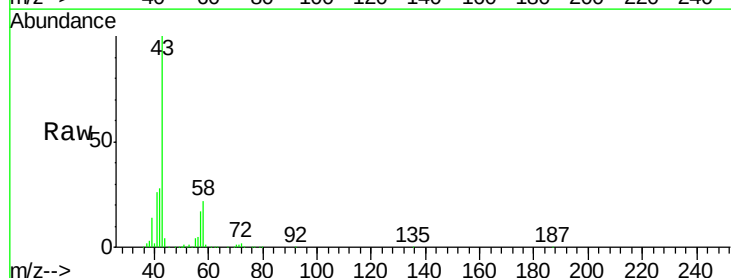
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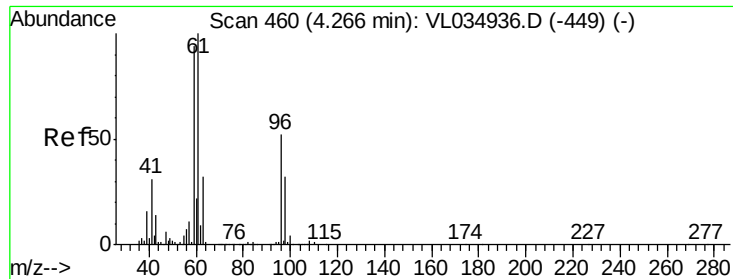
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#15
Acetone
Concen: 1.561 ppbv m
RT: 3.82 min Scan# 322
Delta R.T. -0.00 min
Lab File: VL035003.D
Acq: 13 May 2020 1:29

Tgt Ion: 43 Resp: 214762
Ion Ratio Lower Upper
43 100
58 46.4 21.7 32.5#





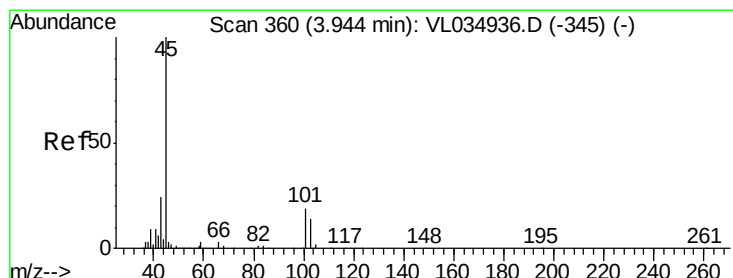
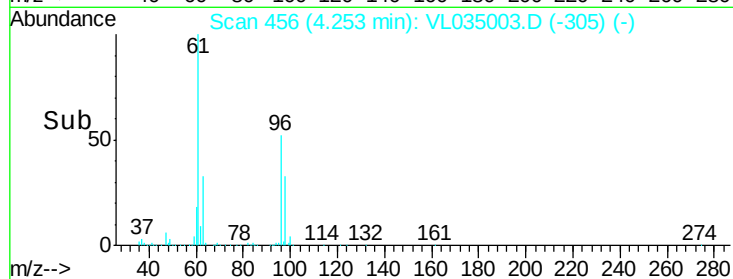
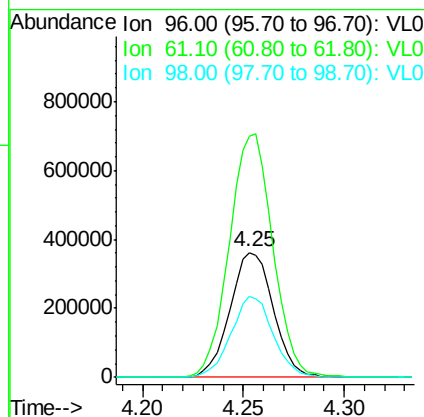
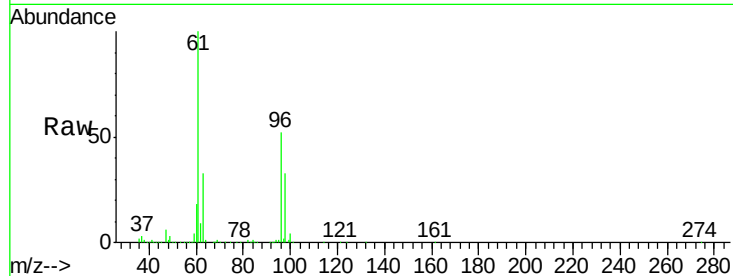
#18
 1,1-Dichloroethene
 Concen: 11.518 ppbv
 RT: 4.25 min Scan# 456
 Delta R.T. -0.01 min
 Lab File: VL035003.D
 Acq: 13 May 2020 1:29

Instrument :
 MSVOA_L
 ClientSampled :
 SG-4

Tot Ion	Ion	Ratio	Lower	Upper
96	100			
61	191.7	152.4	228.6	
98	64.1	48.8	73.2	

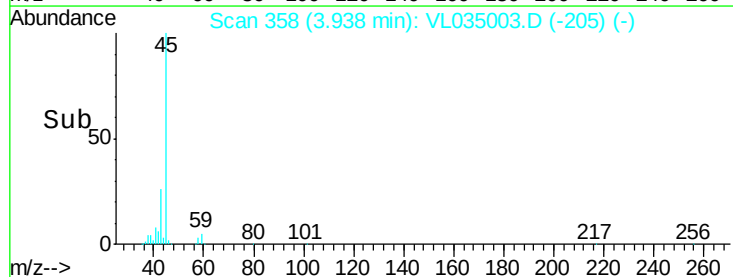
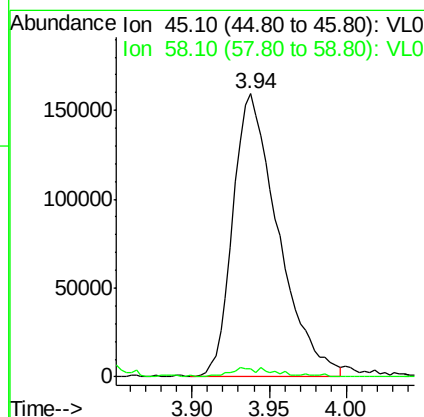
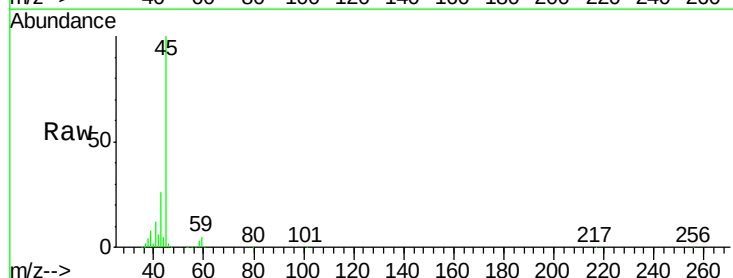
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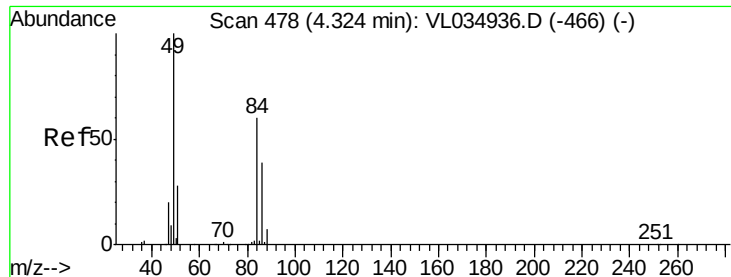
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#19
 Isopropyl Alcohol
 Concen: 3.531 ppbv
 RT: 3.94 min Scan# 358
 Delta R.T. -0.01 min
 Lab File: VL035003.D
 Acq: 13 May 2020 1:29

Tgt Ion	Ion	Ratio	Lower	Upper
45	100			
58	3.0	1.7	2.5#	





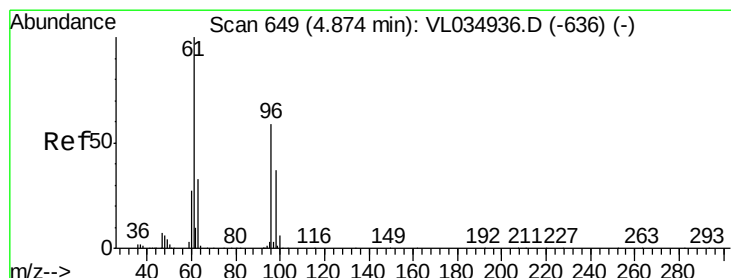
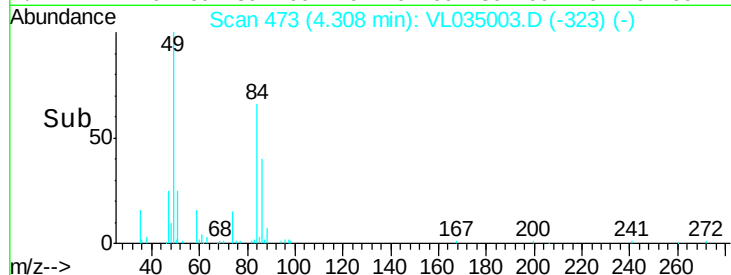
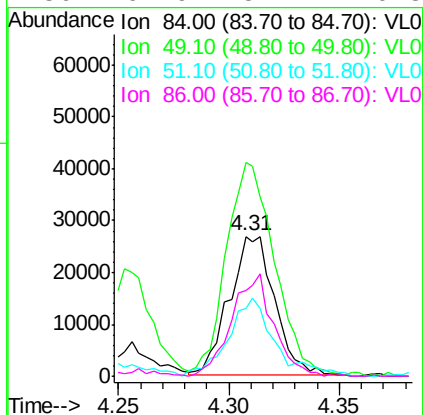
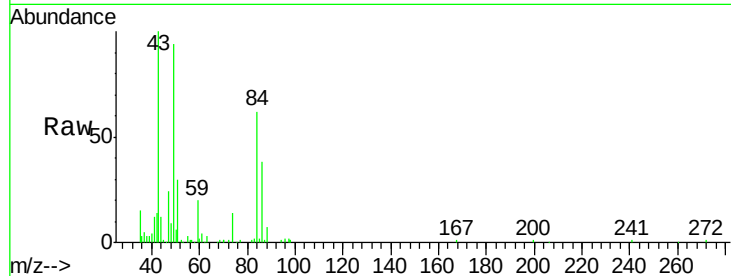
#20
Methvlene Chloride
Concen: 0.838 ppbv
RT: 4.31 min Scan# 473
Delta R.T. -0.02 min
Lab File: VL035003.D
Acq: 13 May 2020 1:29

Instrument :
MSVOA_L
ClientSampled :
SG-4

Tot Ion	Ion	Ratio	Resp	Lower	Upper
84	100				
49	152.4	132.5	198.7		
51	46.2	38.4	57.6		
86	61.9	51.2	76.8		

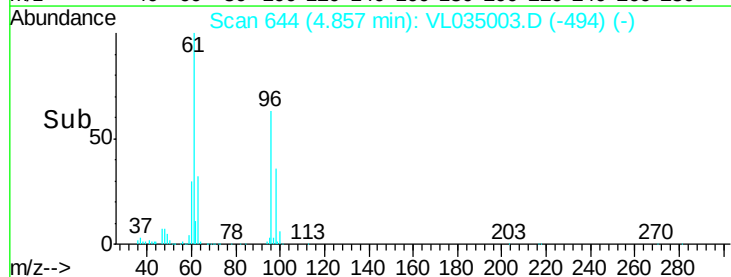
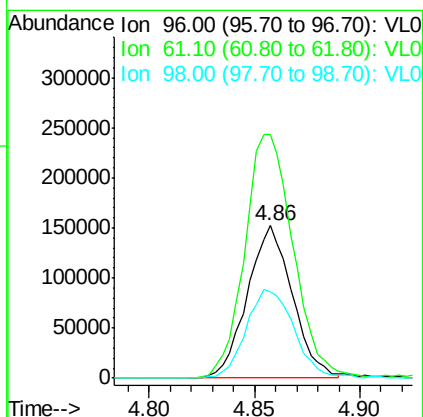
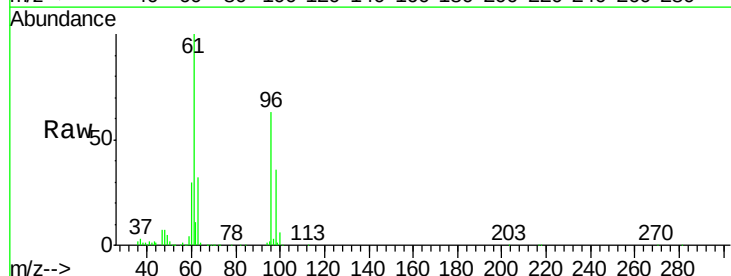
Manual Integrations
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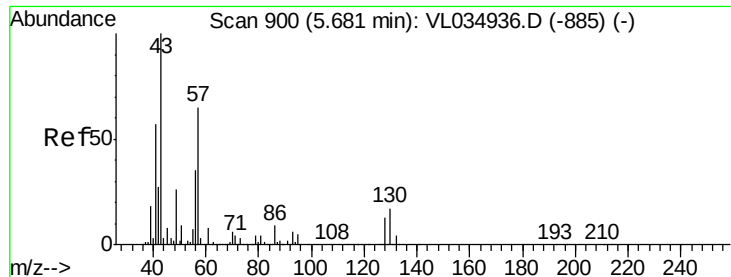
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#22
trans-1,2-Dichloroethene
Concen: 4.849 ppbv
RT: 4.86 min Scan# 644
Delta R.T. -0.02 min
Lab File: VL035003.D
Acq: 13 May 2020 1:29

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
96	100				
61	159.2	135.3	202.9		
98	56.7	50.4	75.6		





#26

Hexane

Concen: 1.531 ppbv

RT: 5.67 min Scan# 896

Delta R.T. -0.01 min

Lab File: VL035003.D

Acq: 13 May 2020 1:29

Instrument :

MSVOA_L

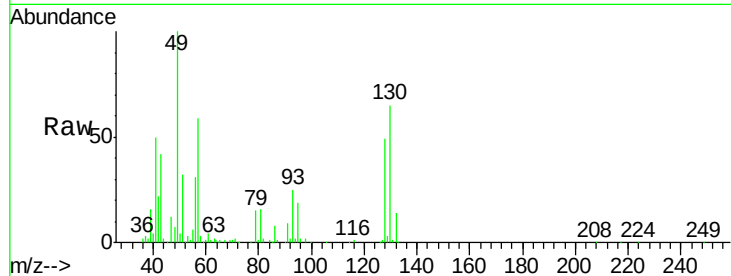
ClientSampleId :

SG-4

Tot Ion:	57	Resp:	153393
Ion Ratio	Lower	Upper	
57	100		
41	92.4	72.7	109.1
43	79.4	182.1	273.1#
56	55.5	42.2	63.2

Manual Integrations
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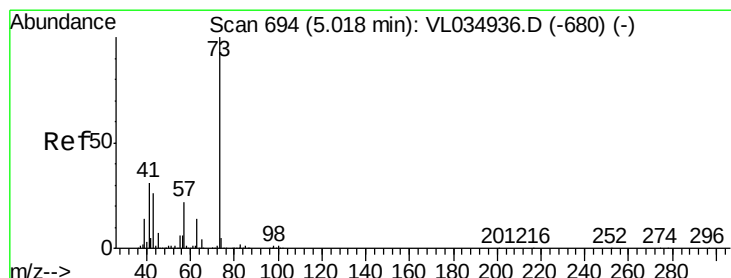
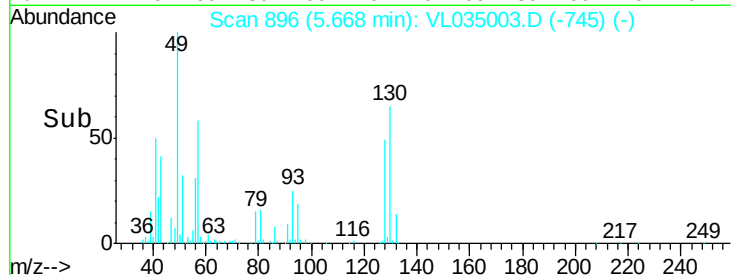
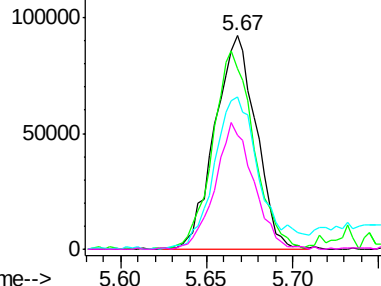


Abundance Ion 57.10 (56.80 to 57.80): VL0

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



#28

Methyl tert-Butyl Ether

Concen: 0.205 ppbv m

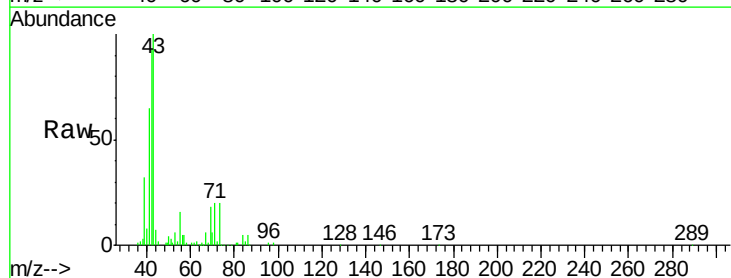
RT: 5.02 min Scan# 695

Delta R.T. 0.00 min

Lab File: VL035003.D

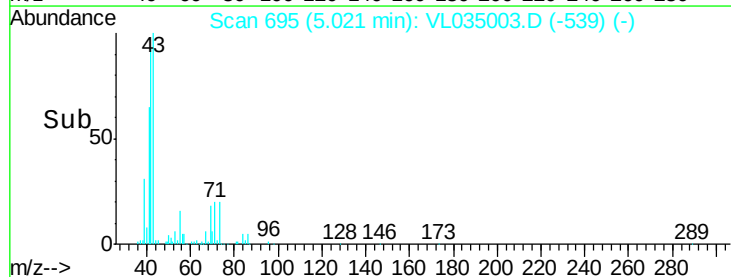
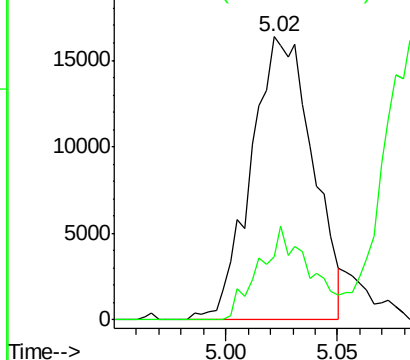
Acq: 13 May 2020 1:29

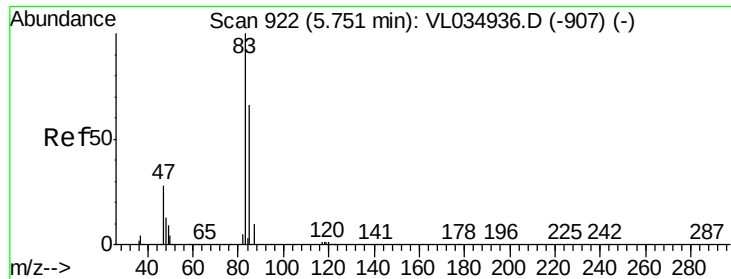
Tgt Ion:	73	Resp:	31299
Ion Ratio	Lower	Upper	
73	100		
57	29.2	18.3	27.5#



Abundance Ion 73.10 (72.80 to 73.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





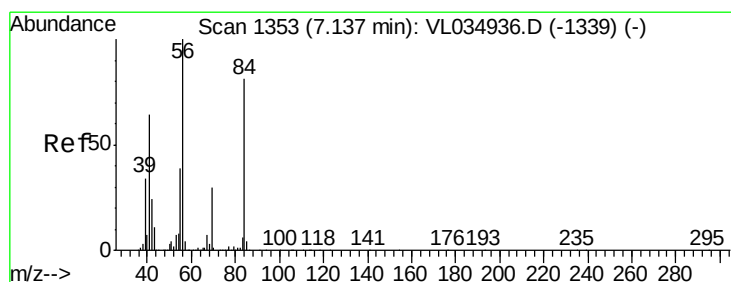
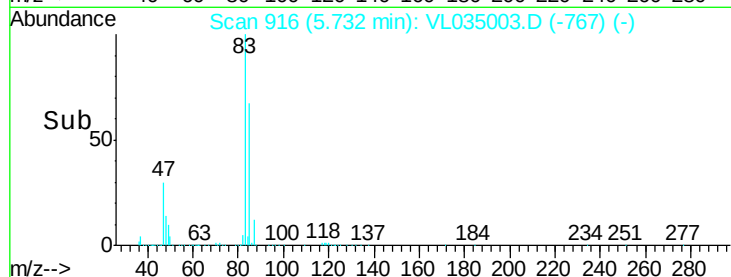
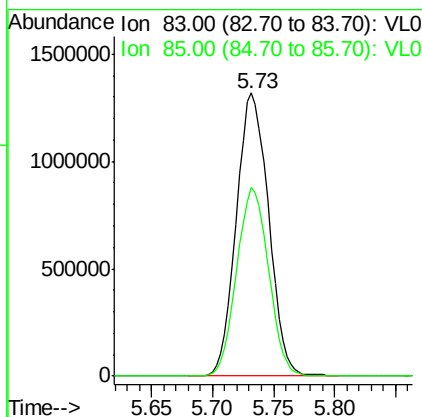
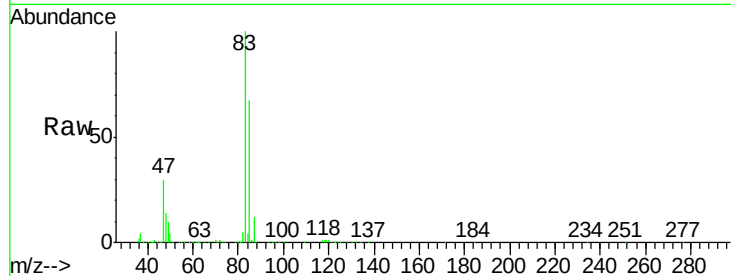
#29
Chloroform
Concen: 14.739 ppbv
RT: 5.73 min Scan# 916
Delta R.T. -0.02 min
Lab File: VL035003.D
Acq: 13 May 2020 1:29

Instrument :
MSVOA_L
ClientSampled :
SG-4

Tot Ion: 83 Resp: 2416869
Ion Ratio Lower Upper
83 100
85 66.7 53.0 79.6

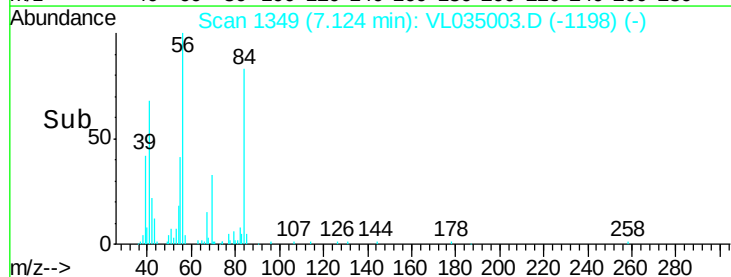
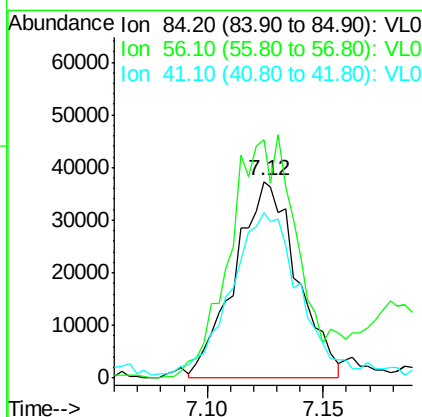
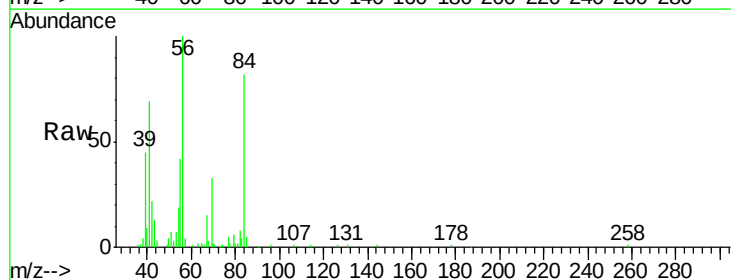
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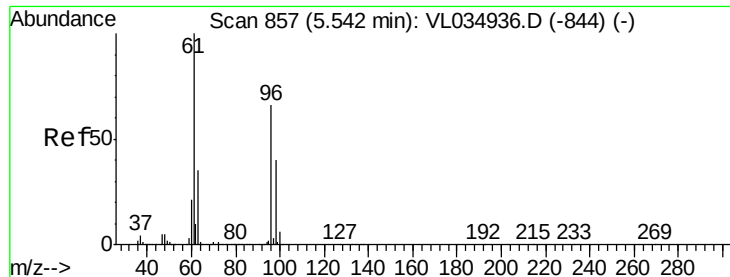
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#30
Cyclohexane
Concen: 0.904 ppbv
RT: 7.12 min Scan# 1349
Delta R.T. -0.01 min
Lab File: VL035003.D
Acq: 13 May 2020 1:29

Tgt Ion: 84 Resp: 69949
Ion Ratio Lower Upper
84 100
56 133.9 111.4 167.2
41 88.9 66.7 100.1





#31

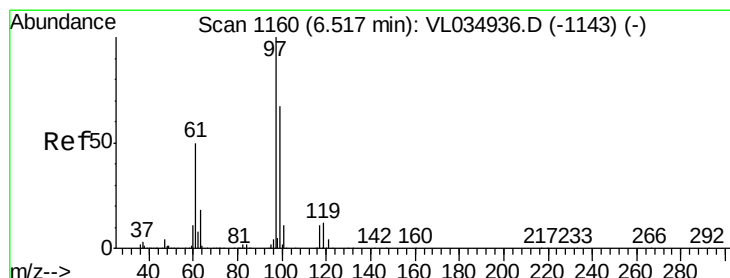
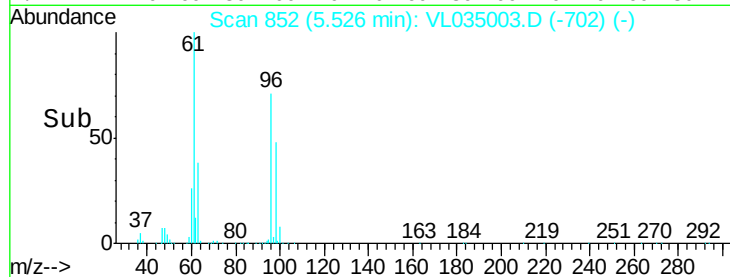
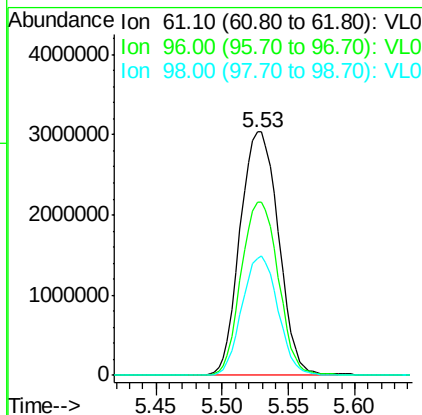
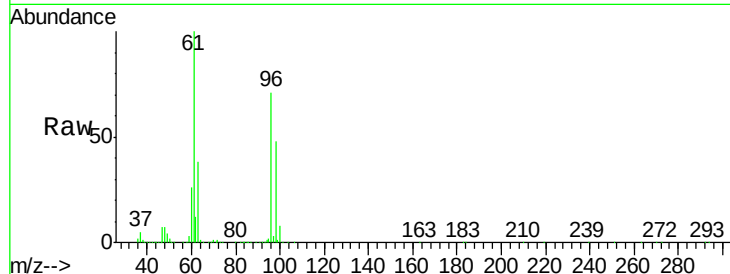
cis-1,2-Dichloroethene
Concen: 62.690 ppbv
RT: 5.53 min Scan# 852
Delta R.T. -0.02 min
Lab File: VL035003.D
Acq: 13 May 2020 1:29

Instrument :
MSVOA_L
ClientSampleId :
SG-4

Tot Ion:	61	Resp:	6129930
Ion	Ratio	Lower	Upper
61	100		
96	71.1	53.0	79.6
98	48.2	32.2	48.2

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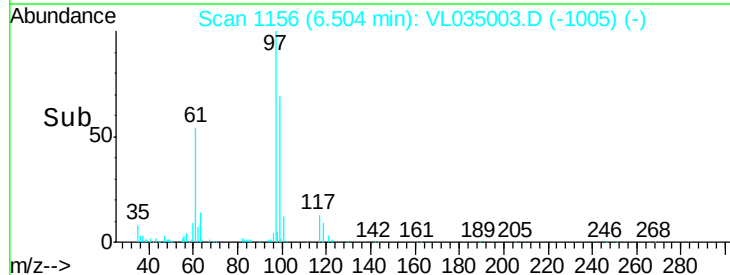
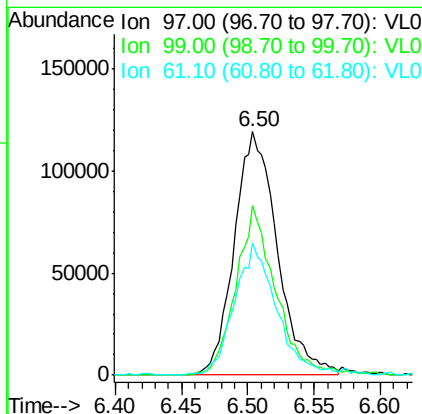
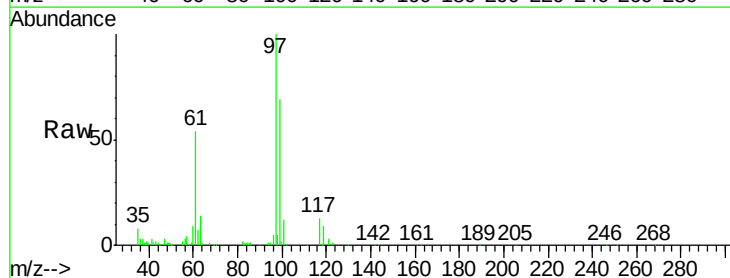
MMDadoda
5/18/2020 2:08:36 PM

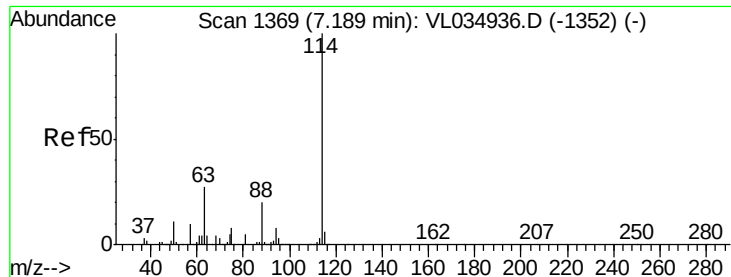


#32

1,1,1-Trichloroethane
Concen: 1.824 ppbv
RT: 6.50 min Scan# 1156
Delta R.T. -0.01 min
Lab File: VL035003.D
Acq: 13 May 2020 1:29

Tgt Ion:	97	Resp:	270128
Ion	Ratio	Lower	Upper
97	100		
99	64.5	52.1	78.1
61	53.8	41.8	62.8





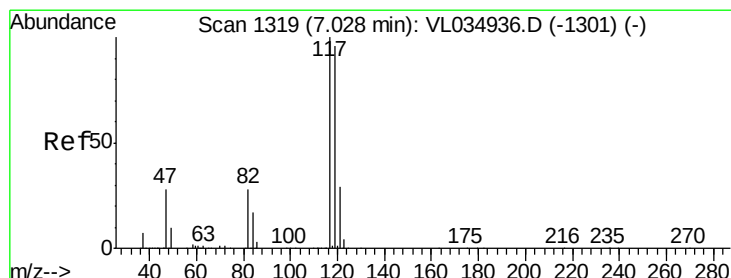
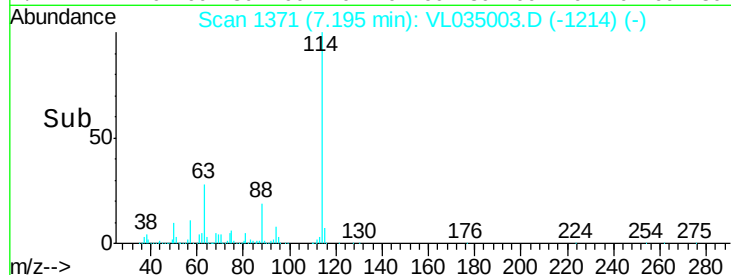
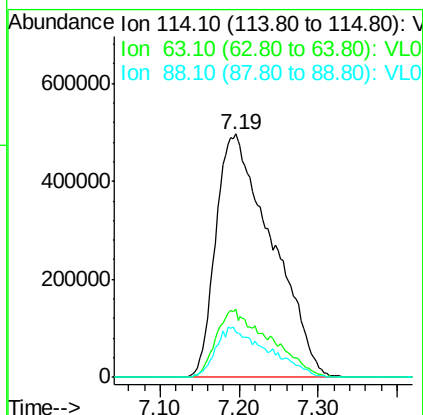
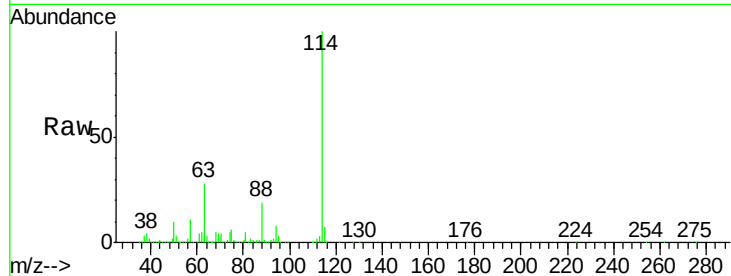
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv m
 RT: 7.19 min Scan# 1371
 Delta R.T. 0.01 min
 Lab File: VL035003.D
 Acq: 13 May 2020 1:29

Instrument :
 MSVOA_L
 ClientSampled :
 SG-4

Tot Ion:114 Resp: 2467660
 Ion Ratio Lower Upper
 114 100
 63 26.9 22.2 33.4
 88 19.2 15.5 23.3

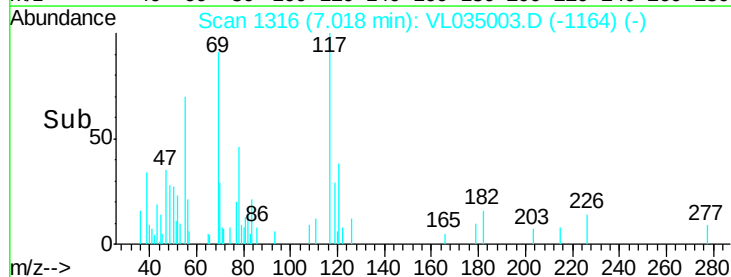
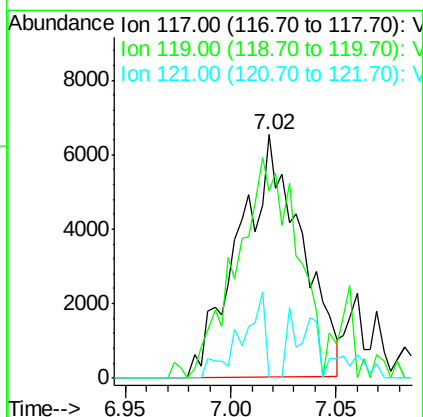
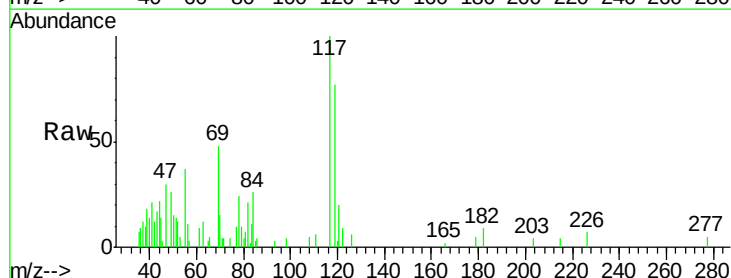
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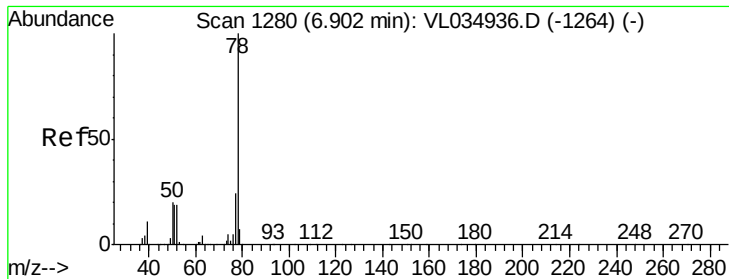
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#35
 Carbon Tetrachloride
 Concen: 0.086 ppbv m
 RT: 7.02 min Scan# 1316
 Delta R.T. -0.01 min
 Lab File: VL035003.D
 Acq: 13 May 2020 1:29

Tgt Ion:117 Resp: 13426
 Ion Ratio Lower Upper
 117 100
 119 76.7 77.0 115.6#
 121 0.0 23.0 34.6#





#36

Benzene

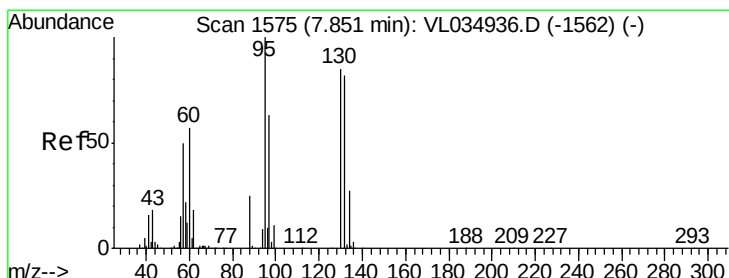
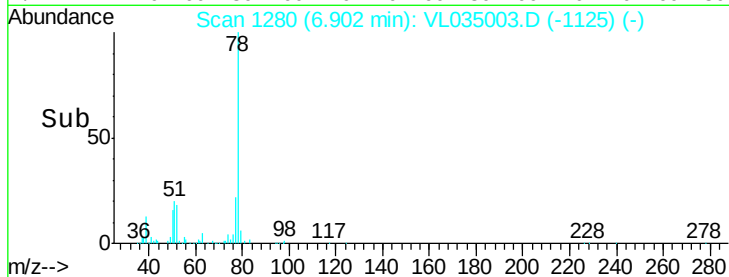
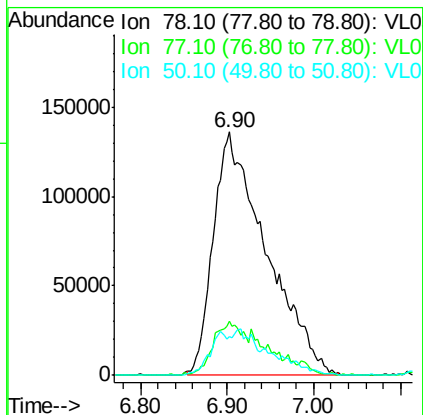
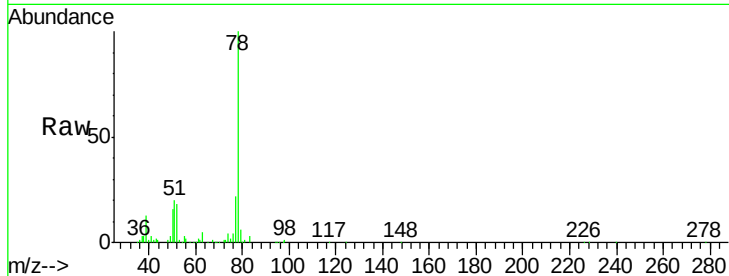
Concen: 2.836 ppbv m
RT: 6.90 min Scan# 1280
Delta R.T. -0.00 min
Lab File: VL035003.D
Acq: 13 May 2020 1:29

Instrument :
MSVOA_L
ClientSampled :
SG-4

Tot Ion	Ratio	Lower	Upper
78	100		
77	22.4	19.0	28.6
50	16.2	15.8	23.8

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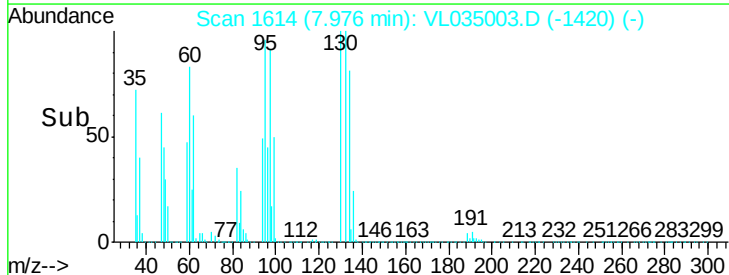
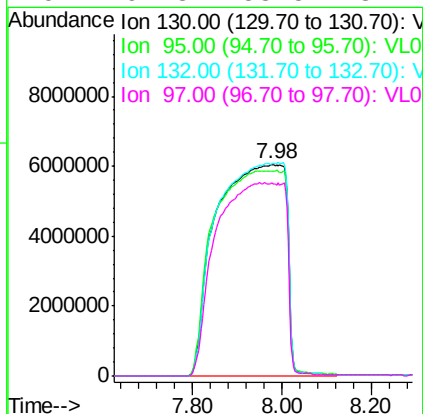
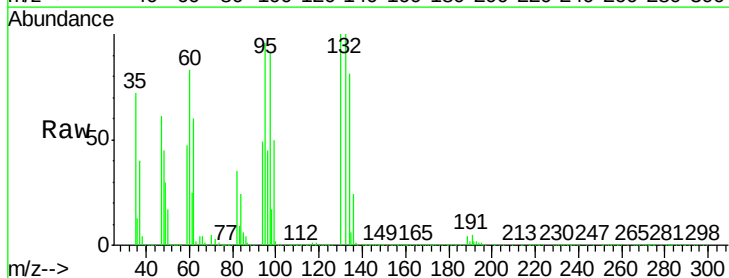


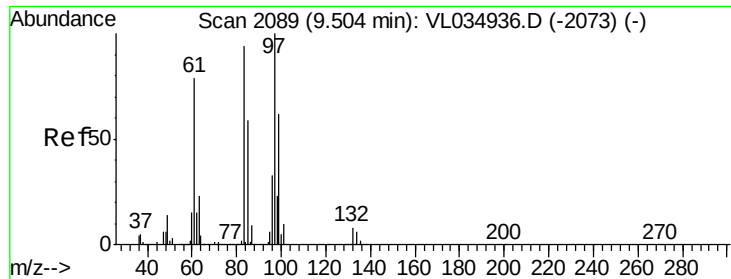
#38

Trichloroethene

Concen: 829.779 ppbv m
RT: 7.98 min Scan# 1614
Delta R.T. 0.13 min
Lab File: VL035003.D
Acq: 13 May 2020 1:29

Tgt Ion	Ratio	Lower	Upper
130	100		
95	96.6	93.4	140.0
132	100.5	76.4	114.6
97	91.3	58.5	87.7#





#47

1,1,2-Trichloroethane

Concen: 2.693 ppbv m

RT: 9.54 min Scan# 2101

Delta R.T. 0.04 min

Lab File: VL035003.D

Acq: 13 May 2020 1:29

Instrument :

MSVOA_L

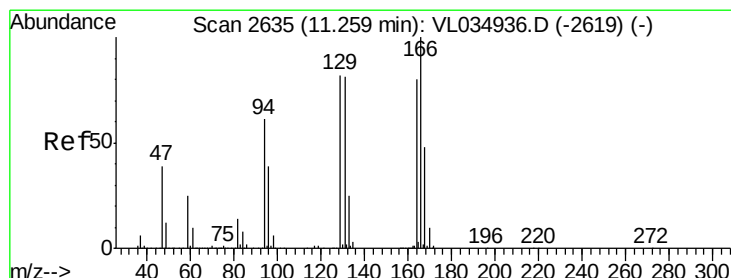
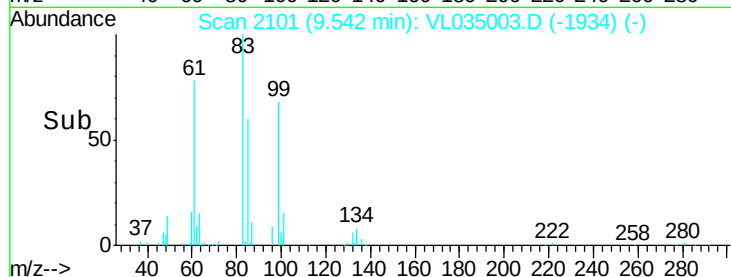
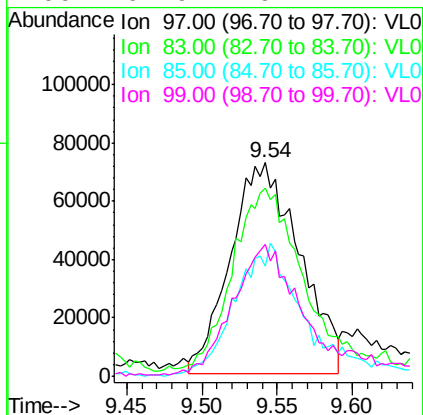
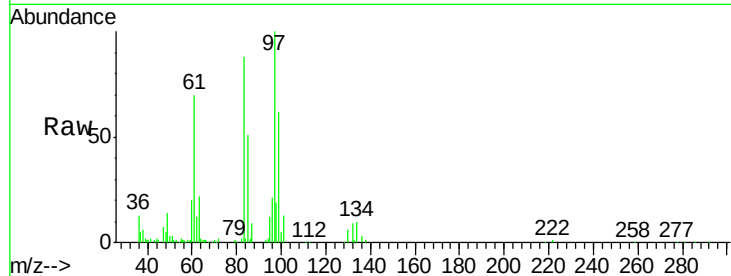
ClientSampled :

SG-4

Tot Ion	Ion	Ratio	Resp	Lower	Upper
97	100		231810		
83	88.3	75.6	113.4		
85	51.5	47.0	70.6		
99	61.9	49.4	74.2		

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#52

Tetrachloroethene

Concen: 2418.742 ppbv m

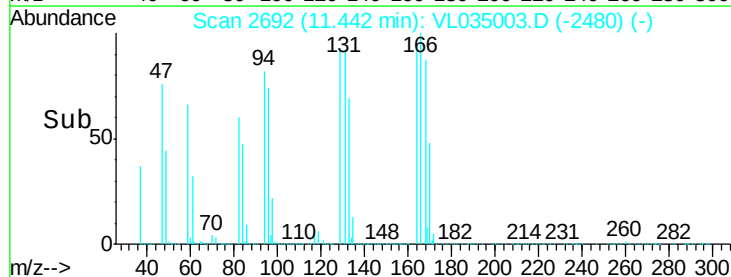
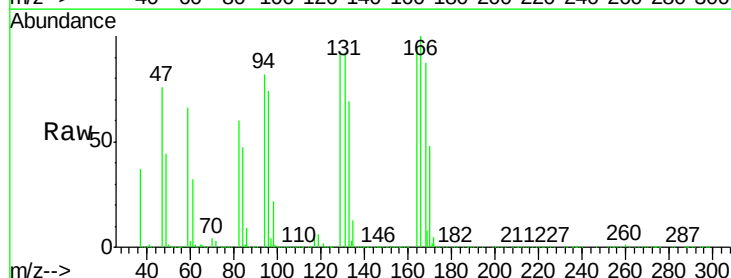
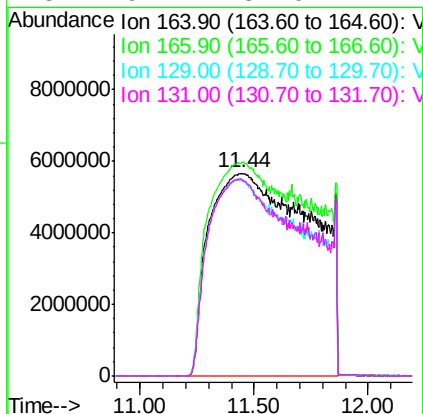
RT: 11.44 min Scan# 2692

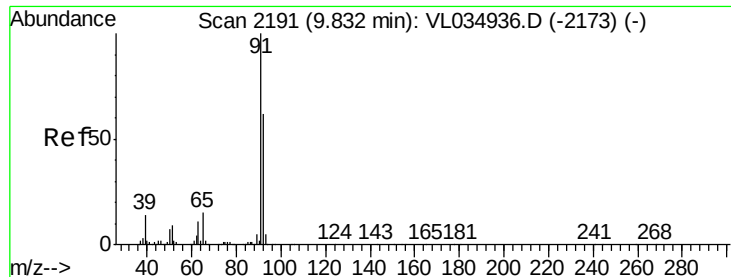
Delta R.T. 0.18 min

Lab File: VL035003.D

Acq: 13 May 2020 1:29

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
164	100		174977963		
166	105.2	100.7	151.1		
129	96.5	83.0	124.4		
131	97.2	81.0	121.4		





#53

Toluene

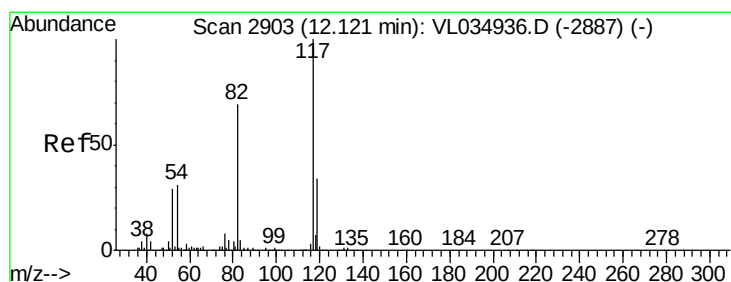
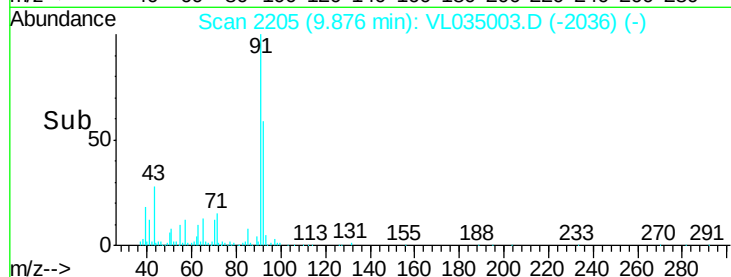
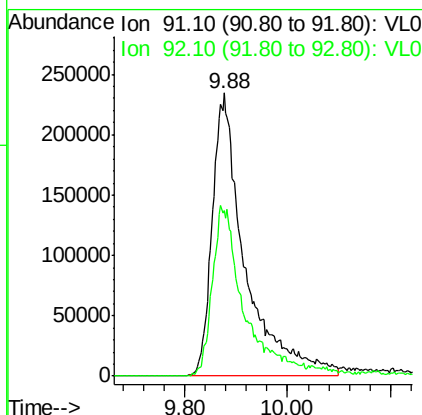
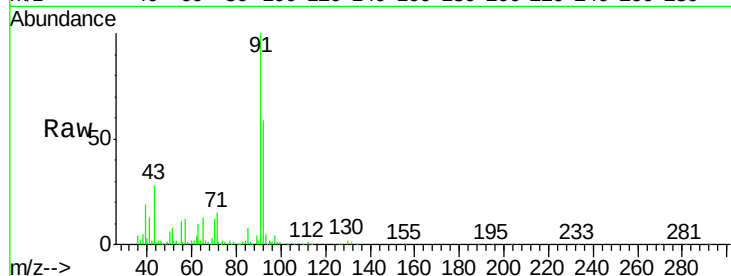
Concen: 4.833 ppbv m
RT: 9.88 min Scan# 2205
Delta R.T. 0.04 min
Lab File: VL035003.D
Acq: 13 May 2020 1:29

Instrument :
MSVOA_L
ClientSampled :
SG-4

Tot Ion: 91 Resp: 1042304
Ion Ratio Lower Upper
91 100
92 60.2 48.6 73.0

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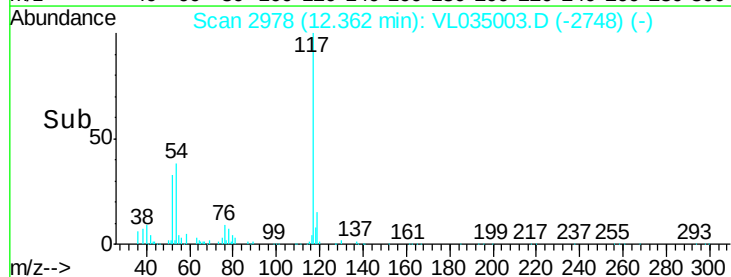
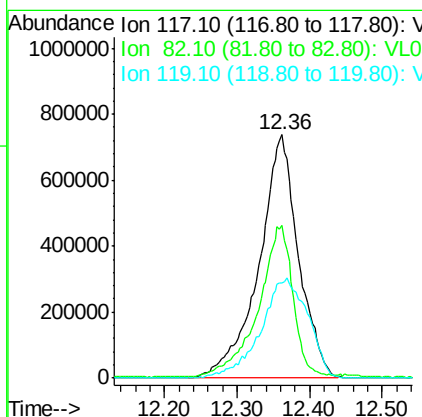
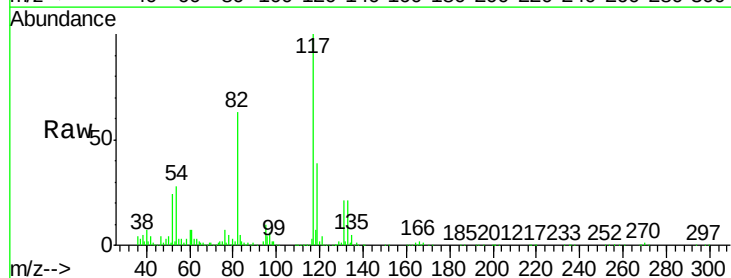


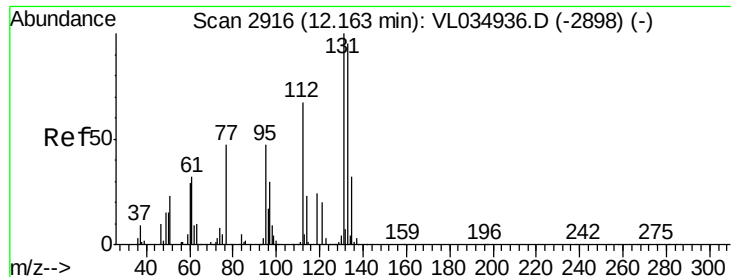
#55

Chlorobenzene-d5

Concen: 10.000 ppbv
RT: 12.36 min Scan# 2978
Delta R.T. 0.24 min
Lab File: VL035003.D
Acq: 13 May 2020 1:29

Tgt Ion: 117 Resp: 2779171
Ion Ratio Lower Upper
117 100
82 55.3 53.1 79.7
119 49.3 26.7 40.1#





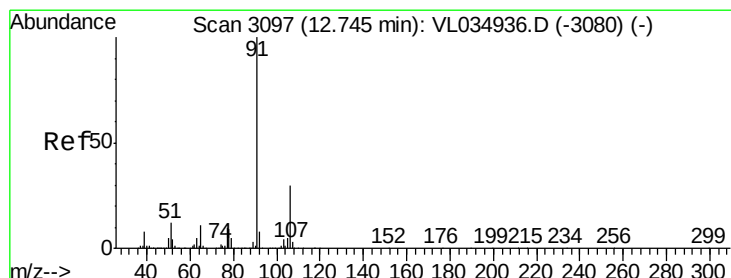
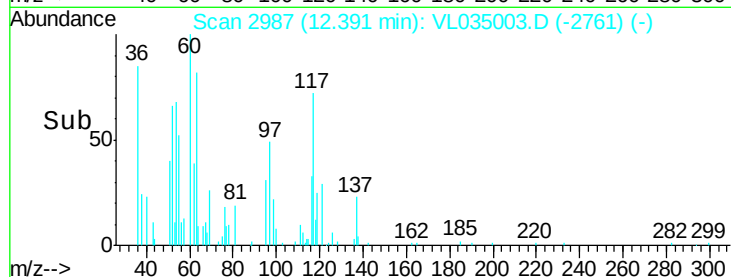
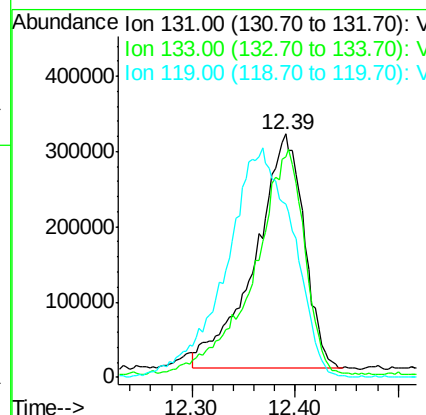
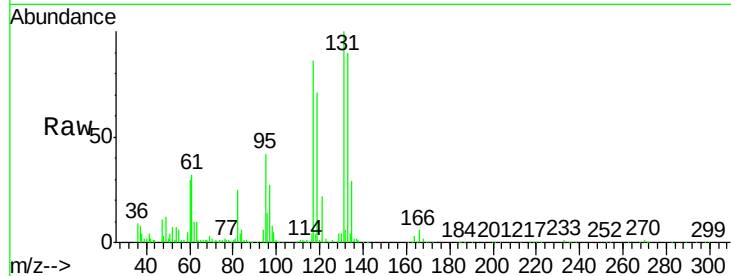
#56
 1,1,1,2-Tetrachloroethane
 Concen: 8.229 ppbv
 RT: 12.39 min Scan# 2987
 Delta R.T. 0.23 min
 Lab File: VL035003.D
 Acq: 13 May 2020 1:29

Instrument :
 MSVOA_L
 ClientSampled :
 SG-4

Tot Ion	Ratio	Lower	Upper
131	100		
133	99.4	77.7	116.5
119	132.9	49.8	74.6

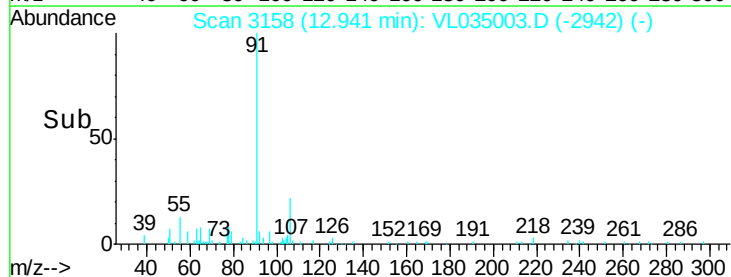
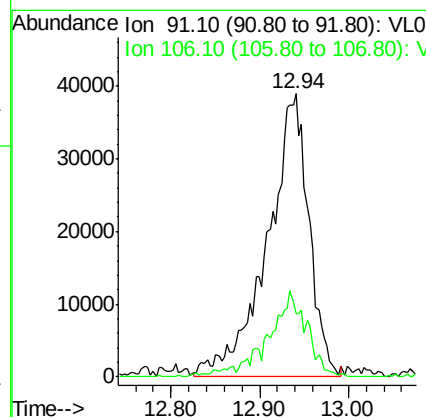
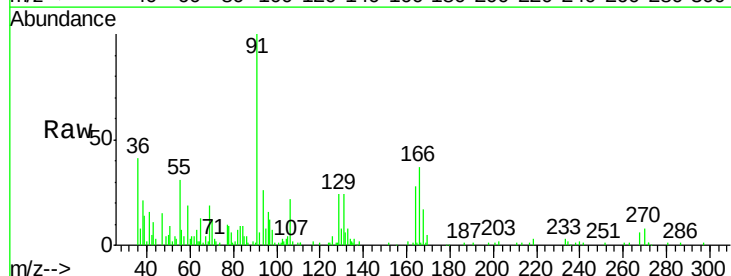
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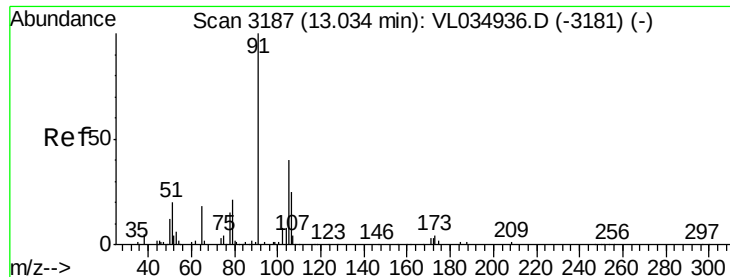
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#58
 Ethyl Benzene
 Concen: 0.369 ppbv m
 RT: 12.94 min Scan# 3158
 Delta R.T. 0.20 min
 Lab File: VL035003.D
 Acq: 13 May 2020 1:29

Tgt Ion	Ratio	Lower	Upper
91	100		
106	22.2	24.2	36.4





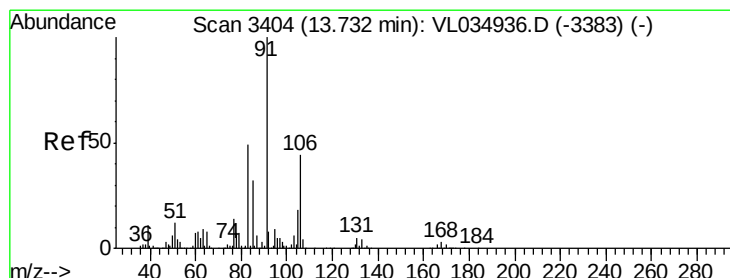
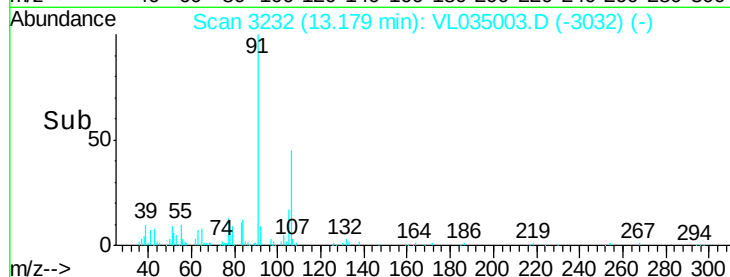
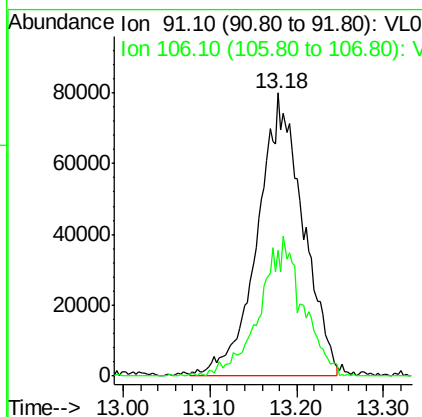
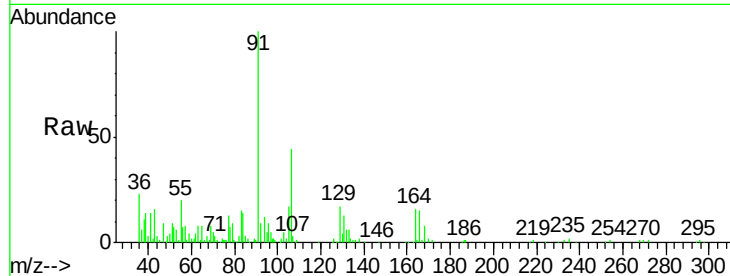
#59
m/p-Xylene
Concen: 0.964 ppbv m
RT: 13.18 min Scan# 3232
Delta R.T. 0.14 min
Lab File: VL035003.D
Acq: 13 May 2020 1:29

Instrument :
MSVOA_L
ClientSampled :
SG-4

Tot Ion: 91 Resp: 291623
Ion Ratio Lower Upper
91 100
106 46.3 66.0 99.0#

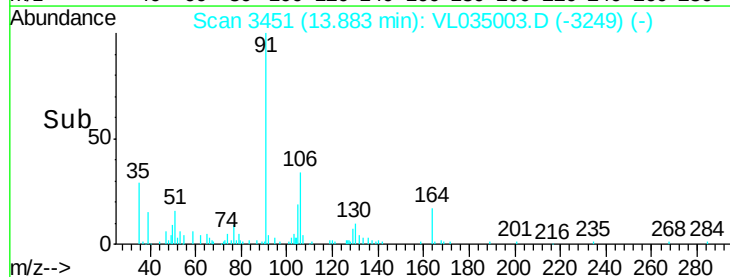
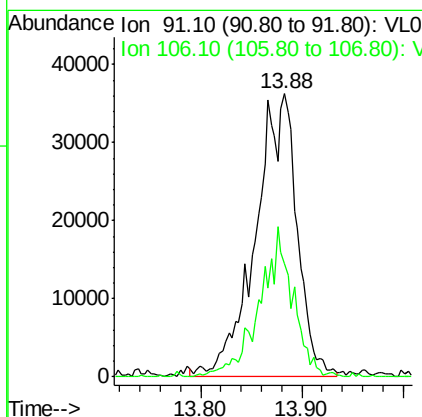
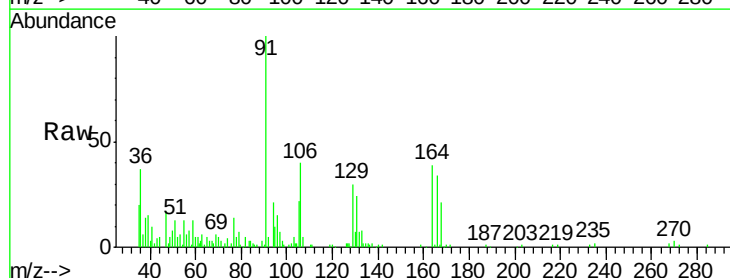
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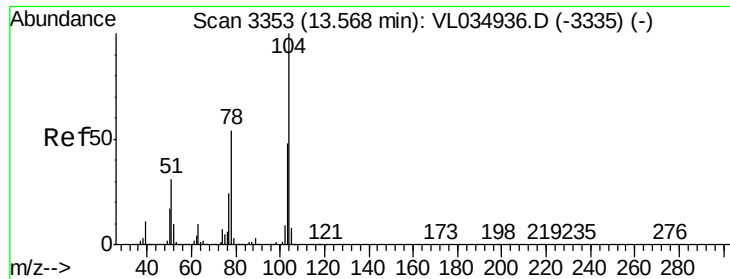
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#60
o-Xylene
Concen: 0.348 ppbv m
RT: 13.88 min Scan# 3451
Delta R.T. 0.15 min
Lab File: VL035003.D
Acq: 13 May 2020 1:29

Tgt Ion: 91 Resp: 103708
Ion Ratio Lower Upper
91 100
106 0.0 21.9 65.5#





#61

Stvrene

Concen: 0.182 ppbv m

RT: 13.71 min Scan# 3398

Delta R.T. 0.14 min

Lab File: VL035003.D

Acq: 13 May 2020 1:29

Instrument :

MSVOA_L

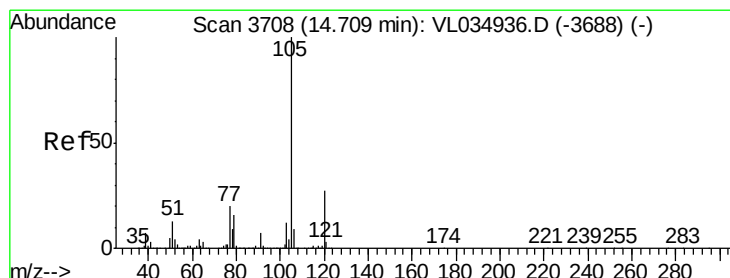
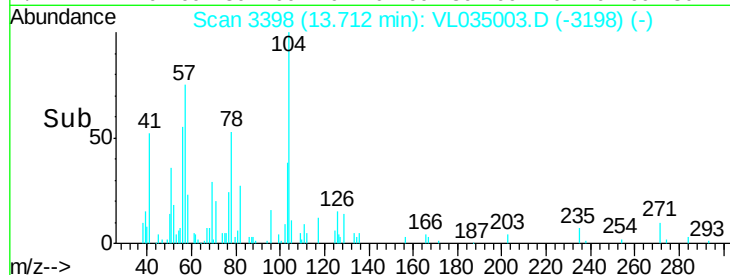
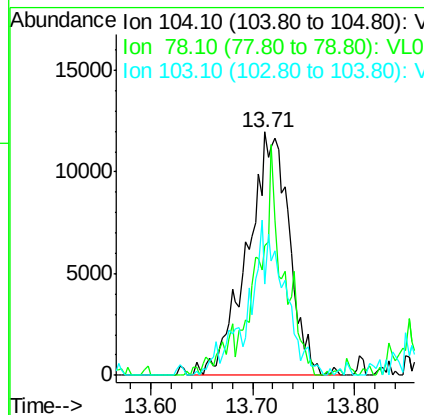
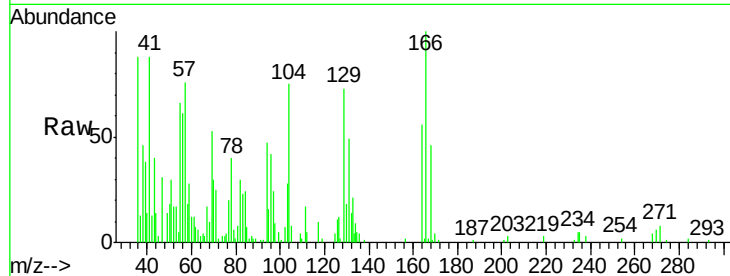
ClientSampled :

SG-4

Tot Ion	Ratio	Lower	Upper
104	100		
78	0.0	43.7	65.5#
103	0.0	38.8	58.2#

Manual Integrations
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#62

Isopropylbenzene

Concen: 0.821 ppbv

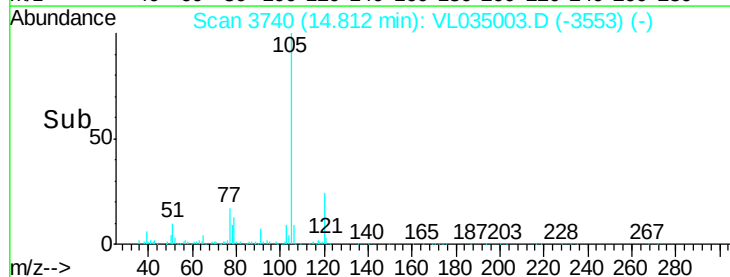
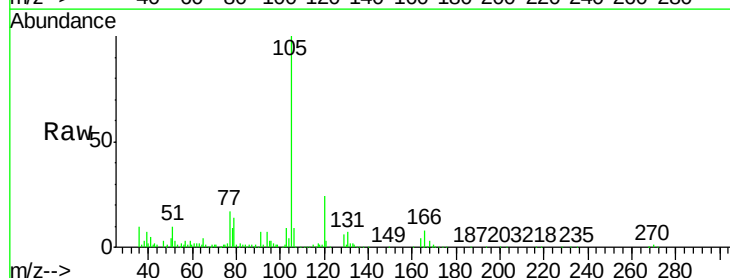
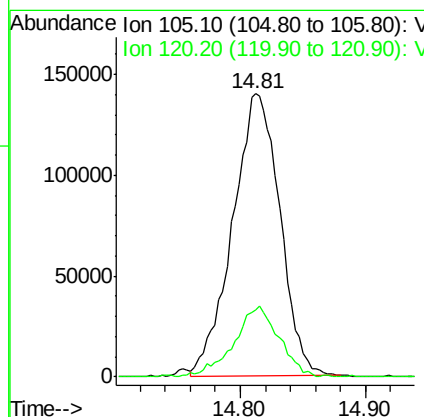
RT: 14.81 min Scan# 3740

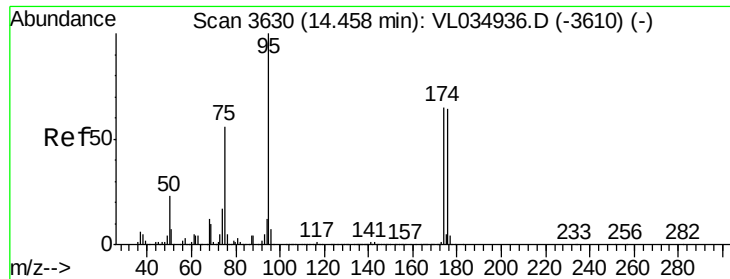
Delta R.T. 0.10 min

Lab File: VL035003.D

Acq: 13 May 2020 1:29

Tgt Ion	Ratio	Lower	Upper
105	100		
120	24.1	20.6	31.0





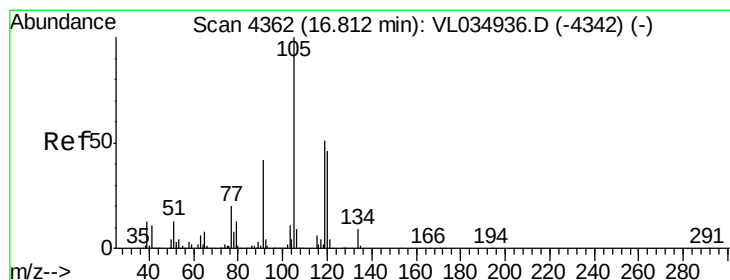
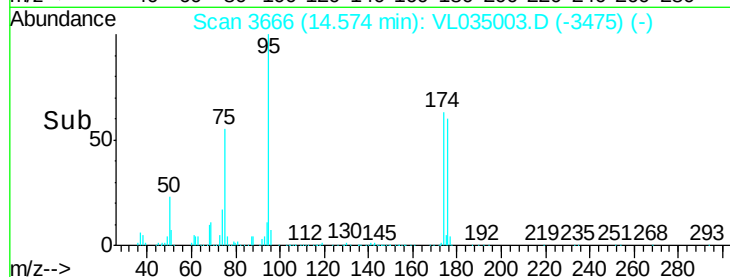
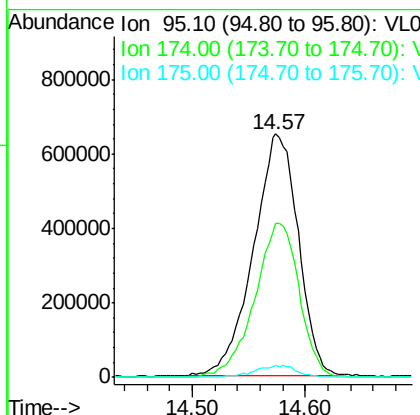
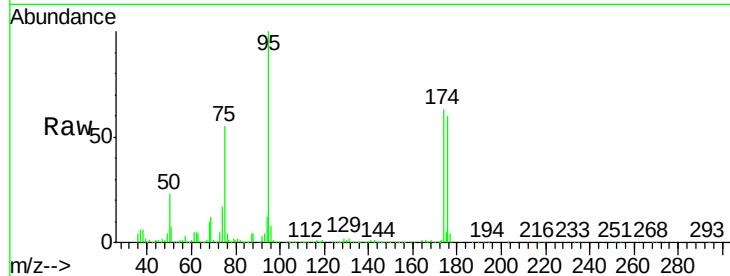
#68
 1-Bromo-4-Fluorobenzene
 Concen: 7.916 ppbv
 RT: 14.57 min Scan# 3666
 Delta R.T. 0.12 min
 Lab File: VL035003.D
 Acq: 13 May 2020 1:29

Instrument :
 MSVOA_L
 ClientSampled :
 SG-4

Tot Ion: 95 Resp: 1780850
 Ion Ratio Lower Upper
 95 100
 174 63.7 51.5 77.3
 175 4.7 3.8 5.8

Manual Integrations
 APPROVED

MMDadoda
 5/18/2020 2:08:36 PM



#74
 1,2,4-Trimethylbenzene
 Concen: 0.175 ppbv m
 RT: 16.86 min Scan# 4376
 Delta R.T. 0.04 min
 Lab File: VL035003.D
 Acq: 13 May 2020 1:29

Tgt Ion: 105 Resp: 61880
 Ion Ratio Lower Upper
 105 100
 120 33.2 36.8 55.2#
 91 13.8 35.4 53.0#
 77 19.6 16.2 24.2

