

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL121620\
 Data File : VL036176.D
 Acq On : 16 Dec 2020 21:12
 Operator : SY/AP
 Sample : L5061-01
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 AS-EFF-201210

Manual Integrations
 APPROVED

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 12/17/2020 3:56:35 PM

Quant Time: Dec 17 14:10:29 2020

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL120720AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Dec 07 2020

QLast Update : Mon Dec 07 16:56:49 2020

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1275918	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.18	114	2545565	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.10	117	2251717	10.00	ppbv	-0.02

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	2021732	11.31	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	113.10%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	3.04	85	272021	1.829	ppbv	98
3) Chlorodifluoromethane	2.98	51	1141875	7.844	ppbv	98
4) Chloromethane	3.13	50	34244	0.479	ppbv #	83
5) Vinyl Chloride	3.25	62	2751m	0.035	ppbv	
9) Propene	3.02	41	53413m	0.732	ppbv	
11) Trichlorofluoromethane	3.95	101	3519448	20.132	ppbv	96
12) 1,1,2-Trichlorotrifluoroet	4.48	101	87130	0.734	ppbv	93
13) Ethanol	3.60	45	159071m	15.823	ppbv	
18) 1,1-Dichloroethene	4.29	96	228410	4.333	ppbv	90
20) Methylene Chloride	4.34	84	257860	4.104	ppbv	98
22) trans-1,2-Dichloroethene	4.88	96	47859m	0.907	ppbv	
24) 1,1-Dichloroethane	5.01	63	260498	1.814	ppbv	99
26) Hexane	5.68	57	362425	2.629	ppbv #	39
28) Methyl tert-Butyl Ether	5.04	73	362736	1.851	ppbv	99
29) Chloroform	5.75	83	189674	1.048	ppbv	97
31) cis-1,2-Dichloroethene	5.55	61	2618354	20.891	ppbv	93
32) 1,1,1-Trichloroethane	6.51	97	95090	0.509	ppbv #	89
35) Carbon Tetrachloride	7.02	117	76311m	0.514	ppbv	
36) Benzene	6.89	78	76874	0.356	ppbv #	88
37) 1,2-Dichloroethane	6.30	62	30347m	0.243	ppbv	
38) Trichloroethene	7.84	130	8942126	110.885	ppbv	95
52) Tetrachloroethene	11.24	164	7699571	98.593	ppbv	91
53) Toluene	9.81	91	77735m	0.321	ppbv	
59) m/p-Xylene	12.97	91	35282m	0.136	ppbv	
62) Isopropylbenzene	14.67	105	42590	0.117	ppbv	93

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

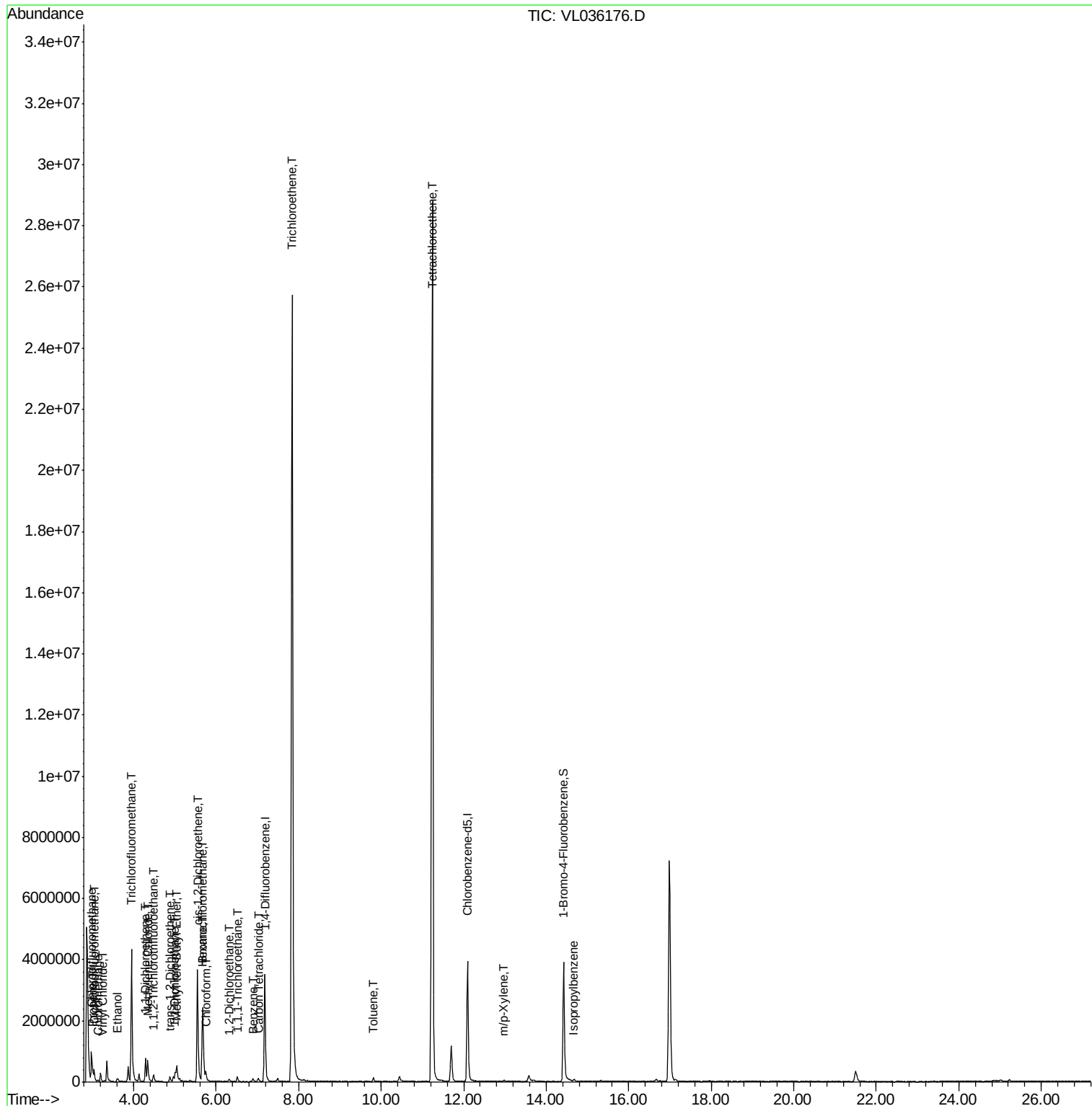
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_L\DATA\VL121620\
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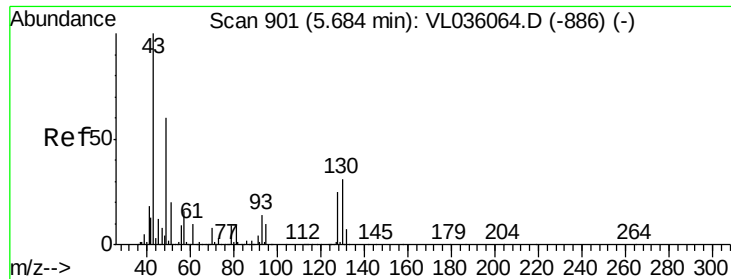
Instrument :
MSVOA_L
ClientSampleId :
AS-EFF-201210

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Quant Time: Dec 17 14:10:29 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL120720AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Dec
QLast Update : Mon Dec 07 16:56:49 2020
Response via : Initial Calibration





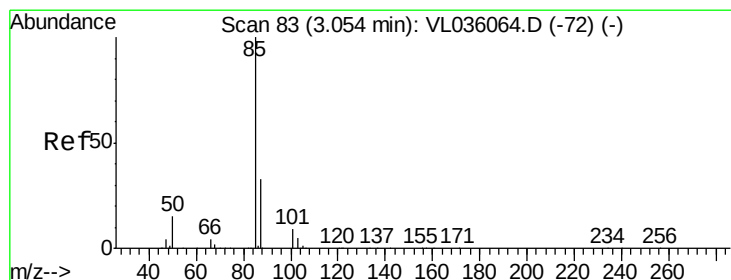
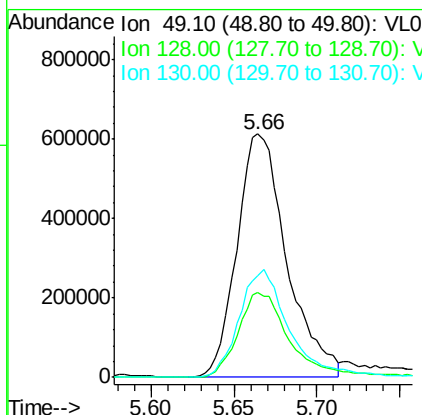
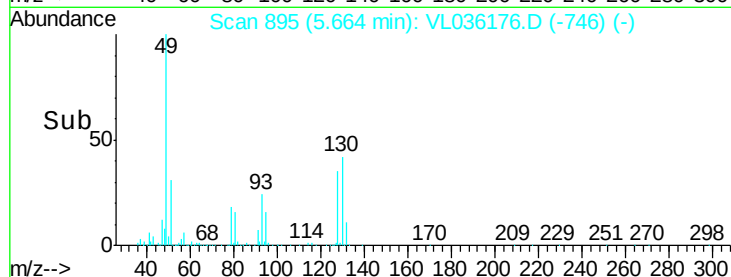
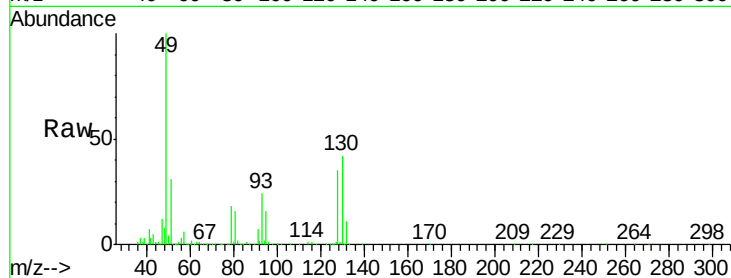
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Bromochloromethane
Concen: 10.000 ppbv
RT: 5.66 min Scan# 895
Delta R.T. -0.02 min
Lab File: VL036176.D
Acq: 16 Dec 2020 21:12

Instrument :
MSVOA_L
ClientSampleId :
AS-EFF-201210

Tgt Ion: 49 Resp: 1275918
Ion Ratio Lower Upper
49 100
128 37.2 21.1 63.1
130 46.1 27.1 81.3

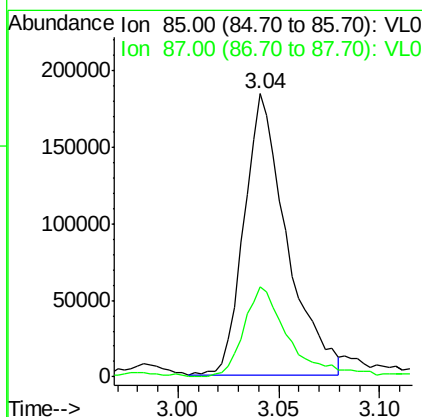
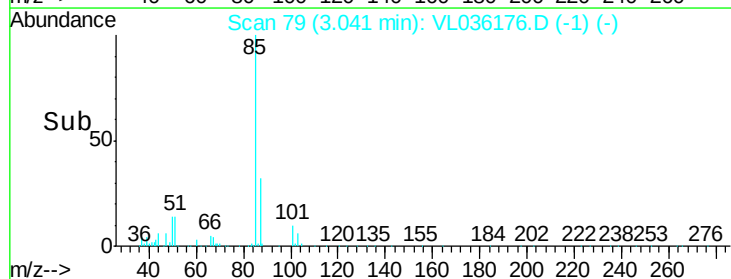
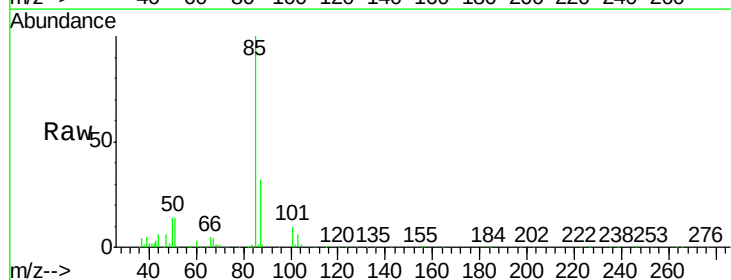
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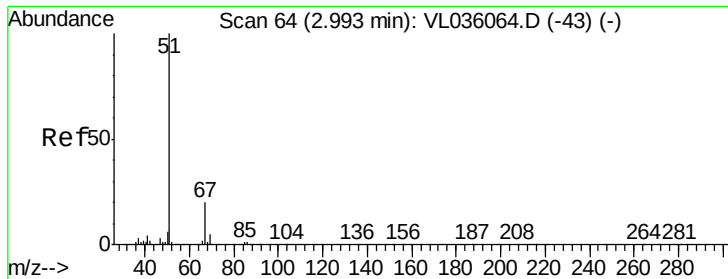
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#2
Dichlorodifluoromethane
Concen: 1.829 ppbv
RT: 3.04 min Scan# 79
Delta R.T. -0.01 min
Lab File: VL036176.D
Acq: 16 Dec 2020 21:12

Tgt Ion: 85 Resp: 272021
Ion Ratio Lower Upper
85 100
87 31.7 26.5 39.7





#3

Chlorodifluoromethane

Concen: 7.844 ppbv

RT: 2.98 min Scan# 60

Delta R.T. -0.01 min

Lab File: VL036176.D

Acq: 16 Dec 2020 21:12

Instrument :

MSVOA_L

ClientSampleId :

AS-EFF-201210

Tgt Ion: 51 Resp: 1141875

Ion Ratio Lower Upper

51 100

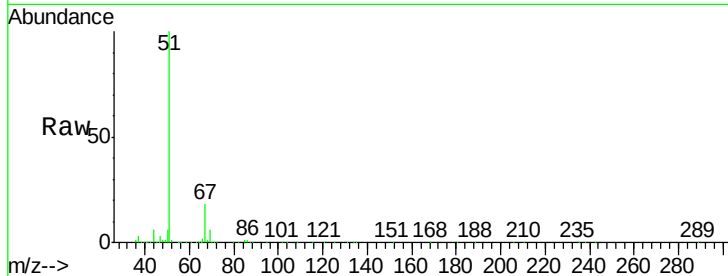
67 19.0 14.3 21.5

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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

2.98

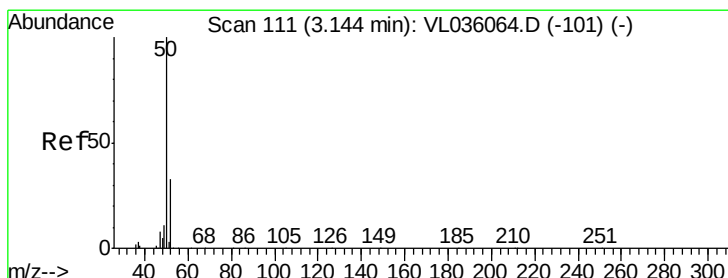
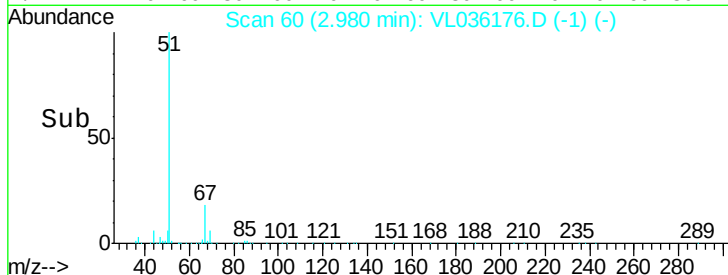
600000

400000

200000

0

Time-->



#4

Chloromethane

Concen: 0.479 ppbv

RT: 3.13 min Scan# 107

Delta R.T. -0.01 min

Lab File: VL036176.D

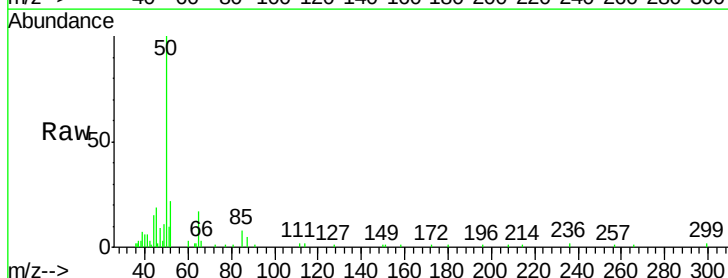
Acq: 16 Dec 2020 21:12

Tgt Ion: 50 Resp: 34244

Ion Ratio Lower Upper

50 100

52 22.8 26.1 39.1#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

3.13

25000

20000

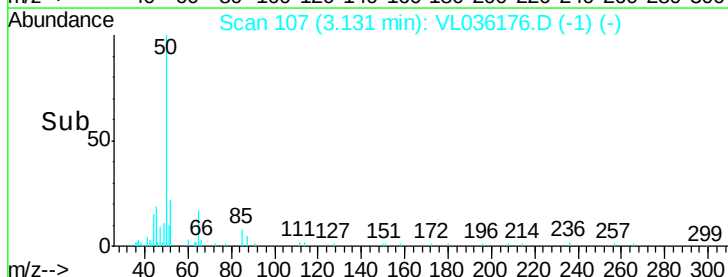
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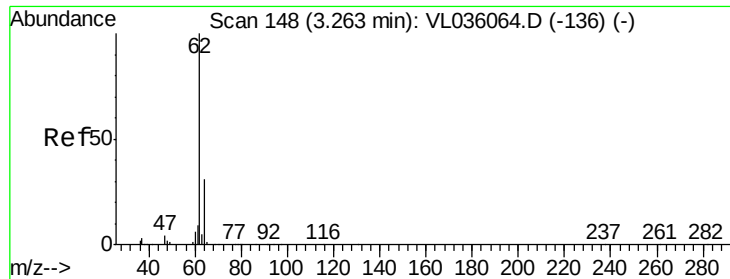
10000

5000

0

Time-->





#5

Vinyl Chloride

Concen: 0.035 ppbv m

RT: 3.25 min Scan# 145

Delta R.T. -0.01 min

Lab File: VL036176.D

Acq: 16 Dec 2020 21:12

Instrument :

MSVOA_L

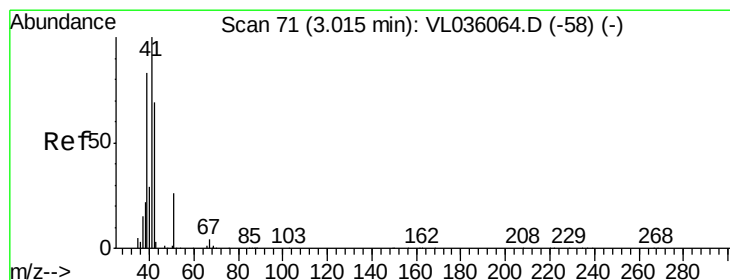
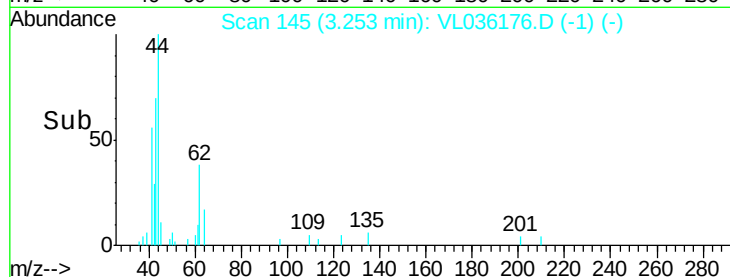
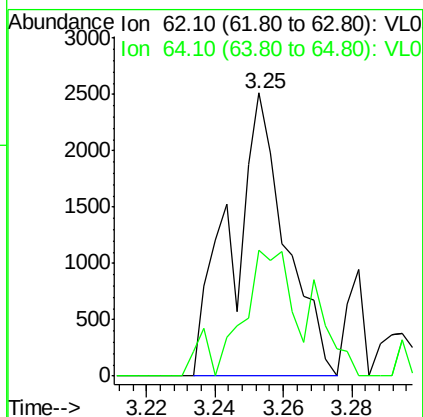
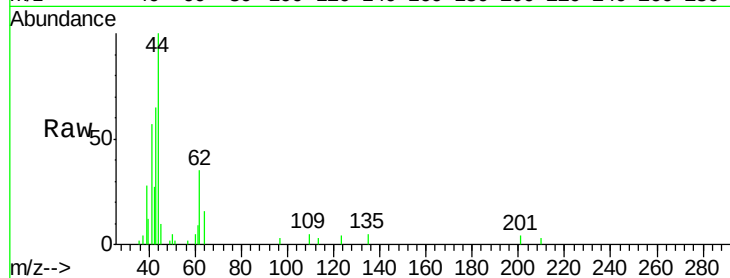
ClientSampleId :

AS-EFF-201210

Tgt Ion	Ratio	Lower	Upper
62	100		
64	44.4	24.5	36.7#

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#9

Propene

Concen: 0.732 ppbv m

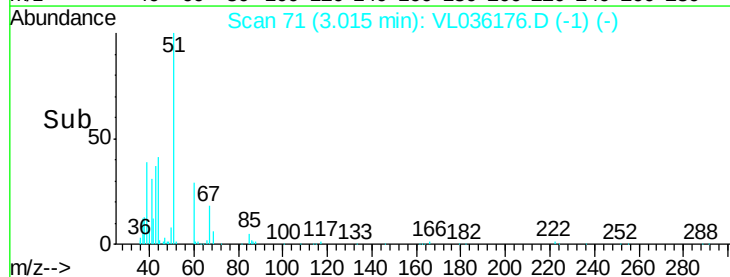
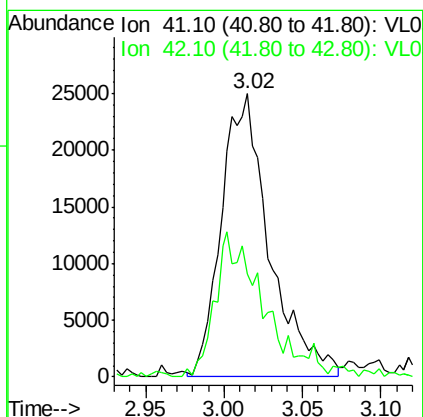
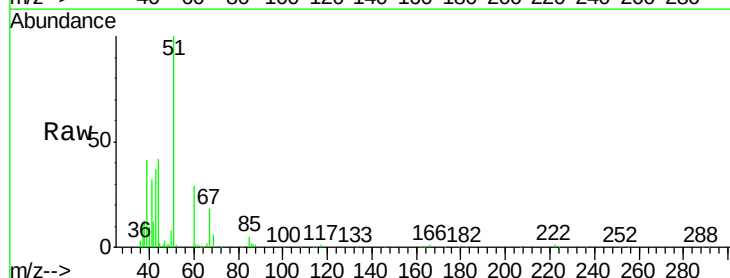
RT: 3.02 min Scan# 71

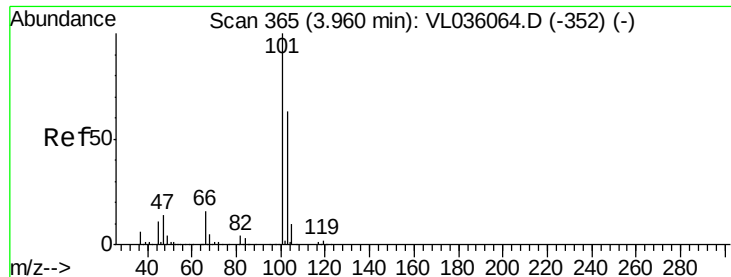
Delta R.T. -0.00 min

Lab File: VL036176.D

Acq: 16 Dec 2020 21:12

Tgt Ion	Ratio	Lower	Upper
41	100		
42	120.8	57.0	85.6#





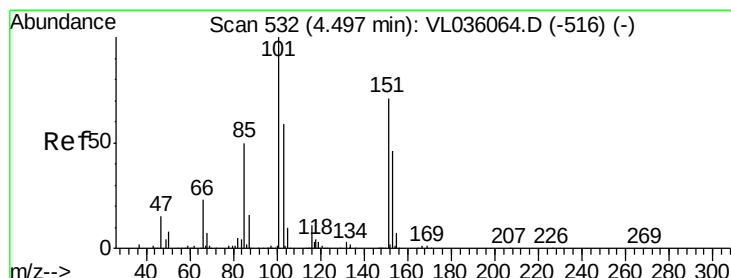
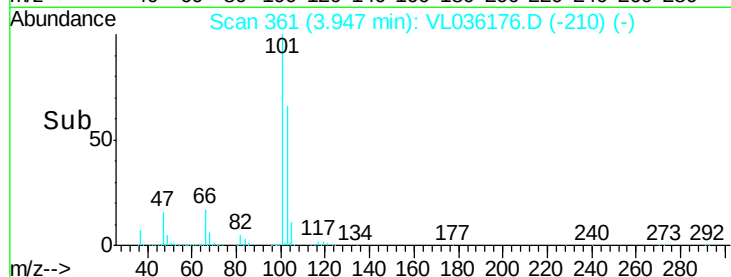
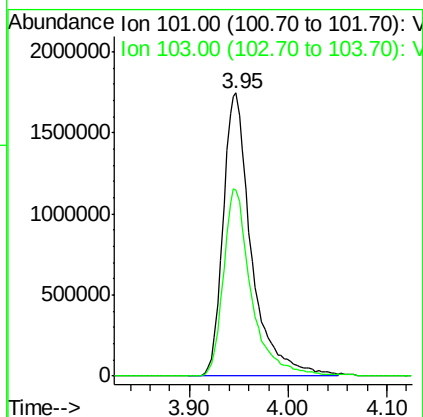
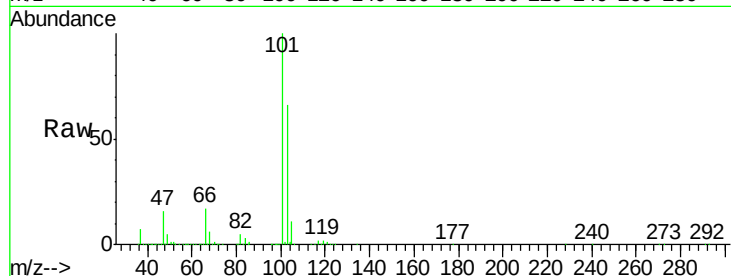
#11
 Trichlorofluoromethane
 Concen: 20.132 ppbv
 RT: 3.95 min Scan# 361
 Delta R.T. -0.01 min
 Lab File: VL036176.D
 Acq: 16 Dec 2020 21:12

Instrument :
 MSVOA_L
 ClientSampleId :
 AS-EFF-201210

Tgt Ion:101 Resp: 3519448
 Ion Ratio Lower Upper
 101 100
 103 65.9 50.3 75.5

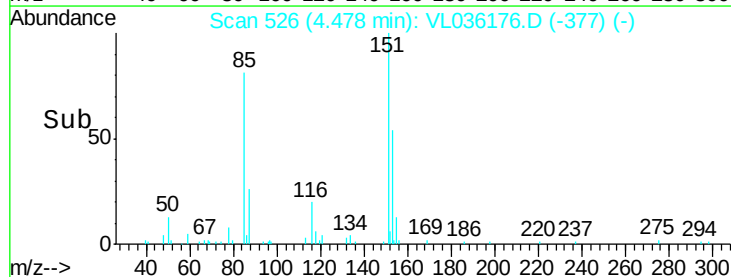
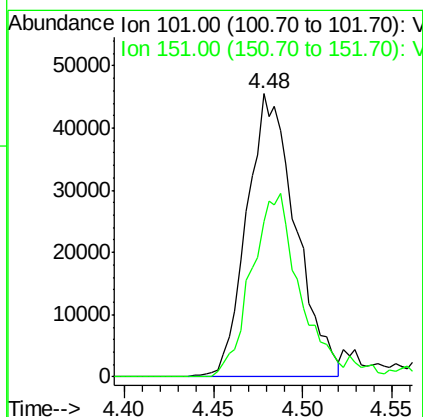
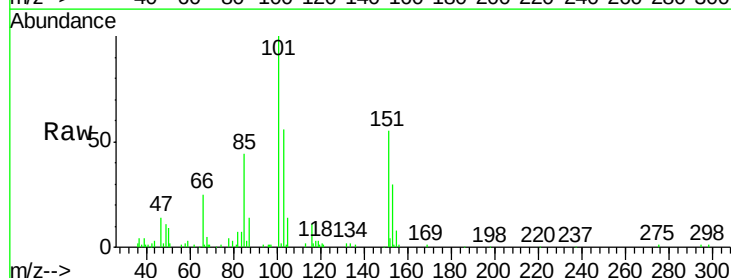
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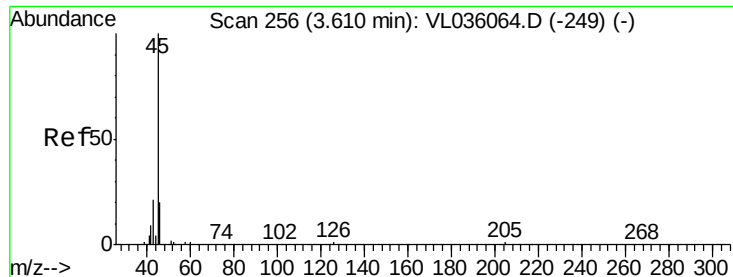
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#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.734 ppbv
 RT: 4.48 min Scan# 526
 Delta R.T. -0.02 min
 Lab File: VL036176.D
 Acq: 16 Dec 2020 21:12

Tgt Ion:101 Resp: 87130
 Ion Ratio Lower Upper
 101 100
 151 68.0 59.3 88.9





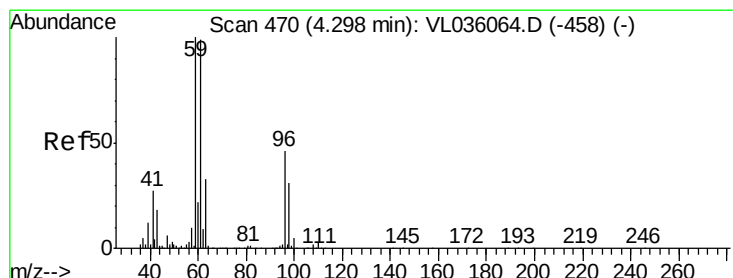
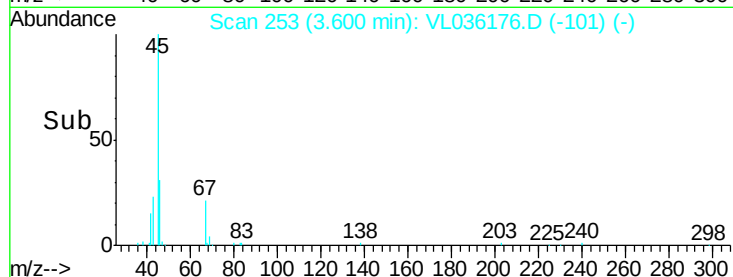
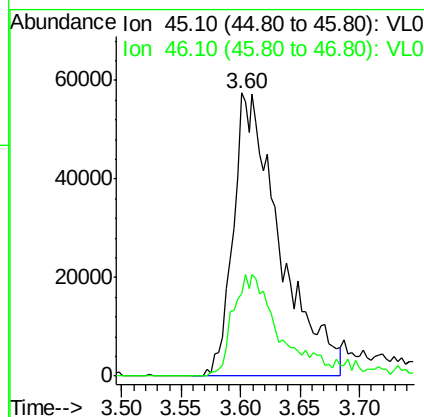
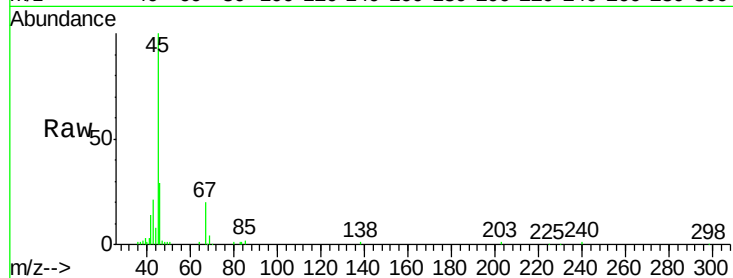
#13
Ethanol
Concen: 15.823 ppbv m
RT: 3.60 min Scan# 253
Delta R.T. -0.01 min
Lab File: VL036176.D
Acq: 16 Dec 2020 21:12

Instrument :
MSVOA_L
ClientSampleId :
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Tgt Ion: 45 Resp: 159071
Ion Ratio Lower Upper
45 100
46 36.2 19.0 75.8

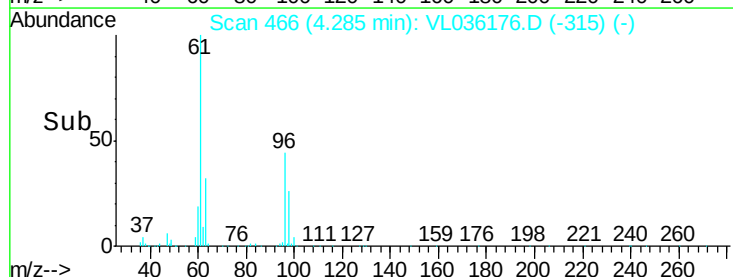
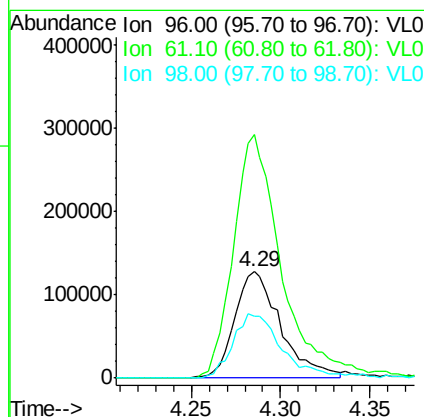
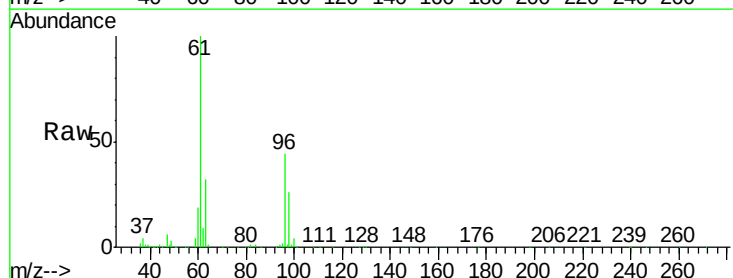
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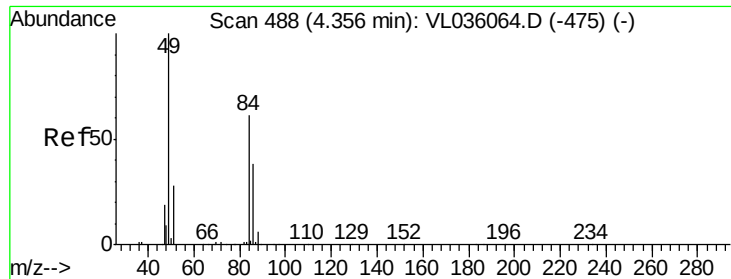
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#18
1,1-Dichloroethene
Concen: 4.333 ppbv
RT: 4.29 min Scan# 466
Delta R.T. -0.01 min
Lab File: VL036176.D
Acq: 16 Dec 2020 21:12

Tgt Ion: 96 Resp: 228410
Ion Ratio Lower Upper
96 100
61 228.3 171.4 257.2
98 58.1 54.2 81.2





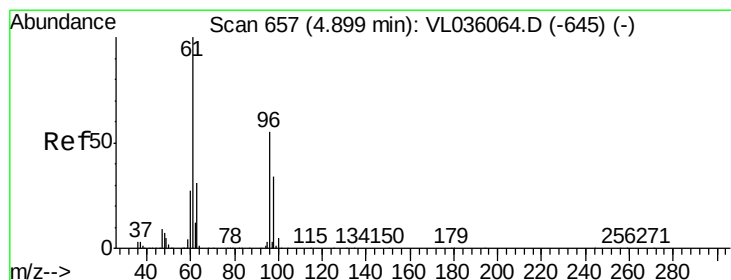
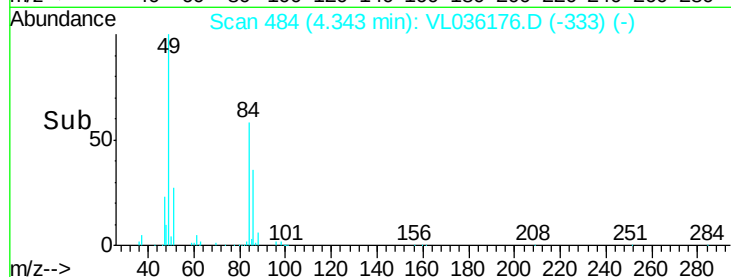
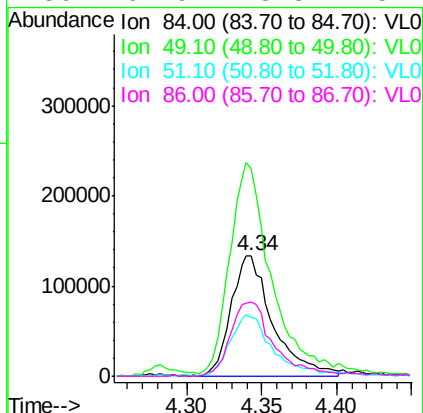
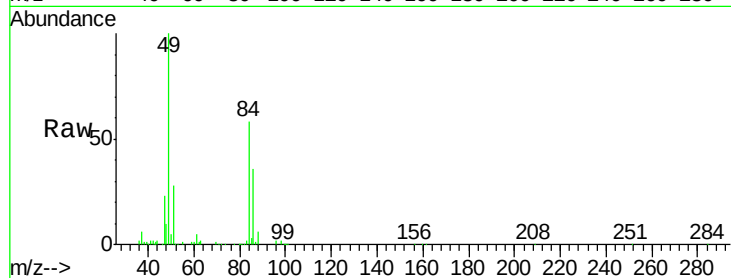
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Methylene Chloride
Concen: 4.104 ppbv
RT: 4.34 min Scan# 484
Delta R.T. -0.01 min
Lab File: VL036176.D
Acq: 16 Dec 2020 21:12

Instrument :
MSVOA_L
ClientSampleId :
AS-EFF-201210

Tgt Ion	Ratio	Lower	Upper
84	100		
49	169.5	133.0	199.4
51	48.3	38.9	58.3
86	61.9	48.8	73.2

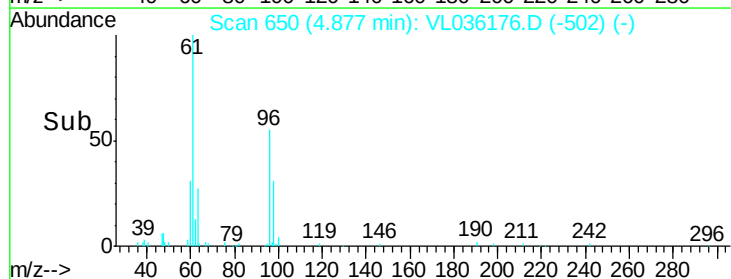
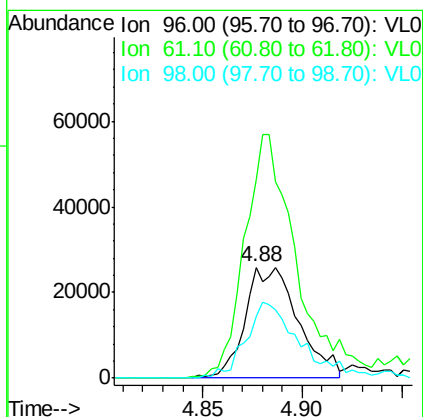
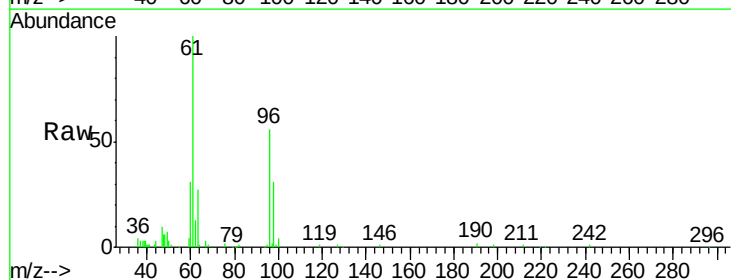
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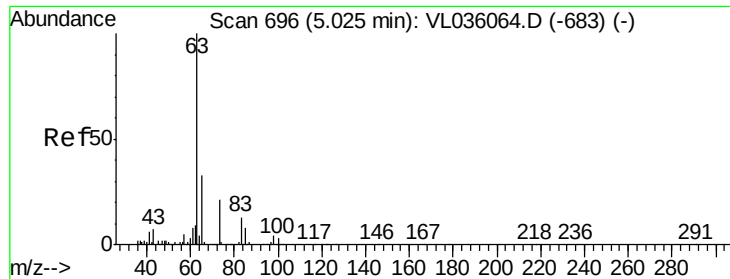
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#22
trans-1,2-Dichloroethene
Concen: 0.907 ppbv m
RT: 4.88 min Scan# 650
Delta R.T. -0.02 min
Lab File: VL036176.D
Acq: 16 Dec 2020 21:12

Tgt Ion	Ratio	Lower	Upper
96	100		
61	178.5	145.7	218.5
98	55.6	49.2	73.8





#24

1,1-Dichloroethane

Concen: 1.814 ppbv

RT: 5.01 min Scan# 691

Delta R.T. -0.02 min

Lab File: VL036176.D

Acq: 16 Dec 2020 21:12

Instrument :

MSVOA_L

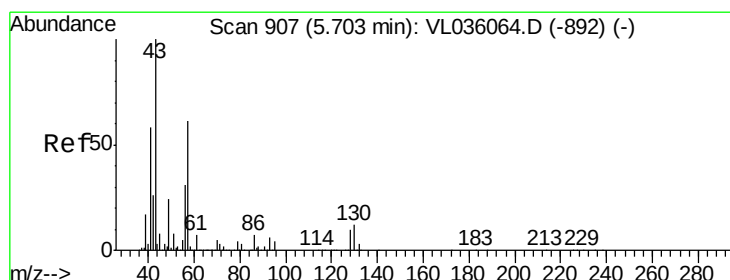
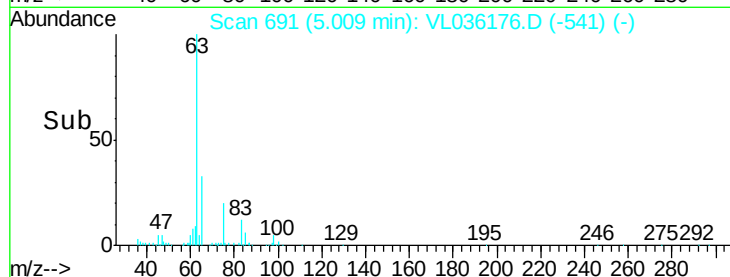
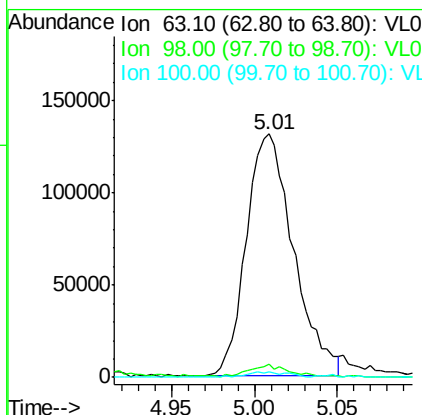
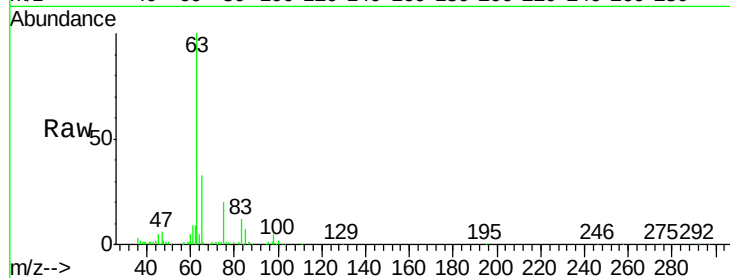
ClientSampleId :

AS-EFF-201210

Tgt Ion	Ratio	Resp Lower	Upper
63	100		
98	5.0	2.2	6.6
100	2.5	1.5	4.4

Manual Integrations
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#26

Hexane

Concen: 2.629 ppbv

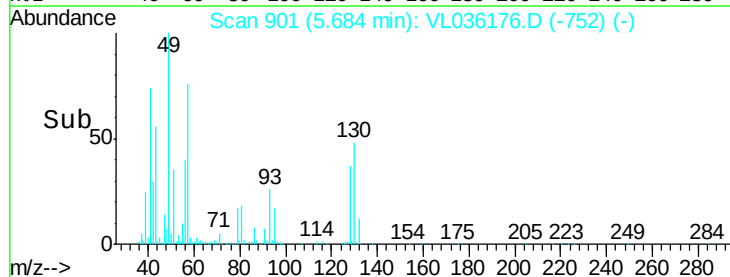
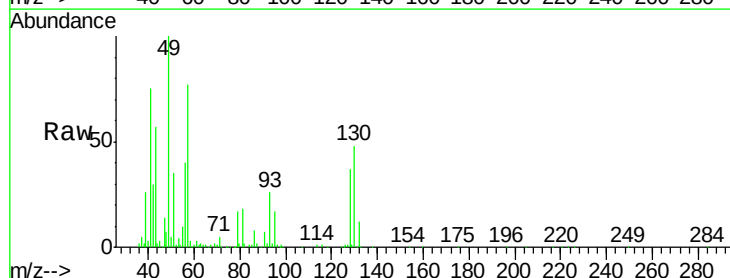
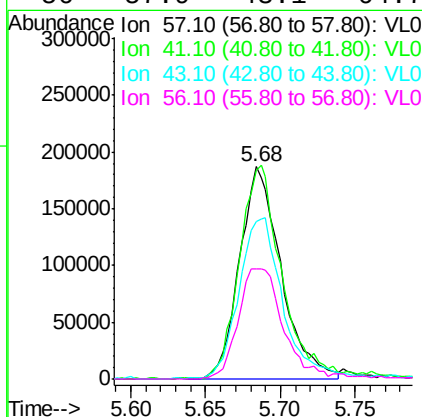
RT: 5.68 min Scan# 901

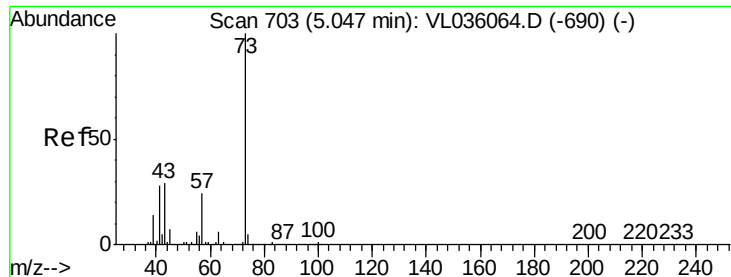
Delta R.T. -0.02 min

Lab File: VL036176.D

Acq: 16 Dec 2020 21:12

Tgt Ion	Ratio	Resp Lower	Upper
57	100		
41	106.5	82.9	124.3
43	81.5	199.9	299.9
56	57.9	43.1	64.7





#28

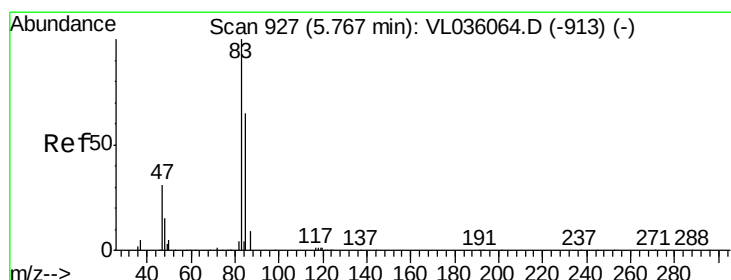
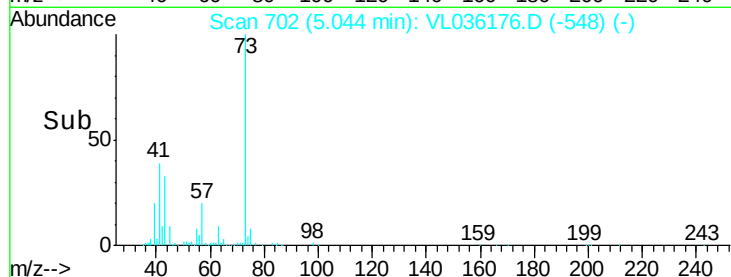
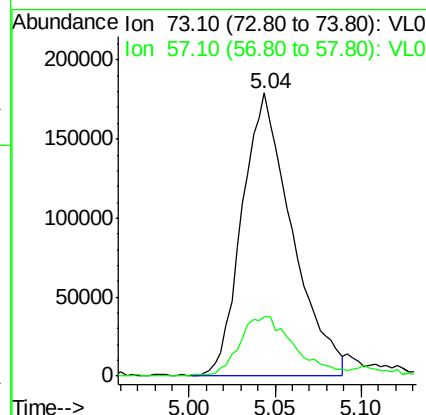
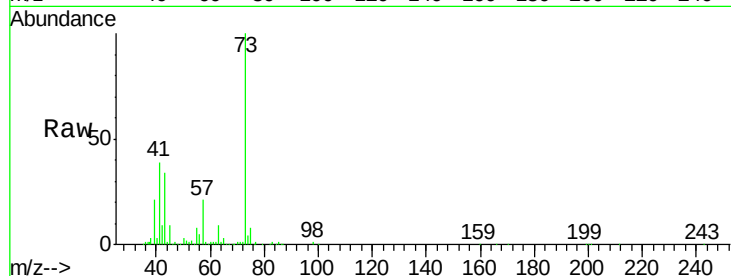
Methyl tert-Butyl Ether
Concen: 1.851 ppbv
RT: 5.04 min Scan# 702
Delta R.T. -0.00 min
Lab File: VL036176.D
Acq: 16 Dec 2020 21:12

Instrument :
MSVOA_L
ClientSampleId :
AS-EFF-201210

Tgt Ion	Ratio	Lower	Upper
73	100		
57	23.4	19.2	28.8

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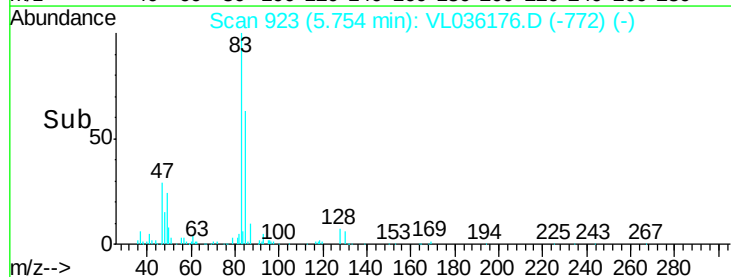
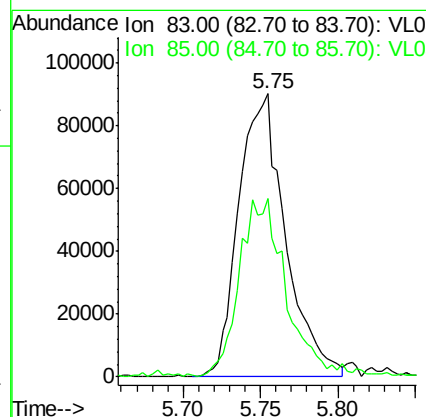
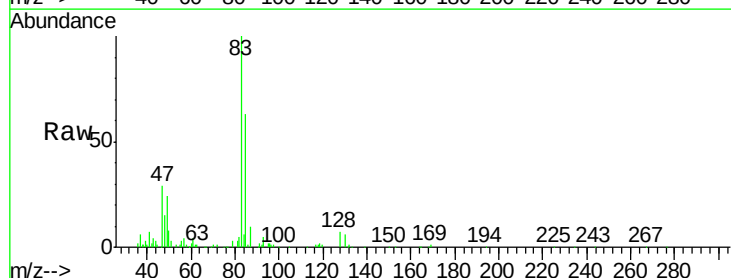
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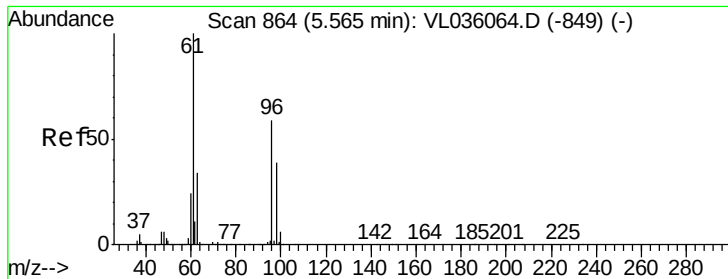


#29

Chloroform
Concen: 1.048 ppbv
RT: 5.75 min Scan# 923
Delta R.T. -0.01 min
Lab File: VL036176.D
Acq: 16 Dec 2020 21:12

Tgt Ion	Ratio	Lower	Upper
83	100		
85	62.6	51.8	77.6





#31

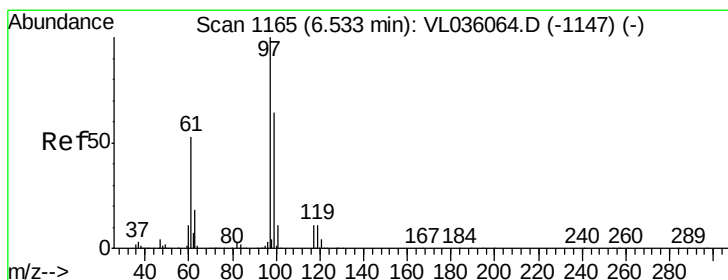
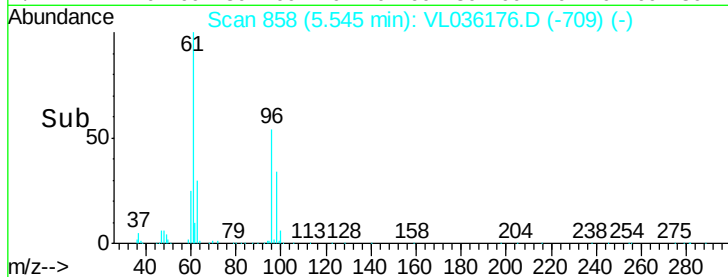
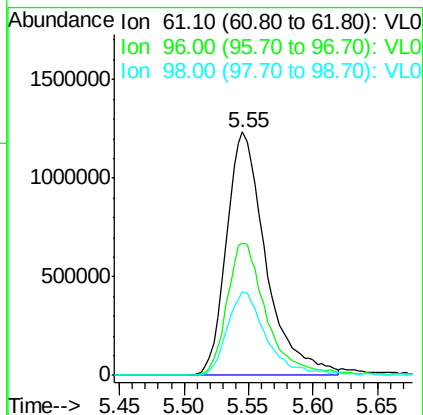
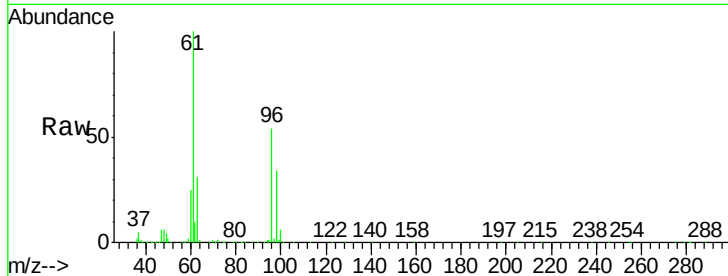
cis-1,2-Dichloroethene
Concen: 20.891 ppbv
RT: 5.55 min Scan# 858
Delta R.T. -0.02 min
Lab File: VL036176.D
Acq: 16 Dec 2020 21:12

Instrument :
MSVOA_L
ClientSampleId :
AS-EFF-201210

Tgt Ion	Ratio	Lower	Upper
61	100		
96	54.3	47.3	70.9
98	34.3	31.4	47.0

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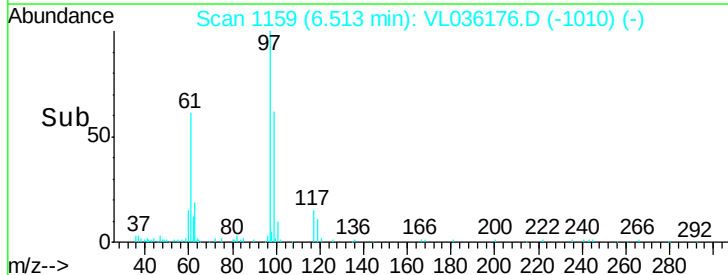
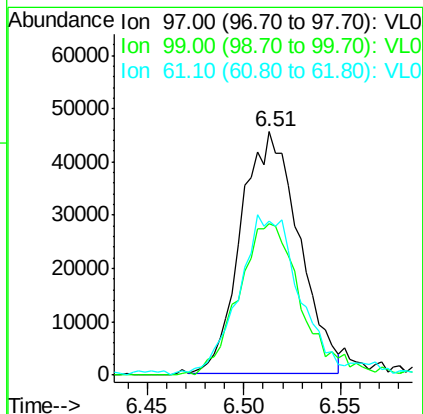
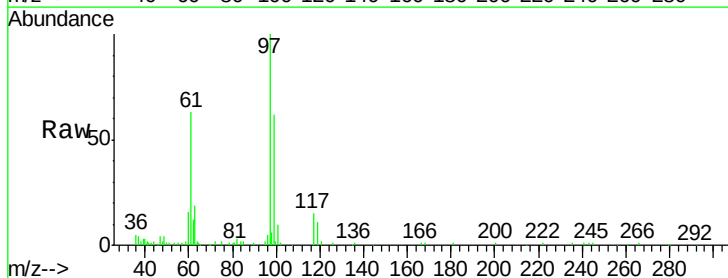
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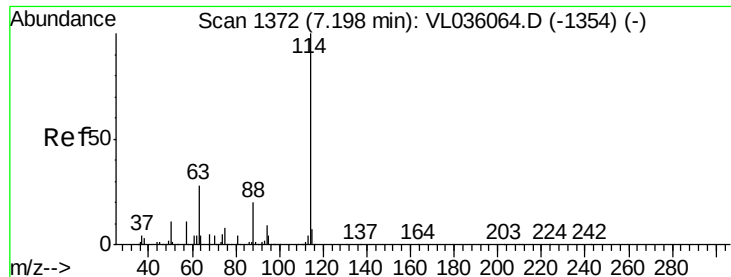


#32

1,1,1-Trichloroethane
Concen: 0.509 ppbv
RT: 6.51 min Scan# 1159
Delta R.T. -0.02 min
Lab File: VL036176.D
Acq: 16 Dec 2020 21:12

Tgt Ion	Ratio	Lower	Upper
97	100		
99	68.9	52.4	78.6
61	67.5	43.4	65.0





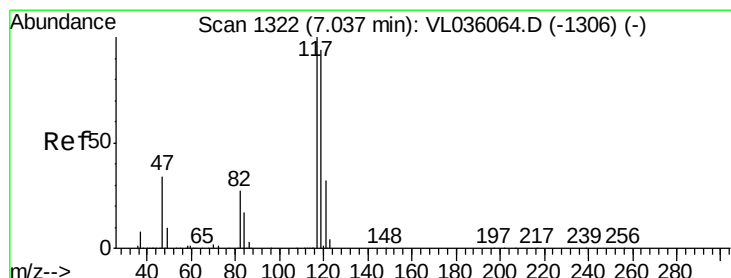
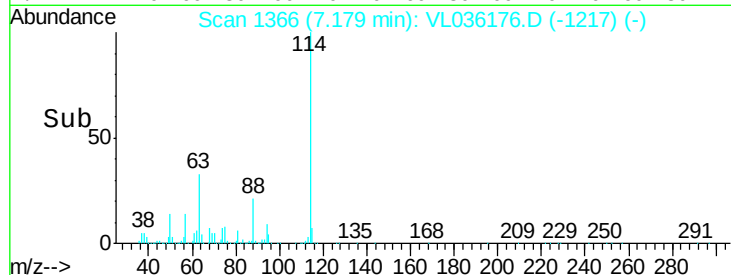
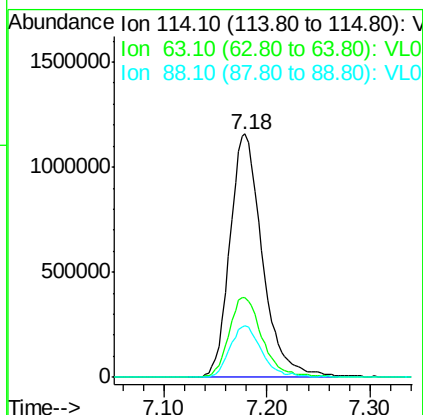
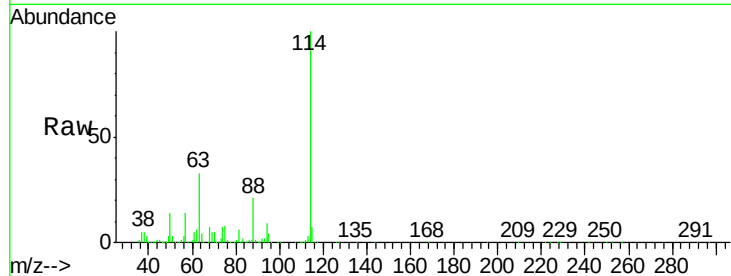
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.18 min Scan# 1366
 Delta R.T. -0.02 min
 Lab File: VL036176.D
 Acq: 16 Dec 2020 21:12

Instrument :
 MSVOA_L
 ClientSampleId :
 AS-EFF-201210

Tgt Ion	Ratio	Lower	Upper
114	100		
63	34.0	23.6	35.4
88	21.4	15.8	23.6

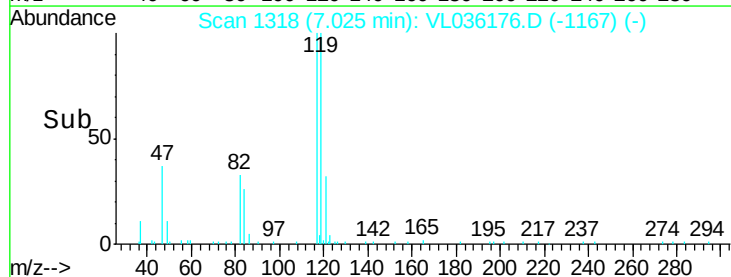
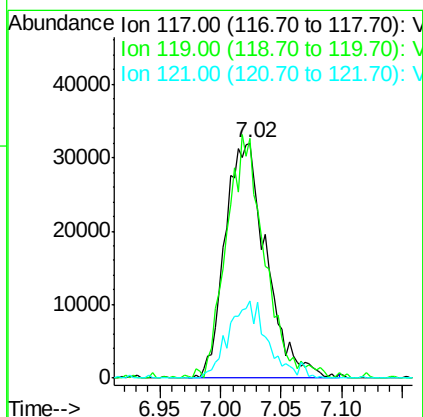
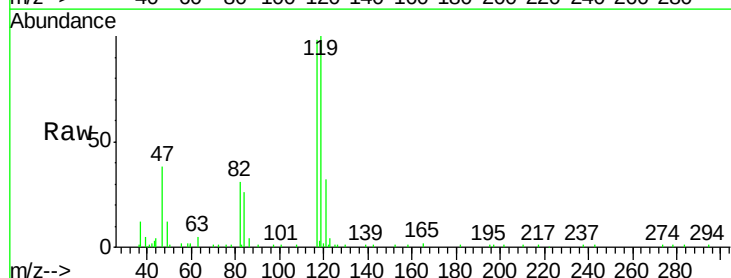
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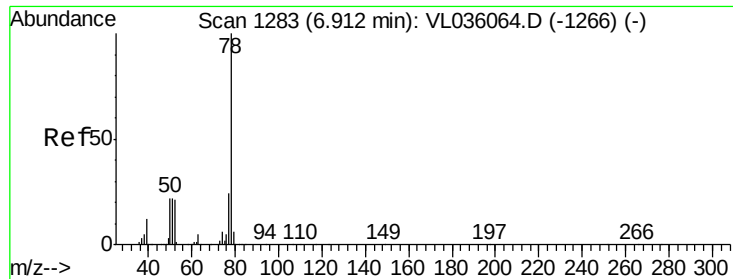
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#35
 Carbon Tetrachloride
 Concen: 0.514 ppbv m
 RT: 7.02 min Scan# 1318
 Delta R.T. -0.01 min
 Lab File: VL036176.D
 Acq: 16 Dec 2020 21:12

Tgt Ion	Ratio	Lower	Upper
117	100		
119	101.9	75.1	112.7
121	32.9	25.6	38.4





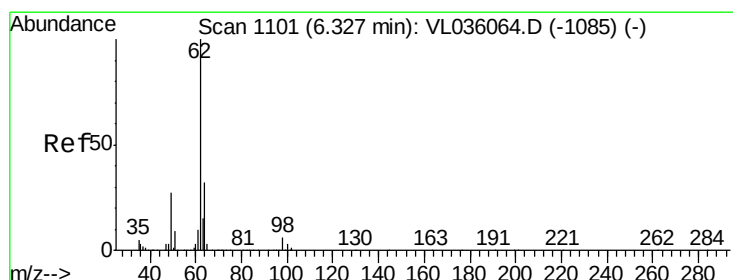
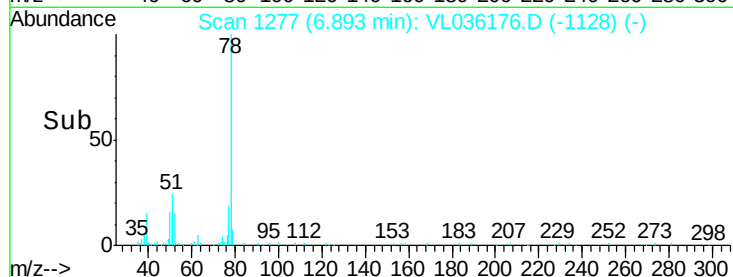
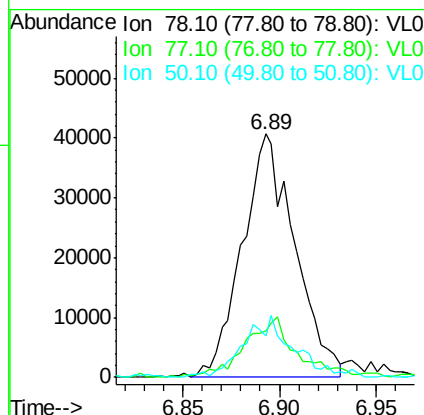
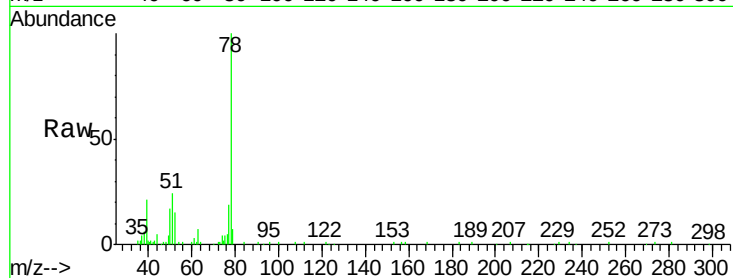
#36
Benzene
Concen: 0.356 ppbv
RT: 6.89 min Scan# 1277
Delta R.T. -0.02 min
Lab File: VL036176.D
Acq: 16 Dec 2020 21:12

Instrument :
MSVOA_L
ClientSampleId :
AS-EFF-201210

Tgt Ion	Ratio	Lower	Upper
78	100		
77	18.5	19.4	29.2#
50	16.0	17.8	26.8#

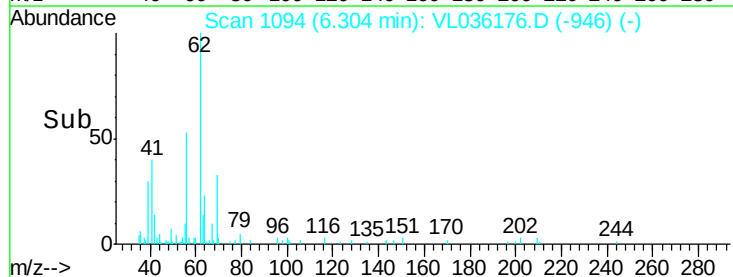
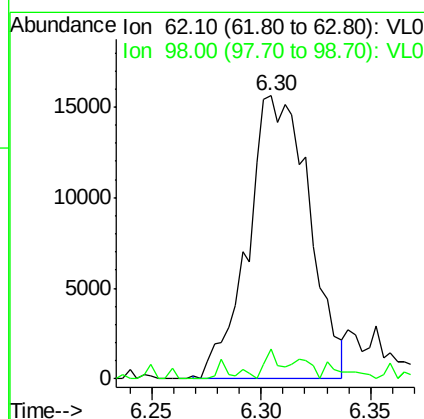
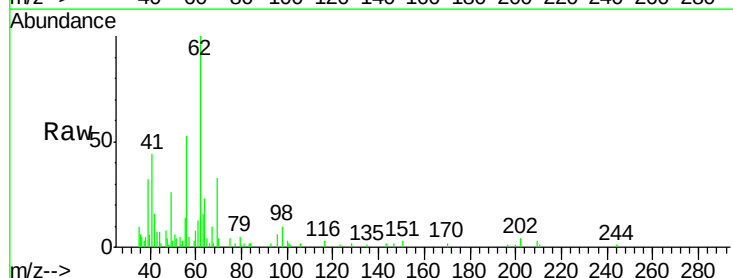
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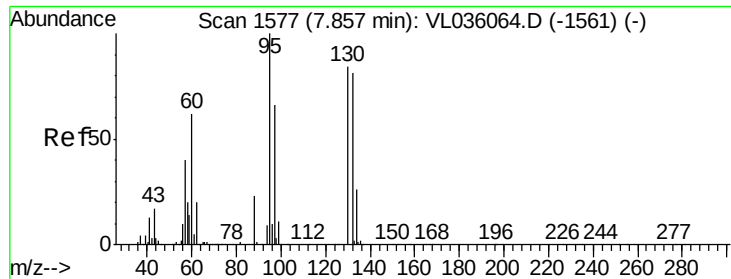
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#37
1,2-Dichloroethane
Concen: 0.243 ppbv m
RT: 6.30 min Scan# 1094
Delta R.T. -0.02 min
Lab File: VL036176.D
Acq: 16 Dec 2020 21:12

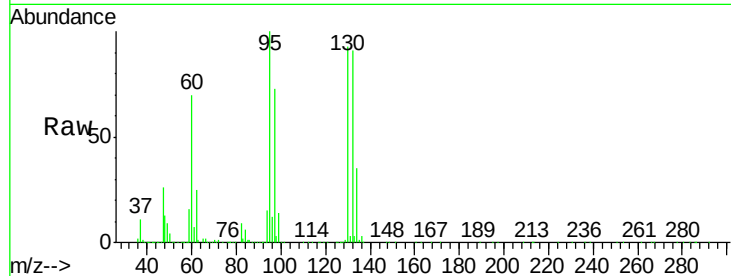
Tgt Ion	Ratio	Lower	Upper
62	100		
98	0.0	4.6	7.0#





#38
 Trichloroethene
 Concen: 110.885 ppbv
 RT: 7.84 min Scan# 1572
 Delta R.T. -0.02 min
 Lab File: VL036176.D
 Acq: 16 Dec 2020 21:12

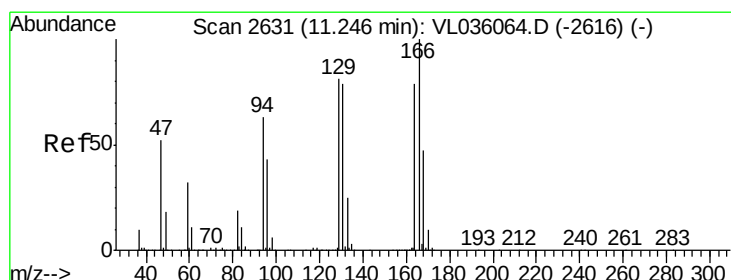
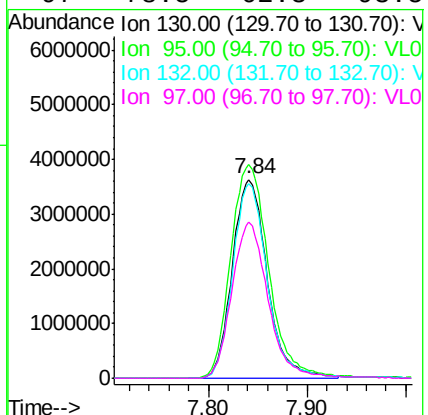
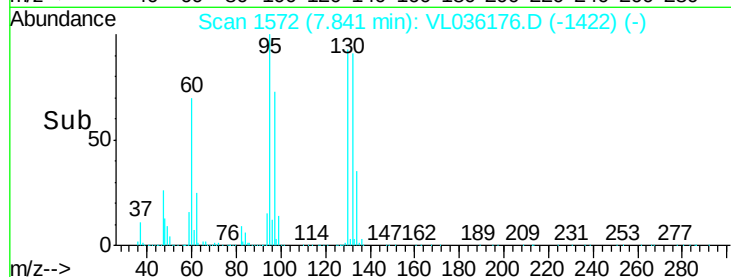
Instrument :
 MSVOA_L
 ClientSampleId :
 AS-EFF-201210



Tgt Ion:130 Resp: 8942126
 Ion Ratio Lower Upper
 130 100
 95 107.3 95.2 142.8
 132 97.6 76.9 115.3
 97 78.5 62.3 93.5

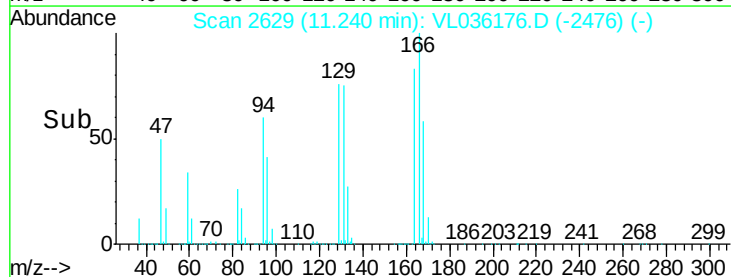
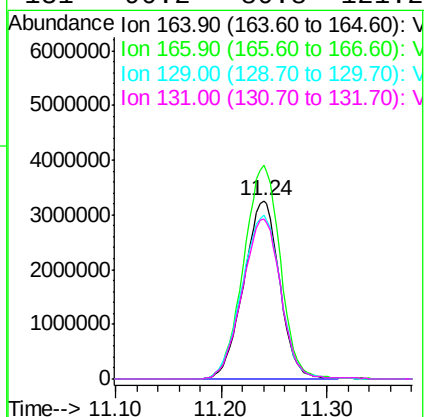
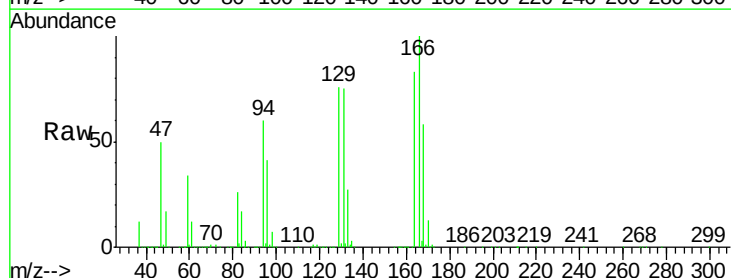
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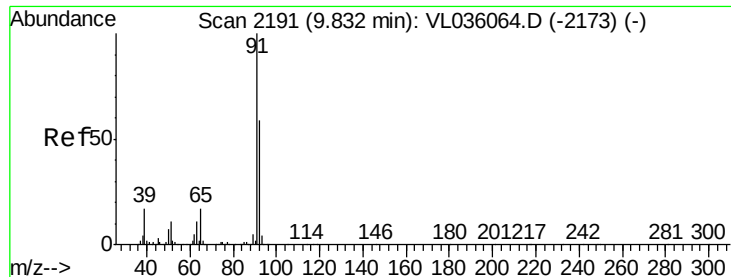
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#52
 Tetrachloroethene
 Concen: 98.593 ppbv
 RT: 11.24 min Scan# 2629
 Delta R.T. -0.01 min
 Lab File: VL036176.D
 Acq: 16 Dec 2020 21:12

Tgt Ion:164 Resp: 7699571
 Ion Ratio Lower Upper
 164 100
 166 120.0 101.9 152.9
 129 91.7 82.1 123.1
 131 90.2 80.8 121.2





#53

Toluene

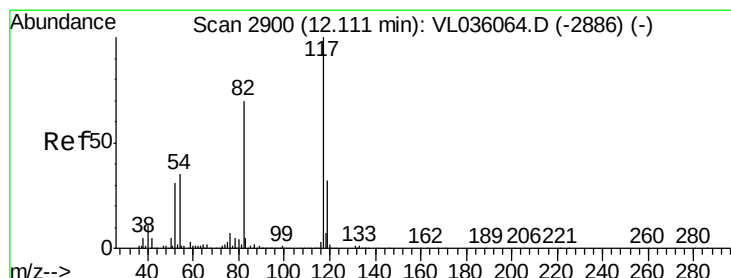
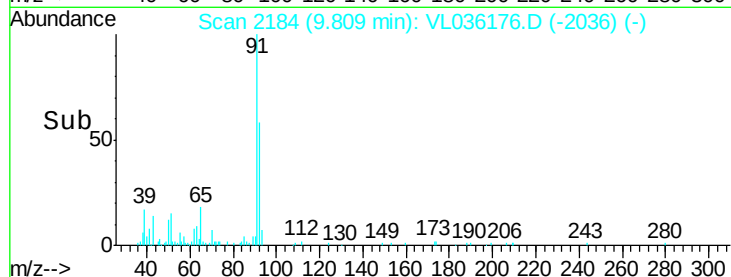
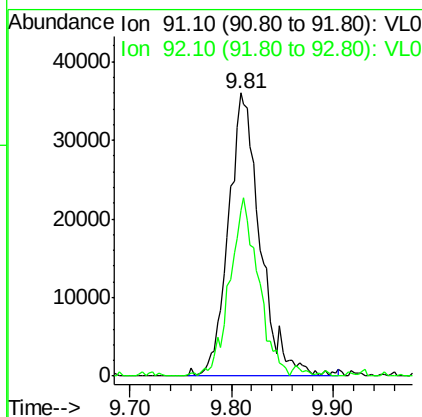
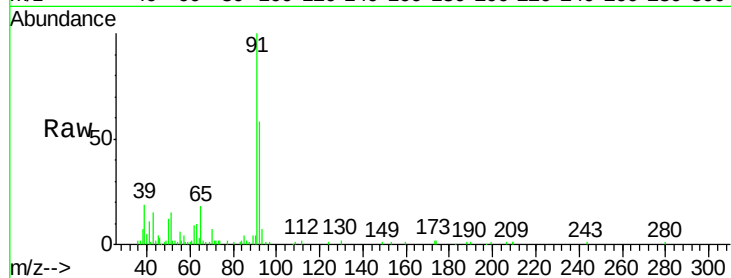
Concen: 0.321 ppbv m
RT: 9.81 min Scan# 2184
Delta R.T. -0.02 min
Lab File: VL036176.D
Acq: 16 Dec 2020 21:12

Instrument :
MSVOA_L
ClientSampleId :
AS-EFF-201210

Tgt Ion: 91 Resp: 77735
Ion Ratio Lower Upper
91 100
92 58.6 48.2 72.2

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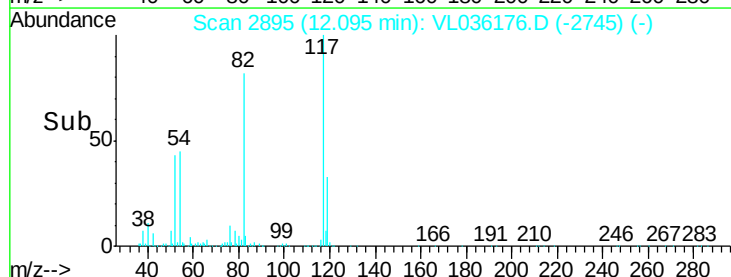
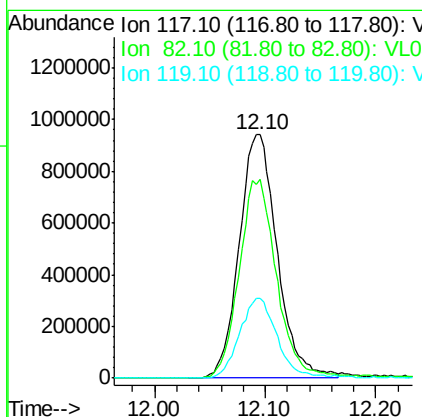
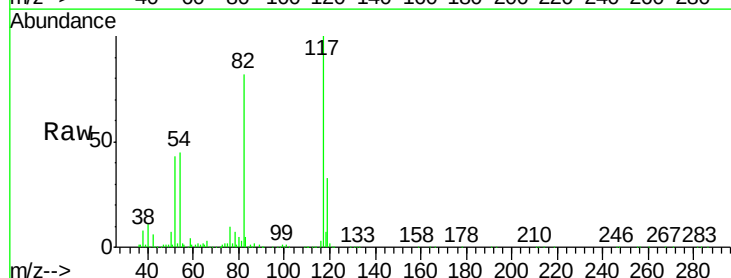


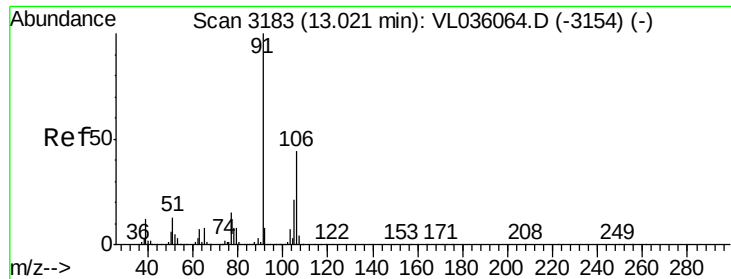
#55

Chlorobenzene-d5

Concen: 10.000 ppbv
RT: 12.10 min Scan# 2895
Delta R.T. -0.02 min
Lab File: VL036176.D
Acq: 16 Dec 2020 21:12

Tgt Ion: 117 Resp: 2251717
Ion Ratio Lower Upper
117 100
82 81.7 0.0 0.0#
119 33.0 0.0 0.0#





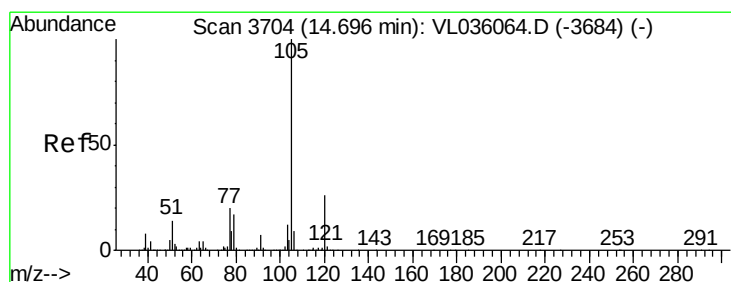
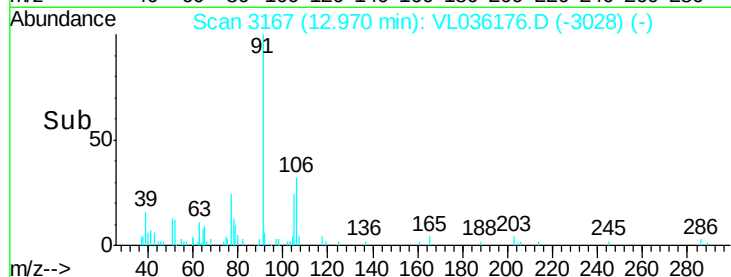
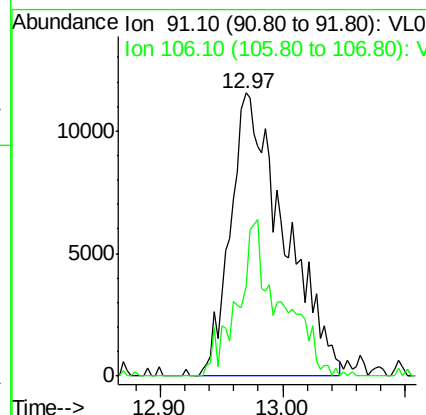
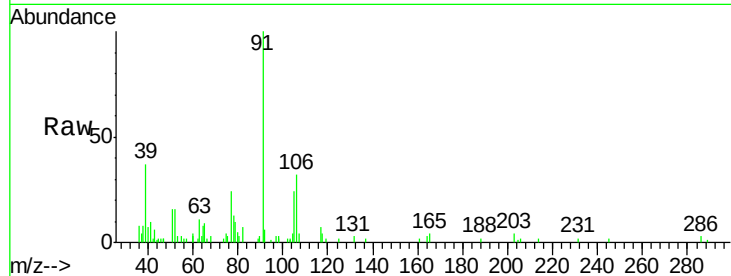
#59
m/p-Xylene
Concen: 0.136 ppbv m
RT: 12.97 min Scan# 3167
Delta R.T. -0.05 min
Lab File: VL036176.D
Acq: 16 Dec 2020 21:12

Instrument :
MSVOA_L
ClientSampleId :
AS-EFF-201210

Tgt Ion: 91 Resp: 35282
Ion Ratio Lower Upper
91 100
106 0.0 33.6 50.4#

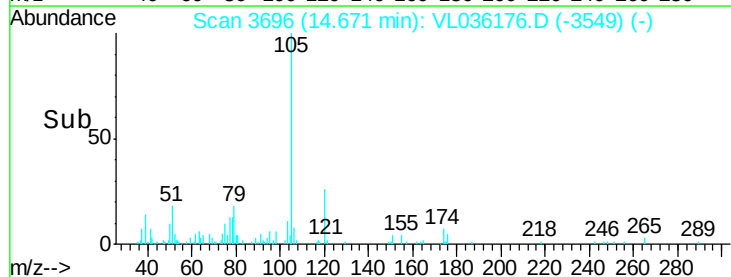
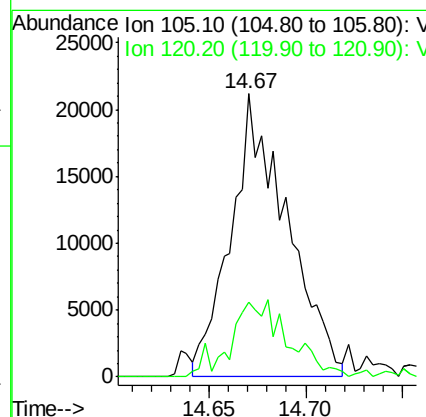
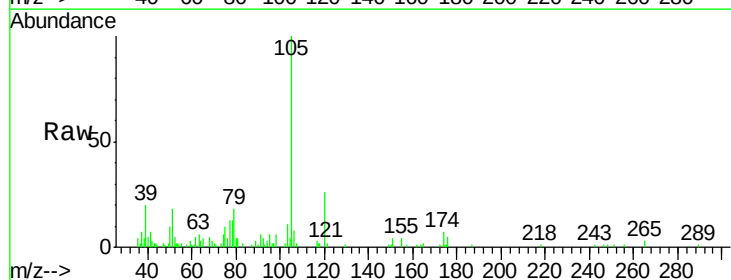
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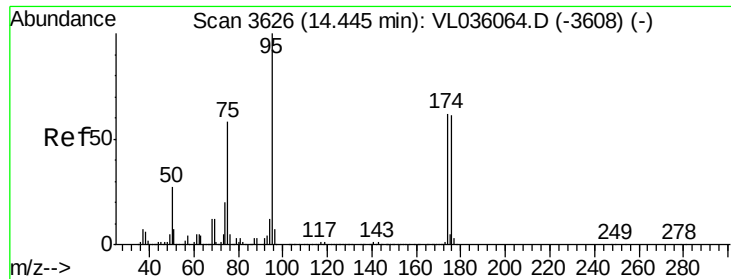
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#62
Isopropylbenzene
Concen: 0.117 ppbv
RT: 14.67 min Scan# 3696
Delta R.T. -0.03 min
Lab File: VL036176.D
Acq: 16 Dec 2020 21:12

Tgt Ion: 105 Resp: 42590
Ion Ratio Lower Upper
105 100
120 28.7 20.1 30.1





#68
 1-Bromo-4-Fluorobenzene
 Concen: 11.307 ppbv
 RT: 14.42 min Scan# 3619
 Delta R.T. -0.02 min
 Lab File: VL036176.D
 Acq: 16 Dec 2020 21:12

Instrument :
 MSVOA_L
 ClientSampleId :
 AS-EFF-201210

Tgt Ion: 95 Resp: 2021732
 Ion Ratio Lower Upper
 95 100
 174 53.0 50.7 76.1
 175 3.8 4.0 6.0#

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