

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032921\
 Data File : VL036550.D
 Acq On : 29 Mar 2021 22:20
 Operator : SY/AP
 Sample : M1759-04
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 EP-104

Manual Integrations
 APPROVED

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 3/30/2021 7:44:22 PM

Quant Time: Mar 30 11:40:03 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar 25 2021
 QLast Update : Thu Mar 25 09:42:40 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1569395	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.16	114	3439841	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.07	117	3344379	10.00	ppbv	-0.03

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.40	95	2543285	9.54	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	95.40%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.03	85	37255	0.146	ppbv	92
3) Chlorodifluoromethane	2.98	51	55666	0.190	ppbv	93
4) Chloromethane	3.13	50	52299	0.505	ppbv #	79
9) Propene	3.01	41	37026m	0.396	ppbv	
11) Trichlorofluoromethane	3.94	101	55699	0.214	ppbv #	73
13) Ethanol	3.62	45	14910140	1339.441	ppbv	96
15) Acetone	3.83	43	3087062	19.985	ppbv	99
17) tert-Butyl alcohol	4.31	59	156765m	1.166	ppbv	
19) Isopropyl Alcohol	3.99	45	2918426	34.346	ppbv #	95
20) Methylene Chloride	4.33	84	59139	0.818	ppbv	97
28) Methyl tert-Butyl Ether	4.98	73	112195m	0.558	ppbv	
29) Chloroform	5.74	83	72267m	0.265	ppbv	
32) 1,1,1-Trichloroethane	6.50	97	11193m	0.041	ppbv	
34) 2-Butanone	5.23	43	272243	1.621	ppbv	97
35) Carbon Tetrachloride	7.00	117	23512m	0.089	ppbv	
36) Benzene	6.87	78	88423	0.279	ppbv #	91
38) Trichloroethene	7.82	130	114096m	0.924	ppbv	
41) Tetrahydrofuran	6.04	42	51339m	0.663	ppbv	
52) Tetrachloroethene	11.21	164	5543m	0.047	ppbv	
53) Toluene	9.79	91	217420	0.644	ppbv	98
58) Ethyl Benzene	12.70	91	47802m	0.098	ppbv	
59) m/p-Xylene	12.96	91	138332m	0.326	ppbv	
60) o-Xylene	13.67	91	55526m	0.135	ppbv	
61) Styrene	13.51	104	94420m	0.457	ppbv	
74) 1,2,4-Trimethylbenzene	16.74	105	61469	0.137	ppbv #	68
75) 1,3-Dichlorobenzene	16.97	146	40459m	0.160	ppbv	
76) 1,4-Dichlorobenzene	17.12	146	131517m	0.524	ppbv	

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

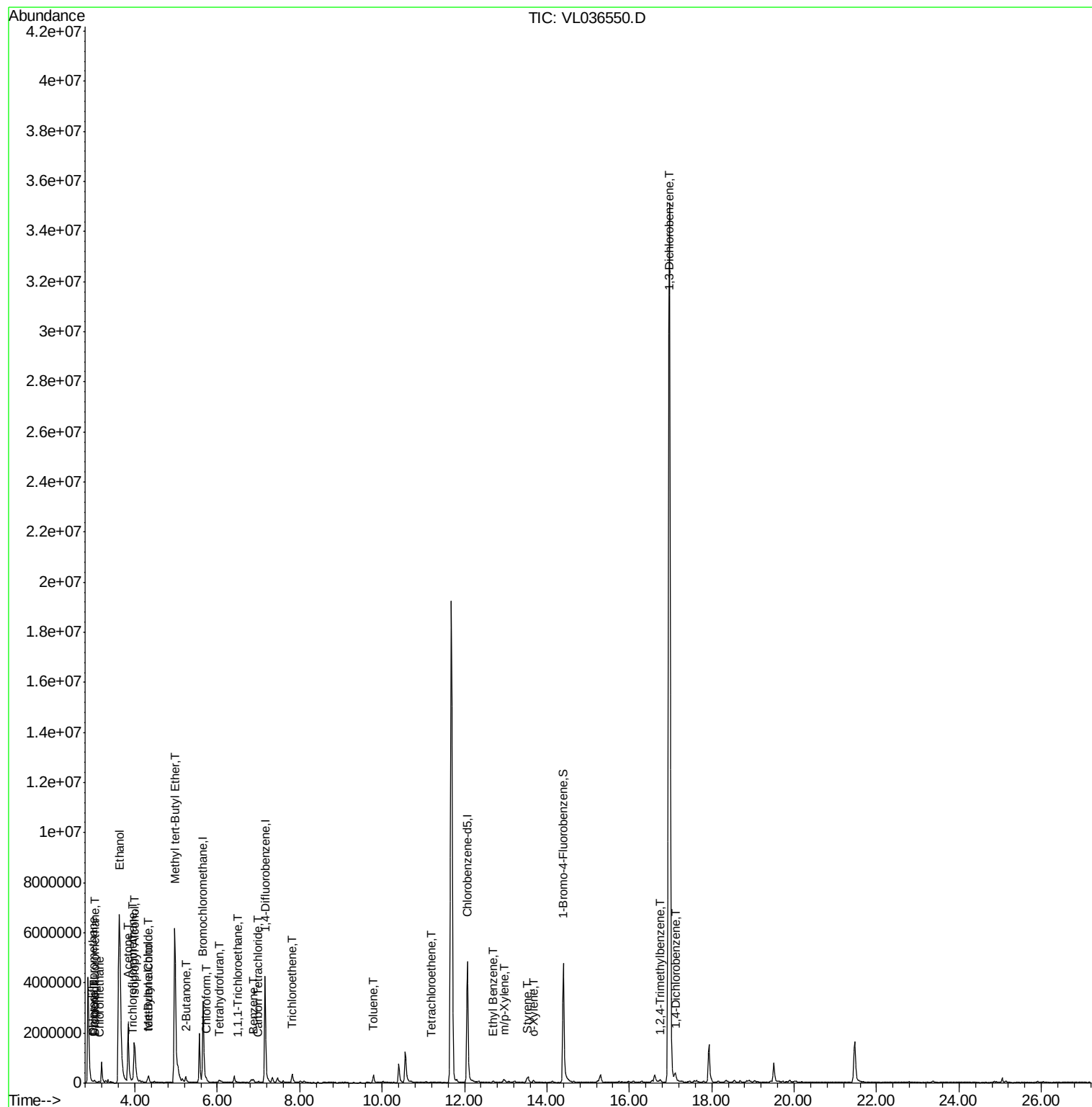
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL032921\
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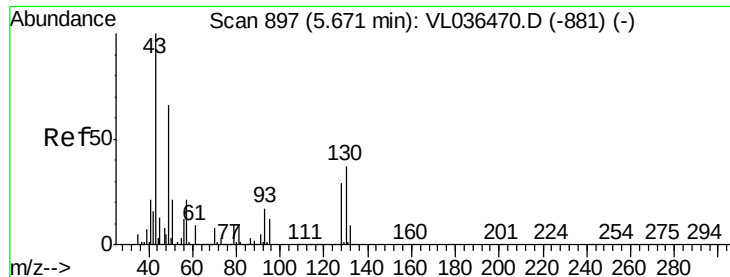
Instrument :
MSVOA_L
ClientSampleId :
EP-104

Manual Integrations
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Quant Time: Mar 30 11:40:03 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar
QLast Update : Thu Mar 25 09:42:40 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 891

Delta R.T. -0.02 min

Lab File: VL036550.D

Acq: 29 Mar 2021 22:20

Instrument :

MSVOA_L

ClientSampleId :

EP-104

Tot Ion: 49 Resp: 1569395

Ion Ratio Lower Upper

49 100

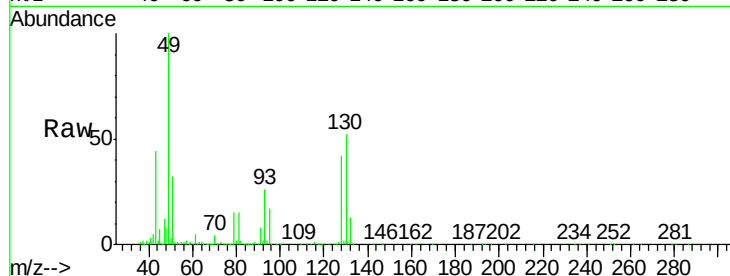
128 44.6 23.5 70.6

130 56.9 29.1 87.4

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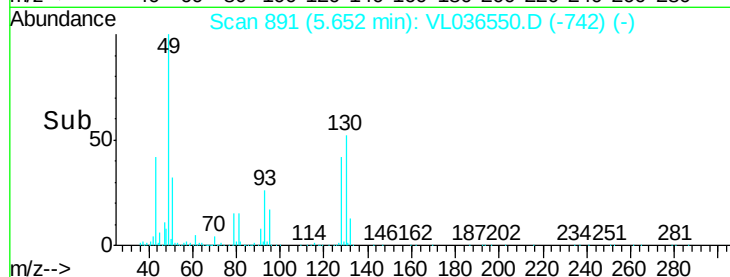


Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

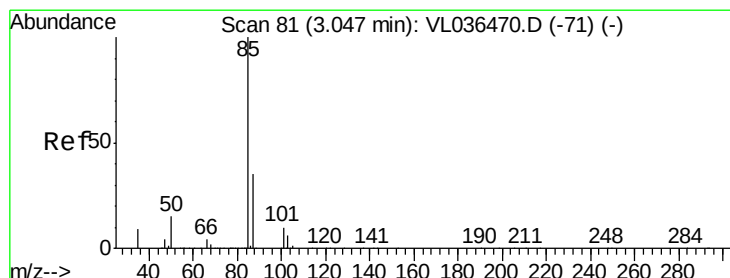
Ion 130.00 (129.70 to 130.70): VL0

Time-->



5.65

Time-->



#2

Dichlorodifluoromethane

Concen: 0.146 ppbv

RT: 3.03 min Scan# 77

Delta R.T. -0.01 min

Lab File: VL036550.D

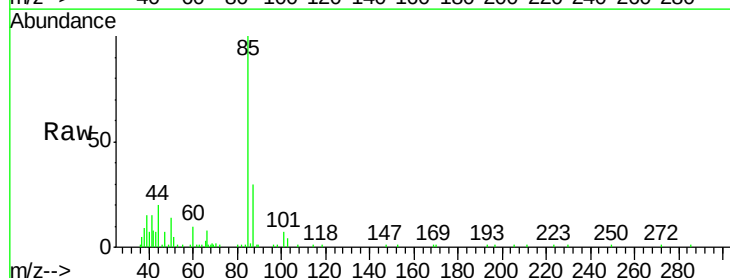
Acq: 29 Mar 2021 22:20

Tgt Ion: 85 Resp: 37255

Ion Ratio Lower Upper

85 100

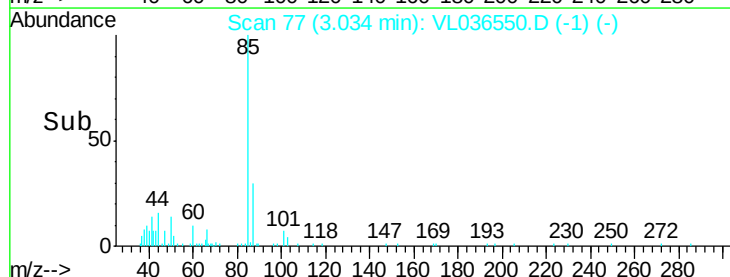
87 30.0 27.8 41.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

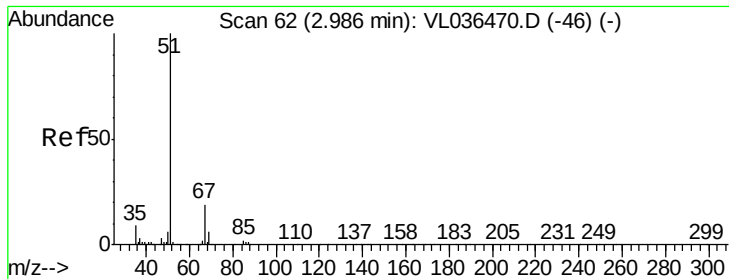
Ion 87.00 (86.70 to 87.70): VL0

Time-->



3.03

Time-->



#3

Chlorodifluoromethane

Concen: 0.190 ppbv

RT: 2.98 min Scan# 59

Delta R.T. -0.01 min

Lab File: VL036550.D

Acq: 29 Mar 2021 22:20

Instrument :

MSVOA_L

ClientSampled :

EP-104

Tot Ion: 51 Resp: 55666

Ion Ratio Lower Upper

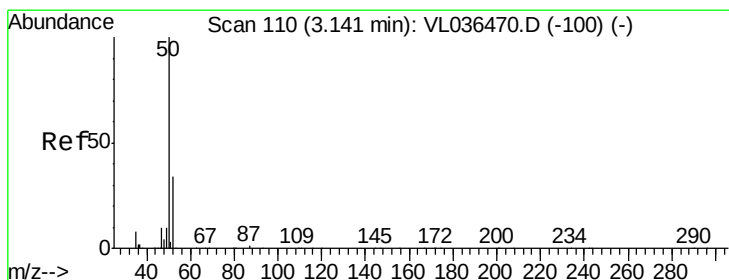
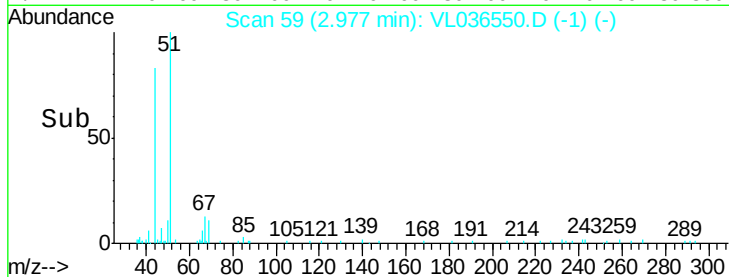
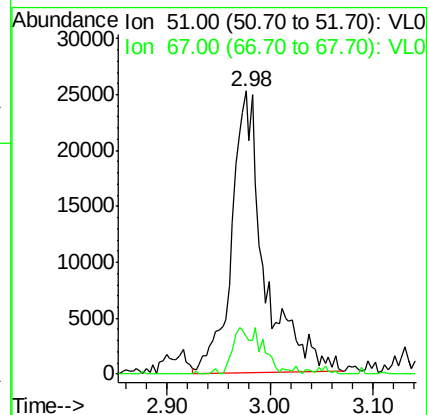
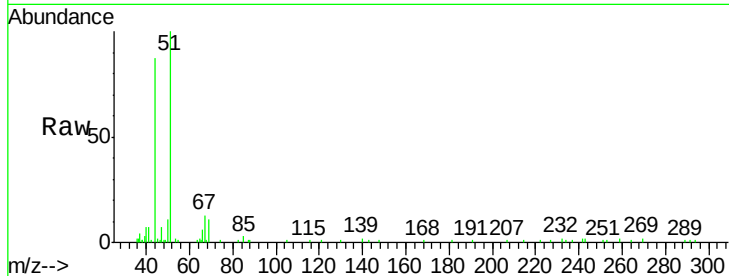
51 100

67 15.3 14.7 22.1

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#4

Chloromethane

Concen: 0.505 ppbv

RT: 3.13 min Scan# 106

Delta R.T. -0.01 min

Lab File: VL036550.D

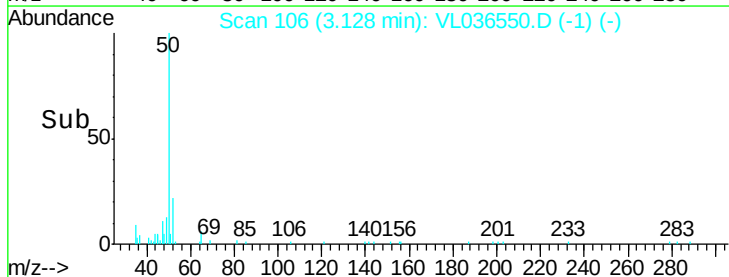
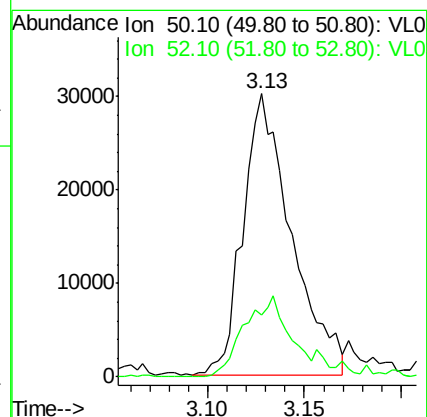
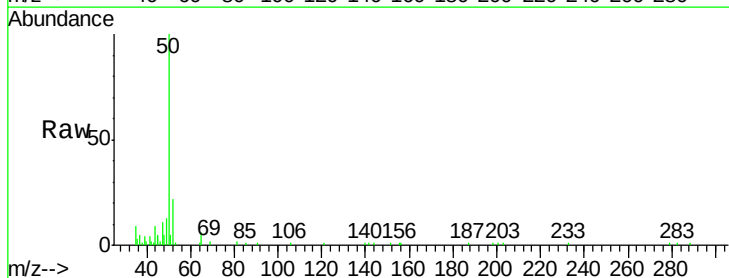
Acq: 29 Mar 2021 22:20

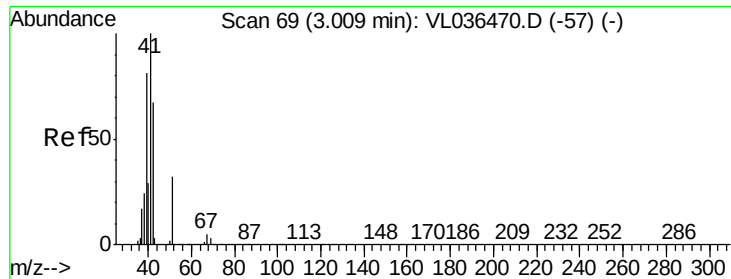
Tgt Ion: 50 Resp: 52299

Ion Ratio Lower Upper

50 100

52 21.9 27.0 40.6#





#9

Propene

Concen: 0.396 ppbv m

RT: 3.01 min Scan# 70

Delta R.T. 0.00 min

Lab File: VL036550.D

Acq: 29 Mar 2021 22:20

Instrument :

MSVOA_L

ClientSampleId :

EP-104

Tot Ion: 41 Resp: 37026

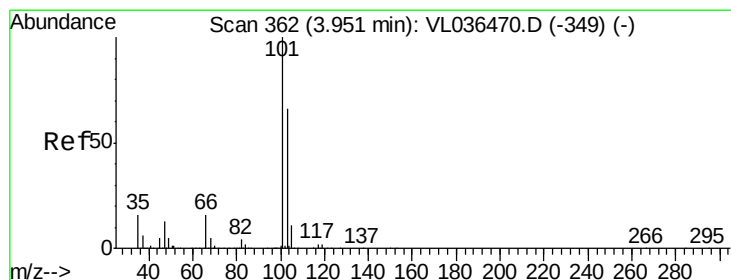
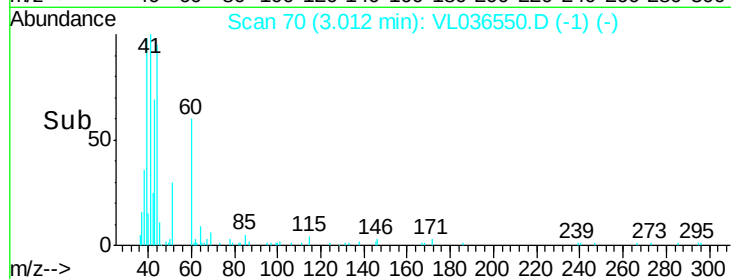
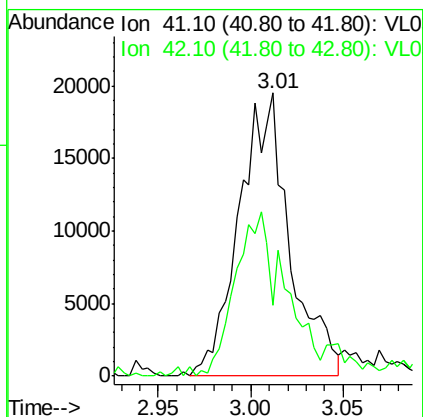
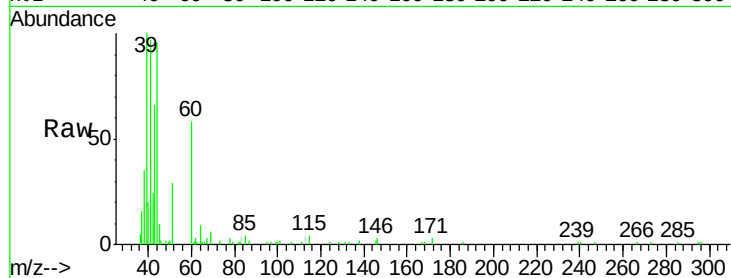
Ion Ratio Lower Upper

41 100

42 64.0 57.0 85.4

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#11

Trichlorofluoromethane

Concen: 0.214 ppbv

RT: 3.94 min Scan# 358

Delta R.T. -0.01 min

Lab File: VL036550.D

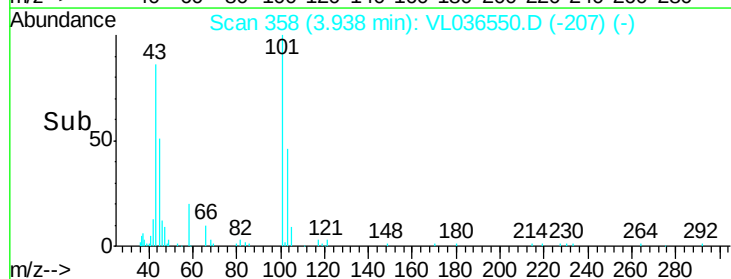
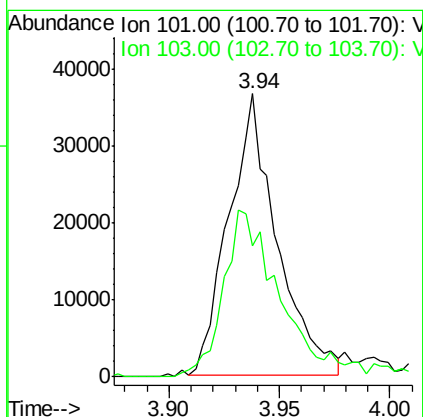
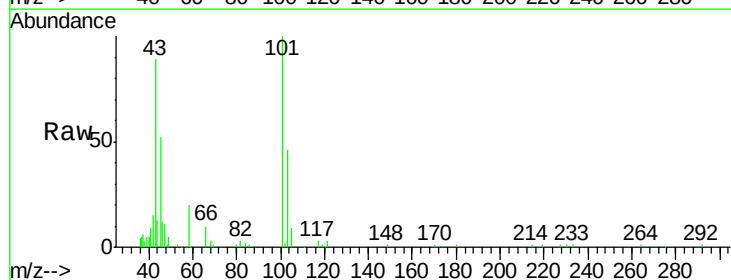
Acq: 29 Mar 2021 22:20

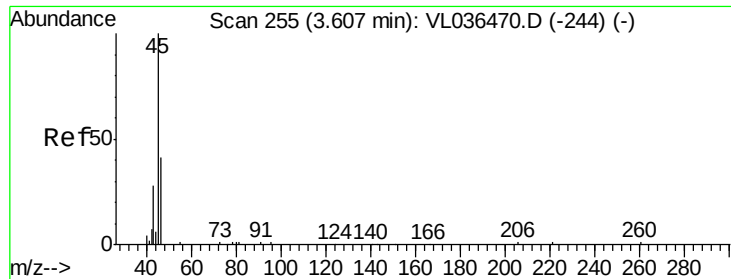
Tgt Ion: 101 Resp: 55699

Ion Ratio Lower Upper

101 100

103 44.0 52.5 78.7#





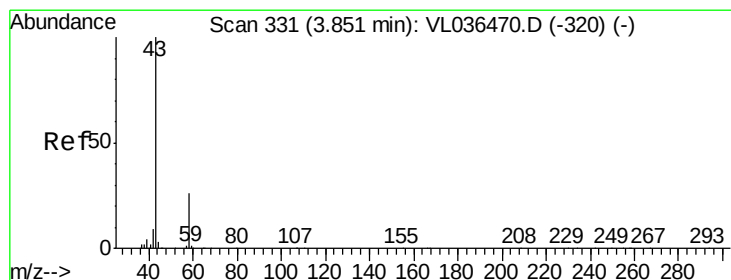
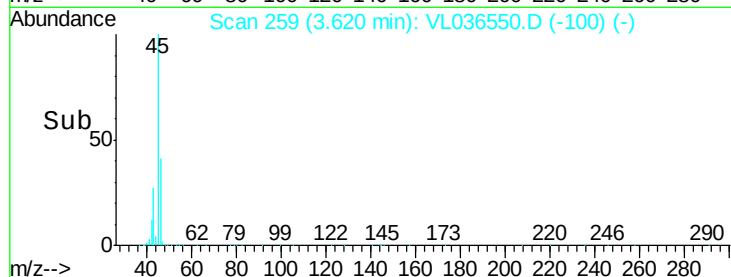
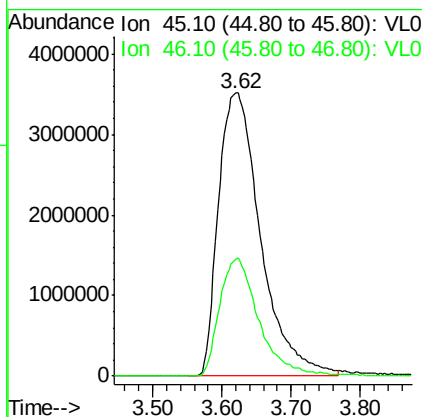
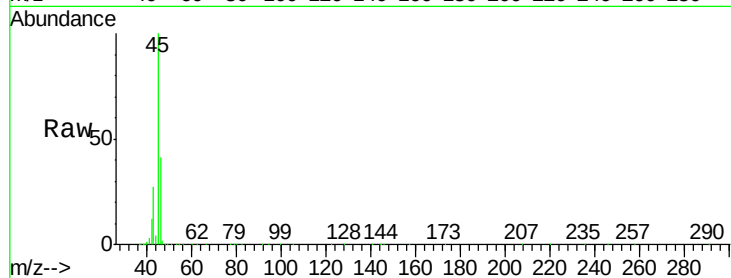
#13
Ethanol
Concen: 1339.441 ppbv
RT: 3.62 min Scan# 259
Delta R.T. 0.01 min
Lab File: VL036550.D
Acq: 29 Mar 2021 22:20

Instrument :
MSVOA_L
ClientSampled :
EP-104

Tot Ion: 45 Resp: 14910140
Ion Ratio Lower Upper
45 100
46 39.0 16.6 66.2

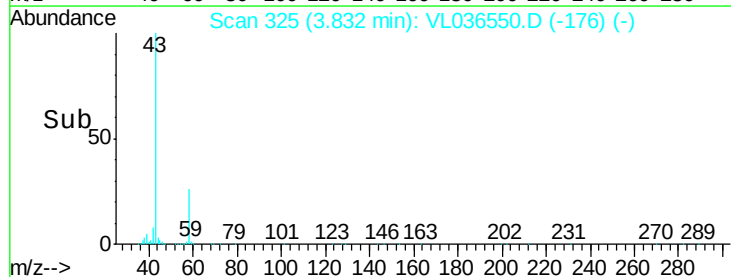
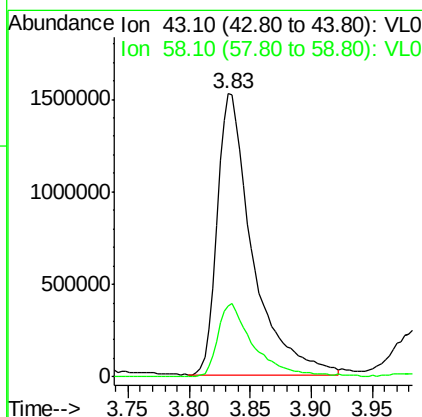
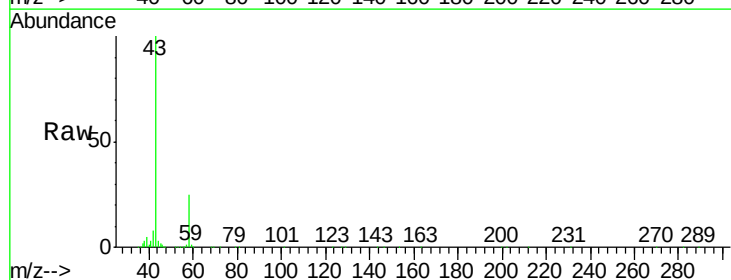
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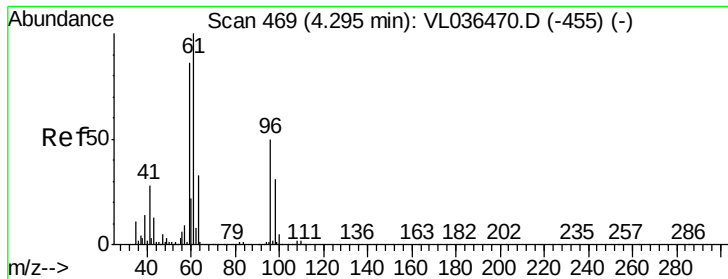
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#15
Acetone
Concen: 19.985 ppbv
RT: 3.83 min Scan# 325
Delta R.T. -0.02 min
Lab File: VL036550.D
Acq: 29 Mar 2021 22:20

Tgt Ion: 43 Resp: 3087062
Ion Ratio Lower Upper
43 100
58 27.0 21.2 31.8





#17

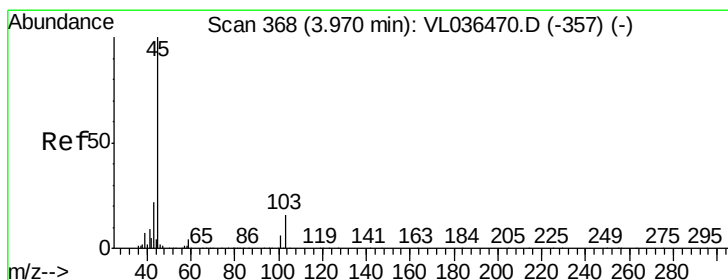
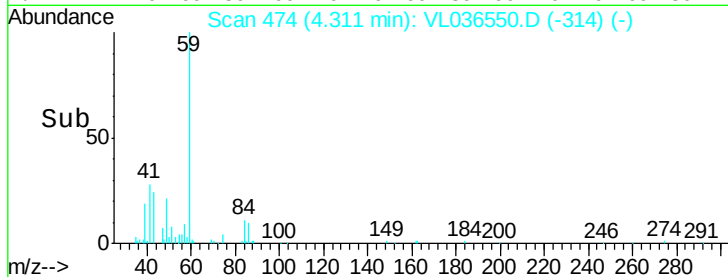
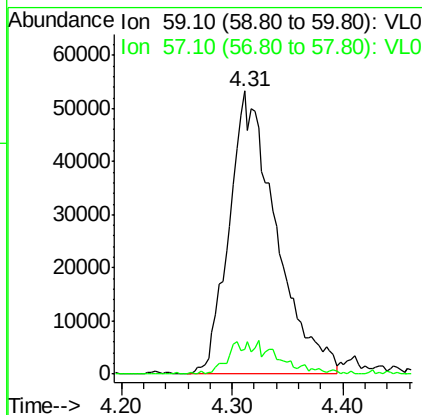
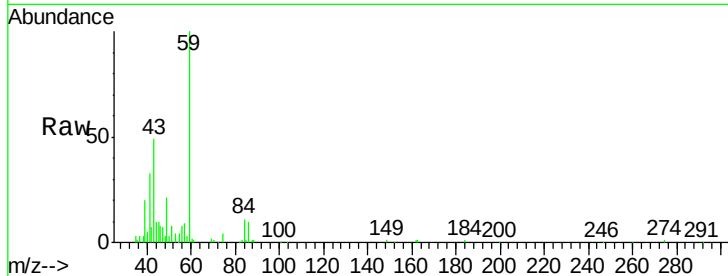
tert-Butyl alcohol
 Concen: 1.166 ppbv
 RT: 4.31 min Scan# 474
 Delta R.T. 0.02 min
 Lab File: VL036550.D
 Acq: 29 Mar 2021 22:20

Instrument :
 MSVOA_L
 ClientSampleId :
 EP-104

Tot Ion	Ratio	Lower	Upper
59	100		
57	0.0	8.6	12.8#

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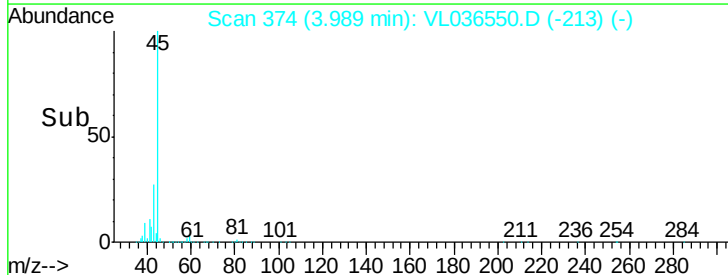
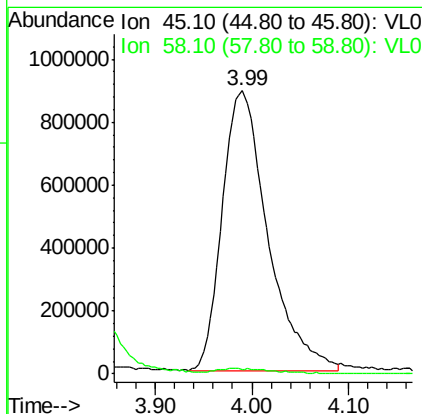
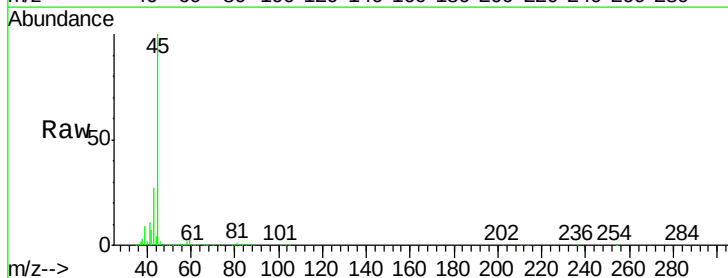
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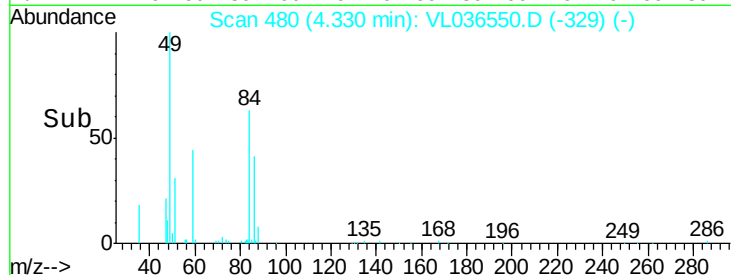
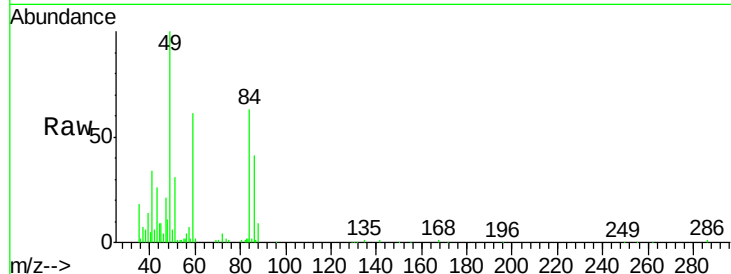
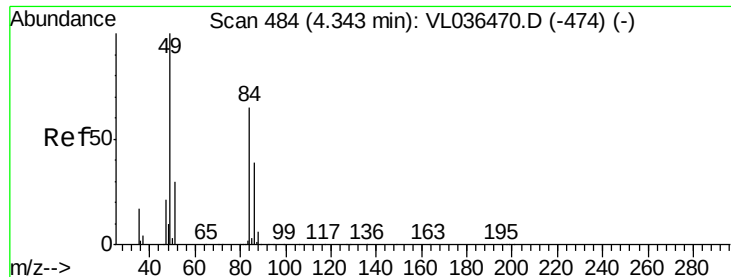


#19

Isopropyl Alcohol
 Concen: 34.346 ppbv
 RT: 3.99 min Scan# 374
 Delta R.T. 0.02 min
 Lab File: VL036550.D
 Acq: 29 Mar 2021 22:20

Tgt Ion	Ratio	Lower	Upper
45	100		
58	2.1	2.9	4.3#





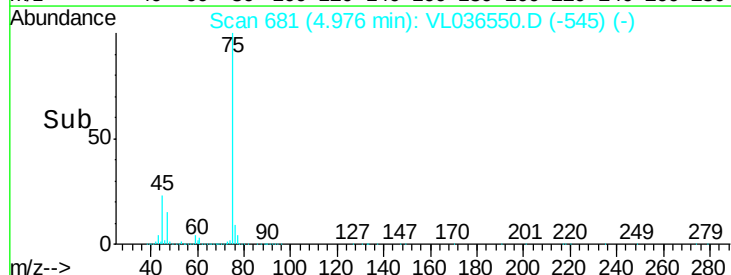
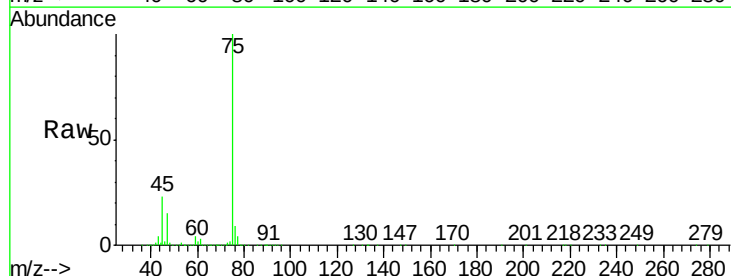
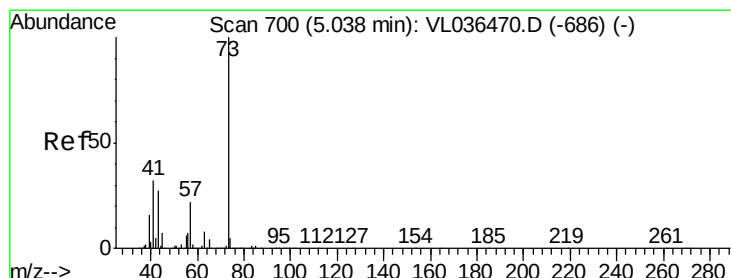
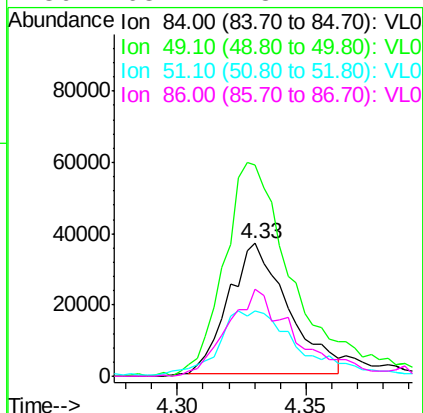
#20
Methylene Chloride
Concen: 0.818 ppbv
RT: 4.33 min Scan# 480
Delta R.T. -0.01 min
Lab File: VL036550.D
Acq: 29 Mar 2021 22:20

Tot Ion:	84	Resp:	59139
Ion	Ratio	Lower	Upper
84	100		
49	149.8	122.9	184.3
51	44.0	36.9	55.3
86	63.4	48.2	72.4

Instrument :
MSVOA_L
ClientSampleId :
EP-104

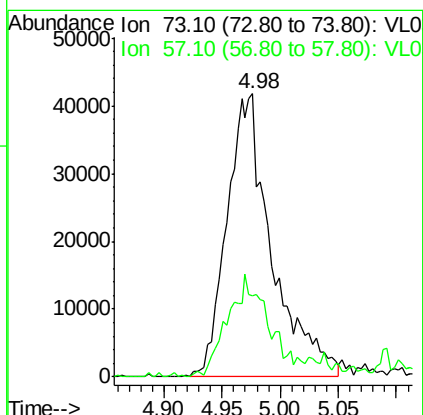
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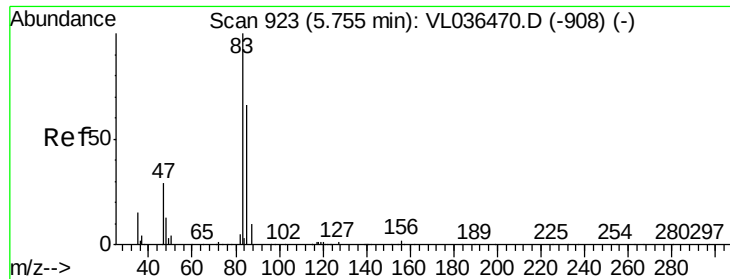
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#28
Methyl tert-Butyl Ether
Concen: 0.558 ppbv m
RT: 4.98 min Scan# 681
Delta R.T. -0.06 min
Lab File: VL036550.D
Acq: 29 Mar 2021 22:20

Tgt Ion:	73	Resp:	112195
Ion	Ratio	Lower	Upper
73	100		
57	0.0	18.5	27.7#





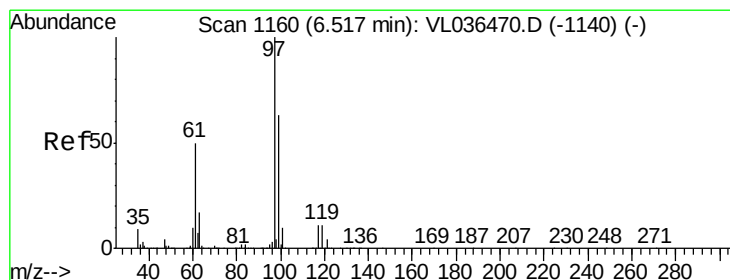
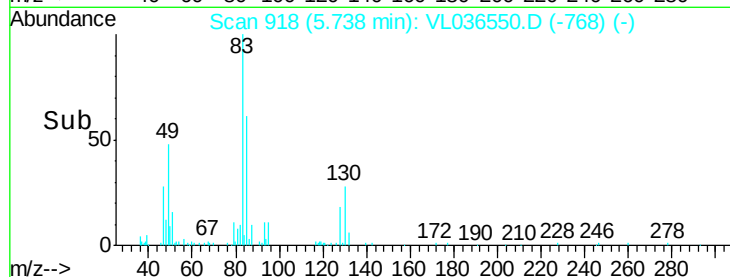
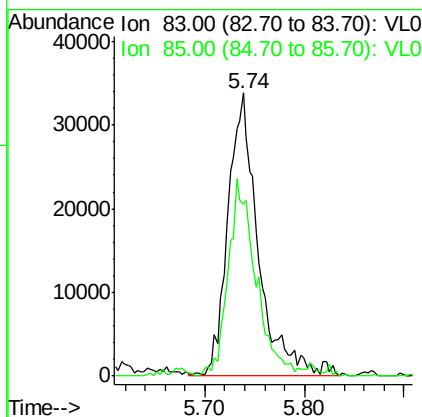
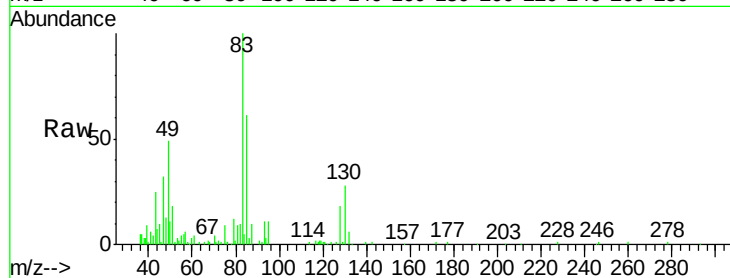
#29
Chloroform
Concen: 0.265 ppbv m
RT: 5.74 min Scan# 918
Delta R.T. -0.02 min
Lab File: VL036550.D
Acq: 29 Mar 2021 22:20

Instrument :
MSVOA_L
ClientSampleId :
EP-104

Tot Ion	83	Resp	72267
Ion Ratio	100	Lower	Upper
85	60.6	52.6	78.8

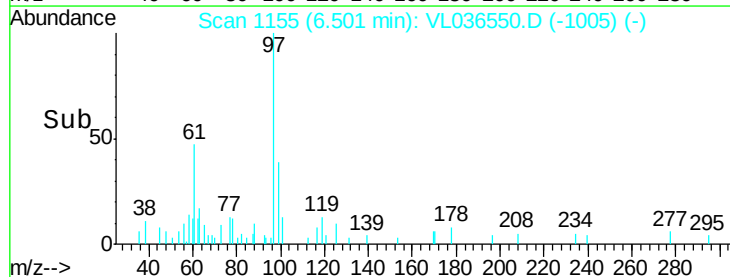
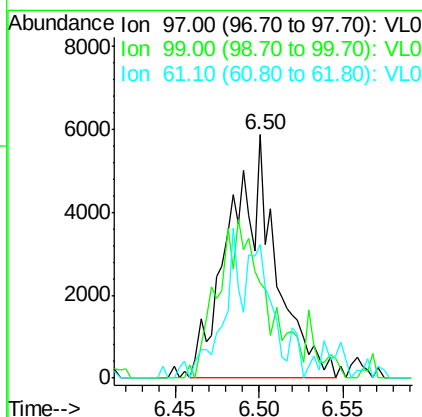
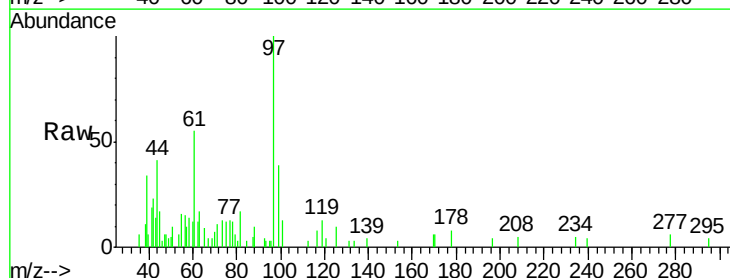
Manual Integrations
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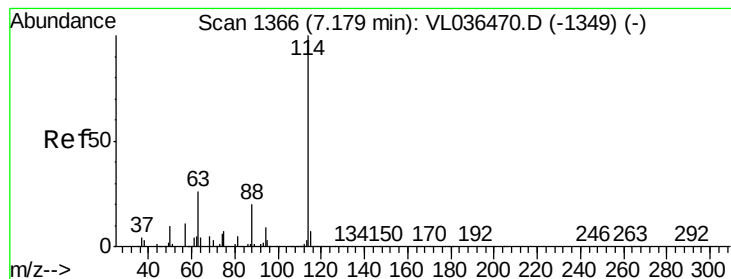
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3/30/2021 7:44:22 PM



#32
1,1,1-Trichloroethane
Concen: 0.041 ppbv m
RT: 6.50 min Scan# 1155
Delta R.T. -0.02 min
Lab File: VL036550.D
Acq: 29 Mar 2021 22:20

Tgt Ion	97	Resp	11193
Ion Ratio	100	Lower	Upper
99	77.6	51.4	77.0#
61	0.0	40.6	60.8#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.16 min Scan# 1360

Delta R.T. -0.02 min

Lab File: VL036550.D

Acq: 29 Mar 2021 22:20

Instrument :

MSVOA_L

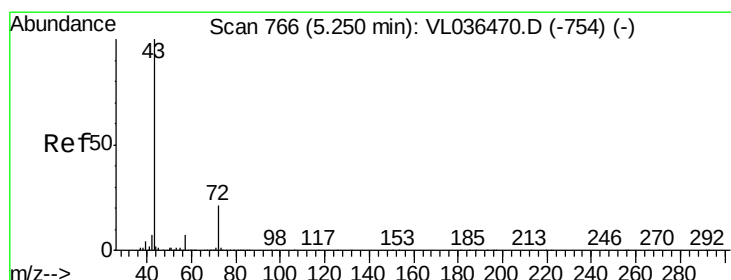
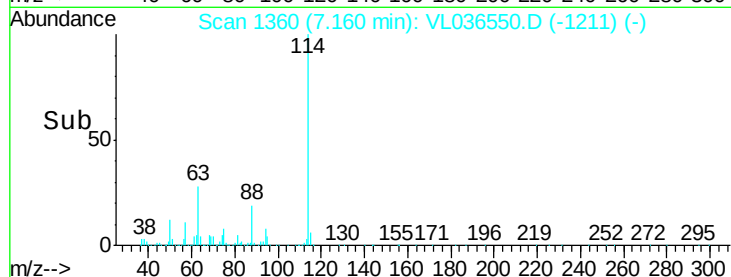
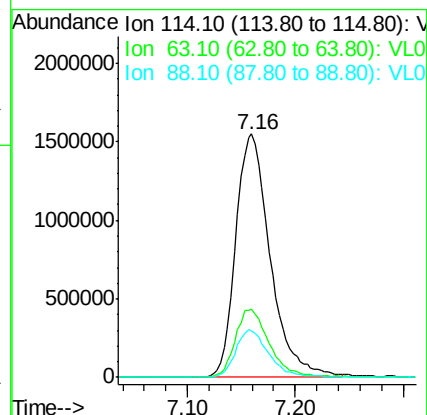
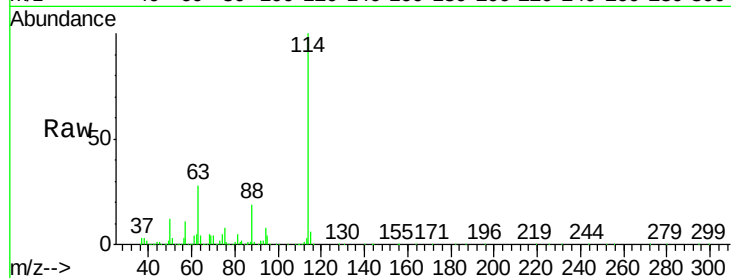
ClientSampleId :

EP-104

Tot Ion:	114	Resp:	3439841
Ion	Ratio	Lower	Upper
114	100		
63	28.1	22.4	33.6
88	19.0	15.4	23.0

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#34

2-Butanone

Concen: 1.621 ppbv

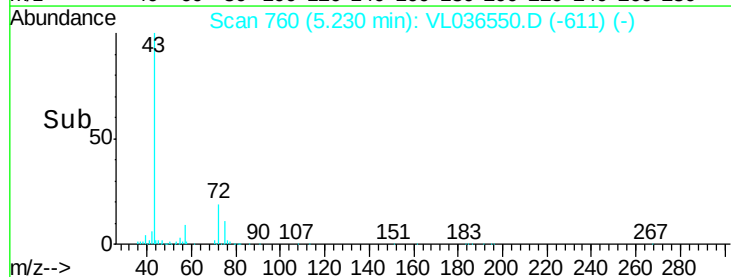
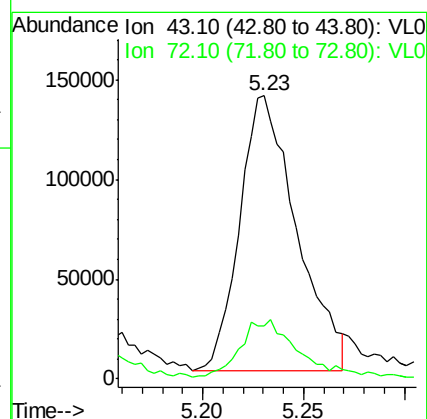
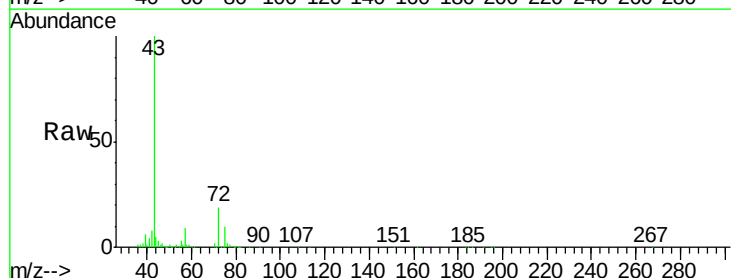
RT: 5.23 min Scan# 760

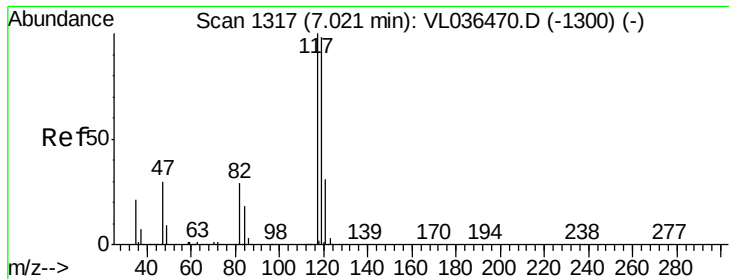
Delta R.T. -0.02 min

Lab File: VL036550.D

Acq: 29 Mar 2021 22:20

Tgt Ion:	43	Resp:	272243
Ion	Ratio	Lower	Upper
43	100		
72	22.9	17.0	25.6





#35

Carbon Tetrachloride

Concen: 0.089 ppbv m

RT: 7.00 min Scan# 1311

Delta R.T. -0.02 min

Lab File: VL036550.D

Acq: 29 Mar 2021 22:20

Instrument :

MSVOA_L

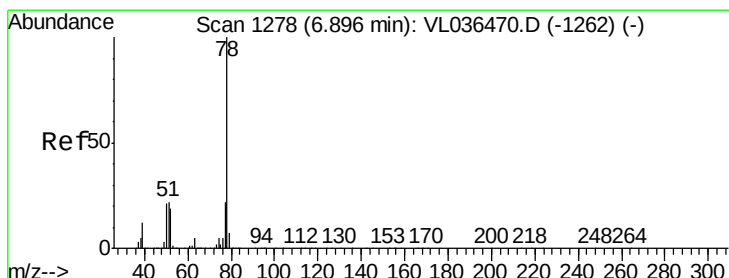
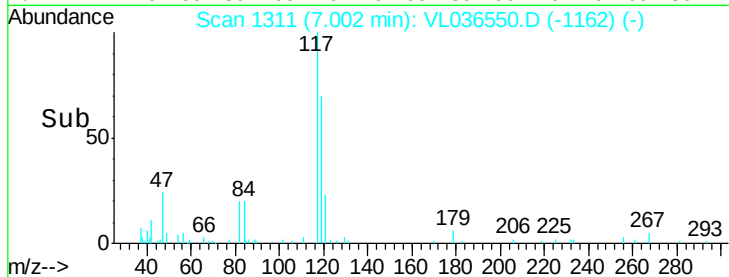
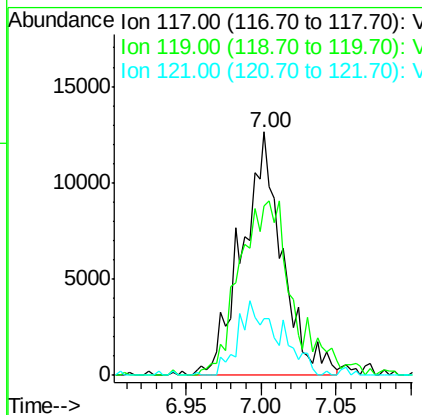
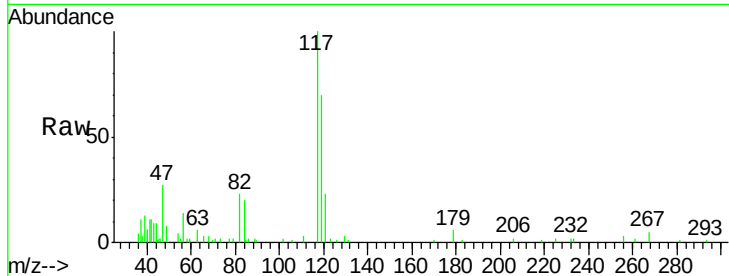
ClientSampleId :

EP-104

Tot Ion	Ratio	Lower	Upper
117	100		
119	69.5	78.2	117.2#
121	23.4	24.5	36.7#

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#36

Benzene

Concen: 0.279 ppbv

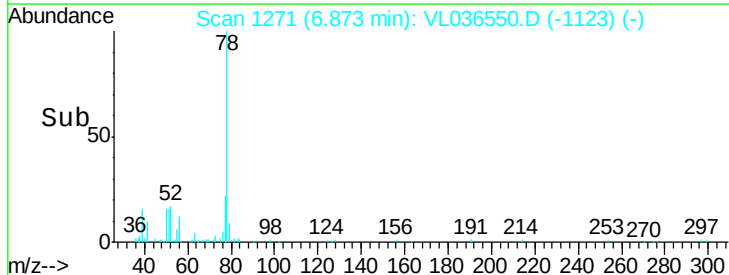
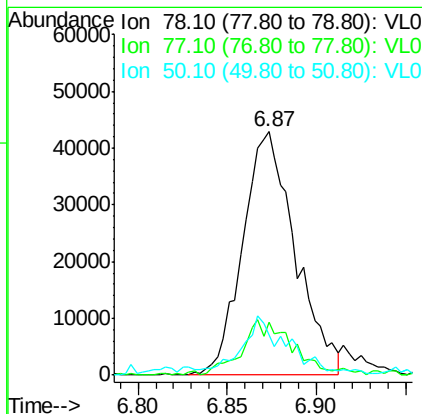
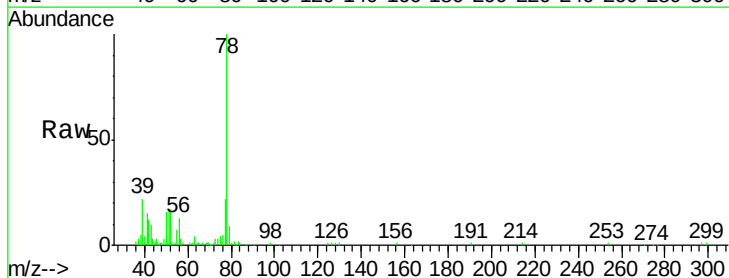
RT: 6.87 min Scan# 1271

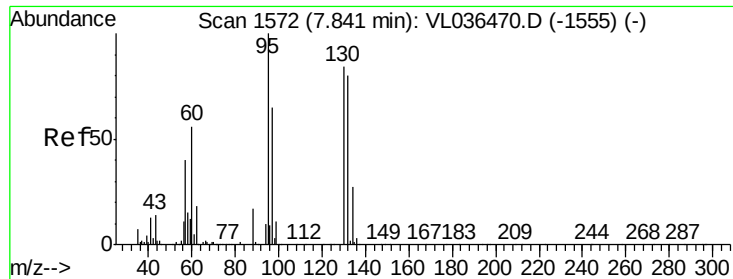
Delta R.T. -0.02 min

Lab File: VL036550.D

Acq: 29 Mar 2021 22:20

Tgt Ion	Ratio	Lower	Upper
78	100		
77	20.1	18.0	27.0
50	14.7	16.5	24.7#





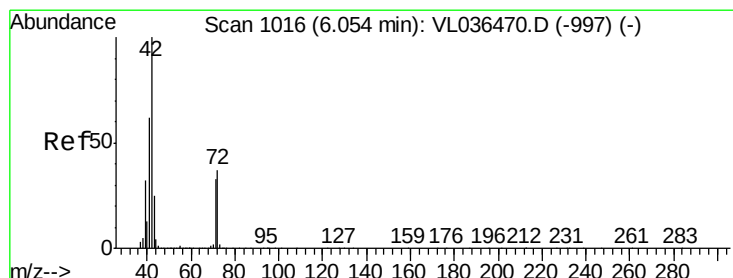
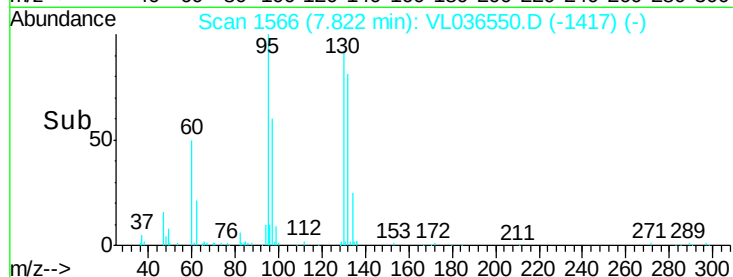
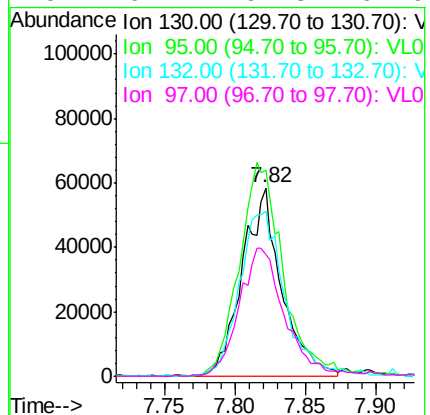
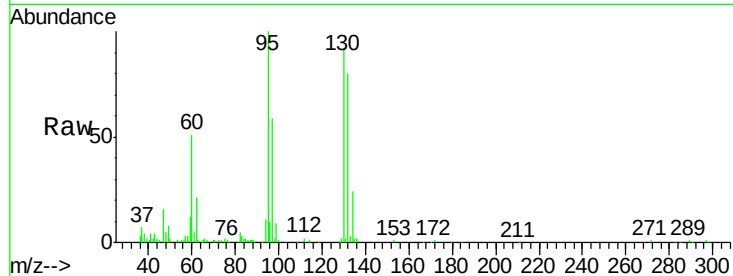
#38
 Trichloroethene
 Concen: 0.924 ppbv m
 RT: 7.82 min Scan# 1566
 Delta R.T. -0.02 min
 Lab File: VL036550.D
 Acq: 29 Mar 2021 22:20

Instrument :
 MSVOA_L
 ClientSampleId :
 EP-104

Tot Ion	Ratio	Lower	Upper
130	100		
95	109.1	95.7	143.5
132	87.8	76.2	114.4
97	64.4	61.8	92.6

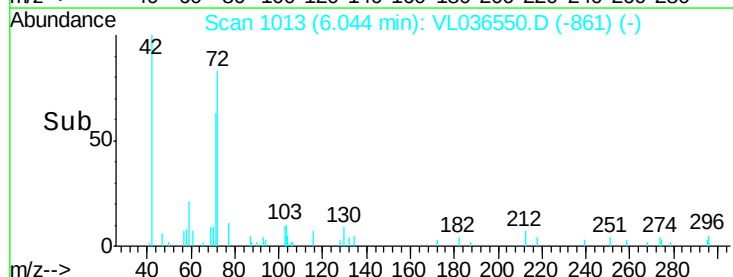
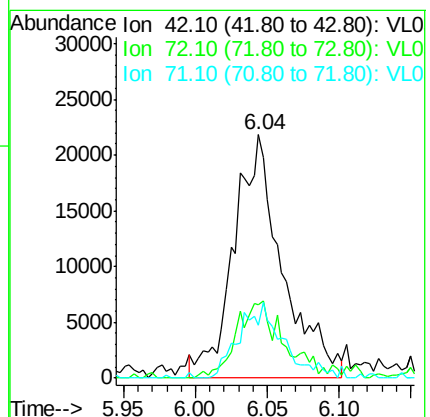
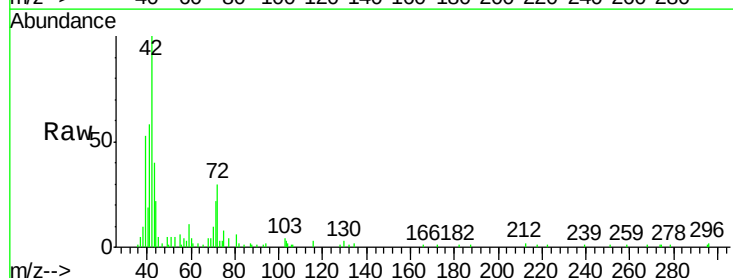
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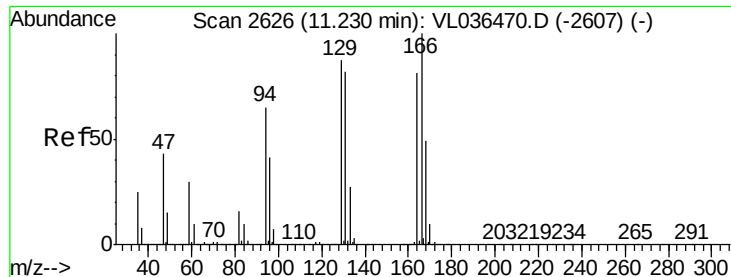
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#41
 Tetrahydrofuran
 Concen: 0.663 ppbv m
 RT: 6.04 min Scan# 1013
 Delta R.T. -0.01 min
 Lab File: VL036550.D
 Acq: 29 Mar 2021 22:20

Tgt Ion	Ratio	Lower	Upper
42	100		
72	0.0	27.6	41.4#
71	0.0	27.0	40.4#





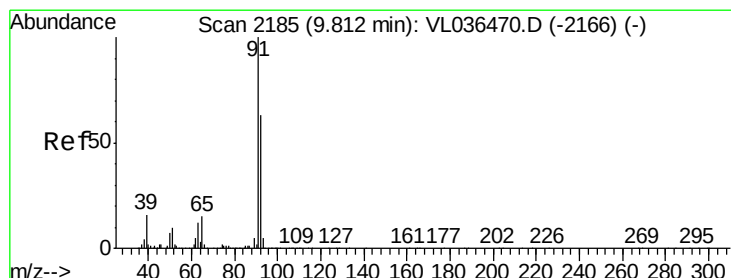
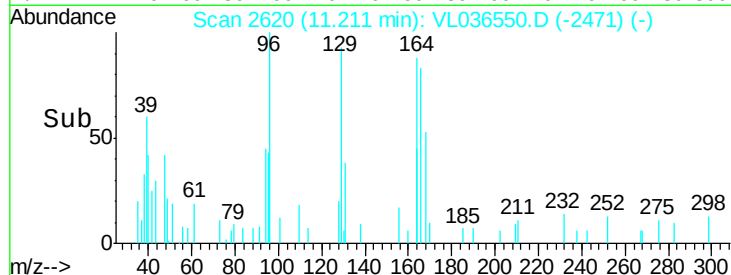
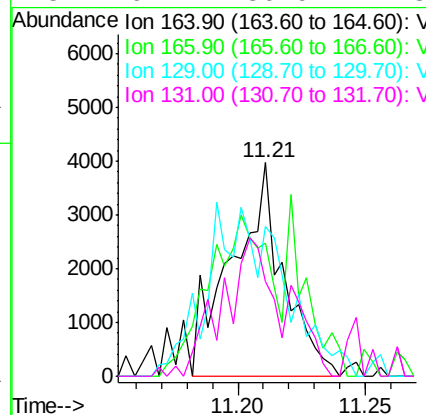
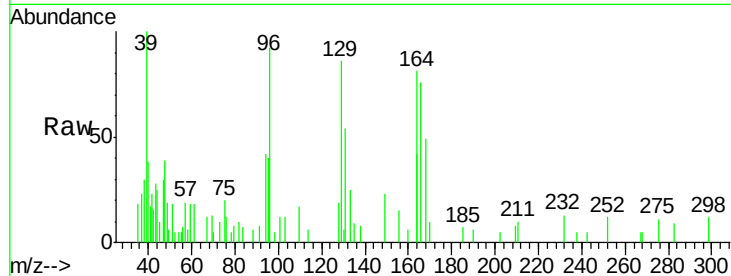
#52
Tetrachloroethene
Concen: 0.047 ppbv m
RT: 11.21 min Scan# 2620
Delta R.T. -0.02 min
Lab File: VL036550.D
Acq: 29 Mar 2021 22:20

Instrument :
MSVOA_L
ClientSampleId :
EP-104

Tot Ion	Ratio	Lower	Upper
164	100		
166	94.4	98.3	147.5#
129	106.4	85.8	128.8
131	67.2	80.9	121.3#

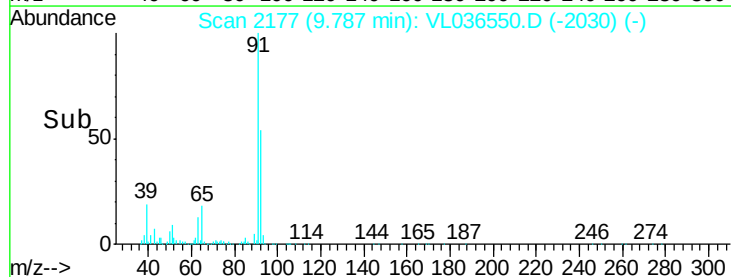
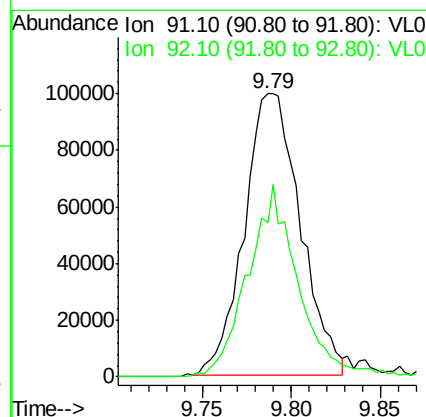
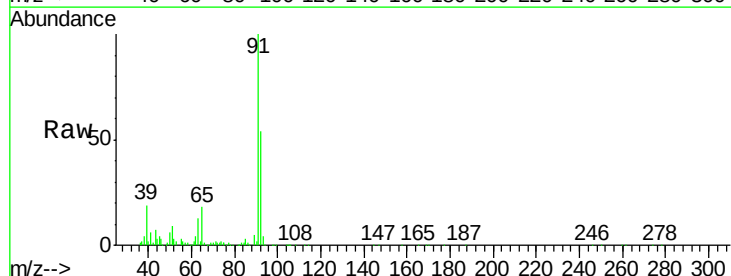
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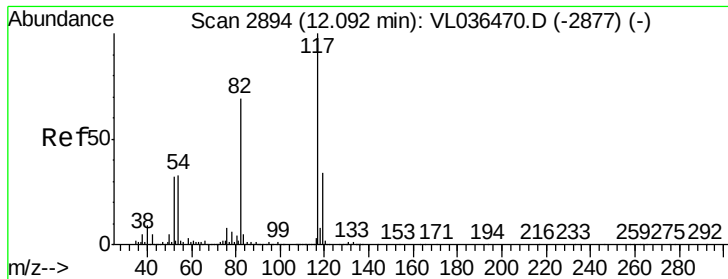
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#53
Toluene
Concen: 0.644 ppbv
RT: 9.79 min Scan# 2177
Delta R.T. -0.03 min
Lab File: VL036550.D
Acq: 29 Mar 2021 22:20

Tgt Ion	Ratio	Lower	Upper
91	100		
92	62.2	48.8	73.2





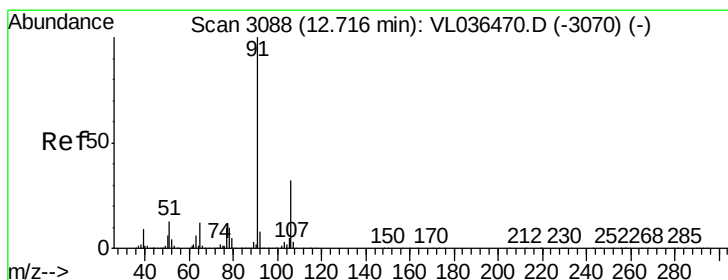
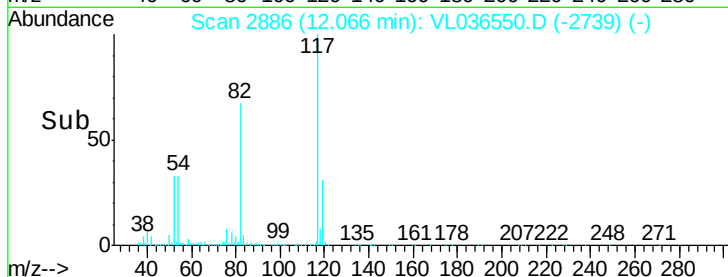
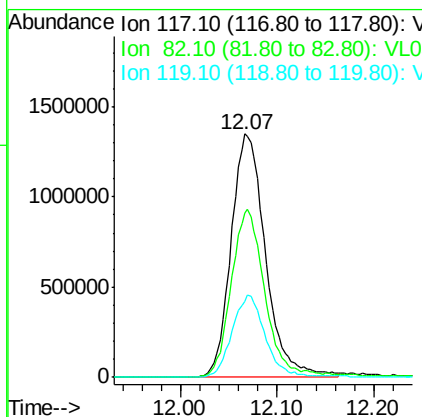
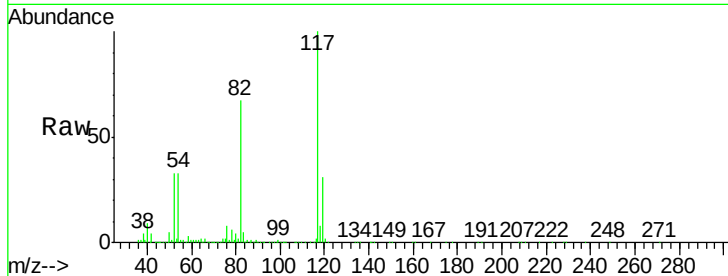
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.07 min Scan# 2886
Delta R.T. -0.03 min
Lab File: VL036550.D
Acq: 29 Mar 2021 22:20

Instrument :
MSVOA_L
ClientSampled :
EP-104

Tot Ion:117 Resp: 3344379
Ion Ratio Lower Upper
117 100
82 69.7 57.4 86.0
119 33.4 47.4 71.0#

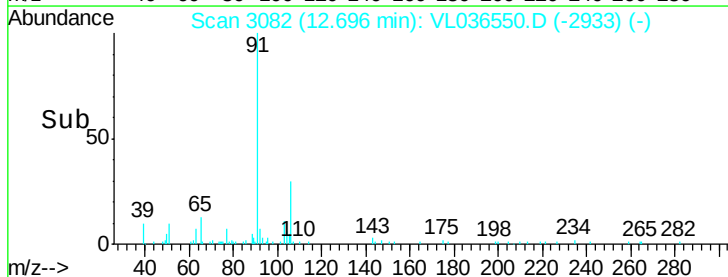
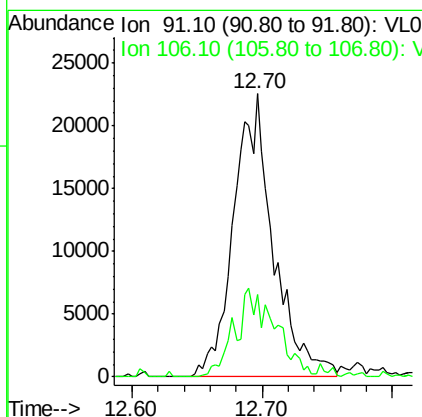
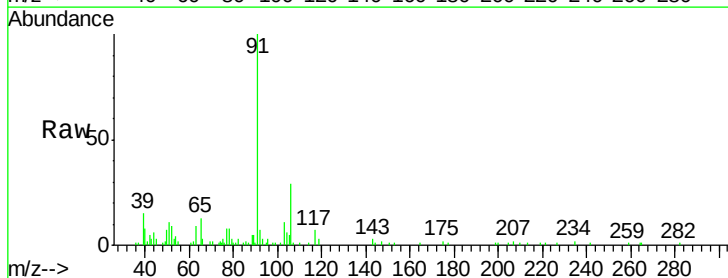
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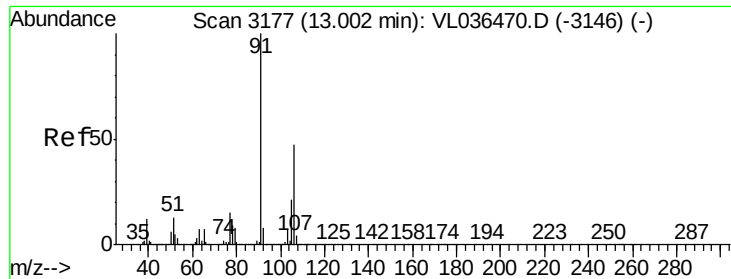
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#58
Ethyl Benzene
Concen: 0.098 ppbv m
RT: 12.70 min Scan# 3082
Delta R.T. -0.02 min
Lab File: VL036550.D
Acq: 29 Mar 2021 22:20

Tgt Ion: 91 Resp: 47802
Ion Ratio Lower Upper
91 100
106 29.3 25.3 37.9





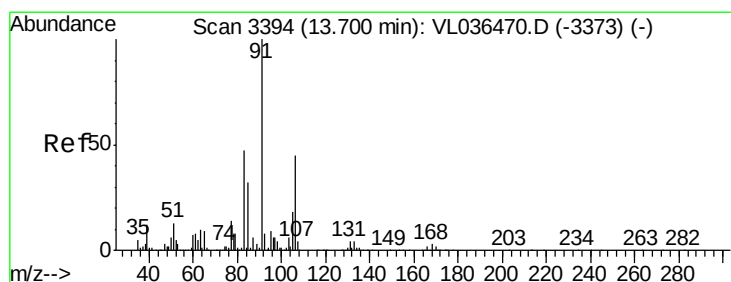
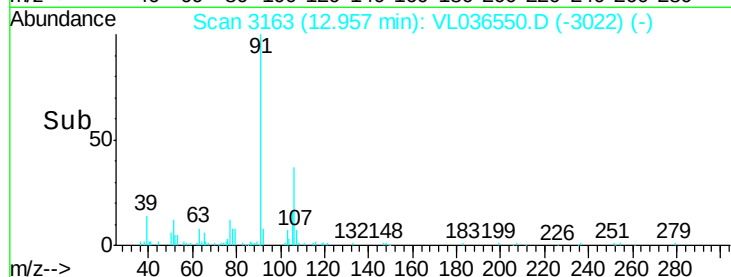
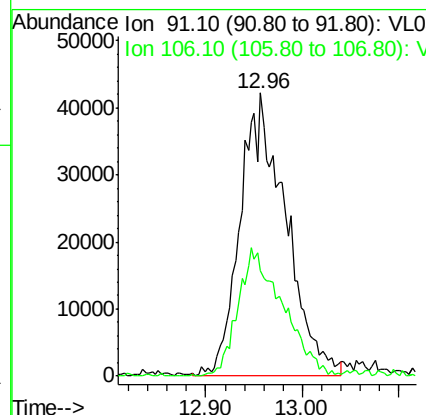
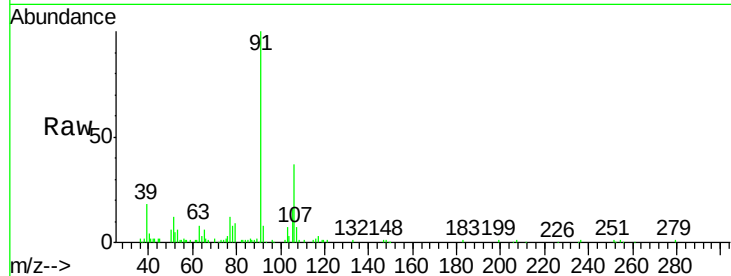
#59
m/p-Xylene
Concen: 0.326 ppbv m
RT: 12.96 min Scan# 3163
Delta R.T. -0.05 min
Lab File: VL036550.D
Acq: 29 Mar 2021 22:20

Instrument :
MSVOA_L
ClientSampleId :
EP-104

Tot Ion	Ion	Ratio	Lower	Upper
91	100			
106	0.0	35.3	52.9#	

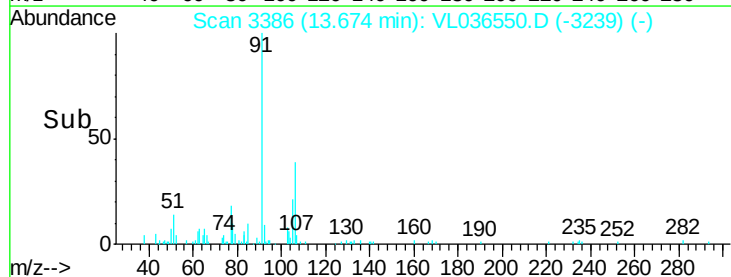
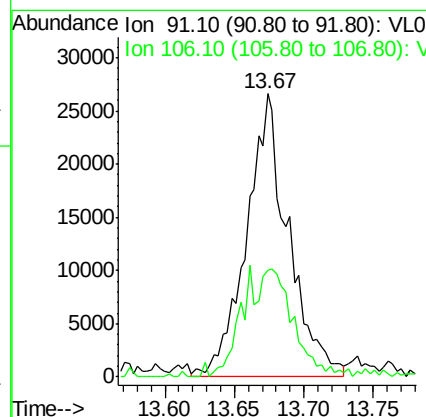
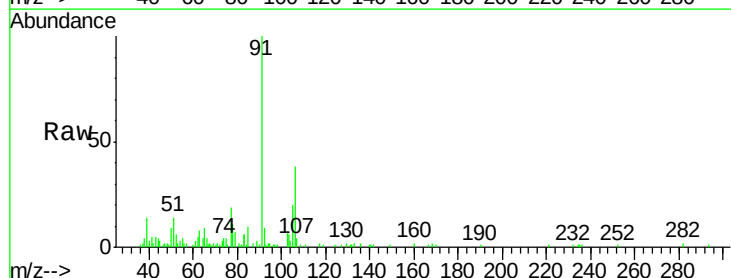
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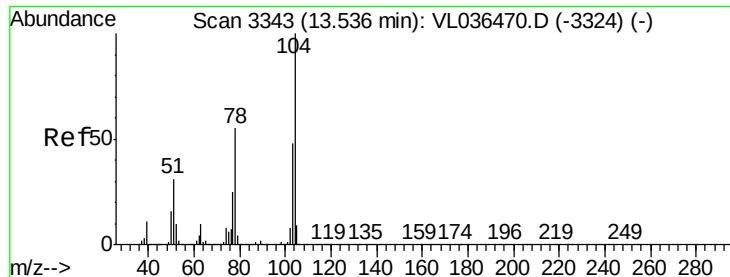
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#60
o-Xylene
Concen: 0.135 ppbv m
RT: 13.67 min Scan# 3386
Delta R.T. -0.03 min
Lab File: VL036550.D
Acq: 29 Mar 2021 22:20

Tgt Ion	Ion	Ratio	Lower	Upper
91	100			
106	47.5	22.3	66.9	





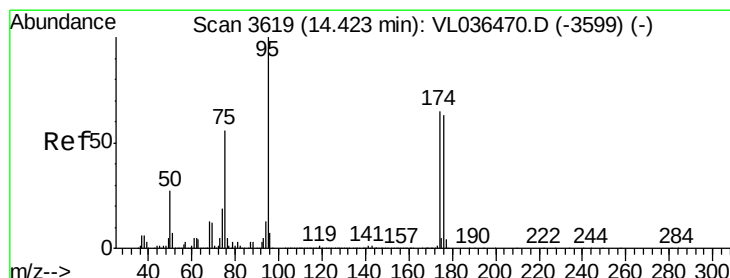
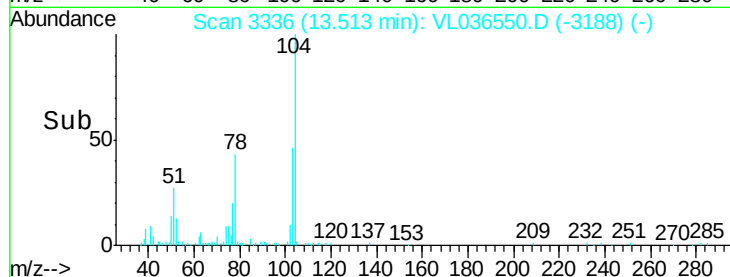
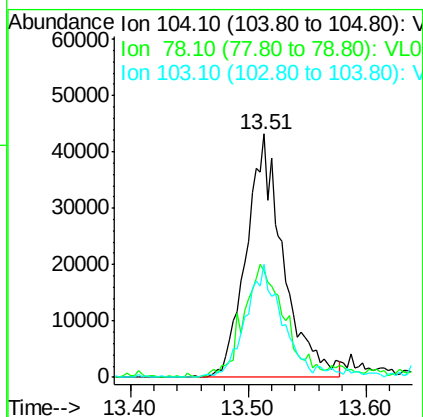
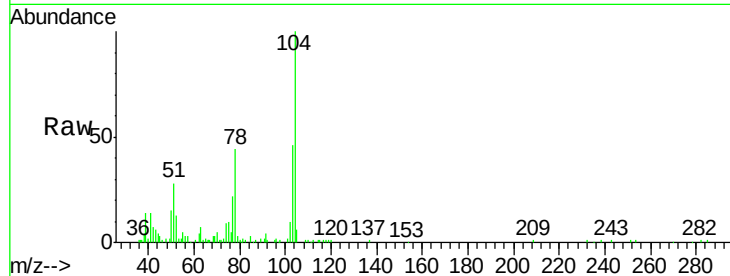
#61
Stvrene
Concen: 0.457 ppbv m
RT: 13.51 min Scan# 3336
Delta R.T. -0.02 min
Lab File: VL036550.D
Acq: 29 Mar 2021 22:20

Instrument :
MSVOA_L
ClientSampled :
EP-104

Tot Ion	Ratio	Lower	Upper
104	100		
78	54.8	43.8	65.8
103	48.6	38.3	57.5

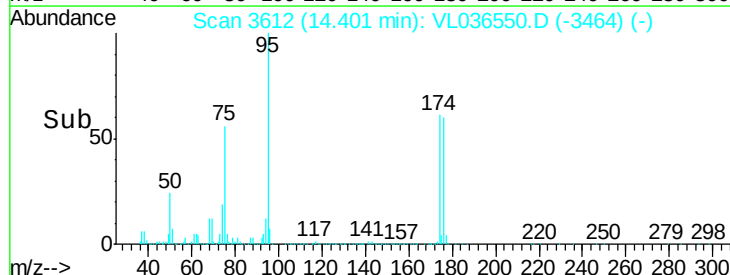
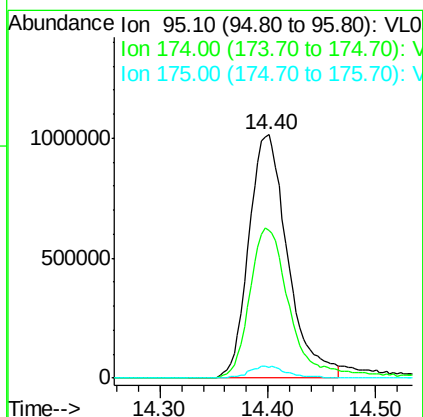
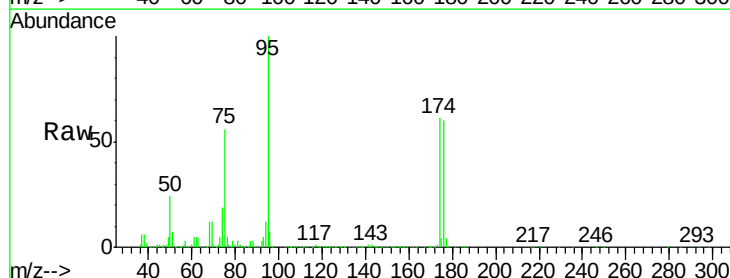
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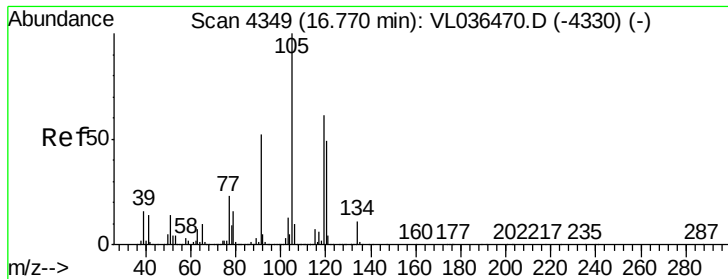
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#68
1-Bromo-4-Fluorobenzene
Concen: 9.542 ppbv
RT: 14.40 min Scan# 3612
Delta R.T. -0.02 min
Lab File: VL036550.D
Acq: 29 Mar 2021 22:20

Tgt Ion	Ratio	Lower	Upper
95	100		
174	65.4	51.0	76.6
175	4.7	3.9	5.9





#74

1,2,4-Trimethylbenzene

Concen: 0.137 ppbv

RT: 16.74 min Scan# 4341

Delta R.T. -0.03 min

Lab File: VL036550.D

Acq: 29 Mar 2021 22:20

Instrument :

MSVOA_L

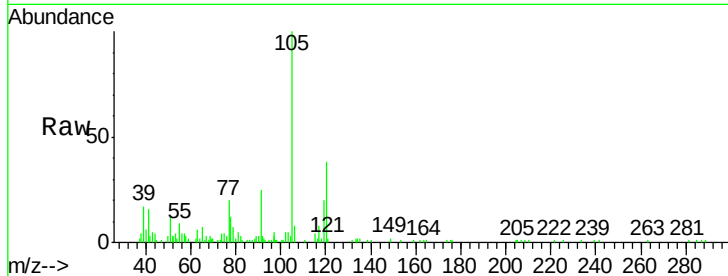
ClientSampled :

EP-104

Tot Ion:	105	Resp:	61469
Ion Ratio	Lower	Upper	
105	100		
120	34.9	39.2	58.8#
91	18.8	42.6	64.0#
77	15.5	18.6	28.0#

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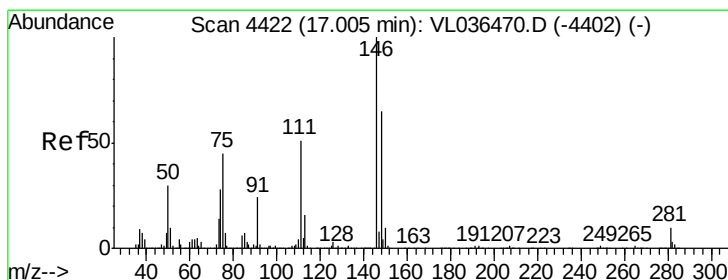
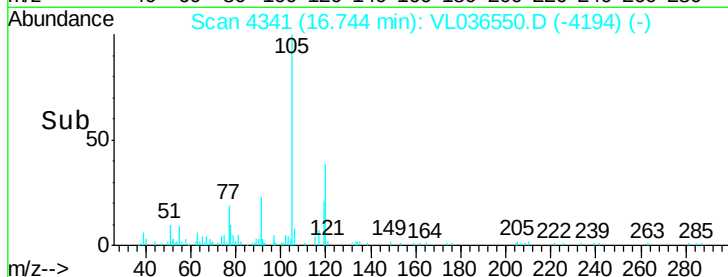
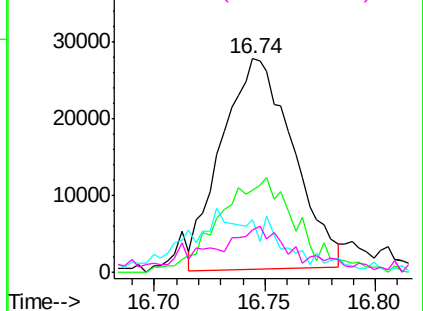


Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#75

1,3-Dichlorobenzene

Concen: 0.160 ppbv m

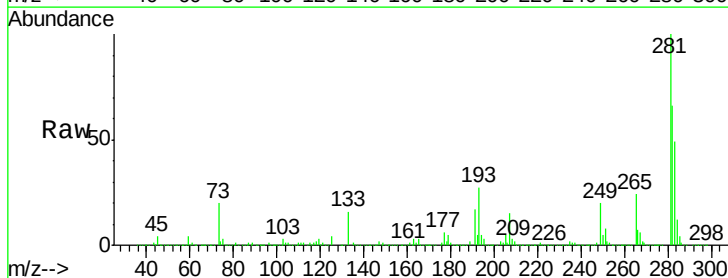
RT: 16.97 min Scan# 4411

Delta R.T. -0.04 min

Lab File: VL036550.D

Acq: 29 Mar 2021 22:20

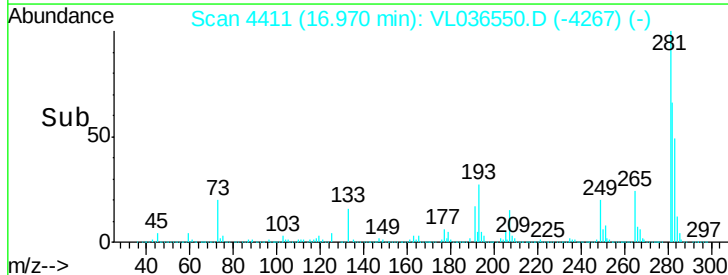
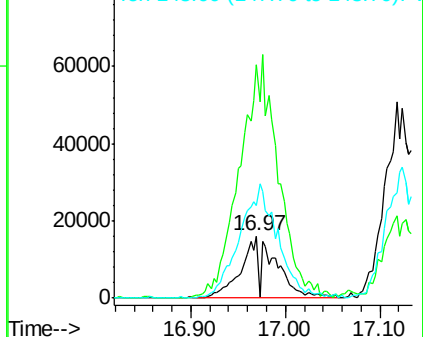
Tgt Ion:	146	Resp:	40459
Ion Ratio	Lower	Upper	
146	100		
111	0.0	24.5	73.5#
148	0.0	32.3	96.9#

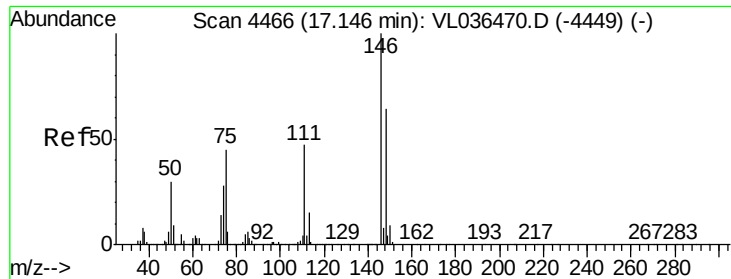


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V





#76
 1,4-Dichlorobenzene
 Concen: 0.524 ppbv m
 RT: 17.12 min Scan# 4457
 Delta R.T. -0.03 min
 Lab File: VL036550.D
 Acq: 29 Mar 2021 22:20

Instrument :
 MSVOA_L
 ClientSampleId :
 EP-104

Tot Ion	Ratio	Lower	Upper
146	100		
111	45.1	24.3	72.8
148	0.0	33.0	98.9

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