

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040621\
 Data File : VL036707.D
 Acq On : 6 Apr 2021 21:06
 Operator : SY/AP
 Sample : M1945-02 2X
 Misc : 400mL/MSVOA L
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV2

Manual Integrations
 APPROVED

MMDadoda
 4/12/2021 11:11:11 AM

Quant Time: Apr 08 12:37:41 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar 2
 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	5.67	49	1262482	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	3237061	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	2986357	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	2444884	10.27	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.05	85	34023	0.165	ppbv	97
4) Chloromethane	3.14	50	12869m	0.154	ppbv	
9) Propene	3.01	41	72788	0.968	ppbv	88
10) Heptane	8.13	43	156097	0.815	ppbv	100
11) Trichlorofluoromethane	3.95	101	21415	0.102	ppbv	98
13) Ethanol	3.61	45	84401	9.425	ppbv	94
15) Acetone	3.84	43	1982165	15.952	ppbv	99
17) tert-Butyl alcohol	4.32	59	19583	0.181	ppbv #	85
20) Methylene Chloride	4.35	84	115647m	1.988	ppbv	
26) Hexane	5.69	57	1604729	11.706	ppbv #	46
27) Carbon Disulfide	4.55	76	22500	0.167	ppbv #	68
29) Chloroform	5.75	83	114130	0.521	ppbv	88
34) 2-Butanone	5.25	43	129891	0.822	ppbv #	82
36) Benzene	6.89	78	49839	0.167	ppbv	92
38) Trichloroethene	7.84	130	4217m	0.036	ppbv	
52) Tetrachloroethene	11.23	164	8292m	0.075	ppbv	
53) Toluene	9.81	91	476413	1.498	ppbv	98
58) Ethyl Benzene	12.72	91	271771	0.626	ppbv #	86
59) m/p-Xylene	12.97	91	596197	1.573	ppbv	91
60) o-Xylene	13.70	91	295796m	0.807	ppbv	
62) Isopropylbenzene	14.68	105	63440m	0.129	ppbv	
63) 1,1,2,2-Tetrachloroethane	13.67	83	133358	0.477	ppbv #	51
64) n-propylbenzene	15.56	120	26895m	0.223	ppbv	
67) sec-Butylbenzene	17.30	105	53311m	0.088	ppbv	
72) 4-Ethyltoluene	15.85	105	94205m	0.235	ppbv	
73) 1,3,5-Trimethylbenzene	16.01	105	85320m	0.228	ppbv	
74) 1,2,4-Trimethylbenzene	16.77	105	196112m	0.489	ppbv	

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

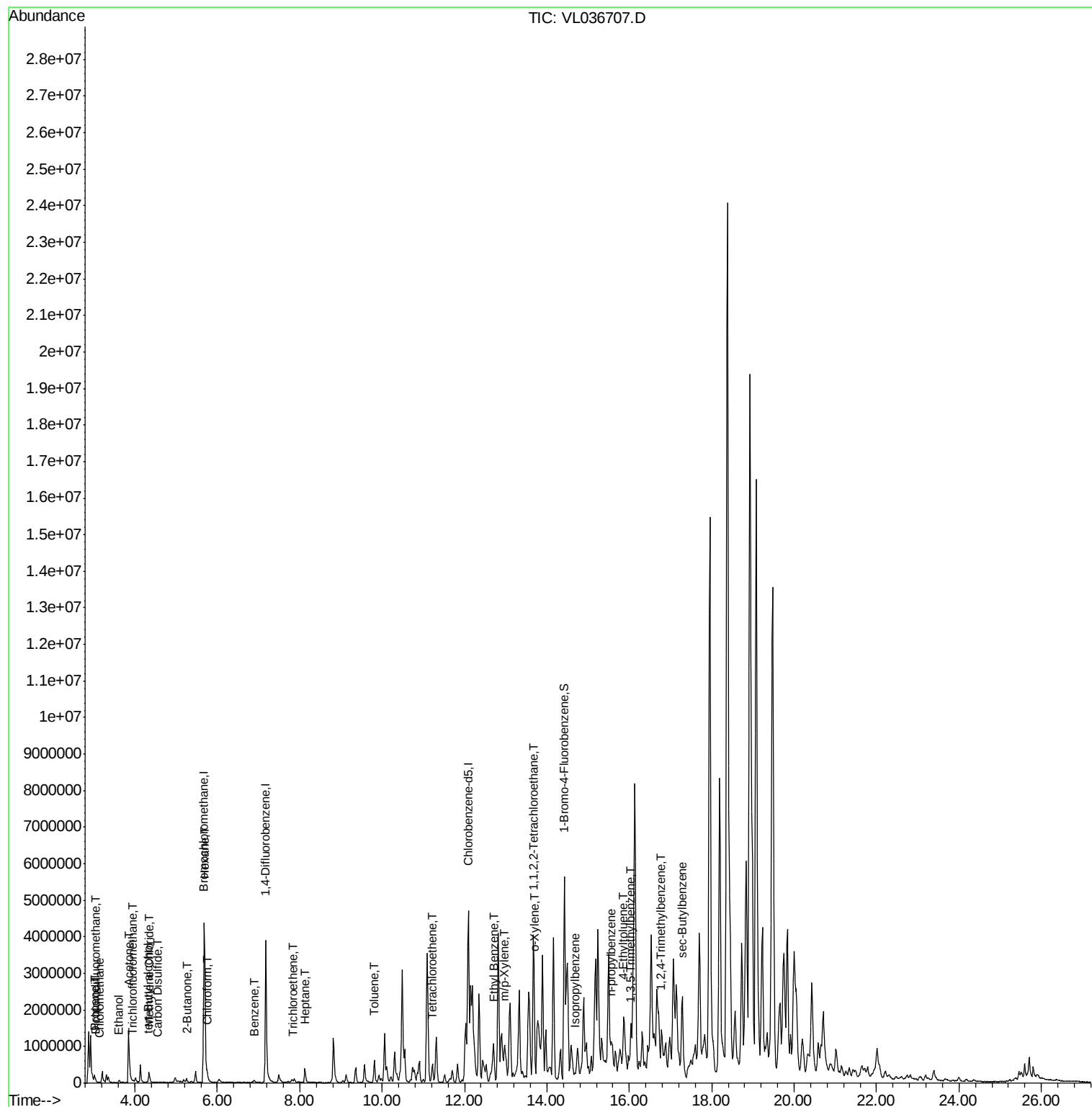
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040621\
Data File : VL036707.D
Acq On : 6 Apr 2021 21:06
Operator : SY/AP
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Misc : 400mL/MSVOA L
ALS Vial : 9 Sample Multiplier: 1

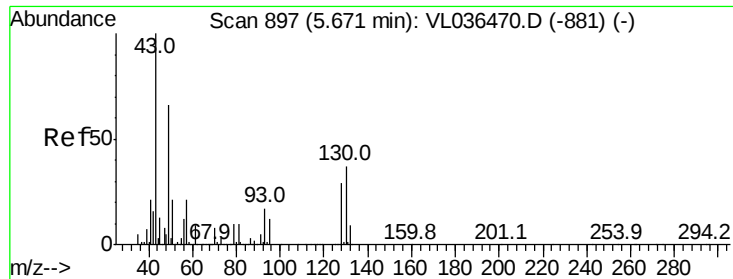
Instrument :
MSVOA_L
ClientSampleId :
SV2

Manual Integrations
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4/12/2021 11:11:11 AM

Quant Time: Apr 08 12:37:41 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

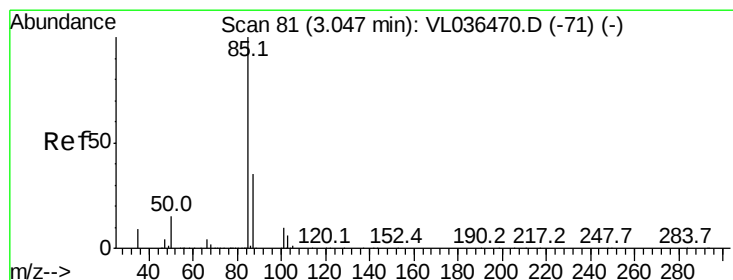
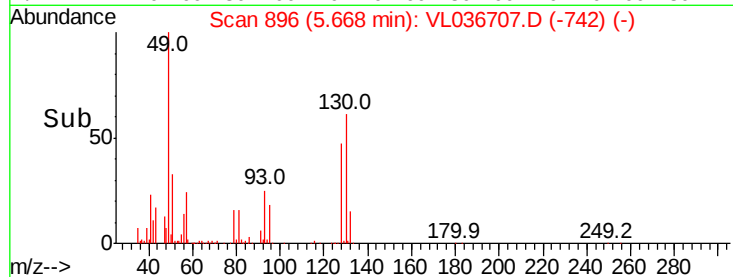
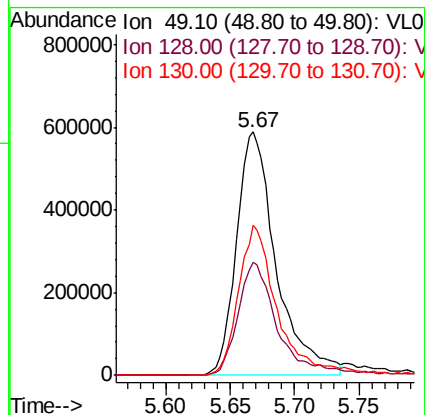
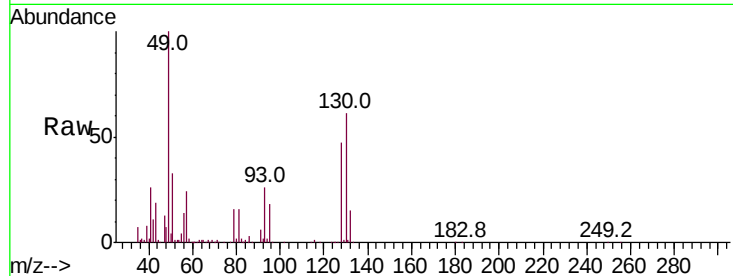
Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.67 min Scan# 896
 Delta R.T. -0.00 min
 Lab File: VL036707.D
 Acq: 6 Apr 2021 21:06

Instrument :
 MSVOA_L
 ClientSampled :
 SV2

Tot Ion	Ratio	Lower	Upper
49	100		
128	47.7	23.5	70.6
130	62.0	29.1	87.4

Manual Integrations
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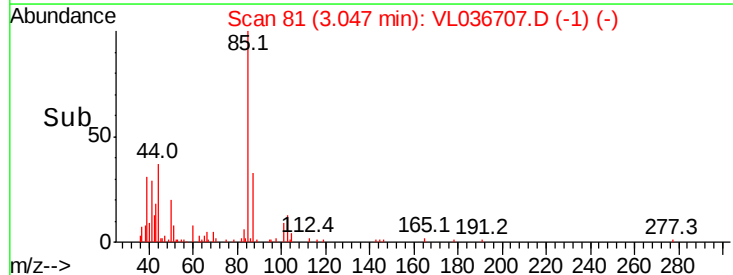
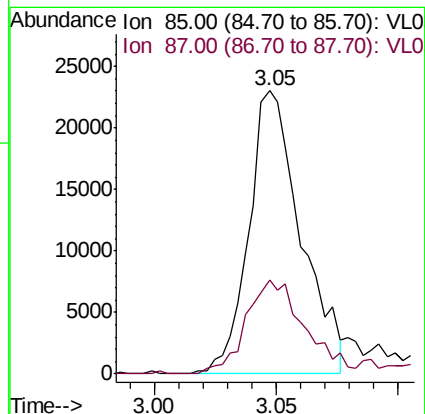
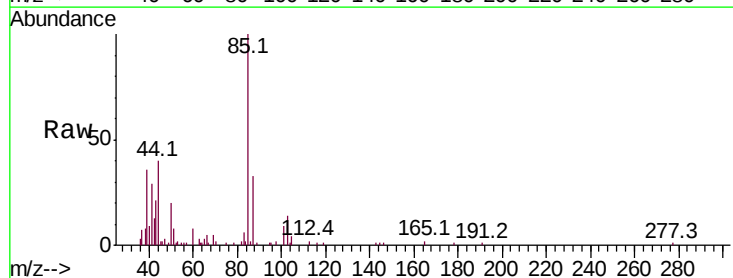
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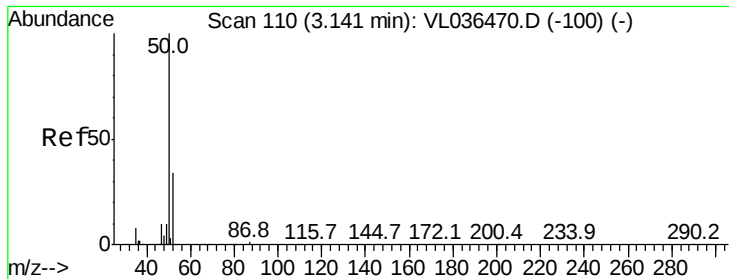


#2

Dichlorodifluoromethane
 Concen: 0.165 ppbv
 RT: 3.05 min Scan# 81
 Delta R.T. -0.00 min
 Lab File: VL036707.D
 Acq: 6 Apr 2021 21:06

Tgt Ion	Ratio	Lower	Upper
85	100		
87	33.2	27.8	41.8





#4

Chloromethane

Concen: 0.154 ppbv m

RT: 3.14 min Scan# 110

Delta R.T. -0.00 min

Lab File: VL036707.D

Acq: 6 Apr 2021 21:06

Instrument :

MSVOA_L

ClientSampleId :

SV2

Tot Ion: 50 Resp: 12869

Ion Ratio Lower Upper

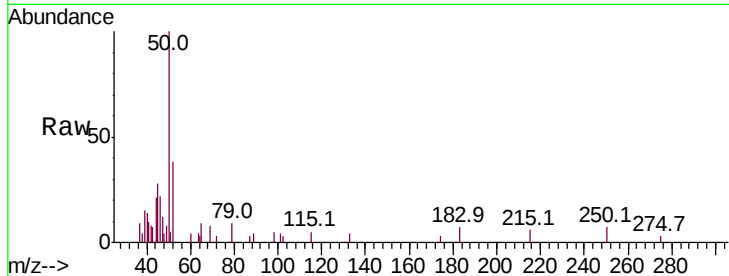
50 100

52 38.4 27.0 40.6

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Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

3.14

8000

6000

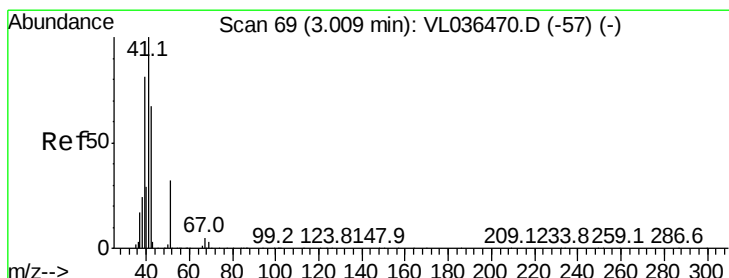
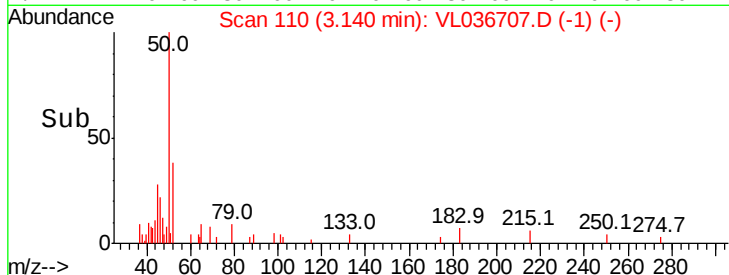
4000

2000

0

3.10 3.15 3.20

Time-->



#9

Propene

Concen: 0.968 ppbv

RT: 3.01 min Scan# 71

Delta R.T. 0.01 min

Lab File: VL036707.D

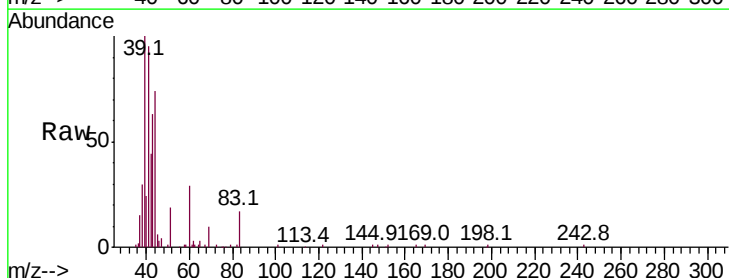
Acq: 6 Apr 2021 21:06

Tgt Ion: 41 Resp: 72788

Ion Ratio Lower Upper

41 100

42 60.9 57.0 85.4



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

3.01

40000

30000

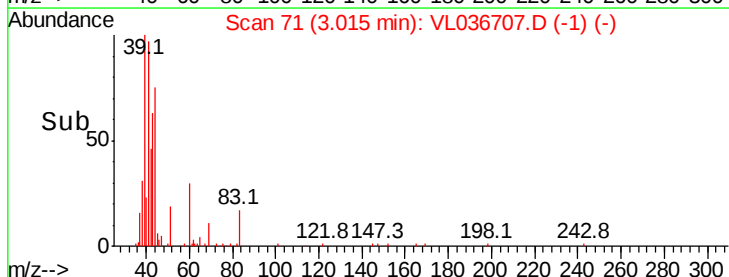
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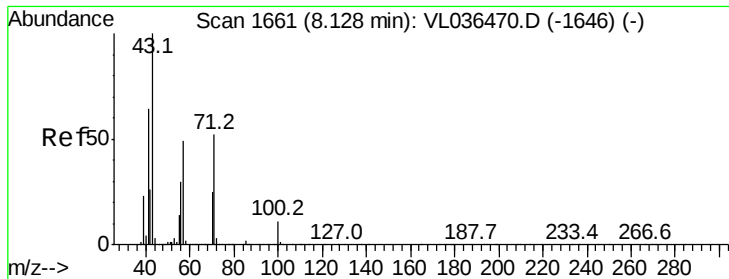
10000

0

2.95 3.00 3.05

Time-->





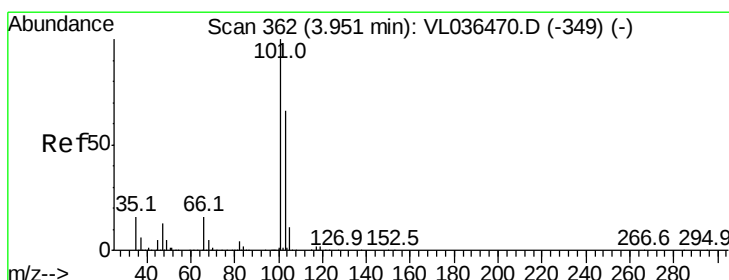
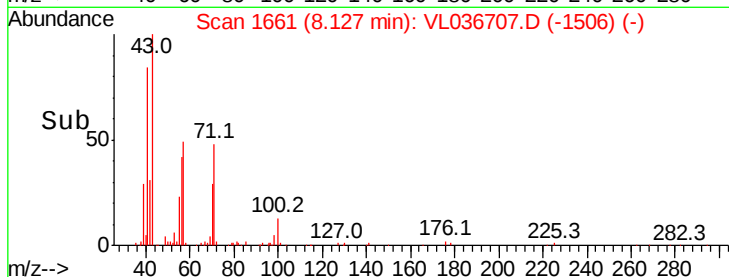
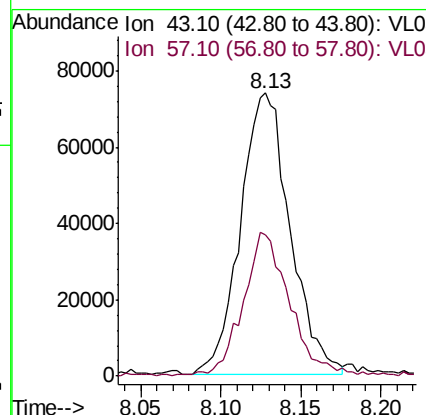
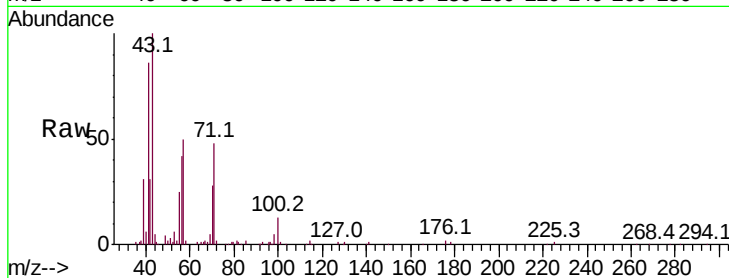
#10
Heptane
Concen: 0.815 ppbv
RT: 8.13 min Scan# 1661
Delta R.T. -0.00 min
Lab File: VL036707.D
Acq: 6 Apr 2021 21:06

Instrument :
MSVOA_L
ClientSampleId :
SV2

Tot Ion: 43 Resp: 156097
Ion Ratio Lower Upper
43 100
57 48.6 39.0 58.6

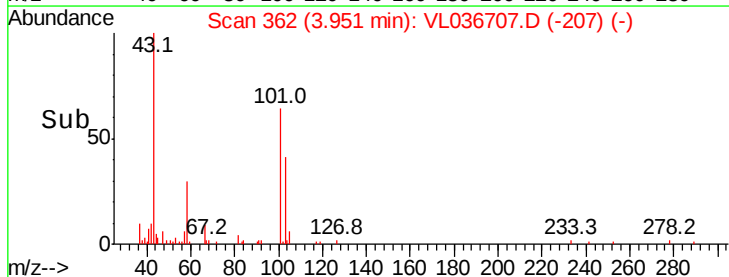
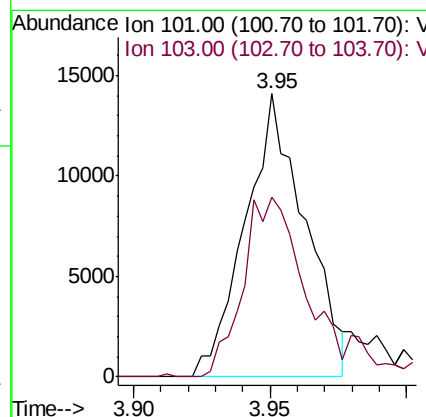
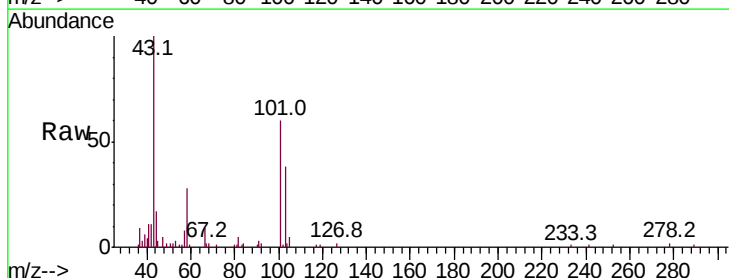
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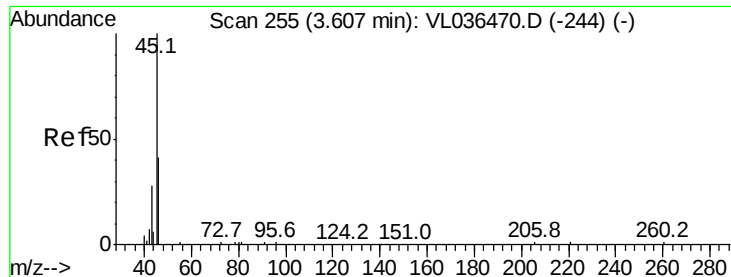
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#11
Trichlorofluoromethane
Concen: 0.102 ppbv
RT: 3.95 min Scan# 362
Delta R.T. -0.00 min
Lab File: VL036707.D
Acq: 6 Apr 2021 21:06

Tgt Ion: 101 Resp: 21415
Ion Ratio Lower Upper
101 100
103 63.7 52.5 78.7





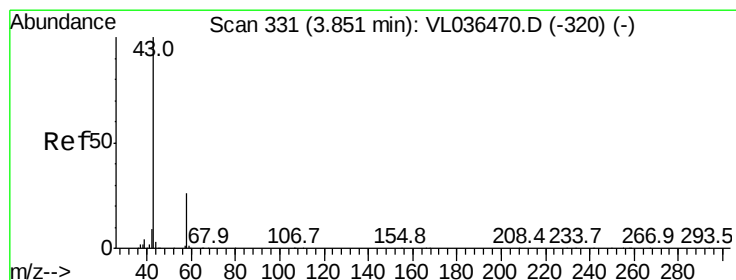
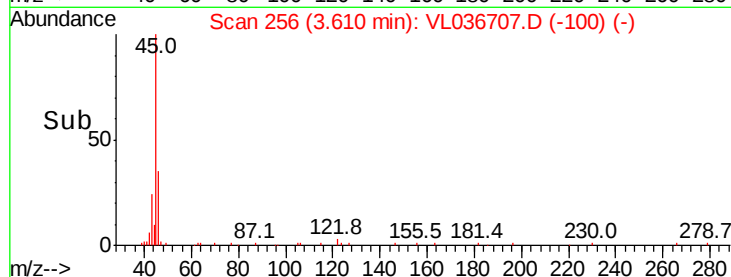
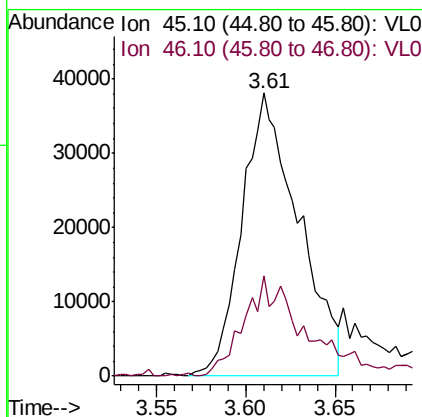
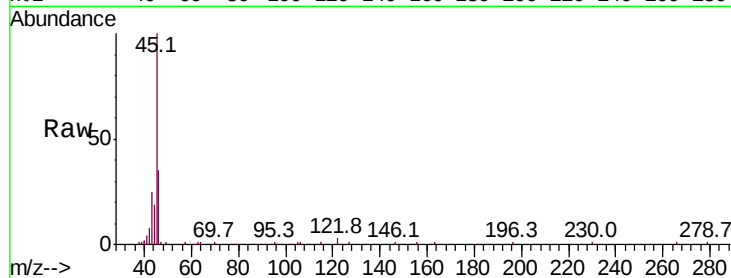
#13
Ethanol
Concen: 9.425 ppbv
RT: 3.61 min Scan# 256
Delta R.T. 0.00 min
Lab File: VL036707.D
Acq: 6 Apr 2021 21:06

Instrument :
MSVOA_L
ClientSampleId :
SV2

Tot Ion: 45 Resp: 84401
Ion Ratio Lower Upper
45 100
46 37.5 16.6 66.2

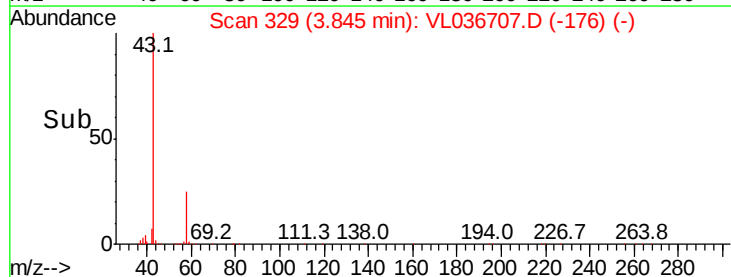
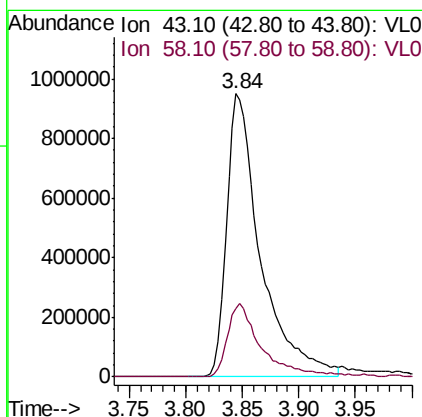
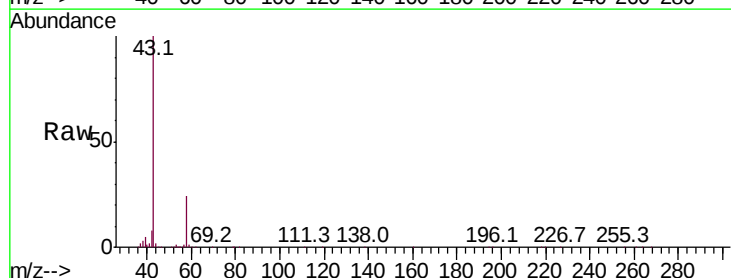
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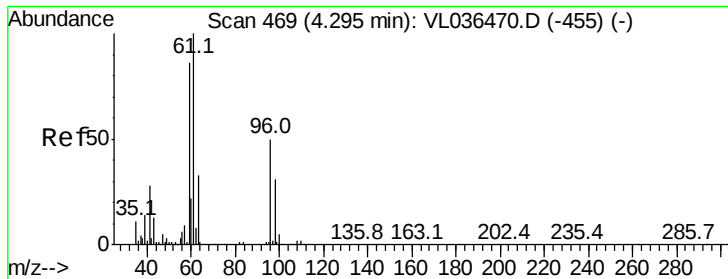
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#15
Acetone
Concen: 15.952 ppbv
RT: 3.84 min Scan# 329
Delta R.T. -0.01 min
Lab File: VL036707.D
Acq: 6 Apr 2021 21:06

Tgt Ion: 43 Resp: 1982165
Ion Ratio Lower Upper
43 100
58 27.3 21.2 31.8





#17

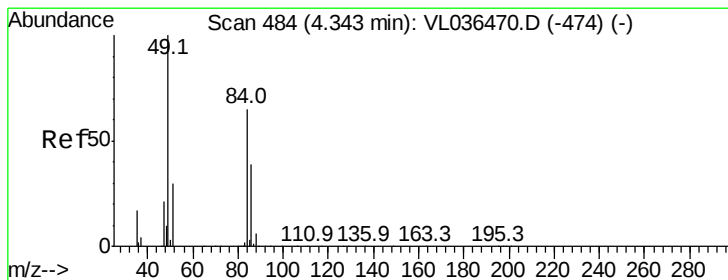
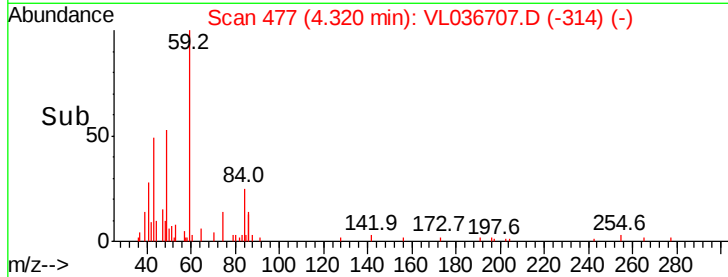
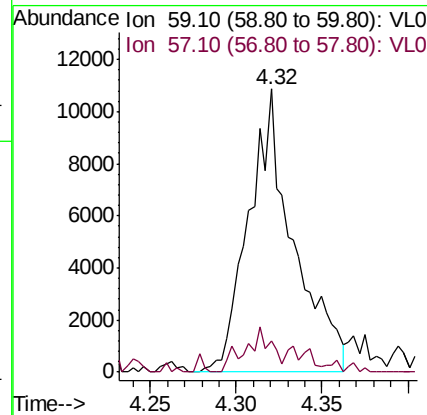
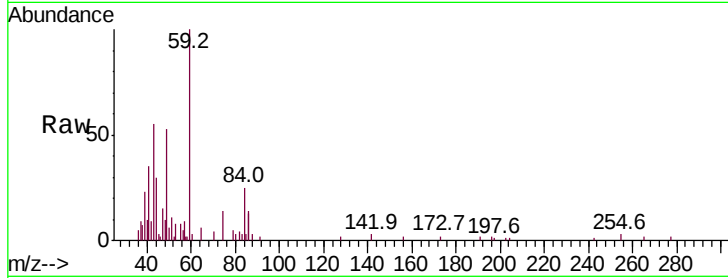
tert-Butyl alcohol
Concen: 0.181 ppbv
RT: 4.32 min Scan# 477
Delta R.T. 0.03 min
Lab File: VL036707.D
Acq: 6 Apr 2021 21:06

Instrument :
MSVOA_L
ClientSampleId :
SV2

Tot Ion: 59 Resp: 19583
Ion Ratio Lower Upper
59 100
57 16.2 8.6 12.8#

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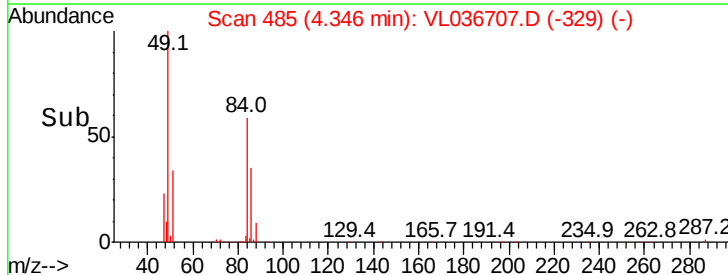
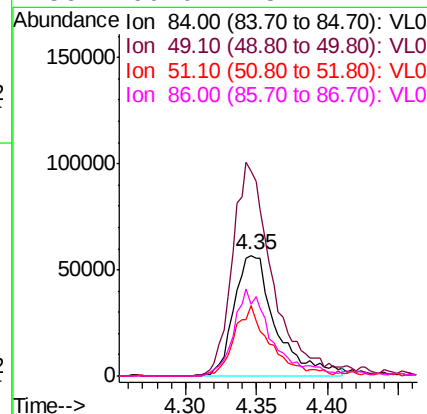
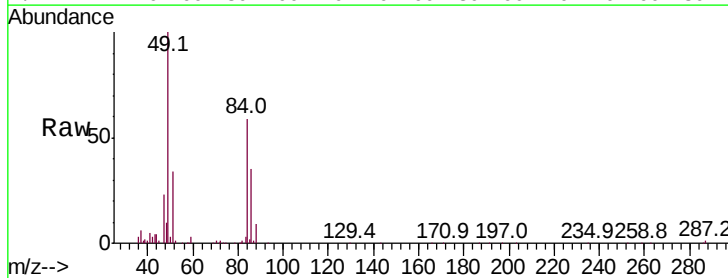
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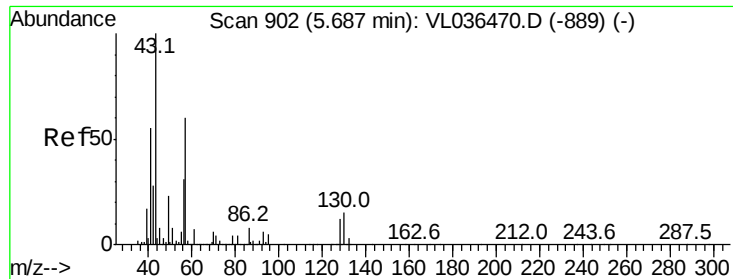


#20

Methylene Chloride
Concen: 1.988 ppbv m
RT: 4.35 min Scan# 485
Delta R.T. 0.00 min
Lab File: VL036707.D
Acq: 6 Apr 2021 21:06

Tgt Ion: 84 Resp: 115647
Ion Ratio Lower Upper
84 100
49 170.3 122.9 184.3
51 58.6 36.9 55.3#
86 60.0 48.2 72.4





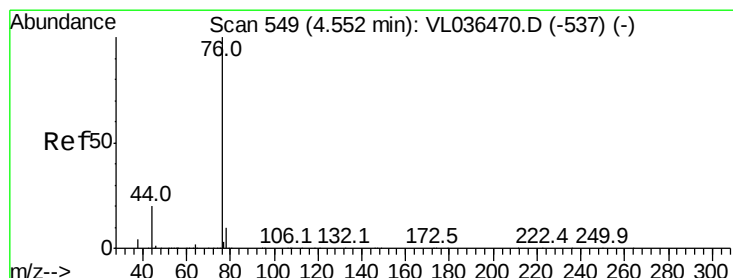
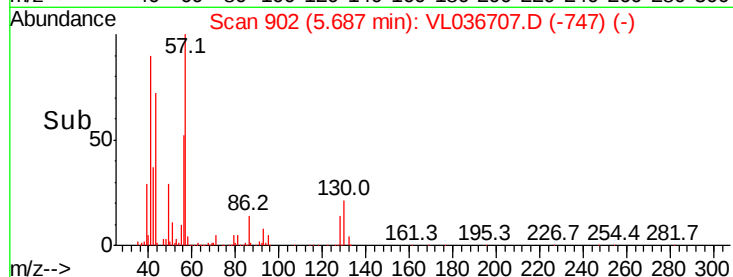
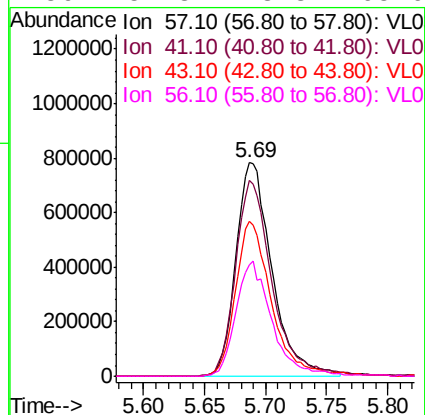
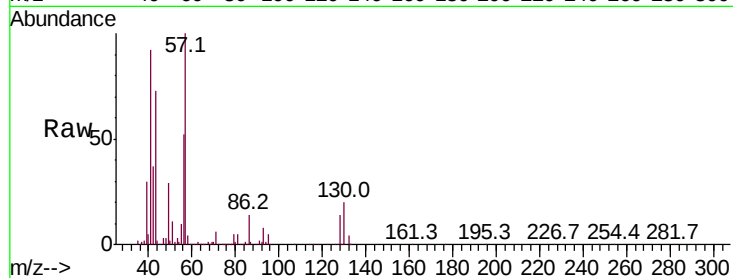
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Hexane
Concen: 11.706 ppbv
RT: 5.69 min Scan# 902
Delta R.T. -0.00 min
Lab File: VL036707.D
Acq: 6 Apr 2021 21:06

Instrument :
MSVOA_L
ClientSampled :
SV2

Tot Ion	57	Resp	1604729
Ion	Ratio	Lower	Upper
57	100		
41	94.2	77.2	115.8
43	72.5	173.8	260.6#
56	54.3	43.8	65.6

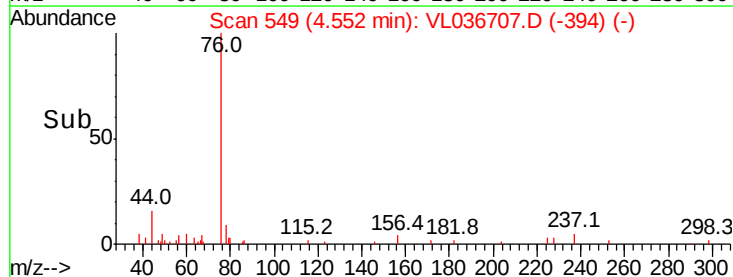
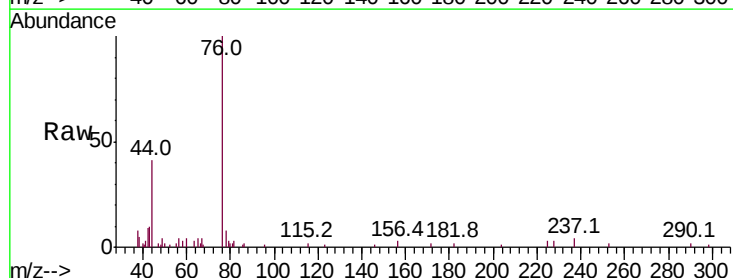
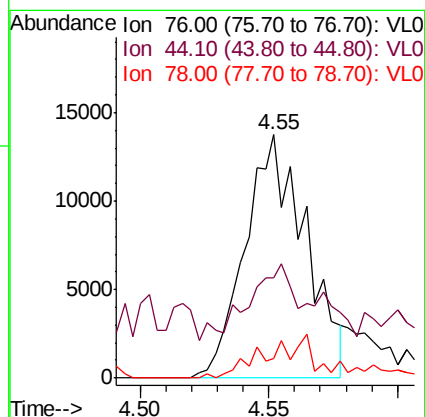
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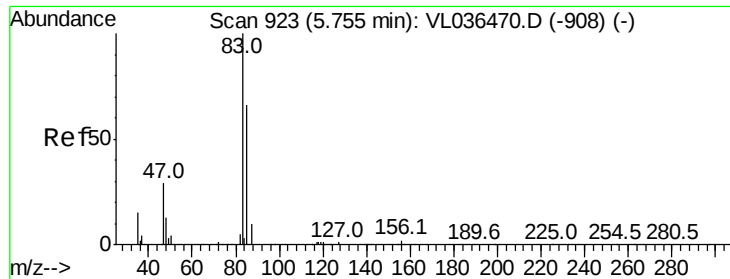
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#27
Carbon Disulfide
Concen: 0.167 ppbv
RT: 4.55 min Scan# 549
Delta R.T. -0.00 min
Lab File: VL036707.D
Acq: 6 Apr 2021 21:06

Tgt Ion	76	Resp	22500
Ion	Ratio	Lower	Upper
76	100		
44	40.0	17.5	26.3#
78	18.5	8.6	13.0#





#29

Chloroform

Concen: 0.521 ppbv

RT: 5.75 min Scan# 923

Delta R.T. -0.00 min

Lab File: VL036707.D

Acq: 6 Apr 2021 21:06

Instrument :

MSVOA_L

ClientSampled :

SV2

Tot Ion: 83 Resp: 114130

Ion Ratio Lower Upper

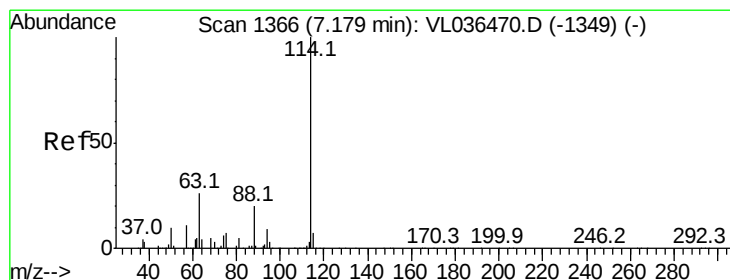
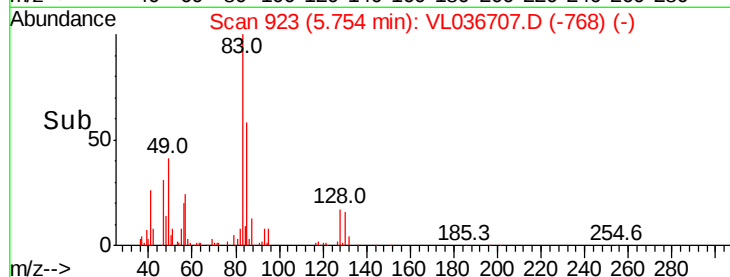
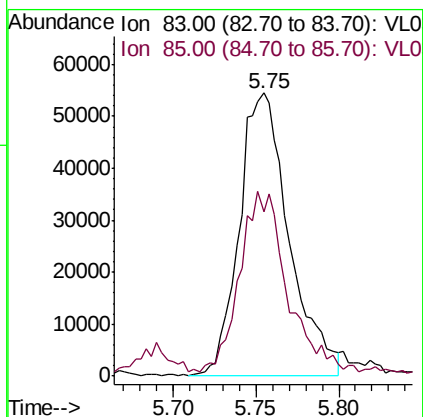
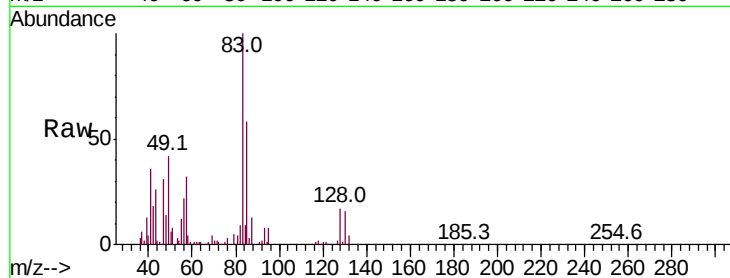
83 100

85 56.5 52.6 78.8

Manual Integrations
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4/12/2021 11:11:11 AM



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.18 min Scan# 1365

Delta R.T. -0.00 min

Lab File: VL036707.D

Acq: 6 Apr 2021 21:06

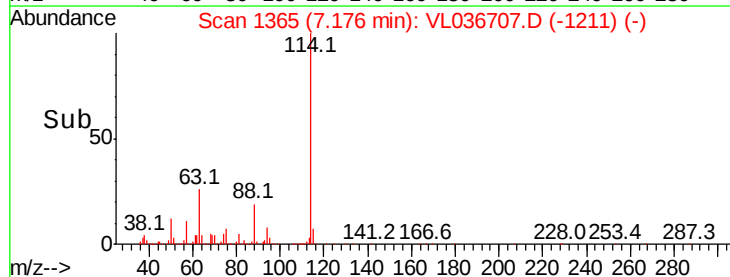
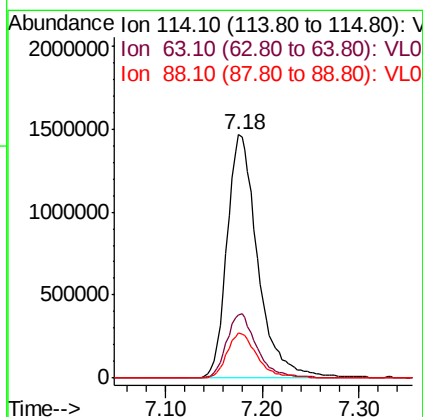
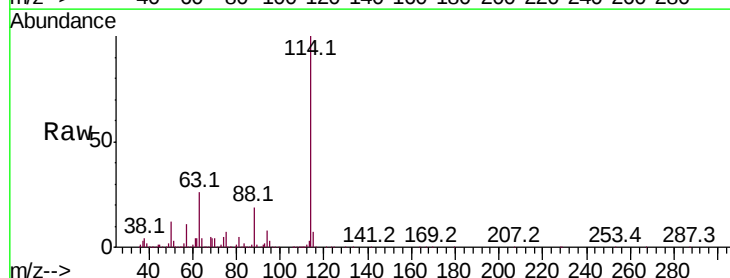
Tgt Ion: 114 Resp: 3237061

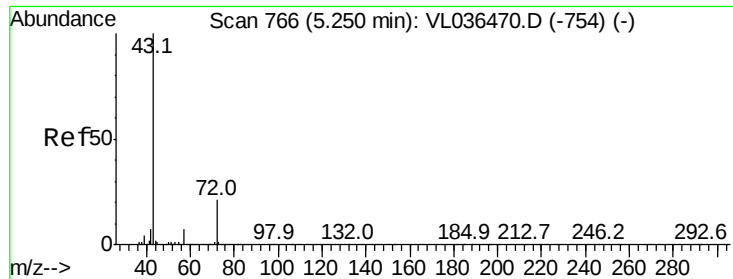
Ion Ratio Lower Upper

114 100

63 26.4 22.4 33.6

88 18.4 15.4 23.0





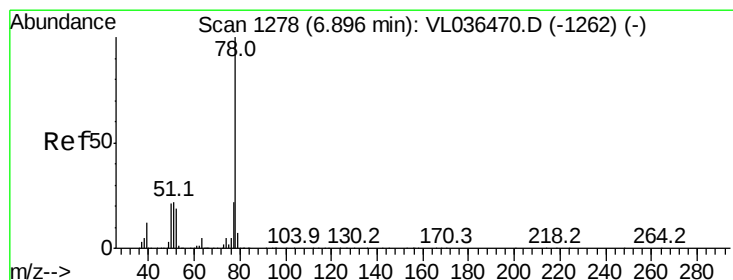
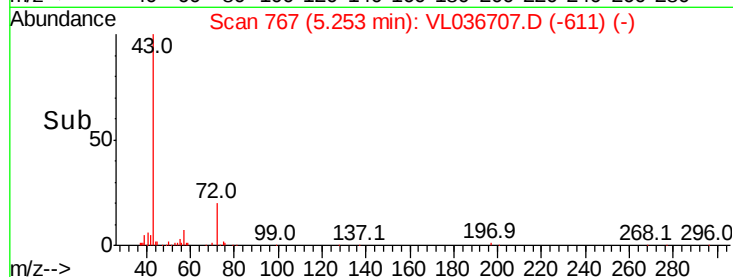
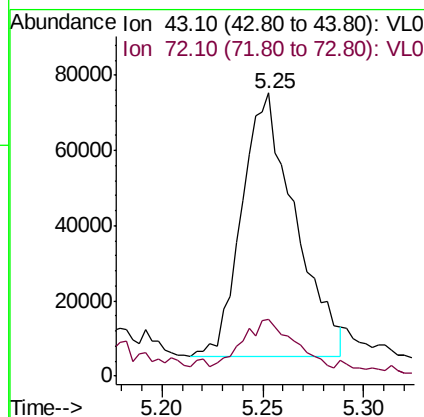
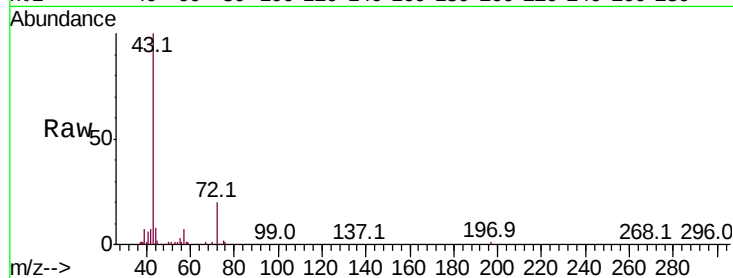
#34
2-Butanone
Concen: 0.822 ppbv
RT: 5.25 min Scan# 767
Delta R.T. 0.00 min
Lab File: VL036707.D
Acq: 6 Apr 2021 21:06

Instrument :
MSVOA_L
ClientSampled :
SV2

Tot Ion: 43 Resp: 129891
Ion Ratio Lower Upper
43 100
72 29.9 17.0 25.6#

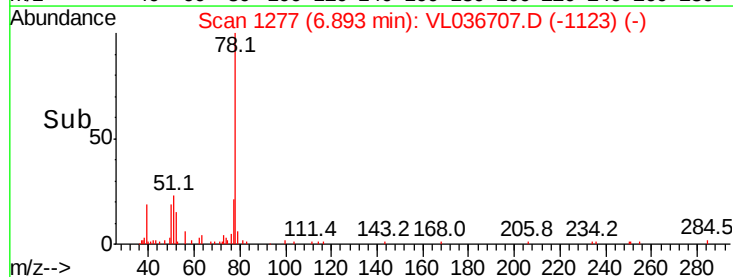
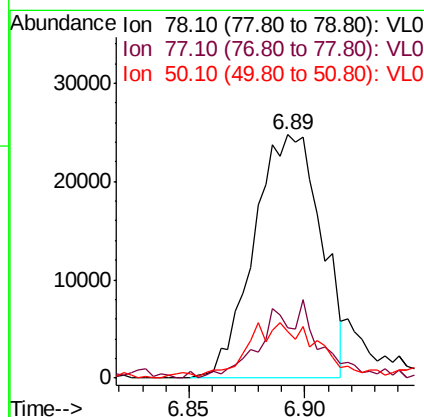
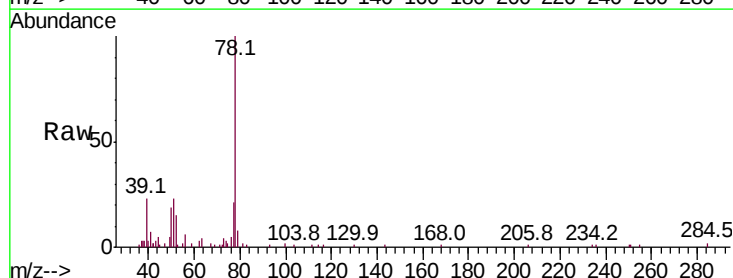
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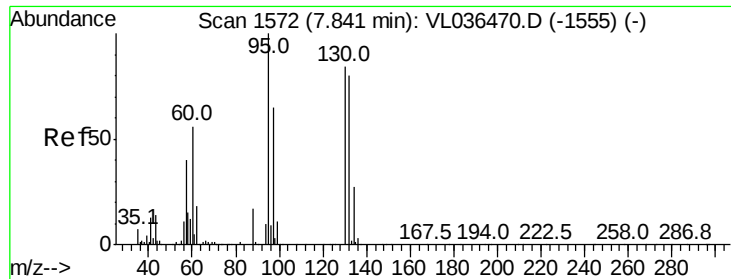
MMDadoda
4/12/2021 11:11:11 AM



#36
Benzene
Concen: 0.167 ppbv
RT: 6.89 min Scan# 1277
Delta R.T. -0.00 min
Lab File: VL036707.D
Acq: 6 Apr 2021 21:06

Tgt Ion: 78 Resp: 49839
Ion Ratio Lower Upper
78 100
77 18.3 18.0 27.0
50 17.4 16.5 24.7





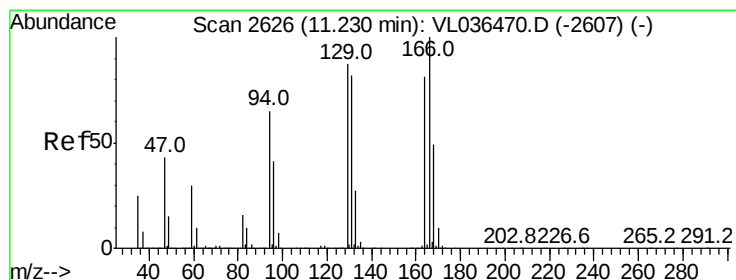
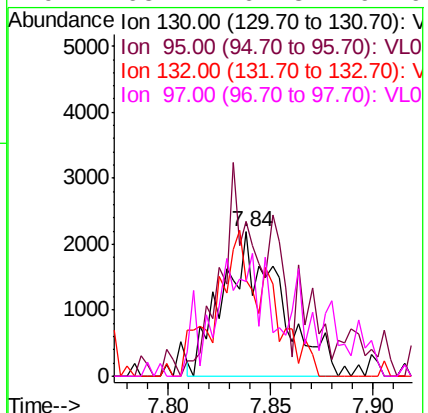
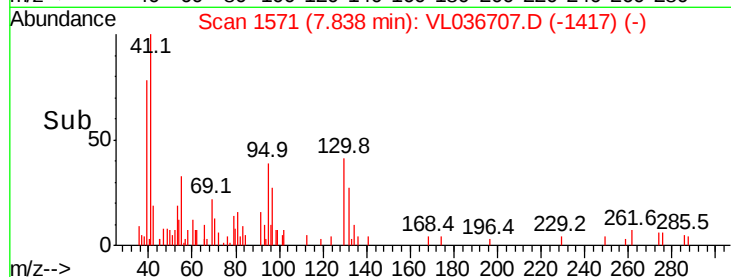
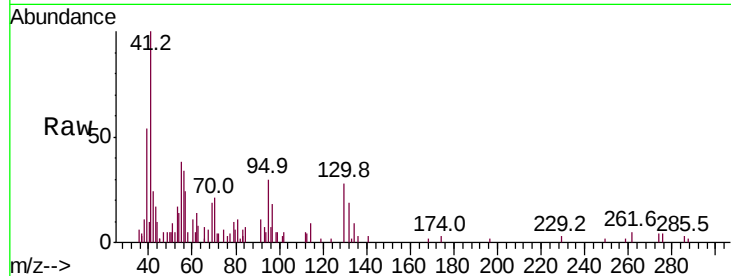
#38
 Trichloroethene
 Concen: 0.036 ppbv m
 RT: 7.84 min Scan# 1571
 Delta R.T. -0.00 min
 Lab File: VL036707.D
 Acq: 6 Apr 2021 21:06

Instrument :
 MSVOA_L
 ClientSampled :
 SV2

Tot Ion	Ratio	Lower	Upper
130	100		
95	107.2	95.7	143.5
132	66.9	76.2	114.4#
97	65.7	61.8	92.6

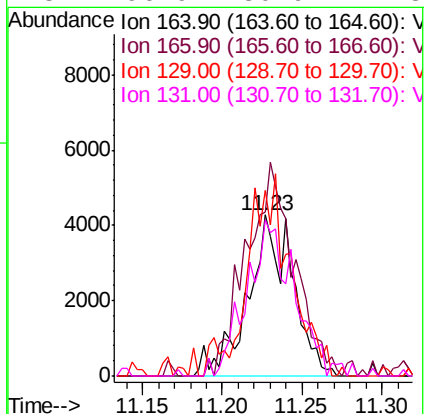
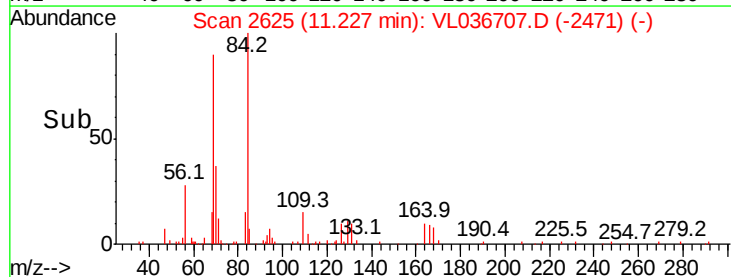
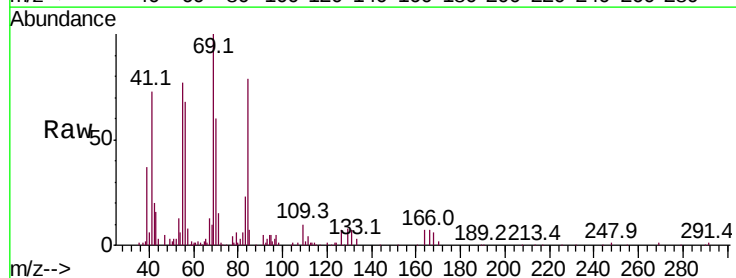
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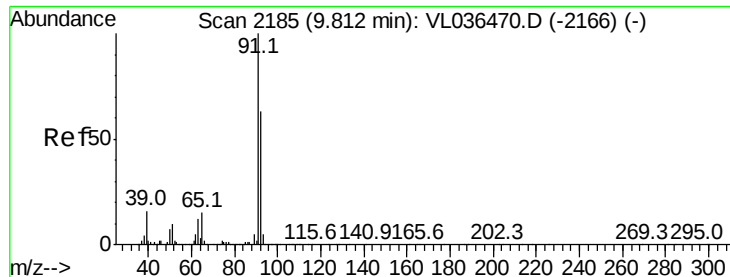
MMDadoda
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#52
 Tetrachloroethene
 Concen: 0.075 ppbv m
 RT: 11.23 min Scan# 2625
 Delta R.T. -0.00 min
 Lab File: VL036707.D
 Acq: 6 Apr 2021 21:06

Tgt Ion	Ratio	Lower	Upper
164	100		
166	101.8	98.3	147.5
129	115.0	85.8	128.8
131	96.9	80.9	121.3





#53

Toluene

Concen: 1.498 ppbv

RT: 9.81 min Scan# 2185

Delta R.T. -0.00 min

Lab File: VL036707.D

Acq: 6 Apr 2021 21:06

Instrument :

MSVOA_L

ClientSampled :

SV2

Tot Ion: 91 Resp: 476413

Ion Ratio Lower Upper

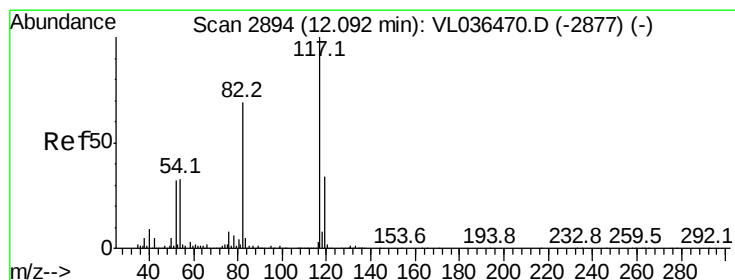
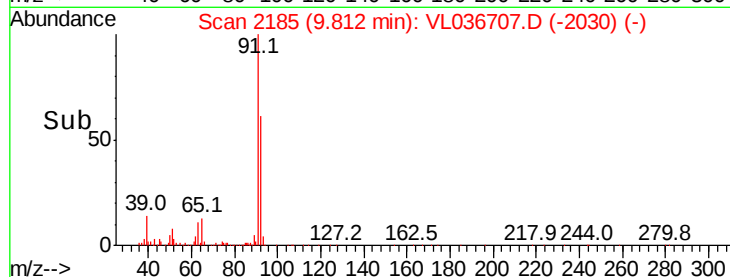
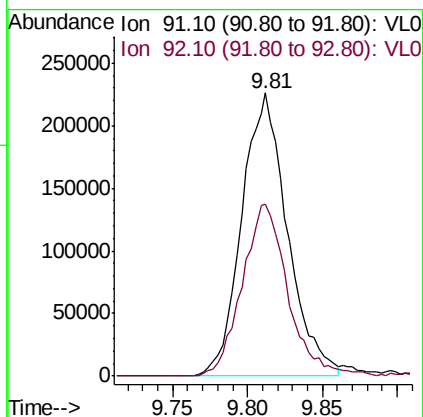
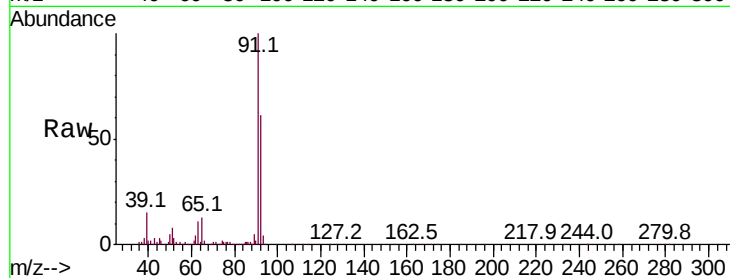
91 100

92 62.5 48.8 73.2

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.09 min Scan# 2894

Delta R.T. -0.00 min

Lab File: VL036707.D

Acq: 6 Apr 2021 21:06

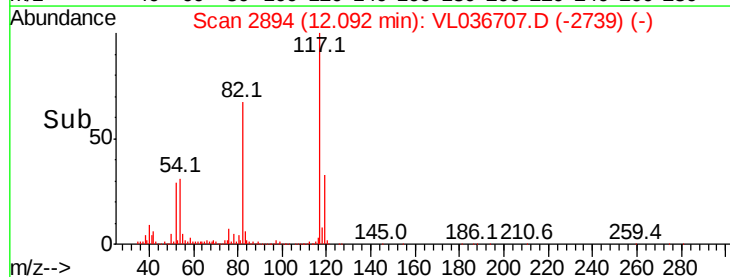
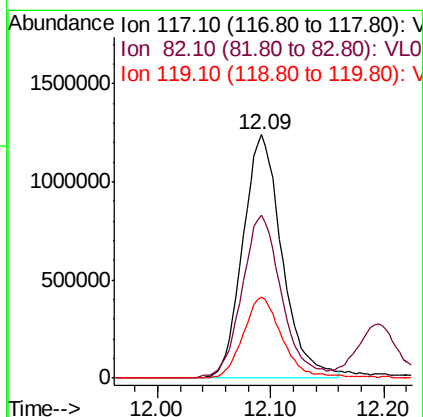
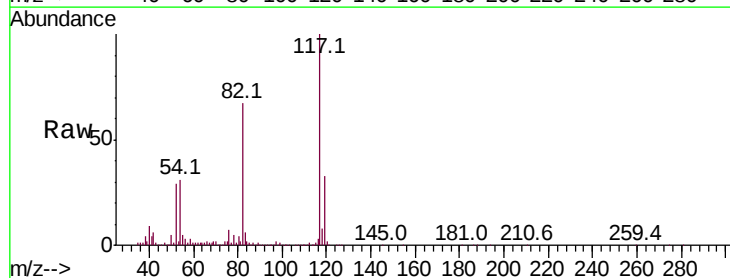
Tgt Ion: 117 Resp: 2986357

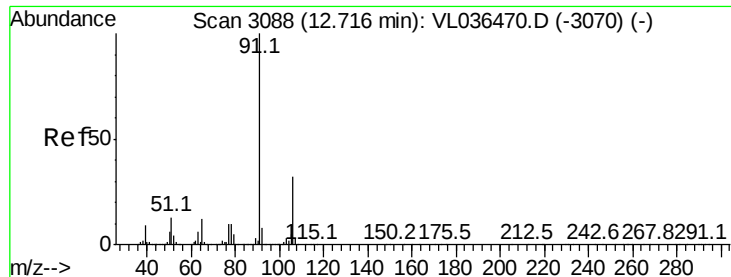
Ion Ratio Lower Upper

117 100

82 68.0 57.4 86.0

119 34.1 47.4 71.0#





#58

Ethyl Benzene

Concen: 0.626 ppbv

RT: 12.72 min Scan# 3089

Delta R.T. 0.00 min

Lab File: VL036707.D

Acq: 6 Apr 2021 21:06

Instrument :

MSVOA_L

ClientSampled :

SV2

Tot Ion: 91 Resp: 271771

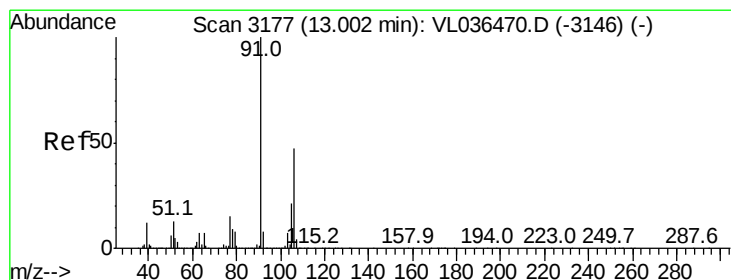
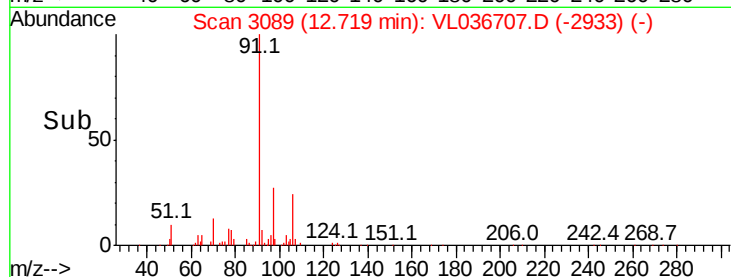
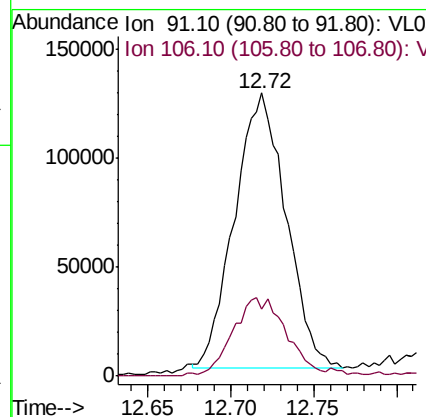
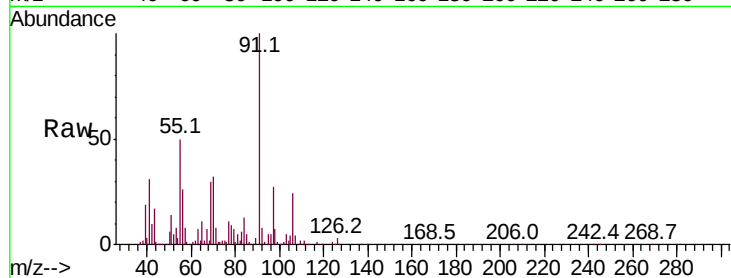
Ion Ratio Lower Upper

91 100

106 23.7 25.3 37.9#

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#59

m/p-Xylene

Concen: 1.573 ppbv

RT: 12.97 min Scan# 3168

Delta R.T. -0.03 min

Lab File: VL036707.D

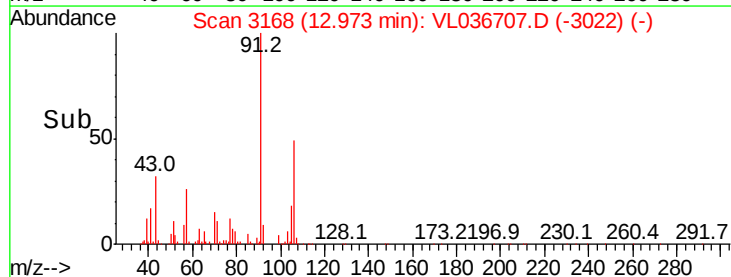
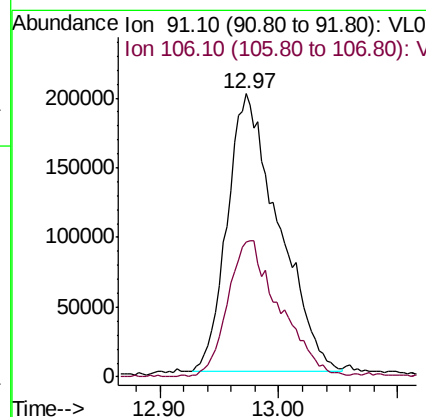
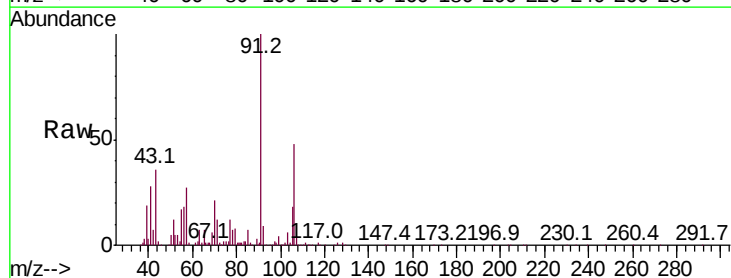
Acq: 6 Apr 2021 21:06

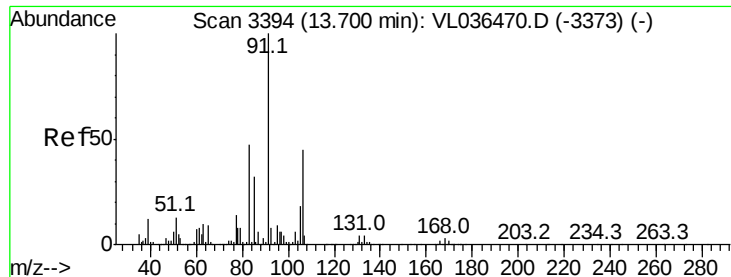
Tgt Ion: 91 Resp: 596197

Ion Ratio Lower Upper

91 100

106 49.8 35.3 52.9





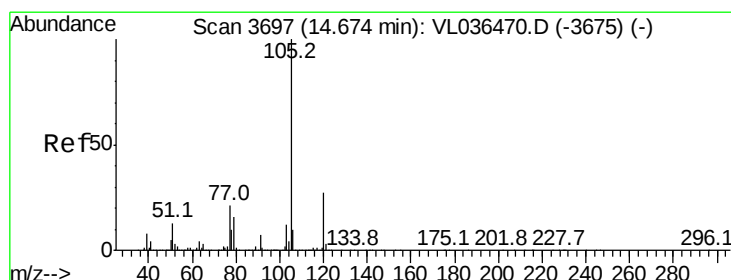
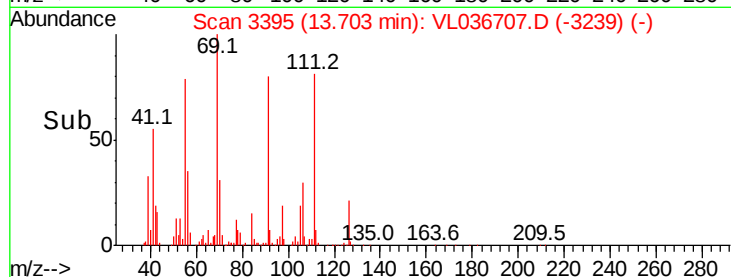
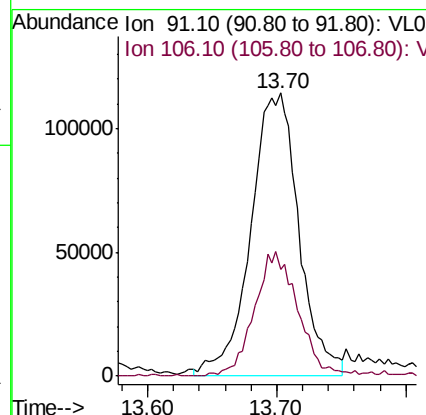
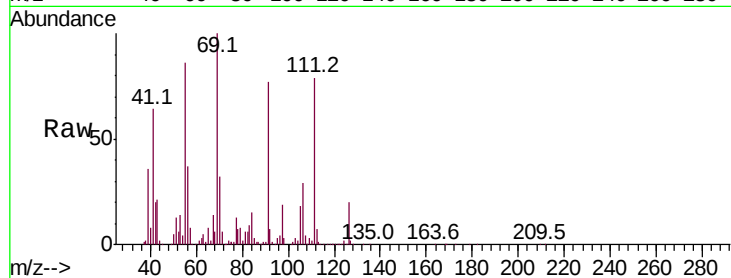
#60
o-Xylene
Concen: 0.807 ppbv m
RT: 13.70 min Scan# 3395
Delta R.T. 0.00 min
Lab File: VL036707.D
Acq: 6 Apr 2021 21:06

Instrument :
MSVOA_L
ClientSampleId :
SV2

Tot Ion: 91 Resp: 295796
Ion Ratio Lower Upper
91 100
106 39.8 22.3 66.9

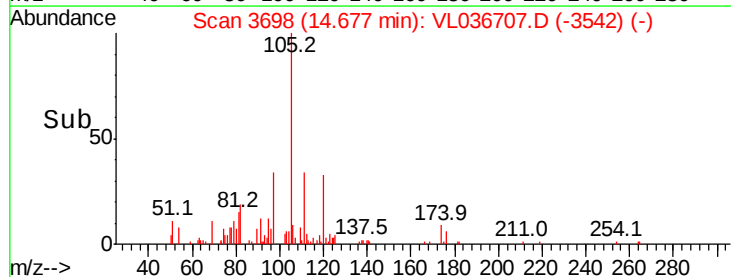
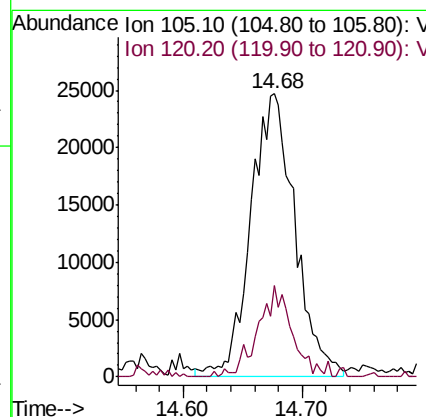
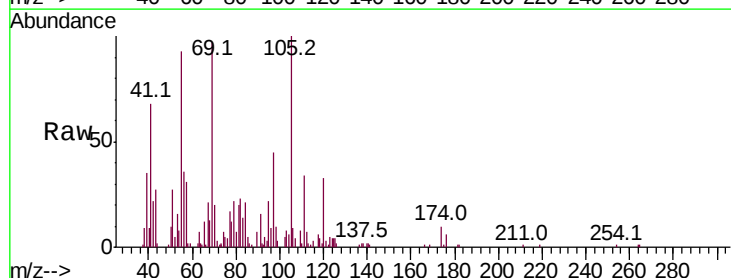
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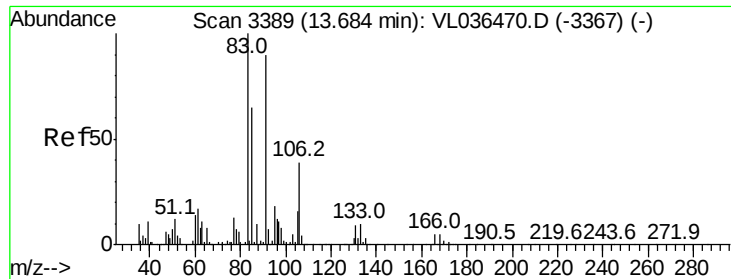
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#62
Isopropylbenzene
Concen: 0.129 ppbv m
RT: 14.68 min Scan# 3698
Delta R.T. 0.00 min
Lab File: VL036707.D
Acq: 6 Apr 2021 21:06

Tgt Ion:105 Resp: 63440
Ion Ratio Lower Upper
105 100
120 25.5 20.6 31.0





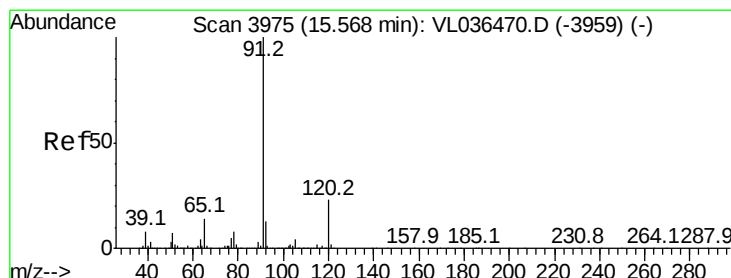
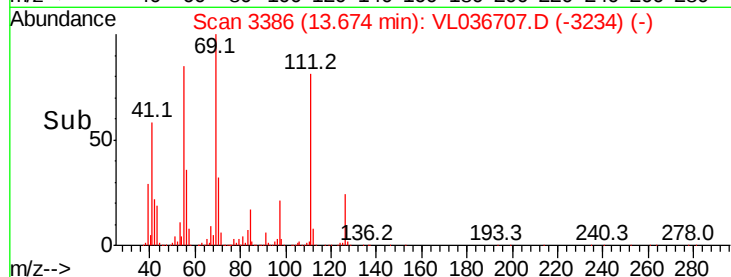
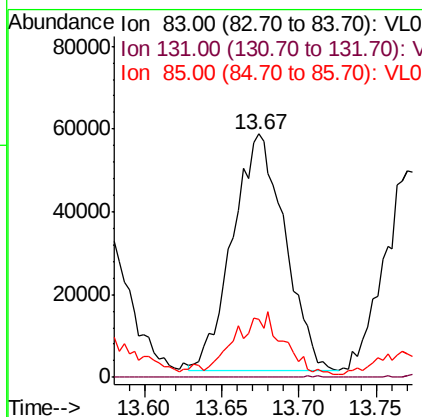
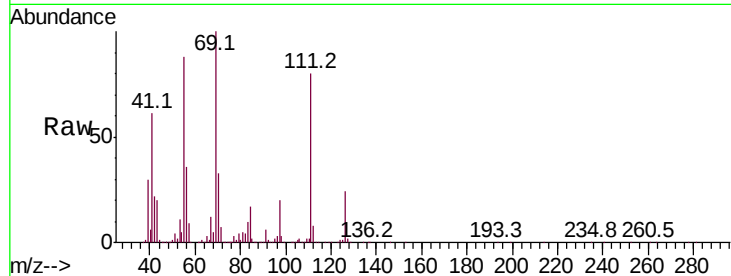
#63
 1,1,2,2-Tetrachloroethane
 Concen: 0.477 ppbv
 RT: 13.67 min Scan# 3386
 Delta R.T. -0.01 min
 Lab File: VL036707.D
 Acq: 6 Apr 2021 21:06

Instrument :
 MSVOA_L
 ClientSampleId :
 SV2

Tot Ion	Ratio	Resp	Lower	Upper
83	100			
131	0.1	4.7	14.0#	
85	24.1	33.1	99.3#	

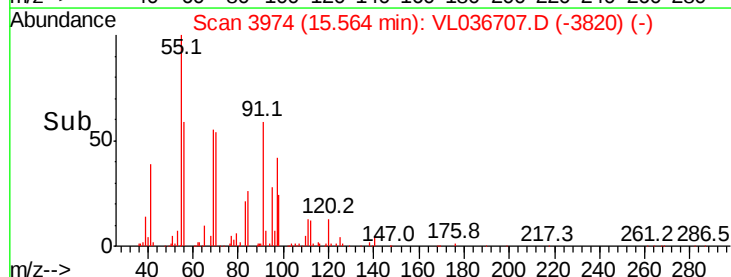
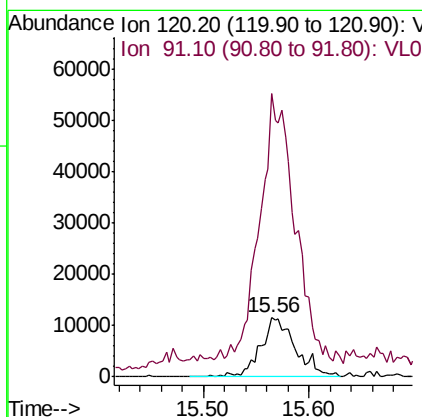
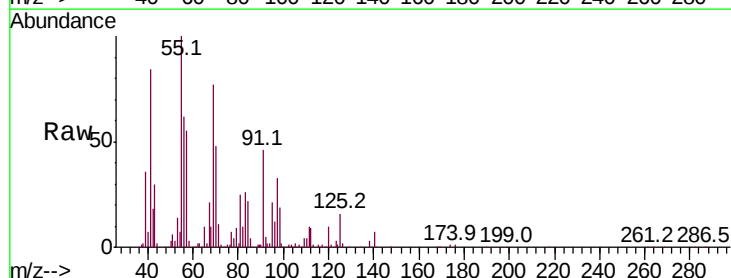
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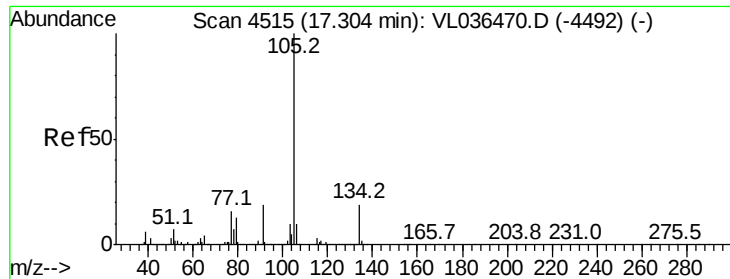
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#64
 n-propylbenzene
 Concen: 0.223 ppbv m
 RT: 15.56 min Scan# 3974
 Delta R.T. -0.00 min
 Lab File: VL036707.D
 Acq: 6 Apr 2021 21:06

Tgt Ion	Ratio	Resp	Lower	Upper
120	100			
91	480.1	377.4	566.2	





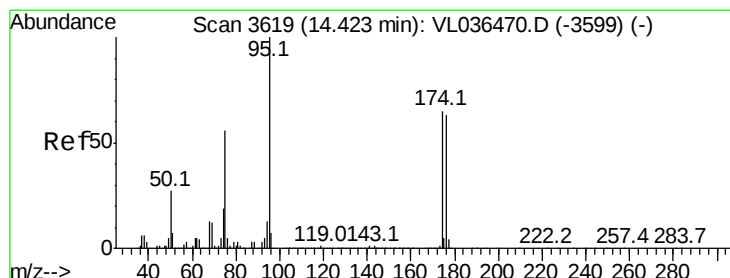
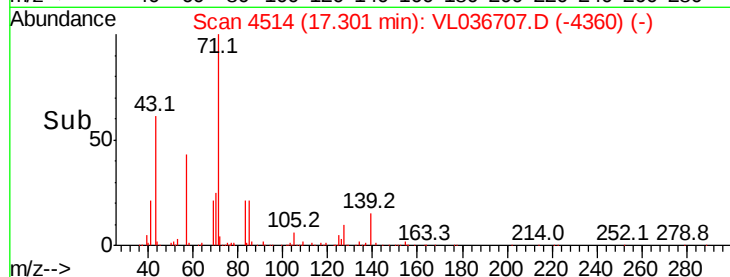
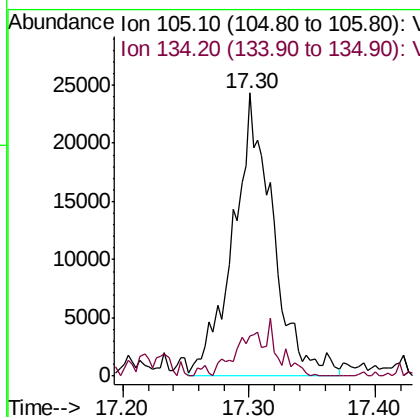
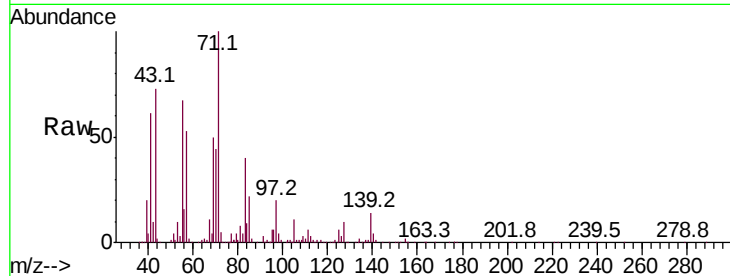
#67
 sec-Butylbenzene
 Concen: 0.088 ppbv m
 RT: 17.30 min Scan# 4514
 Delta R.T. -0.00 min
 Lab File: VL036707.D
 Acq: 6 Apr 2021 21:06

Instrument :
 MSVOA_L
 ClientSampled :
 SV2

Tot Ion: 105 Resp: 53311
 Ion Ratio Lower Upper
 105 100
 134 0.0 14.7 22.1#

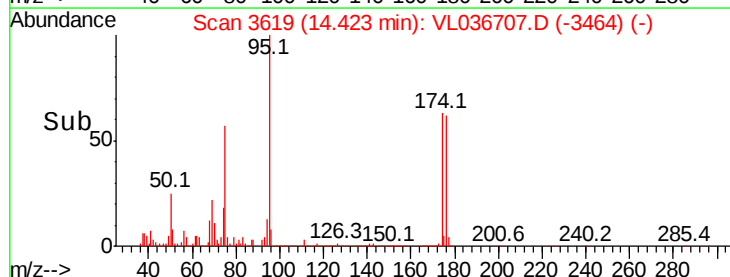
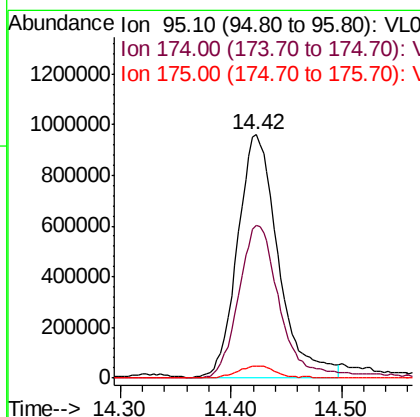
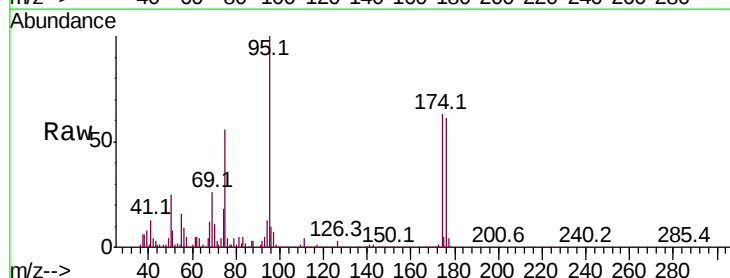
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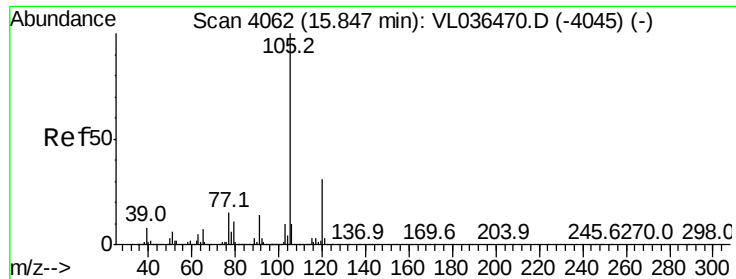
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#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.272 ppbv
 RT: 14.42 min Scan# 3619
 Delta R.T. -0.00 min
 Lab File: VL036707.D
 Acq: 6 Apr 2021 21:06

Tgt Ion: 95 Resp: 2444884
 Ion Ratio Lower Upper
 95 100
 174 66.1 51.0 76.6
 175 4.8 3.9 5.9





#72

4-Ethyltoluene

Concen: 0.235 ppbv m

RT: 15.85 min Scan# 4062

Delta R.T. -0.00 min

Lab File: VL036707.D

Acq: 6 Apr 2021 21:06

Instrument :

MSVOA_L

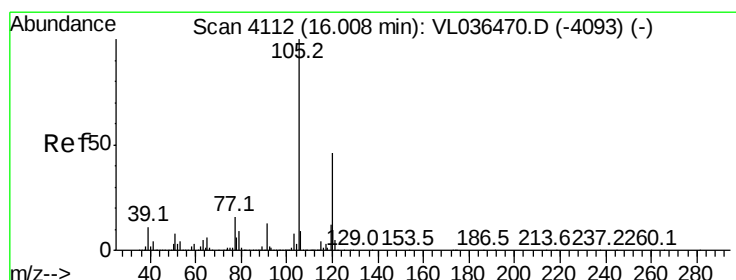
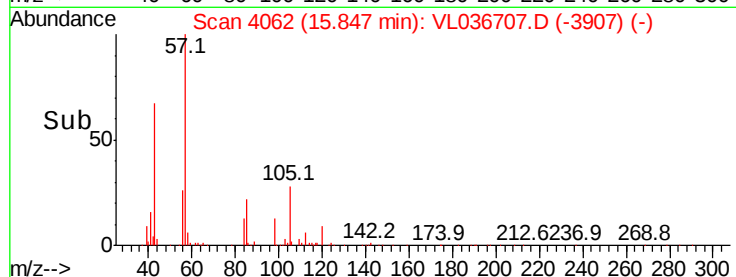
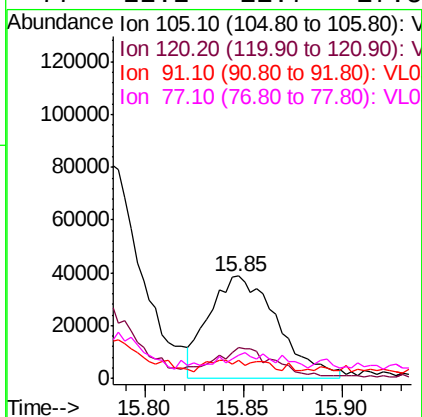
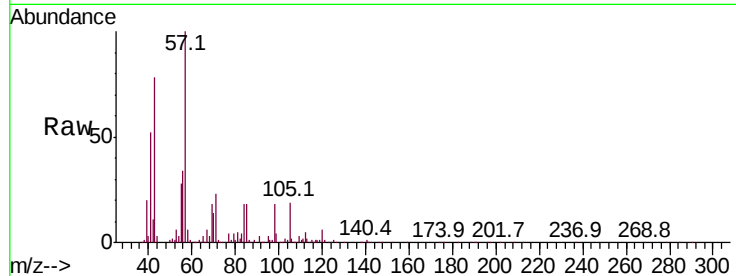
ClientSampleId :

SV2

Tot Ion:	105	Resp:	94205
Ion Ratio	Lower	Upper	
105	100		
120	30.5	24.0	36.0
91	19.0	11.0	16.4#
77	22.2	11.7	17.5#

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#73

1,3,5-Trimethylbenzene

Concen: 0.228 ppbv m

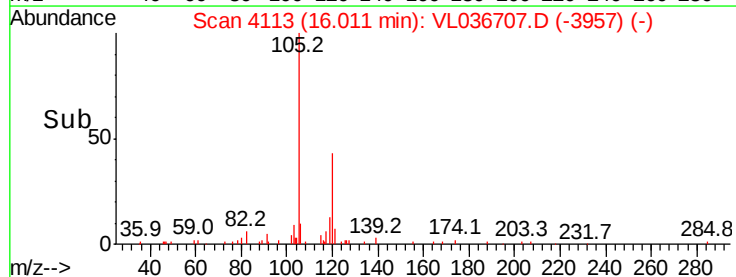
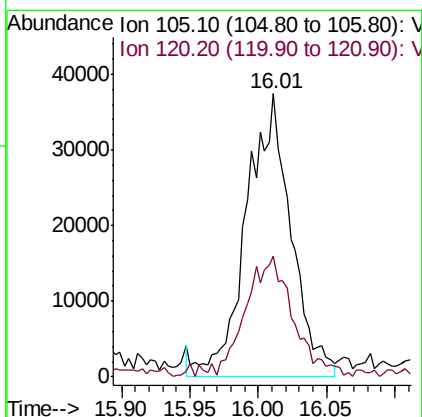
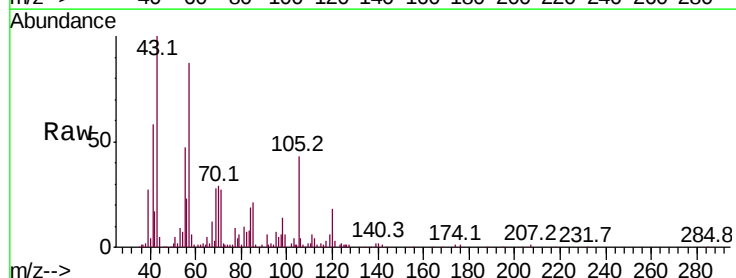
RT: 16.01 min Scan# 4113

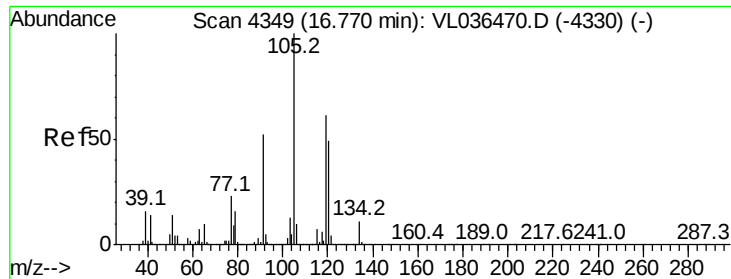
Delta R.T. 0.00 min

Lab File: VL036707.D

Acq: 6 Apr 2021 21:06

Tgt Ion:	105	Resp:	85320
Ion Ratio	Lower	Upper	
105	100		
120	42.9	36.6	54.8





#74
 1,2,4-Trimethylbenzene
 Concen: 0.489 ppbv m
 RT: 16.77 min Scan# 4348
 Delta R.T. -0.00 min
 Lab File: VL036707.D
 Acq: 6 Apr 2021 21:06

Instrument :
 MSVOA_L
 ClientSampleId :
 SV2

Tot Ion	Ratio	Resp Lower	Resp Upper
105	100		
120	39.6	39.2	58.8
91	16.4	42.6	64.0#
77	22.5	18.6	28.0

Manual Integrations
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 4/12/2021 11:11:11 AM

