

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040821\
 Data File : VL036752.D
 Acq On : 8 Apr 2021 15:58
 Operator : SY/AP
 Sample : M1981-02 10X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-4

Manual Integrations
 APPROVED

MMDadoda
 4/12/2021 11:46:47 AM

Quant Time: Apr 09 12:00:26 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	5.66	49	1231331	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	2965414	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	2709621	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	2368306	10.97	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	109.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
5) Vinyl Chloride	3.25	62	309820	3.708	ppbv	97
9) Propene	3.00	41	351426m	4.792	ppbv	
10) Heptane	8.12	43	203627	1.090	ppbv	94
13) Ethanol	3.61	45	19461m	2.228	ppbv	
15) Acetone	3.84	43	5987546	49.406	ppbv	100
19) Isopropyl Alcohol	3.97	45	352087	5.281	ppbv #	1
20) Methylene Chloride	4.34	84	103712	1.828	ppbv	95
22) trans-1,2-Dichloroethene	4.88	96	29045m	0.538	ppbv	
26) Hexane	5.68	57	247983	1.855	ppbv #	46
27) Carbon Disulfide	4.55	76	189431	1.438	ppbv	94
30) Cyclohexane	7.12	84	177073	1.633	ppbv #	83
31) cis-1,2-Dichloroethene	5.55	61	609402	4.712	ppbv	97
34) 2-Butanone	5.24	43	1245654	8.605	ppbv	99
36) Benzene	6.89	78	420023	1.536	ppbv	96
38) Trichloroethene	7.83	130	712553m	6.695	ppbv	
44) 2,2,4-Trimethylpentane	7.87	57	3119996	6.482	ppbv #	74
52) Tetrachloroethene	11.22	164	6757m	0.067	ppbv	
53) Toluene	9.80	91	286324	0.983	ppbv	100
58) Ethyl Benzene	12.71	91	325621	0.826	ppbv	95
59) m/p-Xylene	12.97	91	737724	2.146	ppbv	93
60) o-Xylene	13.69	91	697774	2.099	ppbv	99
62) Isopropylbenzene	14.66	105	168872m	0.377	ppbv	
67) sec-Butylbenzene	17.30	105	135172	0.247	ppbv	99
69) p-Isopropyltoluene	17.65	119	209449	0.489	ppbv	94
72) 4-Ethyltoluene	15.84	105	228984	0.629	ppbv #	92
73) 1,3,5-Trimethylbenzene	16.00	105	406083	1.194	ppbv	99
74) 1,2,4-Trimethylbenzene	16.77	105	700417m	1.925	ppbv	
76) 1,4-Dichlorobenzene	17.14	146	28073m	0.138	ppbv	
79) Naphthalene	22.21	128	70255m	0.331	ppbv	

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

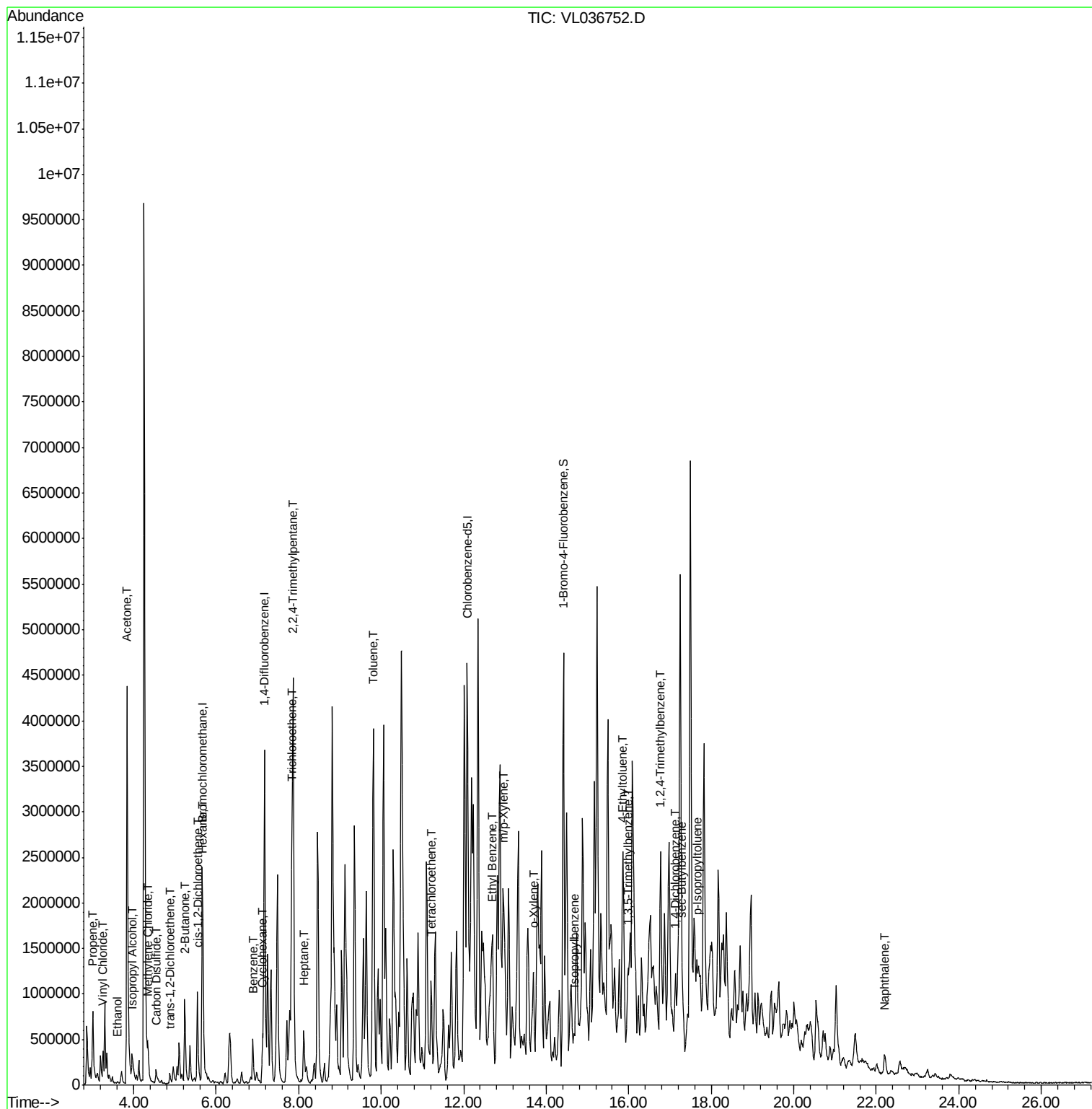
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040821\
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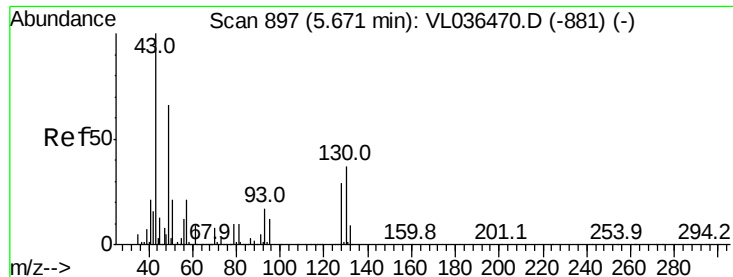
Instrument :
MSVOA_L
ClientSampleId :
SG-4

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4/12/2021 11:46:47 AM

Quant Time: Apr 09 12:00:26 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: 5.66 min Scan# 894

Delta R.T. -0.01 min

Lab File: VL036752.D

Acq: 8 Apr 2021 15:58

Instrument :

MSVOA_L

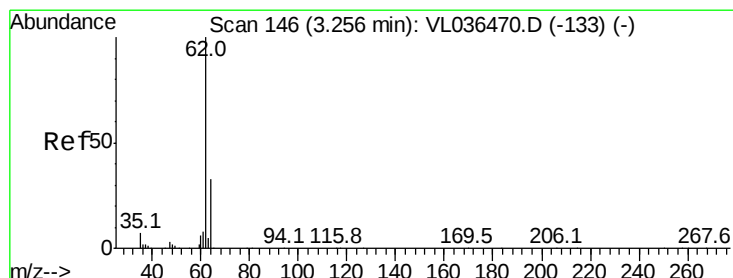
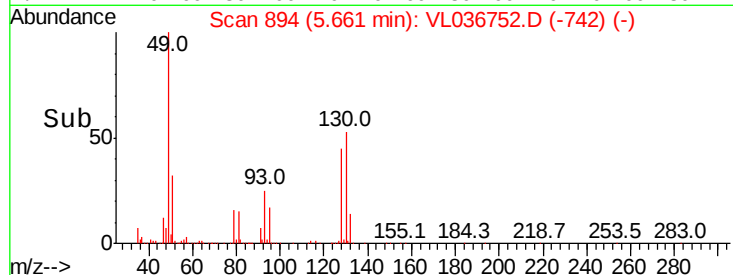
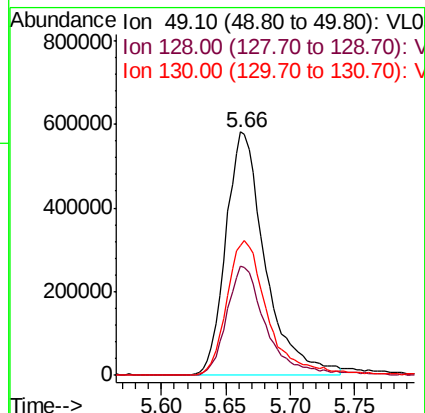
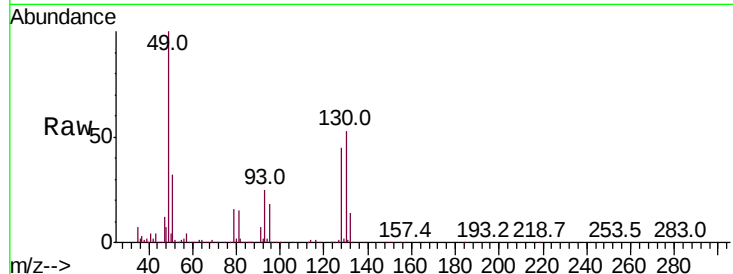
ClientSampled :

SG-4

Tot Ion	Ratio	Lower	Upper
49	100		
128	45.5	23.5	70.6
130	59.1	29.1	87.4

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#5

Vinyl Chloride

Concen: 3.708 ppbv

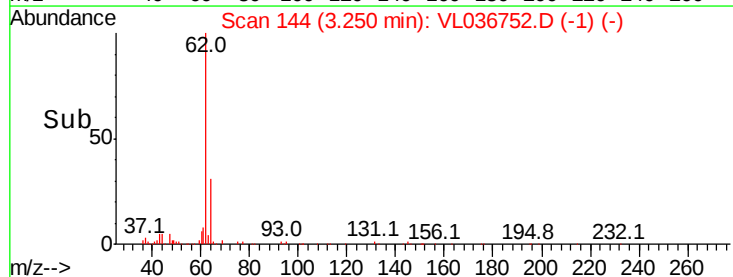
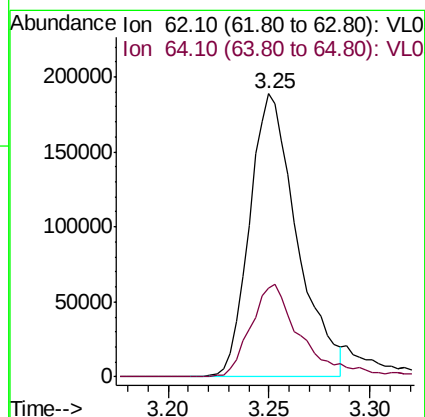
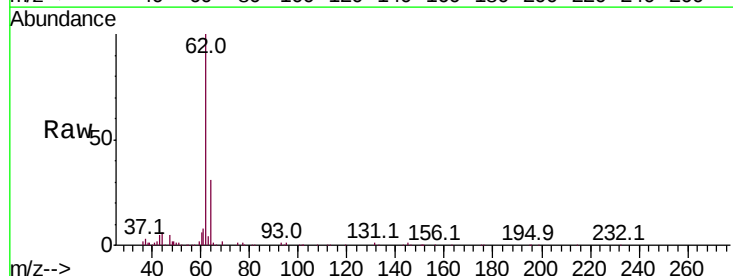
RT: 3.25 min Scan# 144

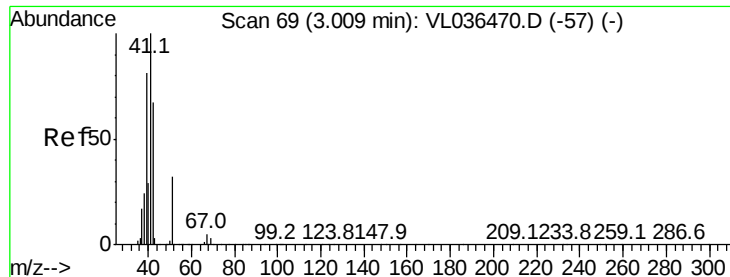
Delta R.T. -0.01 min

Lab File: VL036752.D

Acq: 8 Apr 2021 15:58

Tgt Ion	Ratio	Lower	Upper
62	100		
64	31.1	26.4	39.6





#9

Propene

Concen: 4.792 ppbv m

RT: 3.00 min Scan# 67

Delta R.T. -0.01 min

Lab File: VL036752.D

Acq: 8 Apr 2021 15:58

Instrument :

MSVOA_L

ClientSampleId :

SG-4

Tot Ion: 41 Resp: 351426

Ion Ratio Lower Upper

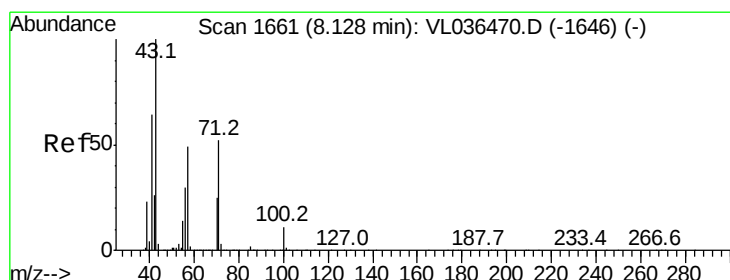
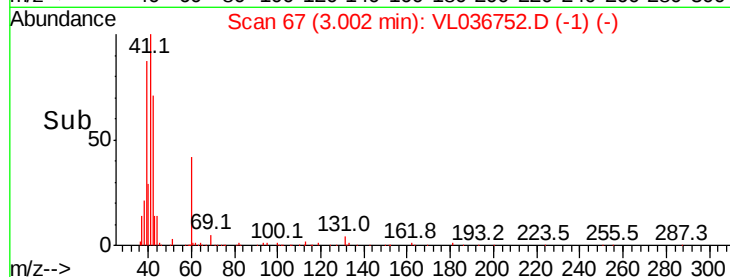
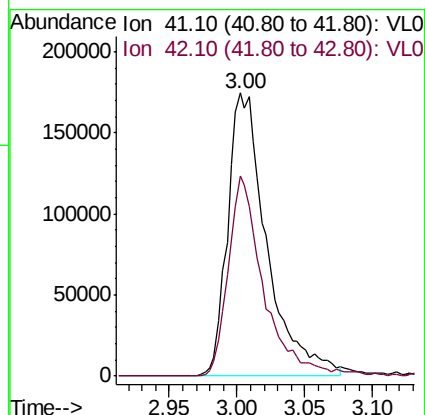
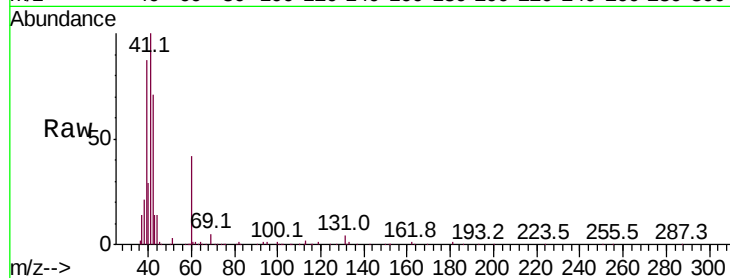
41 100

42 64.2 57.0 85.4

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#10

Heptane

Concen: 1.090 ppbv

RT: 8.12 min Scan# 1660

Delta R.T. -0.00 min

Lab File: VL036752.D

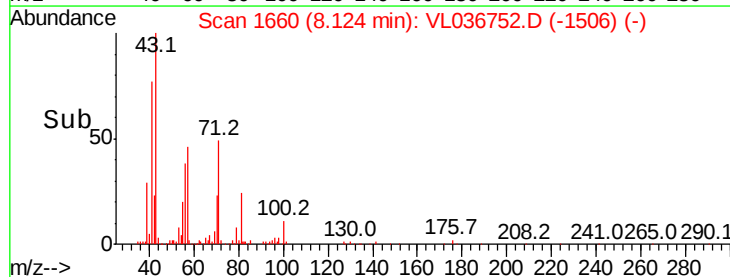
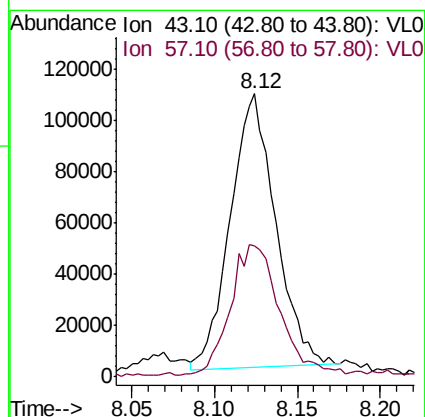
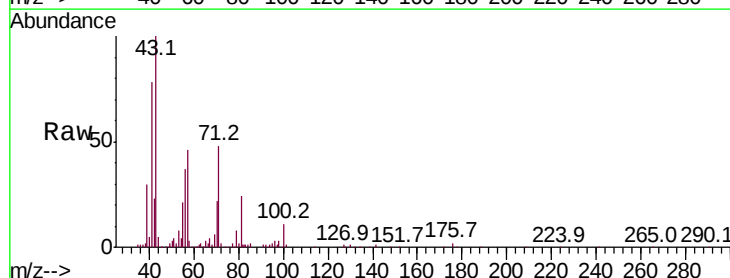
Acq: 8 Apr 2021 15:58

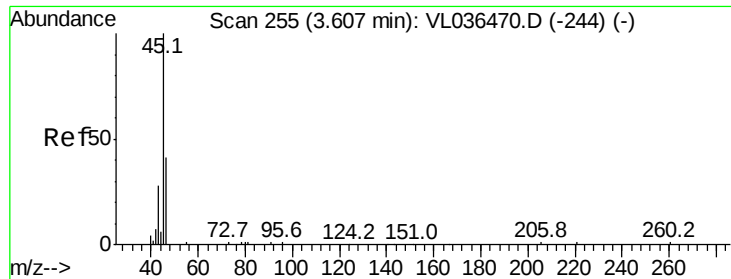
Tgt Ion: 43 Resp: 203627

Ion Ratio Lower Upper

43 100

57 53.1 39.0 58.6





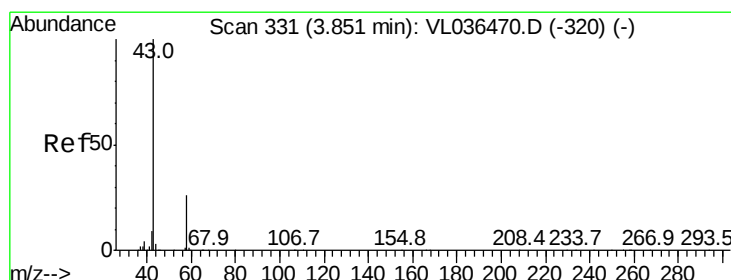
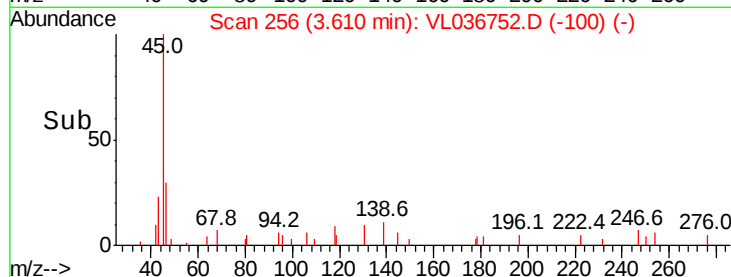
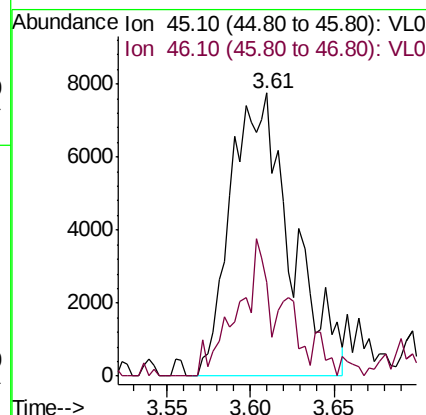
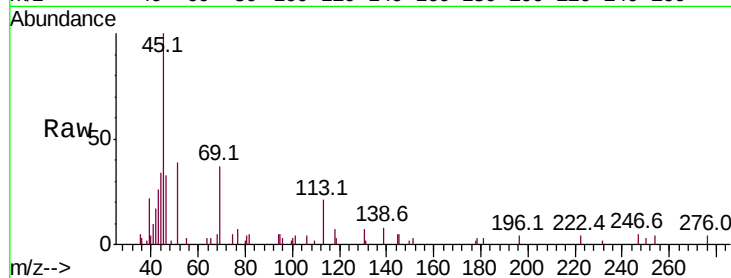
#13
Ethanol
Concen: 2.228 ppbv m
RT: 3.61 min Scan# 256
Delta R.T. 0.00 min
Lab File: VL036752.D
Acq: 8 Apr 2021 15:58

Instrument :
MSVOA_L
ClientSampleId :
SG-4

Tot Ion	Ratio	Lower	Upper
45	100		
46	38.6	16.6	66.2

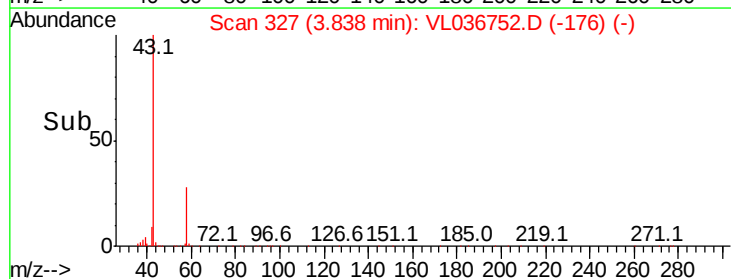
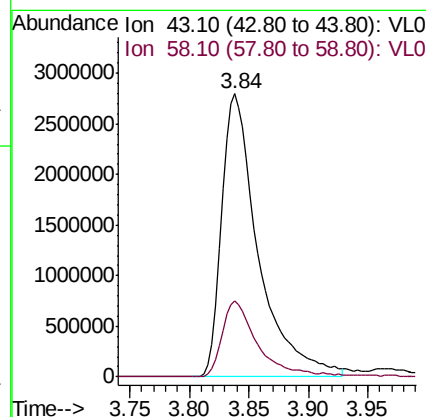
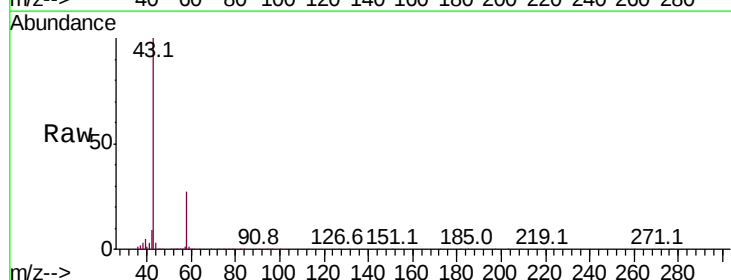
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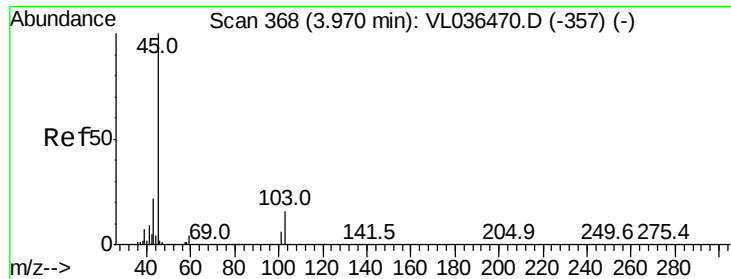
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#15
Acetone
Concen: 49.406 ppbv
RT: 3.84 min Scan# 327
Delta R.T. -0.01 min
Lab File: VL036752.D
Acq: 8 Apr 2021 15:58

Tgt Ion	Ratio	Lower	Upper
43	100		
58	26.3	21.2	31.8





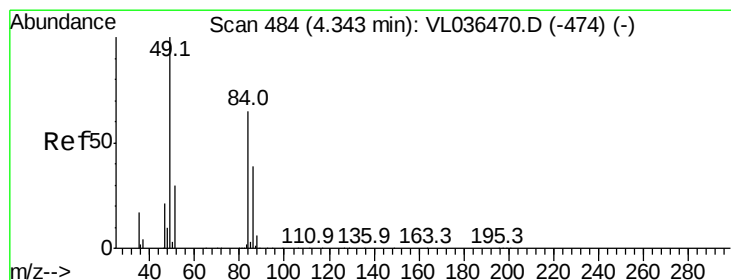
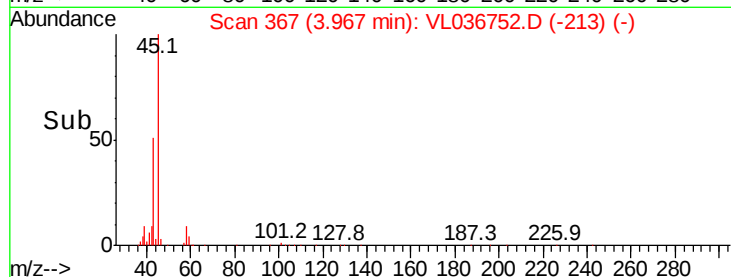
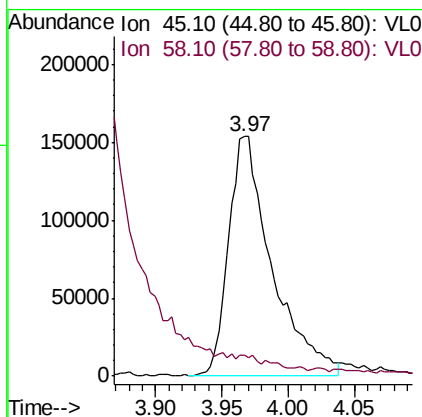
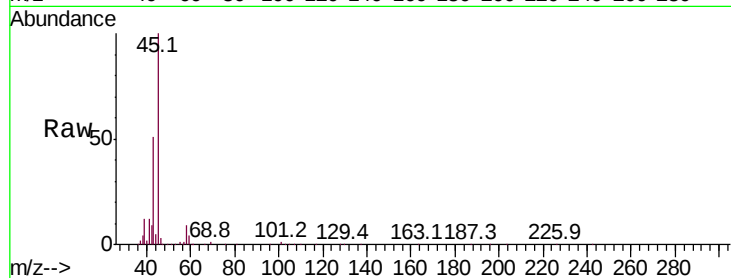
#19
Isopropyl Alcohol
Concen: 5.281 ppbv
RT: 3.97 min Scan# 367
Delta R.T. -0.00 min
Lab File: VL036752.D
Acq: 8 Apr 2021 15:58

Instrument :
MSVOA_L
ClientSampleId :
SG-4

Tot Ion: 45 Resp: 352087
Ion Ratio Lower Upper
45 100
58 461.5 2.9 4.3#

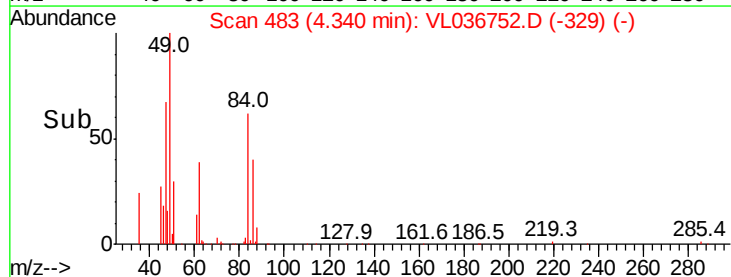
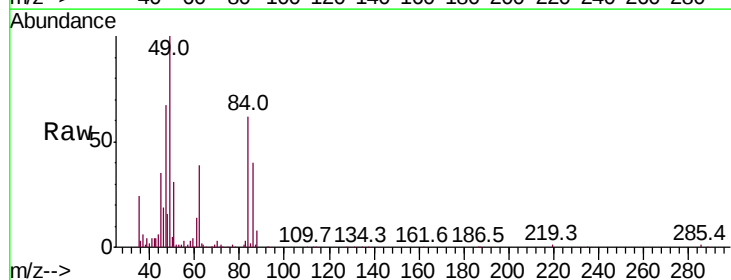
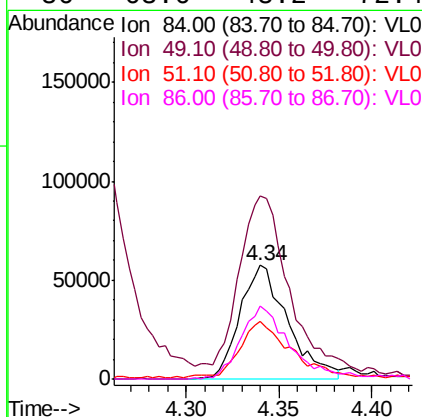
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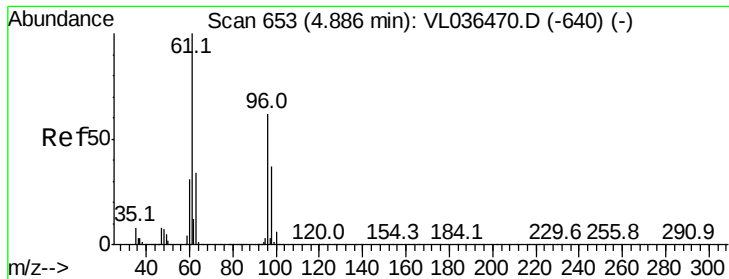
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#20
Methylene Chloride
Concen: 1.828 ppbv
RT: 4.34 min Scan# 483
Delta R.T. -0.00 min
Lab File: VL036752.D
Acq: 8 Apr 2021 15:58

Tgt Ion: 84 Resp: 103712
Ion Ratio Lower Upper
84 100
49 146.4 122.9 184.3
51 48.3 36.9 55.3
86 63.6 48.2 72.4





#22

trans-1,2-Dichloroethene

Concen: 0.538 ppbv m

RT: 4.88 min Scan# 651

Delta R.T. -0.01 min

Lab File: VL036752.D

Acq: 8 Apr 2021 15:58

Instrument :

MSVOA_L

ClientSampleId :

SG-4

Tot Ion: 96 Resp: 29045

Ion Ratio Lower Upper

96 100

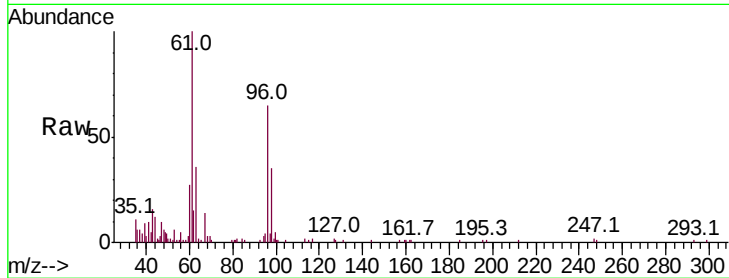
61 152.7 129.4 194.0

98 53.3 48.2 72.4

Manual Integrations
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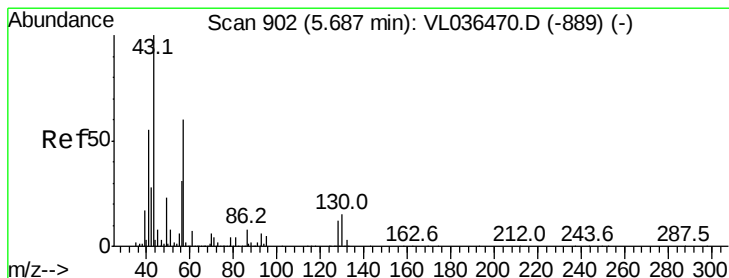
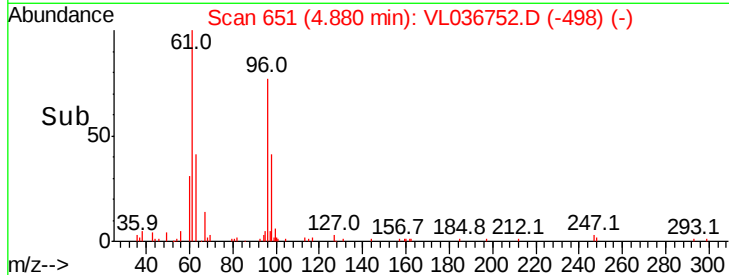
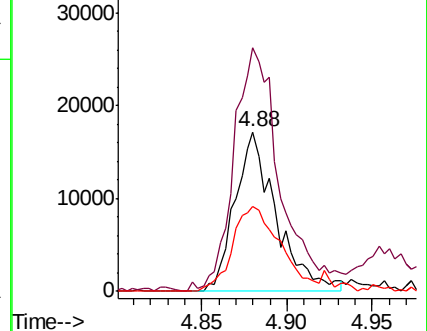
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Abundance Ion 96.00 (95.70 to 96.70): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 98.00 (97.70 to 98.70): VL0



#26

Hexane

Concen: 1.855 ppbv

RT: 5.68 min Scan# 901

Delta R.T. -0.00 min

Lab File: VL036752.D

Acq: 8 Apr 2021 15:58

Tgt Ion: 57 Resp: 247983

Ion Ratio Lower Upper

57 100

41 104.9 77.2 115.8

43 78.6 173.8 260.6#

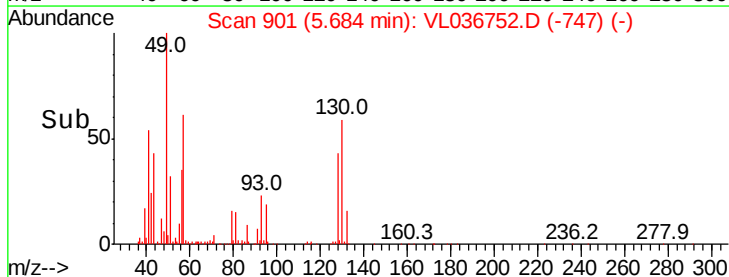
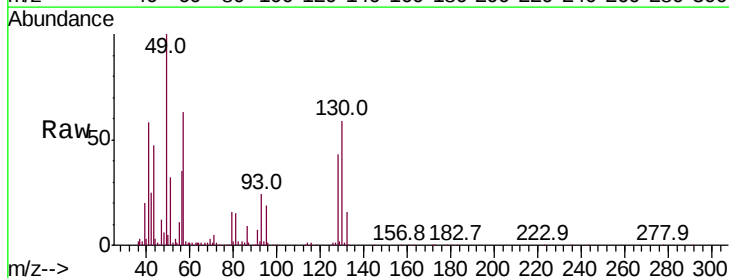
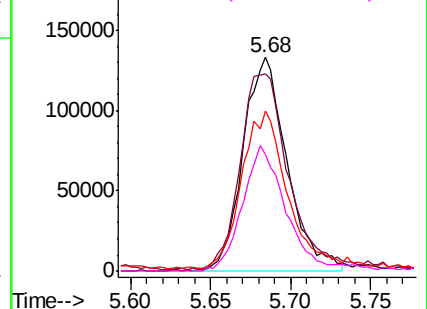
56 59.6 43.8 65.6

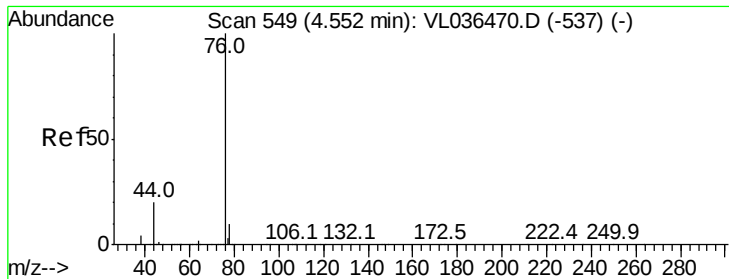
Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0





#27

Carbon Disulfide

Concen: 1.438 ppbv

RT: 4.55 min Scan# 547

Delta R.T. -0.01 min

Lab File: VL036752.D

Acq: 8 Apr 2021 15:58

Instrument :

MSVOA_L

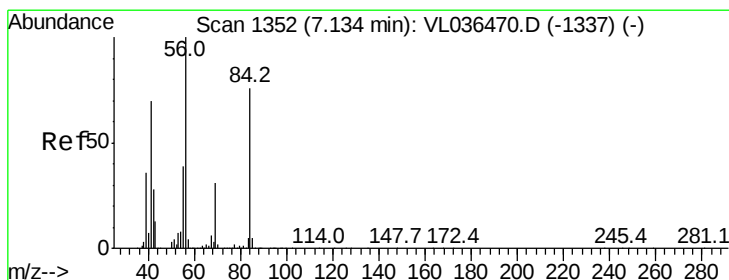
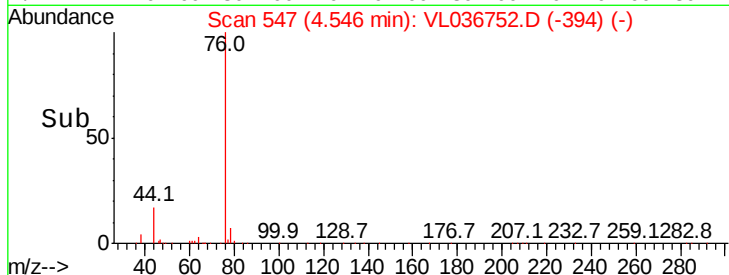
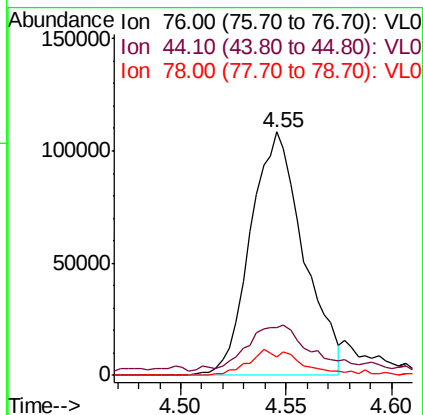
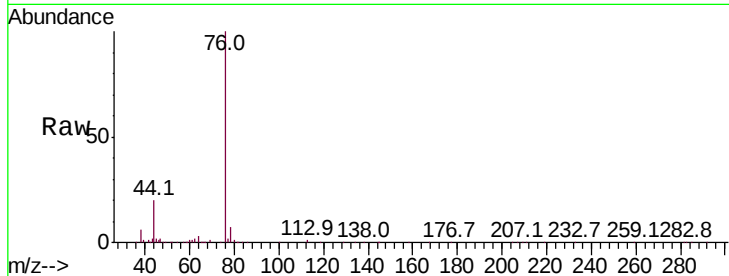
ClientSampled :

SG-4

Tot Ion:	76	Resp:	189431
Ion Ratio	Lower	Upper	
76	100		
44	25.5	17.5	26.3
78	11.4	8.6	13.0

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#30

Cyclohexane

Concen: 1.633 ppbv

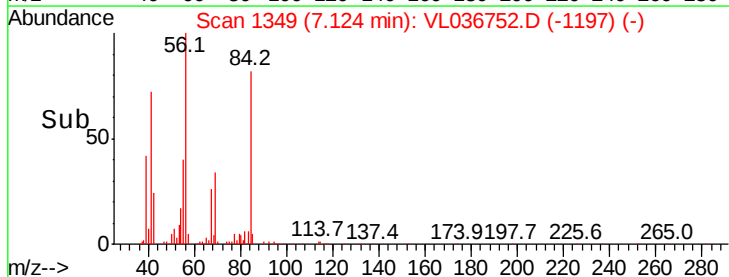
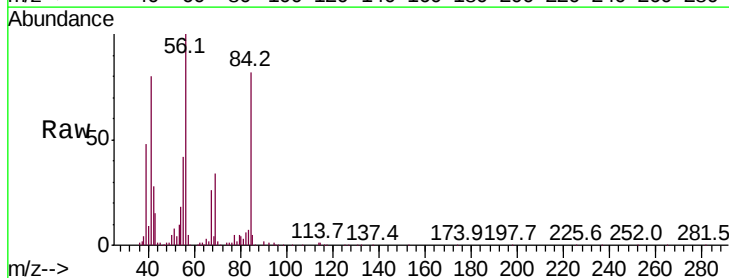
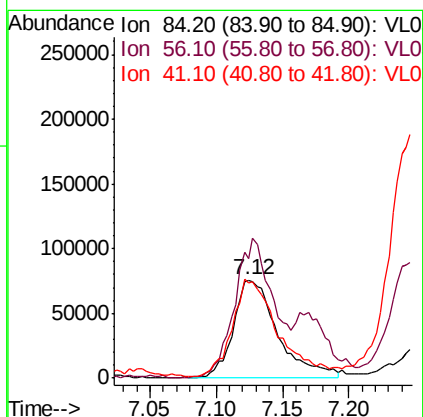
RT: 7.12 min Scan# 1349

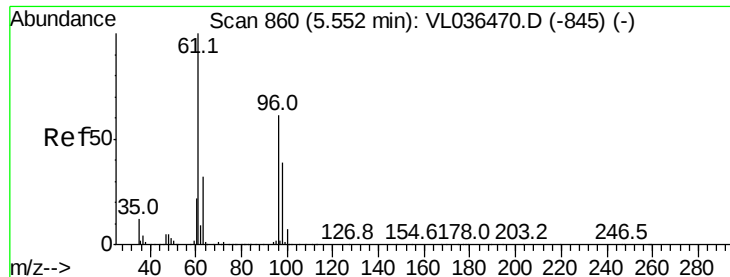
Delta R.T. -0.01 min

Lab File: VL036752.D

Acq: 8 Apr 2021 15:58

Tgt Ion:	84	Resp:	177073
Ion Ratio	Lower	Upper	
84	100		
56	173.1	114.6	171.8#
41	101.0	75.3	112.9





#31

cis-1,2-Dichloroethene

Concen: 4.712 ppbv

RT: 5.55 min Scan# 858

Delta R.T. -0.01 min

Lab File: VL036752.D

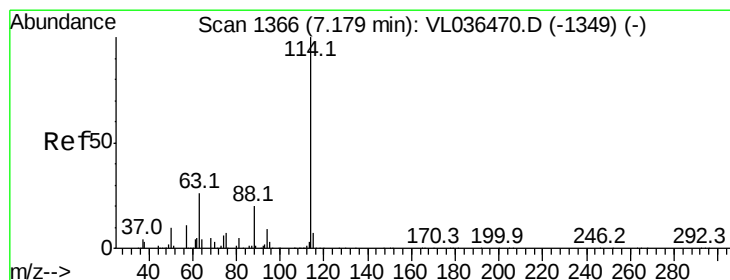
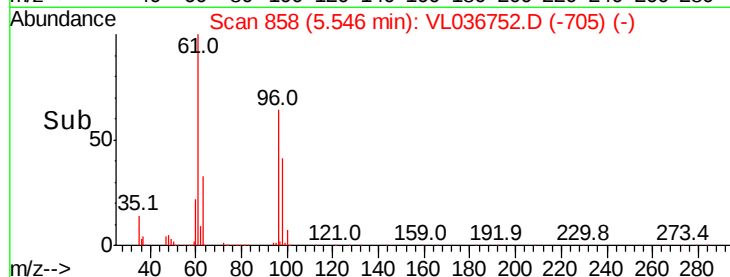
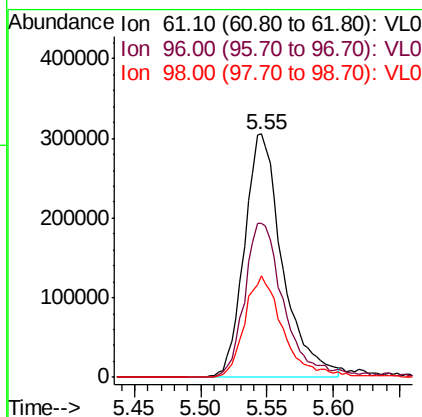
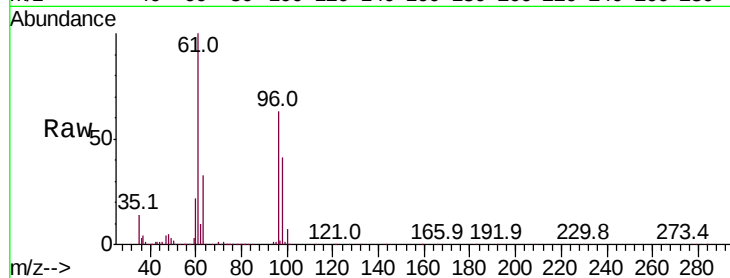
Acq: 8 Apr 2021 15:58

Instrument :
MSVOA_L
ClientSampleId :
SG-4

Tot Ion	Ratio	Lower	Upper
61	100		
96	63.4	48.7	73.1
98	41.5	31.4	47.0

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#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

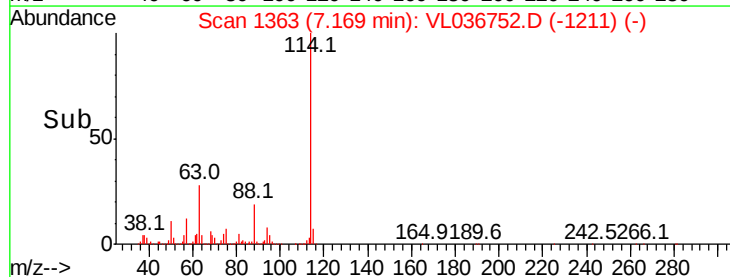
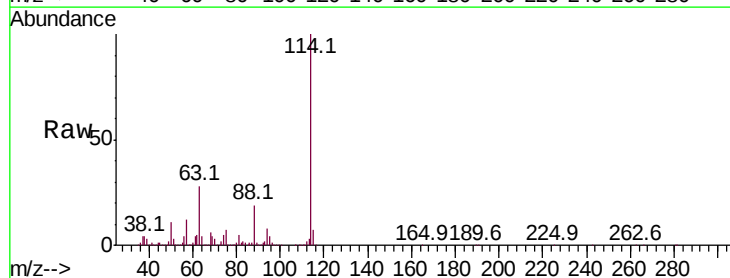
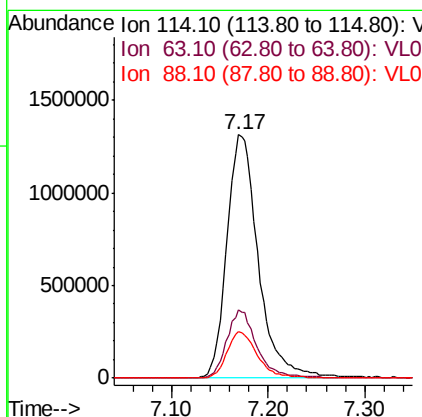
RT: 7.17 min Scan# 1363

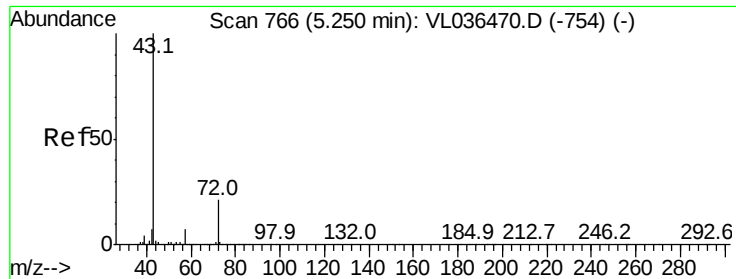
Delta R.T. -0.01 min

Lab File: VL036752.D

Acq: 8 Apr 2021 15:58

Tgt Ion	Ratio	Lower	Upper
114	100		
63	27.2	22.4	33.6
88	18.8	15.4	23.0





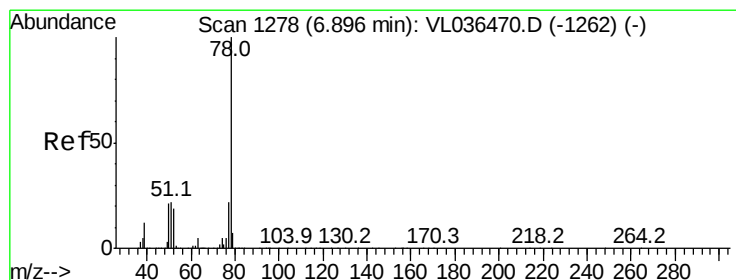
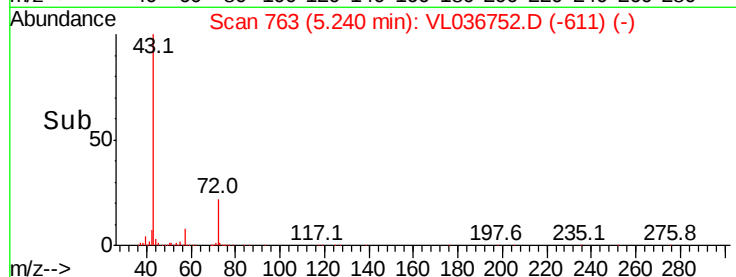
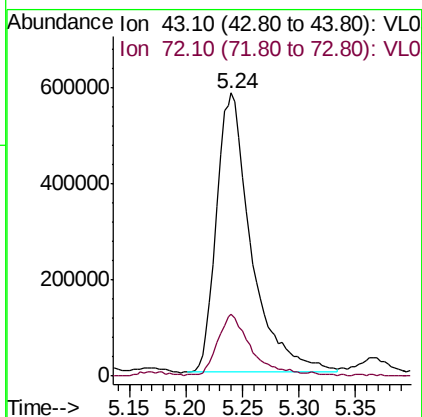
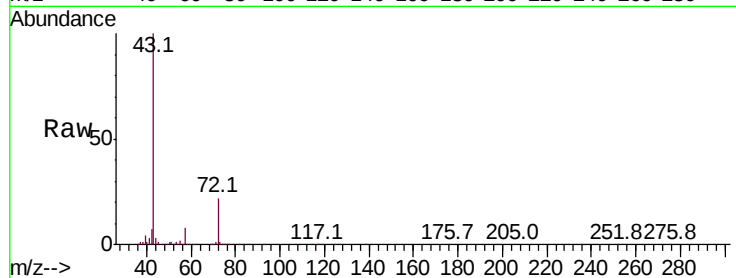
#34
2-Butanone
Concen: 8.605 ppbv
RT: 5.24 min Scan# 763
Delta R.T. -0.01 min
Lab File: VL036752.D
Acq: 8 Apr 2021 15:58

Instrument :
MSVOA_L
ClientSampleId :
SG-4

Tot Ion: 43 Resp: 1245654
Ion Ratio Lower Upper
43 100
72 22.0 17.0 25.6

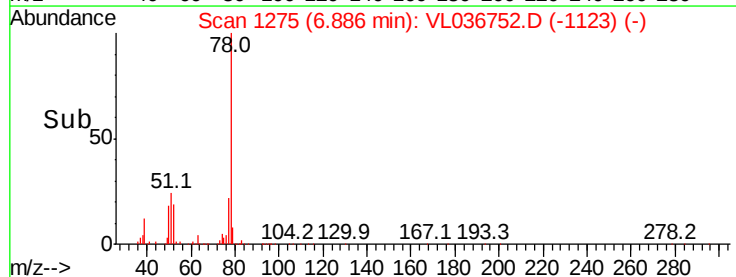
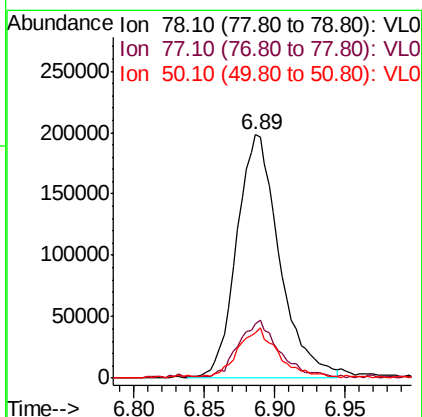
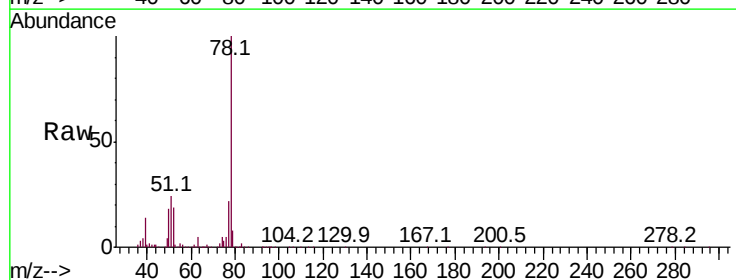
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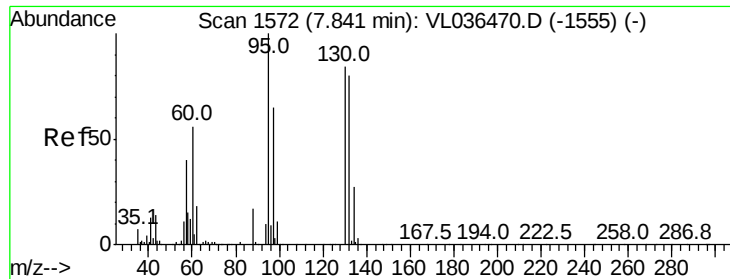
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#36
Benzene
Concen: 1.536 ppbv
RT: 6.89 min Scan# 1275
Delta R.T. -0.01 min
Lab File: VL036752.D
Acq: 8 Apr 2021 15:58

Tgt Ion: 78 Resp: 420023
Ion Ratio Lower Upper
78 100
77 21.6 18.0 27.0
50 17.8 16.5 24.7





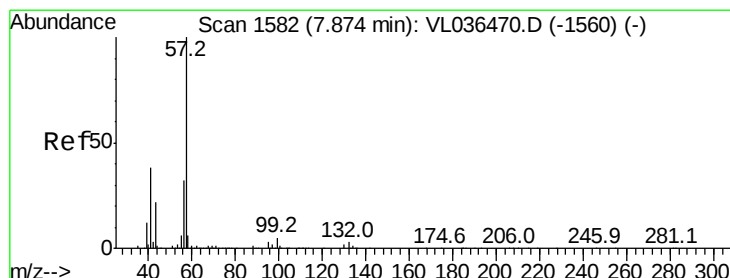
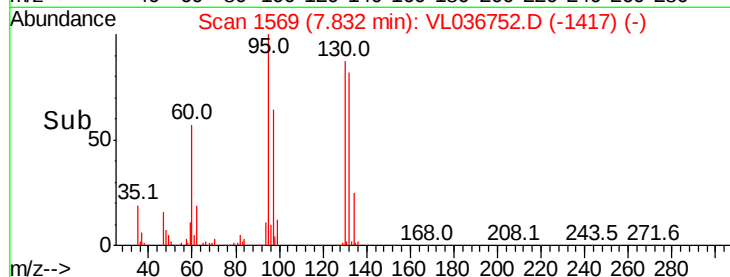
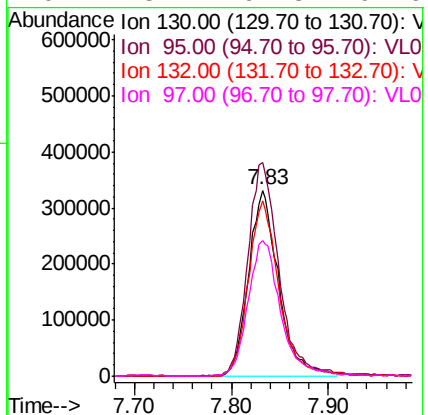
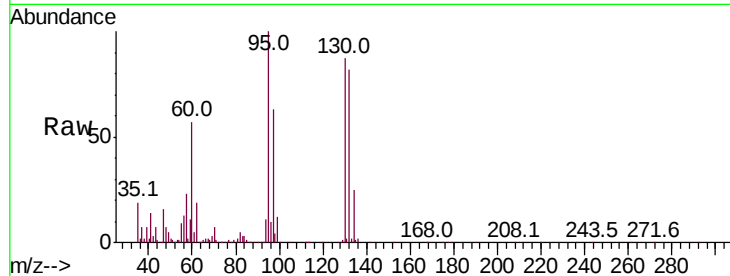
#38
 Trichloroethene
 Concen: 6.695 ppbv m
 RT: 7.83 min Scan# 1569
 Delta R.T. -0.01 min
 Lab File: VL036752.D
 Acq: 8 Apr 2021 15:58

Instrument :
 MSVOA_L
 ClientSampled :
 SG-4

Tot Ion	Ratio	Lower	Upper
130	100		
95	115.1	95.7	143.5
132	94.1	76.2	114.4
97	73.1	61.8	92.6

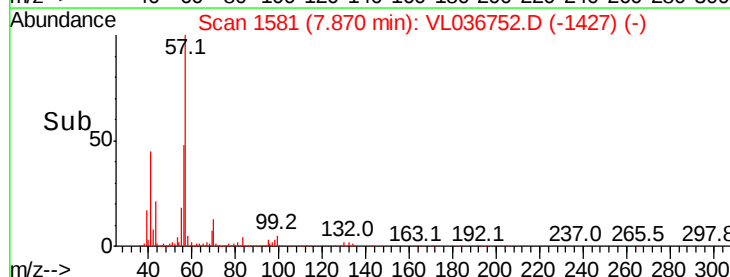
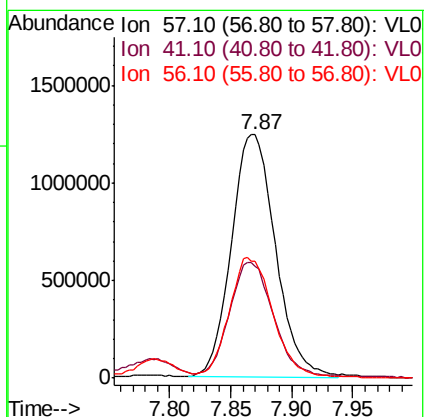
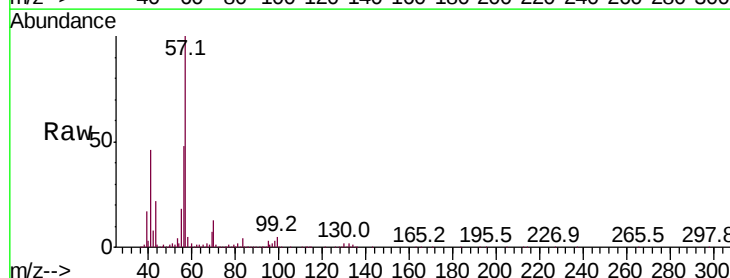
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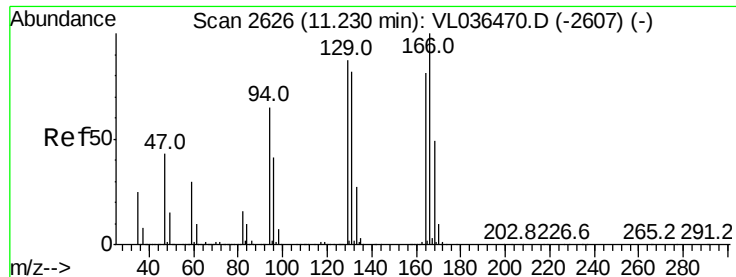
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#44
 2,2,4-Trimethylpentane
 Concen: 6.482 ppbv
 RT: 7.87 min Scan# 1581
 Delta R.T. -0.00 min
 Lab File: VL036752.D
 Acq: 8 Apr 2021 15:58

Tgt Ion	Ratio	Lower	Upper
57	100		
41	49.3	28.8	43.2#
56	49.8	26.1	39.1#





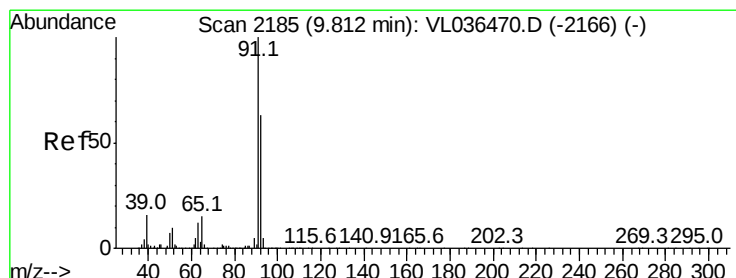
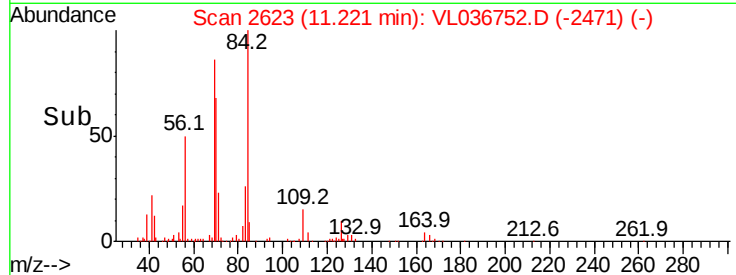
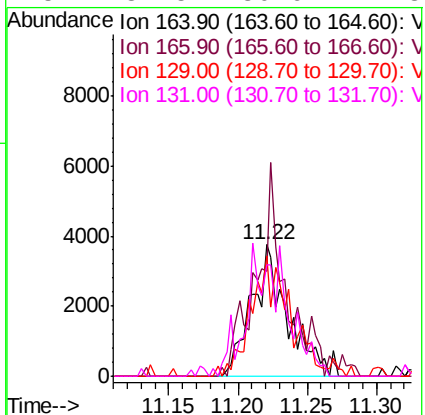
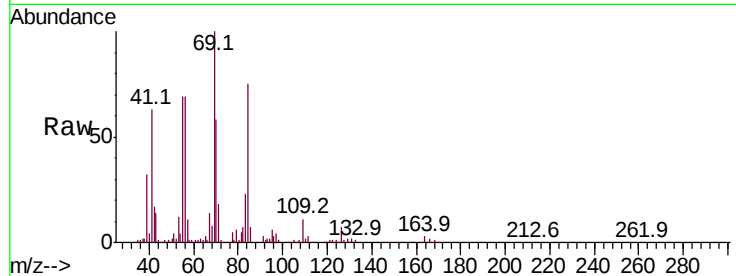
#52
Tetrachloroethene
Concen: 0.067 ppbv
RT: 11.22 min Scan# 2623
Delta R.T. -0.01 min
Lab File: VL036752.D
Acq: 8 Apr 2021 15:58

Instrument :
MSVOA_L
ClientSampleId :
SG-4

Tot Ion	Ratio	Lower	Upper
164	100		
166	79.7	98.3	147.5#
129	91.4	85.8	128.8
131	84.5	80.9	121.3

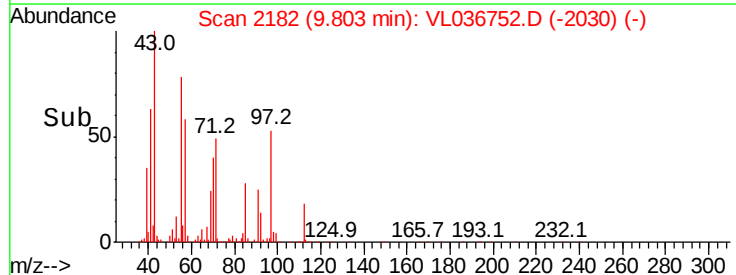
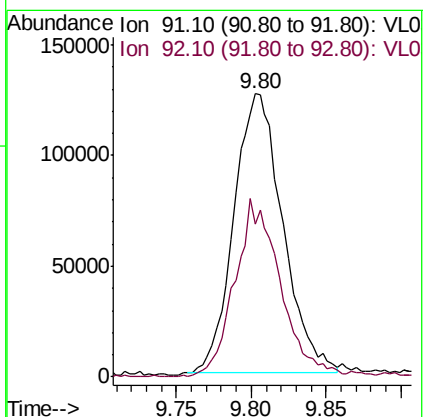
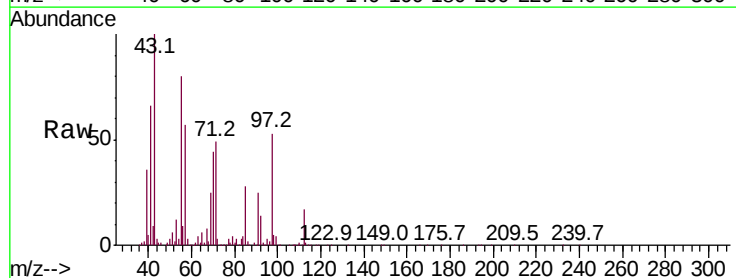
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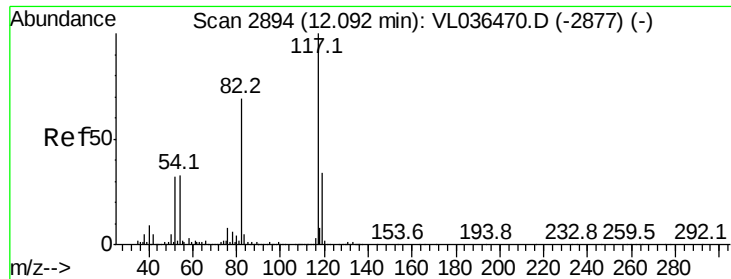
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#53
Toluene
Concen: 0.983 ppbv
RT: 9.80 min Scan# 2182
Delta R.T. -0.01 min
Lab File: VL036752.D
Acq: 8 Apr 2021 15:58

Tgt Ion	Ratio	Lower	Upper
91	100		
92	60.9	48.8	73.2





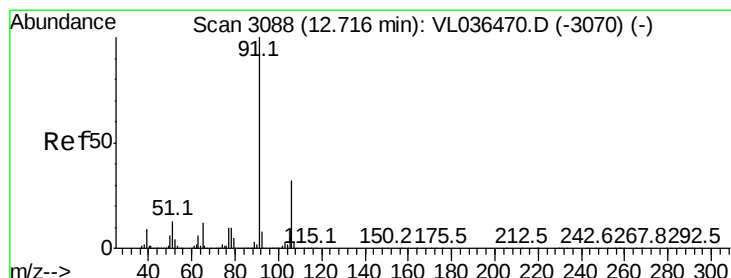
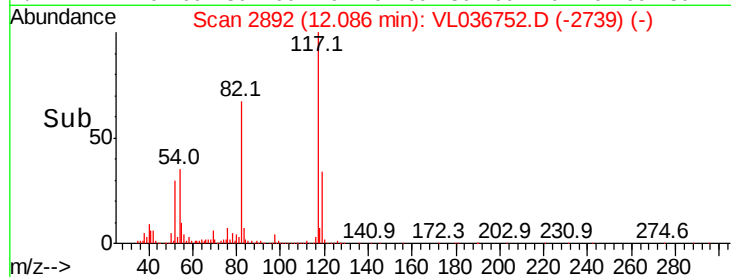
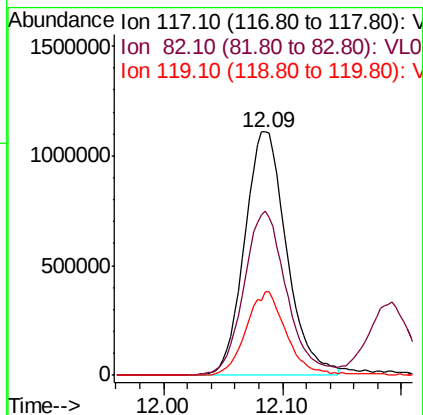
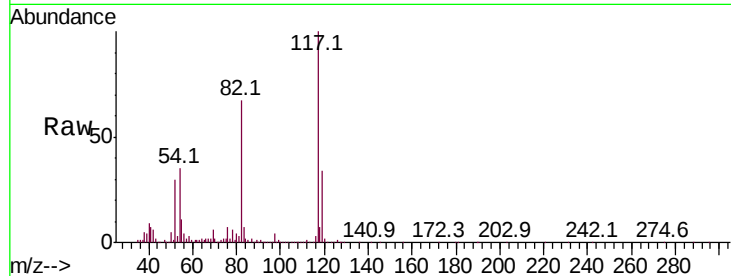
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.09 min Scan# 2892
Delta R.T. -0.01 min
Lab File: VL036752.D
Acq: 8 Apr 2021 15:58

Instrument :
MSVOA_L
ClientSampled :
SG-4

Tot Ion	Ratio	Lower	Upper
117	100		
82	68.0	57.4	86.0
119	33.6	47.4	71.0#

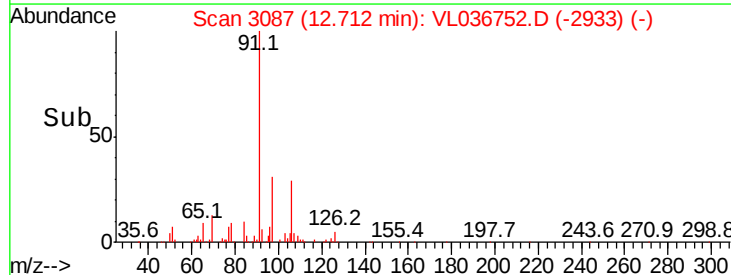
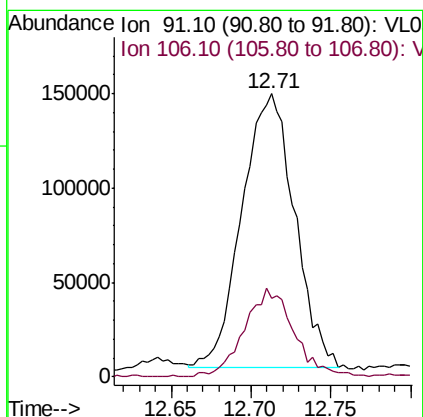
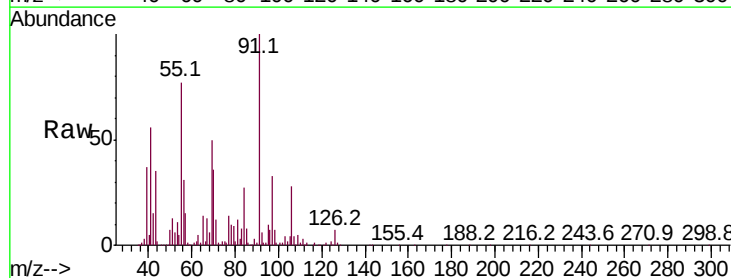
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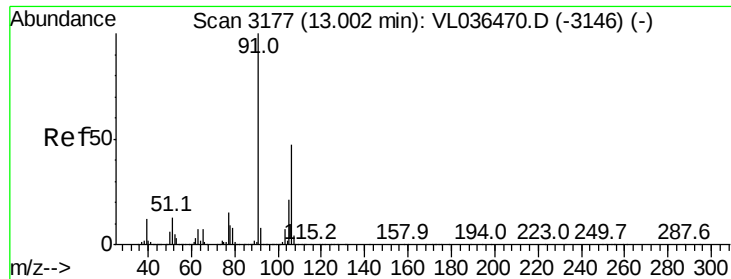
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#58
Ethyl Benzene
Concen: 0.826 ppbv
RT: 12.71 min Scan# 3087
Delta R.T. -0.00 min
Lab File: VL036752.D
Acq: 8 Apr 2021 15:58

Tgt Ion	Ratio	Lower	Upper
91	100		
106	28.9	25.3	37.9





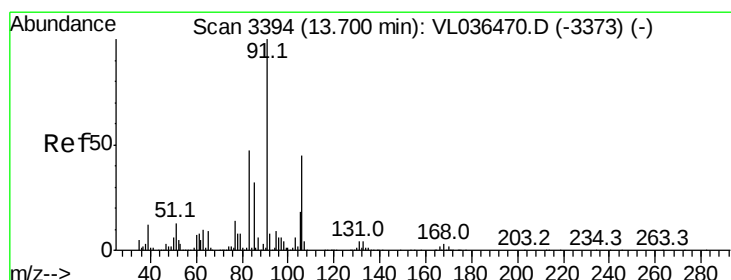
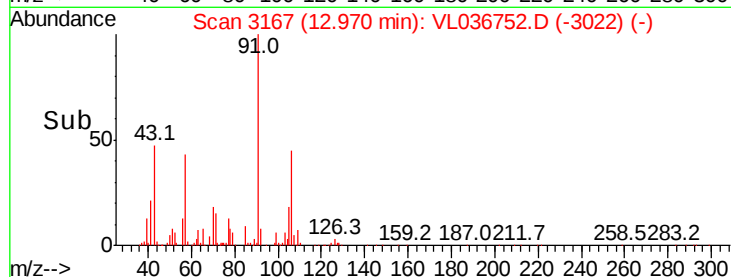
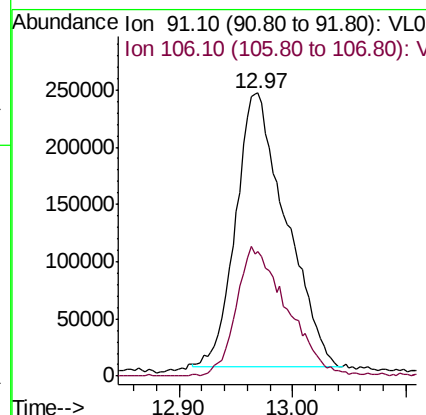
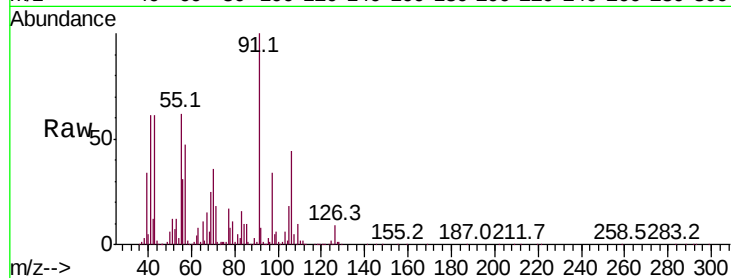
#59
m/p-Xylene
Concen: 2.146 ppbv
RT: 12.97 min Scan# 3167
Delta R.T. -0.03 min
Lab File: VL036752.D
Acq: 8 Apr 2021 15:58

Instrument :
MSVOA_L
ClientSampled :
SG-4

Tot Ion: 91 Resp: 737724
Ion Ratio Lower Upper
91 100
106 48.3 35.3 52.9

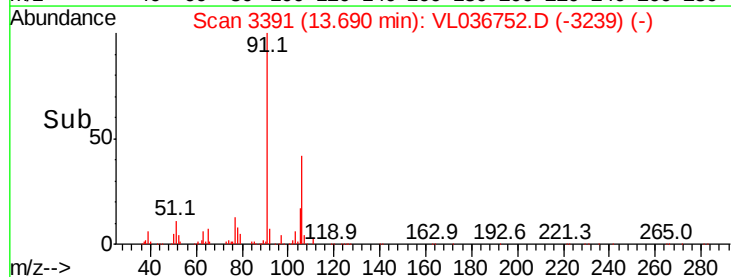
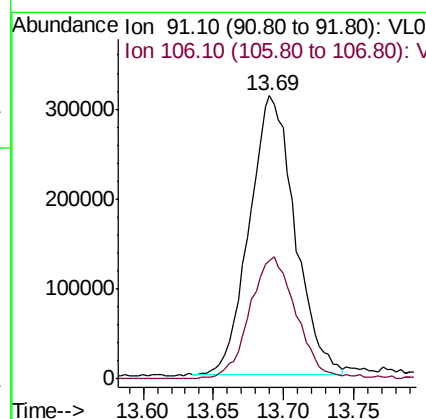
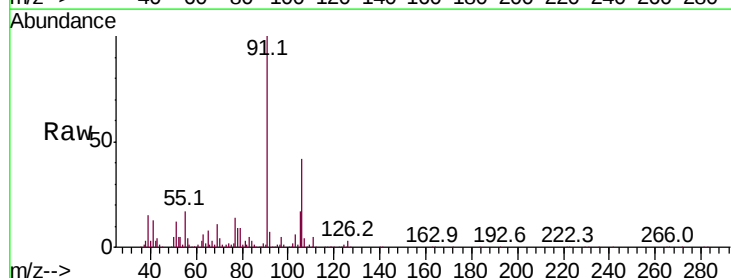
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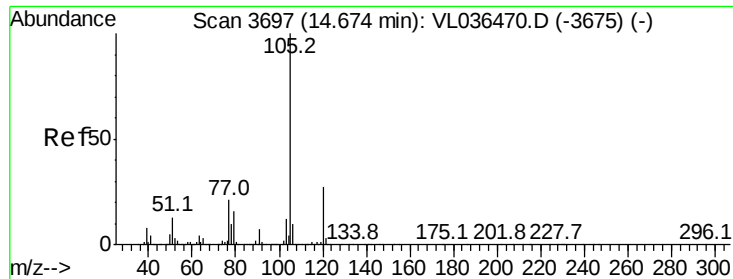
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#60
o-Xylene
Concen: 2.099 ppbv
RT: 13.69 min Scan# 3391
Delta R.T. -0.01 min
Lab File: VL036752.D
Acq: 8 Apr 2021 15:58

Tgt Ion: 91 Resp: 697774
Ion Ratio Lower Upper
91 100
106 45.6 22.3 66.9





#62

Isopropylbenzene

Concen: 0.377 ppbv m

RT: 14.66 min Scan# 3694

Delta R.T. -0.01 min

Lab File: VL036752.D

Acq: 8 Apr 2021 15:58

Instrument :

MSVOA_L

ClientSampled :

SG-4

Tot Ion:105 Resp: 168872

Ion Ratio Lower Upper

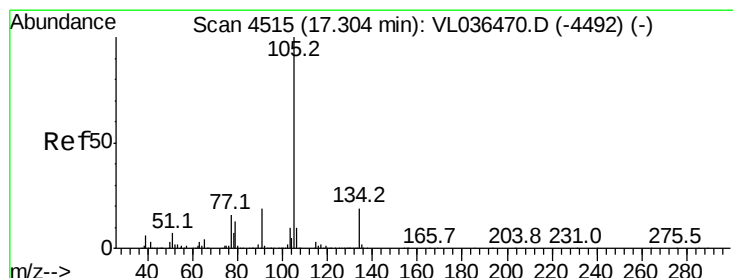
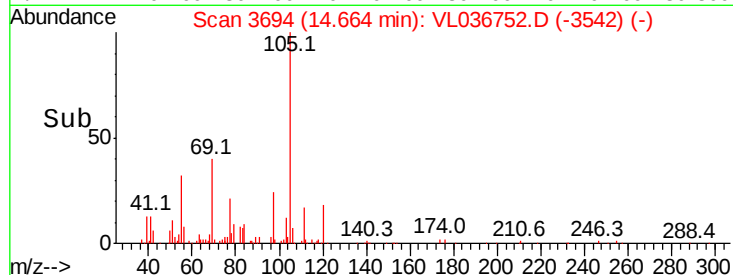
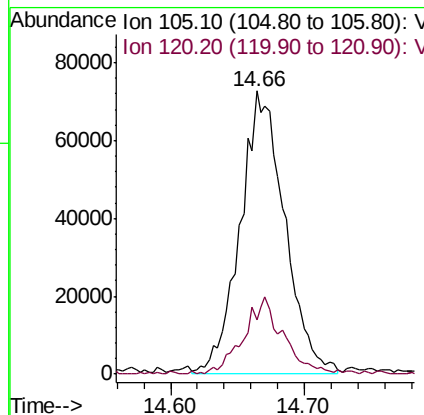
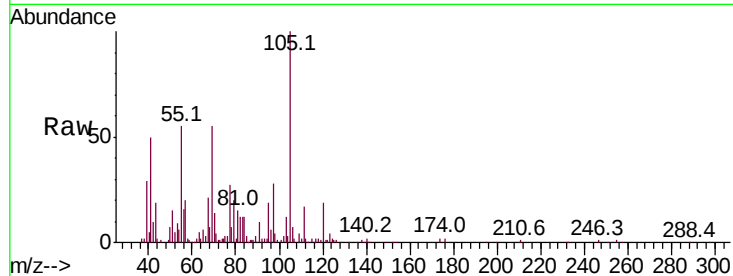
105 100

120 0.0 20.6 31.0#

Manual Integrations
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#67

sec-Butylbenzene

Concen: 0.247 ppbv

RT: 17.30 min Scan# 4514

Delta R.T. -0.00 min

Lab File: VL036752.D

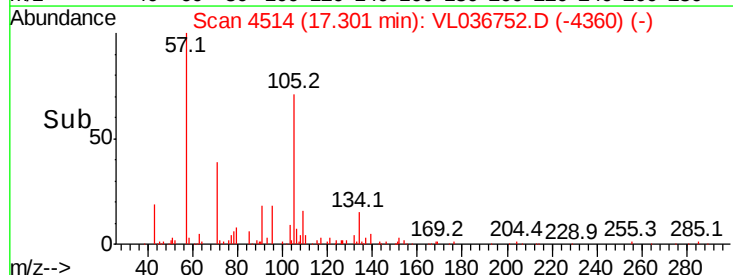
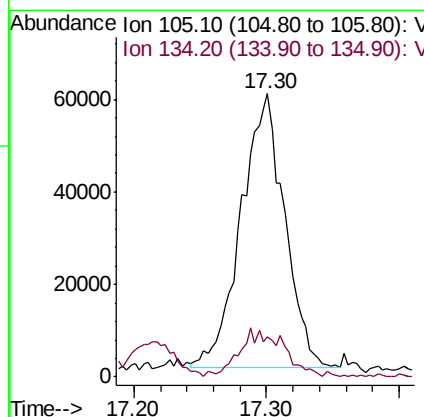
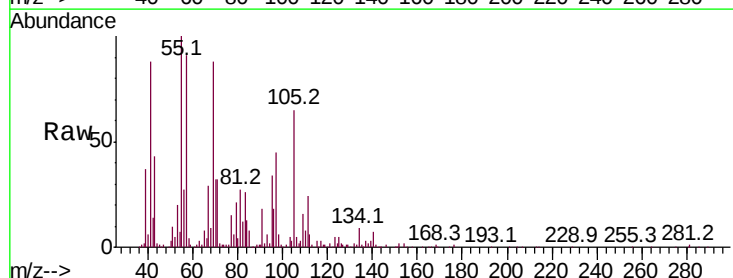
Acq: 8 Apr 2021 15:58

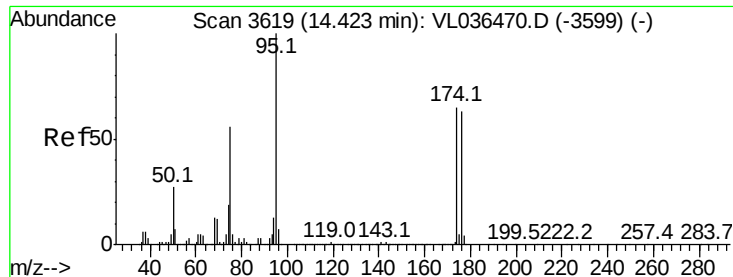
Tgt Ion:105 Resp: 135172

Ion Ratio Lower Upper

105 100

134 18.0 14.7 22.1





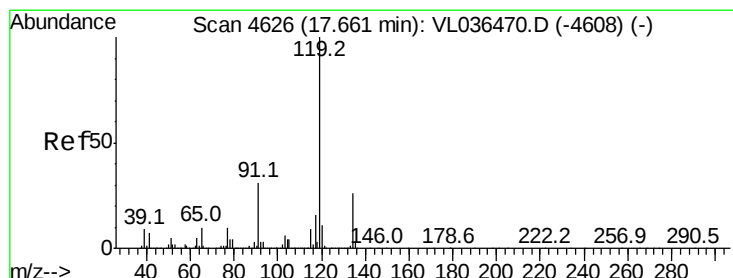
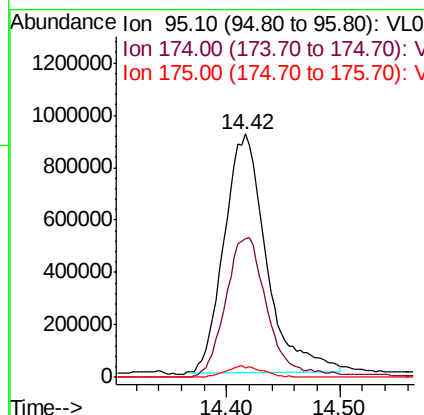
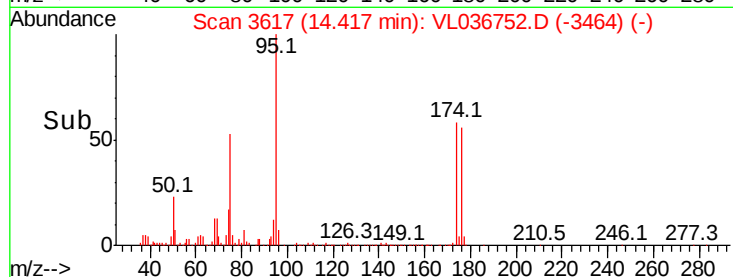
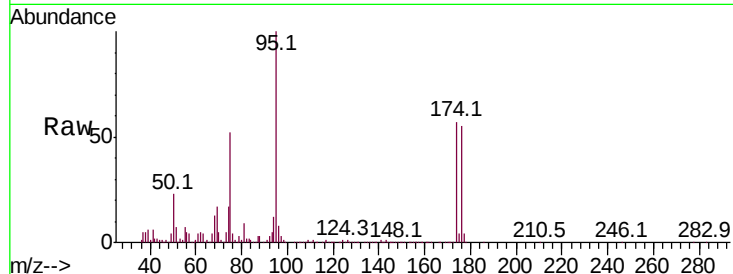
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.966 ppbv
 RT: 14.42 min Scan# 3617
 Delta R.T. -0.01 min
 Lab File: VL036752.D
 Acq: 8 Apr 2021 15:58

Instrument :
 MSVOA_L
 ClientSampleID :
 SG-4

Tot Ion	Ratio	Lower	Upper
95	100		
174	60.2	51.0	76.6
175	4.5	3.9	5.9

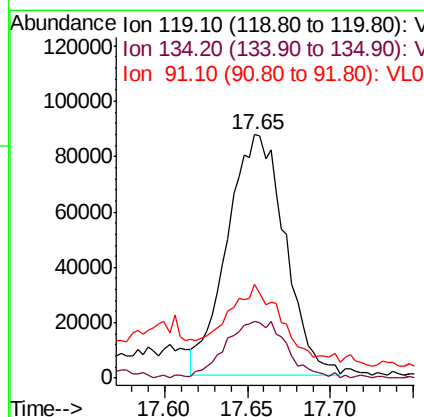
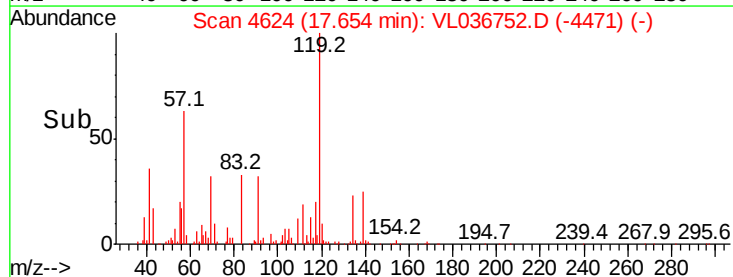
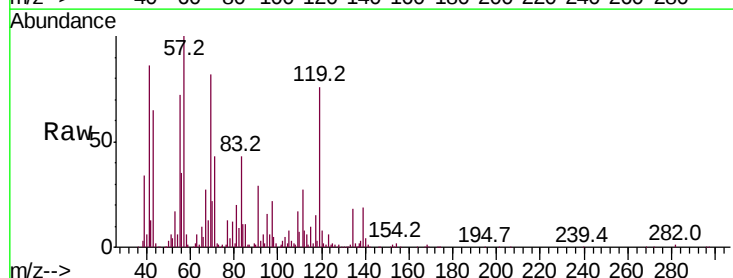
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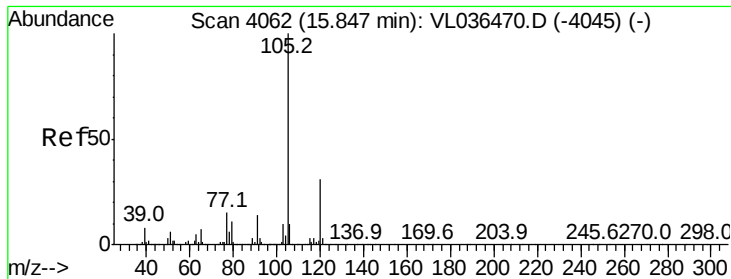
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#69
 p-Isopropyltoluene
 Concen: 0.489 ppbv
 RT: 17.65 min Scan# 4624
 Delta R.T. -0.01 min
 Lab File: VL036752.D
 Acq: 8 Apr 2021 15:58

Tgt Ion	Ratio	Lower	Upper
119	100		
134	25.9	20.6	30.8
91	37.4	25.0	37.6





#72

4-Ethyltoluene

Concen: 0.629 ppbv

RT: 15.84 min Scan# 4060

Delta R.T. -0.01 min

Lab File: VL036752.D

Acq: 8 Apr 2021 15:58

Instrument :

MSVOA_L

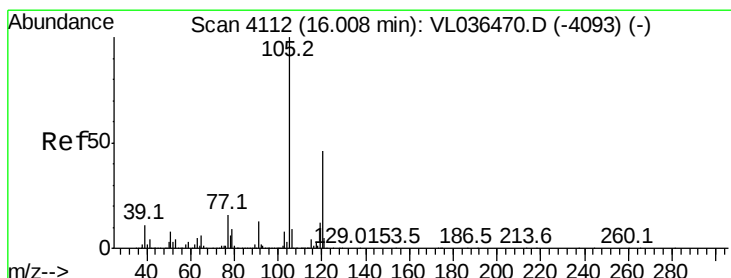
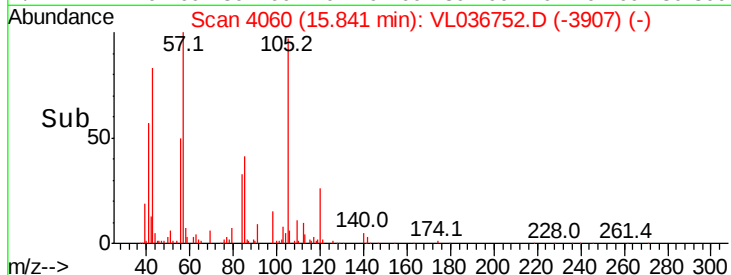
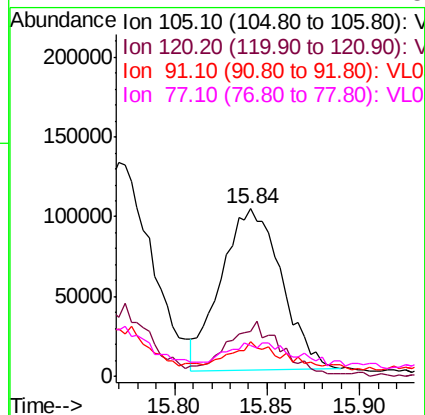
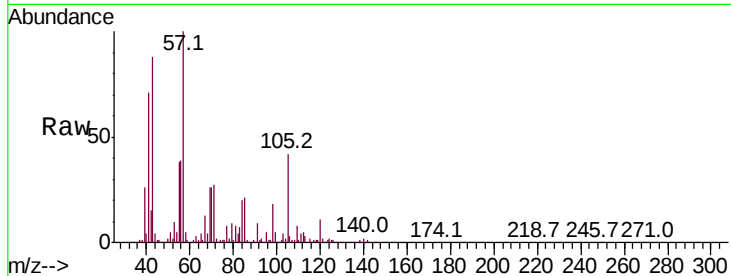
ClientSampled :

SG-4

Tot Ion	Ratio	Resp	Lower	Upper
105	100	228984		
120	30.8	24.0	36.0	
91	18.9	11.0	16.4	
77	22.2	11.7	17.5	

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#73

1,3,5-Trimethylbenzene

Concen: 1.194 ppbv

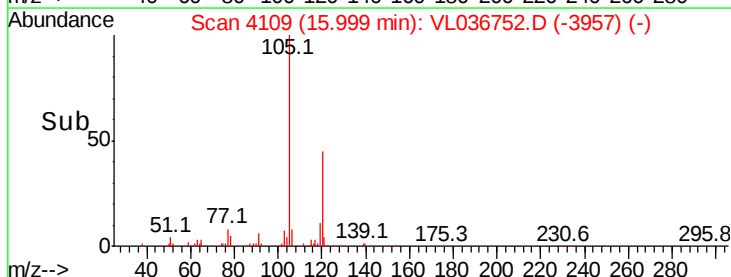
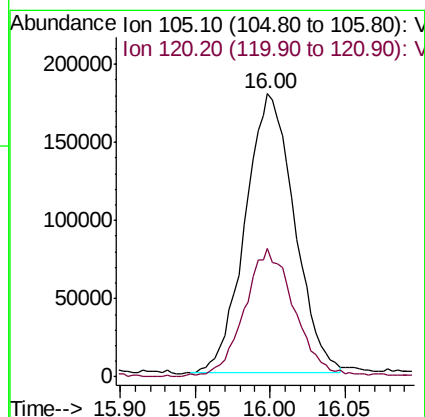
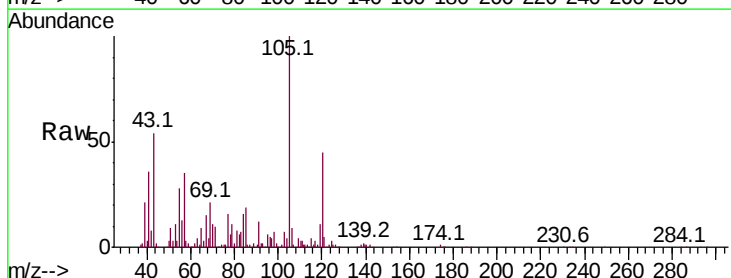
RT: 16.00 min Scan# 4109

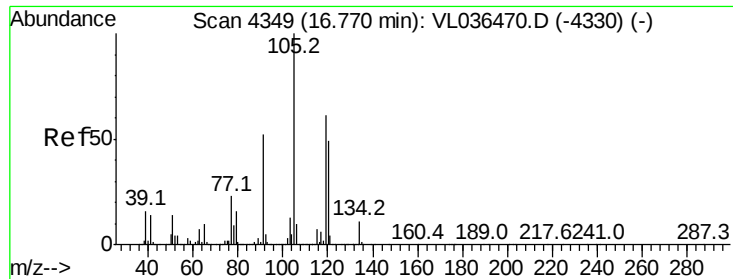
Delta R.T. -0.01 min

Lab File: VL036752.D

Acq: 8 Apr 2021 15:58

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	406083		
120	45.1	36.6	54.8	





#74

1,2,4-Trimethylbenzene

Concen: 1.925 ppbv m

RT: 16.77 min Scan# 4348

Delta R.T. -0.00 min

Lab File: VL036752.D

Acq: 8 Apr 2021 15:58

Instrument :

MSVOA_L

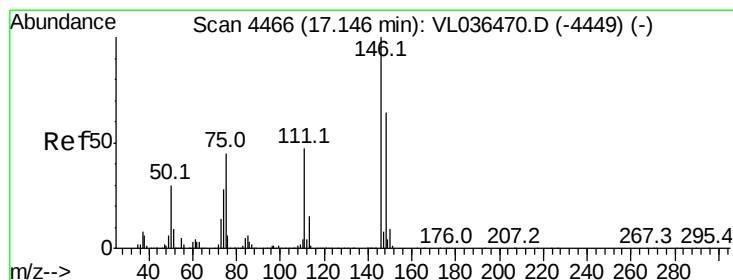
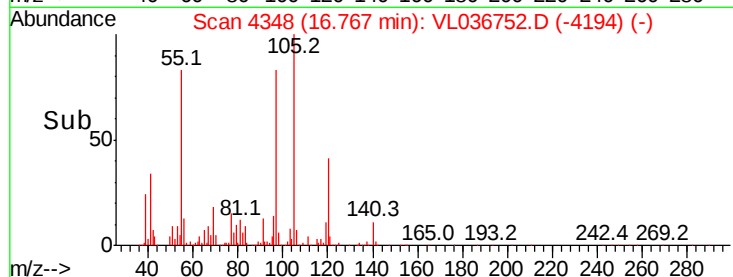
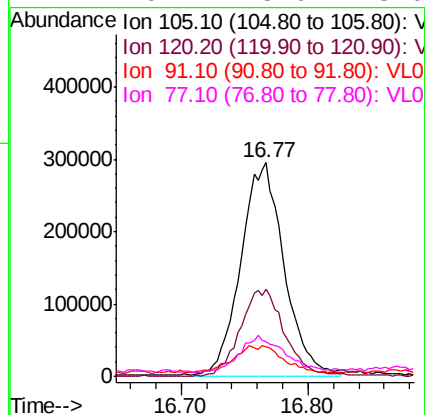
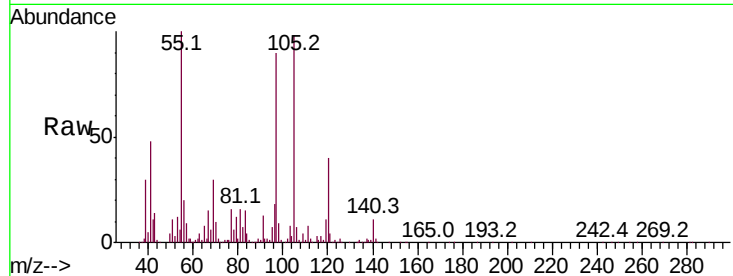
ClientSampled :

SG-4

Tot Ion:	105	Resp:	700417
Ion Ratio	Lower	Upper	
105	100		
120	40.6	39.2	58.8
91	13.7	42.6	64.0#
77	16.4	18.6	28.0#

Manual Integrations
APPROVED

MMDadoda
4/12/2021 11:46:47 AM



#76

1,4-Dichlorobenzene

Concen: 0.138 ppbv m

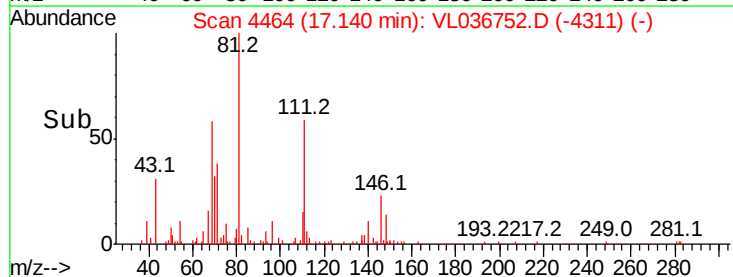
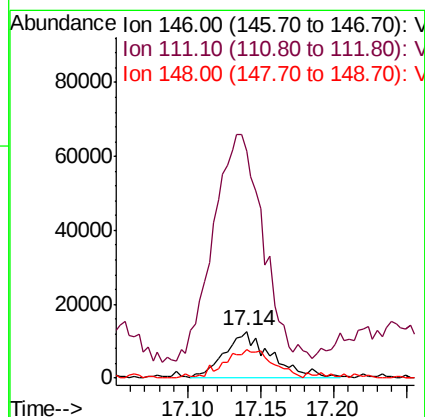
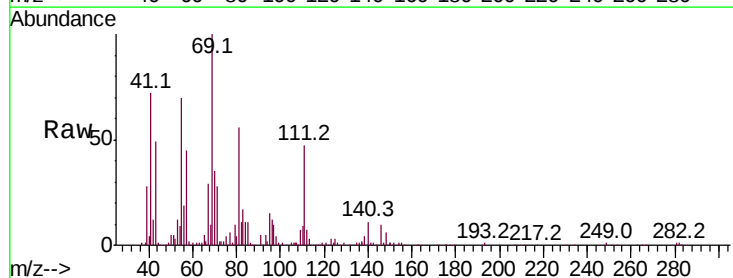
RT: 17.14 min Scan# 4464

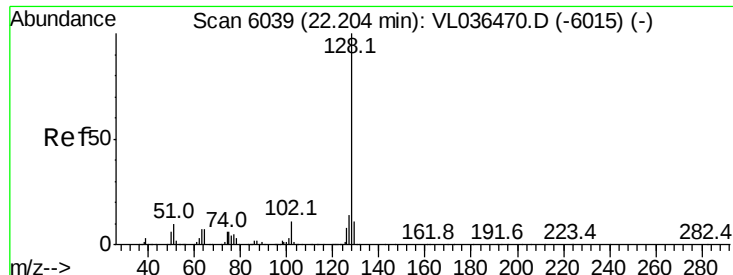
Delta R.T. -0.01 min

Lab File: VL036752.D

Acq: 8 Apr 2021 15:58

Tgt Ion:	146	Resp:	28073
Ion Ratio	Lower	Upper	
146	100		
111	524.2	24.3	72.8#
148	66.0	33.0	98.9





#79

Naphthalene

Concen: 0.331 ppbv m

RT: 22.21 min Scan# 6040

Delta R.T. 0.00 min

Lab File: VL036752.D

Acq: 8 Apr 2021 15:58

Instrument :

MSVOA_L

ClientSampleId :

SG-4

Tot Ion:	128	Resp:	70255
Ion Ratio	Lower	Upper	
128	100		
127	11.0	10.9	16.3
129	11.5	9.0	13.4

Manual Integrations
APPROVED

MMDadoda
4/12/2021 11:46:47 AM

