

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032719\
 Data File : VL033483.D
 Acq On : 28 Mar 2019 00:51
 Operator : SY/AP
 Sample : K1991-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VMP-1

Manual Integrations
 APPROVED

MMDadoda
 4/1/2019 1:26:01 AM

Quant Time: Mar 31 11:25:26 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032519AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Mar 2
 QLast Update : Tue Mar 26 16:00:50 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.75	49	715514	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.28	114	1734026	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	1814547	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.57	95	1453033	10.21	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.10%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.07	85	30254	0.290	ppbv	93
3) Chlorodifluoromethane	3.01	51	22009m	0.267	ppbv	
4) Chloromethane	3.16	50	6798m	0.156	ppbv	
9) Propene	3.04	41	55622m	1.608	ppbv	
10) Heptane	8.25	43	1505305	16.279	ppbv	100
11) Trichlorofluoromethane	4.00	101	31353	0.244	ppbv	96
13) Ethanol	3.64	45	315429	35.236	ppbv	67
15) Acetone	3.89	43	968734	11.260	ppbv	90
17) tert-Butyl alcohol	4.35	59	32845	2.076	ppbv #	73
19) Isopropyl Alcohol	4.02	45	95235	1.750	ppbv #	1
20) Methylene Chloride	4.40	84	197091	5.397	ppbv	94
26) Hexane	5.78	57	1425730	20.088	ppbv #	41
30) Cyclohexane	7.25	84	1229245	21.893	ppbv	98
34) 2-Butanone	5.32	43	128340	1.232	ppbv	96
35) Carbon Tetrachloride	7.13	117	8237m	0.067	ppbv	
36) Benzene	7.00	78	29803m	0.205	ppbv	
53) Toluene	9.94	91	445358	2.634	ppbv	100
58) Ethyl Benzene	12.86	91	77822	0.321	ppbv	99
59) m/p-Xylene	13.11	91	277948	1.284	ppbv #	100
60) o-Xylene	13.84	91	88342	0.422	ppbv	99
62) Isopropylbenzene	14.82	105	29571m	0.100	ppbv	
73) 1,3,5-Trimethylbenzene	16.15	105	52896m	0.235	ppbv	
74) 1,2,4-Trimethylbenzene	16.92	105	83985	0.348	ppbv #	62
76) 1,4-Dichlorobenzene	17.30	146	58794	0.405	ppbv	86

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

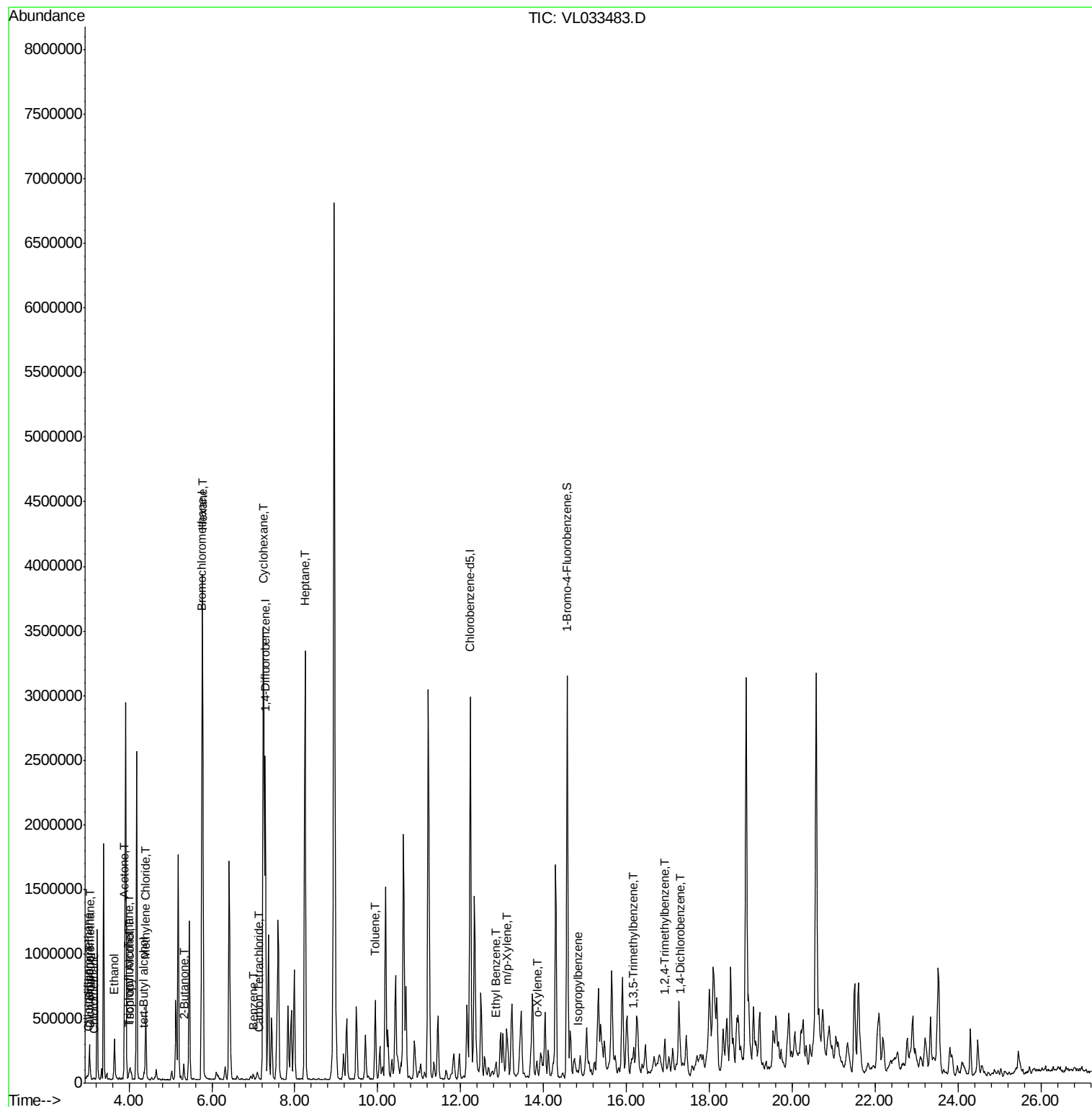
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL032719\
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Quant Time: Mar 31 11:25:26 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032519AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue Mar
QLast Update : Tue Mar 26 16:00:50 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.75 min Scan# 876

Delta R.T. -0.01 min

Lab File: VL033483.D

Acq: 28 Mar 2019 00:51

Instrument :

MSVOA_L

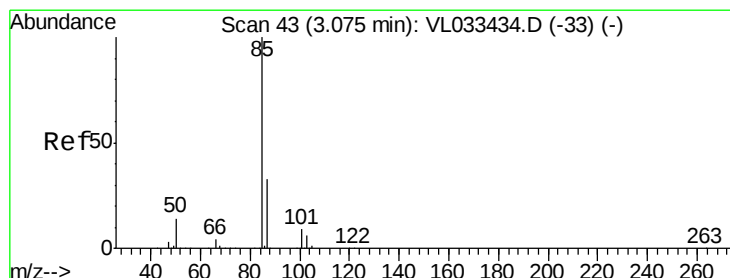
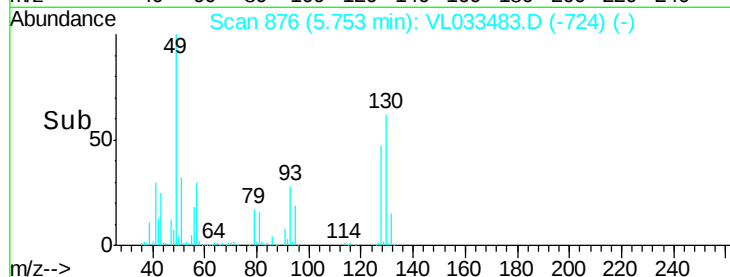
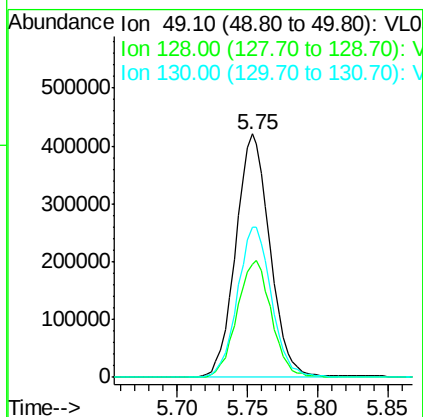
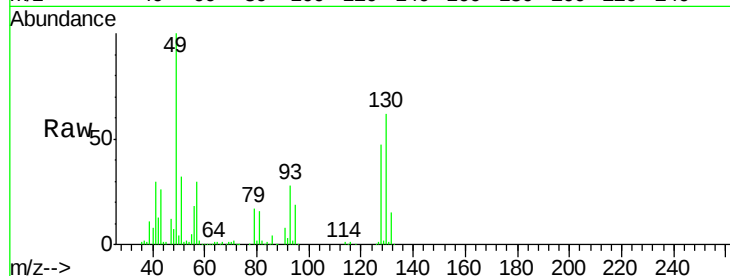
ClientSampled :

VMP-1

Tot Ion:	49	Resp:	715514
Ion	Ratio	Lower	Upper
49	100		
128	48.2	24.0	72.0
130	61.6	31.2	93.6

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#2

Dichlorodifluoromethane

Concen: 0.290 ppbv

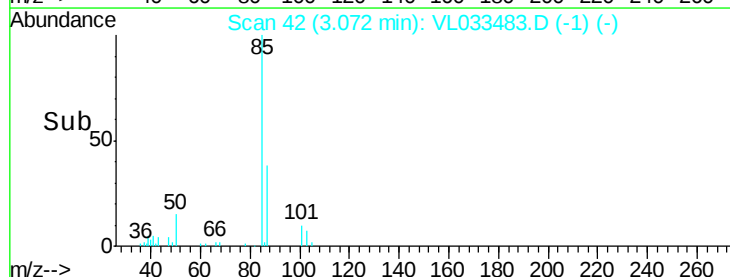
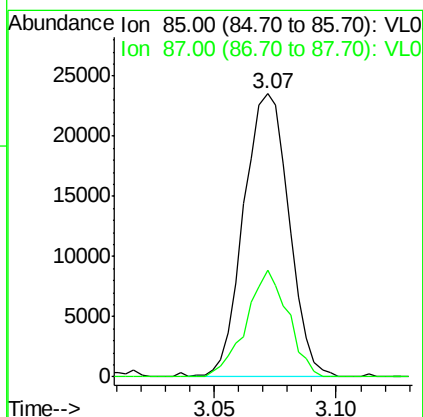
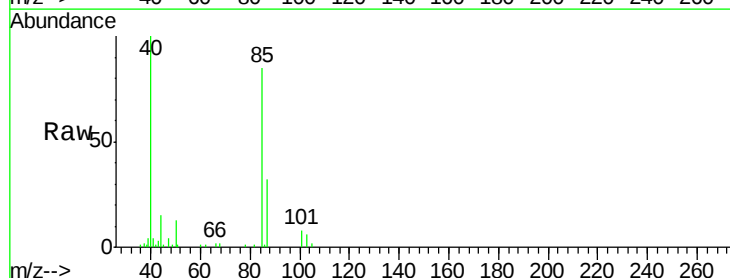
RT: 3.07 min Scan# 42

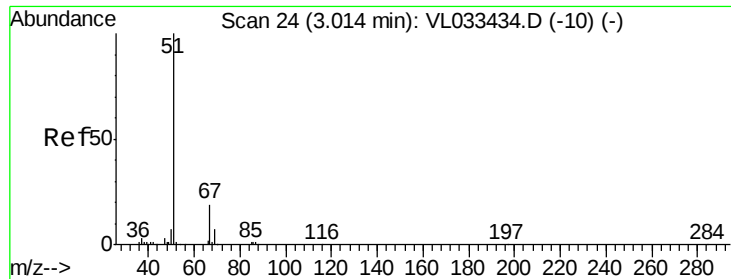
Delta R.T. -0.00 min

Lab File: VL033483.D

Acq: 28 Mar 2019 00:51

Tgt Ion:	85	Resp:	30254
Ion	Ratio	Lower	Upper
85	100		
87	37.6	26.7	40.1





#3

Chlorodifluoromethane

Concen: 0.267 ppbv m

RT: 3.01 min Scan# 22

Delta R.T. -0.01 min

Lab File: VL033483.D

Acq: 28 Mar 2019 00:51

Instrument :

MSVOA_L

ClientSampleId :

VMP-1

Tot Ion: 51 Resp: 22009

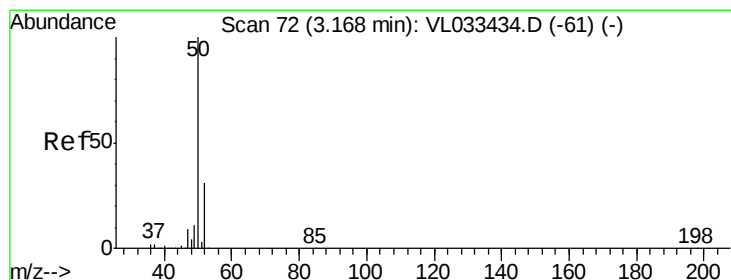
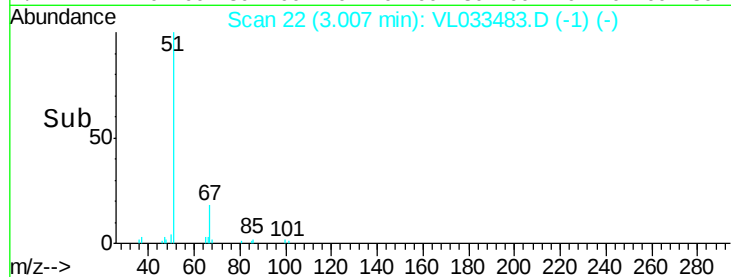
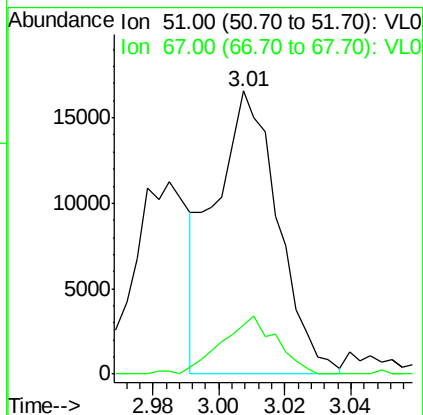
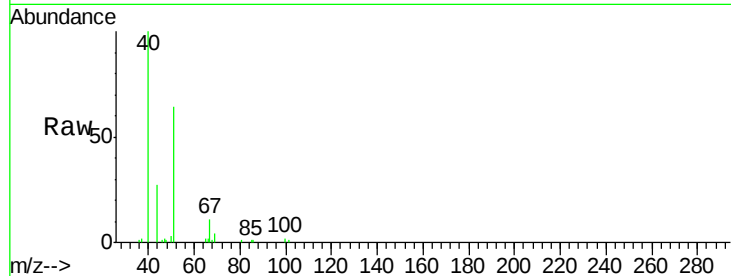
Ion Ratio Lower Upper

51 100

67 18.0 15.7 23.5

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#4

Chloromethane

Concen: 0.156 ppbv m

RT: 3.16 min Scan# 69

Delta R.T. -0.01 min

Lab File: VL033483.D

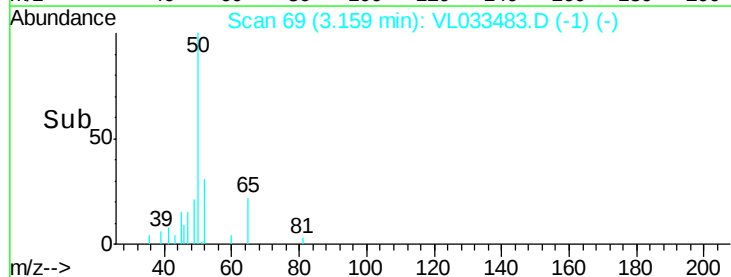
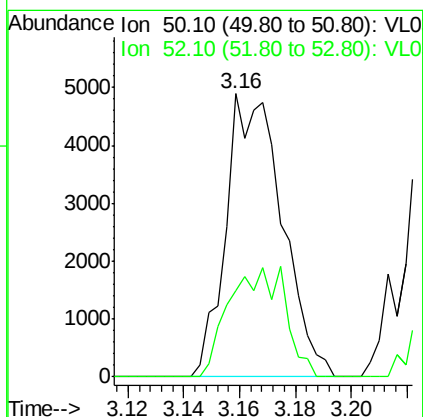
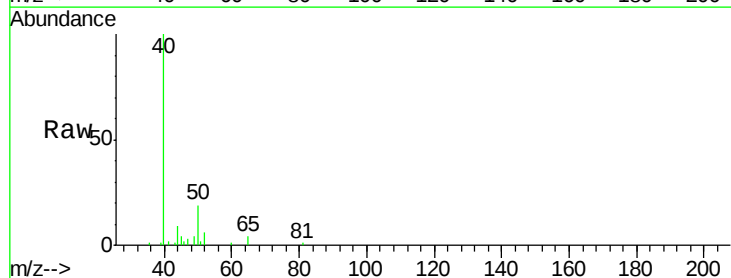
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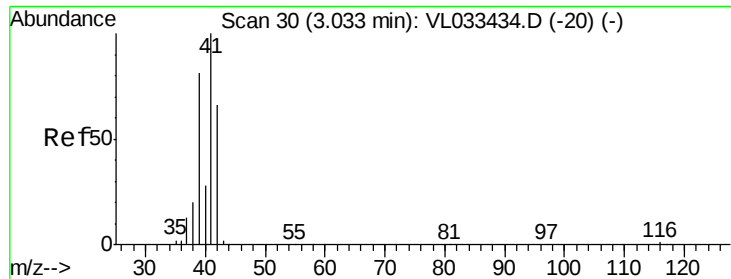
Tgt Ion: 50 Resp: 6798

Ion Ratio Lower Upper

50 100

52 30.6 25.0 37.6





#9

Propene

Concen: 1.608 ppbv m

RT: 3.04 min Scan# 33

Delta R.T. 0.01 min

Lab File: VL033483.D

Acq: 28 Mar 2019 00:51

Instrument :

MSVOA_L

ClientSampleId :

VMP-1

Tot Ion: 41 Resp: 55622

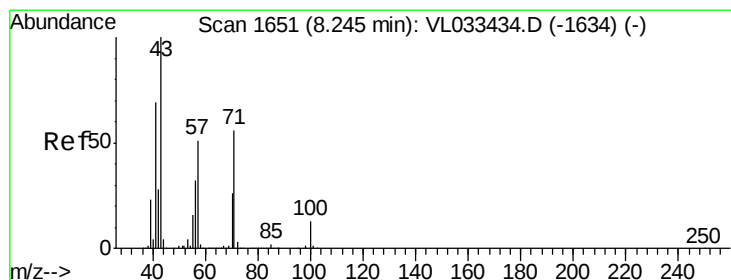
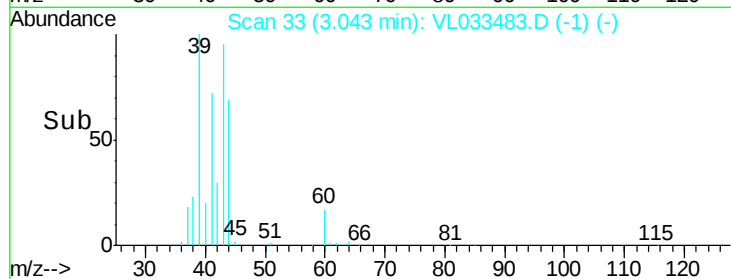
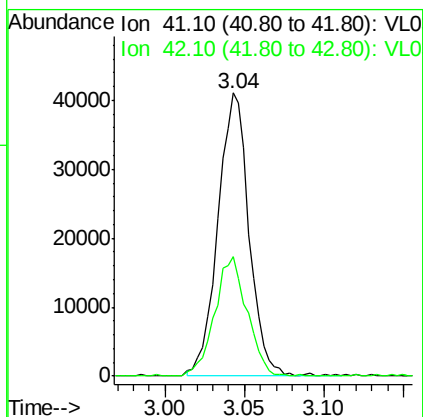
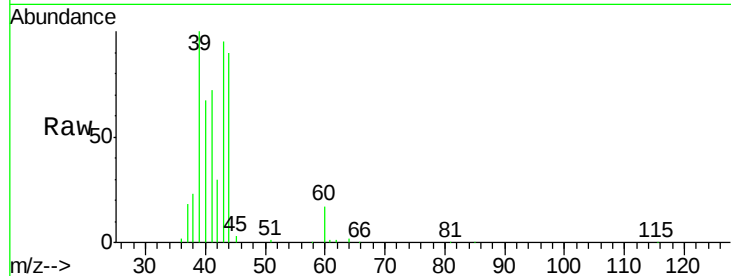
Ion Ratio Lower Upper

41 100

42 357.2 53.9 80.9#

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#10

Heptane

Concen: 16.279 ppbv

RT: 8.25 min Scan# 1651

Delta R.T. -0.00 min

Lab File: VL033483.D

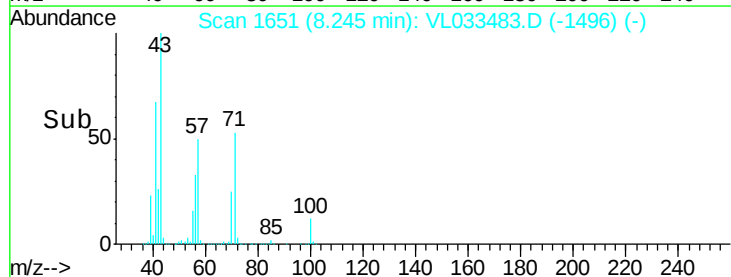
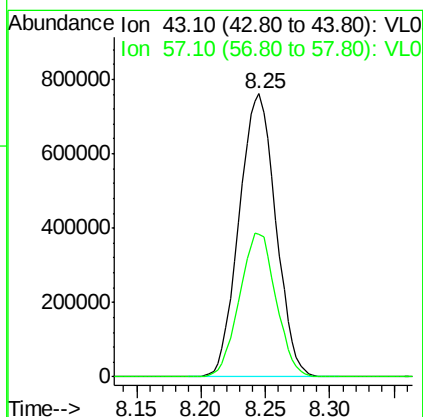
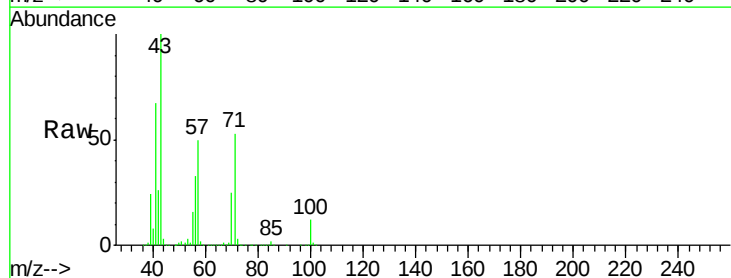
Acq: 28 Mar 2019 00:51

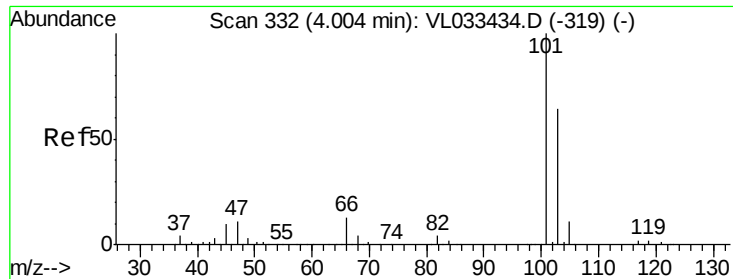
Tgt Ion: 43 Resp: 1505305

Ion Ratio Lower Upper

43 100

57 50.6 40.6 60.8





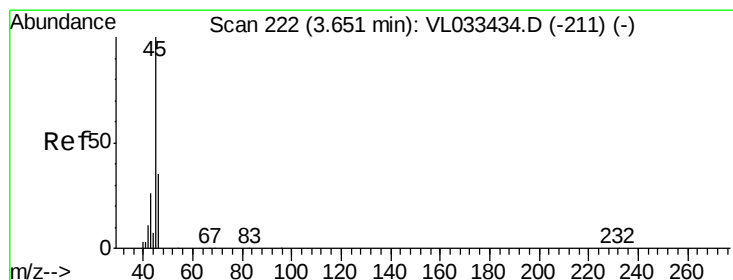
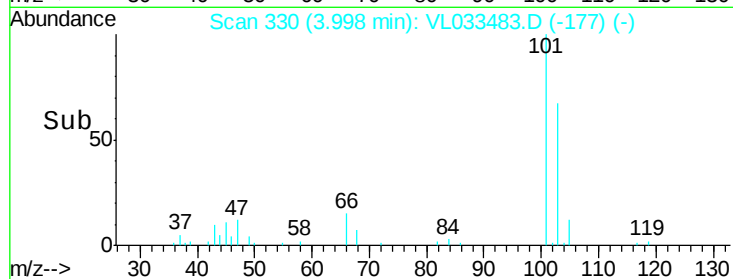
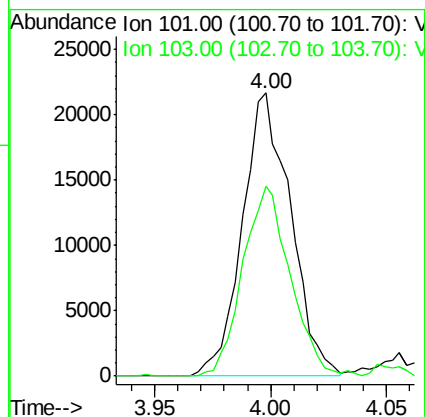
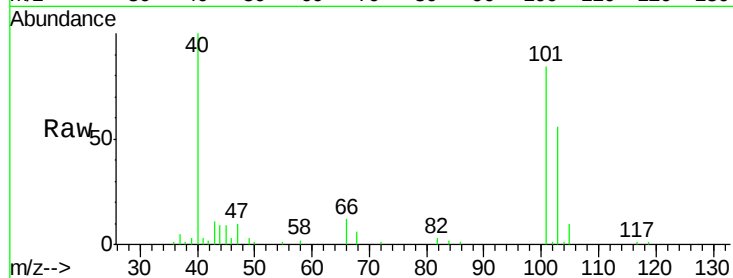
#11
 Trichlorofluoromethane
 Concen: 0.244 ppbv
 RT: 4.00 min Scan# 330
 Delta R.T. -0.01 min
 Lab File: VL033483.D
 Acq: 28 Mar 2019 00:51

Instrument :
 MSVOA_L
 ClientSampleId :
 VMP-1

Tot Ion:101 Resp: 31353
 Ion Ratio Lower Upper
 101 100
 103 66.9 51.3 76.9

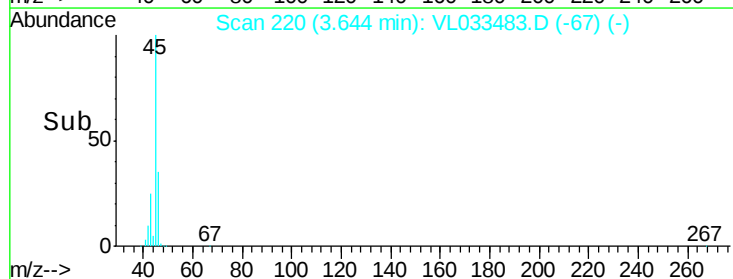
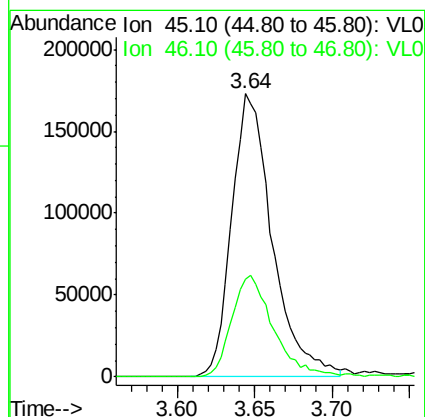
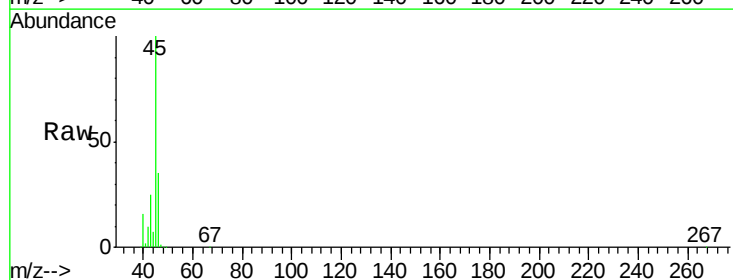
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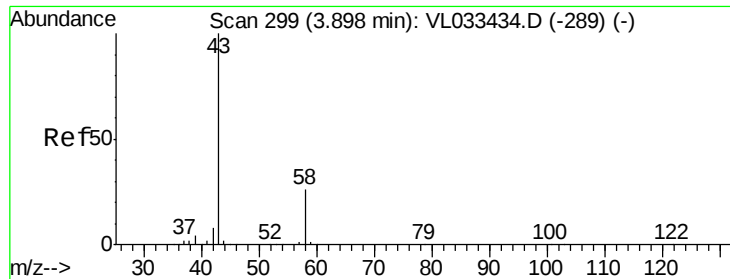
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#13
 Ethanol
 Concen: 35.236 ppbv
 RT: 3.64 min Scan# 220
 Delta R.T. -0.01 min
 Lab File: VL033483.D
 Acq: 28 Mar 2019 00:51

Tgt Ion: 45 Resp: 315429
 Ion Ratio Lower Upper
 45 100
 46 37.7 25.4 101.8





#15

Acetone

Concen: 11.260 ppbv

RT: 3.89 min Scan# 296

Delta R.T. -0.01 min

Lab File: VL033483.D

Acq: 28 Mar 2019 00:51

Instrument :

MSVOA_L

ClientSampleId :

VMP-1

Tot Ion: 43 Resp: 968734

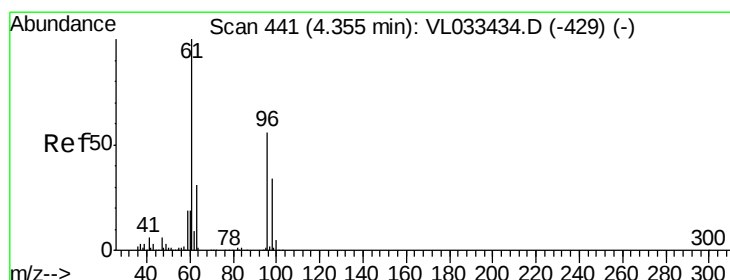
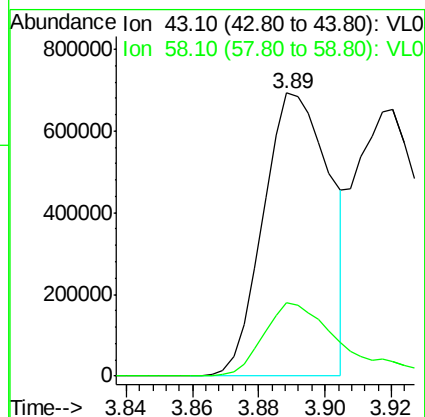
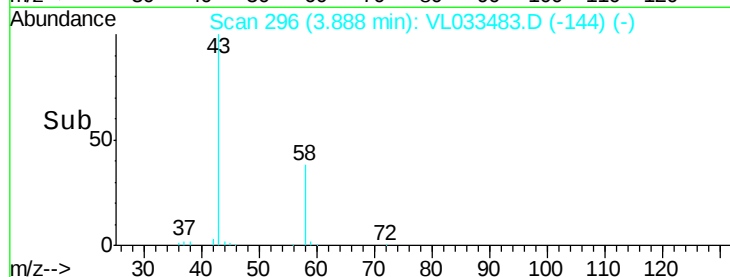
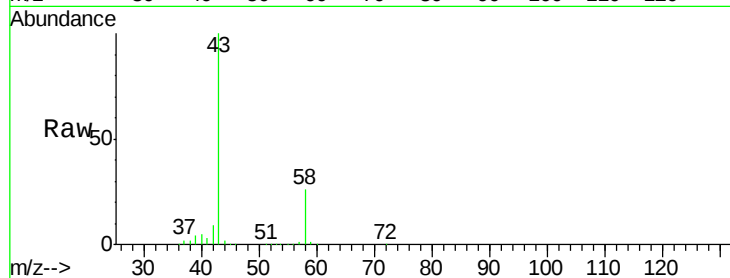
Ion Ratio Lower Upper

43 100

58 30.6 20.5 30.7

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#17

tert-Butyl alcohol

Concen: 2.076 ppbv

RT: 4.35 min Scan# 441

Delta R.T. -0.00 min

Lab File: VL033483.D

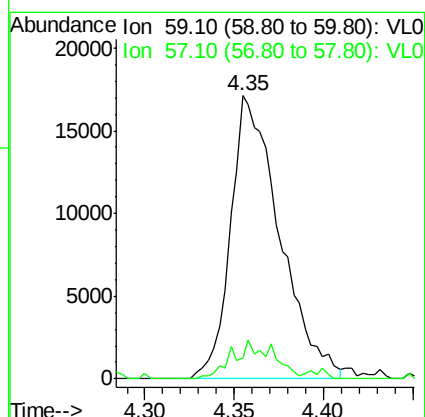
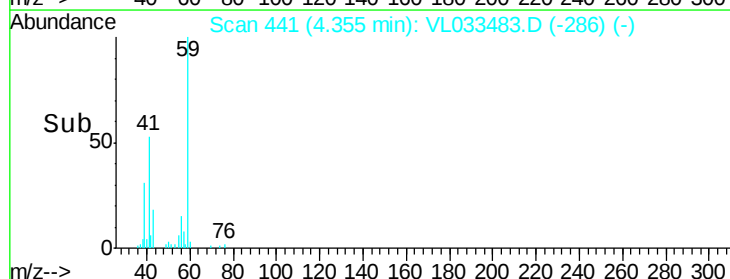
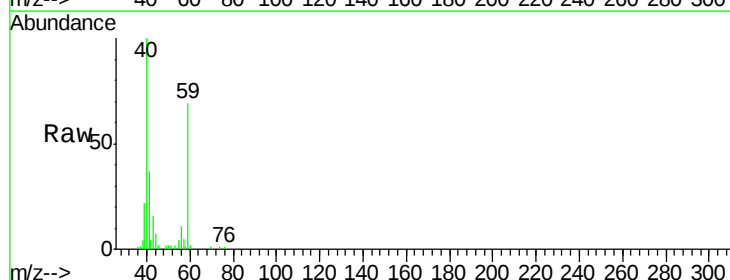
Acq: 28 Mar 2019 00:51

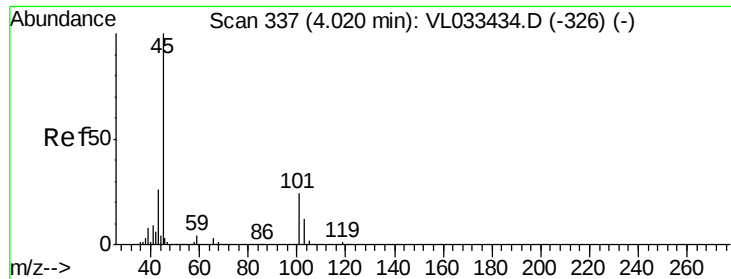
Tgt Ion: 59 Resp: 32845

Ion Ratio Lower Upper

59 100

57 0.0 7.8 11.8#





#19

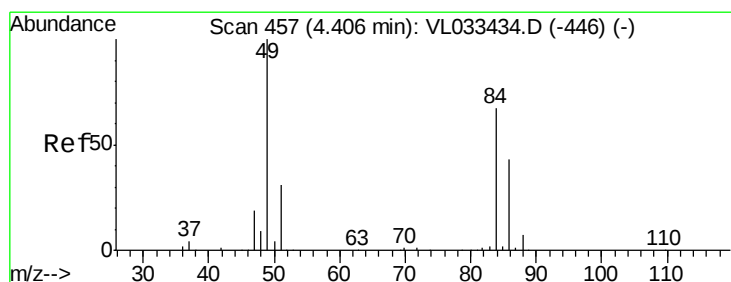
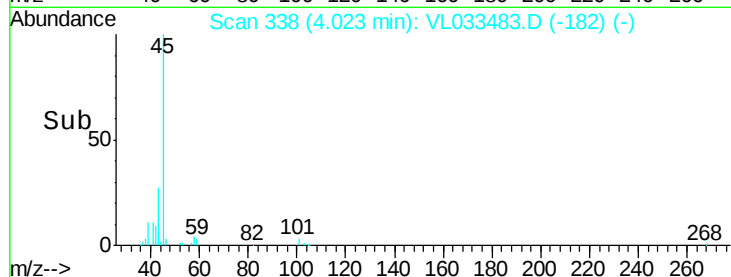
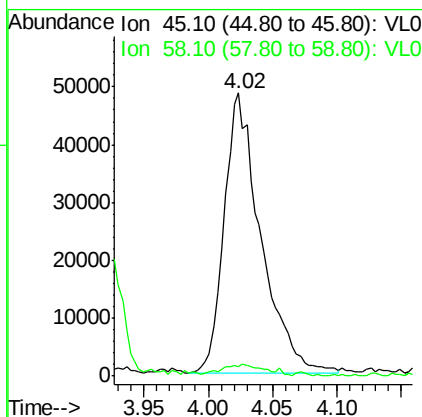
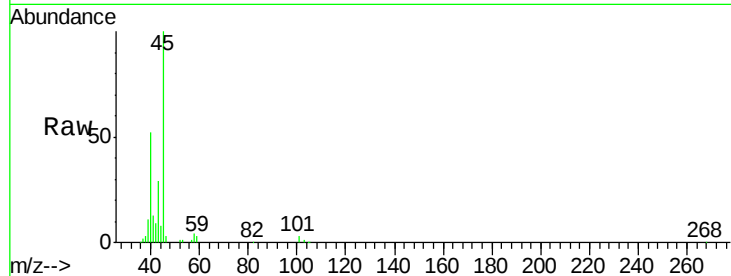
Isopropyl Alcohol
 Concen: 1.750 ppbv
 RT: 4.02 min Scan# 338
 Delta R.T. 0.00 min
 Lab File: VL033483.D
 Acq: 28 Mar 2019 00:51

Instrument :
 MSVOA_L
 ClientSampleId :
 VMP-1

Tot Ion: 45 Resp: 95235
 Ion Ratio Lower Upper
 45 100
 58 311.8 1.4 2.2#

Manual Integrations
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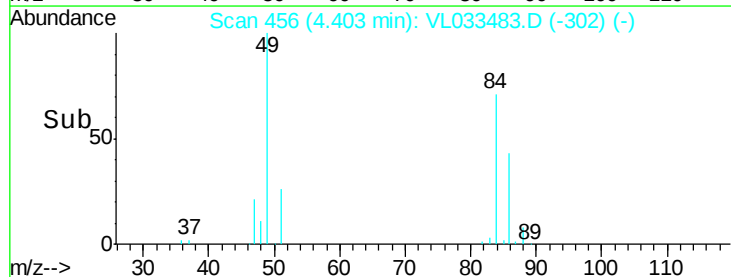
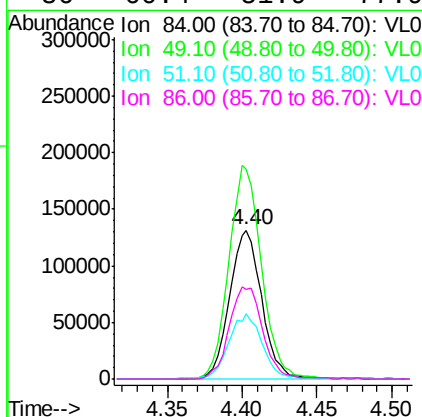
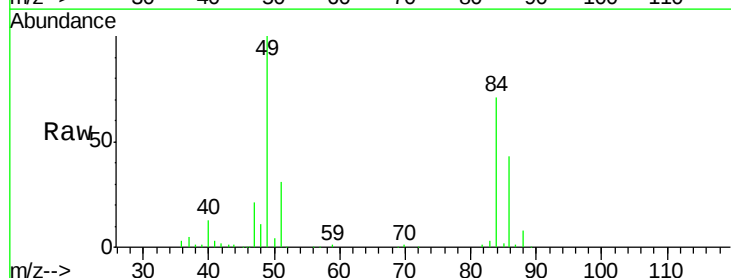
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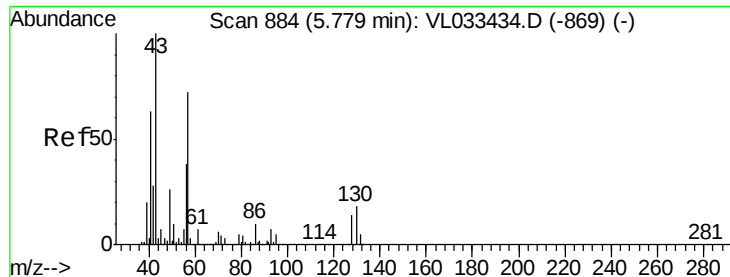


#20

Methylene Chloride
 Concen: 5.397 ppbv
 RT: 4.40 min Scan# 456
 Delta R.T. -0.00 min
 Lab File: VL033483.D
 Acq: 28 Mar 2019 00:51

Tgt Ion: 84 Resp: 197091
 Ion Ratio Lower Upper
 84 100
 49 141.2 120.0 180.0
 51 43.9 36.7 55.1
 86 60.4 51.9 77.9





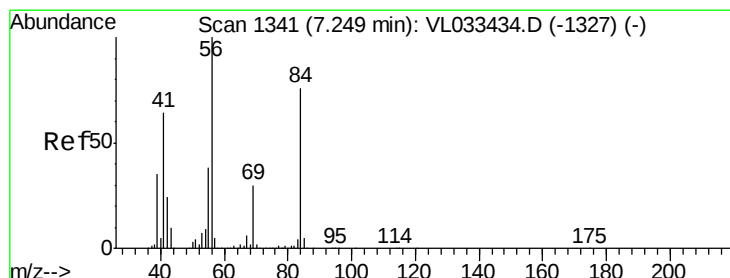
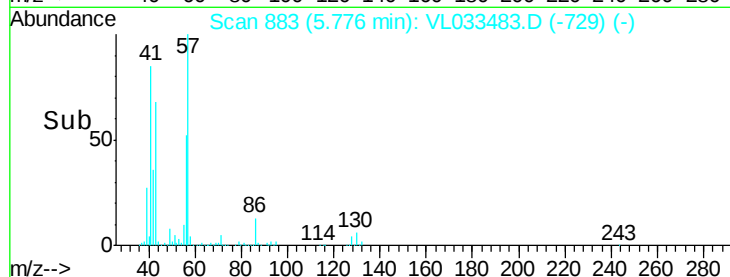
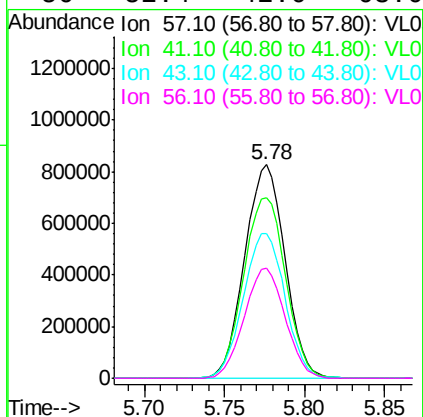
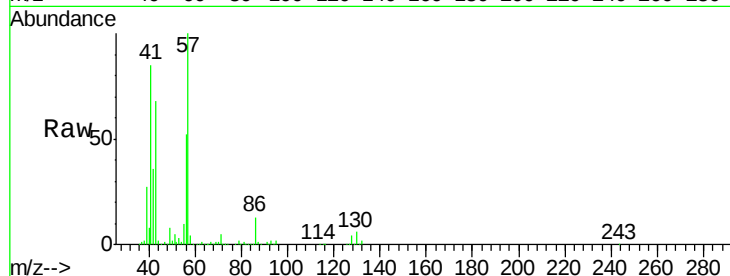
#26
Hexane
Concen: 20.088 ppbv
RT: 5.78 min Scan# 883
Delta R.T. -0.00 min
Lab File: VL033483.D
Acq: 28 Mar 2019 00:51

Instrument :
MSVOA_L
ClientSampleId :
VMP-1

Tot Ion	Ratio	Lower	Upper
57	100		
41	88.6	70.7	106.1
43	70.2	182.6	274.0#
56	52.4	42.0	63.0

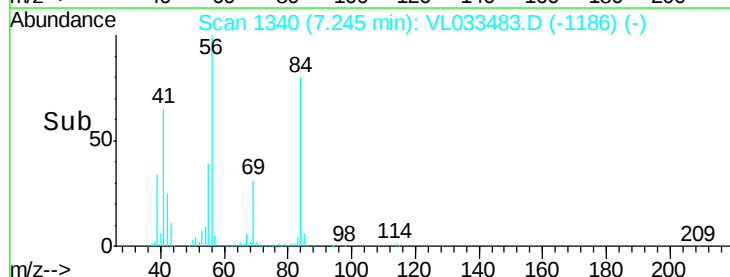
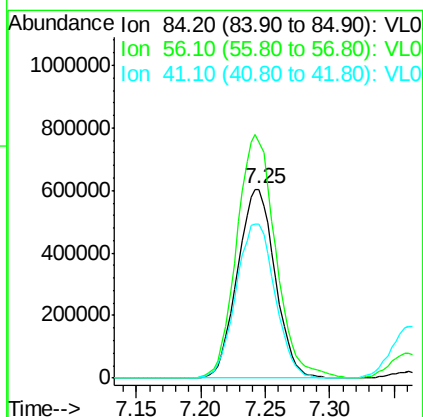
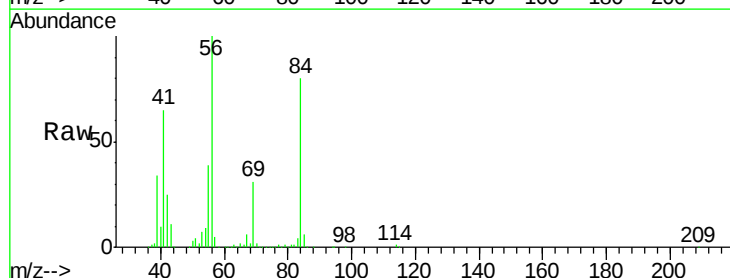
Manual Integrations
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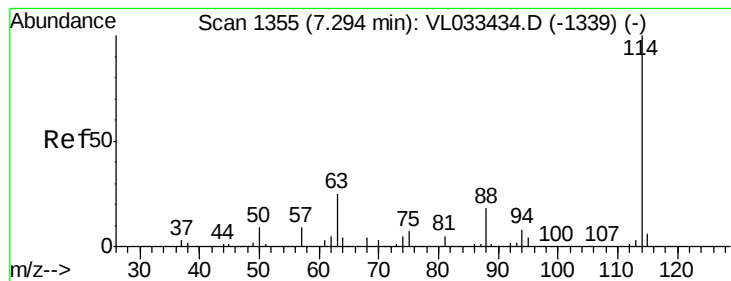
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#30
Cyclohexane
Concen: 21.893 ppbv
RT: 7.25 min Scan# 1340
Delta R.T. -0.00 min
Lab File: VL033483.D
Acq: 28 Mar 2019 00:51

Tgt Ion	Ratio	Lower	Upper
84	100		
56	133.1	109.7	164.5
41	84.4	68.2	102.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.28 min Scan# 1352

Delta R.T. -0.01 min

Lab File: VL033483.D

Acq: 28 Mar 2019 00:51

Instrument :

MSVOA_L

ClientSampleId :

VMP-1

Tot Ion:114 Resp: 1734026

Ion Ratio Lower Upper

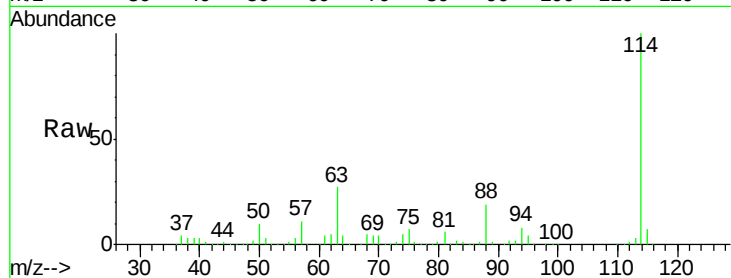
114 100

63 27.5 21.5 32.3

88 18.6 14.5 21.7

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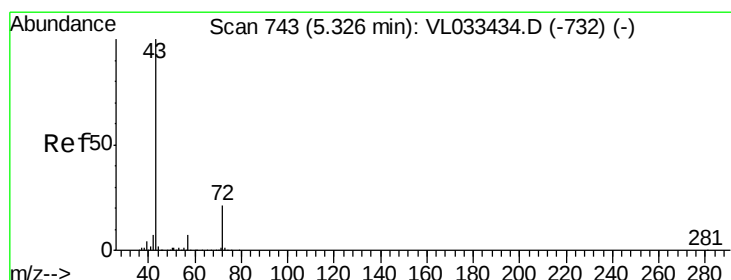
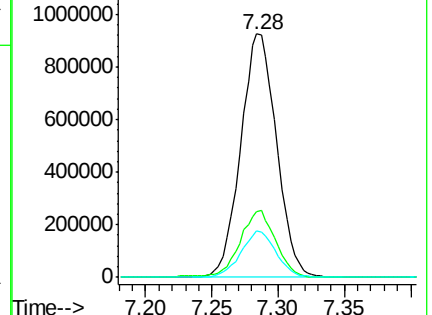
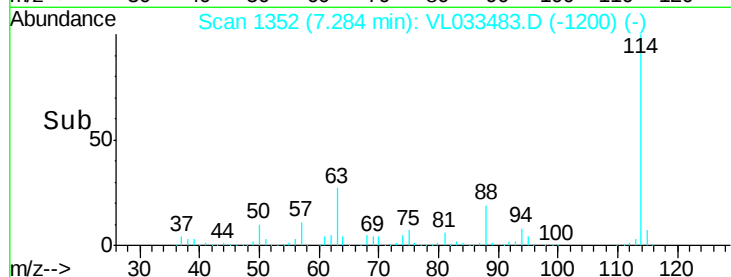
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Abundance Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 1.232 ppbv

RT: 5.32 min Scan# 742

Delta R.T. -0.00 min

Lab File: VL033483.D

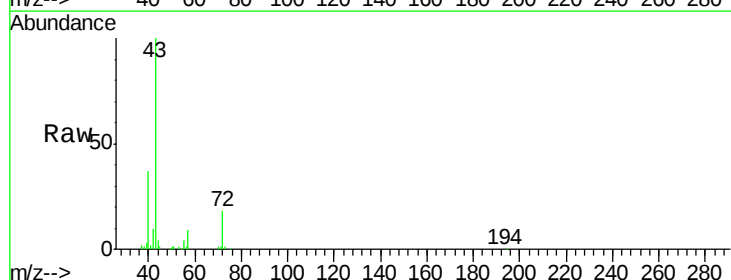
Acq: 28 Mar 2019 00:51

Tgt Ion: 43 Resp: 128340

Ion Ratio Lower Upper

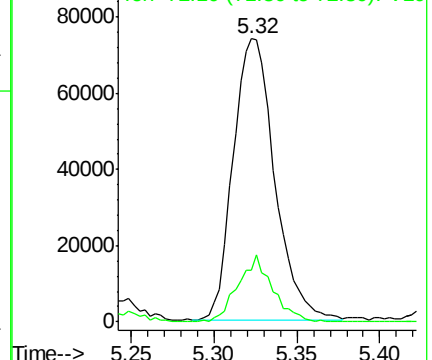
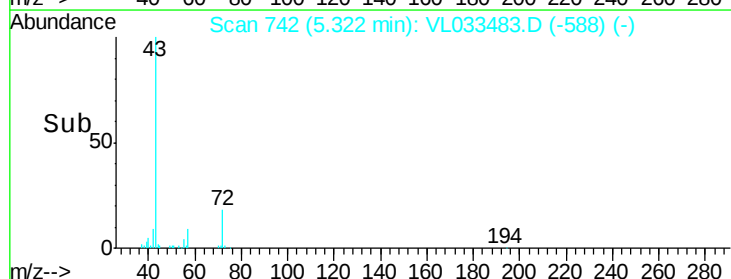
43 100

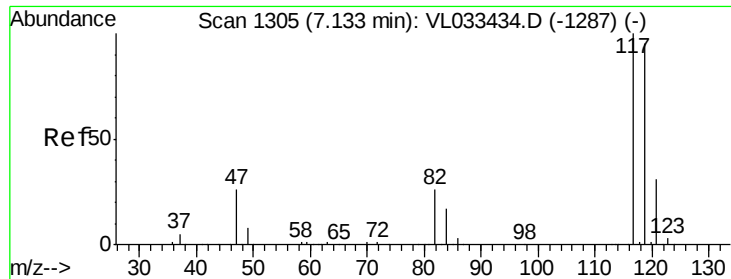
72 19.8 17.4 26.2



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 0.067 ppbv m

RT: 7.13 min Scan# 1305

Delta R.T. -0.00 min

Lab File: VL033483.D

Acq: 28 Mar 2019 00:51

Instrument :

MSVOA_L

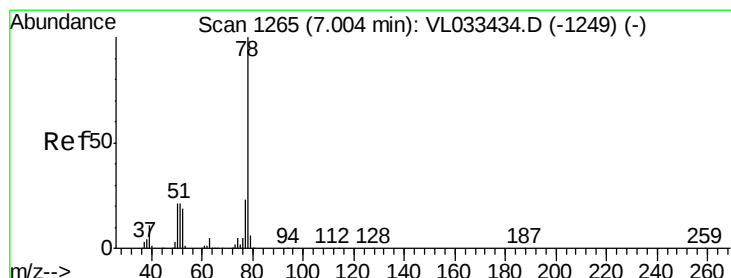
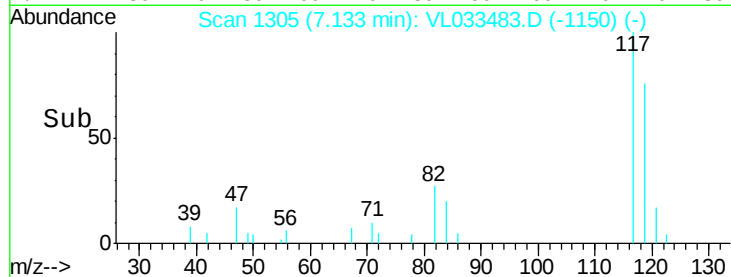
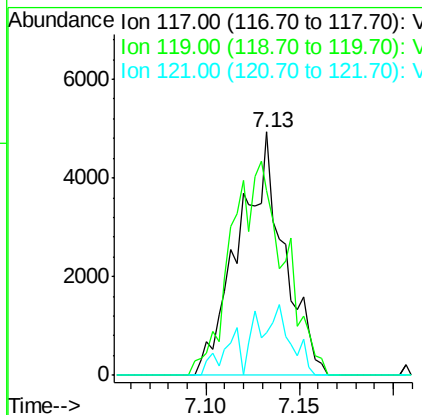
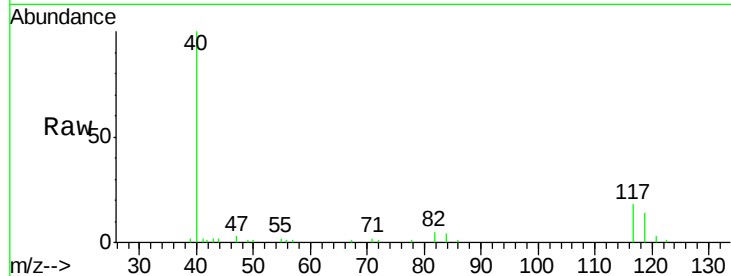
ClientSampleId :

VMP-1

Tot Ion	Ratio	Lower	Upper
117	100		
119	76.1	75.8	113.8
121	17.4	24.7	37.1#

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#36

Benzene

Concen: 0.205 ppbv m

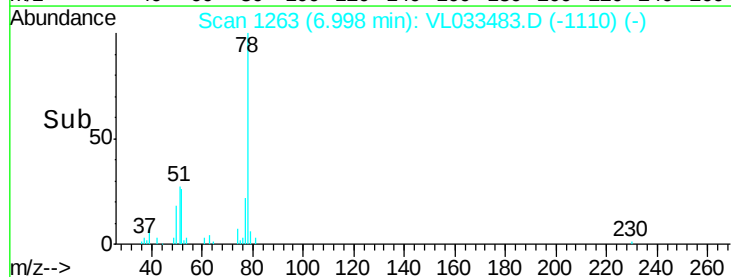
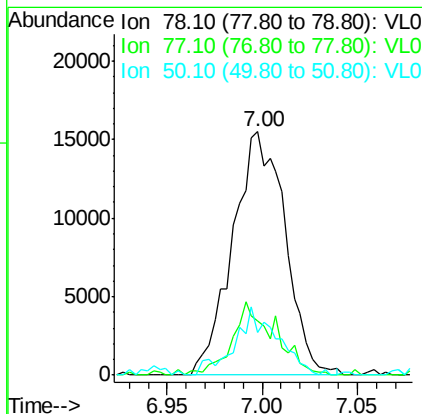
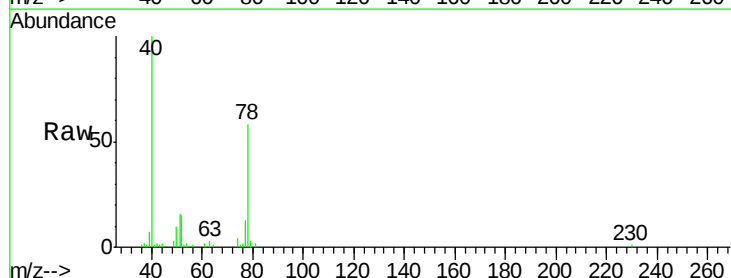
RT: 7.00 min Scan# 1263

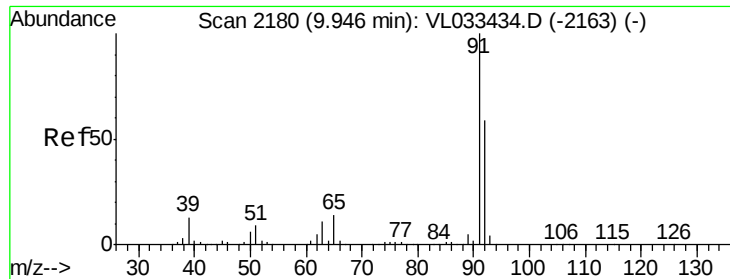
Delta R.T. -0.01 min

Lab File: VL033483.D

Acq: 28 Mar 2019 00:51

Tgt Ion	Ratio	Lower	Upper
78	100		
77	22.3	18.1	27.1
50	17.7	16.7	25.1





#53

Toluene

Concen: 2.634 ppbv

RT: 9.94 min Scan# 2179

Delta R.T. -0.00 min

Lab File: VL033483.D

Acq: 28 Mar 2019 00:51

Instrument :

MSVOA_L

ClientSampled :

VMP-1

Tot Ion: 91 Resp: 445358

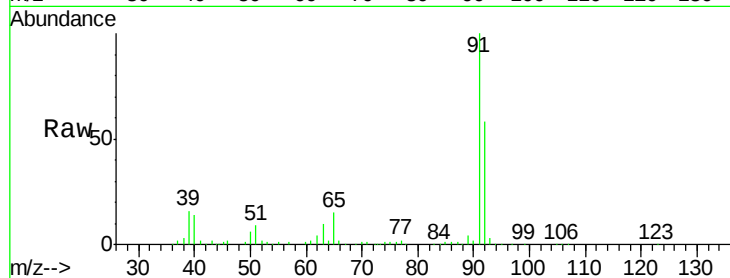
Ion Ratio Lower Upper

91 100

92 58.8 47.4 71.0

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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

9.94

250000

200000

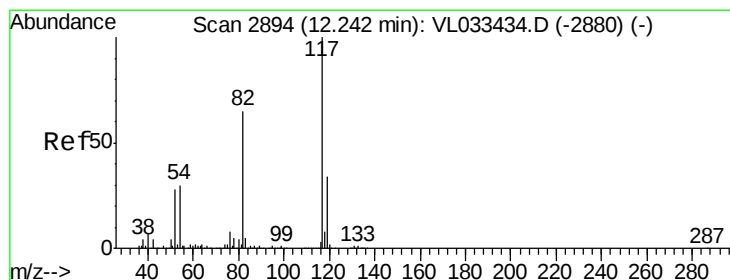
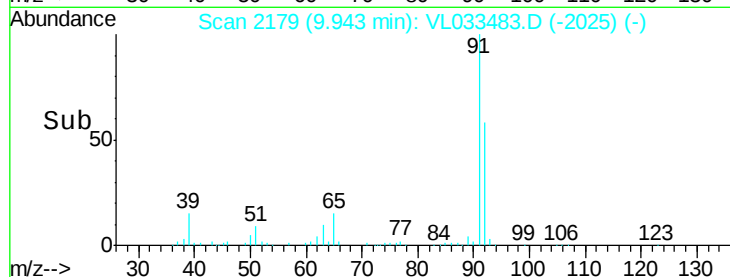
150000

100000

50000

0

Time-->



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.24 min Scan# 2892

Delta R.T. -0.01 min

Lab File: VL033483.D

Acq: 28 Mar 2019 00:51

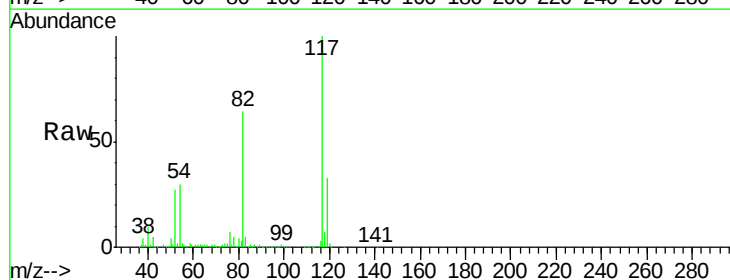
Tgt Ion: 117 Resp: 1814547

Ion Ratio Lower Upper

117 100

82 67.1 51.5 77.3

119 32.4 25.5 38.3



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V

12.24

1000000

800000

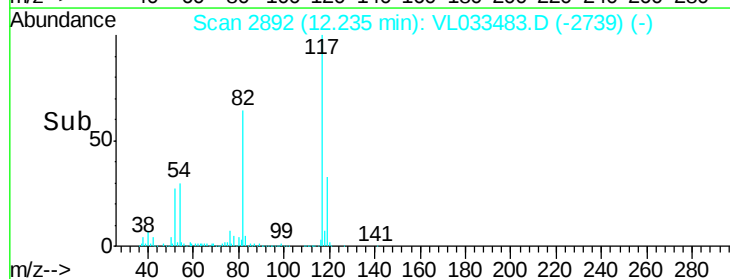
600000

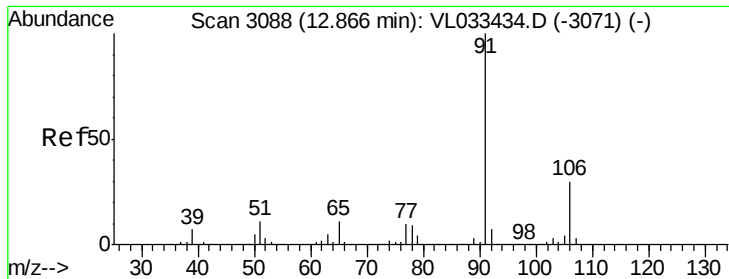
400000

200000

0

Time-->





#58

Ethyl Benzene

Concen: 0.321 ppbv

RT: 12.86 min Scan# 3087

Delta R.T. -0.00 min

Lab File: VL033483.D

Acq: 28 Mar 2019 00:51

Instrument :

MSVOA_L

ClientSampleId :

VMP-1

Tot Ion: 91 Resp: 77822

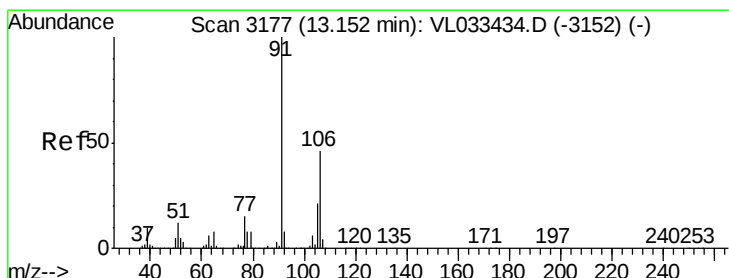
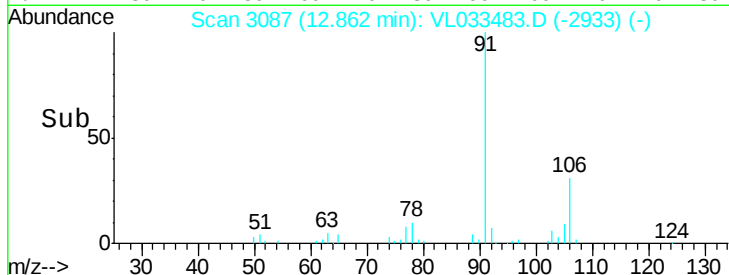
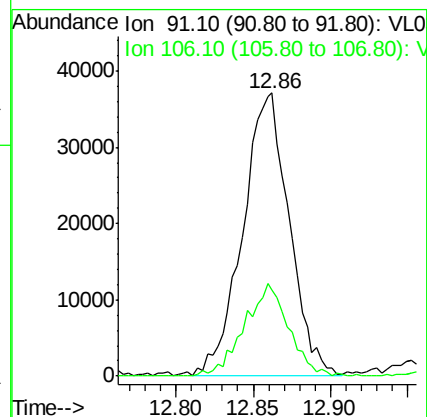
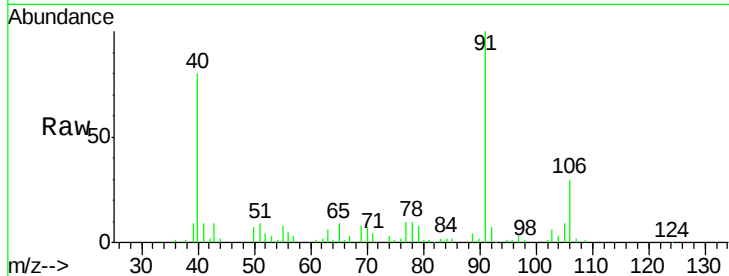
Ion Ratio Lower Upper

91 100

106 30.5 23.8 35.6

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#59

m/p-Xylene

Concen: 1.284 ppbv

RT: 13.11 min Scan# 3165

Delta R.T. -0.04 min

Lab File: VL033483.D

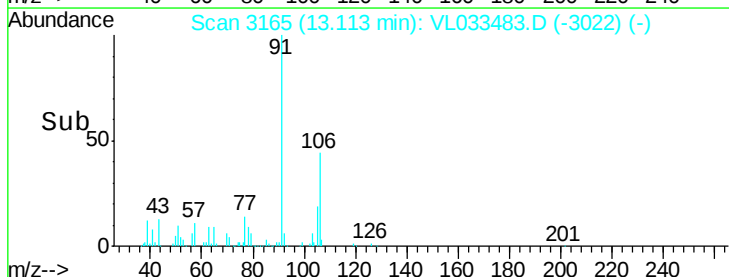
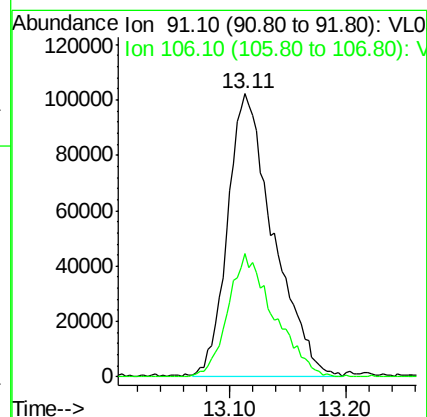
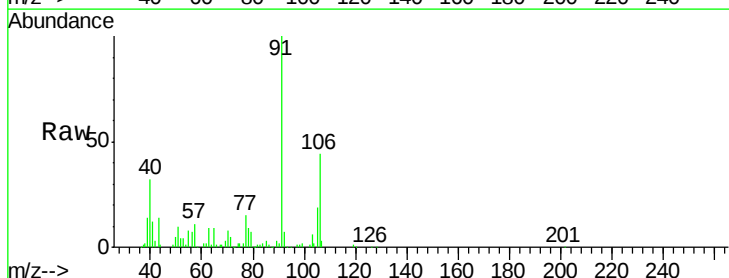
Acq: 28 Mar 2019 00:51

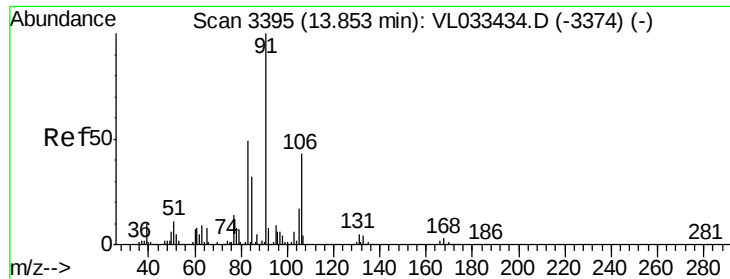
Tgt Ion: 91 Resp: 277948

Ion Ratio Lower Upper

91 100

106 43.9 0.0 0.0#





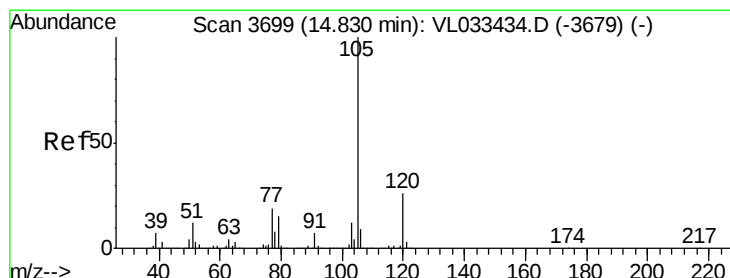
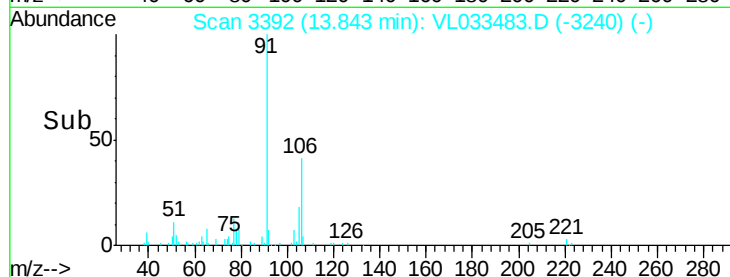
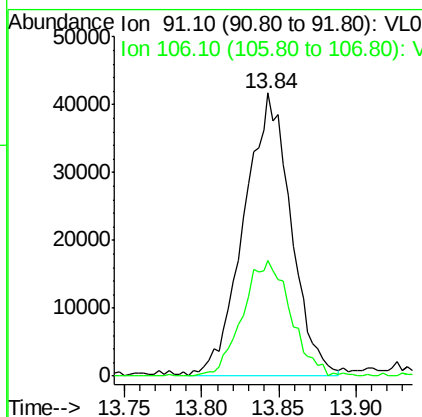
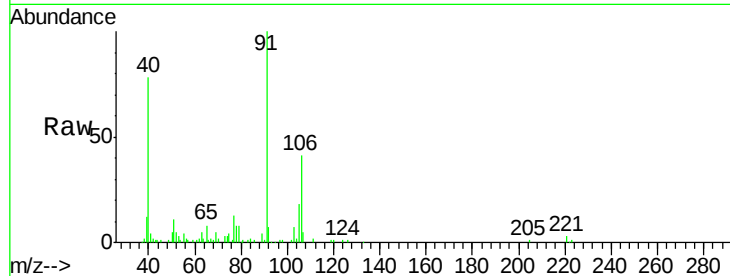
#60
o-Xylene
Concen: 0.422 ppbv
RT: 13.84 min Scan# 3392
Delta R.T. -0.01 min
Lab File: VL033483.D
Acq: 28 Mar 2019 00:51

Instrument :
MSVOA_L
ClientSampleId :
VMP-1

Tot Ion: 91 Resp: 88342
Ion Ratio Lower Upper
91 100
106 42.1 21.4 64.3

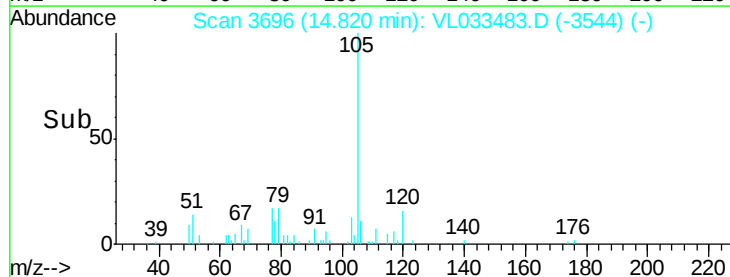
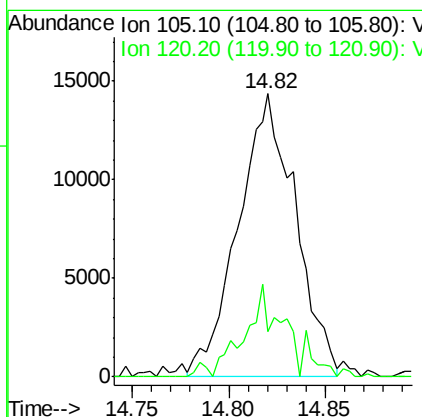
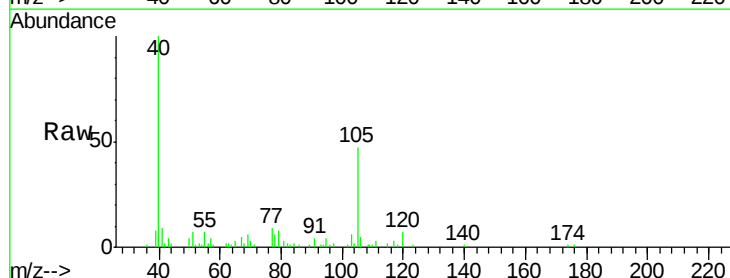
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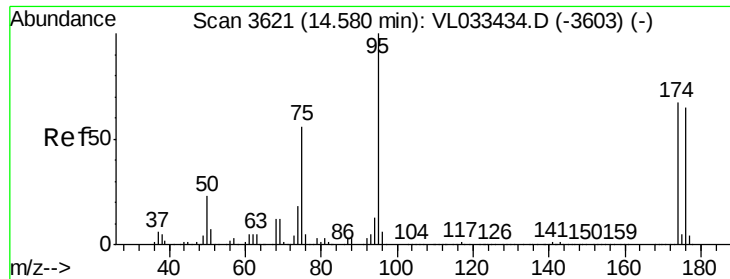
MMDadoda
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#62
Isopropylbenzene
Concen: 0.100 ppbv m
RT: 14.82 min Scan# 3696
Delta R.T. -0.01 min
Lab File: VL033483.D
Acq: 28 Mar 2019 00:51

Tgt Ion: 105 Resp: 29571
Ion Ratio Lower Upper
105 100
120 24.9 20.2 30.2





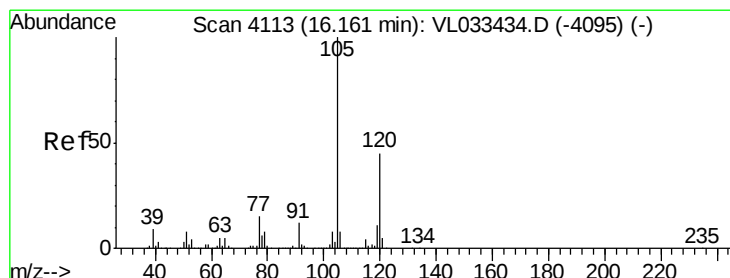
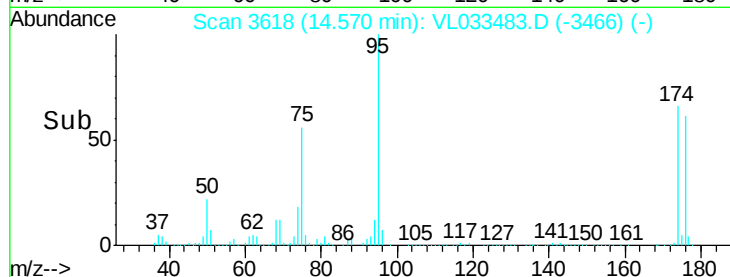
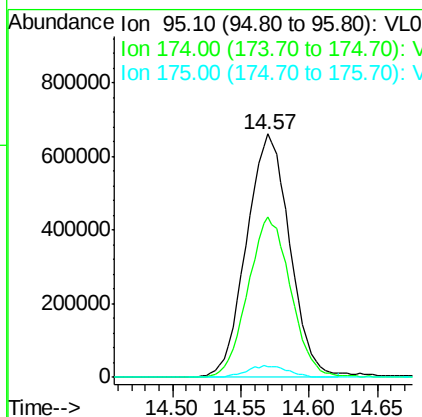
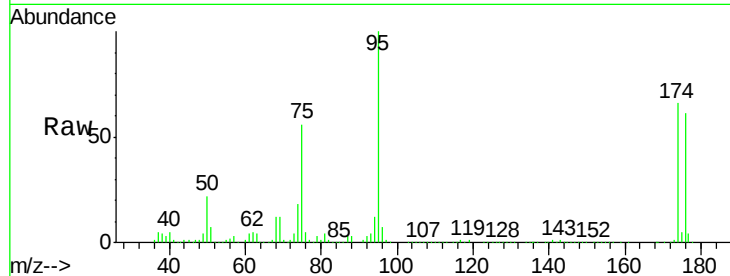
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.214 ppbv
 RT: 14.57 min Scan# 3618
 Delta R.T. -0.01 min
 Lab File: VL033483.D
 Acq: 28 Mar 2019 00:51

Instrument :
 MSVOA_L
 ClientSampled :
 VMP-1

Tot Ion: 95 Resp: 1453033
 Ion Ratio Lower Upper
 95 100
 174 65.5 52.9 79.3
 175 4.7 3.8 5.6

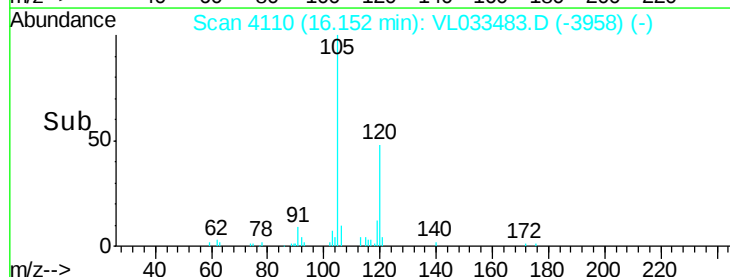
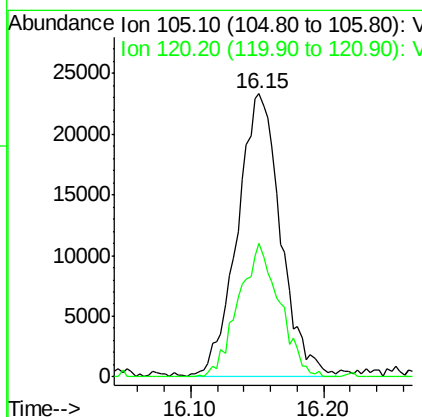
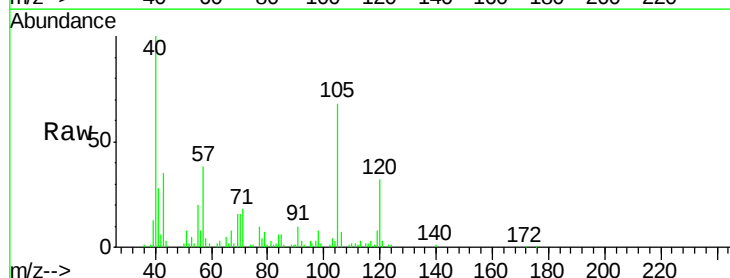
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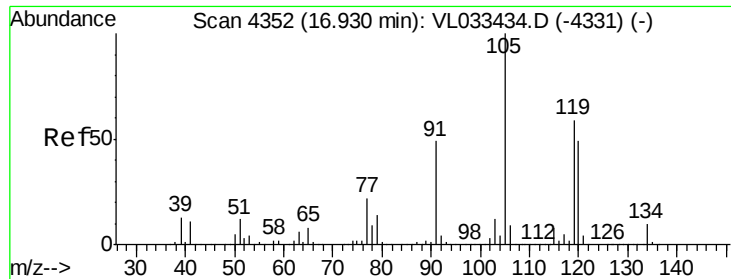
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#73
 1,3,5-Trimethylbenzene
 Concen: 0.235 ppbv m
 RT: 16.15 min Scan# 4110
 Delta R.T. -0.01 min
 Lab File: VL033483.D
 Acq: 28 Mar 2019 00:51

Tgt Ion:105 Resp: 52896
 Ion Ratio Lower Upper
 105 100
 120 47.3 35.7 53.5





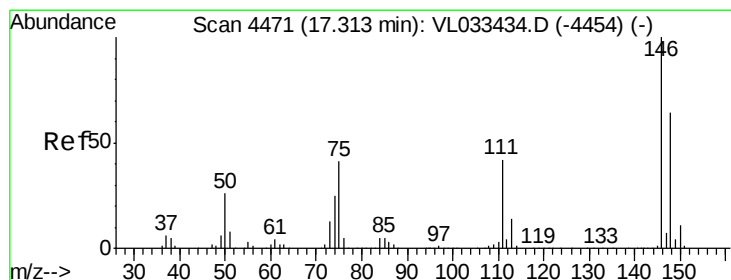
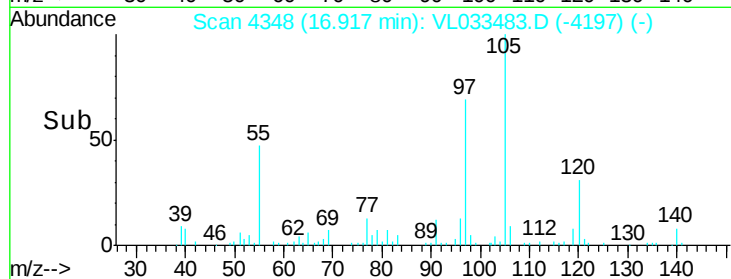
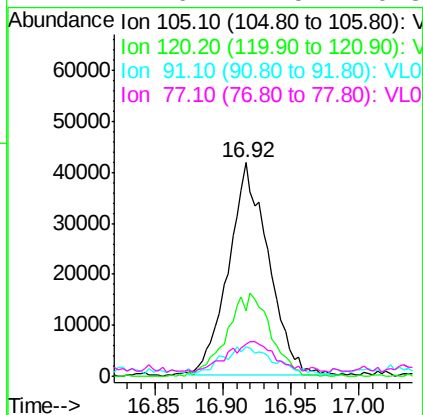
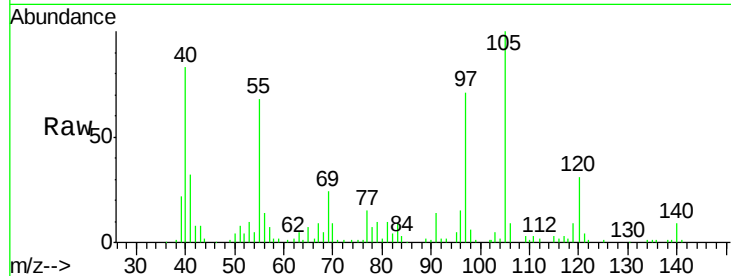
#74
 1,2,4-Trimethylbenzene
 Concen: 0.348 ppbv
 RT: 16.92 min Scan# 4348
 Delta R.T. -0.01 min
 Lab File: VL033483.D
 Acq: 28 Mar 2019 00:51

Instrument :
 MSVOA_L
 ClientSampleId :
 VMP-1

Tot Ion	Ratio	Lower	Upper
105	100		
120	30.4	39.0	58.6#
91	11.2	40.0	60.0#
77	11.6	17.5	26.3#

Manual Integrations
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#76
 1,4-Dichlorobenzene
 Concen: 0.405 ppbv
 RT: 17.30 min Scan# 4467
 Delta R.T. -0.01 min
 Lab File: VL033483.D
 Acq: 28 Mar 2019 00:51

Tgt Ion	Ratio	Lower	Upper
146	100		
111	63.9	21.7	65.1
148	65.0	32.0	96.2

