

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032019\
 Data File : VL033399.D
 Acq On : 20 Mar 2019 21:06
 Operator : SY/AP
 Sample : K1975-02DL 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1DL

Quant Time: Mar 22 05:51:52 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL031519AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Mar 15 14:52:14 2019
 QLast Update : Fri Mar 15 14:52:14 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	863046	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	2119601	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.24	117	2059124	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.57	95	1532668	10.04	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.40%

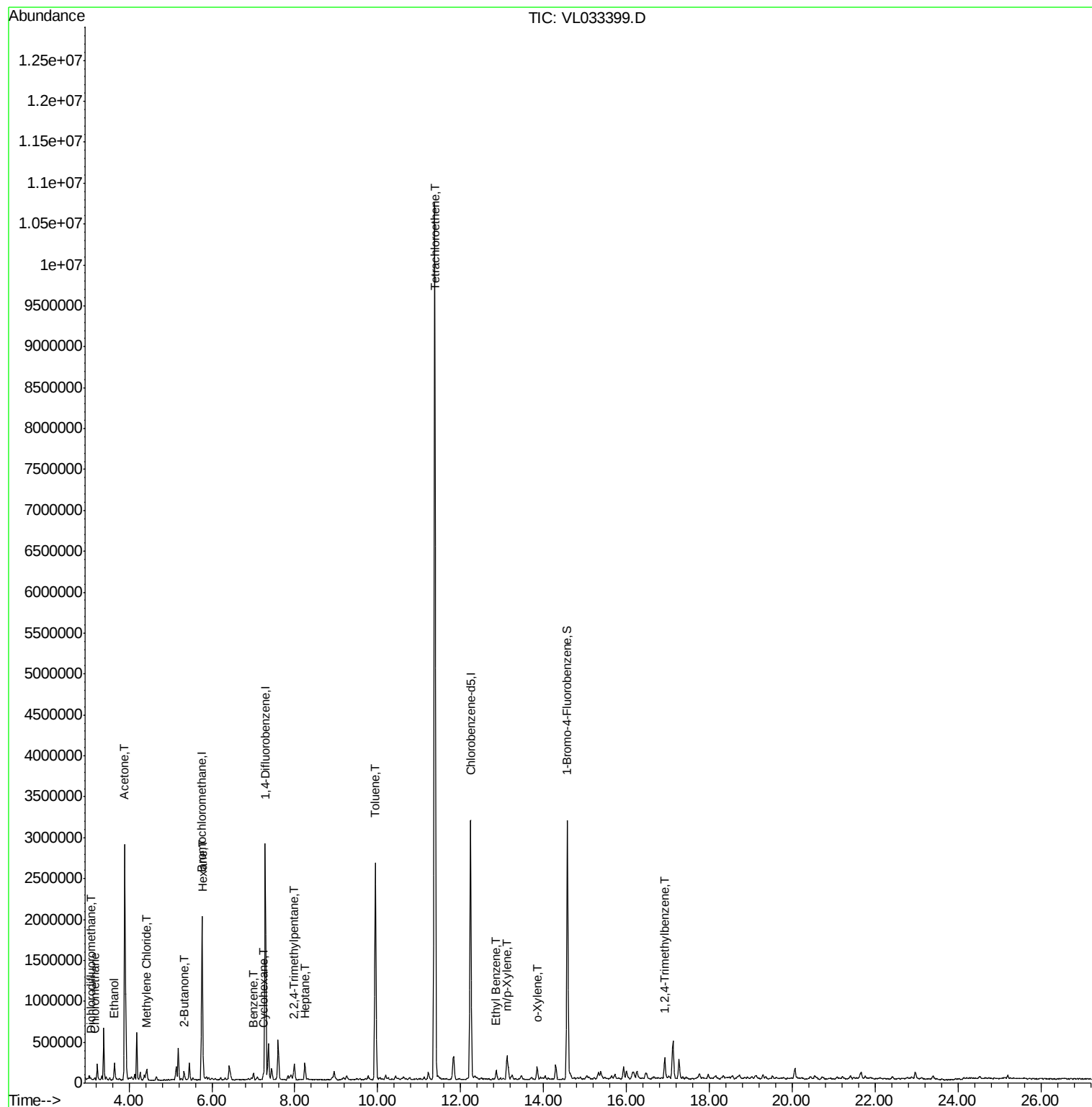
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	13122	0.086	ppbv	96
4) Chloromethane	3.17	50	18347	0.342	ppbv	92
10) Heptane	8.24	43	89205	0.813	ppbv	99
13) Ethanol	3.65	45	218452	10.363	ppbv	96
15) Acetone	3.89	43	3139908	23.404	ppbv	99
20) Methylene Chloride	4.41	84	26981	0.617	ppbv #	89
26) Hexane	5.78	57	131149	1.504	ppbv #	41
30) Cyclohexane	7.24	84	23333	0.334	ppbv	90
34) 2-Butanone	5.33	43	114308	0.821	ppbv	97
36) Benzene	7.00	78	64630	0.341	ppbv #	95
44) 2,2,4-Trimethylpentane	7.99	57	135508	0.431	ppbv #	78
52) Tetrachloroethene	11.37	164	2897774	36.668	ppbv	98
53) Toluene	9.94	91	2148780	9.969	ppbv	100
58) Ethyl Benzene	12.86	91	93436	0.321	ppbv	90
59) m/p-Xylene	13.12	91	300991	1.202	ppbv #	100
60) o-Xylene	13.84	91	109385	0.448	ppbv	96
74) 1,2,4-Trimethylbenzene	16.92	105	167156	0.584	ppbv #	71

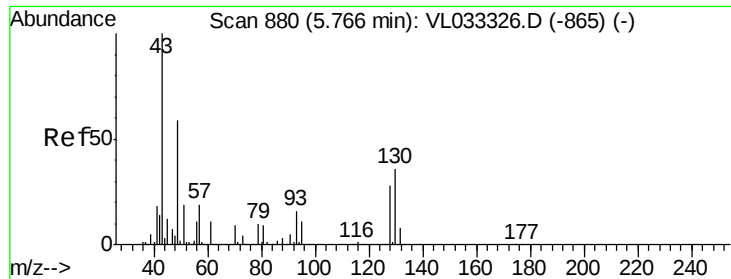
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL031519AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Mar 15 14:52:14 2019
QLast Update : Fri Mar 15 14:52:14 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 877

Delta R.T. -0.01 min

Lab File: VL033399.D

Acq: 20 Mar 2019 21:06

Instrument :

MSVOA_L

ClientSampleId :

IA1DL

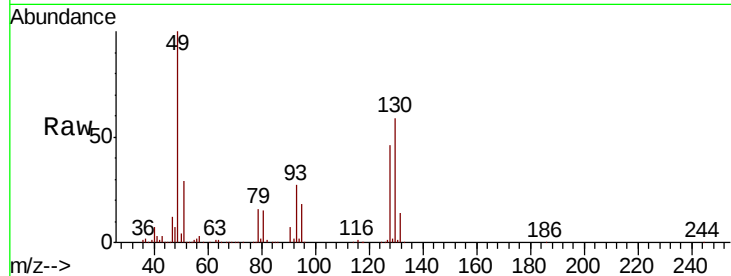
Tot Ion: 49 Resp: 863046

Ion Ratio Lower Upper

49 100

128 48.1 23.5 70.6

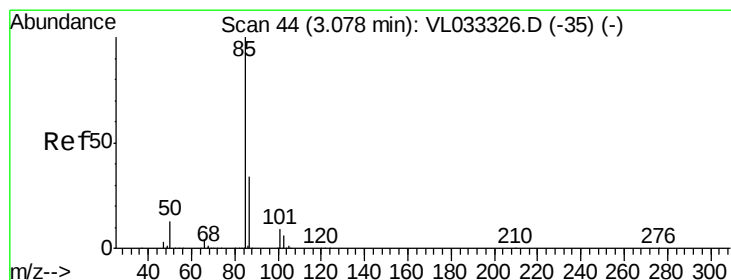
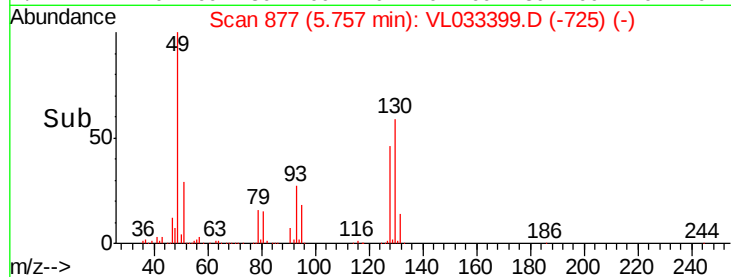
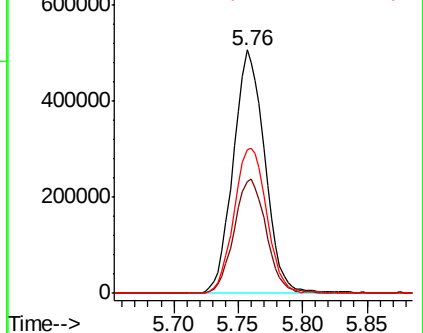
130 61.9 30.1 90.3



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.086 ppbv

RT: 3.08 min Scan# 44

Delta R.T. -0.00 min

Lab File: VL033399.D

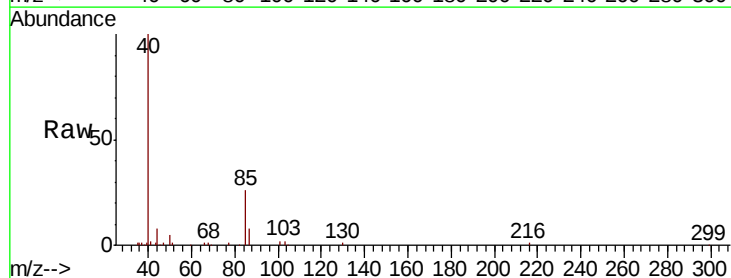
Acq: 20 Mar 2019 21:06

Tgt Ion: 85 Resp: 13122

Ion Ratio Lower Upper

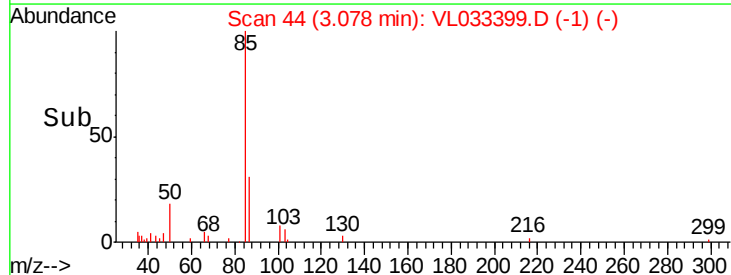
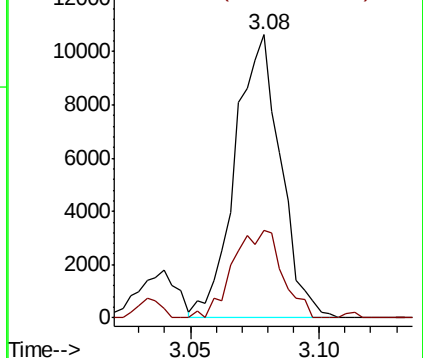
85 100

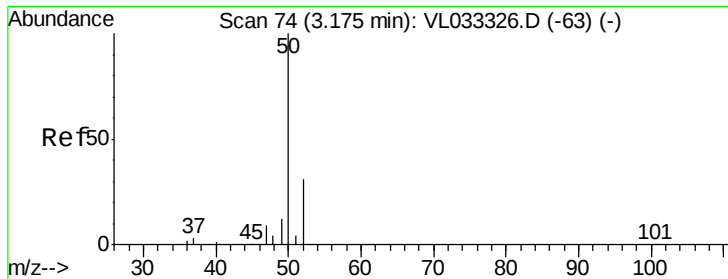
87 31.1 26.9 40.3



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#4

Chloromethane

Concen: 0.342 ppbv

RT: 3.17 min Scan# 73

Delta R.T. -0.00 min

Lab File: VL033399.D

Acq: 20 Mar 2019 21:06

Instrument :

MSVOA_L

ClientSampleId :

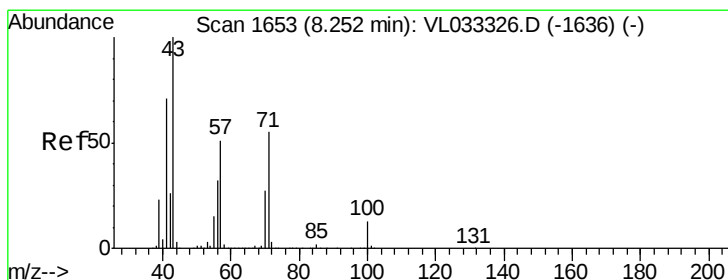
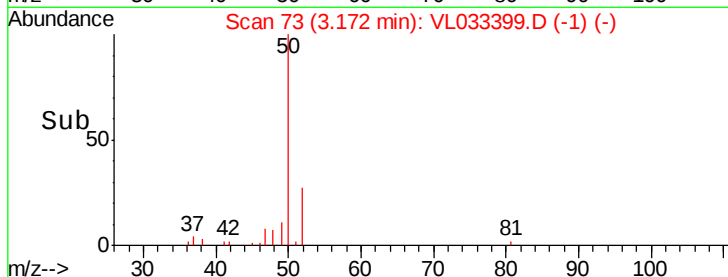
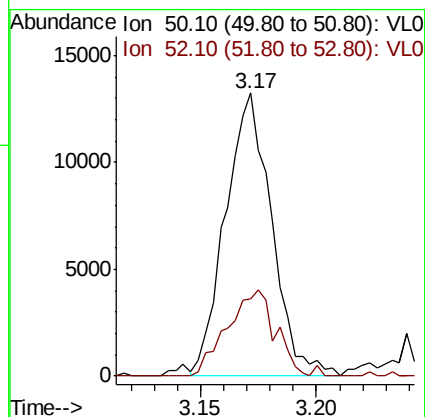
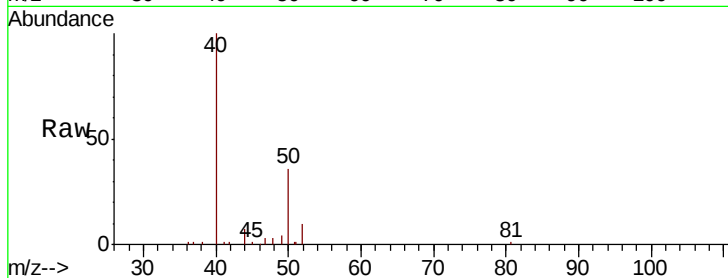
IA1DL

Tot Ion: 50 Resp: 18347

Ion Ratio Lower Upper

50 100

52 26.8 25.0 37.6



#10

Heptane

Concen: 0.813 ppbv

RT: 8.24 min Scan# 1649

Delta R.T. -0.01 min

Lab File: VL033399.D

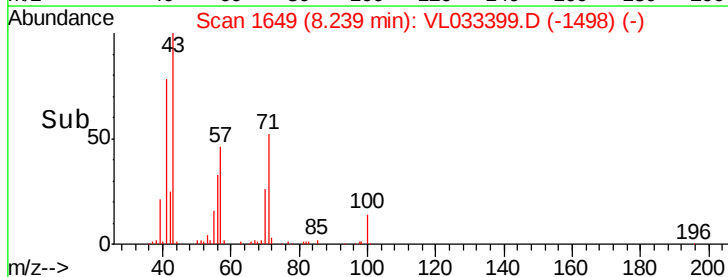
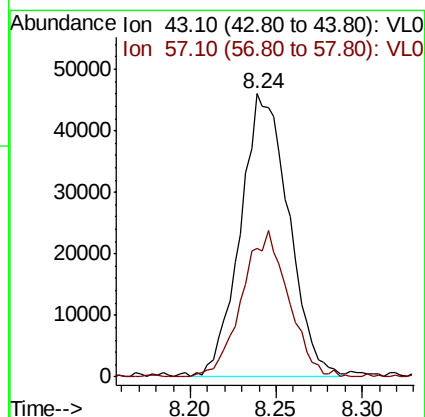
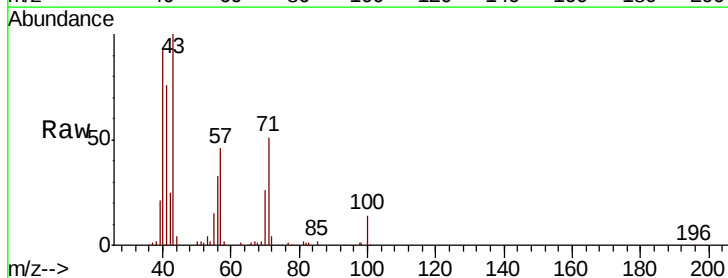
Acq: 20 Mar 2019 21:06

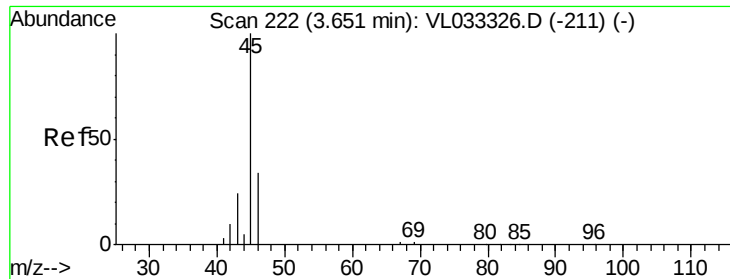
Tgt Ion: 43 Resp: 89205

Ion Ratio Lower Upper

43 100

57 50.1 40.4 60.6





#13

Ethanol

Concen: 10.363 ppbv

RT: 3.65 min Scan# 221

Delta R.T. -0.00 min

Lab File: VL033399.D

Acq: 20 Mar 2019 21:06

Instrument :

MSVOA_L

ClientSampleId :

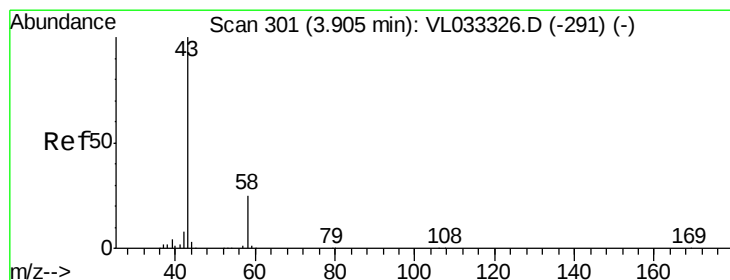
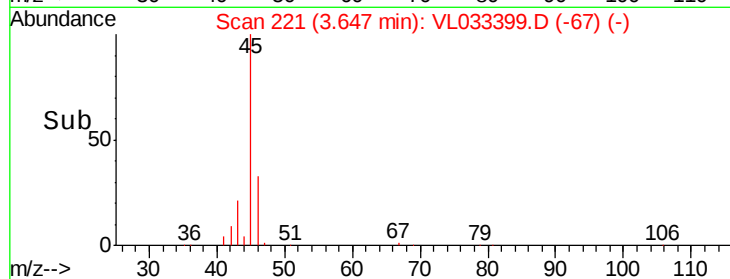
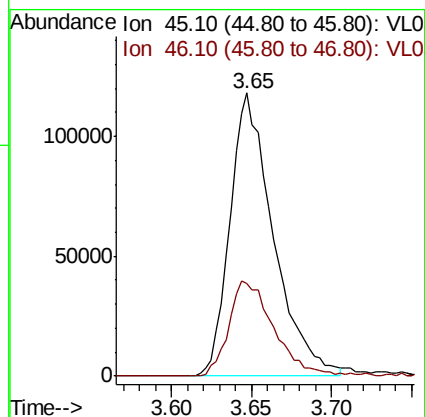
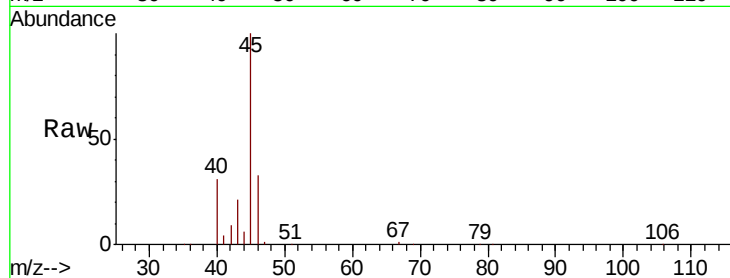
IA1DL

Tot Ion: 45 Resp: 218452

Ion Ratio Lower Upper

45 100

46 35.1 14.9 59.7



#15

Acetone

Concen: 23.404 ppbv

RT: 3.89 min Scan# 297

Delta R.T. -0.01 min

Lab File: VL033399.D

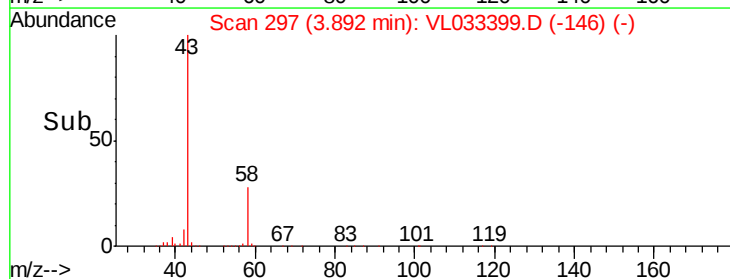
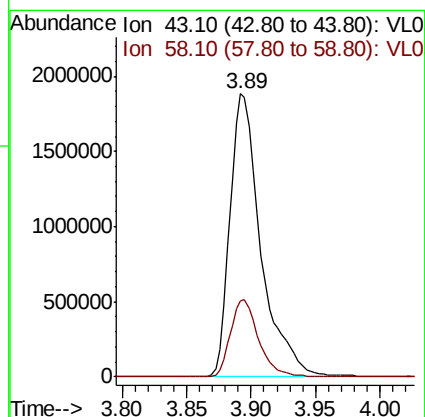
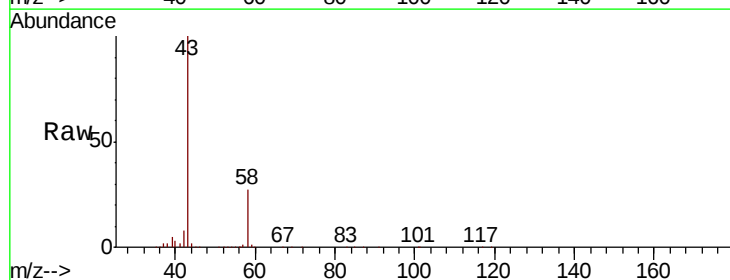
Acq: 20 Mar 2019 21:06

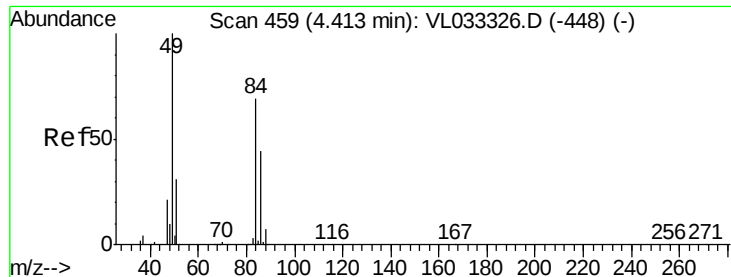
Tgt Ion: 43 Resp: 3139908

Ion Ratio Lower Upper

43 100

58 25.0 20.4 30.6





#20

Methylene Chloride

Concen: 0.617 ppbv

RT: 4.41 min Scan# 457

Delta R.T. -0.01 min

Lab File: VL033399.D

Acq: 20 Mar 2019 21:06

Instrument :

MSVOA_L

ClientSampleId :

IA1DL

Tot Ion: 84 Resp: 26981

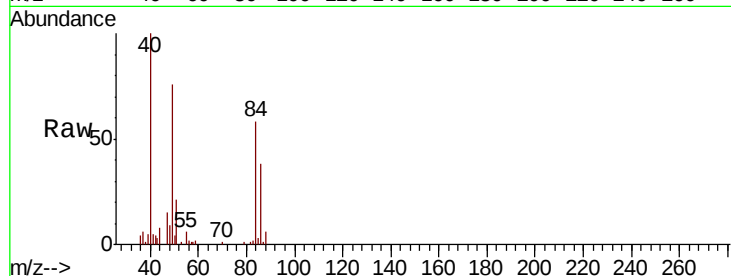
Ion Ratio Lower Upper

84 100

49 129.1 115.4 173.0

51 32.9 35.8 53.6#

86 64.7 50.6 75.8

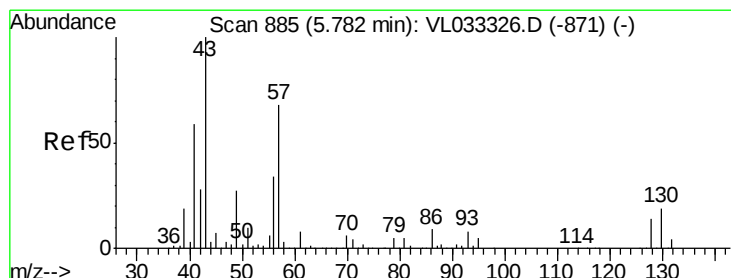
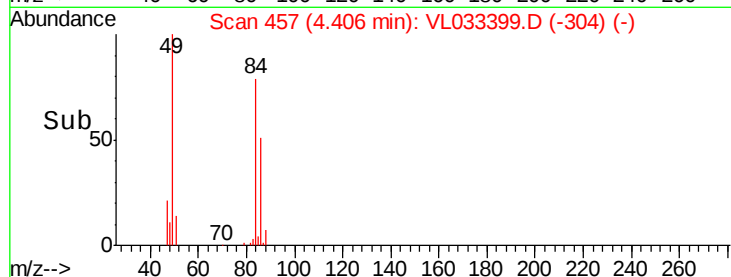
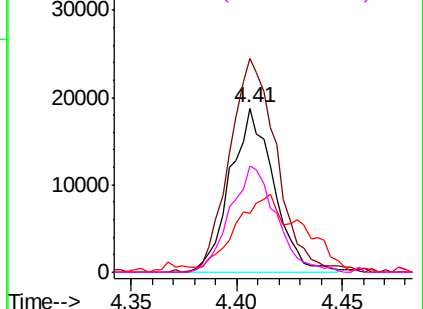


Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0



#26

Hexane

Concen: 1.504 ppbv

RT: 5.78 min Scan# 883

Delta R.T. -0.01 min

Lab File: VL033399.D

Acq: 20 Mar 2019 21:06

Tgt Ion: 57 Resp: 131149

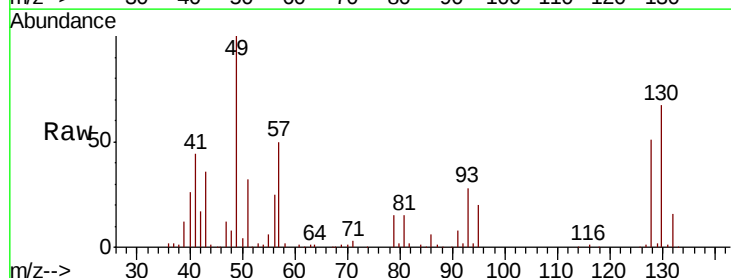
Ion Ratio Lower Upper

57 100

41 93.9 70.5 105.7

43 75.5 181.8 272.8#

56 52.9 42.2 63.2

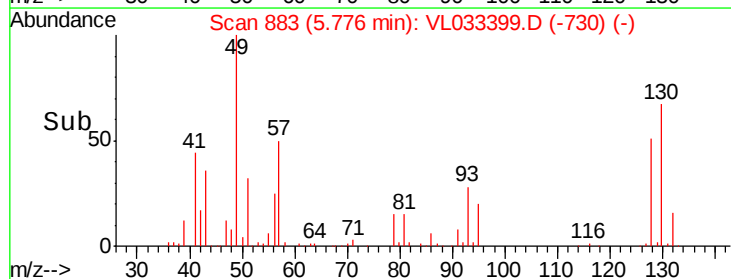
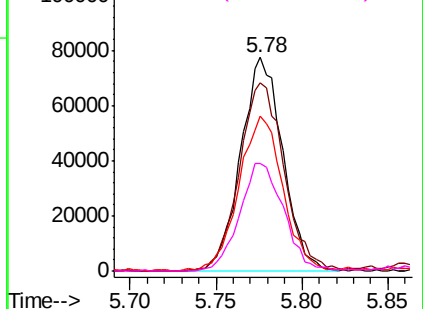


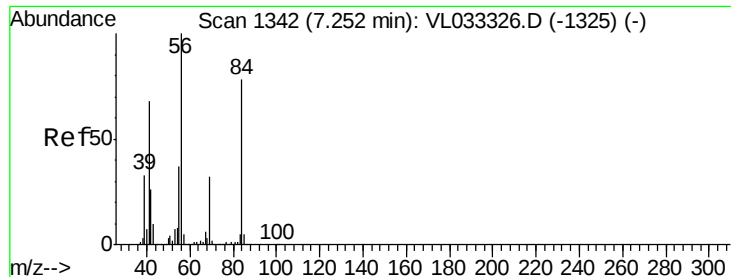
Abundance Ion 57.10 (56.80 to 57.80): VL0

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

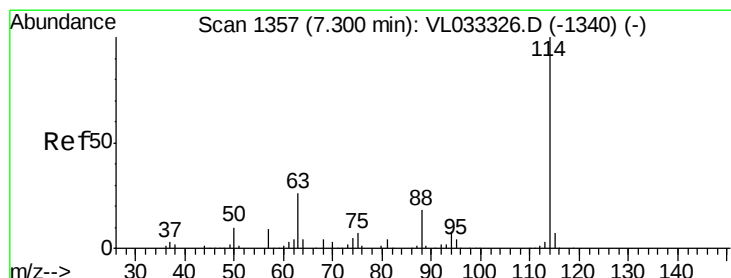
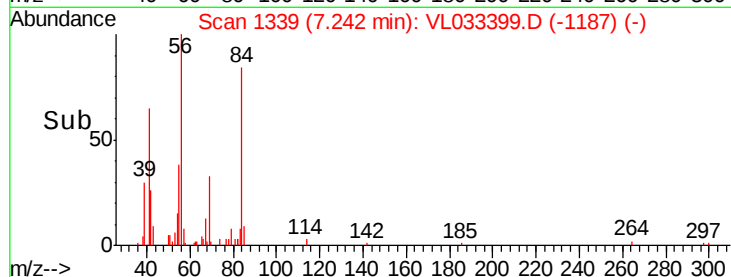
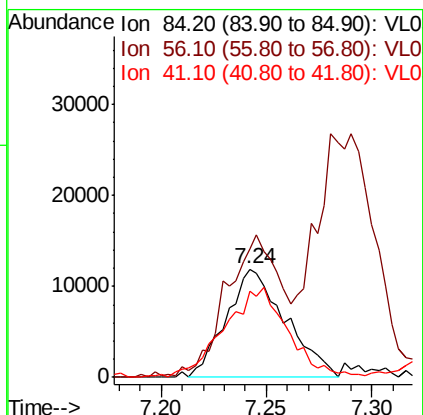
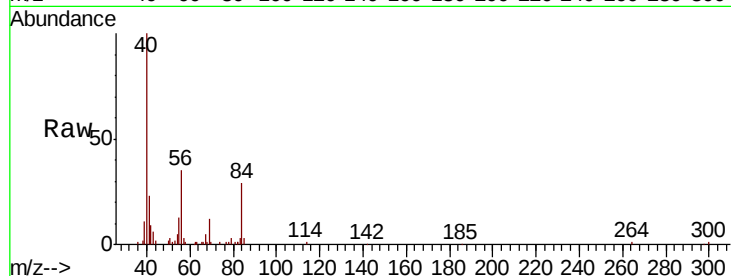




#30
Cyclohexane
Concen: 0.334 ppbv
RT: 7.24 min Scan# 1339
Delta R.T. -0.01 min
Lab File: VL033399.D
Acq: 20 Mar 2019 21:06

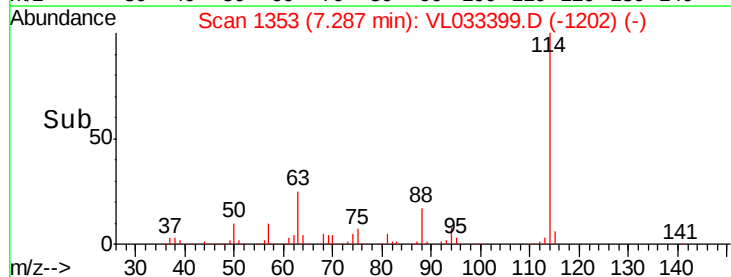
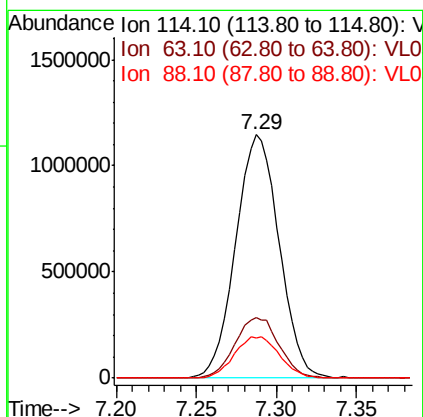
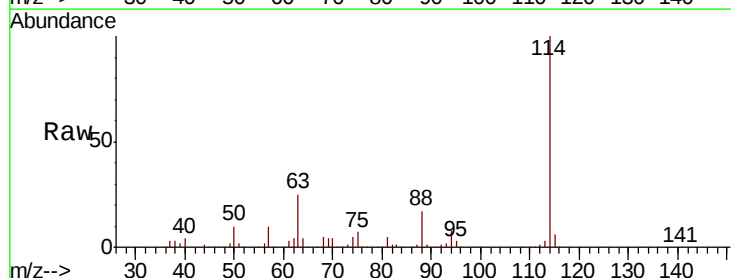
Instrument :
MSVOA_L
ClientSampleID :
IA1DL

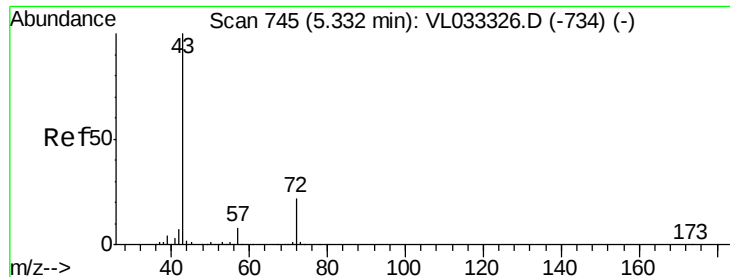
Tot Ion: 84 Resp: 23333
Ion Ratio Lower Upper
84 100
56 120.5 111.3 166.9
41 88.5 69.6 104.4



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.29 min Scan# 1353
Delta R.T. -0.01 min
Lab File: VL033399.D
Acq: 20 Mar 2019 21:06

Tgt Ion: 114 Resp: 2119601
Ion Ratio Lower Upper
114 100
63 25.3 21.4 32.2
88 17.8 14.5 21.7

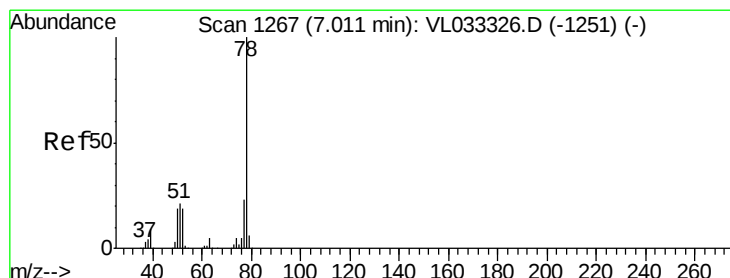
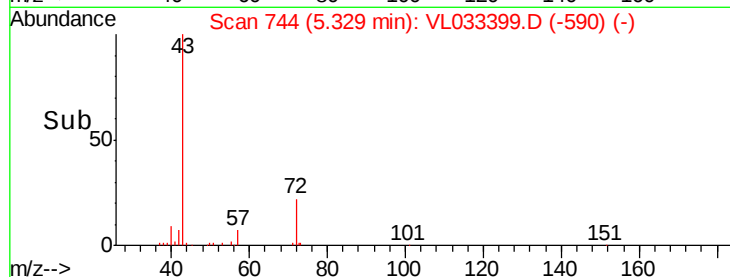
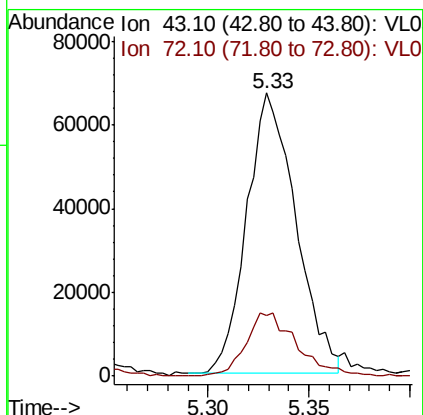
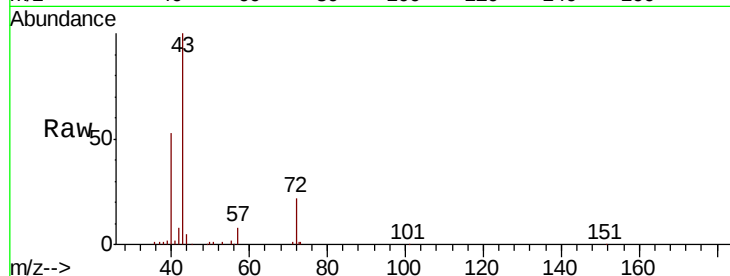




#34
 2-Butanone
 Concen: 0.821 ppbv
 RT: 5.33 min Scan# 744
 Delta R.T. -0.00 min
 Lab File: VL033399.D
 Acq: 20 Mar 2019 21:06

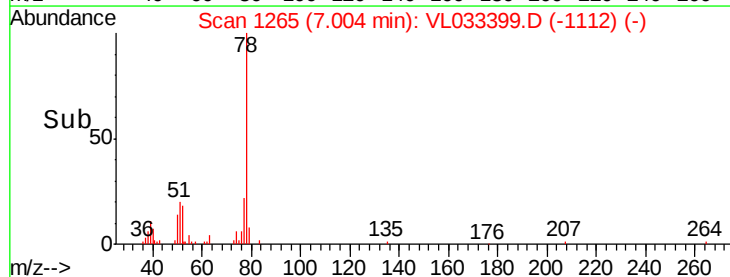
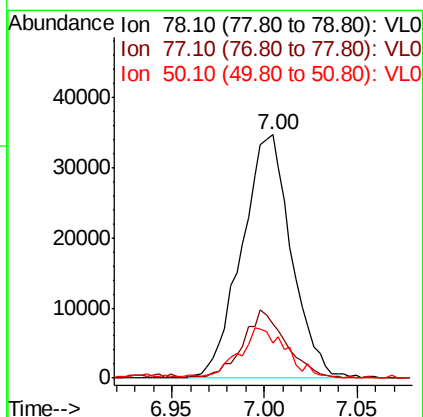
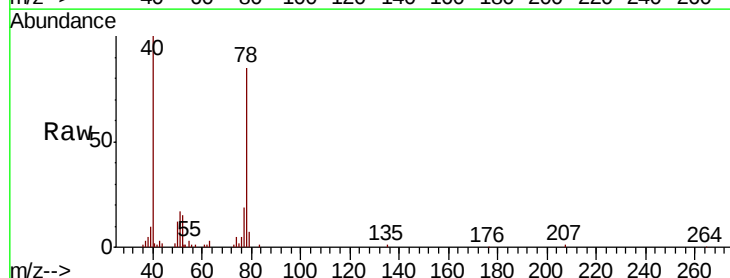
Instrument :
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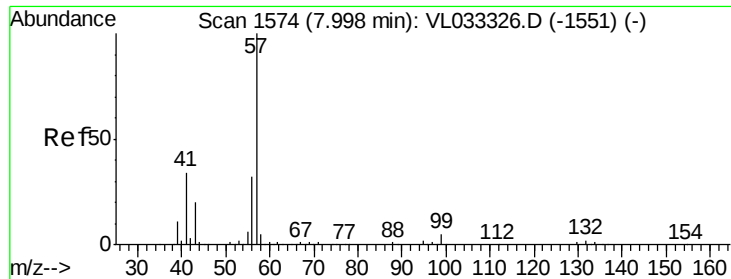
Tot Ion: 43 Resp: 114308
 Ion Ratio Lower Upper
 43 100
 72 23.5 17.7 26.5



#36
 Benzene
 Concen: 0.341 ppbv
 RT: 7.00 min Scan# 1265
 Delta R.T. -0.01 min
 Lab File: VL033399.D
 Acq: 20 Mar 2019 21:06

Tgt Ion: 78 Resp: 64630
 Ion Ratio Lower Upper
 78 100
 77 22.0 18.1 27.1
 50 14.5 15.2 22.8#

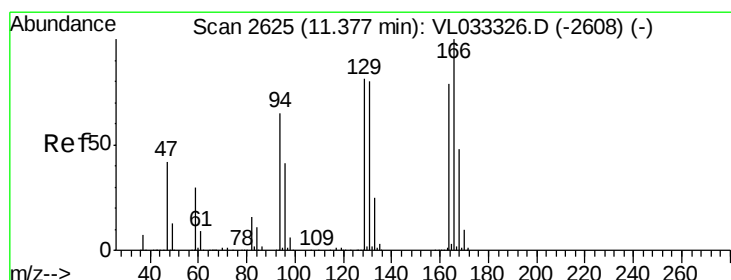
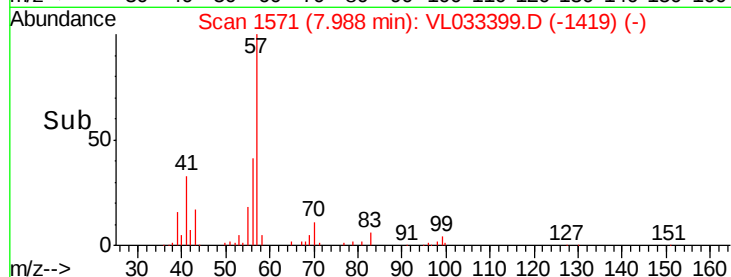
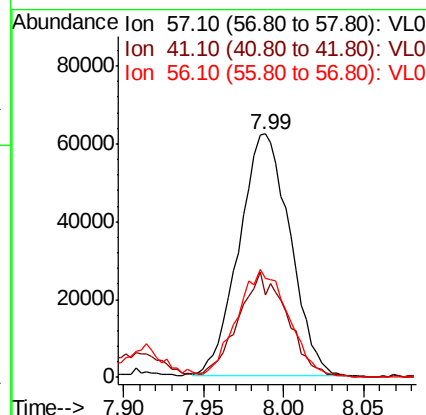
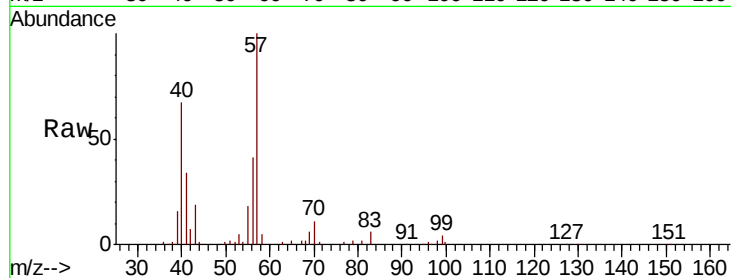




#44
 2,2,4-Trimethylpentane
 Concen: 0.431 ppbv
 RT: 7.99 min Scan# 1571
 Delta R.T. -0.01 min
 Lab File: VL033399.D
 Acq: 20 Mar 2019 21:06

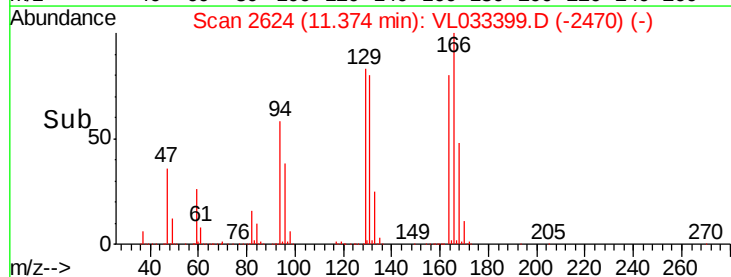
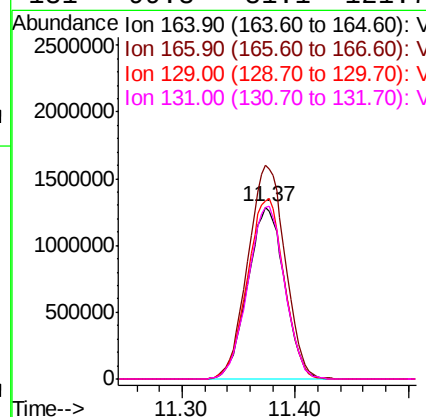
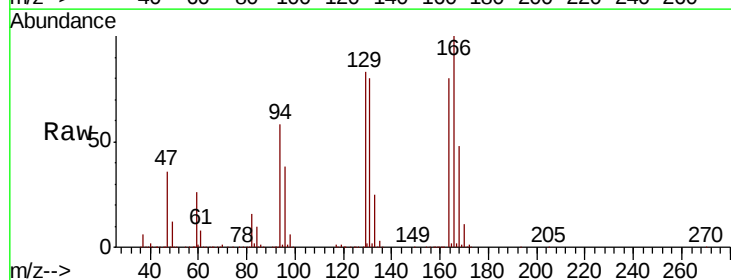
Instrument :
 MSVOA_L
 ClientSampleId :
 IA1DL

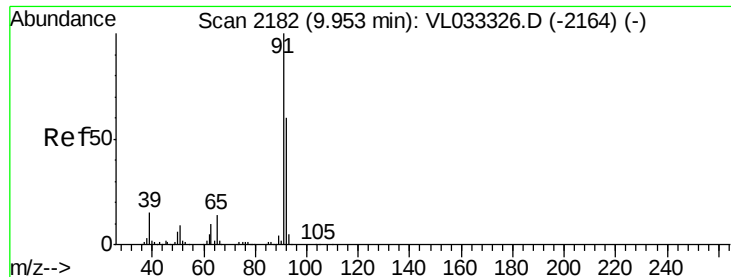
Tot Ion: 57 Resp: 135508
 Ion Ratio Lower Upper
 57 100
 41 42.0 26.0 39.0#
 56 45.4 24.6 36.8#



#52
 Tetrachloroethene
 Concen: 36.668 ppbv
 RT: 11.37 min Scan# 2624
 Delta R.T. -0.00 min
 Lab File: VL033399.D
 Acq: 20 Mar 2019 21:06

Tgt Ion:164 Resp: 2897774
 Ion Ratio Lower Upper
 164 100
 166 124.5 101.5 152.3
 129 103.5 82.2 123.2
 131 99.8 81.1 121.7





#53

Toluene

Concen: 9.969 ppbv

RT: 9.94 min Scan# 2179

Delta R.T. -0.01 min

Lab File: VL033399.D

Acq: 20 Mar 2019 21:06

Instrument :

MSVOA_L

ClientSampleId :

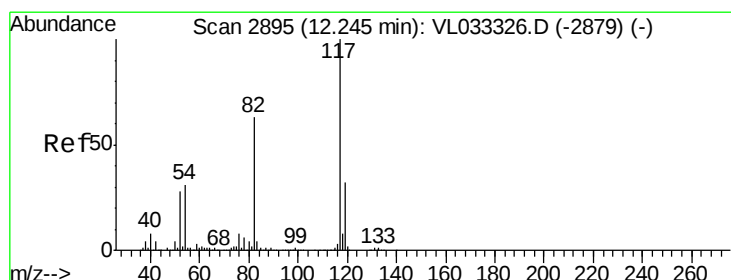
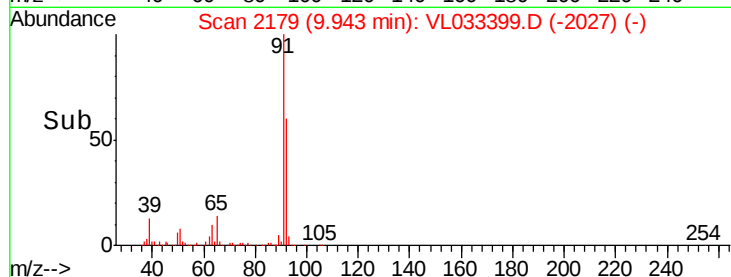
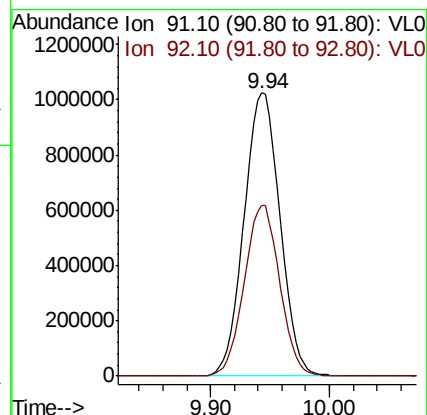
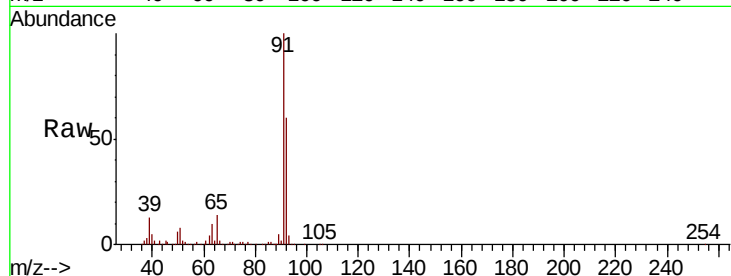
IA1DL

Tot Ion: 91 Resp: 2148780

Ion Ratio Lower Upper

91 100

92 59.5 47.4 71.0



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.24 min Scan# 2892

Delta R.T. -0.01 min

Lab File: VL033399.D

Acq: 20 Mar 2019 21:06

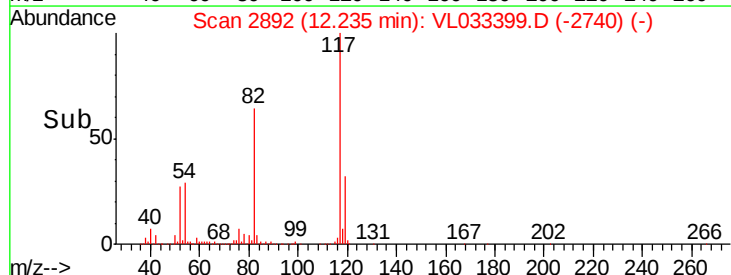
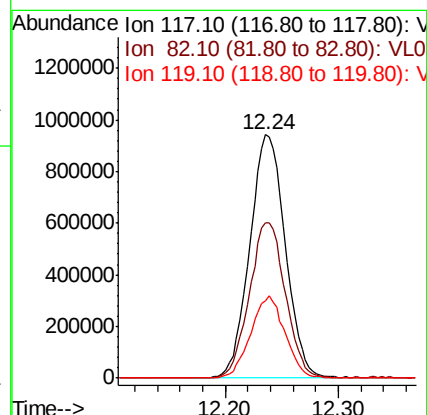
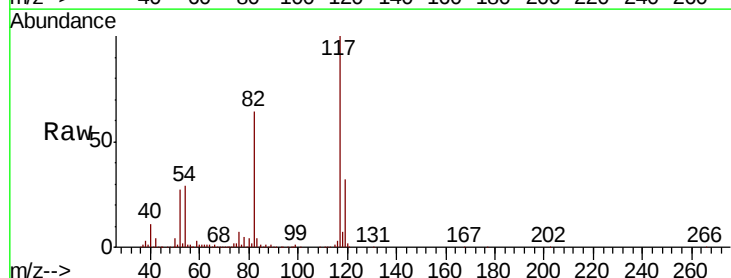
Tgt Ion: 117 Resp: 2059124

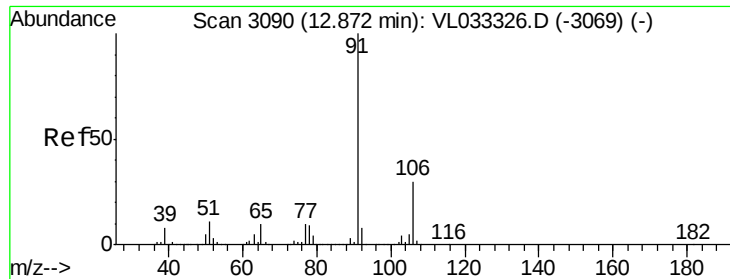
Ion Ratio Lower Upper

117 100

82 64.7 53.4 80.2

119 32.7 27.3 40.9





#58

Ethyl Benzene

Concen: 0.321 ppbv

RT: 12.86 min Scan# 3085

Delta R.T. -0.02 min

Lab File: VL033399.D

Acq: 20 Mar 2019 21:06

Instrument :

MSVOA_L

ClientSampleID :

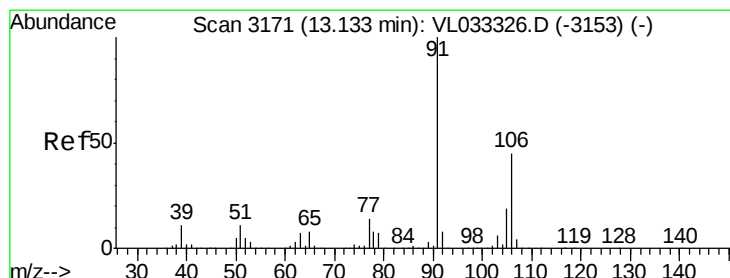
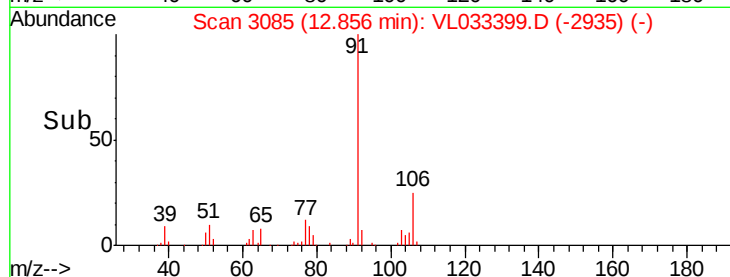
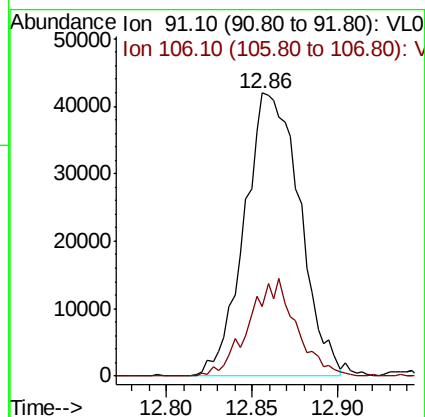
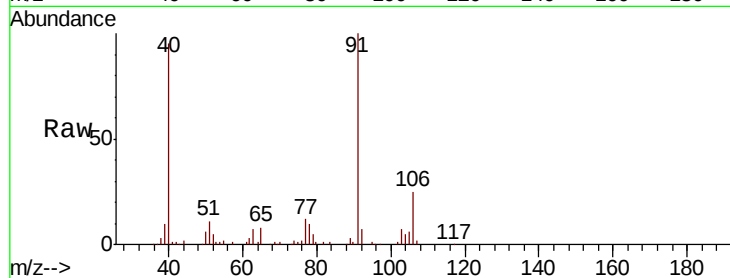
IA1DL

Tot Ion: 91 Resp: 93436

Ion Ratio Lower Upper

91 100

106 24.7 24.2 36.2



#59

m/p-Xylene

Concen: 1.202 ppbv

RT: 13.12 min Scan# 3167

Delta R.T. -0.01 min

Lab File: VL033399.D

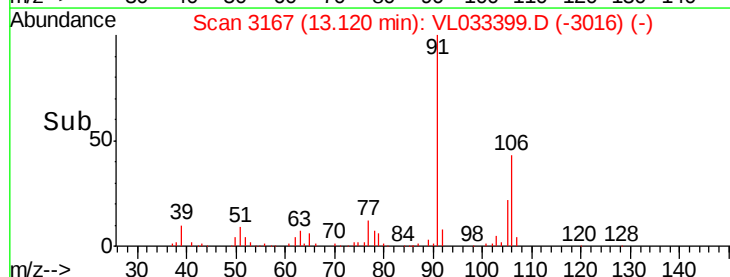
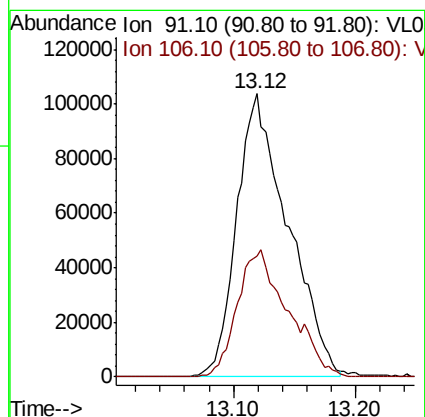
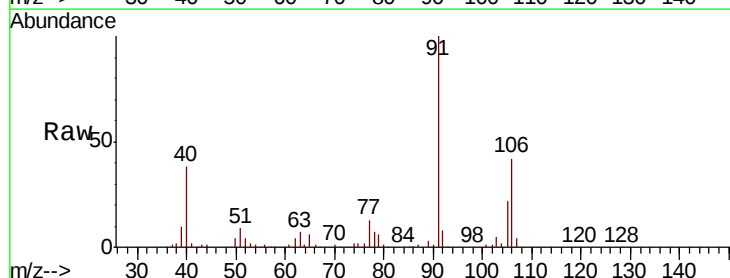
Acq: 20 Mar 2019 21:06

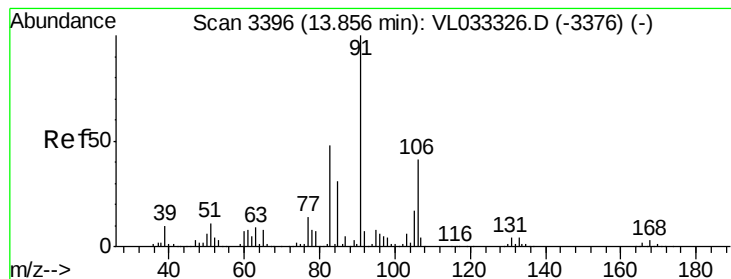
Tgt Ion: 91 Resp: 300991

Ion Ratio Lower Upper

91 100

106 44.5 0.0 0.0#





#60

o-Xylene

Concen: 0.448 ppbv

RT: 13.84 min Scan# 3392

Delta R.T. -0.01 min

Lab File: VL033399.D

Acq: 20 Mar 2019 21:06

Instrument :

MSVOA_L

ClientSampleID :

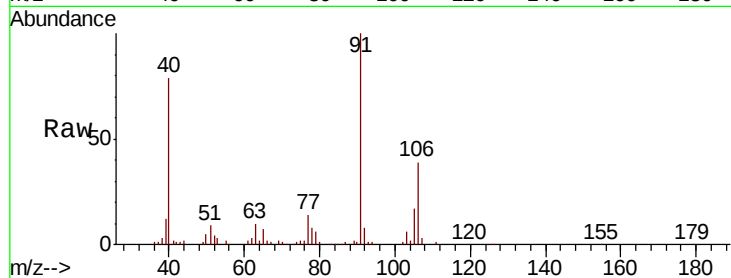
IA1DL

Tot Ion: 91 Resp: 109385

Ion Ratio Lower Upper

91 100

106 44.8 21.3 63.9



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

13.84

60000

50000

40000

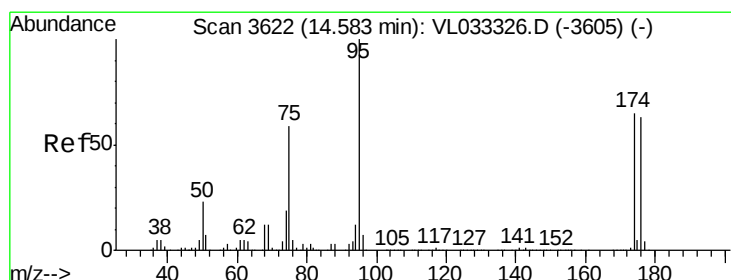
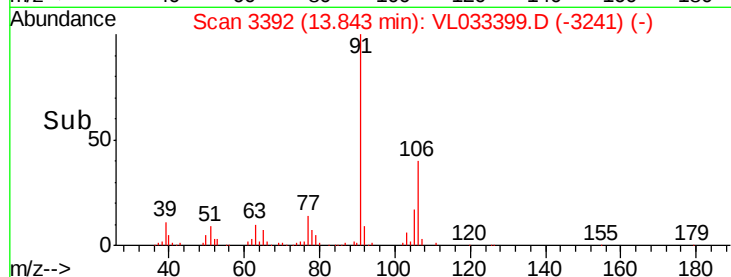
30000

20000

10000

0

Time-->



#68

1-Bromo-4-Fluorobenzene

Concen: 10.045 ppbv

RT: 14.57 min Scan# 3619

Delta R.T. -0.01 min

Lab File: VL033399.D

Acq: 20 Mar 2019 21:06

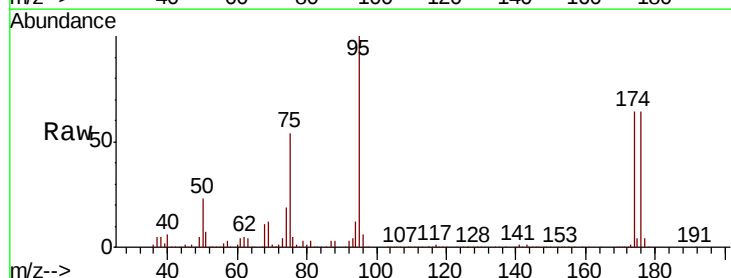
Tgt Ion: 95 Resp: 1532668

Ion Ratio Lower Upper

95 100

174 66.4 51.5 77.3

175 4.9 3.8 5.6



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

14.57

800000

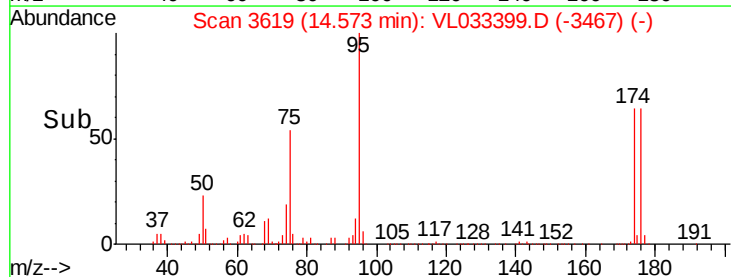
600000

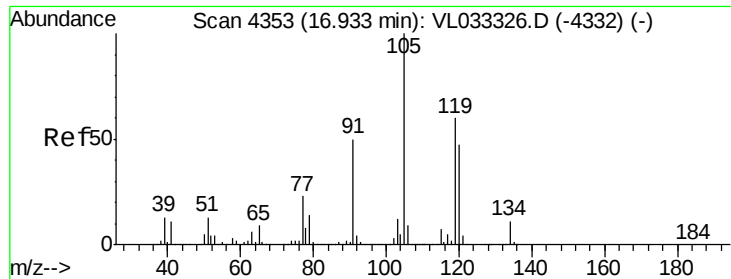
400000

200000

0

Time-->





#74
 1,2,4-Trimethylbenzene
 Concen: 0.584 ppbv
 RT: 16.92 min Scan# 4349
 Delta R.T. -0.01 min
 Lab File: VL033399.D
 Acq: 20 Mar 2019 21:06

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1DL

Tot Ion	Ratio	Lower	Upper
105	100		
120	41.1	37.4	56.2
91	15.2	41.0	61.4#
77	13.0	18.5	27.7#

