

Data File : VL033189.D
Acq On : 13 Feb 2019 16:30
Operator : SY/AP
Sample : K1408-01DUP
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AB-IADUP

Quant Time: Feb 14 04:27:16 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL020519AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Feb 06 09:13:11 2019
QLast Update : Wed Feb 06 09:13:11 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	985967	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	2279389	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	2233640	10.00	ppbv	0.00

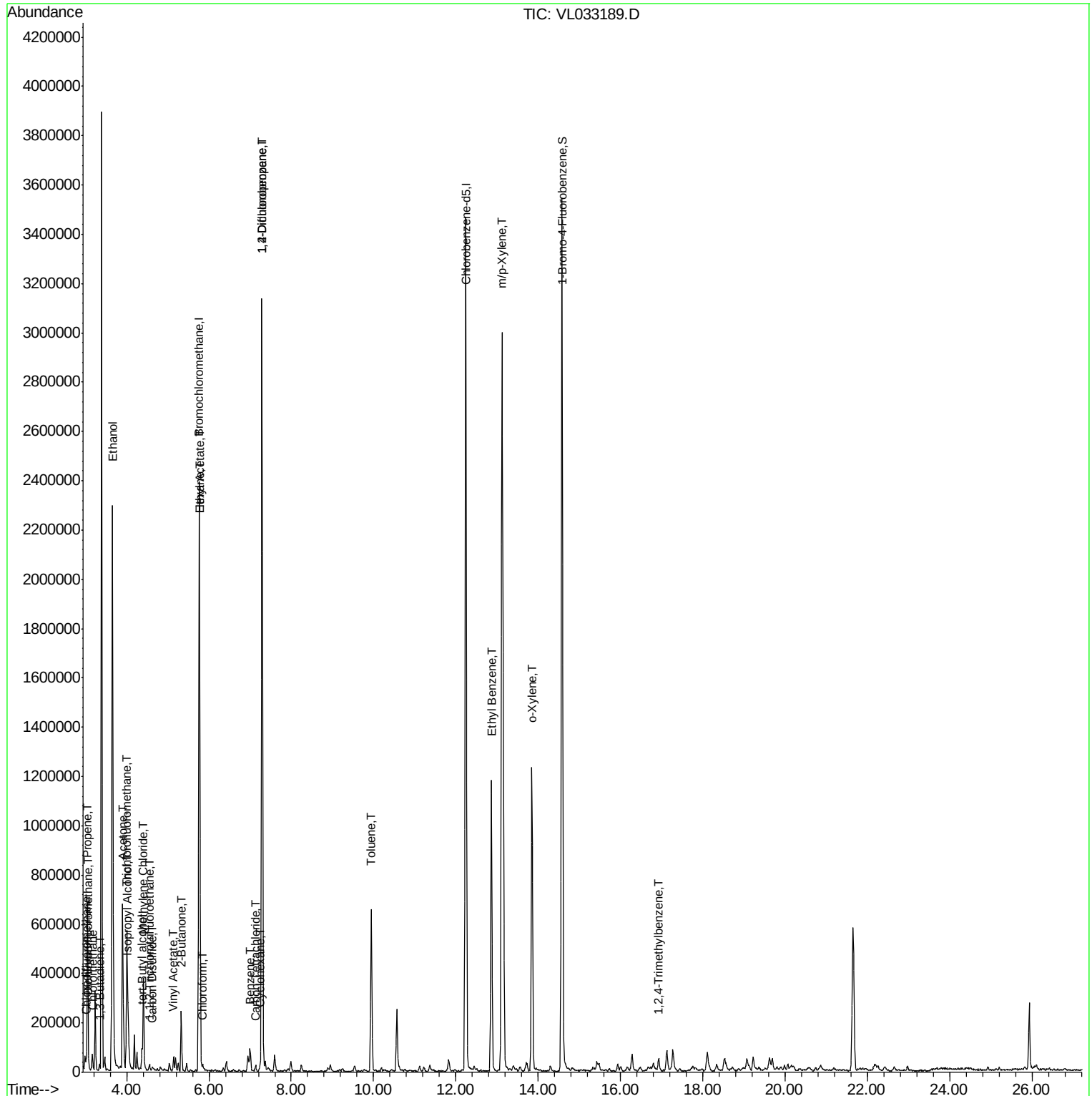
System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.58 95 1775798 10.32 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 103.20%

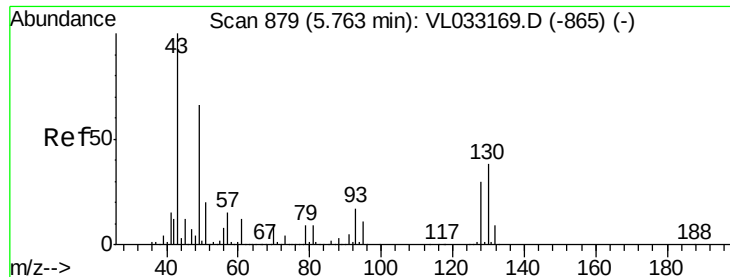
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.07	85	27069	0.144	ppbv	99
3) Chlorodifluoromethane	3.01	51	68986	0.581	ppbv #	83
4) Chloromethane	3.17	50	51112	0.815	ppbv	93
9) Propene	3.05	41	129934	2.266	ppbv #	62
11) Trichlorofluoromethane	4.00	101	374265	2.452	ppbv	99
12) 1,1,2-Trichlorotrifluoroet	4.55	101	6162	0.058	ppbv	87
13) Ethanol	3.65	45	2748687	143.730	ppbv	97
15) Acetone	3.90	43	690043	6.212	ppbv	99
16) 1,3-Butadiene	3.34	39	6512	0.124	ppbv #	5
17) tert-Butyl alcohol	4.37	59	31078	1.467	ppbv #	93
19) Isopropyl Alcohol	4.03	45	294932	3.915	ppbv #	97
20) Methylene Chloride	4.41	84	124208	2.811	ppbv	97
23) Vinyl Acetate	5.14	43	40847	0.212	ppbv #	83
25) Ethyl Acetate	5.78	43	276677	1.108	ppbv #	80
26) Hexane	5.78	57	364134	3.106	ppbv #	44
27) Carbon Disulfide	4.62	76	10079	0.094	ppbv #	37
29) Chloroform	5.85	83	7459	0.042	ppbv	98
30) Cyclohexane	7.25	84	3727	0.034	ppbv #	1
34) 2-Butanone	5.33	43	258152	1.785	ppbv	99
35) Carbon Tetrachloride	7.13	117	7348	0.042	ppbv #	91
36) Benzene	7.00	78	61101	0.264	ppbv	96
39) 1,2-Dichloropropane	7.29	63	594496	6.516	ppbv #	26
53) Toluene	9.94	91	508929	1.860	ppbv	97
58) Ethyl Benzene	12.86	91	1089545	3.014	ppbv	100
59) m/p-Xylene	13.12	91	3283201	10.883	ppbv #	100
60) o-Xylene	13.85	91	992713	3.384	ppbv	99
74) 1,2,4-Trimethylbenzene	16.93	105	12193	0.036	ppbv #	78

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

ALS Vial : 1 Sample Multiplier: 1

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 878

Delta R.T. -0.00 min

Lab File: VL033189.D

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MSVOA_L

ClientSampleId :

AB-IADUP

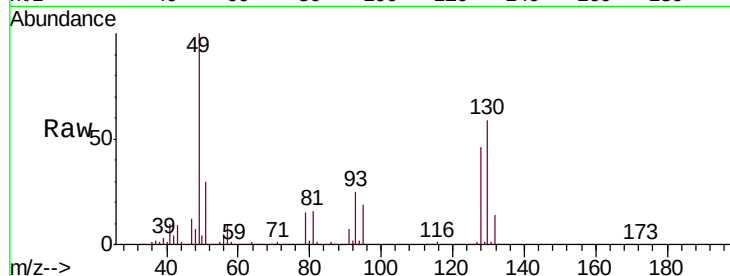
Tgt Ion: 49 Resp: 985967

Ion Ratio Lower Upper

49 100

128 46.2 23.6 71.0

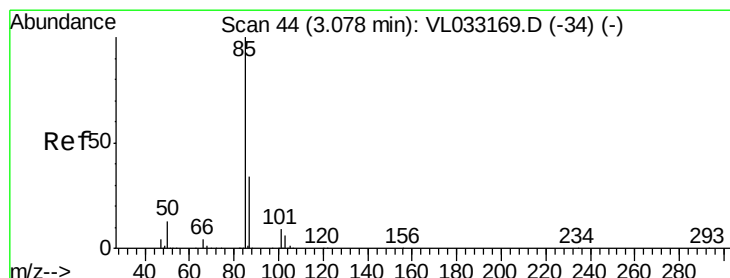
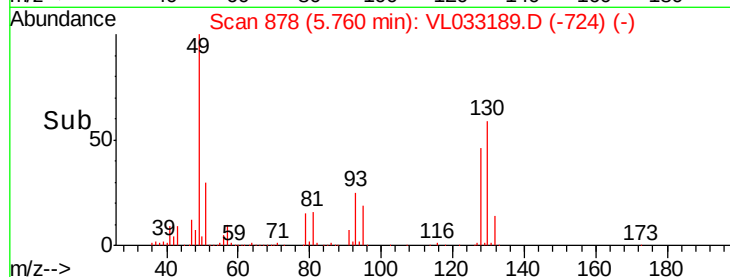
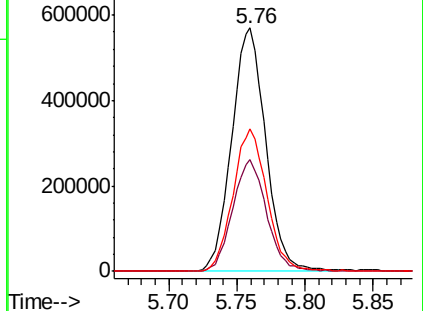
130 58.9 30.3 91.0



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: 0.144 ppbv

RT: 3.07 min Scan# 43

Delta R.T. -0.00 min

Lab File: VL033189.D

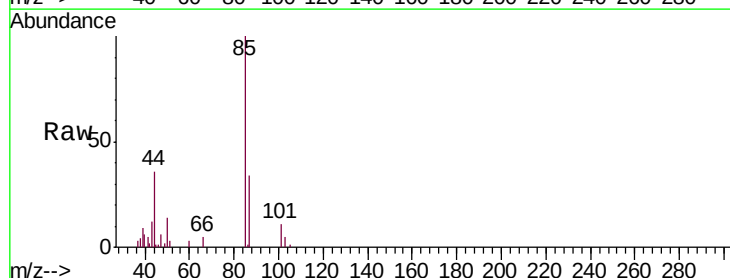
Acq: 13 Feb 2019 16:30

Tgt Ion: 85 Resp: 27069

Ion Ratio Lower Upper

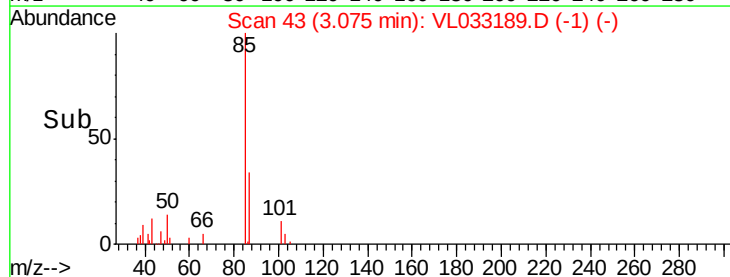
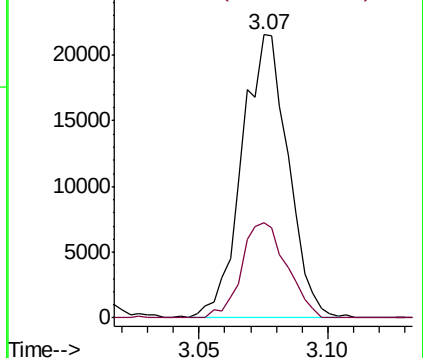
85 100

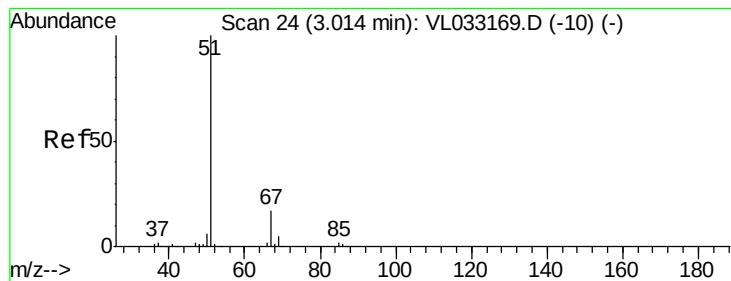
87 33.7 27.4 41.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.581 ppbv

RT: 3.01 min Scan# 24

Delta R.T. -0.00 min

Lab File: VL033189.D

Acq: 13 Feb 2019 16:30

Instrument :

MSVOA_L

ClientSampleId :

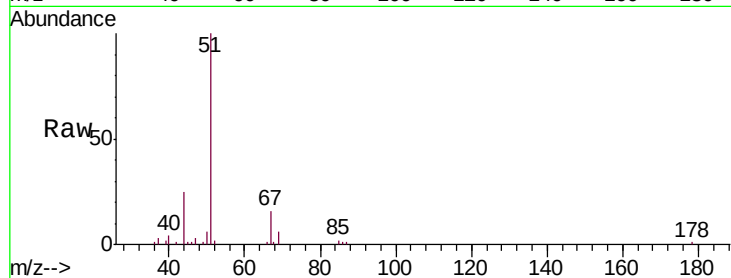
AB-IADUP

Tgt Ion: 51 Resp: 68986

Ion Ratio Lower Upper

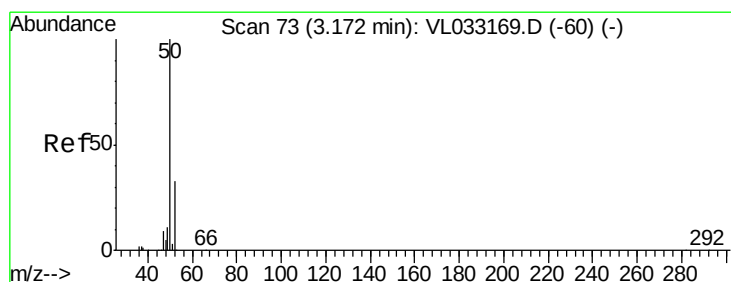
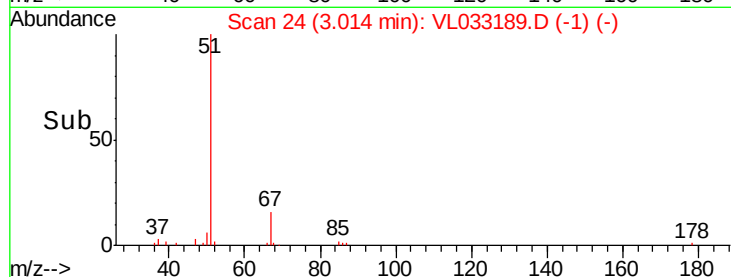
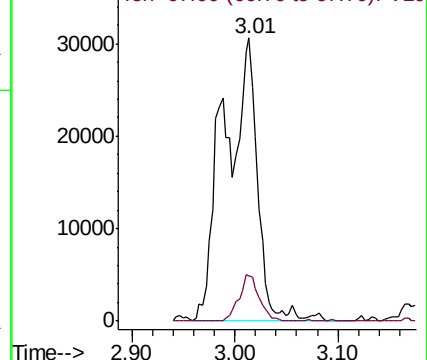
51 100

67 9.9 14.0 21.0#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.815 ppbv

RT: 3.17 min Scan# 72

Delta R.T. -0.00 min

Lab File: VL033189.D

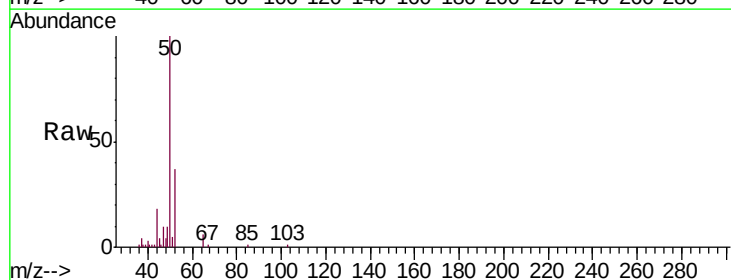
Acq: 13 Feb 2019 16:30

Tgt Ion: 50 Resp: 51112

Ion Ratio Lower Upper

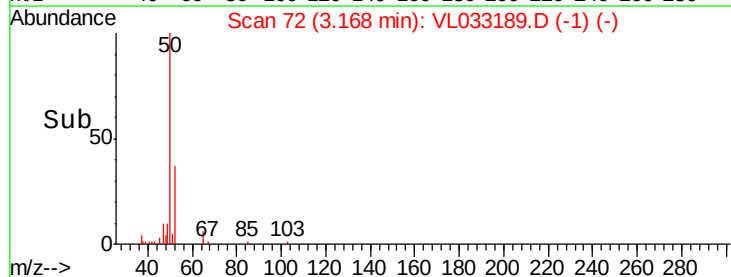
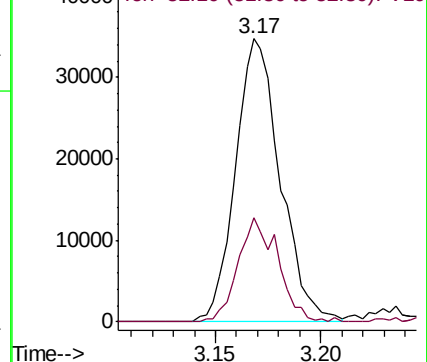
50 100

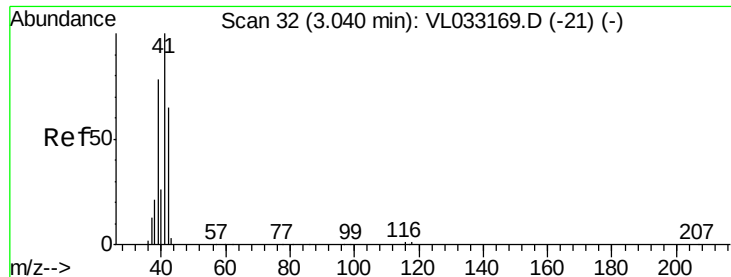
52 37.0 26.5 39.7



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 2.266 ppbv

RT: 3.05 min Scan# 35

Delta R.T. 0.01 min

Lab File: VL033189.D

Acq: 13 Feb 2019 16:30

Instrument :

MSVOA_L

ClientSampleId :

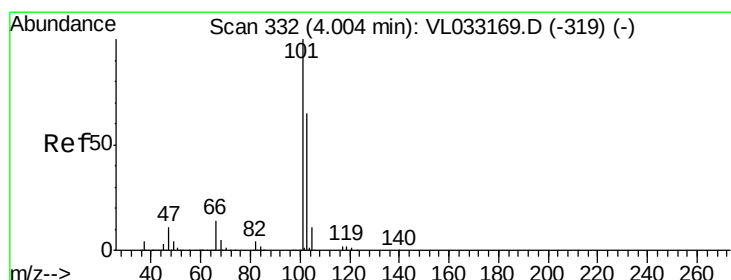
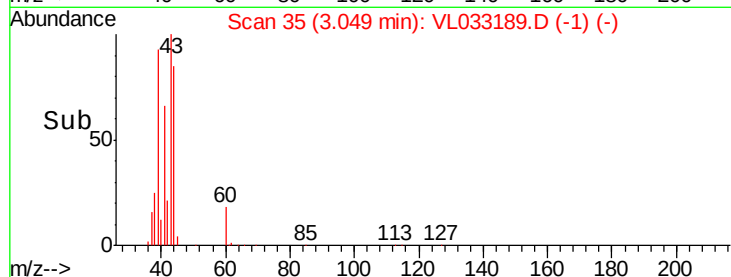
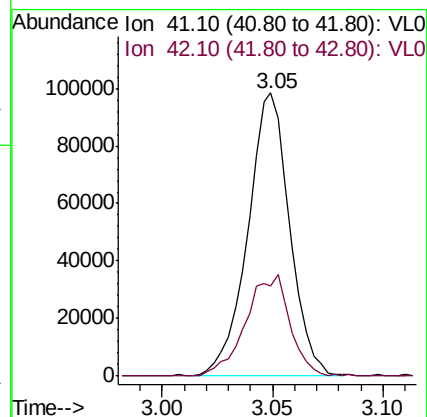
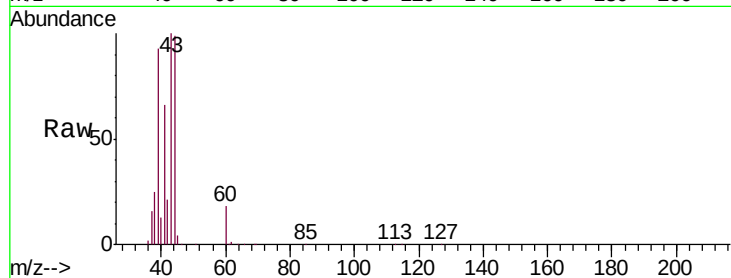
AB-IADUP

Tgt Ion: 41 Resp: 129934

Ion Ratio Lower Upper

41 100

42 38.1 55.0 82.6#



#11

Trichlorofluoromethane

Concen: 2.452 ppbv

RT: 4.00 min Scan# 332

Delta R.T. -0.00 min

Lab File: VL033189.D

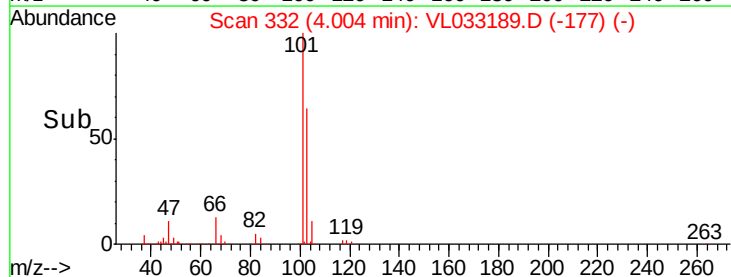
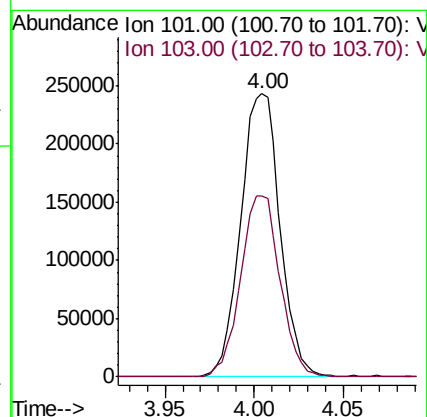
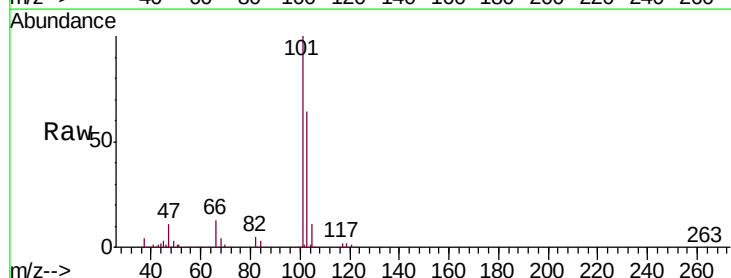
Acq: 13 Feb 2019 16:30

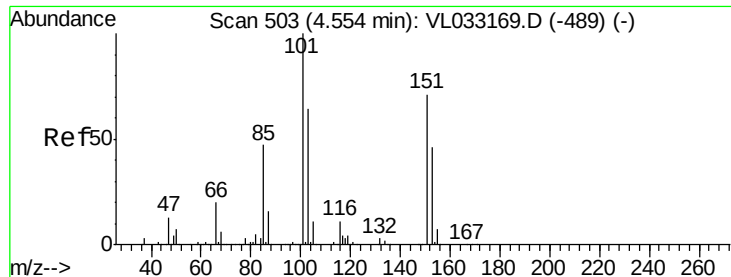
Tgt Ion: 101 Resp: 374265

Ion Ratio Lower Upper

101 100

103 63.8 51.7 77.5





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.058 ppbv

RT: 4.55 min Scan# 503

Delta R.T. -0.00 min

Lab File: VL033189.D

Acq: 13 Feb 2019 16:30

Instrument :

MSVOA_L

ClientSampleId :

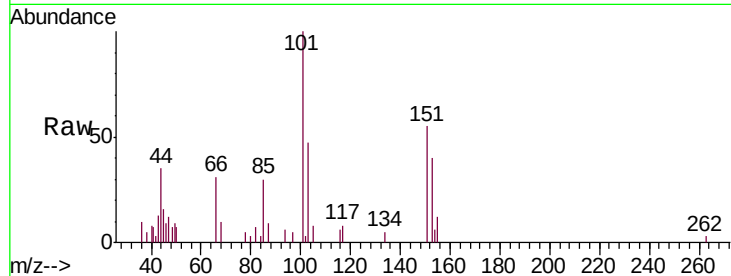
AB-IADUP

Tgt Ion:101 Resp: 6162

Ion Ratio Lower Upper

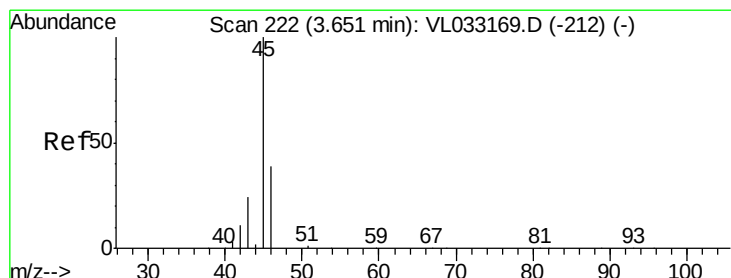
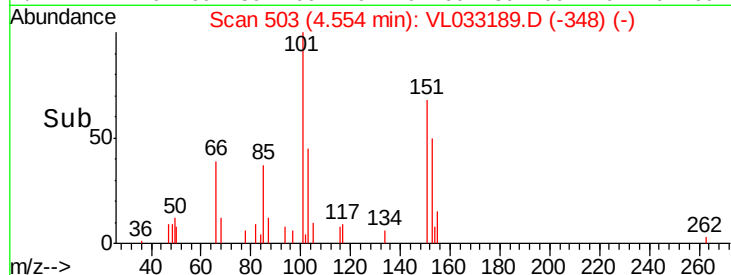
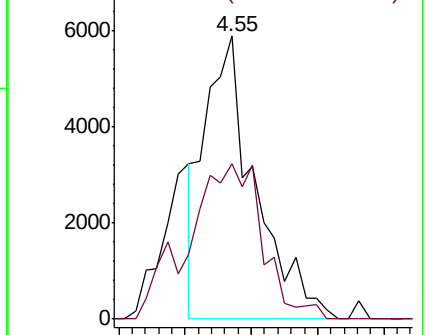
101 100

151 82.5 57.4 86.0



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V



#13

Ethanol

Concen: 143.730 ppbv

RT: 3.65 min Scan# 222

Delta R.T. 0.00 min

Lab File: VL033189.D

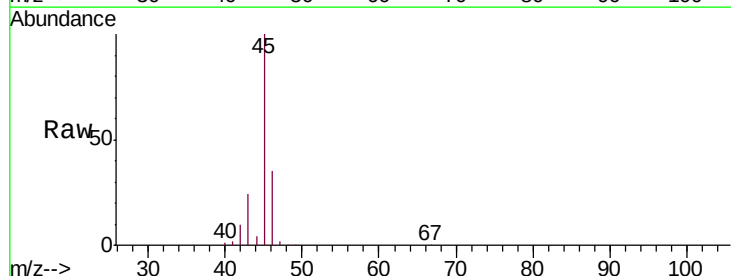
Acq: 13 Feb 2019 16:30

Tgt Ion: 45 Resp: 2748687

Ion Ratio Lower Upper

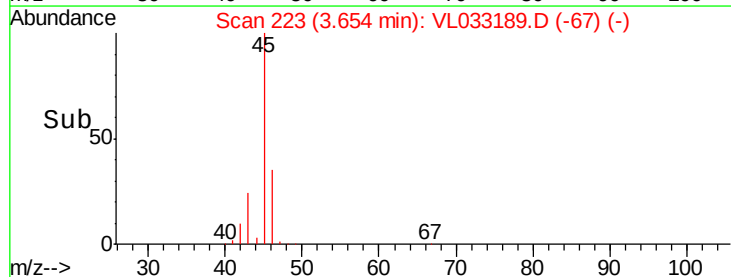
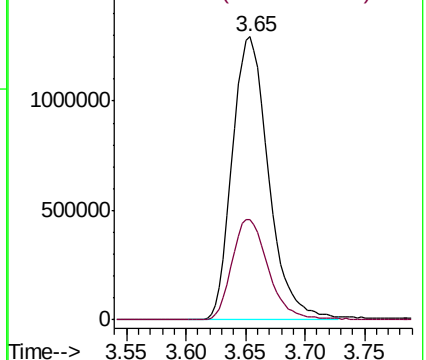
45 100

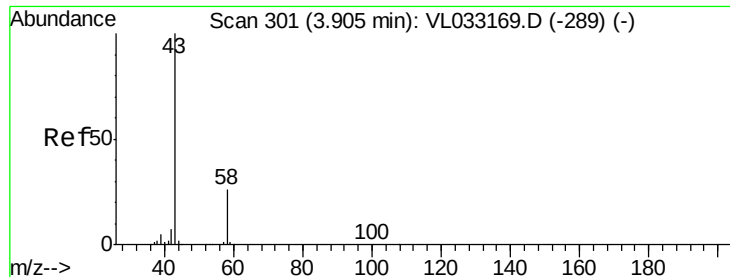
46 35.8 15.0 60.2



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 6.212 ppbv

RT: 3.90 min Scan# 299

Delta R.T. -0.01 min

Lab File: VL033189.D

Acq: 13 Feb 2019 16:30

Instrument :

MSVOA_L

ClientSampleId :

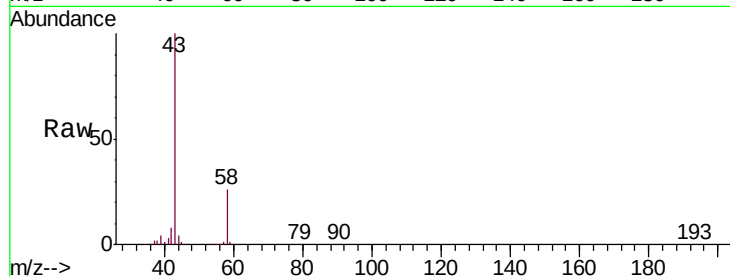
AB-IADUP

Tgt Ion: 43 Resp: 690043

Ion Ratio Lower Upper

43 100

58 26.9 21.1 31.7



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

3.90

400000

300000

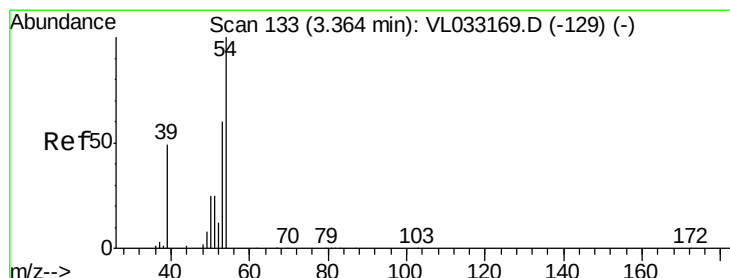
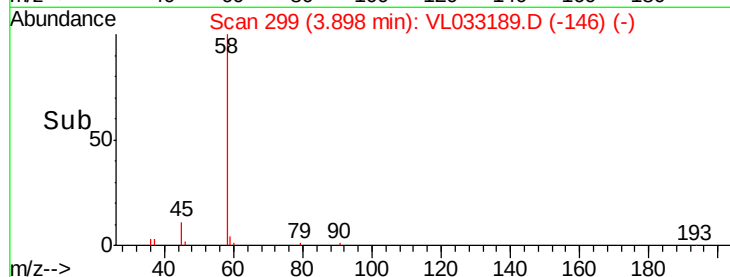
200000

100000

0

Time-->

3.85 3.90 3.95



#16

1,3-Butadiene

Concen: 0.124 ppbv

RT: 3.34 min Scan# 125

Delta R.T. -0.03 min

Lab File: VL033189.D

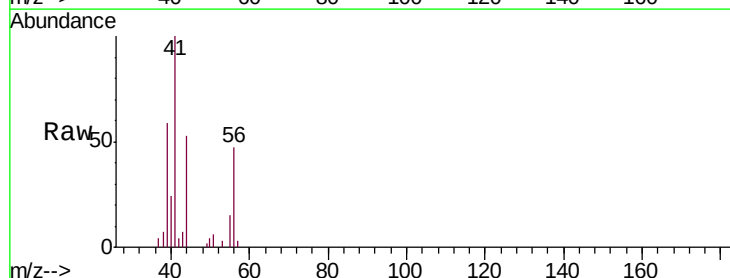
Acq: 13 Feb 2019 16:30

Tgt Ion: 39 Resp: 6512

Ion Ratio Lower Upper

39 100

54 0.0 71.3 106.9#



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0

3.34

15000

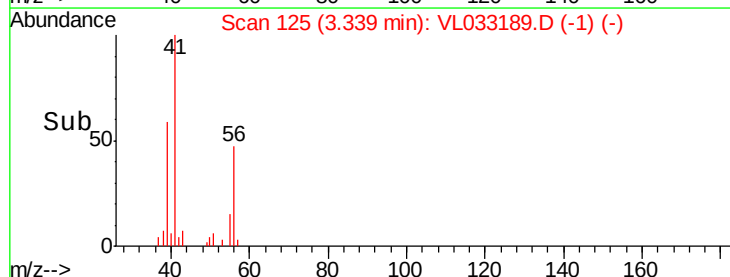
10000

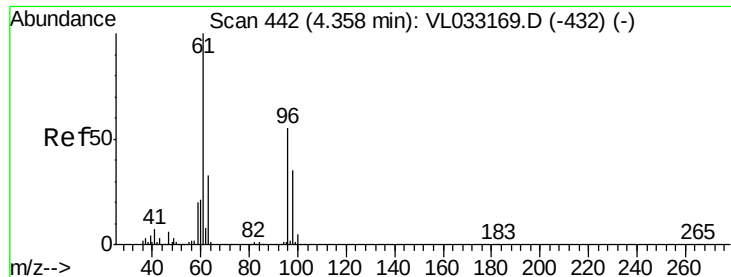
5000

0

Time-->

3.30 3.32 3.34 3.36





#17

tert-Butyl alcohol

Concen: 1.467 ppbv

RT: 4.37 min Scan# 447

Delta R.T. 0.02 min

Lab File: VL033189.D

Acq: 13 Feb 2019 16:30

Instrument :

MSVOA_L

ClientSampleId :

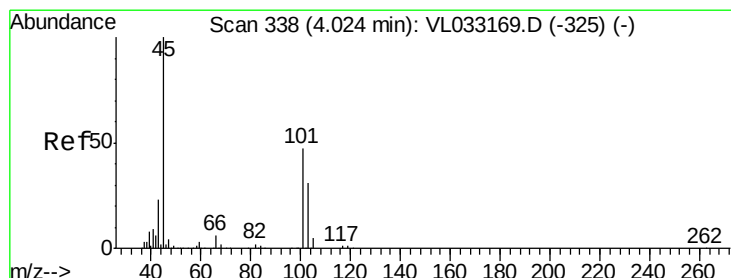
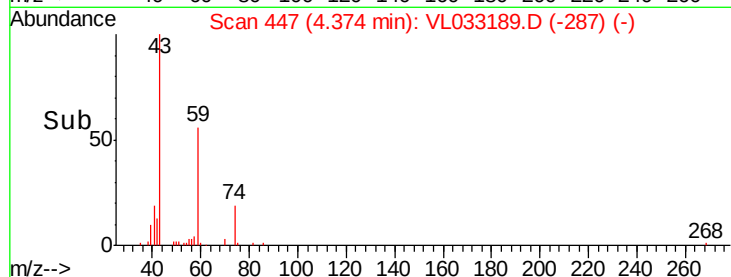
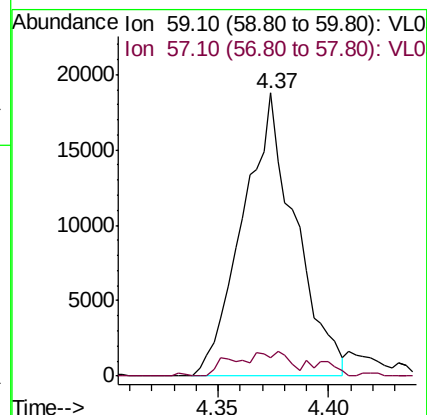
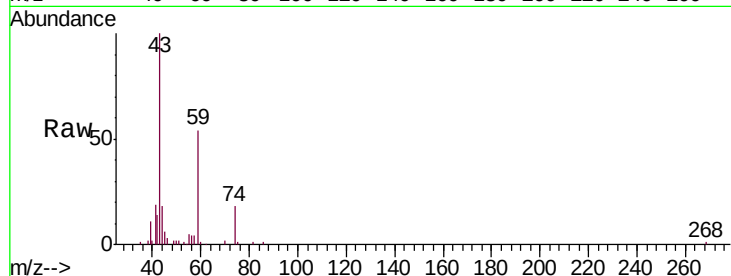
AB-IADUP

Tgt Ion: 59 Resp: 31078

Ion Ratio Lower Upper

59 100

57 12.1 7.6 11.4#



#19

Isopropyl Alcohol

Concen: 3.915 ppbv

RT: 4.03 min Scan# 340

Delta R.T. 0.01 min

Lab File: VL033189.D

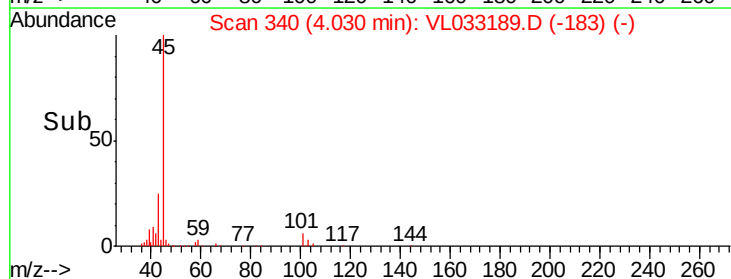
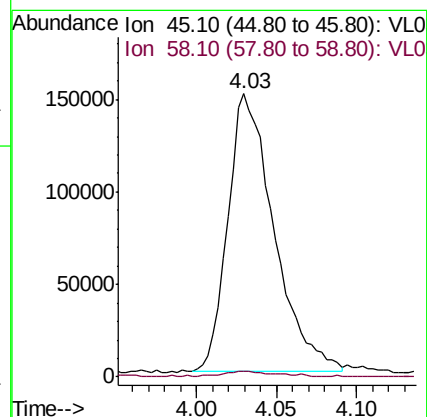
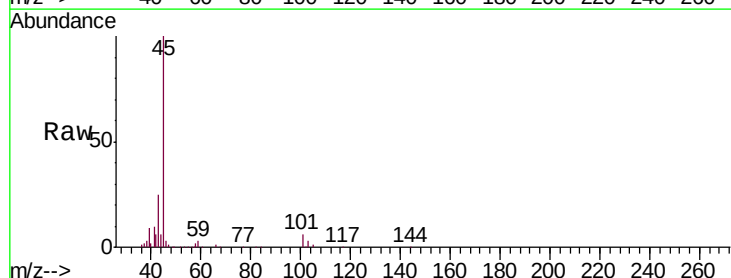
Acq: 13 Feb 2019 16:30

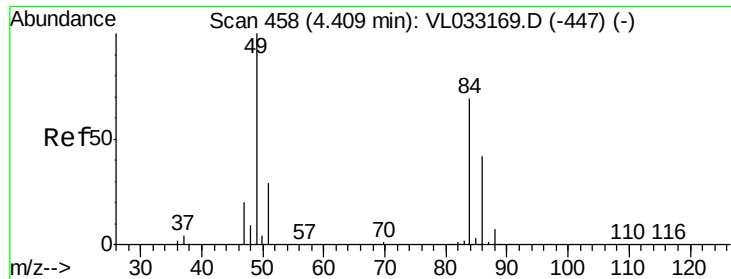
Tgt Ion: 45 Resp: 294932

Ion Ratio Lower Upper

45 100

58 3.0 1.5 2.3#

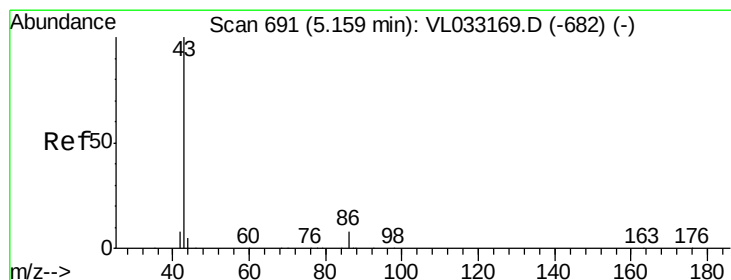
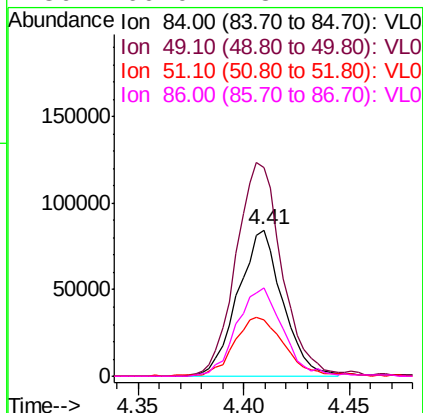
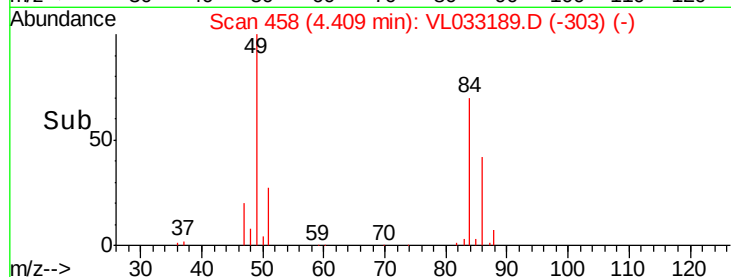
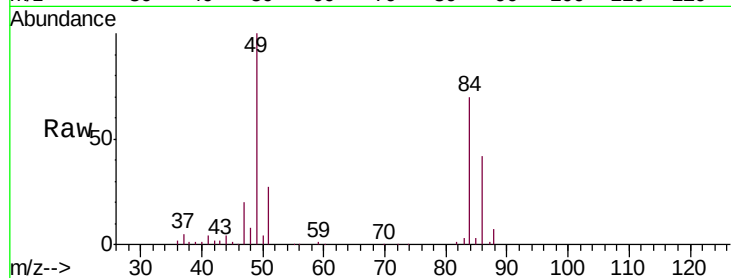




#20
Methylene Chloride
Concen: 2.811 ppbv
RT: 4.41 min Scan# 458
Delta R.T. -0.00 min
Lab File: VL033189.D
Acq: 13 Feb 2019 16:30

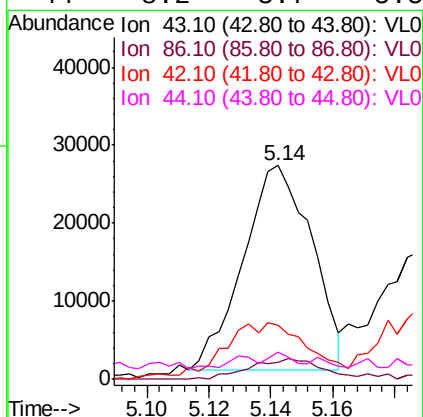
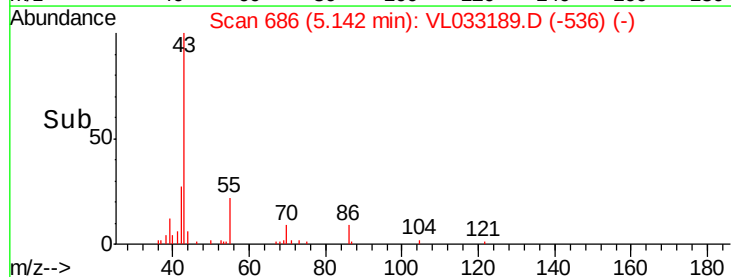
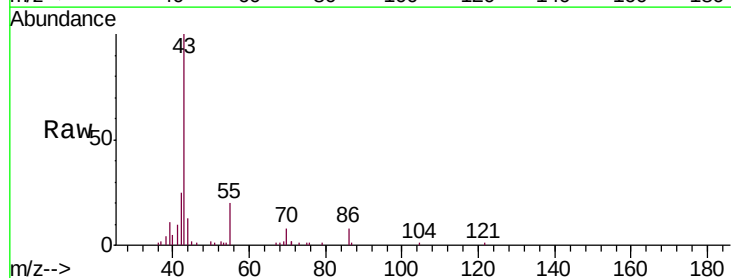
Instrument :
MSVOA_L
ClientSampleId :
AB-IADUP

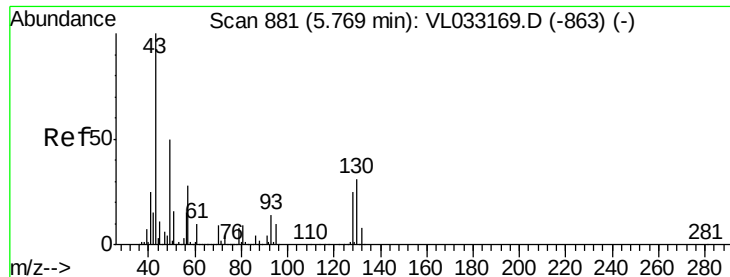
Tgt Ion:	84	Resp:	124208
Ion	Ratio	Lower	Upper
84	100		
49	141.7	115.8	173.8
51	37.4	33.0	49.6
86	60.0	48.2	72.2



#23
Vinyl Acetate
Concen: 0.212 ppbv
RT: 5.14 min Scan# 686
Delta R.T. -0.02 min
Lab File: VL033189.D
Acq: 13 Feb 2019 16:30

Tgt Ion:	43	Resp:	40847
Ion	Ratio	Lower	Upper
43	100		
86	8.2	5.8	8.8
42	20.7	7.4	11.0#
44	8.2	3.7	5.5#





#25

Ethyl Acetate

Concen: 1.108 ppbv

RT: 5.78 min Scan# 884

Delta R.T. 0.01 min

Lab File: VL033189.D

Acq: 13 Feb 2019 16:30

Instrument :

MSVOA_L

ClientSampleId :

AB-IADUP

Tgt Ion: 43 Resp: 276677

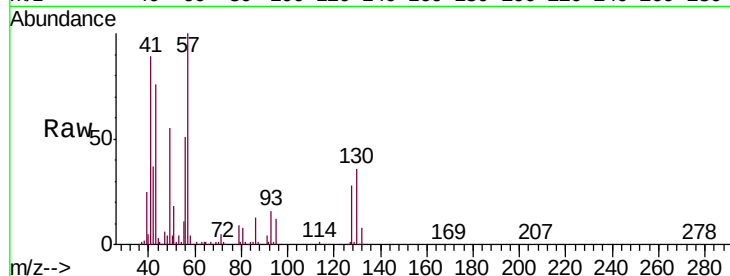
Ion Ratio Lower Upper

43 100

45 2.0 7.9 11.9#

61 1.3 7.5 11.3#

70 2.4 5.8 8.8#

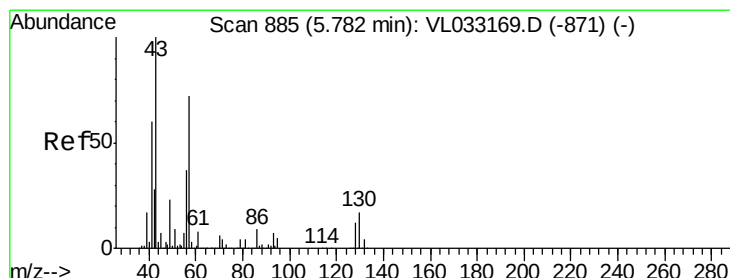
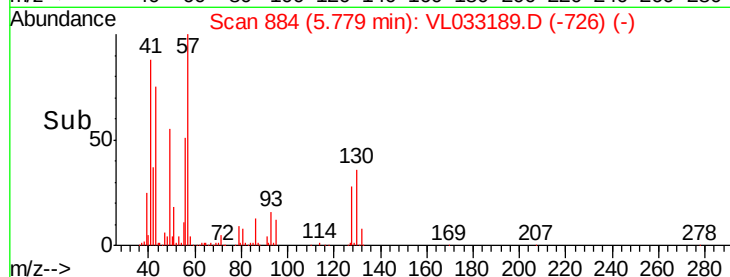
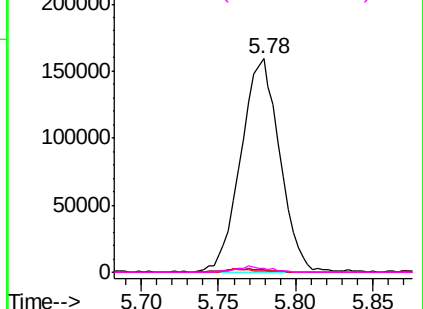


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0



#26

Hexane

Concen: 3.106 ppbv

RT: 5.78 min Scan# 884

Delta R.T. -0.00 min

Lab File: VL033189.D

Acq: 13 Feb 2019 16:30

Tgt Ion: 57 Resp: 364134

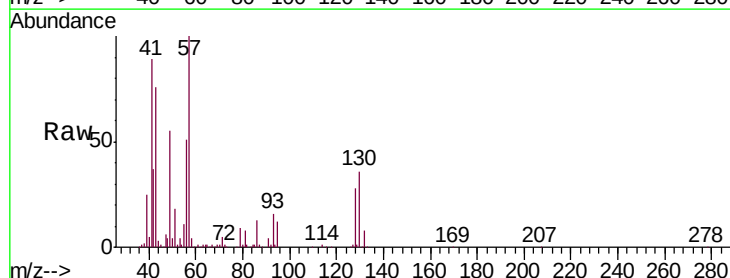
Ion Ratio Lower Upper

57 100

41 89.5 69.4 104.2

43 76.4 176.7 265.1#

56 52.4 41.4 62.0

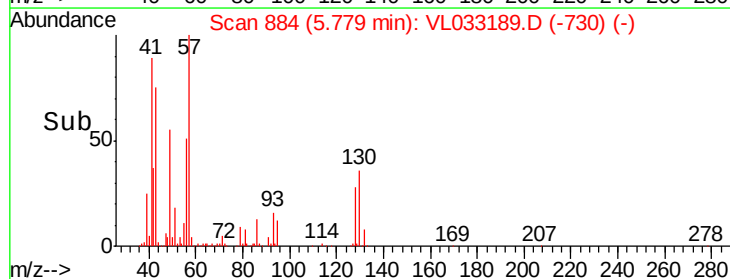
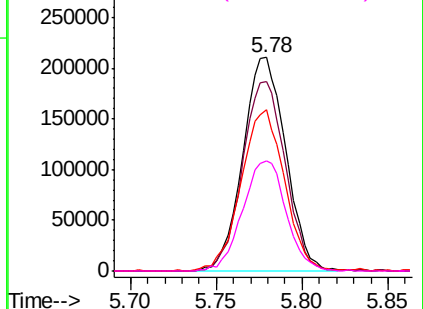


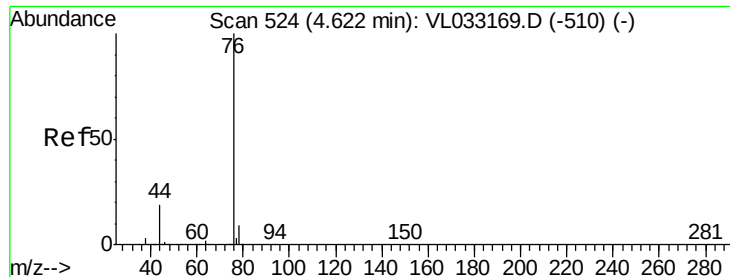
Abundance Ion 57.10 (56.80 to 57.80): VL0

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: 0.094 ppbv

RT: 4.62 min Scan# 524

Delta R.T. -0.00 min

Lab File: VL033189.D

Acq: 13 Feb 2019 16:30

Instrument :

MSVOA_L

ClientSampleId :

AB-IADUP

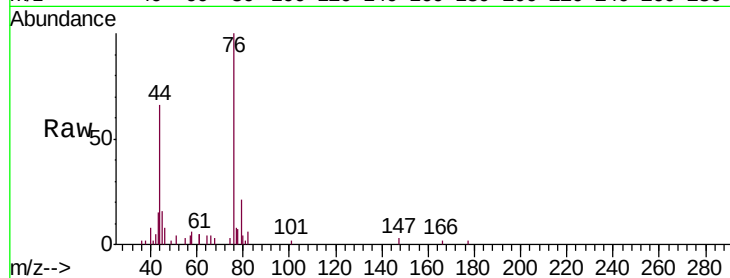
Tgt Ion: 76 Resp: 10079

Ion Ratio Lower Upper

76 100

44 60.6 15.0 22.4#

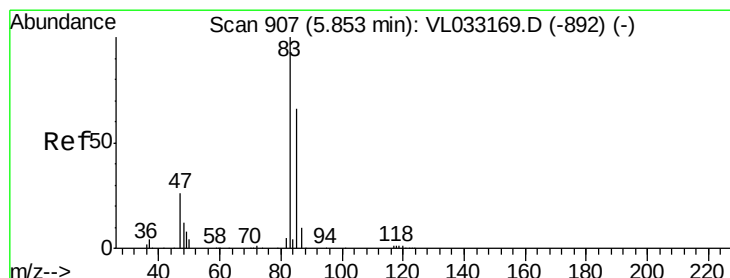
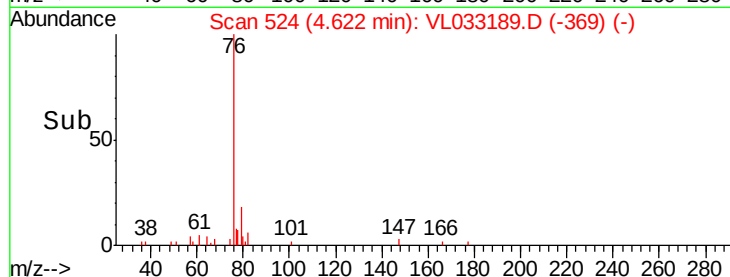
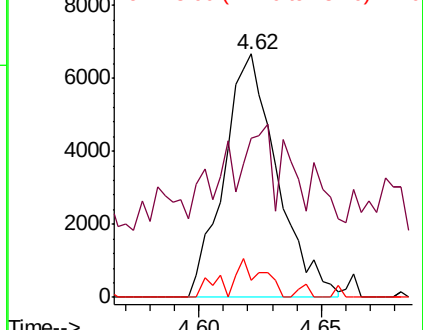
78 9.3 7.4 11.0



Abundance Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0



#29

Chloroform

Concen: 0.042 ppbv

RT: 5.85 min Scan# 905

Delta R.T. -0.01 min

Lab File: VL033189.D

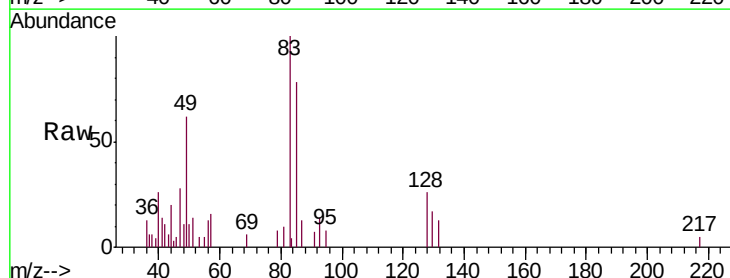
Acq: 13 Feb 2019 16:30

Tgt Ion: 83 Resp: 7459

Ion Ratio Lower Upper

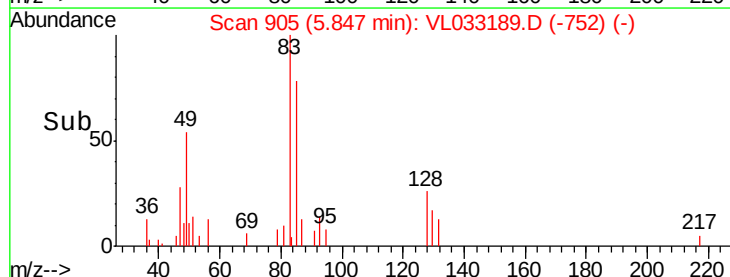
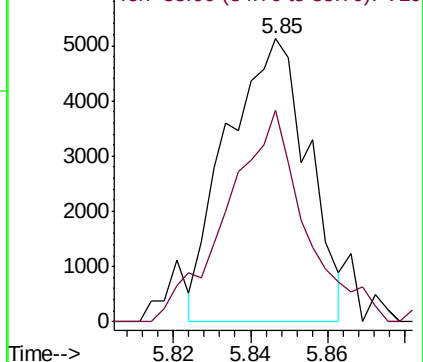
83 100

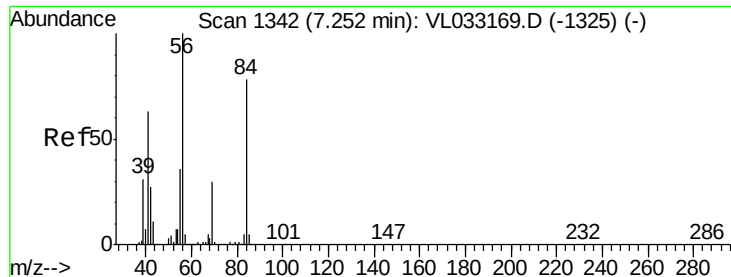
85 67.3 52.6 78.8



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

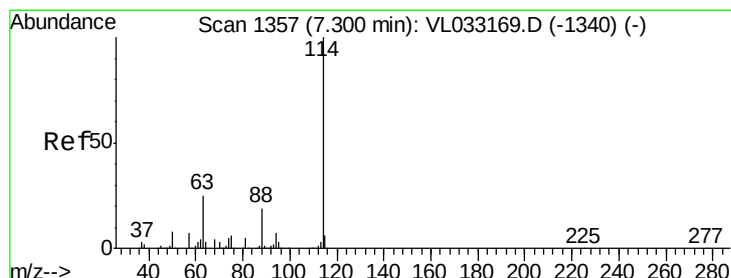
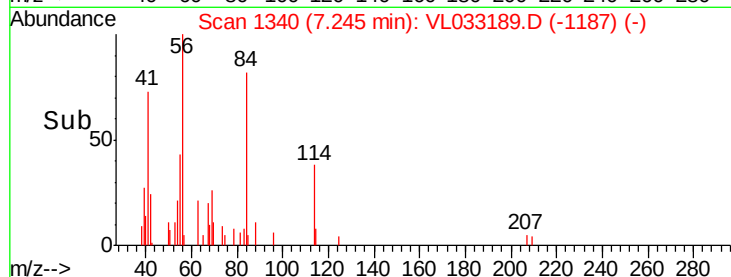
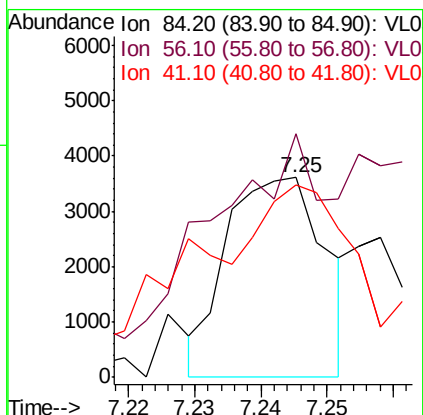
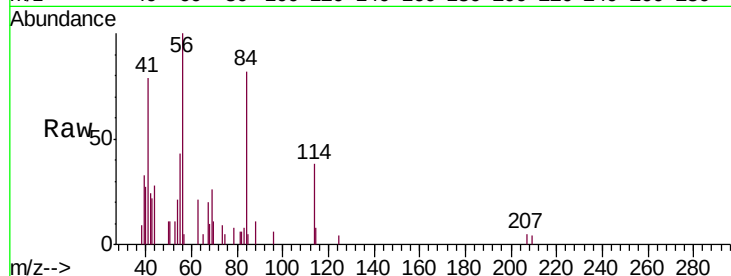




#30
Cyclohexane
Concen: 0.034 ppbv
RT: 7.25 min Scan# 1340
Delta R.T. -0.01 min
Lab File: VL033189.D
Acq: 13 Feb 2019 16:30

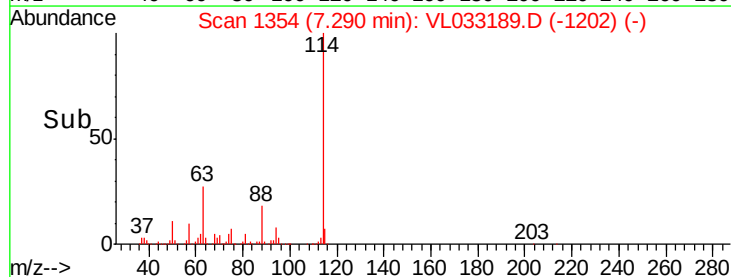
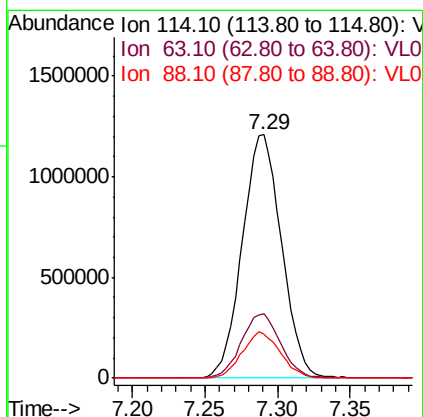
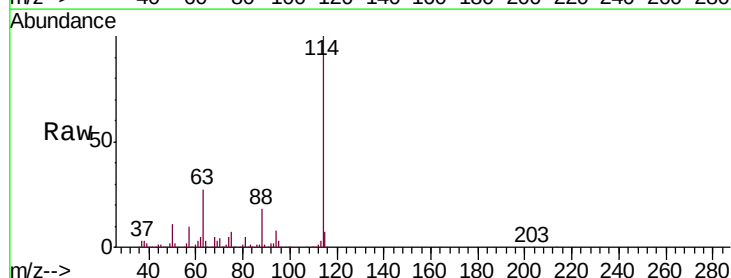
Instrument :
MSVOA_L
ClientSampleId :
AB-IADUP

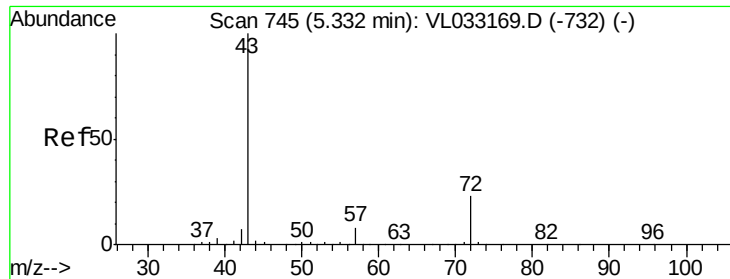
Tgt Ion: 84 Resp: 3727
Ion Ratio Lower Upper
84 100
56 0.0 109.5 164.3#
41 197.3 66.6 100.0#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.29 min Scan# 1354
Delta R.T. -0.01 min
Lab File: VL033189.D
Acq: 13 Feb 2019 16:30

Tgt Ion: 114 Resp: 2279389
Ion Ratio Lower Upper
114 100
63 26.5 20.8 31.2
88 18.4 14.6 22.0

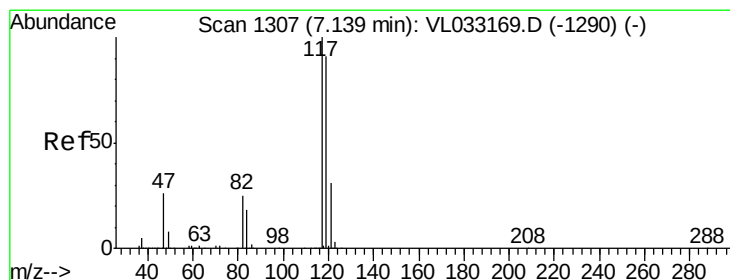
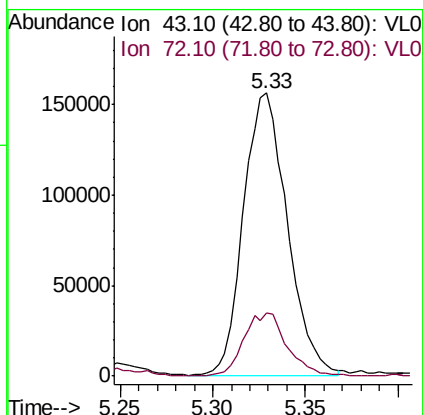
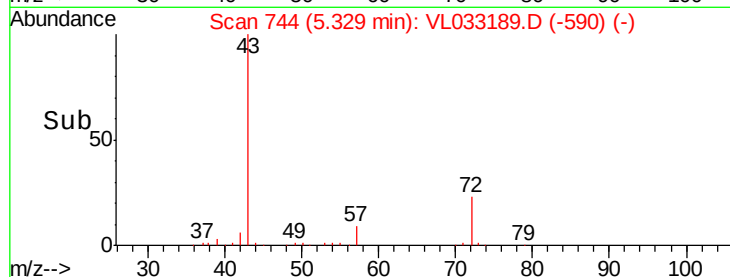
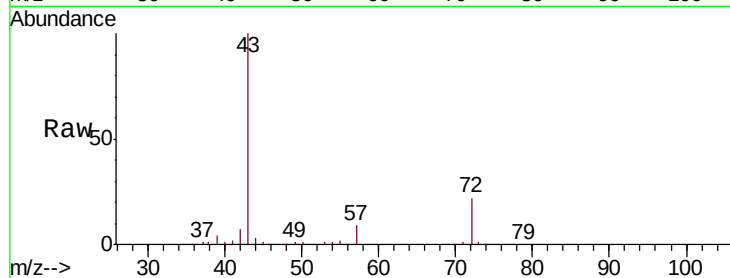




#34
 2-Butanone
 Concen: 1.785 ppbv
 RT: 5.33 min Scan# 744
 Delta R.T. -0.00 min
 Lab File: VL033189.D
 Acq: 13 Feb 2019 16:30

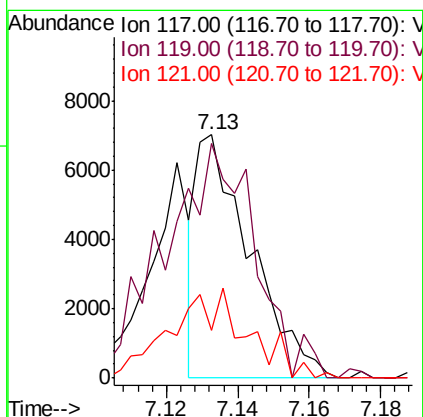
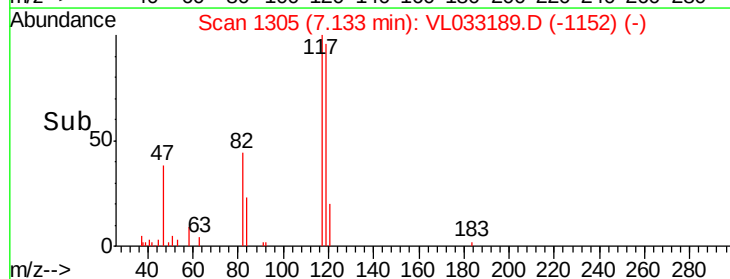
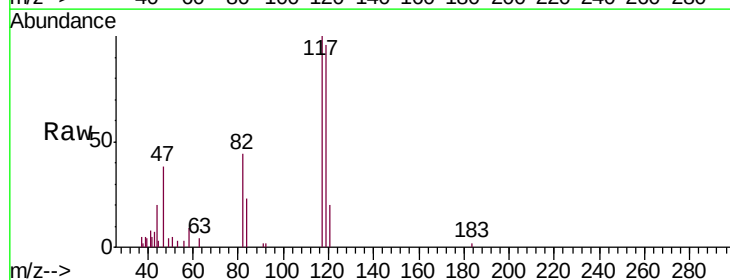
Instrument :
 MSVOA_L
 ClientSampleId :
 AB-IADUP

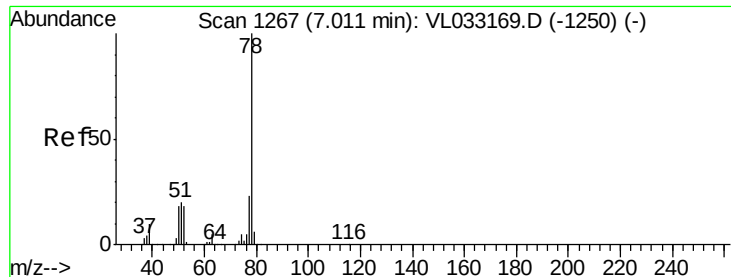
Tgt Ion: 43 Resp: 258152
 Ion Ratio Lower Upper
 43 100
 72 22.5 17.8 26.6



#35
 Carbon Tetrachloride
 Concen: 0.042 ppbv
 RT: 7.13 min Scan# 1305
 Delta R.T. -0.01 min
 Lab File: VL033189.D
 Acq: 13 Feb 2019 16:30

Tgt Ion: 117 Resp: 7348
 Ion Ratio Lower Upper
 117 100
 119 96.3 73.0 109.6
 121 19.7 25.1 37.7#

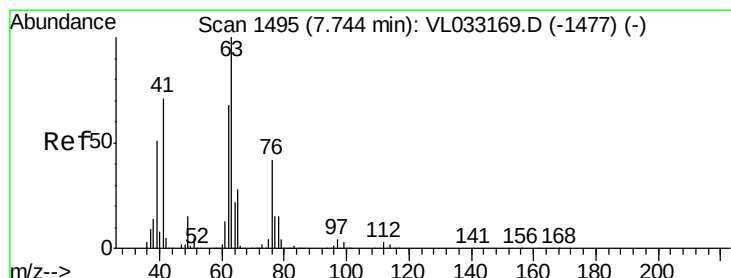
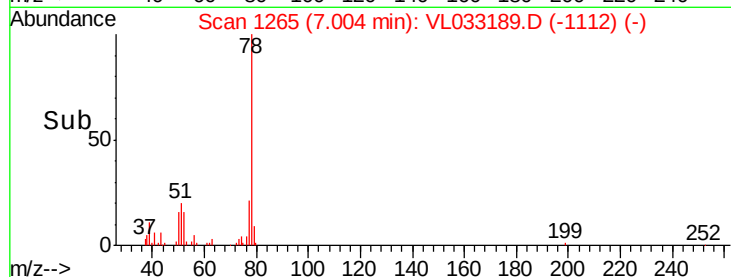
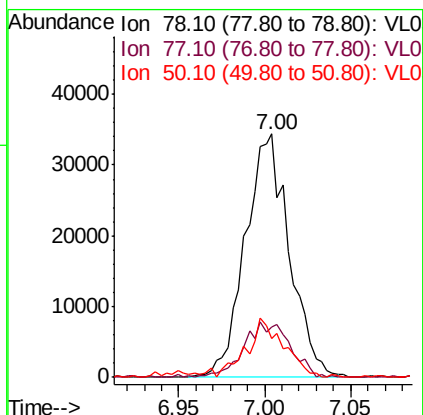
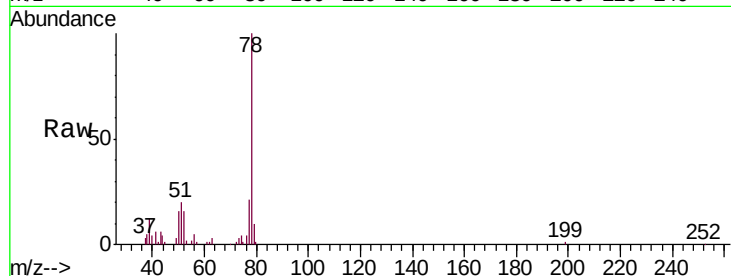




#36
Benzene
Concen: 0.264 ppbv
RT: 7.00 min Scan# 1265
Delta R.T. -0.01 min
Lab File: VL033189.D
Acq: 13 Feb 2019 16:30

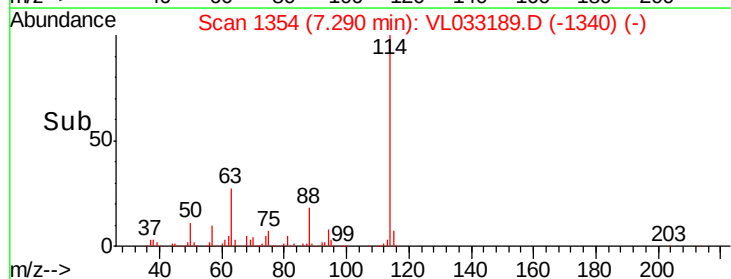
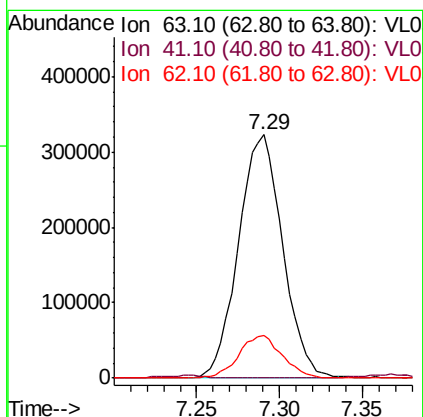
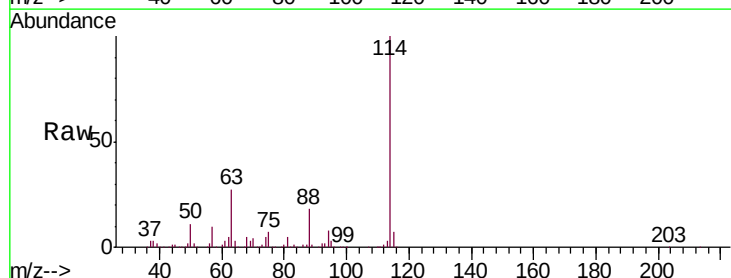
Instrument :
MSVOA_L
ClientSampleId :
AB-IADUP

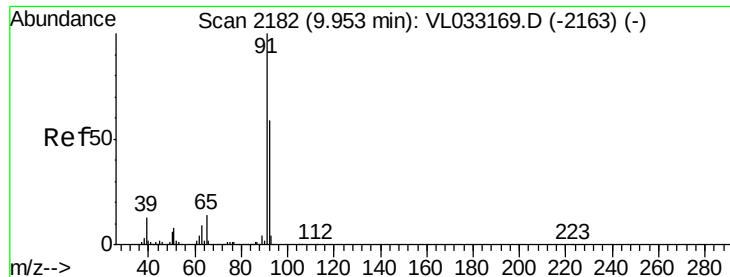
Tgt Ion: 78 Resp: 61101
Ion Ratio Lower Upper
78 100
77 20.8 18.0 27.0
50 15.3 14.2 21.2



#39
1,2-Dichloropropane
Concen: 6.516 ppbv
RT: 7.29 min Scan# 1354
Delta R.T. -0.45 min
Lab File: VL033189.D
Acq: 13 Feb 2019 16:30

Tgt Ion: 63 Resp: 594496
Ion Ratio Lower Upper
63 100
41 0.0 56.4 84.6#
62 17.6 54.2 81.4#





#53

Toluene

Concen: 1.860 ppbv

RT: 9.94 min Scan# 2179

Delta R.T. -0.01 min

Lab File: VL033189.D

Acq: 13 Feb 2019 16:30

Instrument :

MSVOA_L

ClientSampleId :

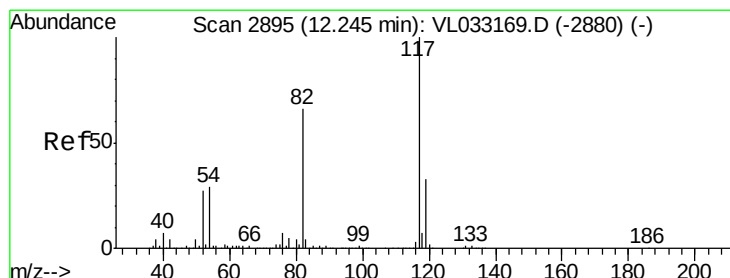
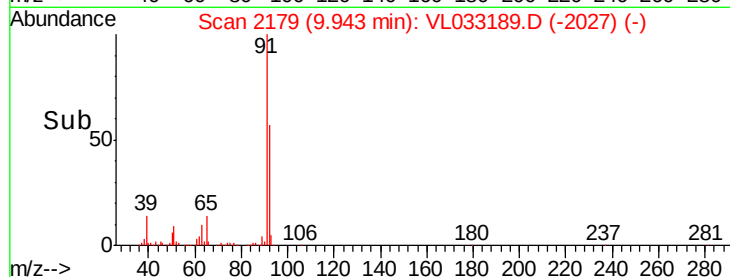
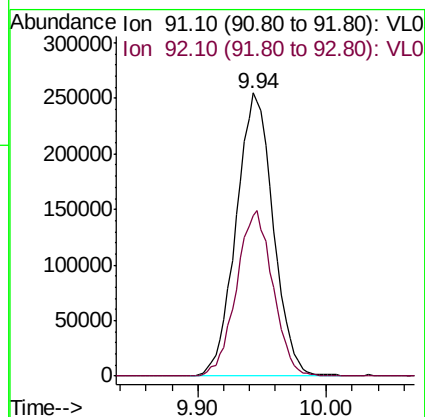
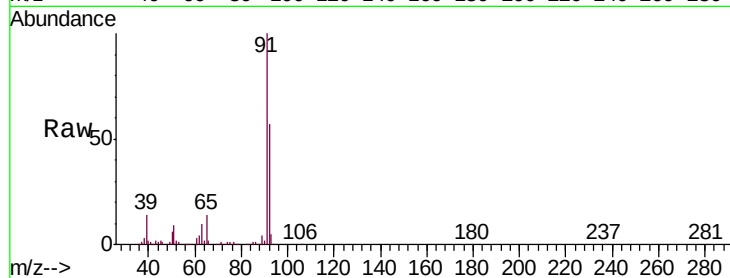
AB-IADUP

Tgt Ion: 91 Resp: 508929

Ion Ratio Lower Upper

91 100

92 57.6 48.0 72.0



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.24 min Scan# 2893

Delta R.T. -0.01 min

Lab File: VL033189.D

Acq: 13 Feb 2019 16:30

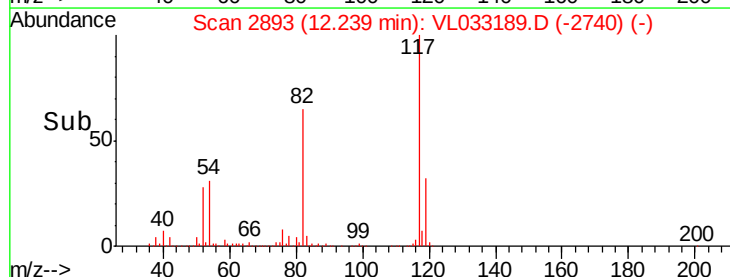
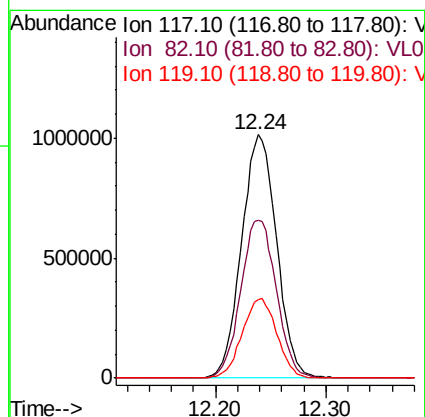
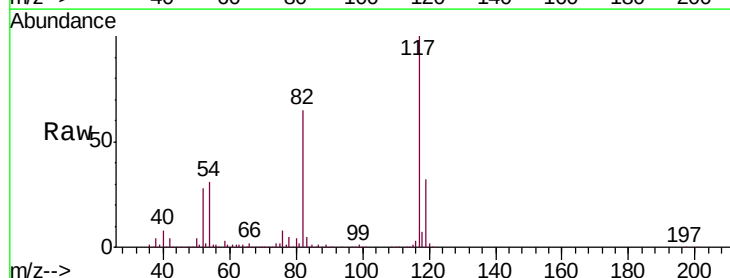
Tgt Ion: 117 Resp: 2233640

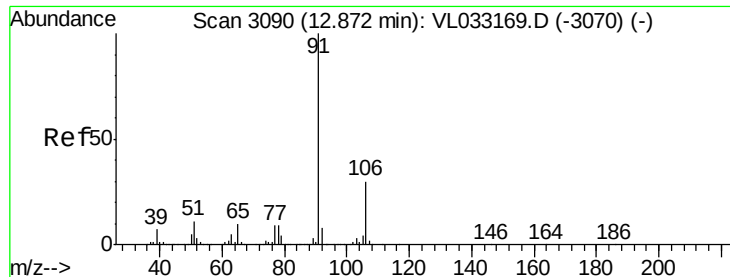
Ion Ratio Lower Upper

117 100

82 66.1 49.5 74.3

119 32.5 24.4 36.6





#58

Ethyl Benzene

Concen: 3.014 ppbv

RT: 12.86 min Scan# 3087

Delta R.T. -0.01 min

Lab File: VL033189.D

Acq: 13 Feb 2019 16:30

Instrument :

MSVOA_L

ClientSampleId :

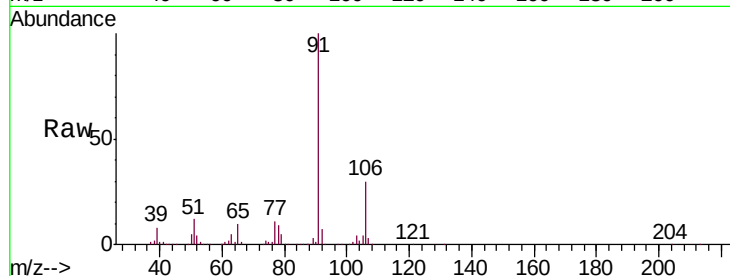
AB-IADUP

Tgt Ion: 91 Resp: 1089545

Ion Ratio Lower Upper

91 100

106 29.9 23.8 35.8



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

12.86

500000

400000

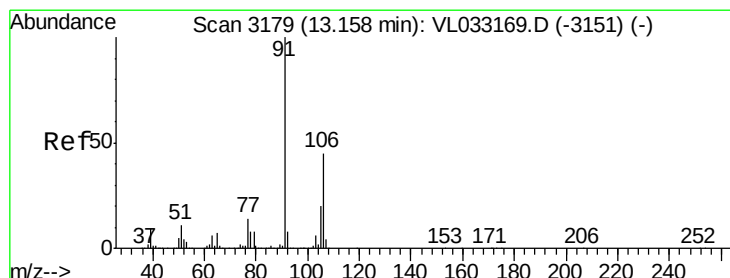
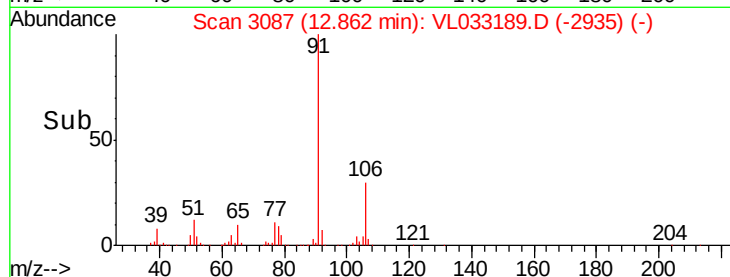
300000

200000

100000

0

Time-->



#59

m/p-Xylene

Concen: 10.883 ppbv

RT: 13.12 min Scan# 3166

Delta R.T. -0.04 min

Lab File: VL033189.D

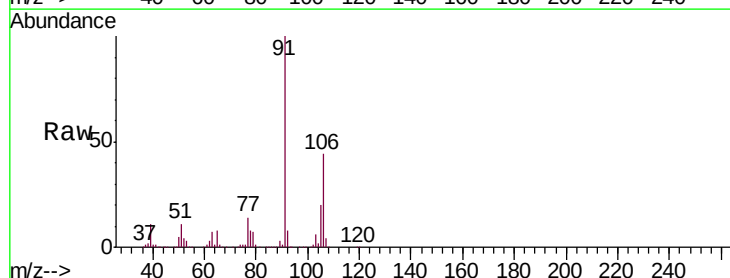
Acq: 13 Feb 2019 16:30

Tgt Ion: 91 Resp: 3283201

Ion Ratio Lower Upper

91 100

106 45.4 0.0 0.0#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

13.12

1200000

1000000

800000

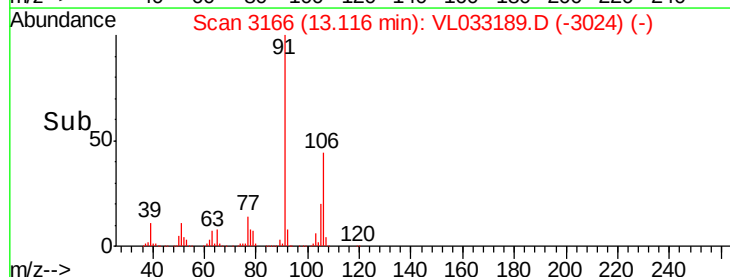
600000

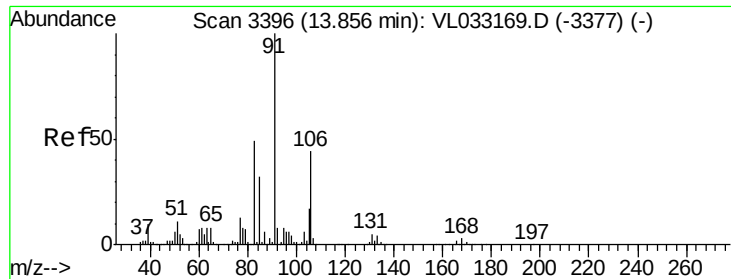
400000

200000

0

Time-->





#60

o-Xylene

Concen: 3.384 ppbv

RT: 13.85 min Scan# 3394

Delta R.T. -0.01 min

Lab File: VL033189.D

Acq: 13 Feb 2019 16:30

Instrument :

MSVOA_L

ClientSampleId :

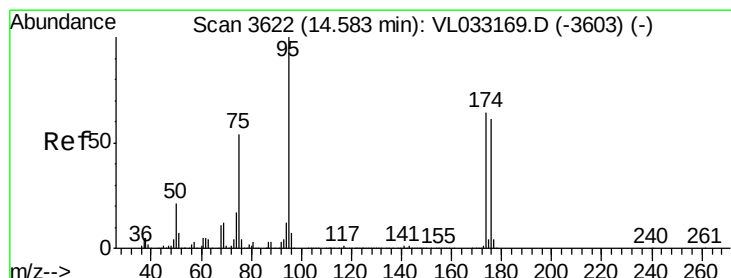
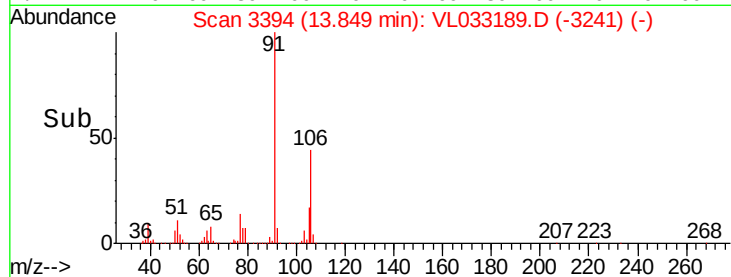
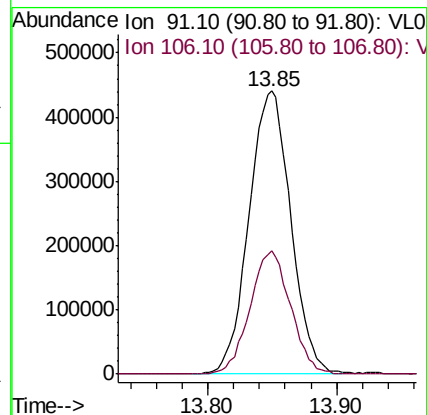
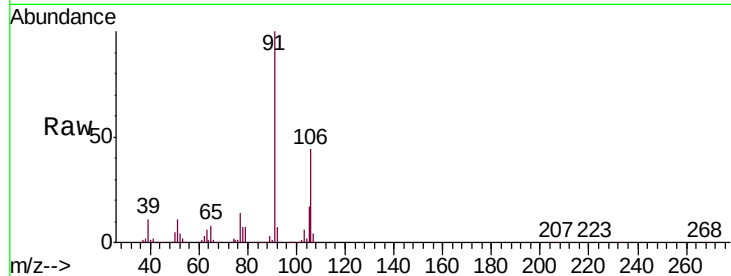
AB-IADUP

Tgt Ion: 91 Resp: 992713

Ion Ratio Lower Upper

91 100

106 42.7 21.8 65.3



#68

1-Bromo-4-Fluorobenzene

Concen: 10.323 ppbv

RT: 14.58 min Scan# 3620

Delta R.T. -0.01 min

Lab File: VL033189.D

Acq: 13 Feb 2019 16:30

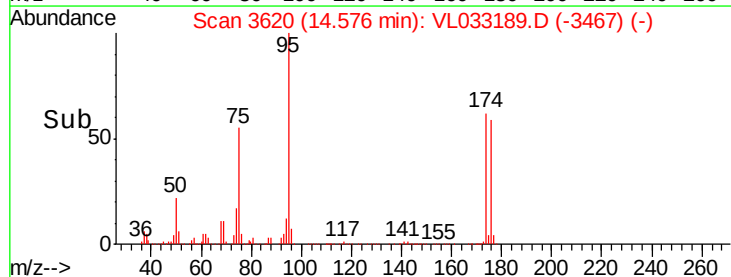
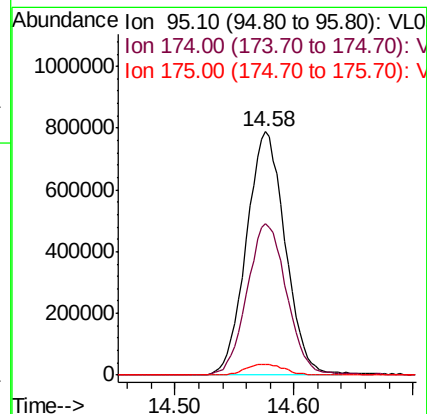
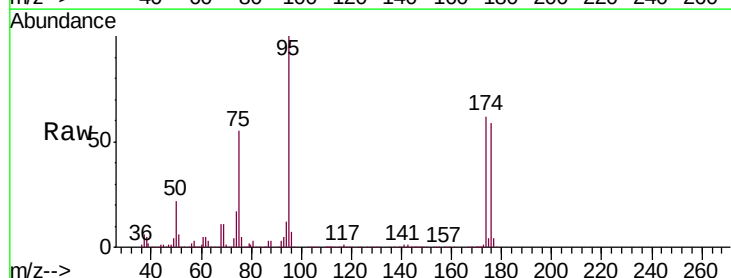
Tgt Ion: 95 Resp: 1775798

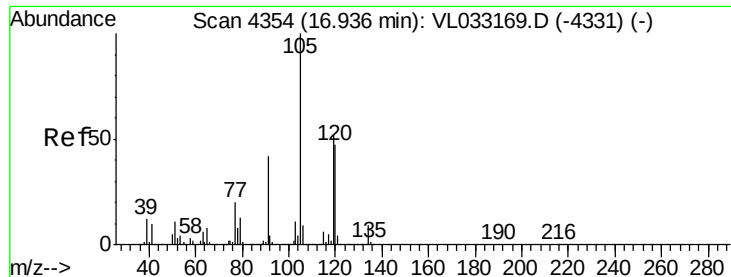
Ion Ratio Lower Upper

95 100

174 64.1 51.2 76.8

175 4.5 3.8 5.6





#74

1,2,4-Trimethylbenzene

Concen: 0.036 ppbv

RT: 16.93 min Scan# 4353

Delta R.T. -0.00 min

Lab File: VL033189.D

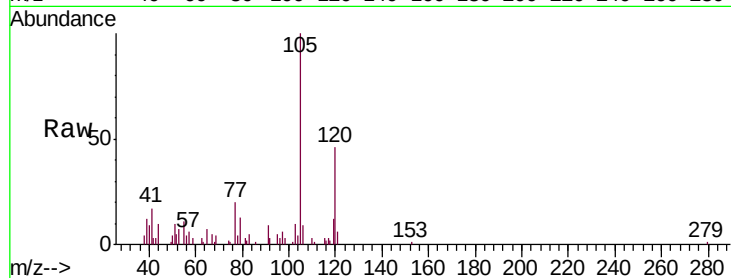
Acq: 13 Feb 2019 16:30

Instrument :

MSVOA_L

ClientSampleId :

AB-IADUP



Tgt Ion:	105	Resp:	12193
Ion	Ratio	Lower	Upper
105	100		
120	51.6	37.9	56.9
91	11.4	34.0	51.0#
77	18.4	15.7	23.5

