

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL102915\
 Data File : VL026276.D
 Acq On : 29 Oct 2015 22:31
 Operator : SY/AP
 Sample : G4169-05
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV2

Quant Time: Oct 30 04:22:58 2015
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL102915AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Oct 29 14:29:54 2015
 QLast Update : Thu Oct 29 14:29:54 2015
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	6.68	49	574539	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	8.35	114	1578774	10.00	ppbv	-0.02
55) Chlorobenzene-d5	13.77	117	1769476	10.00	ppbv	-0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	16.32	95	1386277	10.33	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.30%

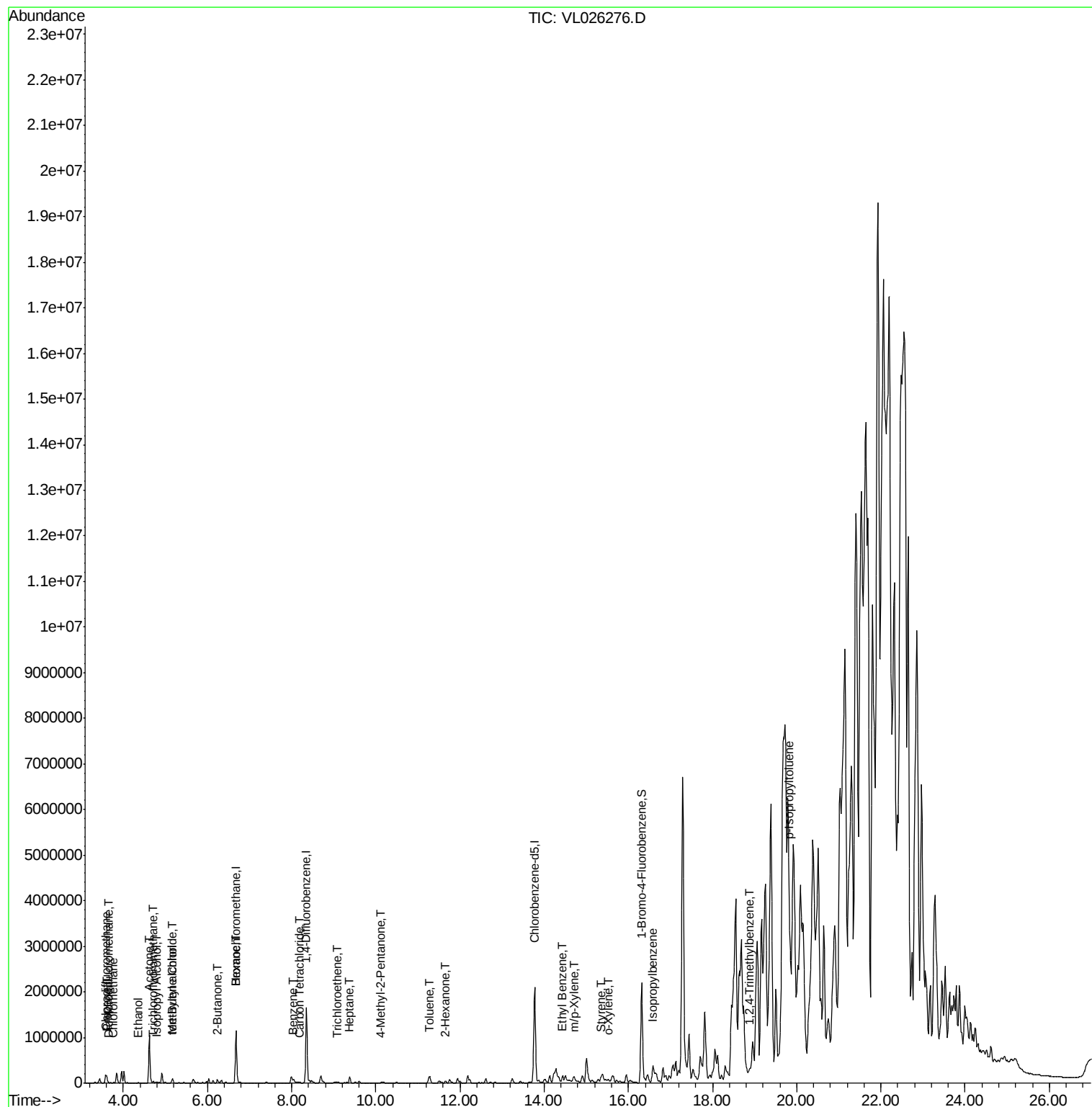
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.65	85	15696	0.13	ppbv	95
3) Chlorodifluoromethane	3.58	51	215404	2.98	ppbv	99
4) Chloromethane	3.77	50	13602	0.33	ppbv	93
9) Propene	3.61	41	51559	1.48	ppbv #	81
10) Heptane	9.38	43	72530	0.62	ppbv	100
11) Trichlorofluoromethane	4.71	101	20922	0.18	ppbv	99
13) Ethanol	4.35	45	11830	2.27	ppbv	93
15) Acetone	4.62	43	1426603	18.75	ppbv	96
17) tert-Butyl alcohol	5.15	59	30567	0.56	ppbv	98
19) Isopropyl Alcohol	4.78	45	10560	0.32	ppbv #	24
20) Methylene Chloride	5.17	84	36724	1.11	ppbv	95
26) Hexane	6.68	57	91247	1.18	ppbv #	47
34) 2-Butanone	6.23	43	94885	1.00	ppbv	98
35) Carbon Tetrachloride	8.19	117	5053	0.04	ppbv	91
36) Benzene	8.04	78	50130	0.30	ppbv	99
38) Trichloroethene	9.09	130	2511	0.03	ppbv #	84
50) 4-Methyl-2-Pentanone	10.13	43	14574	0.11	ppbv	88
51) 2-Hexanone	11.65	43	40049	0.34	ppbv #	95
53) Toluene	11.26	91	111426	0.51	ppbv	98
58) Ethyl Benzene	14.44	91	154536	0.53	ppbv	97
59) m/p-Xylene	14.72	91	102115	0.44	ppbv #	100
60) o-Xylene	15.52	91	51840	0.22	ppbv	97
61) Styrene	15.34	104	20792	0.20	ppbv	96
62) Isopropylbenzene	16.57	105	62329	0.19	ppbv	99
69) p-Isopropyltoluene	19.82	119	70607	0.21	ppbv #	95
74) 1,2,4-Trimethylbenzene	18.86	105	56855	0.21	ppbv #	74

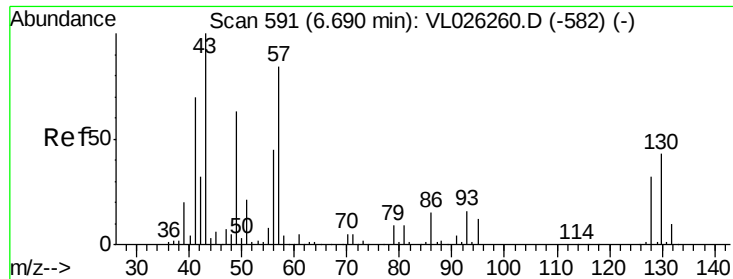
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Thu Oct 29 14:29:54 2015
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 6.68 min Scan# 589

Delta R.T. -0.01 min

Lab File: VL026276.D

Acq: 29 Oct 2015 22:31

Instrument :

MSVOA_L

ClientSampleId :

SV2

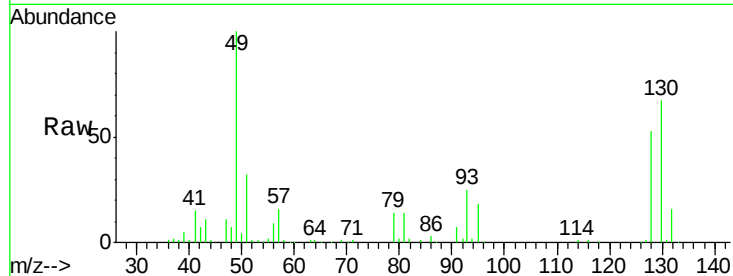
Tot Ion: 49 Resp: 574539

Ion Ratio Lower Upper

49 100

128 52.6 26.7 80.1

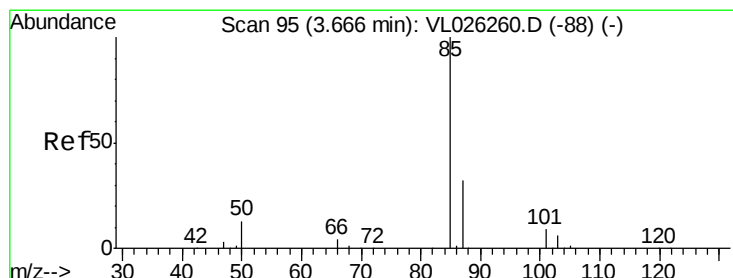
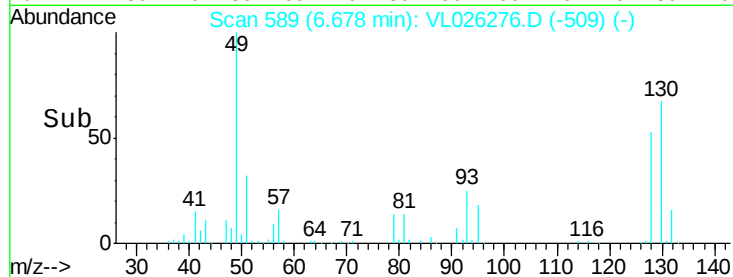
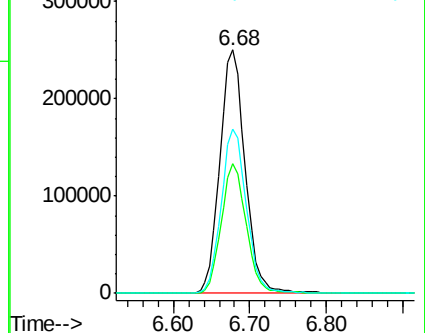
130 67.6 34.4 103.2



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.13 ppbv

RT: 3.65 min Scan# 93

Delta R.T. -0.01 min

Lab File: VL026276.D

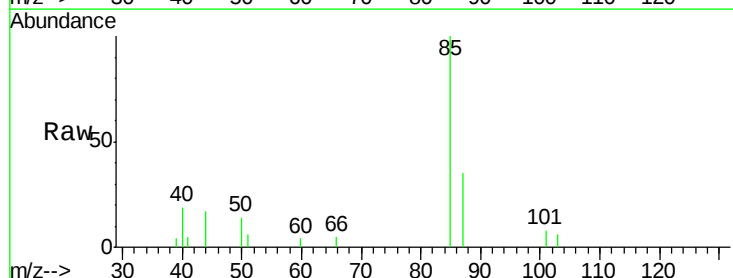
Acq: 29 Oct 2015 22:31

Tgt Ion: 85 Resp: 15696

Ion Ratio Lower Upper

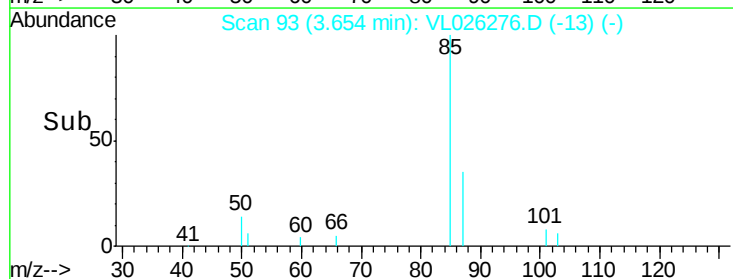
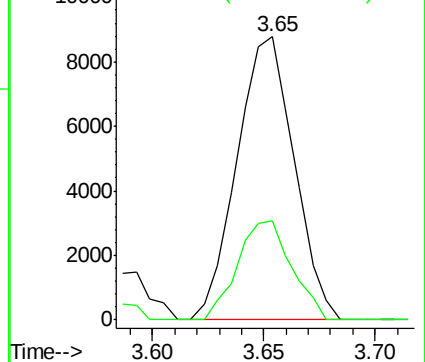
85 100

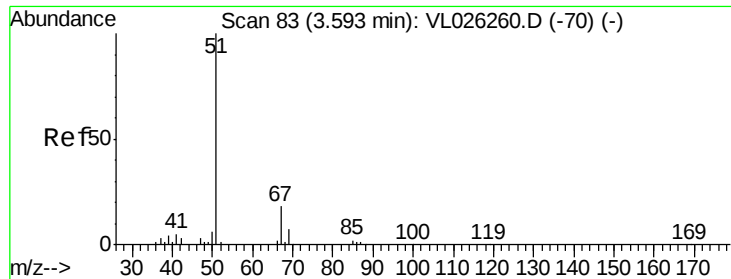
87 35.0 25.9 38.9



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

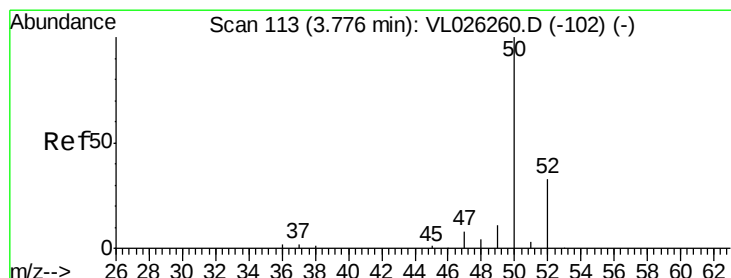
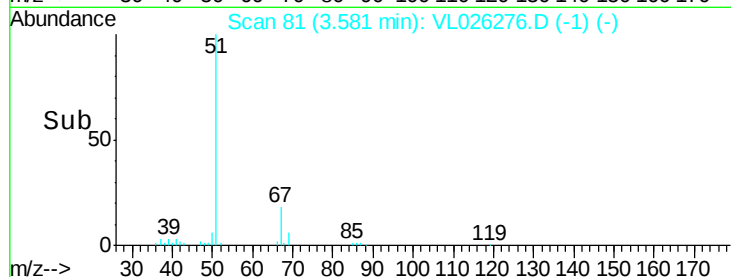
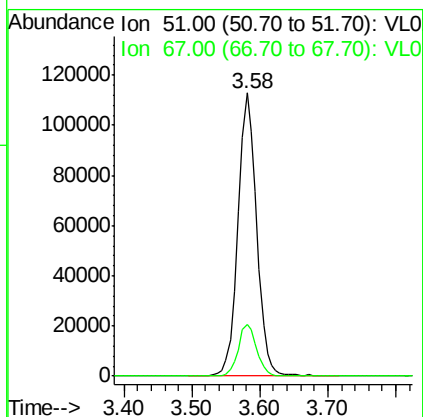
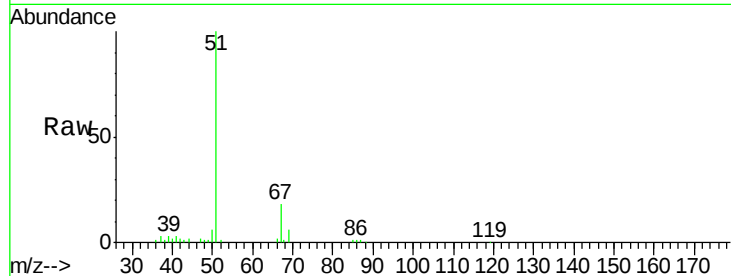




#3
Chlorodifluoromethane
Concen: 2.98 ppbv
RT: 3.58 min Scan# 81
Delta R.T. -0.01 min
Lab File: VL026276.D
Acq: 29 Oct 2015 22:31

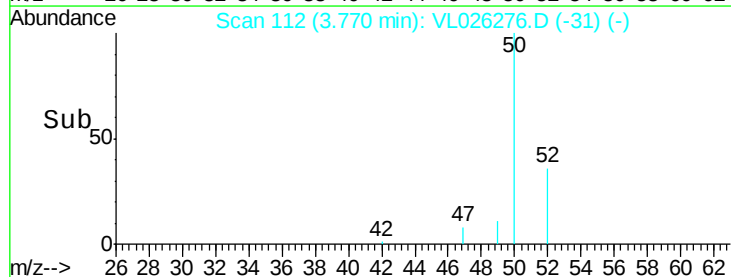
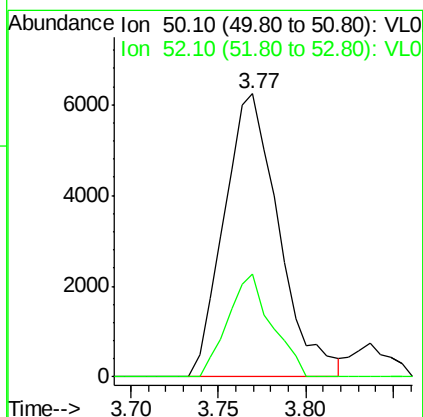
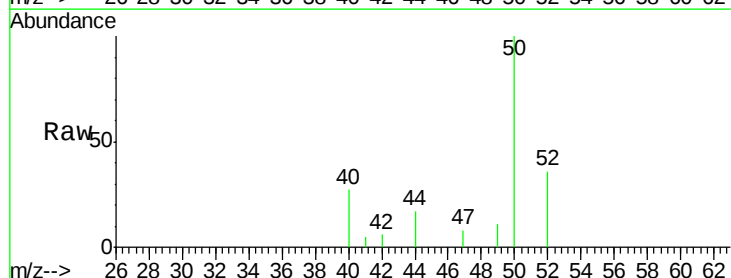
Instrument :
MSVOA_L
ClientSampleId :
SV2

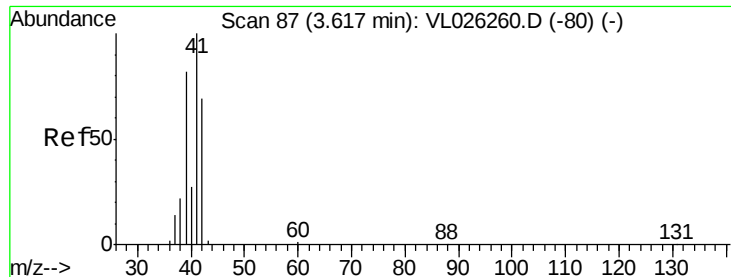
Tot Ion: 51 Resp: 215404
Ion Ratio Lower Upper
51 100
67 17.7 14.5 21.7



#4
Chloromethane
Concen: 0.33 ppbv
RT: 3.77 min Scan# 112
Delta R.T. -0.01 min
Lab File: VL026276.D
Acq: 29 Oct 2015 22:31

Tgt Ion: 50 Resp: 13602
Ion Ratio Lower Upper
50 100
52 36.5 26.1 39.1





#9

Propene

Concen: 1.48 ppbv

RT: 3.61 min Scan# 85

Delta R.T. -0.01 min

Lab File: VL026276.D

Acq: 29 Oct 2015 22:31

Instrument :

MSVOA_L

ClientSampled :

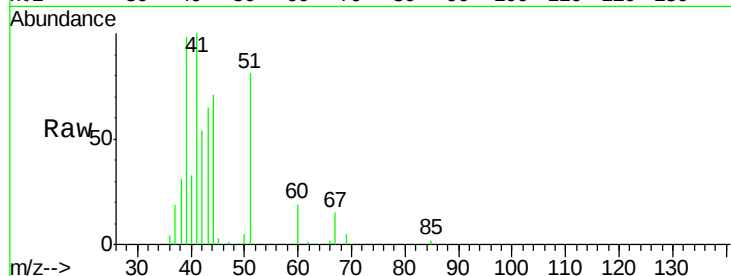
SV2

Tot Ion: 41 Resp: 51559

Ion Ratio Lower Upper

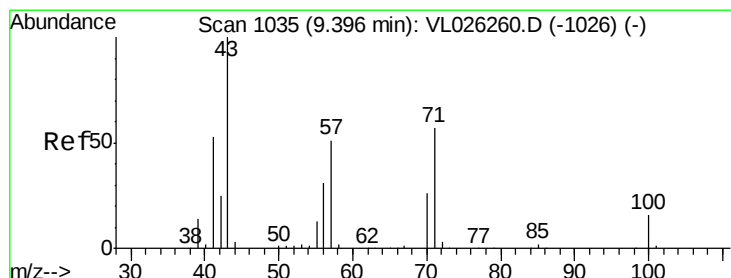
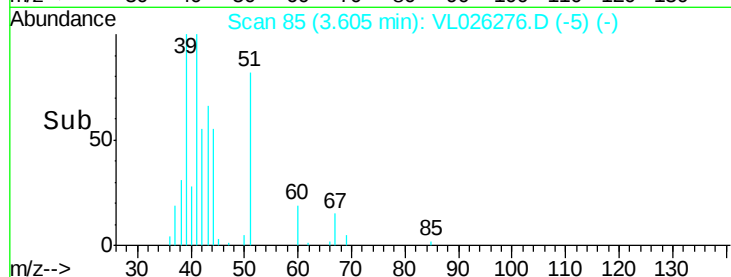
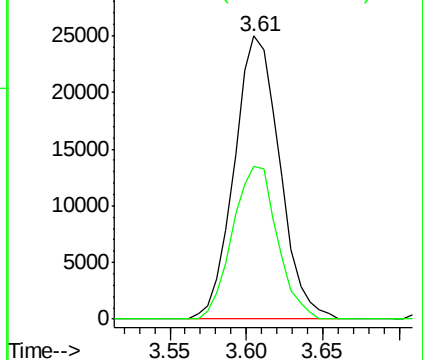
41 100

42 52.9 54.5 81.7#



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#10

Heptane

Concen: 0.62 ppbv

RT: 9.38 min Scan# 1032

Delta R.T. -0.02 min

Lab File: VL026276.D

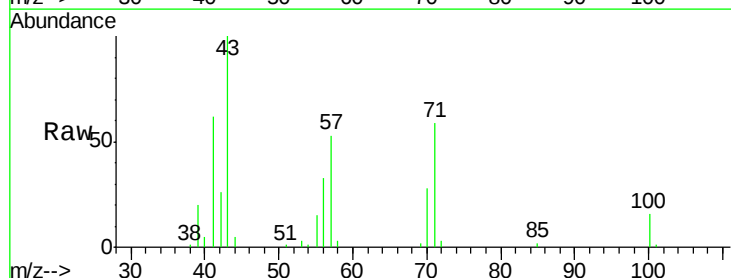
Acq: 29 Oct 2015 22:31

Tgt Ion: 43 Resp: 72530

Ion Ratio Lower Upper

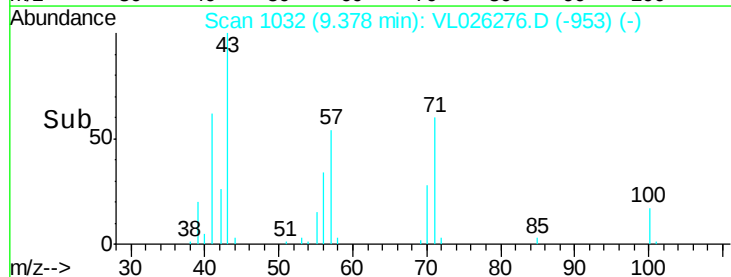
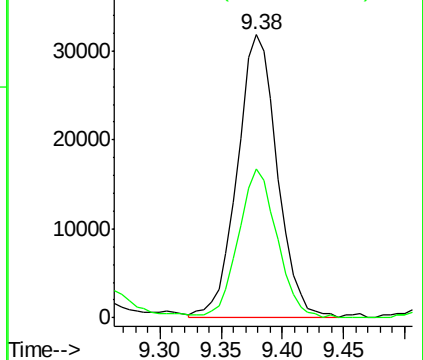
43 100

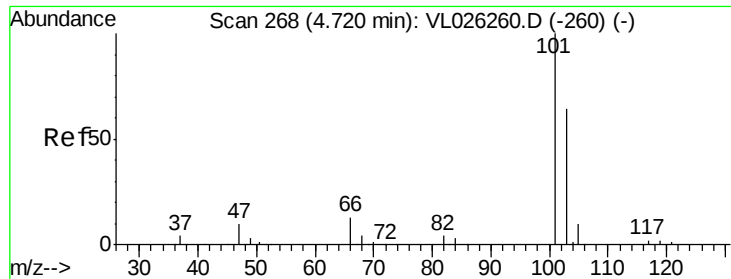
57 51.2 41.1 61.7



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

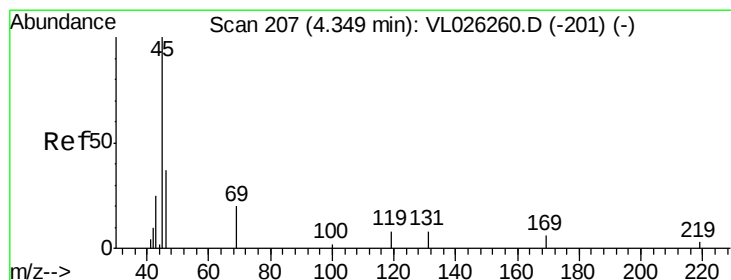
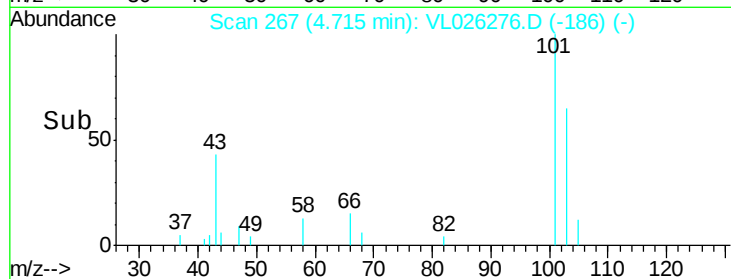
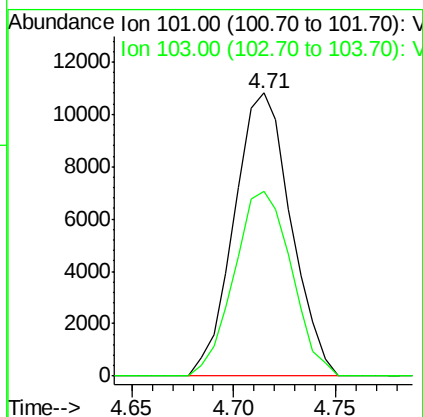
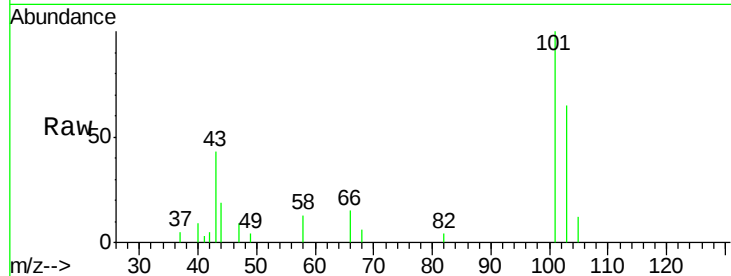




#11
 Trichlorofluoromethane
 Concen: 0.18 ppbv
 RT: 4.71 min Scan# 267
 Delta R.T. -0.01 min
 Lab File: VL026276.D
 Acq: 29 Oct 2015 22:31

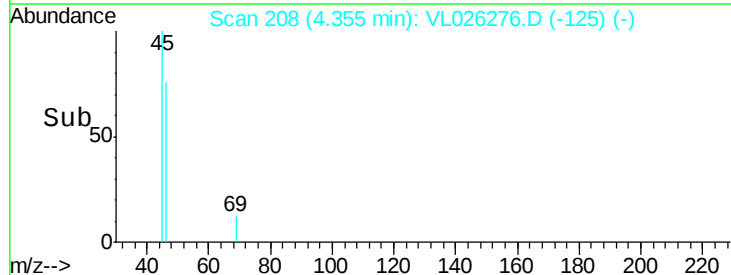
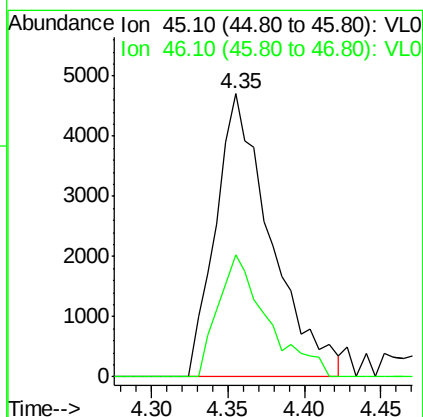
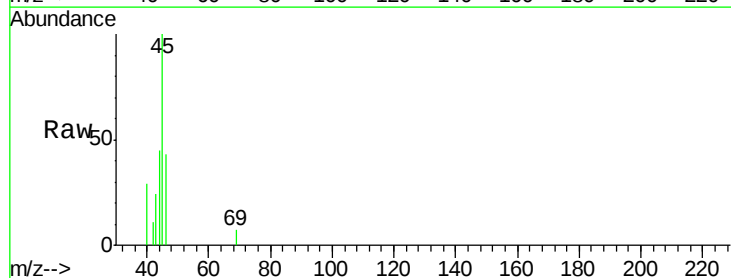
Instrument :
 MSVOA_L
 ClientSampleId :
 SV2

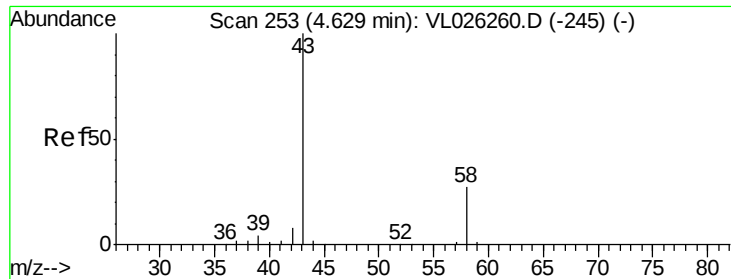
Tot Ion:101 Resp: 20922
 Ion Ratio Lower Upper
 101 100
 103 65.2 51.4 77.0



#13
 Ethanol
 Concen: 2.27 ppbv
 RT: 4.35 min Scan# 208
 Delta R.T. 0.01 min
 Lab File: VL026276.D
 Acq: 29 Oct 2015 22:31

Tgt Ion: 45 Resp: 11830
 Ion Ratio Lower Upper
 45 100
 46 38.3 17.0 68.0





#15

Acetone

Concen: 18.75 ppbv

RT: 4.62 min Scan# 251

Delta R.T. -0.01 min

Lab File: VL026276.D

Acq: 29 Oct 2015 22:31

Instrument :

MSVOA_L

ClientSampleId :

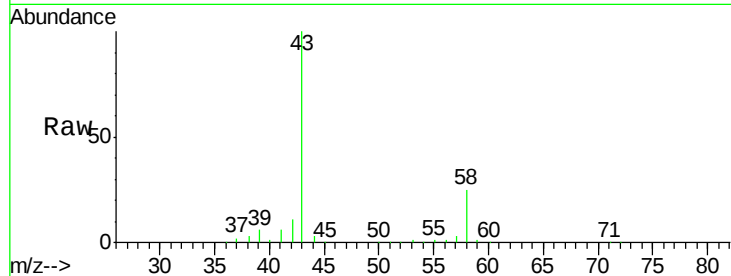
SV2

Tot Ion: 43 Resp: 1426603

Ion Ratio Lower Upper

43 100

58 25.7 22.3 33.5



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

4.62

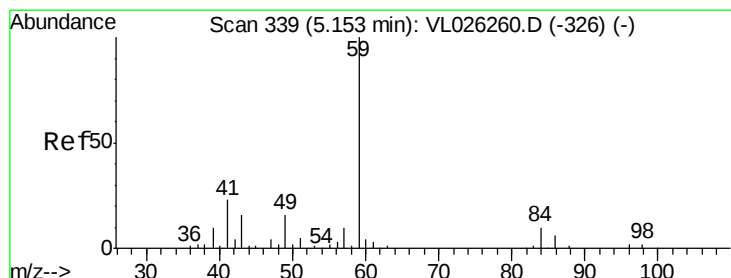
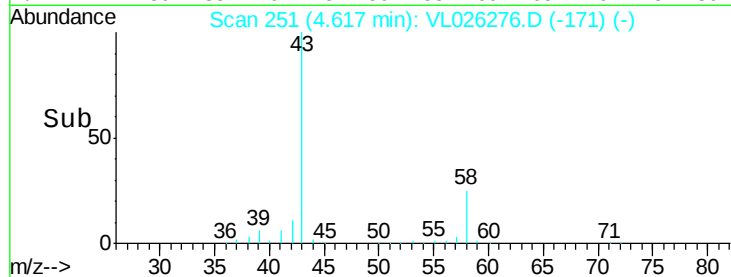
600000

400000

200000

0

Time-->



#17

tert-Butyl alcohol

Concen: 0.56 ppbv

RT: 5.15 min Scan# 339

Delta R.T. 0.00 min

Lab File: VL026276.D

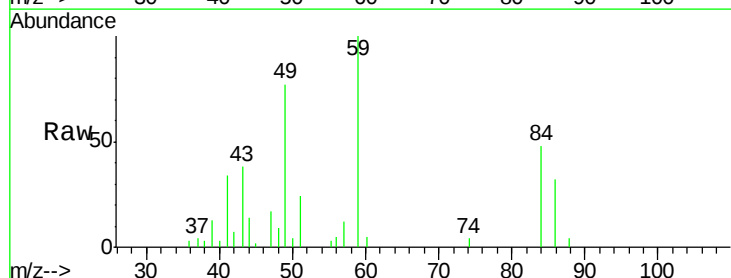
Acq: 29 Oct 2015 22:31

Tgt Ion: 59 Resp: 30567

Ion Ratio Lower Upper

59 100

57 10.1 8.7 13.1



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

5.15

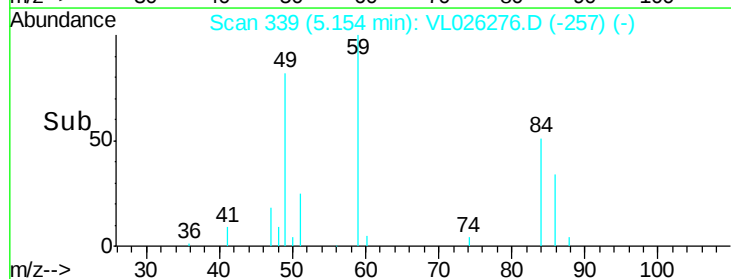
15000

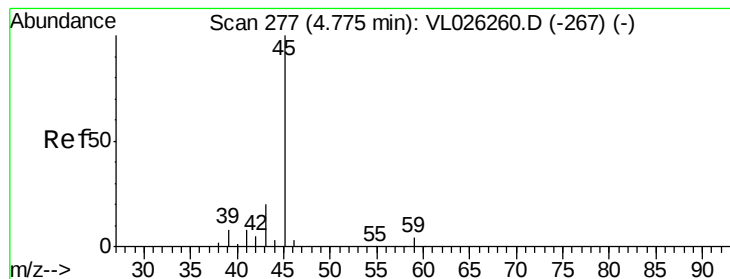
10000

5000

0

Time-->





#19

Isopropyl Alcohol

Concen: 0.32 ppbv

RT: 4.78 min Scan# 278

Delta R.T. 0.01 min

Lab File: VL026276.D

Acq: 29 Oct 2015 22:31

Instrument :

MSVOA_L

ClientSampled :

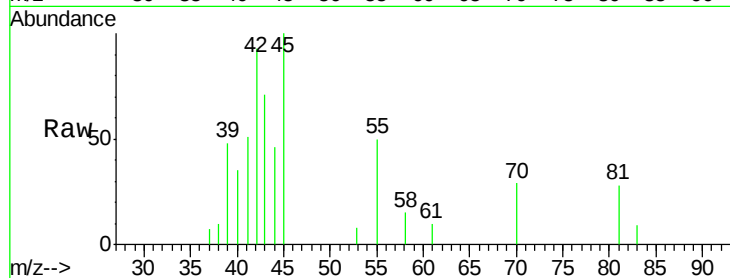
SV2

Tot Ion: 45 Resp: 10560

Ion Ratio Lower Upper

45 100

58 0.0 43.8 65.8#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

4.78

4000

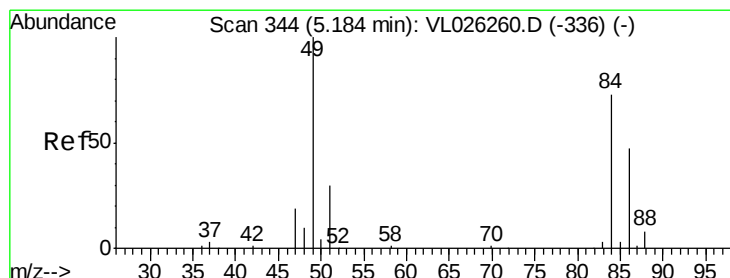
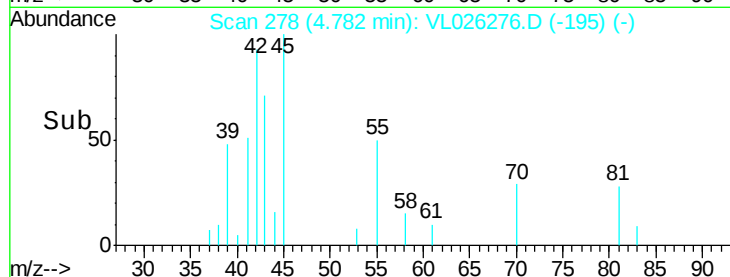
3000

2000

1000

0

Time-->



#20

Methylene Chloride

Concen: 1.11 ppbv

RT: 5.17 min Scan# 342

Delta R.T. -0.01 min

Lab File: VL026276.D

Acq: 29 Oct 2015 22:31

Tgt Ion: 84 Resp: 36724

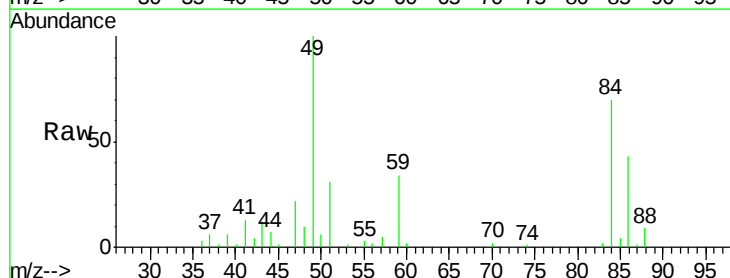
Ion Ratio Lower Upper

84 100

49 143.6 109.0 163.4

51 44.1 32.8 49.2

86 61.1 50.8 76.2



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

40000

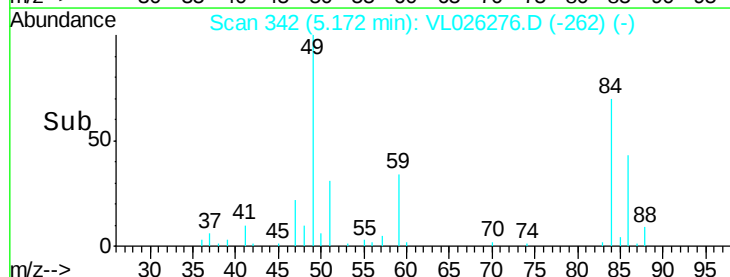
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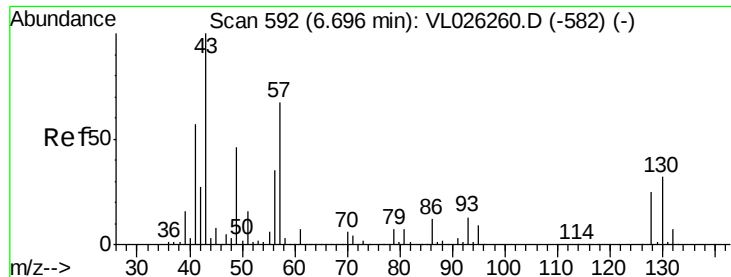
20000

10000

0

Time-->

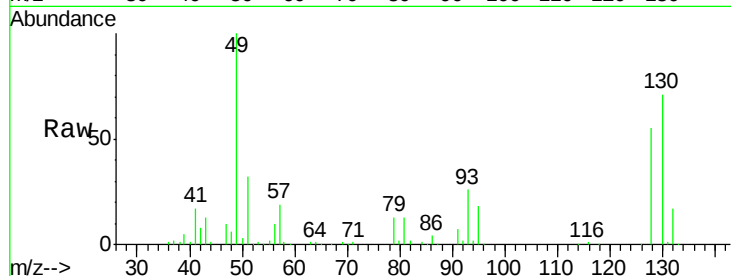




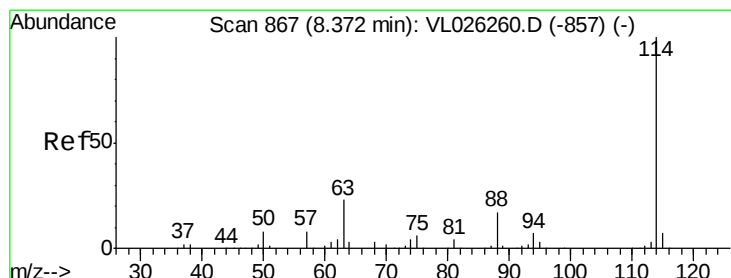
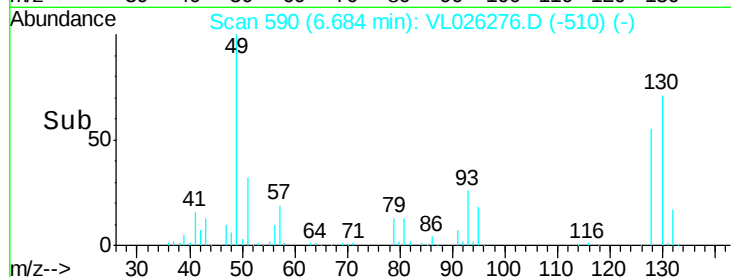
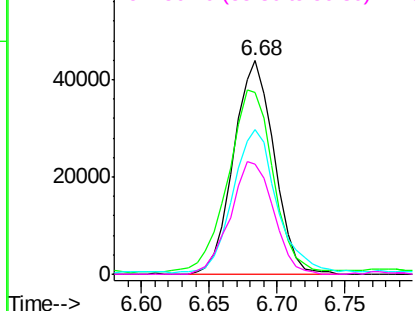
#26
Hexane
Concen: 1.18 ppbv
RT: 6.68 min Scan# 590
Delta R.T. -0.01 min
Lab File: VL026276.D
Acq: 29 Oct 2015 22:31

Instrument :
MSVOA_L
ClientSampleId :
SV2

Tot Ion: 57 Resp: 91247
Ion Ratio Lower Upper
57 100
41 95.3 67.4 101.2
43 79.2 163.9 245.9#
56 56.2 42.2 63.2

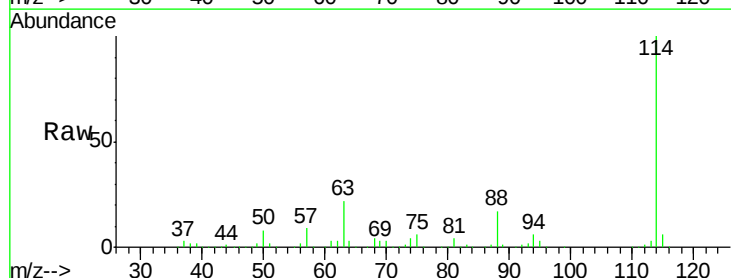


Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0

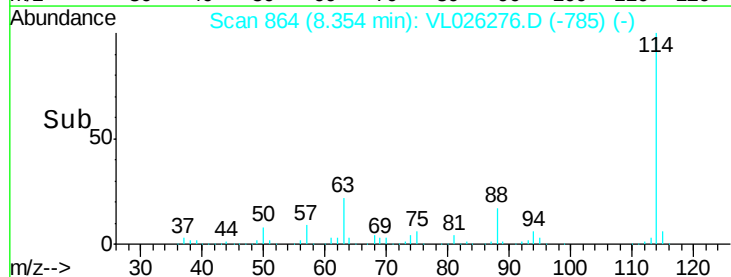
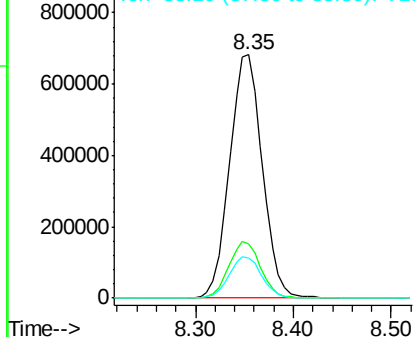


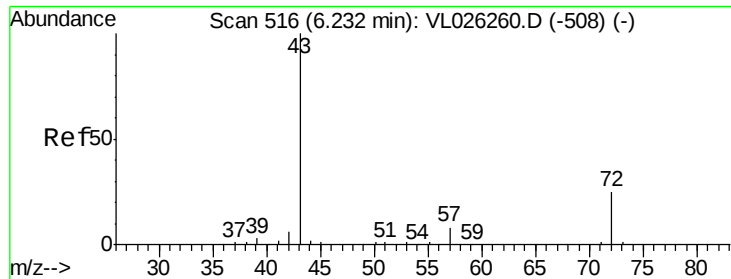
#33
1,4-Difluorobenzene
Concen: 10.00 ppbv
RT: 8.35 min Scan# 864
Delta R.T. -0.02 min
Lab File: VL026276.D
Acq: 29 Oct 2015 22:31

Tgt Ion: 114 Resp: 1578774
Ion Ratio Lower Upper
114 100
63 23.0 18.6 28.0
88 16.9 13.4 20.2



Abundance Ion 114.10 (113.80 to 114.80): V
Ion 63.10 (62.80 to 63.80): VL0
Ion 88.10 (87.80 to 88.80): VL0

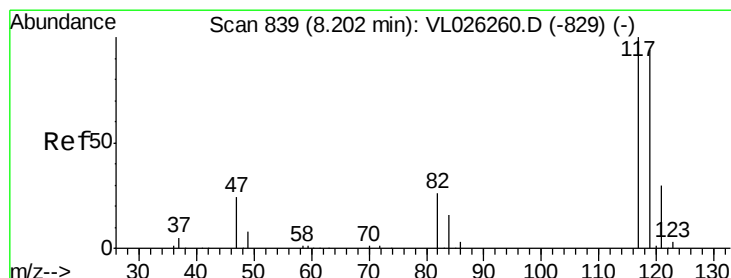
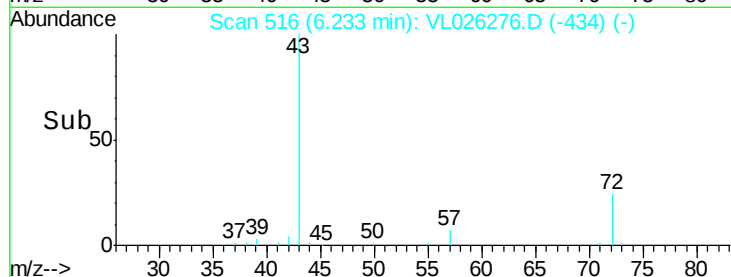
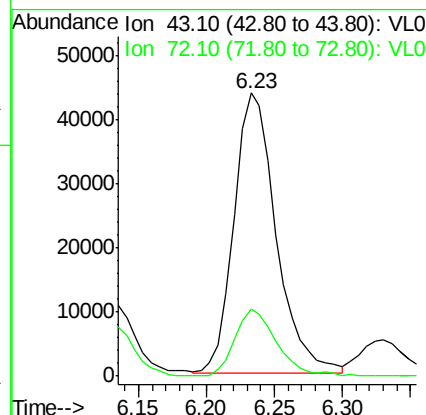
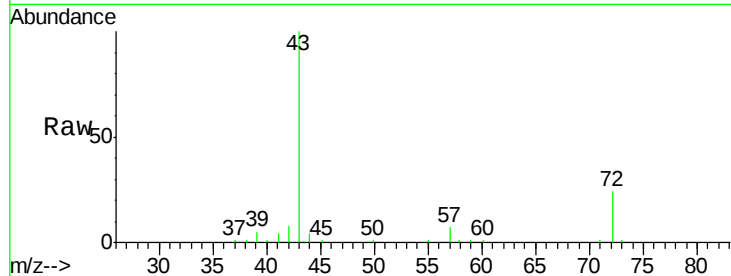




#34
2-Butanone
Concen: 1.00 ppbv
RT: 6.23 min Scan# 516
Delta R.T. 0.00 min
Lab File: VL026276.D
Acq: 29 Oct 2015 22:31

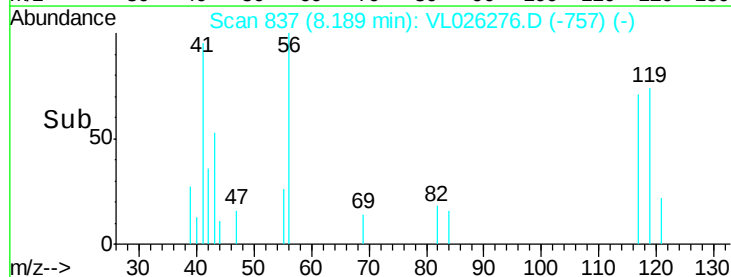
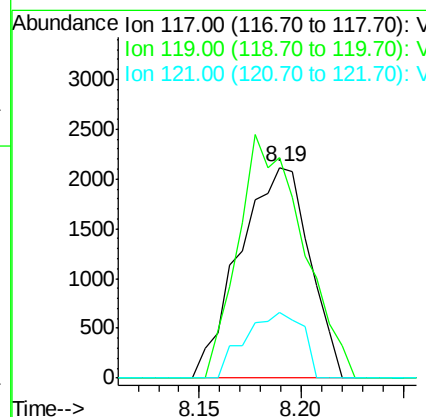
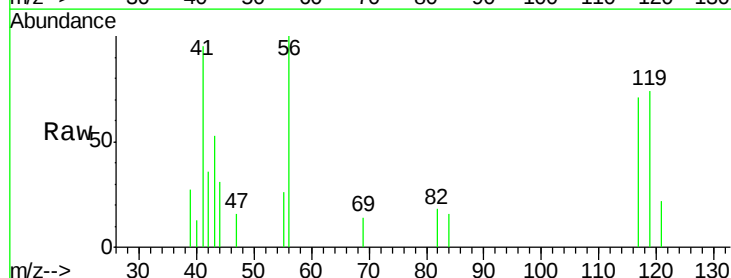
Instrument :
MSVOA_L
ClientSampled :
SV2

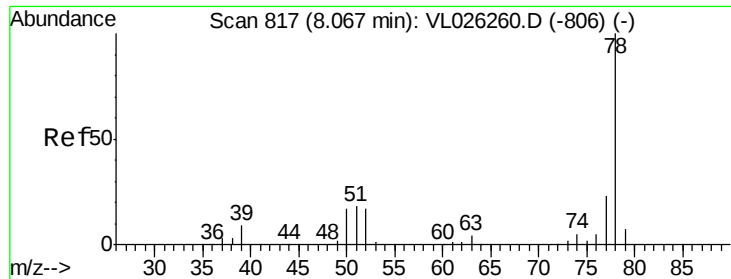
Tot Ion: 43 Resp: 94885
Ion Ratio Lower Upper
43 100
72 23.7 19.9 29.9



#35
Carbon Tetrachloride
Concen: 0.04 ppbv
RT: 8.19 min Scan# 837
Delta R.T. -0.01 min
Lab File: VL026276.D
Acq: 29 Oct 2015 22:31

Tgt Ion: 117 Resp: 5053
Ion Ratio Lower Upper
117 100
119 104.6 75.2 112.8
121 31.2 24.2 36.2

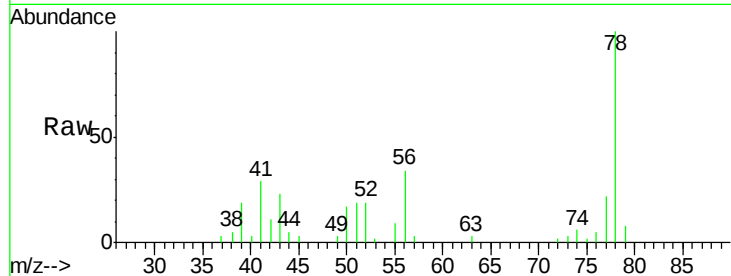




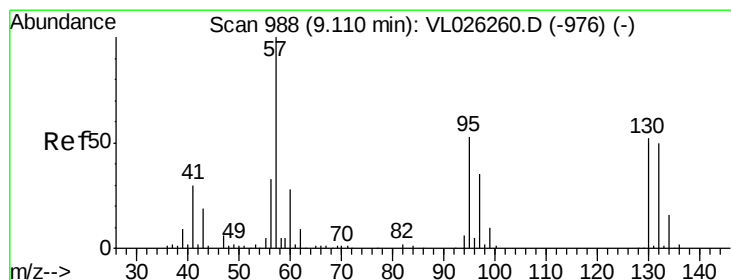
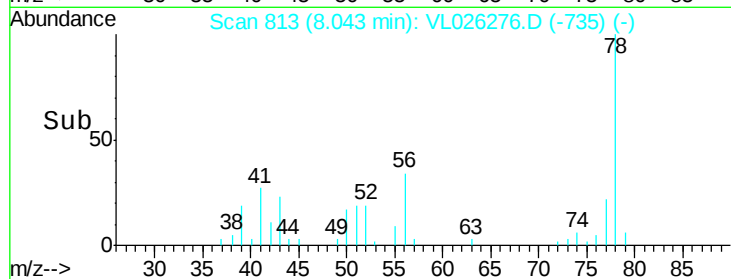
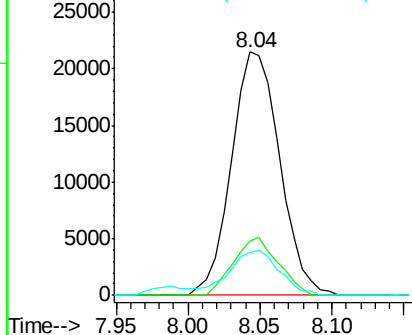
#36
Benzene
Concen: 0.30 ppbv
RT: 8.04 min Scan# 813
Delta R.T. -0.02 min
Lab File: VL026276.D
Acq: 29 Oct 2015 22:31

Instrument :
MSVOA_L
ClientSampled :
SV2

Tot Ion: 78 Resp: 50130
Ion Ratio Lower Upper
78 100
77 22.4 18.0 27.0
50 17.4 13.3 19.9

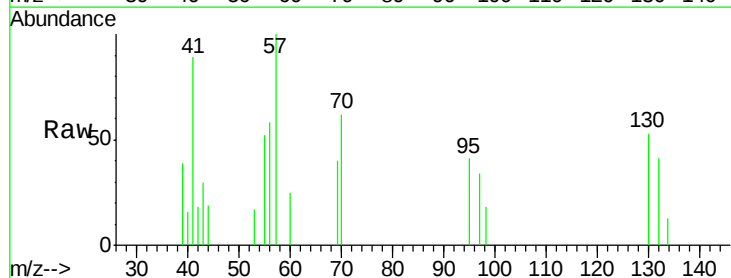


Abundance Ion 78.10 (77.80 to 78.80): VL0
Ion 77.10 (76.80 to 77.80): VL0
Ion 50.10 (49.80 to 50.80): VL0

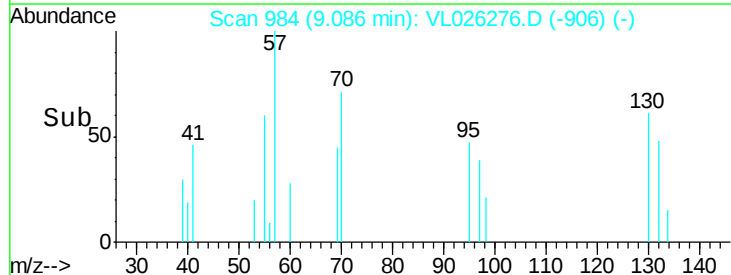
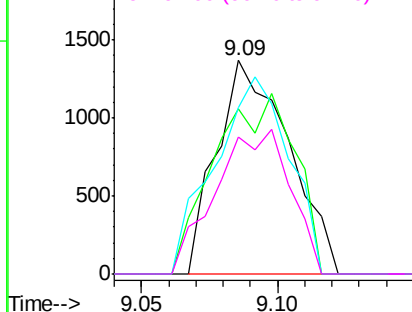


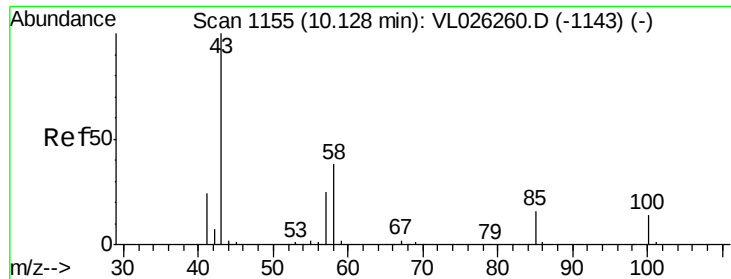
#38
Trichloroethene
Concen: 0.03 ppbv
RT: 9.09 min Scan# 984
Delta R.T. -0.02 min
Lab File: VL026276.D
Acq: 29 Oct 2015 22:31

Tgt Ion: 130 Resp: 2511
Ion Ratio Lower Upper
130 100
95 77.3 80.8 121.2#
132 77.9 76.2 114.2
97 64.4 53.0 79.6



Abundance Ion 130.00 (129.70 to 130.70): V
Ion 95.00 (94.70 to 95.70): VL0
Ion 132.00 (131.70 to 132.70): V
Ion 97.00 (96.70 to 97.70): VL0

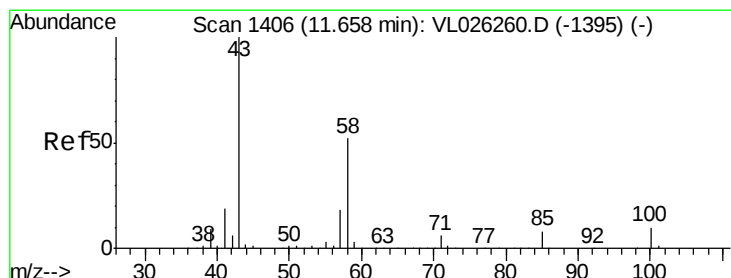
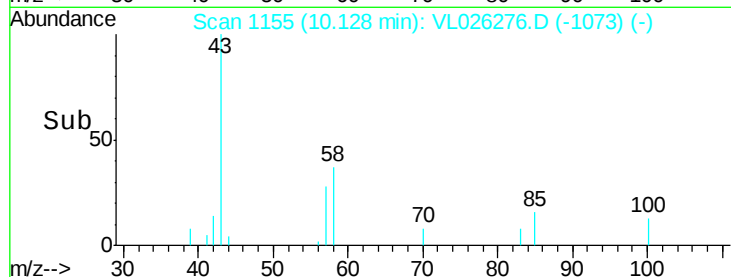
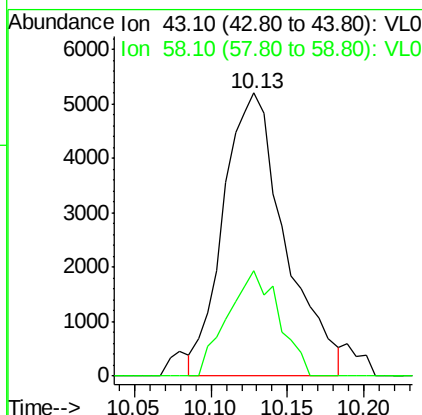
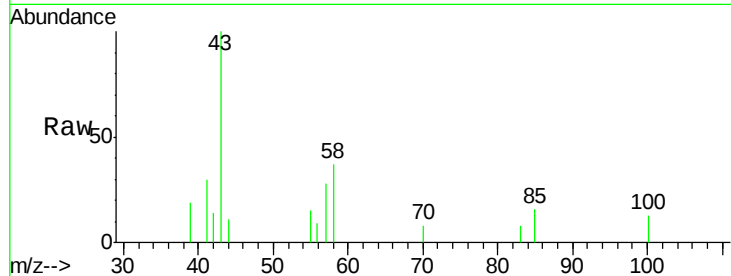




#50
 4-Methyl-2-Pentanone
 Concen: 0.11 ppbv
 RT: 10.13 min Scan# 1155
 Delta R.T. 0.00 min
 Lab File: VL026276.D
 Acq: 29 Oct 2015 22:31

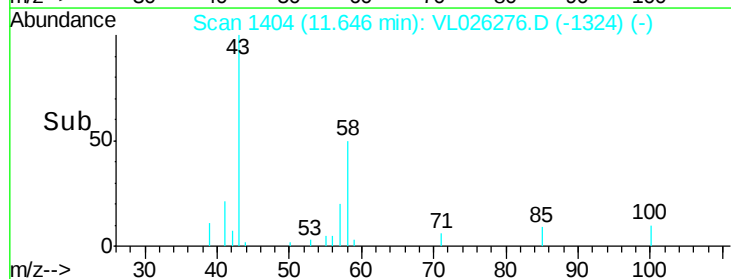
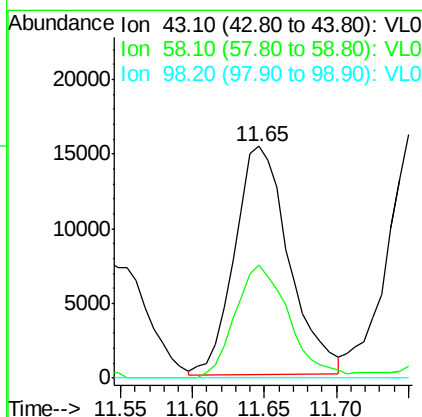
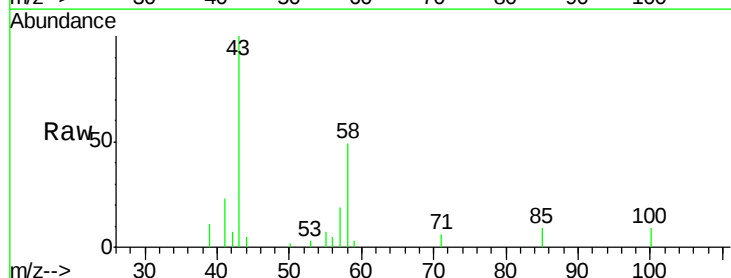
Instrument :
 MSVOA_L
 ClientSampleId :
 SV2

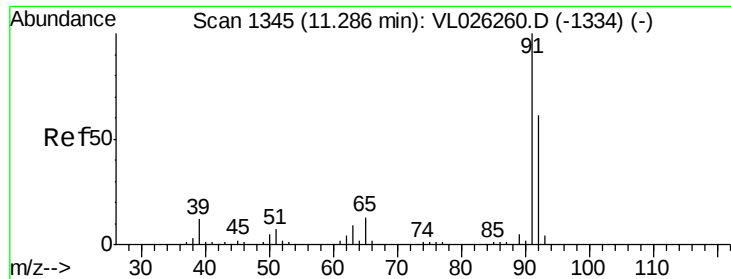
Tot Ion: 43 Resp: 14574
 Ion Ratio Lower Upper
 43 100
 58 31.0 30.5 45.7



#51
 2-Hexanone
 Concen: 0.34 ppbv
 RT: 11.65 min Scan# 1404
 Delta R.T. -0.01 min
 Lab File: VL026276.D
 Acq: 29 Oct 2015 22:31

Tgt Ion: 43 Resp: 40049
 Ion Ratio Lower Upper
 43 100
 58 49.7 42.7 64.1
 98 0.0 0.0 0.0





#53

Toluene

Concen: 0.51 ppbv

RT: 11.26 min Scan# 1341

Delta R.T. -0.02 min

Lab File: VL026276.D

Acq: 29 Oct 2015 22:31

Instrument :

MSVOA_L

ClientSampleId :

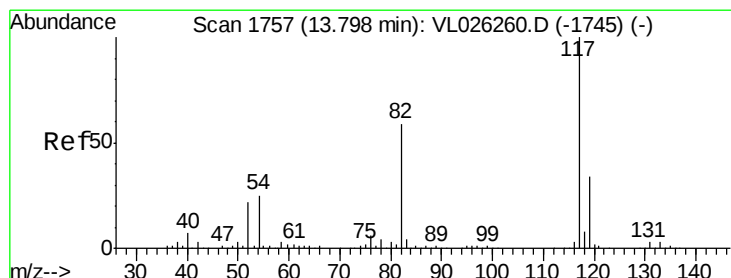
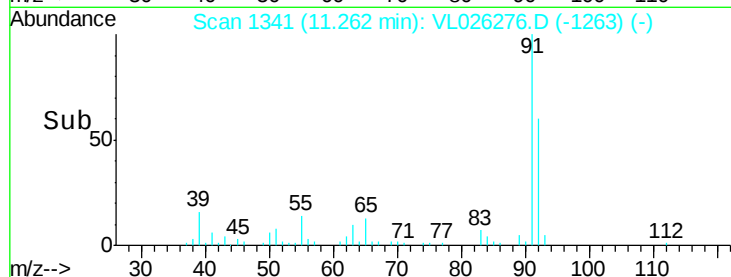
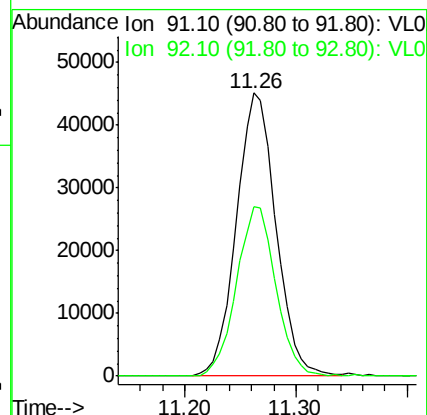
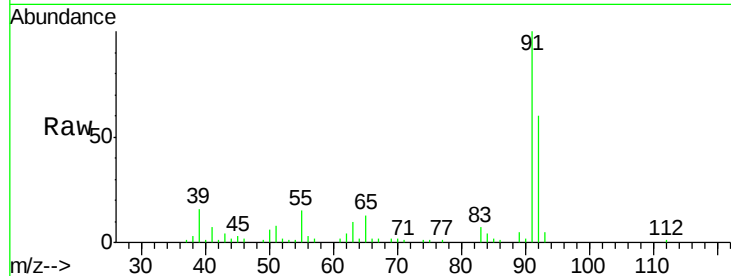
SV2

Tot Ion: 91 Resp: 111426

Ion Ratio Lower Upper

91 100

92 59.4 48.6 73.0



#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 13.77 min Scan# 1753

Delta R.T. -0.02 min

Lab File: VL026276.D

Acq: 29 Oct 2015 22:31

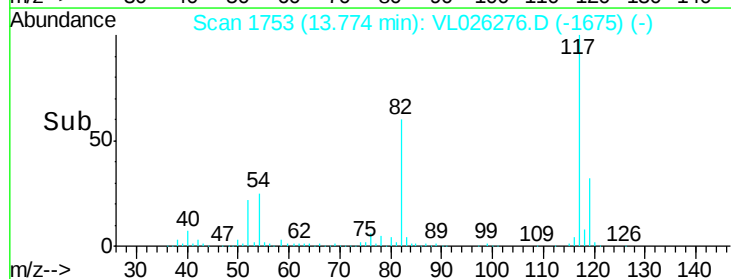
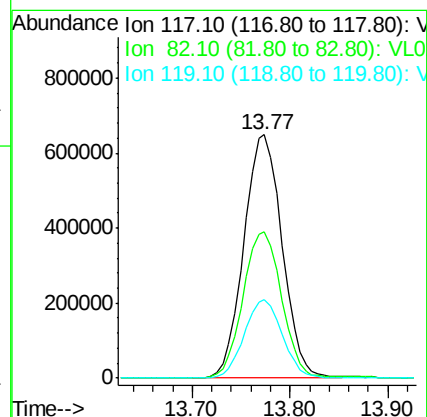
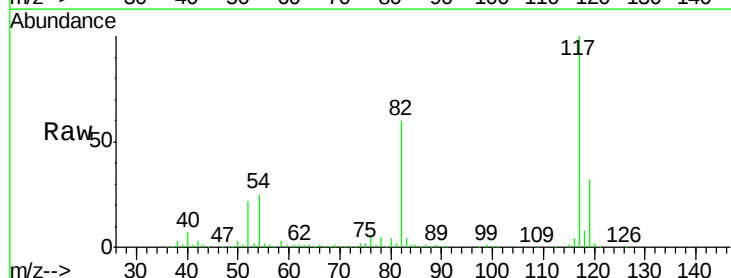
Tgt Ion: 117 Resp: 1769476

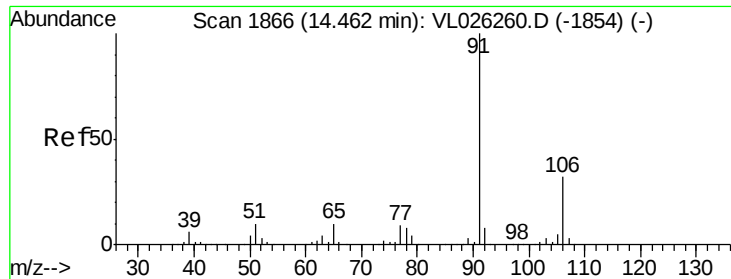
Ion Ratio Lower Upper

117 100

82 61.3 48.2 72.4

119 32.6 46.2 69.2#





#58

Ethyl Benzene

Concen: 0.53 ppbv

RT: 14.44 min Scan# 1862

Delta R.T. -0.02 min

Lab File: VL026276.D

Acq: 29 Oct 2015 22:31

Instrument :

MSVOA_L

ClientSampleId :

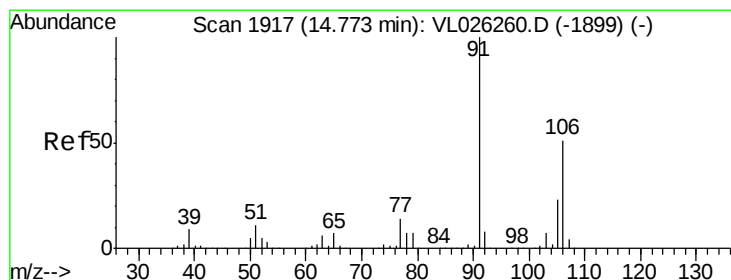
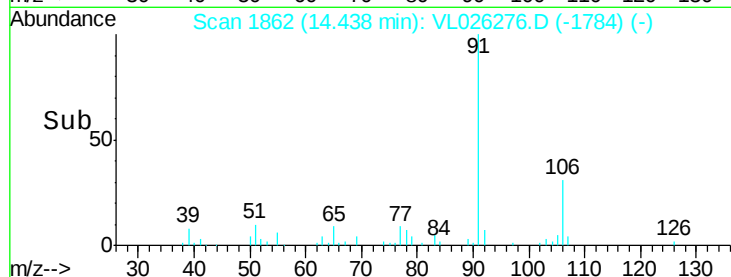
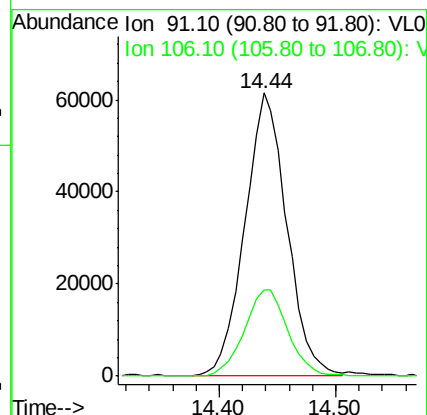
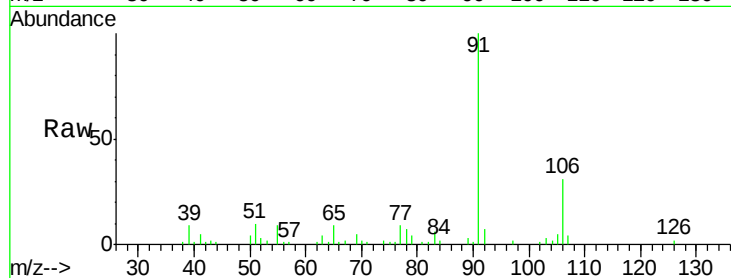
SV2

Tot Ion: 91 Resp: 154536

Ion Ratio Lower Upper

91 100

106 30.6 25.7 38.5



#59

m/p-Xylene

Concen: 0.44 ppbv

RT: 14.72 min Scan# 1908

Delta R.T. -0.05 min

Lab File: VL026276.D

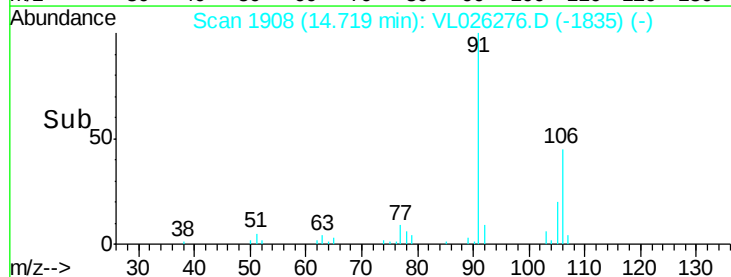
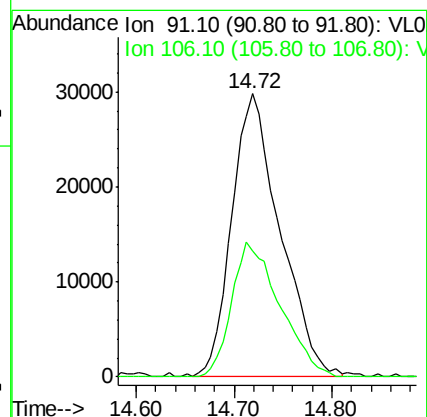
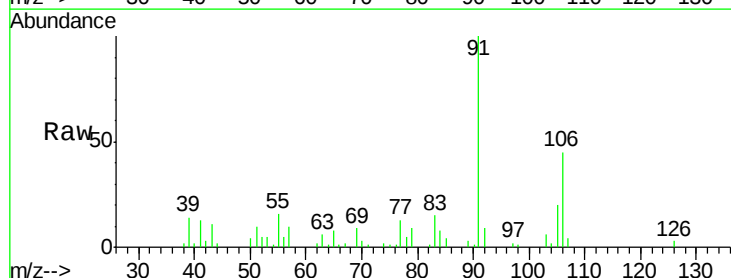
Acq: 29 Oct 2015 22:31

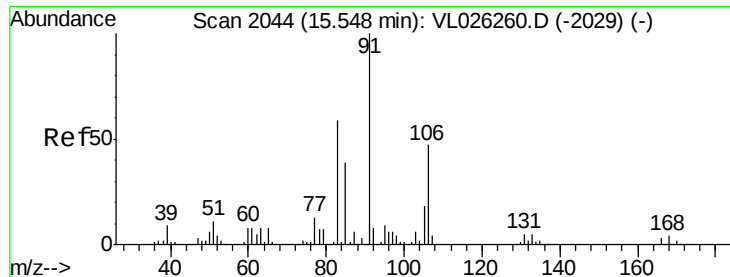
Tgt Ion: 91 Resp: 102115

Ion Ratio Lower Upper

91 100

106 47.5 0.0 0.0#

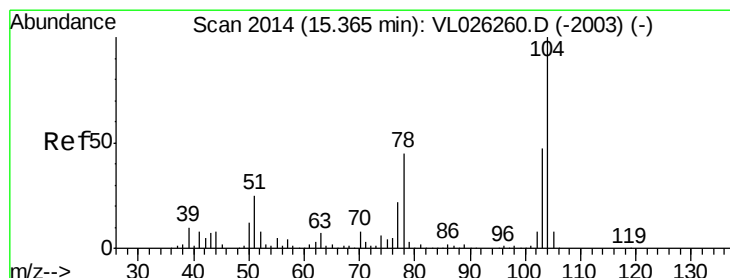
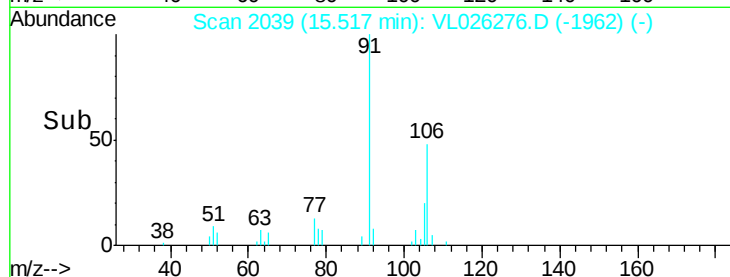
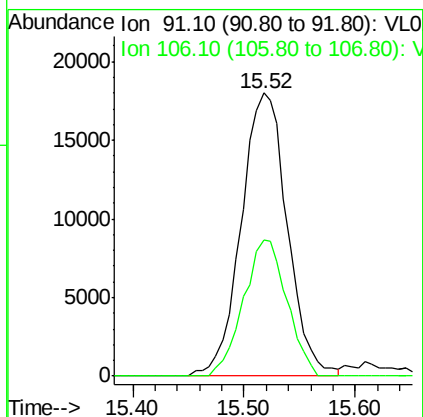
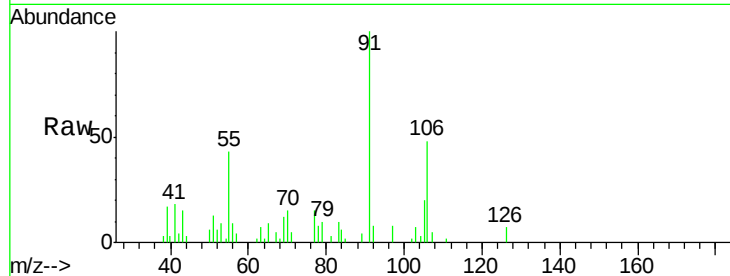




#60
o-Xylene
Concen: 0.22 ppbv
RT: 15.52 min Scan# 2039
Delta R.T. -0.03 min
Lab File: VL026276.D
Acq: 29 Oct 2015 22:31

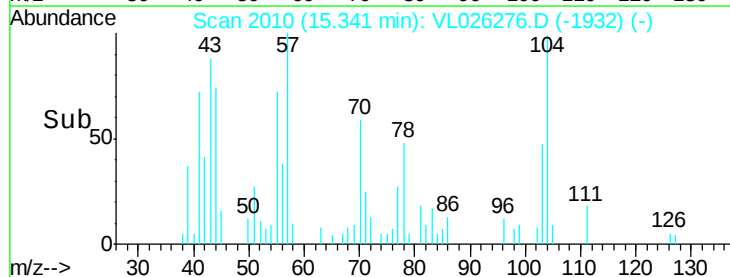
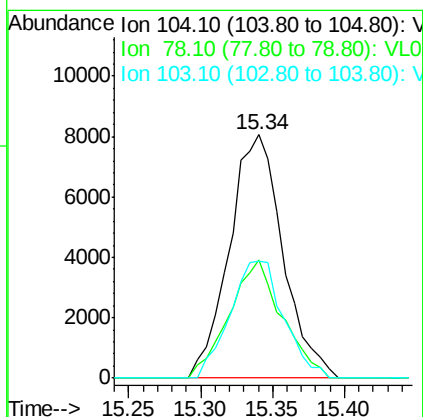
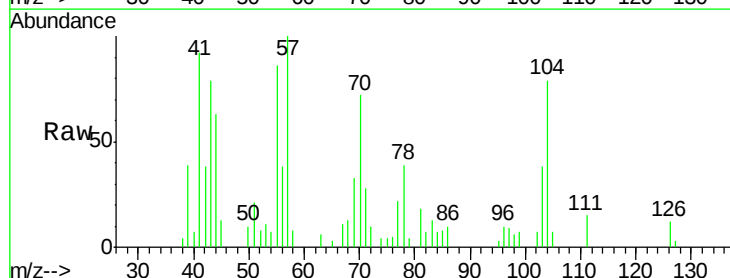
Instrument :
MSVOA_L
ClientSampled :
SV2

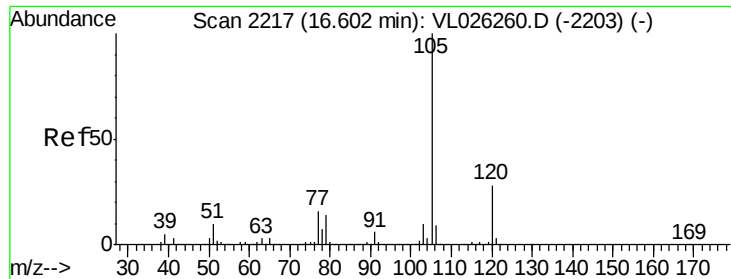
Tot Ion: 91 Resp: 51840
Ion Ratio Lower Upper
91 100
106 45.1 23.6 70.8



#61
Styrene
Concen: 0.20 ppbv
RT: 15.34 min Scan# 2010
Delta R.T. -0.02 min
Lab File: VL026276.D
Acq: 29 Oct 2015 22:31

Tgt Ion: 104 Resp: 20792
Ion Ratio Lower Upper
104 100
78 48.0 35.5 53.3
103 48.1 37.0 55.6





#62

Isopropylbenzene

Concen: 0.19 ppbv

RT: 16.57 min Scan# 2212

Delta R.T. -0.03 min

Lab File: VL026276.D

Acq: 29 Oct 2015 22:31

Instrument :

MSVOA_L

ClientSampled :

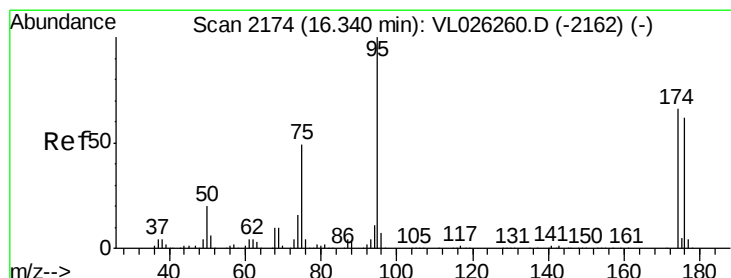
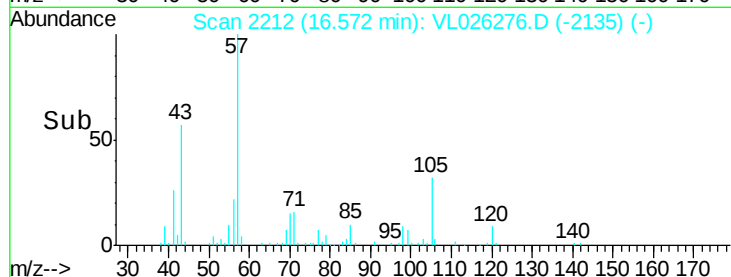
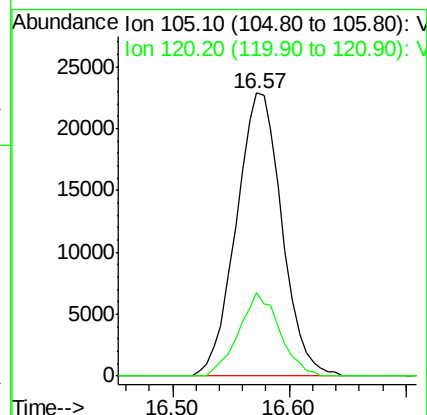
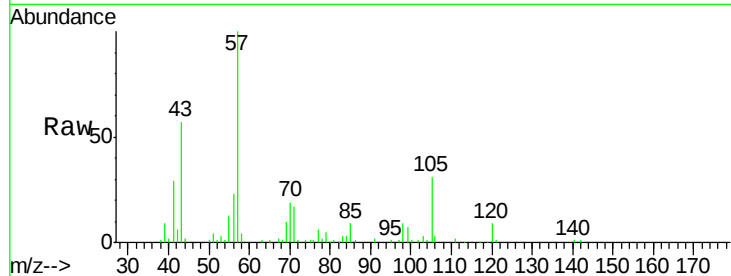
SV2

Tot Ion: 105 Resp: 62329

Ion Ratio Lower Upper

105 100

120 26.4 21.7 32.5



#68

1-Bromo-4-Fluorobenzene

Concen: 10.33 ppbv

RT: 16.32 min Scan# 2170

Delta R.T. -0.02 min

Lab File: VL026276.D

Acq: 29 Oct 2015 22:31

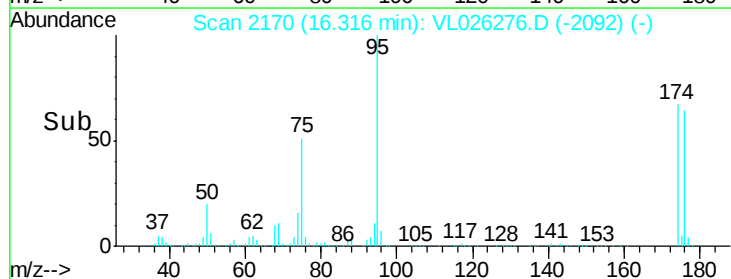
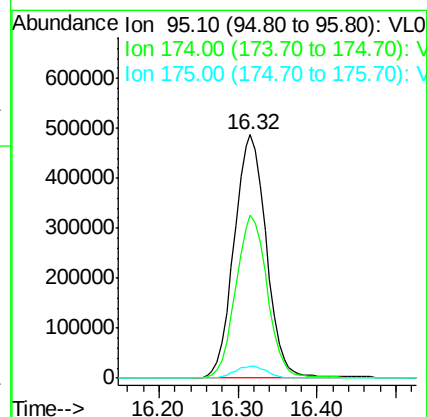
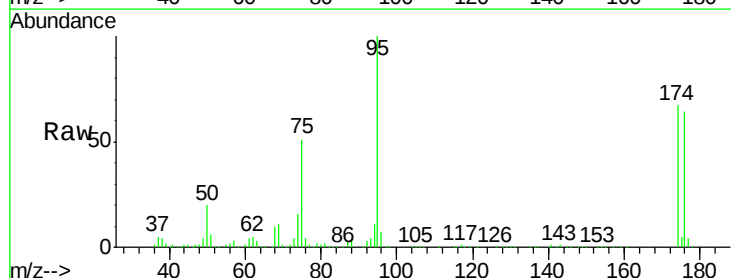
Tgt Ion: 95 Resp: 1386277

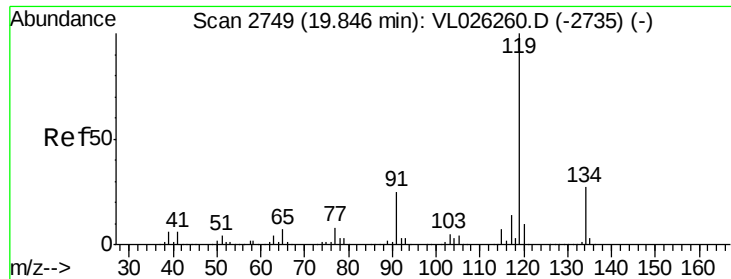
Ion Ratio Lower Upper

95 100

174 66.2 52.9 79.3

175 4.9 3.8 5.8

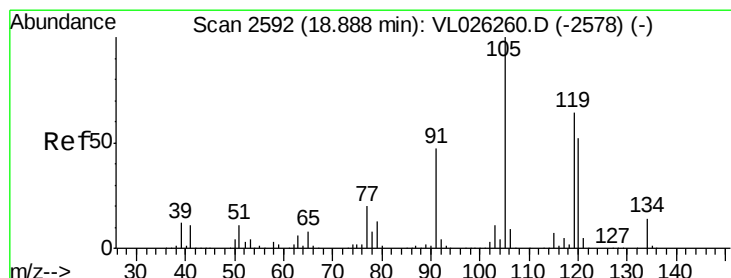
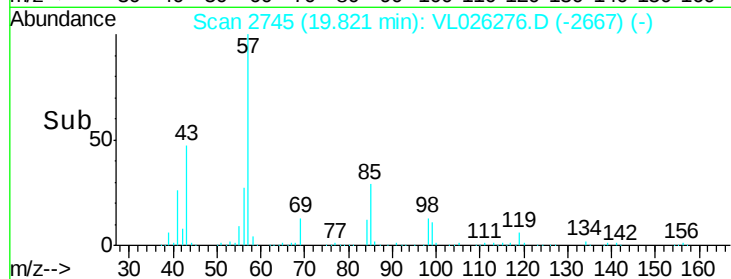
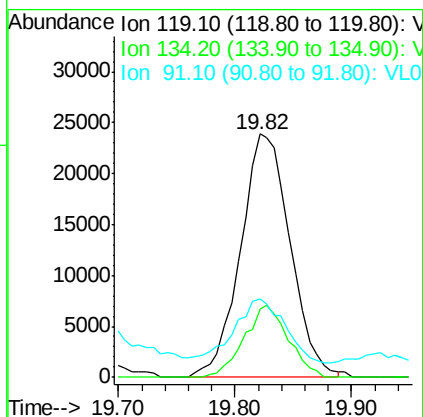
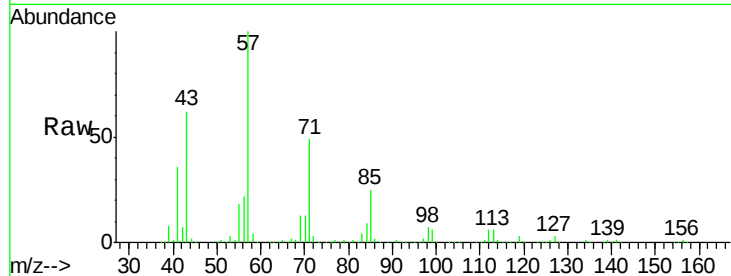




#69
p-Isopropyltoluene
Concen: 0.21 ppbv
RT: 19.82 min Scan# 2745
Delta R.T. -0.02 min
Lab File: VL026276.D
Acq: 29 Oct 2015 22:31

Instrument :
MSVOA_L
ClientSampleId :
SV2

Tot Ion:119 Resp: 70607
Ion Ratio Lower Upper
119 100
134 26.3 21.3 31.9
91 29.9 19.6 29.4#



#74
1,2,4-Trimethylbenzene
Concen: 0.21 ppbv
RT: 18.86 min Scan# 2588
Delta R.T. -0.02 min
Lab File: VL026276.D
Acq: 29 Oct 2015 22:31

Tgt Ion:105 Resp: 56855
Ion Ratio Lower Upper
105 100
120 46.6 41.2 61.8
91 12.5 37.8 56.8#
77 13.9 16.1 24.1#

