

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL102915\
 Data File : VL026271.D
 Acq On : 29 Oct 2015 19:04
 Operator : SY/AP
 Sample : G4169-02
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Manual Integrations
 APPROVED

Mmdadoda
 10/30/2015 12:06:39 PM

Quant Time: Oct 30 11:09:45 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	569476	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	8.35	114	1532151	10.00	ppbv	-0.02
55) Chlorobenzene-d5	13.78	117	1487443	10.00	ppbv	-0.02

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	16.32	95	1163499	10.31	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.10%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.67	85	54666	0.45	ppbv	96
3) Chlorodifluoromethane	3.59	51	1070789	14.93	ppbv	100
4) Chloromethane	3.78	50	17294	0.42	ppbv	97
9) Propene	3.63	41	36960	1.07	ppbv #	71
11) Trichlorofluoromethane	4.72	101	25133	0.22	ppbv	99
12) 1,1,2-Trichlorotrifluoroet	5.33	101	7819	0.10	ppbv	100
13) Ethanol	4.37	45	18023	3.49	ppbv	91
15) Acetone	4.63	43	244859	3.25	ppbv	91
19) Isopropyl Alcohol	4.82	45	12952	0.40	ppbv #	24
20) Methylene Chloride	5.18	84	44965	1.37	ppbv	92
26) Hexane	6.69	57	15211	0.20	ppbv #	63
34) 2-Butanone	6.26	43	20100m	0.22	ppbv	
35) Carbon Tetrachloride	8.20	117	6416	0.06	ppbv	91
36) Benzene	8.06	78	38172	0.24	ppbv	99
52) Tetrachloroethene	12.82	164	2469m	0.03	ppbv	
53) Toluene	11.27	91	57287	0.27	ppbv	100
59) m/p-Xylene	14.72	91	37354	0.19	ppbv #	100
60) o-Xylene	15.52	91	22637	0.11	ppbv	95
61) Styrene	15.35	104	22398	0.26	ppbv	97
74) 1,2,4-Trimethylbenzene	18.87	105	29619	0.13	ppbv #	72

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

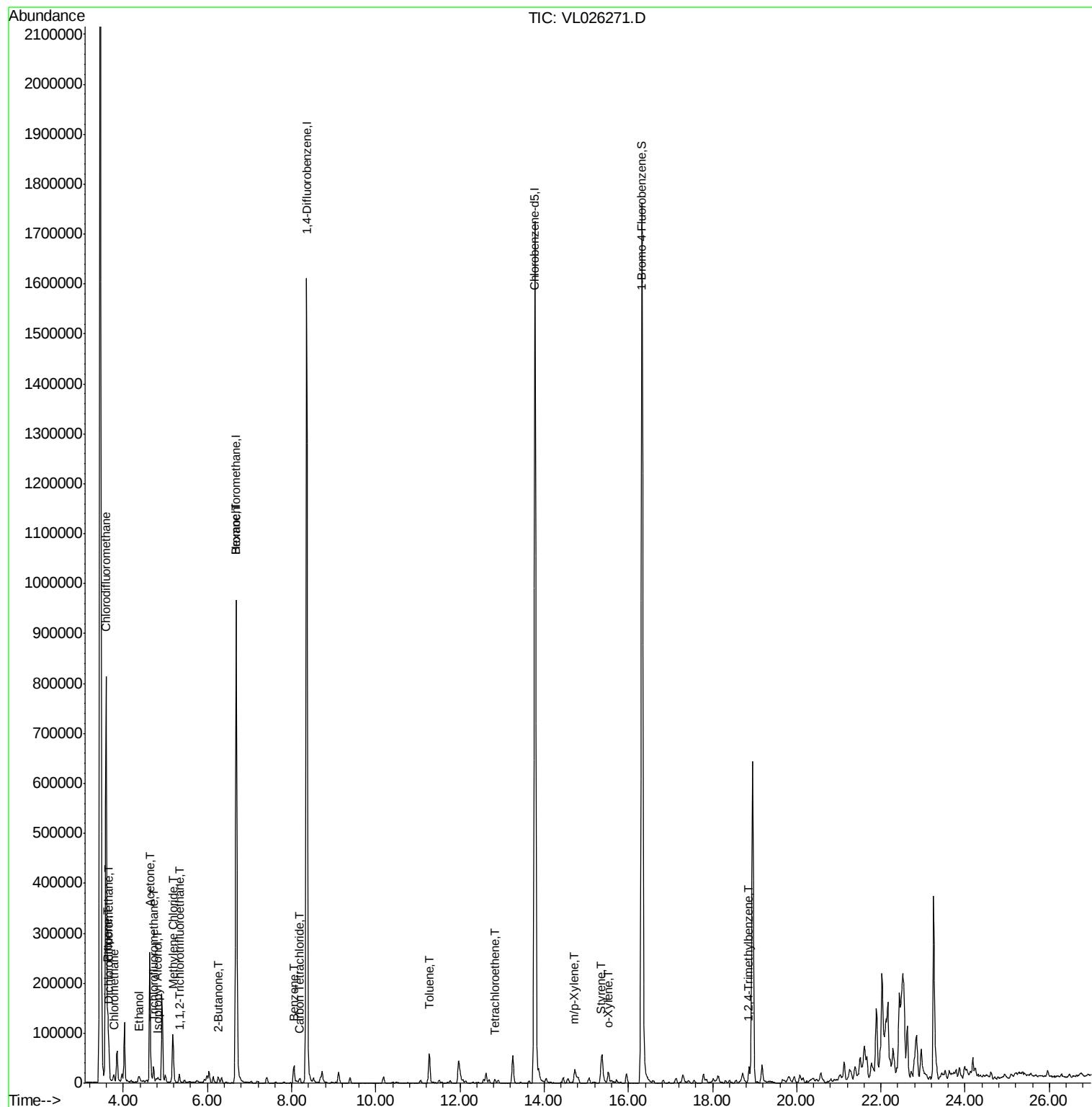
Data Path : W:\HPCHEM1\MSVOA L\DATA\VL102915\
Data File : VL026271.D
Acq On : 29 Oct 2015 19:04
Operator : SY/AP
Sample : G4169-02
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

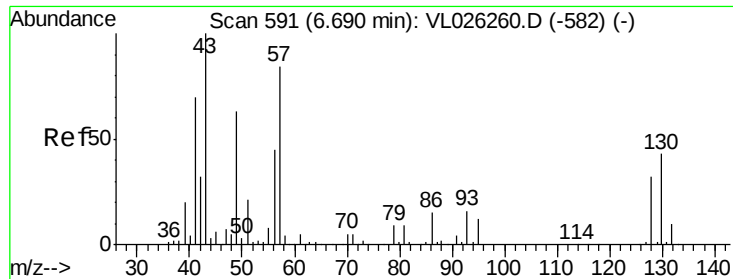
Instrument :
MSVOA_L
ClientSampled :
IA1

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Quant Time: Oct 30 11:09:45 2015
Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL102915AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Oct
QLast Update : Thu Oct 29 14:29:54 2015
Response via : Initial Calibration





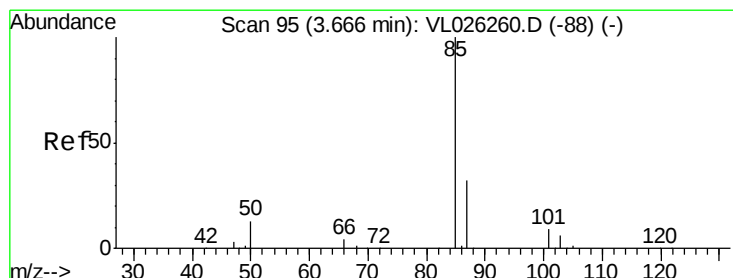
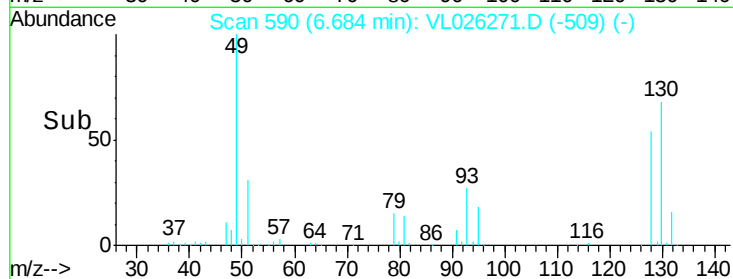
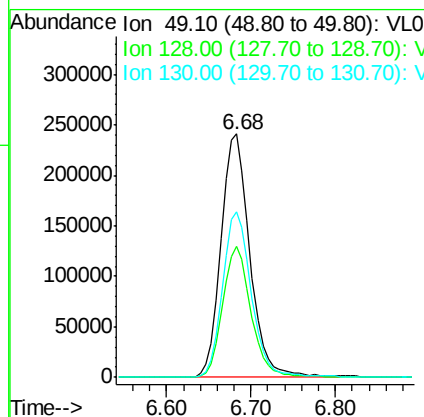
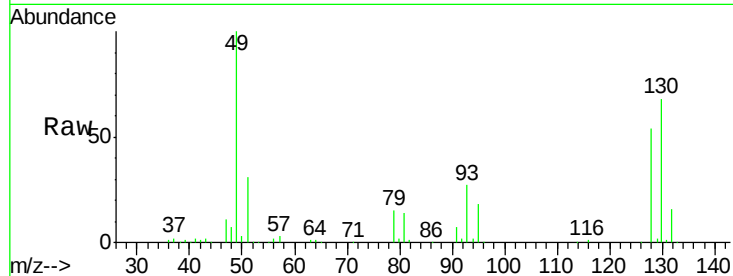
#1
 Bromochloromethane
 Concen: 10.00 ppbv
 RT: 6.68 min Scan# 590
 Delta R.T. -0.01 min
 Lab File: VL026271.D
 Acq: 29 Oct 2015 19:04

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Tot Ion: 49 Resp: 569476
 Ion Ratio Lower Upper
 49 100
 128 53.2 26.7 80.1
 130 68.3 34.4 103.2

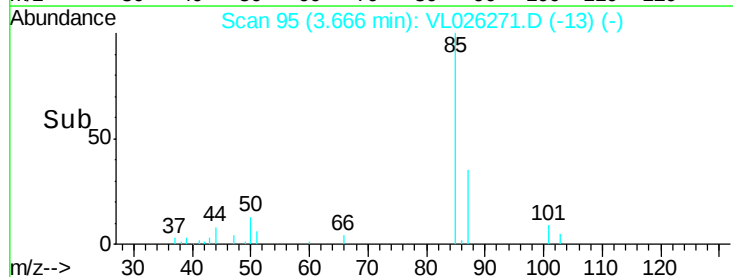
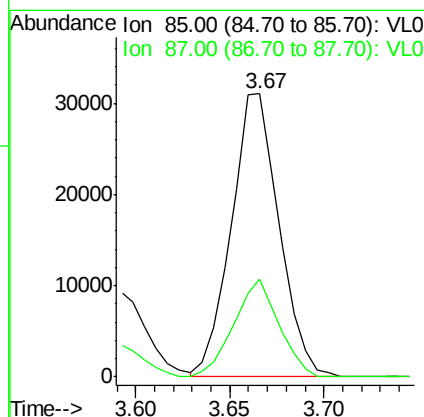
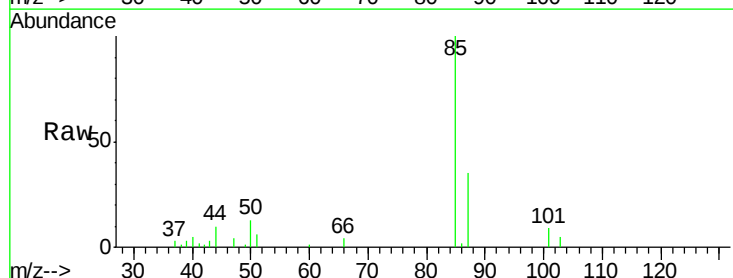
Manual Integrations
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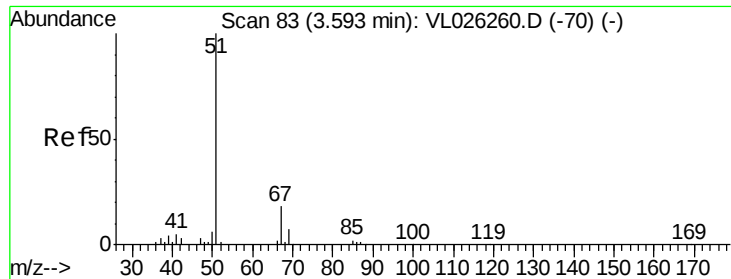
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#2
 Dichlorodifluoromethane
 Concen: 0.45 ppbv
 RT: 3.67 min Scan# 95
 Delta R.T. 0.00 min
 Lab File: VL026271.D
 Acq: 29 Oct 2015 19:04

Tgt Ion: 85 Resp: 54666
 Ion Ratio Lower Upper
 85 100
 87 34.8 25.9 38.9





#3

Chlorodifluoromethane

Concen: 14.93 ppbv

RT: 3.59 min Scan# 83

Delta R.T. 0.00 min

Lab File: VL026271.D

Acq: 29 Oct 2015 19:04

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tot Ion: 51 Resp: 1070789

Ion Ratio Lower Upper

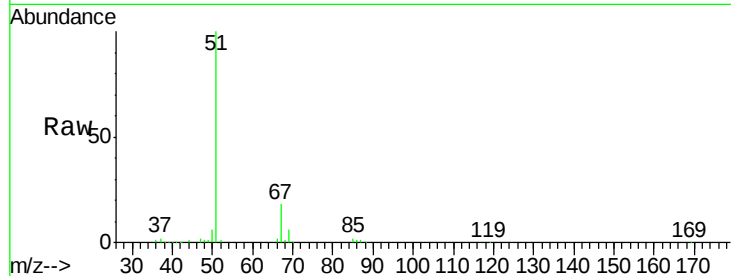
51 100

67 18.2 14.5 21.7

Manual Integrations
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

3.59

600000

500000

400000

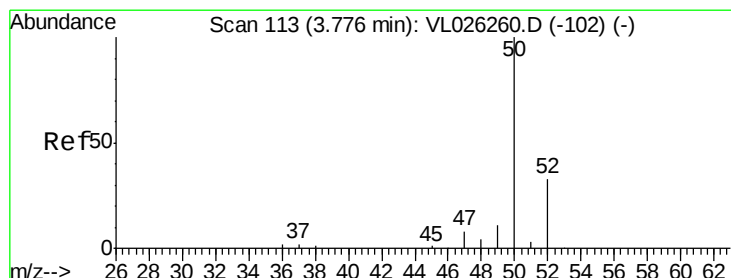
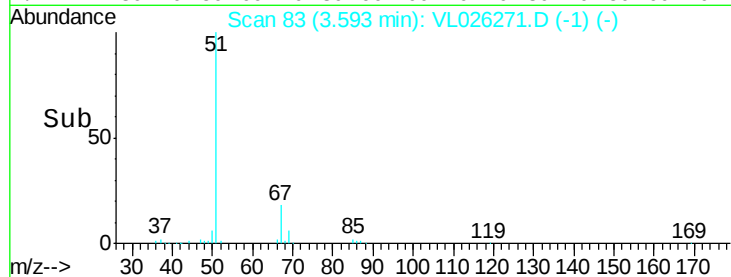
300000

200000

100000

0

Time-->



#4

Chloromethane

Concen: 0.42 ppbv

RT: 3.78 min Scan# 113

Delta R.T. 0.00 min

Lab File: VL026271.D

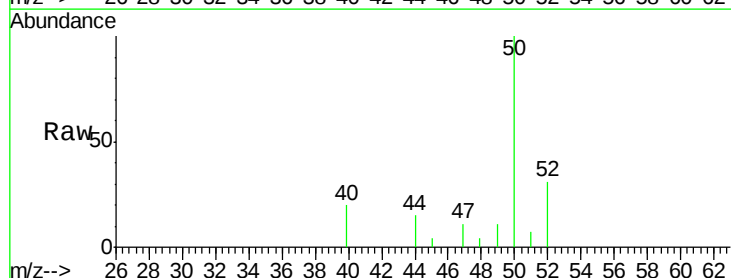
Acq: 29 Oct 2015 19:04

Tgt Ion: 50 Resp: 17294

Ion Ratio Lower Upper

50 100

52 30.9 26.1 39.1



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

3.78

10000

8000

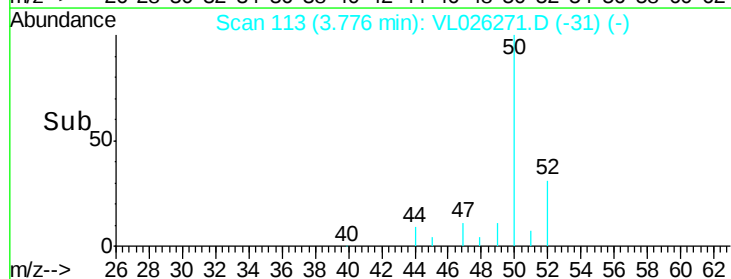
6000

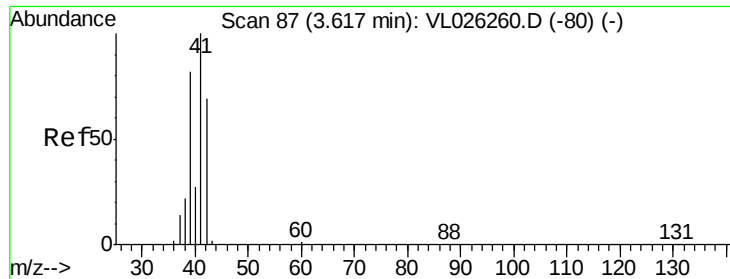
4000

2000

0

Time-->





#9

Propene

Concen: 1.07 ppbv

RT: 3.63 min Scan# 89

Delta R.T. 0.01 min

Lab File: VL026271.D

Acq: 29 Oct 2015 19:04

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion: 41 Resp: 36960

Ion Ratio Lower Upper

41 100

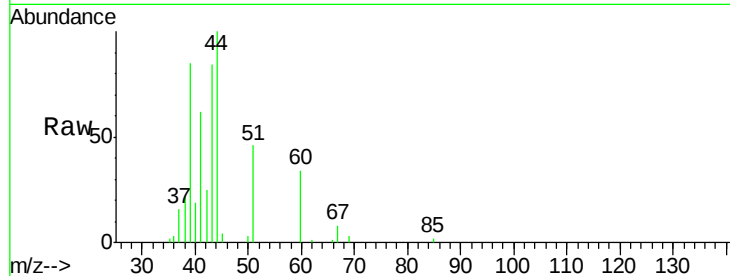
42 44.9 54.5 81.7#

Manual Integrations

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Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

20000

15000

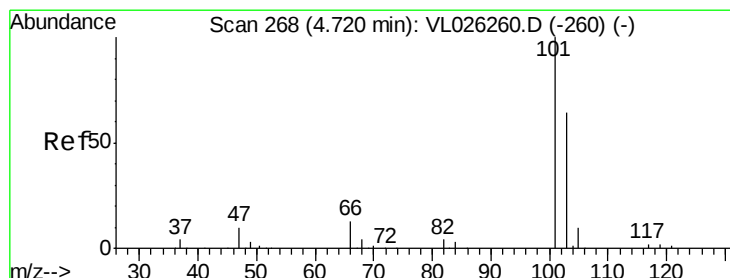
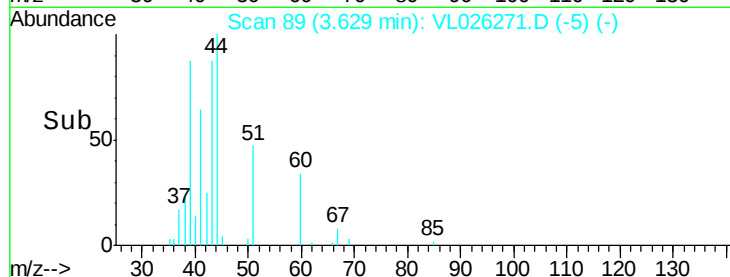
10000

5000

0

Time--> 3.55 3.60 3.65 3.70

3.63



#11

Trichlorofluoromethane

Concen: 0.22 ppbv

RT: 4.72 min Scan# 268

Delta R.T. 0.00 min

Lab File: VL026271.D

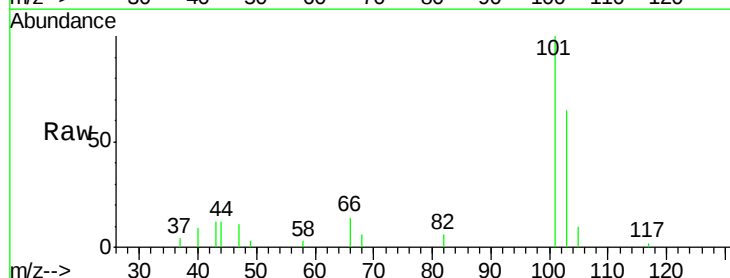
Acq: 29 Oct 2015 19:04

Tgt Ion: 101 Resp: 25133

Ion Ratio Lower Upper

101 100

103 64.7 51.4 77.0



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V

15000

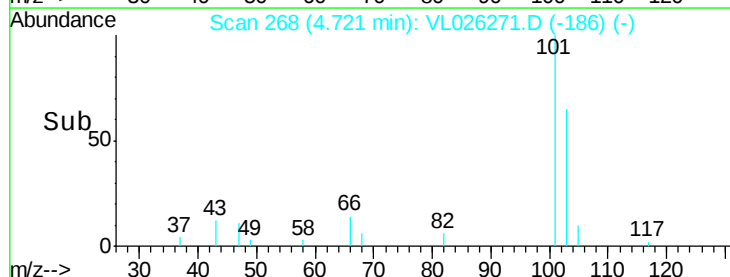
10000

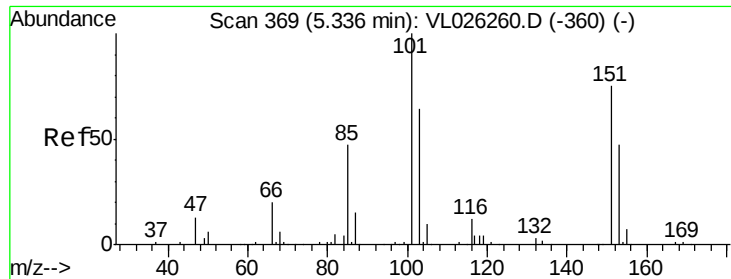
5000

0

Time--> 4.65 4.70 4.75

4.72





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.10 ppbv

RT: 5.33 min Scan# 368

Delta R.T. -0.01 min

Lab File: VL026271.D

Acq: 29 Oct 2015 19:04

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion:101 Resp: 7819

Ion Ratio Lower Upper

101 100

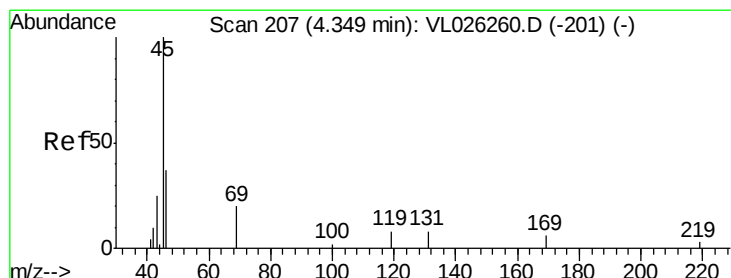
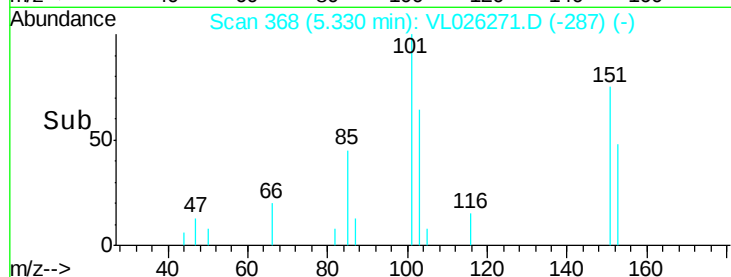
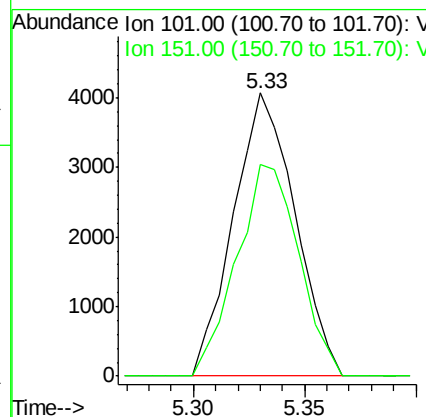
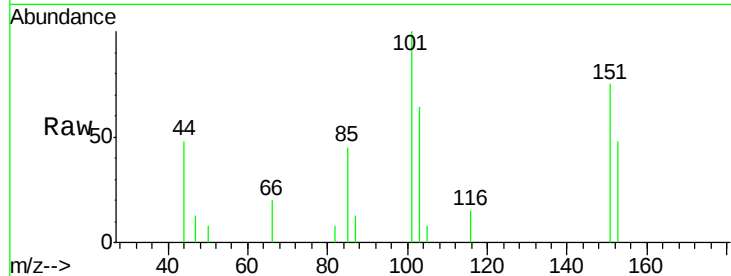
151 75.2 60.3 90.5

Manual Integrations

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#13

Ethanol

Concen: 3.49 ppbv

RT: 4.37 min Scan# 210

Delta R.T. 0.02 min

Lab File: VL026271.D

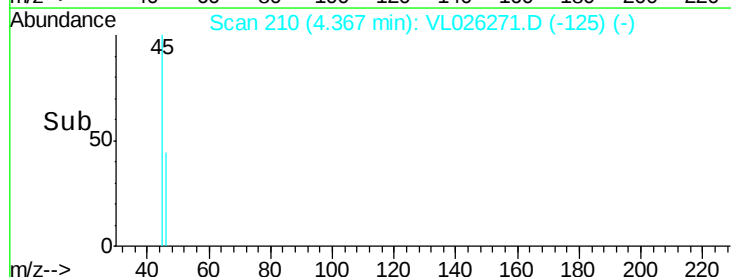
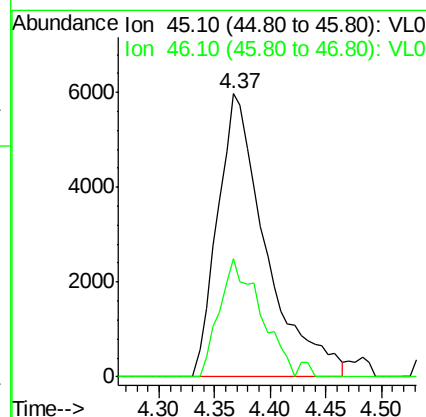
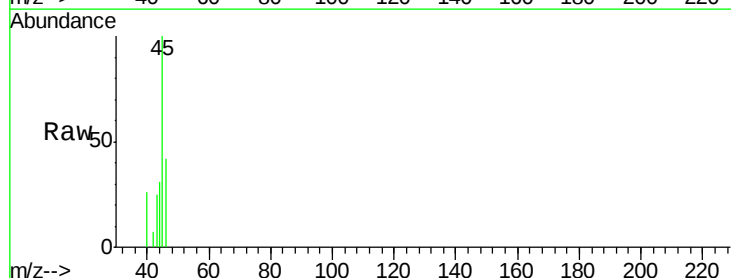
Acq: 29 Oct 2015 19:04

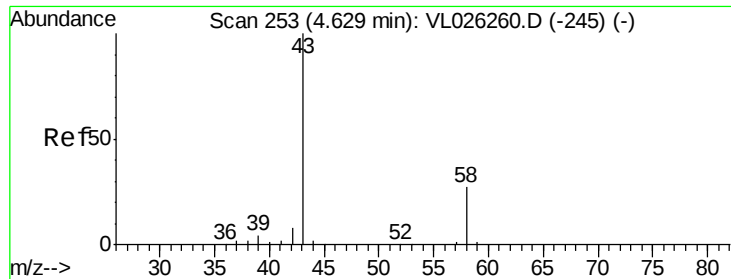
Tgt Ion: 45 Resp: 18023

Ion Ratio Lower Upper

45 100

46 36.9 17.0 68.0





#15

Acetone

Concen: 3.25 ppbv

RT: 4.63 min Scan# 253

Delta R.T. 0.00 min

Lab File: VL026271.D

Acq: 29 Oct 2015 19:04

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion: 43 Resp: 244859

Ion Ratio Lower Upper

43 100

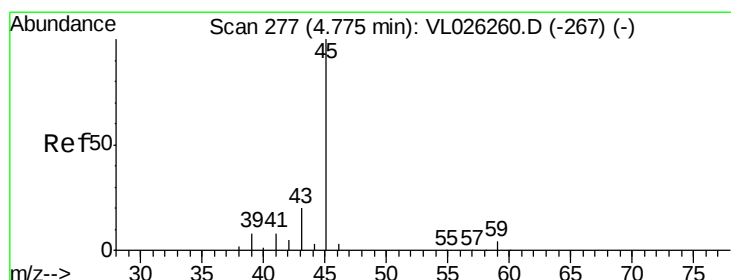
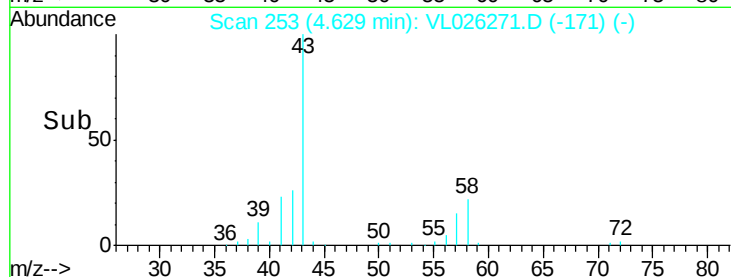
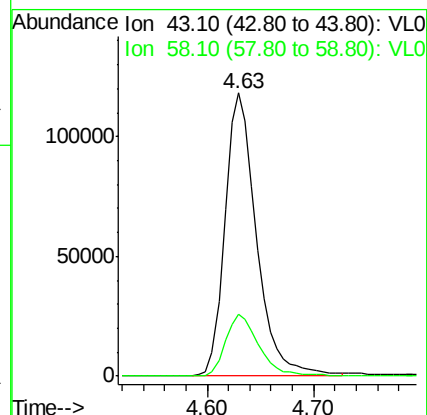
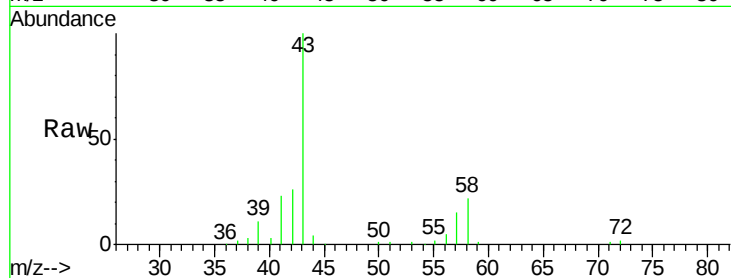
58 23.3 22.3 33.5

Manual Integrations

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#19

Isopropyl Alcohol

Concen: 0.40 ppbv

RT: 4.82 min Scan# 284

Delta R.T. 0.04 min

Lab File: VL026271.D

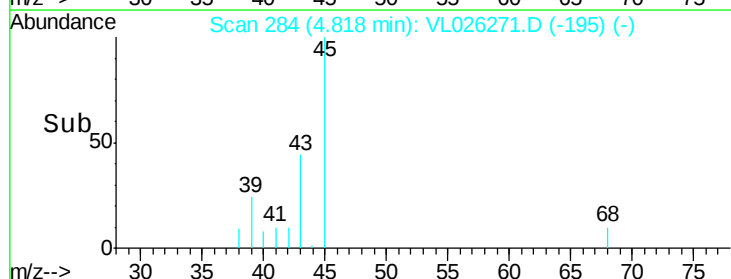
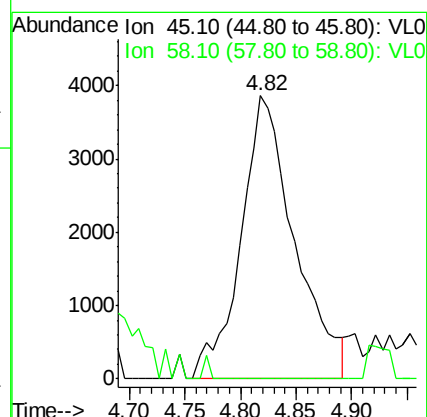
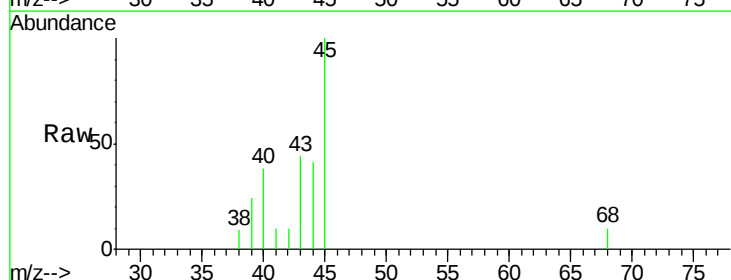
Acq: 29 Oct 2015 19:04

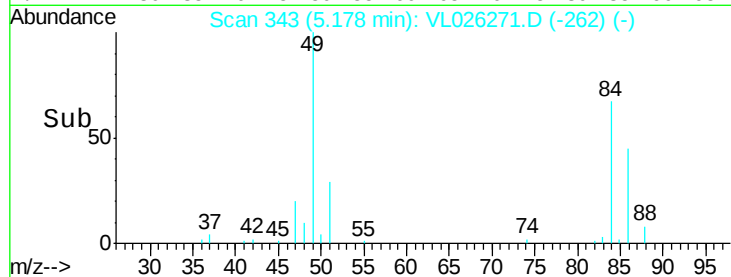
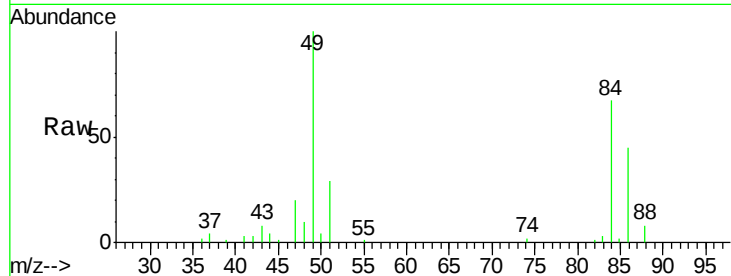
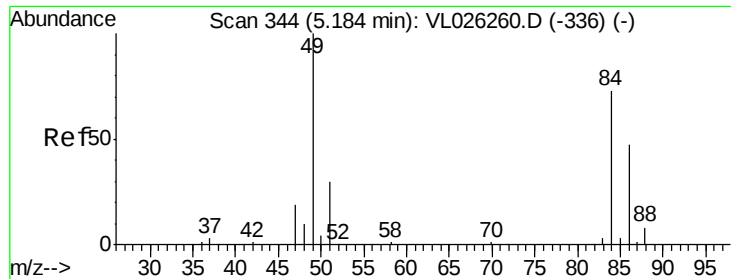
Tgt Ion: 45 Resp: 12952

Ion Ratio Lower Upper

45 100

58 0.0 43.8 65.8#





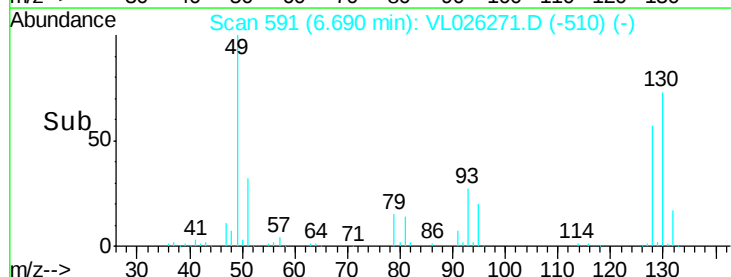
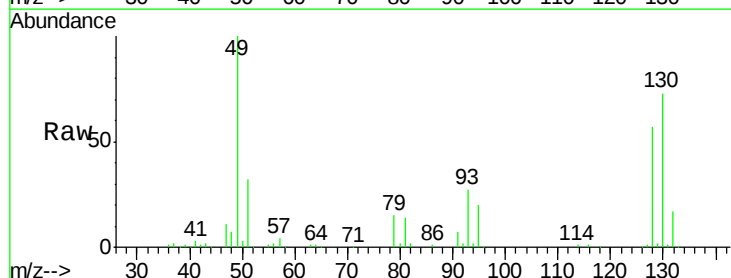
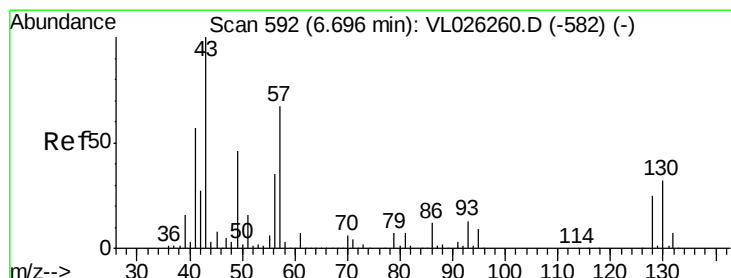
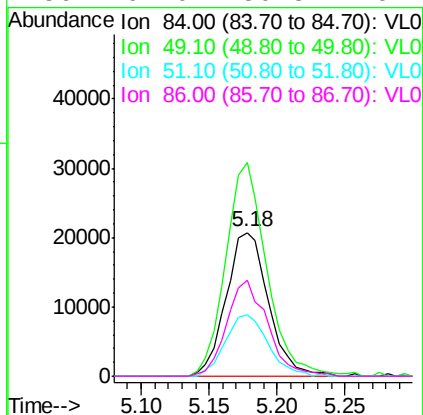
#20
Methvlene Chloride
Concen: 1.37 ppbv
RT: 5.18 min Scan# 343
Delta R.T. -0.01 min
Lab File: VL026271.D
Acq: 29 Oct 2015 19:04

Tot Ion	84	Resp	44965
Ion	Ratio	Lower	Upper
84	100		
49	148.8	109.0	163.4
51	42.8	32.8	49.2
86	67.0	50.8	76.2

Instrument :
MSVOA_L
ClientSampled :
IA1

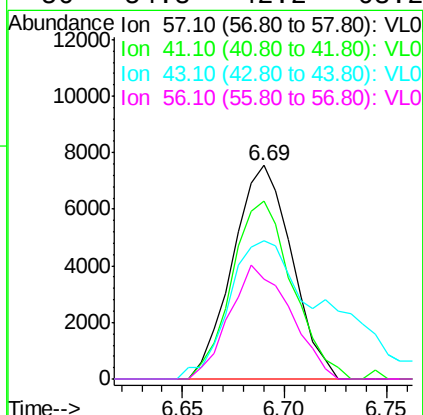
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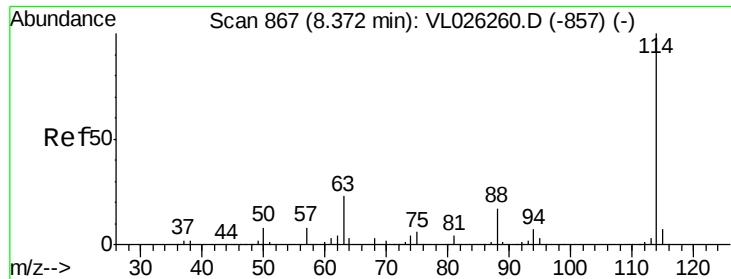
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#26
Hexane
Concen: 0.20 ppbv
RT: 6.69 min Scan# 591
Delta R.T. -0.01 min
Lab File: VL026271.D
Acq: 29 Oct 2015 19:04

Tgt Ion	57	Resp	15211
Ion	Ratio	Lower	Upper
57	100		
41	86.1	67.4	101.2
43	112.4	163.9	245.9#
56	54.8	42.2	63.2





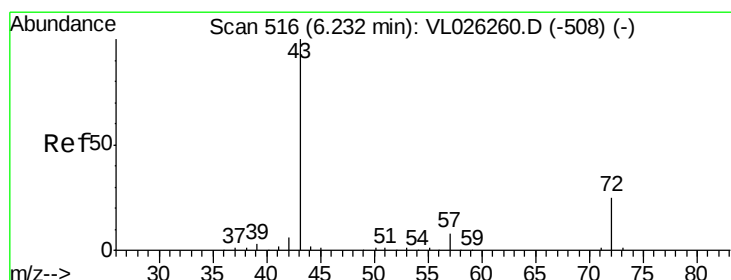
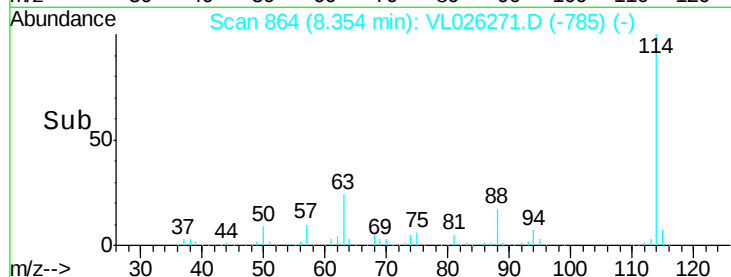
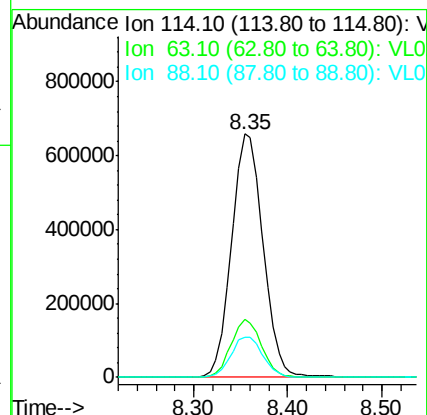
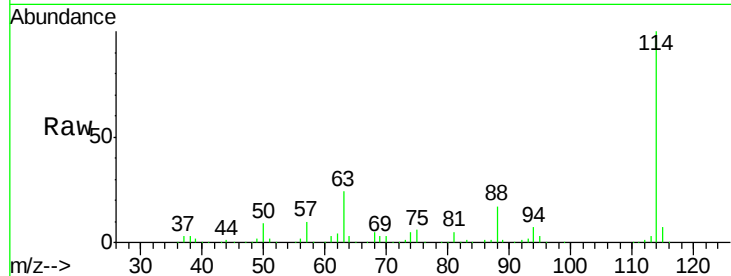
#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 8.35 min Scan# 864
 Delta R.T. -0.02 min
 Lab File: VL026271.D
 Acq: 29 Oct 2015 19:04

Instrument :
 MSVOA_L
 ClientSampled :
 IA1

Tot Ion	Ratio	Lower	Upper
114	100		
63	23.2	18.6	28.0
88	16.9	13.4	20.2

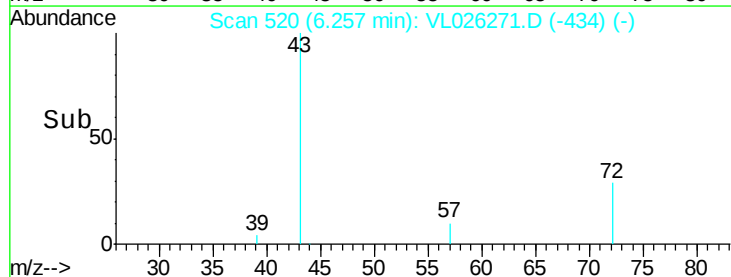
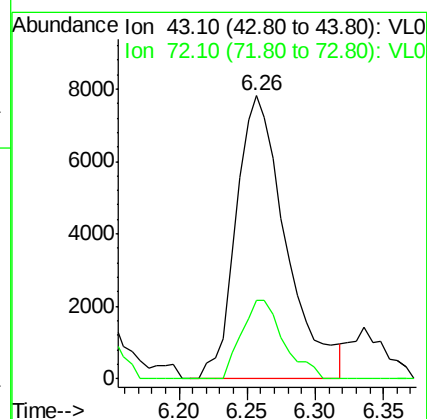
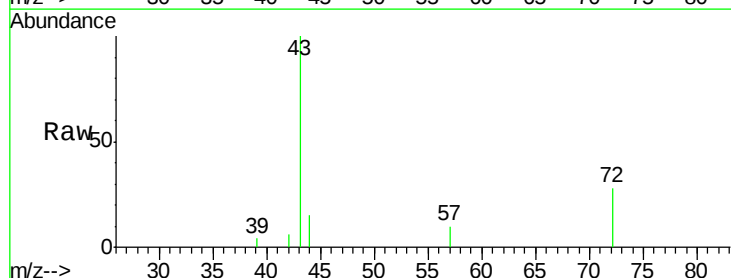
Manual Integrations
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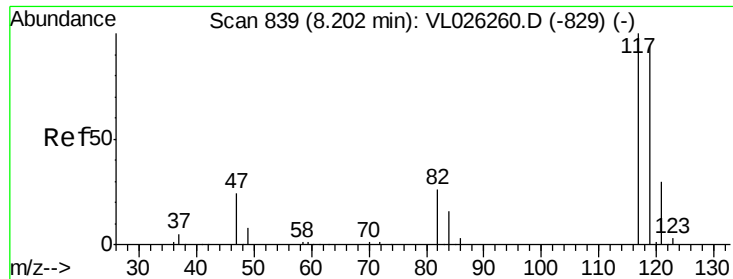
Mmdadoda
 10/30/2015 12:06:39 PM



#34
 2-Butanone
 Concen: 0.22 ppbv m
 RT: 6.26 min Scan# 520
 Delta R.T. 0.02 min
 Lab File: VL026271.D
 Acq: 29 Oct 2015 19:04

Tgt Ion	Ratio	Lower	Upper
43	100		
72	0.0	19.9	29.9#





#35

Carbon Tetrachloride

Concen: 0.06 ppbv

RT: 8.20 min Scan# 838

Delta R.T. -0.01 min

Lab File: VL026271.D

Acq: 29 Oct 2015 19:04

Instrument :

MSVOA_L

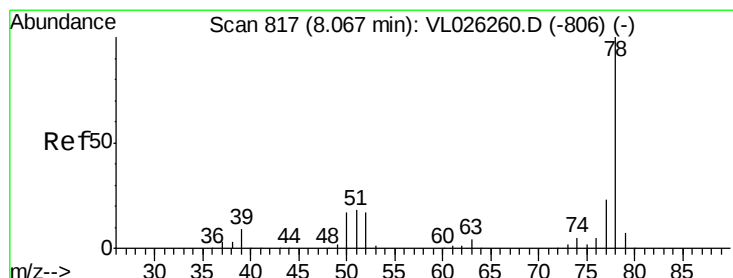
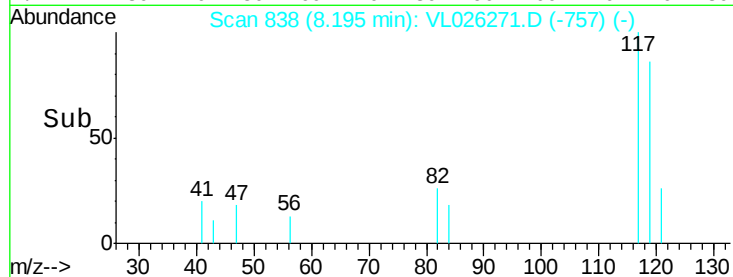
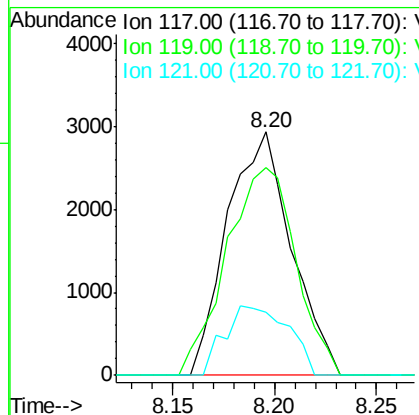
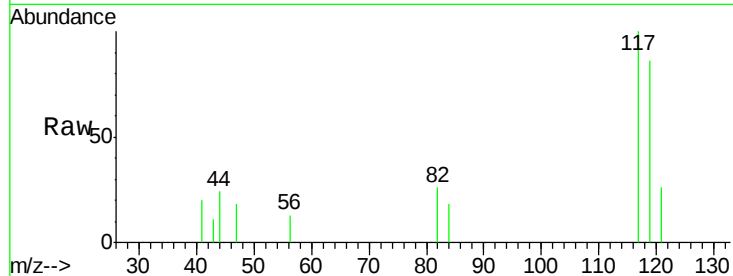
ClientSampled :

IA1

Tot Ion:117 Resp: 6416
 Ion Ratio Lower Upper
 117 100
 119 85.6 75.2 112.8
 121 26.0 24.2 36.2

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#36

Benzene

Concen: 0.24 ppbv

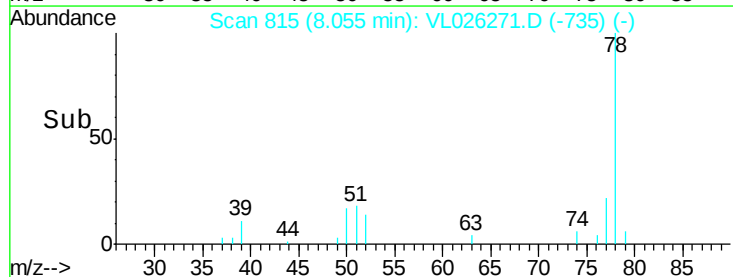
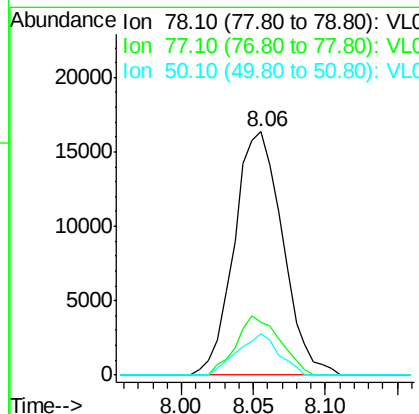
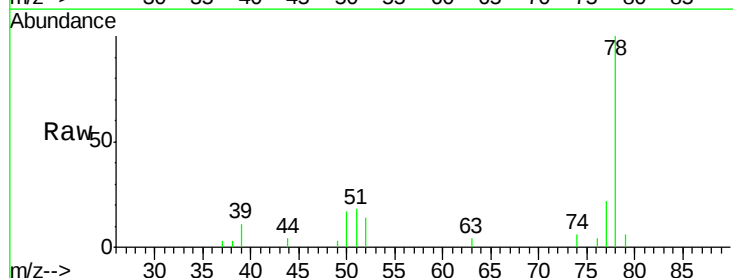
RT: 8.06 min Scan# 815

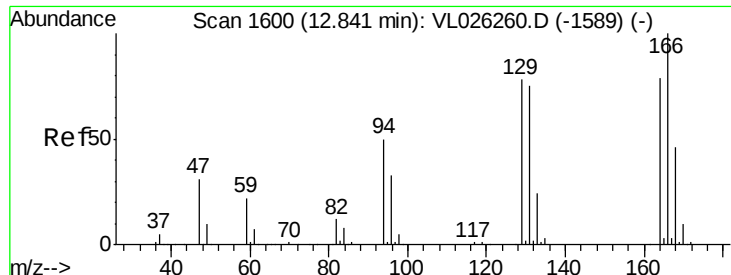
Delta R.T. -0.01 min

Lab File: VL026271.D

Acq: 29 Oct 2015 19:04

Tgt Ion: 78 Resp: 38172
 Ion Ratio Lower Upper
 78 100
 77 21.7 18.0 27.0
 50 17.0 13.3 19.9





#52

Tetrachloroethene

Concen: 0.03 ppbv m

RT: 12.82 min Scan# 1597

Delta R.T. -0.02 min

Lab File: VL026271.D

Acq: 29 Oct 2015 19:04

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion:164 Resp: 2469

Ion Ratio Lower Upper

164 100

166 93.2 101.4 152.0#

129 65.2 78.8 118.2#

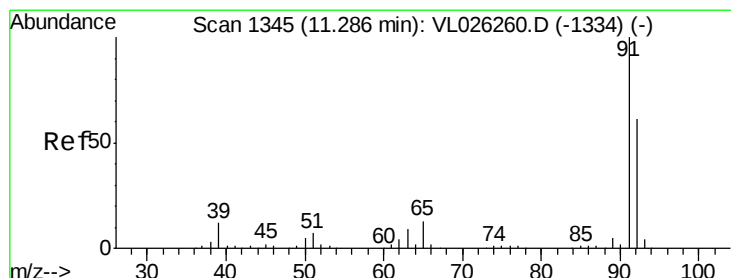
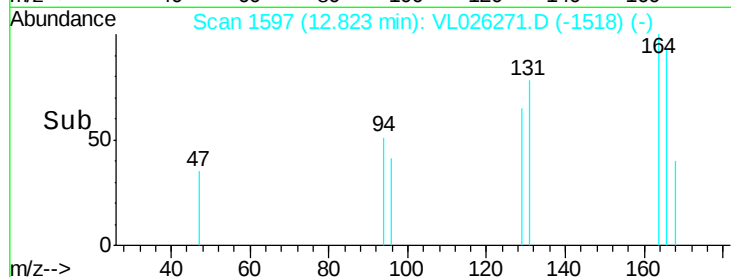
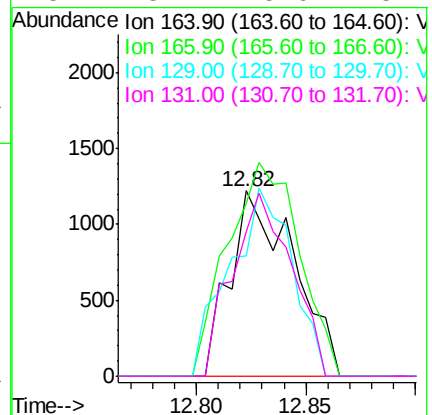
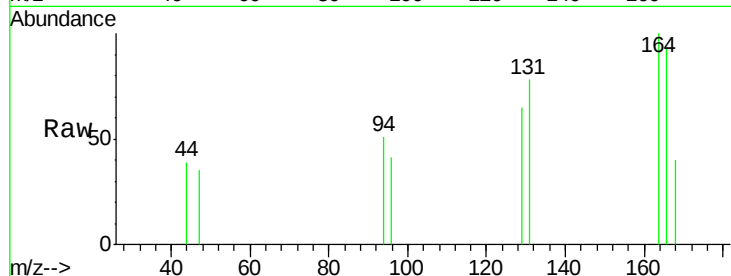
131 78.4 75.6 113.4

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#53

Toluene

Concen: 0.27 ppbv

RT: 11.27 min Scan# 1342

Delta R.T. -0.02 min

Lab File: VL026271.D

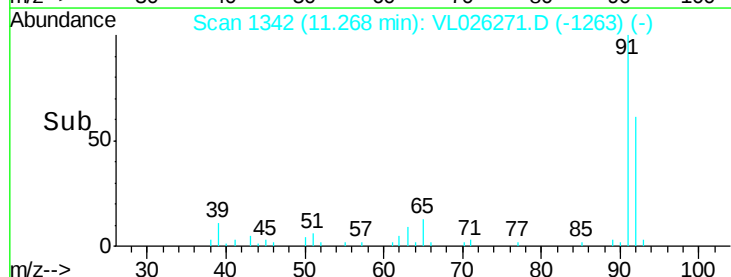
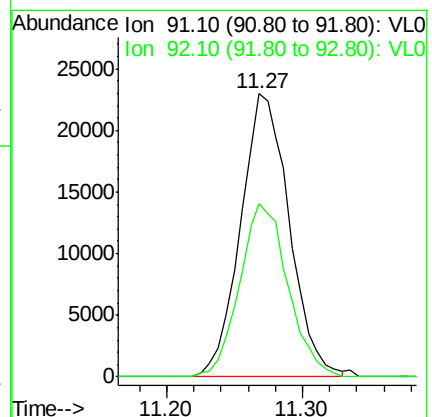
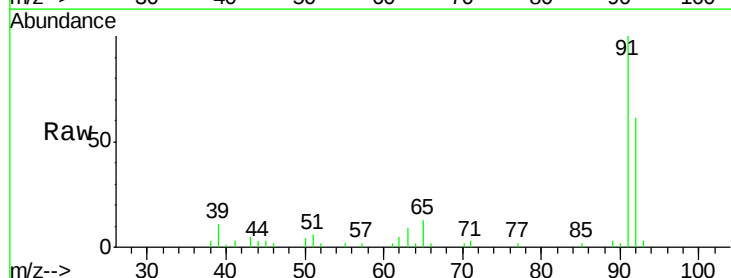
Acq: 29 Oct 2015 19:04

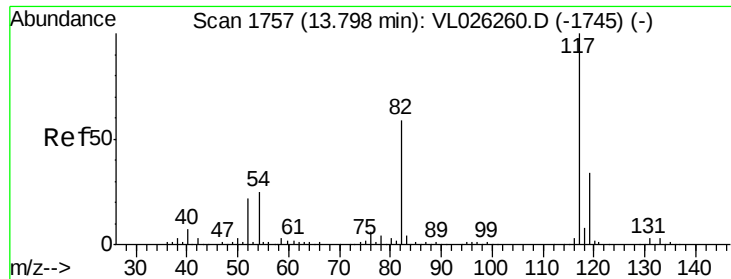
Tgt Ion: 91 Resp: 57287

Ion Ratio Lower Upper

91 100

92 60.8 48.6 73.0





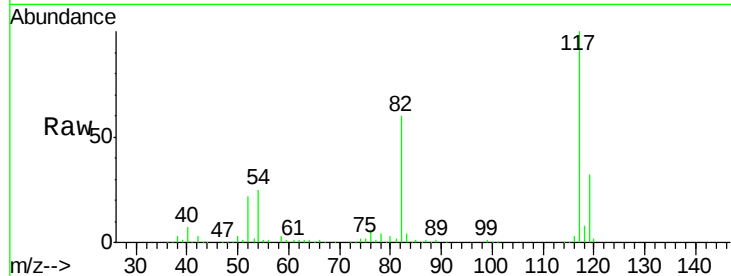
#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 13.78 min Scan# 1754
Delta R.T. -0.02 min
Lab File: VL026271.D
Acq: 29 Oct 2015 19:04

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tot Ion	Ratio	Lower	Upper
117	100		
82	60.7	48.2	72.4
119	32.5	46.2	69.2

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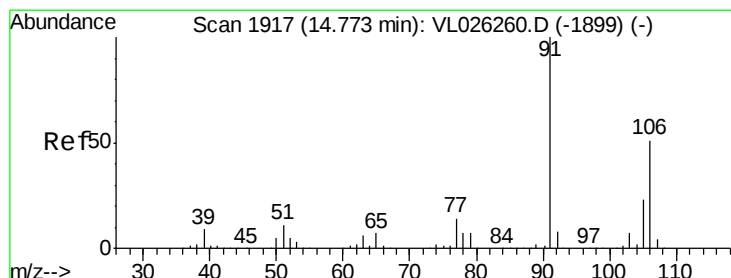
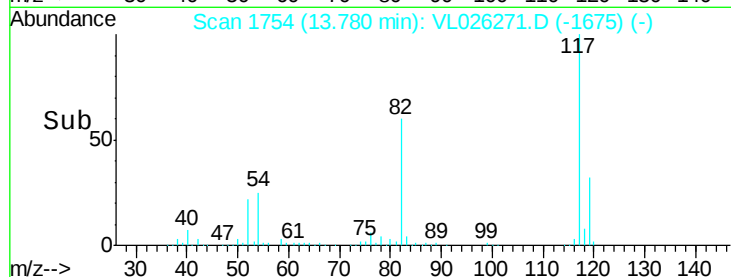
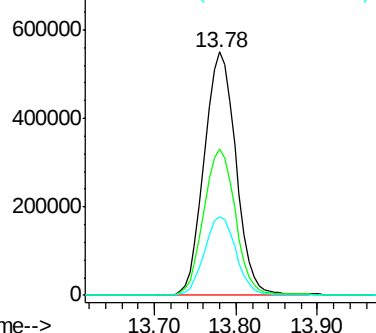
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Abundance Ion 117.10 (116.80 to 117.80): V

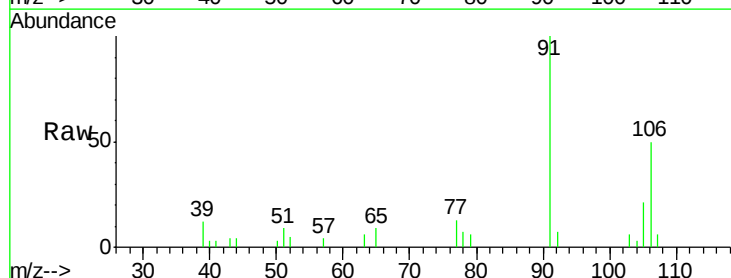
Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



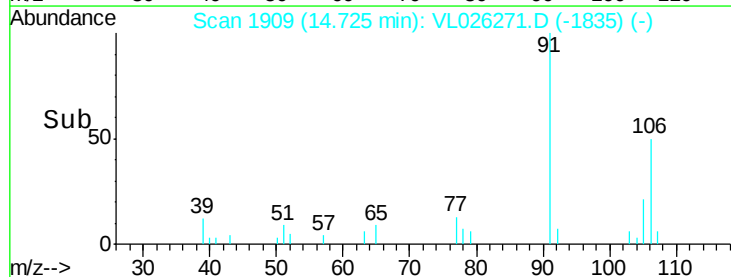
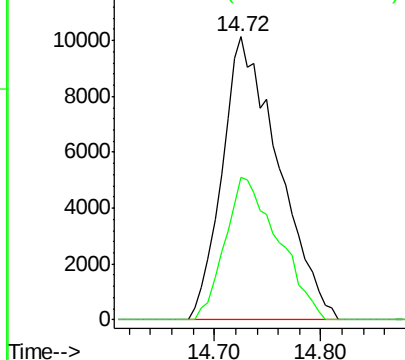
#59
m/p-Xylene
Concen: 0.19 ppbv
RT: 14.72 min Scan# 1909
Delta R.T. -0.05 min
Lab File: VL026271.D
Acq: 29 Oct 2015 19:04

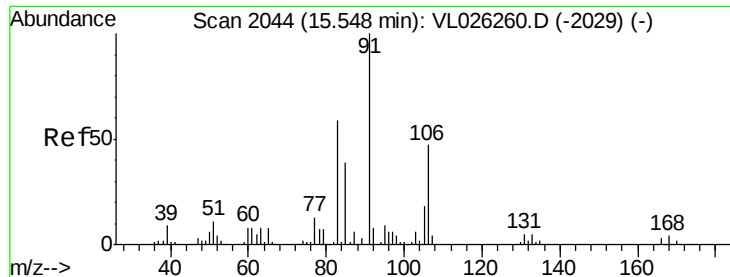
Tgt Ion	Ratio	Lower	Upper
91	100		
106	47.6	0.0	0.0



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





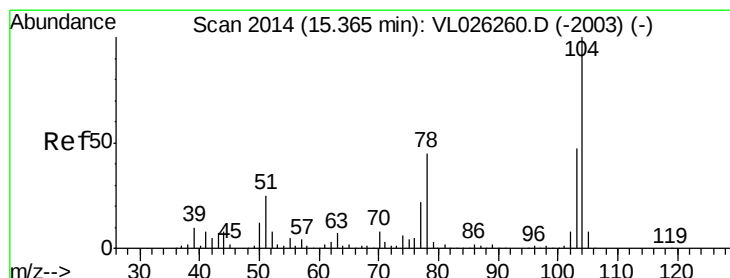
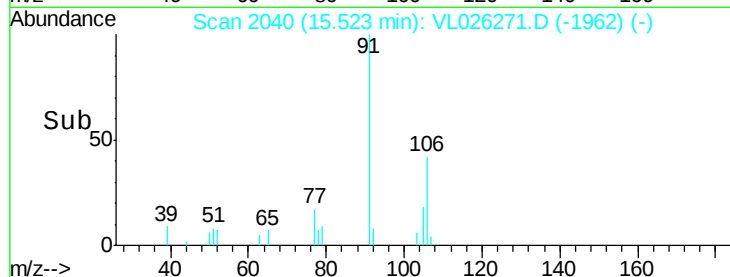
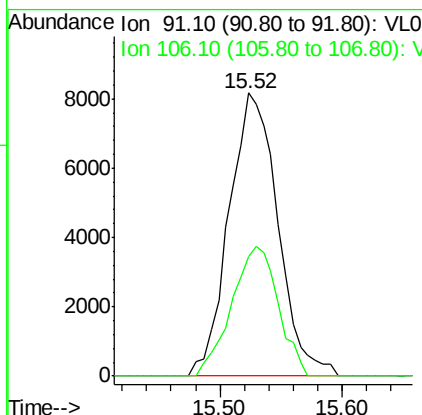
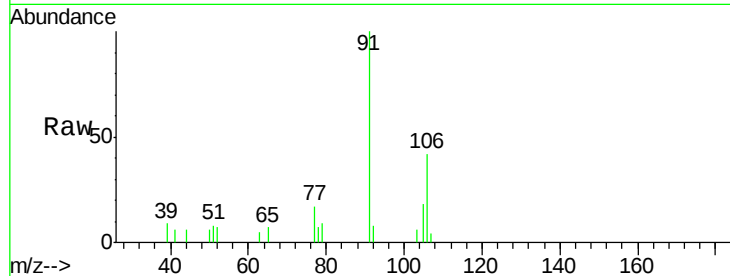
#60
o-Xylene
Concen: 0.11 ppbv
RT: 15.52 min Scan# 2040
Delta R.T. -0.02 min
Lab File: VL026271.D
Acq: 29 Oct 2015 19:04

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion: 91 Resp: 22637
Ion Ratio Lower Upper
91 100
106 43.7 23.6 70.8

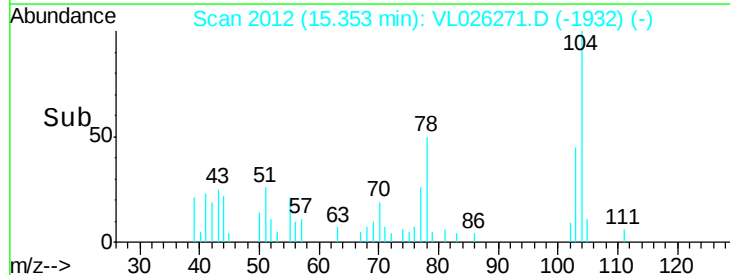
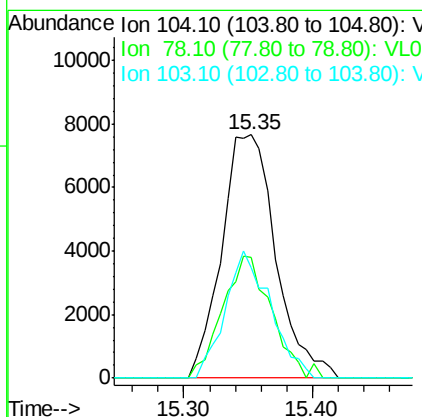
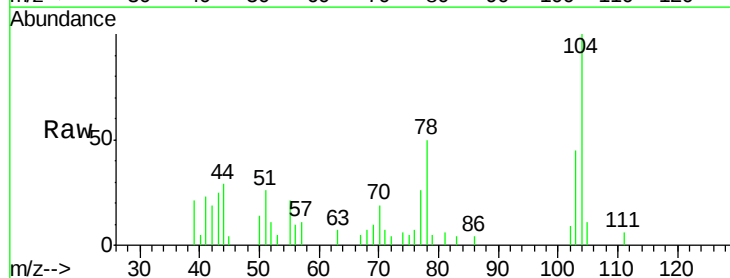
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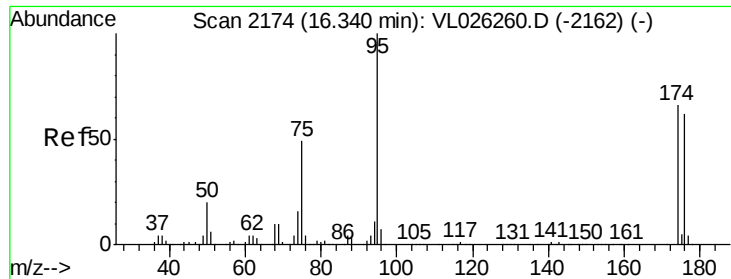
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#61
Styrene
Concen: 0.26 ppbv
RT: 15.35 min Scan# 2012
Delta R.T. -0.01 min
Lab File: VL026271.D
Acq: 29 Oct 2015 19:04

Tgt Ion: 104 Resp: 22398
Ion Ratio Lower Upper
104 100
78 45.3 35.5 53.3
103 43.7 37.0 55.6





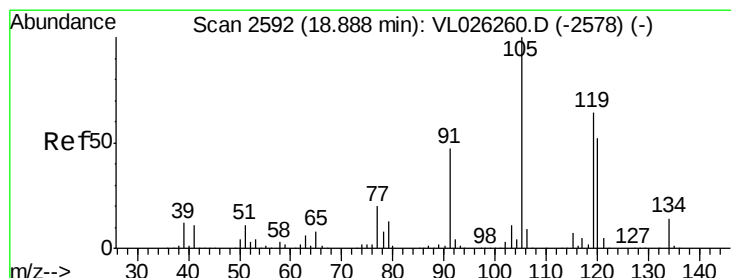
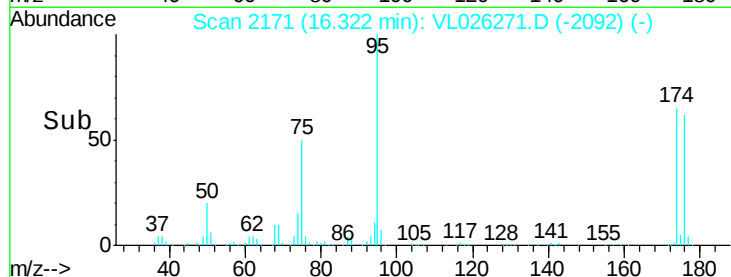
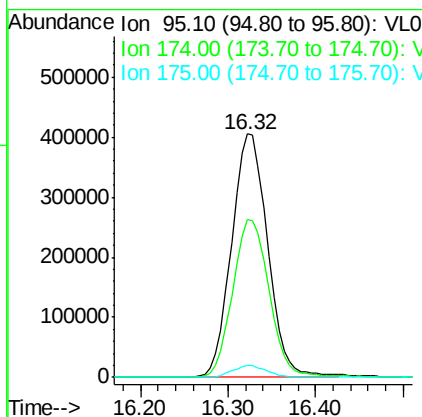
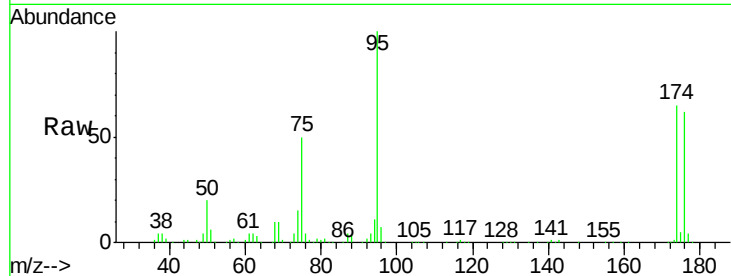
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.31 ppbv
 RT: 16.32 min Scan# 2171
 Delta R.T. -0.02 min
 Lab File: VL026271.D
 Acq: 29 Oct 2015 19:04

Instrument :
 MSVOA_L
 ClientSampled :
 IA1

Tot Ion: 95 Resp: 1163499
 Ion Ratio Lower Upper
 95 100
 174 66.1 52.9 79.3
 175 4.8 3.8 5.8

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 10/30/2015 12:06:39 PM



#74
 1,2,4-Trimethylbenzene
 Concen: 0.13 ppbv
 RT: 18.87 min Scan# 2589
 Delta R.T. -0.02 min
 Lab File: VL026271.D
 Acq: 29 Oct 2015 19:04

Tgt Ion: 105 Resp: 29619
 Ion Ratio Lower Upper
 105 100
 120 43.8 41.2 61.8
 91 12.4 37.8 56.8#
 77 13.2 16.1 24.1#

