

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL102015\
 Data File : VL026229.D
 Acq On : 21 Oct 2015 6:15
 Operator : SY/MD
 Sample : G4112-01 10X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SUBSLAB-233

Manual Integrations
 APPROVED

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 10/22/2015 4:33:14 PM

Quant Time: Oct 22 10:05:34 2015
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL102015AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Tue Oct 20 2015
 QLast Update : Tue Oct 20 20:24:48 2015
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	6.62	49	516258	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	8.29	114	1497473	10.00	ppbv	-0.02
55) Chlorobenzene-d5	13.71	117	1789460	10.00	ppbv	-0.02

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	16.25	95	1434210	10.39	ppbv	-0.02	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.90%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.62	85	40620	0.38	ppbv	98
3) Chlorodifluoromethane	3.56	51	71456m	1.09	ppbv	
9) Propene	3.59	41	2999	0.10	ppbv	97
10) Heptane	9.32	43	8705	0.08	ppbv	92
11) Trichlorofluoromethane	4.68	101	5279	0.05	ppbv #	80
13) Ethanol	4.31	45	123284	26.86	ppbv	95
15) Acetone	4.59	43	165219	2.17	ppbv	92
17) tert-Butyl alcohol	5.14	59	40543	0.78	ppbv	99
19) Isopropyl Alcohol	4.76	45	17119	0.58	ppbv #	27
26) Hexane	6.63	57	43088	0.61	ppbv #	55
30) Cyclohexane	8.26	84	14011	0.20	ppbv #	28
34) 2-Butanone	6.19	43	18461	0.22	ppbv	98
36) Benzene	7.99	78	9418	0.06	ppbv	98
38) Trichloroethene	9.02	130	11125	0.15	ppbv	88
41) Tetrahydrofuran	7.12	42	32645	0.67	ppbv	95
52) Tetrachloroethene	12.77	164	3686889	42.15	ppbv	97
53) Toluene	11.20	91	246892	1.19	ppbv	98
58) Ethyl Benzene	14.38	91	25168	0.09	ppbv	99
59) m/p-Xylene	14.65	91	63084	0.28	ppbv	99
60) o-Xylene	15.46	91	26826	0.11	ppbv	99
61) Styrene	15.27	104	23247	0.22	ppbv	99

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

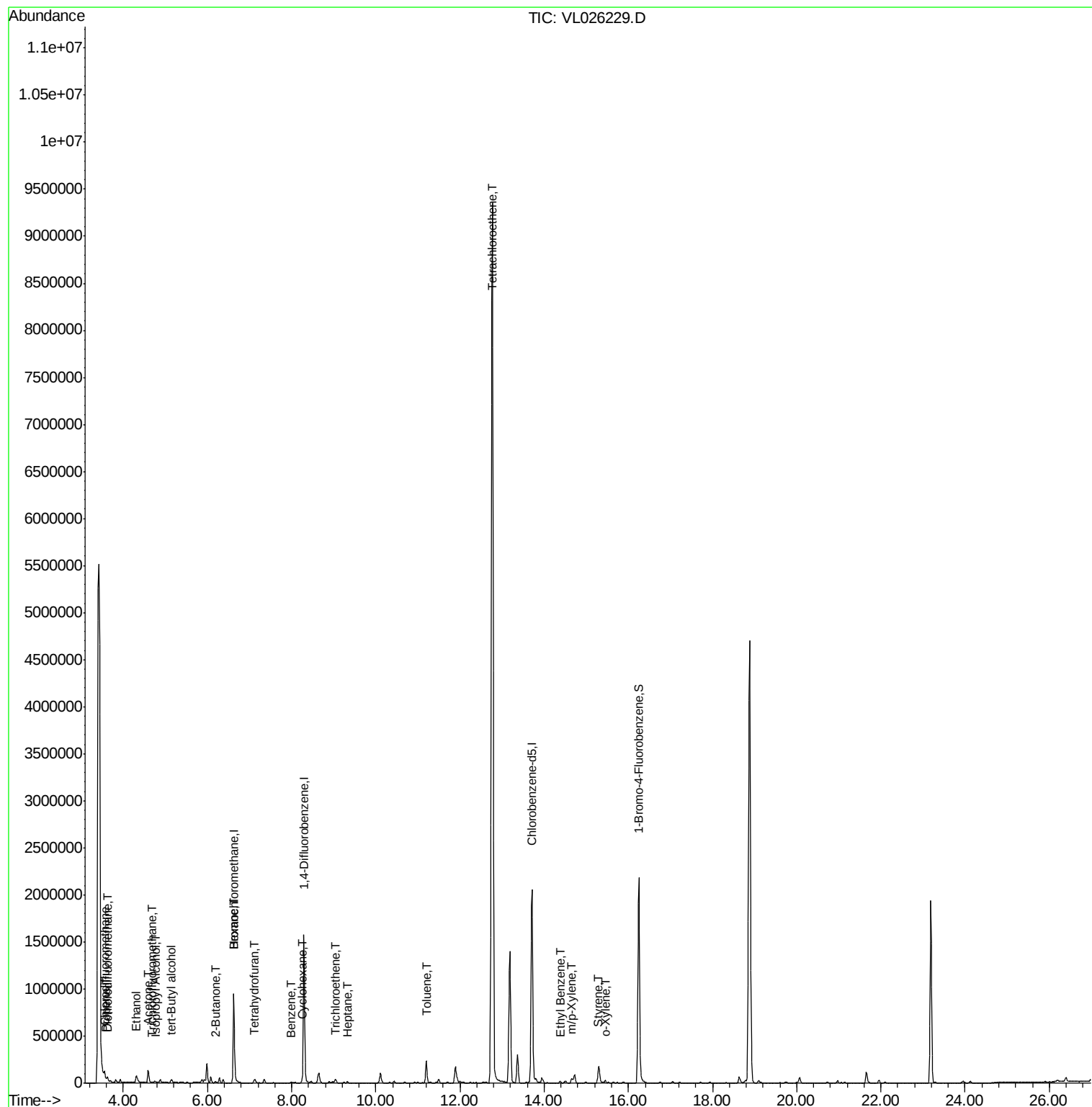
Data Path : W:\HPCHEM1\MSVOA L\DATA\VL102015\
Data File : VL026229.D
Acq On : 21 Oct 2015 6:15
Operator : SY/MD
Sample : G4112-01 10X
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

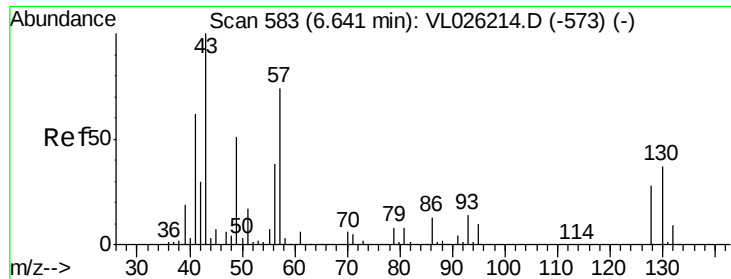
Instrument :
MSVOA_L
ClientSampleId :
SUBSLAB-233

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10/22/2015 4:33:14 PM

Quant Time: Oct 22 10:05:34 2015
Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL102015AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue Oct
QLast Update : Tue Oct 20 20:24:48 2015
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 6.62 min Scan# 580

Delta R.T. -0.02 min

Lab File: VL026229.D

Acq: 21 Oct 2015 6:15

Instrument :

MSVOA_L

ClientSampleId :

SUBSLAB-233

Tot Ion: 49 Resp: 516258

Ion Ratio Lower Upper

49 100

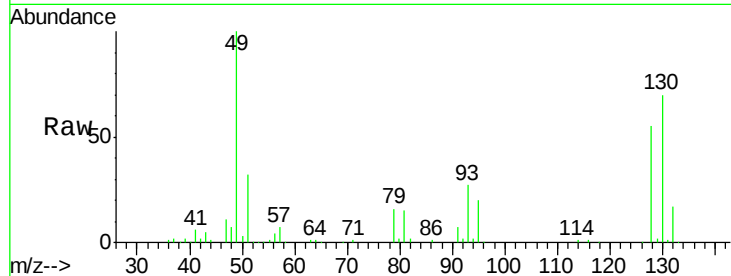
128 56.2 28.2 84.7

130 72.8 36.0 108.1

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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

300000

250000

200000

150000

100000

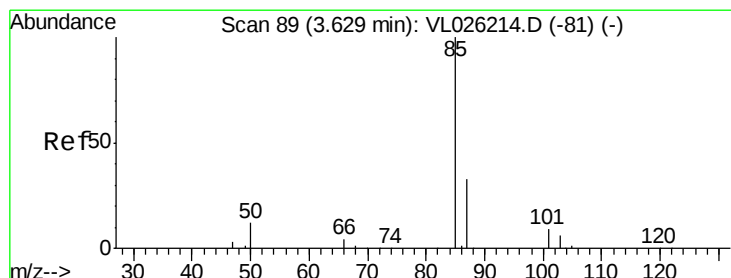
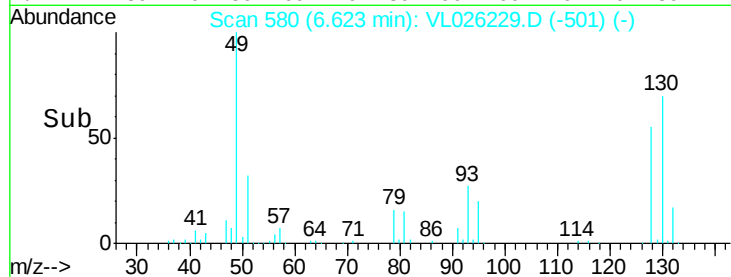
50000

0

6.62

6.50 6.60 6.70 6.80

Time-->



#2

Dichlorodifluoromethane

Concen: 0.38 ppbv

RT: 3.62 min Scan# 88

Delta R.T. -0.01 min

Lab File: VL026229.D

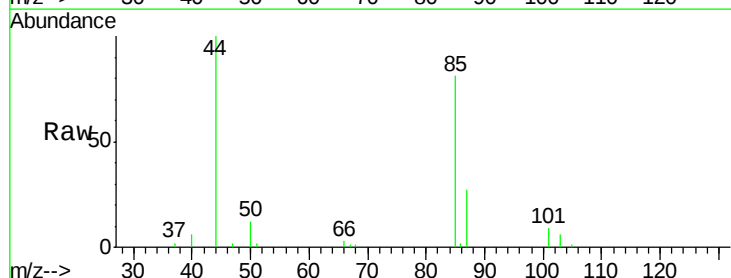
Acq: 21 Oct 2015 6:15

Tgt Ion: 85 Resp: 40620

Ion Ratio Lower Upper

85 100

87 33.8 26.1 39.1



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

25000

20000

15000

10000

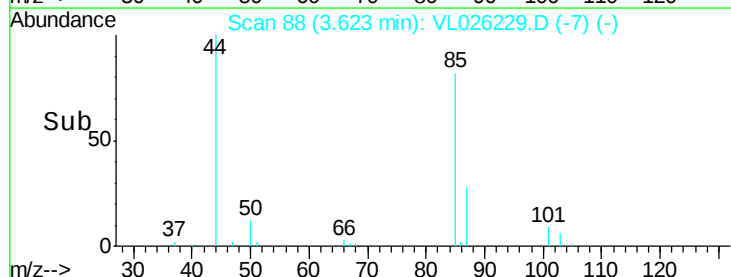
5000

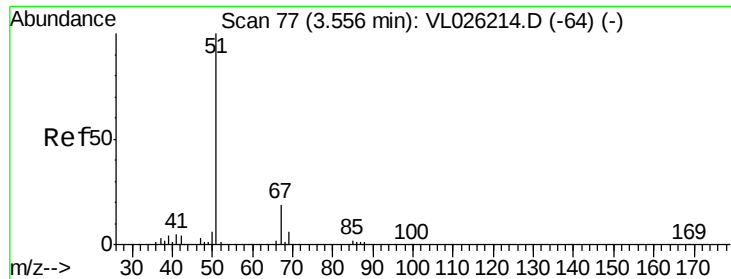
0

3.62

3.55 3.60 3.65

Time-->





#3

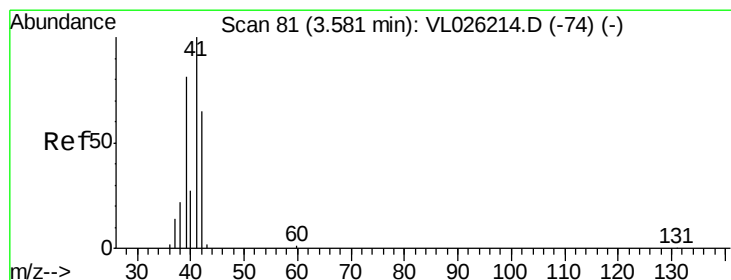
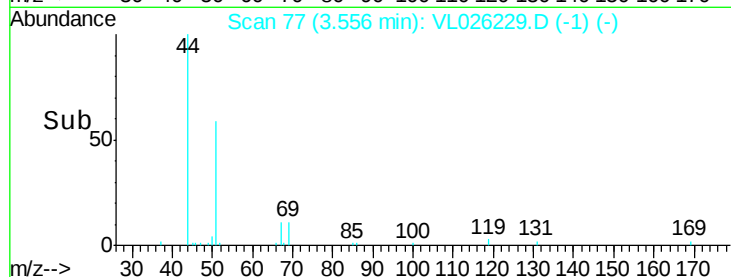
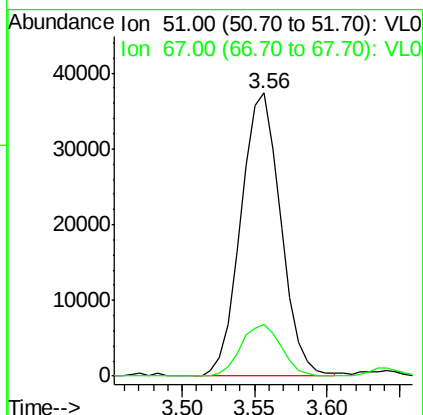
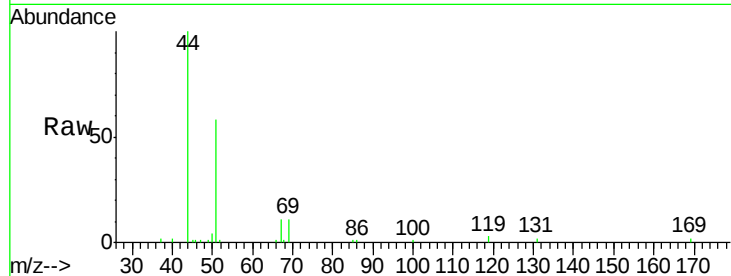
Chlorodifluoromethane
Concen: 1.09 ppbv m
RT: 3.56 min Scan# 77
Delta R.T. 0.00 min
Lab File: VL026229.D
Acq: 21 Oct 2015 6:15

Instrument :
MSVOA_L
ClientSampleId :
SUBSLAB-233

Tot Ion	Ratio	Lower	Upper
51	100		
67	18.3	15.3	22.9

Manual Integrations
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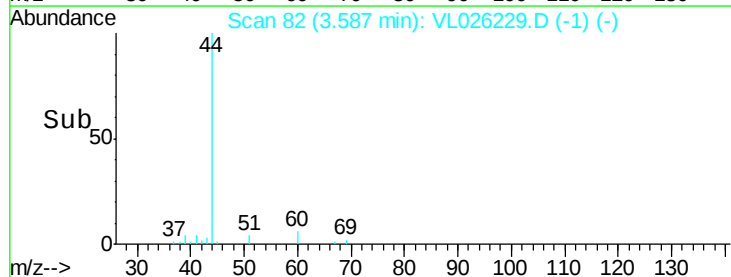
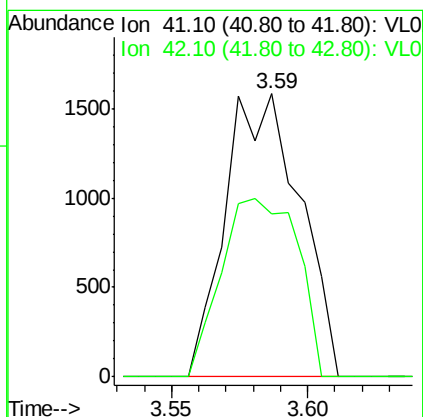
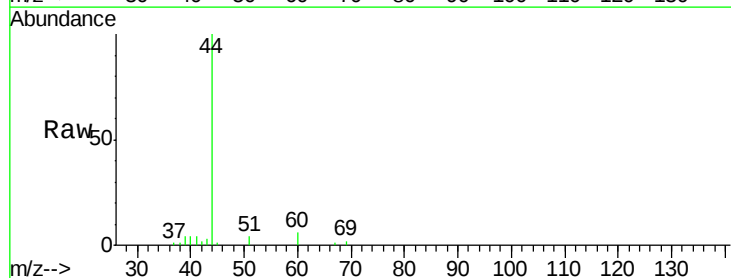
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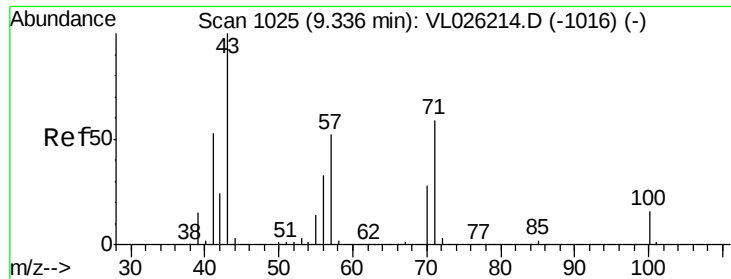


#9

Propene
Concen: 0.10 ppbv
RT: 3.59 min Scan# 82
Delta R.T. 0.01 min
Lab File: VL026229.D
Acq: 21 Oct 2015 6:15

Tgt Ion	Ratio	Lower	Upper
41	100		
42	64.6	53.8	80.8





#10

Heptane

Concen: 0.08 ppbv

RT: 9.32 min Scan# 1022

Delta R.T. -0.02 min

Lab File: VL026229.D

Acq: 21 Oct 2015 6:15

Instrument :

MSVOA_L

ClientSampleId :

SUBSLAB-233

Tot Ion: 43 Resp: 8705

Ion Ratio Lower Upper

43 100

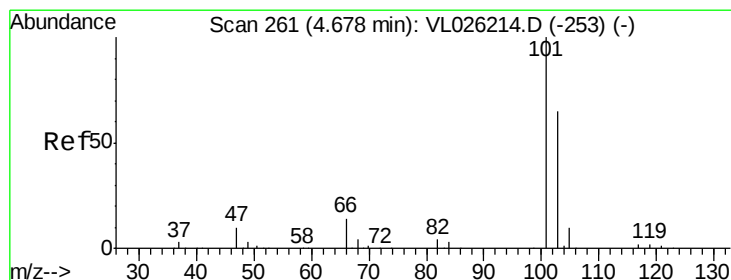
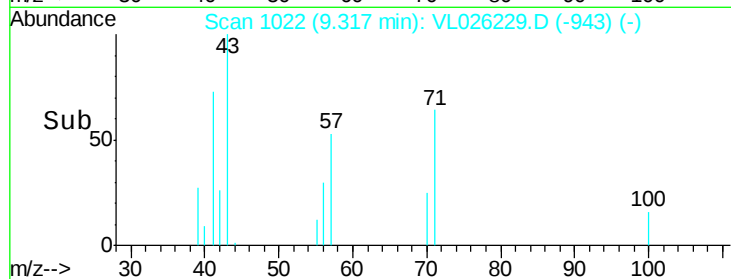
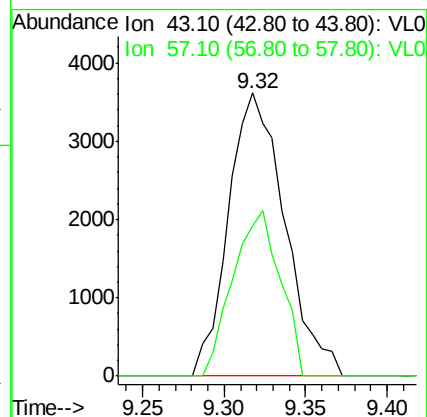
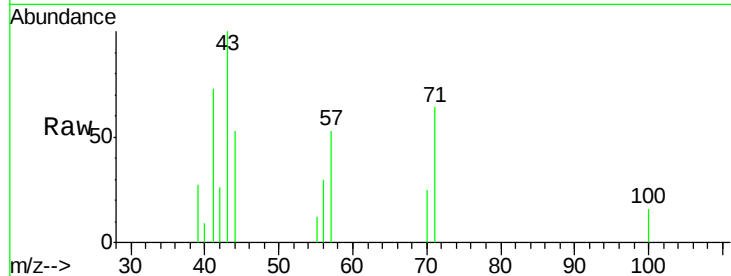
57 49.1 43.7 65.5

Manual Integrations

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#11

Trichlorofluoromethane

Concen: 0.05 ppbv

RT: 4.68 min Scan# 261

Delta R.T. 0.00 min

Lab File: VL026229.D

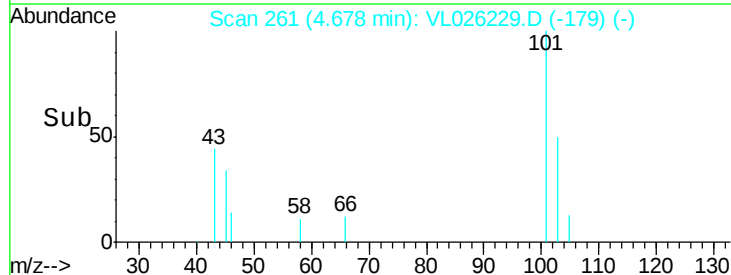
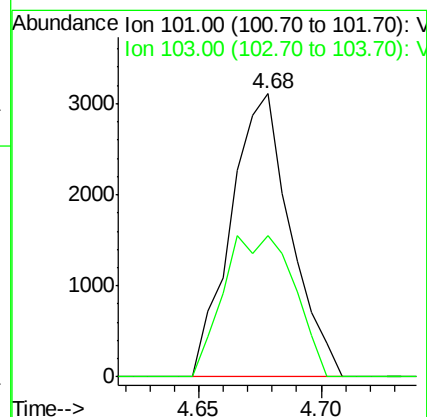
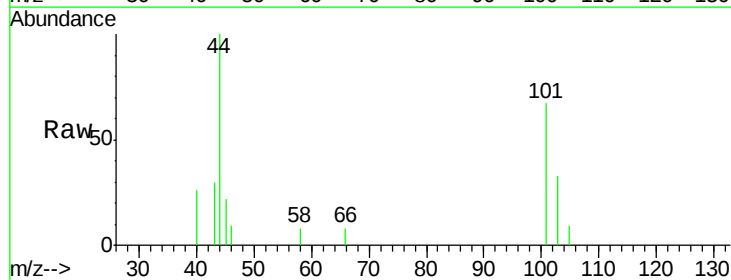
Acq: 21 Oct 2015 6:15

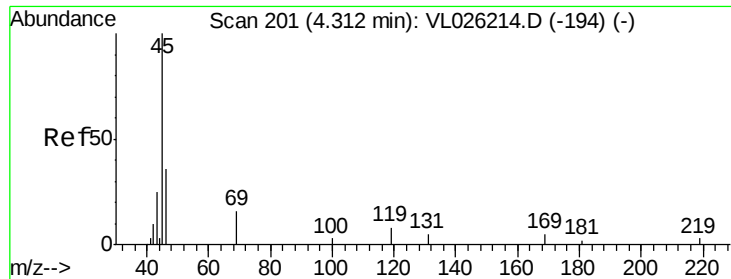
Tgt Ion: 101 Resp: 5279

Ion Ratio Lower Upper

101 100

103 49.8 52.2 78.2#





#13

Ethanol

Concen: 26.86 ppbv

RT: 4.31 min Scan# 201

Delta R.T. 0.00 min

Lab File: VL026229.D

Acq: 21 Oct 2015 6:15

Instrument :

MSVOA_L

ClientSampleId :

SUBSLAB-233

Tot Ion: 45 Resp: 123284

Ion Ratio Lower Upper

45 100

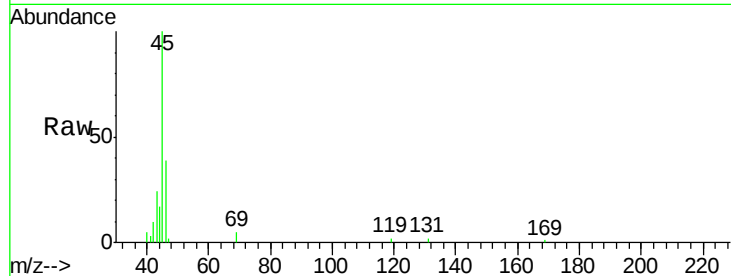
46 42.6 15.8 63.0

Manual Integrations

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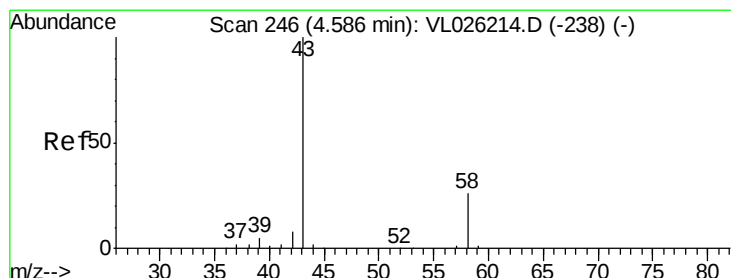
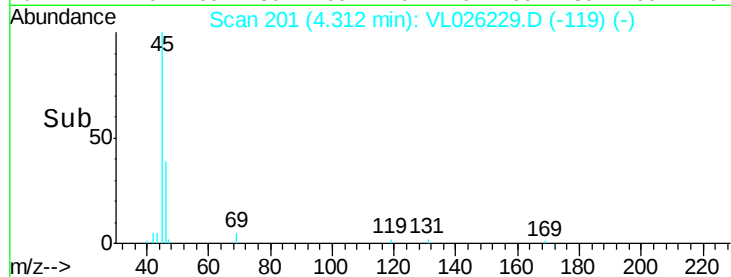
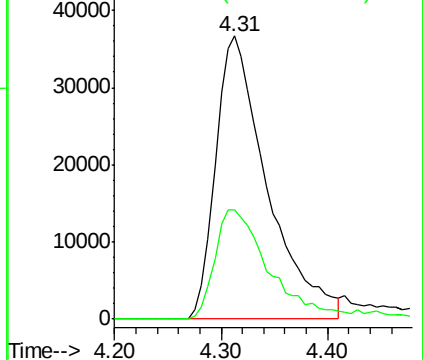
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Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0



#15

Acetone

Concen: 2.17 ppbv

RT: 4.59 min Scan# 247

Delta R.T. 0.01 min

Lab File: VL026229.D

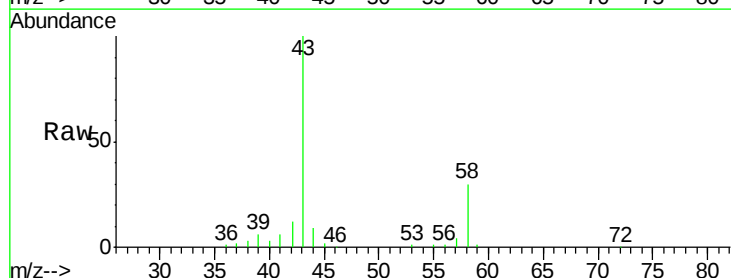
Acq: 21 Oct 2015 6:15

Tgt Ion: 43 Resp: 165219

Ion Ratio Lower Upper

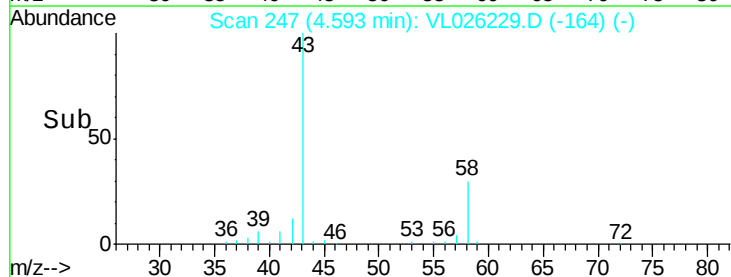
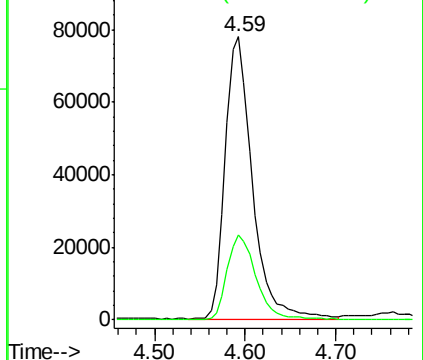
43 100

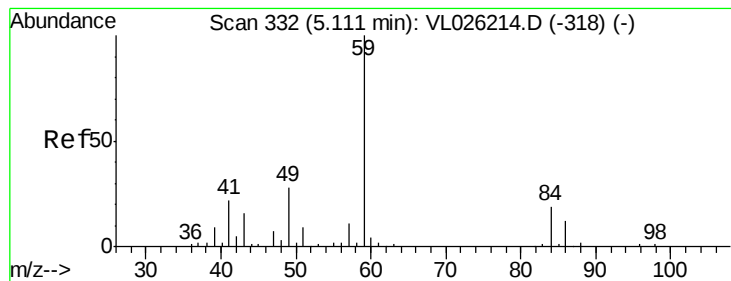
58 31.6 21.8 32.6



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





#17

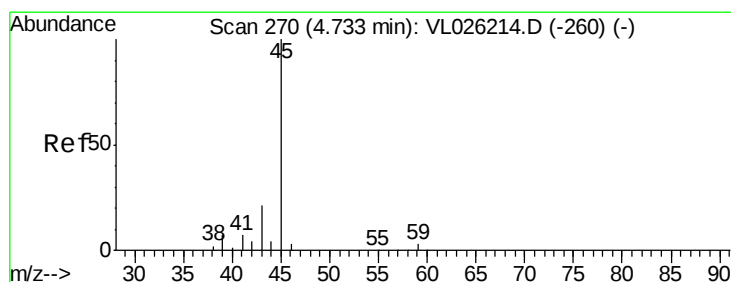
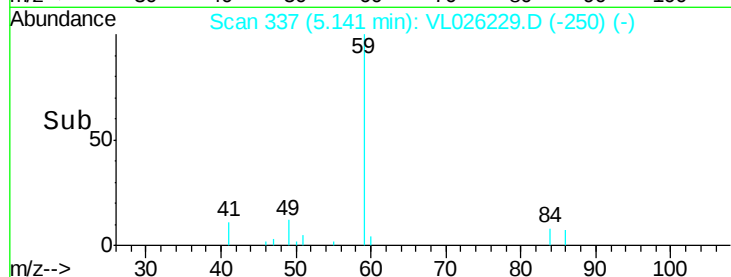
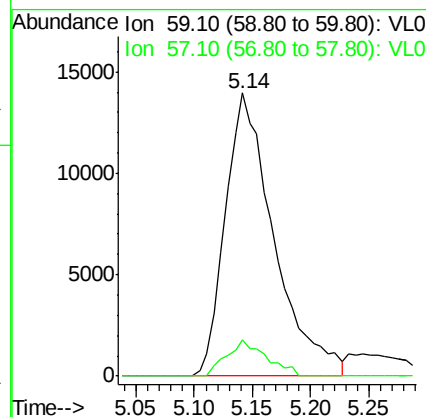
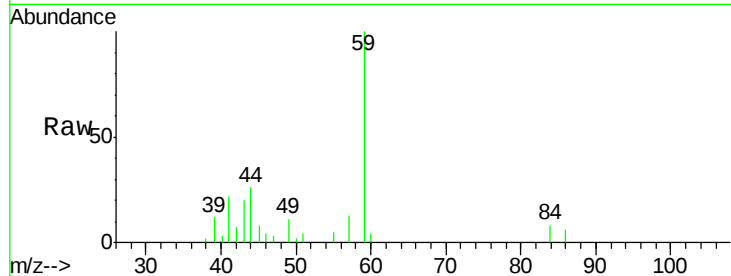
tert-Butyl alcohol
Concen: 0.78 ppbv
RT: 5.14 min Scan# 337
Delta R.T. 0.03 min
Lab File: VL026229.D
Acq: 21 Oct 2015 6:15

Instrument :
MSVOA_L
ClientSampleId :
SUBSLAB-233

Tot Ion	59	Resp	40543
Ion Ratio	100	Lower	Upper
57	10.3	8.5	12.7

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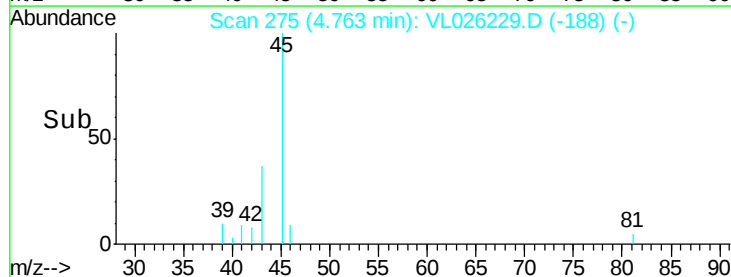
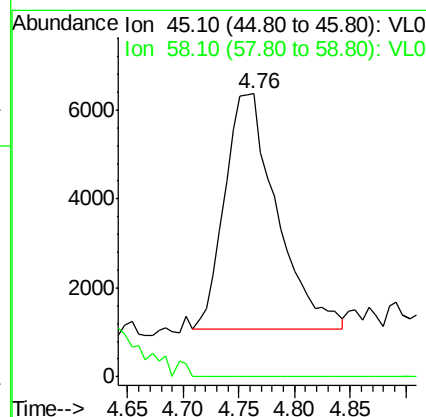
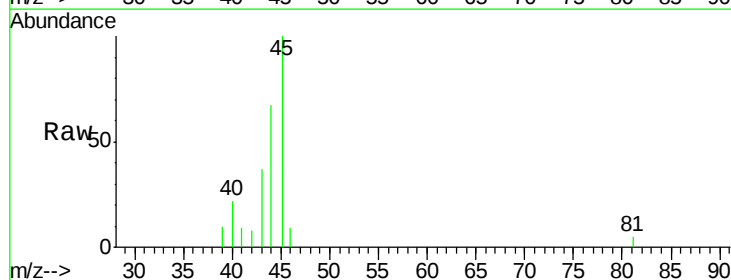
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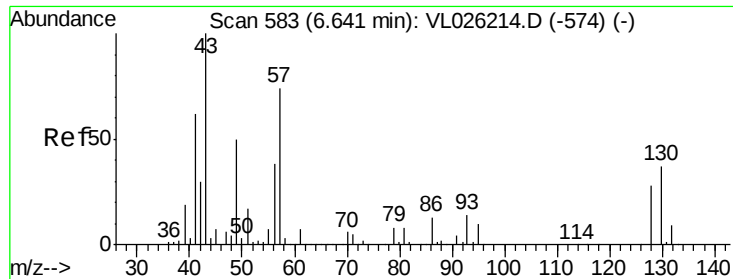


#19

Isopropyl Alcohol
Concen: 0.58 ppbv
RT: 4.76 min Scan# 275
Delta R.T. 0.03 min
Lab File: VL026229.D
Acq: 21 Oct 2015 6:15

Tgt Ion	45	Resp	17119
Ion Ratio	100	Lower	Upper
58	0.0	40.3	60.5#





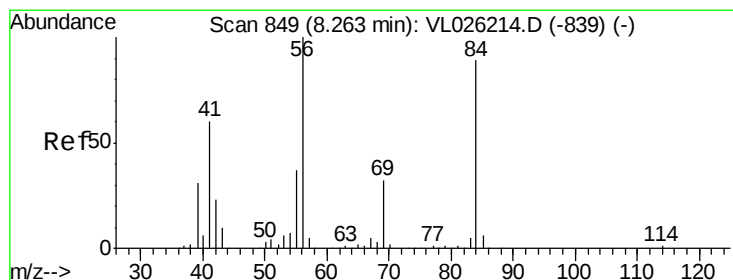
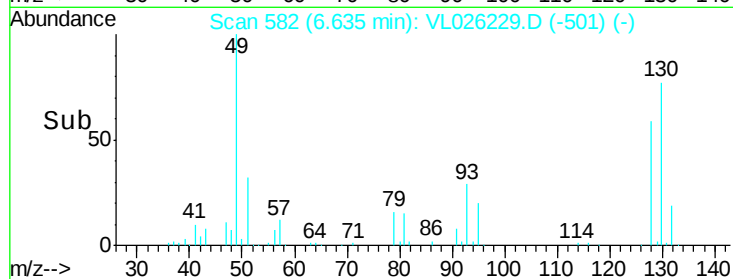
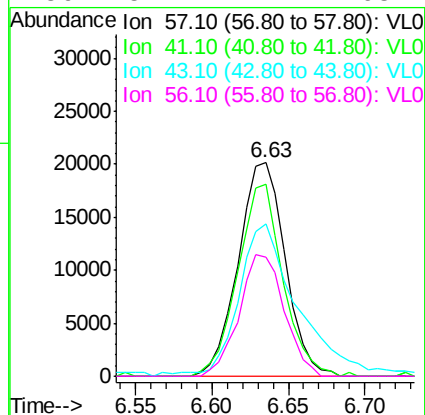
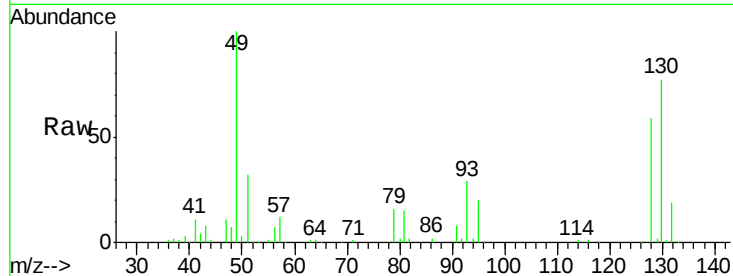
#26
Hexane
Concen: 0.61 ppbv
RT: 6.63 min Scan# 582
Delta R.T. -0.01 min
Lab File: VL026229.D
Acq: 21 Oct 2015 6:15

Instrument :
MSVOA_L
ClientSampleId :
SUBSLAB-233

Tot Ion	Ion	Ratio	Resp	Lower	Upper
57	100		43088		
41	86.7	68.1	102.1		
43	91.5	163.4	245.2#		
56	54.4	42.2	63.4		

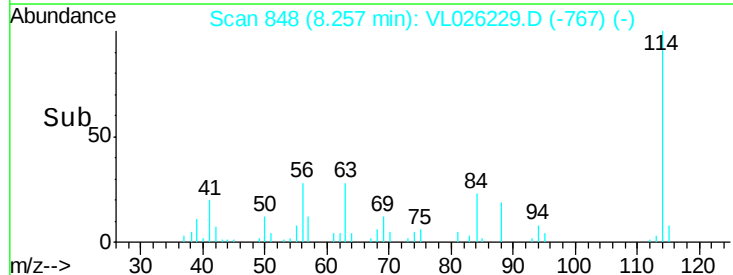
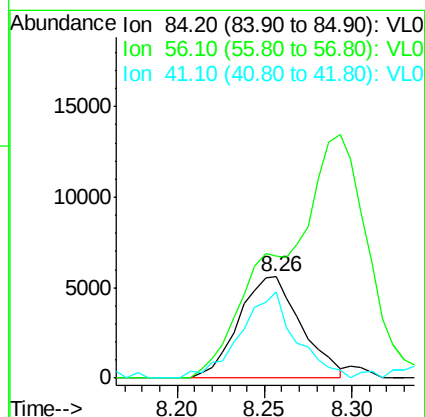
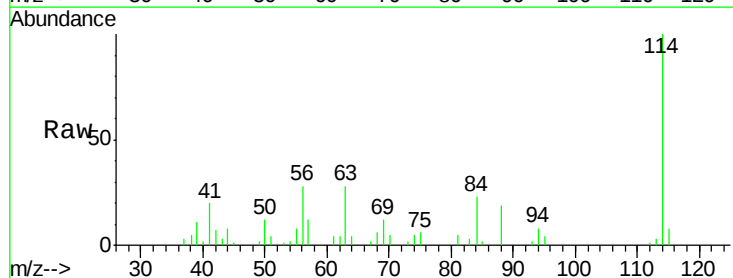
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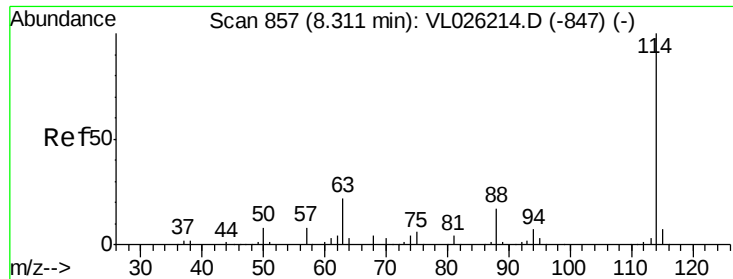
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#30
Cyclohexane
Concen: 0.20 ppbv
RT: 8.26 min Scan# 848
Delta R.T. -0.01 min
Lab File: VL026229.D
Acq: 21 Oct 2015 6:15

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
84	100		14011		
56	0.0	95.9	143.9#		
41	75.3	54.8	82.2		





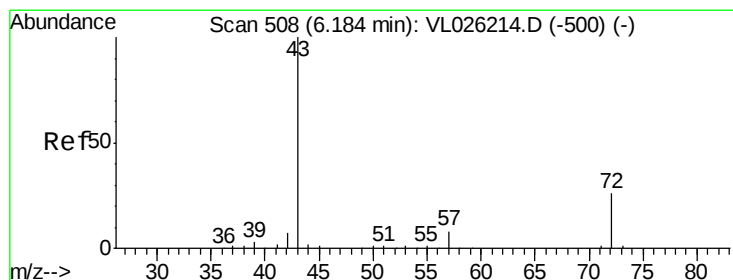
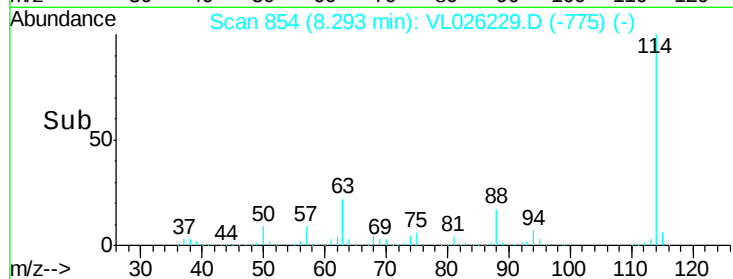
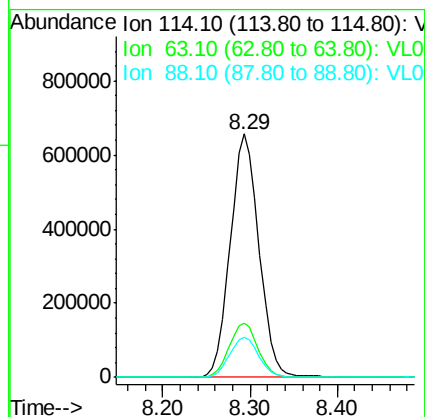
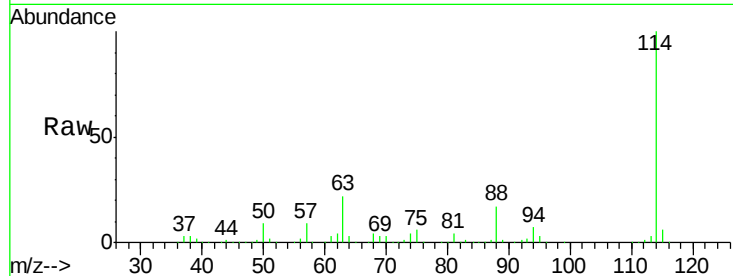
#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 8.29 min Scan# 854
 Delta R.T. -0.02 min
 Lab File: VL026229.D
 Acq: 21 Oct 2015 6:15

Instrument :
 MSVOA_L
 ClientSampleId :
 SUBSLAB-233

Tot Ion:114 Resp: 1497473
 Ion Ratio Lower Upper
 114 100
 63 22.5 18.2 27.4
 88 16.7 13.5 20.3

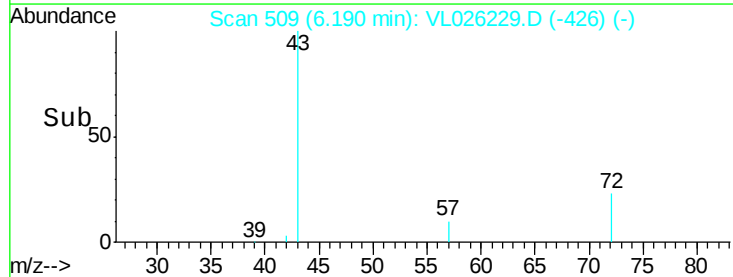
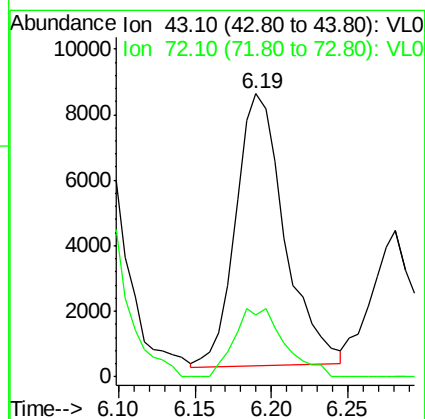
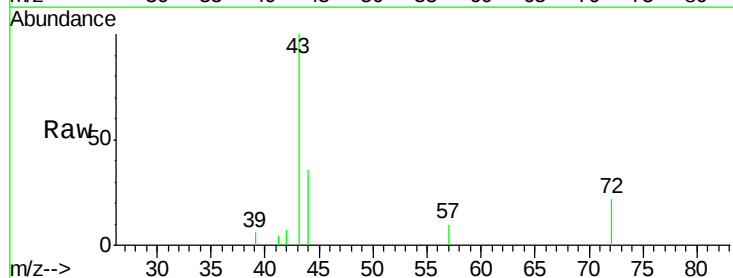
Manual Integrations
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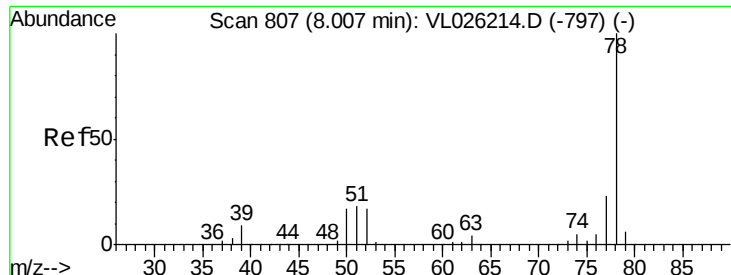
MMDadoda
 10/22/2015 4:33:14 PM



#34
 2-Butanone
 Concen: 0.22 ppbv
 RT: 6.19 min Scan# 509
 Delta R.T. 0.01 min
 Lab File: VL026229.D
 Acq: 21 Oct 2015 6:15

Tgt Ion: 43 Resp: 18461
 Ion Ratio Lower Upper
 43 100
 72 25.9 20.1 30.1





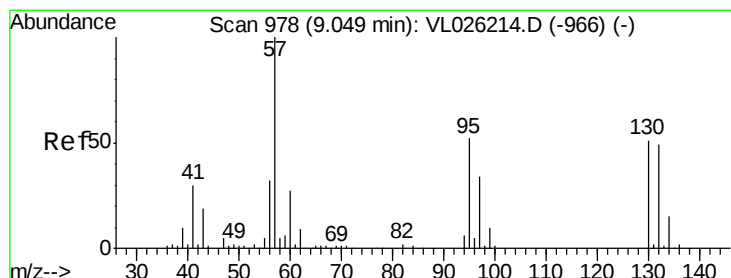
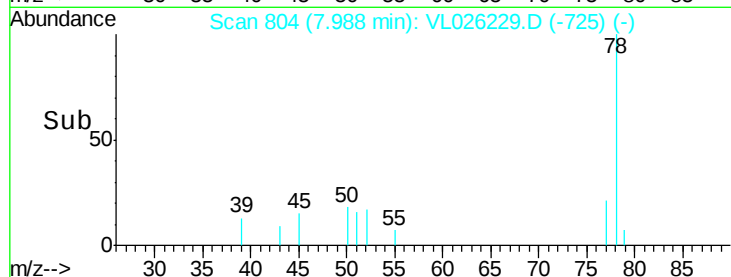
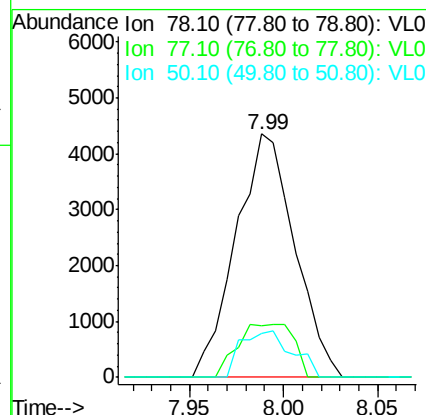
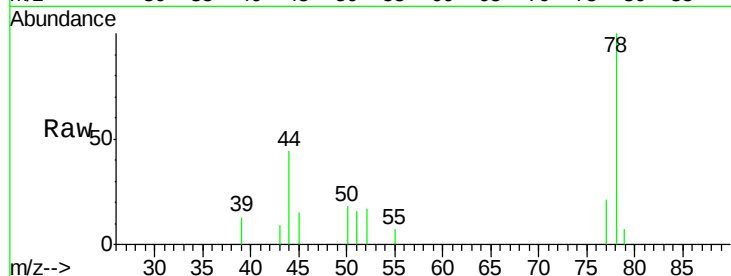
#36
Benzene
Concen: 0.06 ppbv
RT: 7.99 min Scan# 804
Delta R.T. -0.02 min
Lab File: VL026229.D
Acq: 21 Oct 2015 6:15

Instrument :
MSVOA_L
ClientSampleId :
SUBSLAB-233

Tot Ion	Ratio	Lower	Upper
78	100		
77	21.3	18.1	27.1
50	18.2	13.8	20.8

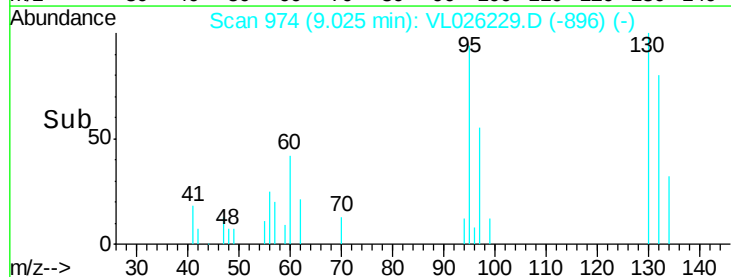
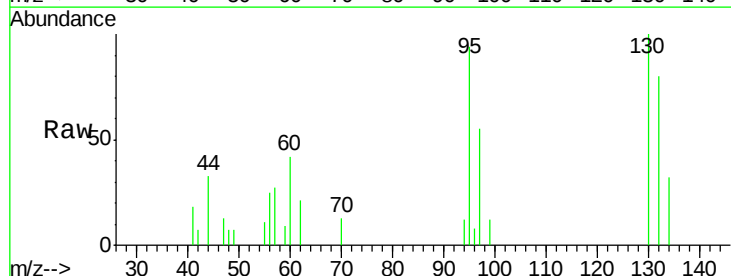
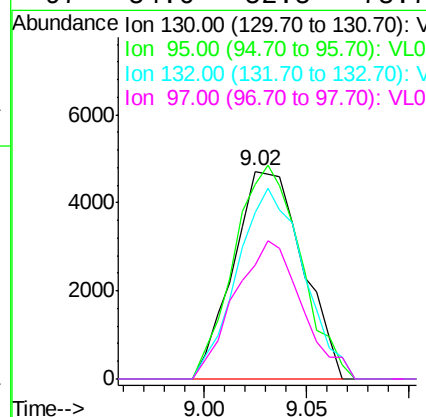
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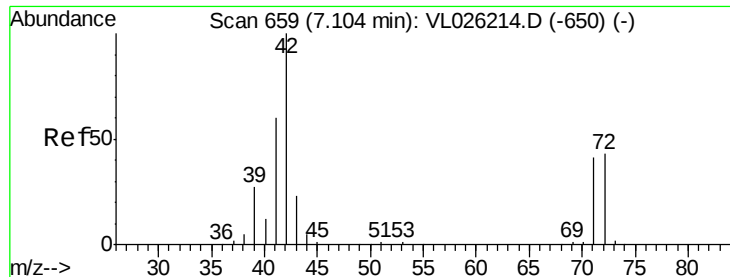
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#38
Trichloroethene
Concen: 0.15 ppbv
RT: 9.02 min Scan# 974
Delta R.T. -0.02 min
Lab File: VL026229.D
Acq: 21 Oct 2015 6:15

Tgt Ion	Ratio	Lower	Upper
130	100		
95	93.9	81.0	121.4
132	80.3	76.5	114.7
97	54.6	52.5	78.7





#41

Tetrahydrofuran

Concen: 0.67 ppbv

RT: 7.12 min Scan# 662

Delta R.T. 0.02 min

Lab File: VL026229.D

Acq: 21 Oct 2015 6:15

Instrument :

MSVOA_L

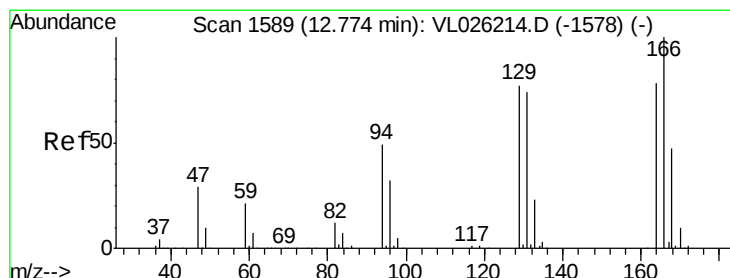
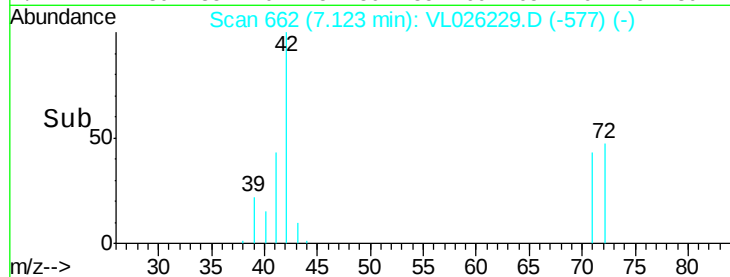
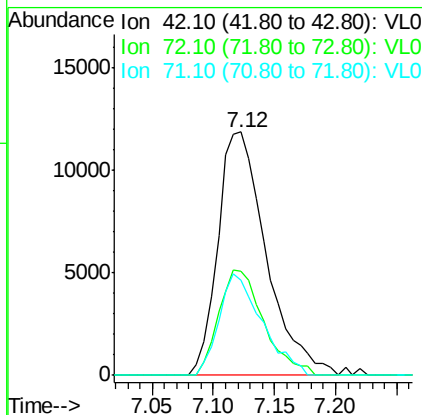
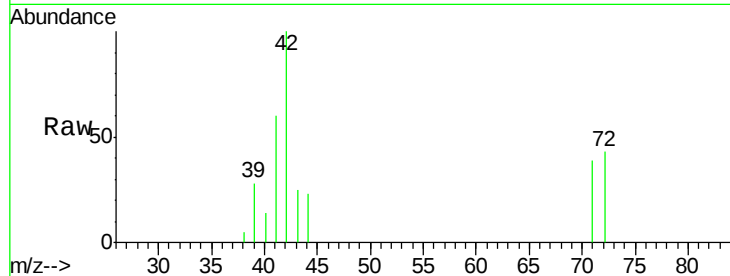
ClientSampleId :

SUBSLAB-233

Tot Ion:	42	Resp:	32645
Ion	Ratio	Lower	Upper
42	100		
72	40.2	34.3	51.5
71	37.0	32.1	48.1

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#52

Tetrachloroethene

Concen: 42.15 ppbv

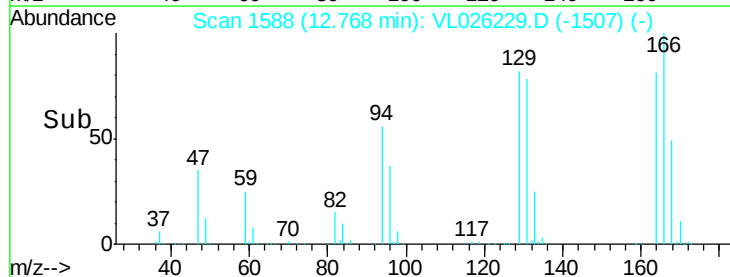
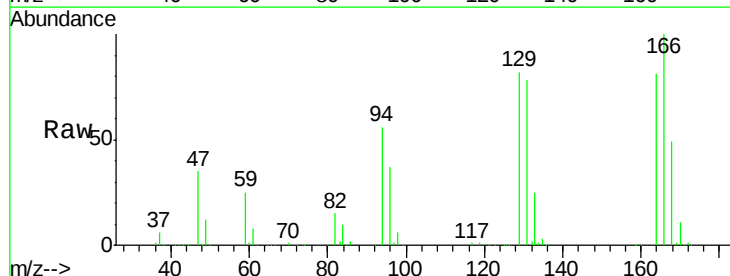
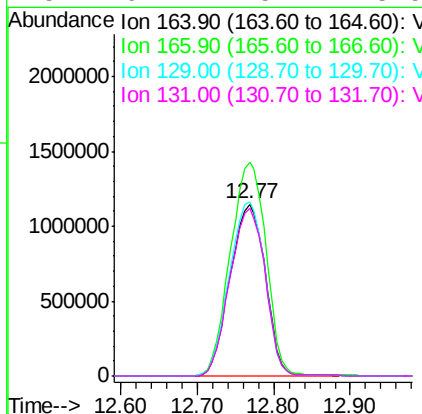
RT: 12.77 min Scan# 1588

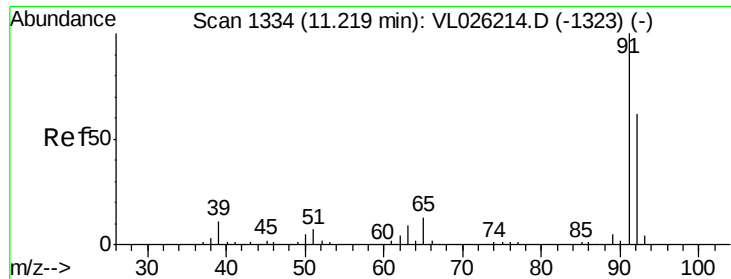
Delta R.T. -0.01 min

Lab File: VL026229.D

Acq: 21 Oct 2015 6:15

Tgt Ion:	164	Resp:	3686889
Ion	Ratio	Lower	Upper
164	100		
166	124.2	102.3	153.5
129	101.3	78.2	117.4
131	97.2	75.7	113.5





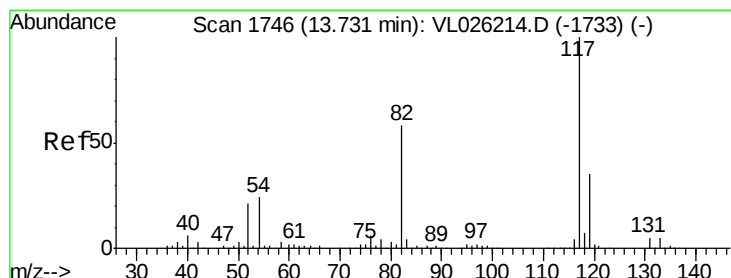
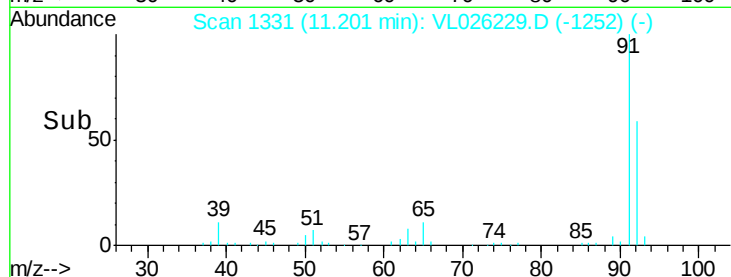
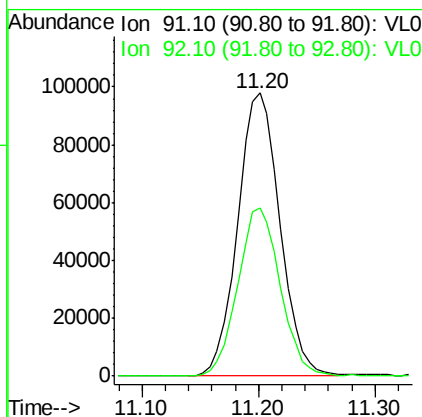
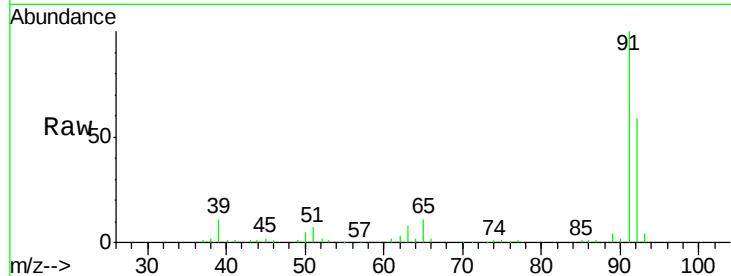
#53
Toluene
Concen: 1.19 ppbv
RT: 11.20 min Scan# 1331
Delta R.T. -0.02 min
Lab File: VL026229.D
Acq: 21 Oct 2015 6:15

Instrument :
MSVOA_L
ClientSampleId :
SUBSLAB-233

Tot Ion: 91 Resp: 246892
Ion Ratio Lower Upper
91 100
92 60.0 49.2 73.8

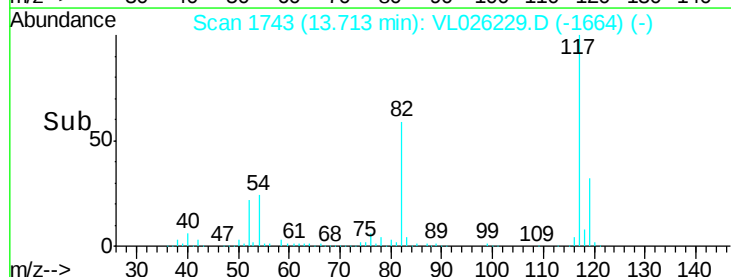
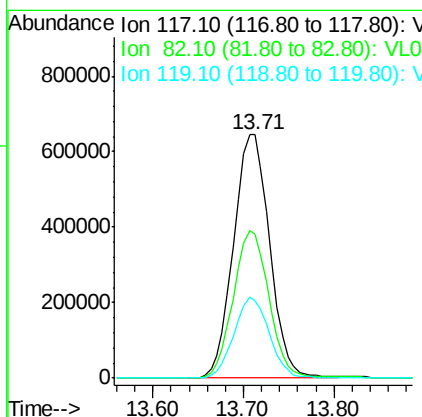
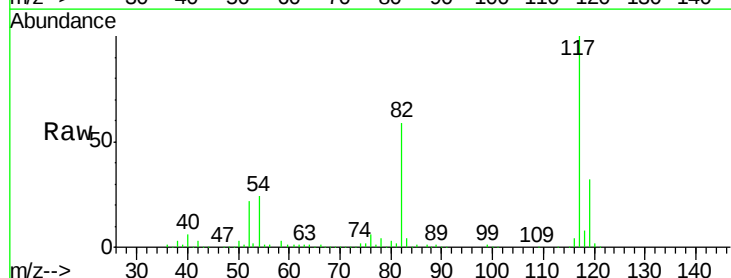
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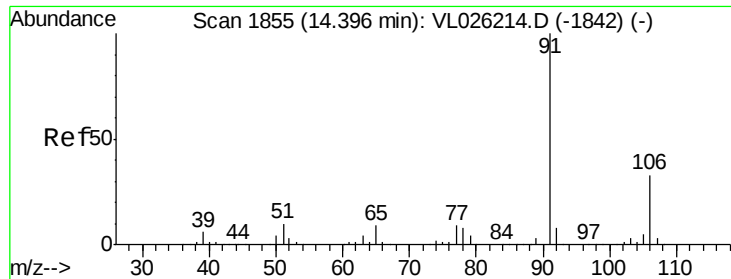
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#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 13.71 min Scan# 1743
Delta R.T. -0.02 min
Lab File: VL026229.D
Acq: 21 Oct 2015 6:15

Tgt Ion: 117 Resp: 1789460
Ion Ratio Lower Upper
117 100
82 60.9 45.8 68.8
119 32.8 45.0 67.4#





#58

Ethyl Benzene

Concen: 0.09 ppbv

RT: 14.38 min Scan# 1852

Delta R.T. -0.02 min

Lab File: VL026229.D

Acq: 21 Oct 2015 6:15

Instrument :

MSVOA_L

ClientSampleId :

SUBSLAB-233

Tot Ion: 91 Resp: 25168

Ion Ratio Lower Upper

91 100

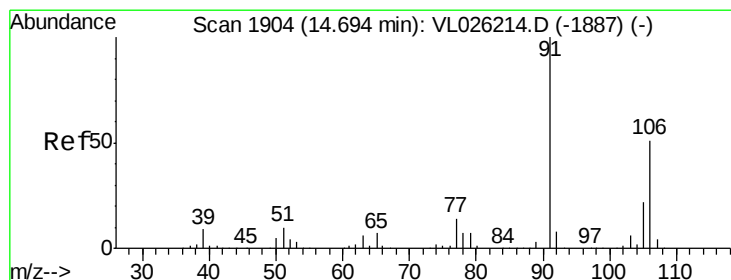
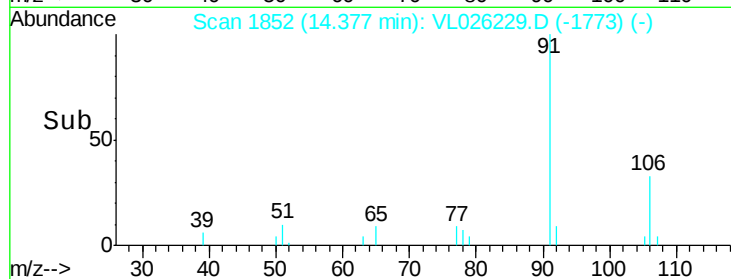
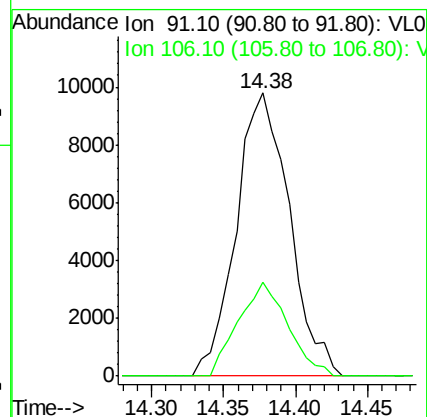
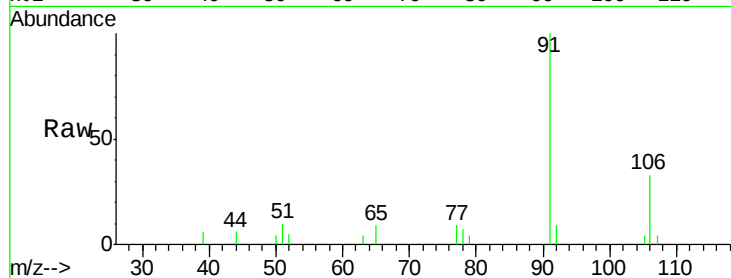
106 33.4 26.1 39.1

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#59

m/p-Xylene

Concen: 0.28 ppbv

RT: 14.65 min Scan# 1897

Delta R.T. -0.04 min

Lab File: VL026229.D

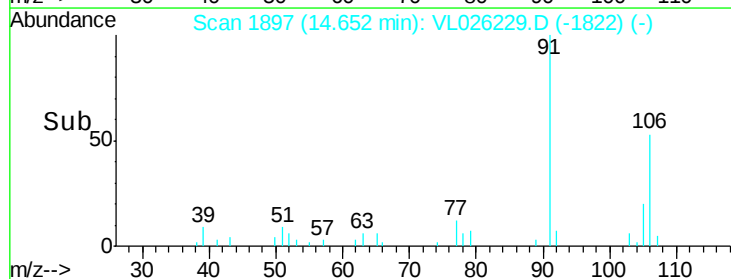
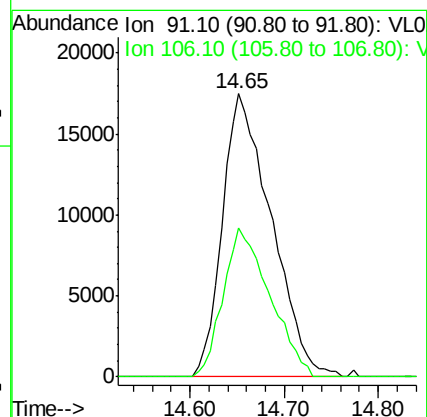
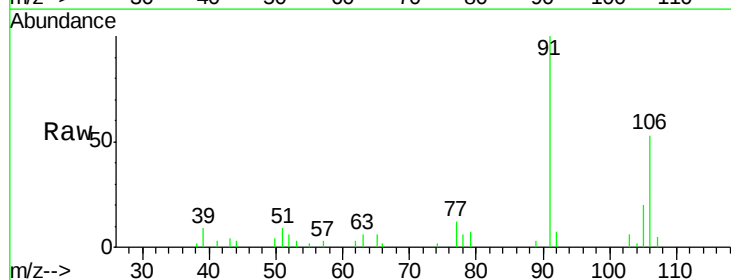
Acq: 21 Oct 2015 6:15

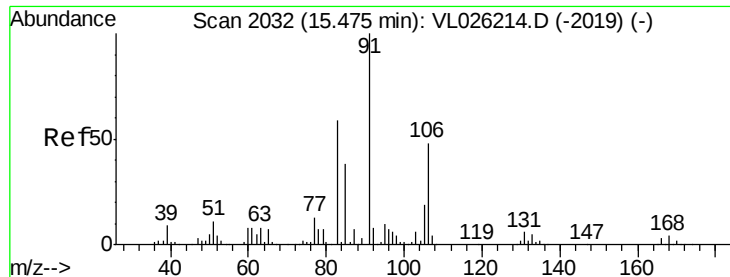
Tgt Ion: 91 Resp: 63084

Ion Ratio Lower Upper

91 100

106 50.2 40.6 61.0





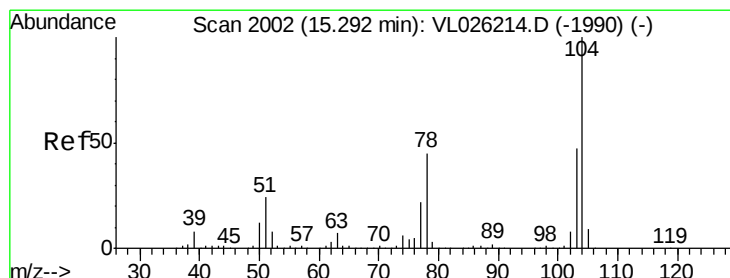
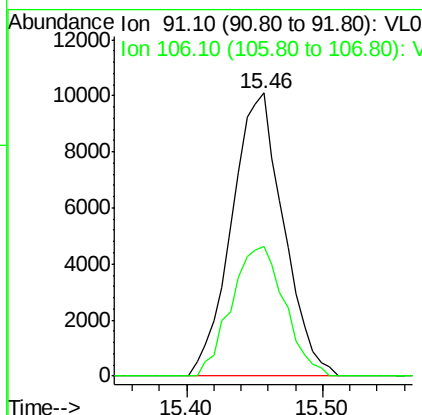
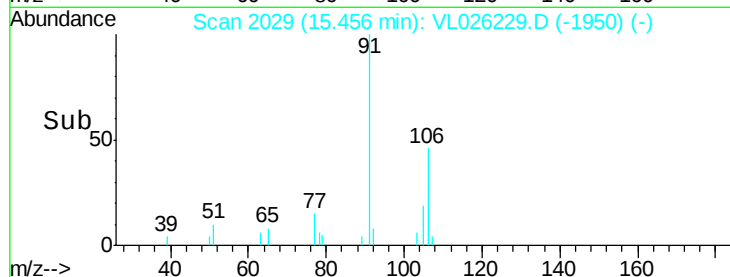
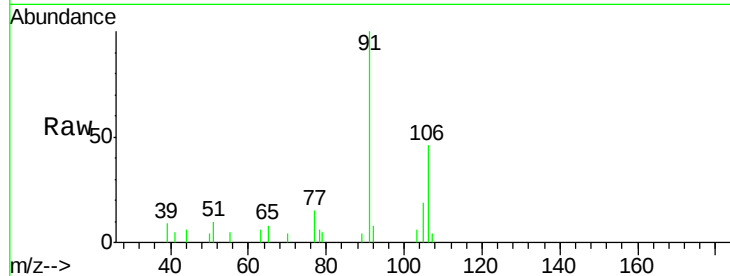
#60
o-Xylene
Concen: 0.11 ppbv
RT: 15.46 min Scan# 2029
Delta R.T. -0.02 min
Lab File: VL026229.D
Acq: 21 Oct 2015 6:15

Instrument :
MSVOA_L
ClientSampleId :
SUBSLAB-233

Tot Ion: 91 Resp: 26826
Ion Ratio Lower Upper
91 100
106 47.2 23.8 71.5

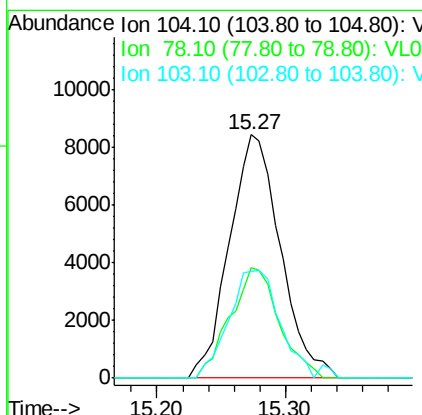
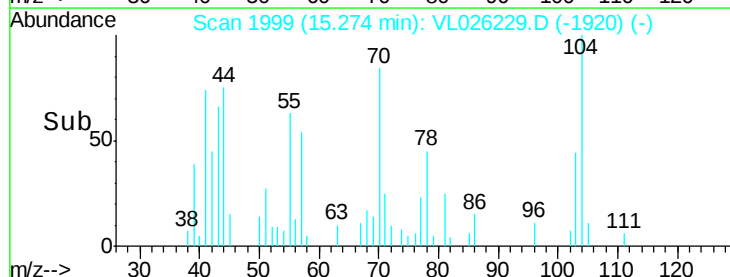
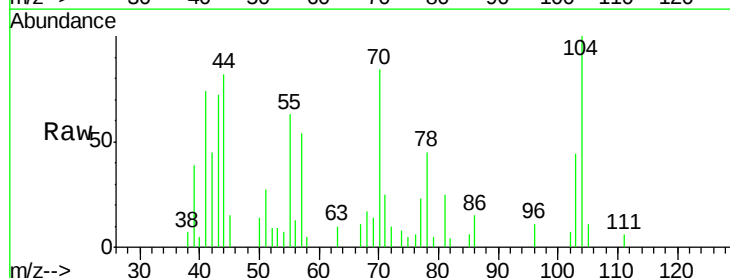
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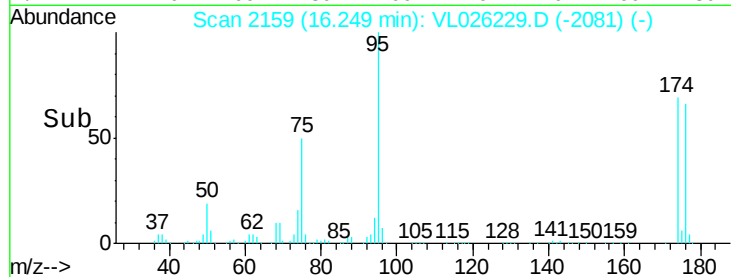
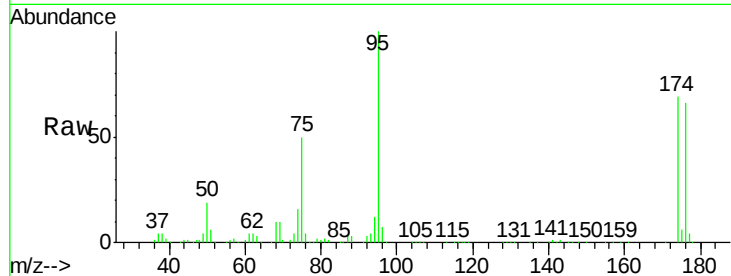
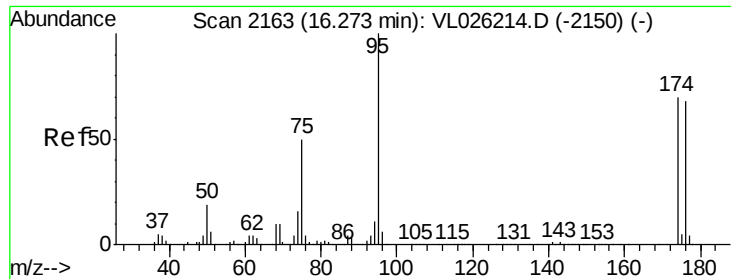
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#61
Styrene
Concen: 0.22 ppbv
RT: 15.27 min Scan# 1999
Delta R.T. -0.02 min
Lab File: VL026229.D
Acq: 21 Oct 2015 6:15

Tgt Ion: 104 Resp: 23247
Ion Ratio Lower Upper
104 100
78 43.5 35.3 52.9
103 45.1 37.0 55.4





#68

1-Bromo-4-Fluorobenzene

Concen: 10.39 ppbv

RT: 16.25 min Scan# 2159

Delta R.T. -0.02 min

Lab File: VL026229.D

Acq: 21 Oct 2015 6:15

Tot Ion: 95 Resp: 1434210

Ion Ratio Lower Upper

95 100

174 68.4 55.8 83.8

175 5.2 4.3 6.5

Instrument :

MSVOA_L

ClientSampleId :

SUBSLAB-233

Manual Integrations

APPROVED

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10/22/2015 4:33:14 PM

