

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL020916\
 Data File : VL026844.D
 Acq On : 10 Feb 2016 7:32
 Operator : SY/AP
 Sample : H1404-01DL 10X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-1DL

Manual Integrations
 APPROVED

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 2/11/2016 1:24:41 PM

Quant Time: Feb 11 01:36:58 2016
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL020916AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Feb 10 2016
 QLast Update : Wed Feb 10 03:14:04 2016
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	6.69	49	1868857	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	8.36	114	5546394	10.00	ppbv	-0.02
55) Chlorobenzene-d5	13.79	117	5599356	10.00	ppbv	-0.01

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	16.33	95	4098202	10.19	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.90%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
3) Chlorodifluoromethane	3.60	51	317254m	1.05	ppbv	
9) Propene	3.64	41	25346	0.31	ppbv #	82
10) Heptane	9.39	43	38988	0.15	ppbv #	84
13) Ethanol	4.37	45	139711	9.92	ppbv	92
19) Isopropyl Alcohol	4.82	45	50323	0.55	ppbv #	1
26) Hexane	6.69	57	98448	0.45	ppbv #	51
36) Benzene	8.06	78	86285	0.20	ppbv	95
44) 2,2,4-Trimethylpentane	9.13	57	234958	0.31	ppbv #	86
50) 4-Methyl-2-Pentanone	10.16	43	24099m	0.08	ppbv	
53) Toluene	11.28	91	508851	1.03	ppbv	100
58) Ethyl Benzene	14.46	91	96414	0.14	ppbv	99
59) m/p-Xylene	14.74	91	334819	0.58	ppbv	99
60) o-Xylene	15.53	91	123456	0.20	ppbv	98
72) 4-Ethyltoluene	17.86	105	55407	0.10	ppbv #	92
73) 1,3,5-Trimethylbenzene	18.02	105	45656	0.08	ppbv	96
74) 1,2,4-Trimethylbenzene	18.88	105	189077	0.29	ppbv #	67
79) Naphthalene	23.98	128	29328m	0.09	ppbv	

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

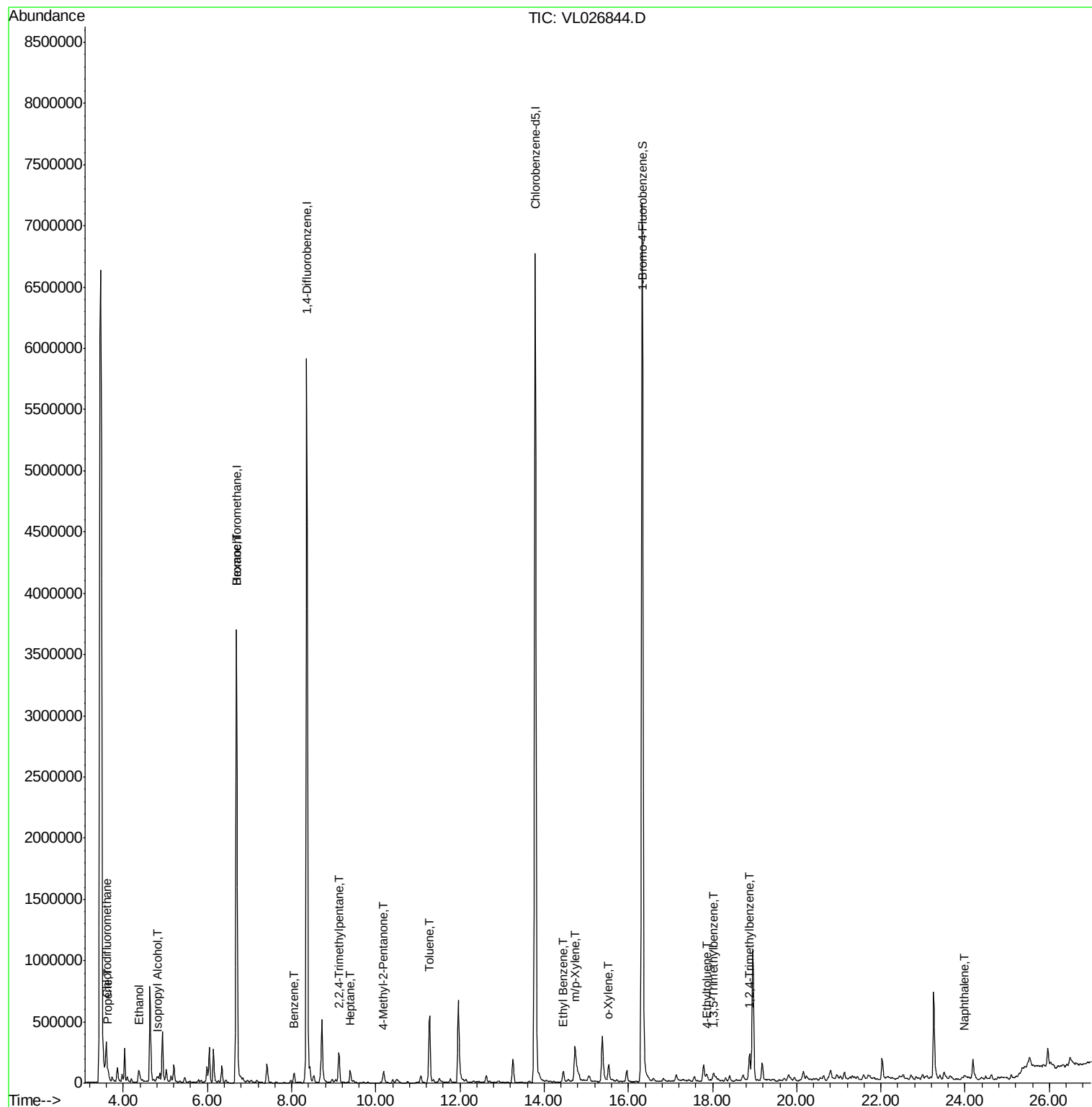
Data Path : W:\HPCHEM1\MSVOA L\DATA\VL020916\
Data File : VL026844.D
Acq On : 10 Feb 2016 7:32
Operator : SY/AP
Sample : H1404-01DL 10X
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

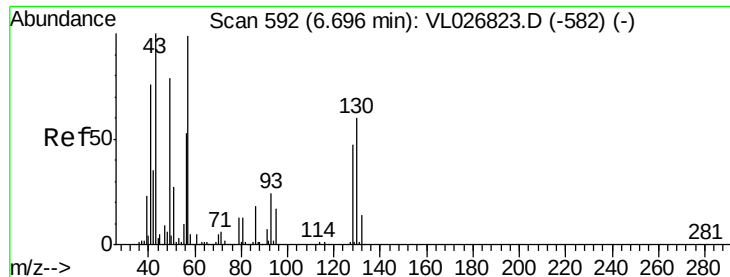
Instrument :
MSVOA_L
ClientSampled :
IA-1DL

Manual Integrations
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2/11/2016 1:24:41 PM

Quant Time: Feb 11 01:36:58 2016
Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL020916AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Feb
QLast Update : Wed Feb 10 03:14:04 2016
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 6.69 min Scan# 591

Delta R.T. -0.01 min

Lab File: VL026844.D

Acq: 10 Feb 2016 7:32

Instrument :

MSVOA_L

ClientSampled :

IA-1DL

Tot Ion: 49 Resp: 1868857

Ion Ratio Lower Upper

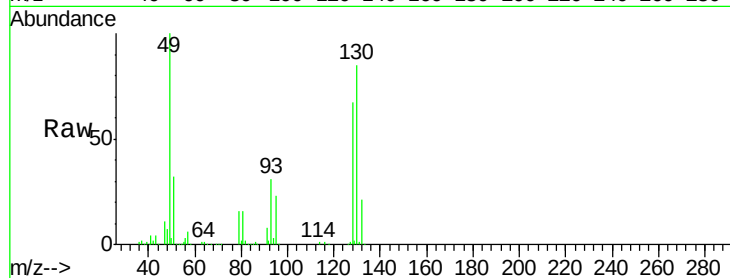
49 100

128 64.7 29.7 89.1

130 82.7 38.3 114.8

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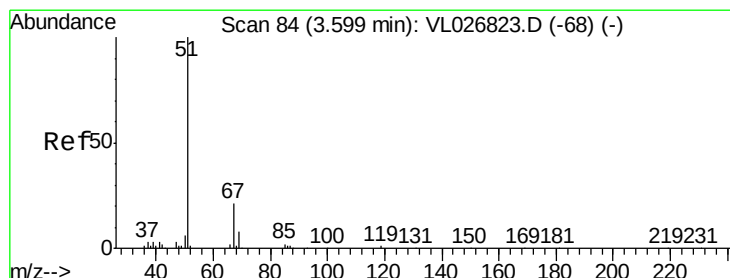
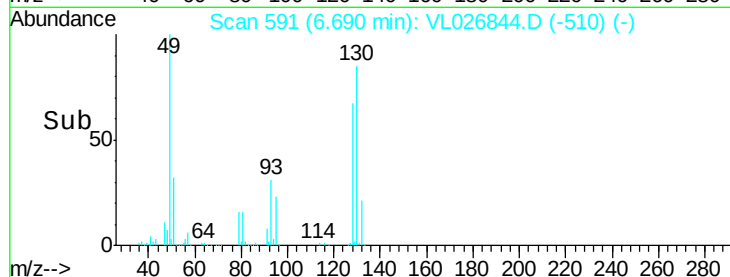
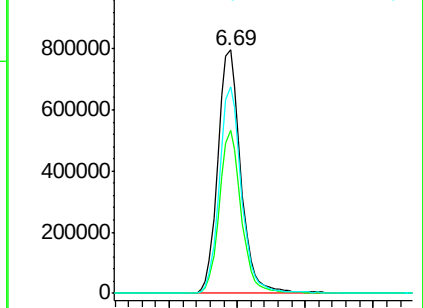
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#3

Chlorodifluoromethane

Concen: 1.05 ppbv m

RT: 3.60 min Scan# 84

Delta R.T. -0.00 min

Lab File: VL026844.D

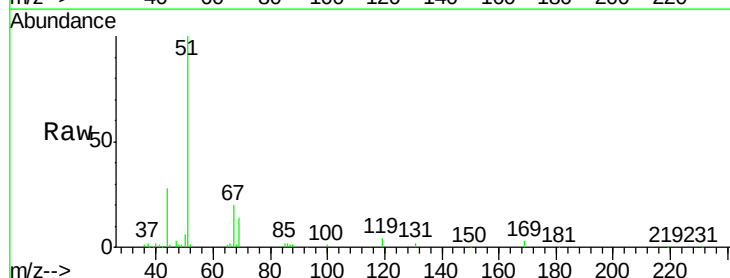
Acq: 10 Feb 2016 7:32

Tgt Ion: 51 Resp: 317254

Ion Ratio Lower Upper

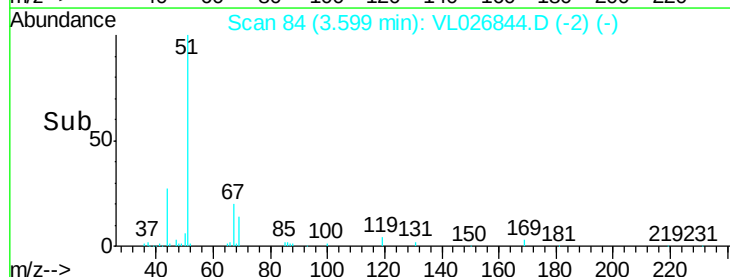
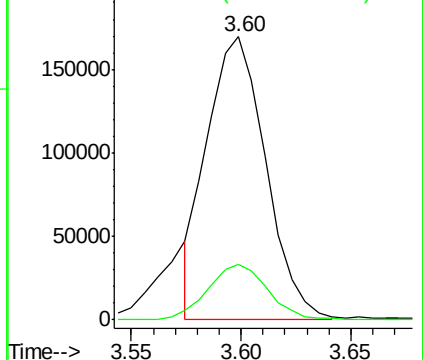
51 100

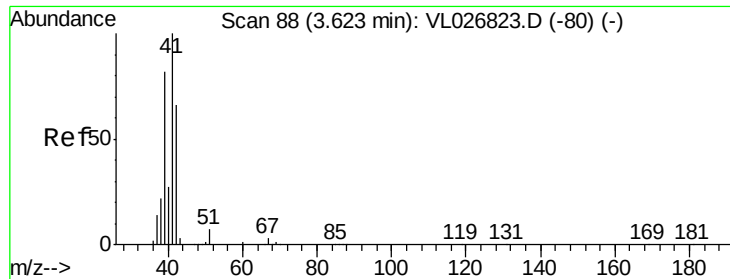
67 20.1 16.4 24.6



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#9

Propene

Concen: 0.31 ppbv

RT: 3.64 min Scan# 90

Delta R.T. 0.01 min

Lab File: VL026844.D

Acq: 10 Feb 2016 7:32

Instrument :

MSVOA_L

ClientSampleId :

IA-1DL

Tot Ion: 41 Resp: 25346

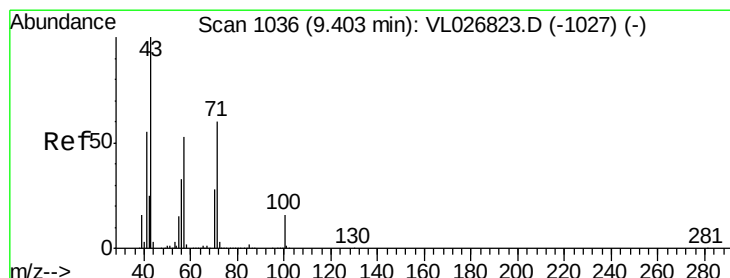
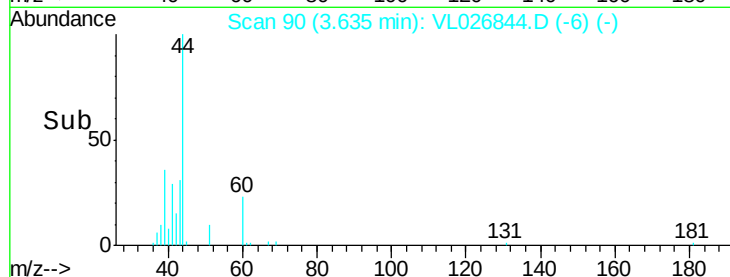
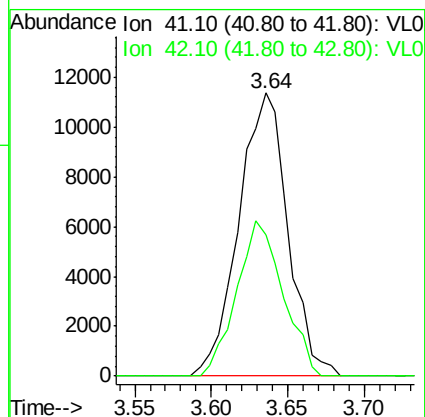
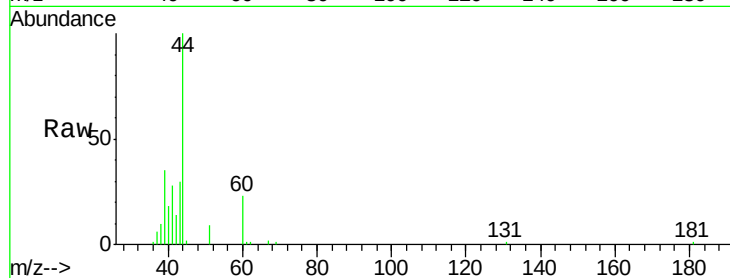
Ion Ratio Lower Upper

41 100

42 51.7 52.8 79.2#

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#10

Heptane

Concen: 0.15 ppbv

RT: 9.39 min Scan# 1034

Delta R.T. -0.01 min

Lab File: VL026844.D

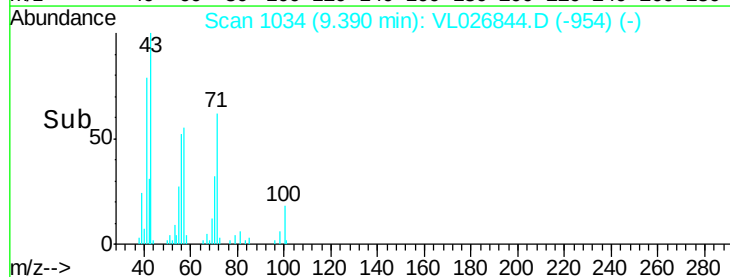
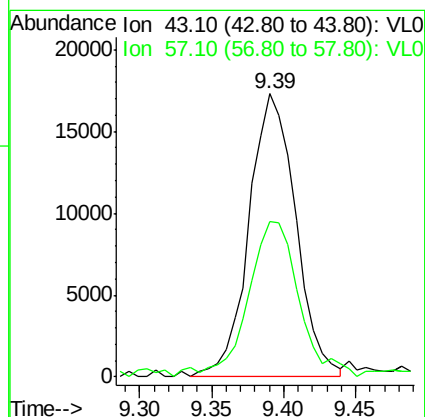
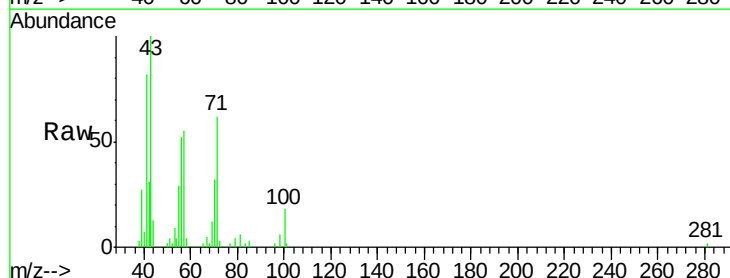
Acq: 10 Feb 2016 7:32

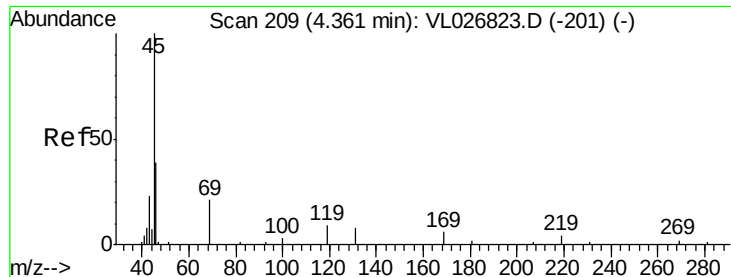
Tgt Ion: 43 Resp: 38988

Ion Ratio Lower Upper

43 100

57 66.4 44.0 66.0#





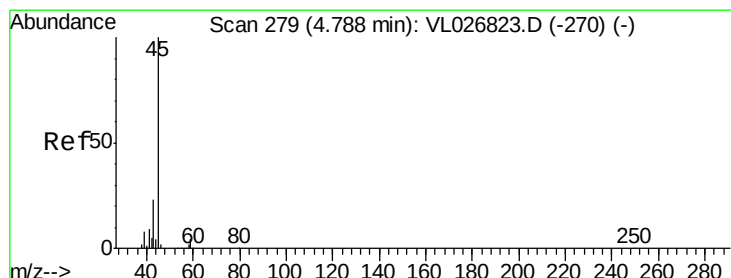
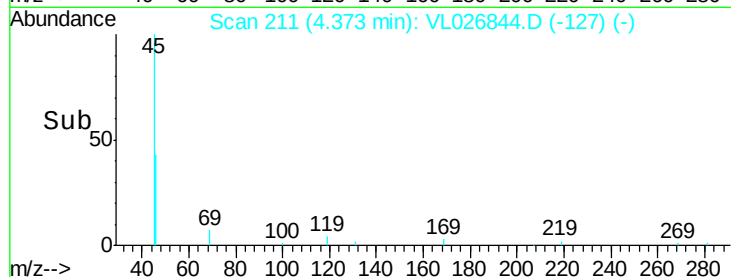
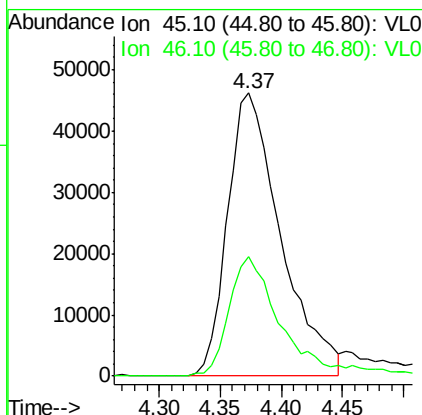
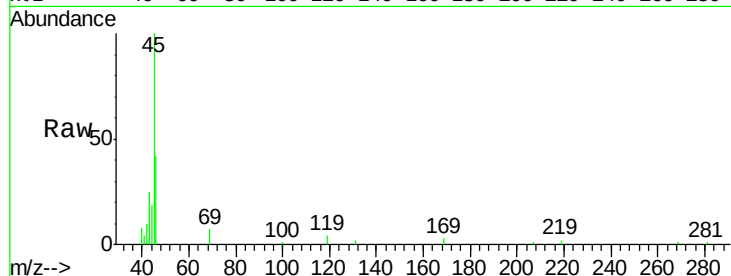
#13
Ethanol
Concen: 9.92 ppbv
RT: 4.37 min Scan# 211
Delta R.T. 0.01 min
Lab File: VL026844.D
Acq: 10 Feb 2016 7:32

Instrument :
MSVOA_L
ClientSampled :
IA-1DL

Tot Ion	45	Resp	139711
Ion Ratio	Lower	Upper	
45	100		
46	44.6	15.8	63.4

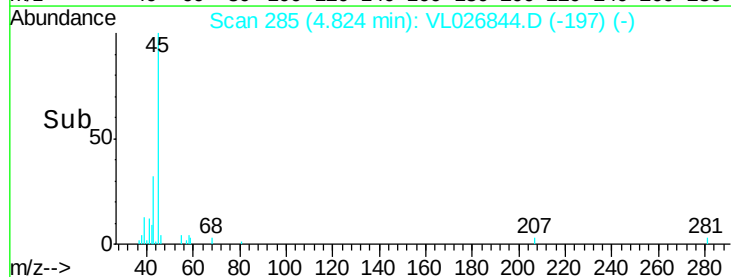
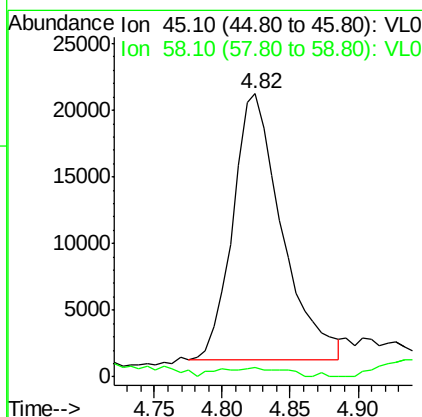
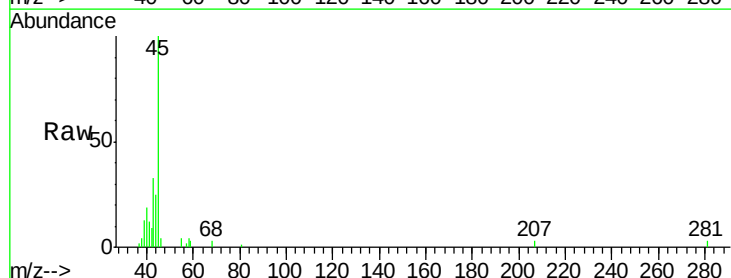
Manual Integrations
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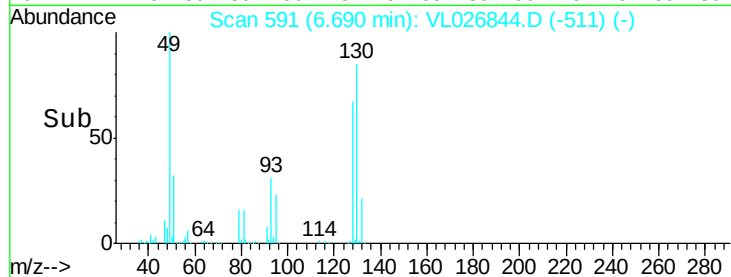
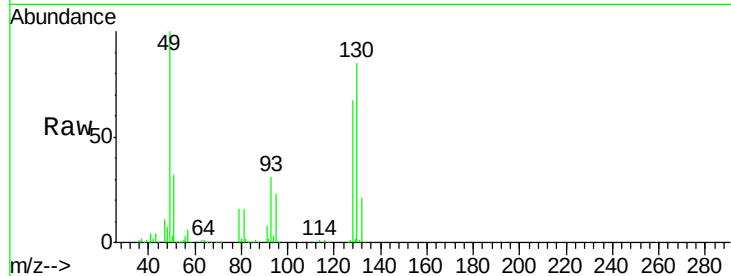
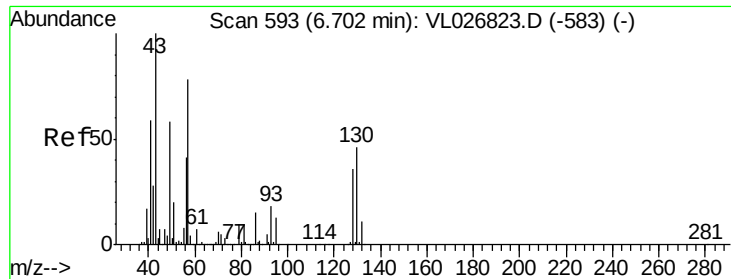
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#19
Isopropyl Alcohol
Concen: 0.55 ppbv
RT: 4.82 min Scan# 285
Delta R.T. 0.04 min
Lab File: VL026844.D
Acq: 10 Feb 2016 7:32

Tgt Ion	45	Resp	50323
Ion Ratio	Lower	Upper	
45	100		
58	221.8	2.2	3.2#





#26

Hexane

Concen: 0.45 ppbv

RT: 6.69 min Scan# 591

Delta R.T. -0.01 min

Lab File: VL026844.D

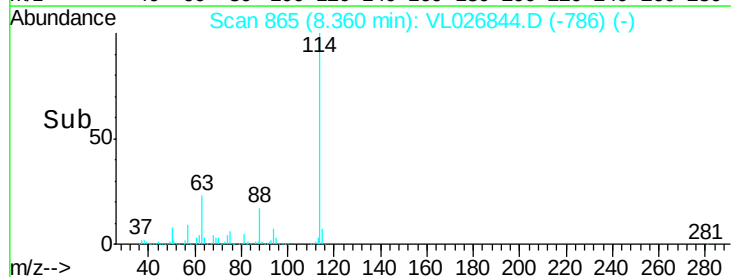
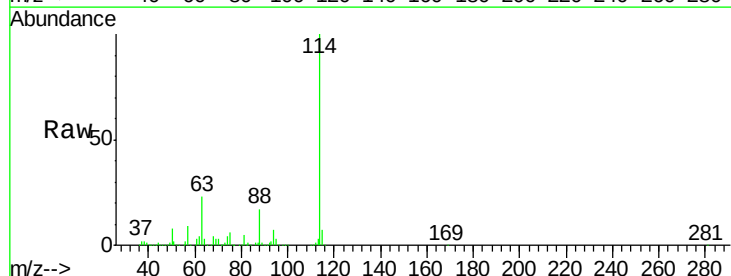
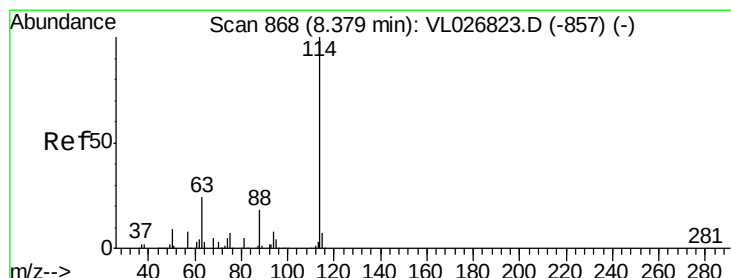
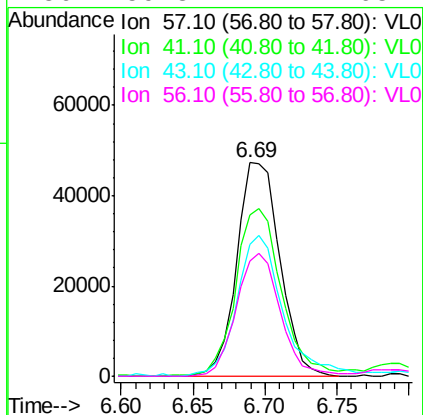
Acq: 10 Feb 2016 7:32

Tot Ion	57	Resp	98448
Ion	Ratio	Lower	Upper
57	100		
41	85.0	63.3	94.9
43	75.3	151.4	227.2#
56	59.3	42.2	63.2

Instrument :
MSVOA_L
ClientSampled :
IA-1DL

Manual Integrations
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#33

1,4-Difluorobenzene

Concen: 10.00 ppbv

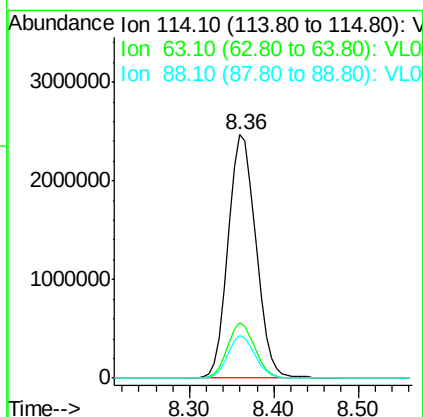
RT: 8.36 min Scan# 865

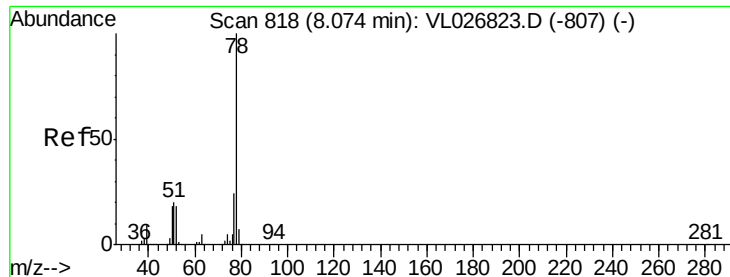
Delta R.T. -0.02 min

Lab File: VL026844.D

Acq: 10 Feb 2016 7:32

Tgt Ion	114	Resp	5546394
Ion	Ratio	Lower	Upper
114	100		
63	22.2	19.7	29.5
88	16.8	13.8	20.6





#36

Benzene

Concen: 0.20 ppbv

RT: 8.06 min Scan# 816

Delta R.T. -0.01 min

Lab File: VL026844.D

Acq: 10 Feb 2016 7:32

Instrument :

MSVOA_L

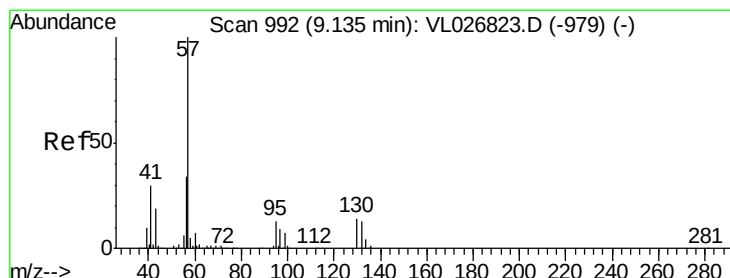
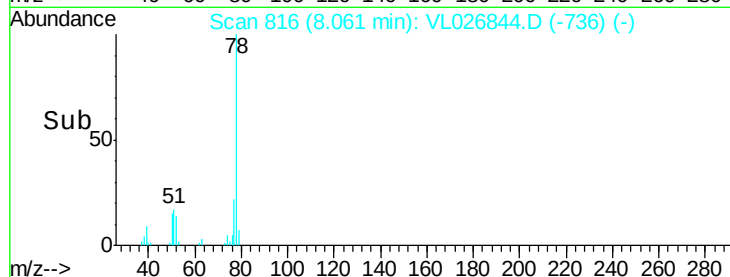
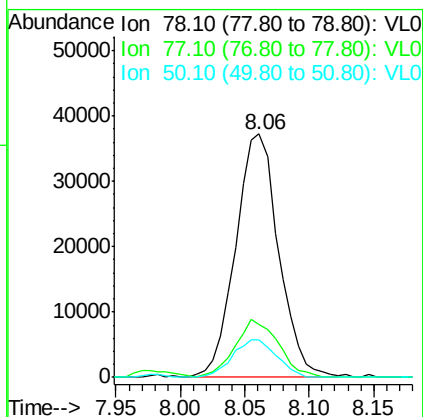
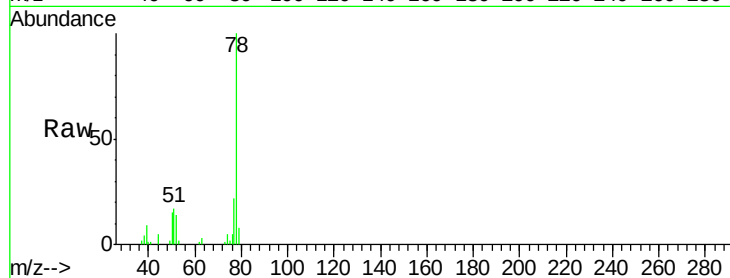
ClientSampleId :

IA-1DL

Tot Ion:	78	Resp:	86285
Ion	Ratio	Lower	Upper
78	100		
77	21.7	19.0	28.6
50	15.3	14.2	21.4

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#44

2,2,4-Trimethylpentane

Concen: 0.31 ppbv

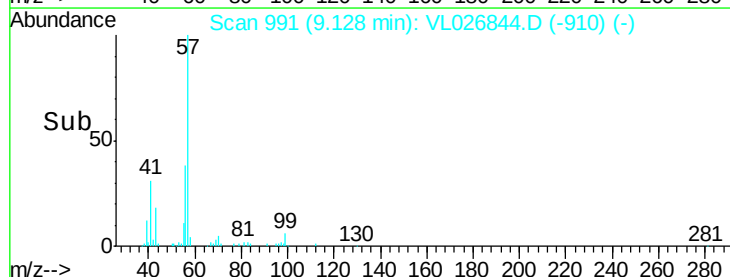
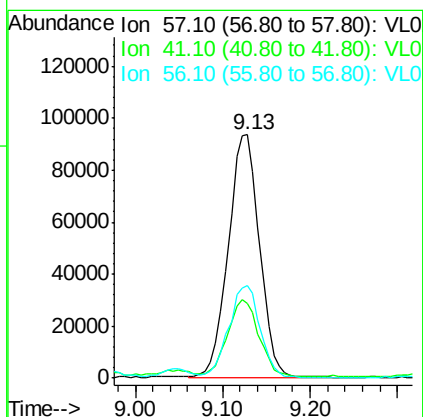
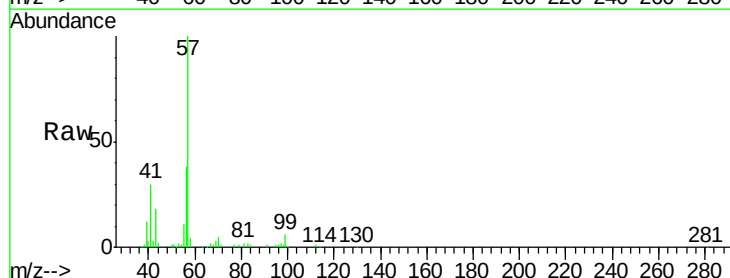
RT: 9.13 min Scan# 991

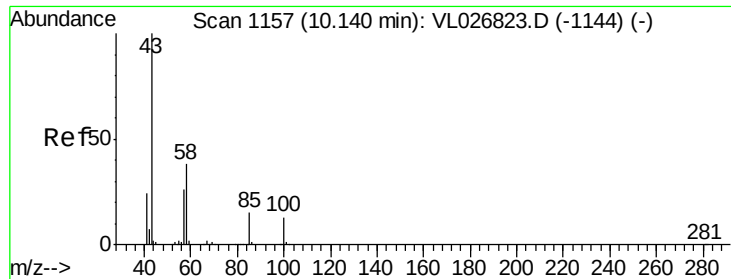
Delta R.T. -0.01 min

Lab File: VL026844.D

Acq: 10 Feb 2016 7:32

Tgt Ion:	57	Resp:	234958
Ion	Ratio	Lower	Upper
57	100		
41	35.6	23.2	34.8#
56	41.9	26.2	39.4#





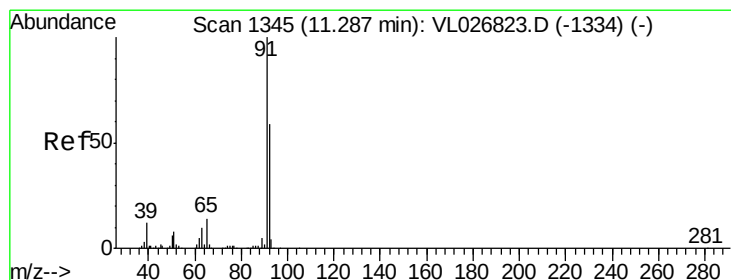
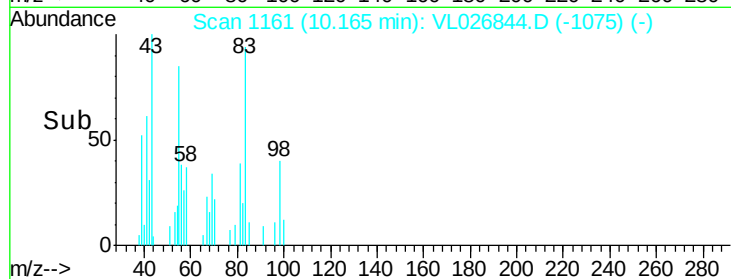
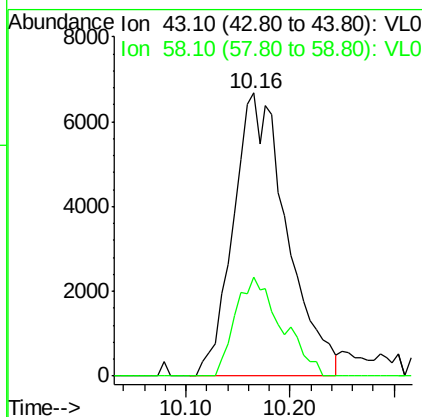
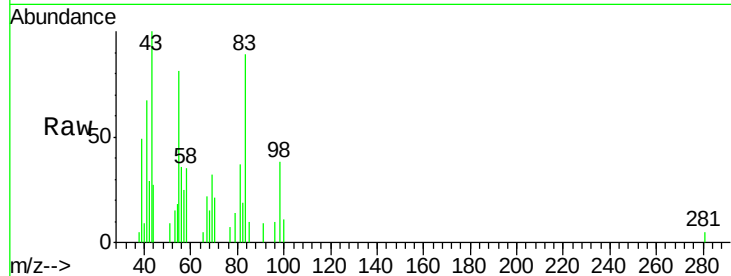
#50
4-Methyl-2-Pentanone
Concen: 0.08 ppbv m
RT: 10.16 min Scan# 1161
Delta R.T. 0.02 min
Lab File: VL026844.D
Acq: 10 Feb 2016 7:32

Instrument :
MSVOA_L
ClientSampled :
IA-1DL

Tot Ion	43	58	83	98	281
Resp	24099				
Ratio	100	30.2			
Lower		30.3			
Upper		45.5			

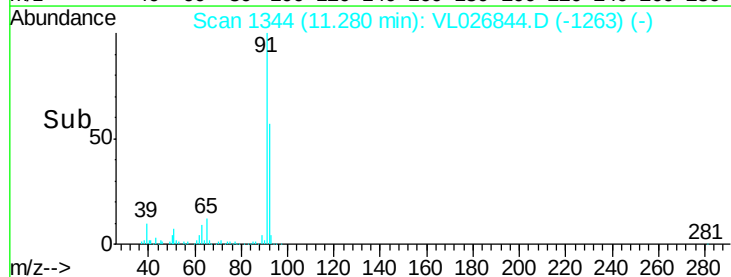
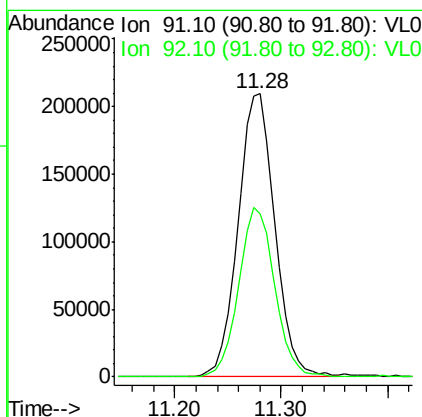
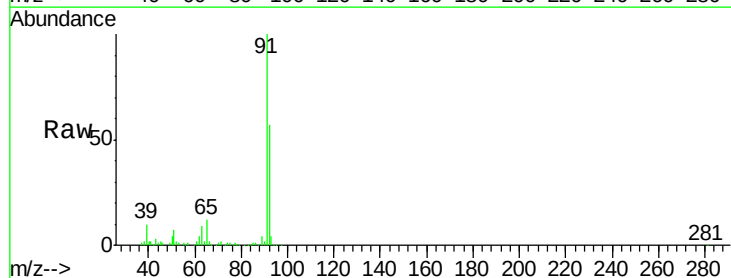
Manual Integrations
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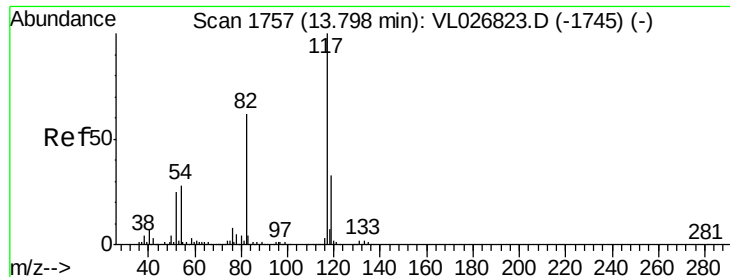
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#53
Toluene
Concen: 1.03 ppbv
RT: 11.28 min Scan# 1344
Delta R.T. -0.01 min
Lab File: VL026844.D
Acq: 10 Feb 2016 7:32

Tgt Ion	91	92
Resp	508851	
Ratio	100	59.2
Lower		47.3
Upper		70.9





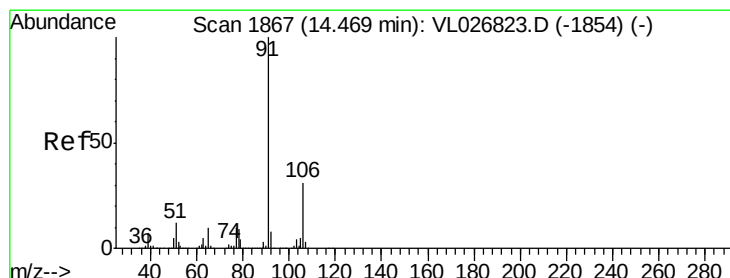
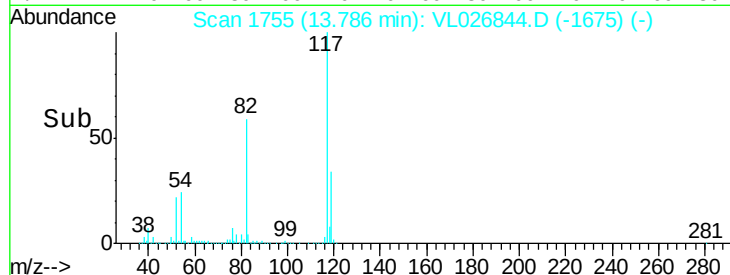
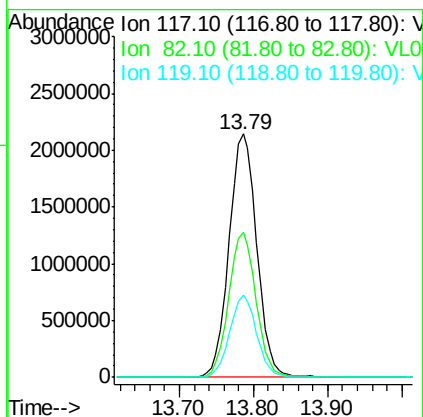
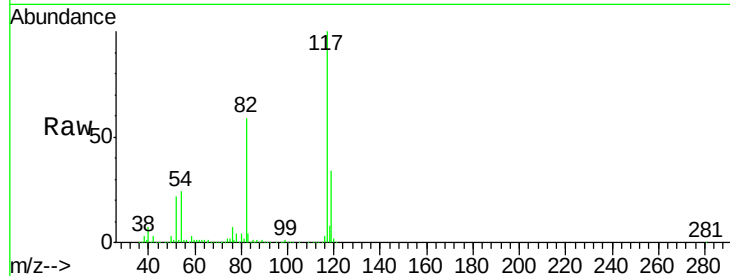
#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 13.79 min Scan# 1755
Delta R.T. -0.01 min
Lab File: VL026844.D
Acq: 10 Feb 2016 7:32

Instrument :
MSVOA_L
ClientSampled :
IA-1DL

Tot Ion	Ratio	Lower	Upper
117	100		
82	0.0	51.9	77.9#
119	0.0	48.5	72.7#

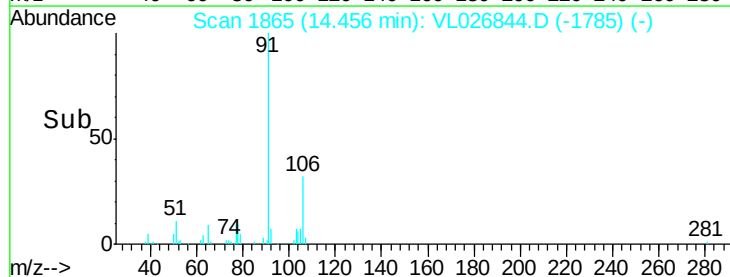
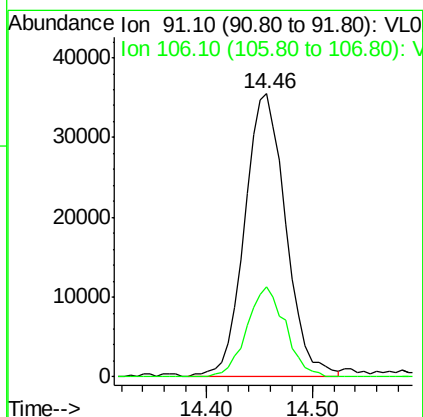
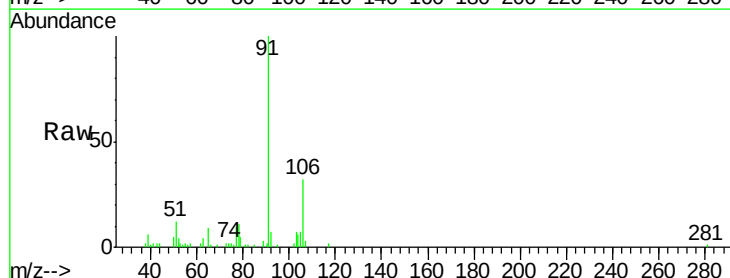
Manual Integrations
APPROVED

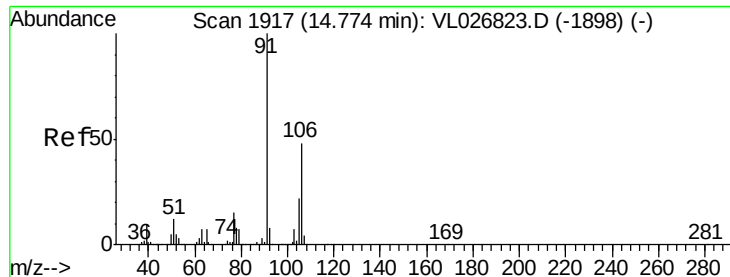
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2/11/2016 1:24:41 PM



#58
Ethyl Benzene
Concen: 0.14 ppbv
RT: 14.46 min Scan# 1865
Delta R.T. -0.01 min
Lab File: VL026844.D
Acq: 10 Feb 2016 7:32

Tgt Ion	Ratio	Lower	Upper
91	100		
106	31.8	24.9	37.3





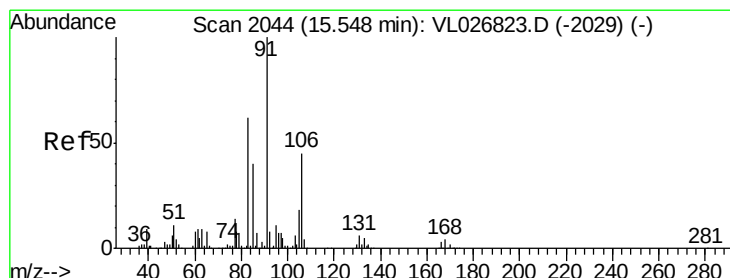
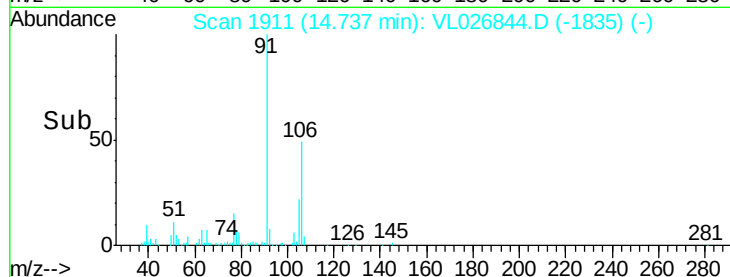
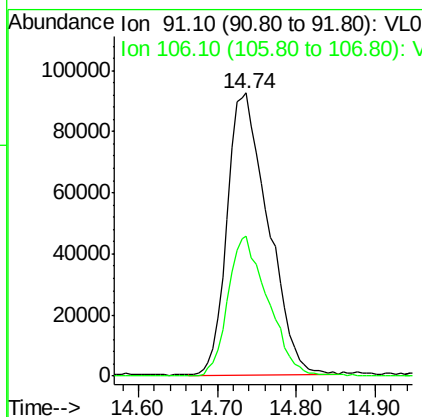
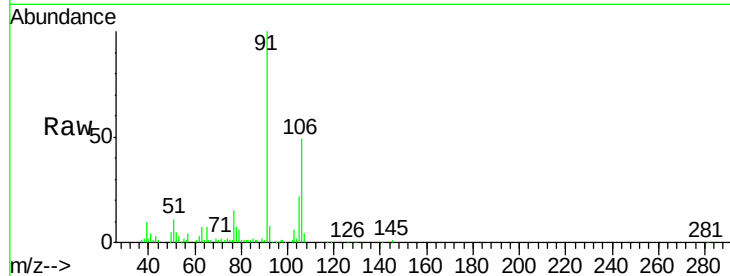
#59
m/p-Xylene
Concen: 0.58 ppbv
RT: 14.74 min Scan# 1911
Delta R.T. -0.04 min
Lab File: VL026844.D
Acq: 10 Feb 2016 7:32

Instrument :
MSVOA_L
ClientSampled :
IA-1DL

Tot Ion: 91 Resp: 334819
Ion Ratio Lower Upper
91 100
106 48.4 38.2 57.2

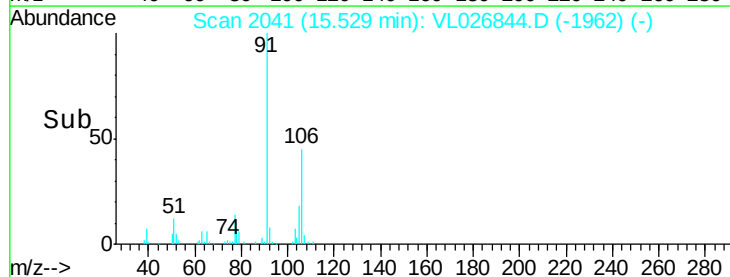
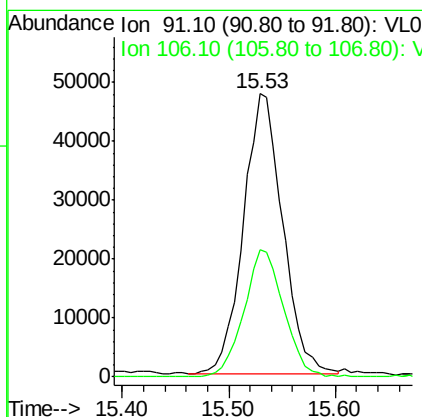
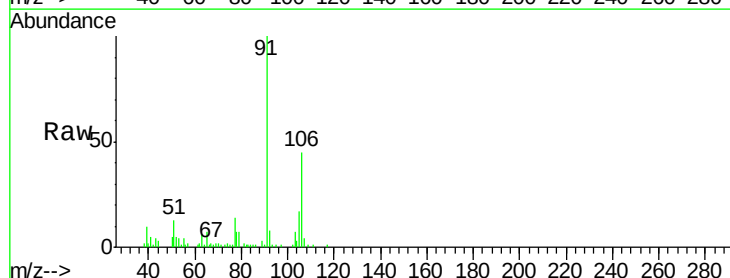
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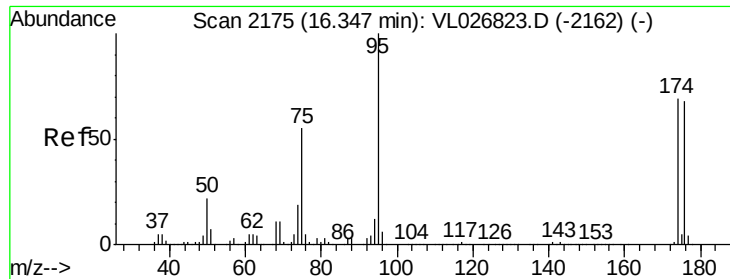
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#60
o-Xylene
Concen: 0.20 ppbv
RT: 15.53 min Scan# 2041
Delta R.T. -0.02 min
Lab File: VL026844.D
Acq: 10 Feb 2016 7:32

Tgt Ion: 91 Resp: 123456
Ion Ratio Lower Upper
91 100
106 45.8 22.3 66.8





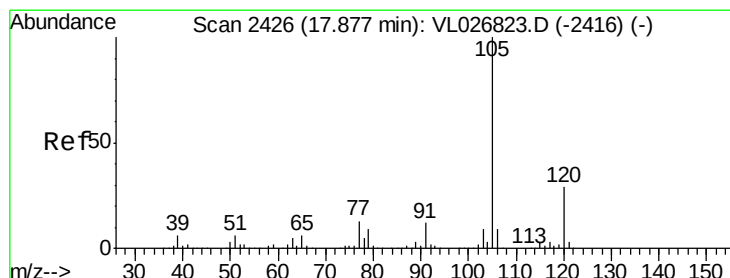
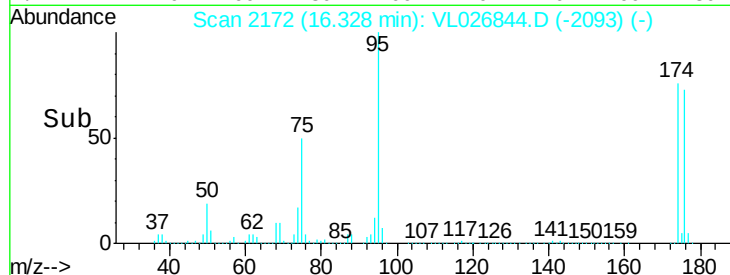
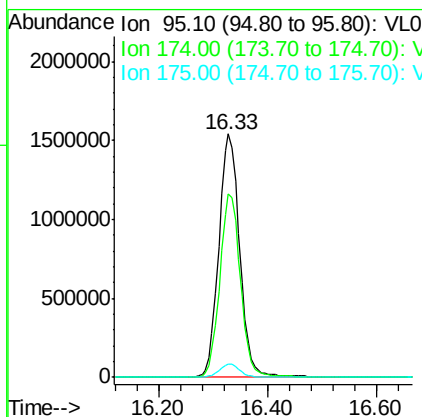
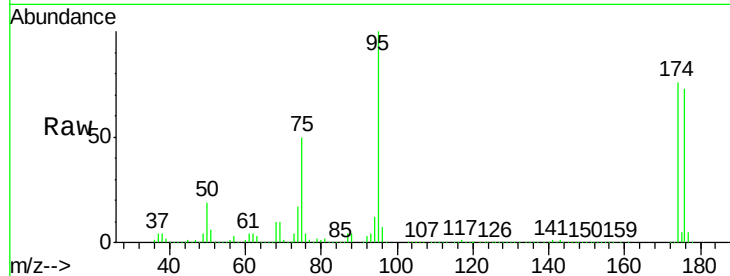
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.19 ppbv
 RT: 16.33 min Scan# 2172
 Delta R.T. -0.02 min
 Lab File: VL026844.D
 Acq: 10 Feb 2016 7:32

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-1DL

Tot Ion: 95 Resp: 4098202
 Ion Ratio Lower Upper
 95 100
 174 75.1 55.6 83.4
 175 5.3 3.9 5.9

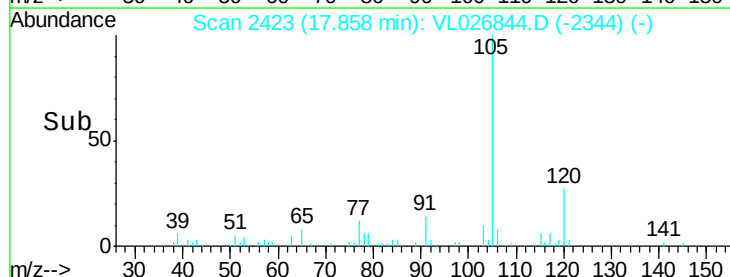
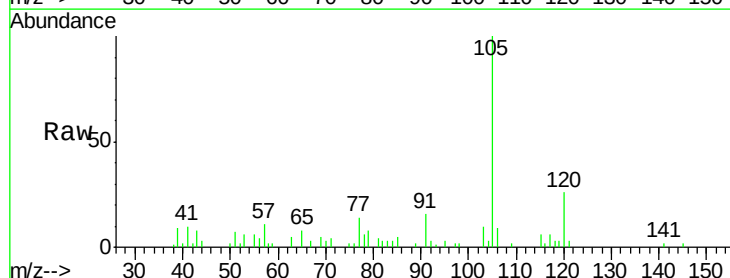
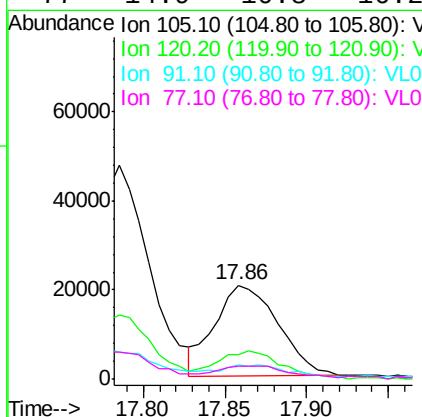
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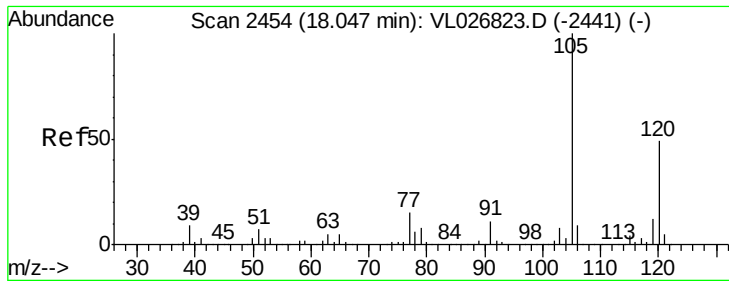
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#72
 4-Ethyltoluene
 Concen: 0.10 ppbv
 RT: 17.86 min Scan# 2423
 Delta R.T. -0.02 min
 Lab File: VL026844.D
 Acq: 10 Feb 2016 7:32

Tgt Ion: 105 Resp: 55407
 Ion Ratio Lower Upper
 105 100
 120 31.1 23.8 35.6
 91 22.2 10.2 15.4#
 77 14.9 10.8 16.2





#73

1,3,5-Trimethylbenzene

Concen: 0.08 ppbv

RT: 18.02 min Scan# 2450

Delta R.T. -0.02 min

Lab File: VL026844.D

Acq: 10 Feb 2016 7:32

Instrument :

MSVOA_L

ClientSampleId :

IA-1DL

Tot Ion:105 Resp: 45656

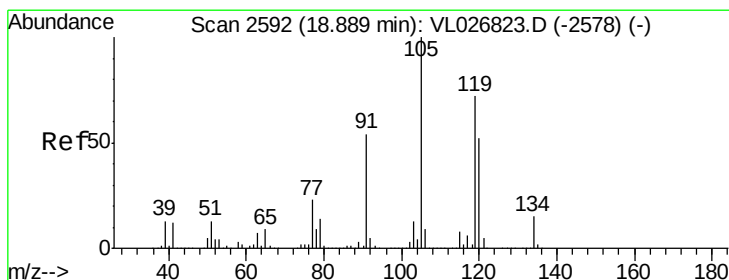
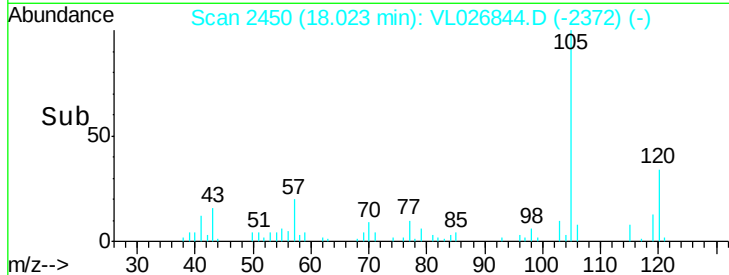
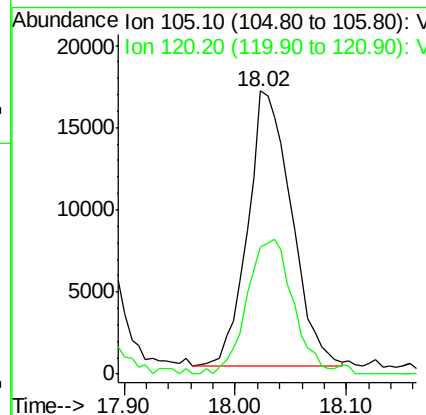
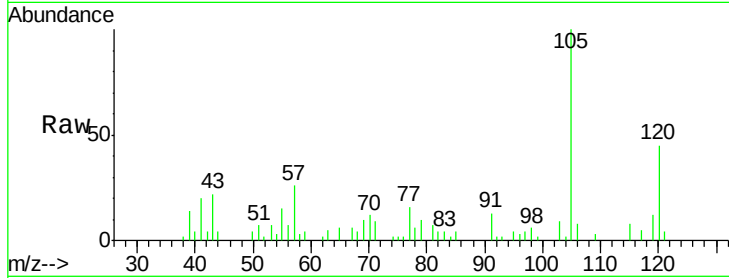
Ion Ratio Lower Upper

105 100

120 46.2 39.4 59.0

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#74

1,2,4-Trimethylbenzene

Concen: 0.29 ppbv

RT: 18.88 min Scan# 2590

Delta R.T. -0.01 min

Lab File: VL026844.D

Acq: 10 Feb 2016 7:32

Tgt Ion:105 Resp: 189077

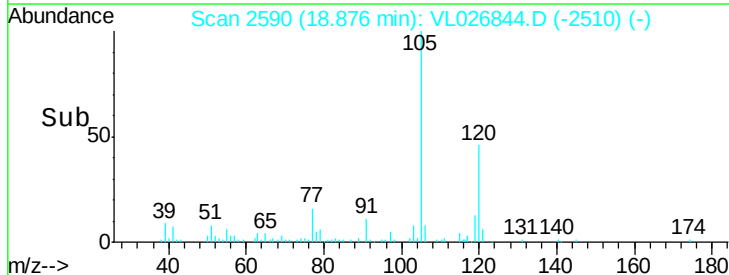
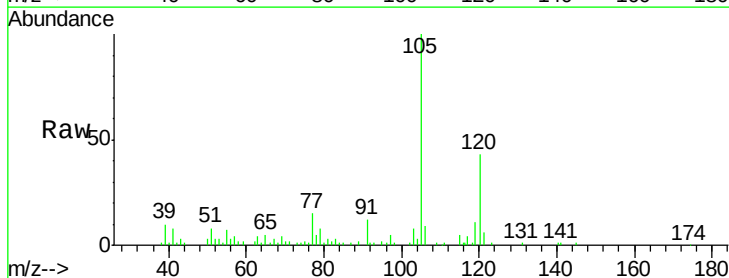
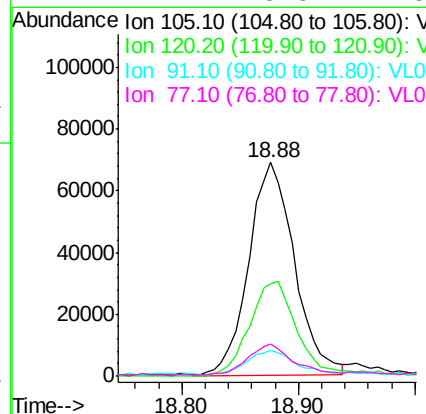
Ion Ratio Lower Upper

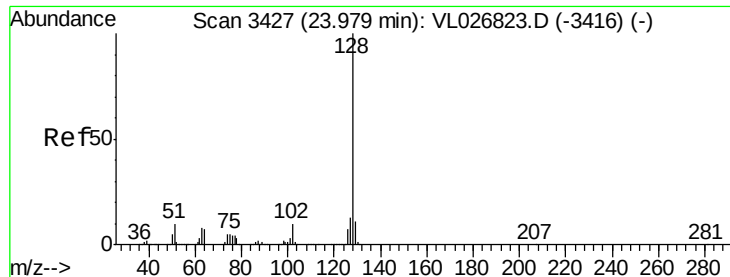
105 100

120 43.5 41.3 61.9

91 10.8 43.3 64.9#

77 14.1 18.3 27.5#





#79

Naphthalene

Concen: 0.09 ppbv m

RT: 23.98 min Scan# 3427

Delta R.T. -0.00 min

Lab File: VL026844.D

Acq: 10 Feb 2016 7:32

Instrument :

MSVOA_L

ClientSampleId :

IA-1DL

Tot Ion:	128	Resp:	29328
Ion Ratio		Lower	Upper
128	100		
127	14.5	10.0	15.0
129	20.4	8.7	13.1#

Manual Integrations
APPROVED

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