

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL100915\
 Data File : VL026197.D
 Acq On : 10 Oct 2015 4:56
 Operator : SY/MD
 Sample : G3925-02
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-2

Manual Integrations
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 10/13/2015 1:17:59 PM

Quant Time: Oct 12 11:05:35 2015
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL100915AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Oct 0
 QLast Update : Fri Oct 09 16:23:14 2015
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	6.65	49	389573	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	8.32	114	1275241	10.00	ppbv	-0.01
55) Chlorobenzene-d5	13.74	117	1378315	10.00	ppbv	-0.02

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	16.28	95	1101350	10.41	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.10%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.64	85	37218	0.51	ppbv	91
3) Chlorodifluoromethane	3.57	51	359944m	7.91	ppbv	
4) Chloromethane	3.75	50	11495	0.45	ppbv	96
9) Propene	3.61	41	77967m	3.73	ppbv	
10) Heptane	9.35	43	117830	1.62	ppbv	99
11) Trichlorofluoromethane	4.69	101	22249	0.31	ppbv	94
13) Ethanol	4.34	45	33159	10.79	ppbv	87
15) Acetone	4.59	43	1182614	23.49	ppbv	97
19) Isopropyl Alcohol	4.79	45	17394	0.89	ppbv #	94
20) Methylene Chloride	5.15	84	20141	0.94	ppbv	93
26) Hexane	6.65	57	24449	0.52	ppbv #	55
34) 2-Butanone	6.21	43	17039	0.24	ppbv	97
35) Carbon Tetrachloride	8.16	117	6811	0.08	ppbv	96
36) Benzene	8.02	78	19557	0.16	ppbv	98
38) Trichloroethene	9.06	130	2244	0.04	ppbv #	74
52) Tetrachloroethene	12.79	164	9216	0.15	ppbv	93
53) Toluene	11.23	91	572724	3.64	ppbv	100
58) Ethyl Benzene	14.41	91	27045	0.14	ppbv	96
59) m/p-Xylene	14.68	91	81752	0.51	ppbv	97
60) o-Xylene	15.48	91	33972	0.20	ppbv	96
72) 4-Ethyltoluene	17.81	105	30523	0.17	ppbv	97
73) 1,3,5-Trimethylbenzene	17.97	105	30918	0.18	ppbv	93
74) 1,2,4-Trimethylbenzene	18.82	105	107174	0.61	ppbv #	69
79) Naphthalene	23.94	128	17087	0.15	ppbv #	96

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

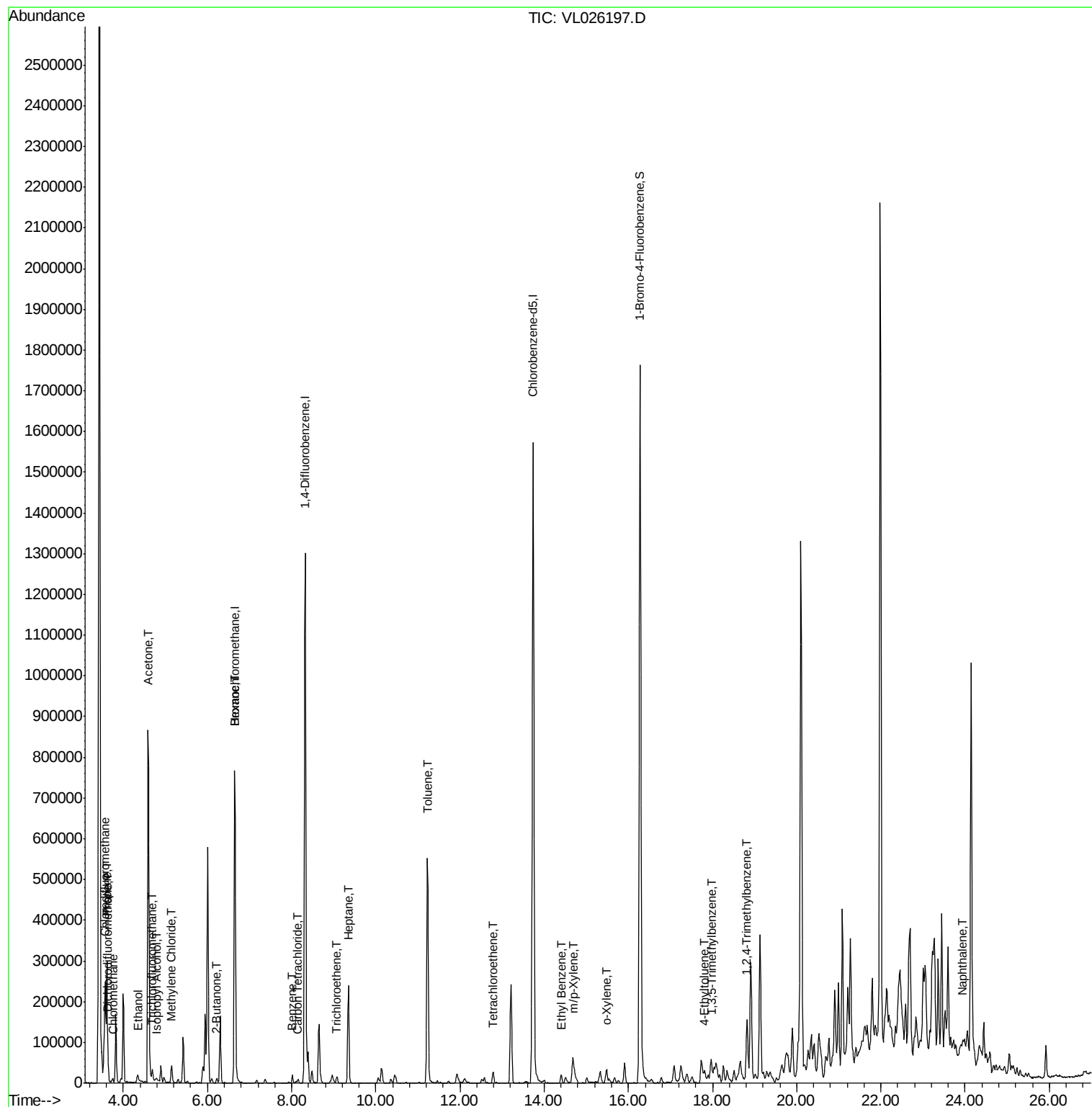
Data Path : W:\HPCHEM1\MSVOA L\DATA\VL100915\
Data File : VL026197.D
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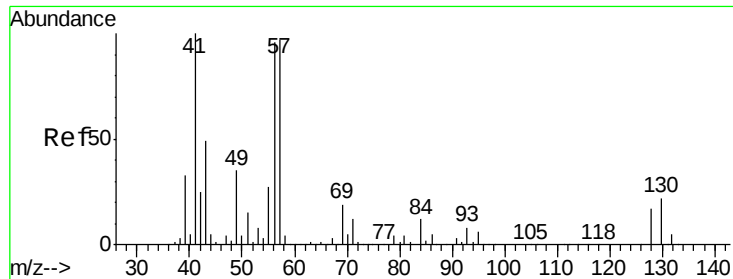
Instrument :
MSVOA_L
ClientSampled :
SG-2

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Quant Time: Oct 12 11:05:35 2015
Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL100915AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Oct
QLast Update : Fri Oct 09 16:23:14 2015
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 6.65 min Scan# 584

Delta R.T. -0.01 min

Lab File: VL026197.D

Acq: 10 Oct 2015 4:56

Instrument :

MSVOA_L

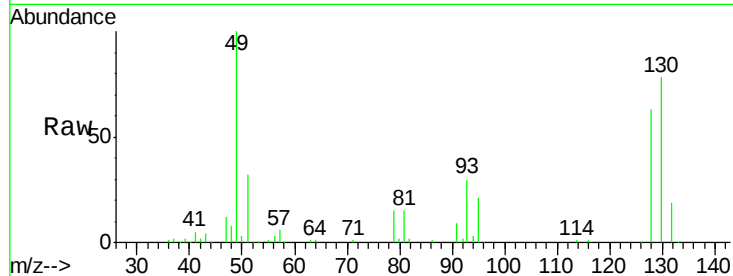
ClientSampled :

SG-2

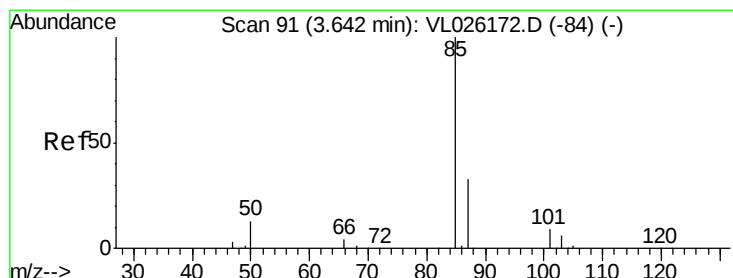
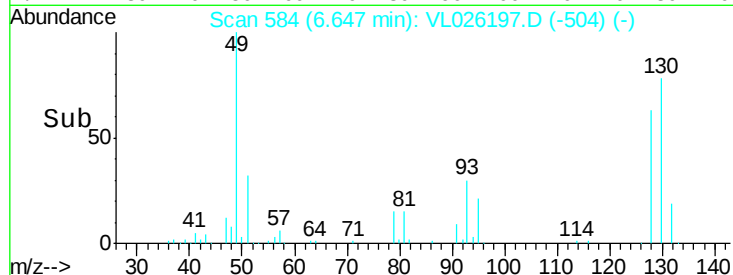
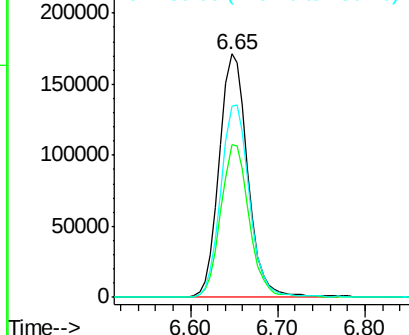
Tot Ion: 49 Resp: 389573
 Ion Ratio Lower Upper
 49 100
 128 63.0 26.3 78.8
 130 80.0 34.2 102.5

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Abundance Ion 49.10 (48.80 to 49.80): VL0
 Ion 128.00 (127.70 to 128.70): V
 Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.51 ppbv

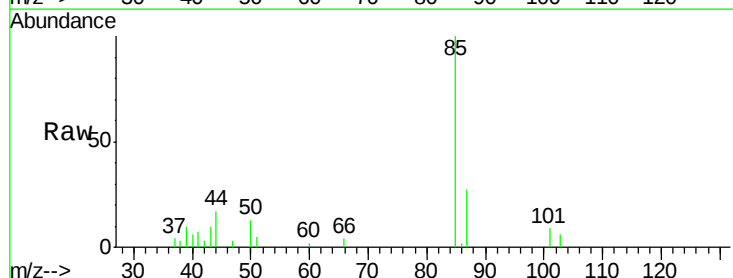
RT: 3.64 min Scan# 91

Delta R.T. -0.00 min

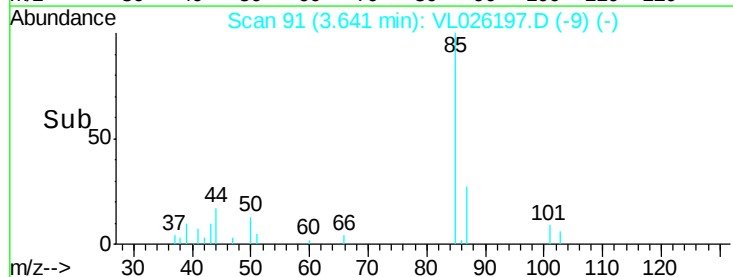
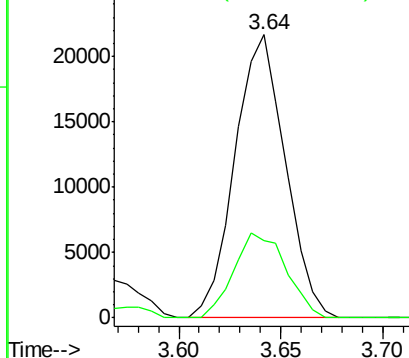
Lab File: VL026197.D

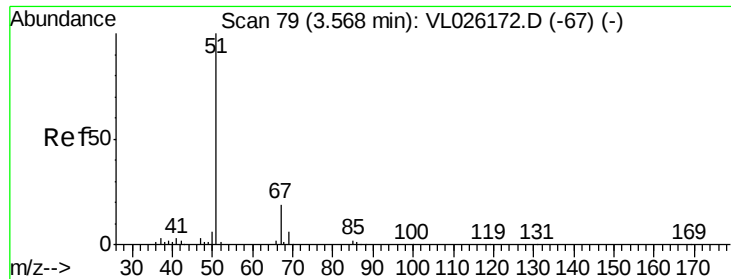
Acq: 10 Oct 2015 4:56

Tgt Ion: 85 Resp: 37218
 Ion Ratio Lower Upper
 85 100
 87 27.5 26.2 39.4



Abundance Ion 85.00 (84.70 to 85.70): VL0
 Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 7.91 ppbv m

RT: 3.57 min Scan# 79

Delta R.T. -0.00 min

Lab File: VL026197.D

Acq: 10 Oct 2015 4:56

Instrument :

MSVOA_L

ClientSampleId :

SG-2

Tot Ion: 51 Resp: 359944

Ion Ratio Lower Upper

51 100

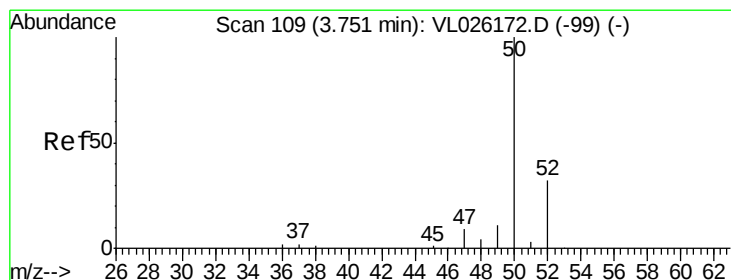
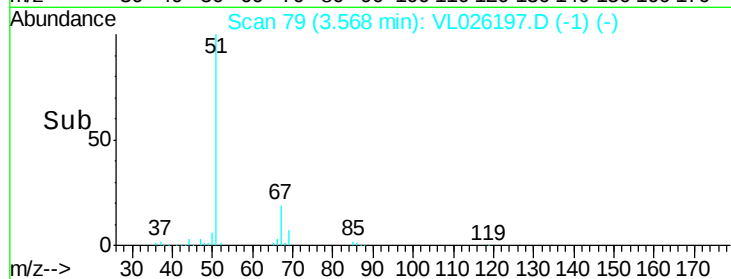
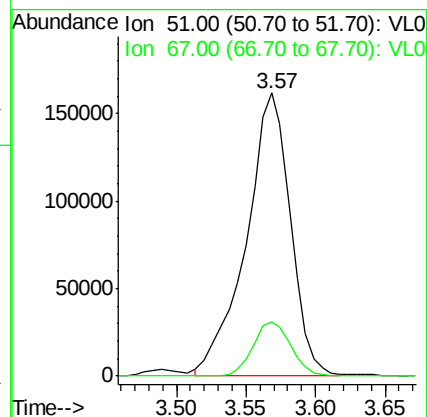
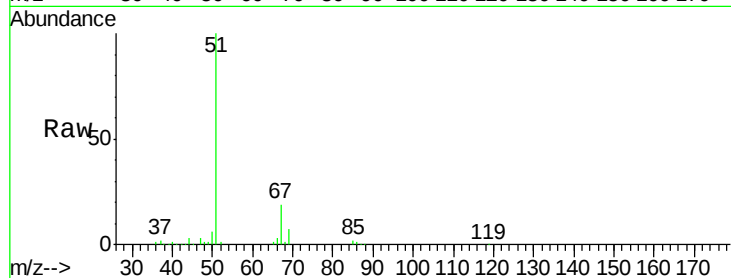
67 16.4 14.9 22.3

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#4

Chloromethane

Concen: 0.45 ppbv

RT: 3.75 min Scan# 109

Delta R.T. -0.00 min

Lab File: VL026197.D

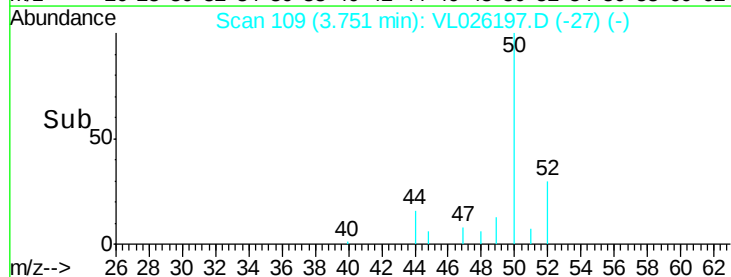
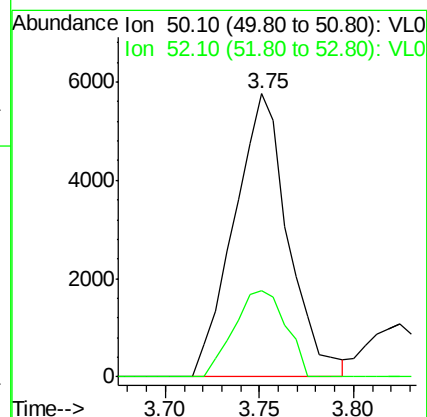
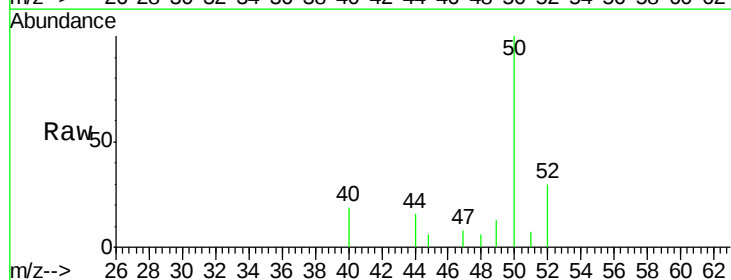
Acq: 10 Oct 2015 4:56

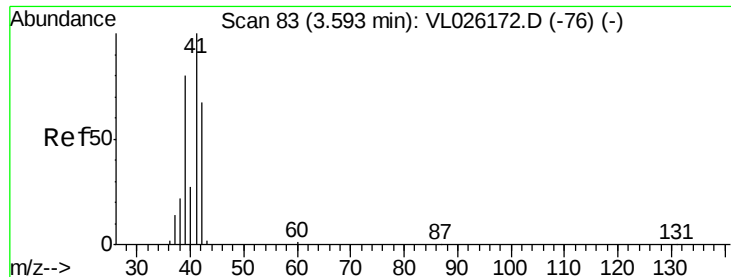
Tgt Ion: 50 Resp: 11495

Ion Ratio Lower Upper

50 100

52 30.4 25.9 38.9





#9

Propene

Concen: 3.73 ppbv m

RT: 3.61 min Scan# 86

Delta R.T. 0.02 min

Lab File: VL026197.D

Acq: 10 Oct 2015 4:56

Instrument :

MSVOA_L

ClientSampleId :

SG-2

Tot Ion: 41 Resp: 77967

Ion Ratio Lower Upper

41 100

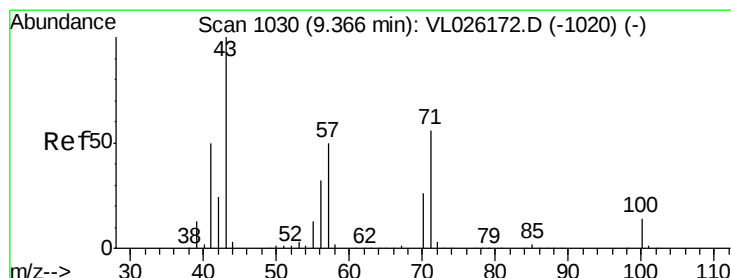
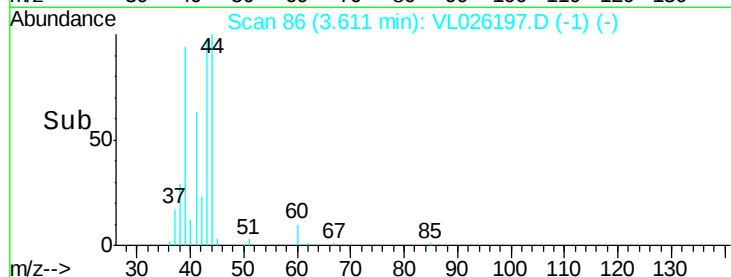
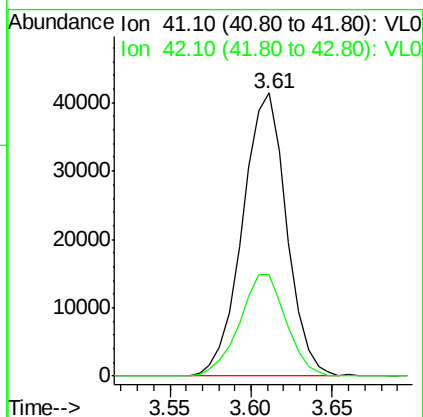
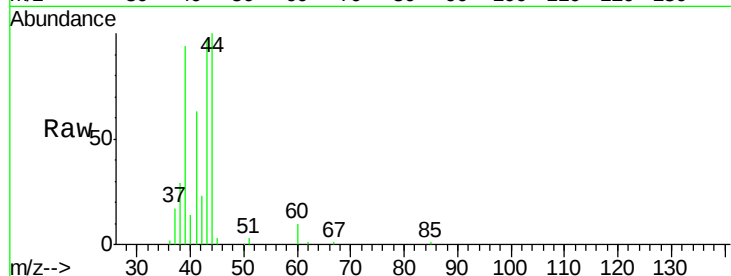
42 51.6 53.6 80.4#

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#10

Heptane

Concen: 1.62 ppbv

RT: 9.35 min Scan# 1027

Delta R.T. -0.02 min

Lab File: VL026197.D

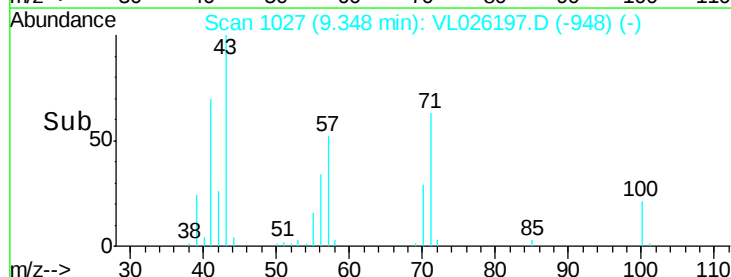
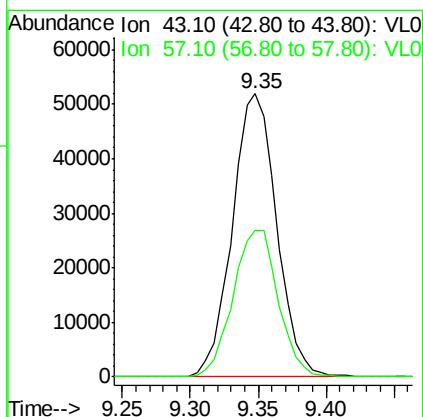
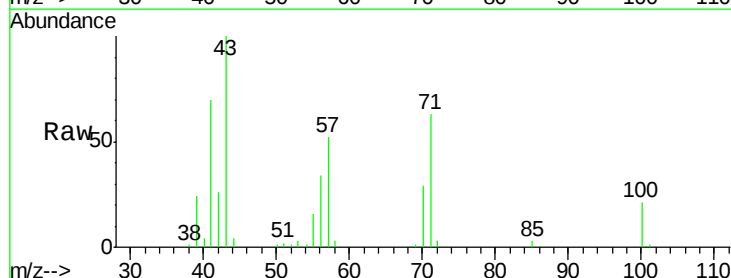
Acq: 10 Oct 2015 4:56

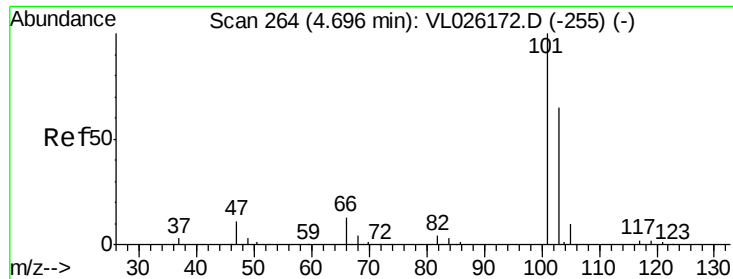
Tgt Ion: 43 Resp: 117830

Ion Ratio Lower Upper

43 100

57 53.1 41.8 62.8





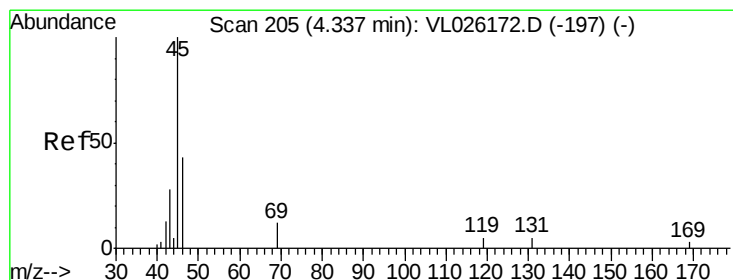
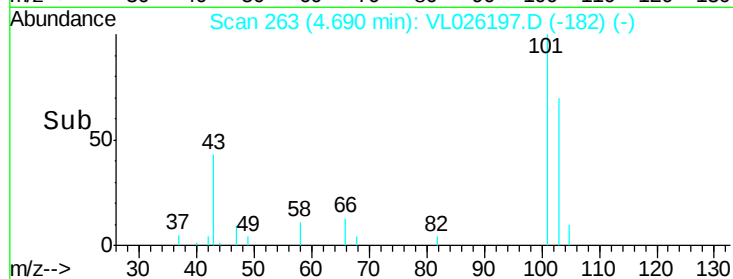
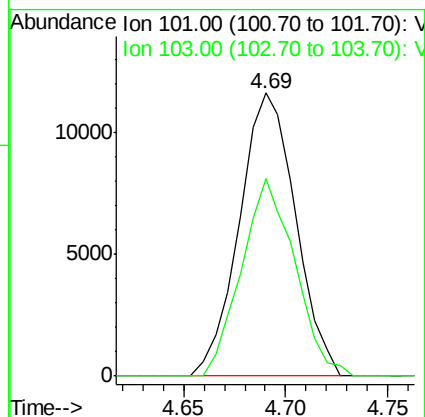
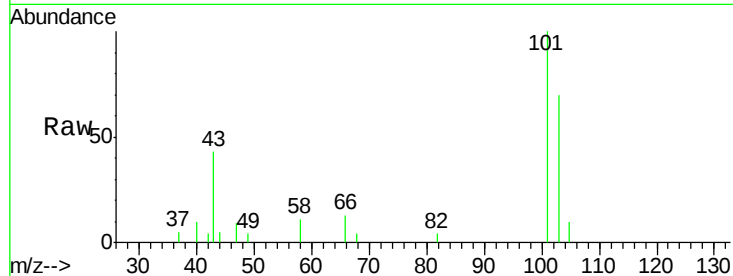
#11
 Trichlorofluoromethane
 Concen: 0.31 ppbv
 RT: 4.69 min Scan# 263
 Delta R.T. -0.01 min
 Lab File: VL026197.D
 Acq: 10 Oct 2015 4:56

Instrument :
 MSVOA_L
 ClientSampled :
 SG-2

Tot Ion: 101 Resp: 22249
 Ion Ratio Lower Upper
 101 100
 103 69.7 51.9 77.9

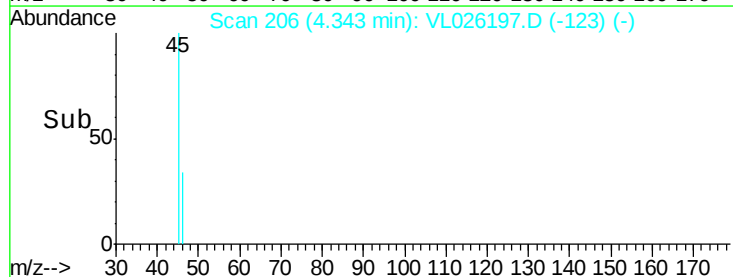
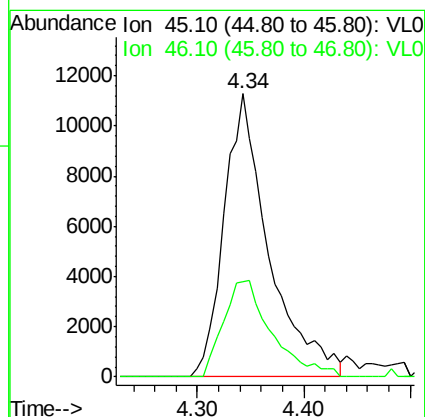
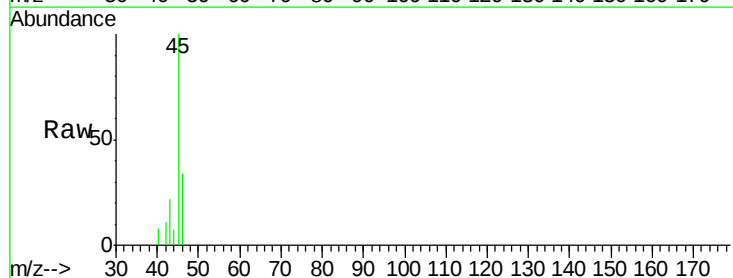
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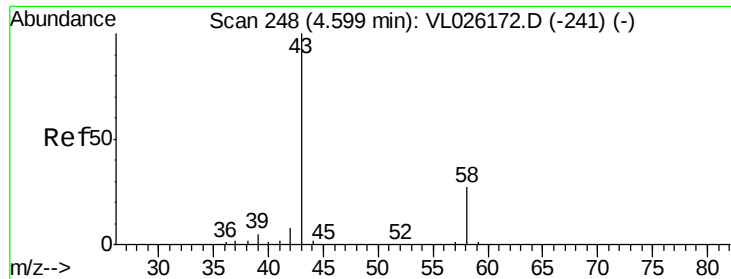
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#13
 Ethanol
 Concen: 10.79 ppbv
 RT: 4.34 min Scan# 206
 Delta R.T. 0.01 min
 Lab File: VL026197.D
 Acq: 10 Oct 2015 4:56

Tgt Ion: 45 Resp: 33159
 Ion Ratio Lower Upper
 45 100
 46 36.8 18.1 72.5





#15

Acetone

Concen: 23.49 ppbv

RT: 4.59 min Scan# 247

Delta R.T. -0.01 min

Lab File: VL026197.D

Acq: 10 Oct 2015 4:56

Instrument :

MSVOA_L

ClientSampleId :

SG-2

Tot Ion: 43 Resp: 1182614

Ion Ratio Lower Upper

43 100

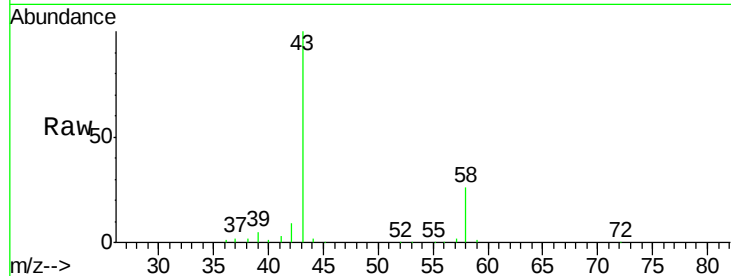
58 26.2 22.0 33.0

Manual Integrations

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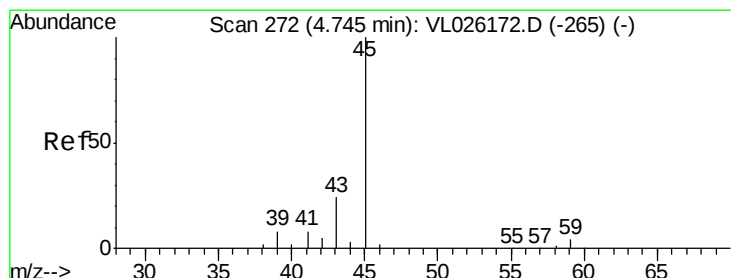
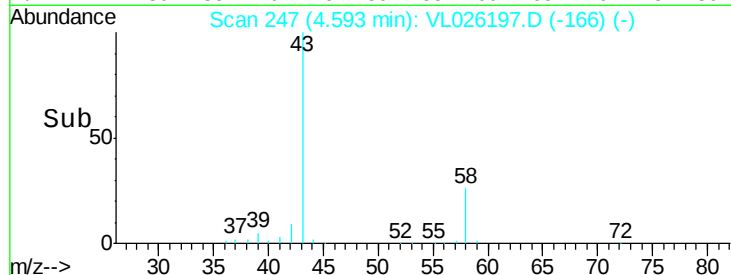
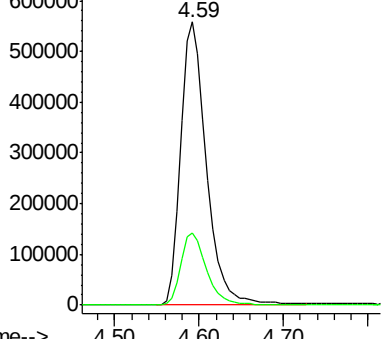
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#19

Isopropyl Alcohol

Concen: 0.89 ppbv

RT: 4.79 min Scan# 280

Delta R.T. 0.05 min

Lab File: VL026197.D

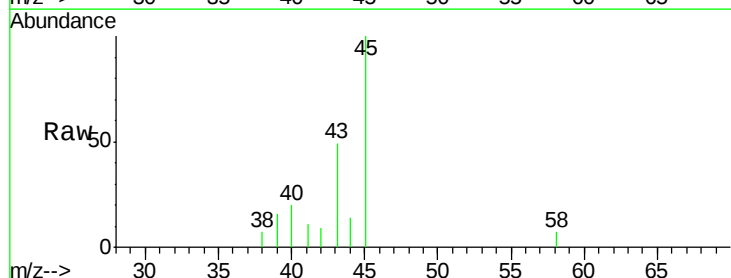
Acq: 10 Oct 2015 4:56

Tgt Ion: 45 Resp: 17394

Ion Ratio Lower Upper

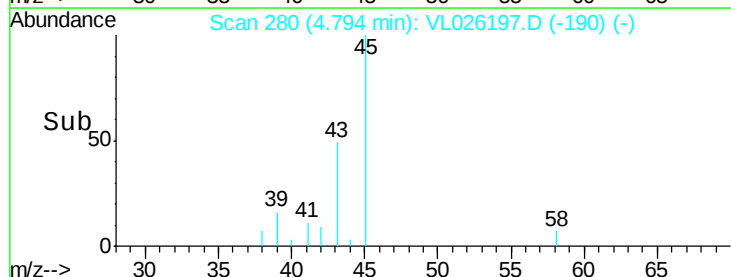
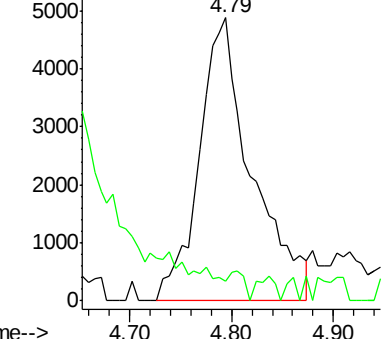
45 100

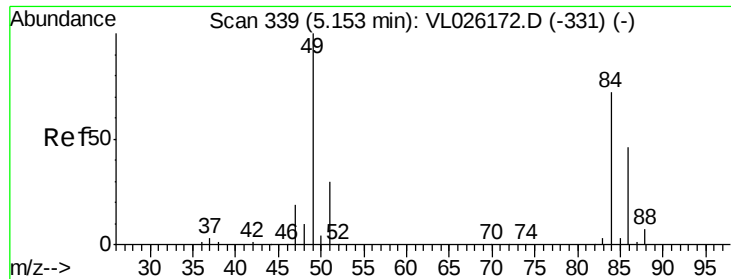
58 0.0 1.7 2.5#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





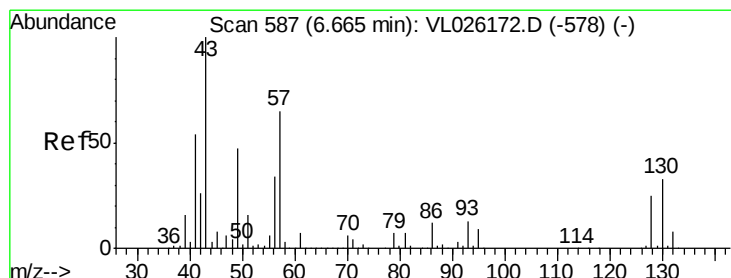
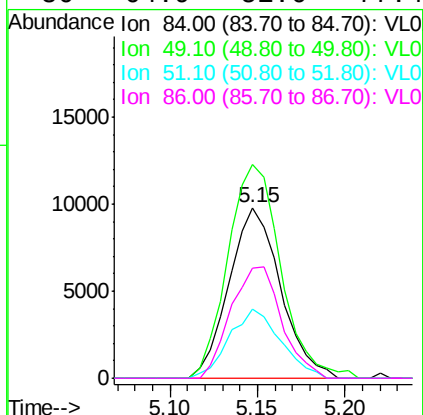
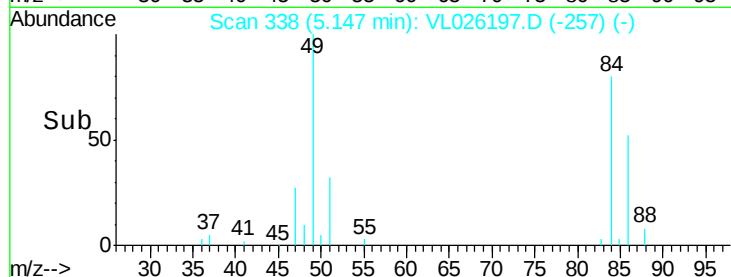
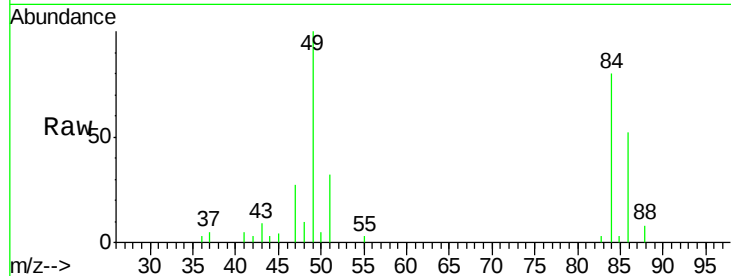
#20
Methvlene Chloride
Concen: 0.94 ppbv
RT: 5.15 min Scan# 338
Delta R.T. -0.01 min
Lab File: VL026197.D
Acq: 10 Oct 2015 4:56

Instrument :
MSVOA_L
ClientSampleId :
SG-2

Tot Ion:	84	Resp:	20141
Ion	Ratio	Lower	Upper
84	100		
49	125.3	111.3	166.9
51	40.6	33.0	49.6
86	64.9	51.6	77.4

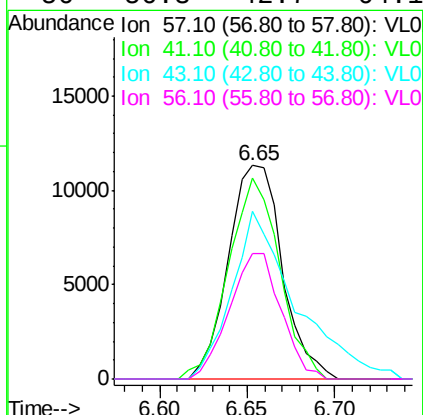
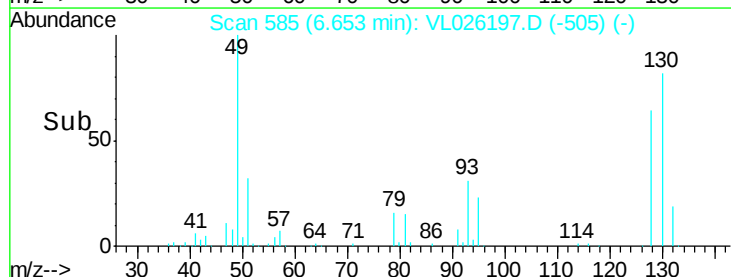
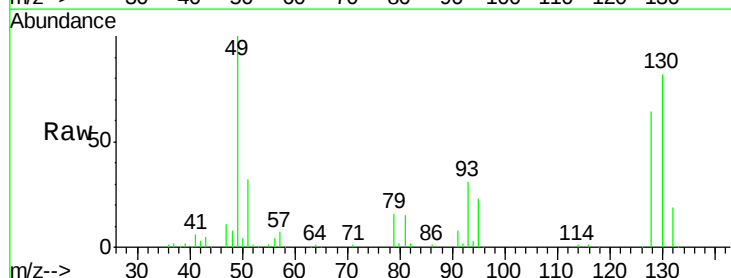
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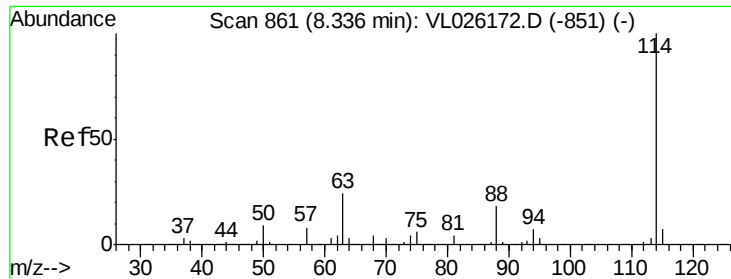
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#26
Hexane
Concen: 0.52 ppbv
RT: 6.65 min Scan# 585
Delta R.T. -0.01 min
Lab File: VL026197.D
Acq: 10 Oct 2015 4:56

Tgt Ion:	57	Resp:	24449
Ion	Ratio	Lower	Upper
57	100		
41	89.1	68.0	102.0
43	93.3	164.4	246.6
56	56.3	42.7	64.1





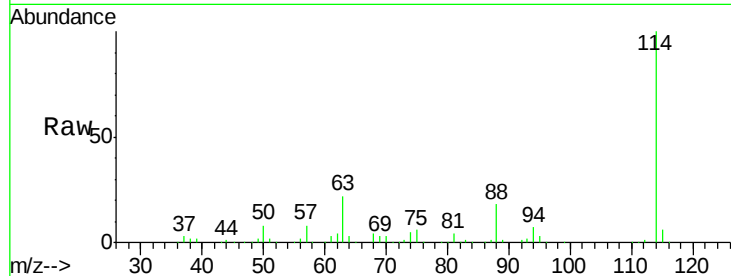
#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 8.32 min Scan# 859
 Delta R.T. -0.01 min
 Lab File: VL026197.D
 Acq: 10 Oct 2015 4:56

Instrument :
 MSVOA_L
 ClientSampled :
 SG-2

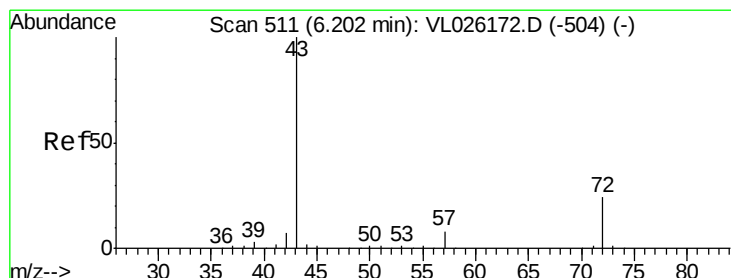
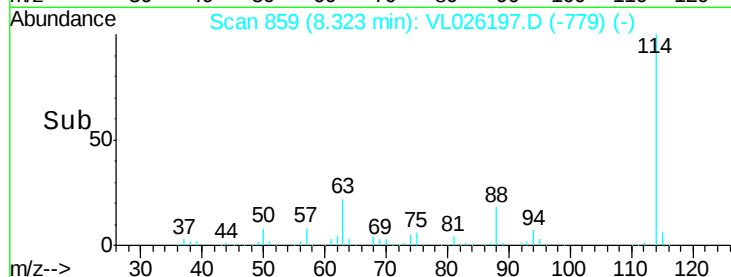
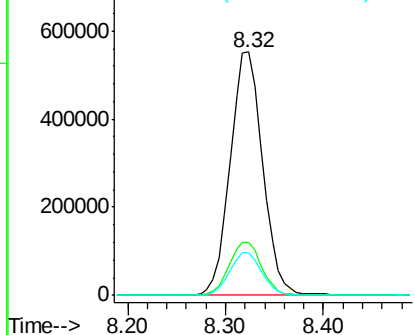
Tot Ion:114 Resp: 1275241
 Ion Ratio Lower Upper
 114 100
 63 22.1 19.0 28.6
 88 17.5 13.8 20.8

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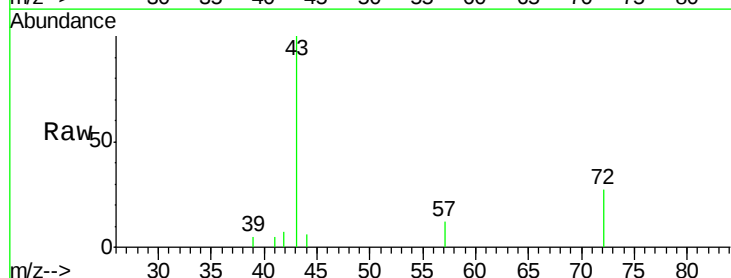


Abundance Ion 114.10 (113.80 to 114.80): V
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

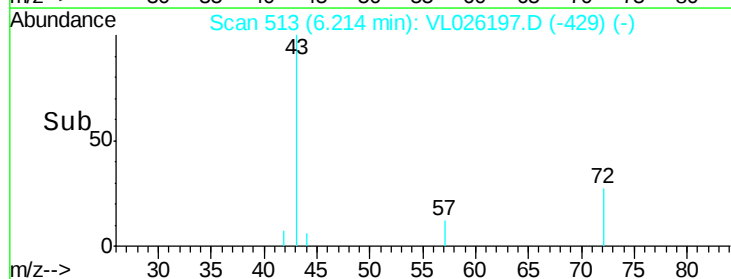
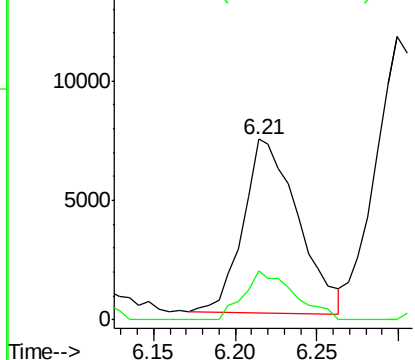


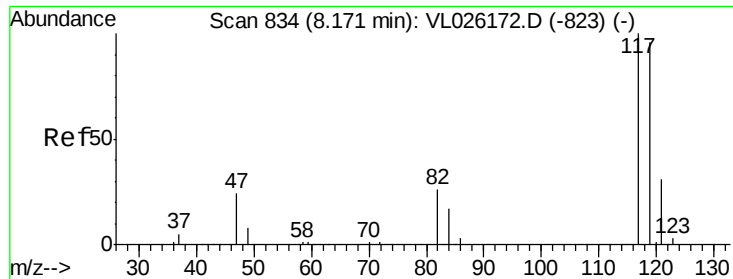
#34
 2-Butanone
 Concen: 0.24 ppbv
 RT: 6.21 min Scan# 513
 Delta R.T. 0.01 min
 Lab File: VL026197.D
 Acq: 10 Oct 2015 4:56

Tgt Ion: 43 Resp: 17039
 Ion Ratio Lower Upper
 43 100
 72 25.8 19.6 29.4



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0





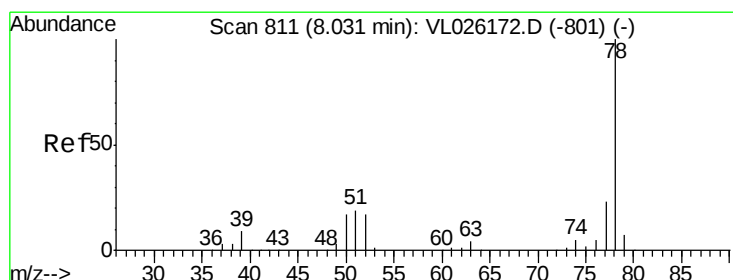
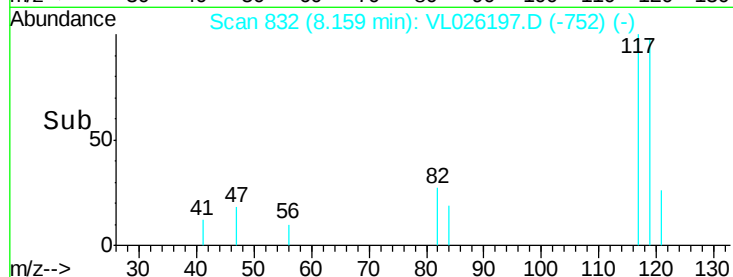
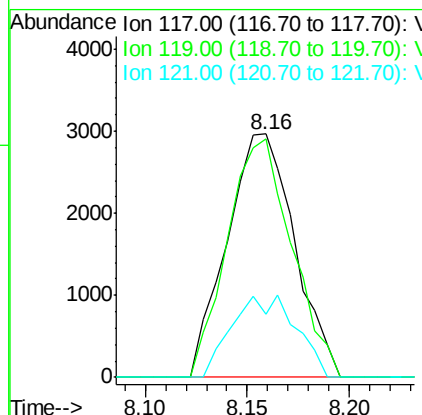
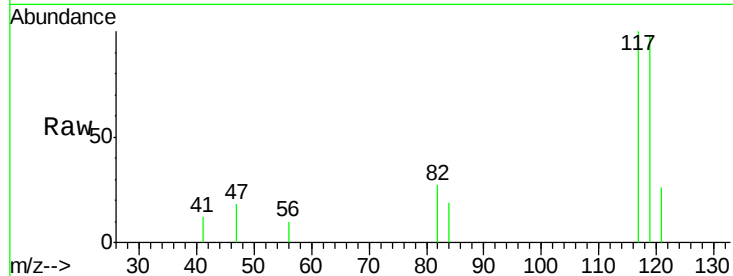
#35
Carbon Tetrachloride
Concen: 0.08 ppbv
RT: 8.16 min Scan# 832
Delta R.T. -0.01 min
Lab File: VL026197.D
Acq: 10 Oct 2015 4:56

Instrument :
MSVOA_L
ClientSampled :
SG-2

Tot Ion	Ratio	Lower	Upper
117	100		
119	97.9	76.6	115.0
121	26.1	25.0	37.4

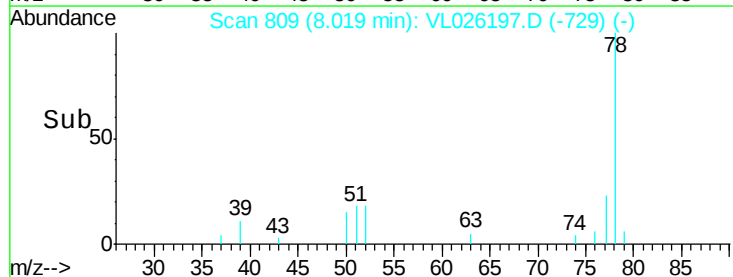
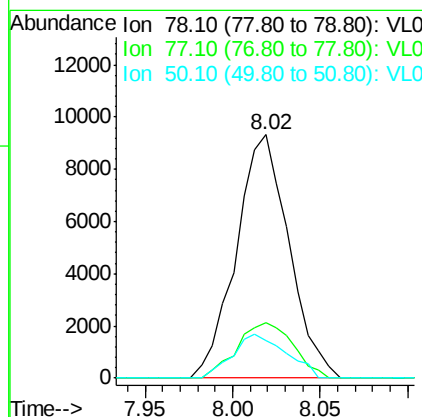
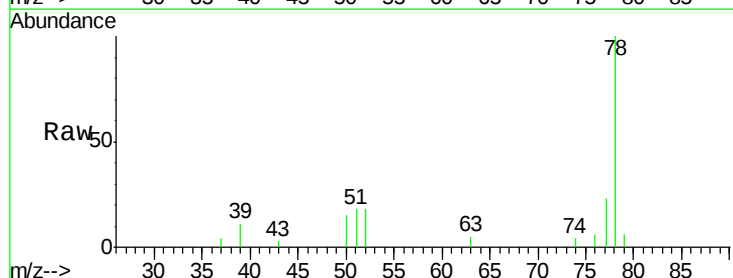
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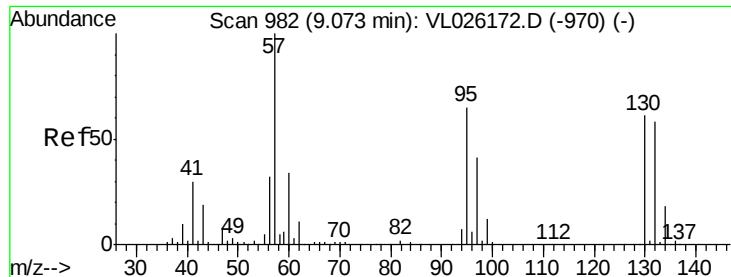
MMdadoda
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#36
Benzene
Concen: 0.16 ppbv
RT: 8.02 min Scan# 809
Delta R.T. -0.01 min
Lab File: VL026197.D
Acq: 10 Oct 2015 4:56

Tgt Ion	Ratio	Lower	Upper
78	100		
77	22.6	18.2	27.4
50	15.3	13.4	20.2





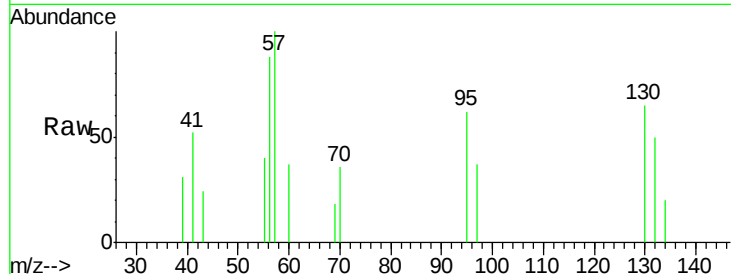
#38
 Trichloroethene
 Concen: 0.04 ppbv
 RT: 9.06 min Scan# 980
 Delta R.T. -0.01 min
 Lab File: VL026197.D
 Acq: 10 Oct 2015 4:56

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-2

Tot Ion	Ratio	Lower	Upper
130	100		
95	65.7	84.9	127.3#
132	77.1	76.8	115.2
97	55.9	54.1	81.1

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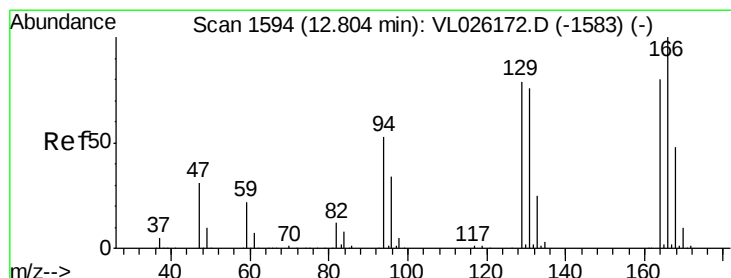
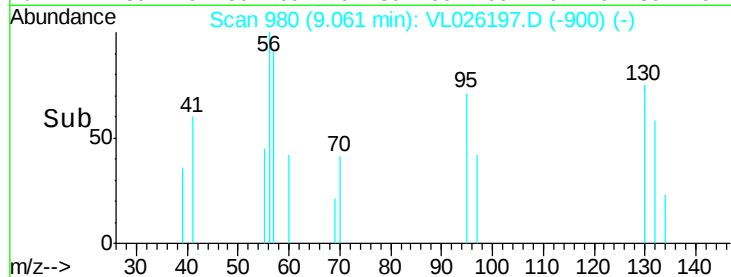
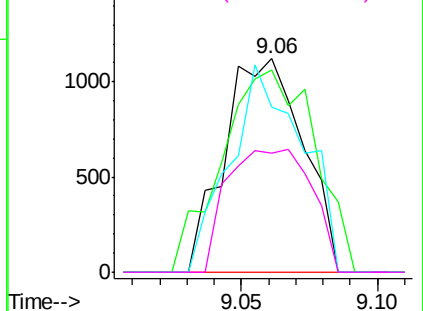


Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): V

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): V



#52
 Tetrachloroethene
 Concen: 0.15 ppbv
 RT: 12.79 min Scan# 1591
 Delta R.T. -0.02 min
 Lab File: VL026197.D
 Acq: 10 Oct 2015 4:56

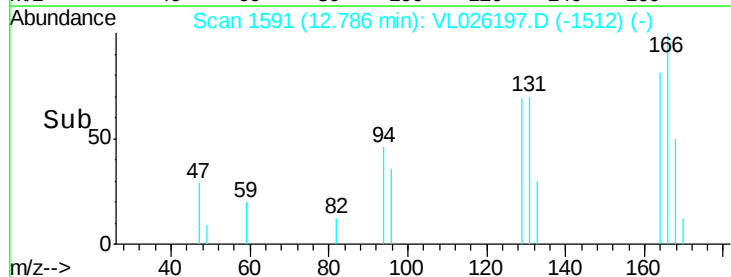
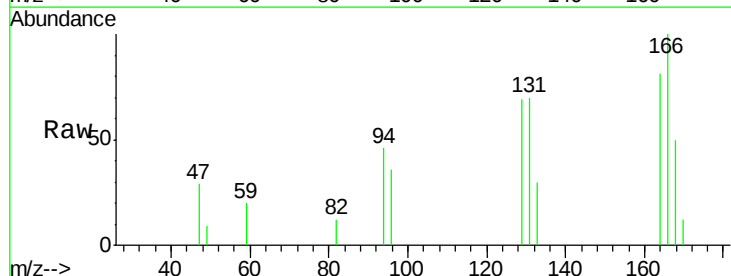
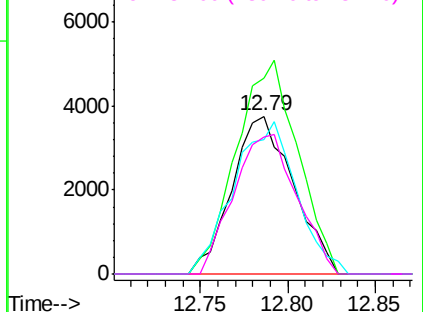
Tgt Ion	Ratio	Lower	Upper
164	100		
166	123.8	99.9	149.9
129	84.9	79.1	118.7
131	86.9	76.3	114.5

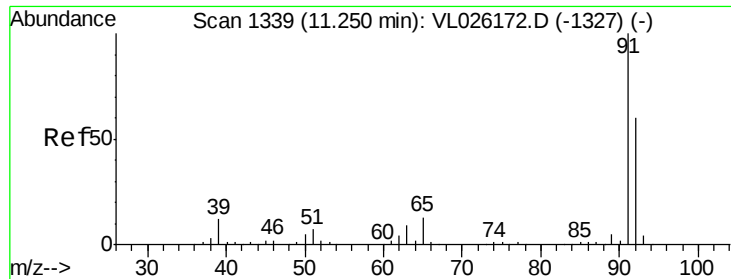
Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V





#53

Toluene

Concen: 3.64 ppbv

RT: 11.23 min Scan# 1335

Delta R.T. -0.02 min

Lab File: VL026197.D

Acq: 10 Oct 2015 4:56

Instrument :

MSVOA_L

ClientSampleId :

SG-2

Tot Ion: 91 Resp: 572724

Ion Ratio Lower Upper

91 100

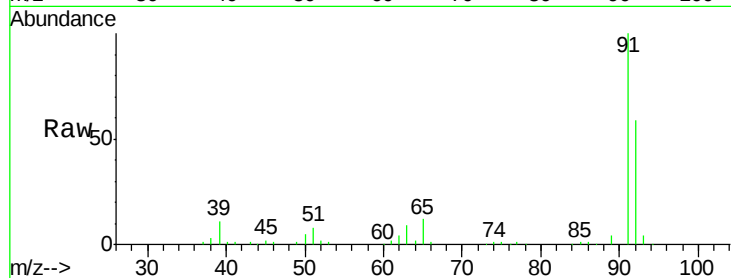
92 60.2 48.5 72.7

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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

11.23

250000

200000

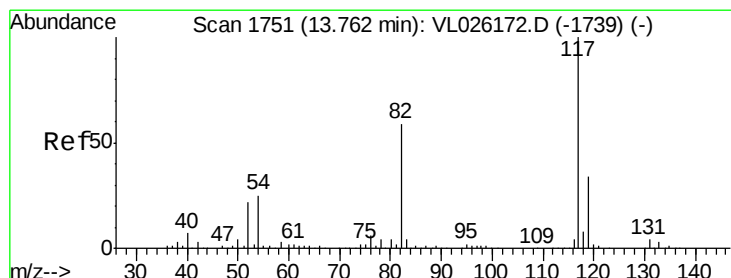
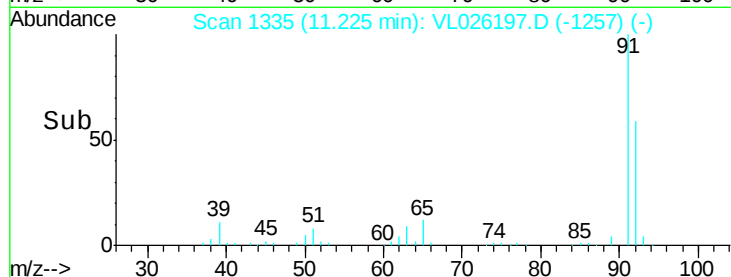
150000

100000

50000

0

Time--> 11.10 11.20 11.30



#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 13.74 min Scan# 1747

Delta R.T. -0.02 min

Lab File: VL026197.D

Acq: 10 Oct 2015 4:56

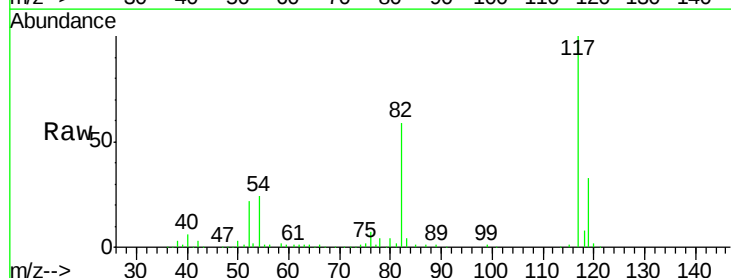
Tgt Ion: 117 Resp: 1378315

Ion Ratio Lower Upper

117 100

82 59.6 47.7 71.5

119 33.0 43.7 65.5#



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

13.74

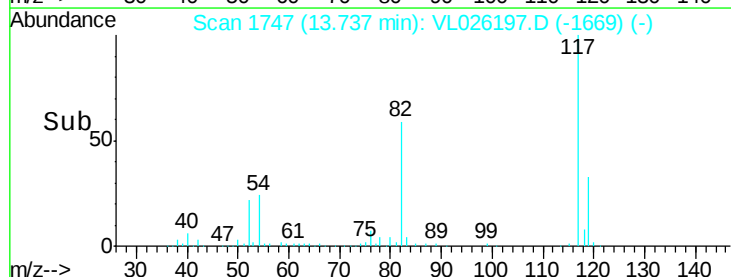
600000

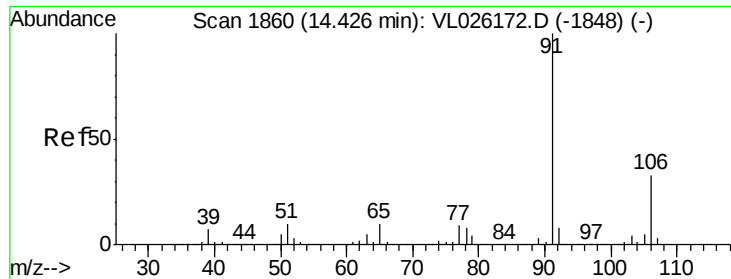
400000

200000

0

Time--> 13.60 13.70 13.80 13.90





#58

Ethyl Benzene

Concen: 0.14 ppbv

RT: 14.41 min Scan# 1857

Delta R.T. -0.02 min

Lab File: VL026197.D

Acq: 10 Oct 2015 4:56

Instrument :

MSVOA_L

ClientSampled :

SG-2

Tot Ion: 91 Resp: 27045

Ion Ratio Lower Upper

91 100

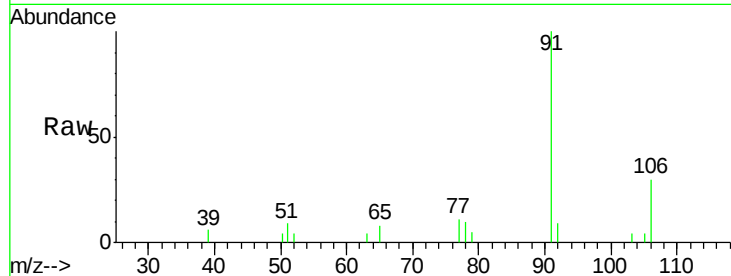
106 30.5 26.1 39.1

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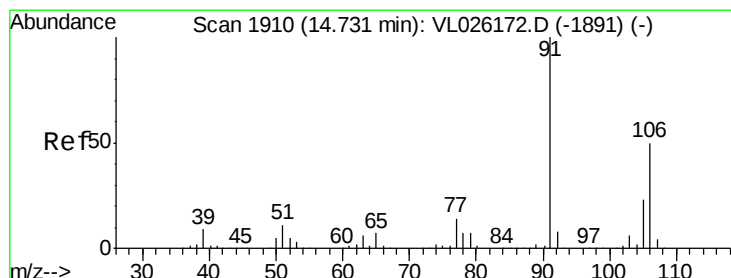
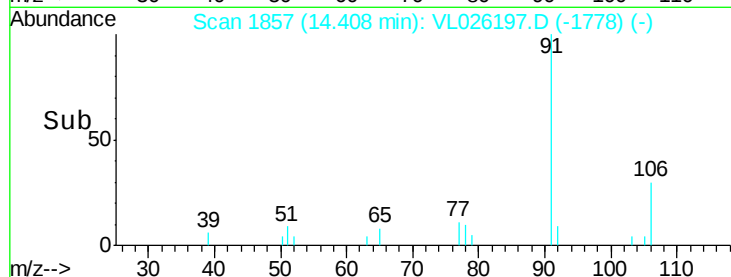
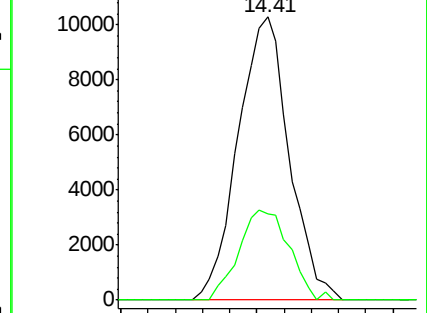
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#59

m/p-Xylene

Concen: 0.51 ppbv

RT: 14.68 min Scan# 1902

Delta R.T. -0.05 min

Lab File: VL026197.D

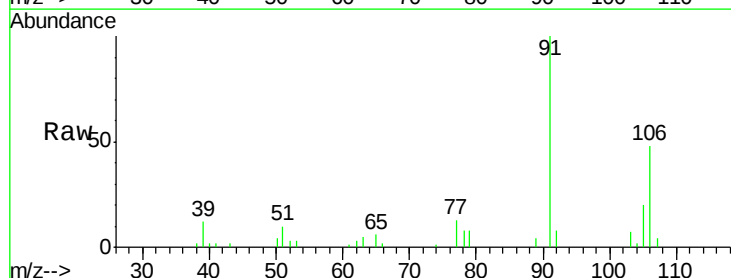
Acq: 10 Oct 2015 4:56

Tgt Ion: 91 Resp: 81752

Ion Ratio Lower Upper

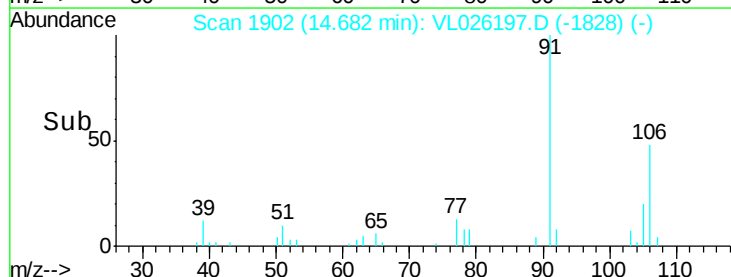
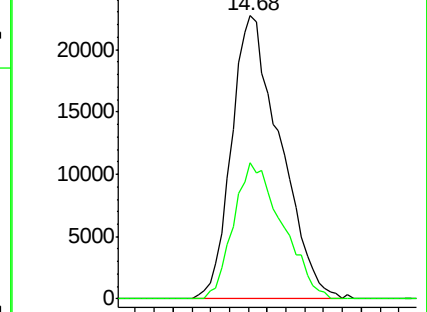
91 100

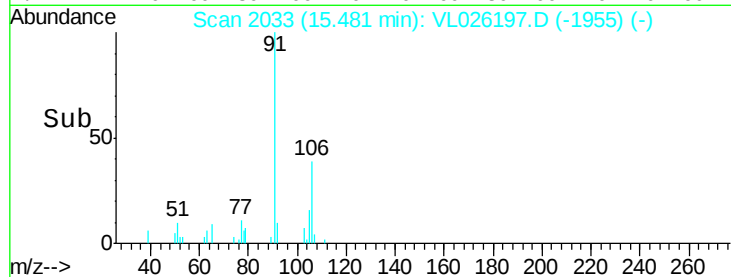
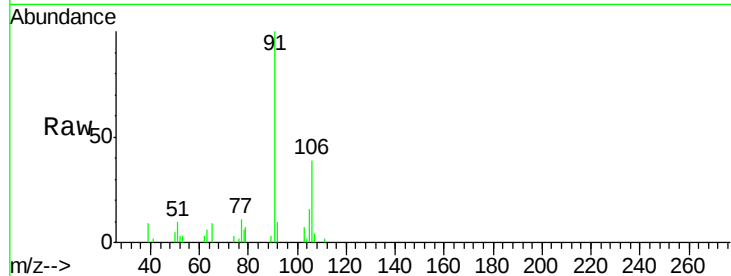
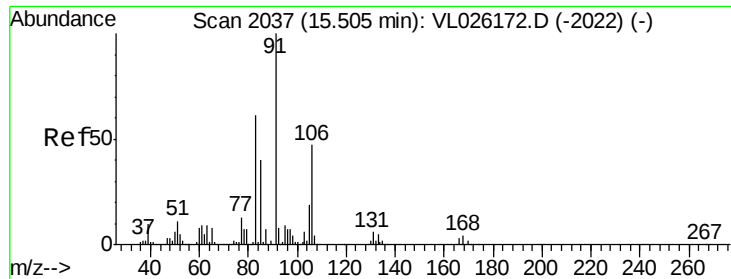
106 48.2 40.2 60.4



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





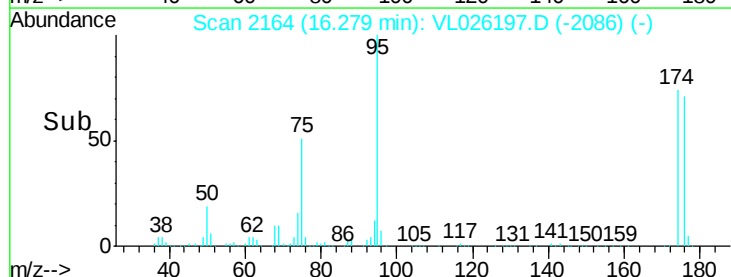
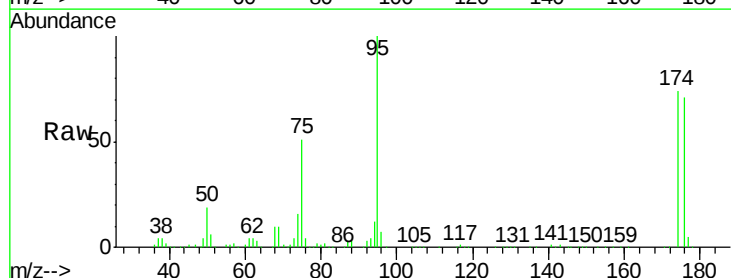
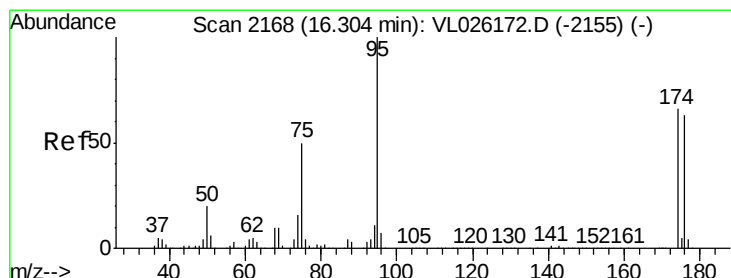
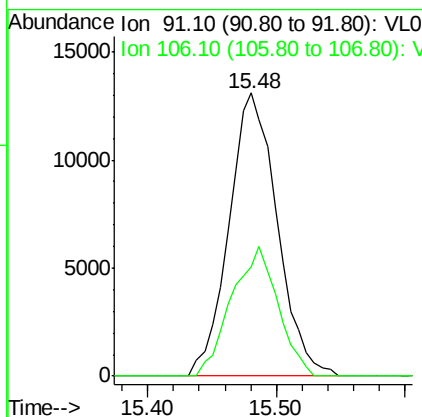
#60
o-Xylene
Concen: 0.20 ppbv
RT: 15.48 min Scan# 2033
Delta R.T. -0.02 min
Lab File: VL026197.D
Acq: 10 Oct 2015 4:56

Tot Ion: 91 Resp: 33972
Ion Ratio Lower Upper
91 100
106 44.1 23.4 70.3

Instrument :
MSVOA_L
ClientSampled :
SG-2

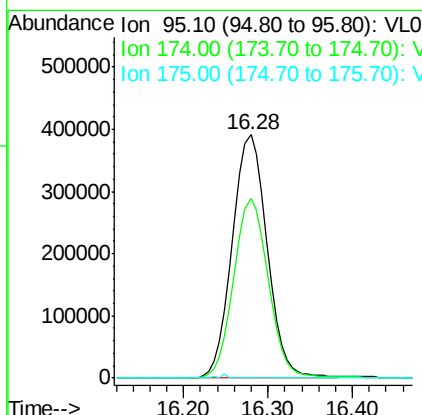
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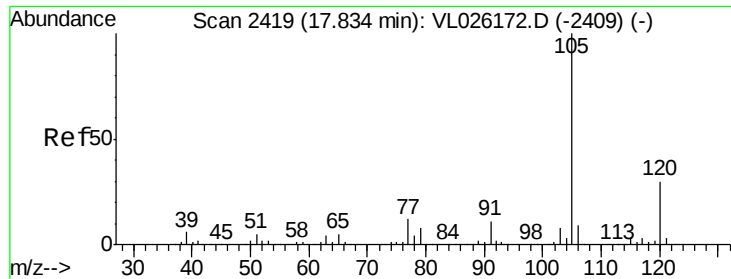
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.41 ppbv
RT: 16.28 min Scan# 2164
Delta R.T. -0.02 min
Lab File: VL026197.D
Acq: 10 Oct 2015 4:56

Tgt Ion: 95 Resp: 1101350
Ion Ratio Lower Upper
95 100
174 73.9 52.2 78.4
175 0.3 3.9 5.9#





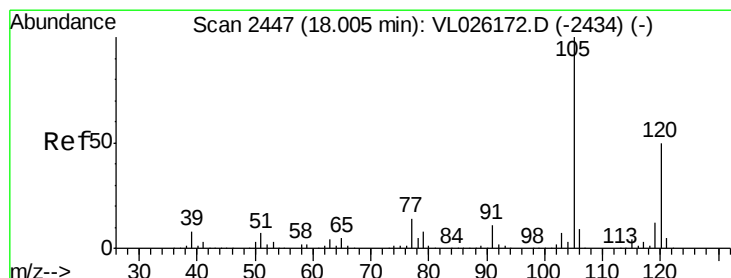
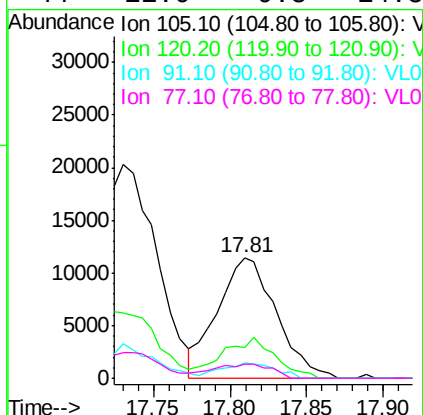
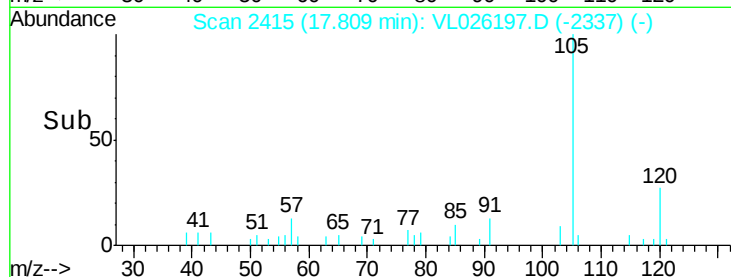
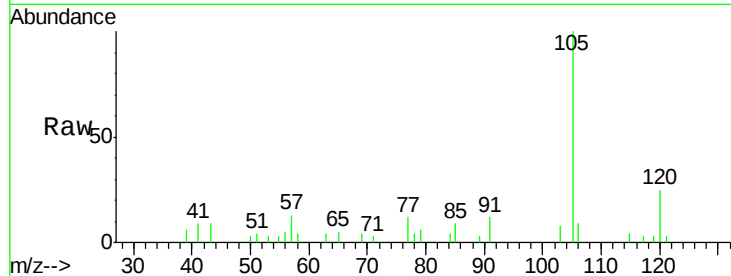
#72
 4-Ethyltoluene
 Concen: 0.17 ppbv
 RT: 17.81 min Scan# 2415
 Delta R.T. -0.02 min
 Lab File: VL026197.D
 Acq: 10 Oct 2015 4:56

Instrument :
 MSVOA_L
 ClientSampled :
 SG-2

Tot Ion	Ratio	Resp	Lower	Upper
105	100			
120	29.1	24.7	37.1	
91	11.3	9.2	13.8	
77	11.0	9.8	14.8	

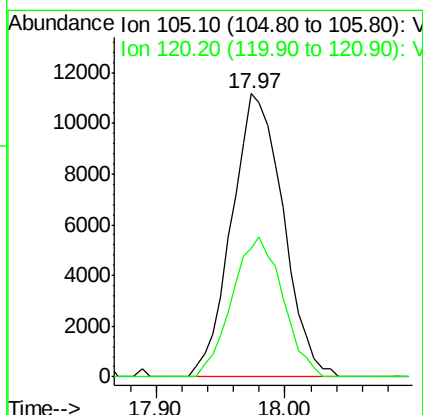
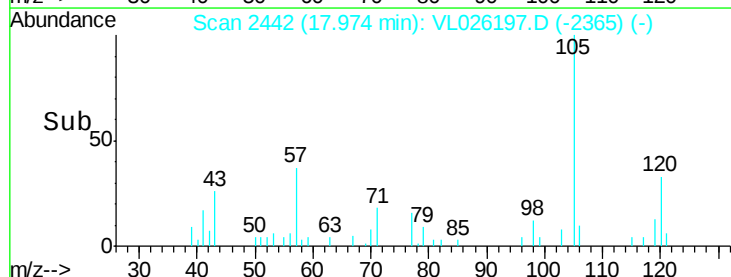
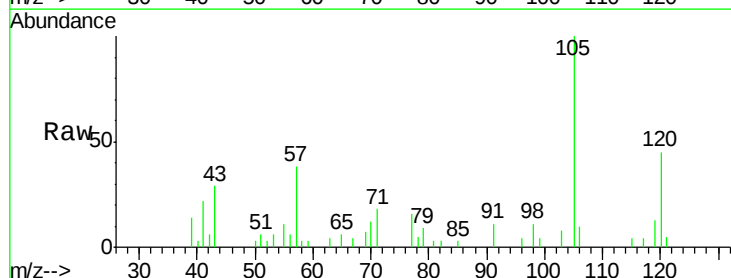
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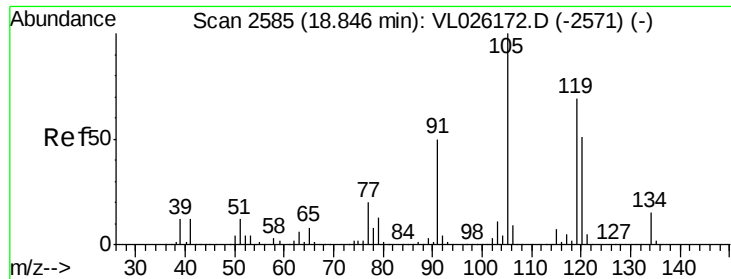
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#73
 1,3,5-Trimethylbenzene
 Concen: 0.18 ppbv
 RT: 17.97 min Scan# 2442
 Delta R.T. -0.03 min
 Lab File: VL026197.D
 Acq: 10 Oct 2015 4:56

Tgt Ion	Ratio	Resp	Lower	Upper
105	100			
120	45.2	40.1	60.1	





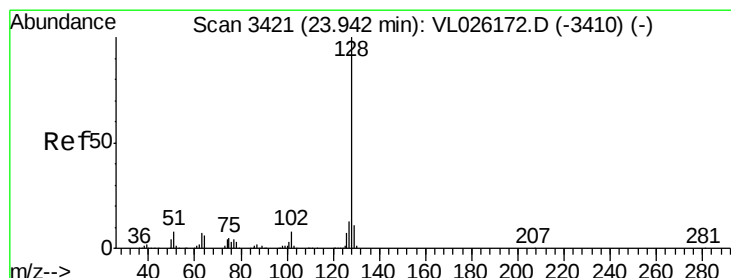
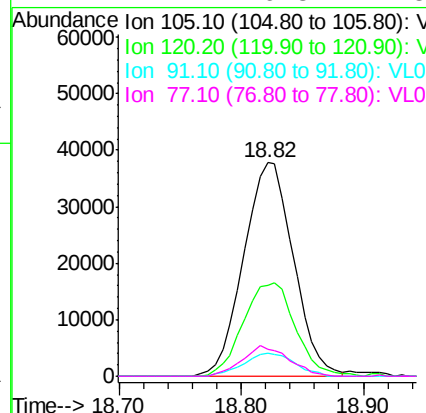
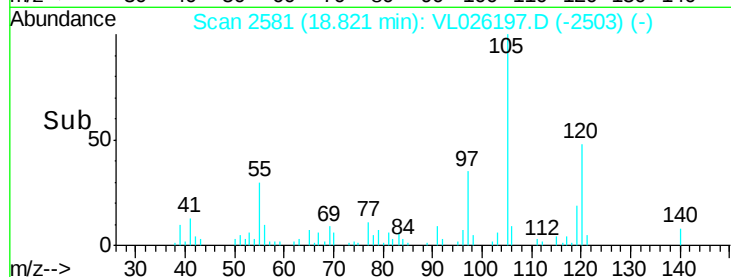
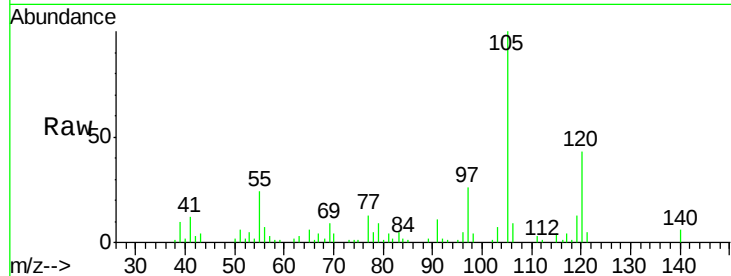
#74
 1,2,4-Trimethylbenzene
 Concen: 0.61 ppbv
 RT: 18.82 min Scan# 2581
 Delta R.T. -0.02 min
 Lab File: VL026197.D
 Acq: 10 Oct 2015 4:56

Instrument :
 MSVOA_L
 ClientSampled :
 SG-2

Tot Ion	Ratio	Resp	Lower	Upper
105	100	107174		
120	42.7		41.1	61.7
91	10.6		39.8	59.6#
77	12.7		16.3	24.5#

Manual Integrations
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#79
 Naphthalene
 Concen: 0.15 ppbv
 RT: 23.94 min Scan# 3420
 Delta R.T. -0.01 min
 Lab File: VL026197.D
 Acq: 10 Oct 2015 4:56

Tgt Ion	Ratio	Resp	Lower	Upper
128	100	17087		
127	11.7		10.2	15.2
129	13.2		8.7	13.1#

