

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL061319\
 Data File : VL033917.D
 Acq On : 14 Jun 2019 4:10
 Operator : SY/AP
 Sample : K3367-02
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA2-2NDFLR

Manual Integrations
 APPROVED

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 6/20/2019 8:59:24 AM

Quant Time: Jun 16 18:11:29 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL060719AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun 0
 QLast Update : Fri Jun 07 08:53:27 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.75	49	930791	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.27	114	2087829	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.23	117	2060971	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.56	95	1752937	10.35	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.50%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.07	85	58092	0.385	ppbv	90
3) Chlorodifluoromethane	3.01	51	61380m	0.560	ppbv	
4) Chloromethane	3.16	50	34356	0.550	ppbv	92
9) Propene	3.04	41	99267m	2.421	ppbv	
10) Heptane	8.24	43	23223m	0.224	ppbv	
11) Trichlorofluoromethane	4.00	101	41404	0.212	ppbv	85
13) Ethanol	3.67	45	13602906	1019.710	ppbv	99
15) Acetone	3.89	43	1971743	14.525	ppbv	99
19) Isopropyl Alcohol	4.05	45	341941	4.409	ppbv #	1
20) Methylene Chloride	4.40	84	39499m	0.746	ppbv	
25) Ethyl Acetate	5.76	43	244486	1.183	ppbv #	96
26) Hexane	5.76	57	78424	0.833	ppbv #	62
29) Chloroform	5.83	83	127267	0.789	ppbv	97
30) Cyclohexane	7.23	84	11826m	0.178	ppbv	
34) 2-Butanone	5.32	43	52084	0.442	ppbv	97
35) Carbon Tetrachloride	7.12	117	12077	0.075	ppbv #	80
36) Benzene	6.98	78	73659	0.462	ppbv #	91
44) 2,2,4-Trimethylpentane	7.98	57	110727	0.390	ppbv #	75
52) Tetrachloroethene	11.36	164	749935	13.364	ppbv	96
53) Toluene	9.93	91	498003	2.822	ppbv	100
58) Ethyl Benzene	12.85	91	40214	0.173	ppbv	99
59) m/p-Xylene	13.11	91	132290	0.626	ppbv	97
60) o-Xylene	13.83	91	52774	0.242	ppbv	99
72) 4-Ethyltoluene	15.98	105	59729m	0.241	ppbv	
73) 1,3,5-Trimethylbenzene	16.14	105	53520m	0.219	ppbv	
74) 1,2,4-Trimethylbenzene	16.91	105	200502	0.711	ppbv #	69
76) 1,4-Dichlorobenzene	17.29	146	26663m	0.165	ppbv	

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

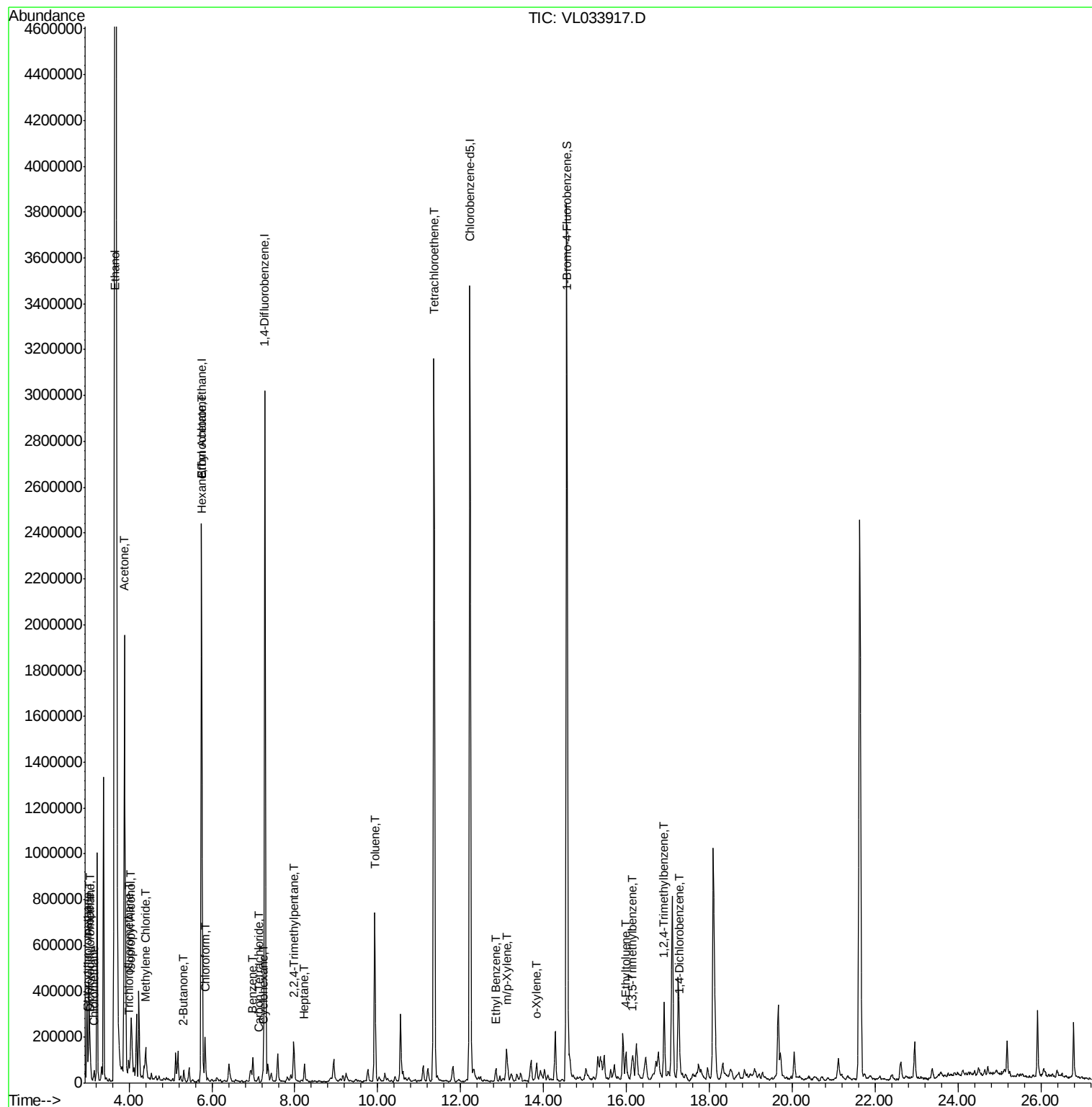
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL061319\
Data File : VL033917.D
Acq On : 14 Jun 2019 4:10
Operator : SY/AP
Sample : K3367-02
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

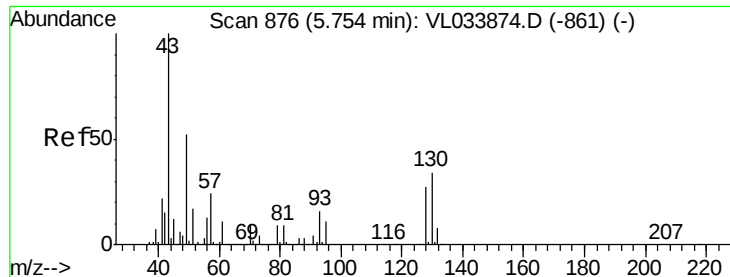
Instrument :
MSVOA_L
ClientSampleId :
IA2-2NDFLR

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6/20/2019 8:59:24 AM

Quant Time: Jun 16 18:11:29 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL060719AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun
QLast Update : Fri Jun 07 08:53:27 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.75 min Scan# 874

Delta R.T. -0.01 min

Lab File: VL033917.D

Acq: 14 Jun 2019 4:10

Instrument :

MSVOA_L

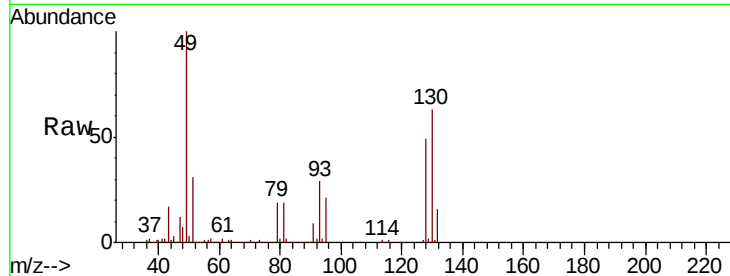
ClientSampleId :

IA2-2NDFLR

Tot Ion	Ratio	Lower	Upper
49	100		
128	51.0	25.5	76.5
130	65.5	32.5	97.4

Manual Integrations
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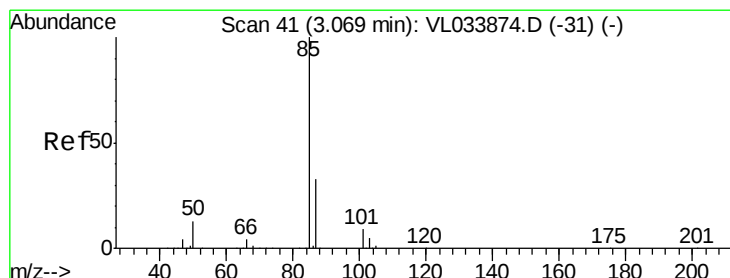
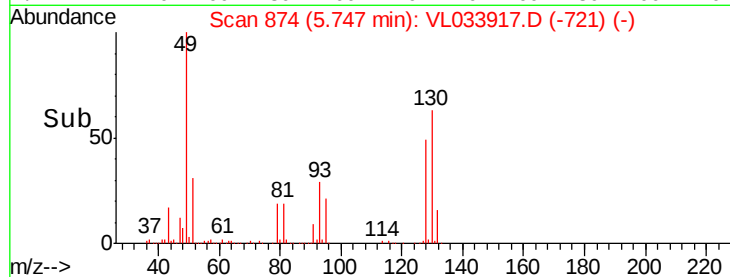
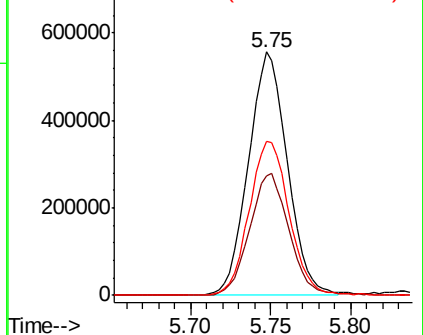


Abundance

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: 0.385 ppbv

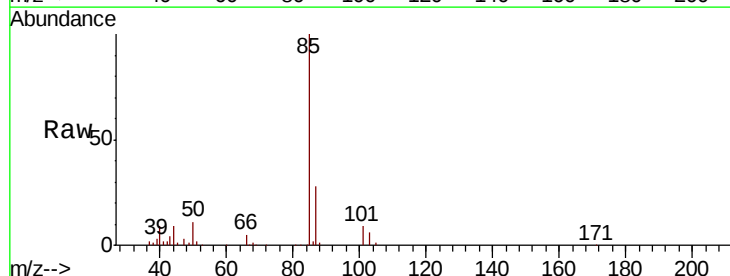
RT: 3.07 min Scan# 41

Delta R.T. -0.00 min

Lab File: VL033917.D

Acq: 14 Jun 2019 4:10

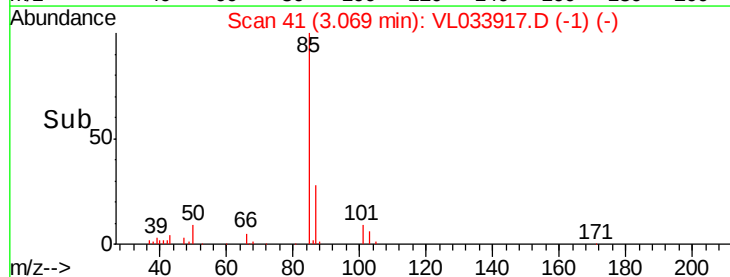
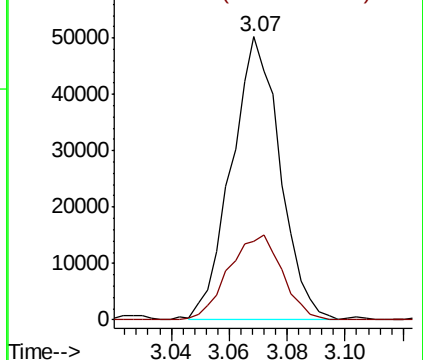
Tgt Ion	Ratio	Lower	Upper
85	100		
87	27.7	26.6	40.0

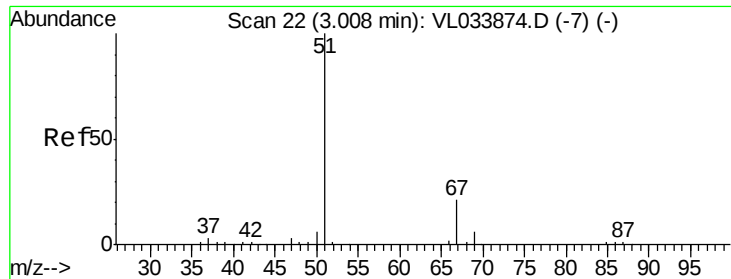


Abundance

Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

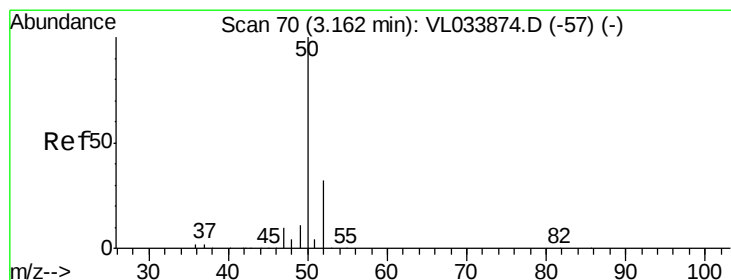
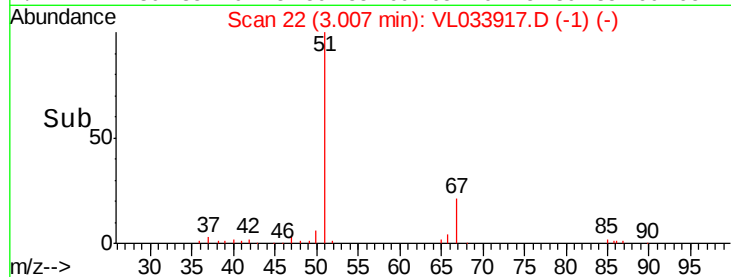
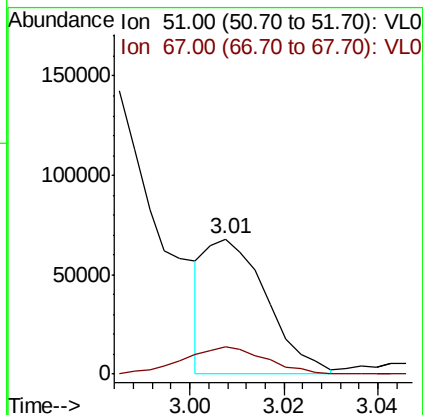
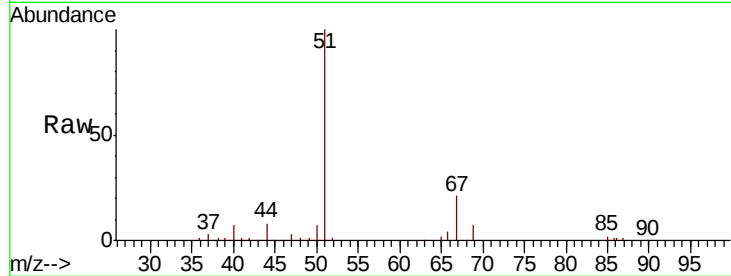
Chlorodifluoromethane
Concen: 0.560 ppbv
RT: 3.01 min Scan# 22
Delta R.T. -0.00 min
Lab File: VL033917.D
Acq: 14 Jun 2019 4:10

Instrument :
MSVOA_L
ClientSampleId :
IA2-2NDFLR

Tot Ion	Ion	Ratio	Lower	Upper
51	100			
67	27.7	16.4	24.6	

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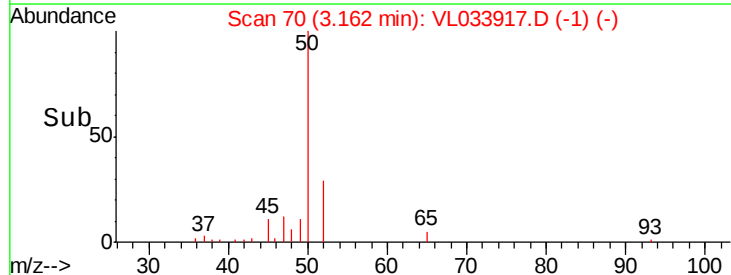
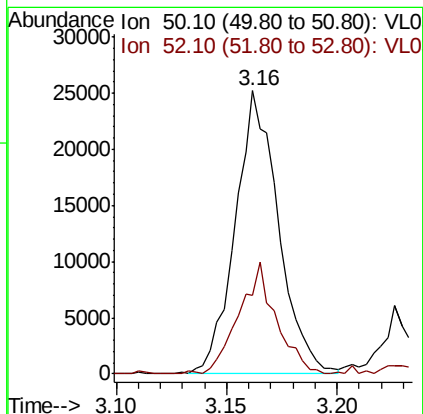
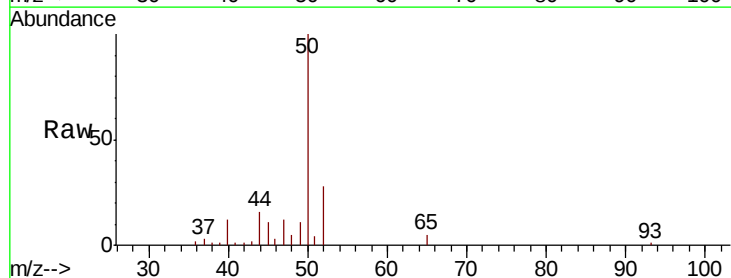
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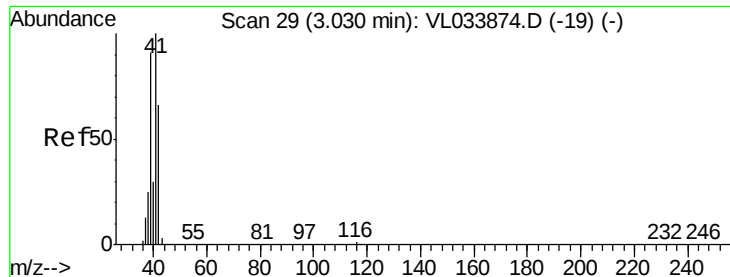


#4

Chloromethane
Concen: 0.550 ppbv
RT: 3.16 min Scan# 70
Delta R.T. -0.00 min
Lab File: VL033917.D
Acq: 14 Jun 2019 4:10

Tgt Ion	Ion	Ratio	Lower	Upper
50	100			
52	27.1	25.4	38.0	





#9

Propene

Concen: 2.421 ppbv m

RT: 3.04 min Scan# 32

Delta R.T. 0.01 min

Lab File: VL033917.D

Acq: 14 Jun 2019 4:10

Instrument :

MSVOA_L

ClientSampleId :

IA2-2NDFLR

Tot Ion: 41 Resp: 99267

Ion Ratio Lower Upper

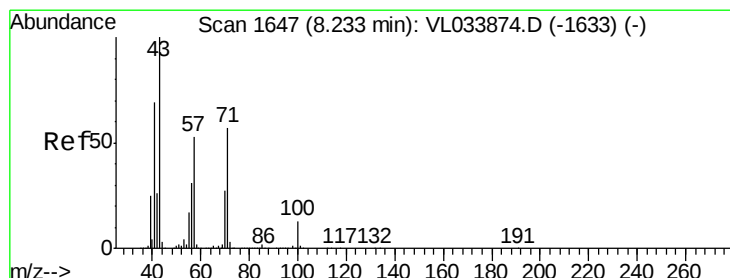
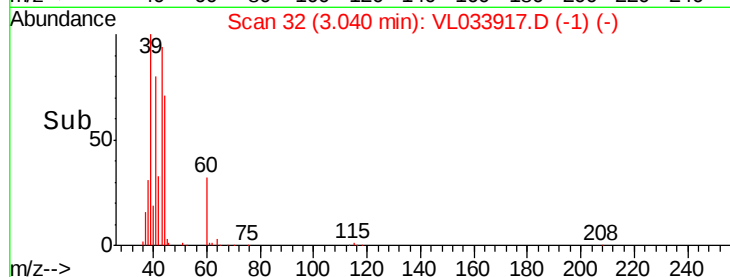
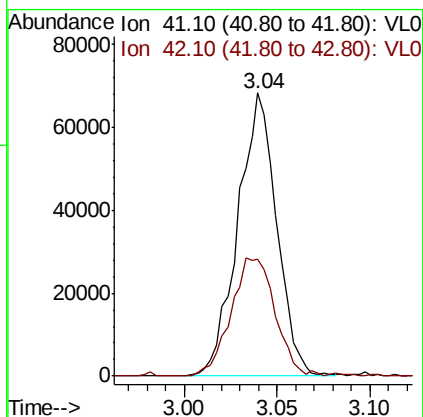
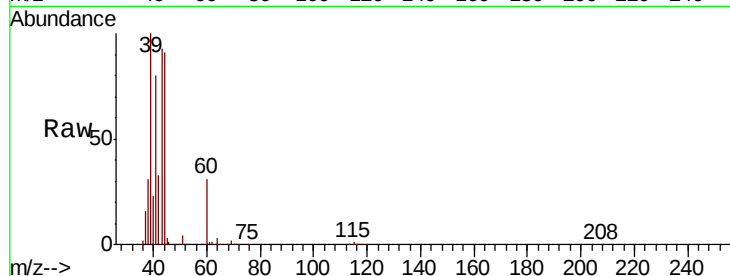
41 100

42 173.5 56.3 84.5#

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#10

Heptane

Concen: 0.224 ppbv m

RT: 8.24 min Scan# 1648

Delta R.T. 0.00 min

Lab File: VL033917.D

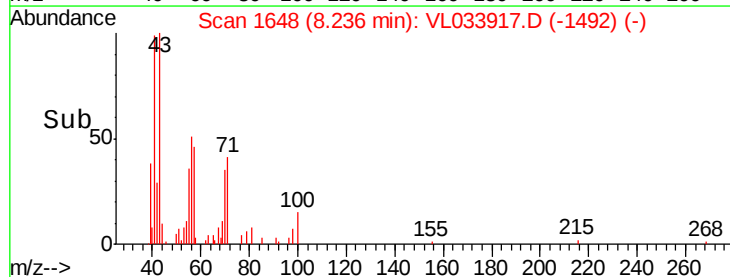
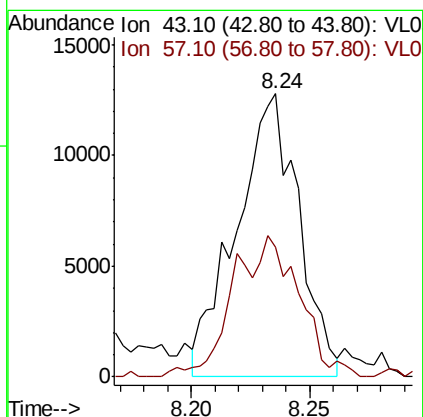
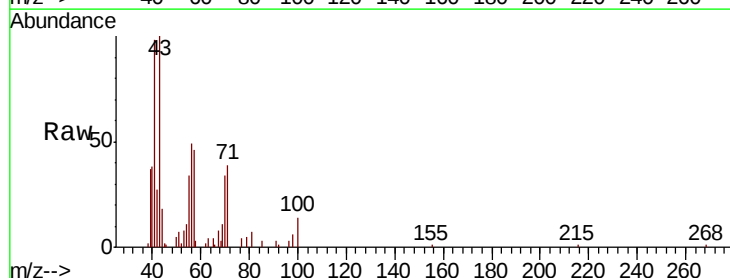
Acq: 14 Jun 2019 4:10

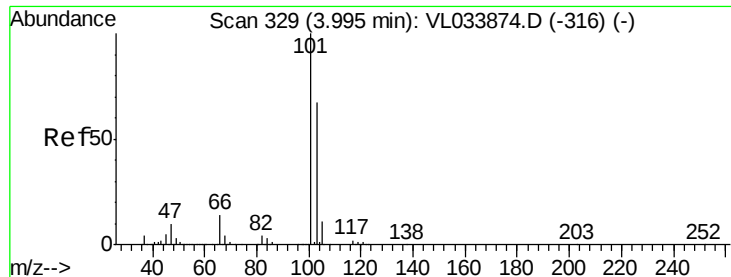
Tgt Ion: 43 Resp: 23223

Ion Ratio Lower Upper

43 100

57 0.0 41.7 62.5#





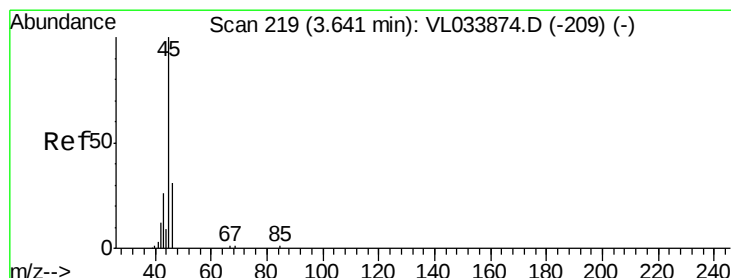
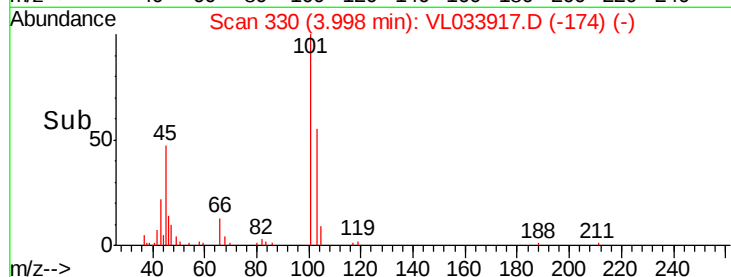
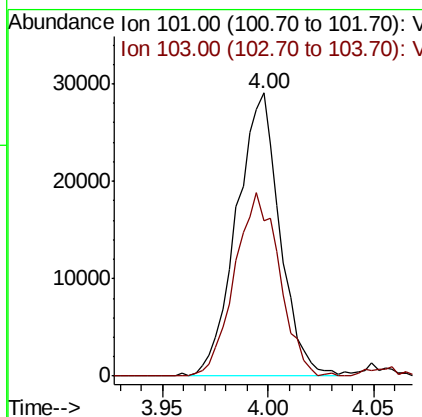
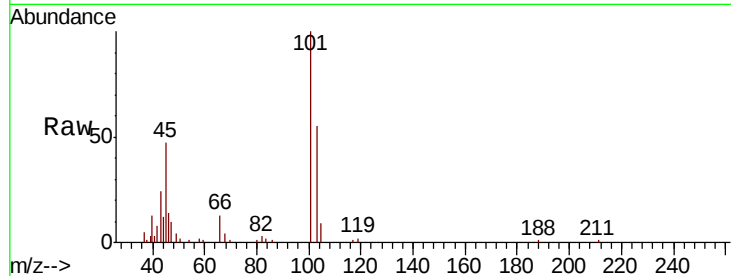
#11
 Trichlorofluoromethane
 Concen: 0.212 ppbv
 RT: 4.00 min Scan# 330
 Delta R.T. 0.00 min
 Lab File: VL033917.D
 Acq: 14 Jun 2019 4:10

Instrument :
 MSVOA_L
 ClientSampleId :
 IA2-2NDFLR

Tot Ion	Ratio	Lower	Upper
101	100		
103	55.0	53.6	80.4

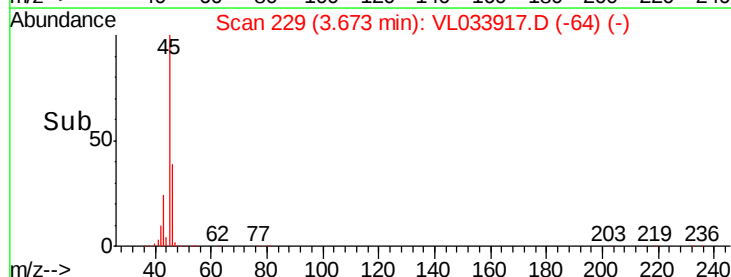
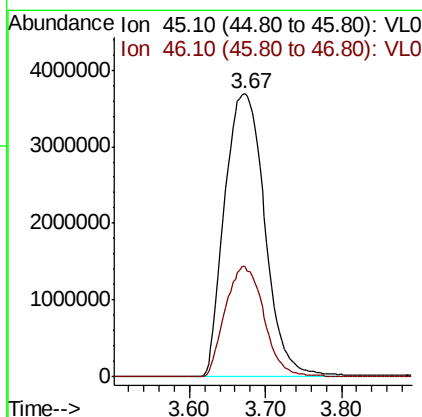
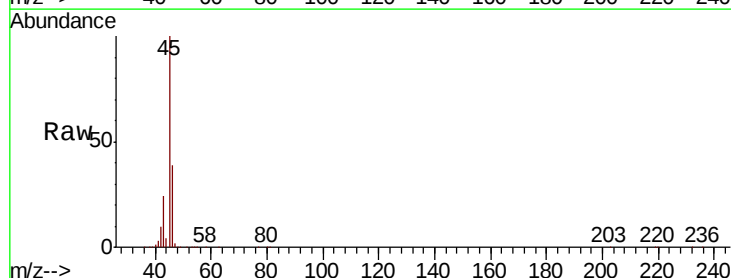
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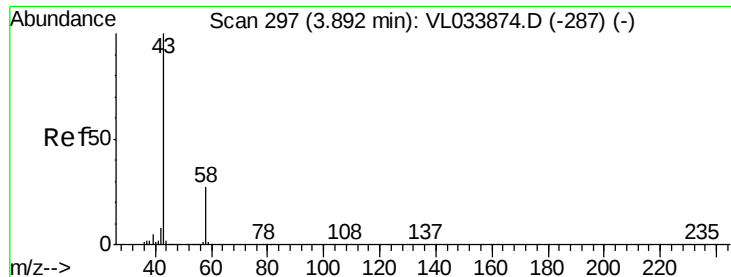
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#13
 Ethanol
 Concen: 1019.710 ppbv
 RT: 3.67 min Scan# 229
 Delta R.T. 0.03 min
 Lab File: VL033917.D
 Acq: 14 Jun 2019 4:10

Tgt Ion	Ratio	Lower	Upper
45	100		
46	37.8	15.3	61.1





#15

Acetone

Concen: 14.525 ppbv

RT: 3.89 min Scan# 296

Delta R.T. -0.00 min

Lab File: VL033917.D

Acq: 14 Jun 2019 4:10

Instrument :

MSVOA_L

ClientSampleId :

IA2-2NDFLR

Tot Ion: 43 Resp: 1971743

Ion Ratio Lower Upper

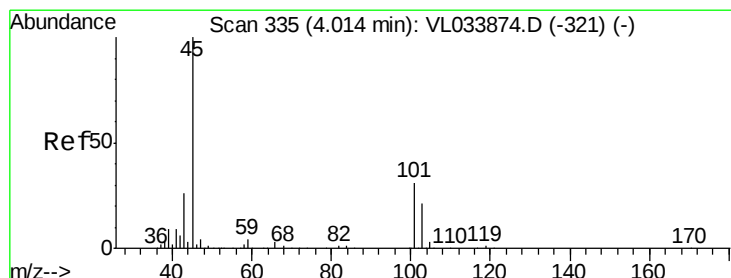
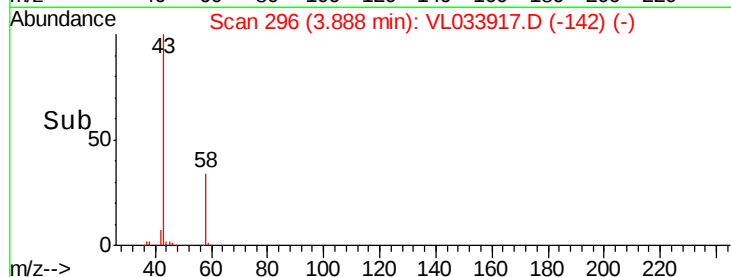
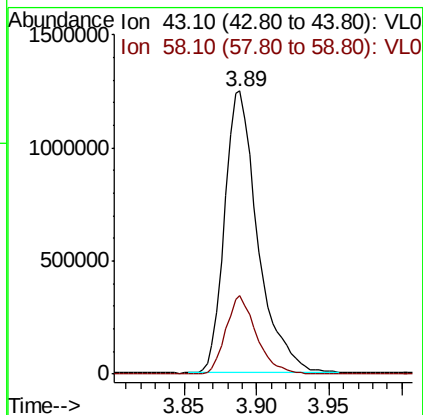
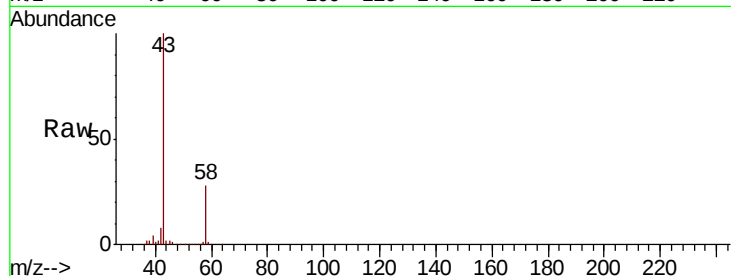
43 100

58 26.0 21.3 31.9

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#19

Isopropyl Alcohol

Concen: 4.409 ppbv

RT: 4.05 min Scan# 347

Delta R.T. 0.04 min

Lab File: VL033917.D

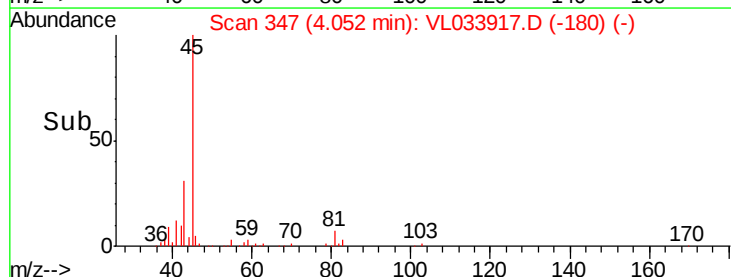
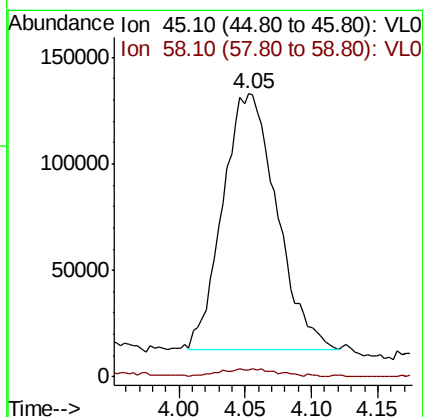
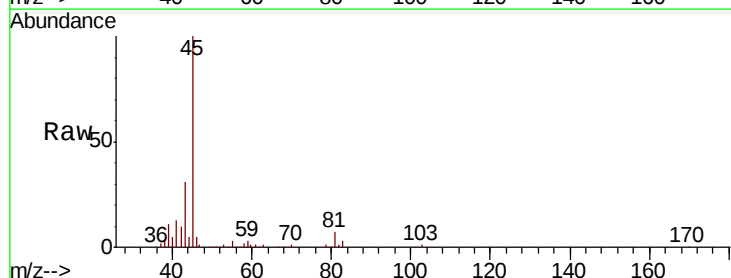
Acq: 14 Jun 2019 4:10

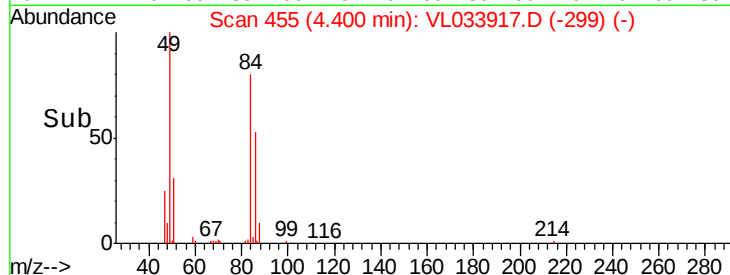
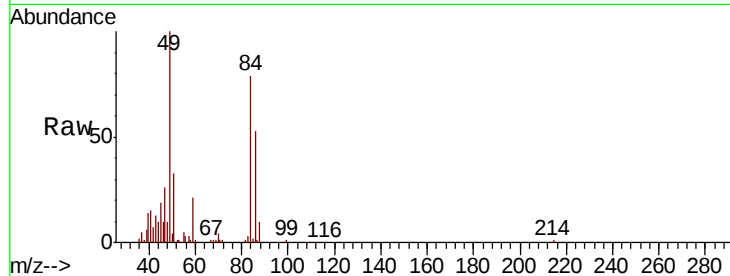
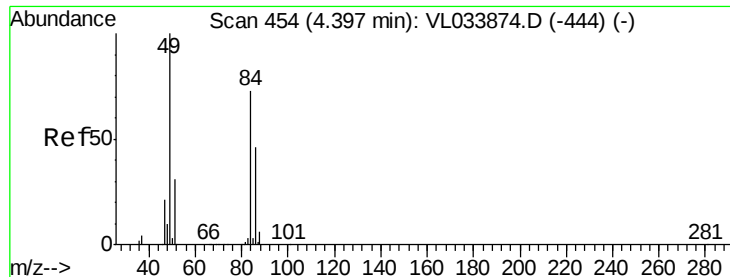
Tgt Ion: 45 Resp: 341941

Ion Ratio Lower Upper

45 100

58 149.7 1.8 2.6#





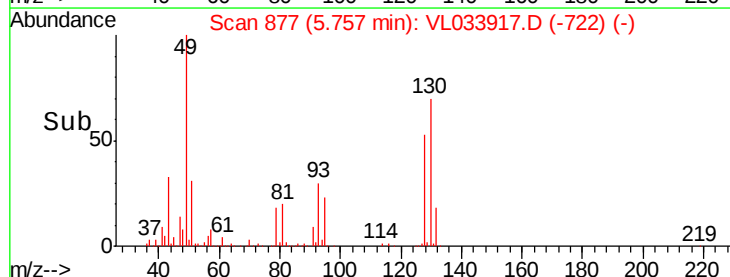
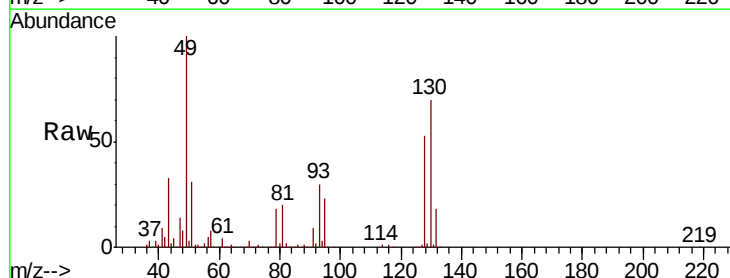
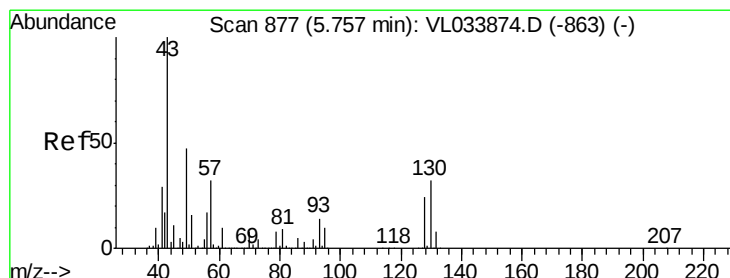
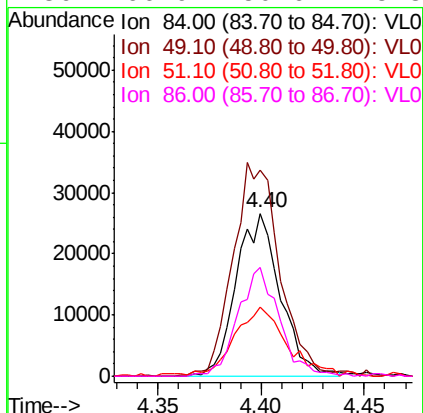
#20
Methvlene Chloride
Concen: 0.746 ppbv
RT: 4.40 min Scan# 455
Delta R.T. 0.00 min
Lab File: VL033917.D
Acq: 14 Jun 2019 4:10

Tot Ion	84	Resp	39499
Ion Ratio	Lower	Upper	
84	100		
49	126.6	110.0	165.0
51	42.2	34.6	51.8
86	66.9	50.6	75.8

Instrument :
MSVOA_L
ClientSampleId :
IA2-2NDFLR

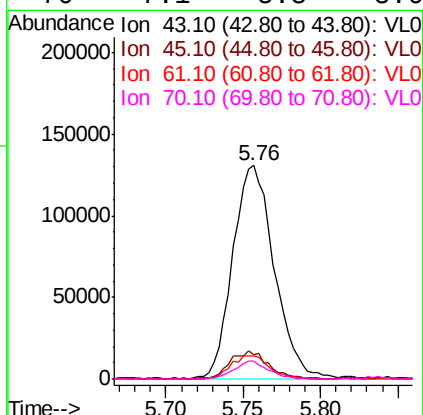
Manual Integrations
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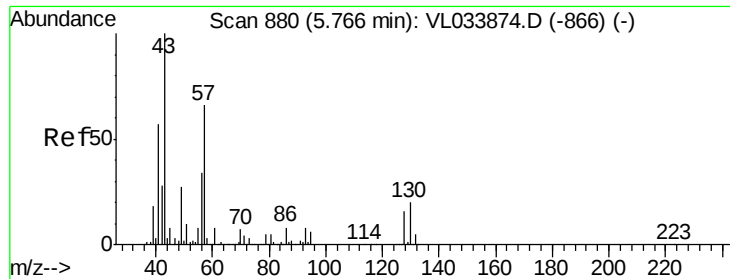
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#25
Ethyl Acetate
Concen: 1.183 ppbv
RT: 5.76 min Scan# 877
Delta R.T. -0.00 min
Lab File: VL033917.D
Acq: 14 Jun 2019 4:10

Tgt Ion	43	Resp	244486
Ion Ratio	Lower	Upper	
43	100		
45	13.1	7.9	11.9#
61	10.0	7.8	11.6
70	7.1	5.8	8.6





#26

Hexane

Concen: 0.833 ppbv

RT: 5.76 min Scan# 879

Delta R.T. -0.00 min

Lab File: VL033917.D

Acq: 14 Jun 2019 4:10

Instrument :

MSVOA_L

ClientSampleId :

IA2-2NDFLR

Tot Ion: 57 Resp: 78424

Ion Ratio Lower Upper

57 100

41 107.5 71.4 107.2#

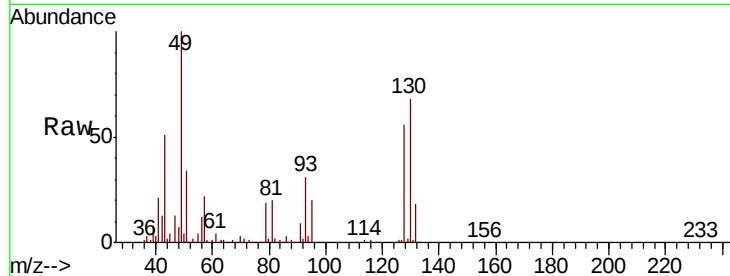
43 314.7 183.7 275.5#

56 60.3 42.7 64.1

Manual Integrations
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6/20/2019 8:59:24 AM

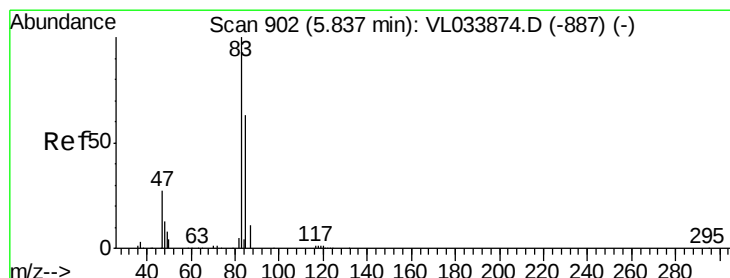
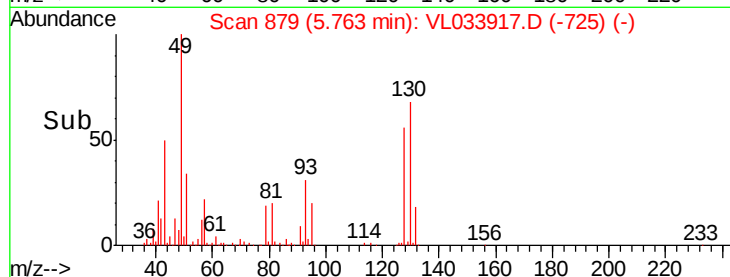
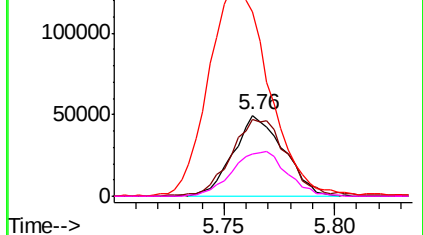


Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



#29

Chloroform

Concen: 0.789 ppbv

RT: 5.83 min Scan# 901

Delta R.T. -0.00 min

Lab File: VL033917.D

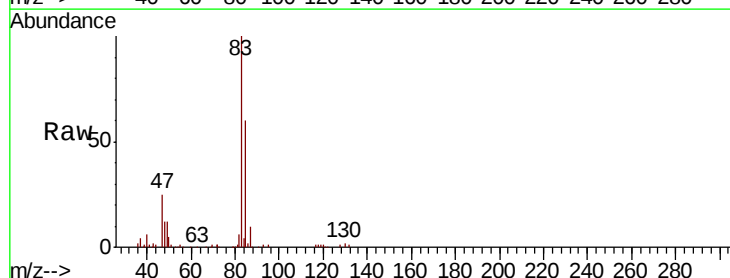
Acq: 14 Jun 2019 4:10

Tgt Ion: 83 Resp: 127267

Ion Ratio Lower Upper

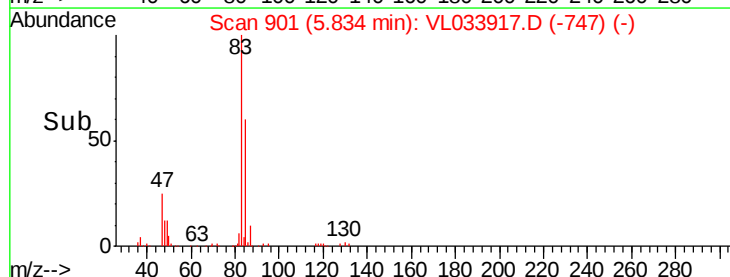
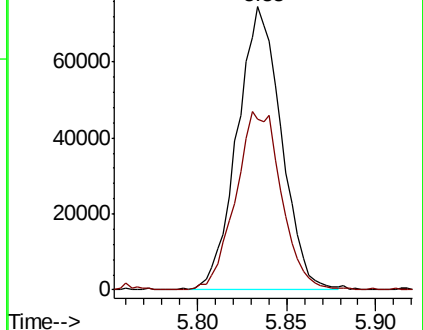
83 100

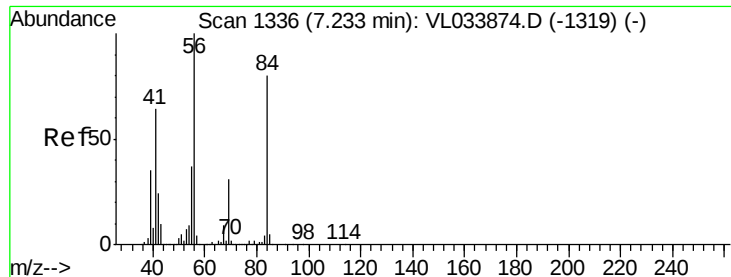
85 60.5 50.5 75.7



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0





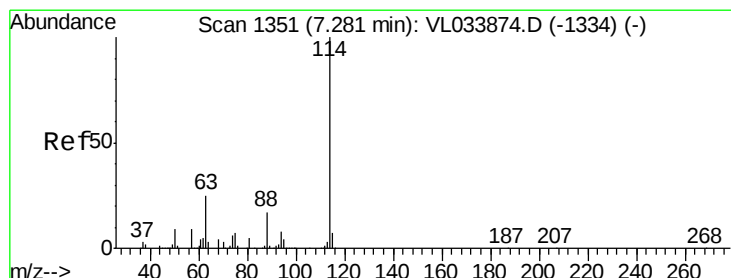
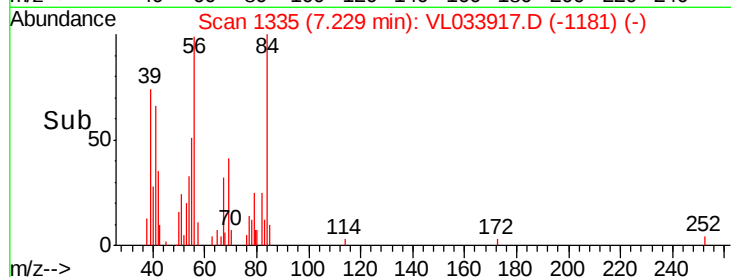
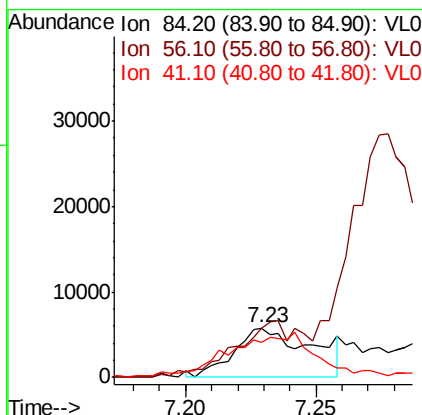
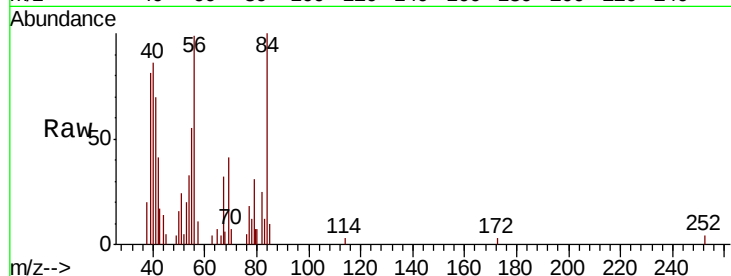
#30
Cvclohexane
Concen: 0.178 ppbv m
RT: 7.23 min Scan# 1335
Delta R.T. -0.00 min
Lab File: VL033917.D
Acq: 14 Jun 2019 4:10

Instrument :
MSVOA_L
ClientSampleId :
IA2-2NDFLR

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	105.8	158.8#
41	0.0	65.7	98.5#

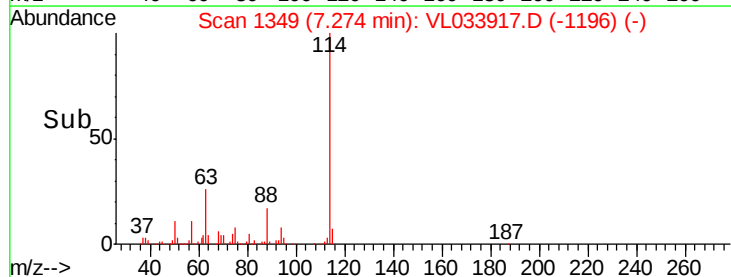
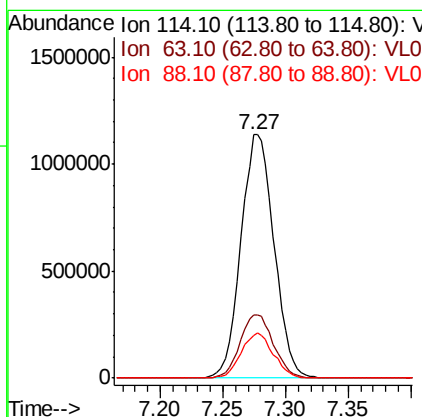
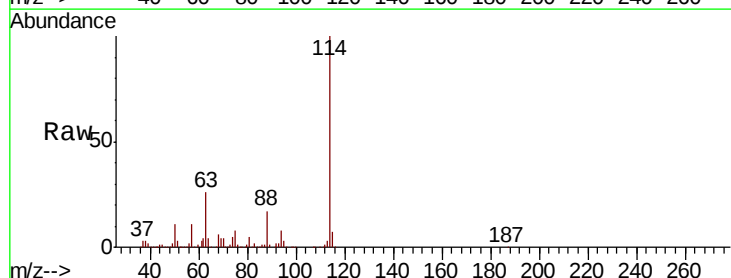
Manual Integrations
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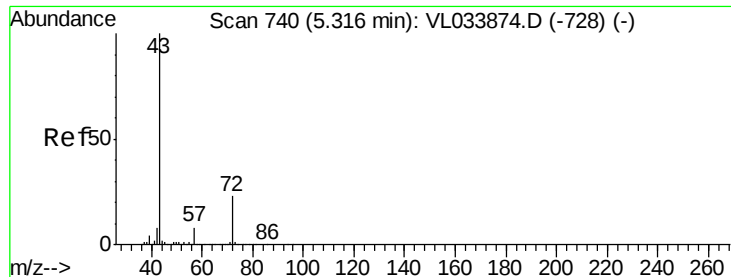
MMDadoda
6/20/2019 8:59:24 AM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.27 min Scan# 1349
Delta R.T. -0.01 min
Lab File: VL033917.D
Acq: 14 Jun 2019 4:10

Tgt Ion	Ratio	Lower	Upper
114	100		
63	26.3	21.1	31.7
88	17.9	14.2	21.4





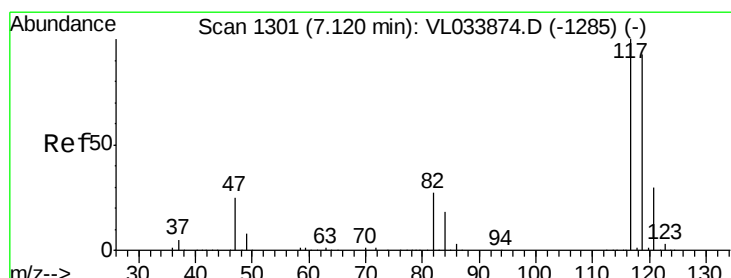
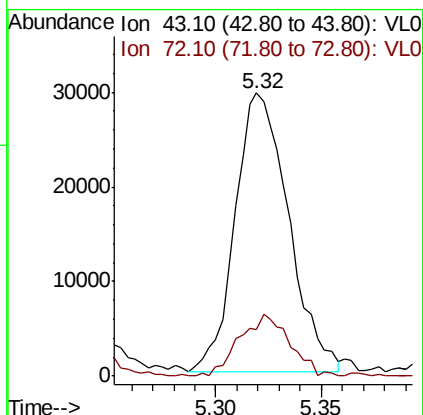
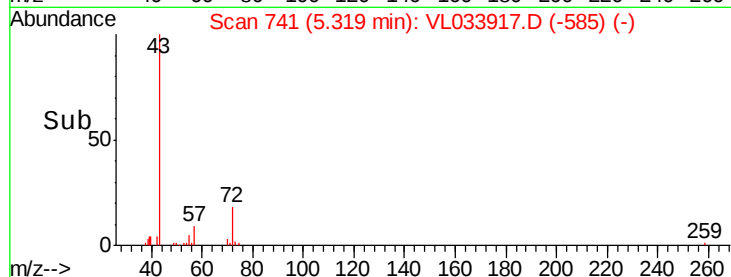
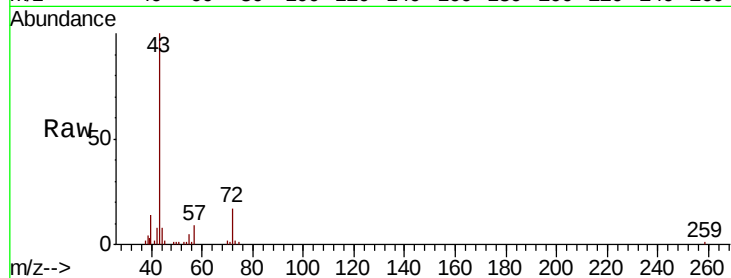
#34
2-Butanone
Concen: 0.442 ppbv
RT: 5.32 min Scan# 741
Delta R.T. 0.00 min
Lab File: VL033917.D
Acq: 14 Jun 2019 4:10

Instrument :
MSVOA_L
ClientSampleId :
IA2-2NDFLR

Tot Ion: 43 Resp: 52084
Ion Ratio Lower Upper
43 100
72 21.2 17.9 26.9

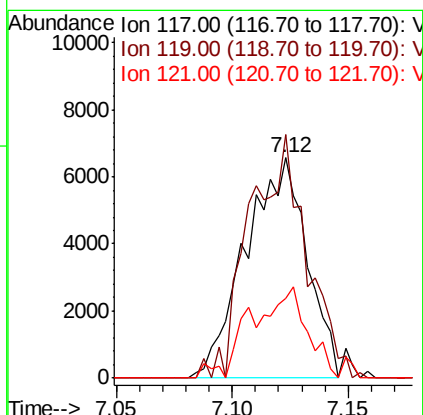
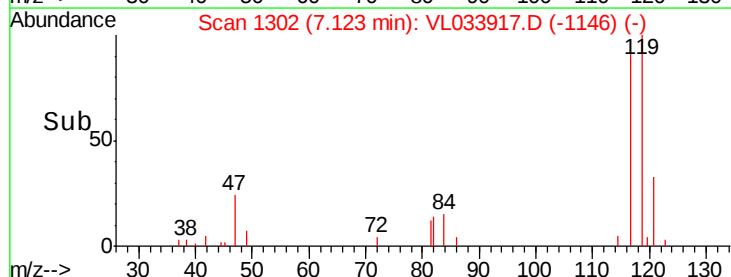
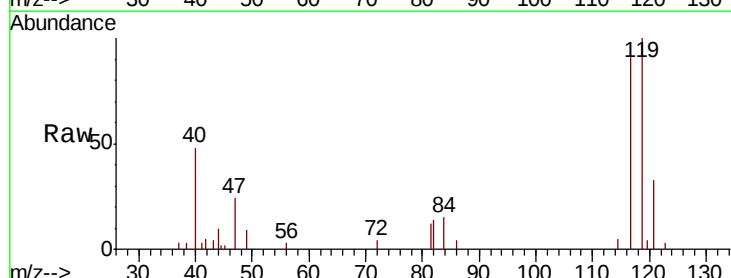
Manual Integrations
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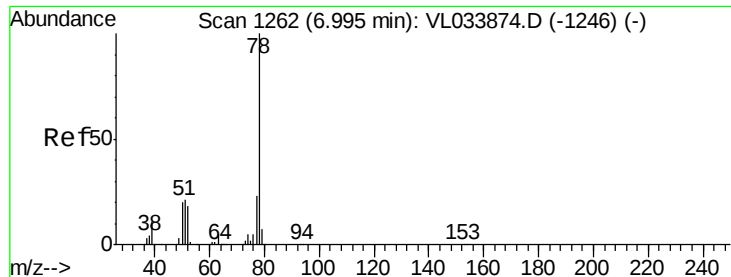
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#35
Carbon Tetrachloride
Concen: 0.075 ppbv
RT: 7.12 min Scan# 1302
Delta R.T. 0.00 min
Lab File: VL033917.D
Acq: 14 Jun 2019 4:10

Tgt Ion: 117 Resp: 12077
Ion Ratio Lower Upper
117 100
119 114.5 74.6 111.8#
121 36.1 24.0 36.0#





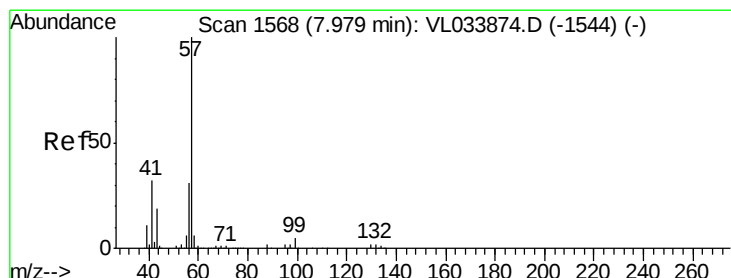
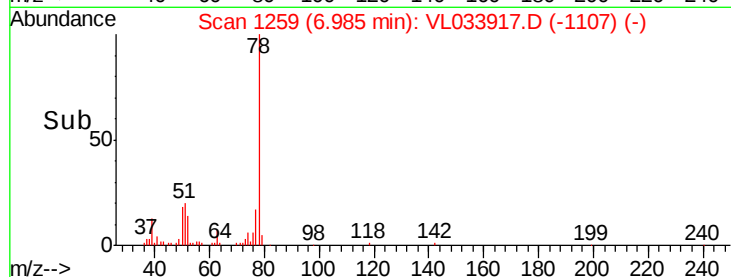
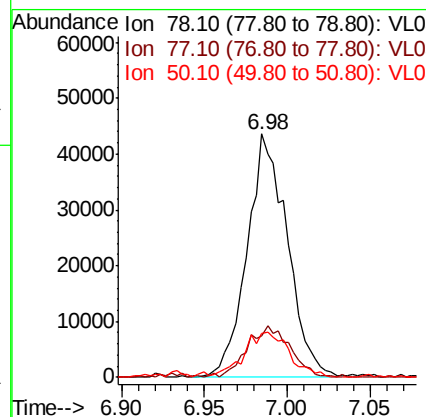
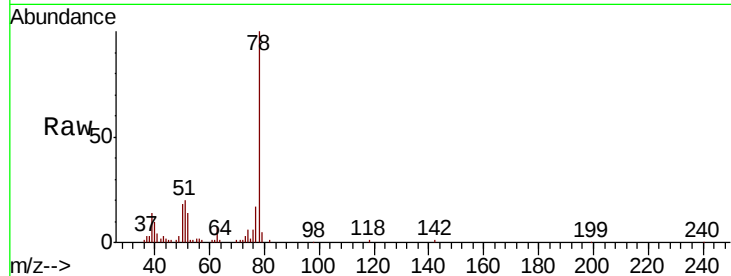
#36
Benzene
Concen: 0.462 ppbv
RT: 6.98 min Scan# 1259
Delta R.T. -0.01 min
Lab File: VL033917.D
Acq: 14 Jun 2019 4:10

Instrument :
MSVOA_L
ClientSampleId :
IA2-2NDFLR

Tot Ion	Ratio	Lower	Upper
78	100		
77	16.2	18.2	27.2#
50	18.0	15.9	23.9

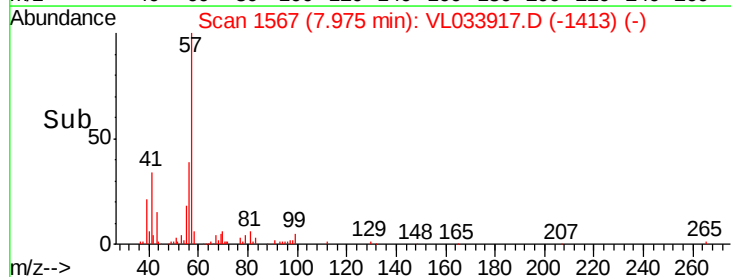
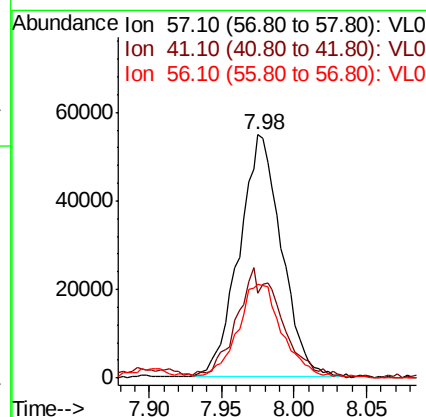
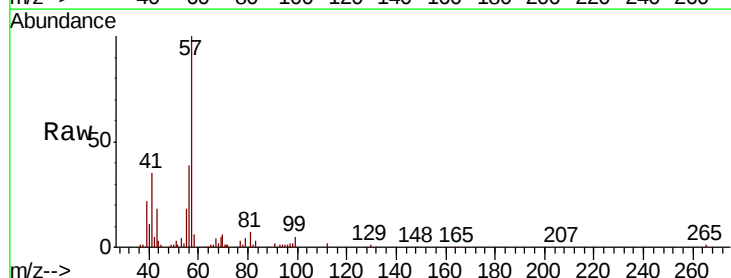
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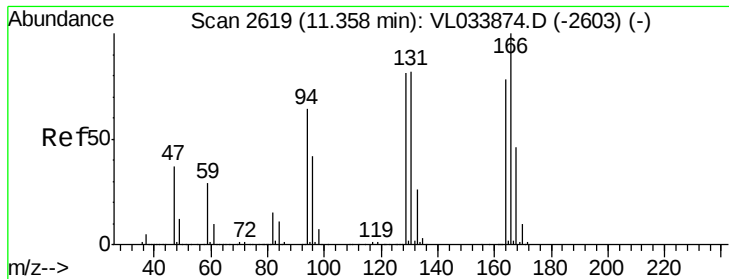
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#44
2,2,4-Trimethylpentane
Concen: 0.390 ppbv
RT: 7.98 min Scan# 1567
Delta R.T. -0.00 min
Lab File: VL033917.D
Acq: 14 Jun 2019 4:10

Tgt Ion	Ratio	Lower	Upper
57	100		
41	49.7	26.1	39.1#
56	41.6	24.6	36.8#





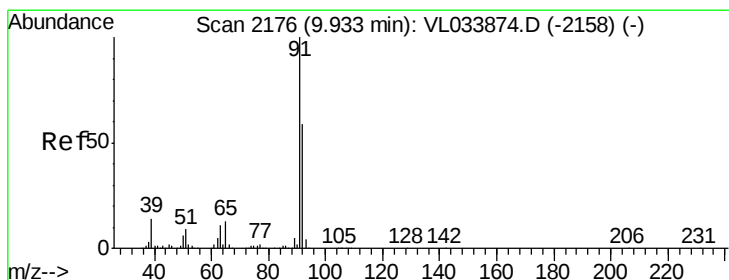
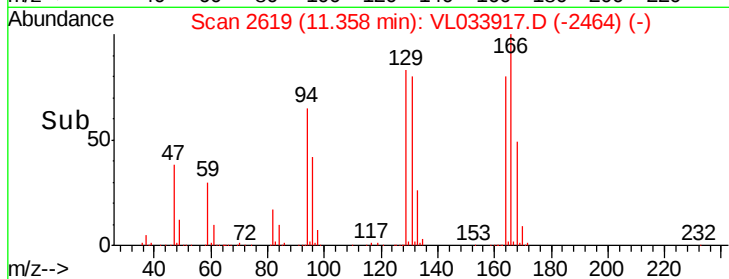
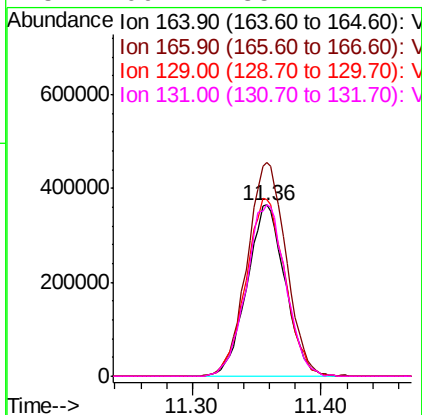
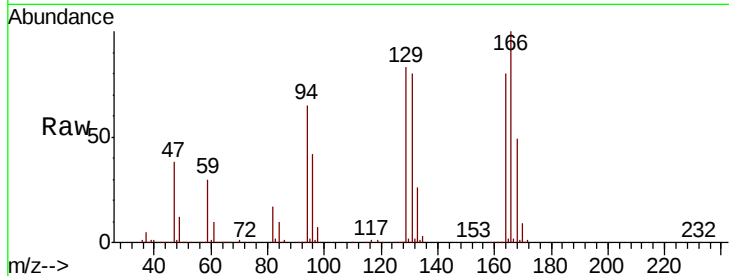
#52
Tetrachloroethene
Concen: 13.364 ppbv
RT: 11.36 min Scan# 2619
Delta R.T. -0.00 min
Lab File: VL033917.D
Acq: 14 Jun 2019 4:10

Instrument :
MSVOA_L
ClientSampleId :
IA2-2NDFLR

Tot Ion	Ratio	Lower	Upper
164	100		
166	124.7	103.1	154.7
129	102.9	83.9	125.9
131	100.2	85.1	127.7

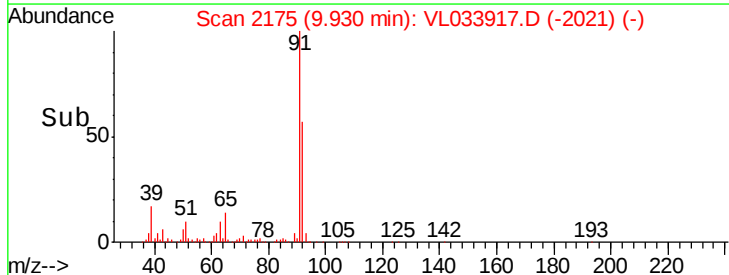
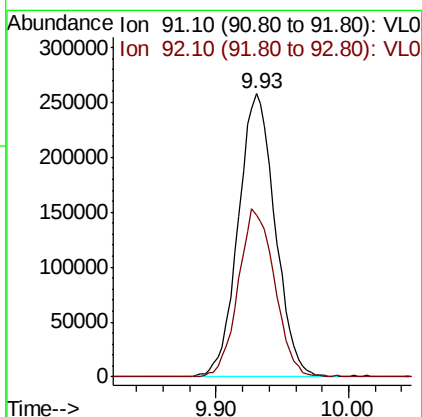
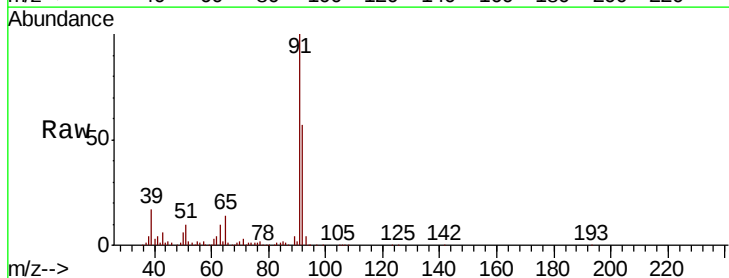
Manual Integrations
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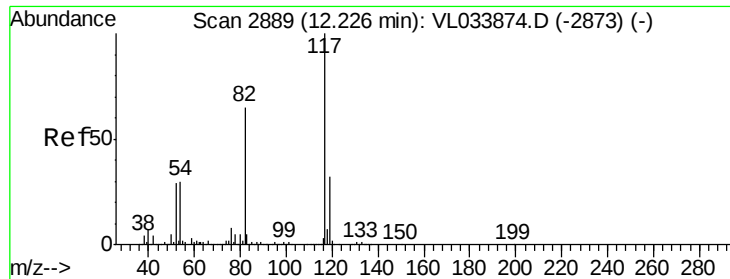
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#53
Toluene
Concen: 2.822 ppbv
RT: 9.93 min Scan# 2175
Delta R.T. -0.00 min
Lab File: VL033917.D
Acq: 14 Jun 2019 4:10

Tgt Ion	Ratio	Lower	Upper
91	100		
92	58.8	47.0	70.6





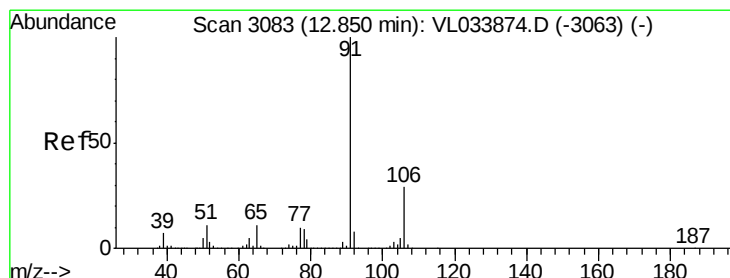
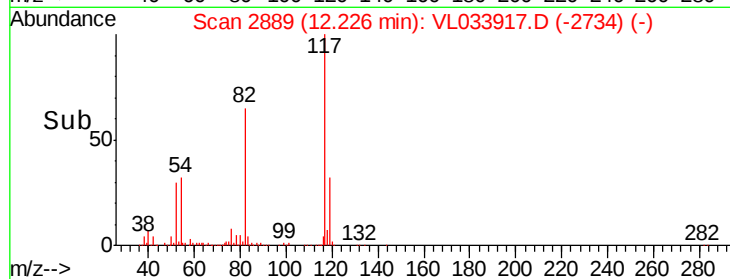
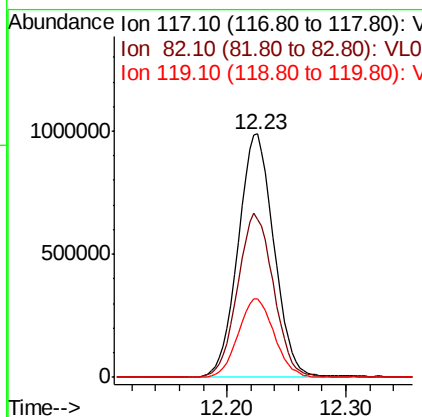
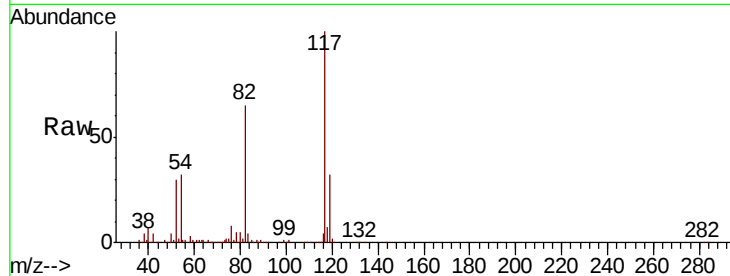
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.23 min Scan# 2889
Delta R.T. -0.00 min
Lab File: VL033917.D
Acq: 14 Jun 2019 4:10

Instrument :
MSVOA_L
ClientSampleId :
IA2-2NDFLR

Tot Ion	Ratio	Lower	Upper
117	100		
82	68.2	50.2	75.2
119	32.9	24.8	37.2

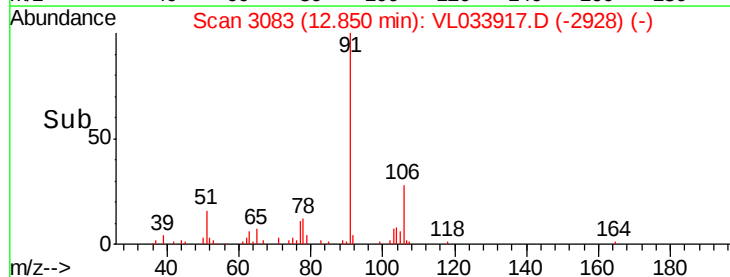
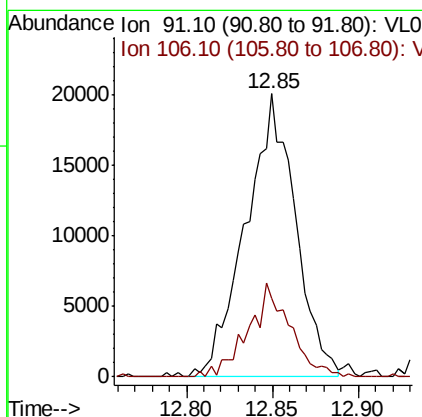
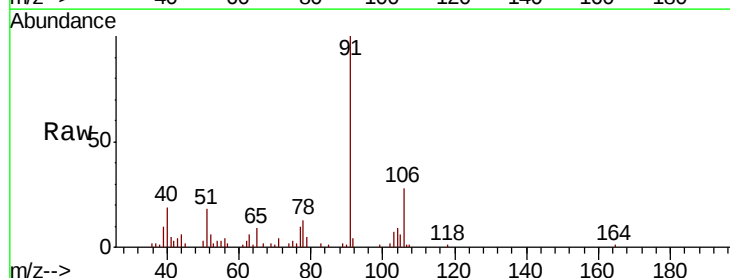
Manual Integrations
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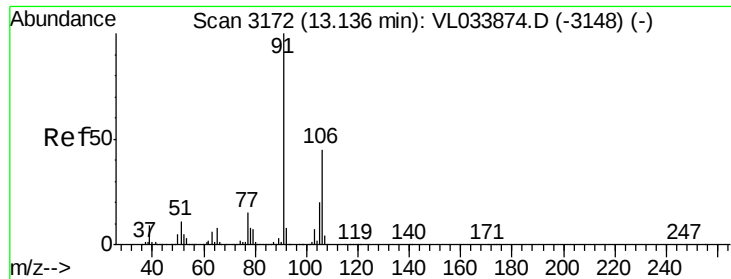
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#58
Ethyl Benzene
Concen: 0.173 ppbv
RT: 12.85 min Scan# 3083
Delta R.T. -0.00 min
Lab File: VL033917.D
Acq: 14 Jun 2019 4:10

Tgt Ion	Ratio	Lower	Upper
91	100		
106	28.2	23.0	34.6





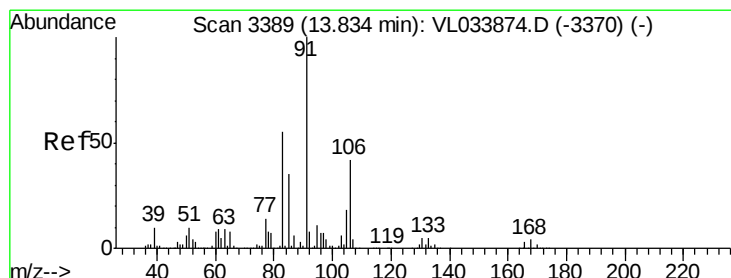
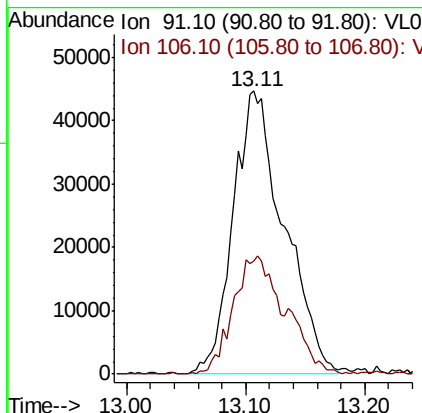
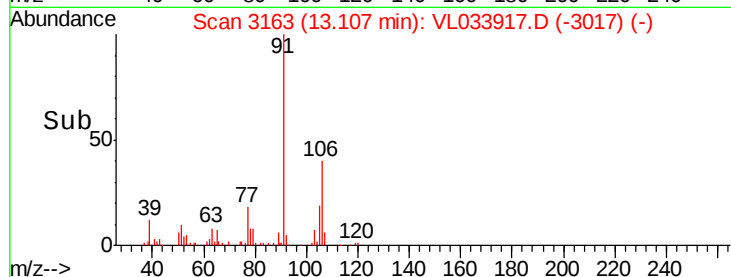
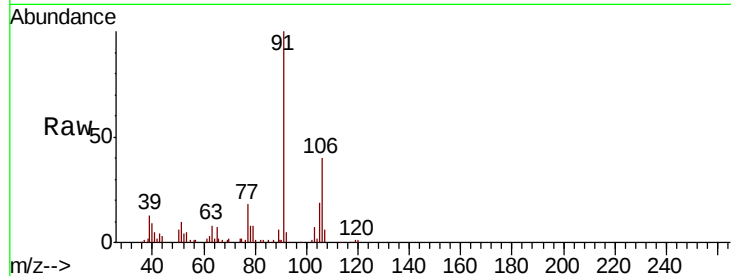
#59
m/p-Xylene
Concen: 0.626 ppbv
RT: 13.11 min Scan# 3163
Delta R.T. -0.03 min
Lab File: VL033917.D
Acq: 14 Jun 2019 4:10

Instrument :
MSVOA_L
ClientSampleId :
IA2-2NDFLR

Tot Ion: 91 Resp: 132290
Ion Ratio Lower Upper
91 100
106 43.0 35.8 53.8

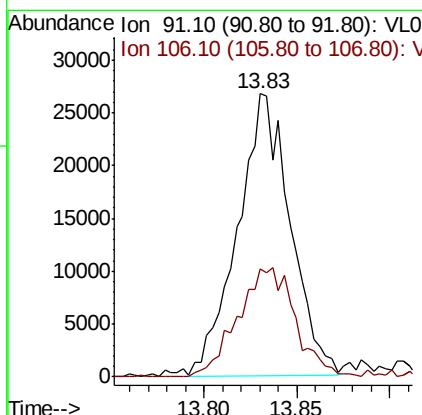
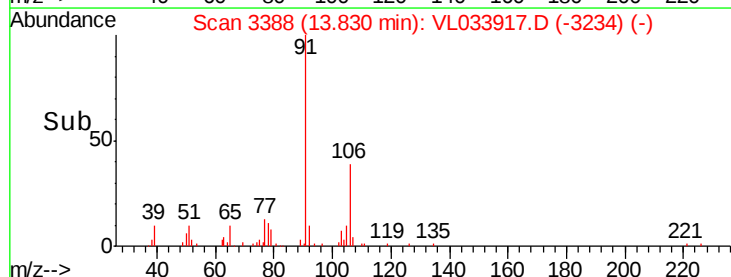
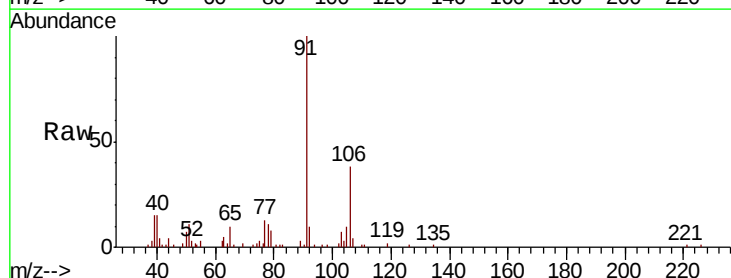
Manual Integrations
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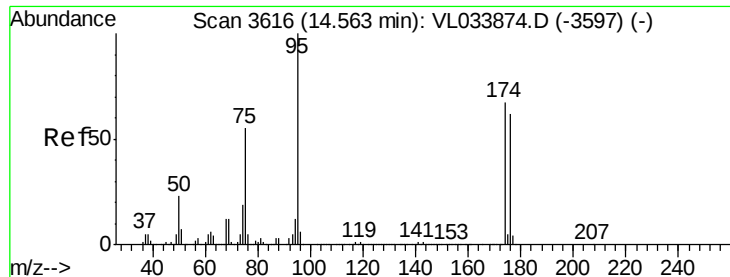
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#60
o-Xylene
Concen: 0.242 ppbv
RT: 13.83 min Scan# 3388
Delta R.T. -0.00 min
Lab File: VL033917.D
Acq: 14 Jun 2019 4:10

Tgt Ion: 91 Resp: 52774
Ion Ratio Lower Upper
91 100
106 42.5 21.7 65.1





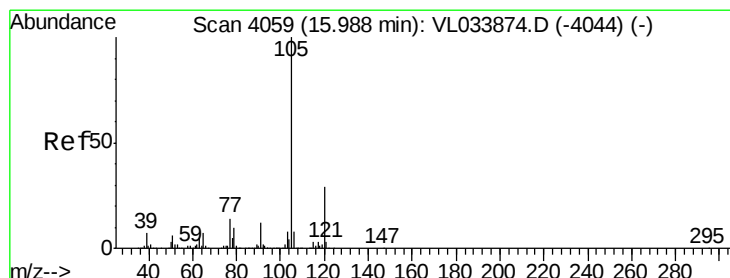
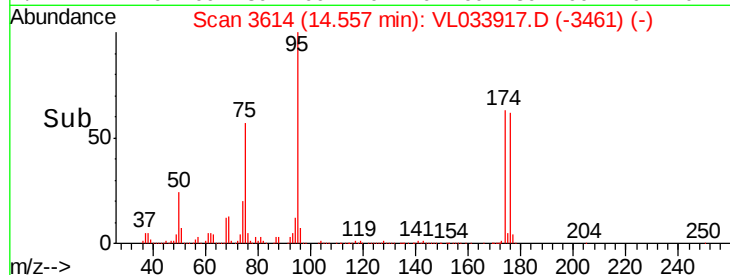
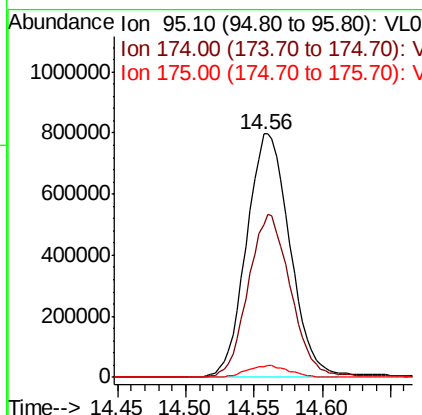
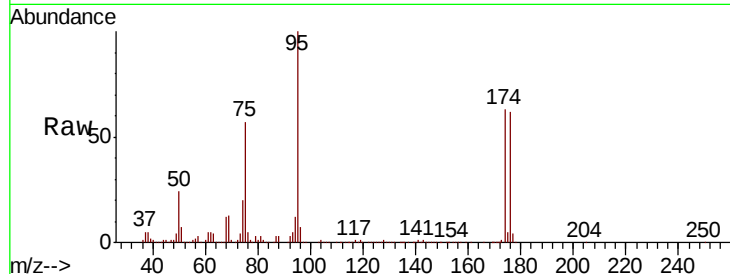
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.355 ppbv
 RT: 14.56 min Scan# 3614
 Delta R.T. -0.01 min
 Lab File: VL033917.D
 Acq: 14 Jun 2019 4:10

Instrument :
 MSVOA_L
 ClientSampled :
 IA2-2NDFLR

Tot Ion: 95 Resp: 1752937
 Ion Ratio Lower Upper
 95 100
 174 66.7 54.0 81.0
 175 4.8 3.8 5.8

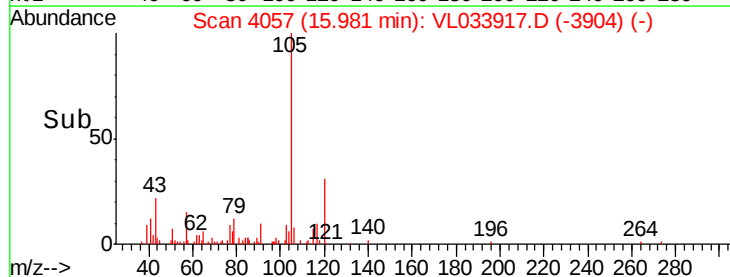
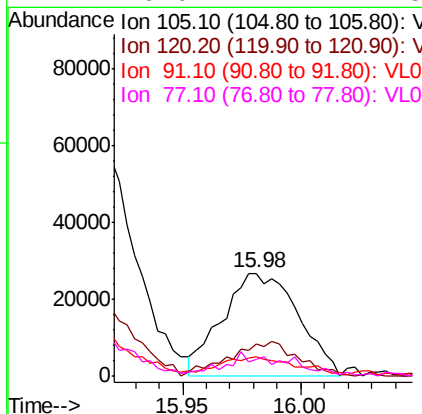
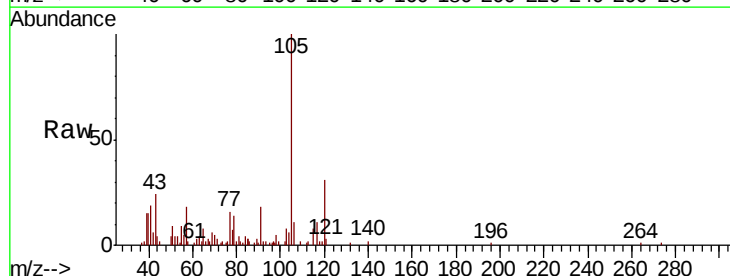
Manual Integrations
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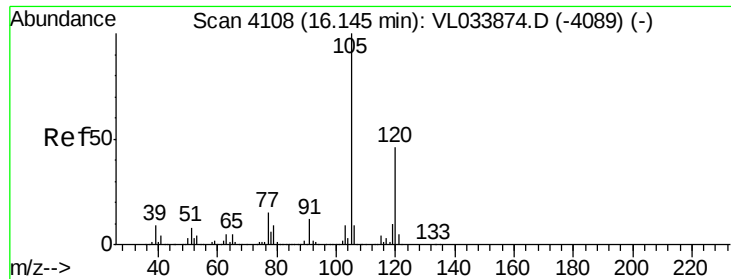
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#72
 4-Ethyltoluene
 Concen: 0.241 ppbv m
 RT: 15.98 min Scan# 4057
 Delta R.T. -0.01 min
 Lab File: VL033917.D
 Acq: 14 Jun 2019 4:10

Tgt Ion: 105 Resp: 59729
 Ion Ratio Lower Upper
 105 100
 120 30.5 23.5 35.3
 91 0.0 10.4 15.6#
 77 0.0 11.7 17.5#





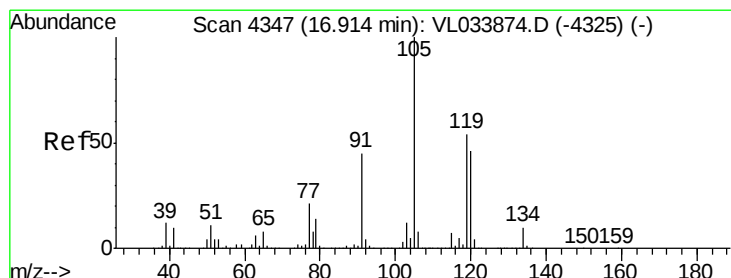
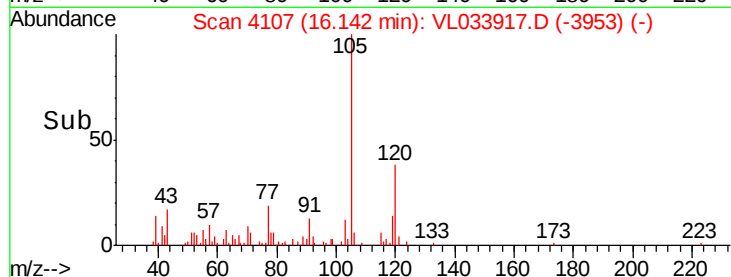
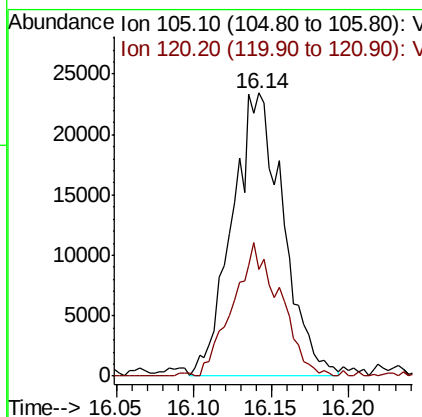
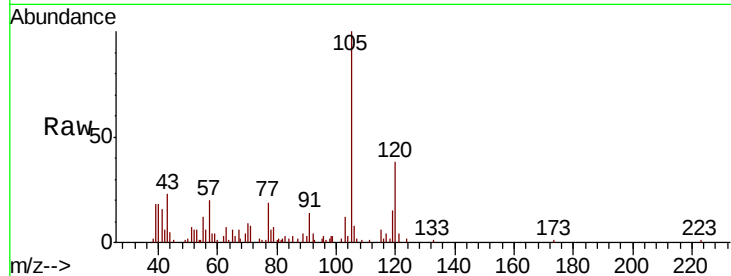
#73
 1,3,5-Trimethylbenzene
 Concen: 0.219 ppbv
 RT: 16.14 min Scan# 4107
 Delta R.T. -0.00 min
 Lab File: VL033917.D
 Acq: 14 Jun 2019 4:10

Instrument :
 MSVOA_L
 ClientSampled :
 IA2-2NDFLR

Tot Ion	Ratio	Lower	Upper
105	100		
120	37.7	37.1	55.7

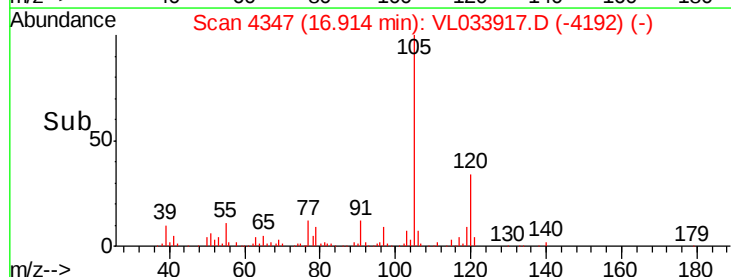
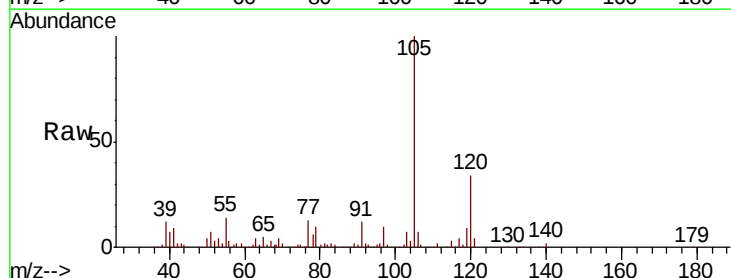
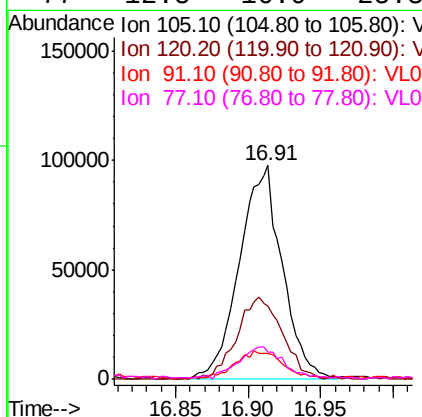
Manual Integrations
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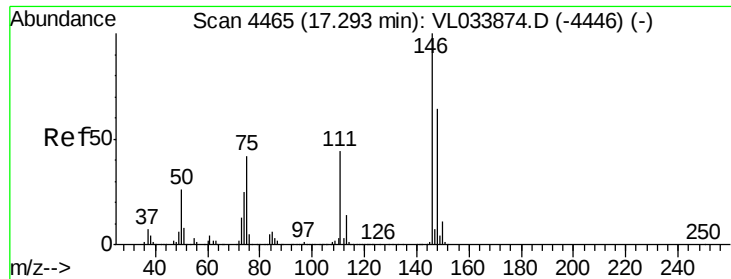
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 6/20/2019 8:59:24 AM



#74
 1,2,4-Trimethylbenzene
 Concen: 0.711 ppbv
 RT: 16.91 min Scan# 4347
 Delta R.T. -0.00 min
 Lab File: VL033917.D
 Acq: 14 Jun 2019 4:10

Tgt Ion	Ratio	Lower	Upper
105	100		
120	34.1	36.7	55.1#
91	11.9	35.8	53.8#
77	12.5	16.9	25.3#





#76

1,4-Dichlorobenzene

Concen: 0.165 ppbv m

RT: 17.29 min Scan# 4463

Delta R.T. -0.01 min

Lab File: VL033917.D

Acq: 14 Jun 2019 4:10

Instrument :

MSVOA_L

ClientSampleId :

IA2-2NDFLR

Tot Ion	Ratio	Resp Lower	Upper
146	100		
111	66.7	22.1	66.5#
148	65.6	32.4	97.0

Manual Integrations
APPROVED

MMDadoda
6/20/2019 8:59:24 AM

