

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL110718\
 Data File : VL032731.D
 Acq On : 8 Nov 2018 00:18
 Operator : SY/AP
 Sample : J5823-02
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 DUP-1

Manual Integrations
 APPROVED

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 11/12/2018 12:30:20 PM

Quant Time: Nov 12 03:18:03 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL101818AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Oct 25 2018
 QLast Update : Thu Oct 25 05:15:43 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	1406963	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	3482509	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	3612720	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.59	95	2657861	9.88	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	36471	0.254	ppbv #	82
3) Chlorodifluoromethane	3.02	51	23523	0.214	ppbv	100
4) Chloromethane	3.17	50	33878	0.551	ppbv	98
9) Propene	3.04	41	110378	2.438	ppbv	86
10) Heptane	8.25	43	154159	0.883	ppbv	99
11) Trichlorofluoromethane	4.02	101	42677	0.228	ppbv #	79
13) Ethanol	3.69	45	14849779	1147.413	ppbv	100
15) Acetone	3.90	43	1943367	14.958	ppbv	94
17) tert-Butyl alcohol	4.40	59	684306m	17.909	ppbv	
19) Isopropyl Alcohol	4.07	45	2466285	26.655	ppbv #	96
20) Methylene Chloride	4.42	84	43704	0.663	ppbv	92
26) Hexane	5.79	57	263303	1.861	ppbv #	55
30) Cyclohexane	7.26	84	44831	0.400	ppbv	84
34) 2-Butanone	5.34	43	277601	1.487	ppbv	99
35) Carbon Tetrachloride	7.14	117	22498m	0.091	ppbv	
36) Benzene	7.01	78	918393	3.248	ppbv	99
41) Tetrahydrofuran	6.17	42	27856	0.268	ppbv	97
44) 2,2,4-Trimethylpentane	8.00	57	1571083	3.254	ppbv	95
52) Tetrachloroethene	11.38	164	25698m	0.261	ppbv	
53) Toluene	9.96	91	6129082	18.907	ppbv	100
58) Ethyl Benzene	12.88	91	897008	2.137	ppbv	94
59) m/p-Xylene	13.13	91	2850898	7.628	ppbv	98
60) o-Xylene	13.86	91	1087953	3.018	ppbv	98
61) Styrene	13.70	104	70892	0.293	ppbv	98
64) n-propylbenzene	15.74	120	35186m	0.277	ppbv	
72) 4-Ethyltoluene	16.01	105	274756	0.716	ppbv	98
73) 1,3,5-Trimethylbenzene	16.17	105	214246	0.573	ppbv	100
74) 1,2,4-Trimethylbenzene	16.93	105	857802	2.148	ppbv #	74
79) Naphthalene	22.43	128	35759m	0.144	ppbv	

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

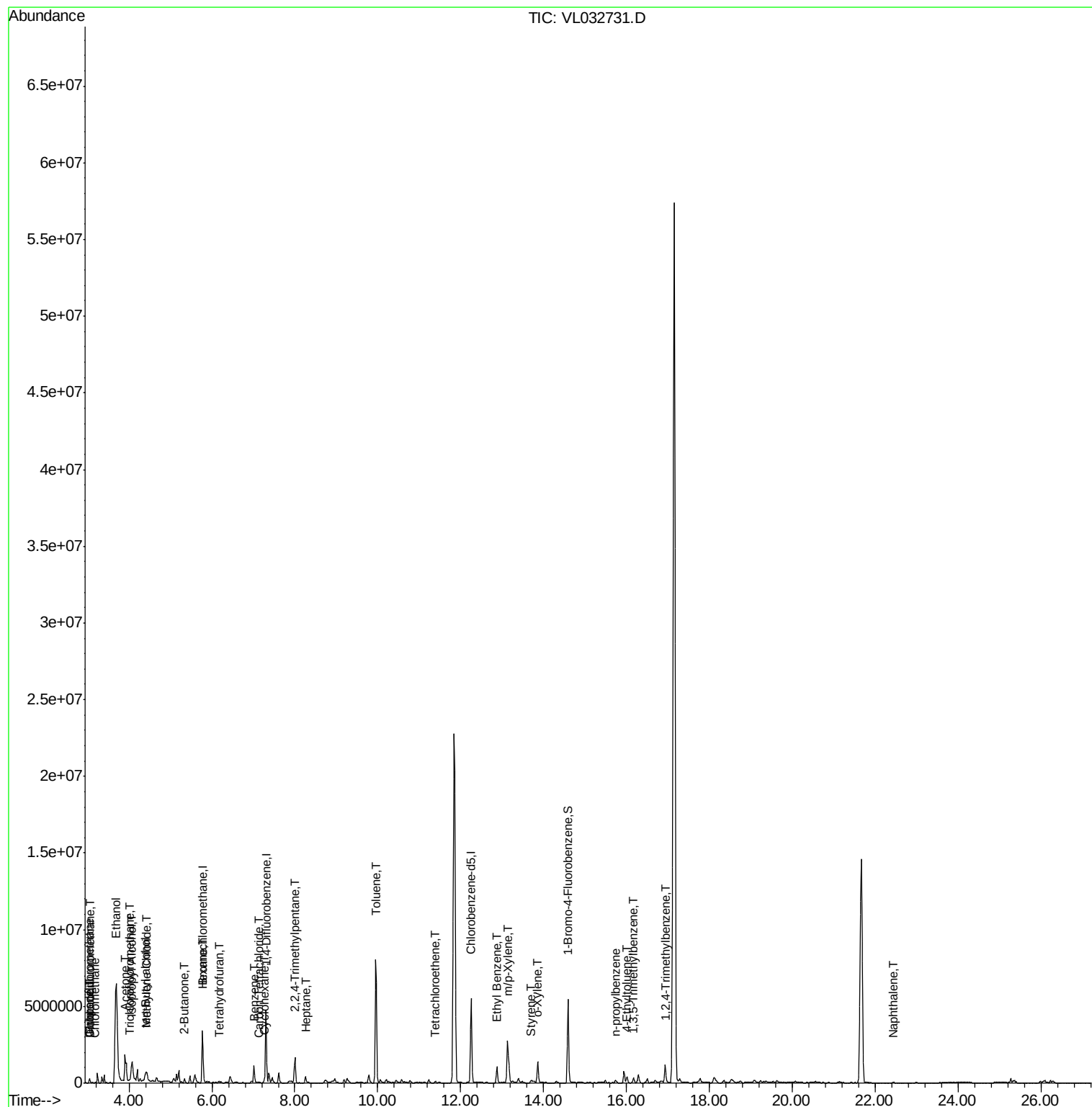
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL110718\
Data File : VL032731.D
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Sample : J5823-02
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

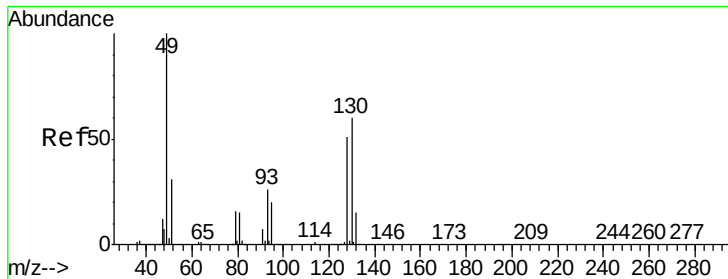
Instrument :
MSVOA_L
ClientSampleId :
DUP-1

Manual Integrations
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Quant Time: Nov 12 03:18:03 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL101818AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Oct
QLast Update : Thu Oct 25 05:15:43 2018
Response via : Initial Calibration





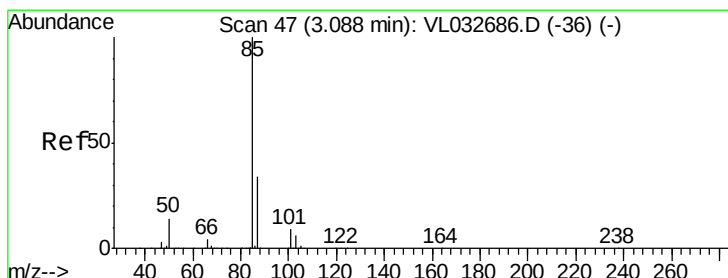
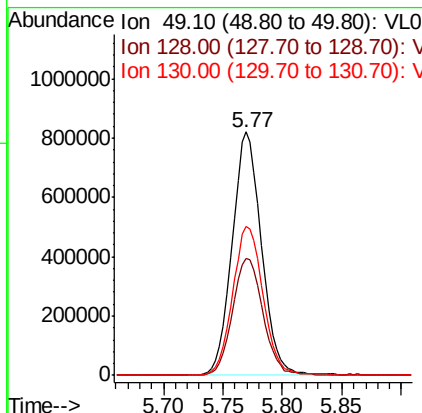
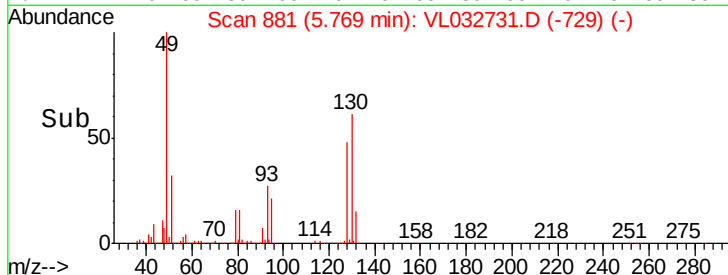
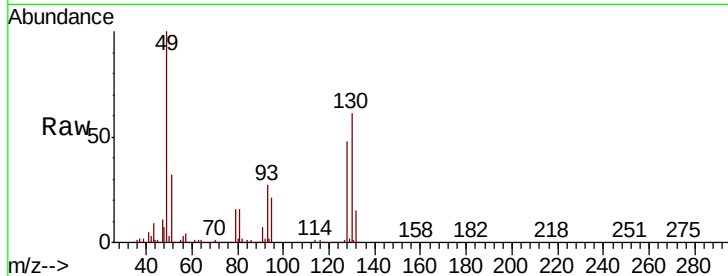
#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.77 min Scan# 881
 Delta R.T. -0.01 min
 Lab File: VL032731.D
 Acq: 8 Nov 2018 00:18

Instrument :
 MSVOA_L
 ClientSampleId :
 DUP-1

Tot Ion:	49	Resp:	1406963
Ion	Ratio	Lower	Upper
49	100		
128	50.3	22.3	66.8
130	63.6	28.4	85.3

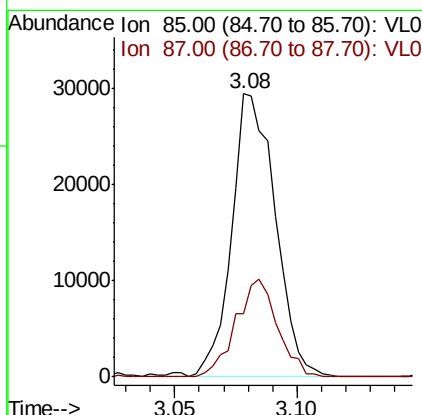
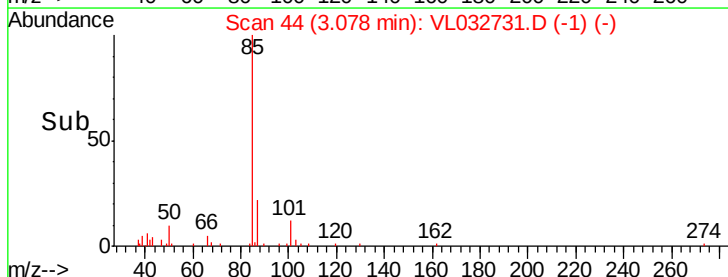
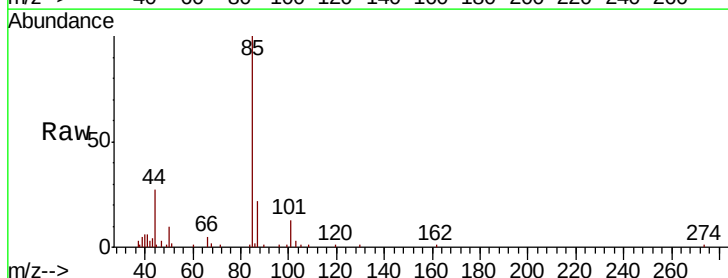
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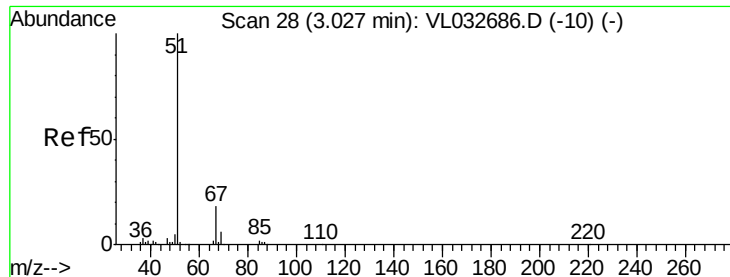
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#2
 Dichlorodifluoromethane
 Concen: 0.254 ppbv
 RT: 3.08 min Scan# 44
 Delta R.T. -0.01 min
 Lab File: VL032731.D
 Acq: 8 Nov 2018 00:18

Tgt Ion:	85	Resp:	36471
Ion	Ratio	Lower	Upper
85	100		
87	22.4	26.2	39.2





#3

Chlorodifluoromethane

Concen: 0.214 ppbv

RT: 3.02 min Scan# 26

Delta R.T. -0.00 min

Lab File: VL032731.D

Acq: 8 Nov 2018 00:18

Instrument :

MSVOA_L

ClientSampleId :

DUP-1

Tot Ion: 51 Resp: 23523

Ion Ratio Lower Upper

51 100

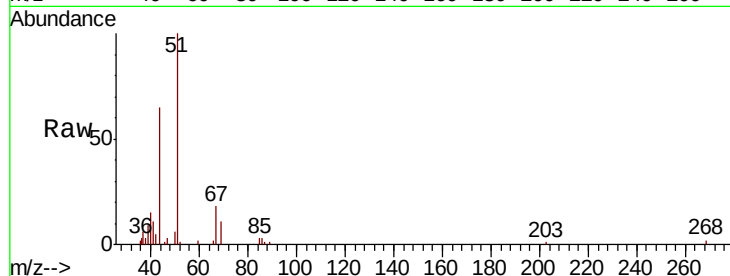
67 18.8 15.2 22.8

Manual Integrations

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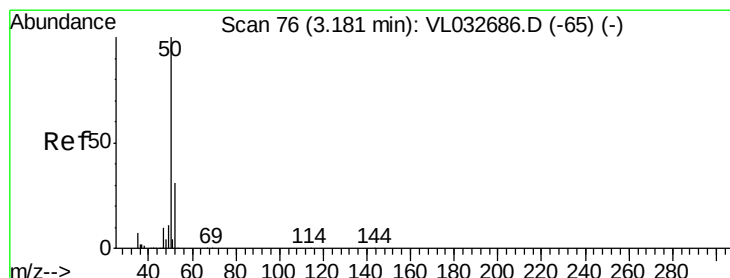
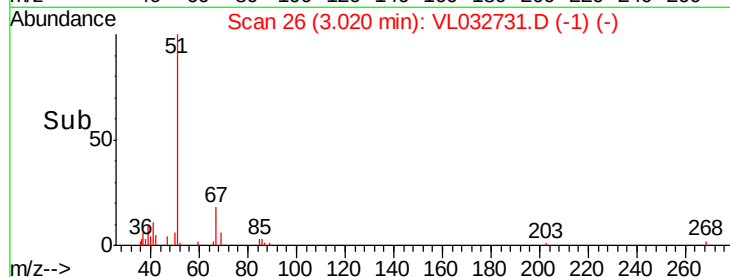
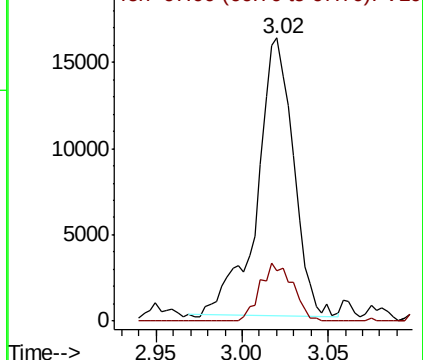
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.551 ppbv

RT: 3.17 min Scan# 74

Delta R.T. -0.00 min

Lab File: VL032731.D

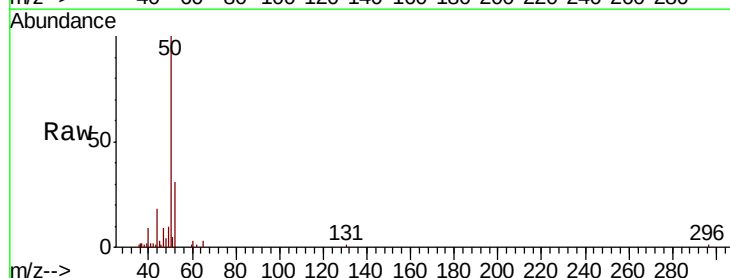
Acq: 8 Nov 2018 00:18

Tgt Ion: 50 Resp: 33878

Ion Ratio Lower Upper

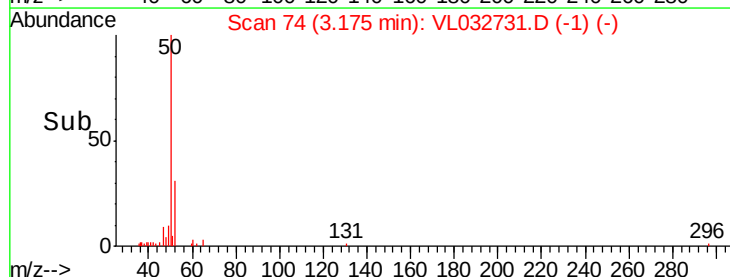
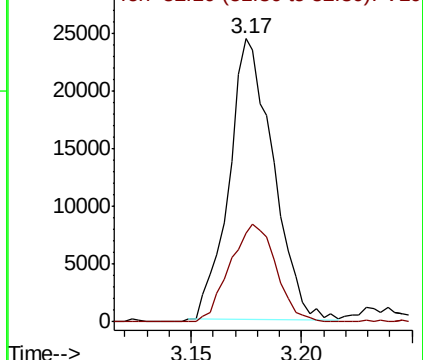
50 100

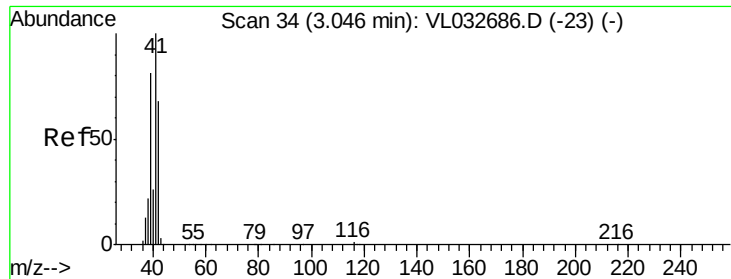
52 31.5 25.9 38.9



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 2.438 ppbv

RT: 3.04 min Scan# 33

Delta R.T. -0.00 min

Lab File: VL032731.D

Acq: 8 Nov 2018 00:18

Instrument :

MSVOA_L

ClientSampleId :

DUP-1

Tot Ion: 41 Resp: 110378

Ion Ratio Lower Upper

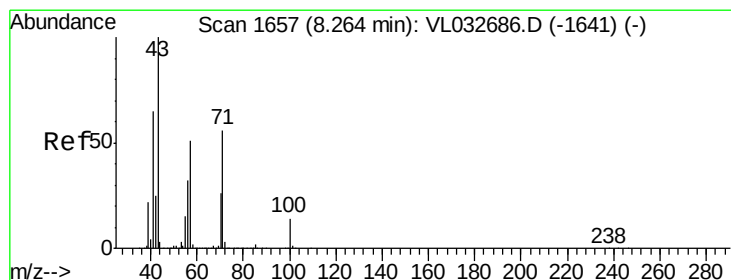
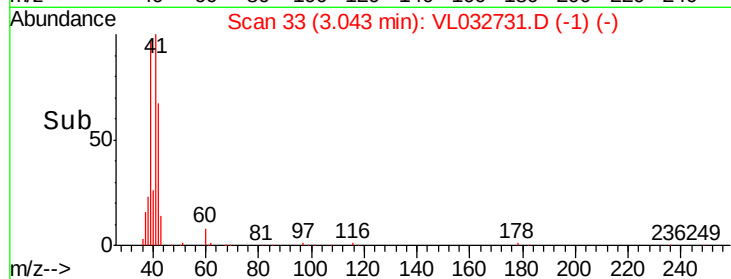
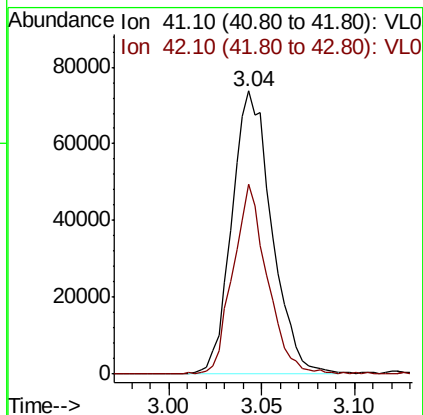
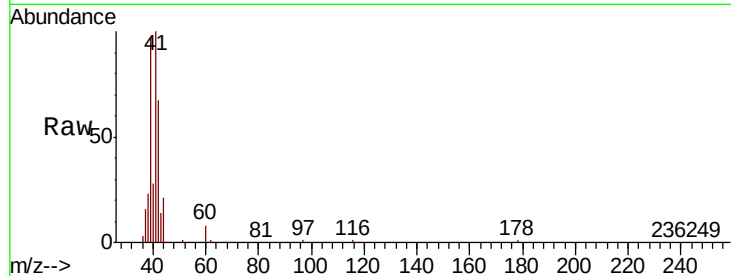
41 100

42 58.1 55.4 83.0

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#10

Heptane

Concen: 0.883 ppbv

RT: 8.25 min Scan# 1654

Delta R.T. -0.01 min

Lab File: VL032731.D

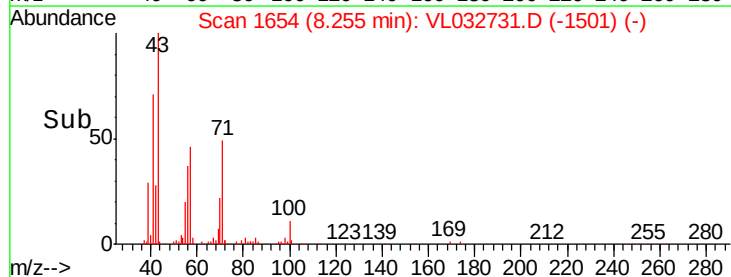
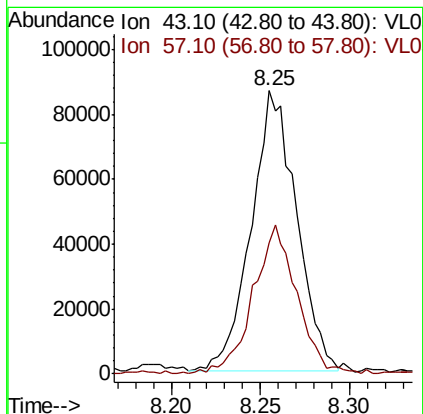
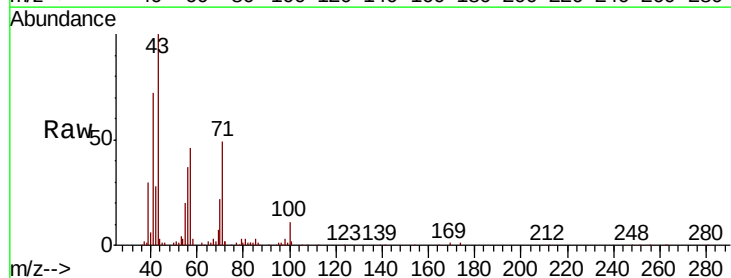
Acq: 8 Nov 2018 00:18

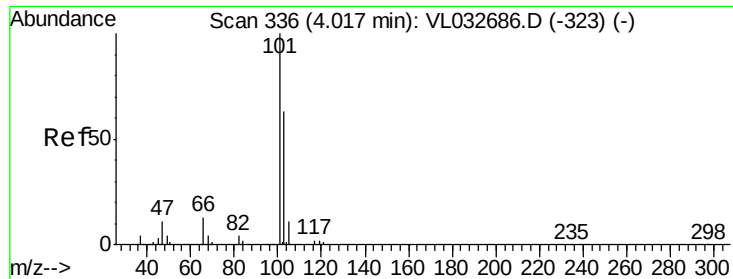
Tgt Ion: 43 Resp: 154159

Ion Ratio Lower Upper

43 100

57 51.4 41.5 62.3





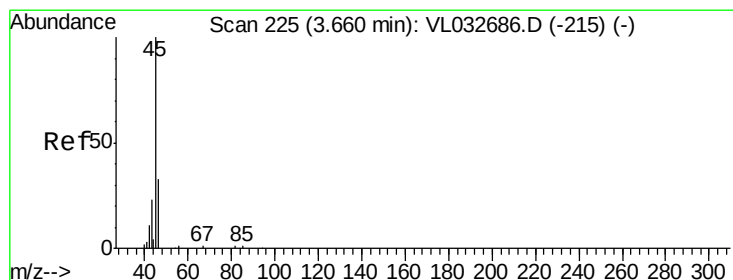
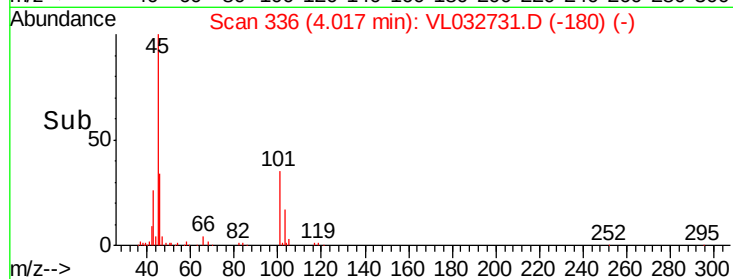
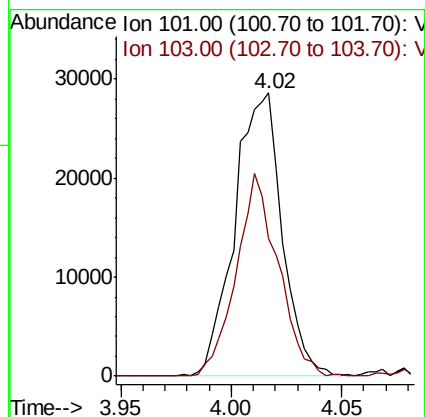
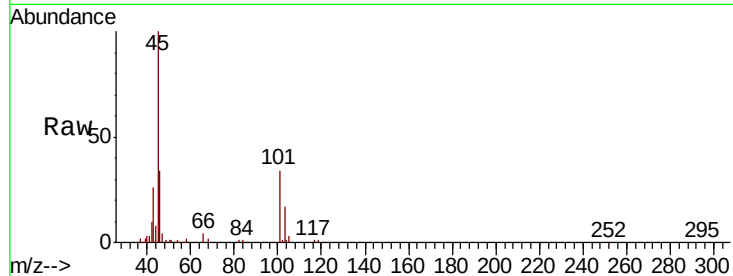
#11
 Trichlorofluoromethane
 Concen: 0.228 ppbv
 RT: 4.02 min Scan# 336
 Delta R.T. 0.00 min
 Lab File: VL032731.D
 Acq: 8 Nov 2018 00:18

Instrument :
 MSVOA_L
 ClientSampleId :
 DUP-1

Tot Ion:101 Resp: 42677
 Ion Ratio Lower Upper
 101 100
 103 48.0 51.4 77.2#

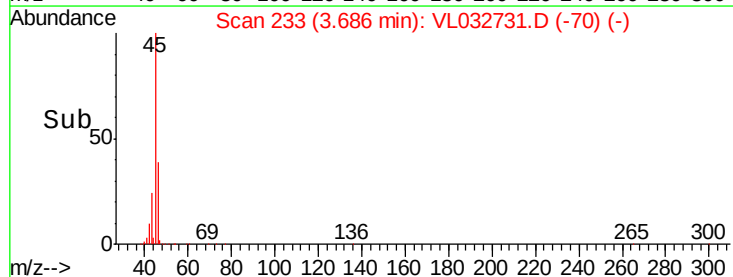
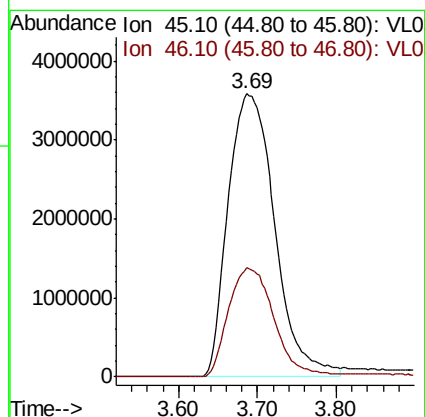
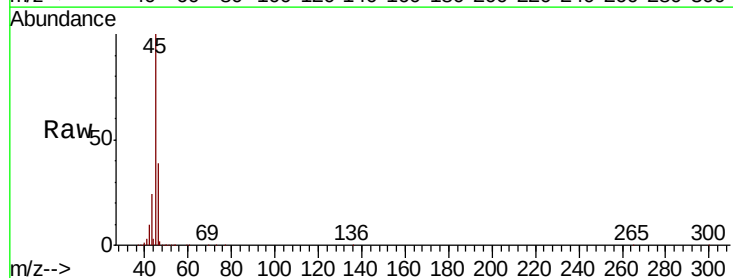
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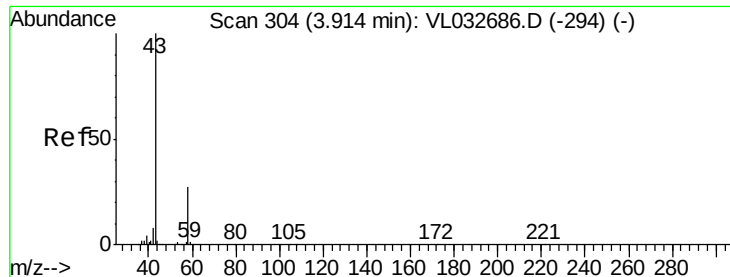
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#13
 Ethanol
 Concen: 1147.413 ppbv
 RT: 3.69 min Scan# 233
 Delta R.T. 0.03 min
 Lab File: VL032731.D
 Acq: 8 Nov 2018 00:18

Tgt Ion: 45 Resp:14849779
 Ion Ratio Lower Upper
 45 100
 46 38.9 15.4 61.8





#15

Acetone

Concen: 14.958 ppbv

RT: 3.90 min Scan# 301

Delta R.T. -0.01 min

Lab File: VL032731.D

Acq: 8 Nov 2018 00:18

Instrument :

MSVOA_L

ClientSampleId :

DUP-1

Tot Ion: 43 Resp: 1943367

Ion Ratio Lower Upper

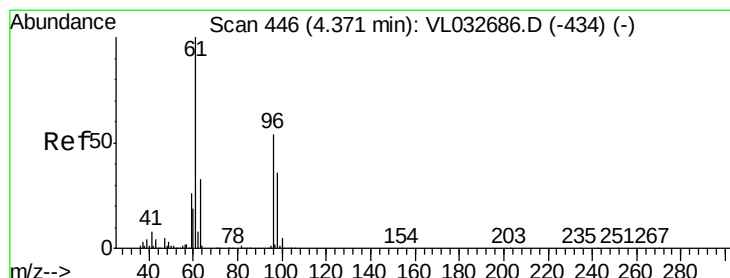
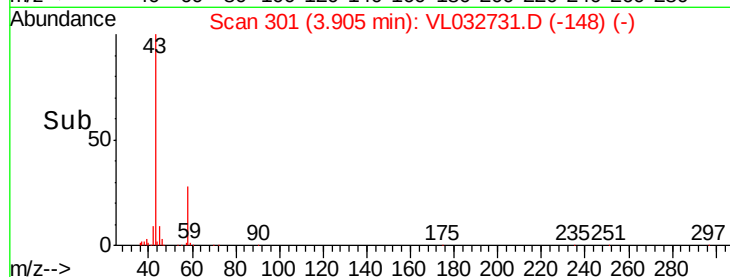
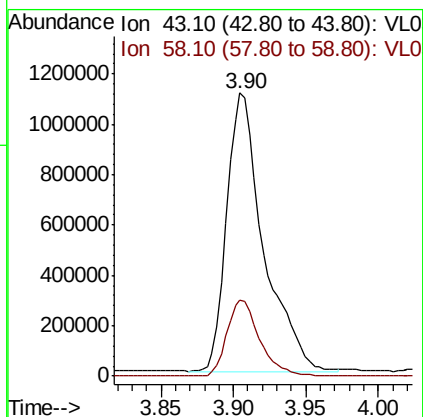
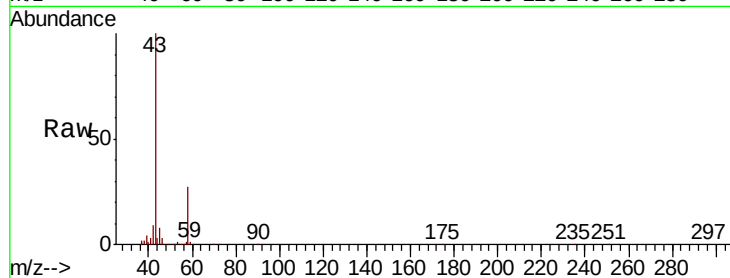
43 100

58 24.6 22.1 33.1

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#17

tert-Butyl alcohol

Concen: 17.909 ppbv m

RT: 4.40 min Scan# 455

Delta R.T. 0.03 min

Lab File: VL032731.D

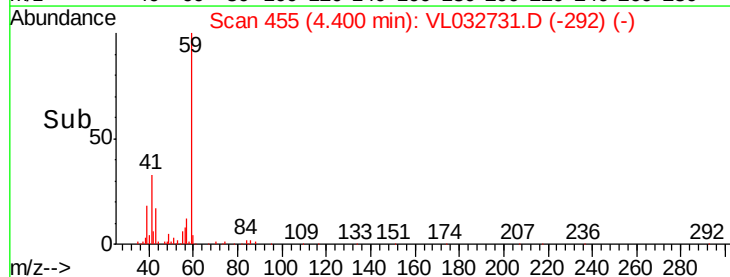
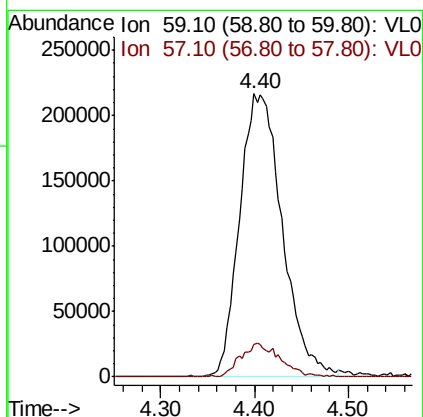
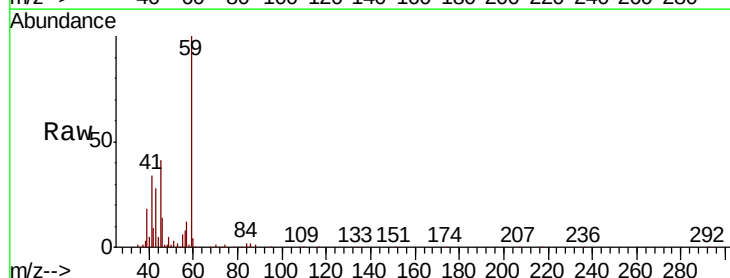
Acq: 8 Nov 2018 00:18

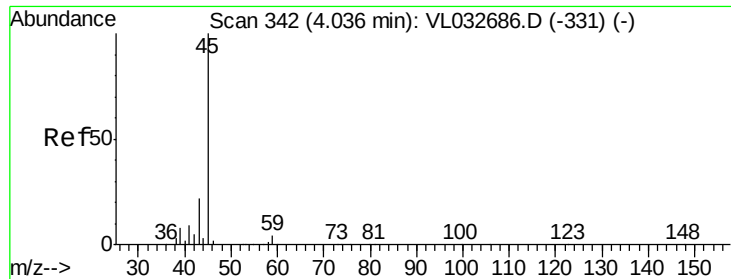
Tgt Ion: 59 Resp: 684306

Ion Ratio Lower Upper

59 100

57 11.1 0.0 0.0#





#19

Isopropyl Alcohol

Concen: 26.655 ppbv

RT: 4.07 min Scan# 352

Delta R.T. 0.04 min

Lab File: VL032731.D

Acq: 8 Nov 2018 00:18

Instrument :

MSVOA_L

ClientSampleId :

DUP-1

Tot Ion: 45 Resp: 2466285

Ion Ratio Lower Upper

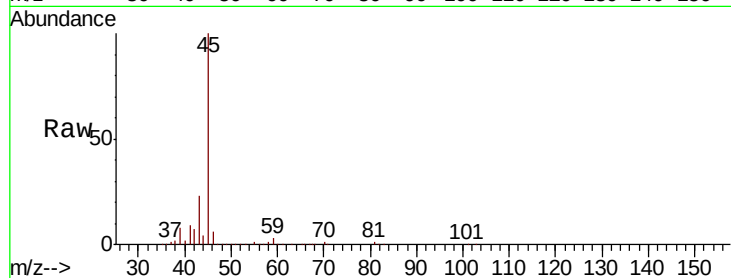
45 100

58 1.2 2.0 3.0#

Manual Integrations
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Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

4.07

800000

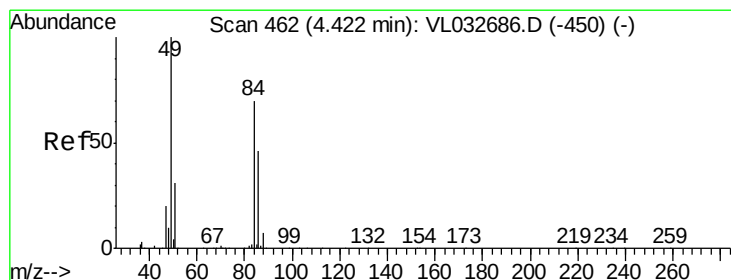
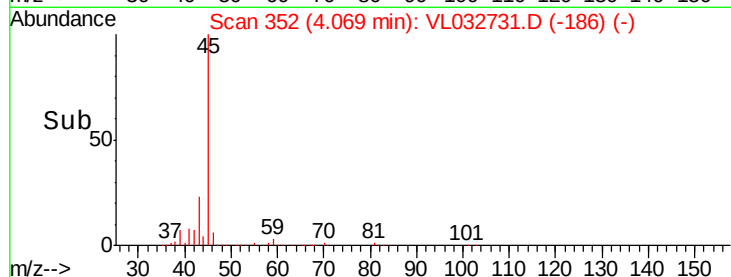
600000

400000

200000

0

Time-->



#20

Methylene Chloride

Concen: 0.663 ppbv

RT: 4.42 min Scan# 461

Delta R.T. -0.00 min

Lab File: VL032731.D

Acq: 8 Nov 2018 00:18

Tgt Ion: 84 Resp: 43704

Ion Ratio Lower Upper

84 100

49 149.5 113.5 170.3

51 42.0 34.8 52.2

86 71.3 47.9 71.9

Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0

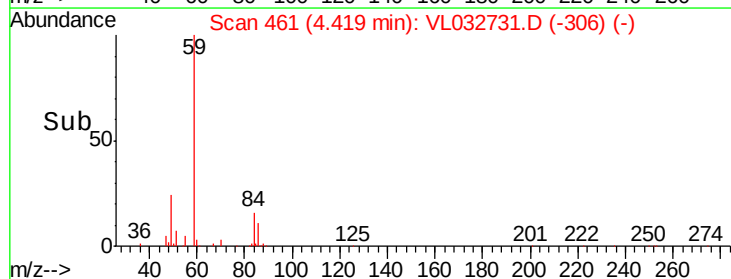
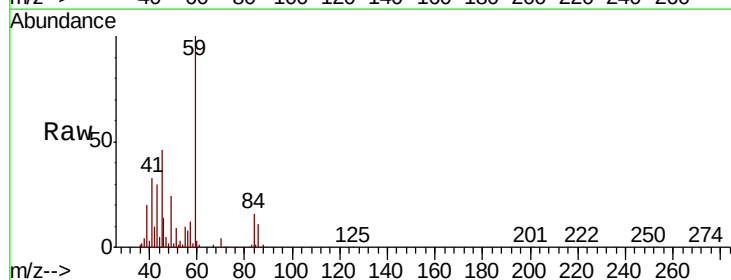
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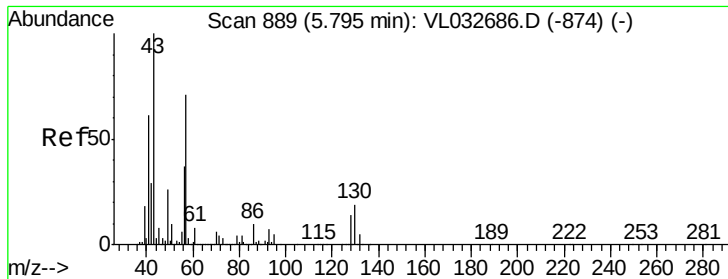
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Time-->





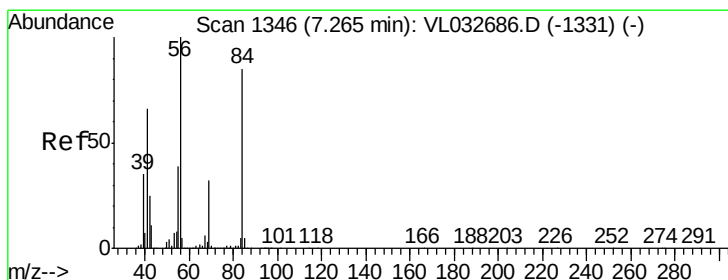
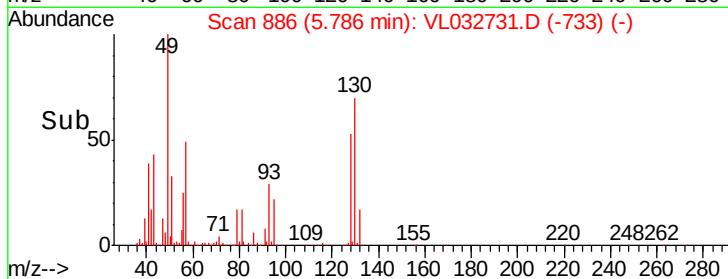
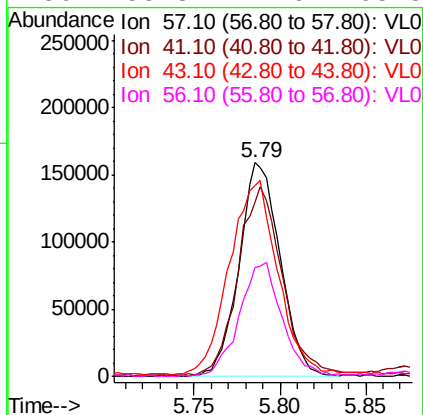
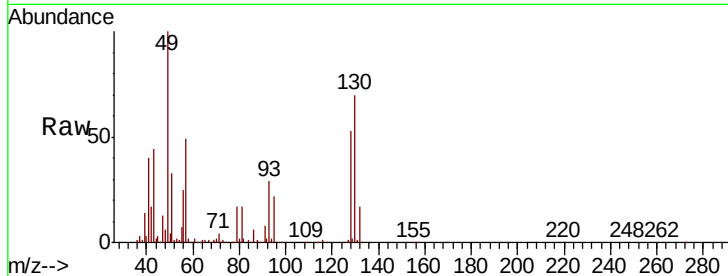
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Hexane
Concen: 1.861 ppbv
RT: 5.79 min Scan# 886
Delta R.T. -0.01 min
Lab File: VL032731.D
Acq: 8 Nov 2018 00:18

Instrument :
MSVOA_L
ClientSampleID :
DUP-1

Tot Ion	Ratio	Lower	Upper
57	100		
41	94.9	67.4	101.0
43	107.7	171.9	257.9#
56	55.8	42.6	63.8

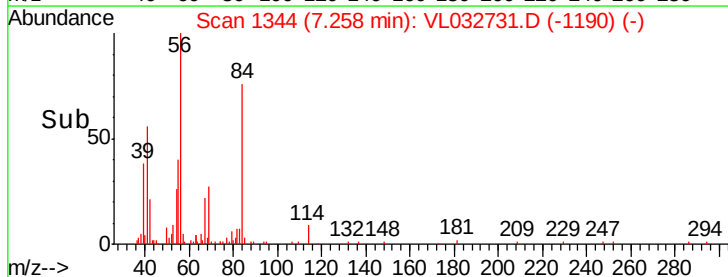
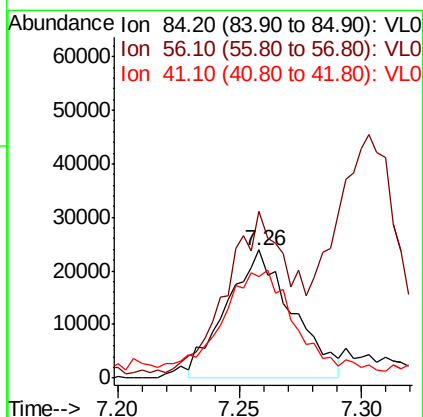
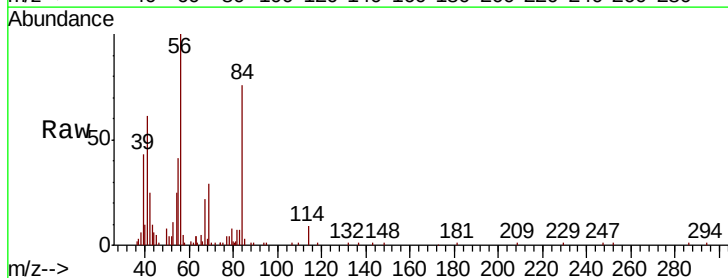
Manual Integrations
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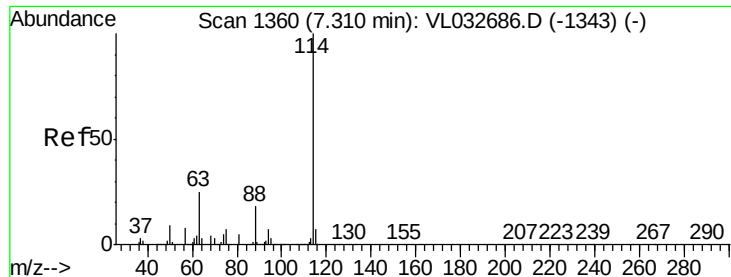
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#30
Cyclohexane
Concen: 0.400 ppbv
RT: 7.26 min Scan# 1344
Delta R.T. -0.00 min
Lab File: VL032731.D
Acq: 8 Nov 2018 00:18

Tgt Ion	Ratio	Lower	Upper
84	100		
56	113.7	108.3	162.5
41	93.0	64.8	97.2





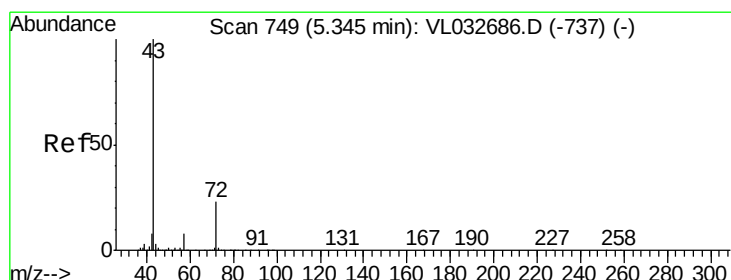
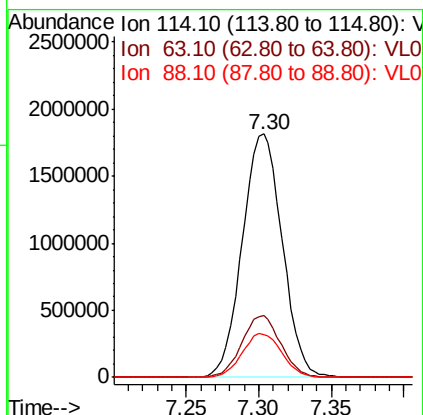
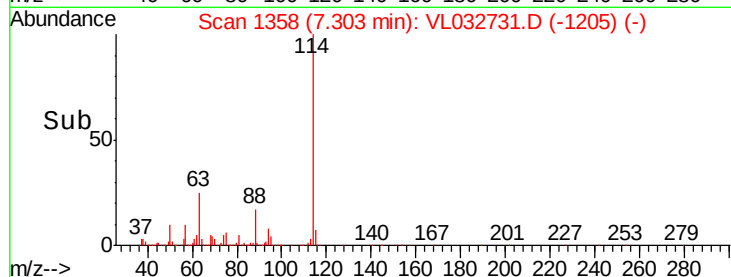
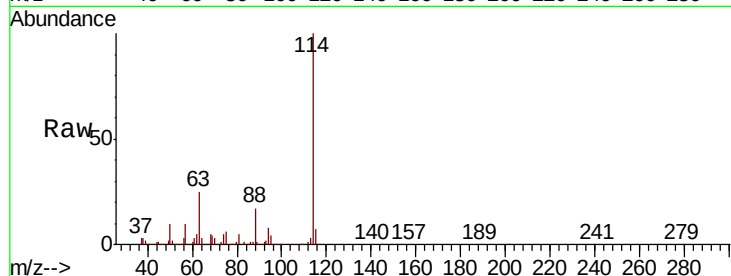
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.30 min Scan# 1358
 Delta R.T. -0.01 min
 Lab File: VL032731.D
 Acq: 8 Nov 2018 00:18

Instrument :
 MSVOA_L
 ClientSampleId :
 DUP-1

Tot Ion	Ratio	Lower	Upper
114	100		
63	25.0	21.7	32.5
88	17.9	14.9	22.3

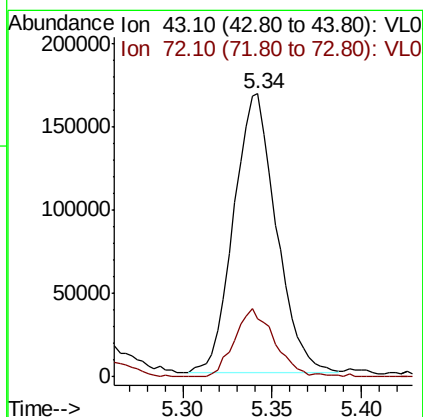
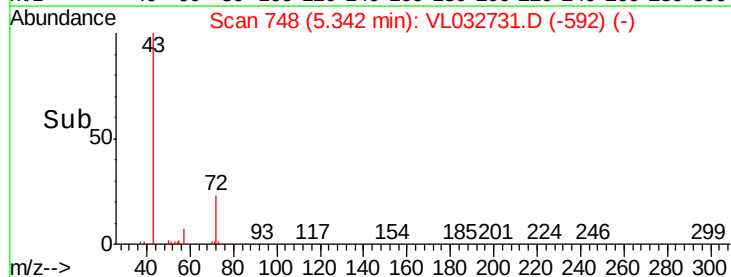
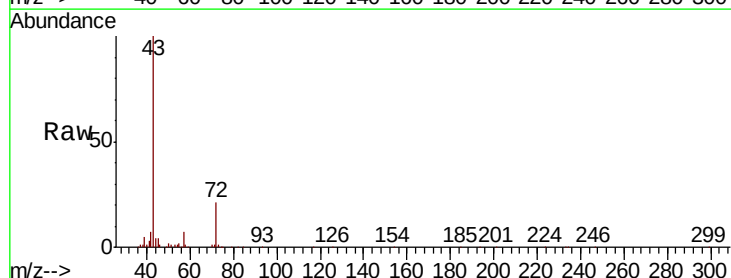
Manual Integrations
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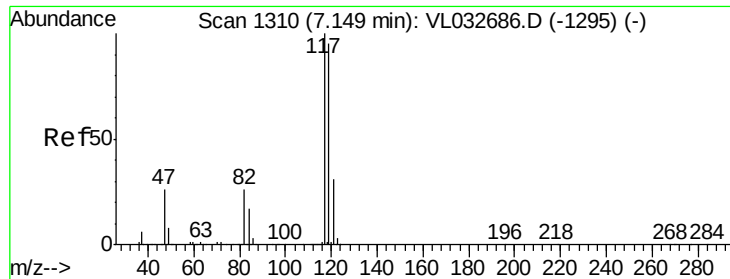
MMDadoda
 11/12/2018 12:30:20 PM



#34
 2-Butanone
 Concen: 1.487 ppbv
 RT: 5.34 min Scan# 748
 Delta R.T. 0.00 min
 Lab File: VL032731.D
 Acq: 8 Nov 2018 00:18

Tgt Ion	Ratio	Lower	Upper
43	100		
72	23.5	18.6	27.8





#35

Carbon Tetrachloride

Concen: 0.091 ppbv m

RT: 7.14 min Scan# 1307

Delta R.T. -0.01 min

Lab File: VL032731.D

Acq: 8 Nov 2018 00:18

Instrument :

MSVOA_L

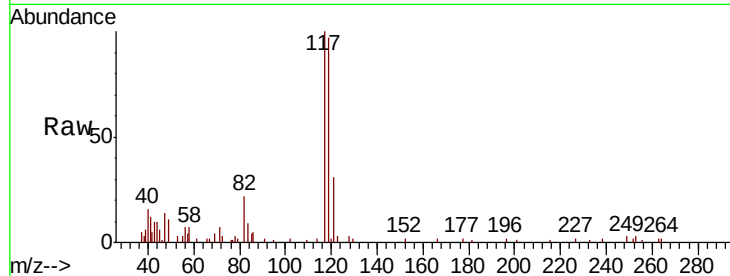
ClientSampled :

DUP-1

Tot Ion	Ratio	Lower	Upper
117	100		
119	97.0	75.7	113.5
121	30.5	24.7	37.1

Manual Integrations
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MMDadoda
11/12/2018 12:30:20 PM

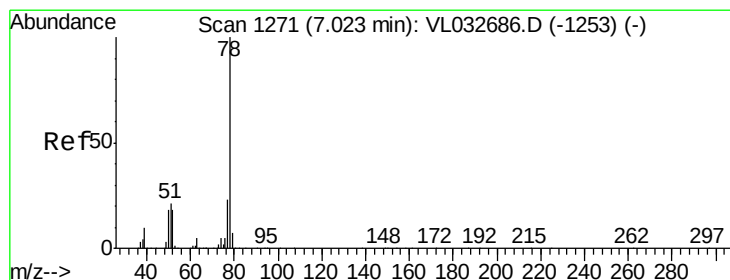
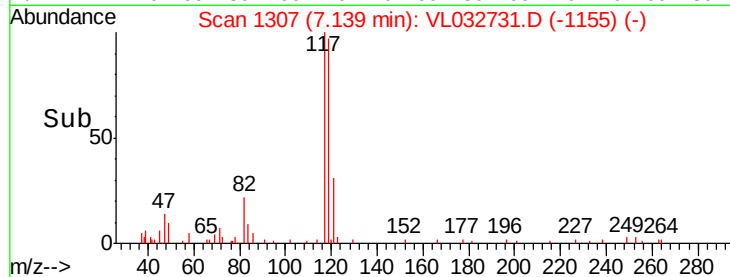
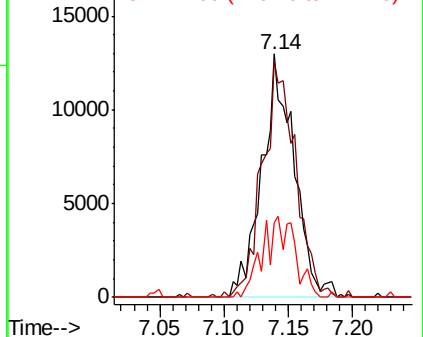


Abundance

Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 3.248 ppbv

RT: 7.01 min Scan# 1267

Delta R.T. -0.01 min

Lab File: VL032731.D

Acq: 8 Nov 2018 00:18

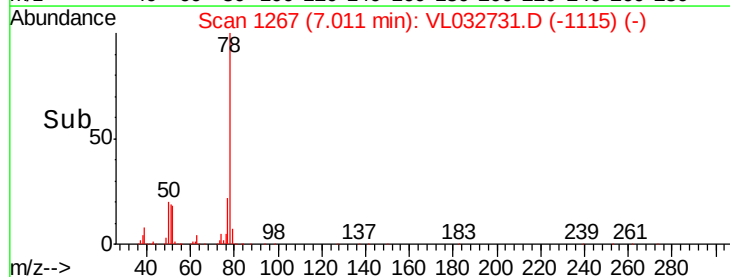
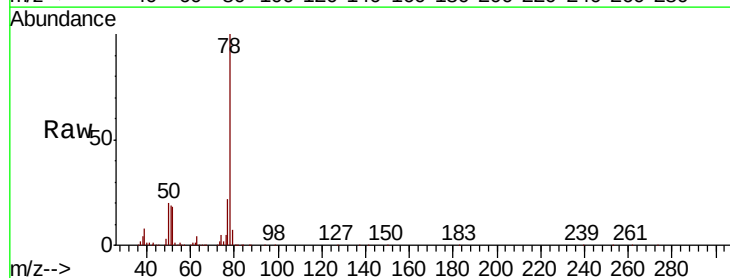
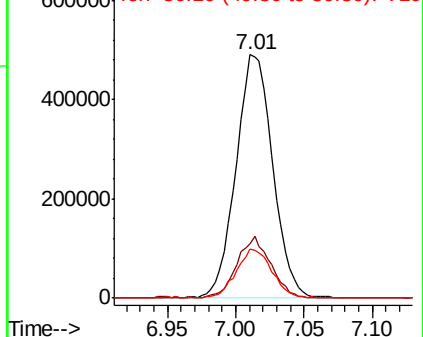
Tgt Ion	Ratio	Lower	Upper
78	100		
77	22.4	18.1	27.1
50	19.7	15.1	22.7

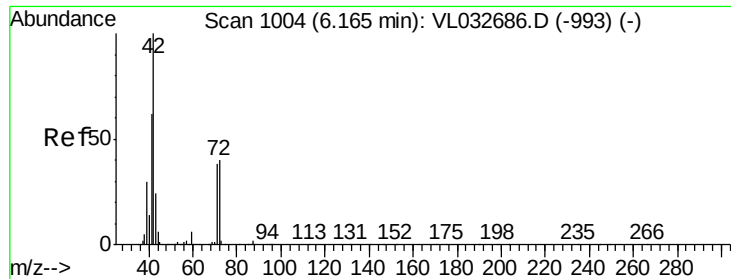
Abundance

Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





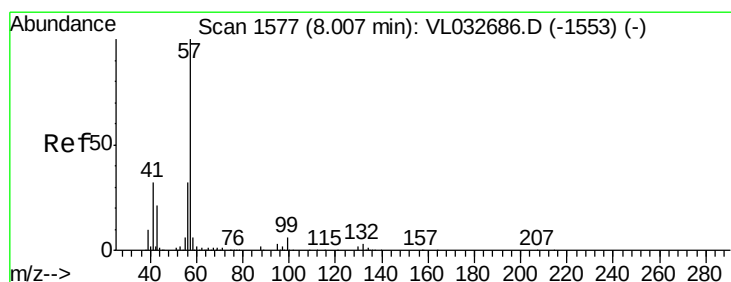
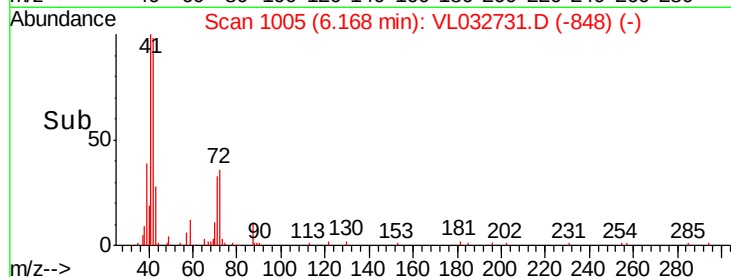
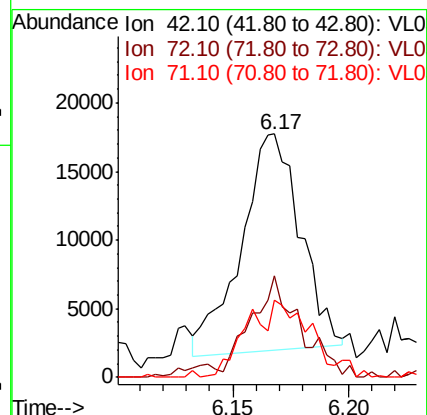
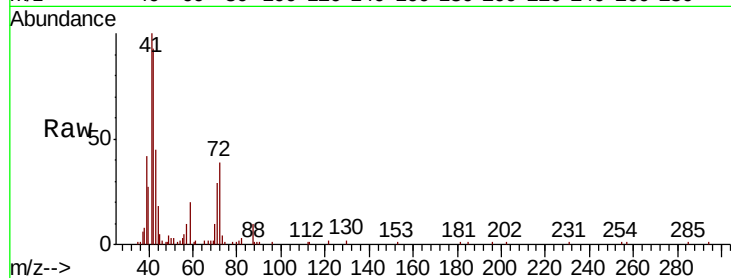
#41
Tetrahydrofuran
Concen: 0.268 ppbv
RT: 6.17 min Scan# 1005
Delta R.T. 0.01 min
Lab File: VL032731.D
Acq: 8 Nov 2018 00:18

Instrument :
MSVOA_L
ClientSampleId :
DUP-1

Tot Ion	Ratio	Lower	Upper
42	100		
72	43.1	32.4	48.6
71	40.0	31.3	46.9

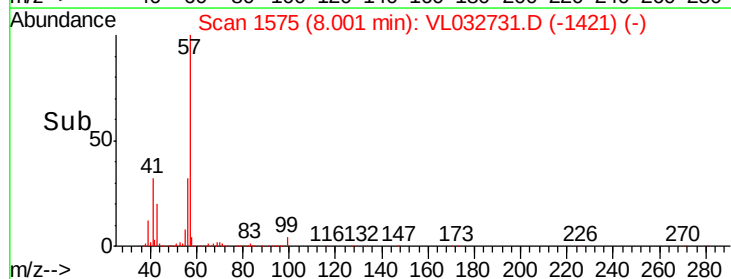
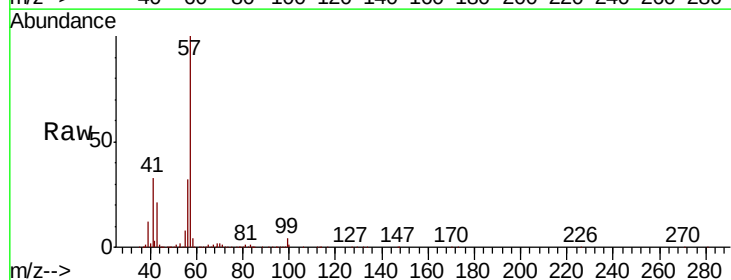
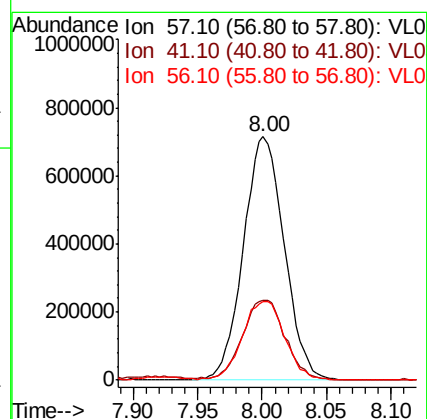
Manual Integrations
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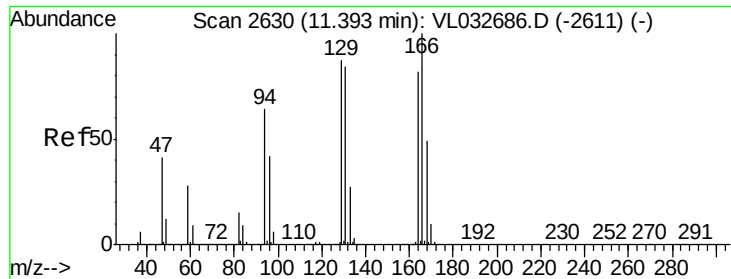
MMDadoda
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#44
2,2,4-Trimethylpentane
Concen: 3.254 ppbv
RT: 8.00 min Scan# 1575
Delta R.T. -0.00 min
Lab File: VL032731.D
Acq: 8 Nov 2018 00:18

Tgt Ion	Ratio	Lower	Upper
57	100		
41	34.2	24.7	37.1
56	33.5	25.0	37.4





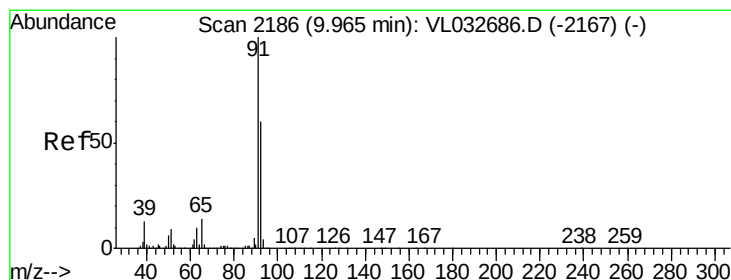
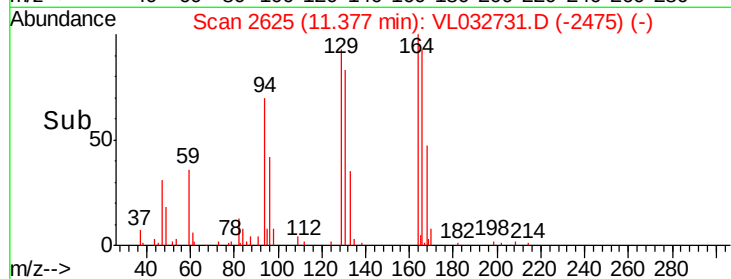
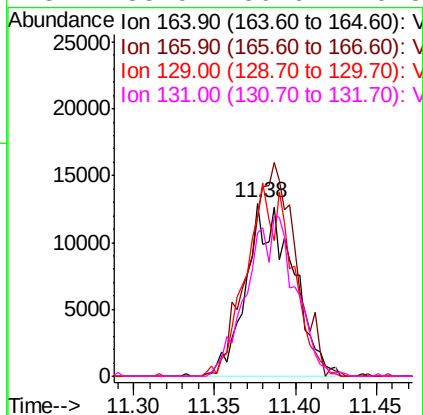
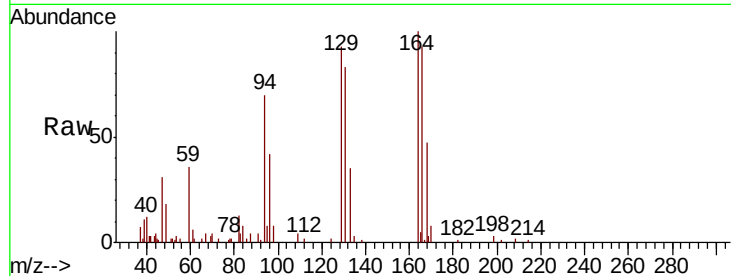
#52
Tetrachloroethene
Concen: 0.261 ppbv m
RT: 11.38 min Scan# 2625
Delta R.T. -0.02 min
Lab File: VL032731.D
Acq: 8 Nov 2018 00:18

Instrument :
MSVOA_L
ClientSampled :
DUP-1

Tot Ion	Ratio	Lower	Upper
164	100		
166	92.5	100.5	150.7#
129	92.7	90.0	135.0
131	83.0	86.6	129.8#

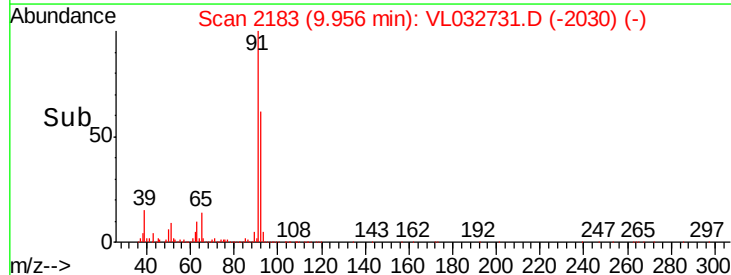
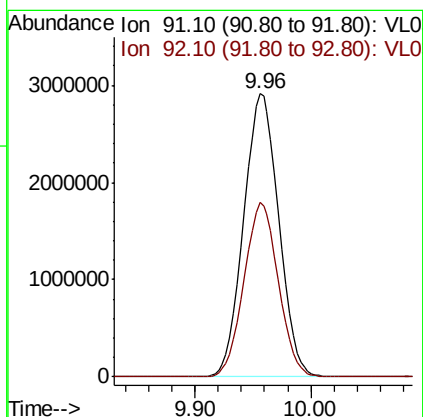
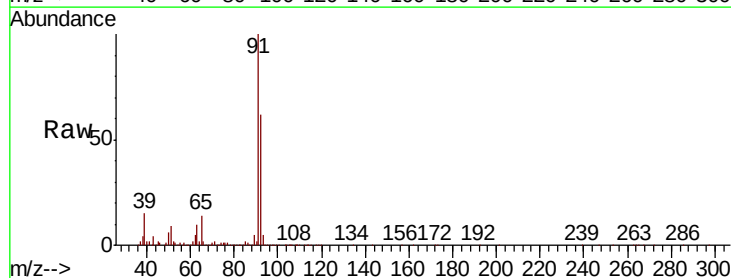
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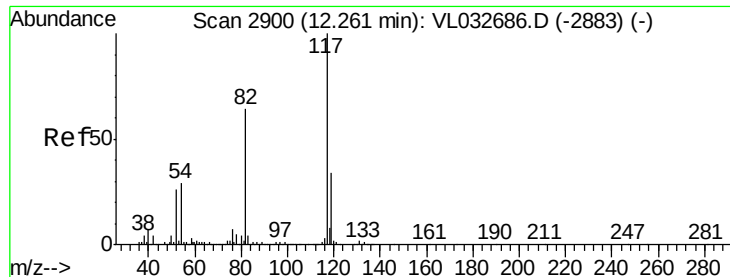
MMDadoda
11/12/2018 12:30:20 PM



#53
Toluene
Concen: 18.907 ppbv
RT: 9.96 min Scan# 2183
Delta R.T. -0.01 min
Lab File: VL032731.D
Acq: 8 Nov 2018 00:18

Tgt Ion	Ratio	Lower	Upper
91	100		
92	60.6	48.4	72.6





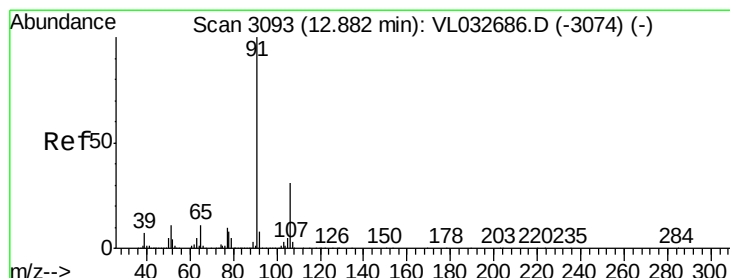
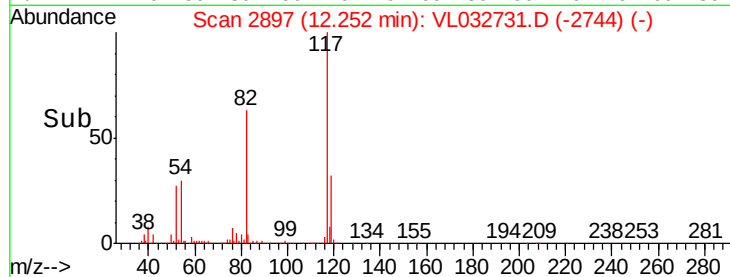
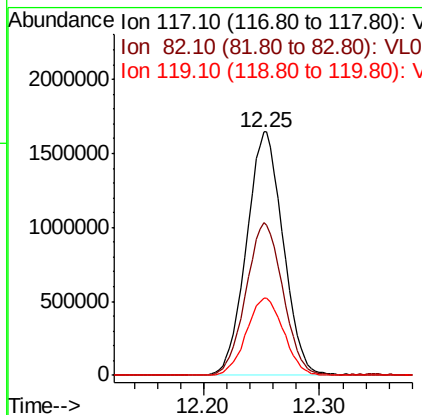
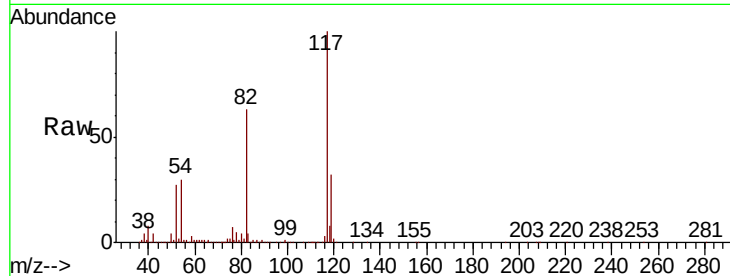
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.25 min Scan# 2897
Delta R.T. -0.01 min
Lab File: VL032731.D
Acq: 8 Nov 2018 00:18

Instrument :
MSVOA_L
ClientSampled :
DUP-1

Tot Ion:117 Resp: 3612720
Ion Ratio Lower Upper
117 100
82 63.4 52.7 79.1
119 32.6 26.7 40.1

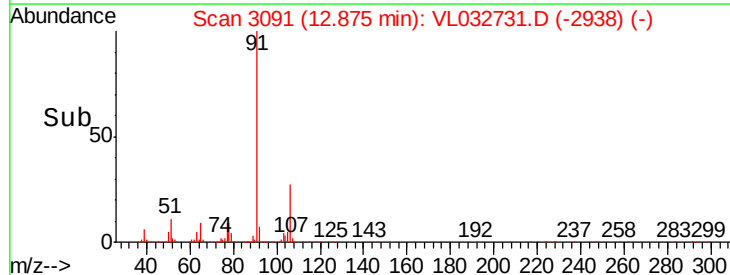
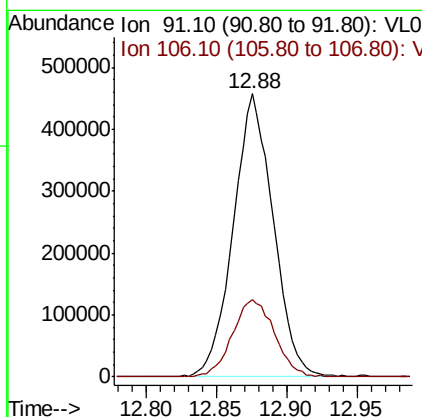
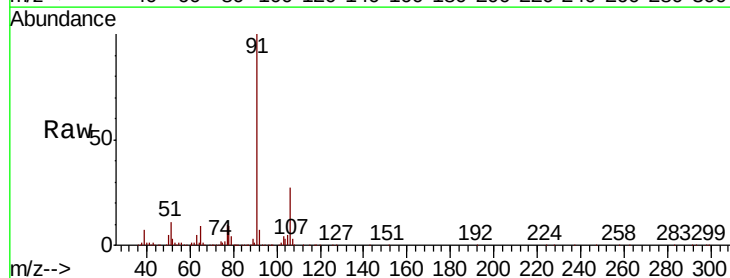
Manual Integrations
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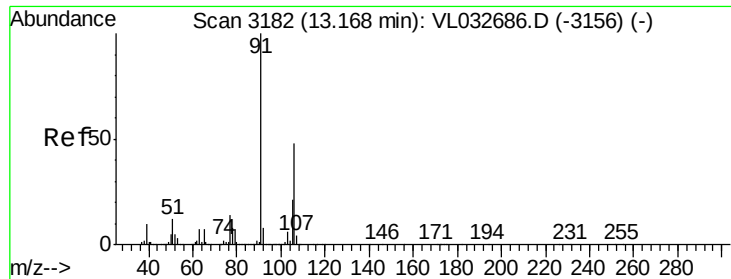
MMDadoda
11/12/2018 12:30:20 PM



#58
Ethyl Benzene
Concen: 2.137 ppbv
RT: 12.88 min Scan# 3091
Delta R.T. -0.01 min
Lab File: VL032731.D
Acq: 8 Nov 2018 00:18

Tgt Ion: 91 Resp: 897008
Ion Ratio Lower Upper
91 100
106 27.2 24.2 36.2





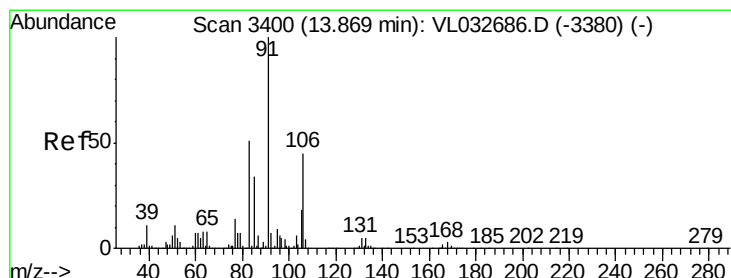
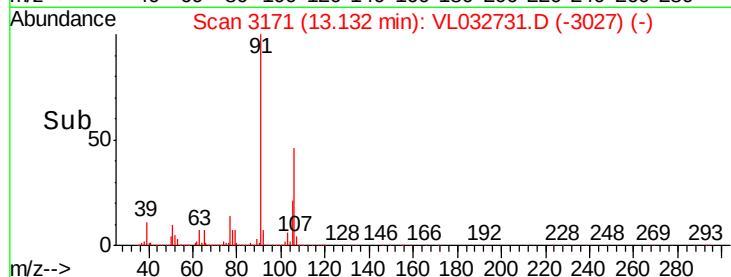
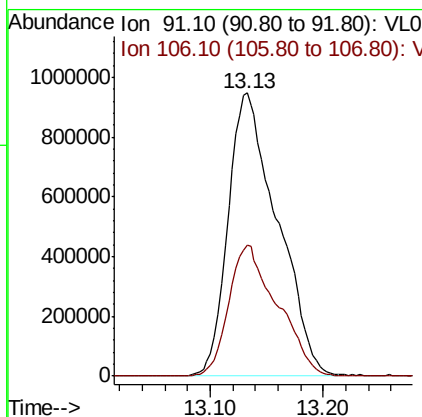
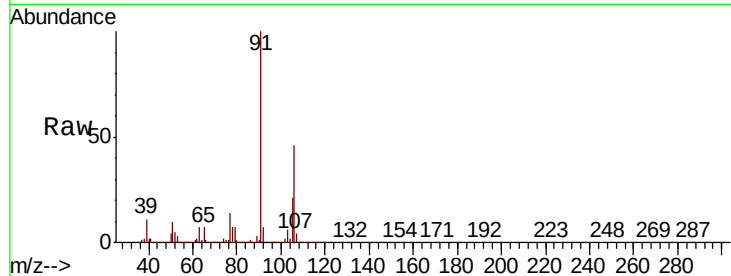
#59
m/p-Xylene
Concen: 7.628 ppbv
RT: 13.13 min Scan# 3171
Delta R.T. -0.04 min
Lab File: VL032731.D
Acq: 8 Nov 2018 00:18

Instrument :
MSVOA_L
ClientSampleId :
DUP-1

Tot Ion: 91 Resp: 2850898
Ion Ratio Lower Upper
91 100
106 46.0 35.9 53.9

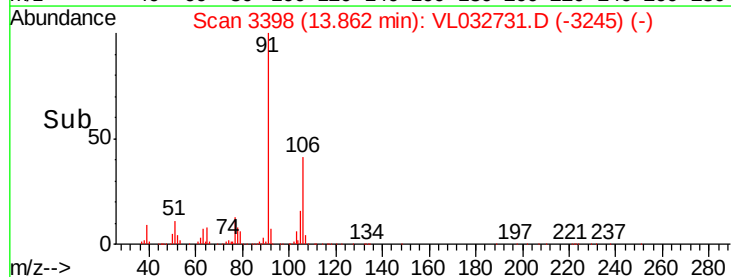
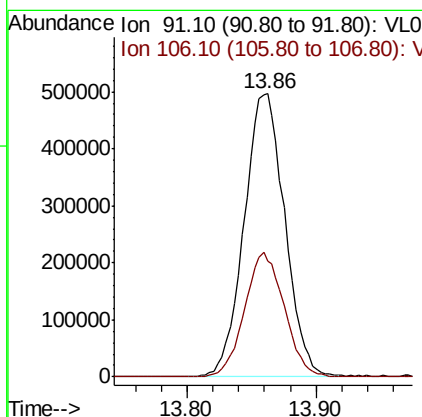
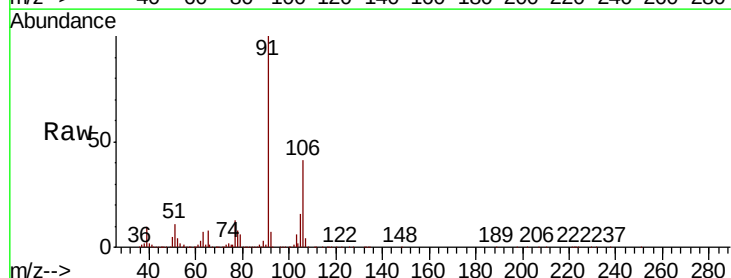
Manual Integrations
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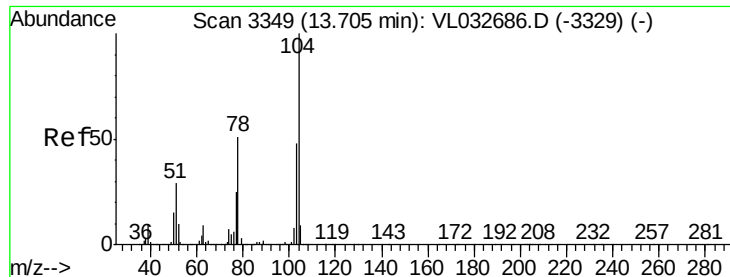
MMDadoda
11/12/2018 12:30:20 PM



#60
o-Xylene
Concen: 3.018 ppbv
RT: 13.86 min Scan# 3398
Delta R.T. -0.01 min
Lab File: VL032731.D
Acq: 8 Nov 2018 00:18

Tgt Ion: 91 Resp: 1087953
Ion Ratio Lower Upper
91 100
106 43.0 22.1 66.1





#61

Stvrene

Concen: 0.293 ppbv

RT: 13.70 min Scan# 3348

Delta R.T. -0.00 min

Lab File: VL032731.D

Acq: 8 Nov 2018 00:18

Instrument :

MSVOA_L

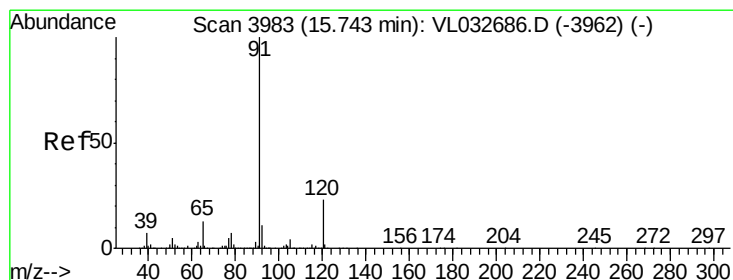
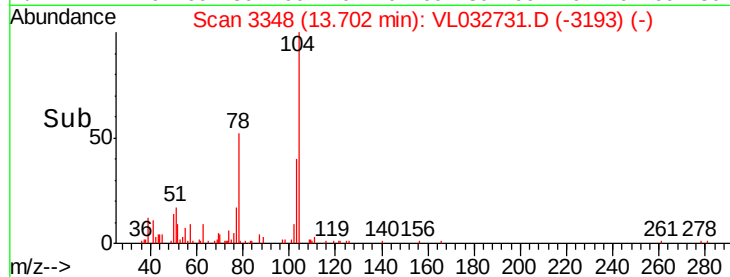
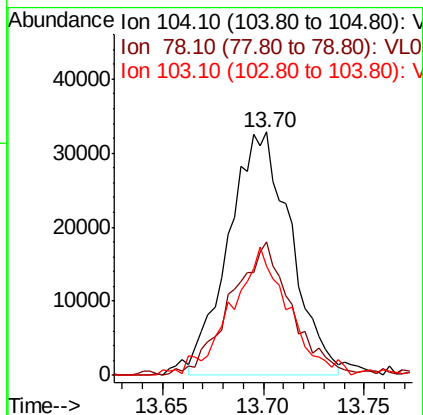
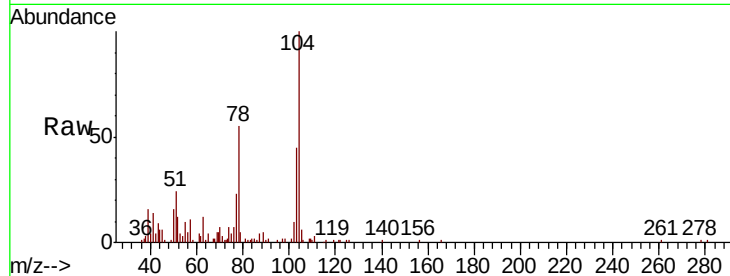
ClientSampleId :

DUP-1

Tot Ion:	104	Resp:	70892
Ion Ratio	Lower	Upper	
104	100		
78	54.5	42.8	64.2
103	48.5	37.4	56.0

Manual Integrations
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MMDadoda
11/12/2018 12:30:20 PM



#64

n-propylbenzene

Concen: 0.277 ppbv m

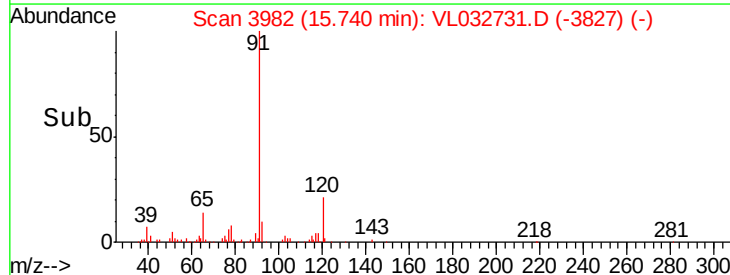
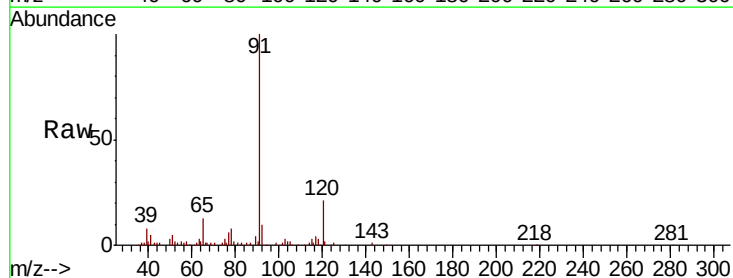
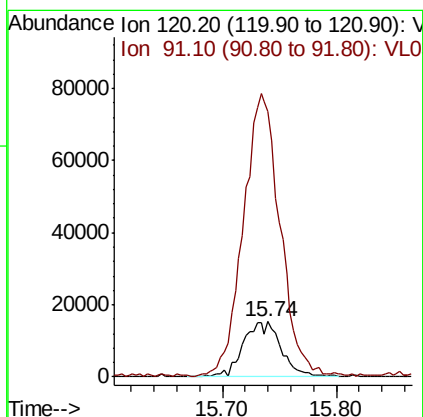
RT: 15.74 min Scan# 3982

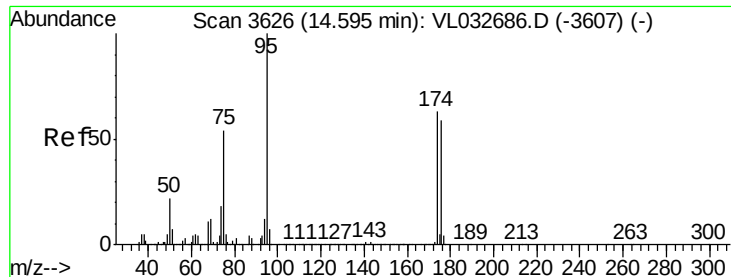
Delta R.T. -0.00 min

Lab File: VL032731.D

Acq: 8 Nov 2018 00:18

Tgt Ion:	120	Resp:	35186
Ion Ratio	Lower	Upper	
120	100		
91	508.8	390.2	585.2





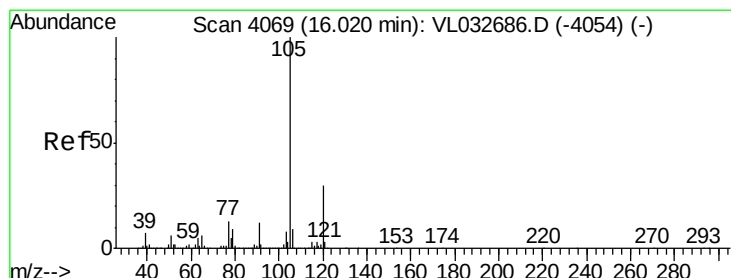
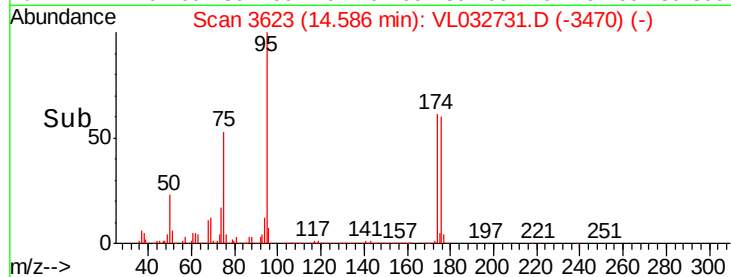
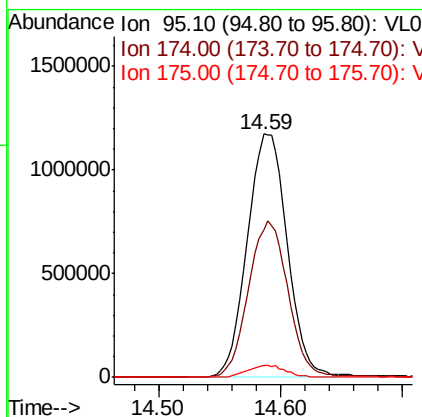
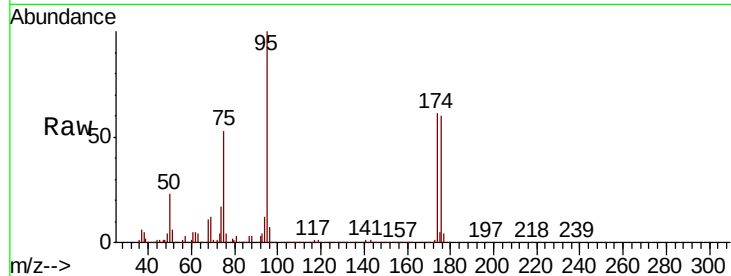
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.881 ppbv
 RT: 14.59 min Scan# 3623
 Delta R.T. -0.01 min
 Lab File: VL032731.D
 Acq: 8 Nov 2018 00:18

Instrument :
 MSVOA_L
 ClientSampleId :
 DUP-1

Tot Ion:	95	Resp:	2657861
Ion	Ratio	Lower	Upper
95	100		
174	64.3	46.0	69.0
175	4.8	3.4	5.0

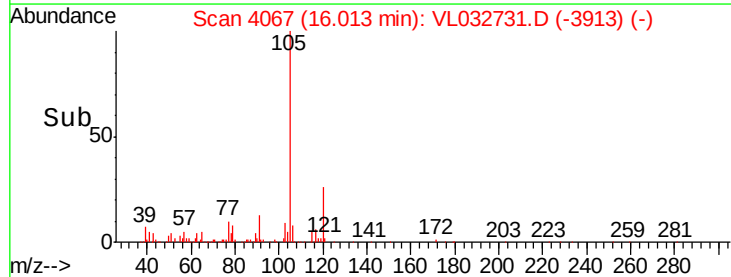
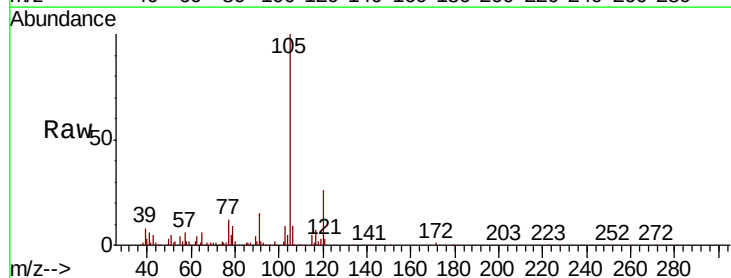
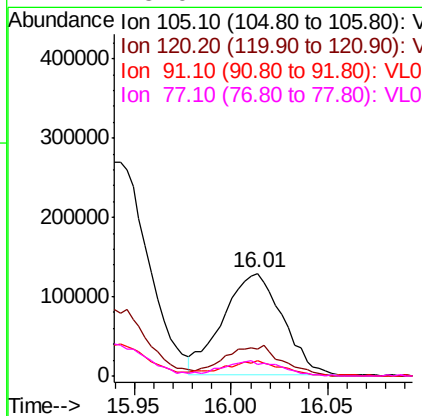
Manual Integrations
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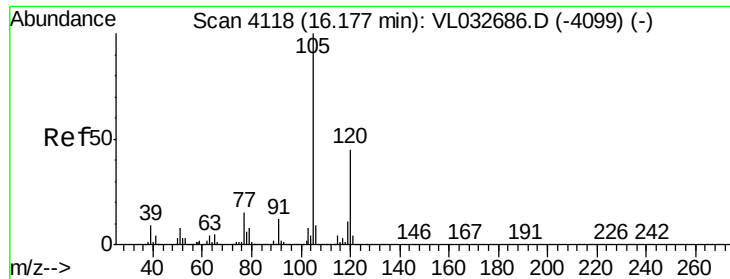
MMDadoda
 11/12/2018 12:30:20 PM



#72
 4-Ethyltoluene
 Concen: 0.716 ppbv
 RT: 16.01 min Scan# 4067
 Delta R.T. -0.00 min
 Lab File: VL032731.D
 Acq: 8 Nov 2018 00:18

Tgt Ion:	105	Resp:	274756
Ion	Ratio	Lower	Upper
105	100		
120	29.0	23.7	35.5
91	15.0	10.4	15.6
77	15.0	11.4	17.2





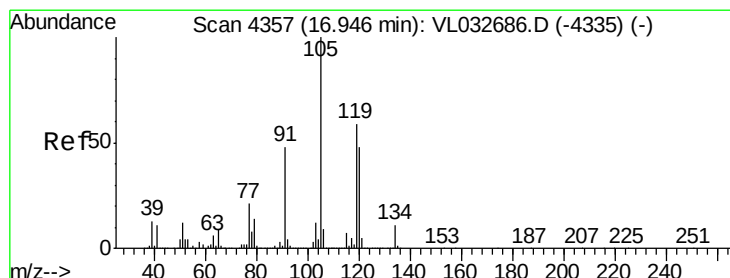
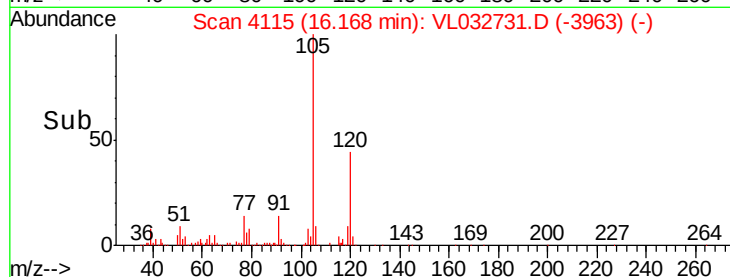
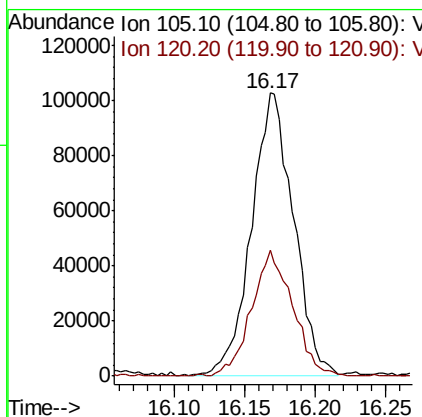
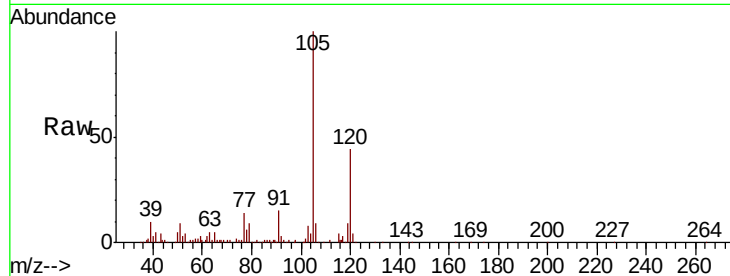
#73
 1,3,5-Trimethylbenzene
 Concen: 0.573 ppbv
 RT: 16.17 min Scan# 4115
 Delta R.T. -0.01 min
 Lab File: VL032731.D
 Acq: 8 Nov 2018 00:18

Instrument :
 MSVOA_L
 ClientSampled :
 DUP-1

Tot Ion	Ratio	Lower	Upper
105	100		
120	44.4	35.4	53.2

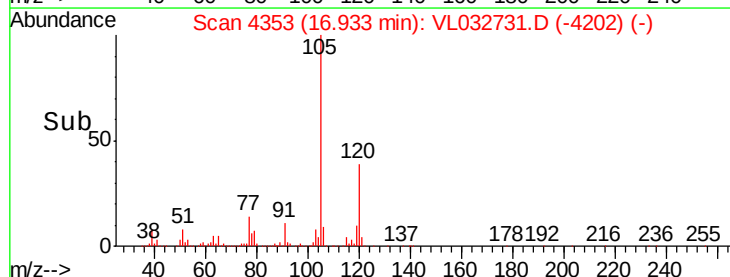
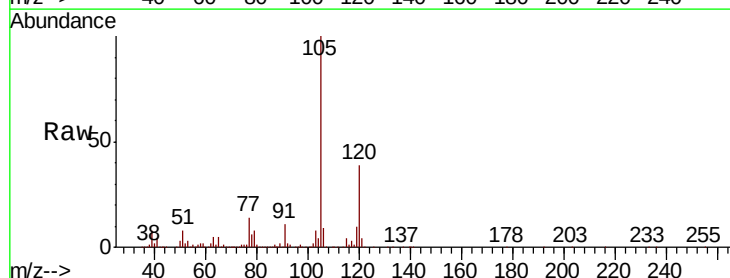
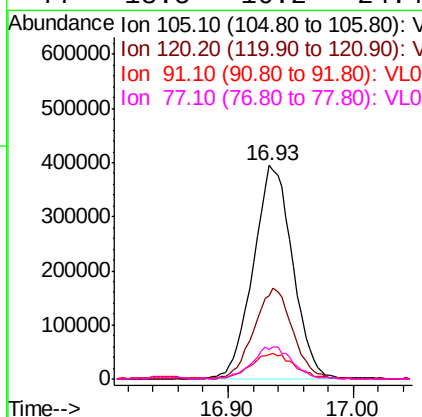
Manual Integrations
 APPROVED

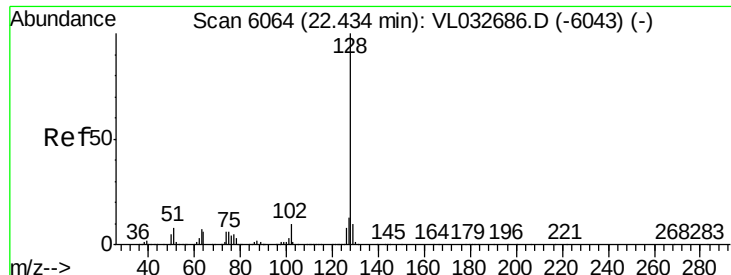
MMDadoda
 11/12/2018 12:30:20 PM



#74
 1,2,4-Trimethylbenzene
 Concen: 2.148 ppbv
 RT: 16.93 min Scan# 4353
 Delta R.T. -0.01 min
 Lab File: VL032731.D
 Acq: 8 Nov 2018 00:18

Tgt Ion	Ratio	Lower	Upper
105	100		
120	38.9	35.8	53.8
91	10.9	33.2	49.8#
77	13.5	16.2	24.4#





#79

Naphthalene

Concen: 0.144 ppbv m

RT: 22.43 min Scan# 6064

Delta R.T. -0.00 min

Lab File: VL032731.D

Acq: 8 Nov 2018 00:18

Instrument :

MSVOA_L

ClientSampleId :

DUP-1

Tot Ion:	128	Resp:	35759
Ion Ratio	Lower	Upper	
128	100		
127	15.6	10.3	15.5#
129	15.6	8.6	13.0#

Manual Integrations
APPROVED

MMDadoda
11/12/2018 12:30:20 PM

