

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL121718\
 Data File : VL033022.D
 Acq On : 18 Dec 2018 12:11
 Operator : SY/AP
 Sample : VSTDCCC010
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleID :
 VSTDCCC010EC

Manual Integrations
 APPROVED

MMDadoda
 12/19/2018 1:58:49 PM

Quant Time: Dec 18 12:42:23 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL120718AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Dec 0
 QLast Update : Fri Dec 07 09:35:17 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	1110059	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	2729763	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	2745297	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	2018270	9.95	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.50%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	1682801	11.356	ppbv	98
3) Chlorodifluoromethane	3.02	51	927462	11.032	ppbv	98
4) Chloromethane	3.17	50	496516	10.145	ppbv	98
5) Vinyl Chloride	3.29	62	518468	10.411	ppbv	100
6) Bromomethane	3.52	94	336860	10.815	ppbv	98
7) Chloroethane	3.61	64	198515	11.122	ppbv	98
8) Dichlorotetrafluoroethane	3.22	85	1285073	10.435	ppbv	98
9) Propene	3.04	41	378943	11.400	ppbv	98
10) Heptane	8.25	43	1366344	10.942	ppbv	99
11) Trichlorofluoromethane	4.01	101	1550009	11.102	ppbv	98
12) 1,1,2-Trichlorotrifluoroet	4.56	101	1054709	8.854	ppbv	100
13) Ethanol	3.65	45	117393	10.257	ppbv	93
14) Bromoethene	3.79	108	470913	11.907	ppbv	100
15) Acetone	3.91	43	980466	10.290	ppbv	98
16) 1,3-Butadiene	3.37	39	421766	11.157	ppbv	97
17) tert-Butyl alcohol	4.36	59	278367	11.475	ppbv #	80
18) 1,1-Dichloroethene	4.36	96	490684	10.518	ppbv	97
19) Isopropyl Alcohol	4.03	45	800033	13.370	ppbv #	99
20) Methylene Chloride	4.41	84	434429	9.329	ppbv	98
21) Allyl Chloride	4.48	41	769510	9.910	ppbv	98
22) trans-1,2-Dichloroethene	4.97	96	491480	8.489	ppbv	100
23) Vinyl Acetate	5.16	43	2015514	12.494	ppbv	99
24) 1,1-Dichloroethane	5.10	63	1279698m	9.123	ppbv	
25) Ethyl Acetate	5.77	43	2409119	10.704	ppbv	100
26) Hexane	5.78	57	1112599	10.707	ppbv	98
27) Carbon Disulfide	4.62	76	1232651	9.487	ppbv	100
28) Methyl tert-Butyl Ether	5.12	73	1873794	12.007	ppbv	100
29) Chloroform	5.85	83	1833479	9.889	ppbv	96
30) Cyclohexane	7.26	84	952452	11.059	ppbv	99
31) cis-1,2-Dichloroethene	5.65	61	1129352	11.843	ppbv	99
32) 1,1,1-Trichloroethane	6.62	97	1924457	9.809	ppbv	99
34) 2-Butanone	5.33	43	1558423	13.107	ppbv	100
35) Carbon Tetrachloride	7.14	117	2129634	9.925	ppbv	99
36) Benzene	7.01	78	2174175	10.829	ppbv	99
37) 1,2-Dichloroethane	6.42	62	1452204	10.623	ppbv	99
38) Trichloroethene	7.97	130	897030	10.735	ppbv	99
39) 1,2-Dichloropropane	7.74	63	790430	10.380	ppbv	95
40) 1,4-Dioxane	7.96	88	355751	12.684	ppbv #	86
41) Tetrahydrofuran	6.15	42	858182	11.605	ppbv	100
42) Bromodichloromethane	7.92	83	2039443	10.768	ppbv	98
43) Methyl Methacrylate	8.14	69	880784	11.839	ppbv	99

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,2,4-Trimethylpentane	8.00	57	3648247	10.704	ppbv	100
45) t-1,3-Dichloropropene	9.42	75	1164801	12.769	ppbv	100
46) cis-1,3-Dichloropropene	8.84	75	1347510	12.069	ppbv	97
47) 1,1,2-Trichloroethane	9.62	97	900581	10.745	ppbv	98
48) Dibromochloromethane	10.46	129	1707674	10.861	ppbv	100
49) Bromoform	13.21	173	1176528	9.098	ppbv	99
50) 4-Methyl-2-Pentanone	8.87	43	2053875	10.802	ppbv	100
51) 2-Hexanone	10.28	43	1537429	11.922	ppbv #	99
52) Tetrachloroethene	11.38	164	790466	10.823	ppbv	97
53) Toluene	9.95	91	2513936	11.806	ppbv	100
54) 1,2-Dibromoethane	10.77	107	1120639	8.559	ppbv	97
56) 1,1,1,2-Tetrachloroethane	12.29	131	1096108	8.956	ppbv	99
57) Chlorobenzene	12.31	112	1585454	7.996	ppbv	99
58) Ethyl Benzene	12.87	91	2770801	9.461	ppbv	99
59) m/p-Xylene	13.13	91	4711807m	17.746	ppbv	
60) o-Xylene	13.86	91	3002635	11.198	ppbv	100
61) Styrene	13.69	104	2195632	12.310	ppbv	99
62) Isopropylbenzene	14.83	105	4213704	11.264	ppbv	100
63) 1,1,2,2-Tetrachloroethane	13.84	83	2040462	9.800	ppbv	100
64) n-propylbenzene	15.73	120	1087648	11.194	ppbv	98
65) tert-Butylbenzene	16.92	119	3758500	10.837	ppbv	100
66) Benzyl Chloride	17.16	91	2184875	11.366	ppbv	100
67) sec-Butylbenzene	17.47	105	5274686	10.316	ppbv	100
69) p-Isopropyltoluene	17.82	119	4392628	10.600	ppbv	99
70) n-Butylbenzene	18.72	91	4405178	11.555	ppbv	100
71) 2-Chlorotoluene	15.62	91	3139183	11.284	ppbv	100
72) 4-Ethyltoluene	16.01	105	3470278	11.593	ppbv	99
73) 1,3,5-Trimethylbenzene	16.16	105	3322559	11.369	ppbv	98
74) 1,2,4-Trimethylbenzene	16.93	105	3409457	10.332	ppbv	99
75) 1,3-Dichlorobenzene	17.17	146	1914283	9.851	ppbv	100
76) 1,4-Dichlorobenzene	17.32	146	1890431	10.426	ppbv	99
77) 1,2-Dichlorobenzene	18.00	146	1848301	10.185	ppbv	100
78) Hexachloro-1,3-Butadiene	23.55	225	1236785	12.393	ppbv	100
79) Naphthalene	22.42	128	2567583	12.051	ppbv	99
80) Naphthalene, 2-methyl-	25.12	142	649495	14.267	ppbv	100
81) 1,2,4-Trichlorobenzene	22.15	180	1271838	11.255	ppbv	99

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

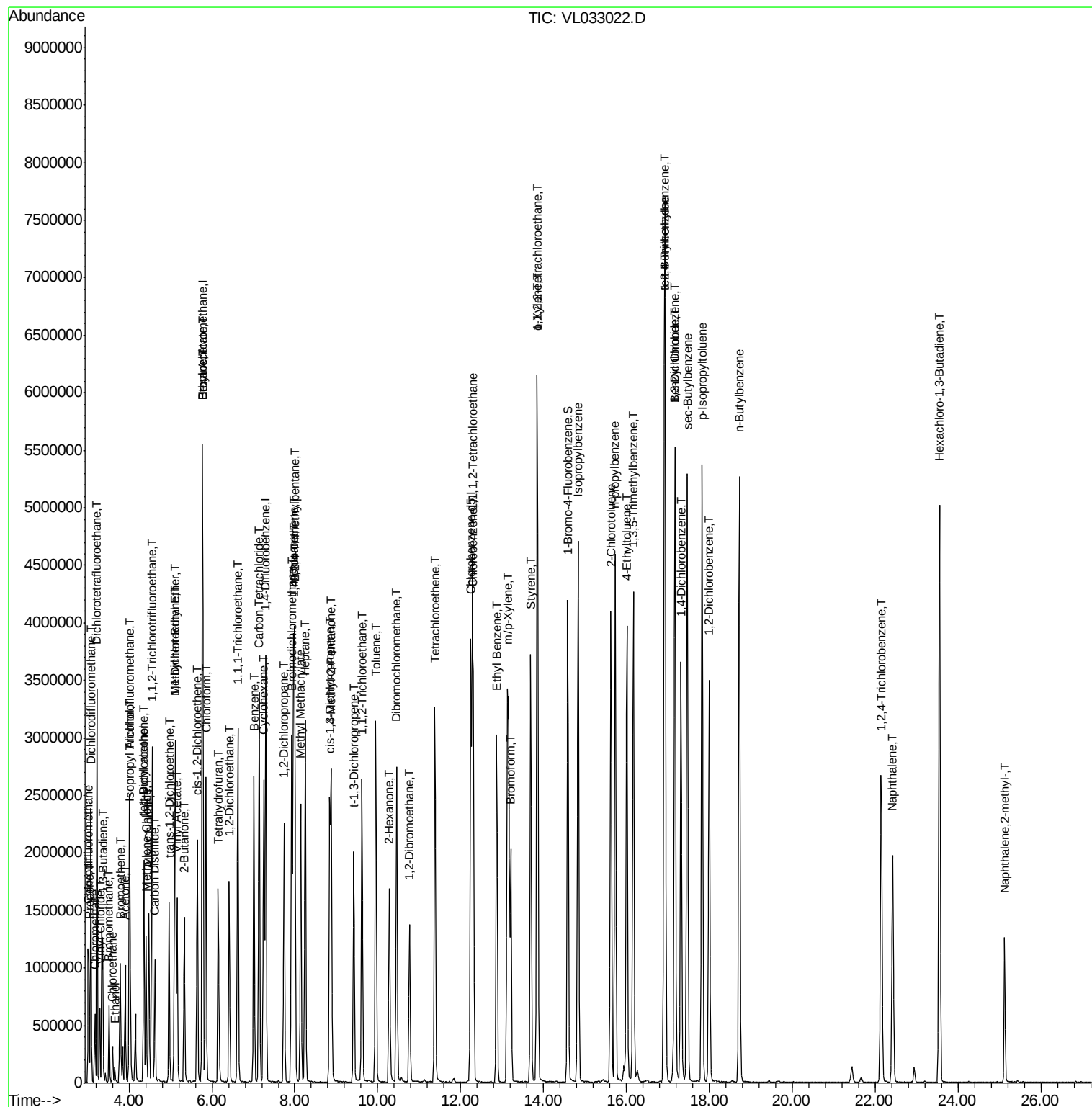
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL121718\
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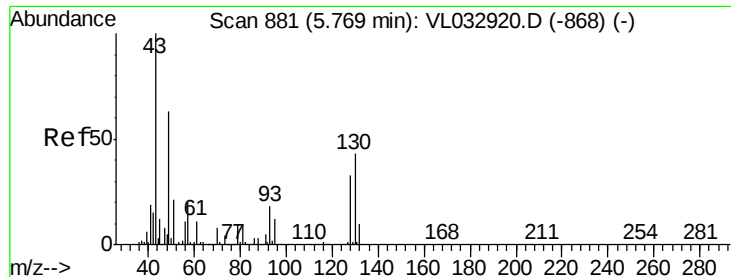
Instrument :
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ClientSampleId :
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QLast Update : Fri Dec 07 09:35:17 2018
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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 880

Delta R.T. -0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 49 Resp: 1110059

Ion Ratio Lower Upper

49 100

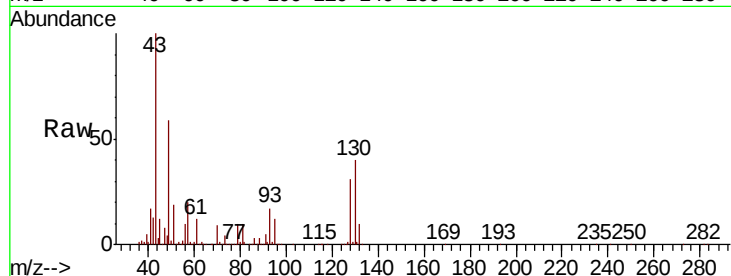
128 52.1 26.3 78.8

130 67.2 33.9 101.7

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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

800000

600000

400000

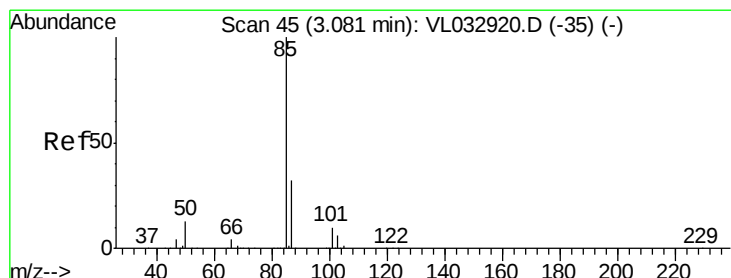
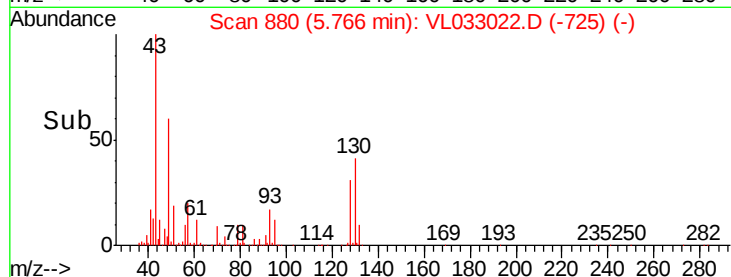
200000

0

5.77

5.70 5.75 5.80 5.85

Time-->



#2

Dichlorodifluoromethane

Concen: 11.356 ppbv

RT: 3.08 min Scan# 45

Delta R.T. 0.00 min

Lab File: VL033022.D

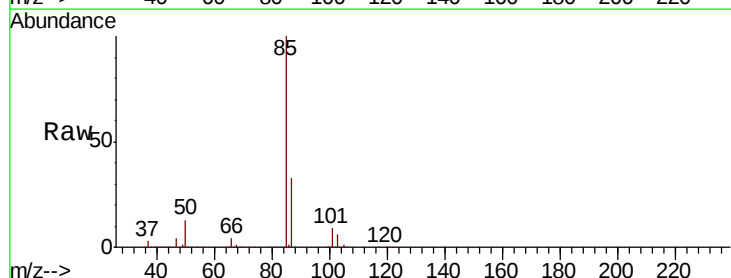
Acq: 18 Dec 2018 12:11

Tgt Ion: 85 Resp: 1682801

Ion Ratio Lower Upper

85 100

87 33.2 25.7 38.5



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

1500000

1000000

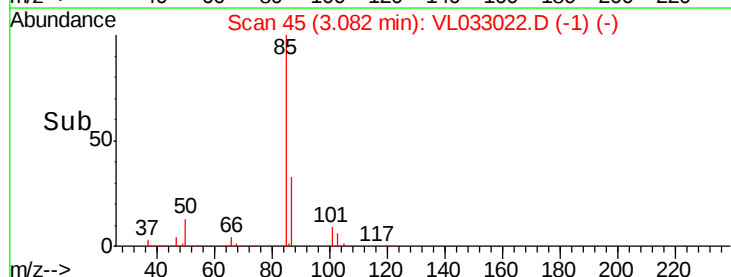
500000

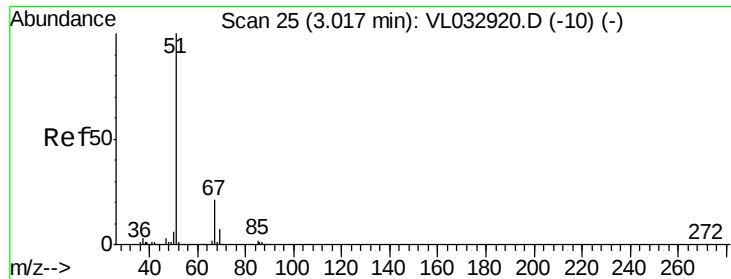
0

3.08

3.05 3.10 3.15

Time-->





#3

Chlorodifluoromethane

Concen: 11.032 ppbv

RT: 3.02 min Scan# 25

Delta R.T. 0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 51 Resp: 927462

Ion Ratio Lower Upper

51 100

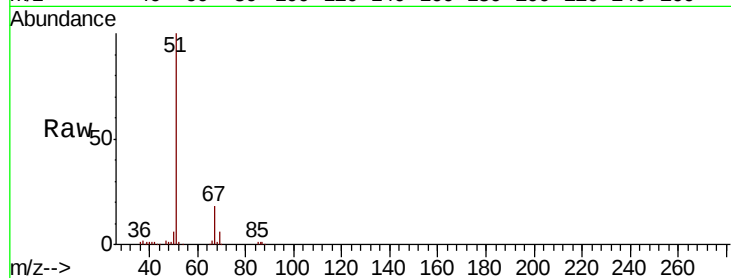
67 19.9 16.8 25.2

Manual Integrations

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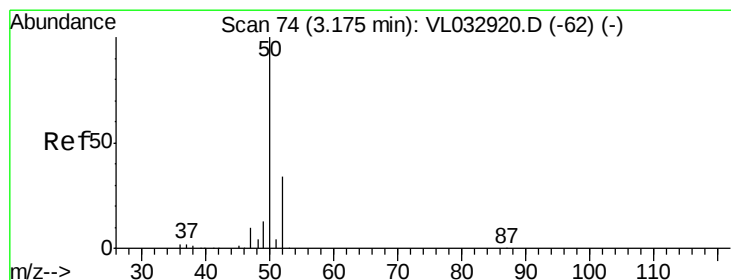
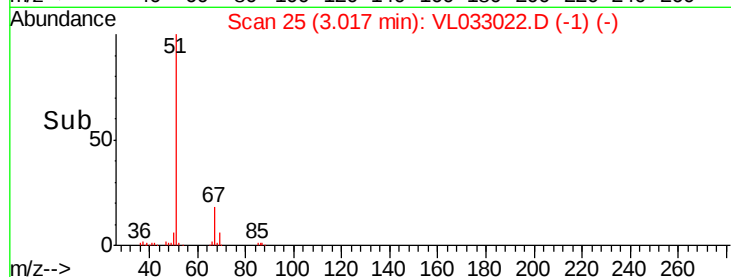
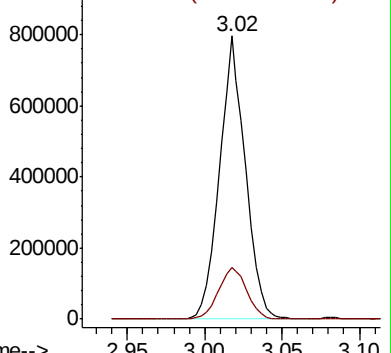
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 10.145 ppbv

RT: 3.17 min Scan# 74

Delta R.T. 0.00 min

Lab File: VL033022.D

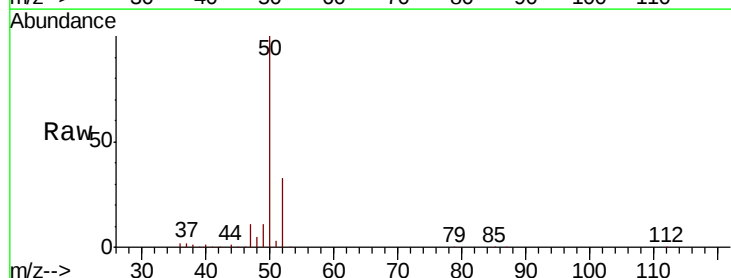
Acq: 18 Dec 2018 12:11

Tgt Ion: 50 Resp: 496516

Ion Ratio Lower Upper

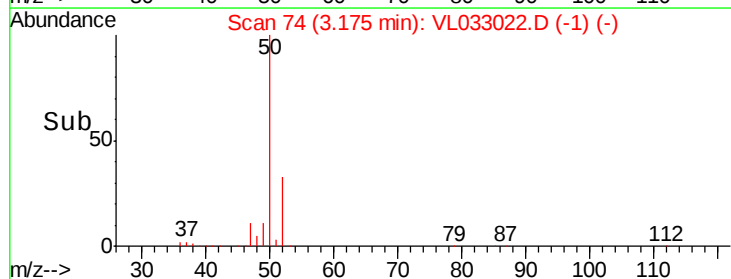
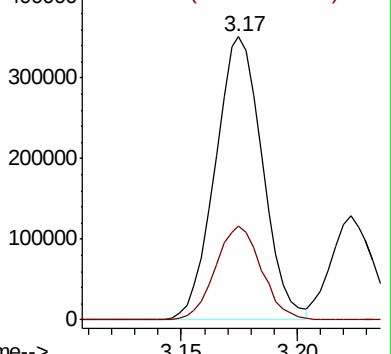
50 100

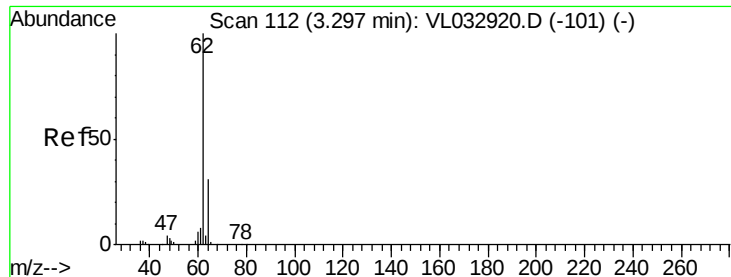
52 33.2 27.3 40.9



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 10.411 ppbv

RT: 3.29 min Scan# 111

Delta R.T. -0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 62 Resp: 518468

Ion Ratio Lower Upper

62 100

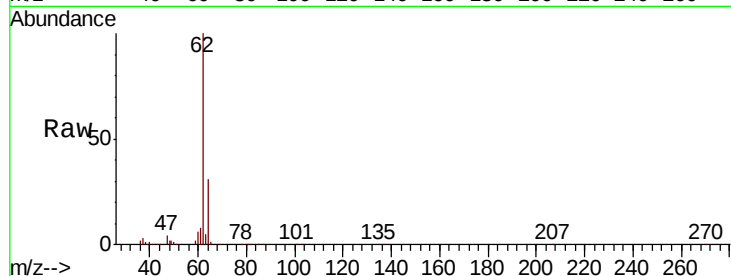
64 31.2 24.8 37.2

Manual Integrations

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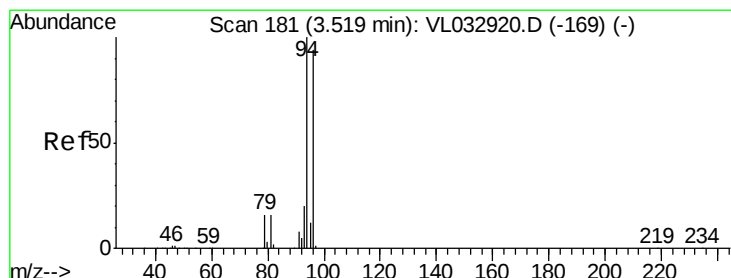
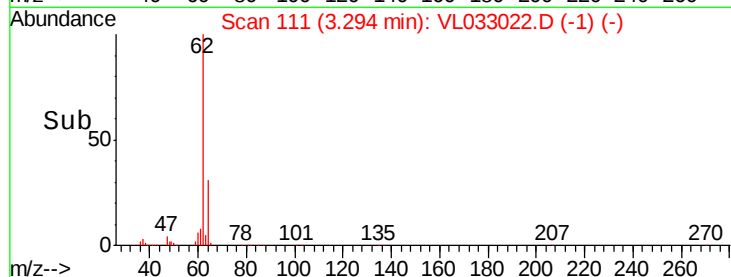
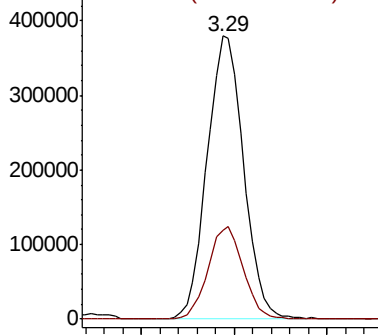
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Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#6

Bromomethane

Concen: 10.815 ppbv

RT: 3.52 min Scan# 181

Delta R.T. 0.00 min

Lab File: VL033022.D

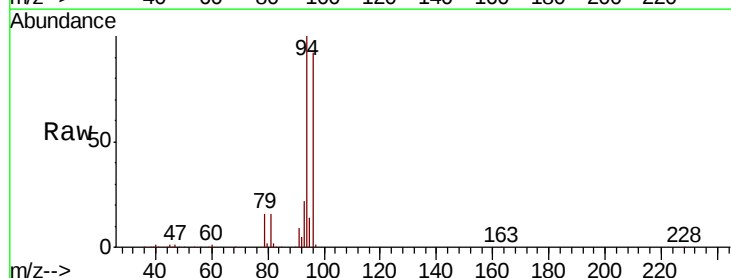
Acq: 18 Dec 2018 12:11

Tgt Ion: 94 Resp: 336860

Ion Ratio Lower Upper

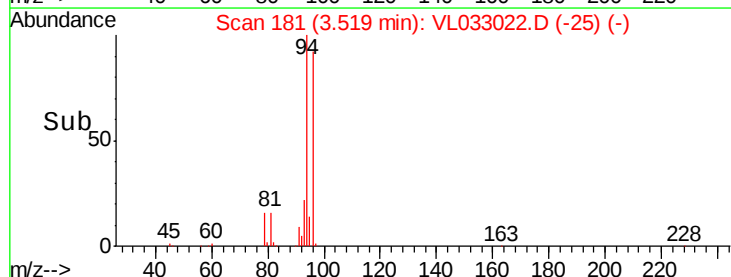
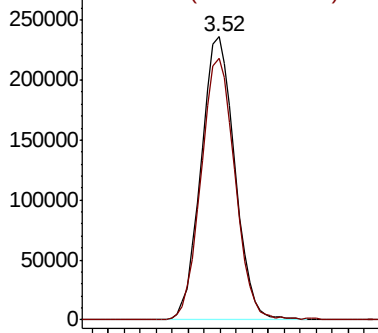
94 100

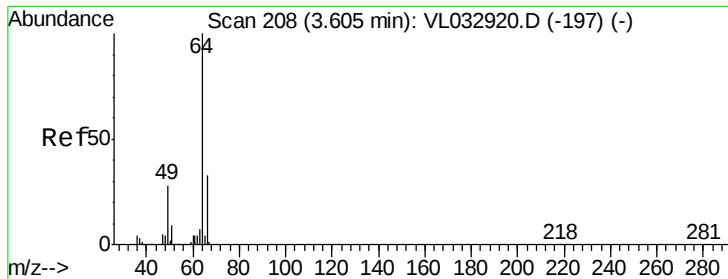
96 92.3 75.5 113.3



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0





#7

Chloroethane

Concen: 11.122 ppbv

RT: 3.61 min Scan# 208

Delta R.T. 0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 64 Resp: 198515

Ion Ratio Lower Upper

64 100

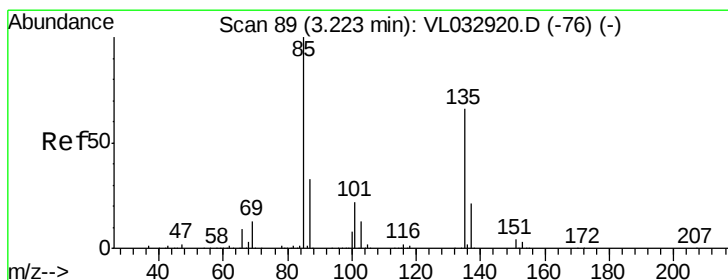
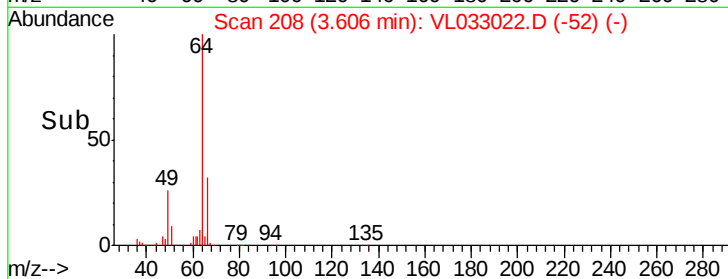
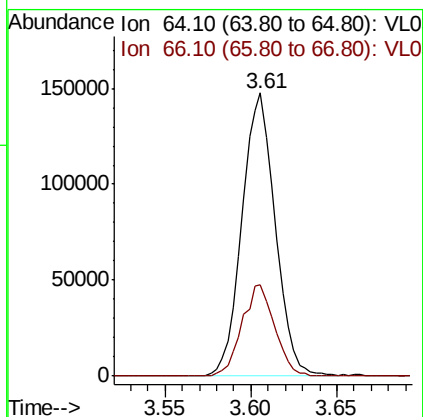
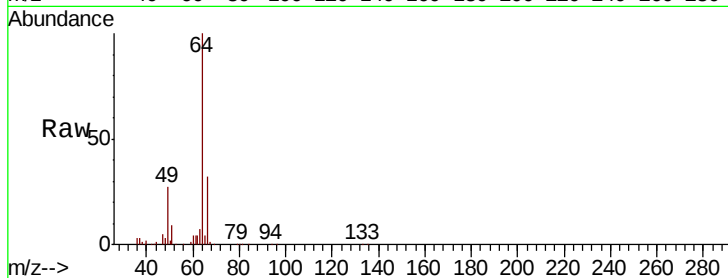
66 32.2 26.6 40.0

Manual Integrations

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#8

Dichlorotetrafluoroethane

Concen: 10.435 ppbv

RT: 3.22 min Scan# 89

Delta R.T. 0.00 min

Lab File: VL033022.D

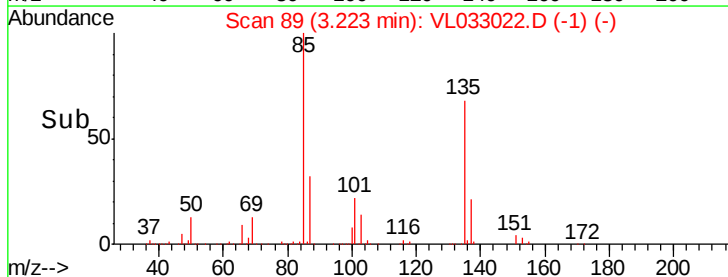
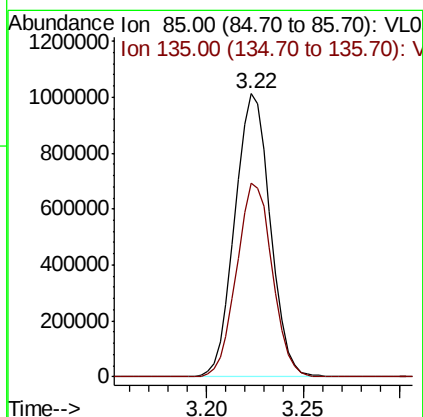
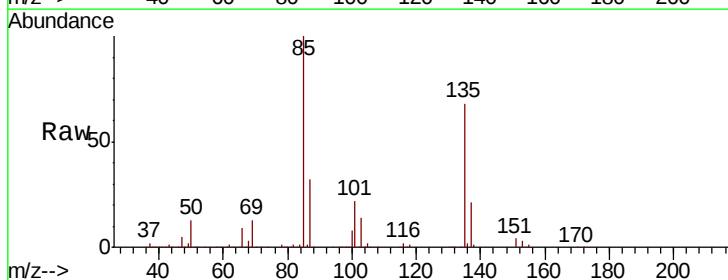
Acq: 18 Dec 2018 12:11

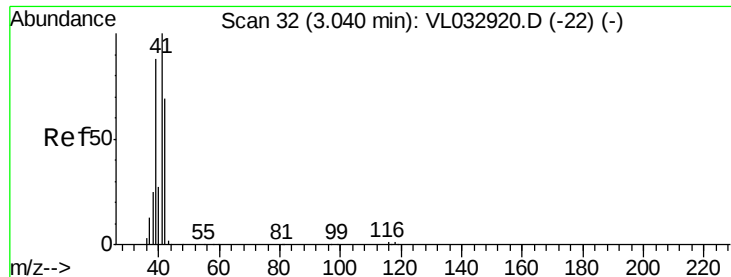
Tgt Ion: 85 Resp: 1285073

Ion Ratio Lower Upper

85 100

135 69.4 54.5 81.7





#9

Propene

Concen: 11.400 ppbv

RT: 3.04 min Scan# 32

Delta R.T. 0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 41 Resp: 378943

Ion Ratio Lower Upper

41 100

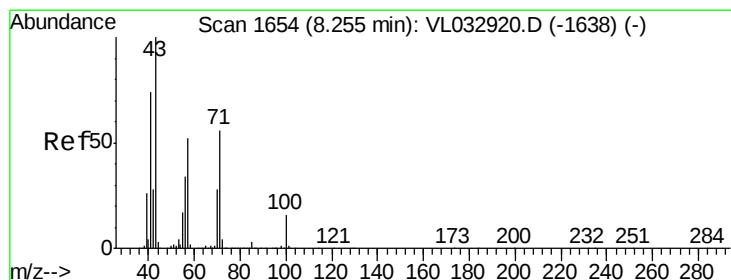
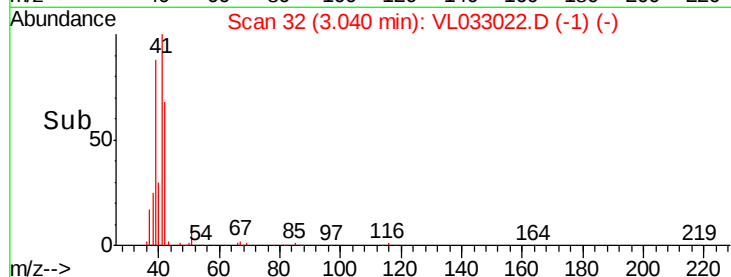
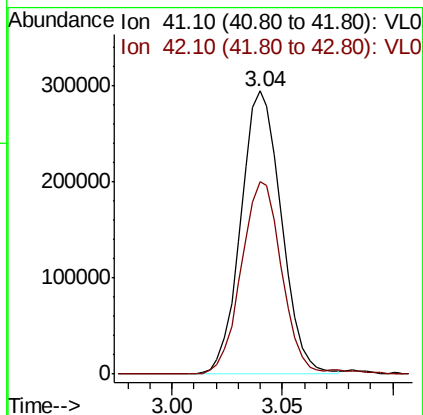
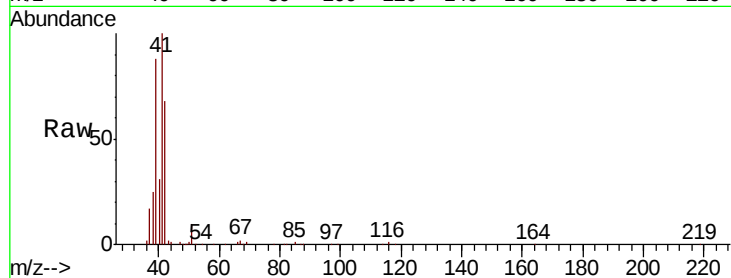
42 68.5 56.2 84.2

Manual Integrations

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#10

Heptane

Concen: 10.942 ppbv

RT: 8.25 min Scan# 1653

Delta R.T. -0.00 min

Lab File: VL033022.D

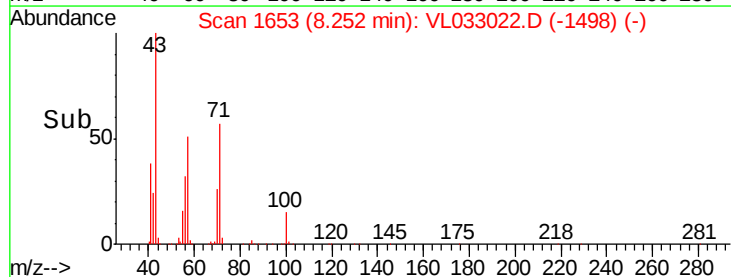
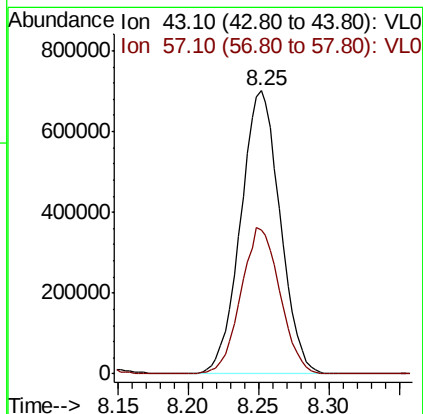
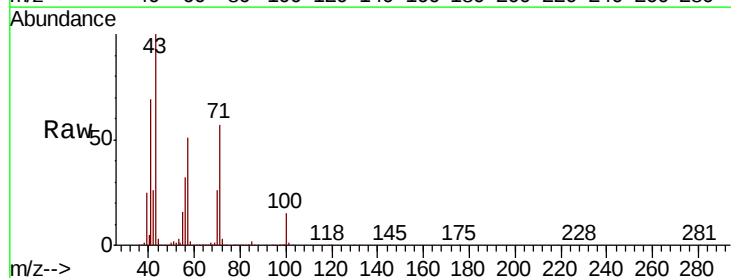
Acq: 18 Dec 2018 12:11

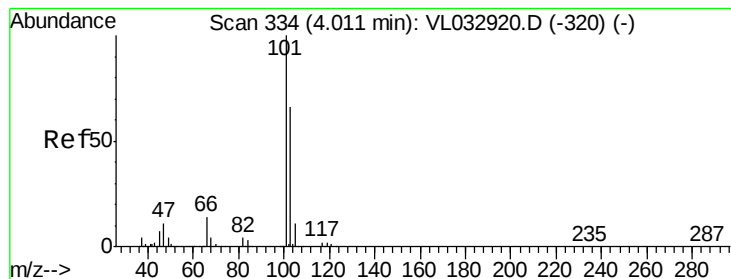
Tgt Ion: 43 Resp: 1366344

Ion Ratio Lower Upper

43 100

57 51.5 41.8 62.6





#11

Trichlorofluoromethane

Concen: 11.102 ppbv

RT: 4.01 min Scan# 333

Delta R.T. -0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:101 Resp: 1550009

Ion Ratio Lower Upper

101 100

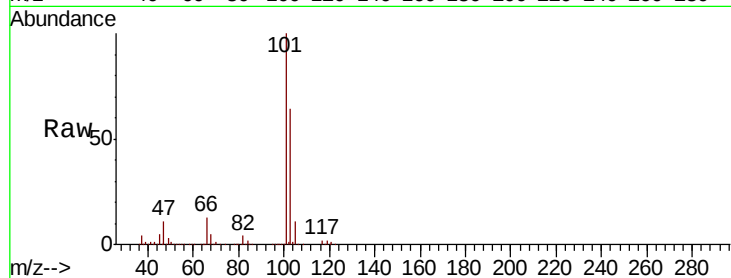
103 64.2 52.7 79.1

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Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V

1200000

1000000

800000

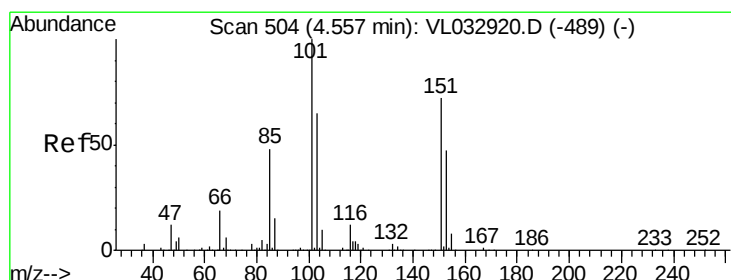
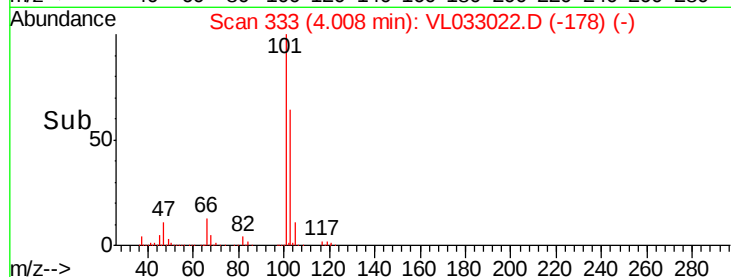
600000

400000

200000

0

Time-->



#12

1,1,2-Trichlorotrifluoroethane

Concen: 8.854 ppbv

RT: 4.56 min Scan# 504

Delta R.T. 0.00 min

Lab File: VL033022.D

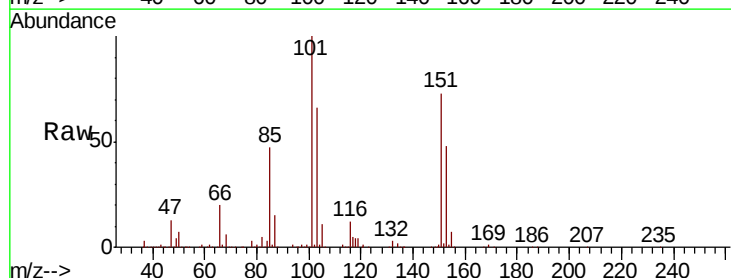
Acq: 18 Dec 2018 12:11

Tgt Ion:101 Resp: 1054709

Ion Ratio Lower Upper

101 100

151 74.2 59.3 88.9



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V

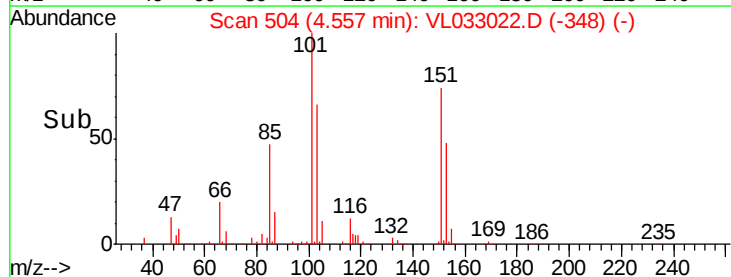
600000

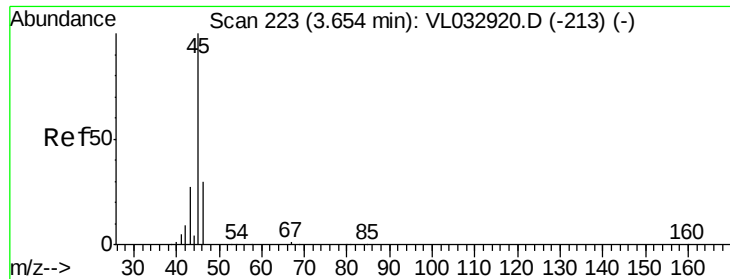
400000

200000

0

Time-->





#13

Ethanol

Concen: 10.257 ppbv

RT: 3.65 min Scan# 223

Delta R.T. 0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 45 Resp: 117393

Ion Ratio Lower Upper

45 100

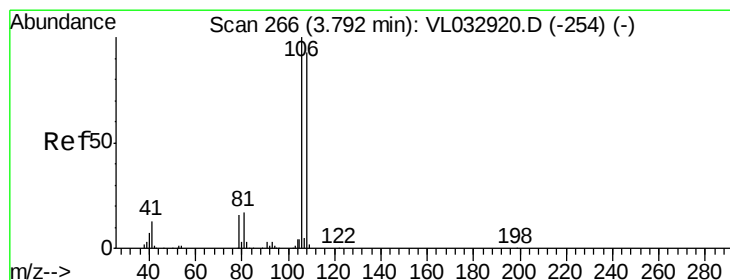
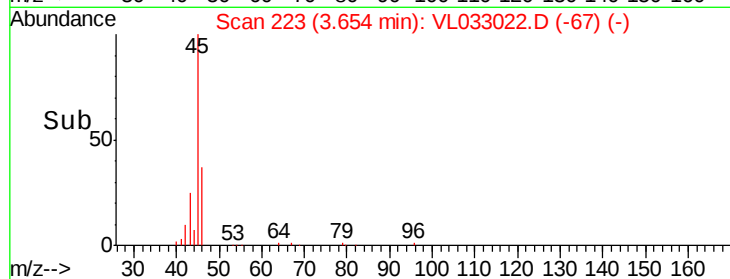
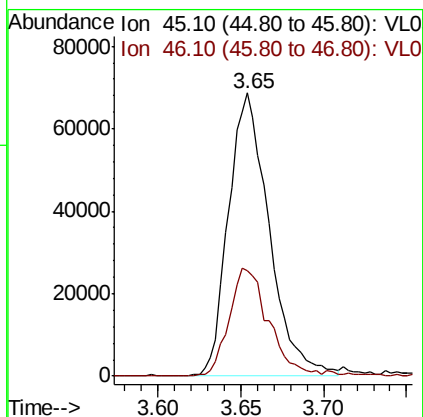
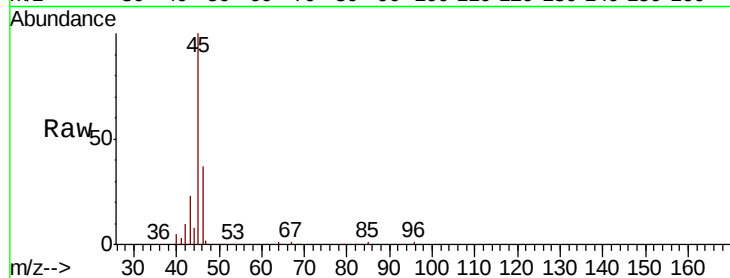
46 38.6 13.8 55.4

Manual Integrations

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#14

Bromoethene

Concen: 11.907 ppbv

RT: 3.79 min Scan# 266

Delta R.T. 0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

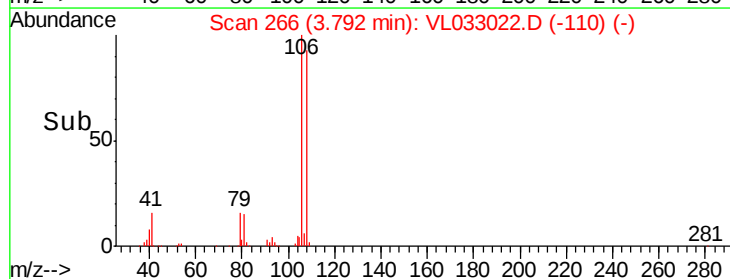
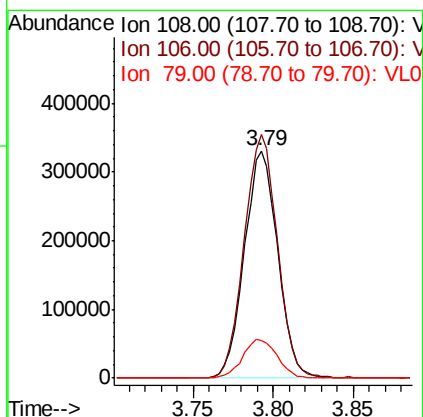
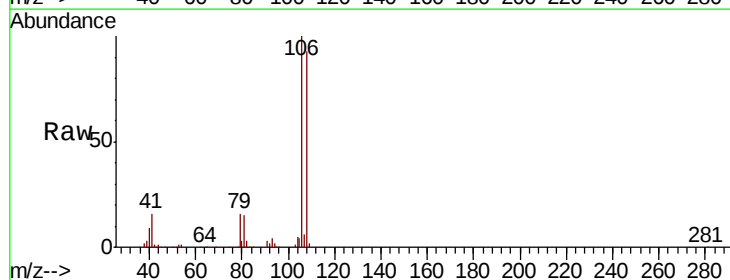
Tgt Ion: 108 Resp: 470913

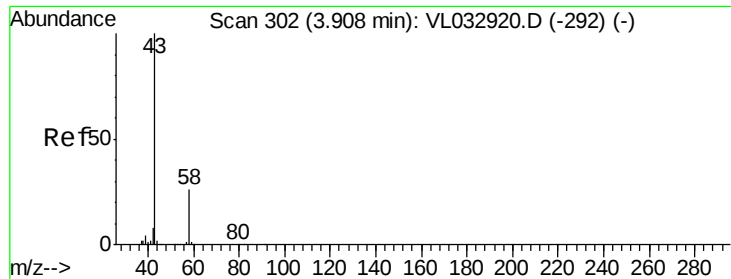
Ion Ratio Lower Upper

108 100

106 106.8 85.4 128.2

79 17.7 14.6 21.8





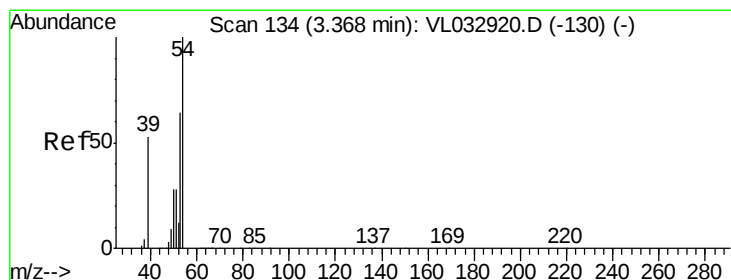
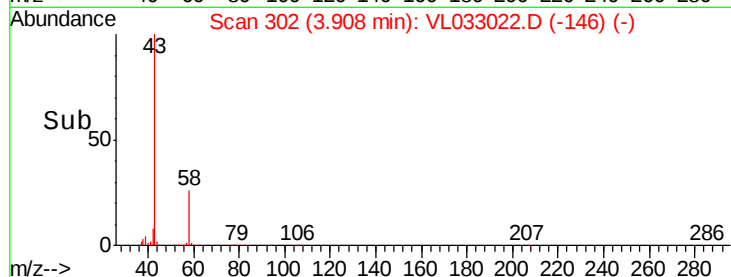
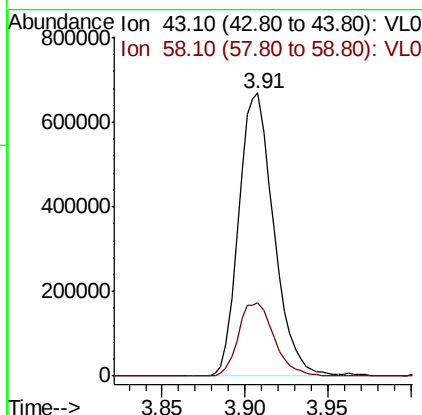
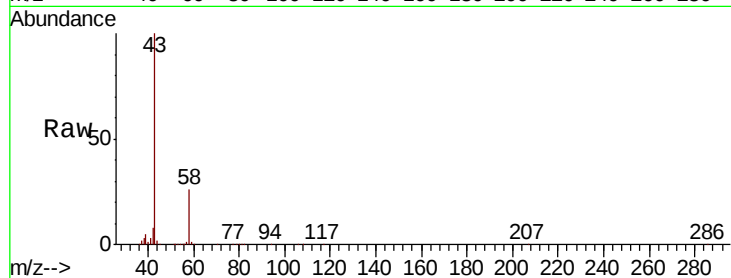
#15
Acetone
Concen: 10.290 ppbv
RT: 3.91 min Scan# 302
Delta R.T. 0.00 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion: 43 Resp: 980466
Ion Ratio Lower Upper
43 100
58 26.7 20.6 30.8

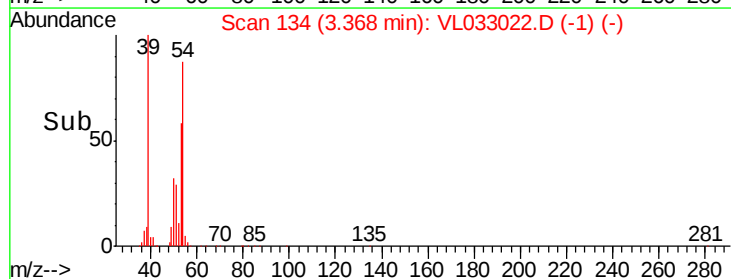
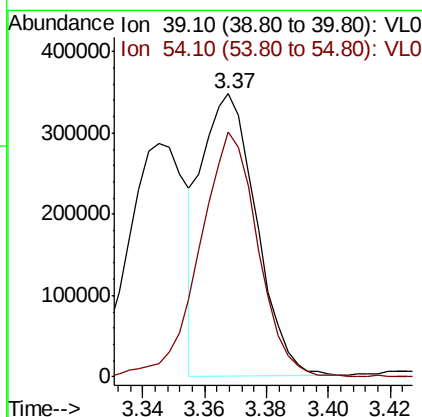
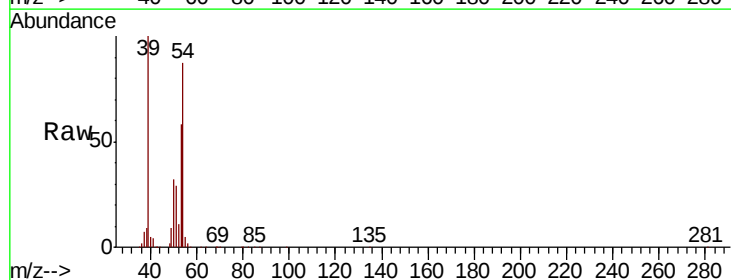
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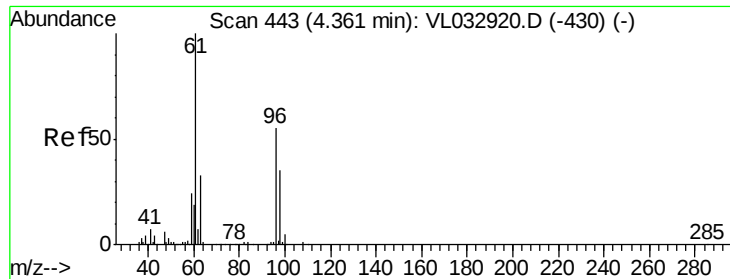
MMDadoda
12/19/2018 1:58:49 PM



#16
1,3-Butadiene
Concen: 11.157 ppbv
RT: 3.37 min Scan# 134
Delta R.T. 0.00 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Tgt Ion: 39 Resp: 421766
Ion Ratio Lower Upper
39 100
54 93.5 72.7 109.1





#17

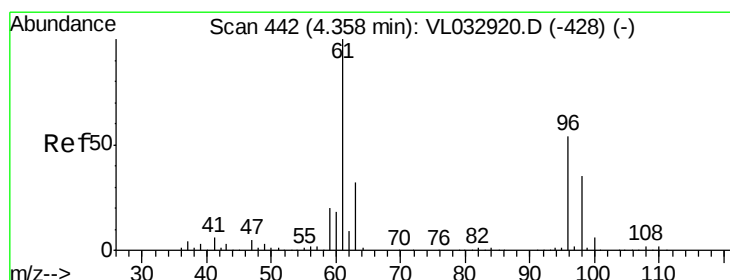
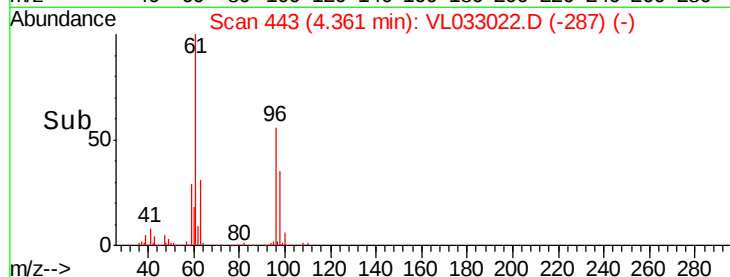
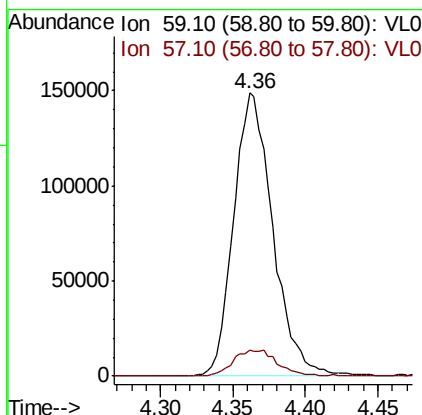
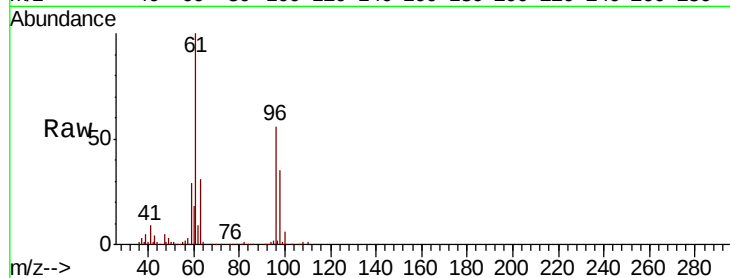
tert-Butyl alcohol
Concen: 11.475 ppbv
RT: 4.36 min Scan# 443
Delta R.T. 0.00 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion: 59 Resp: 278367
Ion Ratio Lower Upper
59 100
57 10.5 0.6 1.0#

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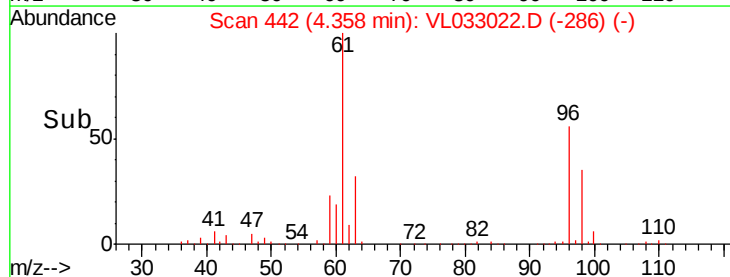
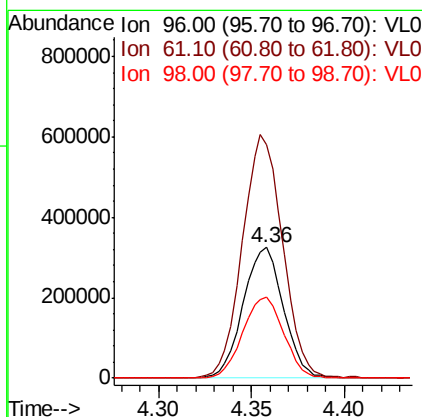
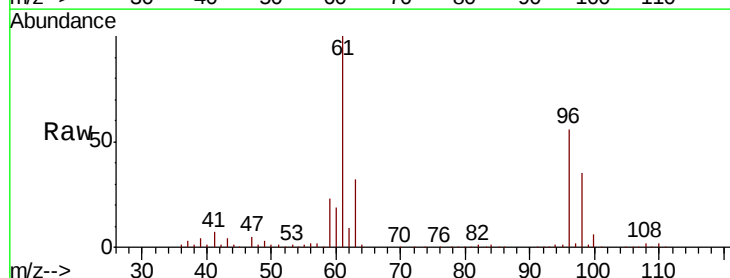
MMDadoda
12/19/2018 1:58:49 PM

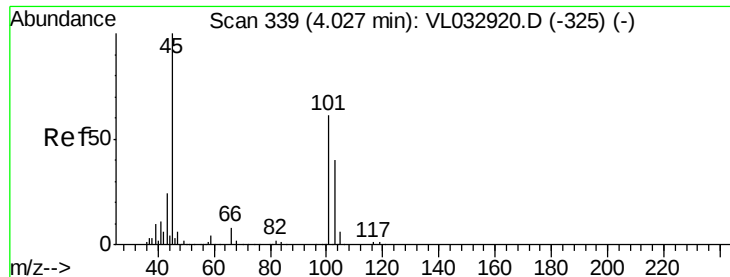


#18

1,1-Dichloroethene
Concen: 10.518 ppbv
RT: 4.36 min Scan# 442
Delta R.T. 0.00 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Tgt Ion: 96 Resp: 490684
Ion Ratio Lower Upper
96 100
61 178.7 147.0 220.4
98 62.2 50.7 76.1





#19

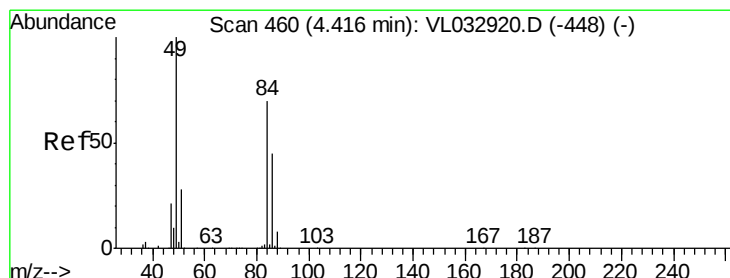
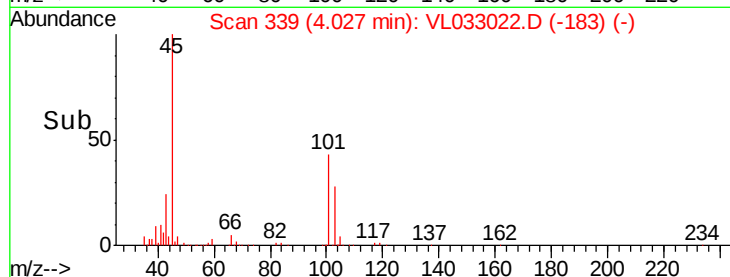
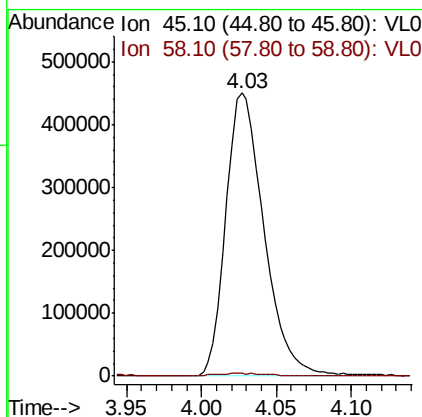
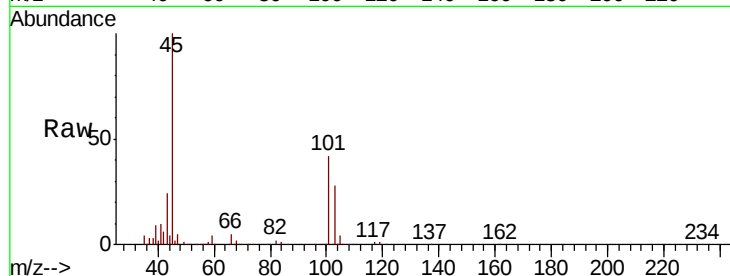
Isopropyl Alcohol
 Concen: 13.370 ppbv
 RT: 4.03 min Scan# 339
 Delta R.T. 0.00 min
 Lab File: VL033022.D
 Acq: 18 Dec 2018 12:11

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDCCC010EC

Tot Ion	Ratio	Lower	Upper
45	100		
58	1.4	1.4	2.2#

Manual Integrations
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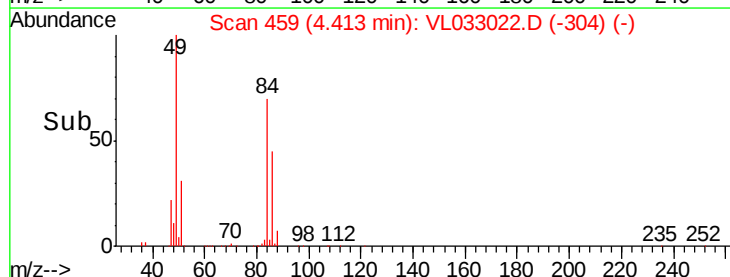
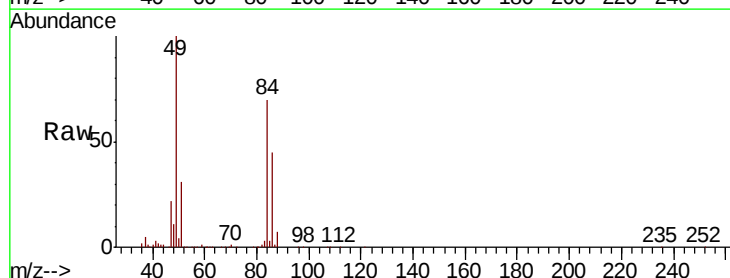
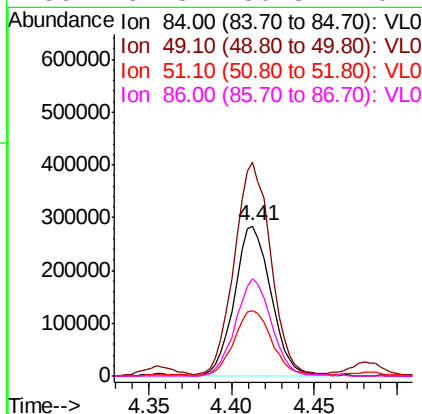
MMDadoda
 12/19/2018 1:58:49 PM

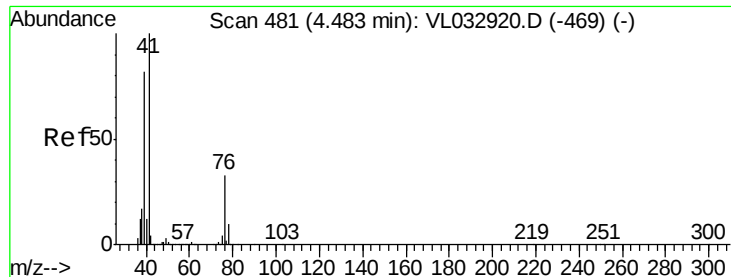


#20

Methylene Chloride
 Concen: 9.329 ppbv
 RT: 4.41 min Scan# 459
 Delta R.T. -0.00 min
 Lab File: VL033022.D
 Acq: 18 Dec 2018 12:11

Tgt Ion	Ratio	Lower	Upper
84	100		
49	141.2	113.8	170.8
51	43.1	31.8	47.8
86	64.8	50.8	76.2





#21

Allvl Chloride

Concen: 9.910 ppbv

RT: 4.48 min Scan# 481

Delta R.T. 0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Instrument :

MSVOA_L

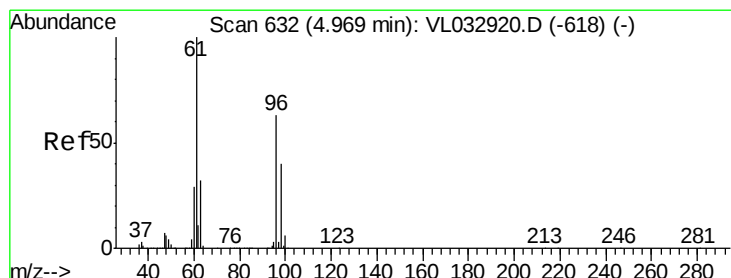
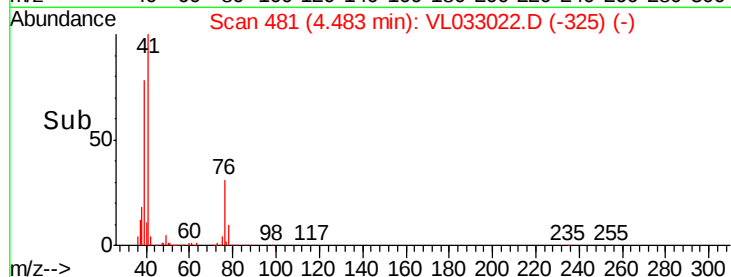
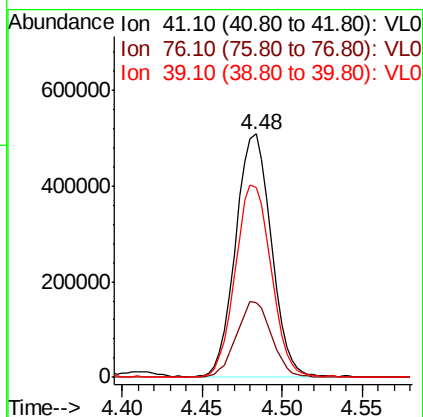
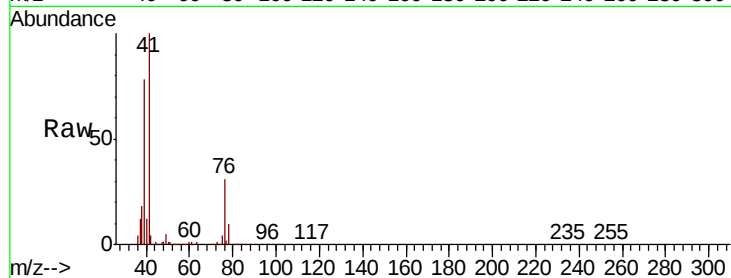
ClientSampleId :

VSTDCCC010EC

Tot Ion:	41	Resp:	769510
Ion Ratio	Lower	Upper	
41	100		
76	30.8	25.2	37.8
39	79.8	65.2	97.8

Manual Integrations
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#22

trans-1,2-Dichloroethene

Concen: 8.489 ppbv

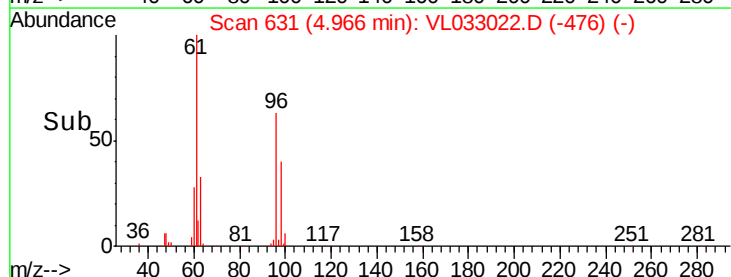
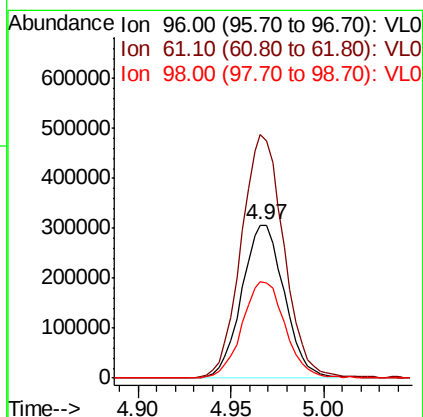
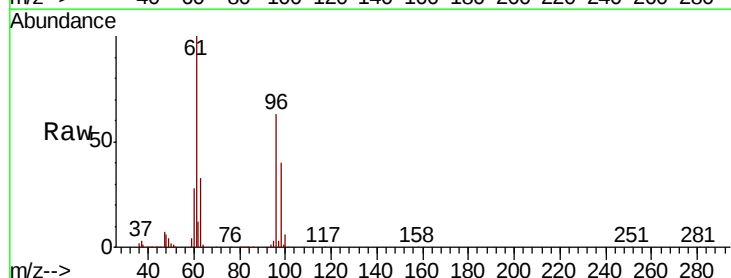
RT: 4.97 min Scan# 631

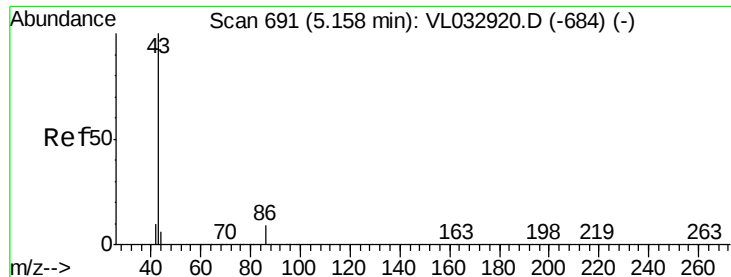
Delta R.T. -0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Tgt Ion:	96	Resp:	491480
Ion Ratio	Lower	Upper	
96	100		
61	158.8	127.1	190.7
98	63.2	51.3	76.9





#23

Vinyl Acetate

Concen: 12.494 ppbv

RT: 5.16 min Scan# 691

Delta R.T. 0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 43 Resp: 2015514

Ion Ratio Lower Upper

43 100

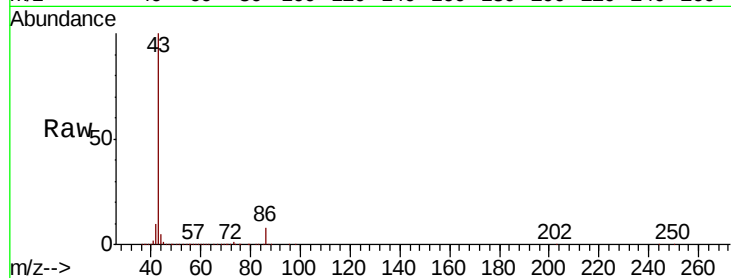
86 8.0 6.6 9.8

42 10.3 8.3 12.5

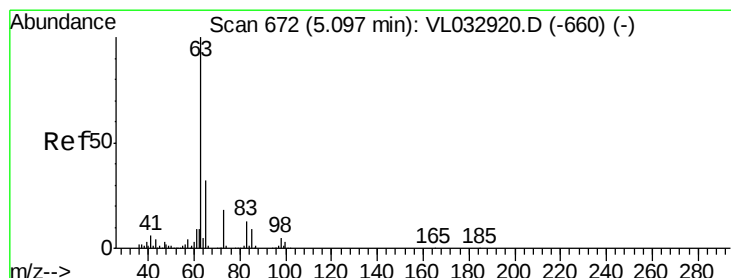
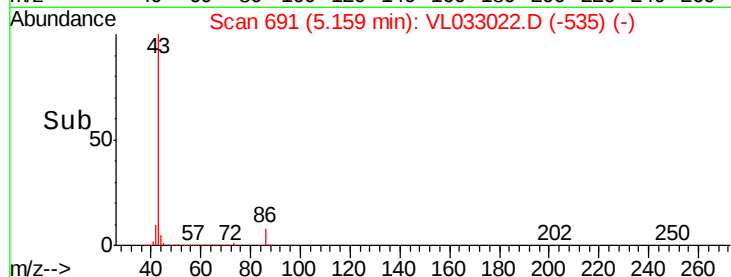
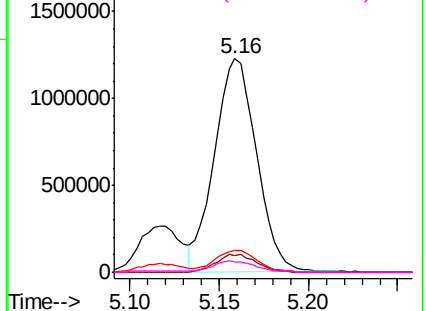
44 4.9 4.2 6.4

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Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 86.10 (85.80 to 86.80): VL0
Ion 42.10 (41.80 to 42.80): VL0
Ion 44.10 (43.80 to 44.80): VL0



#24

1,1-Dichloroethane

Concen: 9.123 ppbv m

RT: 5.10 min Scan# 674

Delta R.T. 0.01 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

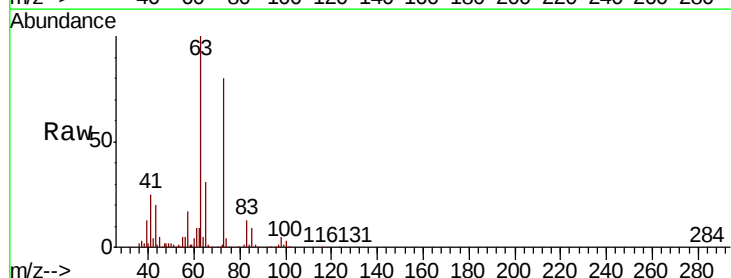
Tgt Ion: 63 Resp: 1279698

Ion Ratio Lower Upper

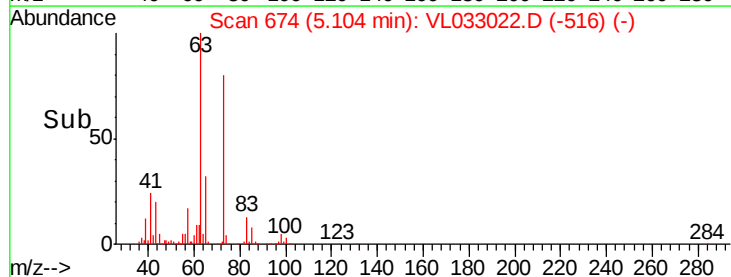
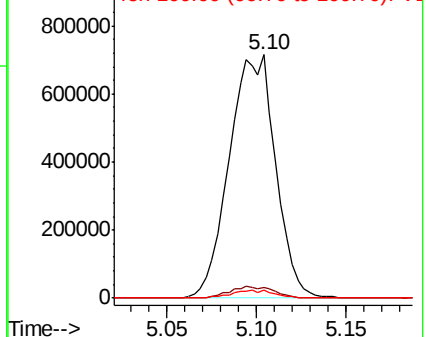
63 100

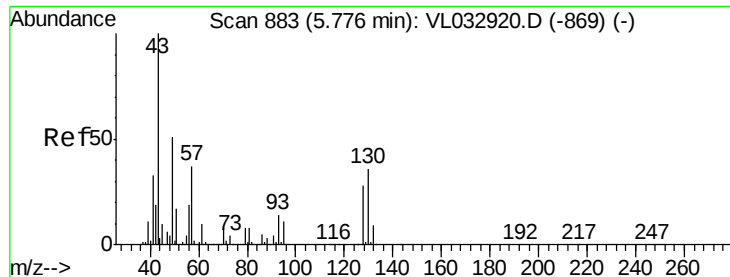
98 4.6 2.5 7.5

100 3.1 1.4 4.2



Abundance Ion 63.10 (62.80 to 63.80): VL0
Ion 98.00 (97.70 to 98.70): VL0
Ion 100.00 (99.70 to 100.70): VL0





#25

Ethyl Acetate

Concen: 10.704 ppbv

RT: 5.77 min Scan# 882

Delta R.T. -0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 43 Resp: 2409119

Ion Ratio Lower Upper

43 100

45 9.6 7.8 11.6

61 9.3 7.4 11.2

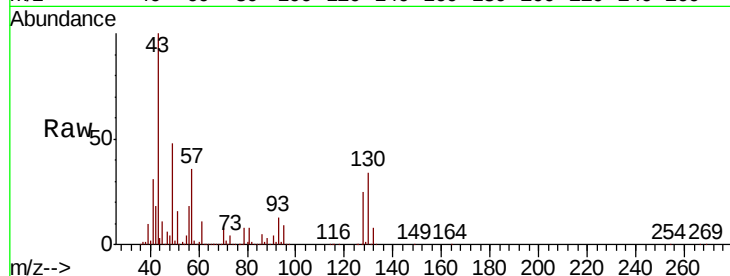
70 7.2 5.7 8.5

Manual Integrations

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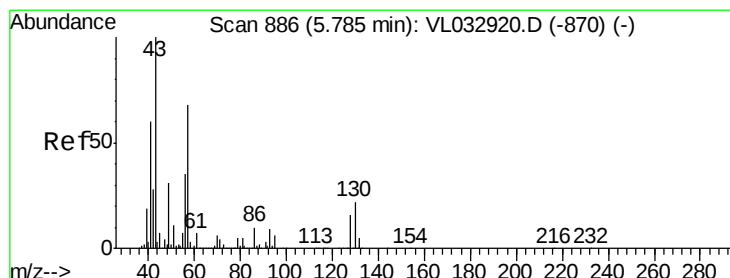
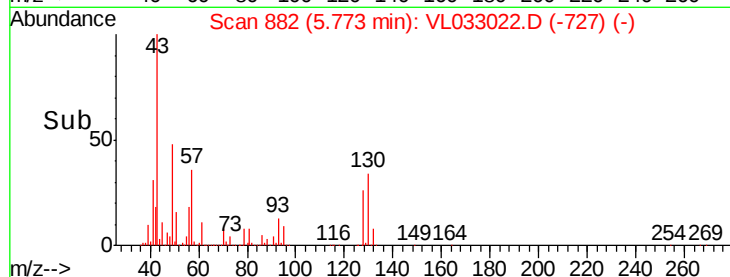
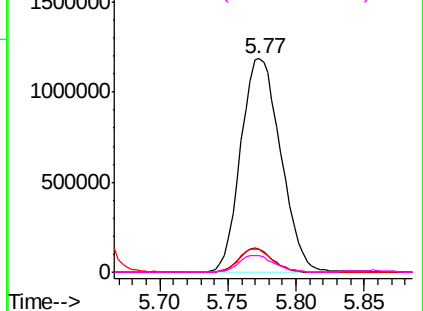


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0



#26

Hexane

Concen: 10.707 ppbv

RT: 5.78 min Scan# 885

Delta R.T. -0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Tgt Ion: 57 Resp: 1112599

Ion Ratio Lower Upper

57 100

41 88.8 72.2 108.2

43 217.9 171.9 257.9

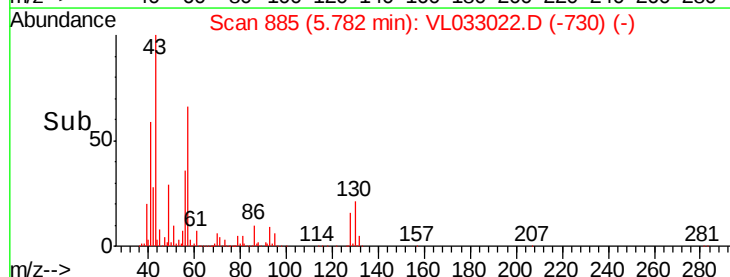
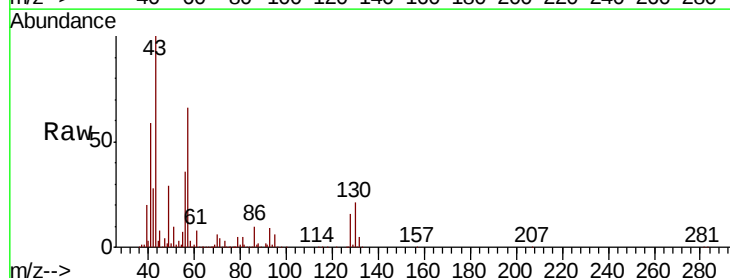
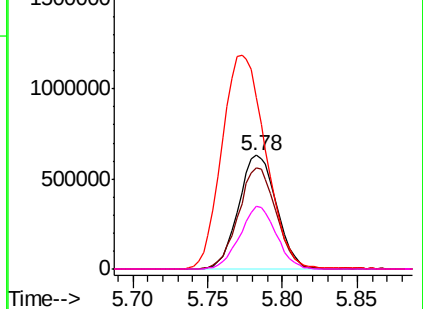
56 52.8 42.2 63.2

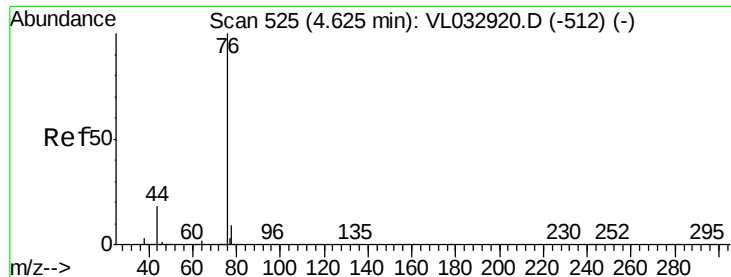
Abundance Ion 57.10 (56.80 to 57.80): VL0

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





#27

Carbon Disulfide

Concen: 9.487 ppbv

RT: 4.62 min Scan# 524

Delta R.T. -0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 76 Resp: 1232651

Ion Ratio Lower Upper

76 100

44 18.7 14.7 22.1

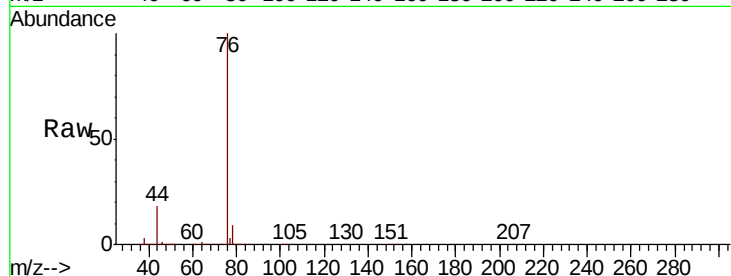
78 9.2 7.4 11.2

Manual Integrations

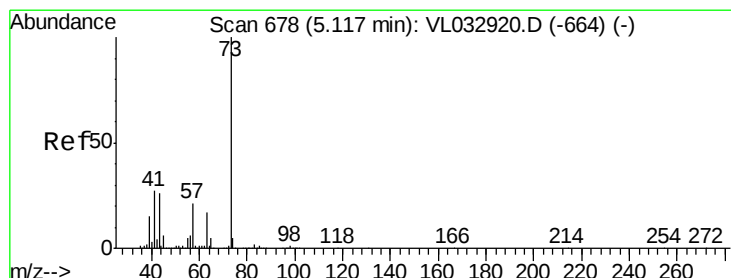
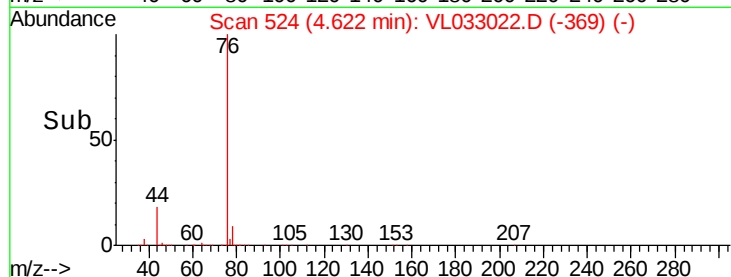
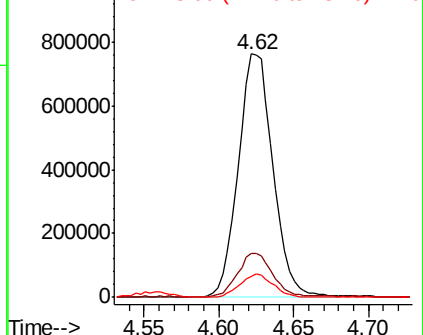
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Abundance Ion 76.00 (75.70 to 76.70): VL0
Ion 44.10 (43.80 to 44.80): VL0
Ion 78.00 (77.70 to 78.70): VL0



#28

Methyl tert-Butyl Ether

Concen: 12.007 ppbv

RT: 5.12 min Scan# 678

Delta R.T. 0.00 min

Lab File: VL033022.D

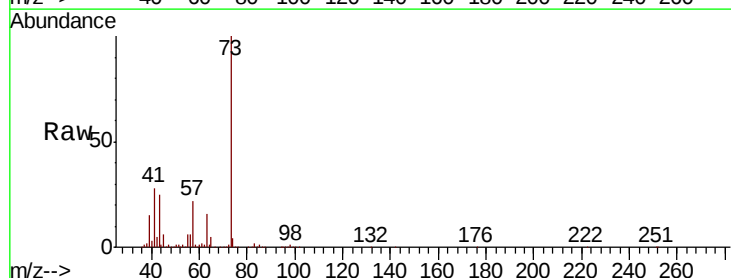
Acq: 18 Dec 2018 12:11

Tgt Ion: 73 Resp: 1873794

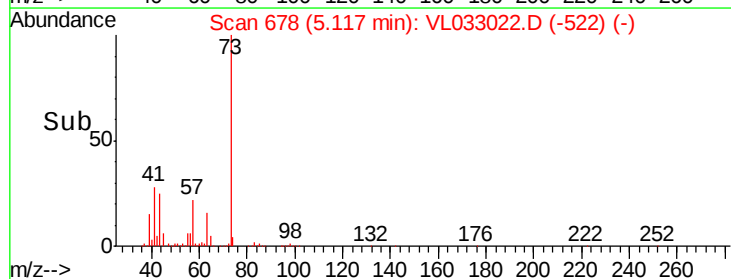
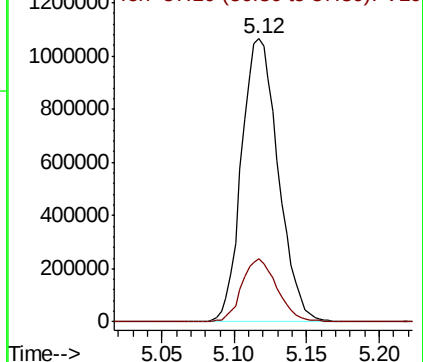
Ion Ratio Lower Upper

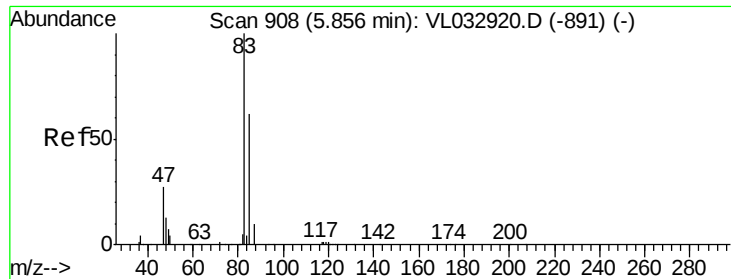
73 100

57 21.6 17.4 26.0



Abundance Ion 73.10 (72.80 to 73.80): VL0
Ion 57.10 (56.80 to 57.80): VL0





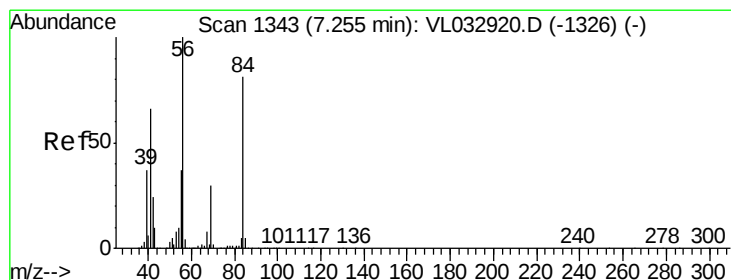
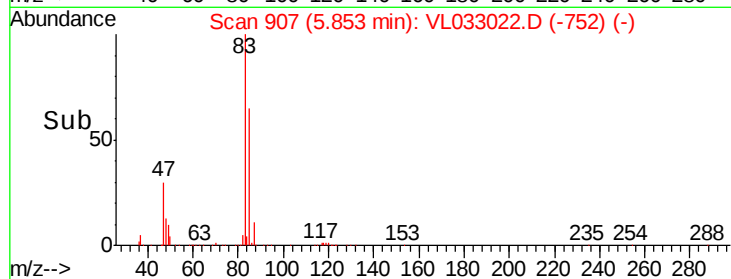
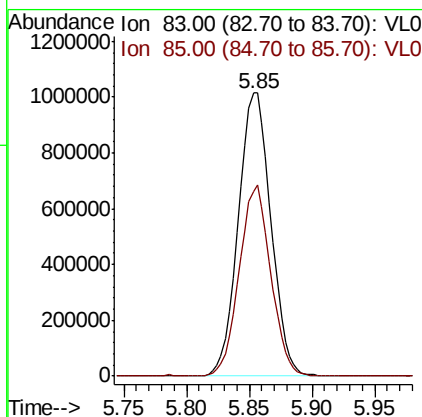
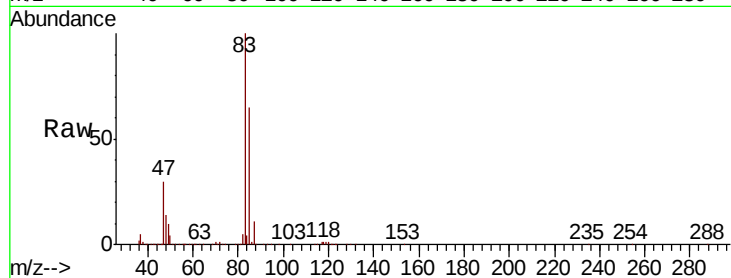
#29
Chloroform
Concen: 9.889 ppbv
RT: 5.85 min Scan# 907
Delta R.T. -0.00 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion: 83 Resp: 1833479
Ion Ratio Lower Upper
83 100
85 65.0 49.8 74.8

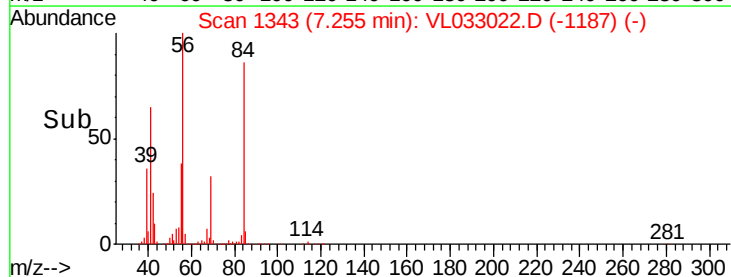
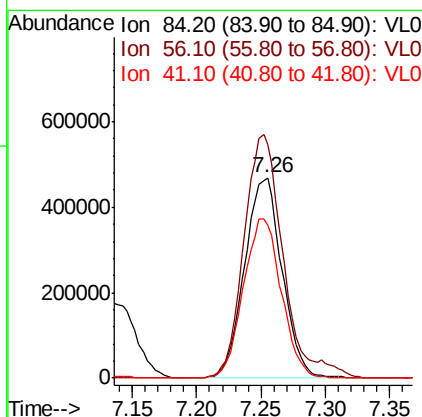
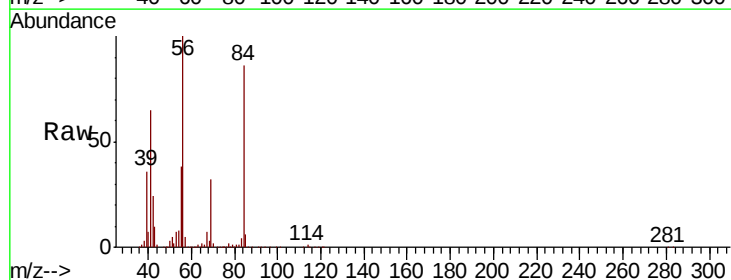
Manual Integrations
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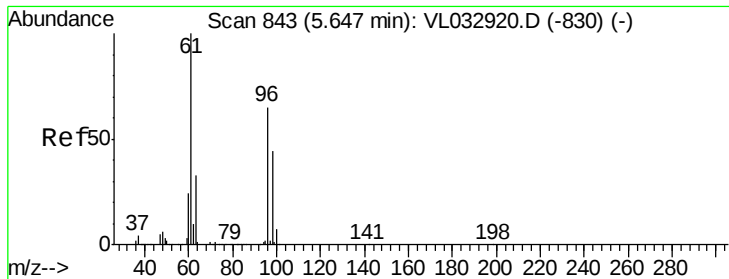
MMDadoda
12/19/2018 1:58:49 PM



#30
Cyclohexane
Concen: 11.059 ppbv
RT: 7.26 min Scan# 1343
Delta R.T. 0.00 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Tgt Ion: 84 Resp: 952452
Ion Ratio Lower Upper
84 100
56 127.1 102.5 153.7
41 80.4 64.1 96.1





#31

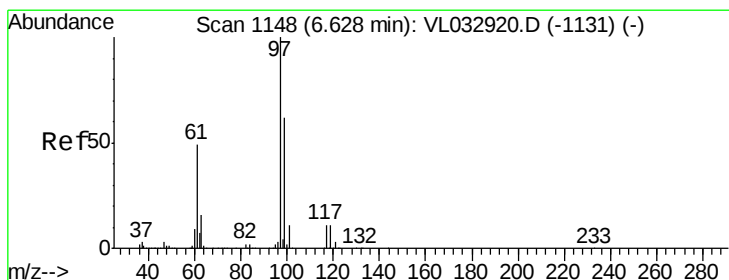
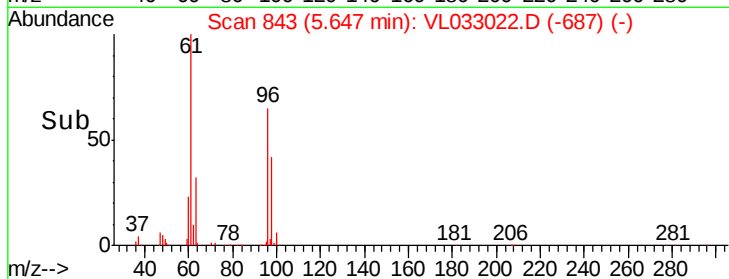
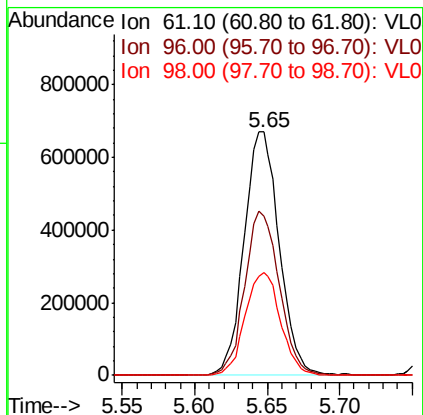
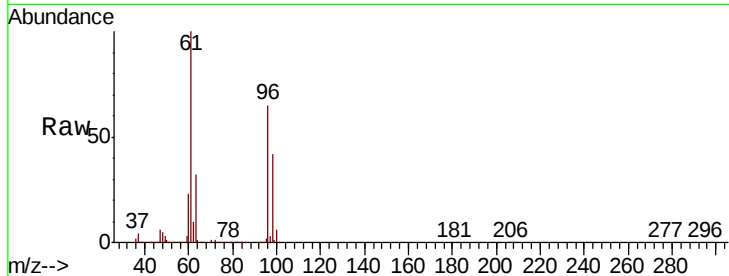
cis-1,2-Dichloroethene
Concen: 11.843 ppbv
RT: 5.65 min Scan# 843
Delta R.T. 0.00 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion	Ratio	Lower	Upper
61	100		
96	65.4	51.9	77.9
98	42.2	35.0	52.4

Manual Integrations
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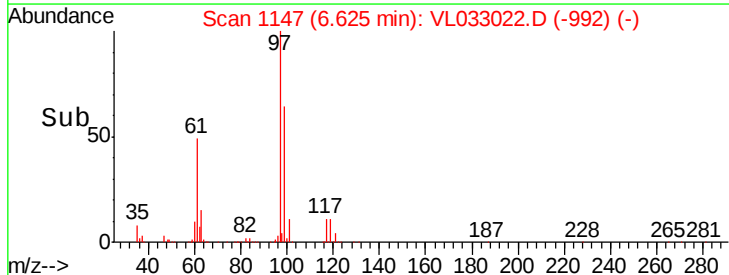
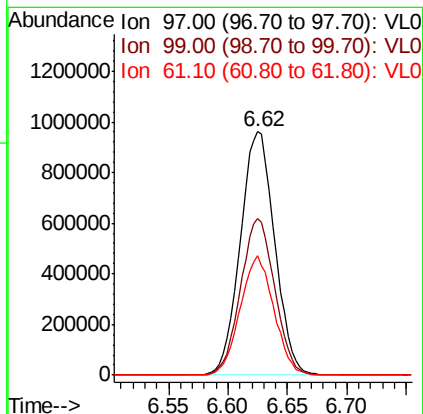
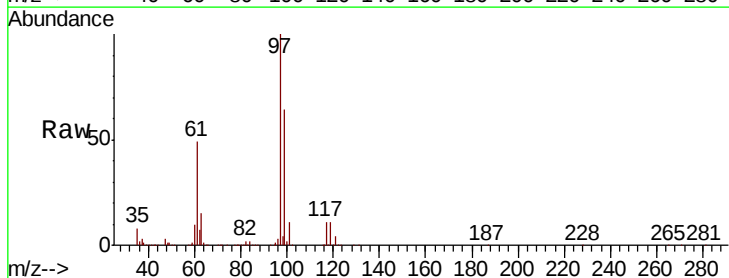
MMDadoda
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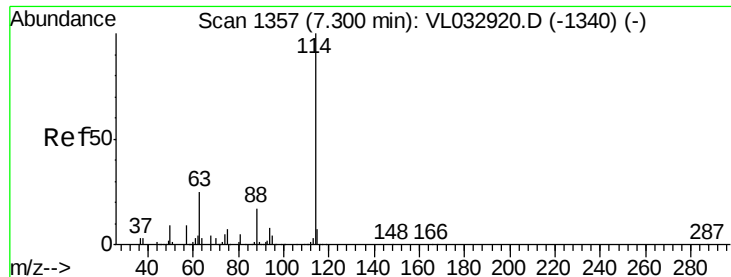


#32

1,1,1-Trichloroethane
Concen: 9.809 ppbv
RT: 6.62 min Scan# 1147
Delta R.T. -0.00 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Tgt Ion	Ratio	Lower	Upper
97	100		
99	64.1	51.1	76.7
61	48.1	39.3	58.9





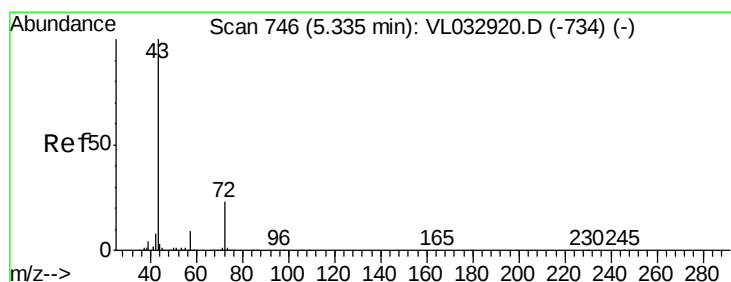
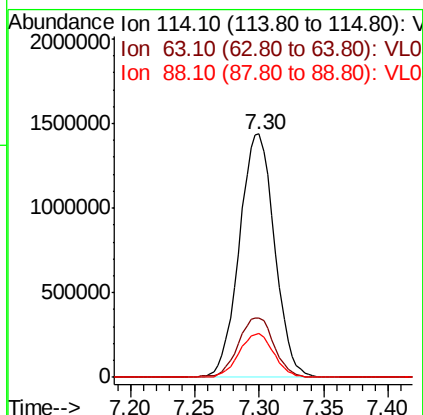
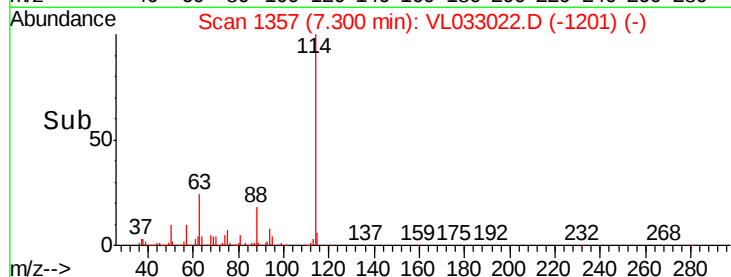
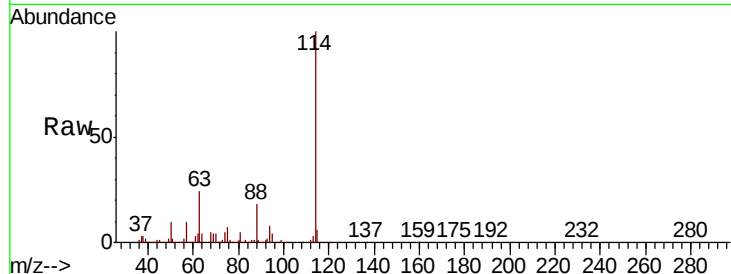
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.30 min Scan# 1357
 Delta R.T. 0.00 min
 Lab File: VL033022.D
 Acq: 18 Dec 2018 12:11

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDCCC010EC

Tot Ion	Ratio	Lower	Upper
114	100		
63	25.1	20.1	30.1
88	17.8	14.2	21.4

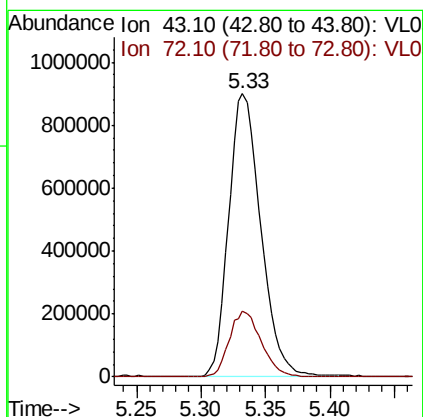
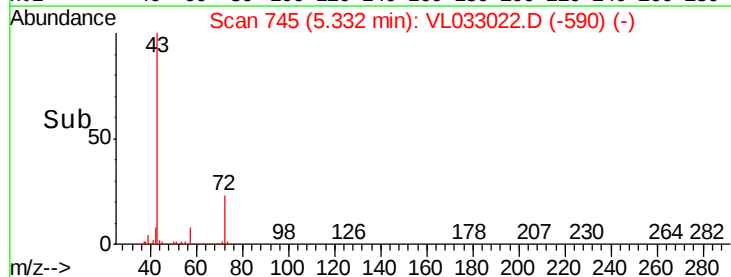
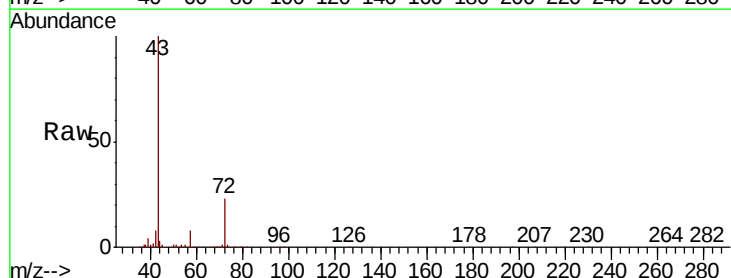
Manual Integrations
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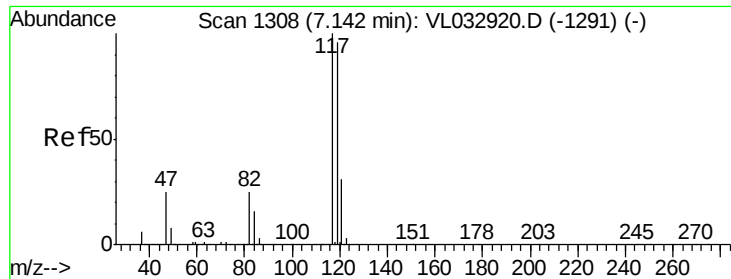
MMDadoda
 12/19/2018 1:58:49 PM



#34
 2-Butanone
 Concen: 13.107 ppbv
 RT: 5.33 min Scan# 745
 Delta R.T. -0.00 min
 Lab File: VL033022.D
 Acq: 18 Dec 2018 12:11

Tgt Ion	Ratio	Lower	Upper
43	100		
72	23.3	18.8	28.2





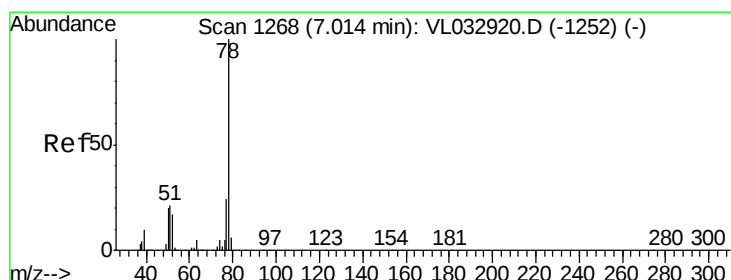
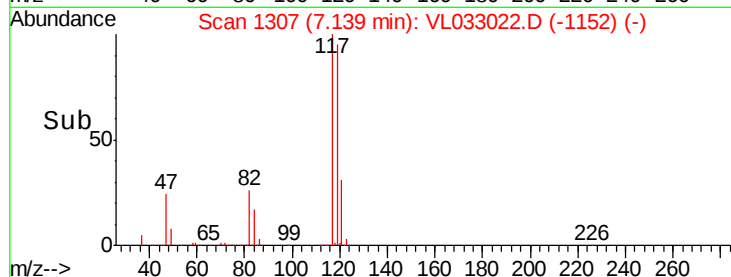
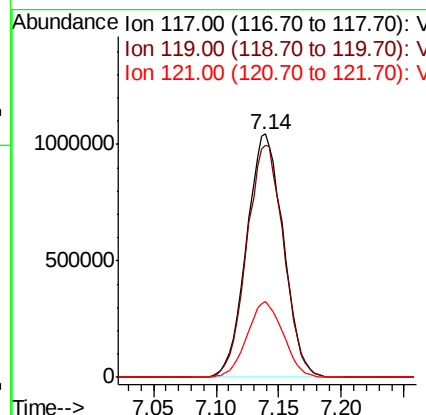
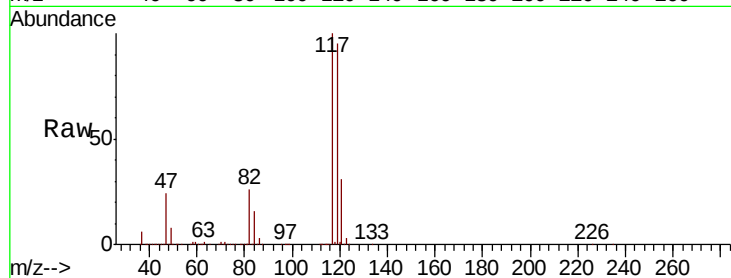
#35
Carbon Tetrachloride
Concen: 9.925 ppbv
RT: 7.14 min Scan# 1307
Delta R.T. -0.00 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion	Ratio	Lower	Upper
117	100		
119	95.1	76.5	114.7
121	30.9	24.5	36.7

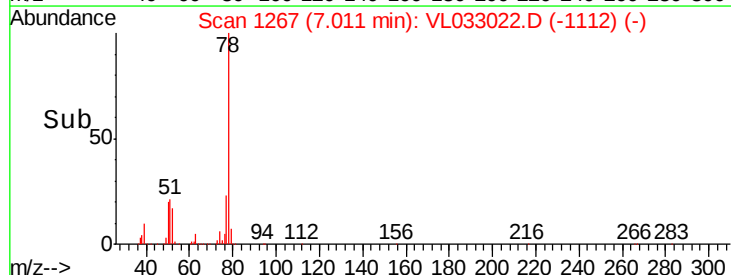
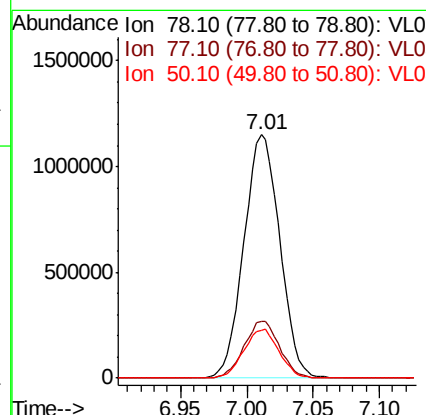
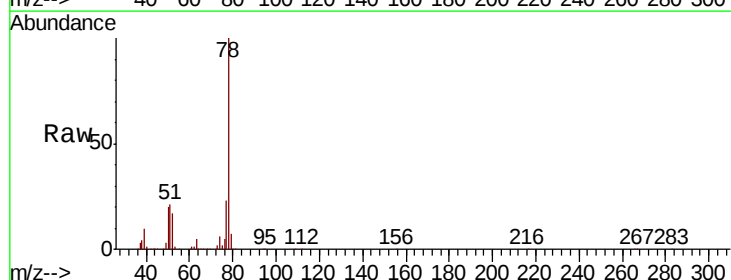
Manual Integrations
APPROVED

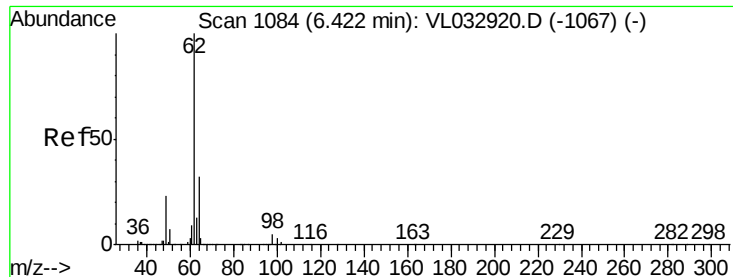
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#36
Benzene
Concen: 10.829 ppbv
RT: 7.01 min Scan# 1267
Delta R.T. -0.00 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Tgt Ion	Ratio	Lower	Upper
78	100		
77	23.5	18.9	28.3
50	19.7	16.1	24.1





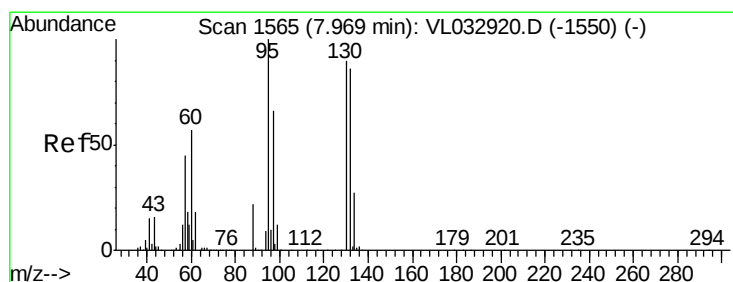
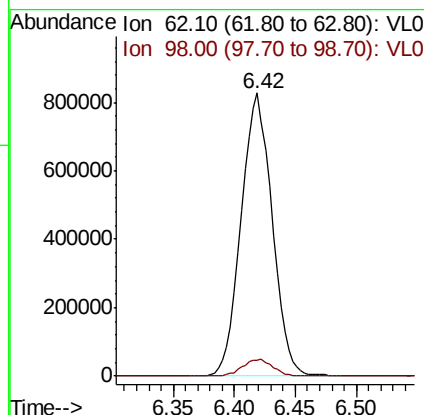
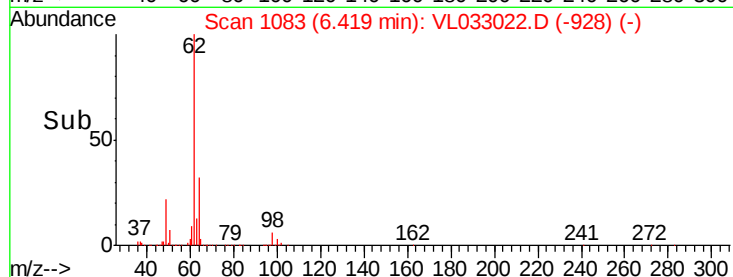
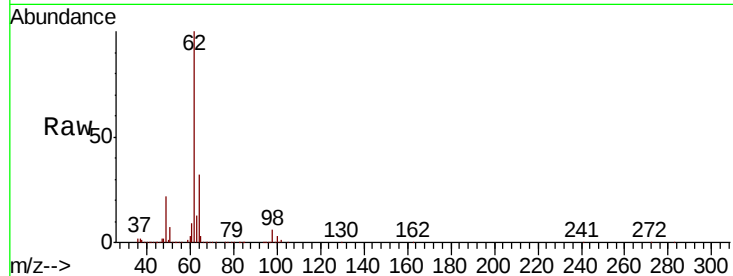
#37
 1,2-Dichloroethane
 Concen: 10.623 ppbv
 RT: 6.42 min Scan# 1083
 Delta R.T. -0.00 min
 Lab File: VL033022.D
 Acq: 18 Dec 2018 12:11

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDCCC010EC

Tot Ion: 62 Resp: 1452204
 Ion Ratio Lower Upper
 62 100
 98 5.9 4.3 6.5

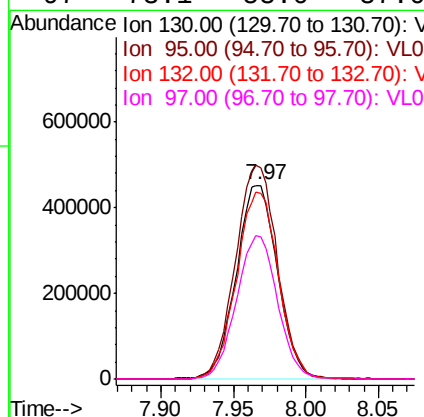
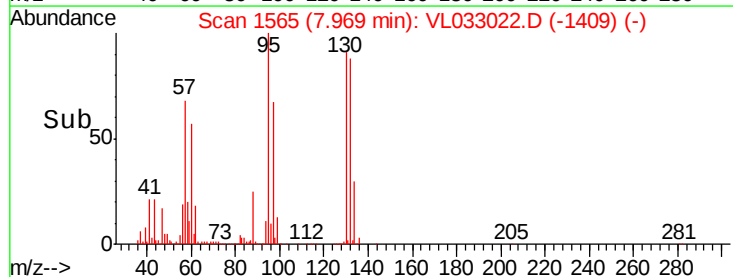
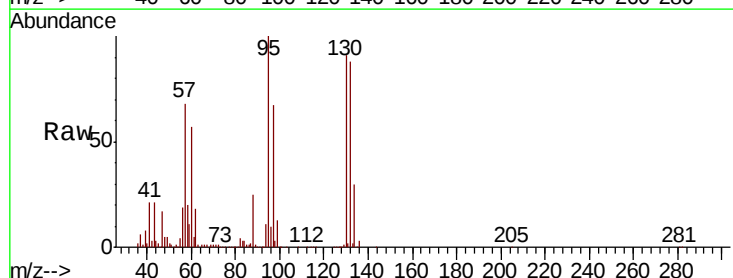
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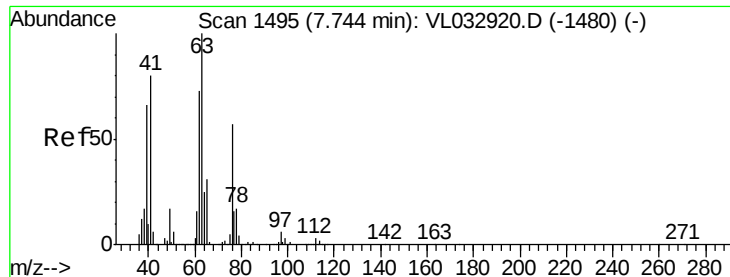
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#38
 Trichloroethene
 Concen: 10.735 ppbv
 RT: 7.97 min Scan# 1565
 Delta R.T. 0.00 min
 Lab File: VL033022.D
 Acq: 18 Dec 2018 12:11

Tgt Ion: 130 Resp: 897030
 Ion Ratio Lower Upper
 130 100
 95 109.2 88.6 132.8
 132 95.5 76.1 114.1
 97 73.1 58.0 87.0





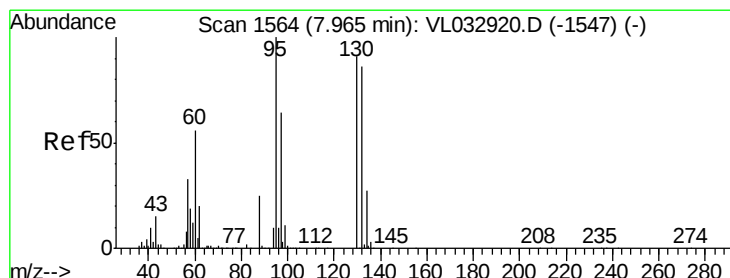
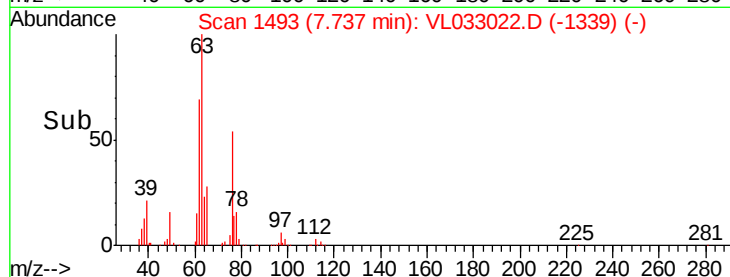
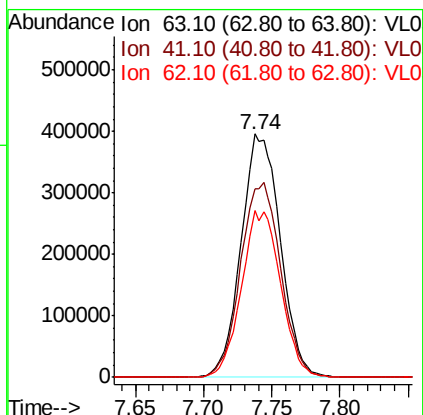
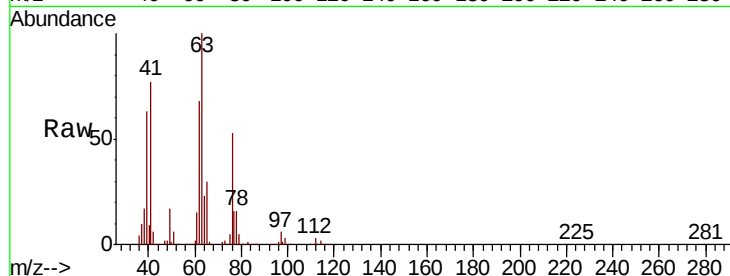
#39
 1,2-Dichloropropane
 Concen: 10.380 ppbv
 RT: 7.74 min Scan# 1493
 Delta R.T. -0.01 min
 Lab File: VL033022.D
 Acq: 18 Dec 2018 12:11

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDCCC010EC

Tot Ion	Ratio	Lower	Upper
63	100		
41	77.3	63.9	95.9
62	68.2	58.8	88.2

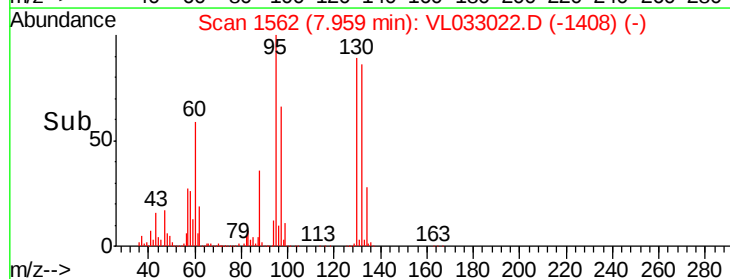
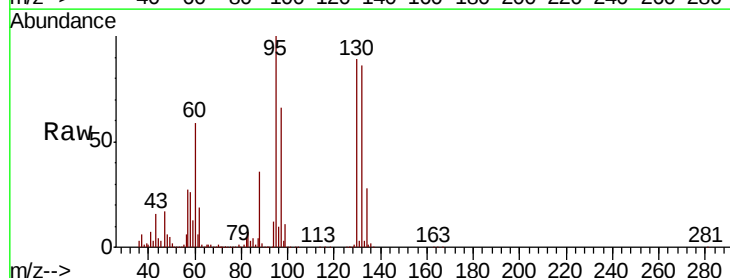
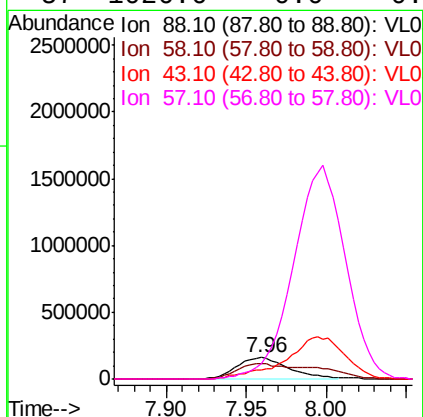
Manual Integrations
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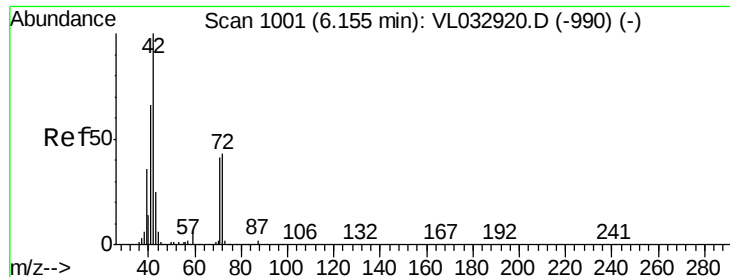
MMDadoda
 12/19/2018 1:58:49 PM



#40
 1,4-Dioxane
 Concen: 12.684 ppbv
 RT: 7.96 min Scan# 1562
 Delta R.T. -0.01 min
 Lab File: VL033022.D
 Acq: 18 Dec 2018 12:11

Tgt Ion	Ratio	Lower	Upper
88	100		
58	117.2	107.4	161.2
43	231.2	0.0	0.0#
57	1026.6	0.0	0.0#





#41

Tetrahydrofuran

Concen: 11.605 ppbv

RT: 6.15 min Scan# 1000

Delta R.T. -0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Instrument :

MSVOA_L

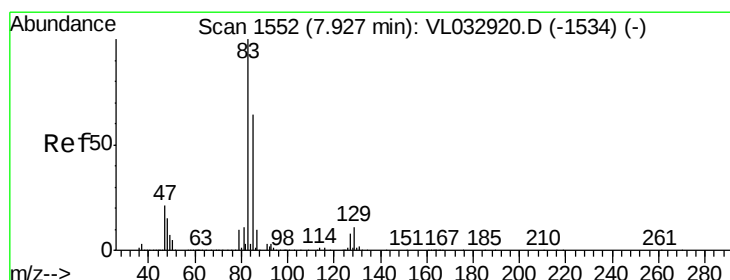
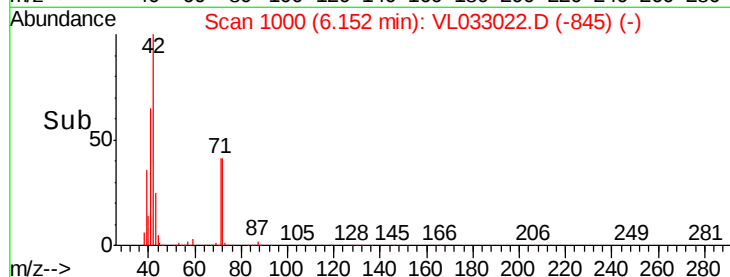
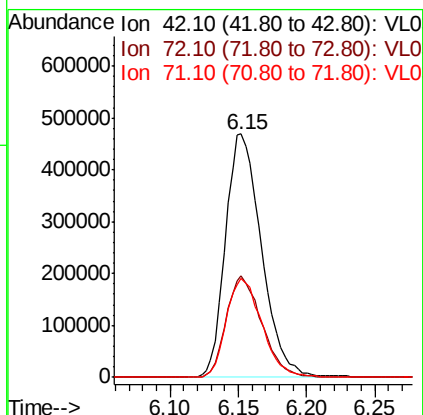
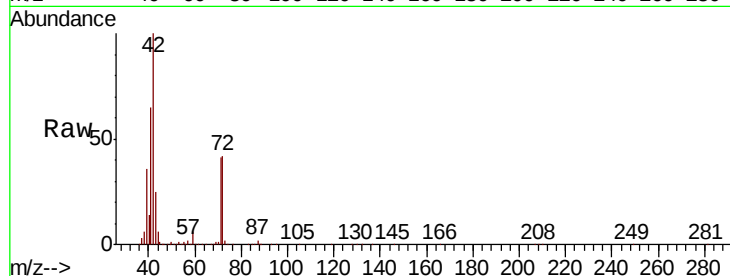
ClientSampleId :

VSTDCCC010EC

Tot Ion:	42	Resp:	858182
Ion Ratio		Lower	Upper
42	100		
72	41.3	32.9	49.3
71	40.4	32.0	48.0

Manual Integrations
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12/19/2018 1:58:49 PM



#42

Bromodichloromethane

Concen: 10.768 ppbv

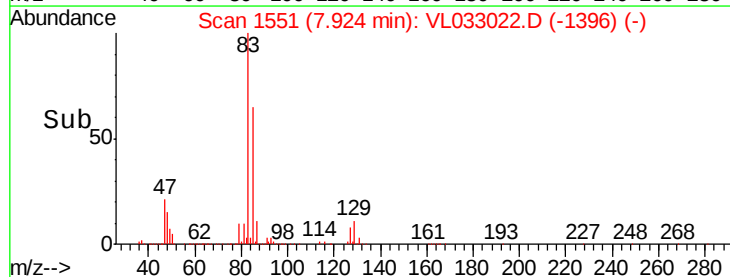
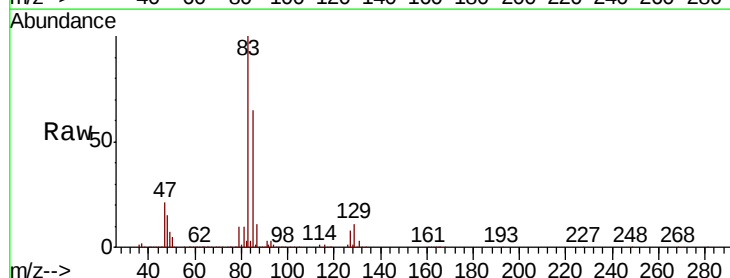
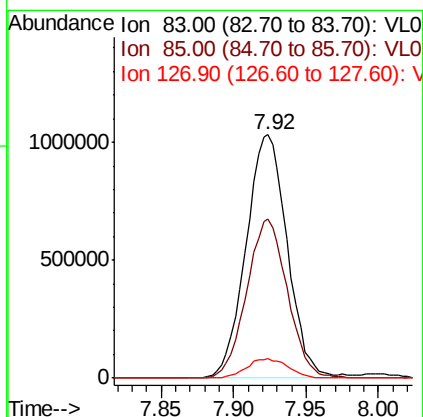
RT: 7.92 min Scan# 1551

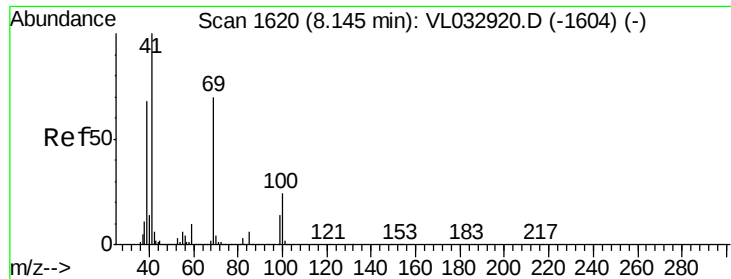
Delta R.T. -0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Tgt Ion:	83	Resp:	2039443
Ion Ratio		Lower	Upper
83	100		
85	65.3	50.9	76.3
127	8.2	6.7	10.1





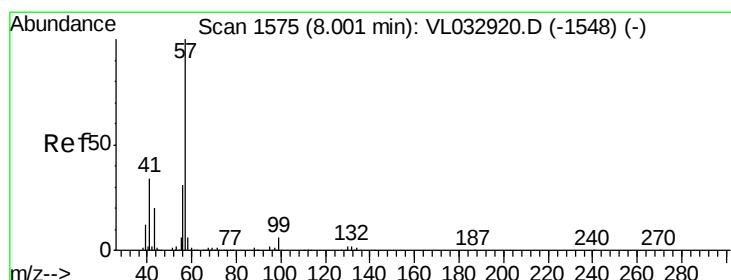
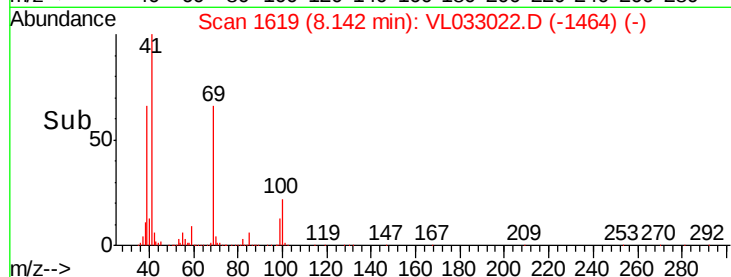
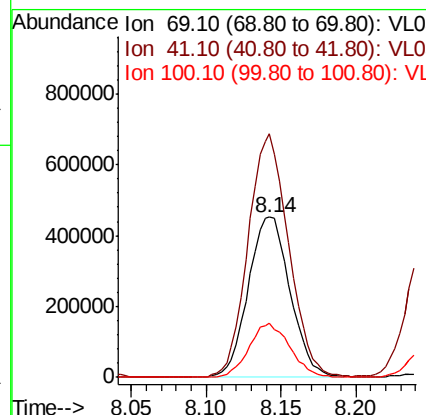
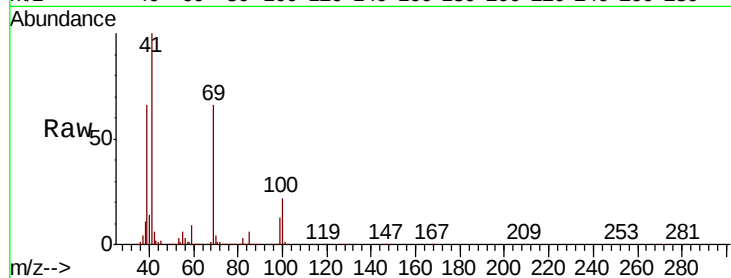
#43
Methvl Methacrilate
Concen: 11.839 ppbv
RT: 8.14 min Scan# 1619
Delta R.T. -0.00 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion	Ratio	Lower	Upper
69	100		
41	146.8	116.6	175.0
100	32.9	26.5	39.7

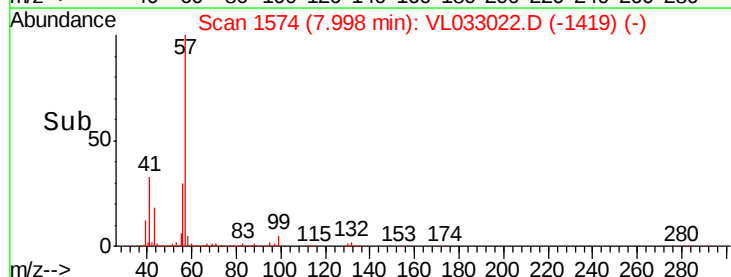
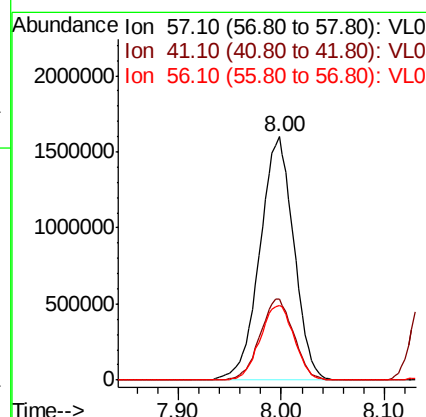
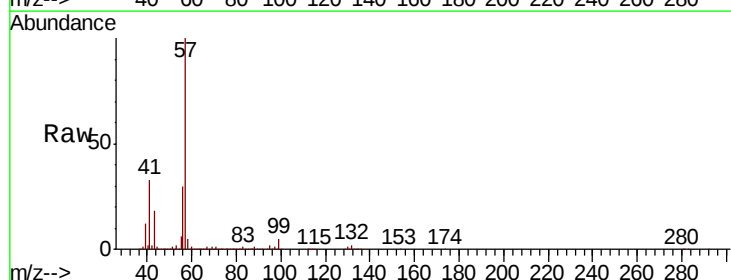
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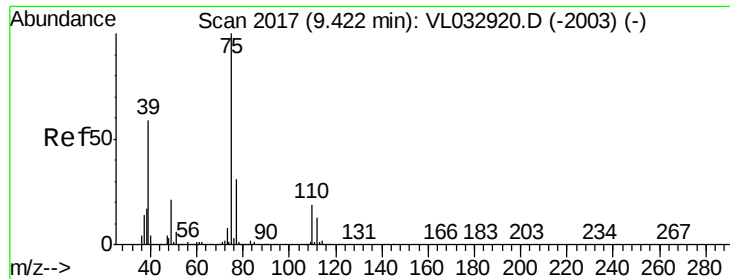
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#44
2,2,4-Trimethylpentane
Concen: 10.704 ppbv
RT: 8.00 min Scan# 1574
Delta R.T. -0.00 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Tgt Ion	Ratio	Lower	Upper
57	100		
41	33.2	27.0	40.4
56	30.8	24.6	37.0





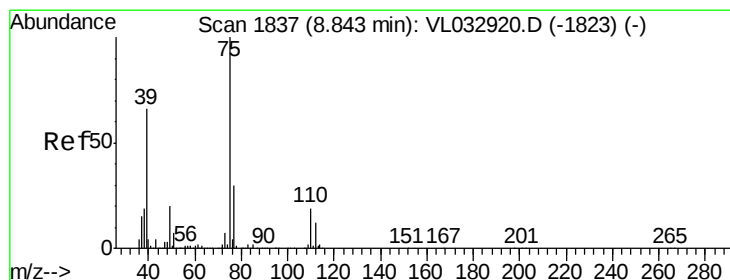
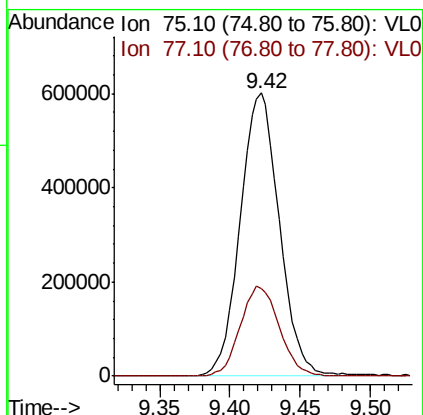
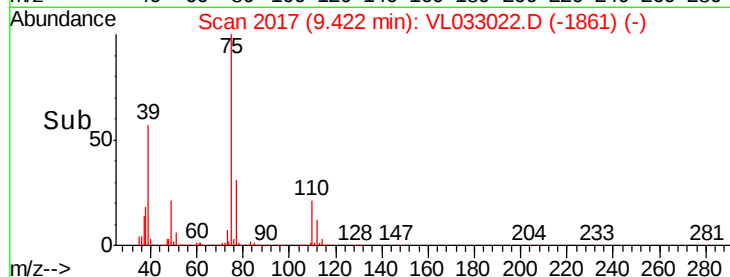
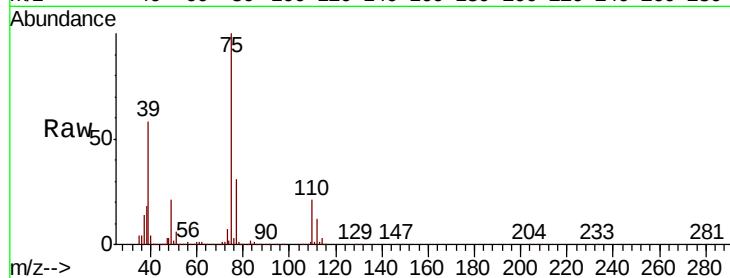
#45
t-1,3-Dichloropropene
Concen: 12.769 ppbv
RT: 9.42 min Scan# 2017
Delta R.T. 0.00 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion: 75 Resp: 1164801
Ion Ratio Lower Upper
75 100
77 30.9 24.8 37.2

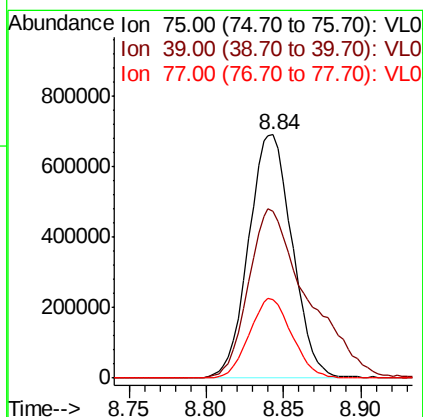
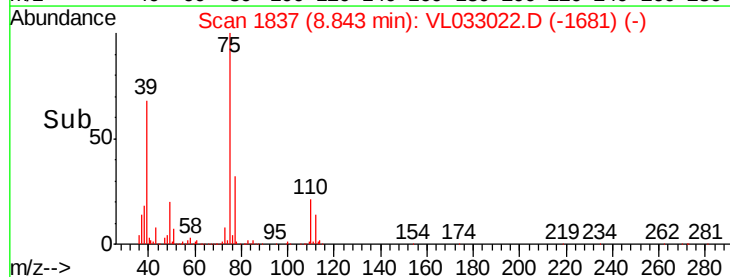
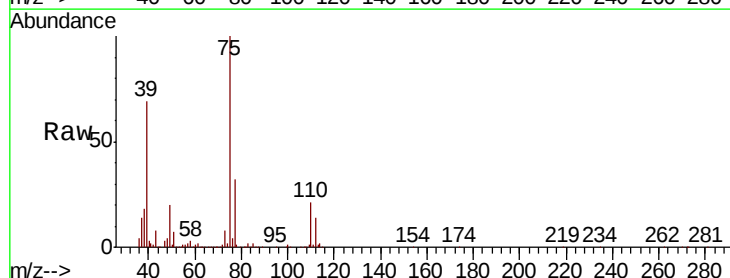
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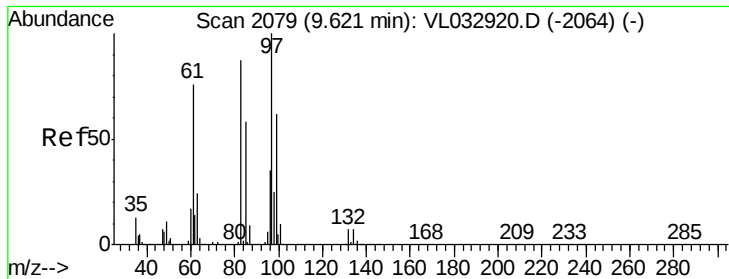
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#46
cis-1,3-Dichloropropene
Concen: 12.069 ppbv
RT: 8.84 min Scan# 1837
Delta R.T. 0.00 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Tgt Ion: 75 Resp: 1347510
Ion Ratio Lower Upper
75 100
39 68.5 52.8 79.2
77 32.1 24.3 36.5





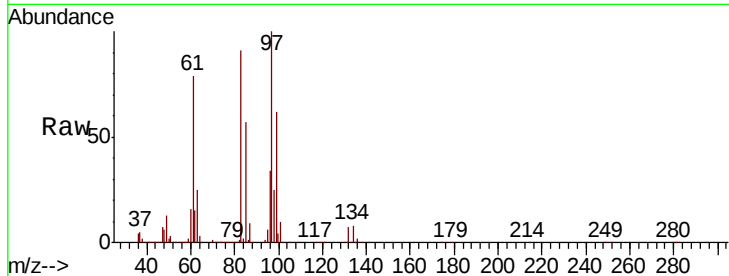
#47
 1,1,2-Trichloroethane
 Concen: 10.745 ppbv
 RT: 9.62 min Scan# 2079
 Delta R.T. 0.00 min
 Lab File: VL033022.D
 Acq: 18 Dec 2018 12:11

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDCCC010EC

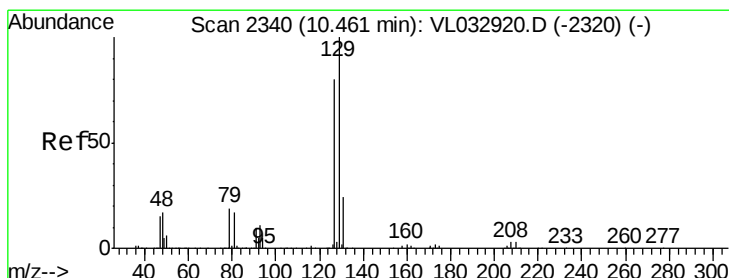
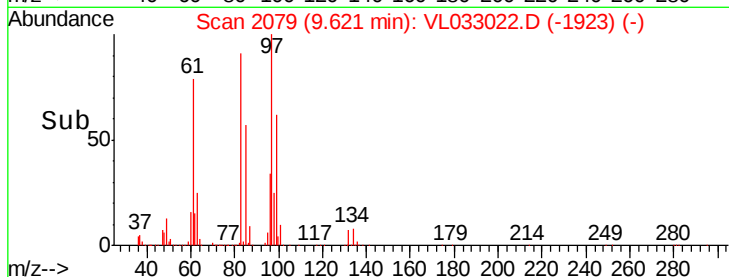
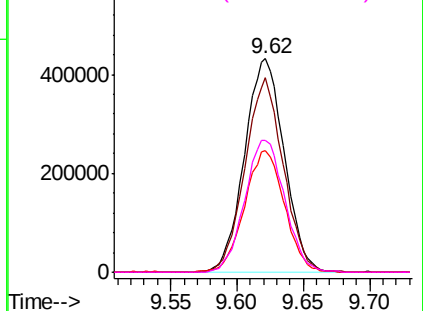
Tot Ion	Ion	Ratio	Resp	Lower	Upper
97	100		900581		
83	90.8	69.8	104.8		
85	56.9	46.7	70.1		
99	61.8	49.2	73.8		

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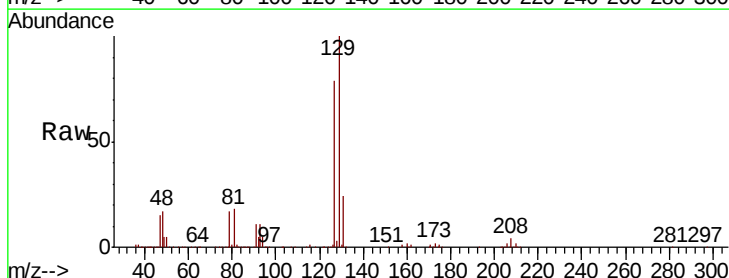


Abundance Ion 97.00 (96.70 to 97.70): VL0
 Ion 83.00 (82.70 to 83.70): VL0
 Ion 85.00 (84.70 to 85.70): VL0
 Ion 99.00 (98.70 to 99.70): VL0

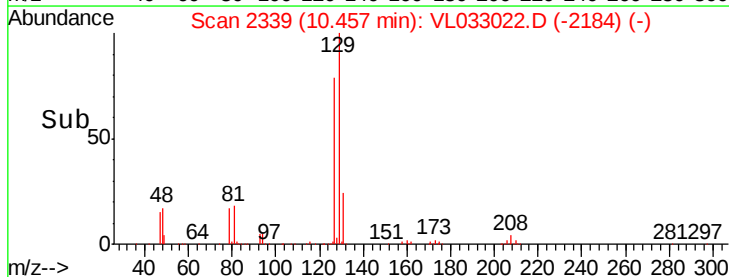
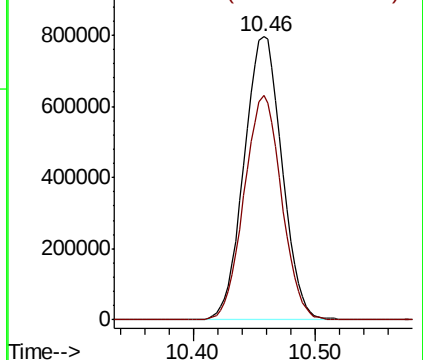


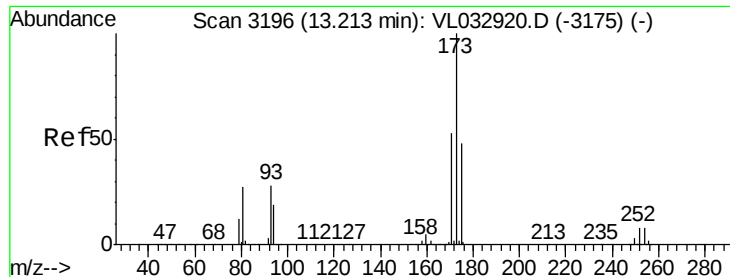
#48
 Dibromochloromethane
 Concen: 10.861 ppbv
 RT: 10.46 min Scan# 2339
 Delta R.T. -0.00 min
 Lab File: VL033022.D
 Acq: 18 Dec 2018 12:11

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
129	100		1707674		
127	78.5	39.3	117.8		



Abundance Ion 129.00 (128.70 to 129.70): V
 Ion 127.00 (126.70 to 127.70): V





#49

Bromoform

Concen: 9.098 ppbv

RT: 13.21 min Scan# 3195

Delta R.T. -0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:173 Resp: 1176528

Ion Ratio Lower Upper

173 100

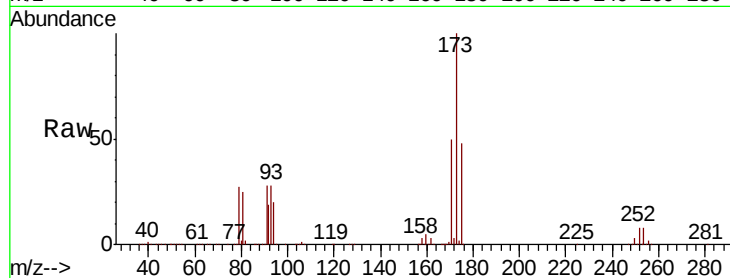
175 49.2 39.0 58.4

171 51.7 41.5 62.3

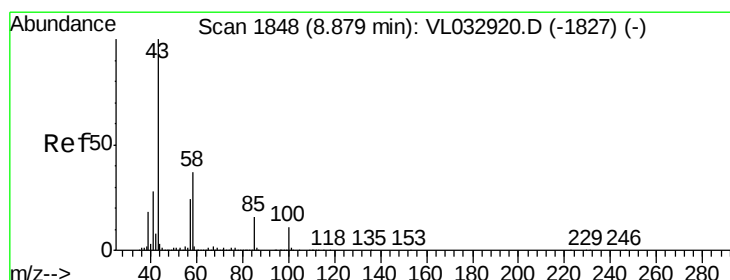
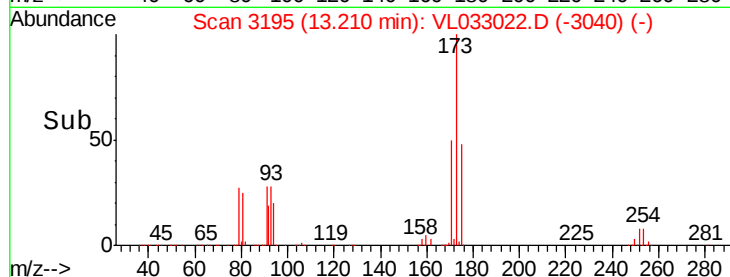
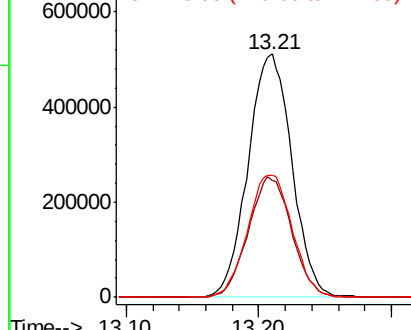
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Abundance Ion 172.90 (172.60 to 173.60): V
Ion 174.90 (174.60 to 175.60): V
Ion 170.90 (170.60 to 171.60): V



#50

4-Methyl-2-Pentanone

Concen: 10.802 ppbv

RT: 8.87 min Scan# 1846

Delta R.T. -0.01 min

Lab File: VL033022.D

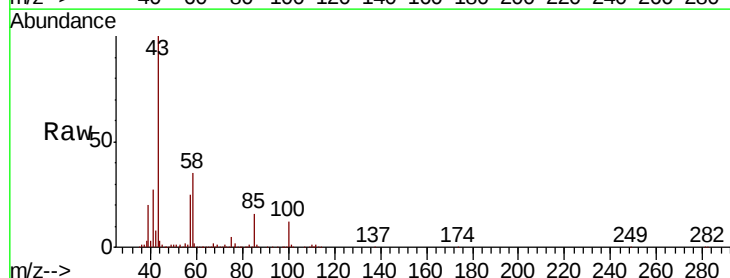
Acq: 18 Dec 2018 12:11

Tgt Ion: 43 Resp: 2053875

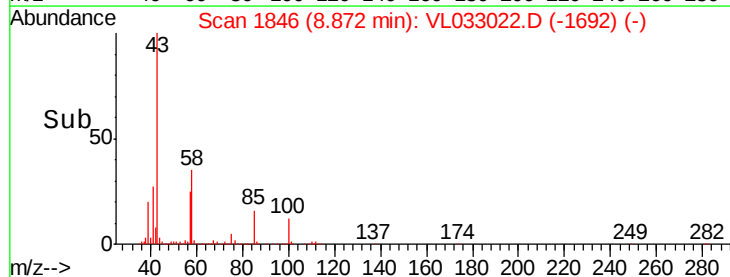
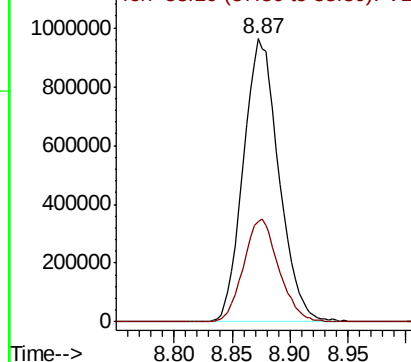
Ion Ratio Lower Upper

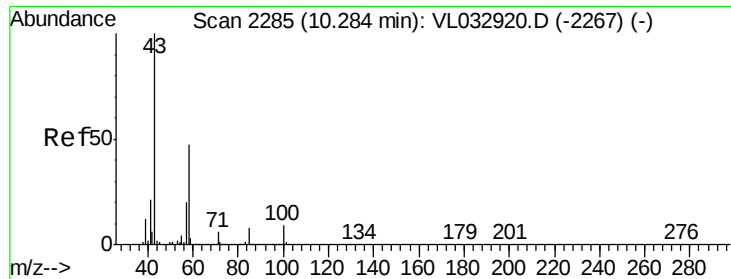
43 100

58 36.1 29.0 43.4



Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 58.10 (57.80 to 58.80): VL0





#51

2-Hexanone

Concen: 11.922 ppbv

RT: 10.28 min Scan# 2283

Delta R.T. -0.01 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 43 Resp: 1537429

Ion Ratio Lower Upper

43 100

58 48.6 38.1 57.1

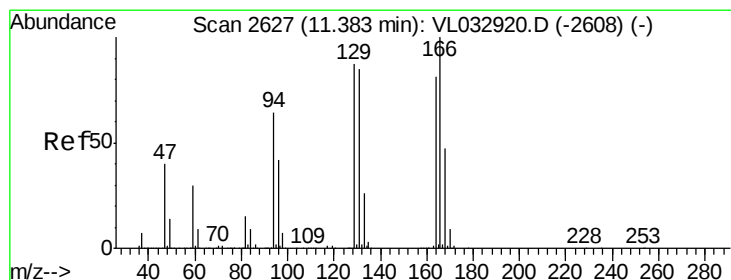
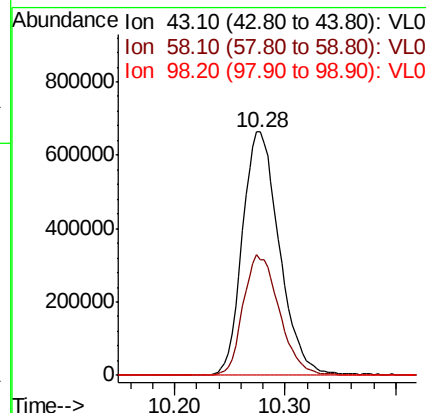
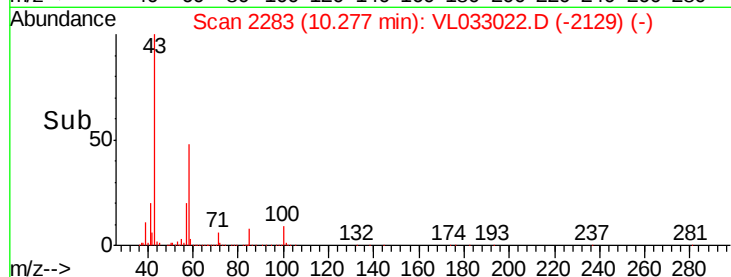
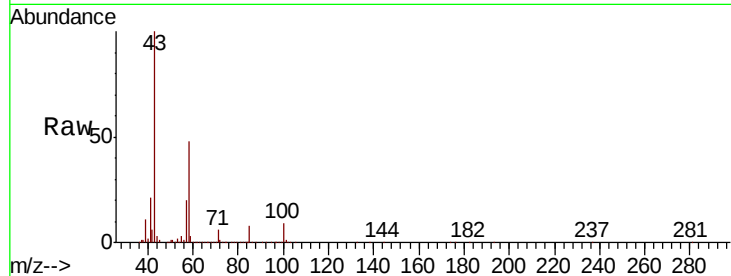
98 0.4 0.4 0.6#

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#52

Tetrachloroethene

Concen: 10.823 ppbv

RT: 11.38 min Scan# 2625

Delta R.T. -0.01 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Tgt Ion:164 Resp: 790466

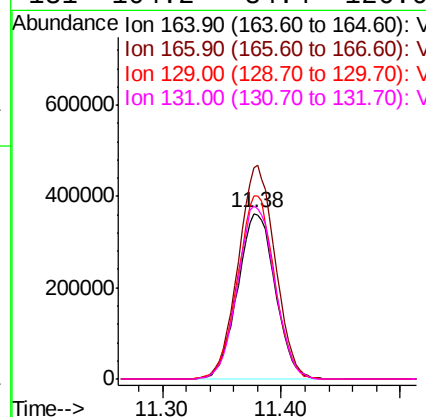
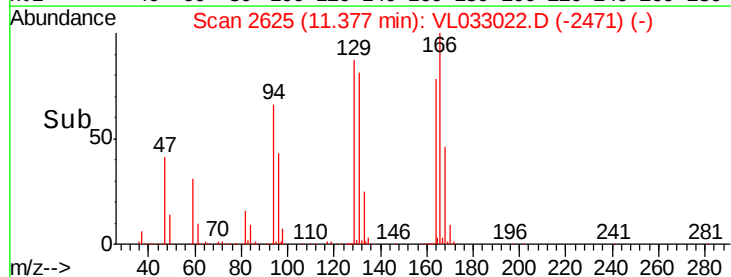
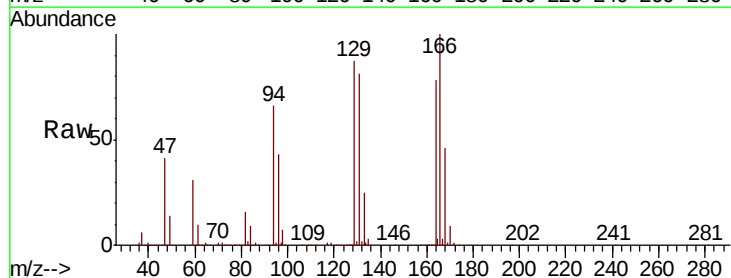
Ion Ratio Lower Upper

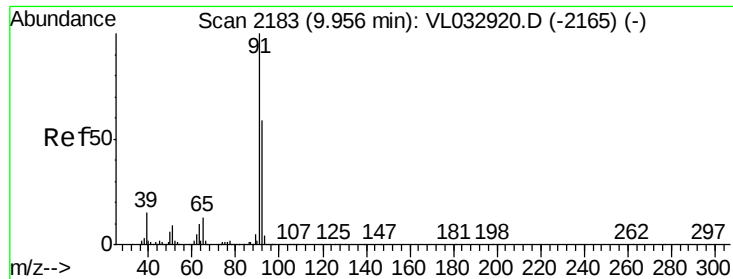
164 100

166 127.9 98.8 148.2

129 110.8 85.5 128.3

131 104.2 84.4 126.6





#53

Toluene

Concen: 11.806 ppbv

RT: 9.95 min Scan# 2182

Delta R.T. -0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 91 Resp: 2513936

Ion Ratio Lower Upper

91 100

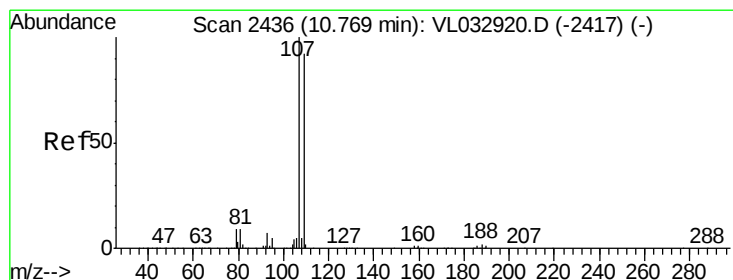
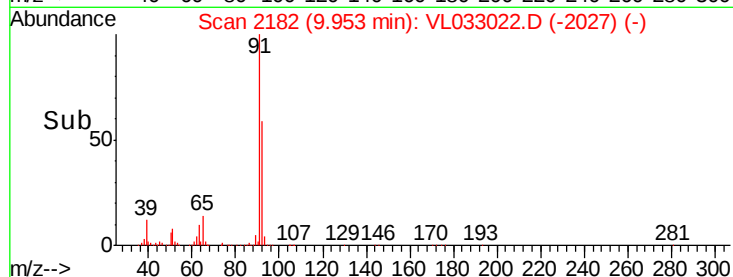
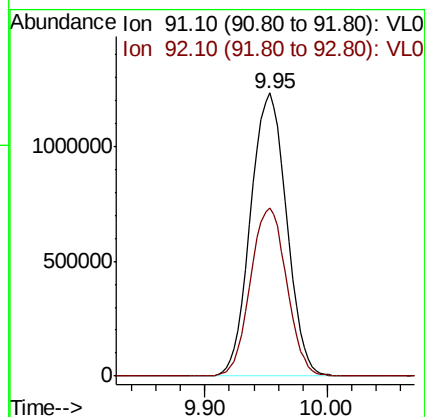
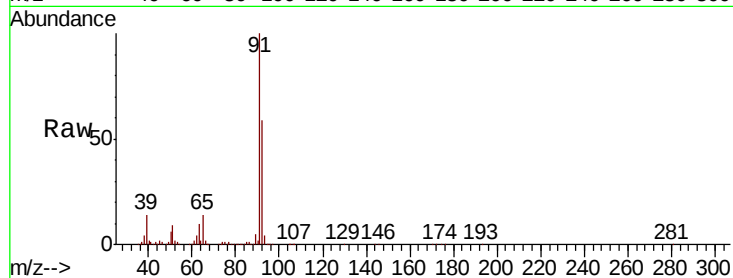
92 59.5 47.4 71.0

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#54

1,2-Dibromoethane

Concen: 8.559 ppbv

RT: 10.77 min Scan# 2435

Delta R.T. -0.00 min

Lab File: VL033022.D

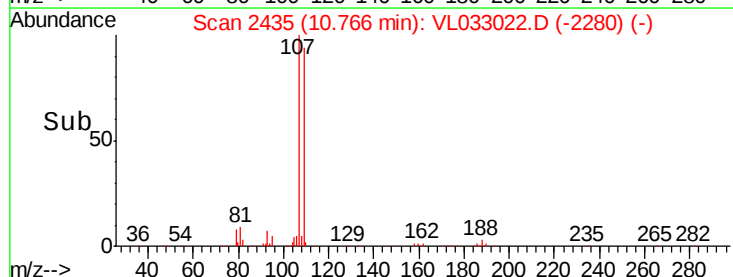
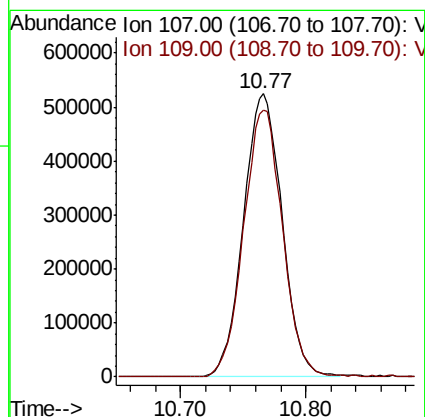
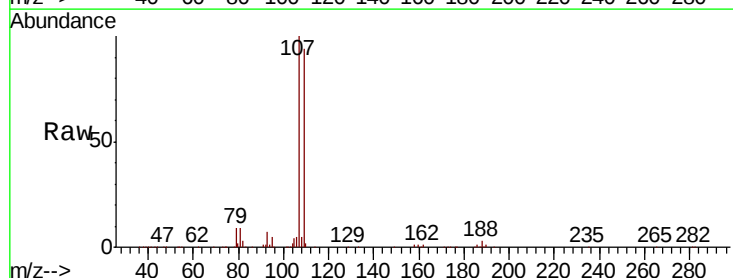
Acq: 18 Dec 2018 12:11

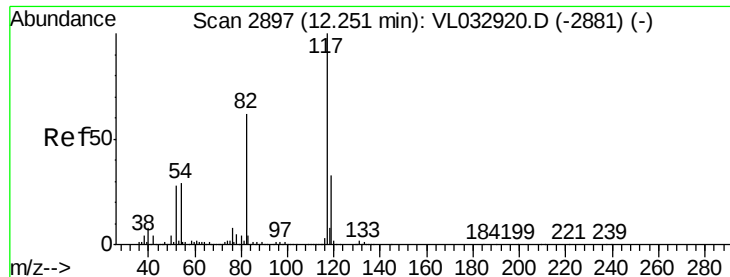
Tgt Ion: 107 Resp: 1120639

Ion Ratio Lower Upper

107 100

109 94.3 73.4 110.2





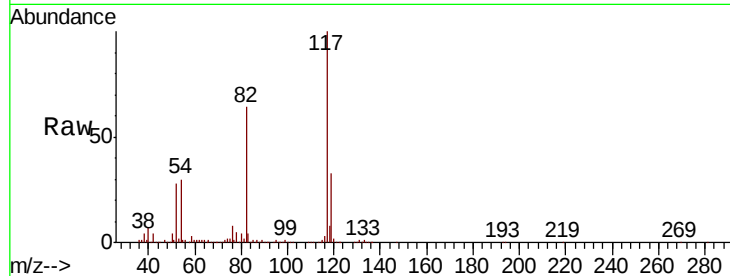
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.25 min Scan# 2895
Delta R.T. -0.01 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

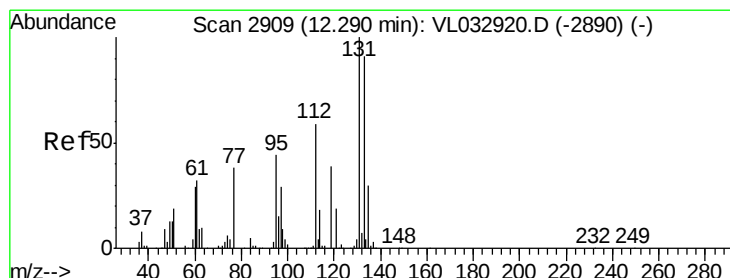
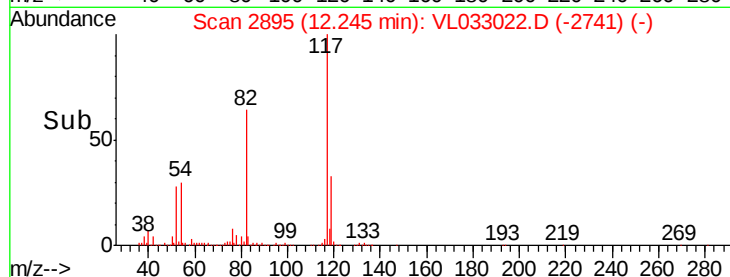
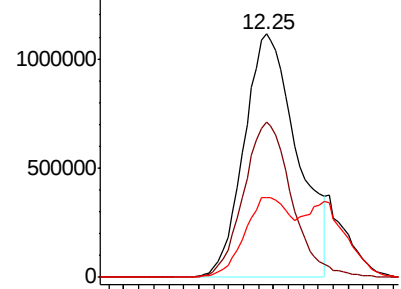
Tot Ion	Ratio	Lower	Upper
117	100		
82	58.3	47.8	71.8
119	28.0	43.1	64.7#

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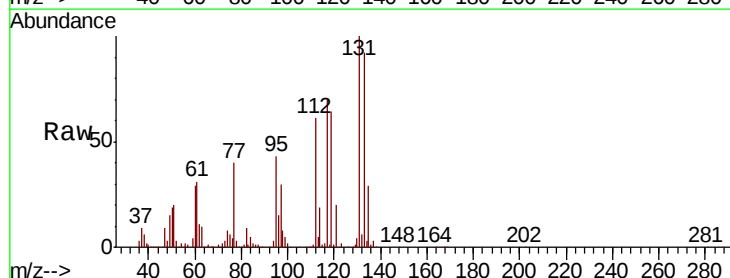


Abundance Ion 117.10 (116.80 to 117.80): V
1500000 Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V

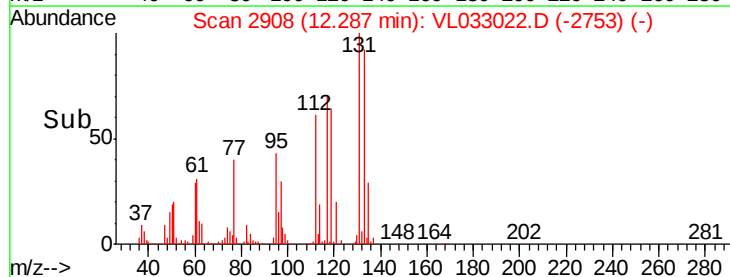
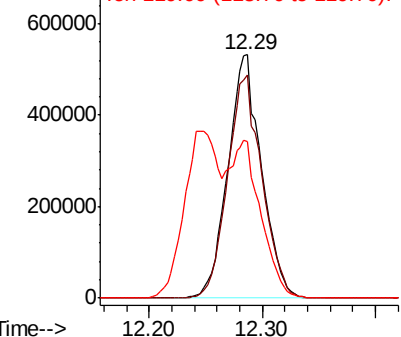


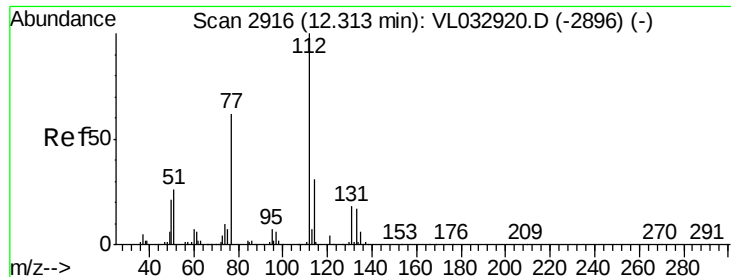
#56
1,1,1,2-Tetrachloroethane
Concen: 8.956 ppbv
RT: 12.29 min Scan# 2908
Delta R.T. -0.00 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Tgt Ion	Ratio	Lower	Upper
131	100		
133	94.1	75.1	112.7
119	57.9	47.5	71.3



Abundance Ion 131.00 (130.70 to 131.70): V
Ion 133.00 (132.70 to 133.70): V
Ion 119.00 (118.70 to 119.70): V





#57

Chlorobenzene

Concen: 7.996 ppbv

RT: 12.31 min Scan# 2915

Delta R.T. -0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Instrument :

MSVOA_L

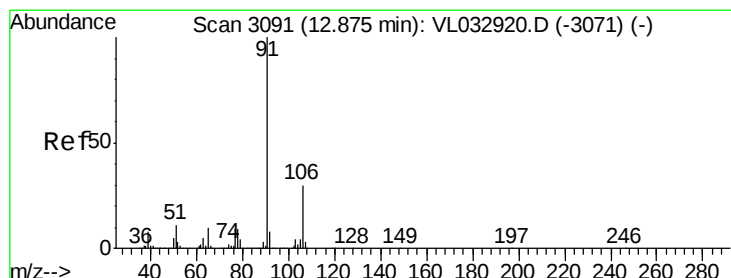
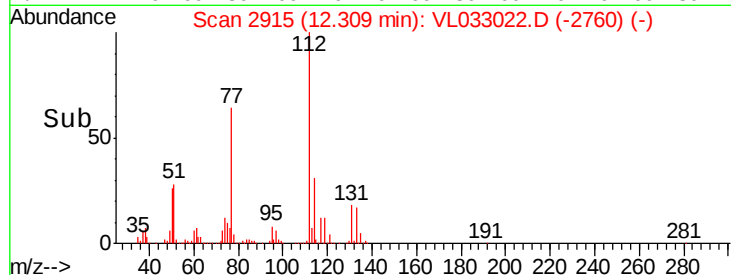
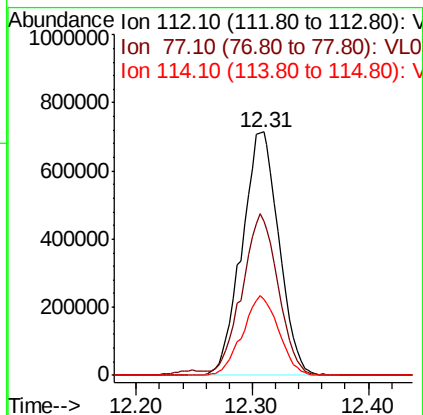
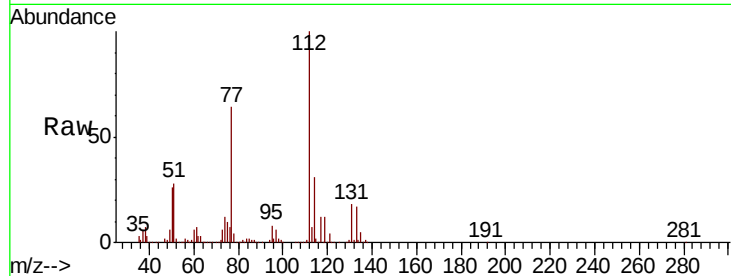
ClientSampleId :

VSTDCCC010EC

Tot Ion:	112	Resp:	1585454
Ion	Ratio	Lower	Upper
112	100		
77	63.4	51.1	76.7
114	31.3	28.4	34.7

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#58

Ethyl Benzene

Concen: 9.461 ppbv

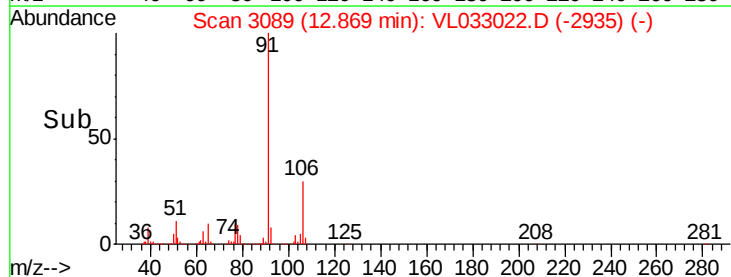
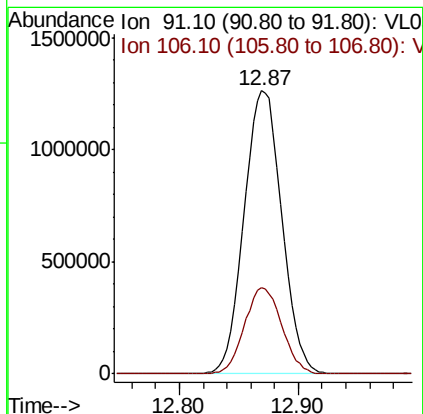
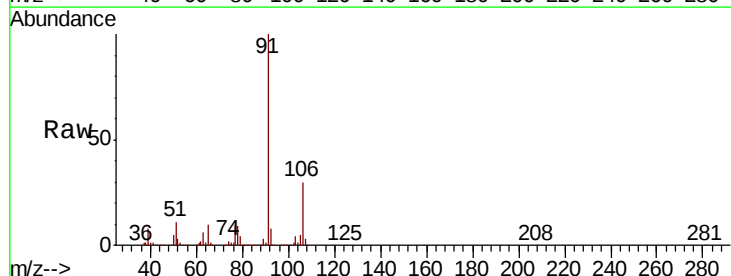
RT: 12.87 min Scan# 3089

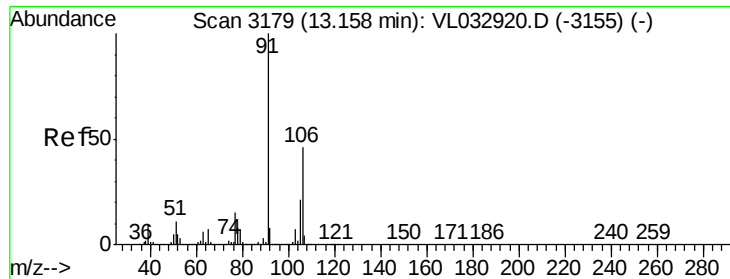
Delta R.T. -0.01 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Tgt Ion:	91	Resp:	2770801
Ion	Ratio	Lower	Upper
91	100		
106	30.5	23.9	35.9





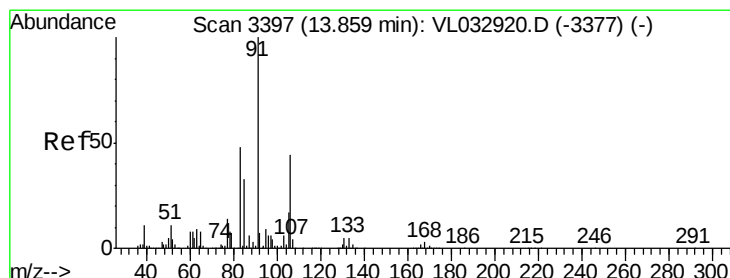
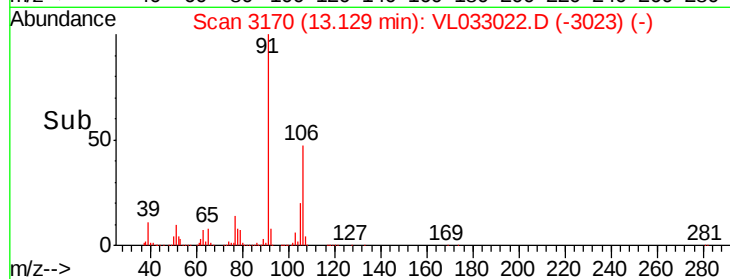
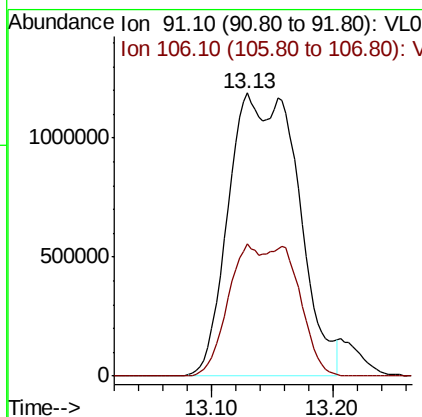
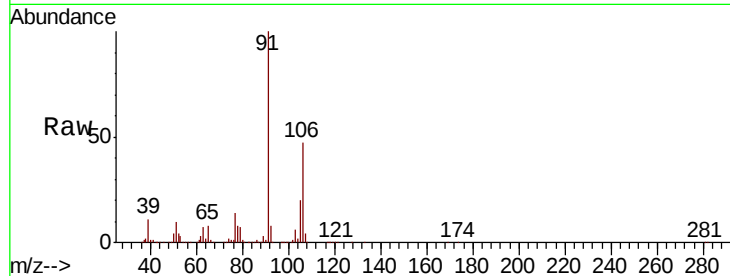
#59
m/p-Xylene
Concen: 17.746 ppbv m
RT: 13.13 min Scan# 3179
Delta R.T. -0.03 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion: 91 Resp: 4711807
Ion Ratio Lower Upper
91 100
106 0.0 0.0 0.0

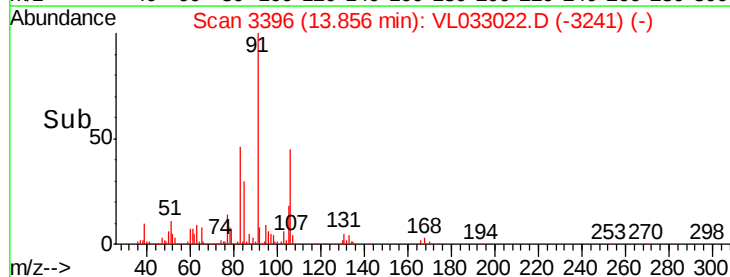
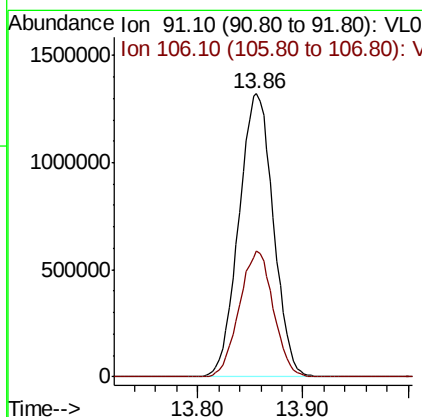
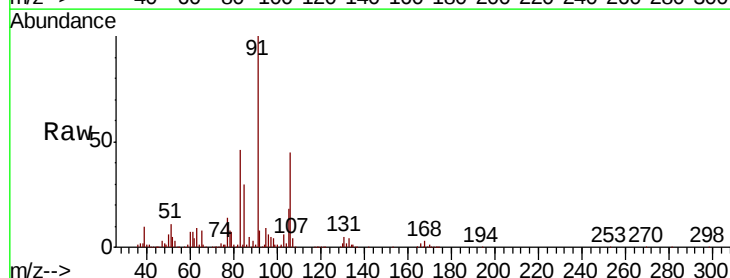
Manual Integrations
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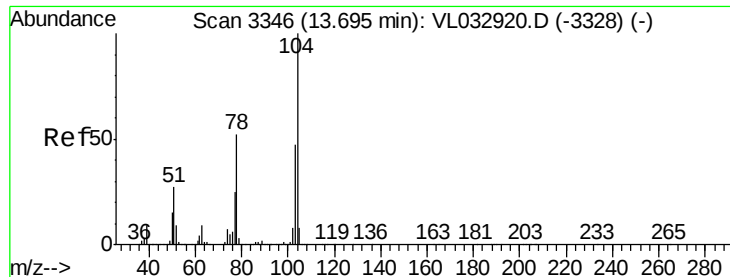
MMDadoda
12/19/2018 1:58:49 PM



#60
o-Xylene
Concen: 11.198 ppbv
RT: 13.86 min Scan# 3396
Delta R.T. -0.00 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Tgt Ion: 91 Resp: 3002635
Ion Ratio Lower Upper
91 100
106 43.9 21.9 65.8





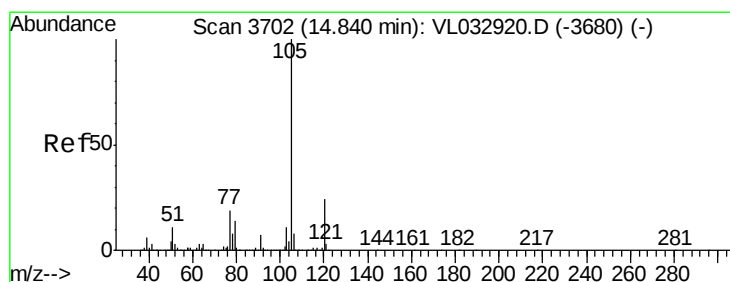
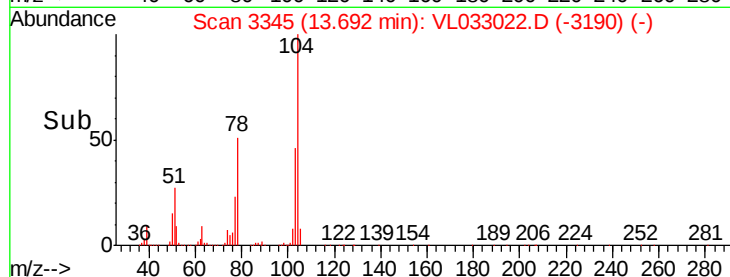
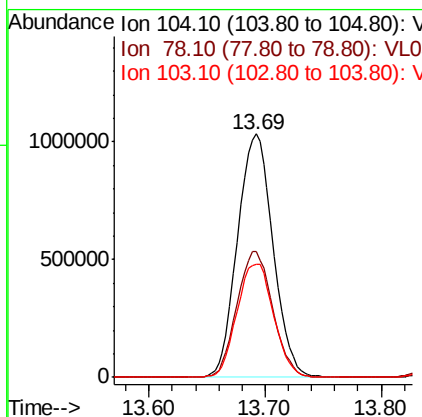
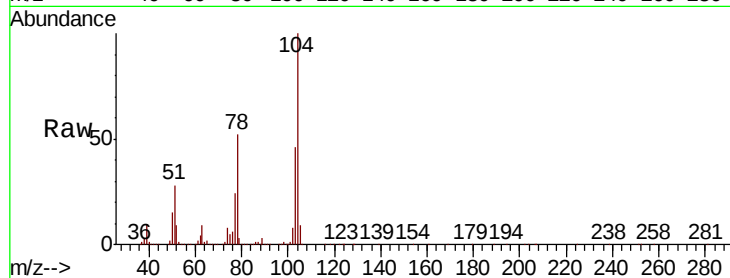
#61
Stvrene
Concen: 12.310 ppbv
RT: 13.69 min Scan# 3345
Delta R.T. -0.00 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion	Ratio	Lower	Upper
104	100		
78	52.3	42.0	63.0
103	48.4	38.3	57.5

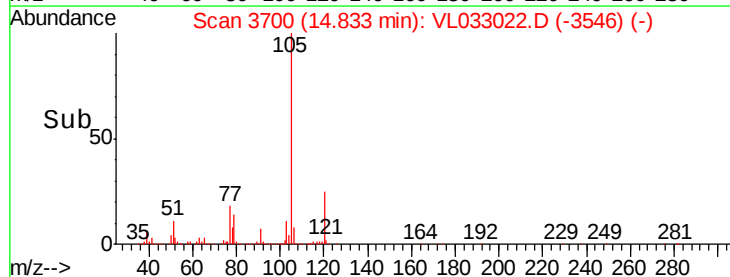
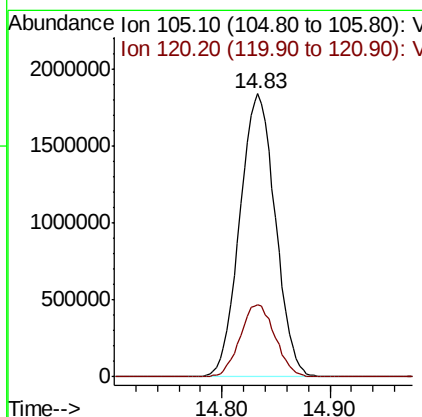
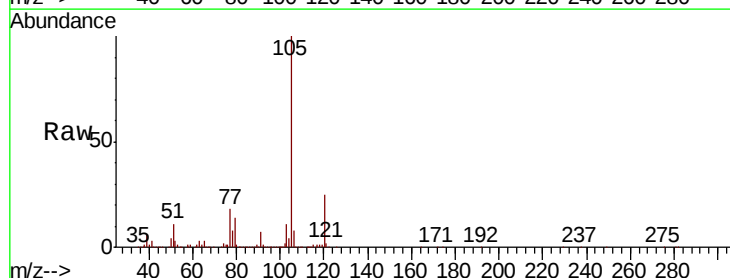
Manual Integrations
APPROVED

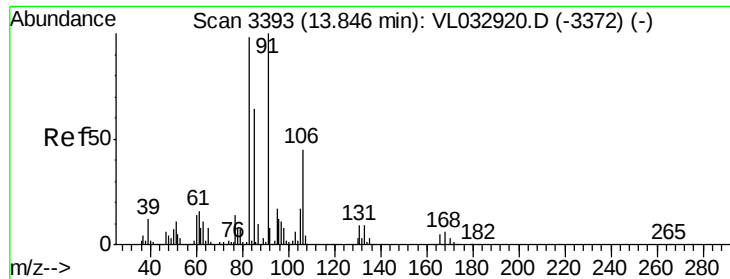
MMDadoda
12/19/2018 1:58:49 PM



#62
Isopropylbenzene
Concen: 11.264 ppbv
RT: 14.83 min Scan# 3700
Delta R.T. -0.01 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Tgt Ion	Ratio	Lower	Upper
105	100		
120	25.2	20.3	30.5





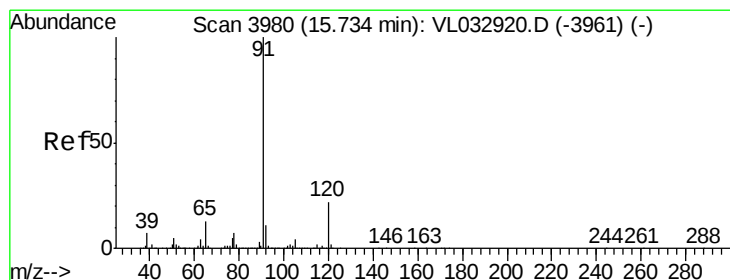
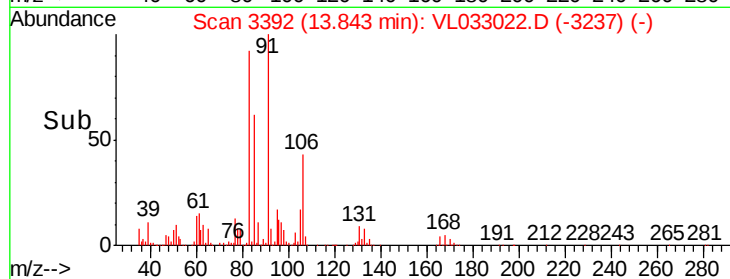
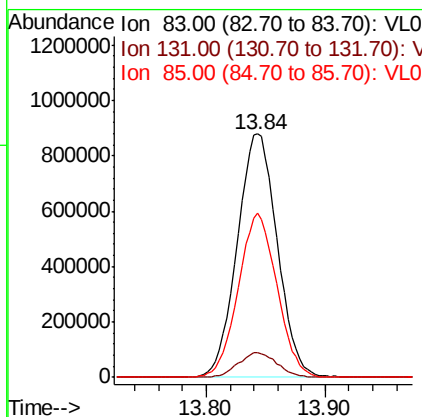
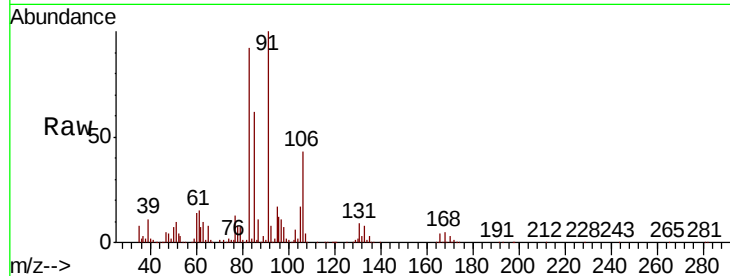
#63
 1,1,2,2-Tetrachloroethane
 Concen: 9.800 ppbv
 RT: 13.84 min Scan# 3392
 Delta R.T. -0.00 min
 Lab File: VL033022.D
 Acq: 18 Dec 2018 12:11

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDCCC010EC

Tot Ion: 83 Resp: 2040462
 Ion Ratio Lower Upper
 83 100
 131 10.0 4.9 14.6
 85 65.7 32.9 98.6

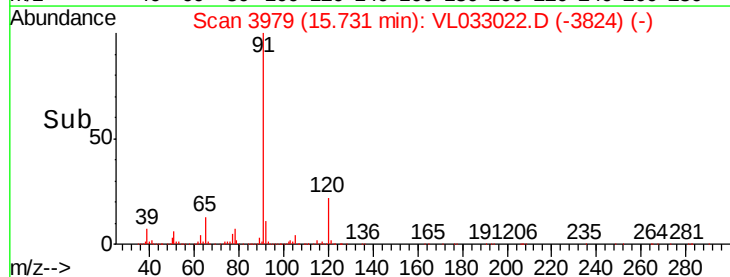
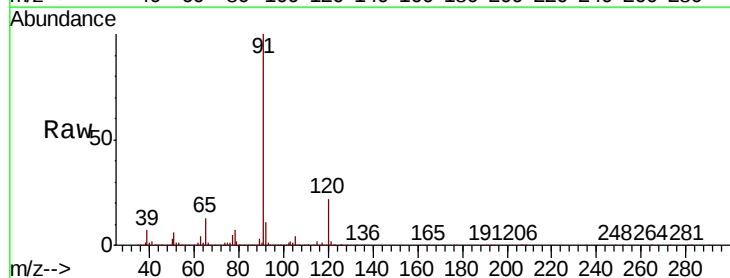
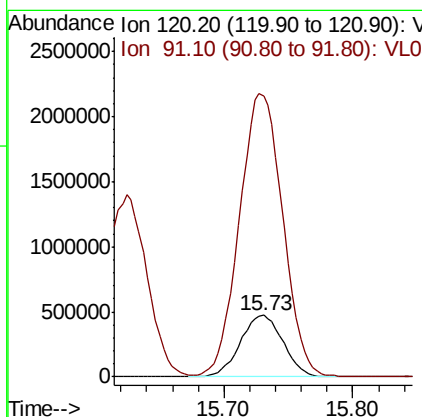
Manual Integrations
 APPROVED

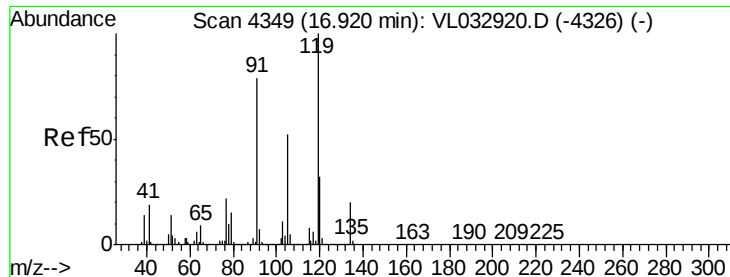
MMDadoda
 12/19/2018 1:58:49 PM



#64
 n-propylbenzene
 Concen: 11.194 ppbv
 RT: 15.73 min Scan# 3979
 Delta R.T. -0.00 min
 Lab File: VL033022.D
 Acq: 18 Dec 2018 12:11

Tgt Ion: 120 Resp: 1087648
 Ion Ratio Lower Upper
 120 100
 91 469.9 380.4 570.6





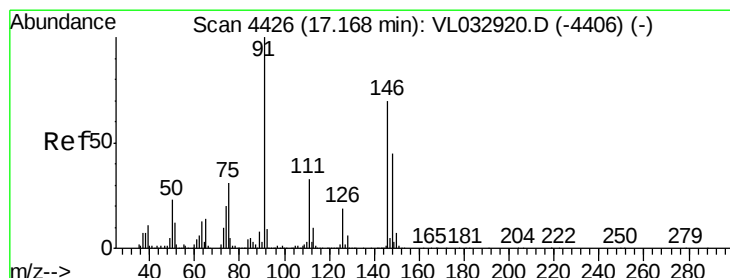
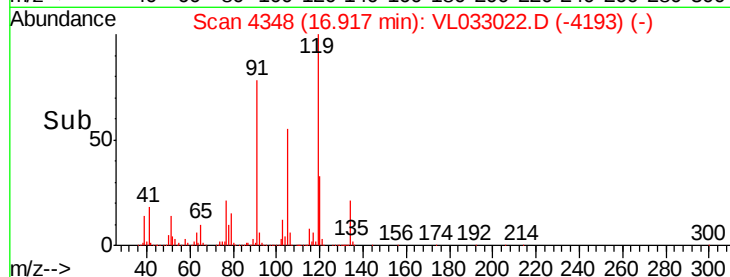
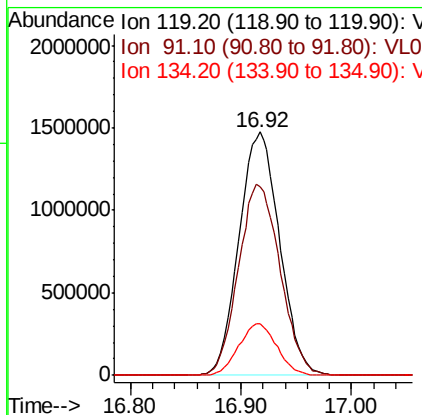
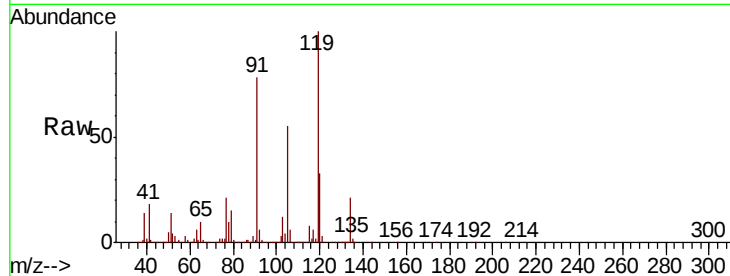
#65
tert-Butylbenzene
Concen: 10.837 ppbv
RT: 16.92 min Scan# 4348
Delta R.T. -0.00 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion	Ratio	Lower	Upper
119	100		
91	80.9	64.5	96.7
134	20.0	15.7	23.5

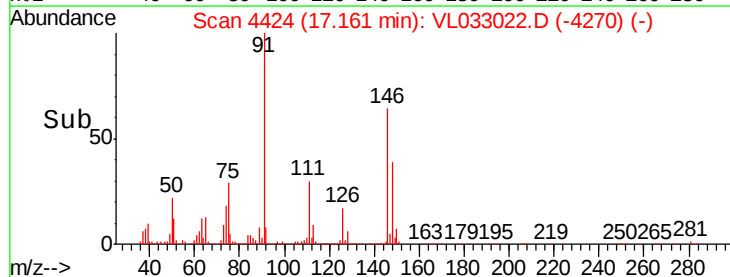
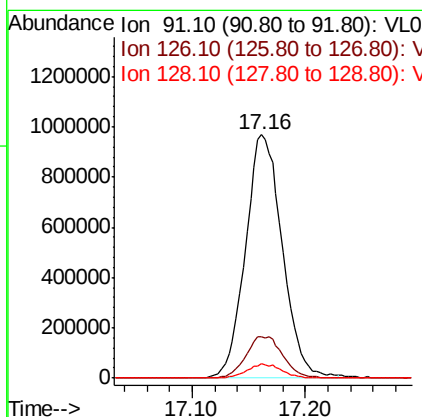
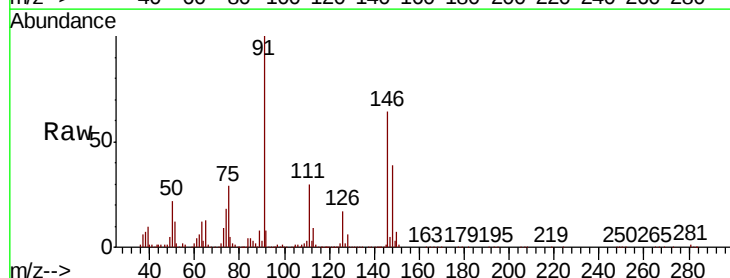
Manual Integrations
APPROVED

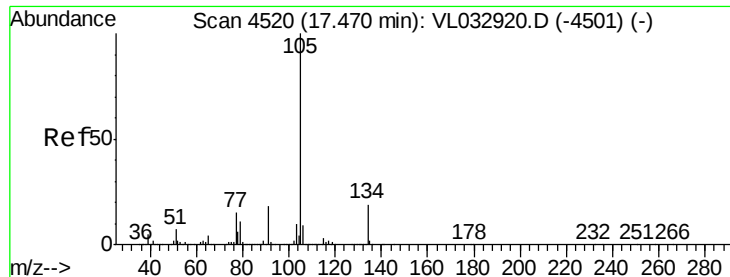
MMDadoda
12/19/2018 1:58:49 PM



#66
Benzyl Chloride
Concen: 11.366 ppbv
RT: 17.16 min Scan# 4424
Delta R.T. -0.01 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Tgt Ion	Ratio	Lower	Upper
91	100		
126	17.4	14.1	21.1
128	5.6	4.5	6.7





#67

sec-Butylbenzene

Concen: 10.316 ppbv

RT: 17.47 min Scan# 4519

Delta R.T. -0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 105 Resp: 5274686

Ion Ratio Lower Upper

105 100

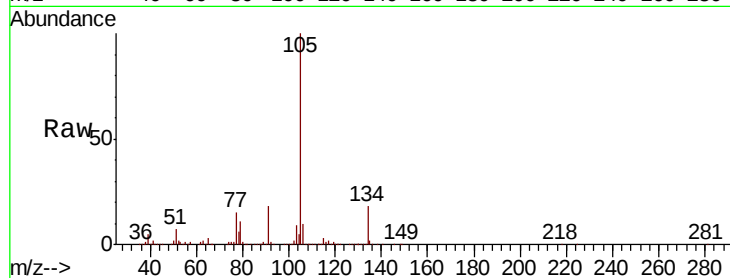
134 18.3 14.6 21.8

Manual Integrations

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12/19/2018 1:58:49 PM



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V

2500000

2000000

1500000

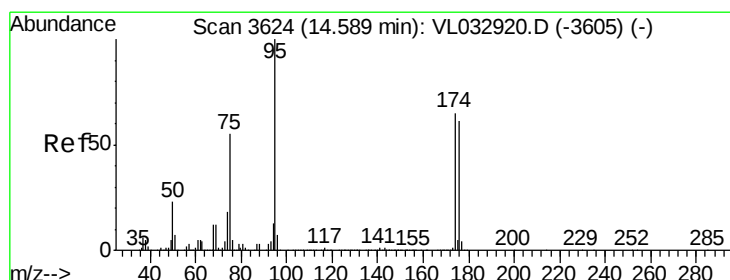
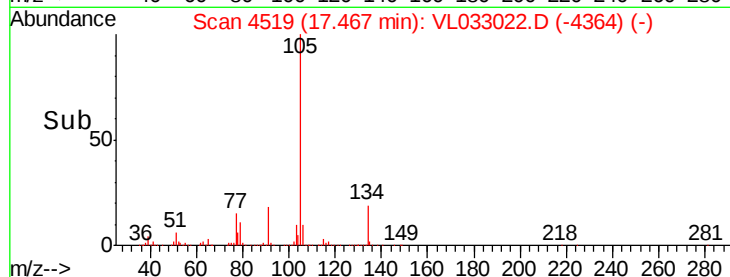
1000000

500000

0

17.40 17.50 17.60

Time-->



#68

1-Bromo-4-Fluorobenzene

Concen: 9.951 ppbv

RT: 14.58 min Scan# 3622

Delta R.T. -0.01 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

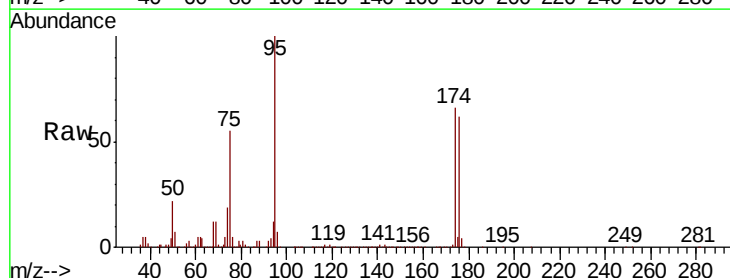
Tgt Ion: 95 Resp: 2018270

Ion Ratio Lower Upper

95 100

174 65.6 51.4 77.0

175 4.9 3.8 5.6



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

1200000

1000000

800000

600000

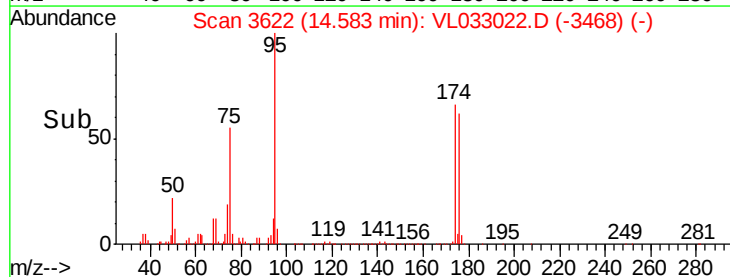
400000

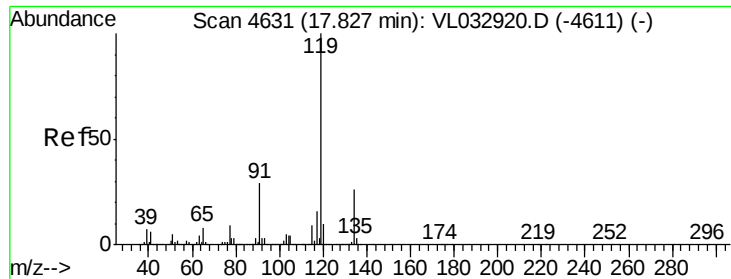
200000

0

14.50 14.60

Time-->





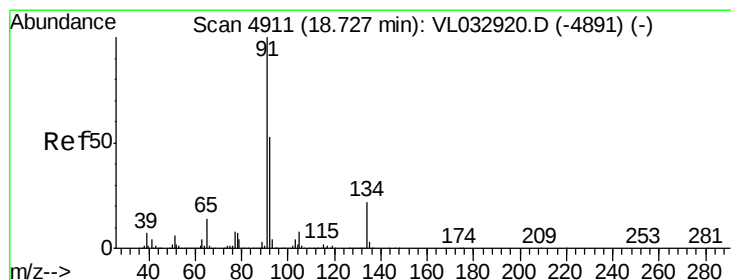
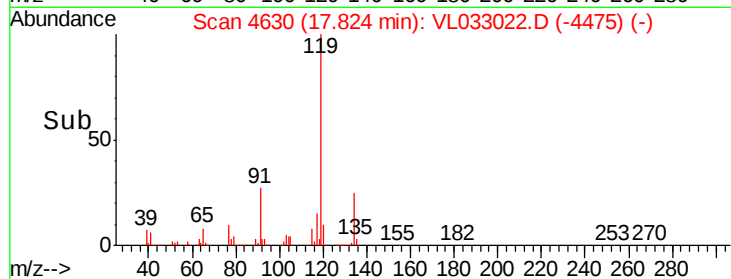
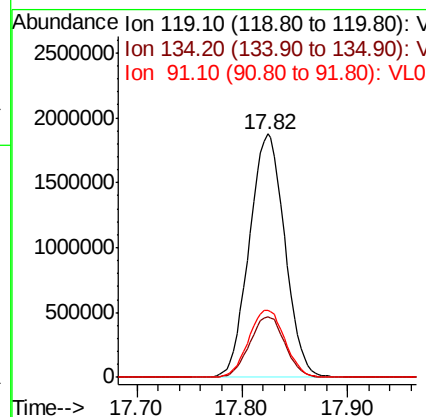
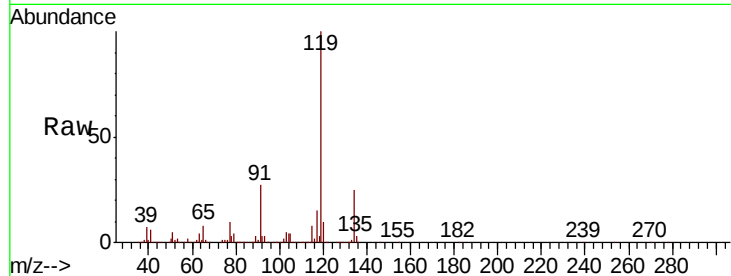
#69
p-Isopropyltoluene
Concen: 10.600 ppbv
RT: 17.82 min Scan# 4630
Delta R.T. -0.00 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion	Ratio	Lower	Upper
119	100		
134	25.0	20.2	30.2
91	28.3	22.9	34.3

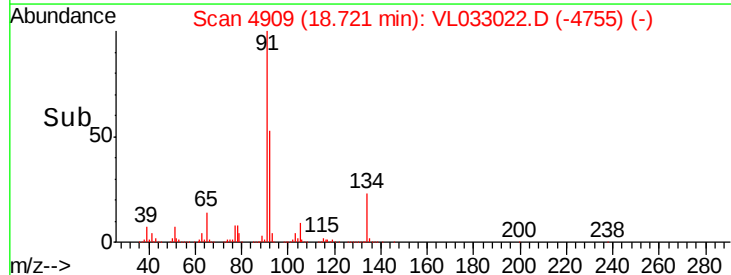
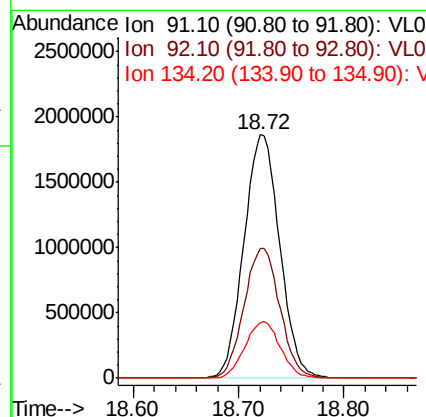
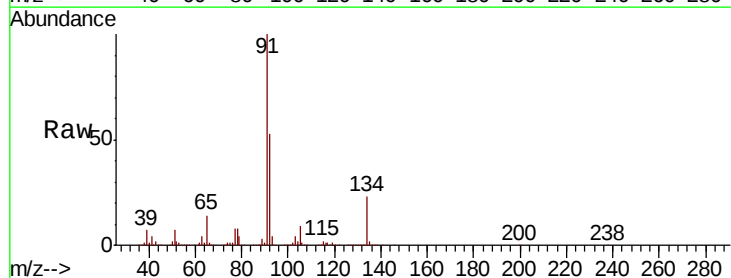
Manual Integrations
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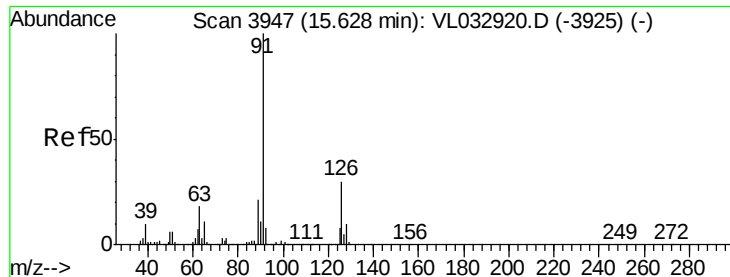
MMDadoda
12/19/2018 1:58:49 PM



#70
n-Butylbenzene
Concen: 11.555 ppbv
RT: 18.72 min Scan# 4909
Delta R.T. -0.01 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Tgt Ion	Ratio	Lower	Upper
91	100		
92	53.4	42.7	64.1
134	22.9	18.0	27.0





#71

2-Chlorotoluene

Concen: 11.284 ppbv

RT: 15.62 min Scan# 3946

Delta R.T. -0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 91 Resp: 3139183

Ion Ratio Lower Upper

91 100

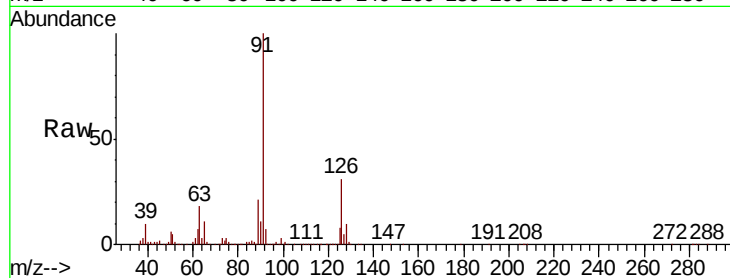
126 30.9 12.3 49.3

Manual Integrations

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12/19/2018 1:58:49 PM



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V

2500000

2000000

1500000

1000000

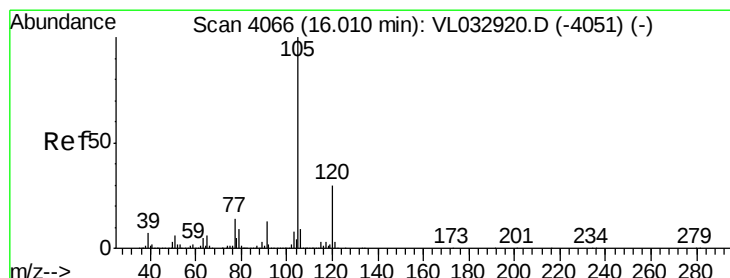
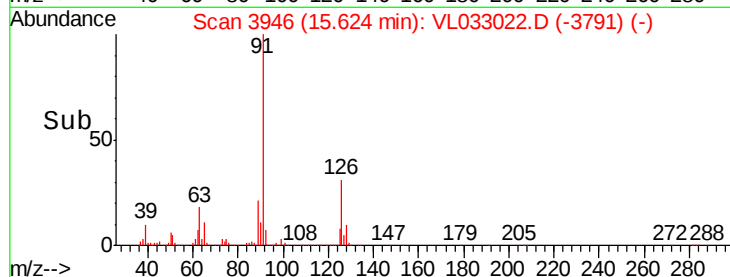
500000

0

15.60

15.70

Time-->



#72

4-Ethyltoluene

Concen: 11.593 ppbv

RT: 16.01 min Scan# 4065

Delta R.T. -0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Tgt Ion:105 Resp: 3470278

Ion Ratio Lower Upper

105 100

120 29.0 23.0 34.4

91 13.5 10.4 15.6

77 13.7 11.0 16.4

Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

2000000

1500000

1000000

500000

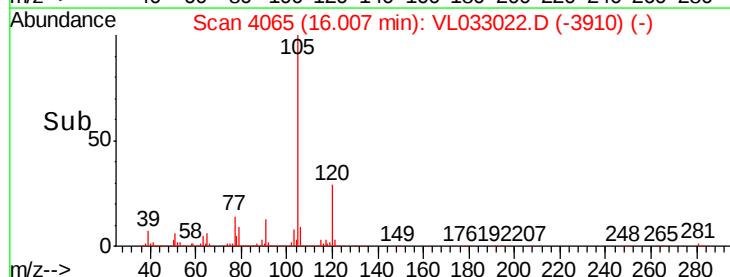
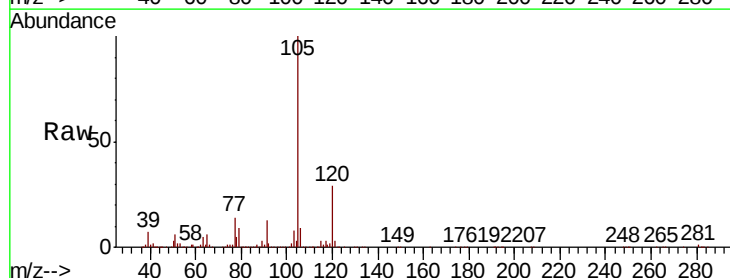
0

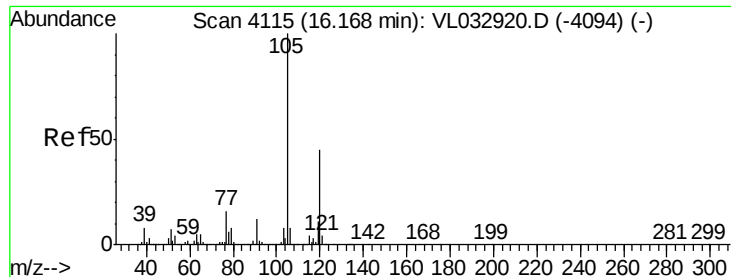
15.95

16.00

16.05

Time-->





#73

1,3,5-Trimethylbenzene

Concen: 11.369 ppbv

RT: 16.16 min Scan# 4114

Delta R.T. -0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:105 Resp: 3322559

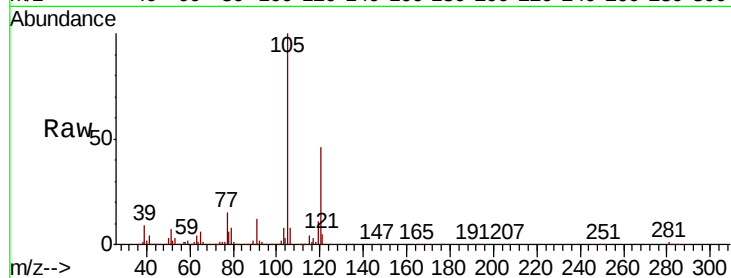
Ion Ratio Lower Upper

105 100

120 46.1 36.0 54.0

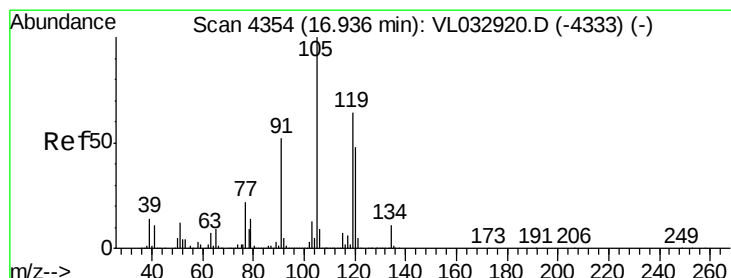
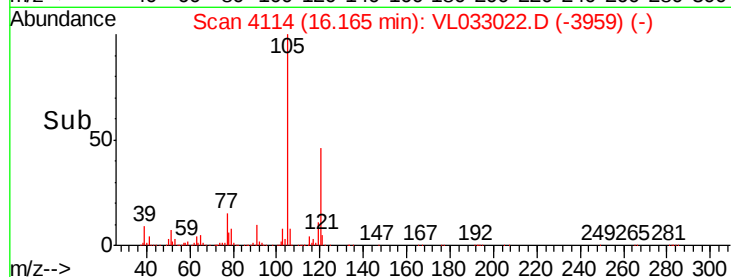
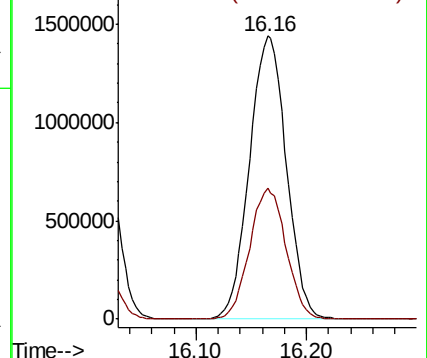
Manual Integrations
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 10.332 ppbv

RT: 16.93 min Scan# 4353

Delta R.T. -0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Tgt Ion:105 Resp: 3409457

Ion Ratio Lower Upper

105 100

120 48.9 38.6 58.0

91 50.7 41.7 62.5

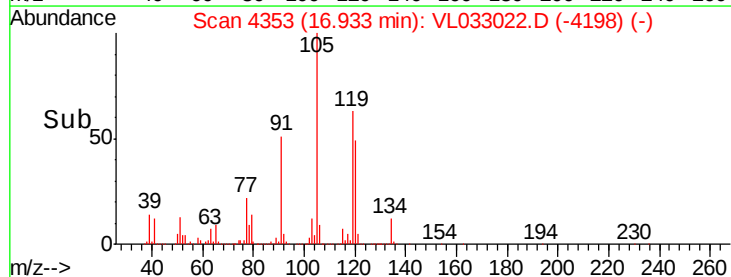
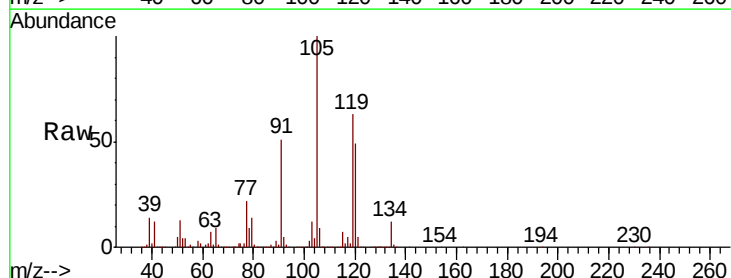
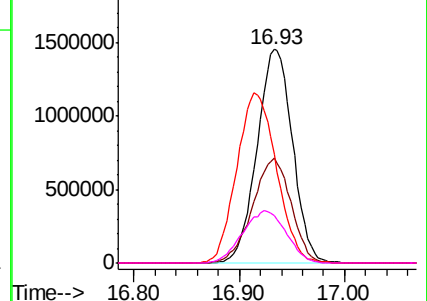
77 22.1 17.4 26.2

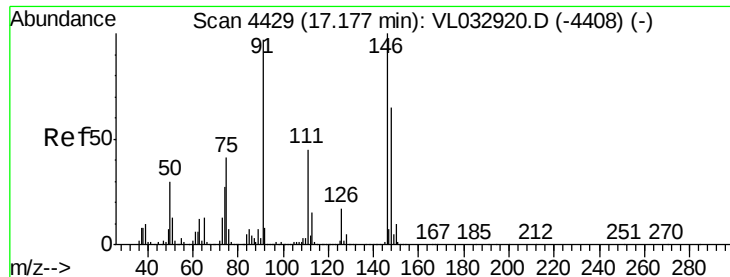
Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0





#75

1,3-Dichlorobenzene

Concen: 9.851 ppbv

RT: 17.17 min Scan# 4427

Delta R.T. -0.01 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:146 Resp: 1914283

Ion Ratio Lower Upper

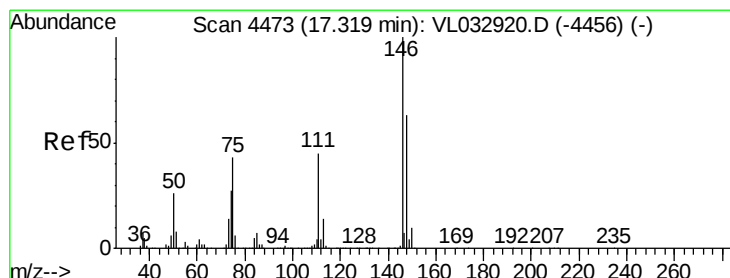
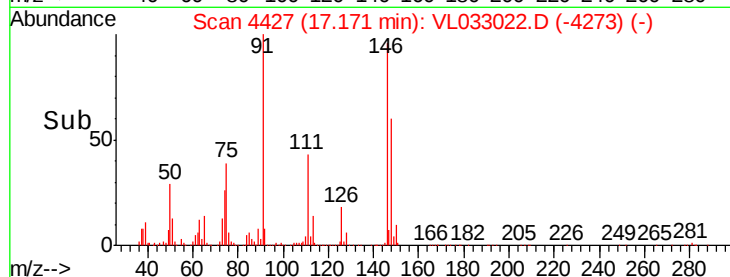
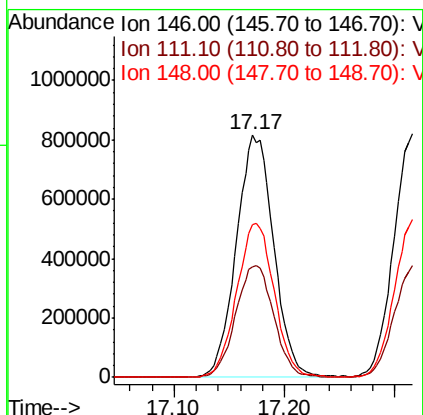
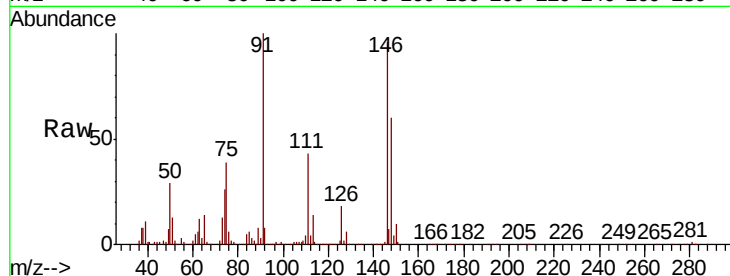
146 100

111 47.0 23.6 70.8

148 63.8 32.1 96.3

Manual Integrations
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12/19/2018 1:58:49 PM



#76

1,4-Dichlorobenzene

Concen: 10.426 ppbv

RT: 17.32 min Scan# 4472

Delta R.T. -0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

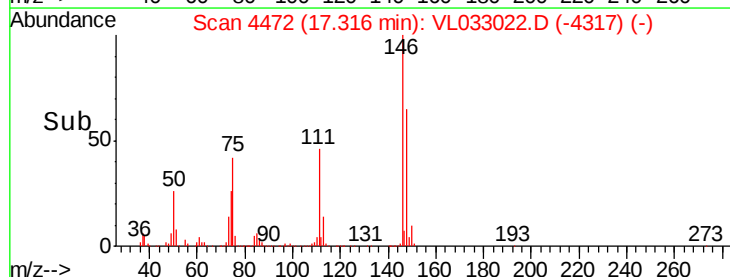
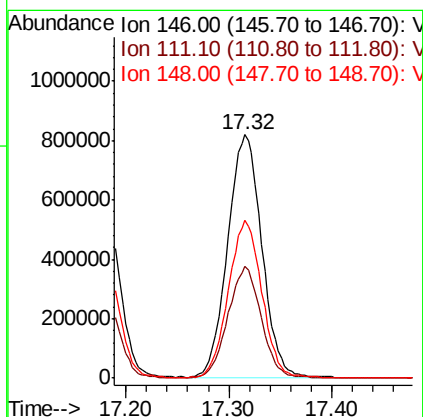
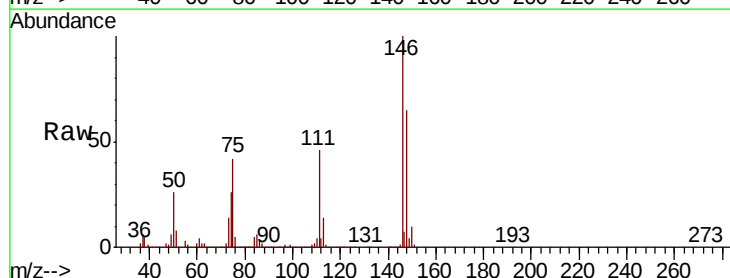
Tgt Ion:146 Resp: 1890431

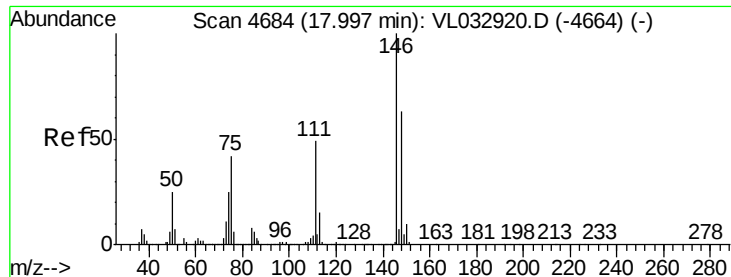
Ion Ratio Lower Upper

146 100

111 44.7 22.8 68.4

148 63.9 32.0 96.2





#77

1,2-Dichlorobenzene

Concen: 10.185 ppbv

RT: 18.00 min Scan# 4684

Delta R.T. 0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

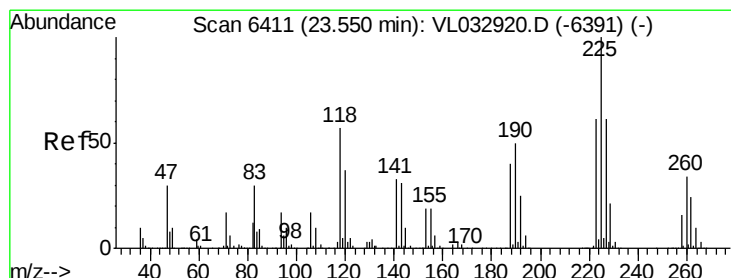
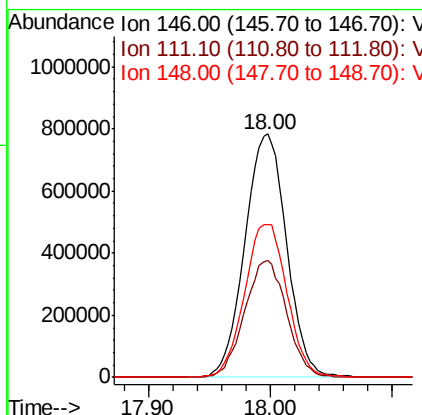
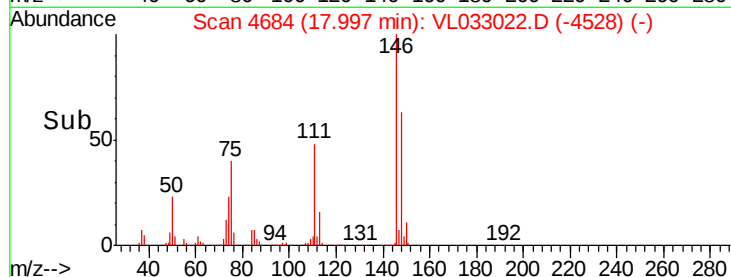
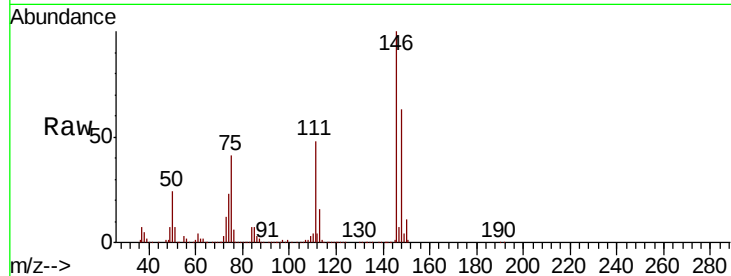
Instrument :
MSVOA_L

ClientSampleId :
VSTDCCC010EC

Tot Ion	Ratio	Lower	Upper
146	100		
111	48.4	24.3	72.9
148	64.5	32.0	96.2

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#78

Hexachloro-1,3-Butadiene

Concen: 12.393 ppbv

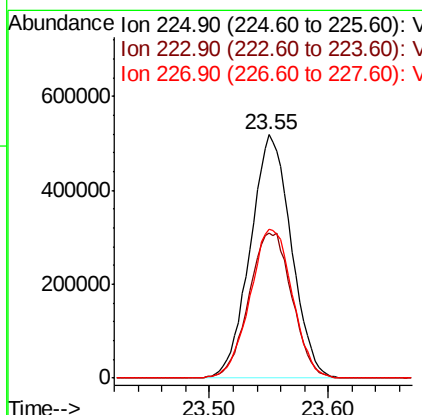
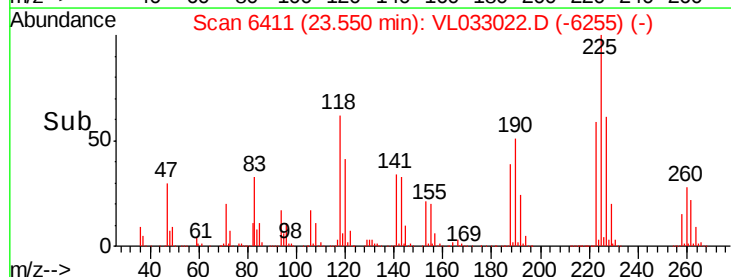
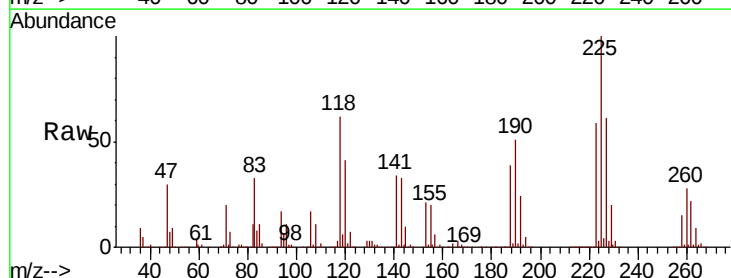
RT: 23.55 min Scan# 6411

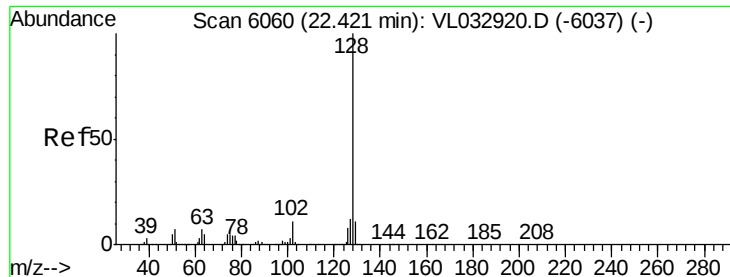
Delta R.T. 0.00 min

Lab File: VL033022.D

Acq: 18 Dec 2018 12:11

Tgt Ion	Ratio	Lower	Upper
225	100		
223	62.9	50.6	75.8
227	63.3	50.4	75.6





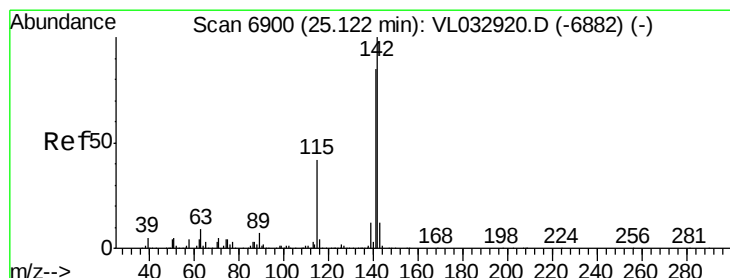
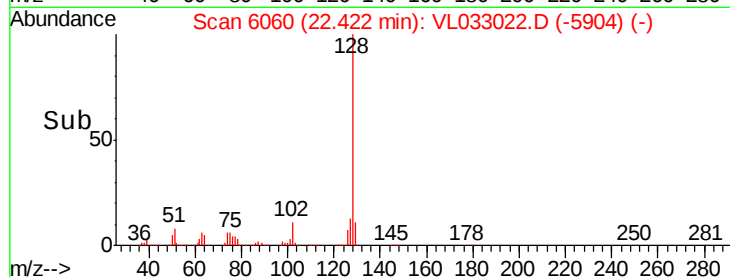
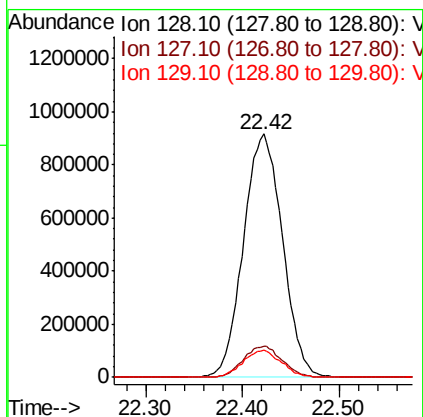
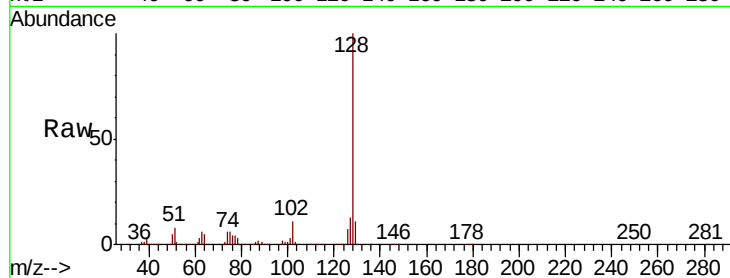
#79
Naphthalene
Concen: 12.051 ppbv
RT: 22.42 min Scan# 6060
Delta R.T. 0.00 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion	Ratio	Lower	Upper
128	100		
127	12.8	9.9	14.9
129	11.0	8.6	13.0

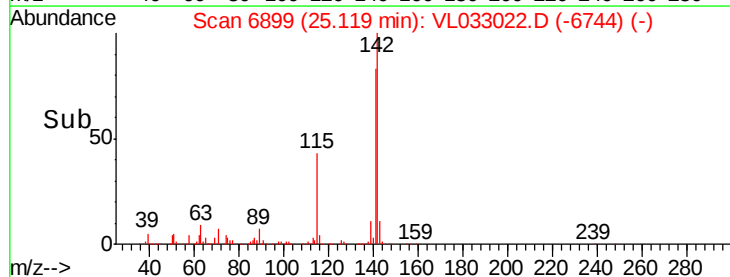
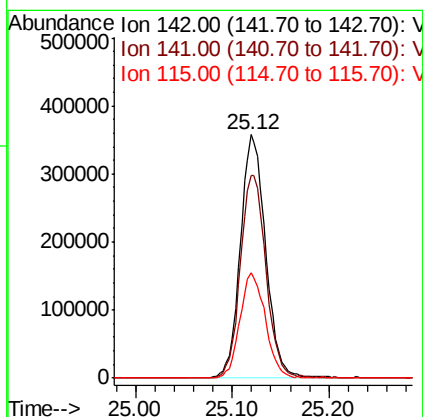
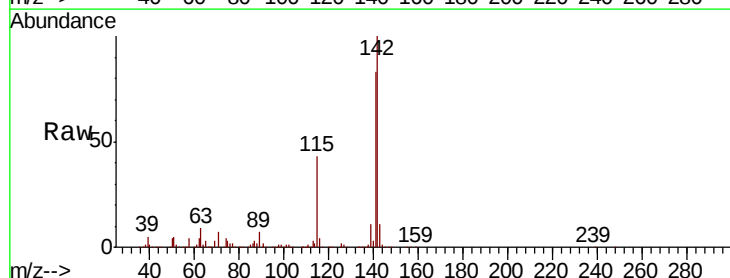
Manual Integrations
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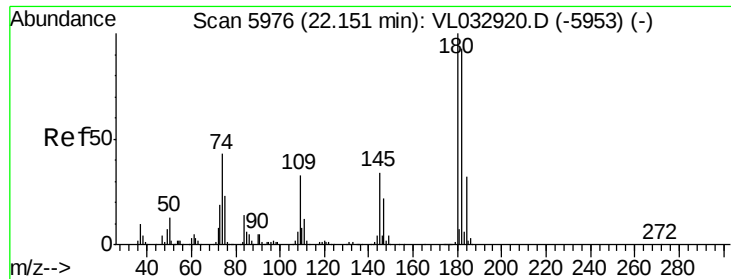
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#80
Naphthalene, 2-methyl-
Concen: 14.267 ppbv
RT: 25.12 min Scan# 6899
Delta R.T. -0.00 min
Lab File: VL033022.D
Acq: 18 Dec 2018 12:11

Tgt Ion	Ratio	Lower	Upper
142	100		
141	84.9	68.2	102.2
115	43.6	35.1	52.7





#81
 1,2,4-Trichlorobenzene
 Concen: 11.255 ppbv
 RT: 22.15 min Scan# 5975
 Delta R.T. -0.00 min
 Lab File: VL033022.D
 Acq: 18 Dec 2018 12:11

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDCCC010EC

Tot Ion	Ratio	Lower	Upper
180	100		
182	95.5	77.0	115.6
184	30.5	24.3	36.5

Manual Integrations
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