

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL020419\
 Data File : VL033157.D
 Acq On : 4 Feb 2019 15:04
 Operator : SY/AP
 Sample : VSTDICV010
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL020419

Manual Integrations
 APPROVED

MMDadoda
 2/5/2019 10:27:41 AM

Quant Time: Feb 05 01:33:56 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL020419AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Feb 05 2019
 QLast Update : Mon Feb 04 14:41:39 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	1133662	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	3158337	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	3153596m	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	2449677	10.42	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.20%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	1840619	11.026	ppbv	98
3) Chlorodifluoromethane	3.01	51	1168292	9.253	ppbv	98
4) Chloromethane	3.17	50	648841	9.132	ppbv	100
5) Vinyl Chloride	3.29	62	632458	9.019	ppbv	98
6) Bromomethane	3.52	94	375944	9.514	ppbv	99
7) Chloroethane	3.60	64	229768	9.637	ppbv	95
8) Dichlorotetrafluoroethane	3.22	85	1426830	9.325	ppbv	97
9) Propene	3.04	41	589364	9.290	ppbv	100
10) Heptane	8.25	43	1824000	9.230	ppbv	99
11) Trichlorofluoromethane	4.00	101	1556827	9.652	ppbv	100
12) 1,1,2-Trichlorotrifluoroet	4.55	101	1008216	9.628	ppbv	98
13) Ethanol	3.64	45	144131	5.763	ppbv	99
14) Bromoethene	3.79	108	484423	10.035	ppbv	99
15) Acetone	3.90	43	1185139	8.781	ppbv	99
16) 1,3-Butadiene	3.36	39	546771	9.979	ppbv	98
17) tert-Butyl alcohol	4.35	59	276720	9.283	ppbv	99
18) 1,1-Dichloroethene	4.35	96	481232	9.986	ppbv	98
19) Isopropyl Alcohol	4.02	45	910425	9.496	ppbv	# 46
20) Methylene Chloride	4.41	84	410464	8.827	ppbv	99
21) Allyl Chloride	4.48	41	824311	10.143	ppbv	99
22) trans-1,2-Dichloroethene	4.96	96	468005	9.834	ppbv	97
23) Vinyl Acetate	5.15	43	2196368	10.003	ppbv	100
24) 1,1-Dichloroethane	5.09	63	1461118	9.753	ppbv	99
25) Ethyl Acetate	5.77	43	2428400	8.706	ppbv	100
26) Hexane	5.78	57	1107483	8.487	ppbv	99
27) Carbon Disulfide	4.62	76	1178041	10.486	ppbv	97
28) Methyl tert-Butyl Ether	5.11	73	1822054	9.596	ppbv	100
29) Chloroform	5.85	83	1711445	8.668	ppbv	98
30) Cyclohexane	7.25	84	1146268	9.149	ppbv	99
31) cis-1,2-Dichloroethene	5.64	61	1166522	9.380	ppbv	98
32) 1,1,1-Trichloroethane	6.62	97	1916916	9.849	ppbv	# 83
34) 2-Butanone	5.33	43	1715637	8.637	ppbv	100
35) Carbon Tetrachloride	7.14	117	1921547m	9.500	ppbv	
36) Benzene	7.01	78	2761456	8.649	ppbv	99
37) 1,2-Dichloroethane	6.41	62	1494399	9.164	ppbv	99
38) Trichloroethene	7.96	130	980644	8.457	ppbv	97
39) 1,2-Dichloropropane	7.74	63	1106841	9.038	ppbv	97
40) 1,4-Dioxane	7.95	88	398961	8.352	ppbv	99
41) Tetrahydrofuran	6.15	42	1190484	9.646	ppbv	99
42) Bromodichloromethane	7.92	83	2216910	9.290	ppbv	100
43) Methyl Methacrylate	8.14	69	1154861	9.093	ppbv	99

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 QLast Update : Mon Feb 04 14:41:39 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,2,4-Trimethylpentane	7.99	57	4620819	8.624	ppbv	100
45) t-1,3-Dichloropropene	9.42	75	1493259	9.527	ppbv	95
46) cis-1,3-Dichloropropene	8.84	75	1714611	9.095	ppbv	99
47) 1,1,2-Trichloroethane	9.62	97	1075529	8.181	ppbv	95
48) Dibromochloromethane	10.45	129	1735944	8.872	ppbv	99
49) Bromoform	13.20	173	1351541	8.369	ppbv	100
50) 4-Methyl-2-Pentanone	8.87	43	2810097	7.816	ppbv	100
51) 2-Hexanone	10.27	43	2243562	7.440	ppbv	100
52) Tetrachloroethene	11.37	164	908477	8.187	ppbv	96
53) Toluene	9.95	91	3158714	8.330	ppbv	99
54) 1,2-Dibromoethane	10.76	107	1670300	8.391	ppbv	98
56) 1,1,1,2-Tetrachloroethane	12.28	131	1221236	8.957	ppbv #	54
57) Chlorobenzene	12.30	112	2244822	8.538	ppbv	96
58) Ethyl Benzene	12.87	91	4253556	8.573	ppbv	100
59) m/p-Xylene	13.13	91	6917173m	17.025	ppbv	
60) o-Xylene	13.85	91	3238734	8.638	ppbv	96
61) Styrene	13.69	104	2567068	8.556	ppbv	98
62) Isopropylbenzene	14.83	105	4525121	8.455	ppbv	99
63) 1,1,2,2-Tetrachloroethane	13.84	83	2098967	7.803	ppbv	100
64) n-propylbenzene	15.72	120	1157395	8.287	ppbv	94
65) tert-Butylbenzene	16.91	119	3679254	7.664	ppbv	96
66) Benzyl Chloride	17.16	91	1879382	8.620	ppbv	98
67) sec-Butylbenzene	17.46	105	5311900	7.741	ppbv	100
69) p-Isopropyltoluene	17.82	119	4366055	7.699	ppbv	98
70) n-Butylbenzene	18.72	91	4605674	7.464	ppbv	98
71) 2-Chlorotoluene	15.62	91	3464614	8.166	ppbv	97
72) 4-Ethyltoluene	16.00	105	3663893	8.176	ppbv	99
73) 1,3,5-Trimethylbenzene	16.16	105	3433858	7.948	ppbv	97
74) 1,2,4-Trimethylbenzene	16.93	105	3358798	7.622	ppbv	98
75) 1,3-Dichlorobenzene	17.17	146	1828582	7.516	ppbv	100
76) 1,4-Dichlorobenzene	17.31	146	1858994	7.607	ppbv	100
77) 1,2-Dichlorobenzene	17.99	146	1833837	7.578	ppbv	99
78) Hexachloro-1,3-Butadiene	23.54	225	1347901	11.197	ppbv	99
79) Naphthalene	22.42	128	3905036	7.568	ppbv	99
80) Naphthalene, 2-methyl-	25.12	142	1596850	6.070	ppbv	98
81) 1,2,4-Trichlorobenzene	22.14	180	1744821	7.461	ppbv	99

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

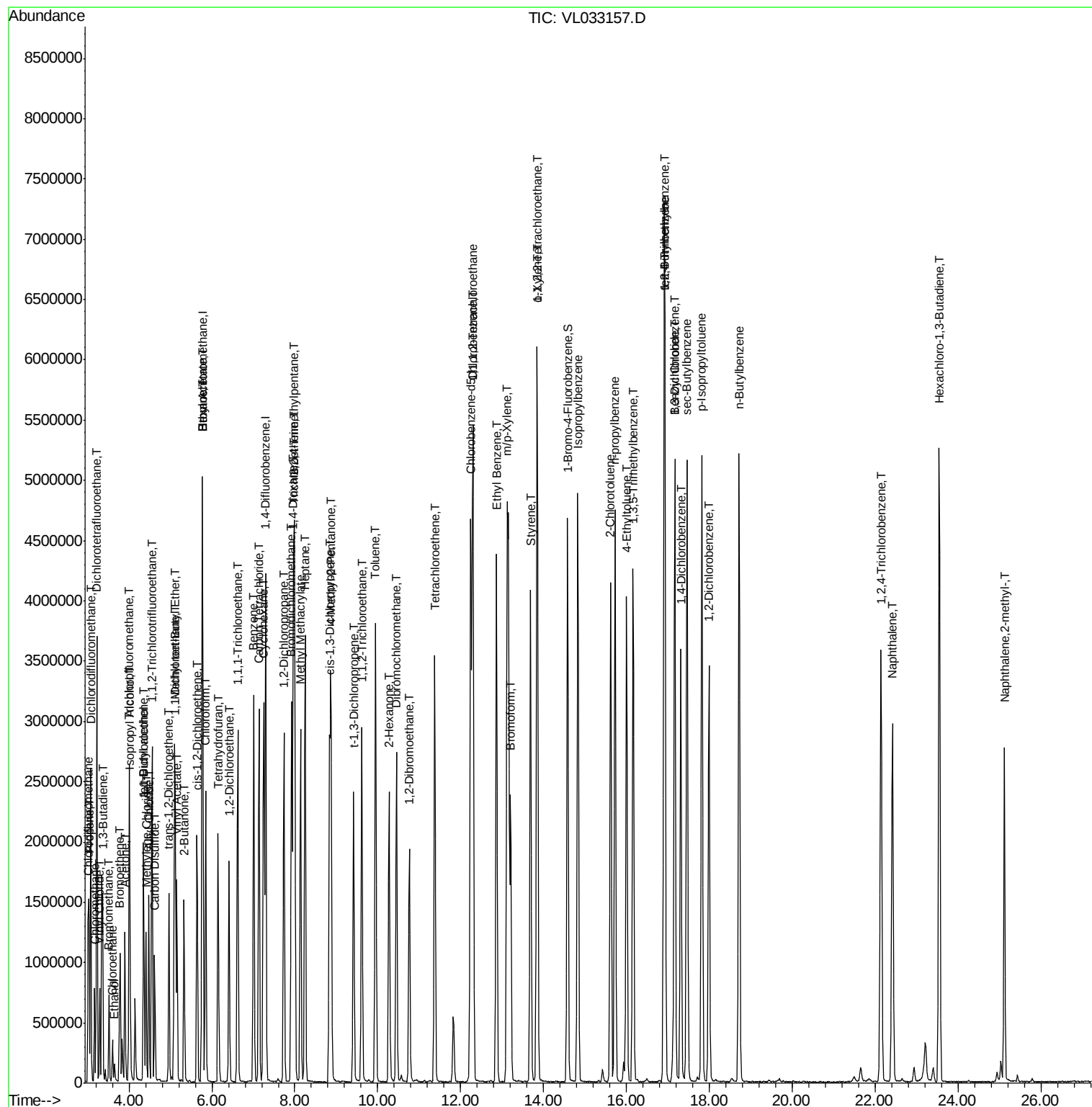
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL020419\
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Acq On : 4 Feb 2019 15:04
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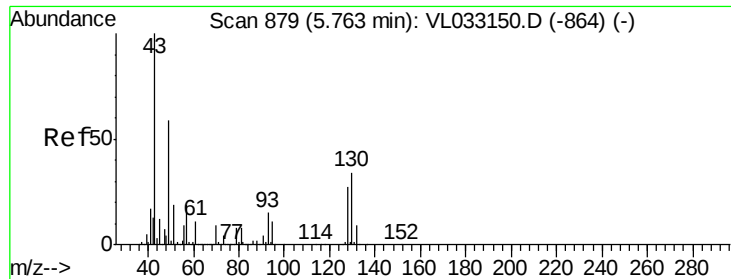
Instrument :
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Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 879

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Instrument :

MSVOA_L

ClientSampleId :

ICVVL020419

Tot Ion: 49 Resp: 1133662

Ion Ratio Lower Upper

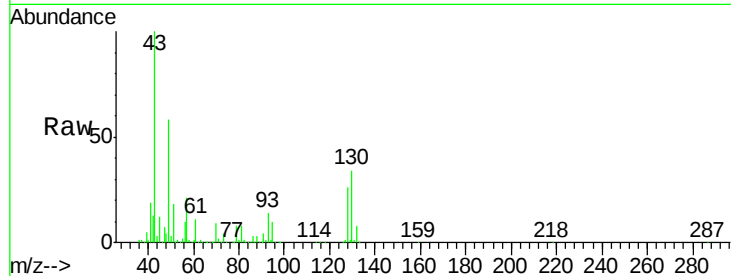
49 100

128 44.8 23.2 69.5

130 57.1 29.5 88.6

Manual Integrations
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2/5/2019 10:27:41 AM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0

5.76

600000

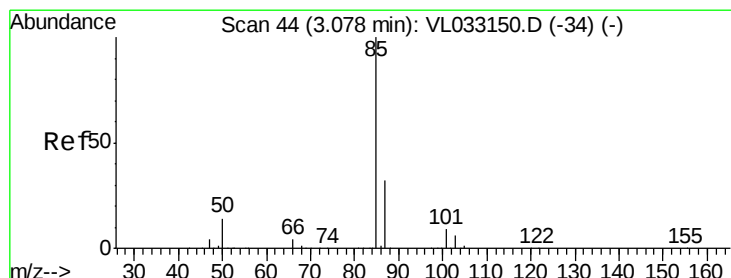
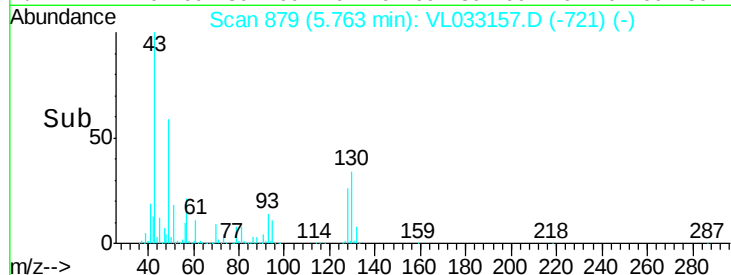
400000

200000

0

5.70 5.75 5.80

Time-->



#2

Dichlorodifluoromethane

Concen: 11.026 ppbv

RT: 3.08 min Scan# 44

Delta R.T. 0.00 min

Lab File: VL033157.D

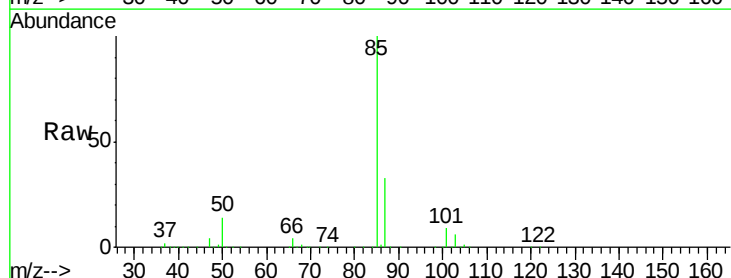
Acq: 4 Feb 2019 15:04

Tgt Ion: 85 Resp: 1840619

Ion Ratio Lower Upper

85 100

87 33.0 27.4 41.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

3.08

1500000

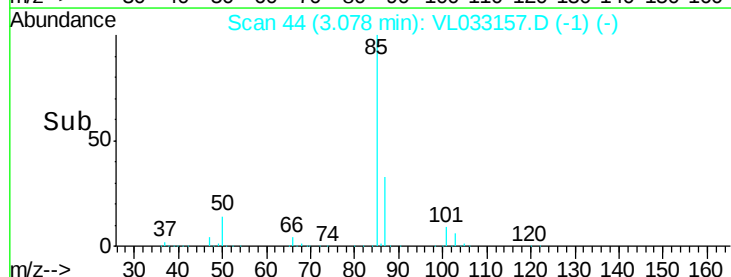
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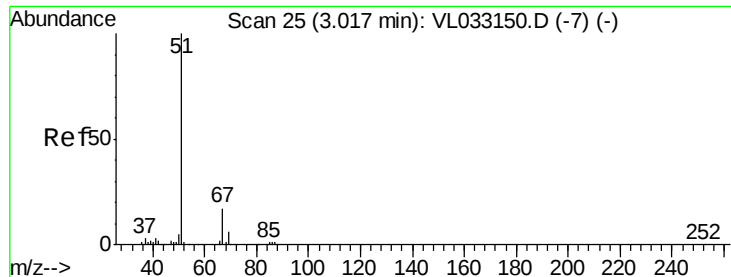
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0

3.05 3.10

Time-->





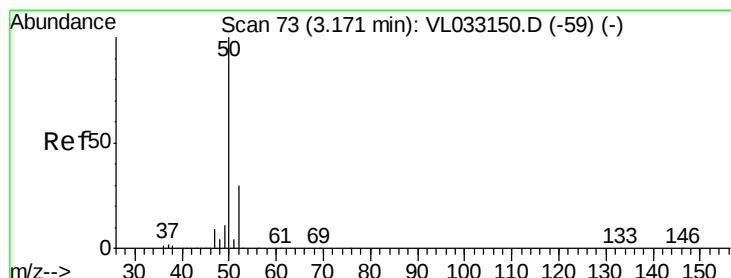
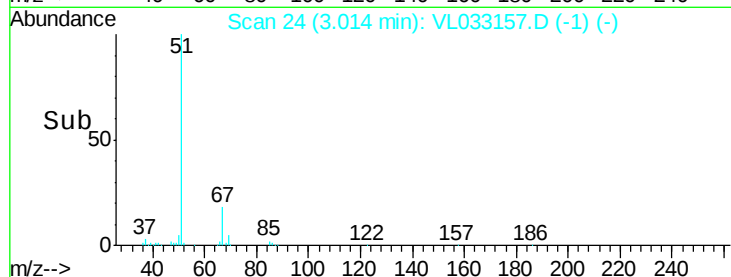
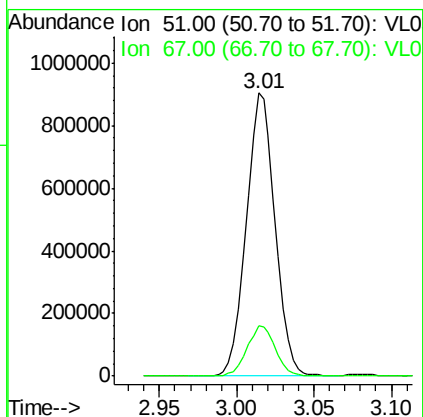
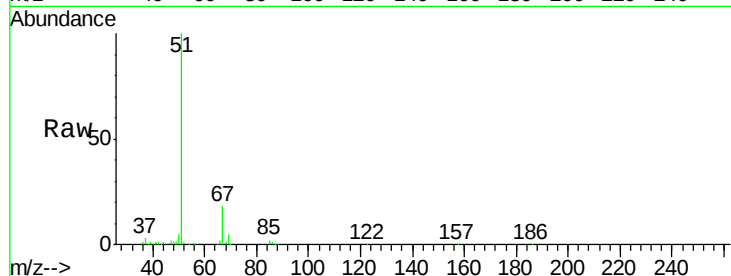
#3
Chlorodifluoromethane
Concen: 9.253 ppbv
RT: 3.01 min Scan# 24
Delta R.T. 0.00 min
Lab File: VL033157.D
Acq: 4 Feb 2019 15:04

Instrument :
MSVOA_L
ClientSampleId :
ICVVL020419

Tot Ion: 51 Resp: 1168292
Ion Ratio Lower Upper
51 100
67 17.6 13.4 20.2

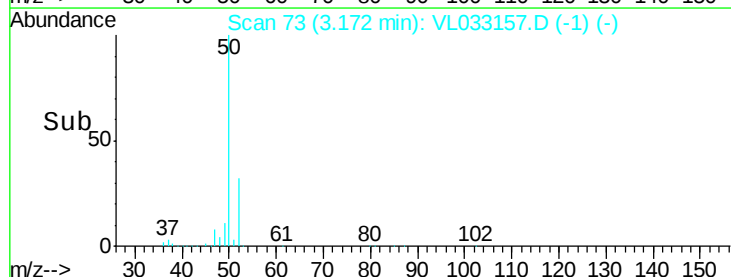
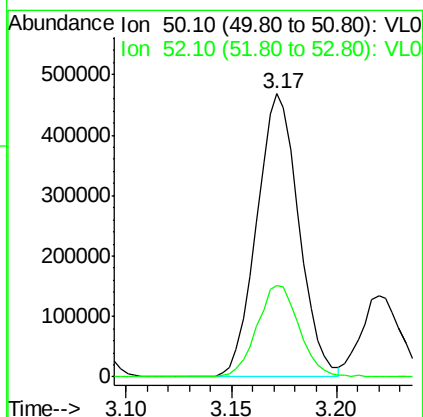
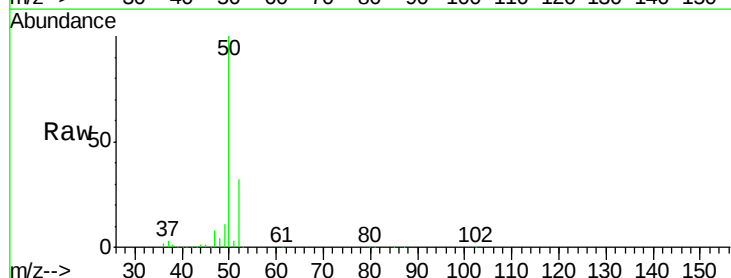
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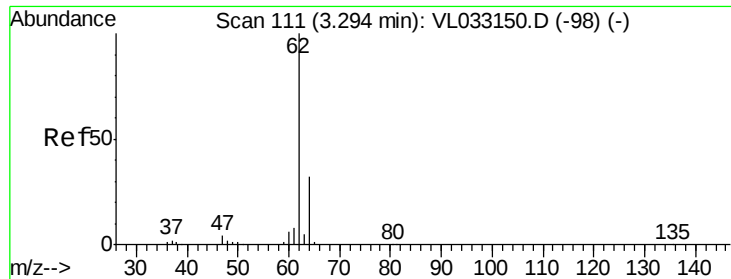
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#4
Chloromethane
Concen: 9.132 ppbv
RT: 3.17 min Scan# 73
Delta R.T. 0.00 min
Lab File: VL033157.D
Acq: 4 Feb 2019 15:04

Tgt Ion: 50 Resp: 648841
Ion Ratio Lower Upper
50 100
52 32.3 25.7 38.5





#5

Vinyl Chloride

Concen: 9.019 ppbv

RT: 3.29 min Scan# 111

Delta R.T. 0.00 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Instrument :

MSVOA_L

ClientSampleId :

ICVVL020419

Tot Ion: 62 Resp: 632458

Ion Ratio Lower Upper

62 100

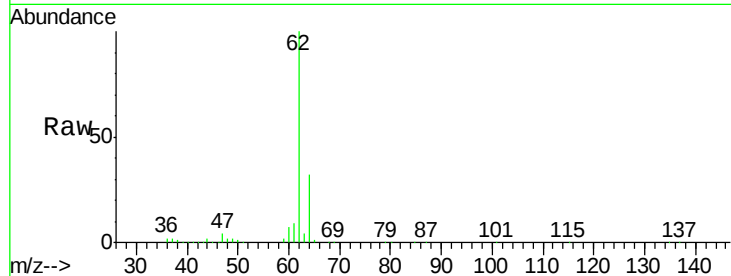
64 31.7 26.3 39.5

Manual Integrations

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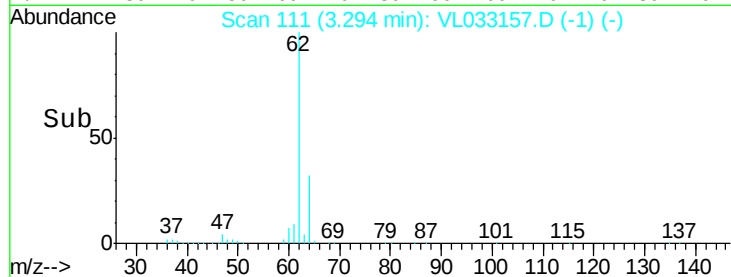
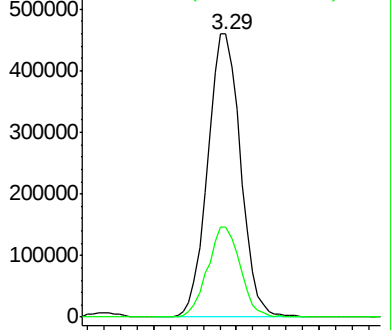
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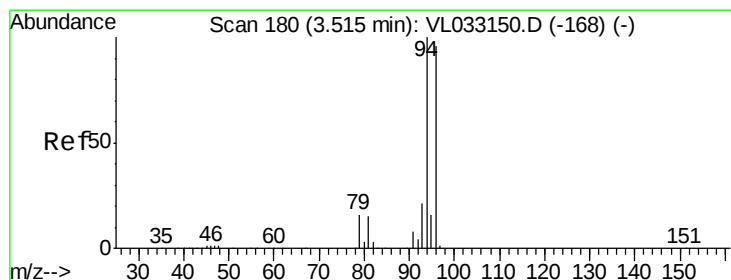


Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



Time-->



#6

Bromomethane

Concen: 9.514 ppbv

RT: 3.52 min Scan# 180

Delta R.T. 0.00 min

Lab File: VL033157.D

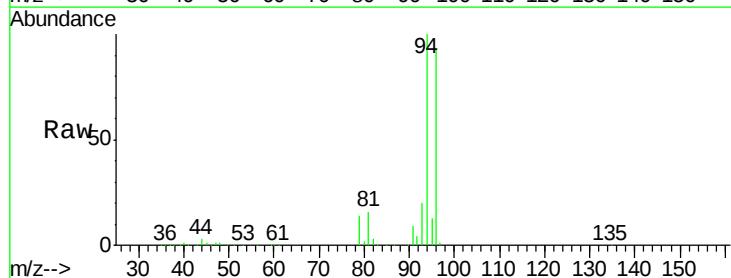
Acq: 4 Feb 2019 15:04

Tgt Ion: 94 Resp: 375944

Ion Ratio Lower Upper

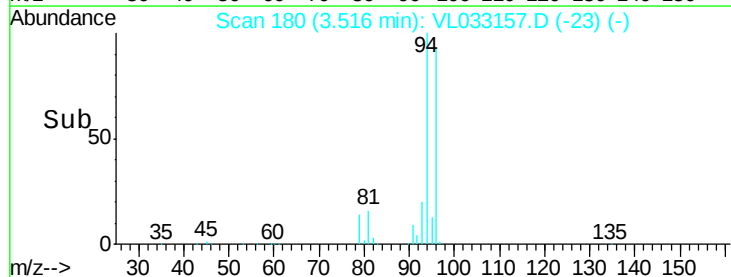
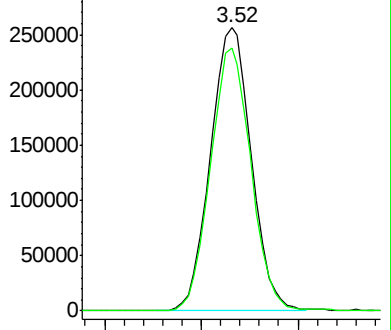
94 100

96 93.1 74.0 111.0

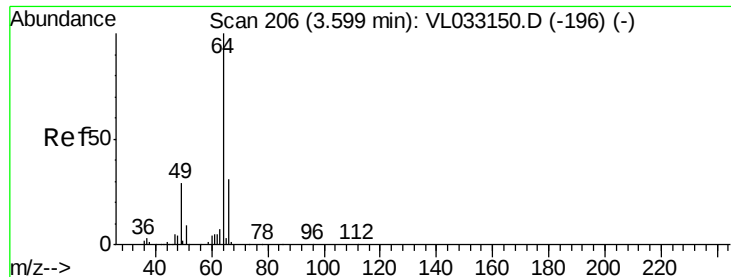


Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0



Time-->



#7

Chloroethane

Concen: 9.637 ppbv

RT: 3.60 min Scan# 207

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Instrument :

MSVOA_L

ClientSampleId :

ICVVL020419

Tot Ion: 64 Resp: 229768

Ion Ratio Lower Upper

64 100

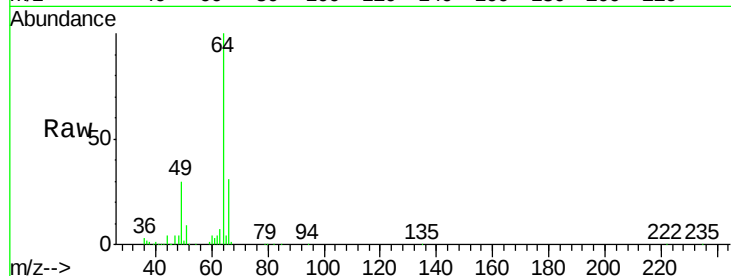
66 30.7 22.3 33.5

Manual Integrations

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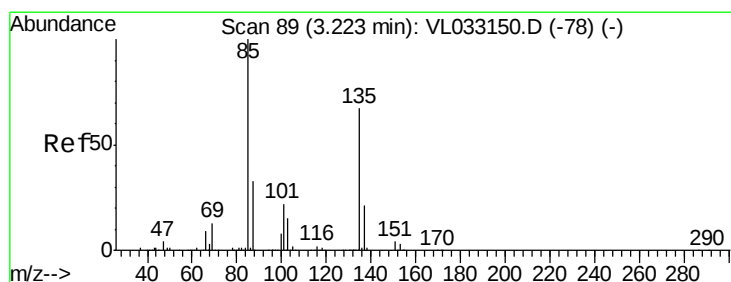
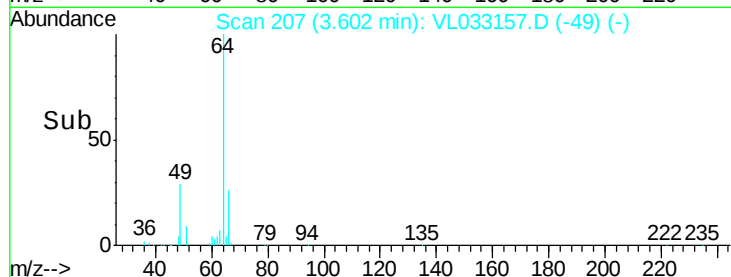
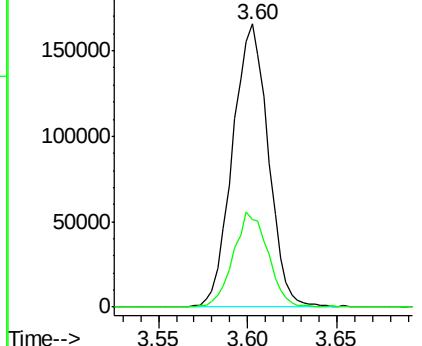
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Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



#8

Dichlorotetrafluoroethane

Concen: 9.325 ppbv

RT: 3.22 min Scan# 88

Delta R.T. 0.00 min

Lab File: VL033157.D

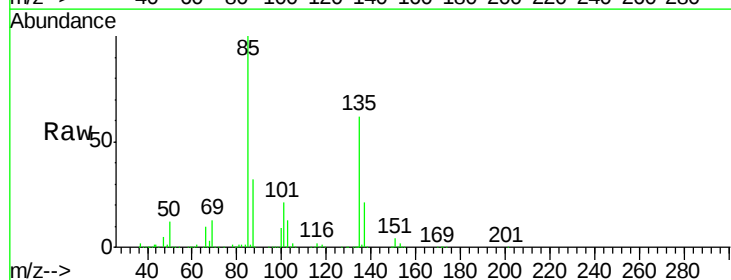
Acq: 4 Feb 2019 15:04

Tgt Ion: 85 Resp: 1426830

Ion Ratio Lower Upper

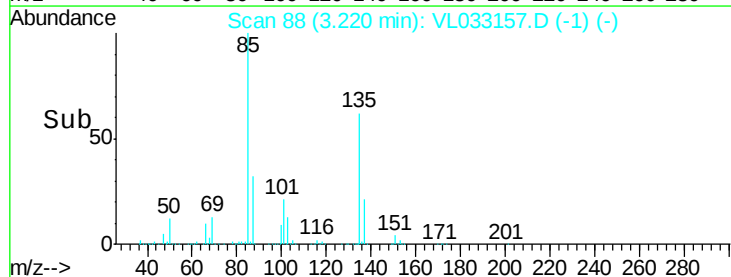
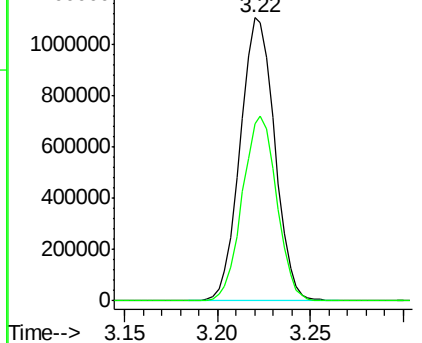
85 100

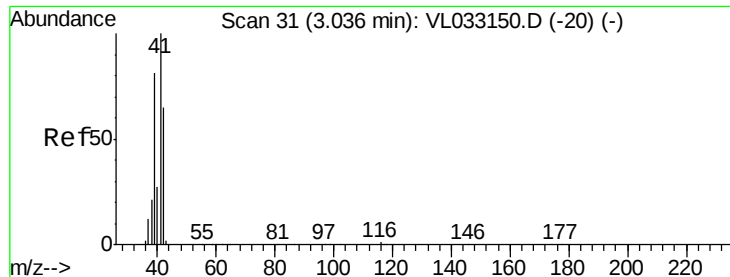
135 65.3 54.0 81.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V





#9

Propene

Concen: 9.290 ppbv

RT: 3.04 min Scan# 31

Delta R.T. 0.00 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Instrument :

MSVOA_L

ClientSampleId :

ICVVL020419

Tot Ion: 41 Resp: 589364

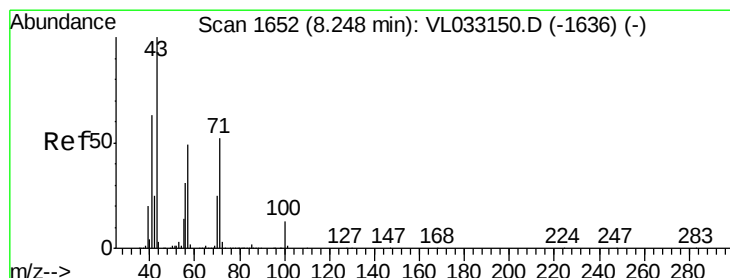
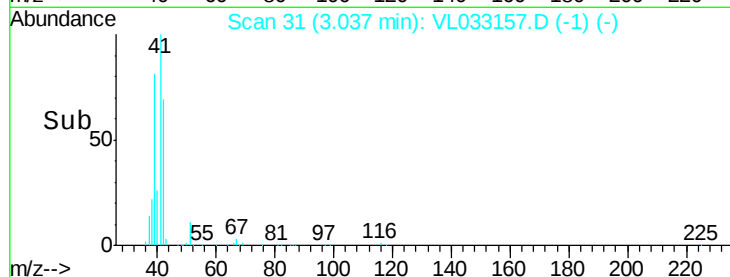
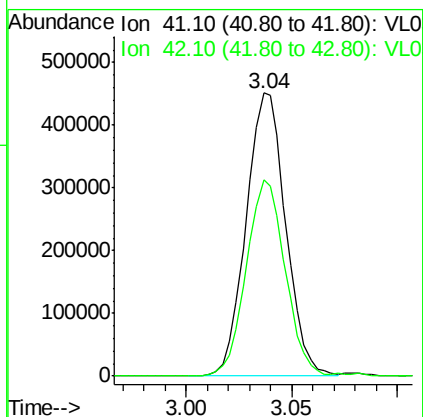
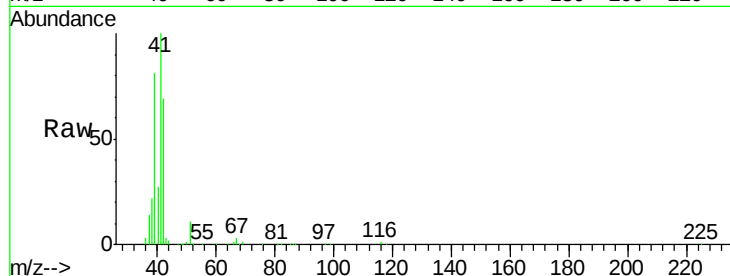
Ion Ratio Lower Upper

41 100

42 69.0 55.1 82.7

Manual Integrations
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2/5/2019 10:27:41 AM



#10

Heptane

Concen: 9.230 ppbv

RT: 8.25 min Scan# 1651

Delta R.T. 0.00 min

Lab File: VL033157.D

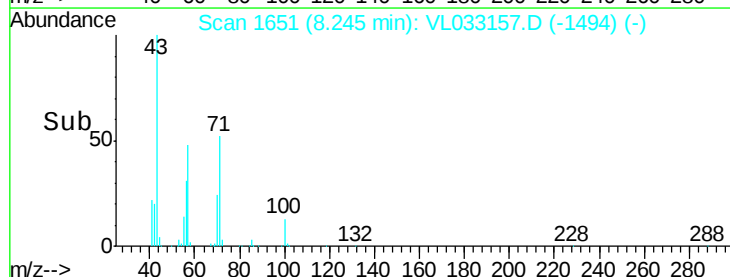
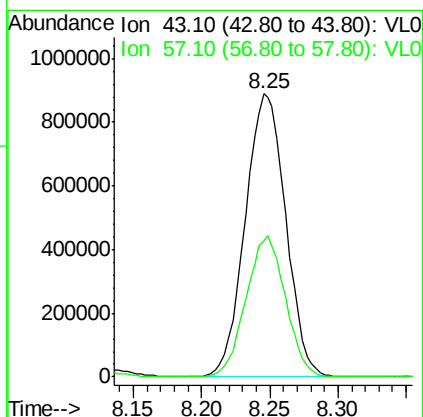
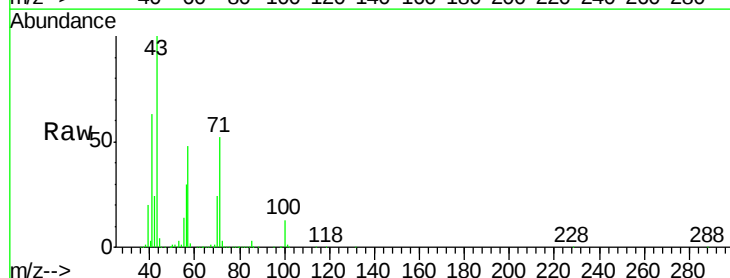
Acq: 4 Feb 2019 15:04

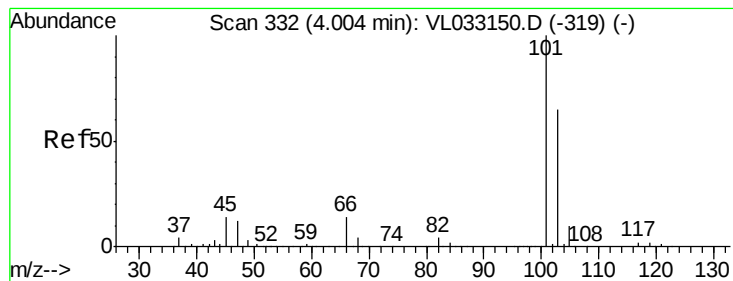
Tgt Ion: 43 Resp: 1824000

Ion Ratio Lower Upper

43 100

57 48.6 39.3 58.9





#11

Trichlorofluoromethane

Concen: 9.652 ppbv

RT: 4.00 min Scan# 332

Delta R.T. 0.00 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Tot Ion:101 Resp: 1556827

Ion Ratio Lower Upper

101 100

103 64.4 51.3 76.9

Instrument :

MSVOA_L

ClientSampleId :

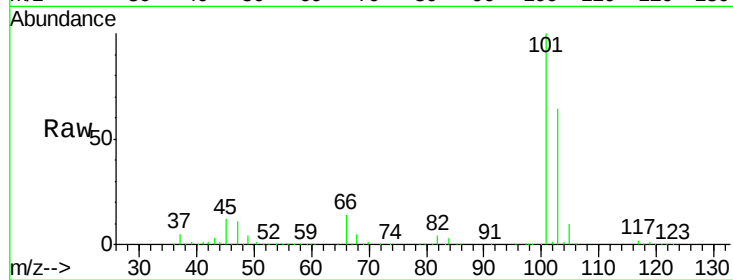
ICVVL020419

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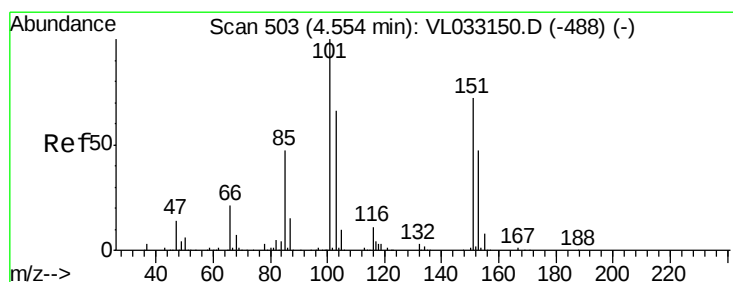
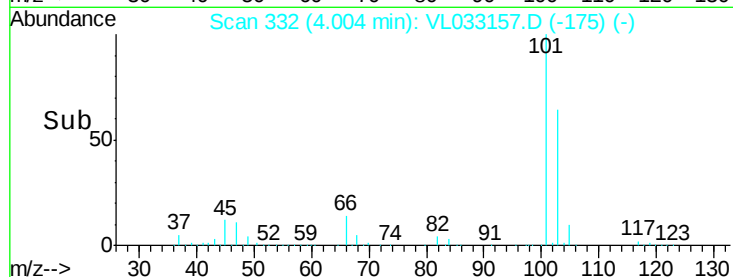
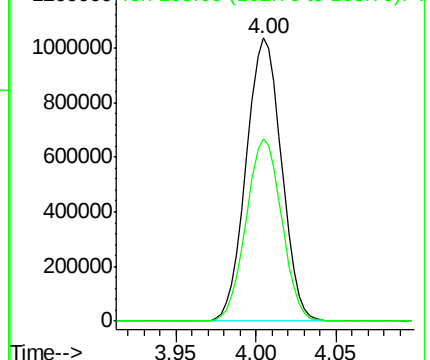
MMDadoda

2/5/2019 10:27:41 AM



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 9.628 ppbv

RT: 4.55 min Scan# 503

Delta R.T. 0.01 min

Lab File: VL033157.D

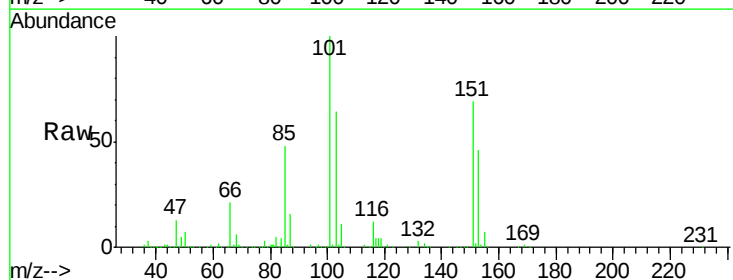
Acq: 4 Feb 2019 15:04

Tgt Ion:101 Resp: 1008216

Ion Ratio Lower Upper

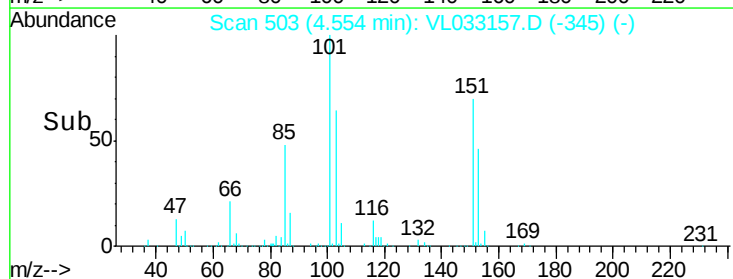
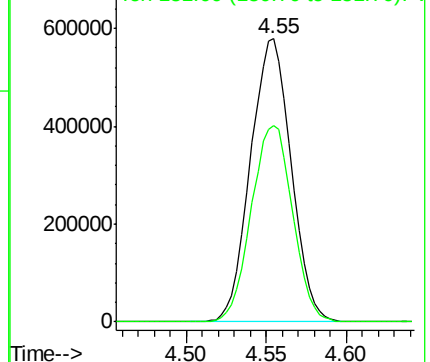
101 100

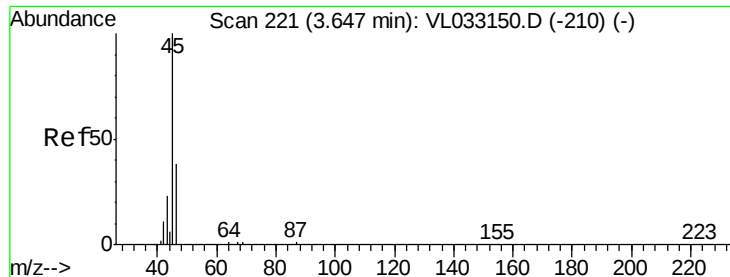
151 70.6 57.9 86.9



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





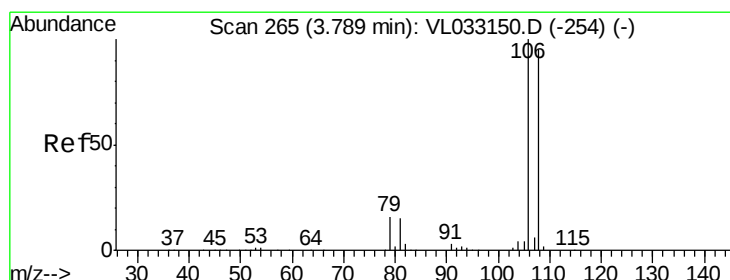
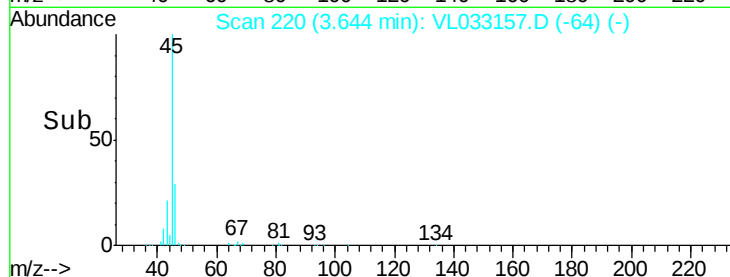
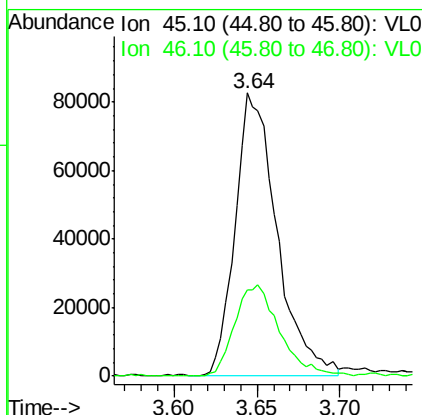
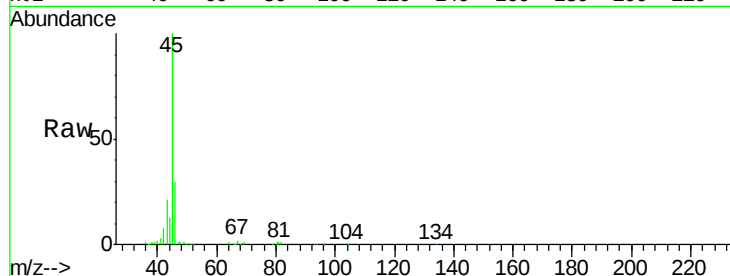
#13
Ethanol
Concen: 5.763 ppbv
RT: 3.64 min Scan# 220
Delta R.T. 0.00 min
Lab File: VL033157.D
Acq: 4 Feb 2019 15:04

Instrument :
MSVOA_L
ClientSampleId :
ICVVL020419

Tot Ion: 45 Resp: 144131
Ion Ratio Lower Upper
45 100
46 35.6 14.0 56.2

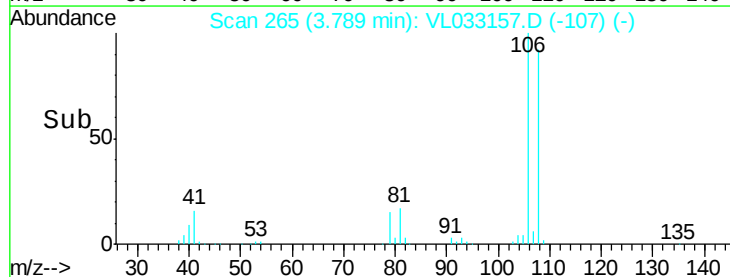
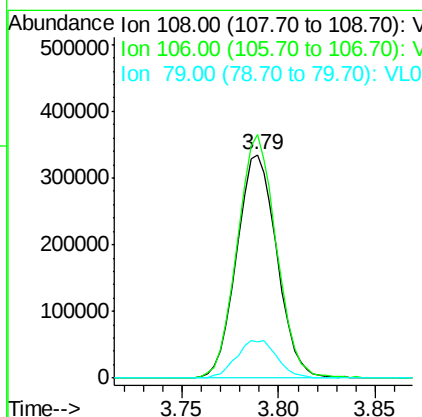
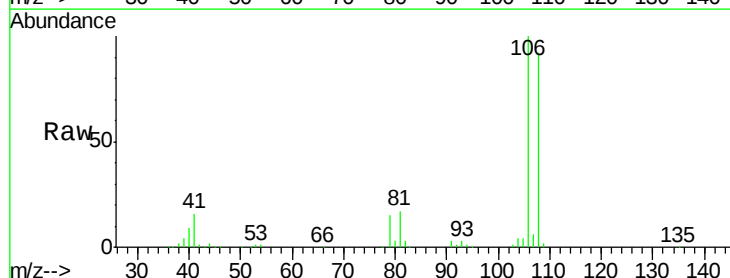
Manual Integrations
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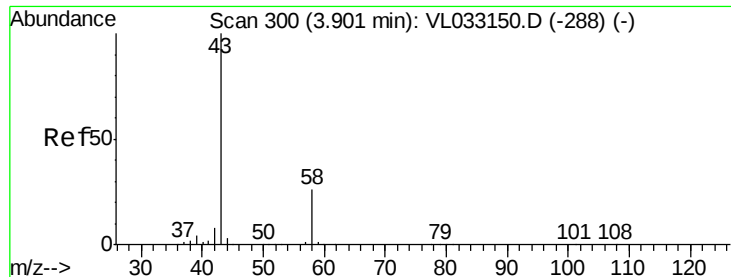
MMDadoda
2/5/2019 10:27:41 AM



#14
Bromoethene
Concen: 10.035 ppbv
RT: 3.79 min Scan# 265
Delta R.T. 0.01 min
Lab File: VL033157.D
Acq: 4 Feb 2019 15:04

Tgt Ion: 108 Resp: 484423
Ion Ratio Lower Upper
108 100
106 106.2 85.6 128.4
79 17.3 14.2 21.4





#15

Acetone

Concen: 8.781 ppbv

RT: 3.90 min Scan# 300

Delta R.T. 0.00 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Instrument :

MSVOA_L

ClientSampleId :

ICVVL020419

Tot Ion: 43 Resp: 1185139

Ion Ratio Lower Upper

43 100

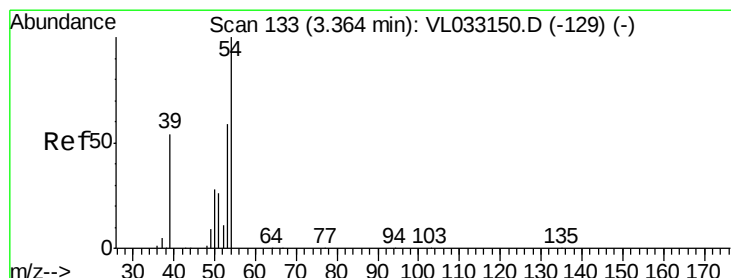
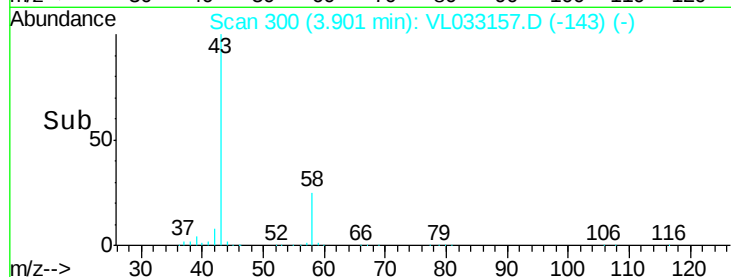
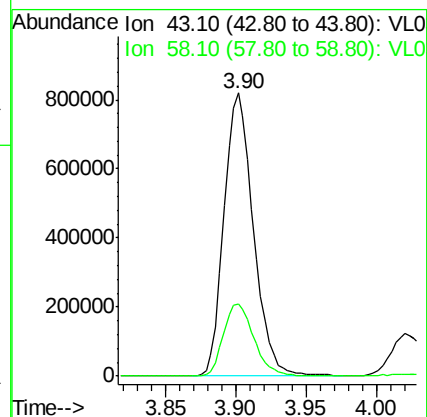
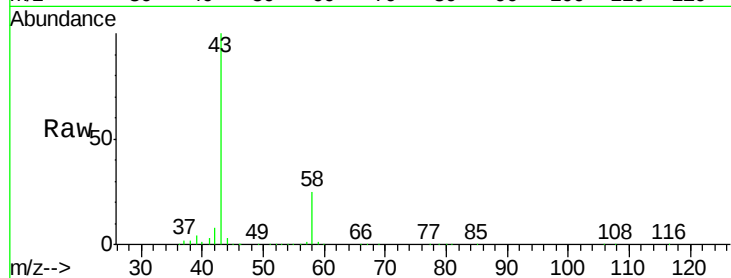
58 26.6 21.8 32.6

Manual Integrations

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#16

1,3-Butadiene

Concen: 9.979 ppbv

RT: 3.36 min Scan# 133

Delta R.T. 0.00 min

Lab File: VL033157.D

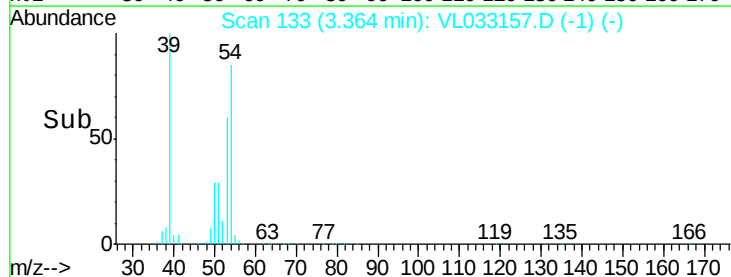
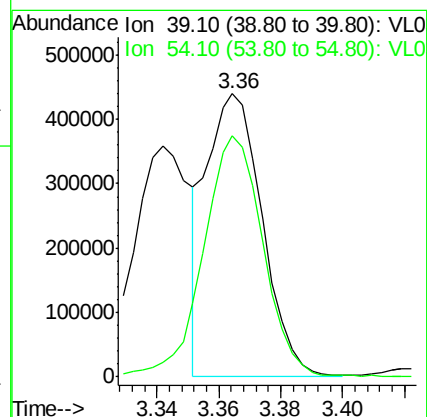
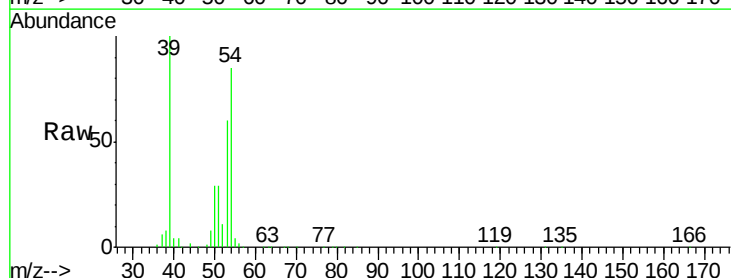
Acq: 4 Feb 2019 15:04

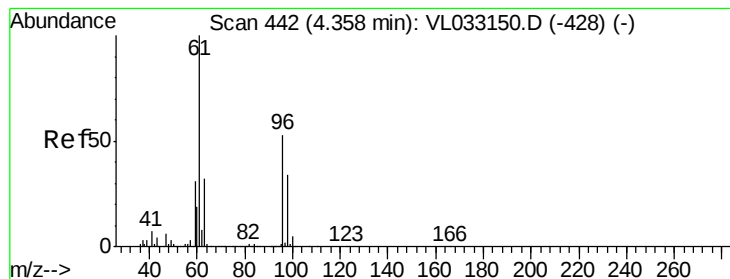
Tgt Ion: 39 Resp: 546771

Ion Ratio Lower Upper

39 100

54 92.3 75.0 112.6





#17

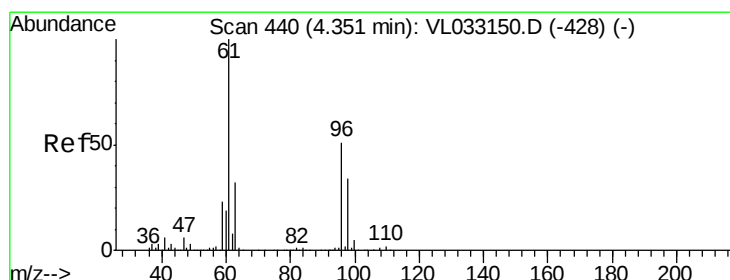
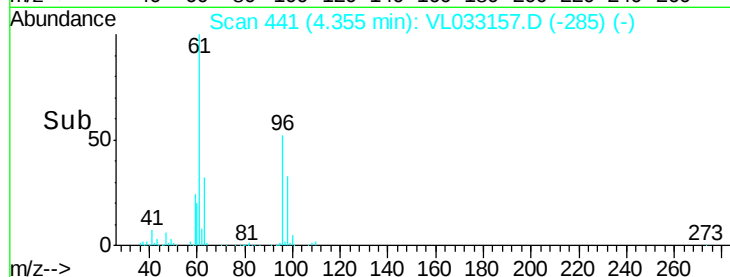
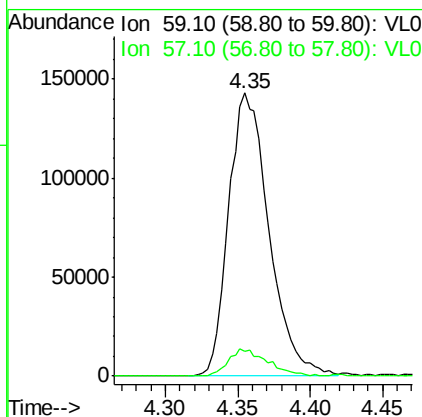
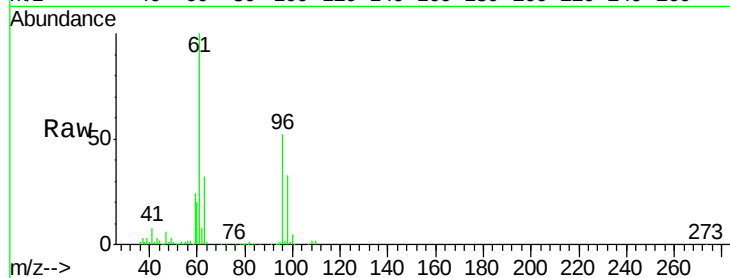
tert-Butyl alcohol
Concen: 9.283 ppbv
RT: 4.35 min Scan# 441
Delta R.T. 0.00 min
Lab File: VL033157.D
Acq: 4 Feb 2019 15:04

Instrument :
MSVOA_L
ClientSampleId :
ICVVL020419

Tot Ion	59	Resp	276720
Ion	Ratio	Lower	Upper
59	100		
57	9.6	8.0	12.0

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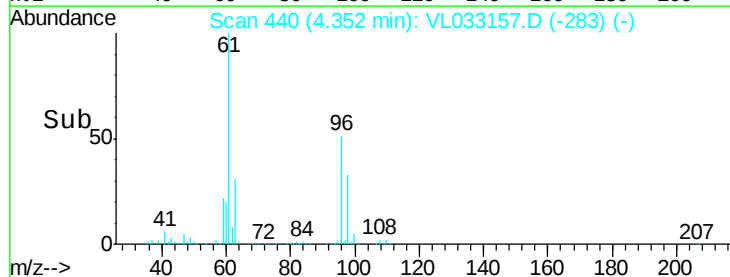
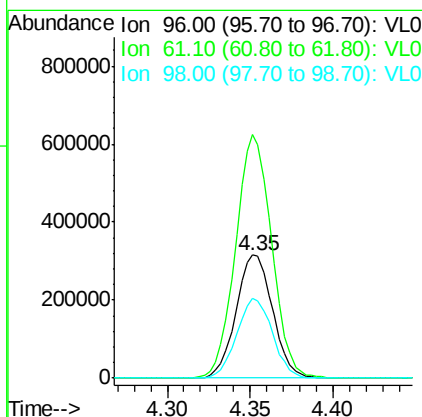
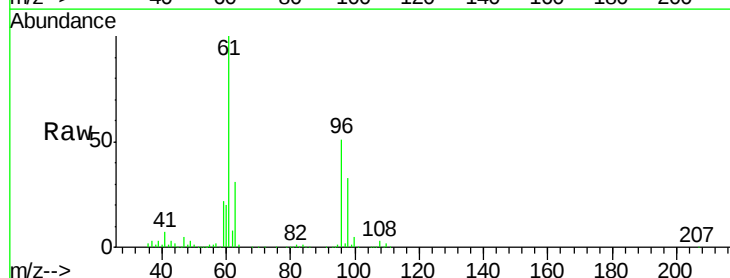
MMDadoda
2/5/2019 10:27:41 AM

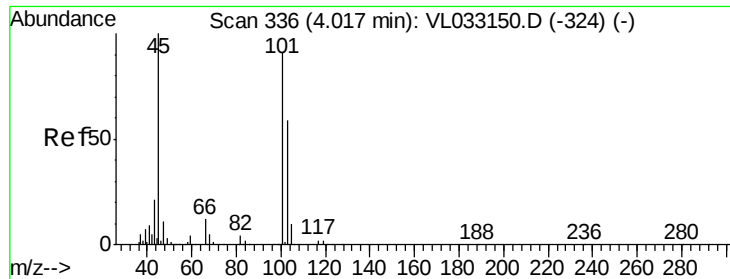


#18

1,1-Dichloroethene
Concen: 9.986 ppbv
RT: 4.35 min Scan# 440
Delta R.T. 0.00 min
Lab File: VL033157.D
Acq: 4 Feb 2019 15:04

Tgt Ion	96	Resp	481232
Ion	Ratio	Lower	Upper
96	100		
61	197.5	158.5	237.7
98	65.1	47.8	71.6





#19

Isopropyl Alcohol

Concen: 9.496 ppbv

RT: 4.02 min Scan# 338

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Instrument :

MSVOA_L

ClientSampleId :

ICVVL020419

Tot Ion: 45 Resp: 910425

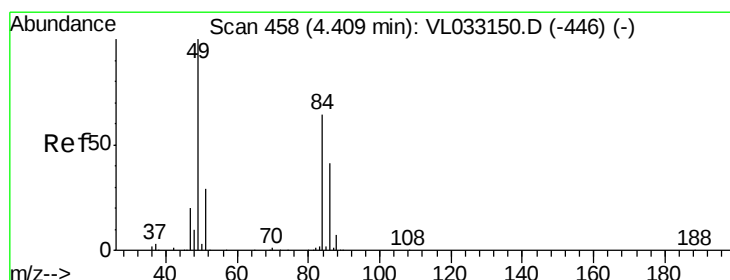
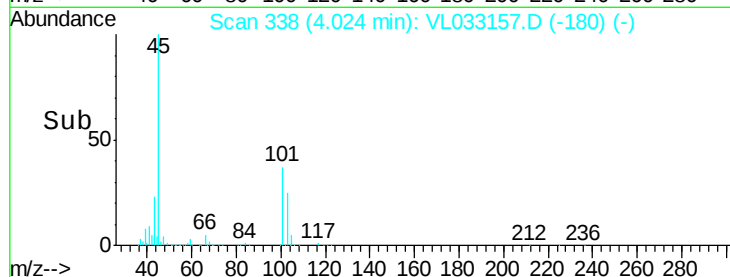
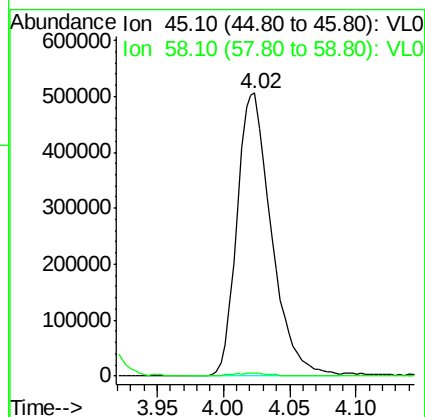
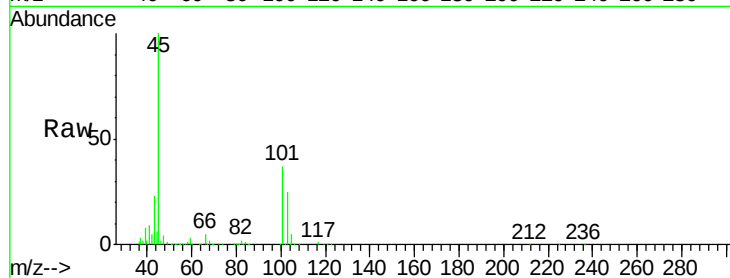
Ion Ratio Lower Upper

45 100

58 1.3 25.1 37.7#

Manual Integrations
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2/5/2019 10:27:41 AM



#20

Methylene Chloride

Concen: 8.827 ppbv

RT: 4.41 min Scan# 457

Delta R.T. 0.00 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Tgt Ion: 84 Resp: 410464

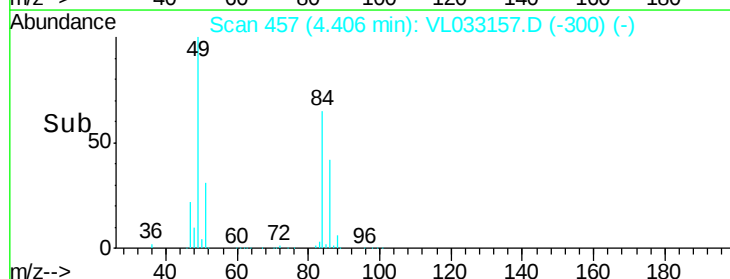
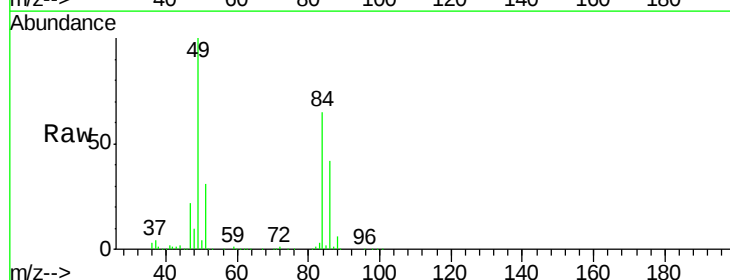
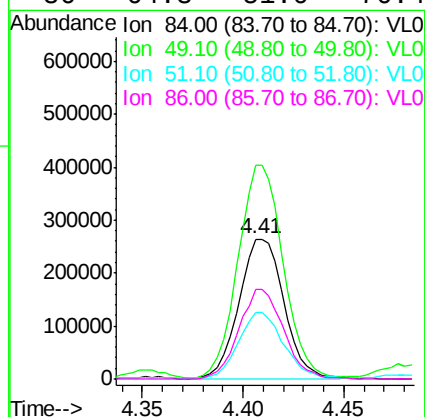
Ion Ratio Lower Upper

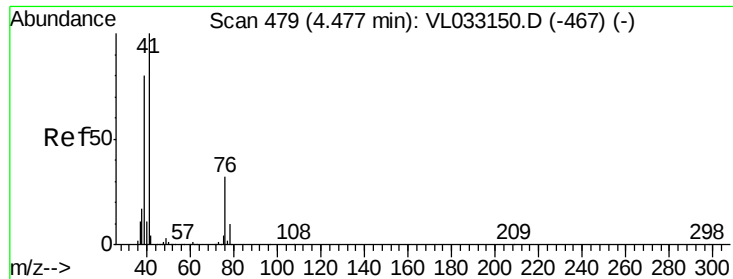
84 100

49 152.6 121.1 181.7

51 46.9 37.5 56.3

86 64.3 51.0 76.4





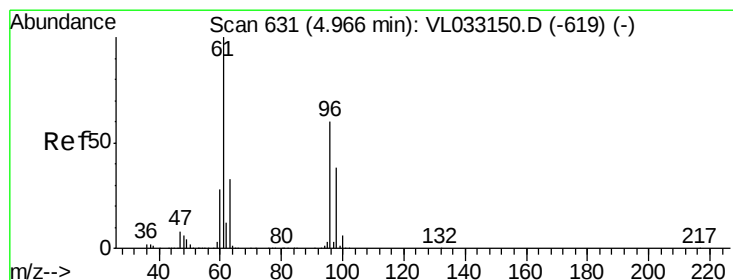
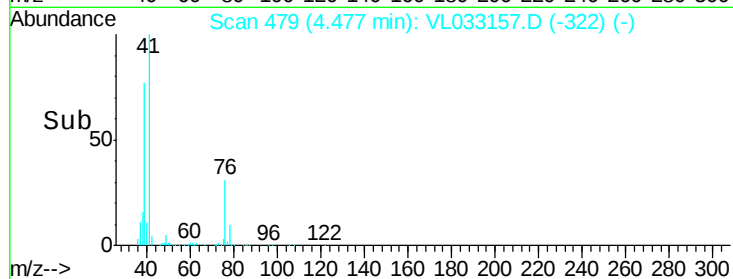
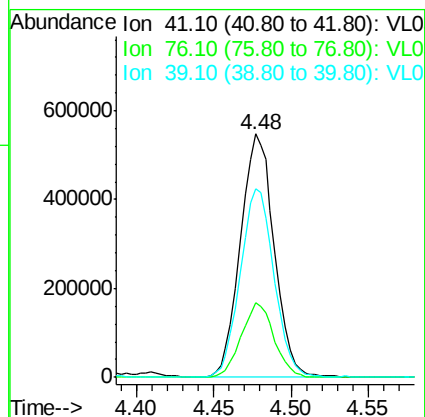
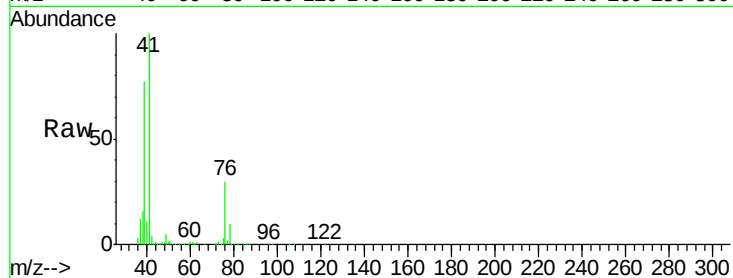
#21
Allvl Chloride
Concen: 10.143 ppbv
RT: 4.48 min Scan# 479
Delta R.T. 0.00 min
Lab File: VL033157.D
Acq: 4 Feb 2019 15:04

Instrument :
MSVOA_L
ClientSampleId :
ICVVL020419

Tot Ion	Ratio	Resp	Lower	Upper
41	100	824311		
76	29.9		23.2	34.8
39	78.4		61.8	92.6

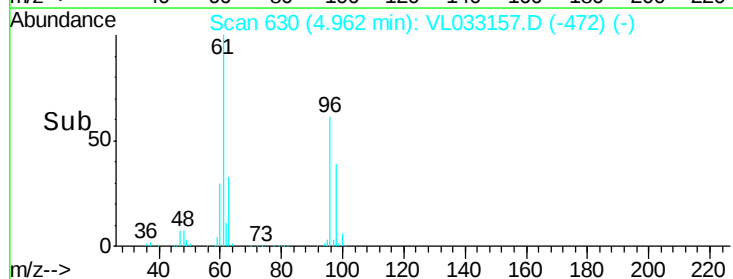
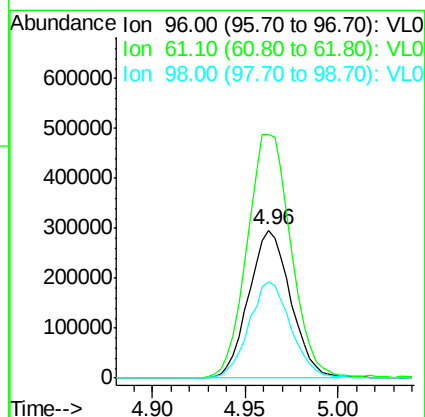
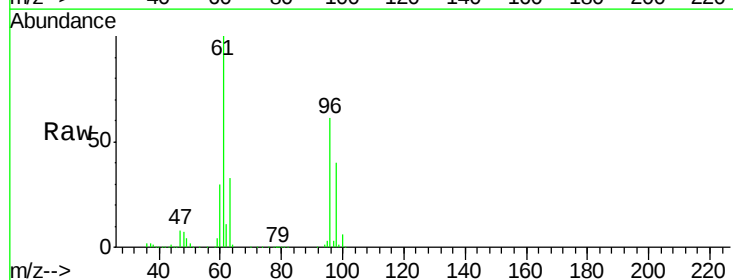
Manual Integrations
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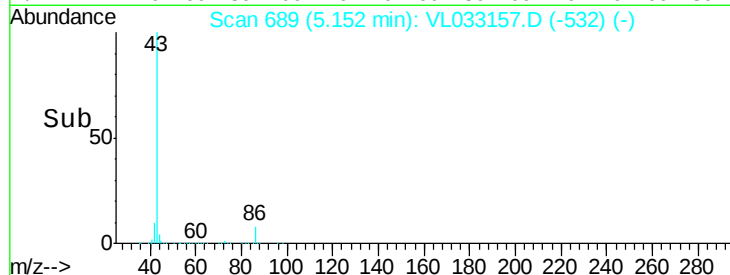
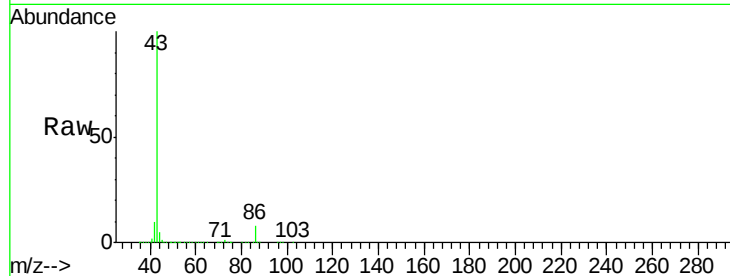
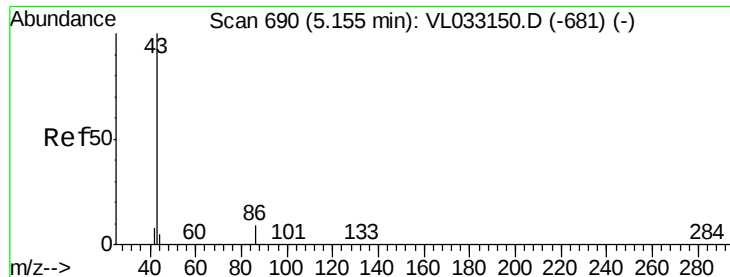
MMDadoda
2/5/2019 10:27:41 AM



#22
trans-1,2-Dichloroethene
Concen: 9.834 ppbv
RT: 4.96 min Scan# 630
Delta R.T. 0.01 min
Lab File: VL033157.D
Acq: 4 Feb 2019 15:04

Tgt Ion	Ratio	Resp	Lower	Upper
96	100	468005		
61	164.7		134.5	201.7
98	65.1		50.2	75.2





#23

Vinyl Acetate

Concen: 10.003 ppbv

RT: 5.15 min Scan# 689

Delta R.T. 0.00 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Tot Ion: 43 Resp: 2196368

Ion Ratio Lower Upper

43 100

86 7.8 6.2 9.4

42 9.6 7.7 11.5

44 4.7 3.8 5.8

Instrument :

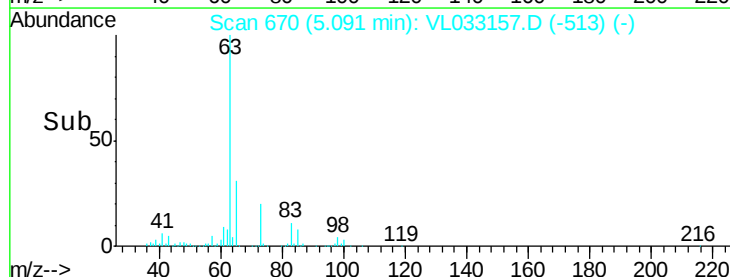
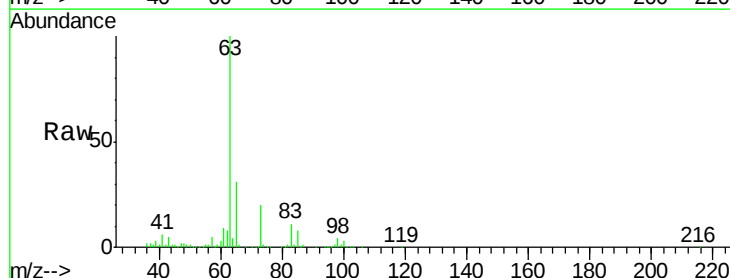
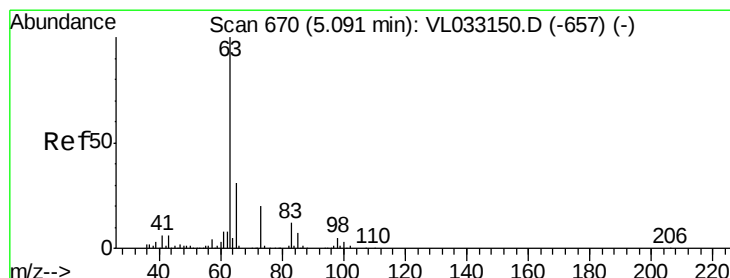
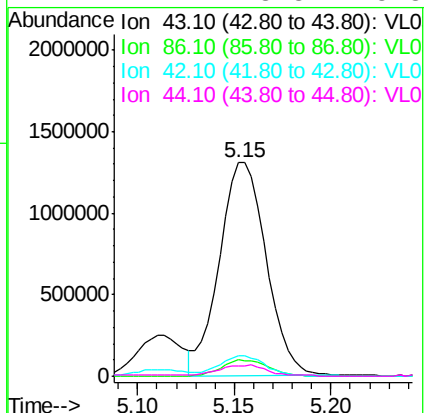
MSVOA_L

ClientSampleId :

ICVVL020419

Manual Integrations
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MMDadoda
2/5/2019 10:27:41 AM



#24

1,1-Dichloroethane

Concen: 9.753 ppbv

RT: 5.09 min Scan# 670

Delta R.T. 0.00 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

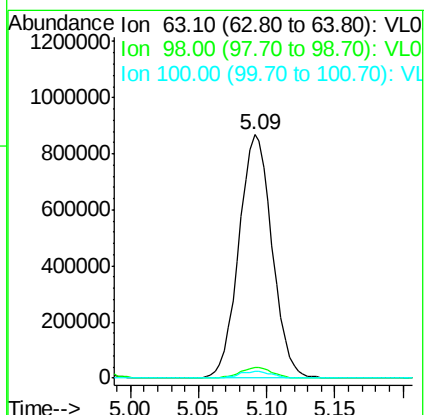
Tgt Ion: 63 Resp: 1461118

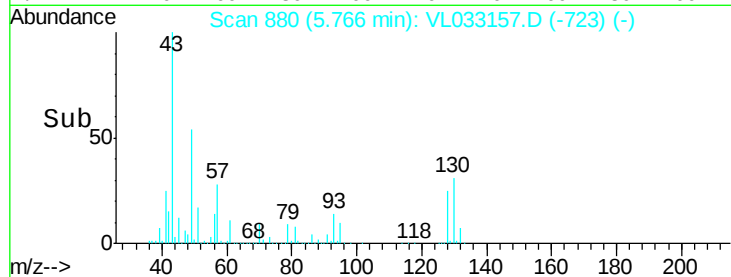
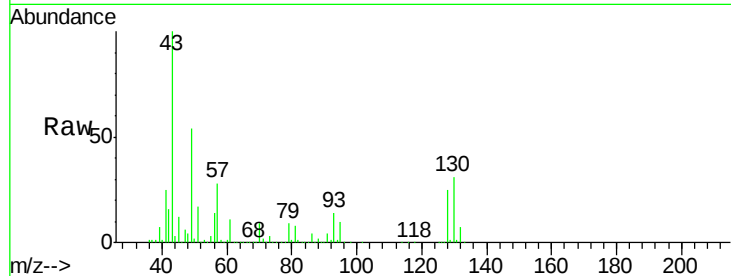
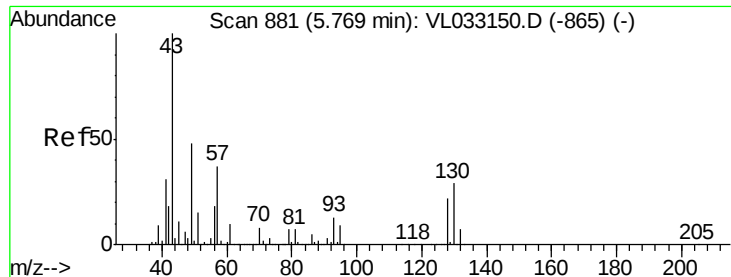
Ion Ratio Lower Upper

63 100

98 4.2 2.3 6.9

100 2.7 1.3 3.9





#25

Ethyl Acetate

Concen: 8.706 ppbv

RT: 5.77 min Scan# 880

Delta R.T. 0.00 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Tot Ion: 43 Resp: 2428400

Ion Ratio Lower Upper

43 100

45 9.9 8.0 12.0

61 9.4 7.4 11.2

70 7.4 5.9 8.9

Instrument :

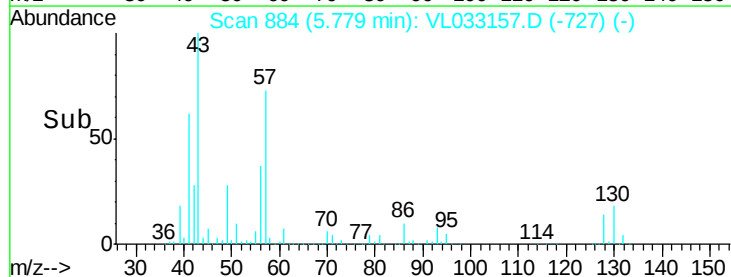
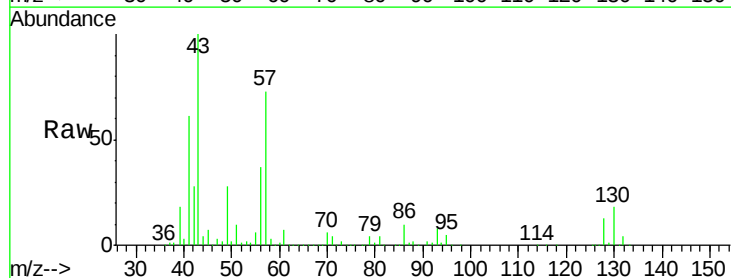
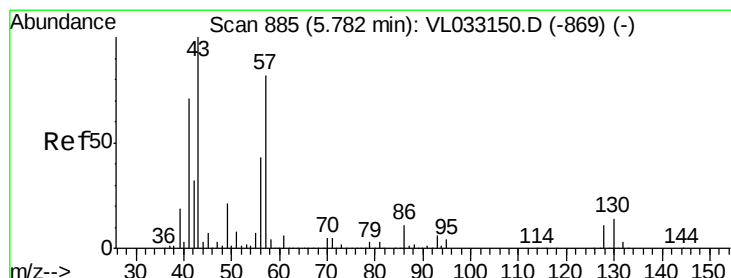
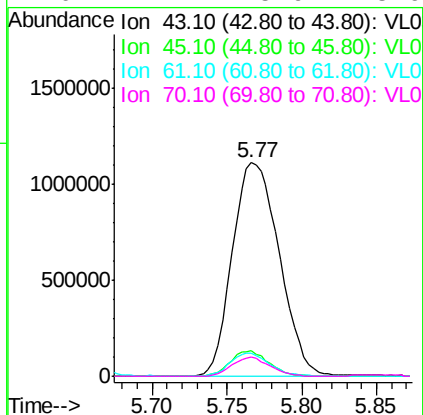
MSVOA_L

ClientSampleId :

ICVVL020419

Manual Integrations
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#26

Hexane

Concen: 8.487 ppbv

RT: 5.78 min Scan# 884

Delta R.T. 0.00 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Tgt Ion: 57 Resp: 1107483

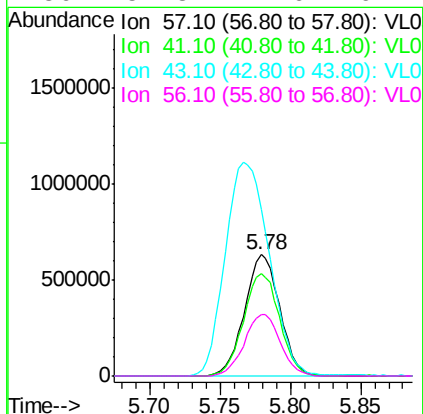
Ion Ratio Lower Upper

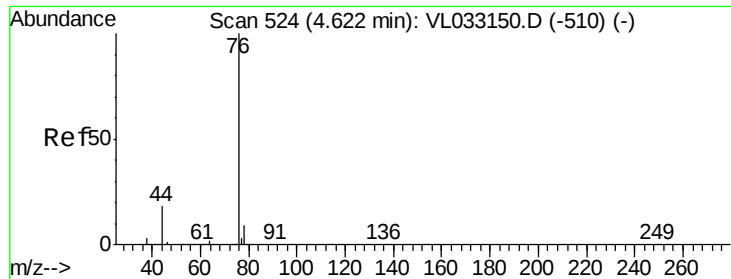
57 100

41 86.7 69.5 104.3

43 220.7 175.5 263.3

56 51.8 41.6 62.4





#27

Carbon Disulfide

Concen: 10.486 ppbv

RT: 4.62 min Scan# 524

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Instrument :

MSVOA_L

ClientSampleId :

ICVVL020419

Tot Ion: 76 Resp: 1178041

Ion Ratio Lower Upper

76 100

44 19.7 17.1 25.7

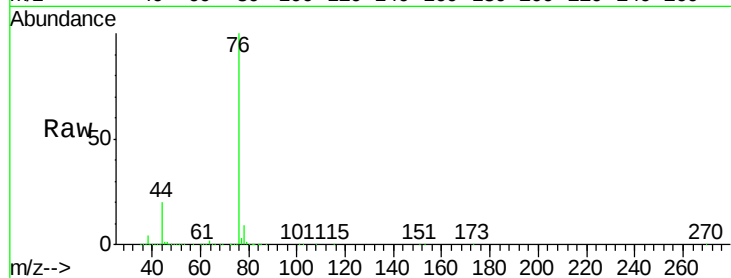
78 9.2 7.2 10.8

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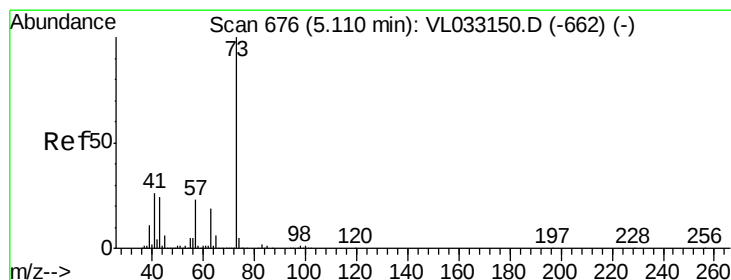
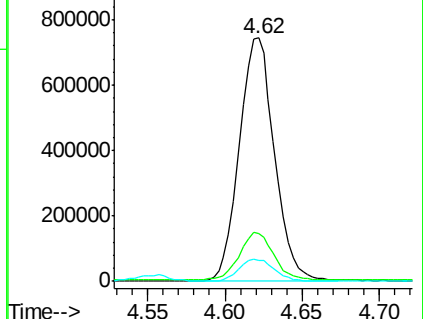
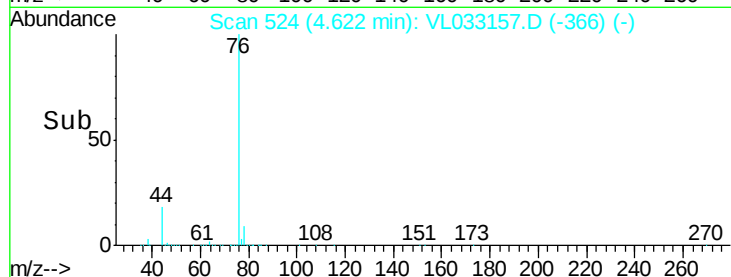
2/5/2019 10:27:41 AM



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: 9.596 ppbv

RT: 5.11 min Scan# 676

Delta R.T. 0.01 min

Lab File: VL033157.D

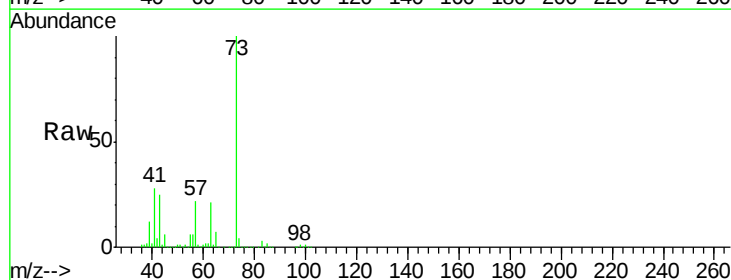
Acq: 4 Feb 2019 15:04

Tgt Ion: 73 Resp: 1822054

Ion Ratio Lower Upper

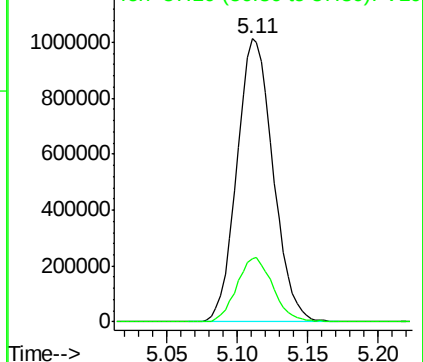
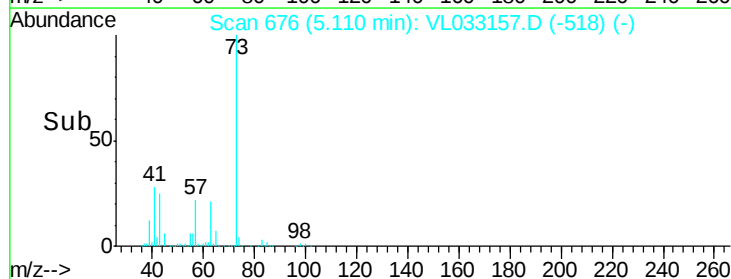
73 100

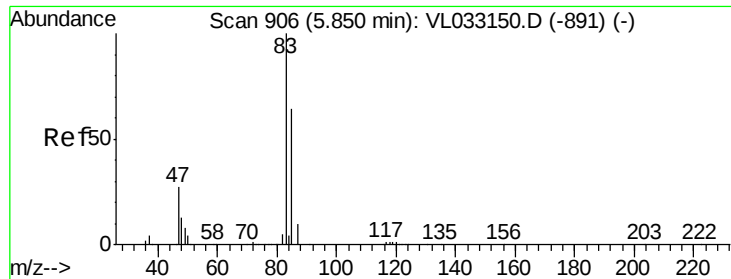
57 22.8 18.3 27.5



Abundance Ion 73.10 (72.80 to 73.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





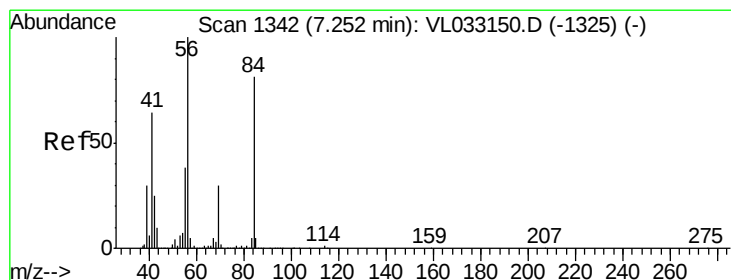
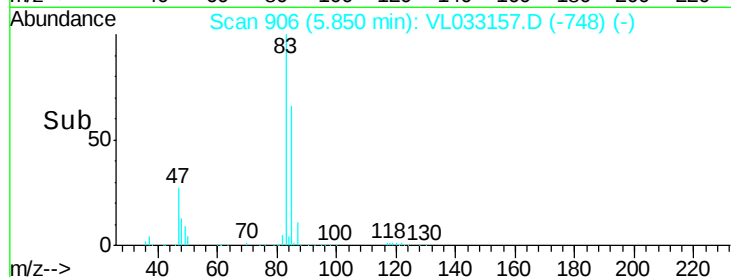
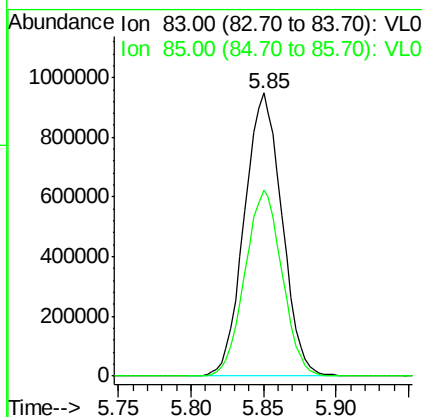
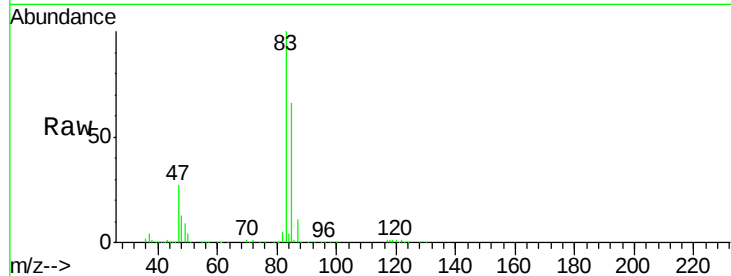
#29
Chloroform
Concen: 8.668 ppbv
RT: 5.85 min Scan# 906
Delta R.T. 0.01 min
Lab File: VL033157.D
Acq: 4 Feb 2019 15:04

Instrument :
MSVOA_L
ClientSampleId :
ICVVL020419

Tot Ion: 83 Resp: 1711445
Ion Ratio Lower Upper
83 100
85 65.8 51.6 77.4

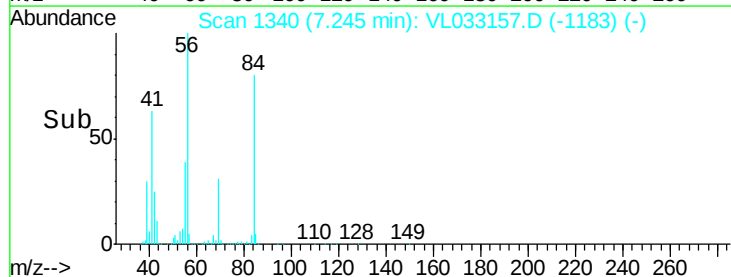
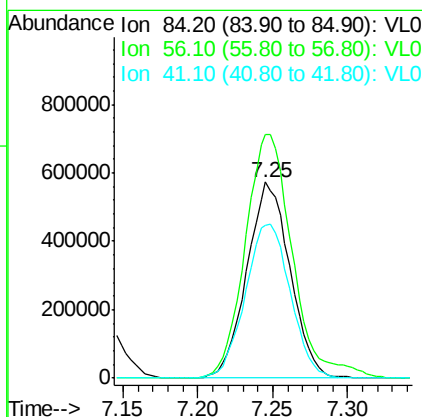
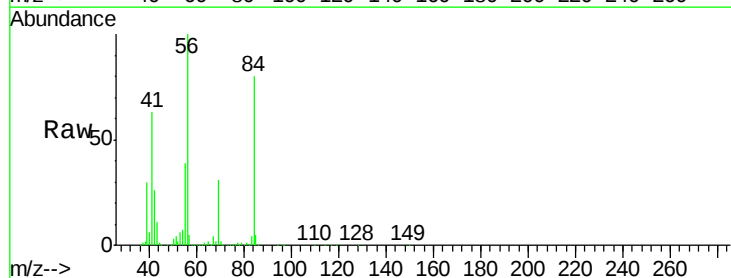
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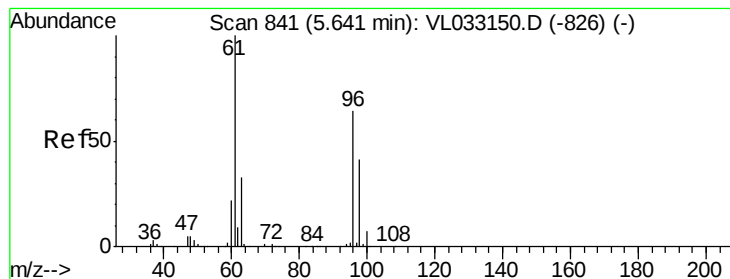
MMDadoda
2/5/2019 10:27:41 AM



#30
Cyclohexane
Concen: 9.149 ppbv
RT: 7.25 min Scan# 1340
Delta R.T. 0.00 min
Lab File: VL033157.D
Acq: 4 Feb 2019 15:04

Tgt Ion: 84 Resp: 1146268
Ion Ratio Lower Upper
84 100
56 136.8 109.0 163.4
41 82.2 65.3 97.9





#31

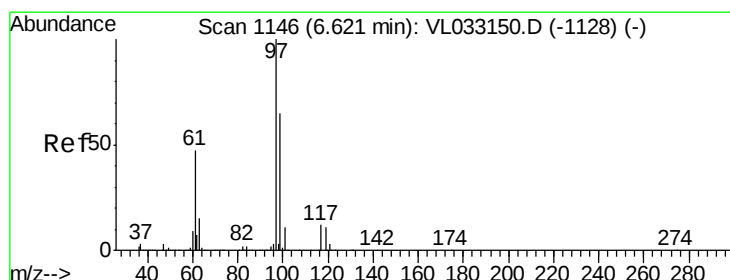
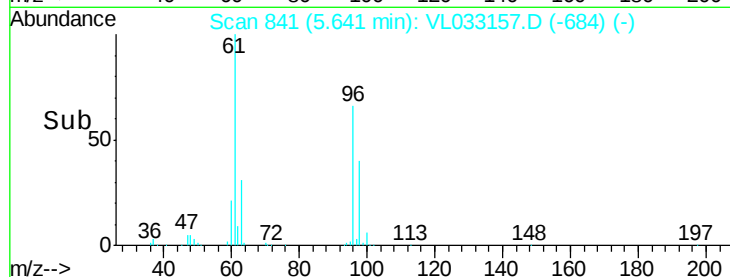
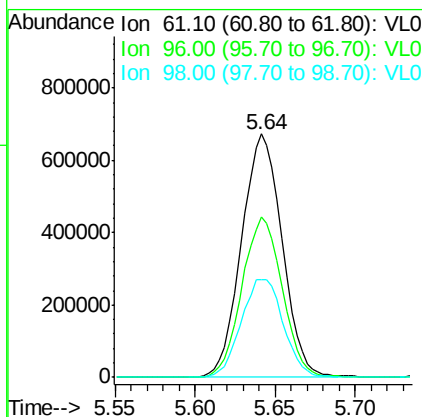
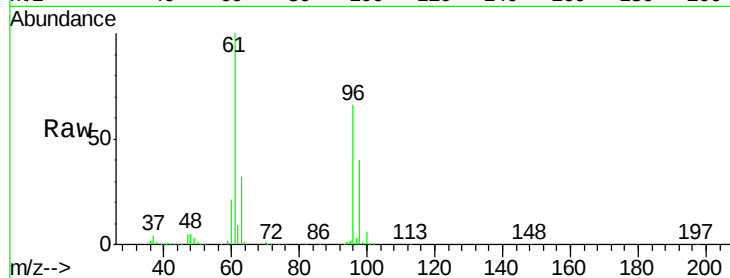
cis-1,2-Dichloroethene
 Concen: 9.380 ppbv
 RT: 5.64 min Scan# 841
 Delta R.T. 0.00 min
 Lab File: VL033157.D
 Acq: 4 Feb 2019 15:04

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL020419

Tot Ion	Ratio	Lower	Upper
61	100		
96	65.6	53.3	79.9
98	40.2	33.7	50.5

Manual Integrations
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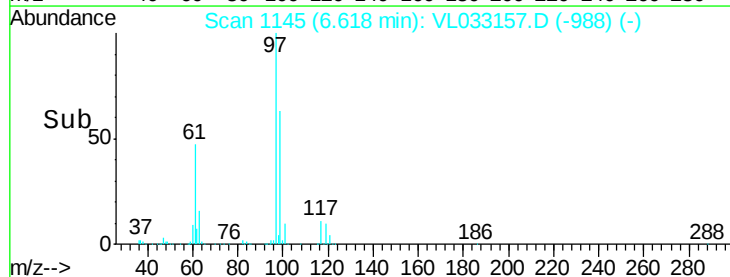
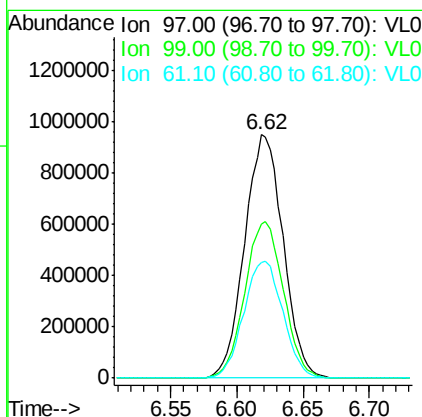
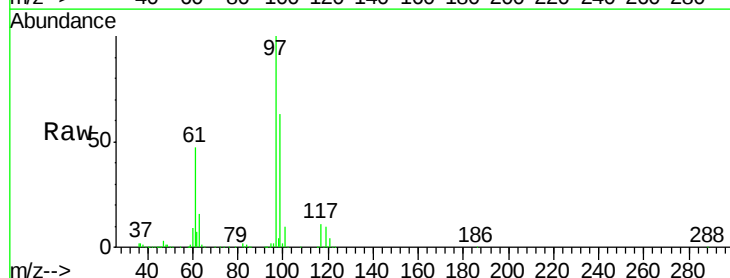
MMDadoda
 2/5/2019 10:27:41 AM

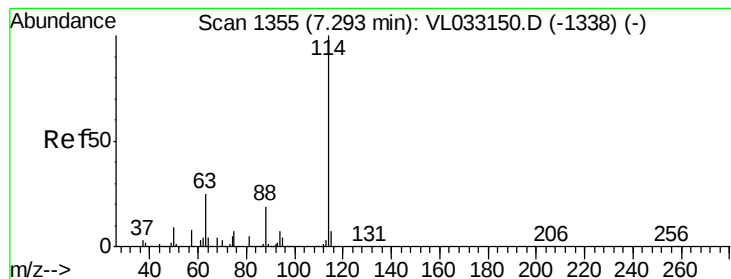


#32

1,1,1-Trichloroethane
 Concen: 9.849 ppbv
 RT: 6.62 min Scan# 1145
 Delta R.T. 0.00 min
 Lab File: VL033157.D
 Acq: 4 Feb 2019 15:04

Tgt Ion	Ratio	Lower	Upper
97	100		
99	64.5	65.1	97.7#
61	49.0	47.7	71.5





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.29 min Scan# 1355

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Instrument :

MSVOA_L

ClientSampleId :

ICVVL020419

Tot Ion:114 Resp: 3158337

Ion Ratio Lower Upper

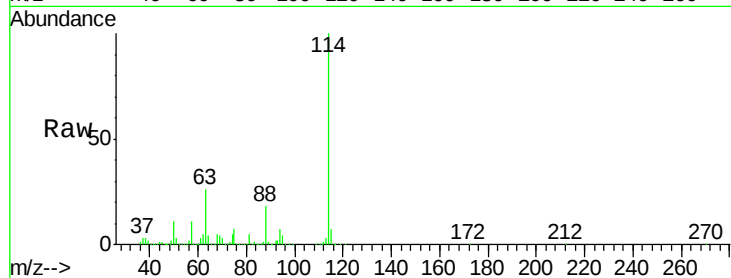
114 100

63 26.1 20.0 30.0

88 18.5 14.4 21.6

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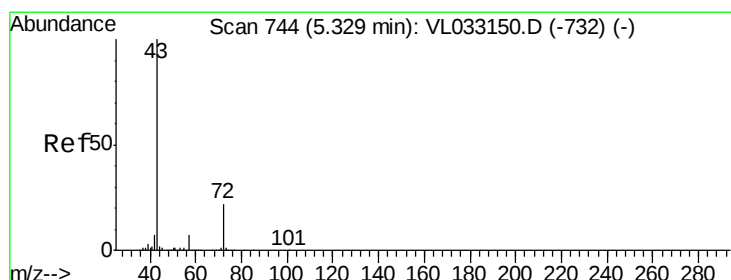
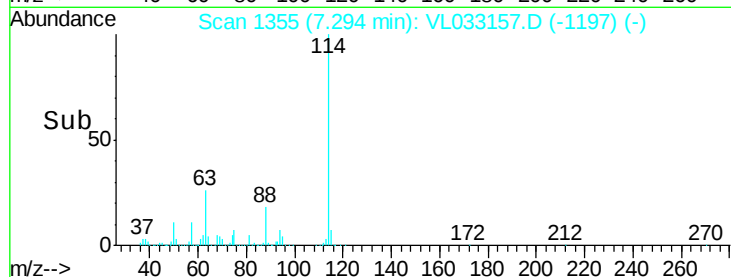
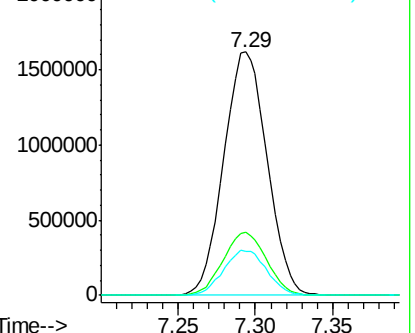
MMDadoda
2/5/2019 10:27:41 AM



Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 8.637 ppbv

RT: 5.33 min Scan# 744

Delta R.T. 0.01 min

Lab File: VL033157.D

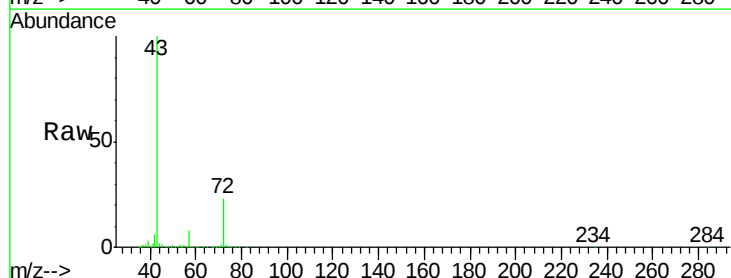
Acq: 4 Feb 2019 15:04

Tgt Ion: 43 Resp: 1715637

Ion Ratio Lower Upper

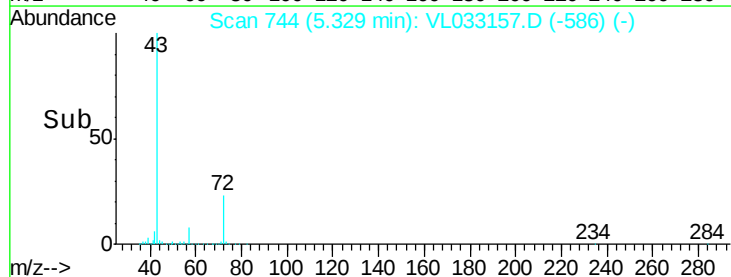
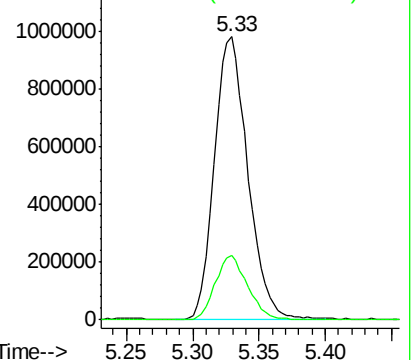
43 100

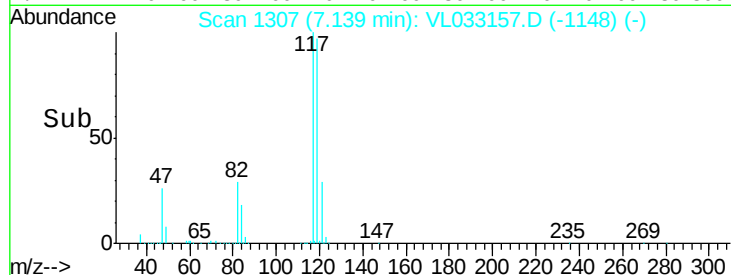
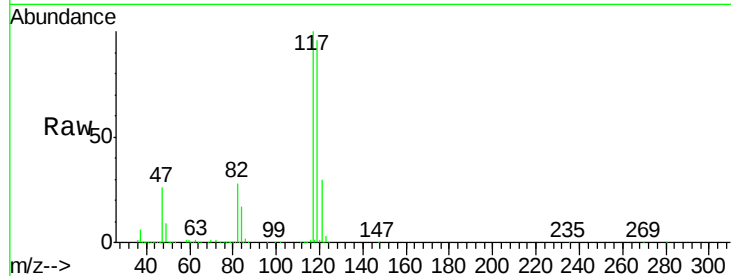
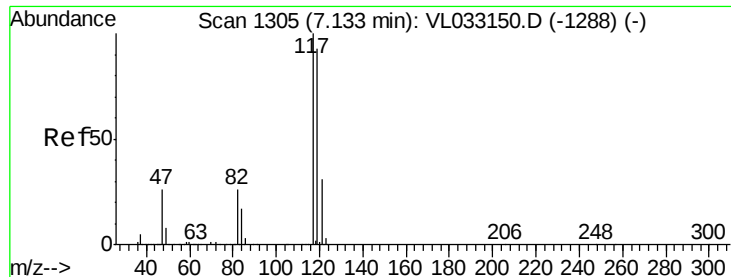
72 22.3 17.9 26.9



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 9.500 ppbv m

RT: 7.14 min Scan# 1307

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Tot Ion	Ratio	Lower	Upper
117	100		
119	96.2	76.6	114.8
121	29.7	25.0	37.4

Instrument :

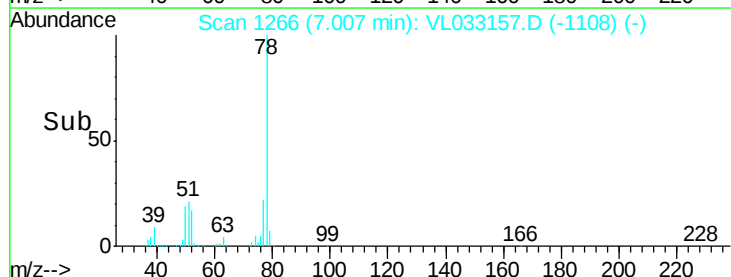
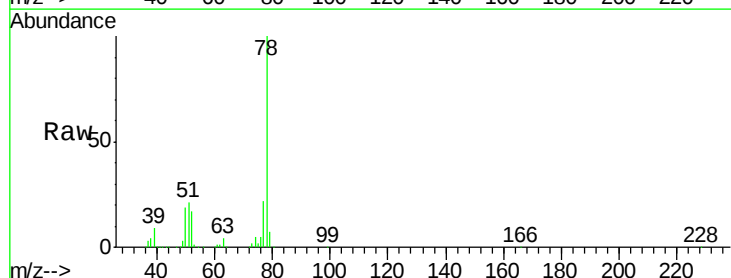
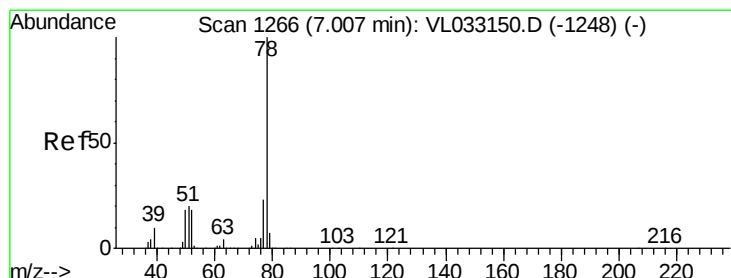
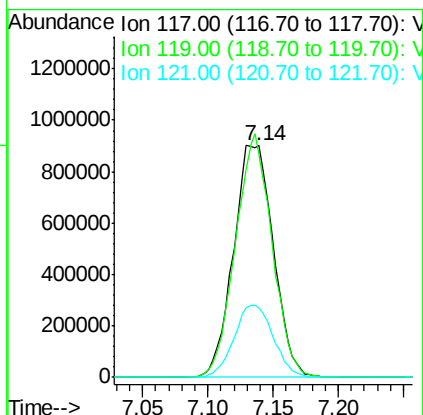
MSVOA_L

ClientSampleId :

ICVVL020419

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#36

Benzene

Concen: 8.649 ppbv

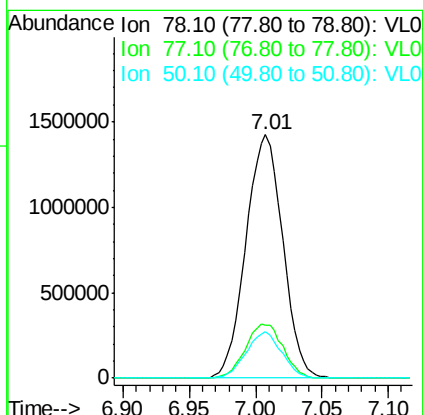
RT: 7.01 min Scan# 1266

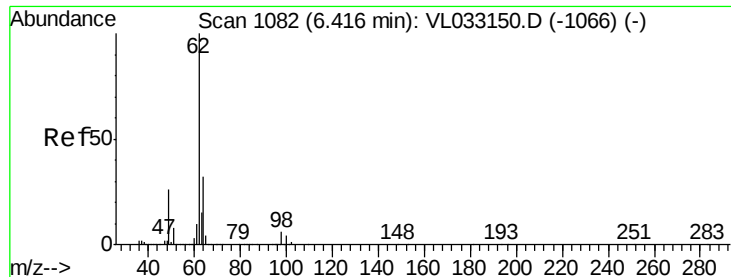
Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Tgt Ion	Ratio	Lower	Upper
78	100		
77	21.8	17.8	26.6
50	18.8	14.7	22.1





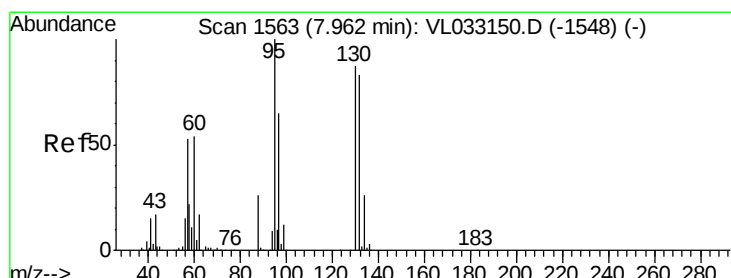
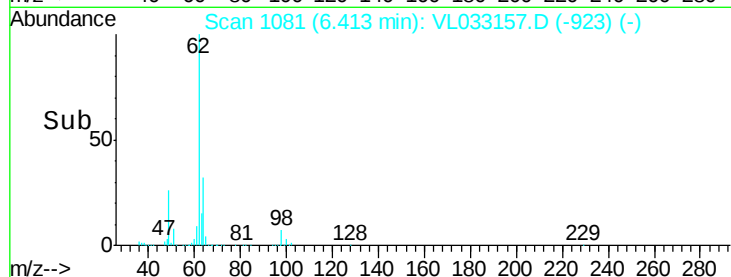
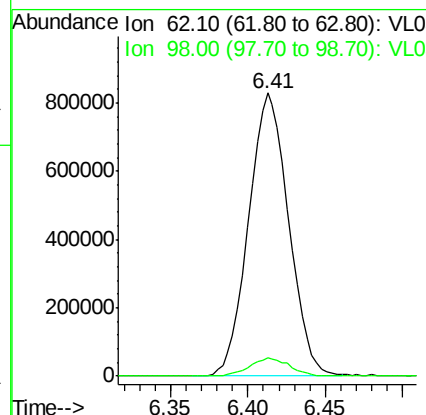
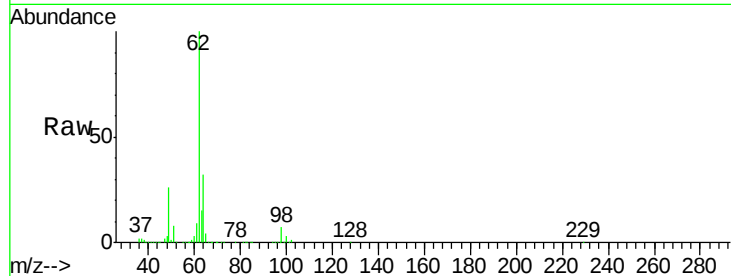
#37
 1,2-Dichloroethane
 Concen: 9.164 ppbv
 RT: 6.41 min Scan# 1081
 Delta R.T. 0.01 min
 Lab File: VL033157.D
 Acq: 4 Feb 2019 15:04

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL020419

Tot Ion	Ratio	Lower	Upper
62	100		
98	6.4	5.3	7.9

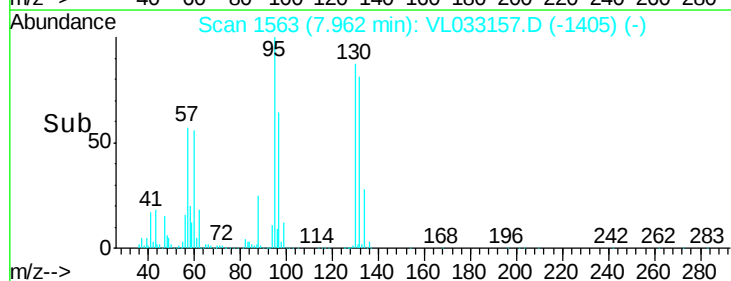
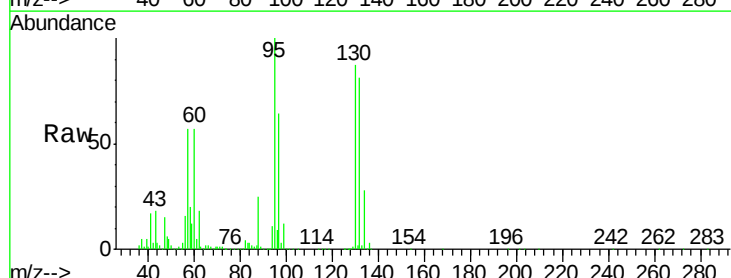
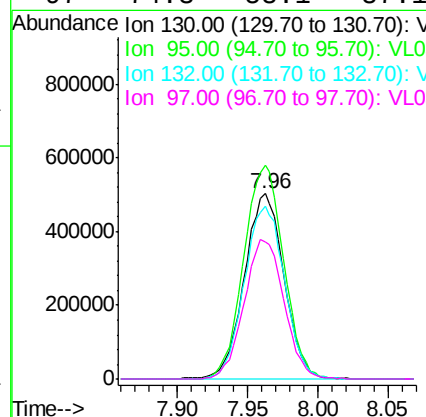
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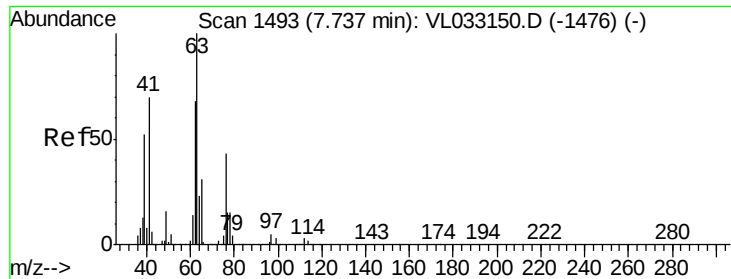
MMDadoda
 2/5/2019 10:27:41 AM



#38
 Trichloroethene
 Concen: 8.457 ppbv
 RT: 7.96 min Scan# 1563
 Delta R.T. 0.01 min
 Lab File: VL033157.D
 Acq: 4 Feb 2019 15:04

Tgt Ion	Ratio	Lower	Upper
130	100		
95	115.7	91.6	137.4
132	93.1	79.0	118.4
97	74.3	58.1	87.1





#39

1,2-Dichloropropane

Concen: 9.038 ppbv

RT: 7.74 min Scan# 1493

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Instrument :

MSVOA_L

ClientSampleId :

ICVVL020419

Tot Ion: 63 Resp: 1106841

Ion Ratio Lower Upper

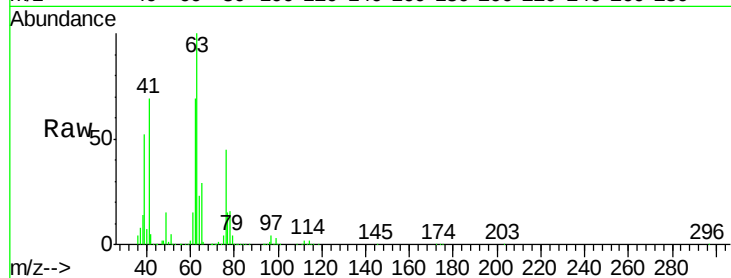
63 100

41 69.4 53.2 79.8

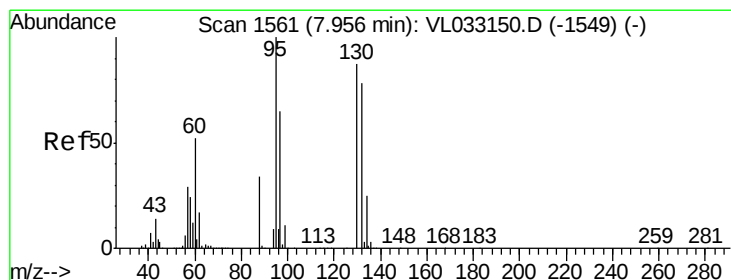
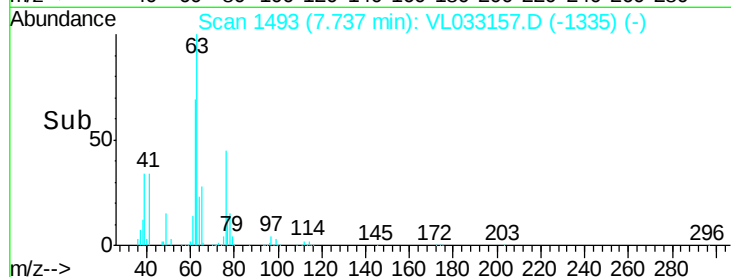
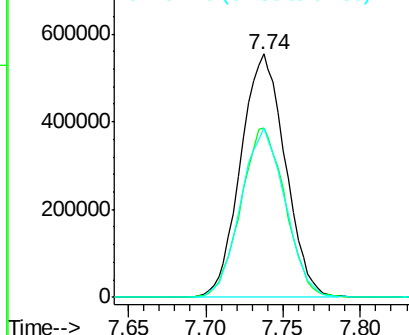
62 69.2 54.4 81.6

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Abundance Ion 63.10 (62.80 to 63.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 62.10 (61.80 to 62.80): VL0



#40

1,4-Dioxane

Concen: 8.352 ppbv

RT: 7.95 min Scan# 1560

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Tgt Ion: 88 Resp: 398961

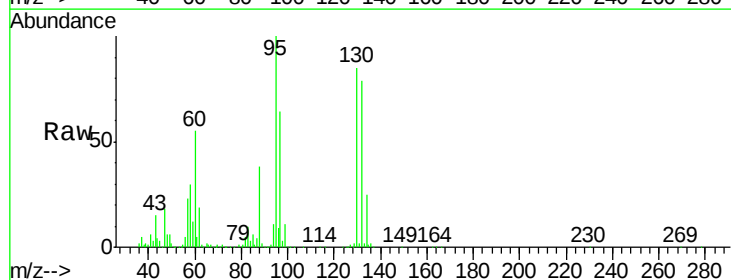
Ion Ratio Lower Upper

88 100

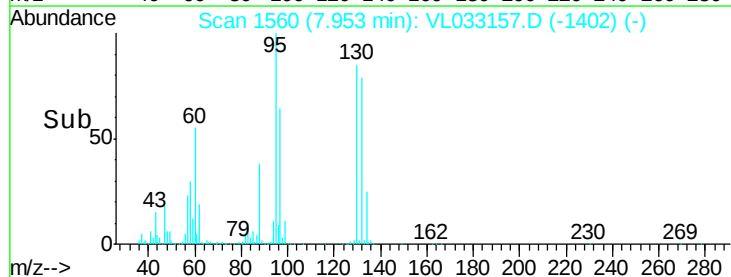
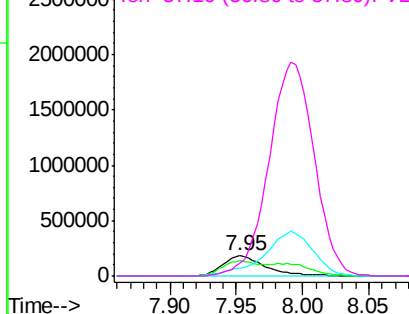
58 130.0 103.4 155.2

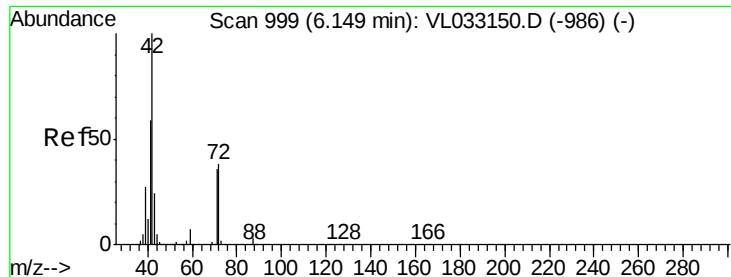
43 261.3 210.8 316.2

57 1159.5 933.2 1399.8



Abundance Ion 88.10 (87.80 to 88.80): VL0
Ion 58.10 (57.80 to 58.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 57.10 (56.80 to 57.80): VL0





#41

Tetrahydrofuran

Concen: 9.646 ppbv

RT: 6.15 min Scan# 999

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Instrument :

MSVOA_L

ClientSampleId :

ICVVL020419

Tot Ion: 42 Resp: 1190484

Ion Ratio Lower Upper

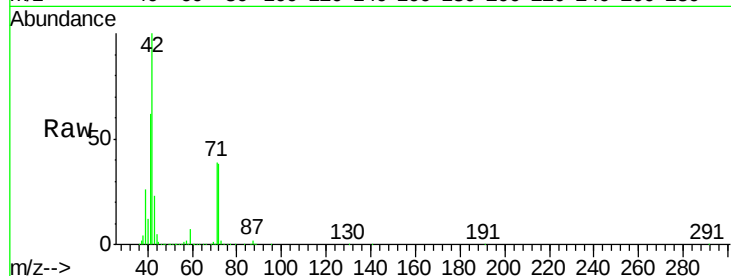
42 100

72 37.9 30.2 45.4

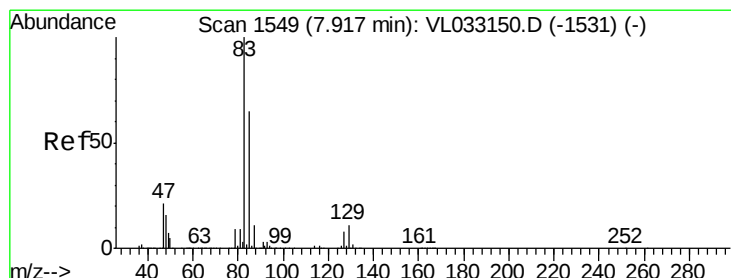
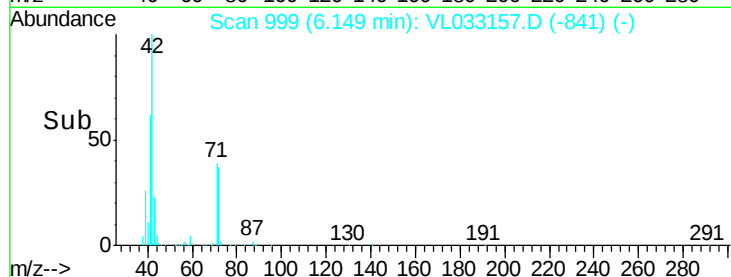
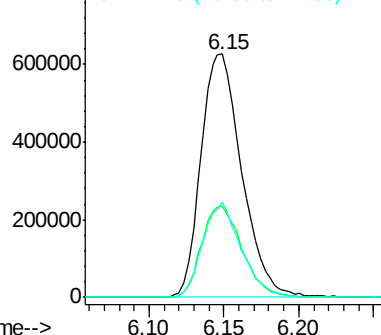
71 36.8 28.8 43.2

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Abundance Ion 42.10 (41.80 to 42.80): VL0
Ion 72.10 (71.80 to 72.80): VL0
Ion 71.10 (70.80 to 71.80): VL0



#42

Bromodichloromethane

Concen: 9.290 ppbv

RT: 7.92 min Scan# 1550

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

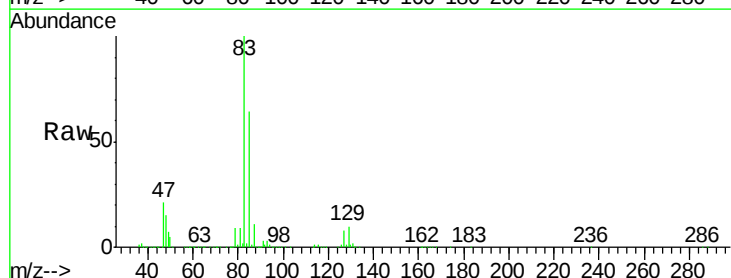
Tgt Ion: 83 Resp: 2216910

Ion Ratio Lower Upper

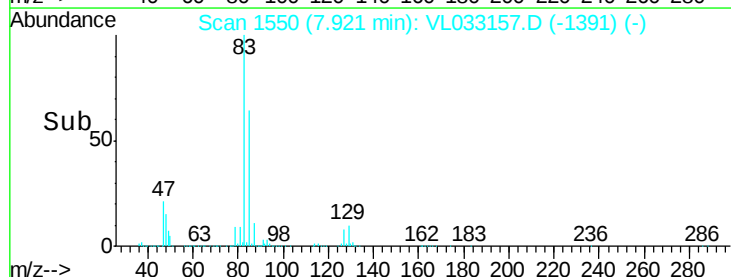
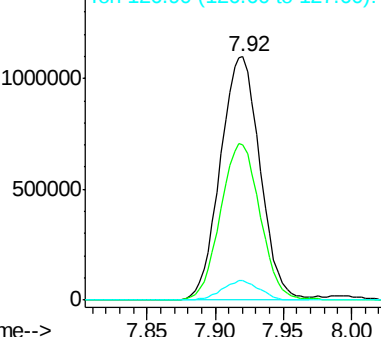
83 100

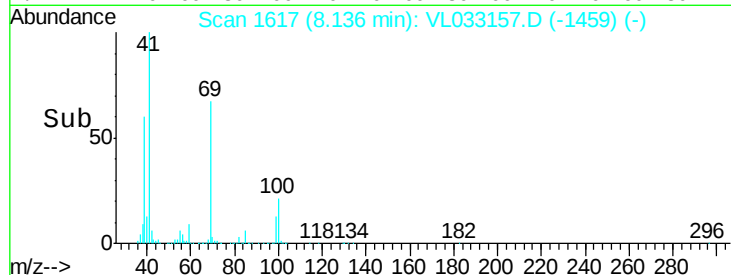
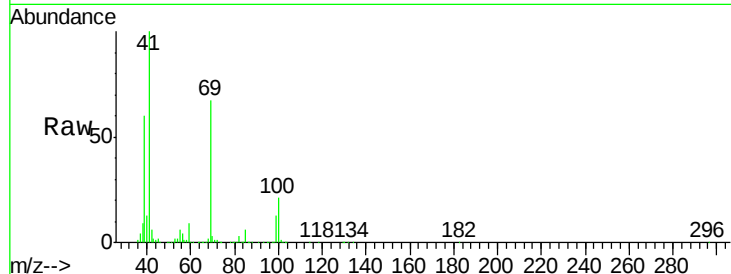
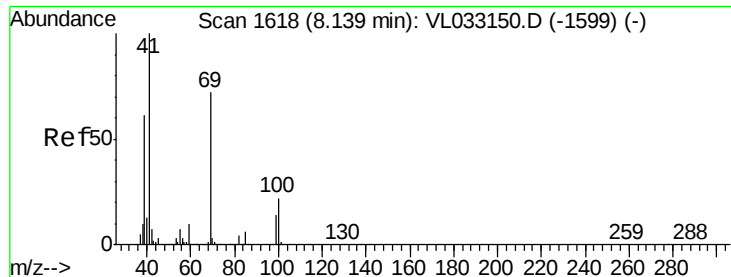
85 64.0 51.3 76.9

127 8.1 6.1 9.1



Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0
Ion 126.90 (126.60 to 127.60): V





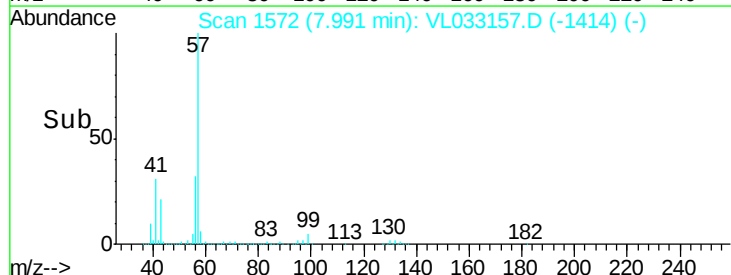
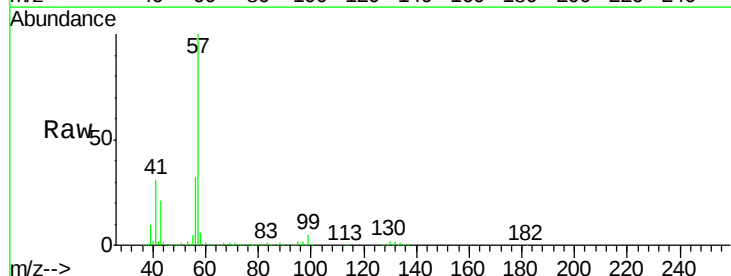
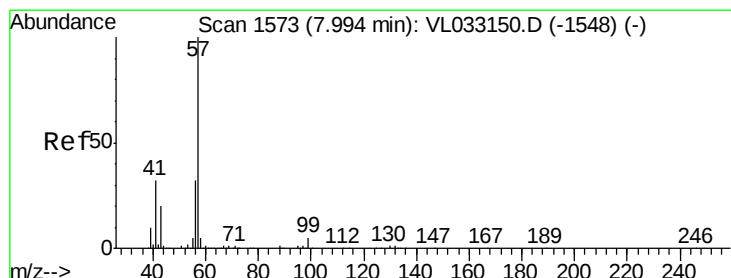
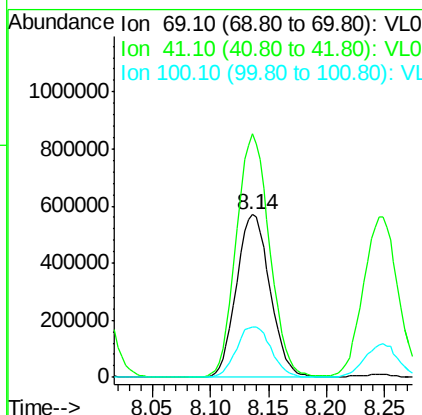
#43
Methvl Methacrilate
Concen: 9.093 ppbv
RT: 8.14 min Scan# 1617
Delta R.T. 0.01 min
Lab File: VL033157.D
Acq: 4 Feb 2019 15:04

Tot Ion	Ion	Ratio	Lower	Upper
69	100			
41	147.1	118.4	177.6	
100	31.9	26.5	39.7	

Instrument :
MSVOA_L
ClientSampleId :
ICVVL020419

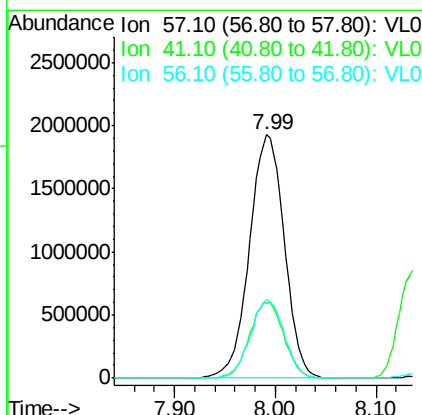
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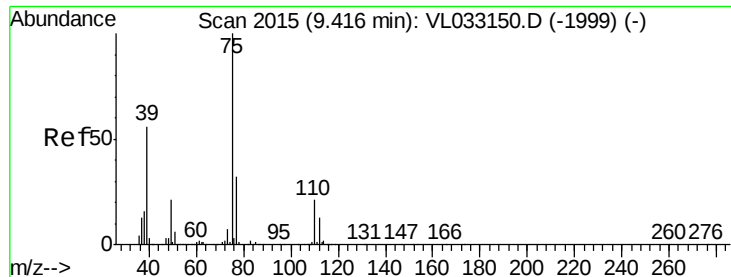
MMDadoda
2/5/2019 10:27:41 AM



#44
2,2,4-Trimethylpentane
Concen: 8.624 ppbv
RT: 7.99 min Scan# 1572
Delta R.T. 0.01 min
Lab File: VL033157.D
Acq: 4 Feb 2019 15:04

Tgt Ion	Ion	Ratio	Lower	Upper
57	100			
41	30.6	24.6	36.8	
56	31.2	24.9	37.3	





#45

t-1,3-Dichloropropene

Concen: 9.527 ppbv

RT: 9.42 min Scan# 2015

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Instrument :

MSVOA_L

ClientSampleId :

ICVVL020419

Tot Ion: 75 Resp: 1493259

Ion Ratio Lower Upper

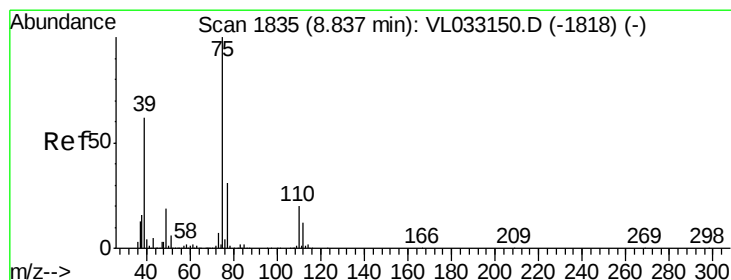
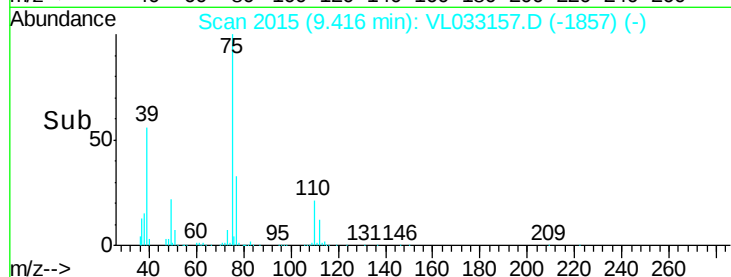
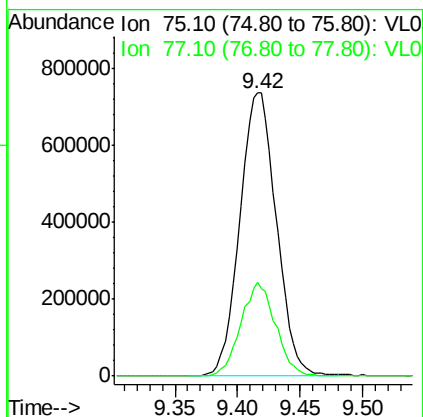
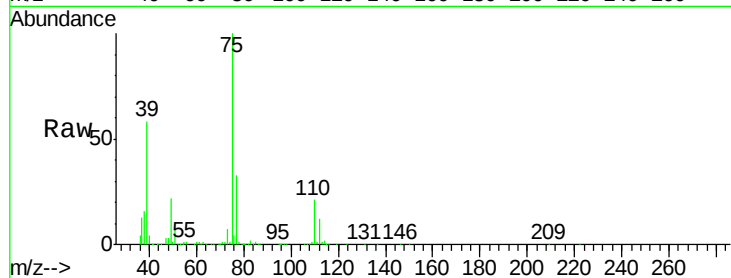
75 100

77 33.2 24.4 36.6

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#46

cis-1,3-Dichloropropene

Concen: 9.095 ppbv

RT: 8.84 min Scan# 1835

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

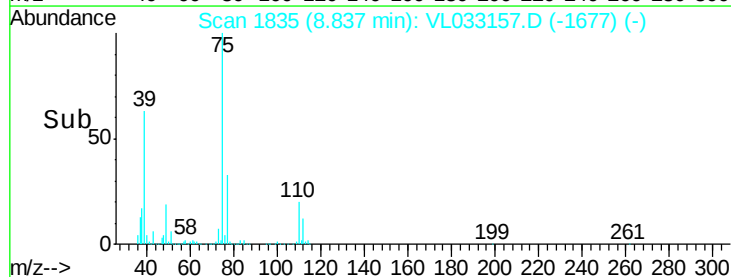
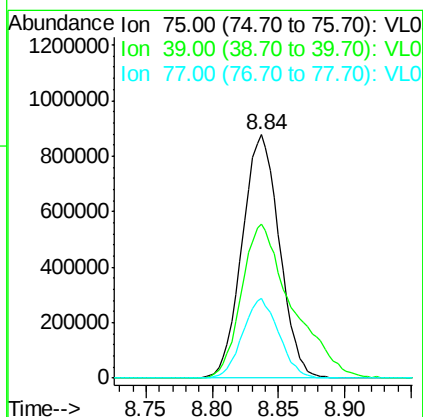
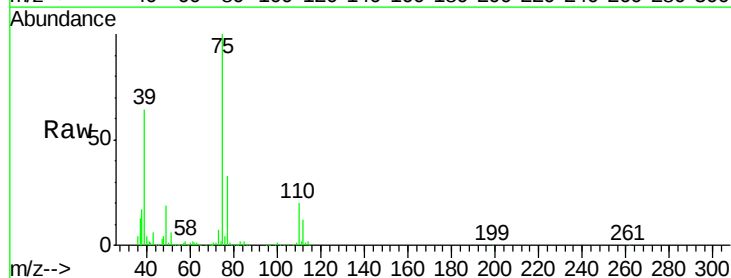
Tgt Ion: 75 Resp: 1714611

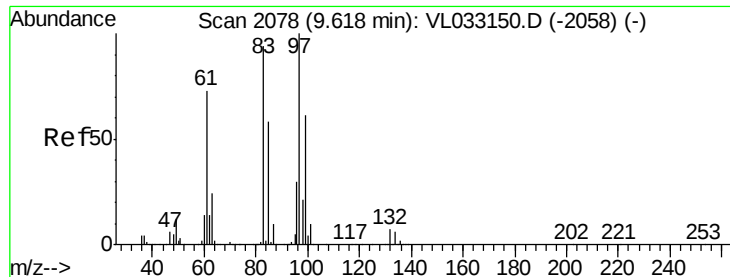
Ion Ratio Lower Upper

75 100

39 63.5 51.4 77.2

77 32.6 25.4 38.0





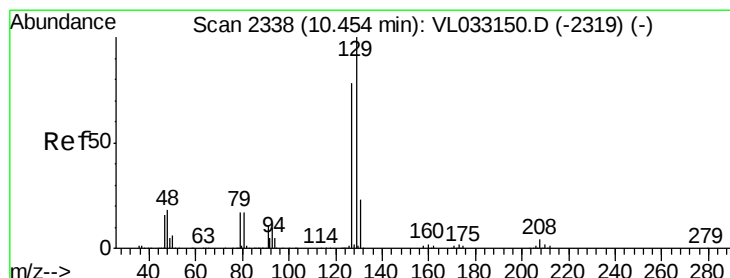
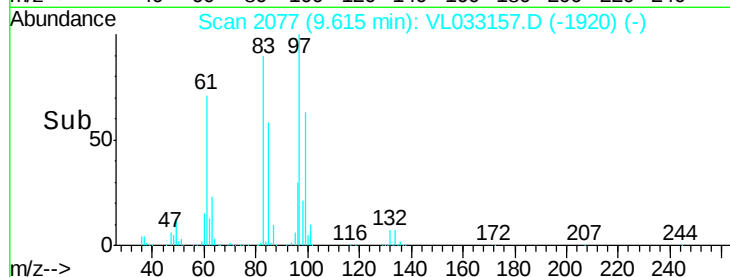
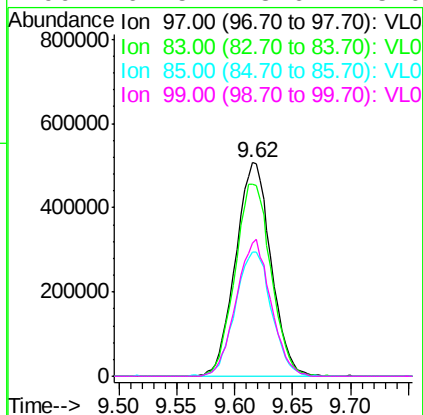
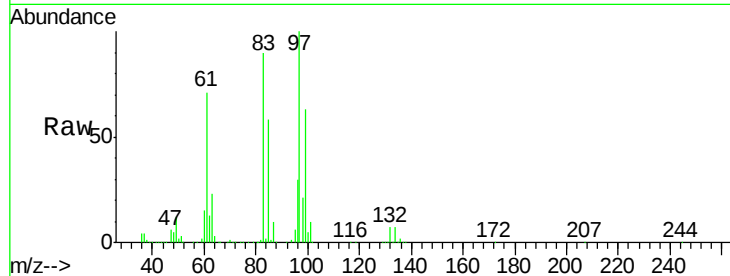
#47
 1,1,2-Trichloroethane
 Concen: 8.181 ppbv
 RT: 9.62 min Scan# 2077
 Delta R.T. 0.00 min
 Lab File: VL033157.D
 Acq: 4 Feb 2019 15:04

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL020419

Tot Ion	Ratio	Lower	Upper
97	100		
83	90.0	65.8	98.8
85	57.9	44.7	67.1
99	62.5	48.6	73.0

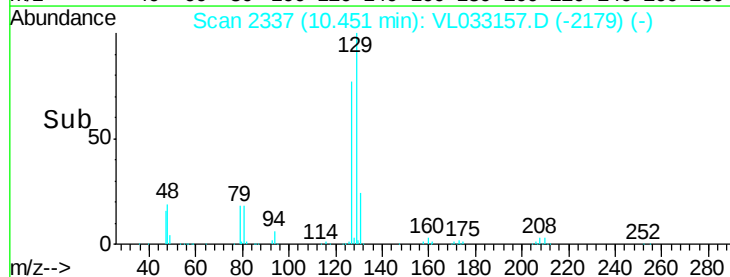
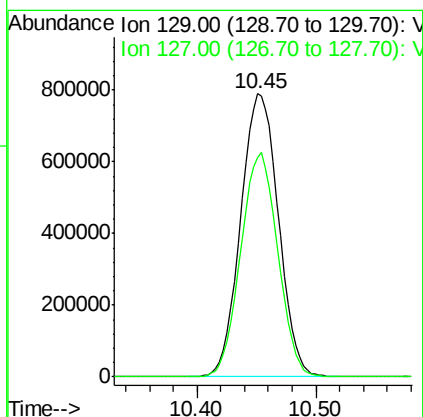
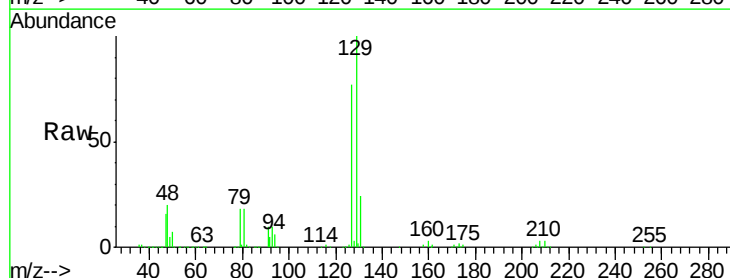
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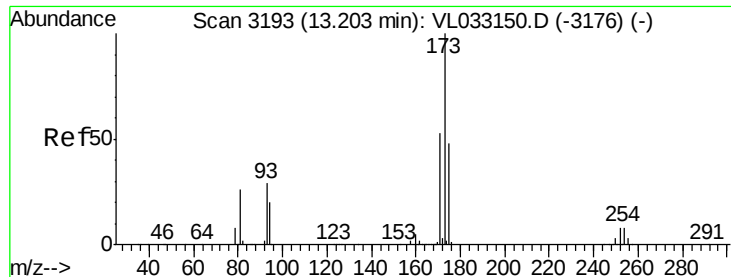
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#48
 Dibromochloromethane
 Concen: 8.872 ppbv
 RT: 10.45 min Scan# 2337
 Delta R.T. 0.01 min
 Lab File: VL033157.D
 Acq: 4 Feb 2019 15:04

Tgt Ion	Ratio	Lower	Upper
129	100		
127	77.8	39.3	117.9





#49

Bromoform

Concen: 8.369 ppbv

RT: 13.20 min Scan# 3193

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Instrument :

MSVOA_L

ClientSampleId :

ICVVL020419

Tot Ion:173 Resp: 1351541

Ion Ratio Lower Upper

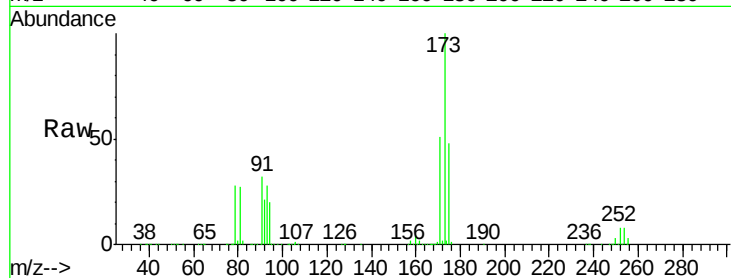
173 100

175 48.7 39.3 58.9

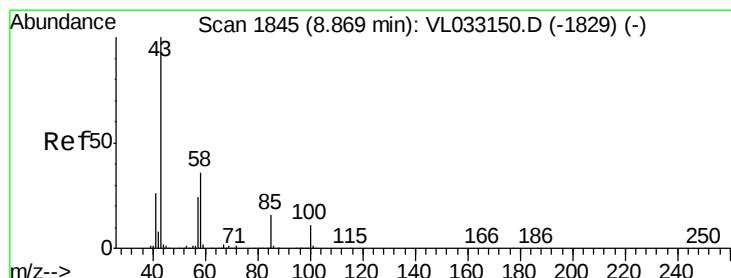
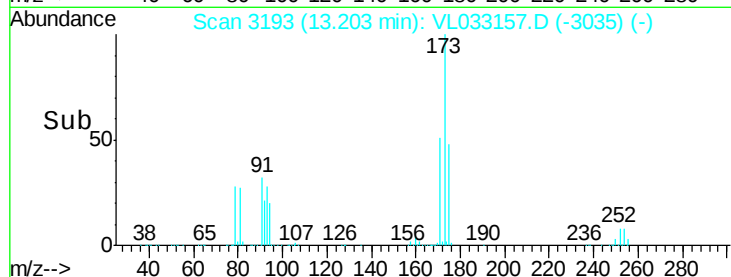
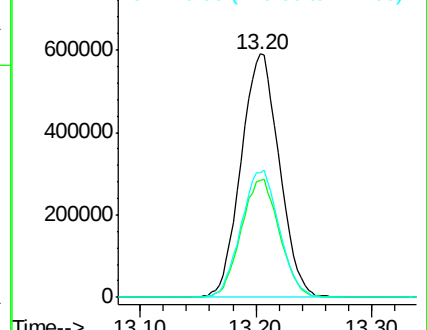
171 52.3 41.8 62.6

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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: 7.816 ppbv

RT: 8.87 min Scan# 1845

Delta R.T. 0.01 min

Lab File: VL033157.D

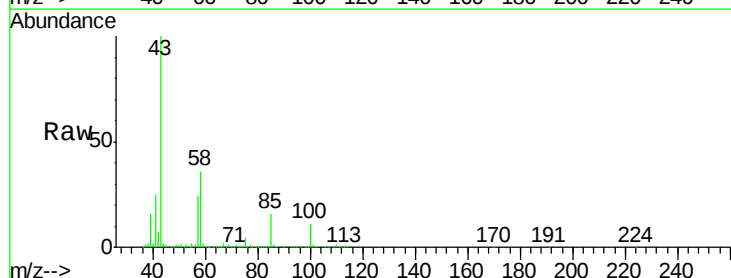
Acq: 4 Feb 2019 15:04

Tgt Ion: 43 Resp: 2810097

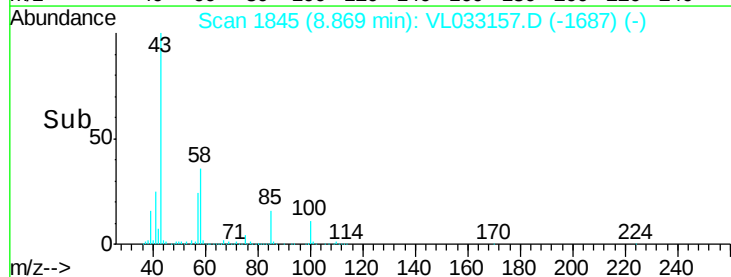
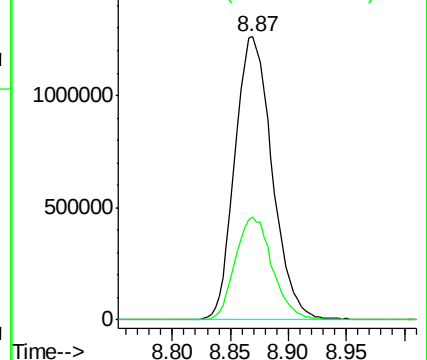
Ion Ratio Lower Upper

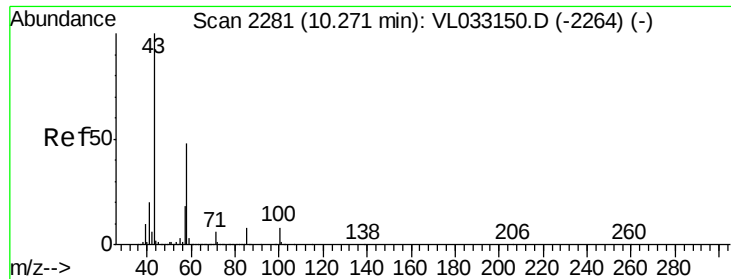
43 100

58 36.1 28.7 43.1



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





#51

2-Hexanone

Concen: 7.440 ppbv

RT: 10.27 min Scan# 2281

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Instrument :

MSVOA_L

ClientSampleId :

ICVVL020419

Tot Ion: 43 Resp: 2243562

Ion Ratio Lower Upper

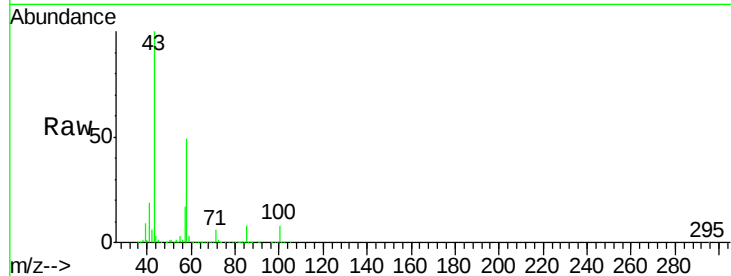
43 100

58 49.5 39.4 59.2

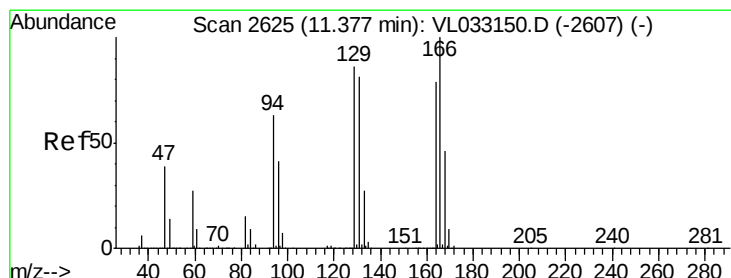
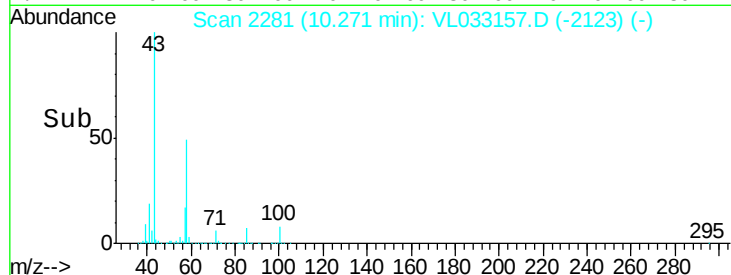
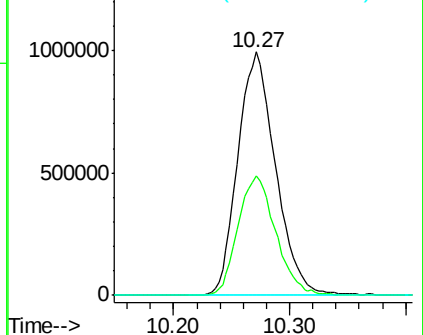
98 0.1 0.1 0.1

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Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 58.10 (57.80 to 58.80): VL0
Ion 98.20 (97.90 to 98.90): VL0



#52

Tetrachloroethene

Concen: 8.187 ppbv

RT: 11.37 min Scan# 2623

Delta R.T. 0.00 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Tgt Ion: 164 Resp: 908477

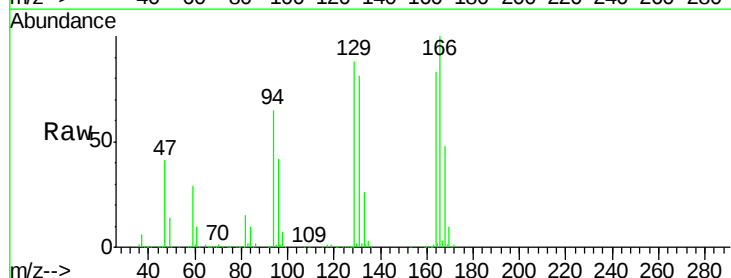
Ion Ratio Lower Upper

164 100

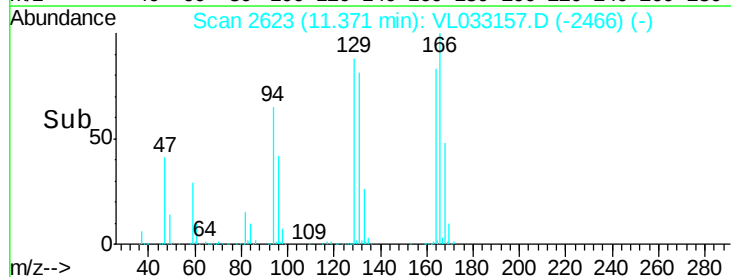
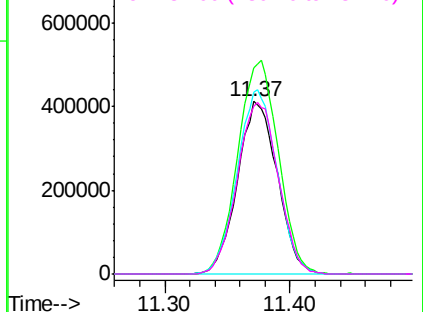
166 119.6 98.6 148.0

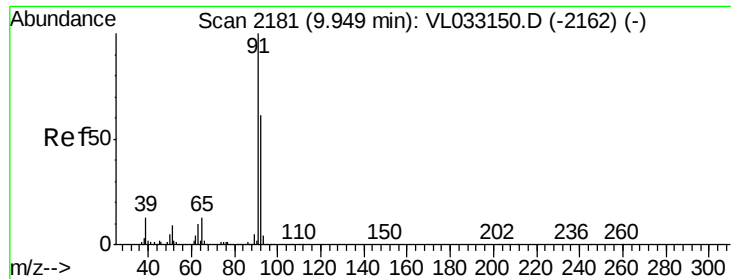
129 105.3 86.3 129.5

131 97.2 83.7 125.5



Abundance Ion 163.90 (163.60 to 164.60): V
Ion 165.90 (165.60 to 166.60): V
Ion 129.00 (128.70 to 129.70): V
Ion 131.00 (130.70 to 131.70): V





#53

Toluene

Concen: 8.330 ppbv

RT: 9.95 min Scan# 2180

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Instrument :

MSVOA_L

ClientSampleId :

ICVVL020419

Tot Ion: 91 Resp: 3158714

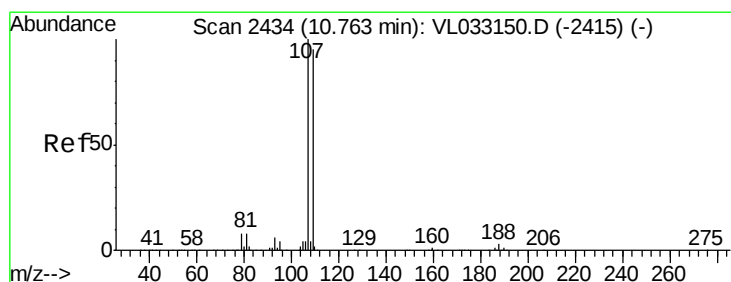
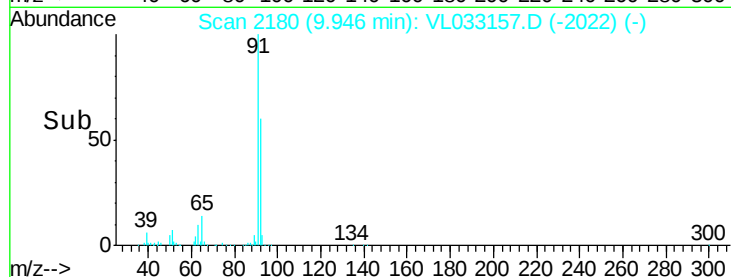
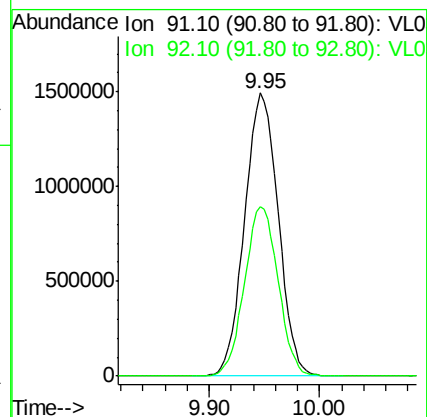
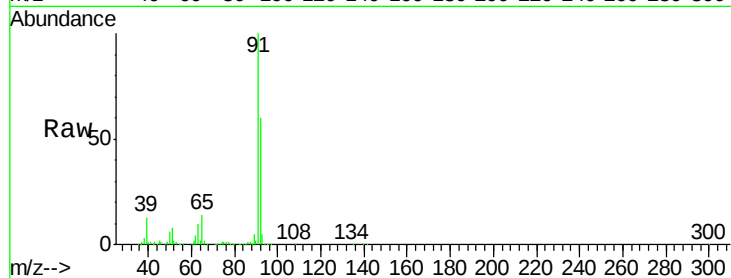
Ion Ratio Lower Upper

91 100

92 60.0 48.9 73.3

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#54

1,2-Dibromoethane

Concen: 8.391 ppbv

RT: 10.76 min Scan# 2434

Delta R.T. 0.01 min

Lab File: VL033157.D

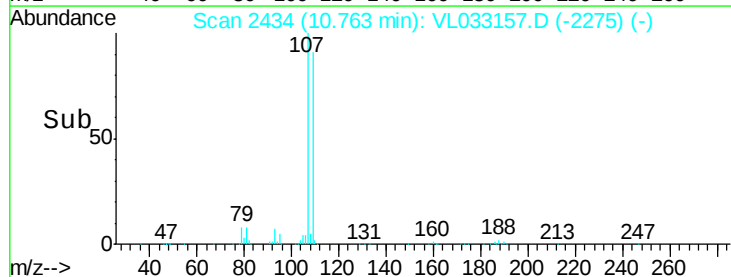
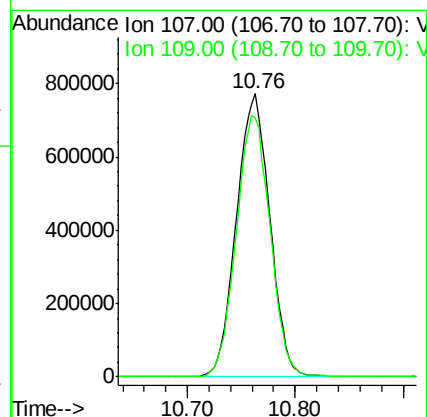
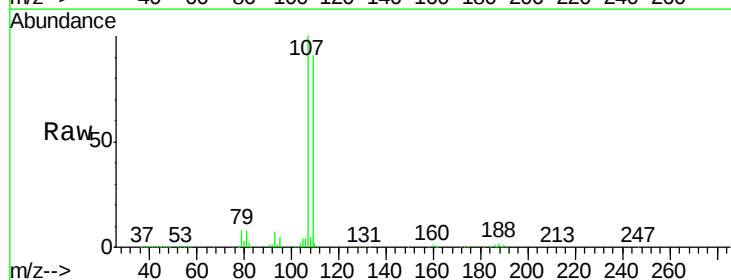
Acq: 4 Feb 2019 15:04

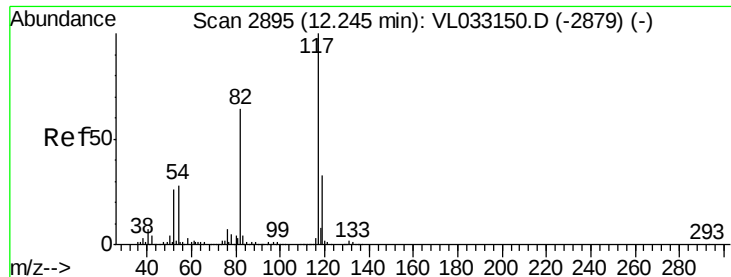
Tgt Ion: 107 Resp: 1670300

Ion Ratio Lower Upper

107 100

109 91.4 74.7 112.1





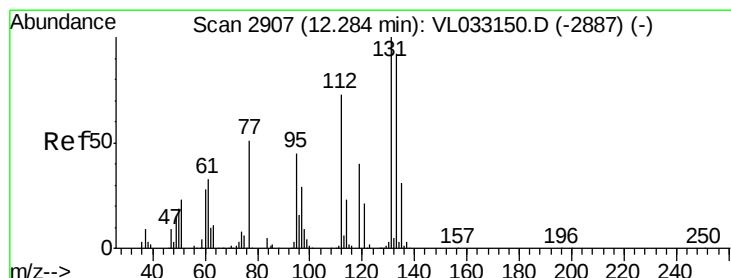
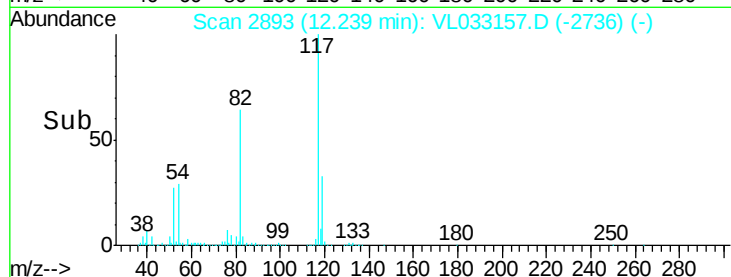
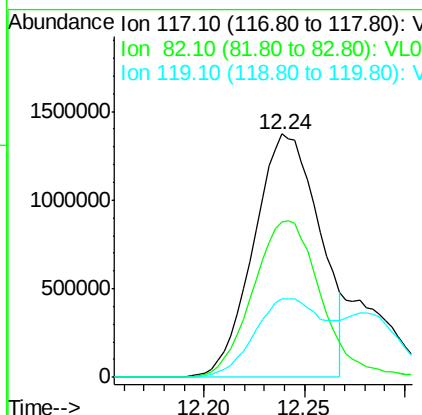
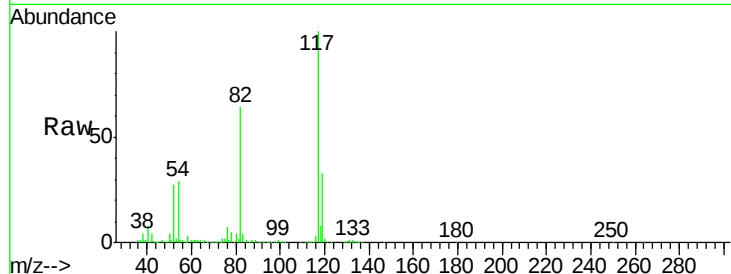
#55
Chlorobenzene-d5
Concen: 10.000 ppbv m
RT: 12.24 min Scan# 2893
Delta R.T. 0.00 min
Lab File: VL033157.D
Acq: 4 Feb 2019 15:04

Instrument :
MSVOA_L
ClientSampleId :
ICVVL020419

Tot Ion:117 Resp: 3153596
Ion Ratio Lower Upper
117 100
82 66.8 49.3 73.9
119 56.8 27.1 40.7#

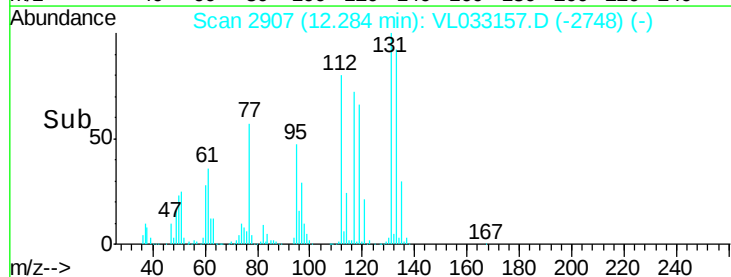
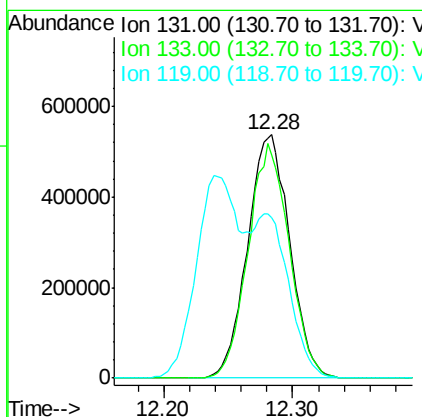
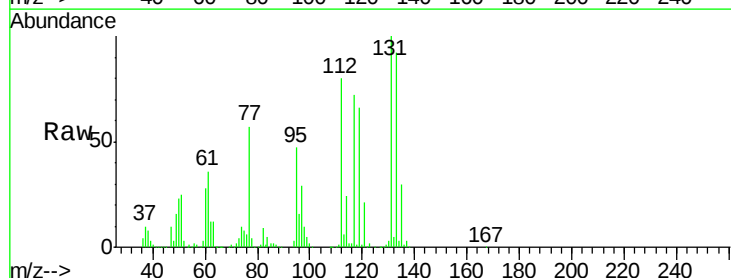
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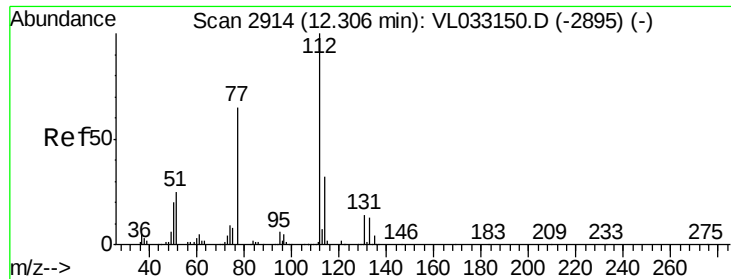
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#56
1,1,1,2-Tetrachloroethane
Concen: 8.957 ppbv
RT: 12.28 min Scan# 2907
Delta R.T. 0.01 min
Lab File: VL033157.D
Acq: 4 Feb 2019 15:04

Tgt Ion:131 Resp: 1221236
Ion Ratio Lower Upper
131 100
133 94.0 76.2 114.4
119 146.6 46.9 70.3#





#57

Chlorobenzene

Concen: 8.538 ppbv

RT: 12.30 min Scan# 2913

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Instrument :

MSVOA_L

ClientSampleId :

ICVVL020419

Tot Ion:112 Resp: 2244822

Ion Ratio Lower Upper

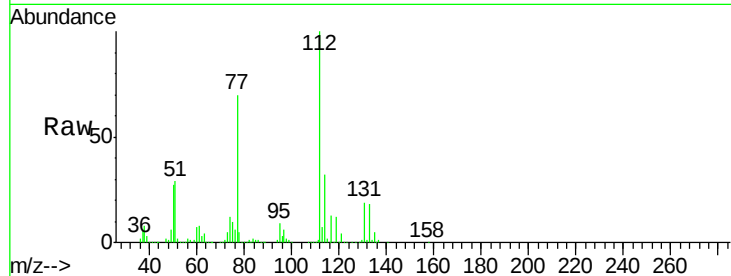
112 100

77 69.6 52.8 79.2

114 32.0 29.7 36.3

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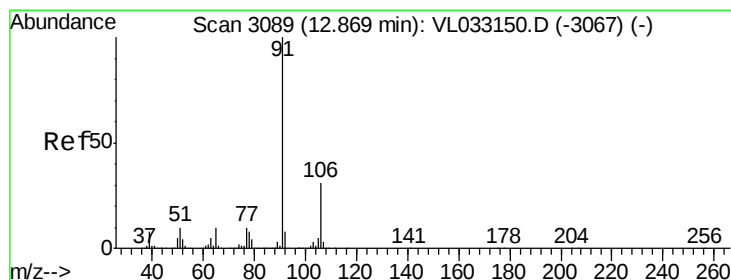
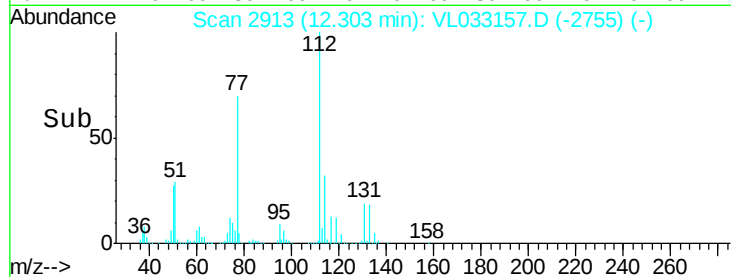
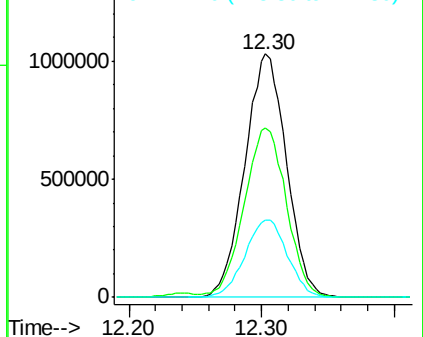
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Abundance Ion 112.10 (111.80 to 112.80): V

Ion 77.10 (76.80 to 77.80): VL0

Ion 114.10 (113.80 to 114.80): V



#58

Ethyl Benzene

Concen: 8.573 ppbv

RT: 12.87 min Scan# 3088

Delta R.T. 0.01 min

Lab File: VL033157.D

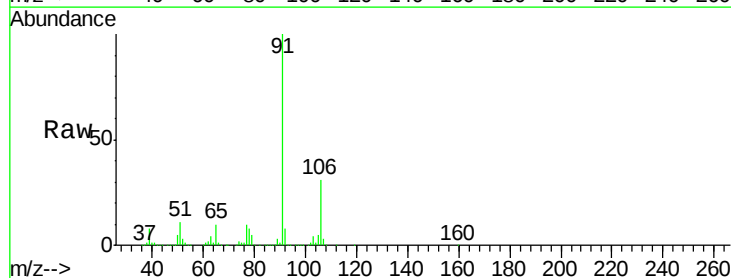
Acq: 4 Feb 2019 15:04

Tgt Ion: 91 Resp: 4253556

Ion Ratio Lower Upper

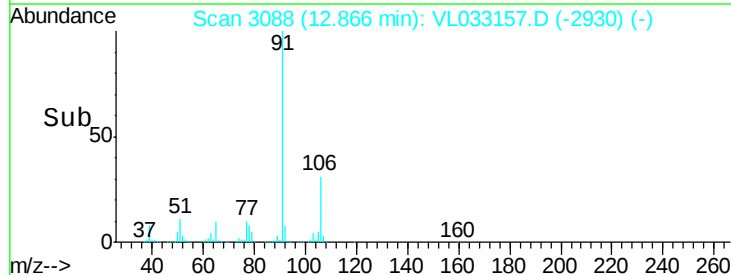
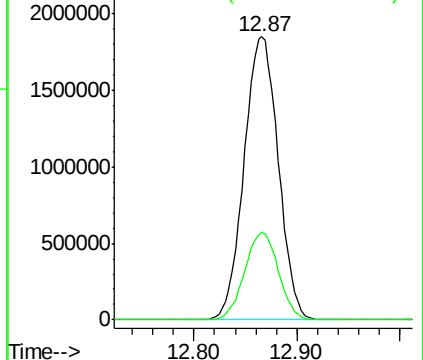
91 100

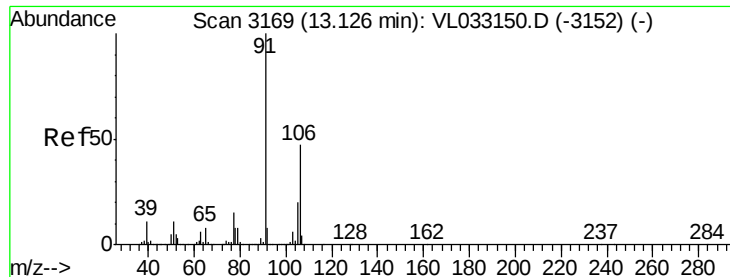
106 31.0 24.7 37.1



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





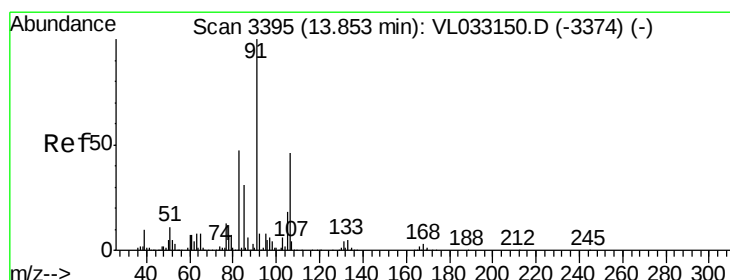
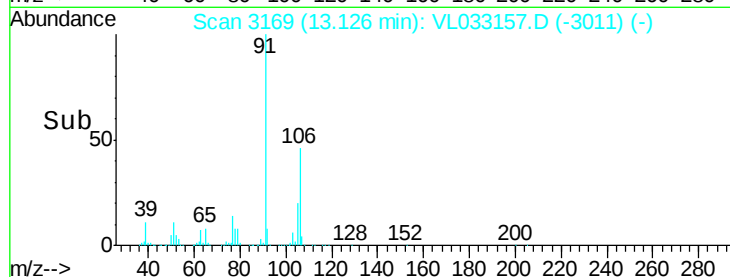
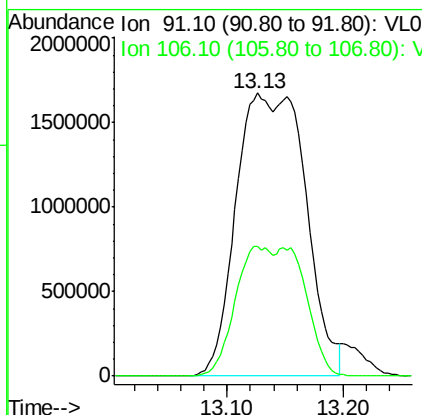
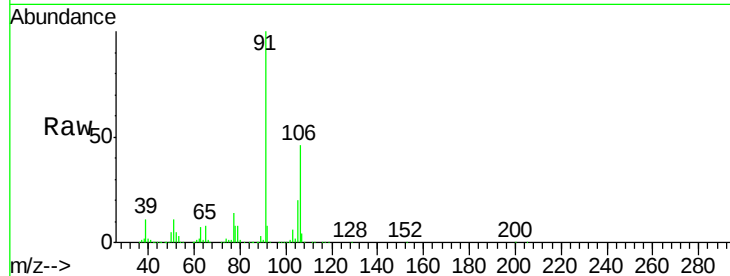
#59
m/p-Xylene
Concen: 17.025 ppbv m
RT: 13.13 min Scan# 3169
Delta R.T. 0.01 min
Lab File: VL033157.D
Acq: 4 Feb 2019 15:04

Instrument :
MSVOA_L
ClientSampleId :
ICVVL020419

Tot Ion: 91 Resp: 6917173
Ion Ratio Lower Upper
91 100
106 45.1 37.6 56.4

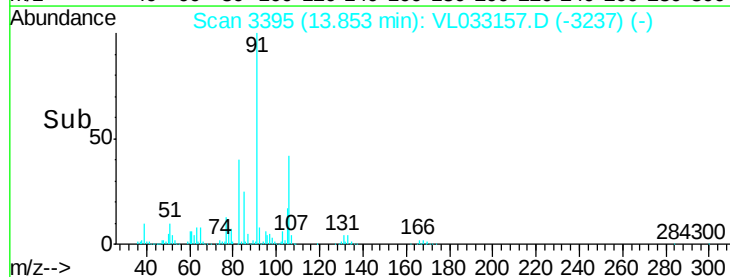
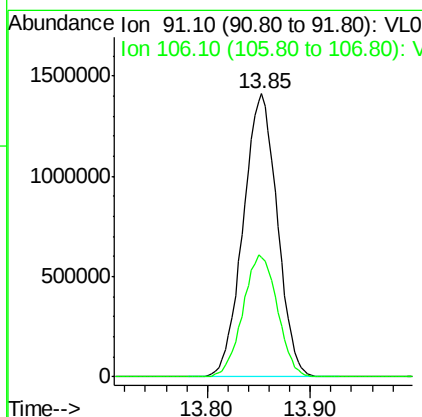
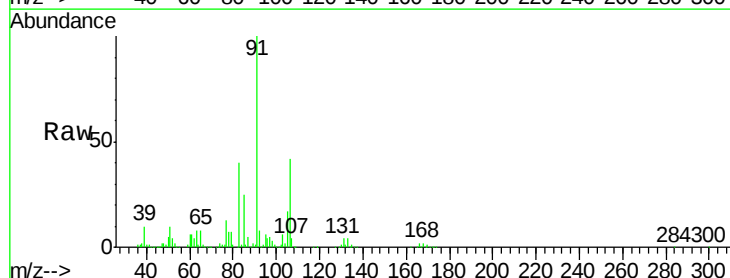
Manual Integrations
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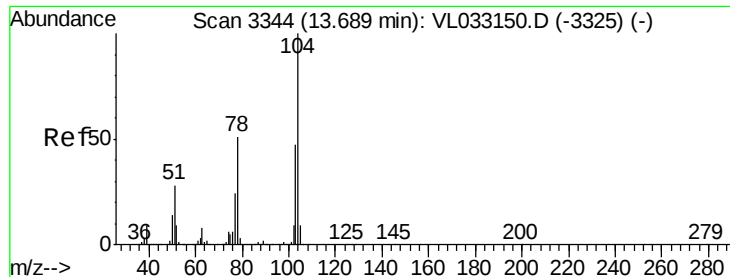
MMDadoda
2/5/2019 10:27:41 AM



#60
o-Xylene
Concen: 8.638 ppbv
RT: 13.85 min Scan# 3395
Delta R.T. 0.01 min
Lab File: VL033157.D
Acq: 4 Feb 2019 15:04

Tgt Ion: 91 Resp: 3238734
Ion Ratio Lower Upper
91 100
106 43.7 23.2 69.5





#61

Stvrene

Concen: 8.556 ppbv

RT: 13.69 min Scan# 3343

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Instrument :

MSVOA_L

ClientSampleId :

ICVVL020419

Tot Ion:104 Resp: 2567068

Ion Ratio Lower Upper

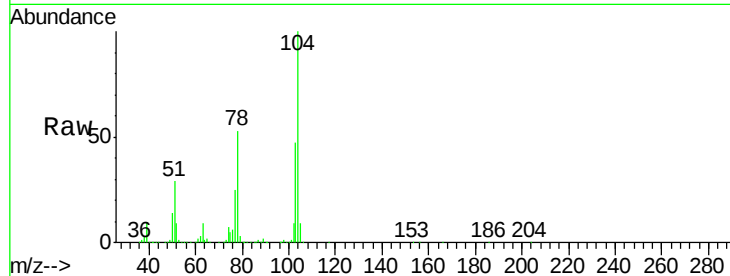
104 100

78 52.8 39.7 59.5

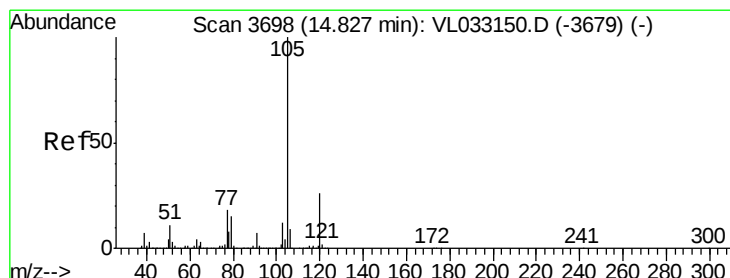
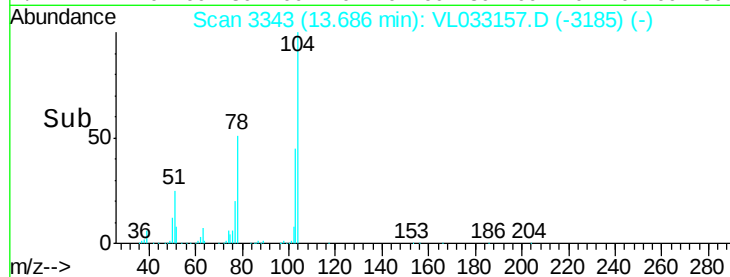
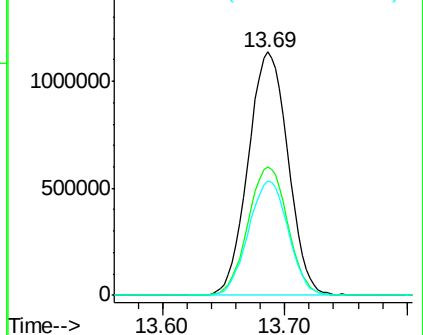
103 47.1 37.7 56.5

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Abundance Ion 104.10 (103.80 to 104.80): V
Ion 78.10 (77.80 to 78.80): VL0
Ion 103.10 (102.80 to 103.80): V



#62

Isopropylbenzene

Concen: 8.455 ppbv

RT: 14.83 min Scan# 3699

Delta R.T. 0.01 min

Lab File: VL033157.D

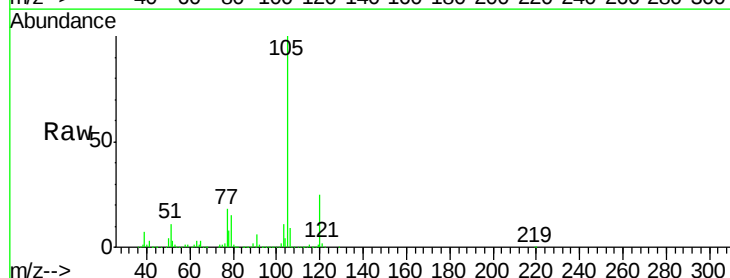
Acq: 4 Feb 2019 15:04

Tgt Ion:105 Resp: 4525121

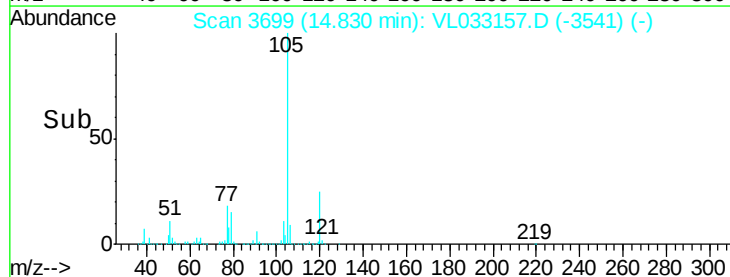
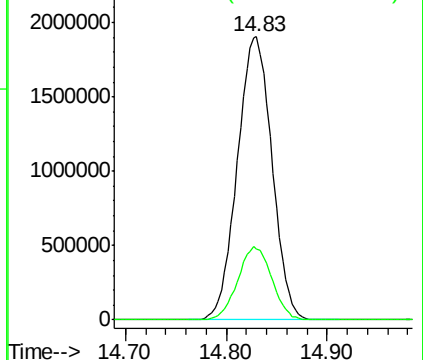
Ion Ratio Lower Upper

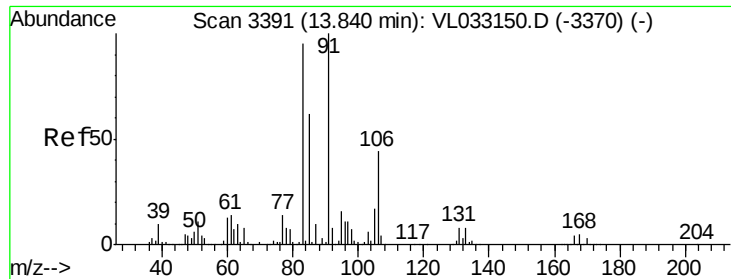
105 100

120 25.5 20.8 31.2



Abundance Ion 105.10 (104.80 to 105.80): V
Ion 120.20 (119.90 to 120.90): V





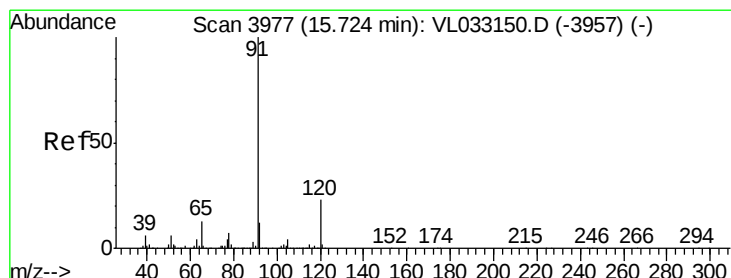
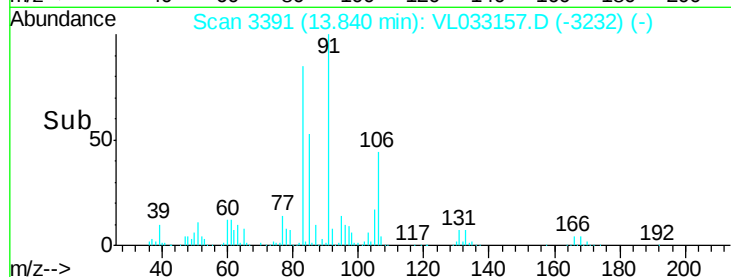
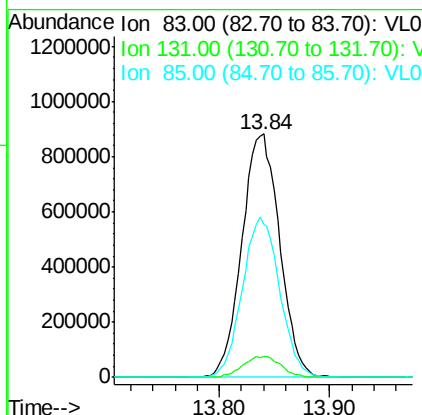
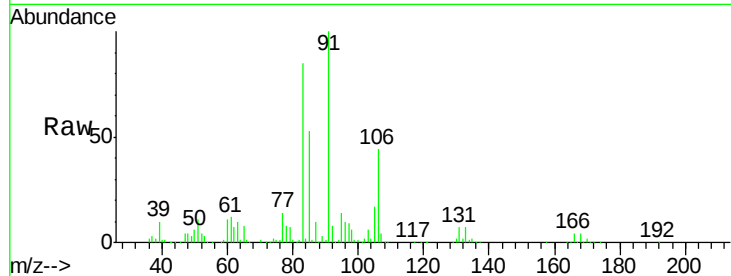
#63
 1,1,2,2-Tetrachloroethane
 Concen: 7.803 ppbv
 RT: 13.84 min Scan# 3391
 Delta R.T. 0.01 min
 Lab File: VL033157.D
 Acq: 4 Feb 2019 15:04

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL020419

Tot Ion	83	Resp	2098967
Ion Ratio	100	Lower	Upper
83	100		
131	8.8	4.5	13.7
85	64.8	32.5	97.4

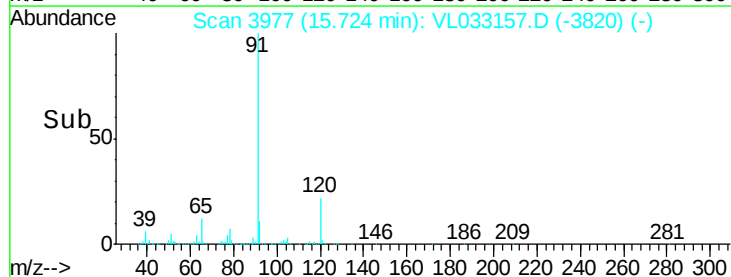
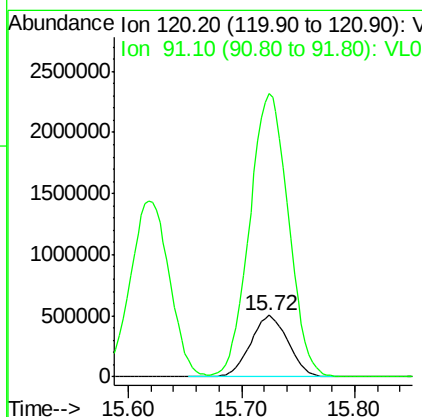
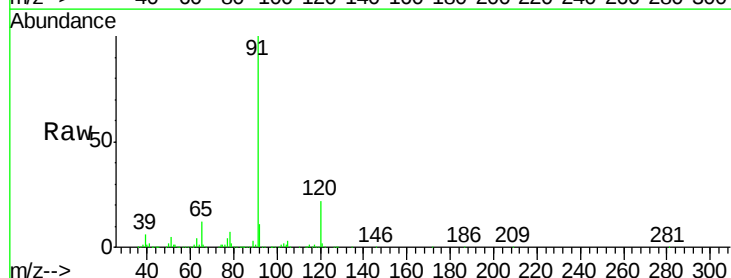
Manual Integrations
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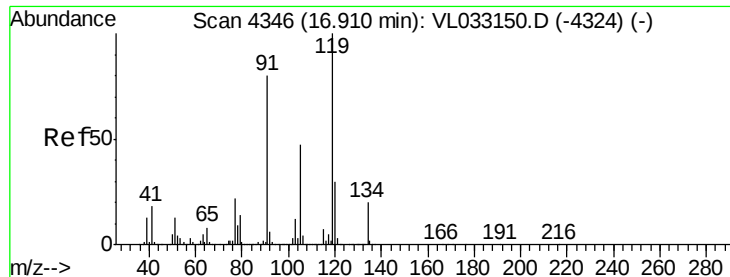
MMDadoda
 2/5/2019 10:27:41 AM



#64
 n-propylbenzene
 Concen: 8.287 ppbv
 RT: 15.72 min Scan# 3977
 Delta R.T. 0.00 min
 Lab File: VL033157.D
 Acq: 4 Feb 2019 15:04

Tgt Ion	120	Resp	1157395
Ion Ratio	100	Lower	Upper
120	100		
91	477.4	370.2	555.2





#65

tert-Butylbenzene

Concen: 7.664 ppbv

RT: 16.91 min Scan# 4346

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Instrument :

MSVOA_L

ClientSampleId :

ICVVL020419

Tot Ion:119 Resp: 3679254

Ion Ratio Lower Upper

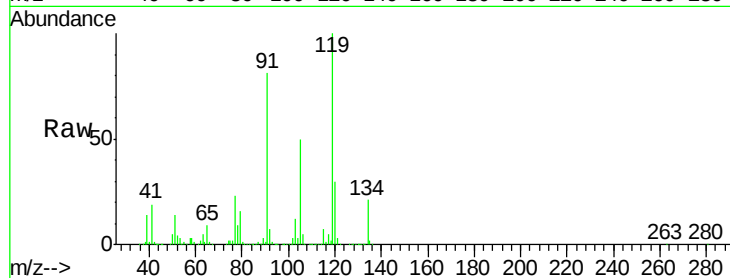
119 100

91 83.2 63.0 94.6

134 19.7 15.5 23.3

Manual Integrations
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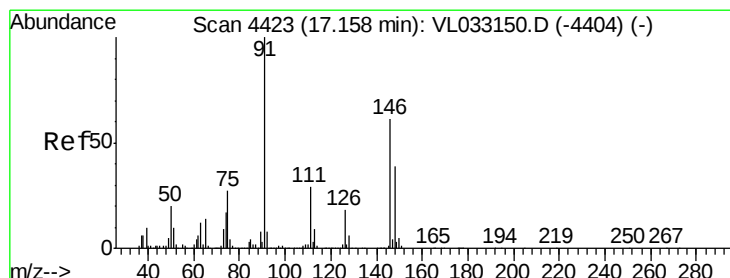
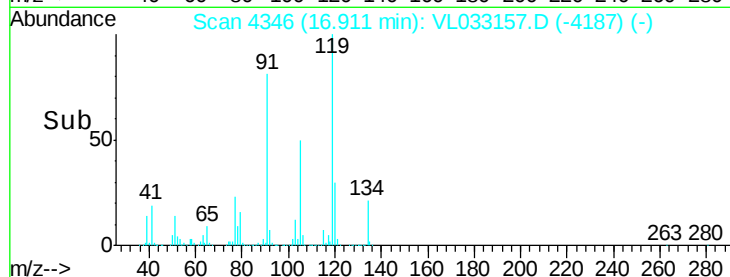
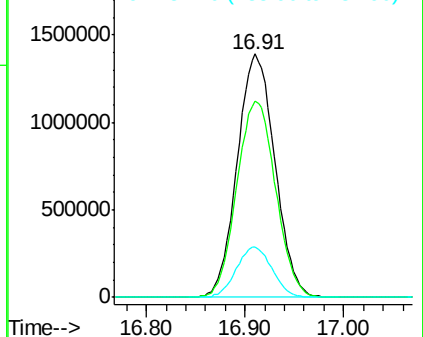
MMDadoda
2/5/2019 10:27:41 AM



Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V



#66

Benzyl Chloride

Concen: 8.620 ppbv

RT: 17.16 min Scan# 4423

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

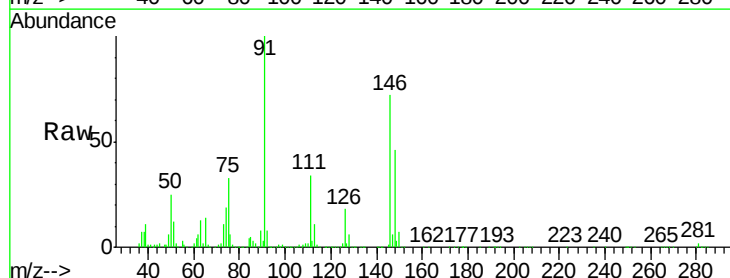
Tgt Ion: 91 Resp: 1879382

Ion Ratio Lower Upper

91 100

126 17.3 14.9 22.3

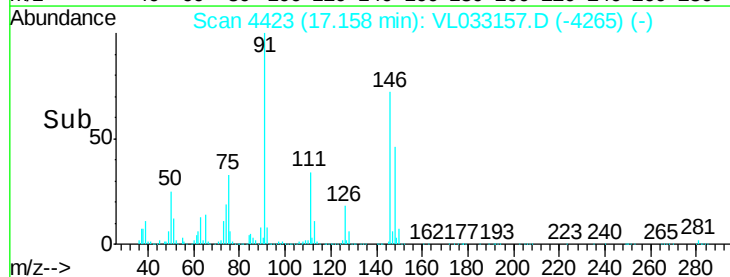
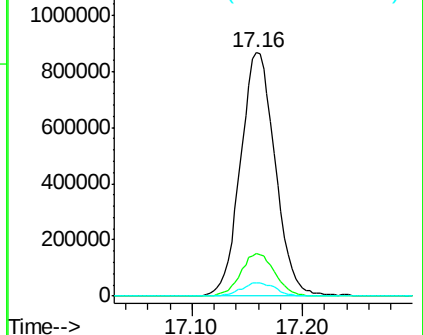
128 5.5 4.7 7.1

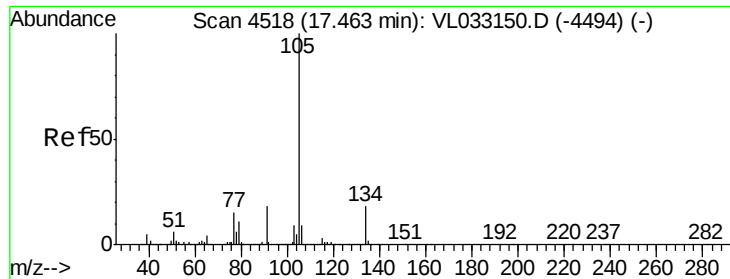


Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V

Ion 128.10 (127.80 to 128.80): V





#67

sec-Butylbenzene

Concen: 7.741 ppbv

RT: 17.46 min Scan# 4518

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Instrument :

MSVOA_L

ClientSampleId :

ICVVL020419

Tot Ion:105 Resp: 5311900

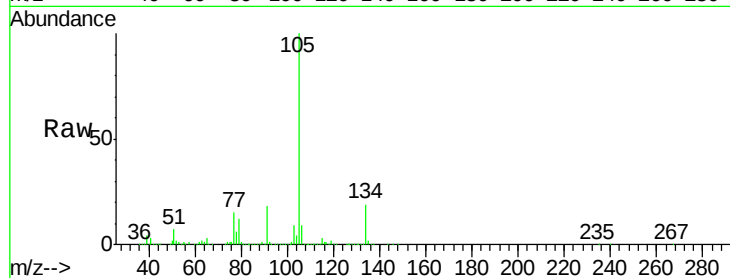
Ion Ratio Lower Upper

105 100

134 18.0 14.4 21.6

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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V

2500000

2000000

1500000

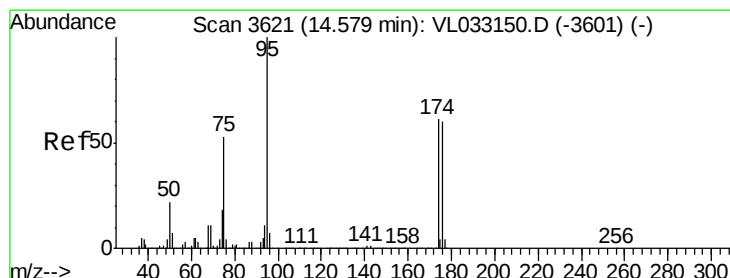
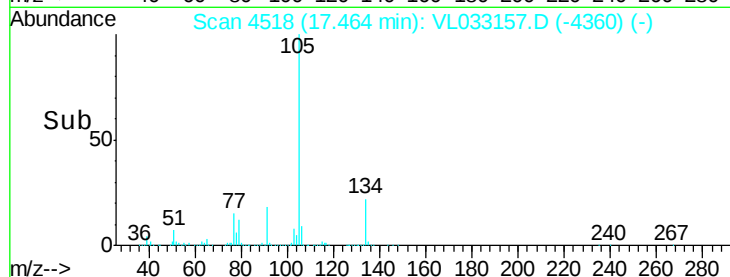
1000000

500000

0

17.40 17.50

Time-->



#68

1-Bromo-4-Fluorobenzene

Concen: 10.423 ppbv

RT: 14.58 min Scan# 3621

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

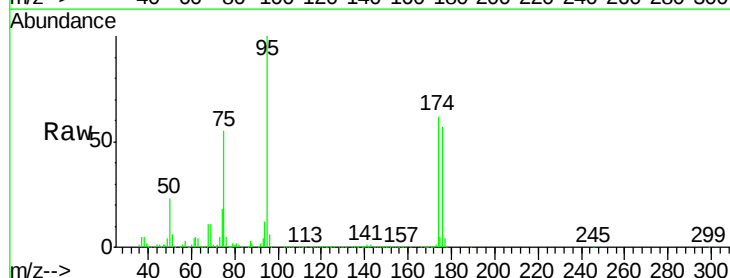
Tgt Ion: 95 Resp: 2449677

Ion Ratio Lower Upper

95 100

174 59.5 49.2 73.8

175 4.5 3.7 5.5



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

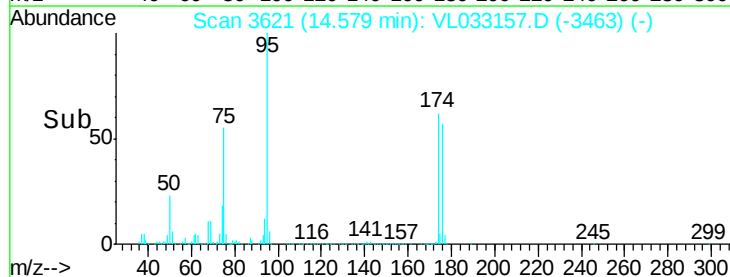
1000000

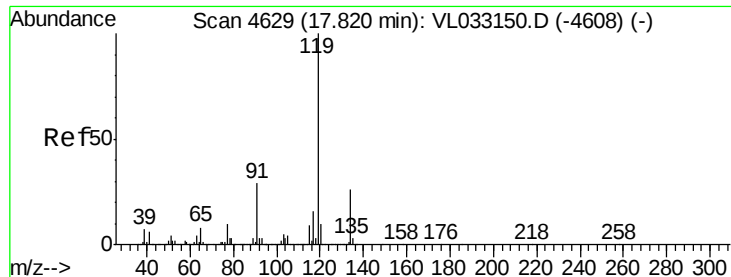
500000

0

14.50 14.60

Time-->





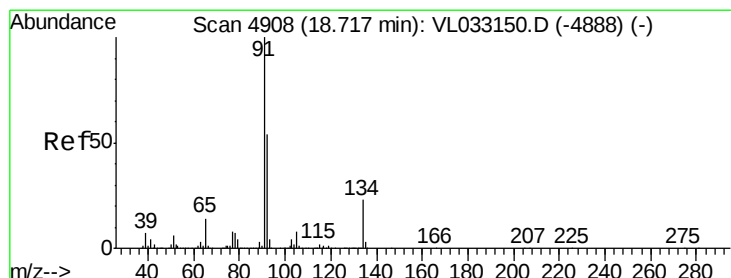
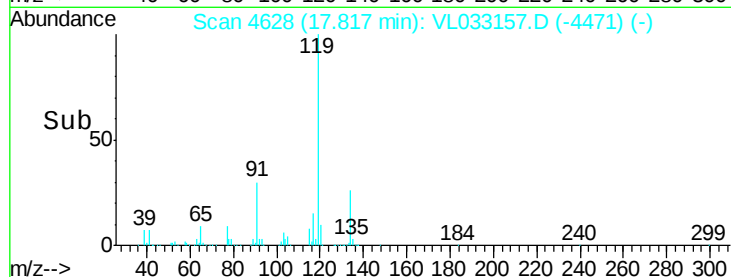
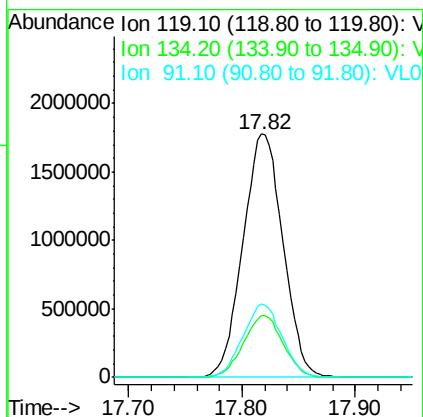
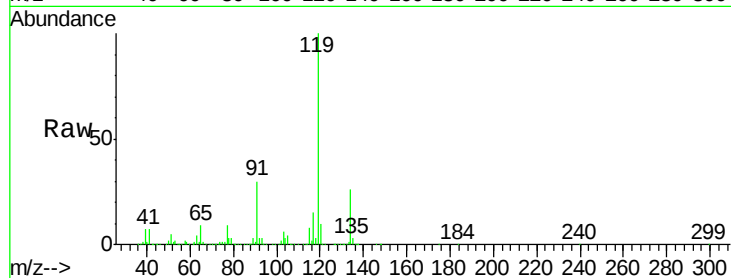
#69
p-Isopropyltoluene
Concen: 7.699 ppbv
RT: 17.82 min Scan# 4628
Delta R.T. 0.00 min
Lab File: VL033157.D
Acq: 4 Feb 2019 15:04

Instrument :
MSVOA_L
ClientSampleId :
ICVVL020419

Tot Ion	Ratio	Lower	Upper
119	100		
134	25.1	20.3	30.5
91	29.5	22.6	33.8

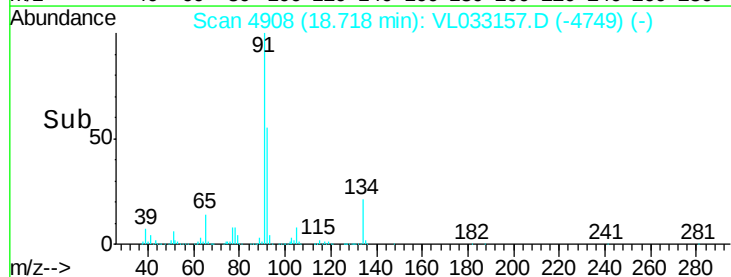
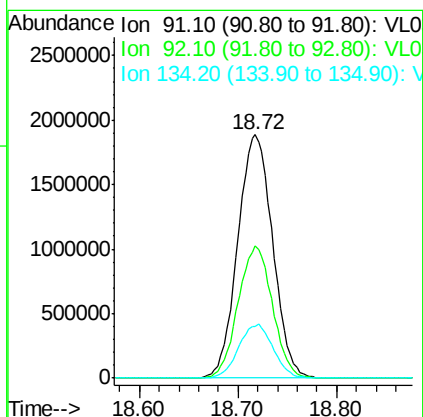
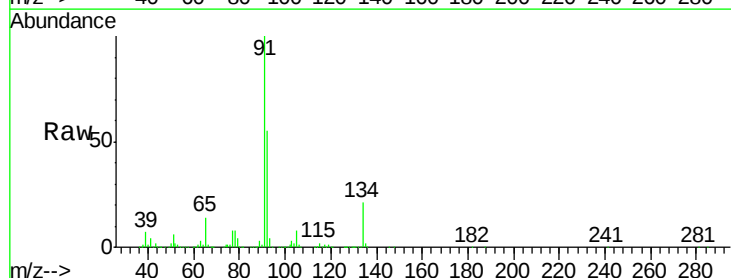
Manual Integrations
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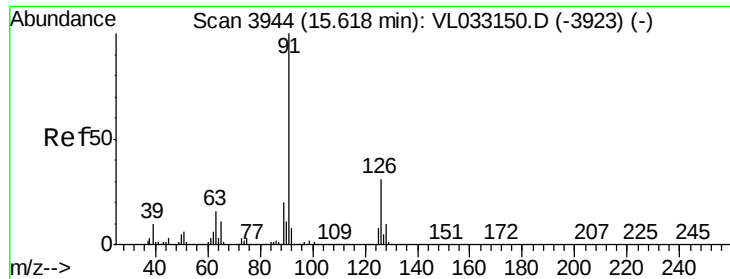
MMDadoda
2/5/2019 10:27:41 AM



#70
n-Butylbenzene
Concen: 7.464 ppbv
RT: 18.72 min Scan# 4908
Delta R.T. 0.01 min
Lab File: VL033157.D
Acq: 4 Feb 2019 15:04

Tgt Ion	Ratio	Lower	Upper
91	100		
92	53.6	43.7	65.5
134	21.8	18.4	27.6





#71

2-Chlorotoluene

Concen: 8.166 ppbv

RT: 15.62 min Scan# 3944

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Instrument :

MSVOA_L

ClientSampleId :

ICVVL020419

Tot Ion: 91 Resp: 3464614

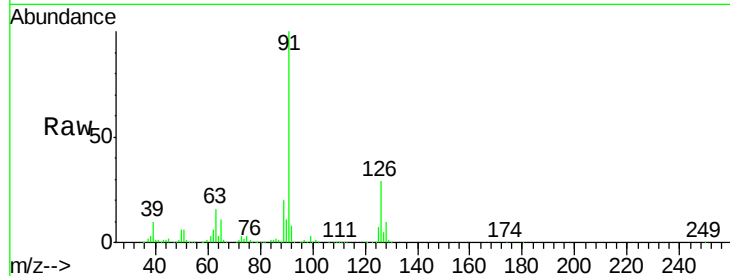
Ion Ratio Lower Upper

91 100

126 29.2 12.3 49.1

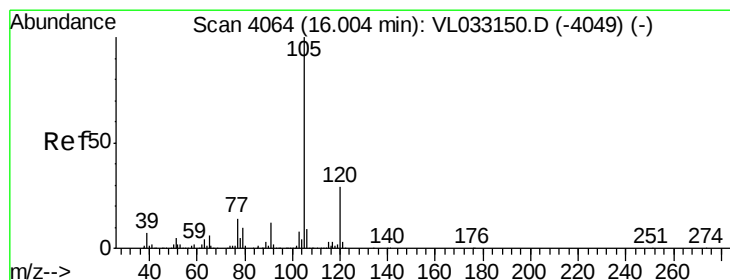
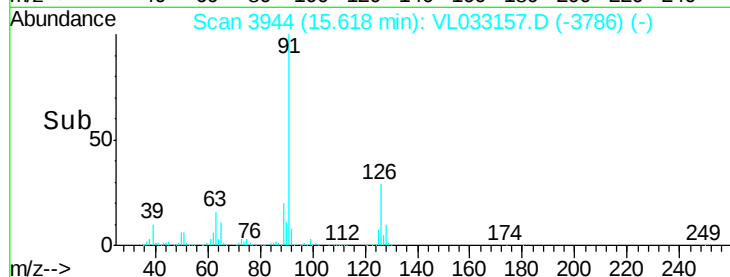
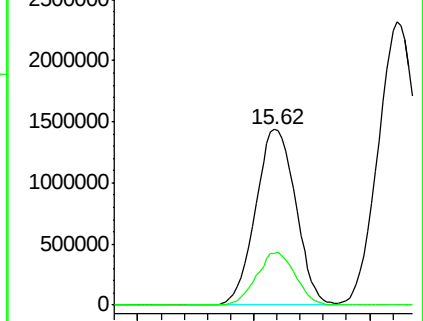
Manual Integrations
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V



#72

4-Ethyltoluene

Concen: 8.176 ppbv

RT: 16.00 min Scan# 4063

Delta R.T. 0.00 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Tgt Ion: 105 Resp: 3663893

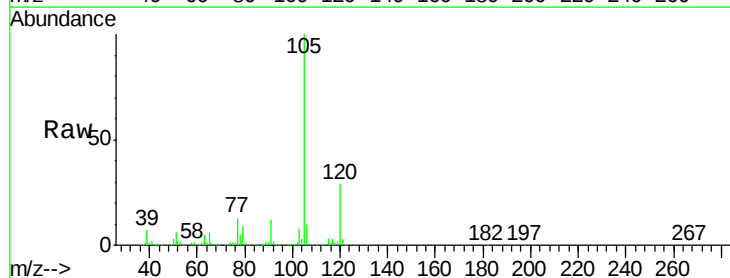
Ion Ratio Lower Upper

105 100

120 28.7 23.2 34.8

91 12.6 9.5 14.3

77 13.7 10.2 15.4

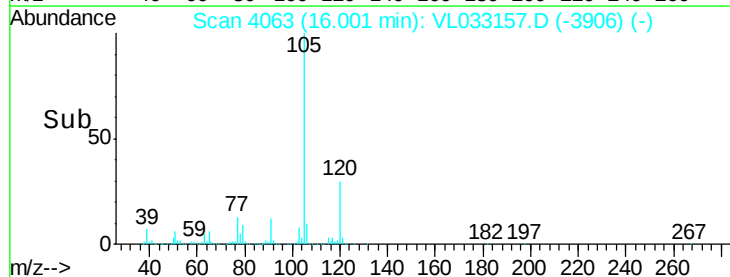
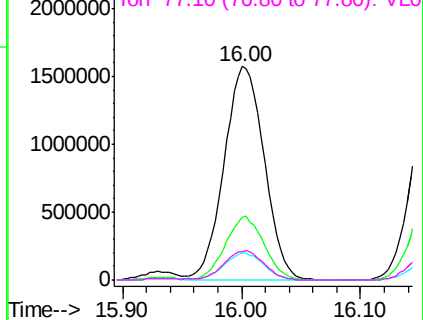


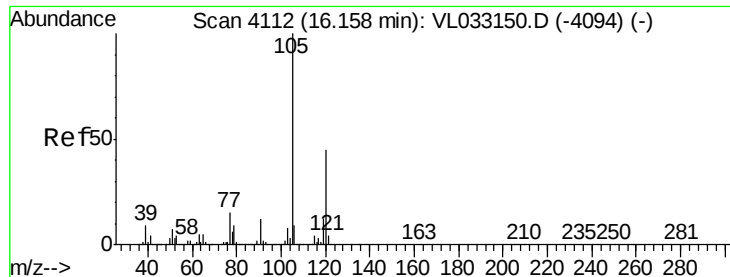
Abundance Ion 105.10 (104.80 to 105.80): V

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





#73

1,3,5-Trimethylbenzene

Concen: 7.948 ppbv

RT: 16.16 min Scan# 4113

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Instrument :

MSVOA_L

ClientSampleId :

ICVVL020419

Tot Ion:105 Resp: 3433858

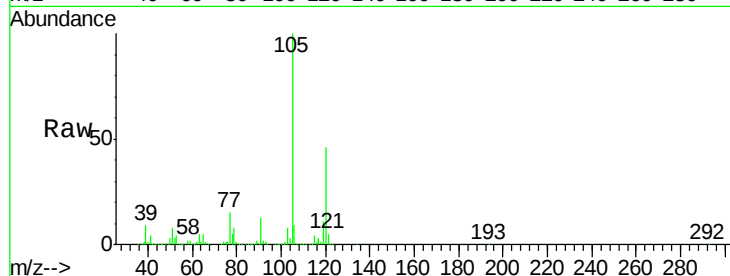
Ion Ratio Lower Upper

105 100

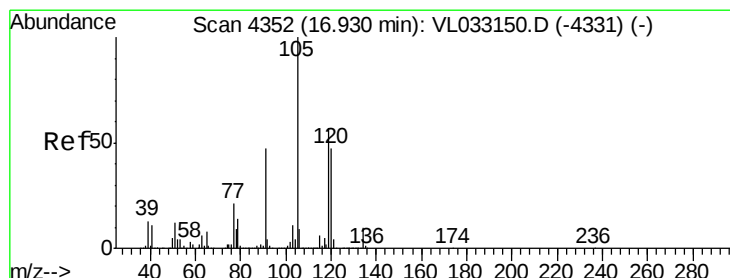
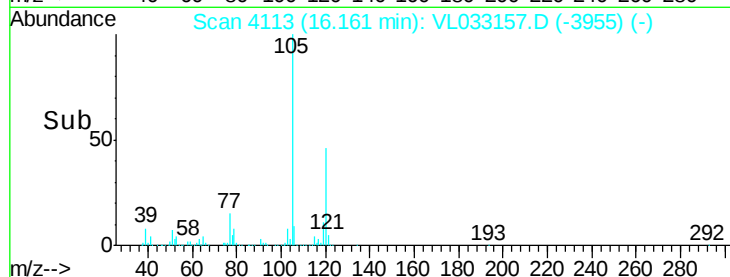
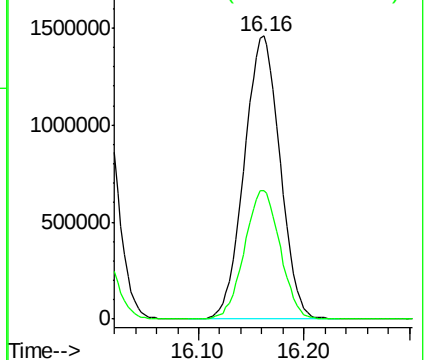
120 45.6 38.0 57.0

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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: 7.622 ppbv

RT: 16.93 min Scan# 4352

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Tgt Ion:105 Resp: 3358798

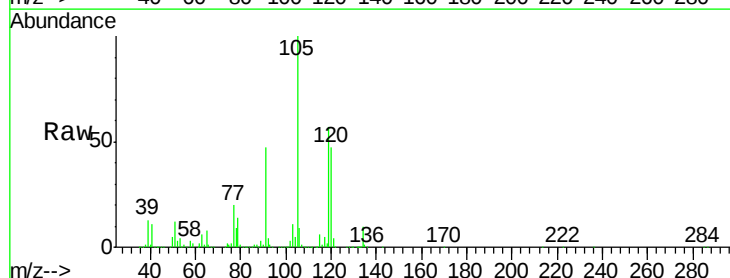
Ion Ratio Lower Upper

105 100

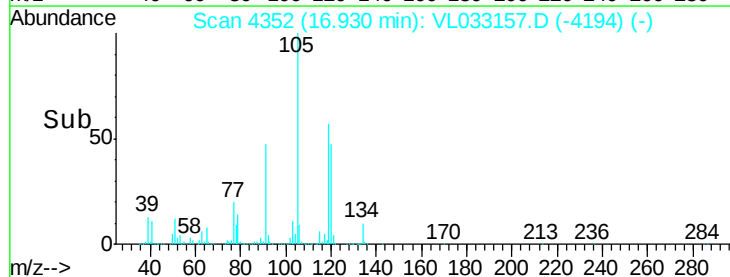
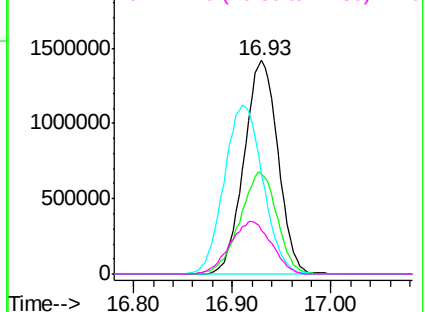
120 47.0 38.2 57.4

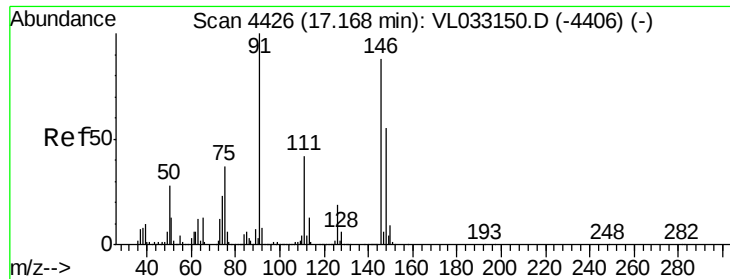
91 46.6 35.0 52.4

77 20.2 15.8 23.6



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: 7.516 ppbv

RT: 17.17 min Scan# 4426

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Instrument :

MSVOA_L

ClientSampleId :

ICVVL020419

Tot Ion:146 Resp: 1828582

Ion Ratio Lower Upper

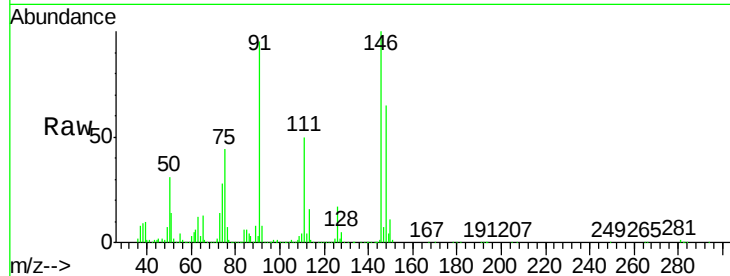
146 100

111 48.1 24.0 72.0

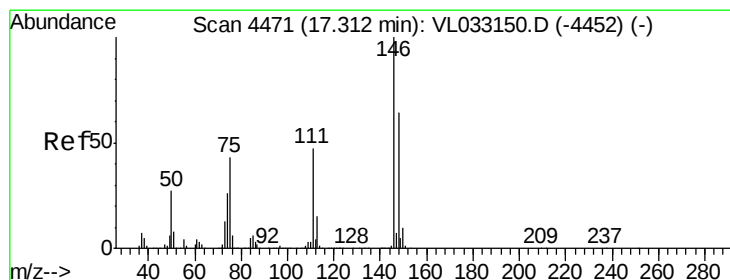
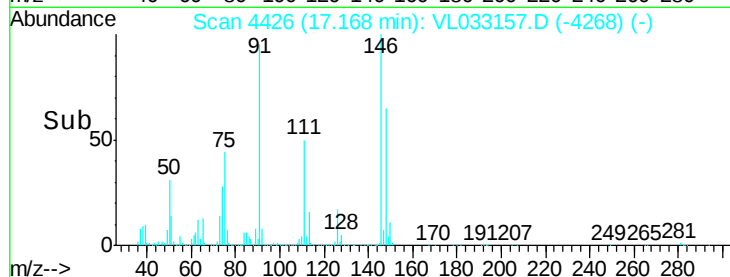
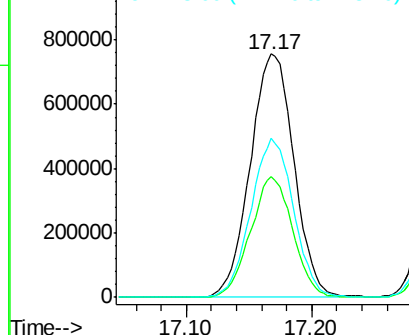
148 64.0 31.9 95.7

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2/5/2019 10:27:41 AM



Abundance Ion 146.00 (145.70 to 146.70): V
Ion 111.10 (110.80 to 111.80): V
Ion 148.00 (147.70 to 148.70): V



#76

1,4-Dichlorobenzene

Concen: 7.607 ppbv

RT: 17.31 min Scan# 4470

Delta R.T. 0.00 min

Lab File: VL033157.D

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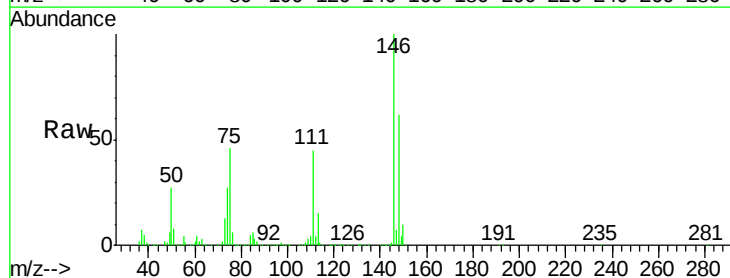
Tgt Ion:146 Resp: 1858994

Ion Ratio Lower Upper

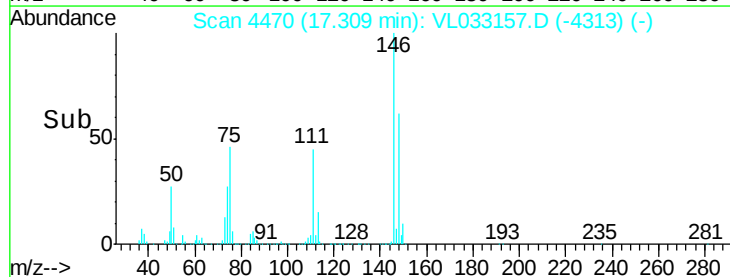
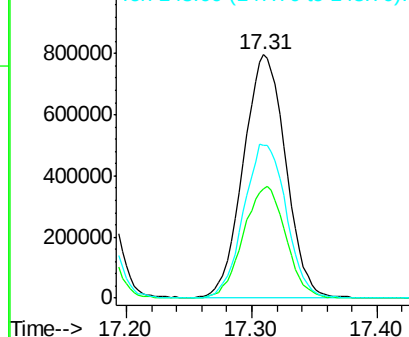
146 100

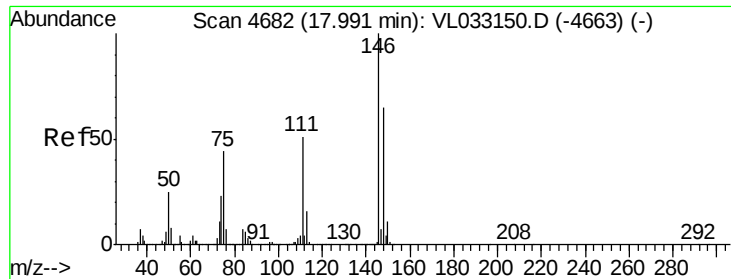
111 46.5 23.4 70.0

148 64.3 31.9 95.9



Abundance Ion 146.00 (145.70 to 146.70): V
Ion 111.10 (110.80 to 111.80): V
Ion 148.00 (147.70 to 148.70): V





#77

1,2-Dichlorobenzene

Concen: 7.578 ppbv

RT: 17.99 min Scan# 4682

Delta R.T. 0.01 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Instrument :

MSVOA_L

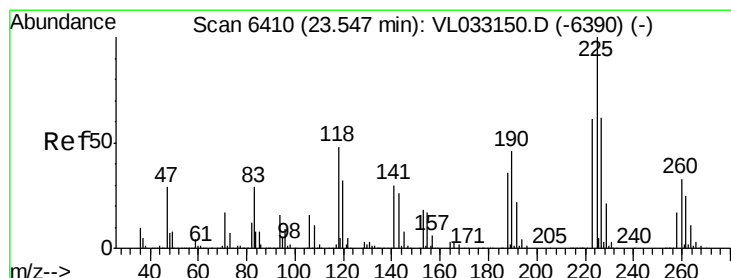
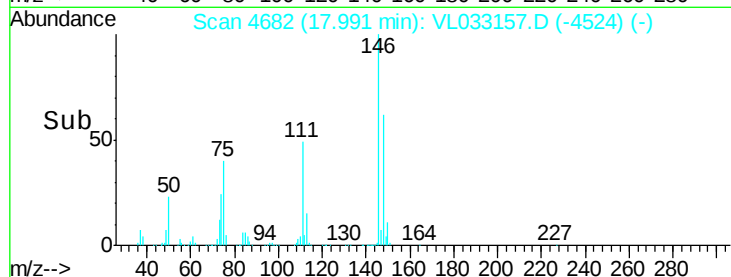
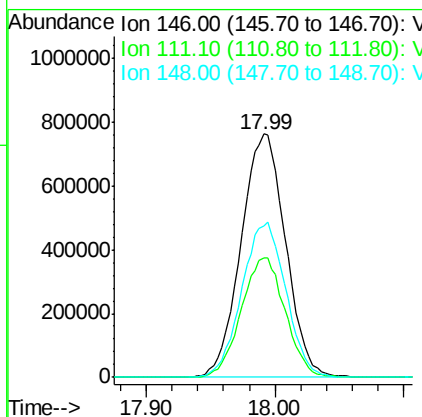
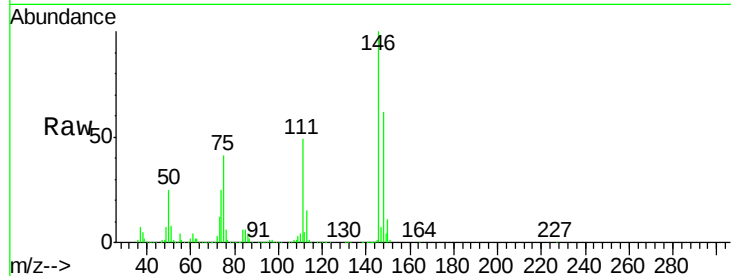
ClientSampleId :

ICVVL020419

Tot Ion	Ratio	Lower	Upper
146	100		
111	48.7	25.1	75.3
148	63.5	32.0	96.2

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#78

Hexachloro-1,3-Butadiene

Concen: 11.197 ppbv

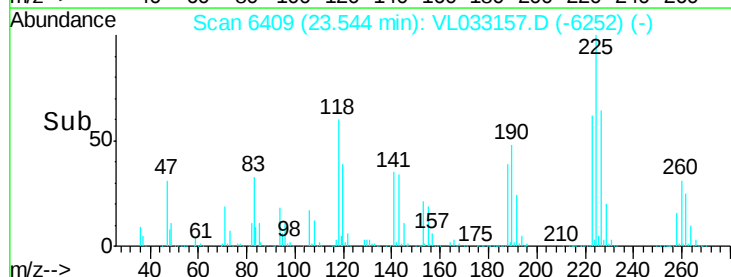
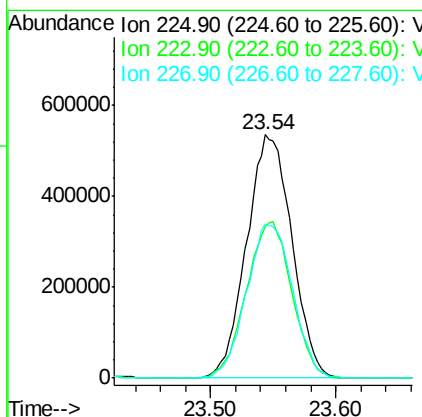
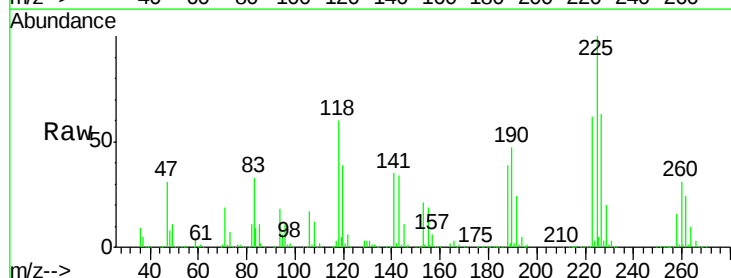
RT: 23.54 min Scan# 6409

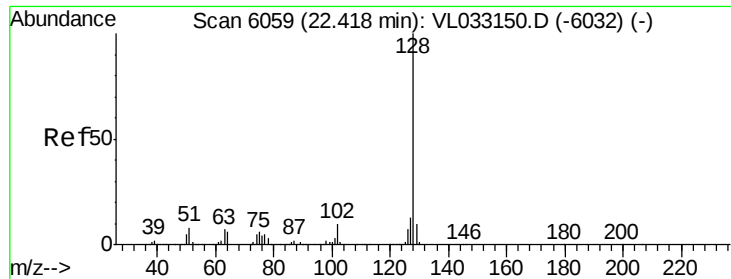
Delta R.T. 0.00 min

Lab File: VL033157.D

Acq: 4 Feb 2019 15:04

Tgt Ion	Ratio	Lower	Upper
225	100		
223	64.2	50.2	75.4
227	64.5	51.1	76.7





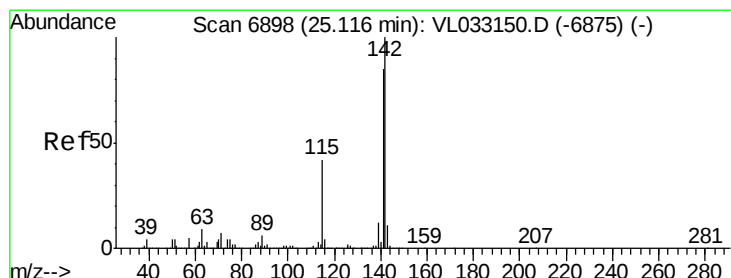
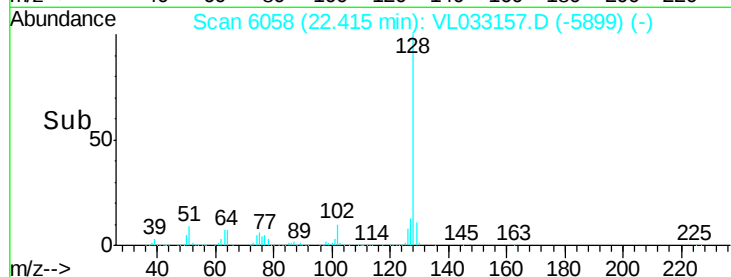
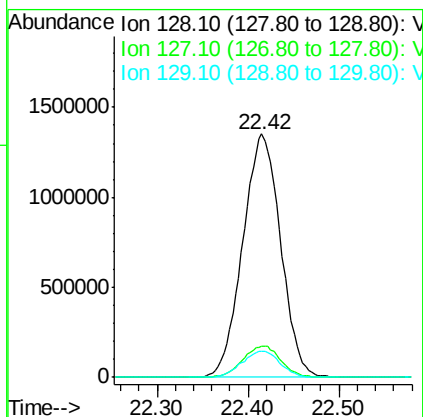
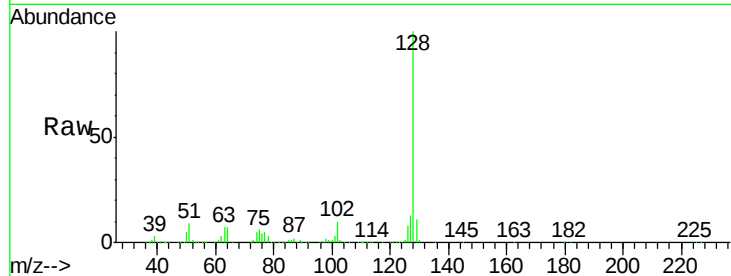
#79
Naphthalene
Concen: 7.568 ppbv
RT: 22.42 min Scan# 6058
Delta R.T. 0.01 min
Lab File: VL033157.D
Acq: 4 Feb 2019 15:04

Instrument :
MSVOA_L
ClientSampleId :
ICVVL020419

Tot Ion	Ratio	Lower	Upper
128	100		
127	13.0	10.6	16.0
129	10.9	9.0	13.4

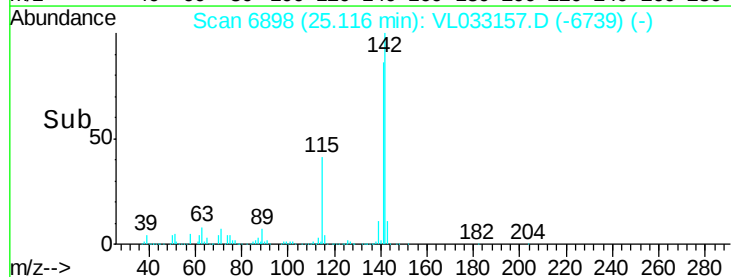
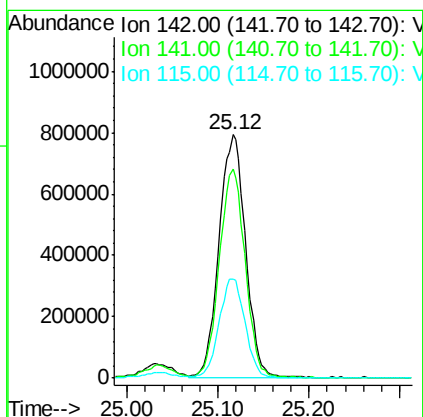
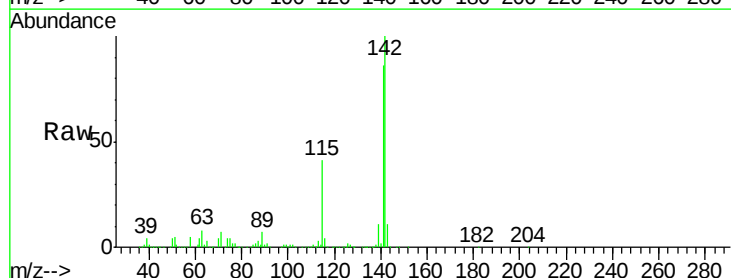
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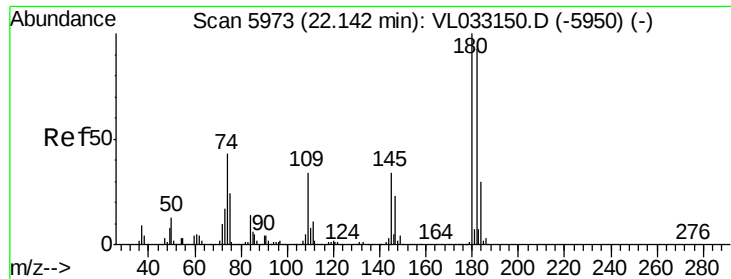
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#80
Naphthalene, 2-methyl-
Concen: 6.070 ppbv
RT: 25.12 min Scan# 6898
Delta R.T. 0.01 min
Lab File: VL033157.D
Acq: 4 Feb 2019 15:04

Tgt Ion	Ratio	Lower	Upper
142	100		
141	85.2	66.5	99.7
115	40.3	31.3	46.9





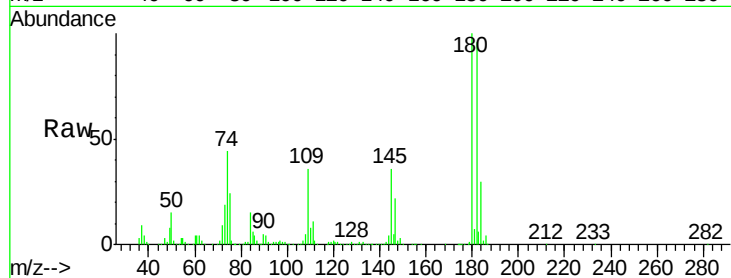
#81
 1,2,4-Trichlorobenzene
 Concen: 7.461 ppbv
 RT: 22.14 min Scan# 5972
 Delta R.T. 0.01 min
 Lab File: VL033157.D
 Acq: 4 Feb 2019 15:04

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL020419

Tot Ion	Ratio	Lower	Upper
180	100		
182	96.2	76.2	114.4
184	30.4	24.6	36.8

Manual Integrations
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Abundance

Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 184.00 (183.70 to 184.70): V

