

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL020419\
 Data File : VL033150.D
 Acq On : 4 Feb 2019 10:01
 Operator : SY/AP
 Sample : VSTDICCC010
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICCC010

Manual Integrations
 APPROVED

MMDadoda
 2/5/2019 10:26:59 AM

Quant Time: Feb 04 14:43:07 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL020419AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Feb 04 2019
 QLast Update : Fri Feb 01 22:01:04 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	1204441	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	3602678	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	3703540m	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.58	95	2743474	9.81	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.10%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	1456426	8.063	ppbv	97
3) Chlorodifluoromethane	3.02	51	1290348	6.661	ppbv	99
4) Chloromethane	3.17	50	740789	6.643	ppbv	96
5) Vinyl Chloride	3.29	62	712978	5.845	ppbv	98
6) Bromomethane	3.52	94	409702	7.622	ppbv	97
7) Chloroethane	3.60	64	253305	7.695	ppbv	94
8) Dichlorotetrafluoroethane	3.22	85	1542376	6.905	ppbv	99
9) Propene	3.04	41	650693	6.574	ppbv	100
10) Heptane	8.25	43	2044681	11.086	ppbv	98
11) Trichlorofluoromethane	4.00	101	1672144	8.797	ppbv	98
12) 1,1,2-Trichlorotrifluoroet	4.55	101	1081687	8.941	ppbv	99
13) Ethanol	3.65	45	183091m	6.538	ppbv	
14) Bromoethene	3.79	108	519005	8.481	ppbv	100
15) Acetone	3.90	43	1186074	7.768	ppbv	99
16) 1,3-Butadiene	3.36	39	606861	8.290	ppbv	99
17) tert-Butyl alcohol	4.36	59	325261	8.836	ppbv	100
18) 1,1-Dichloroethene	4.35	96	506215	8.662	ppbv	96
19) Isopropyl Alcohol	4.02	45	1062126	9.098	ppbv	96
20) Methylene Chloride	4.41	84	428127	7.248	ppbv	98
21) Allyl Chloride	4.48	41	867705	8.846	ppbv	97
22) trans-1,2-Dichloroethene	4.97	96	493327	9.059	ppbv	99
23) Vinyl Acetate	5.16	43	2346773	8.851	ppbv	99
24) 1,1-Dichloroethane	5.09	63	1558711	8.812	ppbv	99
25) Ethyl Acetate	5.77	43	2621752	8.016	ppbv	100
26) Hexane	5.78	57	1192730	7.449	ppbv	99
27) Carbon Disulfide	4.62	76	1298443	10.043	ppbv	96
28) Methyl tert-Butyl Ether	5.11	73	2024923	8.799	ppbv	100
29) Chloroform	5.85	83	1838349	8.500	ppbv	100
30) Cyclohexane	7.25	84	1343449	10.823	ppbv	99
31) cis-1,2-Dichloroethene	5.64	61	1256225	8.592	ppbv	98
32) 1,1,1-Trichloroethane	6.62	97	2264573	10.141	ppbv #	82
34) 2-Butanone	5.33	43	1838860	6.677	ppbv	99
35) Carbon Tetrachloride	7.13	117	2268348	8.391	ppbv	98
36) Benzene	7.01	78	3215837	7.959	ppbv	99
37) 1,2-Dichloroethane	6.42	62	1693530	8.233	ppbv	100
38) Trichloroethene	7.96	130	1143896	7.032	ppbv	98
39) 1,2-Dichloropropane	7.74	63	1244530	8.405	ppbv	98
40) 1,4-Dioxane	7.96	88	447922	8.590	ppbv #	1
41) Tetrahydrofuran	6.15	42	1094848	6.617	ppbv	98
42) Bromodichloromethane	7.92	83	2549086	8.693	ppbv	99
43) Methyl Methacrylate	8.14	69	1318325	9.313	ppbv	98

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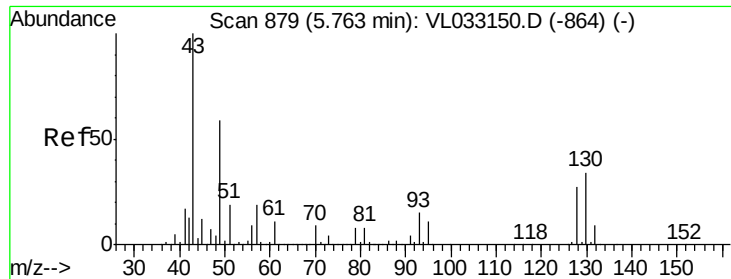
Manual Integrations
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Quant Time: Feb 04 14:43:07 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL020419AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Feb 0
 QLast Update : Fri Feb 01 22:01:04 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,2,4-Trimethylpentane	7.99	57	5285832	8.109	ppbv	99
45) t-1,3-Dichloropropene	9.42	75	1738121	10.164	ppbv	97
46) cis-1,3-Dichloropropene	8.84	75	2028885	9.896	ppbv	98
47) 1,1,2-Trichloroethane	9.62	97	1240595	9.186	ppbv	94
48) Dibromochloromethane	10.45	129	2054909	9.128	ppbv	100
49) Bromoform	13.20	173	1732487	9.275	ppbv	99
50) 4-Methyl-2-Pentanone	8.87	43	3181381	8.894	ppbv	100
51) 2-Hexanone	10.27	43	2519545	7.907	ppbv	99
52) Tetrachloroethene	11.38	164	1022937	6.675	ppbv	98
53) Toluene	9.95	91	3619972	7.825	ppbv	100
54) 1,2-Dibromoethane	10.76	107	1955625	7.698	ppbv	98
56) 1,1,1,2-Tetrachloroethane	12.28	131	1455619	8.836	ppbv #	57
57) Chlorobenzene	12.31	112	2662382	8.169	ppbv	99
58) Ethyl Benzene	12.87	91	5035103	8.289	ppbv	100
59) m/p-Xylene	13.13	91	8068440m	16.285	ppbv	
60) o-Xylene	13.85	91	3856428	8.048	ppbv	98
61) Styrene	13.69	104	3158676	8.593	ppbv	98
62) Isopropylbenzene	14.83	105	5565304	8.169	ppbv	99
63) 1,1,2,2-Tetrachloroethane	13.84	83	2694403	7.452	ppbv	99
64) n-propylbenzene	15.72	120	1512162	8.662	ppbv	97
65) tert-Butylbenzene	16.91	119	4965268	8.660	ppbv	98
66) Benzyl Chloride	17.16	91	3148378	12.259	ppbv	98
67) sec-Butylbenzene	17.46	105	7193053	8.833	ppbv	100
69) p-Isopropyltoluene	17.82	119	5918586	9.221	ppbv	99
70) n-Butylbenzene	18.72	91	6063463	9.285	ppbv	100
71) 2-Chlorotoluene	15.62	91	4557863	8.790	ppbv	98
72) 4-Ethyltoluene	16.00	105	4822632	8.978	ppbv	99
73) 1,3,5-Trimethylbenzene	16.16	105	4586183	9.470	ppbv	96
74) 1,2,4-Trimethylbenzene	16.93	105	4522281	9.481	ppbv	96
75) 1,3-Dichlorobenzene	17.17	146	2517667	8.859	ppbv	100
76) 1,4-Dichlorobenzene	17.31	146	2599503	9.161	ppbv	100
77) 1,2-Dichlorobenzene	17.99	146	2530160	9.231	ppbv	100
78) Hexachloro-1,3-Butadiene	23.55	225	1084262	8.538	ppbv	100
79) Naphthalene	22.42	128	5017432m	16.042	ppbv	
80) Naphthalene, 2-methyl-	25.12	142	2437280	26.419	ppbv	99
81) 1,2,4-Trichlorobenzene	22.14	180	2297285	13.953	ppbv	100

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 879

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDICCC010

Tot Ion: 49 Resp: 1204441

Ion Ratio Lower Upper

49 100

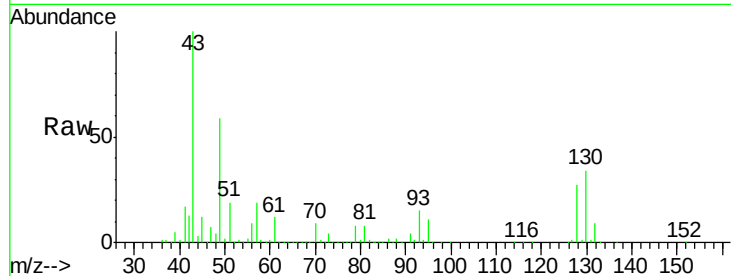
128 45.6 23.2 69.5

130 58.3 29.5 88.6

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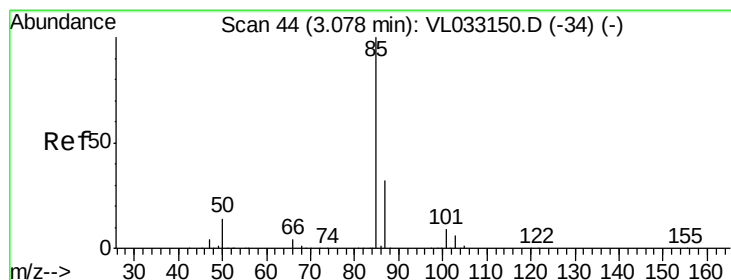
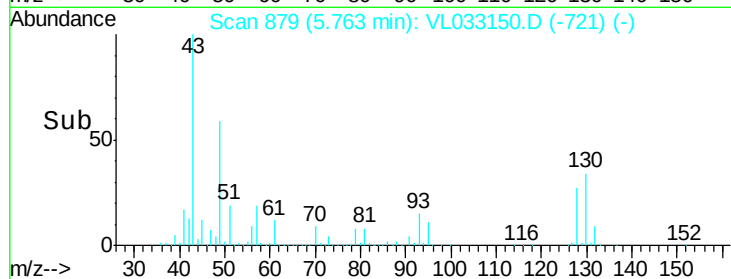
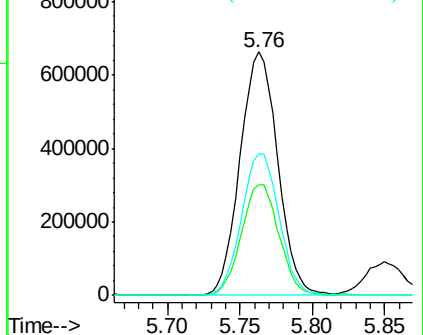
2/5/2019 10:26:59 AM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 8.063 ppbv

RT: 3.08 min Scan# 44

Delta R.T. 0.00 min

Lab File: VL033150.D

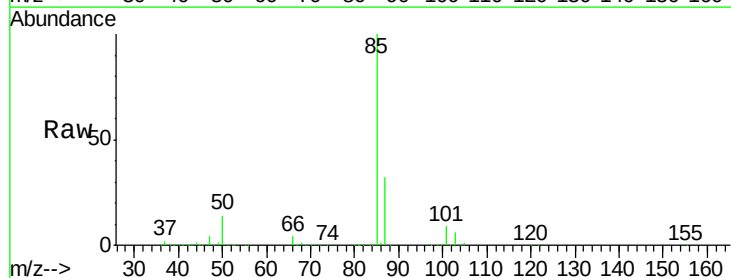
Acq: 4 Feb 2019 10:01

Tgt Ion: 85 Resp: 1456426

Ion Ratio Lower Upper

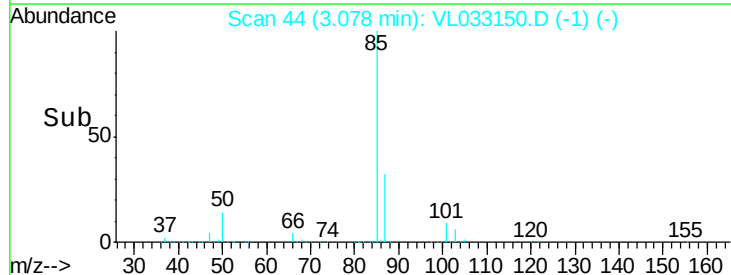
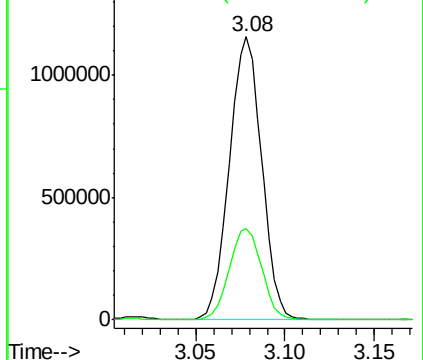
85 100

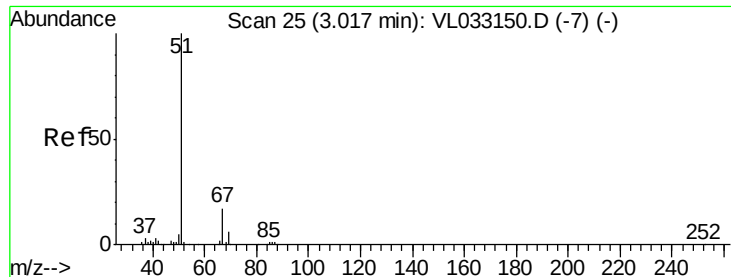
87 32.4 27.4 41.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 6.661 ppbv

RT: 3.02 min Scan# 25

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Tot Ion: 51 Resp: 1290348

Ion Ratio Lower Upper

51 100

67 17.0 13.4 20.2

Instrument :

MSVOA_L

ClientSampleId :

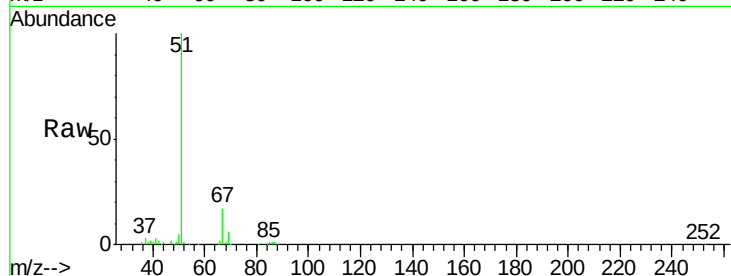
VSTDICCC010

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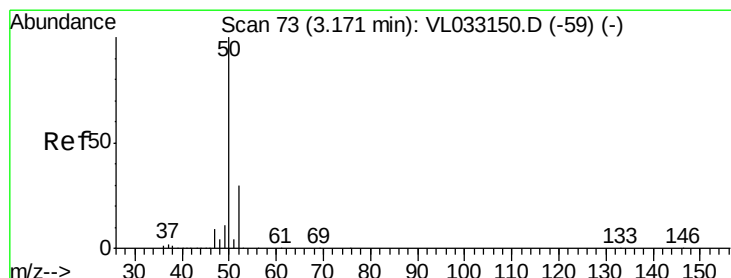
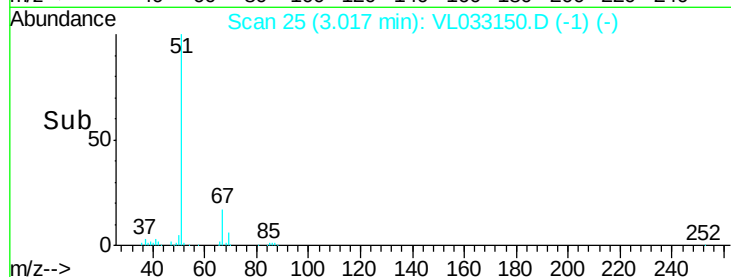
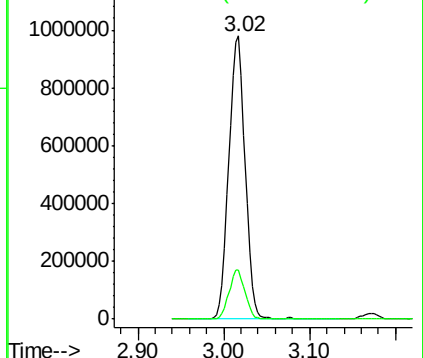
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 6.643 ppbv

RT: 3.17 min Scan# 73

Delta R.T. 0.00 min

Lab File: VL033150.D

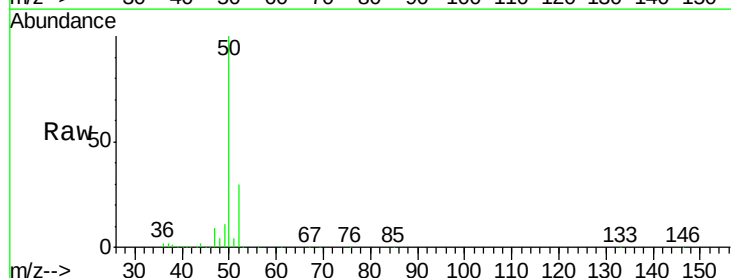
Acq: 4 Feb 2019 10:01

Tgt Ion: 50 Resp: 740789

Ion Ratio Lower Upper

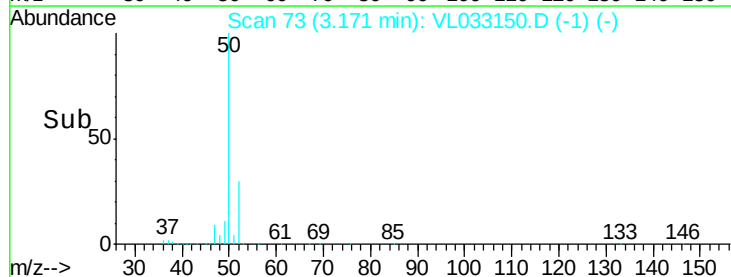
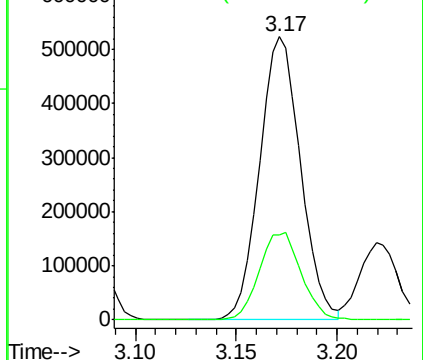
50 100

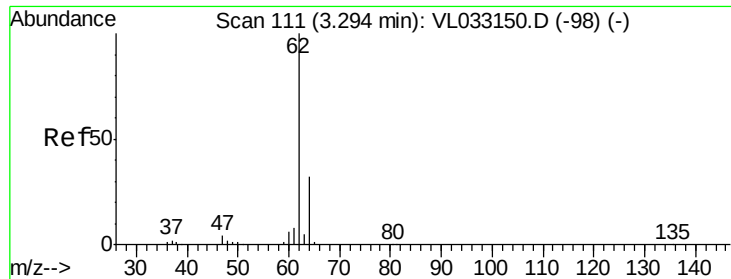
52 30.1 25.7 38.5



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 5.845 ppbv

RT: 3.29 min Scan# 111

Delta R.T. 0.00 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDICCC010

Tot Ion: 62 Resp: 712978

Ion Ratio Lower Upper

62 100

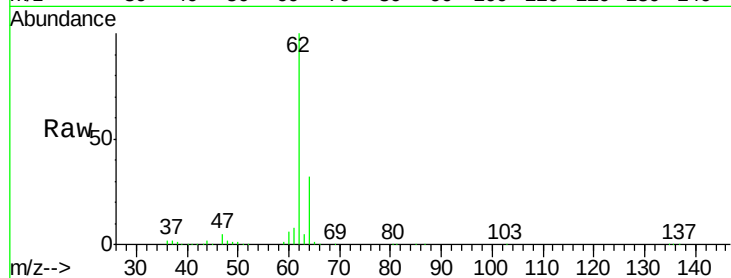
64 31.7 26.3 39.5

Manual Integrations

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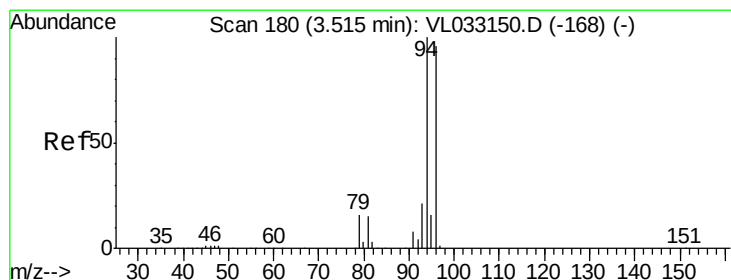
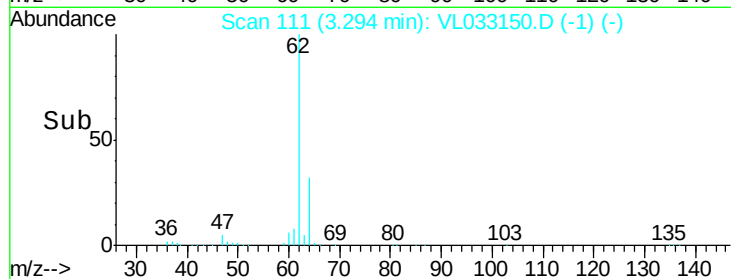
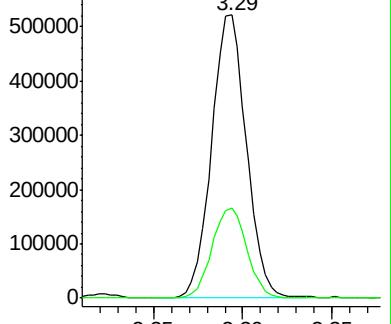
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Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#6

Bromomethane

Concen: 7.622 ppbv

RT: 3.52 min Scan# 180

Delta R.T. 0.00 min

Lab File: VL033150.D

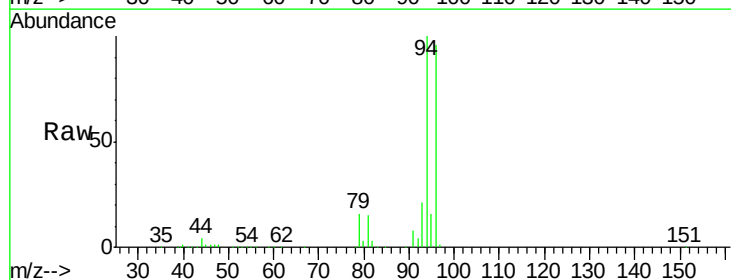
Acq: 4 Feb 2019 10:01

Tgt Ion: 94 Resp: 409702

Ion Ratio Lower Upper

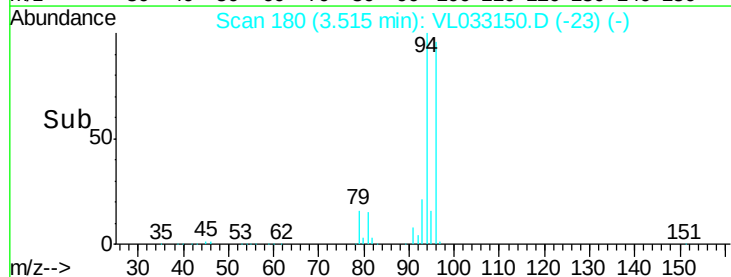
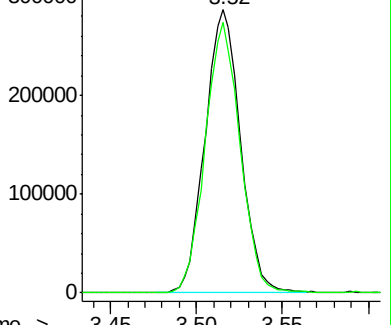
94 100

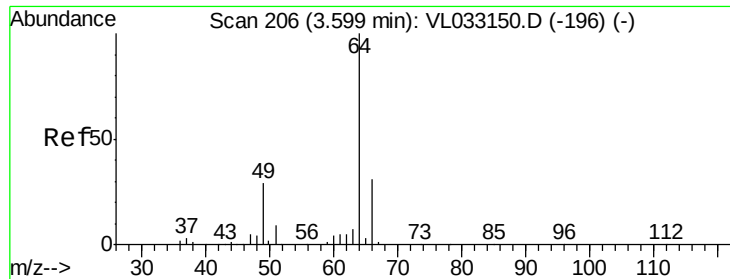
96 95.6 74.0 111.0



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0





#7

Chloroethane

Concen: 7.695 ppbv

RT: 3.60 min Scan# 206

Delta R.T. 0.00 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDICCC010

Tot Ion: 64 Resp: 253305

Ion Ratio Lower Upper

64 100

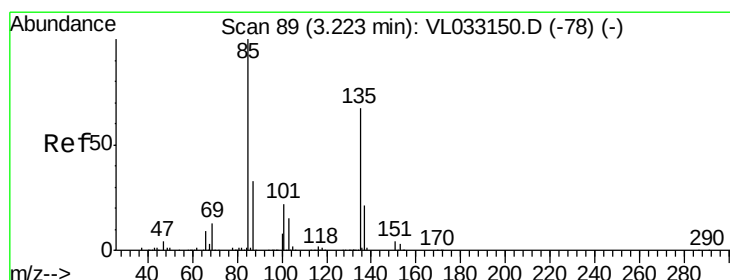
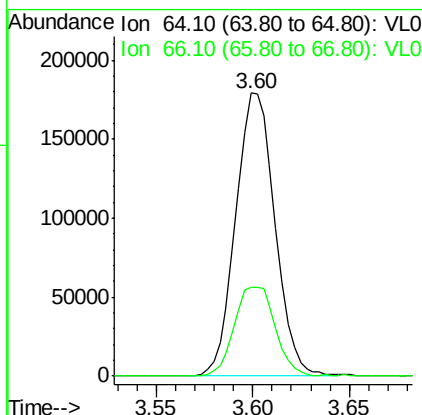
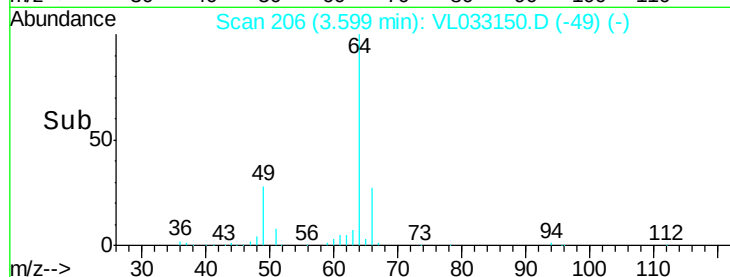
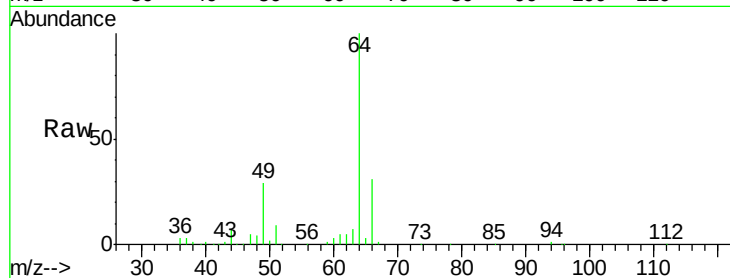
66 31.2 22.3 33.5

Manual Integrations

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#8

Dichlorotetrafluoroethane

Concen: 6.905 ppbv

RT: 3.22 min Scan# 89

Delta R.T. 0.01 min

Lab File: VL033150.D

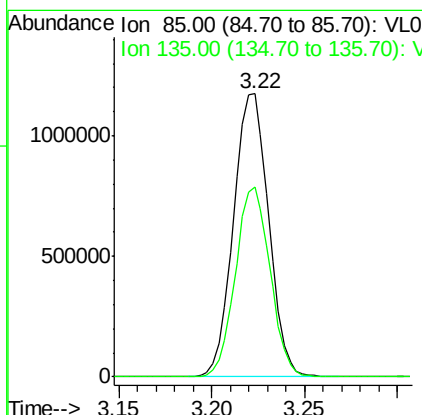
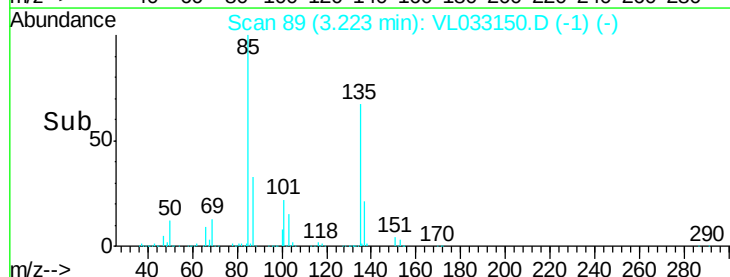
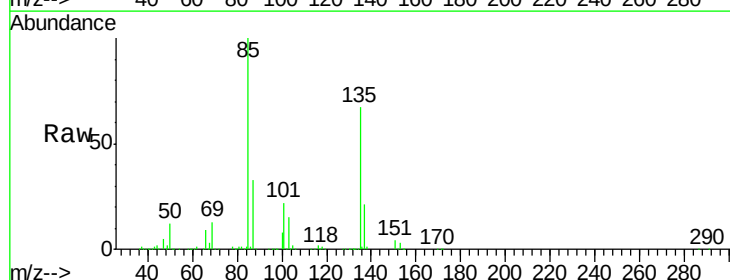
Acq: 4 Feb 2019 10:01

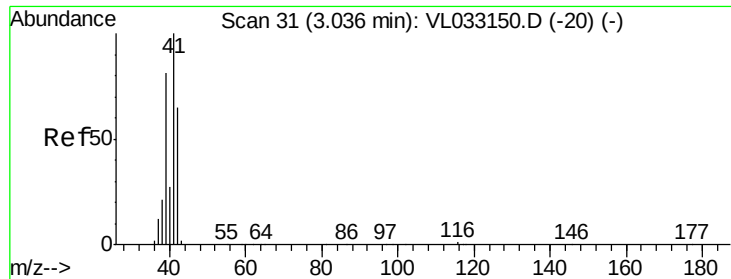
Tgt Ion: 85 Resp: 1542376

Ion Ratio Lower Upper

85 100

135 66.4 54.0 81.0





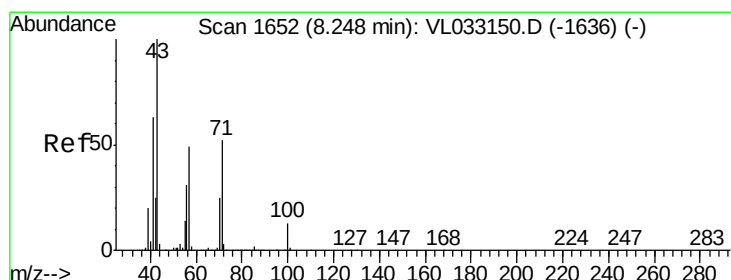
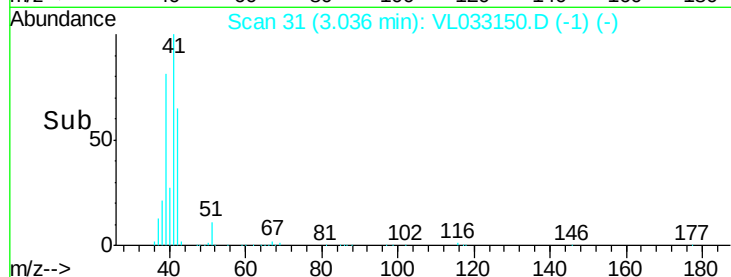
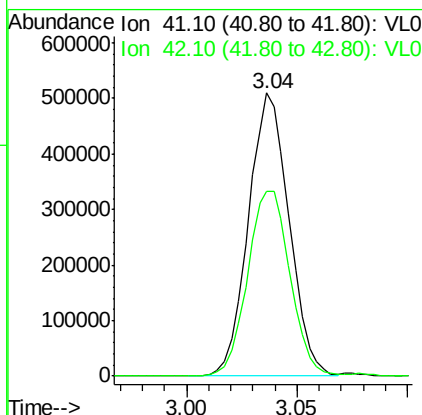
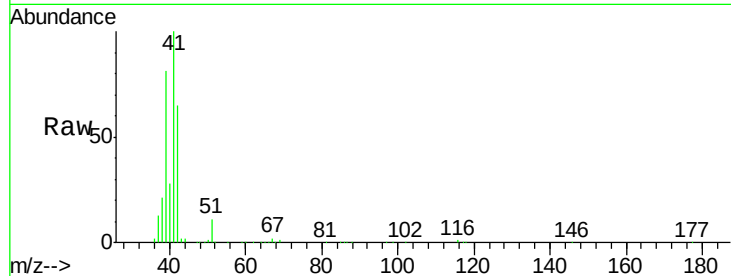
#9
 Propene
 Concen: 6.574 ppbv
 RT: 3.04 min Scan# 31
 Delta R.T. 0.00 min
 Lab File: VL033150.D
 Acq: 4 Feb 2019 10:01

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICCC010

Tot Ion: 41 Resp: 650693
 Ion Ratio Lower Upper
 41 100
 42 69.1 55.1 82.7

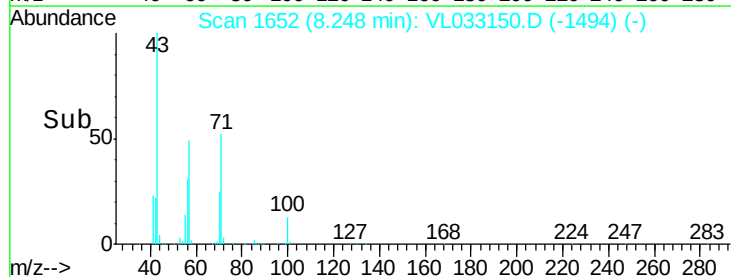
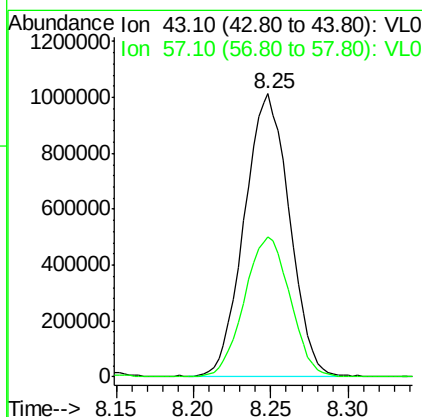
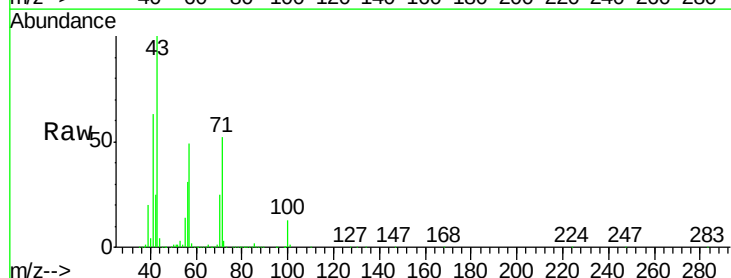
Manual Integrations
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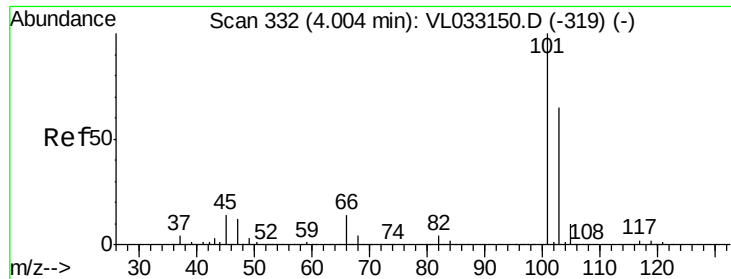
MMDadoda
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#10
 Heptane
 Concen: 11.086 ppbv
 RT: 8.25 min Scan# 1652
 Delta R.T. 0.01 min
 Lab File: VL033150.D
 Acq: 4 Feb 2019 10:01

Tgt Ion: 43 Resp: 2044681
 Ion Ratio Lower Upper
 43 100
 57 50.5 39.3 58.9





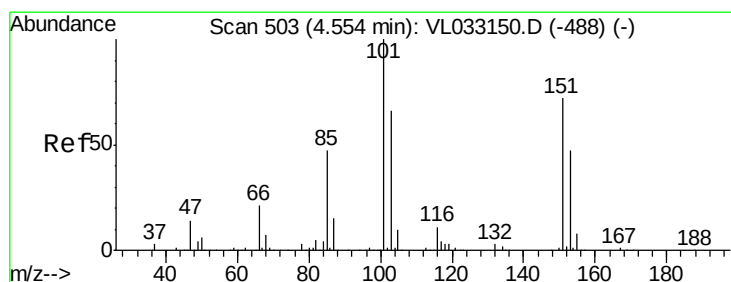
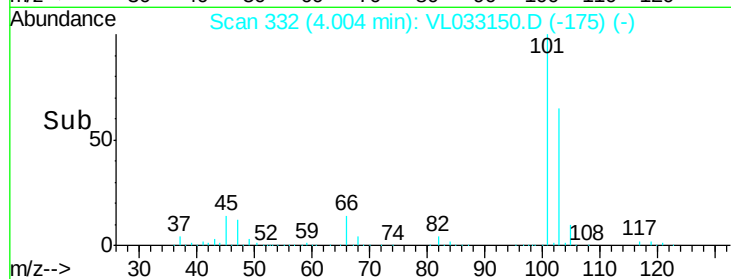
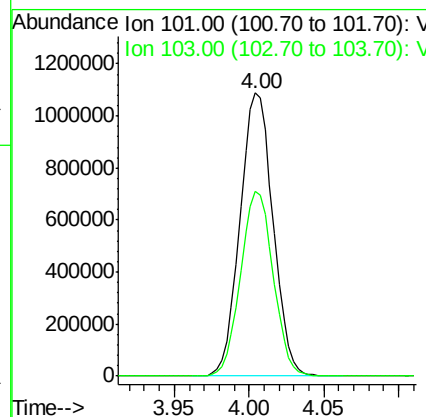
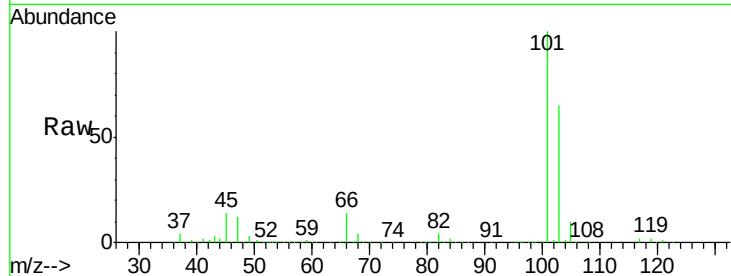
#11
 Trichlorofluoromethane
 Concen: 8.797 ppbv
 RT: 4.00 min Scan# 332
 Delta R.T. 0.00 min
 Lab File: VL033150.D
 Acq: 4 Feb 2019 10:01

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICCC010

Tot Ion:101 Resp: 1672144
 Ion Ratio Lower Upper
 101 100
 103 65.4 51.3 76.9

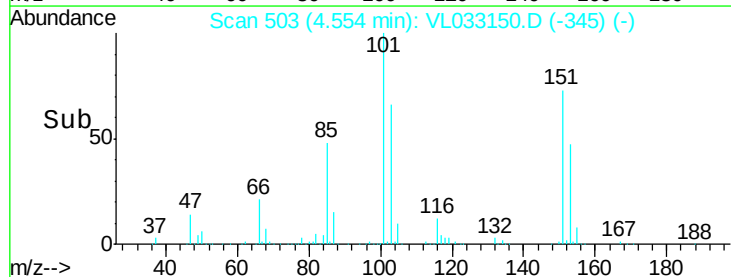
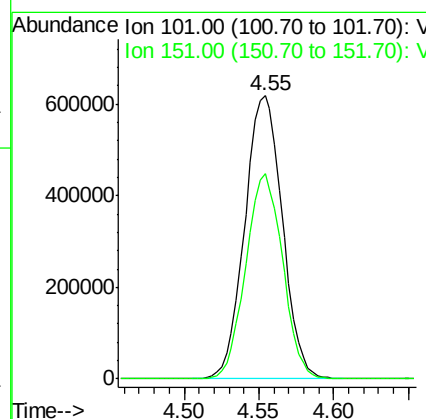
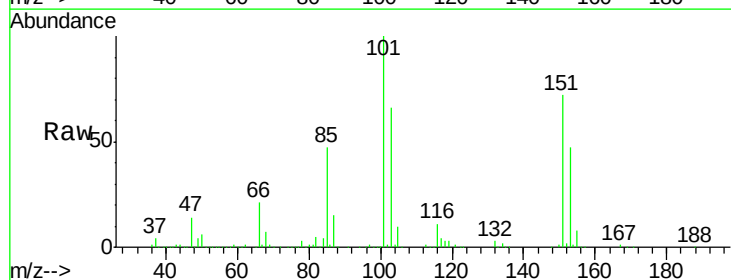
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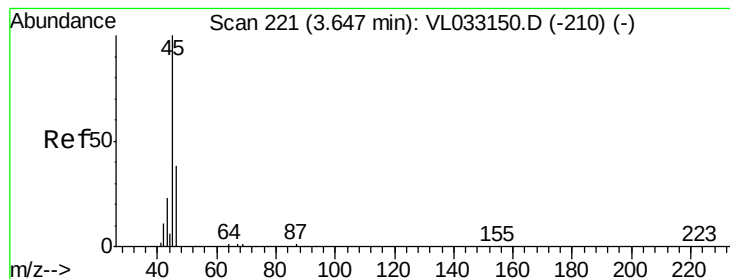
MMDadoda
 2/5/2019 10:26:59 AM



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 8.941 ppbv
 RT: 4.55 min Scan# 503
 Delta R.T. 0.01 min
 Lab File: VL033150.D
 Acq: 4 Feb 2019 10:01

Tgt Ion:101 Resp: 1081687
 Ion Ratio Lower Upper
 101 100
 151 71.3 57.9 86.9





#13

Ethanol

Concen: 6.538 ppbv m

RT: 3.65 min Scan# 221

Delta R.T. 0.00 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDICCC010

Tot Ion: 45 Resp: 183091

Ion Ratio Lower Upper

45 100

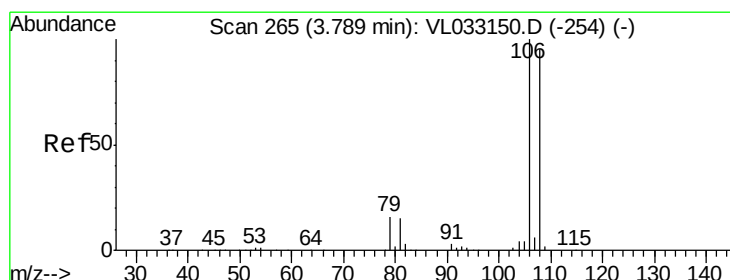
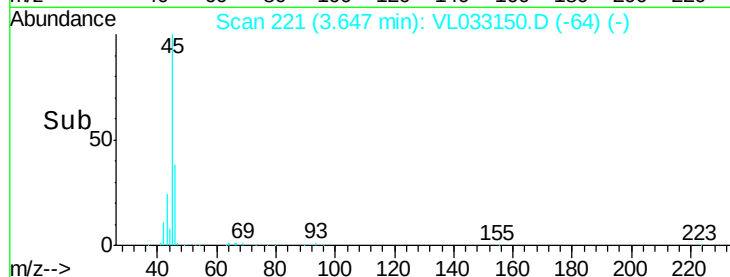
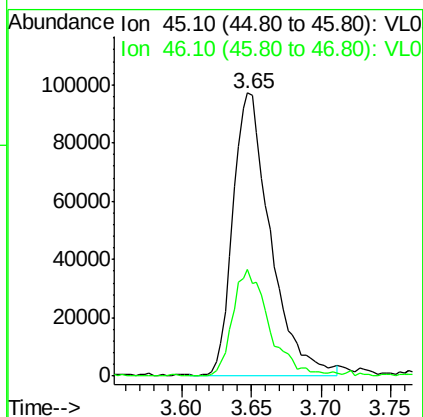
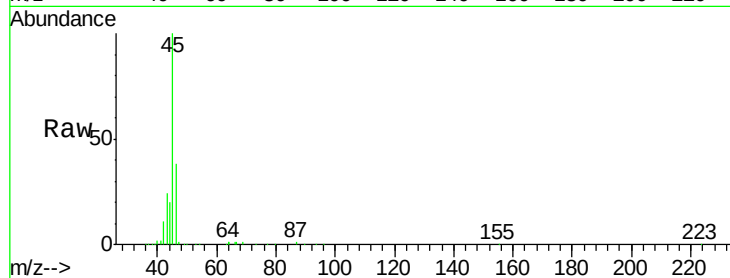
46 37.2 14.0 56.2

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#14

Bromoethene

Concen: 8.481 ppbv

RT: 3.79 min Scan# 265

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

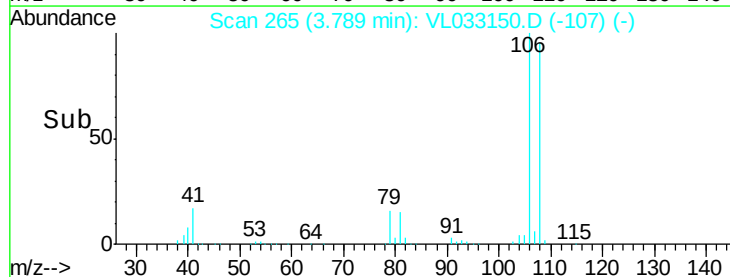
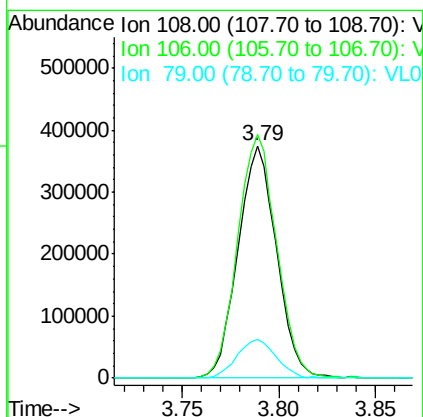
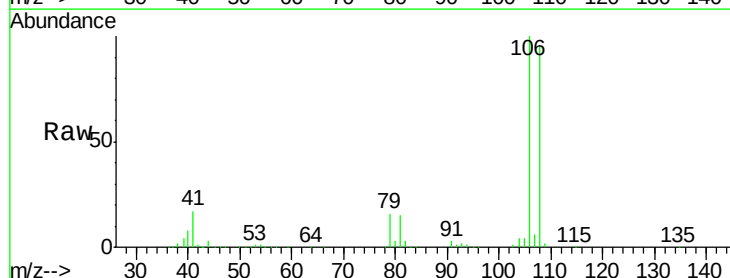
Tgt Ion: 108 Resp: 519005

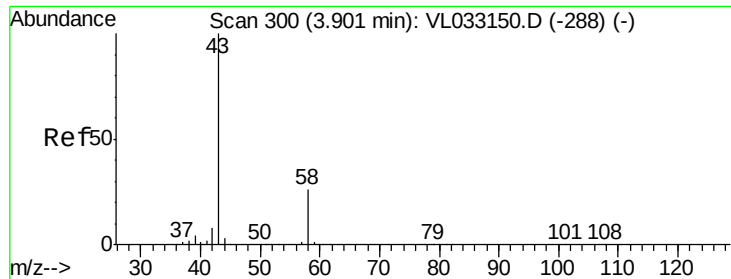
Ion Ratio Lower Upper

108 100

106 106.9 85.6 128.4

79 17.2 14.2 21.4





#15

Acetone

Concen: 7.768 ppbv

RT: 3.90 min Scan# 300

Delta R.T. 0.00 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDICCC010

Tot Ion: 43 Resp: 1186074

Ion Ratio Lower Upper

43 100

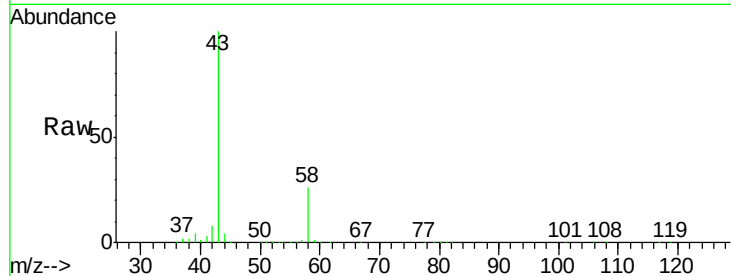
58 26.4 21.8 32.6

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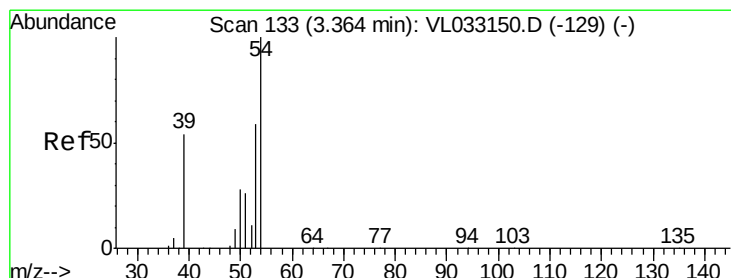
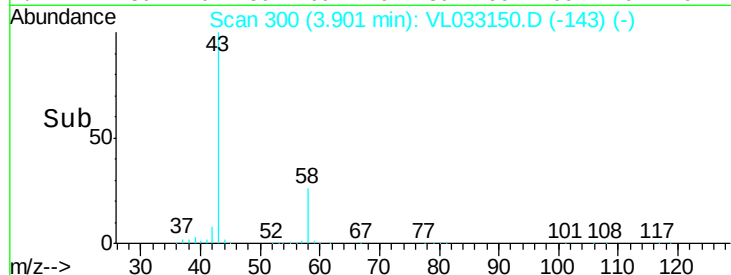
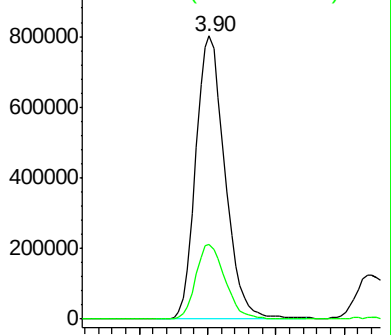
MMDadoda

2/5/2019 10:26:59 AM



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#16

1,3-Butadiene

Concen: 8.290 ppbv

RT: 3.36 min Scan# 133

Delta R.T. 0.00 min

Lab File: VL033150.D

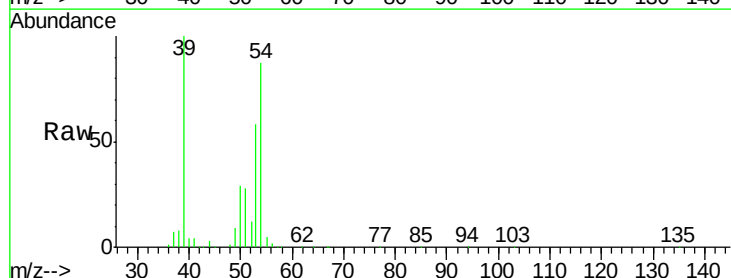
Acq: 4 Feb 2019 10:01

Tgt Ion: 39 Resp: 606861

Ion Ratio Lower Upper

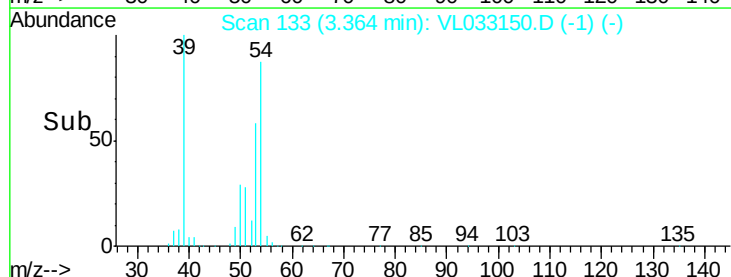
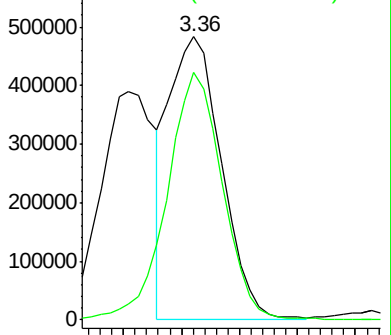
39 100

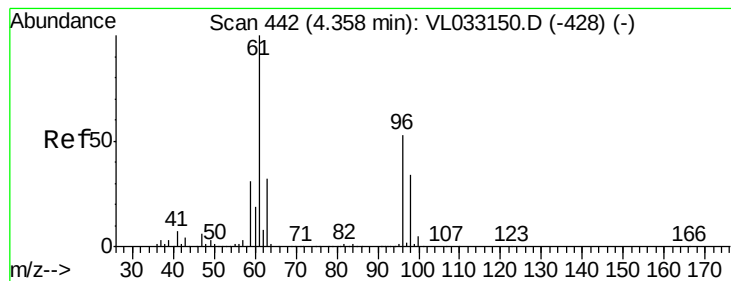
54 93.0 75.0 112.6



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0





#17

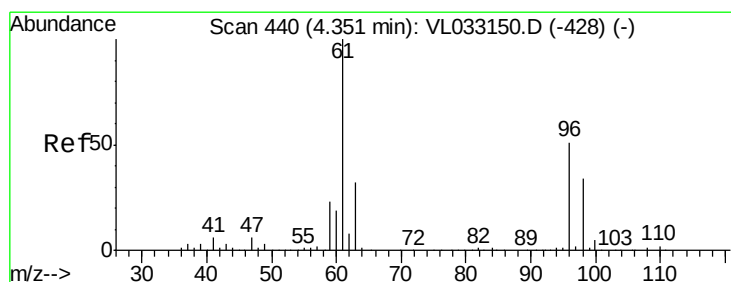
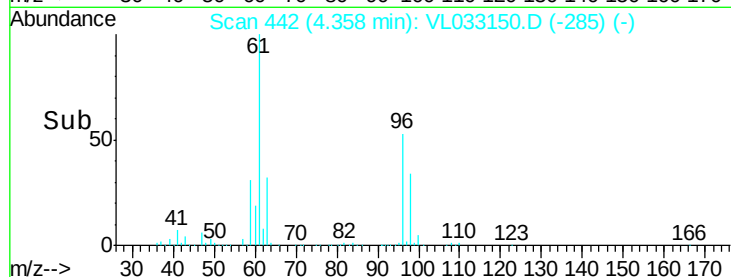
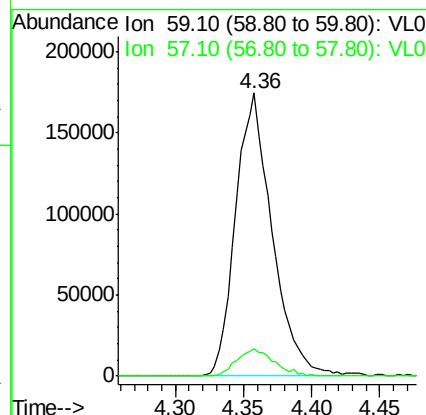
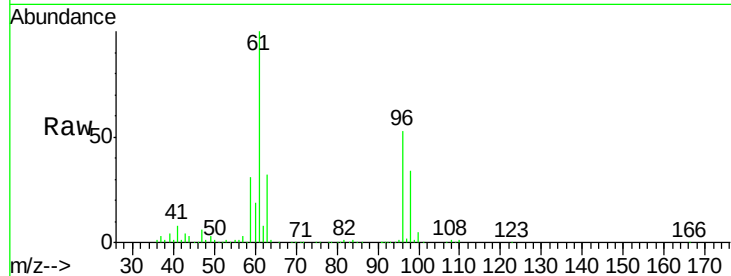
tert-Butyl alcohol
Concen: 8.836 ppbv
RT: 4.36 min Scan# 442
Delta R.T. 0.00 min
Lab File: VL033150.D
Acq: 4 Feb 2019 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tot Ion	Ratio	Lower	Upper
59	100		
57	9.9	8.0	12.0

Manual Integrations
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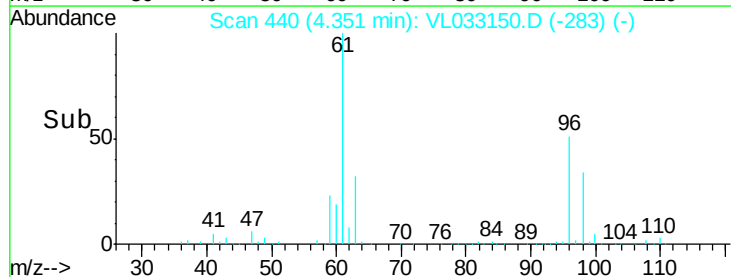
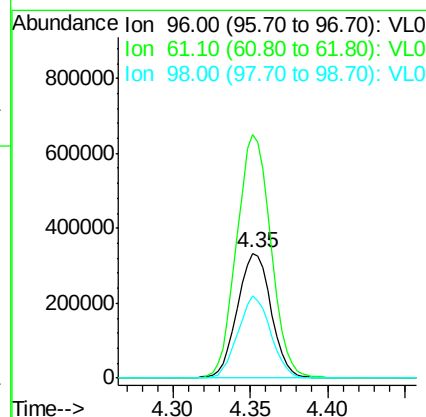
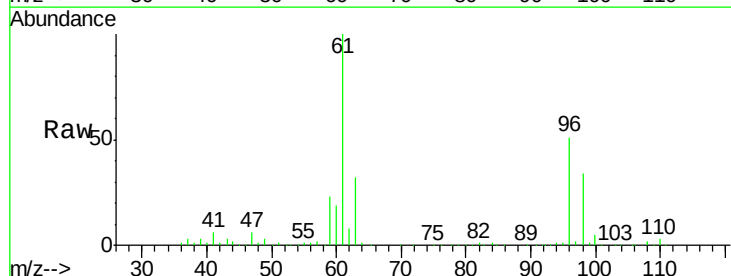
MMDadoda
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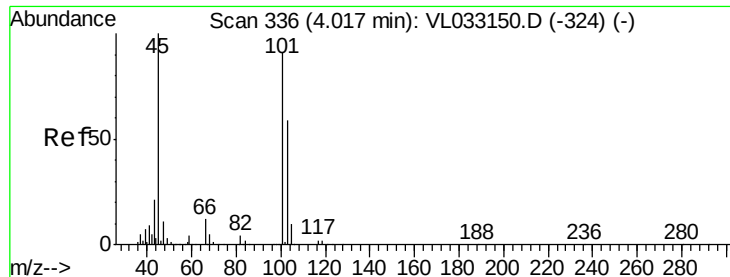


#18

1,1-Dichloroethene
Concen: 8.662 ppbv
RT: 4.35 min Scan# 440
Delta R.T. 0.00 min
Lab File: VL033150.D
Acq: 4 Feb 2019 10:01

Tgt Ion	Ratio	Lower	Upper
96	100		
61	194.7	158.5	237.7
98	66.2	47.8	71.6





#19

Isopropyl Alcohol

Concen: 9.098 ppbv

RT: 4.02 min Scan# 336

Delta R.T. 0.00 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Tot Ion: 45 Resp: 1062126

Ion Ratio Lower Upper

45 100

58 29.4 25.1 37.7

Instrument :

MSVOA_L

ClientSampleId :

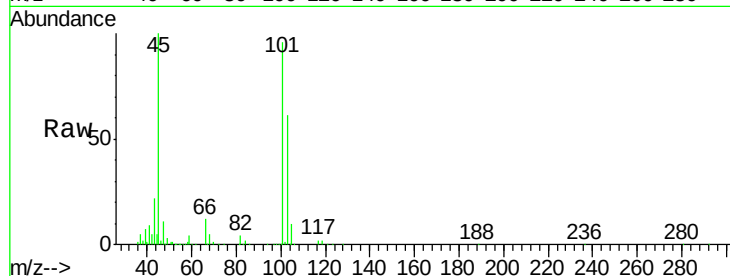
VSTDICCC010

Manual Integrations

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Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

4.02

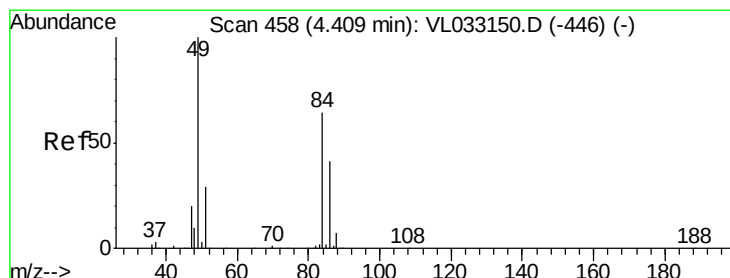
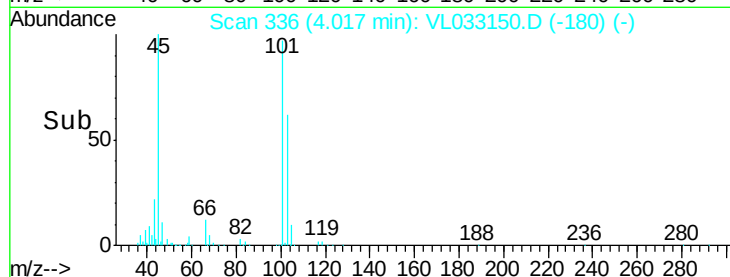
600000

400000

200000

0

Time-->



#20

Methylene Chloride

Concen: 7.248 ppbv

RT: 4.41 min Scan# 458

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Tgt Ion: 84 Resp: 428127

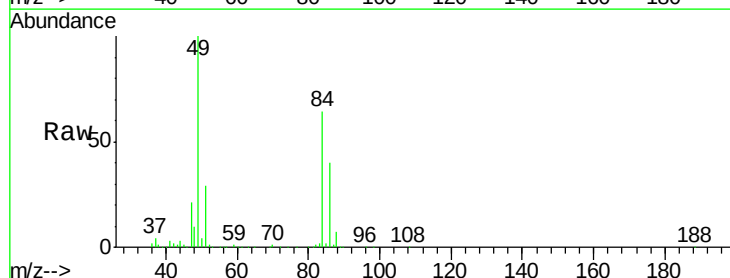
Ion Ratio Lower Upper

84 100

49 155.3 121.1 181.7

51 45.0 37.5 56.3

86 63.0 51.0 76.4



Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0

4.41

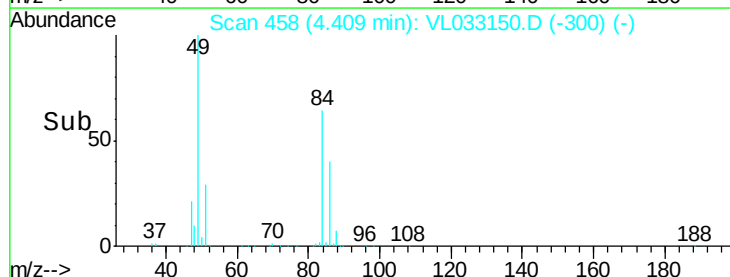
600000

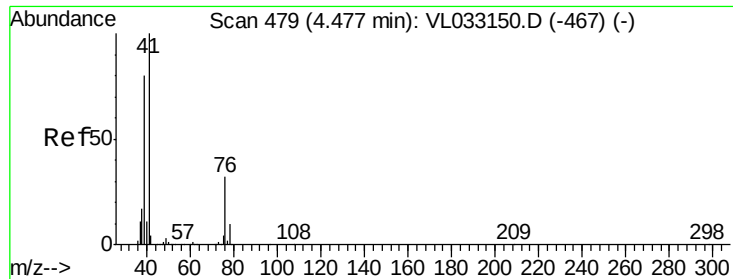
400000

200000

0

Time-->





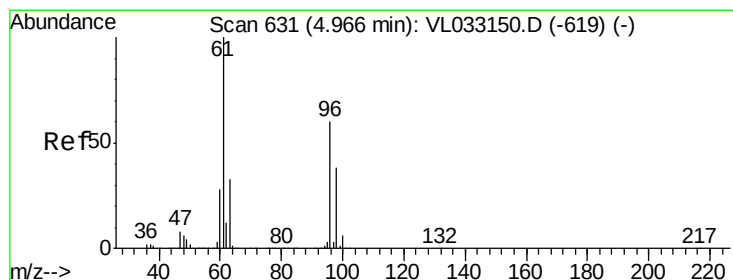
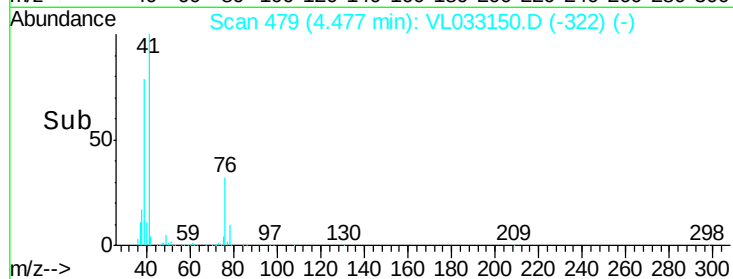
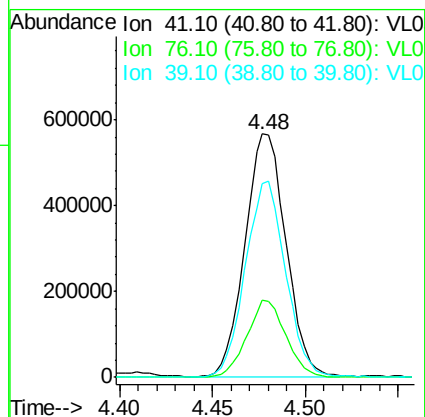
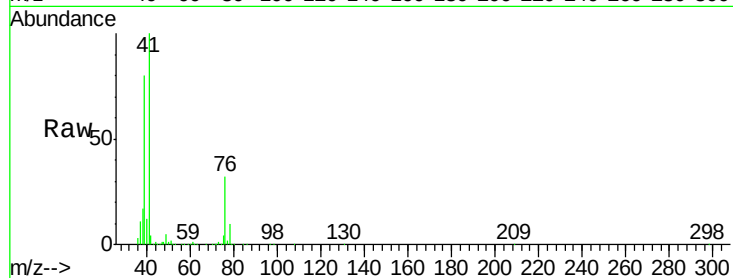
#21
Allvl Chloride
Concen: 8.846 ppbv
RT: 4.48 min Scan# 479
Delta R.T. 0.00 min
Lab File: VL033150.D
Acq: 4 Feb 2019 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tot Ion	Ratio	Lower	Upper
41	100		
76	30.3	23.2	34.8
39	79.4	61.8	92.6

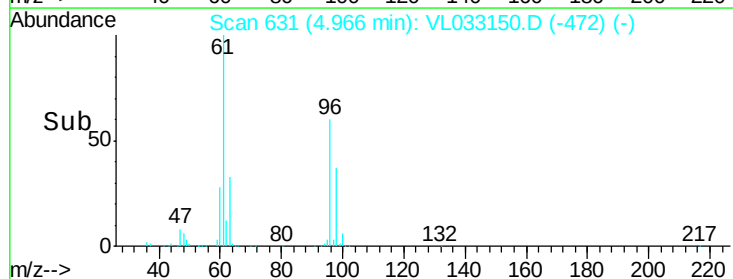
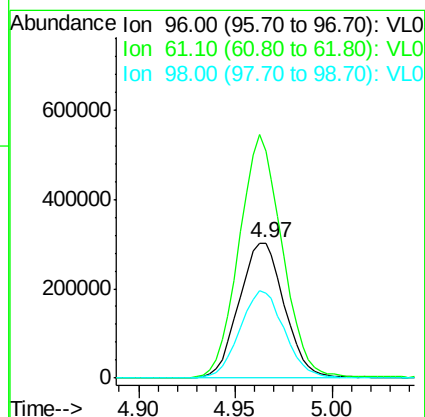
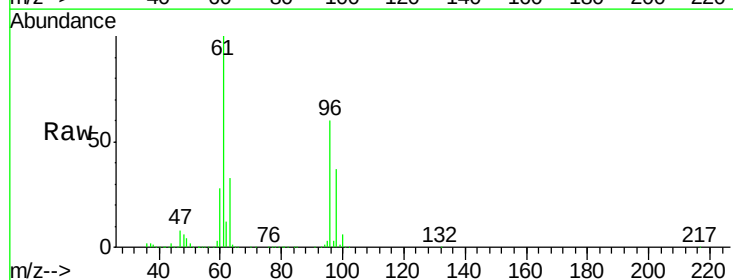
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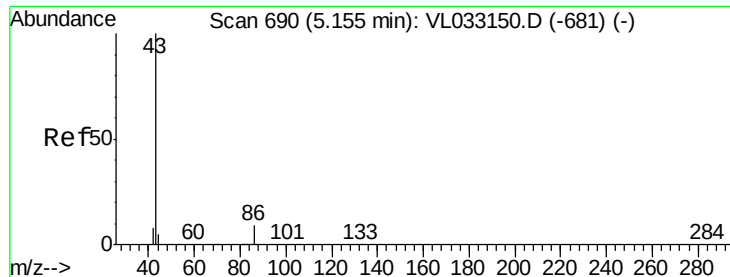
MMDadoda
2/5/2019 10:26:59 AM



#22
trans-1,2-Dichloroethene
Concen: 9.059 ppbv
RT: 4.97 min Scan# 631
Delta R.T. 0.01 min
Lab File: VL033150.D
Acq: 4 Feb 2019 10:01

Tgt Ion	Ratio	Lower	Upper
96	100		
61	167.0	134.5	201.7
98	62.7	50.2	75.2





#23

Vinyl Acetate

Concen: 8.851 ppbv

RT: 5.16 min Scan# 690

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDICCC010

Tot Ion: 43 Resp: 2346773

Ion Ratio Lower Upper

43 100

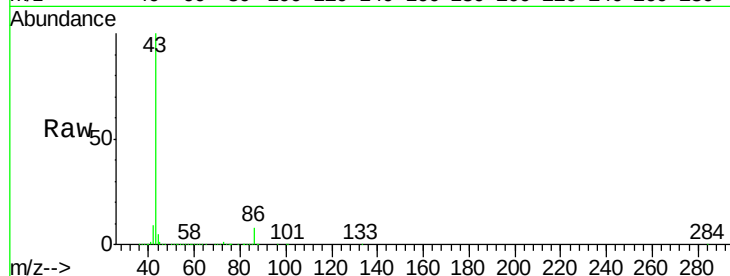
86 8.0 6.2 9.4

42 9.2 7.7 11.5

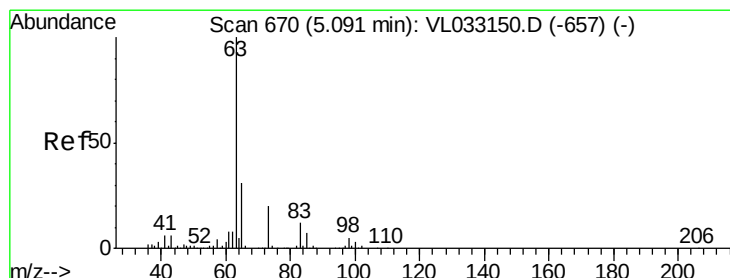
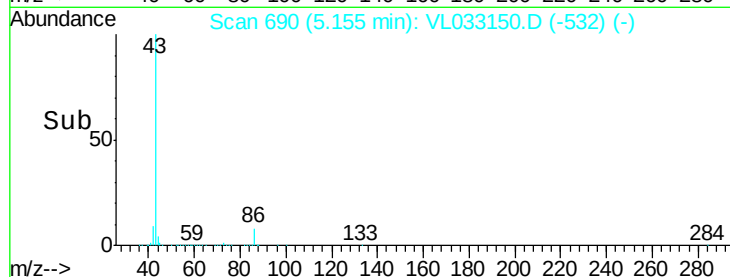
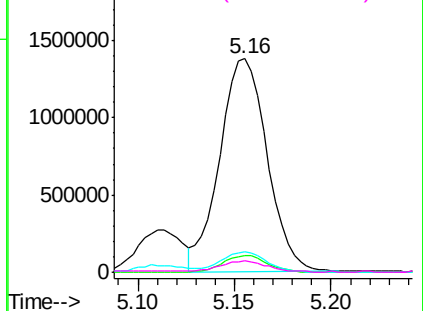
44 5.0 3.8 5.8

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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: 8.812 ppbv

RT: 5.09 min Scan# 670

Delta R.T. 0.00 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

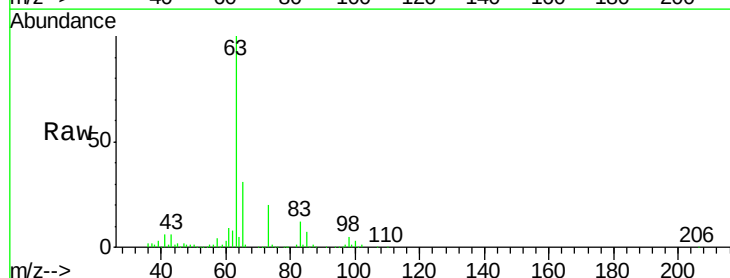
Tgt Ion: 63 Resp: 1558711

Ion Ratio Lower Upper

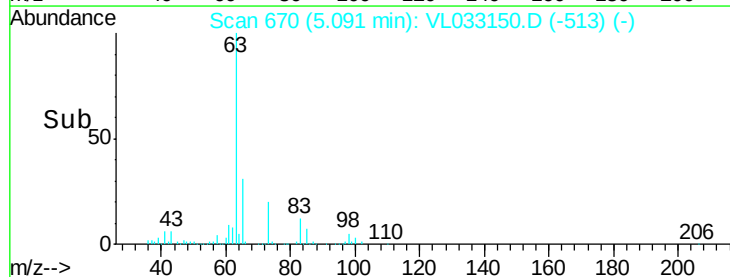
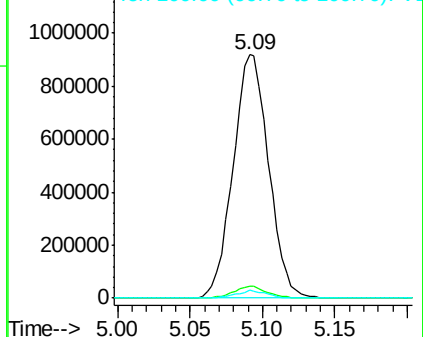
63 100

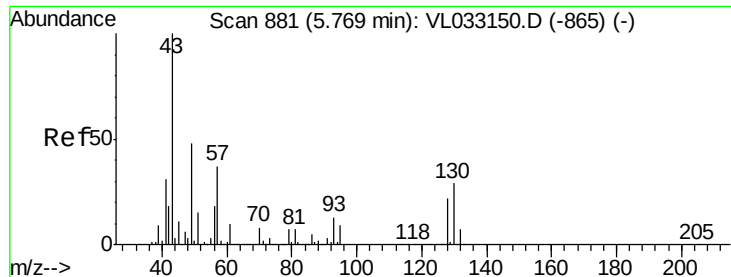
98 4.9 2.3 6.9

100 3.1 1.3 3.9



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: 8.016 ppbv

RT: 5.77 min Scan# 881

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDICCC010

Tot Ion: 43 Resp: 2621752

Ion Ratio Lower Upper

43 100

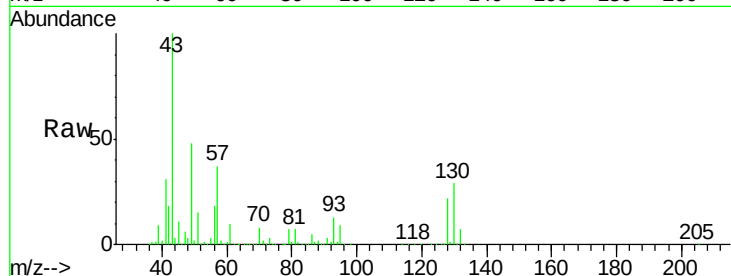
45 9.8 8.0 12.0

61 9.4 7.4 11.2

70 7.3 5.9 8.9

Manual Integrations
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MMDadoda
2/5/2019 10:26:59 AM

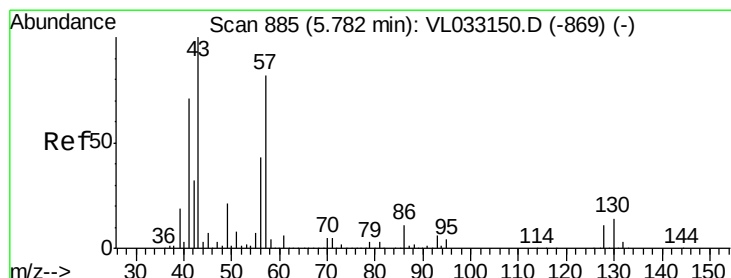
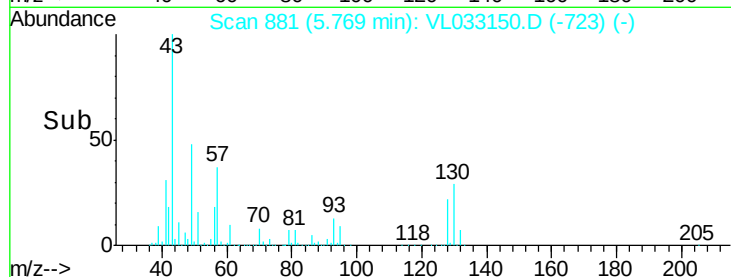
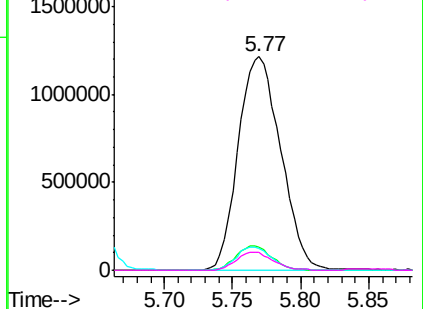


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 7.449 ppbv

RT: 5.78 min Scan# 885

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Tgt Ion: 57 Resp: 1192730

Ion Ratio Lower Upper

57 100

41 85.9 69.5 104.3

43 221.3 175.5 263.3

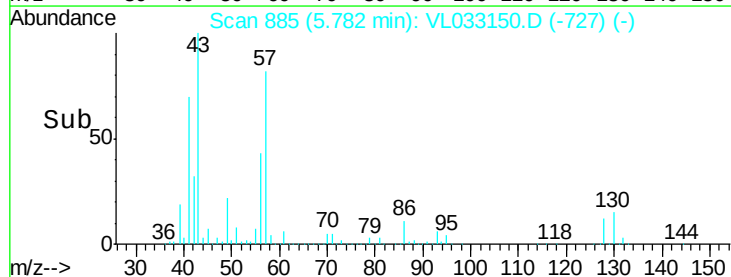
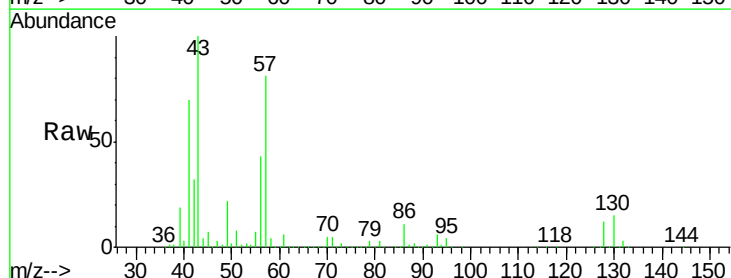
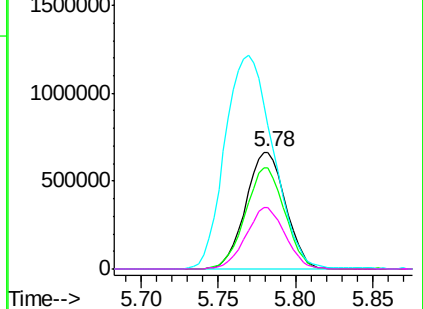
56 52.0 41.6 62.4

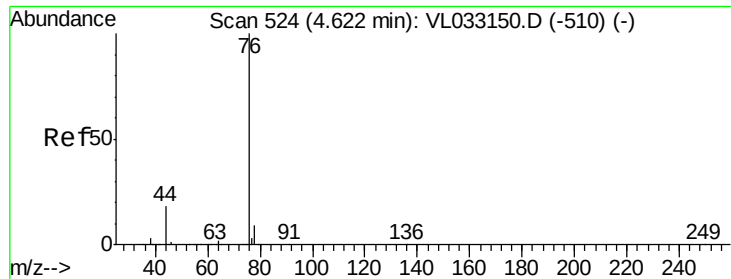
Abundance Ion 57.10 (56.80 to 57.80): VL0

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: 10.043 ppbv

RT: 4.62 min Scan# 524

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDICCC010

Tot Ion: 76 Resp: 1298443

Ion Ratio Lower Upper

76 100

44 19.1 17.1 25.7

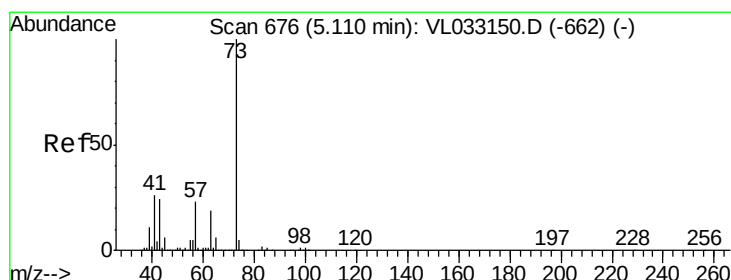
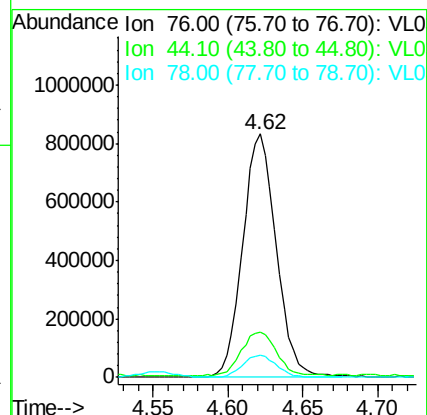
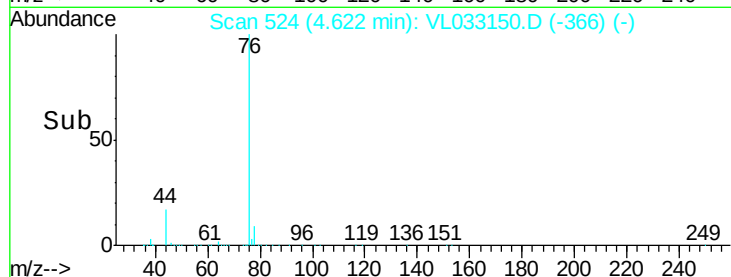
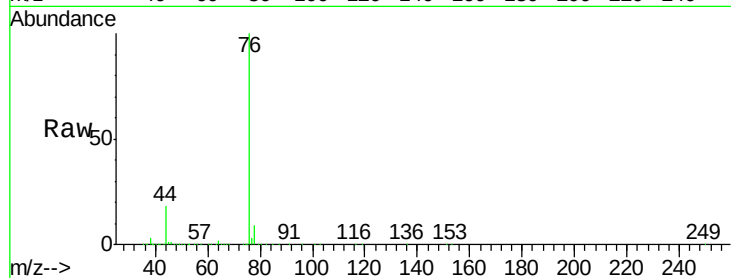
78 9.3 7.2 10.8

Manual Integrations

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#28

Methyl tert-Butyl Ether

Concen: 8.799 ppbv

RT: 5.11 min Scan# 676

Delta R.T. 0.01 min

Lab File: VL033150.D

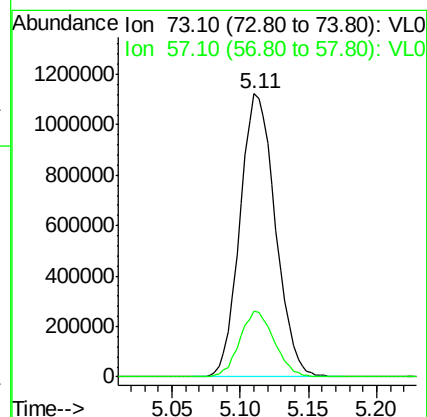
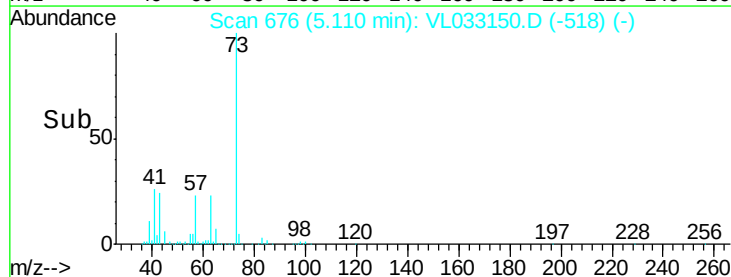
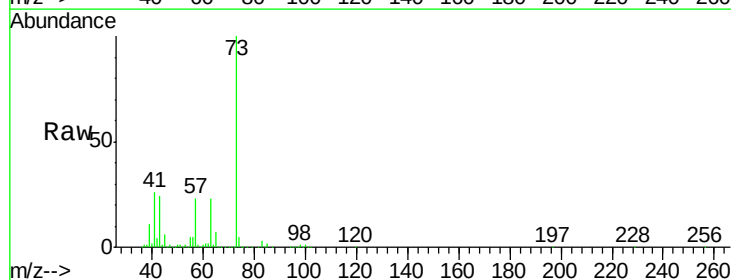
Acq: 4 Feb 2019 10:01

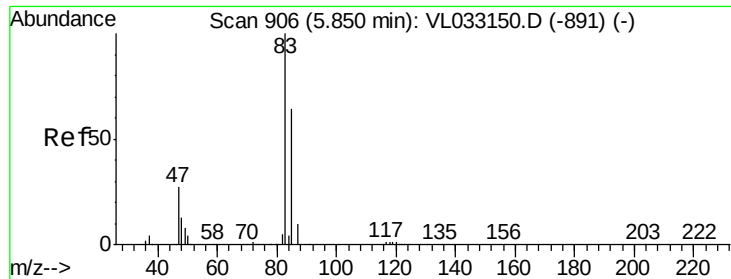
Tgt Ion: 73 Resp: 2024923

Ion Ratio Lower Upper

73 100

57 22.9 18.3 27.5





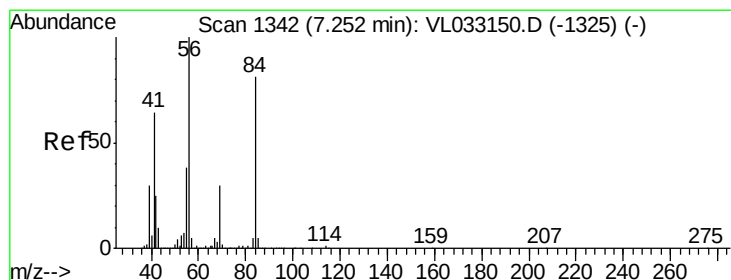
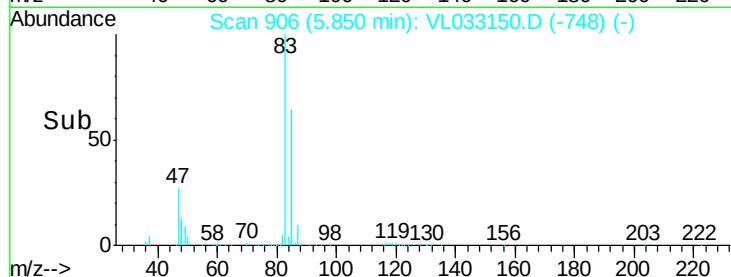
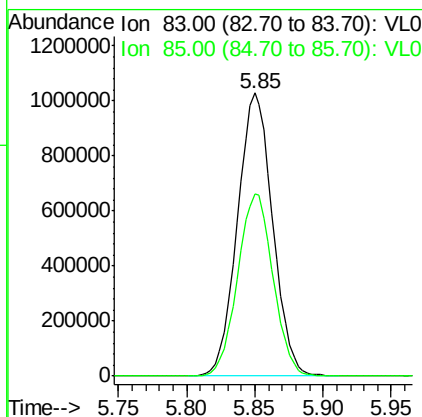
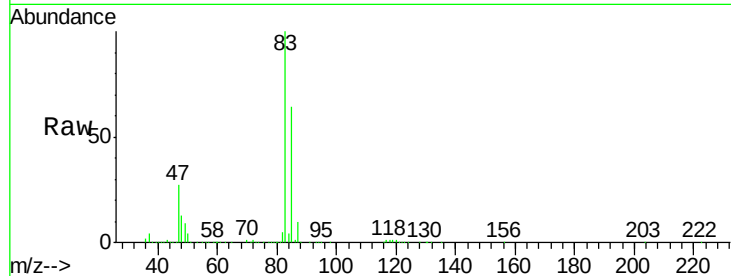
#29
Chloroform
Concen: 8.500 ppbv
RT: 5.85 min Scan# 906
Delta R.T. 0.01 min
Lab File: VL033150.D
Acq: 4 Feb 2019 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tot Ion: 83 Resp: 1838349
Ion Ratio Lower Upper
83 100
85 64.2 51.6 77.4

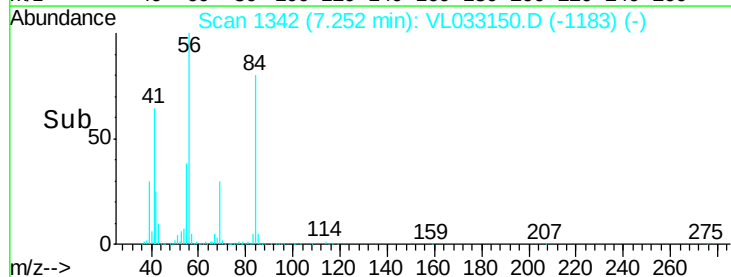
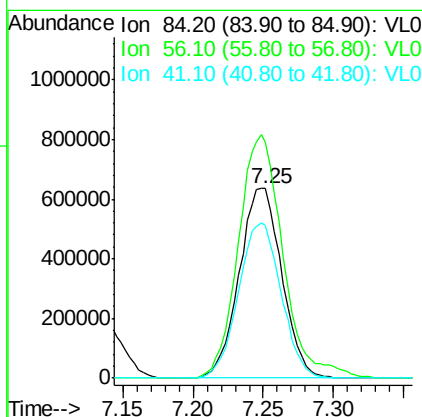
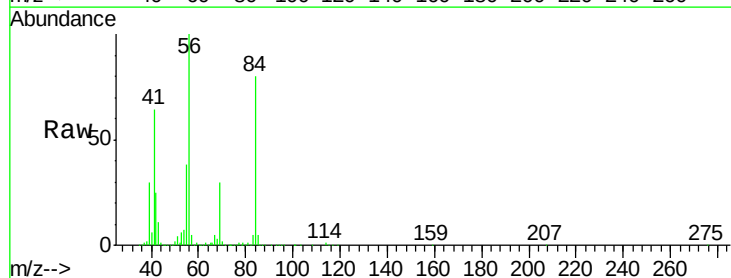
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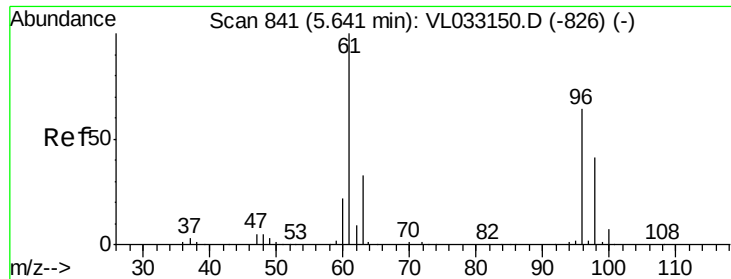
MMDadoda
2/5/2019 10:26:59 AM



#30
Cyclohexane
Concen: 10.823 ppbv
RT: 7.25 min Scan# 1342
Delta R.T. 0.01 min
Lab File: VL033150.D
Acq: 4 Feb 2019 10:01

Tgt Ion: 84 Resp: 1343449
Ion Ratio Lower Upper
84 100
56 135.0 109.0 163.4
41 82.0 65.3 97.9





#31

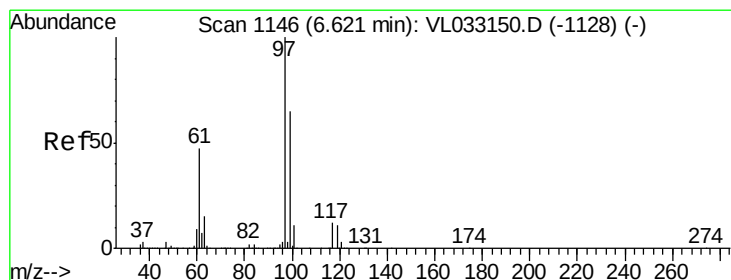
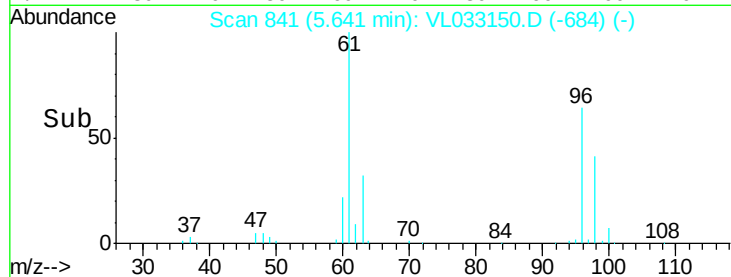
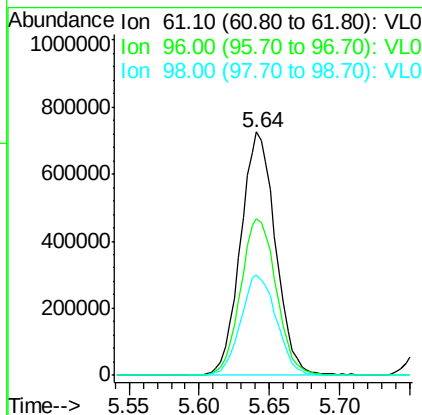
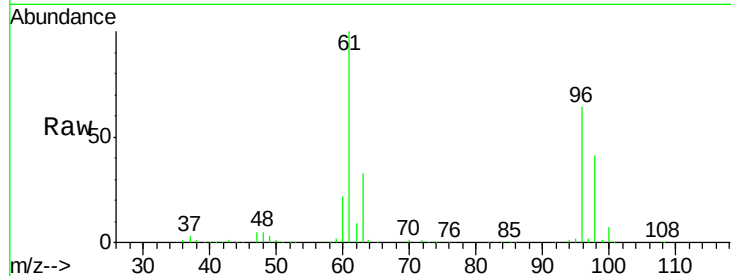
cis-1,2-Dichloroethene
Concen: 8.592 ppbv
RT: 5.64 min Scan# 841
Delta R.T. 0.00 min
Lab File: VL033150.D
Acq: 4 Feb 2019 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tot Ion	Ratio	Lower	Upper
61	100		
96	64.4	53.3	79.9
98	41.4	33.7	50.5

Manual Integrations
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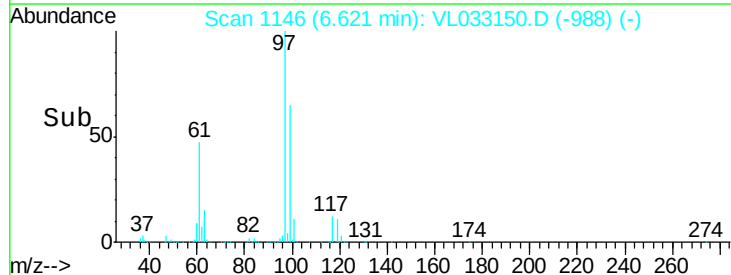
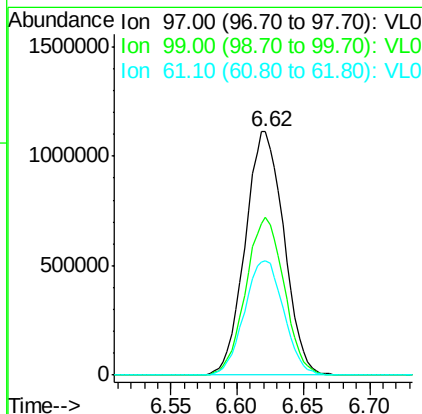
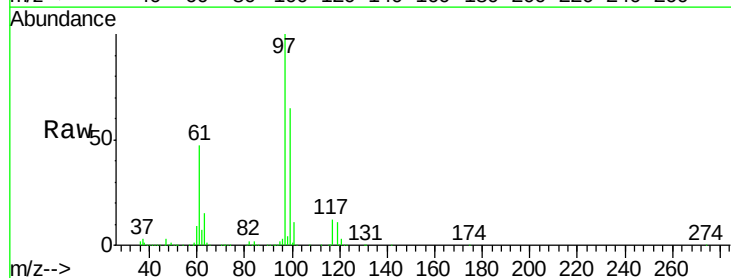
MMDadoda
2/5/2019 10:26:59 AM

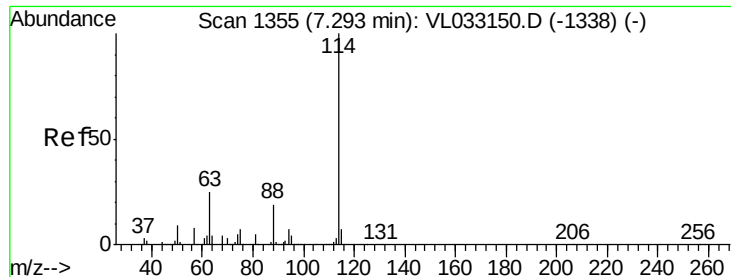


#32

1,1,1-Trichloroethane
Concen: 10.141 ppbv
RT: 6.62 min Scan# 1146
Delta R.T. 0.01 min
Lab File: VL033150.D
Acq: 4 Feb 2019 10:01

Tgt Ion	Ratio	Lower	Upper
97	100		
99	63.9	65.1	97.7#
61	47.6	47.7	71.5#





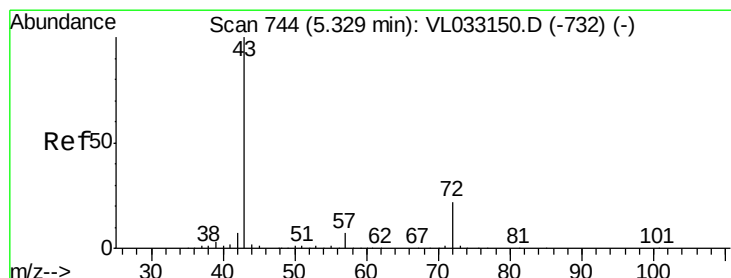
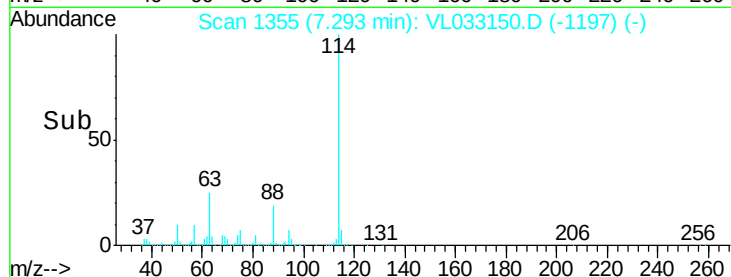
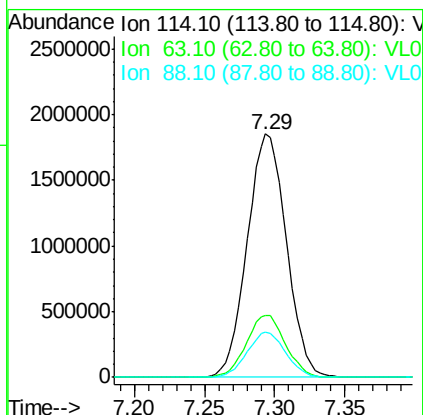
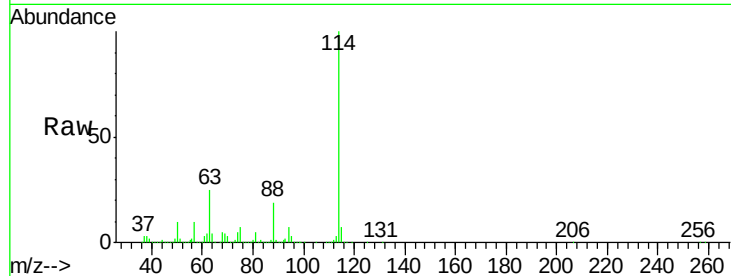
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.29 min Scan# 1355
 Delta R.T. 0.01 min
 Lab File: VL033150.D
 Acq: 4 Feb 2019 10:01

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICCC010

Tot Ion:114 Resp: 3602678
 Ion Ratio Lower Upper
 114 100
 63 25.7 20.0 30.0
 88 18.3 14.4 21.6

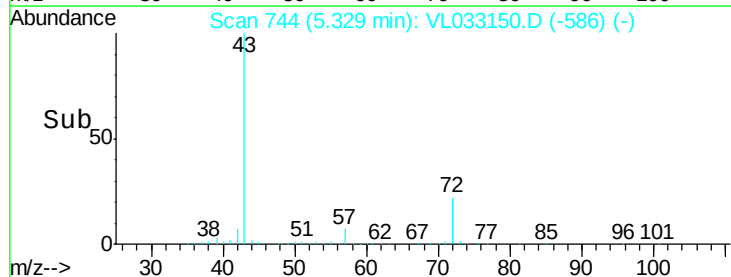
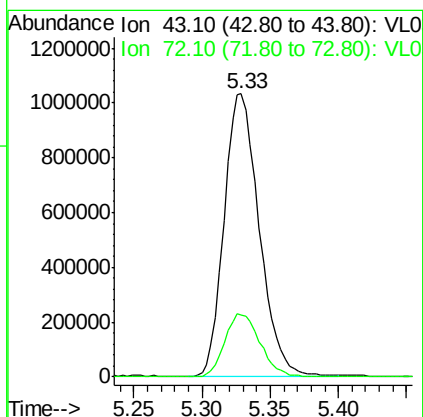
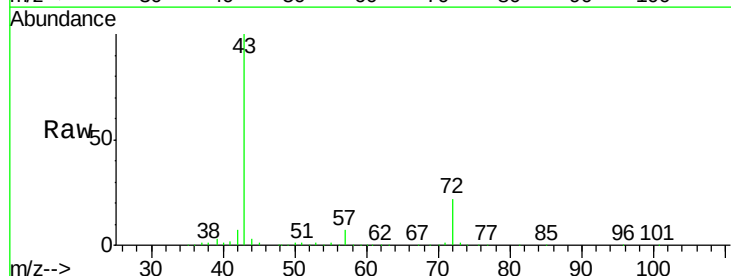
Manual Integrations
 APPROVED

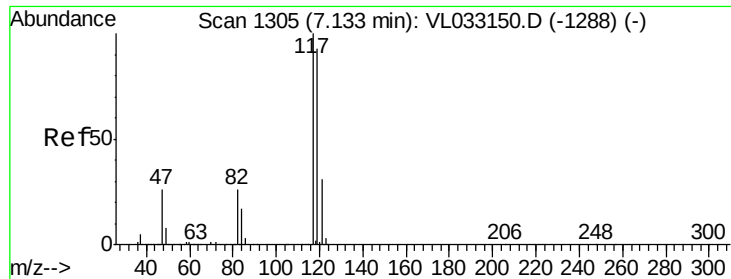
MMDadoda
 2/5/2019 10:26:59 AM



#34
 2-Butanone
 Concen: 6.677 ppbv
 RT: 5.33 min Scan# 744
 Delta R.T. 0.01 min
 Lab File: VL033150.D
 Acq: 4 Feb 2019 10:01

Tgt Ion: 43 Resp: 1838860
 Ion Ratio Lower Upper
 43 100
 72 22.8 17.9 26.9





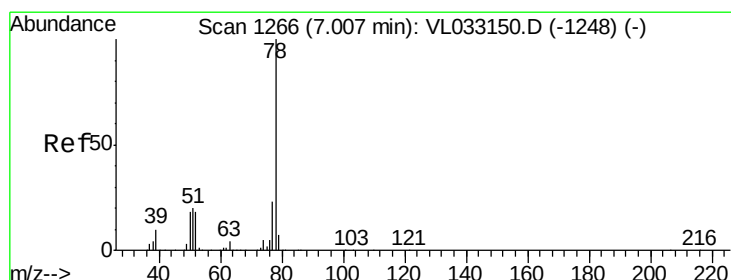
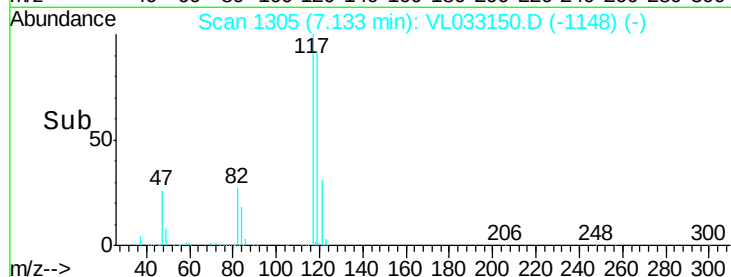
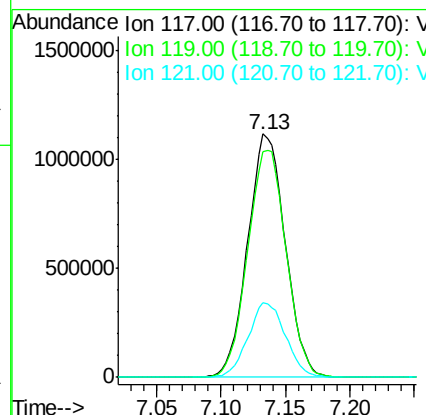
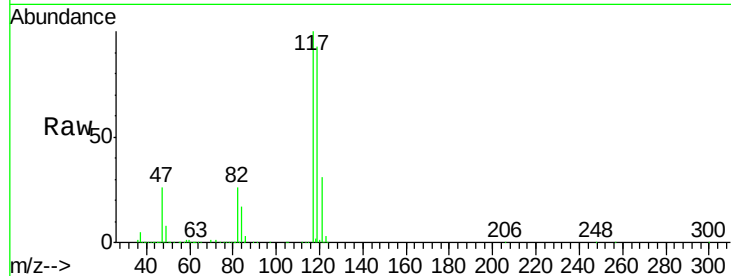
#35
Carbon Tetrachloride
Concen: 8.391 ppbv
RT: 7.13 min Scan# 1305
Delta R.T. 0.00 min
Lab File: VL033150.D
Acq: 4 Feb 2019 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tot Ion	Ratio	Lower	Upper
117	100		
119	92.8	76.6	114.8
121	30.9	25.0	37.4

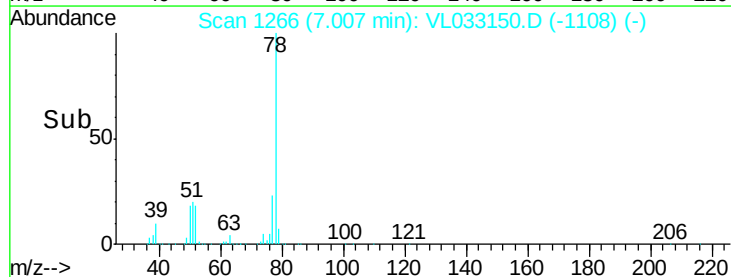
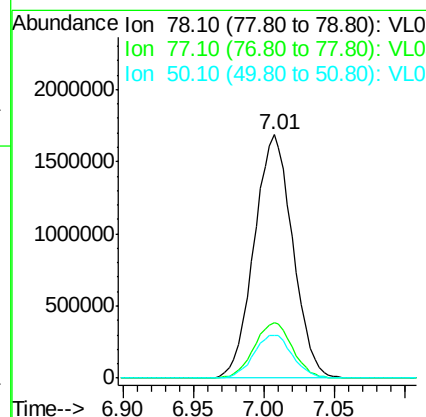
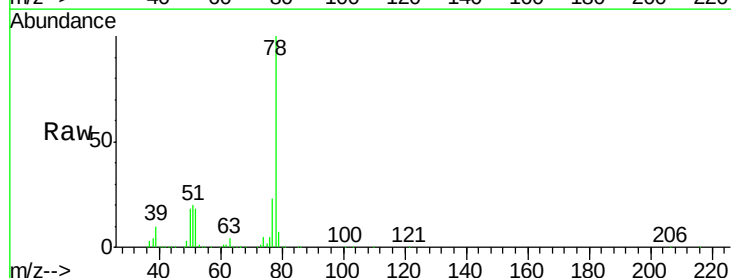
Manual Integrations
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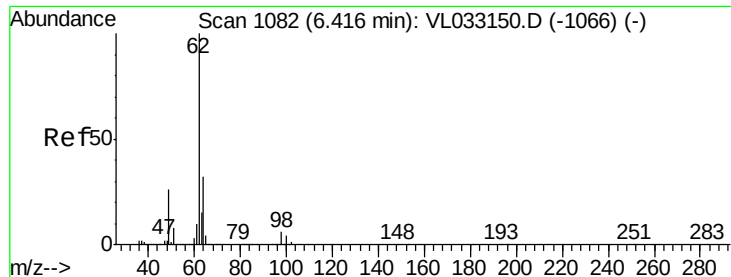
MMDadoda
2/5/2019 10:26:59 AM



#36
Benzene
Concen: 7.959 ppbv
RT: 7.01 min Scan# 1266
Delta R.T. 0.01 min
Lab File: VL033150.D
Acq: 4 Feb 2019 10:01

Tgt Ion	Ratio	Lower	Upper
78	100		
77	22.8	17.8	26.6
50	17.7	14.7	22.1





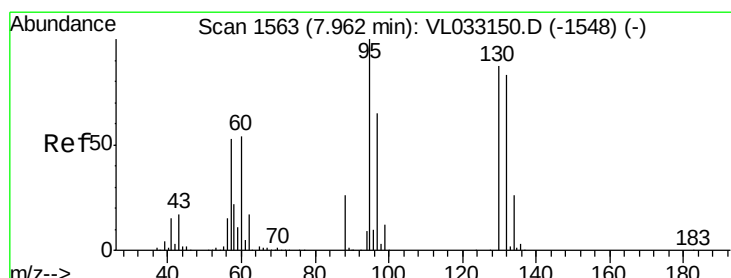
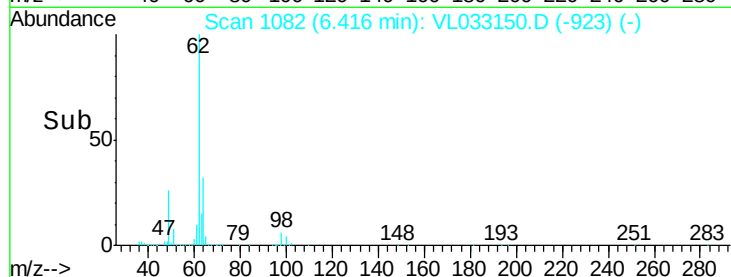
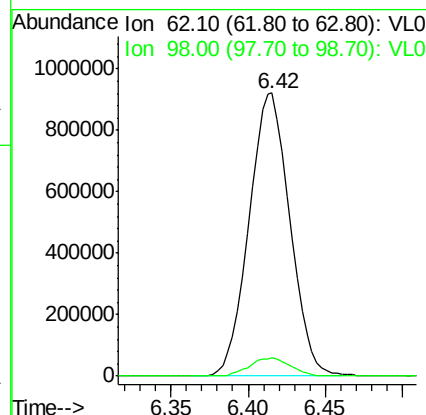
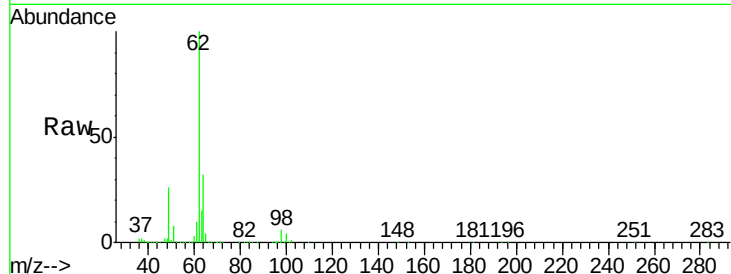
#37
 1,2-Dichloroethane
 Concen: 8.233 ppbv
 RT: 6.42 min Scan# 1082
 Delta R.T. 0.01 min
 Lab File: VL033150.D
 Acq: 4 Feb 2019 10:01

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICCC010

Tot Ion	Ratio	Lower	Upper
62	100		
98	6.5	5.3	7.9

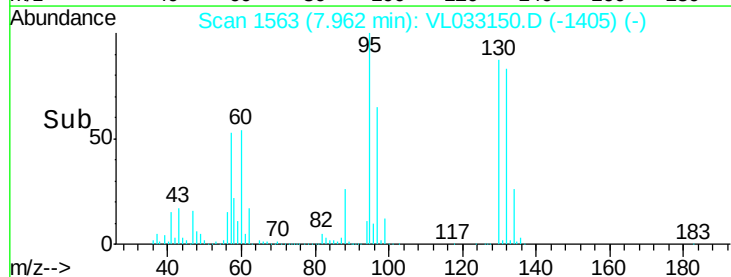
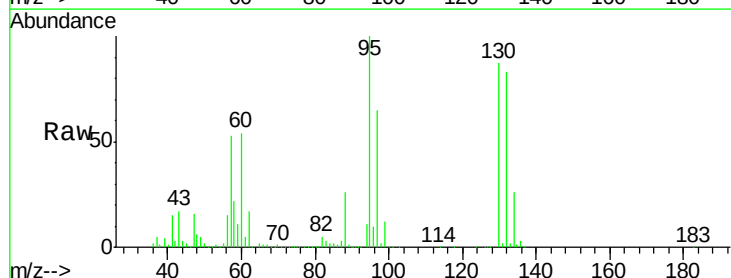
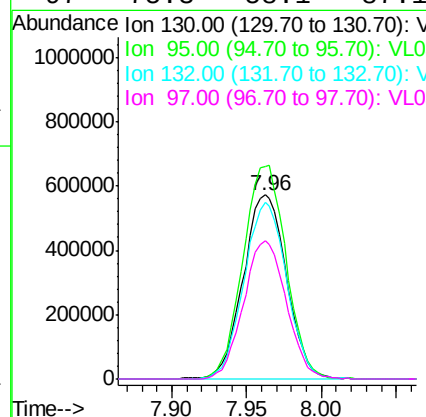
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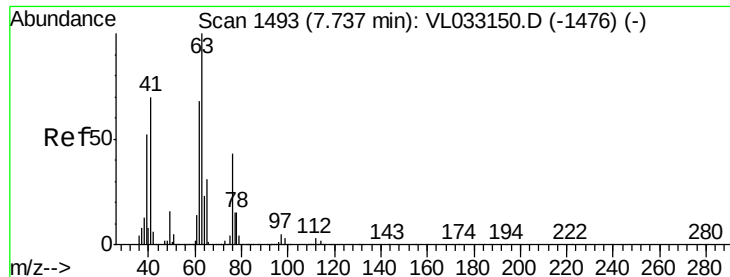
MMDadoda
 2/5/2019 10:26:59 AM



#38
 Trichloroethene
 Concen: 7.032 ppbv
 RT: 7.96 min Scan# 1563
 Delta R.T. 0.01 min
 Lab File: VL033150.D
 Acq: 4 Feb 2019 10:01

Tgt Ion	Ratio	Lower	Upper
130	100		
95	115.3	91.6	137.4
132	95.7	79.0	118.4
97	75.3	58.1	87.1





#39

1,2-Dichloropropane

Concen: 8.405 ppbv

RT: 7.74 min Scan# 1493

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDICCC010

Tot Ion: 63 Resp: 1244530

Ion Ratio Lower Upper

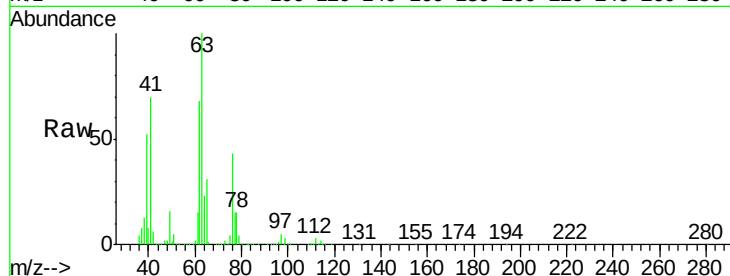
63 100

41 69.7 53.2 79.8

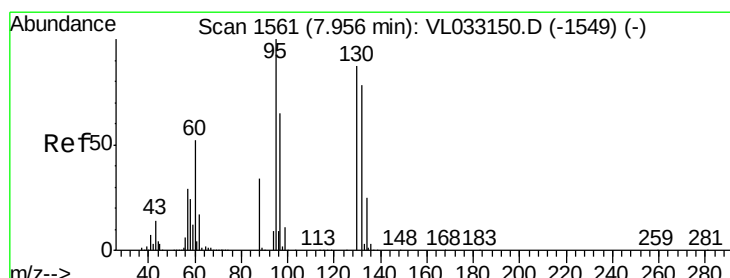
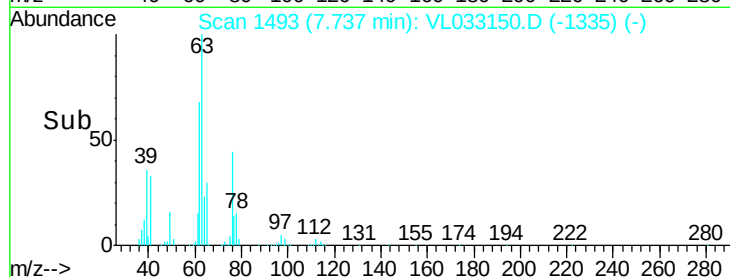
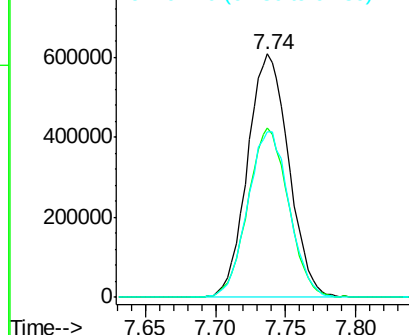
62 68.0 54.4 81.6

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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: 8.590 ppbv

RT: 7.96 min Scan# 1561

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Tgt Ion: 88 Resp: 447922

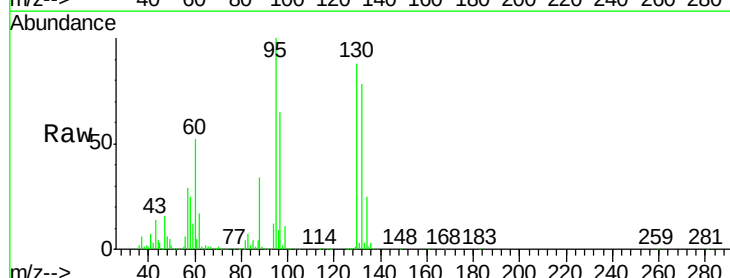
Ion Ratio Lower Upper

88 100

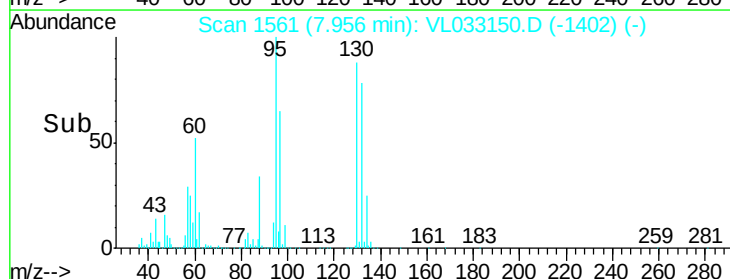
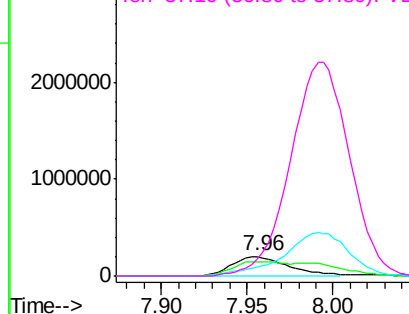
58 134.1 103.4 155.2

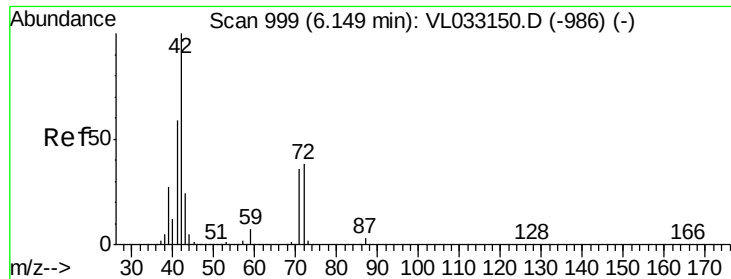
43 0.0 210.8 316.2#

57 0.0 933.2 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





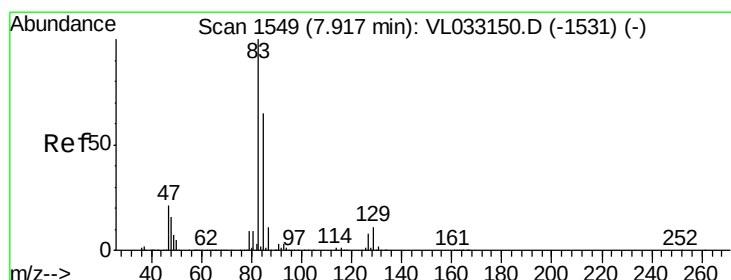
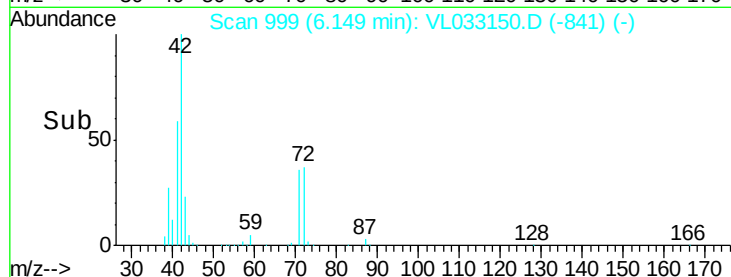
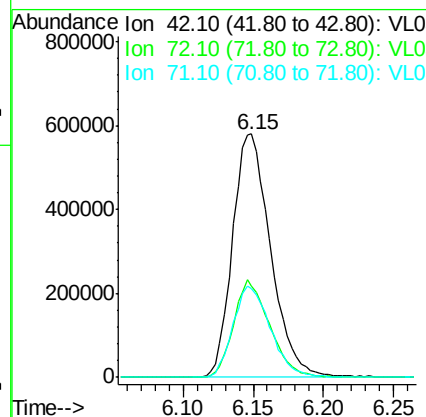
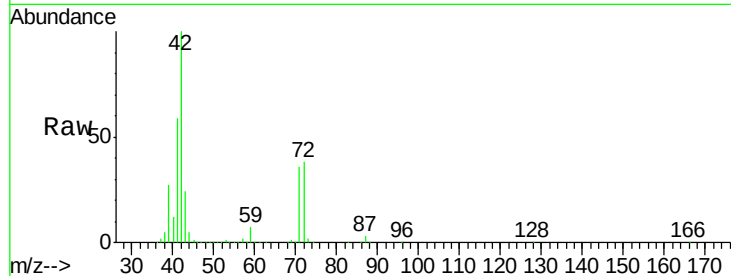
#41
Tetrahydrofuran
Concen: 6.617 ppbv
RT: 6.15 min Scan# 999
Delta R.T. 0.01 min
Lab File: VL033150.D
Acq: 4 Feb 2019 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tot Ion	Ratio	Lower	Upper
42	100		
72	38.4	30.2	45.4
71	37.3	28.8	43.2

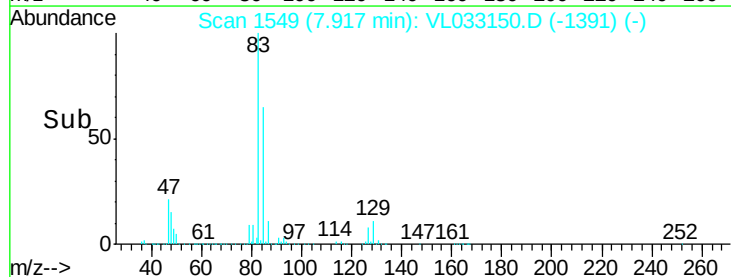
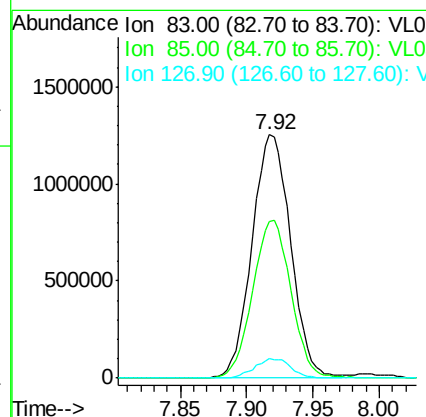
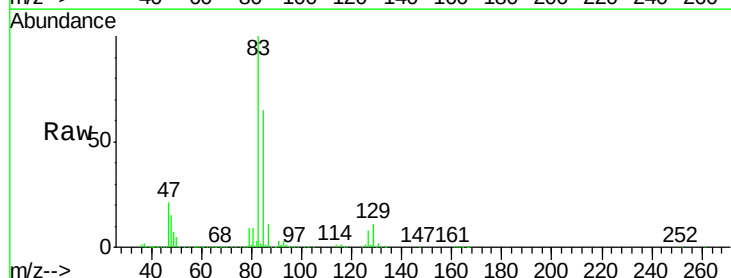
Manual Integrations
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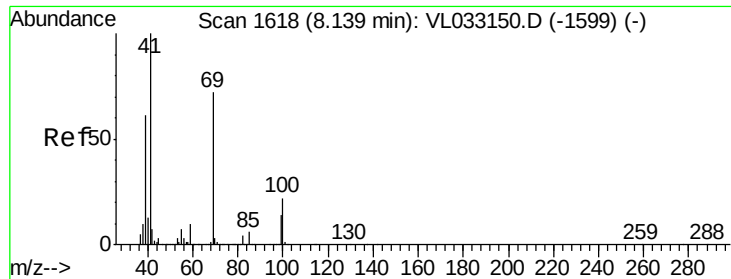
MMDadoda
2/5/2019 10:26:59 AM



#42
Bromodichloromethane
Concen: 8.693 ppbv
RT: 7.92 min Scan# 1549
Delta R.T. 0.01 min
Lab File: VL033150.D
Acq: 4 Feb 2019 10:01

Tgt Ion	Ratio	Lower	Upper
83	100		
85	64.5	51.3	76.9
127	8.0	6.1	9.1





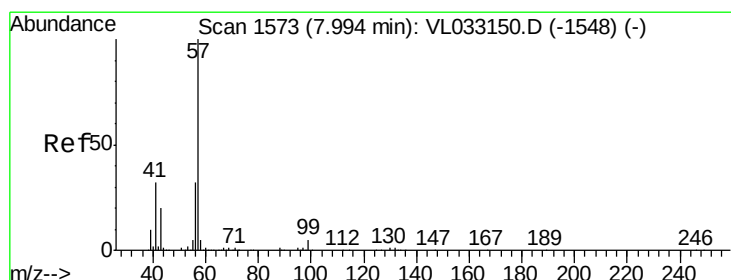
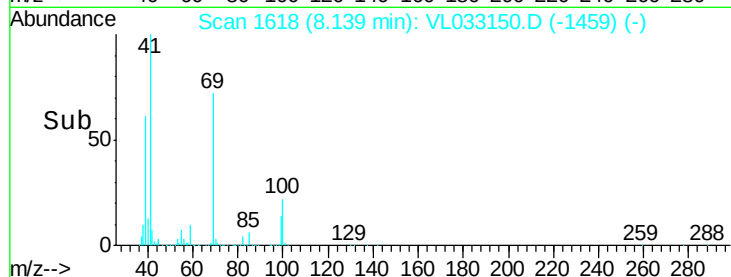
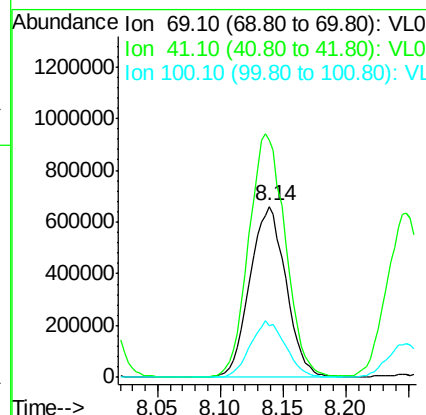
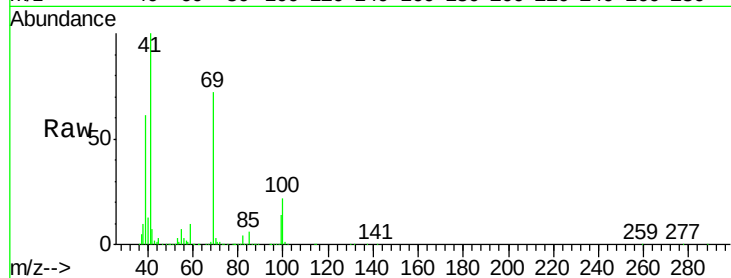
#43
Methyl Methacrylate
Concen: 9.313 ppbv
RT: 8.14 min Scan# 1618
Delta R.T. 0.01 min
Lab File: VL033150.D
Acq: 4 Feb 2019 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tot Ion: 69 Resp: 1318325
Ion Ratio Lower Upper
69 100
41 145.0 118.4 177.6
100 32.0 26.5 39.7

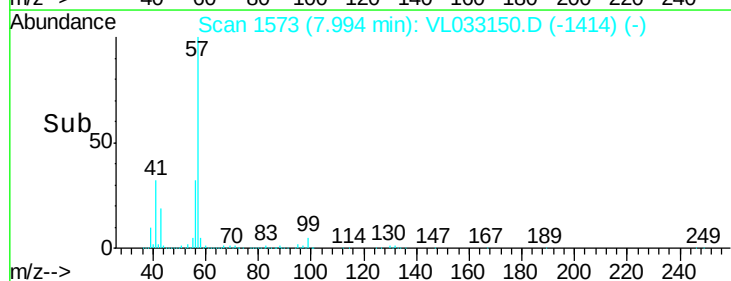
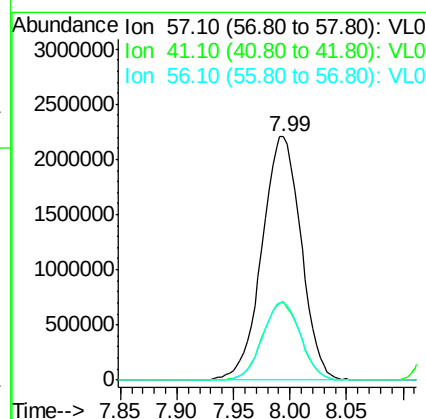
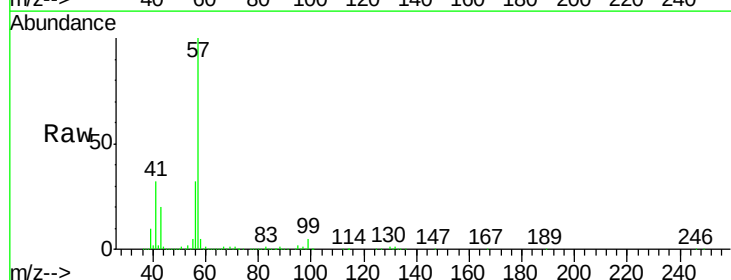
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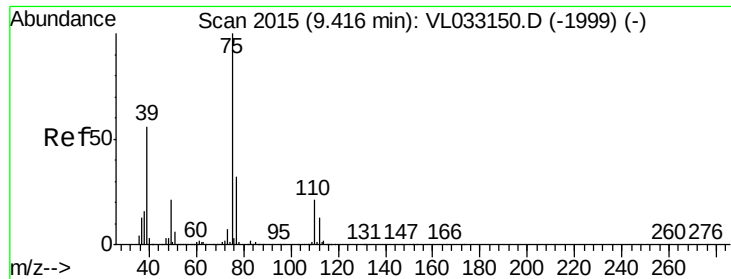
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#44
2,2,4-Trimethylpentane
Concen: 8.109 ppbv
RT: 7.99 min Scan# 1573
Delta R.T. 0.01 min
Lab File: VL033150.D
Acq: 4 Feb 2019 10:01

Tgt Ion: 57 Resp: 5285832
Ion Ratio Lower Upper
57 100
41 31.1 24.6 36.8
56 31.3 24.9 37.3





#45

t-1,3-Dichloropropene

Concen: 10.164 ppbv

RT: 9.42 min Scan# 2015

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDICCC010

Tot Ion: 75 Resp: 1738121

Ion Ratio Lower Upper

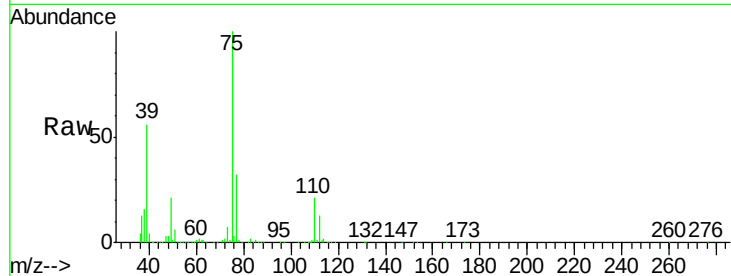
75 100

77 32.1 24.4 36.6

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Abundance Ion 75.10 (74.80 to 75.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

1000000

800000

600000

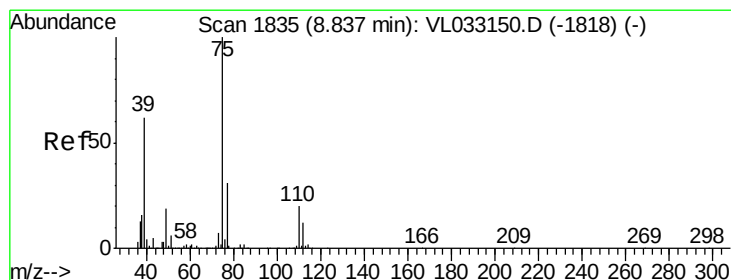
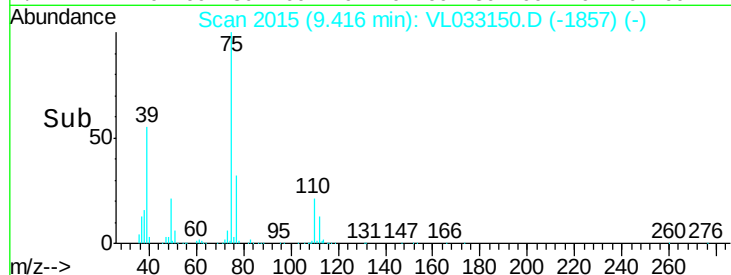
400000

200000

0

9.35 9.40 9.45 9.50

Time-->



#46

cis-1,3-Dichloropropene

Concen: 9.896 ppbv

RT: 8.84 min Scan# 1835

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

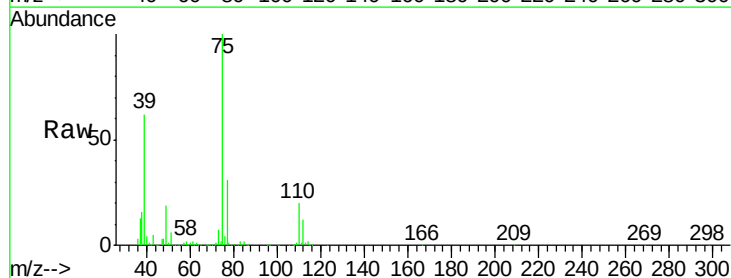
Tgt Ion: 75 Resp: 2028885

Ion Ratio Lower Upper

75 100

39 62.4 51.4 77.2

77 31.4 25.4 38.0



Abundance Ion 75.00 (74.70 to 75.70): VL0

Ion 39.00 (38.70 to 39.70): VL0

Ion 77.00 (76.70 to 77.70): VL0

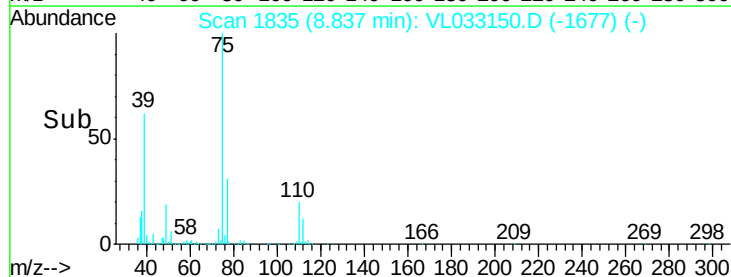
1000000

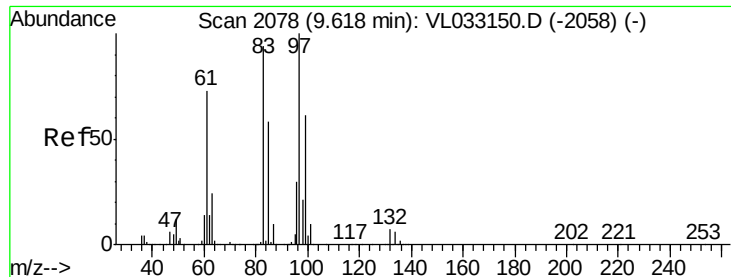
500000

0

8.75 8.80 8.85 8.90

Time-->





#47

1,1,2-Trichloroethane

Concen: 9.186 ppbv

RT: 9.62 min Scan# 2078

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDICCC010

Tot Ion: 97 Resp: 1240595

Ion Ratio Lower Upper

97 100

83 93.6 65.8 98.8

85 57.8 44.7 67.1

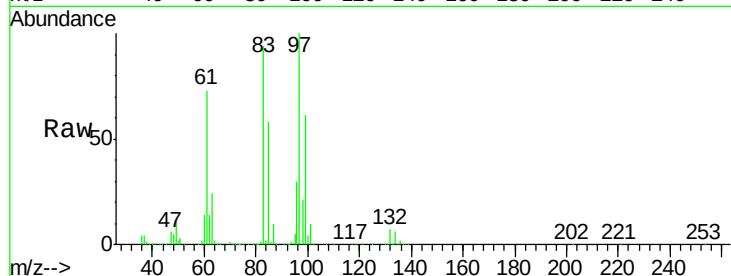
99 61.0 48.6 73.0

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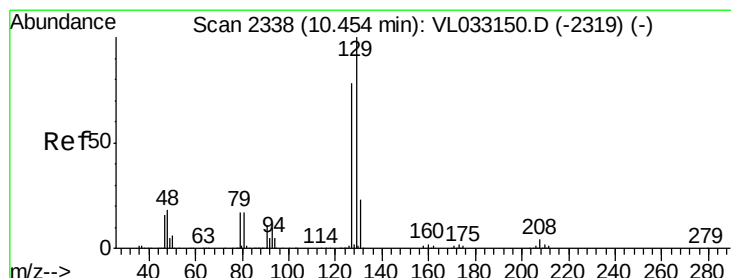
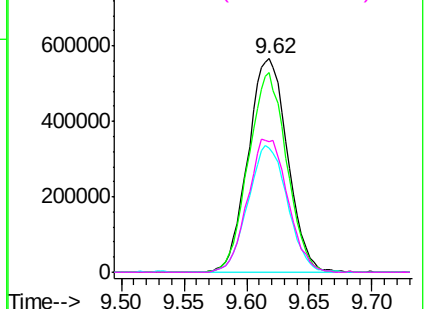
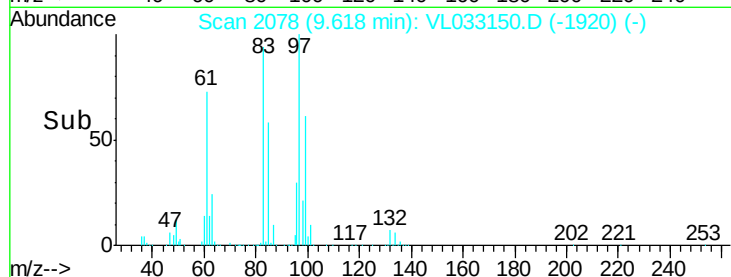
Abundance

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: 9.128 ppbv

RT: 10.45 min Scan# 2338

Delta R.T. 0.01 min

Lab File: VL033150.D

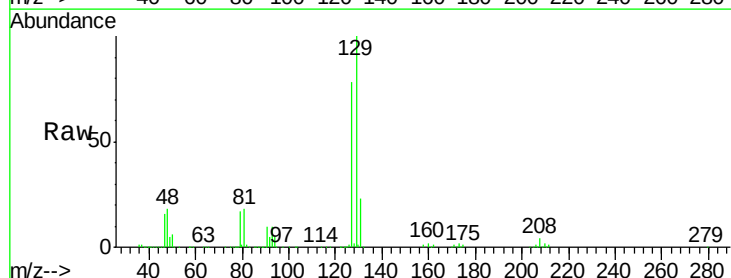
Acq: 4 Feb 2019 10:01

Tgt Ion: 129 Resp: 2054909

Ion Ratio Lower Upper

129 100

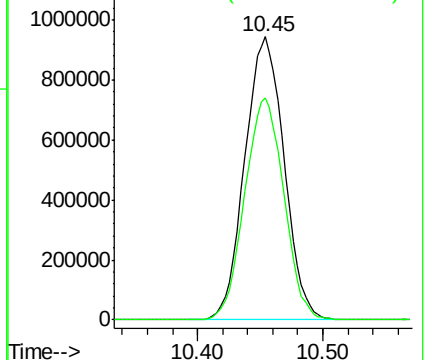
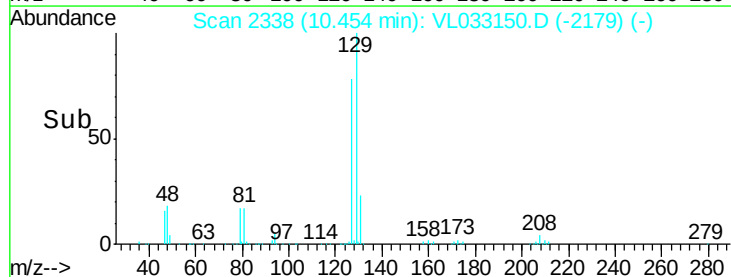
127 78.4 39.3 117.9

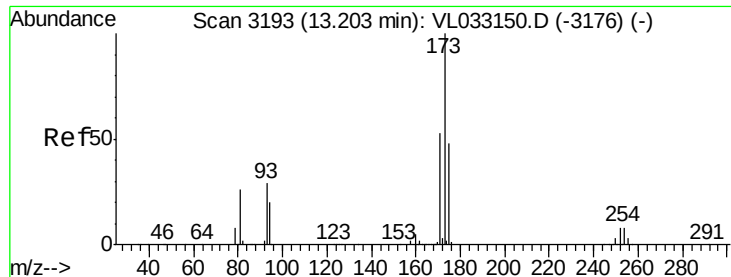


Abundance

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V





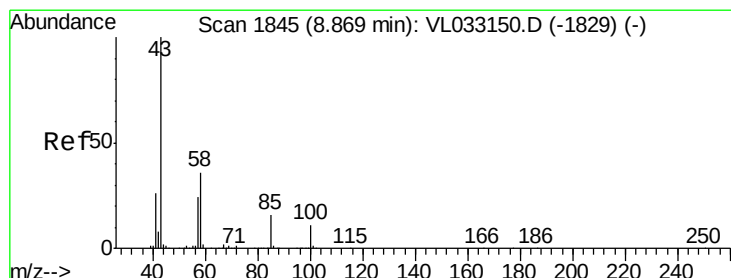
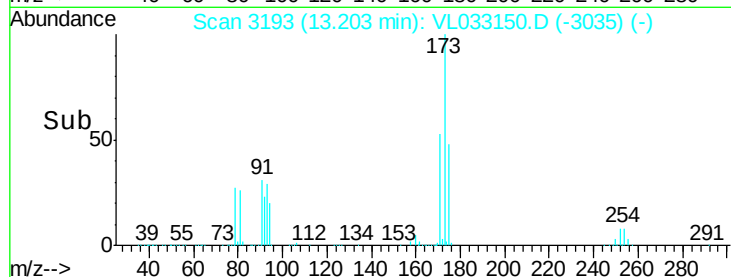
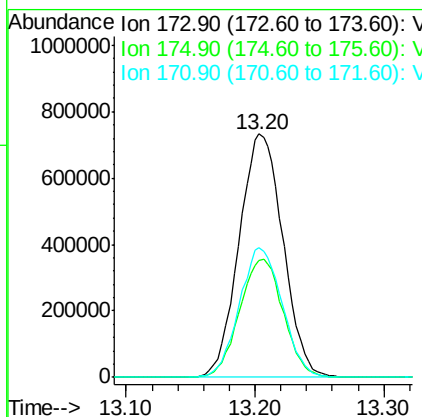
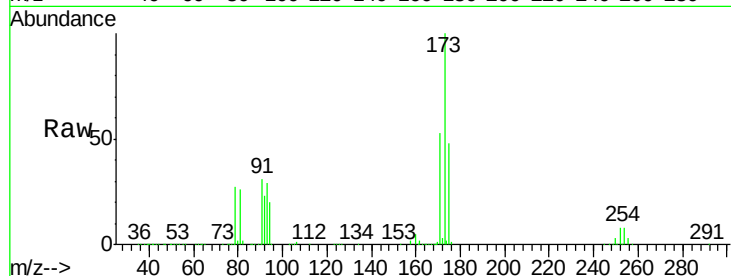
#49
Bromoform
Concen: 9.275 ppbv
RT: 13.20 min Scan# 3193
Delta R.T. 0.01 min
Lab File: VL033150.D
Acq: 4 Feb 2019 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tot Ion	Ratio	Lower	Upper
173	100		
175	48.5	39.3	58.9
171	52.3	41.8	62.6

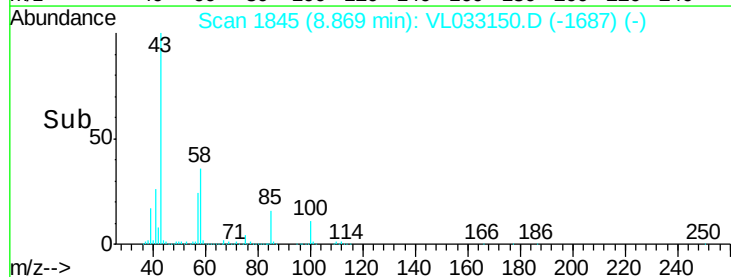
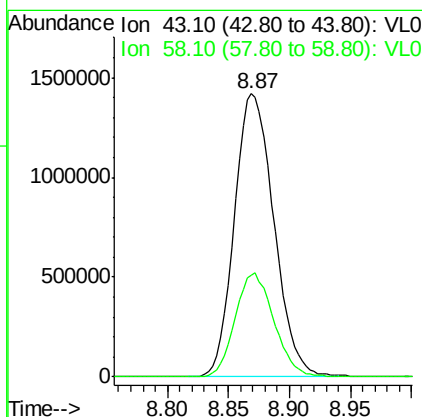
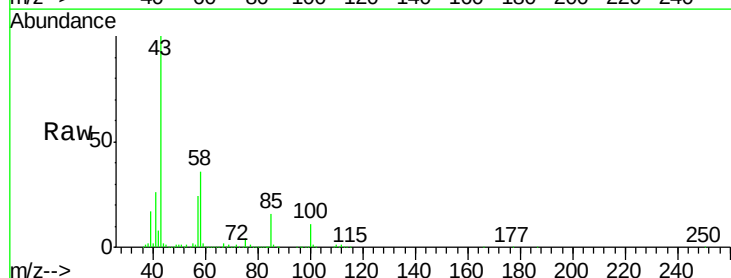
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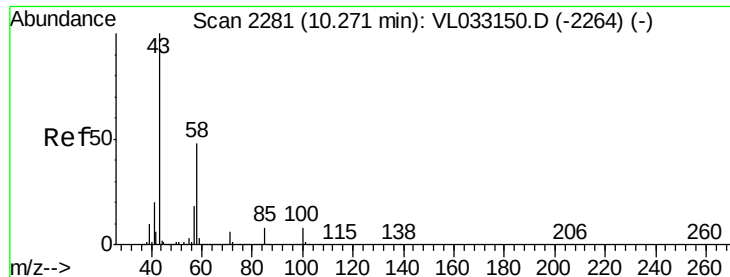
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#50
4-Methyl-2-Pentanone
Concen: 8.894 ppbv
RT: 8.87 min Scan# 1845
Delta R.T. 0.01 min
Lab File: VL033150.D
Acq: 4 Feb 2019 10:01

Tgt Ion	Ratio	Lower	Upper
43	100		
58	36.0	28.7	43.1





#51

2-Hexanone

Concen: 7.907 ppbv

RT: 10.27 min Scan# 2281

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDICCC010

Tot Ion: 43 Resp: 2519545

Ion Ratio Lower Upper

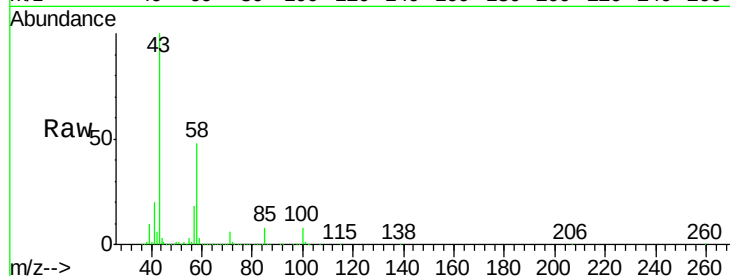
43 100

58 49.7 39.4 59.2

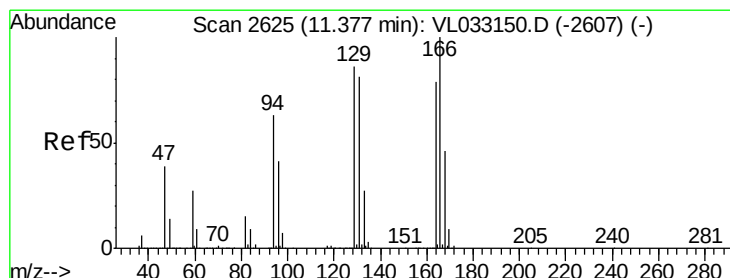
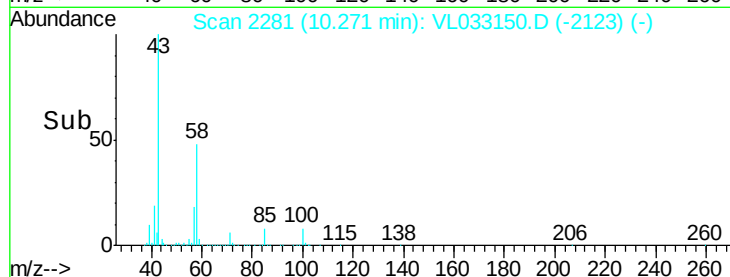
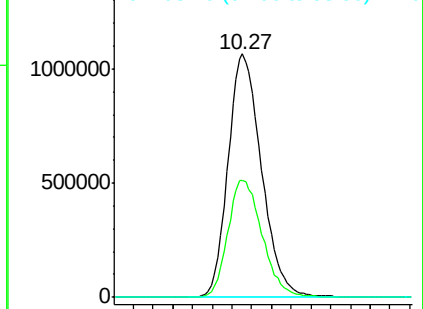
98 0.1 0.1 0.1

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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: 6.675 ppbv

RT: 11.38 min Scan# 2625

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Tgt Ion: 164 Resp: 1022937

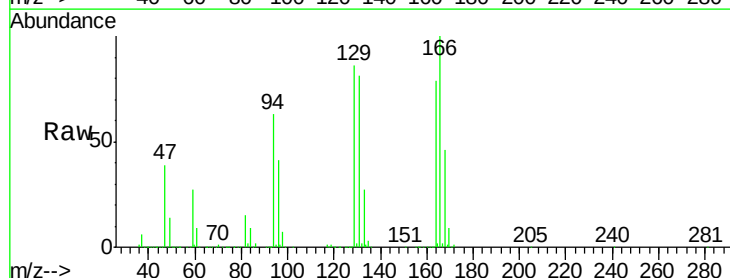
Ion Ratio Lower Upper

164 100

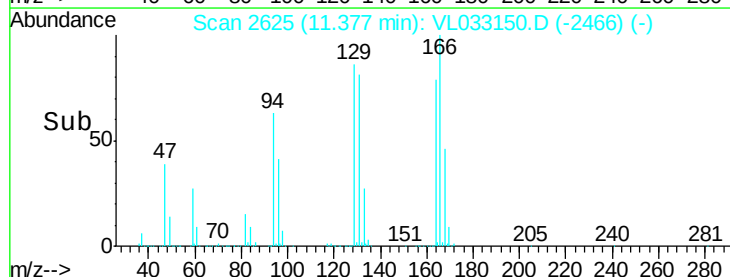
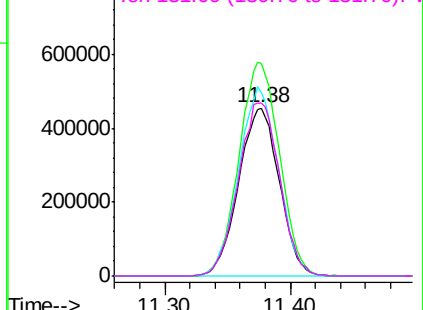
166 126.5 98.6 148.0

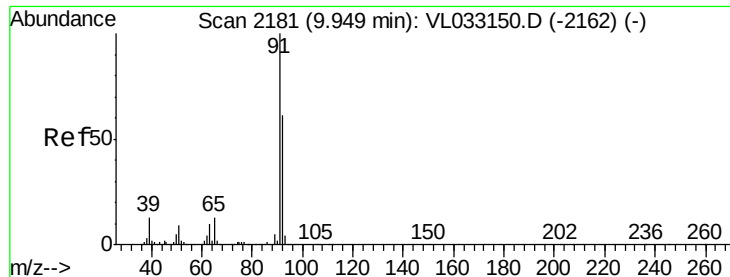
129 108.6 86.3 129.5

131 102.9 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: 7.825 ppbv

RT: 9.95 min Scan# 2181

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDICCC010

Tot Ion: 91 Resp: 3619972

Ion Ratio Lower Upper

91 100

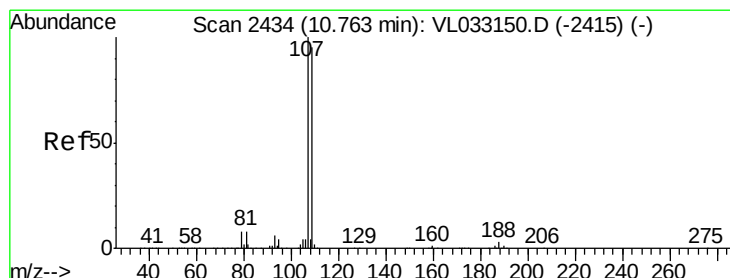
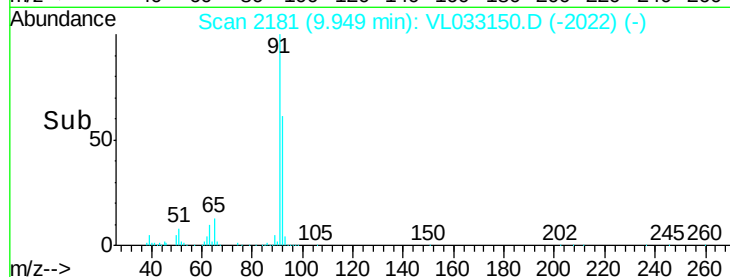
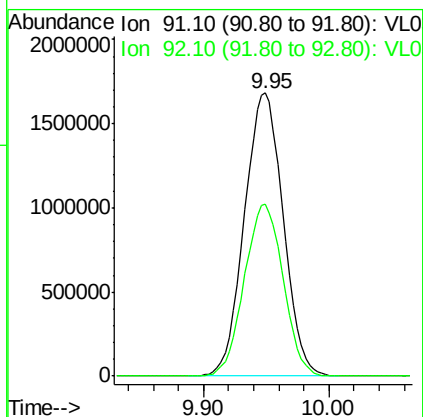
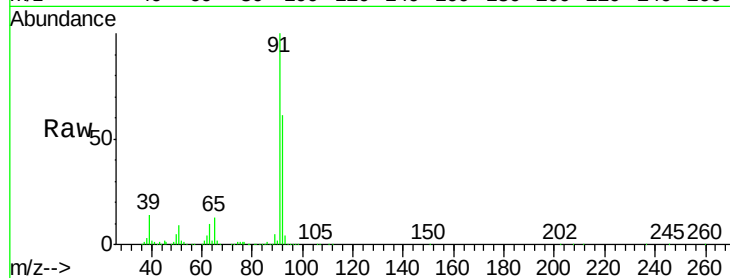
92 60.8 48.9 73.3

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#54

1,2-Dibromoethane

Concen: 7.698 ppbv

RT: 10.76 min Scan# 2434

Delta R.T. 0.01 min

Lab File: VL033150.D

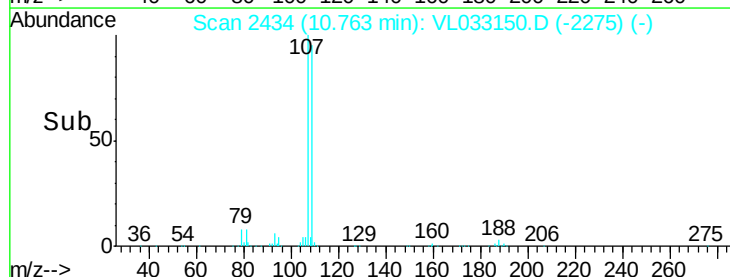
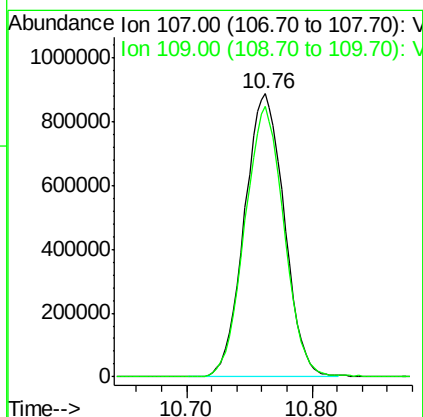
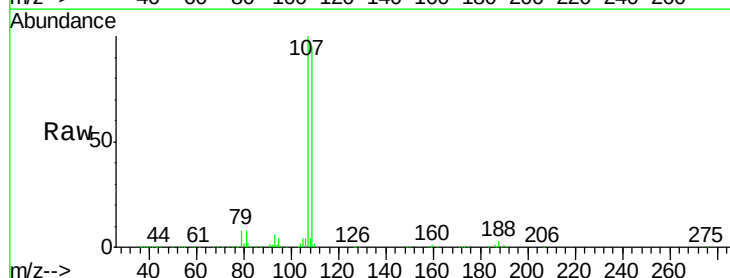
Acq: 4 Feb 2019 10:01

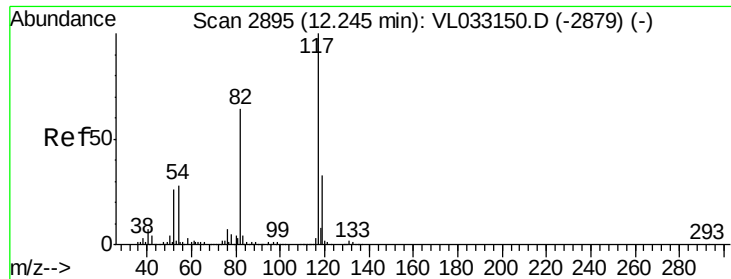
Tgt Ion: 107 Resp: 1955625

Ion Ratio Lower Upper

107 100

109 95.4 74.7 112.1





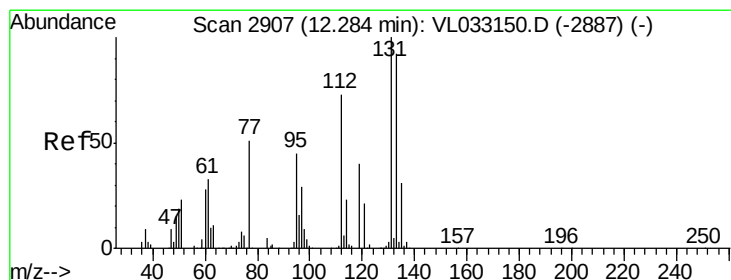
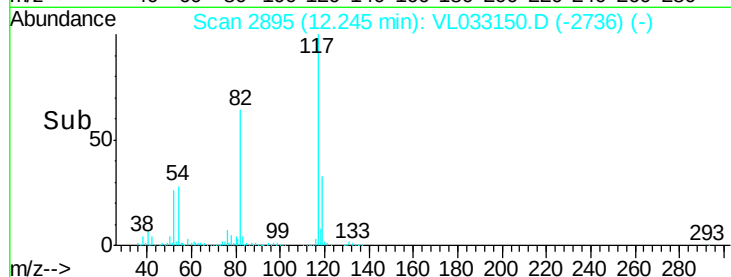
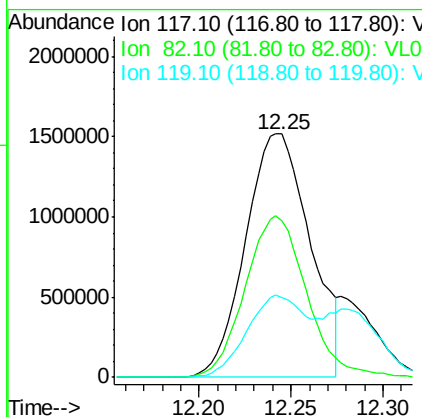
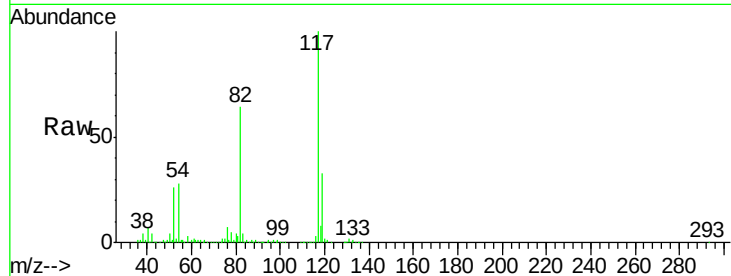
#55
Chlorobenzene-d5
Concen: 10.000 ppbv m
RT: 12.25 min Scan# 2895
Delta R.T. 0.01 min
Lab File: VL033150.D
Acq: 4 Feb 2019 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tot Ion:117 Resp: 3703540
Ion Ratio Lower Upper
117 100
82 63.3 49.3 73.9
119 33.9 27.1 40.7

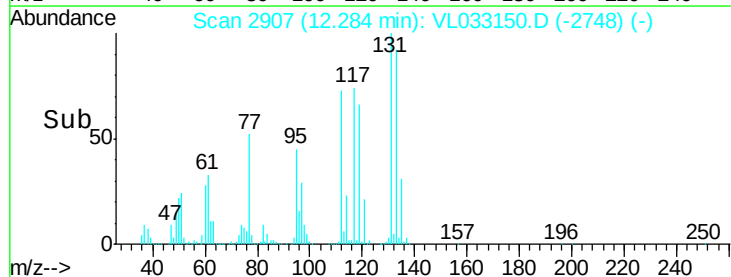
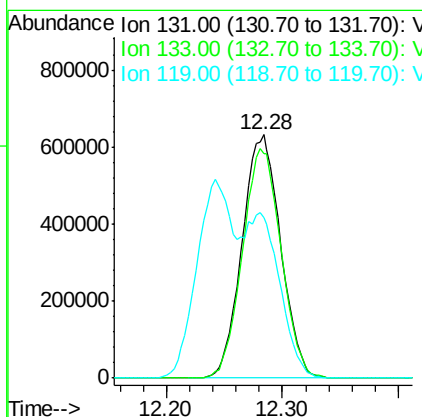
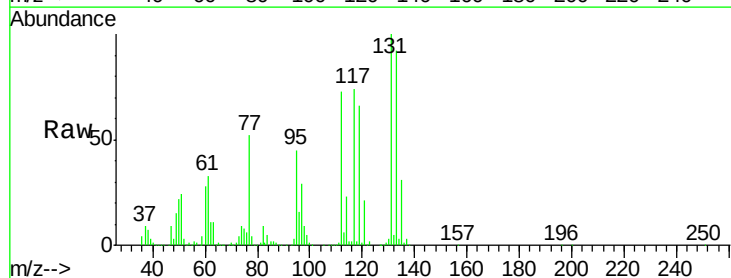
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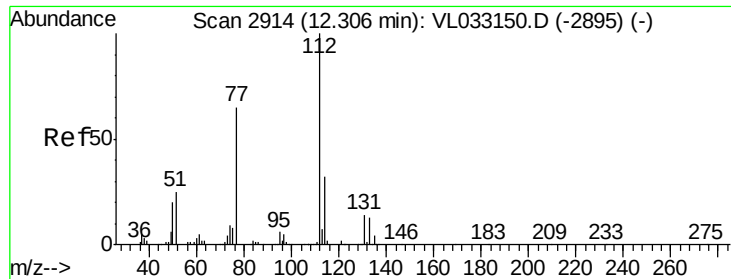
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#56
1,1,1,2-Tetrachloroethane
Concen: 8.836 ppbv
RT: 12.28 min Scan# 2907
Delta R.T. 0.01 min
Lab File: VL033150.D
Acq: 4 Feb 2019 10:01

Tgt Ion:131 Resp: 1455619
Ion Ratio Lower Upper
131 100
133 94.7 76.2 114.4
119 142.1 46.9 70.3#





#57

Chlorobenzene

Concen: 8.169 ppbv

RT: 12.31 min Scan# 2914

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDICCC010

Tot Ion:112 Resp: 2662382

Ion Ratio Lower Upper

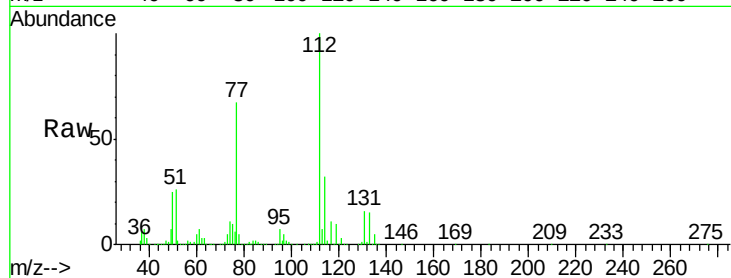
112 100

77 66.6 52.8 79.2

114 31.9 29.7 36.3

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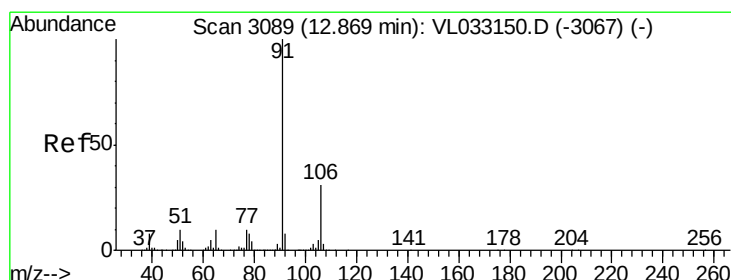
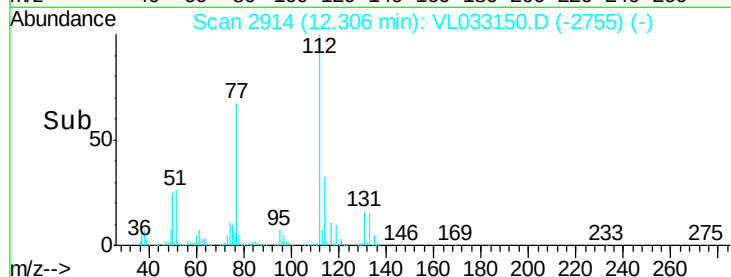
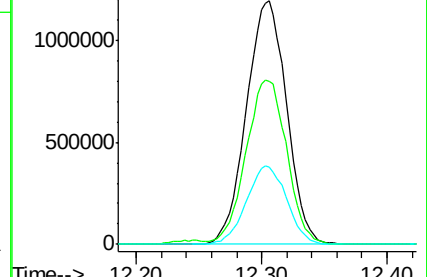
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Abundance Ion 112.10 (111.80 to 112.80): V

Ion 77.10 (76.80 to 77.80): VL0

Ion 114.10 (113.80 to 114.80): V



#58

Ethyl Benzene

Concen: 8.289 ppbv

RT: 12.87 min Scan# 3089

Delta R.T. 0.01 min

Lab File: VL033150.D

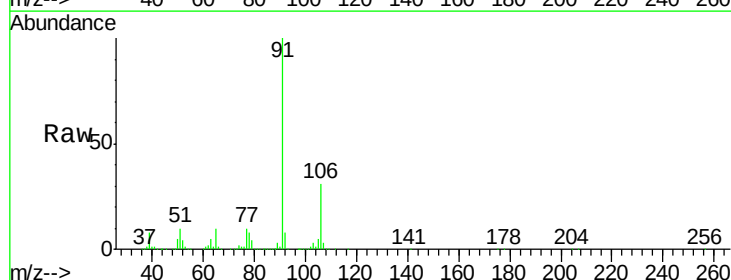
Acq: 4 Feb 2019 10:01

Tgt Ion: 91 Resp: 5035103

Ion Ratio Lower Upper

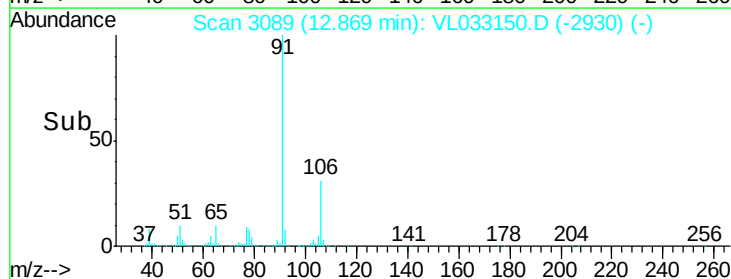
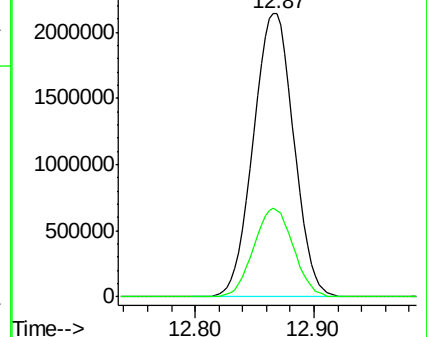
91 100

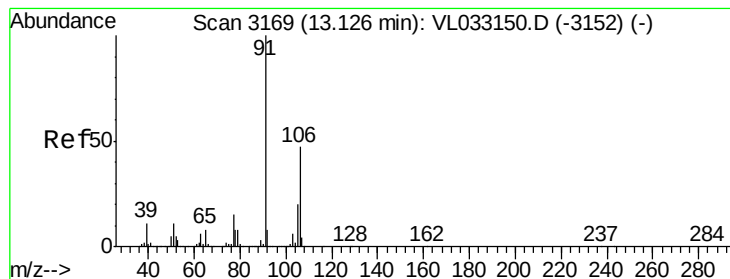
106 30.7 24.7 37.1



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





#59

m/p-Xylene

Concen: 16.285 ppbv m

RT: 13.13 min Scan# 3169

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDICCC010

Tot Ion: 91 Resp: 8068440

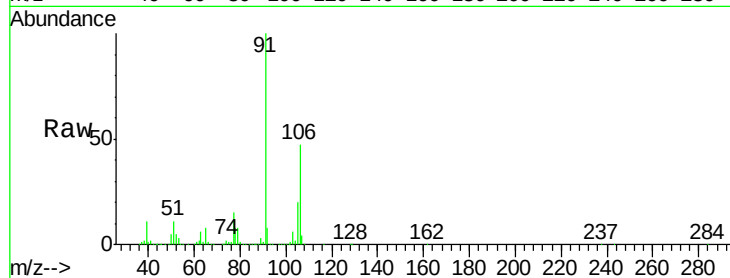
Ion Ratio Lower Upper

91 100

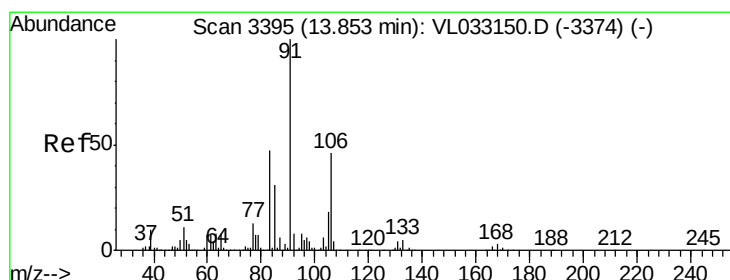
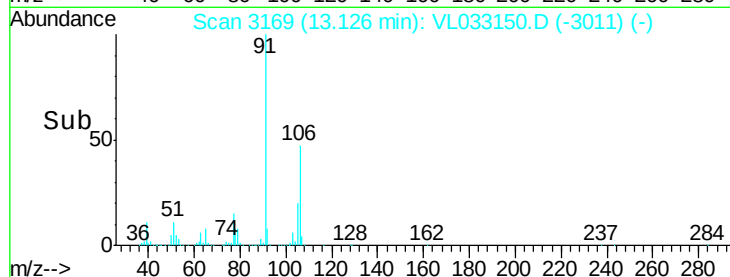
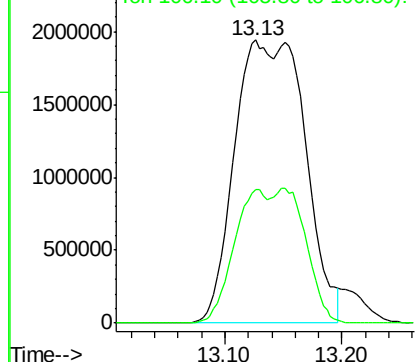
106 0.0 37.6 56.4#

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Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 106.10 (105.80 to 106.80): V



#60

o-Xylene

Concen: 8.048 ppbv

RT: 13.85 min Scan# 3395

Delta R.T. 0.01 min

Lab File: VL033150.D

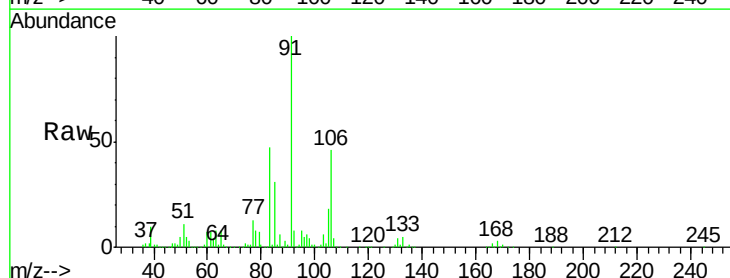
Acq: 4 Feb 2019 10:01

Tgt Ion: 91 Resp: 3856428

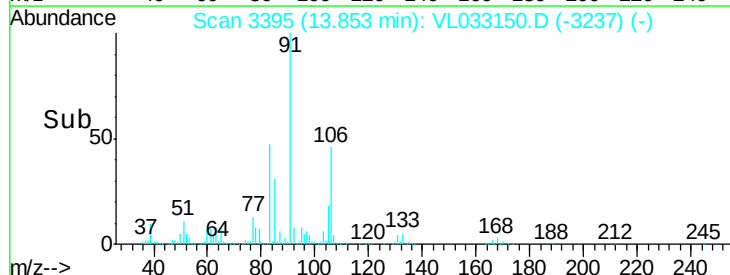
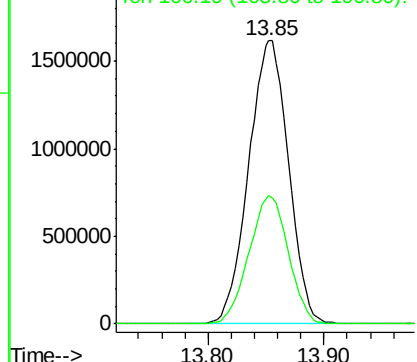
Ion Ratio Lower Upper

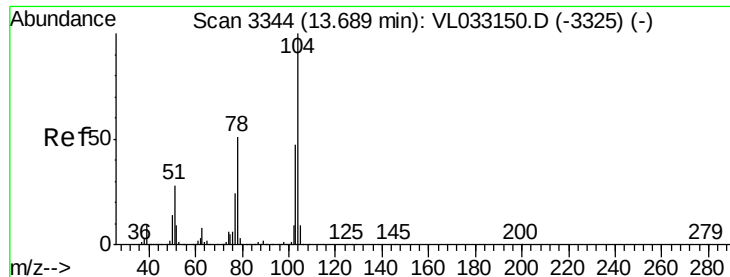
91 100

106 45.0 23.2 69.5



Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 106.10 (105.80 to 106.80): V





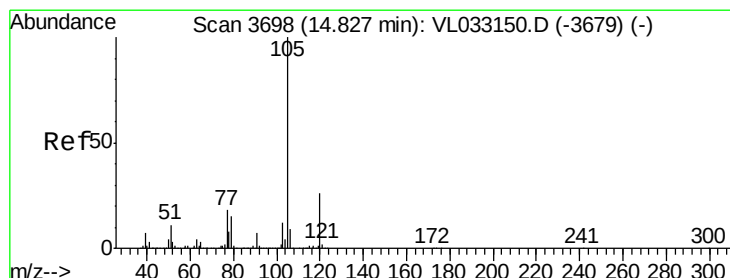
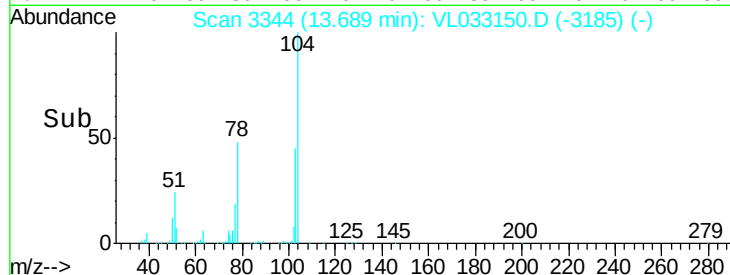
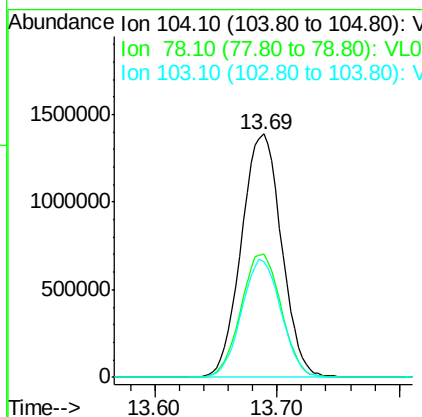
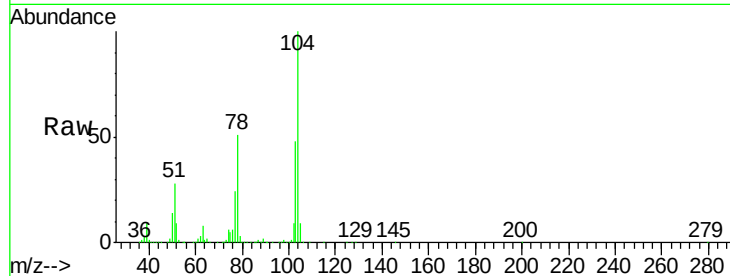
#61
Stvrene
Concen: 8.593 ppbv
RT: 13.69 min Scan# 3344
Delta R.T. 0.01 min
Lab File: VL033150.D
Acq: 4 Feb 2019 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tot Ion:104 Resp: 3158676
Ion Ratio Lower Upper
104 100
78 51.1 39.7 59.5
103 47.7 37.7 56.5

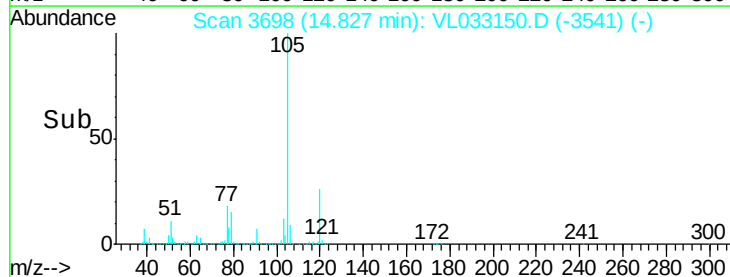
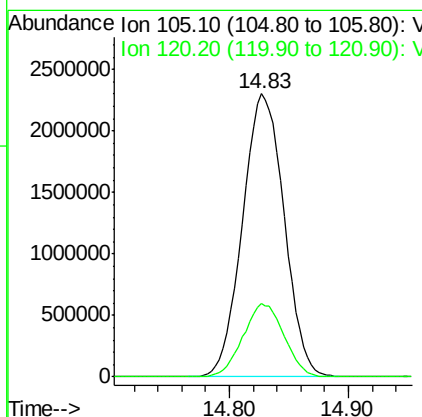
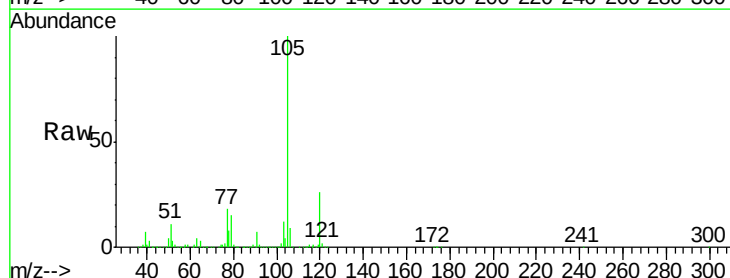
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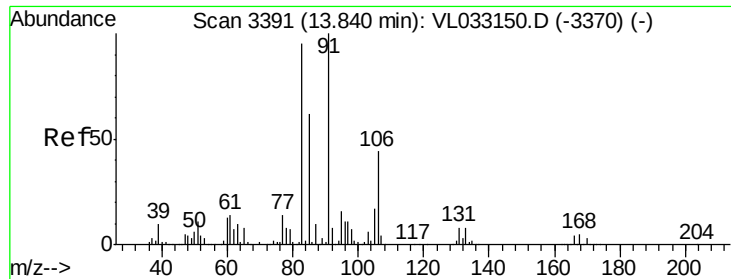
MMDadoda
2/5/2019 10:26:59 AM



#62
Isopropylbenzene
Concen: 8.169 ppbv
RT: 14.83 min Scan# 3698
Delta R.T. 0.00 min
Lab File: VL033150.D
Acq: 4 Feb 2019 10:01

Tgt Ion:105 Resp: 5565304
Ion Ratio Lower Upper
105 100
120 25.5 20.8 31.2





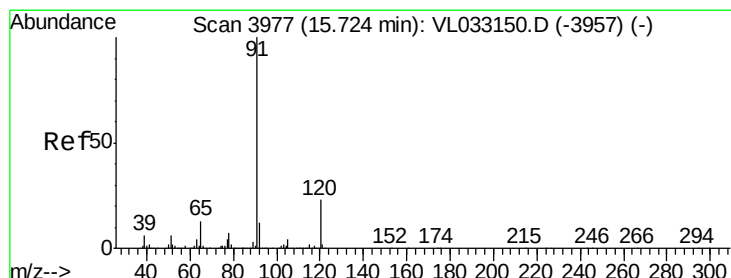
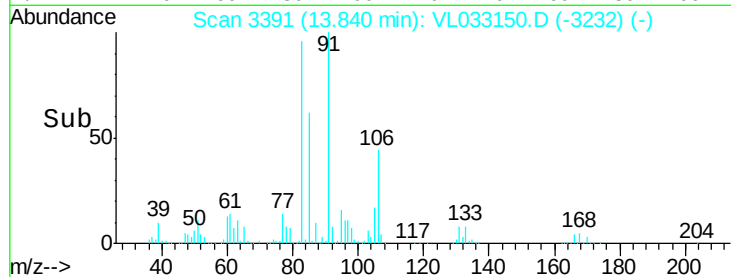
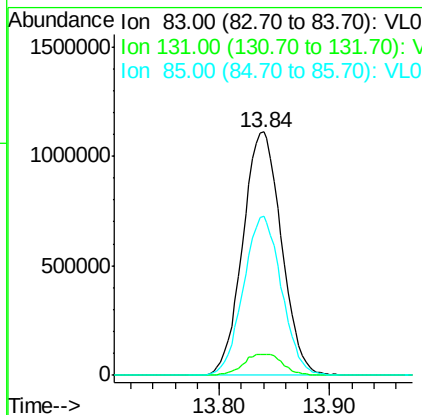
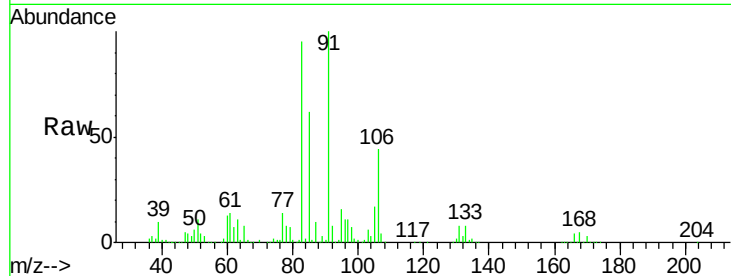
#63
 1,1,2,2-Tetrachloroethane
 Concen: 7.452 ppbv
 RT: 13.84 min Scan# 3391
 Delta R.T. 0.01 min
 Lab File: VL033150.D
 Acq: 4 Feb 2019 10:01

Instrument :
 MSVOA_L
 ClientSampled :
 VSTDICCC010

Tot Ion: 83 Resp: 2694403
 Ion Ratio Lower Upper
 83 100
 131 9.0 4.5 13.7
 85 64.5 32.5 97.4

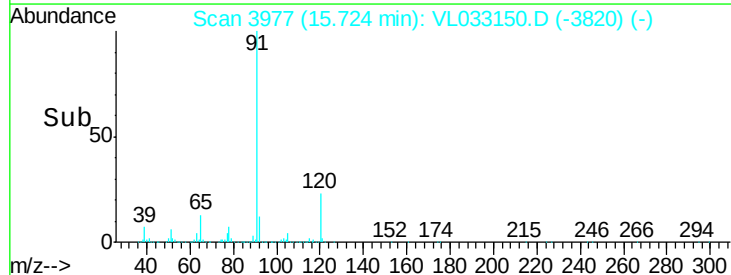
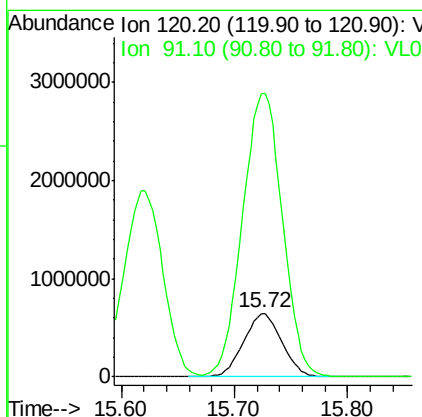
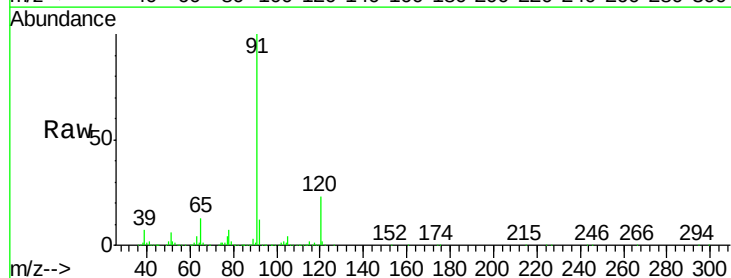
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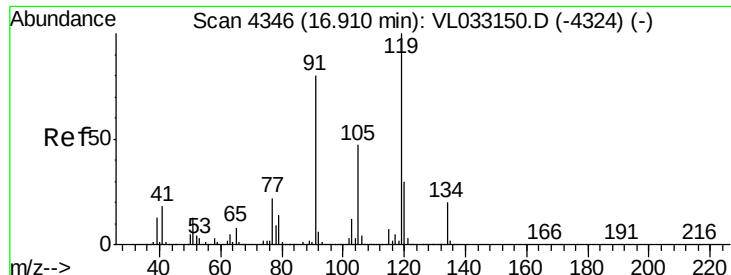
MMDadoda
 2/5/2019 10:26:59 AM



#64
 n-propylbenzene
 Concen: 8.662 ppbv
 RT: 15.72 min Scan# 3977
 Delta R.T. 0.00 min
 Lab File: VL033150.D
 Acq: 4 Feb 2019 10:01

Tgt Ion: 120 Resp: 1512162
 Ion Ratio Lower Upper
 120 100
 91 469.4 370.2 555.2





#65

tert-Butylbenzene

Concen: 8.660 ppbv

RT: 16.91 min Scan# 4346

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDICCC010

Tot Ion:119 Resp: 4965268

Ion Ratio Lower Upper

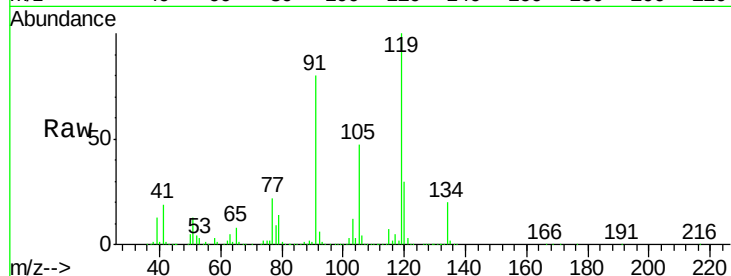
119 100

91 81.3 63.0 94.6

134 19.6 15.5 23.3

Manual Integrations
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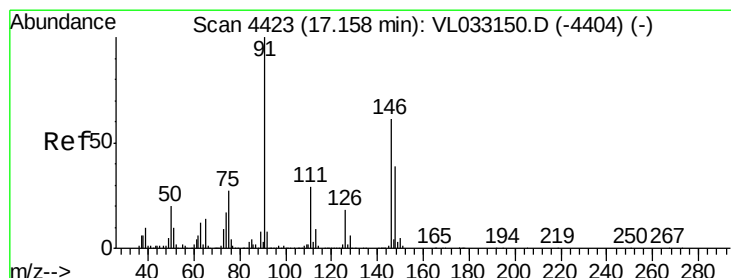
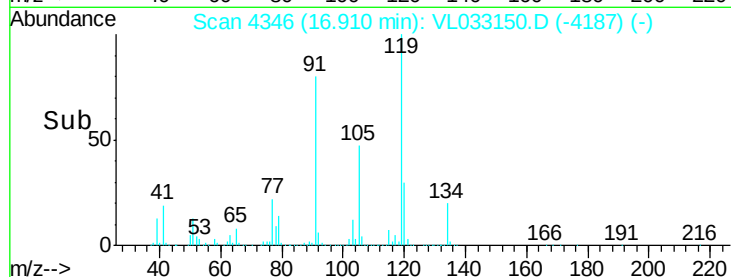
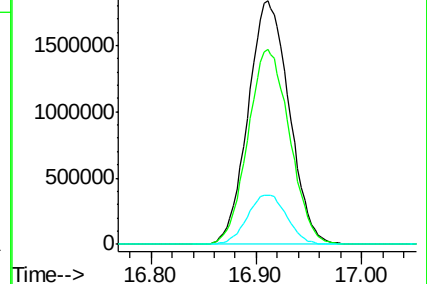
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Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V



#66

Benzyl Chloride

Concen: 12.259 ppbv

RT: 17.16 min Scan# 4423

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

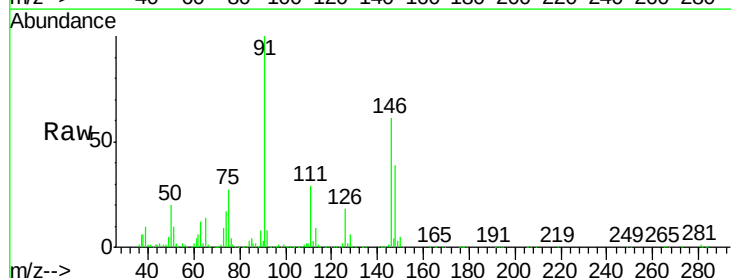
Tgt Ion: 91 Resp: 3148378

Ion Ratio Lower Upper

91 100

126 17.8 14.9 22.3

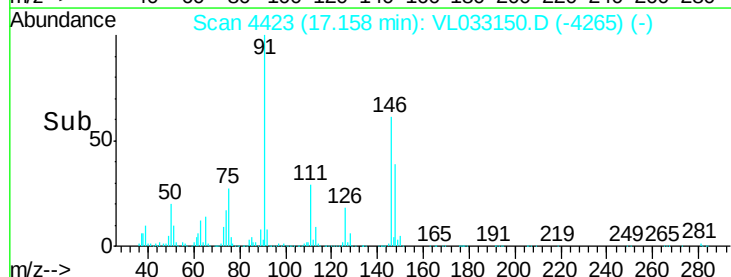
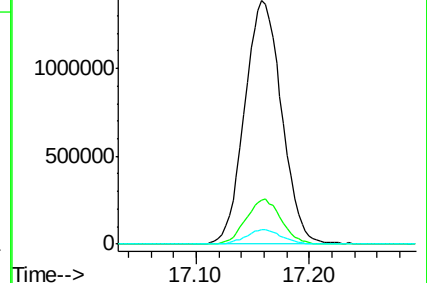
128 5.7 4.7 7.1

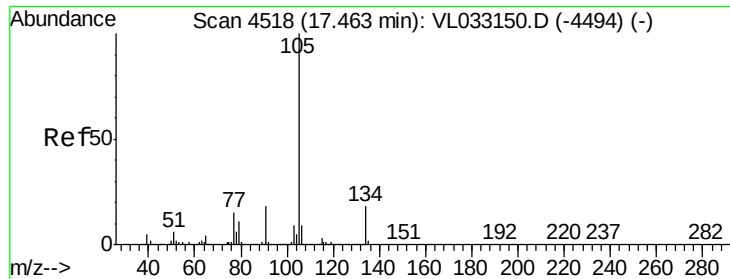


Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V

Ion 128.10 (127.80 to 128.80): V





#67

sec-Butylbenzene

Concen: 8.833 ppbv

RT: 17.46 min Scan# 4518

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDICCC010

Tot Ion: 105 Resp: 7193053

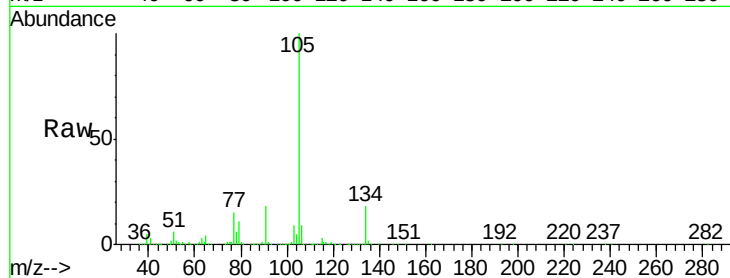
Ion Ratio Lower Upper

105 100

134 17.9 14.4 21.6

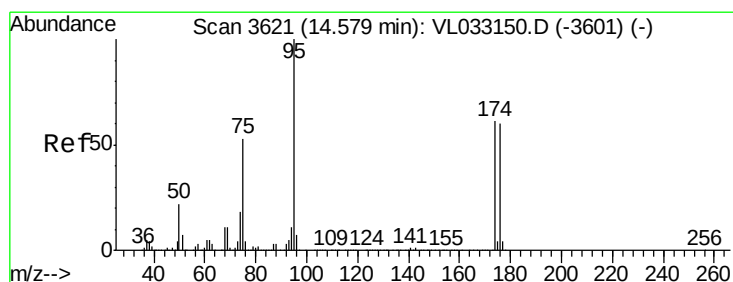
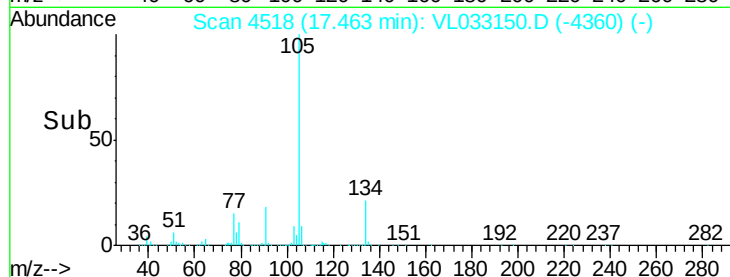
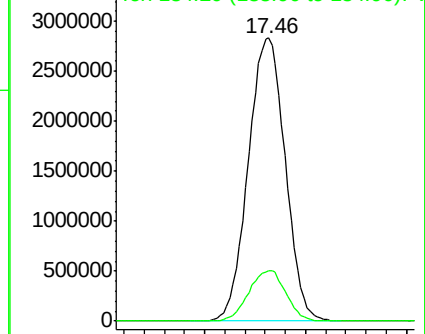
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V



#68

1-Bromo-4-Fluorobenzene

Concen: 9.811 ppbv

RT: 14.58 min Scan# 3621

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

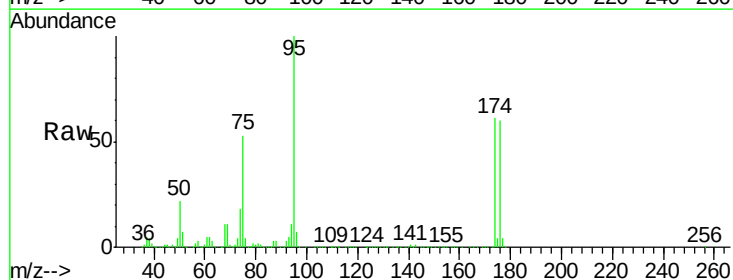
Tgt Ion: 95 Resp: 2743474

Ion Ratio Lower Upper

95 100

174 60.8 49.2 73.8

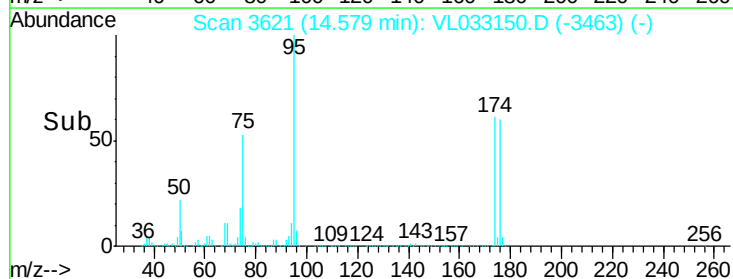
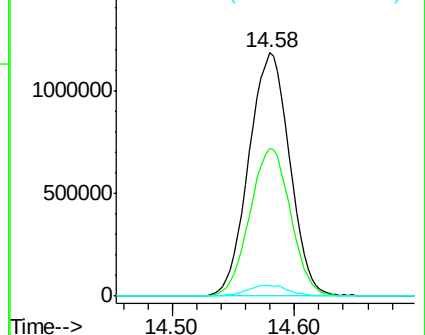
175 4.5 3.7 5.5

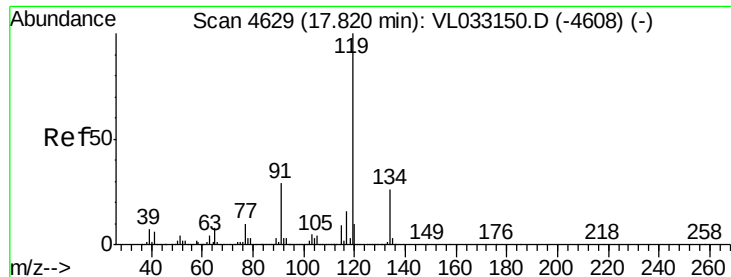


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





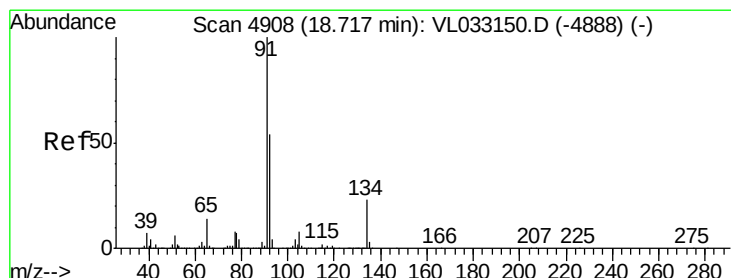
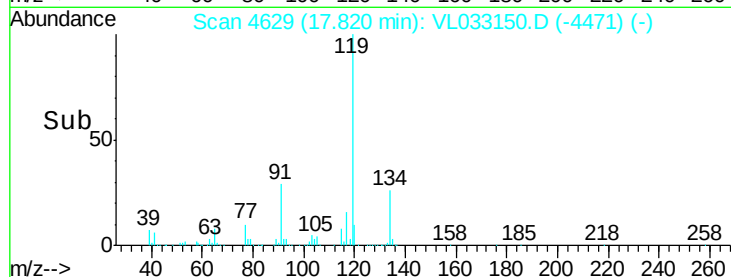
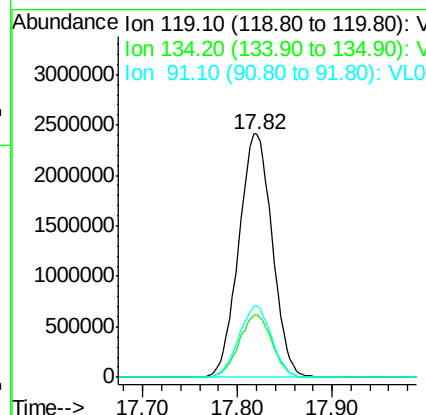
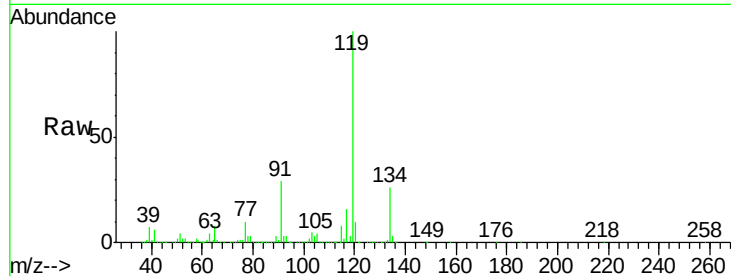
#69
 p-Isopropyltoluene
 Concen: 9.221 ppbv
 RT: 17.82 min Scan# 4629
 Delta R.T. 0.01 min
 Lab File: VL033150.D
 Acq: 4 Feb 2019 10:01

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICCC010

Tot Ion: 119 Resp: 5918586
 Ion Ratio Lower Upper
 119 100
 134 25.5 20.3 30.5
 91 29.2 22.6 33.8

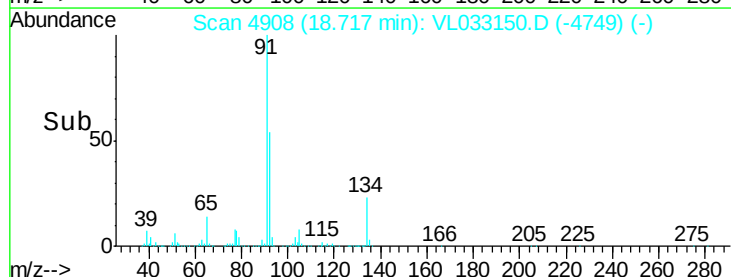
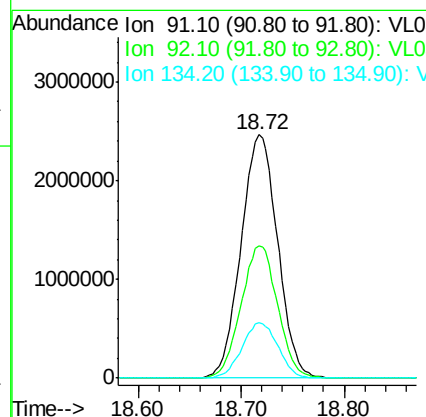
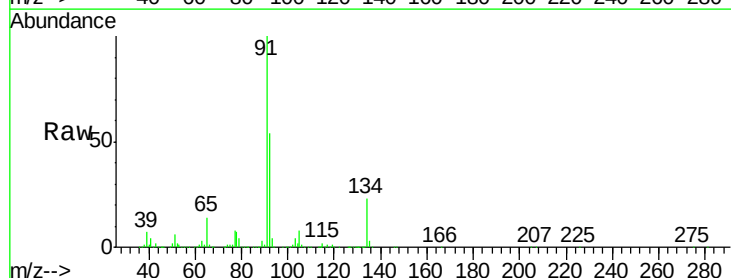
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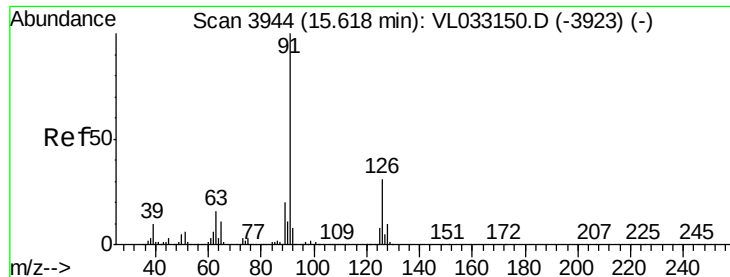
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#70
 n-Butylbenzene
 Concen: 9.285 ppbv
 RT: 18.72 min Scan# 4908
 Delta R.T. 0.01 min
 Lab File: VL033150.D
 Acq: 4 Feb 2019 10:01

Tgt Ion: 91 Resp: 6063463
 Ion Ratio Lower Upper
 91 100
 92 54.6 43.7 65.5
 134 22.6 18.4 27.6





#71

2-Chlorotoluene

Concen: 8.790 ppbv

RT: 15.62 min Scan# 3944

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDICCC010

Tot Ion: 91 Resp: 4557863

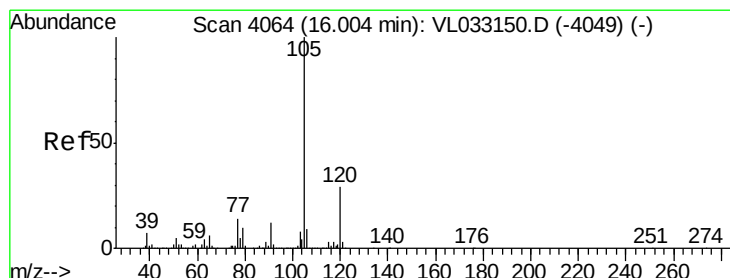
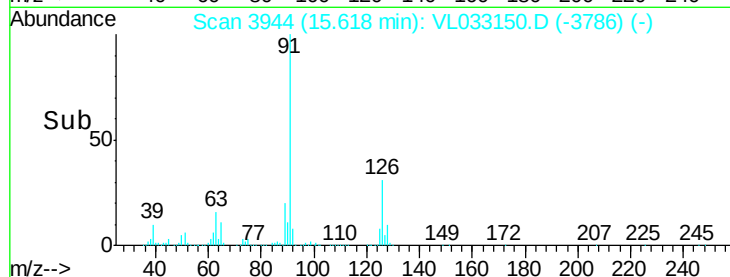
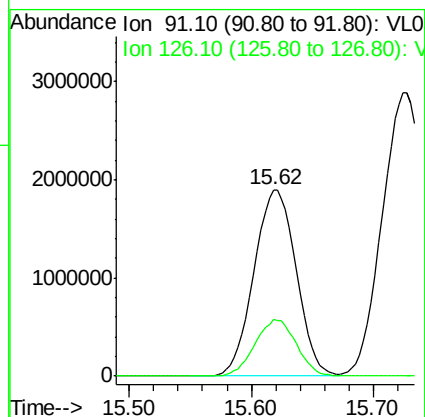
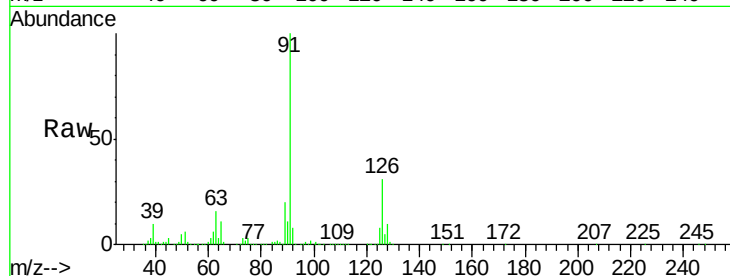
Ion Ratio Lower Upper

91 100

126 29.8 12.3 49.1

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#72

4-Ethyltoluene

Concen: 8.978 ppbv

RT: 16.00 min Scan# 4064

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Tgt Ion: 105 Resp: 4822632

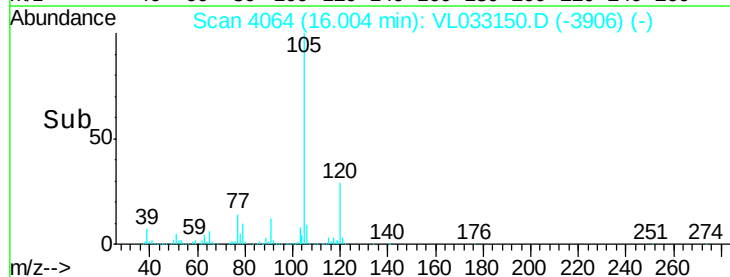
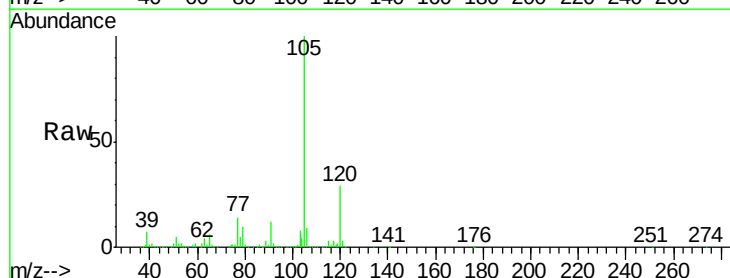
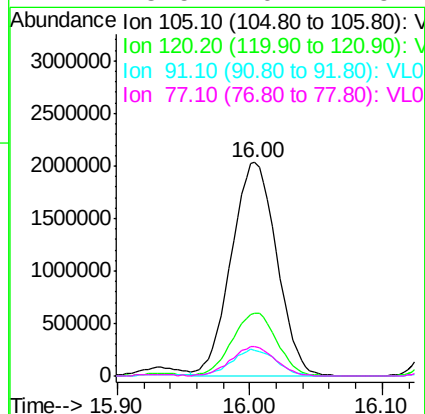
Ion Ratio Lower Upper

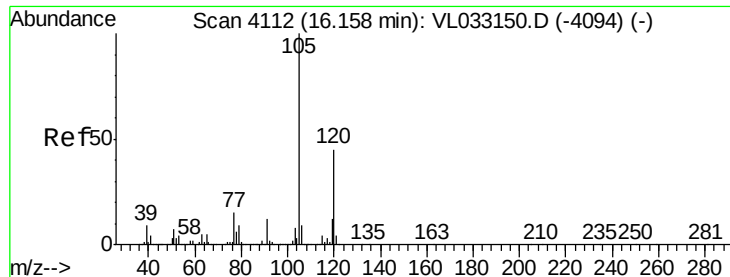
105 100

120 29.4 23.2 34.8

91 12.2 9.5 14.3

77 13.5 10.2 15.4





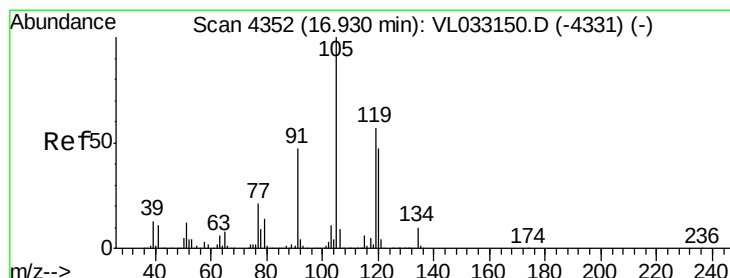
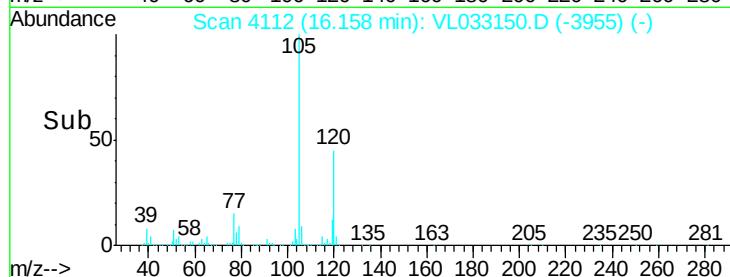
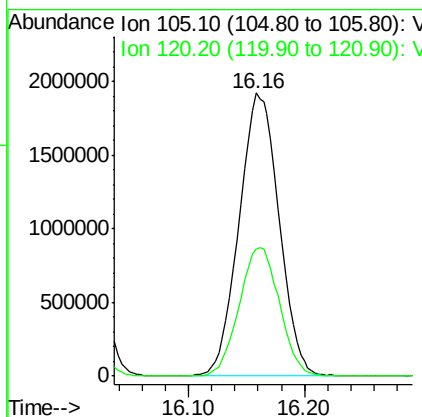
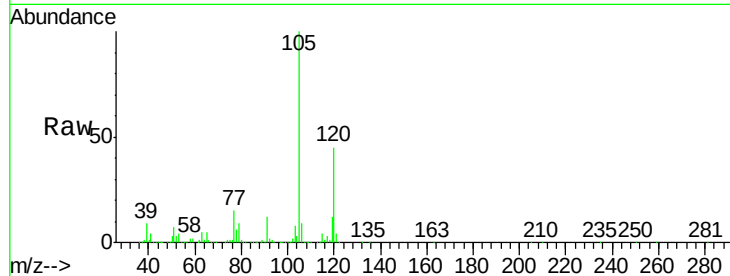
#73
 1,3,5-Trimethylbenzene
 Concen: 9.470 ppbv
 RT: 16.16 min Scan# 4112
 Delta R.T. 0.00 min
 Lab File: VL033150.D
 Acq: 4 Feb 2019 10:01

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICCC010

Tot Ion:105 Resp: 4586183
 Ion Ratio Lower Upper
 105 100
 120 45.0 38.0 57.0

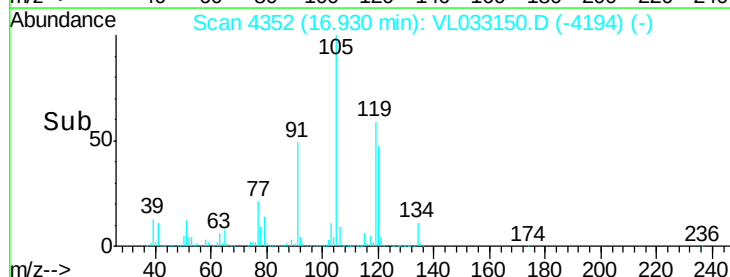
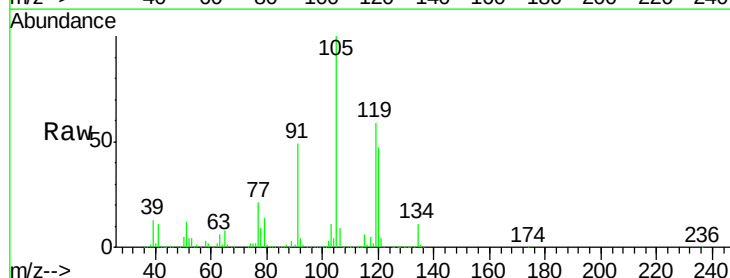
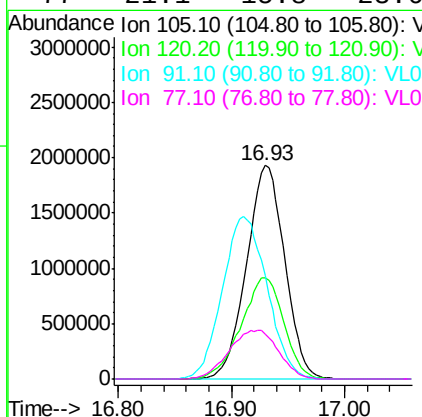
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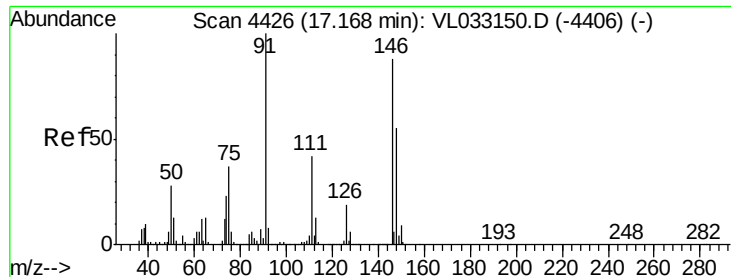
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#74
 1,2,4-Trimethylbenzene
 Concen: 9.481 ppbv
 RT: 16.93 min Scan# 4352
 Delta R.T. 0.01 min
 Lab File: VL033150.D
 Acq: 4 Feb 2019 10:01

Tgt Ion:105 Resp: 4522281
 Ion Ratio Lower Upper
 105 100
 120 47.2 38.2 57.4
 91 48.6 35.0 52.4
 77 21.1 15.8 23.6





#75

1,3-Dichlorobenzene

Concen: 8.859 ppbv

RT: 17.17 min Scan# 4426

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDICCC010

Tot Ion:146 Resp: 2517667

Ion Ratio Lower Upper

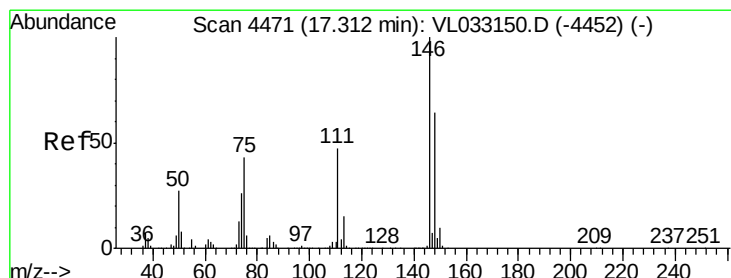
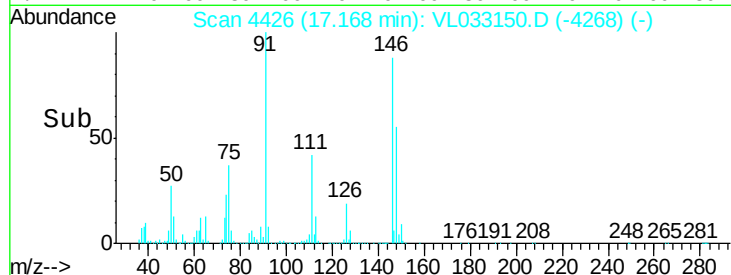
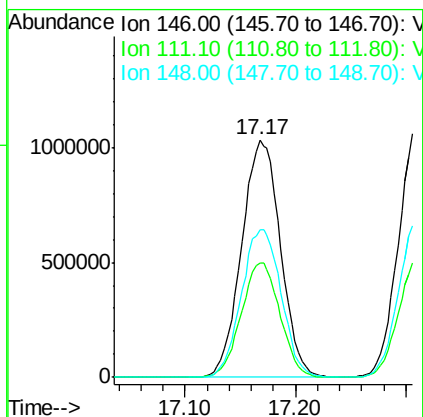
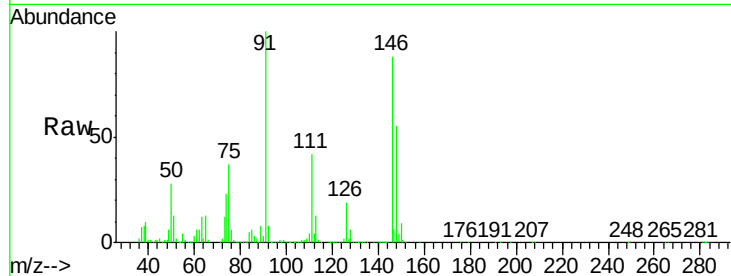
146 100

111 48.3 24.0 72.0

148 63.9 31.9 95.7

Manual Integrations
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MMDadoda
2/5/2019 10:26:59 AM



#76

1,4-Dichlorobenzene

Concen: 9.161 ppbv

RT: 17.31 min Scan# 4471

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

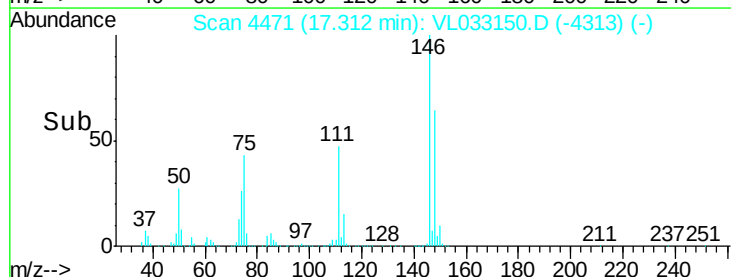
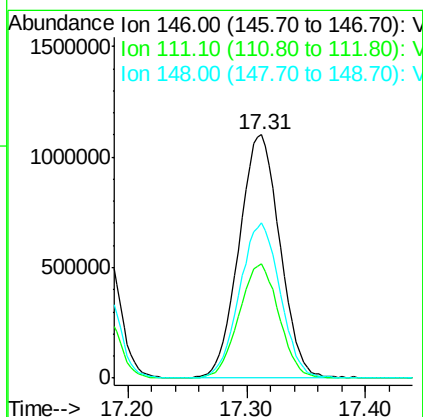
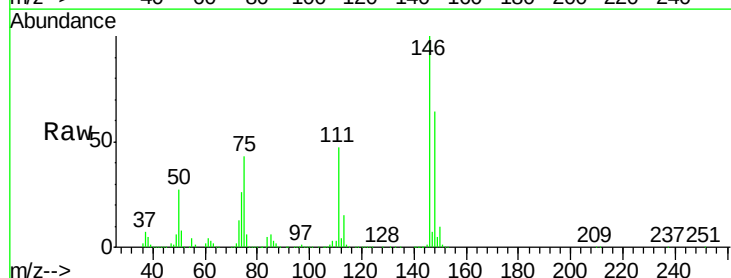
Tgt Ion:146 Resp: 2599503

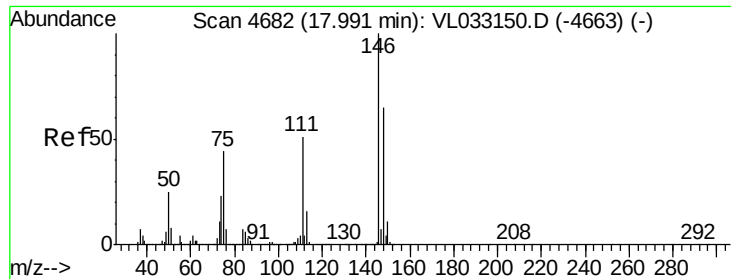
Ion Ratio Lower Upper

146 100

111 46.4 23.4 70.0

148 63.8 31.9 95.9





#77

1,2-Dichlorobenzene

Concen: 9.231 ppbv

RT: 17.99 min Scan# 4682

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

Instrument :

MSVOA_L

ClientSampleId :

VSTDICCC010

Tot Ion:146 Resp: 2530160

Ion Ratio Lower Upper

146 100

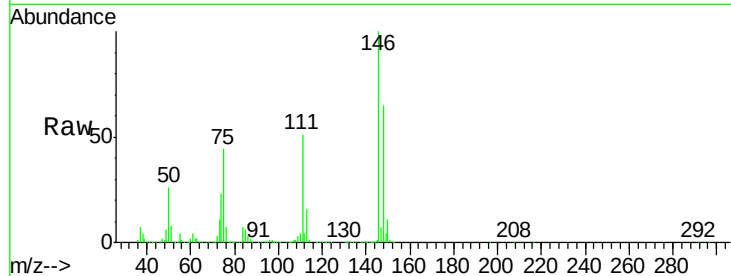
111 50.1 25.1 75.3

148 64.3 32.0 96.2

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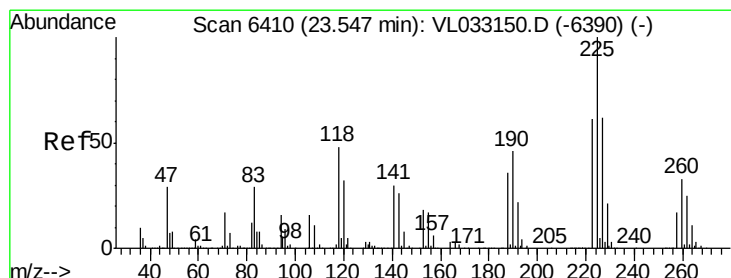
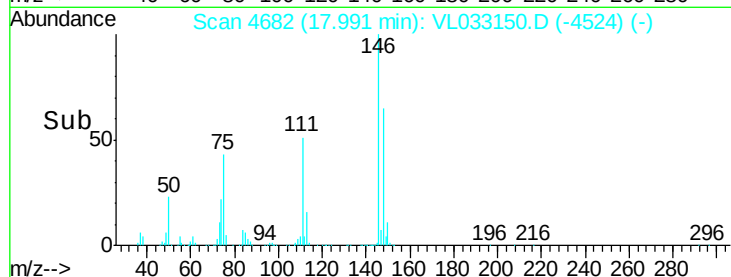
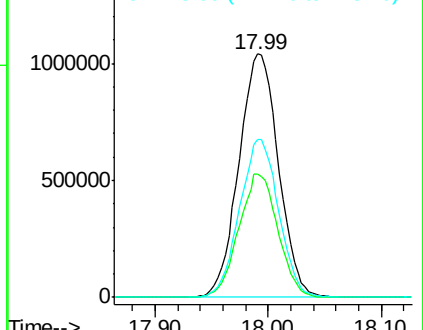
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Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V



#78

Hexachloro-1,3-Butadiene

Concen: 8.538 ppbv

RT: 23.55 min Scan# 6410

Delta R.T. 0.01 min

Lab File: VL033150.D

Acq: 4 Feb 2019 10:01

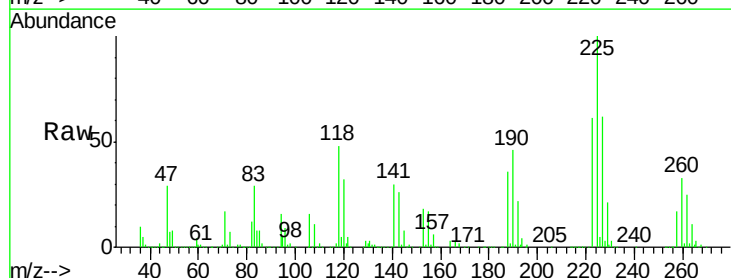
Tgt Ion:225 Resp: 1084262

Ion Ratio Lower Upper

225 100

223 62.6 50.2 75.4

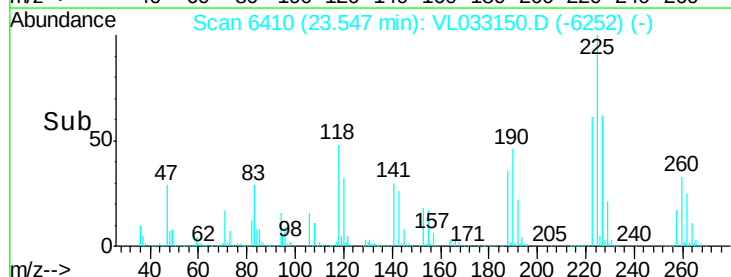
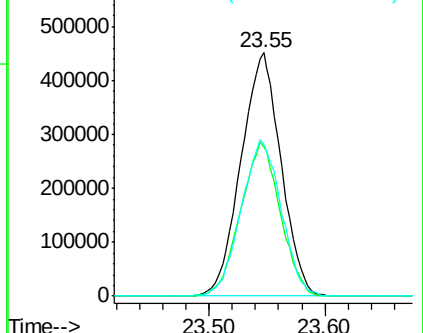
227 64.3 51.1 76.7

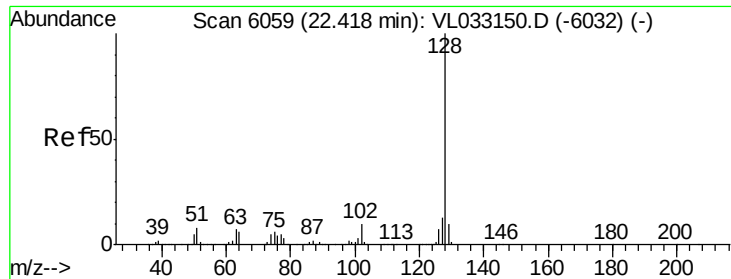


Abundance Ion 224.90 (224.60 to 225.60): V

Ion 222.90 (222.60 to 223.60): V

Ion 226.90 (226.60 to 227.60): V





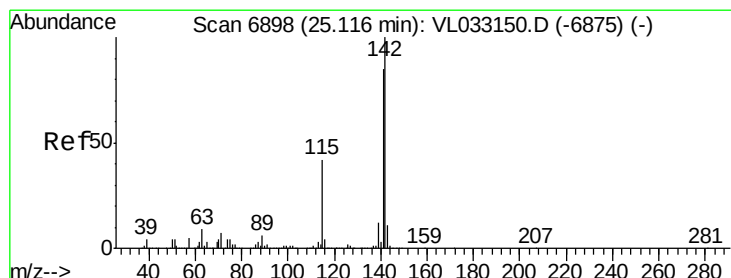
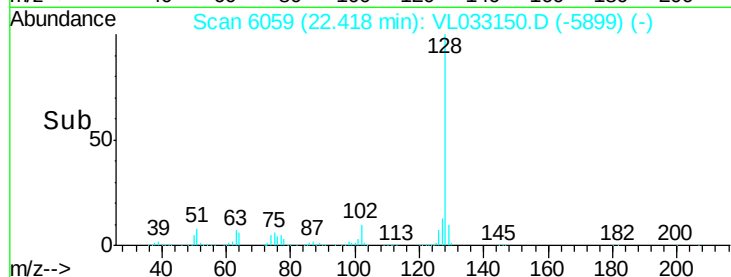
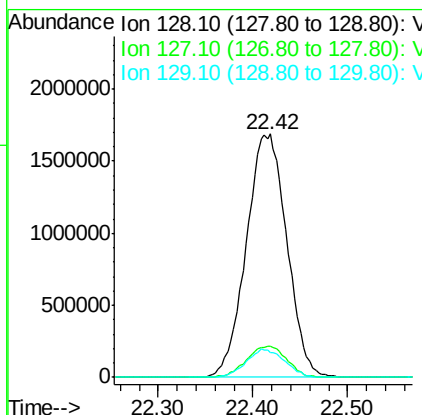
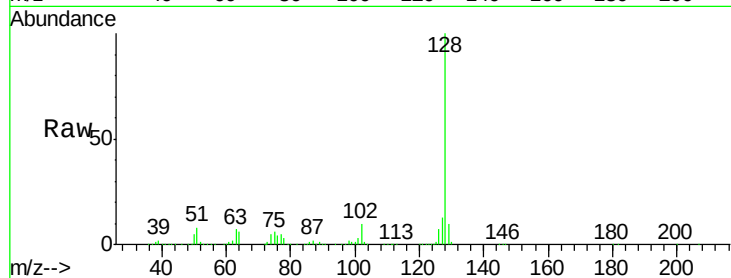
#79
Naphthalene
Concen: 16.042 ppbv m
RT: 22.42 min Scan# 6059
Delta R.T. 0.01 min
Lab File: VL033150.D
Acq: 4 Feb 2019 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tot Ion:128 Resp: 5017432
Ion Ratio Lower Upper
128 100
127 12.9 10.6 16.0
129 10.4 9.0 13.4

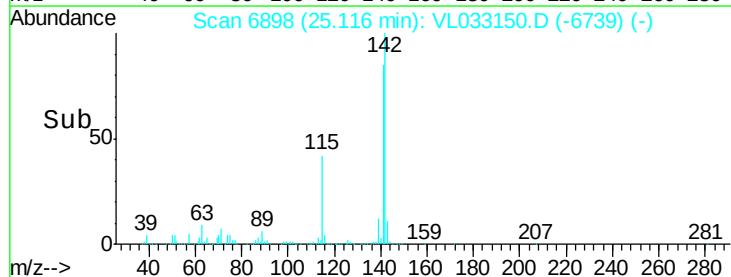
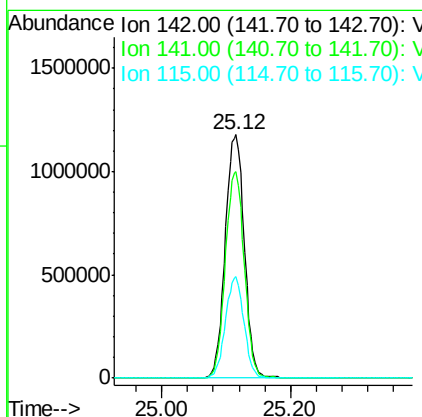
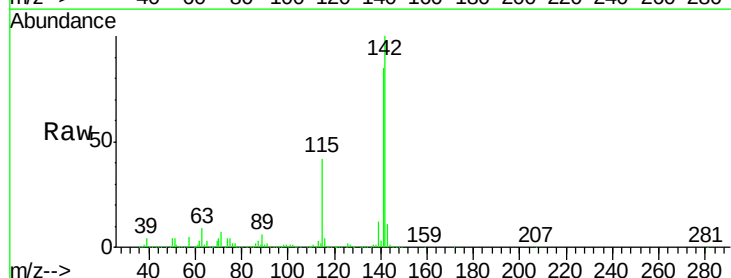
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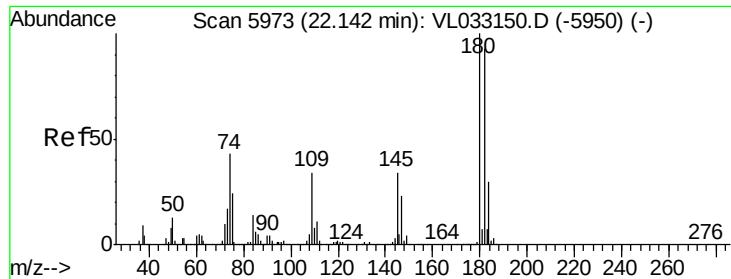
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#80
Naphthalene, 2-methyl-
Concen: 26.419 ppbv
RT: 25.12 min Scan# 6898
Delta R.T. 0.01 min
Lab File: VL033150.D
Acq: 4 Feb 2019 10:01

Tgt Ion:142 Resp: 2437280
Ion Ratio Lower Upper
142 100
141 83.9 66.5 99.7
115 40.3 31.3 46.9





#81
 1,2,4-Trichlorobenzene
 Concen: 13.953 ppbv
 RT: 22.14 min Scan# 5973
 Delta R.T. 0.01 min
 Lab File: VL033150.D
 Acq: 4 Feb 2019 10:01

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICCC010

Tot Ion	Ratio	Lower	Upper
180	100		
182	95.9	76.2	114.4
184	30.7	24.6	36.8

Manual Integrations
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MMDadoda
 2/5/2019 10:26:59 AM

