

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL020419\
 Data File : VL033167.D
 Acq On : 5 Feb 2019 4:33
 Operator : SY/AP
 Sample : VSTDCCC010
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleID :
 VSTDCCC010EC

Manual Integrations
 APPROVED

MMDadoda
 2/5/2019 10:28:36 AM

Quant Time: Feb 05 05:42:27 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	5.77	49	1191332	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	3014609	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	3088288m	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	2343541	10.18	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	1781575	10.156	ppbv	98
3) Chlorodifluoromethane	3.01	51	1128652	8.506	ppbv	99
4) Chloromethane	3.17	50	638782	8.555	ppbv	99
5) Vinyl Chloride	3.29	62	600966	8.155	ppbv	99
6) Bromomethane	3.52	94	363255	8.748	ppbv	98
7) Chloroethane	3.60	64	219419	8.757	ppbv #	89
8) Dichlorotetrafluoroethane	3.22	85	1353270	8.416	ppbv	98
9) Propene	3.04	41	564844	8.473	ppbv	100
10) Heptane	8.25	43	1770538	8.525	ppbv	99
11) Trichlorofluoromethane	4.01	101	1466968	8.654	ppbv	99
12) 1,1,2-Trichlorotrifluoroet	4.55	101	996192	9.052	ppbv	96
13) Ethanol	3.65	45	116584	4.436	ppbv	95
14) Bromoethene	3.79	108	459651	9.061	ppbv	99
15) Acetone	3.90	43	1057680	7.457	ppbv	99
16) 1,3-Butadiene	3.36	39	539292	9.366	ppbv	96
17) tert-Butyl alcohol	4.36	59	226673	7.236	ppbv	100
18) 1,1-Dichloroethene	4.35	96	448033	8.847	ppbv	97
19) Isopropyl Alcohol	4.02	45	757691	7.521	ppbv #	46
20) Methylene Chloride	4.41	84	384126	7.861	ppbv	99
21) Allyl Chloride	4.48	41	772168	9.041	ppbv	98
22) trans-1,2-Dichloroethene	4.96	96	458071	9.159	ppbv	97
23) Vinyl Acetate	5.16	43	1974428	8.557	ppbv	99
24) 1,1-Dichloroethane	5.09	63	1348268	8.564	ppbv	99
25) Ethyl Acetate	5.77	43	2645433	9.025	ppbv	100
26) Hexane	5.78	57	1246288	9.088	ppbv	97
27) Carbon Disulfide	4.62	76	1144444	9.694	ppbv	97
28) Methyl tert-Butyl Ether	5.11	73	1638257	8.211	ppbv	99
29) Chloroform	5.85	83	1892665	9.122	ppbv	98
30) Cyclohexane	7.25	84	1094829	8.316	ppbv	98
31) cis-1,2-Dichloroethene	5.64	61	1110248	8.495	ppbv	100
32) 1,1,1-Trichloroethane	6.62	97	1835530	8.975	ppbv #	83
34) 2-Butanone	5.33	43	1557188	8.213	ppbv	100
35) Carbon Tetrachloride	7.14	117	1797722	9.312	ppbv	100
36) Benzene	7.01	78	2656451	8.717	ppbv	99
37) 1,2-Dichloroethane	6.42	62	1457694	9.365	ppbv	99
38) Trichloroethene	7.96	130	951939	8.601	ppbv	95
39) 1,2-Dichloropropane	7.74	63	1060735	9.075	ppbv	99
40) 1,4-Dioxane	7.96	88	353649	7.756	ppbv #	1
41) Tetrahydrofuran	6.15	42	1146378	9.732	ppbv	99
42) Bromodichloromethane	7.92	83	2115494	9.288	ppbv	97
43) Methyl Methacrylate	8.14	69	1124119	9.273	ppbv	98

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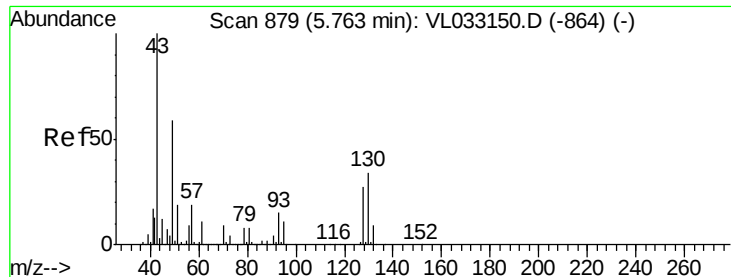
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 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Feb 0
 QLast Update : Mon Feb 04 14:41:39 2019
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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,2,4-Trimethylpentane	7.99	57	4516001	8.831	ppbv	100
45) t-1,3-Dichloropropene	9.42	75	1442080	9.639	ppbv	97
46) cis-1,3-Dichloropropene	8.84	75	1664903	9.252	ppbv	98
47) 1,1,2-Trichloroethane	9.62	97	1071927	8.542	ppbv	96
48) Dibromochloromethane	10.45	129	1701052	9.108	ppbv	100
49) Bromoform	13.21	173	1323689	8.587	ppbv	100
50) 4-Methyl-2-Pentanone	8.87	43	2769620	8.070	ppbv	100
51) 2-Hexanone	10.27	43	2194229	7.623	ppbv	100
52) Tetrachloroethene	11.38	164	882733	8.334	ppbv	98
53) Toluene	9.95	91	3143919	8.686	ppbv	99
54) 1,2-Dibromoethane	10.77	107	1652930	8.699	ppbv	99
56) 1,1,1,2-Tetrachloroethane	12.28	131	1154188	8.644	ppbv #	54
57) Chlorobenzene	12.31	112	2165302	8.410	ppbv	98
58) Ethyl Benzene	12.87	91	4145093	8.531	ppbv	99
59) m/p-Xylene	13.16	91	6675628m	16.778	ppbv	
60) o-Xylene	13.86	91	3122813	8.505	ppbv	96
61) Styrene	13.69	104	2522326	8.585	ppbv	98
62) Isopropylbenzene	14.83	105	4431764	8.456	ppbv	98
63) 1,1,2,2-Tetrachloroethane	13.84	83	2046637	7.770	ppbv	100
64) n-propylbenzene	15.73	120	1123047	8.211	ppbv	93
65) tert-Butylbenzene	16.91	119	3638732	7.740	ppbv	97
66) Benzyl Chloride	17.16	91	1701293	7.968	ppbv	97
67) sec-Butylbenzene	17.46	105	5232494	7.786	ppbv	100
69) p-Isopropyltoluene	17.82	119	4188318	7.542	ppbv	99
70) n-Butylbenzene	18.72	91	4470673	7.399	ppbv	99
71) 2-Chlorotoluene	15.62	91	3396307	8.174	ppbv	97
72) 4-Ethyltoluene	16.01	105	3585710	8.171	ppbv	99
73) 1,3,5-Trimethylbenzene	16.16	105	3380483	7.990	ppbv	93
74) 1,2,4-Trimethylbenzene	16.93	105	3295115	7.636	ppbv	98
75) 1,3-Dichlorobenzene	17.17	146	1818211	7.632	ppbv	99
76) 1,4-Dichlorobenzene	17.31	146	1840970	7.693	ppbv	99
77) 1,2-Dichlorobenzene	17.99	146	1743972	7.359	ppbv	99
78) Hexachloro-1,3-Butadiene	23.55	225	1339756	11.365	ppbv	100
79) Naphthalene	22.42	128	3770114	7.461	ppbv	99
80) Naphthalene, 2-methyl-	25.12	142	1538831	5.973	ppbv	99
81) 1,2,4-Trichlorobenzene	22.15	180	1663912	7.265	ppbv	99

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 880

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 49 Resp: 1191332

Ion Ratio Lower Upper

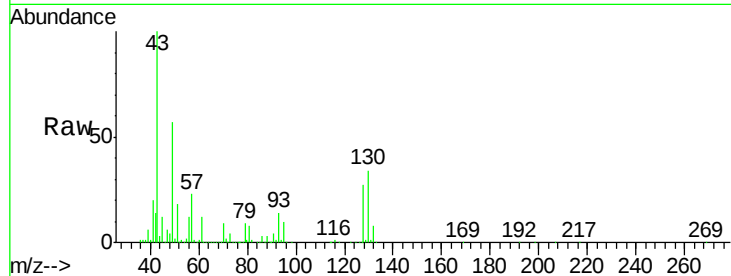
49 100

128 45.6 23.2 69.5

130 58.9 29.5 88.6

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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V

800000

600000

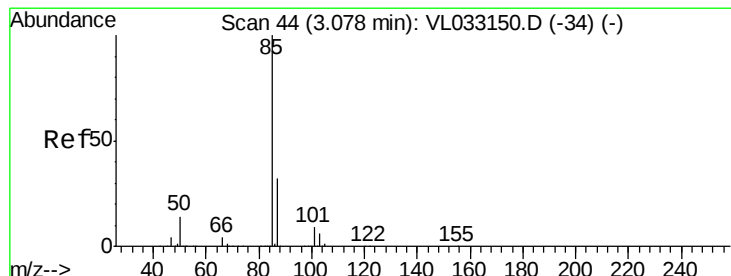
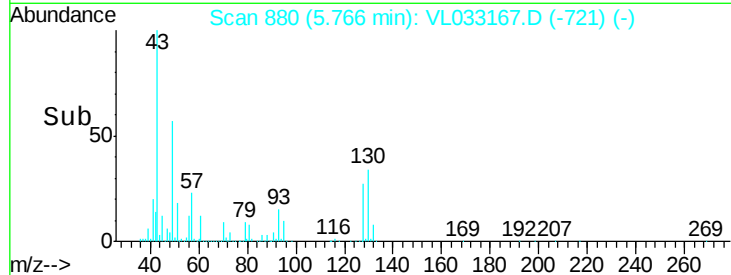
400000

200000

0

5.70 5.75 5.80

Time-->



#2

Dichlorodifluoromethane

Concen: 10.156 ppbv

RT: 3.08 min Scan# 44

Delta R.T. 0.00 min

Lab File: VL033167.D

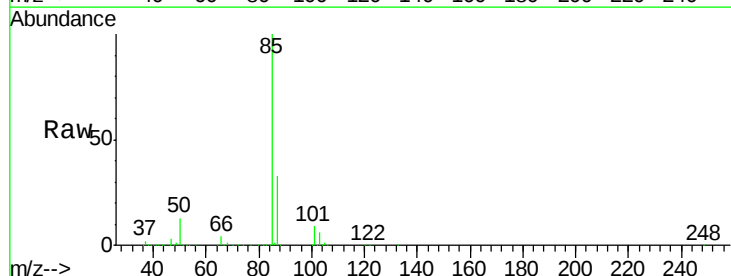
Acq: 5 Feb 2019 4:33

Tgt Ion: 85 Resp: 1781575

Ion Ratio Lower Upper

85 100

87 32.9 27.4 41.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

1500000

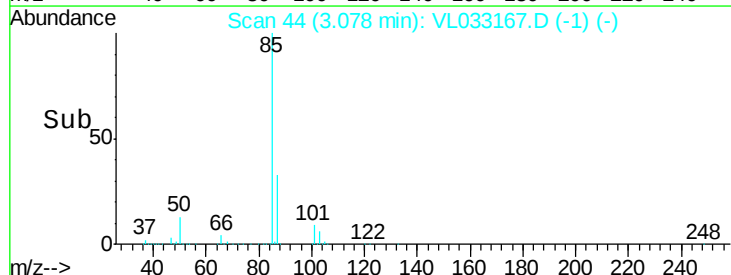
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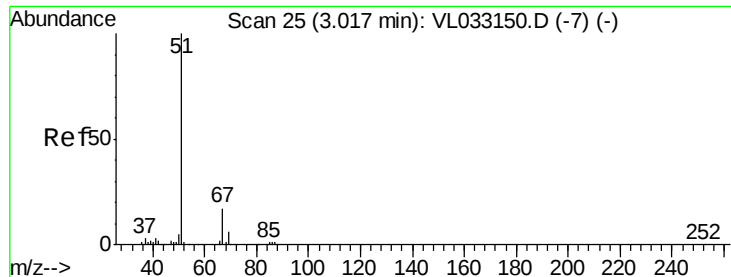
500000

0

3.05 3.10

Time-->





#3

Chlorodifluoromethane

Concen: 8.506 ppbv

RT: 3.01 min Scan# 24

Delta R.T. 0.00 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Tot Ion: 51 Resp: 1128652

Ion Ratio Lower Upper

51 100

67 17.3 13.4 20.2

Instrument :

MSVOA_L

ClientSampleId :

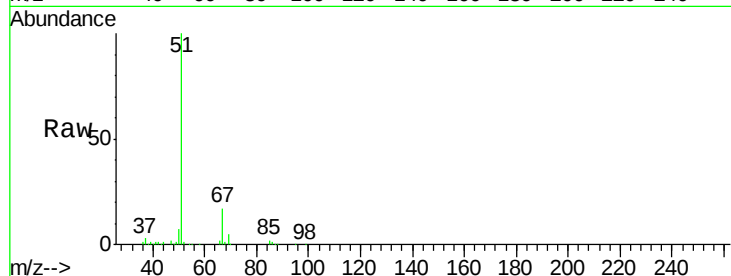
VSTDCCC010EC

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2/5/2019 10:28:36 AM



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

1000000

800000

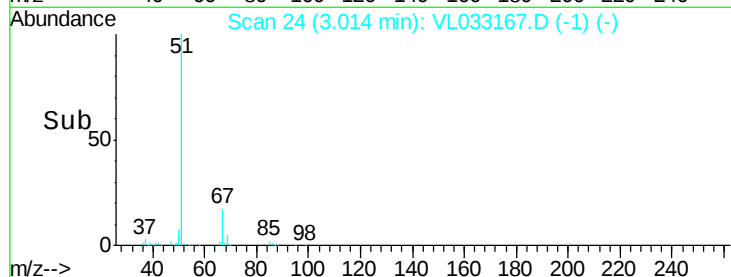
600000

400000

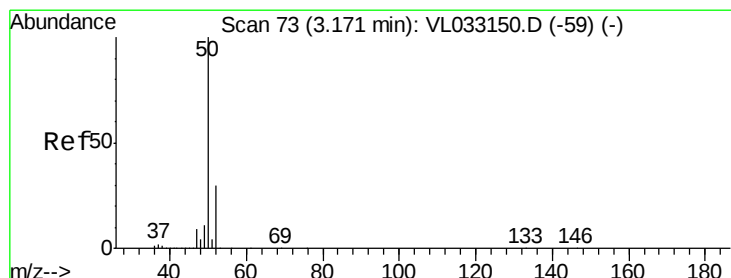
200000

0

Time-->



Time-->



#4

Chloromethane

Concen: 8.555 ppbv

RT: 3.17 min Scan# 73

Delta R.T. 0.00 min

Lab File: VL033167.D

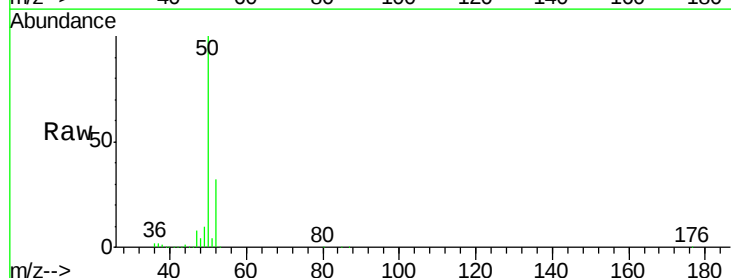
Acq: 5 Feb 2019 4:33

Tgt Ion: 50 Resp: 638782

Ion Ratio Lower Upper

50 100

52 31.6 25.7 38.5



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

500000

400000

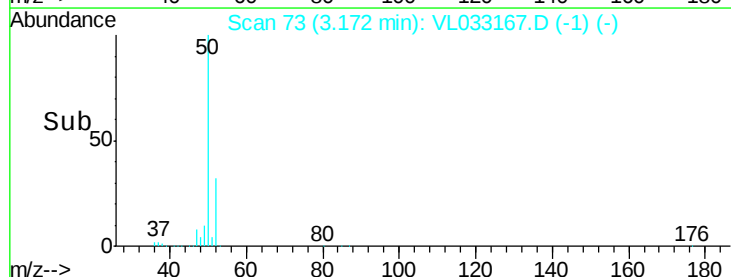
300000

200000

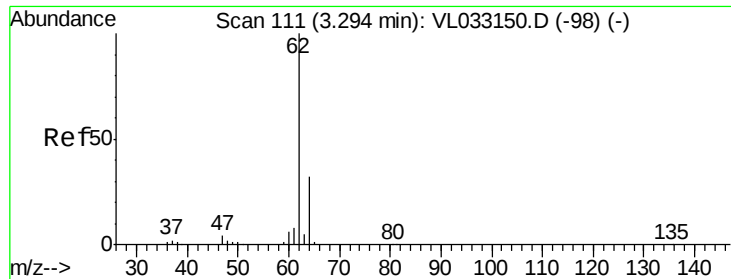
100000

0

Time-->



Time-->



#5

Vinyl Chloride

Concen: 8.155 ppbv

RT: 3.29 min Scan# 111

Delta R.T. 0.00 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 62 Resp: 600966

Ion Ratio Lower Upper

62 100

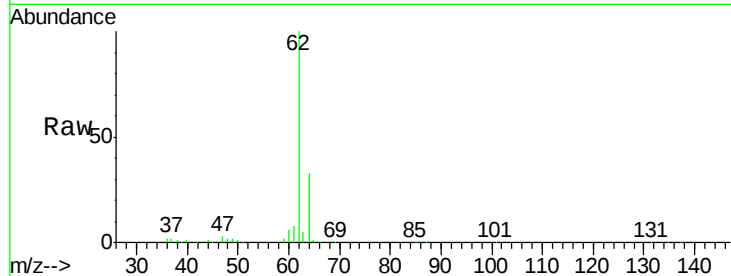
64 32.5 26.3 39.5

Manual Integrations

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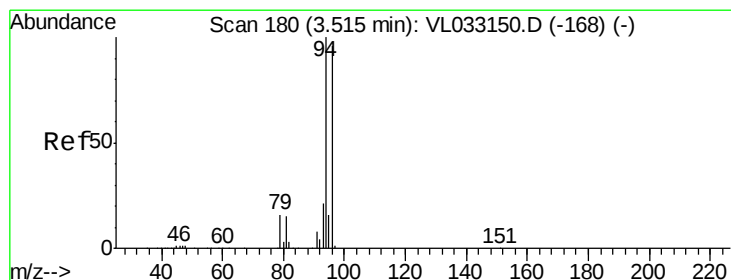
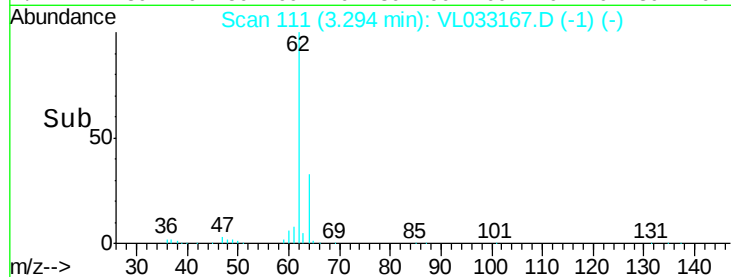
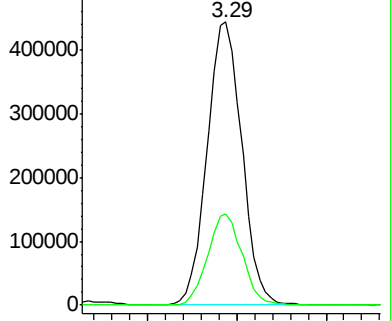
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Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#6

Bromomethane

Concen: 8.748 ppbv

RT: 3.52 min Scan# 180

Delta R.T. 0.00 min

Lab File: VL033167.D

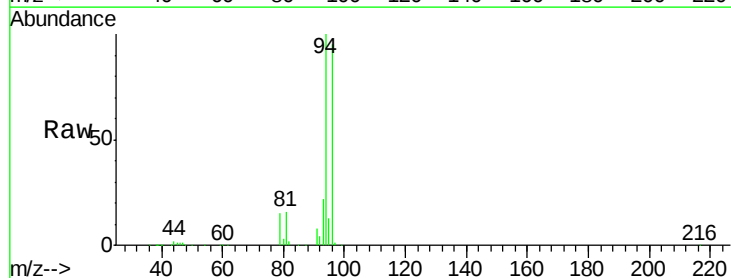
Acq: 5 Feb 2019 4:33

Tgt Ion: 94 Resp: 363255

Ion Ratio Lower Upper

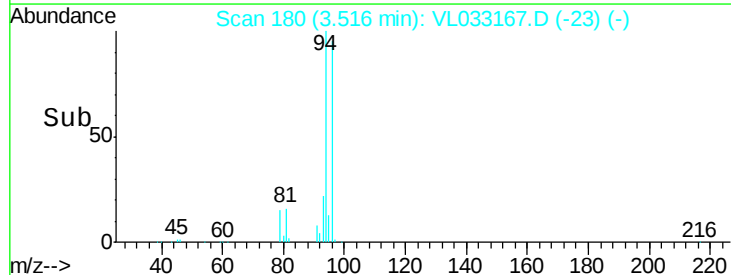
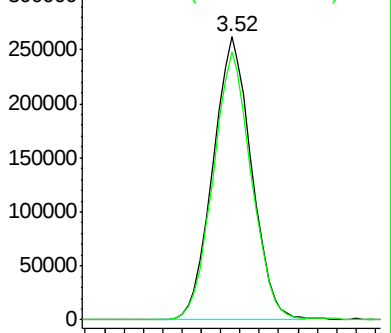
94 100

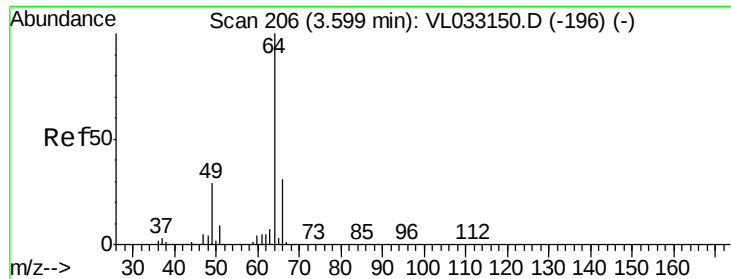
96 94.5 74.0 111.0



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0





#7

Chloroethane

Concen: 8.757 ppbv

RT: 3.60 min Scan# 207

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 64 Resp: 219419

Ion Ratio Lower Upper

64 100

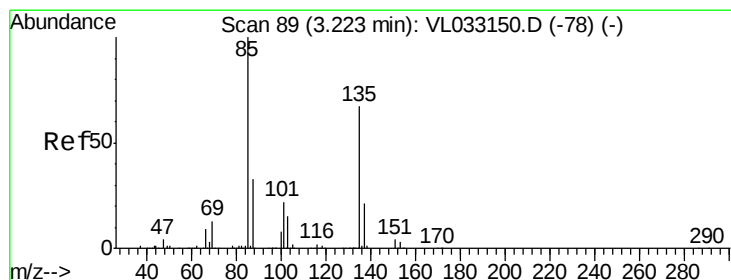
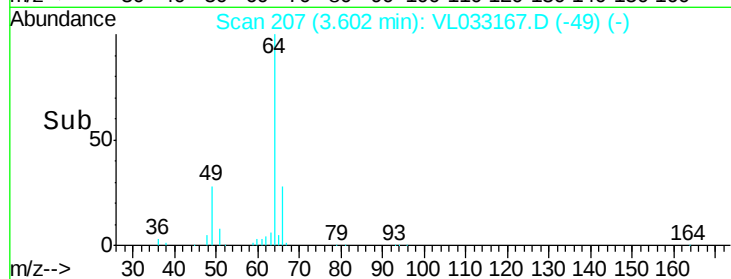
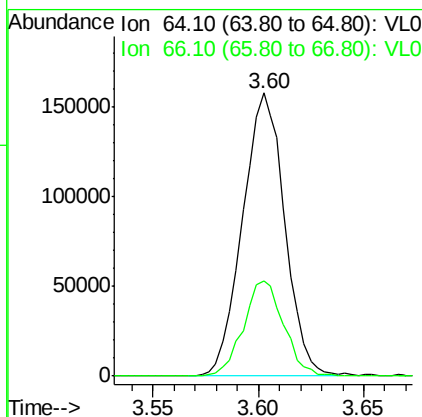
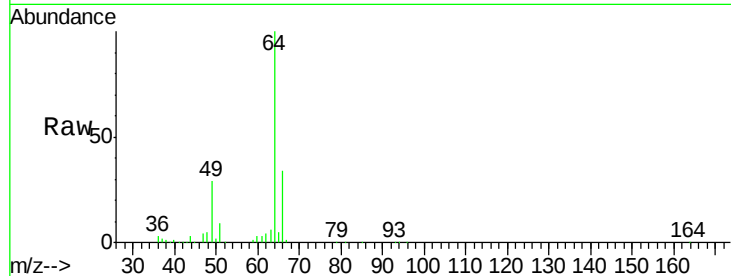
66 33.8 22.3 33.5#

Manual Integrations

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2/5/2019 10:28:36 AM



#8

Dichlorotetrafluoroethane

Concen: 8.416 ppbv

RT: 3.22 min Scan# 89

Delta R.T. 0.01 min

Lab File: VL033167.D

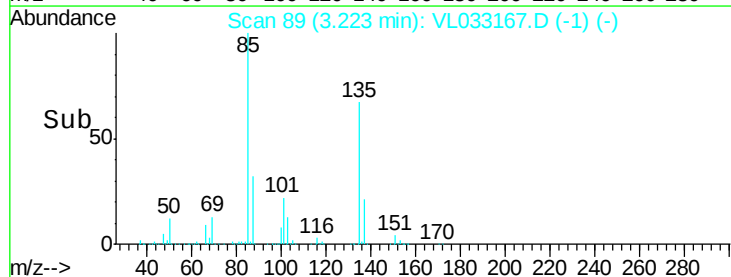
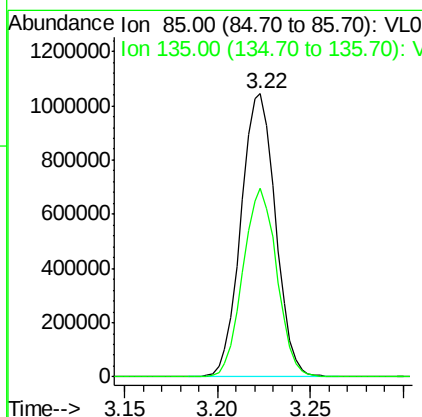
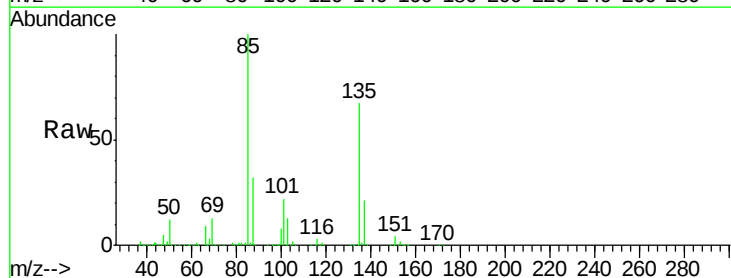
Acq: 5 Feb 2019 4:33

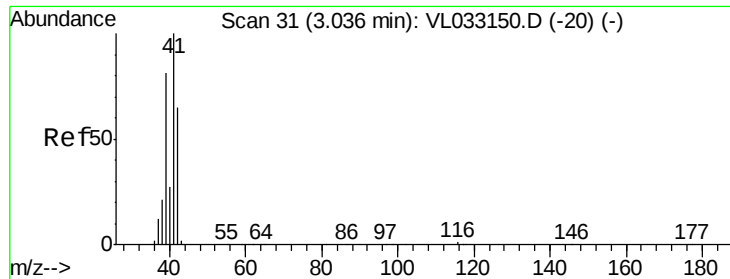
Tgt Ion: 85 Resp: 1353270

Ion Ratio Lower Upper

85 100

135 65.8 54.0 81.0





#9

Propene

Concen: 8.473 ppbv

RT: 3.04 min Scan# 32

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 41 Resp: 564844

Ion Ratio Lower Upper

41 100

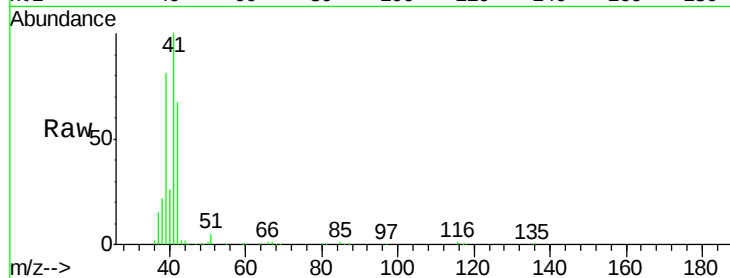
42 68.9 55.1 82.7

Manual Integrations

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2/5/2019 10:28:36 AM



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

500000

400000

300000

200000

100000

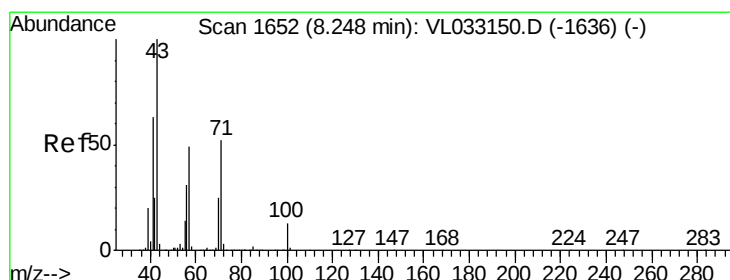
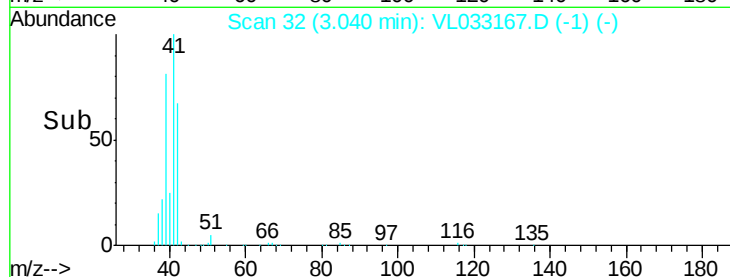
0

3.00

3.05

3.10

Time-->



#10

Heptane

Concen: 8.525 ppbv

RT: 8.25 min Scan# 1652

Delta R.T. 0.01 min

Lab File: VL033167.D

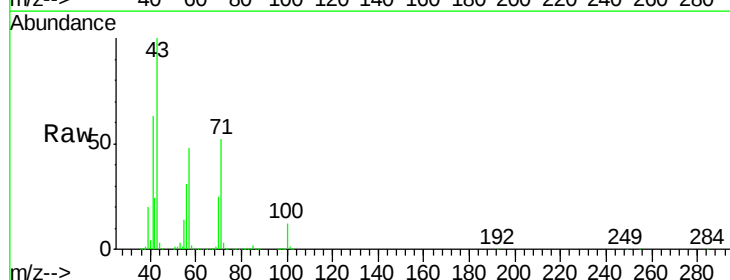
Acq: 5 Feb 2019 4:33

Tgt Ion: 43 Resp: 1770538

Ion Ratio Lower Upper

43 100

57 49.6 39.3 58.9



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

1000000

800000

600000

400000

200000

0

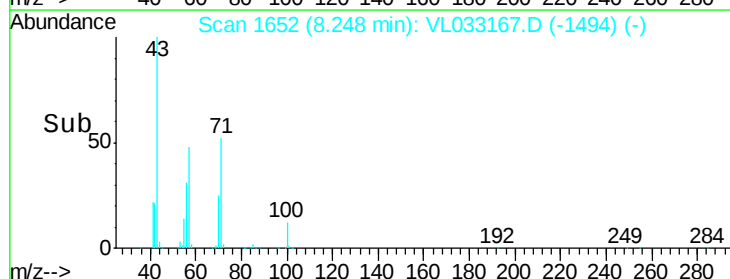
8.15

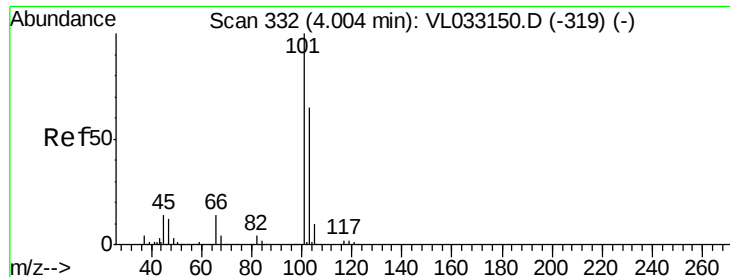
8.20

8.25

8.30

Time-->





#11

Trichlorofluoromethane

Concen: 8.654 ppbv

RT: 4.01 min Scan# 333

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Tot Ion:101 Resp: 1466968

Ion Ratio Lower Upper

101 100

103 64.5 51.3 76.9

Instrument :

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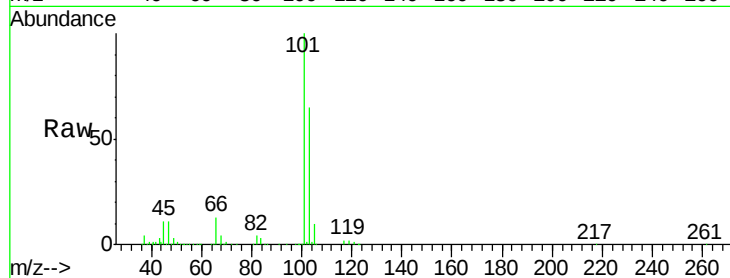
VSTDCCC010EC

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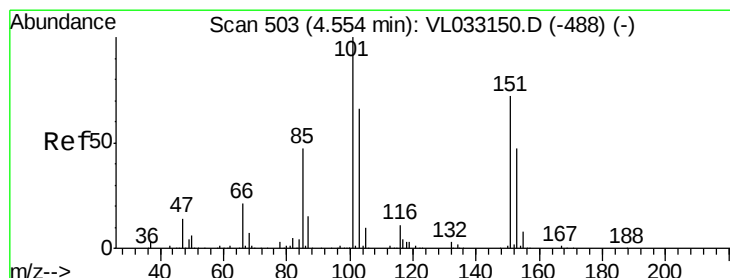
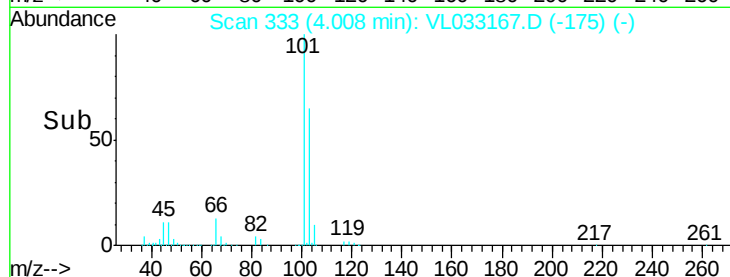
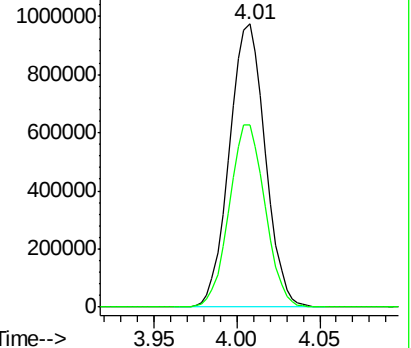
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2/5/2019 10:28:36 AM



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: 9.052 ppbv

RT: 4.55 min Scan# 503

Delta R.T. 0.01 min

Lab File: VL033167.D

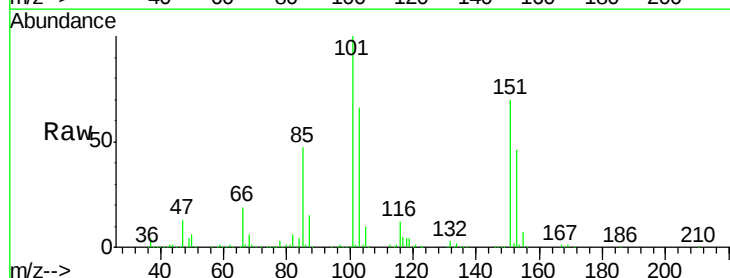
Acq: 5 Feb 2019 4:33

Tgt Ion:101 Resp: 996192

Ion Ratio Lower Upper

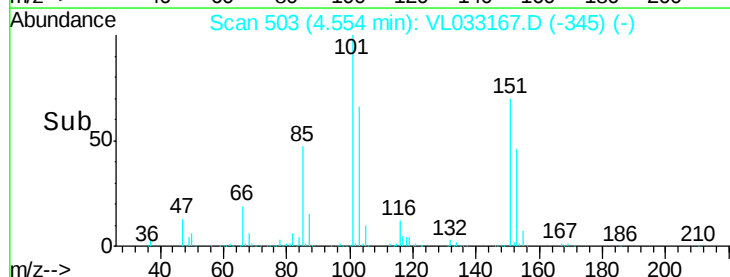
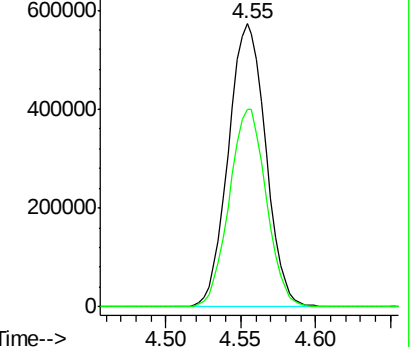
101 100

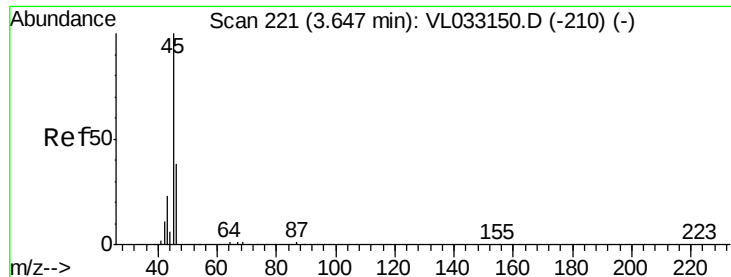
151 69.2 57.9 86.9



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





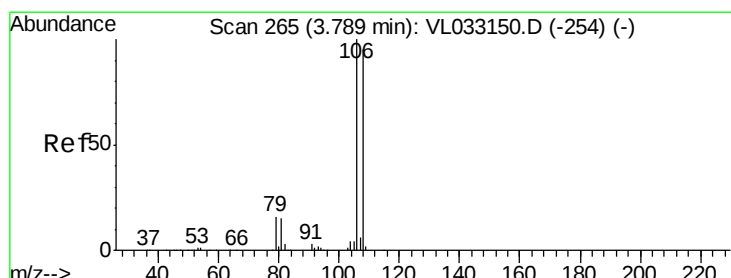
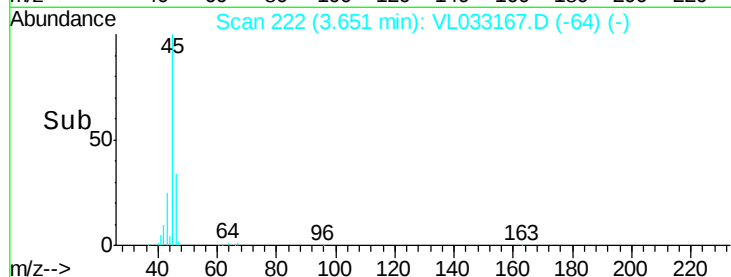
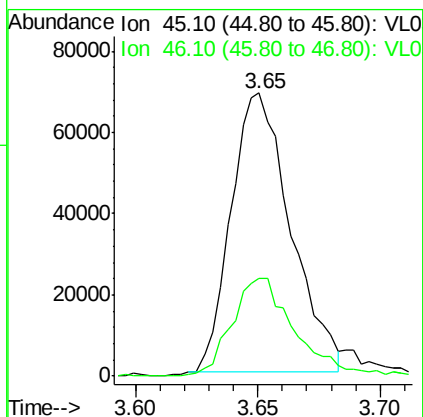
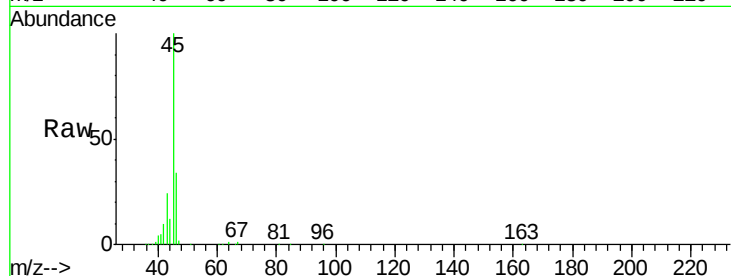
#13
Ethanol
Concen: 4.436 ppbv
RT: 3.65 min Scan# 222
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion: 45 Resp: 116584
Ion Ratio Lower Upper
45 100
46 38.0 14.0 56.2

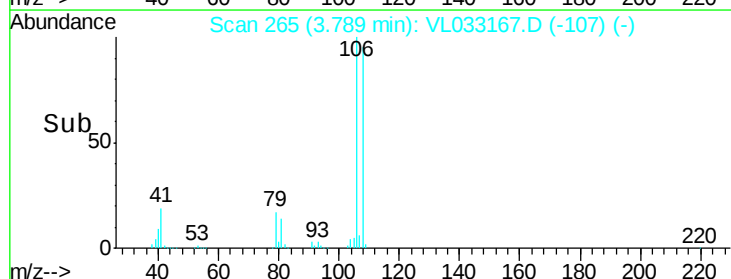
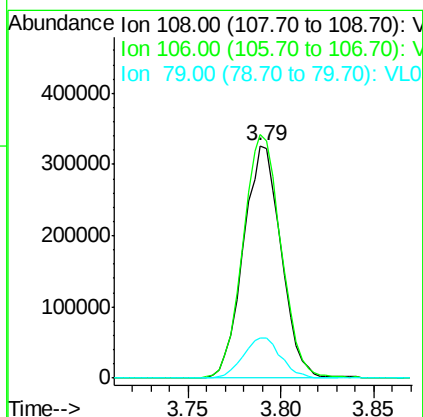
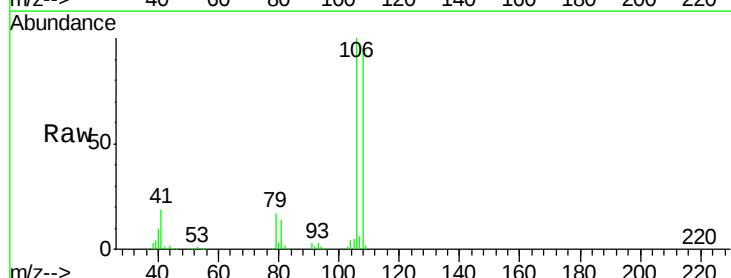
Manual Integrations
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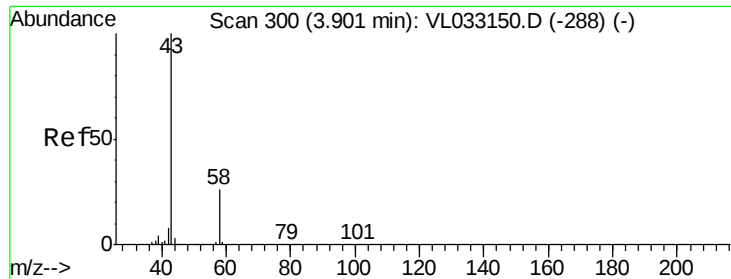
MMDadoda
2/5/2019 10:28:36 AM



#14
Bromoethene
Concen: 9.061 ppbv
RT: 3.79 min Scan# 265
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Tgt Ion: 108 Resp: 459651
Ion Ratio Lower Upper
108 100
106 106.1 85.6 128.4
79 17.6 14.2 21.4





#15

Acetone

Concen: 7.457 ppbv

RT: 3.90 min Scan# 300

Delta R.T. 0.00 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 43 Resp: 1057680

Ion Ratio Lower Upper

43 100

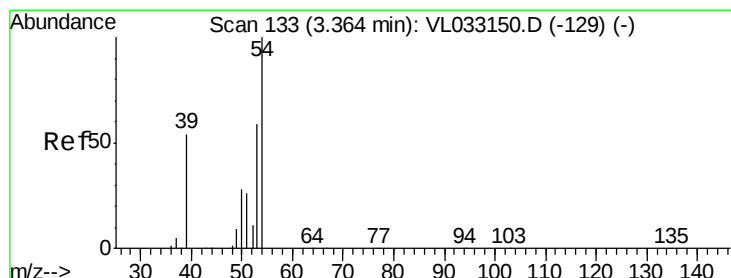
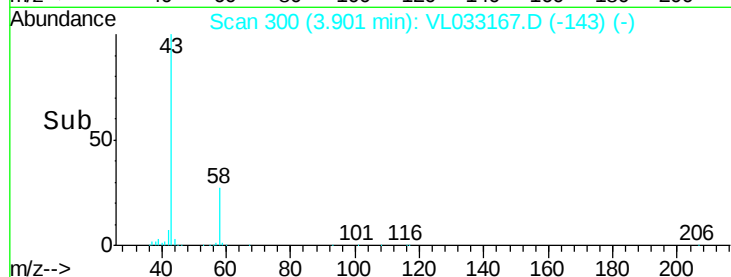
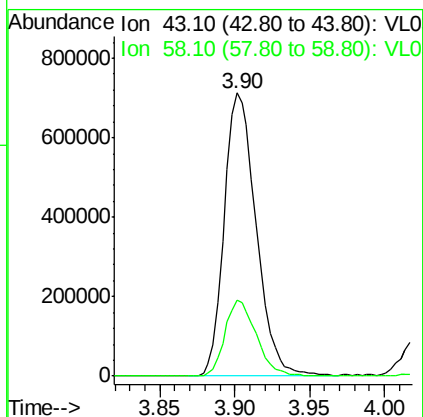
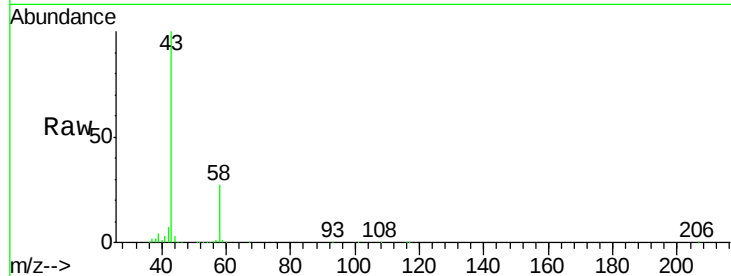
58 26.5 21.8 32.6

Manual Integrations

APPROVED

MMDadoda

2/5/2019 10:28:36 AM



#16

1,3-Butadiene

Concen: 9.366 ppbv

RT: 3.36 min Scan# 133

Delta R.T. 0.00 min

Lab File: VL033167.D

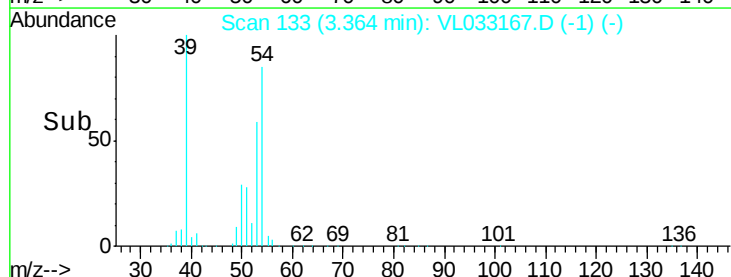
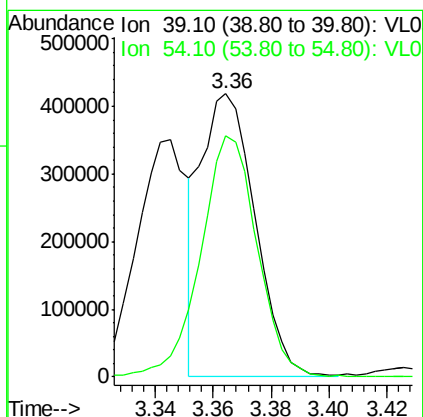
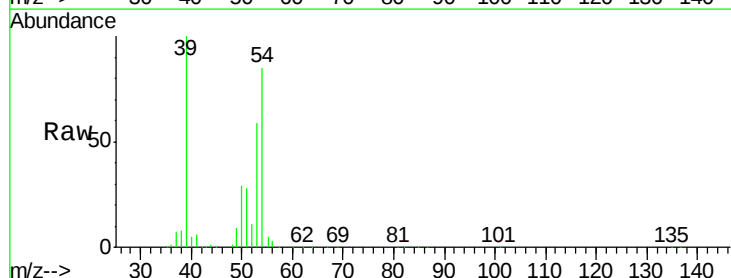
Acq: 5 Feb 2019 4:33

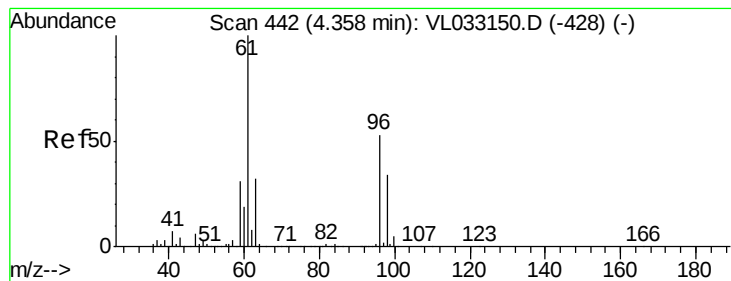
Tgt Ion: 39 Resp: 539292

Ion Ratio Lower Upper

39 100

54 90.2 75.0 112.6





#17

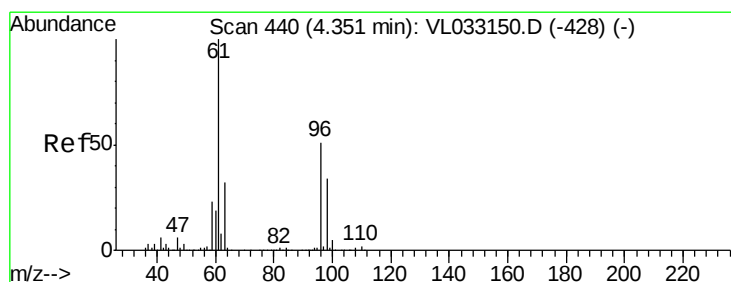
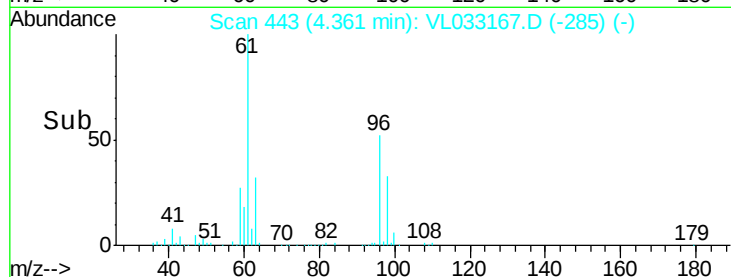
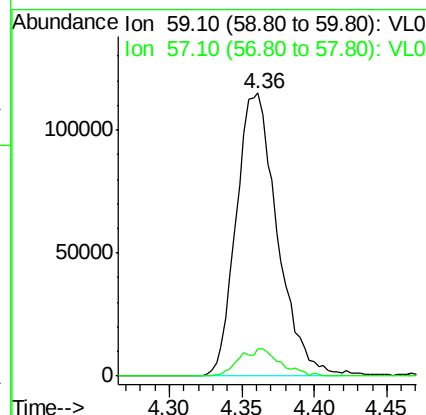
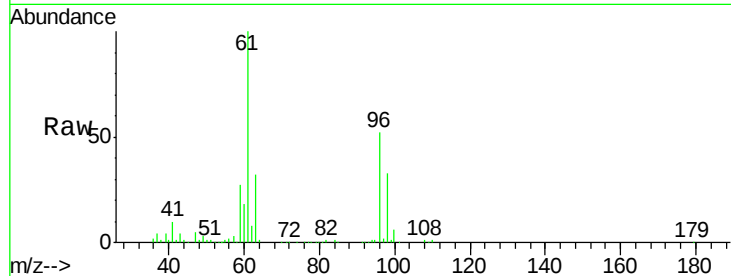
tert-Butyl alcohol
Concen: 7.236 ppbv
RT: 4.36 min Scan# 443
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Instrument :
MSVOA_L
ClientSampleID :
VSTDCCC010EC

Tot Ion	59	Resp	226673
Ion	Ratio	Lower	Upper
59	100		
57	9.8	8.0	12.0

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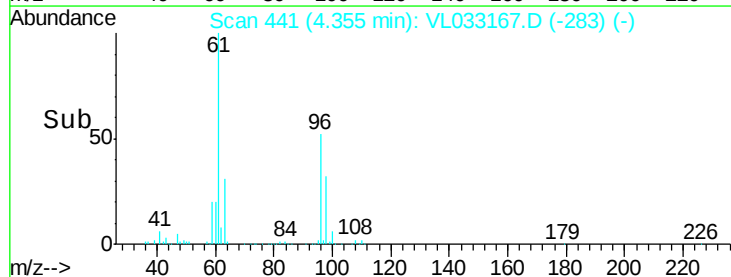
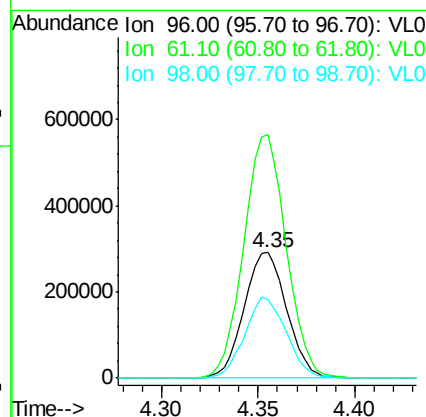
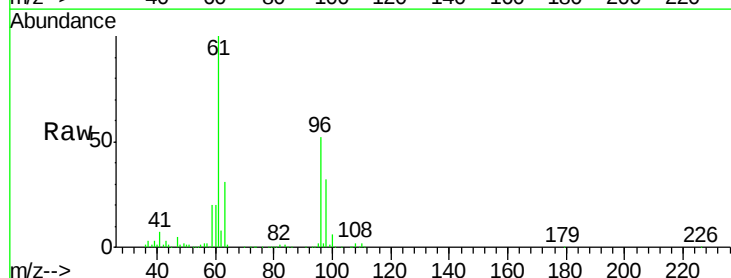
MMDadoda
2/5/2019 10:28:36 AM

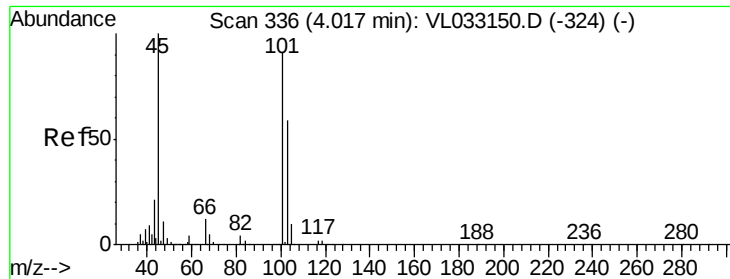


#18

1,1-Dichloroethene
Concen: 8.847 ppbv
RT: 4.35 min Scan# 441
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Tgt Ion	96	Resp	448033
Ion	Ratio	Lower	Upper
96	100		
61	193.4	158.5	237.7
98	62.3	47.8	71.6





#19

Isopropyl Alcohol

Concen: 7.521 ppbv

RT: 4.02 min Scan# 338

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 45 Resp: 757691

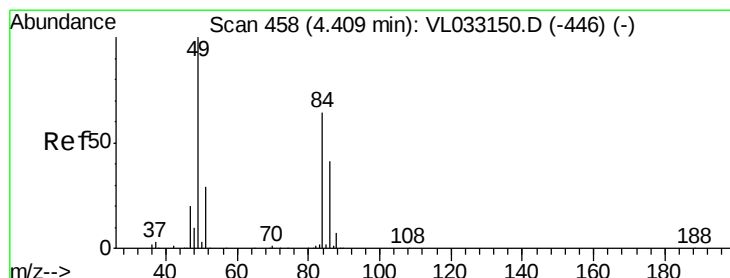
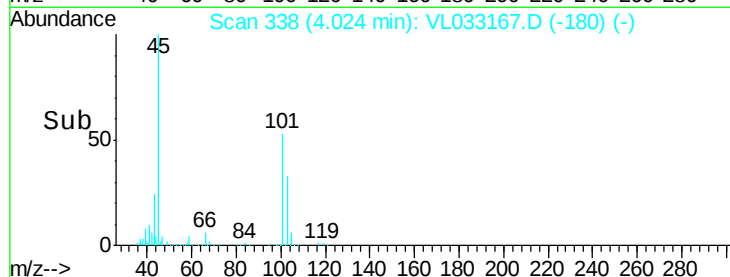
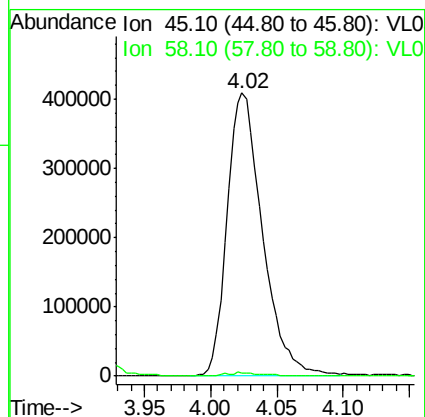
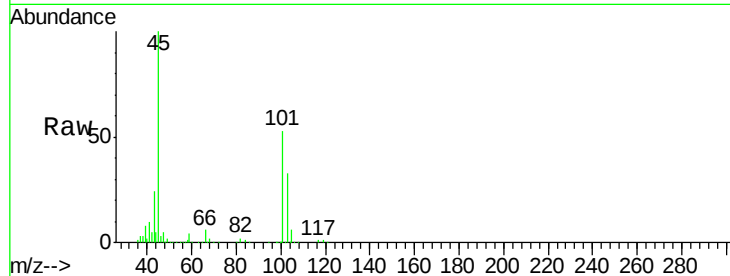
Ion Ratio Lower Upper

45 100

58 1.5 25.1 37.7#

Manual Integrations
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#20

Methylene Chloride

Concen: 7.861 ppbv

RT: 4.41 min Scan# 459

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Tgt Ion: 84 Resp: 384126

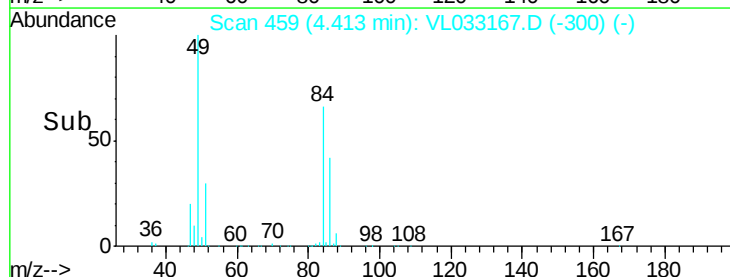
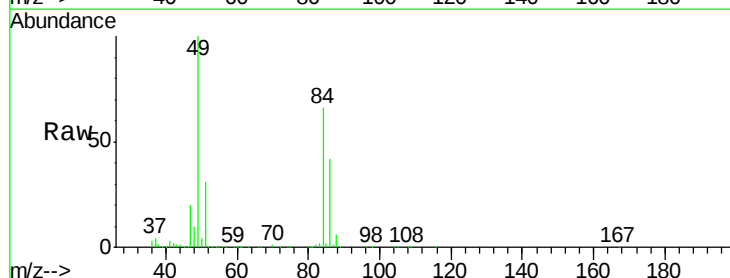
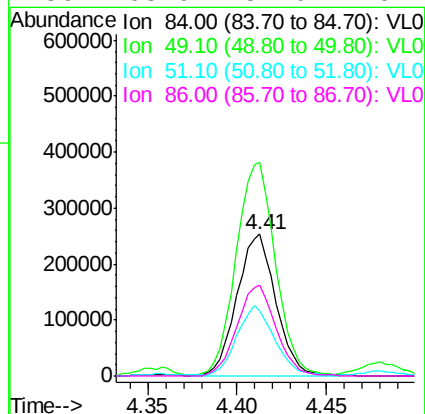
Ion Ratio Lower Upper

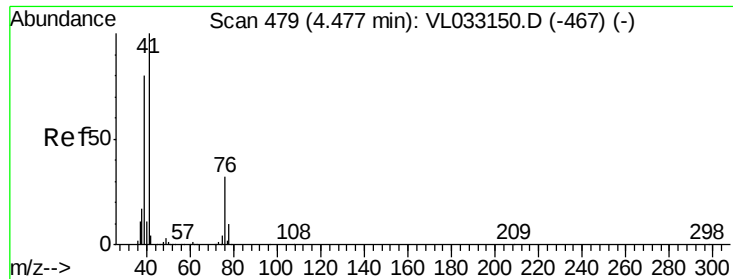
84 100

49 149.8 121.1 181.7

51 45.5 37.5 56.3

86 63.9 51.0 76.4





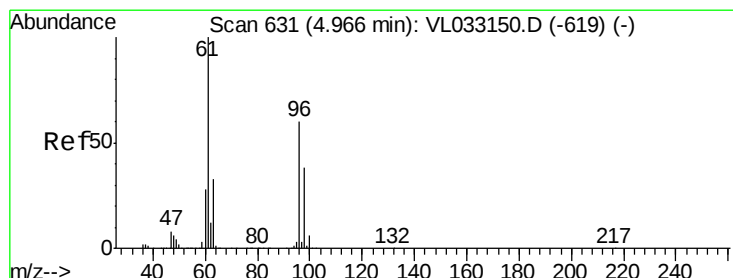
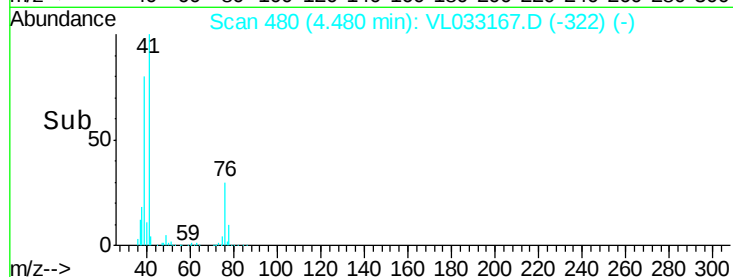
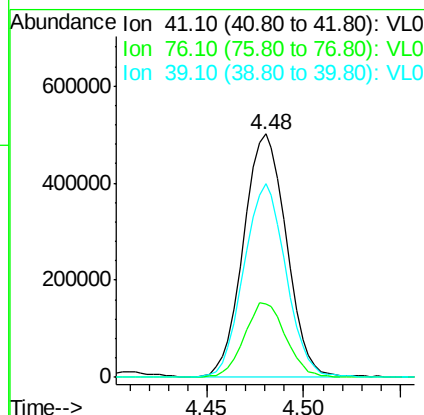
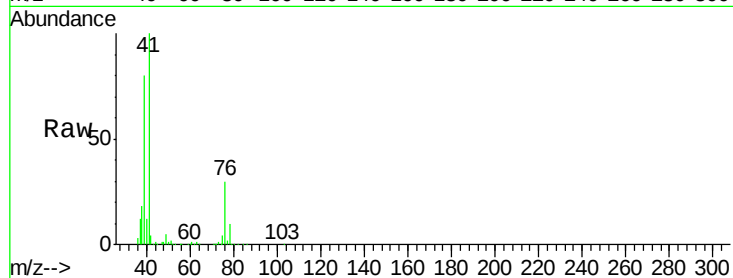
#21
Allvl Chloride
Concen: 9.041 ppbv
RT: 4.48 min Scan# 480
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion	Ratio	Resp	Lower	Upper
41	100	772168		
76	29.9	23.2	34.8	
39	78.5	61.8	92.6	

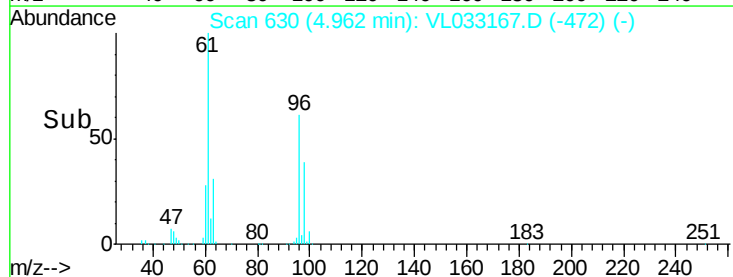
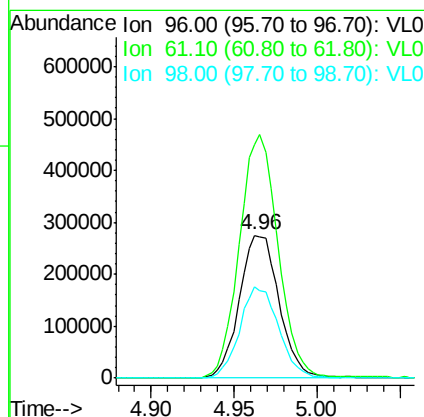
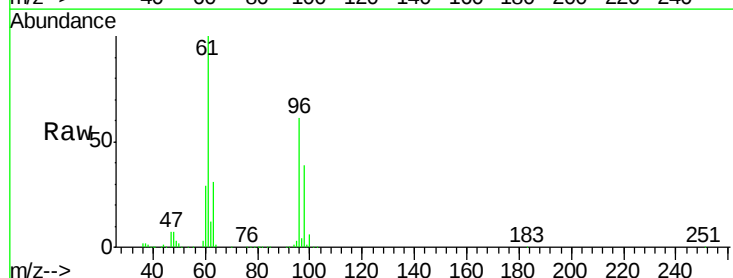
Manual Integrations
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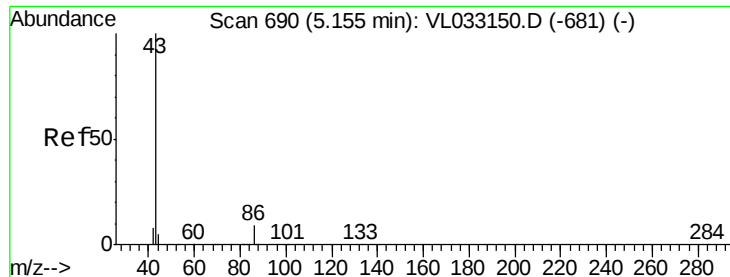
MMDadoda
2/5/2019 10:28:36 AM



#22
trans-1,2-Dichloroethene
Concen: 9.159 ppbv
RT: 4.96 min Scan# 630
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Tgt Ion	Ratio	Resp	Lower	Upper
96	100	458071		
61	163.7	134.5	201.7	
98	64.3	50.2	75.2	





#23

Vinyl Acetate

Concen: 8.557 ppbv

RT: 5.16 min Scan# 690

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Tot Ion: 43 Resp: 1974428

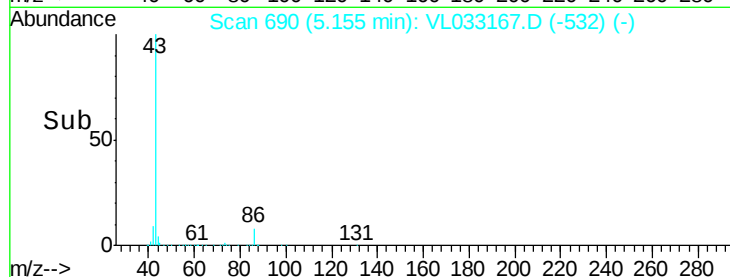
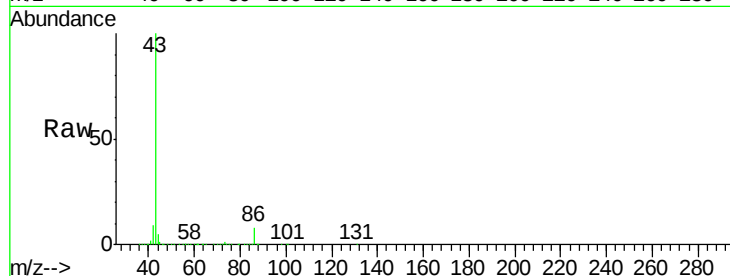
Ion	Ratio	Lower	Upper
43	100		
86	7.6	6.2	9.4
42	9.3	7.7	11.5
44	4.7	3.8	5.8

43 100

86 7.6 6.2 9.4

42 9.3 7.7 11.5

44 4.7 3.8 5.8

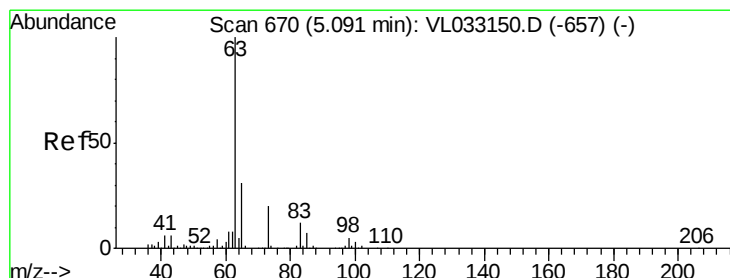
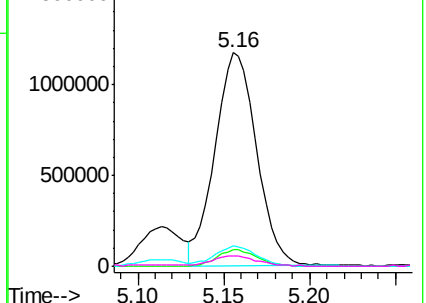


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 8.564 ppbv

RT: 5.09 min Scan# 671

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

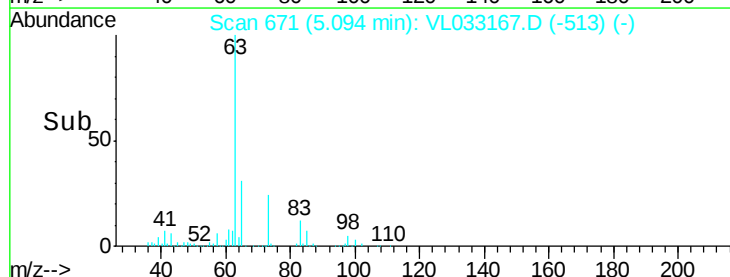
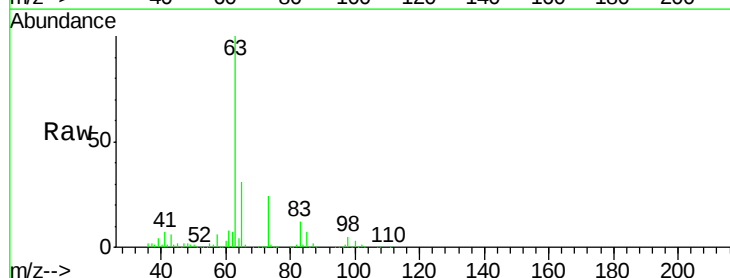
Tgt Ion: 63 Resp: 1348268

Ion	Ratio	Lower	Upper
63	100		
98	4.8	2.3	6.9
100	2.7	1.3	3.9

63 100

98 4.8 2.3 6.9

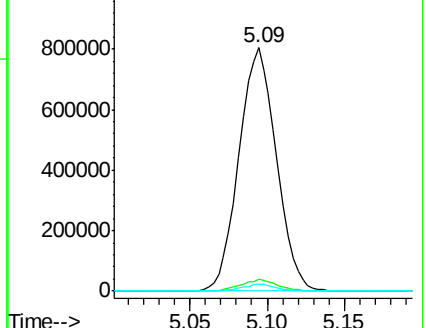
100 2.7 1.3 3.9

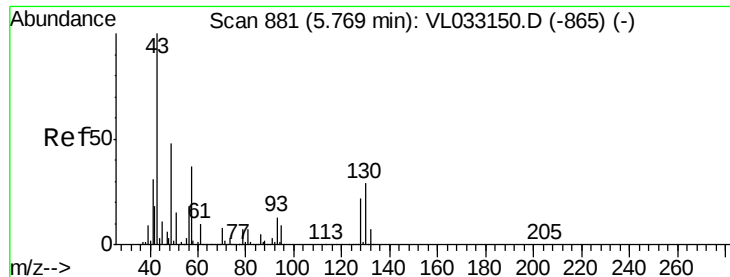


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0





#25

Ethyl Acetate

Concen: 9.025 ppbv

RT: 5.77 min Scan# 882

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 43 Resp: 2645433

Ion Ratio Lower Upper

43 100

45 9.8 8.0 12.0

61 9.3 7.4 11.2

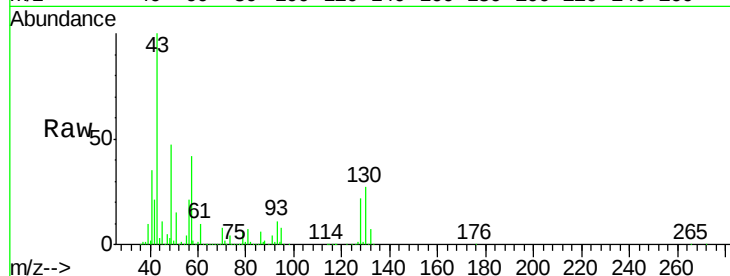
70 7.3 5.9 8.9

Manual Integrations

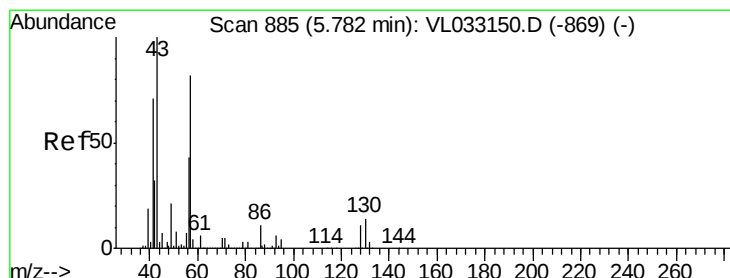
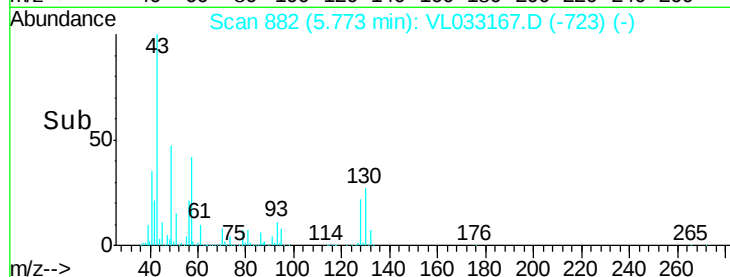
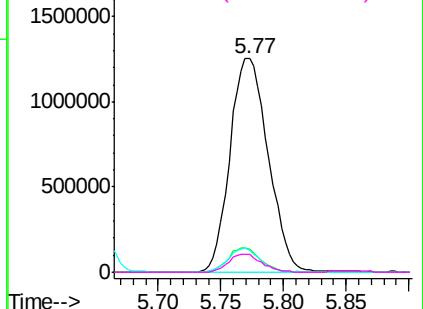
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Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 45.10 (44.80 to 45.80): VL0
Ion 61.10 (60.80 to 61.80): VL0
Ion 70.10 (69.80 to 70.80): VL0



#26

Hexane

Concen: 9.088 ppbv

RT: 5.78 min Scan# 885

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Tgt Ion: 57 Resp: 1246288

Ion Ratio Lower Upper

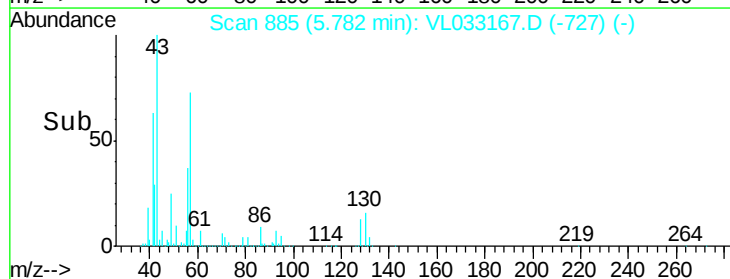
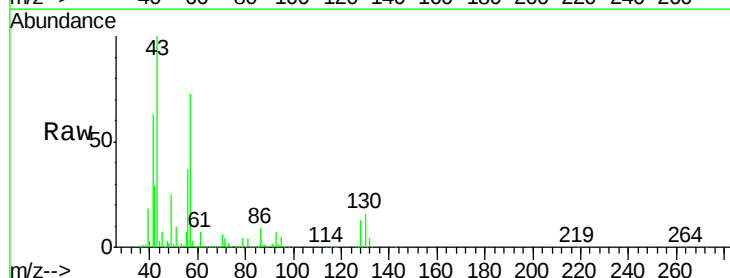
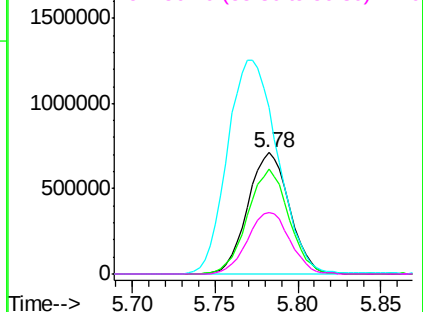
57 100

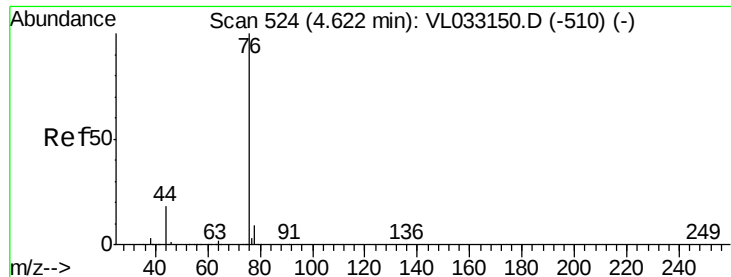
41 85.9 69.5 104.3

43 213.4 175.5 263.3

56 51.9 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: 9.694 ppbv

RT: 4.62 min Scan# 524

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 76 Resp: 1144444

Ion Ratio Lower Upper

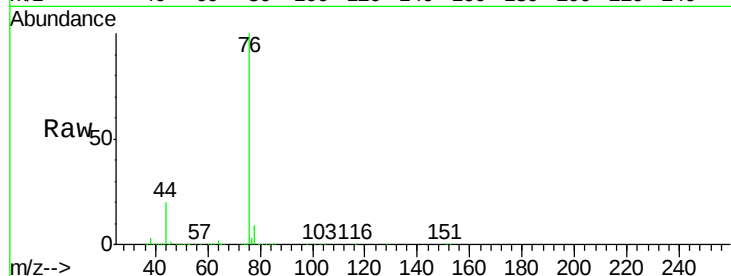
76 100

44 19.2 17.1 25.7

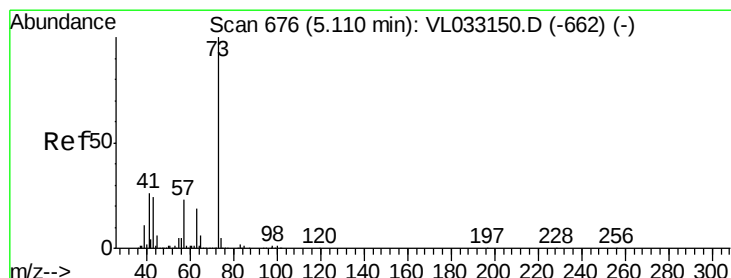
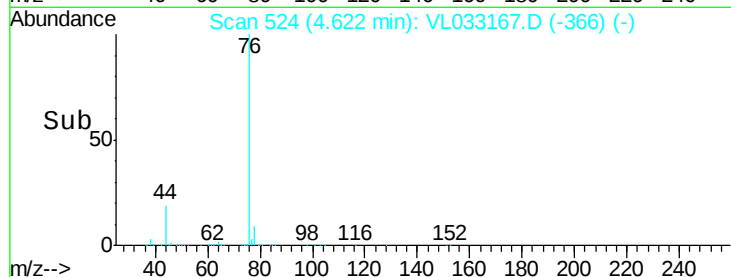
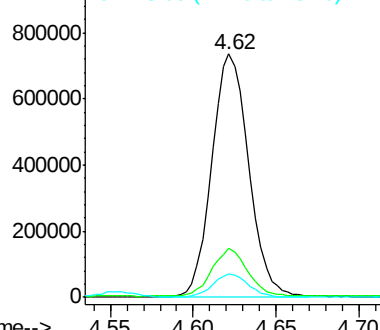
78 9.2 7.2 10.8

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



#28

Methyl tert-Butyl Ether

Concen: 8.211 ppbv

RT: 5.11 min Scan# 677

Delta R.T. 0.01 min

Lab File: VL033167.D

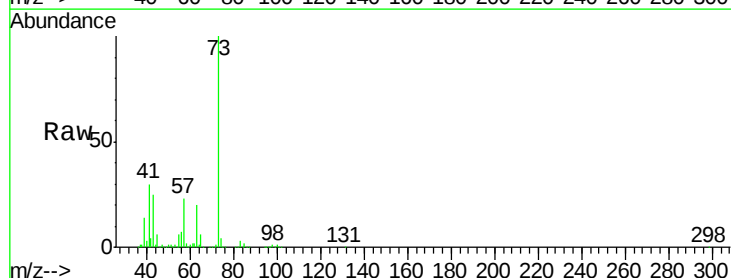
Acq: 5 Feb 2019 4:33

Tgt Ion: 73 Resp: 1638257

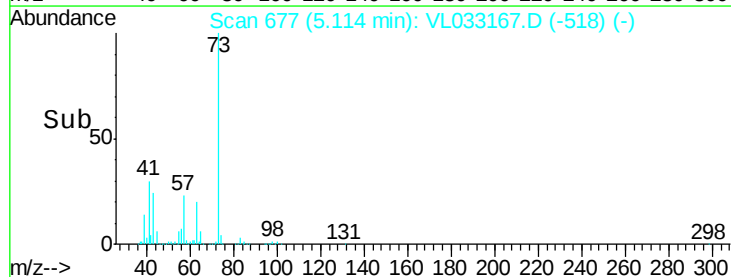
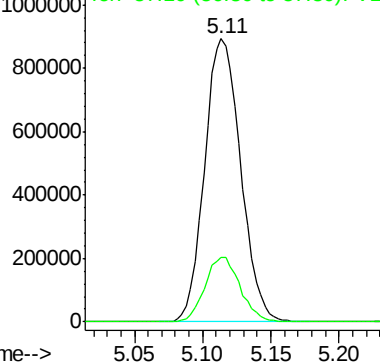
Ion Ratio Lower Upper

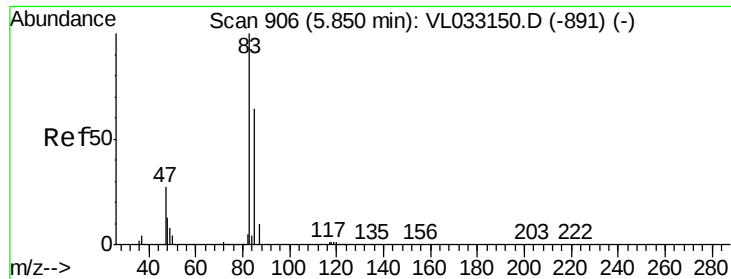
73 100

57 22.6 18.3 27.5



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





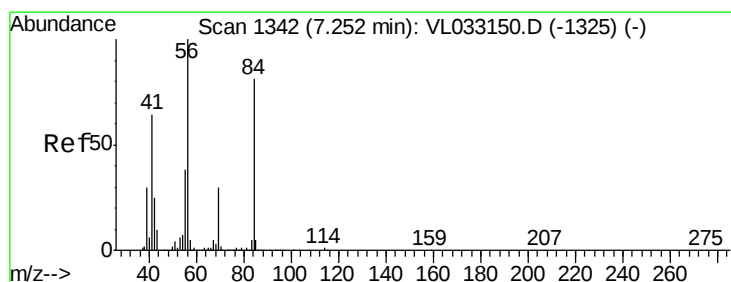
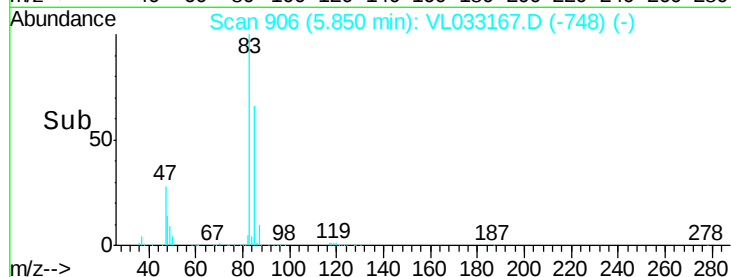
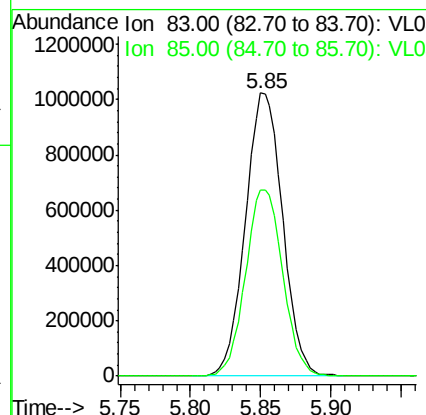
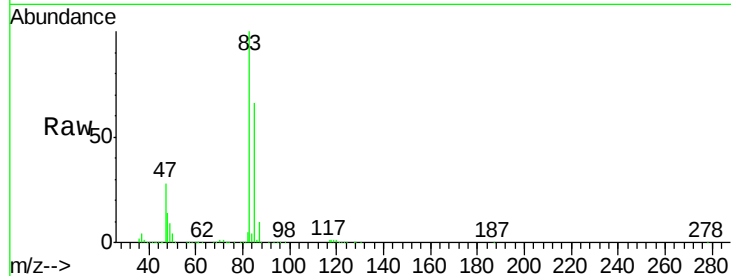
#29
Chloroform
Concen: 9.122 ppbv
RT: 5.85 min Scan# 906
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion: 83 Resp: 1892665
Ion Ratio Lower Upper
83 100
85 65.8 51.6 77.4

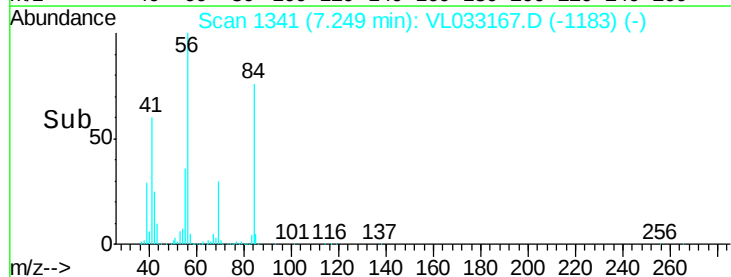
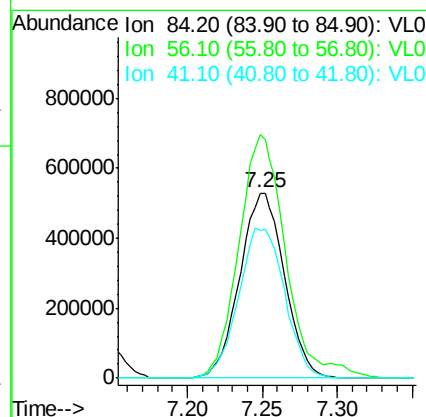
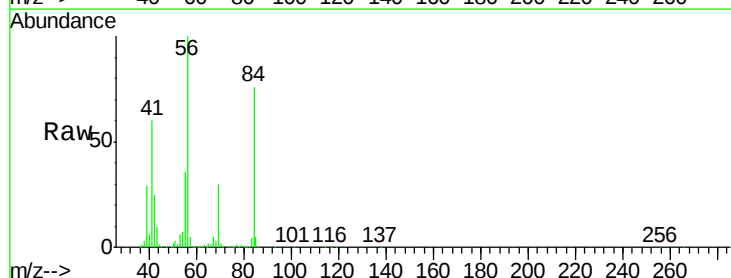
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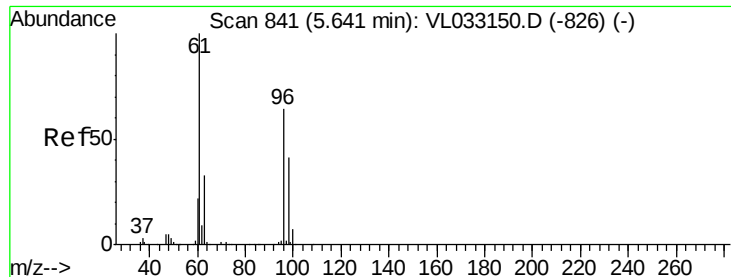
MMDadoda
2/5/2019 10:28:36 AM



#30
Cyclohexane
Concen: 8.316 ppbv
RT: 7.25 min Scan# 1341
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Tgt Ion: 84 Resp: 1094829
Ion Ratio Lower Upper
84 100
56 138.9 109.0 163.4
41 83.7 65.3 97.9





#31

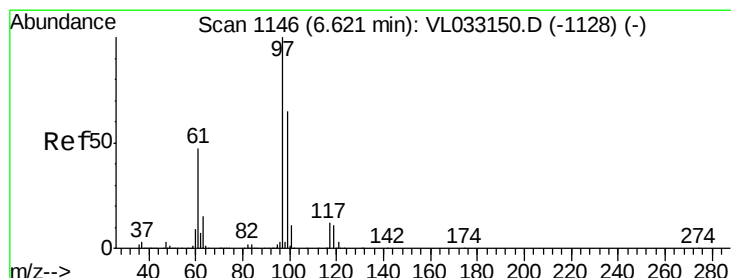
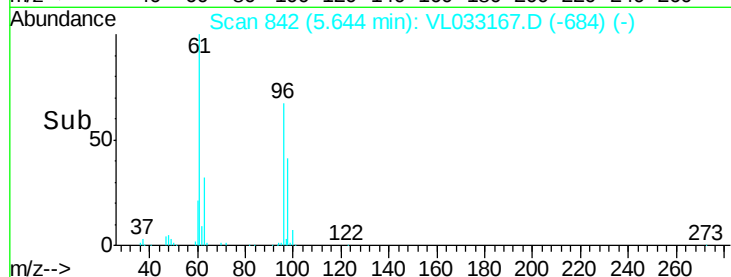
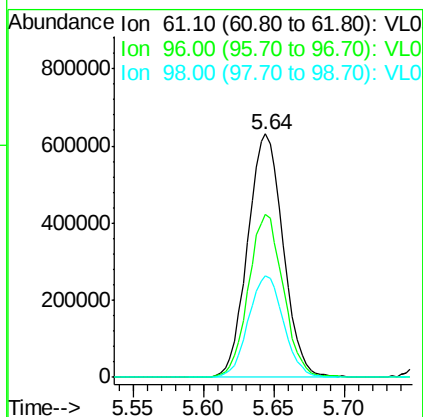
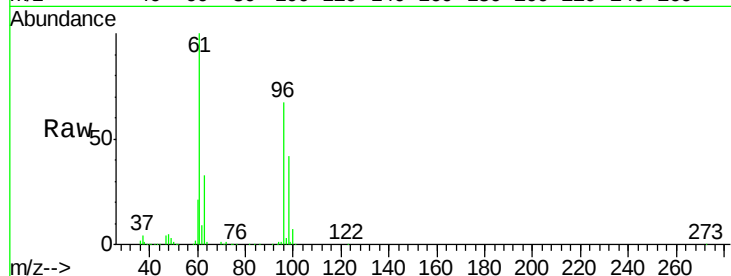
cis-1,2-Dichloroethene
Concen: 8.495 ppbv
RT: 5.64 min Scan# 842
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion	Ratio	Lower	Upper
61	100		
96	66.7	53.3	79.9
98	41.6	33.7	50.5

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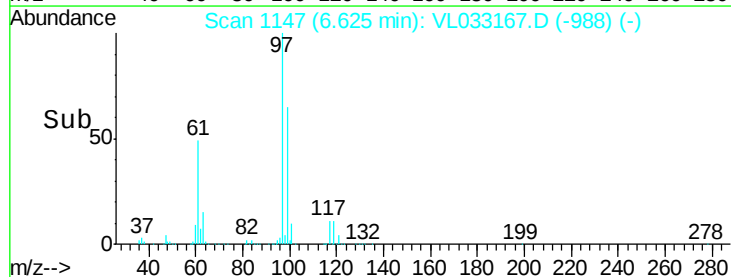
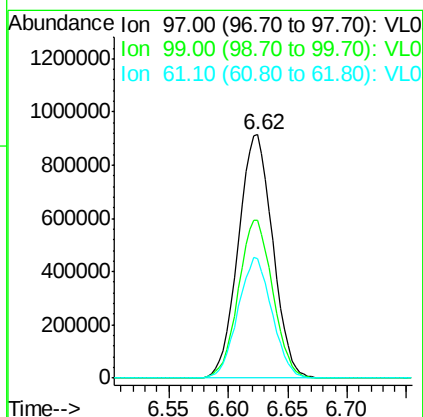
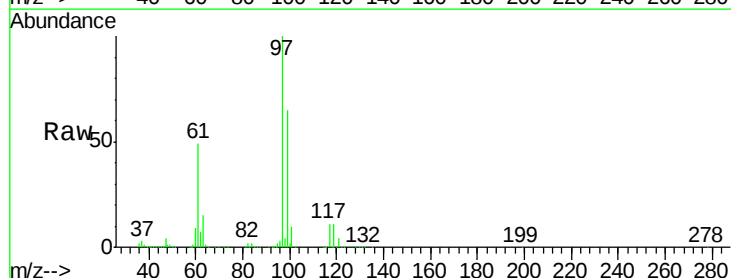
MMDadoda
2/5/2019 10:28:36 AM

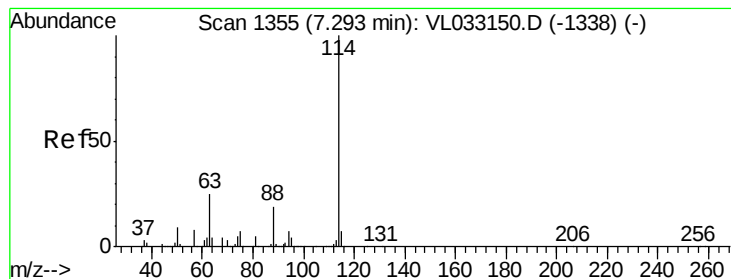


#32

1,1,1-Trichloroethane
Concen: 8.975 ppbv
RT: 6.62 min Scan# 1147
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Tgt Ion	Ratio	Lower	Upper
97	100		
99	64.7	65.1	97.7#
61	48.9	47.7	71.5





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.30 min Scan# 1356

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:114 Resp: 3014609

Ion Ratio Lower Upper

114 100

63 26.2 20.0 30.0

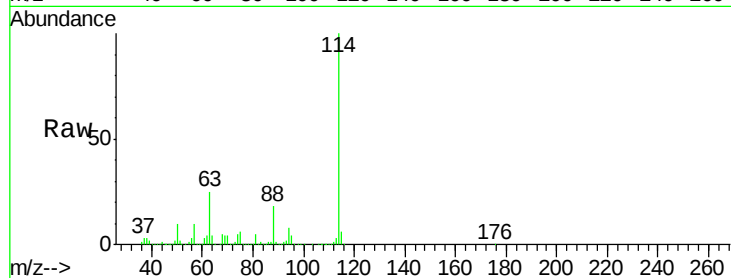
88 18.2 14.4 21.6

Manual Integrations

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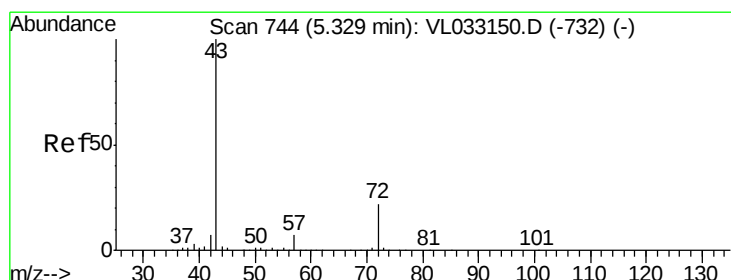
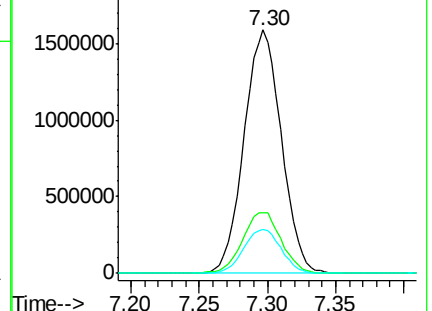
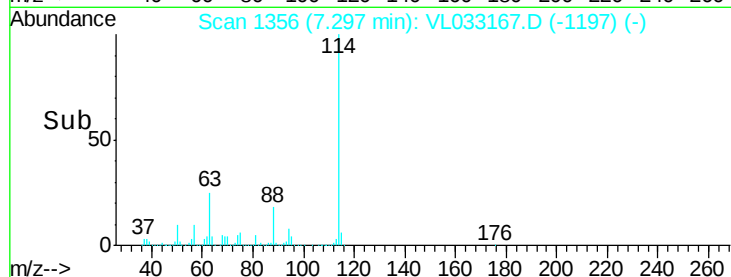
2/5/2019 10:28:36 AM



Abundance Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 8.213 ppbv

RT: 5.33 min Scan# 744

Delta R.T. 0.01 min

Lab File: VL033167.D

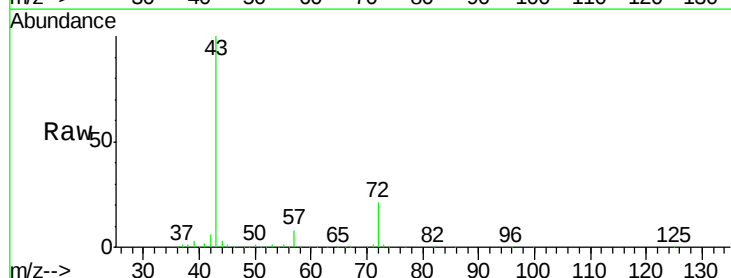
Acq: 5 Feb 2019 4:33

Tgt Ion: 43 Resp: 1557188

Ion Ratio Lower Upper

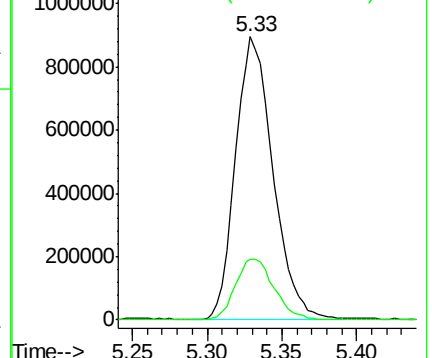
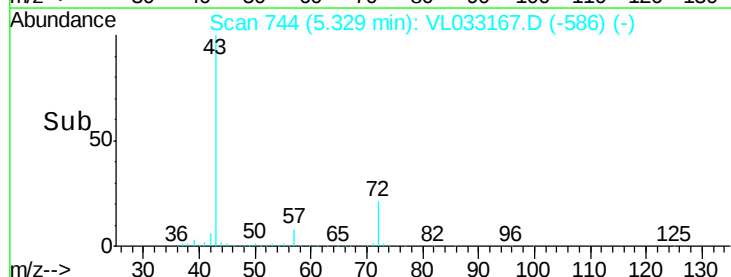
43 100

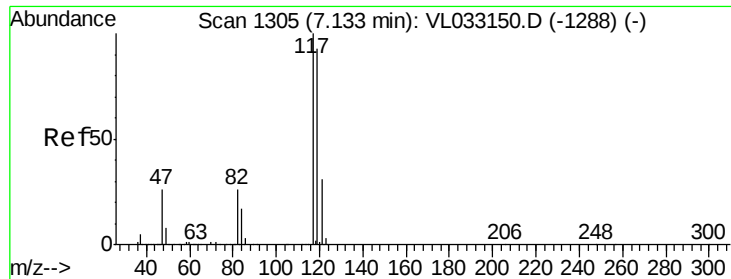
72 22.2 17.9 26.9



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





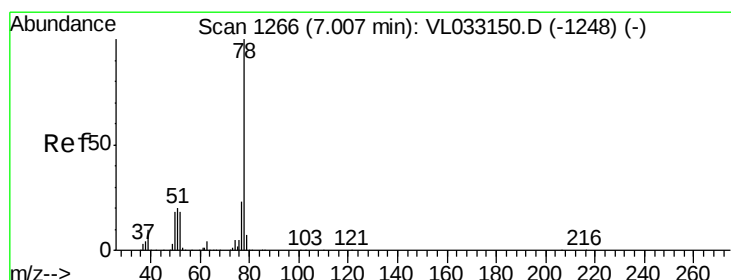
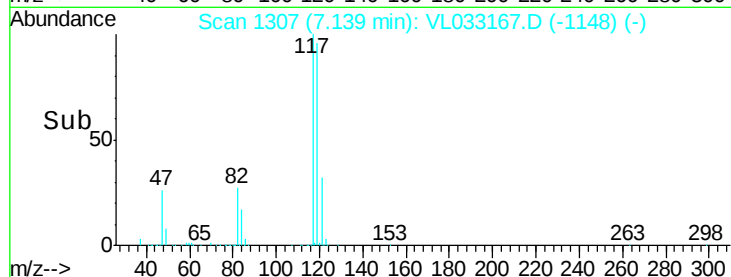
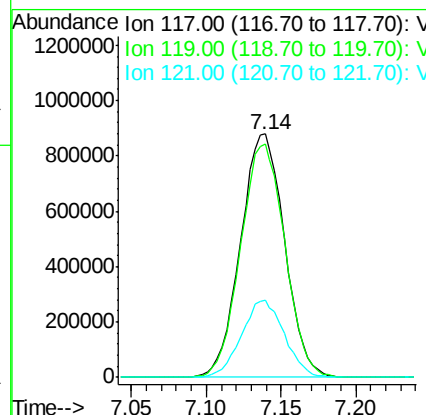
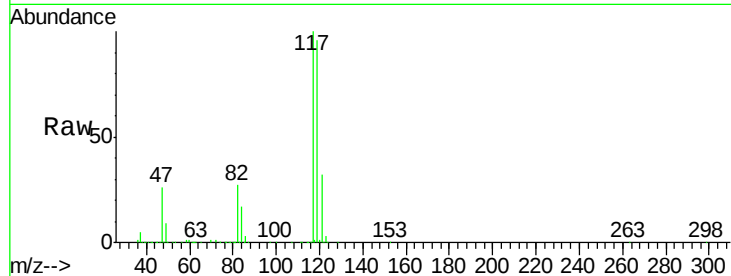
#35
Carbon Tetrachloride
Concen: 9.312 ppbv
RT: 7.14 min Scan# 1307
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion	Ratio	Lower	Upper
117	100		
119	96.0	76.6	114.8
121	31.8	25.0	37.4

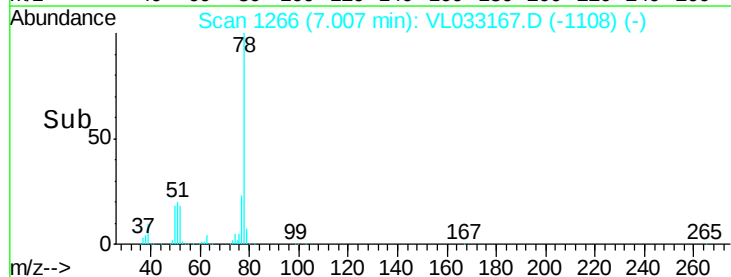
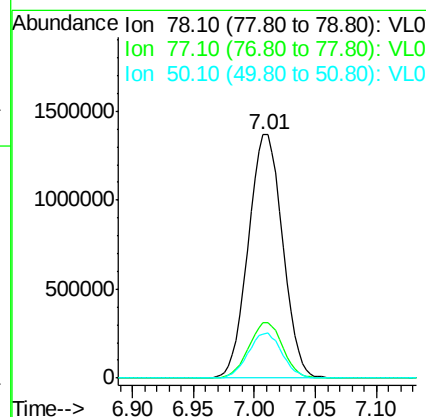
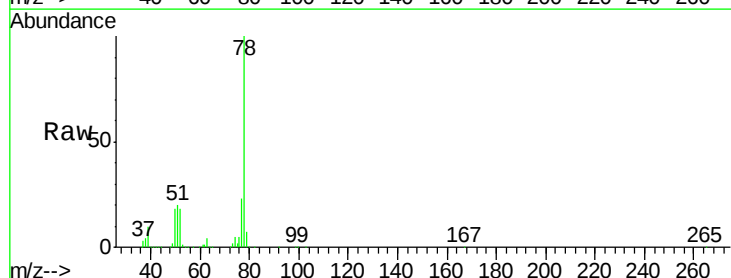
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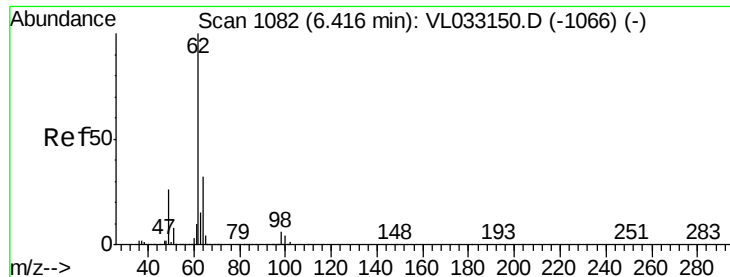
MMDadoda
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#36
Benzene
Concen: 8.717 ppbv
RT: 7.01 min Scan# 1266
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Tgt Ion	Ratio	Lower	Upper
78	100		
77	23.0	17.8	26.6
50	18.1	14.7	22.1





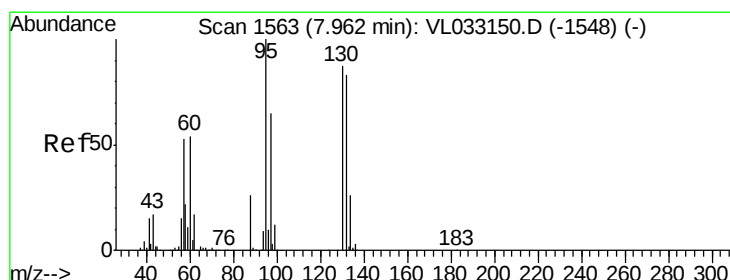
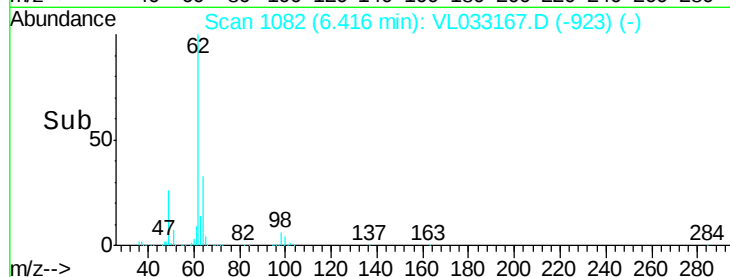
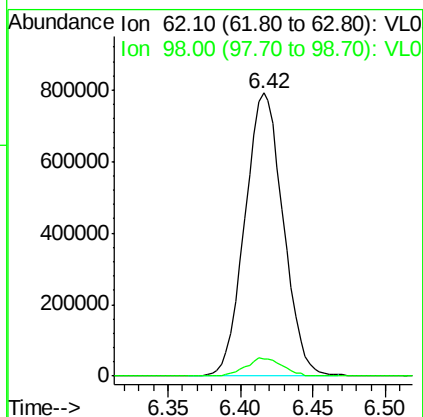
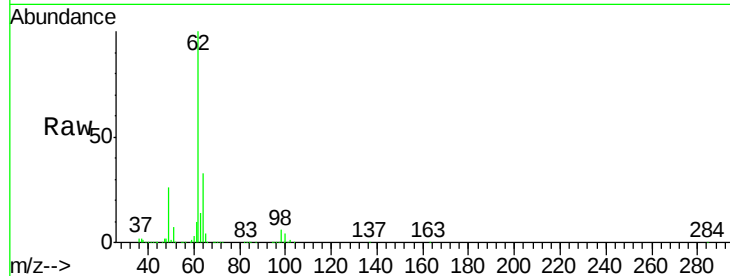
#37
 1,2-Dichloroethane
 Concen: 9.365 ppbv
 RT: 6.42 min Scan# 1082
 Delta R.T. 0.01 min
 Lab File: VL033167.D
 Acq: 5 Feb 2019 4:33

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDCCC010EC

Tot Ion	Ratio	Lower	Upper
62	100		
98	6.2	5.3	7.9

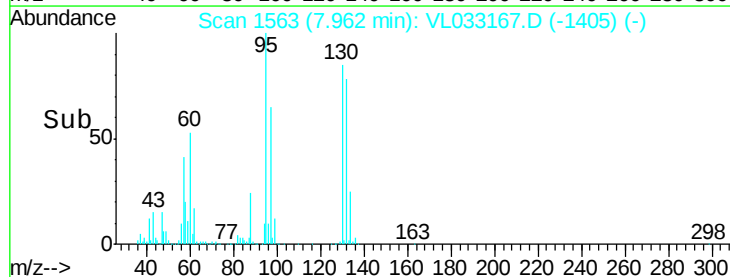
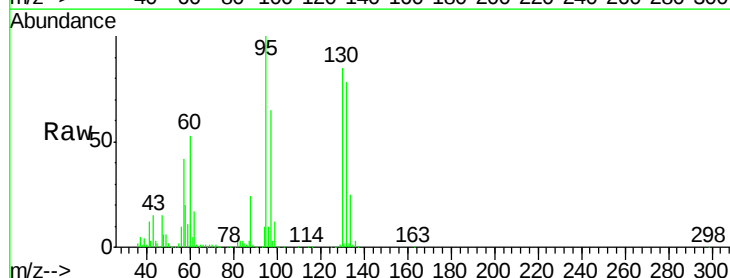
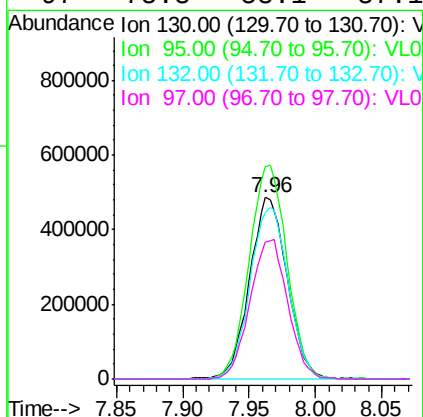
Manual Integrations
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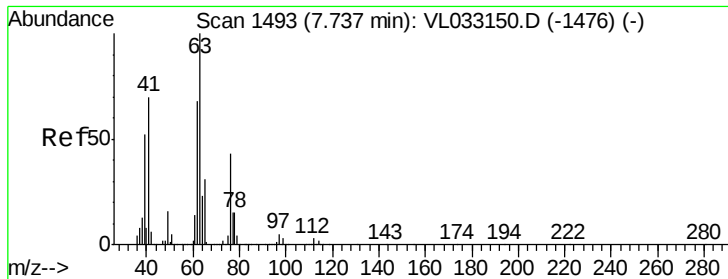
MMDadoda
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#38
 Trichloroethene
 Concen: 8.601 ppbv
 RT: 7.96 min Scan# 1563
 Delta R.T. 0.01 min
 Lab File: VL033167.D
 Acq: 5 Feb 2019 4:33

Tgt Ion	Ratio	Lower	Upper
130	100		
95	117.3	91.6	137.4
132	91.5	79.0	118.4
97	75.8	58.1	87.1





#39

1,2-Dichloropropane

Concen: 9.075 ppbv

RT: 7.74 min Scan# 1494

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 63 Resp: 1060735

Ion Ratio Lower Upper

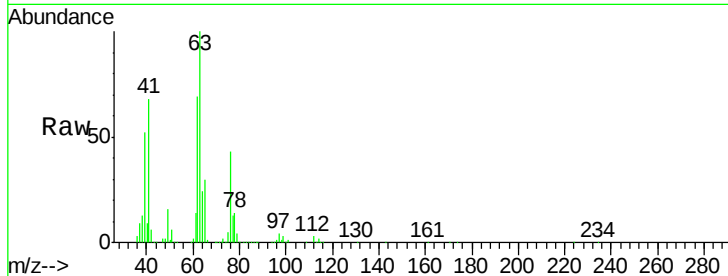
63 100

41 67.8 53.2 79.8

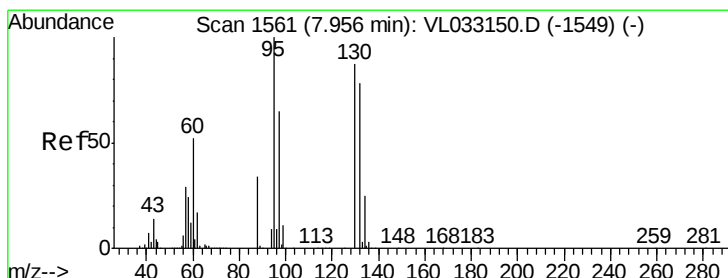
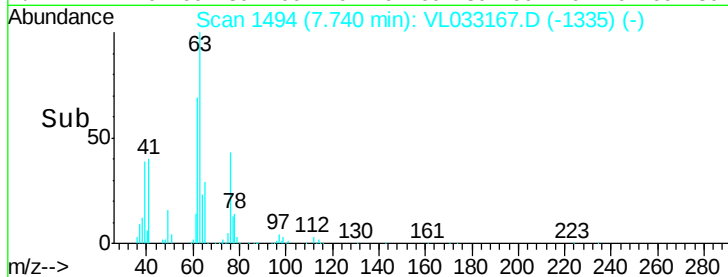
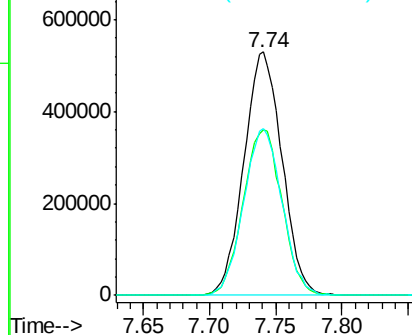
62 68.5 54.4 81.6

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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: 7.756 ppbv

RT: 7.96 min Scan# 1561

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Tgt Ion: 88 Resp: 353649

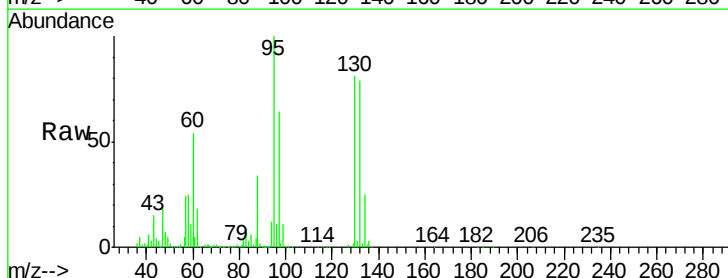
Ion Ratio Lower Upper

88 100

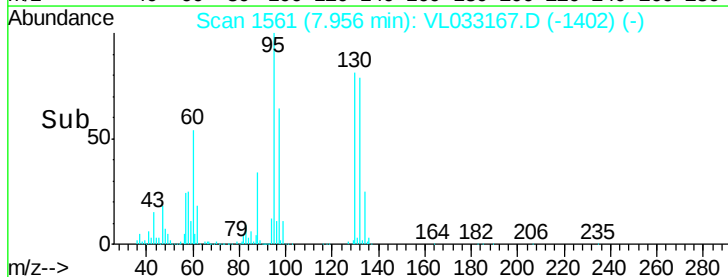
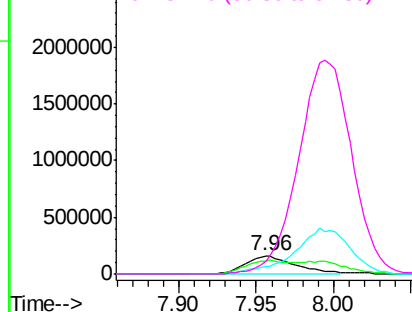
58 135.4 103.4 155.2

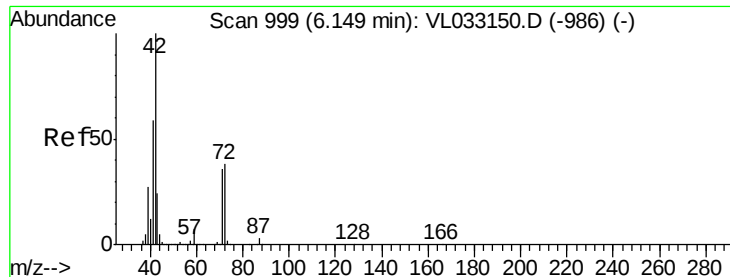
43 0.0 210.8 316.2#

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: 9.732 ppbv

RT: 6.15 min Scan# 999

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 42 Resp: 1146378

Ion Ratio Lower Upper

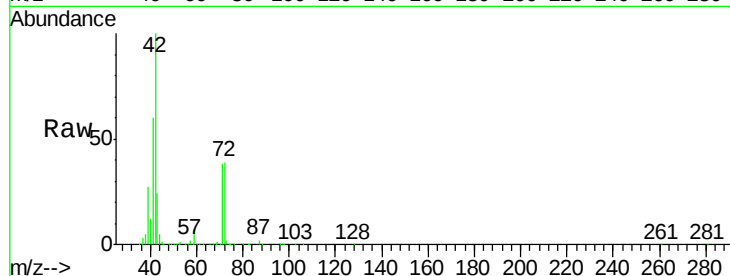
42 100

72 38.2 30.2 45.4

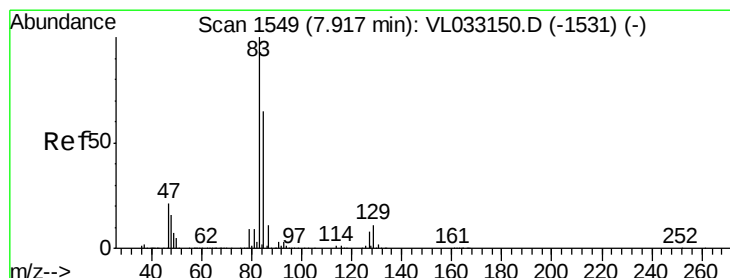
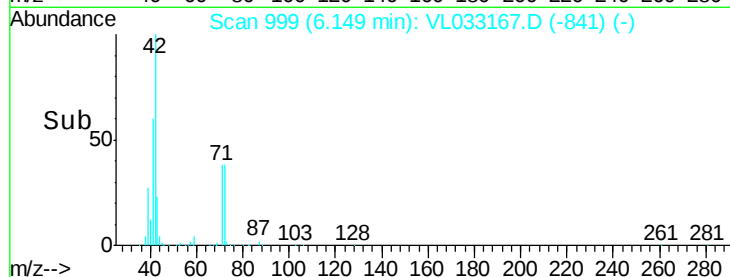
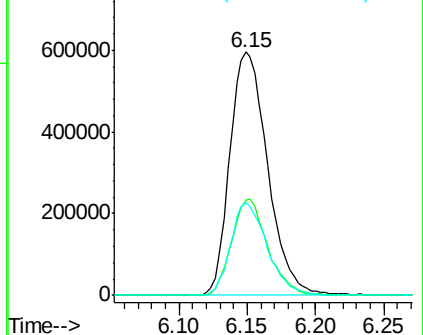
71 36.9 28.8 43.2

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2/5/2019 10:28:36 AM



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: 9.288 ppbv

RT: 7.92 min Scan# 1551

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

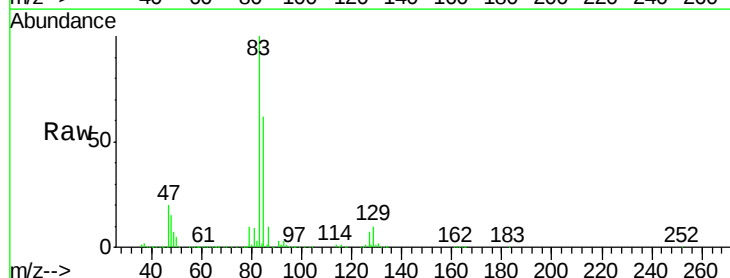
Tgt Ion: 83 Resp: 2115494

Ion Ratio Lower Upper

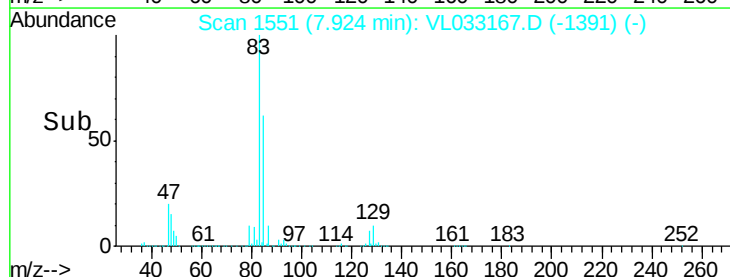
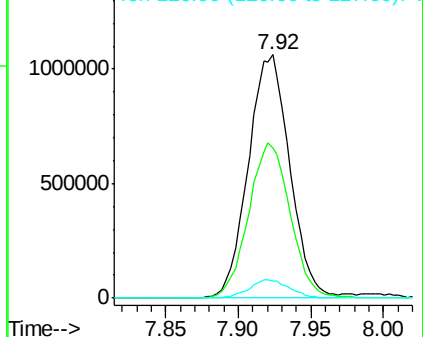
83 100

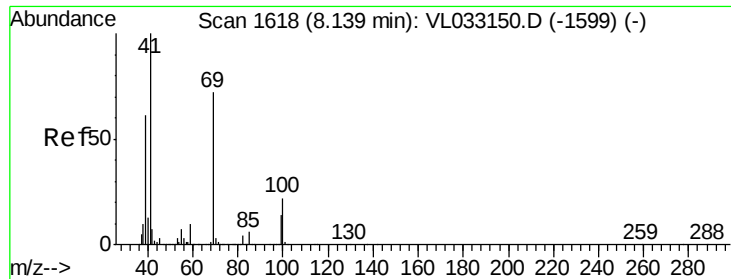
85 61.8 51.3 76.9

127 7.2 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





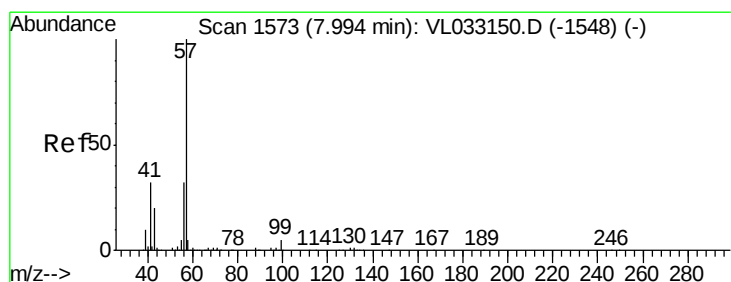
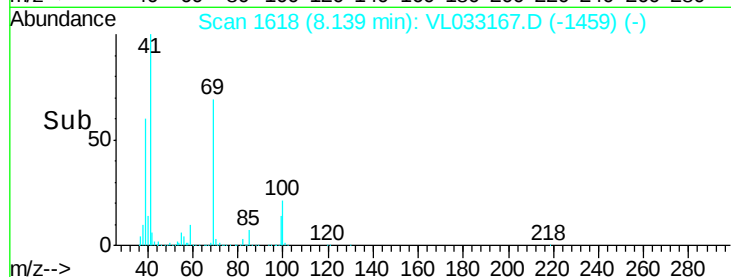
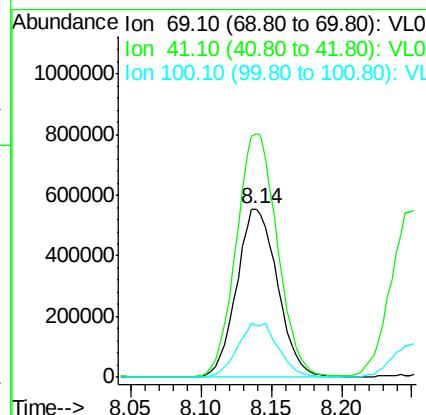
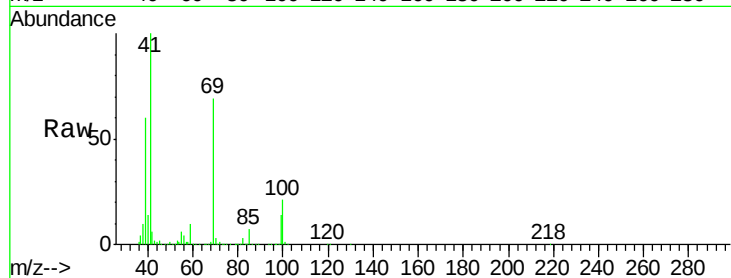
#43
Methyl Methacrylate
Concen: 9.273 ppbv
RT: 8.14 min Scan# 1618
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion: 69 Resp: 1124119
Ion Ratio Lower Upper
69 100
41 146.1 118.4 177.6
100 32.0 26.5 39.7

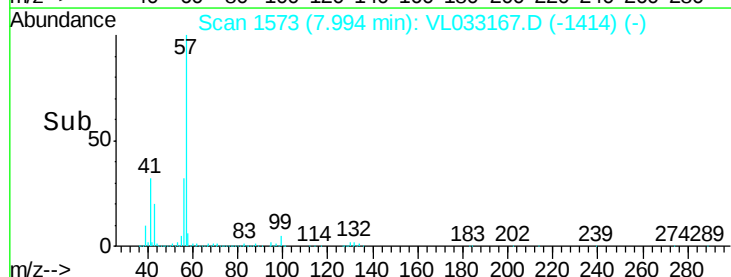
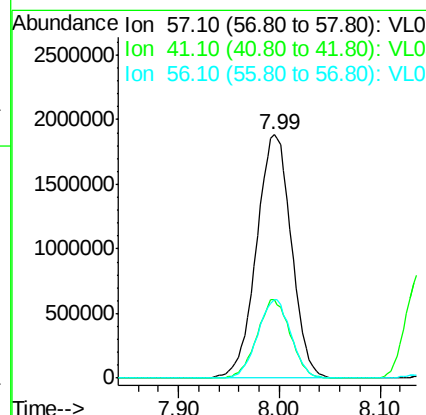
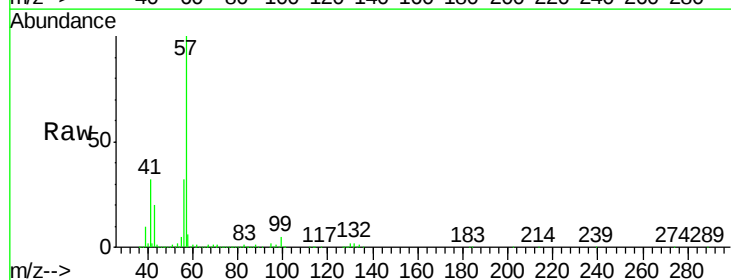
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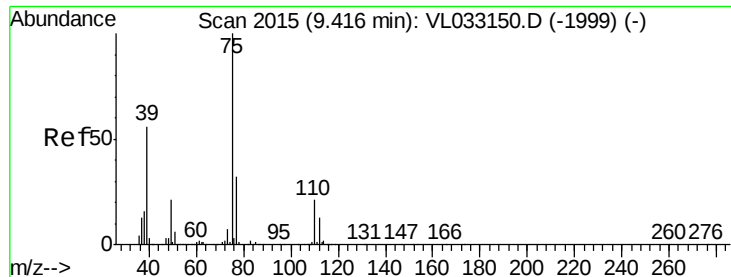
MMDadoda
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#44
2,2,4-Trimethylpentane
Concen: 8.831 ppbv
RT: 7.99 min Scan# 1573
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Tgt Ion: 57 Resp: 4516001
Ion Ratio Lower Upper
57 100
41 30.9 24.6 36.8
56 30.9 24.9 37.3





#45

t-1,3-Dichloropropene

Concen: 9.639 ppbv

RT: 9.42 min Scan# 2016

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 75 Resp: 1442080

Ion Ratio Lower Upper

75 100

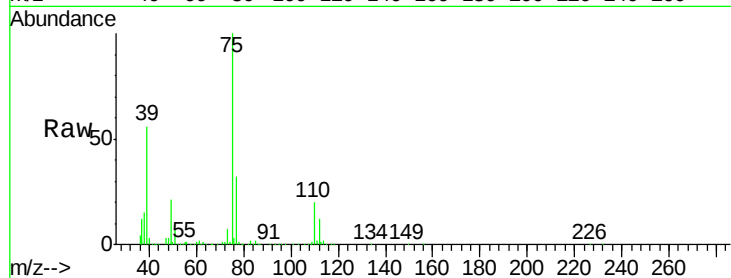
77 32.4 24.4 36.6

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Abundance Ion 75.10 (74.80 to 75.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

9.42

800000

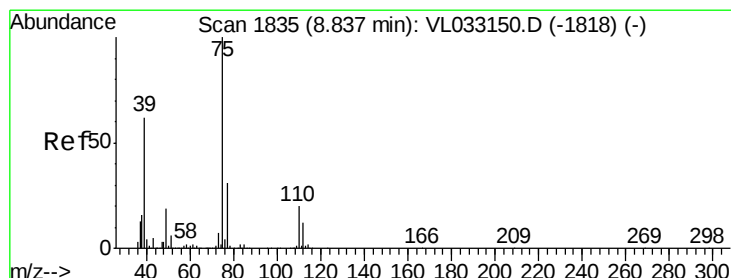
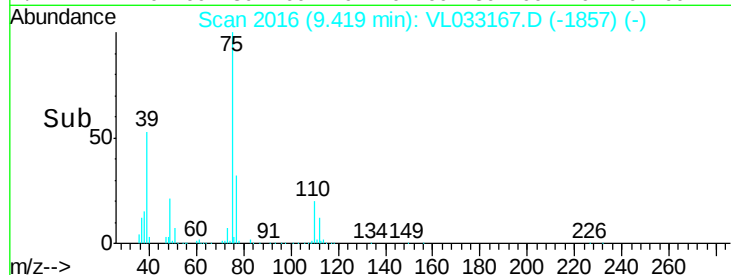
600000

400000

200000

0

Time--> 9.30 9.35 9.40 9.45 9.50



#46

cis-1,3-Dichloropropene

Concen: 9.252 ppbv

RT: 8.84 min Scan# 1836

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

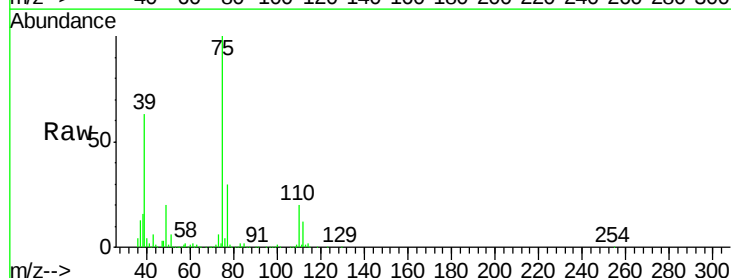
Tgt Ion: 75 Resp: 1664903

Ion Ratio Lower Upper

75 100

39 63.0 51.4 77.2

77 30.4 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

8.84

1000000

800000

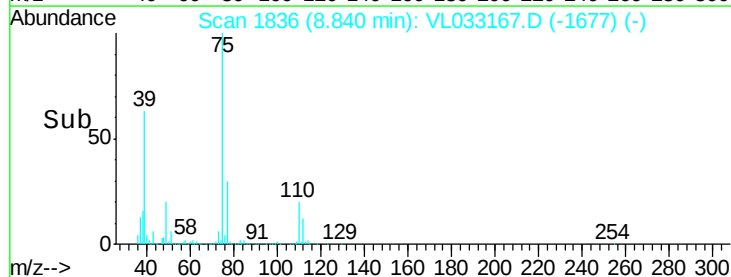
600000

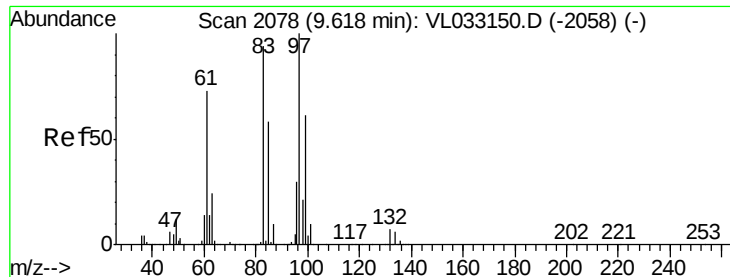
400000

200000

0

Time--> 8.75 8.80 8.85 8.90





#47

1,1,2-Trichloroethane

Concen: 8.542 ppbv

RT: 9.62 min Scan# 2078

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 97 Resp: 1071927

Ion Ratio Lower Upper

97 100

83 89.3 65.8 98.8

85 56.8 44.7 67.1

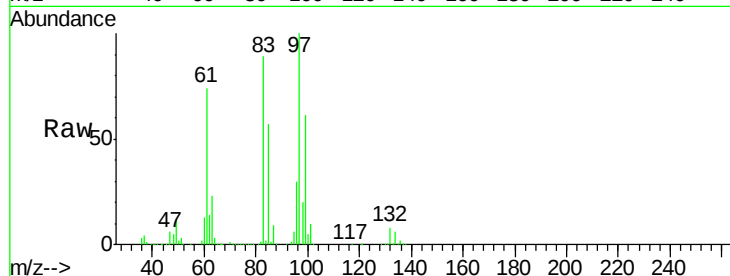
99 61.4 48.6 73.0

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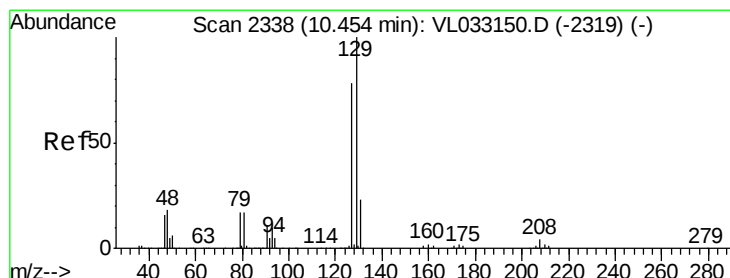
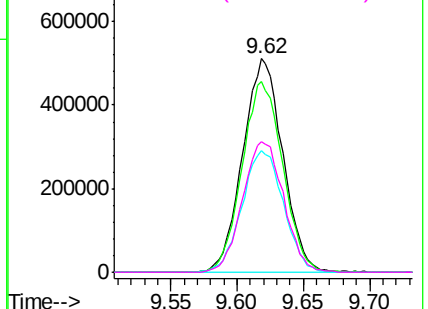
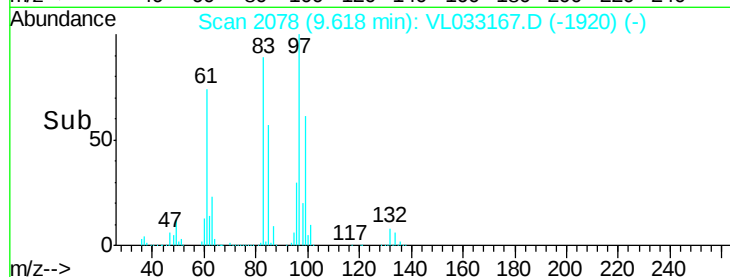


Abundance Ion 97.00 (96.70 to 97.70): VL0

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: 9.108 ppbv

RT: 10.45 min Scan# 2338

Delta R.T. 0.01 min

Lab File: VL033167.D

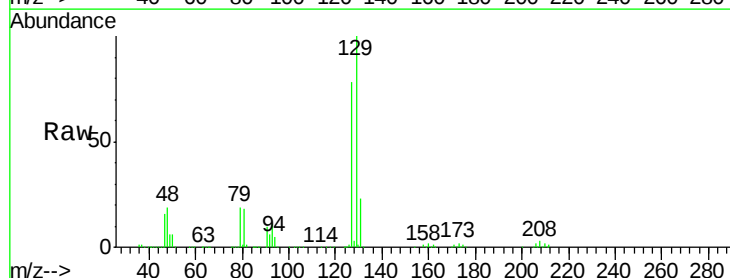
Acq: 5 Feb 2019 4:33

Tgt Ion: 129 Resp: 1701052

Ion Ratio Lower Upper

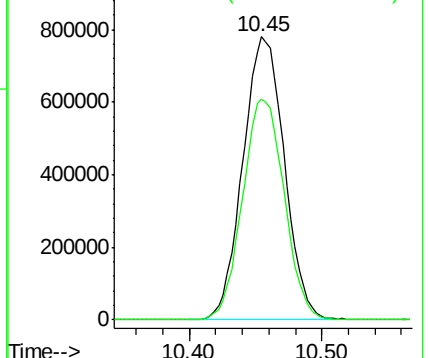
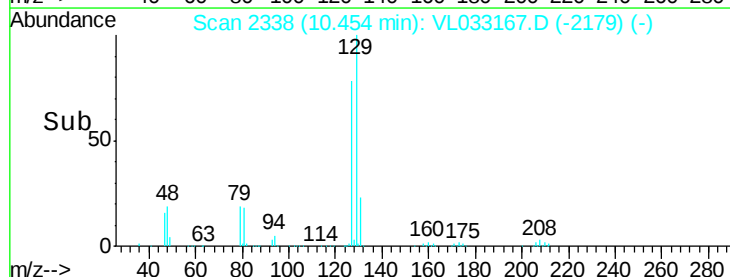
129 100

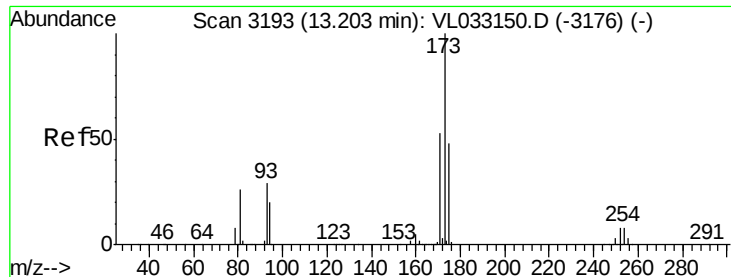
127 78.6 39.3 117.9



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V





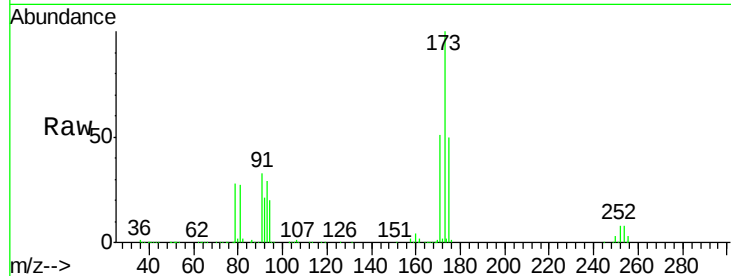
#49
Bromoform
Concen: 8.587 ppbv
RT: 13.21 min Scan# 3194
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion	Ratio	Lower	Upper
173	100		
175	48.9	39.3	58.9
171	51.8	41.8	62.6

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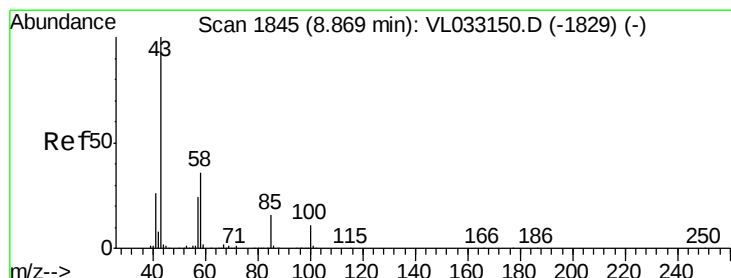
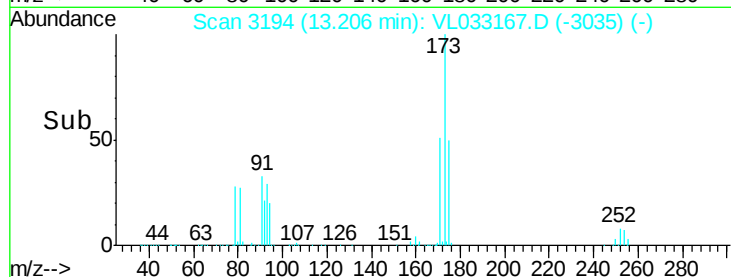
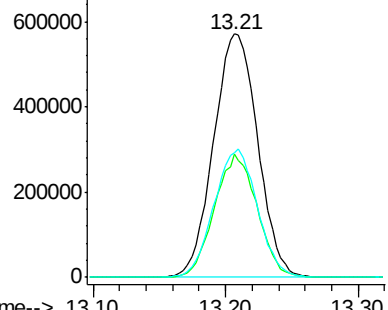


Abundance

Ion 172.90 (172.60 to 173.60): V

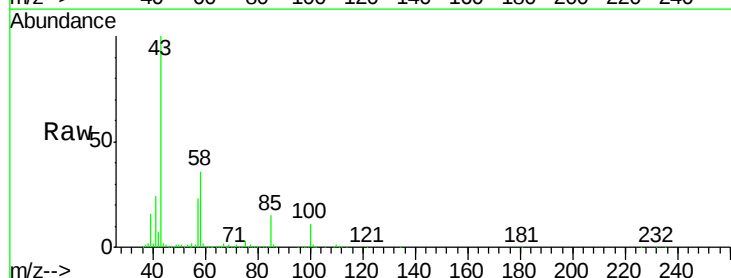
Ion 174.90 (174.60 to 175.60): V

Ion 170.90 (170.60 to 171.60): V



#50
4-Methyl-2-Pentanone
Concen: 8.070 ppbv
RT: 8.87 min Scan# 1846
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

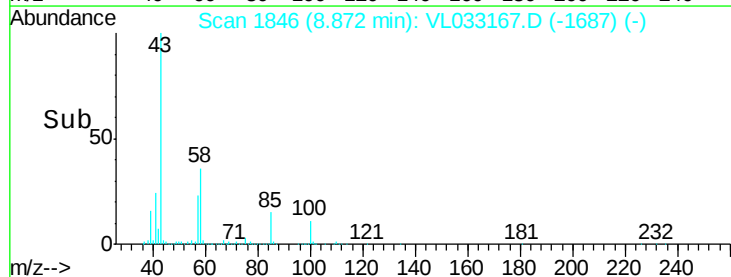
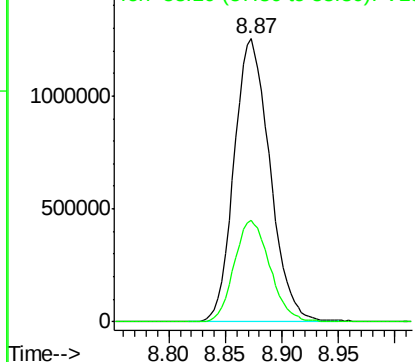
Tgt Ion	Ratio	Lower	Upper
43	100		
58	35.7	28.7	43.1

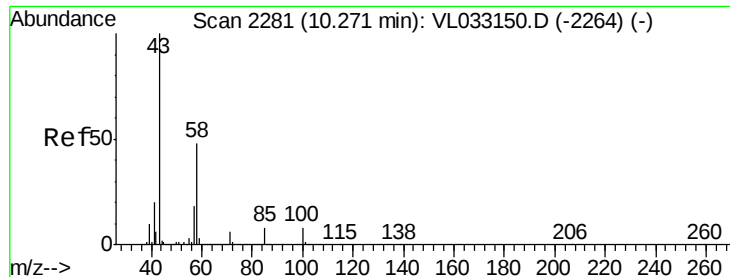


Abundance

Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





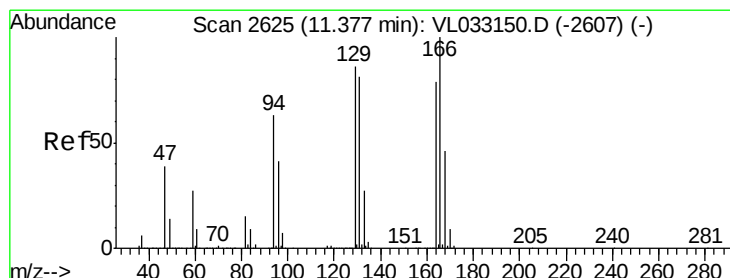
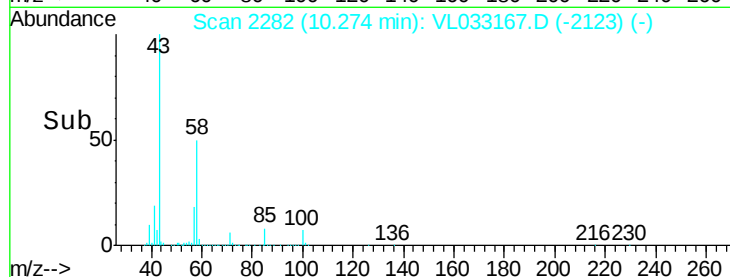
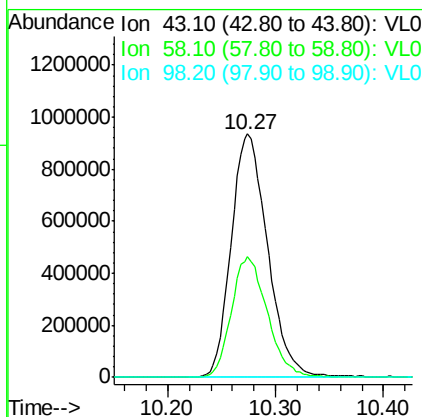
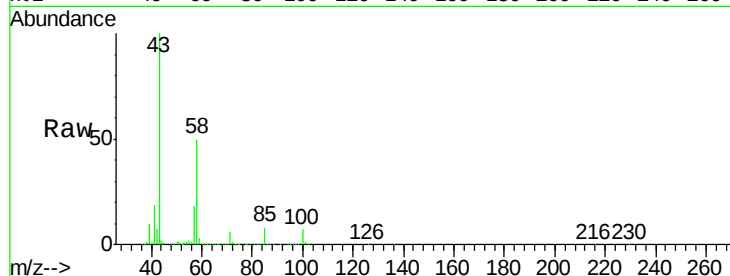
#51
2-Hexanone
Concen: 7.623 ppbv
RT: 10.27 min Scan# 2282
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion	Ratio	Lower	Upper
43	100		
58	49.3	39.4	59.2
98	0.1	0.1	0.1

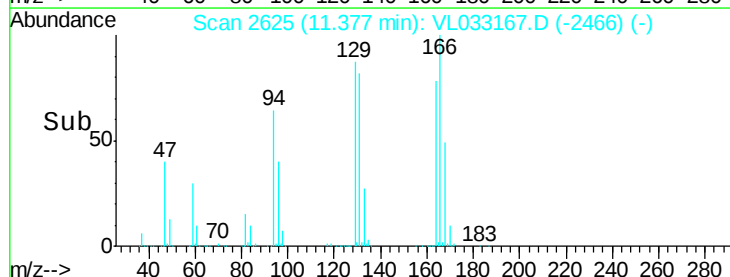
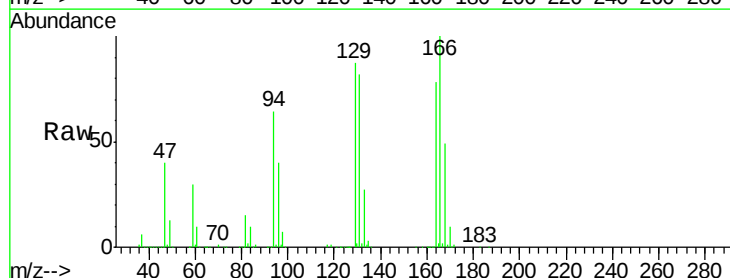
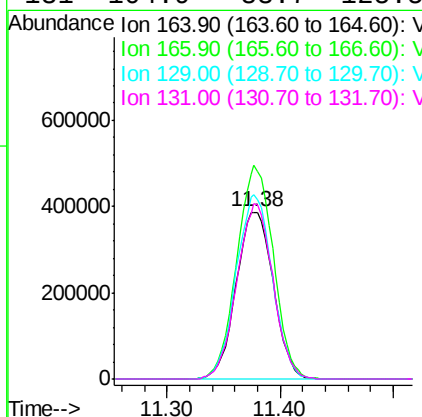
Manual Integrations
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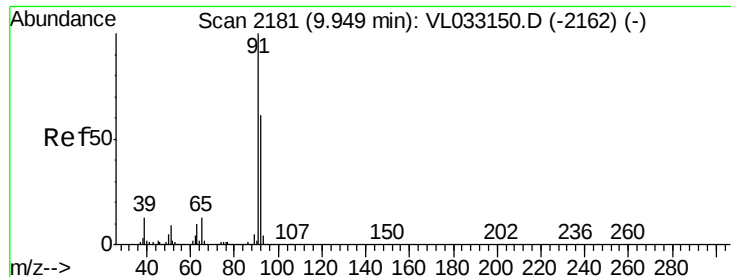
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#52
Tetrachloroethene
Concen: 8.334 ppbv
RT: 11.38 min Scan# 2625
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Tgt Ion	Ratio	Lower	Upper
164	100		
166	127.8	98.6	148.0
129	110.6	86.3	129.5
131	104.9	83.7	125.5





#53

Toluene

Concen: 8.686 ppbv

RT: 9.95 min Scan# 2181

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 91 Resp: 3143919

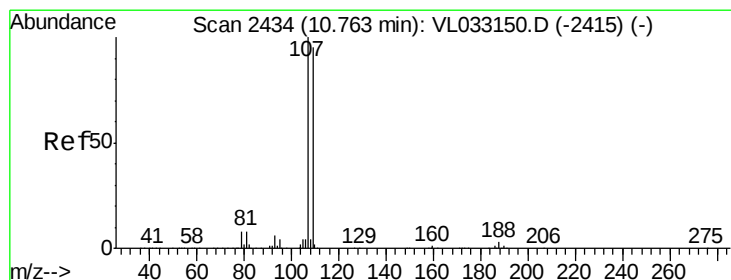
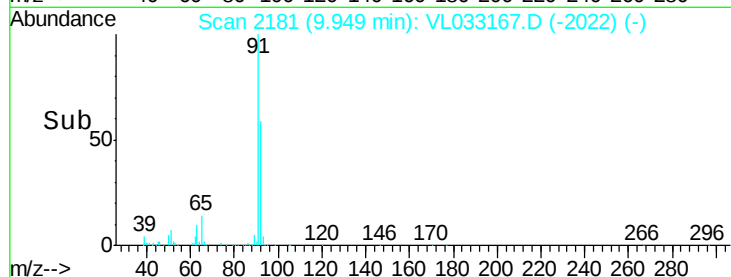
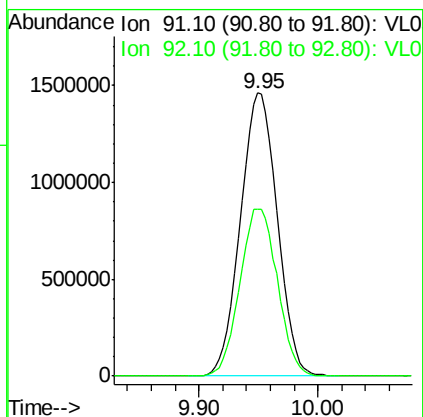
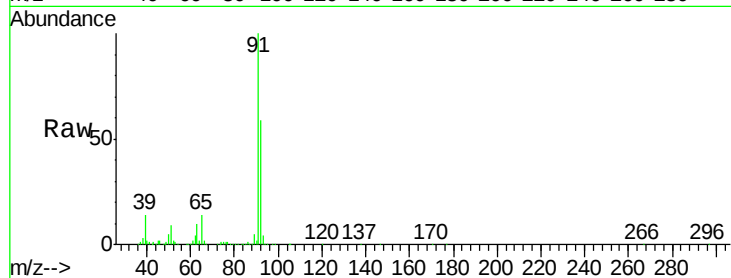
Ion Ratio Lower Upper

91 100

92 60.1 48.9 73.3

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#54

1,2-Dibromoethane

Concen: 8.699 ppbv

RT: 10.77 min Scan# 2435

Delta R.T. 0.01 min

Lab File: VL033167.D

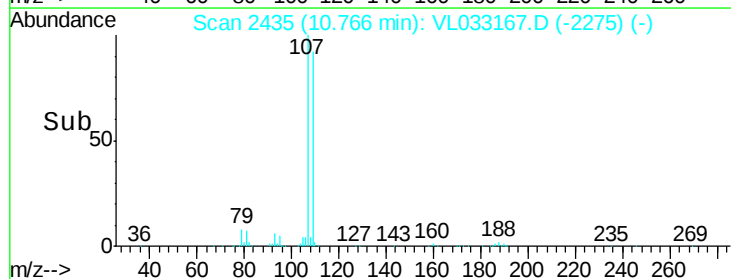
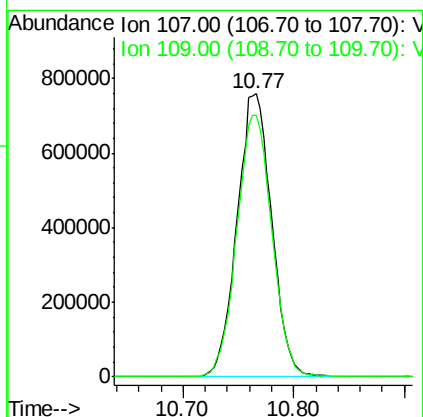
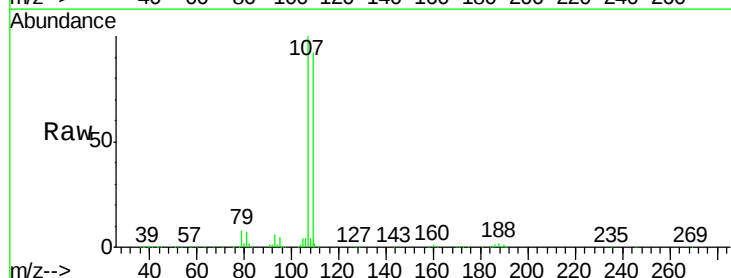
Acq: 5 Feb 2019 4:33

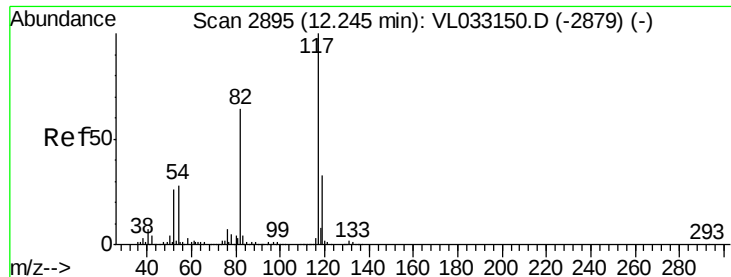
Tgt Ion: 107 Resp: 1652930

Ion Ratio Lower Upper

107 100

109 92.5 74.7 112.1





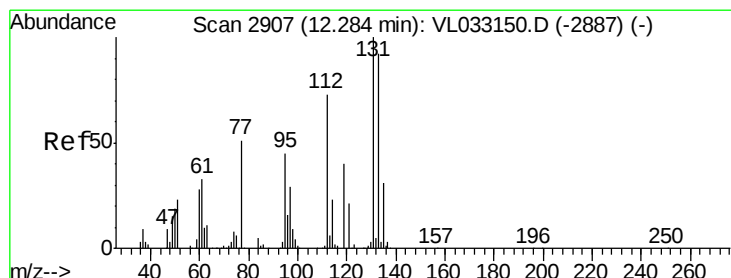
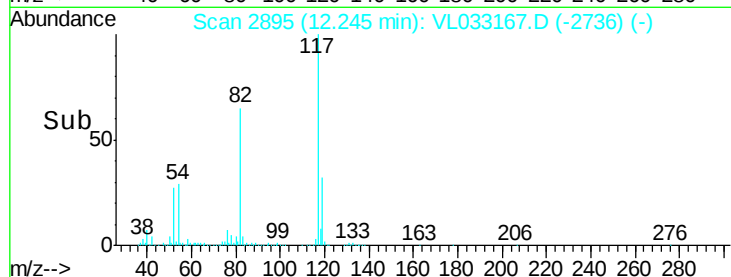
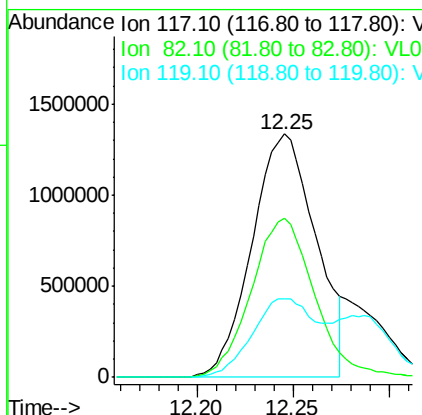
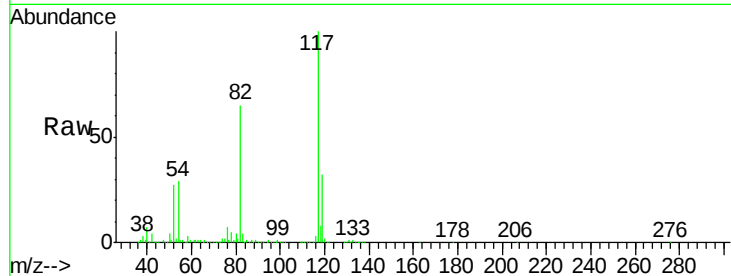
#55
Chlorobenzene-d5
Concen: 10.000 ppbv m
RT: 12.25 min Scan# 2895
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion:117 Resp: 3088288
Ion Ratio Lower Upper
117 100
82 65.2 49.3 73.9
119 34.6 27.1 40.7

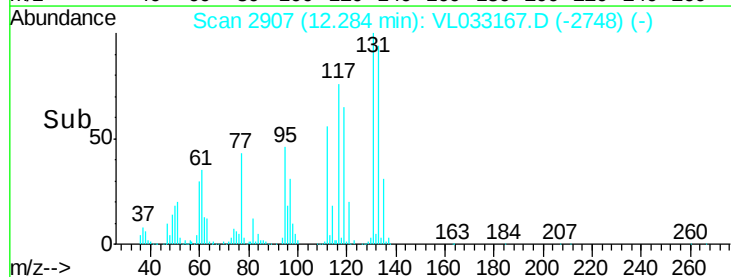
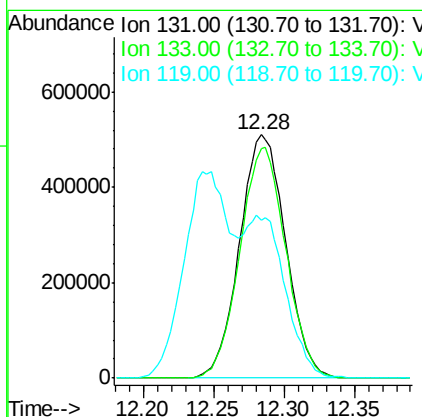
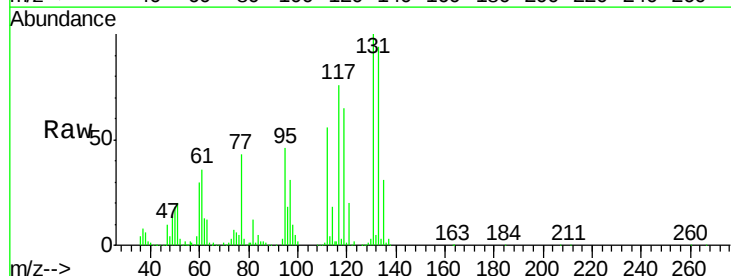
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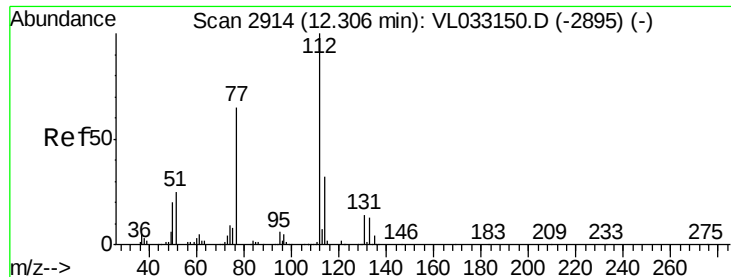
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#56
1,1,1,2-Tetrachloroethane
Concen: 8.644 ppbv
RT: 12.28 min Scan# 2907
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Tgt Ion:131 Resp: 1154188
Ion Ratio Lower Upper
131 100
133 95.5 76.2 114.4
119 147.7 46.9 70.3#





#57

Chlorobenzene

Concen: 8.410 ppbv

RT: 12.31 min Scan# 2914

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:112 Resp: 2165302

Ion Ratio Lower Upper

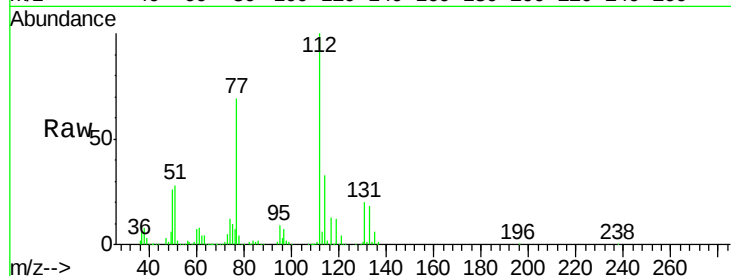
112 100

77 68.8 52.8 79.2

114 32.9 29.7 36.3

Manual Integrations
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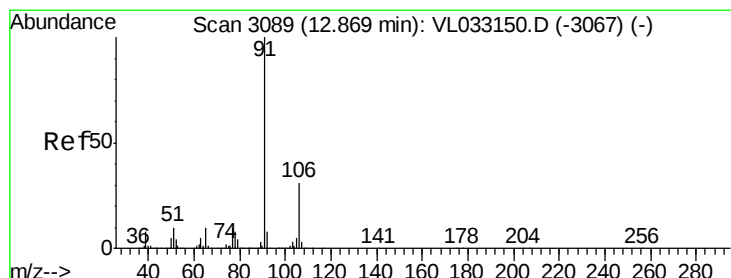
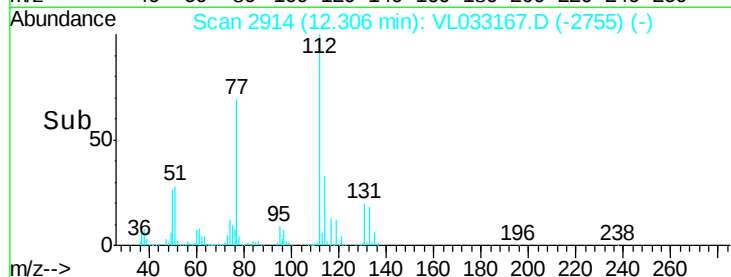
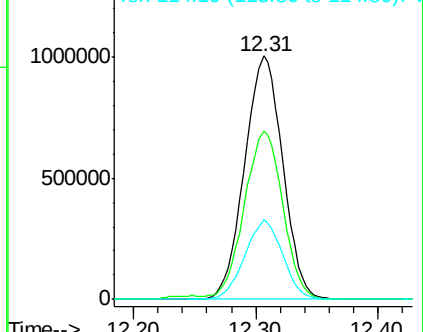
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Abundance Ion 112.10 (111.80 to 112.80): V

Ion 77.10 (76.80 to 77.80): VL0

Ion 114.10 (113.80 to 114.80): V



#58

Ethyl Benzene

Concen: 8.531 ppbv

RT: 12.87 min Scan# 3089

Delta R.T. 0.01 min

Lab File: VL033167.D

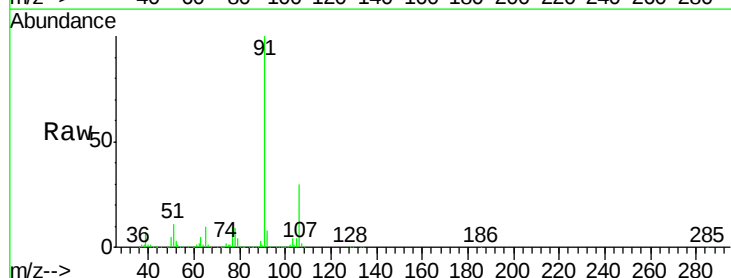
Acq: 5 Feb 2019 4:33

Tgt Ion: 91 Resp: 4145093

Ion Ratio Lower Upper

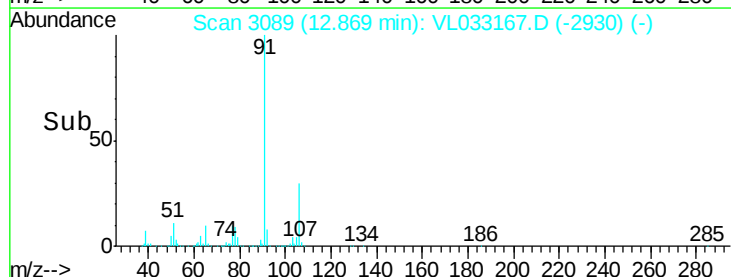
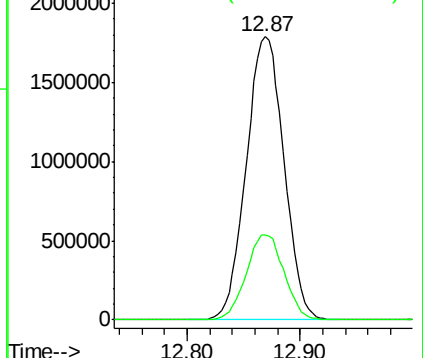
91 100

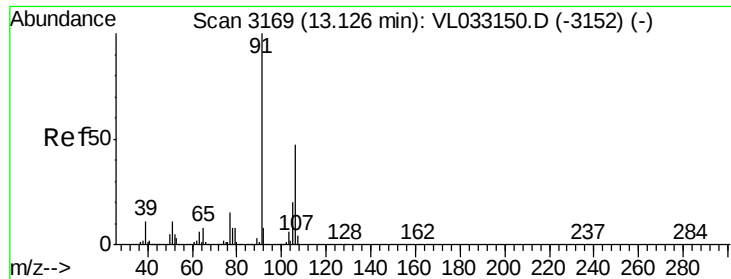
106 30.2 24.7 37.1



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





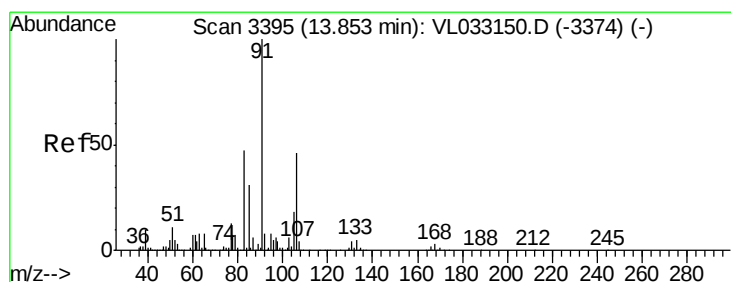
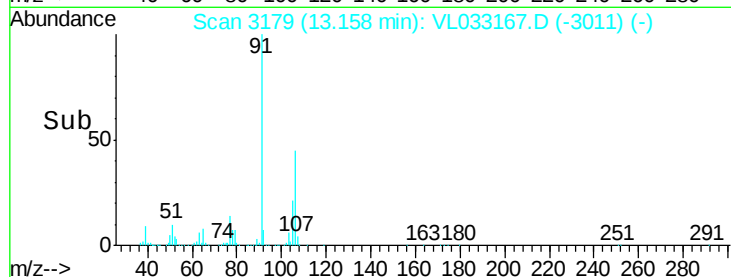
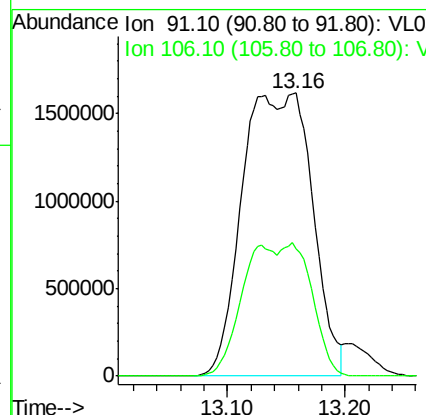
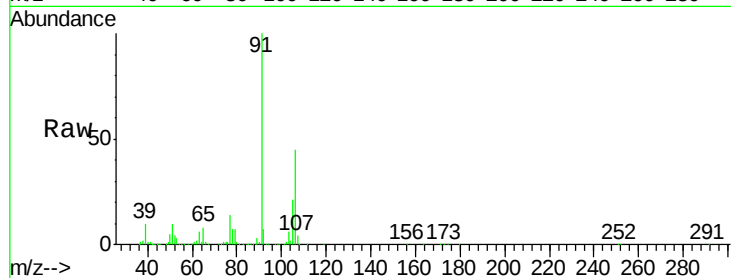
#59
m/p-Xylene
Concen: 16.778 ppbv m
RT: 13.16 min Scan# 3179
Delta R.T. 0.04 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion: 91 Resp: 6675628
Ion Ratio Lower Upper
91 100
106 0.0 37.6 56.4#

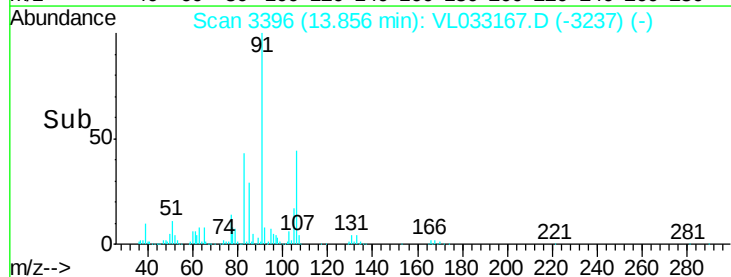
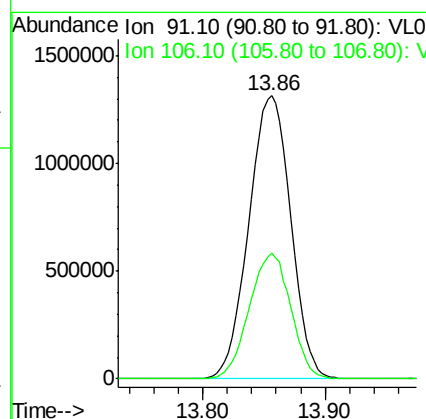
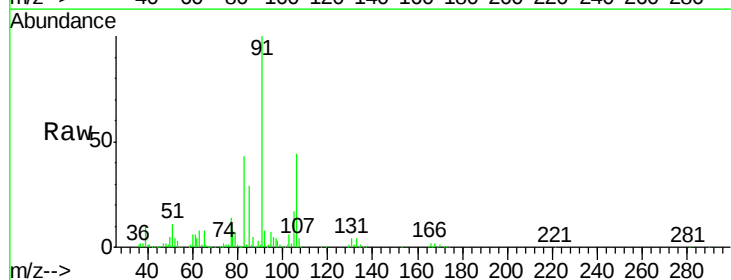
Manual Integrations
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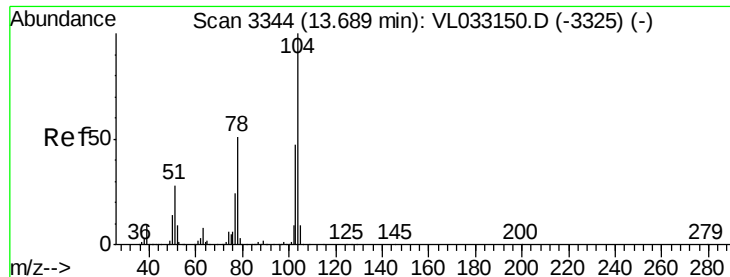
MMDadoda
2/5/2019 10:28:36 AM



#60
o-Xylene
Concen: 8.505 ppbv
RT: 13.86 min Scan# 3396
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Tgt Ion: 91 Resp: 3122813
Ion Ratio Lower Upper
91 100
106 43.9 23.2 69.5





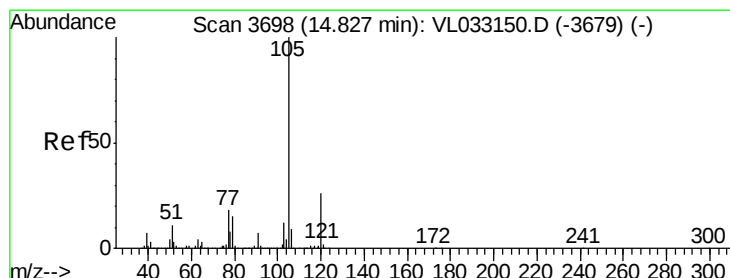
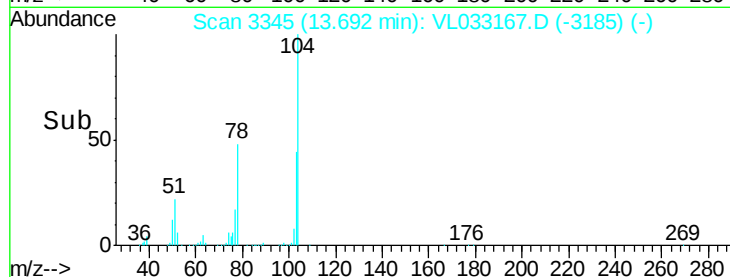
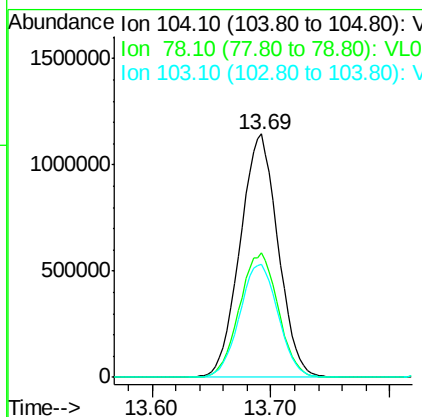
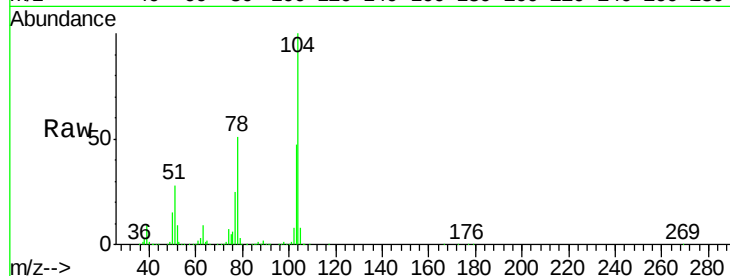
#61
Stvrene
Concen: 8.585 ppbv
RT: 13.69 min Scan# 3345
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion	Ratio	Lower	Upper
104	100		
78	52.2	39.7	59.5
103	47.5	37.7	56.5

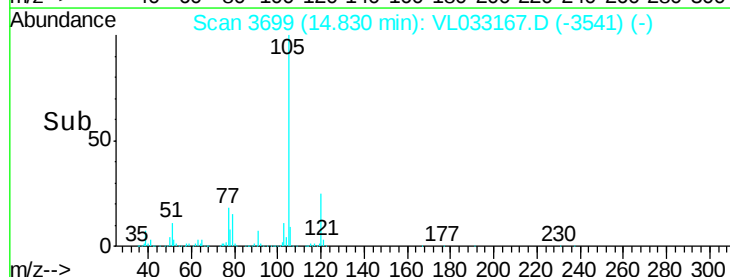
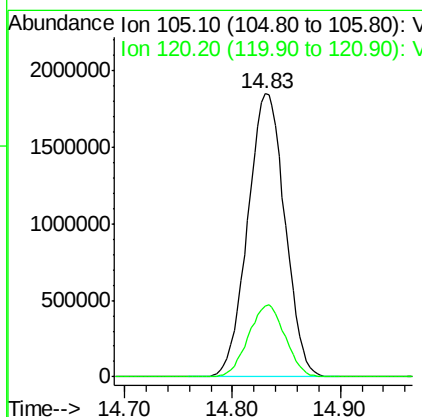
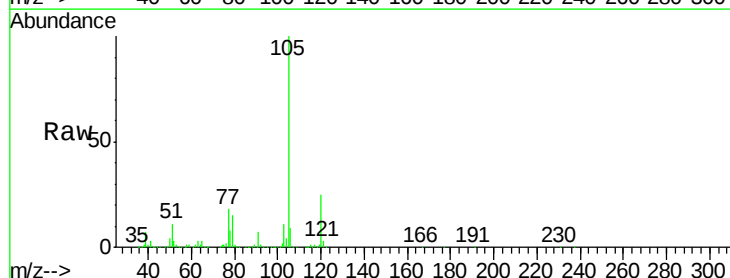
Manual Integrations
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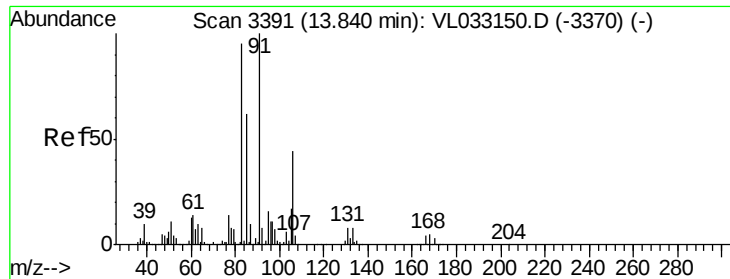
MMDadoda
2/5/2019 10:28:36 AM



#62
Isopropylbenzene
Concen: 8.456 ppbv
RT: 14.83 min Scan# 3699
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Tgt Ion	Ratio	Lower	Upper
105	100		
120	25.0	20.8	31.2





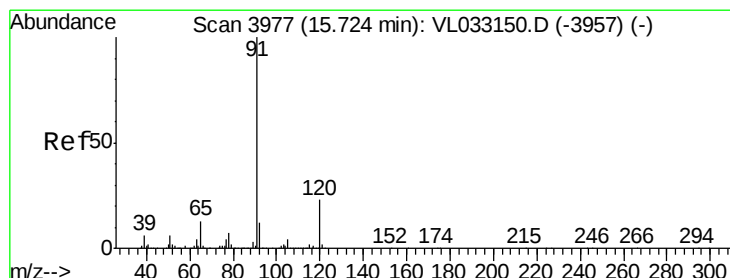
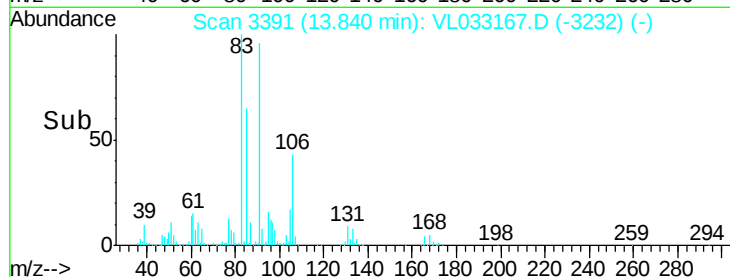
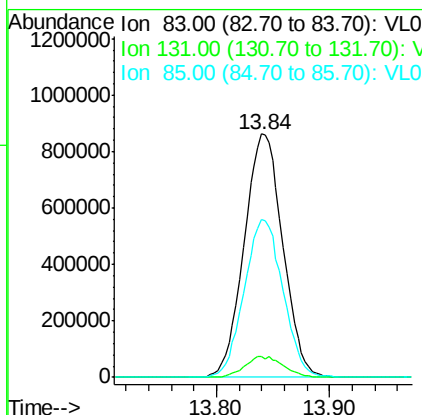
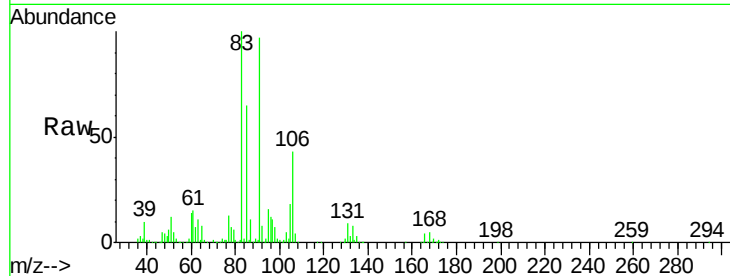
#63
 1,1,2,2-Tetrachloroethane
 Concen: 7.770 ppbv
 RT: 13.84 min Scan# 3391
 Delta R.T. 0.01 min
 Lab File: VL033167.D
 Acq: 5 Feb 2019 4:33

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDCCC010EC

Tot Ion	83	Resp	2046637
Ion	Ratio	Lower	Upper
83	100		
131	8.6	4.5	13.7
85	65.0	32.5	97.4

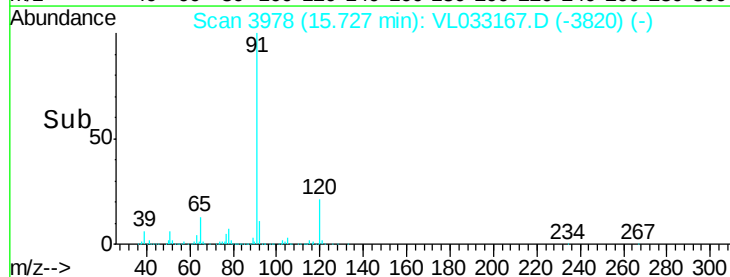
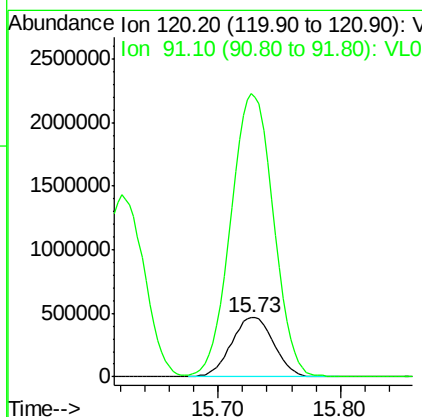
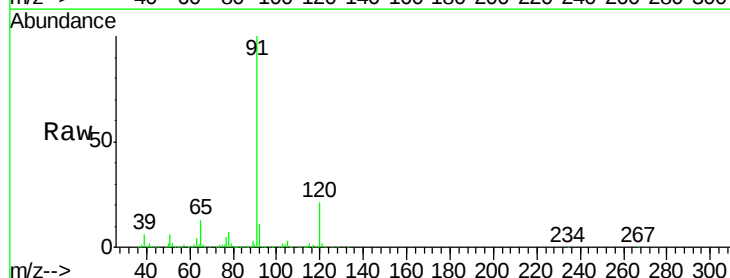
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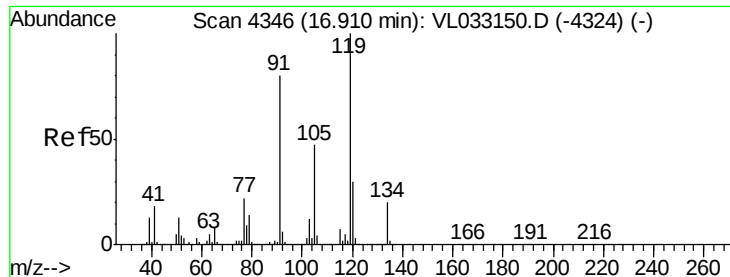
MMDadoda
 2/5/2019 10:28:36 AM



#64
 n-propylbenzene
 Concen: 8.211 ppbv
 RT: 15.73 min Scan# 3978
 Delta R.T. 0.01 min
 Lab File: VL033167.D
 Acq: 5 Feb 2019 4:33

Tgt Ion	120	Resp	1123047
Ion	Ratio	Lower	Upper
120	100		
91	480.4	370.2	555.2





#65

tert-Butylbenzene

Concen: 7.740 ppbv

RT: 16.91 min Scan# 4347

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:119 Resp: 3638732

Ion Ratio Lower Upper

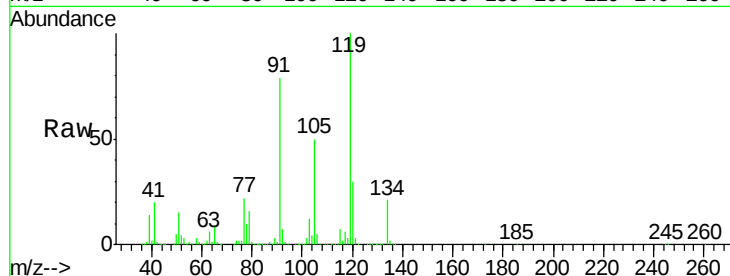
119 100

91 82.4 63.0 94.6

134 19.4 15.5 23.3

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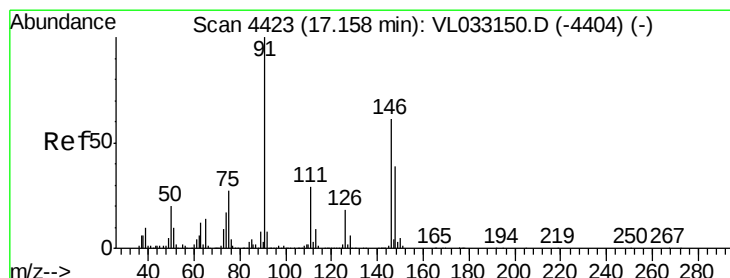
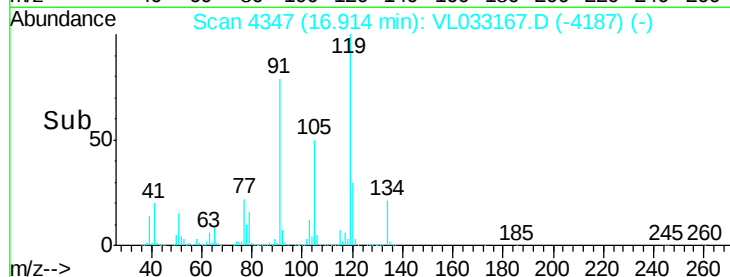
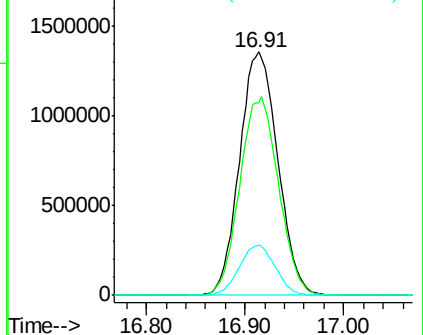
MMDadoda
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Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V



#66

Benzyl Chloride

Concen: 7.968 ppbv

RT: 17.16 min Scan# 4424

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

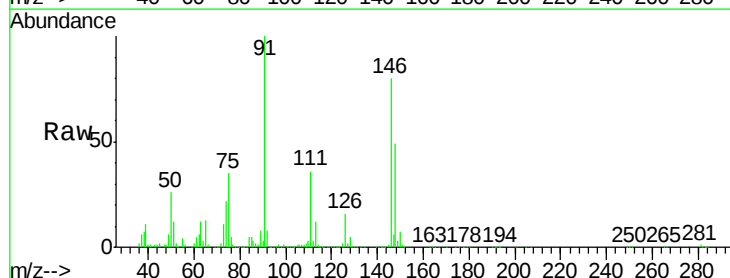
Tgt Ion: 91 Resp: 1701293

Ion Ratio Lower Upper

91 100

126 16.9 14.9 22.3

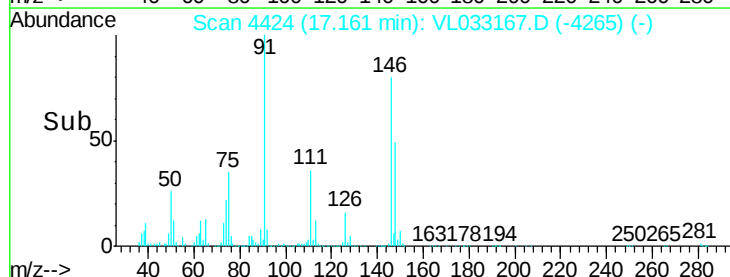
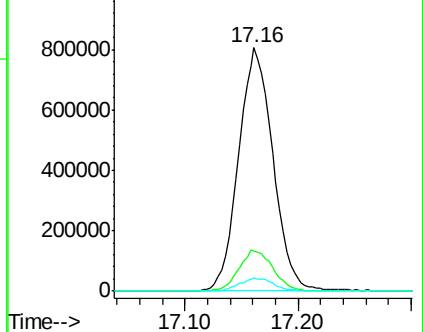
128 5.3 4.7 7.1

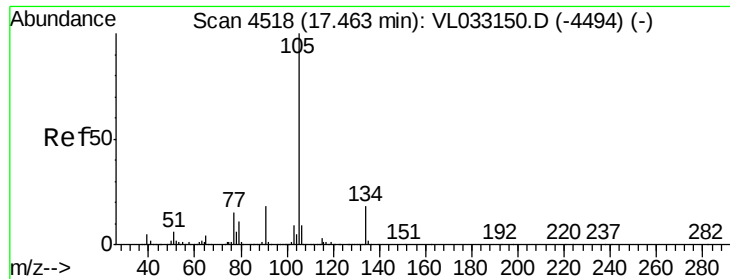


Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V

Ion 128.10 (127.80 to 128.80): V





#67

sec-Butylbenzene

Concen: 7.786 ppbv

RT: 17.46 min Scan# 4518

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:105 Resp: 5232494

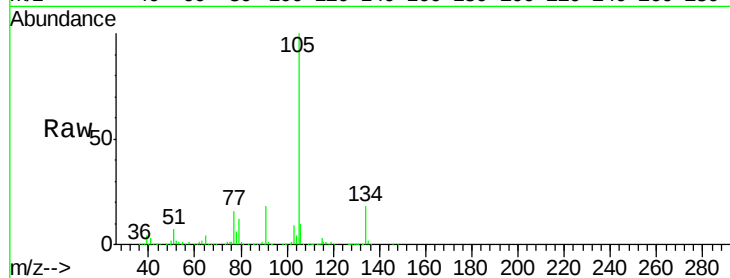
Ion Ratio Lower Upper

105 100

134 17.8 14.4 21.6

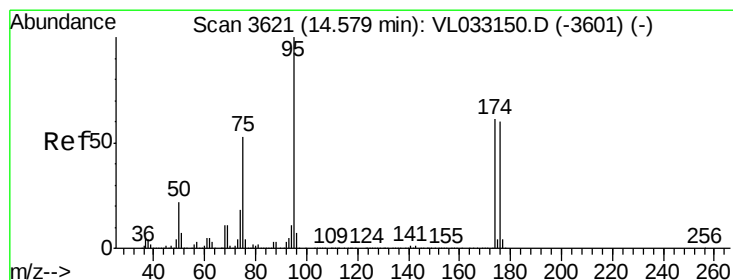
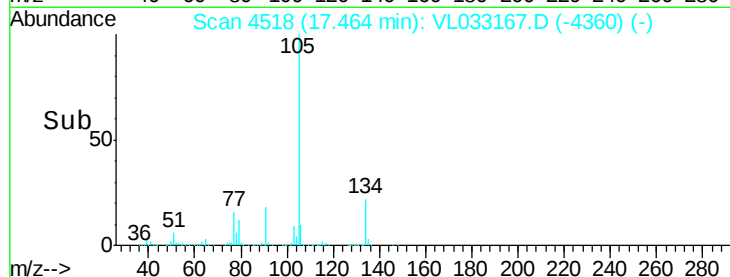
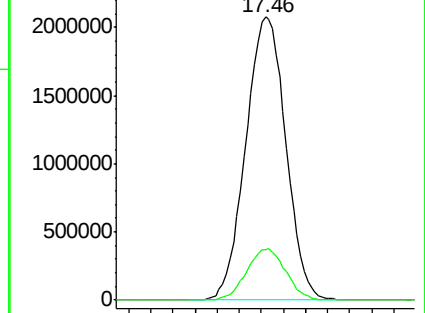
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V



#68

1-Bromo-4-Fluorobenzene

Concen: 10.183 ppbv

RT: 14.58 min Scan# 3622

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

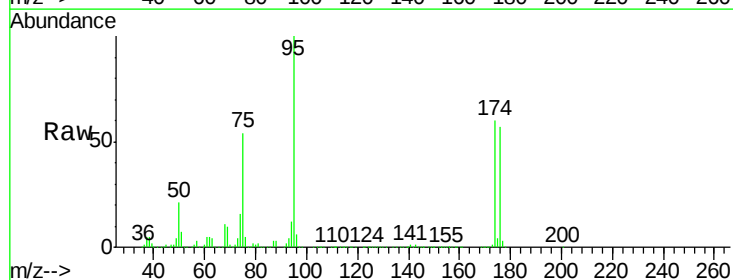
Tgt Ion: 95 Resp: 2343541

Ion Ratio Lower Upper

95 100

174 60.0 49.2 73.8

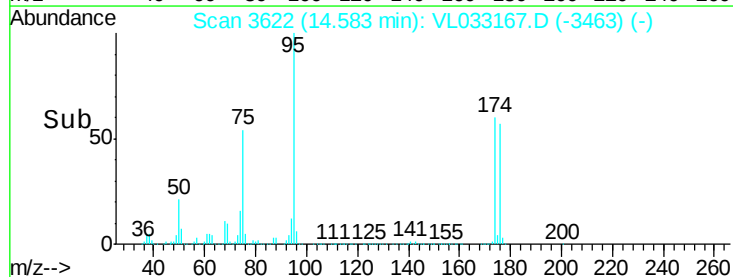
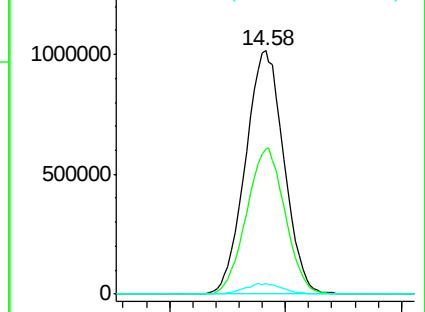
175 4.4 3.7 5.5

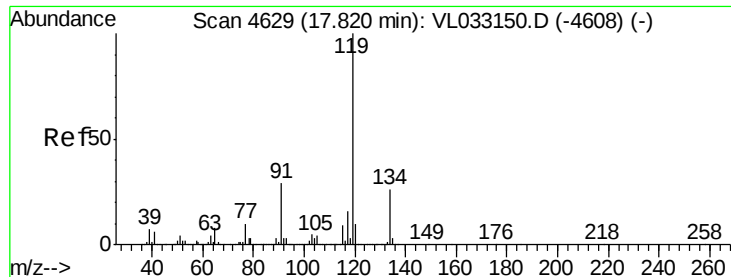


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





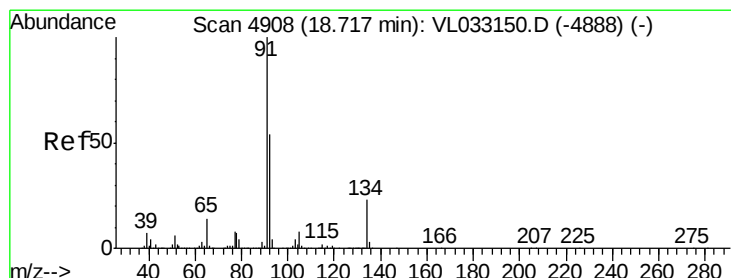
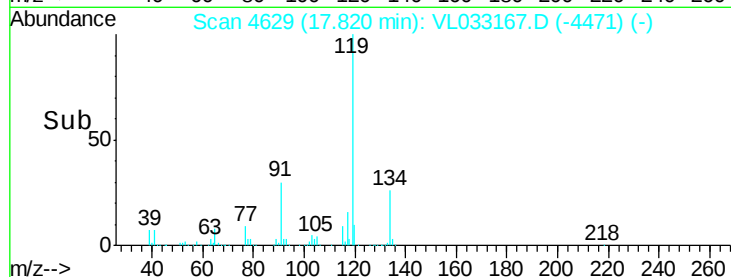
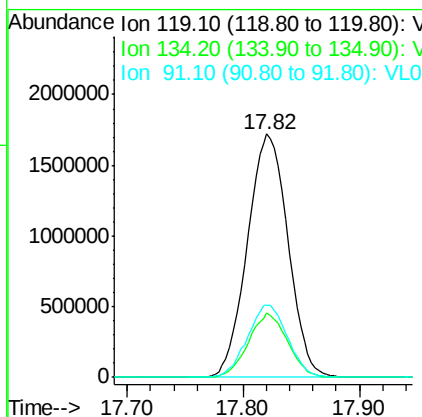
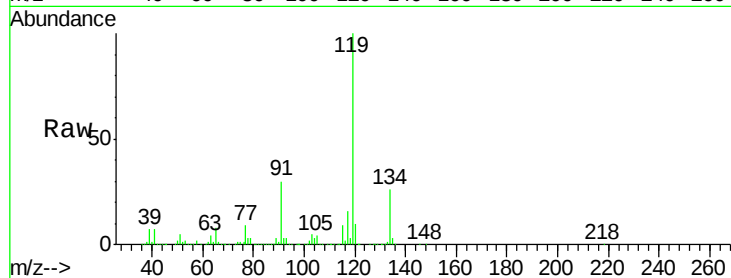
#69
p-Isopropyltoluene
Concen: 7.542 ppbv
RT: 17.82 min Scan# 4629
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion	Ratio	Lower	Upper
119	100		
134	25.3	20.3	30.5
91	29.4	22.6	33.8

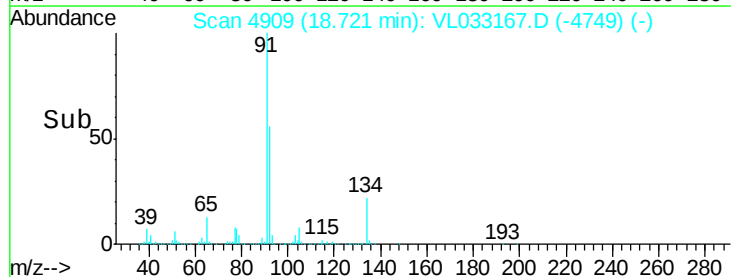
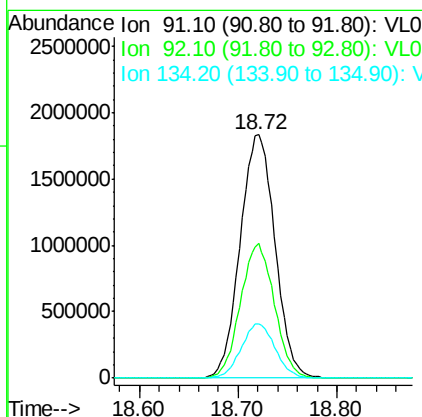
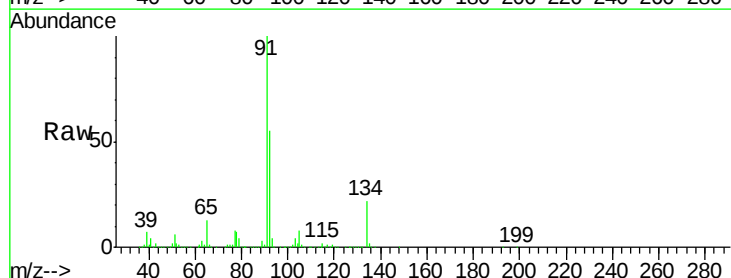
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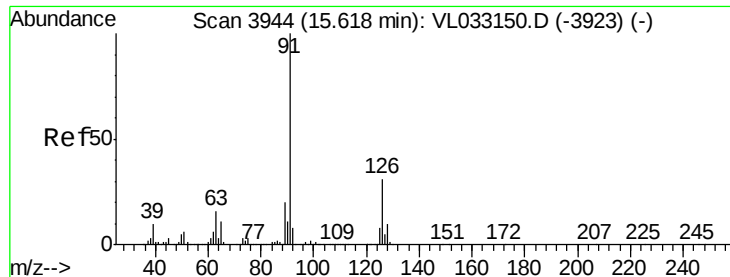
MMDadoda
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#70
n-Butylbenzene
Concen: 7.399 ppbv
RT: 18.72 min Scan# 4909
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Tgt Ion	Ratio	Lower	Upper
91	100		
92	54.0	43.7	65.5
134	21.8	18.4	27.6





#71

2-Chlorotoluene

Concen: 8.174 ppbv

RT: 15.62 min Scan# 3945

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 91 Resp: 3396307

Ion Ratio Lower Upper

91 100

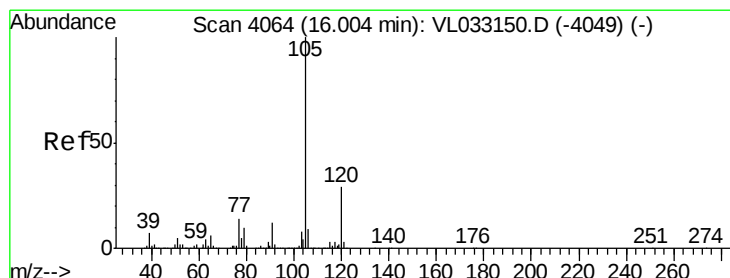
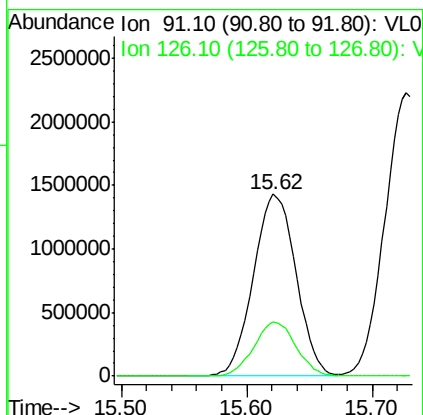
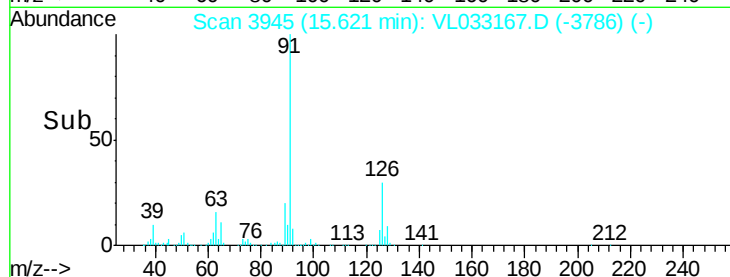
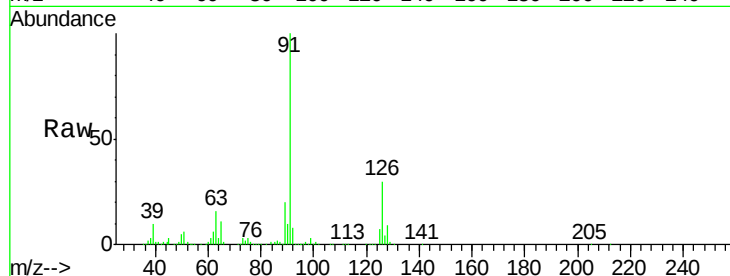
126 29.2 12.3 49.1

Manual Integrations

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2/5/2019 10:28:36 AM



#72

4-Ethyltoluene

Concen: 8.171 ppbv

RT: 16.01 min Scan# 4065

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Tgt Ion: 105 Resp: 3585710

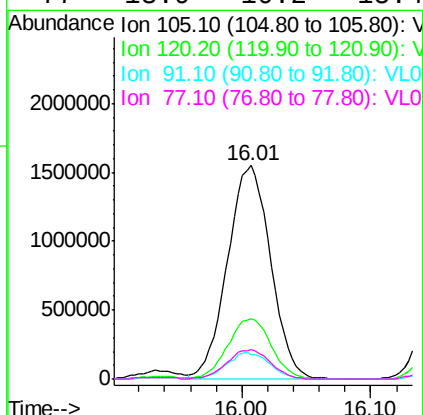
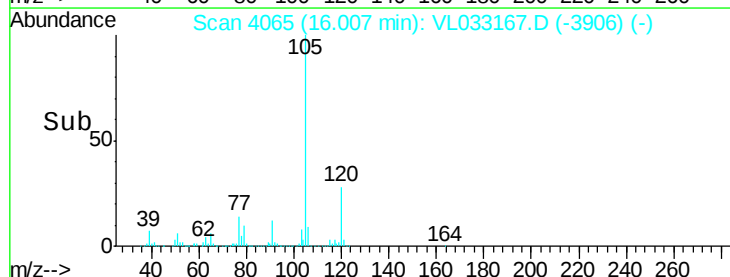
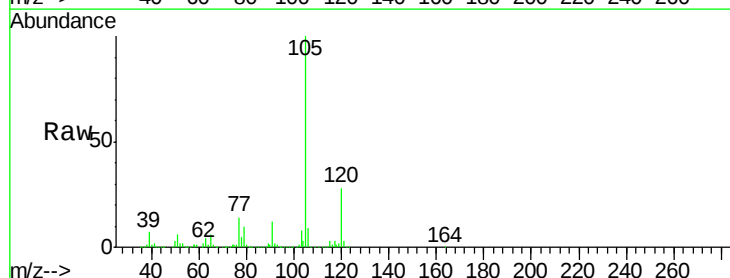
Ion Ratio Lower Upper

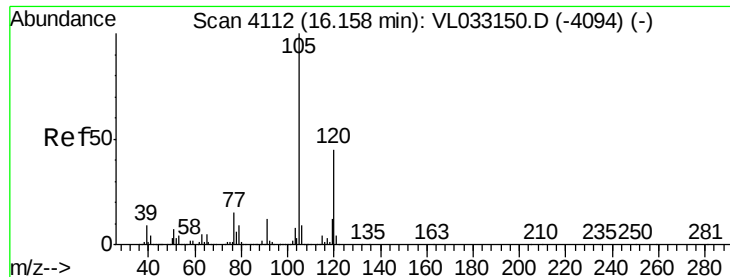
105 100

120 28.7 23.2 34.8

91 12.5 9.5 14.3

77 13.9 10.2 15.4





#73

1,3,5-Trimethylbenzene

Concen: 7.990 ppbv

RT: 16.16 min Scan# 4113

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:105 Resp: 3380483

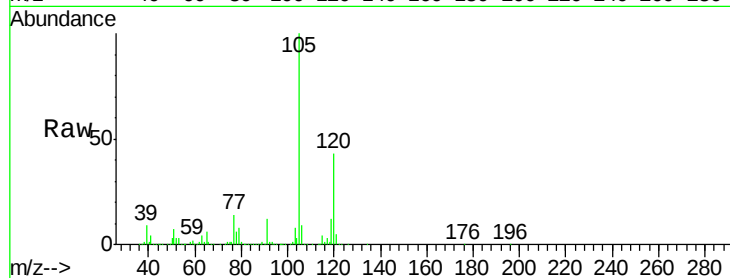
Ion Ratio Lower Upper

105 100

120 42.6 38.0 57.0

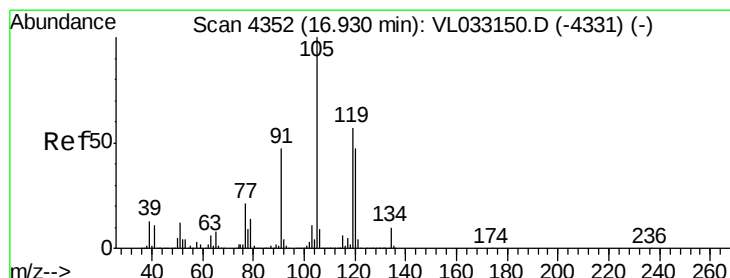
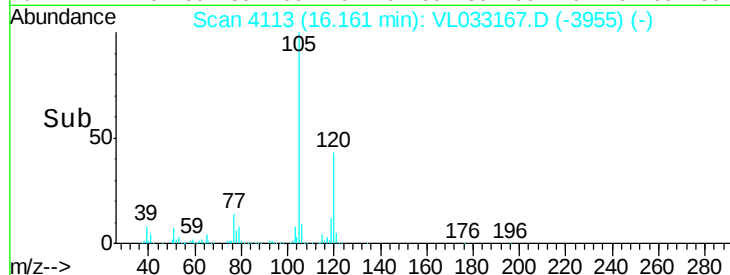
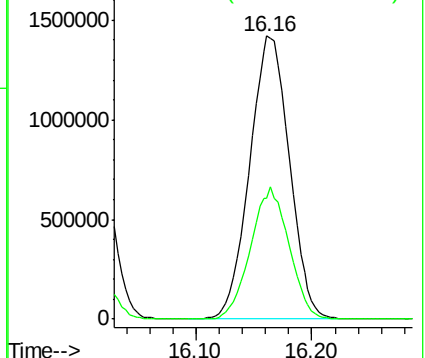
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 7.636 ppbv

RT: 16.93 min Scan# 4353

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Tgt Ion:105 Resp: 3295115

Ion Ratio Lower Upper

105 100

120 46.5 38.2 57.4

91 46.2 35.0 52.4

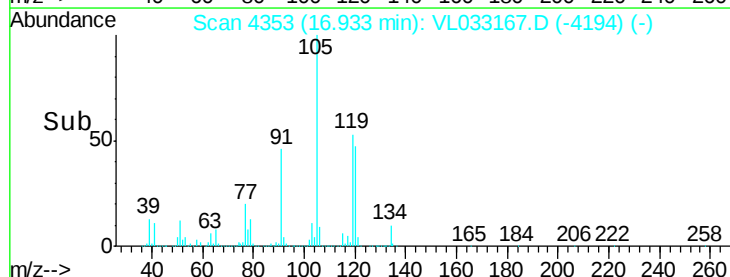
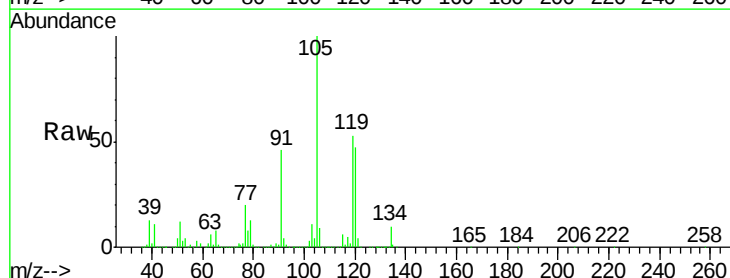
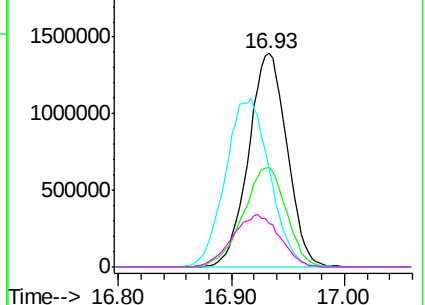
77 20.1 15.8 23.6

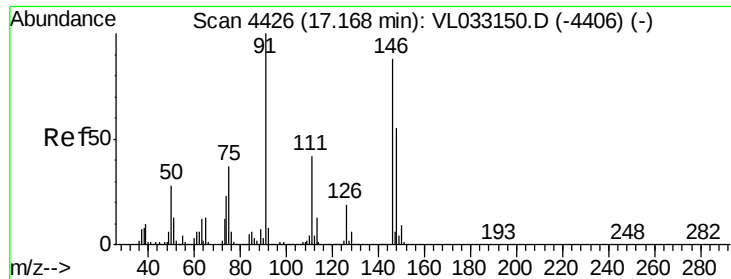
Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VLO

Ion 77.10 (76.80 to 77.80): VLO





#75

1,3-Dichlorobenzene

Concen: 7.632 ppbv

RT: 17.17 min Scan# 4427

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Instrument :

MSVOA_L

ClientSampleId :

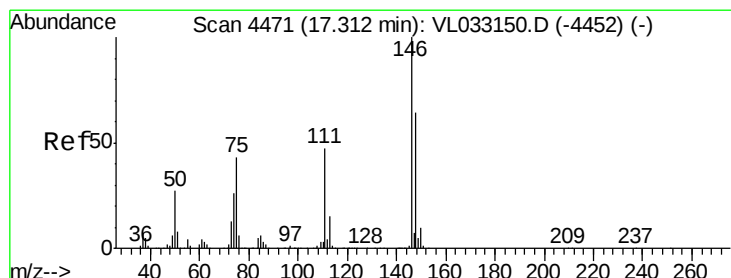
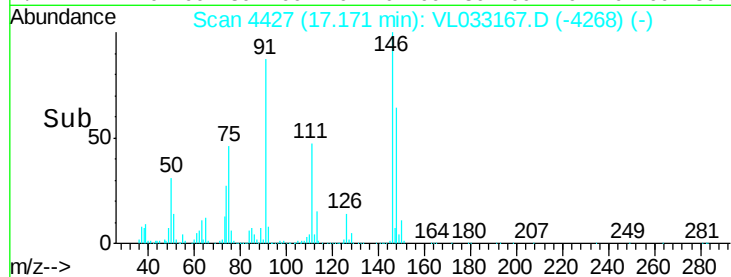
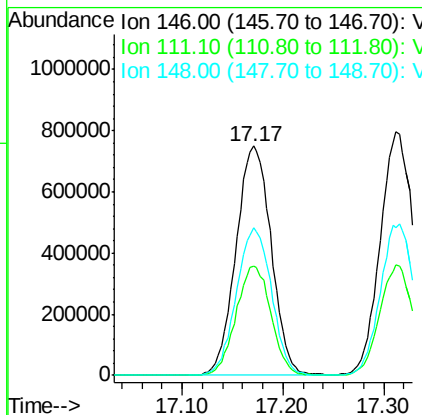
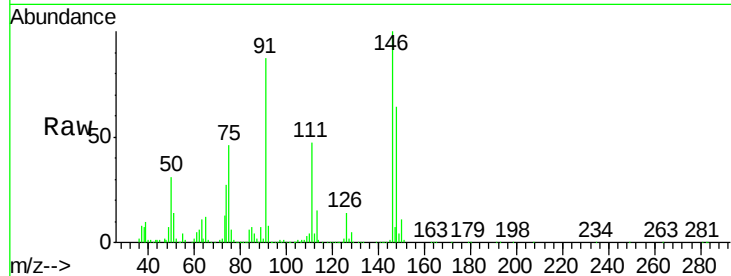
VSTDCCC010EC

Tot Ion:146 Resp: 1818211

Ion	Ratio	Lower	Upper
146	100		
111	47.1	24.0	72.0
148	64.0	31.9	95.7

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#76

1,4-Dichlorobenzene

Concen: 7.693 ppbv

RT: 17.31 min Scan# 4471

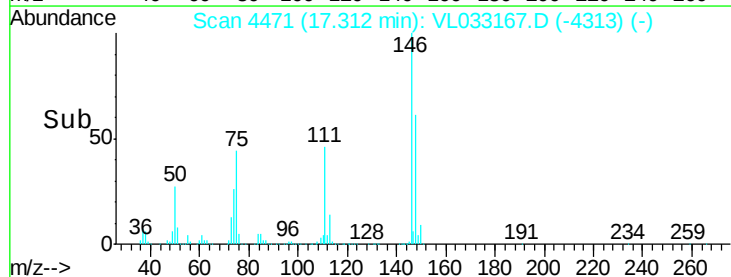
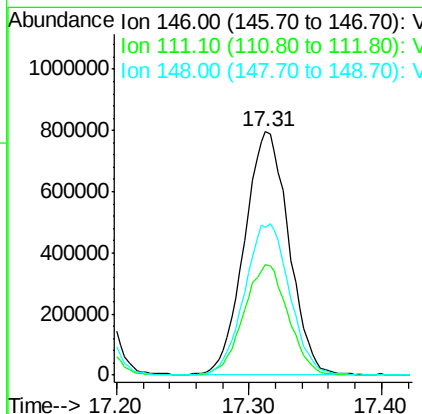
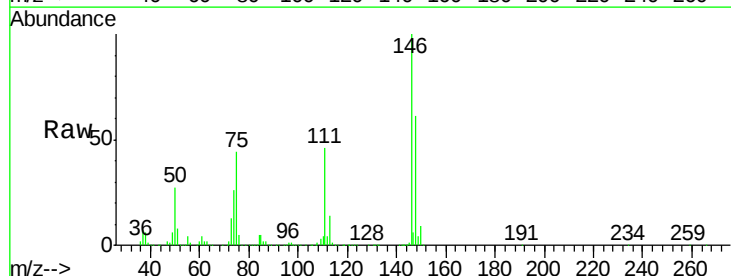
Delta R.T. 0.01 min

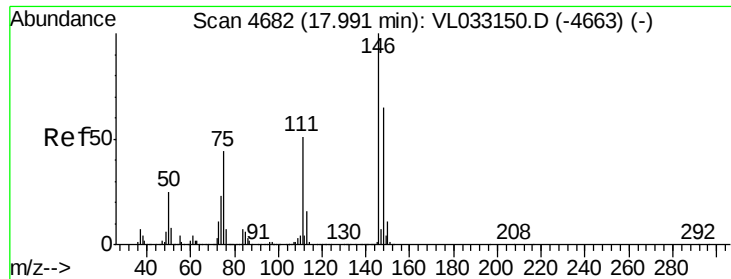
Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Tgt Ion:146 Resp: 1840970

Ion	Ratio	Lower	Upper
146	100		
111	45.9	23.4	70.0
148	63.5	31.9	95.9





#77

1,2-Dichlorobenzene

Concen: 7.359 ppbv

RT: 17.99 min Scan# 4683

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:146 Resp: 1743972

Ion Ratio Lower Upper

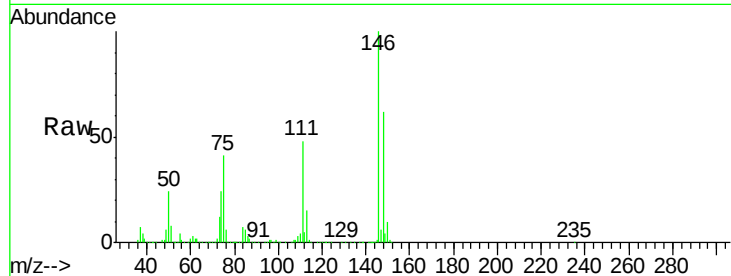
146 100

111 49.4 25.1 75.3

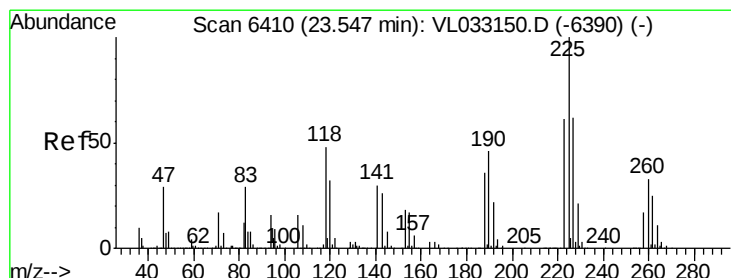
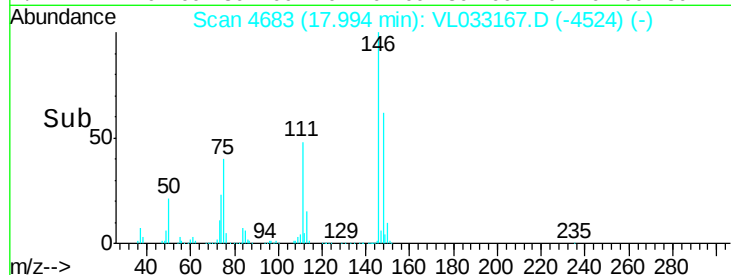
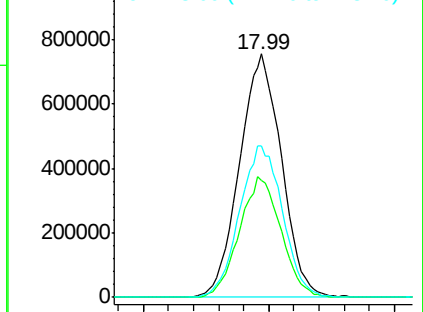
148 64.4 32.0 96.2

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2/5/2019 10:28:36 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



#78

Hexachloro-1,3-Butadiene

Concen: 11.365 ppbv

RT: 23.55 min Scan# 6411

Delta R.T. 0.01 min

Lab File: VL033167.D

Acq: 5 Feb 2019 4:33

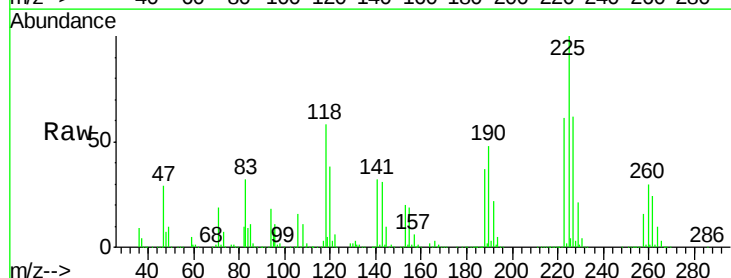
Tgt Ion:225 Resp: 1339756

Ion Ratio Lower Upper

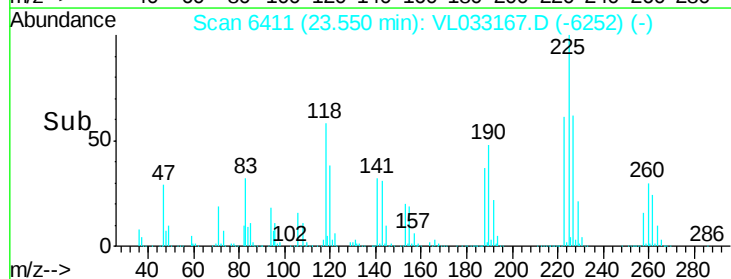
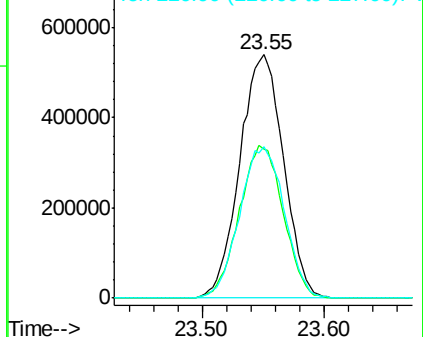
225 100

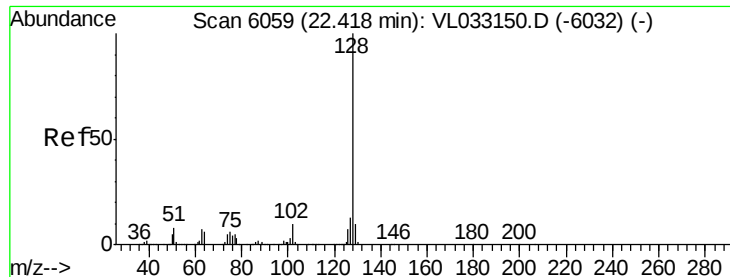
223 62.9 50.2 75.4

227 63.8 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





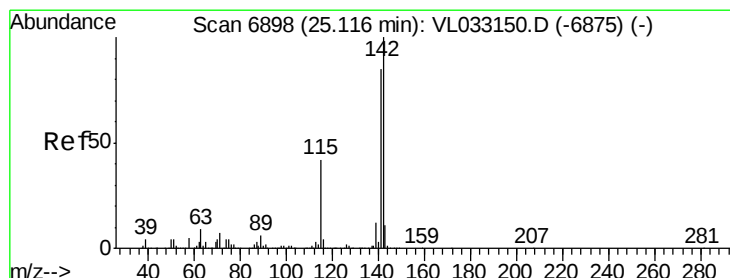
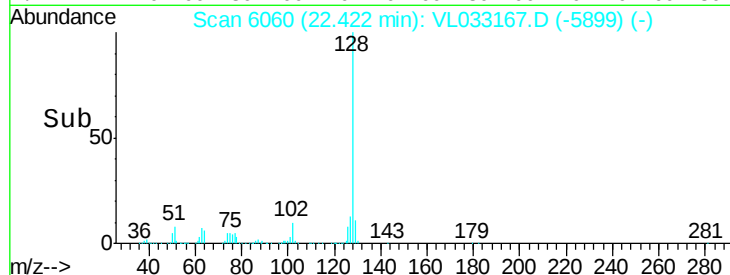
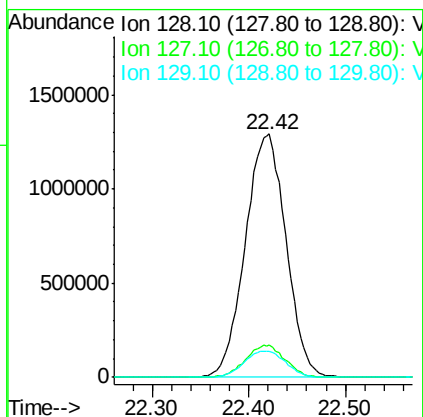
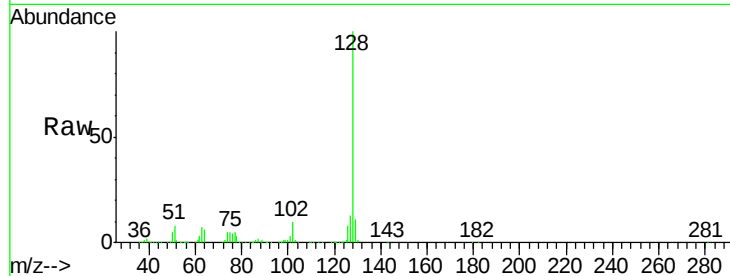
#79
Naphthalene
Concen: 7.461 ppbv
RT: 22.42 min Scan# 6060
Delta R.T. 0.02 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010EC

Tot Ion	Ratio	Lower	Upper
128	100		
127	13.1	10.6	16.0
129	10.7	9.0	13.4

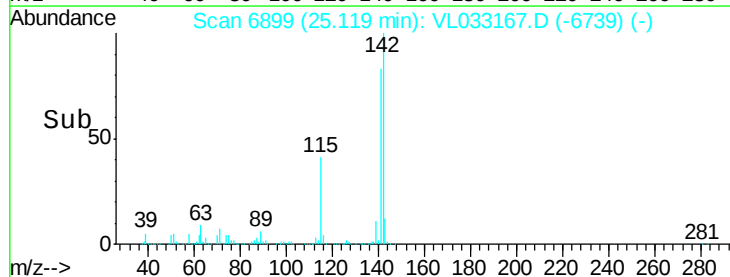
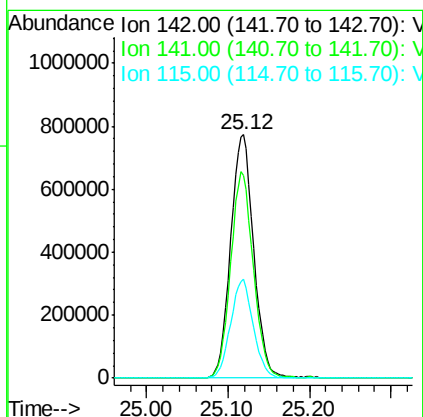
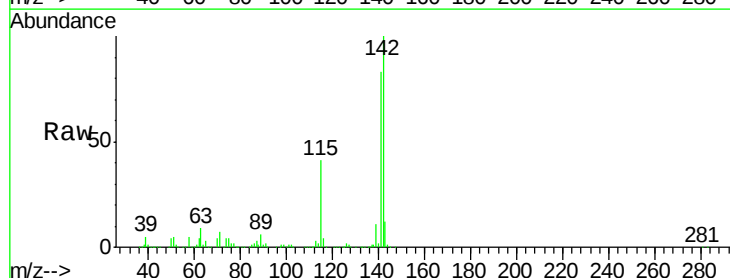
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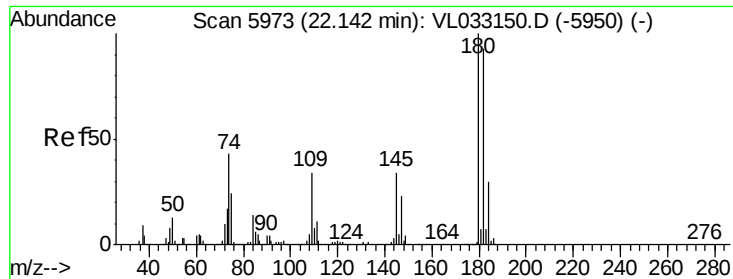
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#80
Naphthalene, 2-methyl-
Concen: 5.973 ppbv
RT: 25.12 min Scan# 6899
Delta R.T. 0.01 min
Lab File: VL033167.D
Acq: 5 Feb 2019 4:33

Tgt Ion	Ratio	Lower	Upper
142	100		
141	83.7	66.5	99.7
115	40.1	31.3	46.9





#81
 1,2,4-Trichlorobenzene
 Concen: 7.265 ppbv
 RT: 22.15 min Scan# 5974
 Delta R.T. 0.02 min
 Lab File: VL033167.D
 Acq: 5 Feb 2019 4:33

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDCCC010EC

Tot Ion	Ratio	Lower	Upper
180	100		
182	96.3	76.2	114.4
184	30.7	24.6	36.8

Manual Integrations
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