

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL020419\
 Data File : VL033159.D
 Acq On : 4 Feb 2019 17:17
 Operator : SY/AP
 Sample : VL0204ABS01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VL0204ABS01

Manual Integrations
 APPROVED

MMDadoda
 2/5/2019 10:27:51 AM

Quant Time: Feb 05 01:36:31 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	1210706	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	2858549	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	2927027m	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	2259669	10.36	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	2107318	11.820	ppbv	99
3) Chlorodifluoromethane	3.02	51	1337092	9.916	ppbv	99
4) Chloromethane	3.17	50	734469	9.679	ppbv	98
5) Vinyl Chloride	3.29	62	697022	9.307	ppbv	99
6) Bromomethane	3.52	94	417408	9.891	ppbv	98
7) Chloroethane	3.60	64	254723	10.004	ppbv	97
8) Dichlorotetrafluoroethane	3.22	85	1571050	9.614	ppbv	96
9) Propene	3.04	41	657136	9.699	ppbv	99
10) Heptane	8.25	43	1682629	7.972	ppbv	100
11) Trichlorofluoromethane	4.01	101	1669256	9.690	ppbv	97
12) 1,1,2-Trichlorotrifluoroet	4.55	101	1112361	9.946	ppbv	96
13) Ethanol	3.65	45	143023	5.355	ppbv	99
14) Bromoethene	3.79	108	508973	9.872	ppbv	99
15) Acetone	3.90	43	1174277	8.146	ppbv	98
16) 1,3-Butadiene	3.37	39	582985	9.963	ppbv	98
17) tert-Butyl alcohol	4.36	59	258501	8.120	ppbv	100
18) 1,1-Dichloroethene	4.35	96	520606	10.116	ppbv	96
19) Isopropyl Alcohol	4.03	45	828340	8.090	ppbv	# 46
20) Methylene Chloride	4.41	84	445641	8.974	ppbv	98
21) Allyl Chloride	4.48	41	868154	10.002	ppbv	98
22) trans-1,2-Dichloroethene	4.97	96	509570	10.026	ppbv	99
23) Vinyl Acetate	5.16	43	2303613	9.824	ppbv	99
24) 1,1-Dichloroethane	5.09	63	1533206	9.583	ppbv	98
25) Ethyl Acetate	5.77	43	2595056	8.712	ppbv	100
26) Hexane	5.78	57	1175684	8.436	ppbv	99
27) Carbon Disulfide	4.62	76	1297451	10.814	ppbv	97
28) Methyl tert-Butyl Ether	5.12	73	1878286	9.263	ppbv	99
29) Chloroform	5.85	83	1848082	8.765	ppbv	96
30) Cyclohexane	7.25	84	1048704	7.838	ppbv	98
31) cis-1,2-Dichloroethene	5.64	61	1270452	9.565	ppbv	96
32) 1,1,1-Trichloroethane	6.62	97	1786060	8.593	ppbv	# 84
34) 2-Butanone	5.33	43	1802945	10.028	ppbv	99
35) Carbon Tetrachloride	7.14	117	1798425	9.824	ppbv	99
36) Benzene	7.01	78	2574902	8.910	ppbv	98
37) 1,2-Dichloroethane	6.42	62	1431231	9.697	ppbv	99
38) Trichloroethene	7.97	130	893803	8.516	ppbv	96
39) 1,2-Dichloropropane	7.74	63	1015831	9.165	ppbv	98
40) 1,4-Dioxane	7.96	88	328837	7.606	ppbv	# 1
41) Tetrahydrofuran	6.15	42	1098966	9.839	ppbv	99
42) Bromodichloromethane	7.92	83	2070503	9.586	ppbv	99
43) Methyl Methacrylate	8.14	69	1062929	9.247	ppbv	99

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL020419\
 Data File : VL033159.D
 Acq On : 4 Feb 2019 17:17
 Operator : SY/AP
 Sample : VL0204ABS01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VL0204ABS01

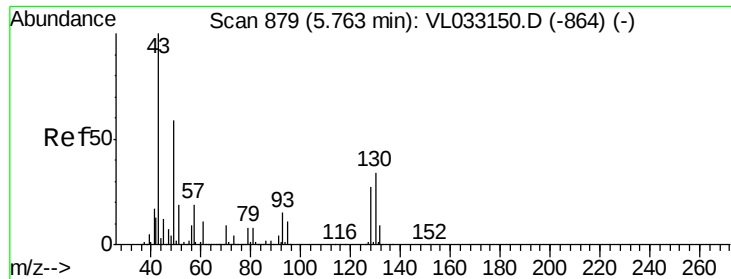
Manual Integrations
 APPROVED

MMDadoda
 2/5/2019 10:27:51 AM

Quant Time: Feb 05 01:36:31 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL020419AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Feb 0
 QLast Update : Mon Feb 04 14:41:39 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,2,4-Trimethylpentane	8.00	57	4278035	8.822	ppbv	99
45) t-1,3-Dichloropropene	9.42	75	1382876	9.748	ppbv	98
46) cis-1,3-Dichloropropene	8.84	75	1597838	9.364	ppbv	99
47) 1,1,2-Trichloroethane	9.62	97	1030727	8.662	ppbv	94
48) Dibromochloromethane	10.46	129	1656951	9.356	ppbv	100
49) Bromoform	13.21	173	1399848	9.577	ppbv	99
50) 4-Methyl-2-Pentanone	8.87	43	2610916	8.023	ppbv	99
51) 2-Hexanone	10.27	43	2127834	7.796	ppbv #	99
52) Tetrachloroethene	11.38	164	839442	8.358	ppbv	97
53) Toluene	9.95	91	2976712	8.673	ppbv	100
54) 1,2-Dibromoethane	10.77	107	1609248	8.932	ppbv	100
56) 1,1,1,2-Tetrachloroethane	12.28	131	1162917	9.189	ppbv #	58
57) Chlorobenzene	12.31	112	2133851	8.744	ppbv	96
58) Ethyl Benzene	12.87	91	4074167	8.847	ppbv	97
59) m/p-Xylene	13.13	91	6530290m	17.317	ppbv	
60) o-Xylene	13.86	91	3179632	9.137	ppbv	95
61) Styrene	13.69	104	2536907	9.110	ppbv	97
62) Isopropylbenzene	14.83	105	4488239	9.035	ppbv	99
63) 1,1,2,2-Tetrachloroethane	13.84	83	2218927	8.888	ppbv	100
64) n-propylbenzene	15.73	120	1681417	12.971	ppbv	95
65) tert-Butylbenzene	16.91	119	5505500	12.356	ppbv	95
66) Benzyl Chloride	17.16	91	3056818	15.105	ppbv	97
67) sec-Butylbenzene	17.46	105	8032602	12.611	ppbv	100
69) p-Isopropyltoluene	17.82	119	6556426	12.456	ppbv	98
70) n-Butylbenzene	18.72	91	7183362	12.543	ppbv	99
71) 2-Chlorotoluene	15.62	91	5112416	12.983	ppbv	98
72) 4-Ethyltoluene	16.01	105	5375575	12.924	ppbv	99
73) 1,3,5-Trimethylbenzene	16.16	105	5147298	12.836	ppbv	96
74) 1,2,4-Trimethylbenzene	16.93	105	5072323	12.401	ppbv	97
75) 1,3-Dichlorobenzene	17.17	146	2846015	12.604	ppbv	100
76) 1,4-Dichlorobenzene	17.32	146	2894539	12.762	ppbv	100
77) 1,2-Dichlorobenzene	18.00	146	2890593	12.870	ppbv	99
78) Hexachloro-1,3-Butadiene	23.55	225	1301917	11.652	ppbv	99
79) Naphthalene	22.42	128	5685283m	11.871	ppbv	
80) Naphthalene, 2-methyl-	25.12	142	2674903	10.955	ppbv	98
81) 1,2,4-Trichlorobenzene	22.14	180	2623596	12.087	ppbv	100

(#) = 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: VL033159.D

Acq: 4 Feb 2019 17:17

Instrument :

MSVOA_L

ClientSampleId :

VL0204ABS01

Tot Ion: 49 Resp: 1210706

Ion Ratio Lower Upper

49 100

128 44.9 23.2 69.5

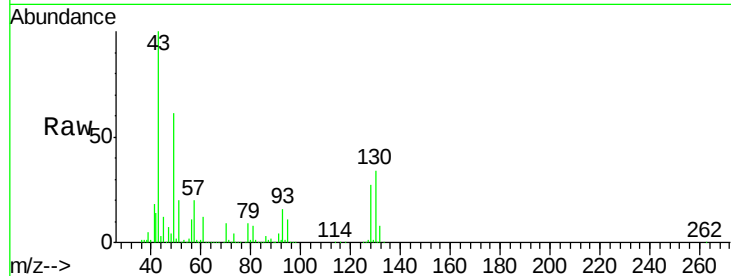
130 56.7 29.5 88.6

Manual Integrations

APPROVED

MMDadoda

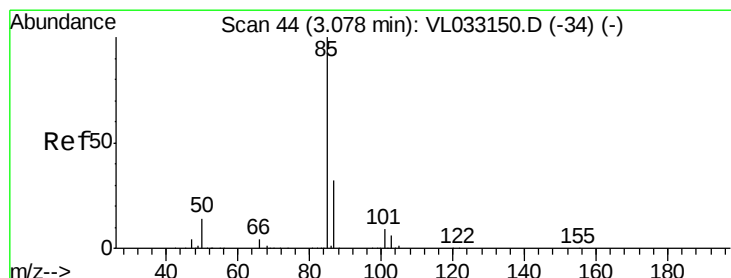
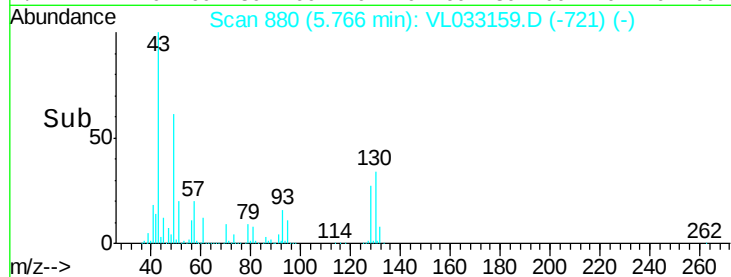
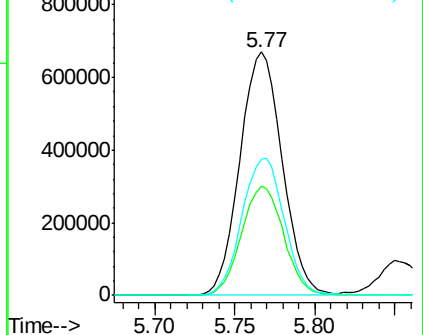
2/5/2019 10:27:51 AM



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: 11.820 ppbv

RT: 3.08 min Scan# 45

Delta R.T. 0.01 min

Lab File: VL033159.D

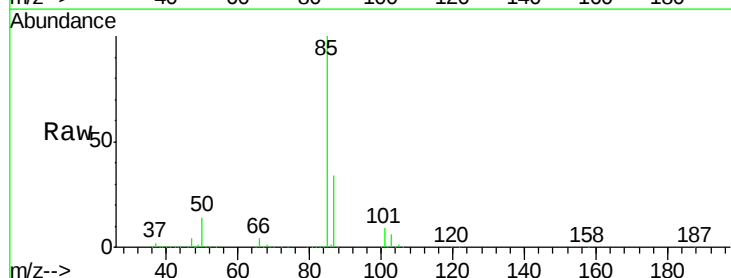
Acq: 4 Feb 2019 17:17

Tgt Ion: 85 Resp: 2107318

Ion Ratio Lower Upper

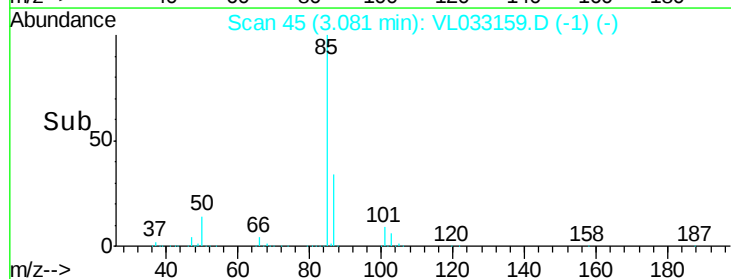
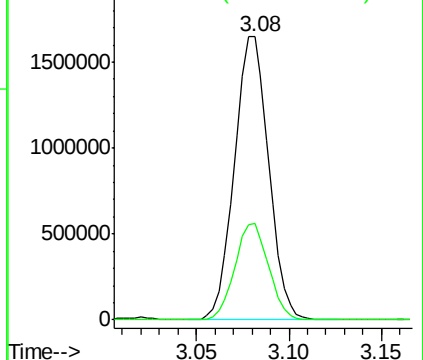
85 100

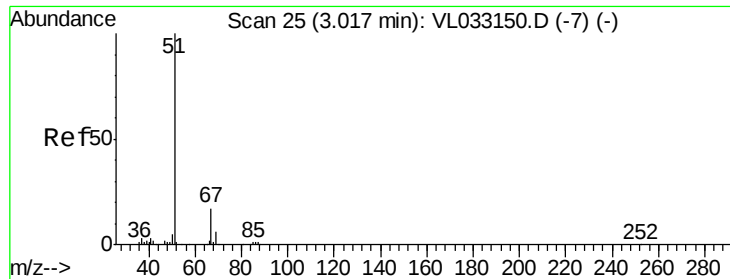
87 33.9 27.4 41.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 9.916 ppbv

RT: 3.02 min Scan# 25

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Tot Ion: 51 Resp: 1337092

Ion Ratio Lower Upper

51 100

67 17.3 13.4 20.2

Instrument :

MSVOA_L

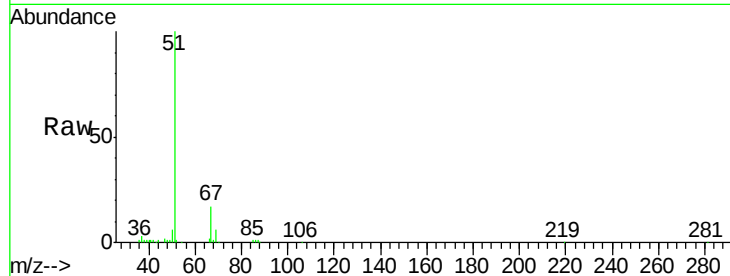
ClientSampleId :

VL0204ABS01

Manual Integrations
APPROVED

MMDadoda

2/5/2019 10:27:51 AM



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

1200000

1000000

800000

600000

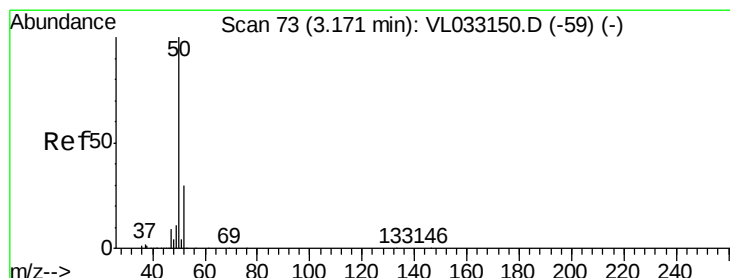
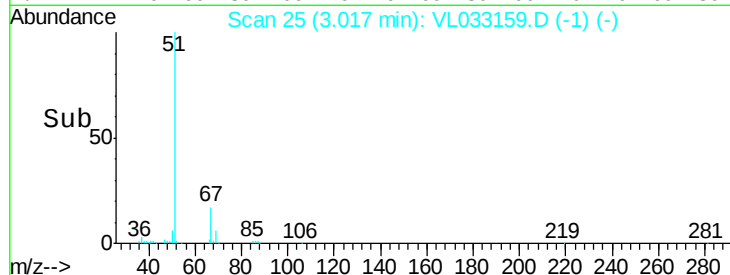
400000

200000

0

3.02

Time-->



#4

Chloromethane

Concen: 9.679 ppbv

RT: 3.17 min Scan# 74

Delta R.T. 0.01 min

Lab File: VL033159.D

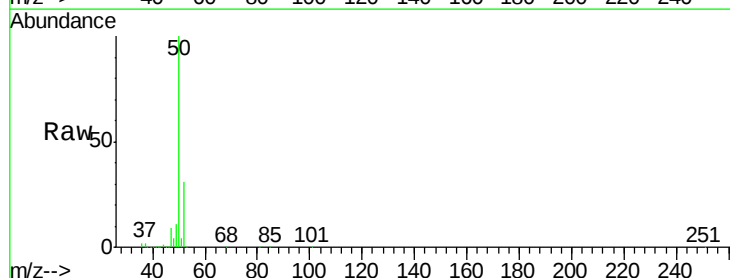
Acq: 4 Feb 2019 17:17

Tgt Ion: 50 Resp: 734469

Ion Ratio Lower Upper

50 100

52 31.1 25.7 38.5



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

600000

500000

400000

300000

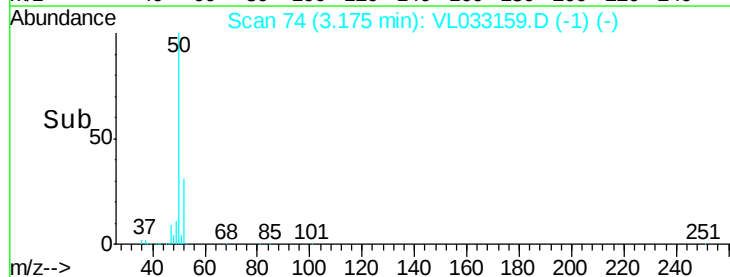
200000

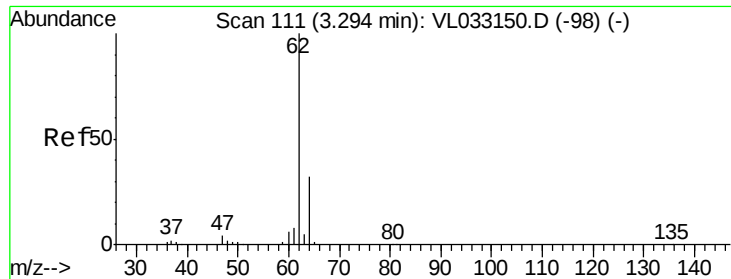
100000

0

3.17

Time-->





#5

Vinyl Chloride

Concen: 9.307 ppbv

RT: 3.29 min Scan# 111

Delta R.T. 0.00 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Instrument :

MSVOA_L

ClientSampled :

VL0204ABS01

Tot Ion: 62 Resp: 697022

Ion Ratio Lower Upper

62 100

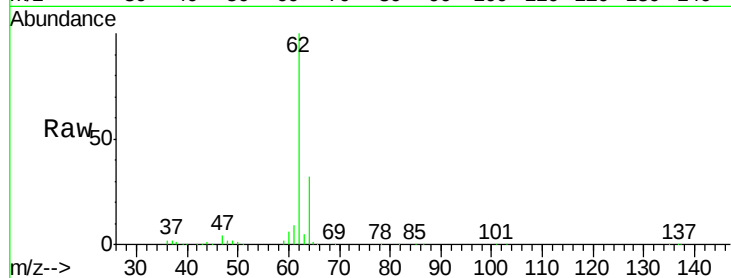
64 32.1 26.3 39.5

Manual Integrations

APPROVED

MMDadoda

2/5/2019 10:27:51 AM



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0

600000

500000

400000

300000

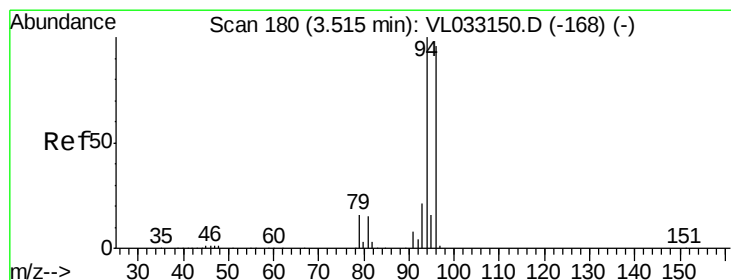
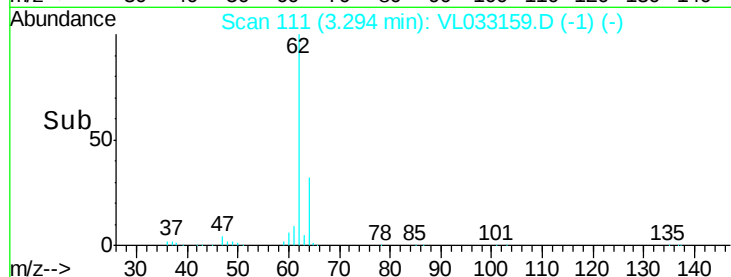
200000

100000

0

3.25 3.30 3.35

Time-->



#6

Bromomethane

Concen: 9.891 ppbv

RT: 3.52 min Scan# 180

Delta R.T. 0.00 min

Lab File: VL033159.D

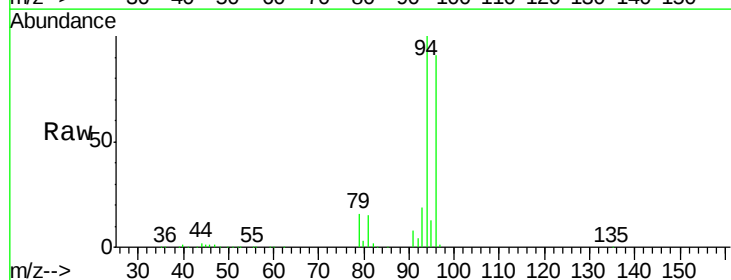
Acq: 4 Feb 2019 17:17

Tgt Ion: 94 Resp: 417408

Ion Ratio Lower Upper

94 100

96 91.0 74.0 111.0



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0

300000

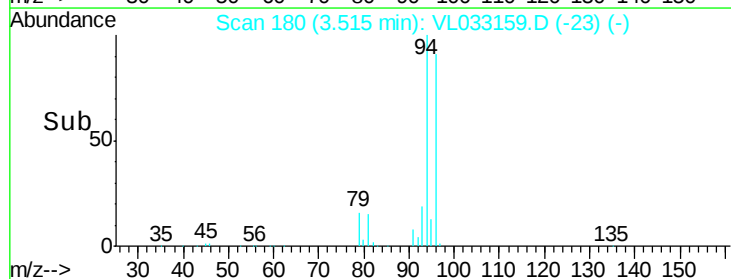
200000

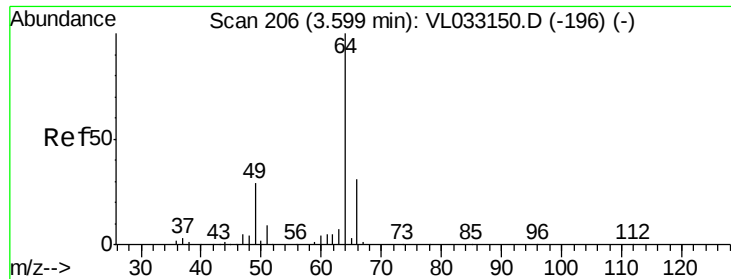
100000

0

3.45 3.50 3.55

Time-->





#7

Chloroethane

Concen: 10.004 ppbv

RT: 3.60 min Scan# 207

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Instrument :

MSVOA_L

ClientSampleId :

VL0204ABS01

Tot Ion: 64 Resp: 254723

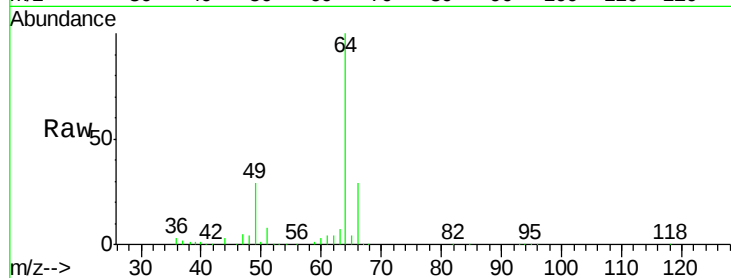
Ion Ratio Lower Upper

64 100

66 29.3 22.3 33.5

Manual Integrations
APPROVED

MMDadoda
2/5/2019 10:27:51 AM



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0

3.60

200000

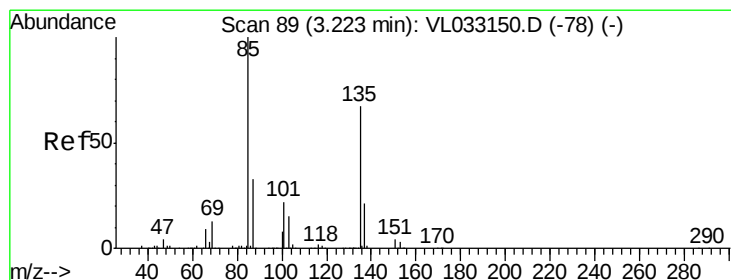
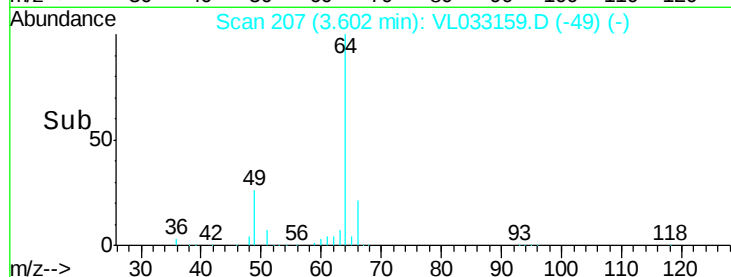
150000

100000

50000

0

Time-->



#8

Dichlorotetrafluoroethane

Concen: 9.614 ppbv

RT: 3.22 min Scan# 89

Delta R.T. 0.01 min

Lab File: VL033159.D

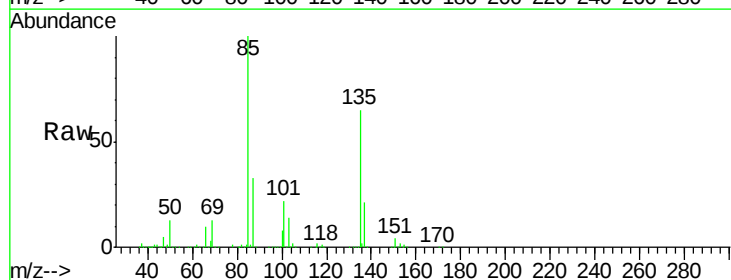
Acq: 4 Feb 2019 17:17

Tgt Ion: 85 Resp: 1571050

Ion Ratio Lower Upper

85 100

135 64.5 54.0 81.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V

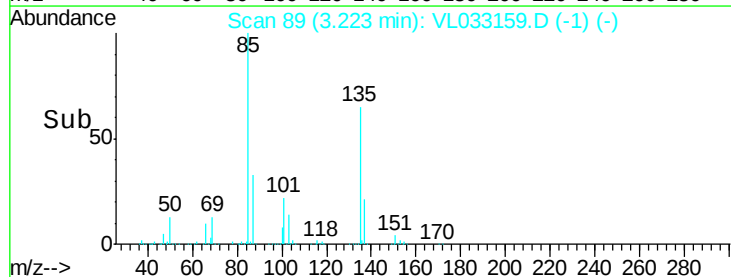
3.22

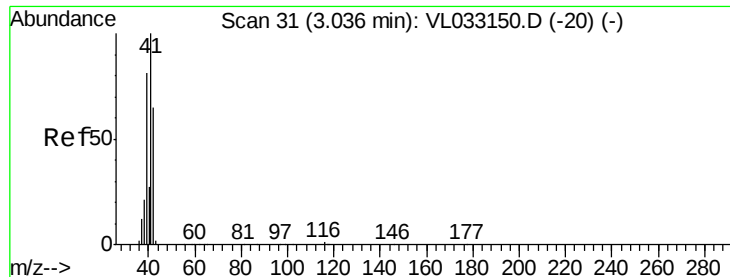
1000000

500000

0

Time-->





#9

Propene

Concen: 9.699 ppbv

RT: 3.04 min Scan# 32

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Instrument :

MSVOA_L

ClientSampleId :

VL0204ABS01

Tot Ion: 41 Resp: 657136

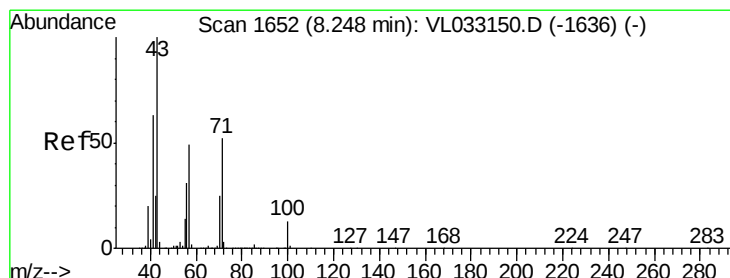
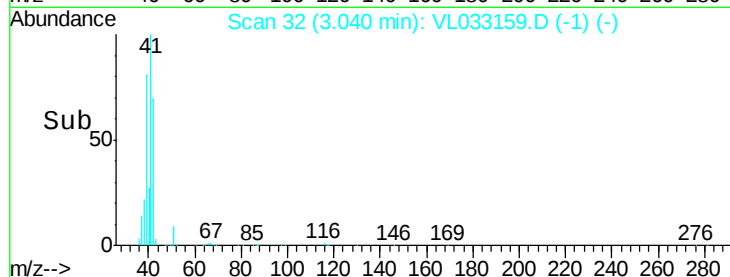
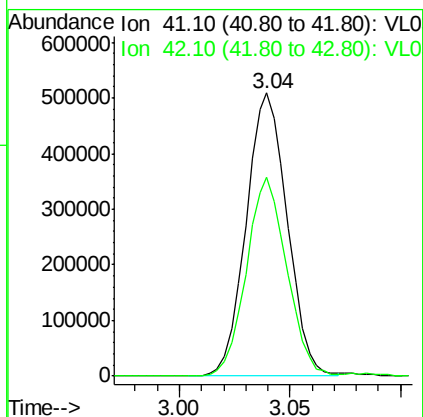
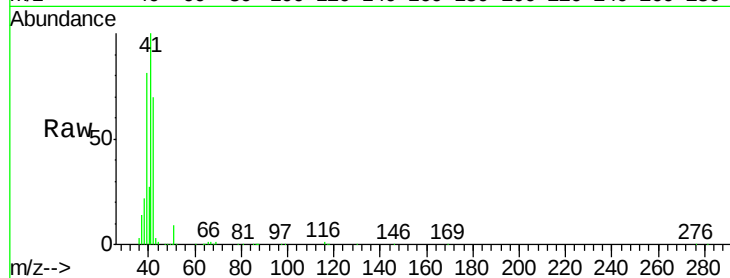
Ion Ratio Lower Upper

41 100

42 69.8 55.1 82.7

Manual Integrations
APPROVED

MMDadoda
2/5/2019 10:27:51 AM



#10

Heptane

Concen: 7.972 ppbv

RT: 8.25 min Scan# 1653

Delta R.T. 0.01 min

Lab File: VL033159.D

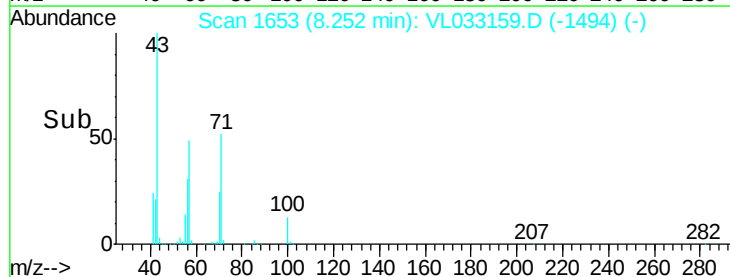
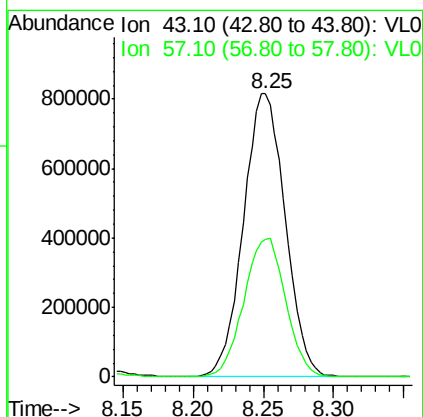
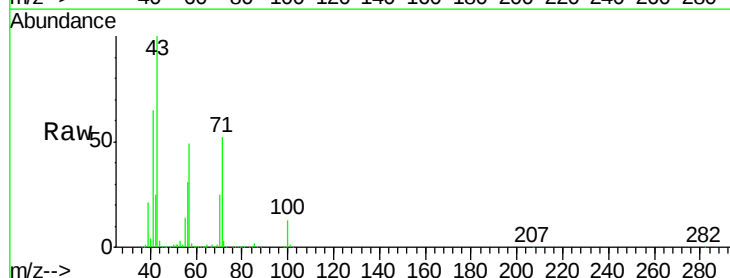
Acq: 4 Feb 2019 17:17

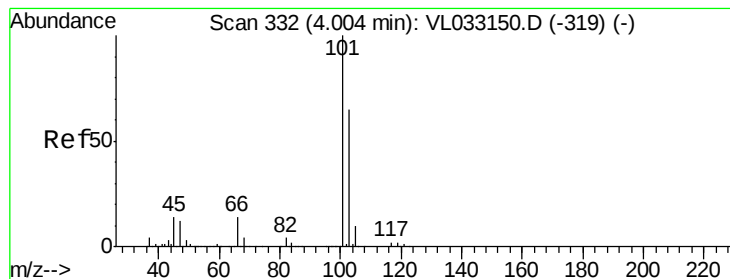
Tgt Ion: 43 Resp: 1682629

Ion Ratio Lower Upper

43 100

57 49.3 39.3 58.9





#11

Trichlorofluoromethane

Concen: 9.690 ppbv

RT: 4.01 min Scan# 333

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Instrument :

MSVOA_L

ClientSampleId :

VL0204ABS01

Tot Ion:101 Resp: 1669256

Ion Ratio Lower Upper

101 100

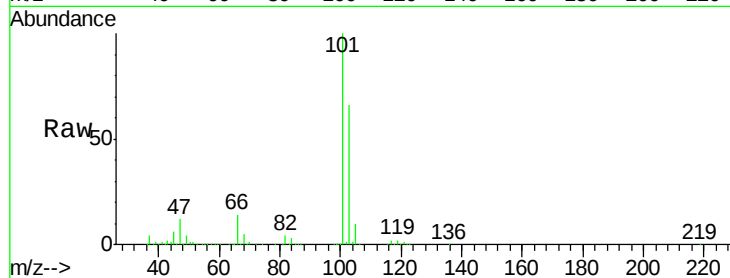
103 66.3 51.3 76.9

Manual Integrations

APPROVED

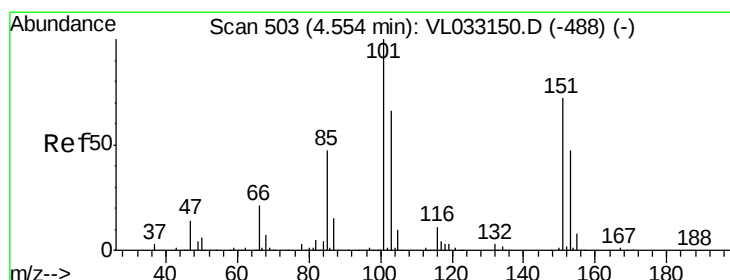
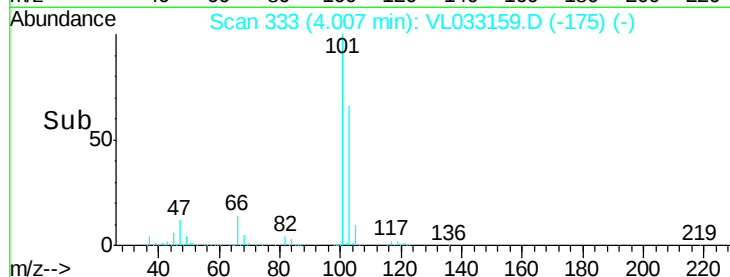
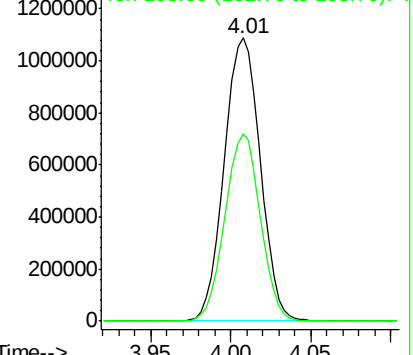
MMDadoda

2/5/2019 10:27:51 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: 9.946 ppbv

RT: 4.55 min Scan# 503

Delta R.T. 0.01 min

Lab File: VL033159.D

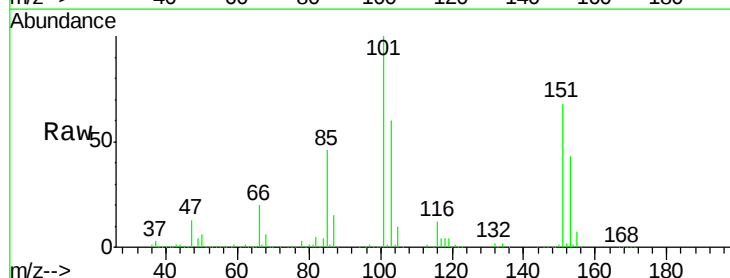
Acq: 4 Feb 2019 17:17

Tgt Ion:101 Resp: 1112361

Ion Ratio Lower Upper

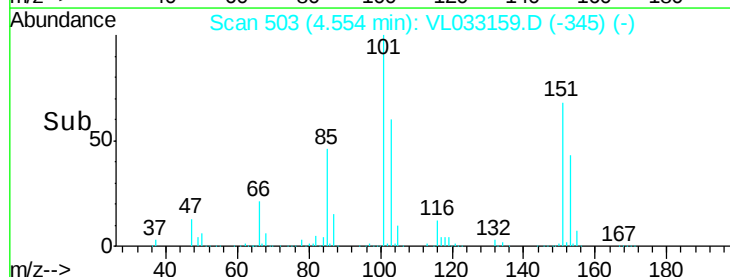
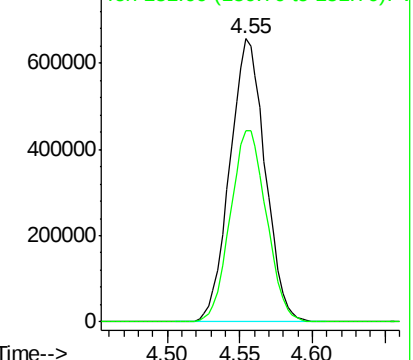
101 100

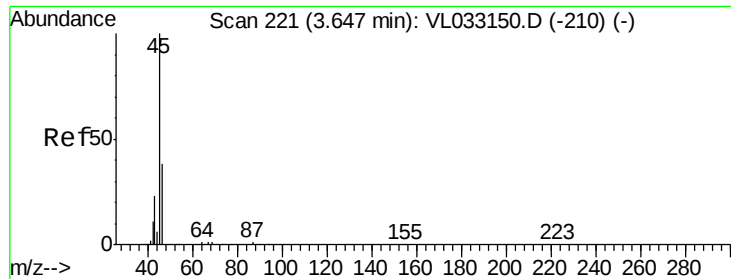
151 69.2 57.9 86.9



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





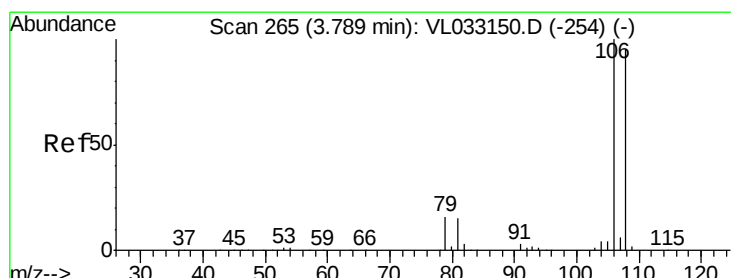
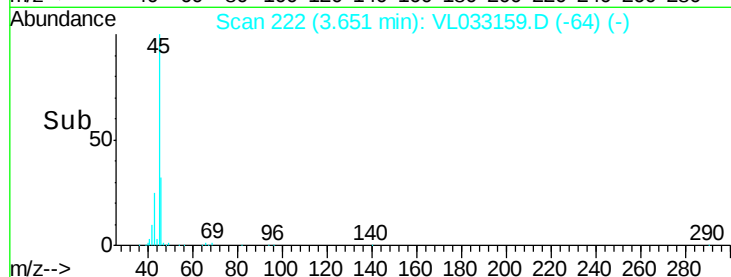
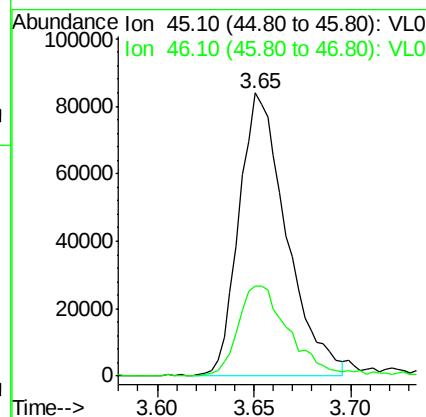
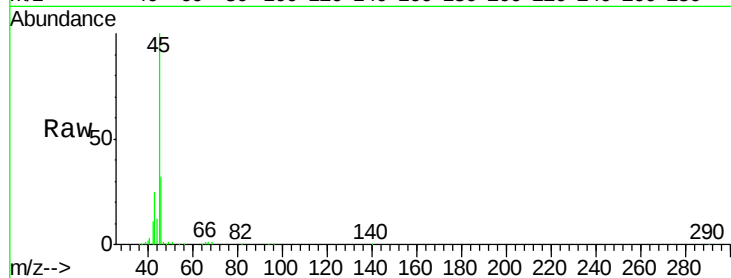
#13
Ethanol
Concen: 5.355 ppbv
RT: 3.65 min Scan# 222
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Instrument :
MSVOA_L
ClientSampleId :
VL0204ABS01

Tot Ion	Ratio	Lower	Upper
45	100		
46	34.8	14.0	56.2

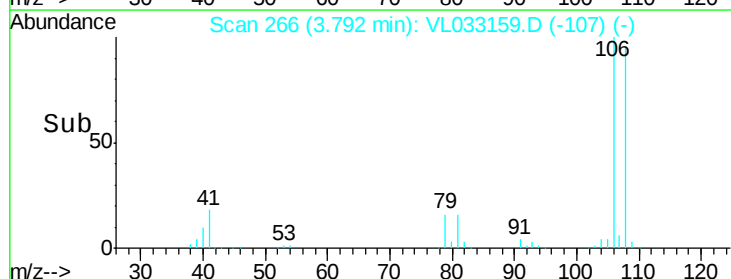
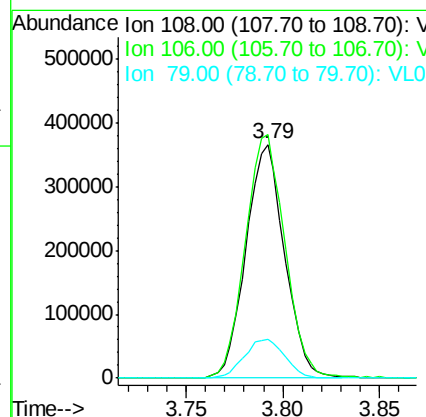
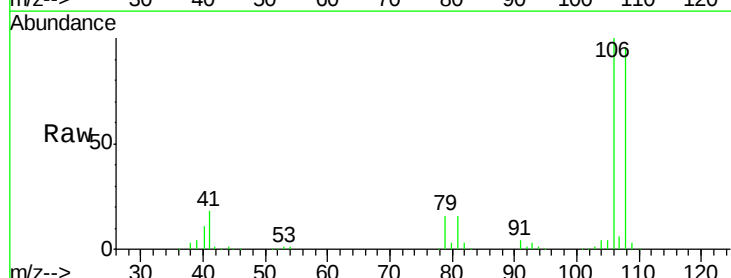
Manual Integrations
APPROVED

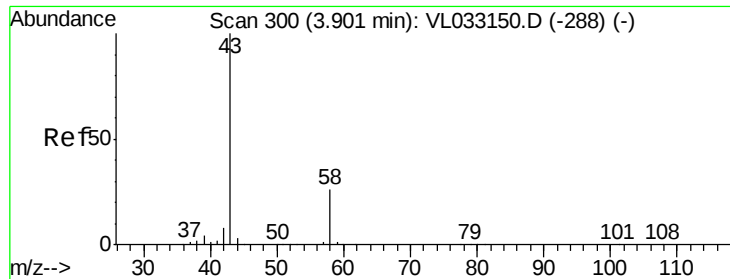
MMDadoda
2/5/2019 10:27:51 AM



#14
Bromoethene
Concen: 9.872 ppbv
RT: 3.79 min Scan# 266
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Tgt Ion	Ratio	Lower	Upper
108	100		
106	107.6	85.6	128.4
79	17.6	14.2	21.4





#15

Acetone

Concen: 8.146 ppbv

RT: 3.90 min Scan# 301

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Instrument :

MSVOA_L

ClientSampleId :

VL0204ABS01

Tot Ion: 43 Resp: 1174277

Ion Ratio Lower Upper

43 100

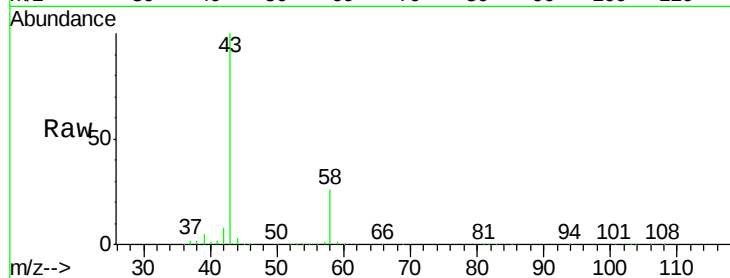
58 26.1 21.8 32.6

Manual Integrations

APPROVED

MMDadoda

2/5/2019 10:27:51 AM



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

3.90

800000

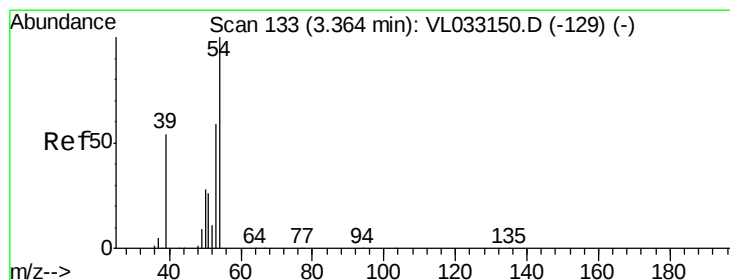
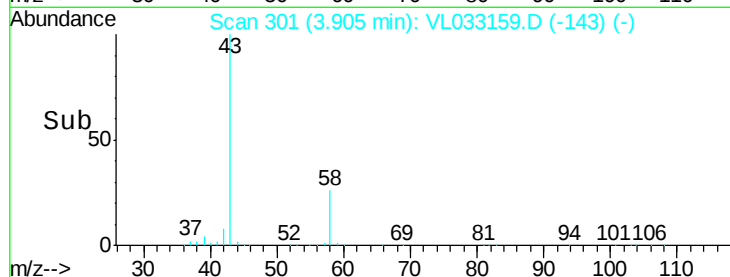
600000

400000

200000

0

Time-->



#16

1,3-Butadiene

Concen: 9.963 ppbv

RT: 3.37 min Scan# 134

Delta R.T. 0.01 min

Lab File: VL033159.D

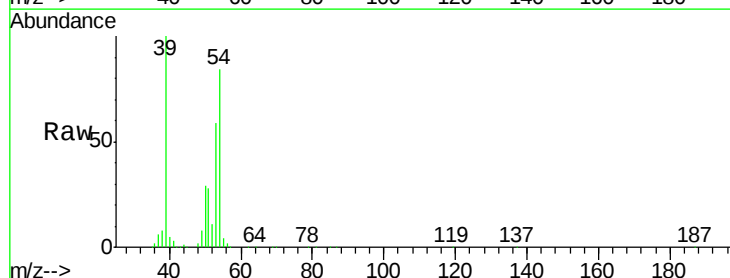
Acq: 4 Feb 2019 17:17

Tgt Ion: 39 Resp: 582985

Ion Ratio Lower Upper

39 100

54 95.6 75.0 112.6



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0

3.37

500000

400000

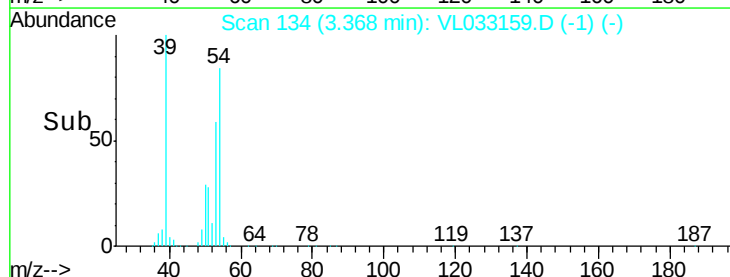
300000

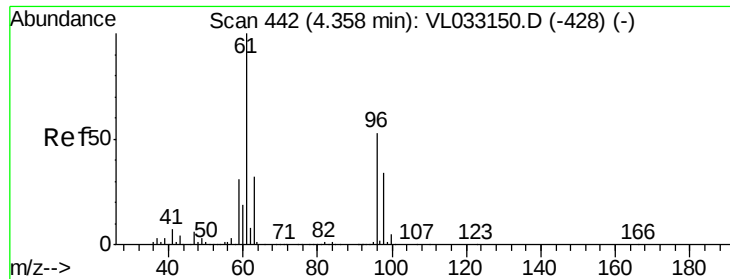
200000

100000

0

Time-->





#17

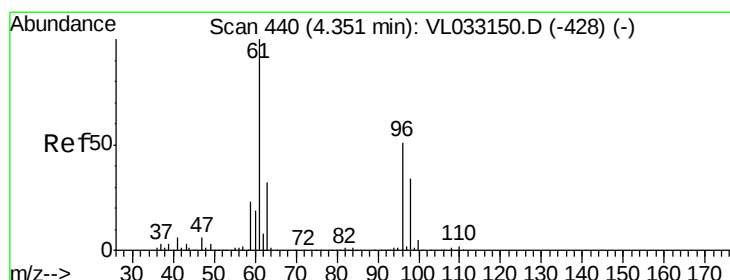
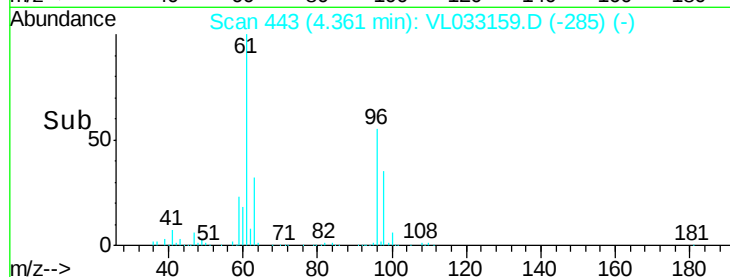
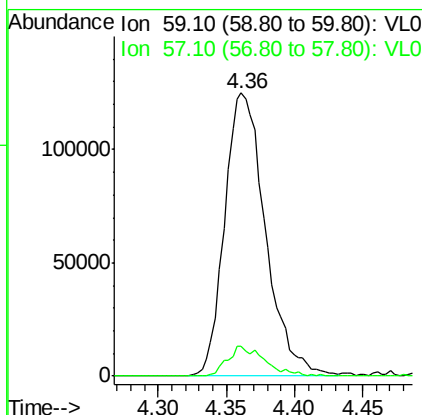
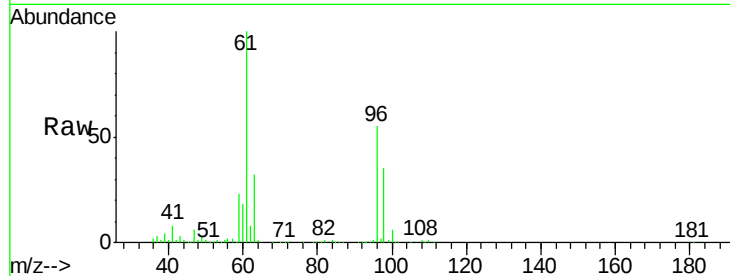
tert-Butyl alcohol
Concen: 8.120 ppbv
RT: 4.36 min Scan# 443
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Instrument :
MSVOA_L
ClientSampleID :
VL0204ABS01

Tot Ion	Ratio	Resp	Lower	Upper
59	100	258501		
57	9.9	8.0	12.0	

Manual Integrations
APPROVED

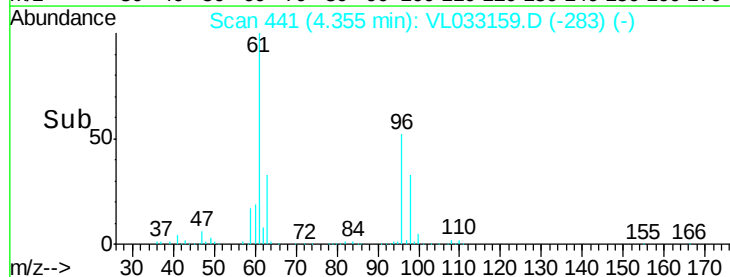
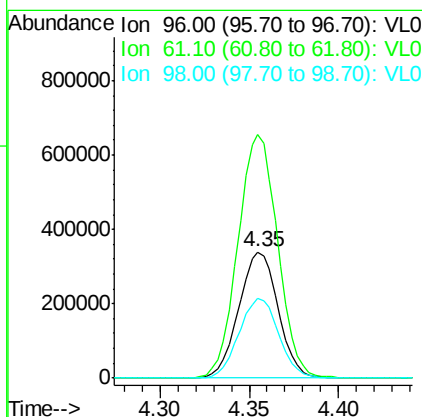
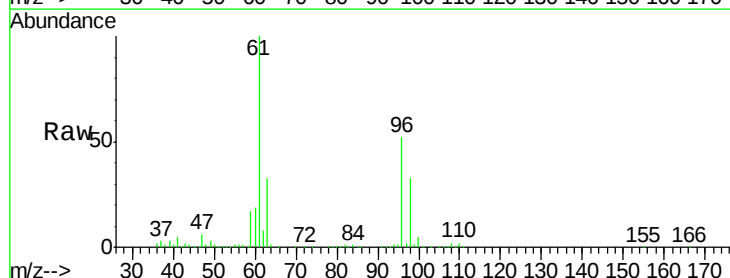
MMDadoda
2/5/2019 10:27:51 AM

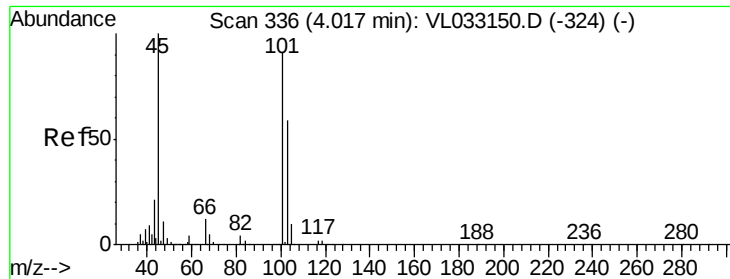


#18

1,1-Dichloroethene
Concen: 10.116 ppbv
RT: 4.35 min Scan# 441
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Tgt Ion	Ratio	Resp	Lower	Upper
96	100	520606		
61	192.9	158.5	237.7	
98	63.7	47.8	71.6	





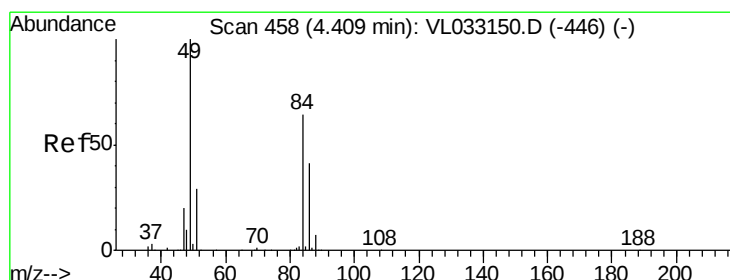
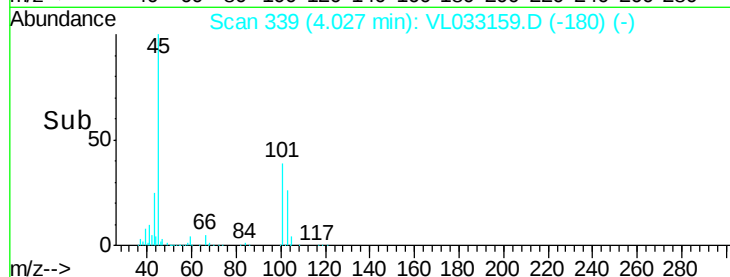
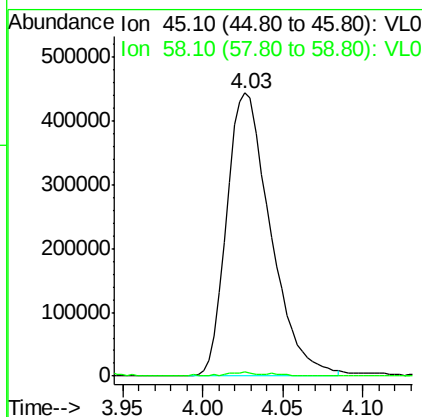
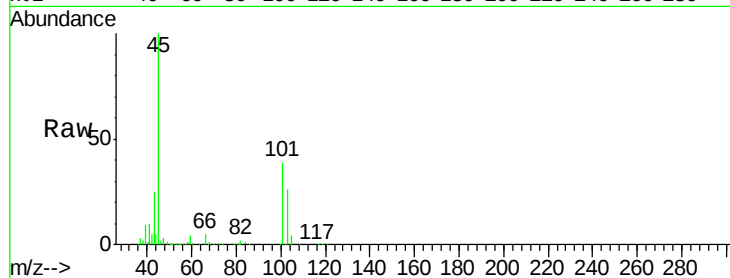
#19
Isopropyl Alcohol
Concen: 8.090 ppbv
RT: 4.03 min Scan# 339
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Instrument :
MSVOA_L
ClientSampleId :
VL0204ABS01

Tot Ion: 45 Resp: 828340
Ion Ratio Lower Upper
45 100
58 1.8 25.1 37.7#

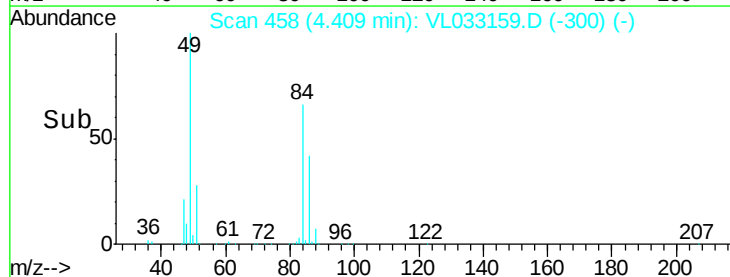
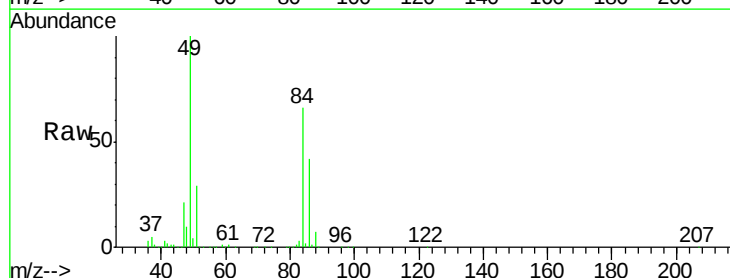
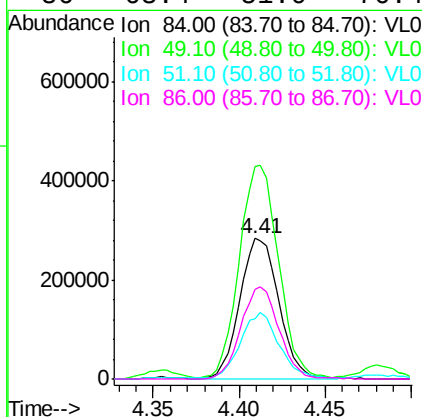
Manual Integrations
APPROVED

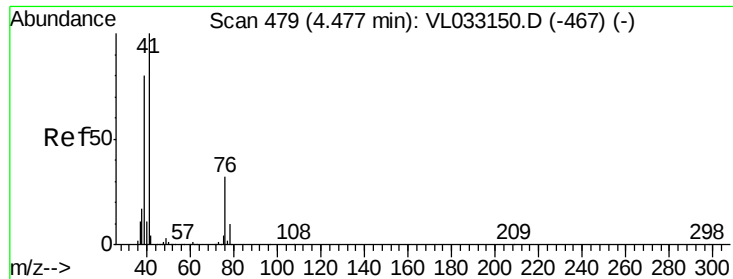
MMDadoda
2/5/2019 10:27:51 AM



#20
Methylene Chloride
Concen: 8.974 ppbv
RT: 4.41 min Scan# 458
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Tgt Ion: 84 Resp: 445641
Ion Ratio Lower Upper
84 100
49 150.0 121.1 181.7
51 42.3 37.5 56.3
86 63.4 51.0 76.4





#21

Allvl Chloride

Concen: 10.002 ppbv

RT: 4.48 min Scan# 480

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Instrument :

MSVOA_L

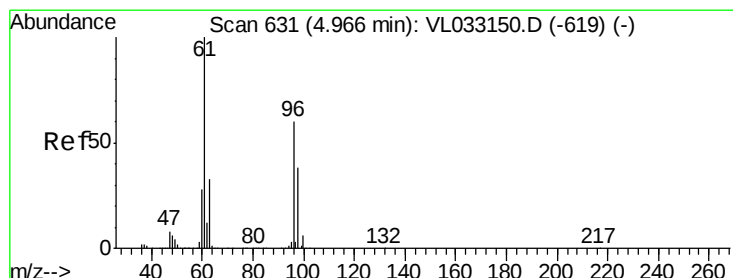
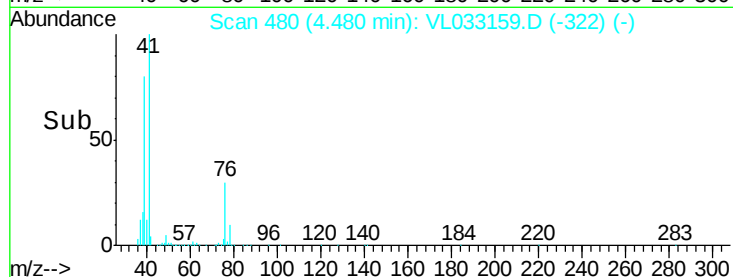
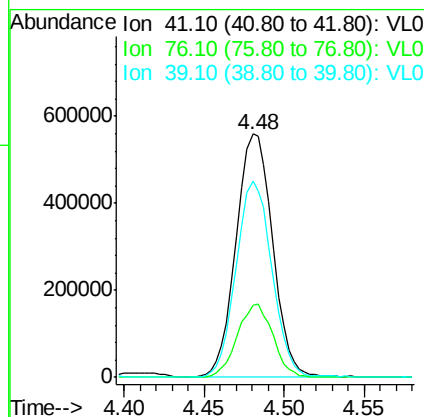
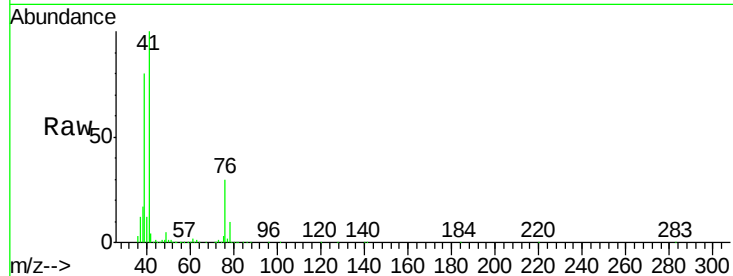
ClientSampleId :

VL0204ABS01

Tot Ion:	41	Resp:	868154
Ion Ratio	Lower	Upper	
41	100		
76	29.5	23.2	34.8
39	78.8	61.8	92.6

Manual Integrations
APPROVED

MMDadoda
2/5/2019 10:27:51 AM



#22

trans-1,2-Dichloroethene

Concen: 10.026 ppbv

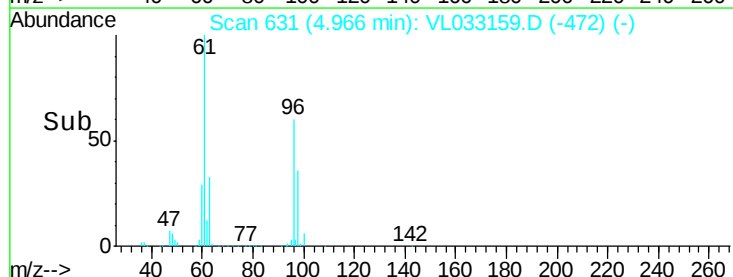
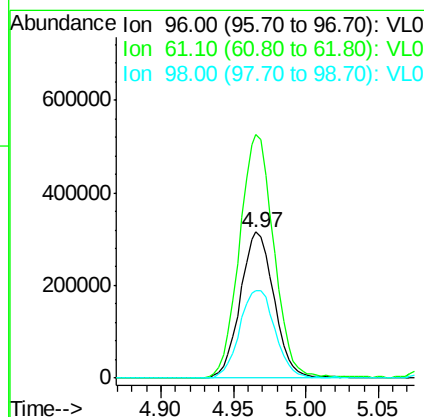
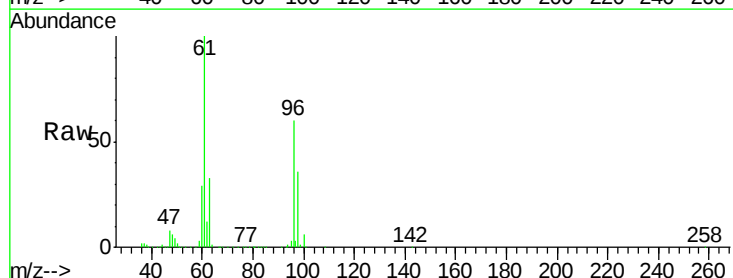
RT: 4.97 min Scan# 631

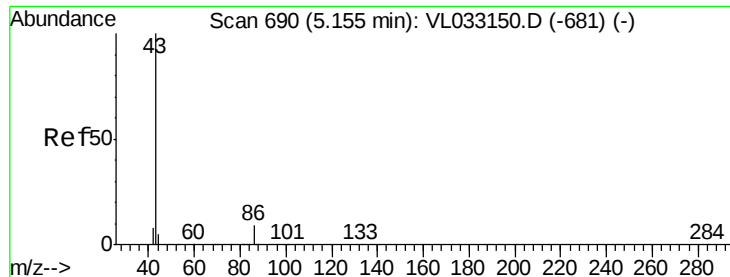
Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Tgt Ion:	96	Resp:	509570
Ion Ratio	Lower	Upper	
96	100		
61	167.0	134.5	201.7
98	60.3	50.2	75.2





#23

Vinyl Acetate

Concen: 9.824 ppbv

RT: 5.16 min Scan# 691

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Instrument :

MSVOA_L

ClientSampleId :

VL0204ABS01

Tot Ion: 43 Resp: 2303613

Ion Ratio Lower Upper

43 100

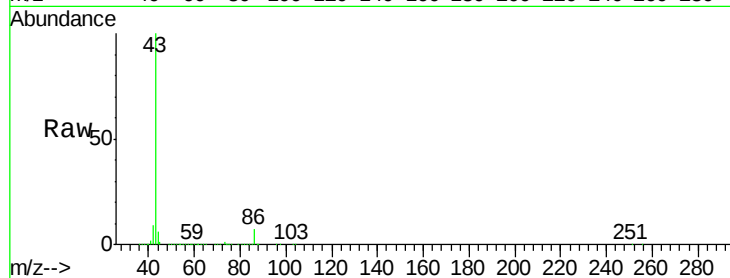
86 7.5 6.2 9.4

42 9.0 7.7 11.5

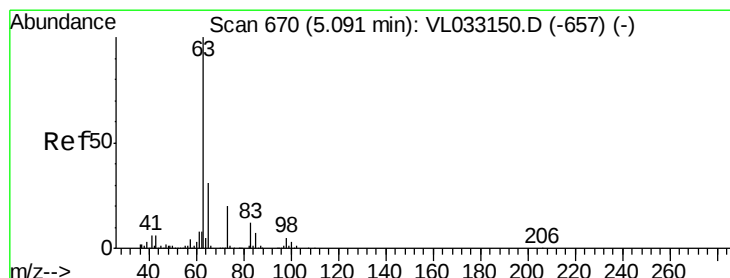
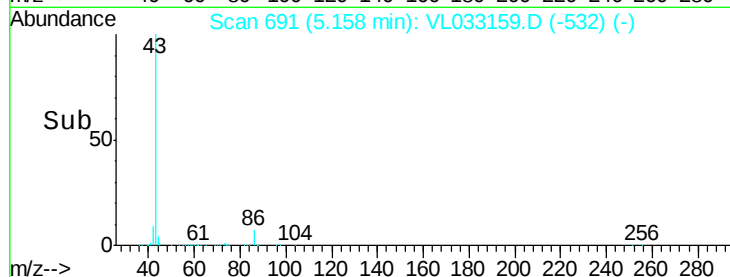
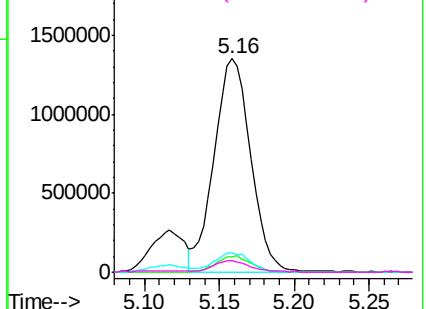
44 5.3 3.8 5.8

Manual Integrations
APPROVED

MMDadoda
2/5/2019 10:27:51 AM



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



#24

1,1-Dichloroethane

Concen: 9.583 ppbv

RT: 5.09 min Scan# 671

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

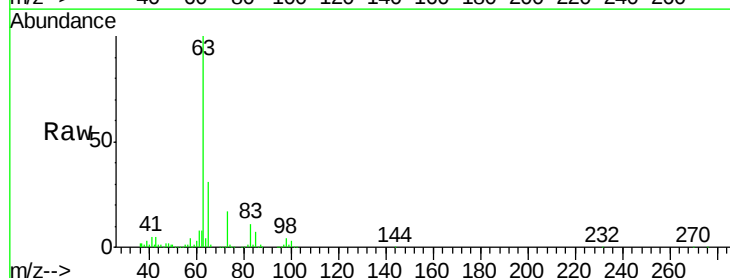
Tgt Ion: 63 Resp: 1533206

Ion Ratio Lower Upper

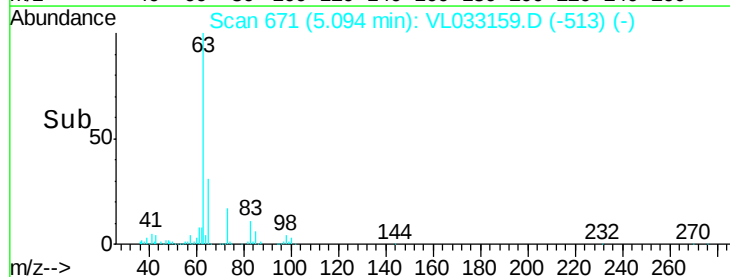
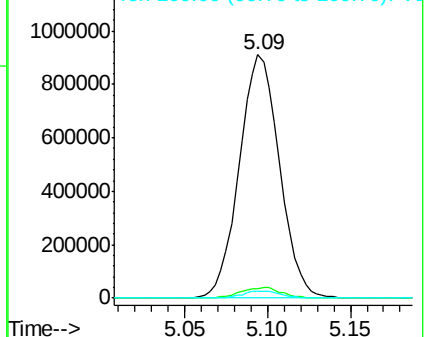
63 100

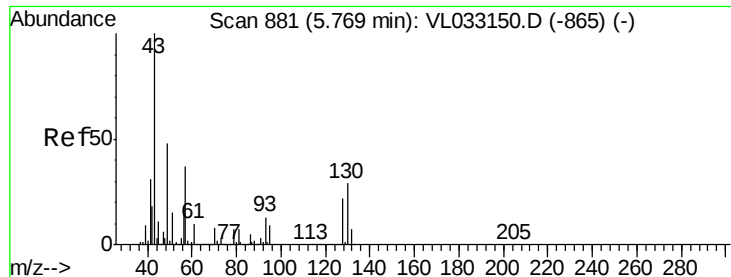
98 4.0 2.3 6.9

100 3.0 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: 8.712 ppbv

RT: 5.77 min Scan# 882

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Instrument :

MSVOA_L

ClientSampleId :

VL0204ABS01

Tot Ion: 43 Resp: 2595056

Ion Ratio Lower Upper

43 100

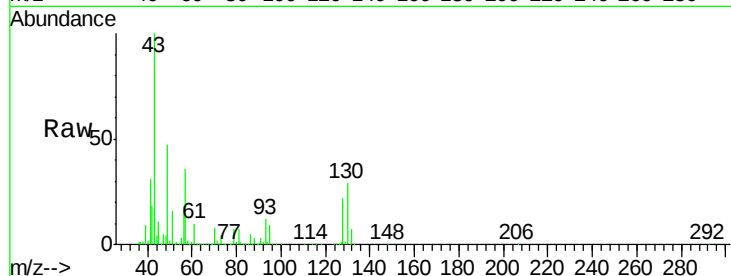
45 9.9 8.0 12.0

61 9.3 7.4 11.2

70 7.2 5.9 8.9

Manual Integrations
APPROVED

MMDadoda
2/5/2019 10:27:51 AM

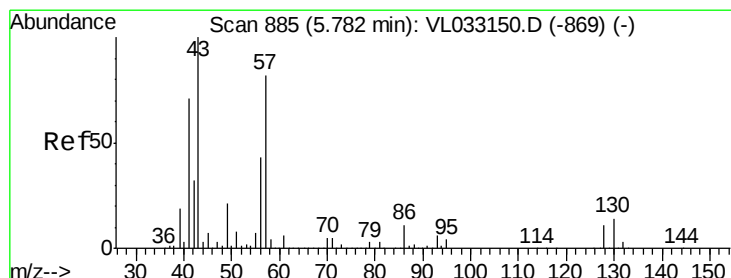
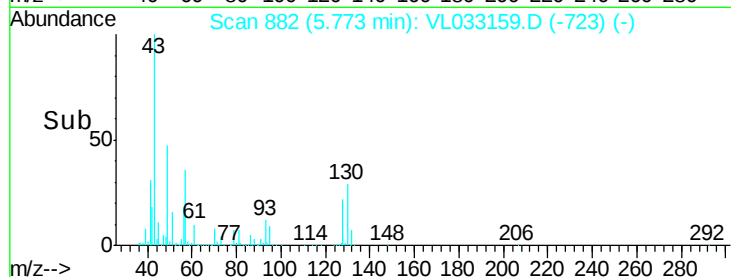
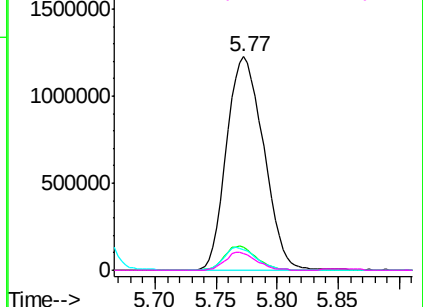


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 8.436 ppbv

RT: 5.78 min Scan# 885

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Tgt Ion: 57 Resp: 1175684

Ion Ratio Lower Upper

57 100

41 86.8 69.5 104.3

43 221.5 175.5 263.3

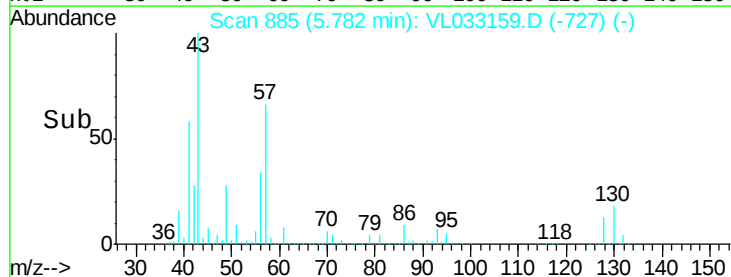
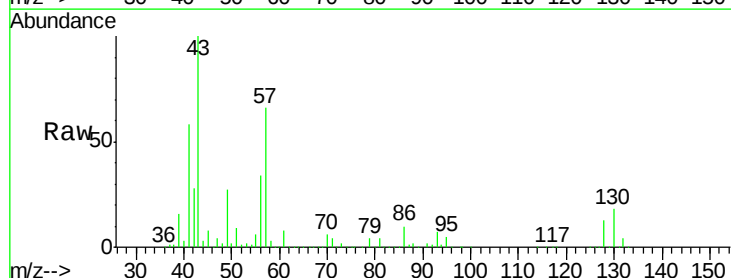
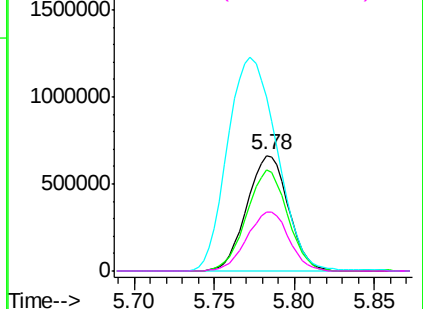
56 52.0 41.6 62.4

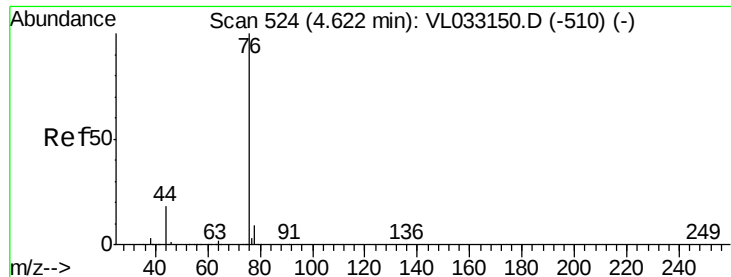
Abundance Ion 57.10 (56.80 to 57.80): VL0

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: 10.814 ppbv

RT: 4.62 min Scan# 525

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Instrument :

MSVOA_L

ClientSampleId :

VL0204ABS01

Tot Ion: 76 Resp: 1297451

Ion Ratio Lower Upper

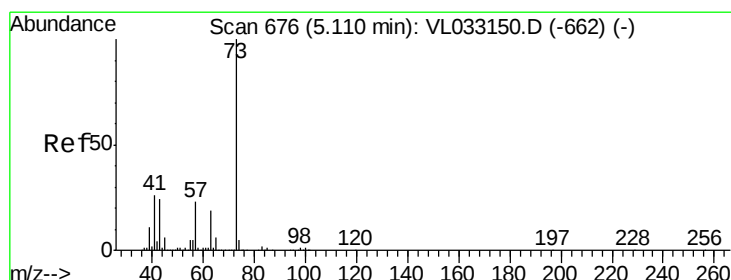
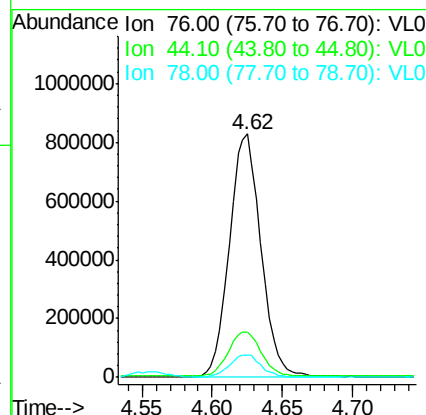
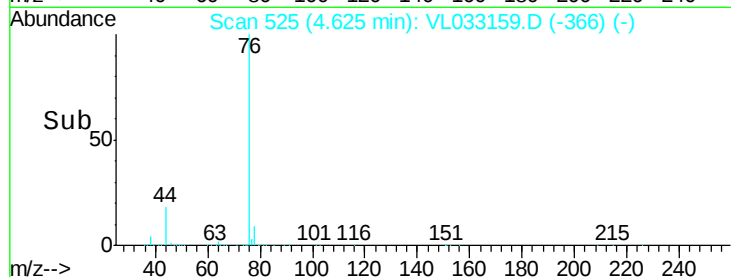
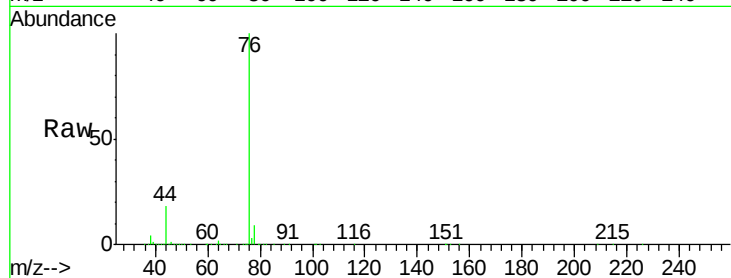
76 100

44 19.5 17.1 25.7

78 9.3 7.2 10.8

Manual Integrations
APPROVED

MMDadoda
2/5/2019 10:27:51 AM



#28

Methyl tert-Butyl Ether

Concen: 9.263 ppbv

RT: 5.12 min Scan# 678

Delta R.T. 0.01 min

Lab File: VL033159.D

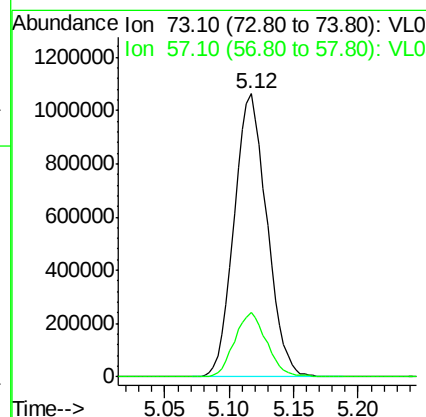
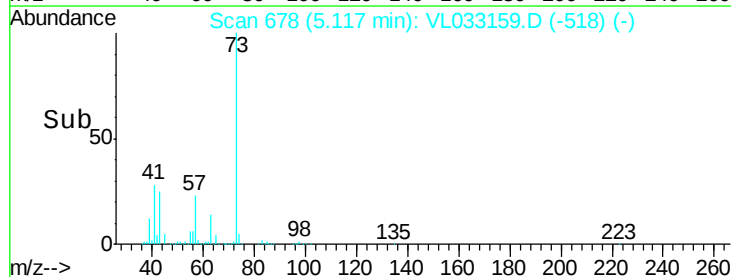
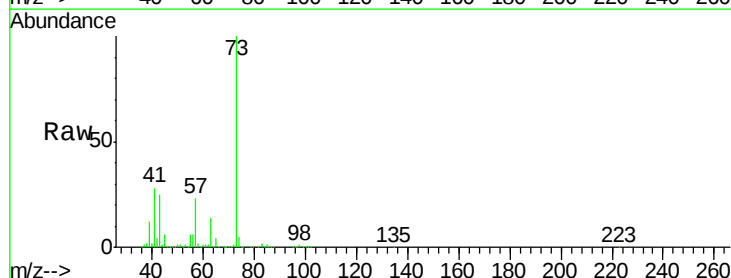
Acq: 4 Feb 2019 17:17

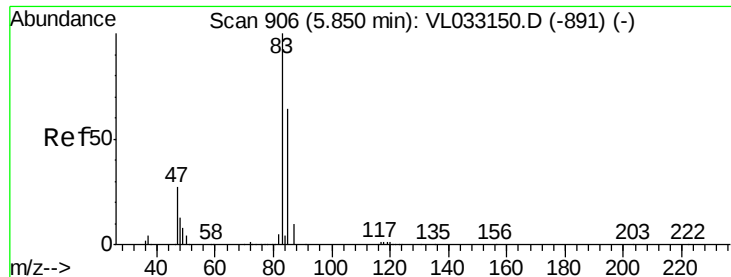
Tgt Ion: 73 Resp: 1878286

Ion Ratio Lower Upper

73 100

57 22.5 18.3 27.5





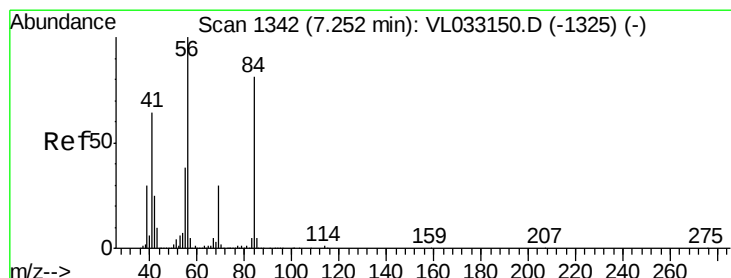
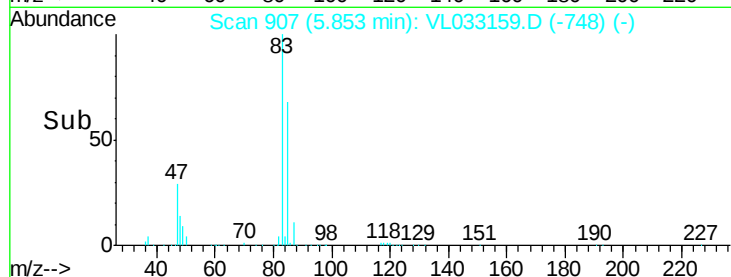
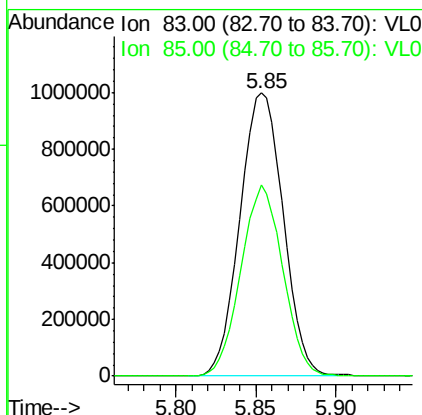
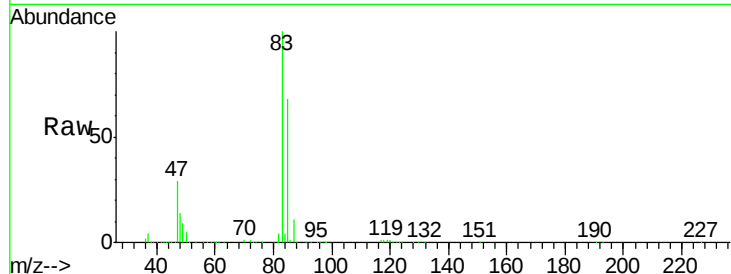
#29
Chloroform
Concen: 8.765 ppbv
RT: 5.85 min Scan# 907
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Instrument :
MSVOA_L
ClientSampleId :
VL0204ABS01

Tot Ion: 83 Resp: 1848082
Ion Ratio Lower Upper
83 100
85 67.6 51.6 77.4

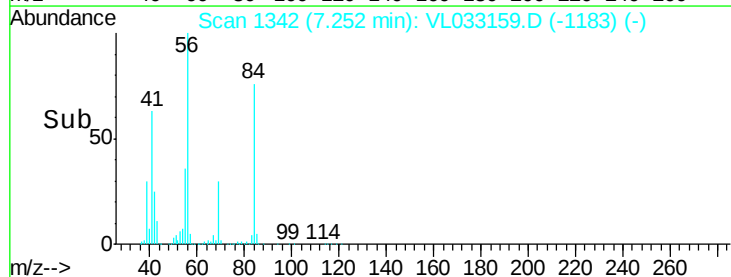
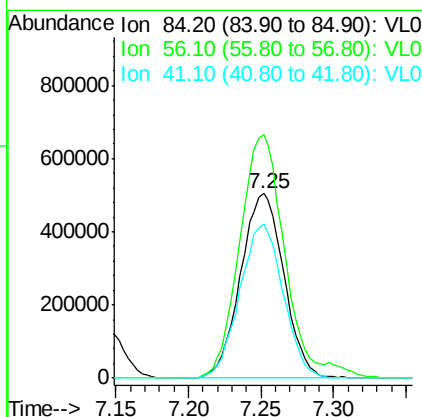
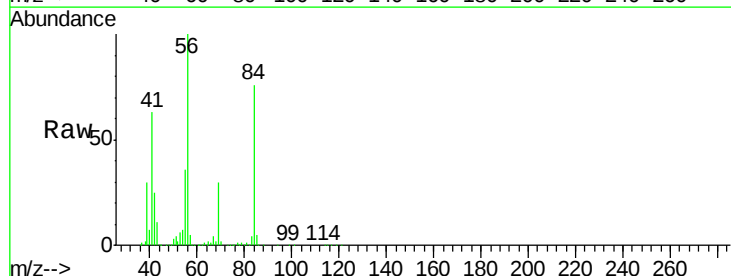
Manual Integrations
APPROVED

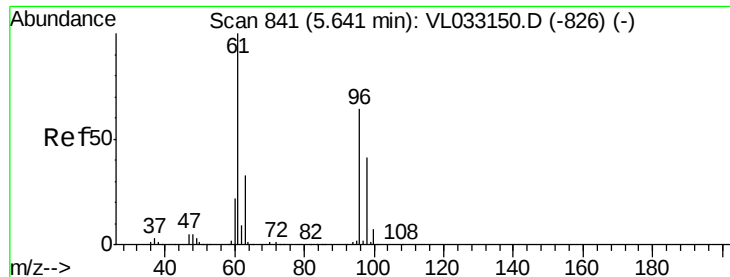
MMDadoda
2/5/2019 10:27:51 AM



#30
Cyclohexane
Concen: 7.838 ppbv
RT: 7.25 min Scan# 1342
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Tgt Ion: 84 Resp: 1048704
Ion Ratio Lower Upper
84 100
56 138.8 109.0 163.4
41 83.7 65.3 97.9





#31

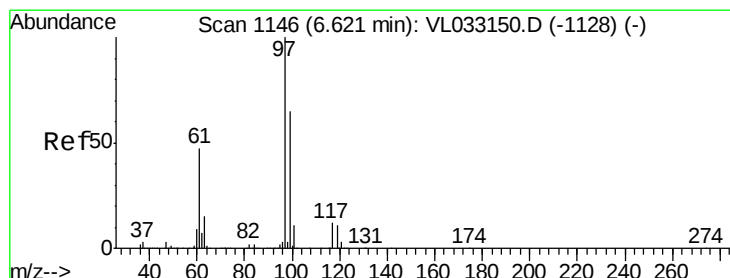
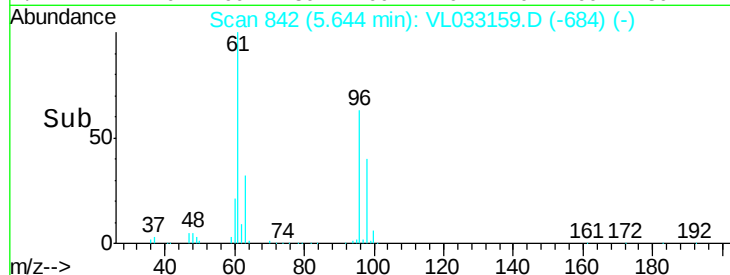
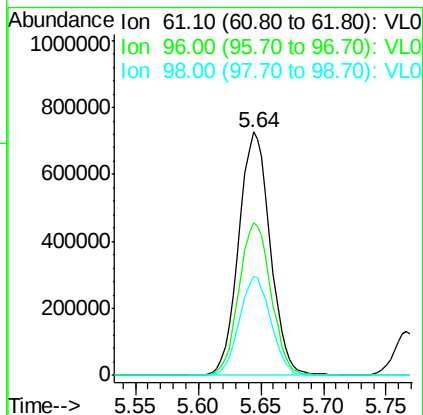
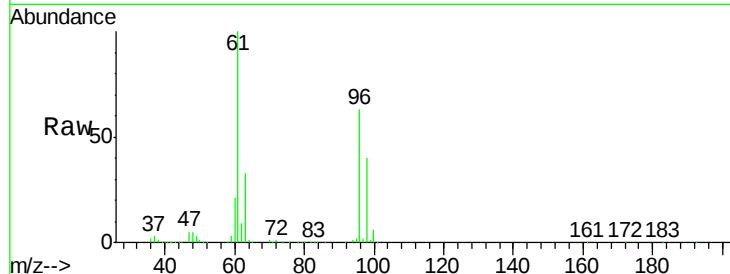
cis-1,2-Dichloroethene
 Concen: 9.565 ppbv
 RT: 5.64 min Scan# 842
 Delta R.T. 0.01 min
 Lab File: VL033159.D
 Acq: 4 Feb 2019 17:17

Instrument :
 MSVOA_L
 ClientSampleId :
 VL0204ABS01

Tot Ion	Ratio	Lower	Upper
61	100		
96	62.6	53.3	79.9
98	40.4	33.7	50.5

Manual Integrations
 APPROVED

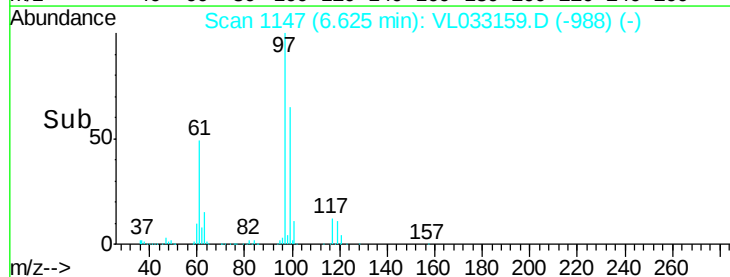
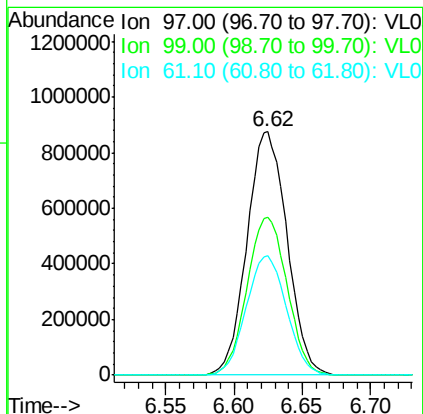
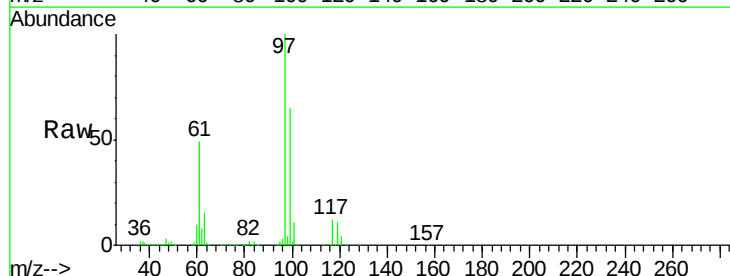
MMDadoda
 2/5/2019 10:27:51 AM

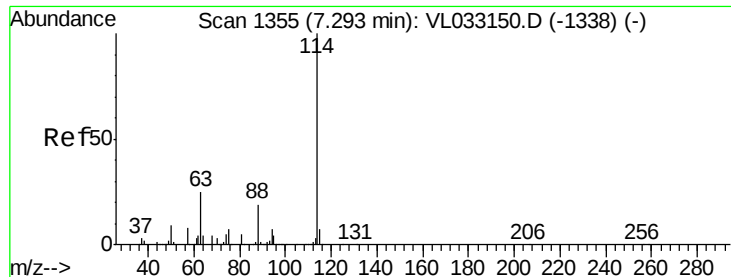


#32

1,1,1-Trichloroethane
 Concen: 8.593 ppbv
 RT: 6.62 min Scan# 1147
 Delta R.T. 0.01 min
 Lab File: VL033159.D
 Acq: 4 Feb 2019 17:17

Tgt Ion	Ratio	Lower	Upper
97	100		
99	65.0	65.1	97.7#
61	49.7	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: VL033159.D

Acq: 4 Feb 2019 17:17

Instrument :

MSVOA_L

ClientSampleId :

VL0204ABS01

Tot Ion:114 Resp: 2858549

Ion Ratio Lower Upper

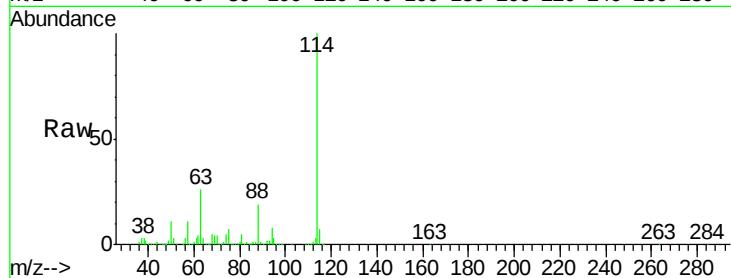
114 100

63 26.9 20.0 30.0

88 18.8 14.4 21.6

Manual Integrations
APPROVED

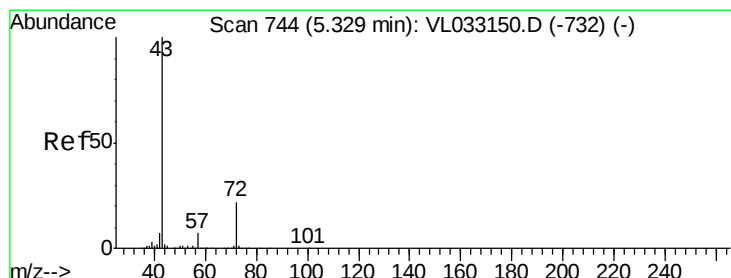
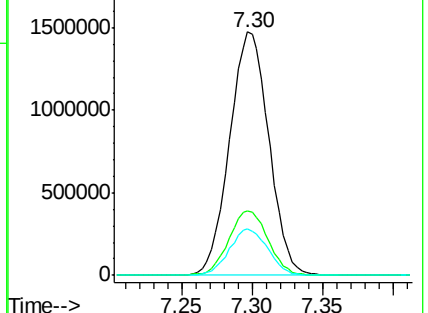
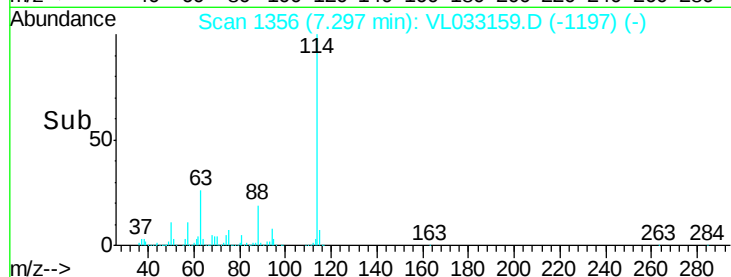
MMDadoda
2/5/2019 10:27:51 AM



Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 10.028 ppbv

RT: 5.33 min Scan# 745

Delta R.T. 0.01 min

Lab File: VL033159.D

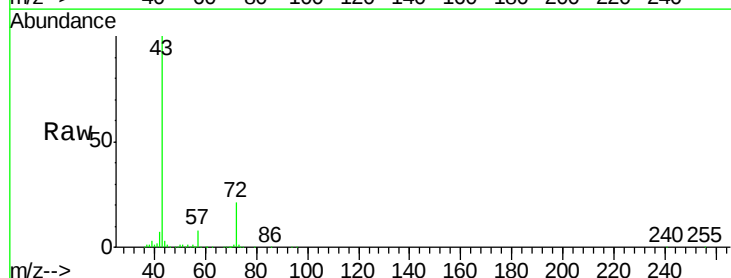
Acq: 4 Feb 2019 17:17

Tgt Ion: 43 Resp: 1802945

Ion Ratio Lower Upper

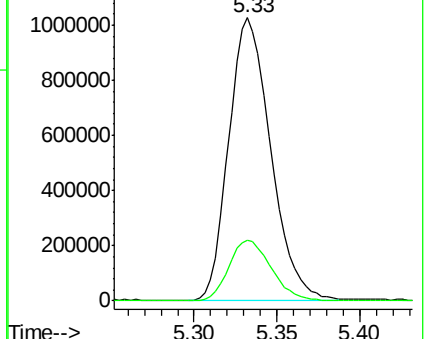
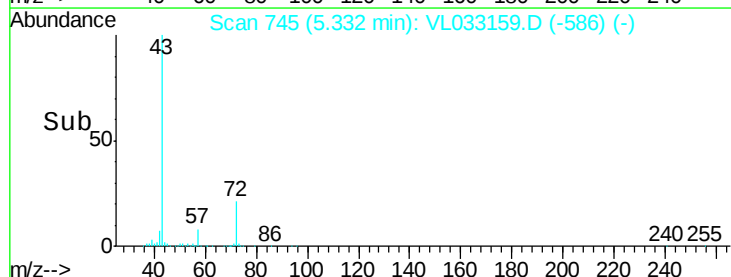
43 100

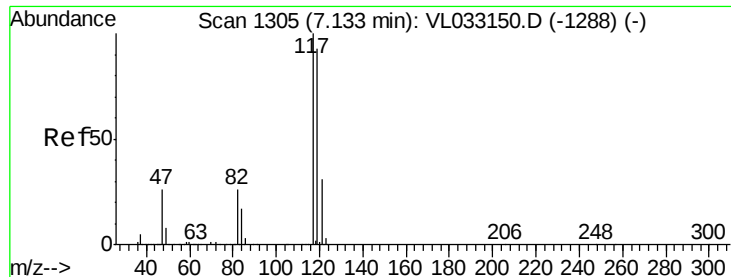
72 21.8 17.9 26.9



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 9.824 ppbv

RT: 7.14 min Scan# 1307

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Instrument :

MSVOA_L

ClientSampleId :

VL0204ABS01

Tot Ion:117 Resp: 1798425

Ion Ratio Lower Upper

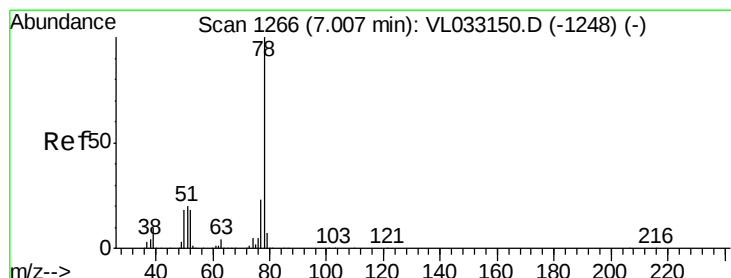
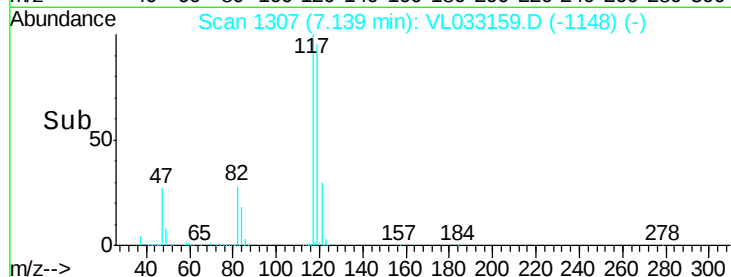
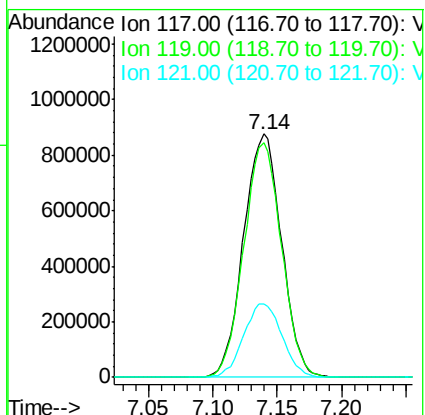
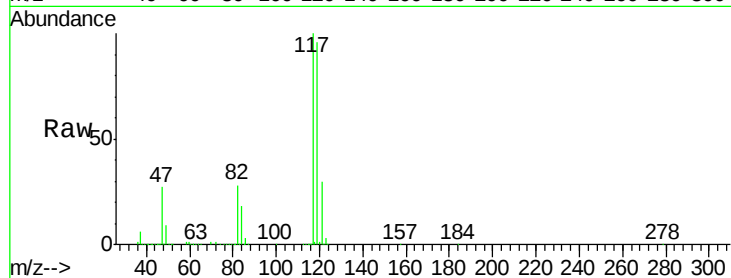
117 100

119 96.2 76.6 114.8

121 29.9 25.0 37.4

Manual Integrations
APPROVED

MMDadoda
2/5/2019 10:27:51 AM



#36

Benzene

Concen: 8.910 ppbv

RT: 7.01 min Scan# 1267

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

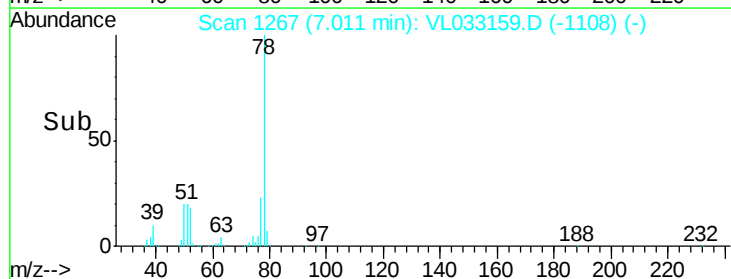
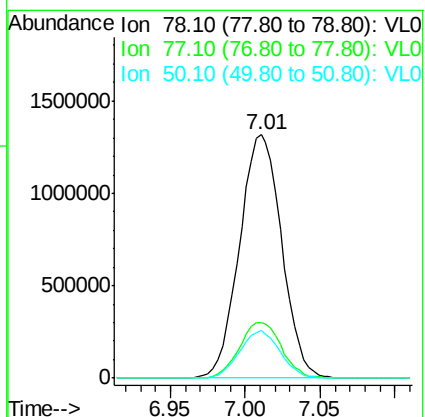
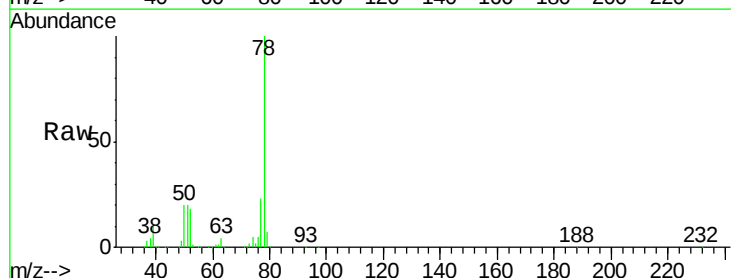
Tgt Ion: 78 Resp: 2574902

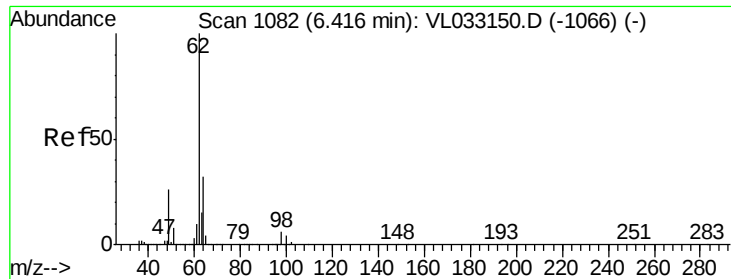
Ion Ratio Lower Upper

78 100

77 22.8 17.8 26.6

50 19.5 14.7 22.1





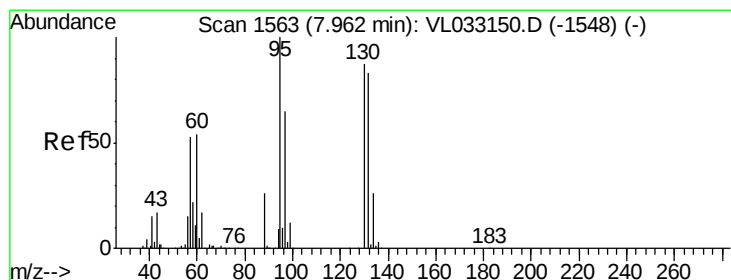
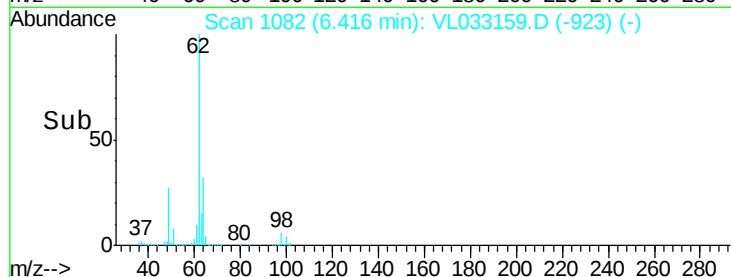
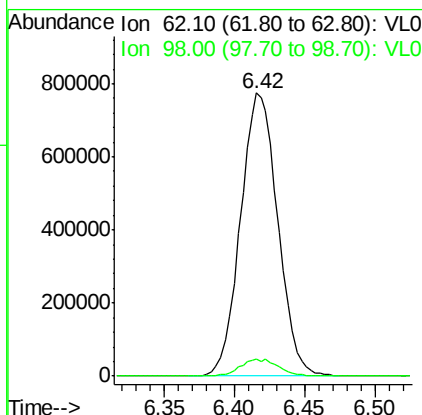
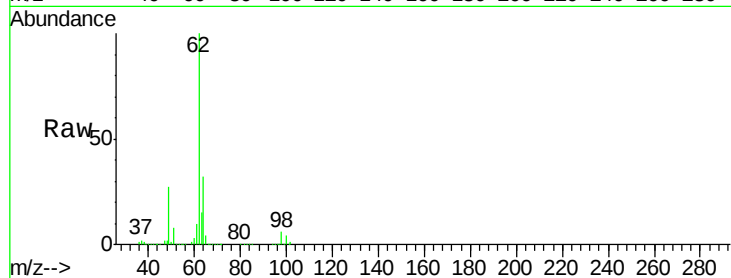
#37
 1,2-Dichloroethane
 Concen: 9.697 ppbv
 RT: 6.42 min Scan# 1082
 Delta R.T. 0.01 min
 Lab File: VL033159.D
 Acq: 4 Feb 2019 17:17

Instrument :
 MSVOA_L
 ClientSampleId :
 VL0204ABS01

Tot Ion	Ratio	Lower	Upper
62	100		
98	6.2	5.3	7.9

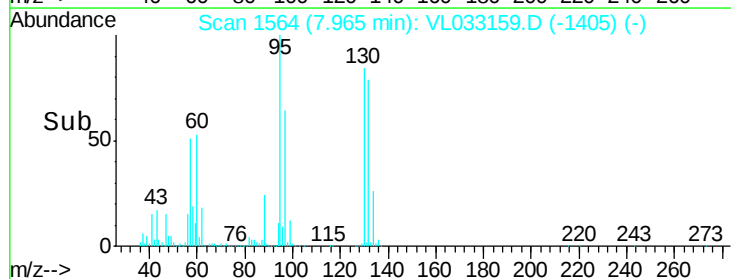
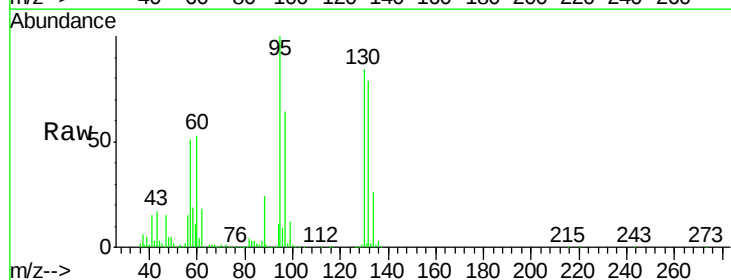
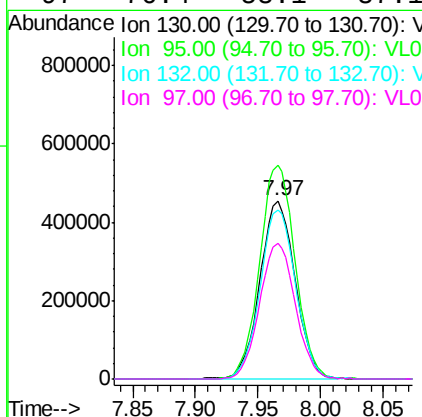
Manual Integrations
 APPROVED

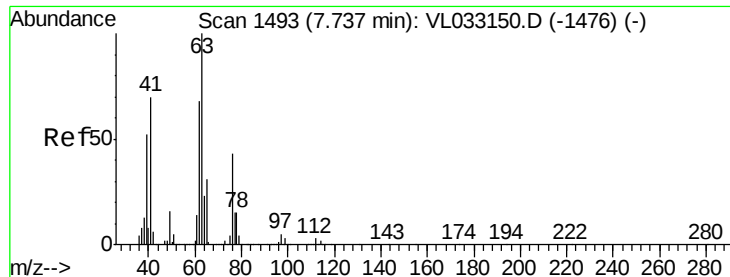
MMDadoda
 2/5/2019 10:27:51 AM



#38
 Trichloroethene
 Concen: 8.516 ppbv
 RT: 7.97 min Scan# 1564
 Delta R.T. 0.01 min
 Lab File: VL033159.D
 Acq: 4 Feb 2019 17:17

Tgt Ion	Ratio	Lower	Upper
130	100		
95	119.7	91.6	137.4
132	94.9	79.0	118.4
97	76.4	58.1	87.1





#39

1,2-Dichloropropane

Concen: 9.165 ppbv

RT: 7.74 min Scan# 1495

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Instrument :

MSVOA_L

ClientSampleId :

VL0204ABS01

Tot Ion: 63 Resp: 1015831

Ion Ratio Lower Upper

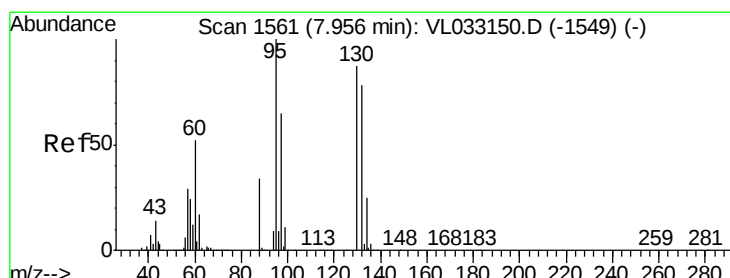
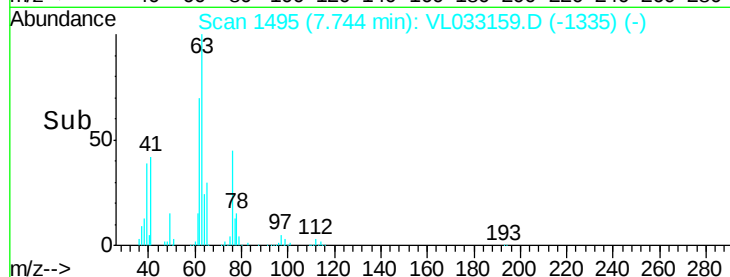
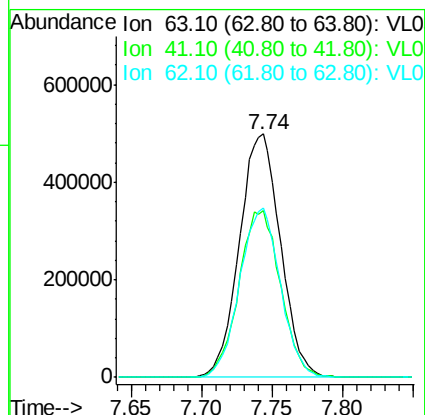
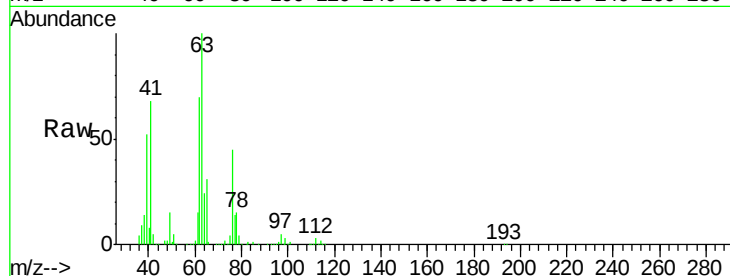
63 100

41 68.3 53.2 79.8

62 69.7 54.4 81.6

Manual Integrations
APPROVED

MMDadoda
2/5/2019 10:27:51 AM



#40

1,4-Dioxane

Concen: 7.606 ppbv

RT: 7.96 min Scan# 1562

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Tgt Ion: 88 Resp: 328837

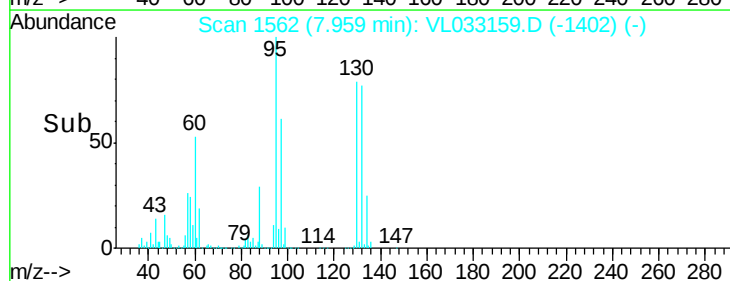
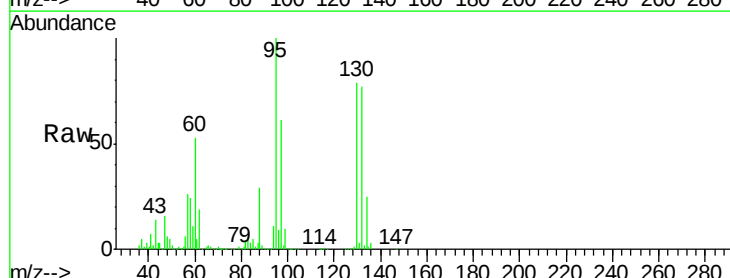
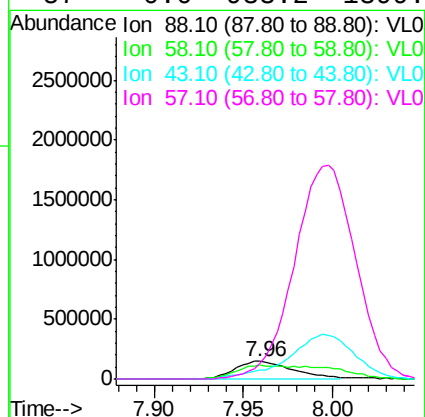
Ion Ratio Lower Upper

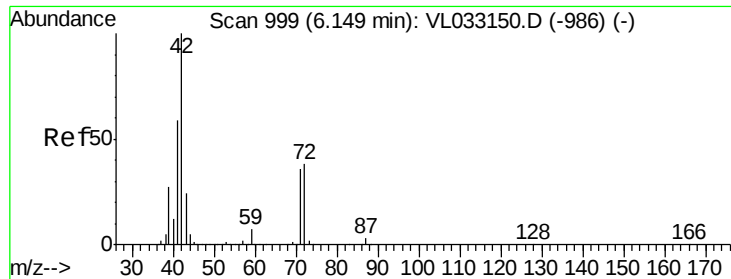
88 100

58 136.7 103.4 155.2

43 0.0 210.8 316.2#

57 0.0 933.2 1399.8#





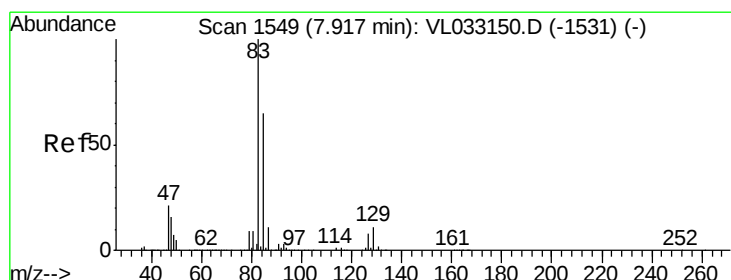
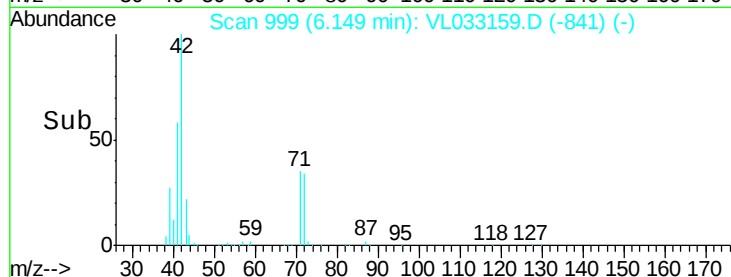
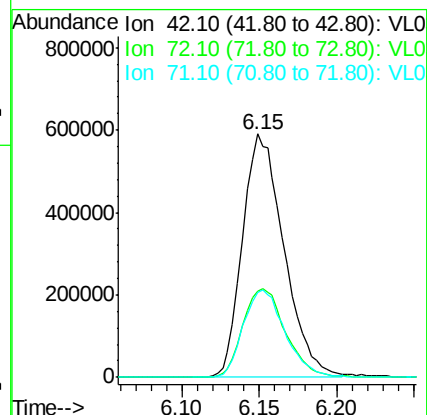
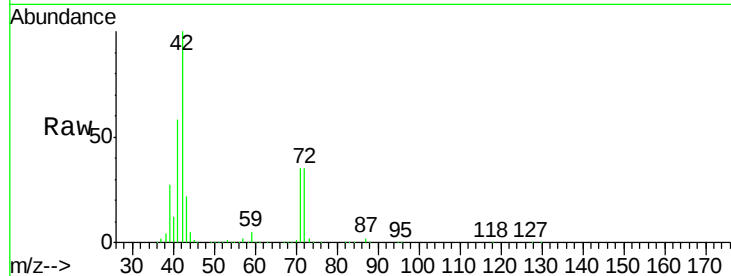
#41
Tetrahydrofuran
Concen: 9.839 ppbv
RT: 6.15 min Scan# 999
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Instrument :
MSVOA_L
ClientSampleId :
VL0204ABS01

Tot Ion	Ratio	Lower	Upper
42	100		
72	38.0	30.2	45.4
71	36.6	28.8	43.2

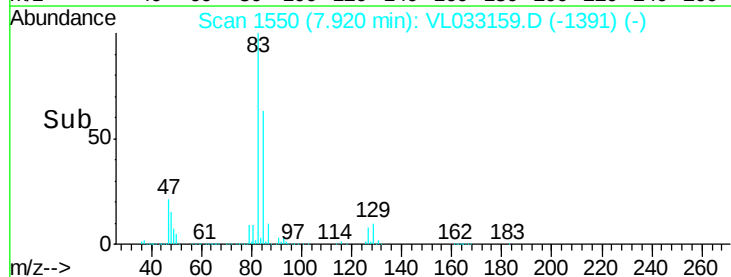
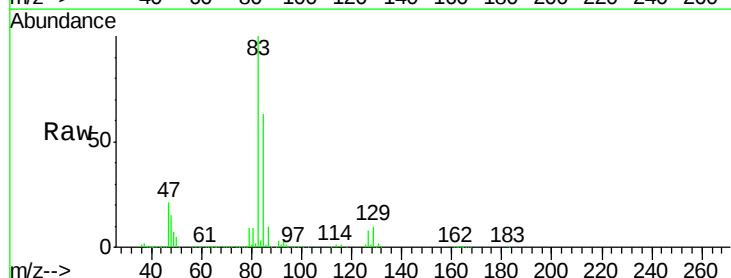
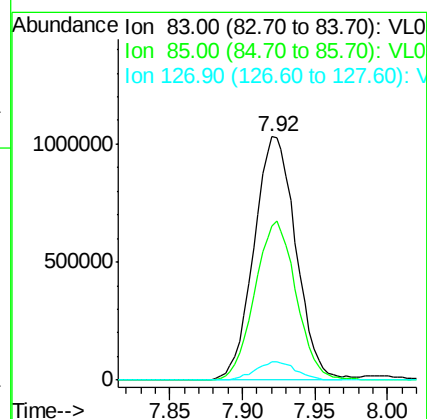
Manual Integrations
APPROVED

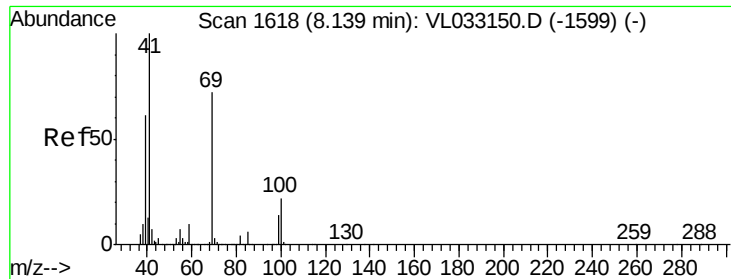
MMDadoda
2/5/2019 10:27:51 AM



#42
Bromodichloromethane
Concen: 9.586 ppbv
RT: 7.92 min Scan# 1550
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Tgt Ion	Ratio	Lower	Upper
83	100		
85	63.3	51.3	76.9
127	7.8	6.1	9.1





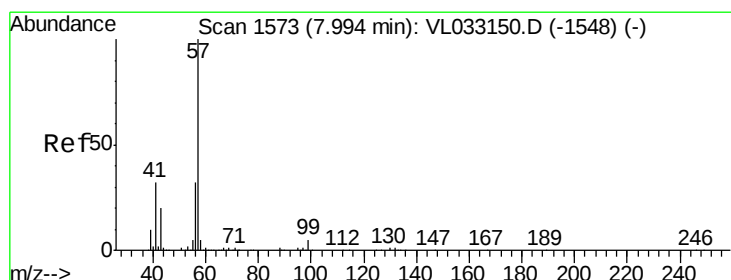
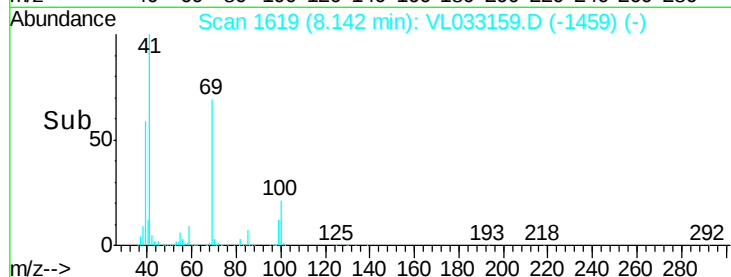
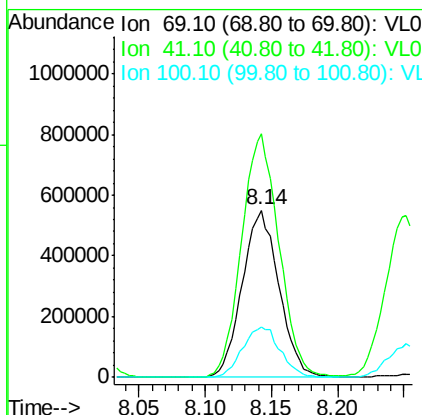
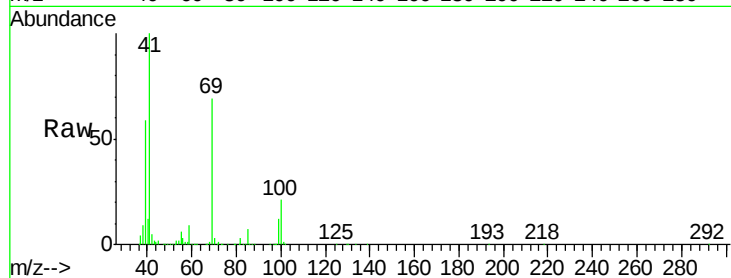
#43
Methvl Methacrvlate
Concen: 9.247 ppbv
RT: 8.14 min Scan# 1619
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Instrument :
MSVOA_L
ClientSampleId :
VL0204ABS01

Tot Ion: 69 Resp: 1062929
Ion Ratio Lower Upper
69 100
41 147.7 118.4 177.6
100 30.8 26.5 39.7

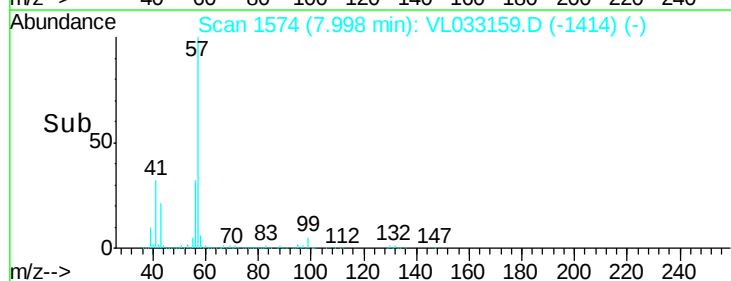
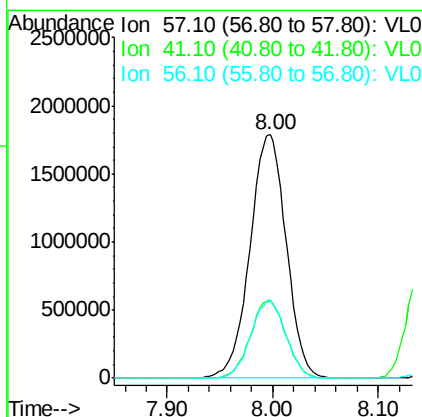
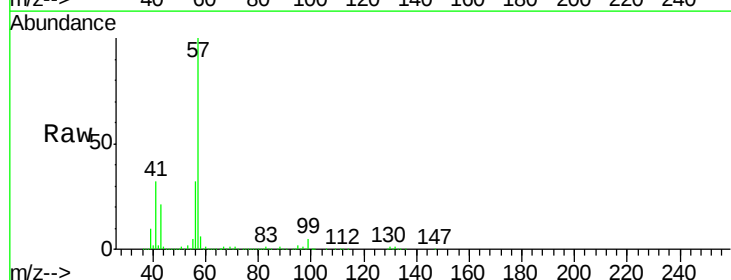
Manual Integrations
APPROVED

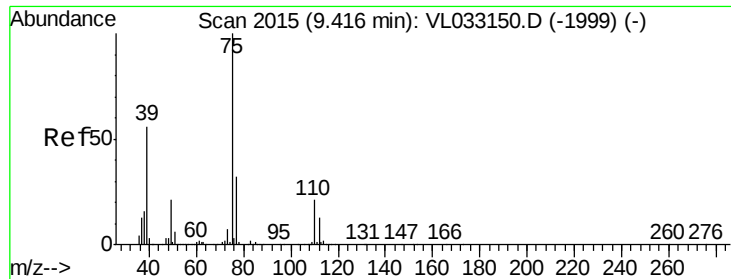
MMDadoda
2/5/2019 10:27:51 AM



#44
2,2,4-Trimethylpentane
Concen: 8.822 ppbv
RT: 8.00 min Scan# 1574
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Tgt Ion: 57 Resp: 4278035
Ion Ratio Lower Upper
57 100
41 31.3 24.6 36.8
56 30.9 24.9 37.3





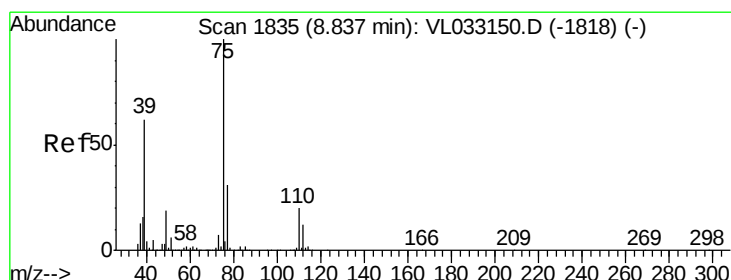
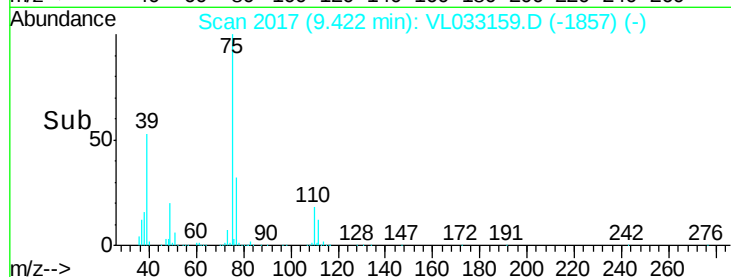
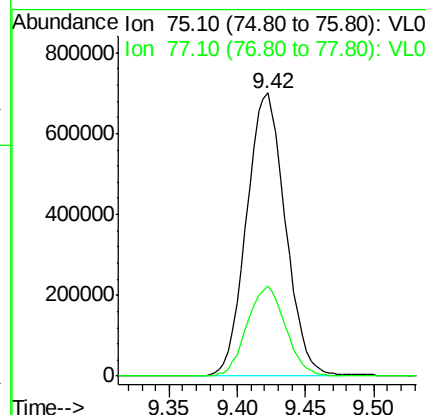
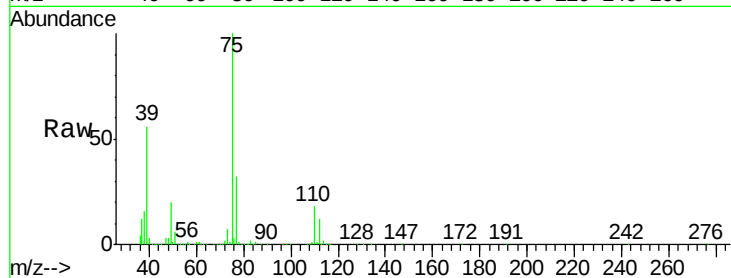
#45
t-1,3-Dichloropropene
Concen: 9.748 ppbv
RT: 9.42 min Scan# 2017
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Instrument :
MSVOA_L
ClientSampleId :
VL0204ABS01

Tot Ion: 75 Resp: 1382876
Ion Ratio Lower Upper
75 100
77 31.7 24.4 36.6

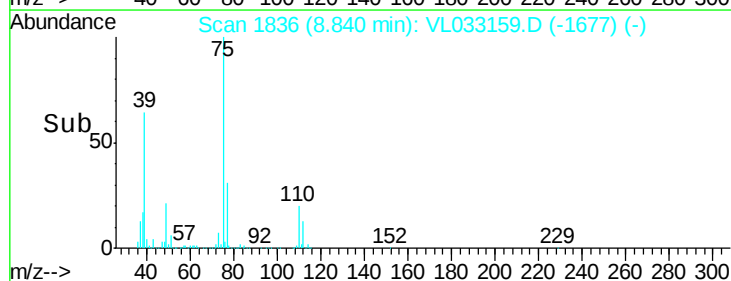
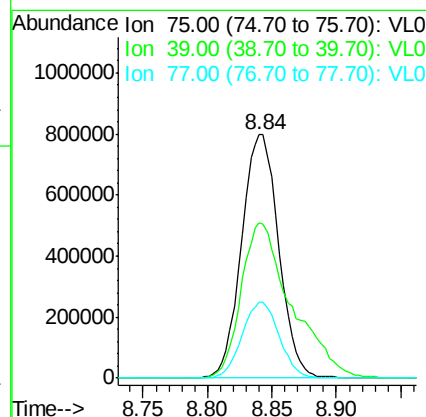
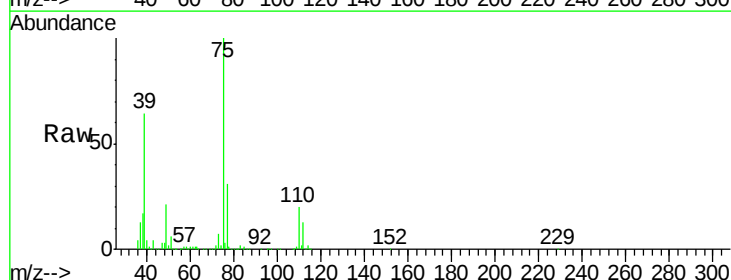
Manual Integrations
APPROVED

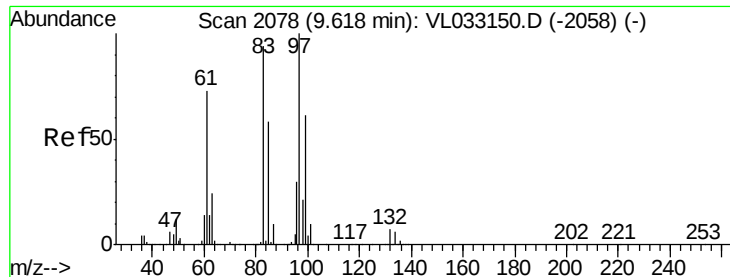
MMDadoda
2/5/2019 10:27:51 AM



#46
cis-1,3-Dichloropropene
Concen: 9.364 ppbv
RT: 8.84 min Scan# 1836
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Tgt Ion: 75 Resp: 1597838
Ion Ratio Lower Upper
75 100
39 63.5 51.4 77.2
77 31.4 25.4 38.0





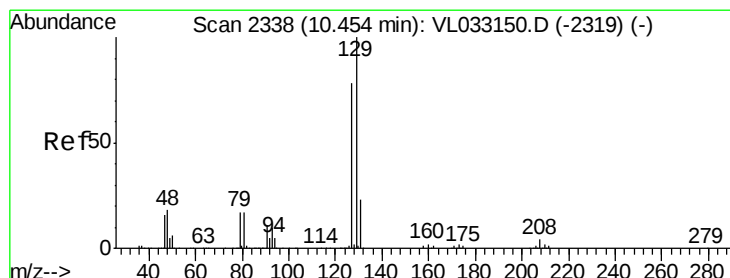
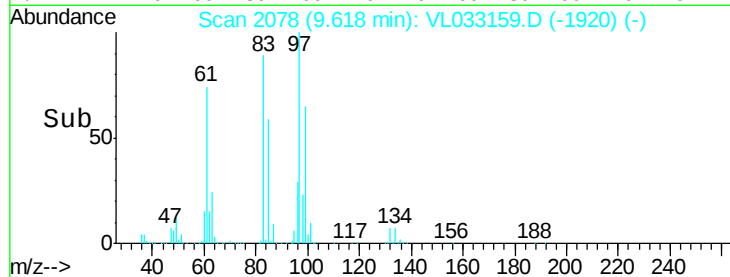
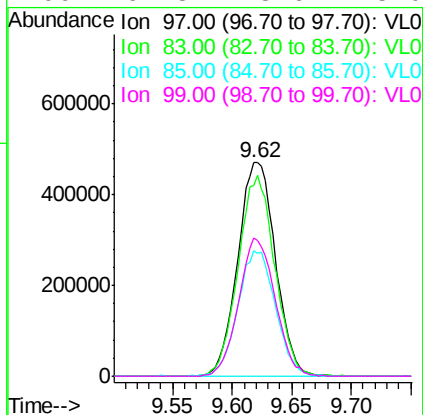
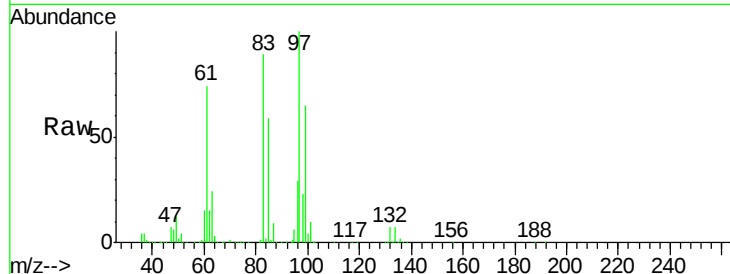
#47
 1,1,2-Trichloroethane
 Concen: 8.662 ppbv
 RT: 9.62 min Scan# 2078
 Delta R.T. 0.01 min
 Lab File: VL033159.D
 Acq: 4 Feb 2019 17:17

Instrument :
 MSVOA_L
 ClientSampleId :
 VL0204ABS01

Tot Ion	Ratio	Lower	Upper
97	100		
83	89.2	65.8	98.8
85	58.8	44.7	67.1
99	64.8	48.6	73.0

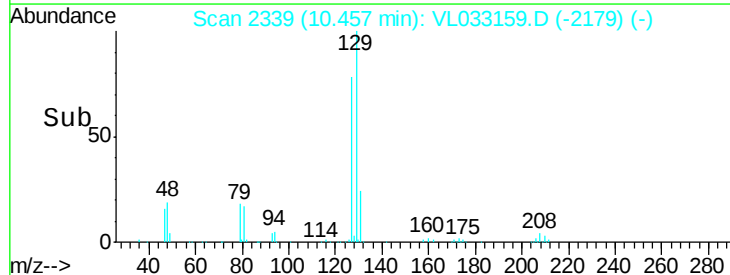
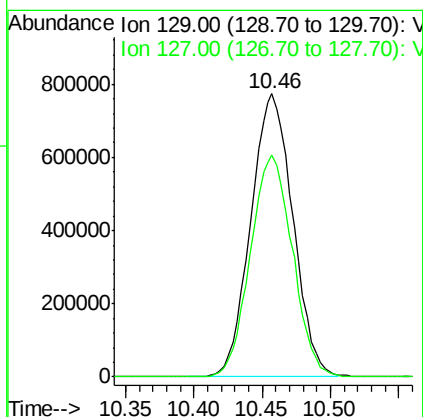
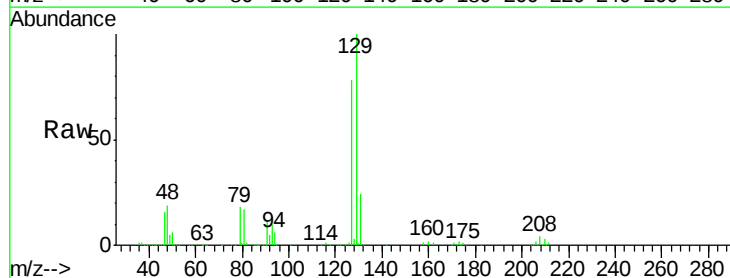
Manual Integrations
 APPROVED

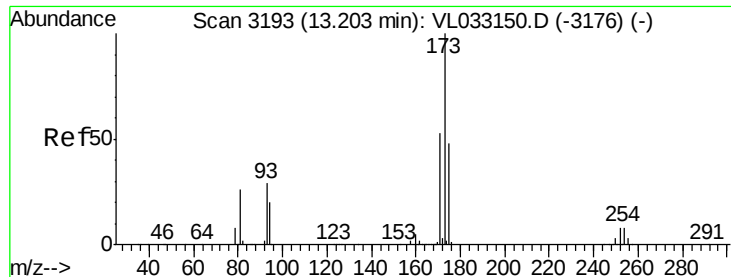
MMDadoda
 2/5/2019 10:27:51 AM



#48
 Dibromochloromethane
 Concen: 9.356 ppbv
 RT: 10.46 min Scan# 2339
 Delta R.T. 0.01 min
 Lab File: VL033159.D
 Acq: 4 Feb 2019 17:17

Tgt Ion	Ratio	Lower	Upper
129	100		
127	78.6	39.3	117.9





#49

Bromoform

Concen: 9.577 ppbv

RT: 13.21 min Scan# 3195

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Instrument :

MSVOA_L

ClientSampleId :

VL0204ABS01

Tot Ion:173 Resp: 1399848

Ion Ratio Lower Upper

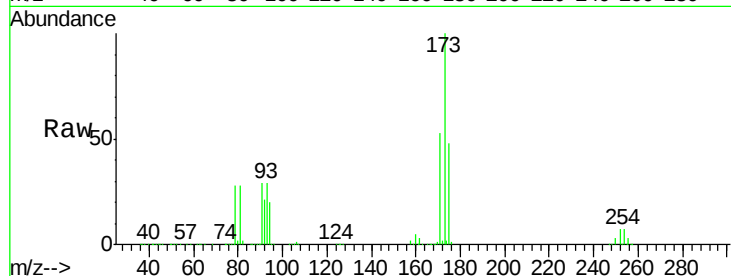
173 100

175 48.2 39.3 58.9

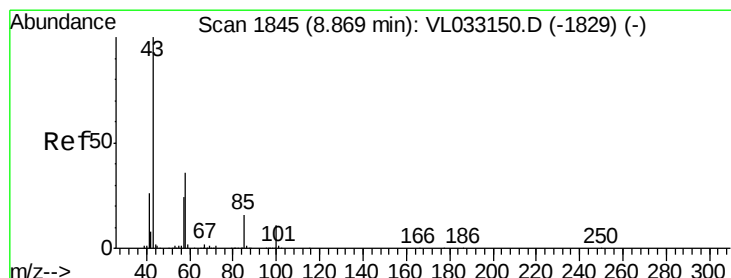
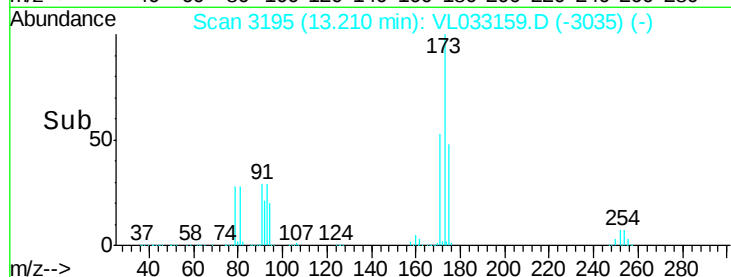
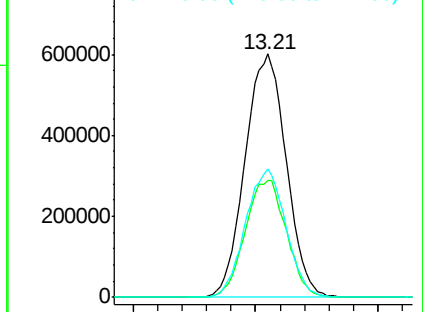
171 51.8 41.8 62.6

Manual Integrations
APPROVED

MMDadoda
2/5/2019 10:27:51 AM



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: 8.023 ppbv

RT: 8.87 min Scan# 1846

Delta R.T. 0.01 min

Lab File: VL033159.D

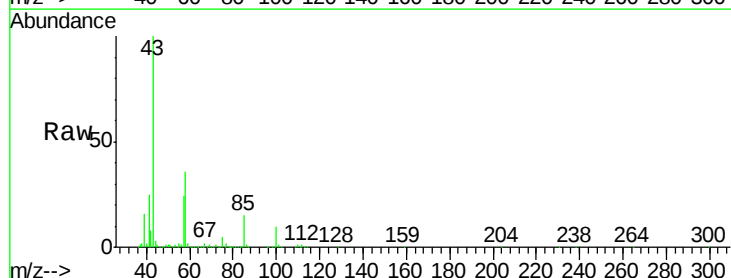
Acq: 4 Feb 2019 17:17

Tgt Ion: 43 Resp: 2610916

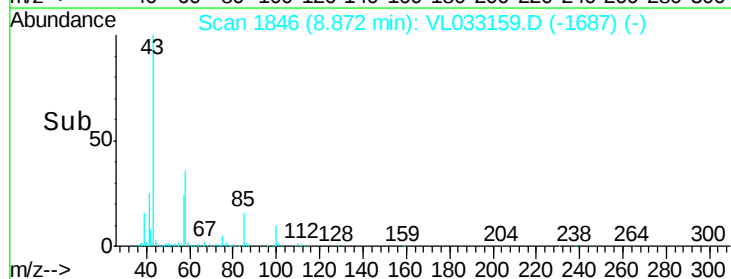
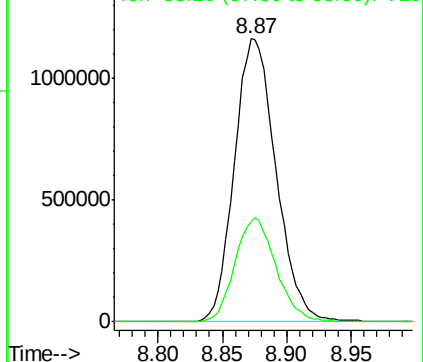
Ion Ratio Lower Upper

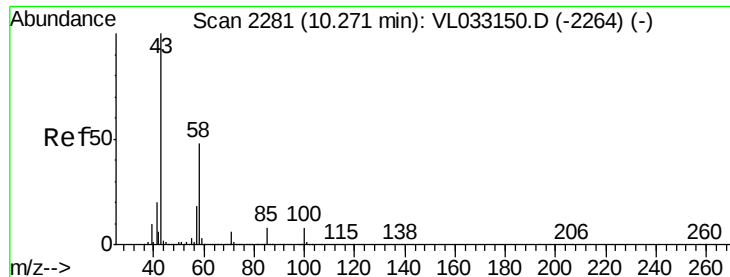
43 100

58 36.3 28.7 43.1



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





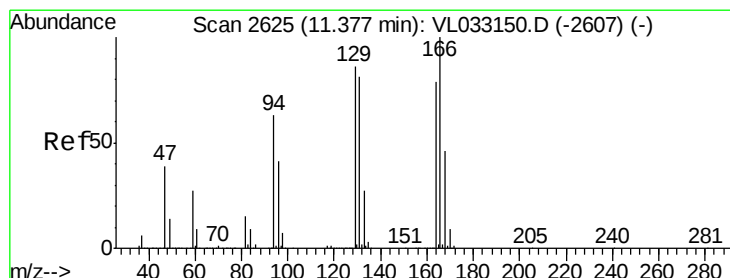
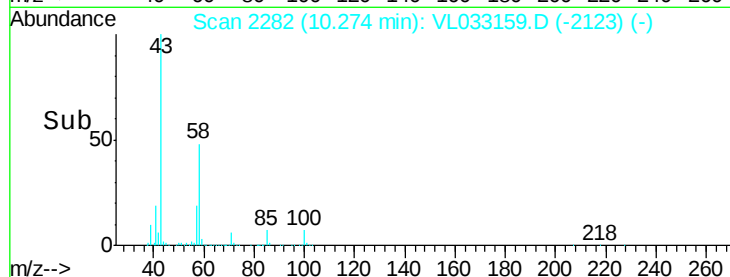
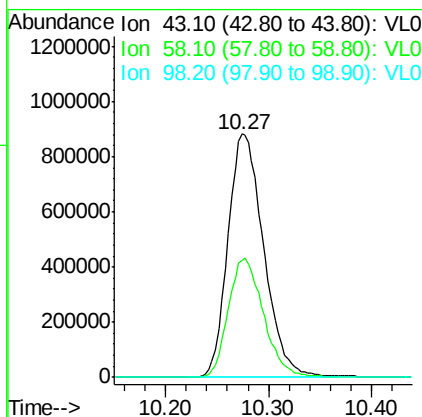
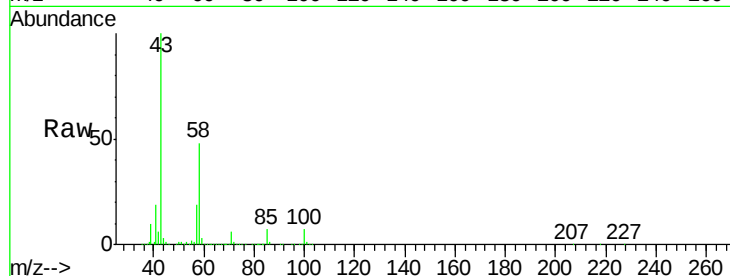
#51
2-Hexanone
Concen: 7.796 ppbv
RT: 10.27 min Scan# 2282
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Instrument :
MSVOA_L
ClientSampleId :
VL0204ABS01

Tot Ion	Ratio	Lower	Upper
43	100		
58	48.6	39.4	59.2
98	0.1	0.1	0.1#

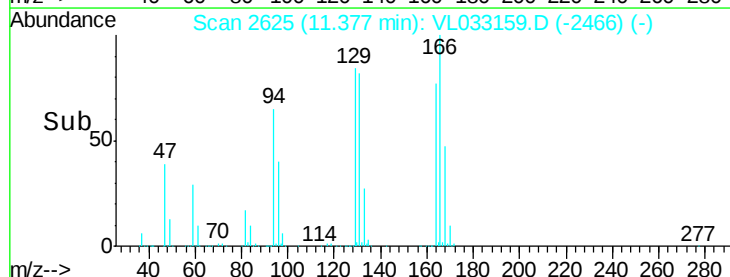
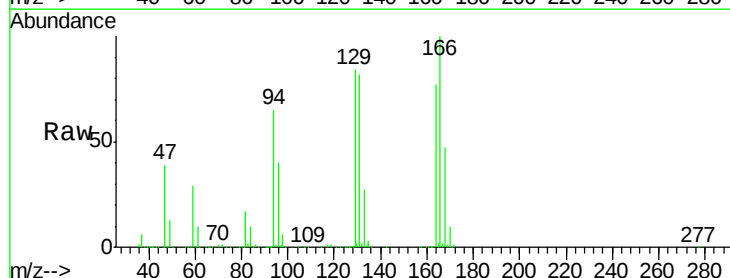
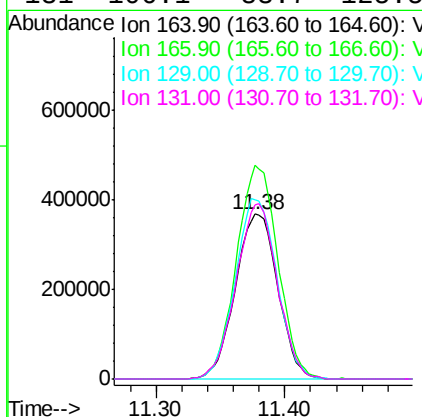
Manual Integrations
APPROVED

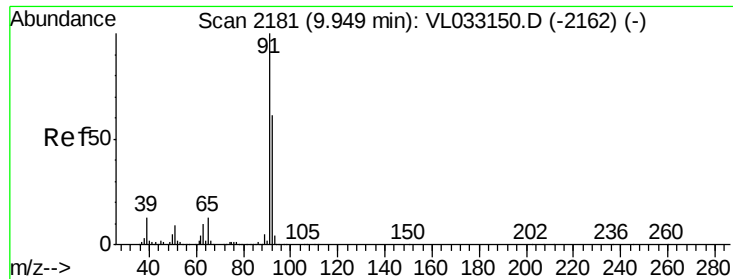
MMDadoda
2/5/2019 10:27:51 AM



#52
Tetrachloroethene
Concen: 8.358 ppbv
RT: 11.38 min Scan# 2625
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Tgt Ion	Ratio	Lower	Upper
164	100		
166	129.8	98.6	148.0
129	109.0	86.3	129.5
131	106.1	83.7	125.5





#53

Toluene

Concen: 8.673 ppbv

RT: 9.95 min Scan# 2182

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Instrument :

MSVOA_L

ClientSampleId :

VL0204ABS01

Tot Ion: 91 Resp: 2976712

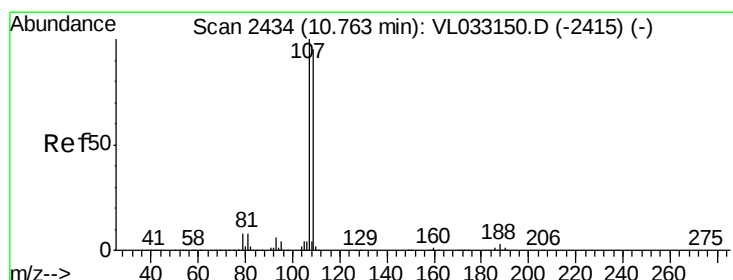
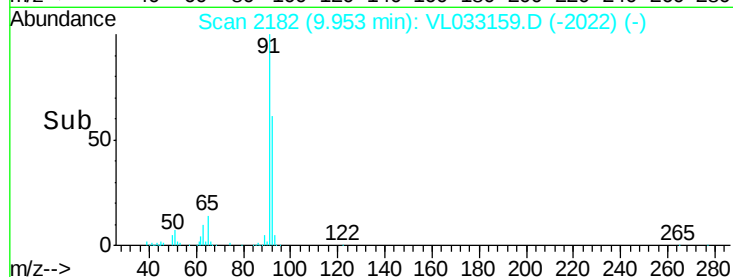
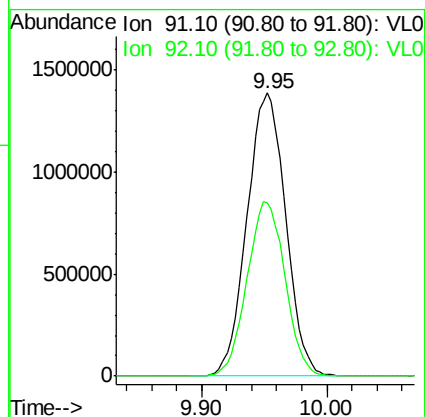
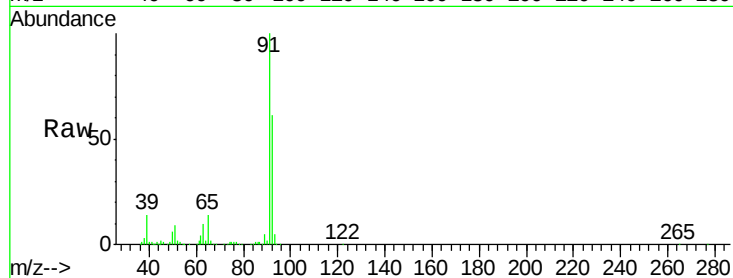
Ion Ratio Lower Upper

91 100

92 60.8 48.9 73.3

Manual Integrations
APPROVED

MMDadoda
2/5/2019 10:27:51 AM



#54

1,2-Dibromoethane

Concen: 8.932 ppbv

RT: 10.77 min Scan# 2435

Delta R.T. 0.01 min

Lab File: VL033159.D

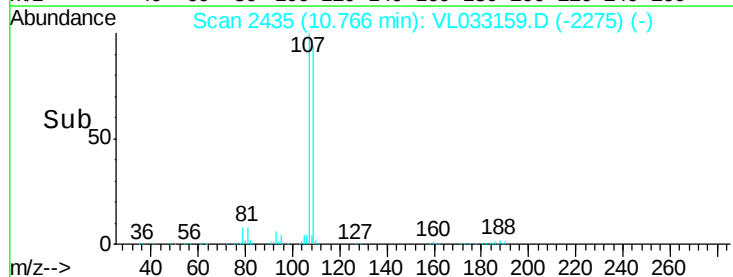
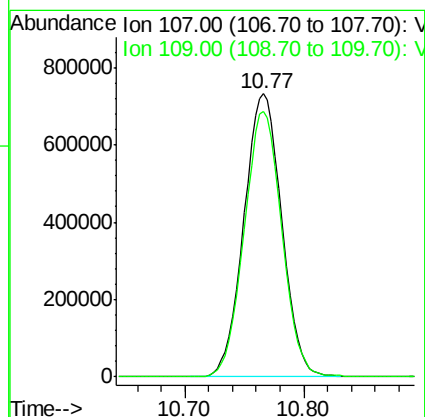
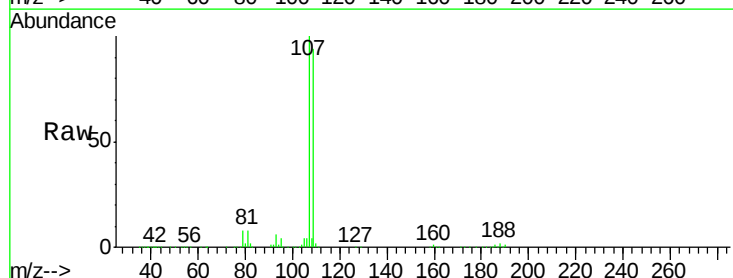
Acq: 4 Feb 2019 17:17

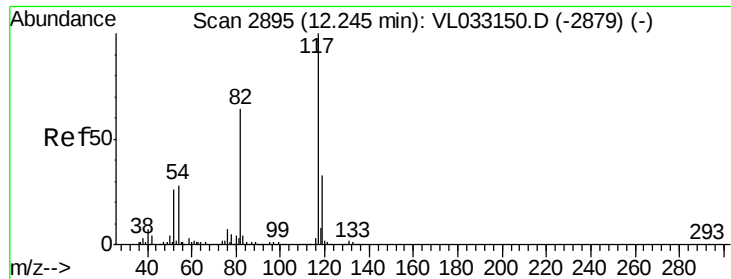
Tgt Ion: 107 Resp: 1609248

Ion Ratio Lower Upper

107 100

109 93.8 74.7 112.1





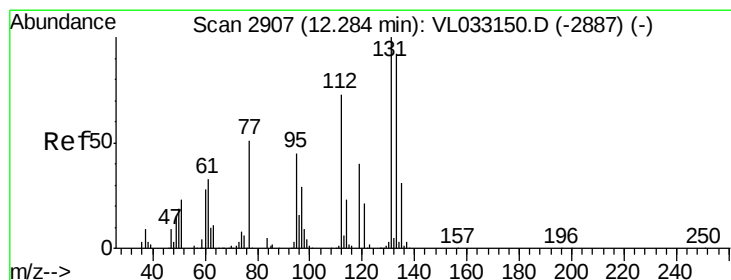
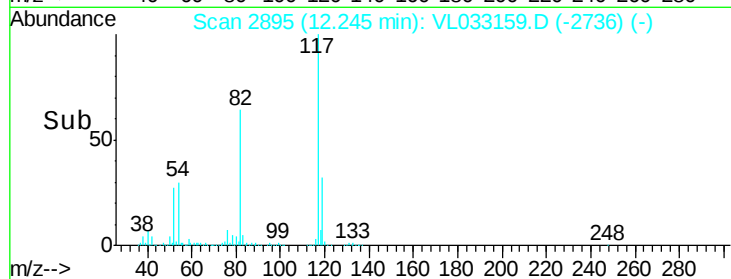
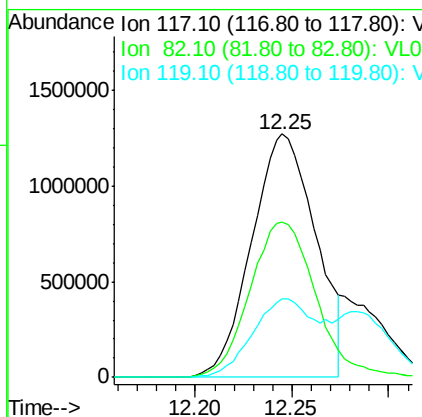
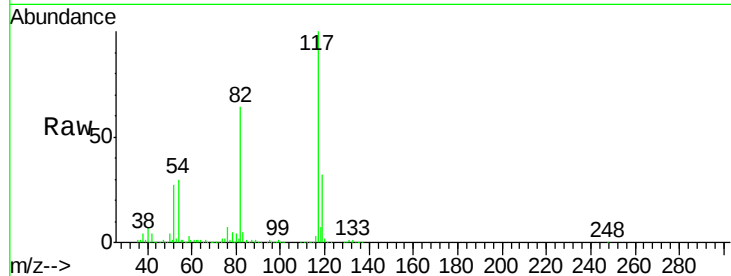
#55
Chlorobenzene-d5
Concen: 10.000 ppbv m
RT: 12.25 min Scan# 2895
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Instrument :
MSVOA_L
ClientSampleId :
VL0204ABS01

Tot Ion:117 Resp: 2927027
Ion Ratio Lower Upper
117 100
82 66.0 49.3 73.9
119 33.9 27.1 40.7

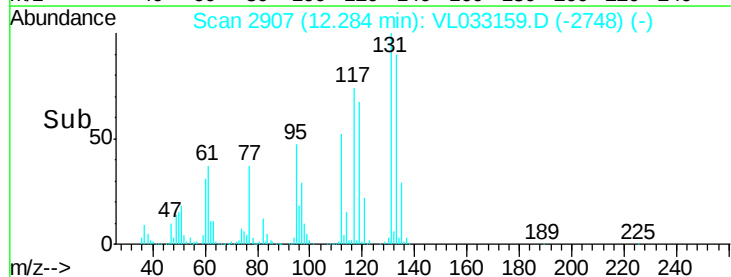
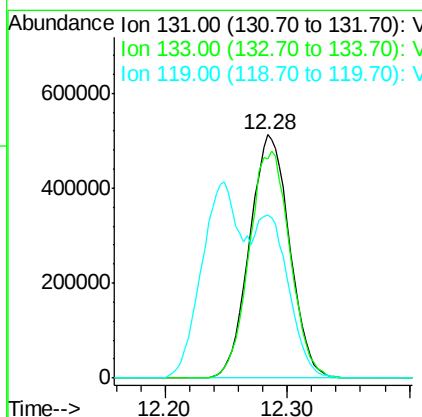
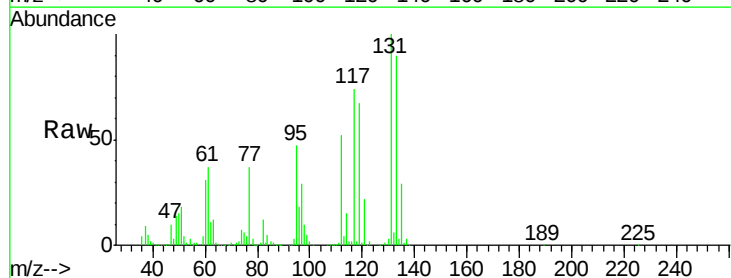
Manual Integrations
APPROVED

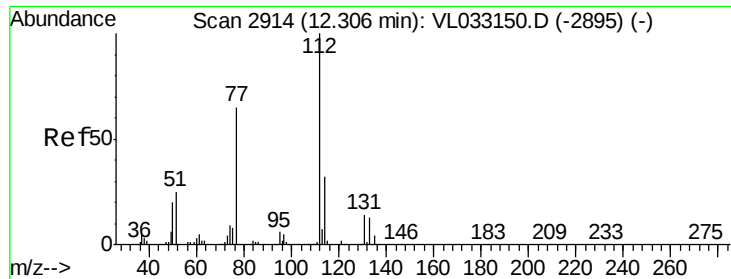
MMDadoda
2/5/2019 10:27:51 AM



#56
1,1,1,2-Tetrachloroethane
Concen: 9.189 ppbv
RT: 12.28 min Scan# 2907
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Tgt Ion:131 Resp: 1162917
Ion Ratio Lower Upper
131 100
133 94.9 76.2 114.4
119 140.7 46.9 70.3#





#57

Chlorobenzene

Concen: 8.744 ppbv

RT: 12.31 min Scan# 2914

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Instrument :

MSVOA_L

ClientSampleId :

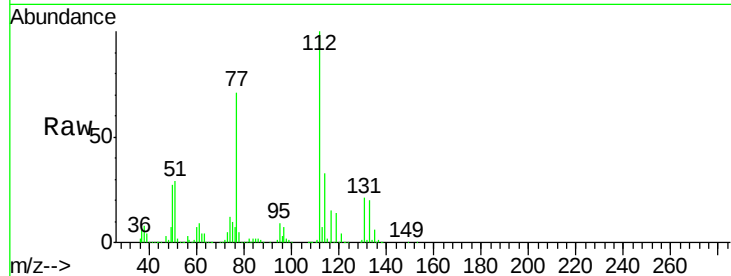
VL0204ABS01

Tot Ion:112 Resp: 2133851

Ion	Ratio	Lower	Upper
112	100		
77	70.8	52.8	79.2
114	32.5	29.7	36.3

Manual Integrations
APPROVED

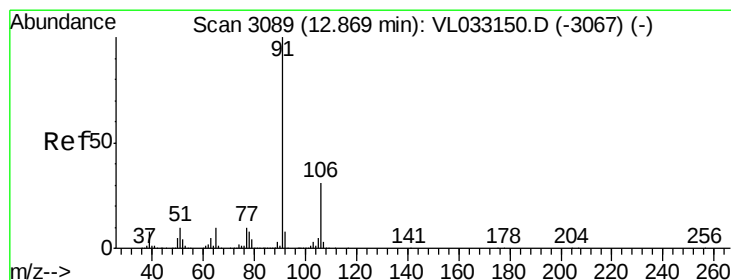
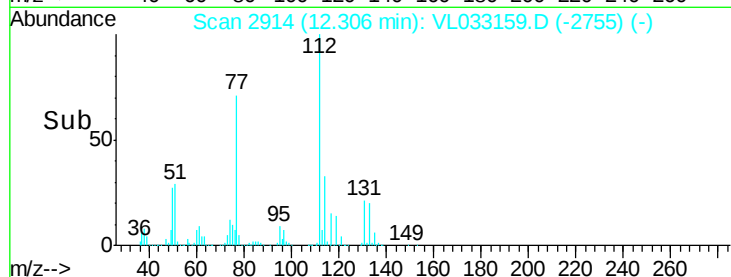
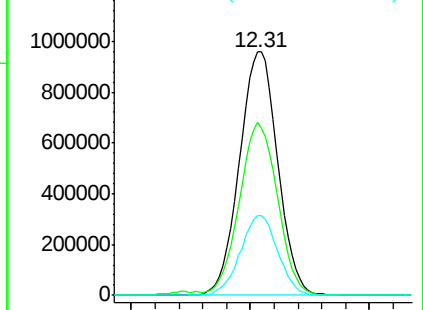
MMDadoda
2/5/2019 10:27:51 AM



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: 8.847 ppbv

RT: 12.87 min Scan# 3090

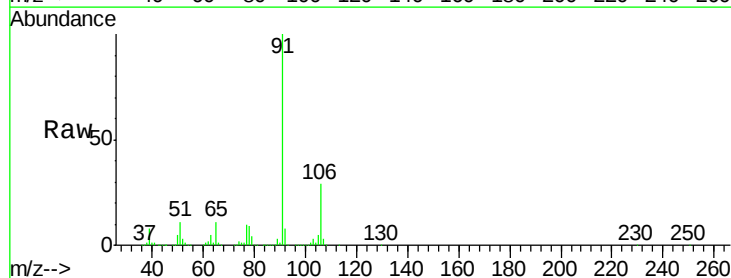
Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

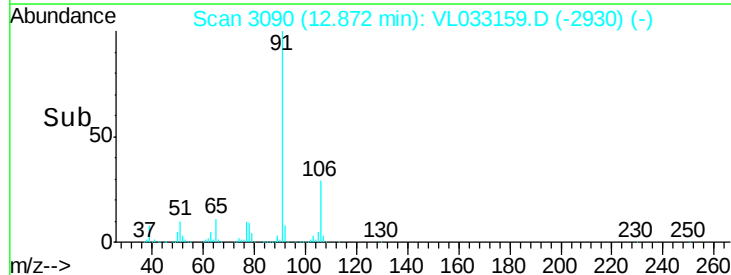
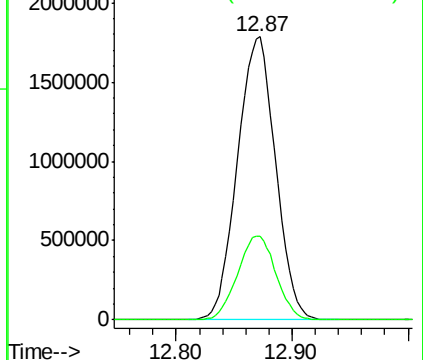
Tgt Ion: 91 Resp: 4074167

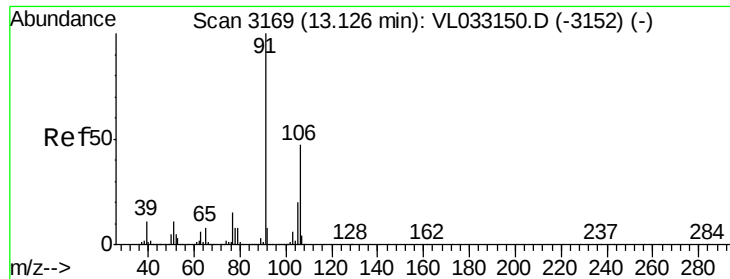
Ion	Ratio	Lower	Upper
91	100		
106	29.4	24.7	37.1



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





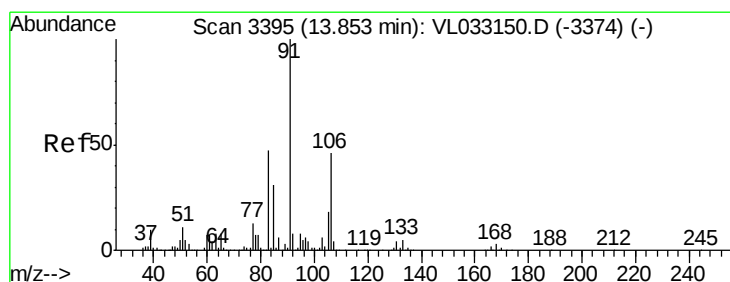
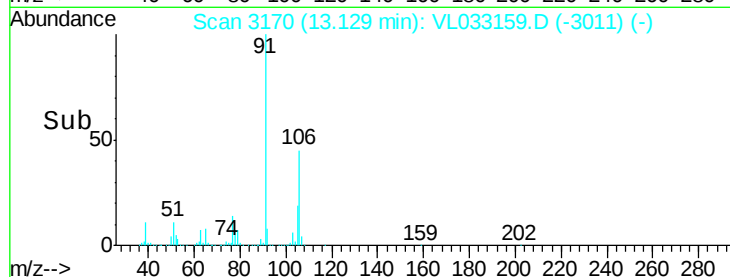
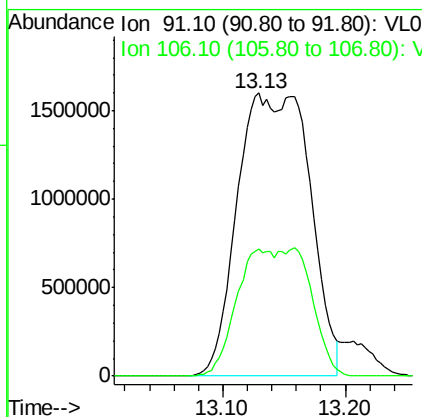
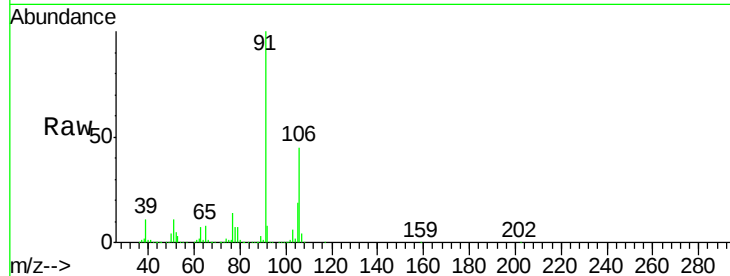
#59
m/p-Xylene
Concen: 17.317 ppbv m
RT: 13.13 min Scan# 3170
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Instrument :
MSVOA_L
ClientSampleId :
VL0204ABS01

Tot Ion: 91 Resp: 6530290
Ion Ratio Lower Upper
91 100
106 0.0 37.6 56.4#

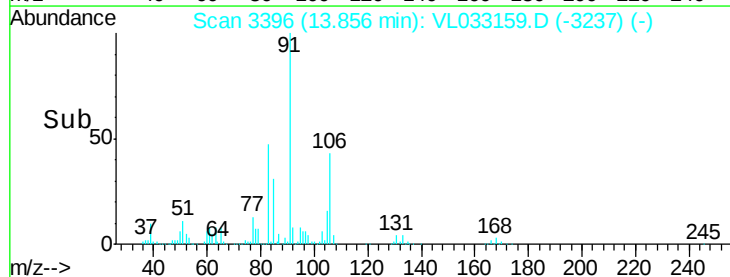
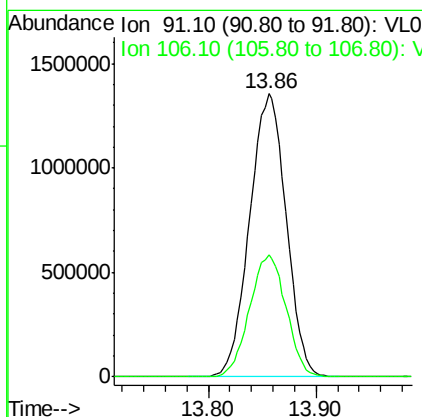
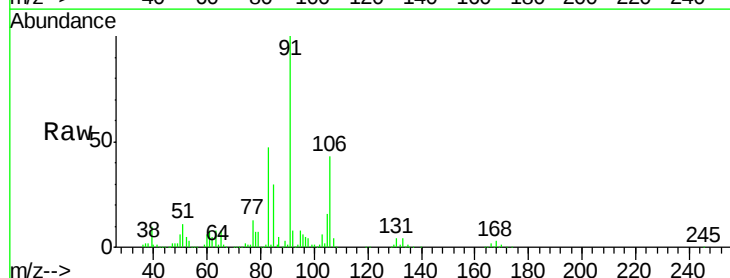
Manual Integrations
APPROVED

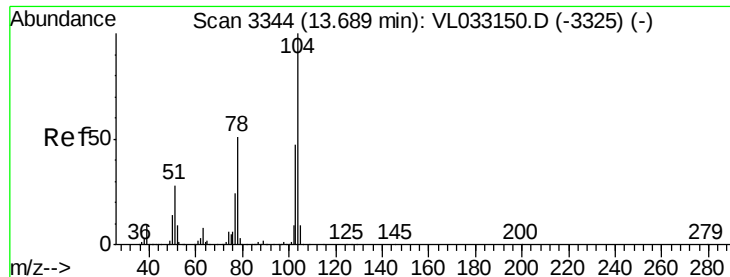
MMDadoda
2/5/2019 10:27:51 AM



#60
o-Xylene
Concen: 9.137 ppbv
RT: 13.86 min Scan# 3396
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Tgt Ion: 91 Resp: 3179632
Ion Ratio Lower Upper
91 100
106 43.3 23.2 69.5





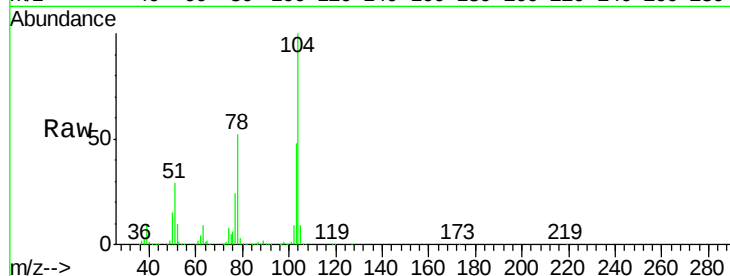
#61
Stvrene
Concen: 9.110 ppbv
RT: 13.69 min Scan# 3344
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Instrument :
MSVOA_L
ClientSampleId :
VL0204ABS01

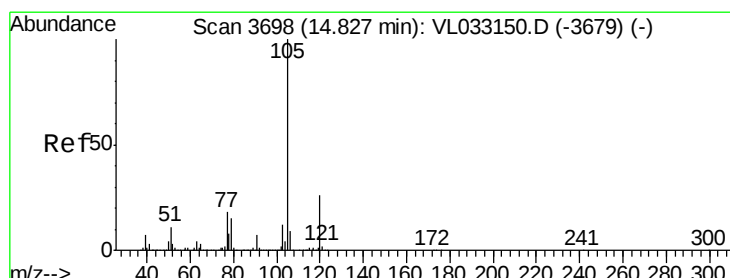
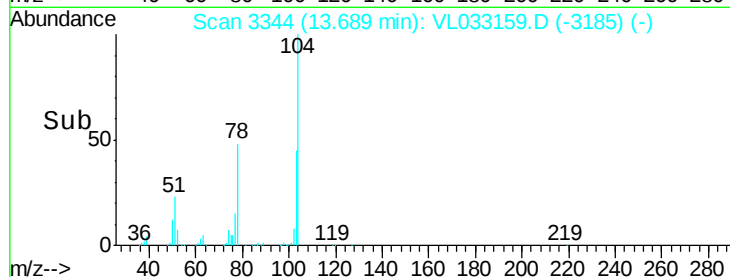
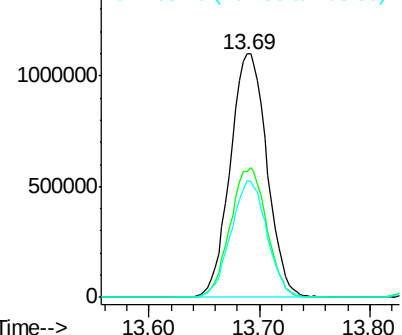
Tot Ion	Ratio	Lower	Upper
104	100		
78	53.1	39.7	59.5
103	46.9	37.7	56.5

Manual Integrations
APPROVED

MMDadoda
2/5/2019 10:27:51 AM

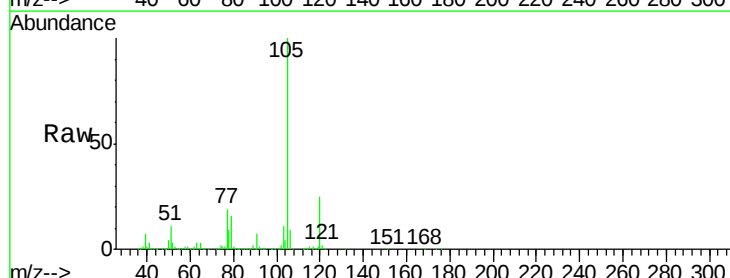


Abundance Ion 104.10 (103.80 to 104.80): V
1500000
Ion 78.10 (77.80 to 78.80): VL0
Ion 103.10 (102.80 to 103.80): V

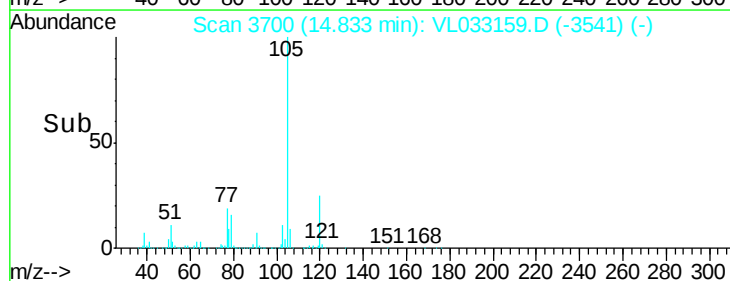
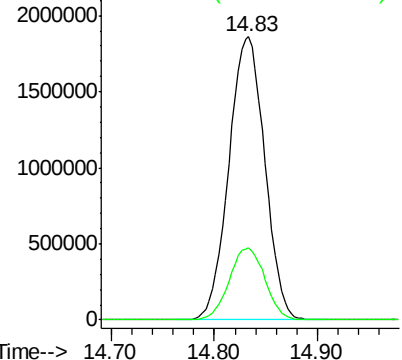


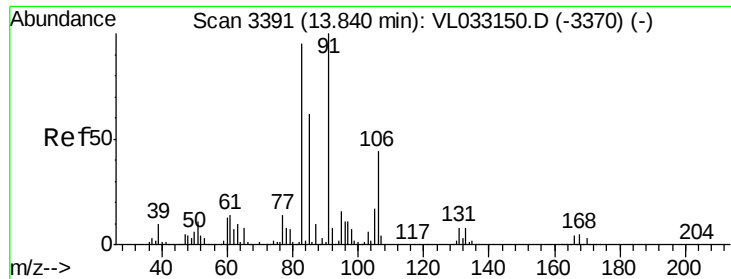
#62
Isopropylbenzene
Concen: 9.035 ppbv
RT: 14.83 min Scan# 3700
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Tgt Ion	Ratio	Lower	Upper
105	100		
120	25.4	20.8	31.2



Abundance Ion 105.10 (104.80 to 105.80): V
2000000
Ion 120.20 (119.90 to 120.90): V





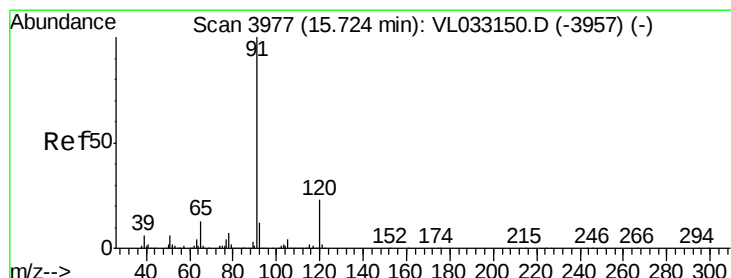
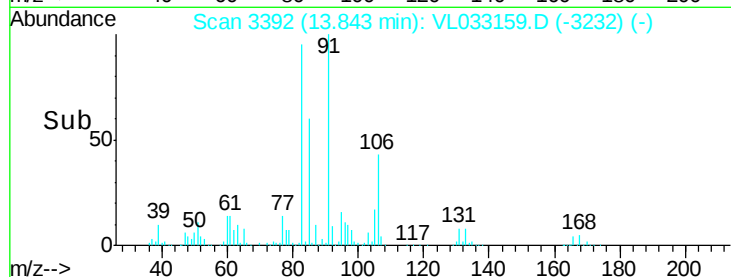
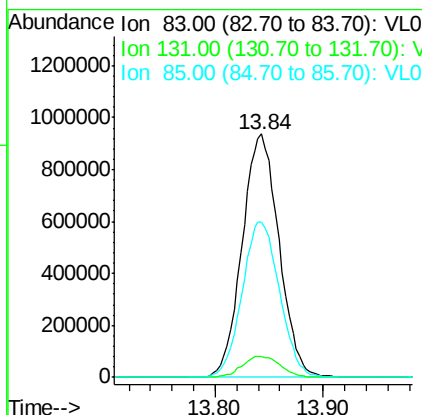
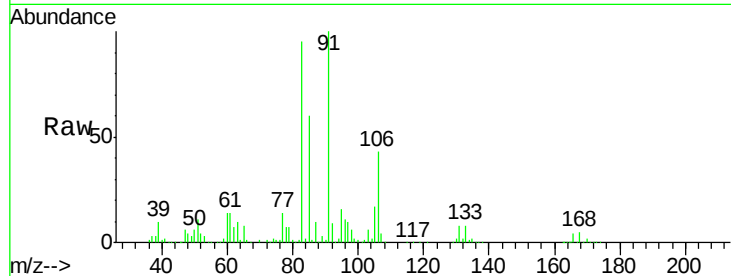
#63
 1,1,2,2-Tetrachloroethane
 Concen: 8.888 ppbv
 RT: 13.84 min Scan# 3392
 Delta R.T. 0.01 min
 Lab File: VL033159.D
 Acq: 4 Feb 2019 17:17

Instrument :
 MSVOA_L
 ClientSampleId :
 VL0204ABS01

Tot Ion	83	Resp	2218927
Ion Ratio	100	Lower	Upper
83	100		
131	9.0	4.5	13.7
85	65.0	32.5	97.4

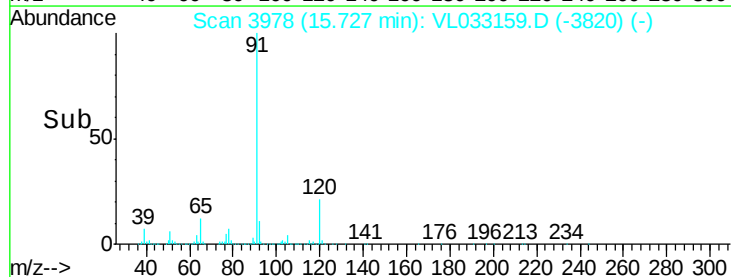
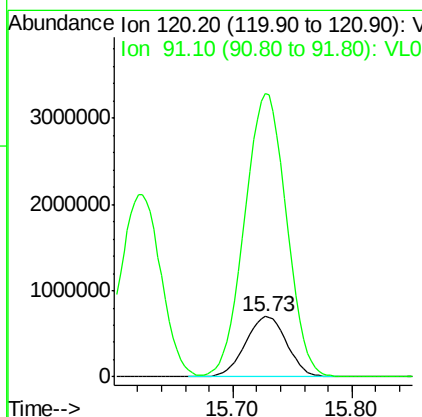
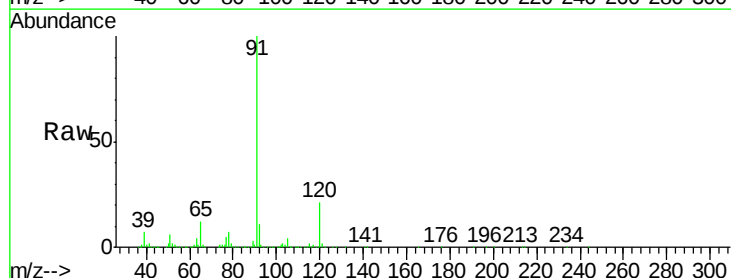
Manual Integrations
 APPROVED

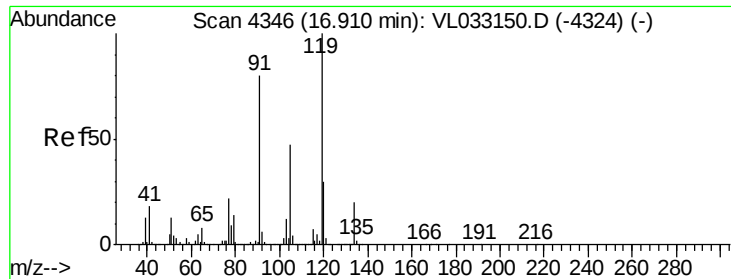
MMDadoda
 2/5/2019 10:27:51 AM



#64
 n-propylbenzene
 Concen: 12.971 ppbv
 RT: 15.73 min Scan# 3978
 Delta R.T. 0.01 min
 Lab File: VL033159.D
 Acq: 4 Feb 2019 17:17

Tgt Ion	120	Resp	1681417
Ion Ratio	100	Lower	Upper
120	100		
91	475.6	370.2	555.2





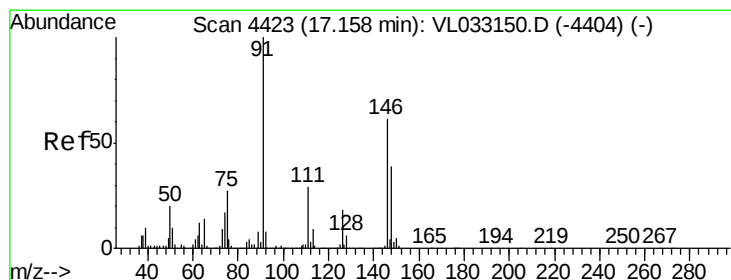
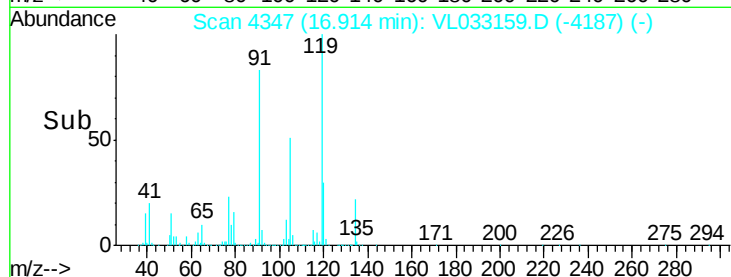
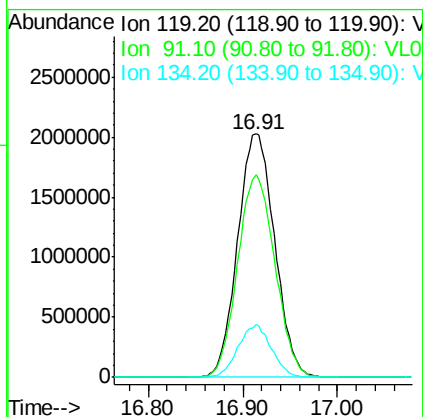
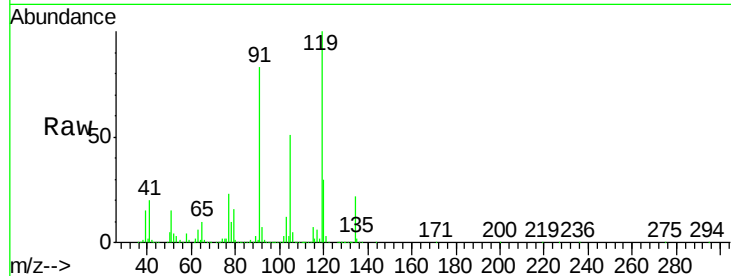
#65
tert-Butylbenzene
Concen: 12.356 ppbv
RT: 16.91 min Scan# 4347
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Instrument :
MSVOA_L
ClientSampleID :
VL0204ABS01

Tot Ion:119 Resp: 5505500
Ion Ratio Lower Upper
119 100
91 84.0 63.0 94.6
134 19.5 15.5 23.3

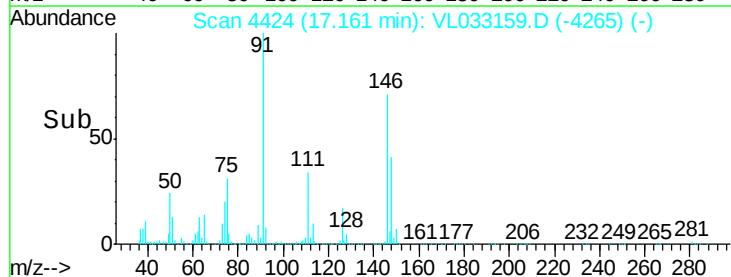
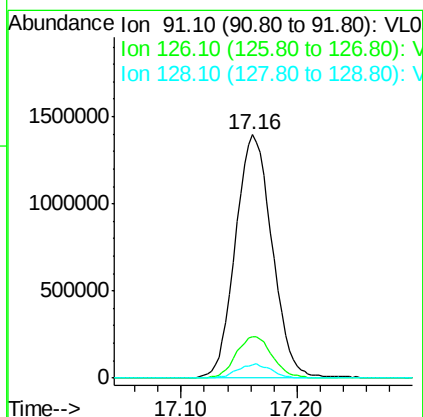
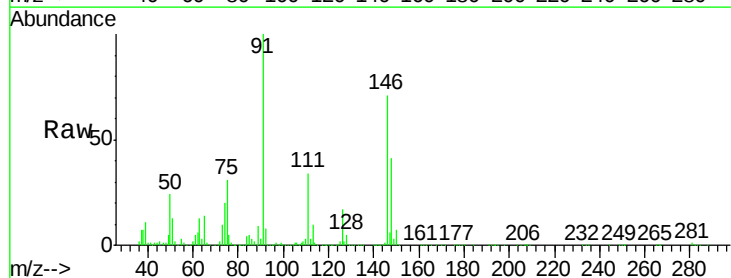
Manual Integrations
APPROVED

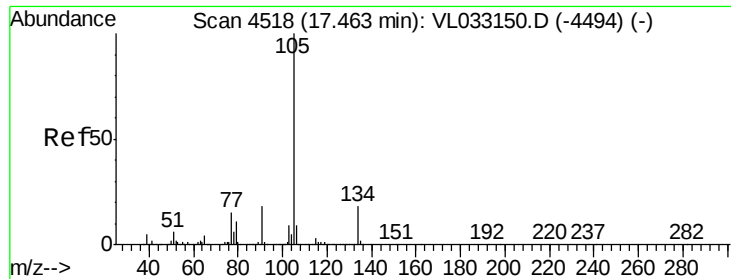
MMDadoda
2/5/2019 10:27:51 AM



#66
Benzyl Chloride
Concen: 15.105 ppbv
RT: 17.16 min Scan# 4424
Delta R.T. 0.01 min
Lab File: VL033159.D
Acq: 4 Feb 2019 17:17

Tgt Ion: 91 Resp: 3056818
Ion Ratio Lower Upper
91 100
126 17.0 14.9 22.3
128 5.5 4.7 7.1





#67

sec-Butylbenzene

Concen: 12.611 ppbv

RT: 17.46 min Scan# 4518

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Instrument :

MSVOA_L

ClientSampleId :

VL0204ABS01

Tot Ion:105 Resp: 8032602

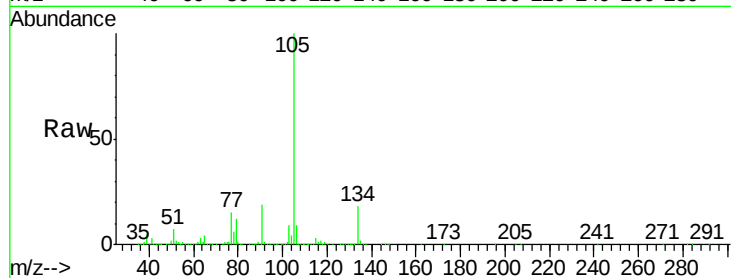
Ion Ratio Lower Upper

105 100

134 18.0 14.4 21.6

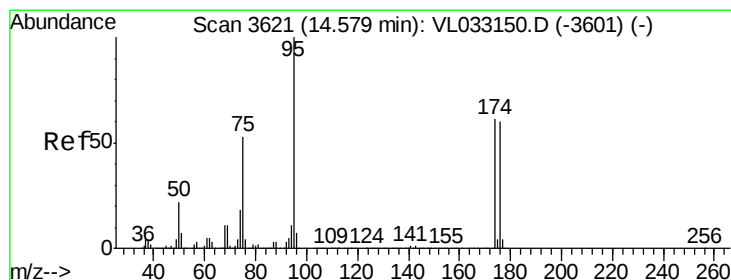
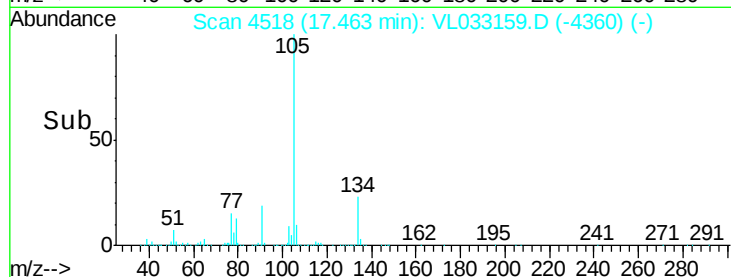
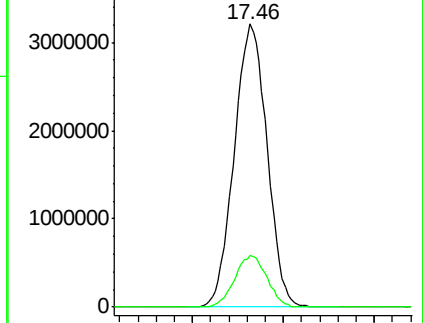
Manual Integrations
APPROVED

MMDadoda
2/5/2019 10:27:51 AM



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: 10.359 ppbv

RT: 14.58 min Scan# 3621

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

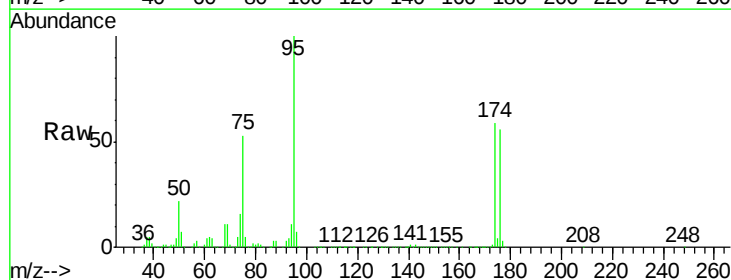
Tgt Ion: 95 Resp: 2259669

Ion Ratio Lower Upper

95 100

174 59.6 49.2 73.8

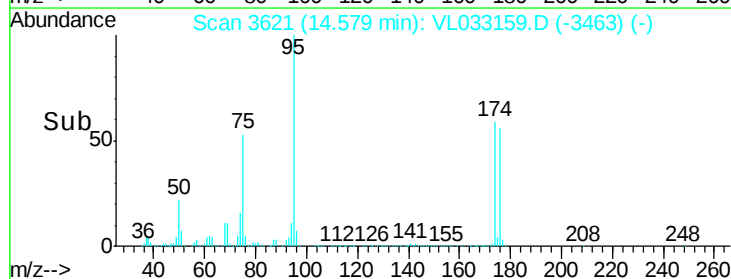
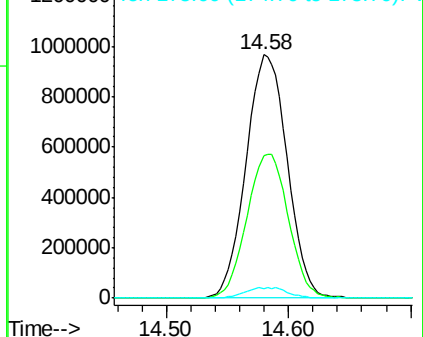
175 4.4 3.7 5.5

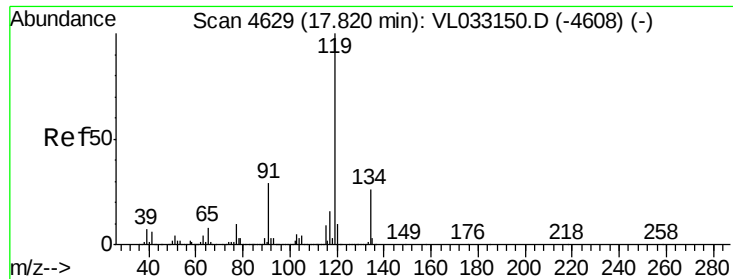


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





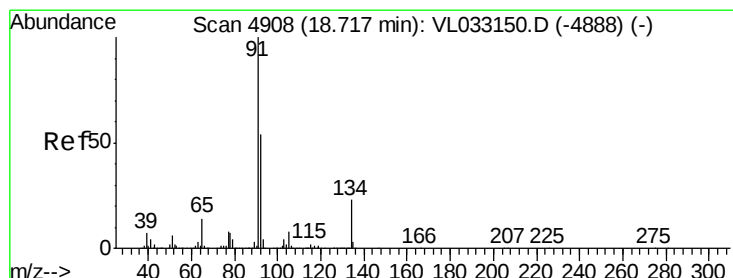
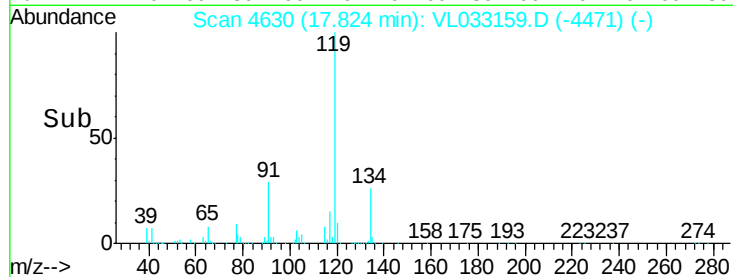
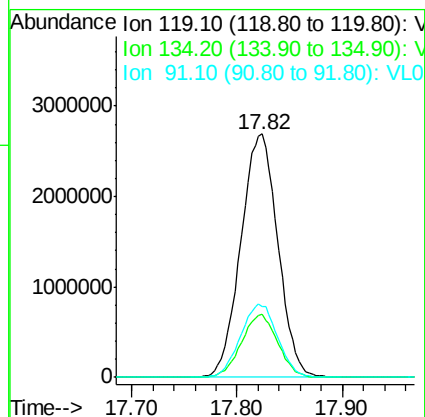
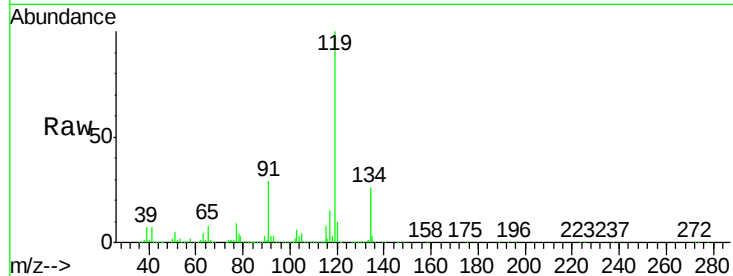
#69
 p-Isopropyltoluene
 Concen: 12.456 ppbv
 RT: 17.82 min Scan# 4630
 Delta R.T. 0.01 min
 Lab File: VL033159.D
 Acq: 4 Feb 2019 17:17

Instrument :
 MSVOA_L
 ClientSampleId :
 VL0204ABS01

Tot Ion	Ratio	Lower	Upper
119	100		
134	25.4	20.3	30.5
91	30.1	22.6	33.8

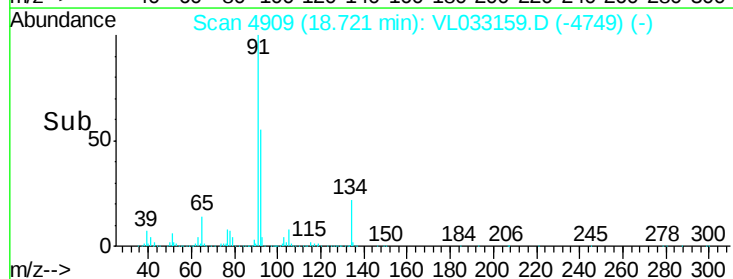
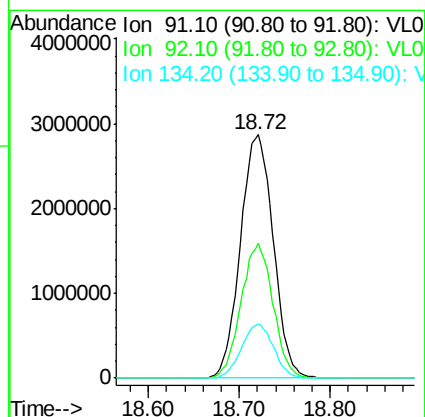
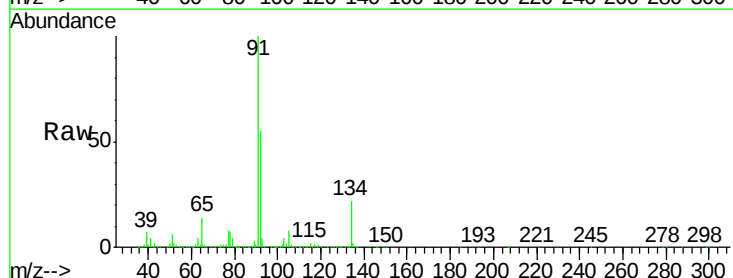
Manual Integrations
 APPROVED

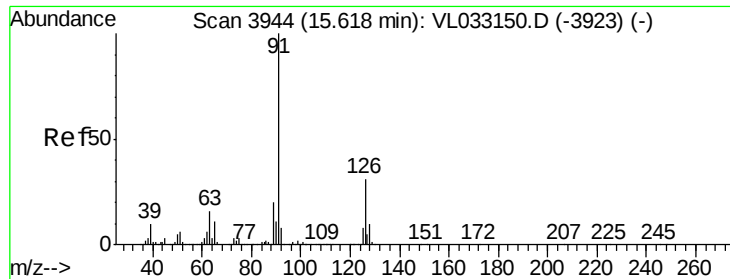
MMDadoda
 2/5/2019 10:27:51 AM



#70
 n-Butylbenzene
 Concen: 12.543 ppbv
 RT: 18.72 min Scan# 4909
 Delta R.T. 0.01 min
 Lab File: VL033159.D
 Acq: 4 Feb 2019 17:17

Tgt Ion	Ratio	Lower	Upper
91	100		
92	54.0	43.7	65.5
134	21.7	18.4	27.6





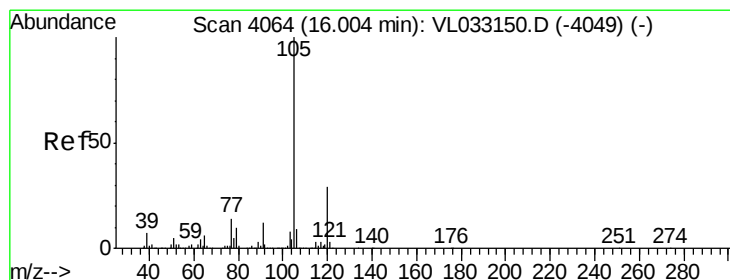
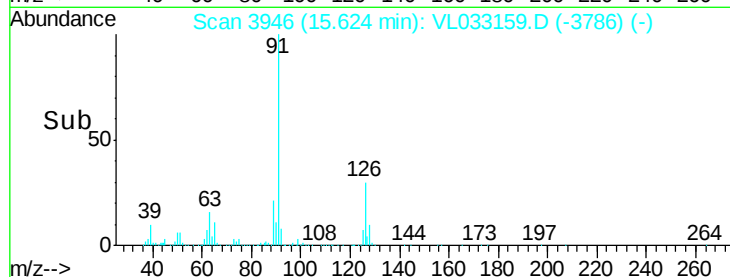
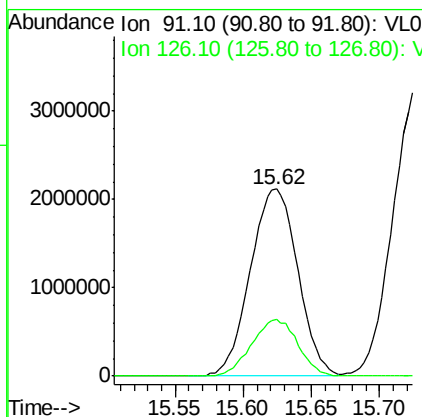
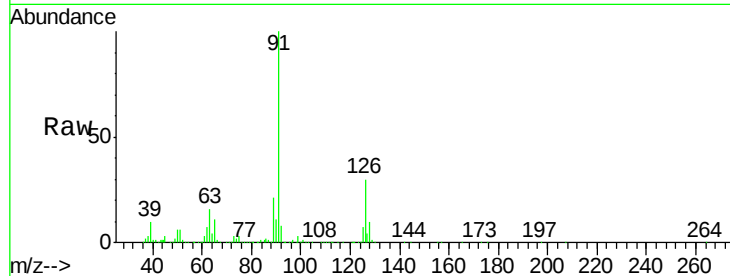
#71
 2-Chlorotoluene
 Concen: 12.983 ppbv
 RT: 15.62 min Scan# 3946
 Delta R.T. 0.01 min
 Lab File: VL033159.D
 Acq: 4 Feb 2019 17:17

Instrument :
 MSVOA_L
 ClientSampleId :
 VL0204ABS01

Tot Ion: 91 Resp: 5112416
 Ion Ratio Lower Upper
 91 100
 126 29.7 12.3 49.1

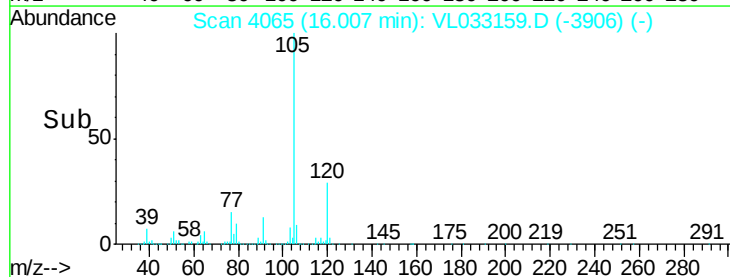
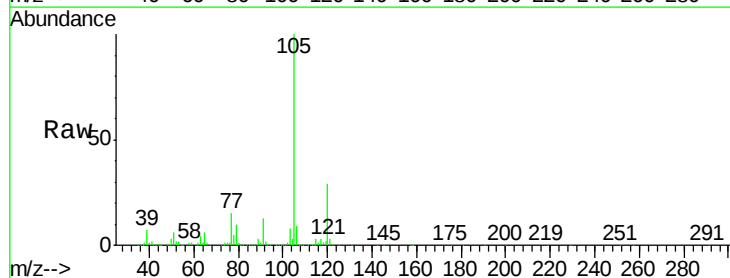
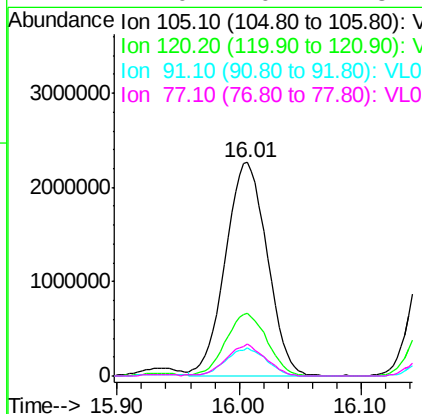
Manual Integrations
 APPROVED

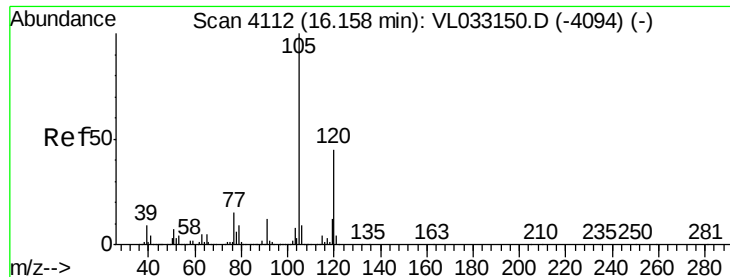
MMDadoda
 2/5/2019 10:27:51 AM



#72
 4-Ethyltoluene
 Concen: 12.924 ppbv
 RT: 16.01 min Scan# 4065
 Delta R.T. 0.01 min
 Lab File: VL033159.D
 Acq: 4 Feb 2019 17:17

Tgt Ion: 105 Resp: 5375575
 Ion Ratio Lower Upper
 105 100
 120 29.0 23.2 34.8
 91 12.7 9.5 14.3
 77 14.0 10.2 15.4





#73

1,3,5-Trimethylbenzene

Concen: 12.836 ppbv

RT: 16.16 min Scan# 4114

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Instrument :

MSVOA_L

ClientSampled :

VL0204ABS01

Tot Ion:105 Resp: 5147298

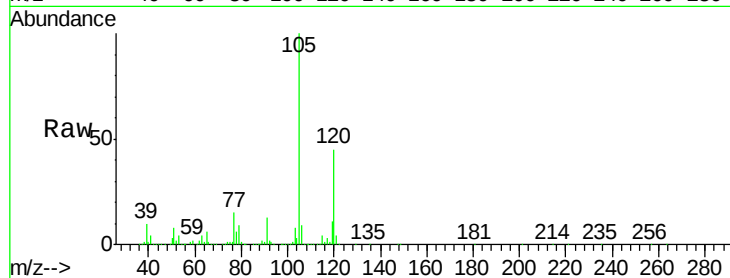
Ion Ratio Lower Upper

105 100

120 45.0 38.0 57.0

Manual Integrations
APPROVED

MMDadoda
2/5/2019 10:27:51 AM



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

2500000

2000000

1500000

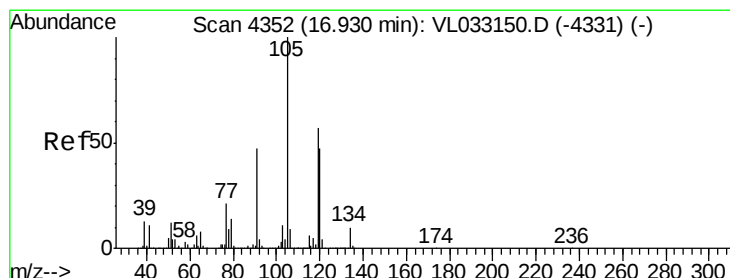
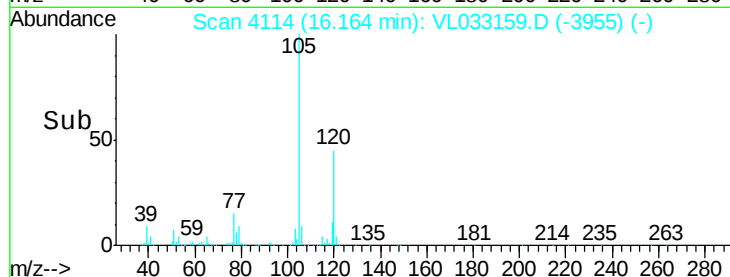
1000000

500000

0

16.10 16.20

Time-->



#74

1,2,4-Trimethylbenzene

Concen: 12.401 ppbv

RT: 16.93 min Scan# 4353

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Tgt Ion:105 Resp: 5072323

Ion Ratio Lower Upper

105 100

120 46.6 38.2 57.4

91 46.6 35.0 52.4

77 22.2 15.8 23.6

Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

3000000

2500000

2000000

1500000

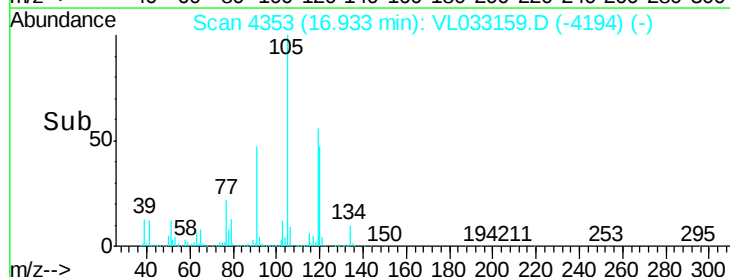
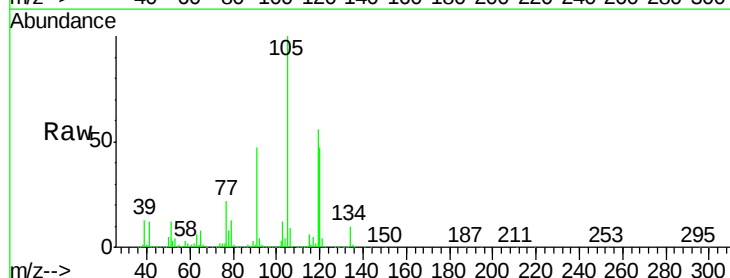
1000000

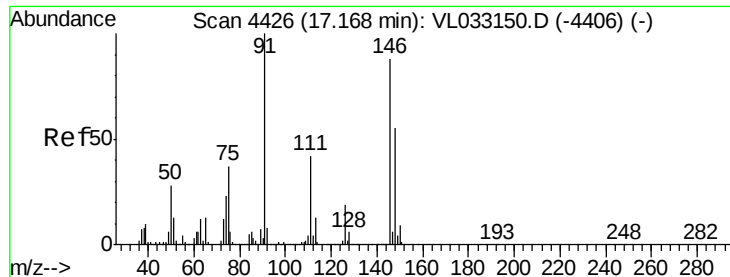
500000

0

16.80 16.90 17.00

Time-->





#75

1,3-Dichlorobenzene

Concen: 12.604 ppbv

RT: 17.17 min Scan# 4427

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Instrument :

MSVOA_L

ClientSampled :

VL0204ABS01

Tot Ion:146 Resp: 2846015

Ion Ratio Lower Upper

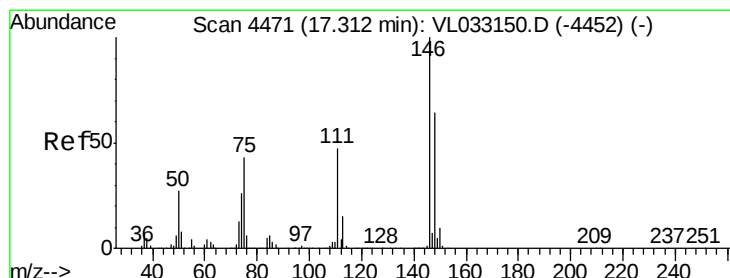
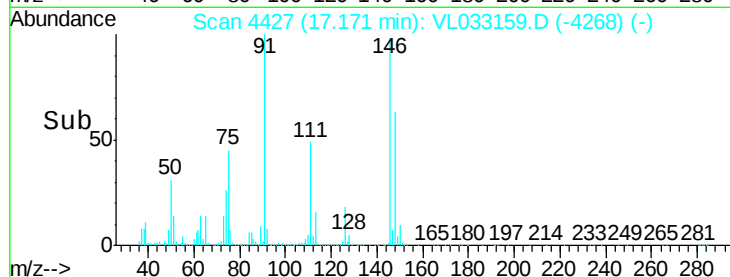
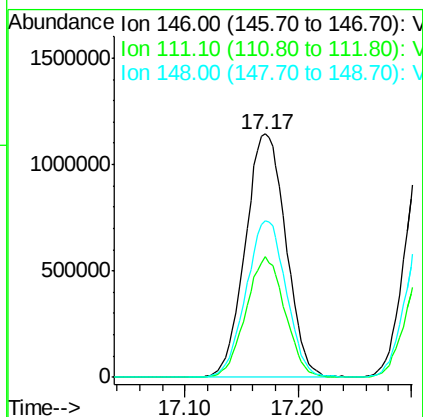
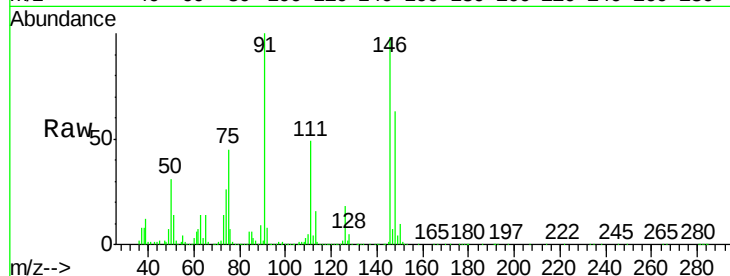
146 100

111 47.6 24.0 72.0

148 63.5 31.9 95.7

Manual Integrations
APPROVED

MMDadoda
2/5/2019 10:27:51 AM



#76

1,4-Dichlorobenzene

Concen: 12.762 ppbv

RT: 17.32 min Scan# 4472

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

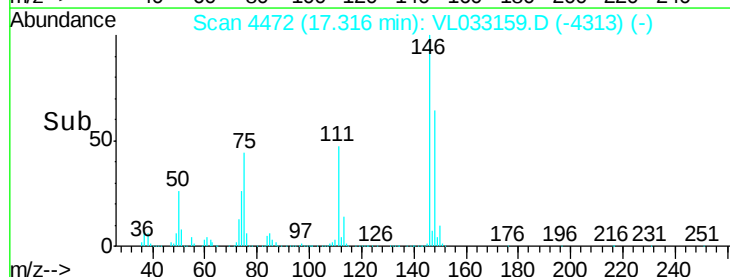
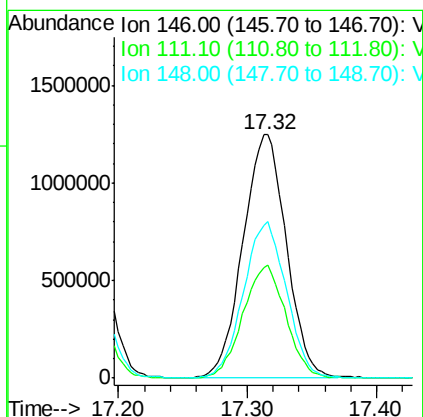
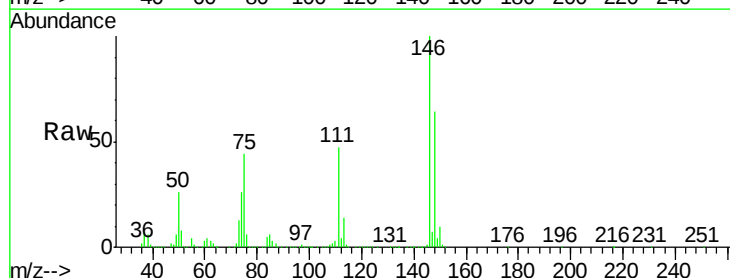
Tgt Ion:146 Resp: 2894539

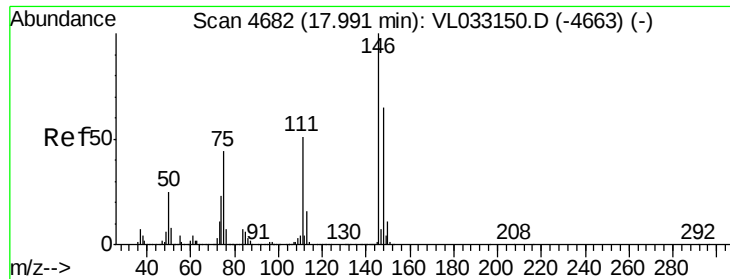
Ion Ratio Lower Upper

146 100

111 46.4 23.4 70.0

148 64.3 31.9 95.9





#77

1,2-Dichlorobenzene

Concen: 12.870 ppbv

RT: 18.00 min Scan# 4684

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Instrument :

MSVOA_L

ClientSampleId :

VL0204ABS01

Tot Ion:146 Resp: 2890593

Ion Ratio Lower Upper

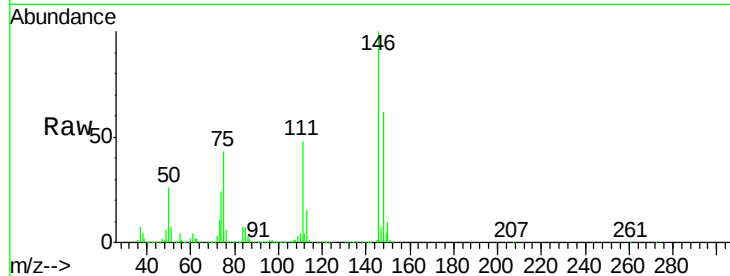
146 100

111 49.0 25.1 75.3

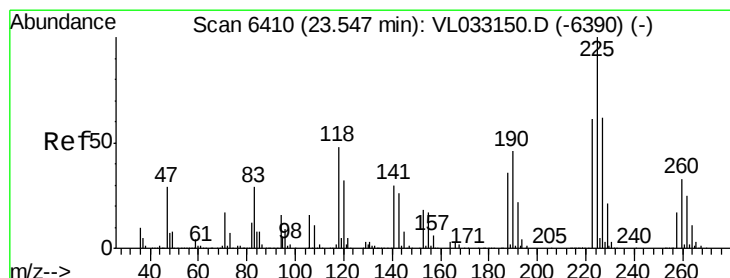
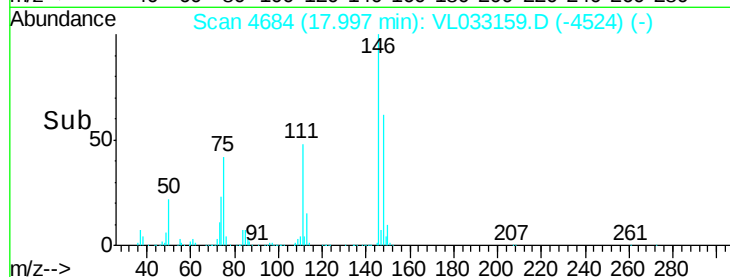
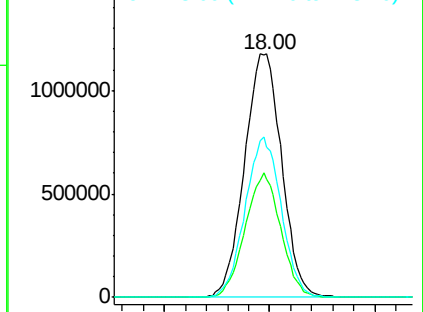
148 63.9 32.0 96.2

Manual Integrations
APPROVED

MMDadoda
2/5/2019 10:27:51 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: 11.652 ppbv

RT: 23.55 min Scan# 6410

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

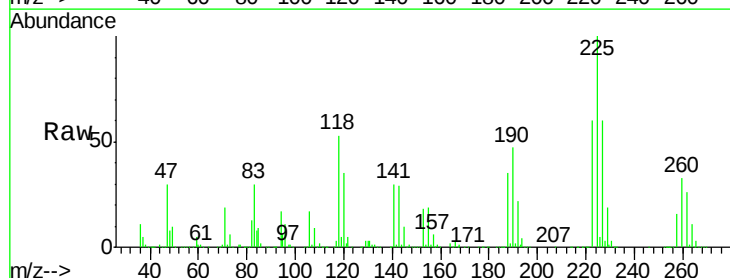
Tgt Ion:225 Resp: 1301917

Ion Ratio Lower Upper

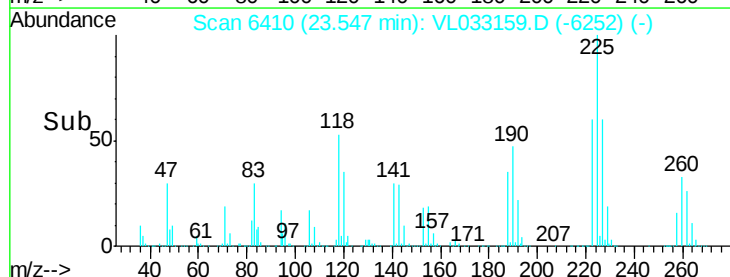
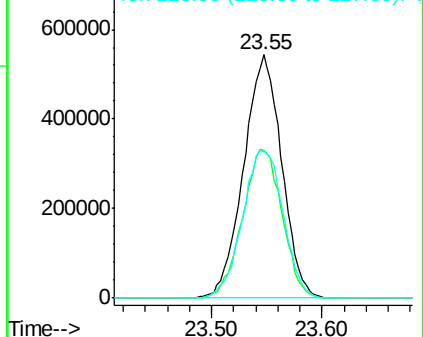
225 100

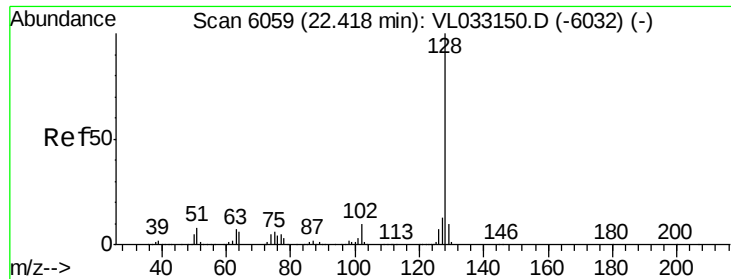
223 63.4 50.2 75.4

227 64.7 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: 11.871 ppbv m

RT: 22.42 min Scan# 6060

Delta R.T. 0.02 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Instrument :

MSVOA_L

ClientSampleId :

VL0204ABS01

Tot Ion:128 Resp: 5685283

Ion	Ratio	Lower	Upper
128	100		
127	13.1	10.6	16.0
129	11.0	9.0	13.4

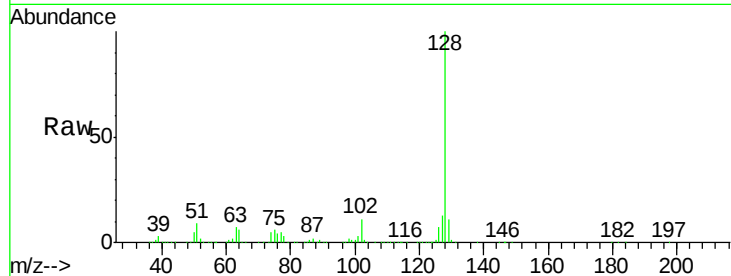
128 100

127 13.1 10.6 16.0

129 11.0 9.0 13.4

Manual Integrations
APPROVED

MMDadoda
2/5/2019 10:27:51 AM



Abundance Ion 128.10 (127.80 to 128.80): V

Ion 127.10 (126.80 to 127.80): V

Ion 129.10 (128.80 to 129.80): V

22.42

2000000

1500000

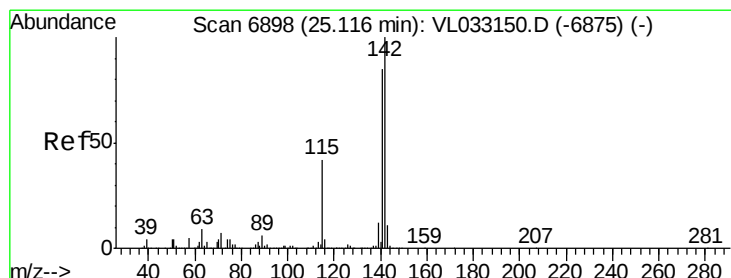
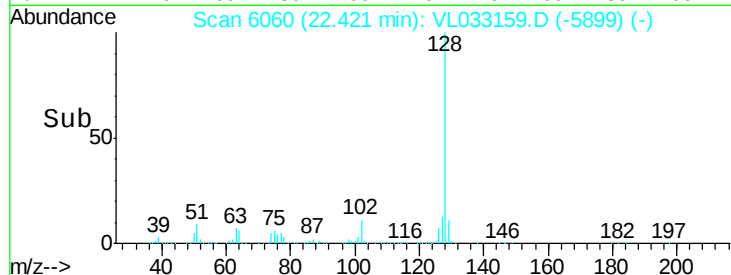
1000000

500000

0

Time-->

22.30 22.40 22.50



#80

Naphthalene, 2-methyl-

Concen: 10.955 ppbv

RT: 25.12 min Scan# 6898

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

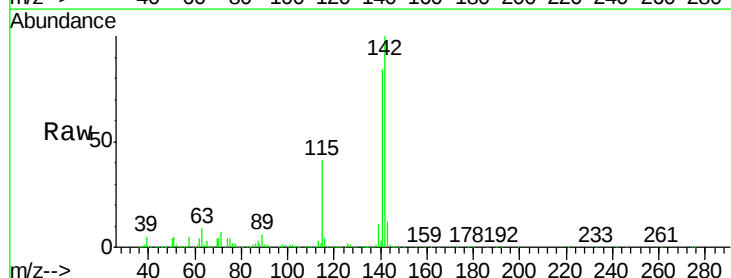
Tgt Ion:142 Resp: 2674903

Ion	Ratio	Lower	Upper
142	100		
141	84.6	66.5	99.7
115	41.3	31.3	46.9

142 100

141 84.6 66.5 99.7

115 41.3 31.3 46.9



Abundance Ion 142.00 (141.70 to 142.70): V

Ion 141.00 (140.70 to 141.70): V

Ion 115.00 (114.70 to 115.70): V

25.12

1500000

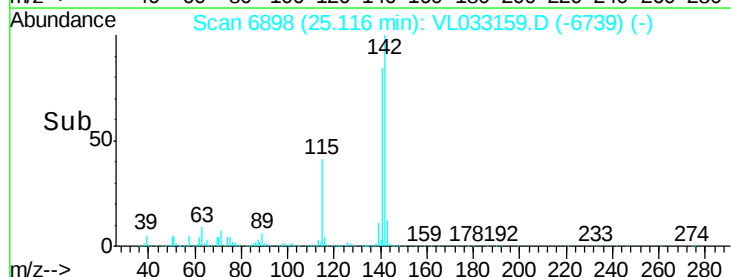
1000000

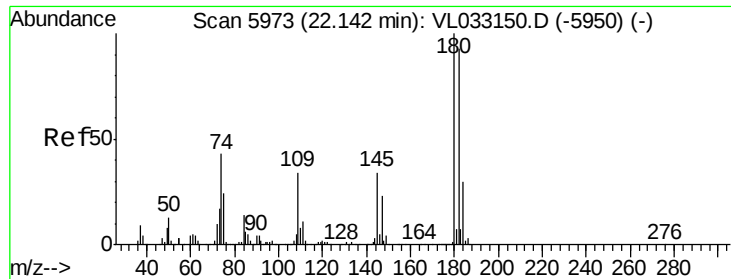
500000

0

Time-->

25.00 25.10 25.20





#81

1,2,4-Trichlorobenzene

Concen: 12.087 ppbv

RT: 22.14 min Scan# 5972

Delta R.T. 0.01 min

Lab File: VL033159.D

Acq: 4 Feb 2019 17:17

Instrument :

MSVOA_L

ClientSampleId :

VL0204ABS01

Tot Ion:180 Resp: 2623596

Ion Ratio Lower Upper

180 100

182 95.2 76.2 114.4

184 30.6 24.6 36.8

Manual Integrations

APPROVED

MMDadoda

2/5/2019 10:27:51 AM

