

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL122018\
 Data File : VL033026.D
 Acq On : 20 Dec 2018 15:25
 Operator : SY/AP
 Sample : VL1220ABS01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleID :
 VL1220ABS01

Manual Integrations
 APPROVED

MMDadoda
 12/24/2018 8:26:18 AM

Quant Time: Dec 23 10:58:13 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL120718AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Dec 0
 QLast Update : Fri Dec 07 09:35:17 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	1315284	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	3132083	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	3114846m	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	2386513	10.37	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.70%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	1859382	10.590	ppbv	96
3) Chlorodifluoromethane	3.02	51	983305	9.871	ppbv	99
4) Chloromethane	3.17	50	538258	9.282	ppbv	98
5) Vinyl Chloride	3.30	62	567907	9.624	ppbv	97
6) Bromomethane	3.52	94	375894	10.185	ppbv	97
7) Chloroethane	3.61	64	219204	10.365	ppbv	97
8) Dichlorotetrafluoroethane	3.23	85	1462700	10.024	ppbv	99
9) Propene	3.04	41	390259	9.908	ppbv	99
10) Heptane	8.25	43	1493224	10.092	ppbv	100
11) Trichlorofluoromethane	4.01	101	1634582	9.881	ppbv	100
12) 1,1,2-Trichlorotrifluoroet	4.56	101	1090567	7.727	ppbv	100
13) Ethanol	3.65	45	101680	7.498	ppbv	97
14) Bromoethene	3.79	108	492450	10.509	ppbv	100
15) Acetone	3.91	43	1032450	9.145	ppbv	99
16) 1,3-Butadiene	3.37	39	443795	9.908	ppbv	90
17) tert-Butyl alcohol	4.36	59	261884	9.111	ppbv #	82
18) 1,1-Dichloroethene	4.36	96	510237	9.230	ppbv	100
19) Isopropyl Alcohol	4.03	45	719944	10.155	ppbv	99
20) Methylene Chloride	4.42	84	426841	7.736	ppbv	98
21) Allyl Chloride	4.48	41	777182	8.447	ppbv	98
22) trans-1,2-Dichloroethene	4.97	96	725616	10.577	ppbv	98
23) Vinyl Acetate	5.16	43	2161587	11.309	ppbv	99
24) 1,1-Dichloroethane	5.10	63	1668926	10.041	ppbv	99
25) Ethyl Acetate	5.78	43	2767907	10.379	ppbv	100
26) Hexane	5.79	57	1269037	10.307	ppbv	98
27) Carbon Disulfide	4.62	76	1239116	8.049	ppbv	99
28) Methyl tert-Butyl Ether	5.12	73	2082397	11.261	ppbv	100
29) Chloroform	5.86	83	2165325	9.856	ppbv	95
30) Cyclohexane	7.25	84	1044481	10.235	ppbv	99
31) cis-1,2-Dichloroethene	5.65	61	1306227	11.561	ppbv	97
32) 1,1,1-Trichloroethane	6.63	97	2232918	9.606	ppbv	99
34) 2-Butanone	5.34	43	1673765	12.268	ppbv	99
35) Carbon Tetrachloride	7.14	117	2367725	9.618	ppbv	98
36) Benzene	7.01	78	2410405	10.463	ppbv	99
37) 1,2-Dichloroethane	6.42	62	1636202	10.432	ppbv	100
38) Trichloroethene	7.97	130	1077850	11.242	ppbv	99
39) 1,2-Dichloropropane	7.74	63	904834	10.357	ppbv	96
40) 1,4-Dioxane	7.96	88	351858	10.934	ppbv #	94
41) Tetrahydrofuran	6.16	42	931983	10.984	ppbv	99
42) Bromodichloromethane	7.93	83	2311374	10.636	ppbv	100
43) Methyl Methacrylate	8.15	69	972445	11.392	ppbv	99

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL122018\
 Data File : VL033026.D
 Acq On : 20 Dec 2018 15:25
 Operator : SY/AP
 Sample : VL1220ABS01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VL1220ABS01

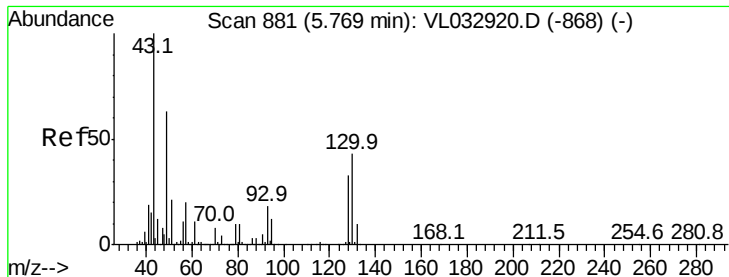
Manual Integrations
 APPROVED

MMDadoda
 12/24/2018 8:26:18 AM

Quant Time: Dec 23 10:58:13 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL120718AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Dec 0
 QLast Update : Fri Dec 07 09:35:17 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,2,4-Trimethylpentane	8.00	57	4230766	10.819	ppbv	100
45) t-1,3-Dichloropropene	9.42	75	1323397	12.644	ppbv	98
46) cis-1,3-Dichloropropene	8.84	75	1096386	8.559	ppbv	98
47) 1,1,2-Trichloroethane	9.62	97	1013247	10.537	ppbv	100
48) Dibromochloromethane	10.46	129	1909345	10.584	ppbv	100
49) Bromoform	13.21	173	1709406	11.521	ppbv	100
50) 4-Methyl-2-Pentanone	8.88	43	1679579	7.699	ppbv	99
51) 2-Hexanone	10.28	43	1656695	11.197	ppbv	99
52) Tetrachloroethene	11.38	164	889867	10.619	ppbv	98
53) Toluene	9.95	91	2827863	11.574	ppbv	100
54) 1,2-Dibromoethane	10.77	107	1577426	10.500	ppbv	98
56) 1,1,1,2-Tetrachloroethane	12.29	131	1376213	9.910	ppbv	98
57) Chlorobenzene	12.31	112	2258142	10.038	ppbv	98
58) Ethyl Benzene	12.87	91	3981973	11.984	ppbv	98
59) m/p-Xylene	13.14	91	6875614m	22.823	ppbv	
60) o-Xylene	13.86	91	3363448	11.056	ppbv	100
61) Styrene	13.69	104	2473319	12.222	ppbv	100
62) Isopropylbenzene	14.83	105	4642466	10.937	ppbv	99
63) 1,1,2,2-Tetrachloroethane	13.84	83	2299389	9.734	ppbv	100
64) n-propylbenzene	15.73	120	1196889	10.857	ppbv	99
65) tert-Butylbenzene	16.91	119	4282757	10.884	ppbv	100
66) Benzyl Chloride	17.16	91	2537584	11.635	ppbv	100
67) sec-Butylbenzene	17.47	105	6008992	10.358	ppbv	100
69) p-Isopropyltoluene	17.82	119	5208568	11.078	ppbv	100
70) n-Butylbenzene	18.72	91	5251050	12.139	ppbv	100
71) 2-Chlorotoluene	15.62	91	3453792	10.942	ppbv	99
72) 4-Ethyltoluene	16.01	105	3844781	11.320	ppbv	100
73) 1,3,5-Trimethylbenzene	16.17	105	3712979	11.198	ppbv	100
74) 1,2,4-Trimethylbenzene	16.94	105	3898310	10.412	ppbv	94
75) 1,3-Dichlorobenzene	17.17	146	2205689	10.004	ppbv	99
76) 1,4-Dichlorobenzene	17.32	146	2110644	10.259	ppbv	99
77) 1,2-Dichlorobenzene	18.00	146	2208709	10.727	ppbv	100
78) Hexachloro-1,3-Butadiene	23.55	225	1034261	9.134	ppbv	99
79) Naphthalene	22.42	128	3132172	12.956	ppbv	100
80) Naphthalene, 2-methyl-	25.12	142	638869	12.369	ppbv	99
81) 1,2,4-Trichlorobenzene	22.14	180	1545574m	12.055	ppbv	

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 881

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

ClientSampleId :

VL1220ABS01

Tot Ion: 49 Resp: 1315284

Ion Ratio Lower Upper

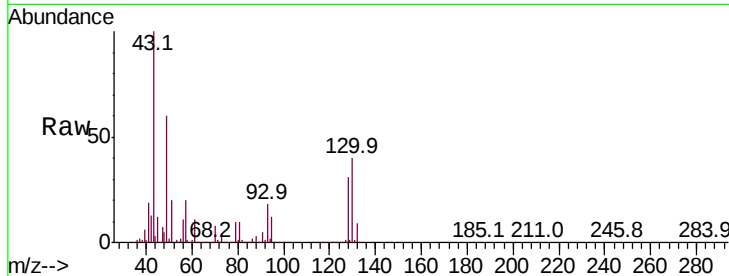
49 100

128 52.9 26.3 78.8

130 67.3 33.9 101.7

Manual Integrations
APPROVED

MMDadoda
12/24/2018 8:26:18 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

5.77

800000

600000

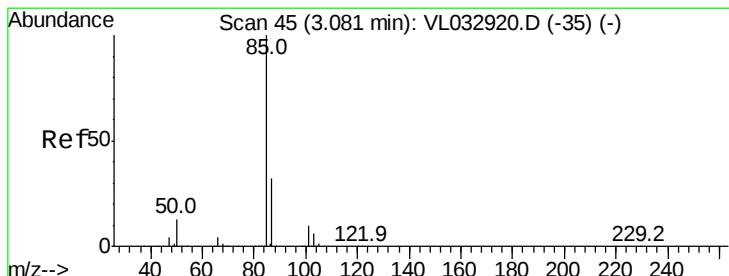
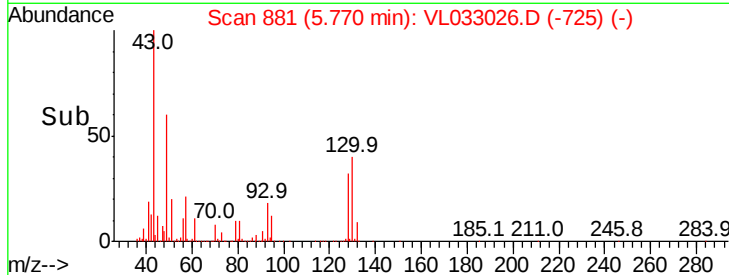
400000

200000

0

5.70 5.75 5.80

Time-->



#2

Dichlorodifluoromethane

Concen: 10.590 ppbv

RT: 3.08 min Scan# 45

Delta R.T. 0.00 min

Lab File: VL033026.D

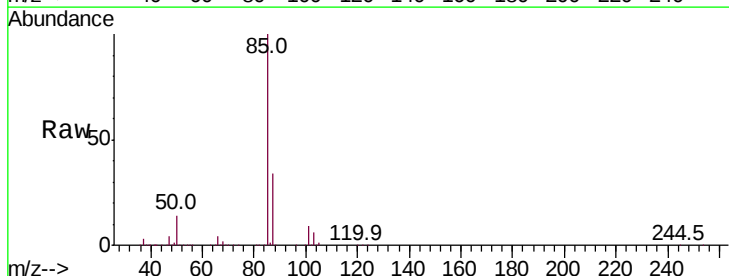
Acq: 20 Dec 2018 15:25

Tgt Ion: 85 Resp: 1859382

Ion Ratio Lower Upper

85 100

87 34.4 25.7 38.5



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

3.08

1500000

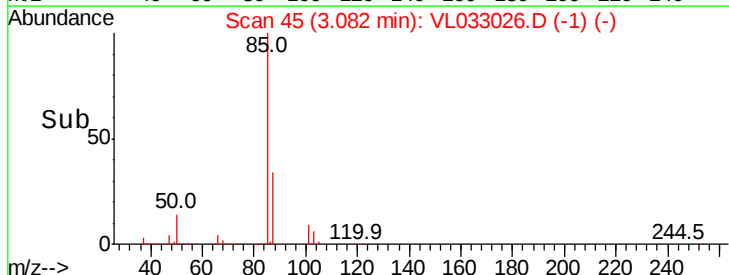
1000000

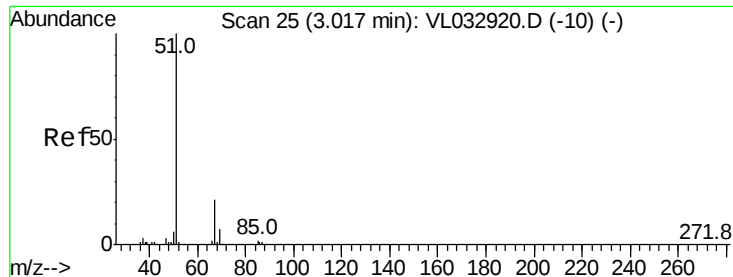
500000

0

3.05 3.10

Time-->





#3

Chlorodifluoromethane

Concen: 9.871 ppbv

RT: 3.02 min Scan# 26

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Tot Ion: 51 Resp: 983305

Ion Ratio Lower Upper

51 100

67 21.2 16.8 25.2

Instrument :

MSVOA_L

ClientSampleId :

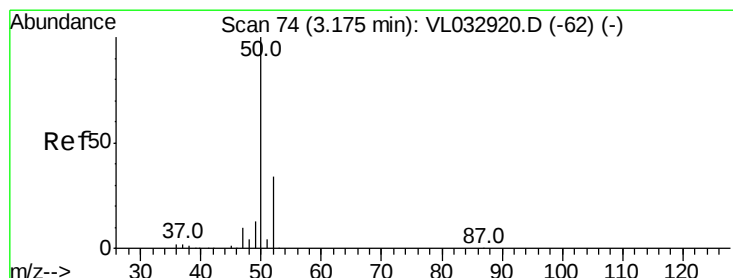
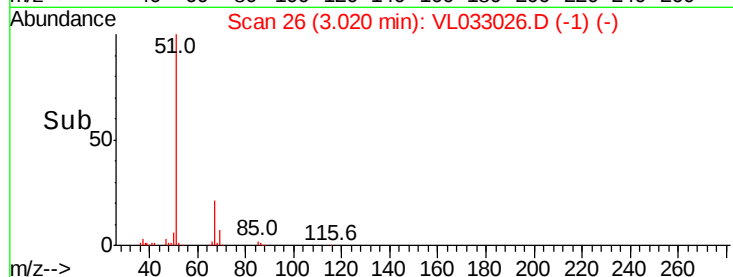
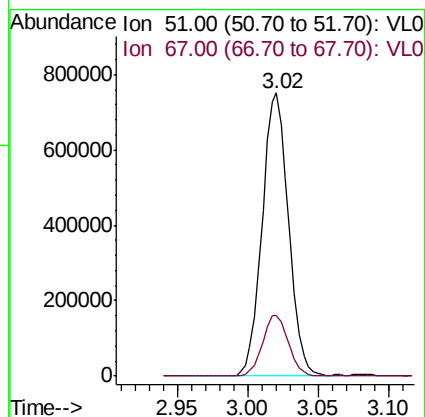
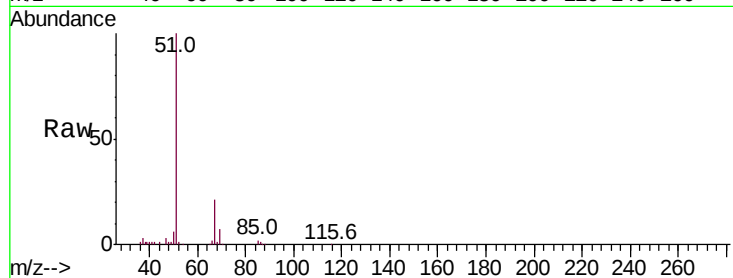
VL1220ABS01

Manual Integrations

APPROVED

MMDadoda

12/24/2018 8:26:18 AM



#4

Chloromethane

Concen: 9.282 ppbv

RT: 3.17 min Scan# 74

Delta R.T. 0.00 min

Lab File: VL033026.D

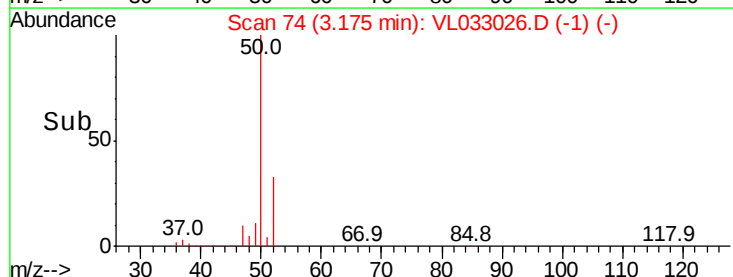
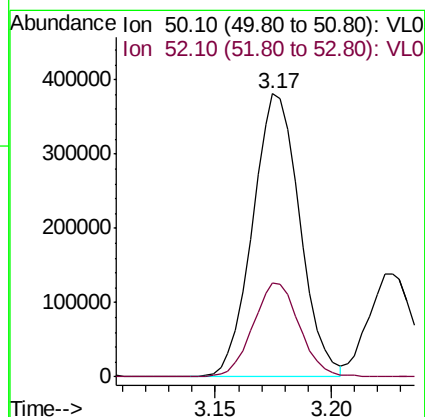
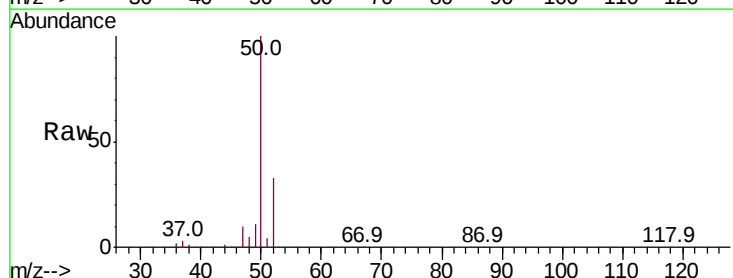
Acq: 20 Dec 2018 15:25

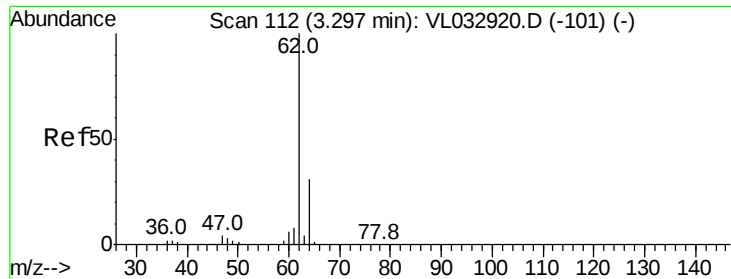
Tgt Ion: 50 Resp: 538258

Ion Ratio Lower Upper

50 100

52 33.0 27.3 40.9





#5

Vinyl Chloride

Concen: 9.624 ppbv

RT: 3.30 min Scan# 112

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

ClientSampleId :

VL1220ABS01

Tot Ion: 62 Resp: 567907

Ion Ratio Lower Upper

62 100

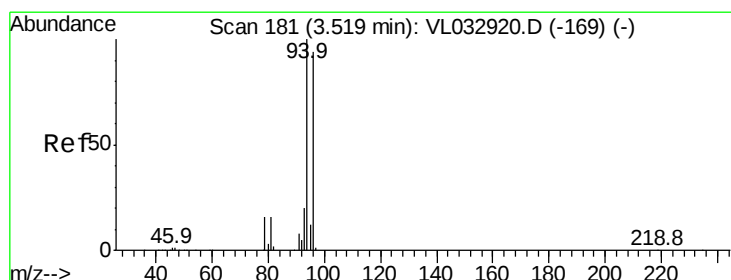
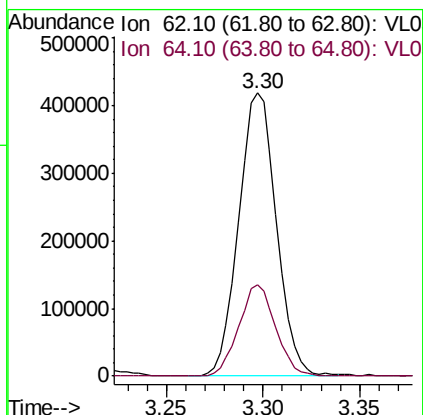
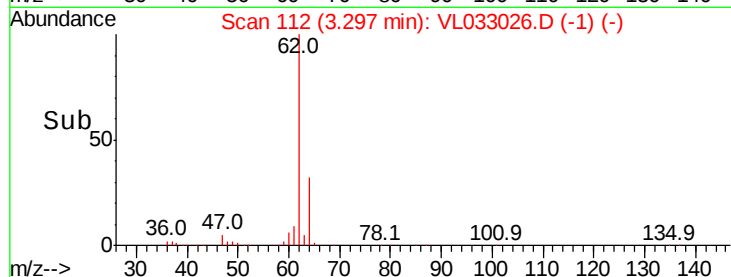
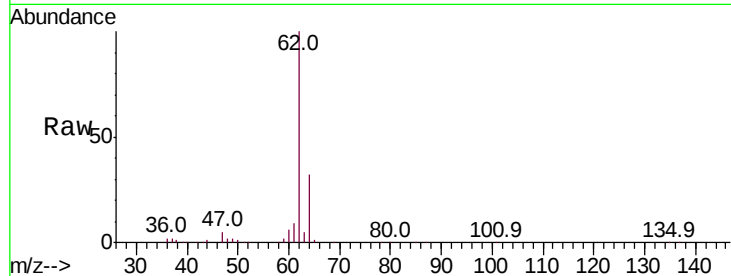
64 32.5 24.8 37.2

Manual Integrations

APPROVED

MMDadoda

12/24/2018 8:26:18 AM



#6

Bromomethane

Concen: 10.185 ppbv

RT: 3.52 min Scan# 181

Delta R.T. 0.00 min

Lab File: VL033026.D

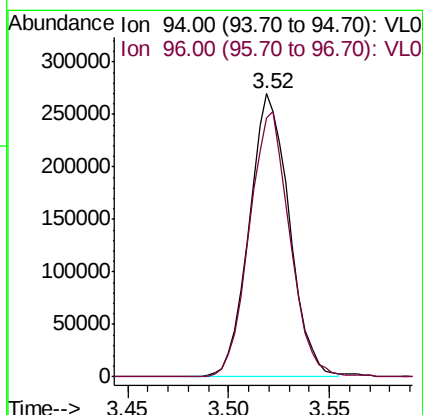
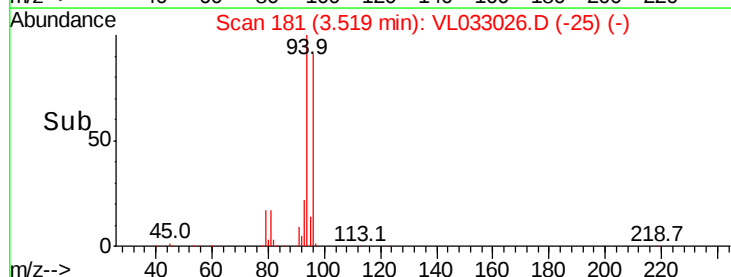
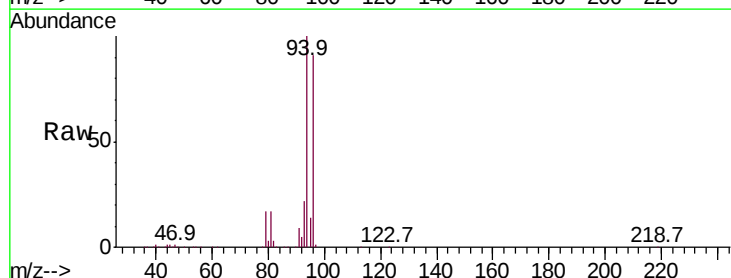
Acq: 20 Dec 2018 15:25

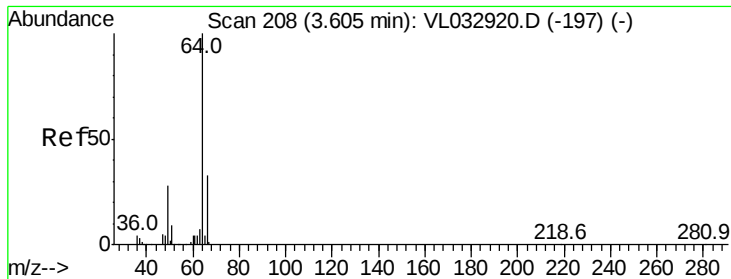
Tgt Ion: 94 Resp: 375894

Ion Ratio Lower Upper

94 100

96 91.3 75.5 113.3





#7

Chloroethane

Concen: 10.365 ppbv

RT: 3.61 min Scan# 208

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

ClientSampleId :

VL1220ABS01

Tot Ion: 64 Resp: 219204

Ion Ratio Lower Upper

64 100

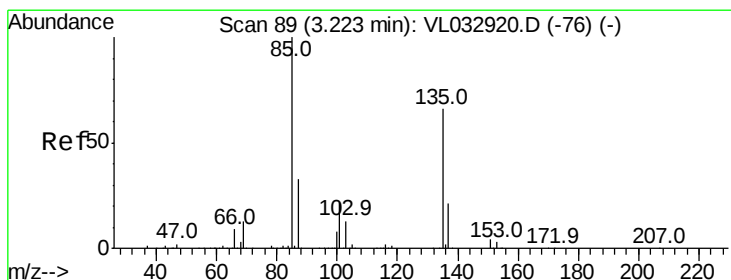
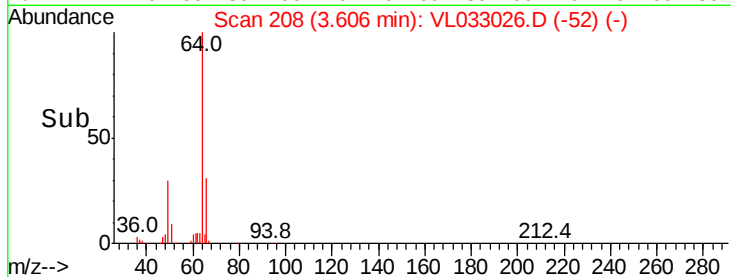
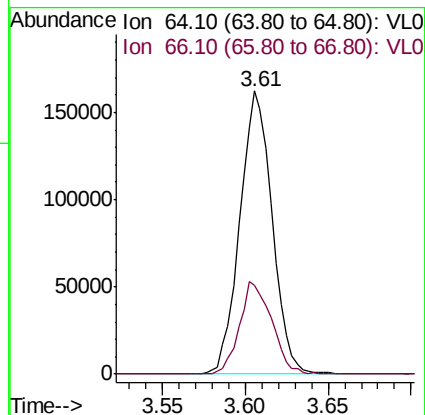
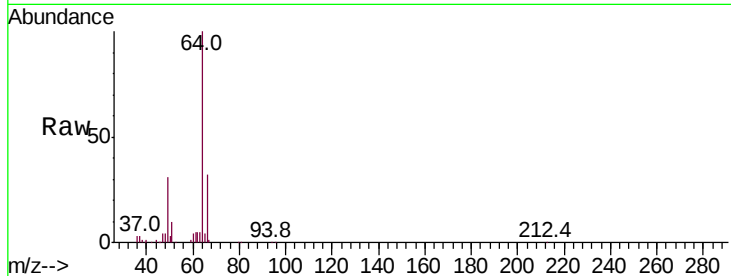
66 31.6 26.6 40.0

Manual Integrations

APPROVED

MMDadoda

12/24/2018 8:26:18 AM



#8

Dichlorotetrafluoroethane

Concen: 10.024 ppbv

RT: 3.23 min Scan# 90

Delta R.T. 0.00 min

Lab File: VL033026.D

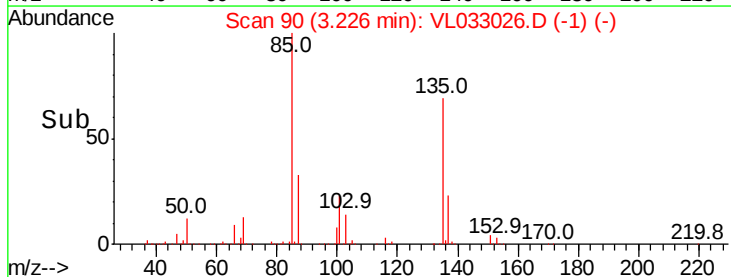
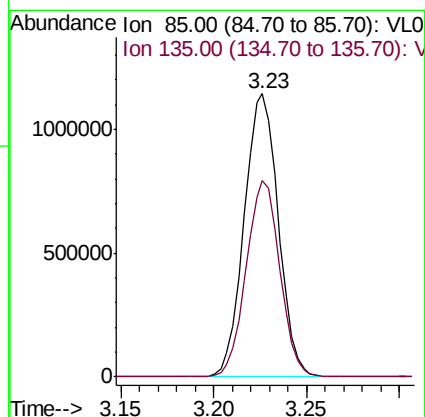
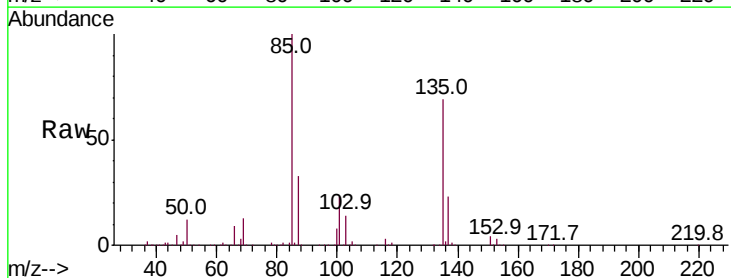
Acq: 20 Dec 2018 15:25

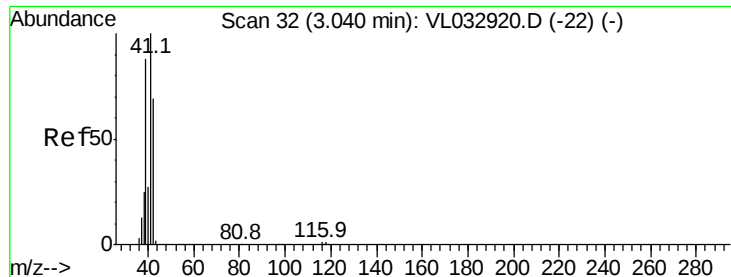
Tgt Ion: 85 Resp: 1462700

Ion Ratio Lower Upper

85 100

135 68.9 54.5 81.7





#9

Propene

Concen: 9.908 ppbv

RT: 3.04 min Scan# 33

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

ClientSampleId :

VL1220ABS01

Tot Ion: 41 Resp: 390259

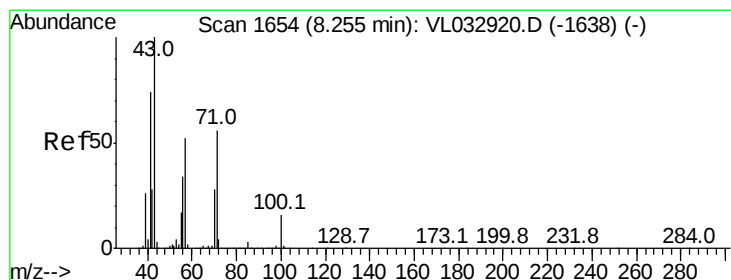
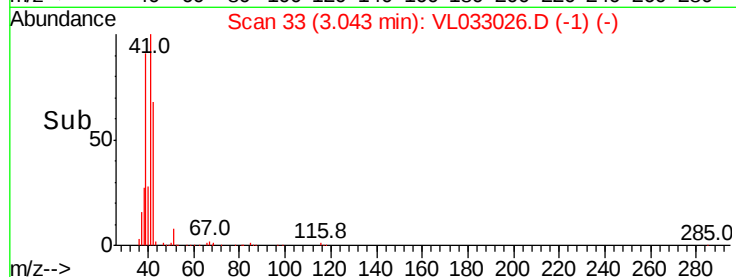
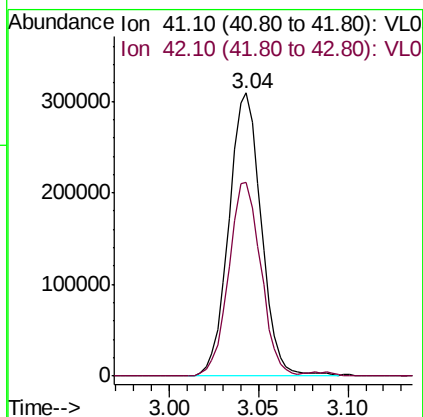
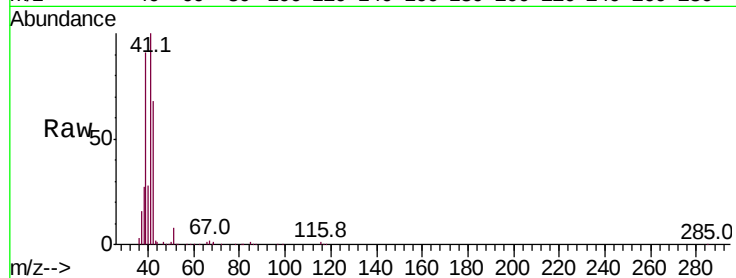
Ion Ratio Lower Upper

41 100

42 69.1 56.2 84.2

Manual Integrations
APPROVED

MMDadoda
12/24/2018 8:26:18 AM



#10

Heptane

Concen: 10.092 ppbv

RT: 8.25 min Scan# 1654

Delta R.T. 0.00 min

Lab File: VL033026.D

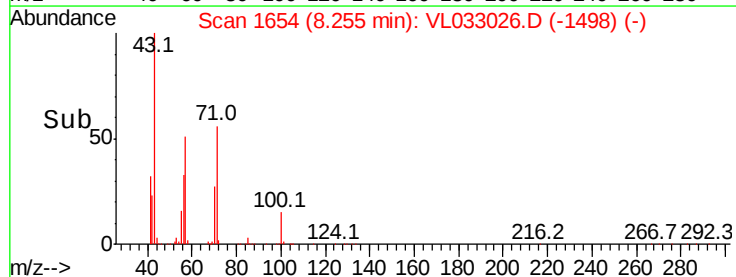
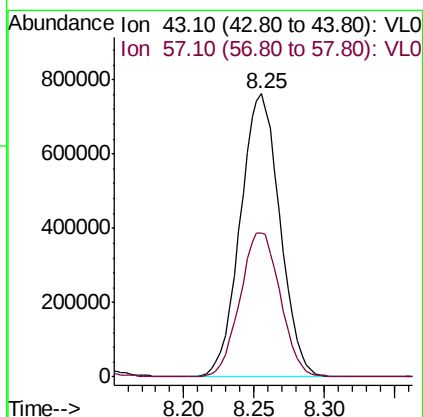
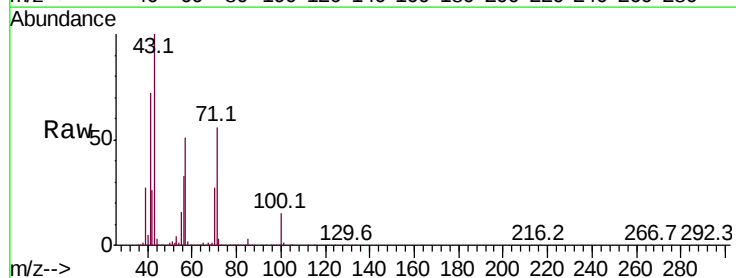
Acq: 20 Dec 2018 15:25

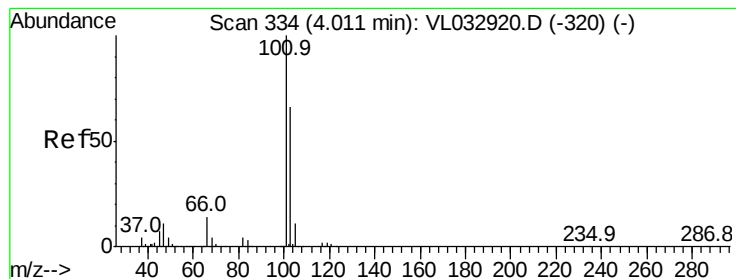
Tgt Ion: 43 Resp: 1493224

Ion Ratio Lower Upper

43 100

57 51.9 41.8 62.6





#11

Trichlorofluoromethane

Concen: 9.881 ppbv

RT: 4.01 min Scan# 334

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

ClientSampleId :

VL1220ABS01

Tot Ion:101 Resp: 1634582

Ion Ratio Lower Upper

101 100

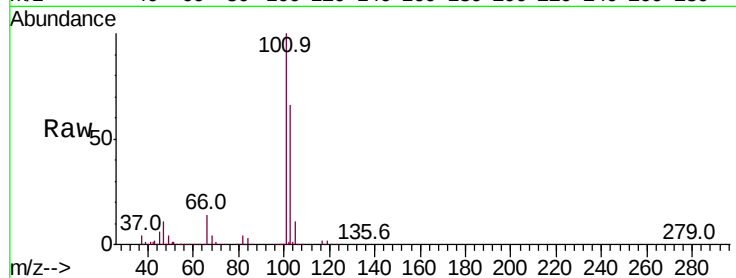
103 65.9 52.7 79.1

Manual Integrations

APPROVED

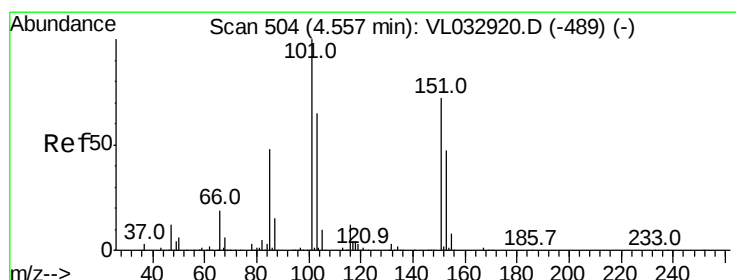
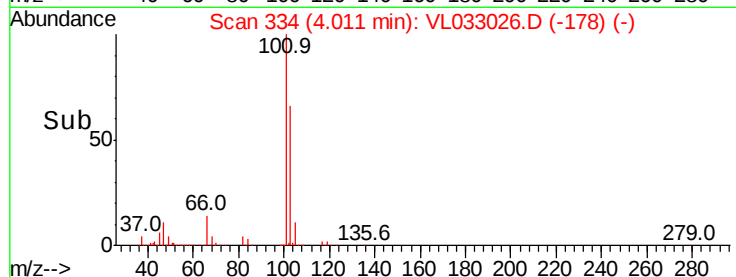
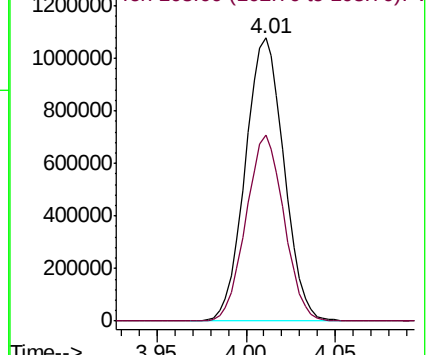
MMDadoda

12/24/2018 8:26:18 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: 7.727 ppbv

RT: 4.56 min Scan# 504

Delta R.T. 0.00 min

Lab File: VL033026.D

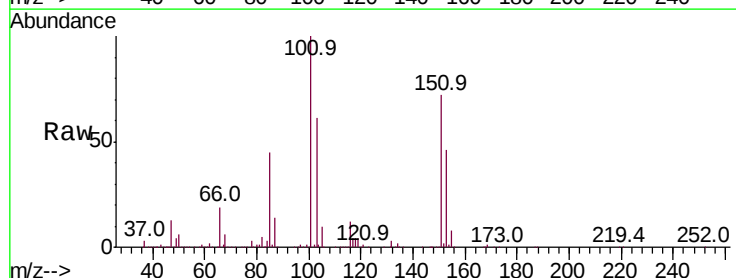
Acq: 20 Dec 2018 15:25

Tgt Ion:101 Resp: 1090567

Ion Ratio Lower Upper

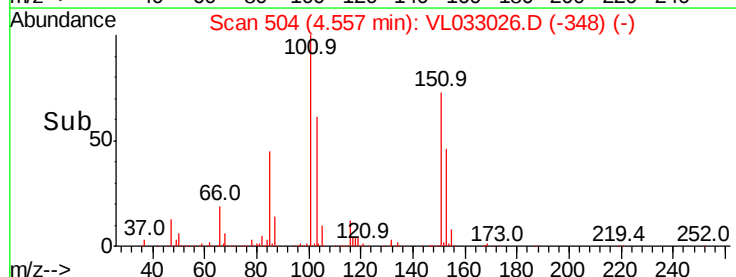
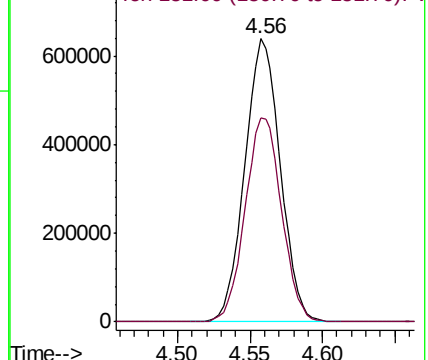
101 100

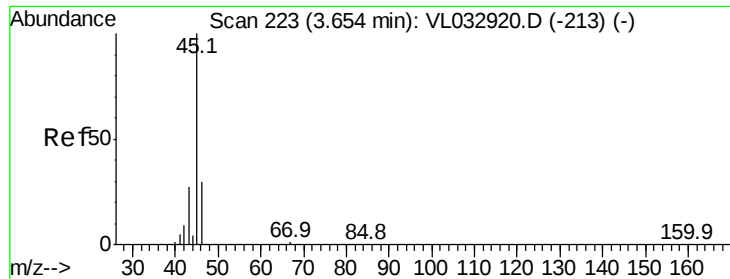
151 74.1 59.3 88.9



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





#13

Ethanol

Concen: 7.498 ppbv

RT: 3.65 min Scan# 223

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

ClientSampleId :

VL1220ABS01

Tot Ion: 45 Resp: 101680

Ion Ratio Lower Upper

45 100

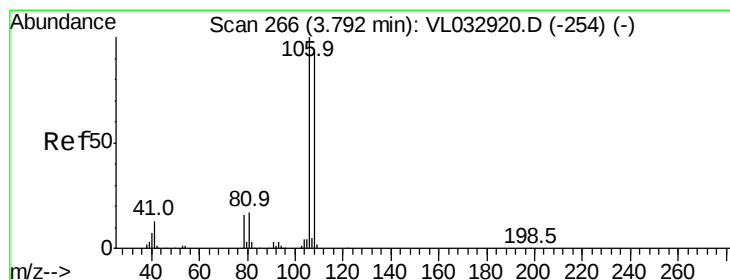
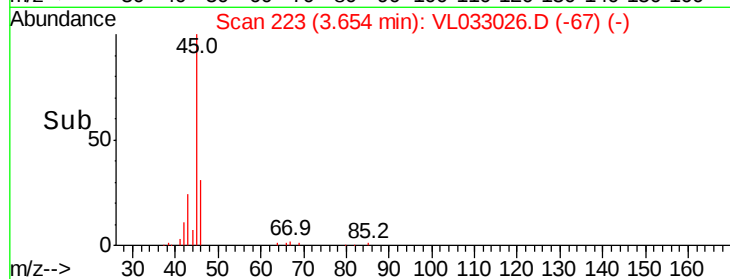
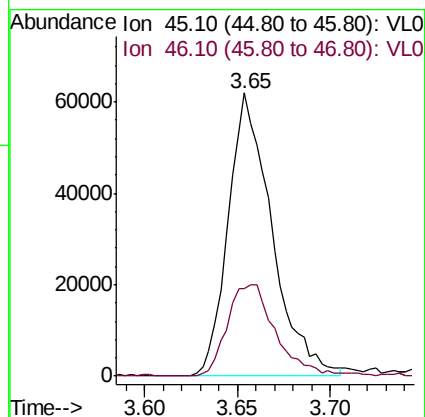
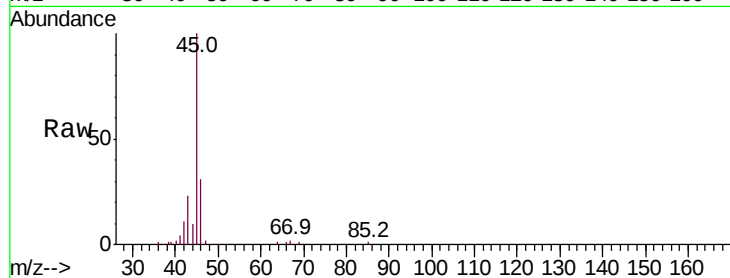
46 36.6 13.8 55.4

Manual Integrations

APPROVED

MMDadoda

12/24/2018 8:26:18 AM



#14

Bromoethene

Concen: 10.509 ppbv

RT: 3.79 min Scan# 266

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

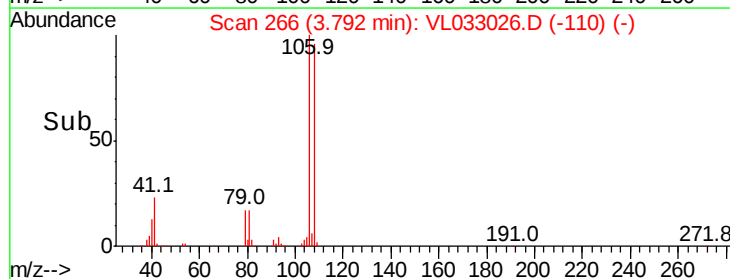
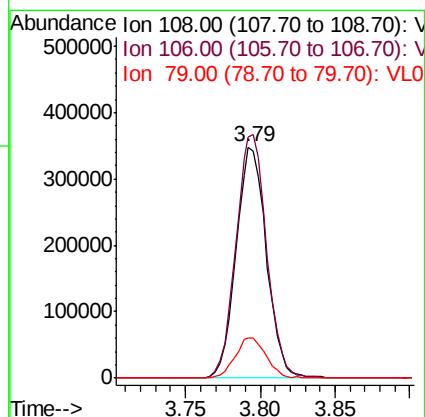
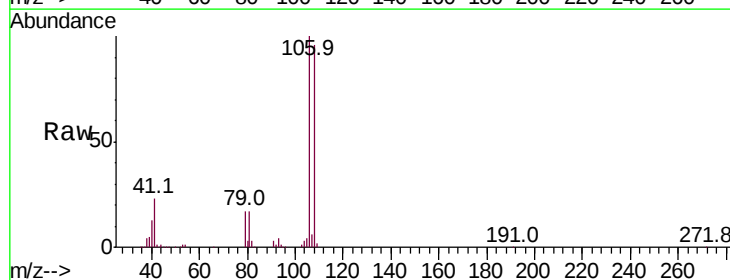
Tgt Ion: 108 Resp: 492450

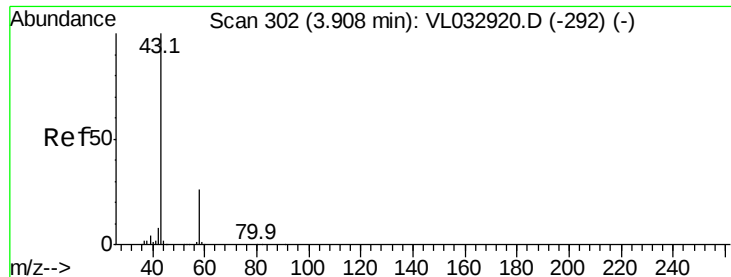
Ion Ratio Lower Upper

108 100

106 106.6 85.4 128.2

79 18.0 14.6 21.8





#15

Acetone

Concen: 9.145 ppbv

RT: 3.91 min Scan# 302

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

ClientSampleId :

VL1220ABS01

Tot Ion: 43 Resp: 1032450

Ion Ratio Lower Upper

43 100

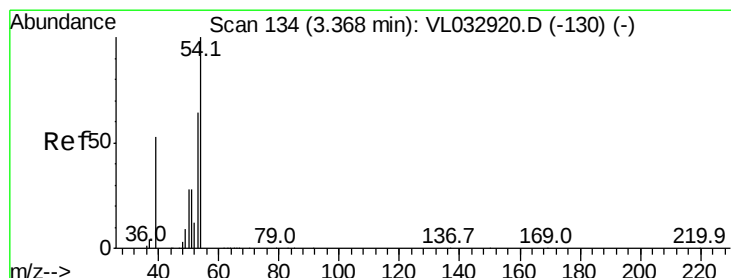
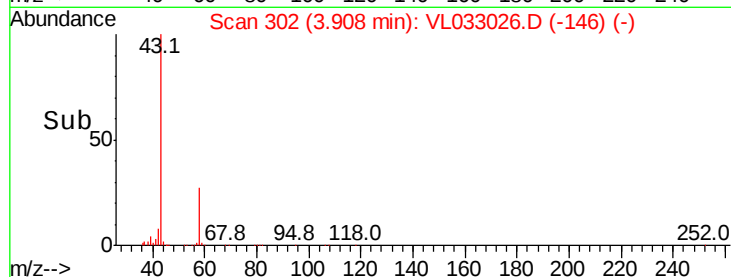
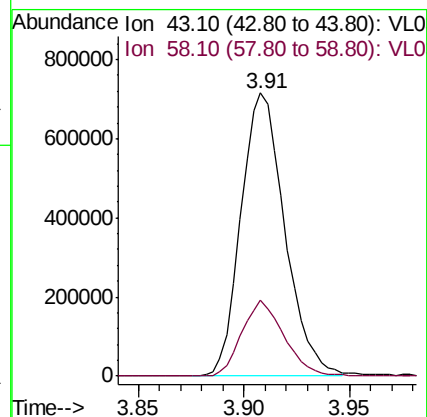
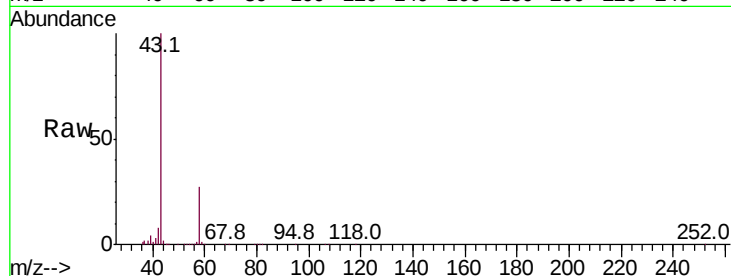
58 26.0 20.6 30.8

Manual Integrations

APPROVED

MMDadoda

12/24/2018 8:26:18 AM



#16

1,3-Butadiene

Concen: 9.908 ppbv

RT: 3.37 min Scan# 135

Delta R.T. 0.00 min

Lab File: VL033026.D

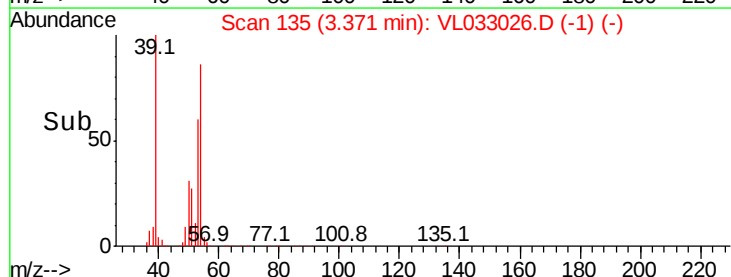
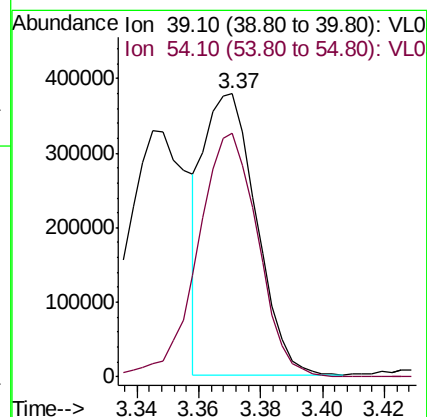
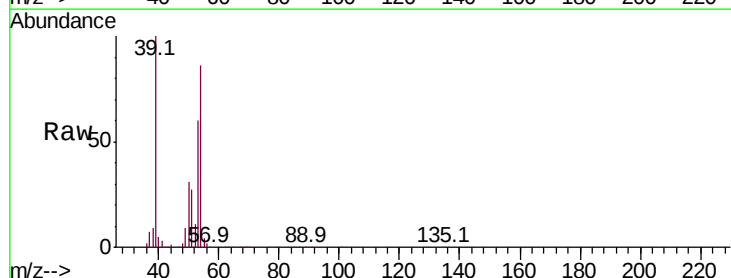
Acq: 20 Dec 2018 15:25

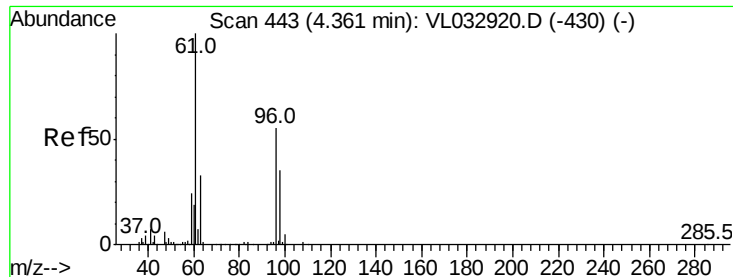
Tgt Ion: 39 Resp: 443795

Ion Ratio Lower Upper

39 100

54 100.4 72.7 109.1





#17

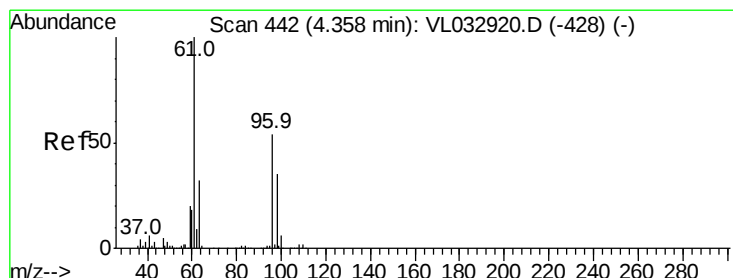
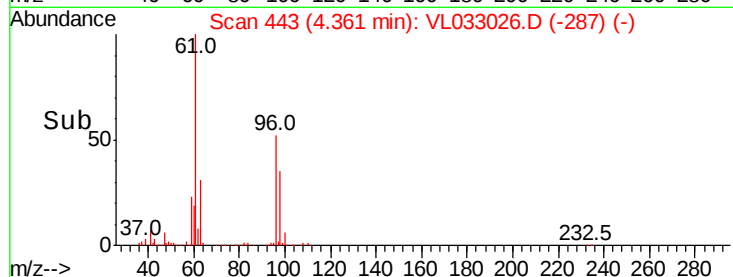
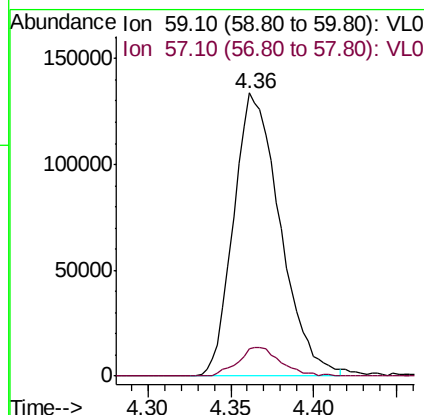
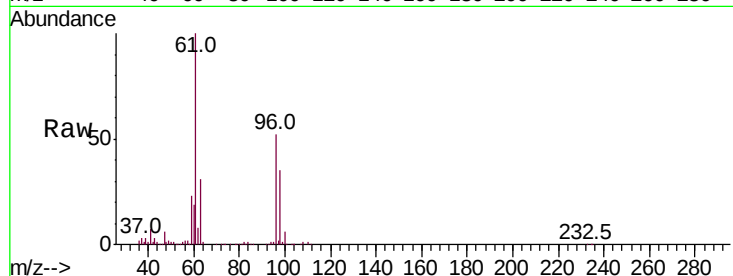
tert-Butyl alcohol
Concen: 9.111 ppbv
RT: 4.36 min Scan# 443
Delta R.T. 0.00 min
Lab File: VL033026.D
Acq: 20 Dec 2018 15:25

Instrument :
MSVOA_L
ClientSampleId :
VL1220ABS01

Tot Ion	59	Resp	261884
Ion	Ratio	Lower	Upper
59	100		
57	9.5	0.6	1.0#

Manual Integrations
APPROVED

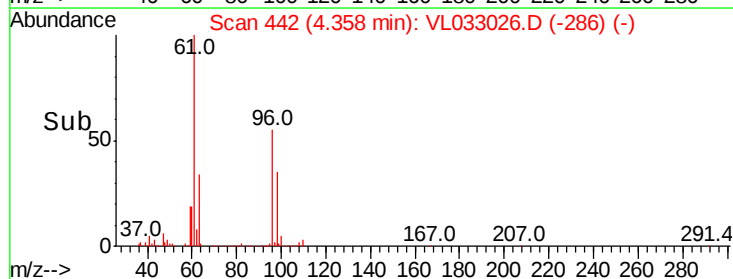
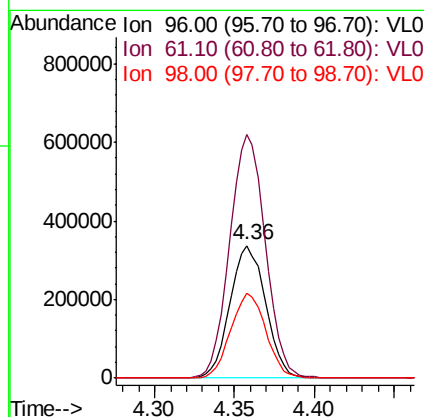
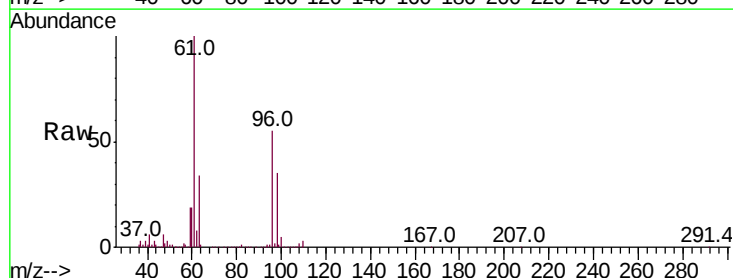
MMDadoda
12/24/2018 8:26:18 AM

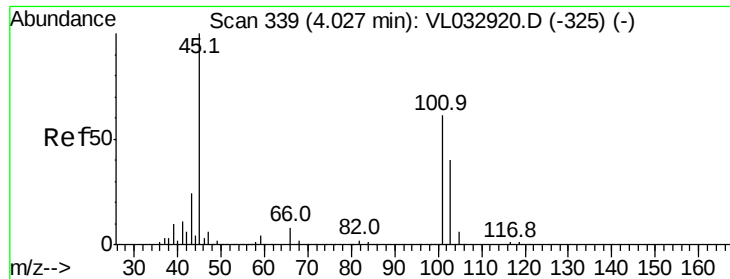


#18

1,1-Dichloroethene
Concen: 9.230 ppbv
RT: 4.36 min Scan# 442
Delta R.T. 0.00 min
Lab File: VL033026.D
Acq: 20 Dec 2018 15:25

Tgt Ion	96	Resp	510237
Ion	Ratio	Lower	Upper
96	100		
61	183.1	147.0	220.4
98	63.4	50.7	76.1





#19

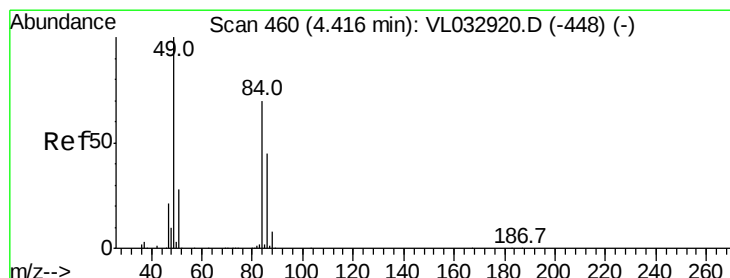
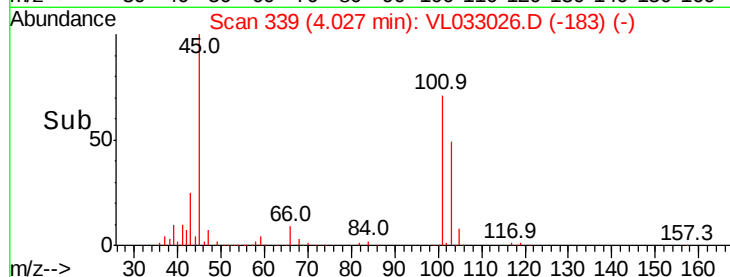
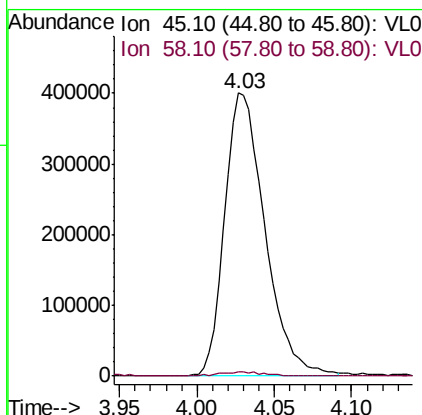
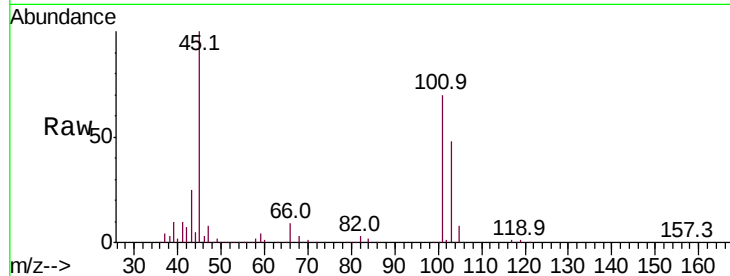
Isopropyl Alcohol
 Concen: 10.155 ppbv
 RT: 4.03 min Scan# 339
 Delta R.T. 0.00 min
 Lab File: VL033026.D
 Acq: 20 Dec 2018 15:25

Instrument :
 MSVOA_L
 ClientSampleId :
 VL1220ABS01

Tot Ion	Ratio	Lower	Upper
45	100		
58	2.0	1.4	2.2

Manual Integrations
 APPROVED

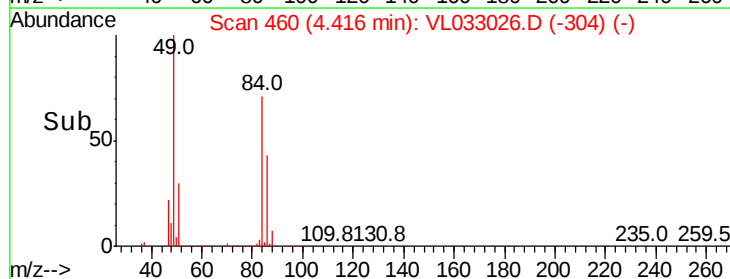
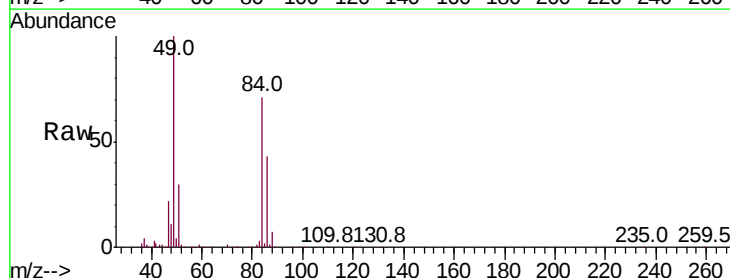
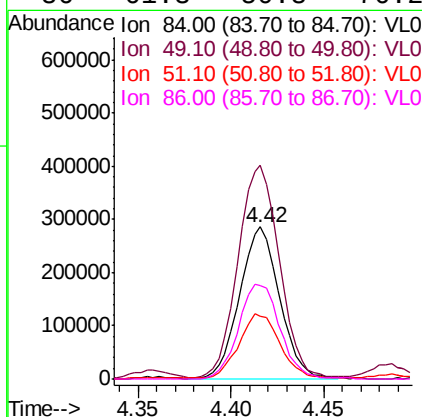
MMDadoda
 12/24/2018 8:26:18 AM

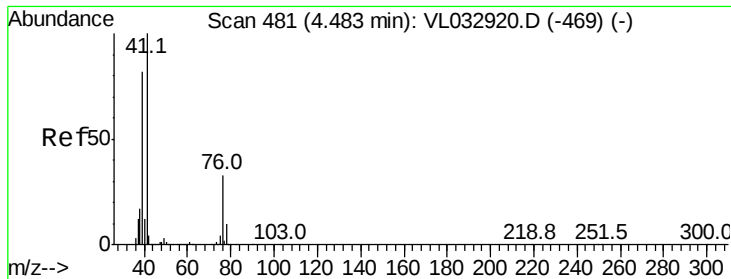


#20

Methylene Chloride
 Concen: 7.736 ppbv
 RT: 4.42 min Scan# 460
 Delta R.T. 0.00 min
 Lab File: VL033026.D
 Acq: 20 Dec 2018 15:25

Tgt Ion	Ratio	Lower	Upper
84	100		
49	139.9	113.8	170.8
51	41.0	31.8	47.8
86	61.3	50.8	76.2





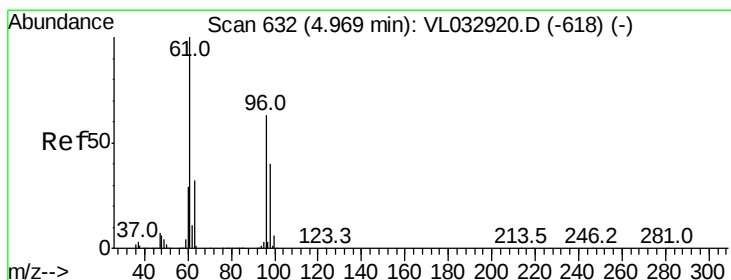
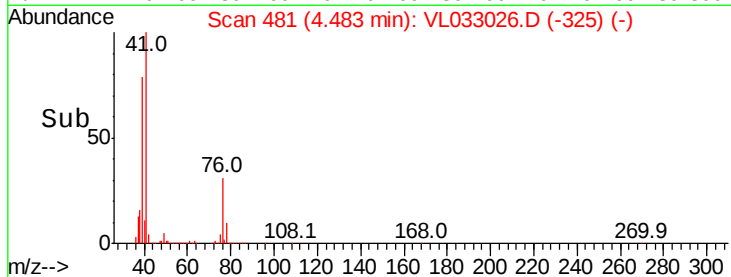
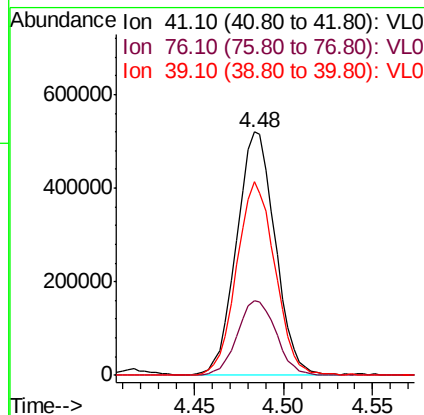
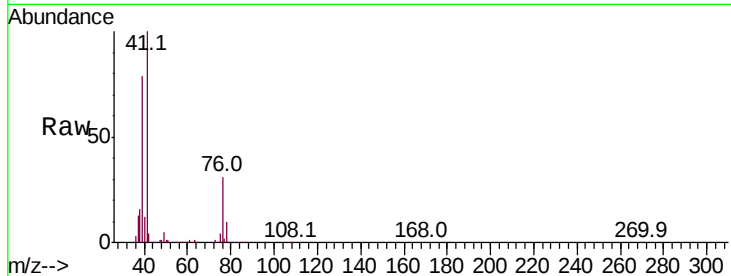
#21
Allvl Chloride
Concen: 8.447 ppbv
RT: 4.48 min Scan# 481
Delta R.T. 0.00 min
Lab File: VL033026.D
Acq: 20 Dec 2018 15:25

Instrument :
MSVOA_L
ClientSampleId :
VL1220ABS01

Tot Ion	Ratio	Resp Lower	Upper
41	100		
76	31.2	25.2	37.8
39	79.8	65.2	97.8

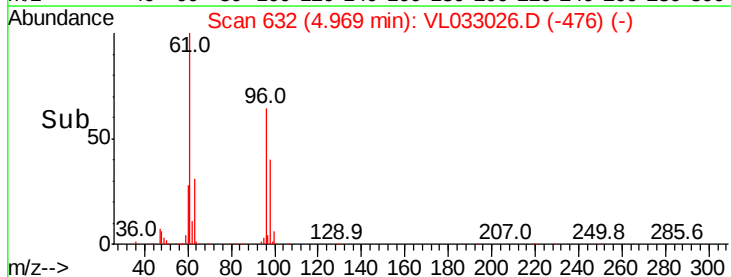
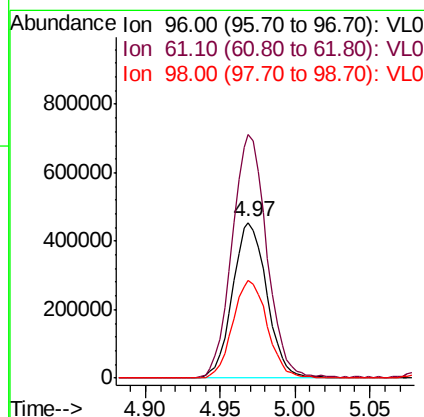
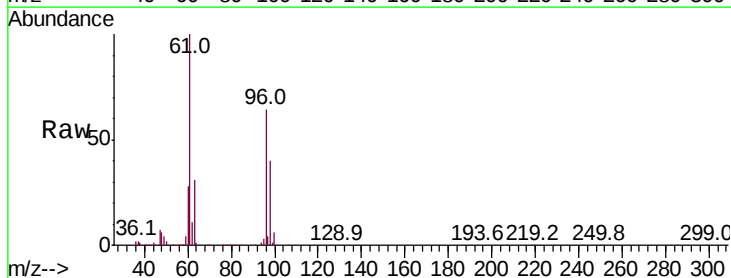
Manual Integrations
APPROVED

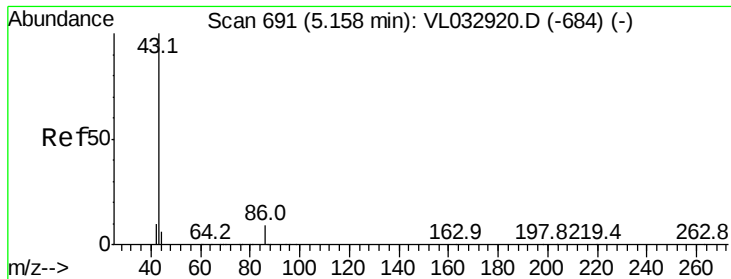
MMDadoda
12/24/2018 8:26:18 AM



#22
trans-1,2-Dichloroethene
Concen: 10.577 ppbv
RT: 4.97 min Scan# 632
Delta R.T. 0.00 min
Lab File: VL033026.D
Acq: 20 Dec 2018 15:25

Tgt Ion	Ratio	Resp Lower	Upper
96	100		
61	156.3	127.1	190.7
98	63.1	51.3	76.9





#23

Vinyl Acetate

Concen: 11.309 ppbv

RT: 5.16 min Scan# 692

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

ClientSampleId :

VL1220ABS01

Tot Ion: 43 Resp: 2161587

Ion	Ratio	Lower	Upper
43	100		
86	8.3	6.6	9.8
42	10.8	8.3	12.5
44	5.4	4.2	6.4

43 100

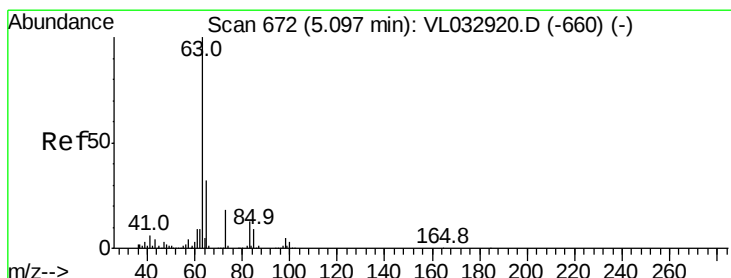
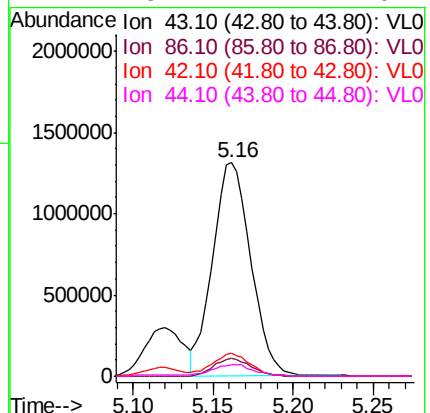
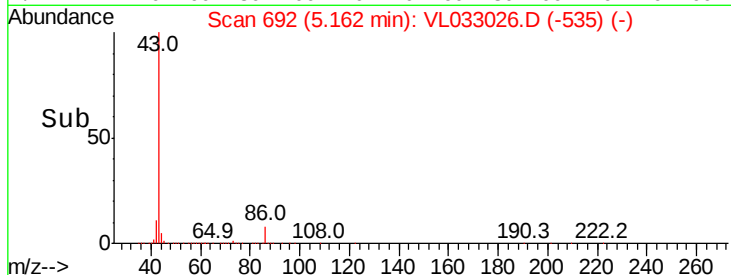
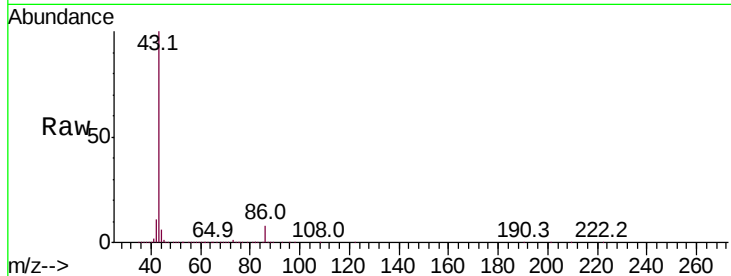
86 8.3 6.6 9.8

42 10.8 8.3 12.5

44 5.4 4.2 6.4

Manual Integrations
APPROVED

MMDadoda
12/24/2018 8:26:18 AM



#24

1,1-Dichloroethane

Concen: 10.041 ppbv

RT: 5.10 min Scan# 673

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

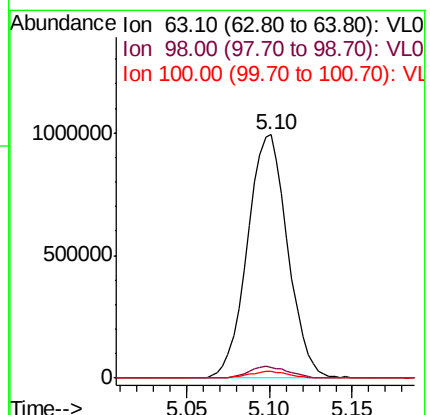
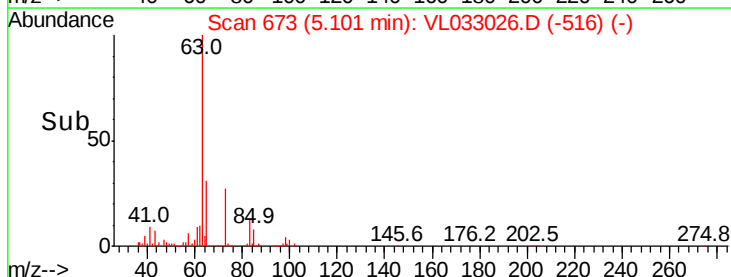
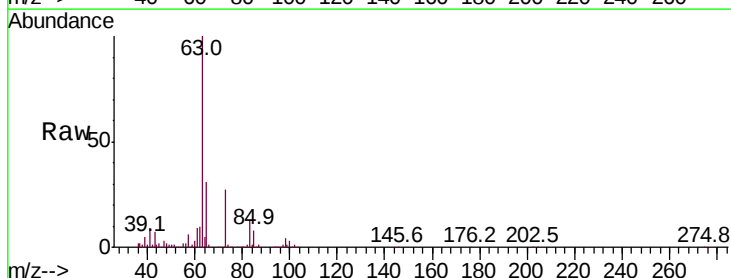
Tgt Ion: 63 Resp: 1668926

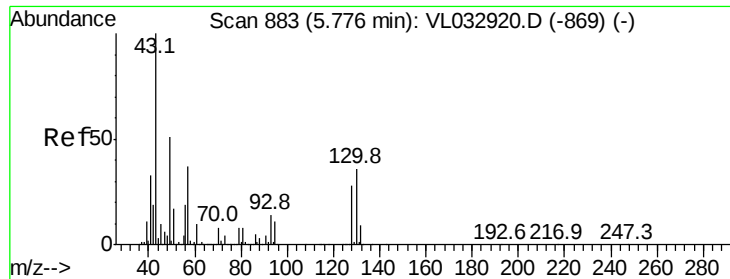
Ion	Ratio	Lower	Upper
63	100		
98	4.3	2.5	7.5
100	3.0	1.4	4.2

63 100

98 4.3 2.5 7.5

100 3.0 1.4 4.2





#25

Ethyl Acetate

Concen: 10.379 ppbv

RT: 5.78 min Scan# 883

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

ClientSampleId :

VL1220ABS01

Tot Ion: 43 Resp: 2767907

Ion Ratio Lower Upper

43 100

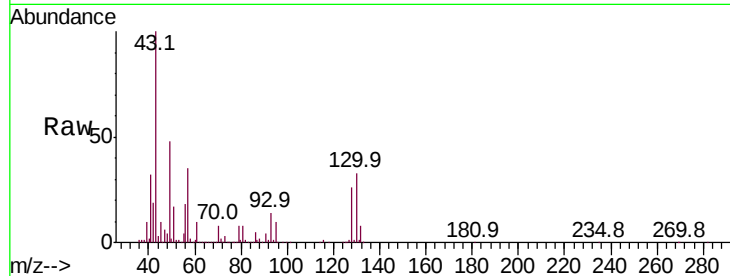
45 9.7 7.8 11.6

61 9.4 7.4 11.2

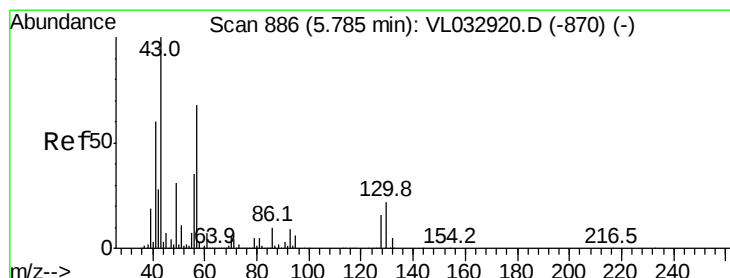
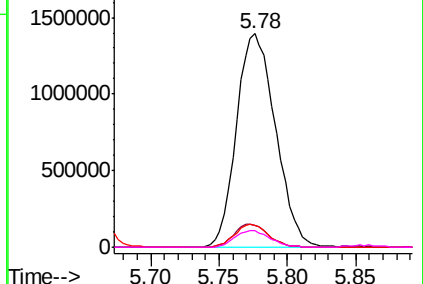
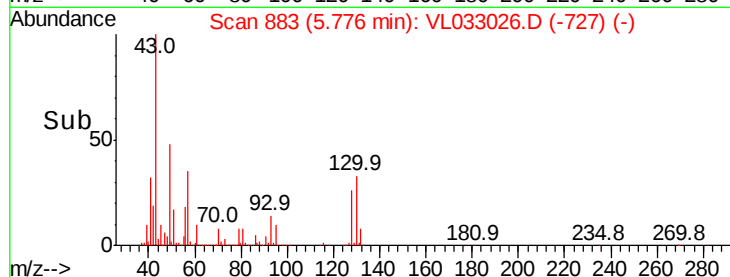
70 7.1 5.7 8.5

Manual Integrations
APPROVED

MMDadoda
12/24/2018 8:26:18 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: 10.307 ppbv

RT: 5.79 min Scan# 886

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Tgt Ion: 57 Resp: 1269037

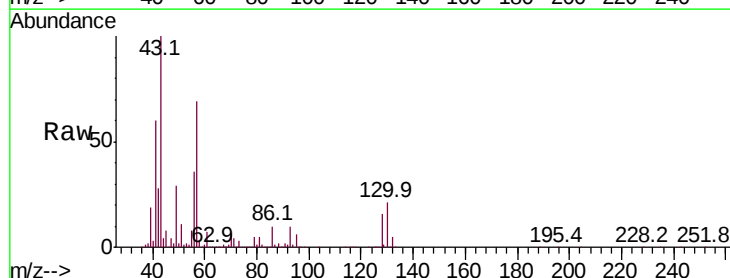
Ion Ratio Lower Upper

57 100

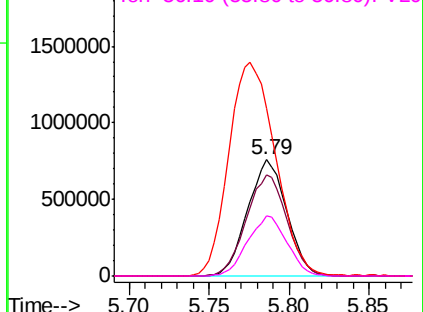
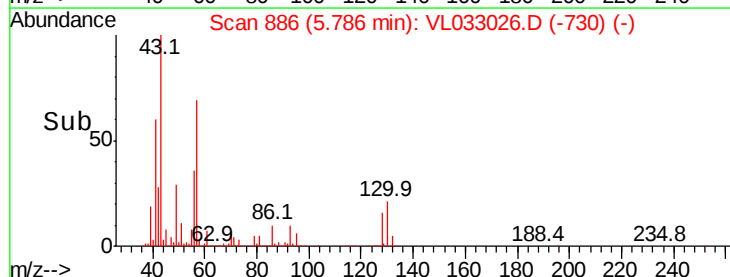
41 90.4 72.2 108.2

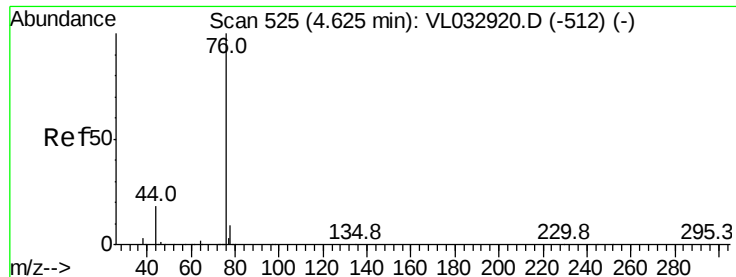
43 219.2 171.9 257.9

56 52.1 42.2 63.2



Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0





#27

Carbon Disulfide

Concen: 8.049 ppbv

RT: 4.62 min Scan# 525

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

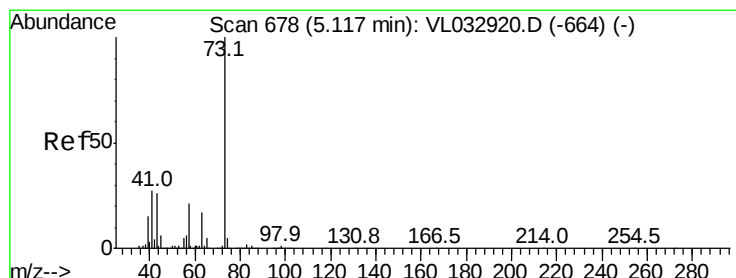
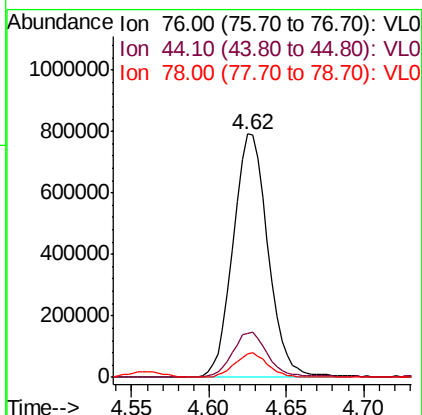
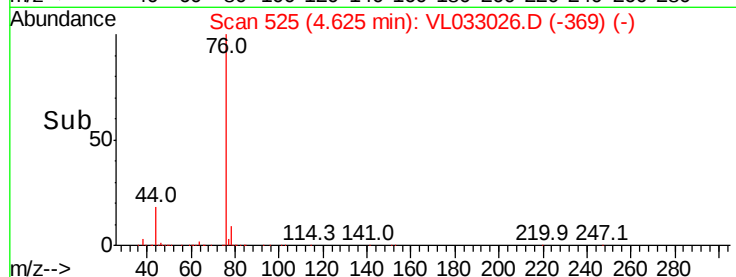
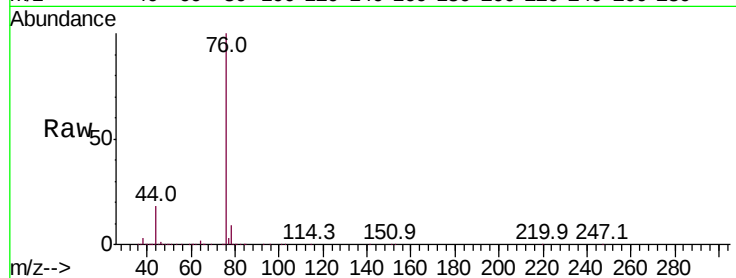
ClientSampleId :

VL1220ABS01

Tot Ion:	76	Resp:	1239116
Ion	Ratio	Lower	Upper
76	100		
44	17.9	14.7	22.1
78	9.5	7.4	11.2

Manual Integrations
APPROVED

MMDadoda
12/24/2018 8:26:18 AM



#28

Methyl tert-Butyl Ether

Concen: 11.261 ppbv

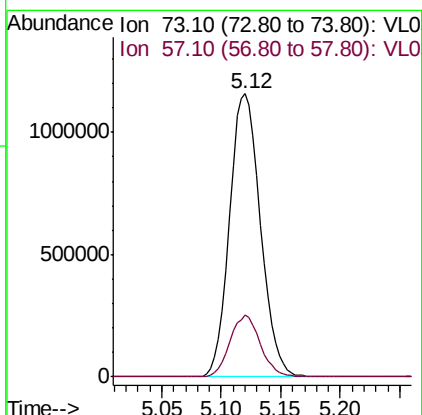
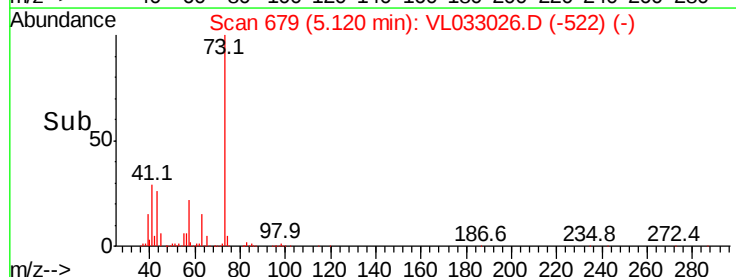
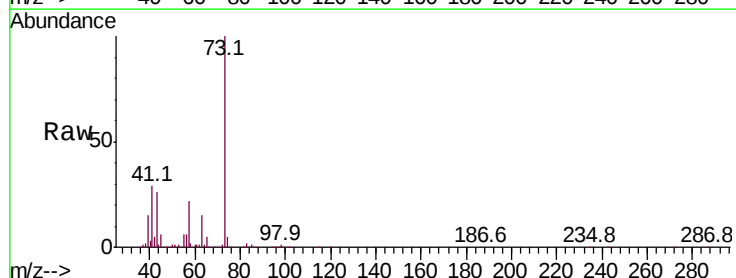
RT: 5.12 min Scan# 679

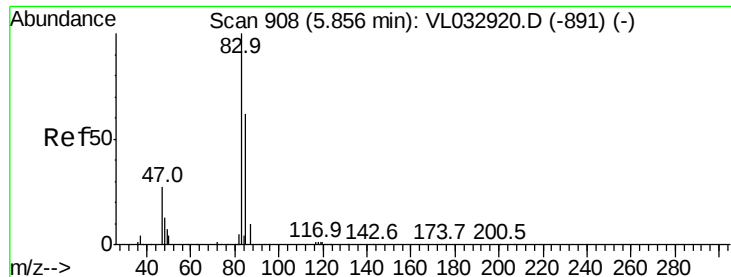
Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Tgt Ion:	73	Resp:	2082397
Ion	Ratio	Lower	Upper
73	100		
57	21.5	17.4	26.0





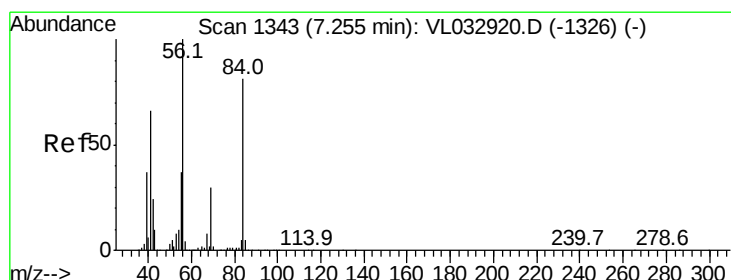
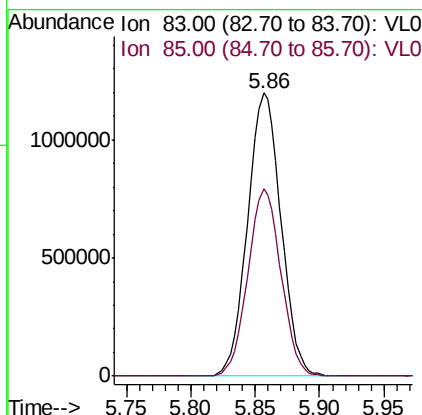
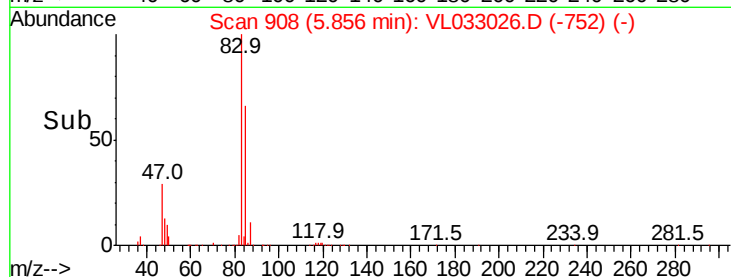
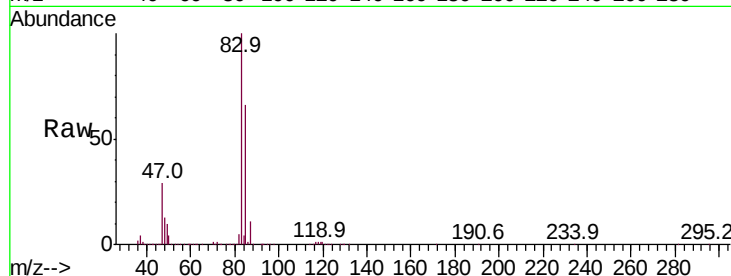
#29
Chloroform
Concen: 9.856 ppbv
RT: 5.86 min Scan# 908
Delta R.T. 0.00 min
Lab File: VL033026.D
Acq: 20 Dec 2018 15:25

Instrument :
MSVOA_L
ClientSampleId :
VL1220ABS01

Tot Ion: 83 Resp: 2165325
Ion Ratio Lower Upper
83 100
85 66.2 49.8 74.8

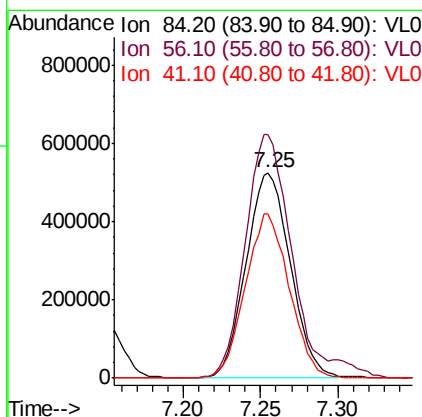
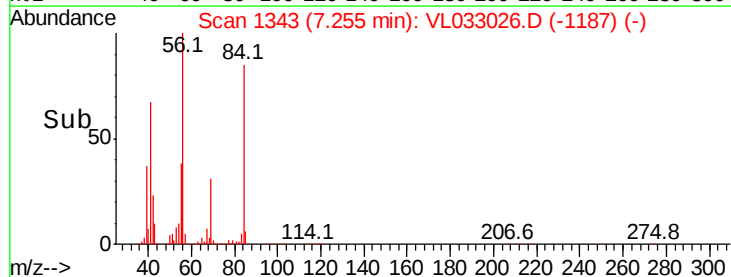
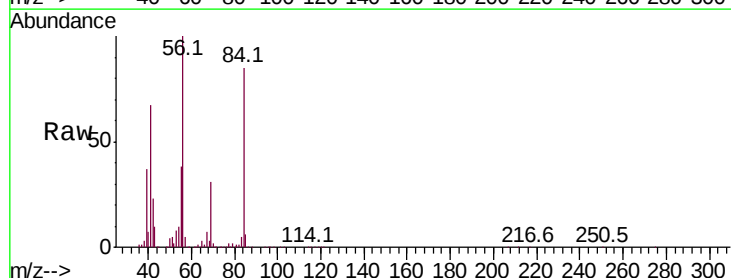
Manual Integrations
APPROVED

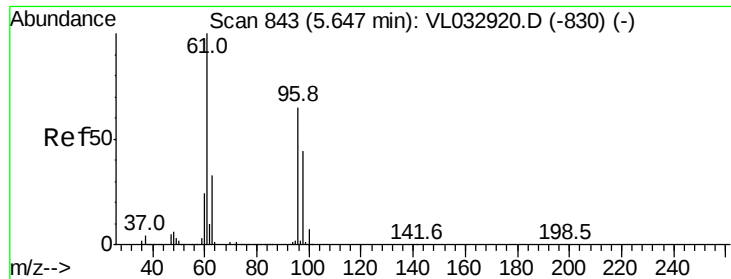
MMDadoda
12/24/2018 8:26:18 AM



#30
Cyclohexane
Concen: 10.235 ppbv
RT: 7.25 min Scan# 1343
Delta R.T. 0.00 min
Lab File: VL033026.D
Acq: 20 Dec 2018 15:25

Tgt Ion: 84 Resp: 1044481
Ion Ratio Lower Upper
84 100
56 126.7 102.5 153.7
41 79.3 64.1 96.1





#31

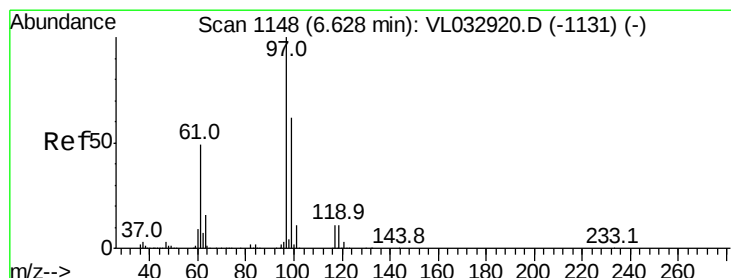
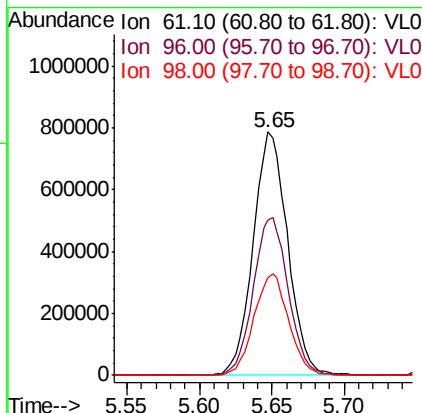
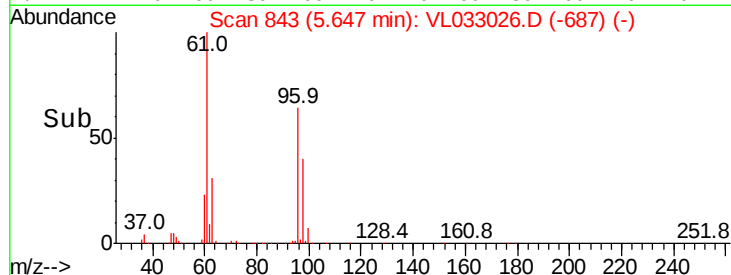
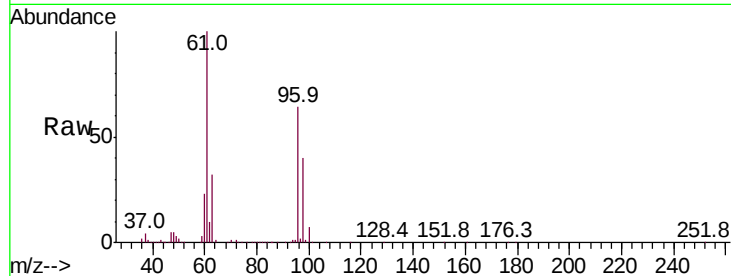
cis-1,2-Dichloroethene
Concen: 11.561 ppbv
RT: 5.65 min Scan# 843
Delta R.T. 0.00 min
Lab File: VL033026.D
Acq: 20 Dec 2018 15:25

Instrument :
MSVOA_L
ClientSampleId :
VL1220ABS01

Tot Ion	Ratio	Lower	Upper
61	100		
96	63.7	51.9	77.9
98	40.3	35.0	52.4

Manual Integrations
APPROVED

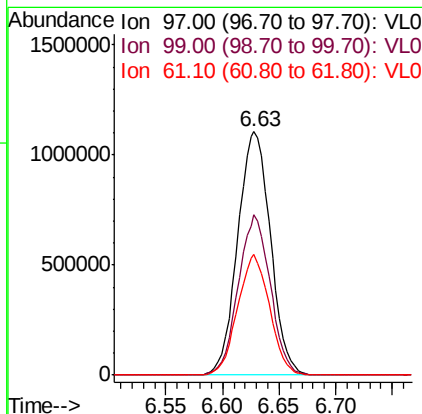
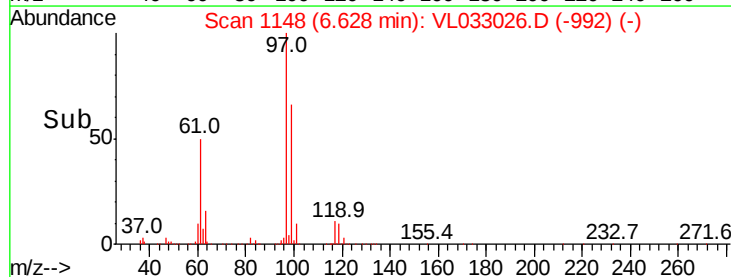
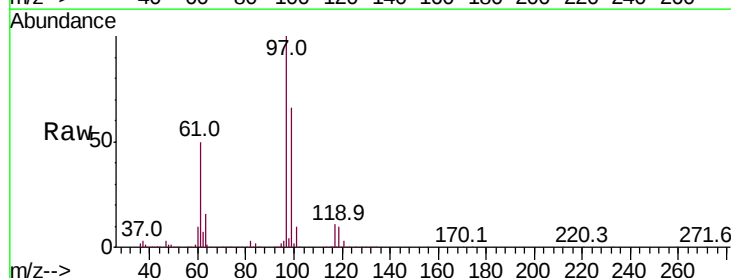
MMDadoda
12/24/2018 8:26:18 AM

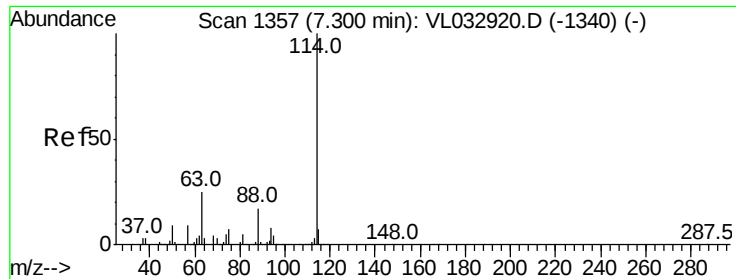


#32

1,1,1-Trichloroethane
Concen: 9.606 ppbv
RT: 6.63 min Scan# 1148
Delta R.T. 0.00 min
Lab File: VL033026.D
Acq: 20 Dec 2018 15:25

Tgt Ion	Ratio	Lower	Upper
97	100		
99	64.3	51.1	76.7
61	48.4	39.3	58.9





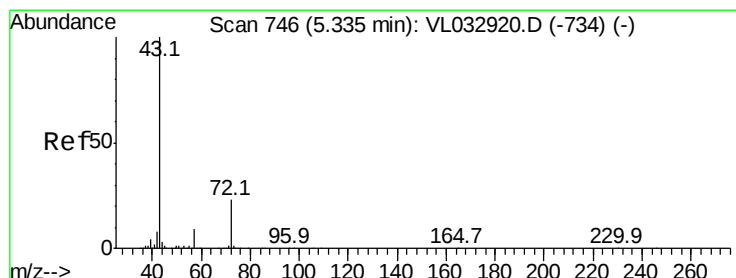
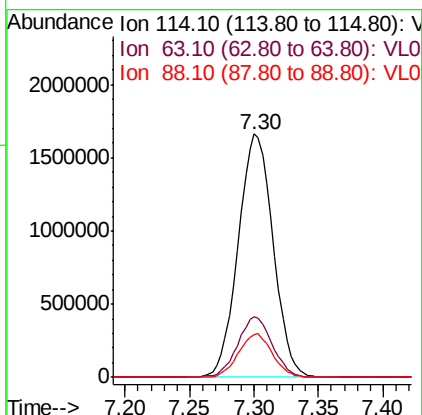
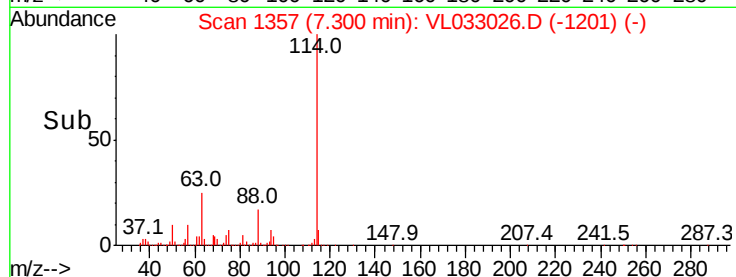
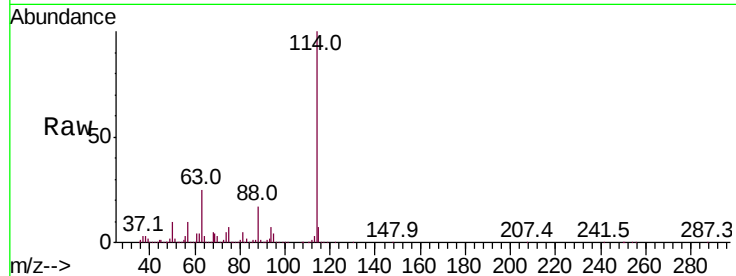
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.30 min Scan# 1357
Delta R.T. 0.00 min
Lab File: VL033026.D
Acq: 20 Dec 2018 15:25

Instrument :
MSVOA_L
ClientSampleId :
VL1220ABS01

Tot Ion:114 Resp: 3132083
Ion Ratio Lower Upper
114 100
63 25.1 20.1 30.1
88 17.5 14.2 21.4

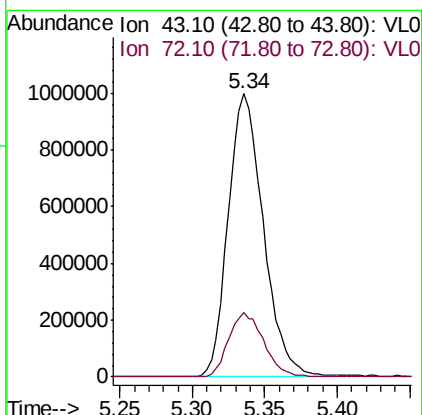
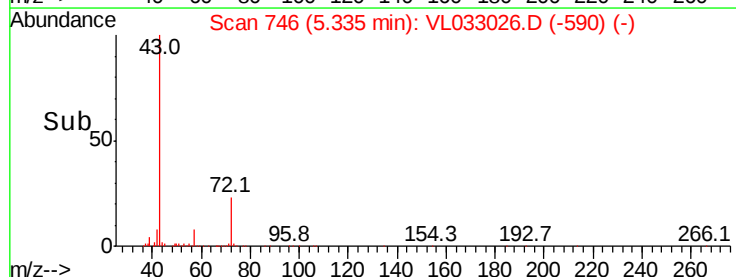
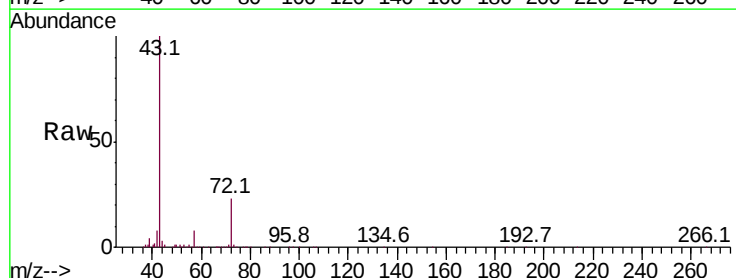
Manual Integrations
APPROVED

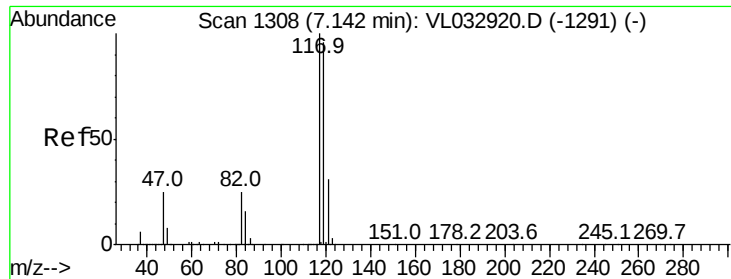
MMDadoda
12/24/2018 8:26:18 AM



#34
2-Butanone
Concen: 12.268 ppbv
RT: 5.34 min Scan# 746
Delta R.T. 0.00 min
Lab File: VL033026.D
Acq: 20 Dec 2018 15:25

Tgt Ion: 43 Resp: 1673765
Ion Ratio Lower Upper
43 100
72 23.1 18.8 28.2





#35

Carbon Tetrachloride

Concen: 9.618 ppbv

RT: 7.14 min Scan# 1308

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

ClientSampleId :

VL1220ABS01

Tot Ion:117 Resp: 2367725

Ion Ratio Lower Upper

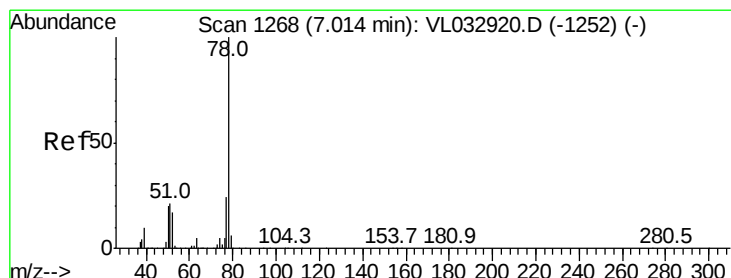
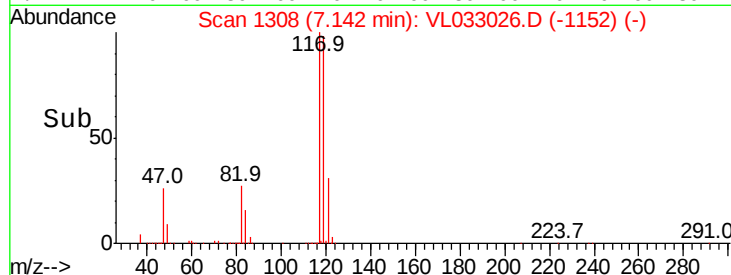
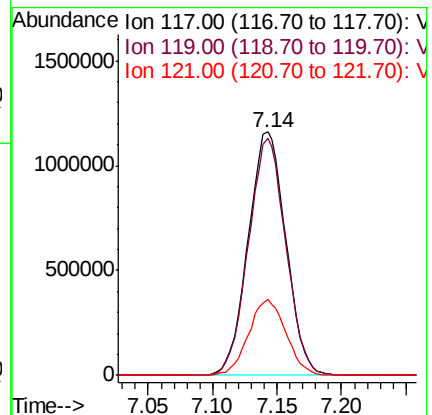
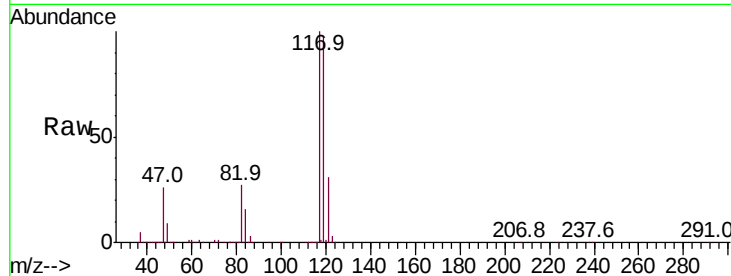
117 100

119 97.4 76.5 114.7

121 31.1 24.5 36.7

Manual Integrations
APPROVED

MMDadoda
12/24/2018 8:26:18 AM



#36

Benzene

Concen: 10.463 ppbv

RT: 7.01 min Scan# 1268

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

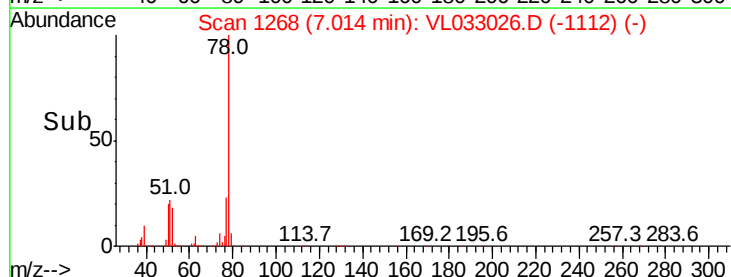
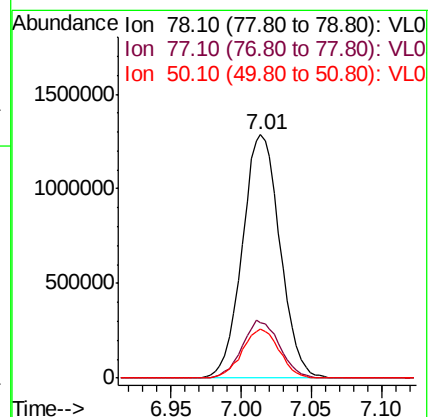
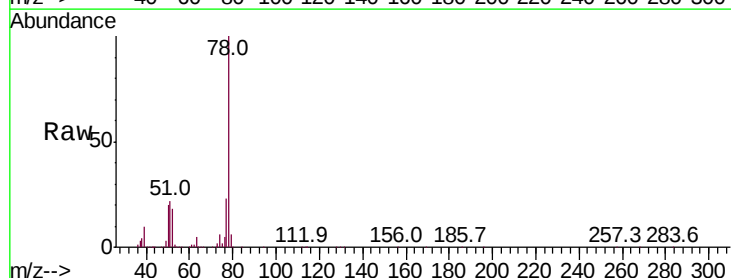
Tgt Ion: 78 Resp: 2410405

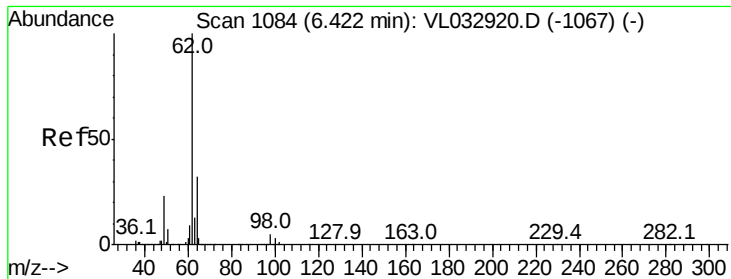
Ion Ratio Lower Upper

78 100

77 23.0 18.9 28.3

50 20.1 16.1 24.1





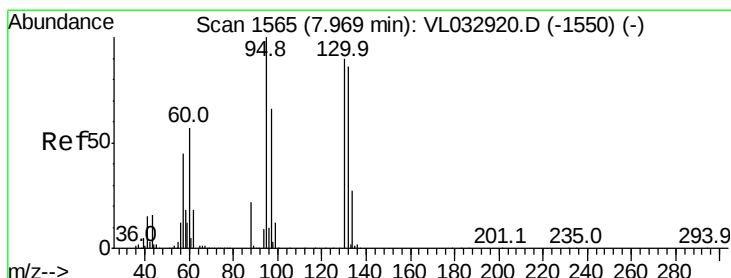
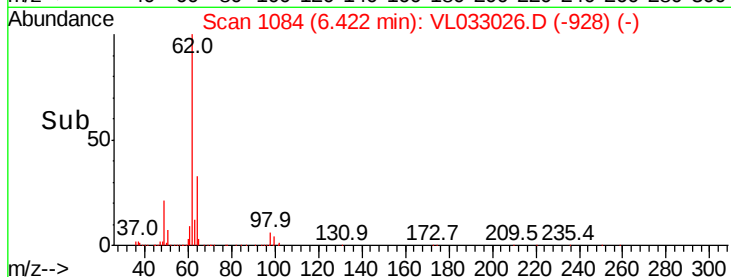
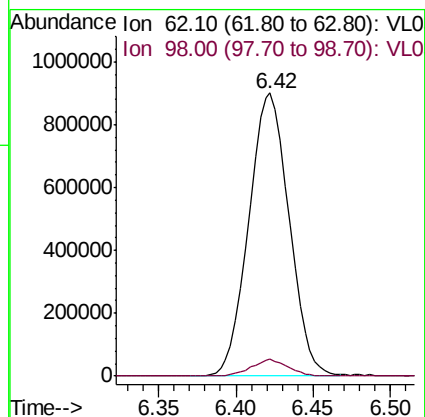
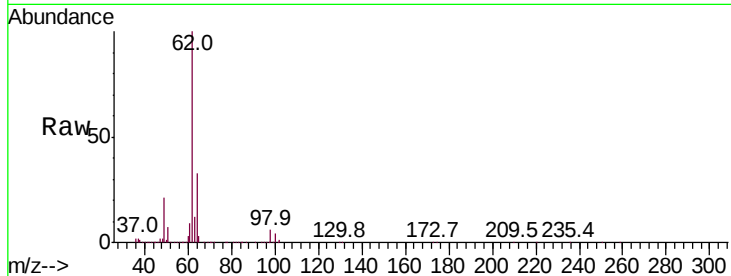
#37
 1,2-Dichloroethane
 Concen: 10.432 ppbv
 RT: 6.42 min Scan# 1084
 Delta R.T. 0.00 min
 Lab File: VL033026.D
 Acq: 20 Dec 2018 15:25

Instrument :
 MSVOA_L
 ClientSampleId :
 VL1220ABS01

Tot Ion	Ratio	Lower	Upper
62	100		
98	5.5	4.3	6.5

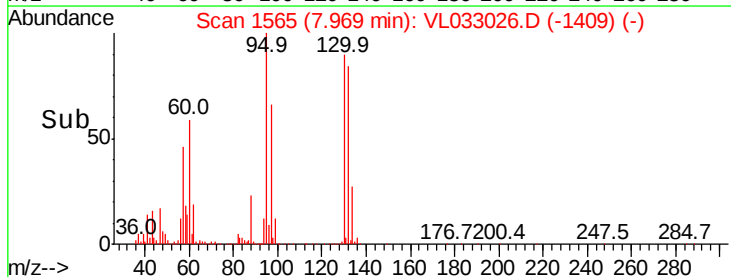
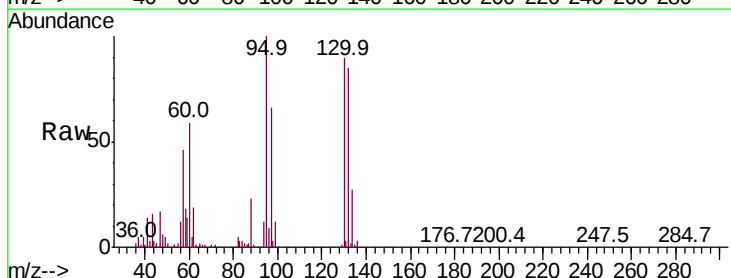
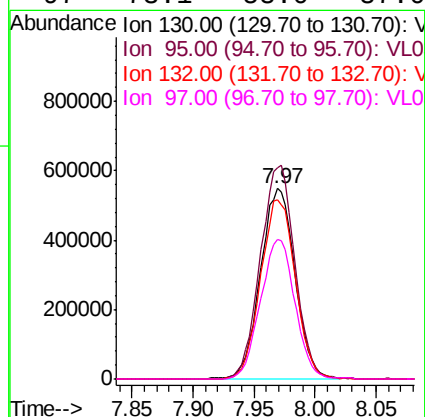
Manual Integrations
 APPROVED

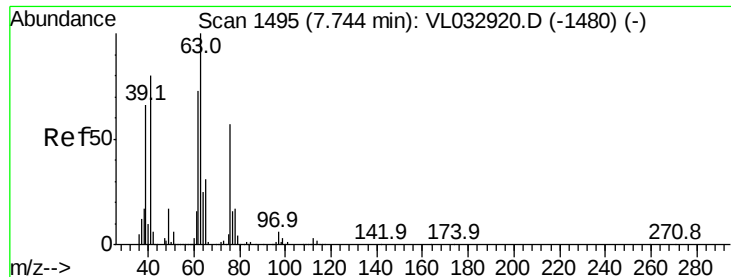
MMDadoda
 12/24/2018 8:26:18 AM



#38
 Trichloroethene
 Concen: 11.242 ppbv
 RT: 7.97 min Scan# 1565
 Delta R.T. 0.00 min
 Lab File: VL033026.D
 Acq: 20 Dec 2018 15:25

Tgt Ion	Ratio	Lower	Upper
130	100		
95	111.0	88.6	132.8
132	93.9	76.1	114.1
97	73.1	58.0	87.0





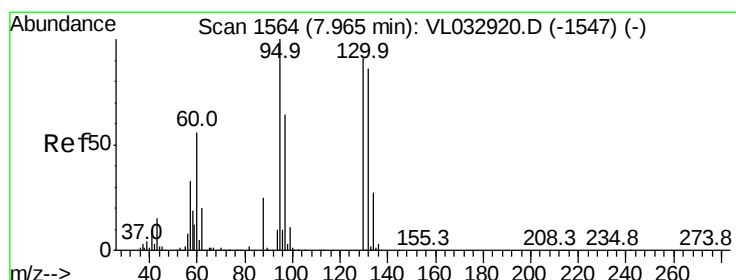
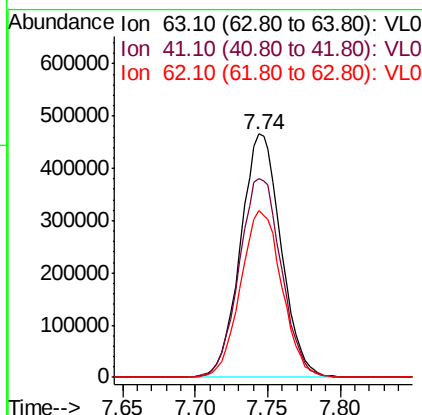
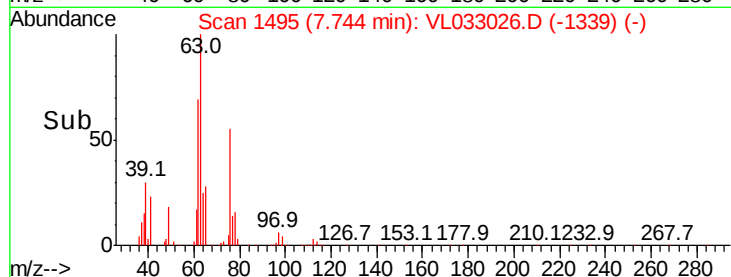
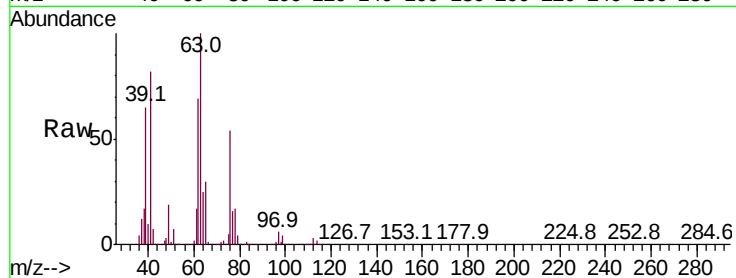
#39
 1,2-Dichloropropane
 Concen: 10.357 ppbv
 RT: 7.74 min Scan# 1495
 Delta R.T. 0.00 min
 Lab File: VL033026.D
 Acq: 20 Dec 2018 15:25

Instrument :
 MSVOA_L
 ClientSampleId :
 VL1220ABS01

Tot Ion	Ratio	Resp	Lower	Upper
63	100			
41	81.8	63.9	95.9	
62	68.5	58.8	88.2	

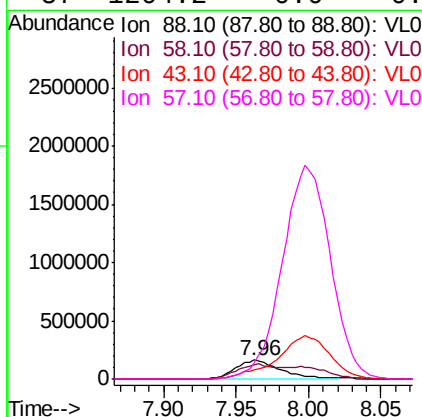
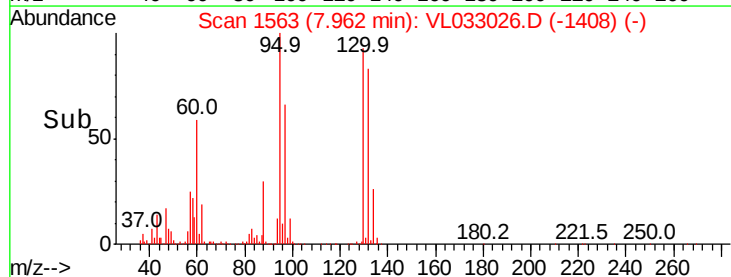
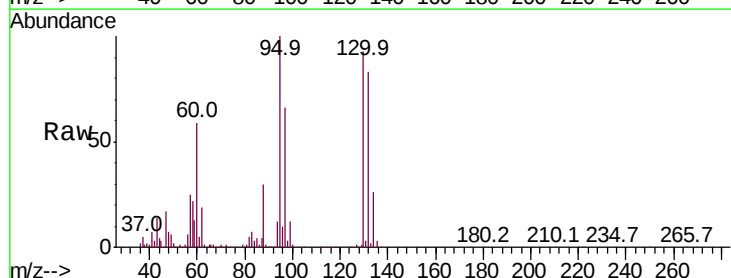
Manual Integrations
 APPROVED

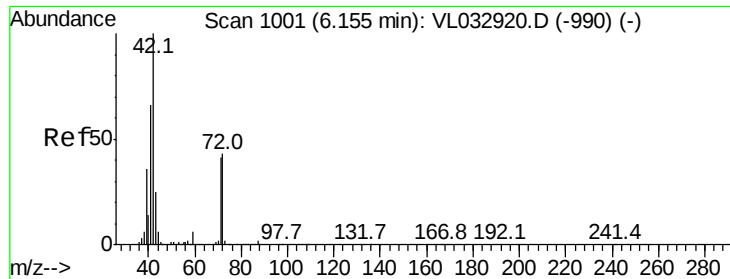
MMDadoda
 12/24/2018 8:26:18 AM



#40
 1,4-Dioxane
 Concen: 10.934 ppbv
 RT: 7.96 min Scan# 1563
 Delta R.T. -0.00 min
 Lab File: VL033026.D
 Acq: 20 Dec 2018 15:25

Tgt Ion	Ratio	Resp	Lower	Upper
88	100			
58	127.3	107.4	161.2	
43	266.2	0.0	0.0#	
57	1204.2	0.0	0.0#	





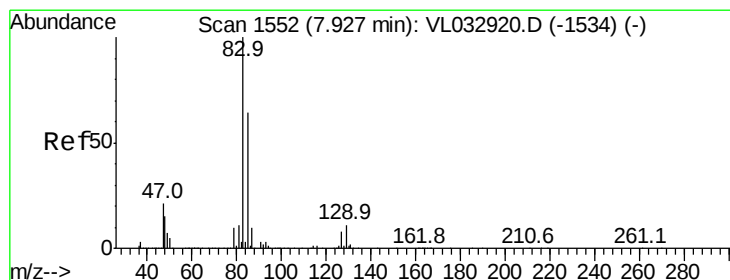
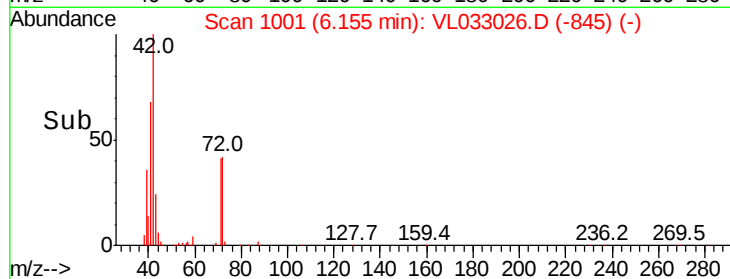
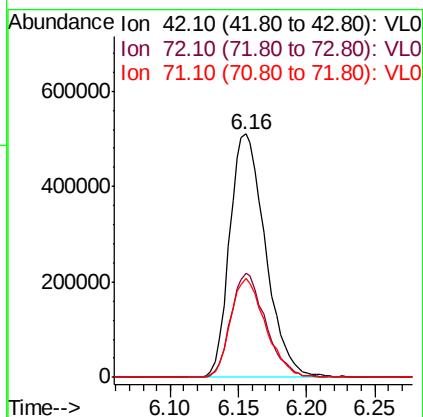
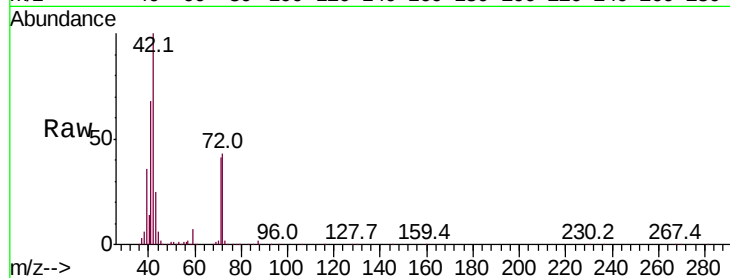
#41
Tetrahydrofuran
Concen: 10.984 ppbv
RT: 6.16 min Scan# 1001
Delta R.T. 0.00 min
Lab File: VL033026.D
Acq: 20 Dec 2018 15:25

Instrument :
MSVOA_L
ClientSampleId :
VL1220ABS01

Tot Ion	Ratio	Lower	Upper
42	100		
72	41.7	32.9	49.3
71	39.8	32.0	48.0

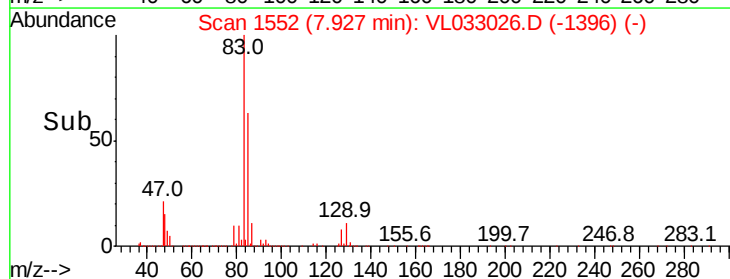
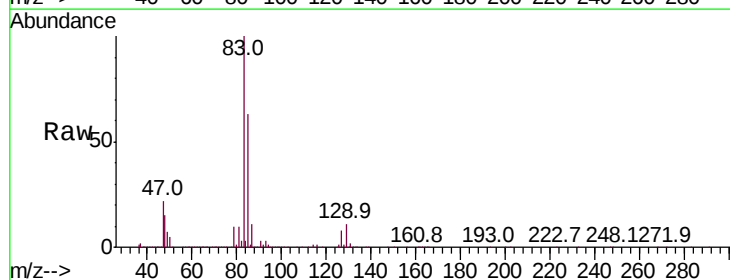
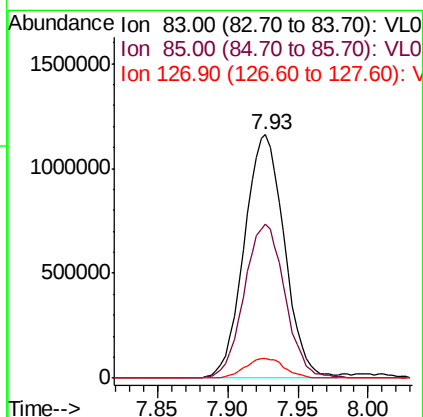
Manual Integrations
APPROVED

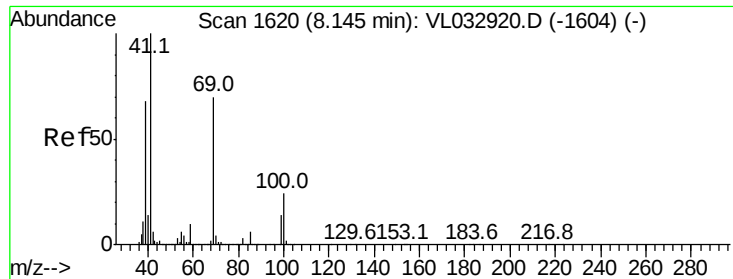
MMDadoda
12/24/2018 8:26:18 AM



#42
Bromodichloromethane
Concen: 10.636 ppbv
RT: 7.93 min Scan# 1552
Delta R.T. 0.00 min
Lab File: VL033026.D
Acq: 20 Dec 2018 15:25

Tgt Ion	Ratio	Lower	Upper
83	100		
85	63.4	50.9	76.3
127	8.2	6.7	10.1





#43

Methyl Methacrylate

Concen: 11.392 ppbv

RT: 8.15 min Scan# 1620

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

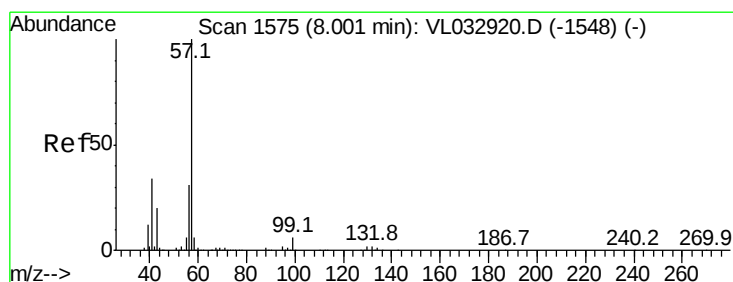
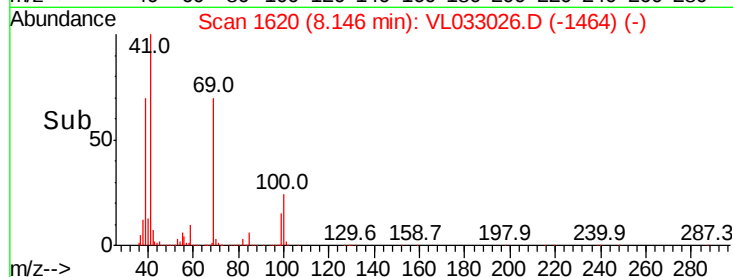
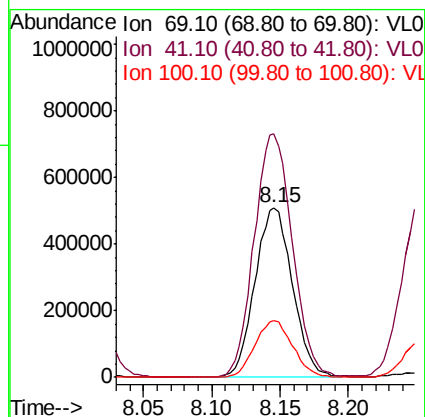
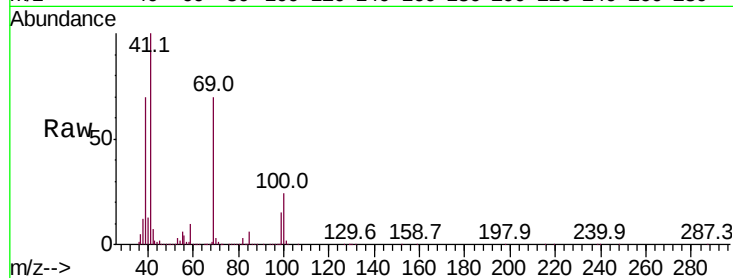
Instrument :
MSVOA_L

ClientSampleId :
VL1220ABS01

Tot Ion	Ratio	Lower	Upper
69	100		
41	146.3	116.6	175.0
100	33.8	26.5	39.7

Manual Integrations
APPROVED

MMDadoda
12/24/2018 8:26:18 AM



#44

2,2,4-Trimethylpentane

Concen: 10.819 ppbv

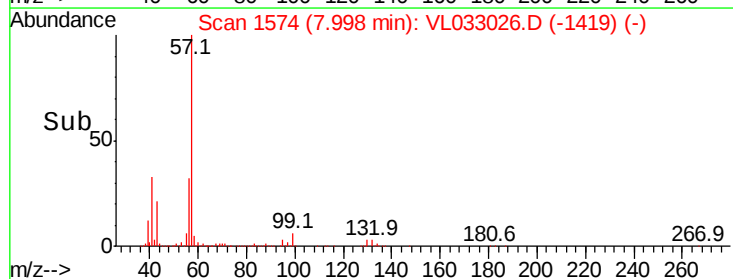
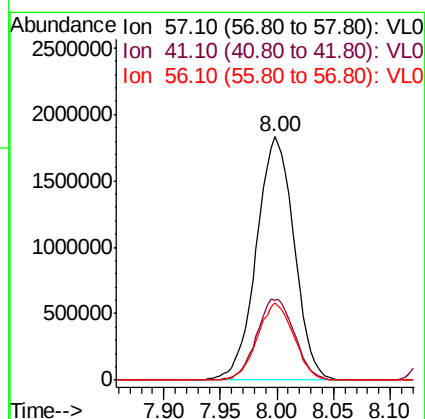
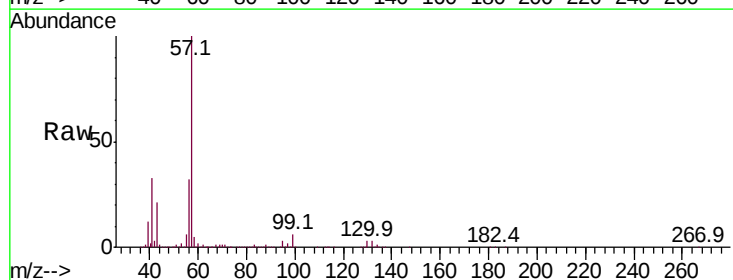
RT: 8.00 min Scan# 1574

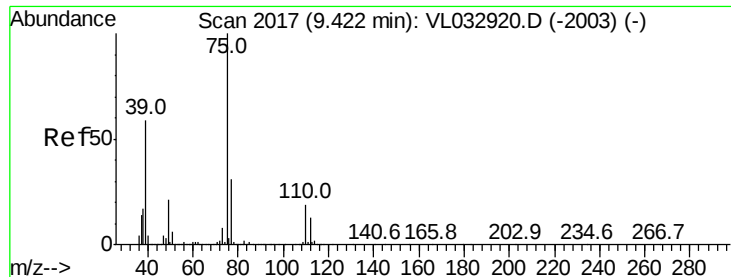
Delta R.T. -0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Tgt Ion	Ratio	Lower	Upper
57	100		
41	33.7	27.0	40.4
56	30.8	24.6	37.0





#45

t-1,3-Dichloropropene

Concen: 12.644 ppbv

RT: 9.42 min Scan# 2017

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

ClientSampleId :

VL1220ABS01

Tot Ion: 75 Resp: 1323397

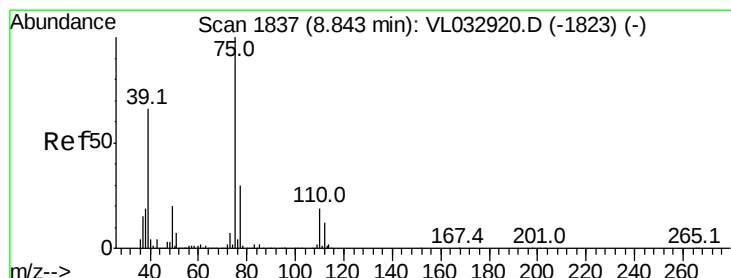
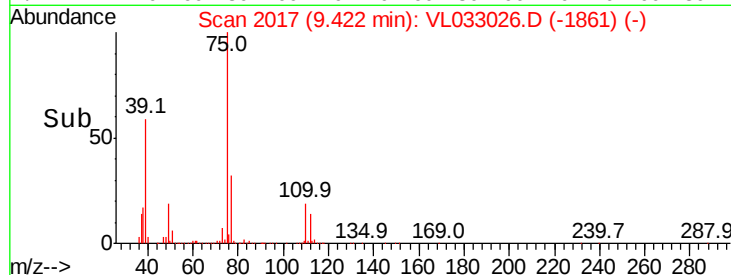
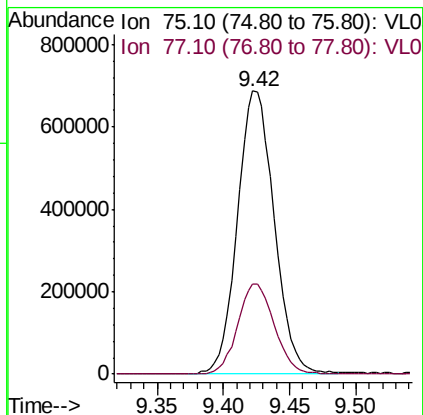
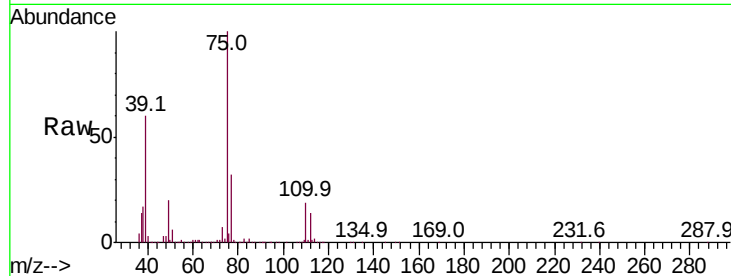
Ion Ratio Lower Upper

75 100

77 31.9 24.8 37.2

Manual Integrations
APPROVED

MMDadoda
12/24/2018 8:26:18 AM



#46

cis-1,3-Dichloropropene

Concen: 8.559 ppbv

RT: 8.84 min Scan# 1837

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

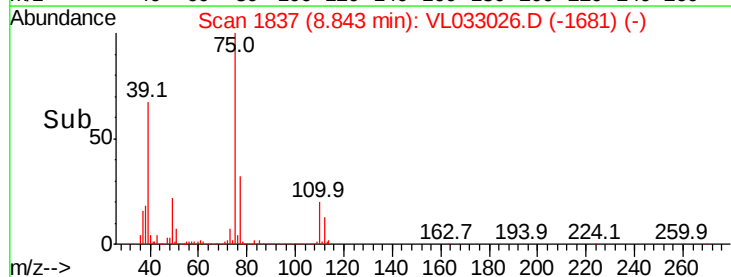
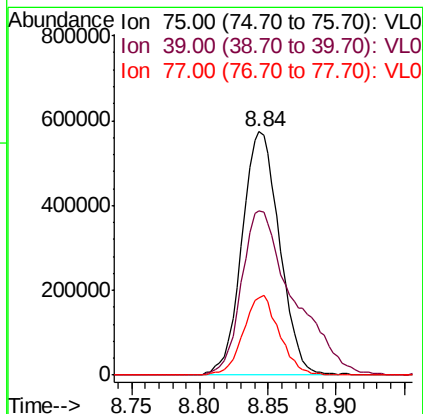
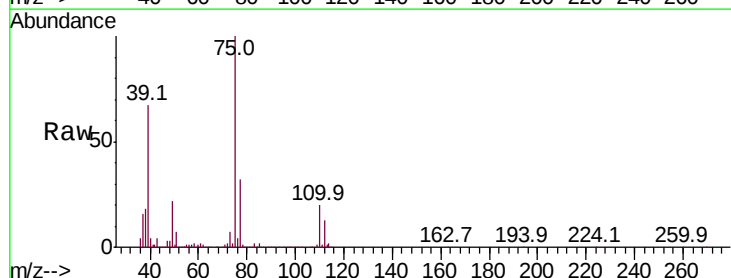
Tgt Ion: 75 Resp: 1096386

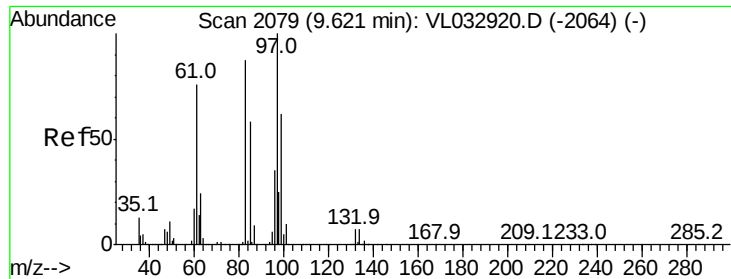
Ion Ratio Lower Upper

75 100

39 67.3 52.8 79.2

77 31.7 24.3 36.5





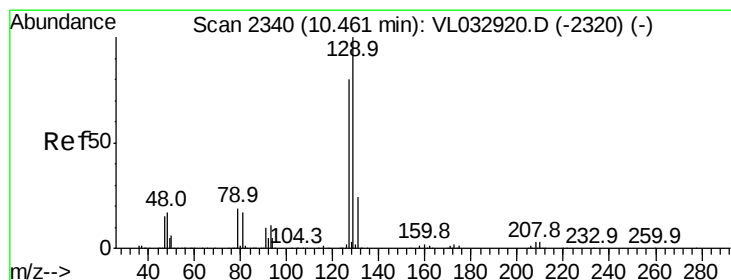
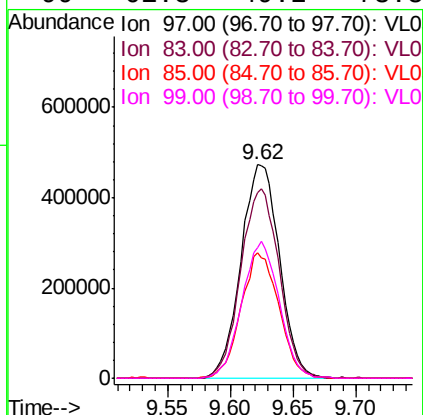
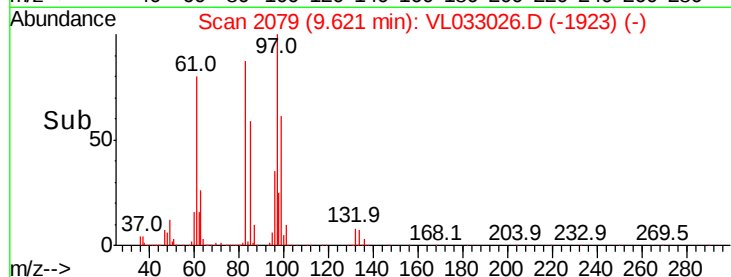
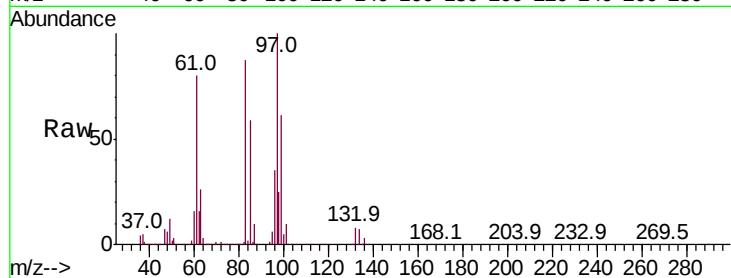
#47
 1,1,2-Trichloroethane
 Concen: 10.537 ppbv
 RT: 9.62 min Scan# 2079
 Delta R.T. 0.00 min
 Lab File: VL033026.D
 Acq: 20 Dec 2018 15:25

Instrument :
 MSVOA_L
 ClientSampleId :
 VL1220ABS01

Tot Ion	97	Resp	1013247
Ion	Ratio	Lower	Upper
97	100		
83	86.8	69.8	104.8
85	58.3	46.7	70.1
99	61.3	49.2	73.8

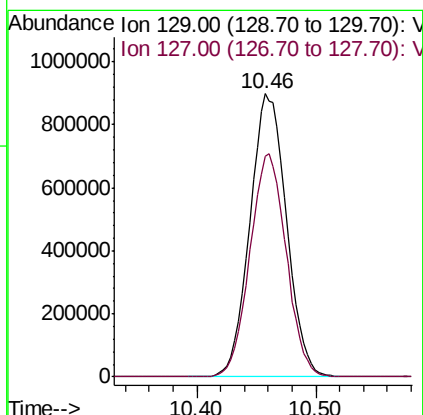
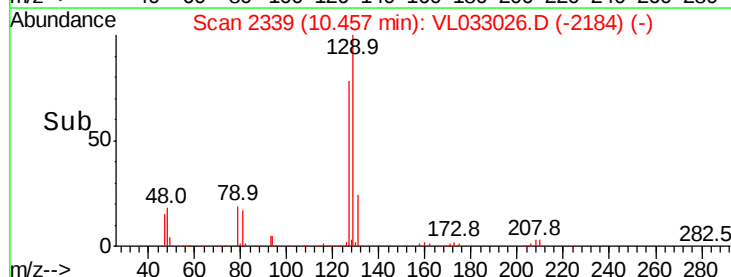
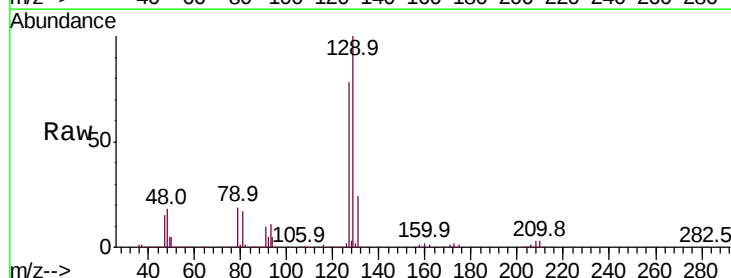
Manual Integrations
 APPROVED

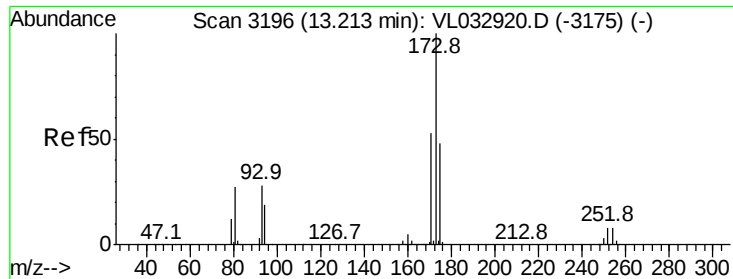
MMDadoda
 12/24/2018 8:26:18 AM



#48
 Dibromochloromethane
 Concen: 10.584 ppbv
 RT: 10.46 min Scan# 2339
 Delta R.T. -0.00 min
 Lab File: VL033026.D
 Acq: 20 Dec 2018 15:25

Tgt Ion	129	Resp	1909345
Ion	Ratio	Lower	Upper
129	100		
127	78.2	39.3	117.8





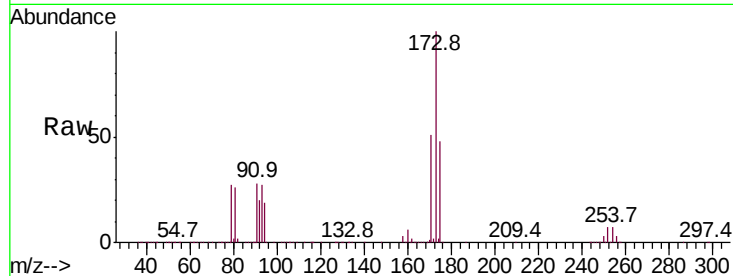
#49
Bromoform
Concen: 11.521 ppbv
RT: 13.21 min Scan# 3196
Delta R.T. 0.00 min
Lab File: VL033026.D
Acq: 20 Dec 2018 15:25

Instrument :
MSVOA_L
ClientSampleId :
VL1220ABS01

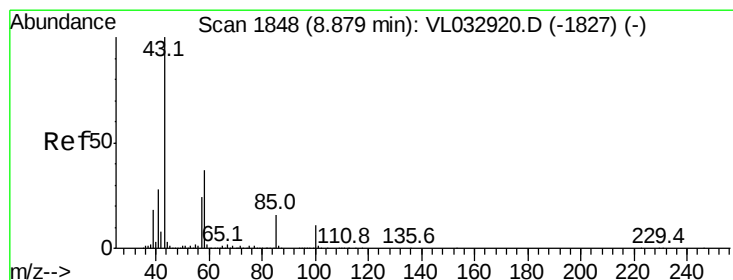
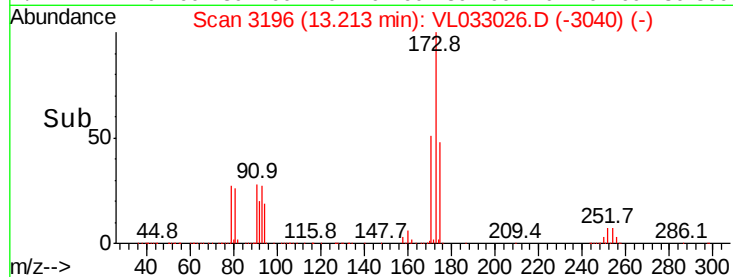
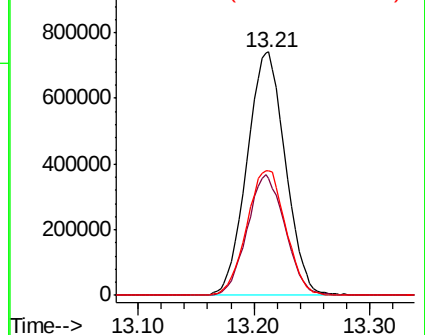
Tot Ion:173 Resp: 1709406
Ion Ratio Lower Upper
173 100
175 48.9 39.0 58.4
171 52.0 41.5 62.3

Manual Integrations
APPROVED

MMDadoda
12/24/2018 8:26:18 AM

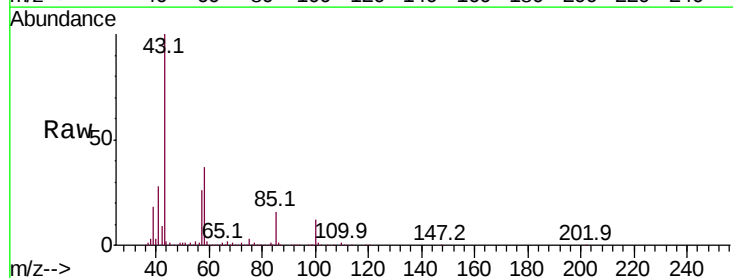


Abundance Ion 172.90 (172.60 to 173.60): V
Ion 174.90 (174.60 to 175.60): V
Ion 170.90 (170.60 to 171.60): V

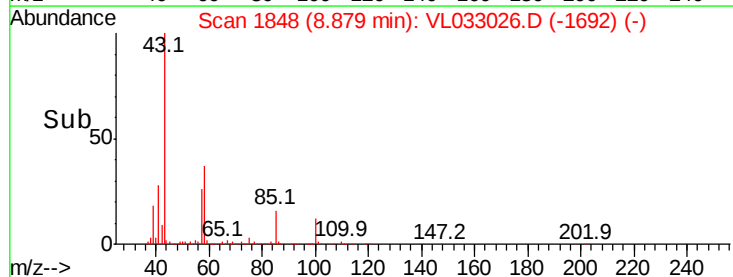
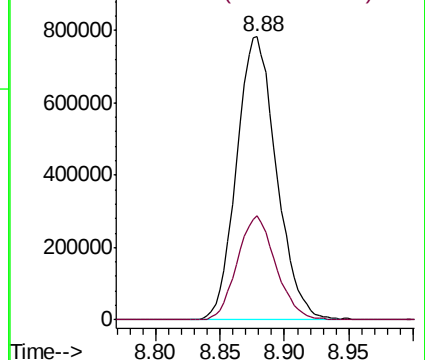


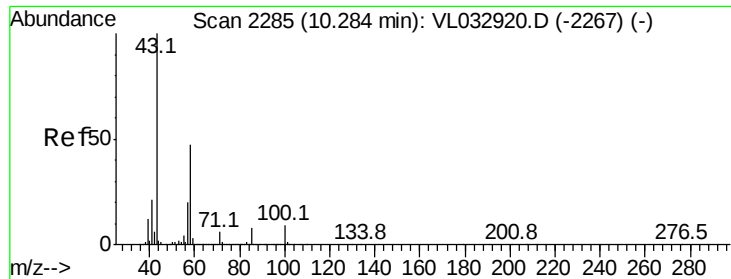
#50
4-Methyl-2-Pentanone
Concen: 7.699 ppbv
RT: 8.88 min Scan# 1848
Delta R.T. 0.00 min
Lab File: VL033026.D
Acq: 20 Dec 2018 15:25

Tgt Ion: 43 Resp: 1679579
Ion Ratio Lower Upper
43 100
58 35.7 29.0 43.4



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





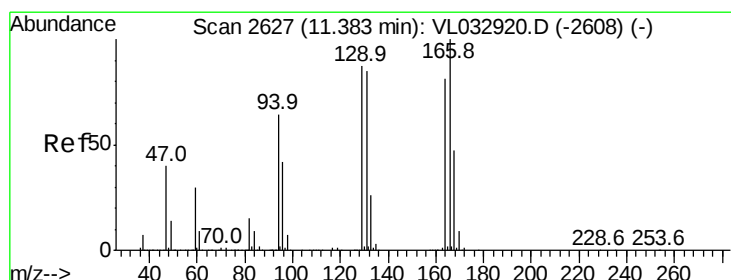
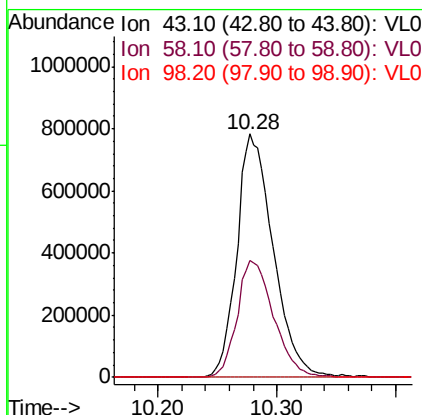
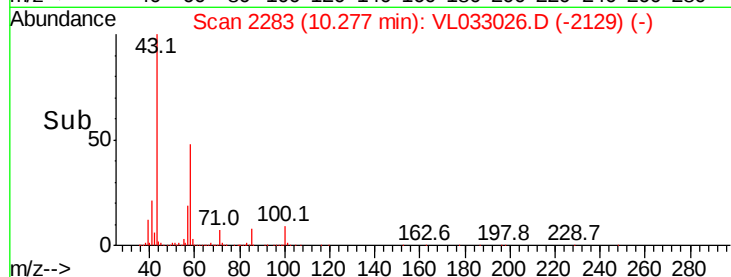
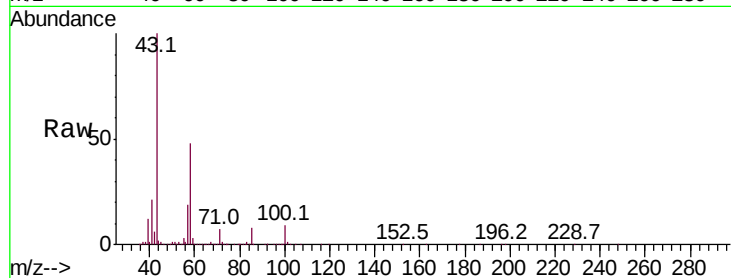
#51
2-Hexanone
Concen: 11.197 ppbv
RT: 10.28 min Scan# 2283
Delta R.T. -0.01 min
Lab File: VL033026.D
Acq: 20 Dec 2018 15:25

Instrument :
MSVOA_L
ClientSampleId :
VL1220ABS01

Tot Ion	Ratio	Lower	Upper
43	100		
58	48.3	38.1	57.1
98	0.5	0.4	0.6

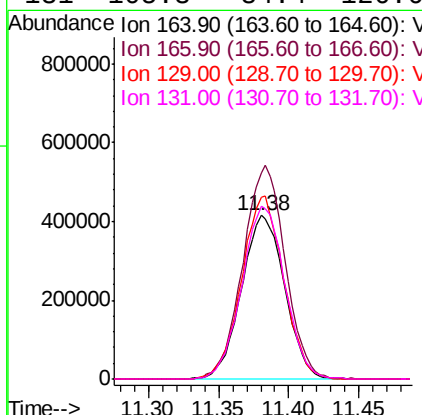
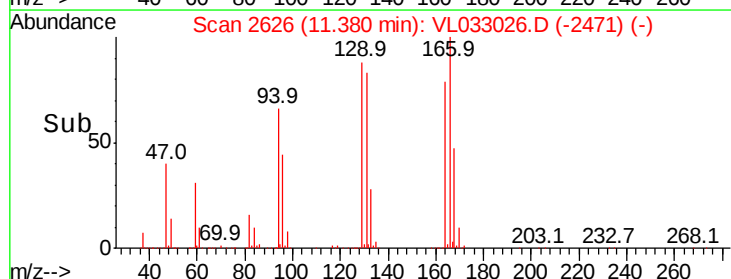
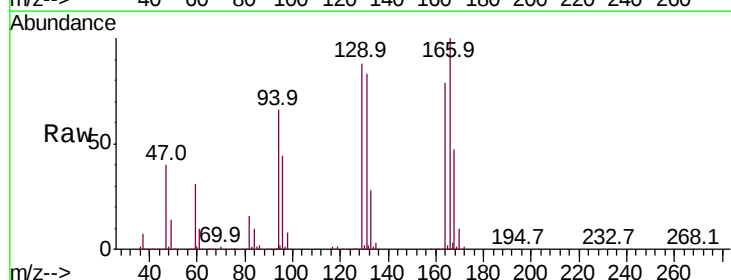
Manual Integrations
APPROVED

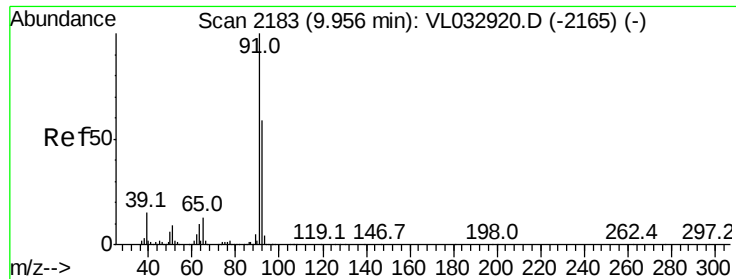
MMDadoda
12/24/2018 8:26:18 AM



#52
Tetrachloroethene
Concen: 10.619 ppbv
RT: 11.38 min Scan# 2626
Delta R.T. -0.00 min
Lab File: VL033026.D
Acq: 20 Dec 2018 15:25

Tgt Ion	Ratio	Lower	Upper
164	100		
166	126.0	98.8	148.2
129	111.1	85.5	128.3
131	105.3	84.4	126.6





#53

Toluene

Concen: 11.574 ppbv

RT: 9.95 min Scan# 2182

Delta R.T. -0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

ClientSampleId :

VL1220ABS01

Tot Ion: 91 Resp: 2827863

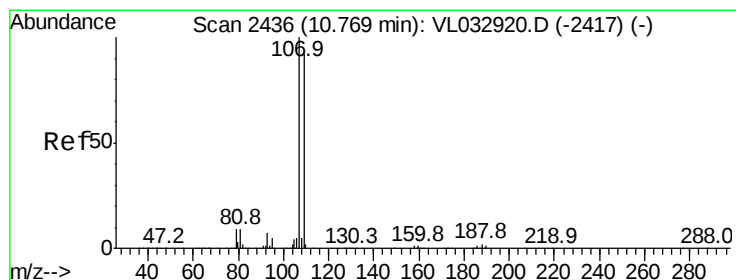
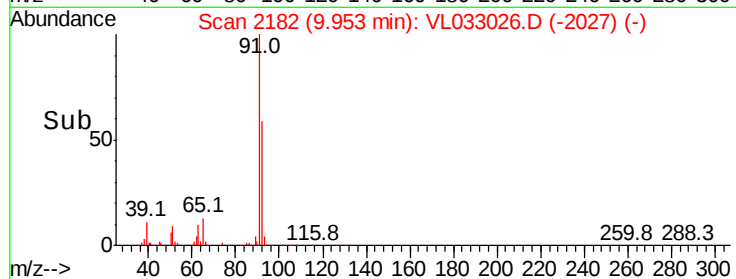
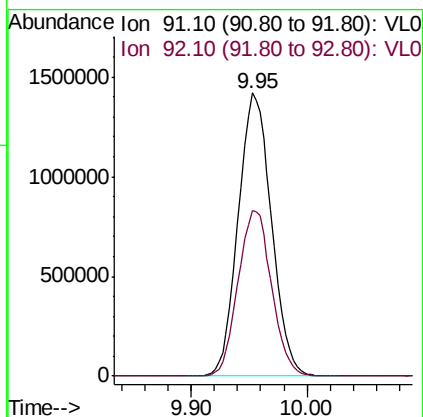
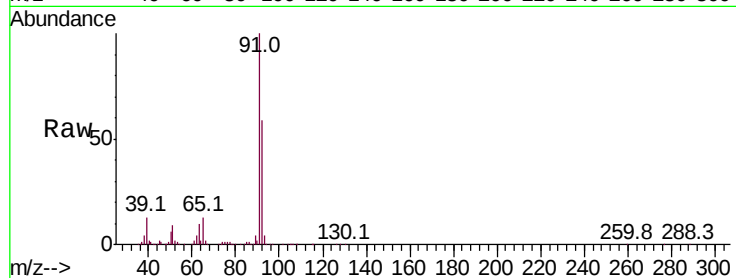
Ion Ratio Lower Upper

91 100

92 59.1 47.4 71.0

Manual Integrations
APPROVED

MMDadoda
12/24/2018 8:26:18 AM



#54

1,2-Dibromoethane

Concen: 10.500 ppbv

RT: 10.77 min Scan# 2435

Delta R.T. -0.00 min

Lab File: VL033026.D

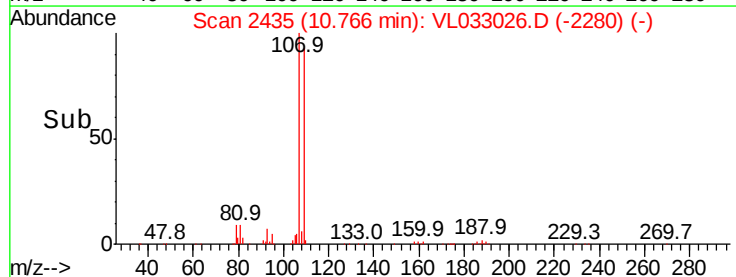
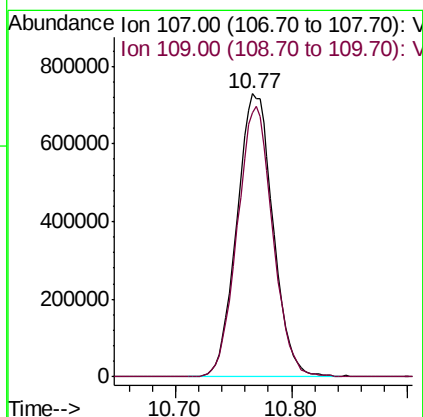
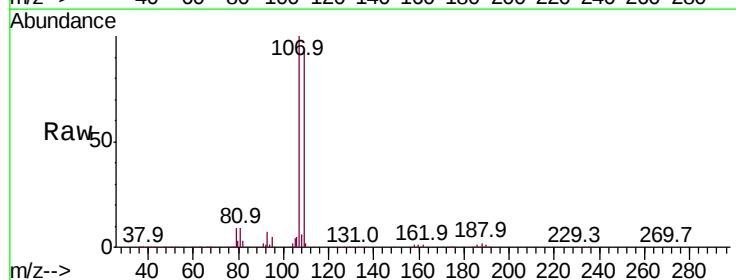
Acq: 20 Dec 2018 15:25

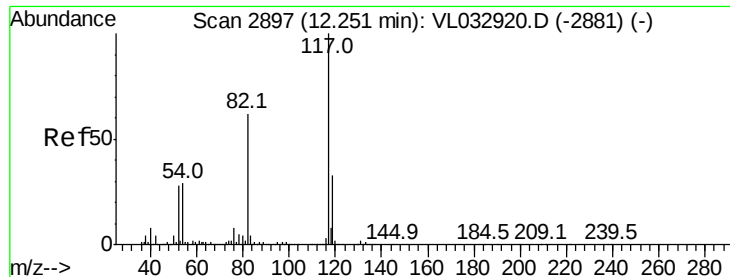
Tgt Ion: 107 Resp: 1577426

Ion Ratio Lower Upper

107 100

109 93.4 73.4 110.2





#55

Chlorobenzene-d5

Concen: 10.000 ppbv m

RT: 12.25 min Scan# 2896

Delta R.T. -0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

ClientSampleId :

VL1220ABS01

Tot Ion:117 Resp: 3114846

Ion Ratio Lower Upper

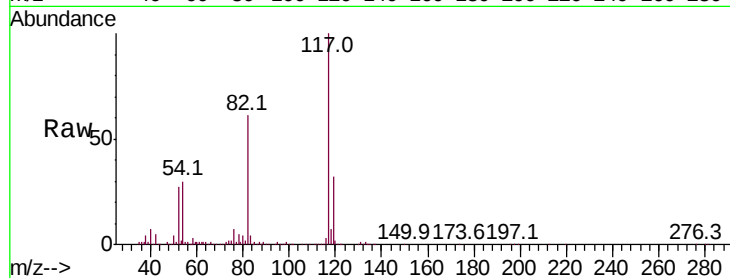
117 100

82 61.1 47.8 71.8

119 33.7 43.1 64.7#

Manual Integrations
APPROVED

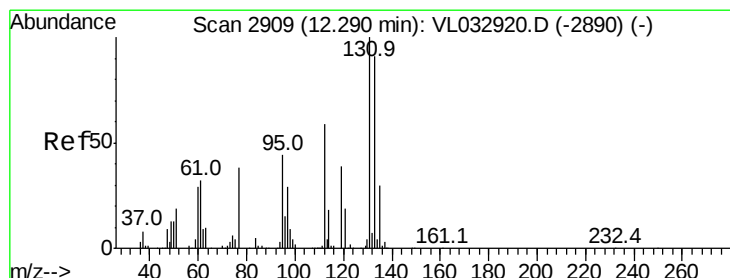
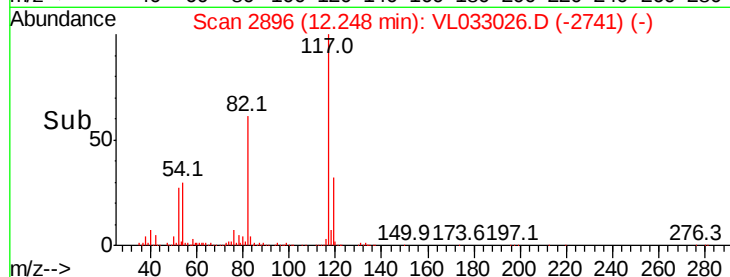
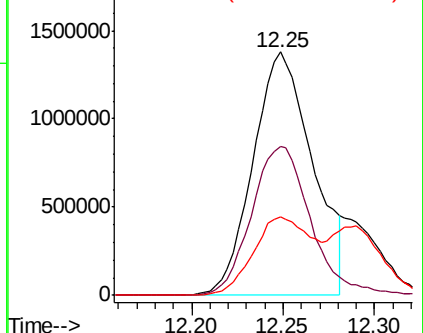
MMDadoda
12/24/2018 8:26:18 AM



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#56

1,1,1,2-Tetrachloroethane

Concen: 9.910 ppbv

RT: 12.29 min Scan# 2908

Delta R.T. -0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

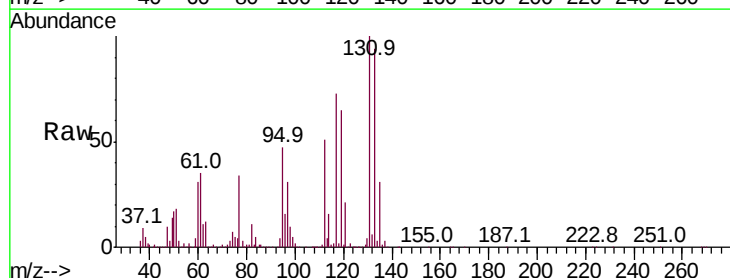
Tgt Ion:131 Resp: 1376213

Ion Ratio Lower Upper

131 100

133 94.7 75.1 112.7

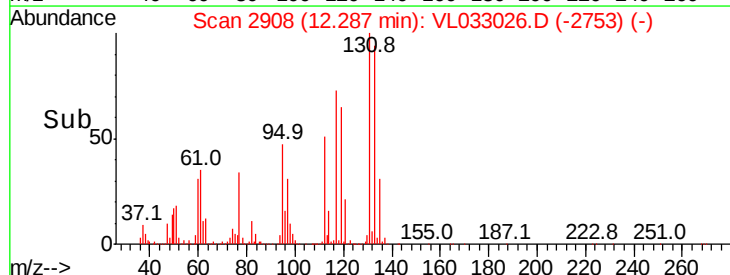
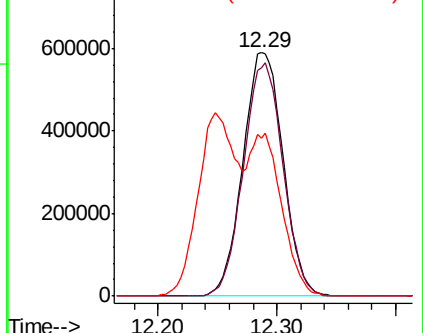
119 56.7 47.5 71.3

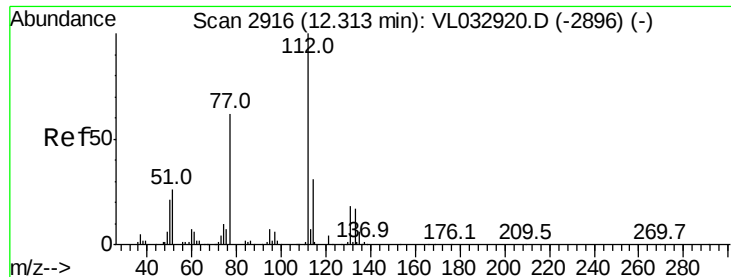


Abundance Ion 131.00 (130.70 to 131.70): V

Ion 133.00 (132.70 to 133.70): V

Ion 119.00 (118.70 to 119.70): V





#57

Chlorobenzene

Concen: 10.038 ppbv

RT: 12.31 min Scan# 2915

Delta R.T. -0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

ClientSampleId :

VL1220ABS01

Tot Ion: 112 Resp: 2258142

Ion Ratio Lower Upper

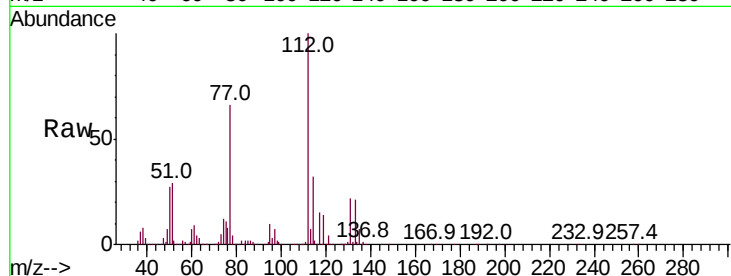
112 100

77 65.6 51.1 76.7

114 32.2 28.4 34.7

Manual Integrations
APPROVED

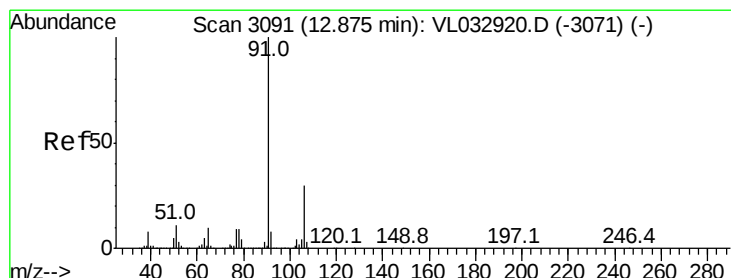
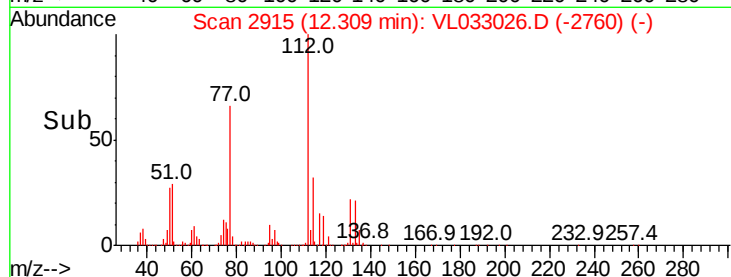
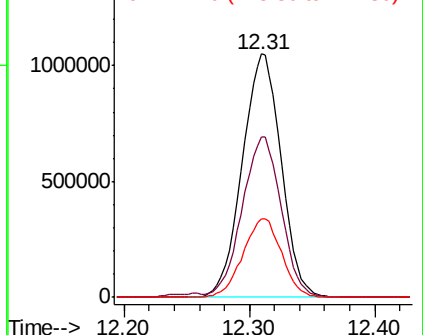
MMDadoda
12/24/2018 8:26:18 AM



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: 11.984 ppbv

RT: 12.87 min Scan# 3090

Delta R.T. -0.00 min

Lab File: VL033026.D

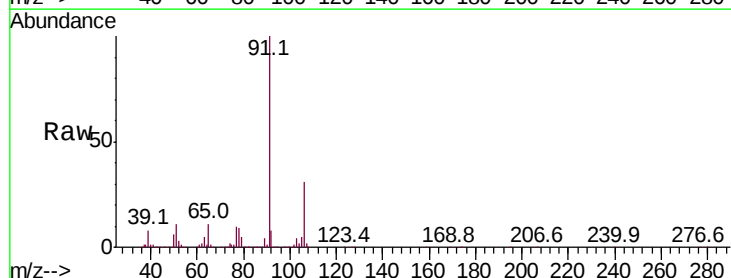
Acq: 20 Dec 2018 15:25

Tgt Ion: 91 Resp: 3981973

Ion Ratio Lower Upper

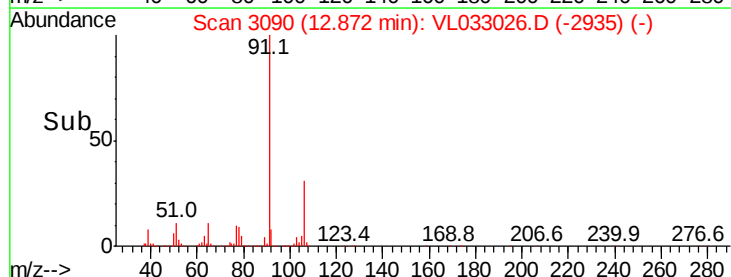
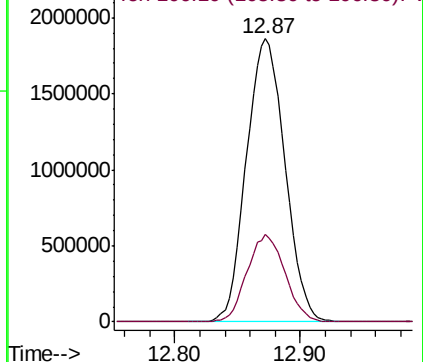
91 100

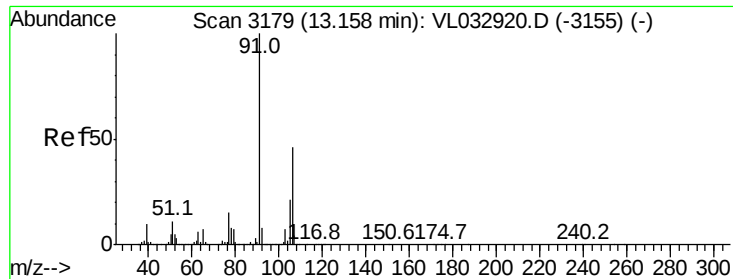
106 30.9 23.9 35.9



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





#59

m/p-Xylene

Concen: 22.823 ppbv m

RT: 13.14 min Scan# 3172

Delta R.T. -0.02 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

ClientSampleId :

VL1220ABS01

Tot Ion: 91 Resp: 6875614

Ion Ratio Lower Upper

91 100

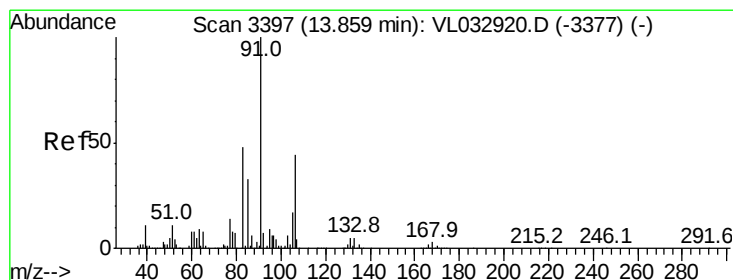
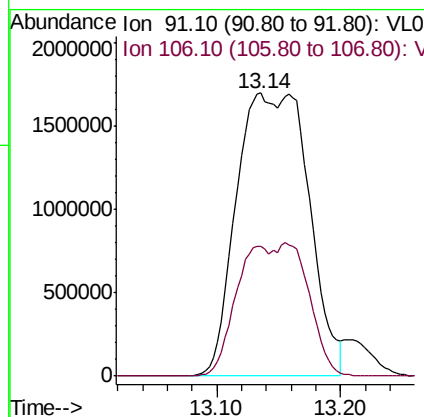
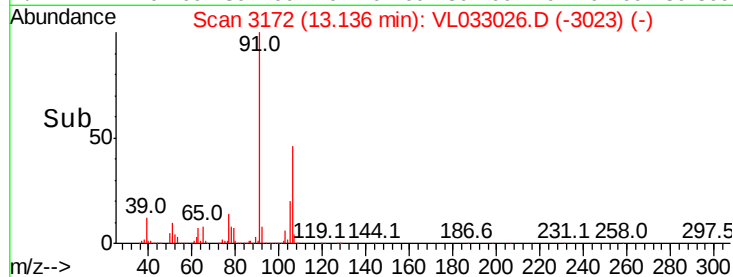
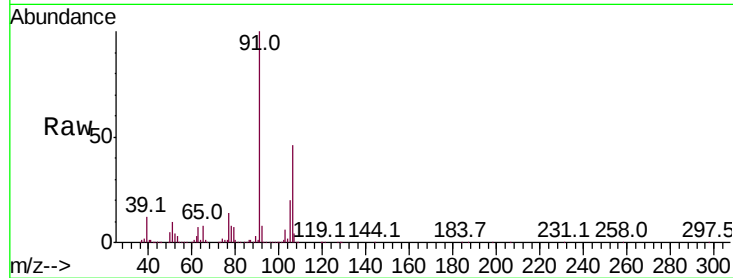
106 45.5 0.0 0.0#

Manual Integrations

APPROVED

MMDadoda

12/24/2018 8:26:18 AM



#60

o-Xylene

Concen: 11.056 ppbv

RT: 13.86 min Scan# 3396

Delta R.T. -0.00 min

Lab File: VL033026.D

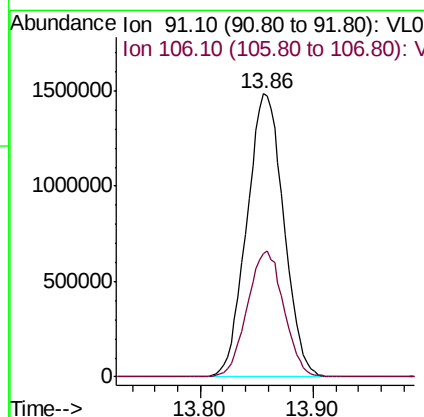
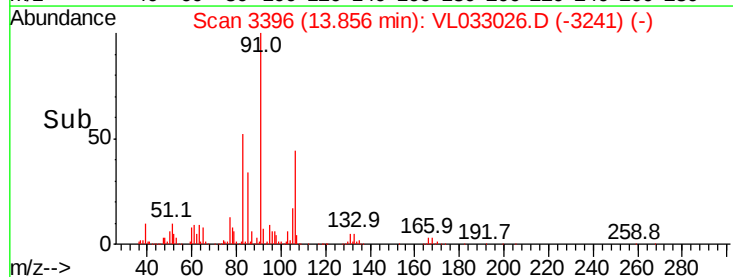
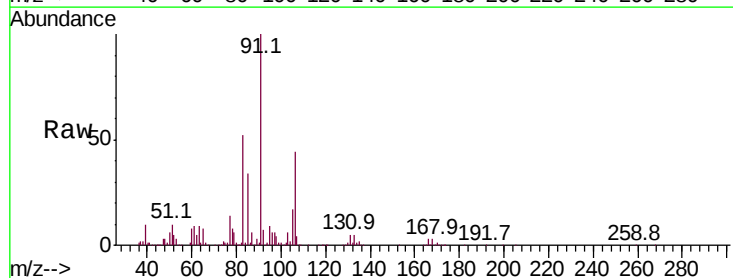
Acq: 20 Dec 2018 15:25

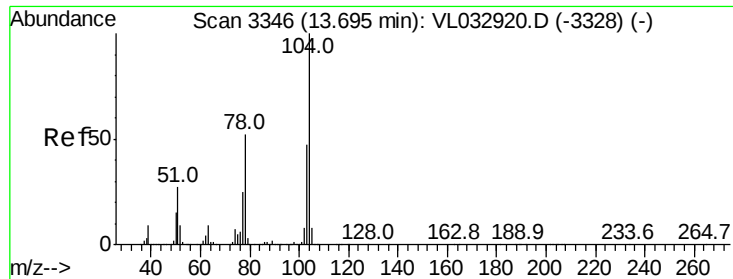
Tgt Ion: 91 Resp: 3363448

Ion Ratio Lower Upper

91 100

106 44.0 21.9 65.8





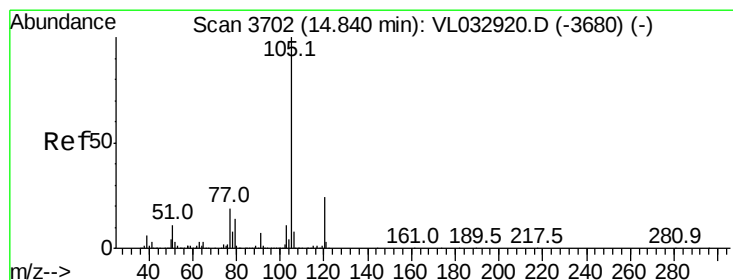
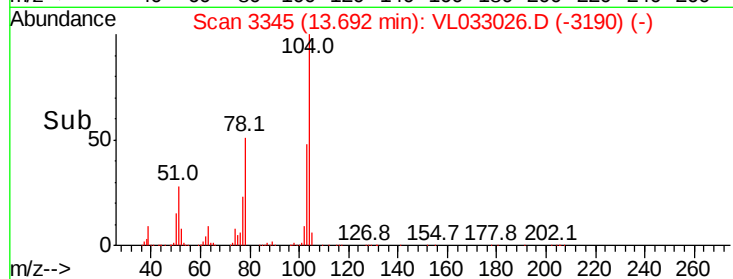
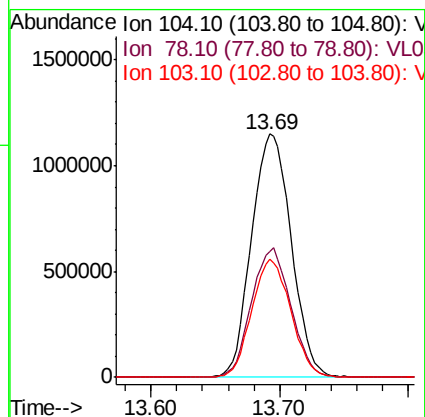
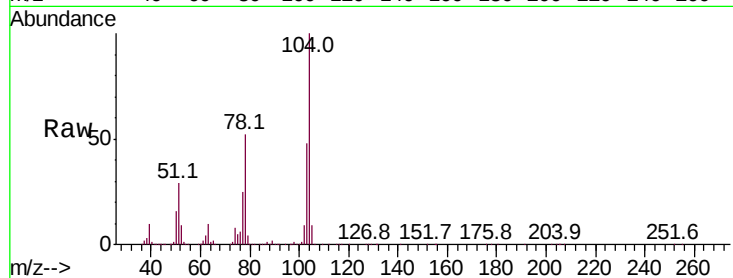
#61
Stvrene
Concen: 12.222 ppbv
RT: 13.69 min Scan# 3345
Delta R.T. -0.00 min
Lab File: VL033026.D
Acq: 20 Dec 2018 15:25

Instrument :
MSVOA_L
ClientSampleId :
VL1220ABS01

Tot Ion	Ratio	Lower	Upper
104	100		
78	52.5	42.0	63.0
103	47.6	38.3	57.5

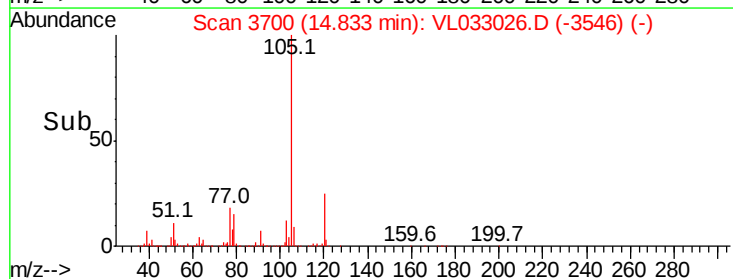
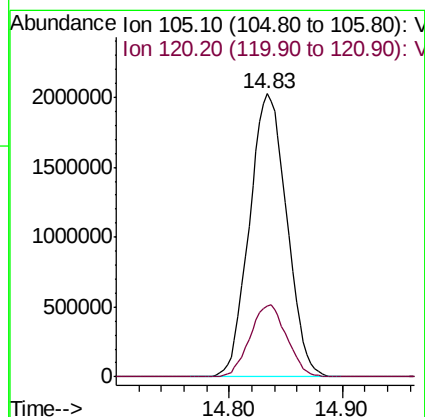
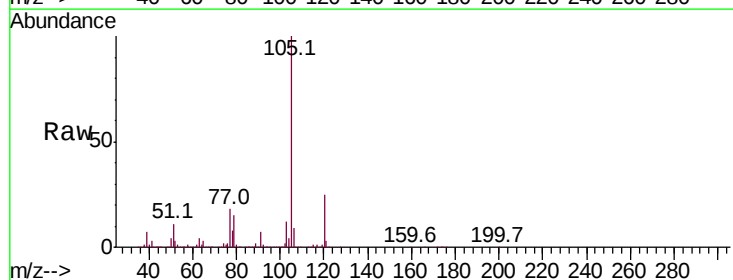
Manual Integrations
APPROVED

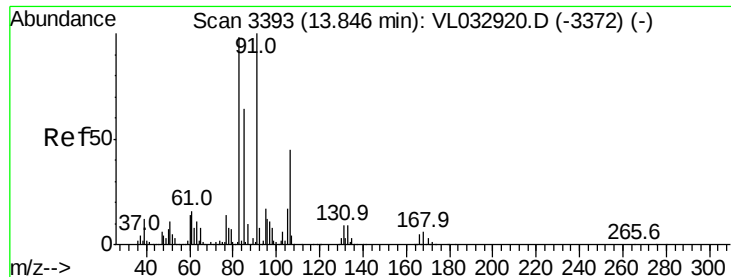
MMDadoda
12/24/2018 8:26:18 AM



#62
Isopropylbenzene
Concen: 10.937 ppbv
RT: 14.83 min Scan# 3700
Delta R.T. -0.01 min
Lab File: VL033026.D
Acq: 20 Dec 2018 15:25

Tgt Ion	Ratio	Lower	Upper
105	100		
120	25.1	20.3	30.5





#63

1,1,2,2-Tetrachloroethane

Concen: 9.734 ppbv

RT: 13.84 min Scan# 3392

Delta R.T. -0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

ClientSampleId :

VL1220ABS01

Tot Ion: 83 Resp: 2299389

Ion Ratio Lower Upper

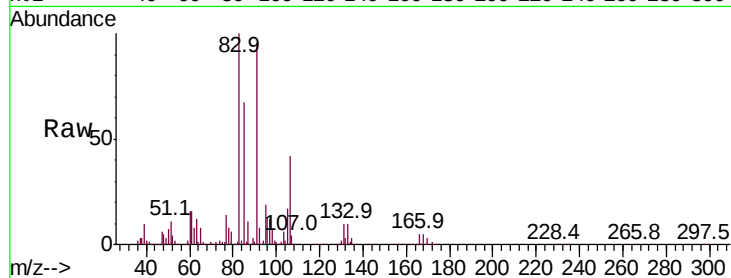
83 100

131 9.9 4.9 14.6

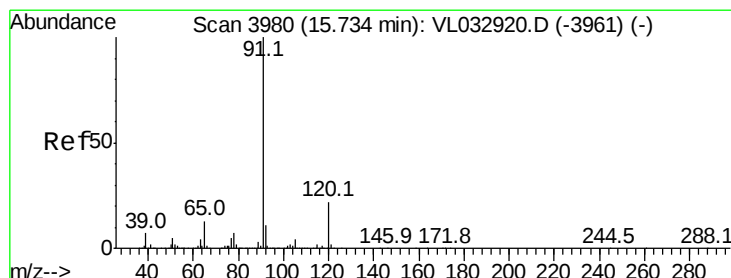
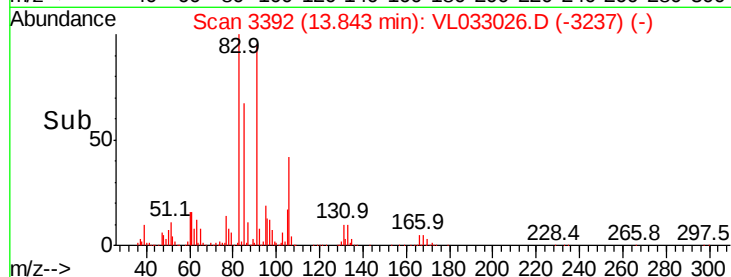
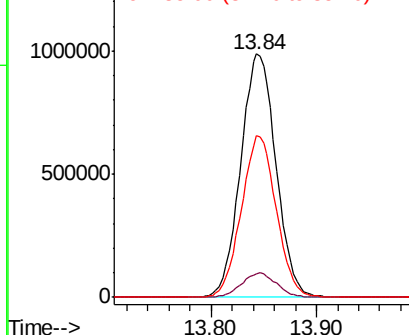
85 65.6 32.9 98.6

Manual Integrations
APPROVED

MMDadoda
12/24/2018 8:26:18 AM



Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 131.00 (130.70 to 131.70): V
Ion 85.00 (84.70 to 85.70): VL0



#64

n-propylbenzene

Concen: 10.857 ppbv

RT: 15.73 min Scan# 3979

Delta R.T. -0.00 min

Lab File: VL033026.D

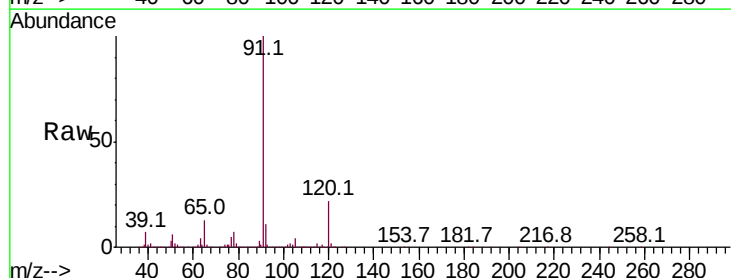
Acq: 20 Dec 2018 15:25

Tgt Ion:120 Resp: 1196889

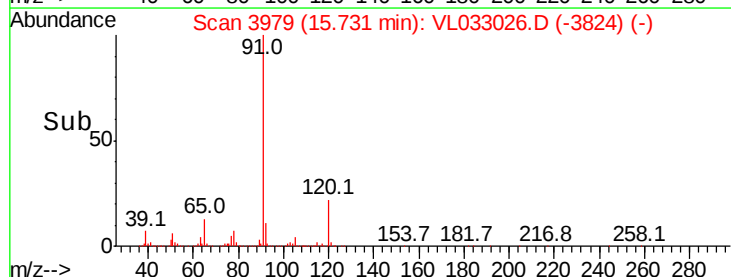
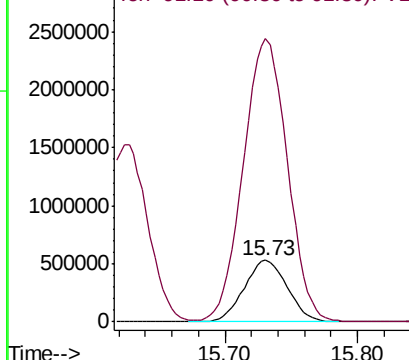
Ion Ratio Lower Upper

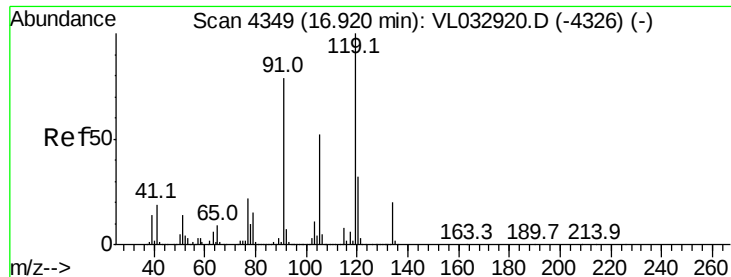
120 100

91 472.0 380.4 570.6



Abundance Ion 120.20 (119.90 to 120.90): V
Ion 91.10 (90.80 to 91.80): VL0





#65

tert-Butylbenzene

Concen: 10.884 ppbv

RT: 16.91 min Scan# 4347

Delta R.T. -0.01 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

ClientSampleId :

VL1220ABS01

Tot Ion:119 Resp: 4282757

Ion Ratio Lower Upper

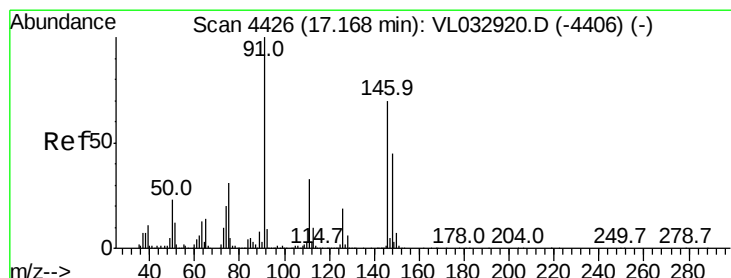
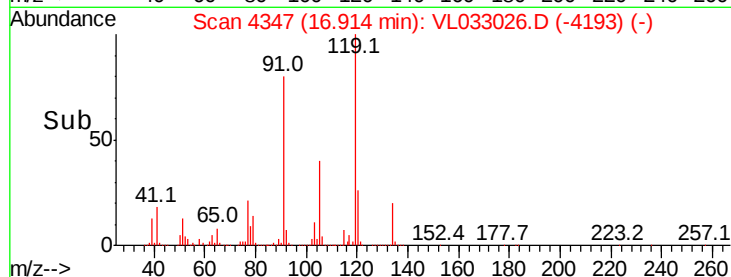
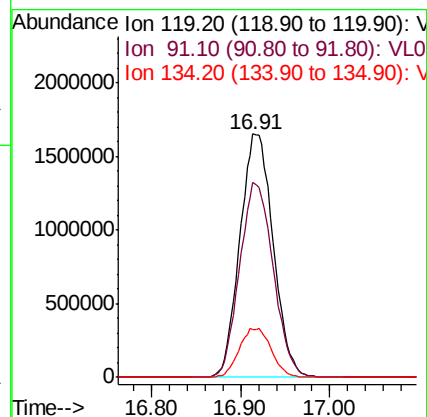
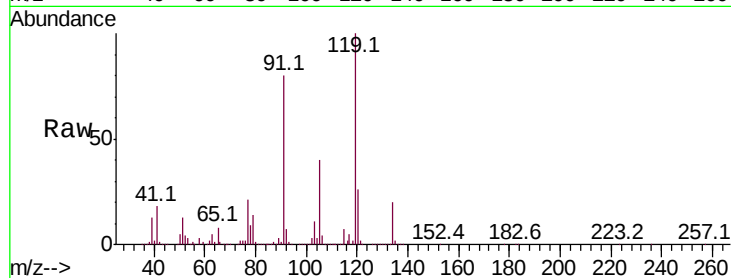
119 100

91 81.0 64.5 96.7

134 19.4 15.7 23.5

Manual Integrations
APPROVED

MMDadoda
12/24/2018 8:26:18 AM



#66

Benzyl Chloride

Concen: 11.635 ppbv

RT: 17.16 min Scan# 4425

Delta R.T. -0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

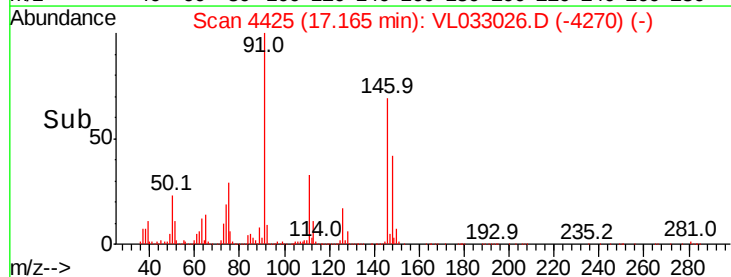
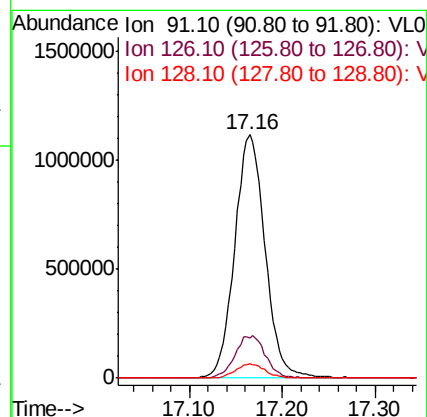
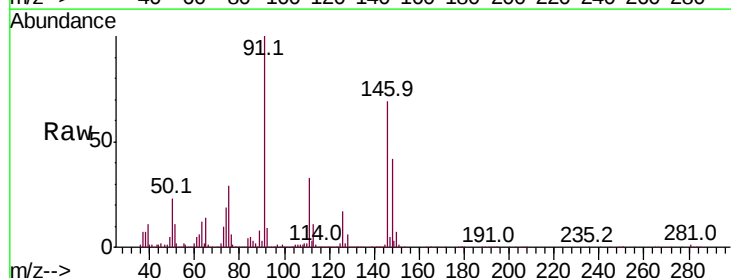
Tgt Ion: 91 Resp: 2537584

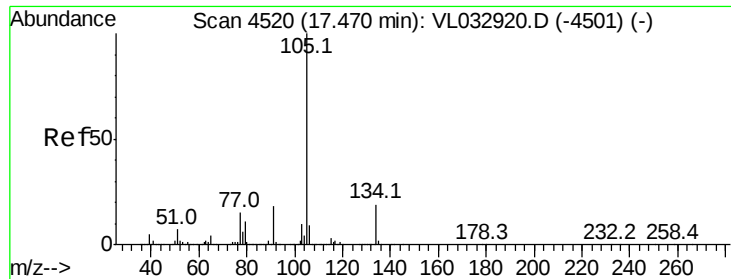
Ion Ratio Lower Upper

91 100

126 17.7 14.1 21.1

128 5.8 4.5 6.7





#67

sec-Butylbenzene

Concen: 10.358 ppbv

RT: 17.47 min Scan# 4519

Delta R.T. -0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

ClientSampleId :

VL1220ABS01

Tot Ion:105 Resp: 6008992

Ion Ratio Lower Upper

105 100

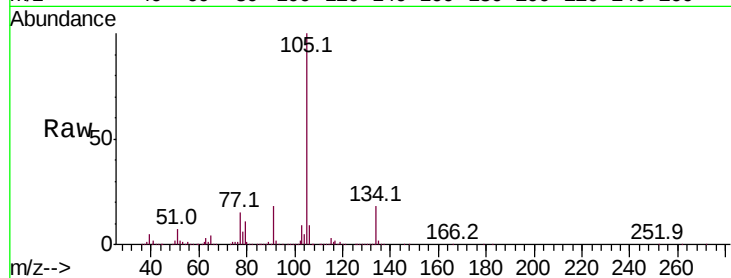
134 18.4 14.6 21.8

Manual Integrations

APPROVED

MMDadoda

12/24/2018 8:26:18 AM



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V

2500000

2000000

1500000

1000000

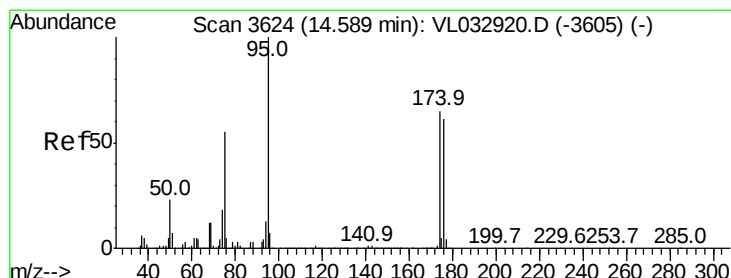
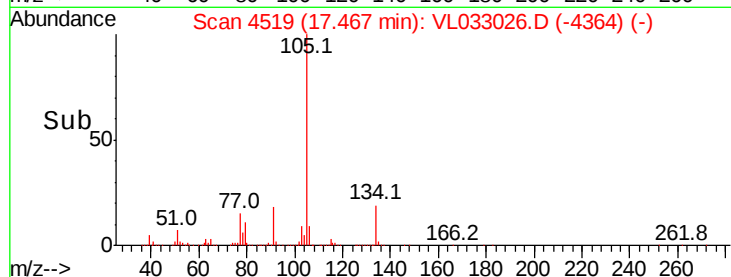
500000

0

17.47

17.40 17.50 17.60

Time-->



#68

1-Bromo-4-Fluorobenzene

Concen: 10.371 ppbv

RT: 14.58 min Scan# 3622

Delta R.T. -0.01 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

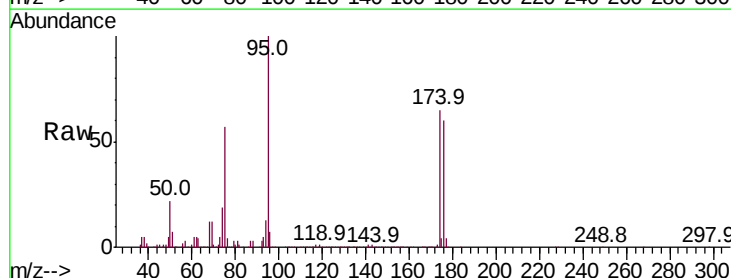
Tgt Ion: 95 Resp: 2386513

Ion Ratio Lower Upper

95 100

174 65.6 51.4 77.0

175 4.8 3.8 5.6



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

1500000

1000000

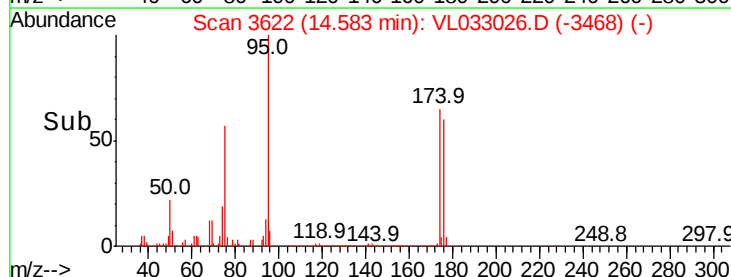
500000

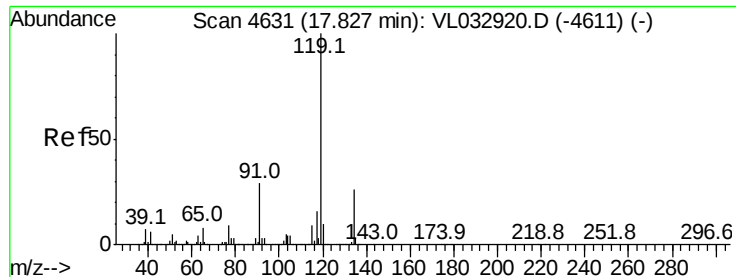
0

14.58

14.50 14.60

Time-->





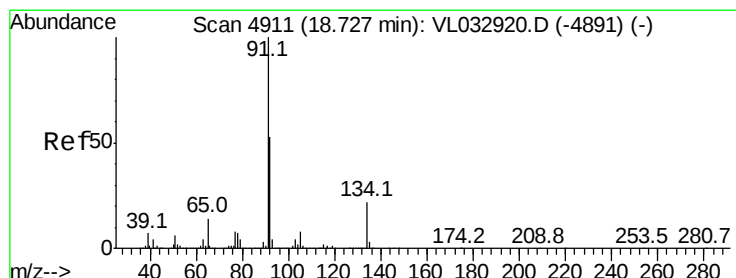
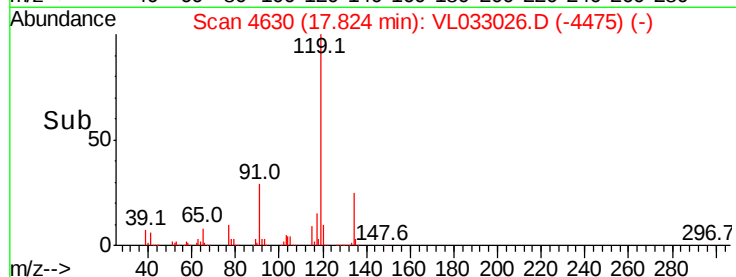
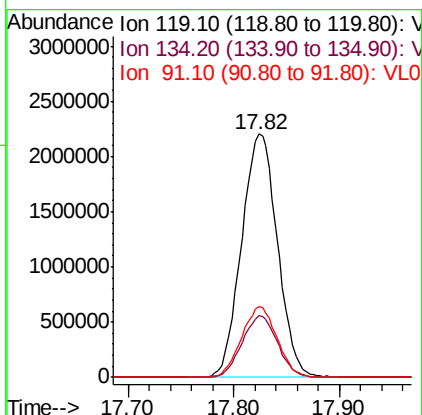
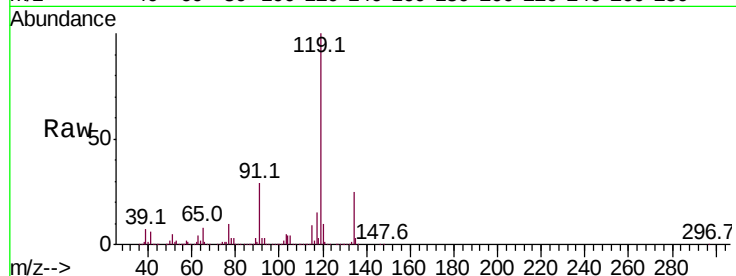
#69
p-Isopropyltoluene
Concen: 11.078 ppbv
RT: 17.82 min Scan# 4630
Delta R.T. -0.00 min
Lab File: VL033026.D
Acq: 20 Dec 2018 15:25

Instrument :
MSVOA_L
ClientSampleId :
VL1220ABS01

Tot Ion	Ratio	Lower	Upper
119	100		
134	25.0	20.2	30.2
91	28.9	22.9	34.3

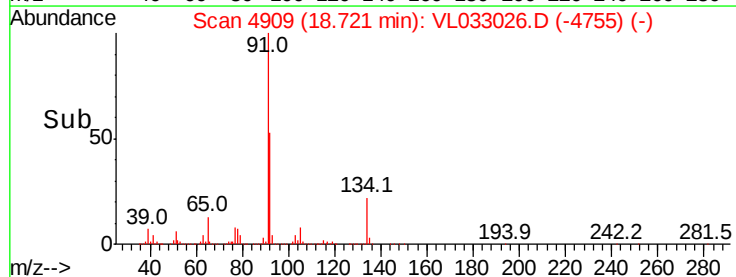
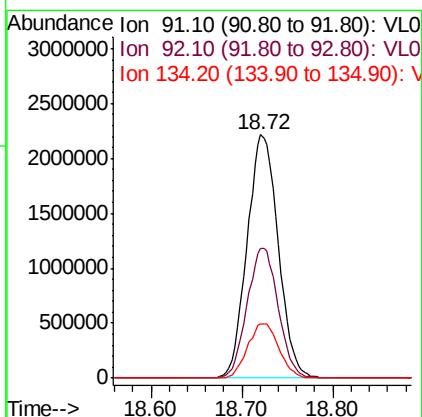
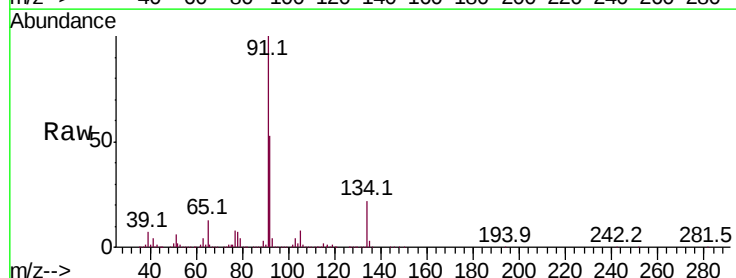
Manual Integrations
APPROVED

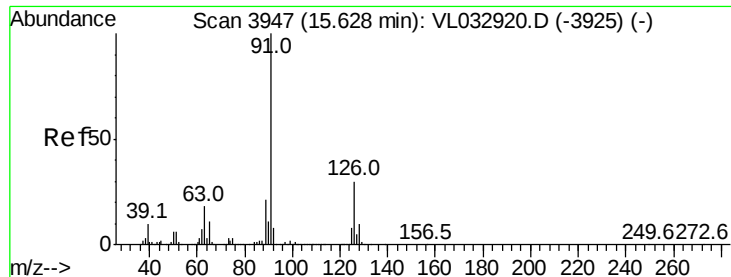
MMDadoda
12/24/2018 8:26:18 AM



#70
n-Butylbenzene
Concen: 12.139 ppbv
RT: 18.72 min Scan# 4909
Delta R.T. -0.01 min
Lab File: VL033026.D
Acq: 20 Dec 2018 15:25

Tgt Ion	Ratio	Lower	Upper
91	100		
92	53.4	42.7	64.1
134	22.5	18.0	27.0





#71

2-Chlorotoluene

Concen: 10.942 ppbv

RT: 15.62 min Scan# 3946

Delta R.T. -0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

ClientSampleId :

VL1220ABS01

Tot Ion: 91 Resp: 3453792

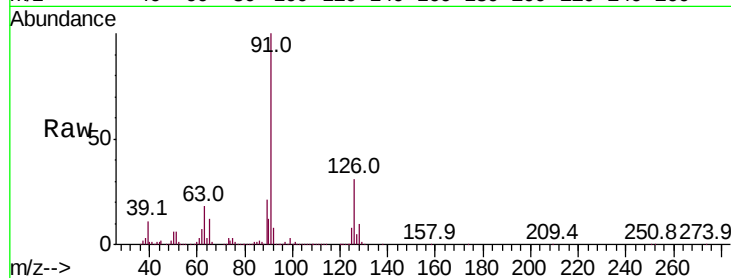
Ion Ratio Lower Upper

91 100

126 31.1 12.3 49.3

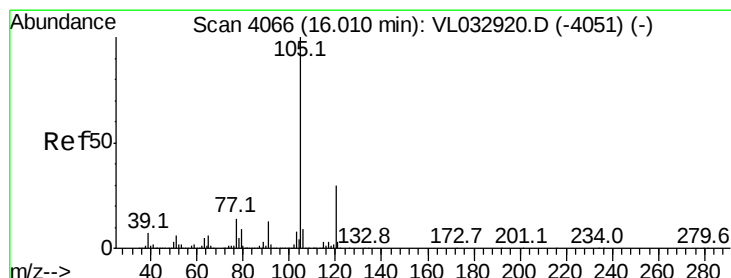
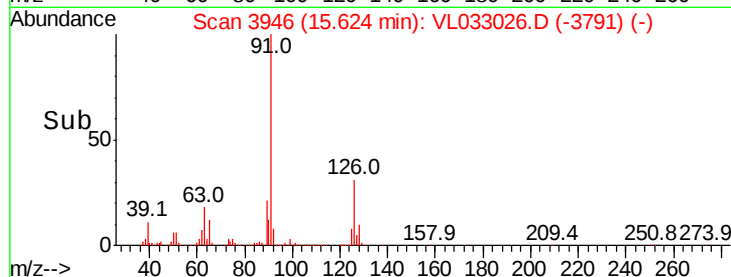
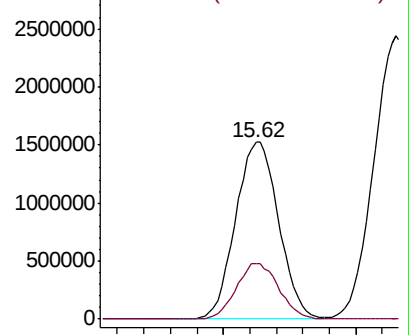
Manual Integrations
APPROVED

MMDadoda
12/24/2018 8:26:18 AM



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V



#72

4-Ethyltoluene

Concen: 11.320 ppbv

RT: 16.01 min Scan# 4066

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Tgt Ion:105 Resp: 3844781

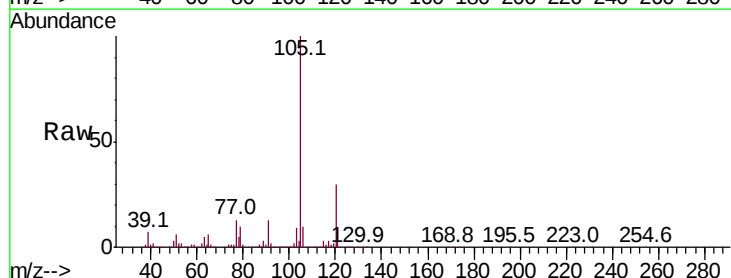
Ion Ratio Lower Upper

105 100

120 28.8 23.0 34.4

91 13.2 10.4 15.6

77 13.7 11.0 16.4

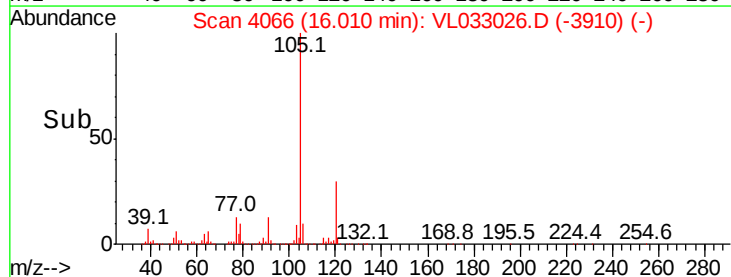
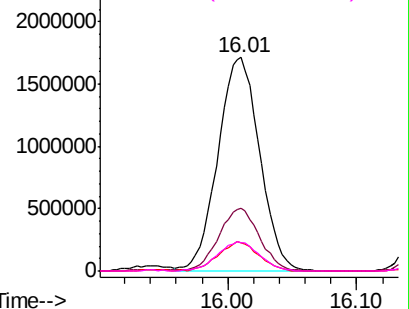


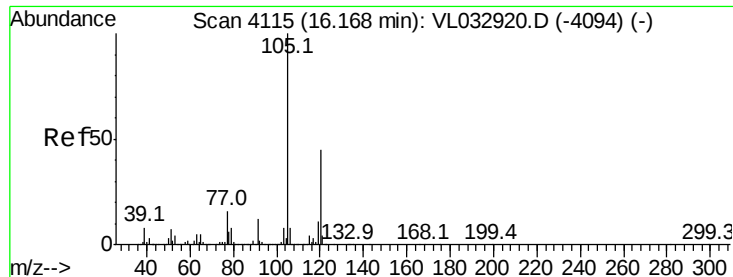
Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0





#73

1,3,5-Trimethylbenzene

Concen: 11.198 ppbv

RT: 16.17 min Scan# 4115

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

ClientSampleId :

VL1220ABS01

Tot Ion:105 Resp: 3712979

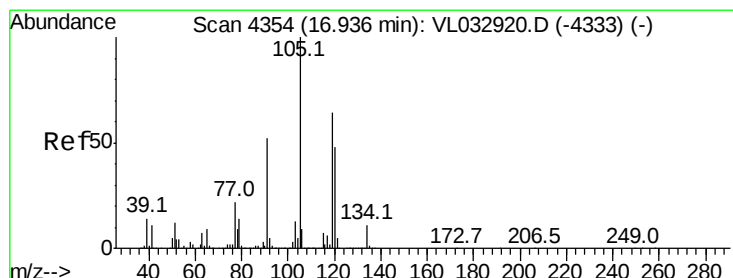
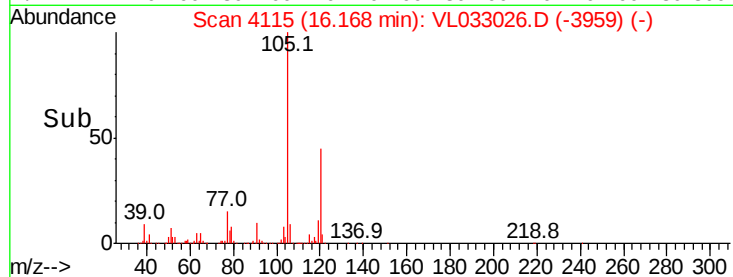
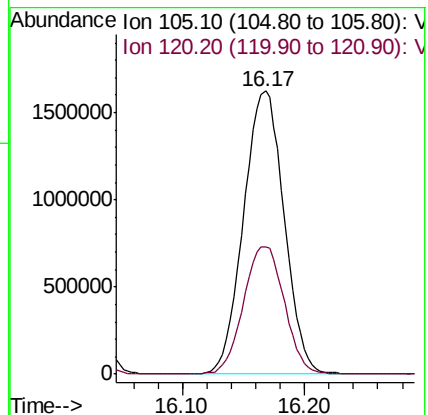
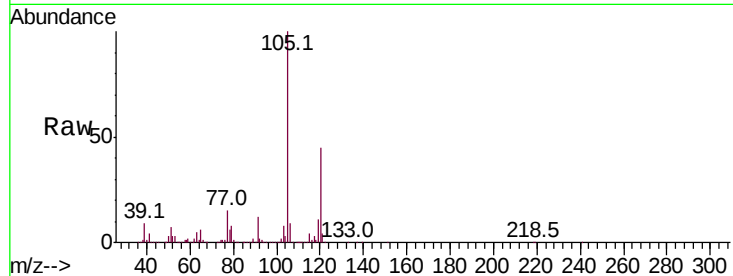
Ion Ratio Lower Upper

105 100

120 45.2 36.0 54.0

Manual Integrations
APPROVED

MMDadoda
12/24/2018 8:26:18 AM



#74

1,2,4-Trimethylbenzene

Concen: 10.412 ppbv

RT: 16.94 min Scan# 4354

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Tgt Ion:105 Resp: 3898310

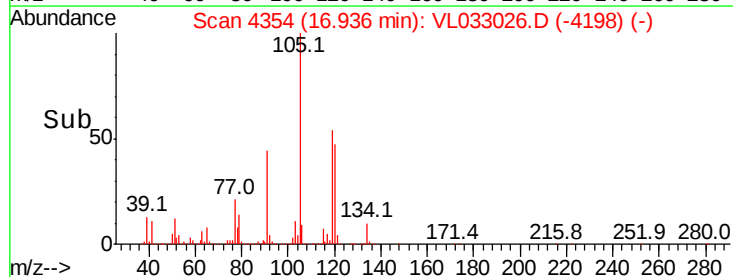
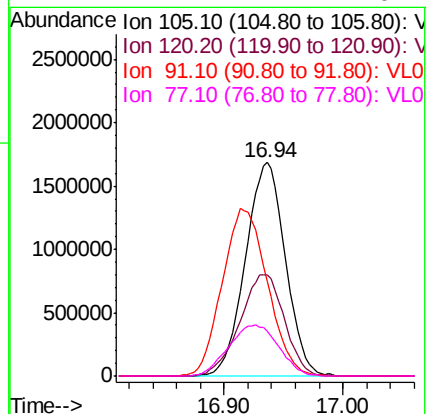
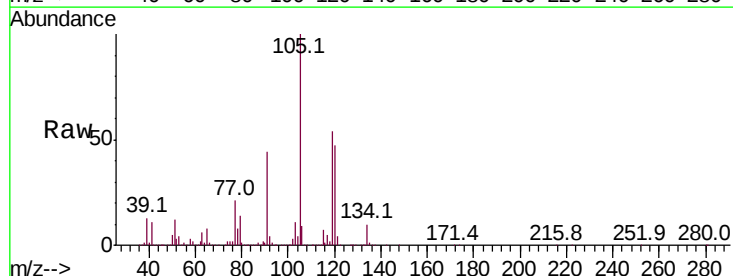
Ion Ratio Lower Upper

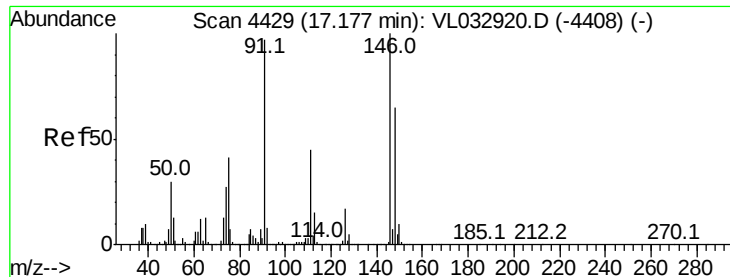
105 100

120 47.0 38.6 58.0

91 44.2 41.7 62.5

77 21.2 17.4 26.2





#75

1,3-Dichlorobenzene

Concen: 10.004 ppbv

RT: 17.17 min Scan# 4428

Delta R.T. -0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

ClientSampleId :

VL1220ABS01

Tot Ion:146 Resp: 2205689

Ion Ratio Lower Upper

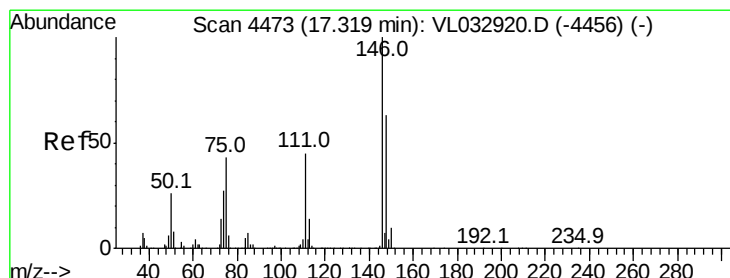
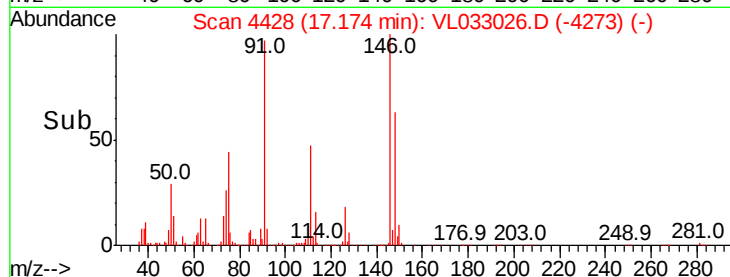
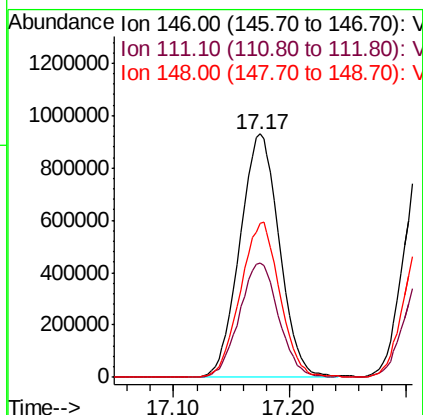
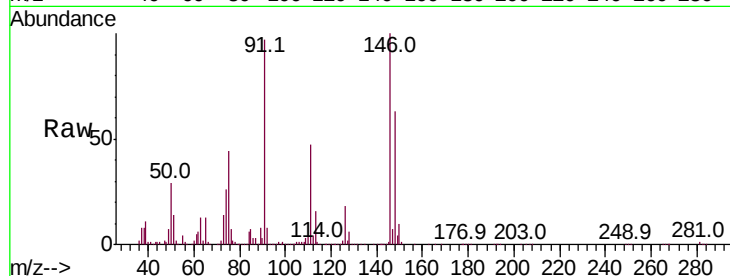
146 100

111 46.7 23.6 70.8

148 63.5 32.1 96.3

Manual Integrations
APPROVED

MMDadoda
12/24/2018 8:26:18 AM



#76

1,4-Dichlorobenzene

Concen: 10.259 ppbv

RT: 17.32 min Scan# 4473

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

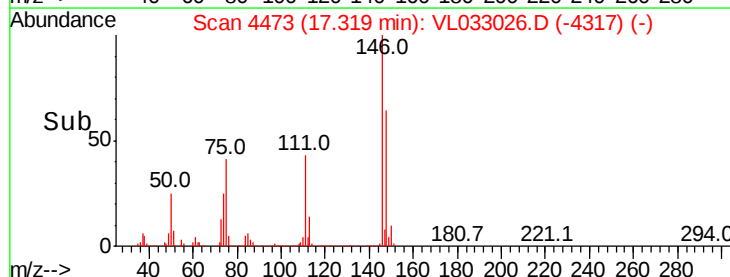
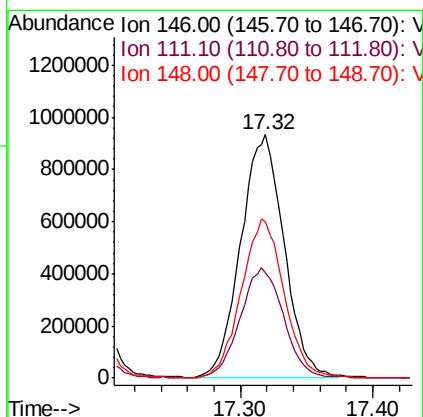
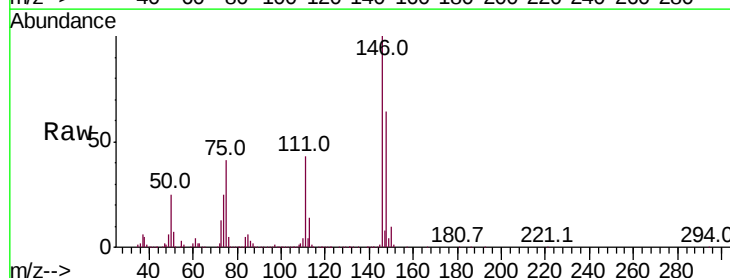
Tgt Ion:146 Resp: 2110644

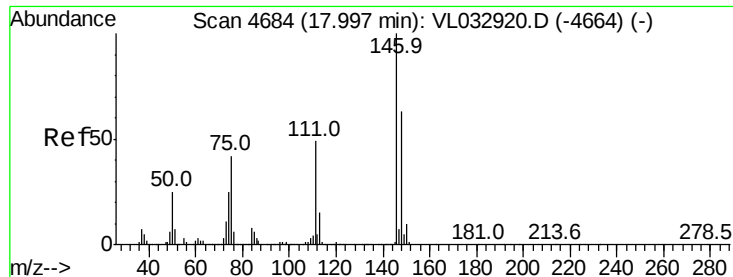
Ion Ratio Lower Upper

146 100

111 45.8 22.8 68.4

148 64.9 32.0 96.2





#77

1,2-Dichlorobenzene

Concen: 10.727 ppbv

RT: 18.00 min Scan# 4684

Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

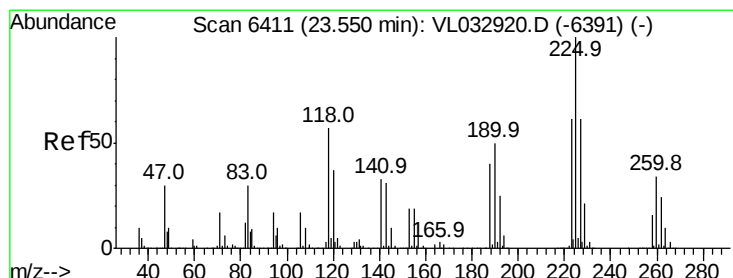
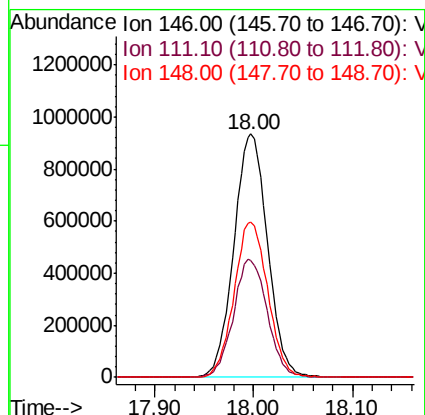
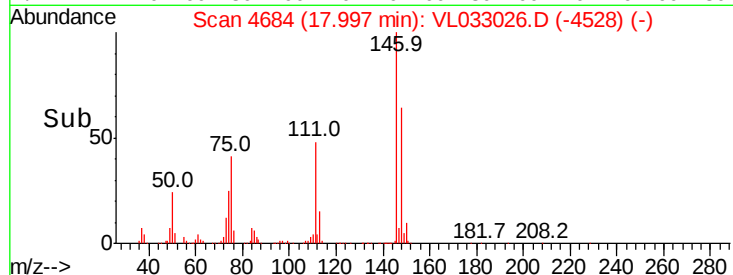
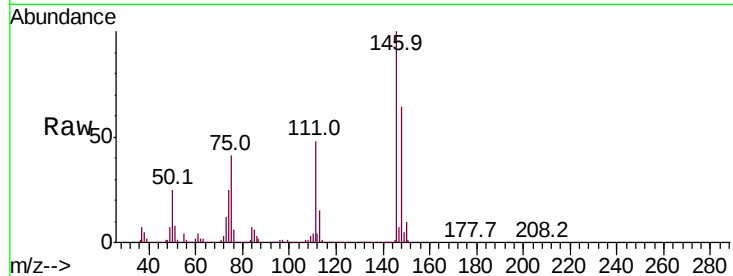
ClientSampleId :

VL1220ABS01

Tot Ion:	146	Resp:	2208709
Ion	Ratio	Lower	Upper
146	100		
111	48.9	24.3	72.9
148	64.4	32.0	96.2

Manual Integrations
APPROVED

MMDadoda
12/24/2018 8:26:18 AM



#78

Hexachloro-1,3-Butadiene

Concen: 9.134 ppbv

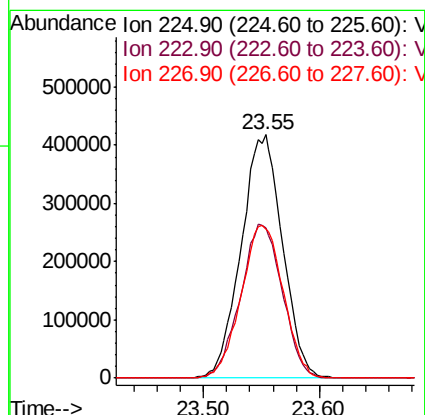
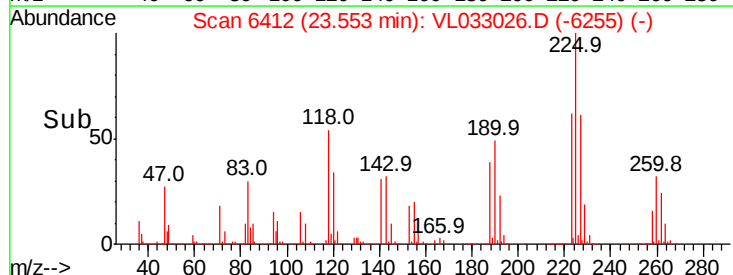
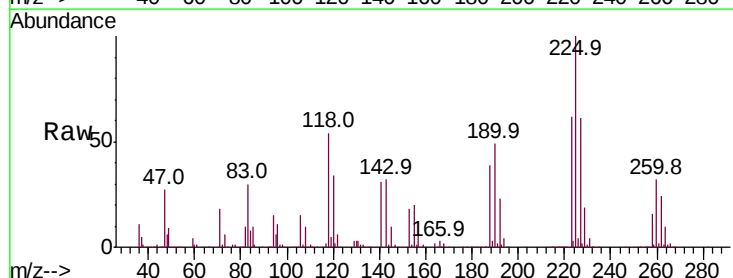
RT: 23.55 min Scan# 6412

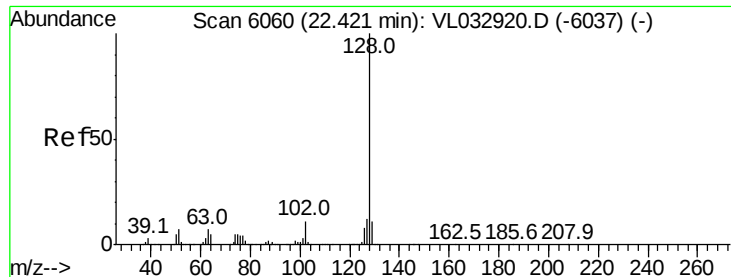
Delta R.T. 0.00 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Tgt Ion:	225	Resp:	1034261
Ion	Ratio	Lower	Upper
225	100		
223	63.9	50.6	75.8
227	64.0	50.4	75.6





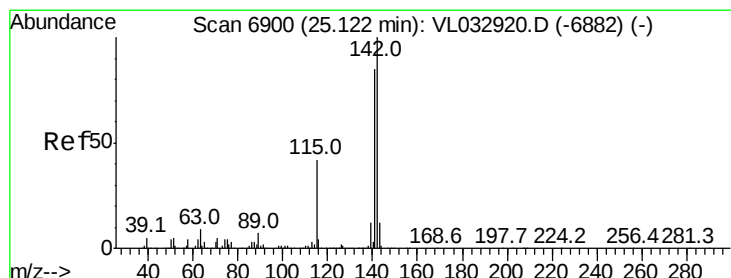
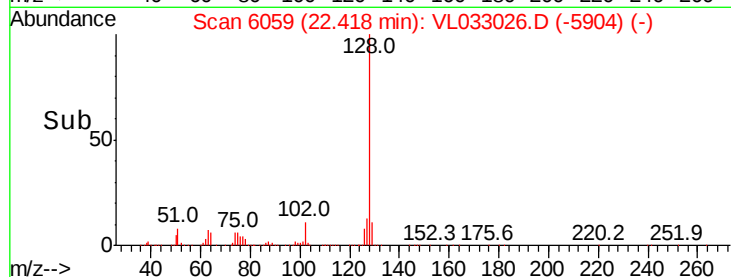
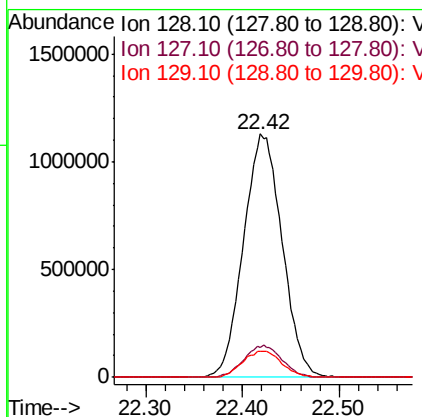
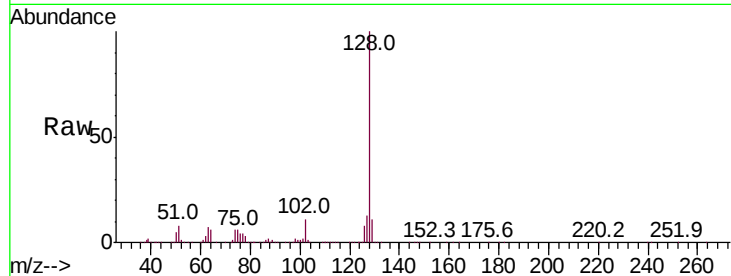
#79
Naphthalene
Concen: 12.956 ppbv
RT: 22.42 min Scan# 6059
Delta R.T. -0.00 min
Lab File: VL033026.D
Acq: 20 Dec 2018 15:25

Instrument :
MSVOA_L
ClientSampleId :
VL1220ABS01

Tot Ion	Ratio	Lower	Upper
128	100		
127	12.5	9.9	14.9
129	10.9	8.6	13.0

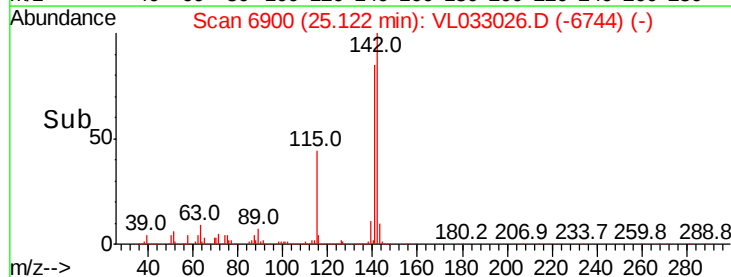
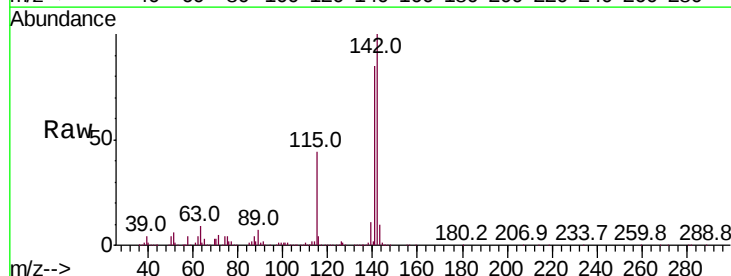
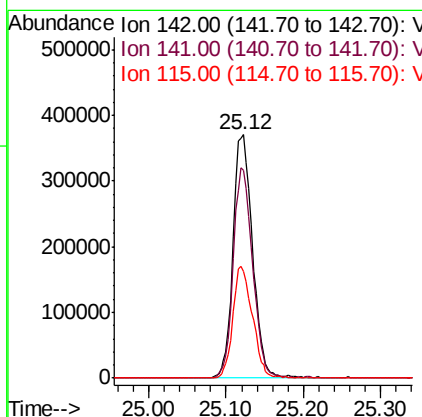
Manual Integrations
APPROVED

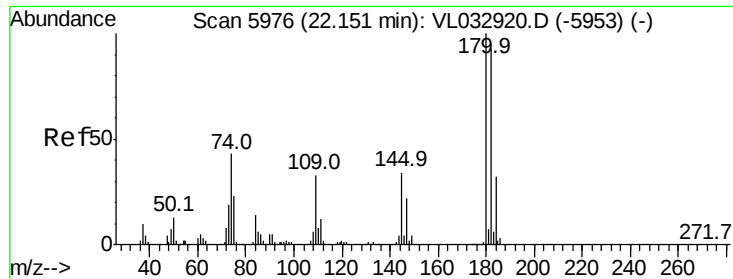
MMDadoda
12/24/2018 8:26:18 AM



#80
Naphthalene, 2-methyl-
Concen: 12.369 ppbv
RT: 25.12 min Scan# 6900
Delta R.T. 0.00 min
Lab File: VL033026.D
Acq: 20 Dec 2018 15:25

Tgt Ion	Ratio	Lower	Upper
142	100		
141	85.5	68.2	102.2
115	46.2	35.1	52.7





#81

1,2,4-Trichlorobenzene

Concen: 12.055 ppbv m

RT: 22.14 min Scan# 5972

Delta R.T. -0.01 min

Lab File: VL033026.D

Acq: 20 Dec 2018 15:25

Instrument :

MSVOA_L

ClientSampleId :

VL1220ABS01

Tot Ion:180 Resp: 1545574

Ion Ratio Lower Upper

180 100

182 95.0 77.0 115.6

184 30.7 24.3 36.5

Manual Integrations

APPROVED

MMDadoda

12/24/2018 8:26:18 AM

