

Data File : VL034455.D
Acq On : 3 Dec 2019 11:36
Operator : SY/AP
Sample : VL1203ABS01
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL1203ABS01

Quant Time: Dec 03 12:14:34 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL111919AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Nov 19 14:15:35 2019
QLast Update : Tue Nov 19 14:15:35 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.69	49	954865	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.21	114	1931093	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.15	117	2090659	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.49	95	1705782	9.70	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.00%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	3.03	85	1864429	10.793	ppbv	100
3) Chlorodifluoromethane	2.97	51	1088173	9.134	ppbv	98
4) Chloromethane	3.12	50	657912	9.362	ppbv	98
5) Vinyl Chloride	3.24	62	613089	9.312	ppbv	92
6) Bromomethane	3.46	94	322206	9.726	ppbv	94
7) Chloroethane	3.55	64	229087	9.586	ppbv	98
8) Dichlorotetrafluoroethane	3.17	85	1415323	9.124	ppbv	99
9) Propene	2.99	41	477135	9.021	ppbv	98
10) Heptane	8.16	43	1268917	9.296	ppbv	100
11) Trichlorofluoromethane	3.94	101	1621830	9.434	ppbv	98
12) 1,1,2-Trichlorotrifluoroet	4.49	101	1084246	9.497	ppbv	100
13) Ethanol	3.60	45	104497	7.092	ppbv	97
14) Bromoethene	3.73	108	438415	9.444	ppbv	99
15) Acetone	3.84	43	1184424	8.662	ppbv	99
16) 1,3-Butadiene	3.31	39	563366	9.459	ppbv	99
17) tert-Butyl alcohol	4.29	59	1021732	8.890	ppbv	100
18) 1,1-Dichloroethene	4.29	96	485675	9.725	ppbv	96
19) Isopropyl Alcohol	3.97	45	812940	9.276	ppbv	100
20) Methylene Chloride	4.34	84	430894	8.887	ppbv	97
21) Allyl Chloride	4.41	41	837340	10.220	ppbv	99
22) trans-1,2-Dichloroethene	4.89	96	493381	9.800	ppbv	98
23) Vinyl Acetate	5.09	43	1787824	10.009	ppbv	99
24) 1,1-Dichloroethane	5.02	63	1283133	9.352	ppbv	100
25) Ethyl Acetate	5.69	43	2247051	9.210	ppbv	100
26) Hexane	5.71	57	945938	9.022	ppbv	98
27) Carbon Disulfide	4.56	76	1265276	11.080	ppbv	98
28) Methyl tert-Butyl Ether	5.04	73	1697975	9.767	ppbv	100
29) Chloroform	5.78	83	1572150	9.260	ppbv	96
30) Cyclohexane	7.17	84	752276	9.491	ppbv	99
31) cis-1,2-Dichloroethene	5.57	61	1045311	9.648	ppbv	97
32) 1,1,1-Trichloroethane	6.54	97	1615260	10.147	ppbv	99
34) 2-Butanone	5.26	43	1467845	9.235	ppbv	100
35) Carbon Tetrachloride	7.05	117	1681459	10.127	ppbv	97
36) Benzene	6.92	78	1805691	9.354	ppbv	96
37) 1,2-Dichloroethane	6.34	62	1372536	9.571	ppbv	100
38) Trichloroethene	7.88	130	730629	9.223	ppbv	99
39) 1,2-Dichloropropane	7.65	63	759825	10.217	ppbv	96
40) 1,4-Dioxane	7.87	88	275782	8.489	ppbv #	95
41) Tetrahydrofuran	6.07	42	841513	9.439	ppbv	99
42) Bromodichloromethane	7.83	83	1755917	9.790	ppbv	98
43) Methyl Methacrylate	8.05	69	781246	9.757	ppbv	99

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Quant Time: Dec 03 12:14:34 2019

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL111919AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Nov 19 14:15:35 2019

QLast Update : Tue Nov 19 14:15:35 2019

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,2,4-Trimethylpentane	7.91	57	3270381	9.270	ppbv	99
45) t-1,3-Dichloropropene	9.33	75	1117056	10.879	ppbv	99
46) cis-1,3-Dichloropropene	8.75	75	1208817	10.481	ppbv	97
47) 1,1,2-Trichloroethane	9.53	97	784514	9.483	ppbv	95
48) Dibromochloromethane	10.37	129	1456885	10.257	ppbv	99
49) Bromoform	13.11	173	1319846	10.409	ppbv	99
50) 4-Methyl-2-Pentanone	8.79	43	2174501	9.455	ppbv	100
51) 2-Hexanone	10.19	43	1839907	9.551	ppbv	97
52) Tetrachloroethene	11.28	164	685940	8.213	ppbv	96
53) Toluene	9.86	91	2093154	9.546	ppbv	100
54) 1,2-Dibromoethane	10.67	107	1179137	9.297	ppbv	100
56) 1,1,1,2-Tetrachloroethane	12.19	131	964901	9.435	ppbv	99
57) Chlorobenzene	12.21	112	1617686	8.560	ppbv	98
58) Ethyl Benzene	12.78	91	2912985	8.978	ppbv	100
59) m/p-Xylene	13.06	91	2607540	9.298	ppbv #	39
60) o-Xylene	13.76	91	2439905	8.799	ppbv	99
61) Styrene	13.60	104	1815682	9.080	ppbv	99
62) Isopropylbenzene	14.74	105	3179073	8.669	ppbv	100
63) 1,1,2,2-Tetrachloroethane	13.74	83	1715648	8.231	ppbv	99
64) n-propylbenzene	15.64	120	822745	8.639	ppbv	96
65) tert-Butylbenzene	16.82	119	2847815	8.645	ppbv	100
66) Benzyl Chloride	17.07	91	1455193	11.483	ppbv	100
67) sec-Butylbenzene	17.37	105	3952234	8.577	ppbv	99
69) p-Isopropyltoluene	17.73	119	3280386	8.578	ppbv	100
70) n-Butylbenzene	18.63	91	3481273	8.460	ppbv	100
71) 2-Chlorotoluene	15.53	91	2497341	8.540	ppbv	99
72) 4-Ethyltoluene	15.91	105	2818766	8.798	ppbv	99
73) 1,3,5-Trimethylbenzene	16.07	105	2704223	8.623	ppbv	96
74) 1,2,4-Trimethylbenzene	16.84	105	2781184	8.348	ppbv	93
75) 1,3-Dichlorobenzene	17.08	146	1590240	8.305	ppbv	100
76) 1,4-Dichlorobenzene	17.22	146	1590812	8.555	ppbv	99
77) 1,2-Dichlorobenzene	17.90	146	1539451	8.324	ppbv	99
78) Hexachloro-1,3-Butadiene	23.46	225	1320322	8.309	ppbv	99
79) Naphthalene	22.30	128	2376248	8.228	ppbv	99
80) Naphthalene,2-methyl-	25.04	142	1241653	9.521	ppbv	99
81) 1,2,4-Trichlorobenzene	22.03	180	1437627	8.103	ppbv	100

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

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VL1203ABS01

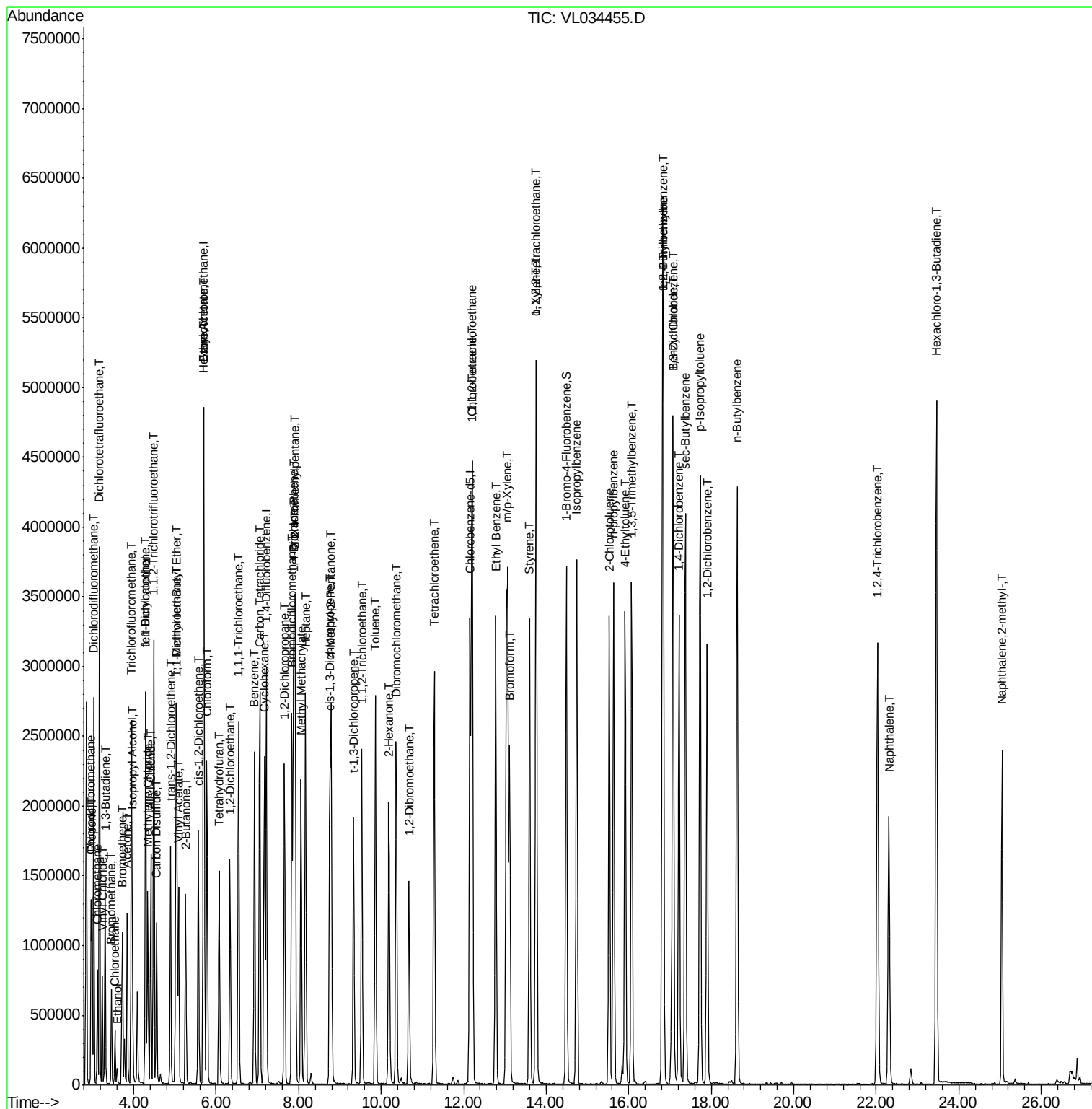
Quant Time: Dec 03 12:14:34 2019

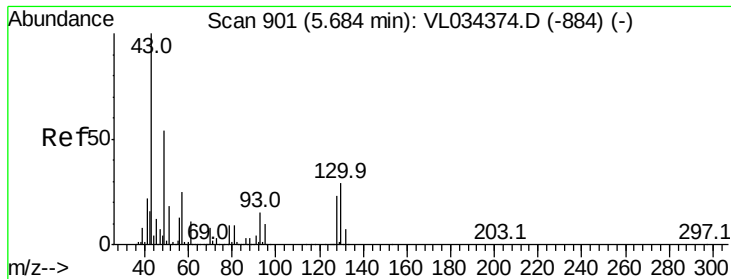
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A_L\METHODS\VL111919AIR.M

Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_LTue Nov 19 14:15:35 2019

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Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.69 min Scan# 903

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

Instrument :

MSVOA_L

ClientSampleId :

VL1203ABS01

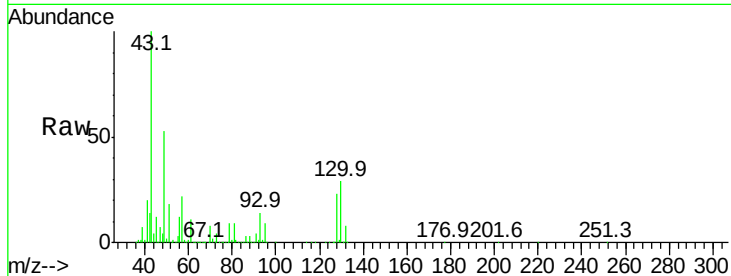
Tgt Ion: 49 Resp: 954865

Ion Ratio Lower Upper

49 100

128 42.9 21.8 65.3

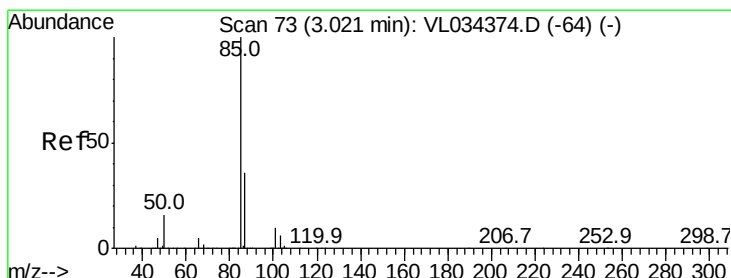
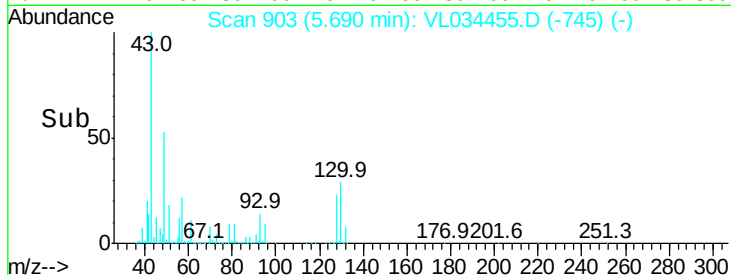
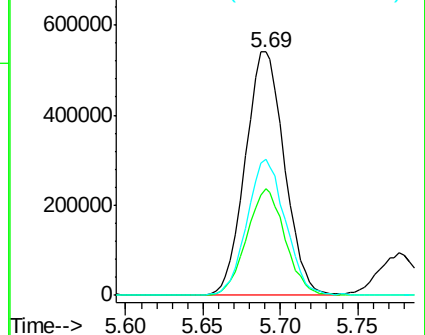
130 55.0 28.0 84.0



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 10.793 ppbv

RT: 3.03 min Scan# 75

Delta R.T. 0.01 min

Lab File: VL034455.D

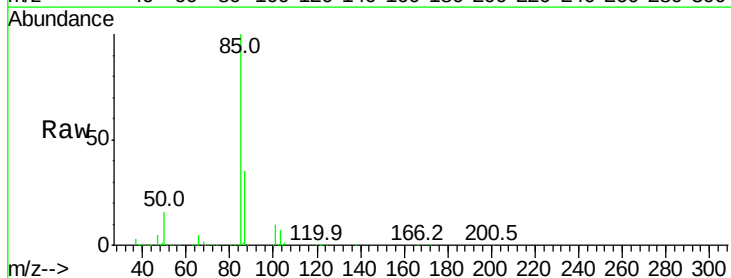
Acq: 3 Dec 2019 11:36

Tgt Ion: 85 Resp: 1864429

Ion Ratio Lower Upper

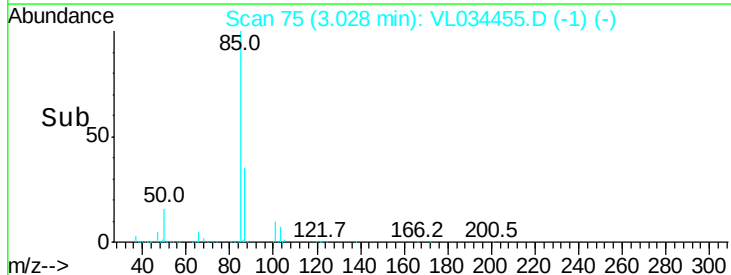
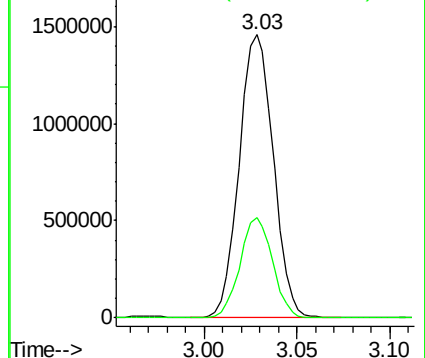
85 100

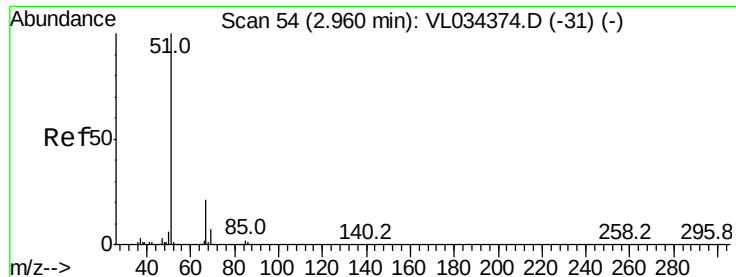
87 35.4 28.5 42.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 9.134 ppbv

RT: 2.97 min Scan# 56

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

Instrument :

MSVOA_L

ClientSampleId :

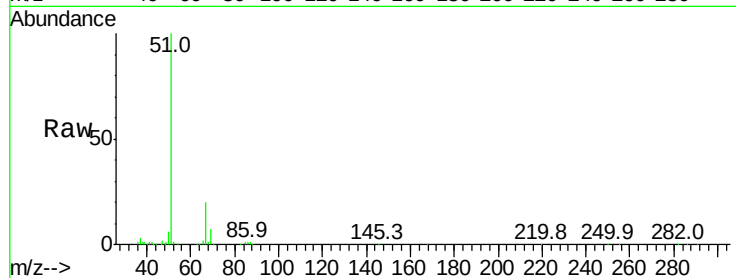
VL1203ABS01

Tgt Ion: 51 Resp: 1088173

Ion Ratio Lower Upper

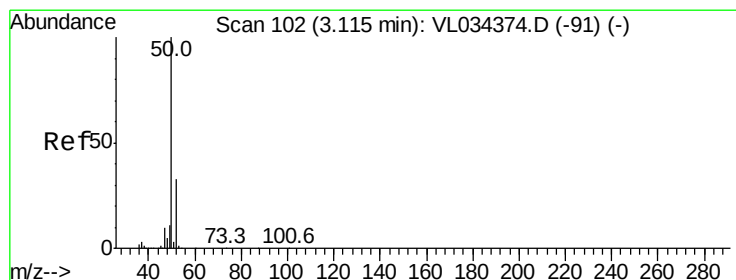
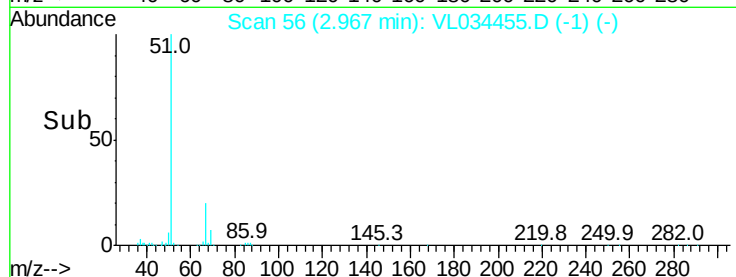
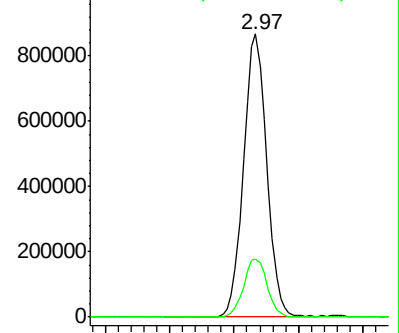
51 100

67 21.0 16.2 24.2



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 9.362 ppbv

RT: 3.12 min Scan# 104

Delta R.T. 0.01 min

Lab File: VL034455.D

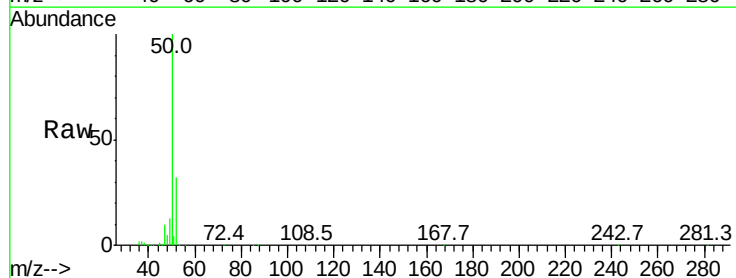
Acq: 3 Dec 2019 11:36

Tgt Ion: 50 Resp: 657912

Ion Ratio Lower Upper

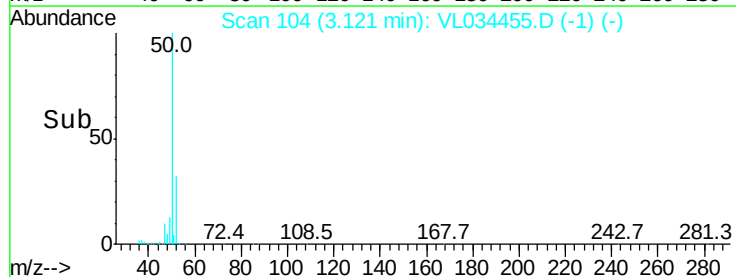
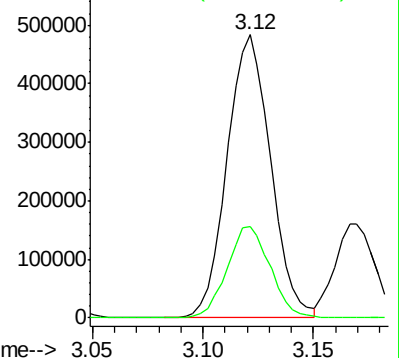
50 100

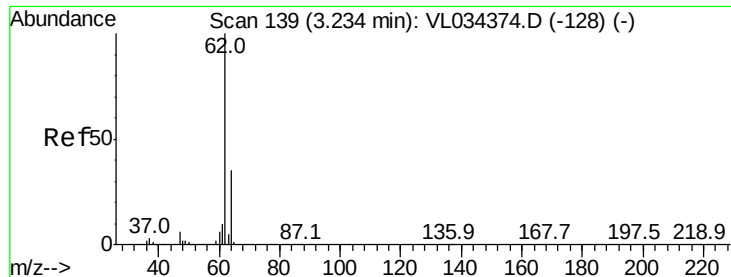
52 32.5 26.8 40.2



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 9.312 ppbv

RT: 3.24 min Scan# 141

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

Instrument :

MSVOA_L

ClientSampleId :

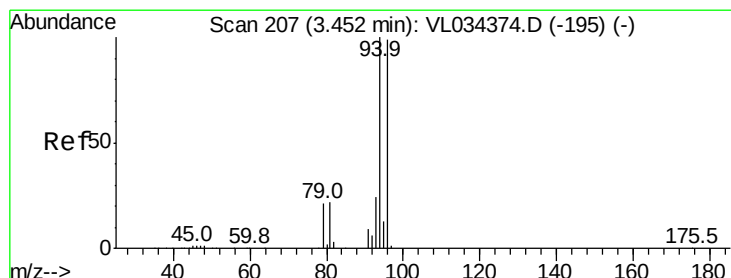
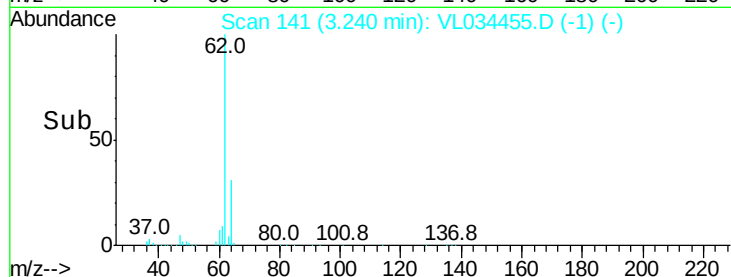
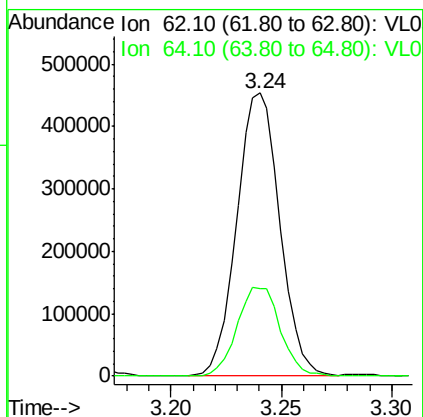
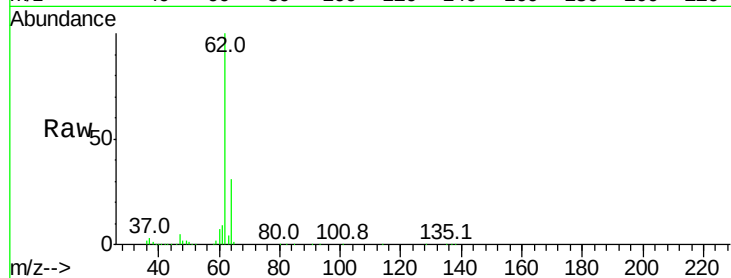
VL1203ABS01

Tgt Ion: 62 Resp: 613089

Ion Ratio Lower Upper

62 100

64 31.0 28.4 42.6



#6

Bromomethane

Concen: 9.726 ppbv

RT: 3.46 min Scan# 209

Delta R.T. 0.01 min

Lab File: VL034455.D

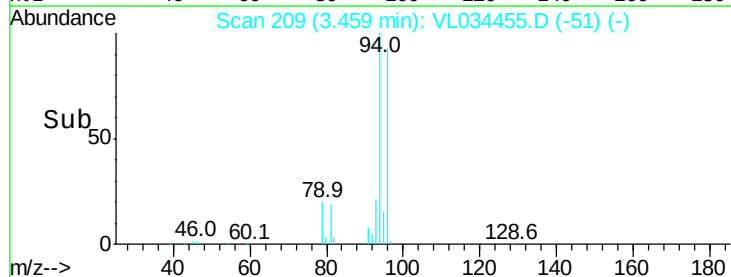
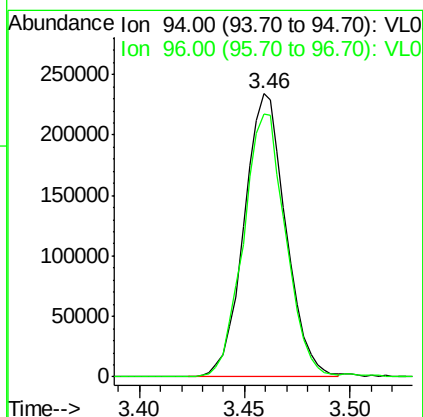
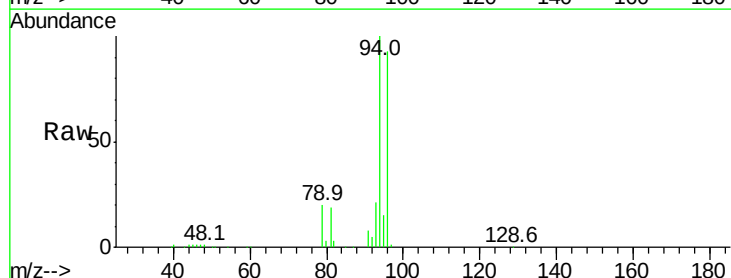
Acq: 3 Dec 2019 11:36

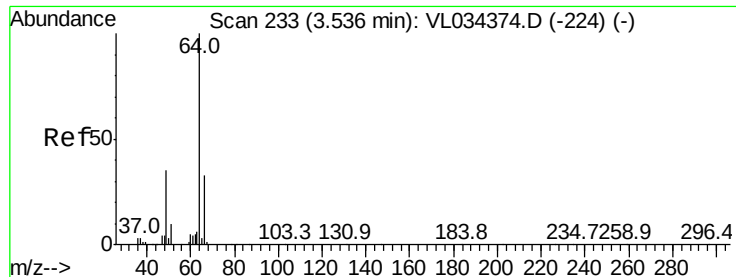
Tgt Ion: 94 Resp: 322206

Ion Ratio Lower Upper

94 100

96 92.9 79.5 119.3





#7

Chloroethane

Concen: 9.586 ppbv

RT: 3.55 min Scan# 236

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

Instrument :

MSVOA_L

ClientSampleId :

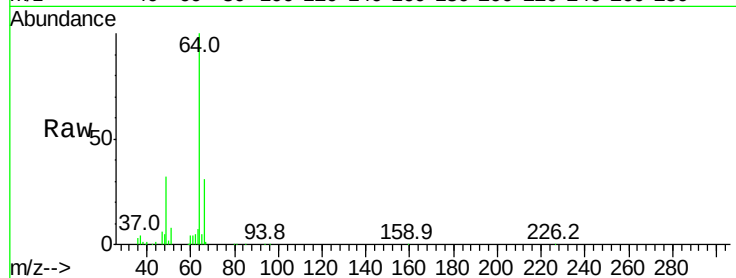
VL1203ABS01

Tgt Ion: 64 Resp: 229087

Ion Ratio Lower Upper

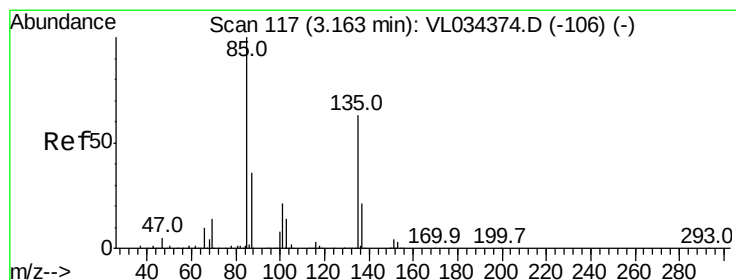
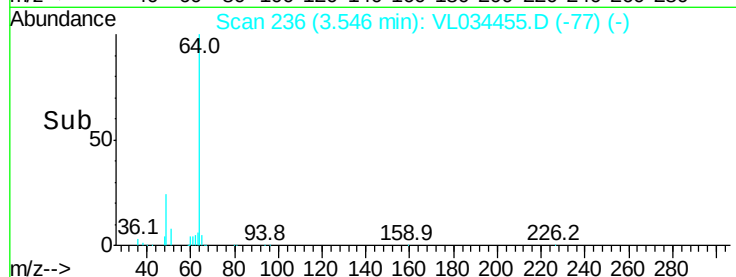
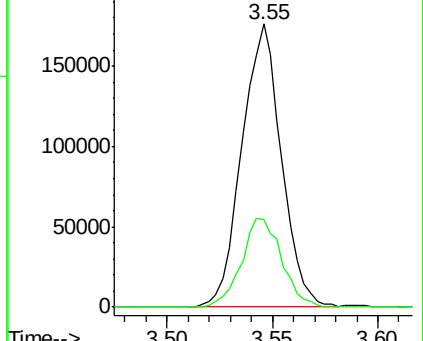
64 100

66 31.1 26.0 39.0



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



#8

Dichlorotetrafluoroethane

Concen: 9.124 ppbv

RT: 3.17 min Scan# 119

Delta R.T. 0.01 min

Lab File: VL034455.D

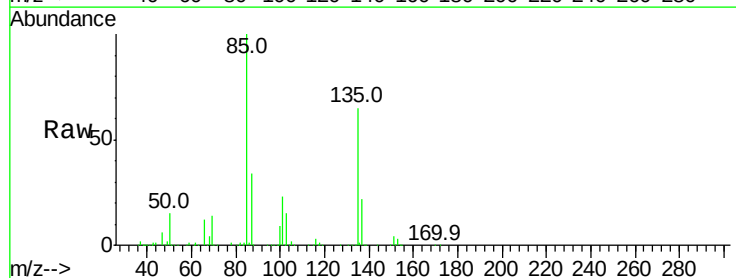
Acq: 3 Dec 2019 11:36

Tgt Ion: 85 Resp: 1415323

Ion Ratio Lower Upper

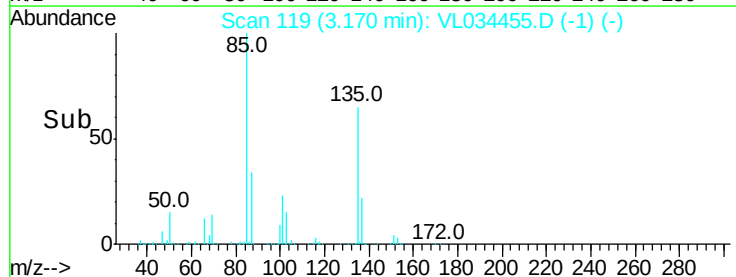
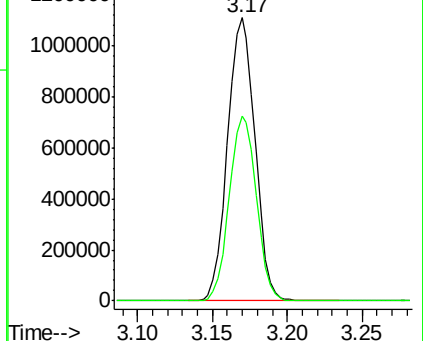
85 100

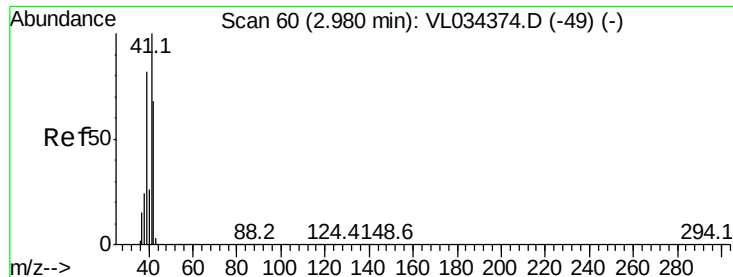
135 64.8 51.1 76.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V





#9

Propene

Concen: 9.021 ppbv

RT: 2.99 min Scan# 63

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

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ClientSampleId :

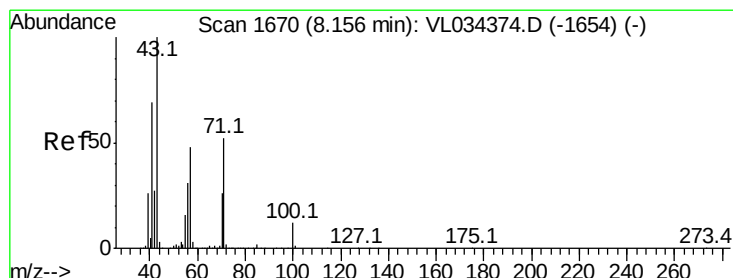
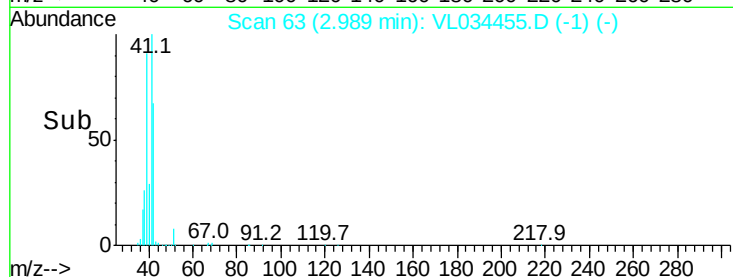
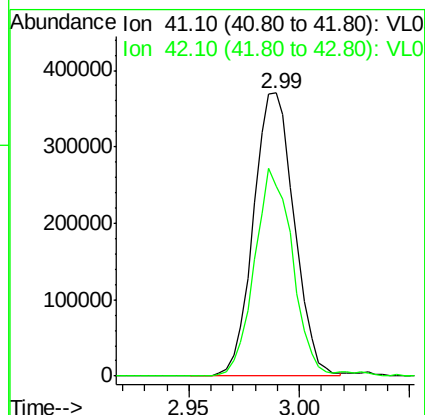
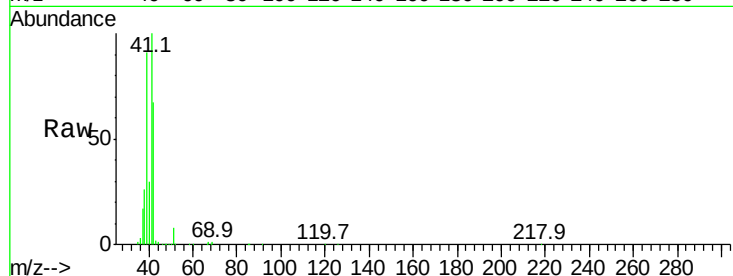
VL1203ABS01

Tgt Ion: 41 Resp: 477135

Ion Ratio Lower Upper

41 100

42 69.7 54.6 82.0



#10

Heptane

Concen: 9.296 ppbv

RT: 8.16 min Scan# 1672

Delta R.T. 0.01 min

Lab File: VL034455.D

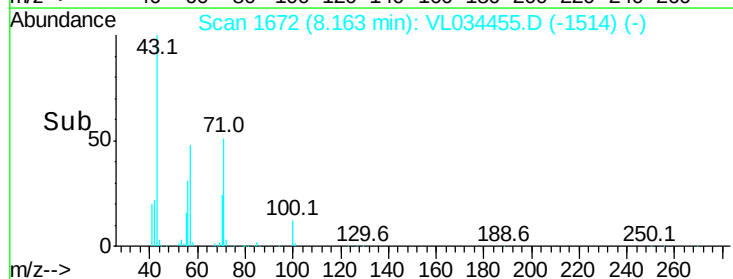
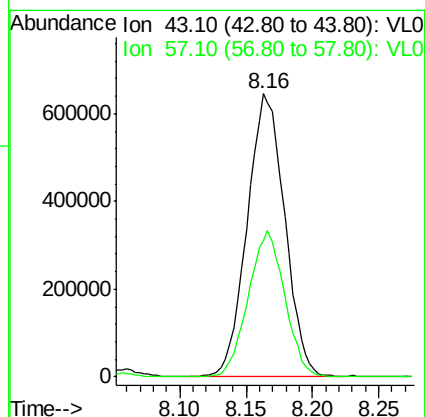
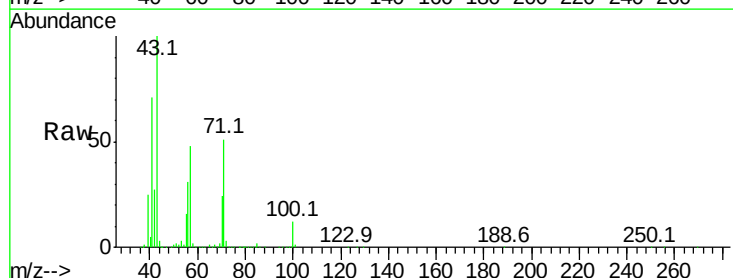
Acq: 3 Dec 2019 11:36

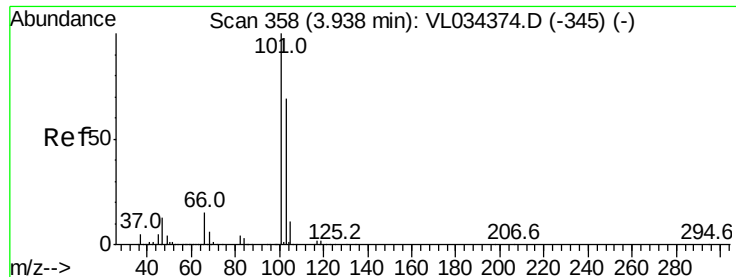
Tgt Ion: 43 Resp: 1268917

Ion Ratio Lower Upper

43 100

57 50.3 40.2 60.2

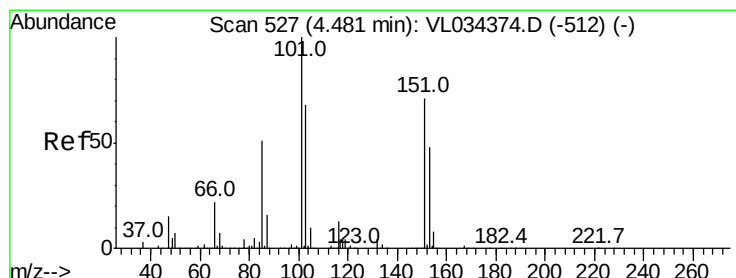
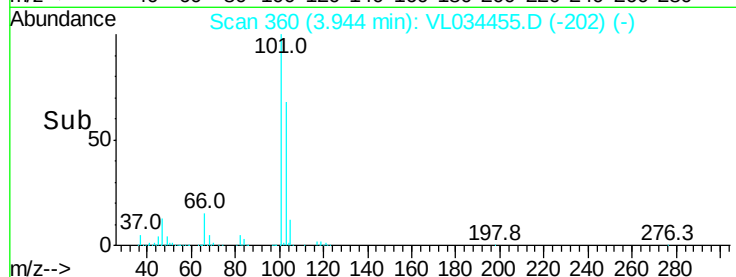
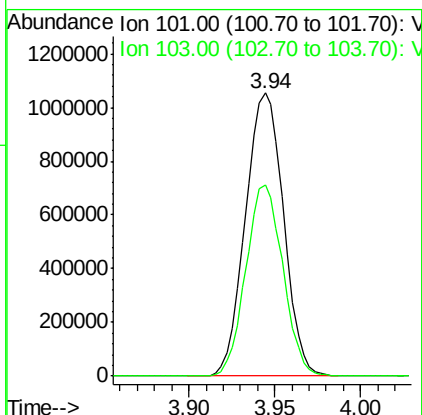
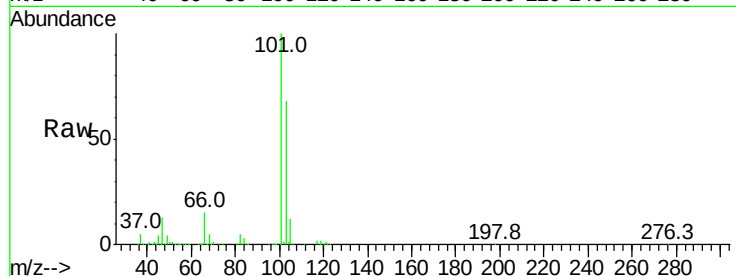




#11
 Trichlorofluoromethane
 Concen: 9.434 ppbv
 RT: 3.94 min Scan# 360
 Delta R.T. 0.01 min
 Lab File: VL034455.D
 Acq: 3 Dec 2019 11:36

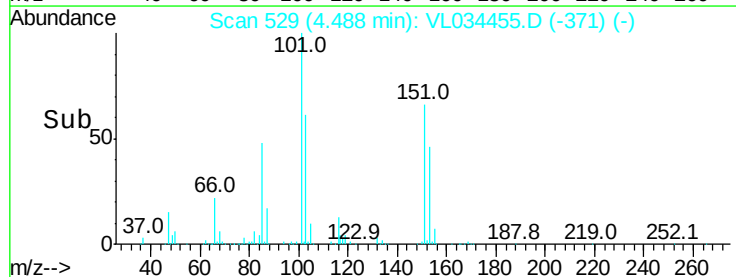
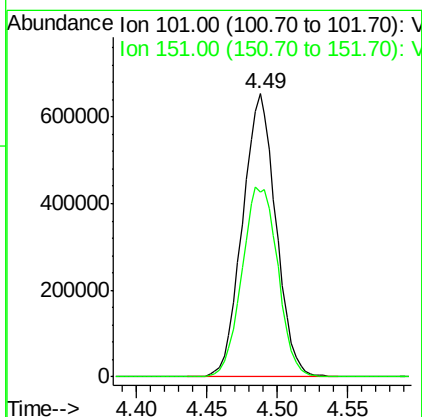
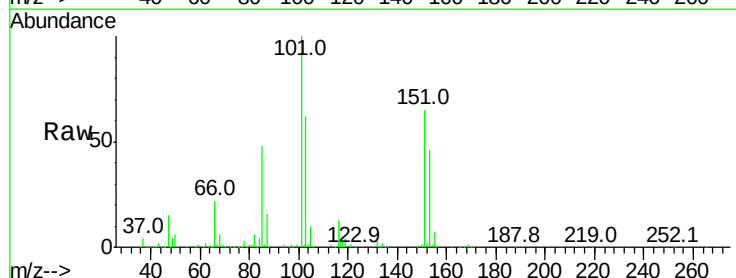
Instrument :
 MSVOA_L
 ClientSampleId :
 VL1203ABS01

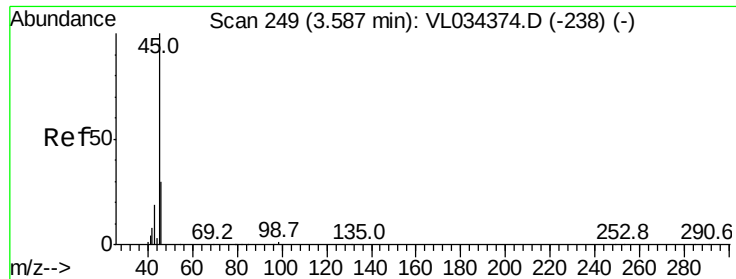
Tgt Ion:101 Resp: 1621830
 Ion Ratio Lower Upper
 101 100
 103 67.7 55.4 83.0



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 9.497 ppbv
 RT: 4.49 min Scan# 529
 Delta R.T. 0.01 min
 Lab File: VL034455.D
 Acq: 3 Dec 2019 11:36

Tgt Ion:101 Resp: 1084246
 Ion Ratio Lower Upper
 101 100
 151 72.1 57.4 86.2





#13

Ethanol

Concen: 7.092 ppbv

RT: 3.60 min Scan# 252

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

Instrument :

MSVOA_L

ClientSampleId :

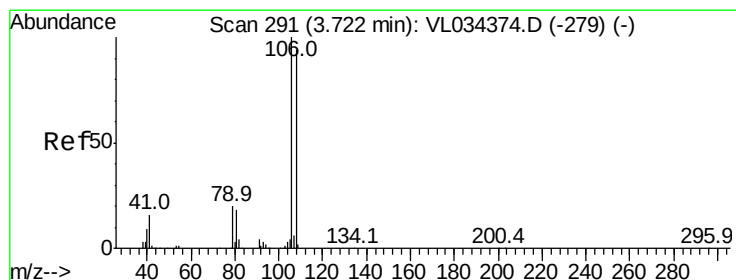
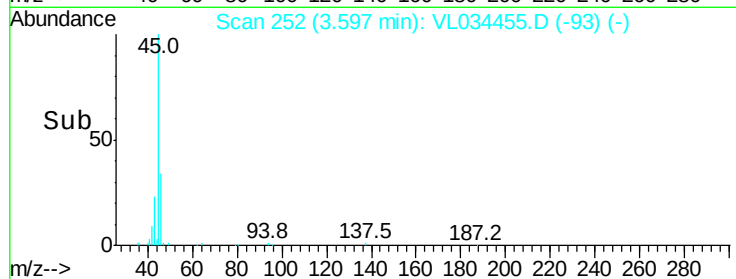
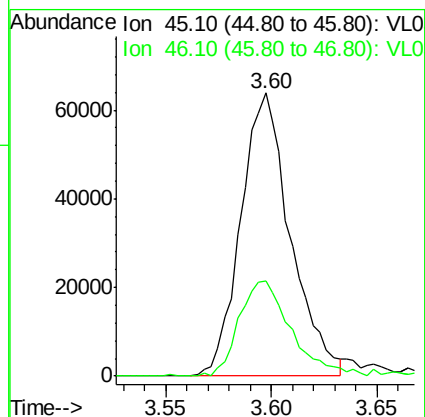
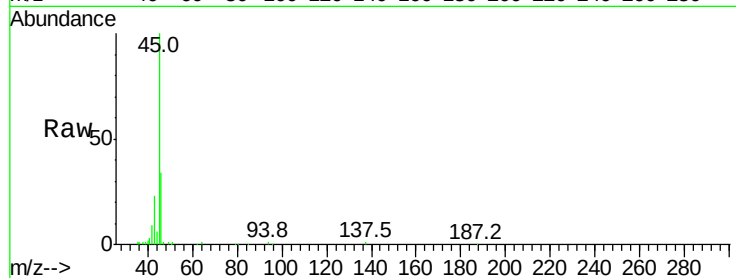
VL1203ABS01

Tgt Ion: 45 Resp: 104497

Ion Ratio Lower Upper

45 100

46 36.4 13.8 55.4



#14

Bromoethene

Concen: 9.444 ppbv

RT: 3.73 min Scan# 293

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

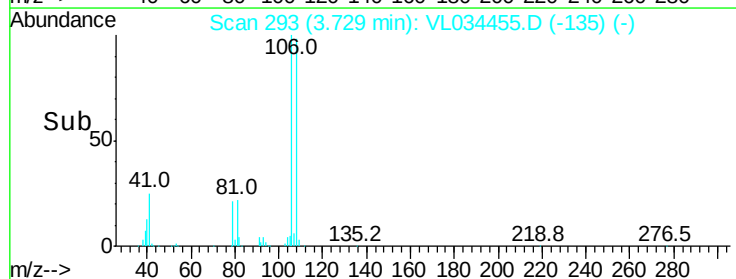
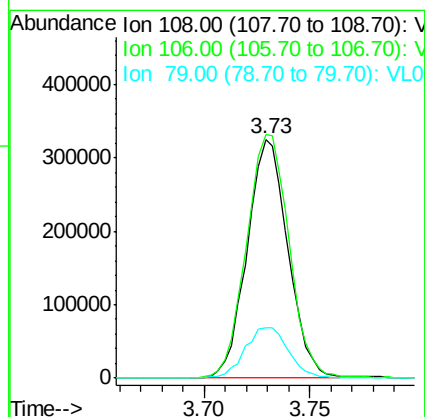
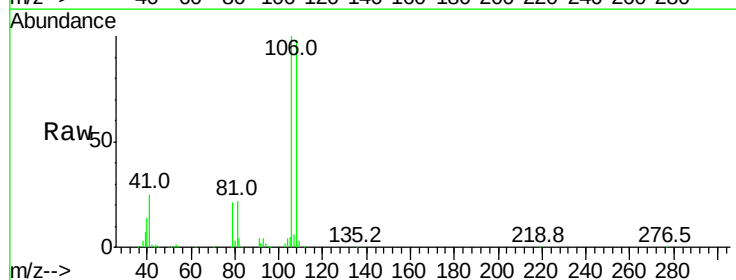
Tgt Ion: 108 Resp: 438415

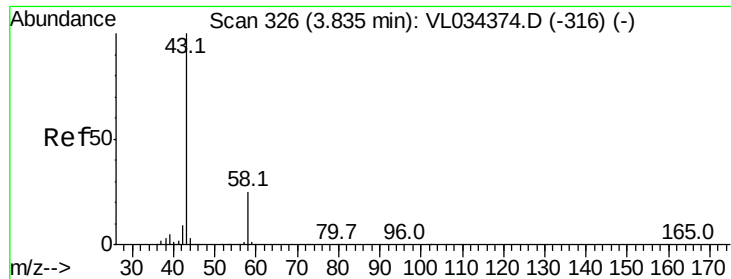
Ion Ratio Lower Upper

108 100

106 107.3 85.7 128.5

79 22.5 17.2 25.8





#15

Acetone

Concen: 8.662 ppbv

RT: 3.84 min Scan# 328

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

Instrument :

MSVOA_L

ClientSampleId :

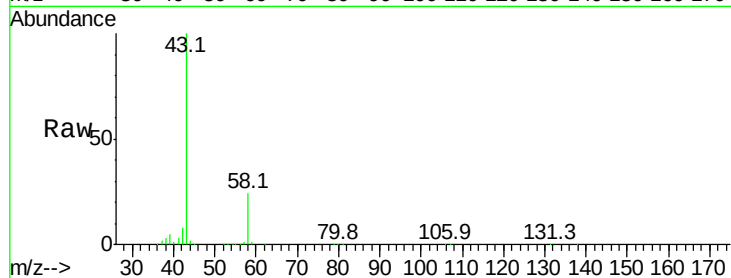
VL1203ABS01

Tgt Ion: 43 Resp: 1184424

Ion Ratio Lower Upper

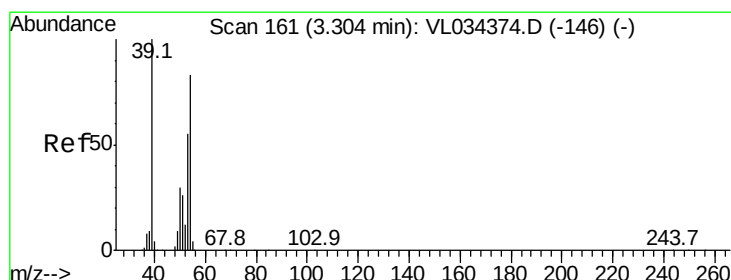
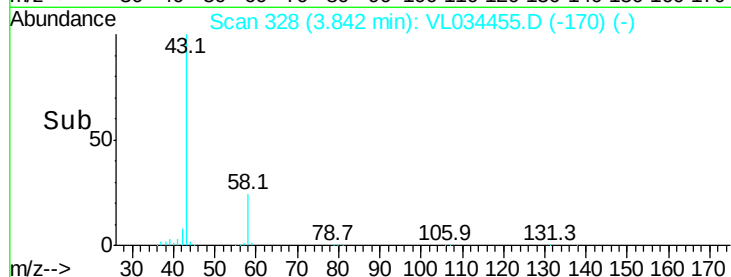
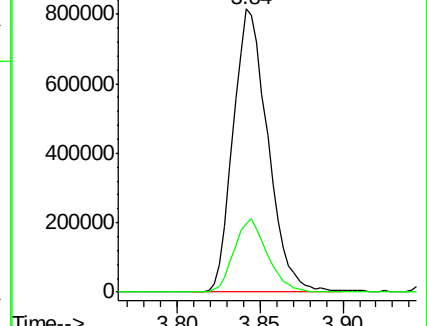
43 100

58 25.0 20.2 30.4



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#16

1,3-Butadiene

Concen: 9.459 ppbv

RT: 3.31 min Scan# 163

Delta R.T. 0.01 min

Lab File: VL034455.D

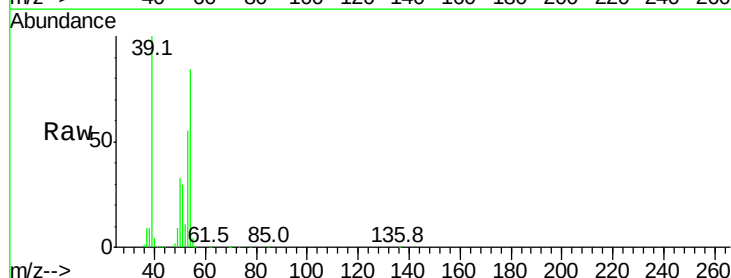
Acq: 3 Dec 2019 11:36

Tgt Ion: 39 Resp: 563366

Ion Ratio Lower Upper

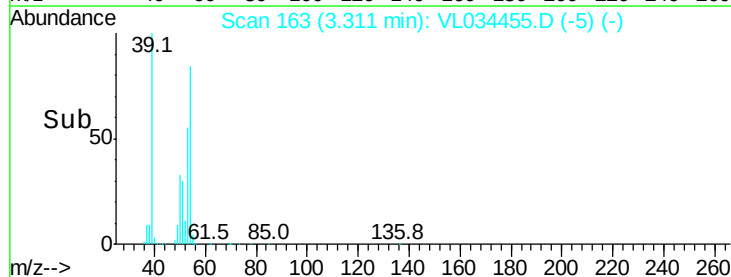
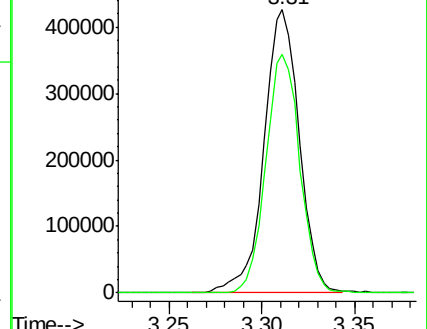
39 100

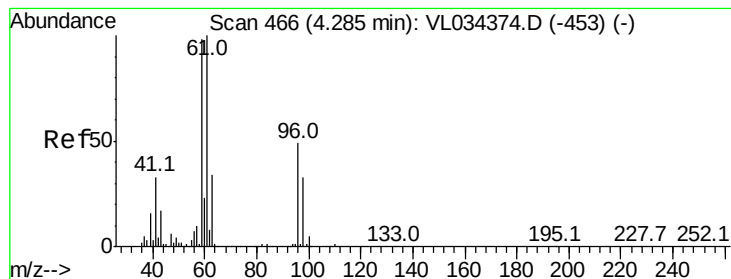
54 81.5 64.7 97.1



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0



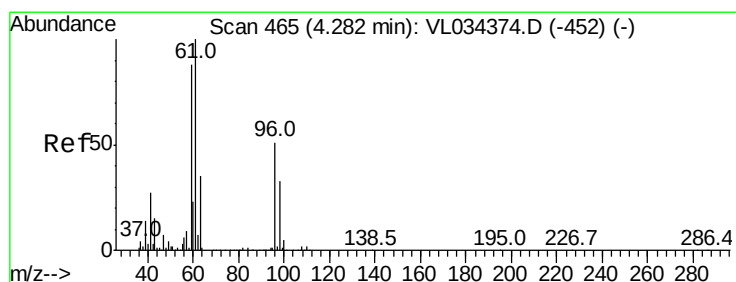
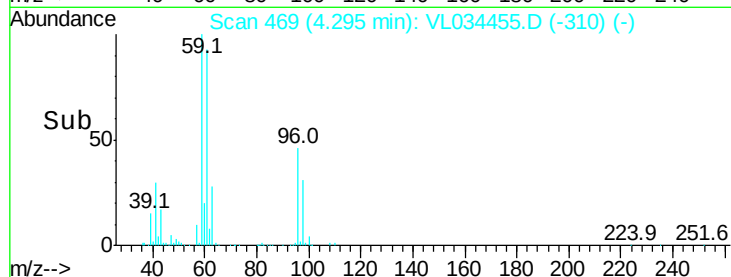
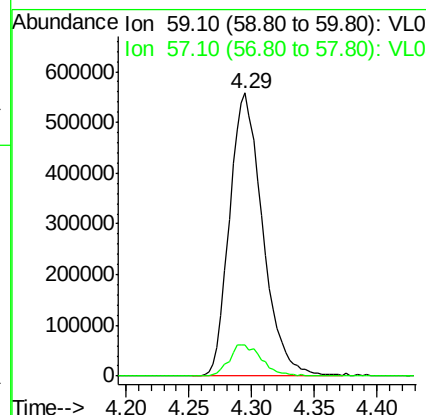
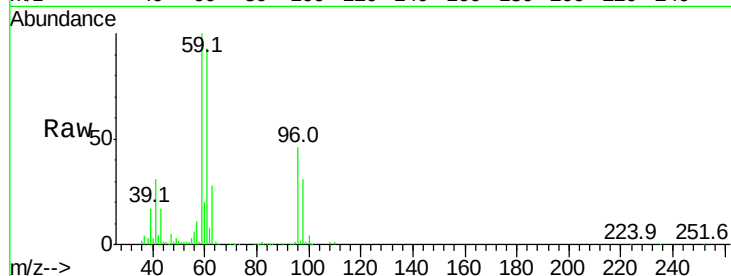


#17

tert-Butyl alcohol
Concen: 8.890 ppbv
RT: 4.29 min Scan# 469
Delta R.T. 0.01 min
Lab File: VL034455.D
Acq: 3 Dec 2019 11:36

Instrument :
MSVOA_L
ClientSampleId :
VL1203ABS01

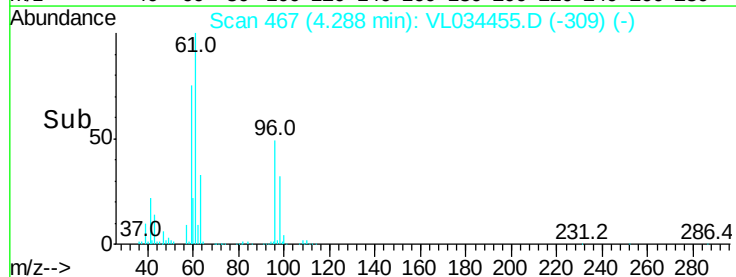
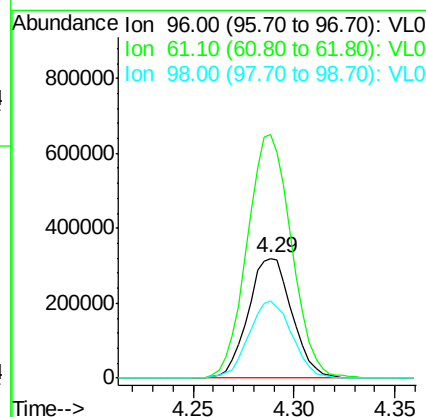
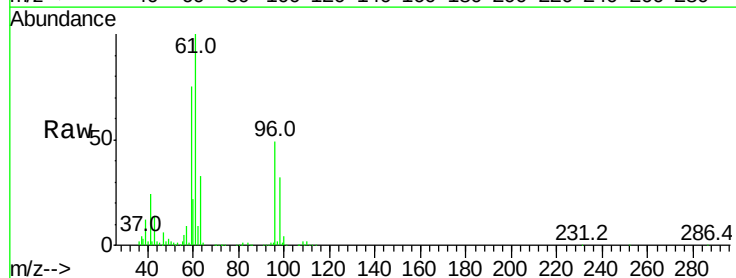
Tgt Ion: 59 Resp: 1021732
Ion Ratio Lower Upper
59 100
57 11.1 8.8 13.2

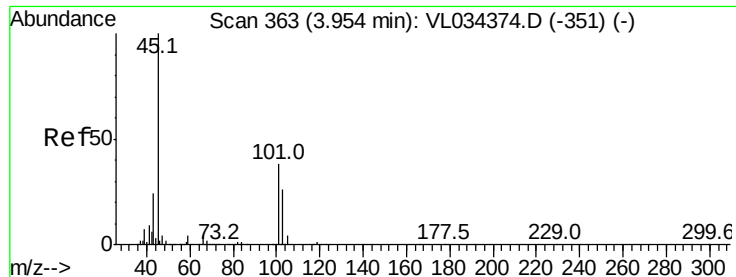


#18

1,1-Dichloroethene
Concen: 9.725 ppbv
RT: 4.29 min Scan# 467
Delta R.T. 0.01 min
Lab File: VL034455.D
Acq: 3 Dec 2019 11:36

Tgt Ion: 96 Resp: 485675
Ion Ratio Lower Upper
96 100
61 202.6 155.6 233.4
98 64.3 51.6 77.4





#19

Isopropyl Alcohol

Concen: 9.276 ppbv

RT: 3.97 min Scan# 367

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

Instrument :

MSVOA_L

ClientSampleId :

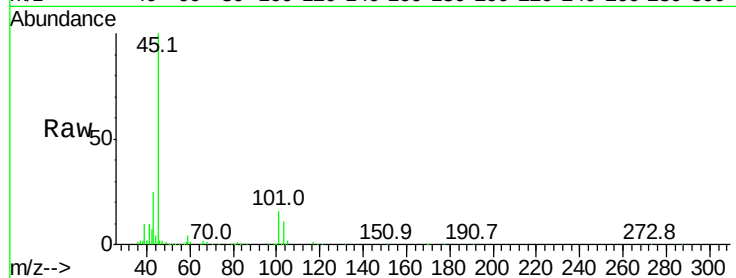
VL1203ABS01

Tgt Ion: 45 Resp: 812940

Ion Ratio Lower Upper

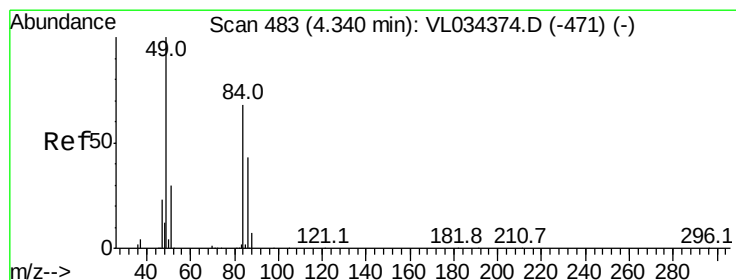
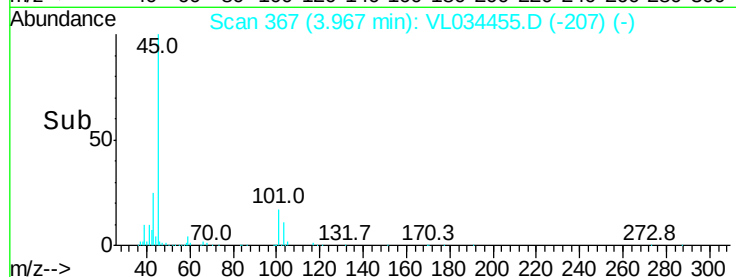
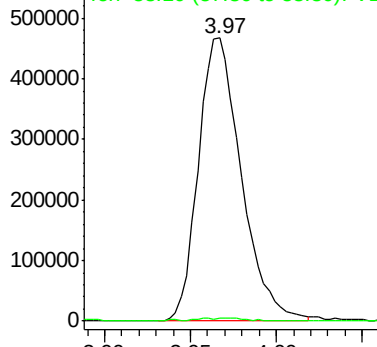
45 100

58 1.6 1.3 1.9



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#20

Methylene Chloride

Concen: 8.887 ppbv

RT: 4.34 min Scan# 484

Delta R.T. 0.00 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

Tgt Ion: 84 Resp: 430894

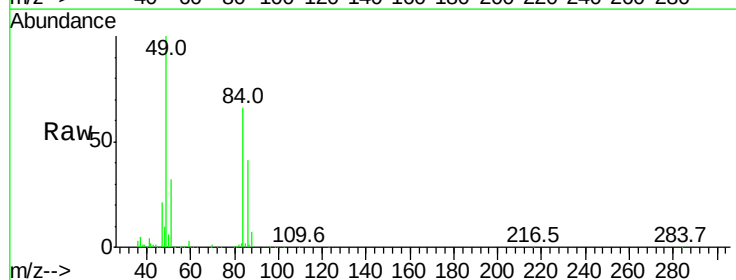
Ion Ratio Lower Upper

84 100

49 150.4 116.8 175.2

51 47.8 35.6 53.4

86 61.6 50.7 76.1

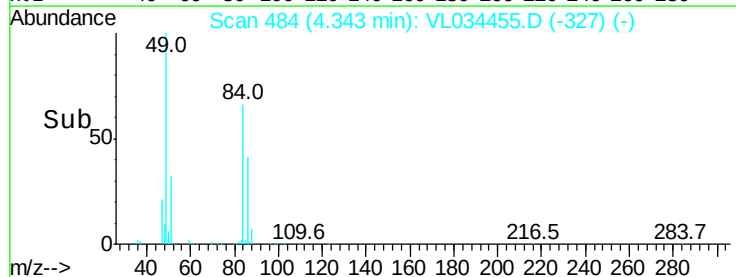
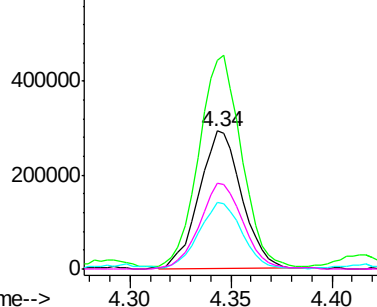


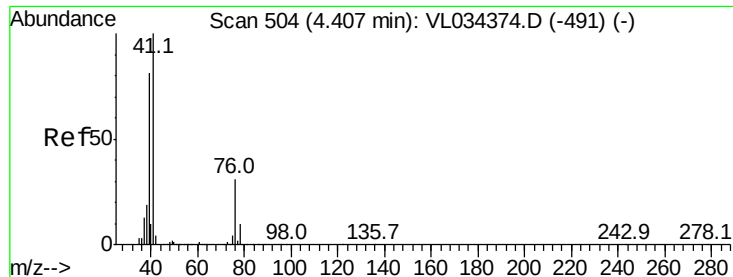
Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0





#21

Allyl Chloride

Concen: 10.220 ppbv

RT: 4.41 min Scan# 506

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

Instrument :

MSVOA_L

ClientSampleId :

VL1203ABS01

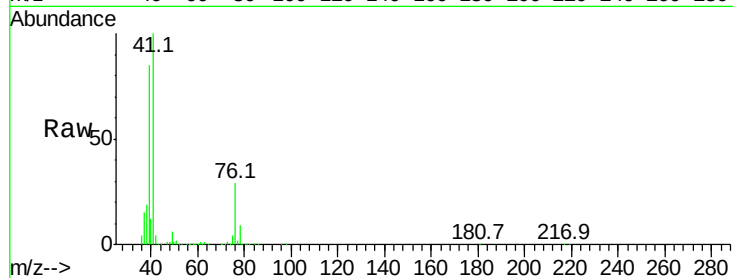
Tgt Ion: 41 Resp: 837340

Ion Ratio Lower Upper

41 100

76 29.6 24.2 36.2

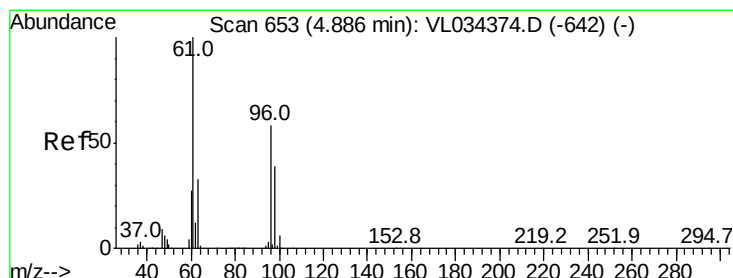
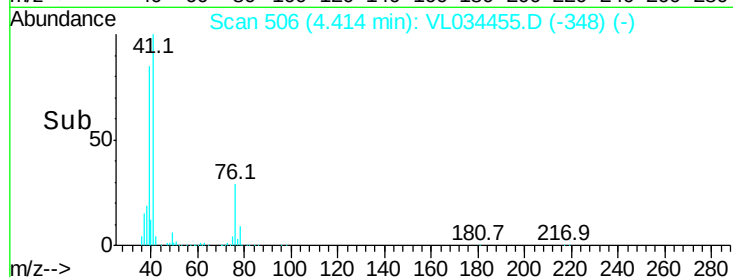
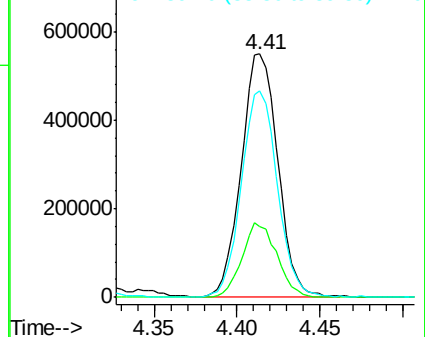
39 84.2 66.9 100.3



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 76.10 (75.80 to 76.80): VL0

Ion 39.10 (38.80 to 39.80): VL0



#22

trans-1,2-Dichloroethene

Concen: 9.800 ppbv

RT: 4.89 min Scan# 655

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

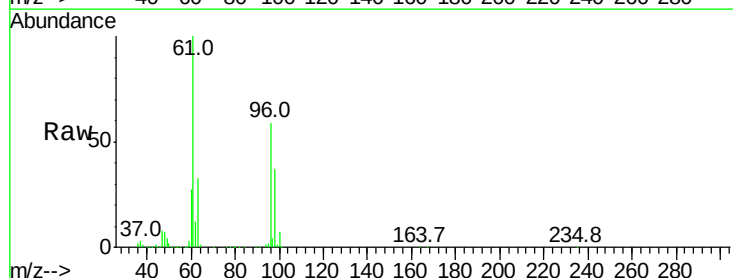
Tgt Ion: 96 Resp: 493381

Ion Ratio Lower Upper

96 100

61 170.5 137.9 206.9

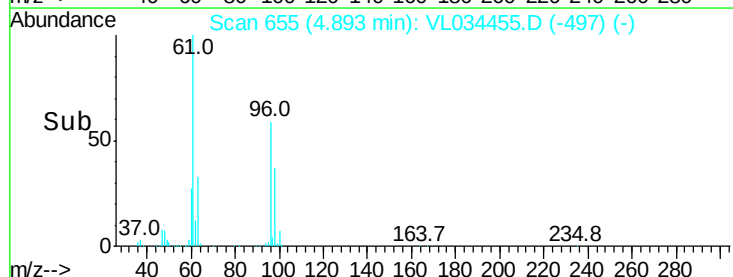
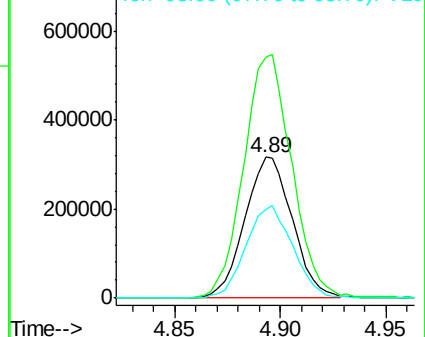
98 63.1 53.5 80.3

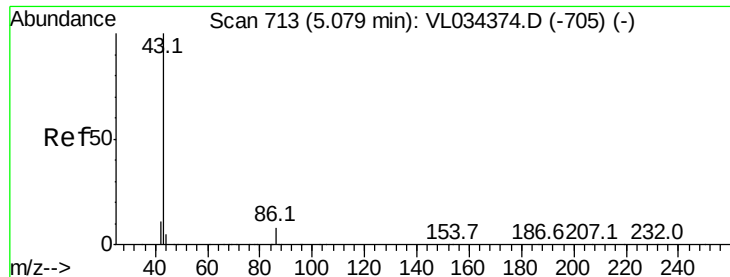


Abundance Ion 96.00 (95.70 to 96.70): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 98.00 (97.70 to 98.70): VL0





#23

Vinyl Acetate

Concen: 10.009 ppbv

RT: 5.09 min Scan# 715

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

Instrument :

MSVOA_L

ClientSampleId :

VL1203ABS01

Tgt Ion: 43 Resp: 1787824

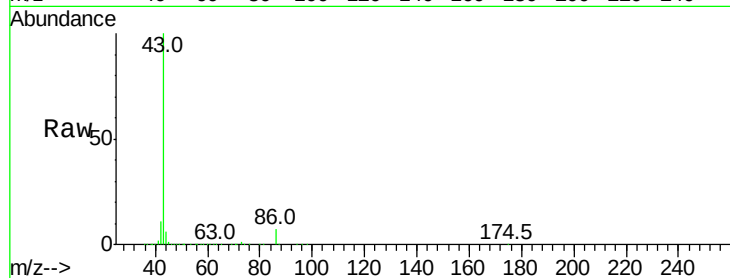
Ion Ratio Lower Upper

43 100

86 6.8 5.8 8.6

42 10.7 8.9 13.3

44 5.5 4.0 6.0

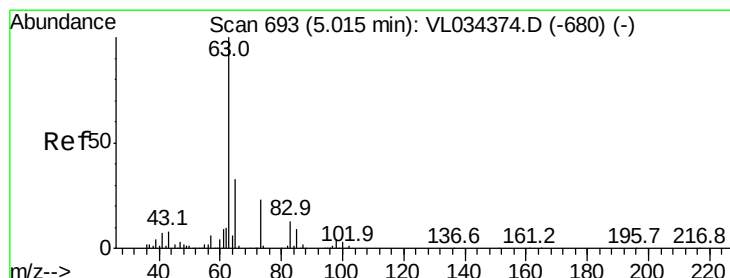
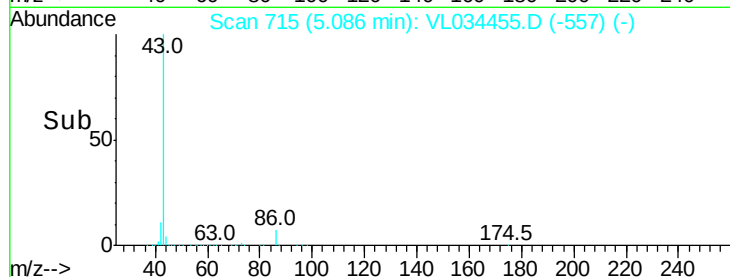
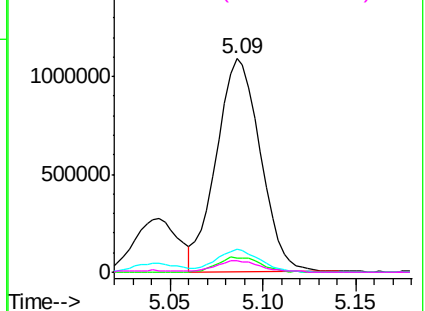


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 9.352 ppbv

RT: 5.02 min Scan# 695

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

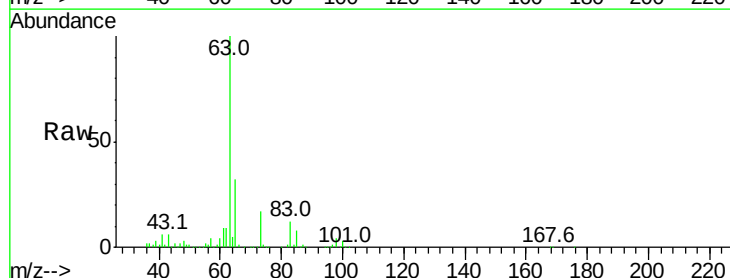
Tgt Ion: 63 Resp: 1283133

Ion Ratio Lower Upper

63 100

98 4.0 1.9 5.7

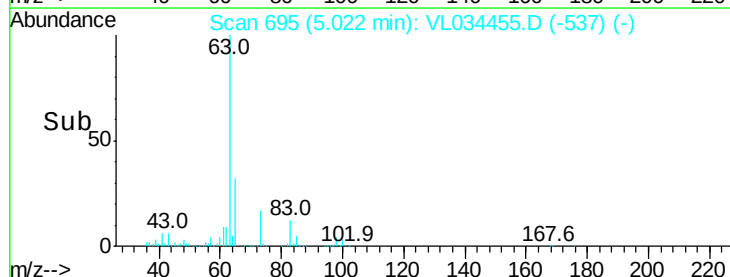
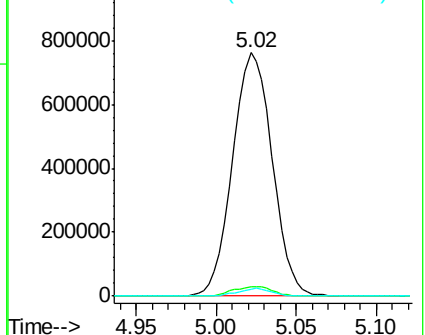
100 2.7 1.4 4.0

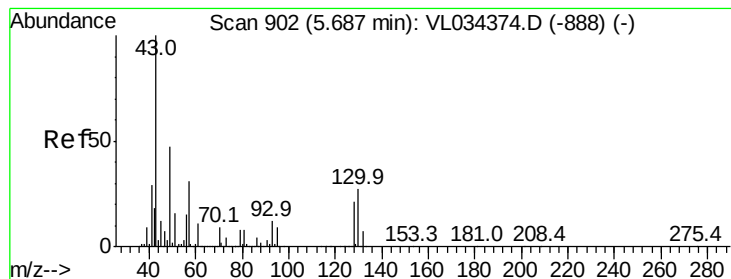


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0





#25

Ethyl Acetate

Concen: 9.210 ppbv

RT: 5.69 min Scan# 904

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

Instrument :

MSVOA_L

ClientSampleId :

VL1203ABS01

Tgt Ion: 43 Resp: 2247051

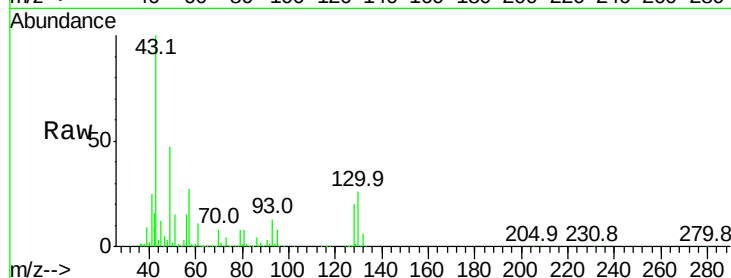
Ion Ratio Lower Upper

43 100

45 10.4 8.2 12.4

61 9.5 7.5 11.3

70 7.3 5.7 8.5

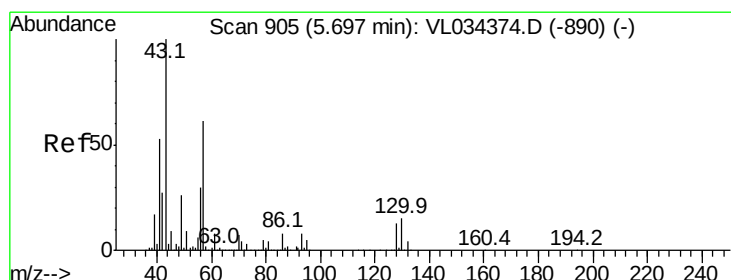
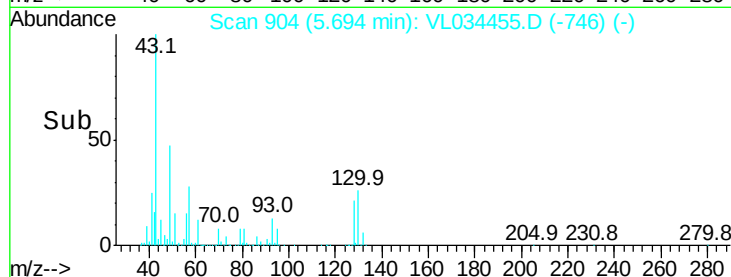
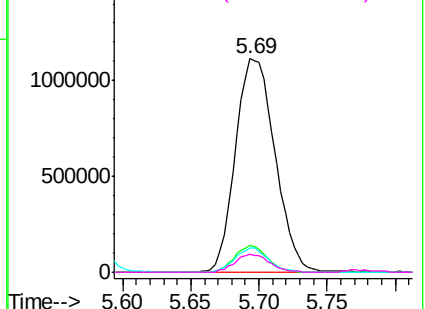


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0



#26

Hexane

Concen: 9.022 ppbv

RT: 5.71 min Scan# 909

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

Tgt Ion: 57 Resp: 945938

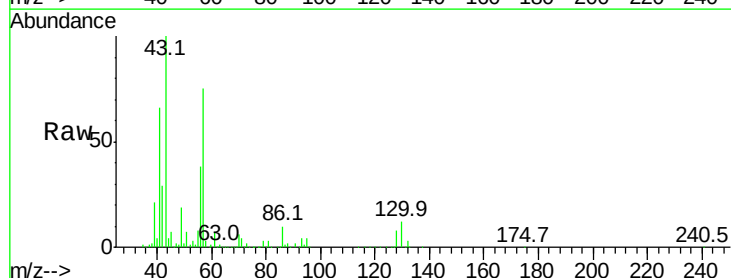
Ion Ratio Lower Upper

57 100

41 94.2 75.0 112.4

43 238.5 186.6 279.8

56 53.5 41.5 62.3

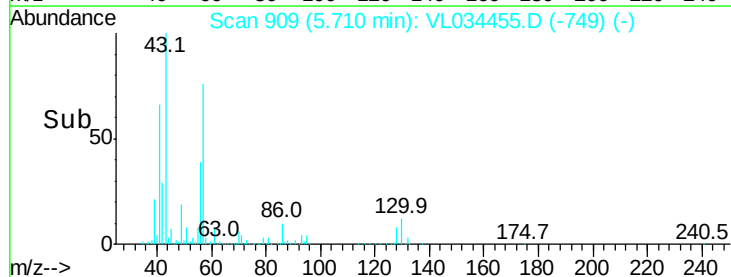
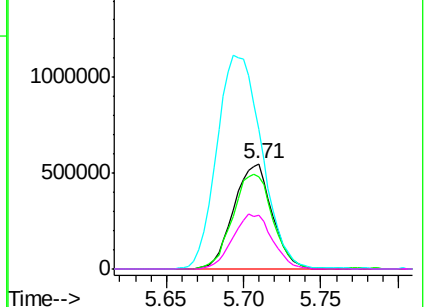


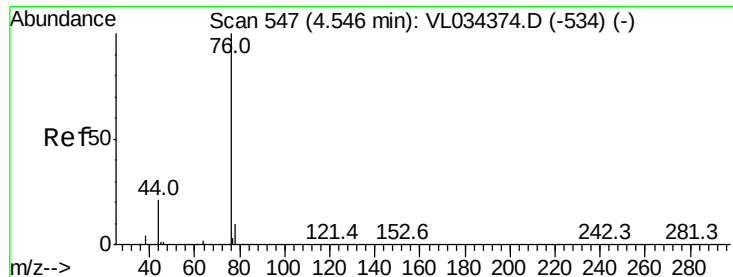
Abundance Ion 57.10 (56.80 to 57.80): VL0

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: 11.080 ppbv

RT: 4.56 min Scan# 550

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

Instrument :

MSVOA_L

ClientSampleId :

VL1203ABS01

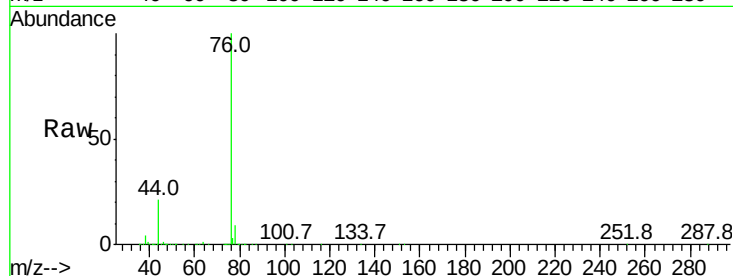
Tgt Ion: 76 Resp: 1265276

Ion Ratio Lower Upper

76 100

44 20.1 17.0 25.4

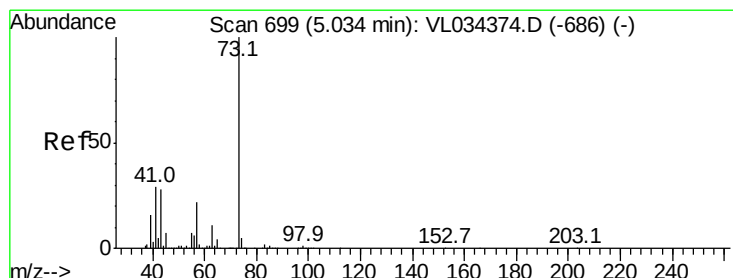
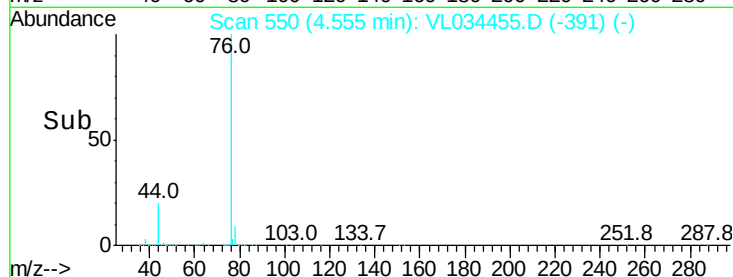
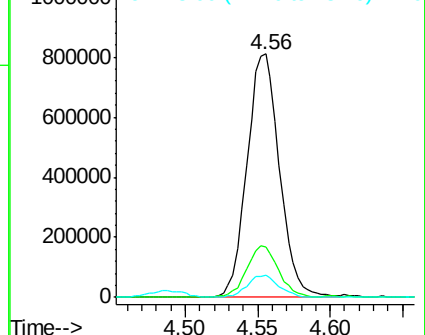
78 8.9 7.6 11.4



Abundance Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0



#28

Methyl tert-Butyl Ether

Concen: 9.767 ppbv

RT: 5.04 min Scan# 702

Delta R.T. 0.01 min

Lab File: VL034455.D

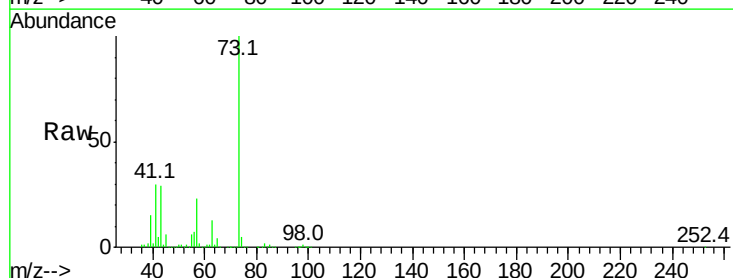
Acq: 3 Dec 2019 11:36

Tgt Ion: 73 Resp: 1697975

Ion Ratio Lower Upper

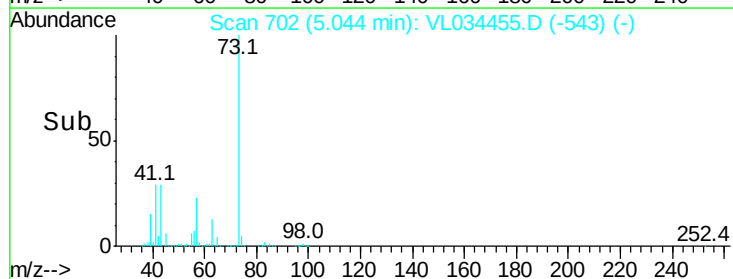
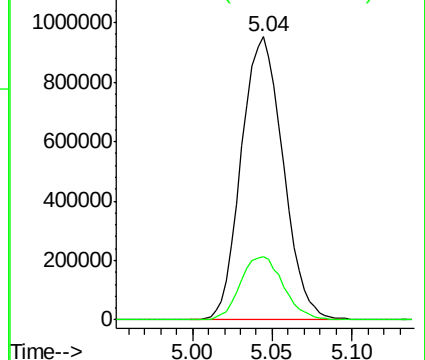
73 100

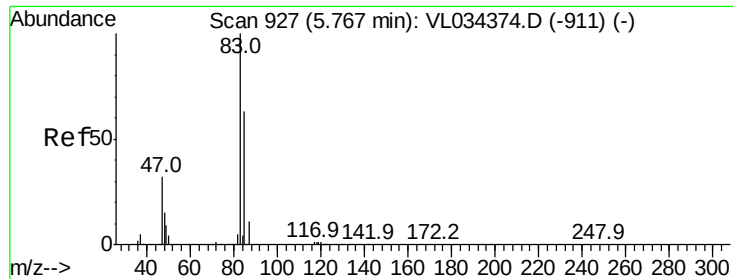
57 23.1 18.4 27.6



Abundance Ion 73.10 (72.80 to 73.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

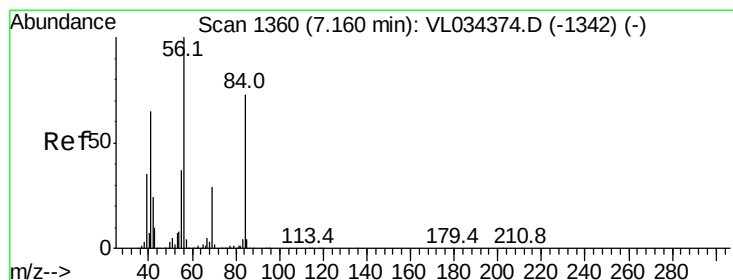
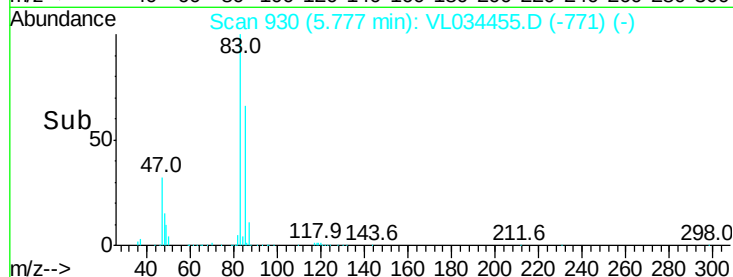
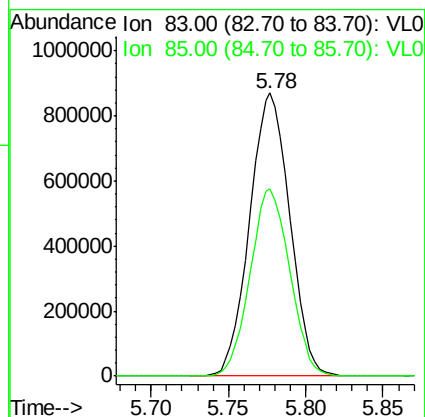
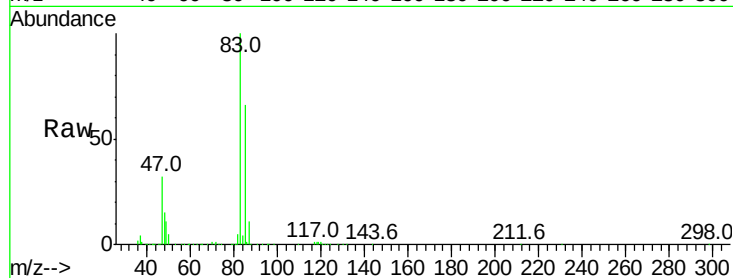




#29
Chloroform
Concen: 9.260 ppbv
RT: 5.78 min Scan# 930
Delta R.T. 0.01 min
Lab File: VL034455.D
Acq: 3 Dec 2019 11:36

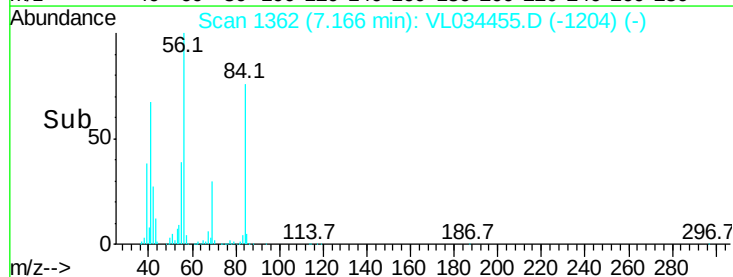
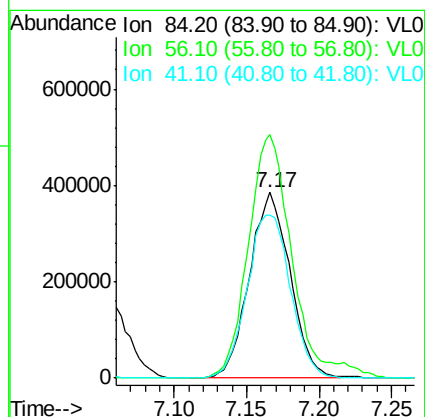
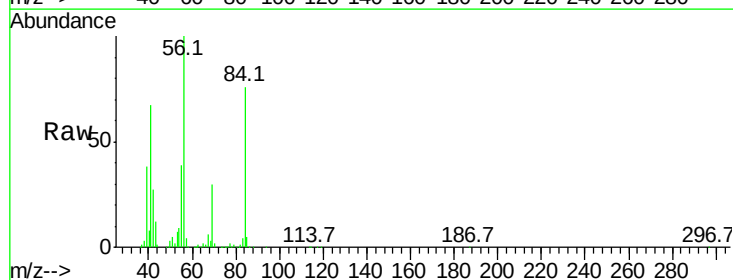
Instrument :
MSVOA_L
ClientSampleId :
VL1203ABS01

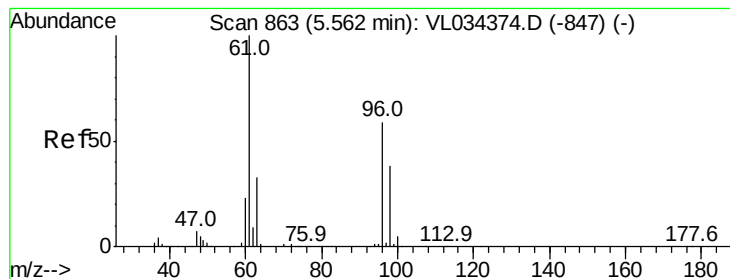
Tgt Ion: 83 Resp: 1572150
Ion Ratio Lower Upper
83 100
85 65.9 50.4 75.6



#30
Cyclohexane
Concen: 9.491 ppbv
RT: 7.17 min Scan# 1362
Delta R.T. 0.01 min
Lab File: VL034455.D
Acq: 3 Dec 2019 11:36

Tgt Ion: 84 Resp: 752276
Ion Ratio Lower Upper
84 100
56 141.7 112.6 169.0
41 94.2 73.4 110.2





#31

cis-1,2-Dichloroethene

Concen: 9.648 ppbv

RT: 5.57 min Scan# 865

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

Instrument :

MSVOA_L

ClientSampleId :

VL1203ABS01

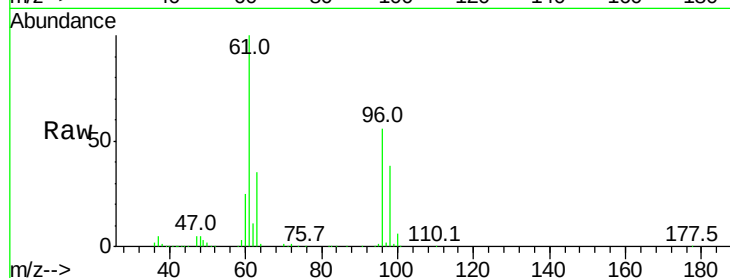
Tgt Ion: 61 Resp: 1045311

Ion Ratio Lower Upper

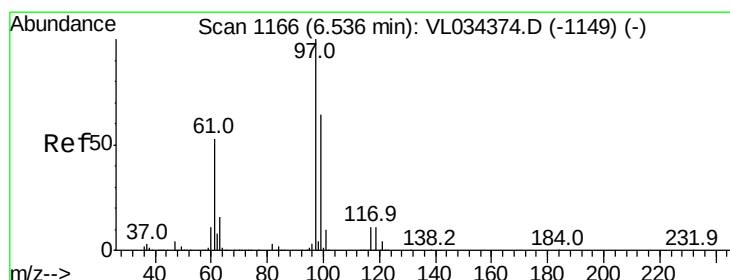
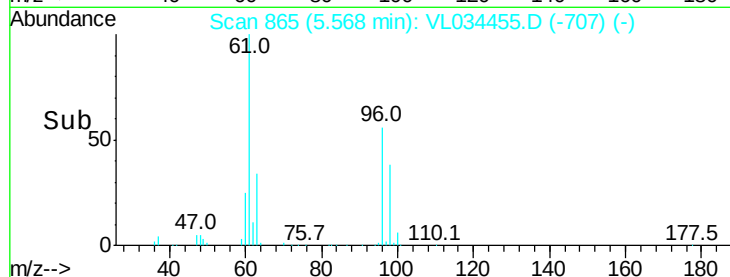
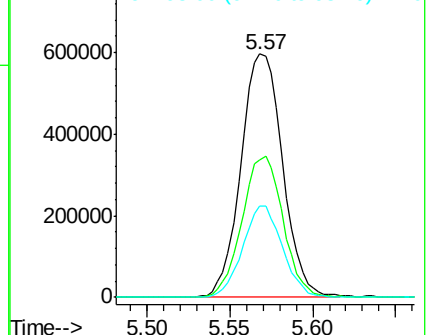
61 100

96 56.4 47.4 71.2

98 37.8 30.6 45.8



Abundance Ion 61.10 (60.80 to 61.80): VL0
Ion 96.00 (95.70 to 96.70): VL0
Ion 98.00 (97.70 to 98.70): VL0



#32

1,1,1-Trichloroethane

Concen: 10.147 ppbv

RT: 6.54 min Scan# 1168

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

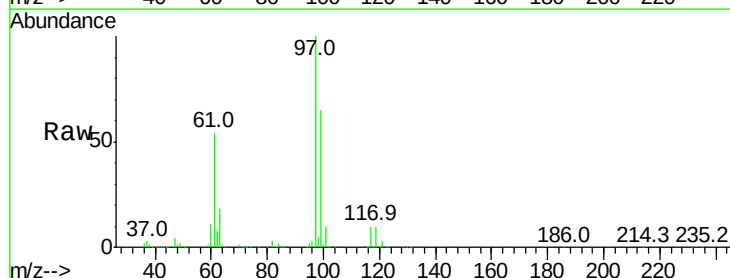
Tgt Ion: 97 Resp: 1615260

Ion Ratio Lower Upper

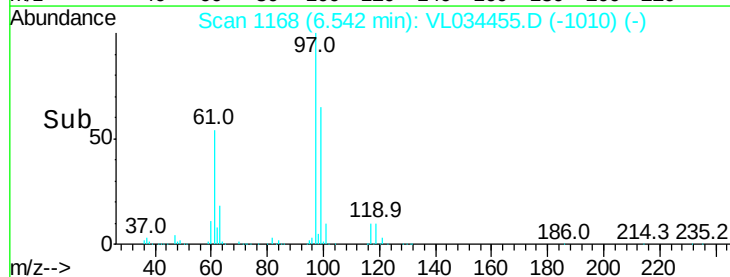
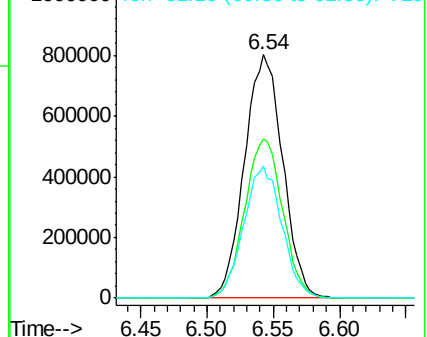
97 100

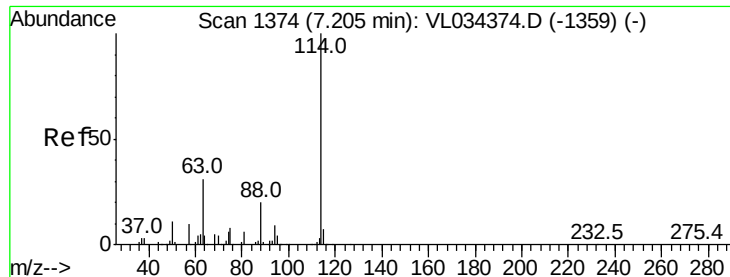
99 65.1 52.3 78.5

61 53.9 43.7 65.5



Abundance Ion 97.00 (96.70 to 97.70): VL0
Ion 99.00 (98.70 to 99.70): VL0
Ion 61.10 (60.80 to 61.80): VL0

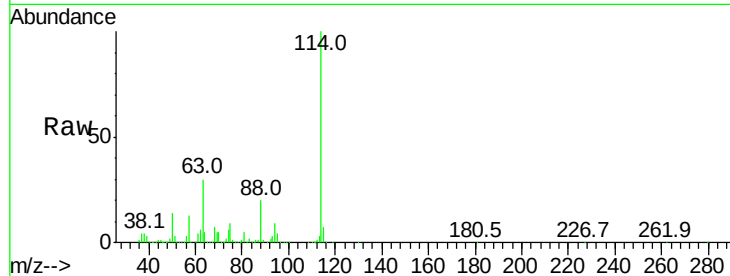




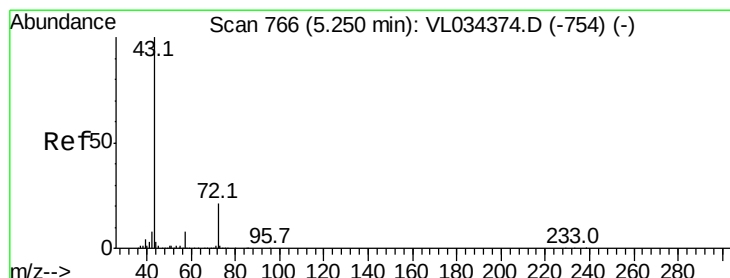
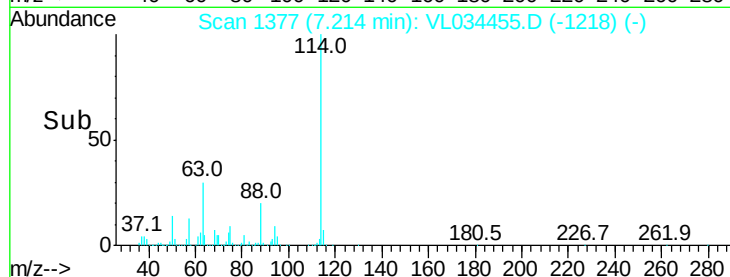
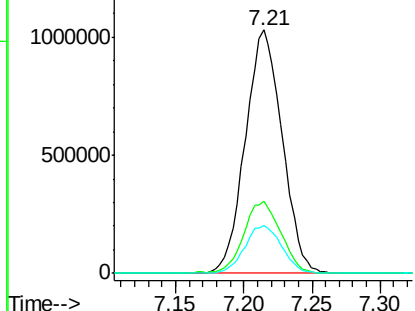
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.21 min Scan# 1377
 Delta R.T. 0.01 min
 Lab File: VL034455.D
 Acq: 3 Dec 2019 11:36

Instrument :
 MSVOA_L
 ClientSampleId :
 VL1203ABS01

Tgt Ion:114 Resp: 1931093
 Ion Ratio Lower Upper
 114 100
 63 30.2 24.2 36.4
 88 19.8 15.9 23.9

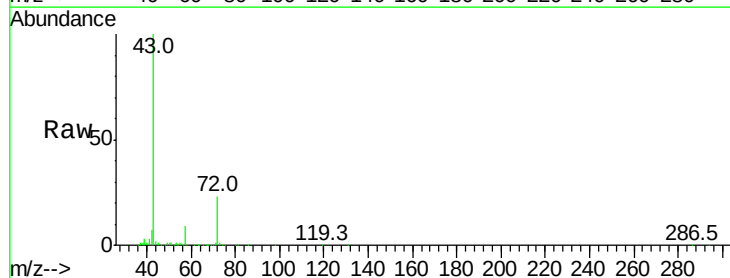


Abundance Ion 114.10 (113.80 to 114.80): V
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

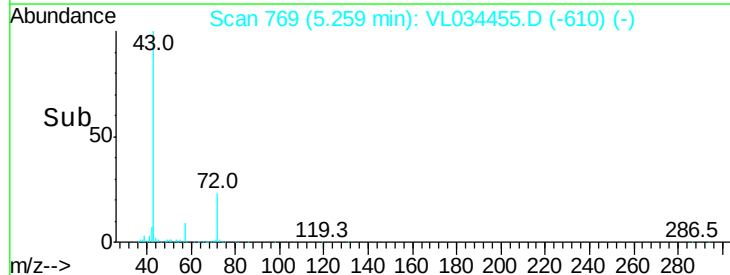
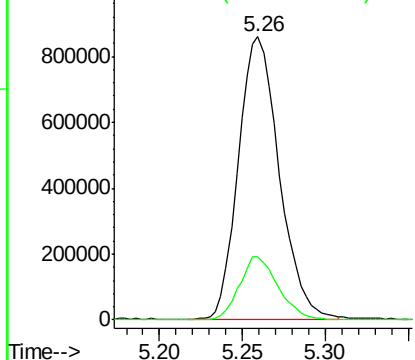


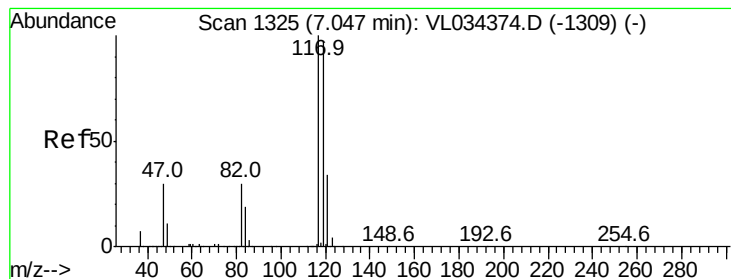
#34
 2-Butanone
 Concen: 9.235 ppbv
 RT: 5.26 min Scan# 769
 Delta R.T. 0.01 min
 Lab File: VL034455.D
 Acq: 3 Dec 2019 11:36

Tgt Ion: 43 Resp: 1467845
 Ion Ratio Lower Upper
 43 100
 72 21.5 17.0 25.6



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 10.127 ppbv

RT: 7.05 min Scan# 1327

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

Instrument :

MSVOA_L

ClientSampleId :

VL1203ABS01

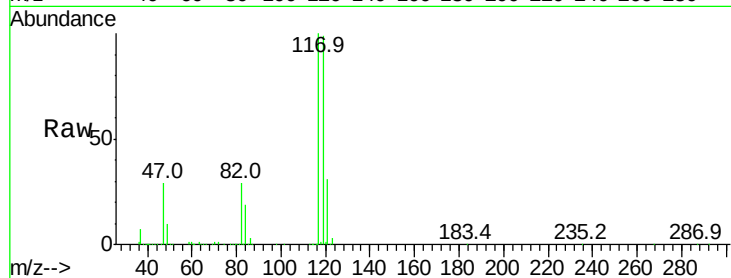
Tgt Ion:117 Resp: 1681459

Ion Ratio Lower Upper

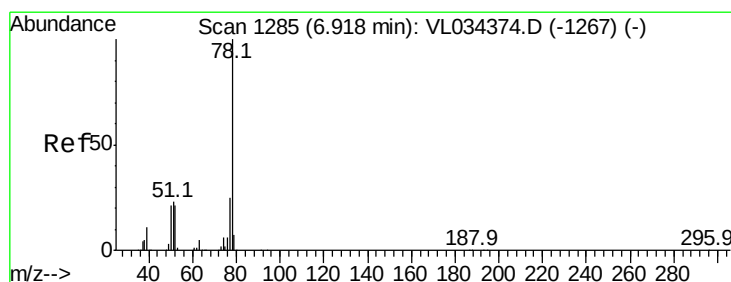
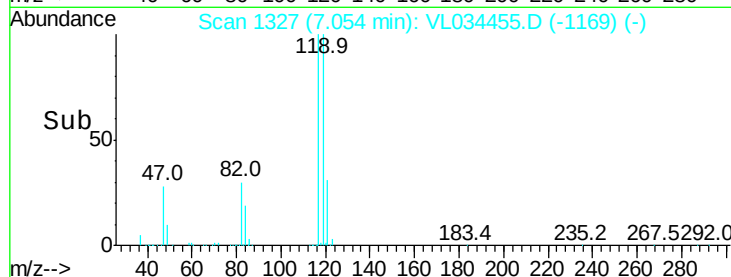
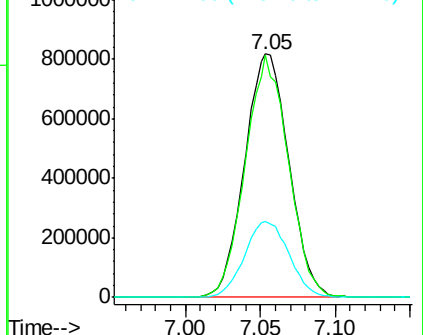
117 100

119 99.3 77.3 115.9

121 31.2 27.4 41.2



Abundance Ion 117.00 (116.70 to 117.70): V
Ion 119.00 (118.70 to 119.70): V
Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 9.354 ppbv

RT: 6.92 min Scan# 1287

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

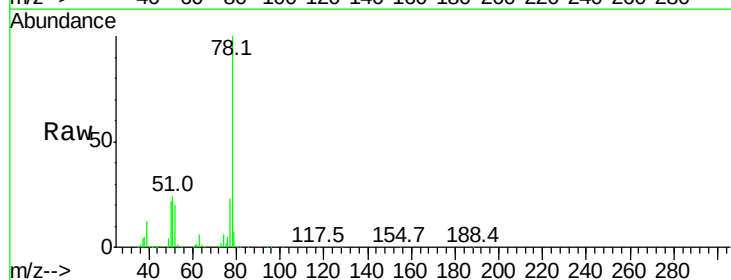
Tgt Ion: 78 Resp: 1805691

Ion Ratio Lower Upper

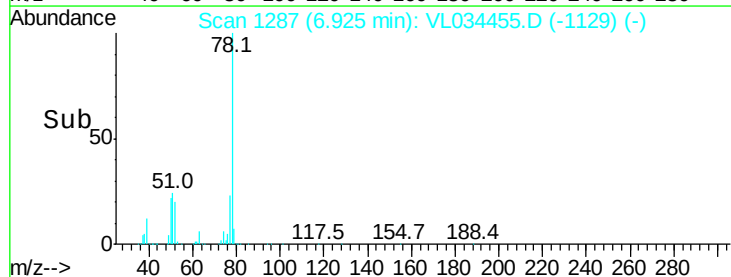
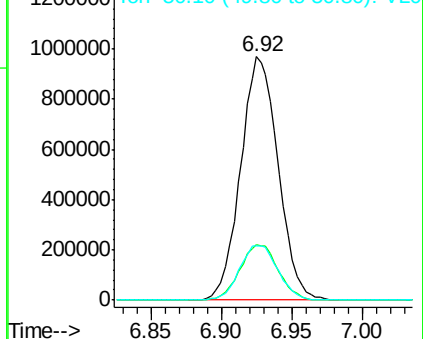
78 100

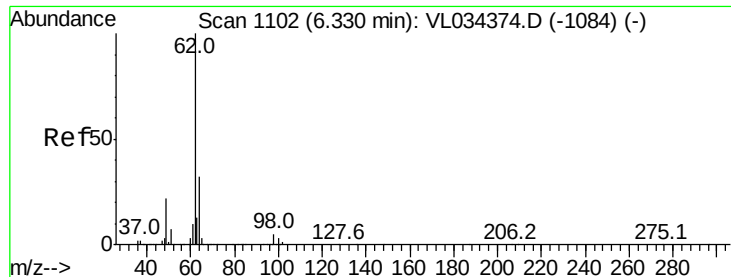
77 22.5 20.2 30.4

50 22.0 17.1 25.7



Abundance Ion 78.10 (77.80 to 78.80): VL0
Ion 77.10 (76.80 to 77.80): VL0
Ion 50.10 (49.80 to 50.80): VL0

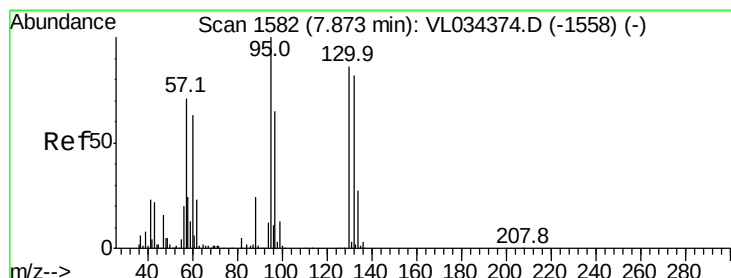
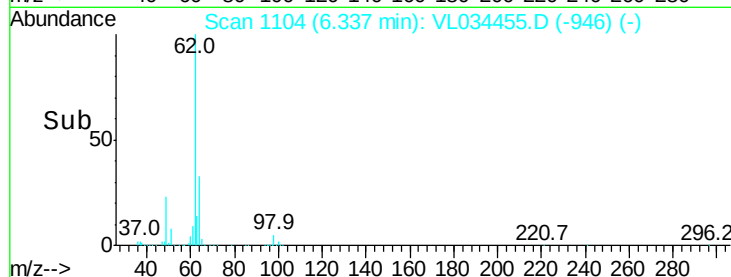
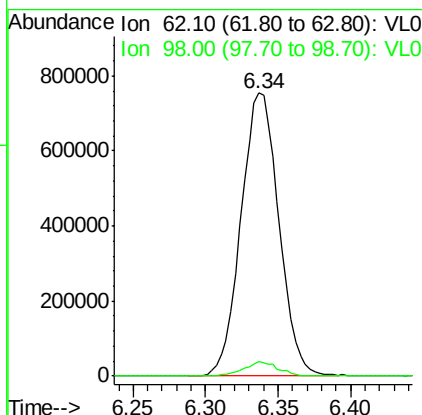
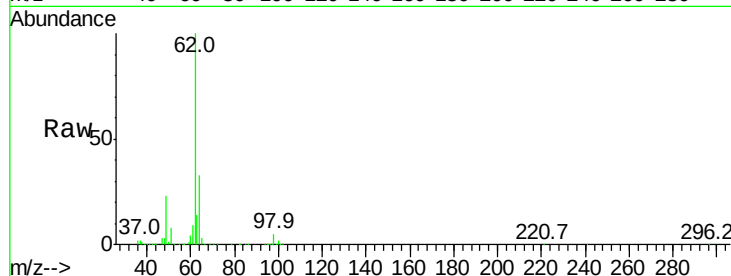




#37
 1,2-Dichloroethane
 Concen: 9.571 ppbv
 RT: 6.34 min Scan# 1104
 Delta R.T. 0.01 min
 Lab File: VL034455.D
 Acq: 3 Dec 2019 11:36

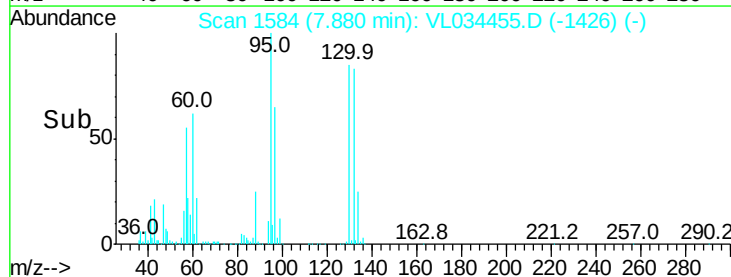
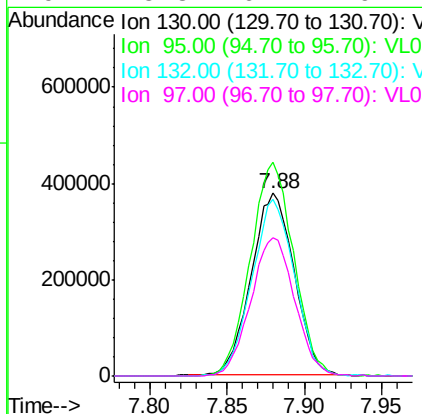
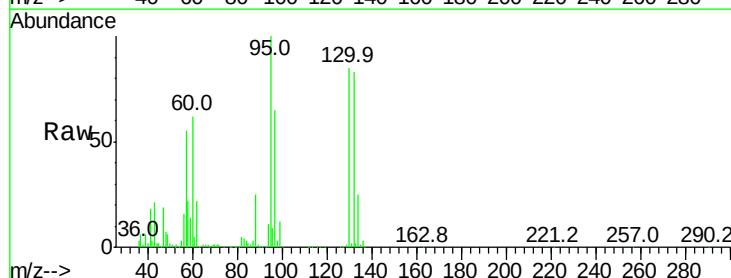
Instrument :
 MSVOA_L
 ClientSampleId :
 VL1203ABS01

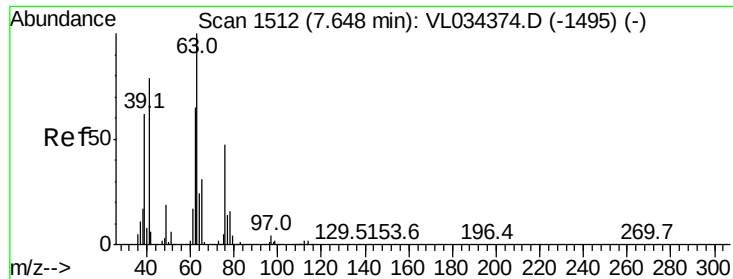
Tgt Ion: 62 Resp: 1372536
 Ion Ratio Lower Upper
 62 100
 98 4.7 3.8 5.8



#38
 Trichloroethene
 Concen: 9.223 ppbv
 RT: 7.88 min Scan# 1584
 Delta R.T. 0.01 min
 Lab File: VL034455.D
 Acq: 3 Dec 2019 11:36

Tgt Ion: 130 Resp: 730629
 Ion Ratio Lower Upper
 130 100
 95 117.4 93.4 140.0
 132 97.3 76.4 114.6
 97 75.8 61.1 91.7





#39

1,2-Dichloropropane

Concen: 10.217 ppbv

RT: 7.65 min Scan# 1514

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

Instrument :

MSVOA_L

ClientSampleId :

VL1203ABS01

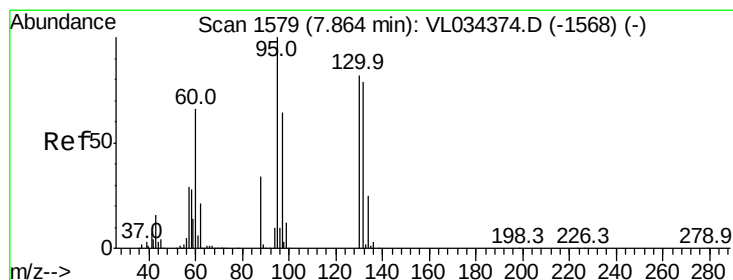
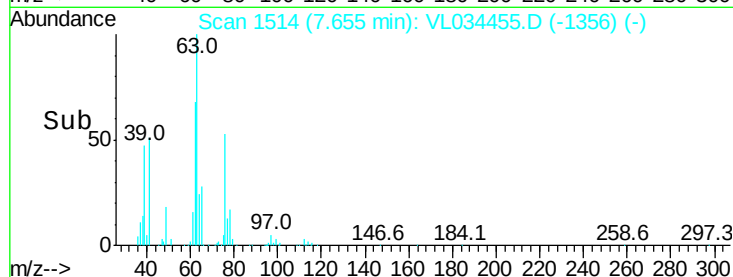
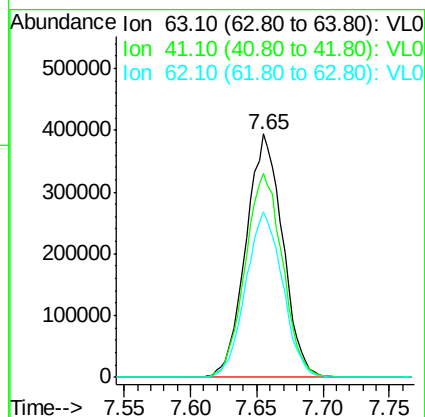
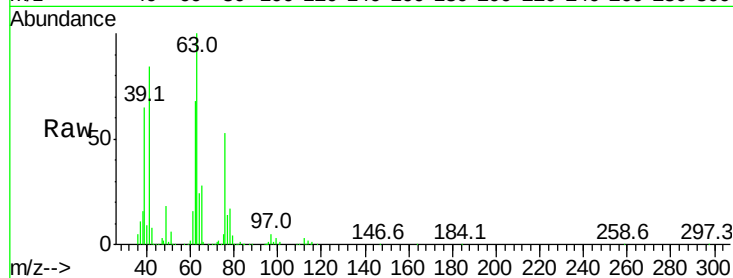
Tgt Ion: 63 Resp: 759825

Ion Ratio Lower Upper

63 100

41 83.6 63.1 94.7

62 67.8 52.3 78.5



#40

1,4-Dioxane

Concen: 8.489 ppbv

RT: 7.87 min Scan# 1581

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

Tgt Ion: 88 Resp: 275782

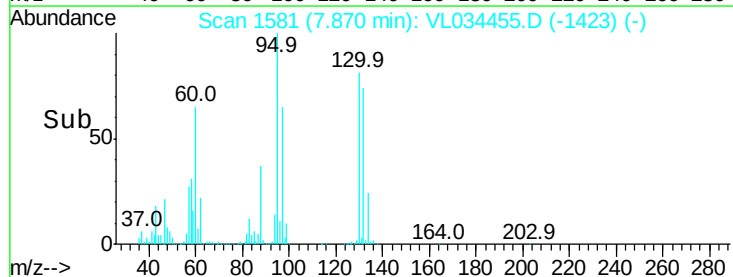
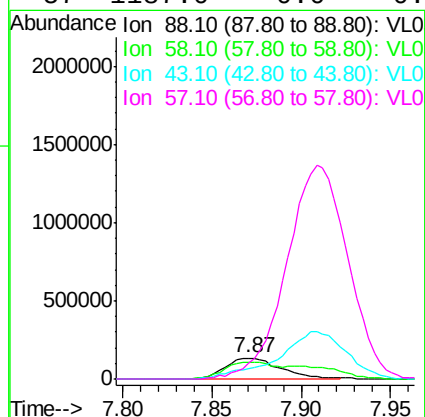
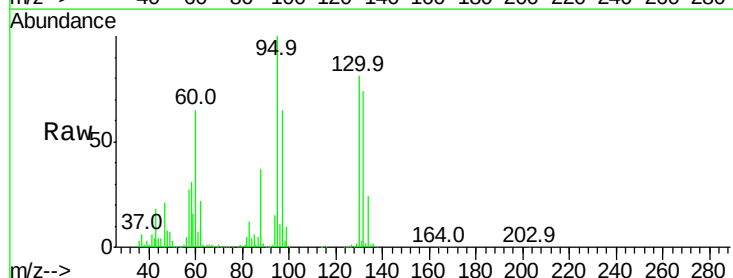
Ion Ratio Lower Upper

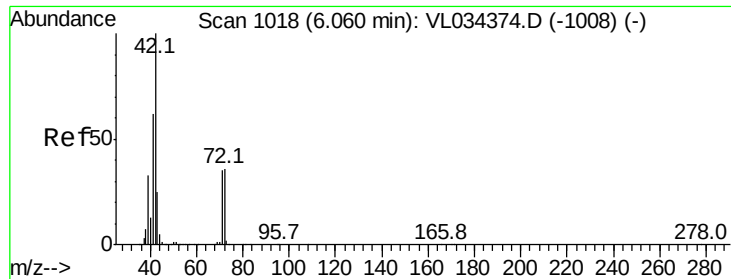
88 100

58 142.7 109.5 164.3

43 292.0 0.0 0.0#

57 1187.0 0.0 0.0#

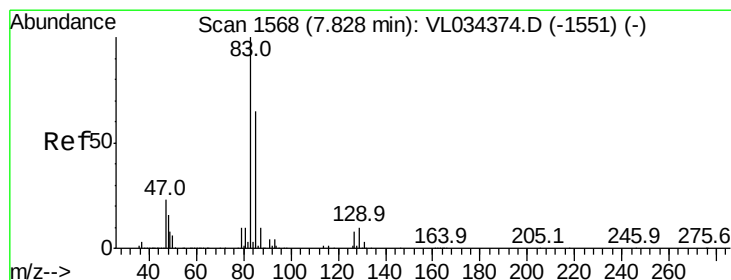
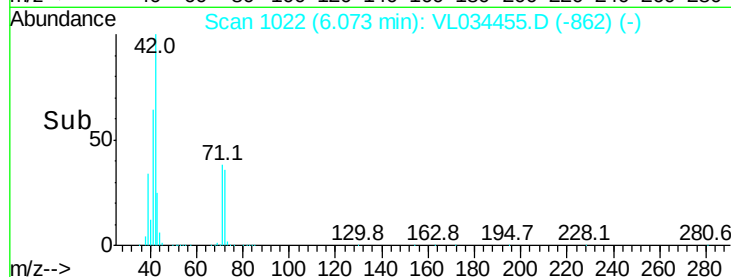
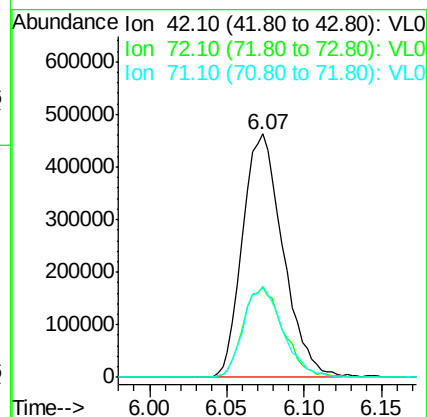
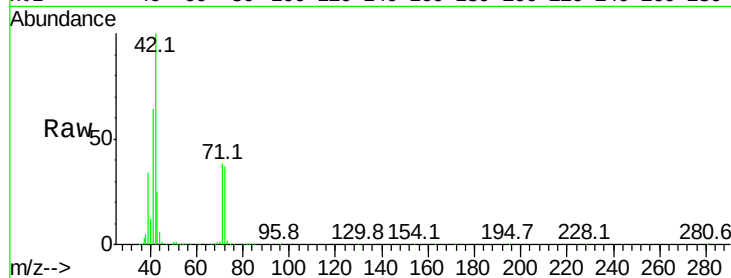




#41
Tetrahydrofuran
Concen: 9.439 ppbv
RT: 6.07 min Scan# 1022
Delta R.T. 0.01 min
Lab File: VL034455.D
Acq: 3 Dec 2019 11:36

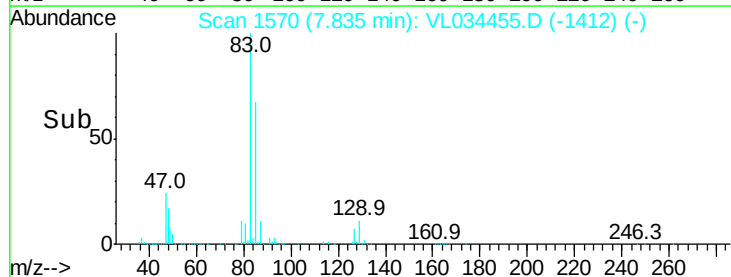
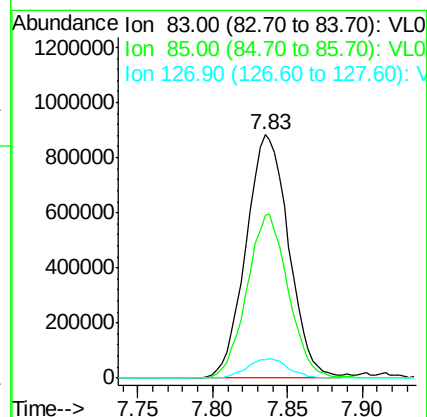
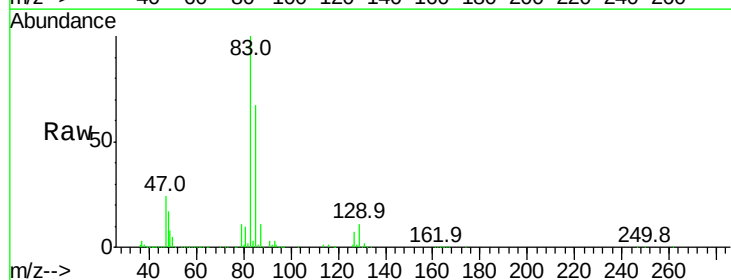
Instrument :
MSVOA_L
ClientSampleId :
VL1203ABS01

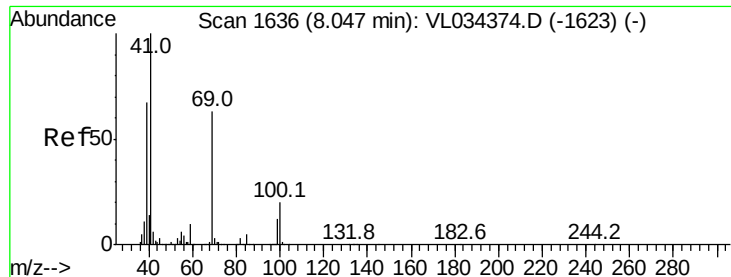
Tgt Ion: 42 Resp: 841513
Ion Ratio Lower Upper
42 100
72 36.8 30.2 45.4
71 36.4 29.4 44.2



#42
Bromodichloromethane
Concen: 9.790 ppbv
RT: 7.83 min Scan# 1570
Delta R.T. 0.01 min
Lab File: VL034455.D
Acq: 3 Dec 2019 11:36

Tgt Ion: 83 Resp: 1755917
Ion Ratio Lower Upper
83 100
85 66.7 52.3 78.5
127 7.3 6.1 9.1

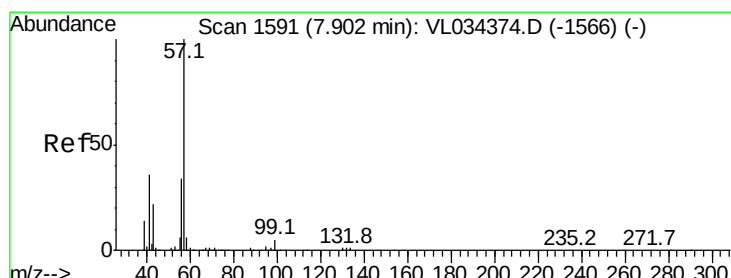
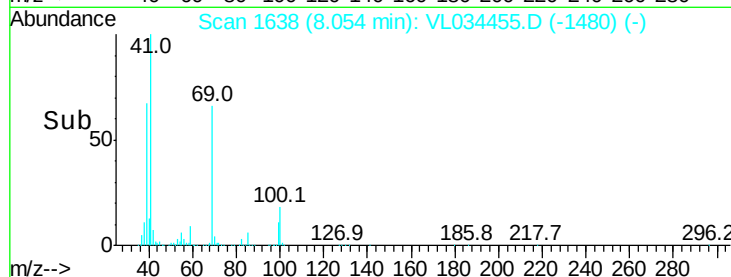
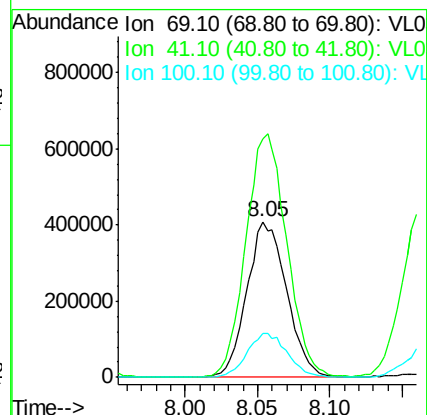
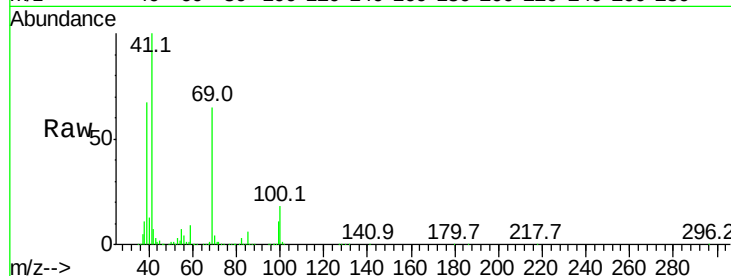




#43
Methyl Methacrylate
Concen: 9.757 ppbv
RT: 8.05 min Scan# 1638
Delta R.T. 0.01 min
Lab File: VL034455.D
Acq: 3 Dec 2019 11:36

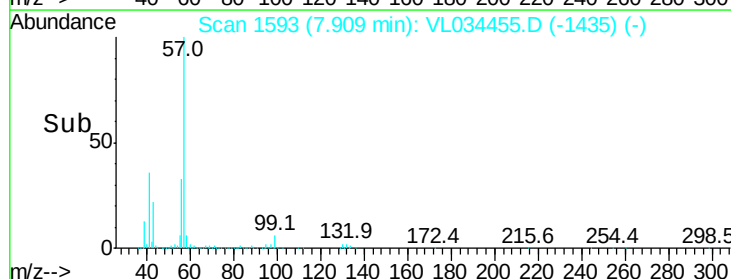
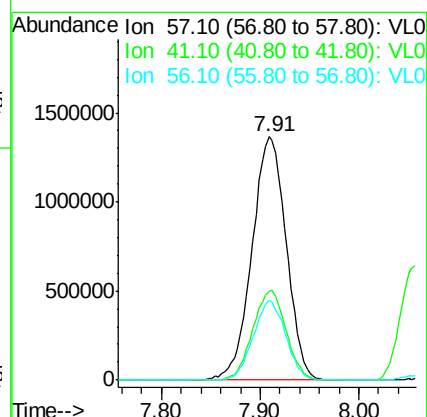
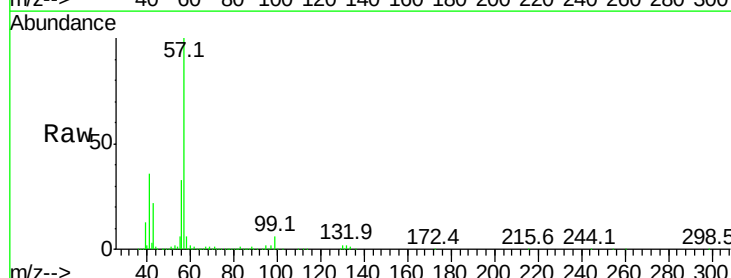
Instrument :
MSVOA_L
ClientSampleId :
VL1203ABS01

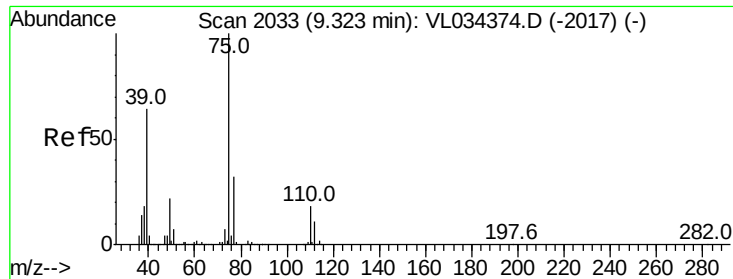
Tgt Ion: 69 Resp: 781246
Ion Ratio Lower Upper
69 100
41 160.3 127.4 191.2
100 28.5 24.2 36.4



#44
2,2,4-Trimethylpentane
Concen: 9.270 ppbv
RT: 7.91 min Scan# 1593
Delta R.T. 0.01 min
Lab File: VL034455.D
Acq: 3 Dec 2019 11:36

Tgt Ion: 57 Resp: 3270381
Ion Ratio Lower Upper
57 100
41 35.8 28.6 42.8
56 31.0 25.3 37.9





#45

t-1,3-Dichloropropene

Concen: 10.879 ppbv

RT: 9.33 min Scan# 2035

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

Instrument :

MSVOA_L

ClientSampleId :

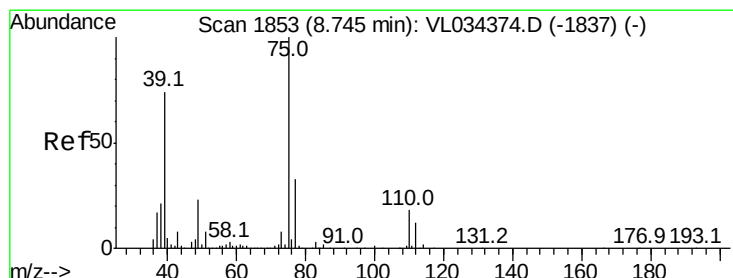
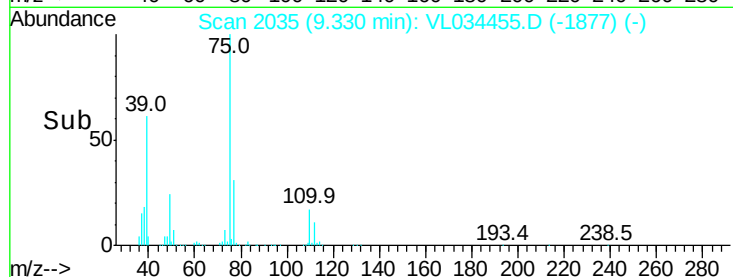
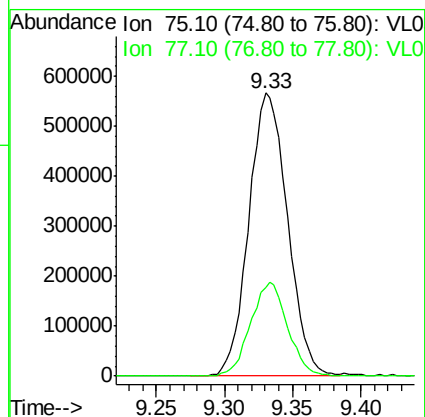
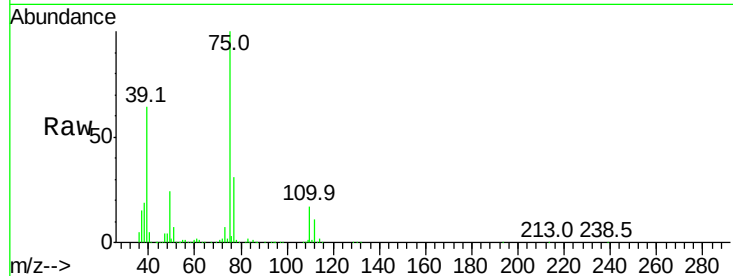
VL1203ABS01

Tgt Ion: 75 Resp: 1117056

Ion Ratio Lower Upper

75 100

77 31.3 25.4 38.2



#46

cis-1,3-Dichloropropene

Concen: 10.481 ppbv

RT: 8.75 min Scan# 1856

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

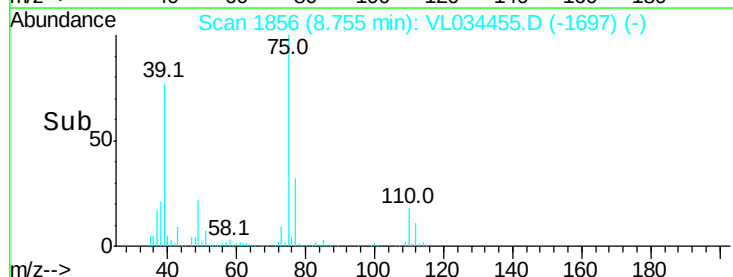
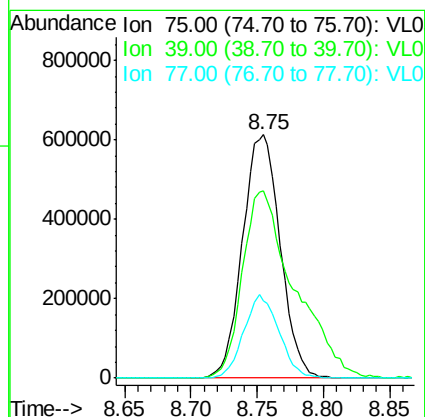
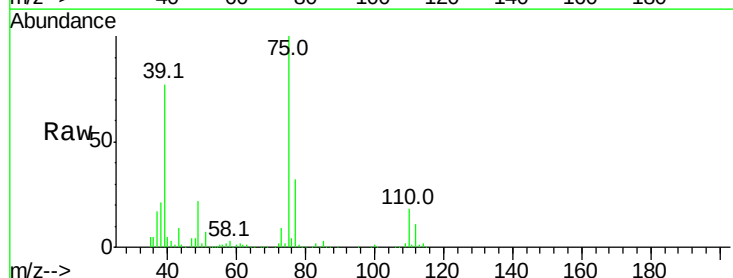
Tgt Ion: 75 Resp: 1208817

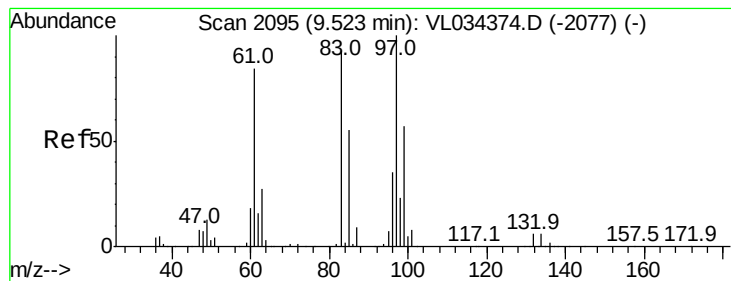
Ion Ratio Lower Upper

75 100

39 76.7 59.0 88.6

77 31.6 26.4 39.6





#47

1,1,2-Trichloroethane

Concen: 9.483 ppbv

RT: 9.53 min Scan# 2098

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

Instrument :

MSVOA_L

ClientSampleId :

VL1203ABS01

Tgt Ion: 97 Resp: 784514

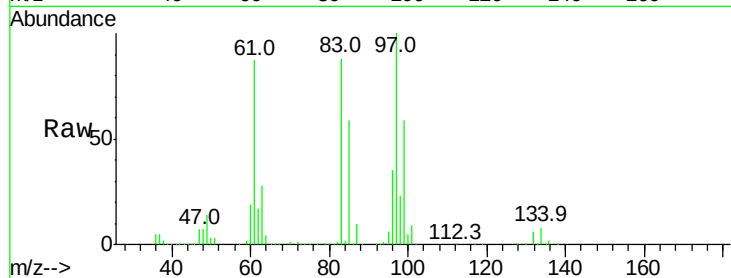
Ion Ratio Lower Upper

97 100

83 87.6 74.6 112.0

85 58.6 43.8 65.8

99 59.3 45.6 68.4

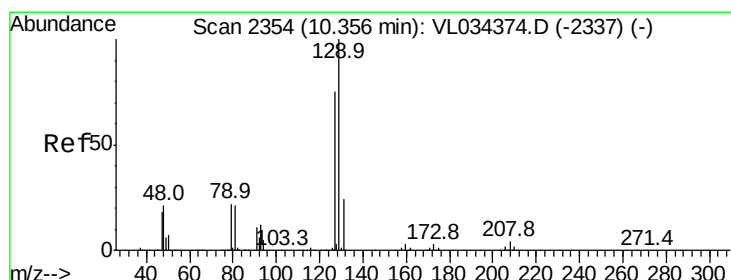
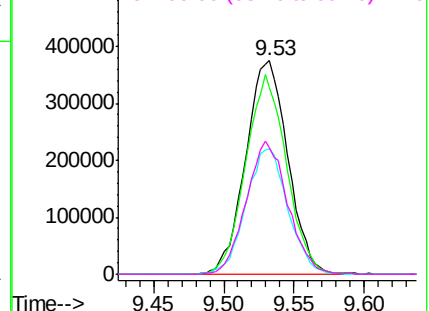
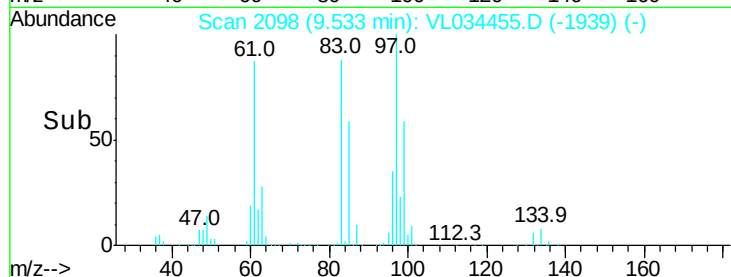


Abundance Ion 97.00 (96.70 to 97.70): VL0

Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 99.00 (98.70 to 99.70): VL0



#48

Dibromochloromethane

Concen: 10.257 ppbv

RT: 10.37 min Scan# 2357

Delta R.T. 0.01 min

Lab File: VL034455.D

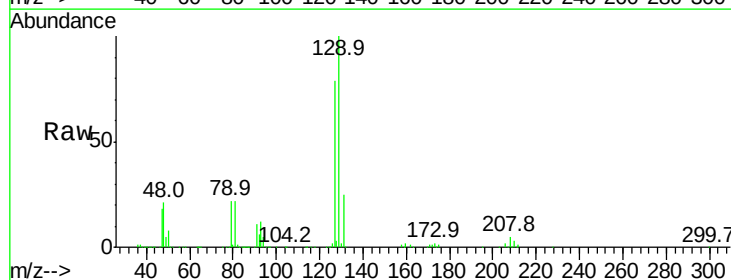
Acq: 3 Dec 2019 11:36

Tgt Ion: 129 Resp: 1456885

Ion Ratio Lower Upper

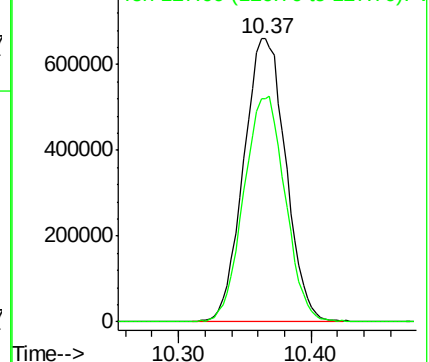
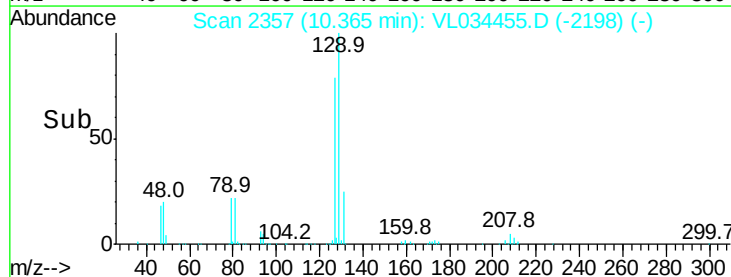
129 100

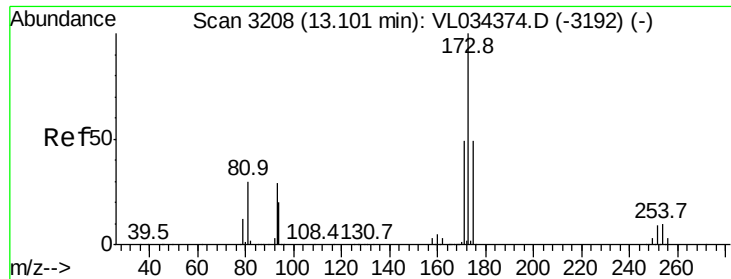
127 78.8 39.1 117.5



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V

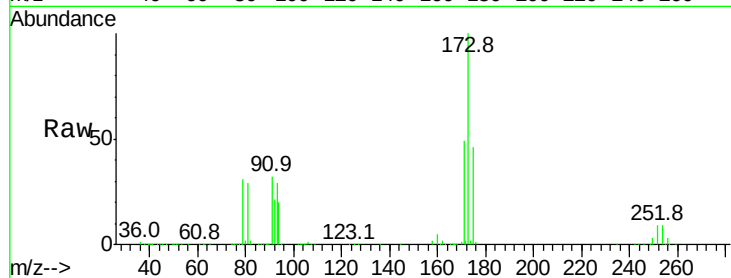




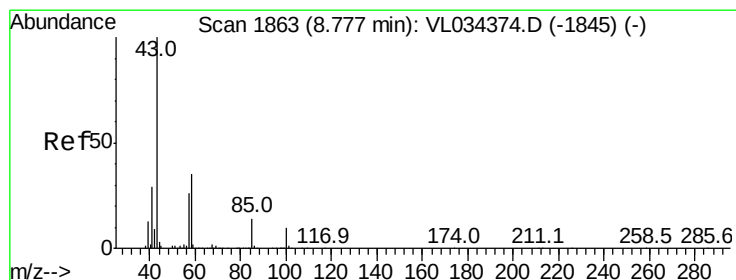
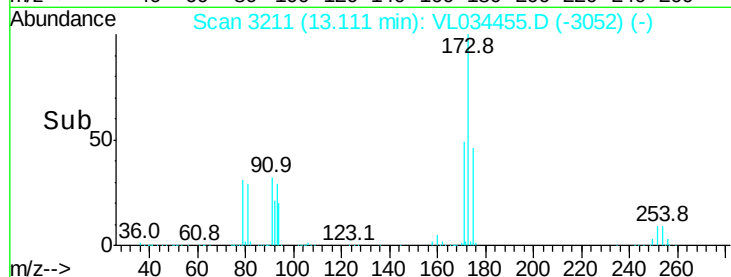
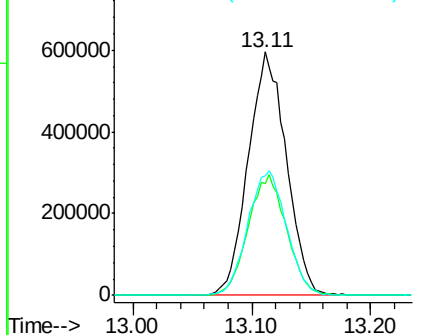
#49
Bromoform
Concen: 10.409 ppbv
RT: 13.11 min Scan# 3211
Delta R.T. 0.01 min
Lab File: VL034455.D
Acq: 3 Dec 2019 11:36

Instrument :
MSVOA_L
ClientSampleId :
VL1203ABS01

Tgt Ion:173 Resp: 1319846
Ion Ratio Lower Upper
173 100
175 49.7 39.3 58.9
171 52.3 42.4 63.6

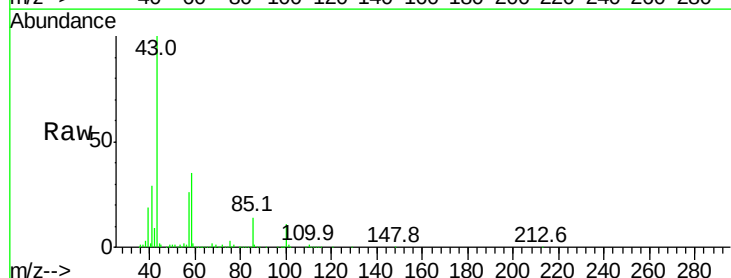


Abundance Ion 172.90 (172.60 to 173.60): V
Ion 174.90 (174.60 to 175.60): V
Ion 170.90 (170.60 to 171.60): V

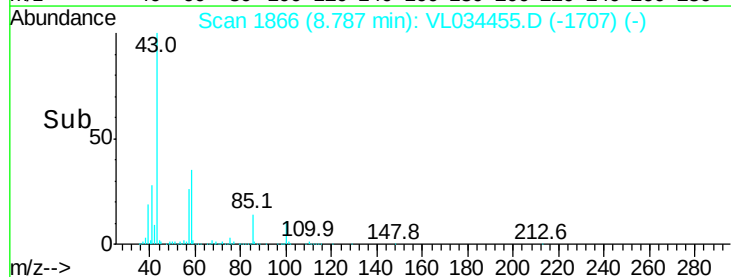
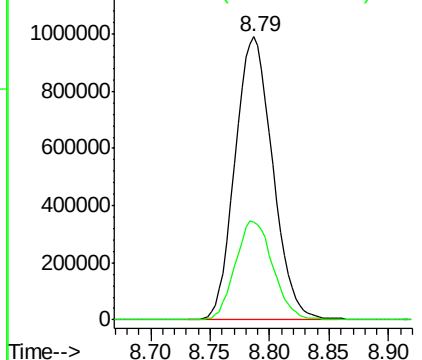


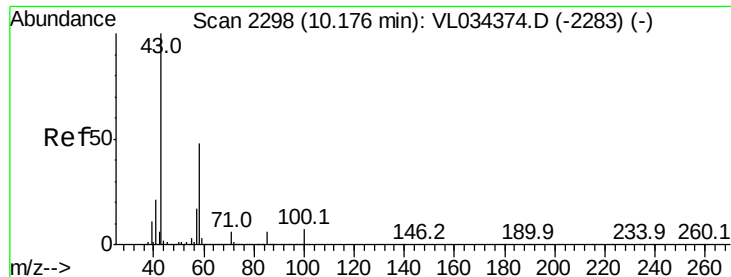
#50
4-Methyl-2-Pentanone
Concen: 9.455 ppbv
RT: 8.79 min Scan# 1866
Delta R.T. 0.01 min
Lab File: VL034455.D
Acq: 3 Dec 2019 11:36

Tgt Ion: 43 Resp: 2174501
Ion Ratio Lower Upper
43 100
58 34.9 27.9 41.9



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





#51

2-Hexanone

Concen: 9.551 ppbv

RT: 10.19 min Scan# 2301

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

Instrument :

MSVOA_L

ClientSampleId :

VL1203ABS01

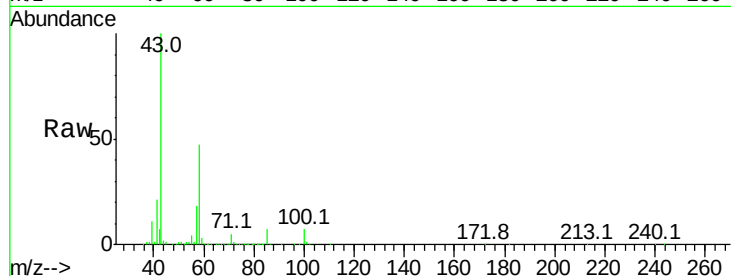
Tgt Ion: 43 Resp: 1839907

Ion Ratio Lower Upper

43 100

58 45.9 38.2 57.4

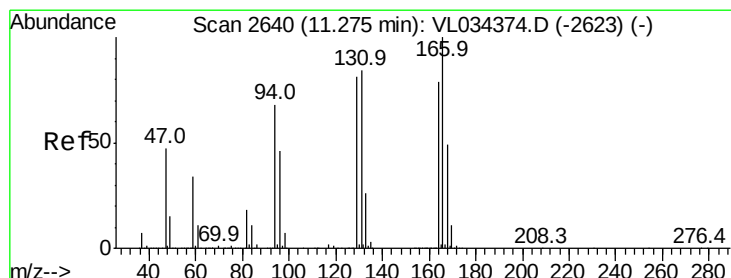
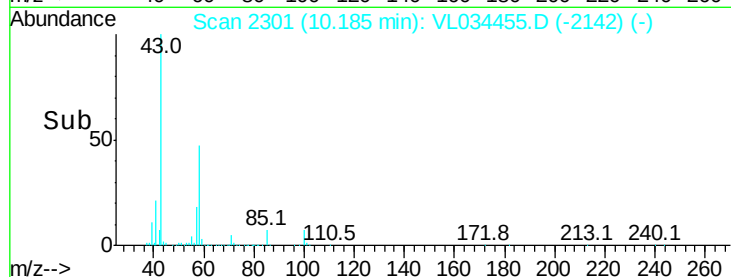
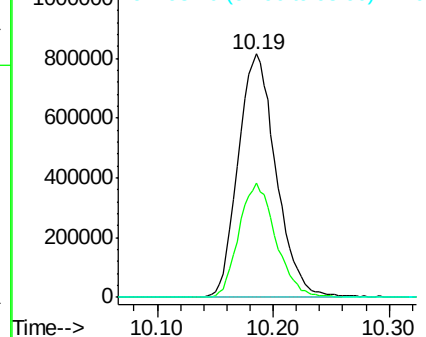
98 0.2 0.2 0.2



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

Ion 98.20 (97.90 to 98.90): VL0



#52

Tetrachloroethene

Concen: 8.213 ppbv

RT: 11.28 min Scan# 2642

Delta R.T. 0.01 min

Lab File: VL034455.D

Acq: 3 Dec 2019 11:36

Tgt Ion: 164 Resp: 685940

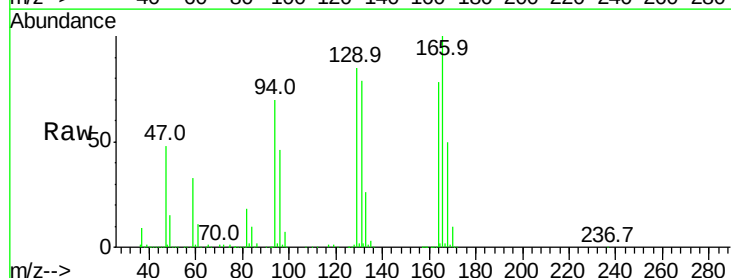
Ion Ratio Lower Upper

164 100

166 128.0 101.7 152.5

129 108.9 82.6 123.8

131 100.9 85.2 127.8



Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V

