

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_D\DATA\VD110819\
 Data File : VD064156.D
 Acq On : 08 Nov 2019 14:35
 Operator : VA/SY
 Sample : VSTDIC020
 Misc : 5.00G/5.00ml/MSVOA_D/SOIL
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :
 VSTDIC020

Quant Time: Nov 08 15:35:51 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D110819S.M
 Quant Title : SW846 8260
 QLast Update : Fri Nov 08 15:32:18 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.98	168	853450	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.87	114	1225157	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.65	117	1068093	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.58	152	516214	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	8.34	65	151902	21.97	ug/l	0.00
Spiked Amount			Recovery	=	43.94%	
35) Dibromofluoromethane	7.92	113	146168	19.47	ug/l	0.00
Spiked Amount			Recovery	=	38.94%	
50) Toluene-d8	10.34	98	548217	18.36	ug/l	0.00
Spiked Amount			Recovery	=	36.72%	
62) 4-Bromofluorobenzene	12.64	95	186866	18.88	ug/l	0.00
Spiked Amount			Recovery	=	37.76%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.99	85	136080	16.022	ug/l	96
3) Chloromethane	2.21	50	162577	12.084	ug/l	97
4) Vinyl Chloride	2.35	62	162714	11.198	ug/l	98
5) Bromomethane	2.76	94	103121	10.972	ug/l	98
6) Chloroethane	2.92	64	106745	11.778	ug/l	99
7) Trichlorofluoromethane	3.27	101	263978	12.985	ug/l	99
8) Diethyl Ether	3.71	74	79053	20.838	ug/l	99
9) 1,1,2-Trichlorotrifluoroet	4.09	101	149511	19.171	ug/l	98
10) Methyl Iodide	4.30	142	144701	15.279	ug/l	98
11) Tert butyl alcohol	5.25	59	53241	138.375	ug/l #	84
12) 1,1-Dichloroethene	4.06	96	144709	19.469	ug/l	92
13) Acrolein	3.93	56	38289	86.645	ug/l	96
14) Allyl chloride	4.71	41	258010	27.361	ug/l	97
15) Acrylonitrile	5.43	53	172126	121.158	ug/l	98
16) Acetone	4.17	43	162782	120.919	ug/l	98
17) Carbon Disulfide	4.40	76	453745	19.849	ug/l	100
18) Methyl Acetate	4.73	43	97107	26.645	ug/l	97
19) Methyl tert-butyl Ether	5.48	73	364833	23.540	ug/l	98
20) Methylene Chloride	4.96	84	178371	19.422	ug/l	94
21) trans-1,2-Dichloroethene	5.47	96	164677	19.774	ug/l	95
22) Diisopropyl ether	6.37	45	495004	24.722	ug/l	99
23) Vinyl Acetate	6.31	43	1418285	128.759	ug/l	99
24) 1,1-Dichloroethane	6.27	63	283323	21.504	ug/l	99
25) 2-Butanone	7.22	43	231091	125.052	ug/l	96
26) 2,2-Dichloropropane	7.21	77	276635	22.023	ug/l	99
27) cis-1,2-Dichloroethene	7.21	96	183424	19.832	ug/l	98
28) Bromochloromethane	7.55	49	84161	17.763	ug/l	97
29) Tetrahydrofuran	7.57	42	141621	130.268	ug/l	98
30) Chloroform	7.71	83	292945	19.759	ug/l	100
31) Cyclohexane	7.98	56	266715	20.680	ug/l	95
32) 1,1,1-Trichloroethane	7.90	97	272330	19.696	ug/l	99
36) 1,1-Dichloropropene	8.11	75	226025	19.570	ug/l	100
37) Ethyl Acetate	7.30	43	104625	28.054	ug/l	99
38) Carbon Tetrachloride	8.10	117	238826	19.113	ug/l	98

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_D\DATA\VD110819\
 Data File : VD064156.D
 Acq On : 08 Nov 2019 14:35
 Operator : VA/SY
 Sample : VSTDICC020
 Misc : 5.00G/5.00ml/MSVOA_D/SOIL
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :
 VSTDICC020

Quant Time: Nov 08 15:35:51 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D110819S.M
 Quant Title : SW846 8260
 QLast Update : Fri Nov 08 15:32:18 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) Methylcyclohexane	9.36	83	271447	19.343	ug/l	98
40) Benzene	8.36	78	630396	20.114	ug/l	97
41) Methacrylonitrile	7.54	41	67372	30.162	ug/l	97
42) 1,2-Dichloroethane	8.43	62	198350	23.567	ug/l	98
43) Isopropyl Acetate	8.46	43	208005	27.303	ug/l	99
44) Trichloroethene	9.11	130	184873	19.554	ug/l	99
45) 1,2-Dichloropropane	9.39	63	155323	21.162	ug/l	96
46) Dibromomethane	9.48	93	84690	19.655	ug/l	98
47) Bromodichloromethane	9.67	83	223213	20.352	ug/l	97
48) Methyl methacrylate	9.46	41	101246	28.637	ug/l	97
49) 1,4-Dioxane	9.47	88	20895	429.480	ug/l	91
51) 4-Methyl-2-Pentanone	10.23	43	514585	128.557	ug/l	100
52) Toluene	10.40	92	409903	18.940	ug/l	99
53) t-1,3-Dichloropropene	10.63	75	224218	21.733	ug/l	99
54) cis-1,3-Dichloropropene	10.09	75	262313	21.544	ug/l	97
55) 1,1,2-Trichloroethane	10.80	97	114726	18.948	ug/l	98
56) Ethyl methacrylate	10.66	69	162272	23.782	ug/l	99
57) 1,3-Dichloropropane	10.95	76	201901	19.988	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.94	63	328057	117.731	ug/l	99
59) 2-Hexanone	10.99	43	355468	125.344	ug/l	99
60) Dibromochloromethane	11.14	129	156356	18.980	ug/l	99
61) 1,2-Dibromoethane	11.25	107	114357	18.944	ug/l	100
64) Tetrachloroethene	10.88	164	162818	20.834	ug/l	97
65) Chlorobenzene	11.67	112	439505	19.920	ug/l	100
66) 1,1,1,2-Tetrachloroethane	11.74	131	165613	19.985	ug/l	99
67) Ethyl Benzene	11.75	91	785554	19.959	ug/l	99
68) m/p-Xylenes	11.86	106	598665	38.157	ug/l	100
69) o-Xylene	12.18	106	275508	19.211	ug/l	99
70) Styrene	12.20	104	494719	20.048	ug/l	99
71) Bromoform	12.36	173	96886	21.635	ug/l #	98
73) Isopropylbenzene	12.48	105	754088	20.647	ug/l	99
74) N-amyl acetate	12.29	43	190749	29.482	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.74	83	124174	21.689	ug/l	99
76) 1,2,3-Trichloropropane	12.79	75	172233	48.131	ug/l #	100
77) Bromobenzene	12.76	156	184841	20.887	ug/l	96
78) n-propylbenzene	12.83	91	854308	20.038	ug/l	98
79) 2-Chlorotoluene	12.91	91	489990	21.219	ug/l	100
80) 1,3,5-Trimethylbenzene	12.96	105	624021	20.547	ug/l	100
81) trans-1,4-Dichloro-2-buten	12.53	75	43328	24.433	ug/l	100
82) 4-Chlorotoluene	13.01	91	511392	20.883	ug/l	100
83) tert-Butylbenzene	13.23	119	541772	19.913	ug/l	100
84) 1,2,4-Trimethylbenzene	13.27	105	617158	20.279	ug/l	99
85) sec-Butylbenzene	13.41	105	727257	19.594	ug/l	99
86) p-Isopropyltoluene	13.52	119	690844	19.826	ug/l	99
87) 1,3-Dichlorobenzene	13.52	146	342137	19.684	ug/l	100
88) 1,4-Dichlorobenzene	13.60	146	333106	19.335	ug/l	98
89) n-Butylbenzene	13.85	91	625069	19.491	ug/l	100
90) Hexachloroethane	14.12	117	128679	19.631	ug/l	98
91) 1,2-Dichlorobenzene	13.90	146	292469	19.538	ug/l	99
92) 1,2-Dibromo-3-Chloropropan	14.51	75	22402	25.908	ug/l	97

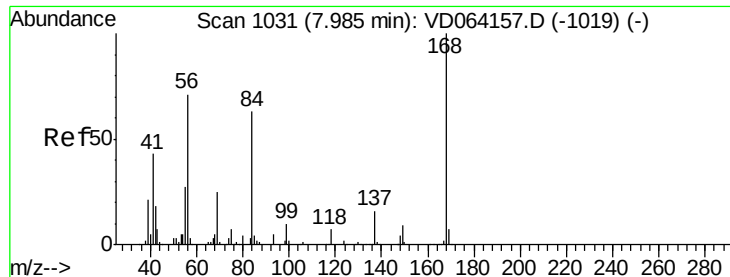
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_D\DATA\VD110819\
Data File : VD064156.D
Acq On : 08 Nov 2019 14:35
Operator : VA/SY
Sample : VSTDICC020
Misc : 5.00G/5.00ml/MSVOA_D/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_D
ClientSampleId :
VSTDICC020

Quant Time: Nov 08 15:35:51 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_D\METHOD\82D110819S.M
Quant Title : SW846 8260
QLast Update : Fri Nov 08 15:32:18 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2,4-Trichlorobenzene	15.17	180	227117	20.880	ug/l	99
94) Hexachlorobutadiene	15.27	225	140011	21.650	ug/l	99
95) Naphthalene	15.41	128	386566	21.869	ug/l	99
96) 1,2,3-Trichlorobenzene	15.60	180	190856	20.212	ug/l	99

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.98 min Scan# 1031

Delta R.T. -0.00 min

Lab File: VD064156.D

Acq: 08 Nov 2019 14:35

Instrument :

MSVOA_D

ClientSampleId :

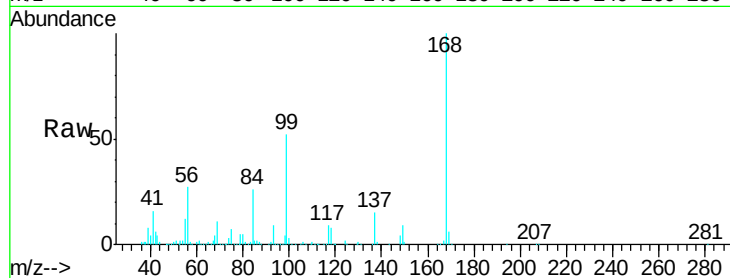
VSTDIC020

Tgt Ion:168 Resp: 853450

Ion Ratio Lower Upper

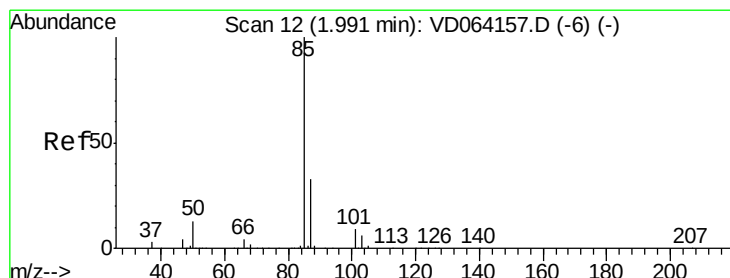
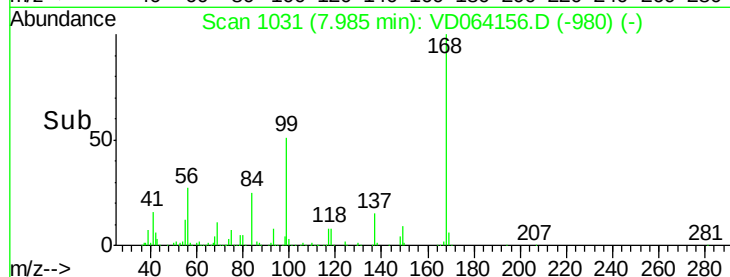
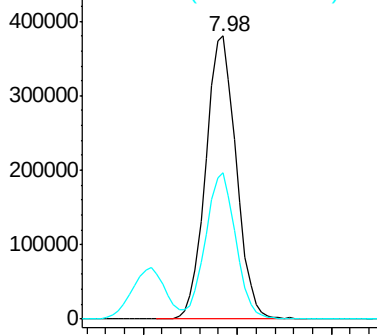
168 100

99 51.3 41.6 62.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VDC



#2

Dichlorodifluoromethane

Concen: 16.022 ug/l

RT: 1.99 min Scan# 12

Delta R.T. -0.00 min

Lab File: VD064156.D

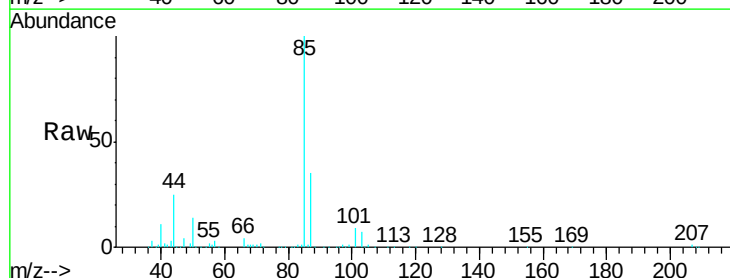
Acq: 08 Nov 2019 14:35

Tgt Ion: 85 Resp: 136080

Ion Ratio Lower Upper

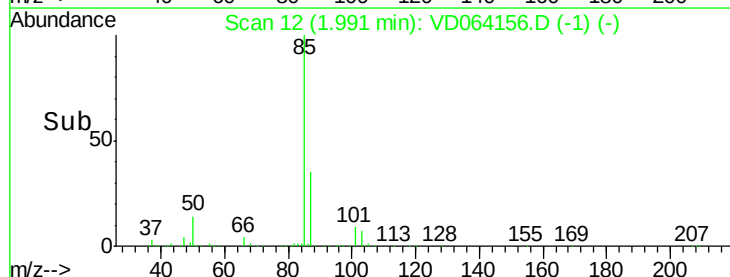
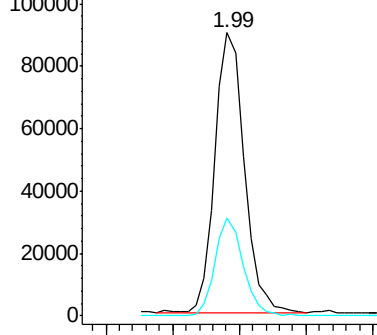
85 100

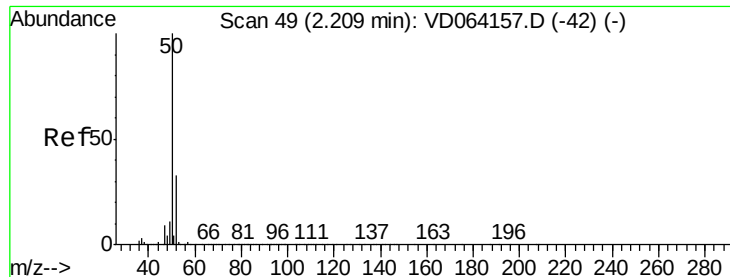
87 35.0 16.4 49.2



Abundance Ion 84.90 (84.60 to 85.60): VDC

Ion 86.90 (86.60 to 87.60): VDC





#3

Chloromethane

Concen: 12.084 ug/l

RT: 2.21 min Scan# 49

Delta R.T. -0.00 min

Lab File: VD064156.D

Acq: 08 Nov 2019 14:35

Instrument :

MSVOA_D

ClientSampleId :

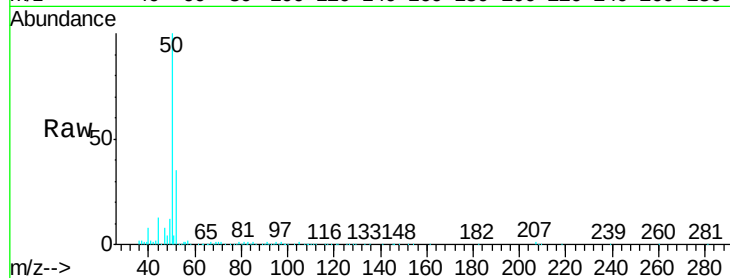
VSTDIC020

Tgt Ion: 50 Resp: 162577

Ion Ratio Lower Upper

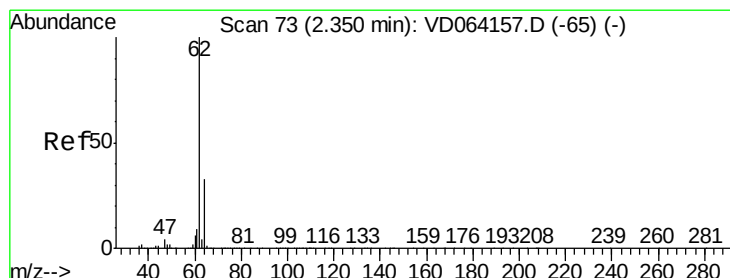
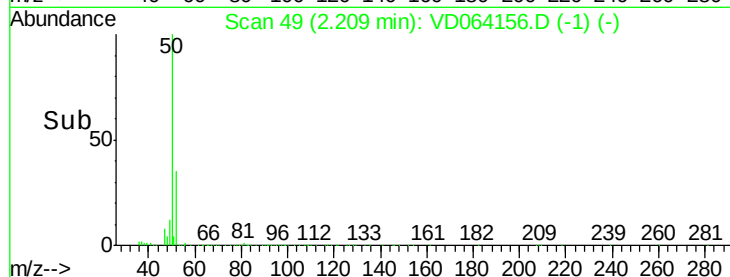
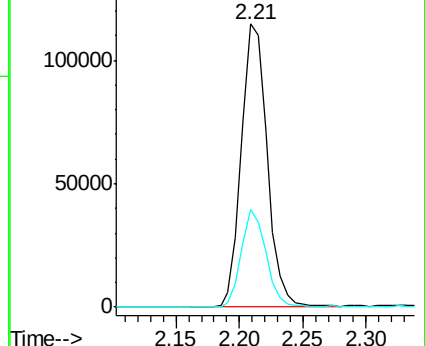
50 100

52 34.4 26.2 39.4



Abundance Ion 49.90 (49.60 to 50.60): VDC

Ion 51.90 (51.60 to 52.60): VDC



#4

Vinyl Chloride

Concen: 11.198 ug/l

RT: 2.35 min Scan# 73

Delta R.T. -0.00 min

Lab File: VD064156.D

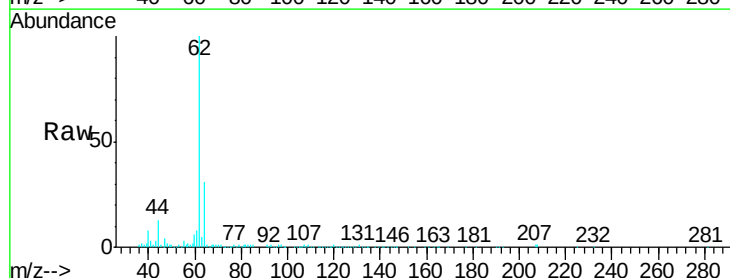
Acq: 08 Nov 2019 14:35

Tgt Ion: 62 Resp: 162714

Ion Ratio Lower Upper

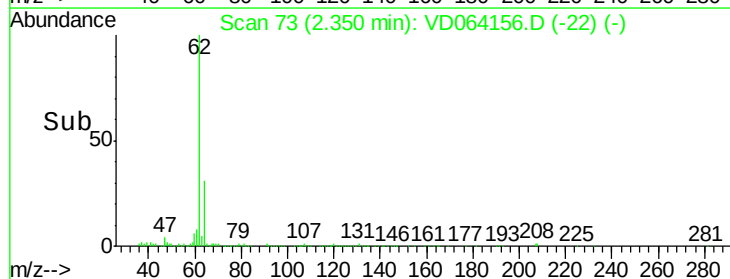
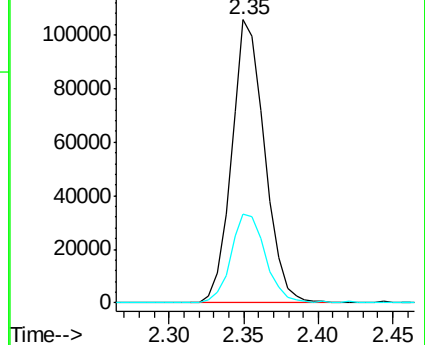
62 100

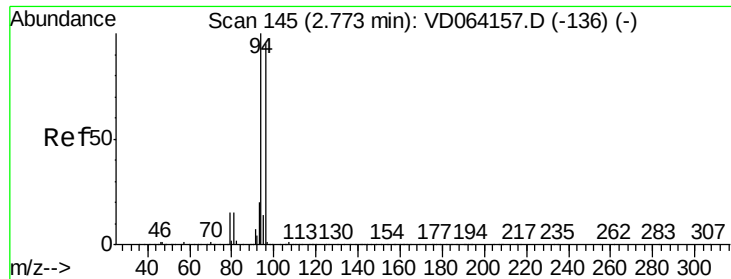
64 31.4 26.2 39.2



Abundance Ion 61.90 (61.60 to 62.60): VDC

Ion 63.90 (63.60 to 64.60): VDC





#5

Bromomethane

Concen: 10.972 ug/l

RT: 2.76 min Scan# 143

Delta R.T. -0.01 min

Lab File: VD064156.D

Acq: 08 Nov 2019 14:35

Instrument :

MSVOA_D

ClientSampleId :

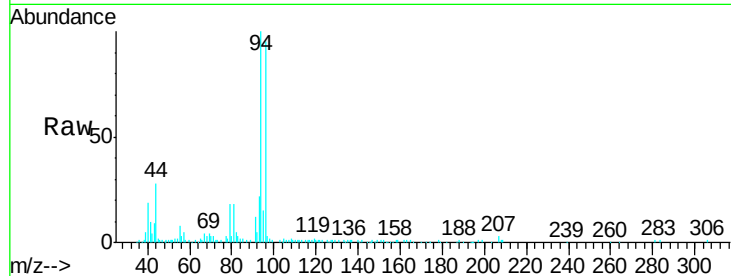
VSTDIC020

Tgt Ion: 94 Resp: 103121

Ion Ratio Lower Upper

94 100

96 93.2 76.2 114.4



Abundance Ion 93.90 (93.60 to 94.60): VDC

Ion 95.90 (95.60 to 96.60): VDC

2.76

50000

40000

30000

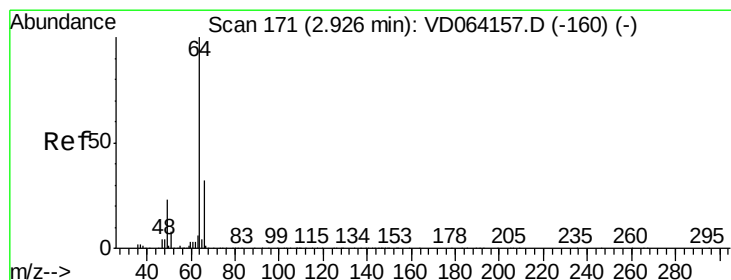
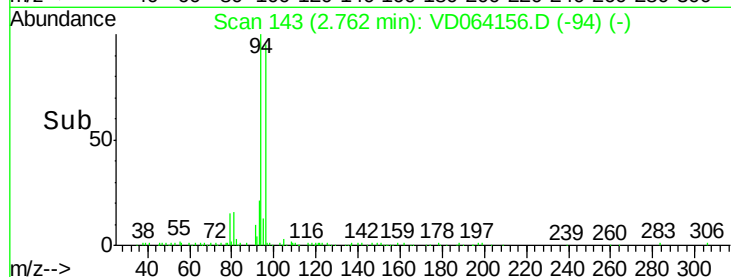
20000

10000

0

Time-->

2.70 2.80 2.90



#6

Chloroethane

Concen: 11.778 ug/l

RT: 2.92 min Scan# 170

Delta R.T. -0.01 min

Lab File: VD064156.D

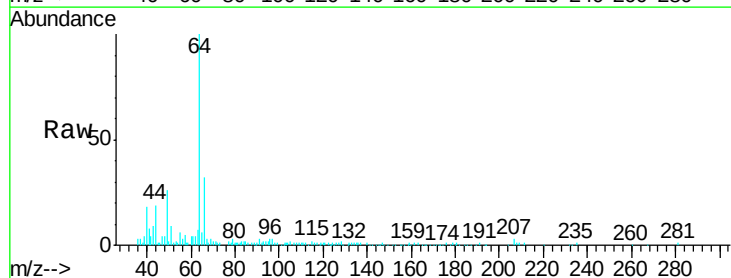
Acq: 08 Nov 2019 14:35

Tgt Ion: 64 Resp: 106745

Ion Ratio Lower Upper

64 100

66 31.3 25.5 38.3



Abundance Ion 63.90 (63.60 to 64.60): VDC

Ion 65.90 (65.60 to 66.60): VDC

2.92

60000

50000

40000

30000

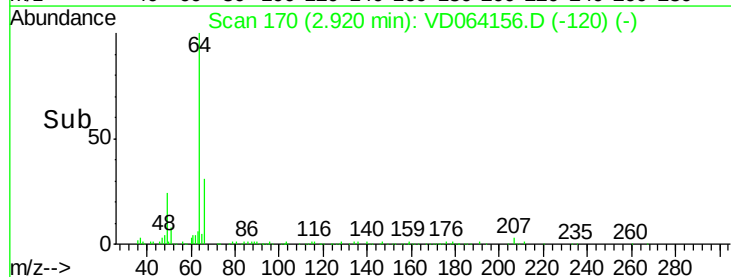
20000

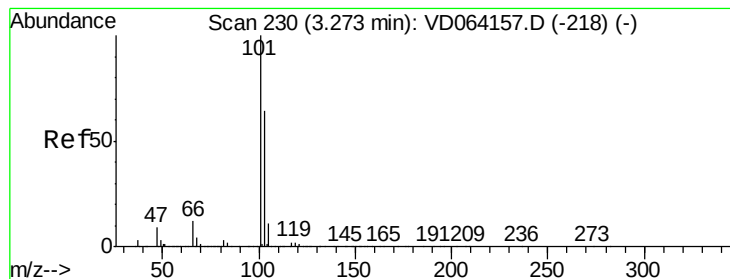
10000

0

Time-->

2.80 2.90 3.00



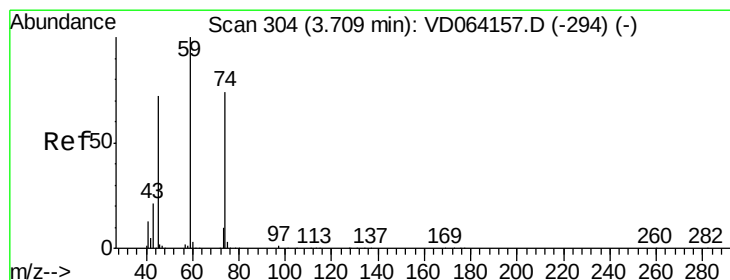
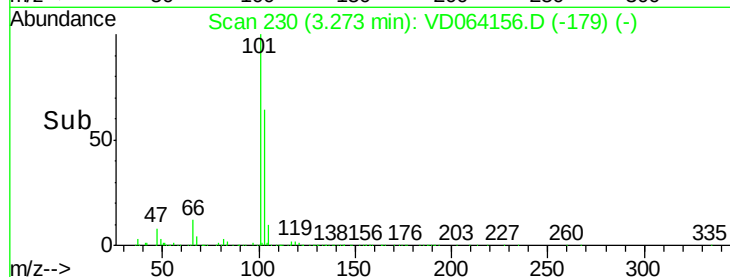
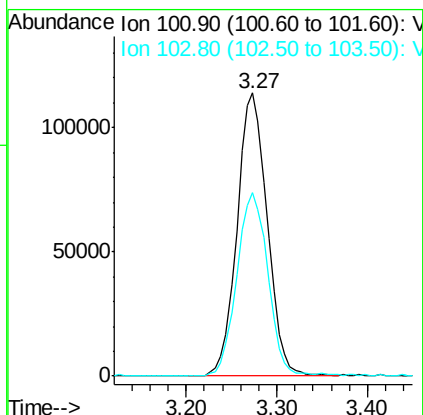
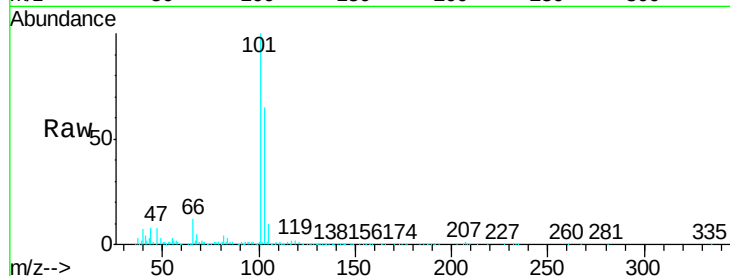


#7

Trichlorofluoromethane
 Concen: 12.985 ug/l
 RT: 3.27 min Scan# 230
 Delta R.T. -0.00 min
 Lab File: VD064156.D
 Acq: 08 Nov 2019 14:35

Instrument :
 MSVOA_D
 ClientSampleId :
 VSTDIC020

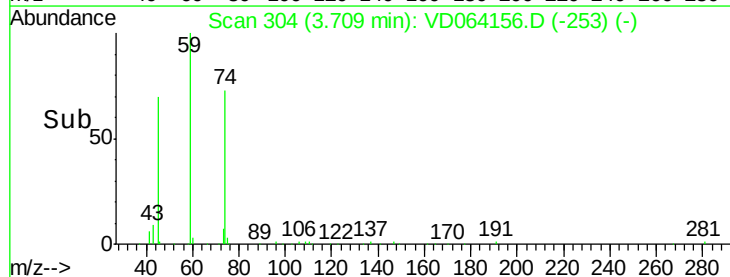
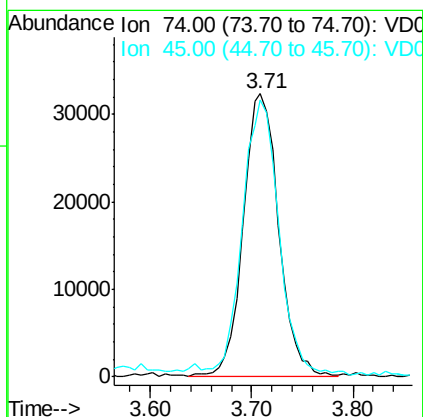
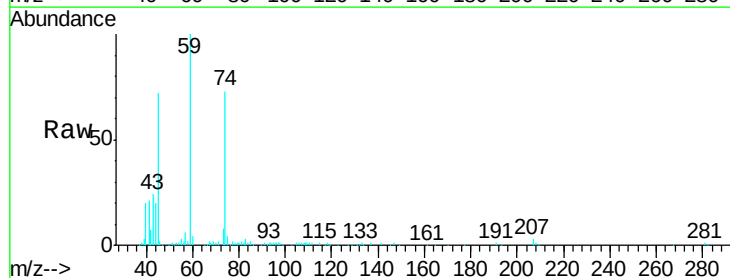
Tgt Ion:101 Resp: 263978
 Ion Ratio Lower Upper
 101 100
 103 64.4 50.8 76.2

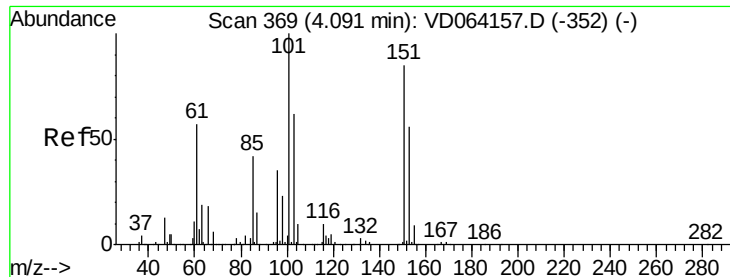


#8

Diethyl Ether
 Concen: 20.838 ug/l
 RT: 3.71 min Scan# 304
 Delta R.T. -0.00 min
 Lab File: VD064156.D
 Acq: 08 Nov 2019 14:35

Tgt Ion: 74 Resp: 79053
 Ion Ratio Lower Upper
 74 100
 45 97.1 47.9 143.7





#9

1,1,2-Trichlorotrifluoroethane

Concen: 19.171 ug/l

RT: 4.09 min Scan# 368

Delta R.T. -0.01 min

Lab File: VD064156.D

Acq: 08 Nov 2019 14:35

Instrument :

MSVOA_D

ClientSampleId :

VSTDIC020

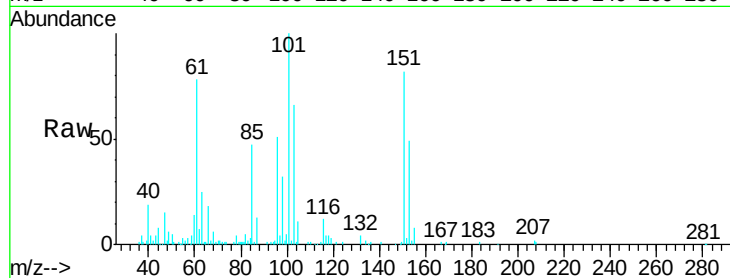
Tgt Ion:101 Resp: 149511

Ion Ratio Lower Upper

101 100

85 44.7 34.4 51.6

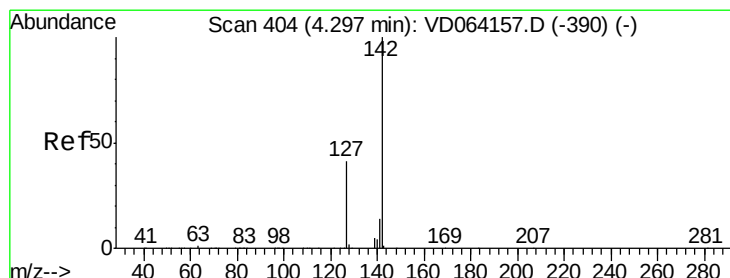
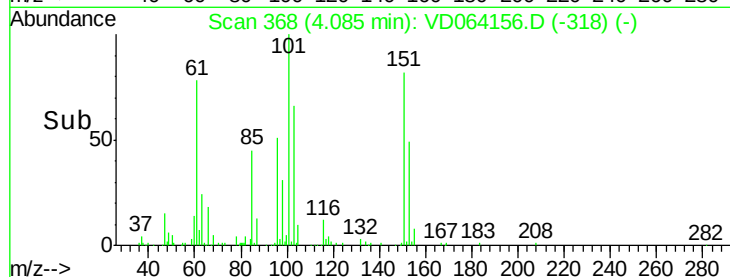
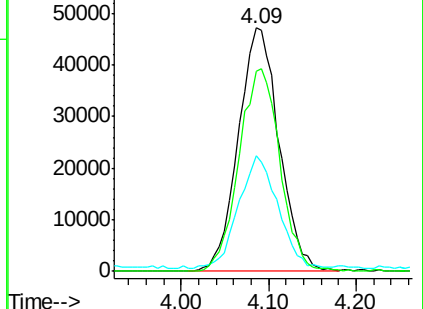
151 83.7 68.1 102.1



Abundance Ion 100.90 (100.60 to 101.60): V

Ion 84.90 (84.60 to 85.60): V

Ion 150.80 (150.50 to 151.50): V



#10

Methyl Iodide

Concen: 15.279 ug/l

RT: 4.30 min Scan# 405

Delta R.T. 0.01 min

Lab File: VD064156.D

Acq: 08 Nov 2019 14:35

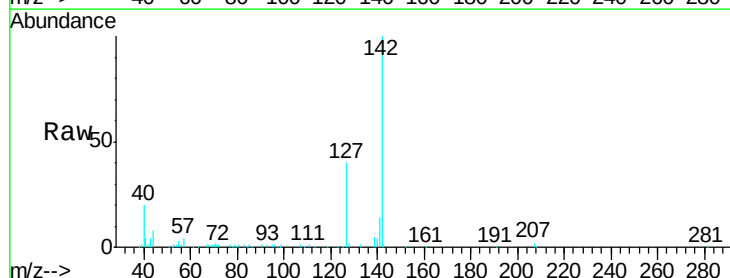
Tgt Ion:142 Resp: 144701

Ion Ratio Lower Upper

142 100

127 44.1 34.4 51.6

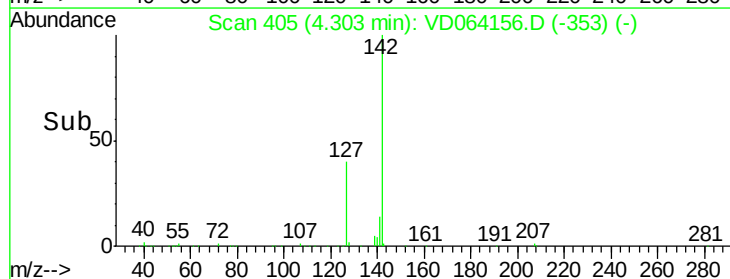
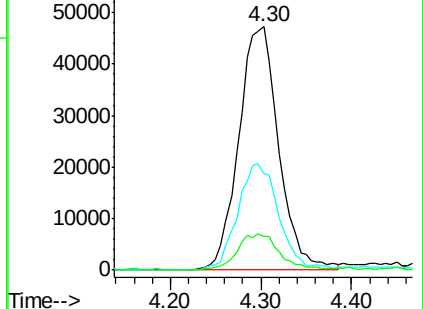
141 15.7 11.2 16.8

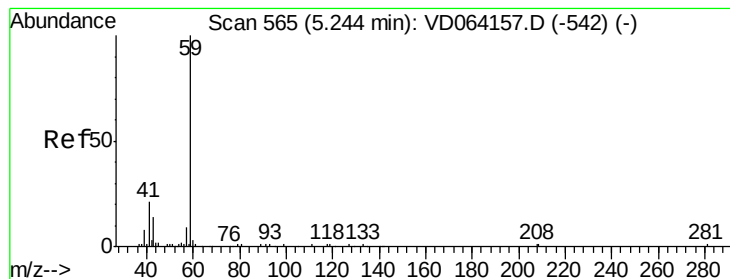


Abundance Ion 141.80 (141.50 to 142.50): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.80 (140.50 to 141.50): V



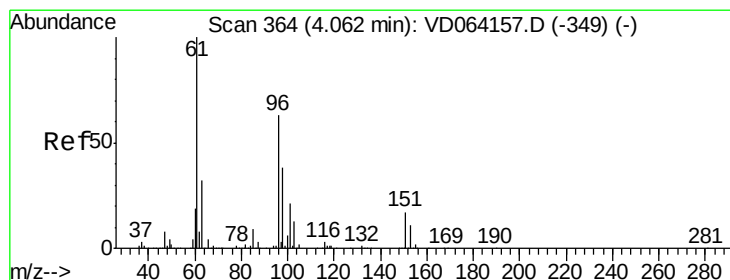
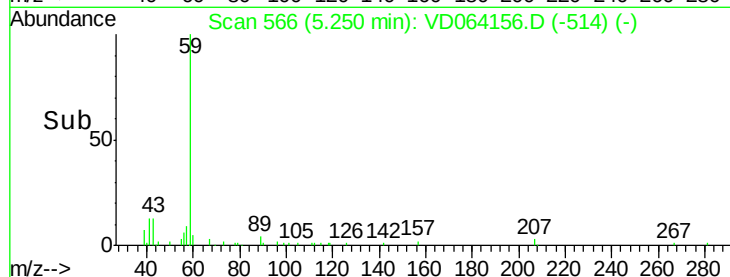
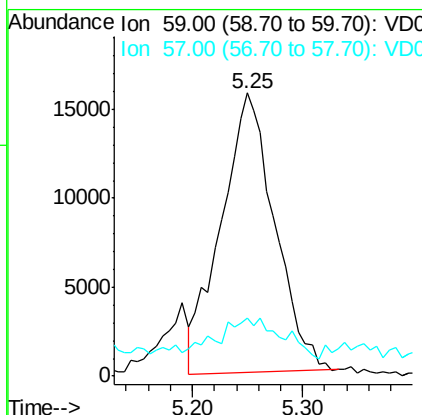
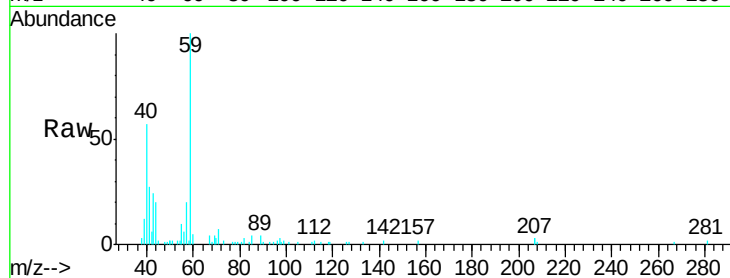


#11

Tert butyl alcohol
 Concen: 138.375 ug/l
 RT: 5.25 min Scan# 566
 Delta R.T. 0.01 min
 Lab File: VD064156.D
 Acq: 08 Nov 2019 14:35

Instrument :
 MSVOA_D
 ClientSampleId :
 VSTDIC020

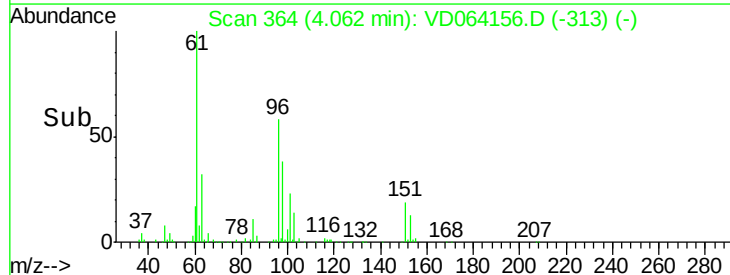
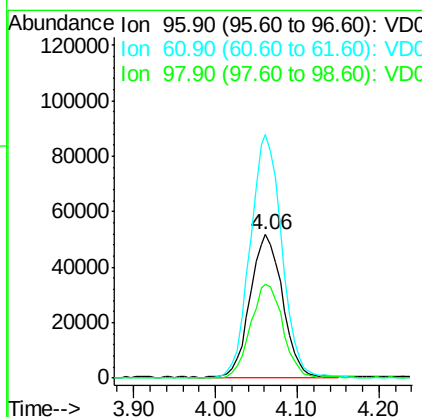
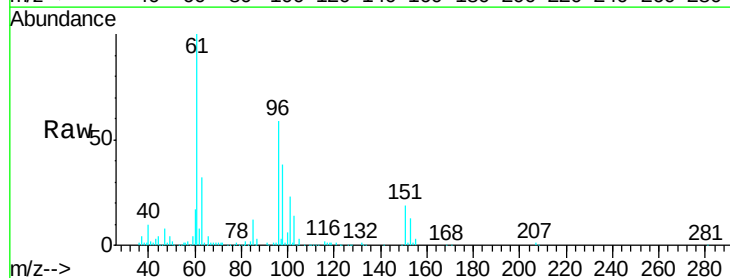
Tgt Ion: 59 Resp: 53241
 Ion Ratio Lower Upper
 59 100
 57 18.0 9.4 14.2#

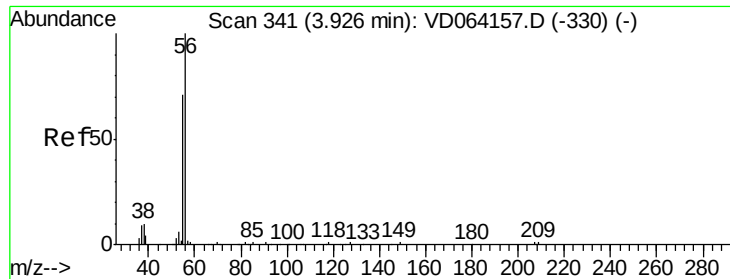


#12

1,1-Dichloroethene
 Concen: 19.469 ug/l
 RT: 4.06 min Scan# 364
 Delta R.T. -0.00 min
 Lab File: VD064156.D
 Acq: 08 Nov 2019 14:35

Tgt Ion: 96 Resp: 144709
 Ion Ratio Lower Upper
 96 100
 61 170.0 127.4 191.2
 98 65.2 48.1 72.1





#13

Acrolein

Concen: 86.645 ug/l

RT: 3.93 min Scan# 341

Delta R.T. -0.00 min

Lab File: VD064156.D

Acq: 08 Nov 2019 14:35

Instrument :

MSVOA_D

ClientSampleId :

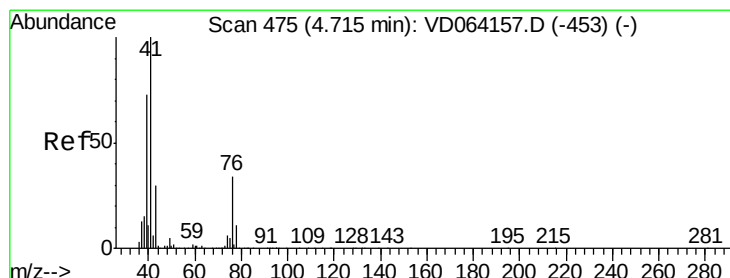
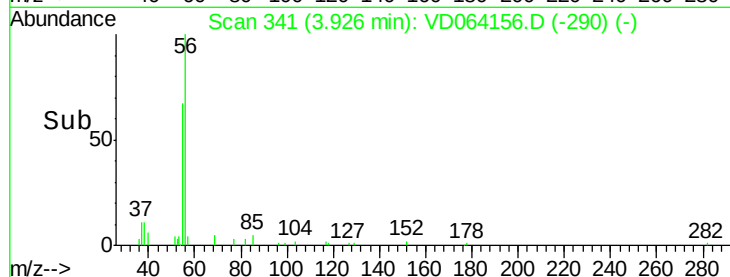
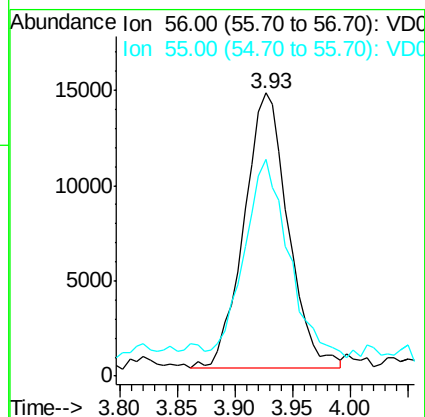
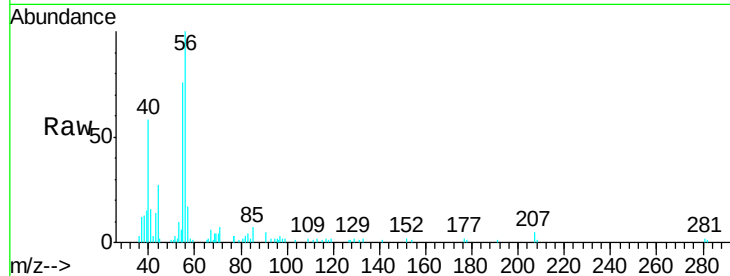
VSTDIC020

Tgt Ion: 56 Resp: 38289

Ion Ratio Lower Upper

56 100

55 73.2 56.1 84.1



#14

Allyl chloride

Concen: 27.361 ug/l

RT: 4.71 min Scan# 475

Delta R.T. -0.00 min

Lab File: VD064156.D

Acq: 08 Nov 2019 14:35

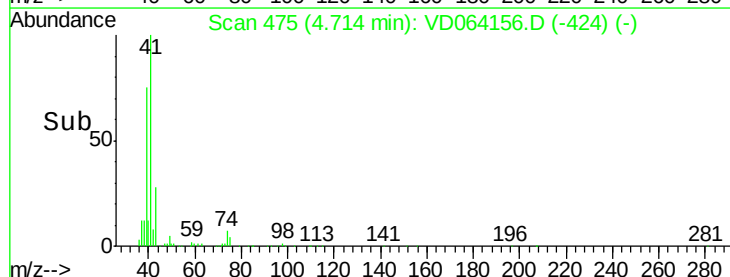
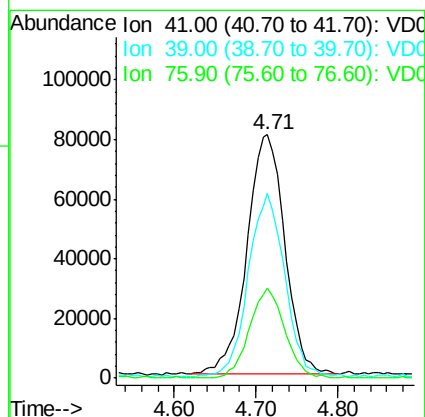
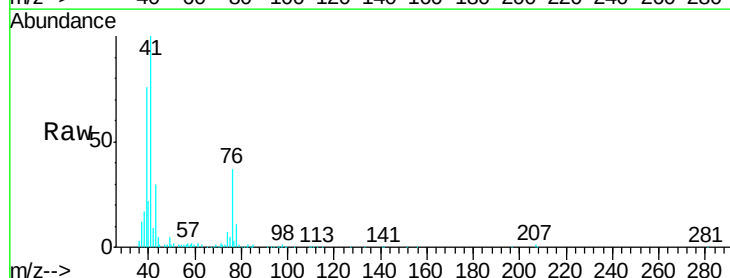
Tgt Ion: 41 Resp: 258010

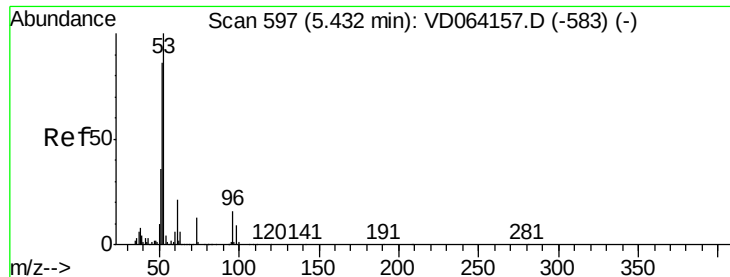
Ion Ratio Lower Upper

41 100

39 74.4 57.5 86.3

76 35.1 26.8 40.2

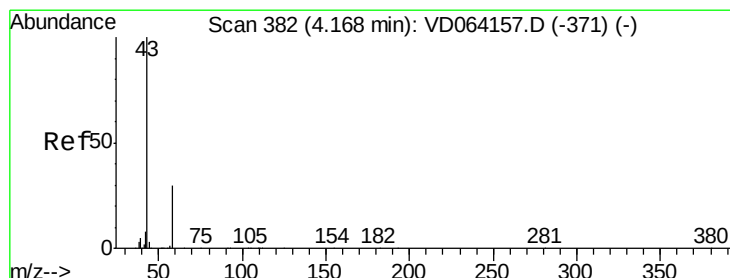
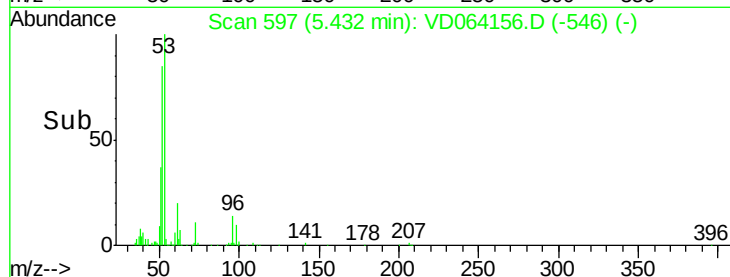
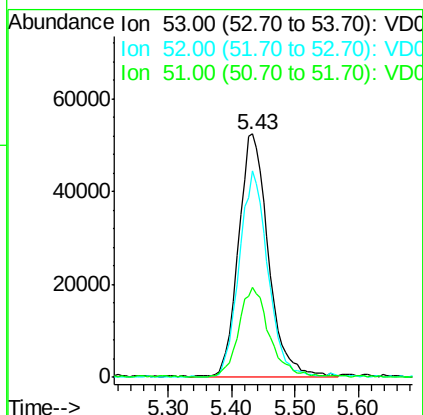
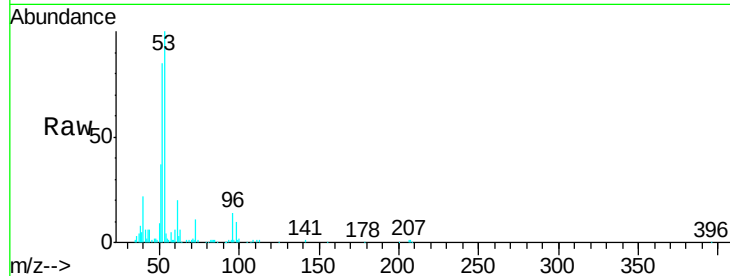




#15
 Acrylonitrile
 Concen: 121.158 ug/l
 RT: 5.43 min Scan# 597
 Delta R.T. -0.00 min
 Lab File: VD064156.D
 Acq: 08 Nov 2019 14:35

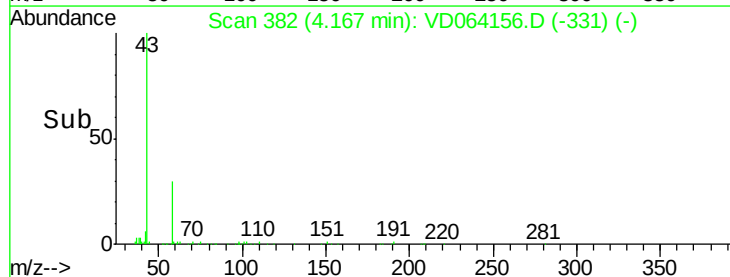
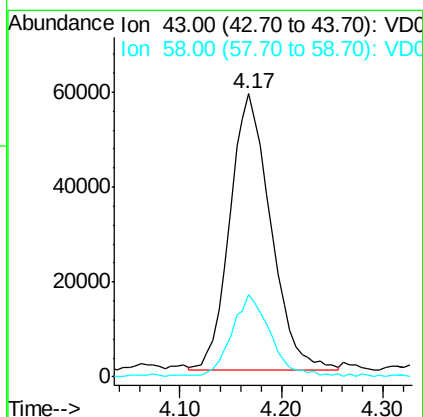
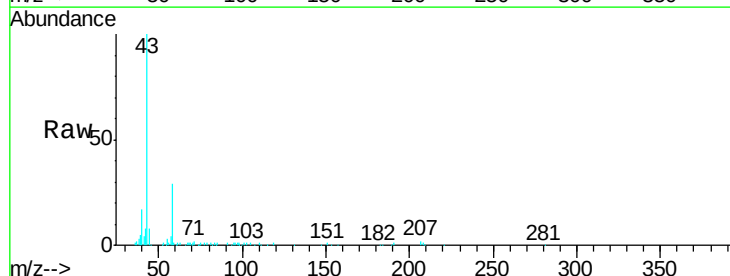
Instrument :
 MSVOA_D
 ClientSampleId :
 VSTDIC020

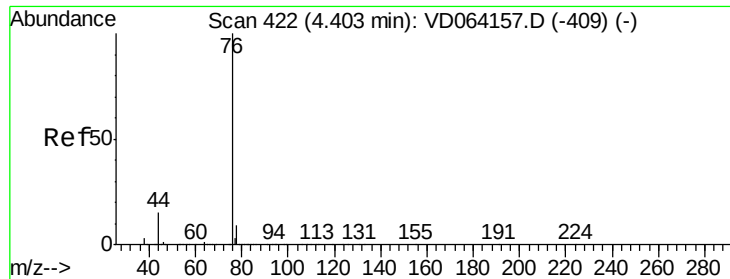
Tgt Ion: 53 Resp: 172126
 Ion Ratio Lower Upper
 53 100
 52 81.0 66.7 100.1
 51 37.8 30.6 46.0



#16
 Acetone
 Concen: 120.919 ug/l
 RT: 4.17 min Scan# 382
 Delta R.T. -0.00 min
 Lab File: VD064156.D
 Acq: 08 Nov 2019 14:35

Tgt Ion: 43 Resp: 162782
 Ion Ratio Lower Upper
 43 100
 58 29.2 24.1 36.1





#17

Carbon Disulfide

Concen: 19.849 ug/l

RT: 4.40 min Scan# 422

Delta R.T. -0.00 min

Lab File: VD064156.D

Acq: 08 Nov 2019 14:35

Instrument :

MSVOA_D

ClientSampleId :

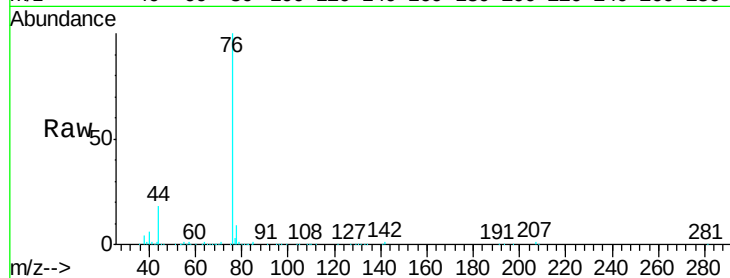
VSTDIC020

Tgt Ion: 76 Resp: 453745

Ion Ratio Lower Upper

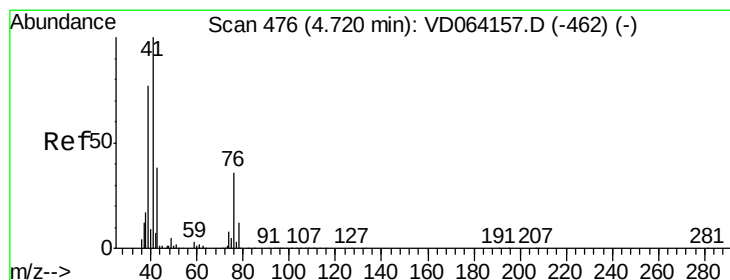
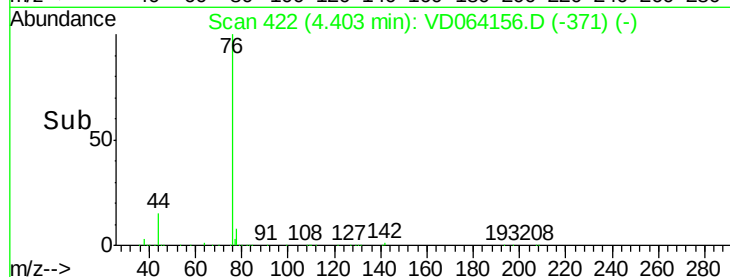
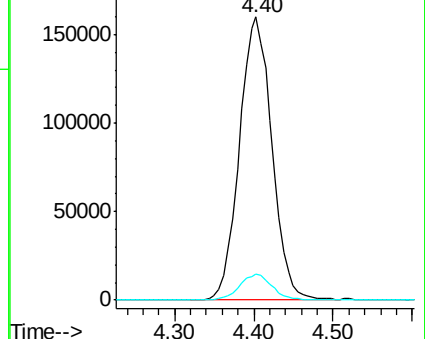
76 100

78 9.0 7.2 10.8



Abundance Ion 75.90 (75.60 to 76.60): VDC

Ion 77.90 (77.60 to 78.60): VDC



#18

Methyl Acetate

Concen: 26.645 ug/l

RT: 4.73 min Scan# 477

Delta R.T. 0.01 min

Lab File: VD064156.D

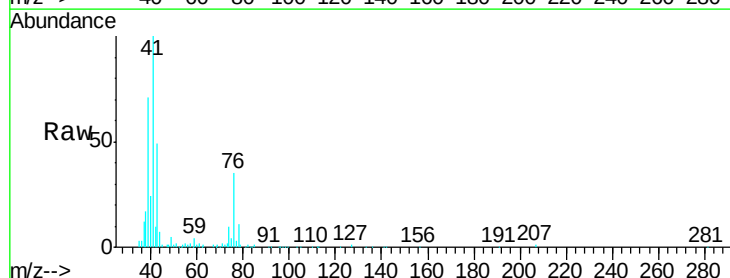
Acq: 08 Nov 2019 14:35

Tgt Ion: 43 Resp: 97107

Ion Ratio Lower Upper

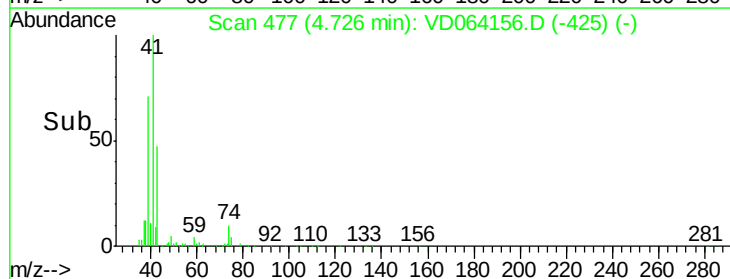
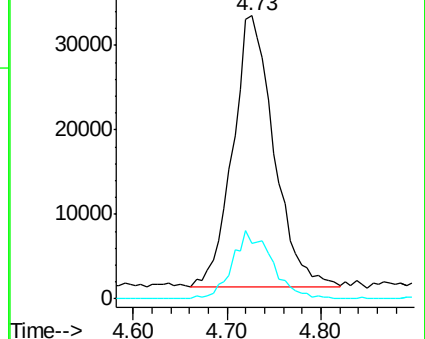
43 100

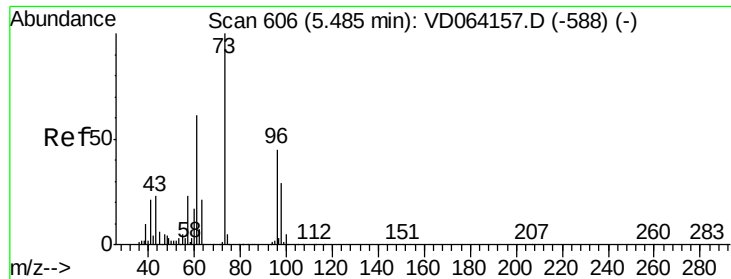
74 24.2 18.4 27.6



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 74.00 (73.70 to 74.70): VDC

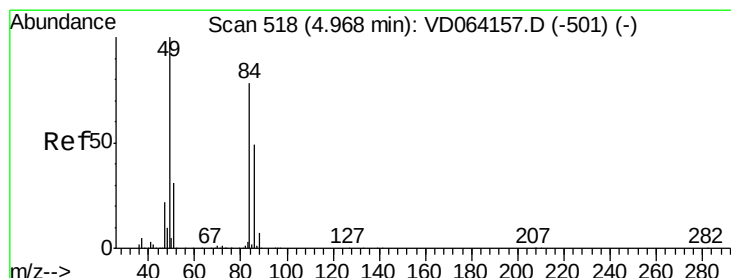
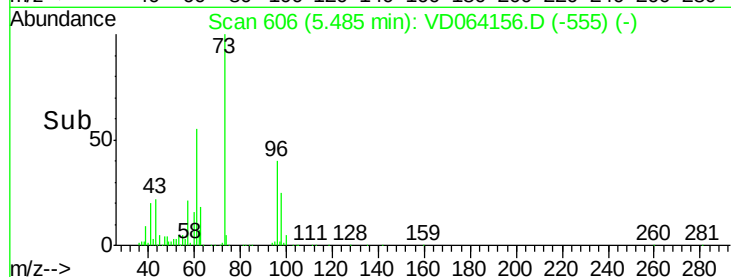
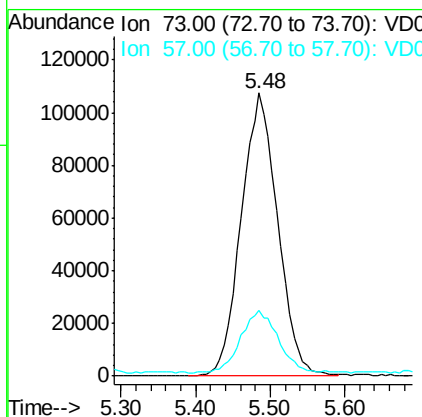
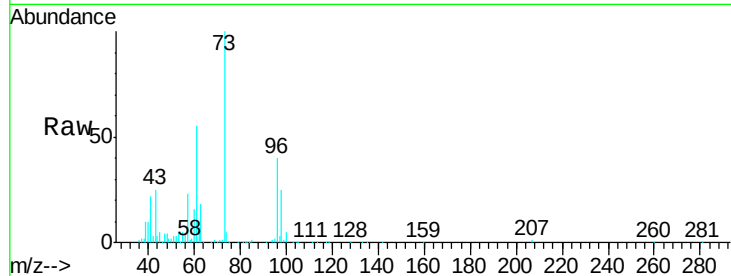




#19
Methyl tert-butyl Ether
Concen: 23.540 ug/l
RT: 5.48 min Scan# 606
Delta R.T. -0.00 min
Lab File: VD064156.D
Acq: 08 Nov 2019 14:35

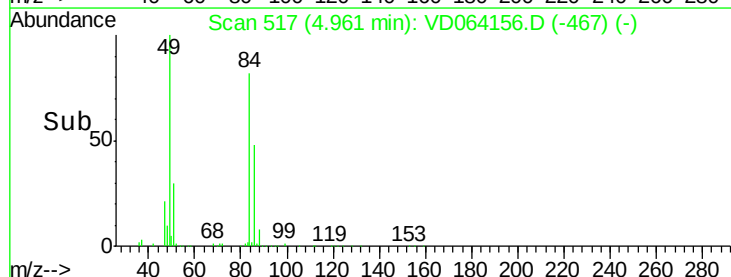
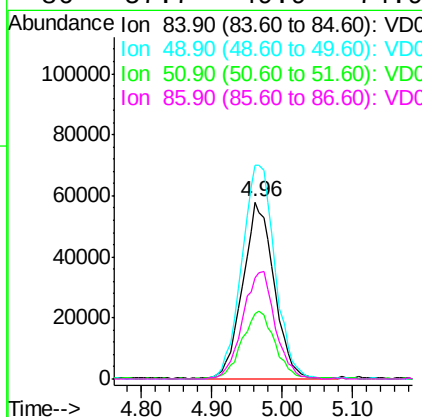
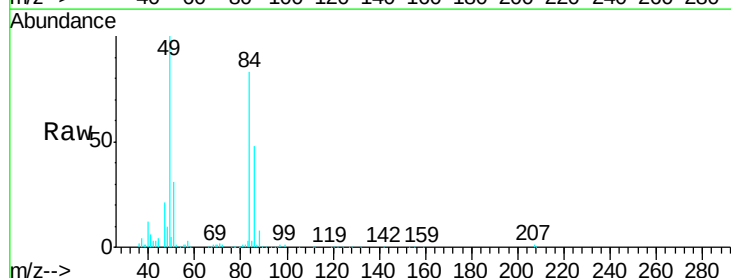
Instrument :
MSVOA_D
ClientSampleId :
VSTDIC020

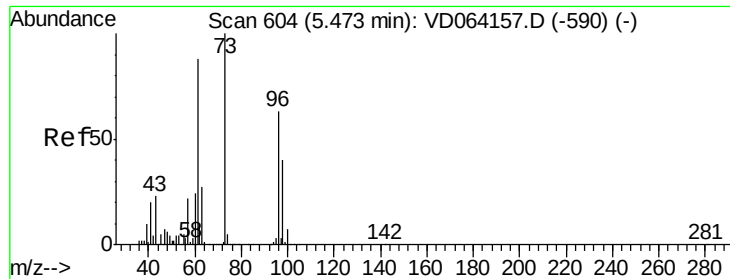
Tgt Ion: 73 Resp: 364833
Ion Ratio Lower Upper
73 100
57 22.1 18.4 27.6



#20
Methylene Chloride
Concen: 19.422 ug/l
RT: 4.96 min Scan# 517
Delta R.T. -0.01 min
Lab File: VD064156.D
Acq: 08 Nov 2019 14:35

Tgt Ion: 84 Resp: 178371
Ion Ratio Lower Upper
84 100
49 121.3 102.1 153.1
51 37.2 32.2 48.2
86 57.7 49.9 74.9





#21

trans-1,2-Dichloroethene

Concen: 19.774 ug/l

RT: 5.47 min Scan# 604

Delta R.T. -0.00 min

Lab File: VD064156.D

Acq: 08 Nov 2019 14:35

Instrument :

MSVOA_D

ClientSampleId :

VSTDIC020

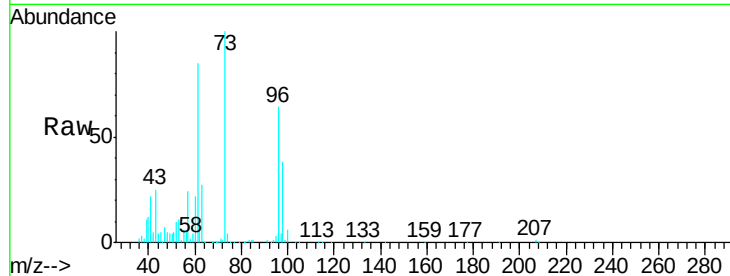
Tgt Ion: 96 Resp: 164677

Ion Ratio Lower Upper

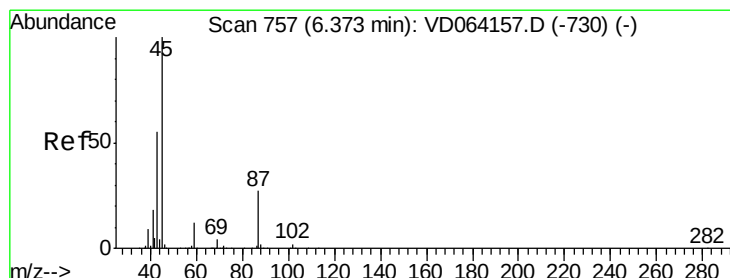
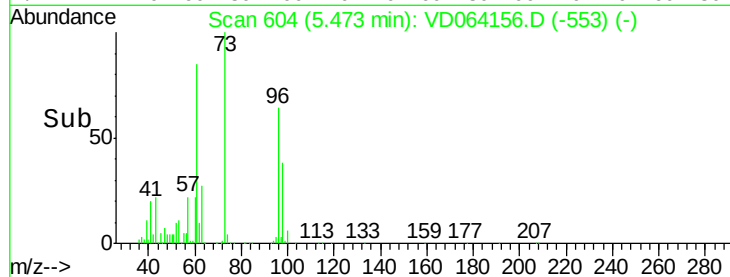
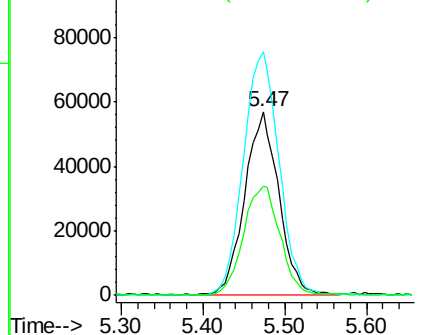
96 100

61 132.7 111.8 167.6

98 59.5 50.3 75.5



Abundance Ion 95.90 (95.60 to 96.60): VDC
Ion 60.90 (60.60 to 61.60): VDC
Ion 97.90 (97.60 to 98.60): VDC



#22

Diisopropyl ether

Concen: 24.722 ug/l

RT: 6.37 min Scan# 757

Delta R.T. -0.00 min

Lab File: VD064156.D

Acq: 08 Nov 2019 14:35

Tgt Ion: 45 Resp: 495004

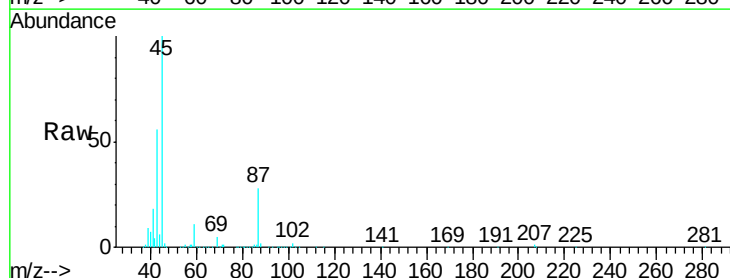
Ion Ratio Lower Upper

45 100

43 54.7 44.4 66.6

87 28.0 21.9 32.9

59 10.9 9.4 14.2



Abundance Ion 45.00 (44.70 to 45.70): VDC
Ion 43.00 (42.70 to 43.70): VDC
Ion 87.00 (86.70 to 87.70): VDC
Ion 59.00 (58.70 to 59.70): VDC

