

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL120919\
 Data File : VL034488.D
 Acq On : 10 Dec 2019 8:47
 Operator : SY/AP
 Sample : VIBLK
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

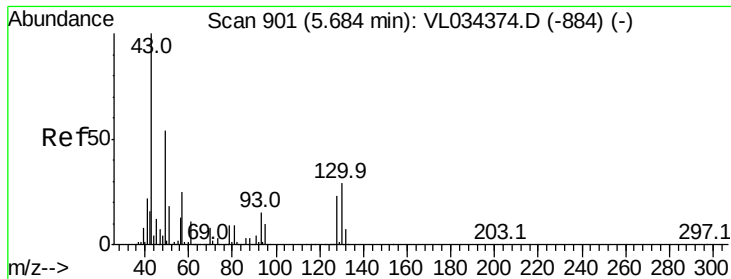
Quant Time: Dec 10 13:17:42 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111919AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue Nov 19 14:15:35 2019
 QLast Update : Tue Nov 19 14:15:35 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	884292	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.19	114	1751772	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.13	117	1753231	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.47	95	1521350	10.31	ppbv	-0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.10%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.16	85	8564	0.054	ppbv	96
3) Chlorodifluoromethane	2.95	51	6275	0.057	ppbv #	83
4) Chloromethane	3.11	50	3831	0.059	ppbv #	76
5) Vinyl Chloride	3.23	62	1932	0.032	ppbv #	41
8) Dichlorotetrafluoroethane	3.16	85	8564	0.060	ppbv	99
9) Propene	2.98	41	1628	0.033	ppbv #	16
15) Acetone	3.85	43	17753	0.140	ppbv	92
16) 1,3-Butadiene	3.30	39	1815	0.033	ppbv #	68
18) 1,1-Dichloroethene	4.27	96	1798	0.039	ppbv #	63
20) Methylene Chloride	4.33	84	4108	0.091	ppbv #	45
23) Vinyl Acetate	5.08	43	7026	0.042	ppbv #	85
24) 1,1-Dichloroethane	5.01	63	5618	0.044	ppbv #	90
25) Ethyl Acetate	5.69	43	8835	0.039	ppbv #	91
29) Chloroform	5.75	83	5731	0.036	ppbv #	69
39) 1,2-Dichloropropane	7.19	63	524436	7.774	ppbv #	24

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 896

Delta R.T. -0.02 min

Lab File: VL034488.D

Acq: 10 Dec 2019 8:47

Instrument :
MSVOA_L
ClientSampleId :

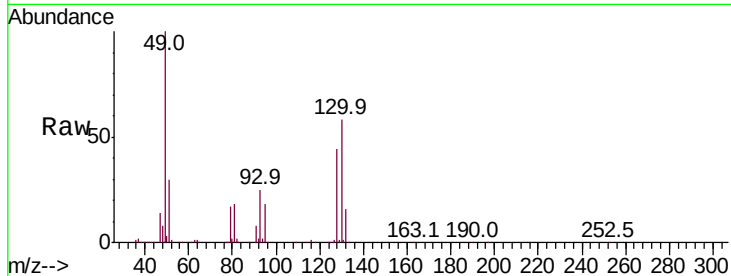
Tot Ion: 49 Resp: 884292

Ion Ratio Lower Upper

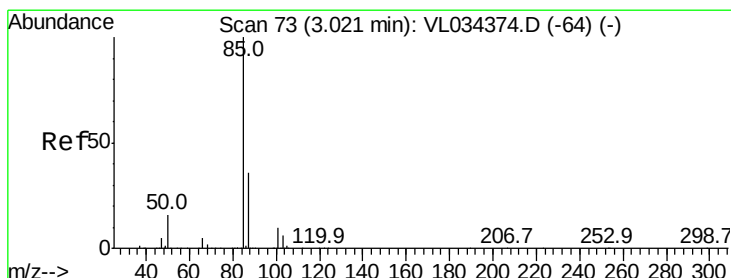
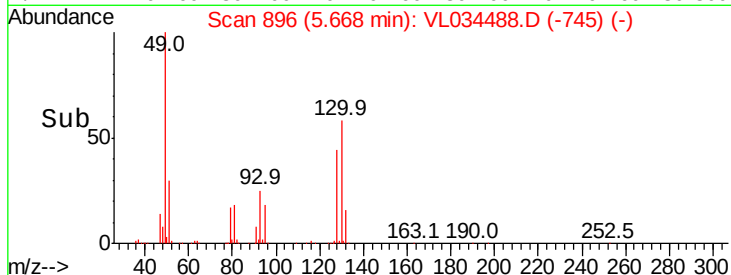
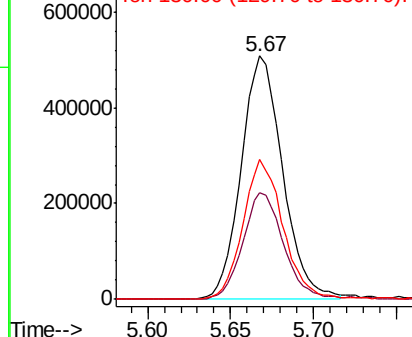
49 100

128 44.0 21.8 65.3

130 55.9 28.0 84.0



Abundance Ion 49.10 (48.80 to 49.80): VL0
Ion 128.00 (127.70 to 128.70): V
Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.054 ppbv

RT: 3.16 min Scan# 115

Delta R.T. 0.14 min

Lab File: VL034488.D

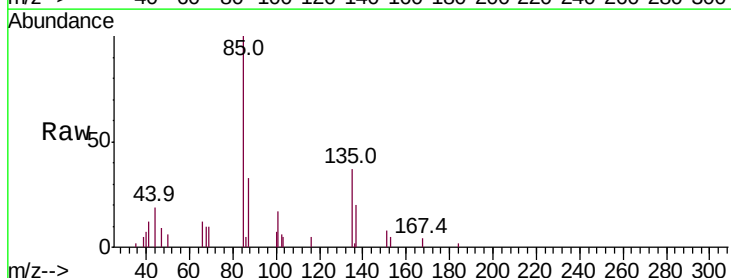
Acq: 10 Dec 2019 8:47

Tgt Ion: 85 Resp: 8564

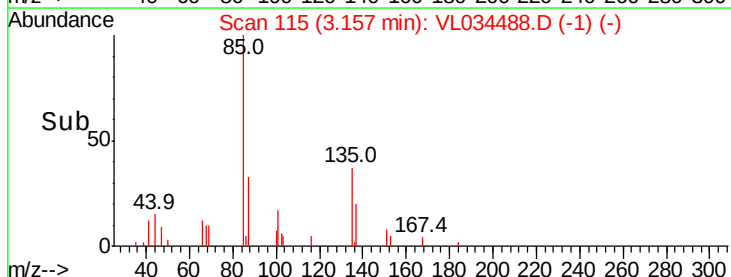
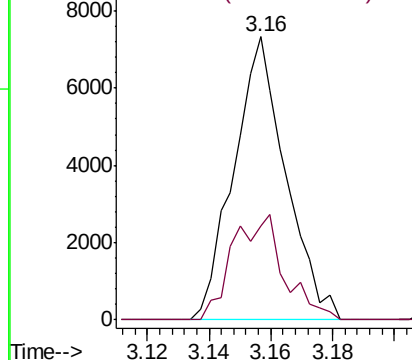
Ion Ratio Lower Upper

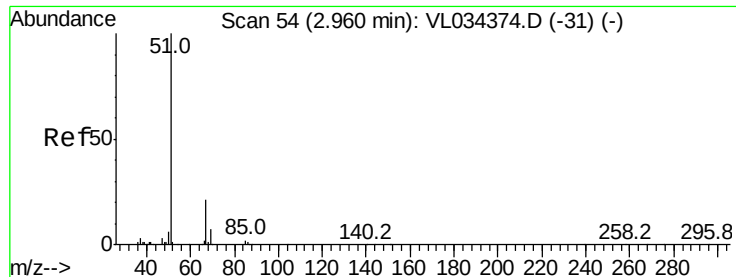
85 100

87 33.0 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: 0.057 ppbv

RT: 2.95 min Scan# 52

Delta R.T. -0.01 min

Lab File: VL034488.D

Acq: 10 Dec 2019 8:47

Instrument :

MSVOA_L

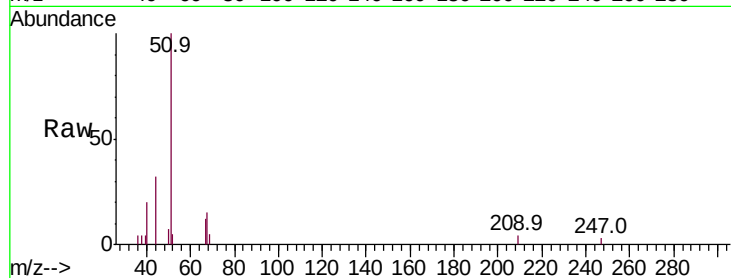
ClientSampleId :

Tot Ion: 51 Resp: 6275

Ion Ratio Lower Upper

51 100

67 28.1 16.2 24.2#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

6000

5000

4000

3000

2000

1000

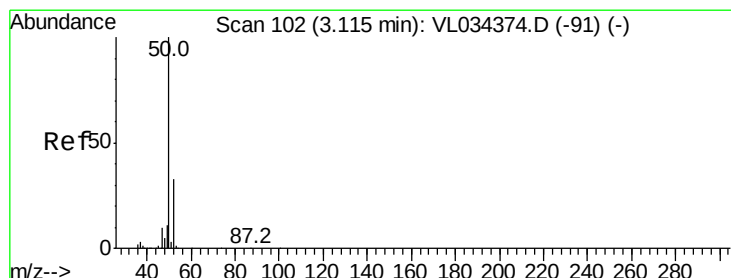
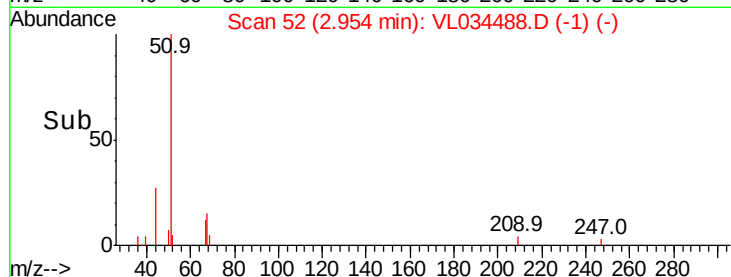
0

2.90

2.95

3.00

Time-->



#4

Chloromethane

Concen: 0.059 ppbv

RT: 3.11 min Scan# 101

Delta R.T. -0.00 min

Lab File: VL034488.D

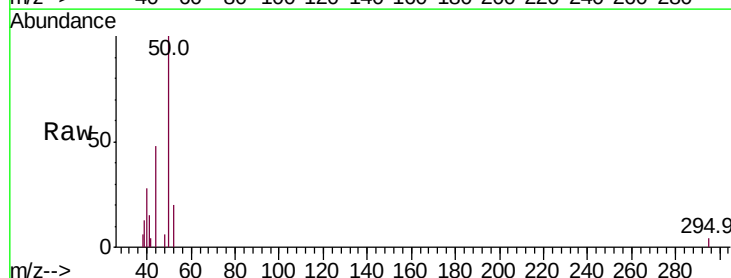
Acq: 10 Dec 2019 8:47

Tgt Ion: 50 Resp: 3831

Ion Ratio Lower Upper

50 100

52 19.6 26.8 40.2#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

5000

4000

3000

2000

1000

0

3.08

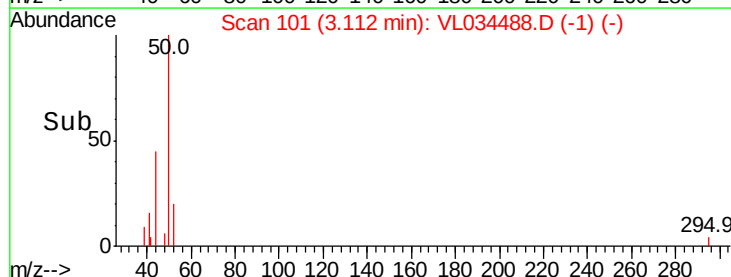
3.10

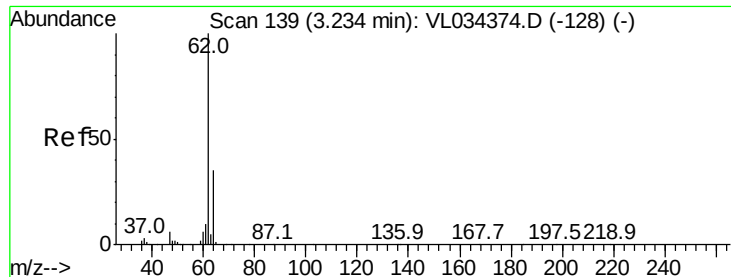
3.11

3.12

3.14

Time-->





#5

Vinyl Chloride

Concen: 0.032 ppbv

RT: 3.23 min Scan# 137

Delta R.T. -0.01 min

Lab File: VL034488.D

Acq: 10 Dec 2019 8:47

Instrument :

MSVOA_L

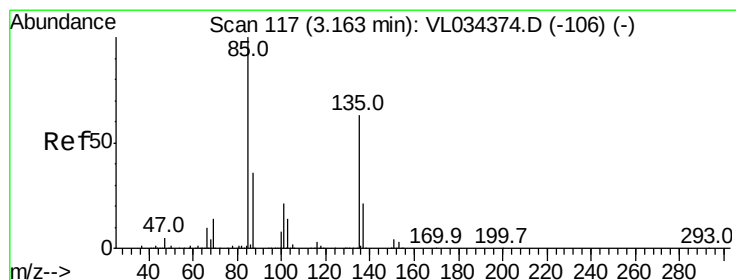
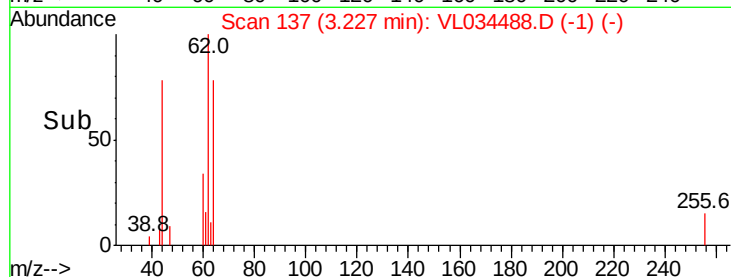
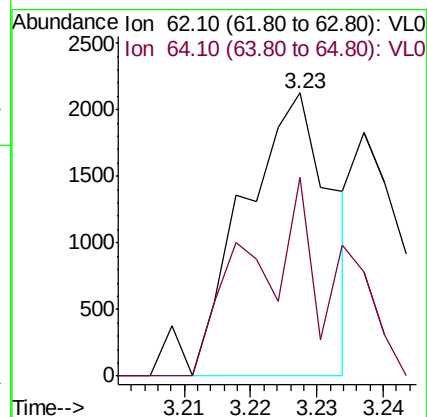
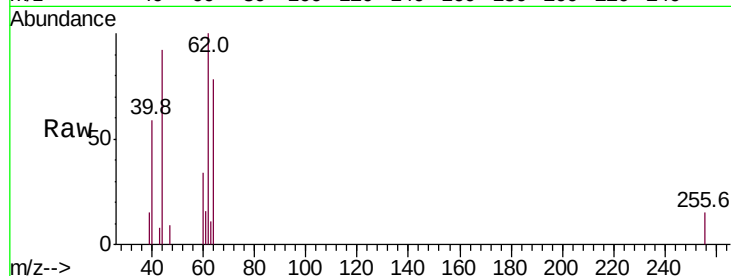
ClientSampleId :

Tot Ion: 62 Resp: 1932

Ion Ratio Lower Upper

62 100

64 70.2 28.4 42.6#



#8

Dichlorotetrafluoroethane

Concen: 0.060 ppbv

RT: 3.16 min Scan# 115

Delta R.T. -0.01 min

Lab File: VL034488.D

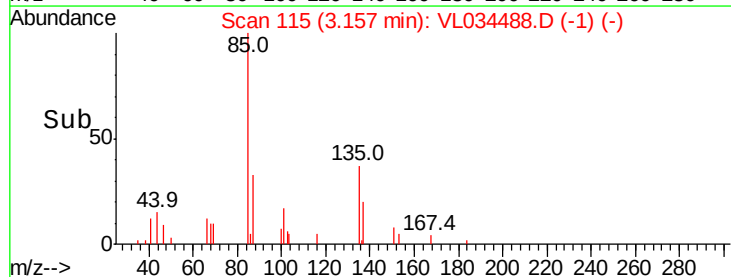
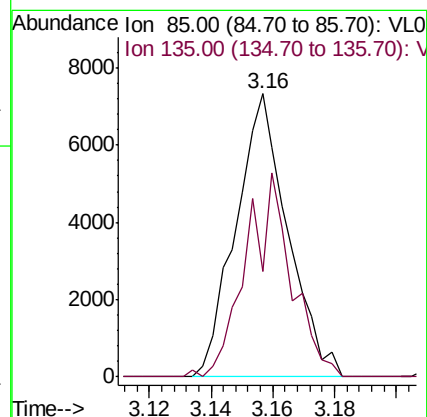
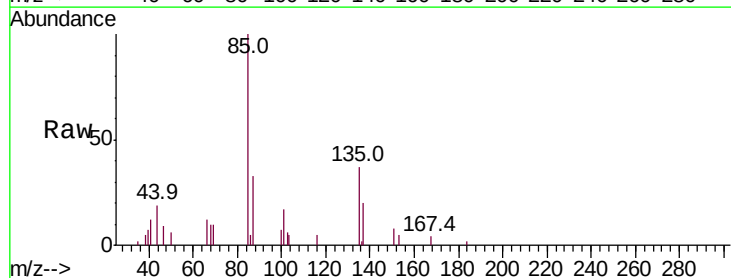
Acq: 10 Dec 2019 8:47

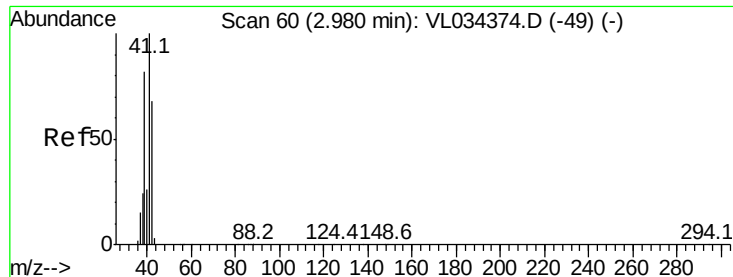
Tgt Ion: 85 Resp: 8564

Ion Ratio Lower Upper

85 100

135 62.7 51.1 76.7





#9

Propene

Concen: 0.033 ppbv

RT: 2.98 min Scan# 59

Delta R.T. -0.00 min

Lab File: VL034488.D

Acq: 10 Dec 2019 8:47

Instrument :

MSVOA_L

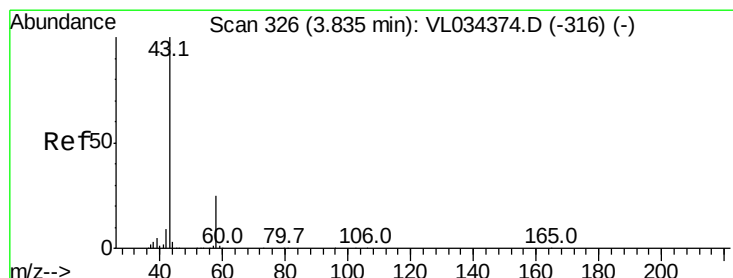
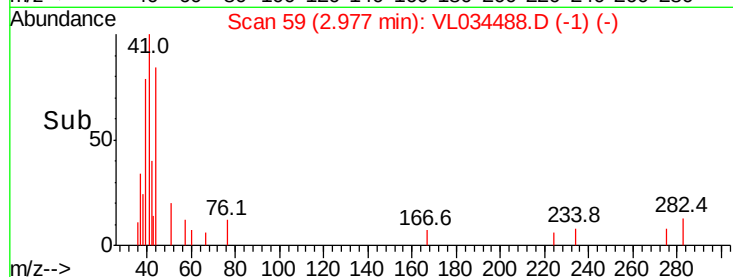
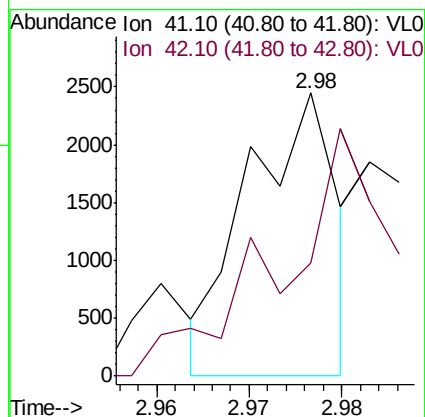
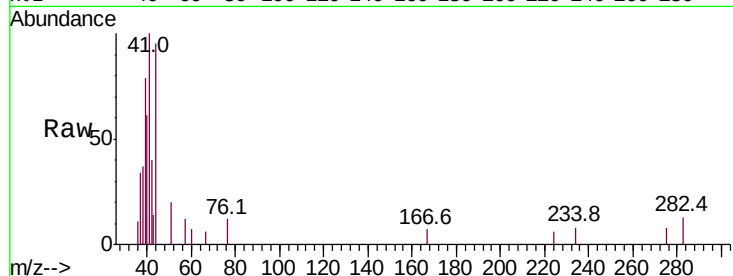
ClientSampleId :

Tot Ion: 41 Resp: 1628

Ion Ratio Lower Upper

41 100

42 0.0 54.6 82.0#



#15

Acetone

Concen: 0.140 ppbv

RT: 3.85 min Scan# 331

Delta R.T. 0.02 min

Lab File: VL034488.D

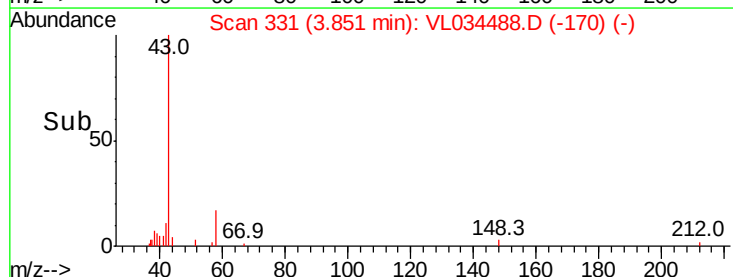
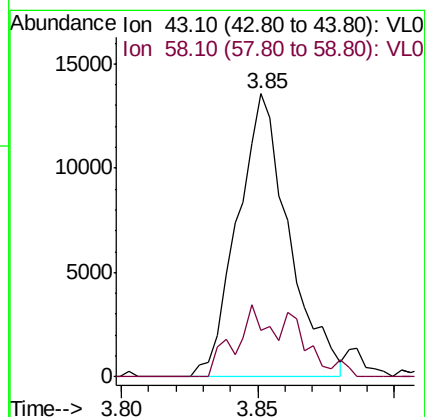
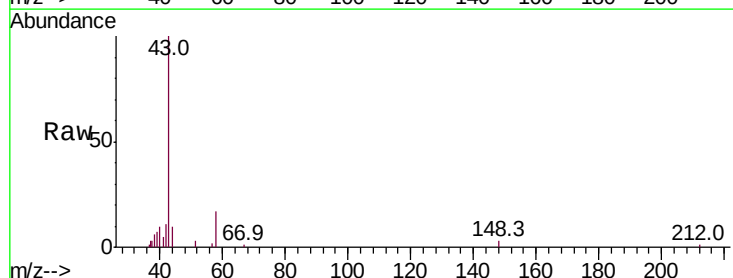
Acq: 10 Dec 2019 8:47

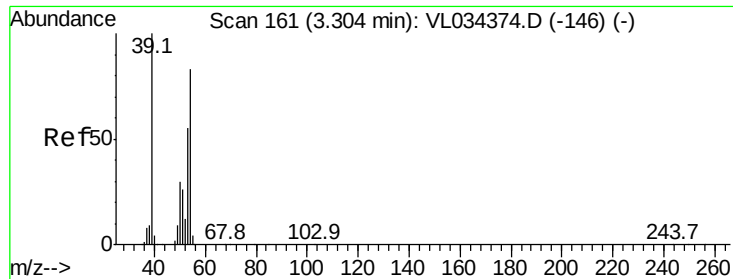
Tgt Ion: 43 Resp: 17753

Ion Ratio Lower Upper

43 100

58 29.2 20.2 30.4

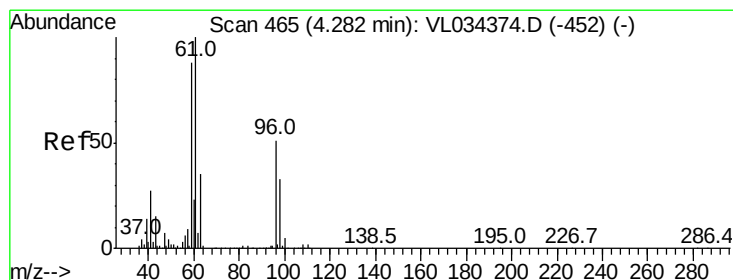
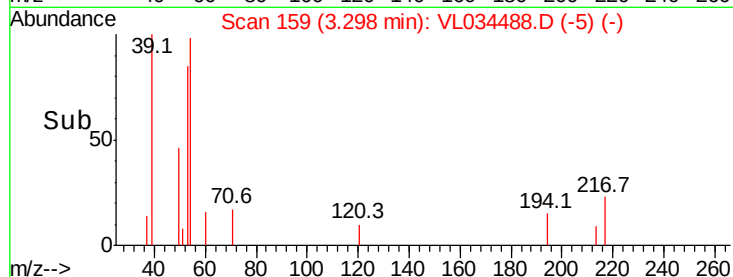
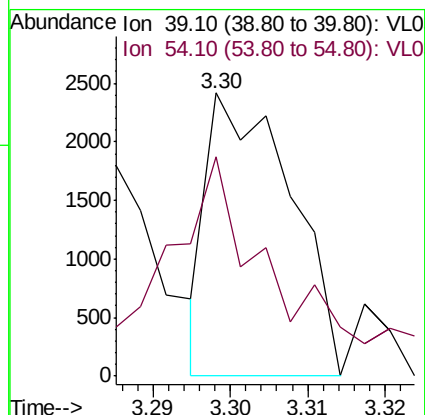
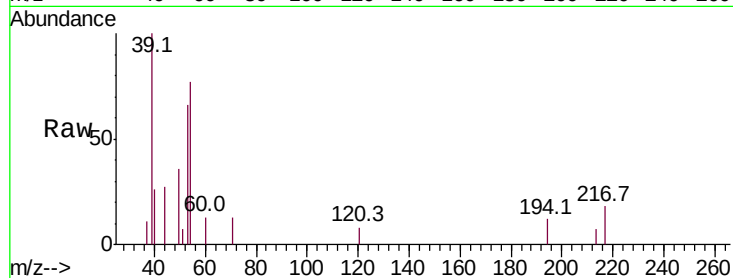




#16
1,3-Butadiene
Concen: 0.033 ppbv
RT: 3.30 min Scan# 159
Delta R.T. -0.01 min
Lab File: VL034488.D
Acq: 10 Dec 2019 8:47

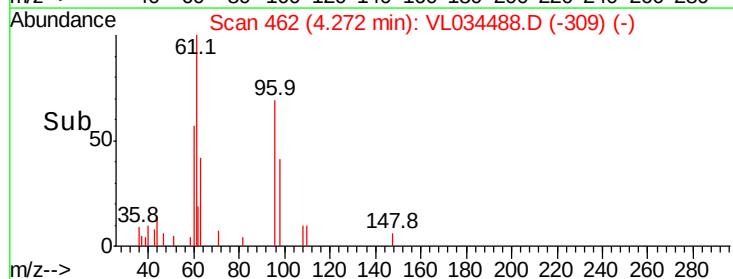
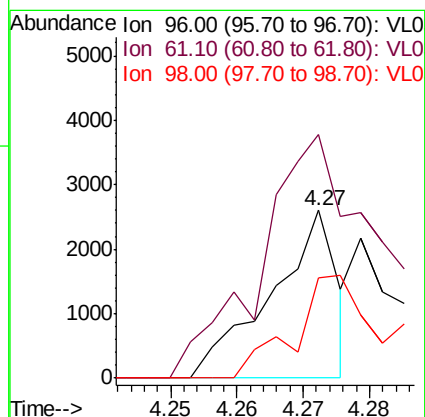
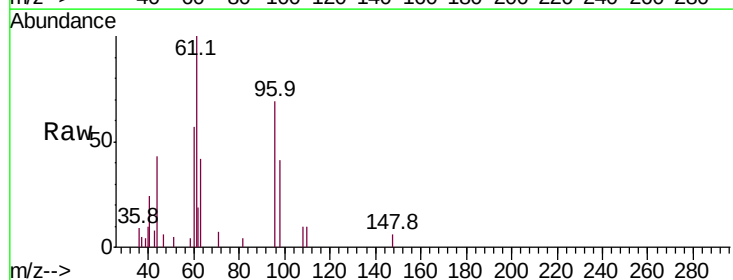
Instrument :
MSVOA_L
ClientSampleId :

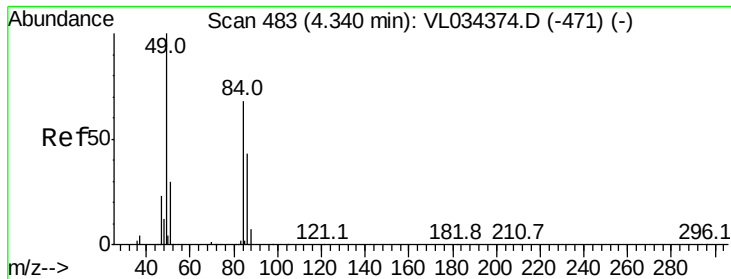
Tot Ion: 39 Resp: 1815
Ion Ratio Lower Upper
39 100
54 109.4 64.7 97.1#



#18
1,1-Dichloroethene
Concen: 0.039 ppbv
RT: 4.27 min Scan# 462
Delta R.T. -0.01 min
Lab File: VL034488.D
Acq: 10 Dec 2019 8:47

Tgt Ion: 96 Resp: 1798
Ion Ratio Lower Upper
96 100
61 123.8 155.6 233.4#
98 60.1 51.6 77.4





#20

Methvlene Chloride

Concen: 0.091 ppbv

RT: 4.33 min Scan# 479

Delta R.T. -0.01 min

Lab File: VL034488.D

Acq: 10 Dec 2019 8:47

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion: 84 Resp: 4108

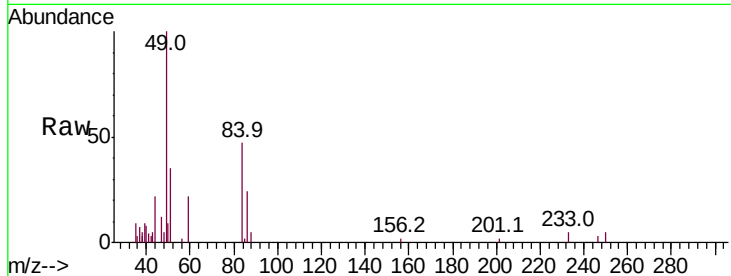
Ion Ratio Lower Upper

84 100

49 216.3 116.8 175.2#

51 79.9 35.6 53.4#

86 21.4 50.7 76.1#

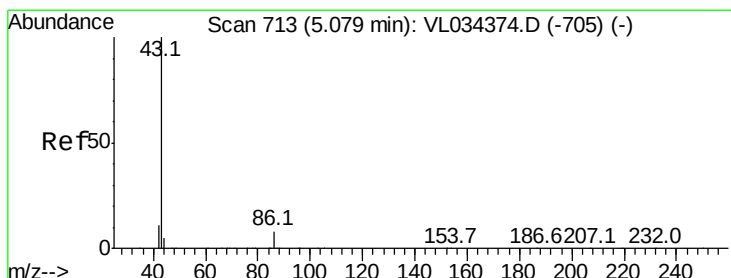
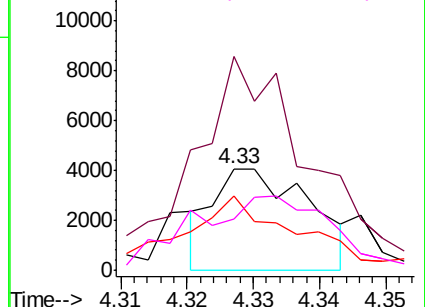
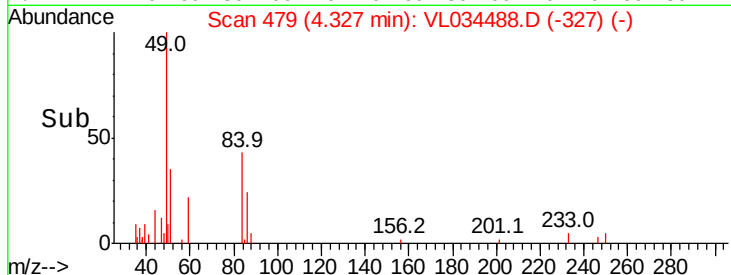


Abundance Ion 84.00 (83.70 to 84.70): VL0

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



#23

Vinyl Acetate

Concen: 0.042 ppbv

RT: 5.08 min Scan# 712

Delta R.T. -0.00 min

Lab File: VL034488.D

Acq: 10 Dec 2019 8:47

Tgt Ion: 43 Resp: 7026

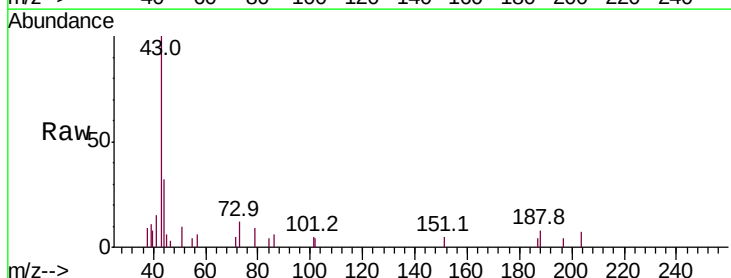
Ion Ratio Lower Upper

43 100

86 6.2 5.8 8.6

42 0.0 8.9 13.3#

44 6.1 4.0 6.0#

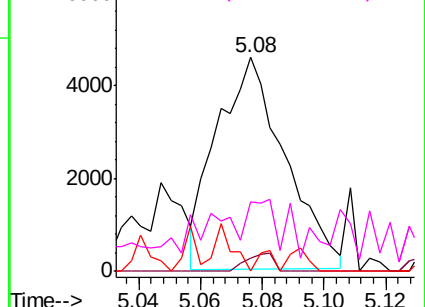
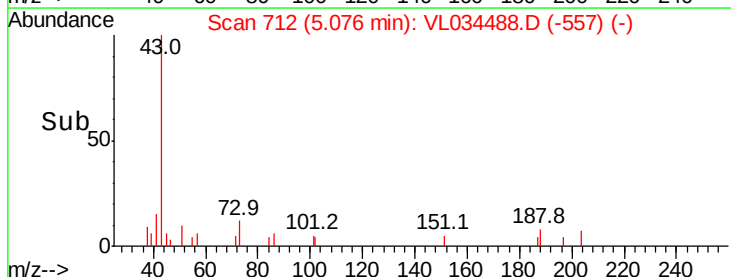


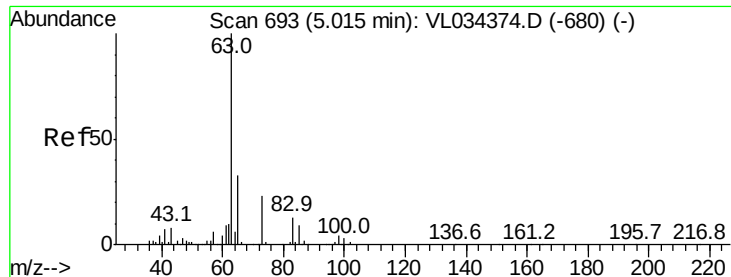
Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.044 ppbv

RT: 5.01 min Scan# 690

Delta R.T. -0.01 min

Lab File: VL034488.D

Acq: 10 Dec 2019 8:47

Instrument :

MSVOA_L

ClientSampleId :

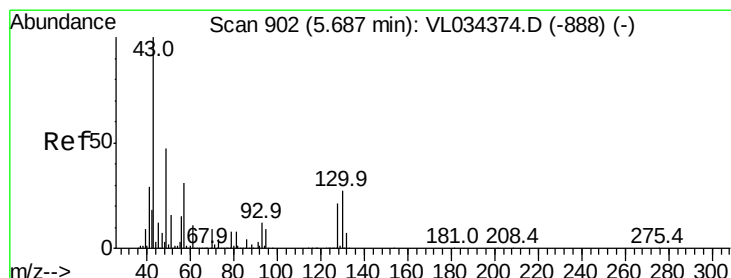
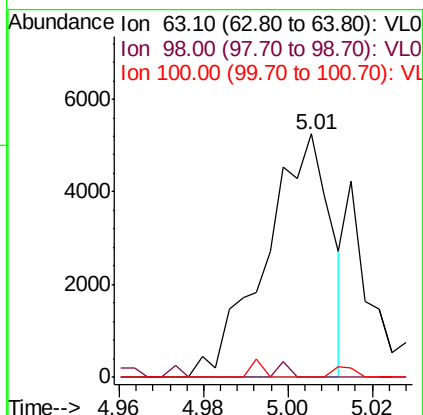
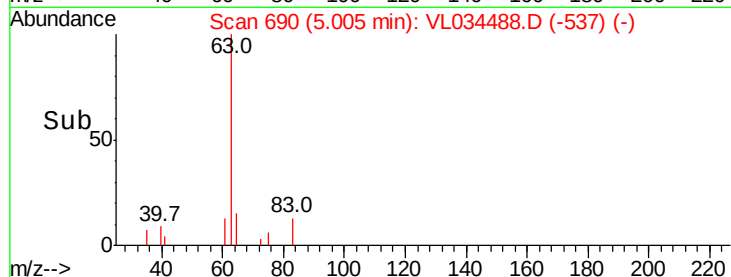
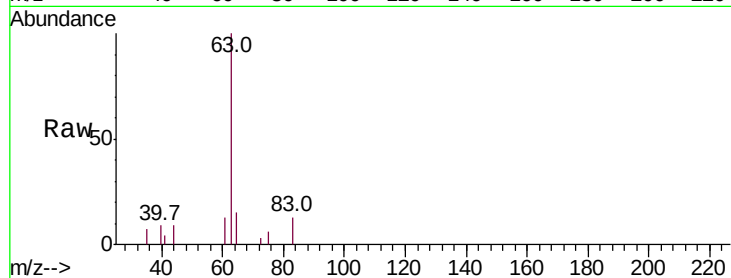
Tot Ion: 63 Resp: 5618

Ion Ratio Lower Upper

63 100

98 0.0 1.9 5.7#

100 0.0 1.4 4.0#



#25

Ethyl Acetate

Concen: 0.039 ppbv

RT: 5.69 min Scan# 903

Delta R.T. 0.00 min

Lab File: VL034488.D

Acq: 10 Dec 2019 8:47

Tgt Ion: 43 Resp: 8835

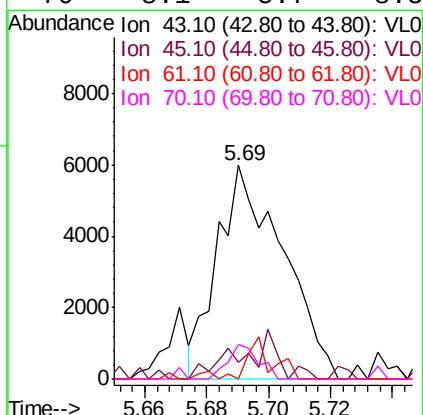
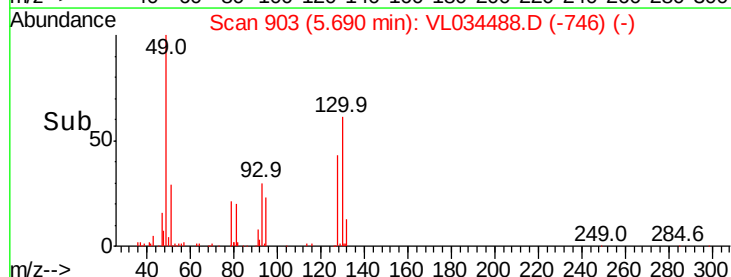
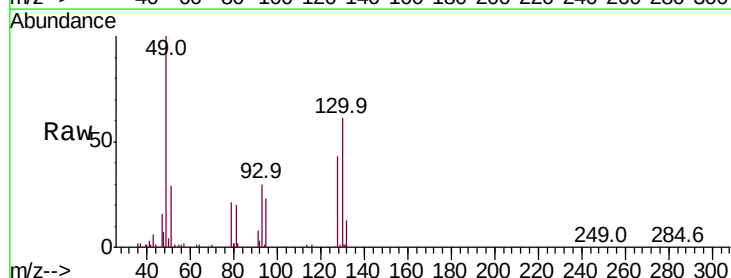
Ion Ratio Lower Upper

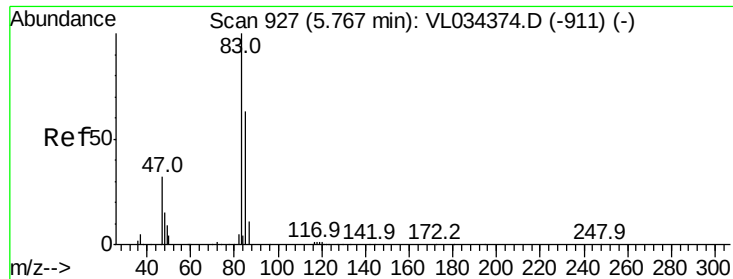
43 100

45 17.0 8.2 12.4#

61 7.8 7.5 11.3

70 8.1 5.7 8.5

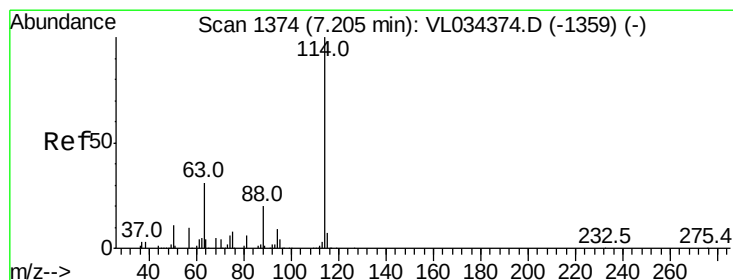
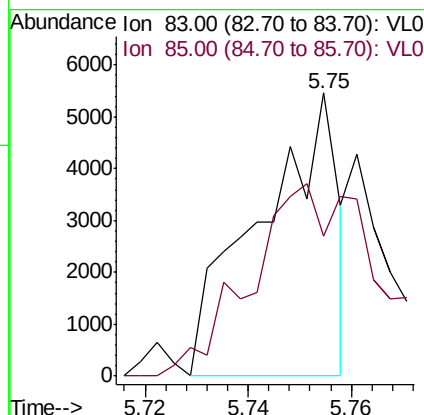
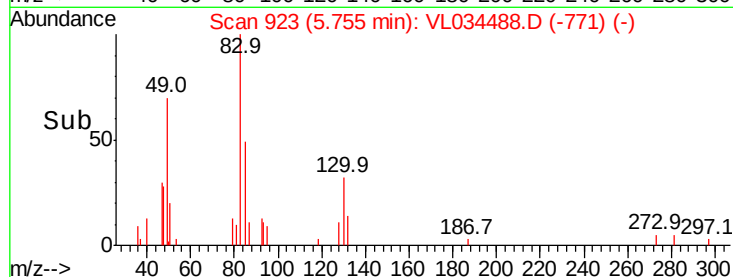
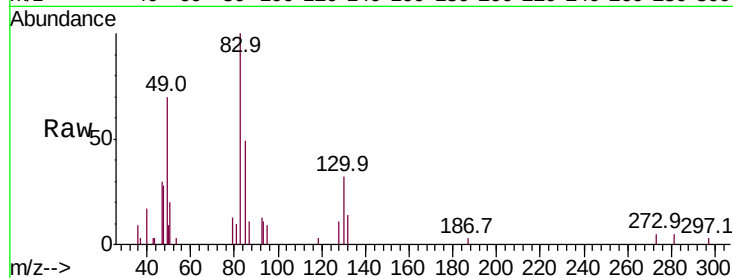




#29
Chloroform
Concen: 0.036 ppbv
RT: 5.75 min Scan# 923
Delta R.T. -0.01 min
Lab File: VL034488.D
Acq: 10 Dec 2019 8:47

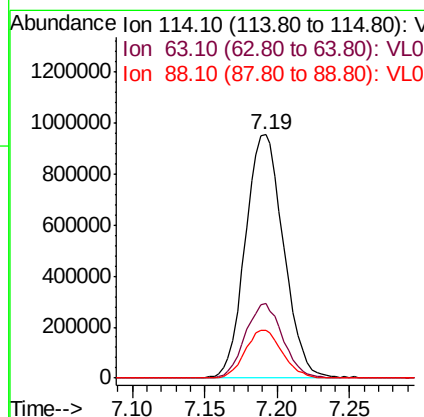
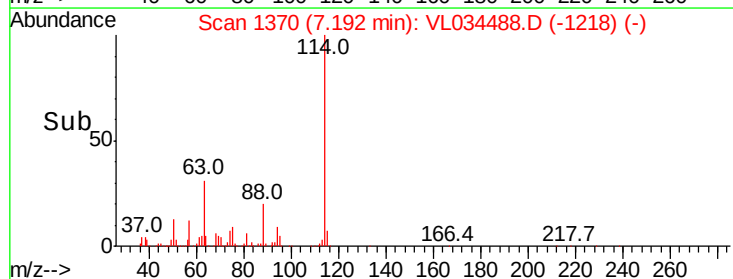
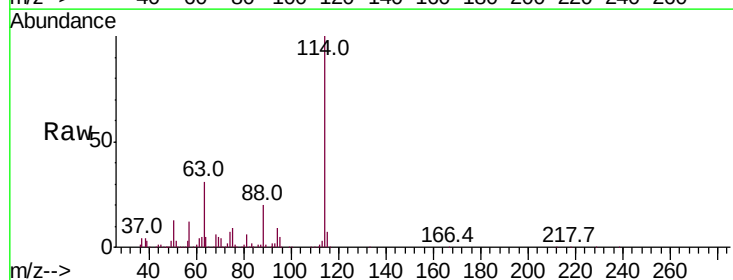
Instrument :
MSVOA_L
ClientSampleId :

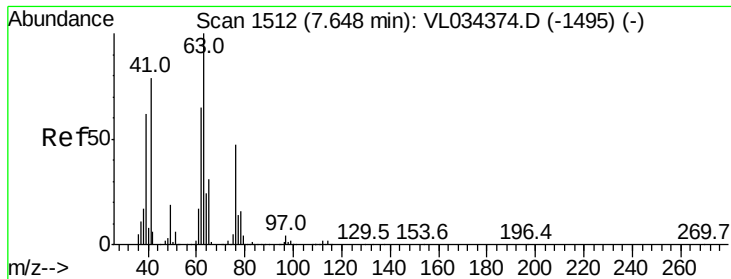
Tot Ion: 83 Resp: 5731
Ion Ratio Lower Upper
83 100
85 39.3 50.4 75.6#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.19 min Scan# 1370
Delta R.T. -0.01 min
Lab File: VL034488.D
Acq: 10 Dec 2019 8:47

Tgt Ion: 114 Resp: 1751772
Ion Ratio Lower Upper
114 100
63 30.2 24.2 36.4
88 19.3 15.9 23.9





#39

1,2-Dichloropropane

Concen: 7.774 ppbv

RT: 7.19 min Scan# 1370

Delta R.T. -0.46 min

Lab File: VL034488.D

Acq: 10 Dec 2019 8:47

Instrument :
MSVOA_L
ClientSampleId :

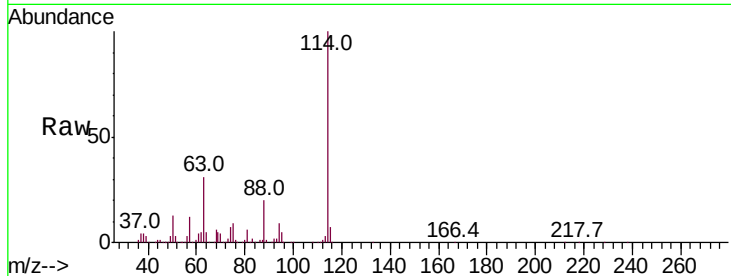
Tot Ion: 63 Resp: 524436

Ion Ratio Lower Upper

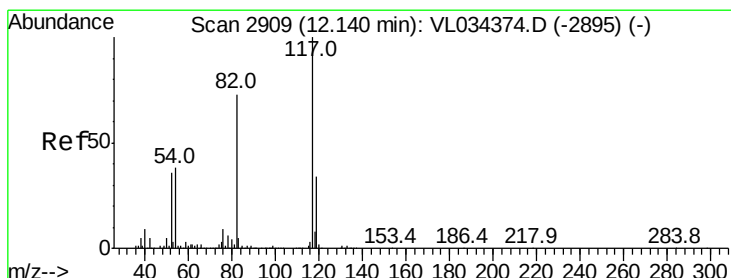
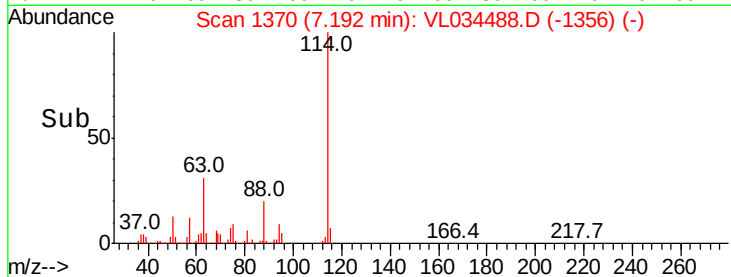
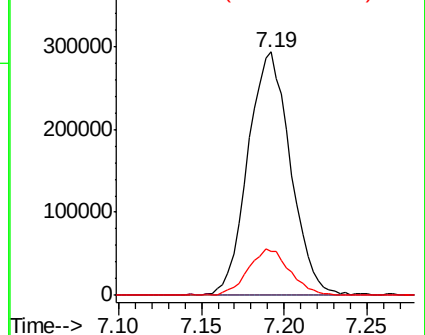
63 100

41 0.0 63.1 94.7#

62 17.9 52.3 78.5#



Abundance Ion 63.10 (62.80 to 63.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 62.10 (61.80 to 62.80): VL0



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.13 min Scan# 2906

Delta R.T. -0.01 min

Lab File: VL034488.D

Acq: 10 Dec 2019 8:47

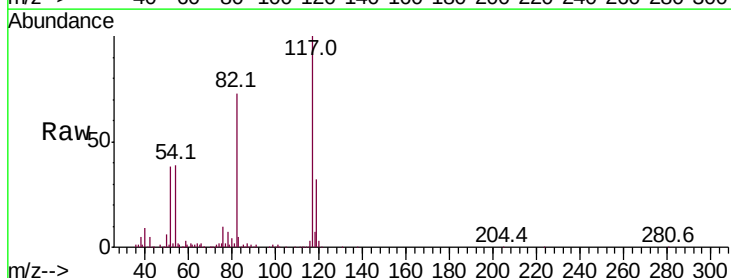
Tgt Ion: 117 Resp: 1753231

Ion Ratio Lower Upper

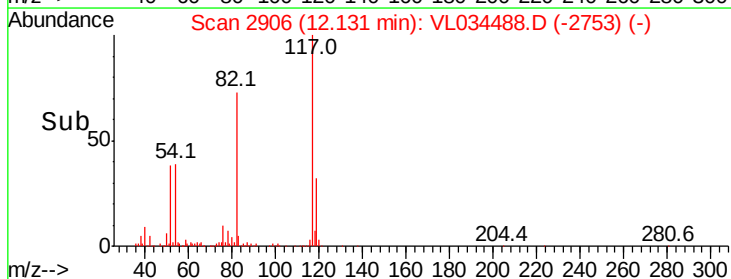
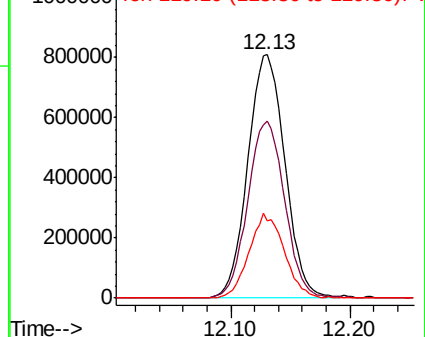
117 100

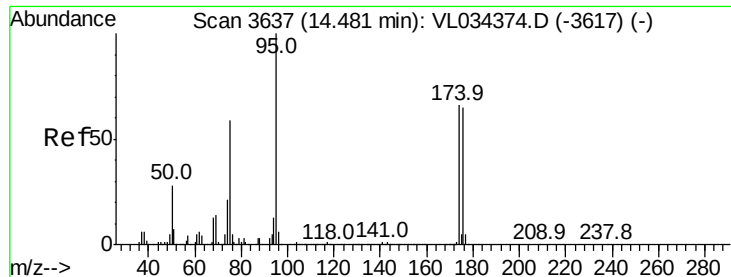
82 72.6 57.5 86.3

119 33.0 25.4 38.2



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





#68

1-Bromo-4-Fluorobenzene

Concen: 10.315 ppbv

RT: 14.47 min Scan# 3633

Delta R.T. -0.01 min

Lab File: VL034488.D

Acq: 10 Dec 2019 8:47

Instrument :

MSVOA_L

ClientSampleId :

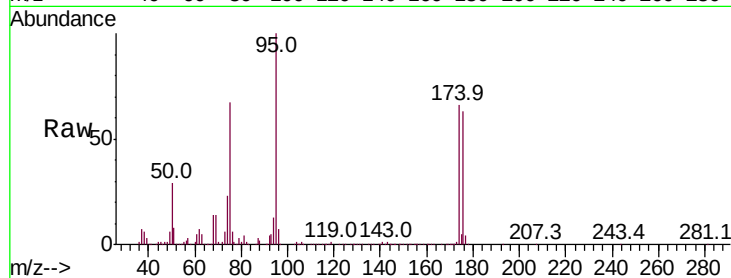
Tot Ion: 95 Resp: 1521350

Ion Ratio Lower Upper

95 100

174 65.2 52.2 78.2

175 4.7 3.8 5.8



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

