

Data File : VL035405.D
Acq On : 13 Aug 2020 17:46
Operator : SY/AP
Sample : L3510-01
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
E053-1100

Quant Time: Aug 14 04:29:53 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL081220AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Aug 12 20:32:44 2020
QLast Update : Wed Aug 12 20:32:44 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1461714	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	3347330	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	3754546	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.43	95	4193911	13.83	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	138.30%#

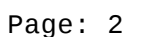
Target Compounds

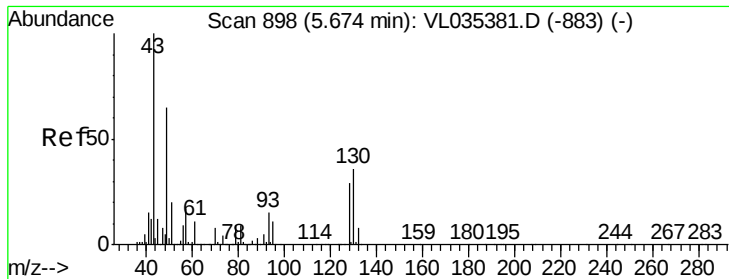
						Qvalue
3) Chlorodifluoromethane	2.98	51	12205	0.072	ppbv #	83
4) Chloromethane	3.13	50	7853	0.083	ppbv #	85
6) Bromomethane	3.47	94	1862666	35.785	ppbv	99
9) Propene	3.01	41	13093	0.149	ppbv	85
13) Ethanol	3.60	45	132359	4.585	ppbv	95
15) Acetone	3.86	43	514848	2.797	ppbv	99
16) 1,3-Butadiene	3.30	39	4421	0.047	ppbv #	19
17) tert-Butyl alcohol	4.29	59	144701	0.674	ppbv #	71
18) 1,1-Dichloroethene	4.29	96	1782333	26.779	ppbv	94
19) Isopropyl Alcohol	3.99	45	6852	0.048	ppbv #	44
20) Methylene Chloride	4.34	84	574722	8.267	ppbv	96
23) Vinyl Acetate	5.08	43	70646	0.240	ppbv #	97
25) Ethyl Acetate	5.69	43	235045	0.619	ppbv #	79
26) Hexane	5.69	57	318343	1.914	ppbv #	42
29) Chloroform	5.75	83	4633362	19.525	ppbv	93
34) 2-Butanone	5.27	43	90408	0.379	ppbv	98
36) Benzene	6.90	78	10754	0.034	ppbv	96
38) Trichloroethene	7.84	130	3273816	26.026	ppbv	98
39) 1,2-Dichloropropane	7.18	63	946333	7.446	ppbv #	26
42) Bromodichloromethane	7.80	83	7492101	29.851	ppbv #	91
47) 1,1,2-Trichloroethane	9.49	97	3047055	23.636	ppbv	98
48) Dibromochloromethane	10.32	129	4741382	23.011	ppbv	98
53) Toluene	9.82	91	16551	0.043	ppbv #	72
58) Ethyl Benzene	12.73	91	8363627	14.094	ppbv	91
59) m/p-Xylene	12.73	91	8363627	16.901	ppbv #	81
75) 1,3-Dichlorobenzene	17.16	146	7001891	22.245	ppbv	96
76) 1,4-Dichlorobenzene	17.16	146	7001891	21.657	ppbv	95
77) 1,2-Dichlorobenzene	17.84	146	6783267	21.375	ppbv	95
79) Naphthalene	22.22	128	35545	0.049	ppbv #	92
80) Naphthalene,2-methyl-	24.99	142	71028	0.212	ppbv	95
81) 1,2,4-Trichlorobenzene	21.95	180	13795	0.041	ppbv #	4

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

ALS Vial : 1 Sample Multiplier: 1

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 896

Delta R.T. -0.01 min

Lab File: VL035405.D

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MSVOA_L

ClientSampleId :

E053-1100

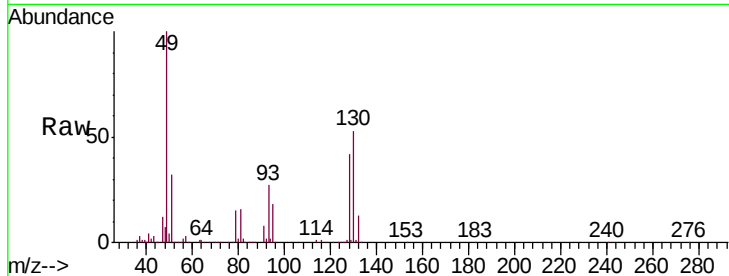
Tgt Ion: 49 Resp: 1461714

Ion Ratio Lower Upper

49 100

128 42.4 21.8 65.3

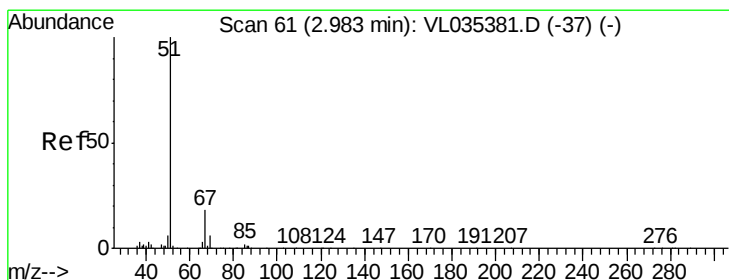
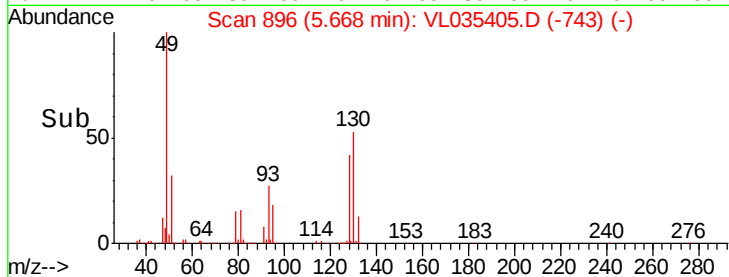
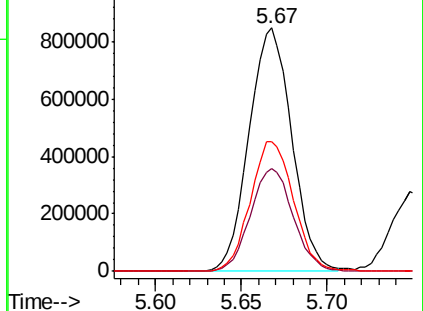
130 54.1 27.9 83.6



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



#3

Chlorodifluoromethane

Concen: 0.072 ppbv

RT: 2.98 min Scan# 61

Delta R.T. -0.00 min

Lab File: VL035405.D

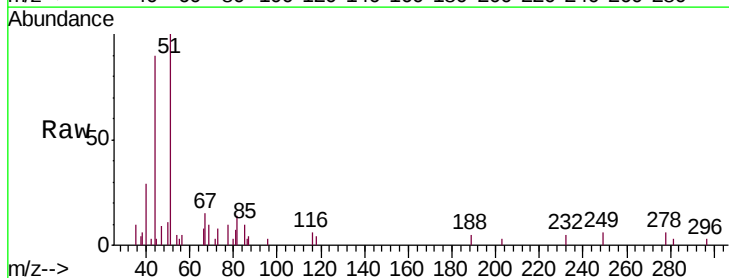
Acq: 13 Aug 2020 17:46

Tgt Ion: 51 Resp: 12205

Ion Ratio Lower Upper

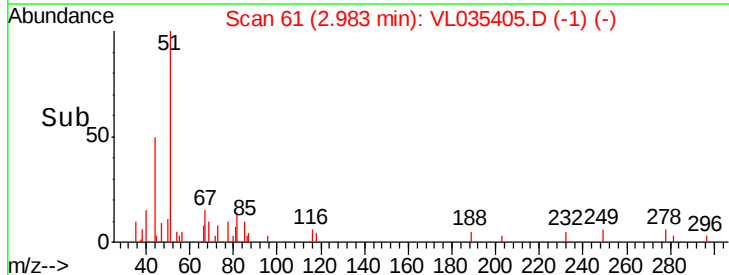
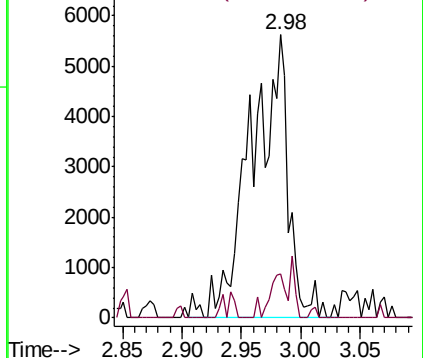
51 100

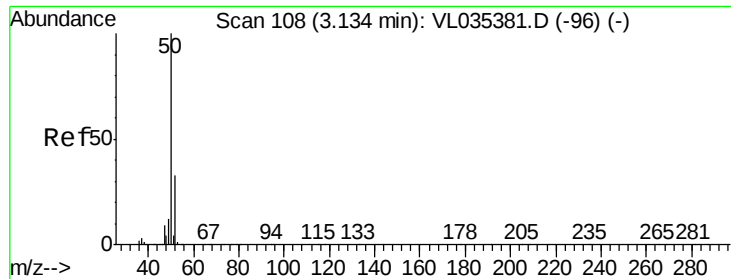
67 10.1 14.1 21.1#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#4

Chloromethane

Concen: 0.083 ppbv

RT: 3.13 min Scan# 107

Delta R.T. -0.00 min

Lab File: VL035405.D

Acq: 13 Aug 2020 17:46

Instrument :

MSVOA_L

ClientSampleId :

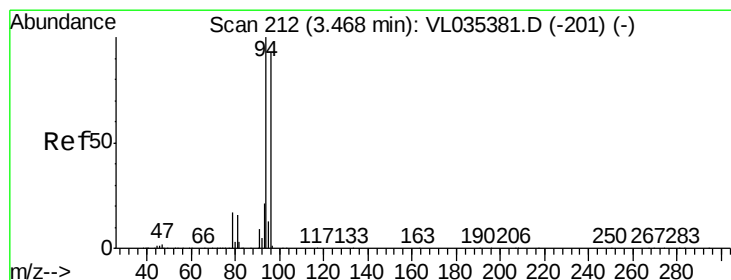
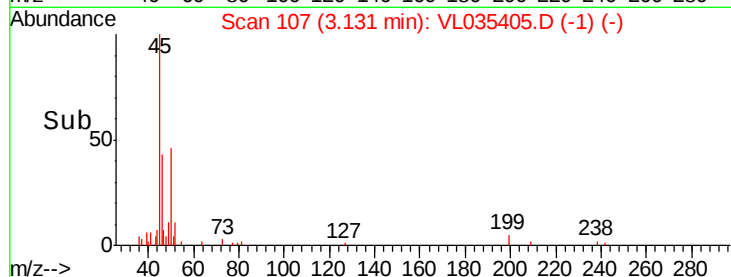
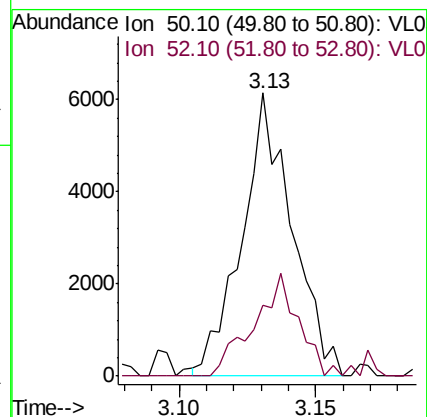
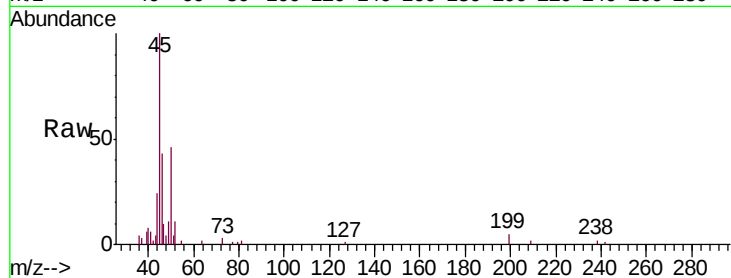
E053-1100

Tgt Ion: 50 Resp: 7853

Ion Ratio Lower Upper

50 100

52 25.0 26.6 39.8#



#6

Bromomethane

Concen: 35.785 ppbv

RT: 3.47 min Scan# 212

Delta R.T. -0.00 min

Lab File: VL035405.D

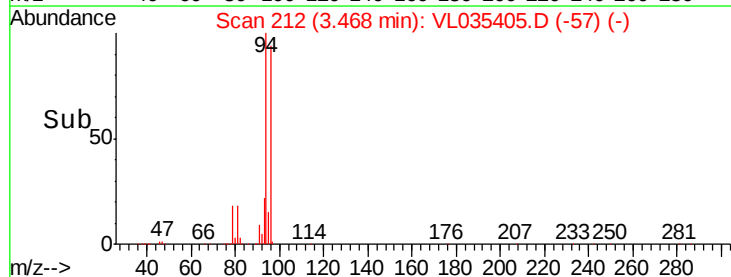
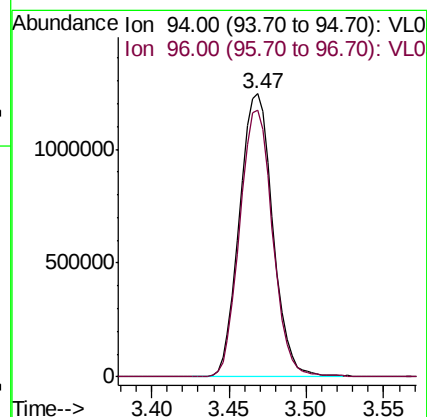
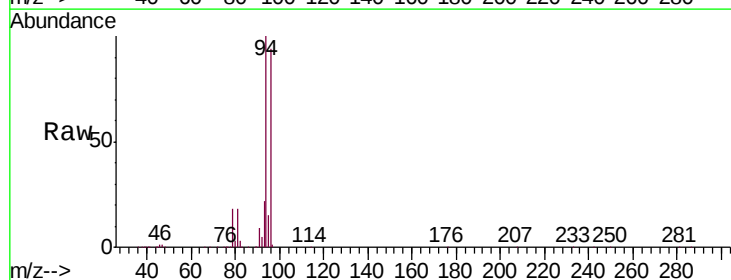
Acq: 13 Aug 2020 17:46

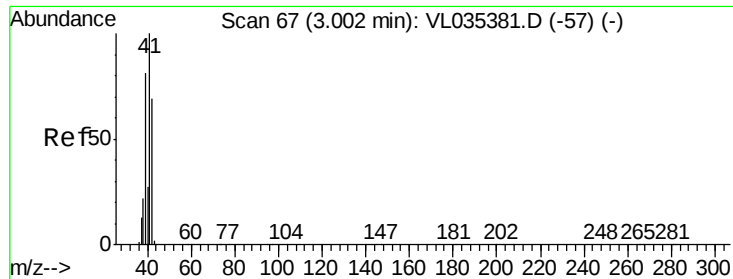
Tgt Ion: 94 Resp: 1862666

Ion Ratio Lower Upper

94 100

96 94.2 74.4 111.6





#9

Propene

Concen: 0.149 ppbv

RT: 3.01 min Scan# 71

Delta R.T. 0.01 min

Lab File: VL035405.D

Acq: 13 Aug 2020 17:46

Instrument :

MSVOA_L

ClientSampleId :

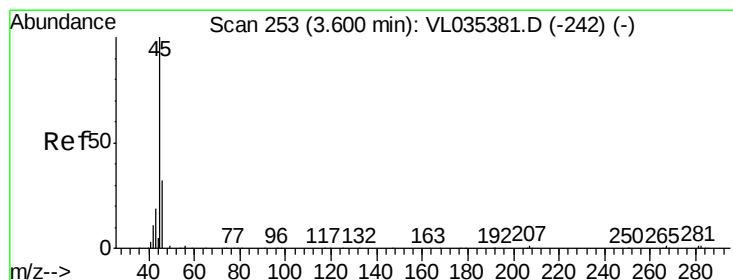
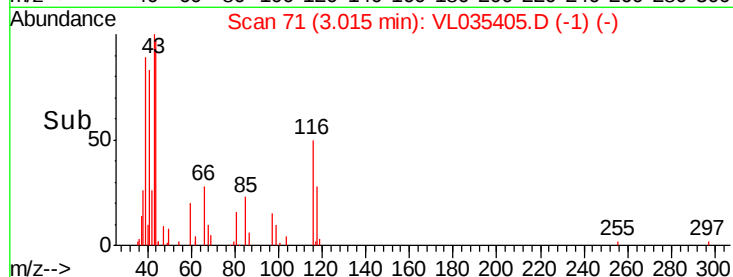
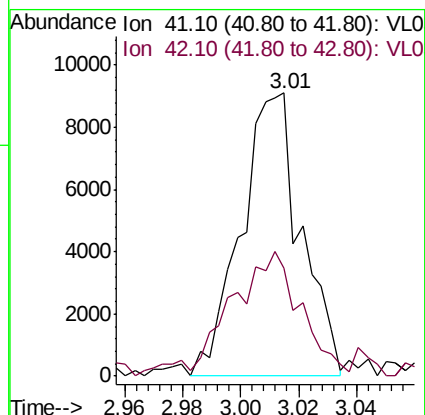
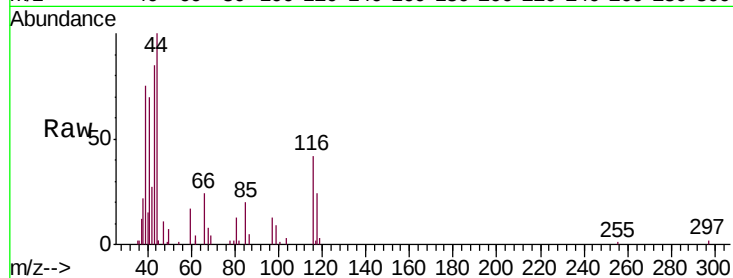
E053-1100

Tgt Ion: 41 Resp: 13093

Ion Ratio Lower Upper

41 100

42 56.8 55.4 83.2



#13

Ethanol

Concen: 4.585 ppbv

RT: 3.60 min Scan# 254

Delta R.T. 0.00 min

Lab File: VL035405.D

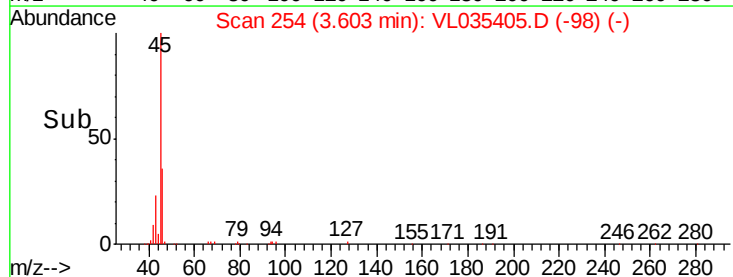
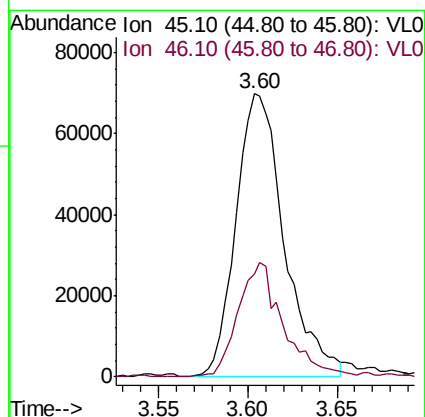
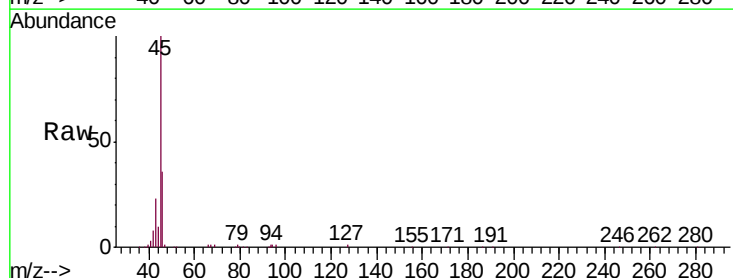
Acq: 13 Aug 2020 17:46

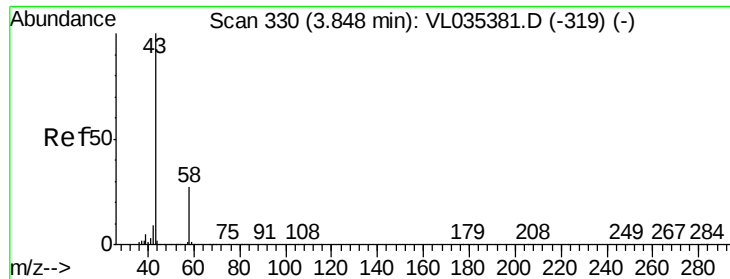
Tgt Ion: 45 Resp: 132359

Ion Ratio Lower Upper

45 100

46 38.2 14.1 56.3





#15

Acetone

Concen: 2.797 ppbv

RT: 3.86 min Scan# 333

Delta R.T. 0.01 min

Lab File: VL035405.D

Acq: 13 Aug 2020 17:46

Instrument :

MSVOA_L

ClientSampleId :

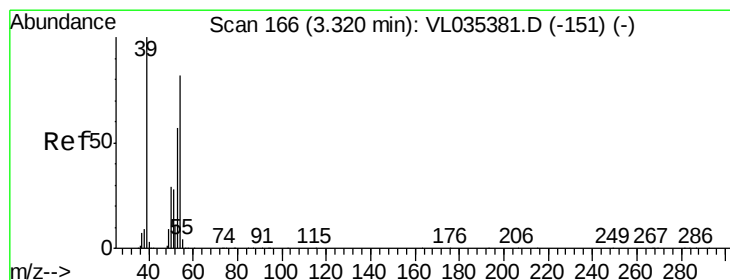
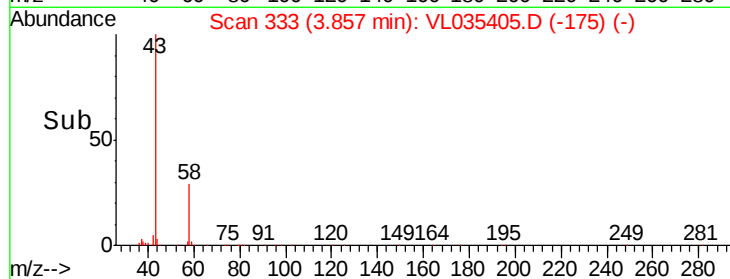
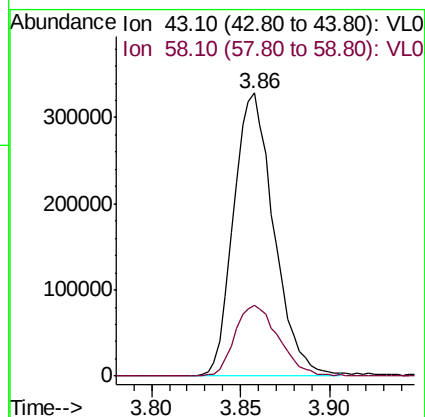
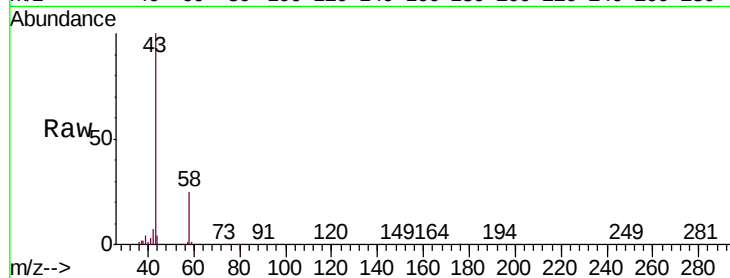
E053-1100

Tgt Ion: 43 Resp: 514848

Ion Ratio Lower Upper

43 100

58 27.5 21.7 32.5



#16

1,3-Butadiene

Concen: 0.047 ppbv

RT: 3.30 min Scan# 160

Delta R.T. -0.02 min

Lab File: VL035405.D

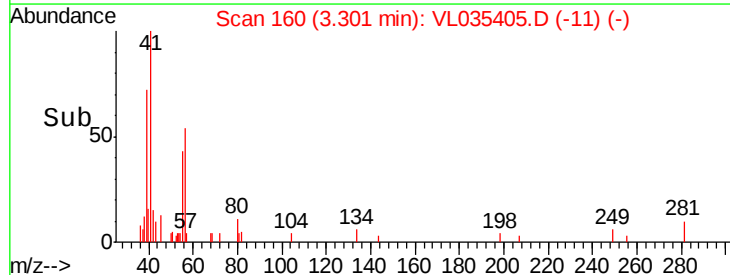
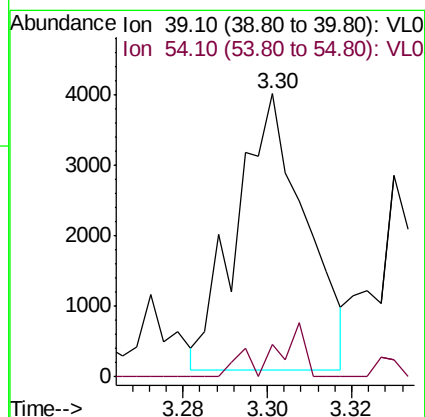
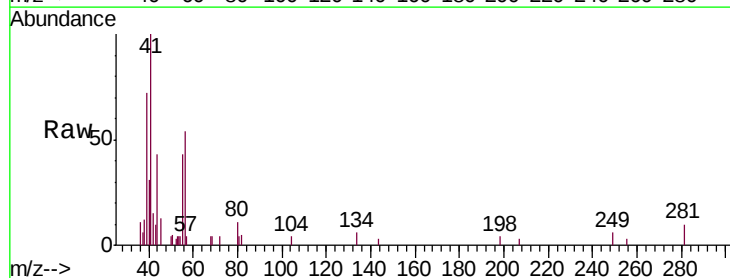
Acq: 13 Aug 2020 17:46

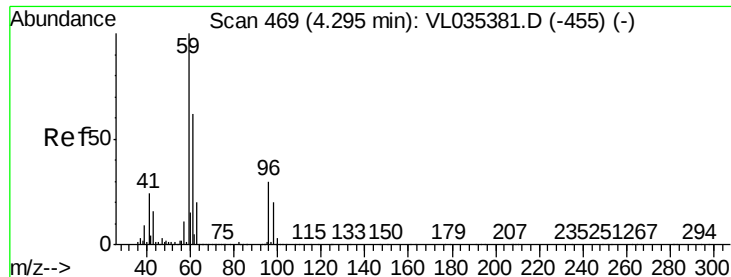
Tgt Ion: 39 Resp: 4421

Ion Ratio Lower Upper

39 100

54 9.1 64.9 97.3#



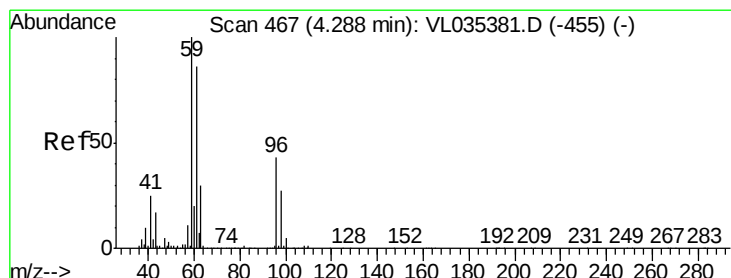
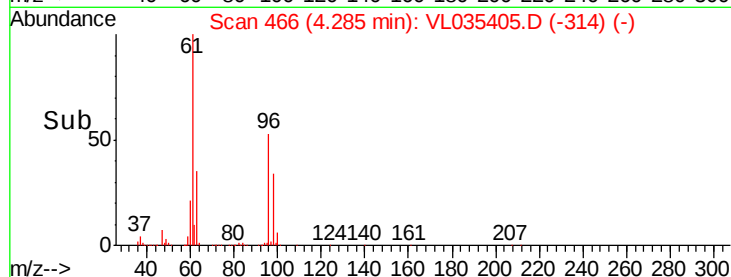
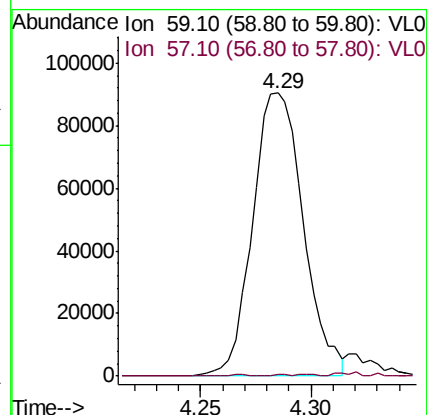
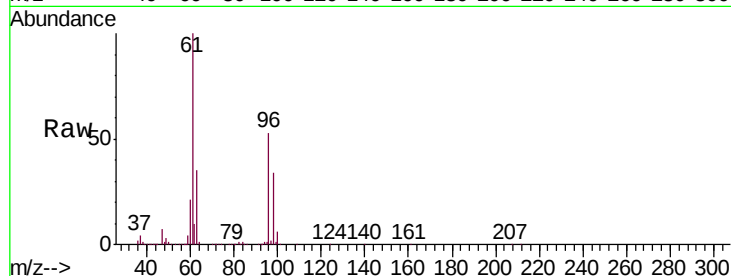


#17

tert-Butyl alcohol
Concen: 0.674 ppbv
RT: 4.29 min Scan# 466
Delta R.T. -0.01 min
Lab File: VL035405.D
Acq: 13 Aug 2020 17:46

Instrument :
MSVOA_L
ClientSampled :
E053-1100

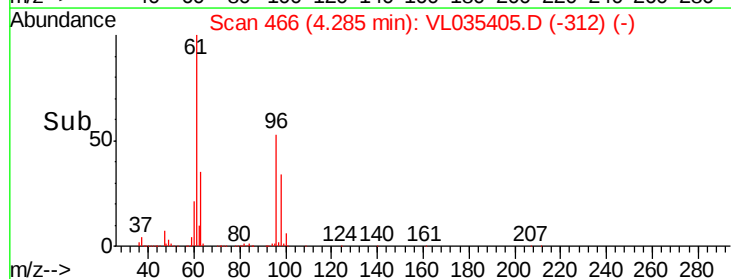
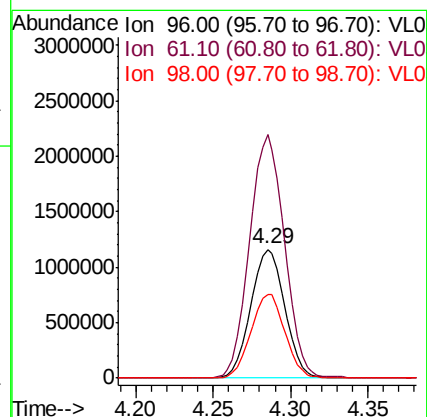
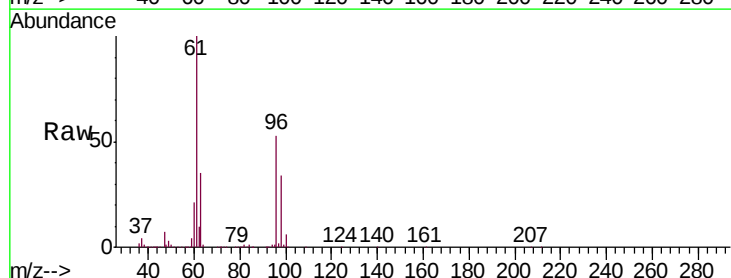
Tgt Ion: 59 Resp: 144701
Ion Ratio Lower Upper
59 100
57 0.0 8.6 13.0#

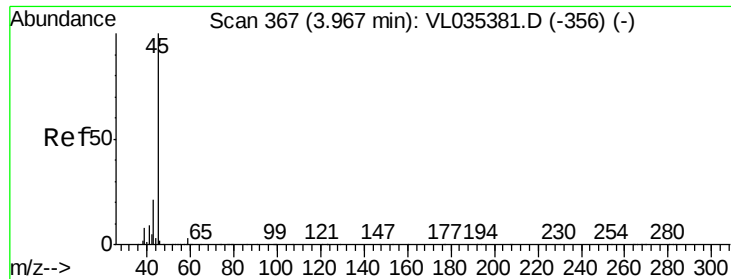


#18

1,1-Dichloroethene
Concen: 26.779 ppbv
RT: 4.29 min Scan# 466
Delta R.T. -0.00 min
Lab File: VL035405.D
Acq: 13 Aug 2020 17:46

Tgt Ion: 96 Resp: 1782333
Ion Ratio Lower Upper
96 100
61 188.7 159.0 238.4
98 65.1 50.3 75.5





#19

Isopropyl Alcohol

Concen: 0.048 ppbv

RT: 3.99 min Scan# 374

Delta R.T. 0.02 min

Lab File: VL035405.D

Acq: 13 Aug 2020 17:46

Instrument :

MSVOA_L

ClientSampleId :

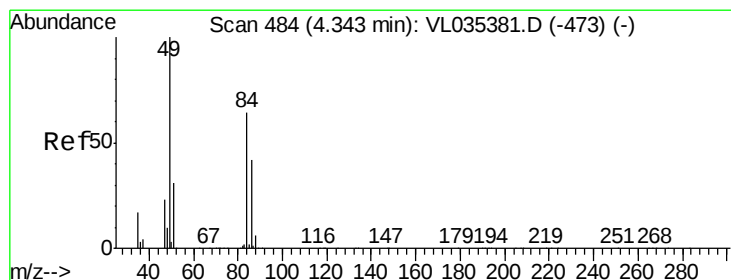
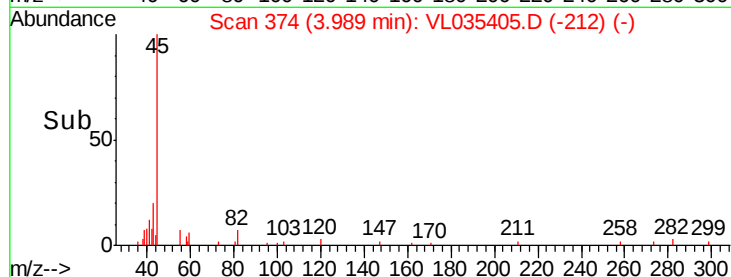
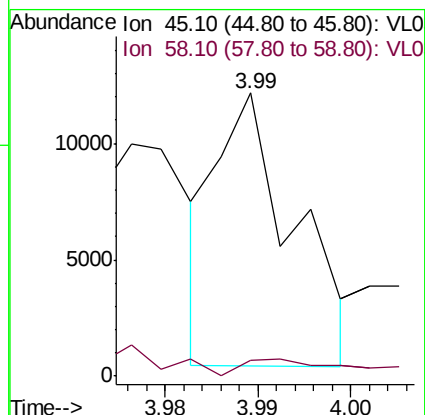
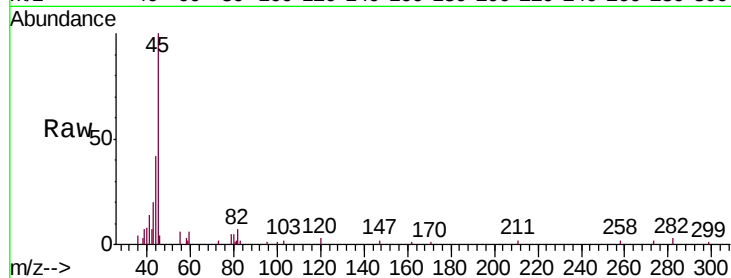
E053-1100

Tgt Ion: 45 Resp: 6852

Ion Ratio Lower Upper

45 100

58 0.0 24.9 37.3#



#20

Methylene Chloride

Concen: 8.267 ppbv

RT: 4.34 min Scan# 483

Delta R.T. -0.00 min

Lab File: VL035405.D

Acq: 13 Aug 2020 17:46

Tgt Ion: 84 Resp: 574722

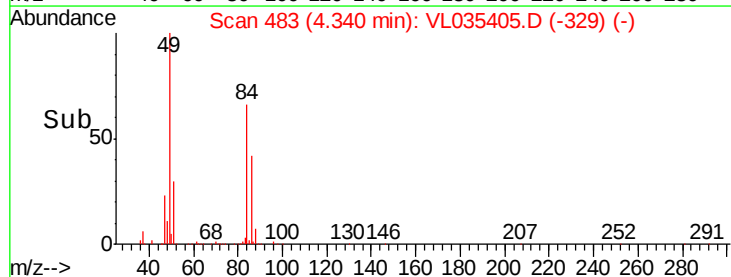
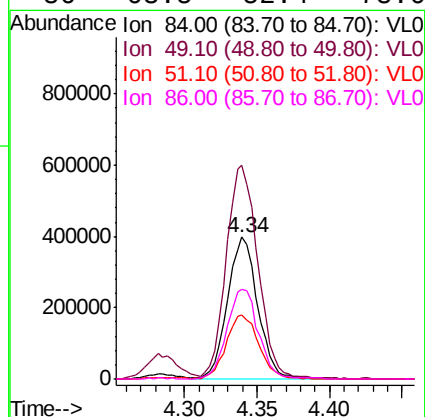
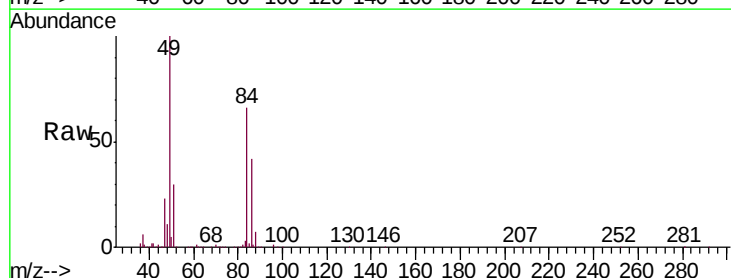
Ion Ratio Lower Upper

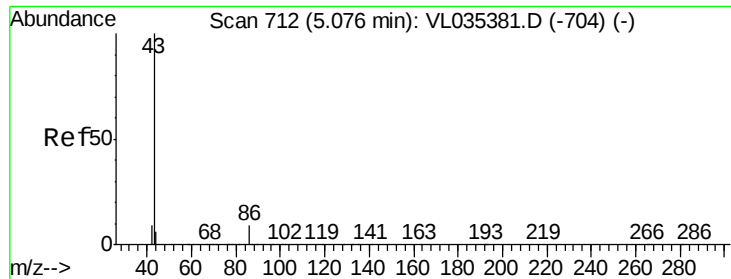
84 100

49 150.6 125.7 188.5

51 45.3 38.5 57.7

86 63.5 52.4 78.6





#23

Vinyl Acetate

Concen: 0.240 ppbv

RT: 5.08 min Scan# 712

Delta R.T. -0.00 min

Lab File: VL035405.D

Acq: 13 Aug 2020 17:46

Instrument :

MSVOA_L

ClientSampleId :

E053-1100

Tgt Ion: 43 Resp: 70646

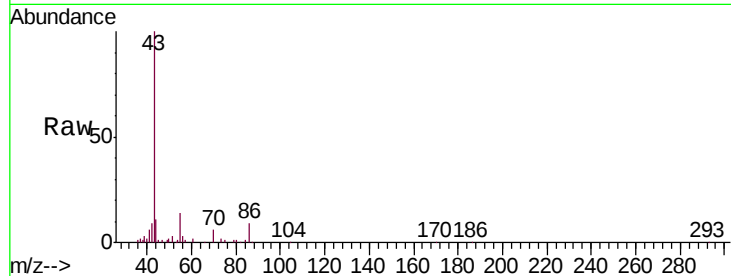
Ion Ratio Lower Upper

43 100

86 9.4 5.8 8.8#

42 9.0 8.0 12.0

44 4.9 4.2 6.2

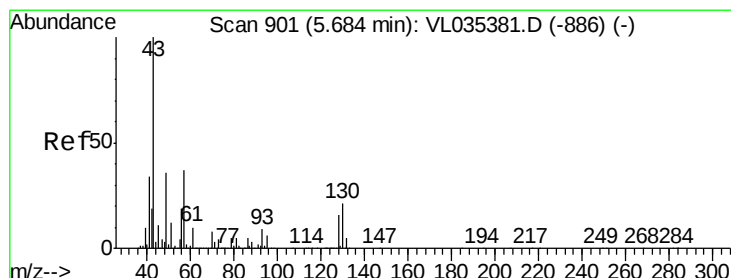
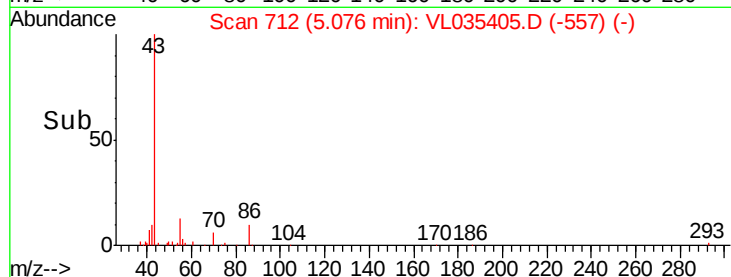
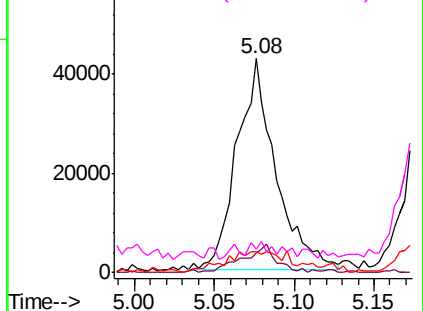


Abundance Ion 43.10 (42.80 to 43.80): VL0

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



#25

Ethyl Acetate

Concen: 0.619 ppbv

RT: 5.69 min Scan# 902

Delta R.T. 0.00 min

Lab File: VL035405.D

Acq: 13 Aug 2020 17:46

Tgt Ion: 43 Resp: 235045

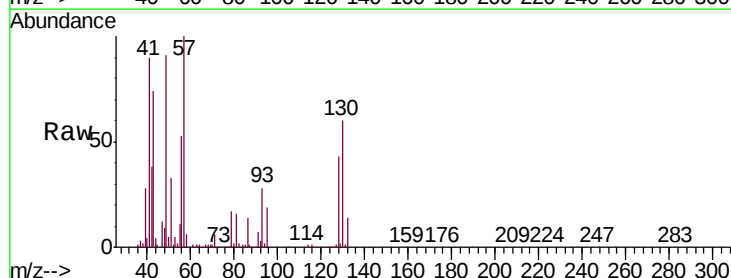
Ion Ratio Lower Upper

43 100

45 2.1 8.0 12.0#

61 0.5 7.4 11.2#

70 1.5 5.9 8.9#

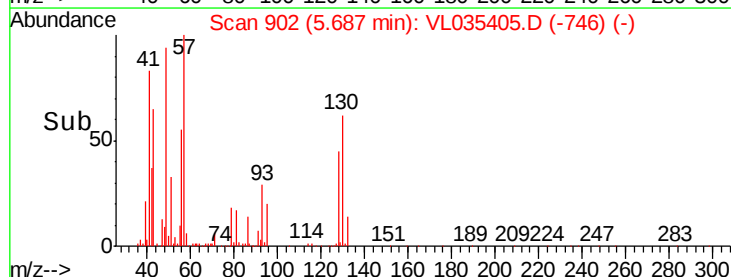
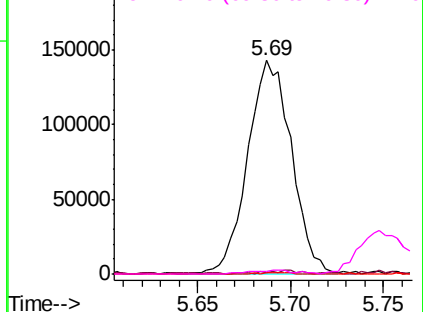


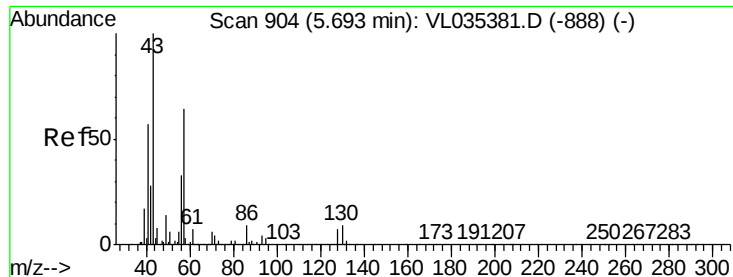
Abundance Ion 43.10 (42.80 to 43.80): VL0

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

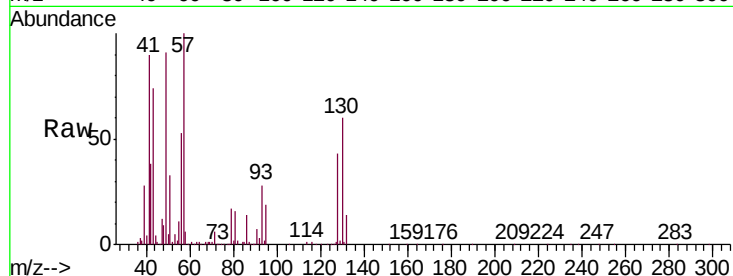




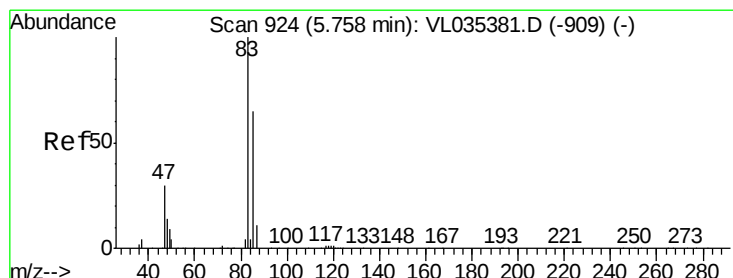
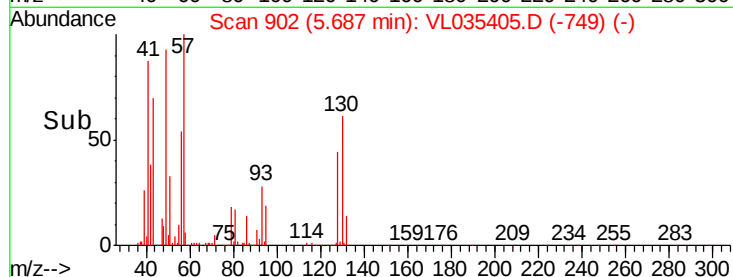
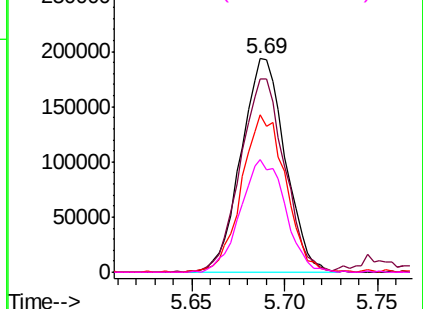
#26
Hexane
Concen: 1.914 ppbv
RT: 5.69 min Scan# 902
Delta R.T. -0.01 min
Lab File: VL035405.D
Acq: 13 Aug 2020 17:46

Instrument :
MSVOA_L
ClientSampleId :
E053-1100

Tgt Ion: 57 Resp: 318343
Ion Ratio Lower Upper
57 100
41 91.7 75.4 113.2
43 74.1 184.1 276.1#
56 54.2 42.2 63.4

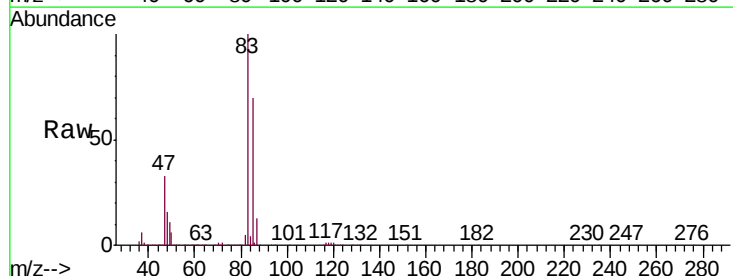


Abundance Ion 57.10 (56.80 to 57.80): VL0
300000
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0

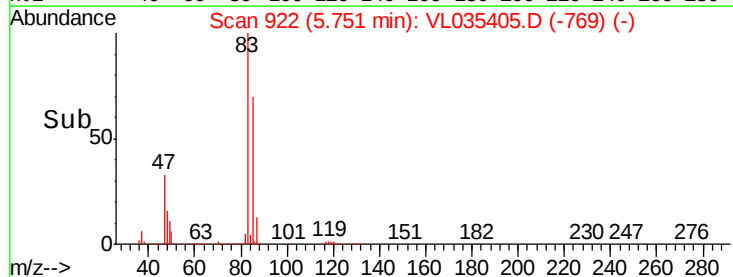
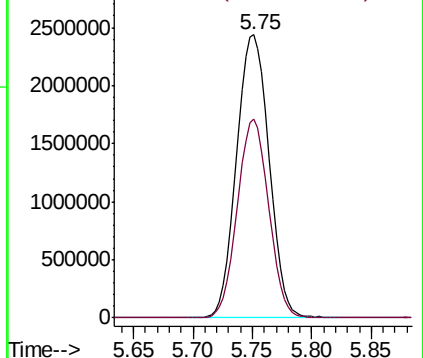


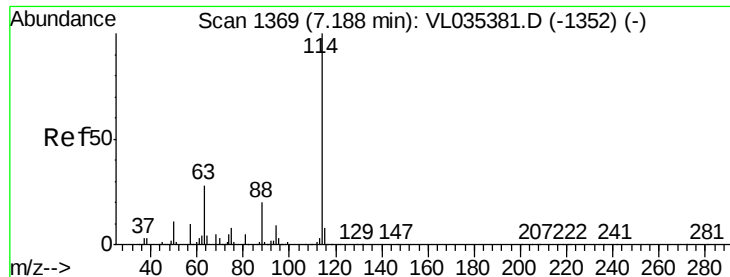
#29
Chloroform
Concen: 19.525 ppbv
RT: 5.75 min Scan# 922
Delta R.T. -0.01 min
Lab File: VL035405.D
Acq: 13 Aug 2020 17:46

Tgt Ion: 83 Resp: 4633362
Ion Ratio Lower Upper
83 100
85 70.2 51.7 77.5



Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0

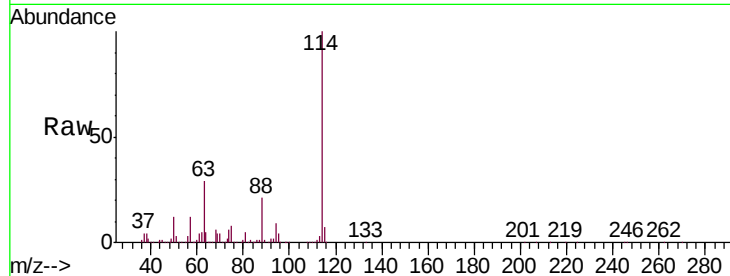




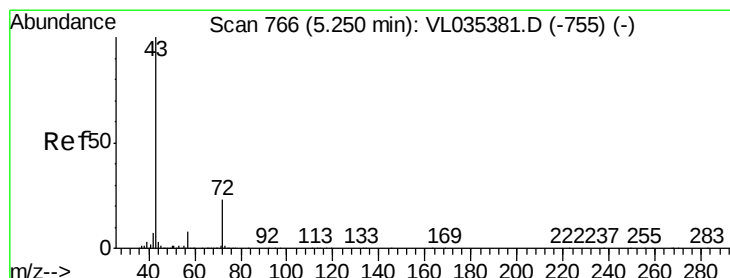
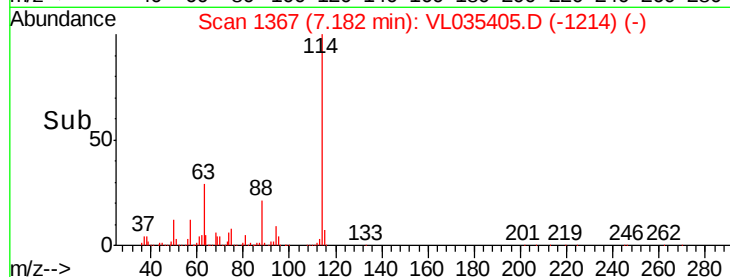
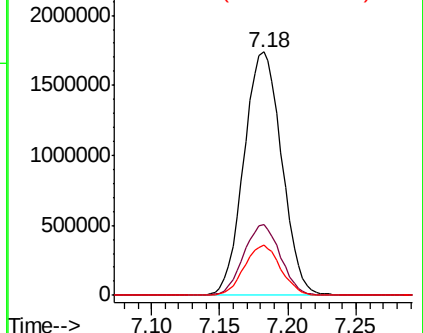
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.18 min Scan# 1367
 Delta R.T. -0.01 min
 Lab File: VL035405.D
 Acq: 13 Aug 2020 17:46

Instrument :
 MSVOA_L
 ClientSampleId :
 E053-1100

Tgt Ion: 114 Resp: 3347330
 Ion Ratio Lower Upper
 114 100
 63 28.3 21.5 32.3
 88 19.9 15.6 23.4

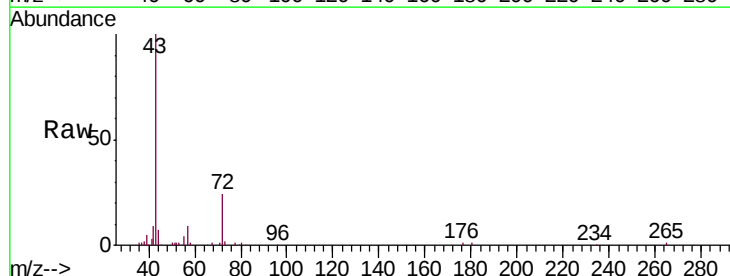


Abundance Ion 114.10 (113.80 to 114.80): V
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

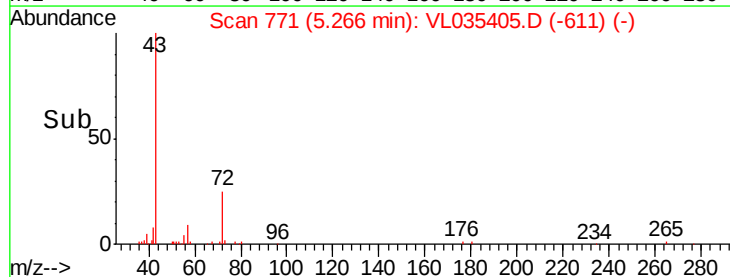
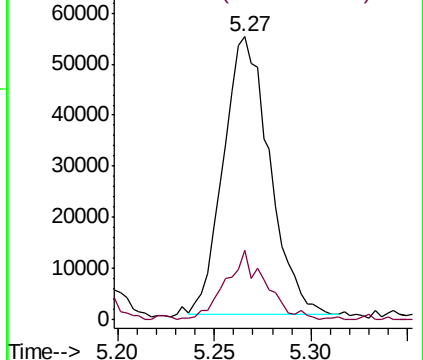


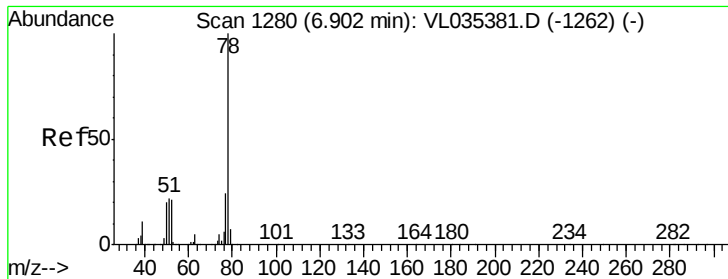
#34
 2-Butanone
 Concen: 0.379 ppbv
 RT: 5.27 min Scan# 771
 Delta R.T. 0.02 min
 Lab File: VL035405.D
 Acq: 13 Aug 2020 17:46

Tgt Ion: 43 Resp: 90408
 Ion Ratio Lower Upper
 43 100
 72 23.1 17.7 26.5



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





#36

Benzene

Concen: 0.034 ppbv

RT: 6.90 min Scan# 1280

Delta R.T. -0.00 min

Lab File: VL035405.D

Acq: 13 Aug 2020 17:46

Instrument :

MSVOA_L

ClientSampleId :

E053-1100

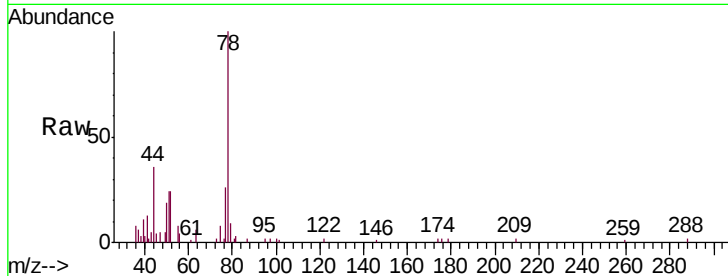
Tgt Ion: 78 Resp: 10754

Ion Ratio Lower Upper

78 100

77 24.7 19.1 28.7

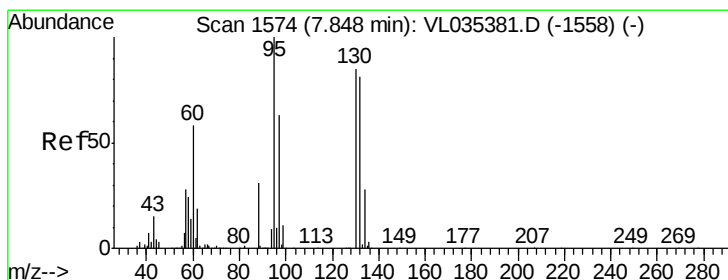
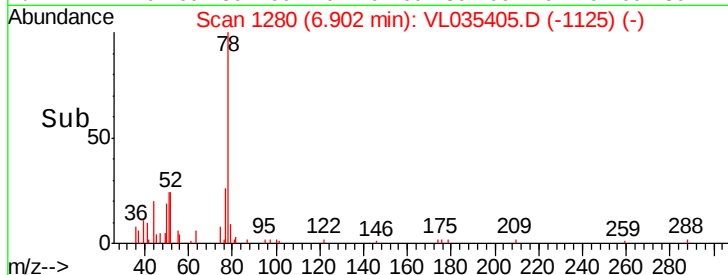
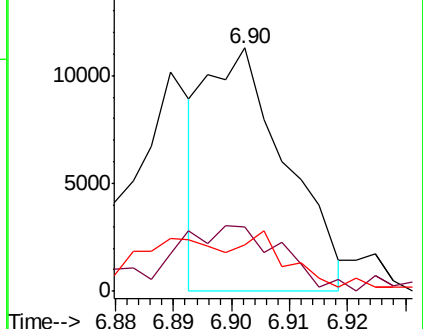
50 16.6 15.8 23.6



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



#38

Trichloroethene

Concen: 26.026 ppbv

RT: 7.84 min Scan# 1573

Delta R.T. -0.00 min

Lab File: VL035405.D

Acq: 13 Aug 2020 17:46

Tgt Ion: 130 Resp: 3273816

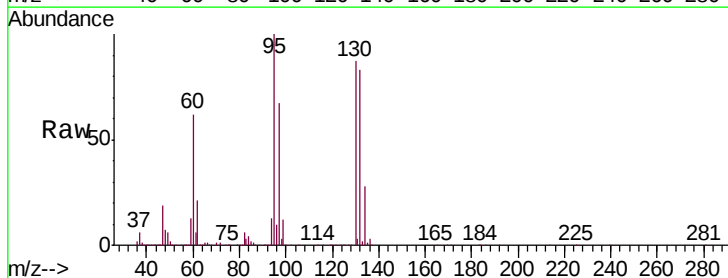
Ion Ratio Lower Upper

130 100

95 115.2 94.2 141.4

132 95.7 76.6 114.8

97 77.5 59.3 88.9

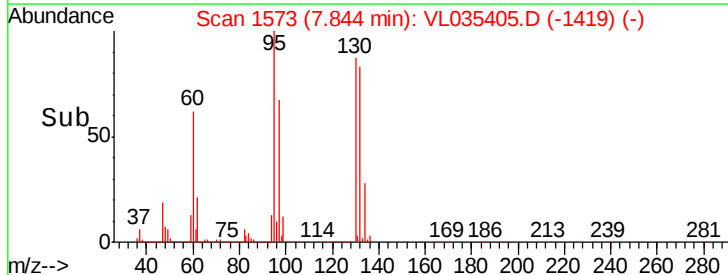
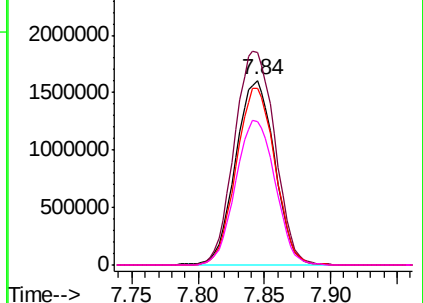


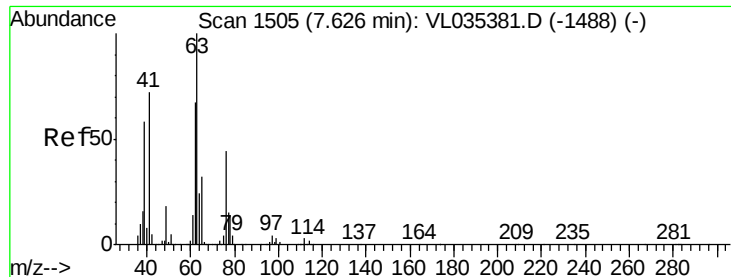
Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0

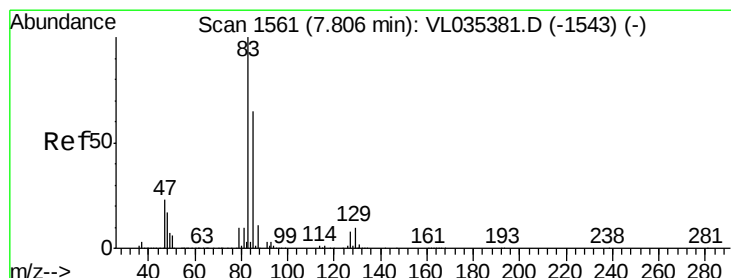
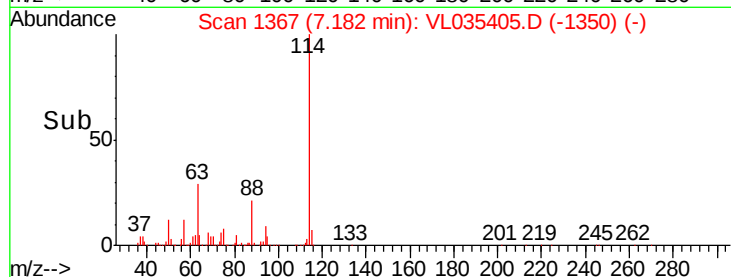
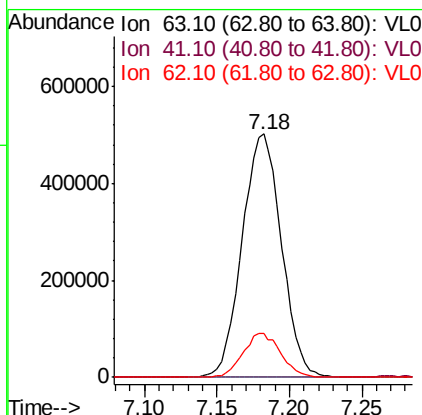
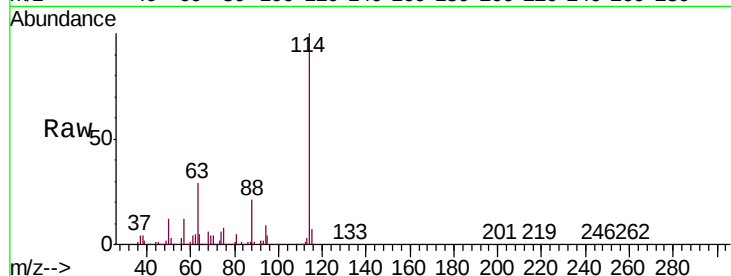




#39
 1,2-Dichloropropane
 Concen: 7.446 ppbv
 RT: 7.18 min Scan# 1367
 Delta R.T. -0.44 min
 Lab File: VL035405.D
 Acq: 13 Aug 2020 17:46

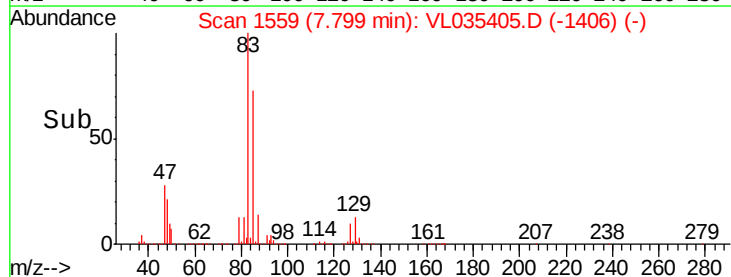
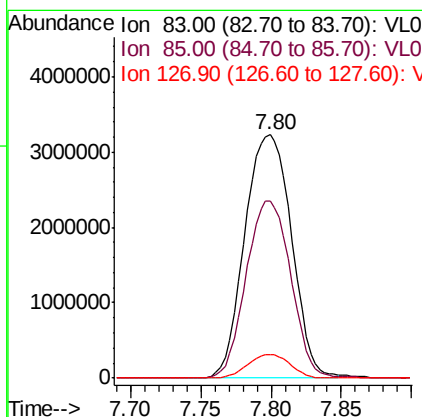
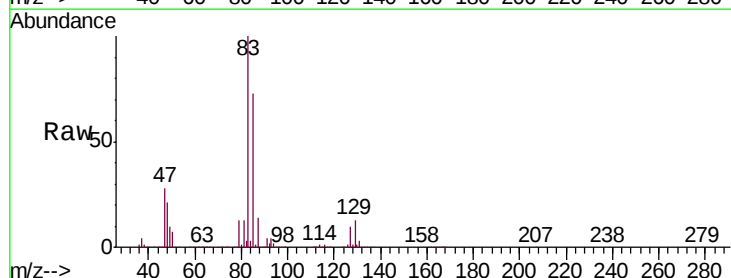
Instrument :
 MSVOA_L
 ClientSampleId :
 E053-1100

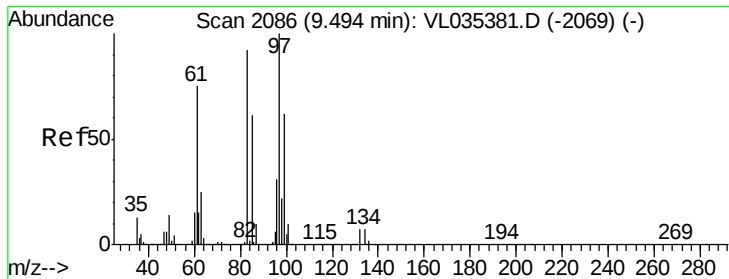
Tgt Ion: 63 Resp: 946333
 Ion Ratio Lower Upper
 63 100
 41 0.1 57.4 86.2#
 62 18.1 53.6 80.4#



#42
 Bromodichloromethane
 Concen: 29.851 ppbv
 RT: 7.80 min Scan# 1559
 Delta R.T. -0.01 min
 Lab File: VL035405.D
 Acq: 13 Aug 2020 17:46

Tgt Ion: 83 Resp: 7492101
 Ion Ratio Lower Upper
 83 100
 85 72.7 52.2 78.4
 127 9.6 6.3 9.5#





#47

1,1,2-Trichloroethane

Concen: 23.636 ppbv

RT: 9.49 min Scan# 2084

Delta R.T. -0.01 min

Lab File: VL035405.D

Acq: 13 Aug 2020 17:46

Instrument :

MSVOA_L

ClientSampleId :

E053-1100

Tgt Ion: 97 Resp: 3047055

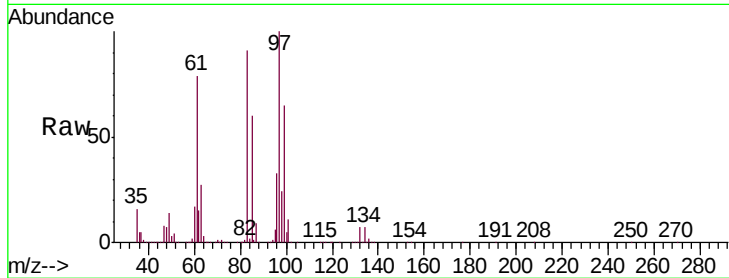
Ion Ratio Lower Upper

97 100

83 90.9 73.9 110.9

85 60.2 49.0 73.6

99 64.6 49.9 74.9

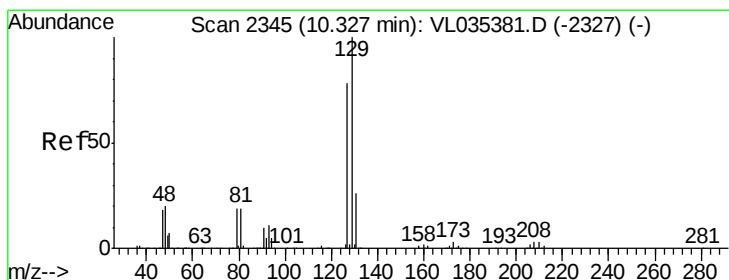
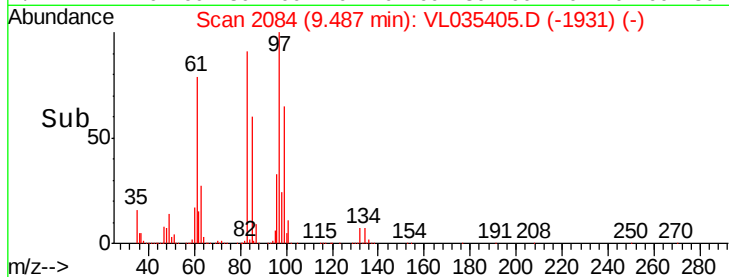
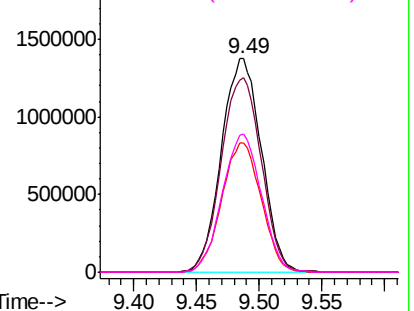


Abundance Ion 97.00 (96.70 to 97.70): VL0

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: 23.011 ppbv

RT: 10.32 min Scan# 2342

Delta R.T. -0.01 min

Lab File: VL035405.D

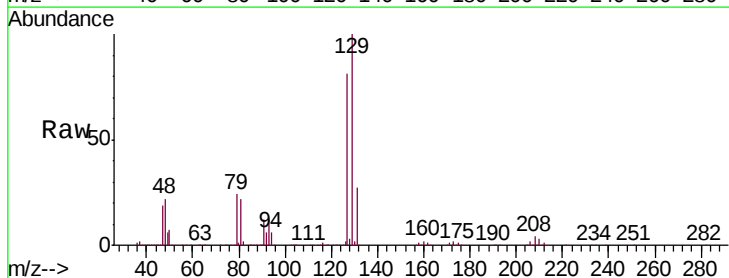
Acq: 13 Aug 2020 17:46

Tgt Ion: 129 Resp: 4741382

Ion Ratio Lower Upper

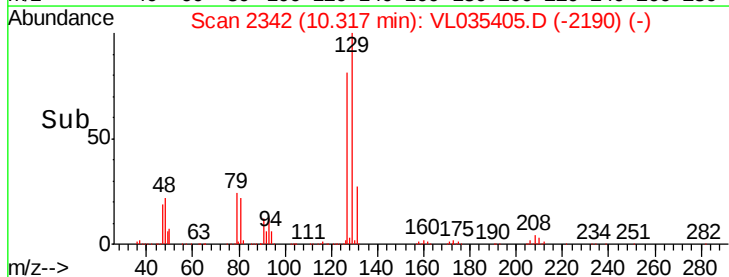
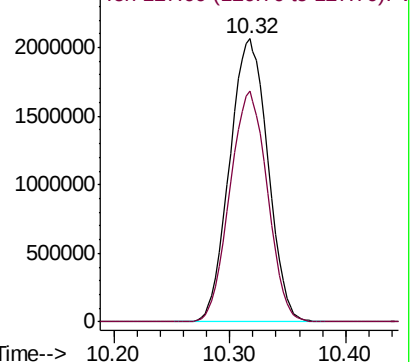
129 100

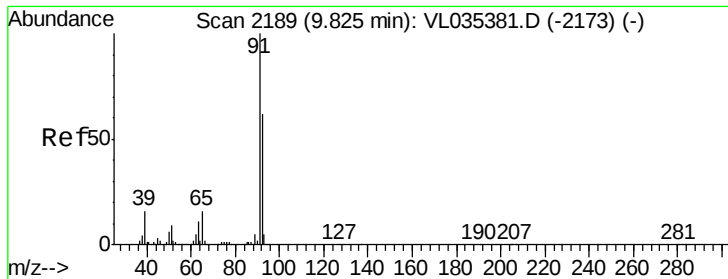
127 80.0 39.3 117.8



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V





#53

Toluene

Concen: 0.043 ppbv

RT: 9.82 min Scan# 2187

Delta R.T. -0.01 min

Lab File: VL035405.D

Acq: 13 Aug 2020 17:46

Instrument :

MSVOA_L

ClientSampleId :

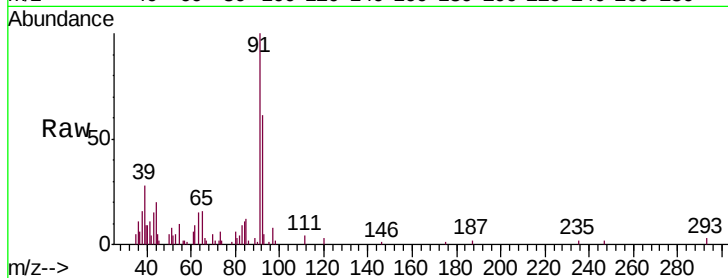
E053-1100

Tgt Ion: 91 Resp: 16551

Ion Ratio Lower Upper

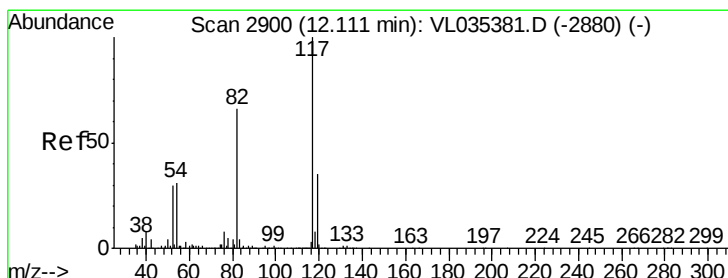
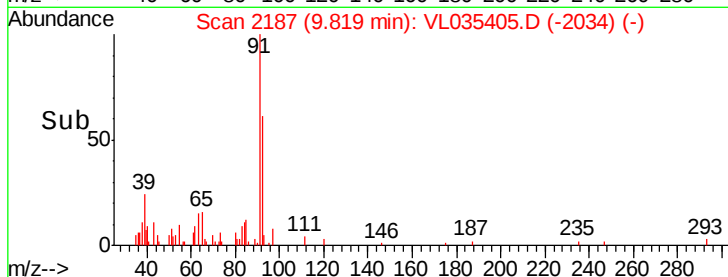
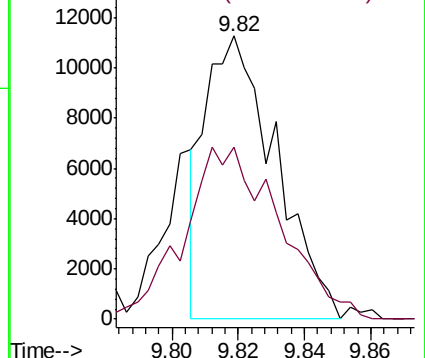
91 100

92 83.1 49.1 73.7#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.10 min Scan# 2897

Delta R.T. -0.01 min

Lab File: VL035405.D

Acq: 13 Aug 2020 17:46

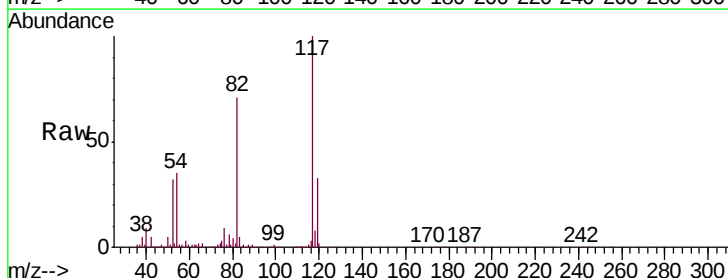
Tgt Ion: 117 Resp: 3754546

Ion Ratio Lower Upper

117 100

82 72.2 53.0 79.6

119 33.5 25.7 38.5



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

