

Data File : VL035406.D
Acq On : 13 Aug 2020 18:24
Operator : SY/AP
Sample : L3510-01DL 2X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
E053-1100DL

Quant Time: Aug 14 04:30:13 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	1308538	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	2946924	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	3106341	10.00	ppbv	-0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.43	95	3200174	12.76	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	127.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
4) Chloromethane	3.13	50	3866	0.045	ppbv	# 85
6) Bromomethane	3.47	94	965304	20.716	ppbv	96
9) Propene	3.01	41	7706	0.098	ppbv	91
13) Ethanol	3.61	45	79813	3.088	ppbv	99
15) Acetone	3.86	43	264524	1.605	ppbv	99
17) tert-Butyl alcohol	4.13	59	7279	0.038	ppbv	100
18) 1,1-Dichloroethene	4.29	96	923431	15.498	ppbv	98
19) Isopropyl Alcohol	3.99	45	9869	0.077	ppbv	# 44
20) Methylene Chloride	4.34	84	327956	5.270	ppbv	90
23) Vinyl Acetate	5.07	43	17829	0.068	ppbv	# 88
25) Ethyl Acetate	5.69	43	128860	0.379	ppbv	# 80
26) Hexane	5.69	57	179469	1.206	ppbv	# 41
29) Chloroform	5.75	83	2558205	12.042	ppbv	97
34) 2-Butanone	5.27	43	42282	0.201	ppbv	99
36) Benzene	6.90	78	9418	0.033	ppbv	# 70
38) Trichloroethene	7.84	130	1809850	16.343	ppbv	98
39) 1,2-Dichloropropane	7.18	63	838109	7.490	ppbv	# 25
42) Bromodichloromethane	7.80	83	4532326	20.512	ppbv	97
47) 1,1,2-Trichloroethane	9.48	97	1636799	14.422	ppbv	97
48) Dibromochloromethane	10.31	129	2584144	14.245	ppbv	100
58) Ethyl Benzene	12.73	91	4824472	9.826	ppbv	99
59) m/p-Xylene	12.73	91	4824472	11.784	ppbv	# 77
75) 1,3-Dichlorobenzene	17.16	146	3983624	15.297	ppbv	99
76) 1,4-Dichlorobenzene	17.16	146	3983624	14.892	ppbv	97
77) 1,2-Dichlorobenzene	17.83	146	3845622	14.647	ppbv	98
80) Naphthalene,2-methyl-	25.00	142	31331	0.113	ppbv	96

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

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Instrument :

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ClientSampleId :

E053-1100DL

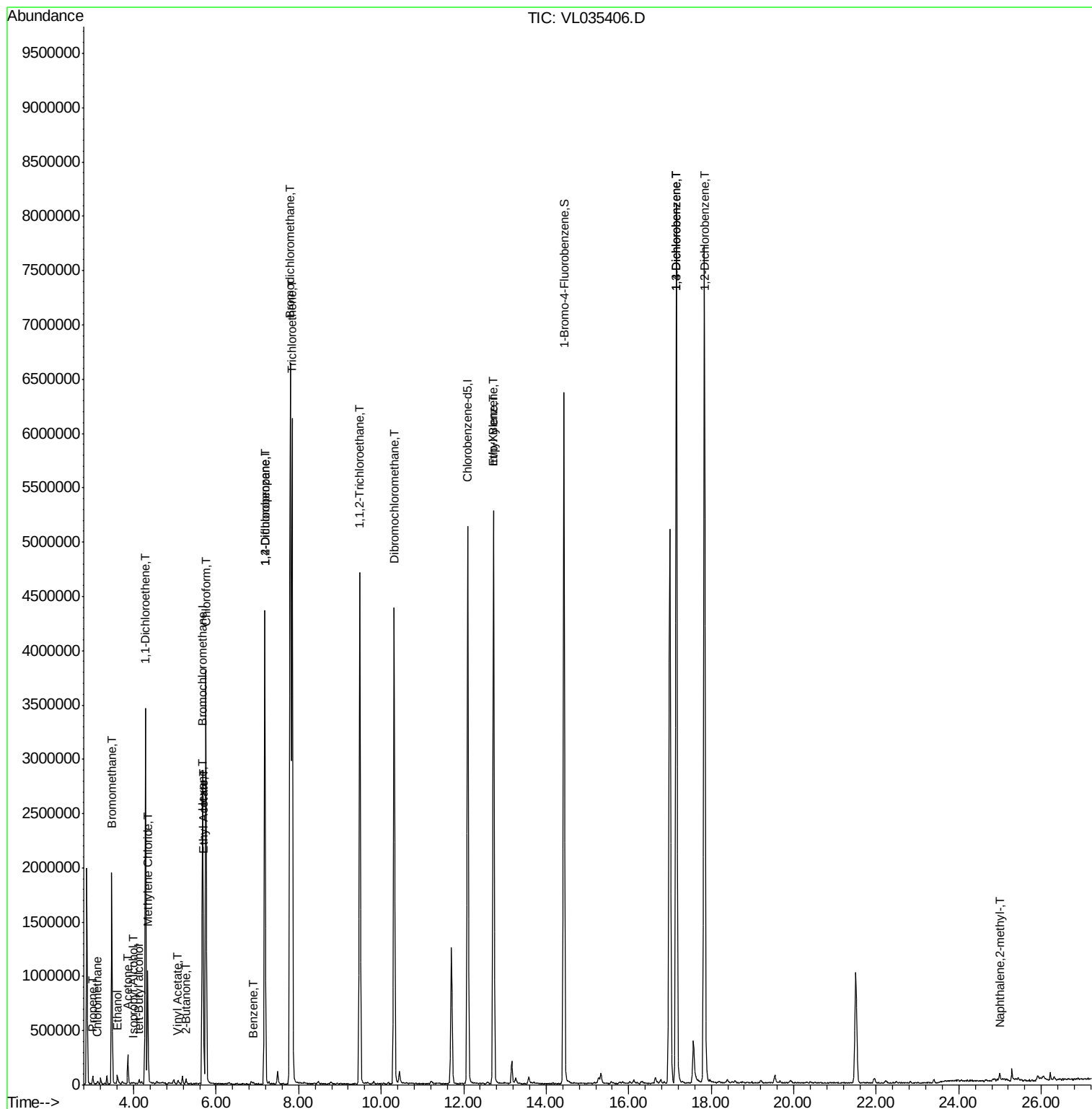
Quant Time: Aug 14 04:30:13 2020

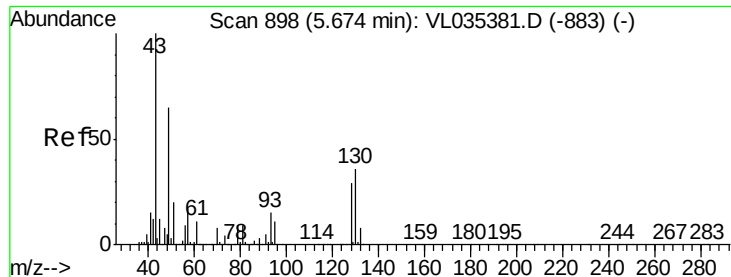
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL081220AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Aug 12 20:32:44 2020

QLast Update : Wed Aug 12 20:32:44 2020

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 896

Delta R.T. -0.01 min

Lab File: VL035406.D

Acq: 13 Aug 2020 18:24

Instrument :

MSVOA_L

ClientSampleId :

E053-1100DL

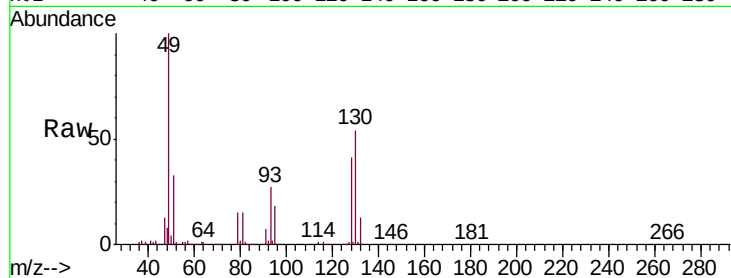
Tgt Ion: 49 Resp: 1308538

Ion Ratio Lower Upper

49 100

128 42.6 21.8 65.3

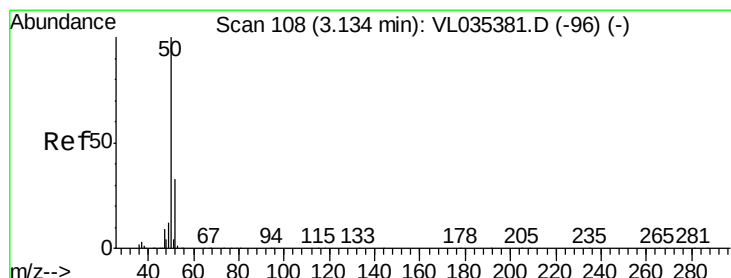
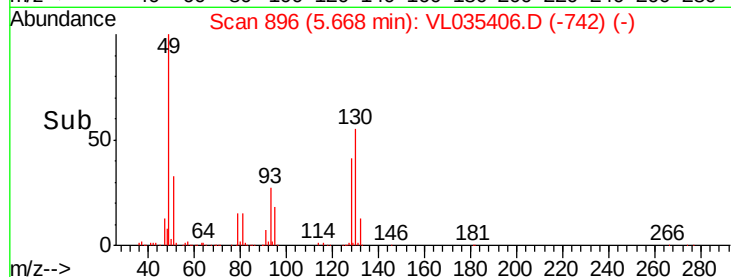
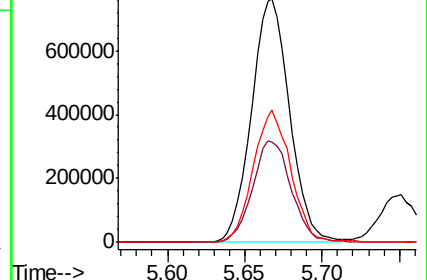
130 54.0 27.9 83.6



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



#4

Chloromethane

Concen: 0.045 ppbv

RT: 3.13 min Scan# 107

Delta R.T. -0.00 min

Lab File: VL035406.D

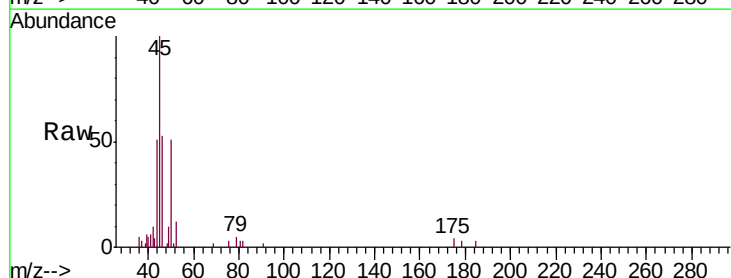
Acq: 13 Aug 2020 18:24

Tgt Ion: 50 Resp: 3866

Ion Ratio Lower Upper

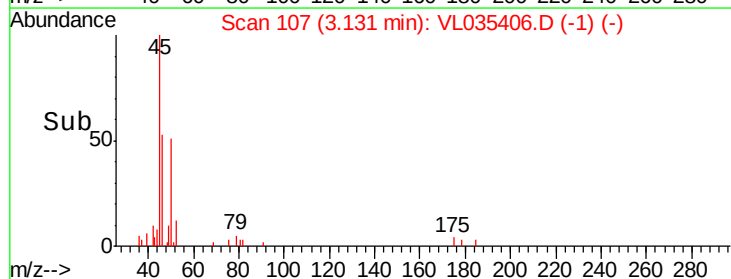
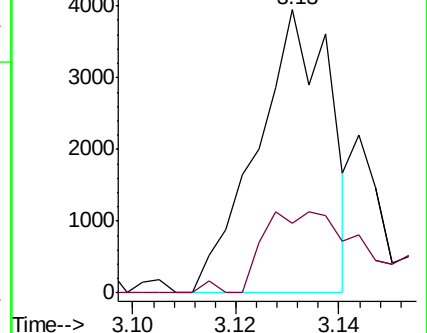
50 100

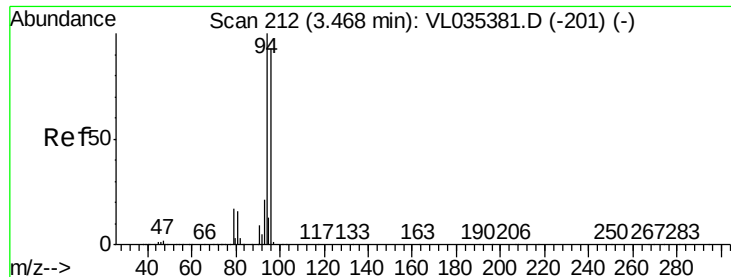
52 24.4 26.6 39.8#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#6

Bromomethane

Concen: 20.716 ppbv

RT: 3.47 min Scan# 212

Delta R.T. 0.00 min

Lab File: VL035406.D

Acq: 13 Aug 2020 18:24

Instrument :

MSVOA_L

ClientSampleId :

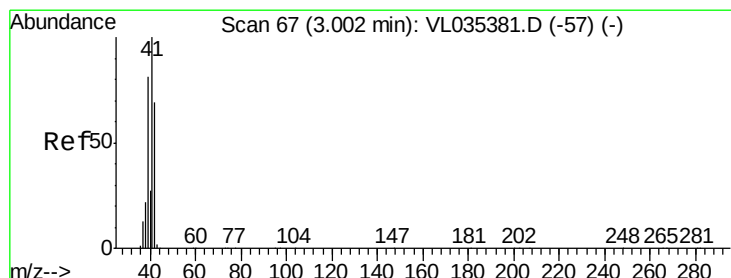
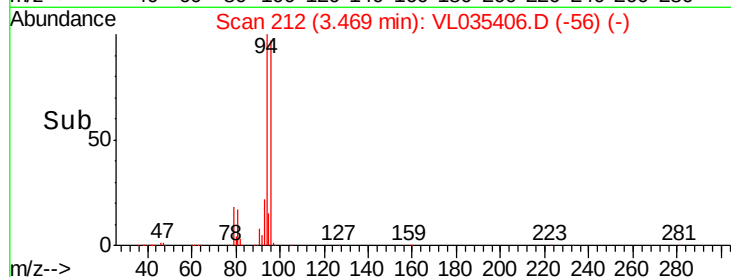
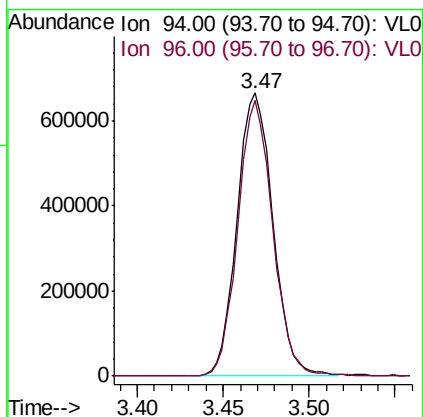
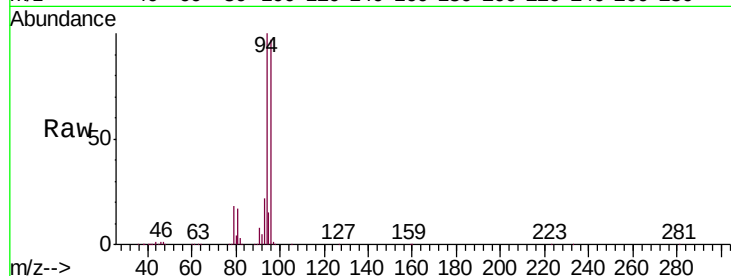
E053-1100DL

Tgt Ion: 94 Resp: 965304

Ion Ratio Lower Upper

94 100

96 97.2 74.4 111.6



#9

Propene

Concen: 0.098 ppbv

RT: 3.01 min Scan# 70

Delta R.T. 0.01 min

Lab File: VL035406.D

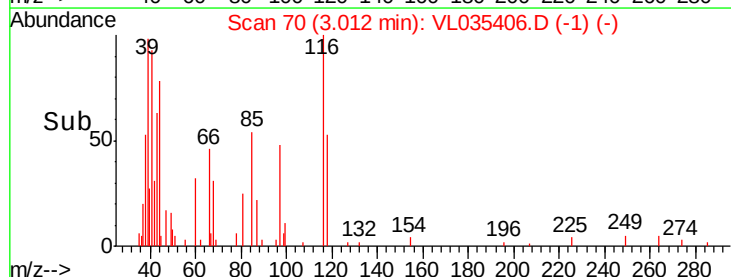
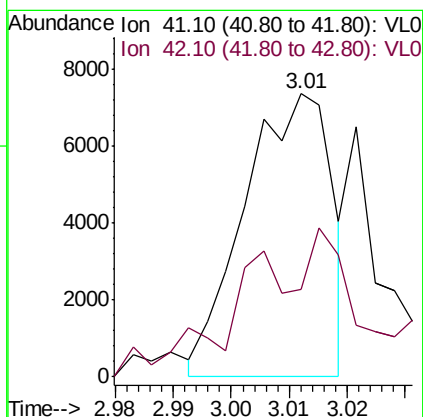
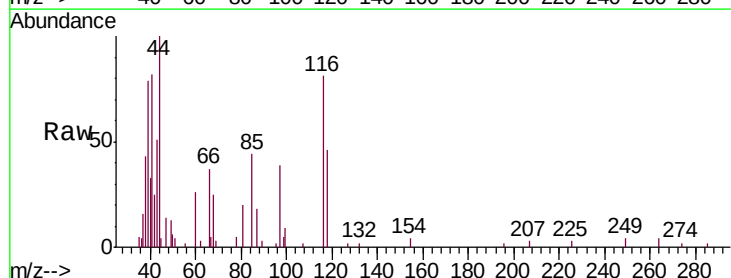
Acq: 13 Aug 2020 18:24

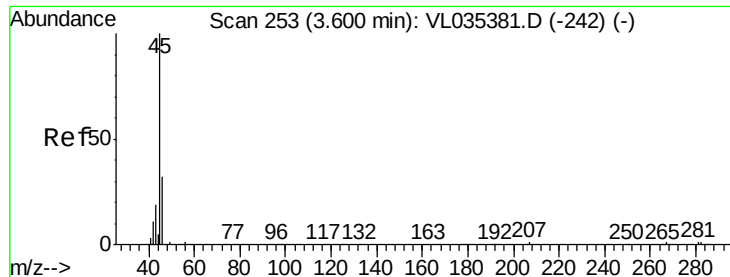
Tgt Ion: 41 Resp: 7706

Ion Ratio Lower Upper

41 100

42 76.4 55.4 83.2





#13

Ethanol

Concen: 3.088 ppbv

RT: 3.61 min Scan# 255

Delta R.T. 0.01 min

Lab File: VL035406.D

Acq: 13 Aug 2020 18:24

Instrument :

MSVOA_L

ClientSampleId :

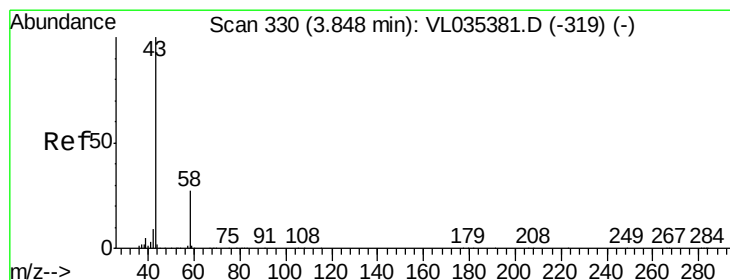
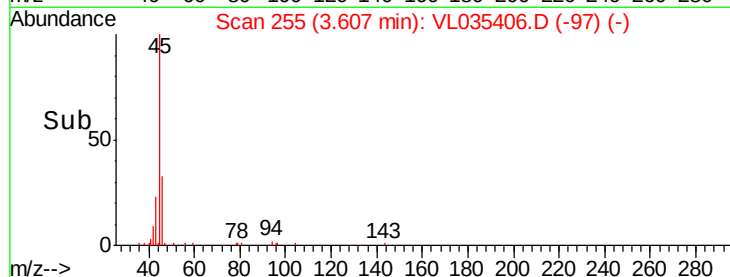
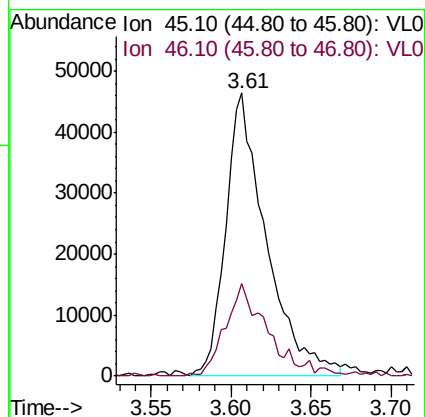
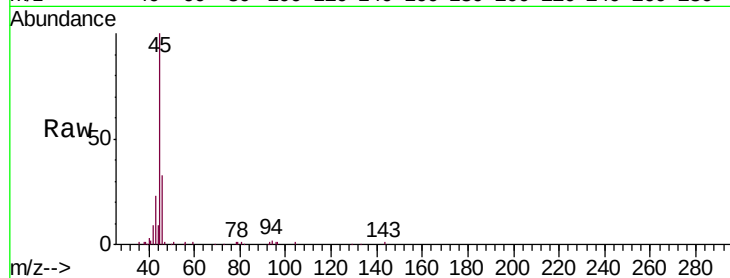
E053-1100DL

Tgt Ion: 45 Resp: 79813

Ion Ratio Lower Upper

45 100

46 35.9 14.1 56.3



#15

Acetone

Concen: 1.605 ppbv

RT: 3.86 min Scan# 333

Delta R.T. 0.01 min

Lab File: VL035406.D

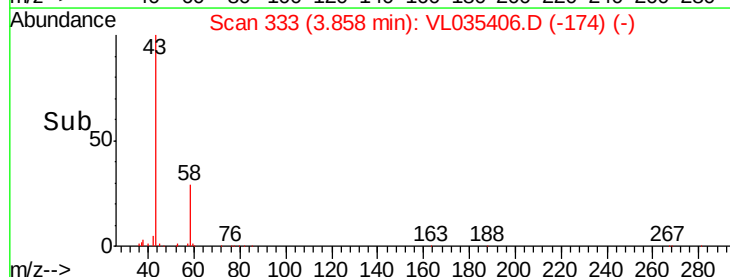
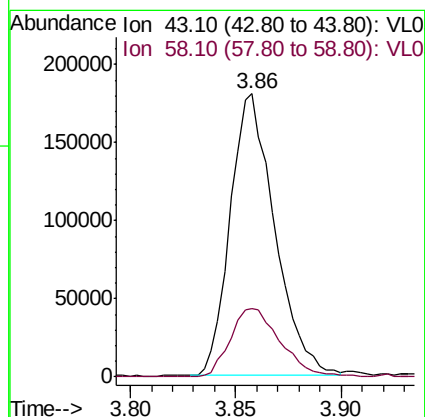
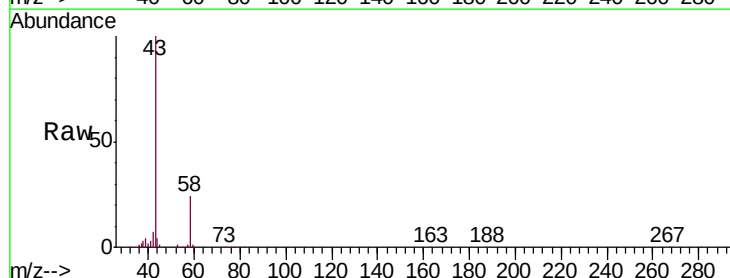
Acq: 13 Aug 2020 18:24

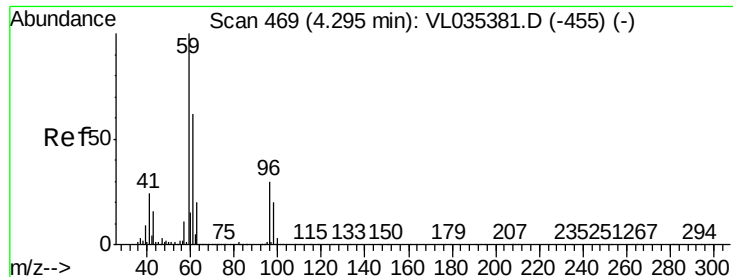
Tgt Ion: 43 Resp: 264524

Ion Ratio Lower Upper

43 100

58 27.4 21.7 32.5





#17

tert-Butyl alcohol

Concen: 0.038 ppbv

RT: 4.13 min Scan# 418

Delta R.T. -0.16 min

Lab File: VL035406.D

Acq: 13 Aug 2020 18:24

Instrument :

MSVOA_L

ClientSampleId :

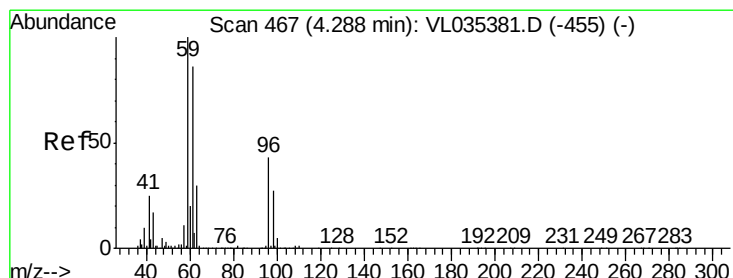
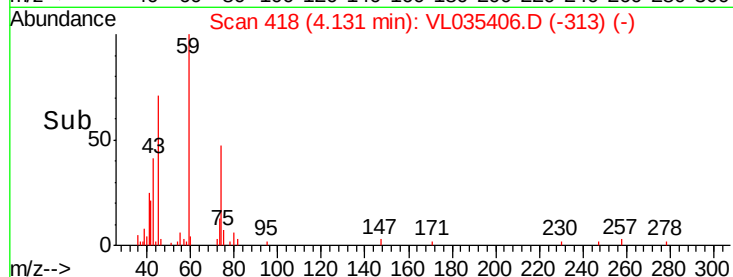
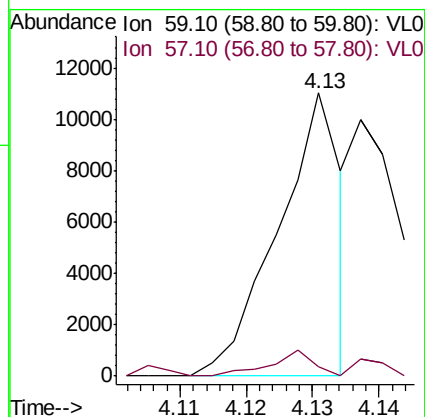
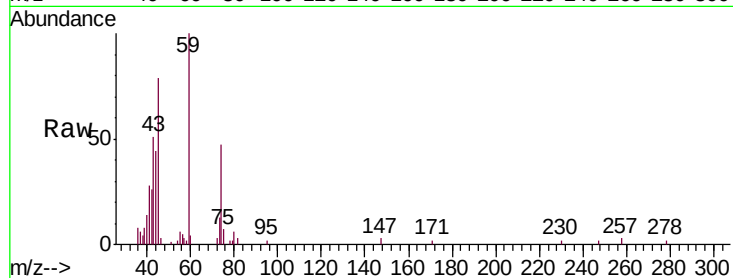
E053-1100DL

Tgt Ion: 59 Resp: 7279

Ion Ratio Lower Upper

59 100

57 11.0 8.6 13.0



#18

1,1-Dichloroethene

Concen: 15.498 ppbv

RT: 4.29 min Scan# 466

Delta R.T. -0.00 min

Lab File: VL035406.D

Acq: 13 Aug 2020 18:24

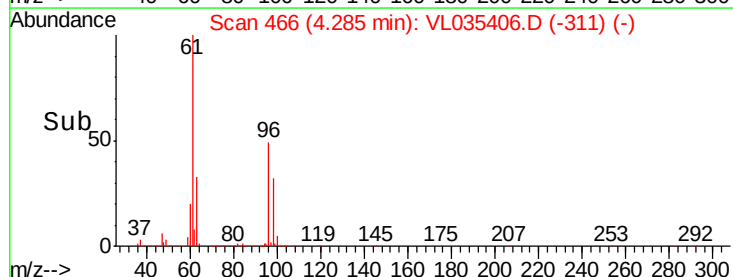
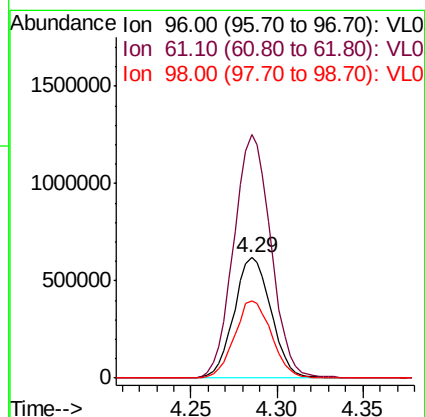
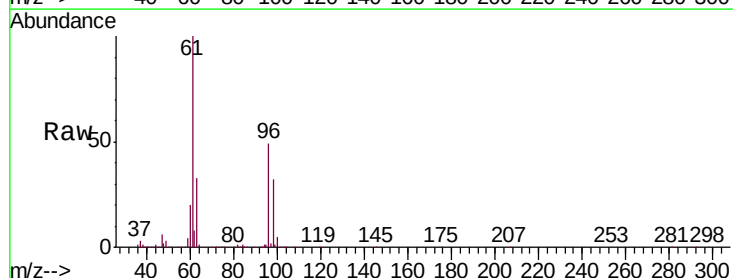
Tgt Ion: 96 Resp: 923431

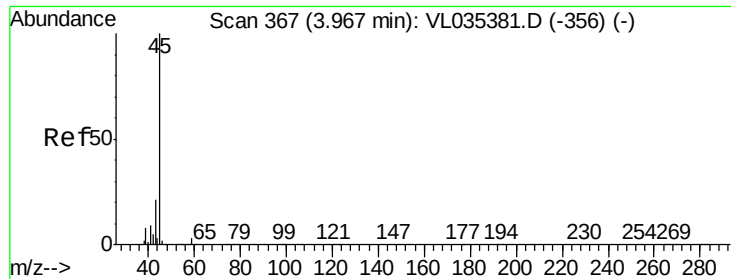
Ion Ratio Lower Upper

96 100

61 202.2 159.0 238.4

98 64.4 50.3 75.5





#19

Isopropyl Alcohol

Concen: 0.077 ppbv

RT: 3.99 min Scan# 373

Delta R.T. 0.02 min

Lab File: VL035406.D

Acq: 13 Aug 2020 18:24

Instrument :

MSVOA_L

ClientSampleId :

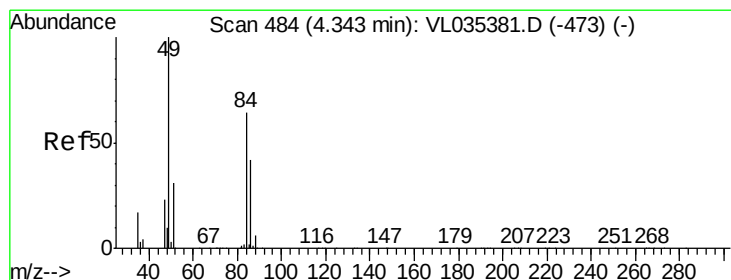
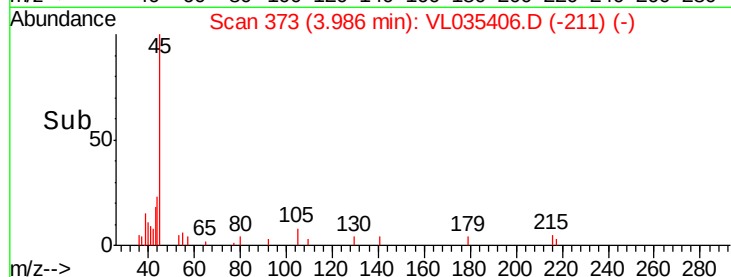
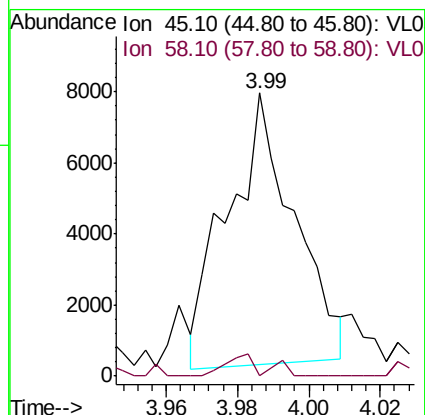
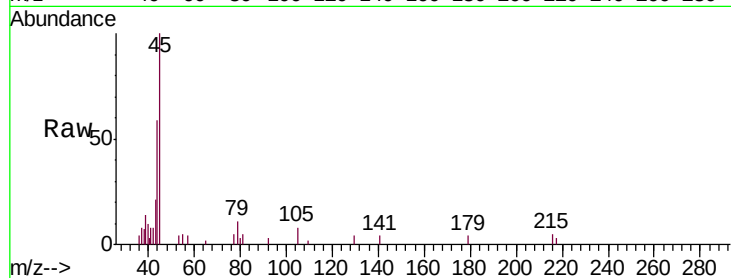
E053-1100DL

Tgt Ion: 45 Resp: 9869

Ion Ratio Lower Upper

45 100

58 0.0 24.9 37.3#



#20

Methylene Chloride

Concen: 5.270 ppbv

RT: 4.34 min Scan# 483

Delta R.T. -0.00 min

Lab File: VL035406.D

Acq: 13 Aug 2020 18:24

Tgt Ion: 84 Resp: 327956

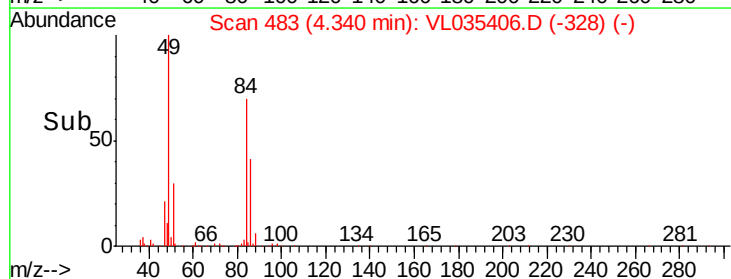
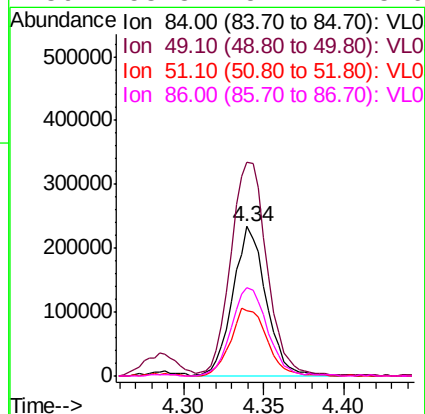
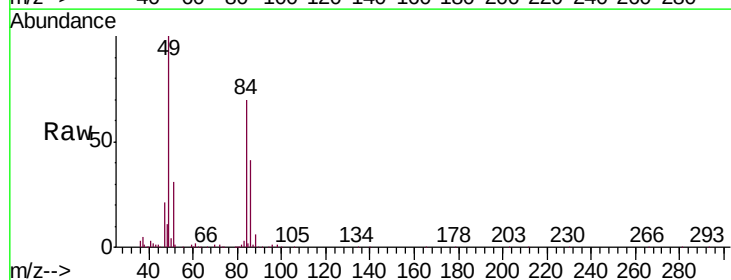
Ion Ratio Lower Upper

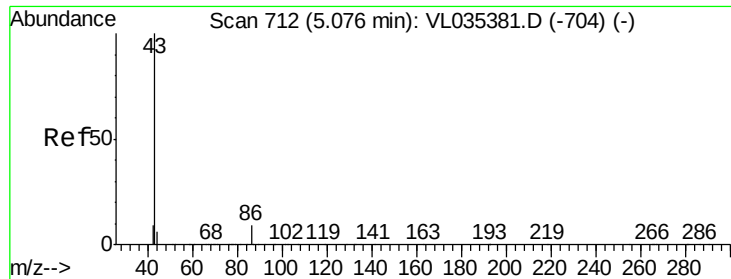
84 100

49 142.7 125.7 188.5

51 43.5 38.5 57.7

86 58.8 52.4 78.6





#23

Vinyl Acetate

Concen: 0.068 ppbv

RT: 5.07 min Scan# 710

Delta R.T. -0.01 min

Lab File: VL035406.D

Acq: 13 Aug 2020 18:24

Instrument :

MSVOA_L

ClientSampleId :

E053-1100DL

Tgt Ion: 43 Resp: 17829

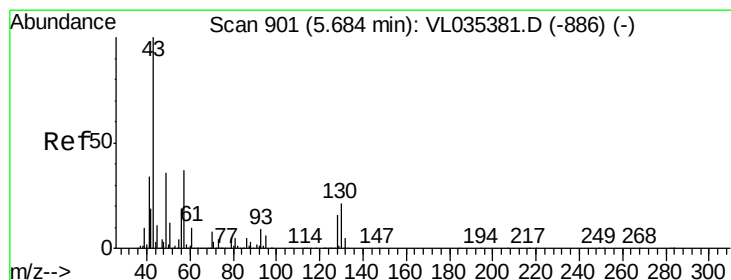
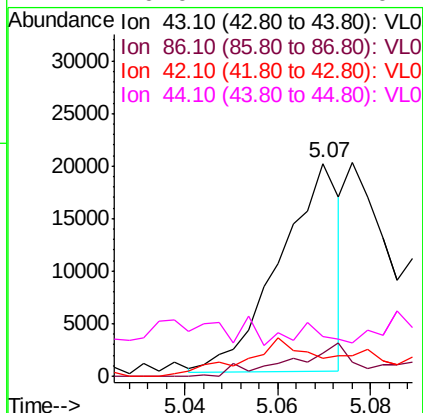
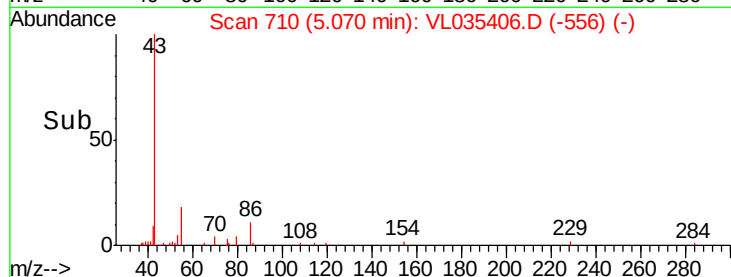
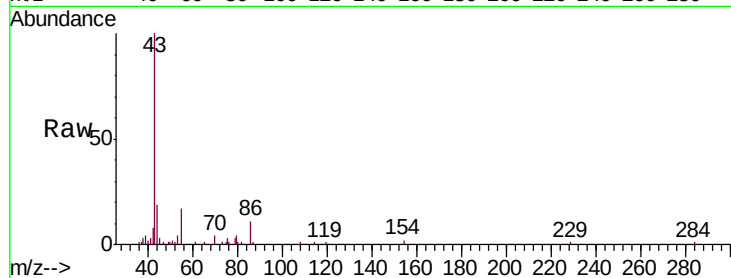
Ion Ratio Lower Upper

43 100

86 11.0 5.8 8.8#

42 6.2 8.0 12.0#

44 0.0 4.2 6.2#



#25

Ethyl Acetate

Concen: 0.379 ppbv

RT: 5.69 min Scan# 903

Delta R.T. 0.01 min

Lab File: VL035406.D

Acq: 13 Aug 2020 18:24

Tgt Ion: 43 Resp: 128860

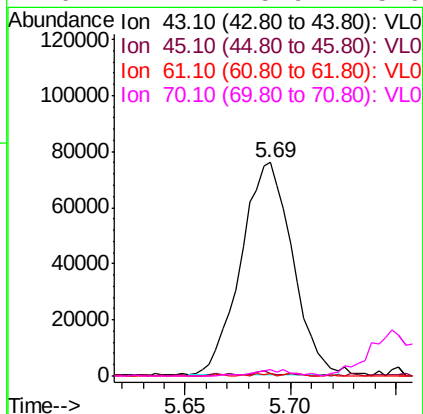
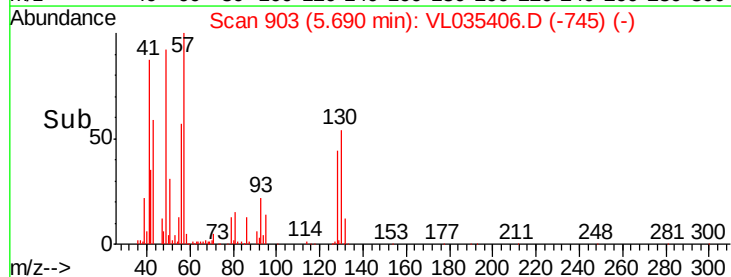
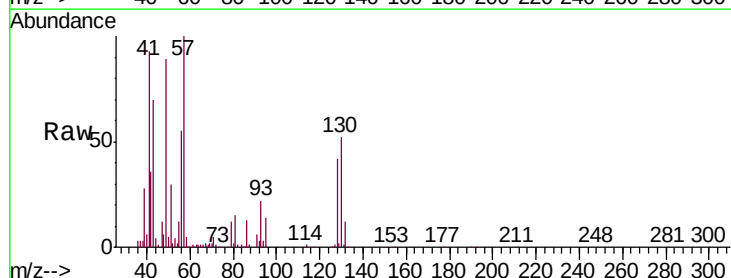
Ion Ratio Lower Upper

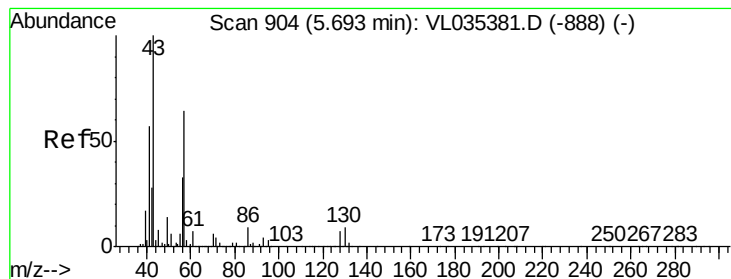
43 100

45 1.8 8.0 12.0#

61 1.1 7.4 11.2#

70 2.2 5.9 8.9#





#26

Hexane

Concen: 1.206 ppbv

RT: 5.69 min Scan# 902

Delta R.T. -0.01 min

Lab File: VL035406.D

Acq: 13 Aug 2020 18:24

Instrument :

MSVOA_L

ClientSampleId :

E053-1100DL

Tgt Ion: 57 Resp: 179469

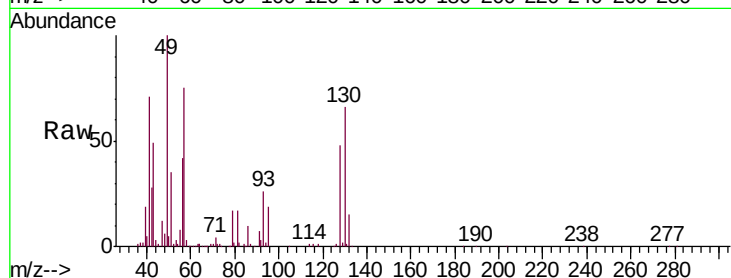
Ion Ratio Lower Upper

57 100

41 96.3 75.4 113.2

43 73.4 184.1 276.1#

56 54.6 42.2 63.4

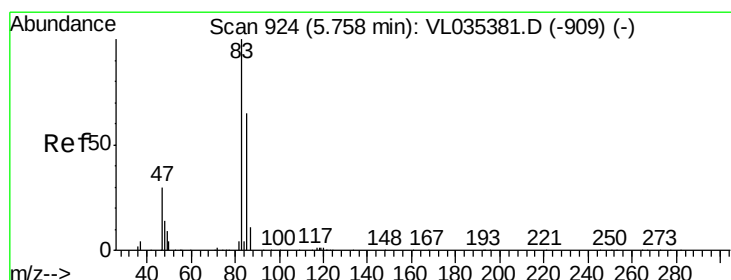
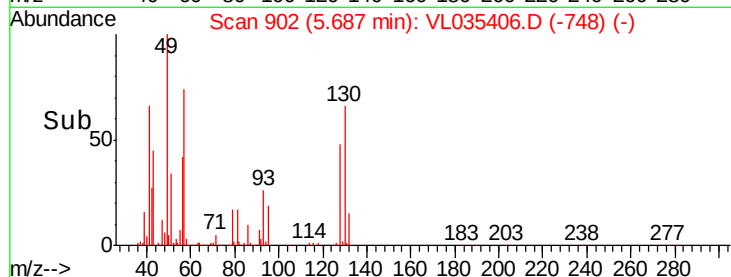
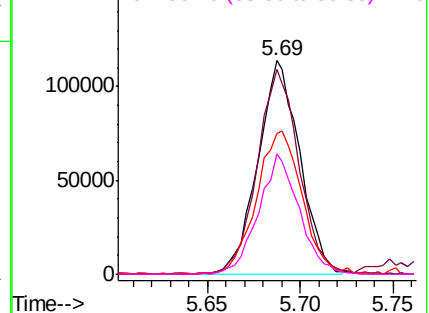


Abundance Ion 57.10 (56.80 to 57.80): VL0

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



#29

Chloroform

Concen: 12.042 ppbv

RT: 5.75 min Scan# 922

Delta R.T. -0.01 min

Lab File: VL035406.D

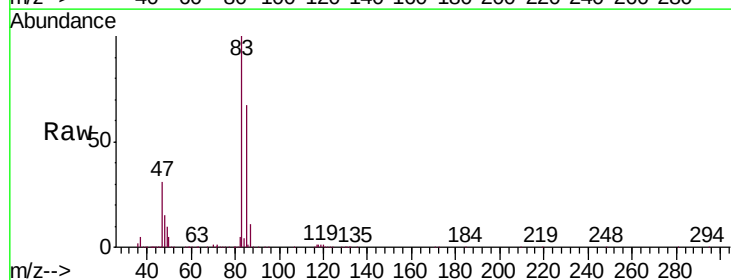
Acq: 13 Aug 2020 18:24

Tgt Ion: 83 Resp: 2558205

Ion Ratio Lower Upper

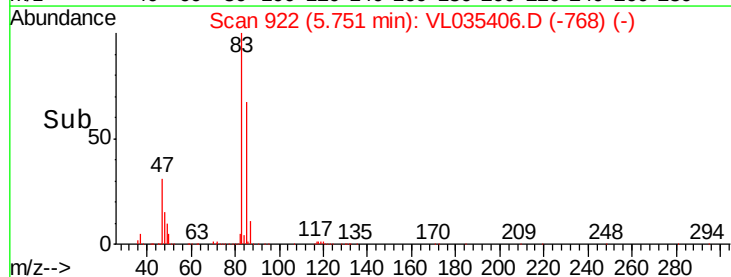
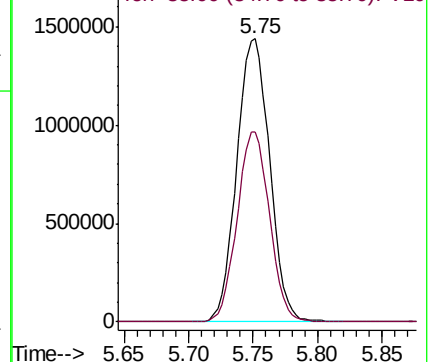
83 100

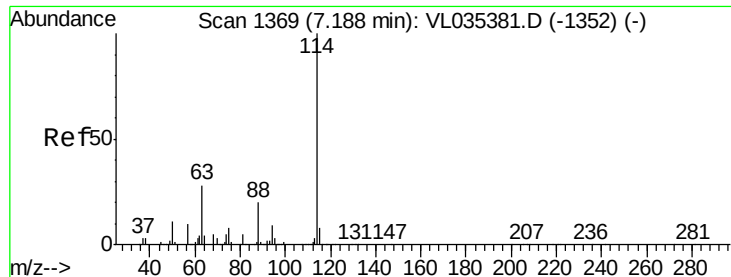
85 66.9 51.7 77.5



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

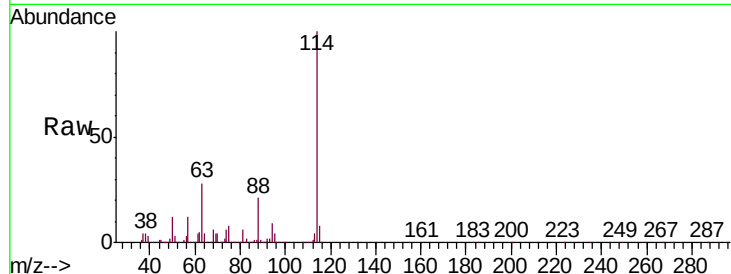




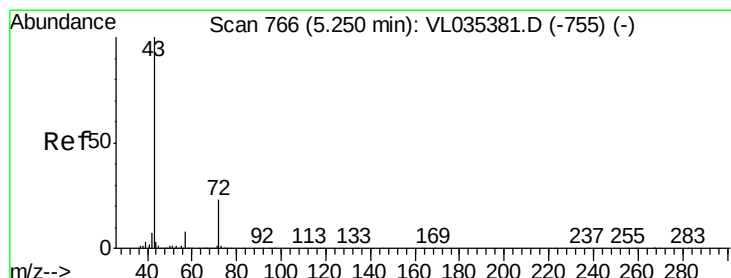
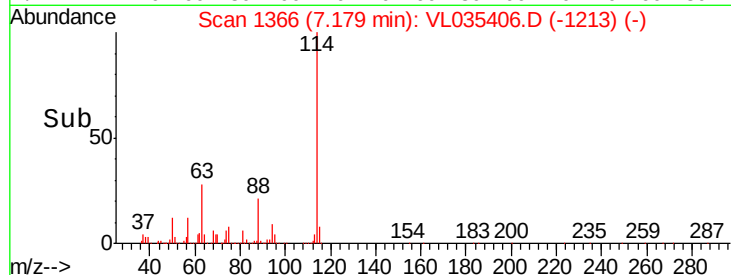
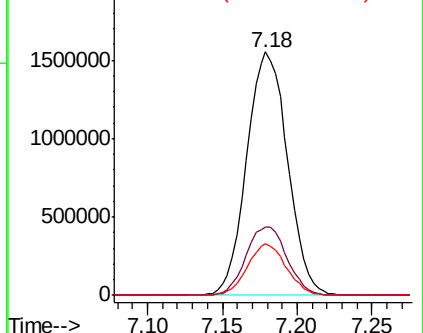
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.18 min Scan# 1366
 Delta R.T. -0.01 min
 Lab File: VL035406.D
 Acq: 13 Aug 2020 18:24

Instrument :
 MSVOA_L
 ClientSampleId :
 E053-1100DL

Tgt Ion:114 Resp: 2946924
 Ion Ratio Lower Upper
 114 100
 63 28.5 21.5 32.3
 88 20.3 15.6 23.4

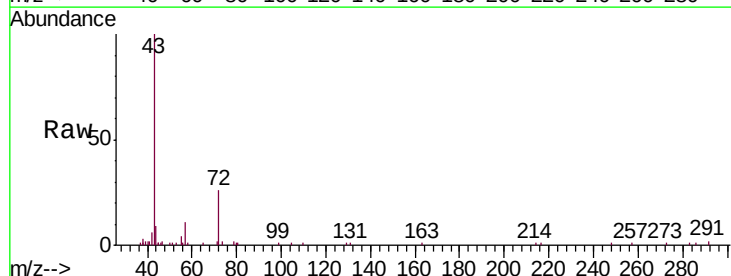


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

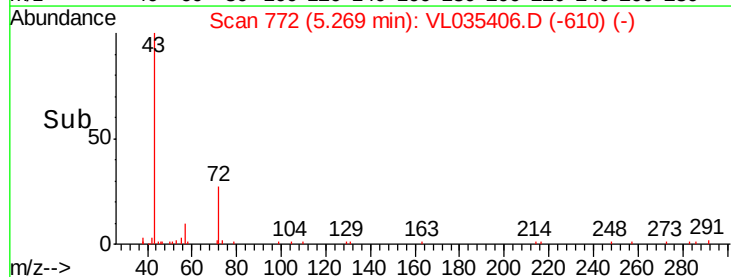
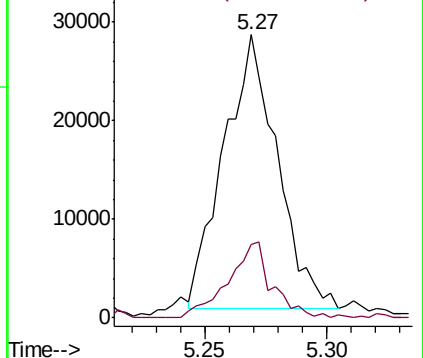


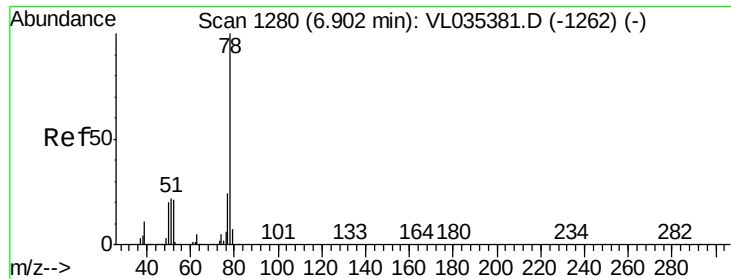
#34
 2-Butanone
 Concen: 0.201 ppbv
 RT: 5.27 min Scan# 772
 Delta R.T. 0.02 min
 Lab File: VL035406.D
 Acq: 13 Aug 2020 18:24

Tgt Ion: 43 Resp: 42282
 Ion Ratio Lower Upper
 43 100
 72 22.7 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: 0.033 ppbv

RT: 6.90 min Scan# 1278

Delta R.T. -0.01 min

Lab File: VL035406.D

Acq: 13 Aug 2020 18:24

Instrument :

MSVOA_L

ClientSampleId :

E053-1100DL

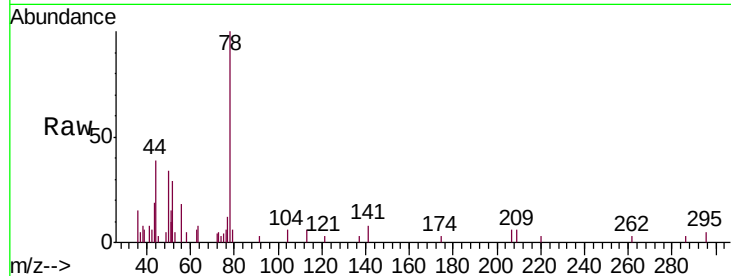
Tgt Ion: 78 Resp: 9418

Ion Ratio Lower Upper

78 100

77 9.4 19.1 28.7#

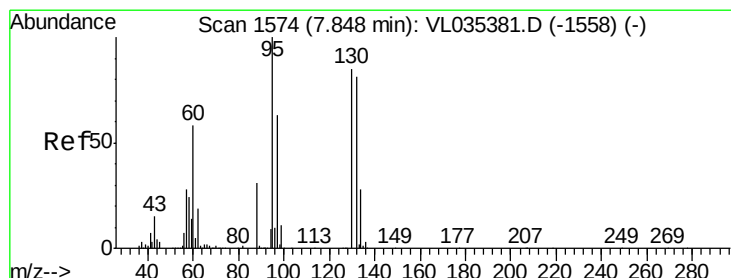
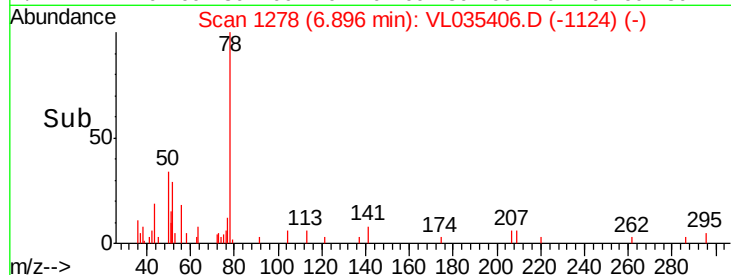
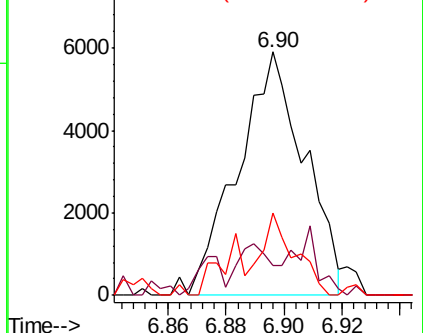
50 33.8 15.8 23.6#



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: 16.343 ppbv

RT: 7.84 min Scan# 1572

Delta R.T. -0.01 min

Lab File: VL035406.D

Acq: 13 Aug 2020 18:24

Tgt Ion: 130 Resp: 1809850

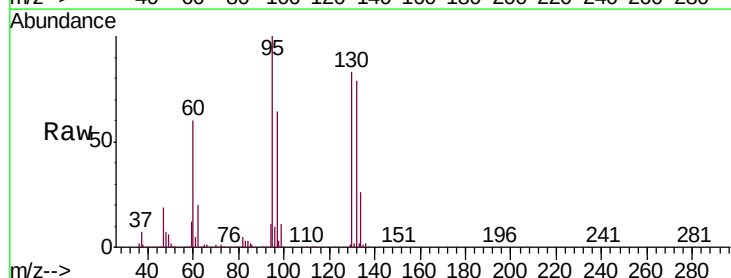
Ion Ratio Lower Upper

130 100

95 120.3 94.2 141.4

132 95.0 76.6 114.8

97 77.2 59.3 88.9

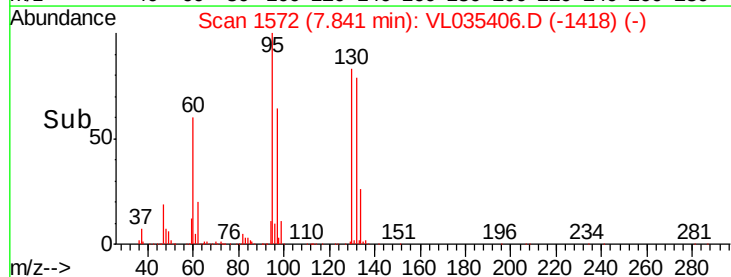
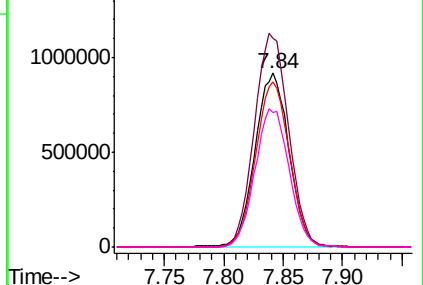


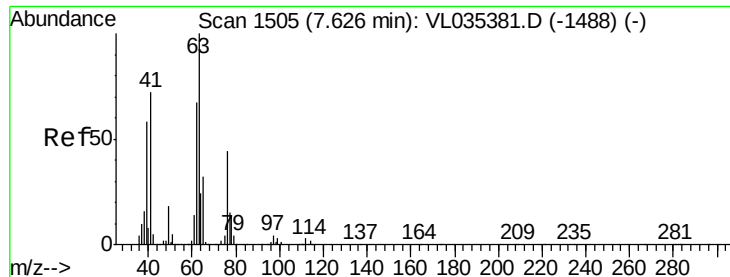
Abundance Ion 130.00 (129.70 to 130.70): V

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: 7.490 ppbv

RT: 7.18 min Scan# 1367

Delta R.T. -0.44 min

Lab File: VL035406.D

Acq: 13 Aug 2020 18:24

Instrument :

MSVOA_L

ClientSampleId :

E053-1100DL

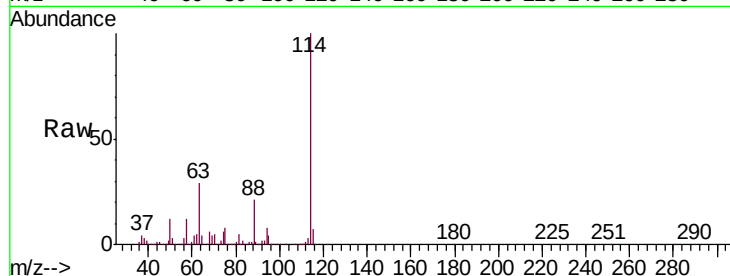
Tgt Ion: 63 Resp: 838109

Ion Ratio Lower Upper

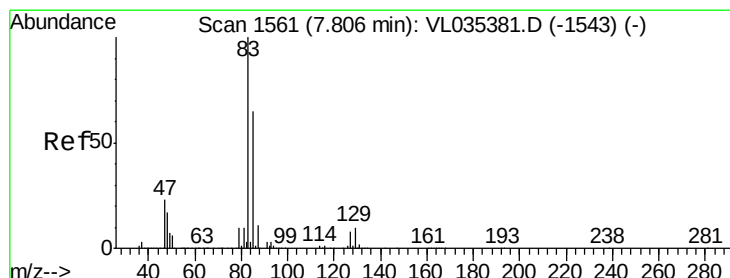
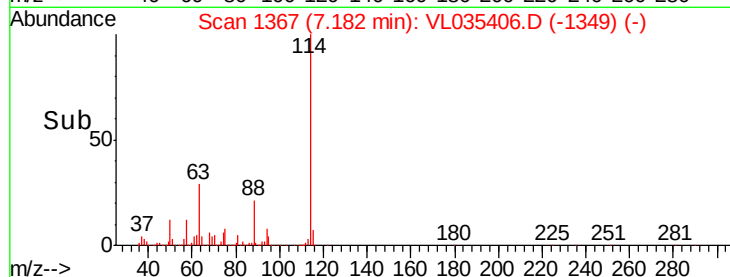
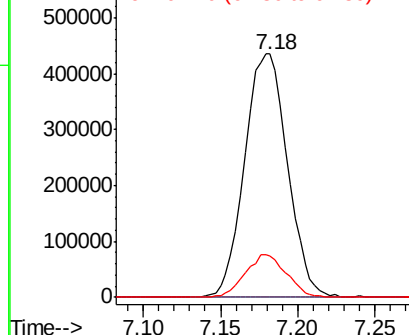
63 100

41 0.0 57.4 86.2#

62 17.0 53.6 80.4#



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



#42

Bromodichloromethane

Concen: 20.512 ppbv

RT: 7.80 min Scan# 1558

Delta R.T. -0.01 min

Lab File: VL035406.D

Acq: 13 Aug 2020 18:24

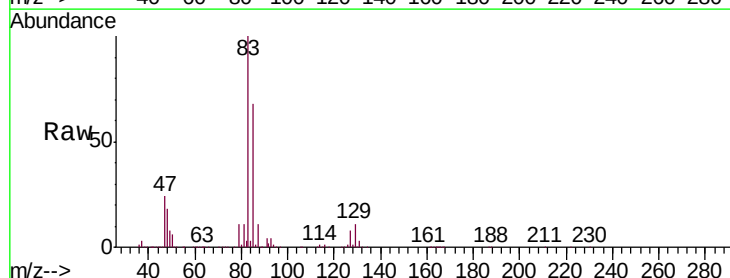
Tgt Ion: 83 Resp: 4532326

Ion Ratio Lower Upper

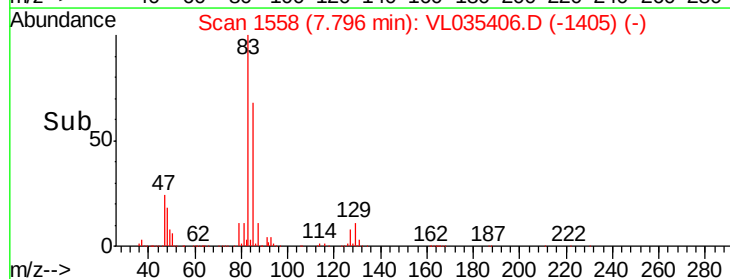
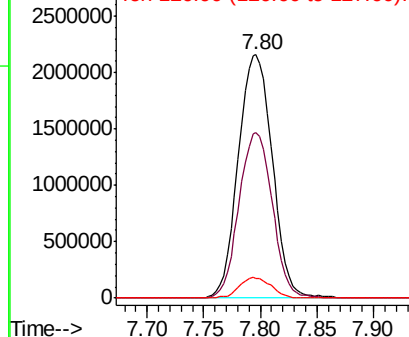
83 100

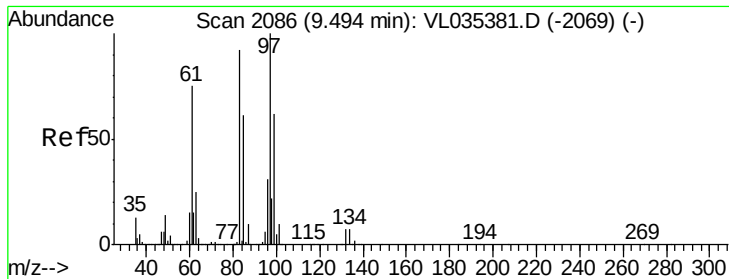
85 67.9 52.2 78.4

127 8.1 6.3 9.5



Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0
Ion 126.90 (126.60 to 127.60): V





#47

1,1,2-Trichloroethane

Concen: 14.422 ppbv

RT: 9.48 min Scan# 2082

Delta R.T. -0.01 min

Lab File: VL035406.D

Acq: 13 Aug 2020 18:24

Instrument :

MSVOA_L

ClientSampleId :

E053-1100DL

Tgt Ion: 97 Resp: 1636799

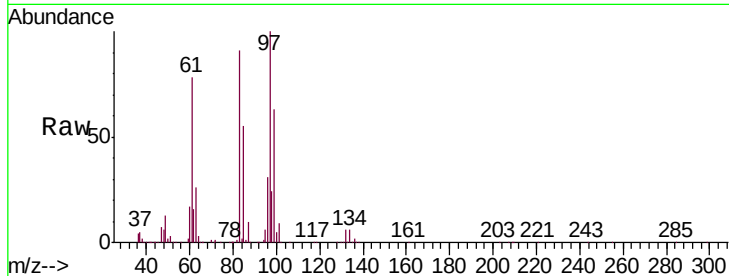
Ion Ratio Lower Upper

97 100

83 90.8 73.9 110.9

85 55.5 49.0 73.6

99 62.6 49.9 74.9

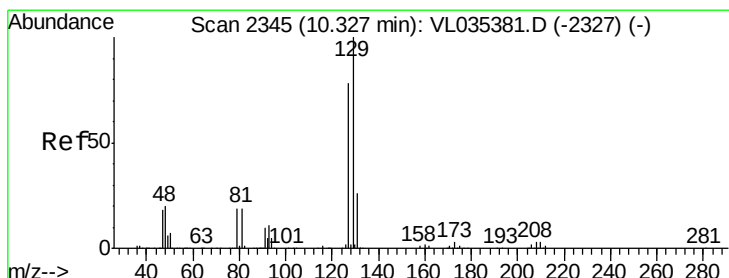
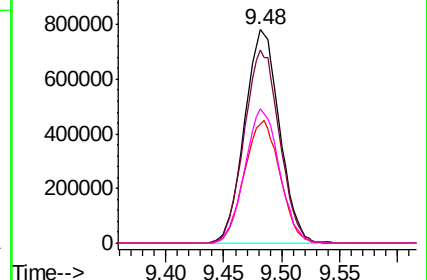
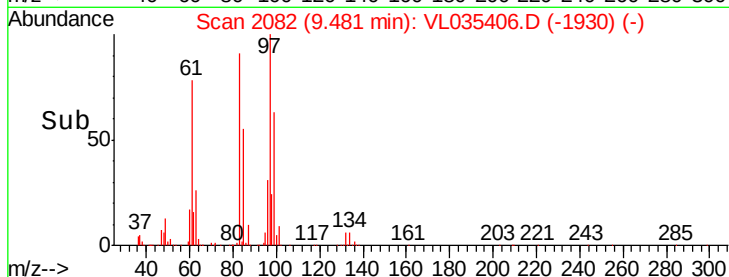


Abundance Ion 97.00 (96.70 to 97.70): VL0

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: 14.245 ppbv

RT: 10.31 min Scan# 2340

Delta R.T. -0.02 min

Lab File: VL035406.D

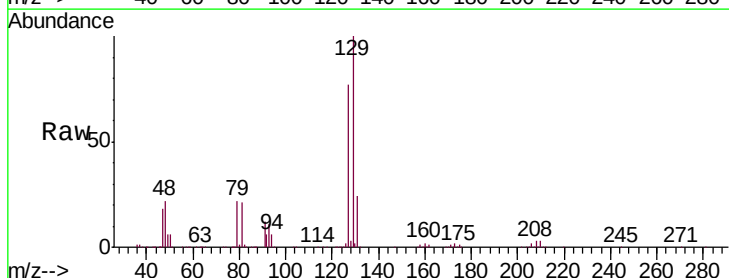
Acq: 13 Aug 2020 18:24

Tgt Ion: 129 Resp: 2584144

Ion Ratio Lower Upper

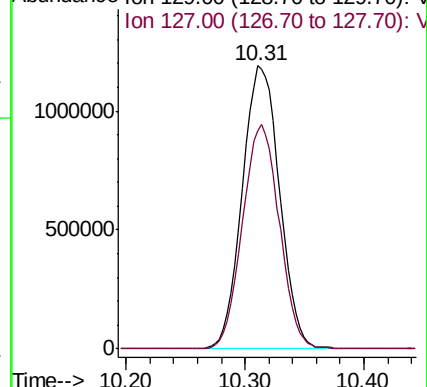
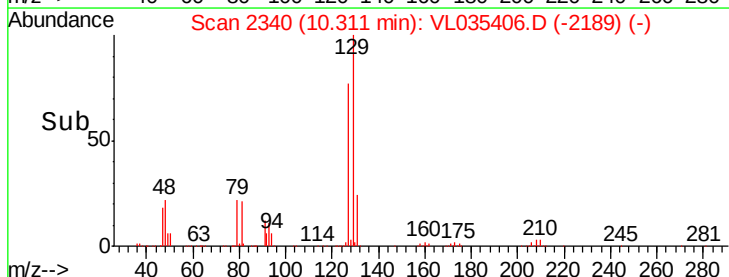
129 100

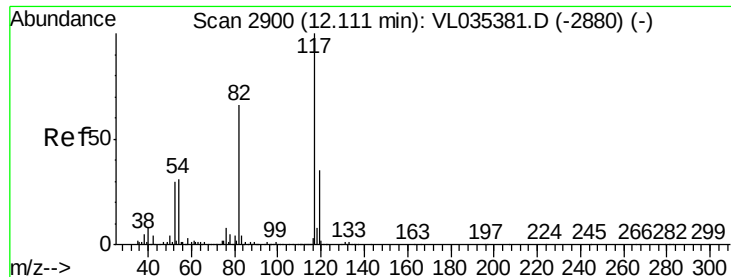
127 78.5 39.3 117.8



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.10 min Scan# 2895

Delta R.T. -0.02 min

Lab File: VL035406.D

Acq: 13 Aug 2020 18:24

Instrument :

MSVOA_L

ClientSampleId :

E053-1100DL

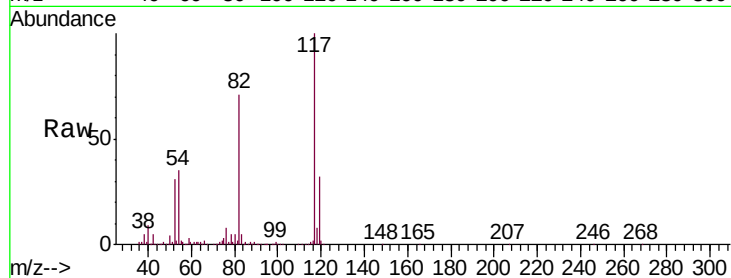
Tgt Ion:117 Resp: 3106341

Ion Ratio Lower Upper

117 100

82 71.8 53.0 79.6

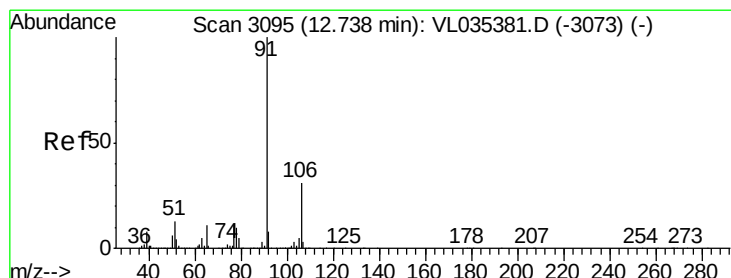
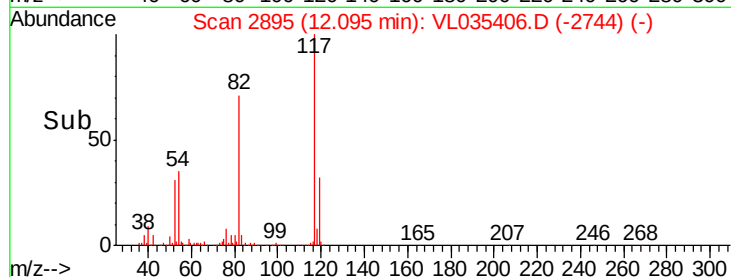
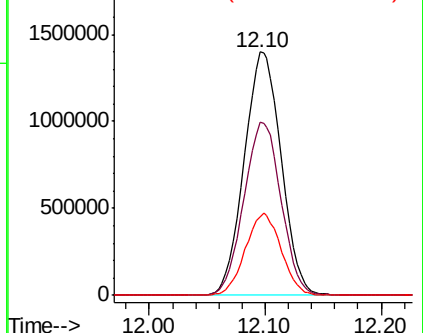
119 32.9 25.7 38.5



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



#58

Ethyl Benzene

Concen: 9.826 ppbv

RT: 12.73 min Scan# 3091

Delta R.T. -0.01 min

Lab File: VL035406.D

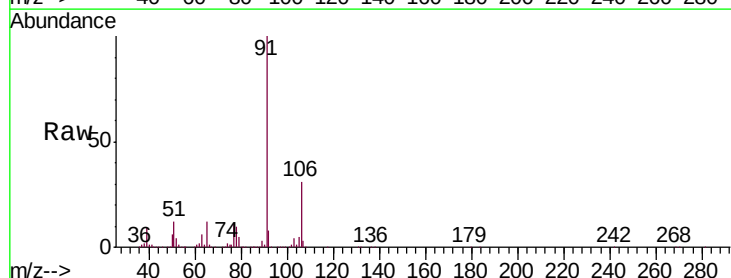
Acq: 13 Aug 2020 18:24

Tgt Ion: 91 Resp: 4824472

Ion Ratio Lower Upper

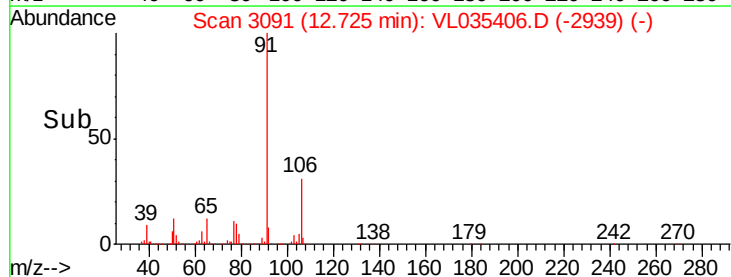
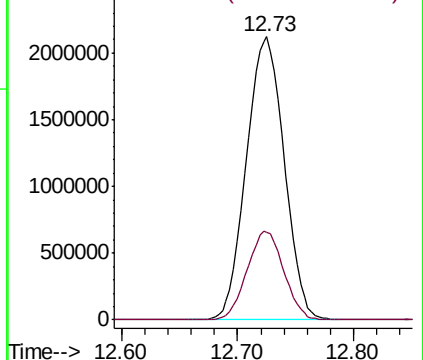
91 100

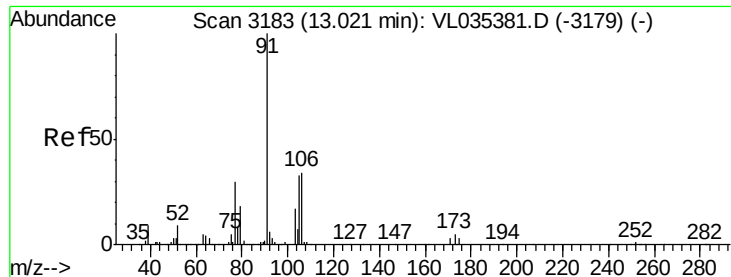
106 30.9 25.1 37.7



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

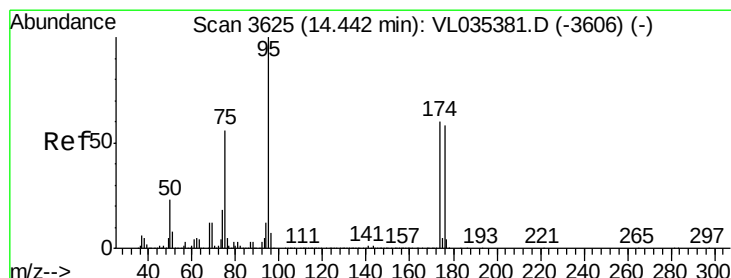
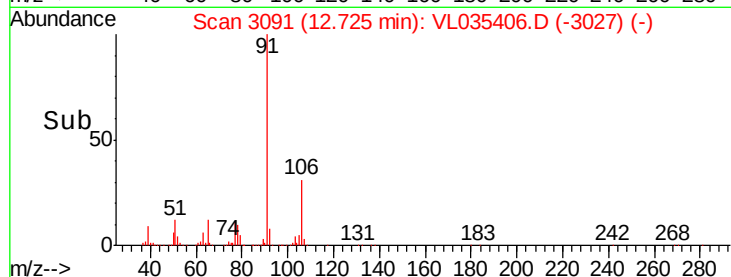
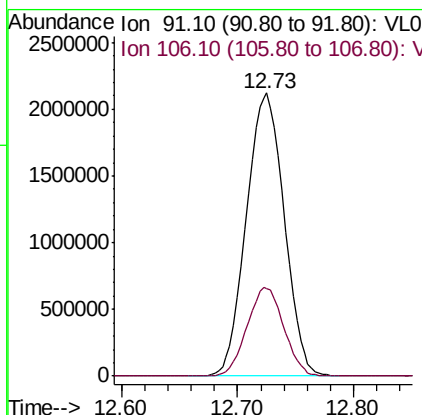
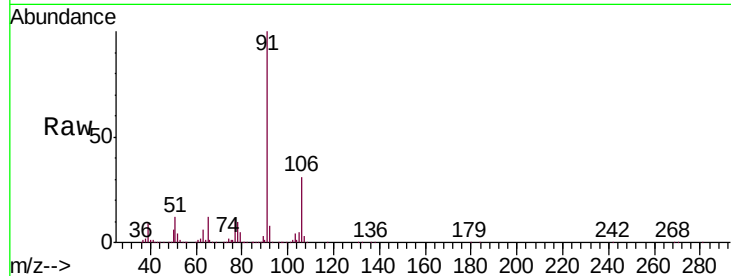




#59
m/p-Xylene
Concen: 11.784 ppbv
RT: 12.73 min Scan# 3091
Delta R.T. -0.30 min
Lab File: VL035406.D
Acq: 13 Aug 2020 18:24

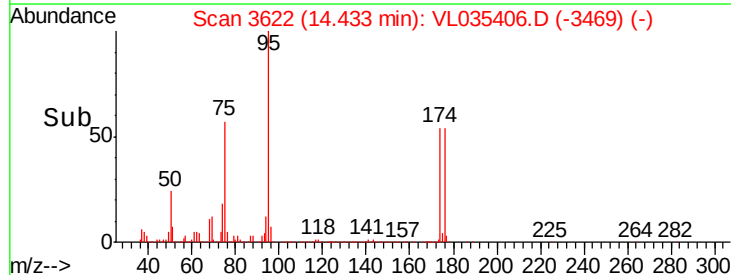
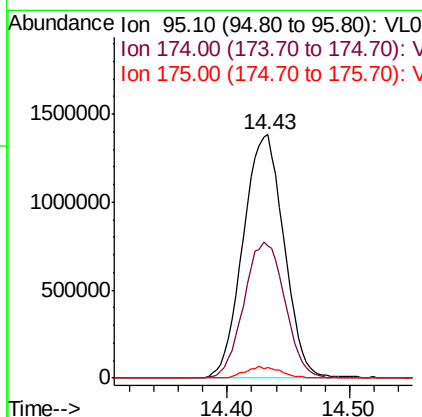
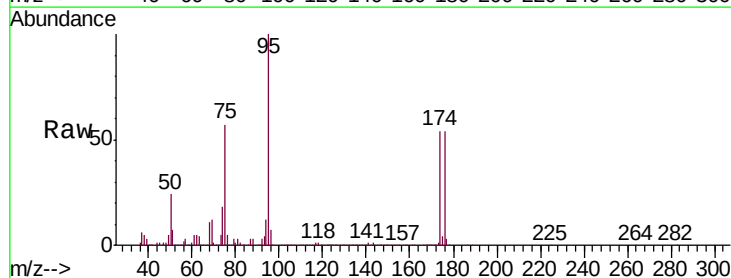
Instrument :
MSVOA_L
ClientSampleId :
E053-1100DL

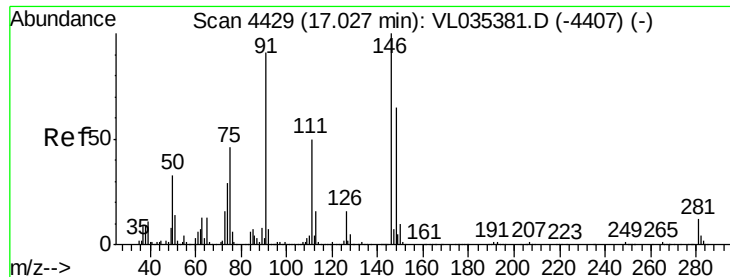
Tgt Ion: 91 Resp: 4824472
Ion Ratio Lower Upper
91 100
106 30.4 36.7 55.1#



#68
1-Bromo-4-Fluorobenzene
Concen: 12.759 ppbv
RT: 14.43 min Scan# 3622
Delta R.T. -0.01 min
Lab File: VL035406.D
Acq: 13 Aug 2020 18:24

Tgt Ion: 95 Resp: 3200174
Ion Ratio Lower Upper
95 100
174 56.4 48.2 72.2
175 4.2 3.7 5.5

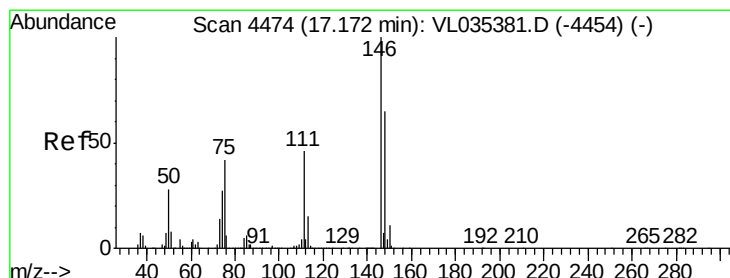
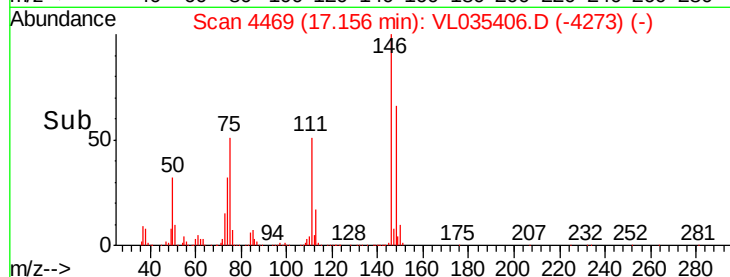
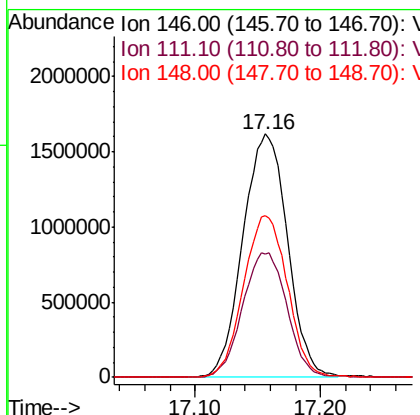
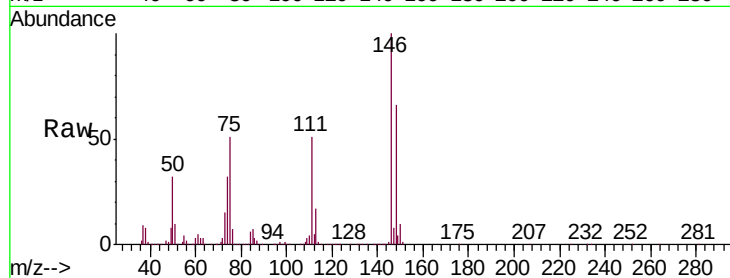




#75
 1,3-Dichlorobenzene
 Concen: 15.297 ppbv
 RT: 17.16 min Scan# 4469
 Delta R.T. 0.13 min
 Lab File: VL035406.D
 Acq: 13 Aug 2020 18:24

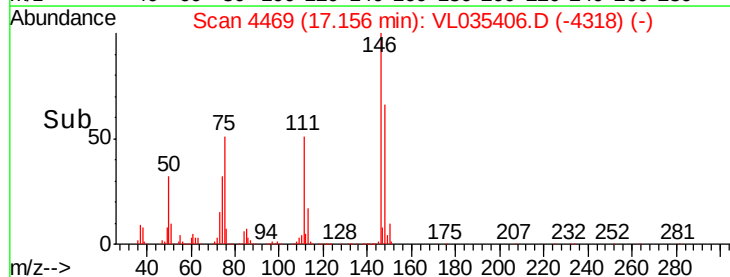
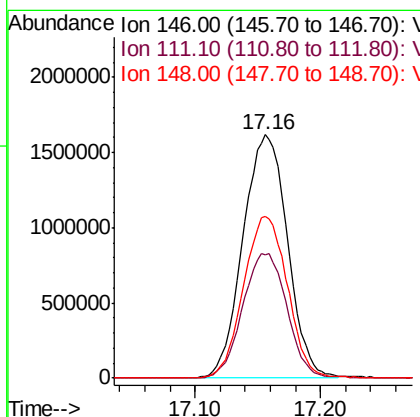
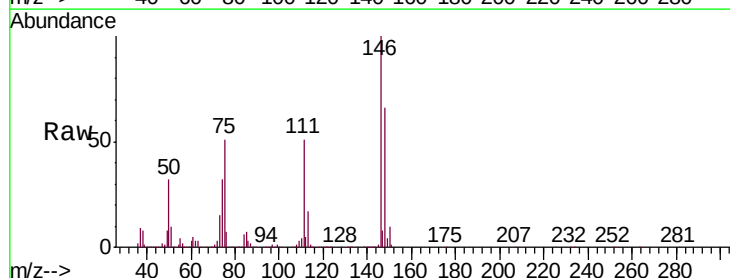
Instrument :
 MSVOA_L
 ClientSampleId :
 E053-1100DL

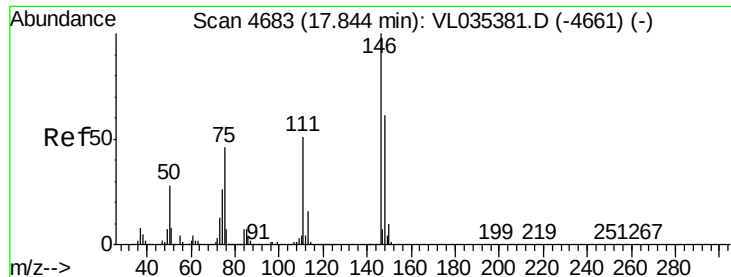
Tgt Ion:146 Resp: 3983624
 Ion Ratio Lower Upper
 146 100
 111 51.2 25.0 75.0
 148 65.8 32.6 97.7



#76
 1,4-Dichlorobenzene
 Concen: 14.892 ppbv
 RT: 17.16 min Scan# 4469
 Delta R.T. -0.02 min
 Lab File: VL035406.D
 Acq: 13 Aug 2020 18:24

Tgt Ion:146 Resp: 3983624
 Ion Ratio Lower Upper
 146 100
 111 51.2 24.0 72.0
 148 65.8 32.5 97.5

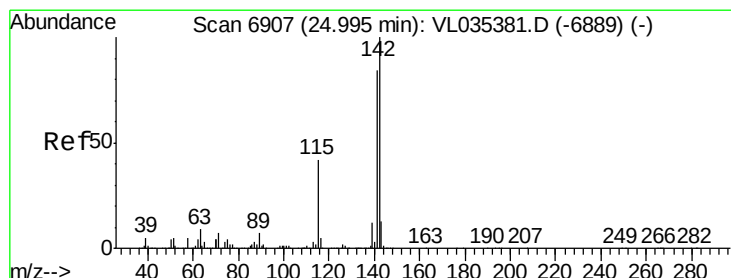
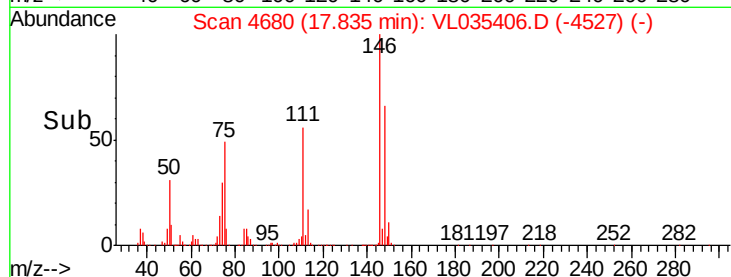
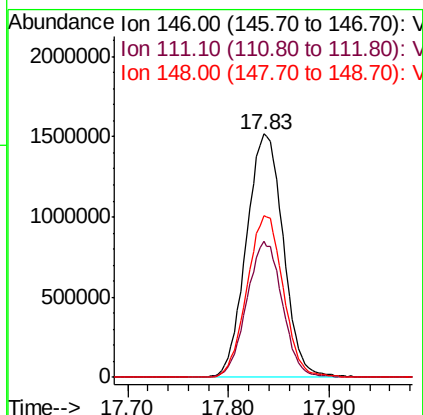
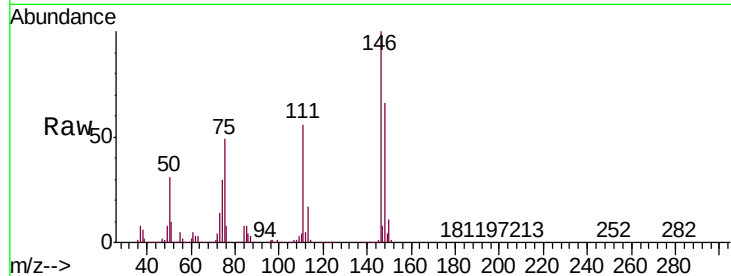




#77
 1,2-Dichlorobenzene
 Concen: 14.647 ppbv
 RT: 17.83 min Scan# 4680
 Delta R.T. -0.01 min
 Lab File: VL035406.D
 Acq: 13 Aug 2020 18:24

Instrument :
 MSVOA_L
 ClientSampleId :
 E053-1100DL

Tgt Ion:146 Resp: 3845622
 Ion Ratio Lower Upper
 146 100
 111 53.9 25.9 77.8
 148 65.2 32.1 96.3



#80
 Naphthalene, 2-methyl-
 Concen: 0.113 ppbv
 RT: 25.00 min Scan# 6907
 Delta R.T. 0.00 min
 Lab File: VL035406.D
 Acq: 13 Aug 2020 18:24

Tgt Ion:142 Resp: 31331
 Ion Ratio Lower Upper
 142 100
 141 83.7 67.7 101.5
 115 49.5 34.0 51.0

