

Data File : VL032391.D
Acq On : 17 Aug 2018 00:24
Operator : SY/AP
Sample : J4457-09DL 10X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SG04-MIVIDL

Quant Time: Aug 17 03:21:24 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL081518AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Aug 15 14:58:02 2018
QLast Update : Wed Aug 15 14:58:02 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.81	49	1840345	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.35	114	3590353	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.30	117	3390461	10.00	ppbv	0.00

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.64 95 2653196 10.26 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 102.60%

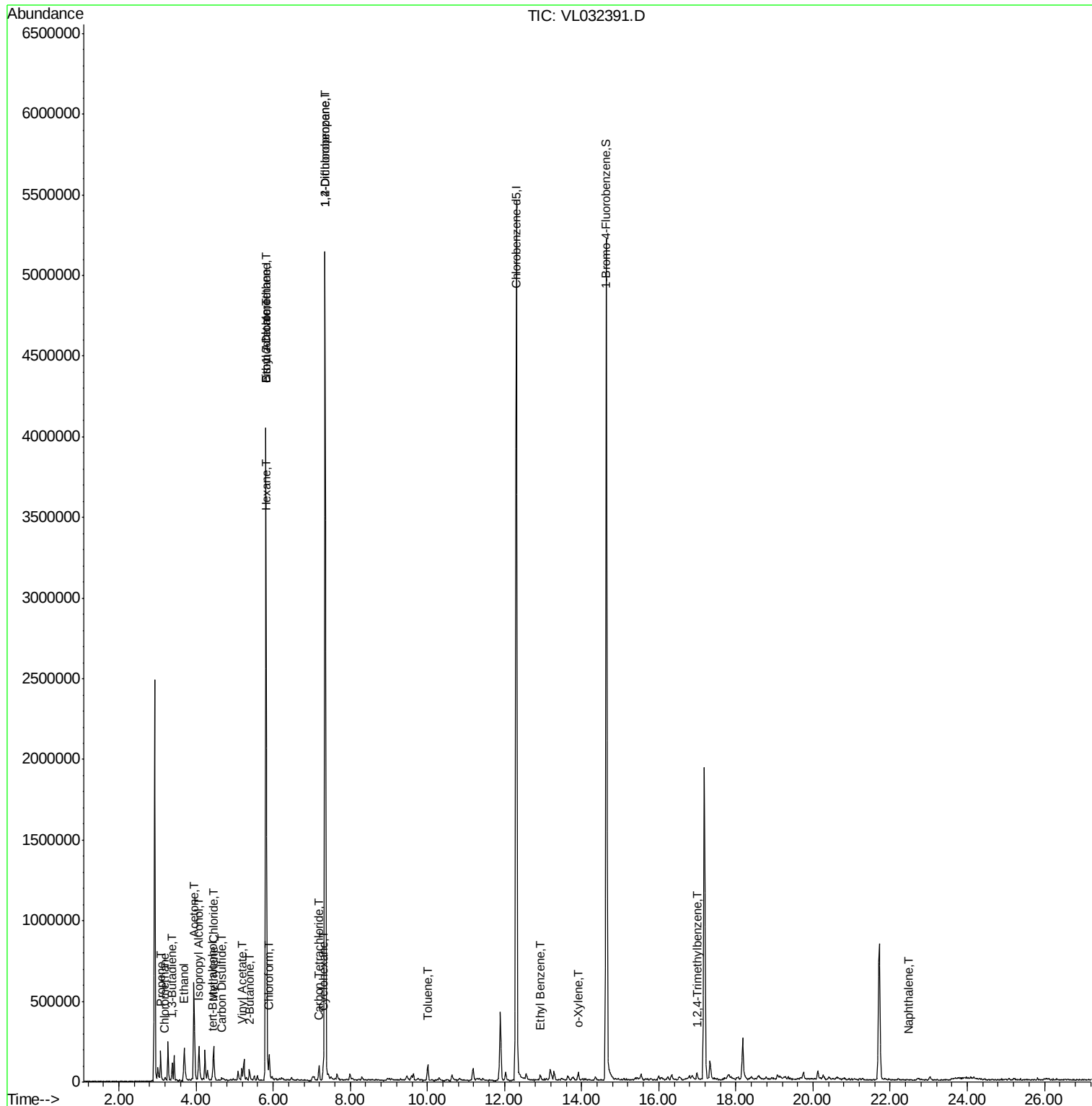
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.11	85	8509	Below Cal		98
4) Chloromethane	3.21	50	9991	0.098	ppbv	97
9) Propene	3.08	41	37425	0.513	ppbv #	81
13) Ethanol	3.69	45	239549	12.783	ppbv	98
15) Acetone	3.95	43	633769	3.625	ppbv	95
16) 1,3-Butadiene	3.38	39	26767	0.371	ppbv #	4
17) tert-Butyl alcohol	4.42	59	8322	0.284	ppbv #	62
19) Isopropyl Alcohol	4.07	45	225175	1.912	ppbv #	91
20) Methylene Chloride	4.46	84	69050	1.046	ppbv	95
23) Vinyl Acetate	5.20	43	30769	0.102	ppbv #	45
25) Ethyl Acetate	5.82	43	691792	1.846	ppbv #	91
26) Hexane	5.83	57	43198	0.259	ppbv #	1
27) Carbon Disulfide	4.67	76	9114	0.058	ppbv #	63
29) Chloroform	5.90	83	88500	0.361	ppbv	98
30) Cyclohexane	7.30	84	11609	0.091	ppbv #	1
31) cis-1,2-Dichloroethene	5.82	61	82583	0.505	ppbv #	29
34) 2-Butanone	5.39	43	74198	0.304	ppbv	100
35) Carbon Tetrachloride	7.19	117	53624	0.253	ppbv #	90
39) 1,2-Dichloropropane	7.35	63	1010990	7.951	ppbv #	25
53) Toluene	10.01	91	67442	0.202	ppbv	99
58) Ethyl Benzene	12.93	91	19795	0.049	ppbv	98
60) o-Xylene	13.91	91	32190	0.095	ppbv	98
74) 1,2,4-Trimethylbenzene	16.99	105	11939	0.031	ppbv #	67
79) Naphthalene	22.48	128	1092	0.330	ppbv #	74

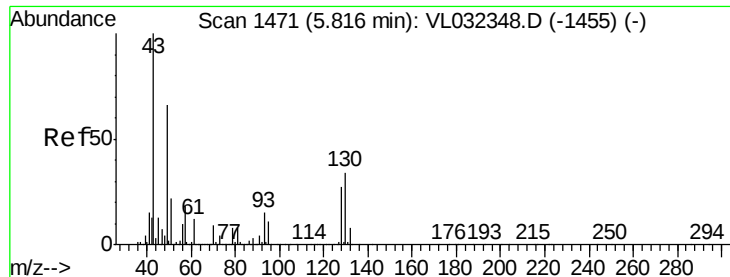
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.81 min Scan# 1470

Delta R.T. -0.00 min

Lab File: VL032391.D

Acq: 17 Aug 2018 00:24

Instrument :

MSVOA_L

ClientSampleId :

SG04-MIVIDL

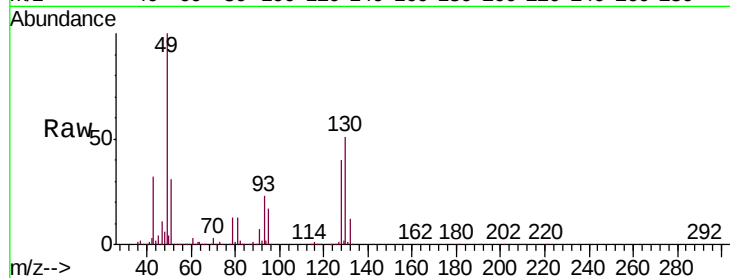
Tgt Ion: 49 Resp: 1840345

Ion Ratio Lower Upper

49 100

128 40.0 20.5 61.6

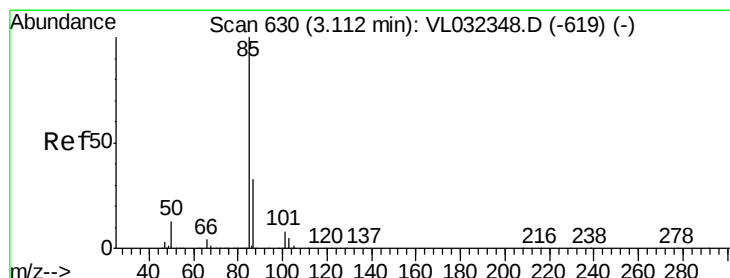
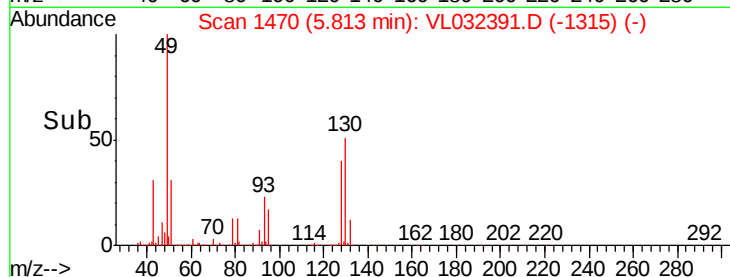
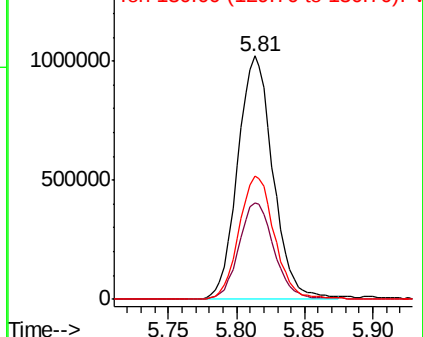
130 51.5 26.2 78.5



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: Below Cal

RT: 3.11 min Scan# 629

Delta R.T. -0.00 min

Lab File: VL032391.D

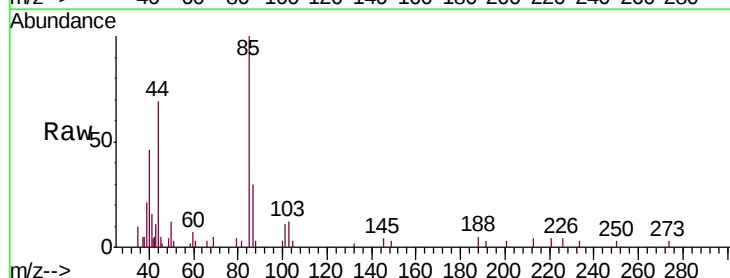
Acq: 17 Aug 2018 00:24

Tgt Ion: 85 Resp: 8509

Ion Ratio Lower Upper

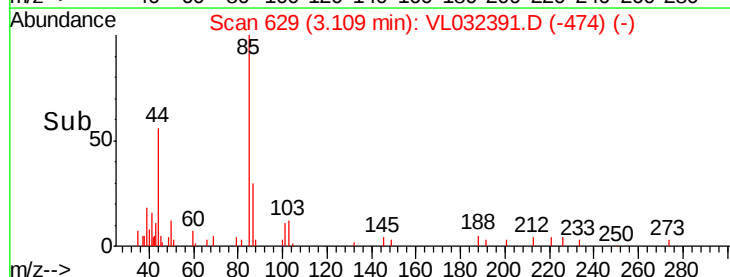
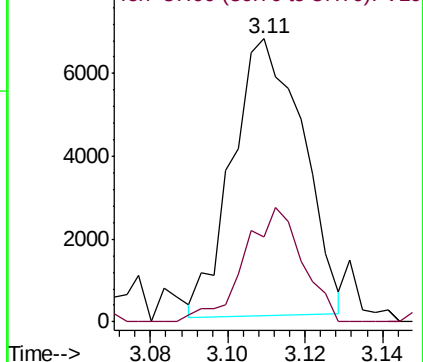
85 100

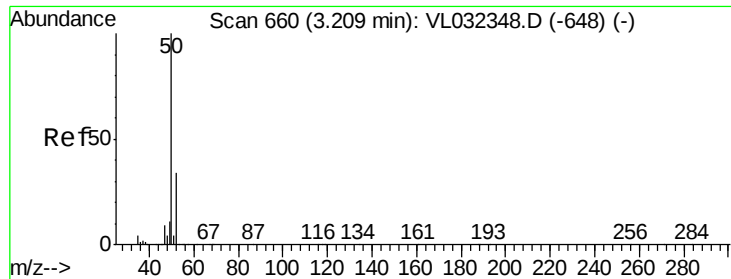
87 31.8 26.3 39.5



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#4

Chloromethane

Concen: 0.098 ppbv

RT: 3.21 min Scan# 659

Delta R.T. -0.00 min

Lab File: VL032391.D

Acq: 17 Aug 2018 00:24

Instrument :

MSVOA_L

ClientSampleId :

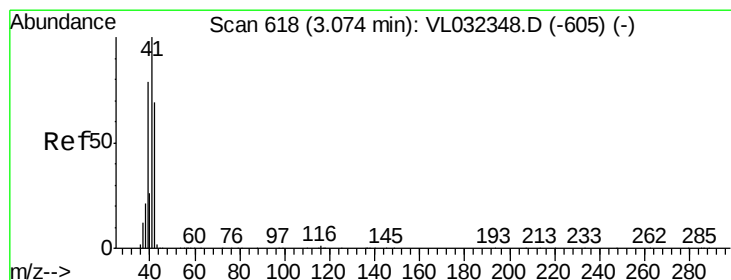
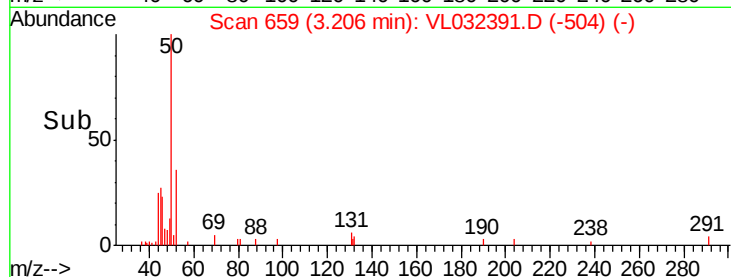
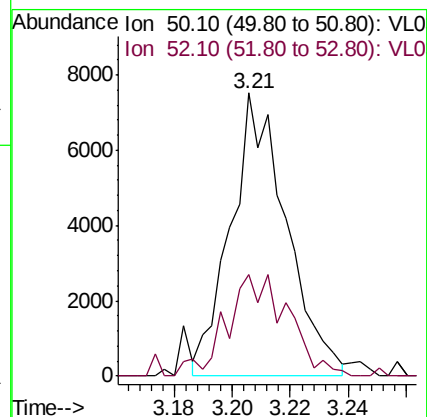
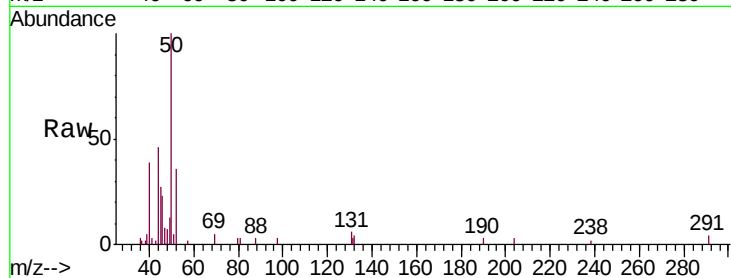
SG04-MIVIDL

Tgt Ion: 50 Resp: 9991

Ion Ratio Lower Upper

50 100

52 35.3 26.8 40.2



#9

Propene

Concen: 0.513 ppbv

RT: 3.08 min Scan# 621

Delta R.T. 0.01 min

Lab File: VL032391.D

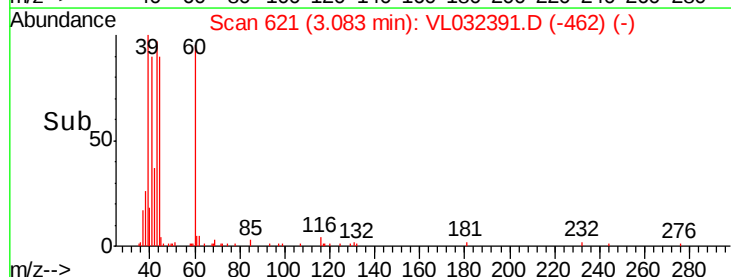
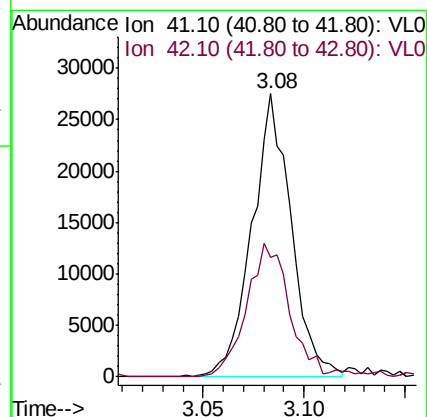
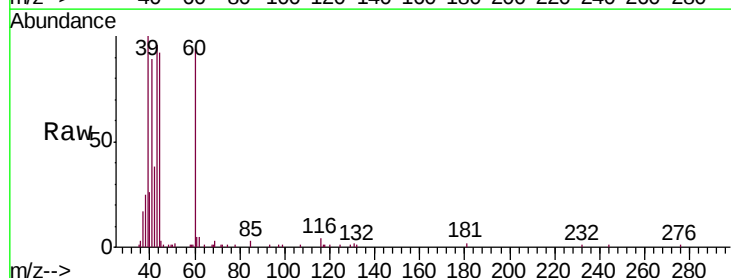
Acq: 17 Aug 2018 00:24

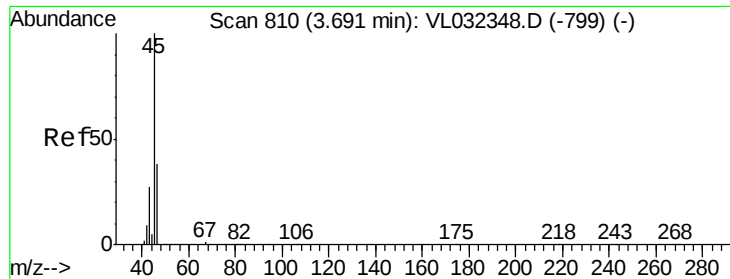
Tgt Ion: 41 Resp: 37425

Ion Ratio Lower Upper

41 100

42 54.5 55.9 83.9#





#13

Ethanol

Concen: 12.783 ppbv

RT: 3.69 min Scan# 811

Delta R.T. 0.00 min

Lab File: VL032391.D

Acq: 17 Aug 2018 00:24

Instrument :

MSVOA_L

ClientSampleId :

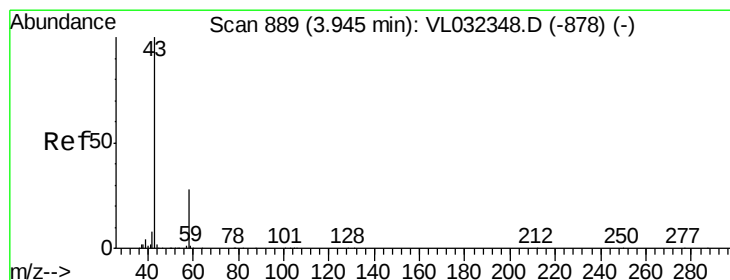
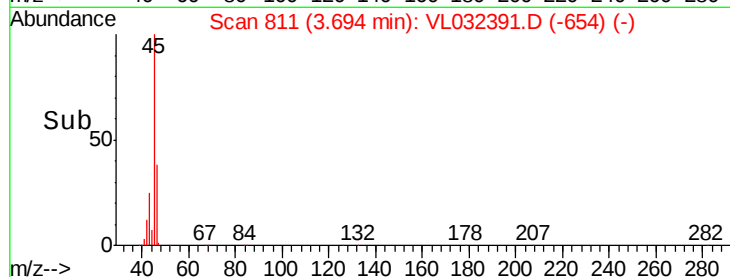
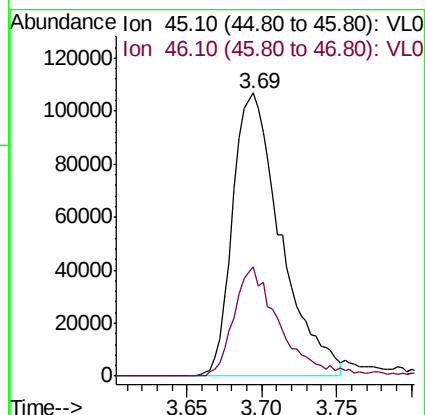
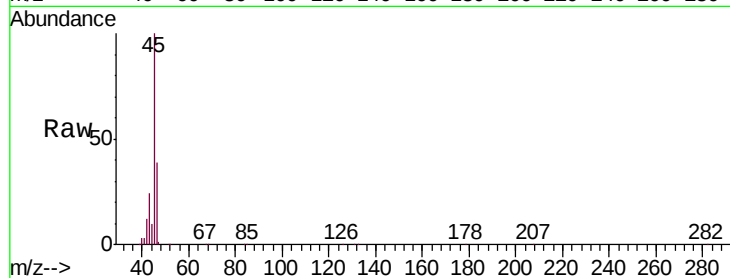
SG04-MIVIDL

Tgt Ion: 45 Resp: 239549

Ion Ratio Lower Upper

45 100

46 37.5 15.6 62.4



#15

Acetone

Concen: 3.625 ppbv

RT: 3.95 min Scan# 889

Delta R.T. 0.00 min

Lab File: VL032391.D

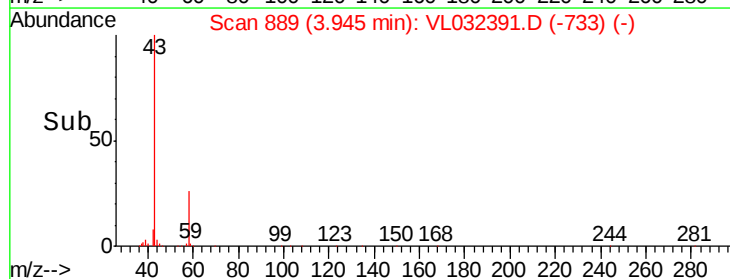
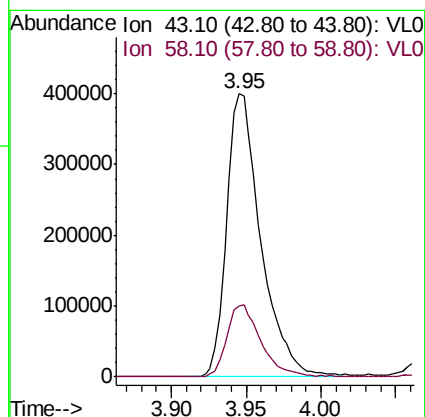
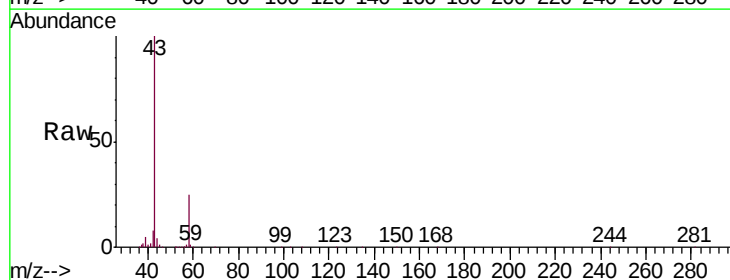
Acq: 17 Aug 2018 00:24

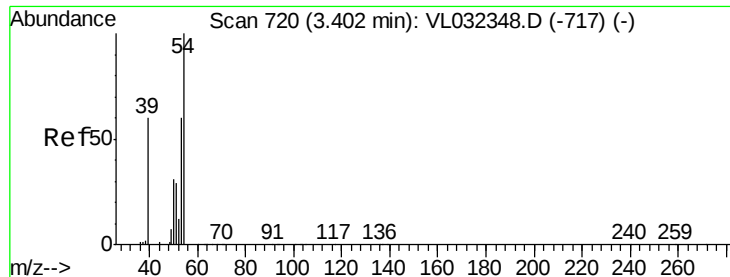
Tgt Ion: 43 Resp: 633769

Ion Ratio Lower Upper

43 100

58 25.6 22.4 33.6





#16

1,3-Butadiene

Concen: 0.371 ppbv

RT: 3.38 min Scan# 713

Delta R.T. -0.02 min

Lab File: VL032391.D

Acq: 17 Aug 2018 00:24

Instrument :

MSVOA_L

ClientSampleId :

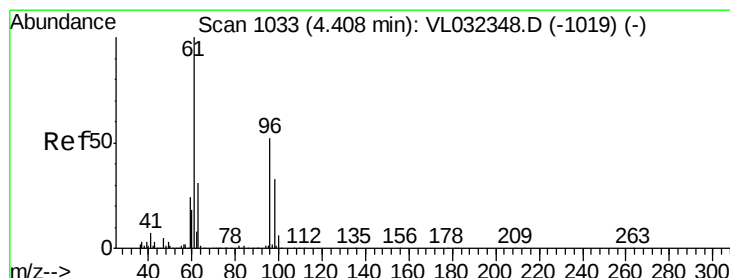
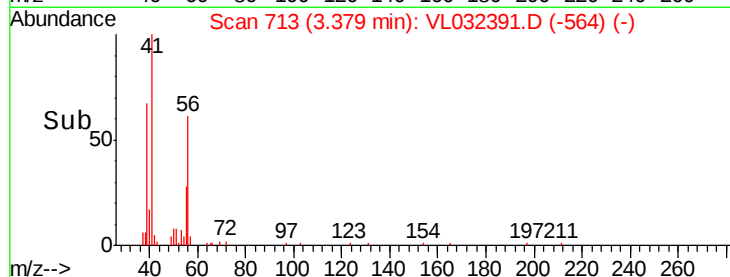
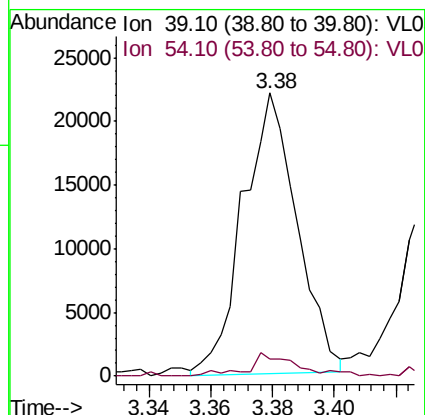
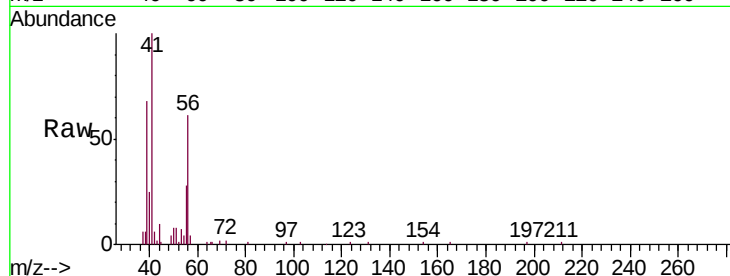
SG04-MIVIDL

Tgt Ion: 39 Resp: 26767

Ion Ratio Lower Upper

39 100

54 7.6 85.5 128.3#



#17

tert-Butyl alcohol

Concen: 0.284 ppbv

RT: 4.42 min Scan# 1036

Delta R.T. 0.01 min

Lab File: VL032391.D

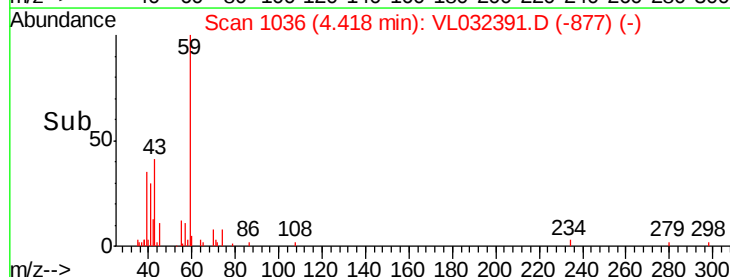
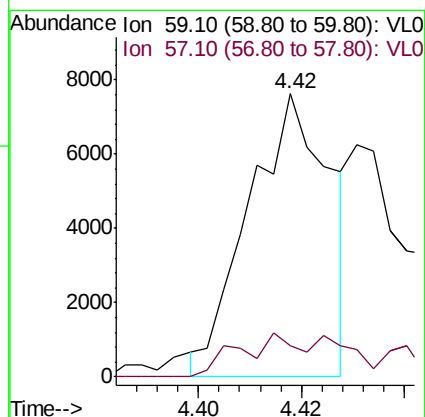
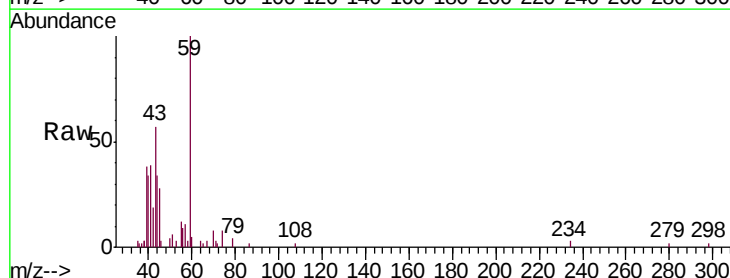
Acq: 17 Aug 2018 00:24

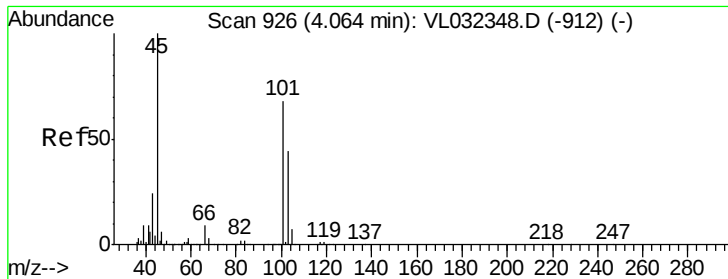
Tgt Ion: 59 Resp: 8322

Ion Ratio Lower Upper

59 100

57 23.6 7.6 11.4#





#19

Isopropyl Alcohol

Concen: 1.912 ppbv

RT: 4.07 min Scan# 929

Delta R.T. 0.01 min

Lab File: VL032391.D

Acq: 17 Aug 2018 00:24

Instrument :

MSVOA_L

ClientSampleId :

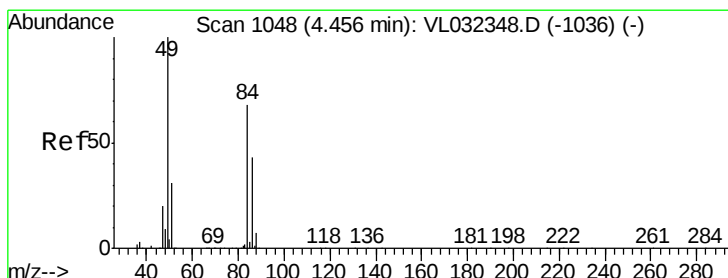
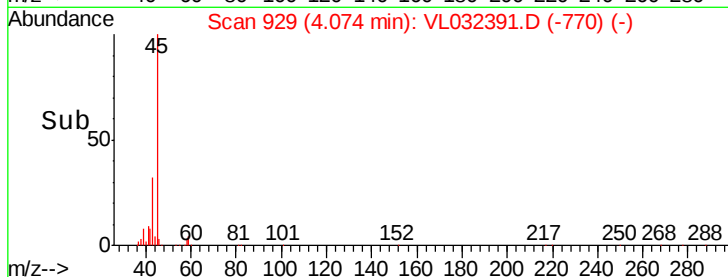
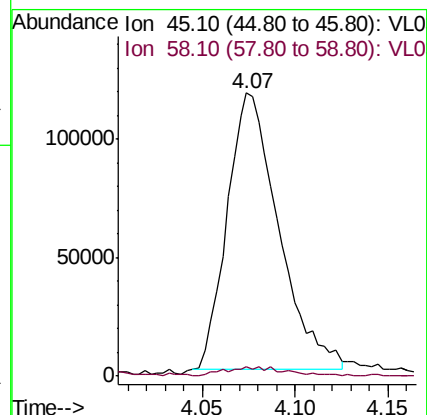
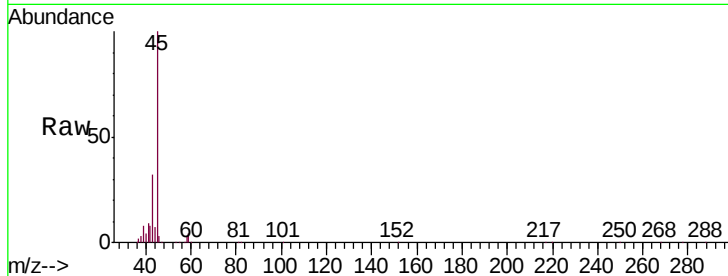
SG04-MIVIDL

Tgt Ion: 45 Resp: 225175

Ion Ratio Lower Upper

45 100

58 4.8 1.4 2.0#



#20

Methylene Chloride

Concen: 1.046 ppbv

RT: 4.46 min Scan# 1048

Delta R.T. 0.00 min

Lab File: VL032391.D

Acq: 17 Aug 2018 00:24

Tgt Ion: 84 Resp: 69050

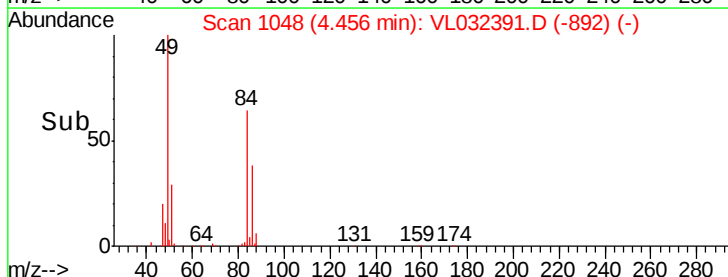
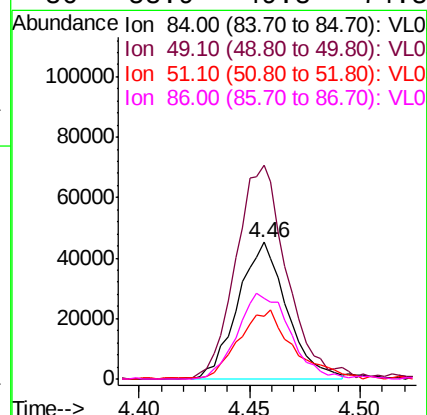
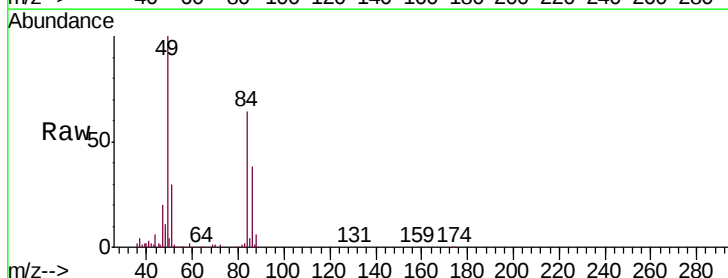
Ion Ratio Lower Upper

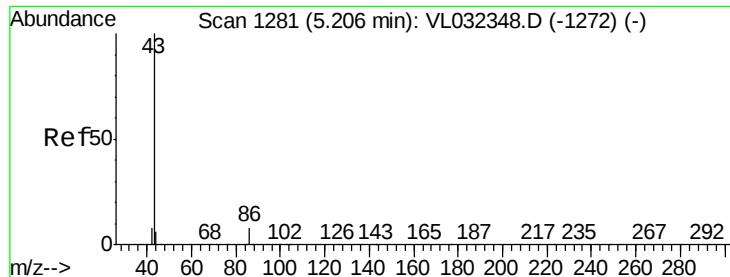
84 100

49 154.8 117.3 175.9

51 45.9 36.6 55.0

86 58.9 49.8 74.8





#23

Vinyl Acetate

Concen: 0.102 ppbv

RT: 5.20 min Scan# 1278

Delta R.T. -0.01 min

Lab File: VL032391.D

Acq: 17 Aug 2018 00:24

Instrument :

MSVOA_L

ClientSampleId :

SG04-MIVIDL

Tgt Ion: 43 Resp: 30769

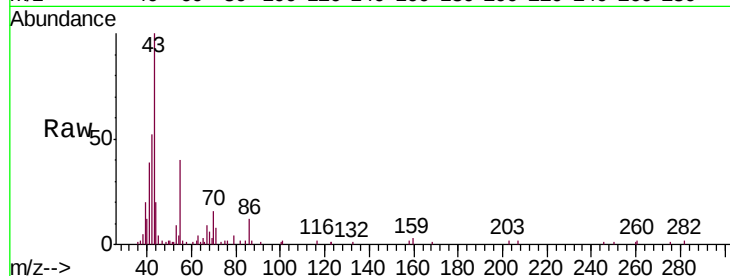
Ion Ratio Lower Upper

43 100

86 14.3 5.5 8.3#

42 49.9 7.0 10.6#

44 3.8 4.6 6.8#

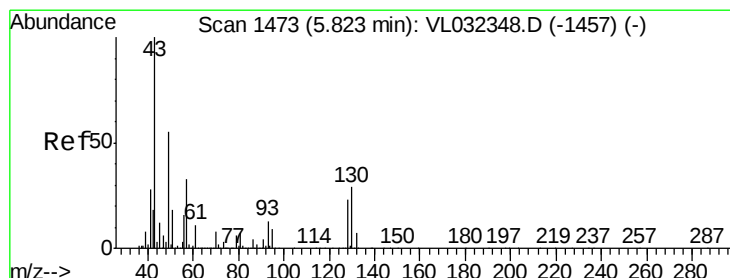
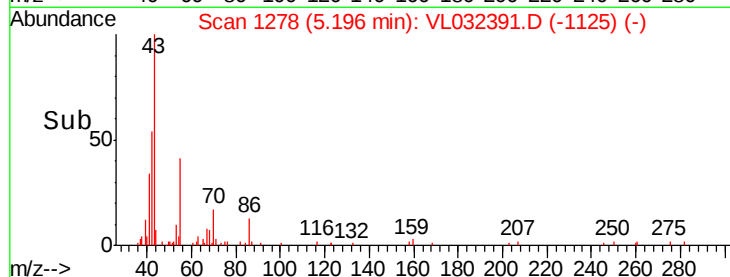
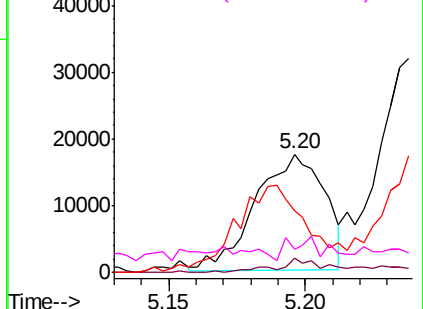


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 1.846 ppbv

RT: 5.82 min Scan# 1473

Delta R.T. 0.00 min

Lab File: VL032391.D

Acq: 17 Aug 2018 00:24

Tgt Ion: 43 Resp: 691792

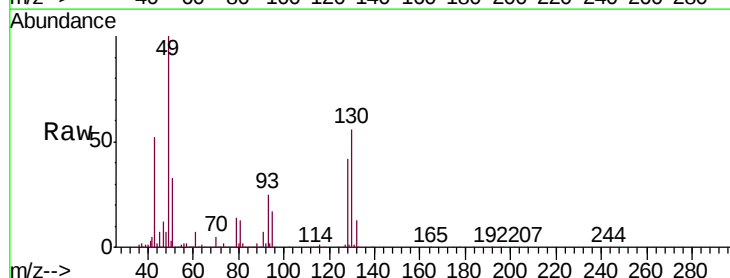
Ion Ratio Lower Upper

43 100

45 14.2 7.9 11.9#

61 12.2 7.4 11.2#

70 9.3 5.8 8.6#

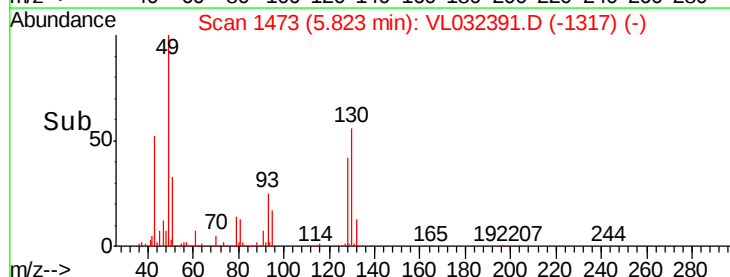
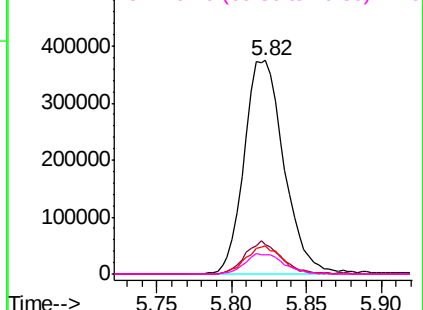


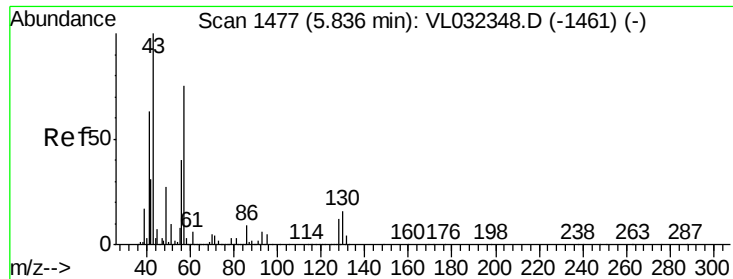
Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.259 ppbv

RT: 5.83 min Scan# 1476

Delta R.T. -0.00 min

Lab File: VL032391.D

Acq: 17 Aug 2018 00:24

Instrument :

MSVOA_L

ClientSampleId :

SG04-MIVIDL

Tgt Ion: 57 Resp: 43198

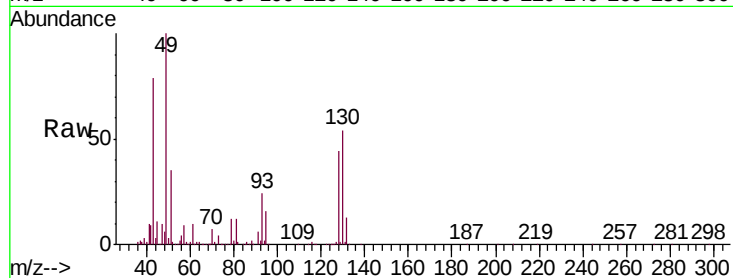
Ion Ratio Lower Upper

57 100

41 115.0 68.0 102.0#

43 1620.2 175.3 262.9#

56 59.7 42.0 63.0

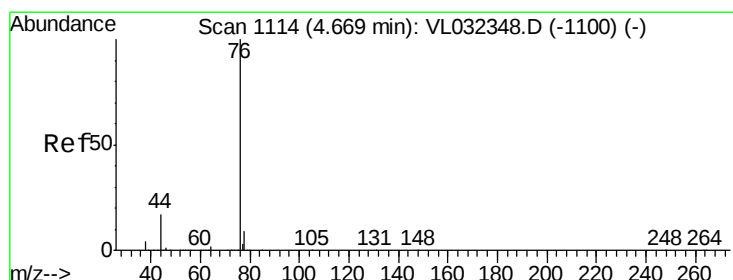
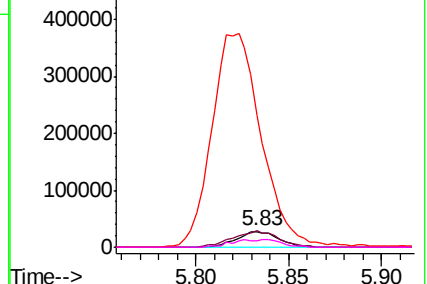
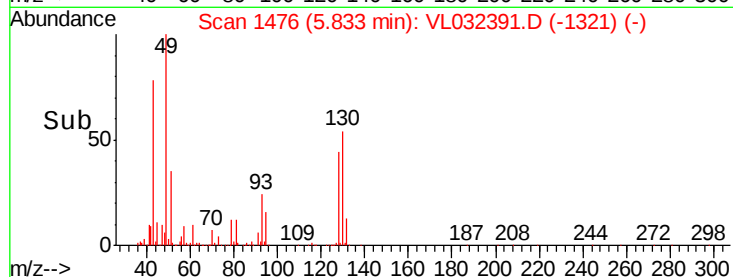


Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



#27

Carbon Disulfide

Concen: 0.058 ppbv

RT: 4.67 min Scan# 1114

Delta R.T. -0.00 min

Lab File: VL032391.D

Acq: 17 Aug 2018 00:24

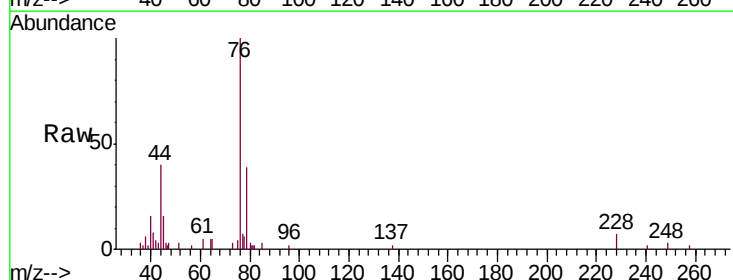
Tgt Ion: 76 Resp: 9114

Ion Ratio Lower Upper

76 100

44 35.2 14.4 21.6#

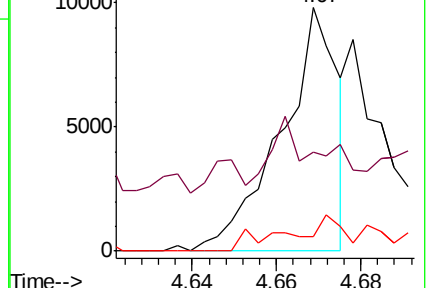
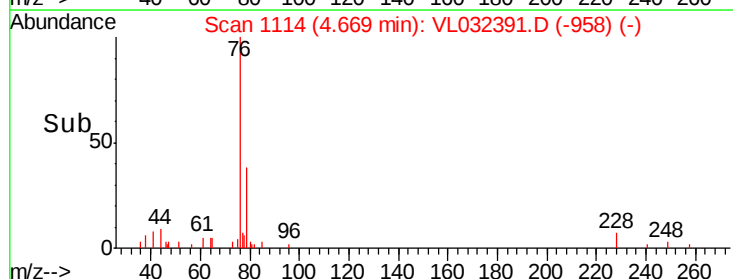
78 21.0 7.4 11.0#

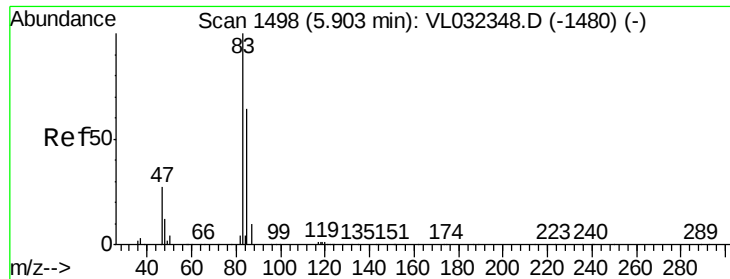


Abundance Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0





#29

Chloroform

Concen: 0.361 ppbv

RT: 5.90 min Scan# 1496

Delta R.T. -0.01 min

Lab File: VL032391.D

Acq: 17 Aug 2018 00:24

Instrument :

MSVOA_L

ClientSampleId :

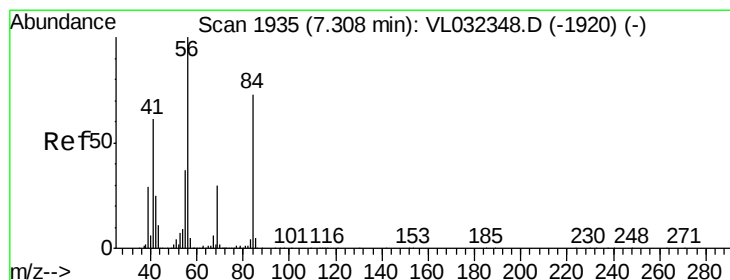
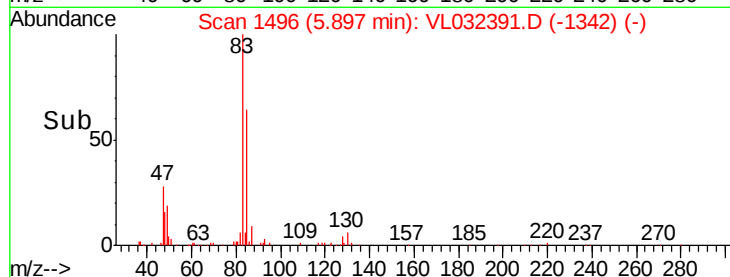
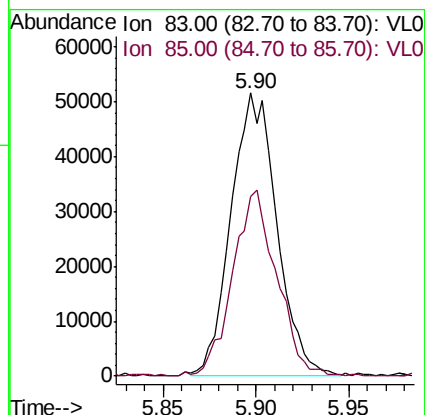
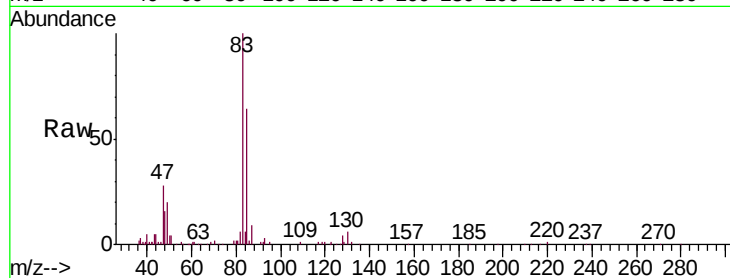
SG04-MIVIDL

Tgt Ion: 83 Resp: 88500

Ion Ratio Lower Upper

83 100

85 63.3 51.6 77.4



#30

Cyclohexane

Concen: 0.091 ppbv

RT: 7.30 min Scan# 1933

Delta R.T. -0.01 min

Lab File: VL032391.D

Acq: 17 Aug 2018 00:24

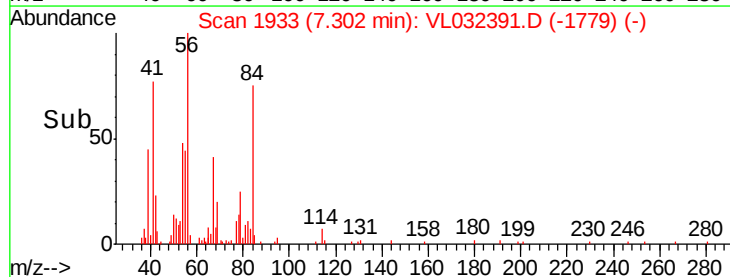
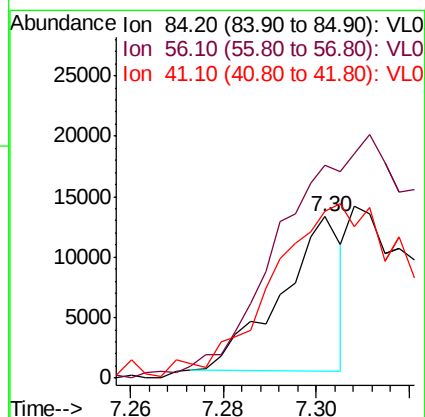
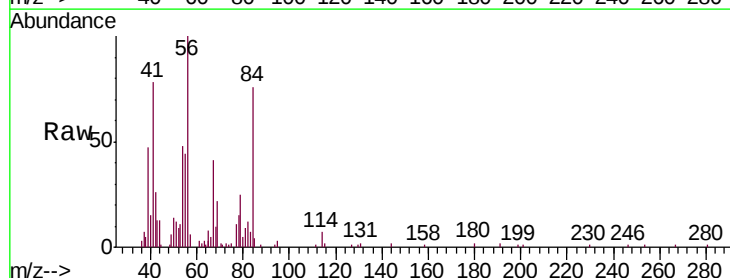
Tgt Ion: 84 Resp: 11609

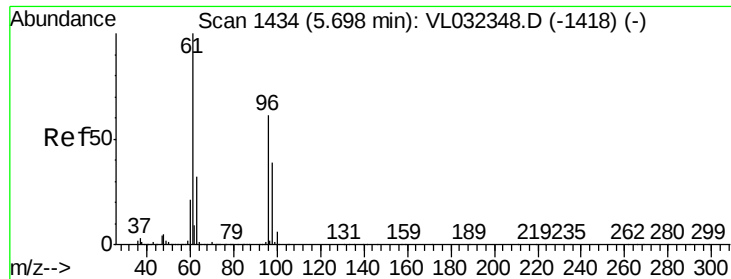
Ion Ratio Lower Upper

84 100

56 0.0 115.7 173.5#

41 287.3 67.9 101.9#

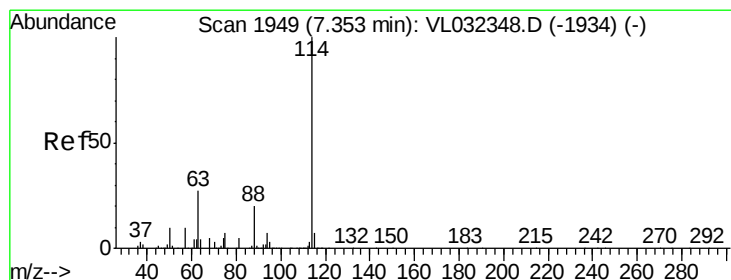
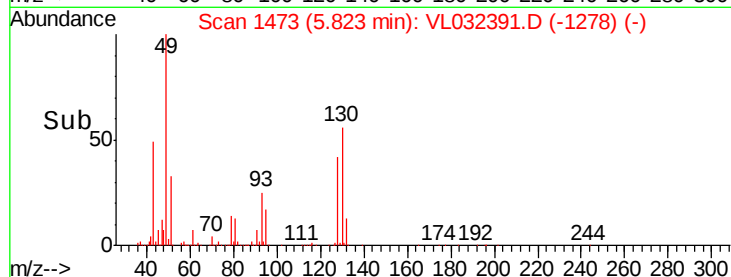
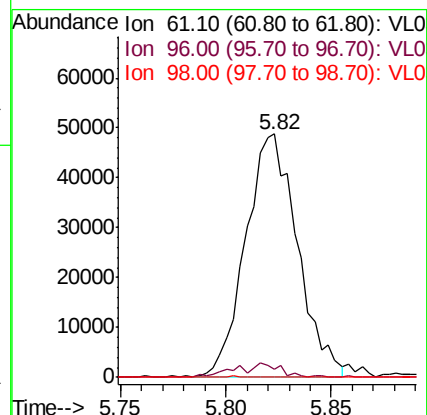
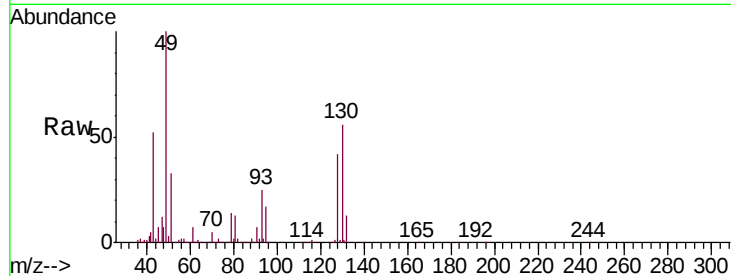




#31
 cis-1,2-Dichloroethene
 Concen: 0.505 ppbv
 RT: 5.82 min Scan# 1473
 Delta R.T. 0.13 min
 Lab File: VL032391.D
 Acq: 17 Aug 2018 00:24

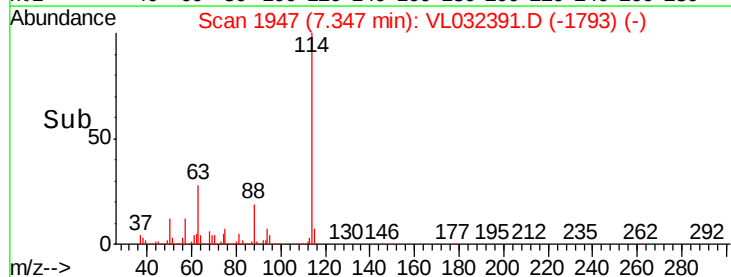
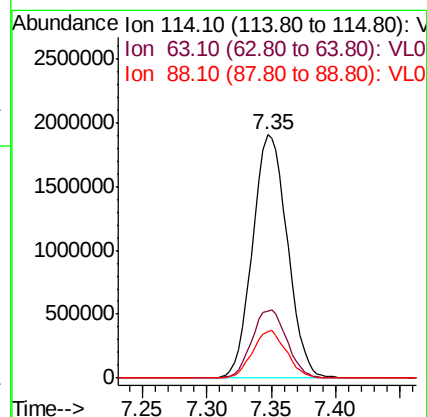
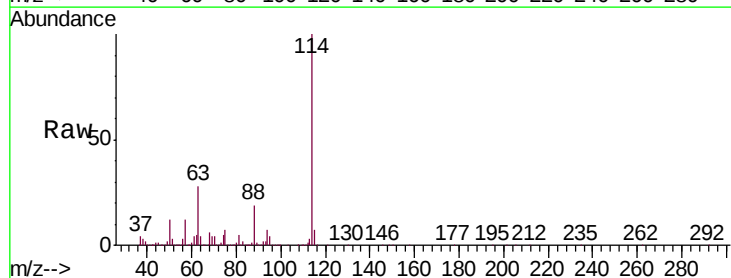
Instrument :
 MSVOA_L
 ClientSampleId :
 SG04-MIVIDL

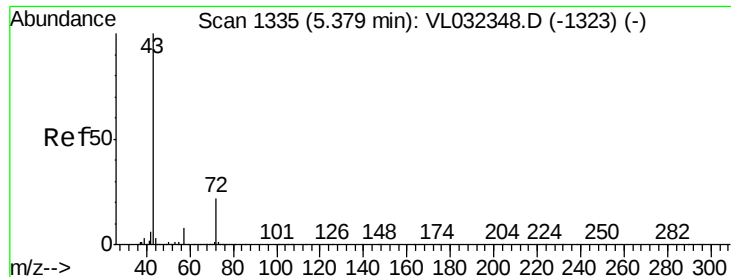
Tgt Ion	Ratio	Lower	Upper
61	100		
96	3.1	48.5	72.7#
98	0.0	31.0	46.4#



#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.35 min Scan# 1947
 Delta R.T. -0.01 min
 Lab File: VL032391.D
 Acq: 17 Aug 2018 00:24

Tgt Ion	Ratio	Lower	Upper
114	100		
63	28.5	22.0	33.0
88	19.1	15.3	22.9

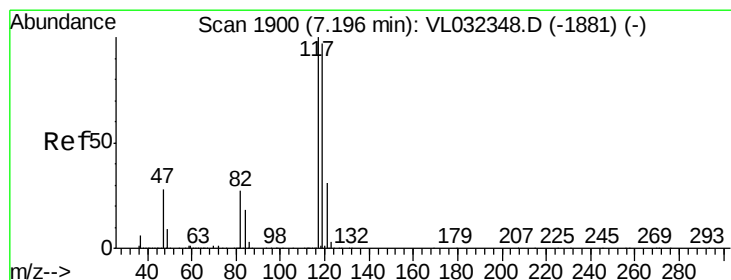
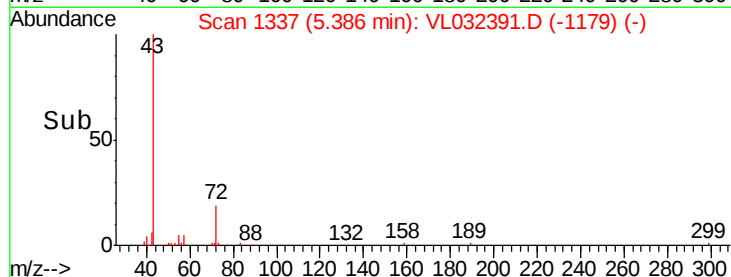
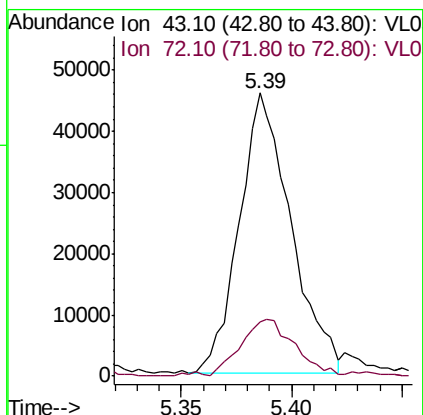
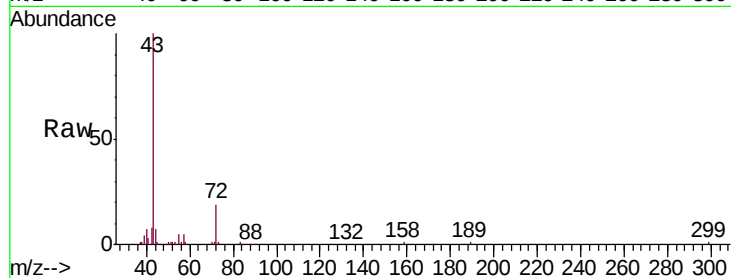




#34
2-Butanone
Concen: 0.304 ppbv
RT: 5.39 min Scan# 1337
Delta R.T. 0.01 min
Lab File: VL032391.D
Acq: 17 Aug 2018 00:24

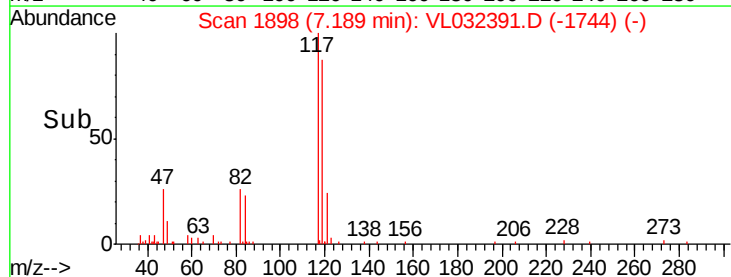
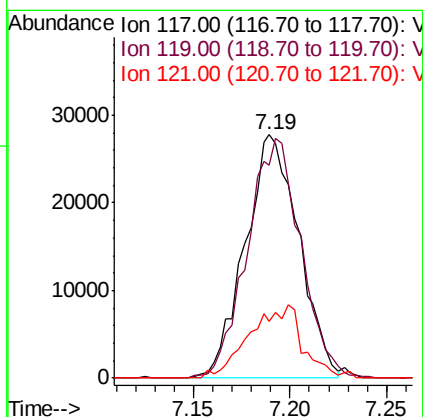
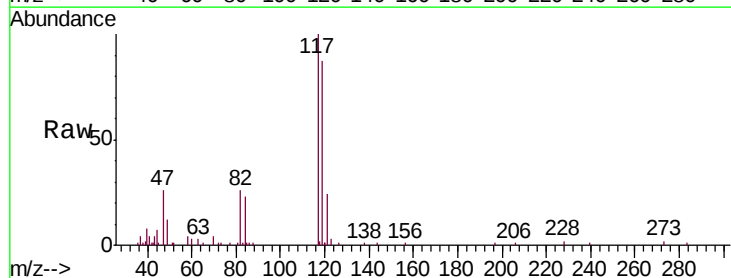
Instrument :
MSVOA_L
ClientSampleId :
SG04-MIVIDL

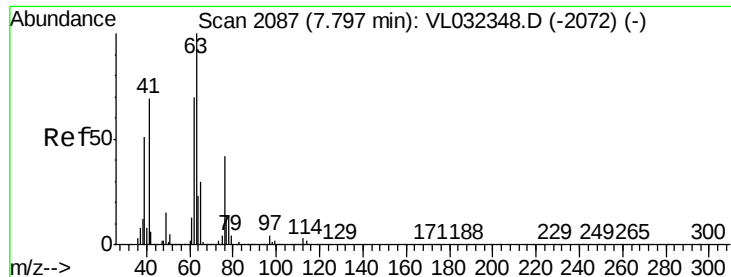
Tgt Ion: 43 Resp: 74198
Ion Ratio Lower Upper
43 100
72 22.3 17.9 26.9



#35
Carbon Tetrachloride
Concen: 0.253 ppbv
RT: 7.19 min Scan# 1898
Delta R.T. -0.01 min
Lab File: VL032391.D
Acq: 17 Aug 2018 00:24

Tgt Ion: 117 Resp: 53624
Ion Ratio Lower Upper
117 100
119 88.4 77.2 115.8
121 23.5 25.1 37.7#





#39

1,2-Dichloropropane

Concen: 7.951 ppbv

RT: 7.35 min Scan# 1948

Delta R.T. -0.45 min

Lab File: VL032391.D

Acq: 17 Aug 2018 00:24

Instrument :

MSVOA_L

ClientSampleId :

SG04-MIVIDL

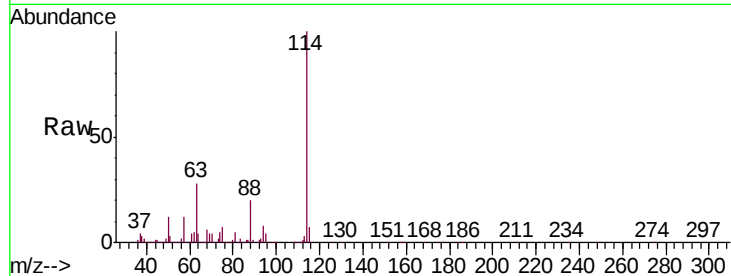
Tgt Ion: 63 Resp: 1010990

Ion Ratio Lower Upper

63 100

41 0.0 55.5 83.3#

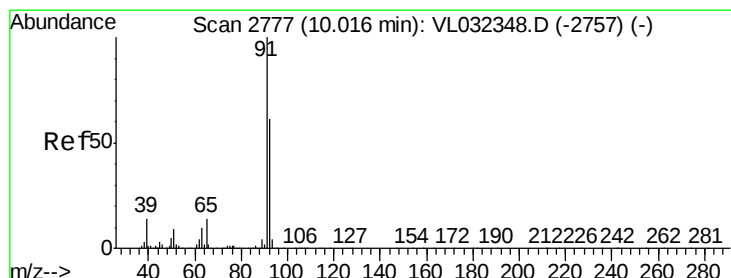
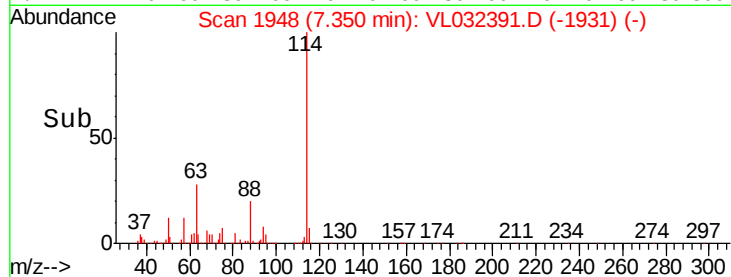
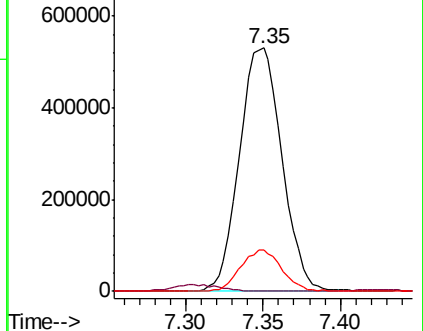
62 16.9 56.3 84.5#



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



#53

Toluene

Concen: 0.202 ppbv

RT: 10.01 min Scan# 2776

Delta R.T. -0.00 min

Lab File: VL032391.D

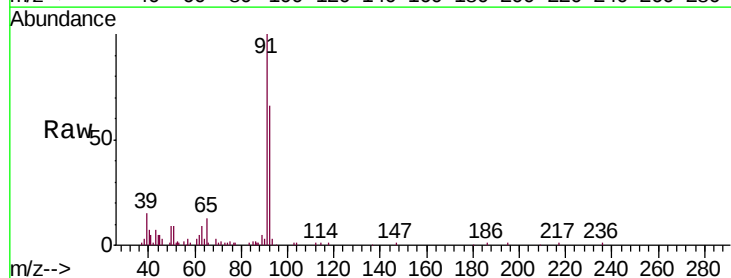
Acq: 17 Aug 2018 00:24

Tgt Ion: 91 Resp: 67442

Ion Ratio Lower Upper

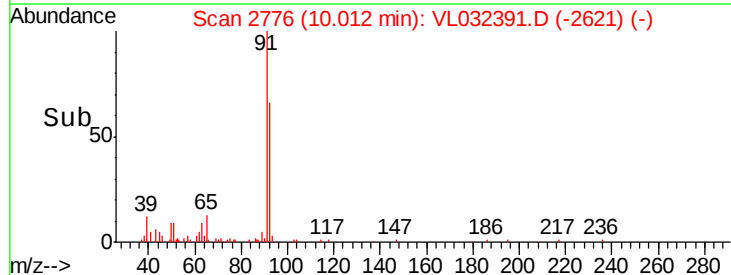
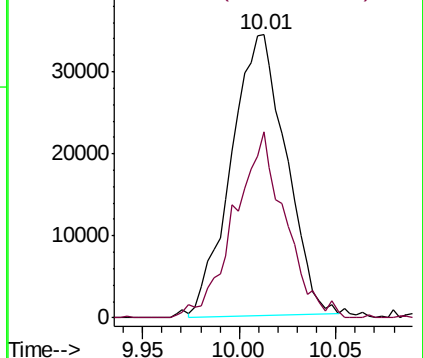
91 100

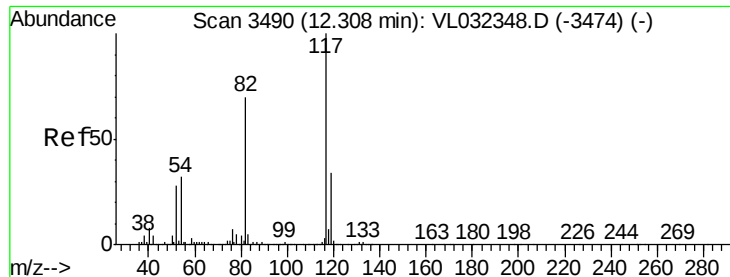
92 61.6 48.7 73.1



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

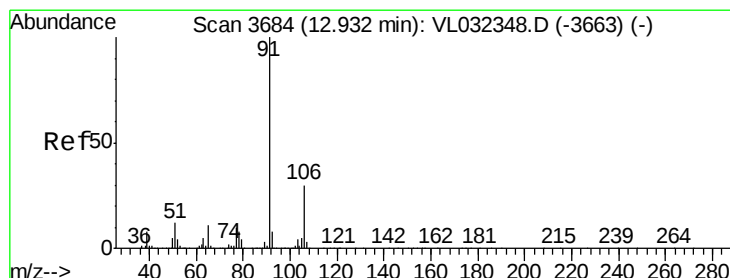
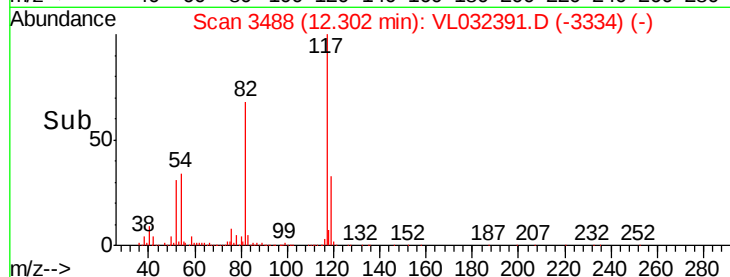
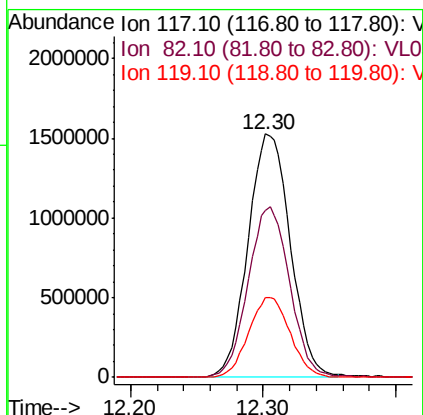
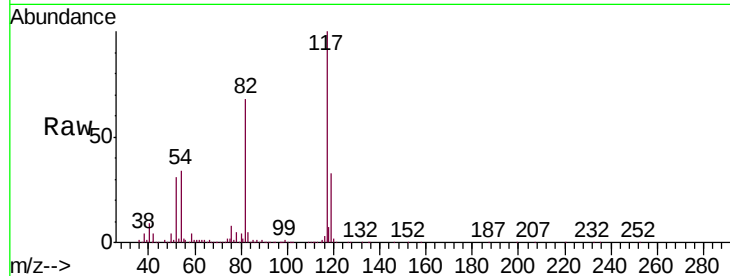




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.30 min Scan# 3488
Delta R.T. -0.01 min
Lab File: VL032391.D
Acq: 17 Aug 2018 00:24

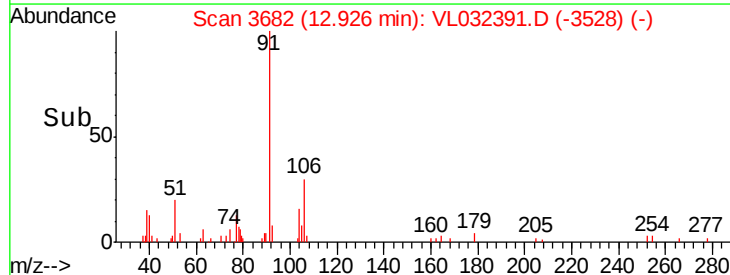
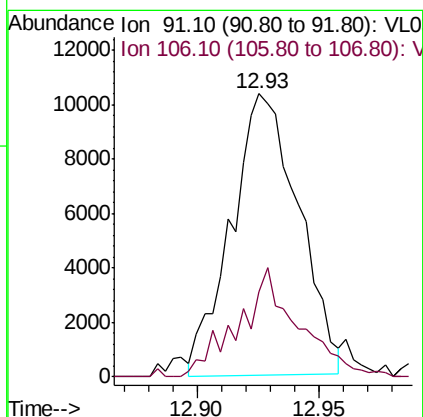
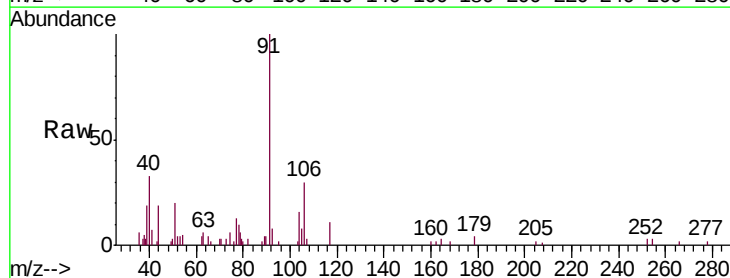
Instrument :
MSVOA_L
ClientSampleId :
SG04-MIVIDL

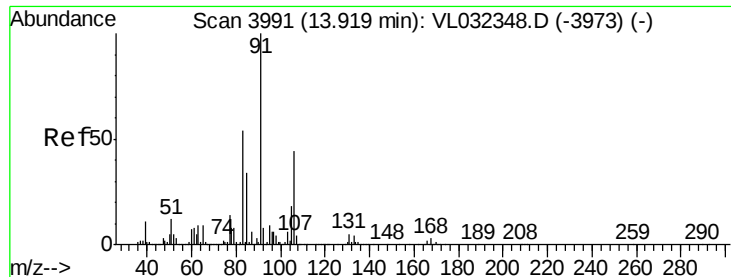
Tgt Ion:117 Resp: 3390461
Ion Ratio Lower Upper
117 100
82 69.4 55.1 82.7
119 32.5 46.0 69.0#



#58
Ethyl Benzene
Concen: 0.049 ppbv
RT: 12.93 min Scan# 3682
Delta R.T. -0.01 min
Lab File: VL032391.D
Acq: 17 Aug 2018 00:24

Tgt Ion: 91 Resp: 19795
Ion Ratio Lower Upper
91 100
106 29.5 24.3 36.5

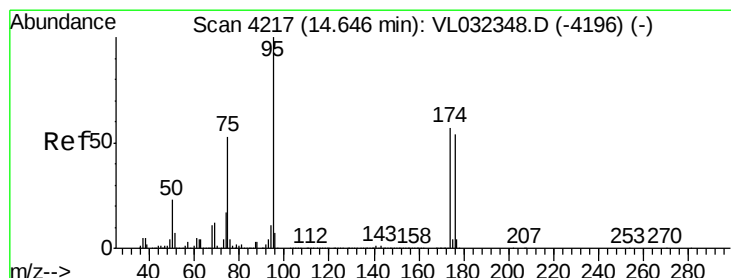
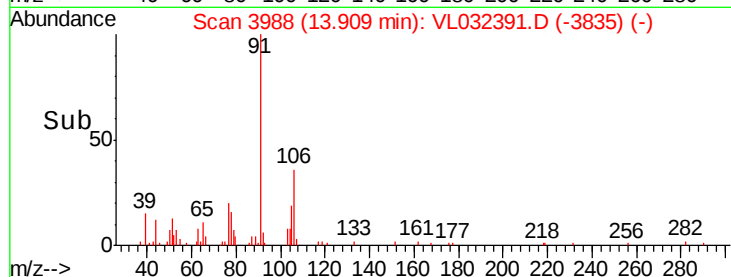
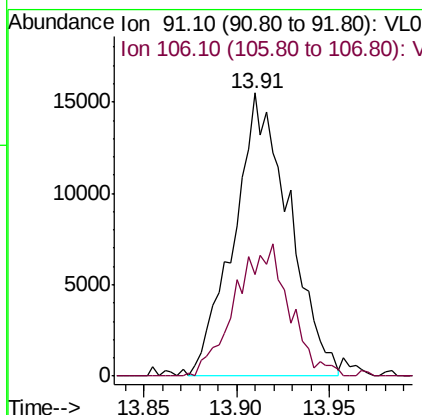
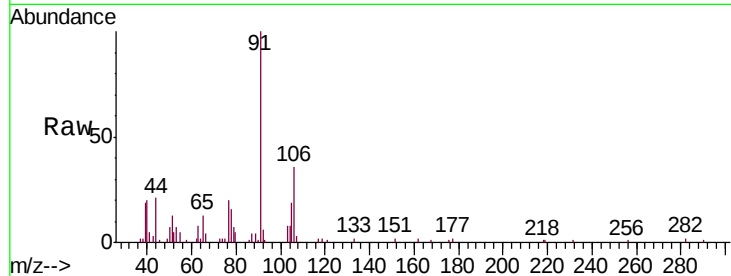




#60
o-Xylene
Concen: 0.095 ppbv
RT: 13.91 min Scan# 3988
Delta R.T. -0.01 min
Lab File: VL032391.D
Acq: 17 Aug 2018 00:24

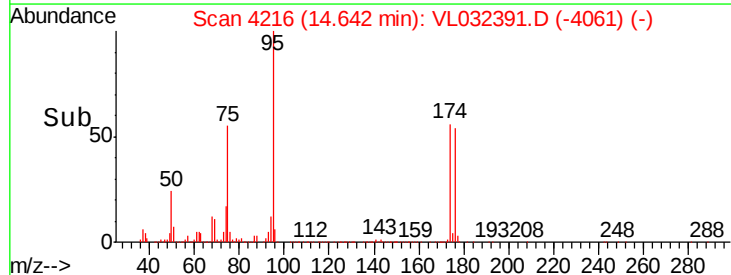
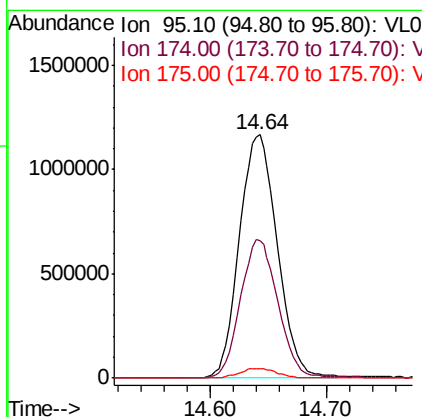
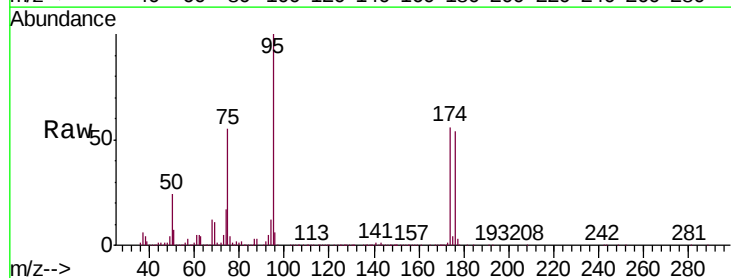
Instrument :
MSVOA_L
ClientSampleId :
SG04-MIVIDL

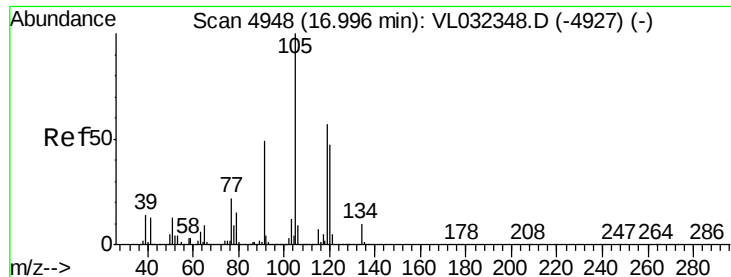
Tgt Ion: 91 Resp: 32190
Ion Ratio Lower Upper
91 100
106 45.7 22.3 66.8



#68
1-Bromo-4-Fluorobenzene
Concen: 10.257 ppbv
RT: 14.64 min Scan# 4216
Delta R.T. -0.00 min
Lab File: VL032391.D
Acq: 17 Aug 2018 00:24

Tgt Ion: 95 Resp: 2653196
Ion Ratio Lower Upper
95 100
174 56.9 46.2 69.4
175 4.1 3.4 5.0





#74

1,2,4-Trimethylbenzene

Concen: 0.031 ppbv

RT: 16.99 min Scan# 4945

Delta R.T. -0.01 min

Lab File: VL032391.D

Acq: 17 Aug 2018 00:24

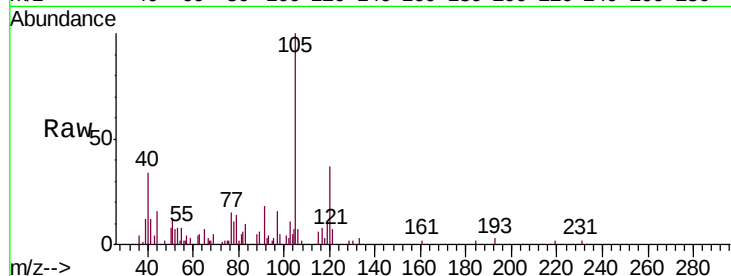
Instrument :

MSVOA_L

ClientSampleId :

SG04-MIVIDL

Tgt Ion:	105	Resp:	11939
Ion	Ratio	Lower	Upper
105	100		
120	32.8	37.6	56.4#
91	11.7	39.9	59.9#
77	24.7	17.8	26.8



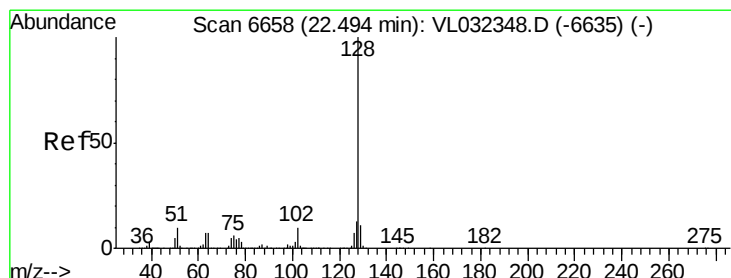
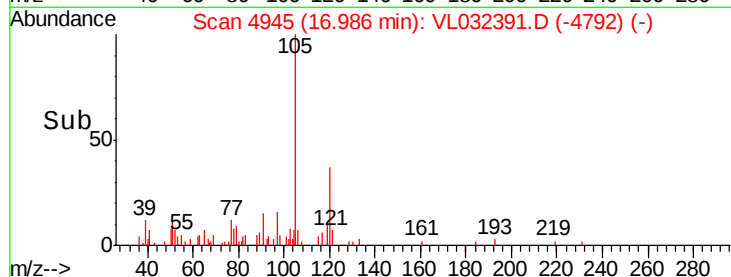
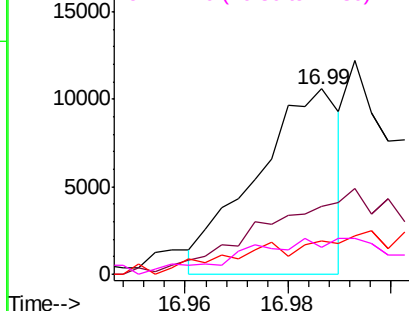
Abundance

Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#79

Naphthalene

Concen: 0.330 ppbv

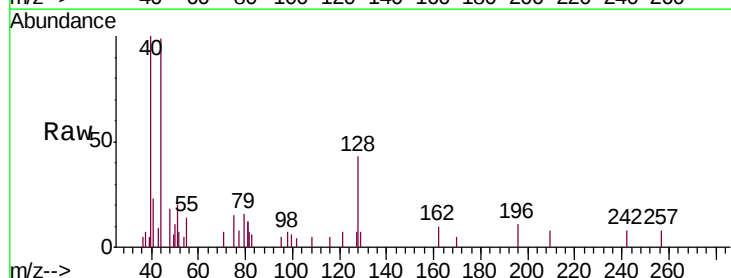
RT: 22.48 min Scan# 6654

Delta R.T. -0.01 min

Lab File: VL032391.D

Acq: 17 Aug 2018 00:24

Tgt Ion:	128	Resp:	1092
Ion	Ratio	Lower	Upper
128	100		
127	0.0	10.3	15.5#
129	17.4	8.6	13.0#



Abundance

Ion 128.10 (127.80 to 128.80): V

Ion 127.10 (126.80 to 127.80): V

Ion 129.10 (128.80 to 129.80): V

