

Data File : VL032555.D
Acq On : 27 Sep 2018 18:46
Operator : SY/AP
Sample : J5136-02
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
247

Quant Time: Sep 28 02:09:02 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL092418AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Sep 25 05:17:15 2018
QLast Update : Tue Sep 25 05:17:15 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.79	49	1332636	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.32	114	2844581	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.27	117	3201662	10.00	ppbv	-0.02

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.61 95 2241305 9.28 ppbv -0.03
Spiked Amount 10.000 Range 65 - 135 Recovery = 92.80%

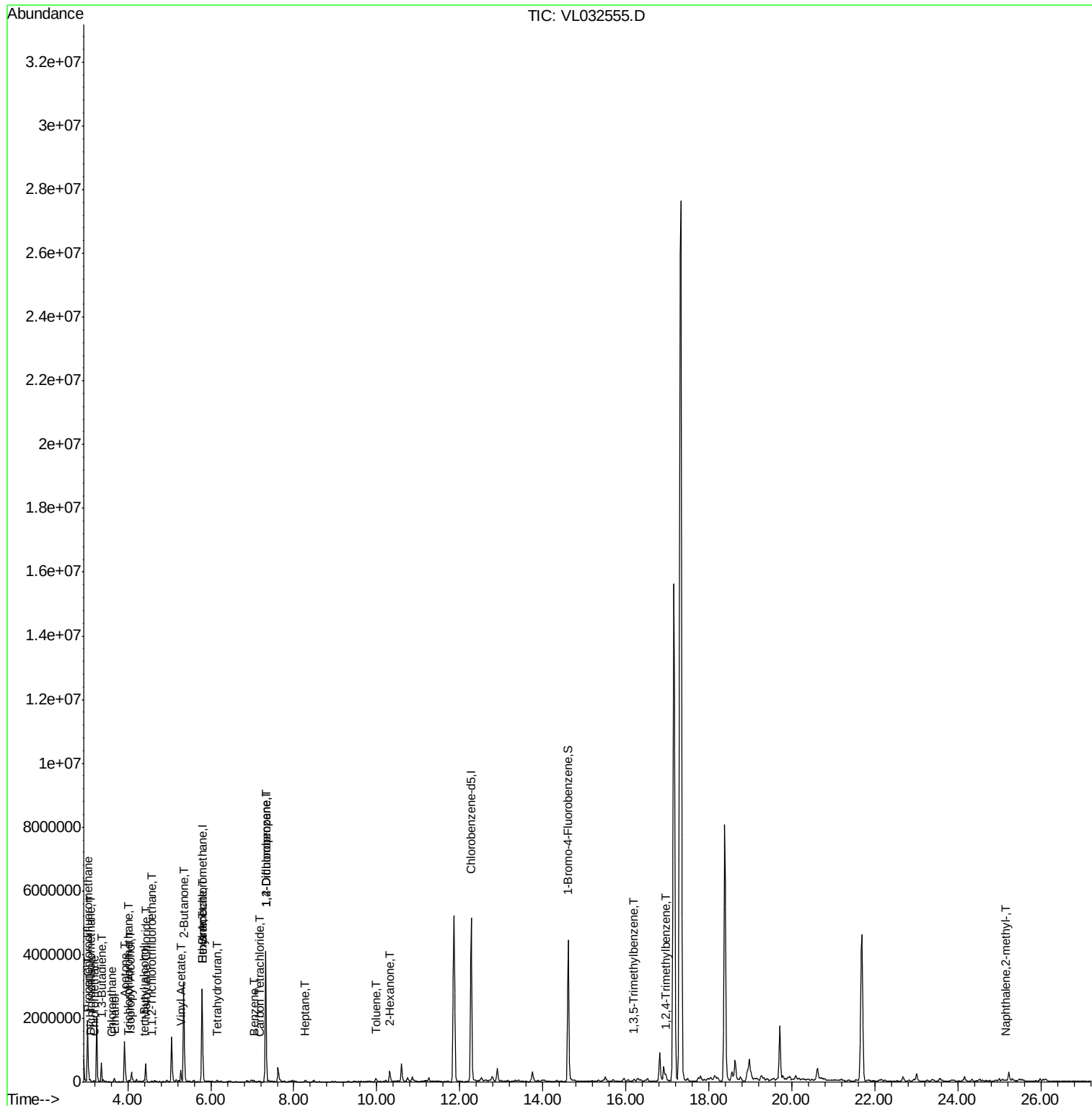
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.10	85	43943	0.357	ppbv	93
3) Chlorodifluoromethane	3.03	51	1767234	15.947	ppbv	98
4) Chloromethane	3.19	50	30997	0.480	ppbv	94
7) Chloroethane	3.62	64	705	0.030	ppbv #	85
9) Propene	3.06	41	128308	2.668	ppbv	99
10) Heptane	8.27	43	5785	0.033	ppbv #	28
11) Trichlorofluoromethane	4.02	101	17458	0.119	ppbv	87
12) 1,1,2-Trichlorotrifluoroet	4.58	101	5724	0.048	ppbv #	48
13) Ethanol	3.68	45	107962	7.470	ppbv	97
15) Acetone	3.92	43	1207616	10.324	ppbv #	74
16) 1,3-Butadiene	3.37	39	135223	2.850	ppbv #	7
17) tert-Butyl alcohol	4.39	59	19653	1.337	ppbv #	100
19) Isopropyl Alcohol	4.06	45	11626	0.143	ppbv #	93
20) Methylene Chloride	4.44	84	189809	3.351	ppbv	99
23) Vinyl Acetate	5.28	43	96389	0.466	ppbv #	1
25) Ethyl Acetate	5.81	43	135809	0.478	ppbv #	81
26) Hexane	5.81	57	178885	1.395	ppbv #	43
34) 2-Butanone	5.35	43	3469039	20.479	ppbv	99
35) Carbon Tetrachloride	7.16	117	8143	0.041	ppbv #	91
36) Benzene	7.03	78	16409	0.071	ppbv #	87
39) 1,2-Dichloropropane	7.32	63	763687	7.372	ppbv #	27
41) Tetrahydrofuran	6.15	42	7482	0.081	ppbv #	52
51) 2-Hexanone	10.31	43	271369	1.232	ppbv #	97
53) Toluene	9.97	91	39124	0.140	ppbv #	21
73) 1,3,5-Trimethylbenzene	16.19	105	30325	0.085	ppbv	97
74) 1,2,4-Trimethylbenzene	16.96	105	131600	0.344	ppbv #	71
80) Naphthalene,2-methyl-	25.15	142	2382	0.037	ppbv #	58

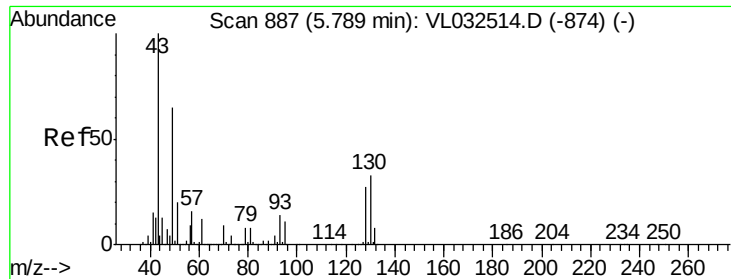
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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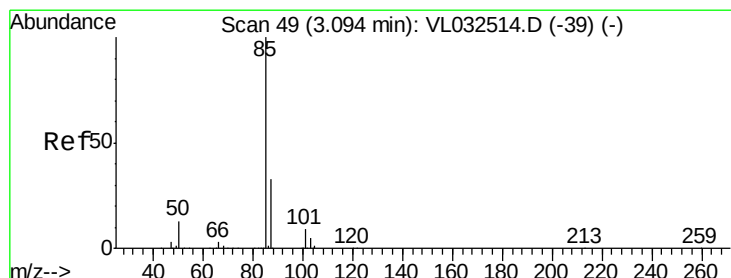
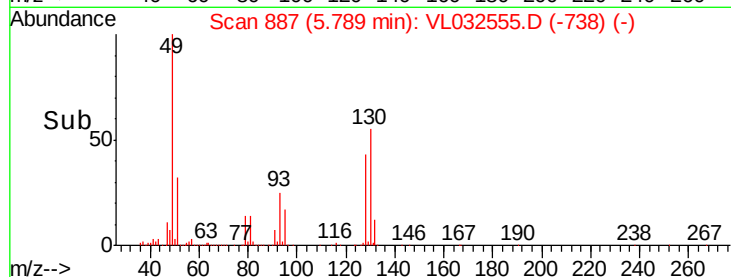
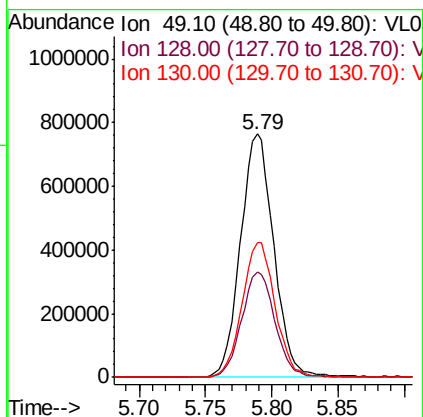
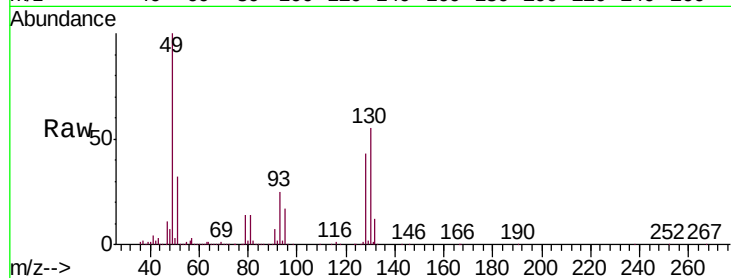




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.79 min Scan# 887
 Delta R.T. -0.02 min
 Lab File: VL032555.D
 Acq: 27 Sep 2018 18:46

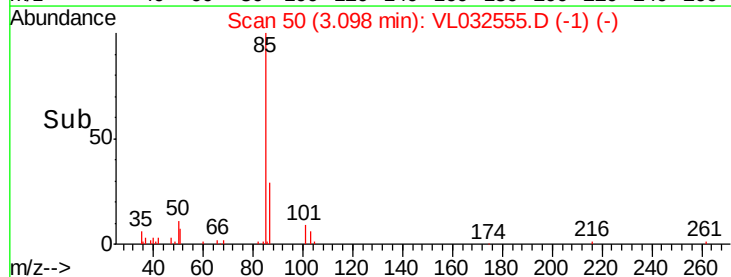
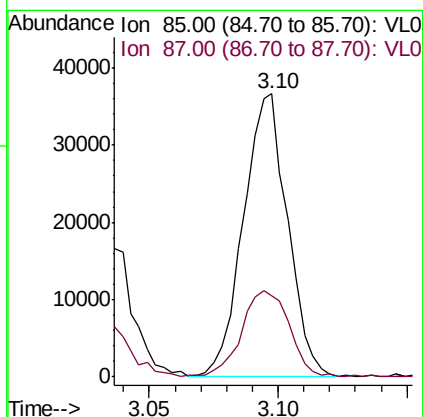
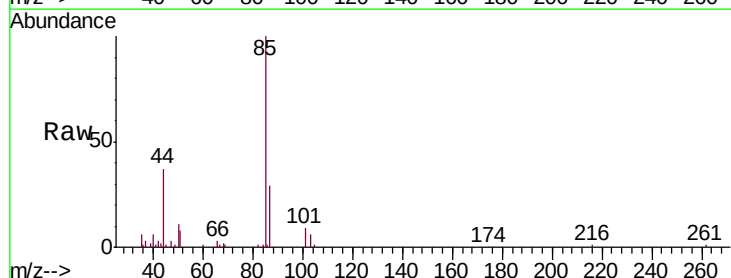
Instrument :
 MSVOA_L
 ClientSampleId :
 247

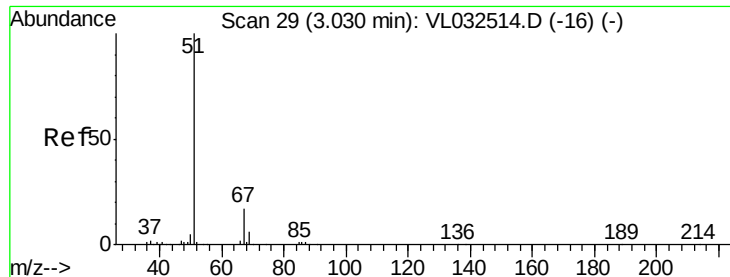
Tgt Ion: 49 Resp: 1332636
 Ion Ratio Lower Upper
 49 100
 128 43.6 20.7 62.1
 130 55.6 26.6 79.7



#2
 Dichlorodifluoromethane
 Concen: 0.357 ppbv
 RT: 3.10 min Scan# 50
 Delta R.T. -0.01 min
 Lab File: VL032555.D
 Acq: 27 Sep 2018 18:46

Tgt Ion: 85 Resp: 43943
 Ion Ratio Lower Upper
 85 100
 87 28.7 26.2 39.4

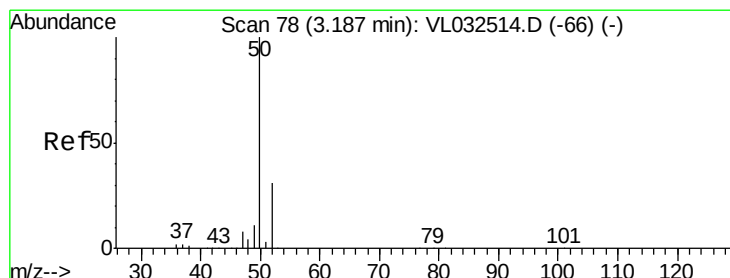
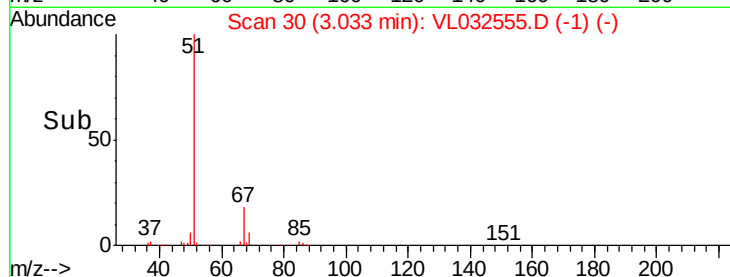
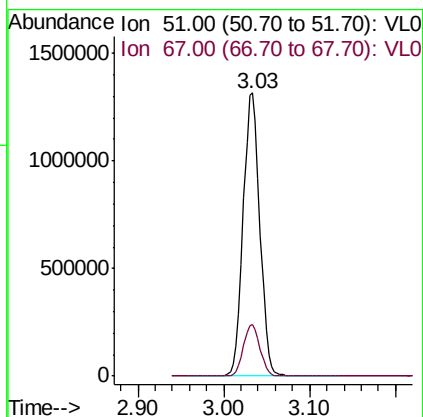
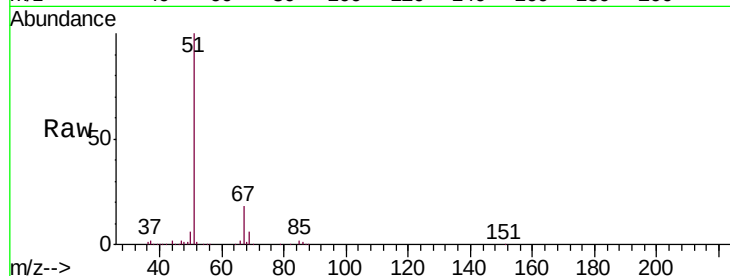




#3
Chlorodifluoromethane
Concen: 15.947 ppbv
RT: 3.03 min Scan# 30
Delta R.T. -0.01 min
Lab File: VL032555.D
Acq: 27 Sep 2018 18:46

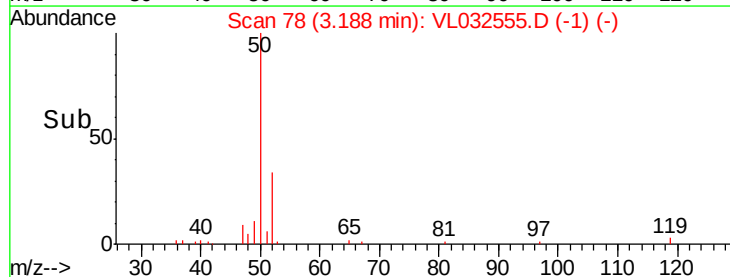
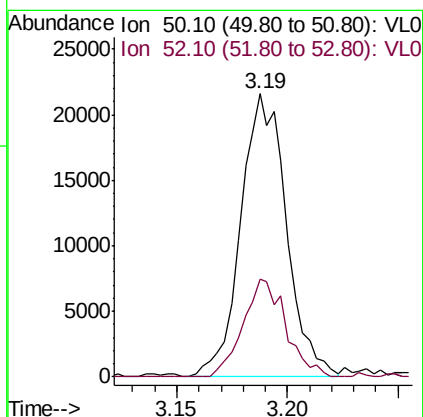
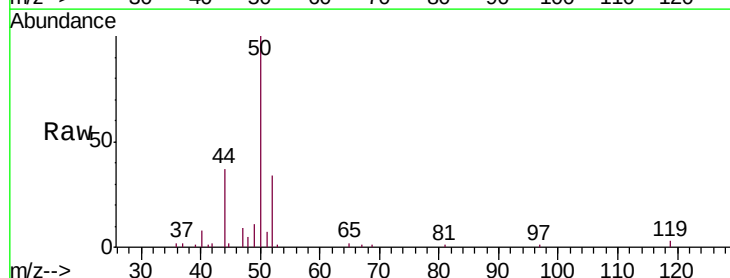
Instrument :
MSVOA_L
ClientSampleId :
247

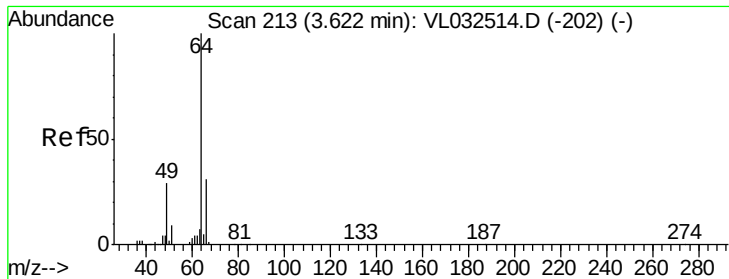
Tgt Ion: 51 Resp: 1767234
Ion Ratio Lower Upper
51 100
67 18.2 13.8 20.8



#4
Chloromethane
Concen: 0.480 ppbv
RT: 3.19 min Scan# 78
Delta R.T. -0.01 min
Lab File: VL032555.D
Acq: 27 Sep 2018 18:46

Tgt Ion: 50 Resp: 30997
Ion Ratio Lower Upper
50 100
52 35.3 25.6 38.4





#7

Chloroethane

Concen: 0.030 ppbv

RT: 3.62 min Scan# 212

Delta R.T. -0.02 min

Lab File: VL032555.D

Acq: 27 Sep 2018 18:46

Instrument :

MSVOA_L

ClientSampleId :

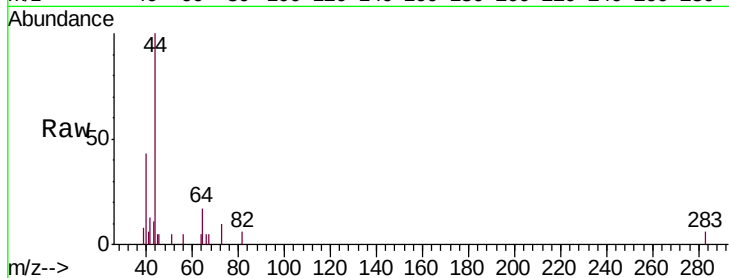
247

Tgt Ion: 64 Resp: 705

Ion Ratio Lower Upper

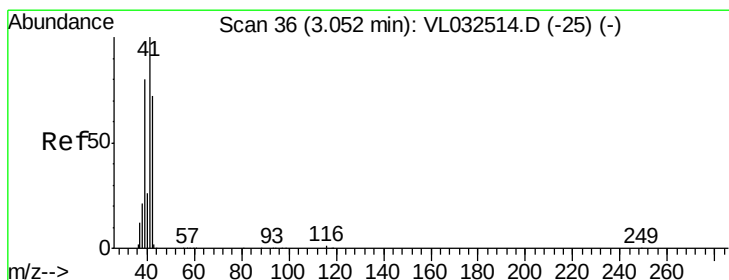
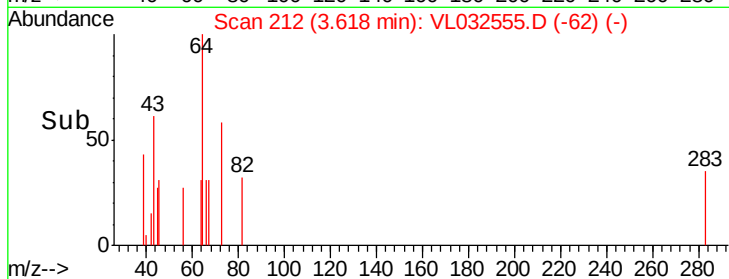
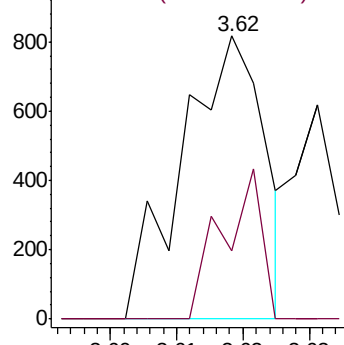
64 100

66 23.9 25.8 38.6#



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



#9

Propene

Concen: 2.668 ppbv

RT: 3.06 min Scan# 37

Delta R.T. -0.01 min

Lab File: VL032555.D

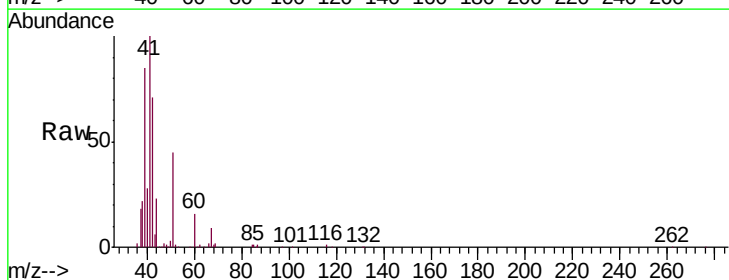
Acq: 27 Sep 2018 18:46

Tgt Ion: 41 Resp: 128308

Ion Ratio Lower Upper

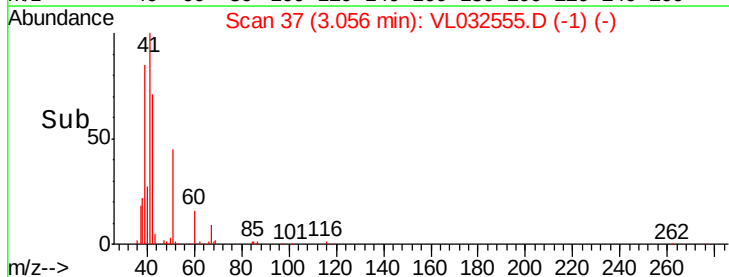
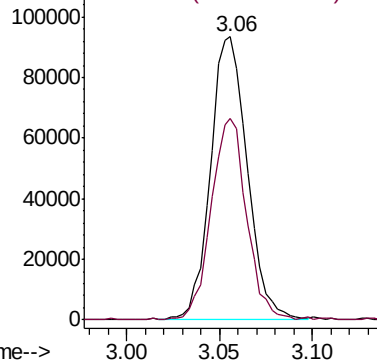
41 100

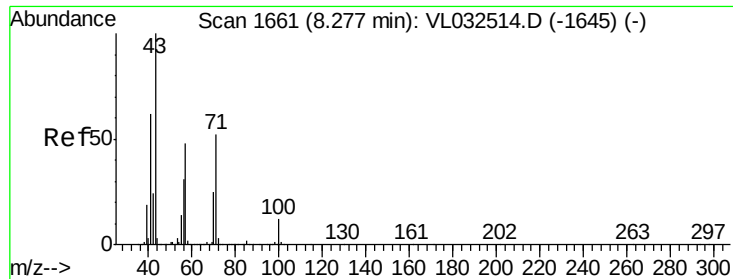
42 69.9 56.6 84.8



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





#10

Heptane

Concen: 0.033 ppbv

RT: 8.27 min Scan# 1659

Delta R.T. -0.03 min

Lab File: VL032555.D

Acq: 27 Sep 2018 18:46

Instrument :

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ClientSampleId :

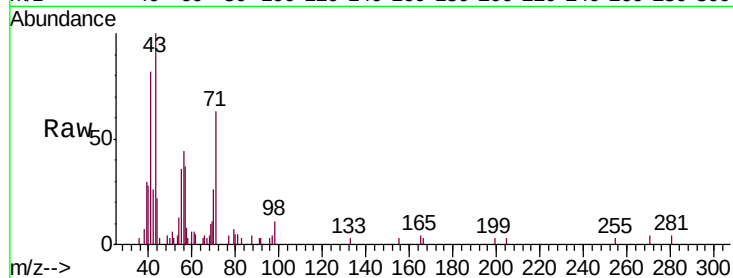
247

Tgt Ion: 43 Resp: 5785

Ion Ratio Lower Upper

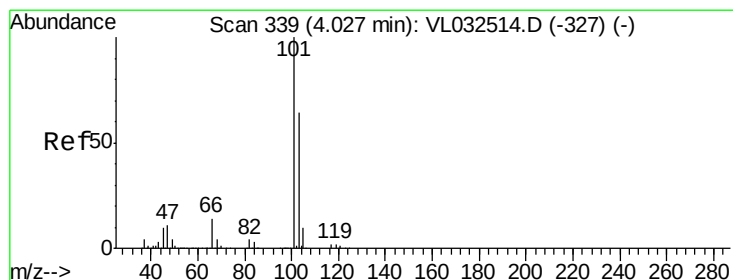
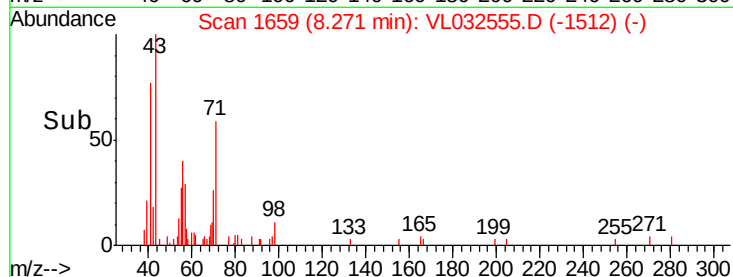
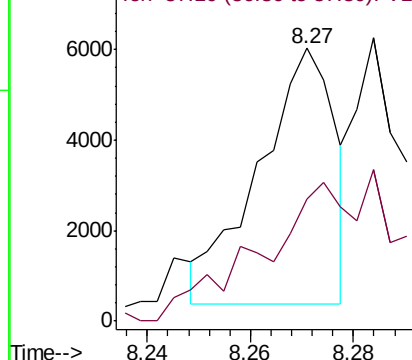
43 100

57 0.0 39.6 59.4#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0



#11

Trichlorofluoromethane

Concen: 0.119 ppbv

RT: 4.02 min Scan# 338

Delta R.T. -0.02 min

Lab File: VL032555.D

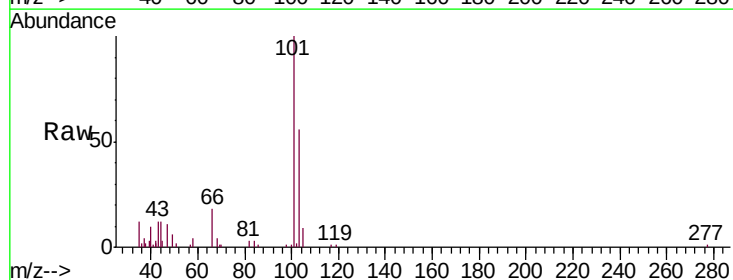
Acq: 27 Sep 2018 18:46

Tgt Ion: 101 Resp: 17458

Ion Ratio Lower Upper

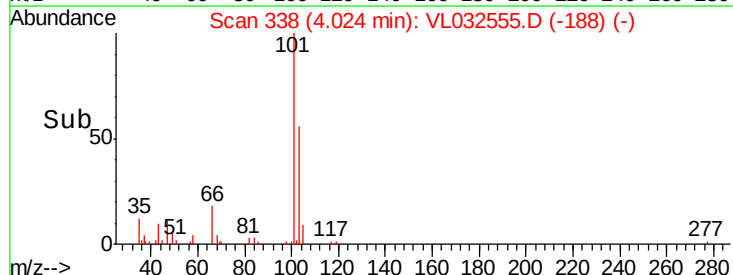
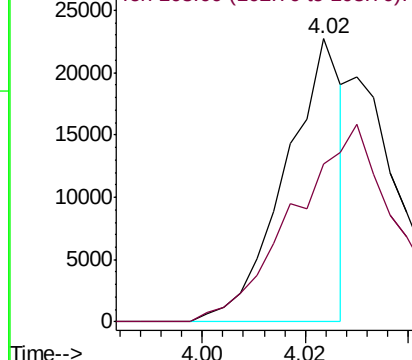
101 100

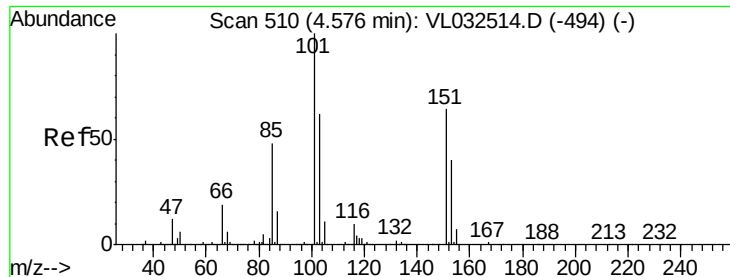
103 55.9 52.8 79.2



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.048 ppbv

RT: 4.58 min Scan# 510

Delta R.T. -0.02 min

Lab File: VL032555.D

Acq: 27 Sep 2018 18:46

Instrument :

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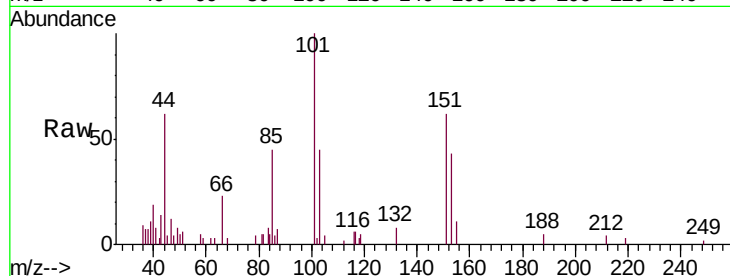
247

Tgt Ion:101 Resp: 5724

Ion Ratio Lower Upper

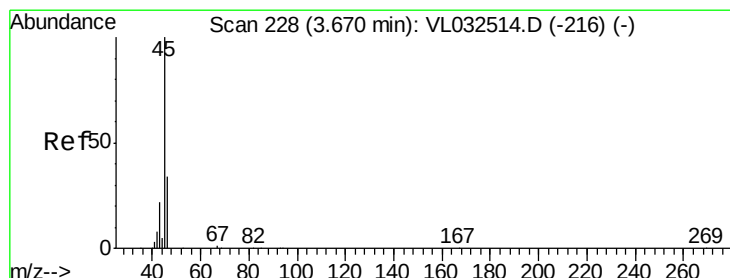
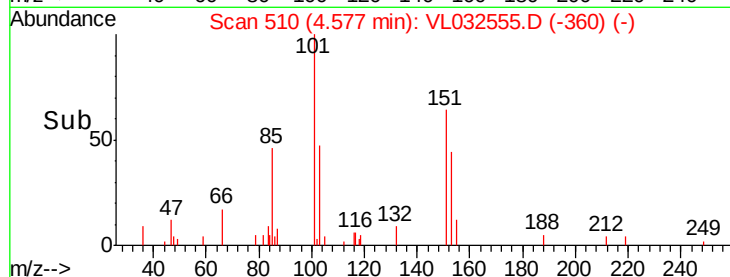
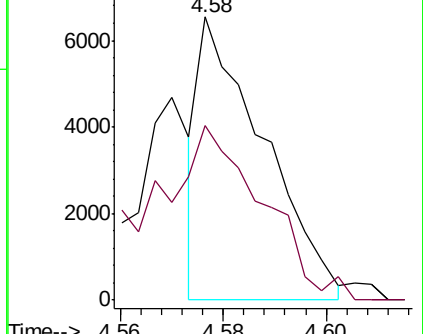
101 100

151 107.0 52.6 78.8#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V



#13

Ethanol

Concen: 7.470 ppbv

RT: 3.68 min Scan# 230

Delta R.T. -0.01 min

Lab File: VL032555.D

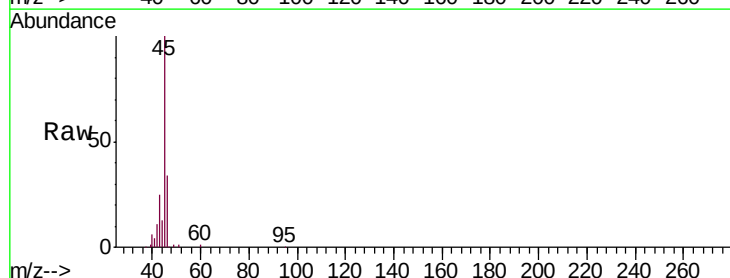
Acq: 27 Sep 2018 18:46

Tgt Ion: 45 Resp: 107962

Ion Ratio Lower Upper

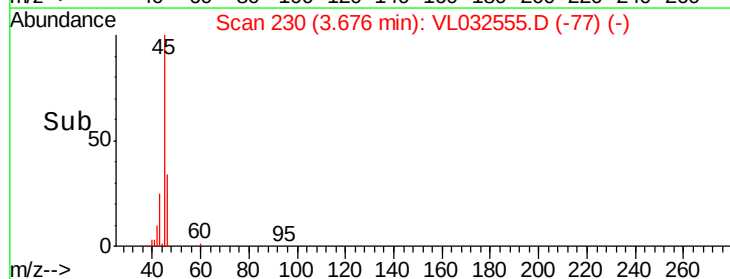
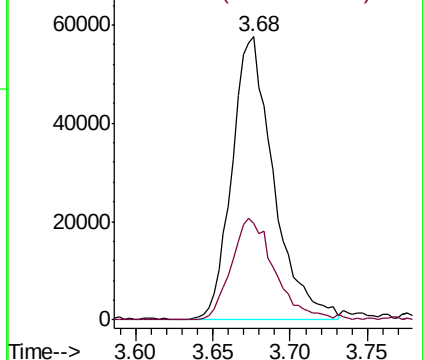
45 100

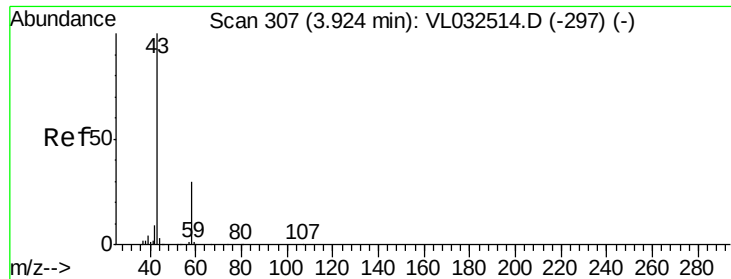
46 37.4 14.2 56.8



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 10.324 ppbv

RT: 3.92 min Scan# 306

Delta R.T. -0.02 min

Lab File: VL032555.D

Acq: 27 Sep 2018 18:46

Instrument :

MSVOA_L

ClientSampleId :

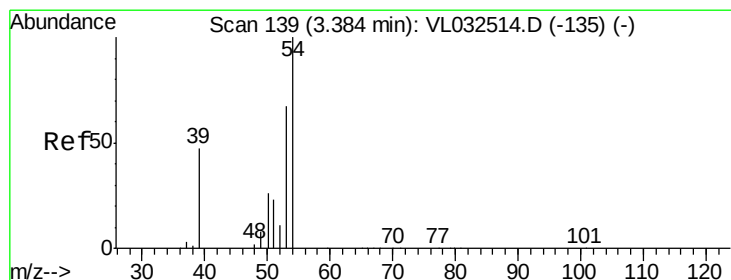
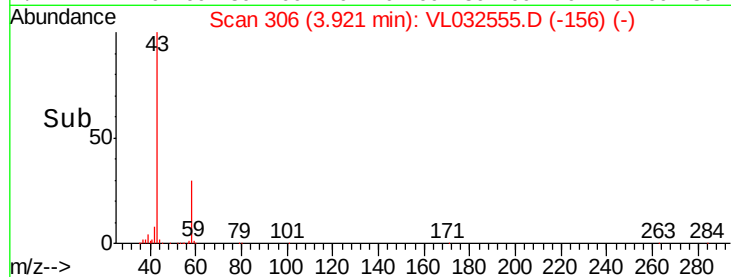
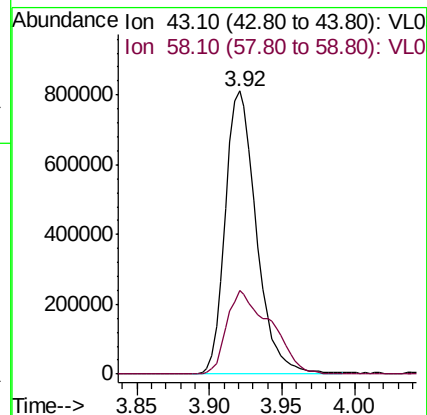
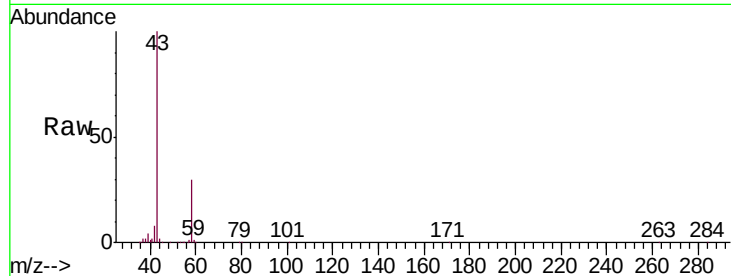
247

Tgt Ion: 43 Resp: 1207616

Ion Ratio Lower Upper

43 100

58 42.1 22.6 33.8#



#16

1,3-Butadiene

Concen: 2.850 ppbv

RT: 3.37 min Scan# 134

Delta R.T. -0.03 min

Lab File: VL032555.D

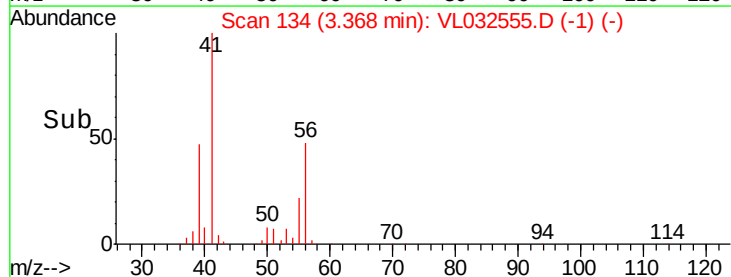
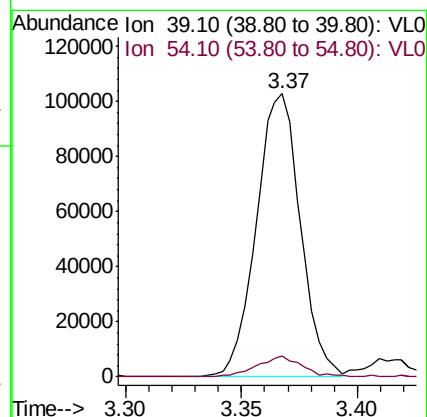
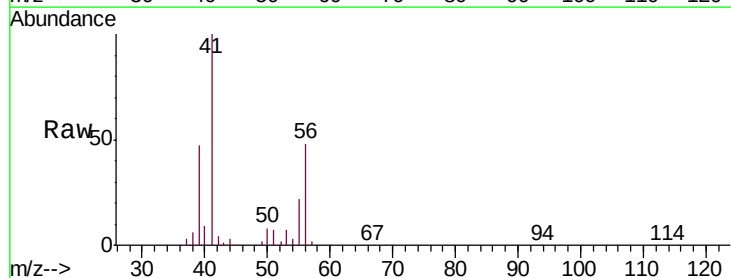
Acq: 27 Sep 2018 18:46

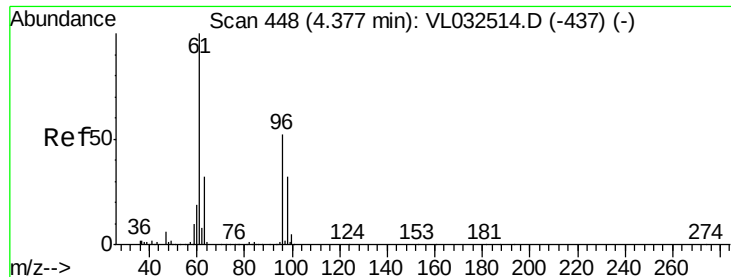
Tgt Ion: 39 Resp: 135223

Ion Ratio Lower Upper

39 100

54 7.9 80.8 121.2#



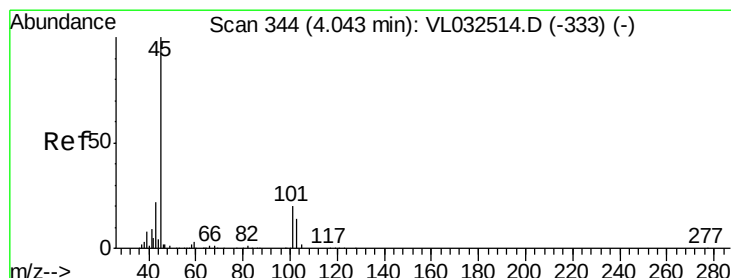
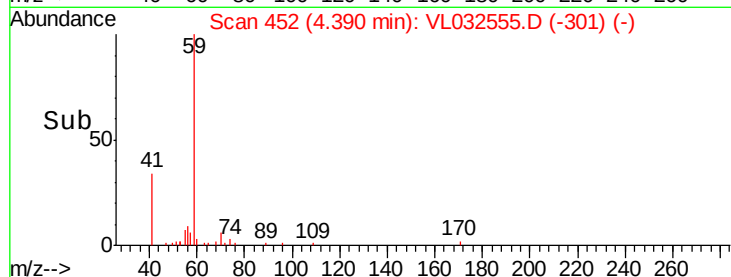
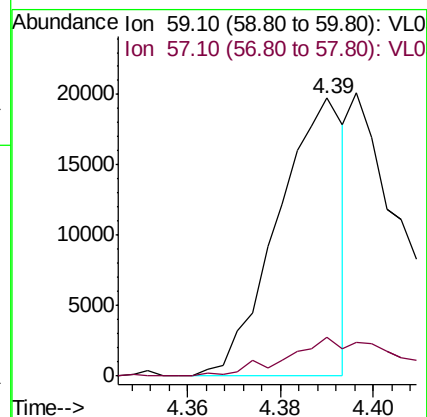
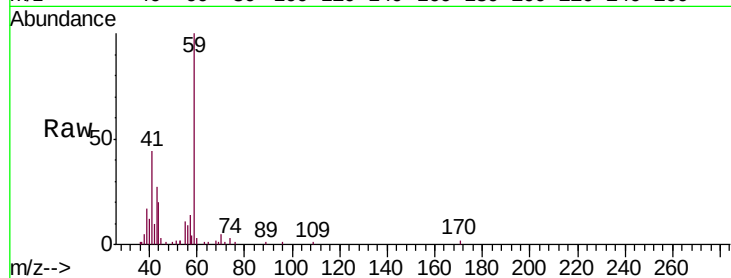


#17

tert-Butyl alcohol
 Concen: 1.337 ppbv
 RT: 4.39 min Scan# 452
 Delta R.T. -0.01 min
 Lab File: VL032555.D
 Acq: 27 Sep 2018 18:46

Instrument :
 MSVOA_L
 ClientSampleId :
 247

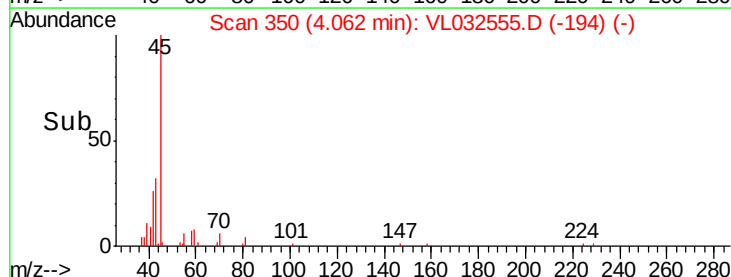
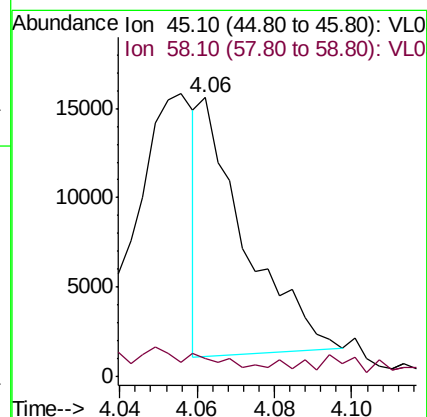
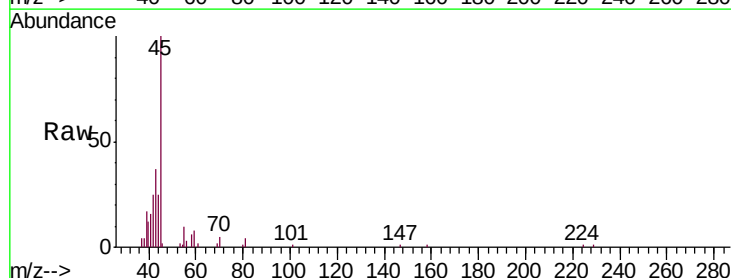
Tgt Ion: 59 Resp: 19653
 Ion Ratio Lower Upper
 59 100
 57 24.3 0.0 0.0#

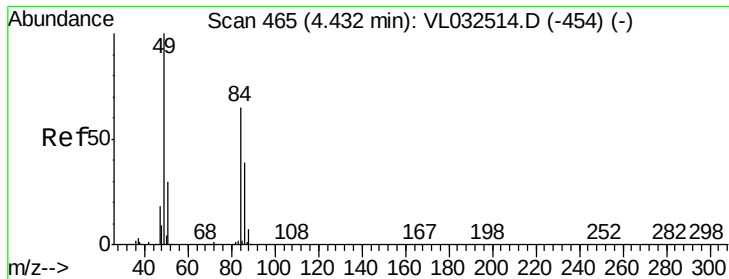


#19

Isopropyl Alcohol
 Concen: 0.143 ppbv
 RT: 4.06 min Scan# 350
 Delta R.T. 0.00 min
 Lab File: VL032555.D
 Acq: 27 Sep 2018 18:46

Tgt Ion: 45 Resp: 11626
 Ion Ratio Lower Upper
 45 100
 58 0.0 2.0 3.0#

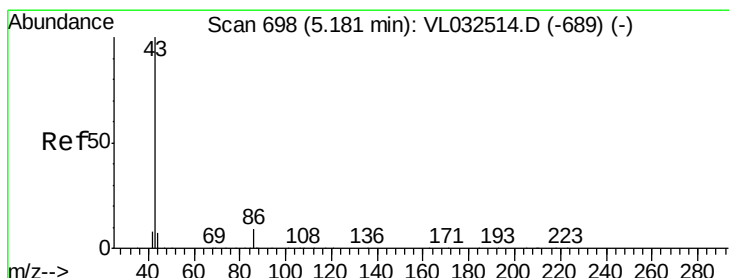
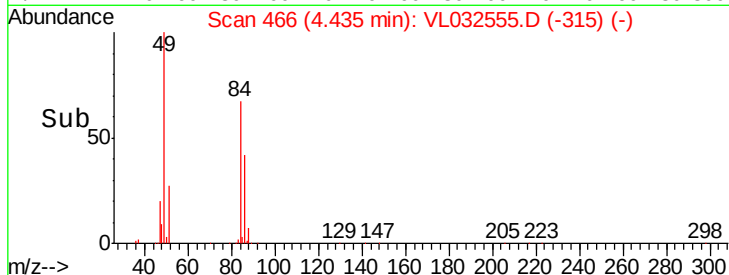
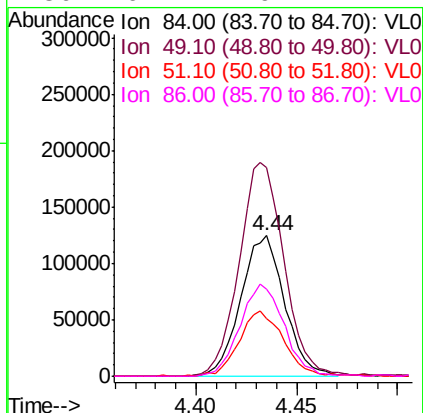
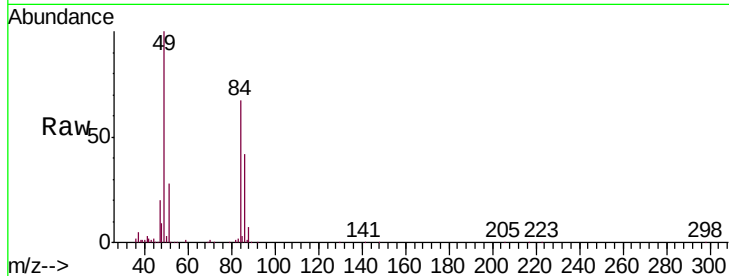




#20
Methylene Chloride
Concen: 3.351 ppbv
RT: 4.44 min Scan# 466
Delta R.T. -0.01 min
Lab File: VL032555.D
Acq: 27 Sep 2018 18:46

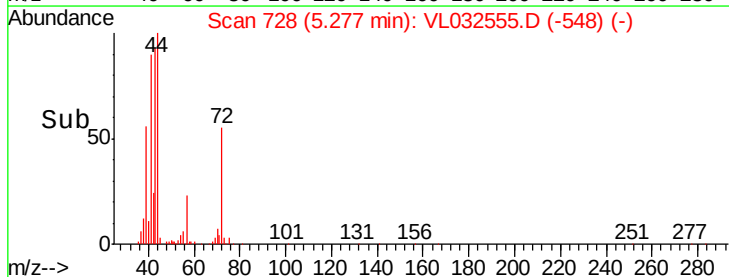
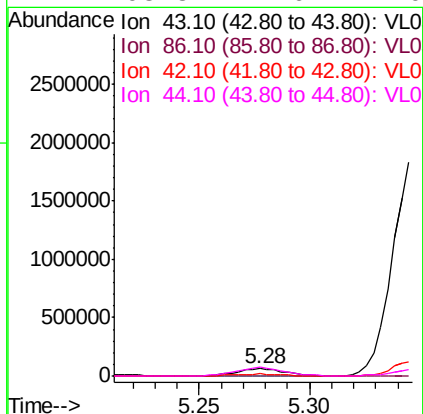
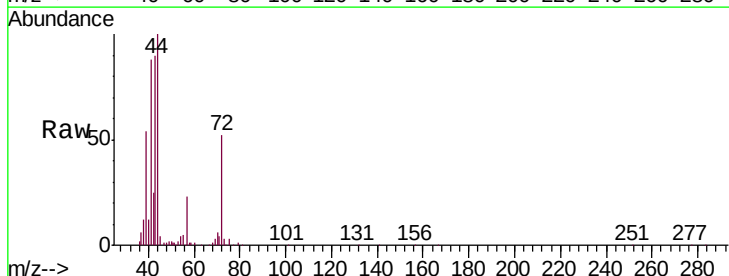
Instrument :
MSVOA_L
ClientSampled :
247

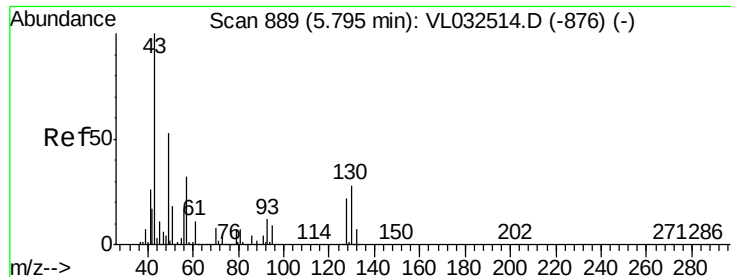
Tgt Ion:	84	Resp:	189809
Ion	Ratio	Lower	Upper
84	100		
49	148.6	119.1	178.7
51	40.5	35.2	52.8
86	62.4	49.4	74.2



#23
Vinyl Acetate
Concen: 0.466 ppbv
RT: 5.28 min Scan# 728
Delta R.T. 0.08 min
Lab File: VL032555.D
Acq: 27 Sep 2018 18:46

Tgt Ion:	43	Resp:	96389
Ion	Ratio	Lower	Upper
43	100		
86	0.0	5.9	8.9#
42	26.9	6.9	10.3#
44	108.8	4.6	7.0#

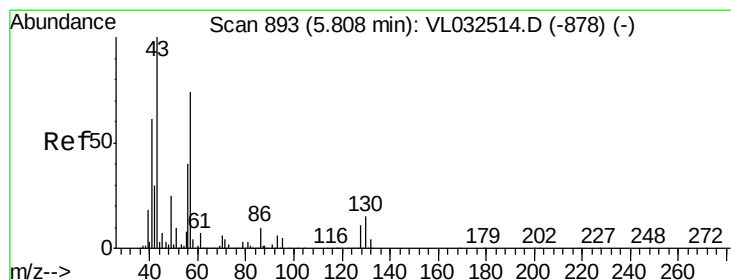
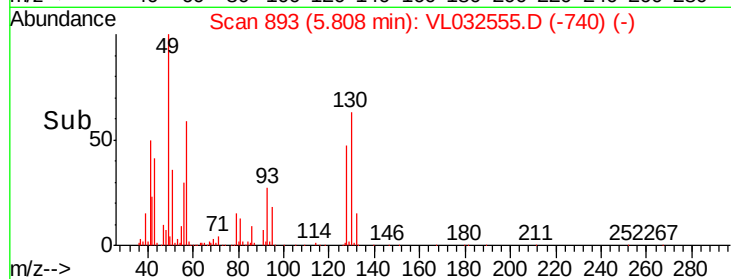
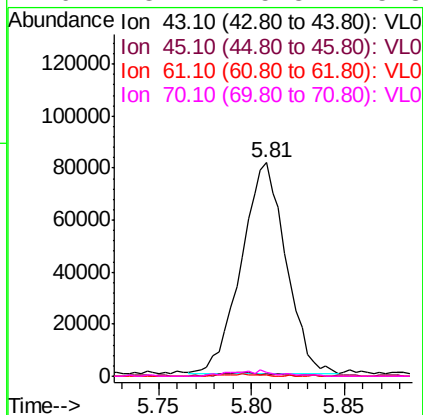
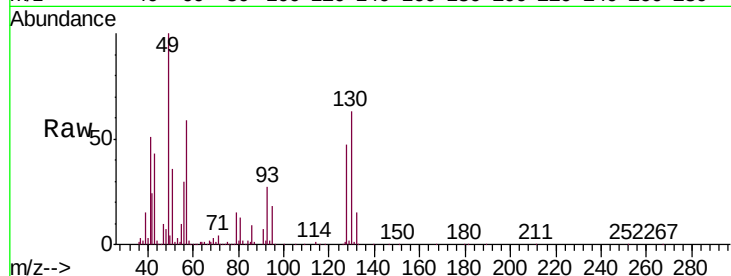




#25
Ethyl Acetate
Concen: 0.478 ppbv
RT: 5.81 min Scan# 893
Delta R.T. -0.01 min
Lab File: VL032555.D
Acq: 27 Sep 2018 18:46

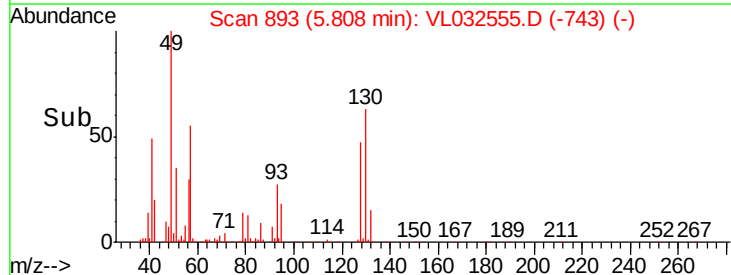
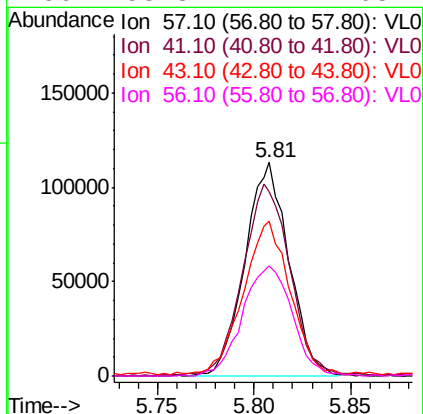
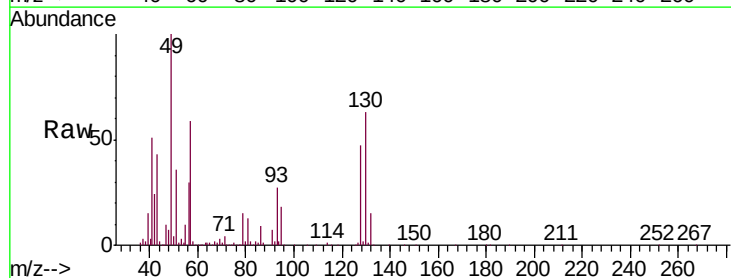
Instrument :
MSVOA_L
ClientSampleId :
247

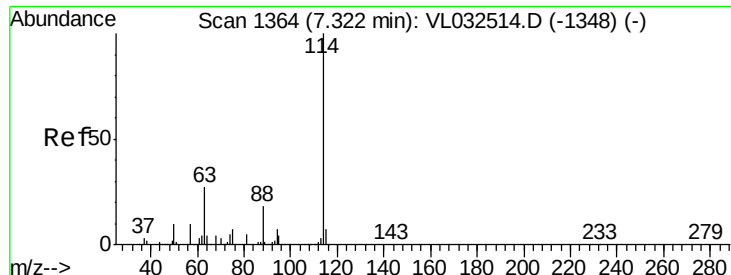
Tgt Ion:	43	Resp:	135809
Ion	Ratio	Lower	Upper
43	100		
45	2.2	8.0	12.0#
61	1.1	7.6	11.4#
70	3.1	5.8	8.8#



#26
Hexane
Concen: 1.395 ppbv
RT: 5.81 min Scan# 893
Delta R.T. -0.02 min
Lab File: VL032555.D
Acq: 27 Sep 2018 18:46

Tgt Ion:	57	Resp:	178885
Ion	Ratio	Lower	Upper
57	100		
41	97.6	69.0	103.4
43	77.7	172.1	258.1#
56	58.3	42.2	63.2

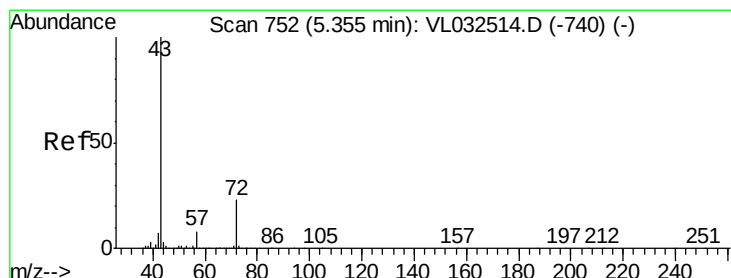
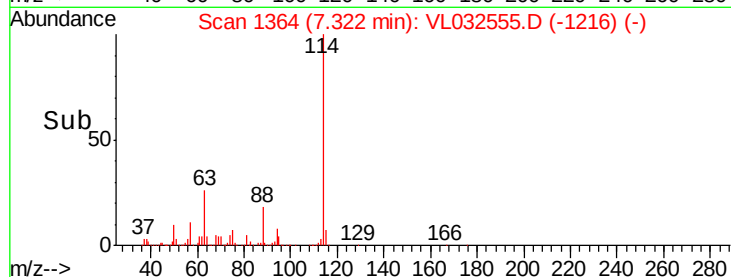
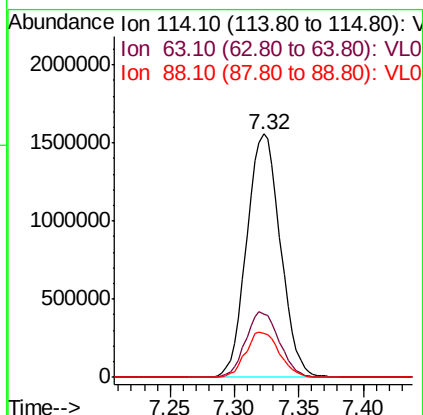
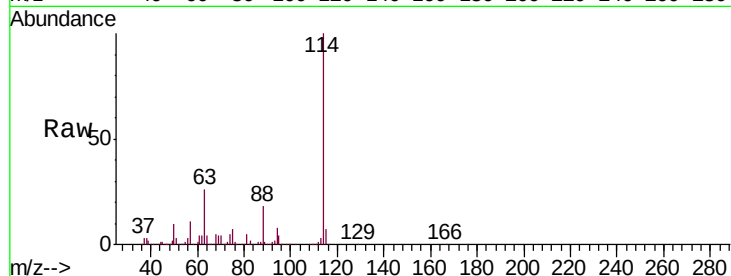




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.32 min Scan# 1364
 Delta R.T. -0.02 min
 Lab File: VL032555.D
 Acq: 27 Sep 2018 18:46

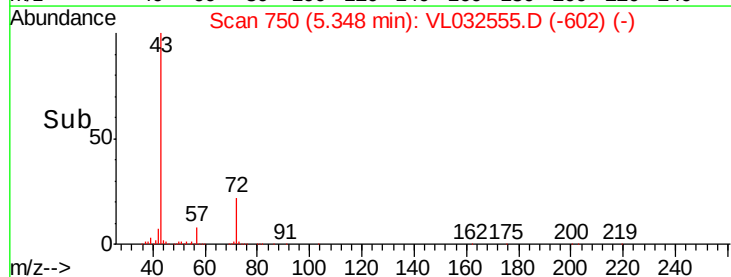
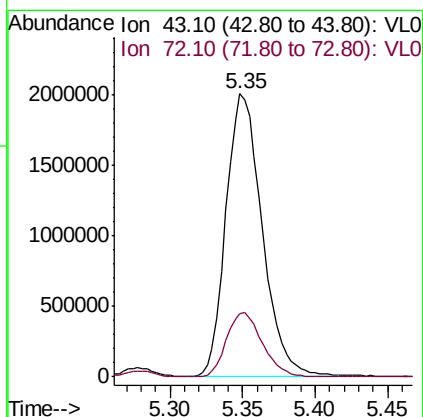
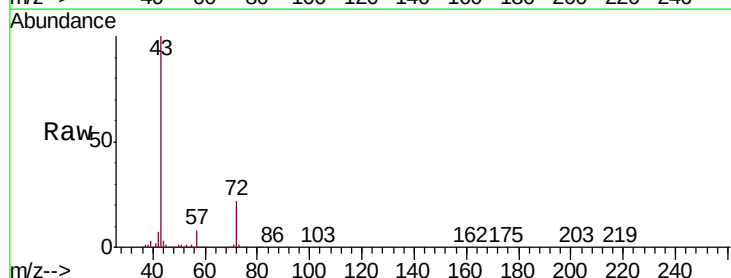
Instrument :
 MSVOA_L
 ClientSampleId :
 247

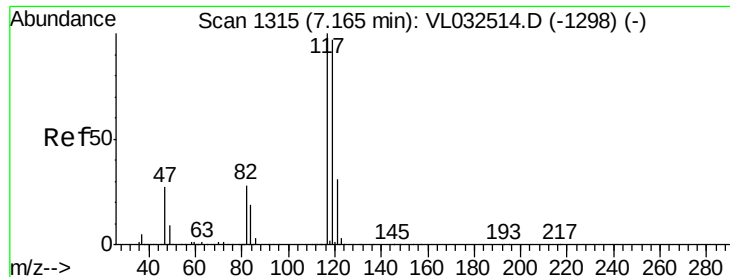
Tgt Ion:114 Resp: 2844581
 Ion Ratio Lower Upper
 114 100
 63 27.0 22.2 33.4
 88 18.6 15.0 22.4



#34
 2-Butanone
 Concen: 20.479 ppbv
 RT: 5.35 min Scan# 750
 Delta R.T. -0.02 min
 Lab File: VL032555.D
 Acq: 27 Sep 2018 18:46

Tgt Ion: 43 Resp: 3469039
 Ion Ratio Lower Upper
 43 100
 72 22.7 17.8 26.6





#35

Carbon Tetrachloride

Concen: 0.041 ppbv

RT: 7.16 min Scan# 1314

Delta R.T. -0.02 min

Lab File: VL032555.D

Acq: 27 Sep 2018 18:46

Instrument :

MSVOA_L

ClientSampleId :

247

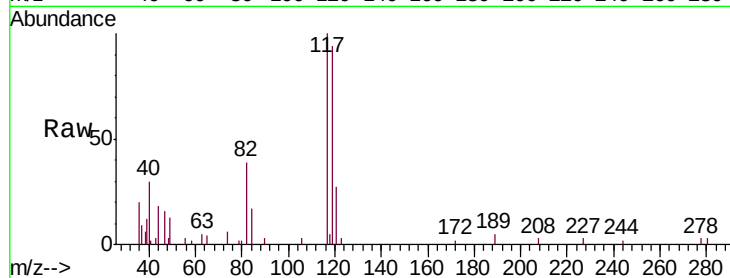
Tgt Ion:117 Resp: 8143

Ion Ratio Lower Upper

117 100

119 90.4 76.6 115.0

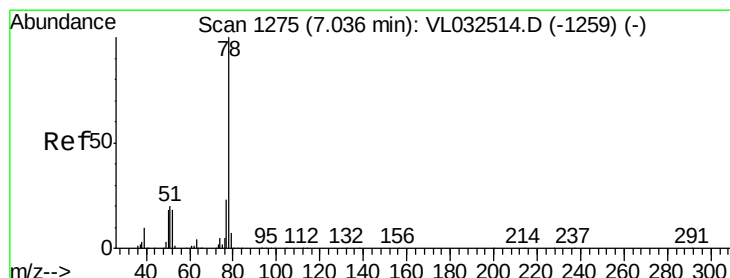
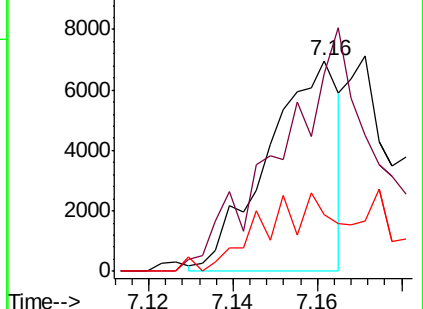
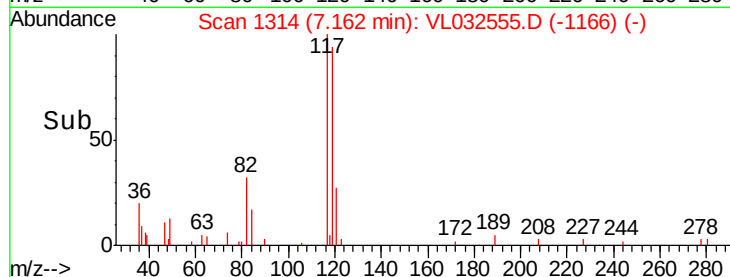
121 20.1 24.6 36.8#



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 0.071 ppbv

RT: 7.03 min Scan# 1274

Delta R.T. -0.02 min

Lab File: VL032555.D

Acq: 27 Sep 2018 18:46

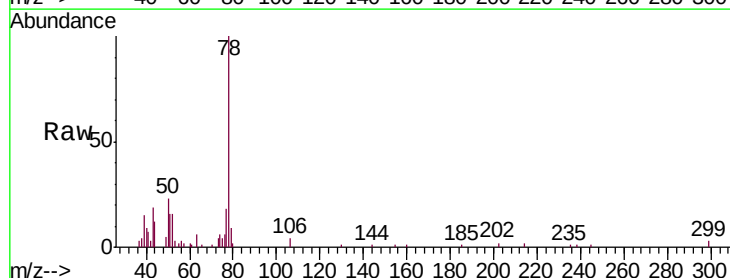
Tgt Ion: 78 Resp: 16409

Ion Ratio Lower Upper

78 100

77 15.7 18.4 27.6#

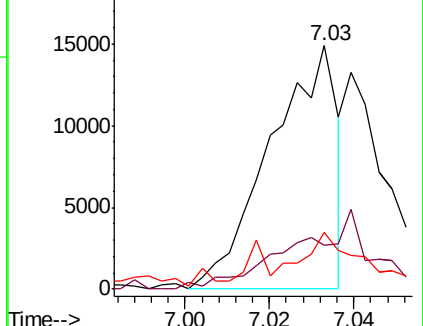
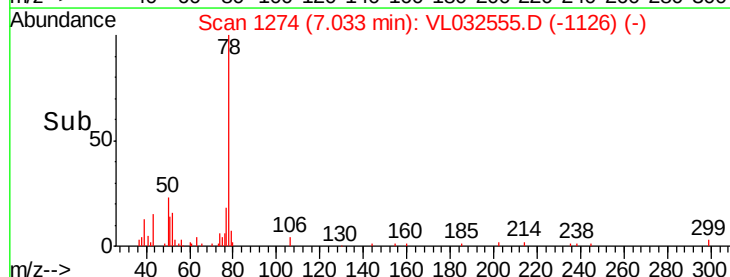
50 22.5 14.4 21.6#

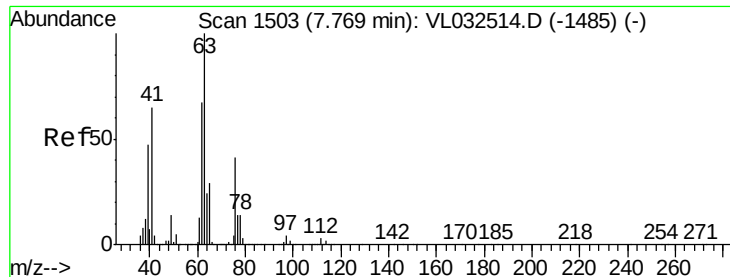


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





#39

1,2-Dichloropropane

Concen: 7.372 ppbv

RT: 7.32 min Scan# 1363

Delta R.T. -0.47 min

Lab File: VL032555.D

Acq: 27 Sep 2018 18:46

Instrument :

MSVOA_L

ClientSampleId :

247

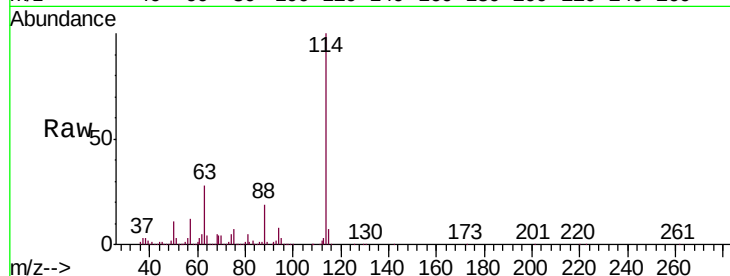
Tgt Ion: 63 Resp: 763687

Ion Ratio Lower Upper

63 100

41 1.7 55.4 83.0#

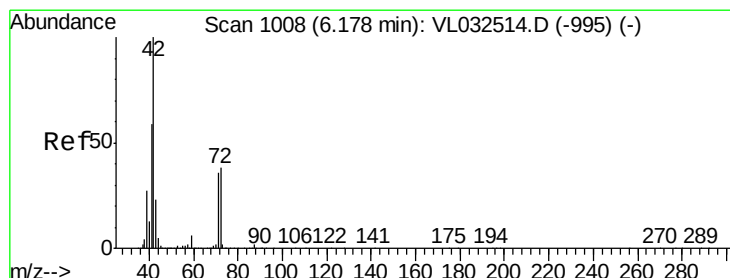
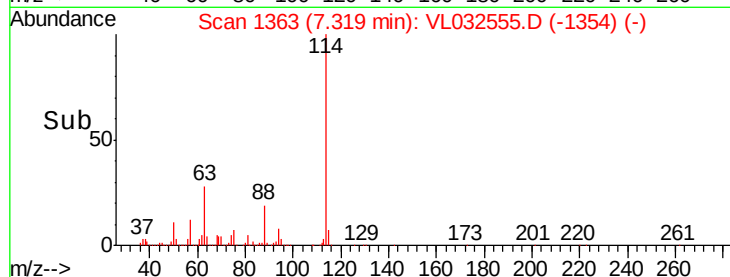
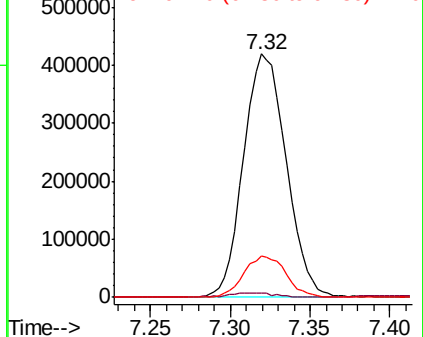
62 16.8 55.4 83.0#



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



#41

Tetrahydrofuran

Concen: 0.081 ppbv

RT: 6.15 min Scan# 999

Delta R.T. -0.05 min

Lab File: VL032555.D

Acq: 27 Sep 2018 18:46

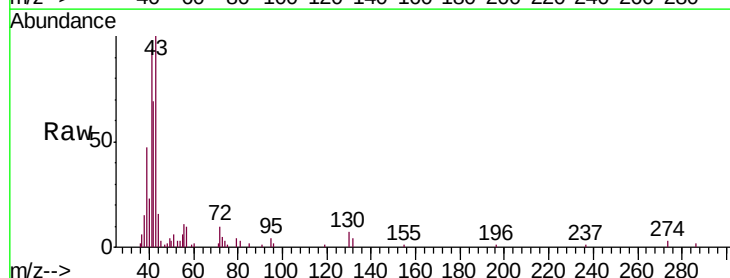
Tgt Ion: 42 Resp: 7482

Ion Ratio Lower Upper

42 100

72 57.7 29.5 44.3#

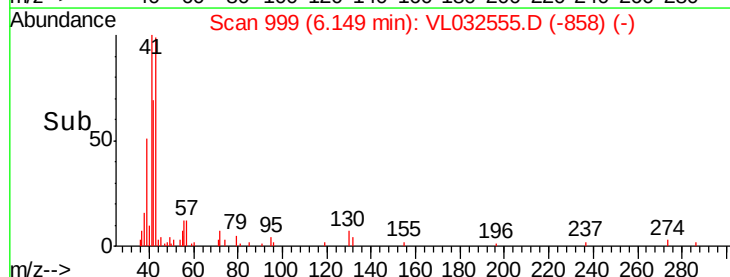
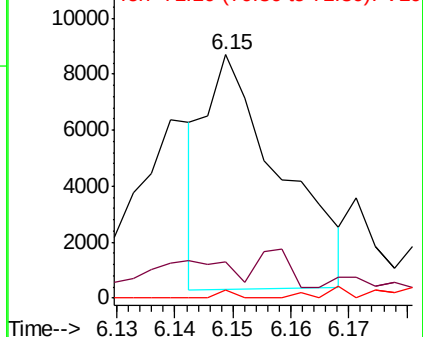
71 0.0 28.3 42.5#

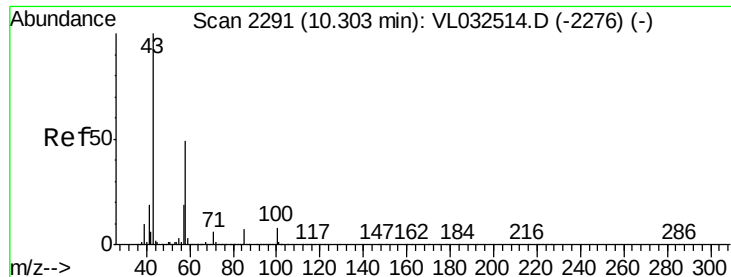


Abundance Ion 42.10 (41.80 to 42.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

Ion 71.10 (70.80 to 71.80): VL0





#51

2-Hexanone

Concen: 1.232 ppbv

RT: 10.31 min Scan# 2293

Delta R.T. -0.02 min

Lab File: VL032555.D

Acq: 27 Sep 2018 18:46

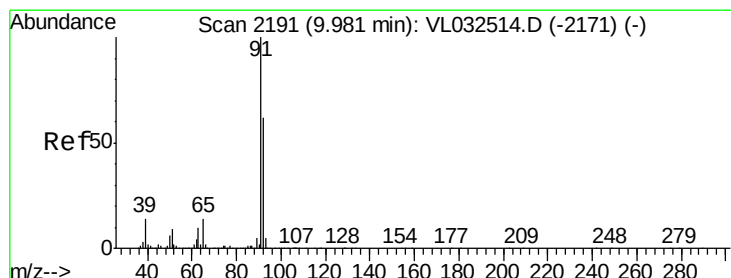
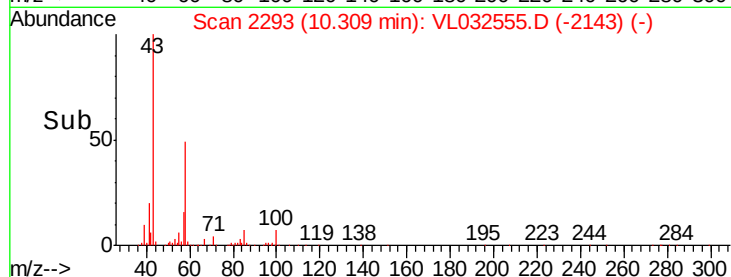
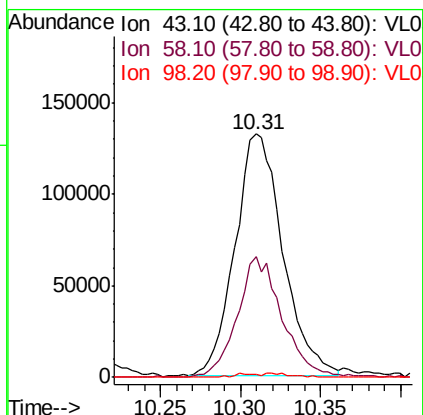
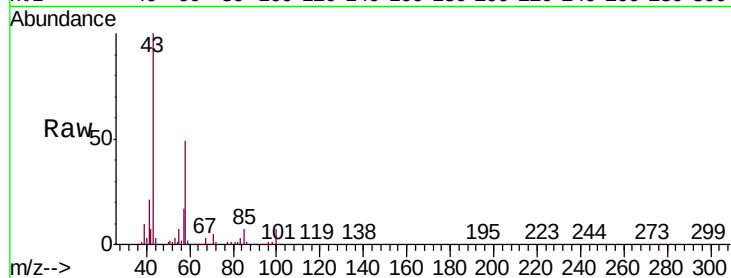
Instrument :

MSVOA_L

ClientSampleId :

247

Tgt Ion:	43	Resp:	271369
Ion	Ratio	Lower	Upper
43	100		
58	46.8	39.2	58.8
98	1.8	0.4	0.6#



#53

Toluene

Concen: 0.140 ppbv

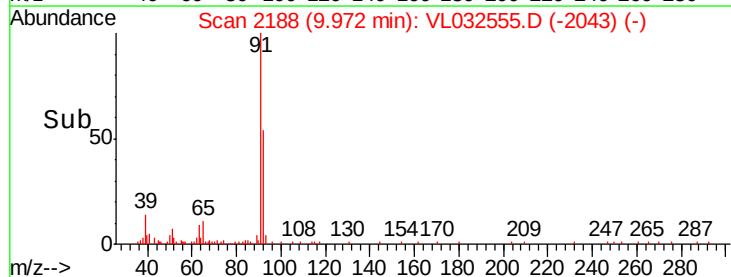
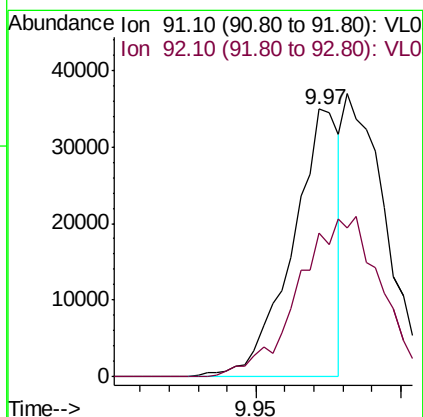
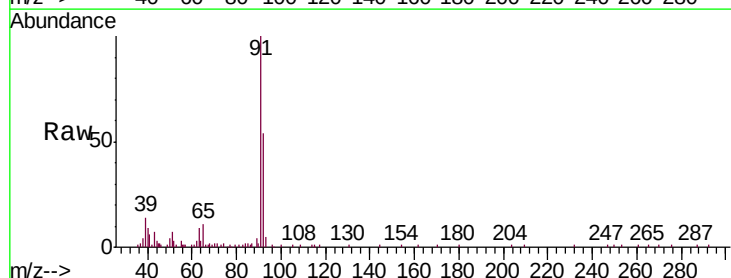
RT: 9.97 min Scan# 2188

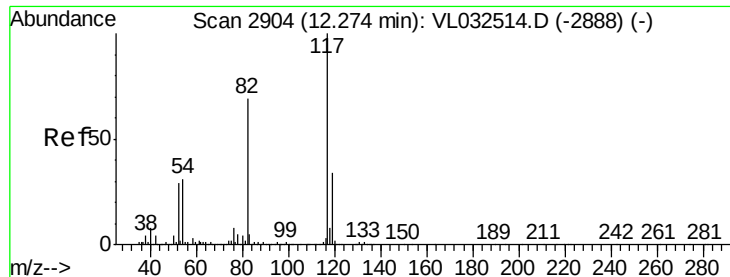
Delta R.T. -0.03 min

Lab File: VL032555.D

Acq: 27 Sep 2018 18:46

Tgt Ion:	91	Resp:	39124
Ion	Ratio	Lower	Upper
91	100		
92	0.0	48.1	72.1#





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.27 min Scan# 2904

Delta R.T. -0.02 min

Lab File: VL032555.D

Acq: 27 Sep 2018 18:46

Instrument :

MSVOA_L

ClientSampleId :

247

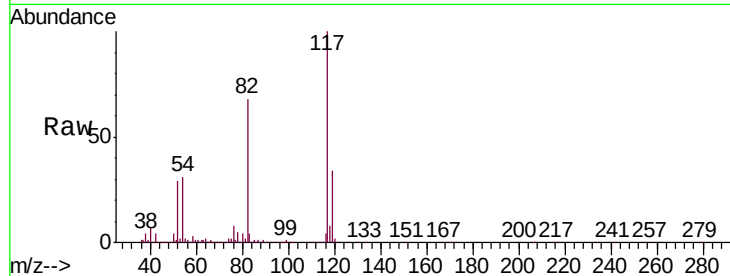
Tgt Ion: 117 Resp: 3201662

Ion Ratio Lower Upper

117 100

82 67.8 53.0 79.6

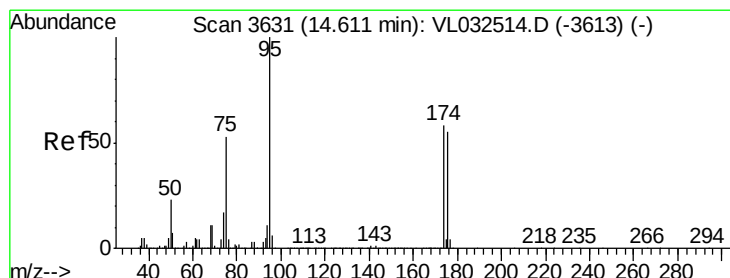
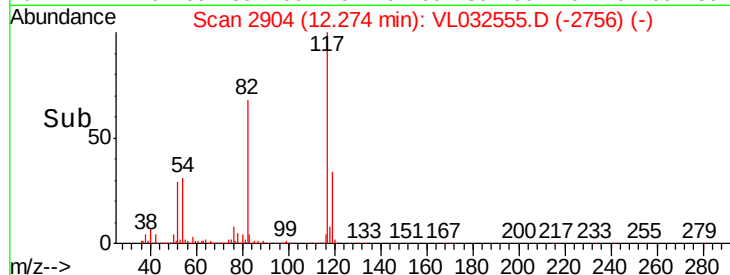
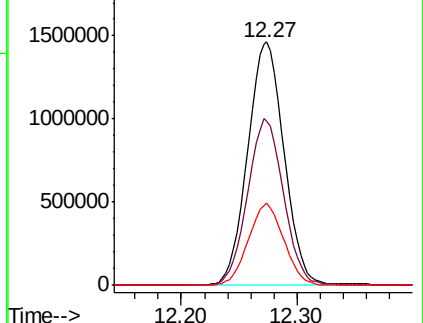
119 32.9 45.9 68.9#



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: 9.283 ppbv

RT: 14.61 min Scan# 3630

Delta R.T. -0.03 min

Lab File: VL032555.D

Acq: 27 Sep 2018 18:46

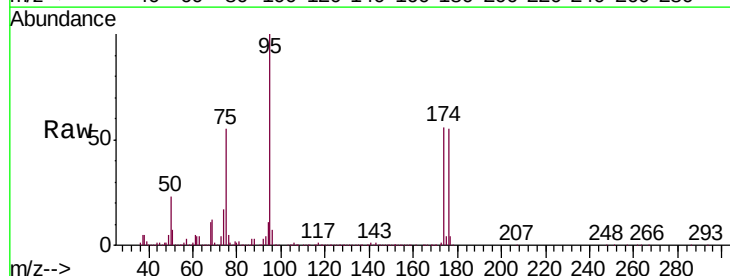
Tgt Ion: 95 Resp: 2241305

Ion Ratio Lower Upper

95 100

174 58.5 46.3 69.5

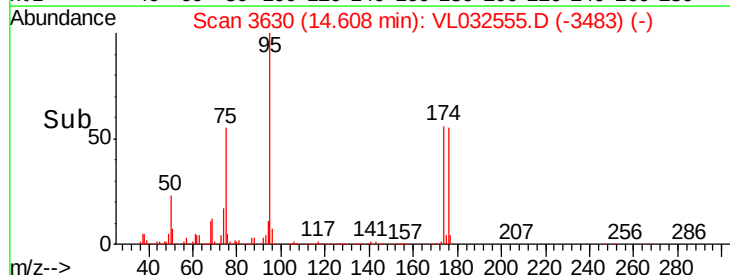
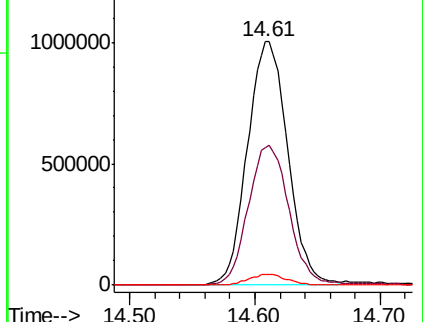
175 4.3 3.4 5.0

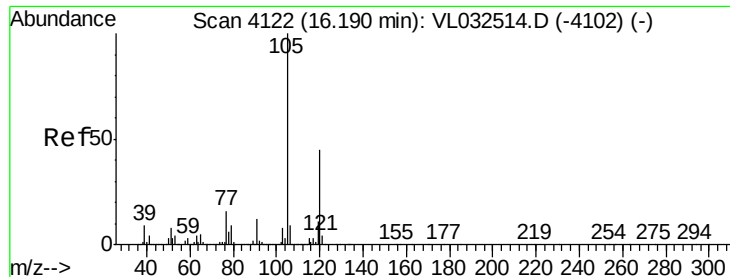


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





#73

1,3,5-Trimethylbenzene

Concen: 0.085 ppbv

RT: 16.19 min Scan# 4122

Delta R.T. -0.03 min

Lab File: VL032555.D

Acq: 27 Sep 2018 18:46

Instrument :

MSVOA_L

ClientSampleId :

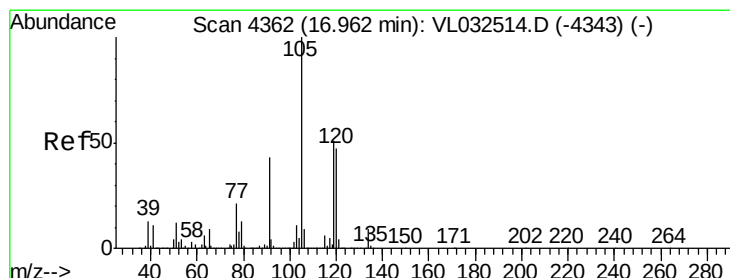
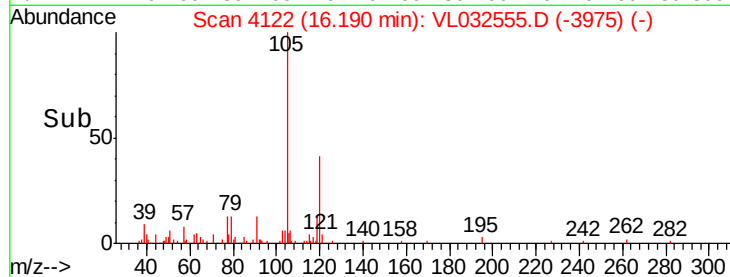
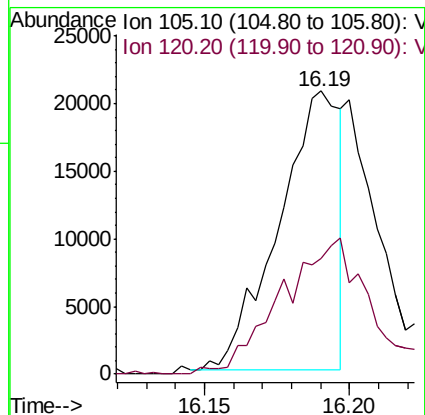
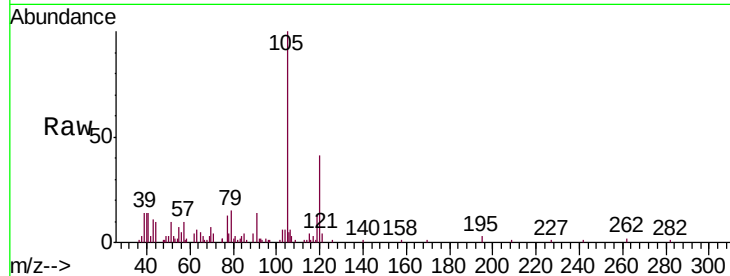
247

Tgt Ion:105 Resp: 30325

Ion Ratio Lower Upper

105 100

120 45.7 37.9 56.9



#74

1,2,4-Trimethylbenzene

Concen: 0.344 ppbv

RT: 16.96 min Scan# 4361

Delta R.T. -0.02 min

Lab File: VL032555.D

Acq: 27 Sep 2018 18:46

Tgt Ion:105 Resp: 131600

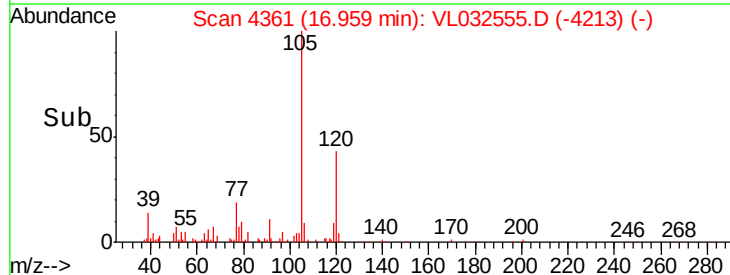
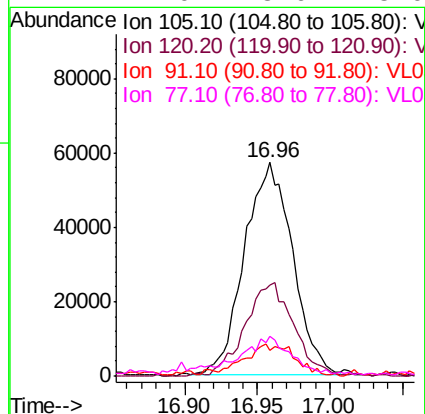
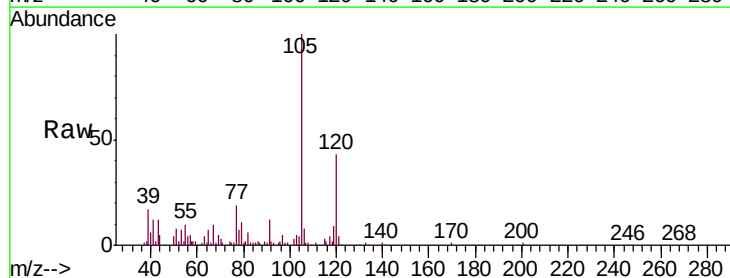
Ion Ratio Lower Upper

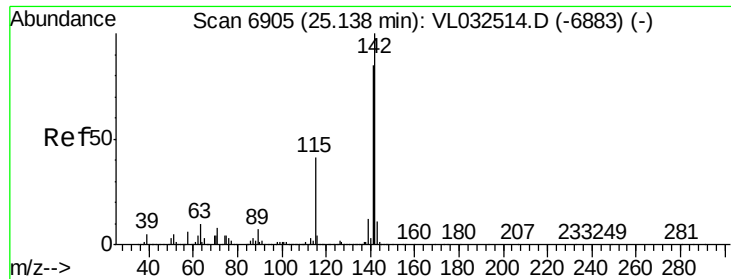
105 100

120 42.4 37.8 56.8

91 12.2 41.4 62.0#

77 17.0 18.6 28.0#





#80

Naphthalene, 2-methyl-

Concen: 0.037 ppbv

RT: 25.15 min Scan# 6910

Delta R.T. 0.00 min

Lab File: VL032555.D

Acq: 27 Sep 2018 18:46

Instrument :

MSVOA_L

ClientSampleId :

247

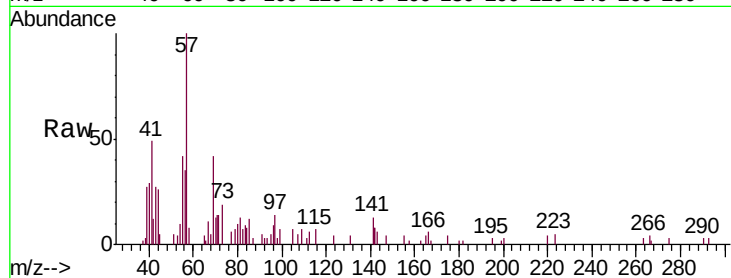
Tgt Ion:142 Resp: 2382

Ion Ratio Lower Upper

142 100

141 52.2 67.0 100.6#

115 4.5 31.3 46.9#



Abundance Ion 142.00 (141.70 to 142.70): V

Ion 141.00 (140.70 to 141.70): V

Ion 115.00 (114.70 to 115.70): V

