

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL092418\
 Data File : VL032528.D
 Acq On : 25 Sep 2018 3:39
 Operator : SY/AP
 Sample : J5039-02
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 OUTDOOR-AMBIENT

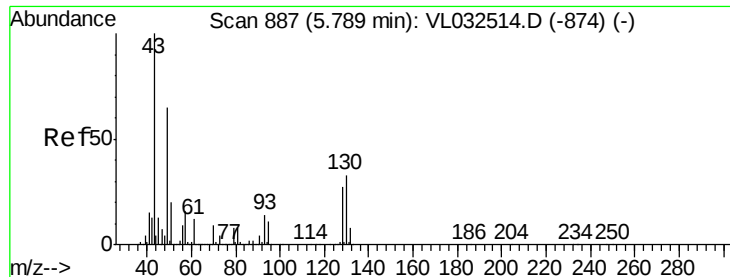
Quant Time: Sep 25 05:35:59 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL092418AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Sep 25 05:17:15 2018
 QLast Update : Tue Sep 25 05:17:15 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.79	49	1372741	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.32	114	2981866	10.00	ppbv	-0.03
55) Chlorobenzene-d5	12.27	117	2923976	10.00	ppbv	-0.03

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.61	95	2191727	9.94	ppbv	-0.03	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.40%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.09	85	104929	0.826	ppbv	93
3) Chlorodifluoromethane	3.03	51	84647	0.741	ppbv #	84
4) Chloromethane	3.19	50	32944	0.495	ppbv	90
9) Propene	3.26	41	66961	1.352	ppbv	99
11) Trichlorofluoromethane	4.02	101	40710	0.270	ppbv	88
12) 1,1,2-Trichlorotrifluoroet	4.58	101	5876	0.048	ppbv #	42
13) Ethanol	3.67	45	133513	8.968	ppbv	99
15) Acetone	3.92	43	811734	6.737	ppbv	99
16) 1,3-Butadiene	3.41	39	14464	0.296	ppbv #	14
17) tert-Butyl alcohol	4.40	59	3080	0.203	ppbv #	100
19) Isopropyl Alcohol	4.06	45	76801	0.915	ppbv #	1
20) Methylene Chloride	4.43	84	135135	2.316	ppbv	95
23) Vinyl Acetate	5.16	43	8752	0.041	ppbv #	34
25) Ethyl Acetate	5.80	43	332368	1.137	ppbv #	80
26) Hexane	5.80	57	432674	3.276	ppbv #	45
34) 2-Butanone	5.36	43	23183	0.131	ppbv #	54
35) Carbon Tetrachloride	7.16	117	15281	0.074	ppbv	98
36) Benzene	7.03	78	37590	0.156	ppbv #	88
39) 1,2-Dichloropropane	7.32	63	808191	7.442	ppbv #	25
41) Tetrahydrofuran	5.80	42	180153	1.867	ppbv #	51
53) Toluene	9.98	91	463286	1.578	ppbv	97
74) 1,2,4-Trimethylbenzene	16.96	105	26465	0.076	ppbv #	69

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.79 min Scan# 886

Delta R.T. -0.02 min

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OUTDOOR-AMBIENT

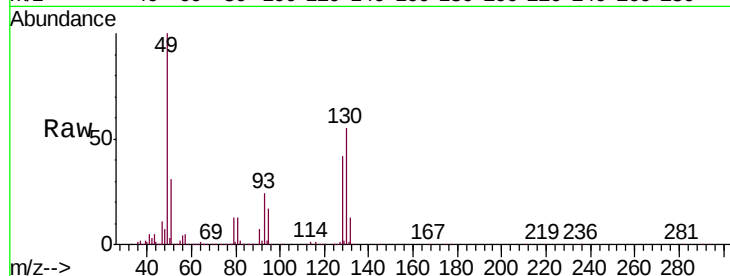
Tgt Ion: 49 Resp: 1372741

Ion Ratio Lower Upper

49 100

128 43.4 20.7 62.1

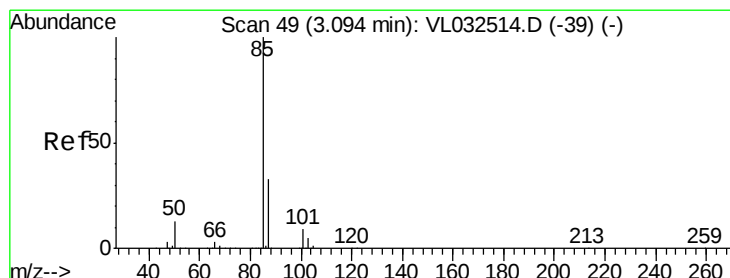
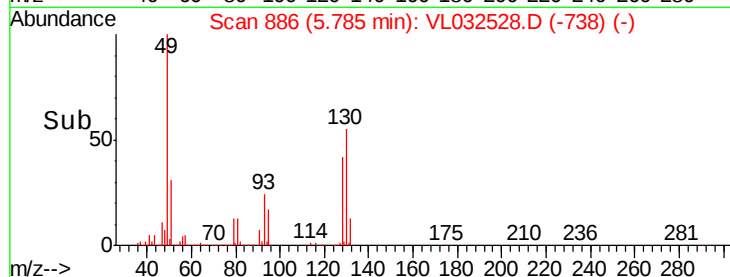
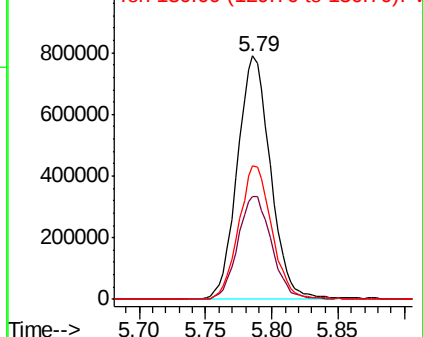
130 55.4 26.6 79.7



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.826 ppbv

RT: 3.09 min Scan# 48

Delta R.T. -0.02 min

Lab File: VL032528.D

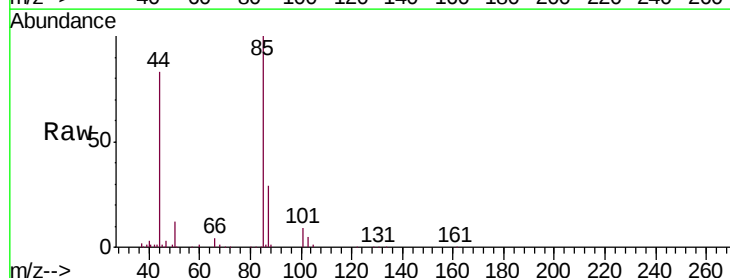
Acq: 25 Sep 2018 3:39

Tgt Ion: 85 Resp: 104929

Ion Ratio Lower Upper

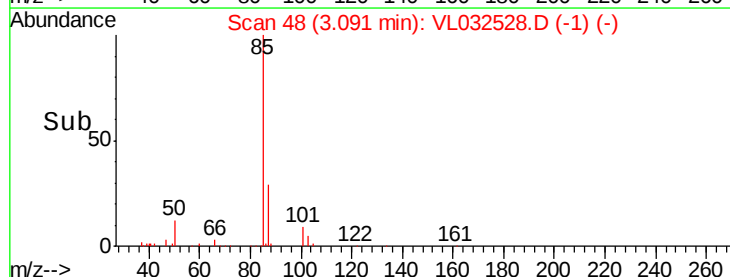
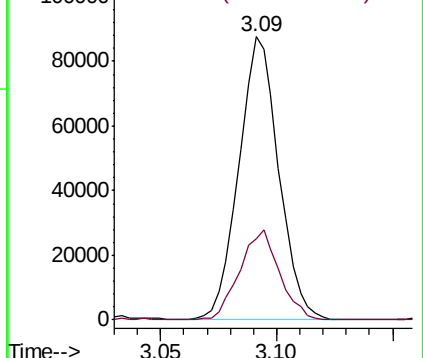
85 100

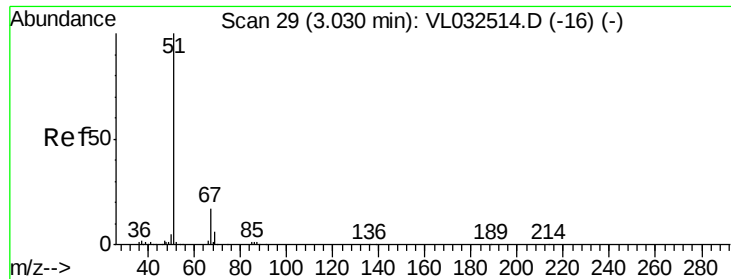
87 28.9 26.2 39.4



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

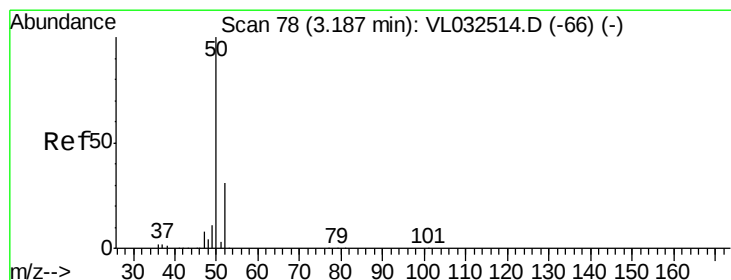
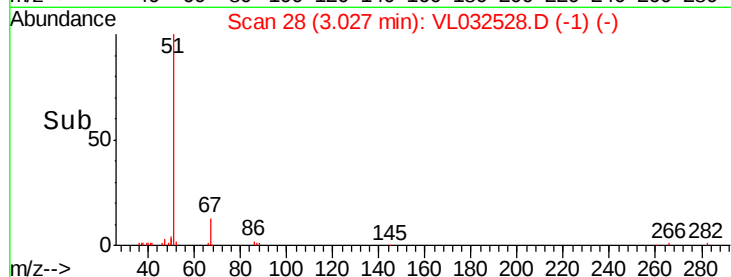
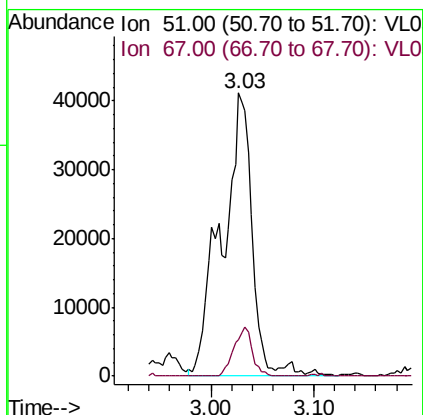
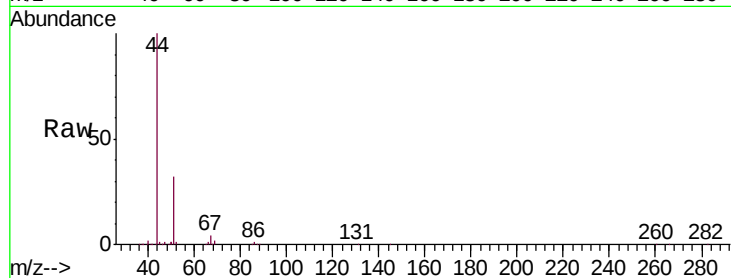




#3
Chlorodifluoromethane
Concen: 0.741 ppbv
RT: 3.03 min Scan# 28
Delta R.T. -0.02 min
Lab File: VL032528.D
Acq: 25 Sep 2018 3:39

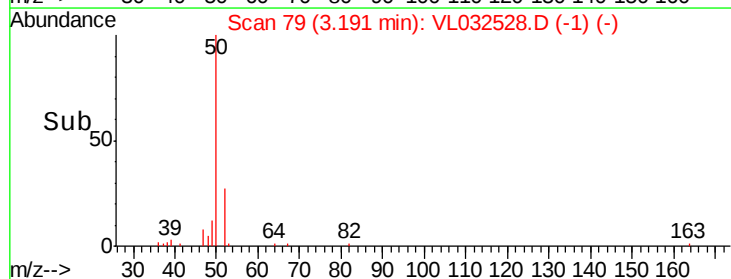
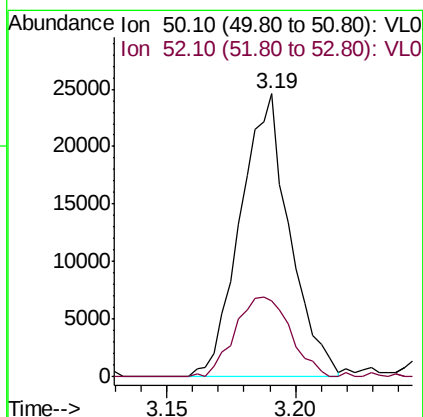
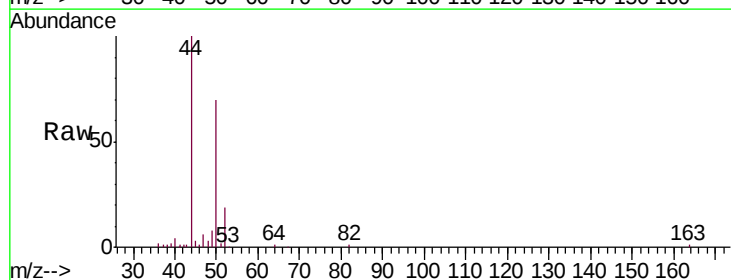
Instrument :
MSVOA_L
ClientSampleId :
OUTDOOR-AMBIENT

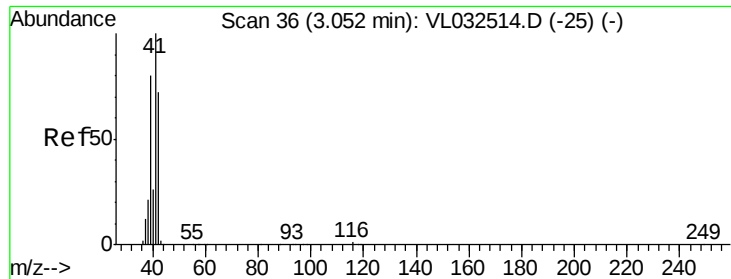
Tgt Ion: 51 Resp: 84647
Ion Ratio Lower Upper
51 100
67 10.5 13.8 20.8#



#4
Chloromethane
Concen: 0.495 ppbv
RT: 3.19 min Scan# 79
Delta R.T. -0.01 min
Lab File: VL032528.D
Acq: 25 Sep 2018 3:39

Tgt Ion: 50 Resp: 32944
Ion Ratio Lower Upper
50 100
52 26.7 25.6 38.4





#9

Propene

Concen: 1.352 ppbv

RT: 3.26 min Scan# 99

Delta R.T. 0.19 min

Lab File: VL032528.D

Acq: 25 Sep 2018 3:39

Instrument :

MSVOA_L

ClientSampleId :

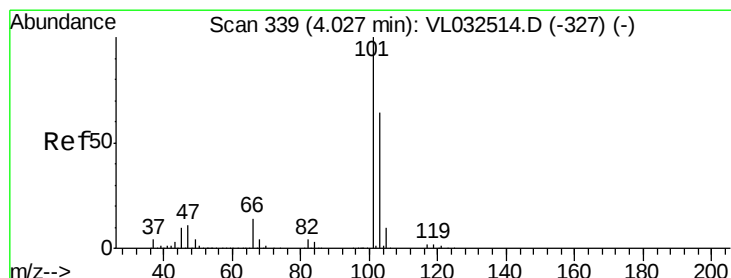
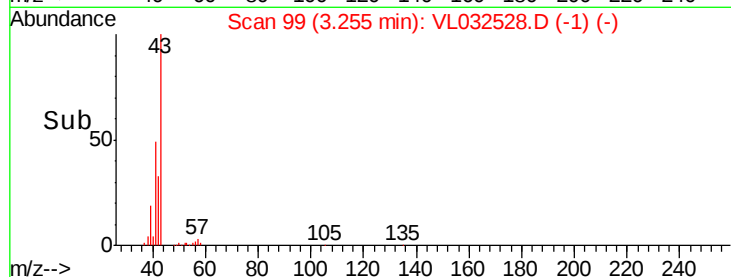
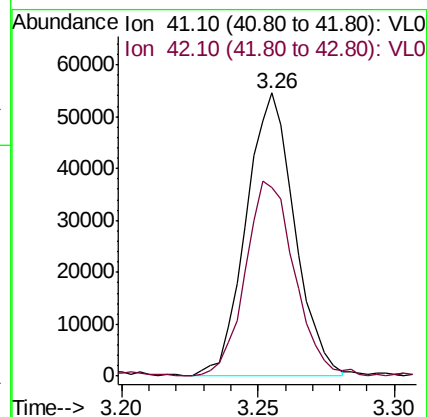
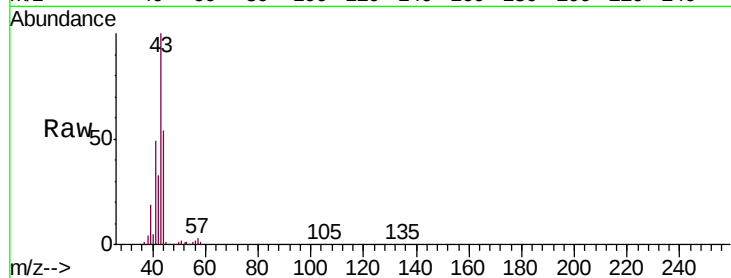
OUTDOOR-AMBIENT

Tgt Ion: 41 Resp: 66961

Ion Ratio Lower Upper

41 100

42 70.1 56.6 84.8



#11

Trichlorofluoromethane

Concen: 0.270 ppbv

RT: 4.02 min Scan# 338

Delta R.T. -0.02 min

Lab File: VL032528.D

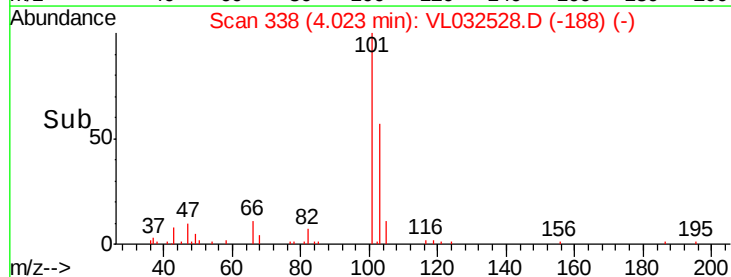
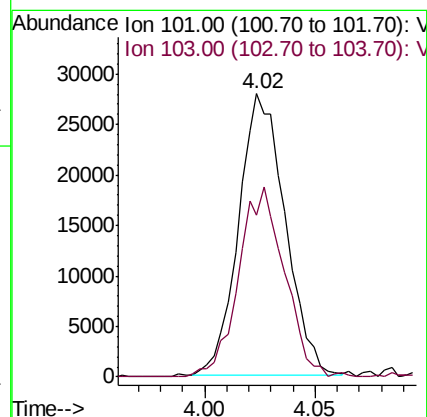
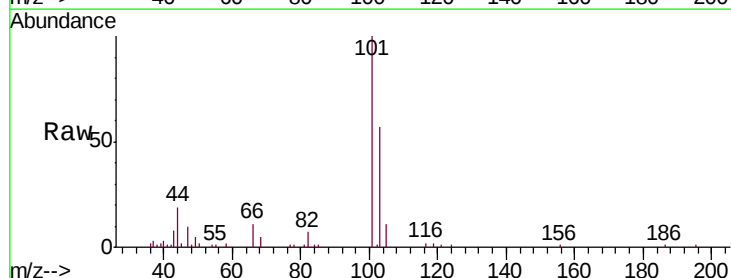
Acq: 25 Sep 2018 3:39

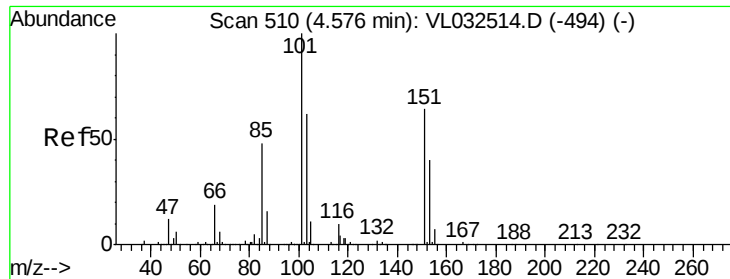
Tgt Ion: 101 Resp: 40710

Ion Ratio Lower Upper

101 100

103 56.2 52.8 79.2





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.048 ppbv

RT: 4.58 min Scan# 510

Delta R.T. -0.02 min

Lab File: VL032528.D

Acq: 25 Sep 2018 3:39

Instrument :

MSVOA_L

ClientSampleId :

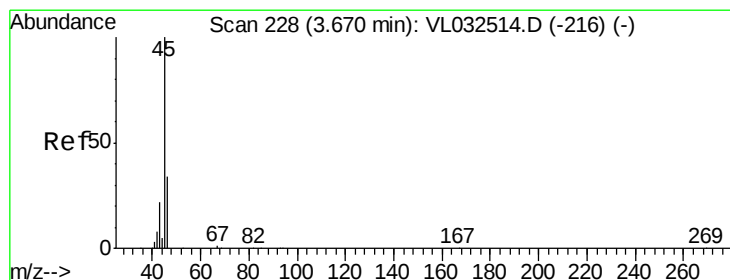
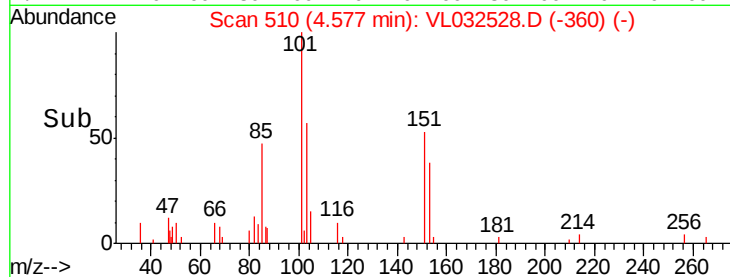
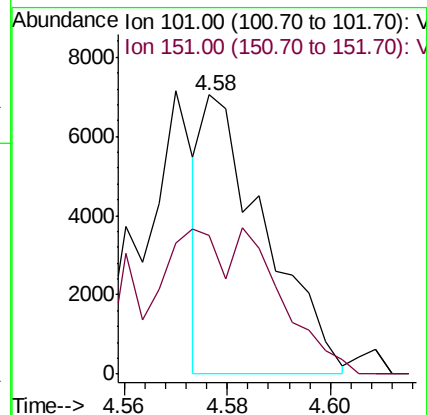
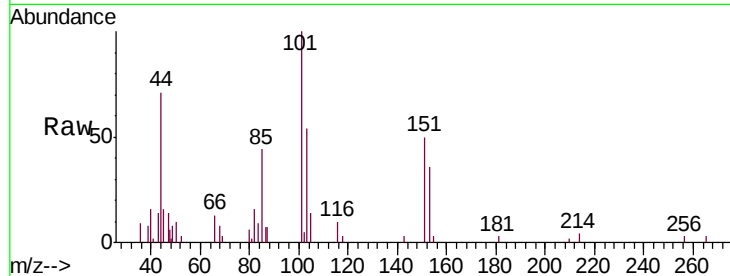
OUTDOOR-AMBIENT

Tgt Ion: 101 Resp: 5876

Ion Ratio Lower Upper

101 100

151 111.9 52.6 78.8#



#13

Ethanol

Concen: 8.968 ppbv

RT: 3.67 min Scan# 229

Delta R.T. -0.01 min

Lab File: VL032528.D

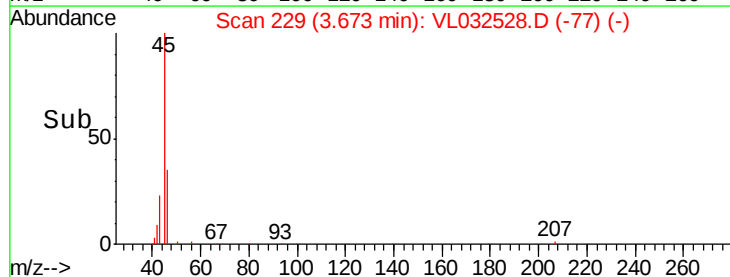
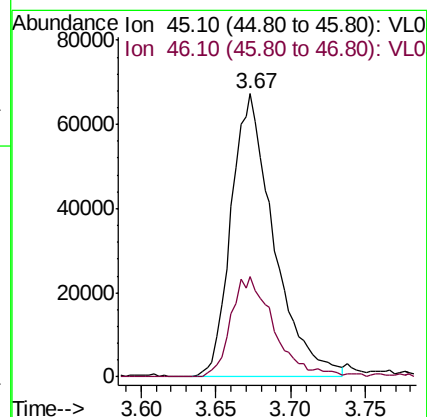
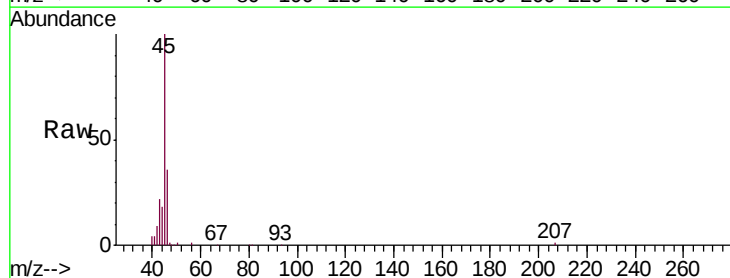
Acq: 25 Sep 2018 3:39

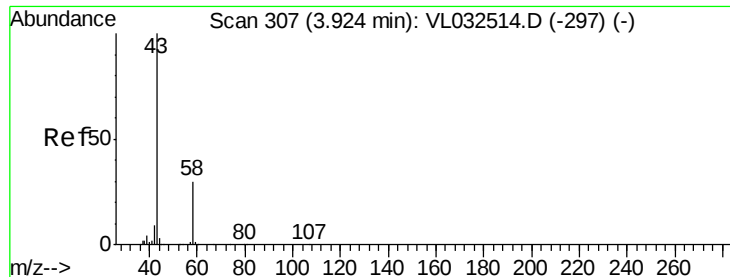
Tgt Ion: 45 Resp: 133513

Ion Ratio Lower Upper

45 100

46 35.9 14.2 56.8





#15

Acetone

Concen: 6.737 ppbv

RT: 3.92 min Scan# 306

Delta R.T. -0.02 min

Lab File: VL032528.D

Acq: 25 Sep 2018 3:39

Instrument :

MSVOA_L

ClientSampleId :

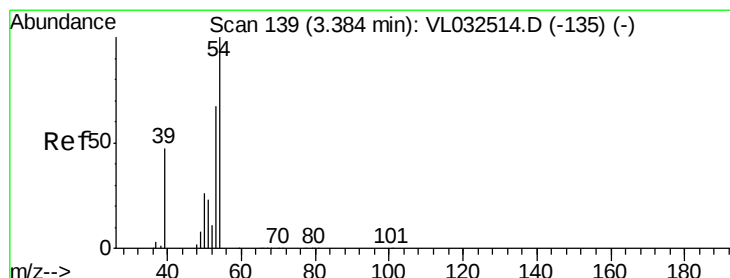
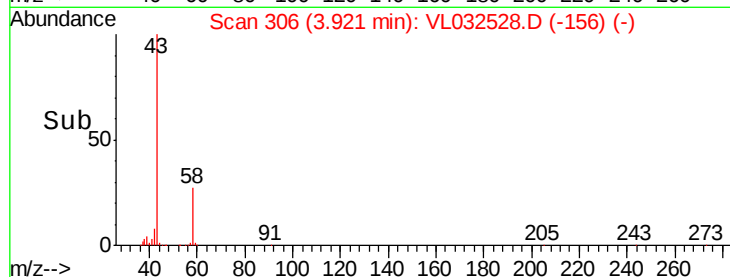
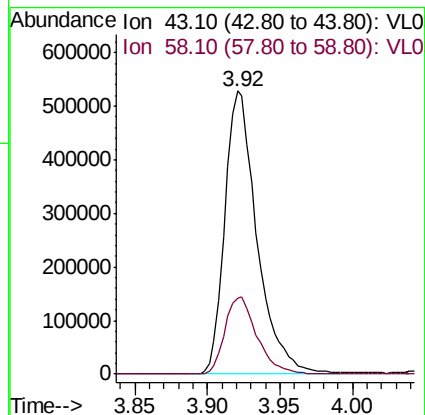
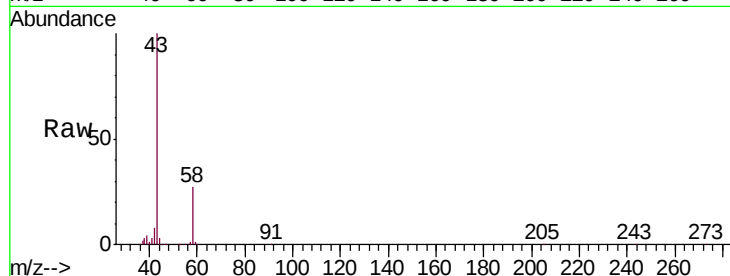
OUTDOOR-AMBIENT

Tgt Ion: 43 Resp: 811734

Ion Ratio Lower Upper

43 100

58 27.6 22.6 33.8



#16

1,3-Butadiene

Concen: 0.296 ppbv

RT: 3.41 min Scan# 148

Delta R.T. 0.01 min

Lab File: VL032528.D

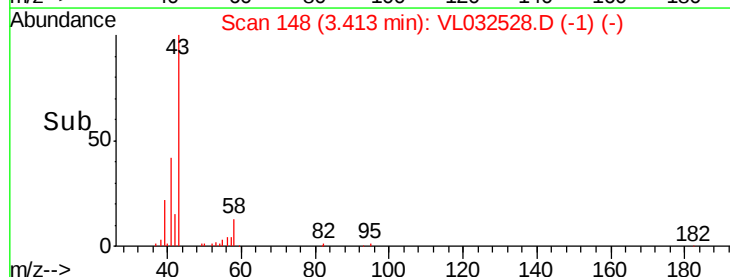
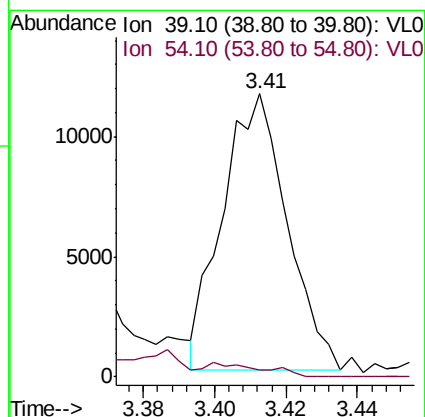
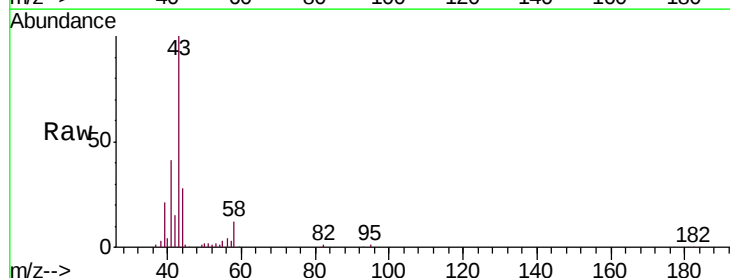
Acq: 25 Sep 2018 3:39

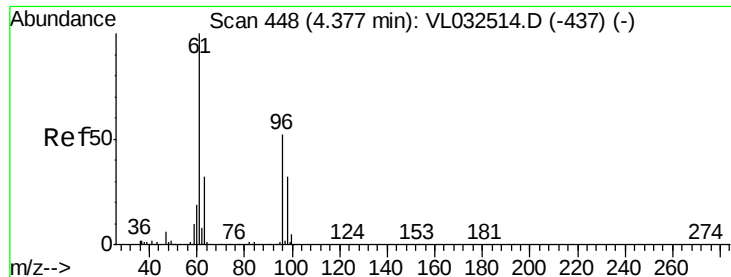
Tgt Ion: 39 Resp: 14464

Ion Ratio Lower Upper

39 100

54 14.4 80.8 121.2#





#17

tert-Butyl alcohol

Concen: 0.203 ppbv

RT: 4.40 min Scan# 456

Delta R.T. -0.00 min

Lab File: VL032528.D

Acq: 25 Sep 2018 3:39

Instrument :

MSVOA_L

ClientSampleId :

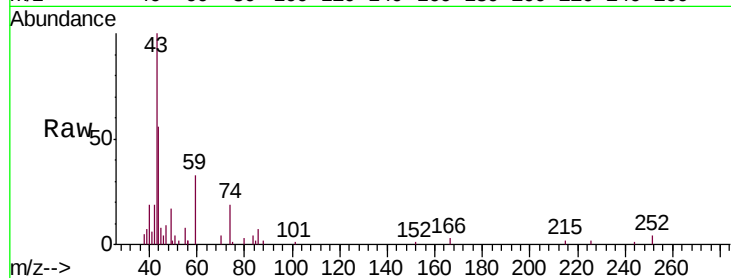
OUTDOOR-AMBIENT

Tgt Ion: 59 Resp: 3080

Ion Ratio Lower Upper

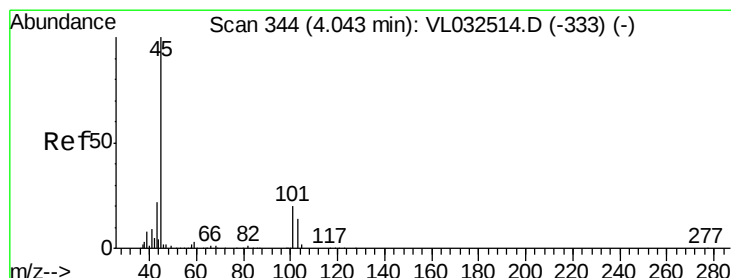
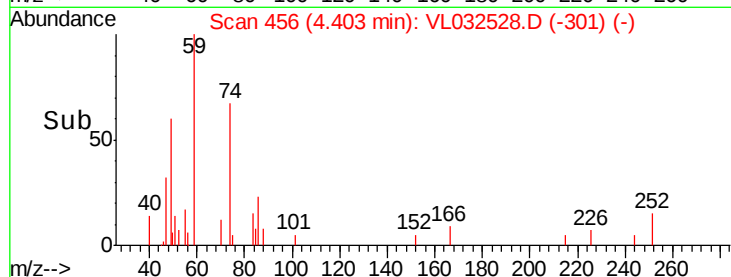
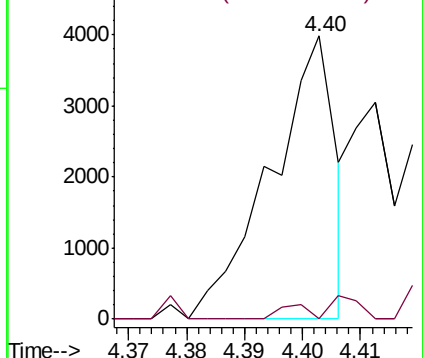
59 100

57 0.0 0.0 0.0



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0



#19

Isopropyl Alcohol

Concen: 0.915 ppbv

RT: 4.06 min Scan# 349

Delta R.T. -0.00 min

Lab File: VL032528.D

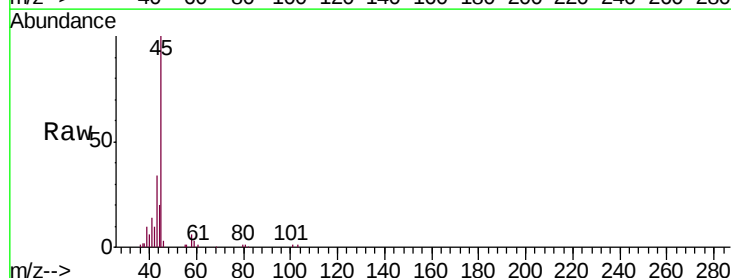
Acq: 25 Sep 2018 3:39

Tgt Ion: 45 Resp: 76801

Ion Ratio Lower Upper

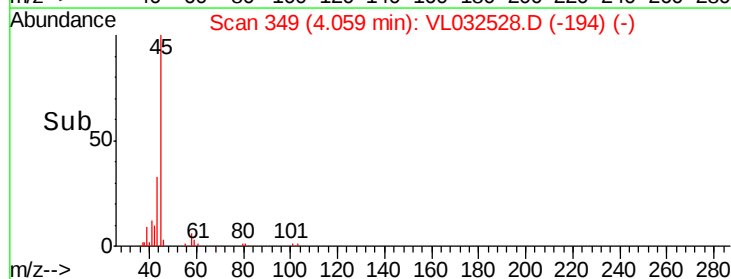
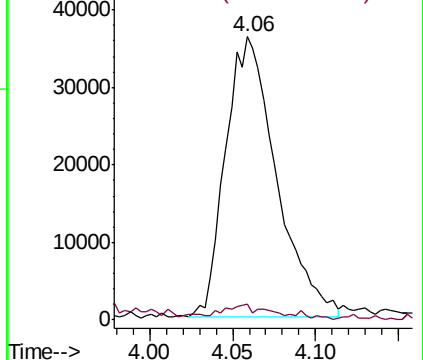
45 100

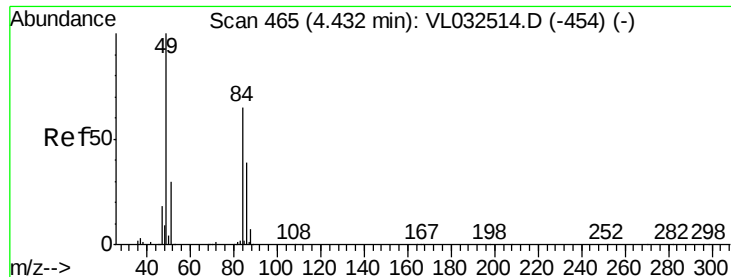
58 291.4 2.0 3.0#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

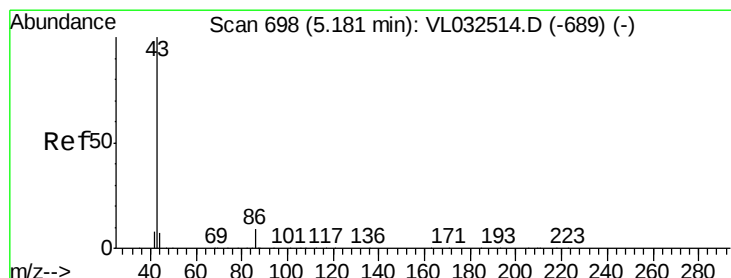
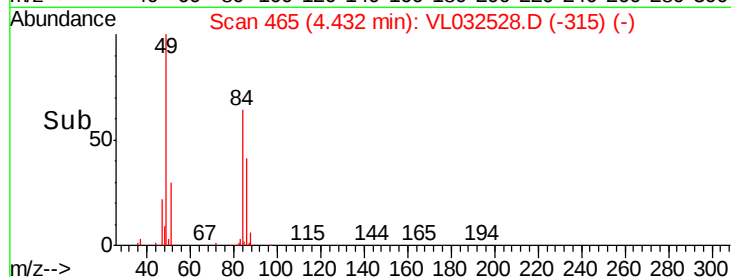
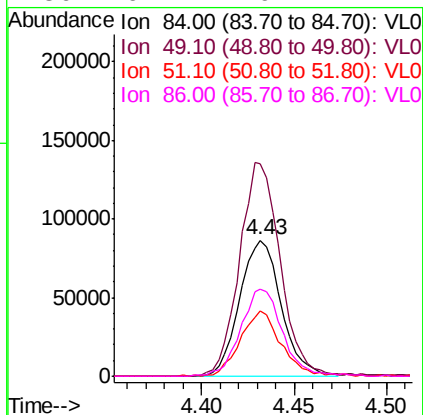
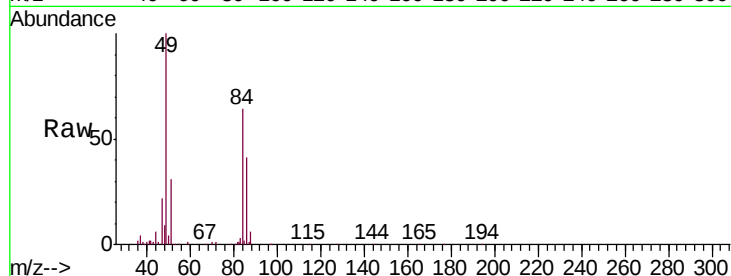




#20
Methylene Chloride
Concen: 2.316 ppbv
RT: 4.43 min Scan# 465
Delta R.T. -0.02 min
Lab File: VL032528.D
Acq: 25 Sep 2018 3:39

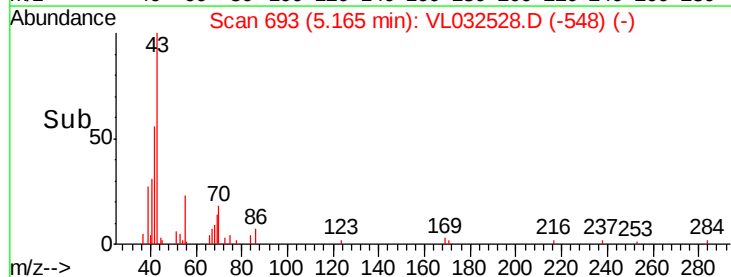
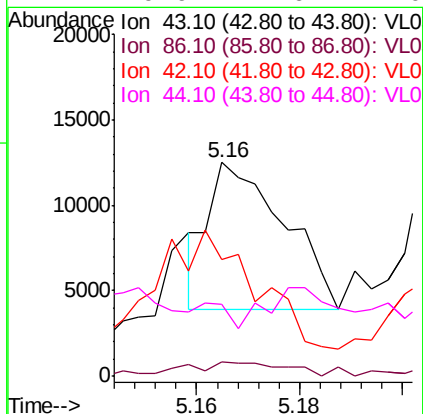
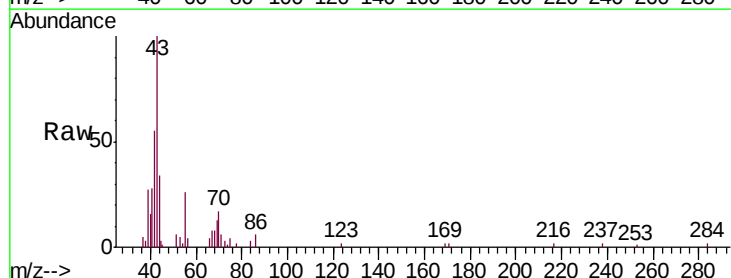
Instrument :
MSVOA_L
ClientSampleId :
OUTDOOR-AMBIENT

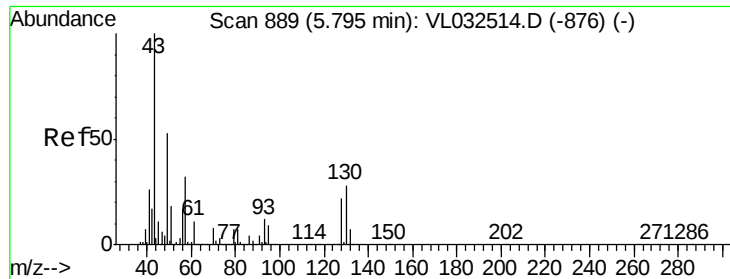
Tgt Ion:	84	Resp:	135135
Ion	Ratio	Lower	Upper
84	100		
49	156.4	119.1	178.7
51	47.9	35.2	52.8
86	64.2	49.4	74.2



#23
Vinyl Acetate
Concen: 0.041 ppbv
RT: 5.16 min Scan# 693
Delta R.T. -0.03 min
Lab File: VL032528.D
Acq: 25 Sep 2018 3:39

Tgt Ion:	43	Resp:	8752
Ion	Ratio	Lower	Upper
43	100		
86	3.3	5.9	8.9#
42	61.5	6.9	10.3#
44	9.9	4.6	7.0#

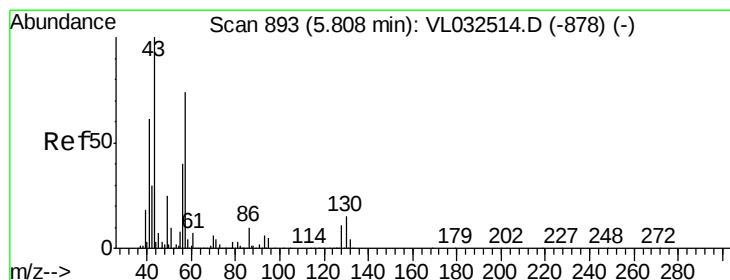
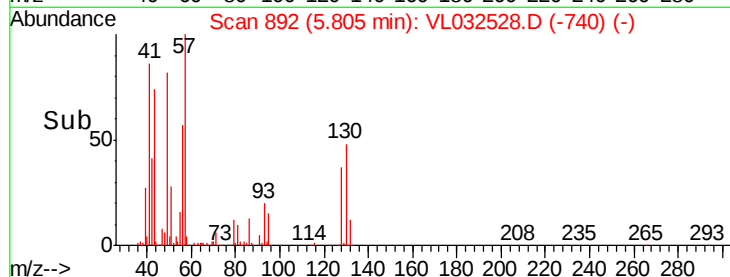
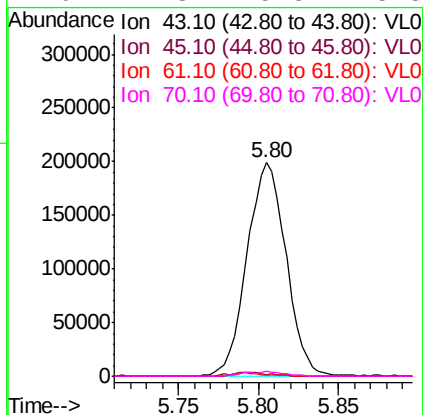
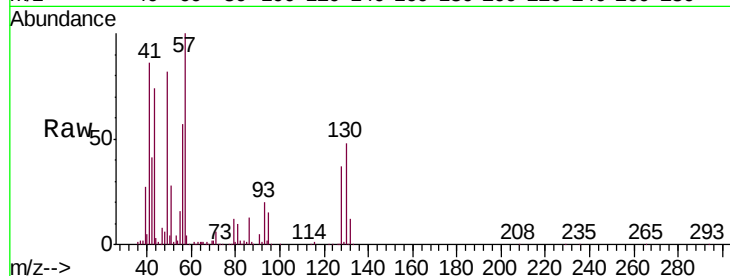




#25
Ethyl Acetate
Concen: 1.137 ppbv
RT: 5.80 min Scan# 892
Delta R.T. -0.01 min
Lab File: VL032528.D
Acq: 25 Sep 2018 3:39

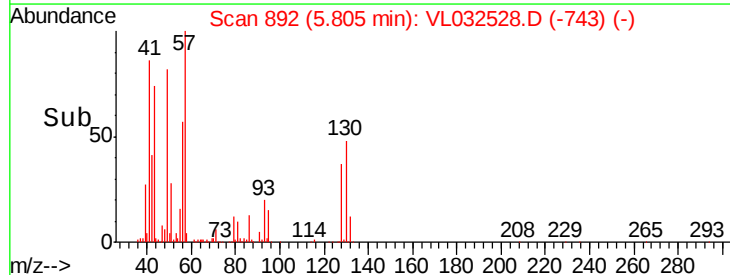
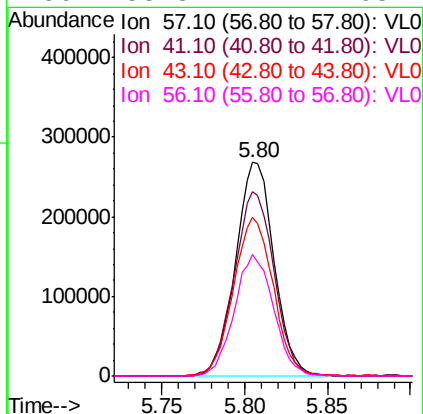
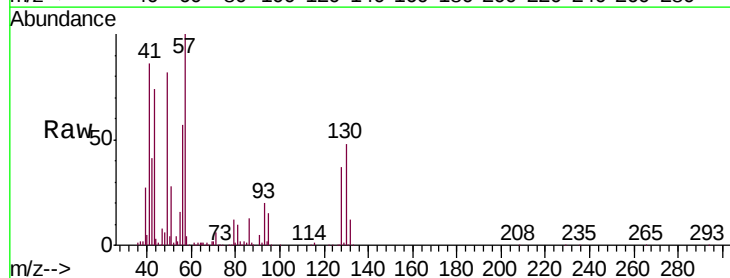
Instrument :
MSVOA_L
ClientSampleId :
OUTDOOR-AMBIENT

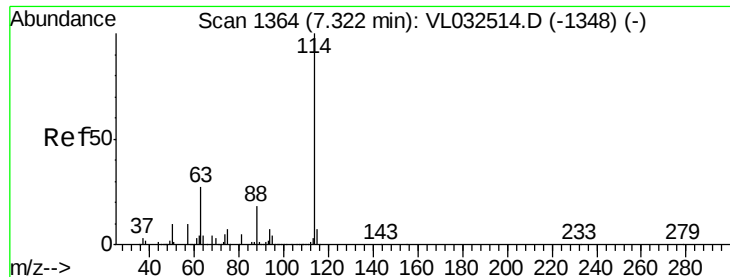
Tgt Ion:	43	Resp:	332368
Ion	Ratio	Lower	Upper
43	100		
45	2.2	8.0	12.0#
61	1.3	7.6	11.4#
70	2.3	5.8	8.8#



#26
Hexane
Concen: 3.276 ppbv
RT: 5.80 min Scan# 892
Delta R.T. -0.02 min
Lab File: VL032528.D
Acq: 25 Sep 2018 3:39

Tgt Ion:	57	Resp:	432674
Ion	Ratio	Lower	Upper
57	100		
41	90.2	69.0	103.4
43	76.8	172.1	258.1#
56	58.3	42.2	63.2

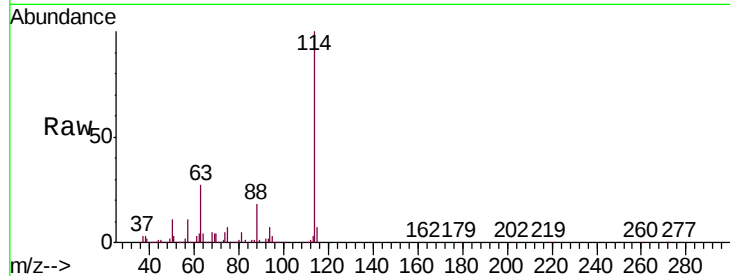




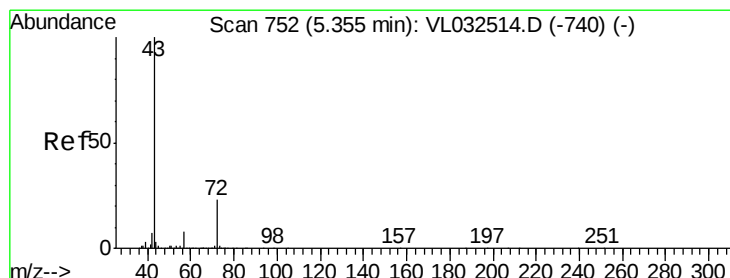
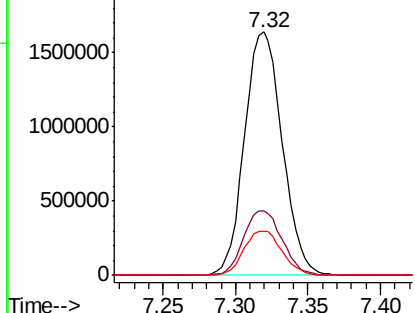
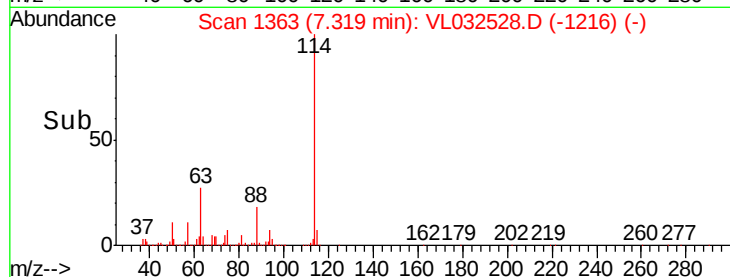
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.32 min Scan# 1363
 Delta R.T. -0.03 min
 Lab File: VL032528.D
 Acq: 25 Sep 2018 3:39

Instrument :
 MSVOA_L
 ClientSampleId :
 OUTDOOR-AMBIENT

Tgt Ion:114 Resp: 2981866
 Ion Ratio Lower Upper
 114 100
 63 27.3 22.2 33.4
 88 18.4 15.0 22.4

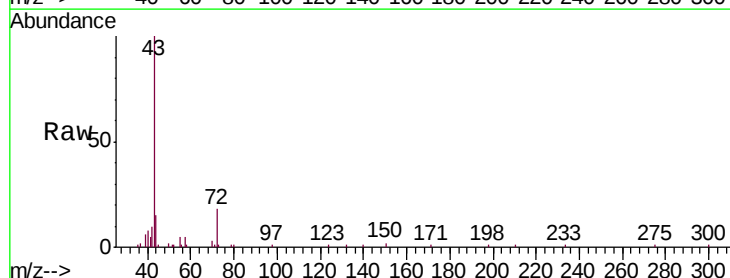


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

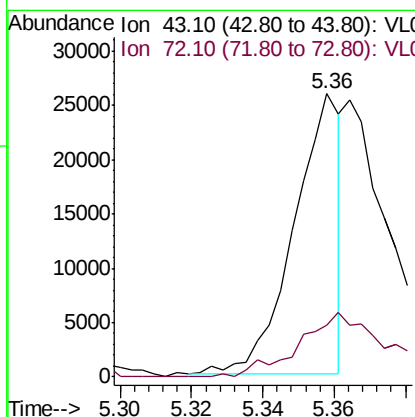
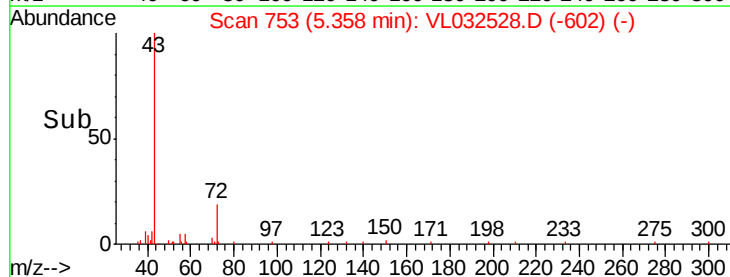


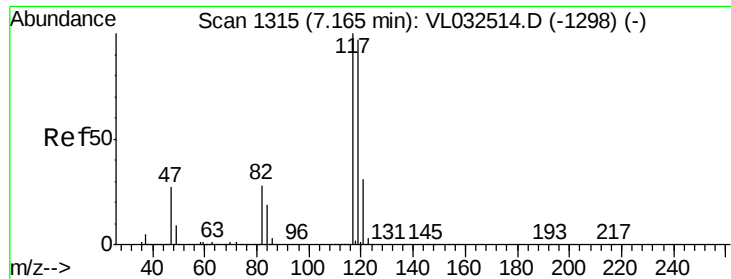
#34
 2-Butanone
 Concen: 0.131 ppbv
 RT: 5.36 min Scan# 753
 Delta R.T. -0.01 min
 Lab File: VL032528.D
 Acq: 25 Sep 2018 3:39

Tgt Ion: 43 Resp: 23183
 Ion Ratio Lower Upper
 43 100
 72 0.0 17.8 26.6#



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





#35

Carbon Tetrachloride

Concen: 0.074 ppbv

RT: 7.16 min Scan# 1313

Delta R.T. -0.03 min

Lab File: VL032528.D

Acq: 25 Sep 2018 3:39

Instrument :

MSVOA_L

ClientSampleId :

OUTDOOR-AMBIENT

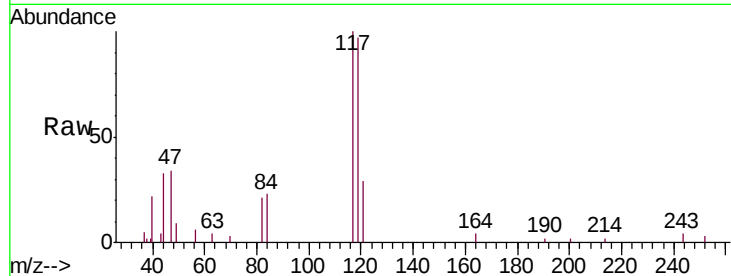
Tgt Ion: 117 Resp: 15281

Ion Ratio Lower Upper

117 100

119 94.8 76.6 115.0

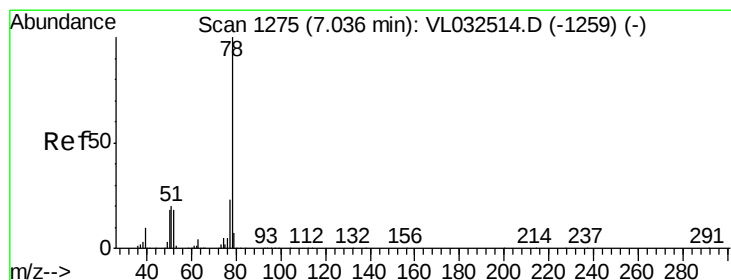
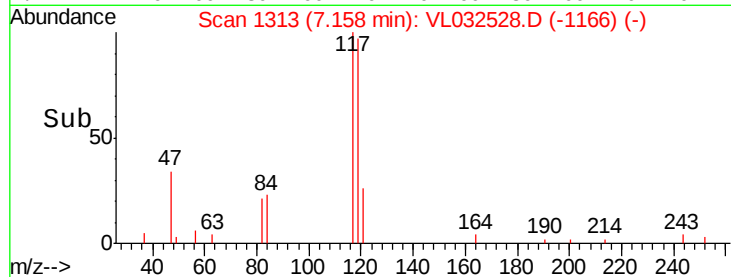
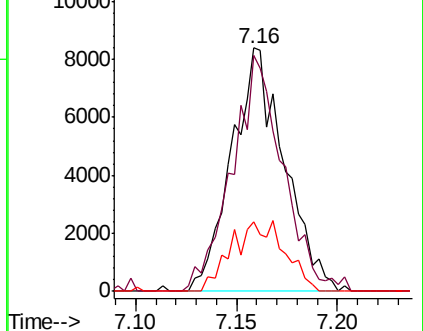
121 28.6 24.6 36.8



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: 0.156 ppbv

RT: 7.03 min Scan# 1272

Delta R.T. -0.03 min

Lab File: VL032528.D

Acq: 25 Sep 2018 3:39

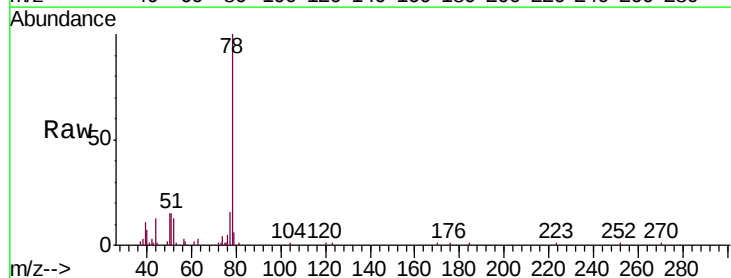
Tgt Ion: 78 Resp: 37590

Ion Ratio Lower Upper

78 100

77 16.2 18.4 27.6#

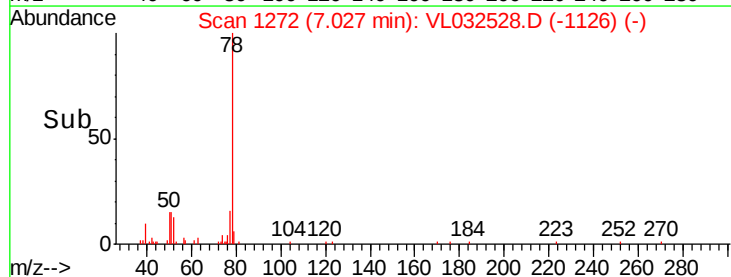
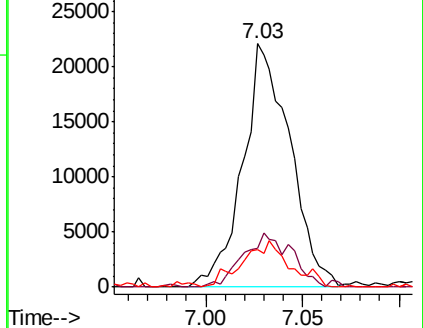
50 13.9 14.4 21.6#

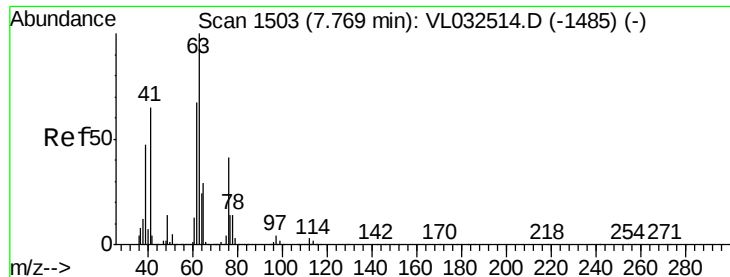


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





#39

1,2-Dichloropropane

Concen: 7.442 ppbv

RT: 7.32 min Scan# 1363

Delta R.T. -0.47 min

Lab File: VL032528.D

Acq: 25 Sep 2018 3:39

Instrument :

MSVOA_L

ClientSampleId :

OUTDOOR-AMBIENT

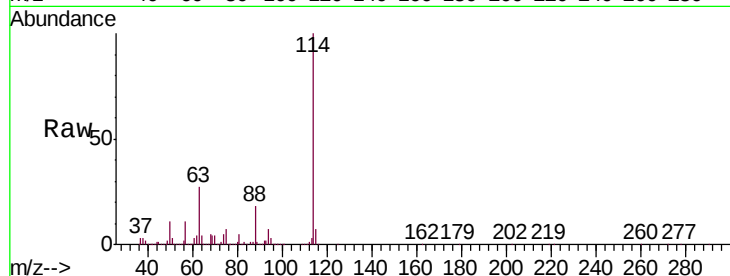
Tgt Ion: 63 Resp: 808191

Ion Ratio Lower Upper

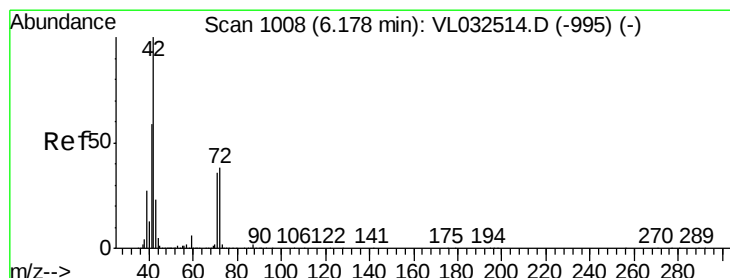
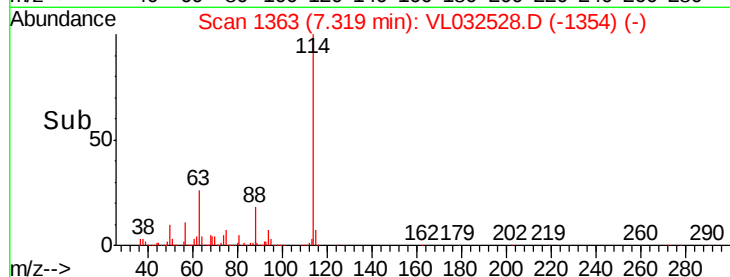
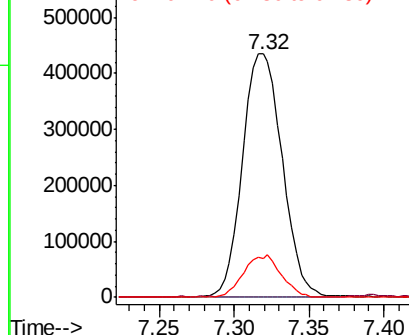
63 100

41 0.0 55.4 83.0#

62 16.1 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: 1.867 ppbv

RT: 5.80 min Scan# 892

Delta R.T. -0.39 min

Lab File: VL032528.D

Acq: 25 Sep 2018 3:39

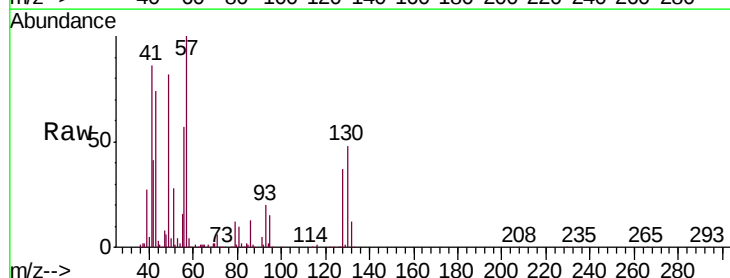
Tgt Ion: 42 Resp: 180153

Ion Ratio Lower Upper

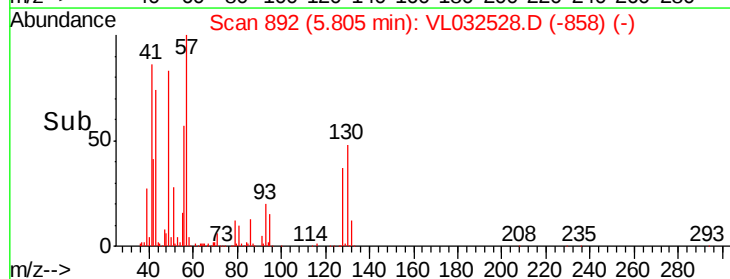
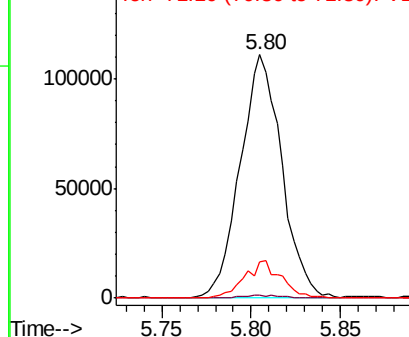
42 100

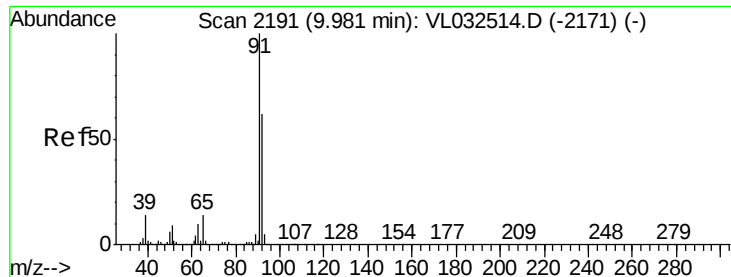
72 1.1 29.5 44.3#

71 13.7 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





#53

Toluene

Concen: 1.578 ppbv

RT: 9.98 min Scan# 2189

Delta R.T. -0.03 min

Lab File: VL032528.D

Acq: 25 Sep 2018 3:39

Instrument :

MSVOA_L

ClientSampleId :

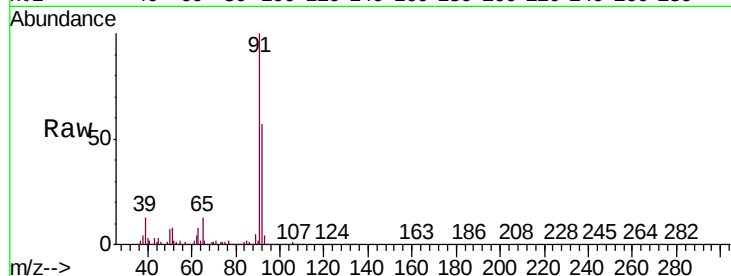
OUTDOOR-AMBIENT

Tgt Ion: 91 Resp: 463286

Ion Ratio Lower Upper

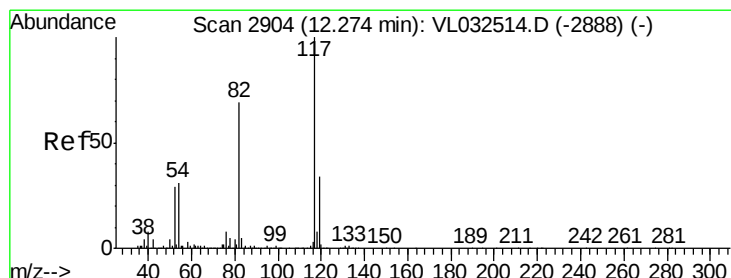
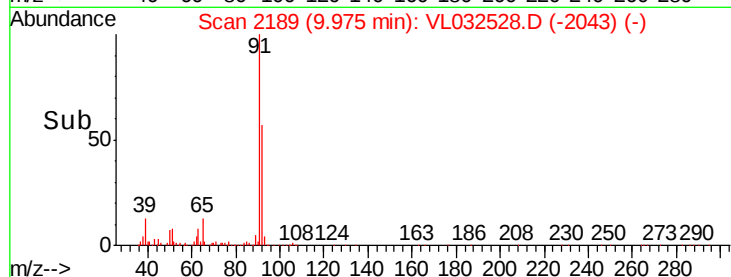
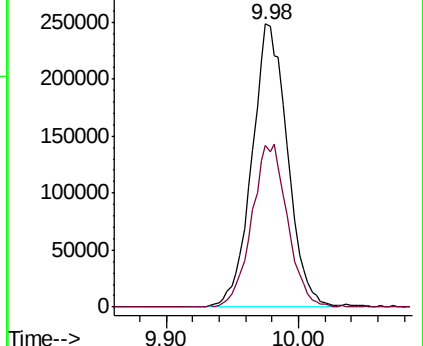
91 100

92 58.1 48.1 72.1



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: 12.27 min Scan# 2902

Delta R.T. -0.03 min

Lab File: VL032528.D

Acq: 25 Sep 2018 3:39

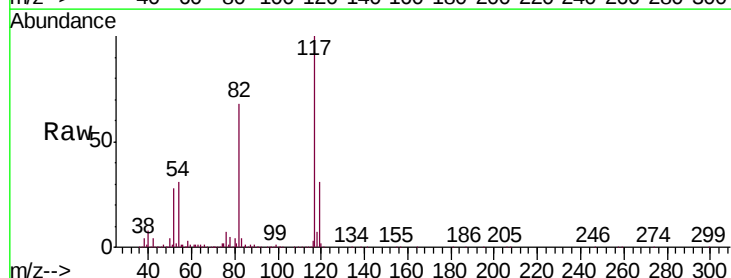
Tgt Ion: 117 Resp: 2923976

Ion Ratio Lower Upper

117 100

82 67.2 53.0 79.6

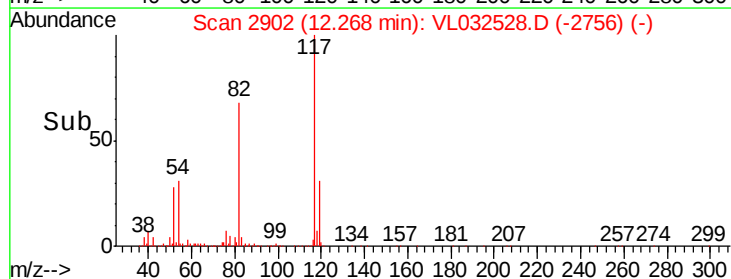
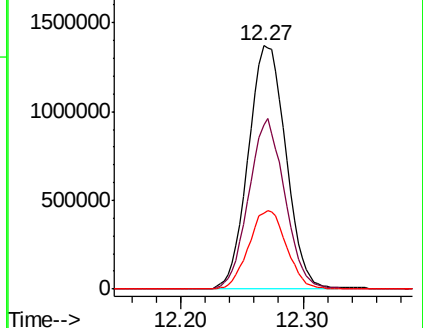
119 32.5 45.9 68.9#

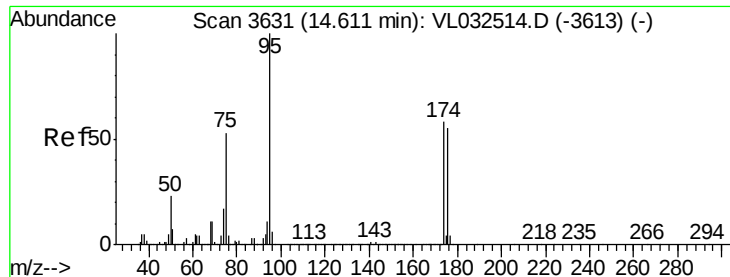


Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V

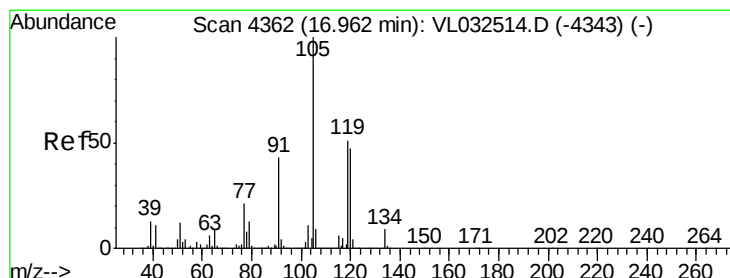
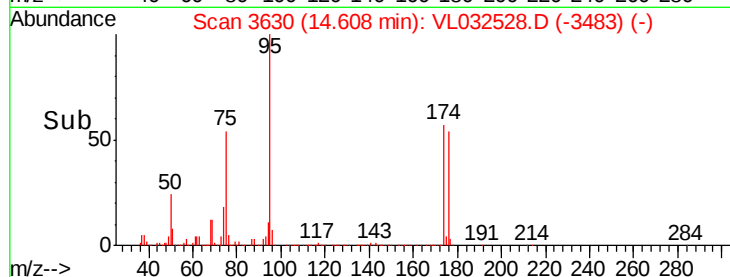
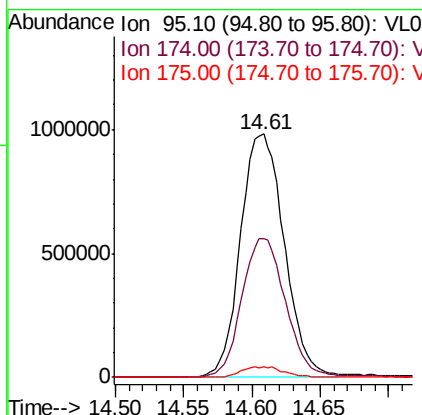
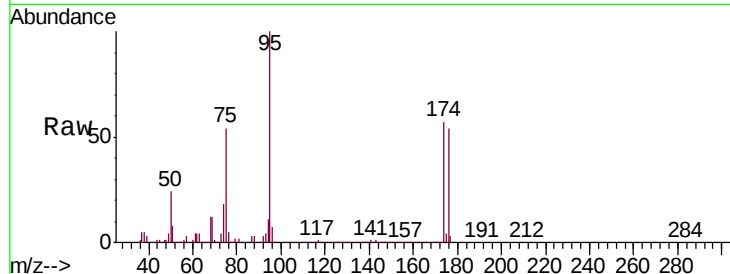




#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.940 ppbv
 RT: 14.61 min Scan# 3630
 Delta R.T. -0.03 min
 Lab File: VL032528.D
 Acq: 25 Sep 2018 3:39

Instrument :
 MSVOA_L
 ClientSampleId :
 OUTDOOR-AMBIENT

Tgt Ion: 95 Resp: 2191727
 Ion Ratio Lower Upper
 95 100
 174 58.0 46.3 69.5
 175 4.3 3.4 5.0



#74
 1,2,4-Trimethylbenzene
 Concen: 0.076 ppbv
 RT: 16.96 min Scan# 4360
 Delta R.T. -0.03 min
 Lab File: VL032528.D
 Acq: 25 Sep 2018 3:39

Tgt Ion: 105 Resp: 26465
 Ion Ratio Lower Upper
 105 100
 120 42.5 37.8 56.8
 91 10.2 41.4 62.0#
 77 14.7 18.6 28.0#

