

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL070715\
 Data File : VL025616.D
 Acq On : 7 Jul 2015 20:40
 Operator : SY/MD
 Sample : G2872-01DUP
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 DIN46-EFFLUENT-070115DUP

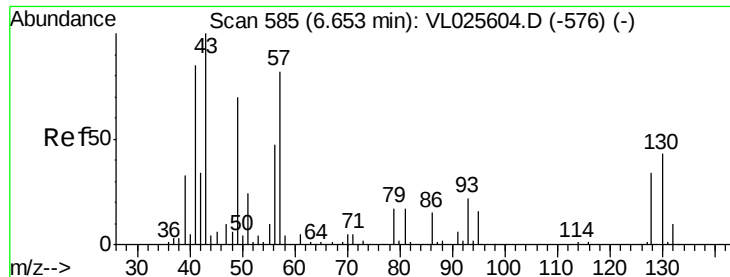
Quant Time: Jul 08 07:26:08 2015
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL070715AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Jul 08 02:22:55 2015
 QLast Update : Wed Jul 08 02:22:55 2015
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	6.66	49	608915	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	8.33	114	1643883	10.00	ppbv	0.00
55) Chlorobenzene-d5	13.74	117	1998055	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	16.29	95	1667973	9.90	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.64	85	58403	0.37	ppbv	98
3) Chlorodifluoromethane	3.57	51	29356	0.34	ppbv	93
4) Chloromethane	3.75	50	50066	1.28	ppbv	94
5) Vinyl Chloride	3.89	62	721654	17.07	ppbv	99
7) Chloroethane	4.25	64	5081	0.26	ppbv	97
9) Propene	3.60	41	591028	20.73	ppbv	94
13) Ethanol	4.34	45	241006	54.37	ppbv	98
15) Acetone	4.59	43	7321774	68.07	ppbv	92
17) tert-Butyl alcohol	5.13	59	8754873	96.99	ppbv	97
19) Isopropyl Alcohol	4.76	45	161311	3.76	ppbv #	96
20) Methylene Chloride	5.15	84	15457	0.35	ppbv #	1
34) 2-Butanone	6.19	43	2547618	27.31	ppbv	100
38) Trichloroethene	9.07	130	20163	0.28	ppbv	94
41) Tetrahydrofuran	7.11	42	641095	13.77	ppbv	99
51) 2-Hexanone	11.63	43	28886	0.24	ppbv #	97
52) Tetrachloroethene	12.80	164	5736	0.07	ppbv #	80
53) Toluene	11.23	91	30850	0.14	ppbv	96
62) Isopropylbenzene	16.54	105	56886	0.14	ppbv	97
74) 1,2,4-Trimethylbenzene	18.83	105	92688	0.24	ppbv #	71
79) Naphthalene	23.93	128	92469	0.25	ppbv #	90
80) Naphthalene,2-methyl-	26.05	142	25896	0.24	ppbv #	77

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



#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 6.66 min Scan# 586

Delta R.T. 0.01 min

Lab File: VL025616.D

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DIN46-EFFLUENT-070115DUP

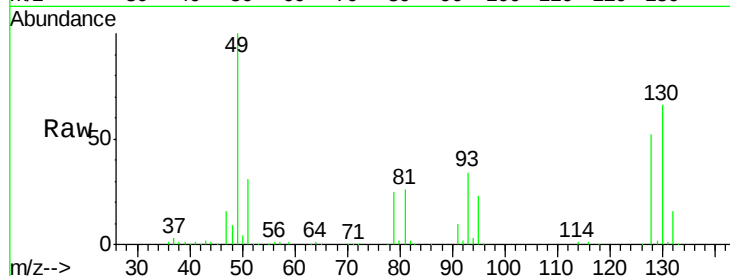
Tot Ion: 49 Resp: 608915

Ion Ratio Lower Upper

49 100

128 51.4 25.4 76.0

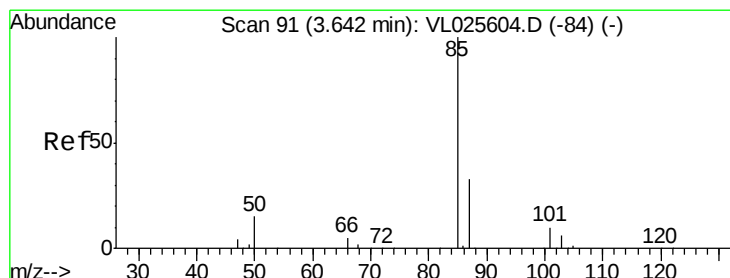
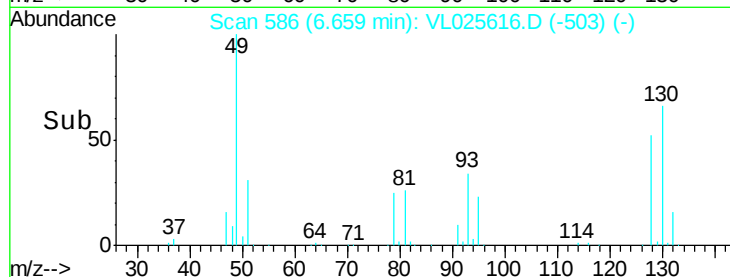
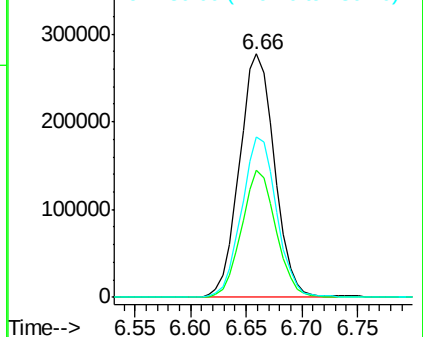
130 65.9 31.9 95.9



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



#2

Dichlorodifluoromethane

Concen: 0.37 ppbv

RT: 3.64 min Scan# 91

Delta R.T. -0.00 min

Lab File: VL025616.D

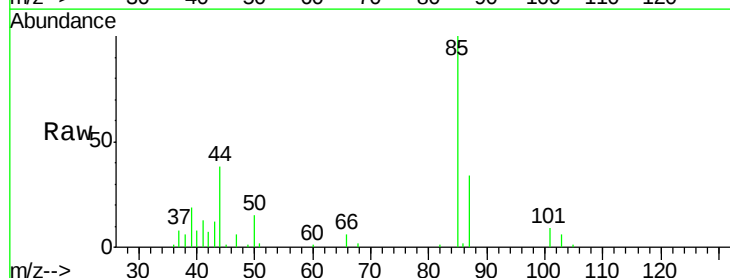
Acq: 7 Jul 2015 20:40

Tgt Ion: 85 Resp: 58403

Ion Ratio Lower Upper

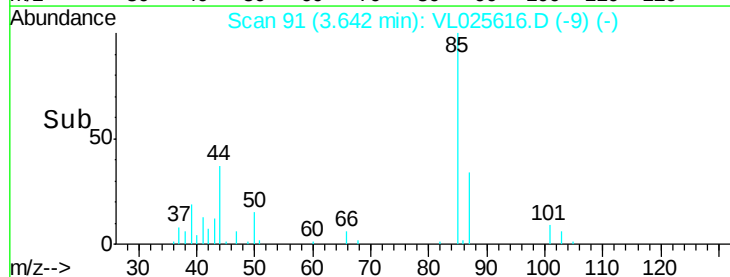
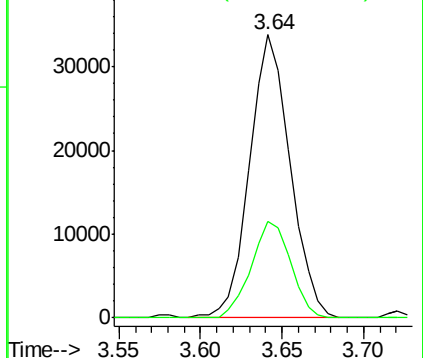
85 100

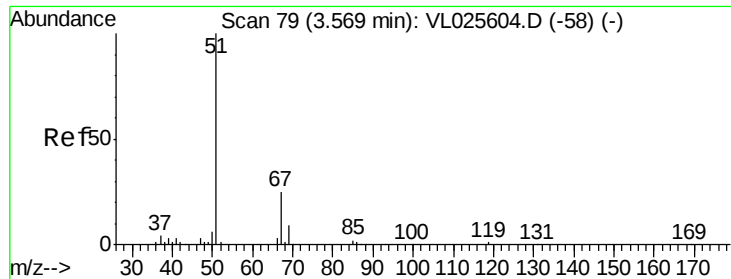
87 34.1 26.5 39.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.34 ppbv

RT: 3.57 min Scan# 79

Delta R.T. -0.00 min

Lab File: VL025616.D

Acq: 7 Jul 2015 20:40

Instrument :

MSVOA_L

ClientSampleId :

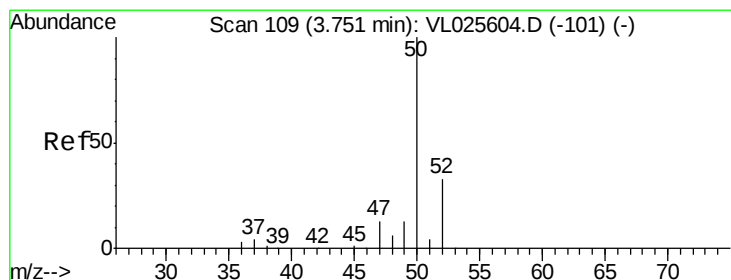
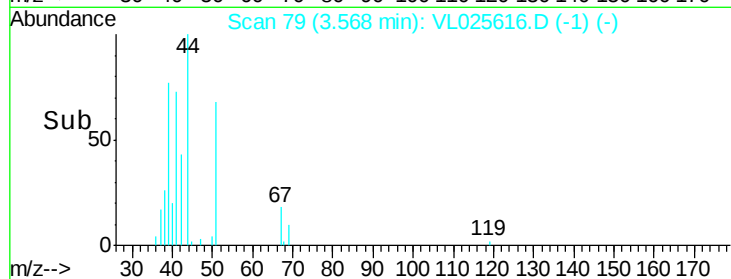
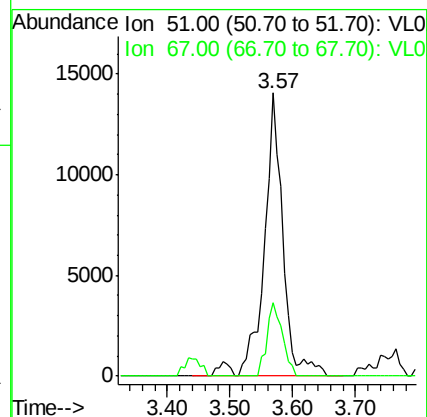
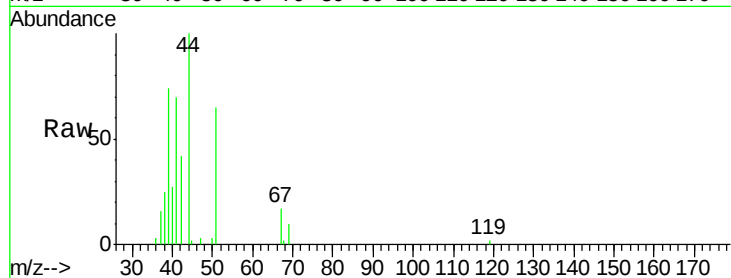
DIN46-EFFLUENT-070115DUP

Tot Ion: 51 Resp: 29356

Ion Ratio Lower Upper

51 100

67 21.1 19.5 29.3



#4

Chloromethane

Concen: 1.28 ppbv

RT: 3.75 min Scan# 109

Delta R.T. -0.00 min

Lab File: VL025616.D

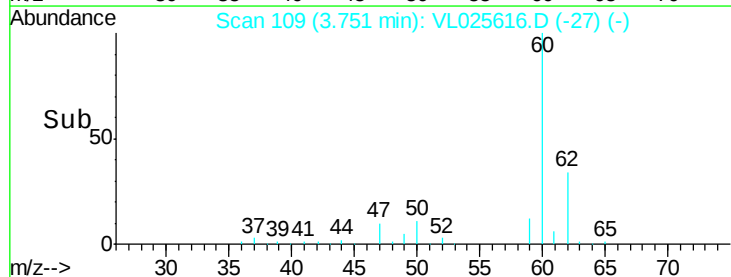
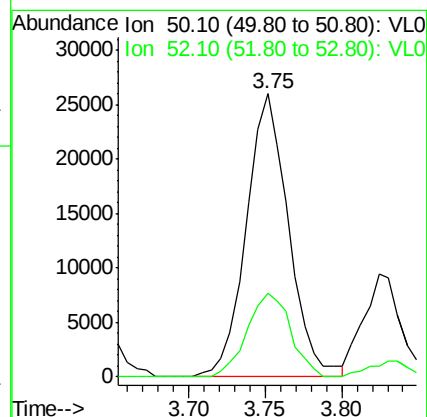
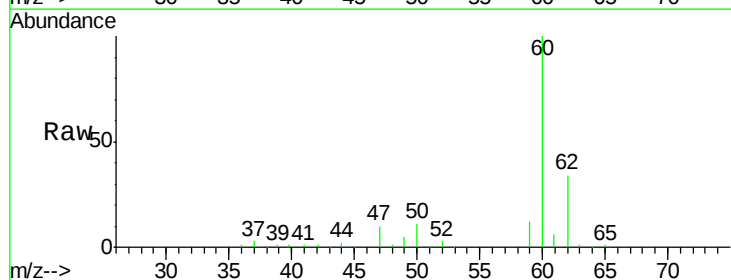
Acq: 7 Jul 2015 20:40

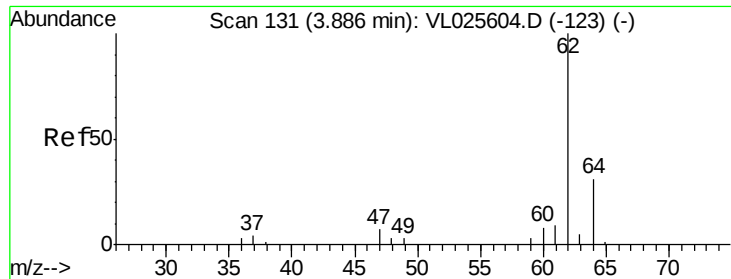
Tgt Ion: 50 Resp: 50066

Ion Ratio Lower Upper

50 100

52 29.5 26.2 39.2





#5

Vinyl Chloride

Concen: 17.07 ppbv

RT: 3.89 min Scan# 132

Delta R.T. 0.01 min

Lab File: VL025616.D

Acq: 7 Jul 2015 20:40

Instrument :

MSVOA_L

ClientSampleId :

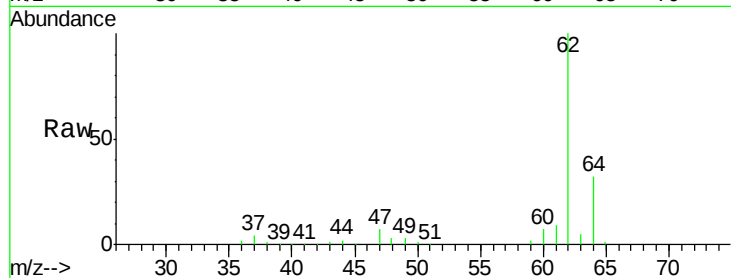
DIN46-EFFLUENT-070115DUP

Tot Ion: 62 Resp: 721654

Ion Ratio Lower Upper

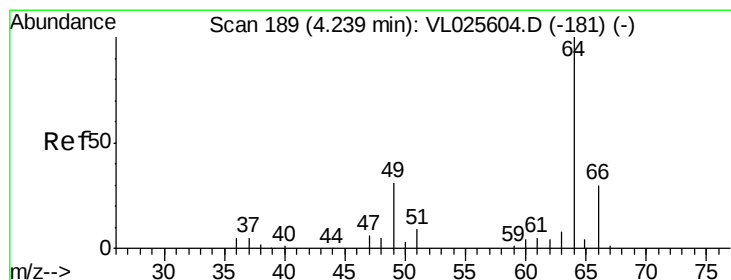
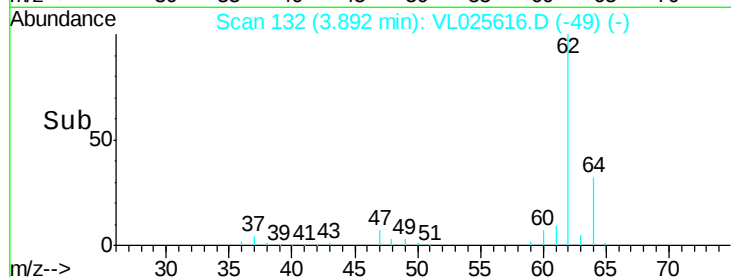
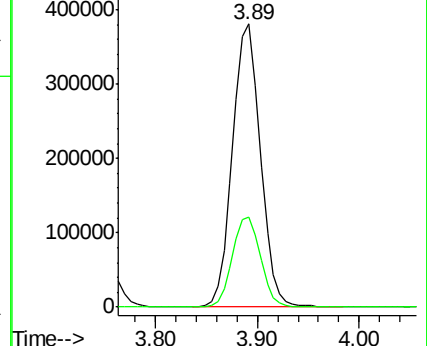
62 100

64 31.8 25.0 37.6



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#7

Chloroethane

Concen: 0.26 ppbv

RT: 4.25 min Scan# 190

Delta R.T. 0.01 min

Lab File: VL025616.D

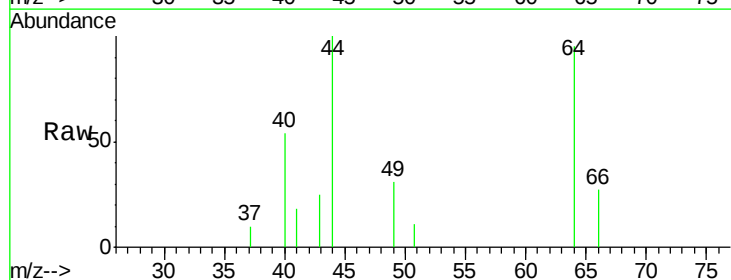
Acq: 7 Jul 2015 20:40

Tgt Ion: 64 Resp: 5081

Ion Ratio Lower Upper

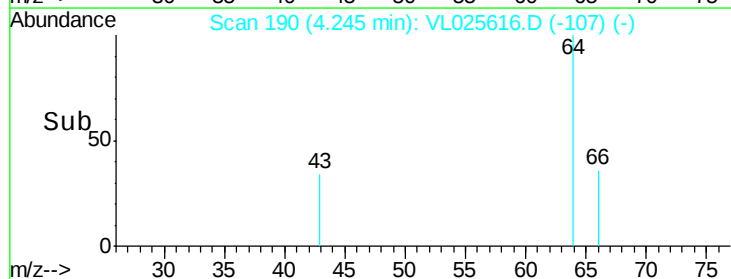
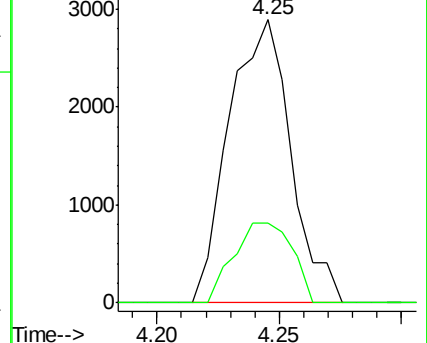
64 100

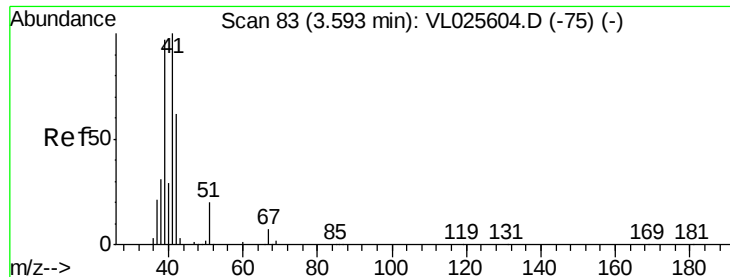
66 28.3 23.8 35.8



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0





#9

Propene

Concen: 20.73 ppbv

RT: 3.60 min Scan# 84

Delta R.T. 0.01 min

Lab File: VL025616.D

Acq: 7 Jul 2015 20:40

Instrument :

MSVOA_L

ClientSampleId :

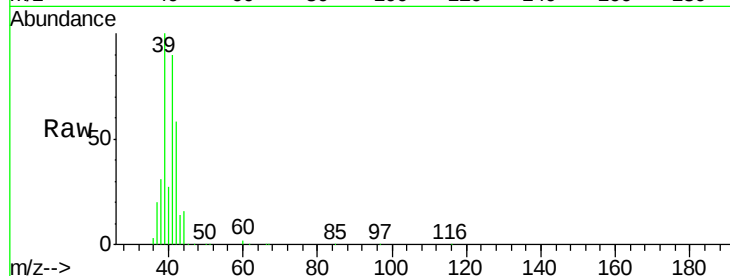
DIN46-EFFLUENT-070115DUP

Tot Ion: 41 Resp: 591028

Ion Ratio Lower Upper

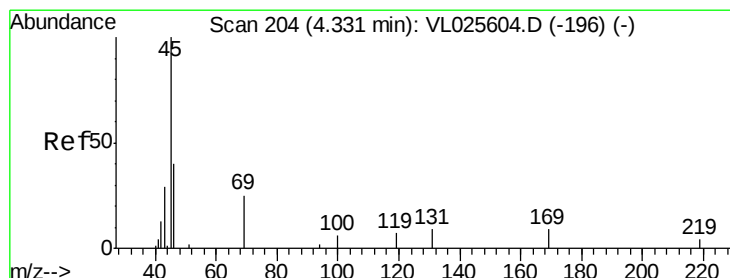
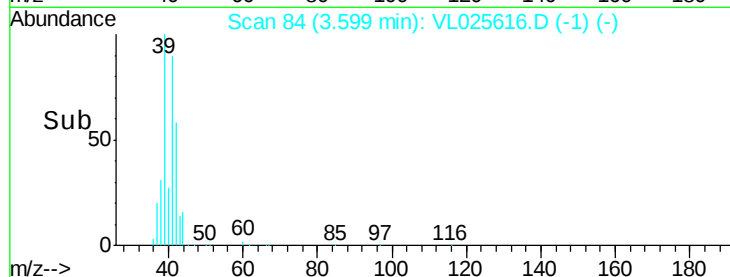
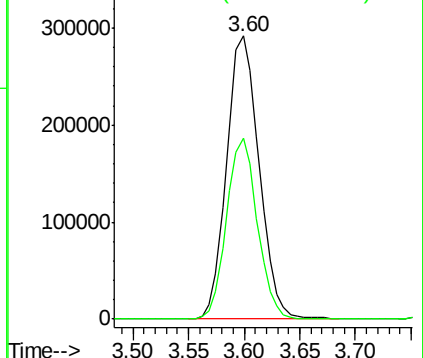
41 100

42 60.9 52.4 78.6



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#13

Ethanol

Concen: 54.37 ppbv

RT: 4.34 min Scan# 205

Delta R.T. 0.01 min

Lab File: VL025616.D

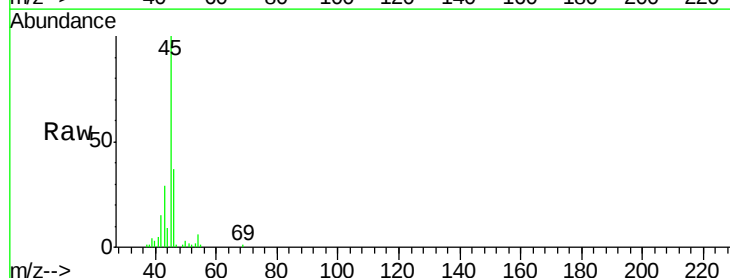
Acq: 7 Jul 2015 20:40

Tgt Ion: 45 Resp: 241006

Ion Ratio Lower Upper

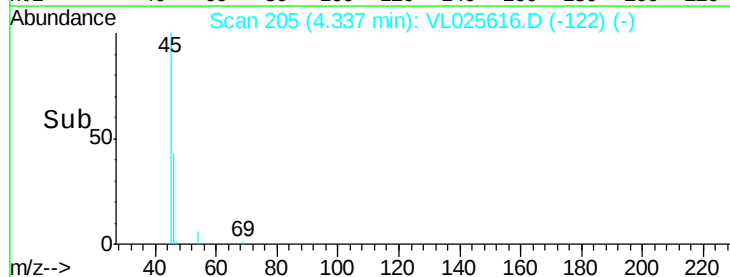
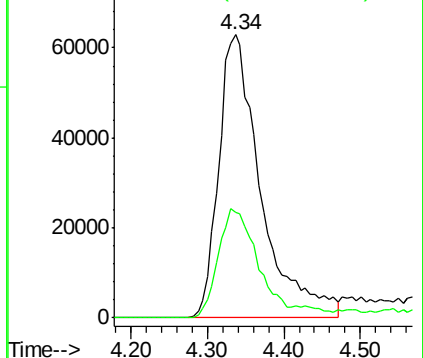
45 100

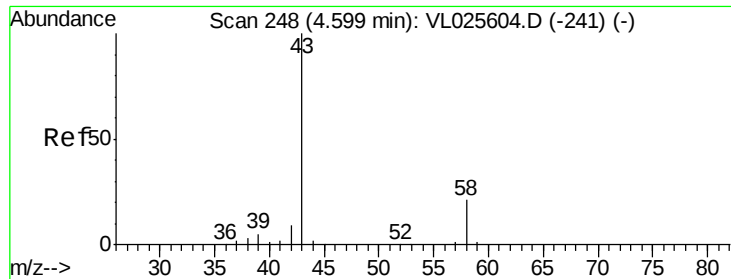
46 39.0 16.0 64.0



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 68.07 ppbv

RT: 4.59 min Scan# 247

Delta R.T. -0.01 min

Lab File: VL025616.D

Acq: 7 Jul 2015 20:40

Instrument :

MSVOA_L

ClientSampleId :

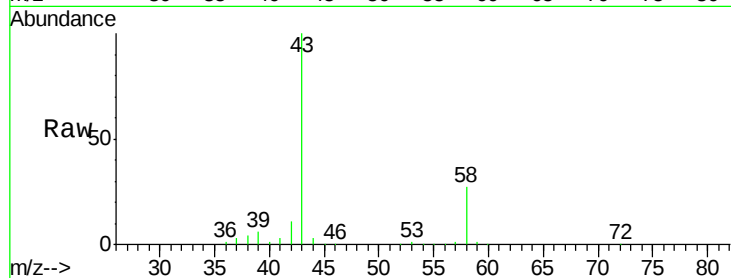
DIN46-EFFLUENT-070115DUP

Tot Ion: 43 Resp: 7321774

Ion Ratio Lower Upper

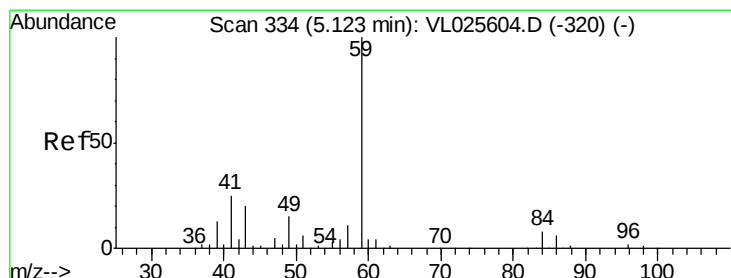
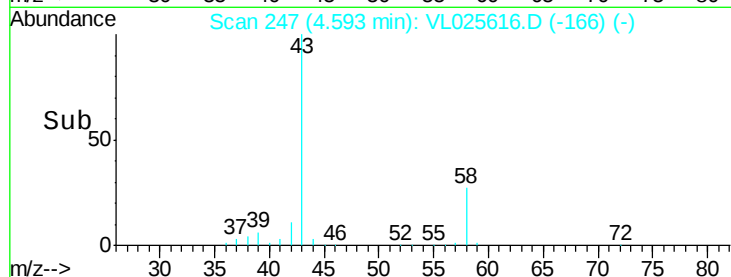
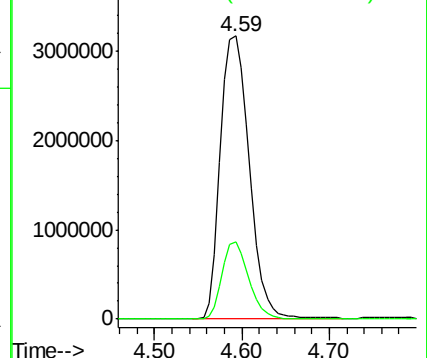
43 100

58 25.4 17.2 25.8



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#17

tert-Butyl alcohol

Concen: 96.99 ppbv

RT: 5.13 min Scan# 335

Delta R.T. 0.01 min

Lab File: VL025616.D

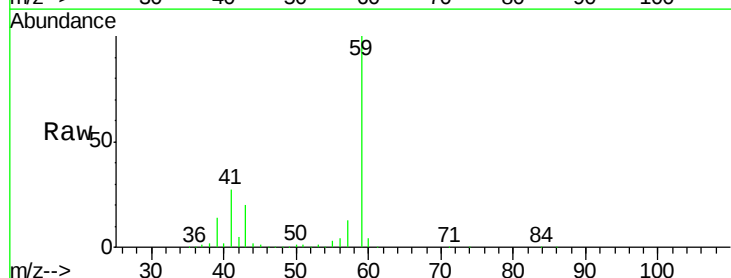
Acq: 7 Jul 2015 20:40

Tgt Ion: 59 Resp: 8754873

Ion Ratio Lower Upper

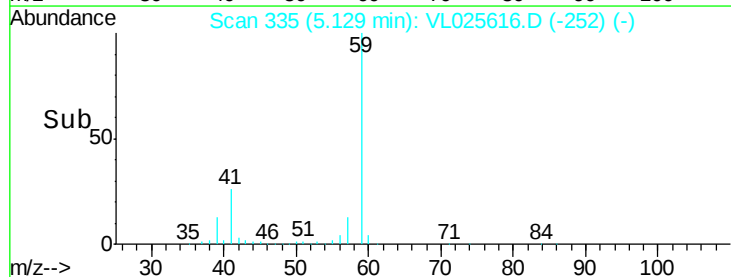
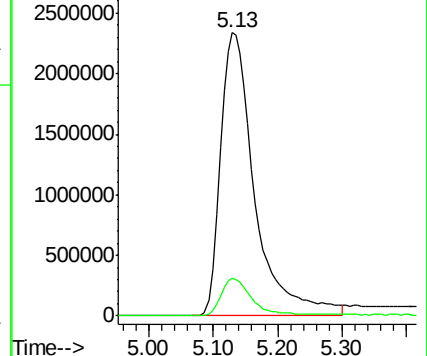
59 100

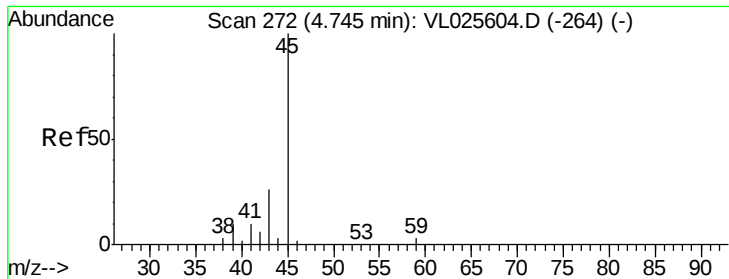
57 12.8 9.4 14.2



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





#19

Isopropyl Alcohol

Concen: 3.76 ppbv

RT: 4.76 min Scan# 275

Delta R.T. 0.02 min

Lab File: VL025616.D

Acq: 7 Jul 2015 20:40

Instrument :

MSVOA_L

ClientSampleId :

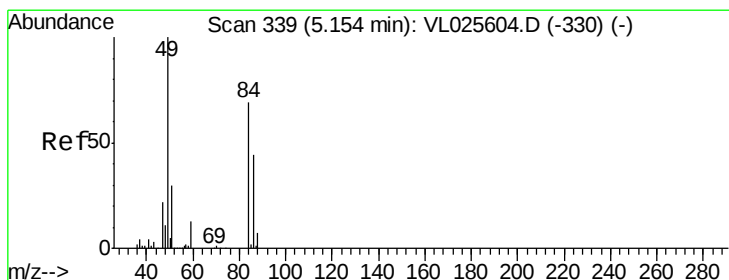
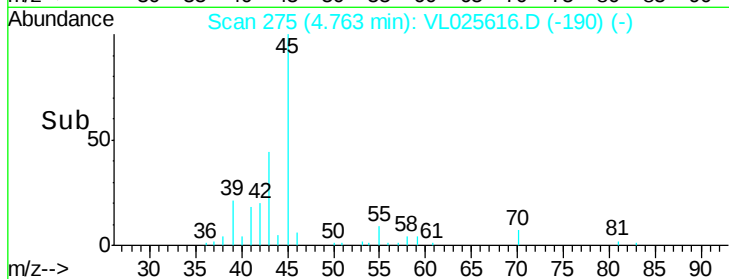
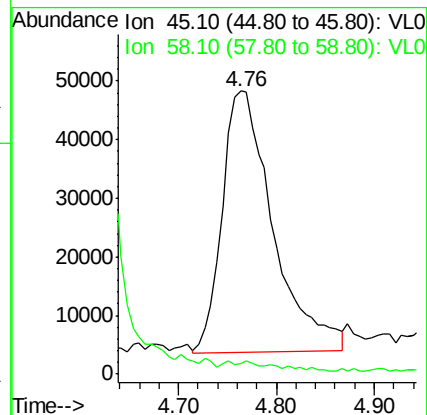
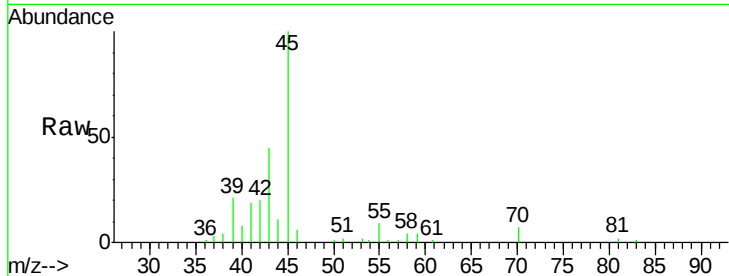
DIN46-EFFLUENT-070115DUP

Tot Ion: 45 Resp: 161311

Ion Ratio Lower Upper

45 100

58 0.0 1.1 1.7#



#20

Methylene Chloride

Concen: 0.35 ppbv

RT: 5.15 min Scan# 339

Delta R.T. -0.00 min

Lab File: VL025616.D

Acq: 7 Jul 2015 20:40

Tgt Ion: 84 Resp: 15457

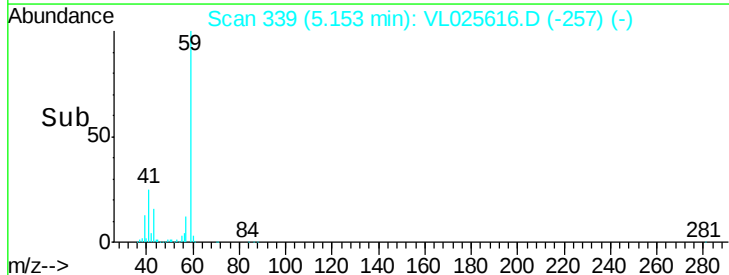
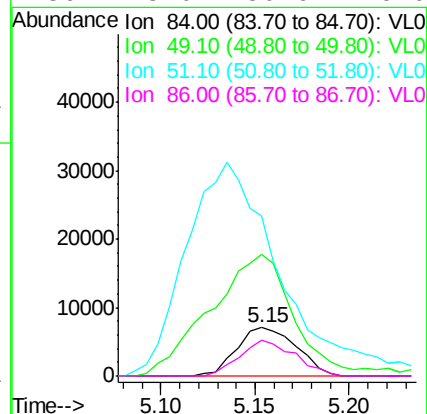
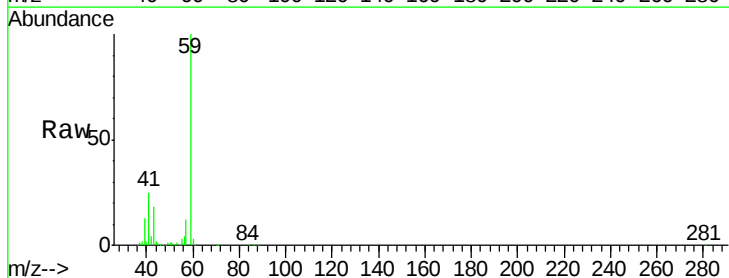
Ion Ratio Lower Upper

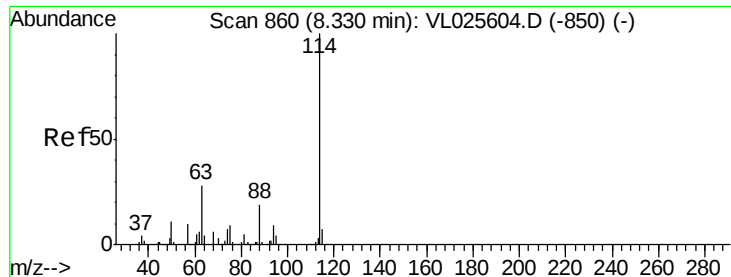
84 100

49 234.1 115.2 172.8#

51 272.6 35.0 52.6#

86 75.0 50.6 76.0

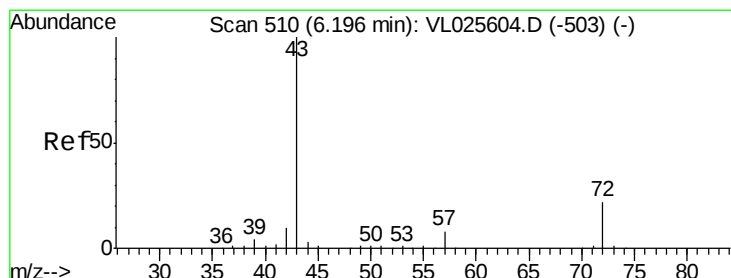
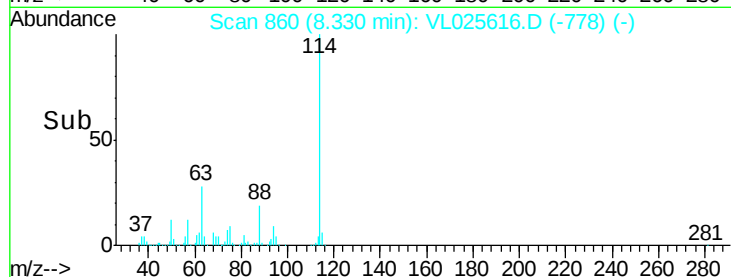
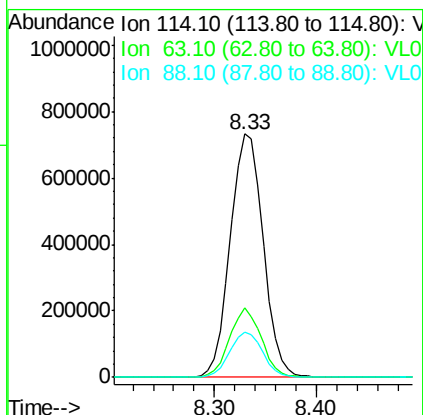
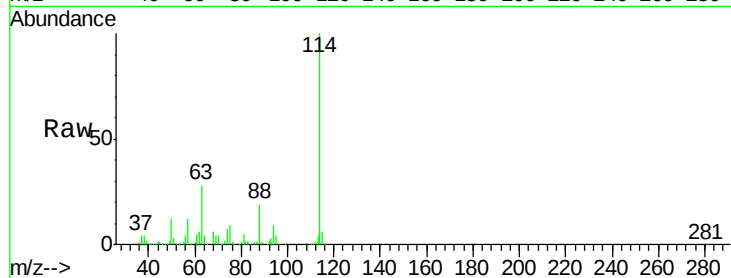




#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 8.33 min Scan# 860
 Delta R.T. -0.00 min
 Lab File: VL025616.D
 Acq: 7 Jul 2015 20:40

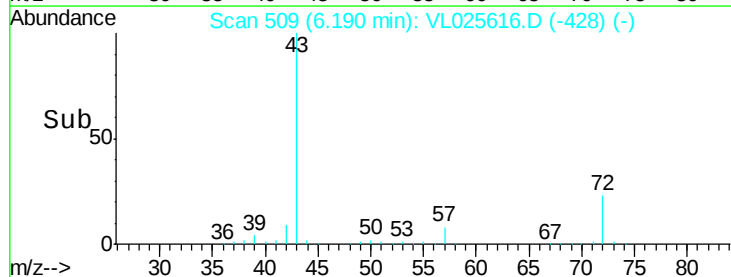
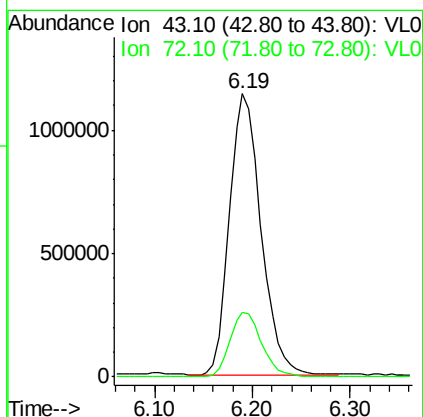
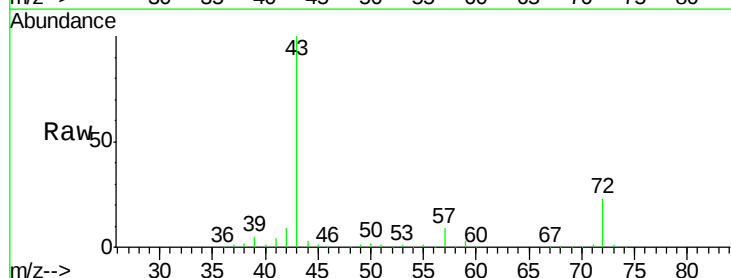
Instrument :
 MSVOA_L
 ClientSampleId :
 DIN46-EFFLUENT-070115DUP

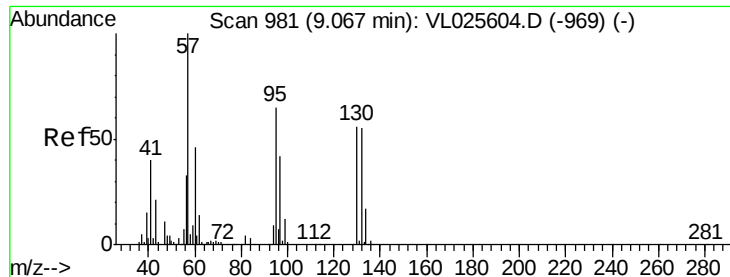
Tot Ion:114 Resp: 1643883
 Ion Ratio Lower Upper
 114 100
 63 27.5 22.4 33.6
 88 18.5 15.0 22.4



#34
 2-Butanone
 Concen: 27.31 ppbv
 RT: 6.19 min Scan# 509
 Delta R.T. -0.01 min
 Lab File: VL025616.D
 Acq: 7 Jul 2015 20:40

Tgt Ion: 43 Resp: 2547618
 Ion Ratio Lower Upper
 43 100
 72 23.2 18.6 28.0





#38

Trichloroethene

Concen: 0.28 ppbv

RT: 9.07 min Scan# 981

Delta R.T. -0.00 min

Lab File: VL025616.D

Acq: 7 Jul 2015 20:40

Instrument :

MSVOA_L

ClientSampleId :

DIN46-EFFLUENT-070115DUP

Tot Ion:130 Resp: 20163

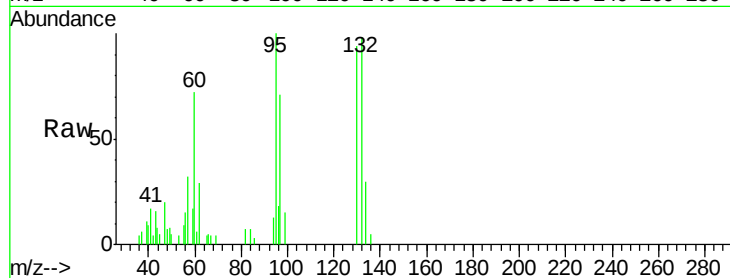
Ion Ratio Lower Upper

130 100

95 106.2 94.2 141.4

132 104.1 78.6 118.0

97 74.9 60.6 90.8

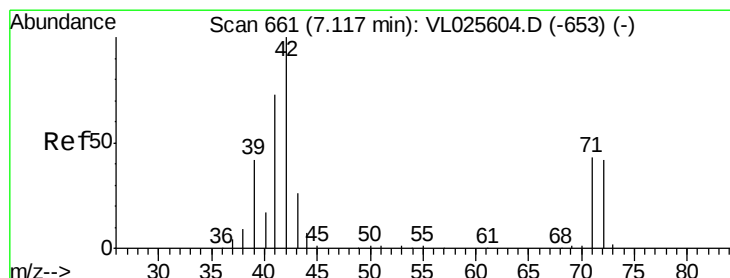
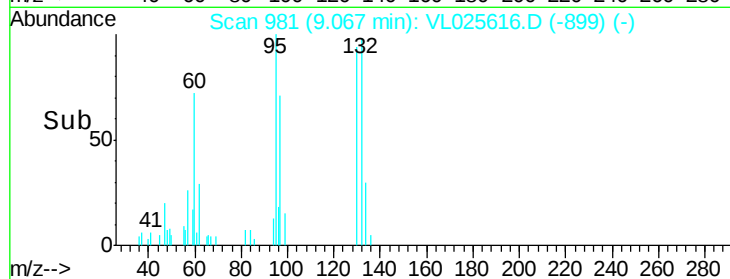
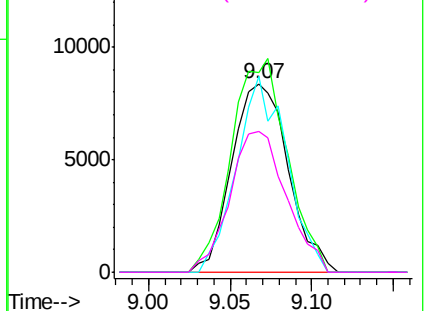


Abundance Ion 130.00 (129.70 to 130.70): V

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



#41

Tetrahydrofuran

Concen: 13.77 ppbv

RT: 7.11 min Scan# 660

Delta R.T. -0.01 min

Lab File: VL025616.D

Acq: 7 Jul 2015 20:40

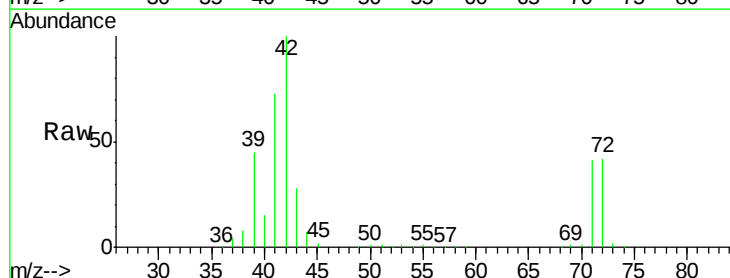
Tgt Ion: 42 Resp: 641095

Ion Ratio Lower Upper

42 100

72 43.0 34.0 51.0

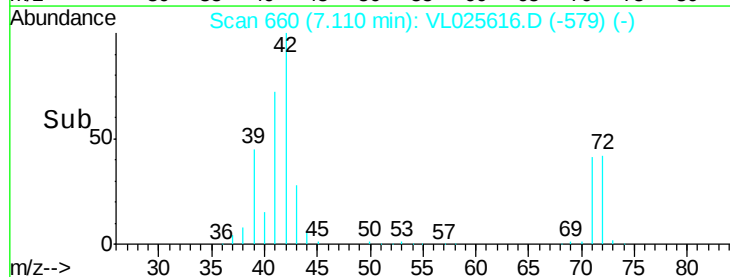
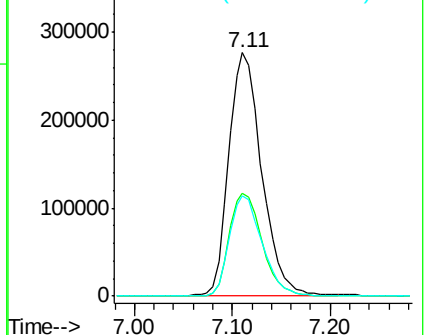
71 41.5 33.0 49.6

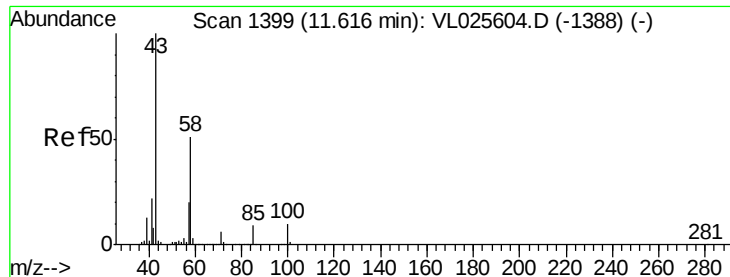


Abundance Ion 42.10 (41.80 to 42.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

Ion 71.10 (70.80 to 71.80): VL0

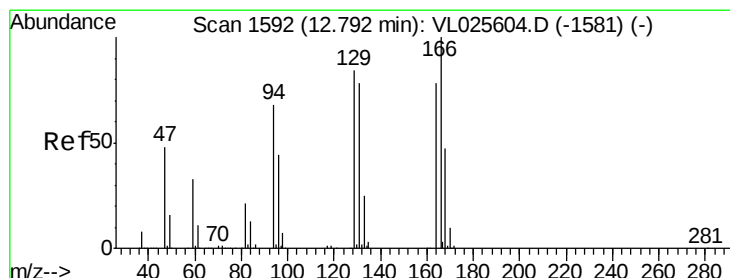
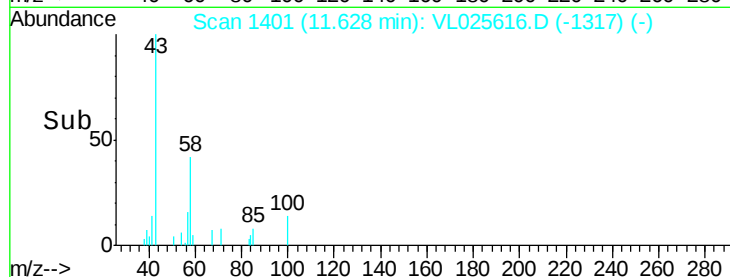
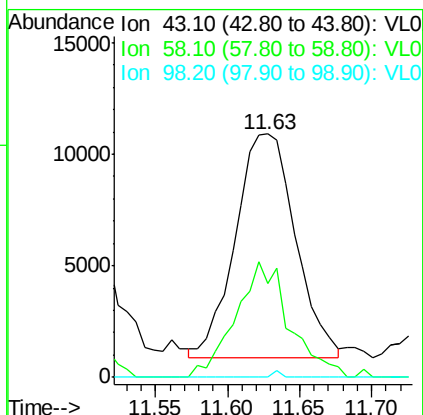
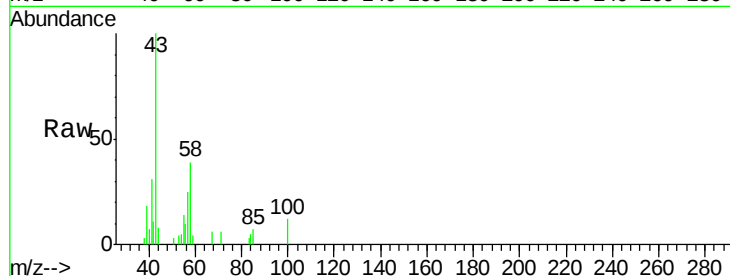




#51
2-Hexanone
Concen: 0.24 ppbv
RT: 11.63 min Scan# 1401
Delta R.T. 0.01 min
Lab File: VL025616.D
Acq: 7 Jul 2015 20:40

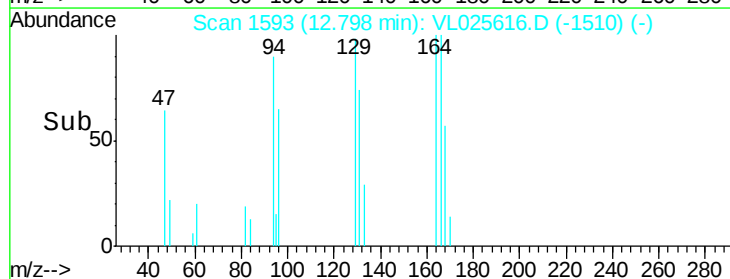
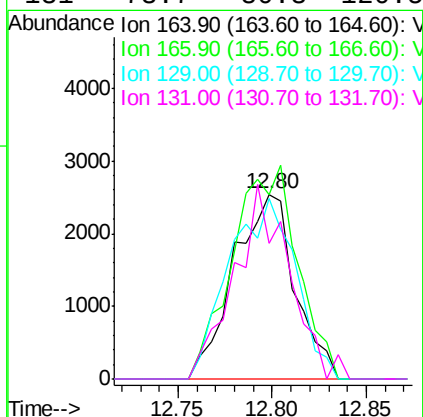
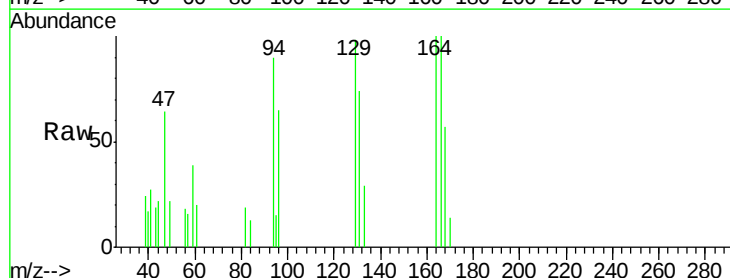
Instrument :
MSVOA_L
ClientSampleId :
DIN46-EFFLUENT-070115DUP

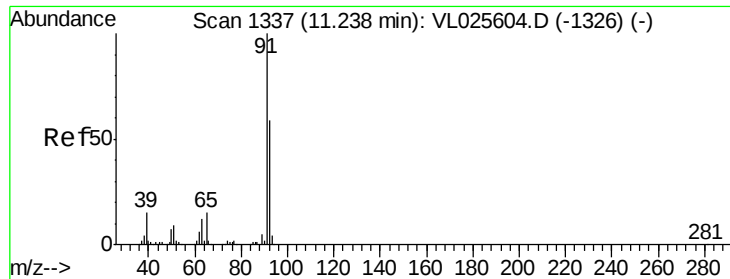
Tot Ion: 43 Resp: 28886
Ion Ratio Lower Upper
43 100
58 46.9 39.0 58.6
98 0.0 0.2 0.4#



#52
Tetrachloroethene
Concen: 0.07 ppbv
RT: 12.80 min Scan# 1593
Delta R.T. 0.01 min
Lab File: VL025616.D
Acq: 7 Jul 2015 20:40

Tgt Ion: 164 Resp: 5736
Ion Ratio Lower Upper
164 100
166 99.9 102.3 153.5#
129 97.7 86.2 129.4
131 73.7 80.3 120.5#





#53

Toluene

Concen: 0.14 ppbv

RT: 11.23 min Scan# 1336

Delta R.T. -0.01 min

Lab File: VL025616.D

Acq: 7 Jul 2015 20:40

Instrument :

MSVOA_L

ClientSampleId :

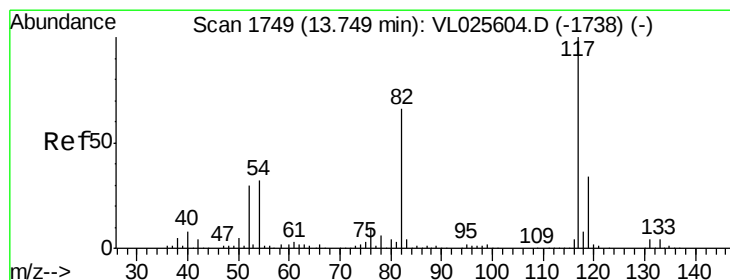
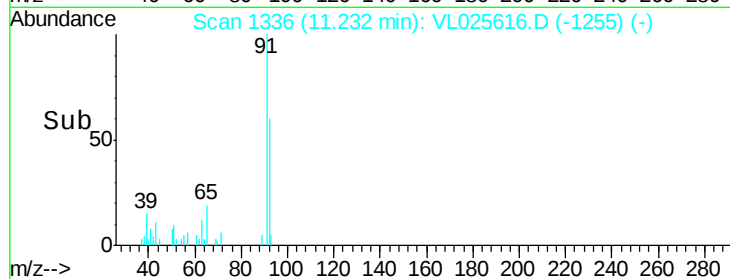
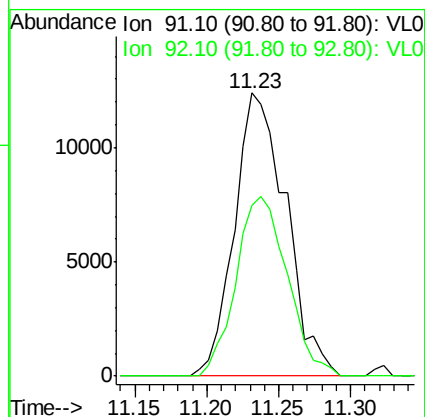
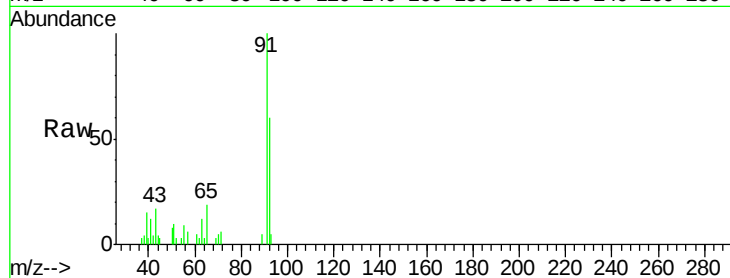
DIN46-EFFLUENT-070115DUP

Tot Ion: 91 Resp: 30850

Ion Ratio Lower Upper

91 100

92 62.9 48.2 72.2



#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 13.74 min Scan# 1748

Delta R.T. -0.01 min

Lab File: VL025616.D

Acq: 7 Jul 2015 20:40

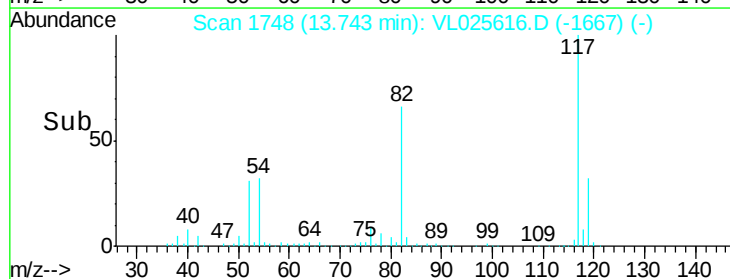
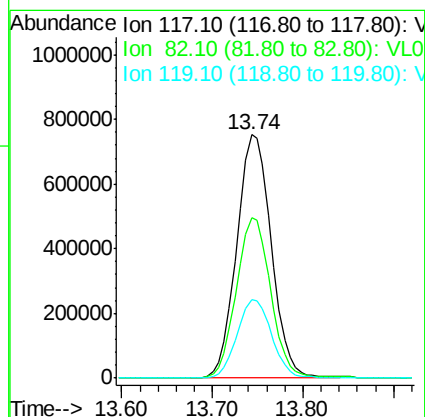
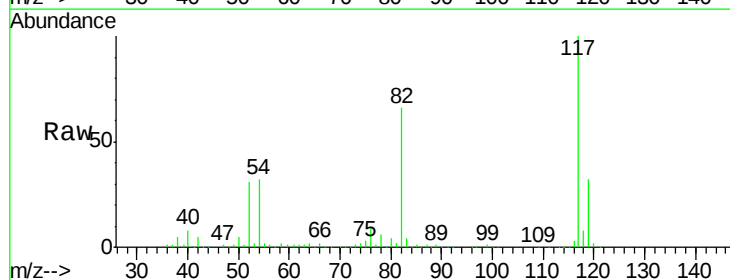
Tgt Ion: 117 Resp: 1998055

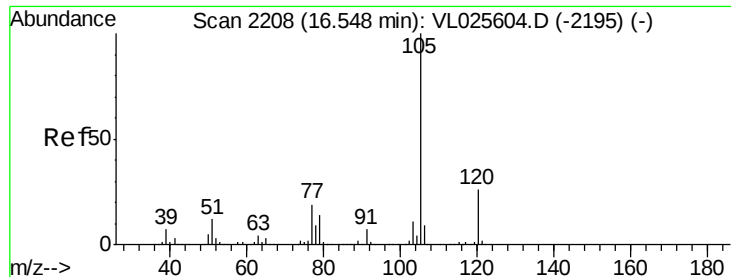
Ion Ratio Lower Upper

117 100

82 66.0 50.5 75.7

119 32.5 45.1 67.7#





#62

Isopropylbenzene

Concen: 0.14 ppbv

RT: 16.54 min Scan# 2207

Delta R.T. -0.01 min

Lab File: VL025616.D

Acq: 7 Jul 2015 20:40

Instrument :

MSVOA_L

ClientSampleId :

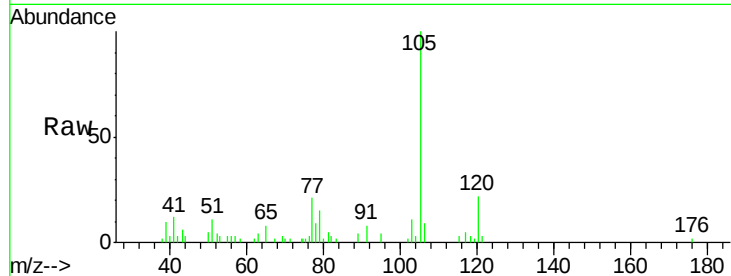
DIN46-EFFLUENT-070115DUP

Tot Ion: 105 Resp: 56886

Ion Ratio Lower Upper

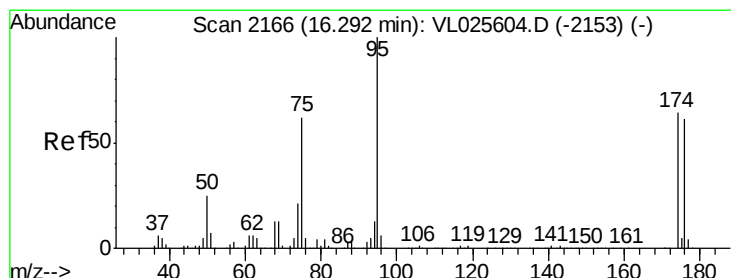
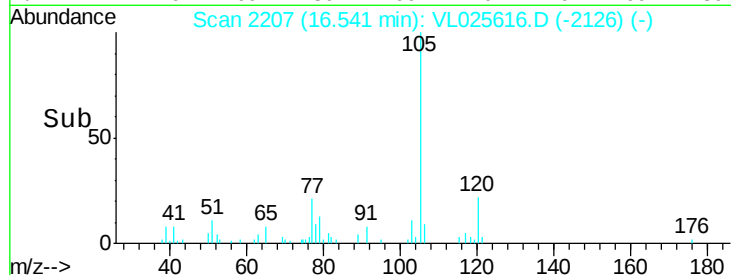
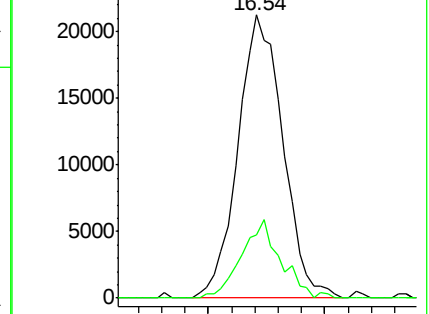
105 100

120 24.1 20.6 31.0



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#68

1-Bromo-4-Fluorobenzene

Concen: 9.90 ppbv

RT: 16.29 min Scan# 2165

Delta R.T. -0.01 min

Lab File: VL025616.D

Acq: 7 Jul 2015 20:40

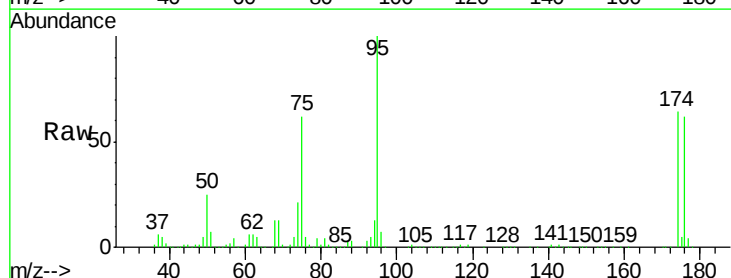
Tgt Ion: 95 Resp: 1667973

Ion Ratio Lower Upper

95 100

174 65.2 52.0 78.0

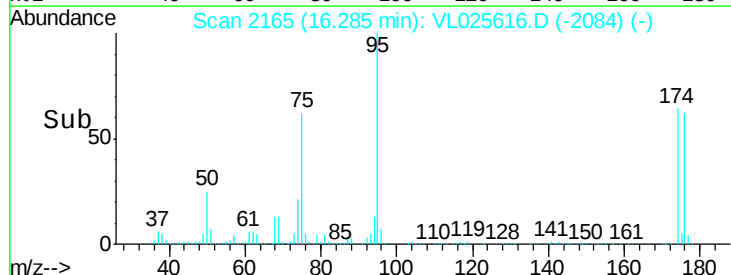
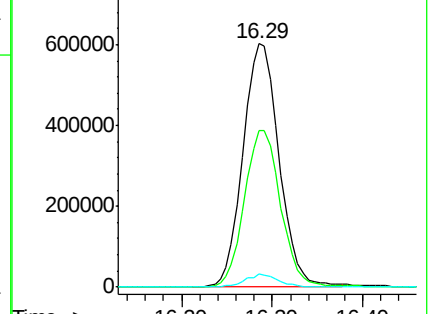
175 4.9 3.9 5.9

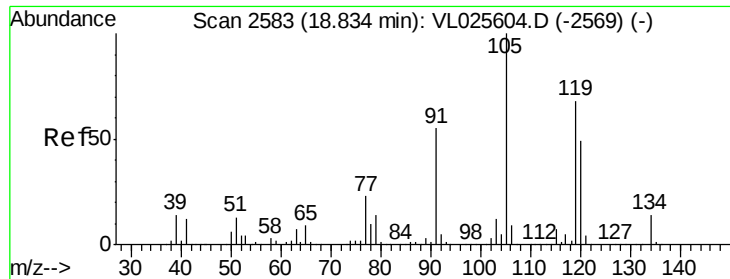


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

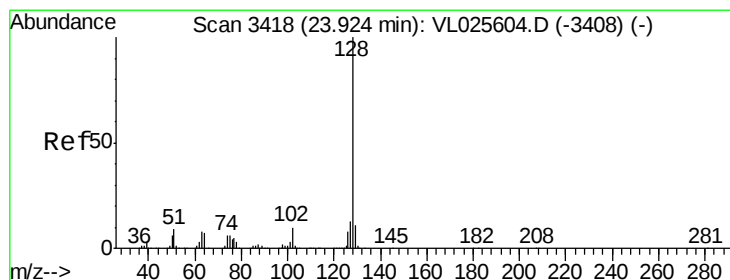
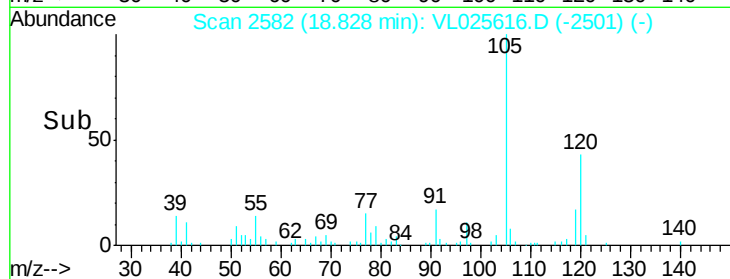
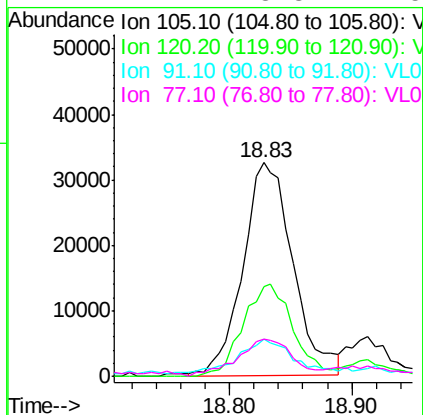
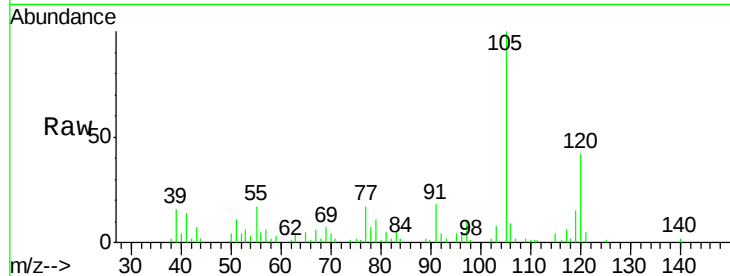




#74
 1,2,4-Trimethylbenzene
 Concen: 0.24 ppbv
 RT: 18.83 min Scan# 2582
 Delta R.T. -0.01 min
 Lab File: VL025616.D
 Acq: 7 Jul 2015 20:40

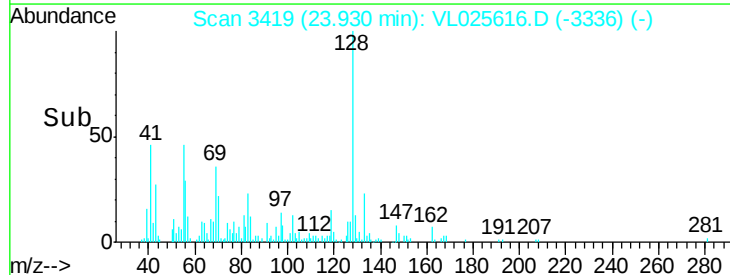
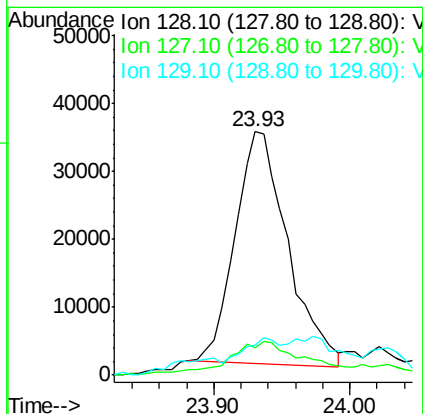
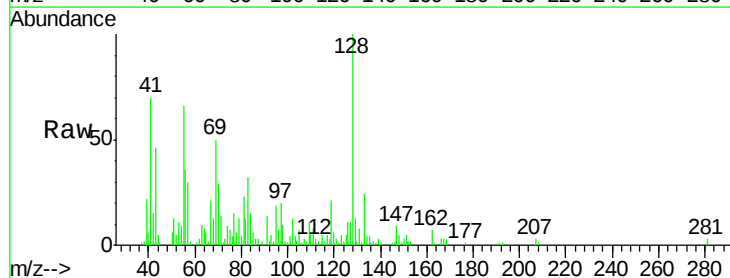
Instrument :
 MSVOA_L
 ClientSampleId :
 DIN46-EFFLUENT-070115DUP

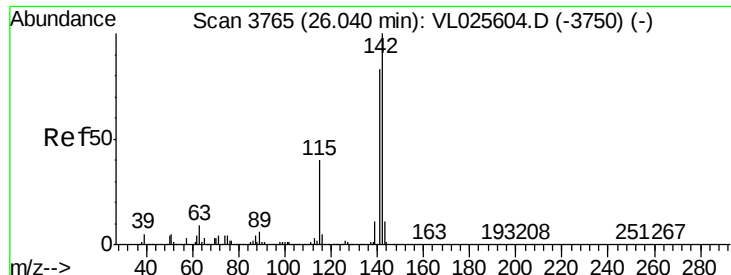
Tot Ion:	105	Resp:	92688
Ion	Ratio	Lower	Upper
105	100		
120	42.4	39.3	58.9
91	15.8	43.8	65.6#
77	17.7	18.3	27.5#



#79
 Naphthalene
 Concen: 0.25 ppbv
 RT: 23.93 min Scan# 3419
 Delta R.T. 0.01 min
 Lab File: VL025616.D
 Acq: 7 Jul 2015 20:40

Tgt Ion:	128	Resp:	92469
Ion	Ratio	Lower	Upper
128	100		
127	9.8	10.8	16.2#
129	7.4	9.0	13.4#





#80

Naphthalene, 2-methyl-

Concen: 0.24 ppbv

RT: 26.05 min Scan# 3766

Delta R.T. 0.01 min

Lab File: VL025616.D

Acq: 7 Jul 2015 20:40

Instrument :

MSVOA_L

ClientSampleId :

DIN46-EFFLUENT-070115DUP

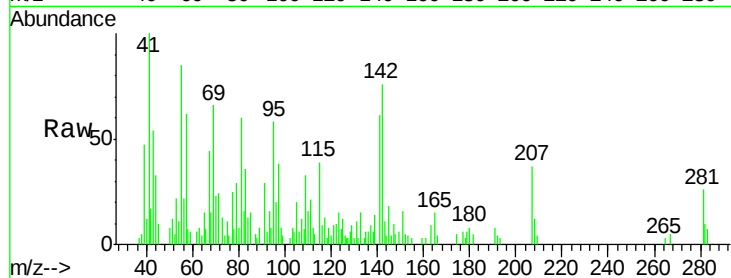
Tot Ion:142 Resp: 25896

Ion Ratio Lower Upper

142 100

141 105.6 67.1 100.7#

115 56.7 33.9 50.9#



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

