

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV041819\
 Data File : VV010374.D
 Acq On : 19 Apr 2019 05:59
 Operator : SY/MD
 Sample : K2402-11
 Misc : 5.06G/10mL/MSVOA V/SOIL
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_V
 ClientSampleId :
 GAHJ1

Quant Time: Apr 19 09:23:13 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOM2VLM041819S.M
 Quant Title : VOC Analysis
 QLast Update : Fri Apr 19 09:02:02 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	5.66	114	72	25.00	ug/L	0.00
28) Chlorobenzene-d5	8.89	117	382	25.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	11.30	152	404	25.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.36	65	76	83.13	ug/L	0.05
Spiked Amount	25.000	Range	30 - 150	Recovery	=	332.52%#
7) Chloroethane-d5	1.52	69	50	65.11	ug/L	-0.05
Spiked Amount	25.000	Range	30 - 150	Recovery	=	260.44%#
10) 1,1-Dichloroethene-d2	1.82	63	48	21.76	ug/L	-0.31
Spiked Amount	25.000	Range	45 - 110	Recovery	=	87.04%
20) 2-Butanone-d5	3.94	46	756	2655.19	ug/L	0.00
Spiked Amount	50.000	Range	20 - 135	Recovery	=	5310.38%#
24) Chloroform-d	4.41	84	170	89.81	ug/L	0.00
Spiked Amount	25.000	Range	40 - 150	Recovery	=	359.24%#
26) 1,2-Dichloroethane-d4	5.08	65	561	502.06	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	2008.24%#
29) Benzene-d6	5.11	84	262	13.40	ug/L	0.02
Spiked Amount	25.000	Range	20 - 135	Recovery	=	53.60%
33) 1,2-Dichloropropane-d6	6.12	67	43	7.51	ug/L	0.00
Spiked Amount	25.000	Range	70 - 120	Recovery	=	30.04%#
37) Toluene-d8	7.36	98	196	10.43	ug/L	0.00
Spiked Amount	25.000	Range	30 - 130	Recovery	=	41.72%
38) trans-1,3-Dichloropropene-	7.80	79	85	30.20	ug/L	0.14
Spiked Amount	25.000	Range	30 - 135	Recovery	=	120.80%
39) 2-Hexanone-d5	8.14	63	625	490.50	ug/L	0.00
Spiked Amount	50.000	Range	20 - 135	Recovery	=	981.00%#
48) 1,1,2,2-Tetrachloroethane-	10.26	84	2476	432.61	ug/L	0.00
Spiked Amount	25.000	Range	45 - 120	Recovery	=	1730.44%#
61) 1,2-Dichlorobenzene-d4	11.67	152	399	25.12	ug/L	0.00
Spiked Amount	25.000	Range	75 - 120	Recovery	=	100.48%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
3) Chloromethane	1.25	50	218	229.685	ug/L #	50
5) Vinyl chloride	1.30	62	74	74.634	ug/L #	1
6) Bromomethane	1.58	94	47	74.109	ug/L	98
8) Chloroethane	1.60	64	273	432.009	ug/L #	44
9) Trichlorofluoromethane	1.76	101	40	19.643	ug/L #	1
12) 1,1-Dichloroethene	2.14	96	44	47.042	ug/L #	1
13) Acetone	2.19	43	1074	3574.263	ug/L	69
14) Carbon disulfide	2.31	76	139	60.247	ug/L #	75
15) Methyl Acetate	2.44	43	44	89.710	ug/L #	47
16) Methylene chloride	2.53	84	1007	875.632	ug/L	83
21) 2-Butanone	4.09	43	62	190.341	ug/L #	49
25) Chloroform	4.40	83	54	30.573	ug/L #	17
30) Cyclohexane	4.68	56	73	10.427	ug/L #	1
40) 1,2-Dichloropropane	6.00	63	43	8.994	ug/L #	86
43) 4-Methyl-2-pentanone	7.31	43	46	12.315	ug/L #	1
49) 2-Hexanone	8.20	43	48	18.358	ug/L #	37
53) Ethylbenzene	9.18	91	195	8.167	ug/L #	42

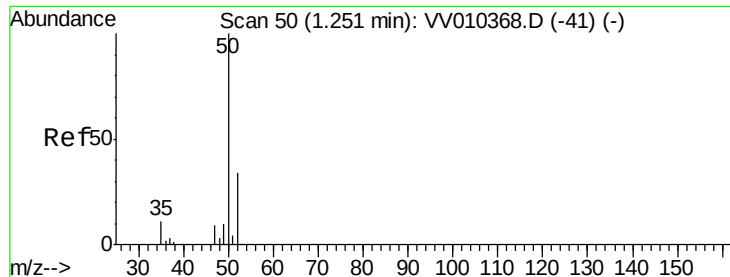
Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV041819\
 Data File : VV010374.D
 Acq On : 19 Apr 2019 05:59
 Operator : SY/MD
 Sample : K2402-11
 Misc : 5.06G/10mL/MSVOA V/SOIL
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_V
 ClientSampleId :
 GAHJ1

Quant Time: Apr 19 09:23:13 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOM2VLM041819S.M
 Quant Title : VOC Analysis
 QLast Update : Fri Apr 19 09:02:02 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
55) o-xylene	9.59	106	84	9.424	ug/L #	23
59) 1,2,3-Trichloropropane	10.67	75	43	10.662	ug/L #	1
63) 1,3-Dichlorobenzene	11.23	146	49	1.989	ug/L #	25
64) 1,4-Dichlorobenzene	11.23	146	49	1.929	ug/L #	25
67) 1,3,5-Trichlorobenzene	12.69	180	112	5.465	ug/L #	42
68) 1,2,4-trichlorobenzene	13.31	180	41	2.504	ug/L #	1
69) Naphthalene	13.55	128	1946839	64371.645	ug/L	100
70) 1,2,3-Trichlorobenzene	13.80	180	124	7.792	ug/L #	92

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



#3

Chloromethane

Concen: 229.685 ug/L

RT: 1.25 min Scan# 49

Delta R.T. 0.00 min

Lab File: VV010374.D

Acq: 19 Apr 2019 05:59

Instrument :

MSVOA_V

ClientSampleId :

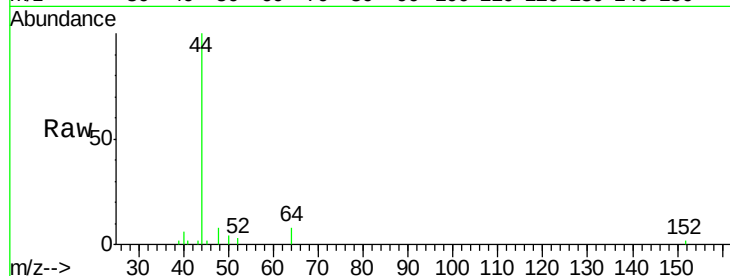
GAHJ1

Tot Ion: 50 Resp: 218

Ion Ratio Lower Upper

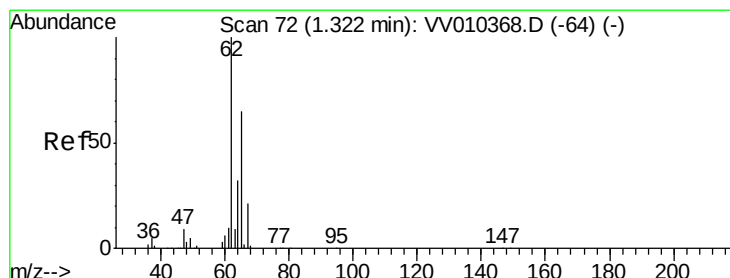
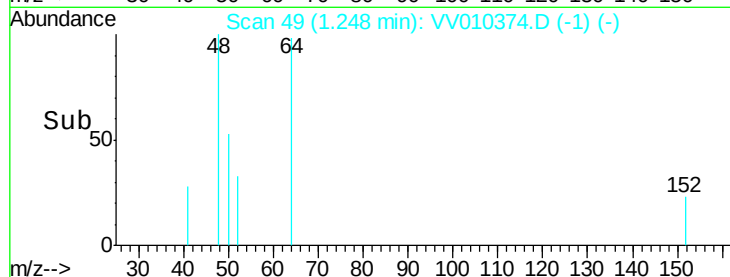
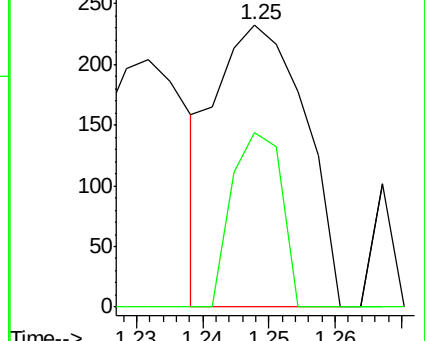
50 100

52 61.8 23.2 43.2#



Abundance Ion 50.00 (49.70 to 50.70): VV0

Ion 52.00 (51.70 to 52.70): VV0



#5

Vinyl chloride

Concen: 74.634 ug/L

RT: 1.30 min Scan# 65

Delta R.T. -0.02 min

Lab File: VV010374.D

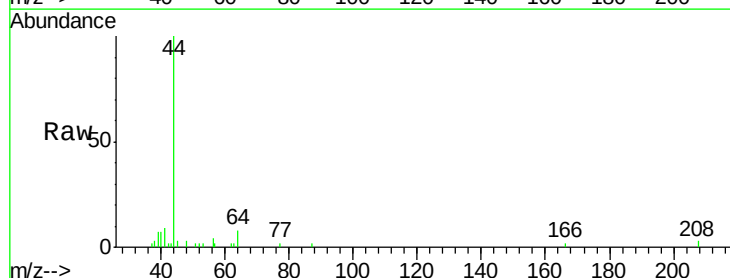
Acq: 19 Apr 2019 05:59

Tgt Ion: 62 Resp: 74

Ion Ratio Lower Upper

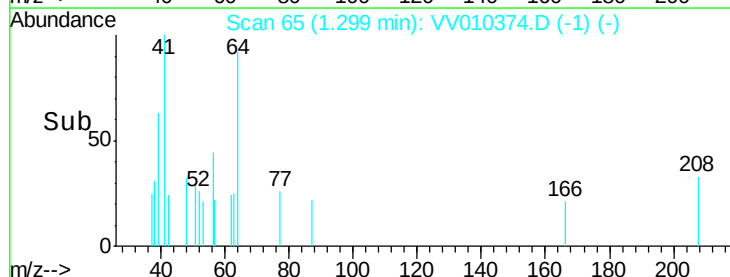
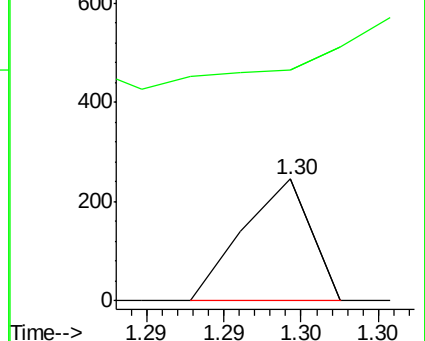
62 100

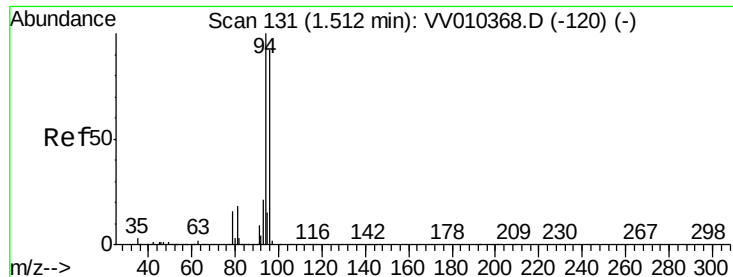
64 189.4 23.9 44.3#



Abundance Ion 62.00 (61.70 to 62.70): VV0

Ion 64.00 (63.70 to 64.70): VV0





#6

Bromomethane

Concen: 74.109 ug/L

RT: 1.58 min Scan# 151

Delta R.T. 0.05 min

Lab File: VV010374.D

Acq: 19 Apr 2019 05:59

Instrument :

MSVOA_V

ClientSampled :

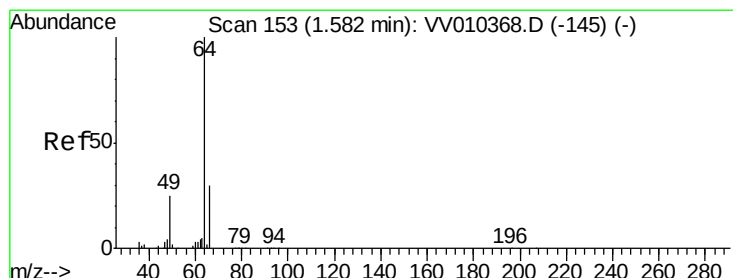
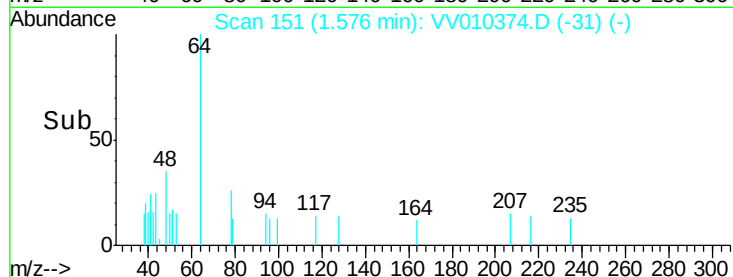
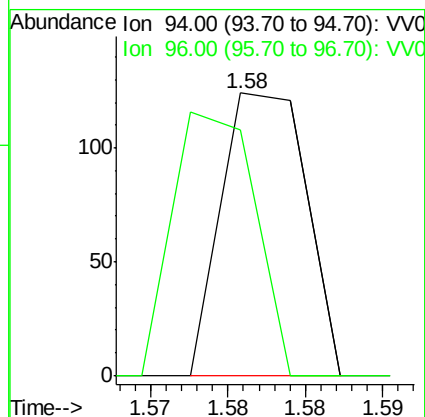
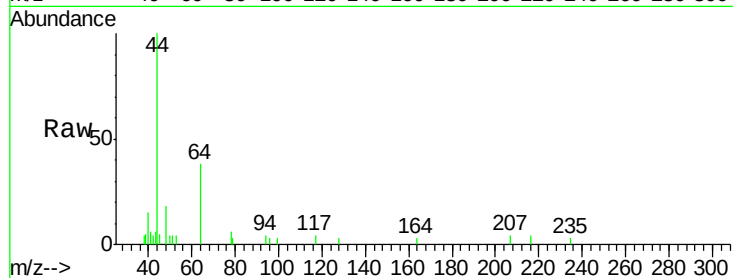
GAHJ1

Tot Ion: 94 Resp: 47

Ion Ratio Lower Upper

94 100

96 91.5 9.3 177.1



#8

Chloroethane

Concen: 432.009 ug/L

RT: 1.60 min Scan# 160

Delta R.T. 0.02 min

Lab File: VV010374.D

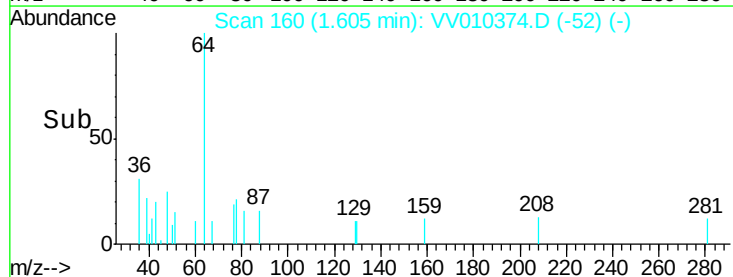
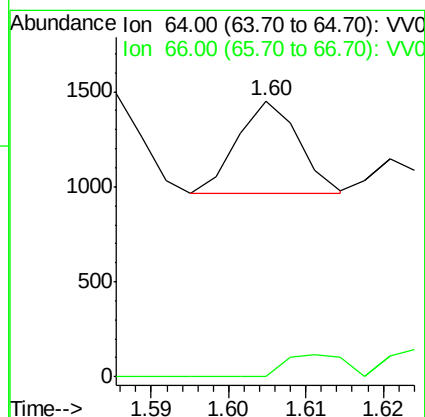
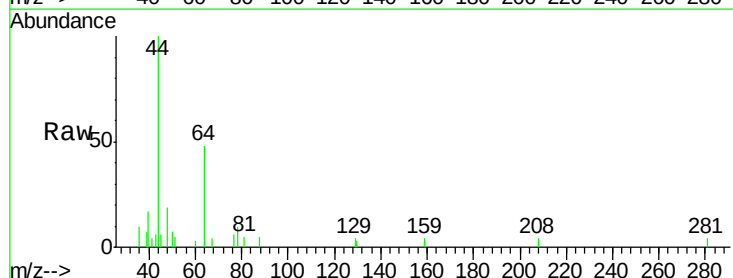
Acq: 19 Apr 2019 05:59

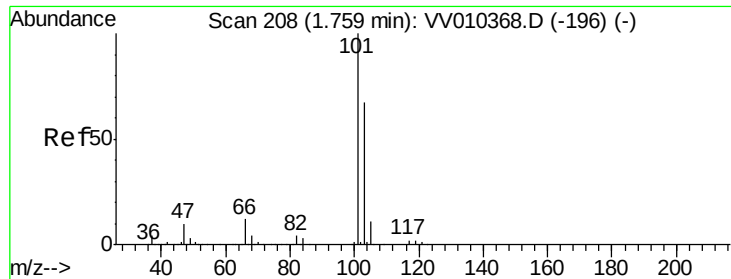
Tgt Ion: 64 Resp: 273

Ion Ratio Lower Upper

64 100

66 0.0 21.4 39.8#





#9

Trichlorofluoromethane

Concen: 19.643 ug/L

RT: 1.76 min Scan# 209

Delta R.T. 0.00 min

Lab File: VV010374.D

Acq: 19 Apr 2019 05:59

Instrument :

MSVOA_V

ClientSampleId :

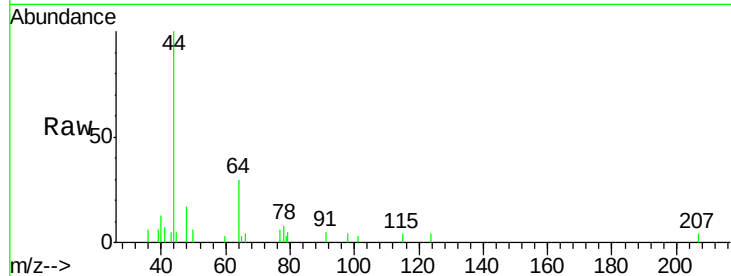
GAHJ1

Tot Ion:101 Resp: 40

Ion Ratio Lower Upper

101 100

103 187.5 45.5 84.5#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V

1.76

1.75

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

1.76

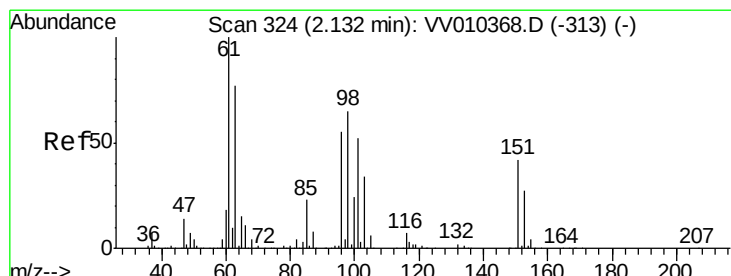
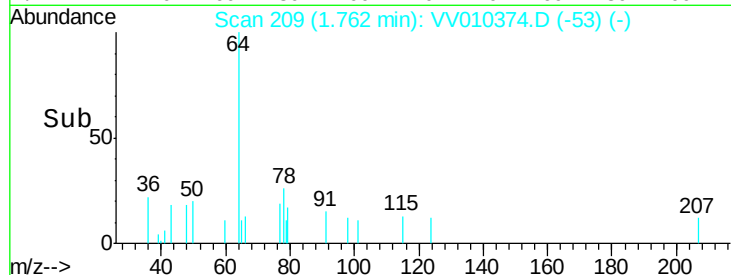
1.76

1.76

1.76

1.76

1.76



#12

1,1-Dichloroethene

Concen: 47.042 ug/L

RT: 2.14 min Scan# 327

Delta R.T. 0.01 min

Lab File: VV010374.D

Acq: 19 Apr 2019 05:59

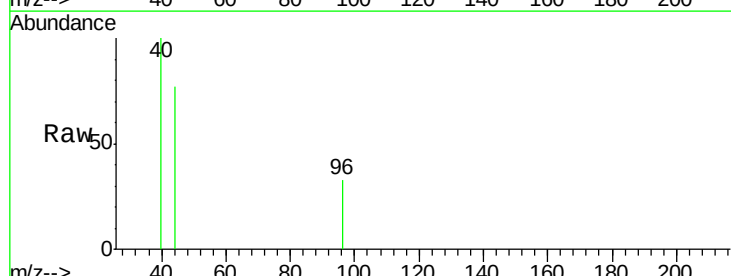
Tgt Ion: 96 Resp: 44

Ion Ratio Lower Upper

96 100

61 0.0 124.7 231.5#

63 0.0 88.7 164.7#



Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.00 (60.70 to 61.70): VV0

Ion 63.00 (62.70 to 63.70): VV0

2.14

2.13

2.14

2.14

2.14

2.14

2.14

2.14

2.14

2.14

2.14

2.14

2.14

2.14

2.14

2.14

2.14

2.14

2.14

2.14

2.14

2.14

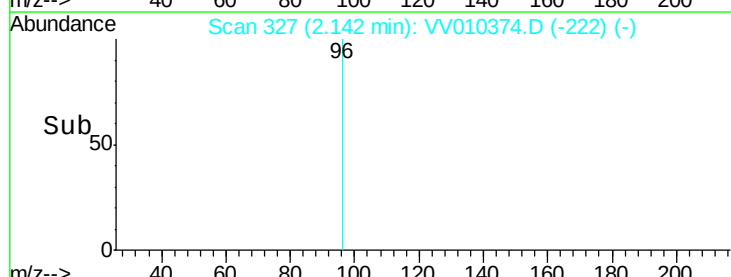
2.14

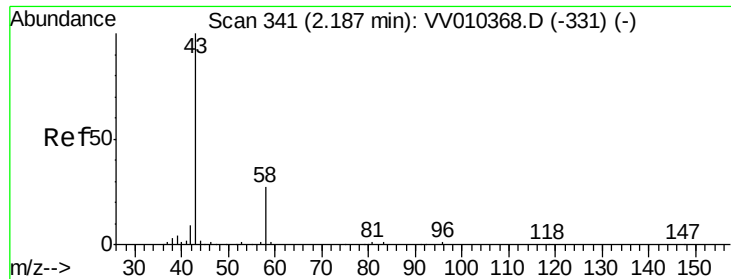
2.14

2.14

2.14

2.14





#13

Acetone

Concen: 3574.263 ug/L

RT: 2.19 min Scan# 342

Delta R.T. -0.00 min

Lab File: VV010374.D

Acq: 19 Apr 2019 05:59

Instrument :

MSVOA_V

ClientSampleId :

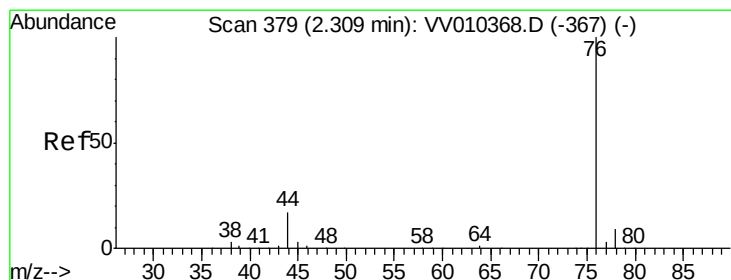
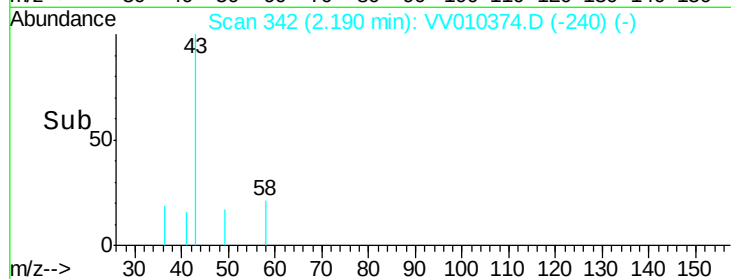
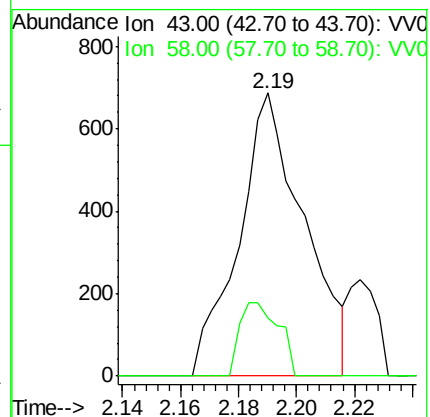
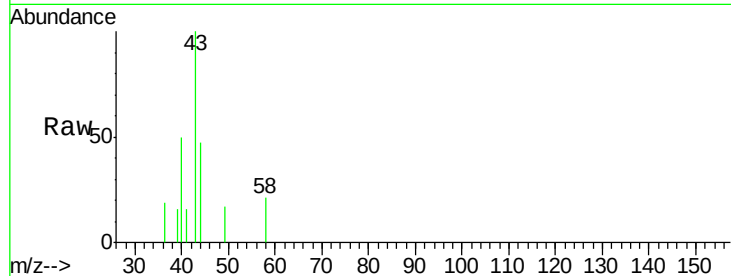
GAHJ1

Tot Ion: 43 Resp: 1074

Ion Ratio Lower Upper

43 100

58 13.4 0.0 60.0



#14

Carbon disulfide

Concen: 60.247 ug/L

RT: 2.31 min Scan# 380

Delta R.T. 0.00 min

Lab File: VV010374.D

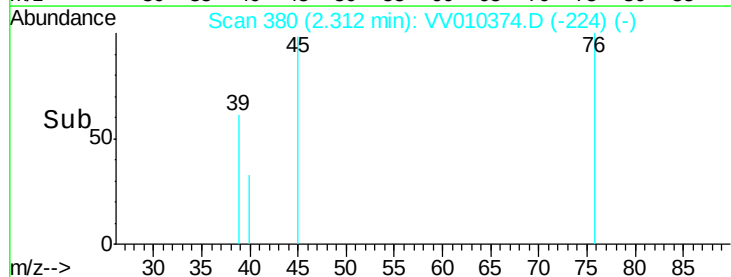
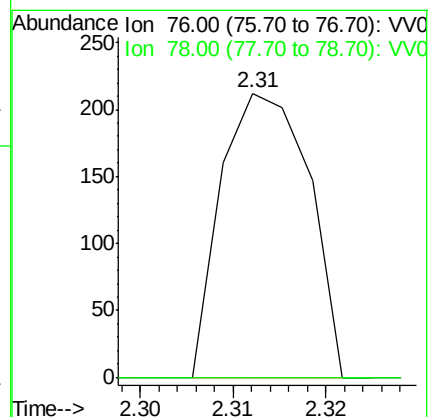
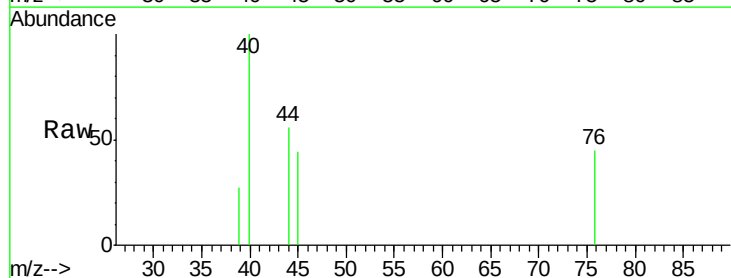
Acq: 19 Apr 2019 05:59

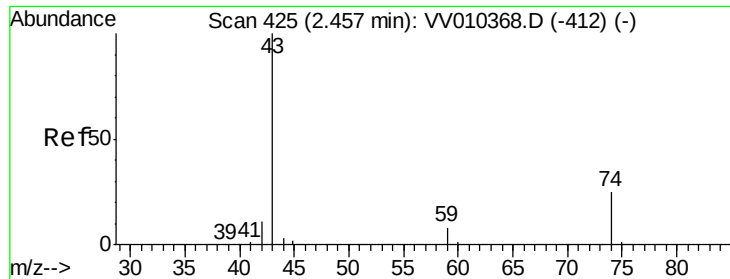
Tgt Ion: 76 Resp: 139

Ion Ratio Lower Upper

76 100

78 0.0 7.1 10.7#

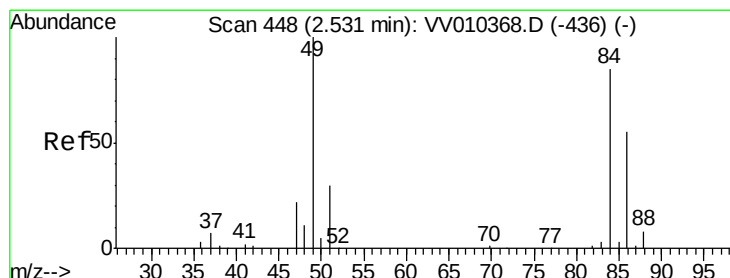
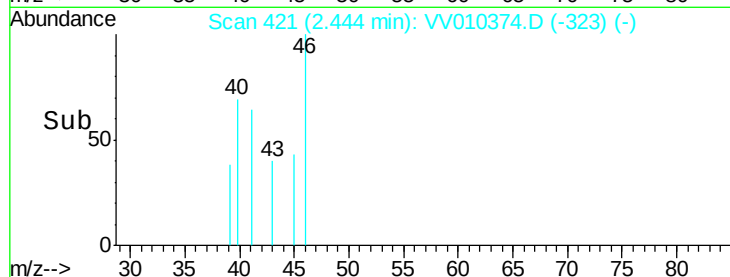
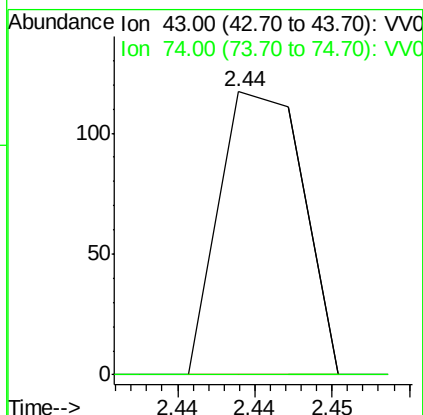
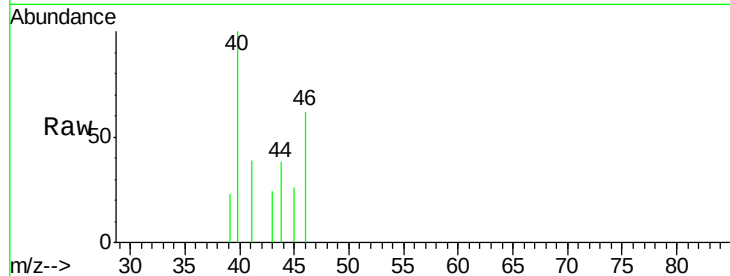




#15
Methvl Acetate
Concen: 89.710 ug/L
RT: 2.44 min Scan# 421
Delta R.T. -0.02 min
Lab File: VV010374.D
Acq: 19 Apr 2019 05:59

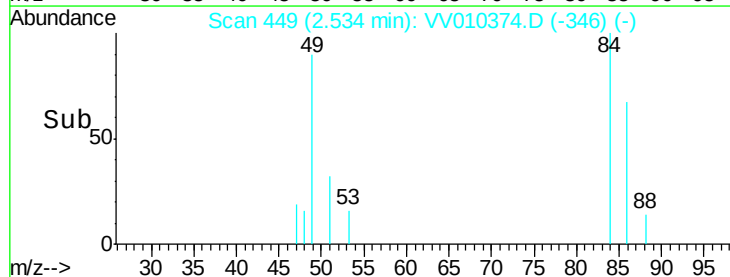
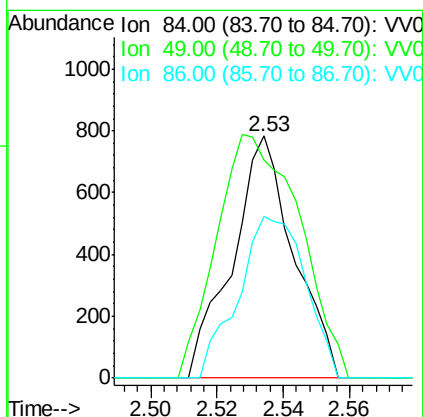
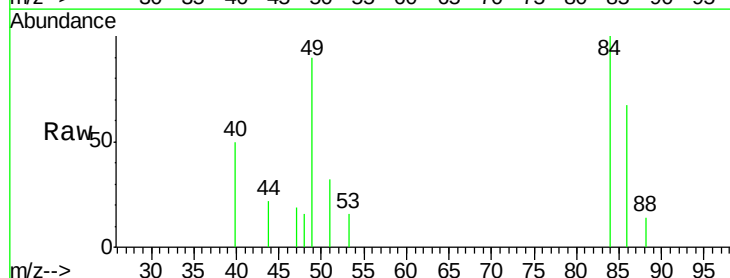
Instrument :
MSVOA_V
ClientSampled :
GAHJ1

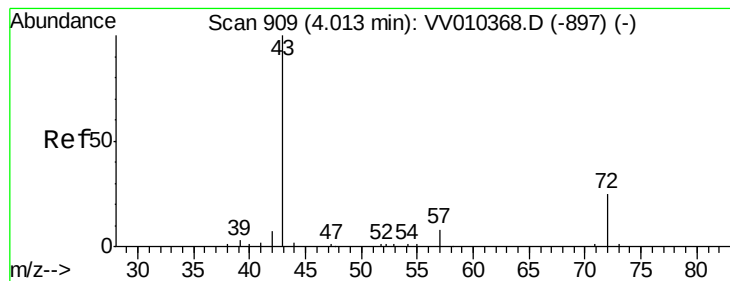
Tot Ion: 43 Resp: 44
Ion Ratio Lower Upper
43 100
74 0.0 22.1 33.1#



#16
Methylene chloride
Concen: 875.632 ug/L
RT: 2.53 min Scan# 449
Delta R.T. 0.00 min
Lab File: VV010374.D
Acq: 19 Apr 2019 05:59

Tgt Ion: 84 Resp: 1007
Ion Ratio Lower Upper
84 100
49 90.3 83.8 155.6
86 66.7 46.1 85.5





#21

2-Butanone

Concen: 190.341 ug/L

RT: 4.09 min Scan# 933

Delta R.T. 0.07 min

Lab File: VV010374.D

Acq: 19 Apr 2019 05:59

Instrument :

MSVOA_V

ClientSampleId :

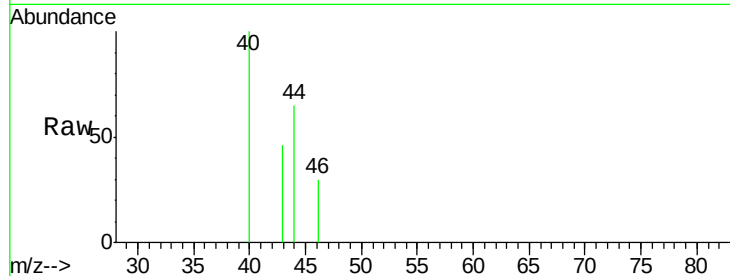
GAHJ1

Tot Ion: 43 Resp: 62

Ion Ratio Lower Upper

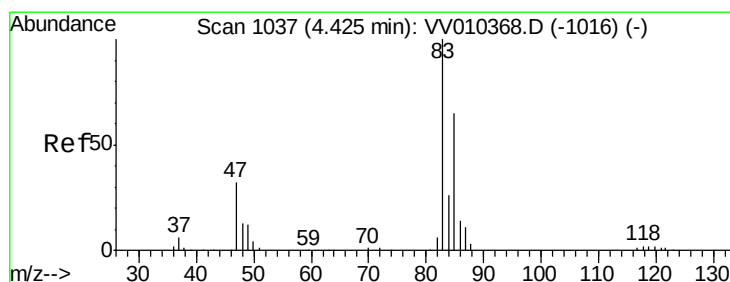
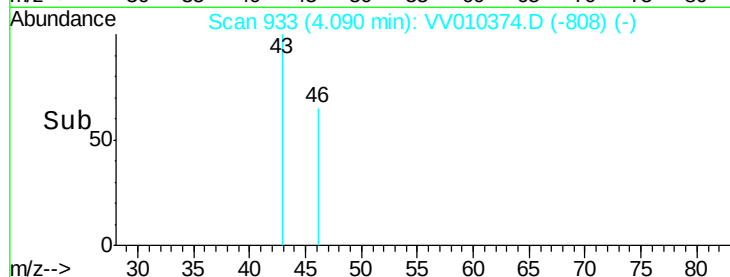
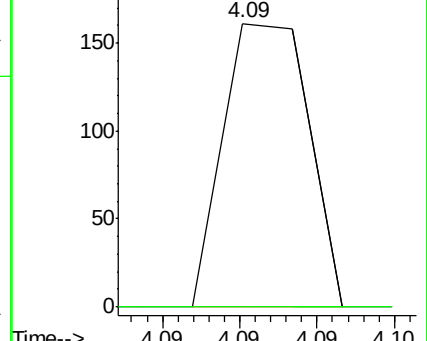
43 100

72 0.0 13.1 39.1#



Abundance Ion 43.00 (42.70 to 43.70): VV0

Ion 72.00 (71.70 to 72.70): VV0



#25

Chloroform

Concen: 30.573 ug/L

RT: 4.40 min Scan# 1030

Delta R.T. -0.03 min

Lab File: VV010374.D

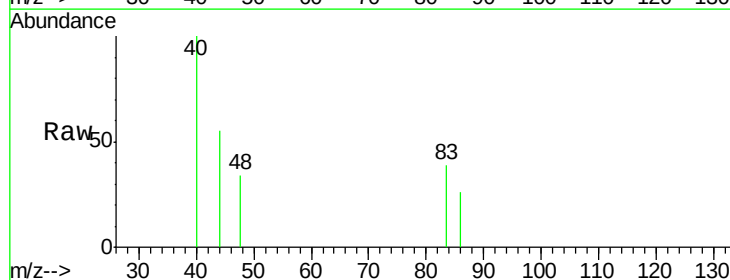
Acq: 19 Apr 2019 05:59

Tgt Ion: 83 Resp: 54

Ion Ratio Lower Upper

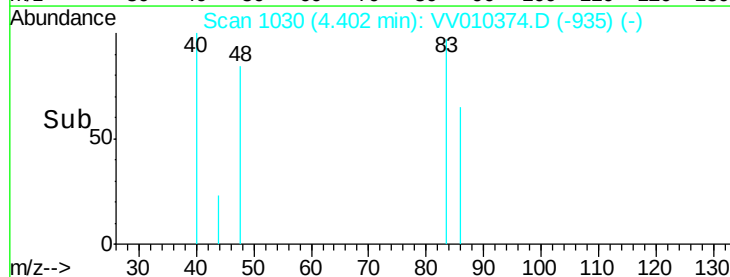
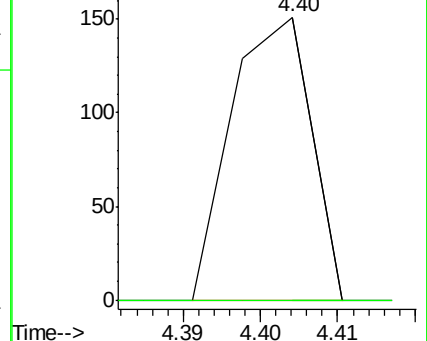
83 100

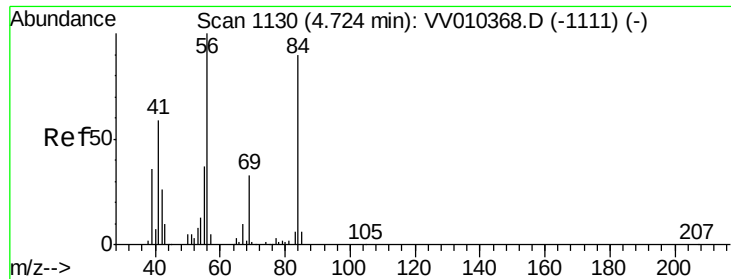
85 0.0 46.5 86.5#



Abundance Ion 83.00 (82.70 to 83.70): VV0

Ion 85.00 (84.70 to 85.70): VV0

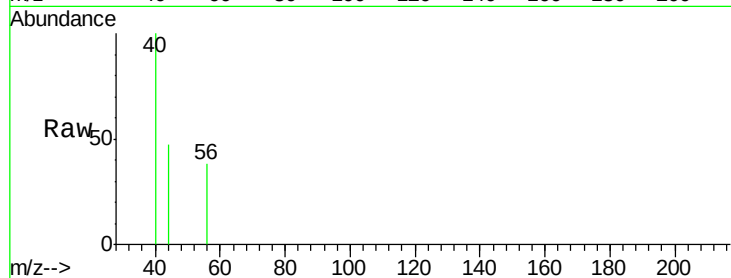




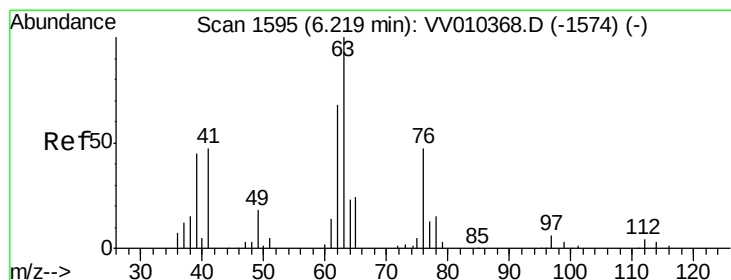
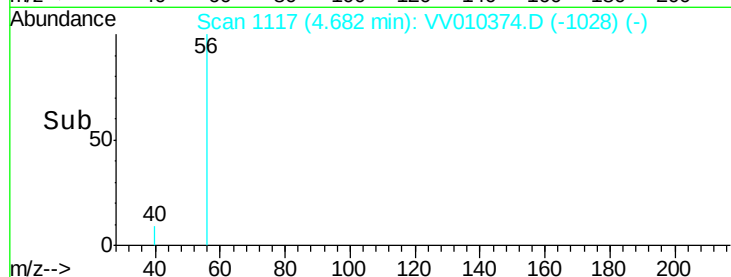
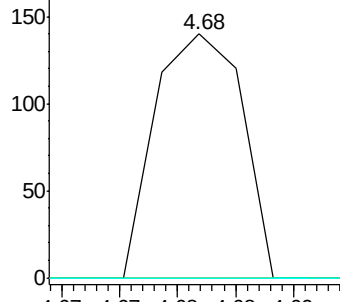
#30
Cyclohexane
Concen: 10.427 ug/L
RT: 4.68 min Scan# 1117
Delta R.T. -0.04 min
Lab File: VV010374.D
Acq: 19 Apr 2019 05:59

Instrument :
MSVOA_V
ClientSampled :
GAHJ1

Tot Ion: 56 Resp: 73
Ion Ratio Lower Upper
56 100
69 0.0 25.3 37.9#
84 232.9 73.0 109.4#

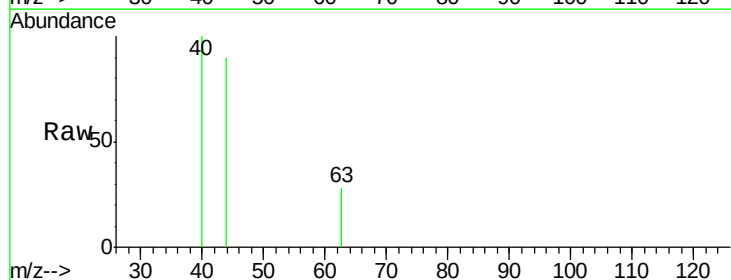


Abundance Ion 56.00 (55.70 to 56.70): VV0
Ion 69.00 (68.70 to 69.70): VV0
Ion 84.00 (83.70 to 84.70): VV0

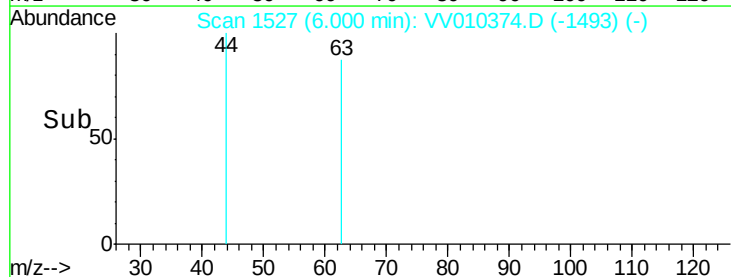
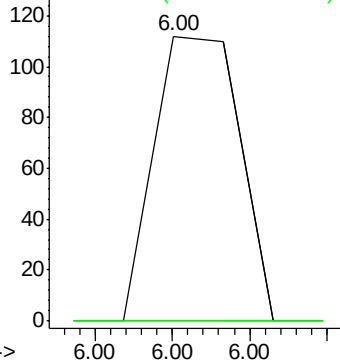


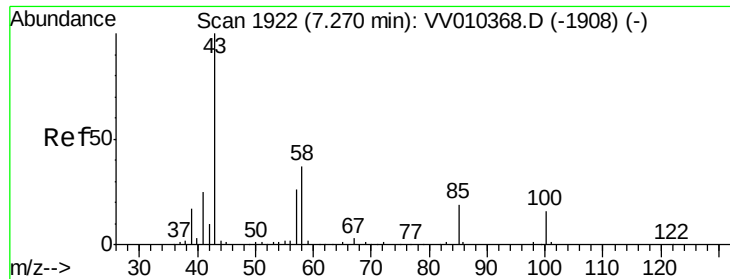
#40
1,2-Dichloropropane
Concen: 8.994 ug/L
RT: 6.00 min Scan# 1527
Delta R.T. -0.22 min
Lab File: VV010374.D
Acq: 19 Apr 2019 05:59

Tgt Ion: 63 Resp: 43
Ion Ratio Lower Upper
63 100
112 0.0 3.6 5.4#



Abundance Ion 63.00 (62.70 to 63.70): VV0
Ion 112.00 (111.70 to 112.70): V





#43

4-Methyl-2-pentanone

Concen: 12.315 ug/L

RT: 7.31 min Scan# 1934

Delta R.T. 0.04 min

Lab File: VV010374.D

Acq: 19 Apr 2019 05:59

Instrument :

MSVOA_V

ClientSampleId :

GAHJ1

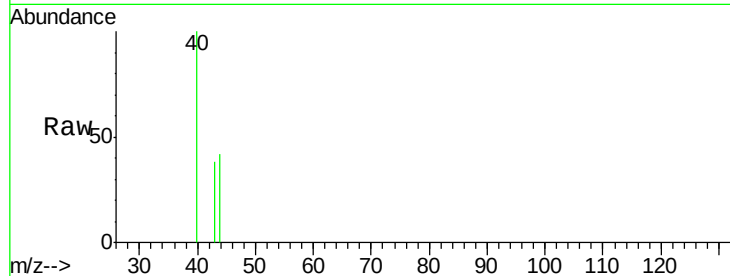
Tot Ion: 43 Resp: 46

Ion Ratio Lower Upper

43 100

58 0.0 30.0 45.0#

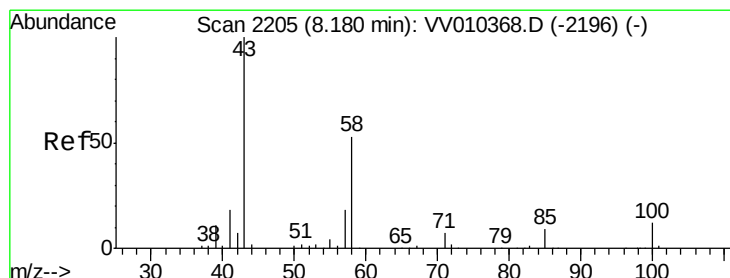
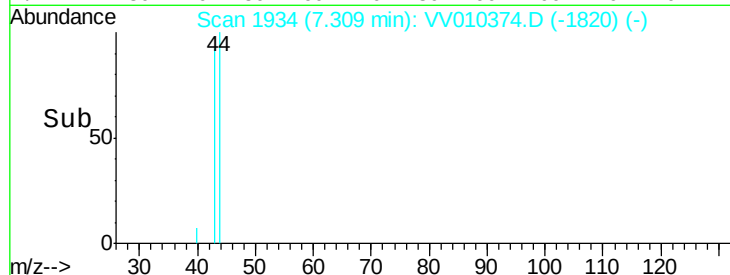
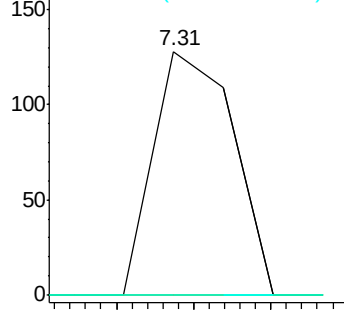
100 515.2 12.6 19.0#



Abundance Ion 43.00 (42.70 to 43.70): VV0

Ion 58.00 (57.70 to 58.70): VV0

Ion 100.00 (99.70 to 100.70): VV0



#49

2-Hexanone

Concen: 18.358 ug/L

RT: 8.20 min Scan# 2210

Delta R.T. 0.01 min

Lab File: VV010374.D

Acq: 19 Apr 2019 05:59

Tgt Ion: 43 Resp: 48

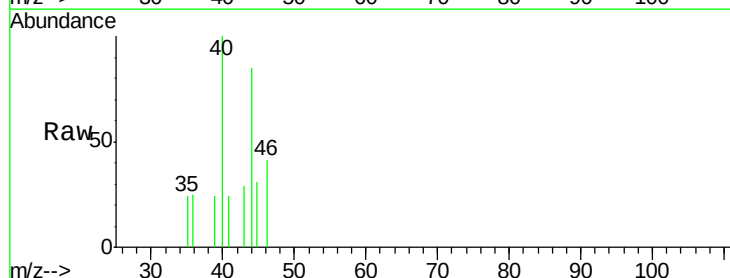
Ion Ratio Lower Upper

43 100

58 0.0 44.9 67.3#

57 0.0 15.8 23.6#

100 0.0 10.1 15.1#

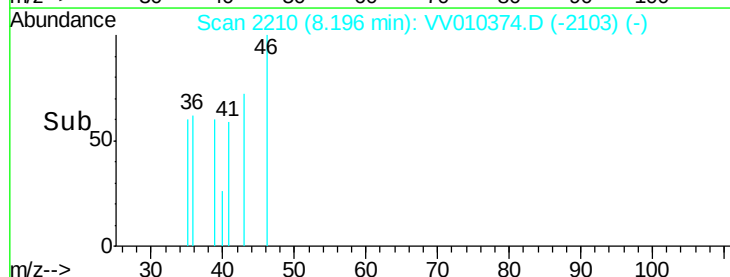
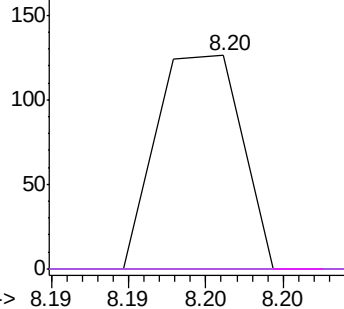


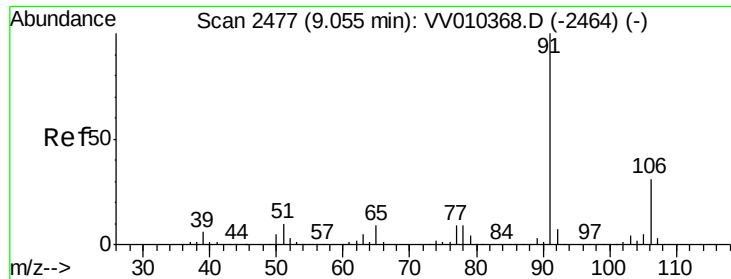
Abundance Ion 43.00 (42.70 to 43.70): VV0

Ion 58.00 (57.70 to 58.70): VV0

Ion 57.00 (56.70 to 57.70): VV0

Ion 100.00 (99.70 to 100.70): VV0

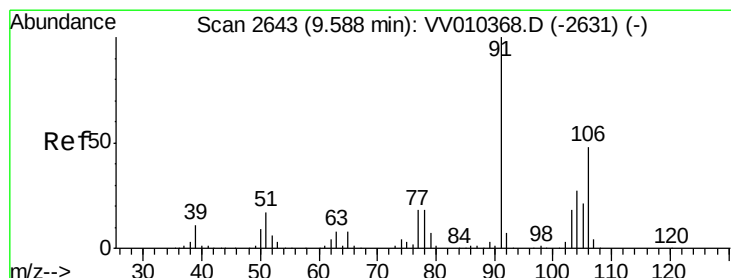
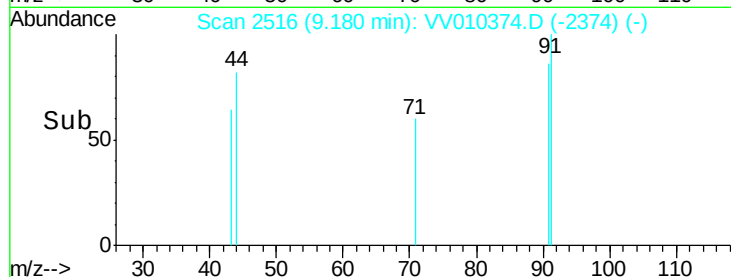
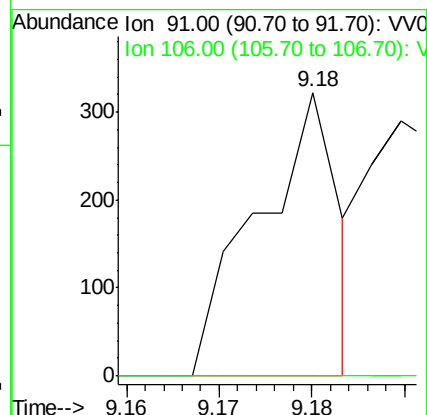
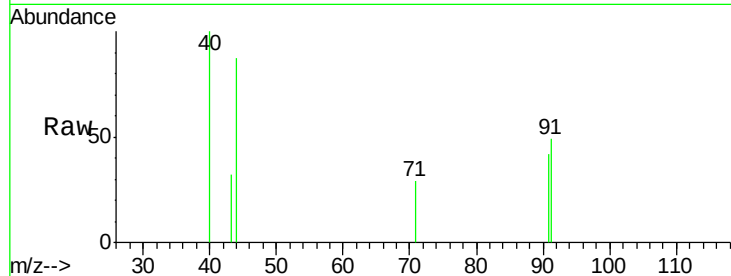




#53
Ethylbenzene
Concen: 8.167 ug/L
RT: 9.18 min Scan# 2516
Delta R.T. 0.13 min
Lab File: VV010374.D
Acq: 19 Apr 2019 05:59

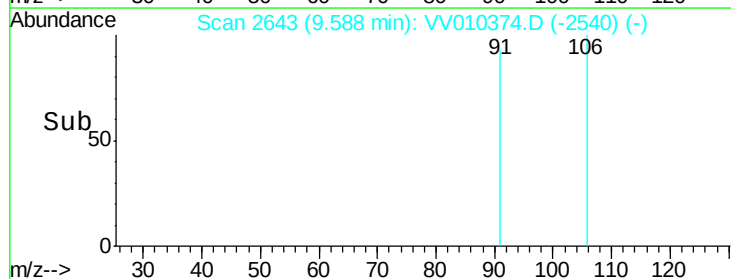
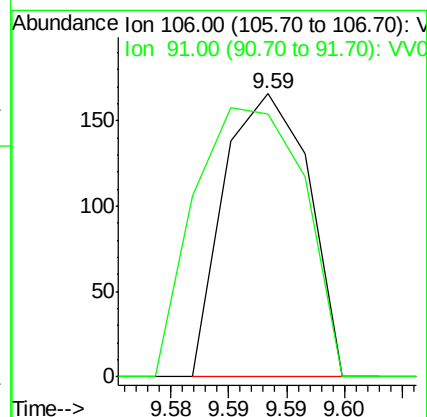
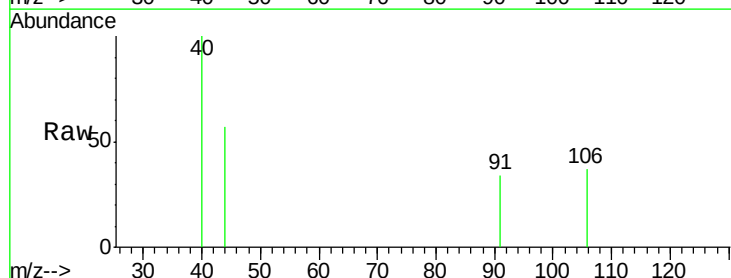
Instrument :
MSVOA_V
ClientSampled :
GAHJ1

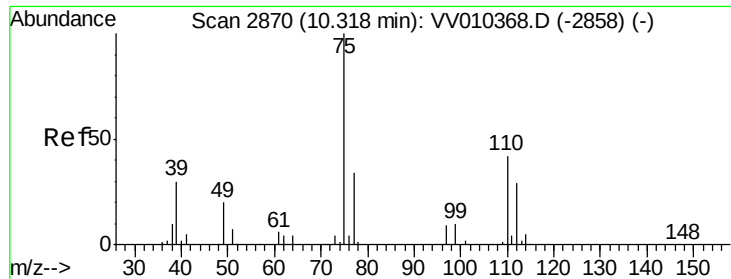
Tot Ion: 91 Resp: 195
Ion Ratio Lower Upper
91 100
106 0.0 22.5 41.9#



#55
o-xylene
Concen: 9.424 ug/L
RT: 9.59 min Scan# 2643
Delta R.T. 0.00 min
Lab File: VV010374.D
Acq: 19 Apr 2019 05:59

Tgt Ion: 106 Resp: 84
Ion Ratio Lower Upper
106 100
91 92.8 150.1 278.9#





#59

1,2,3-Trichloropropane

Concen: 10.662 ug/L

RT: 10.67 min Scan# 2978

Delta R.T. 0.35 min

Lab File: VV010374.D

Acq: 19 Apr 2019 05:59

Instrument :

MSVOA_V

ClientSampleId :

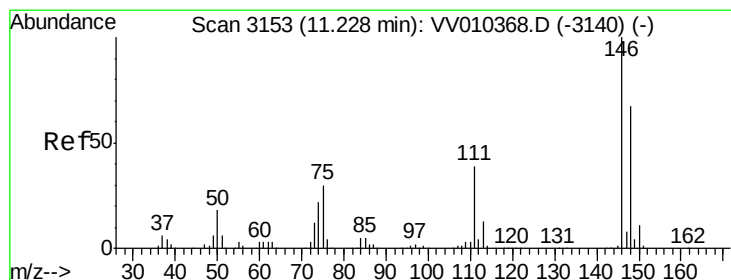
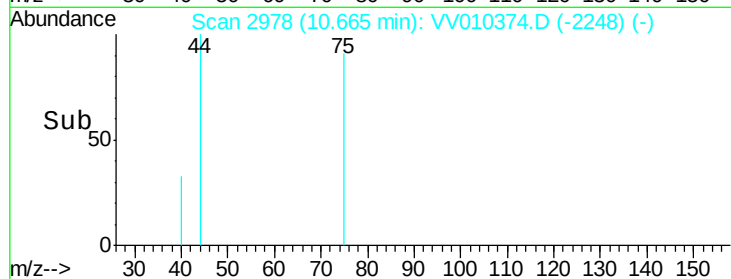
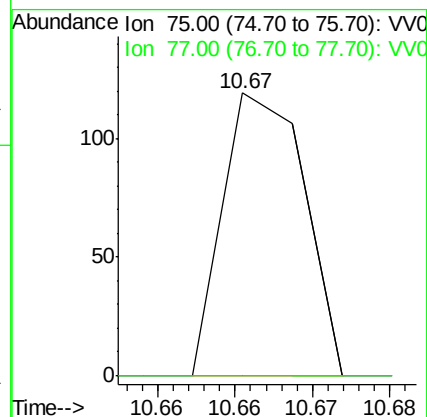
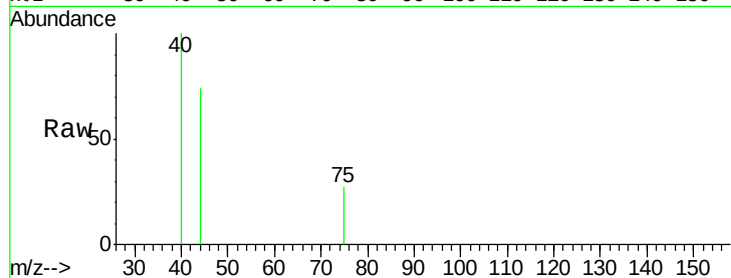
GAHJ1

Tot Ion: 75 Resp: 43

Ion Ratio Lower Upper

75 100

77 216.3 25.8 38.8#



#63

1,3-Dichlorobenzene

Concen: 1.989 ug/L

RT: 11.23 min Scan# 3155

Delta R.T. 0.01 min

Lab File: VV010374.D

Acq: 19 Apr 2019 05:59

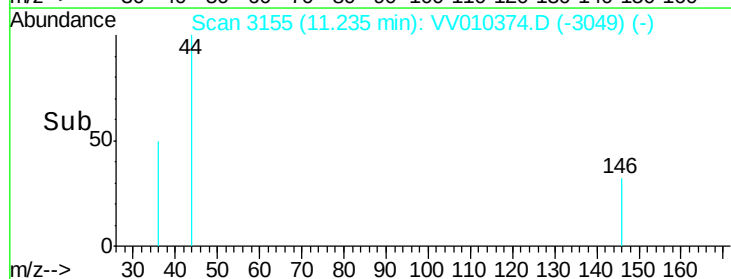
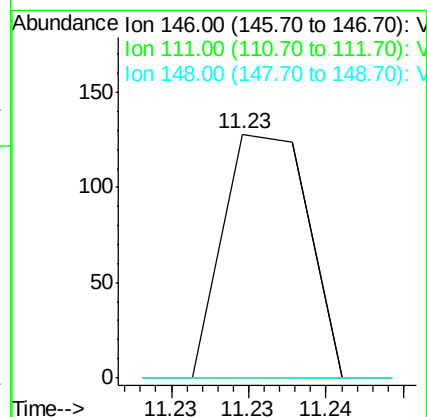
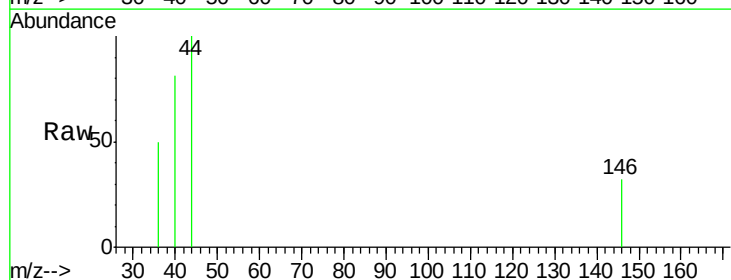
Tgt Ion: 146 Resp: 49

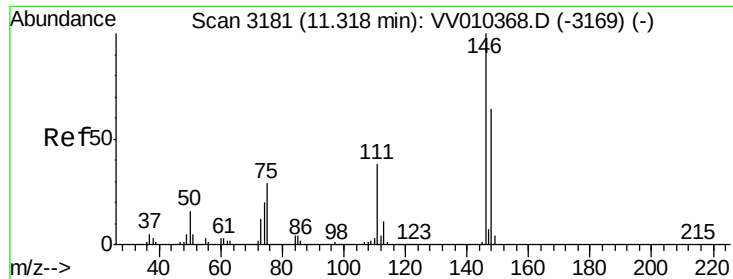
Ion Ratio Lower Upper

146 100

111 0.0 27.6 51.4#

148 0.0 45.3 84.1#





#64

1,4-Dichlorobenzene

Concen: 1.929 ug/L

RT: 11.23 min Scan# 3155

Delta R.T. -0.08 min

Lab File: VV010374.D

Acq: 19 Apr 2019 05:59

Instrument :

MSVOA_V

ClientSampleId :

GAHJ1

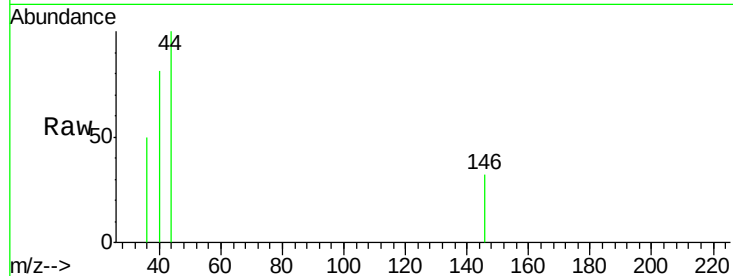
Tot Ion:146 Resp: 49

Ion Ratio Lower Upper

146 100

111 0.0 26.4 49.0#

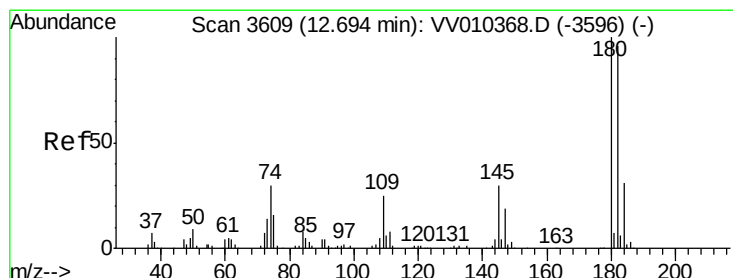
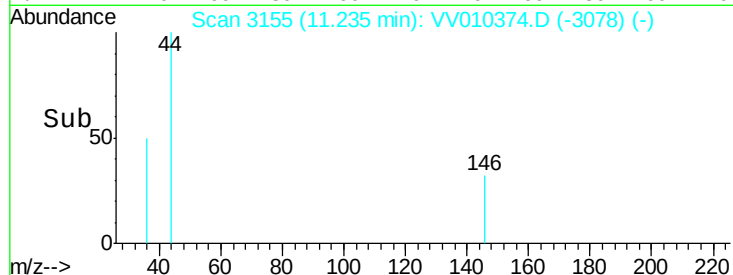
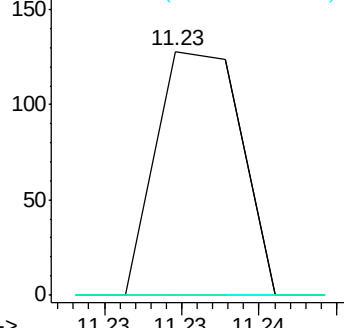
148 0.0 45.3 84.1#



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#67

1,3,5-Trichlorobenzene

Concen: 5.465 ug/L

RT: 12.69 min Scan# 3608

Delta R.T. -0.00 min

Lab File: VV010374.D

Acq: 19 Apr 2019 05:59

Tgt Ion:180 Resp: 112

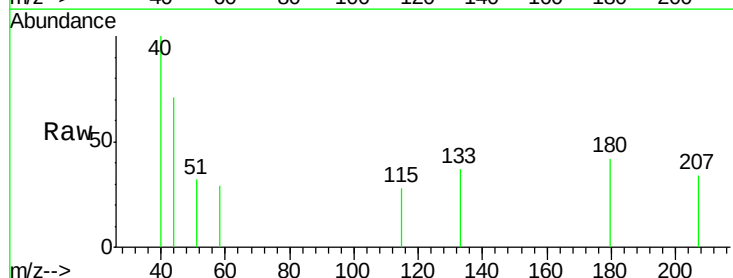
Ion Ratio Lower Upper

180 100

182 35.7 75.5 113.3#

184 0.0 23.6 35.4#

145 0.0 22.6 33.8#

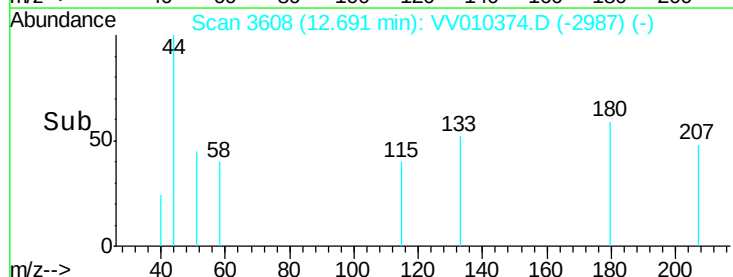
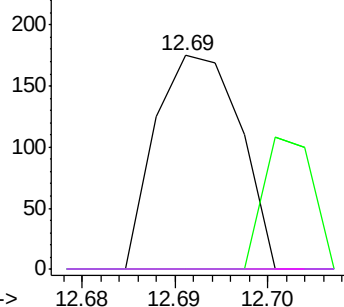


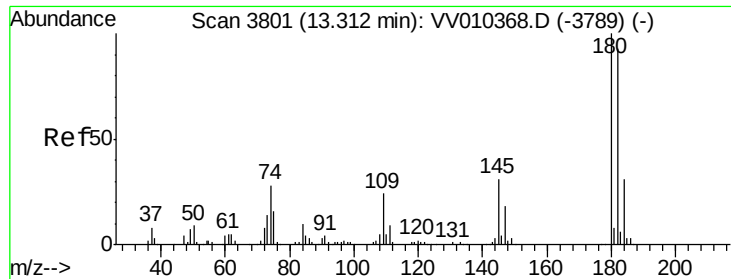
Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 184.00 (183.70 to 184.70): V

Ion 145.00 (144.70 to 145.70): V





#68

1,2,4-trichlorobenzene

Concen: 2.504 ug/L

RT: 13.31 min Scan# 3801

Delta R.T. 0.00 min

Lab File: VV010374.D

Acq: 19 Apr 2019 05:59

Instrument :

MSVOA_V

ClientSampled :

GAHJ1

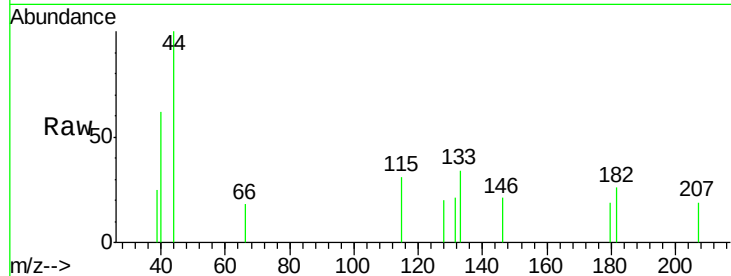
Tot Ion:180 Resp: 41

Ion Ratio Lower Upper

180 100

182 390.2 77.3 115.9#

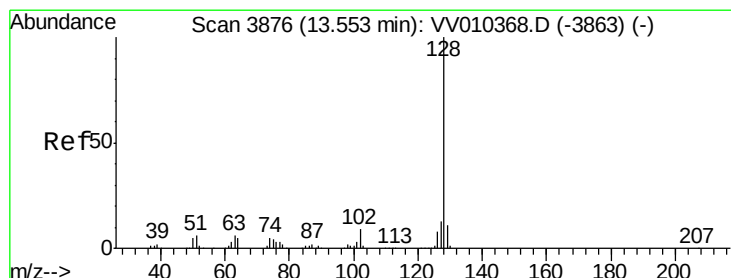
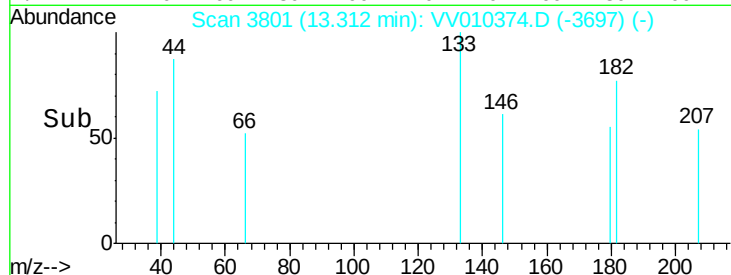
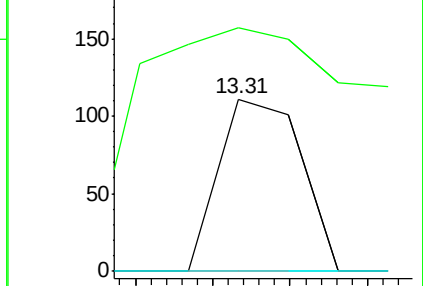
145 275.6 24.5 36.7#



Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V



#69

Naphthalene

Concen: 64371.645 ug/L

RT: 13.55 min Scan# 3876

Delta R.T. 0.00 min

Lab File: VV010374.D

Acq: 19 Apr 2019 05:59

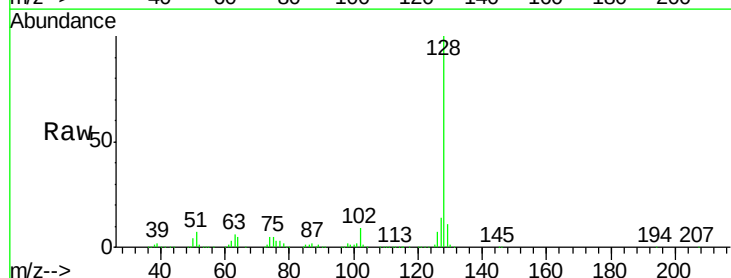
Tgt Ion:128 Resp: 1946839

Ion Ratio Lower Upper

128 100

129 11.0 8.7 13.1

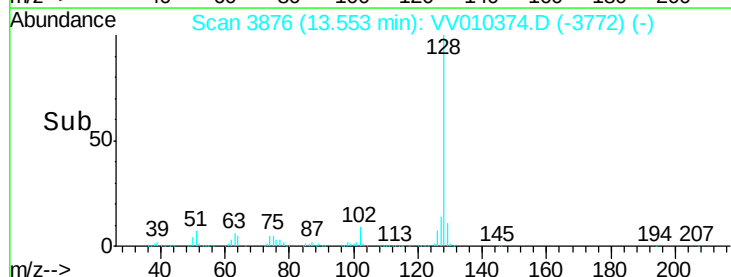
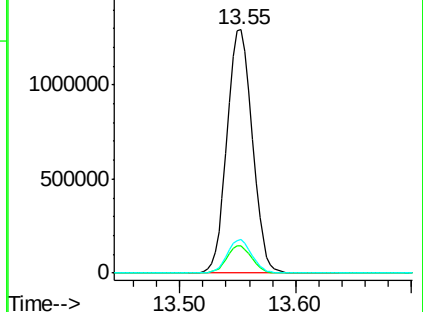
127 13.3 10.7 16.1

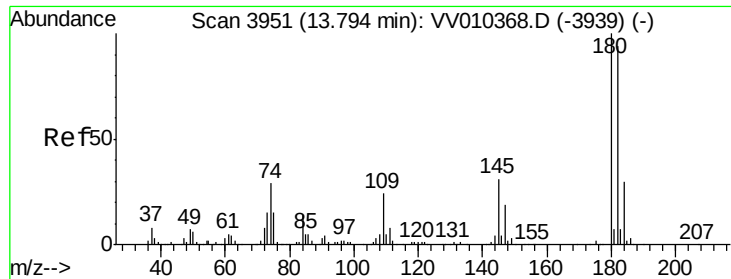


Abundance Ion 128.00 (127.70 to 128.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V





#70
 1,2,3-Trichlorobenzene
 Concen: 7.792 ug/L
 RT: 13.80 min Scan# 3952
 Delta R.T. 0.00 min
 Lab File: VV010374.D
 Acq: 19 Apr 2019 05:59

Instrument :
 MSVOA_V
 ClientSampleId :
 GAHJ1

Tot Ion:180 Resp: 124
 Ion Ratio Lower Upper
 180 100
 182 102.4 77.4 116.0
 145 39.5 25.1 37.7#

