

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU071218\
 Data File : VU025378.D
 Acq On : 13 Jul 2018 07:40
 Operator : MD/SY
 Sample : J3947-08
 Misc : 5.0mL/MSVOA U/WATER
 ALS Vial : 50 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 PAR-4

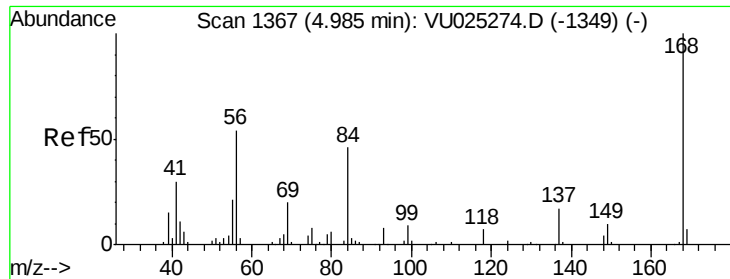
Quant Time: Jul 13 09:07:01 2018
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\82U070918W.M
 Quant Title : SW846 8260
 QLast Update : Tue Jul 10 09:34:16 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.99	168	192658	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	5.89	114	296091	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.09	117	272661	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	11.49	152	146576	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	5.31	65	150030	50.12	ug/l	0.00
Spiked Amount 50.000			Recovery =	100.24%		
35) Dibromofluoromethane	4.89	113	116146	46.50	ug/l	0.00
Spiked Amount 50.000			Recovery =	93.00%		
50) Toluene-d8	7.57	98	424201	49.59	ug/l	0.00
Spiked Amount 50.000			Recovery =	99.18%		
62) 4-Bromofluorobenzene	10.31	95	155578	45.18	ug/l	0.00
Spiked Amount 50.000			Recovery =	90.36%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chloromethane	1.33	50	352	0.74	ug/l #	42
5) Bromomethane	1.64	94	112	Below Cal		98
6) Chloroethane	1.72	64	20	0.30	ug/l #	43
11) Tert butyl alcohol	2.83	59	1901	2.91	ug/l #	73
16) Acetone	2.32	43	19557	17.42	ug/l	96
17) Carbon Disulfide	2.49	76	1577	2.20	ug/l #	74
18) Methyl Acetate	2.62	43	19258	6.28	ug/l	100
20) Methylene Chloride	2.71	84	13392	6.40	ug/l	97
25) 2-Butanone	4.27	43	4357	2.10	ug/l #	87
29) Tetrahydrofuran	4.65	42	734	0.59	ug/l #	40
30) Chloroform	4.68	83	4901	1.13	ug/l #	82
31) Cyclohexane	4.99	56	4186	1.83	ug/l #	16
36) 1,1-Dichloropropene	4.99	75	14398	4.37	ug/l #	49
38) Carbon Tetrachloride	4.99	117	19137	5.40	ug/l #	16
41) Methacrylonitrile	4.65	41	421	0.21	ug/l #	43
43) Isopropyl Acetate	5.82	43	43388	7.38	ug/l #	61
47) Bromodichloromethane	6.76	83	1305	0.39	ug/l #	88
51) 4-Methyl-2-Pentanone	7.47	43	1608	0.42	ug/l #	64
74) N-amyl acetate	9.99	43	301	1.33	ug/l #	47
76) 1,2,3-Trichloropropane	10.31	75	80507	27.02	ug/l #	36
81) trans-1,4-Dichloro-2-buten	10.31	75	80507	68.94	ug/l #	100
84) 1,2,4-Trimethylbenzene	11.15	105	3101	0.32	ug/l	93
95) Naphthalene	13.75	128	62664	7.95	ug/l	98

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



#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 4.99 min Scan# 1368

Delta R.T. 0.00 min

Lab File: VU025378.D

Acq: 13 Jul 2018 07:40

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ClientSampleId :

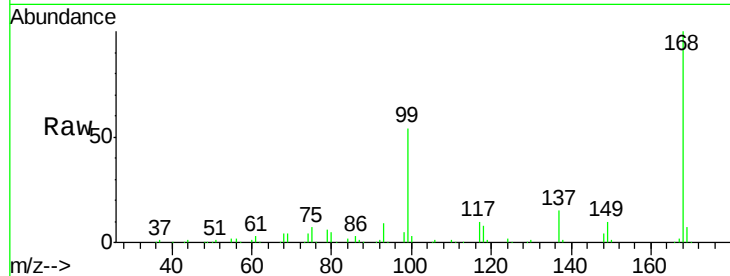
PAR-4

Tot Ion:168 Resp: 192658

Ion Ratio Lower Upper

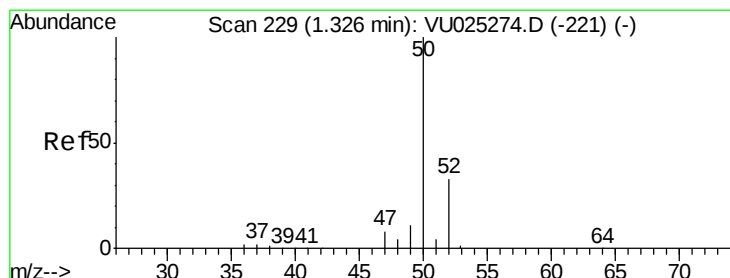
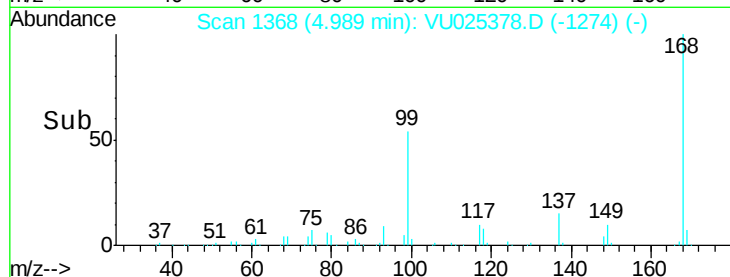
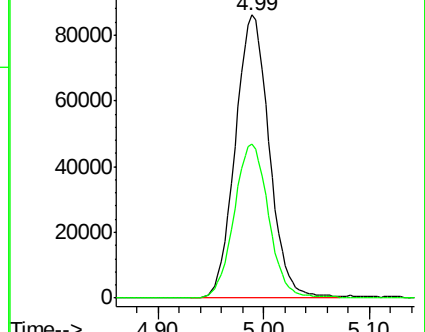
168 100

99 54.5 42.8 64.2



Abundance Ion 167.90 (167.60 to 168.60): VU025274.D (-1349) (-)

Ion 98.90 (98.60 to 99.60): VU025274.D (-1349) (-)



#3

Chloromethane

Concen: 0.74 ug/l

RT: 1.33 min Scan# 230

Delta R.T. 0.00 min

Lab File: VU025378.D

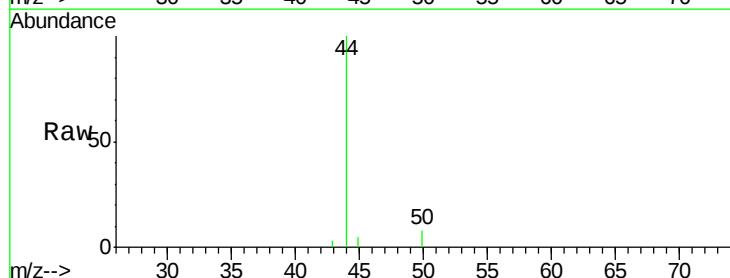
Acq: 13 Jul 2018 07:40

Tgt Ion: 50 Resp: 352

Ion Ratio Lower Upper

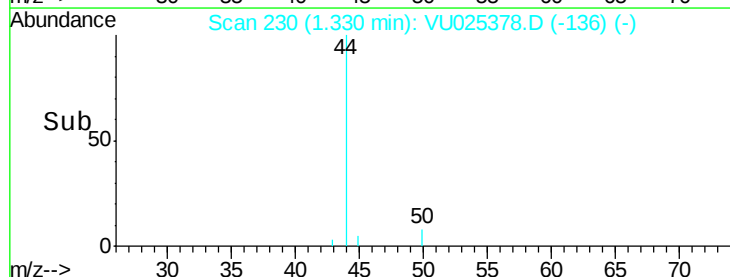
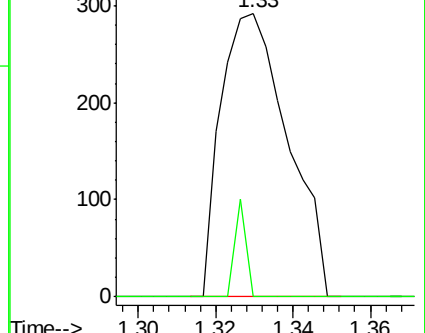
50 100

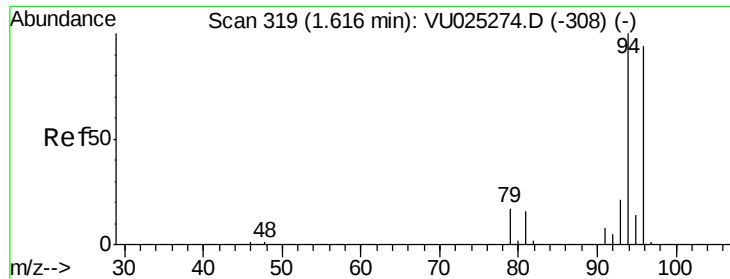
52 0.0 26.5 39.7#



Abundance Ion 49.90 (49.60 to 50.60): VU025274.D (-221) (-)

Ion 51.90 (51.60 to 52.60): VU025274.D (-221) (-)





#5

Bromomethane

Concen: Below Cal

RT: 1.64 min Scan# 325

Delta R.T. 0.02 min

Lab File: VU025378.D

Acq: 13 Jul 2018 07:40

Instrument :

MSVOA_U

ClientSampleId :

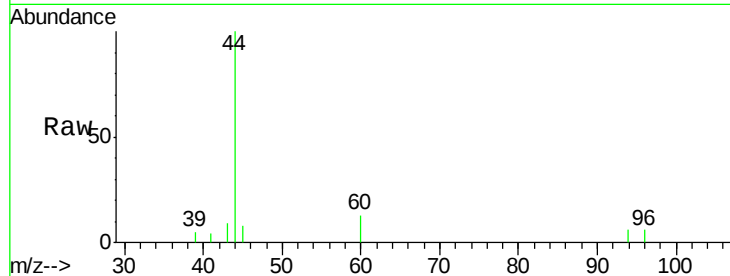
PAR-4

Tot Ion: 94 Resp: 112

Ion Ratio Lower Upper

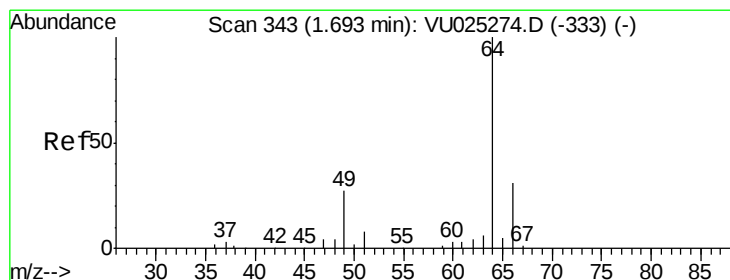
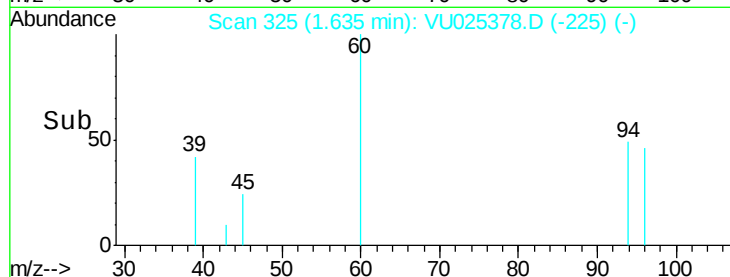
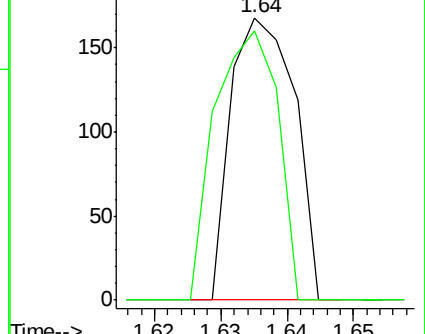
94 100

96 95.2 75.0 112.4



Abundance Ion 93.90 (93.60 to 94.60): VU0

Ion 95.90 (95.60 to 96.60): VU0



#6

Chloroethane

Concen: 0.30 ug/l

RT: 1.72 min Scan# 352

Delta R.T. 0.03 min

Lab File: VU025378.D

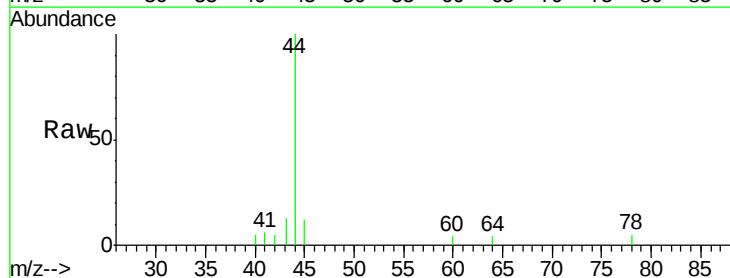
Acq: 13 Jul 2018 07:40

Tgt Ion: 64 Resp: 20

Ion Ratio Lower Upper

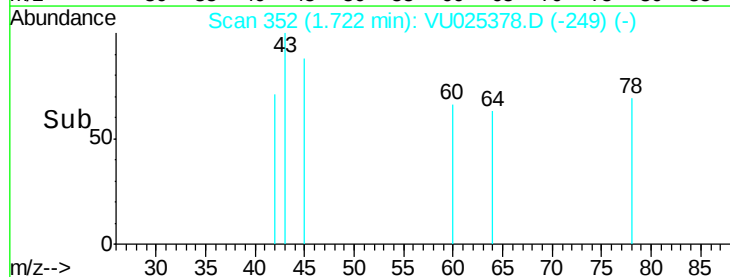
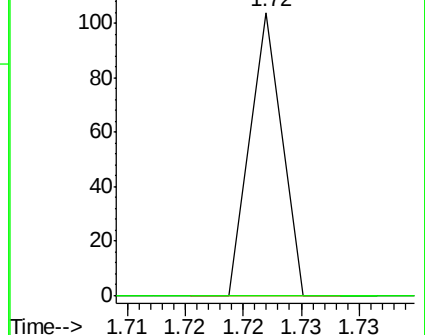
64 100

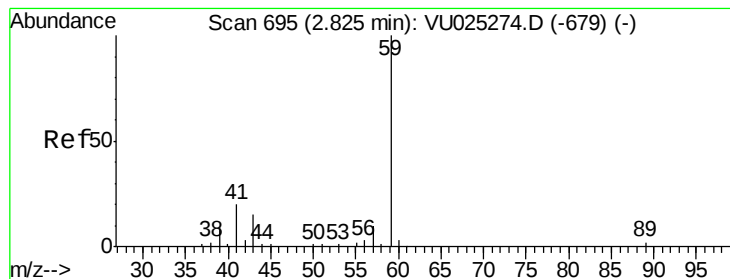
66 0.0 25.0 37.4#



Abundance Ion 63.90 (63.60 to 64.60): VU0

Ion 65.90 (65.60 to 66.60): VU0



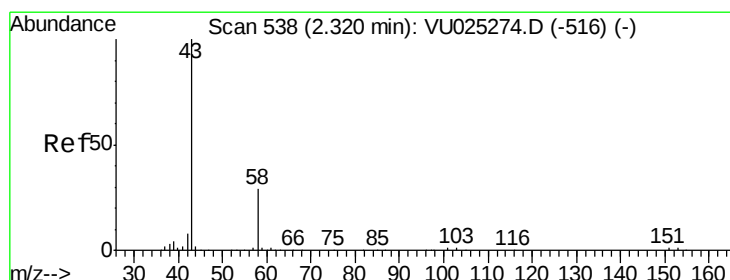
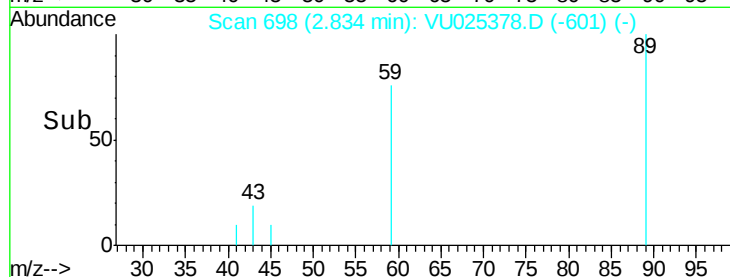
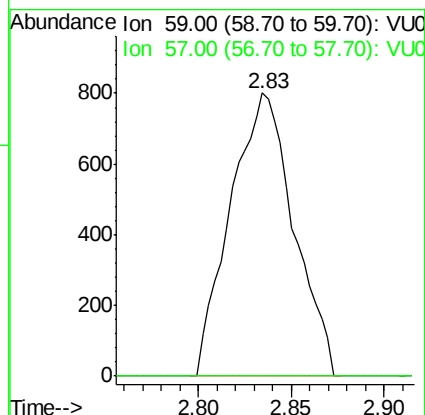
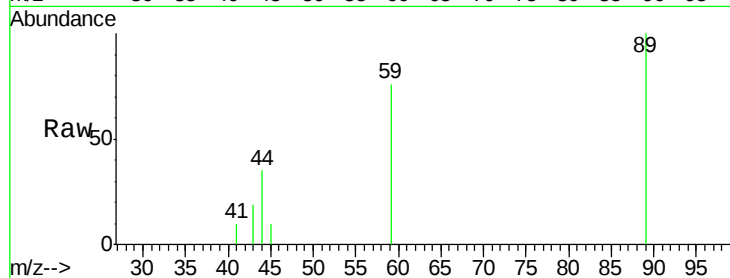


#11

Tert butyl alcohol
 Concen: 2.91 ug/l
 RT: 2.83 min Scan# 698
 Delta R.T. 0.01 min
 Lab File: VU025378.D
 Acq: 13 Jul 2018 07:40

Instrument :
 MSVOA_U
 ClientSampled :
 PAR-4

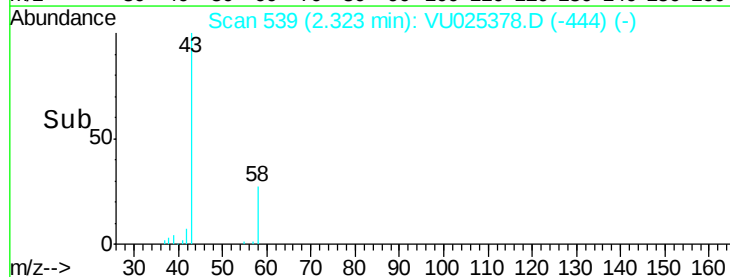
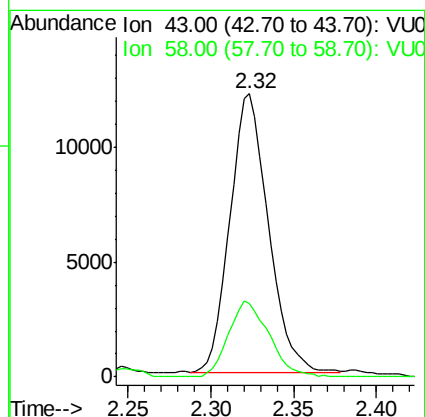
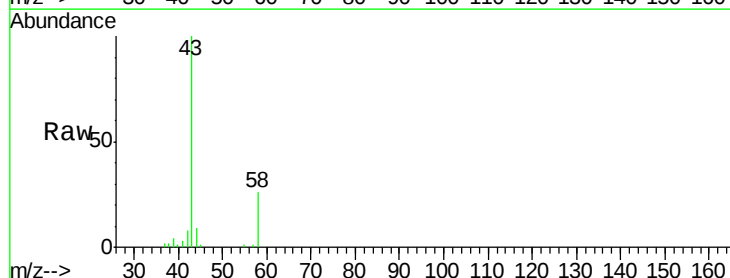
Tot Ion: 59 Resp: 1901
 Ion Ratio Lower Upper
 59 100
 57 0.0 8.2 12.2#

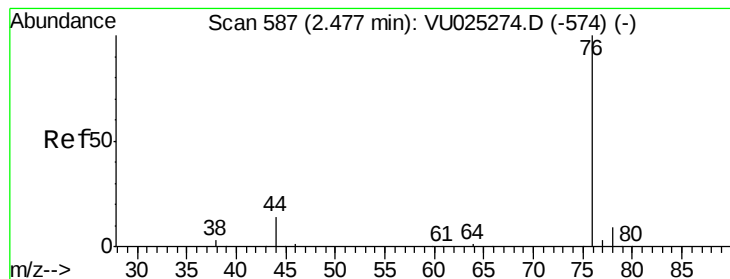


#16

Acetone
 Concen: 17.42 ug/l
 RT: 2.32 min Scan# 539
 Delta R.T. 0.00 min
 Lab File: VU025378.D
 Acq: 13 Jul 2018 07:40

Tgt Ion: 43 Resp: 19557
 Ion Ratio Lower Upper
 43 100
 58 26.6 23.1 34.7





#17

Carbon Disulfide

Concen: 2.20 ug/l

RT: 2.49 min Scan# 590

Delta R.T. 0.01 min

Lab File: VU025378.D

Acq: 13 Jul 2018 07:40

Instrument :

MSVOA_U

ClientSampleId :

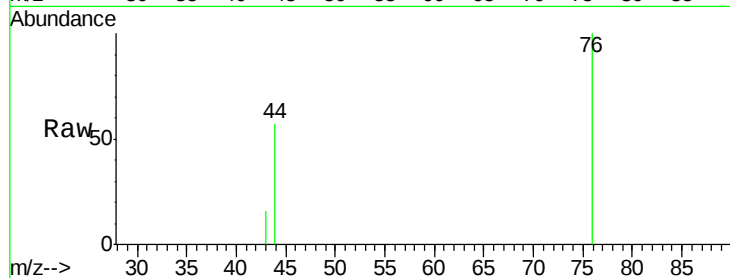
PAR-4

Tot Ion: 76 Resp: 1577

Ion Ratio Lower Upper

76 100

78 0.0 7.4 11.2#



Abundance Ion 75.90 (75.60 to 76.60): VU0

Ion 77.90 (77.60 to 78.60): VU0

2.49

1000

800

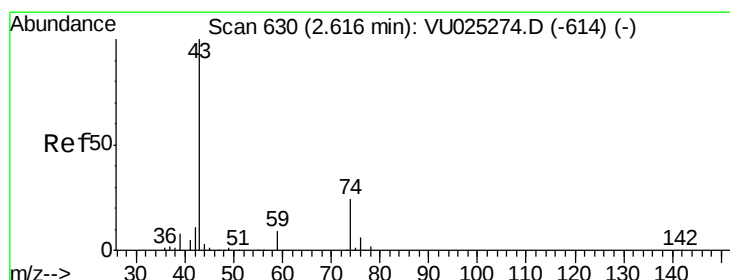
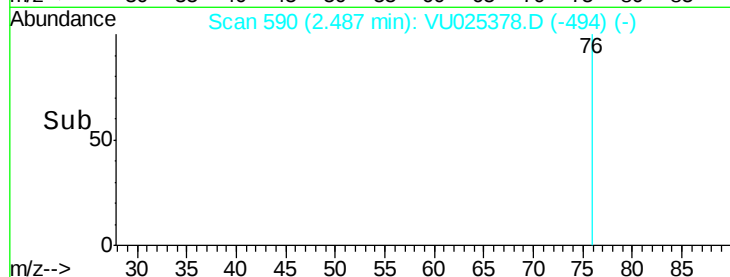
600

400

200

0

Time-->



#18

Methyl Acetate

Concen: 6.28 ug/l

RT: 2.62 min Scan# 631

Delta R.T. 0.00 min

Lab File: VU025378.D

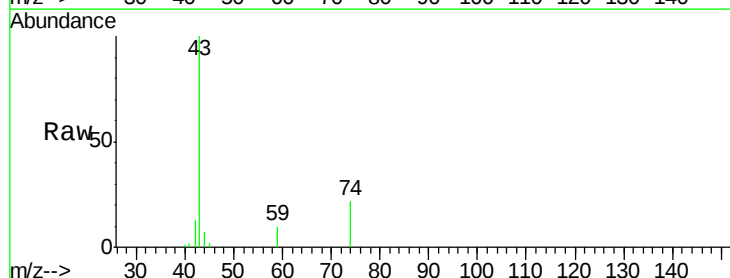
Acq: 13 Jul 2018 07:40

Tgt Ion: 43 Resp: 19258

Ion Ratio Lower Upper

43 100

74 23.2 18.5 27.7



Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 74.00 (73.70 to 74.70): VU0

12000

10000

8000

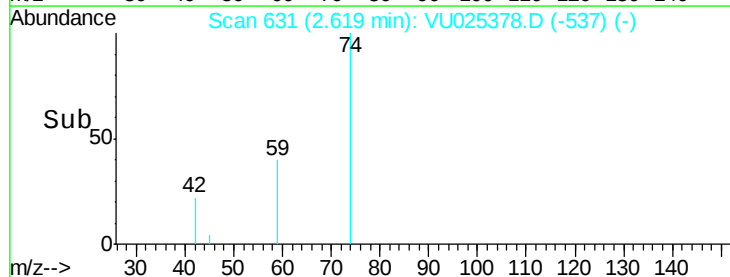
6000

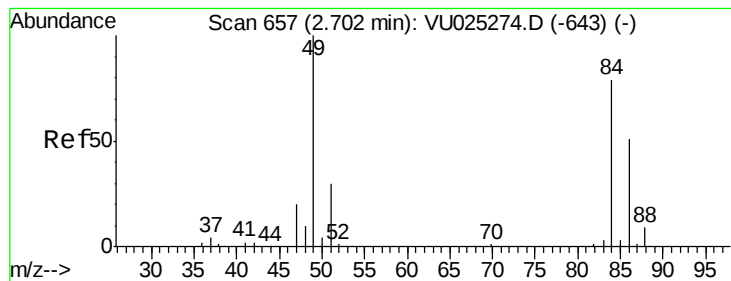
4000

2000

0

Time-->





#20

Methvlene Chloride

Concen: 6.40 ug/l

RT: 2.71 min Scan# 658

Delta R.T. 0.00 min

Lab File: VU025378.D

Acq: 13 Jul 2018 07:40

Instrument :

MSVOA_U

ClientSampleId :

PAR-4

Tot Ion: 84 Resp: 13392

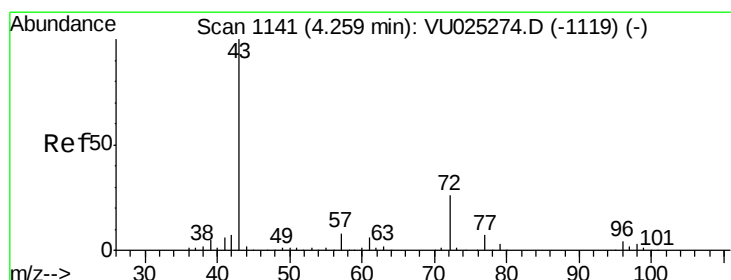
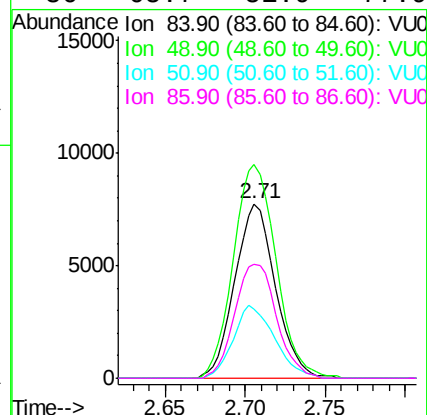
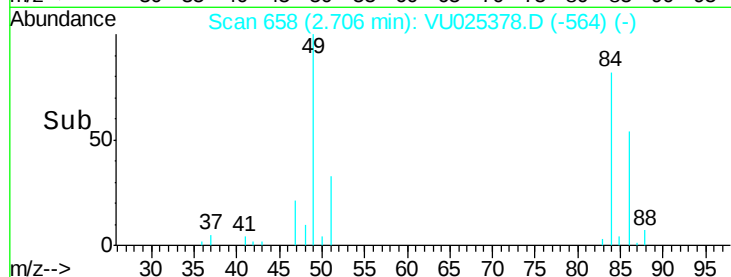
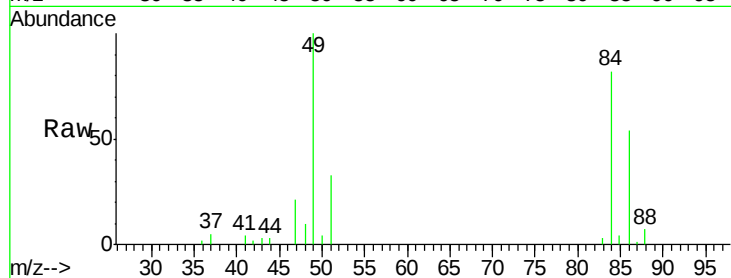
Ion Ratio Lower Upper

84 100

49 122.7 101.8 152.6

51 40.0 30.8 46.2

86 65.7 51.9 77.9



#25

2-Butanone

Concen: 2.10 ug/l

RT: 4.27 min Scan# 1146

Delta R.T. 0.02 min

Lab File: VU025378.D

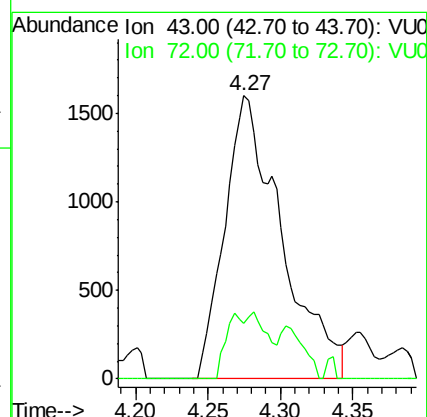
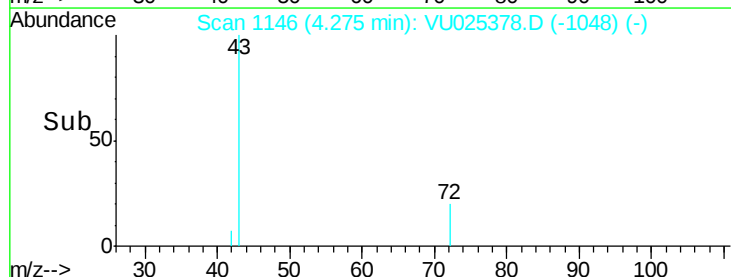
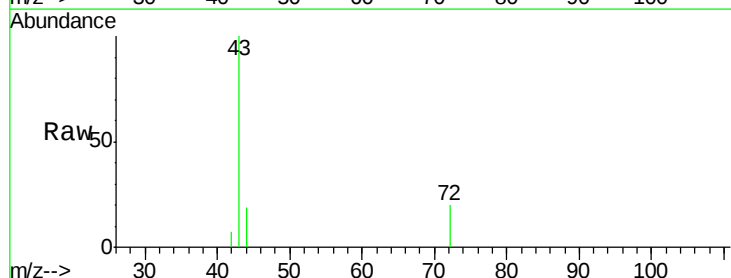
Acq: 13 Jul 2018 07:40

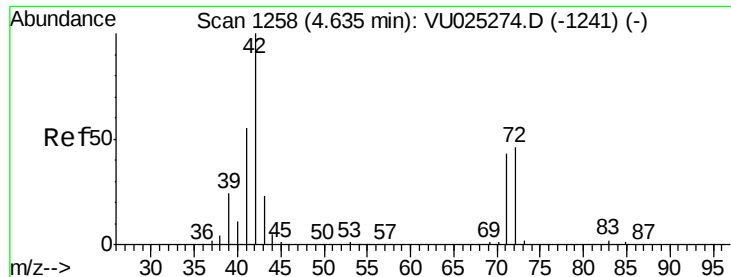
Tgt Ion: 43 Resp: 4357

Ion Ratio Lower Upper

43 100

72 19.5 21.0 31.4#





#29

Tetrahydrofuran

Concen: 0.59 ug/l

RT: 4.65 min Scan# 1262

Delta R.T. 0.01 min

Lab File: VU025378.D

Acq: 13 Jul 2018 07:40

Instrument :

MSVOA_U

ClientSampleId :

PAR-4

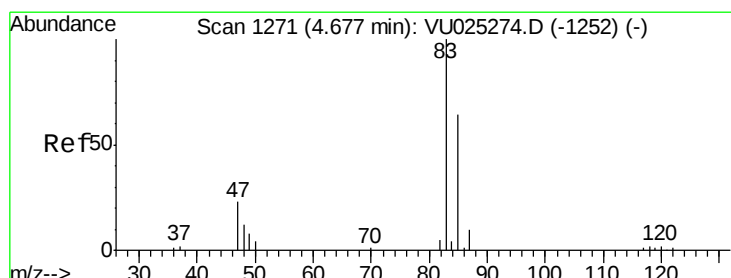
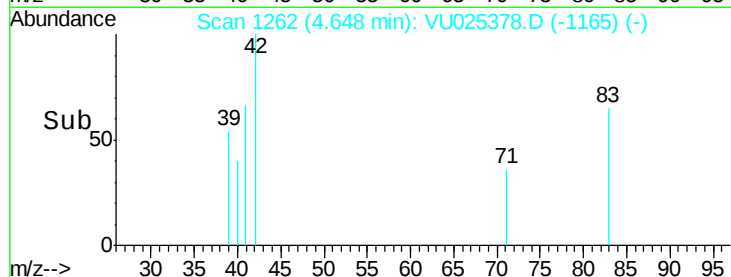
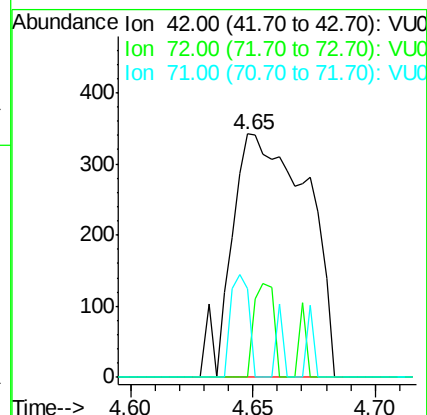
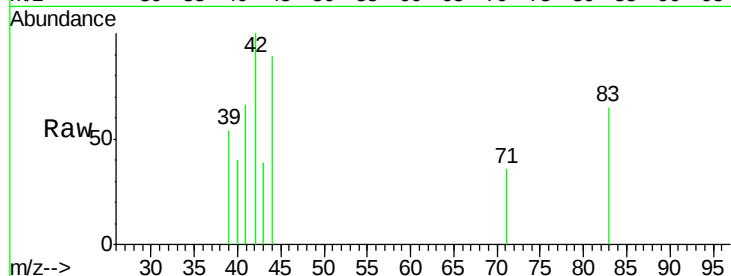
Tot Ion: 42 Resp: 734

Ion Ratio Lower Upper

42 100

72 0.0 36.7 55.1#

71 10.4 33.9 50.9#



#30

Chloroform

Concen: 1.13 ug/l

RT: 4.68 min Scan# 1273

Delta R.T. 0.01 min

Lab File: VU025378.D

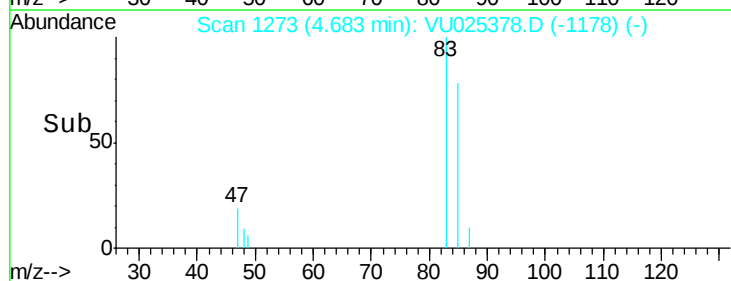
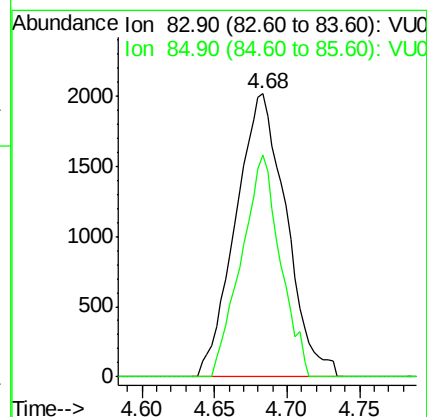
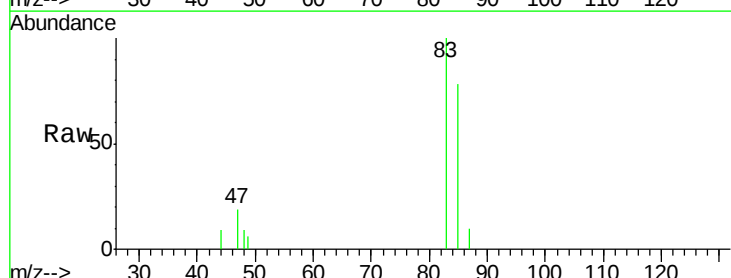
Acq: 13 Jul 2018 07:40

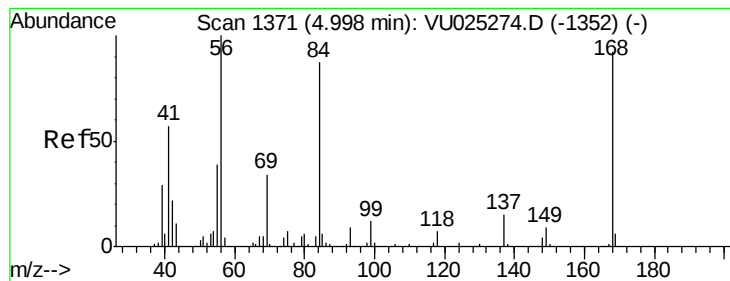
Tgt Ion: 83 Resp: 4901

Ion Ratio Lower Upper

83 100

85 78.3 51.5 77.3#





#31

Cyclohexane

Concen: 1.83 ug/l

RT: 4.99 min Scan# 1369

Delta R.T. -0.01 min

Lab File: VU025378.D

Acq: 13 Jul 2018 07:40

Instrument :

MSVOA_U

ClientSampleId :

PAR-4

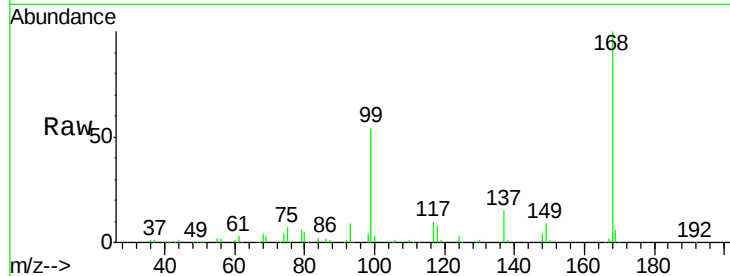
Tot Ion: 56 Resp: 4186

Ion Ratio Lower Upper

56 100

69 160.3 26.8 40.2#

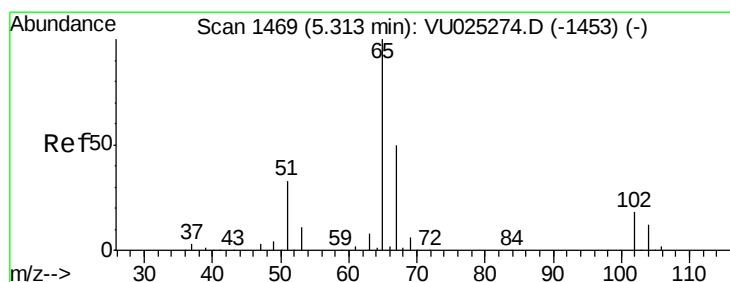
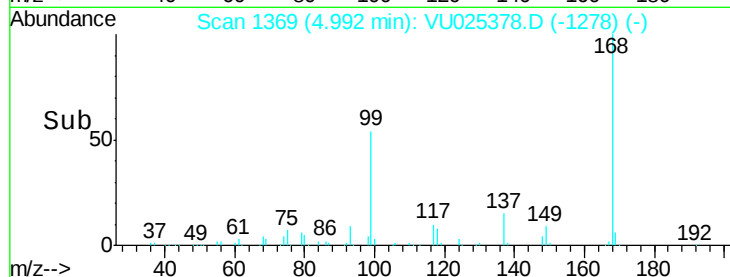
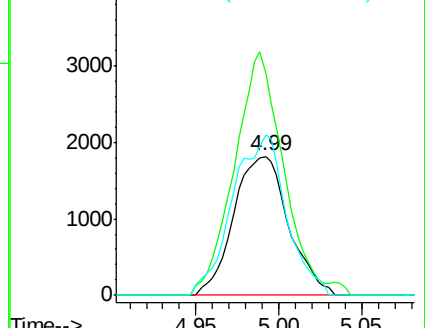
84 115.9 69.7 104.5#



Abundance Ion 56.00 (55.70 to 56.70): VU0

Ion 69.00 (68.70 to 69.70): VU0

Ion 84.00 (83.70 to 84.70): VU0



#33

1,2-Dichloroethane-d4

Concen: 50.12 ug/l

RT: 5.31 min Scan# 1469

Delta R.T. 0.00 min

Lab File: VU025378.D

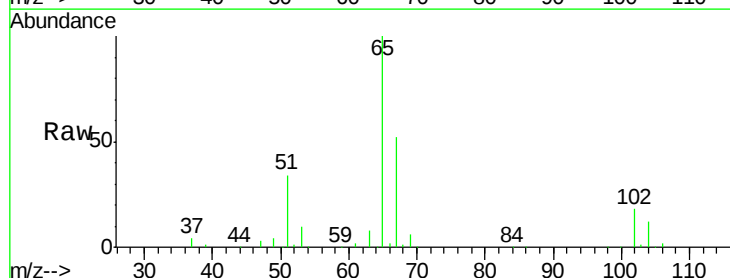
Acq: 13 Jul 2018 07:40

Tgt Ion: 65 Resp: 150030

Ion Ratio Lower Upper

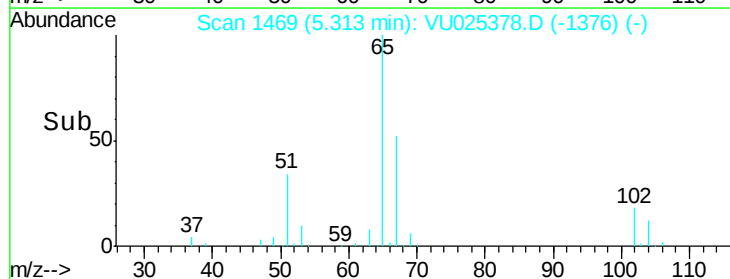
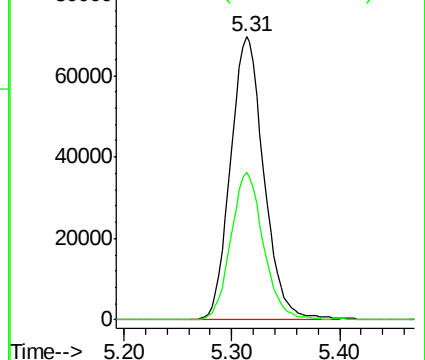
65 100

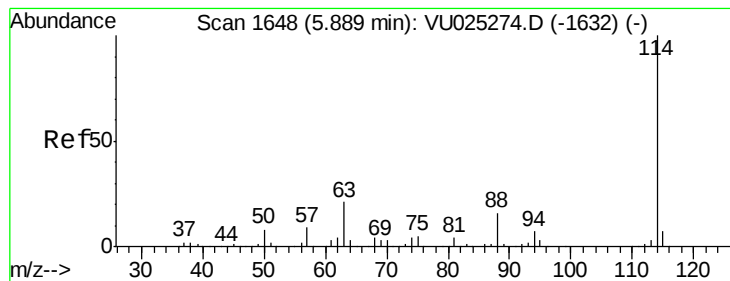
67 50.8 0.0 103.6



Abundance Ion 64.90 (64.60 to 65.60): VU0

Ion 66.90 (66.60 to 67.60): VU0





#34

1,4-Difluorobenzene

Concen: 50.00 ug/l

RT: 5.89 min Scan# 1649

Delta R.T. 0.00 min

Lab File: VU025378.D

Acq: 13 Jul 2018 07:40

Instrument :

MSVOA_U

ClientSampleId :

PAR-4

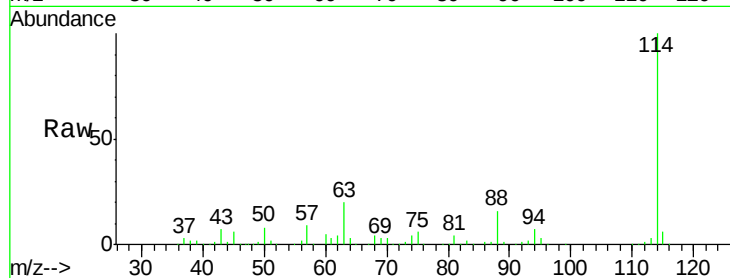
Tot Ion:114 Resp: 296091

Ion Ratio Lower Upper

114 100

63 20.4 0.0 41.6

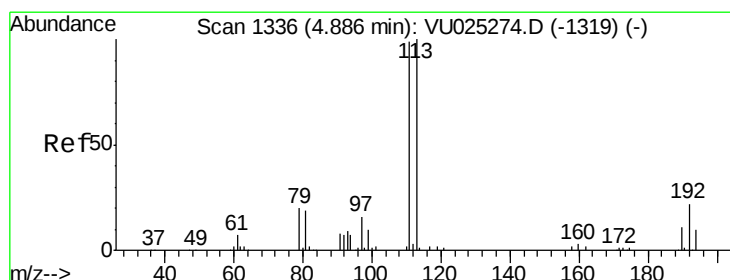
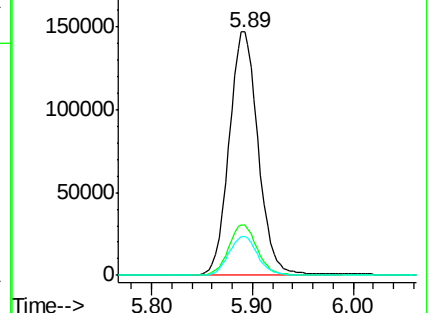
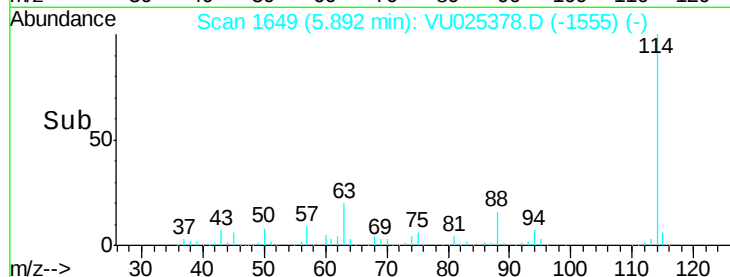
88 16.1 0.0 32.4



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VU0

Ion 87.90 (87.60 to 88.60): VU0



#35

Dibromofluoromethane

Concen: 46.50 ug/l

RT: 4.89 min Scan# 1337

Delta R.T. 0.00 min

Lab File: VU025378.D

Acq: 13 Jul 2018 07:40

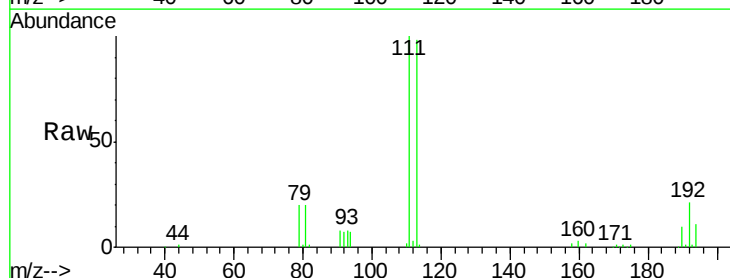
Tgt Ion:113 Resp: 116146

Ion Ratio Lower Upper

113 100

111 100.9 81.7 122.5

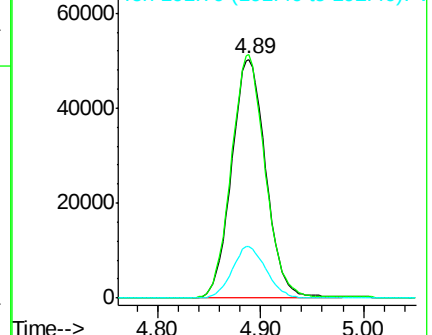
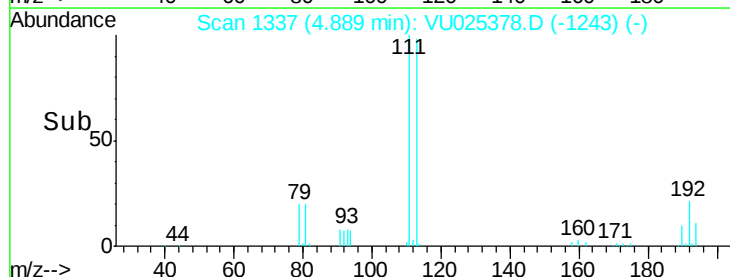
192 21.4 17.1 25.7

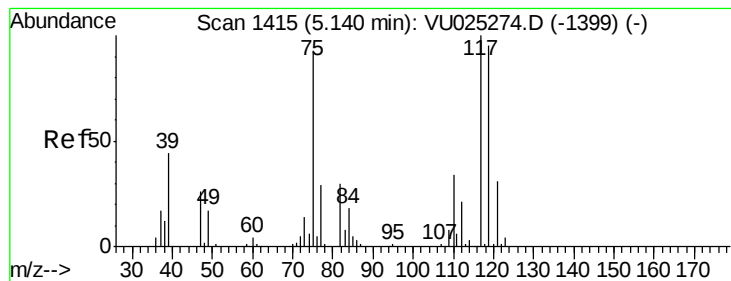


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V





#36

1,1-Dichloropropene

Concen: 4.37 ug/l

RT: 4.99 min Scan# 1367

Delta R.T. -0.15 min

Lab File: VU025378.D

Acq: 13 Jul 2018 07:40

Instrument :

MSVOA_U

ClientSampleId :

PAR-4

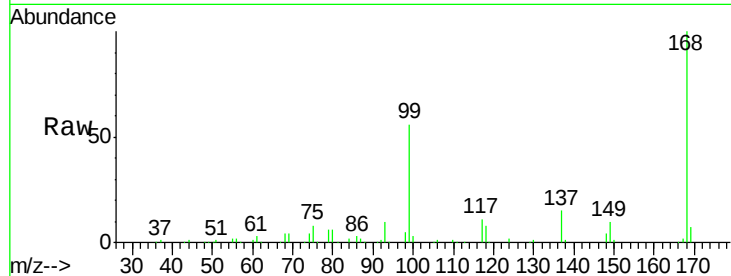
Tot Ion: 75 Resp: 14398

Ion Ratio Lower Upper

75 100

110 8.5 17.6 52.9#

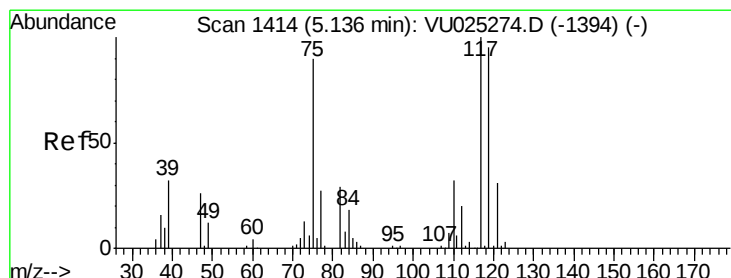
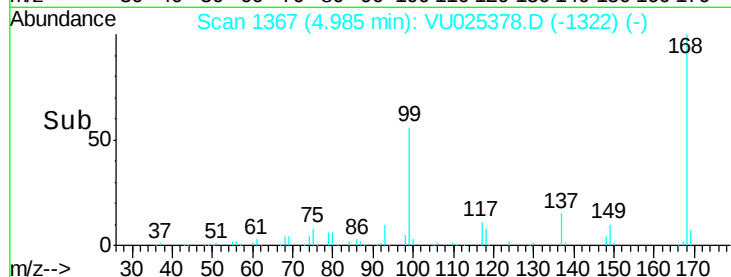
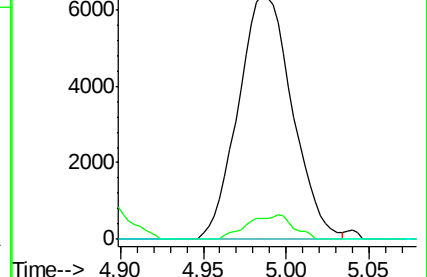
77 0.0 24.4 36.6#



Abundance Ion 74.90 (74.60 to 75.60): VU025274.D (-1399) (-)

Ion 109.90 (109.60 to 110.60): VU025274.D (-1399) (-)

Ion 76.90 (76.60 to 77.60): VU025274.D (-1399) (-)



#38

Carbon Tetrachloride

Concen: 5.40 ug/l

RT: 4.99 min Scan# 1367

Delta R.T. -0.15 min

Lab File: VU025378.D

Acq: 13 Jul 2018 07:40

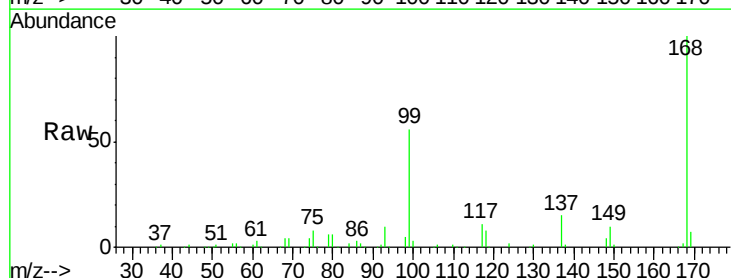
Tgt Ion: 117 Resp: 19137

Ion Ratio Lower Upper

117 100

119 4.5 75.7 113.5#

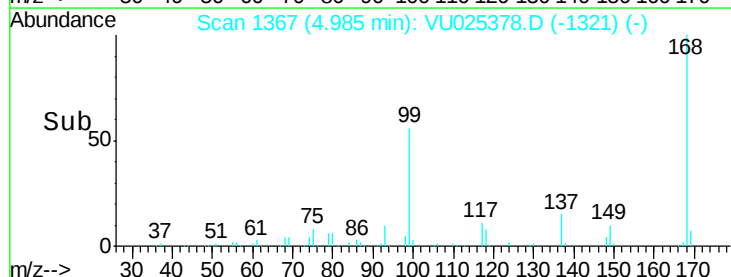
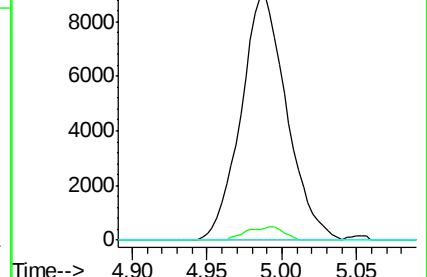
121 0.0 24.6 36.8#

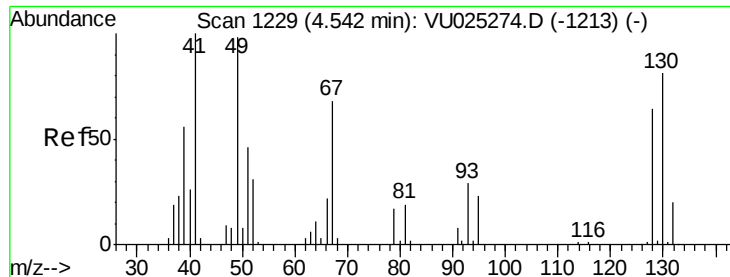


Abundance Ion 116.80 (116.50 to 117.50): VU025274.D (-1394) (-)

Ion 118.80 (118.50 to 119.50): VU025274.D (-1394) (-)

Ion 120.80 (120.50 to 121.50): VU025274.D (-1394) (-)

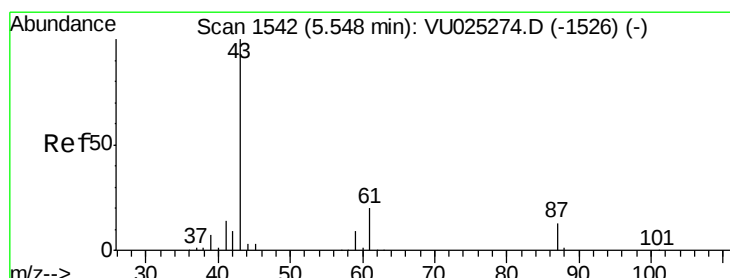
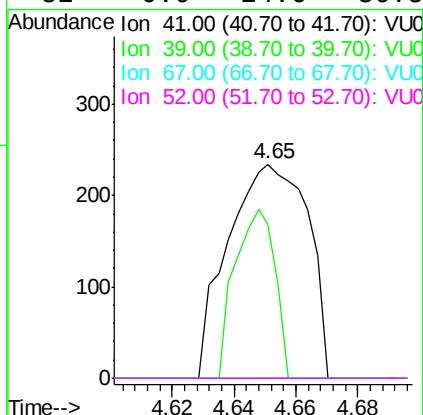
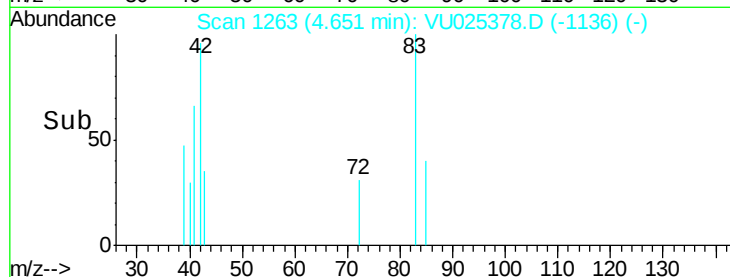
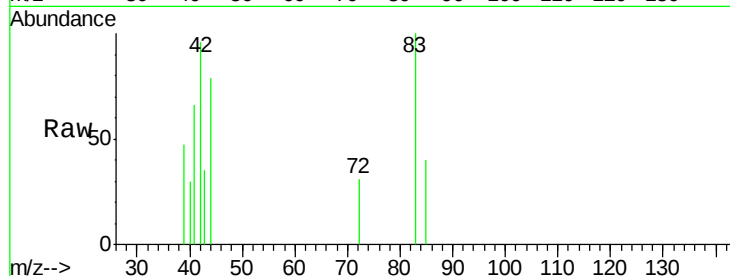




#41
Methacrylonitrile
Concen: 0.21 ug/l
RT: 4.65 min Scan# 1263
Delta R.T. 0.11 min
Lab File: VU025378.D
Acq: 13 Jul 2018 07:40

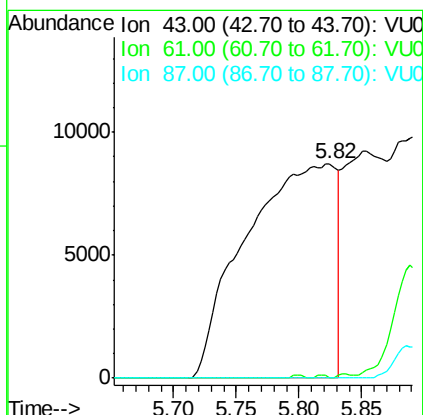
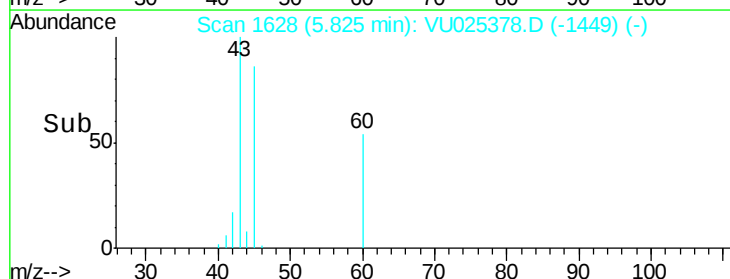
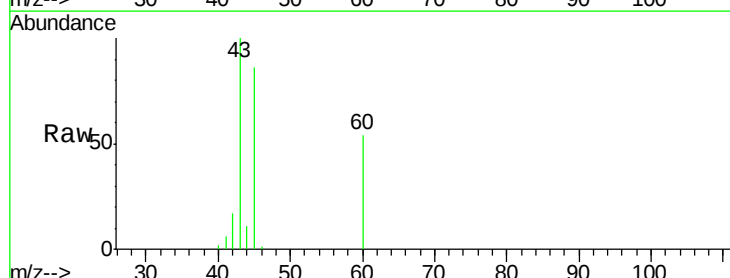
Instrument :
MSVOA_U
ClientSampled :
PAR-4

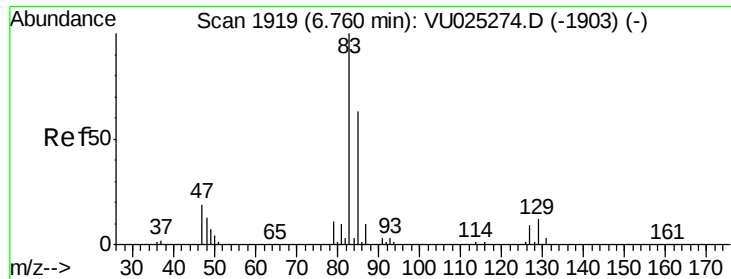
Tot Ion: 41 Resp: 421
Ion Ratio Lower Upper
41 100
39 39.4 44.4 66.6#
67 0.0 56.0 84.0#
52 0.0 24.6 36.8#



#43
Isopropyl Acetate
Concen: 7.38 ug/l
RT: 5.82 min Scan# 1628
Delta R.T. 0.28 min
Lab File: VU025378.D
Acq: 13 Jul 2018 07:40

Tgt Ion: 43 Resp: 43388
Ion Ratio Lower Upper
43 100
61 0.2 15.5 23.3#
87 0.0 10.6 16.0#





#47

Bromodichloromethane

Concen: 0.39 ug/l

RT: 6.76 min Scan# 1920

Delta R.T. 0.00 min

Lab File: VU025378.D

Acq: 13 Jul 2018 07:40

Instrument :

MSVOA_U

ClientSampleId :

PAR-4

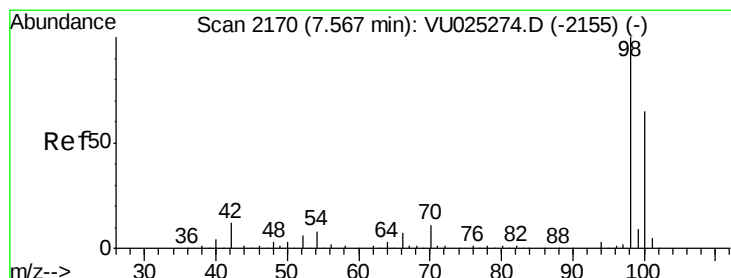
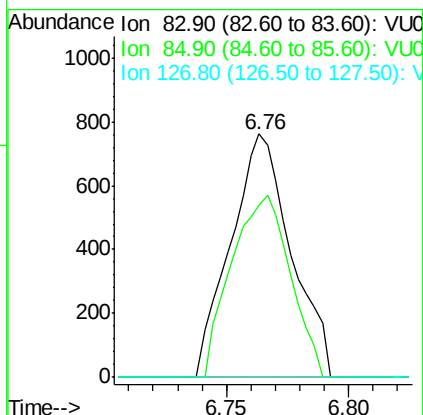
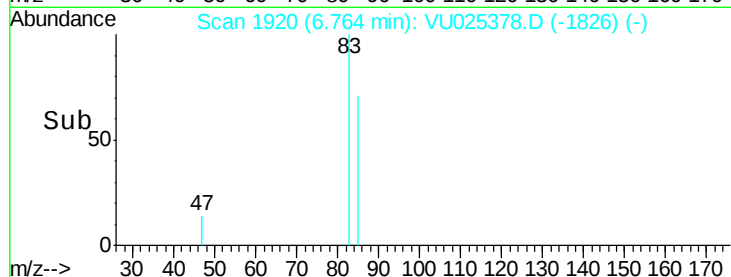
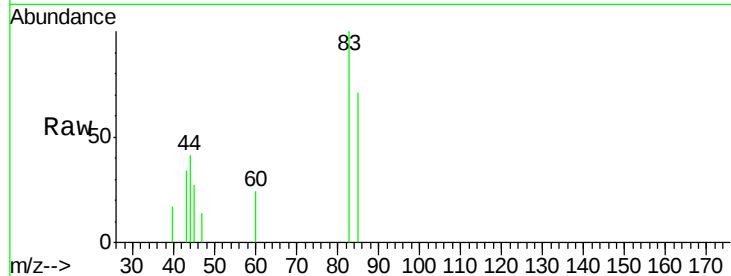
Tot Ion: 83 Resp: 1305

Ion Ratio Lower Upper

83 100

85 70.9 50.2 75.4

127 0.0 7.2 10.8#



#50

Toluene-d8

Concen: 49.59 ug/l

RT: 7.57 min Scan# 2170

Delta R.T. 0.00 min

Lab File: VU025378.D

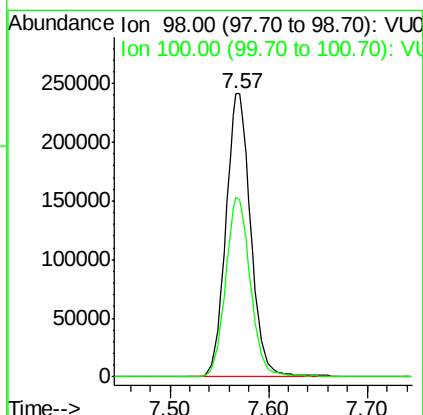
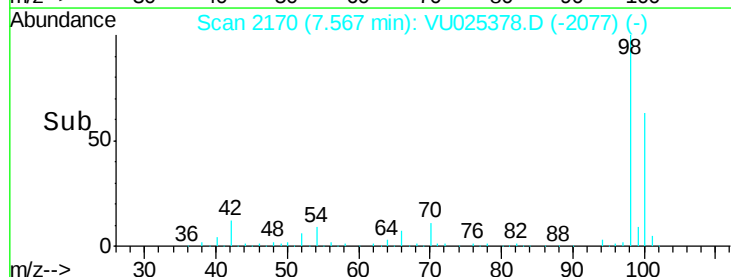
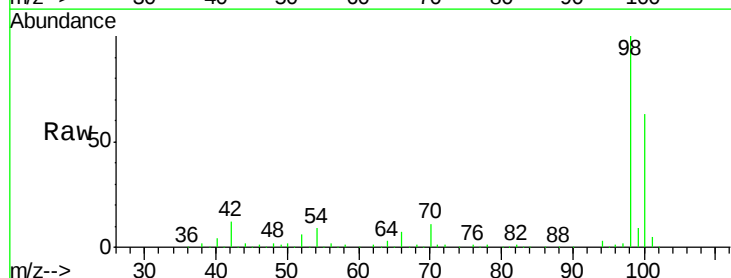
Acq: 13 Jul 2018 07:40

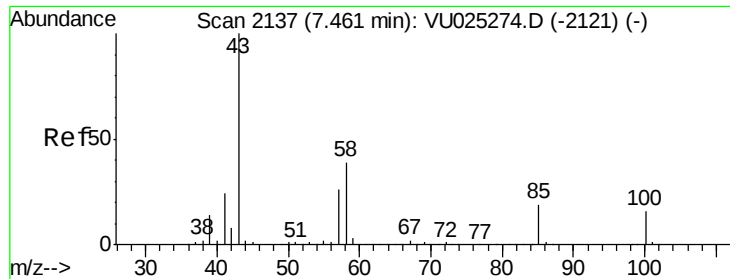
Tgt Ion: 98 Resp: 424201

Ion Ratio Lower Upper

98 100

100 63.2 51.1 76.7





#51

4-Methyl-2-Pentanone

Concen: 0.42 ug/l

RT: 7.47 min Scan# 2139

Delta R.T. 0.01 min

Lab File: VU025378.D

Acq: 13 Jul 2018 07:40

Instrument :

MSVOA_U

ClientSampled :

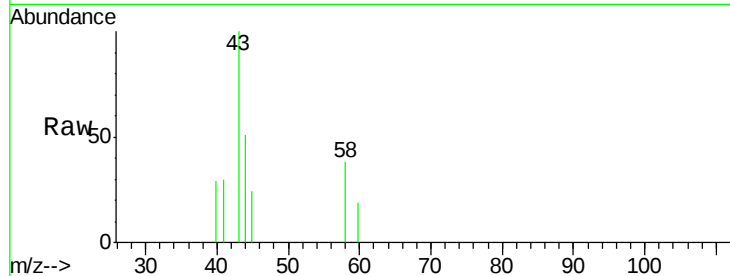
PAR-4

Tot Ion: 43 Resp: 1608

Ion Ratio Lower Upper

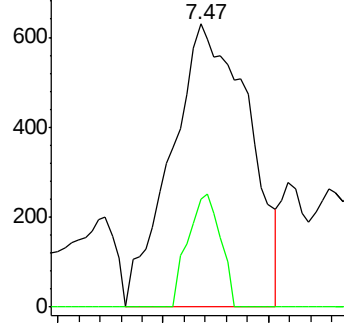
43 100

58 16.8 31.0 46.4#

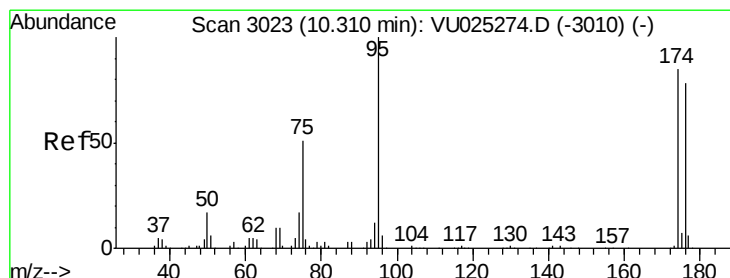
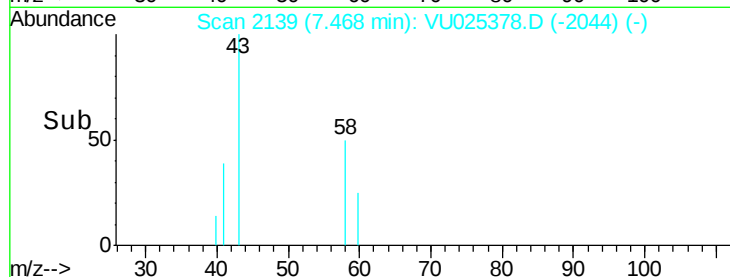


Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 58.00 (57.70 to 58.70): VU0



Time-->



#62

4-Bromofluorobenzene

Concen: 45.18 ug/l

RT: 10.31 min Scan# 3023

Delta R.T. 0.00 min

Lab File: VU025378.D

Acq: 13 Jul 2018 07:40

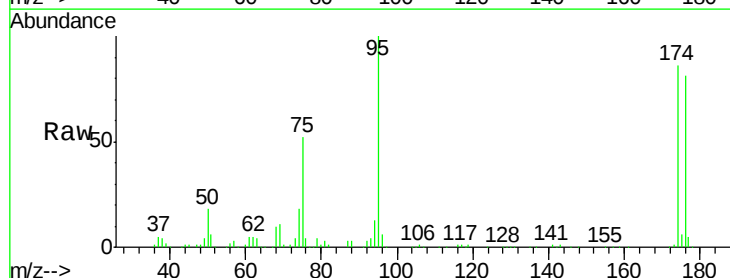
Tgt Ion: 95 Resp: 155578

Ion Ratio Lower Upper

95 100

174 86.4 0.0 172.2

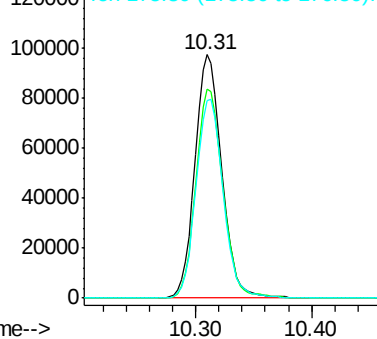
176 82.5 0.0 162.6



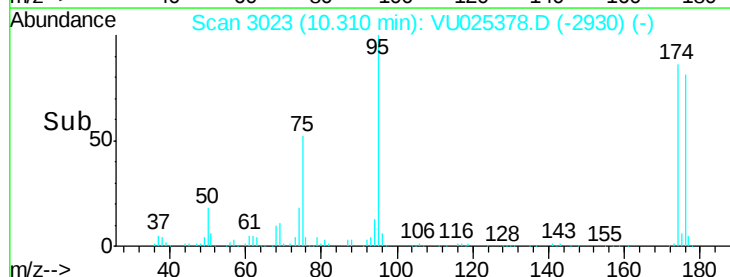
Abundance Ion 94.90 (94.60 to 95.60): VU0

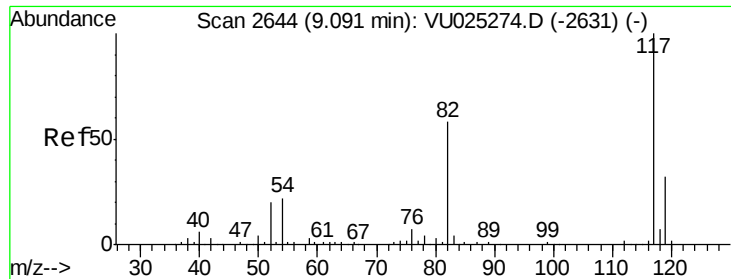
Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V



Time-->

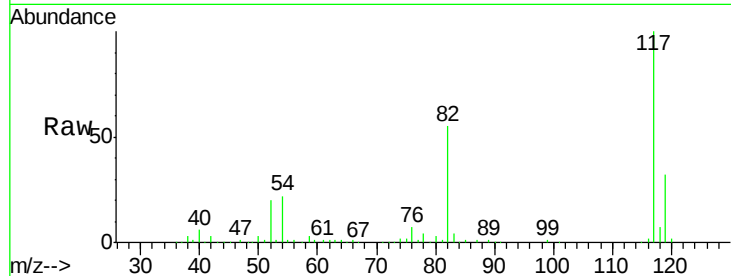




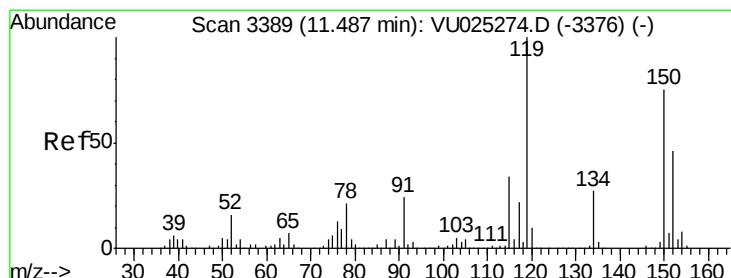
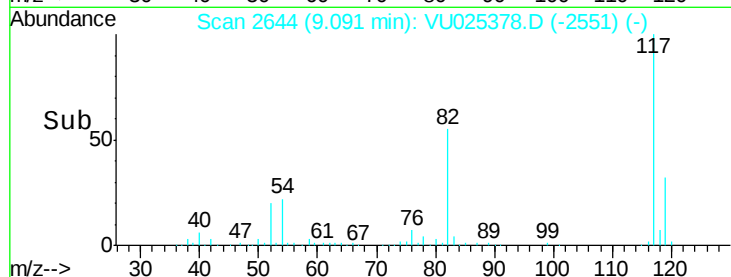
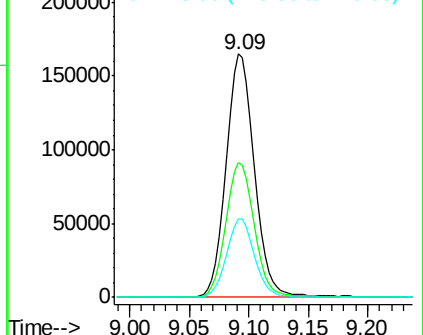
#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 9.09 min Scan# 2644
Delta R.T. 0.00 min
Lab File: VU025378.D
Acq: 13 Jul 2018 07:40

Instrument :
MSVOA_U
ClientSampleId :
PAR-4

Tot Ion:117 Resp: 272661
Ion Ratio Lower Upper
117 100
82 55.3 46.0 69.0
119 32.1 26.0 39.0

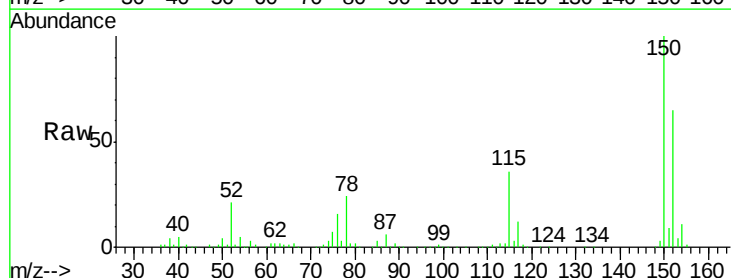


Abundance Ion 116.90 (116.60 to 117.60): V
Ion 82.00 (81.70 to 82.70): VU0
Ion 118.90 (118.60 to 119.60): V

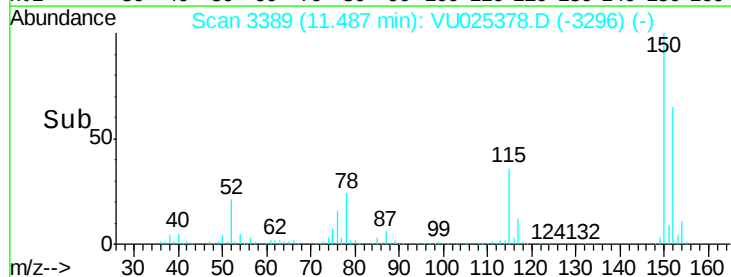
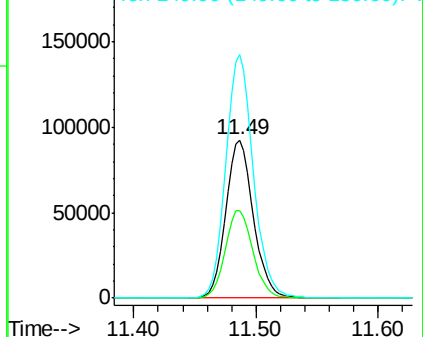


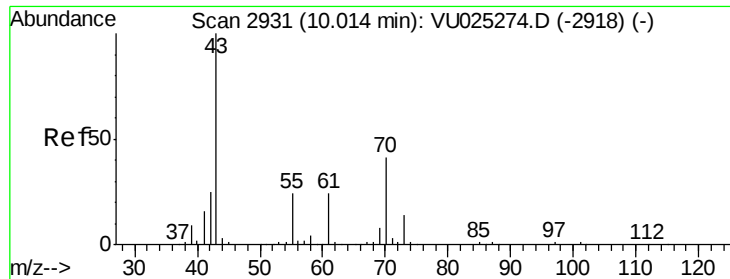
#72
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 11.49 min Scan# 3389
Delta R.T. 0.00 min
Lab File: VU025378.D
Acq: 13 Jul 2018 07:40

Tgt Ion:152 Resp: 146576
Ion Ratio Lower Upper
152 100
115 55.9 40.1 120.3
150 154.1 0.0 351.4



Abundance Ion 151.90 (151.60 to 152.60): V
Ion 114.90 (114.60 to 115.60): V
Ion 149.90 (149.60 to 150.60): V





#74

N-amvl acetate

Concen: 1.33 ug/l

RT: 9.99 min Scan# 2924

Delta R.T. -0.02 min

Lab File: VU025378.D

Acq: 13 Jul 2018 07:40

Instrument :

MSVOA_U

ClientSampleId :

PAR-4

Tot Ion: 43 Resp: 301

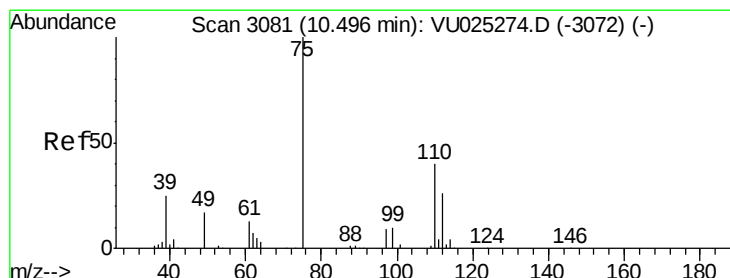
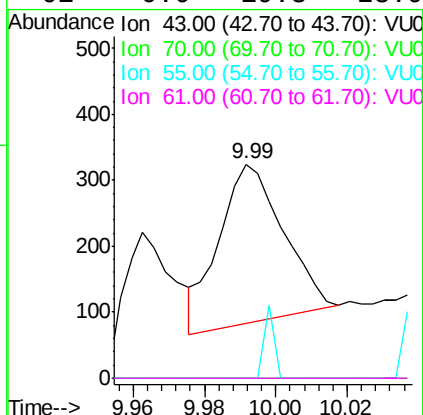
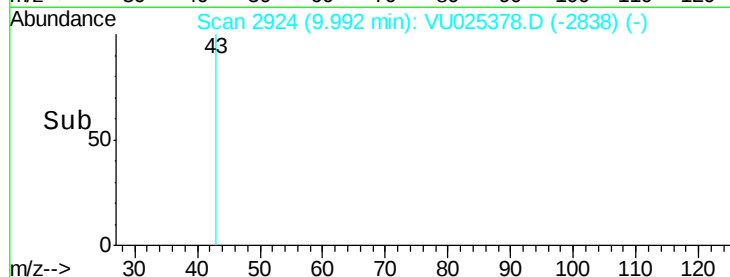
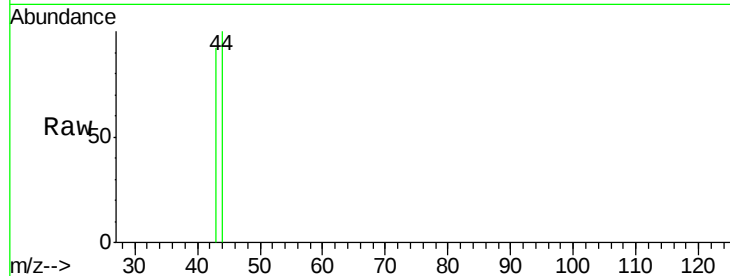
Ion Ratio Lower Upper

43 100

70 0.0 33.4 50.2#

55 7.0 19.0 28.6#

61 0.0 19.3 28.9#



#76

1,2,3-Trichloropropane

Concen: 27.02 ug/l

RT: 10.31 min Scan# 3023

Delta R.T. -0.19 min

Lab File: VU025378.D

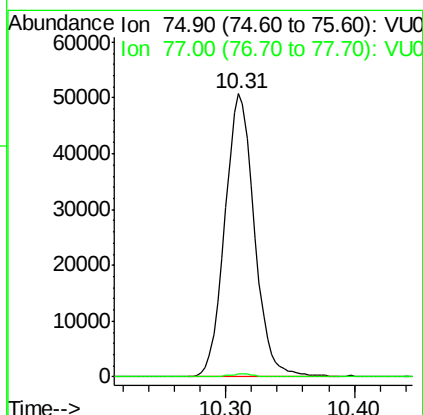
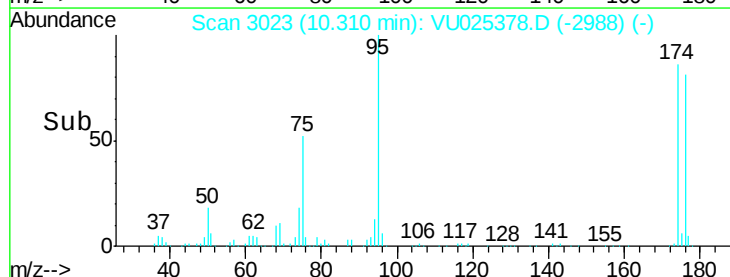
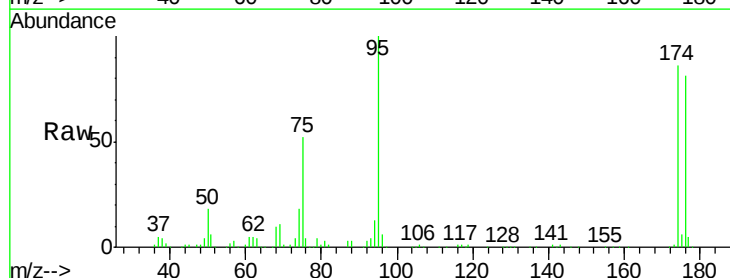
Acq: 13 Jul 2018 07:40

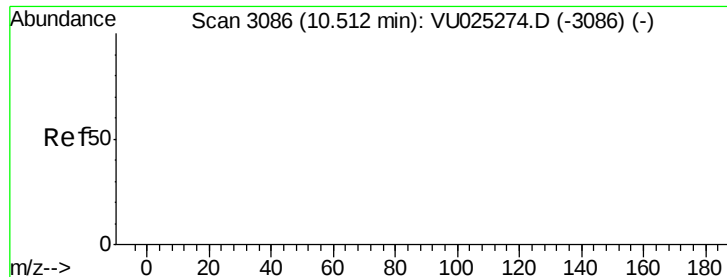
Tgt Ion: 75 Resp: 80507

Ion Ratio Lower Upper

75 100

77 0.9 20.4 61.3#





#81

trans-1,4-Dichloro-2-butene

Concen: 68.94 ug/l

RT: 10.31 min Scan# 3023

Delta R.T. -0.20 min

Lab File: VU025378.D

Acq: 13 Jul 2018 07:40

Instrument :

MSVOA_U

ClientSampleId :

PAR-4

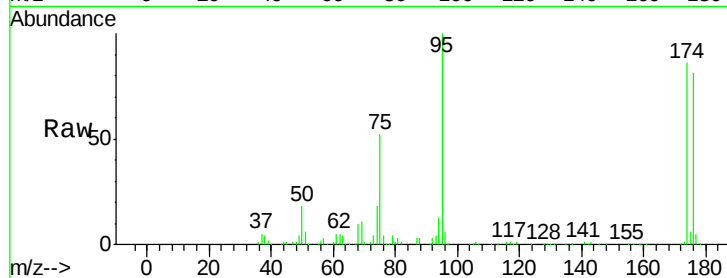
Tot Ion: 75 Resp: 80507

Ion Ratio Lower Upper

75 100

53 0.0 0.0 0.0

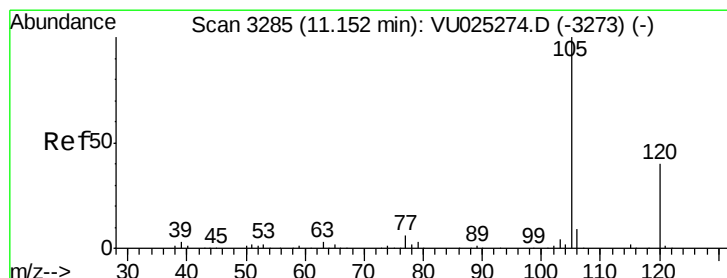
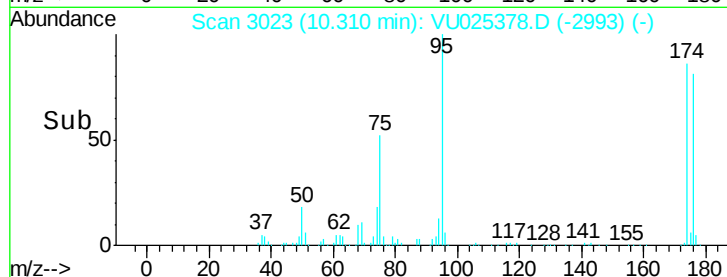
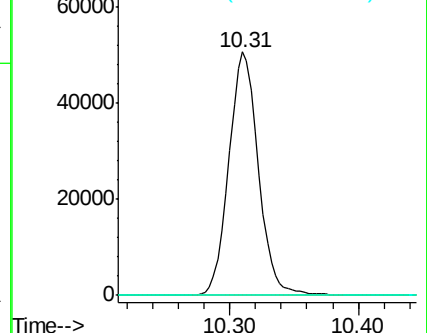
89 0.0 0.0 0.0



Abundance Ion 74.90 (74.60 to 75.60): VU025274.D (-3086) (-)

Ion 53.00 (52.70 to 53.70): VU025274.D (-3086) (-)

Ion 88.90 (88.60 to 89.60): VU025274.D (-3086) (-)



#84

1,2,4-Trimethylbenzene

Concen: 0.32 ug/l

RT: 11.15 min Scan# 3285

Delta R.T. 0.00 min

Lab File: VU025378.D

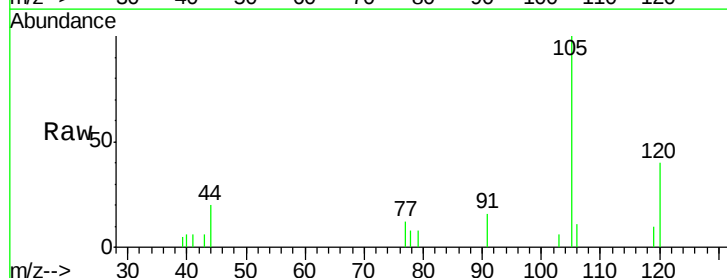
Acq: 13 Jul 2018 07:40

Tgt Ion: 105 Resp: 3101

Ion Ratio Lower Upper

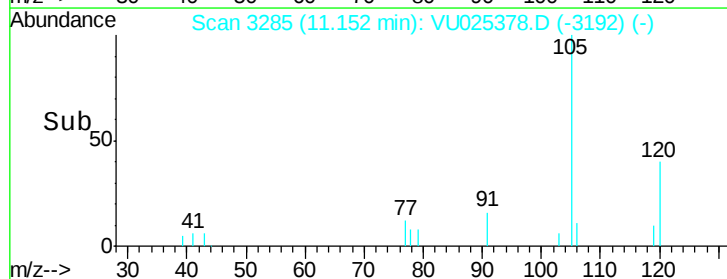
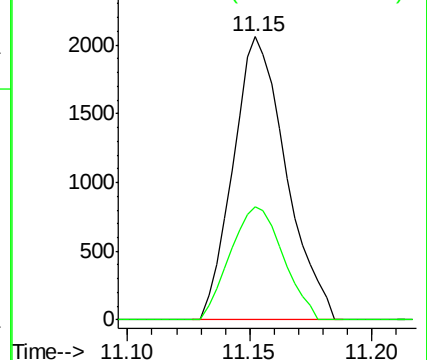
105 100

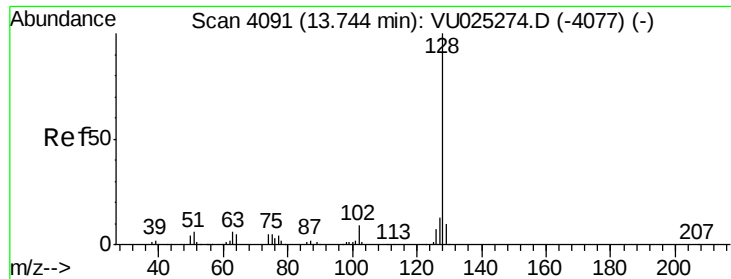
120 40.0 22.3 66.8



Abundance Ion 105.00 (104.70 to 105.70): VU025274.D (-3273) (-)

Ion 120.00 (119.70 to 120.70): VU025274.D (-3273) (-)





#95
Naphthalene
Concen: 7.95 ug/l
RT: 13.75 min Scan# 4092
Delta R.T. 0.00 min
Lab File: VU025378.D
Acq: 13 Jul 2018 07:40

Instrument :
MSVOA_U
ClientSampleId :
PAR-4

Tot Ion	Ratio	Lower	Upper
128	100		
127	12.4	10.5	15.7
129	11.0	8.3	12.5

