

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU090719\
 Data File : VU034333.D
 Acq On : 06 Sep 2019 16:11
 Operator : JC/SP
 Sample : K4689-02DL 100X
 Misc : 5.0mL/MSVOA U/WATER
 ALS Vial : 20 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :

Quant Time: Sep 06 17:11:52 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\82U090619W.M
 Quant Title : SW846 8260
 QLast Update : Fri Sep 06 05:10:13 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.96	168	296763	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	5.87	114	434969	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.07	117	430520	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	11.46	152	270829	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	5.29	65	225846	50.30	ug/l	0.00
Spiked Amount			Recovery	=	100.60%	
35) Dibromofluoromethane	4.86	113	198667	49.09	ug/l	0.00
Spiked Amount			Recovery	=	98.18%	
50) Toluene-d8	7.55	98	762339	50.13	ug/l	0.00
Spiked Amount			Recovery	=	100.26%	
62) 4-Bromofluorobenzene	10.29	95	277924	47.34	ug/l	0.00
Spiked Amount			Recovery	=	94.68%	

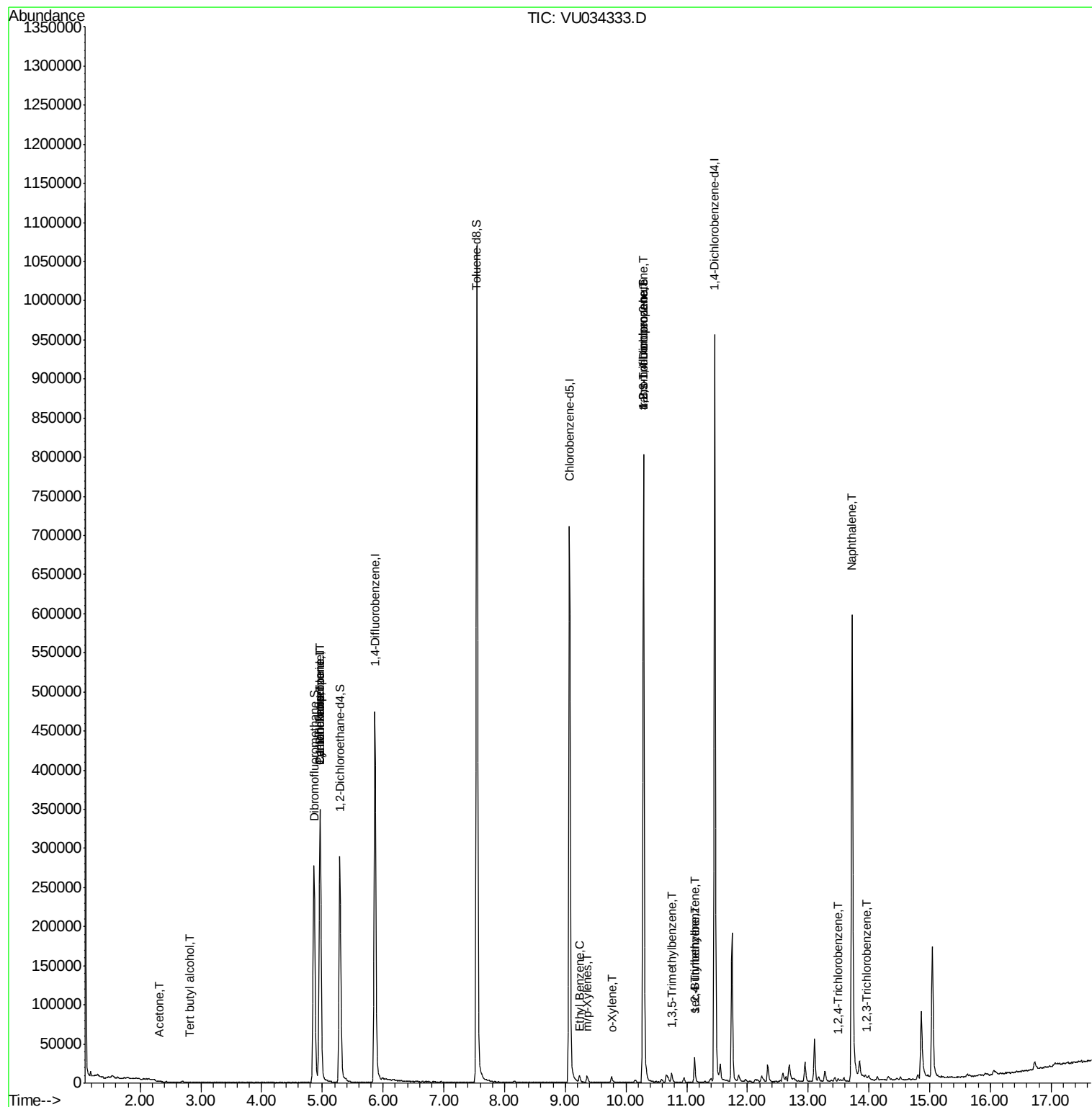
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chloromethane	1.32	50	255	Below Cal	#	78
5) Bromomethane	1.63	94	378	Below Cal	#	49
6) Chloroethane	1.73	64	67	Below Cal	#	43
11) Tert butyl alcohol	2.82	59	474	0.500	ug/l #	73
16) Acetone	2.32	43	1550	0.667	ug/l #	82
20) Methylene Chloride	2.68	84	750	Below Cal	#	79
31) Cyclohexane	4.96	56	4826	0.918	ug/l #	1
36) 1,1-Dichloropropene	4.96	75	19622	4.160	ug/l #	49
38) Carbon Tetrachloride	4.96	117	25835	5.129	ug/l #	17
67) Ethyl Benzene	9.23	91	6411	0.359	ug/l	97
68) m/p-Xylenes	9.36	106	2614	0.389	ug/l	86
69) o-Xylene	9.76	106	2216	0.337	ug/l	96
76) 1,2,3-Trichloropropane	10.29	75	129821	21.960	ug/l #	36
80) 1,3,5-Trimethylbenzene	10.76	105	7131	0.484	ug/l	99
81) trans-1,4-Dichloro-2-buten	10.29	75	129821	73.850	ug/l #	100
84) 1,2,4-Trimethylbenzene	11.13	105	18085	1.219	ug/l	99
85) sec-Butylbenzene	11.13	105	18085	1.039	ug/l #	56
93) 1,2,4-Trichlorobenzene	13.49	180	119	3.469	ug/l #	1
95) Naphthalene	13.73	128	544911	31.760	ug/l	99
96) 1,2,3-Trichlorobenzene	13.97	180	88	2.652	ug/l #	1

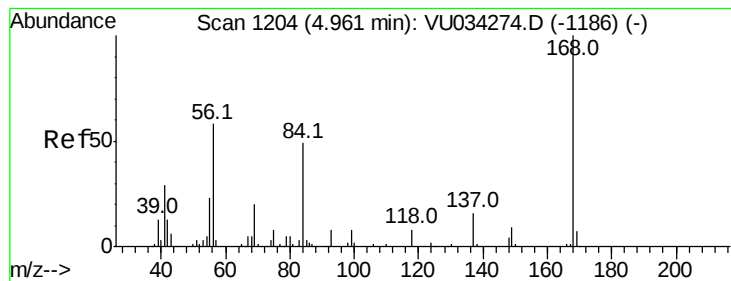
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Fri Sep 06 05:10:13 2019
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.96 min Scan# 1205

Delta R.T. 0.00 min

Lab File: VU034333.D

Acq: 06 Sep 2019 16:11

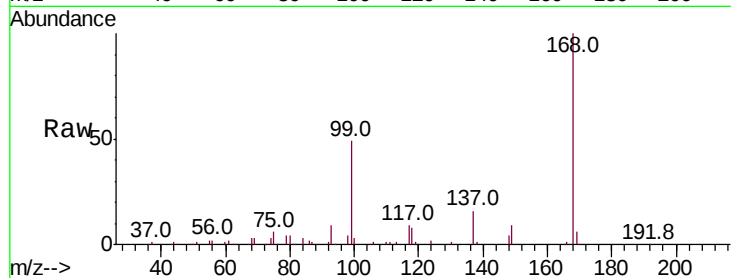
Instrument :
MSVOA_U
ClientSampleId :

Tot Ion:168 Resp: 296763

Ion Ratio Lower Upper

168 100

99 49.4 41.6 62.4



Abundance Ion 167.90 (167.60 to 168.60): VU034274.D (-1186) (-)

Ion 98.90 (98.60 to 99.60): VU034274.D (-1186) (-)

4.96

150000

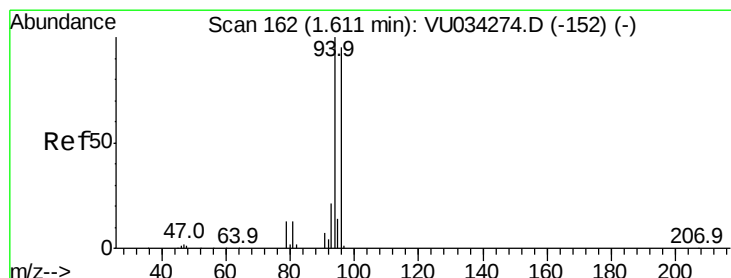
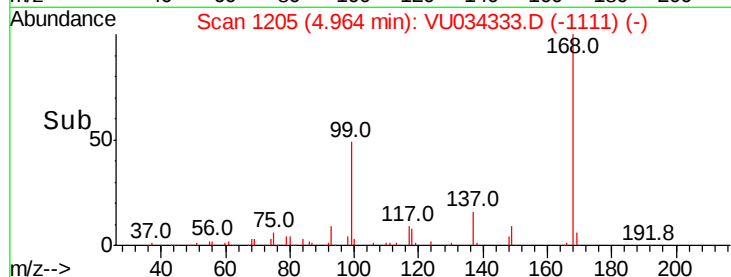
100000

50000

0

4.90 5.00 5.10

Time-->



#5

Bromomethane

Concen: Below Cal

RT: 1.63 min Scan# 167

Delta R.T. 0.02 min

Lab File: VU034333.D

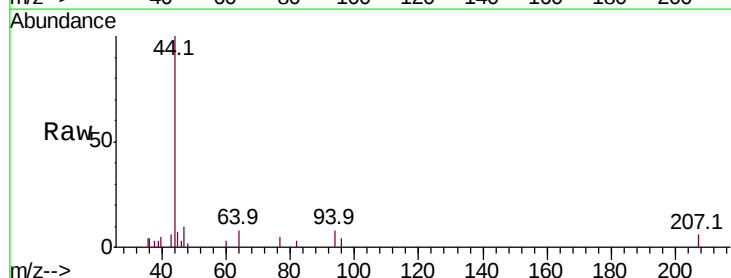
Acq: 06 Sep 2019 16:11

Tgt Ion: 94 Resp: 378

Ion Ratio Lower Upper

94 100

96 45.6 75.7 113.5#



Abundance Ion 93.90 (93.60 to 94.60): VU034274.D (-152) (-)

Ion 95.90 (95.60 to 96.60): VU034274.D (-152) (-)

1.63

400

300

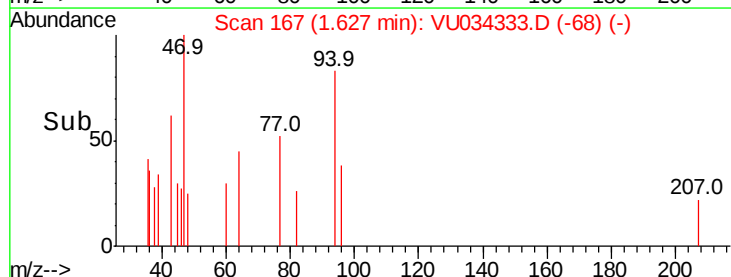
200

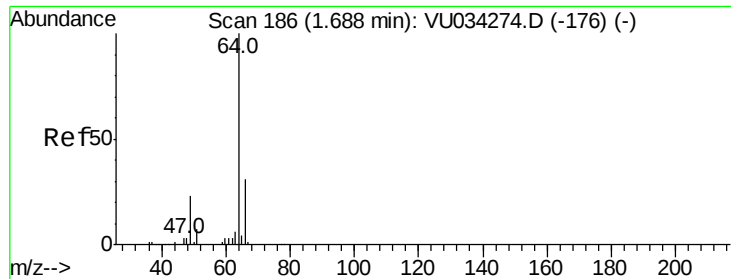
100

0

1.60 1.62 1.64

Time-->





#6

Chloroethane

Concen: Below Cal

RT: 1.73 min Scan# 199

Delta R.T. 0.04 min

Lab File: VU034333.D

Acq: 06 Sep 2019 16:11

Instrument :

MSVOA_U

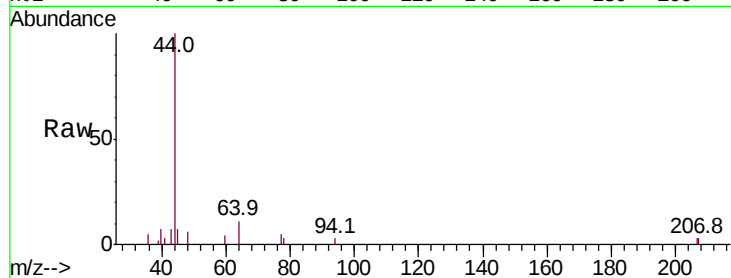
ClientSampled :

Tot Ion: 64 Resp: 67

Ion Ratio Lower Upper

64 100

66 0.0 25.0 37.6#



Abundance Ion 63.90 (63.60 to 64.60): VU0

Ion 65.90 (65.60 to 66.60): VU0

1.73

Time-->

500

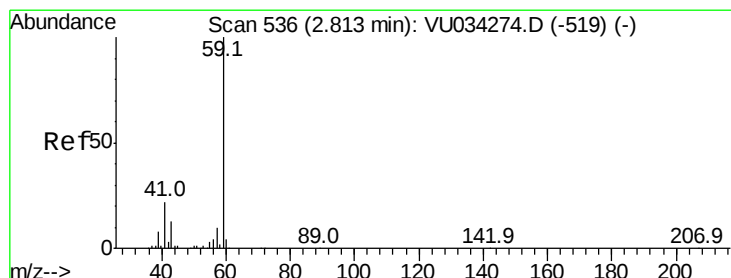
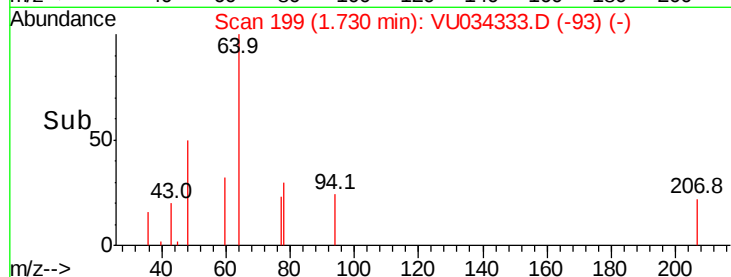
400

300

200

100

0



#11

Tert butyl alcohol

Concen: 0.500 ug/l

RT: 2.82 min Scan# 538

Delta R.T. 0.01 min

Lab File: VU034333.D

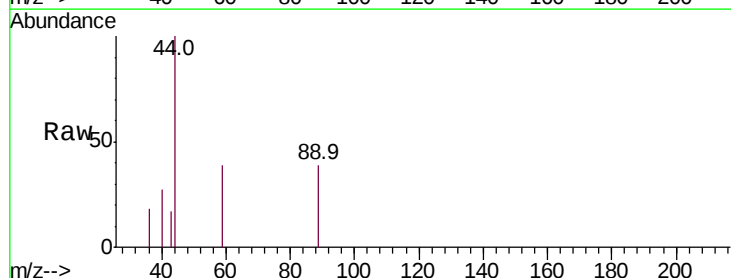
Acq: 06 Sep 2019 16:11

Tgt Ion: 59 Resp: 474

Ion Ratio Lower Upper

59 100

57 0.0 7.9 11.9#



Abundance Ion 59.00 (58.70 to 59.70): VU0

Ion 57.00 (56.70 to 57.70): VU0

2.82

Time-->

300

250

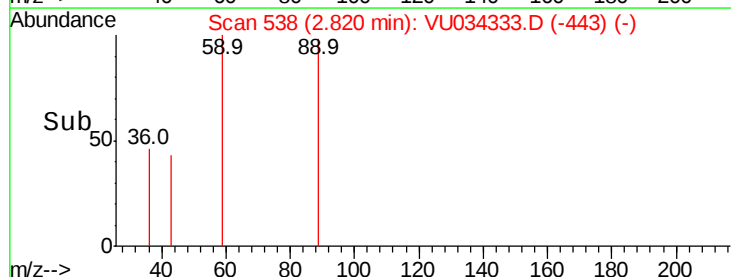
200

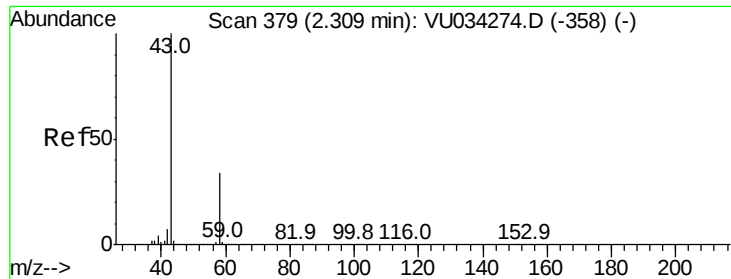
150

100

50

0





#16

Acetone

Concen: 0.667 ug/l

RT: 2.32 min Scan# 382

Delta R.T. 0.01 min

Lab File: VU034333.D

Acq: 06 Sep 2019 16:11

Instrument :

MSVOA_U

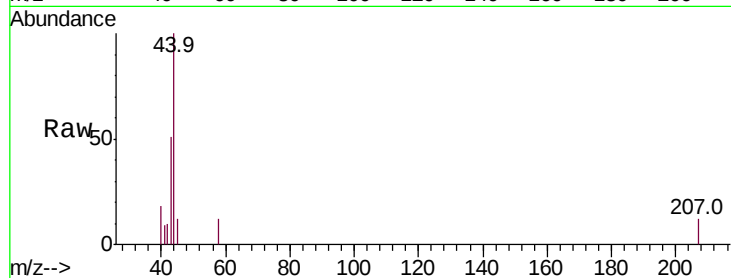
ClientSampleId :

Tot Ion: 43 Resp: 1550

Ion Ratio Lower Upper

43 100

58 24.1 27.6 41.4#



Abundance Ion 43.00 (42.70 to 43.70): VU034333.D (-382) (-)

Ion 58.00 (57.70 to 58.70): VU034333.D (-382) (-)

2.32

600

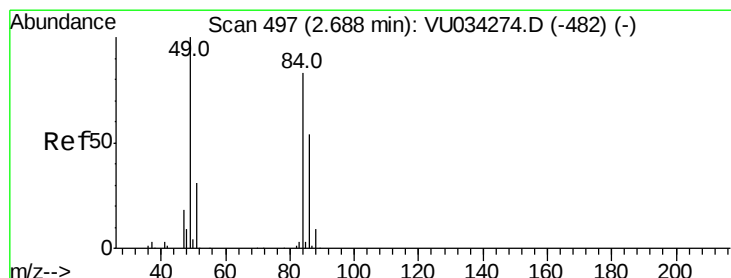
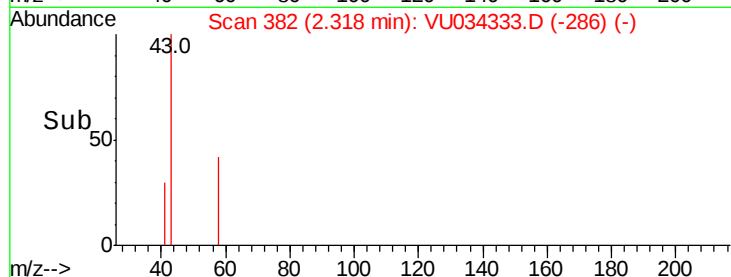
400

200

0

2.25 2.30 2.35 2.40

Time-->



#20

Methylene Chloride

Concen: Below Cal

RT: 2.68 min Scan# 496

Delta R.T. -0.00 min

Lab File: VU034333.D

Acq: 06 Sep 2019 16:11

Tgt Ion: 84 Resp: 750

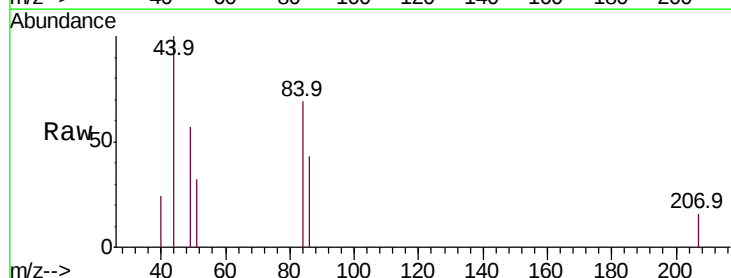
Ion Ratio Lower Upper

84 100

49 83.3 96.0 144.0#

51 46.7 30.0 45.0#

86 62.1 51.4 77.0



Abundance Ion 83.90 (83.60 to 84.60): VU034333.D (-496) (-)

Ion 48.90 (48.60 to 49.60): VU034333.D (-496) (-)

Ion 50.90 (50.60 to 51.60): VU034333.D (-496) (-)

Ion 85.90 (85.60 to 86.60): VU034333.D (-496) (-)

2.68

600

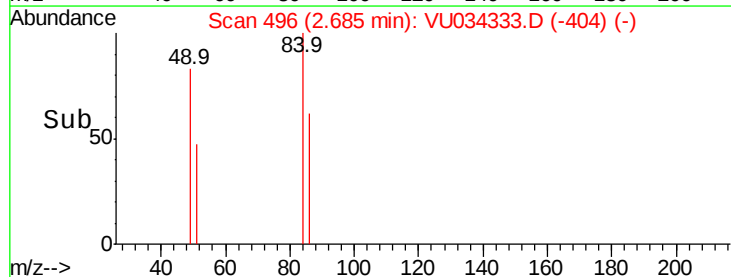
400

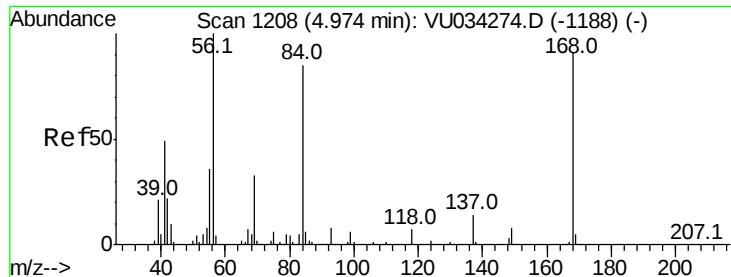
200

0

2.66 2.68 2.70 2.72

Time-->





#31

Cyclohexane

Concen: 0.918 ug/l

RT: 4.96 min Scan# 1203

Delta R.T. -0.02 min

Lab File: VU034333.D

Acq: 06 Sep 2019 16:11

Instrument :
MSVOA_U
ClientSampleId :

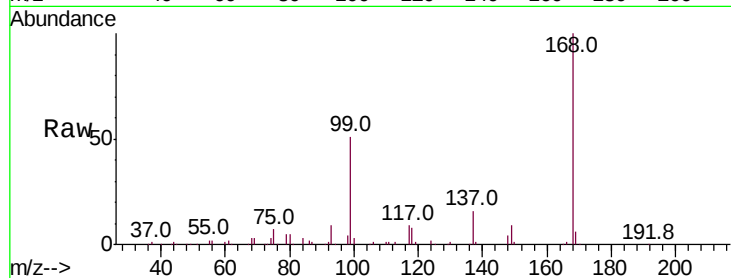
Tot Ion: 56 Resp: 4826

Ion Ratio Lower Upper

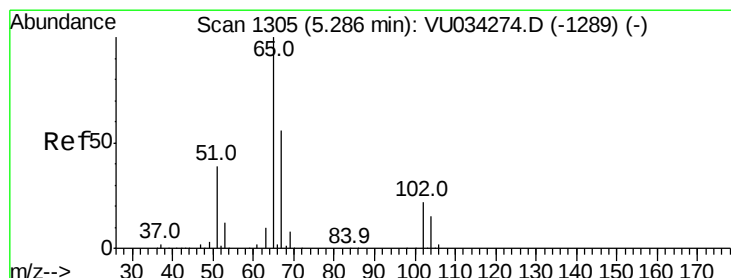
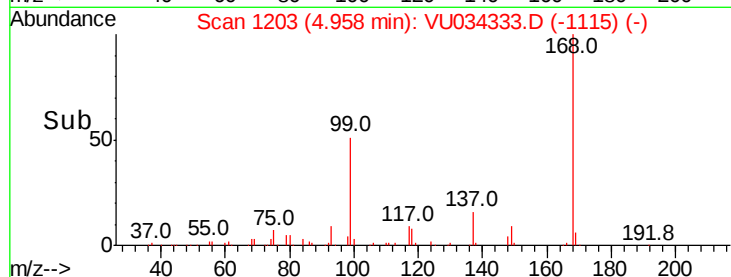
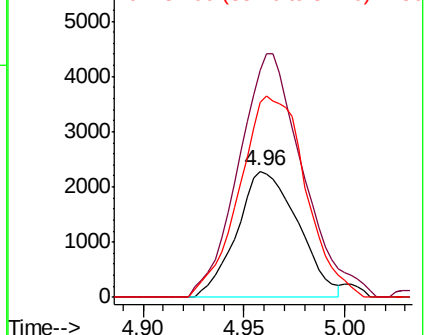
56 100

69 180.7 26.7 40.1#

84 154.7 68.2 102.4#



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: 50.298 ug/l

RT: 5.29 min Scan# 1306

Delta R.T. 0.00 min

Lab File: VU034333.D

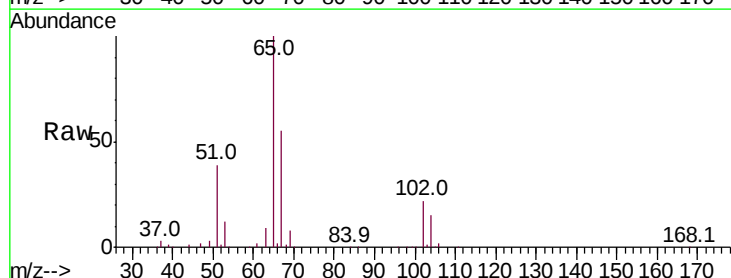
Acq: 06 Sep 2019 16:11

Tgt Ion: 65 Resp: 225846

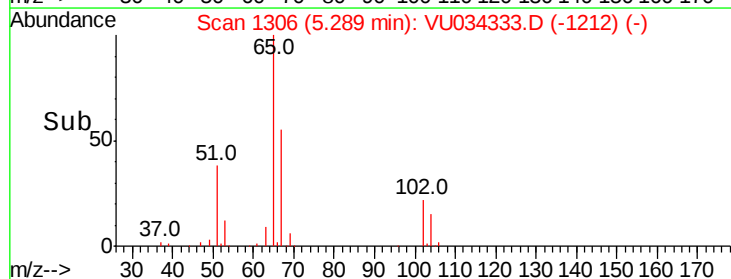
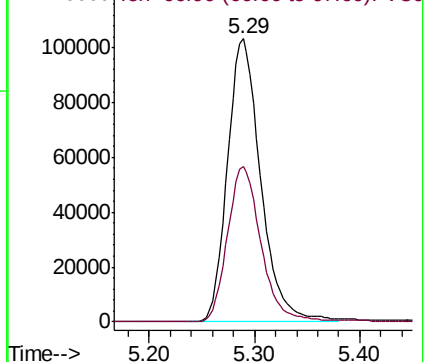
Ion Ratio Lower Upper

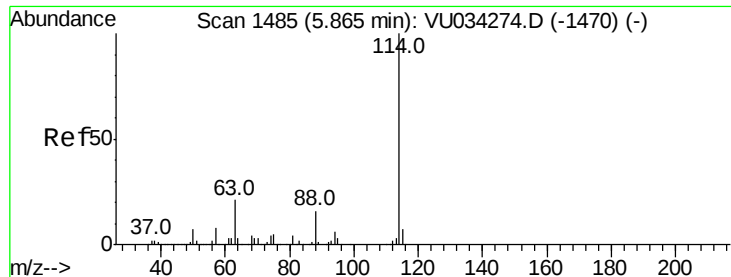
65 100

67 55.1 0.0 112.4



Abundance Ion 64.90 (64.60 to 65.60): VU0
Ion 66.90 (66.60 to 67.60): VU0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.87 min Scan# 1486

Delta R.T. 0.00 min

Lab File: VU034333.D

Acq: 06 Sep 2019 16:11

Instrument :
MSVOA_U
ClientSampled :

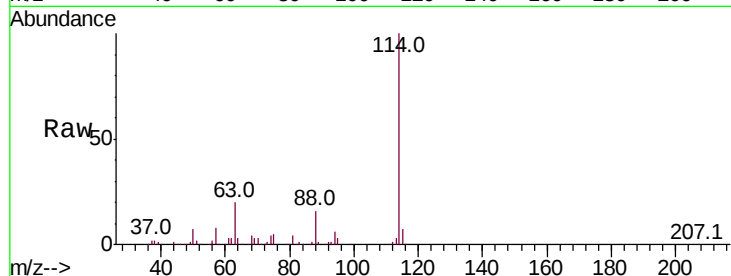
Tot Ion:114 Resp: 434969

Ion Ratio Lower Upper

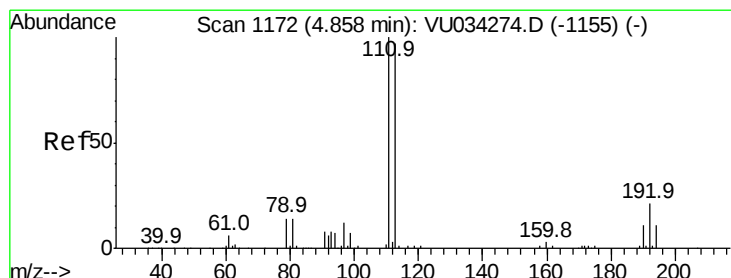
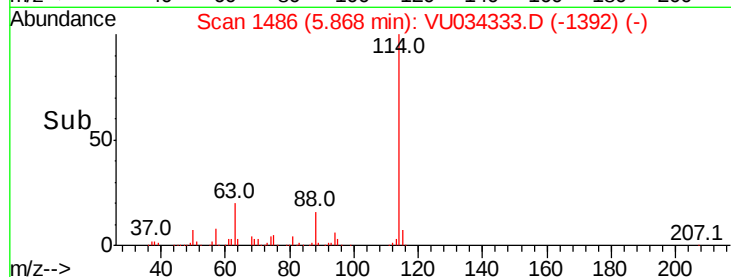
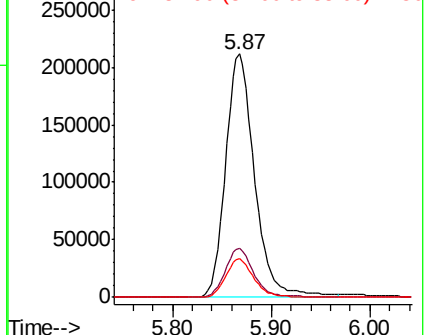
114 100

63 20.0 0.0 42.4

88 15.8 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: 49.085 ug/l

RT: 4.86 min Scan# 1173

Delta R.T. 0.00 min

Lab File: VU034333.D

Acq: 06 Sep 2019 16:11

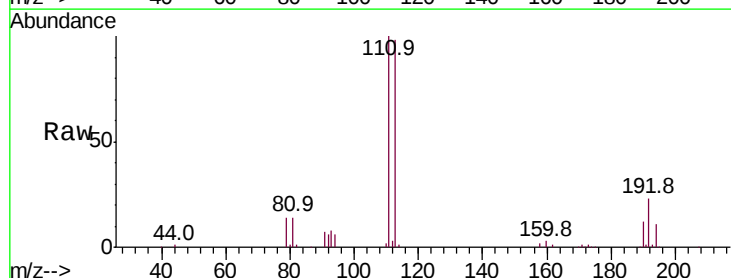
Tgt Ion:113 Resp: 198667

Ion Ratio Lower Upper

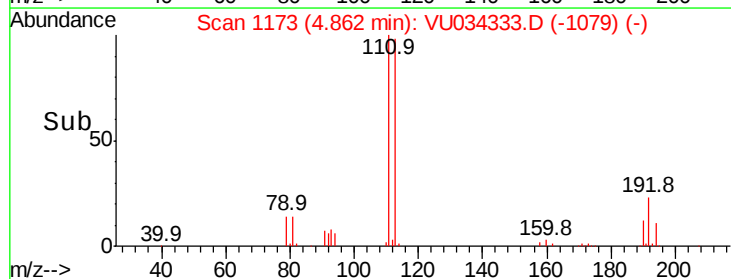
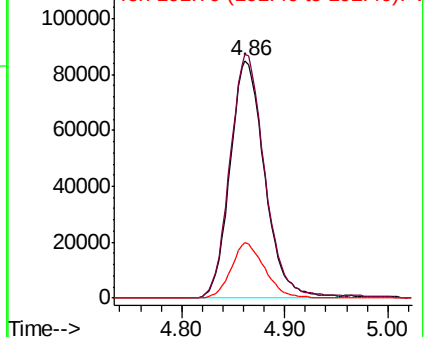
113 100

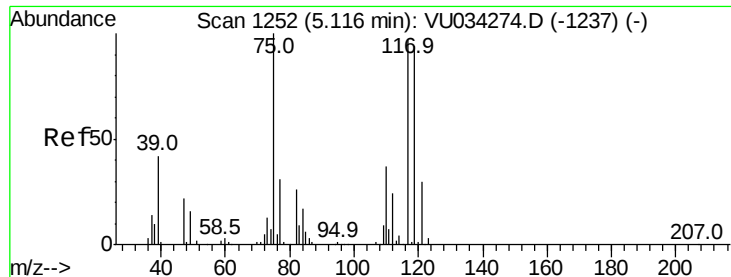
111 103.6 81.5 122.3

192 22.7 17.8 26.8



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: 4.160 ug/l

RT: 4.96 min Scan# 1204

Delta R.T. -0.15 min

Lab File: VU034333.D

Acq: 06 Sep 2019 16:11

Instrument :
MSVOA_U
ClientSampled :

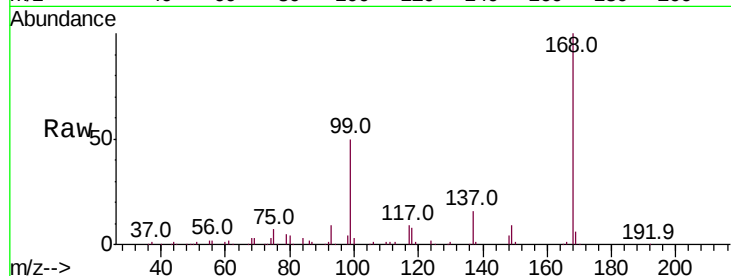
Tot Ion: 75 Resp: 19622

Ion Ratio Lower Upper

75 100

110 9.0 18.3 54.9#

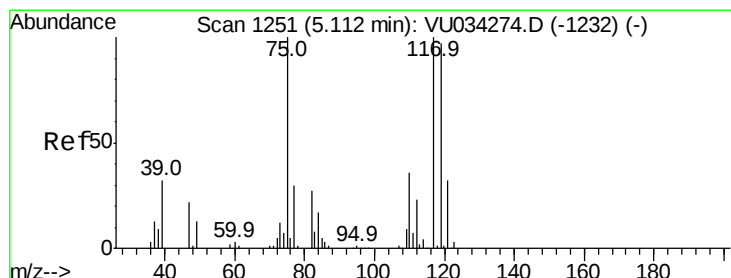
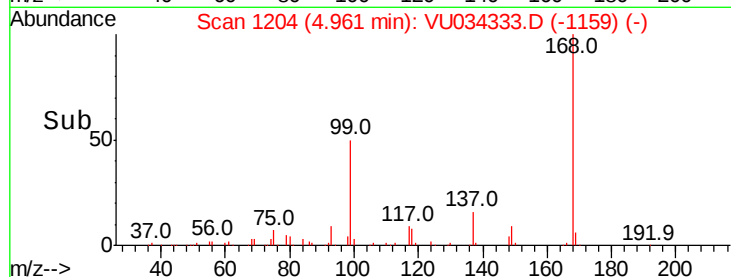
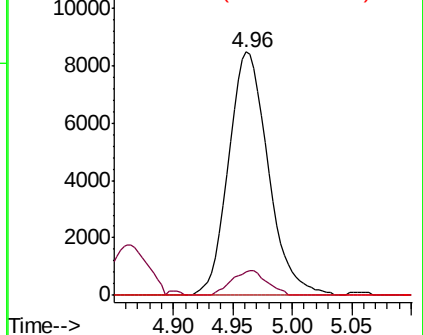
77 0.0 24.9 37.3#



Abundance Ion 74.90 (74.60 to 75.60): VU034333.D (-1159) (-)

Ion 109.90 (109.60 to 110.60): VU034333.D (-1159) (-)

Ion 76.90 (76.60 to 77.60): VU034333.D (-1159) (-)



#38

Carbon Tetrachloride

Concen: 5.129 ug/l

RT: 4.96 min Scan# 1204

Delta R.T. -0.15 min

Lab File: VU034333.D

Acq: 06 Sep 2019 16:11

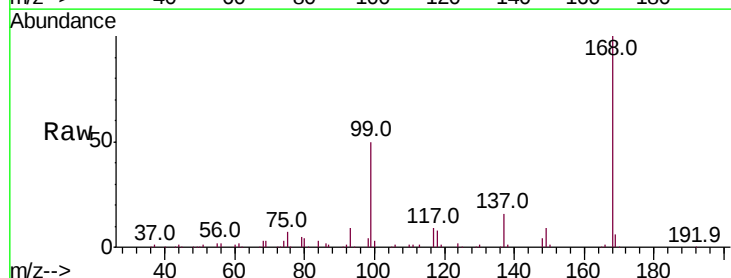
Tgt Ion: 117 Resp: 25835

Ion Ratio Lower Upper

117 100

119 6.6 77.8 116.6#

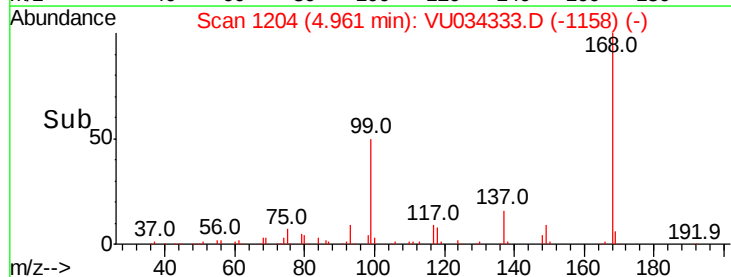
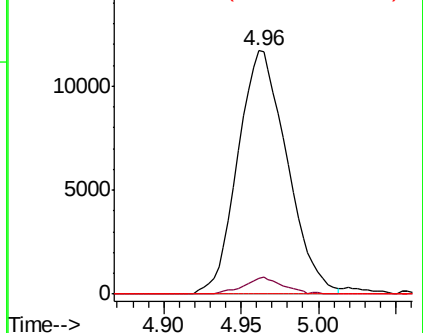
121 0.0 25.2 37.8#

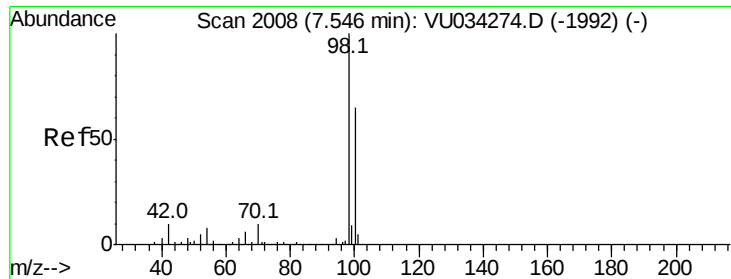


Abundance Ion 116.80 (116.50 to 117.50): VU034333.D (-1158) (-)

Ion 118.80 (118.50 to 119.50): VU034333.D (-1158) (-)

Ion 120.80 (120.50 to 121.50): VU034333.D (-1158) (-)

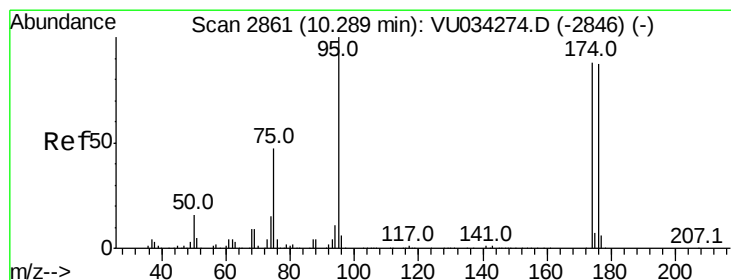
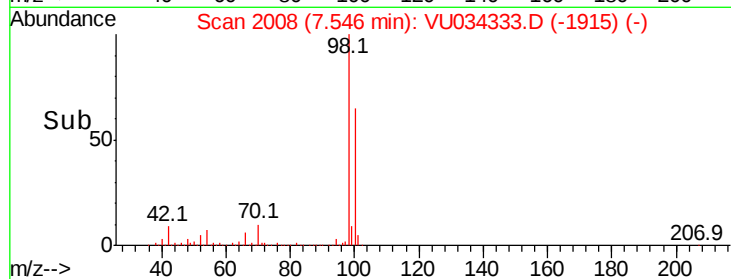
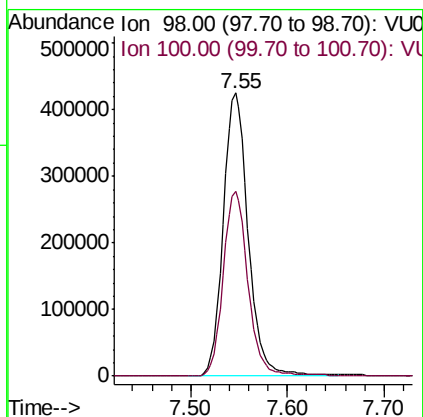
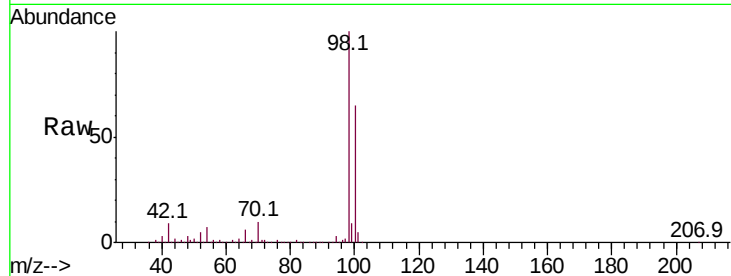




#50
Toluene-d8
Concen: 50.134 ug/l
RT: 7.55 min Scan# 2008
Delta R.T. -0.00 min
Lab File: VU034333.D
Acq: 06 Sep 2019 16:11

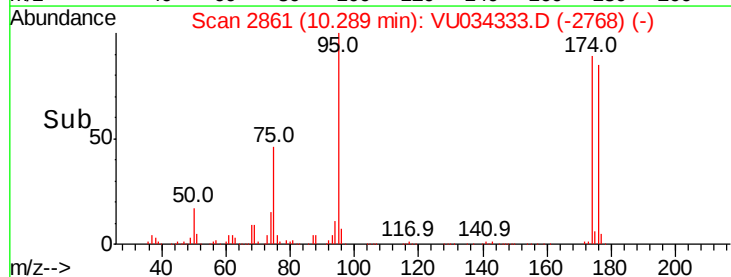
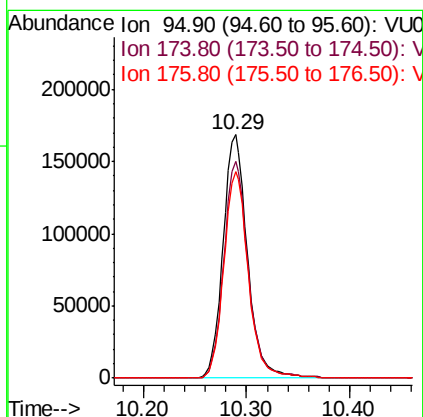
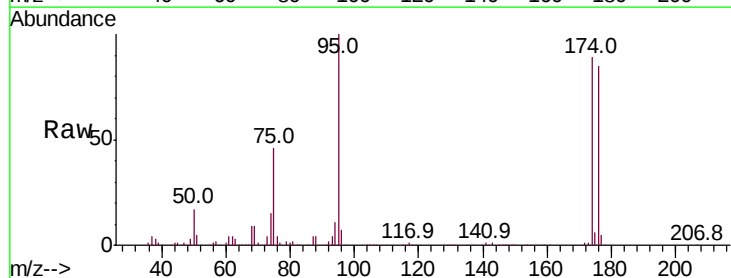
Instrument :
MSVOA_U
ClientSampleId :

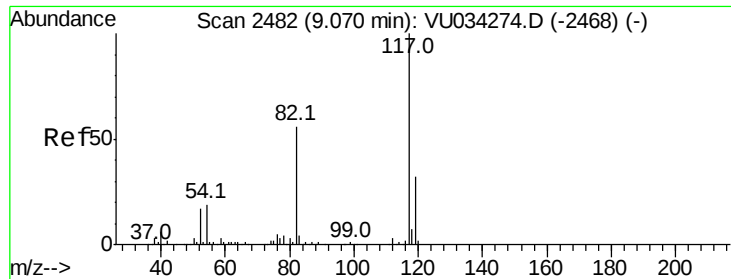
Tot Ion: 98 Resp: 762339
Ion Ratio Lower Upper
98 100
100 65.1 51.7 77.5



#62
4-Bromofluorobenzene
Concen: 47.338 ug/l
RT: 10.29 min Scan# 2861
Delta R.T. -0.00 min
Lab File: VU034333.D
Acq: 06 Sep 2019 16:11

Tgt Ion: 95 Resp: 277924
Ion Ratio Lower Upper
95 100
174 89.5 0.0 175.2
176 85.3 0.0 168.0

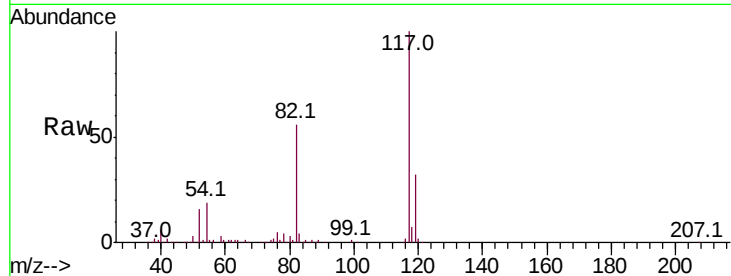




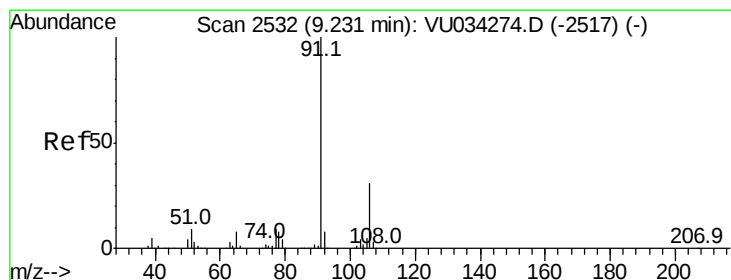
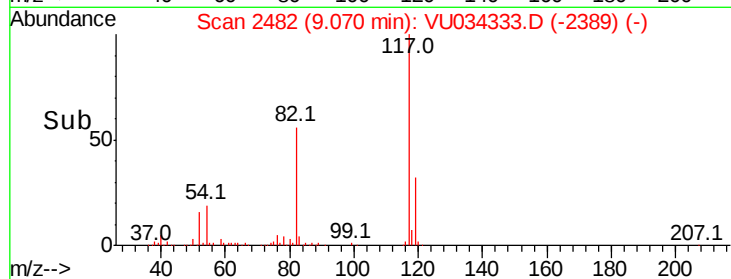
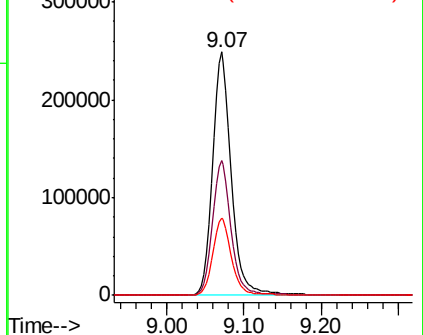
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 9.07 min Scan# 2482
Delta R.T. -0.00 min
Lab File: VU034333.D
Acq: 06 Sep 2019 16:11

Instrument :
MSVOA_U
ClientSampleId :

Tot Ion:117 Resp: 430520
Ion Ratio Lower Upper
117 100
82 55.6 44.6 67.0
119 31.7 25.9 38.9

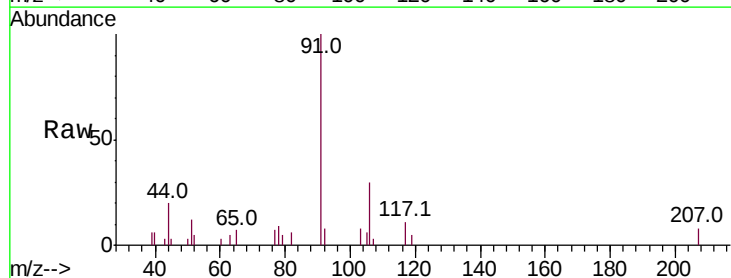


Abundance Ion 116.90 (116.60 to 117.60): V
Ion 82.00 (81.70 to 82.70): VU0
Ion 118.90 (118.60 to 119.60): V

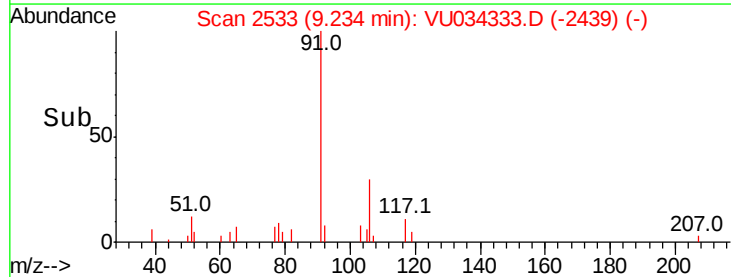
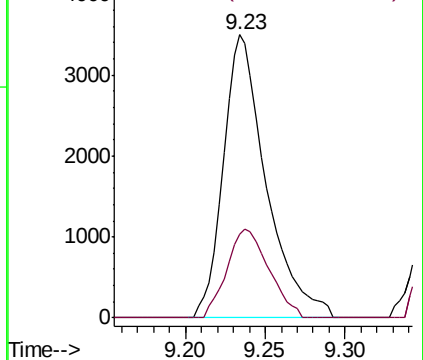


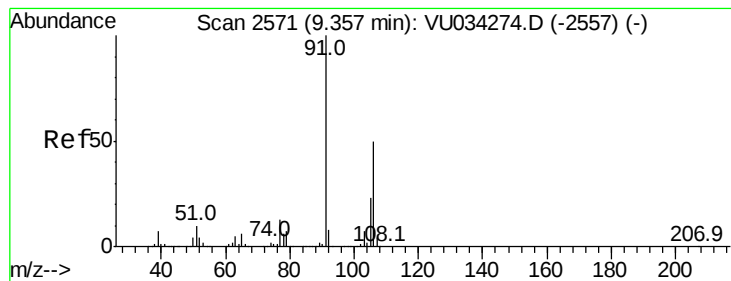
#67
Ethyl Benzene
Concen: 0.359 ug/l
RT: 9.23 min Scan# 2533
Delta R.T. 0.00 min
Lab File: VU034333.D
Acq: 06 Sep 2019 16:11

Tgt Ion: 91 Resp: 6411
Ion Ratio Lower Upper
91 100
106 29.6 24.8 37.2



Abundance Ion 91.00 (90.70 to 91.70): VU0
Ion 106.00 (105.70 to 106.70): V





#68

m/p-Xylenes

Concen: 0.389 ug/l

RT: 9.36 min Scan# 2572

Delta R.T. 0.00 min

Lab File: VU034333.D

Acq: 06 Sep 2019 16:11

Instrument :

MSVOA_U

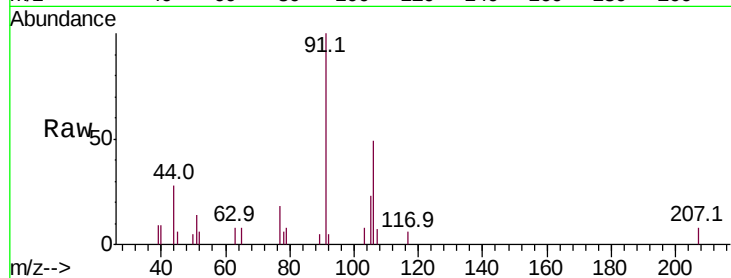
ClientSampleId :

Tot Ion:106 Resp: 2614

Ion Ratio Lower Upper

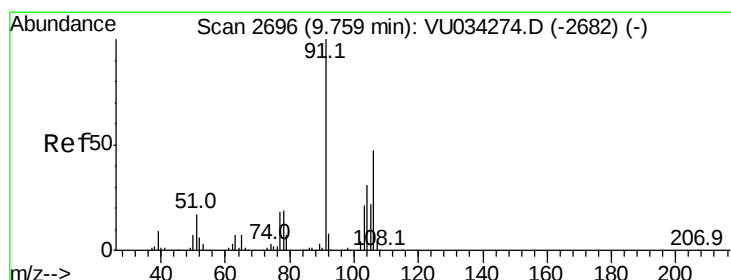
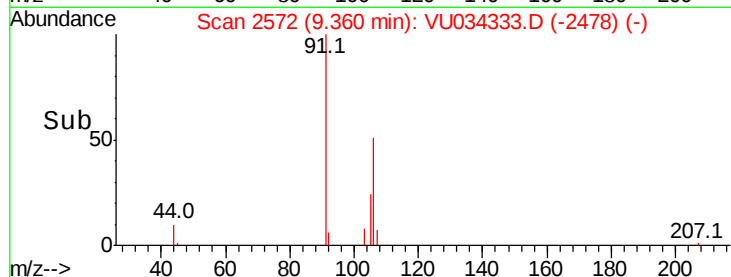
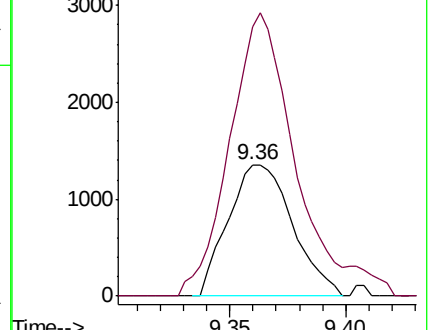
106 100

91 221.2 160.1 240.1



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VU0



#69

o-Xylene

Concen: 0.337 ug/l

RT: 9.76 min Scan# 2698

Delta R.T. 0.01 min

Lab File: VU034333.D

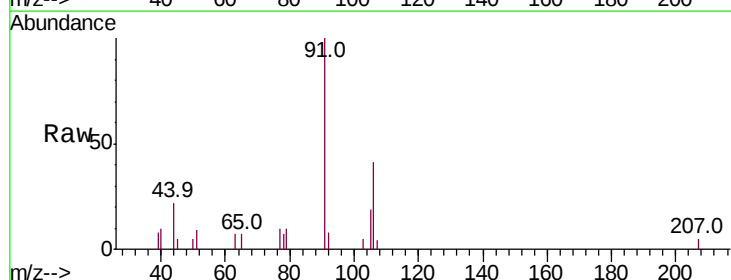
Acq: 06 Sep 2019 16:11

Tgt Ion:106 Resp: 2216

Ion Ratio Lower Upper

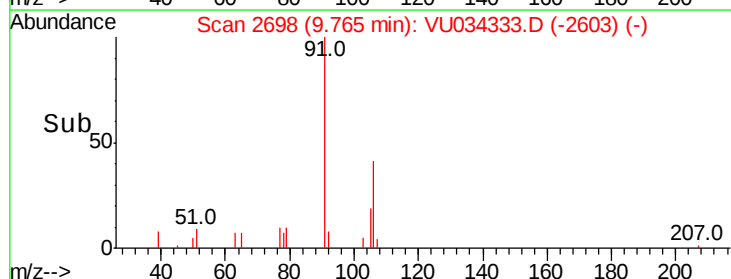
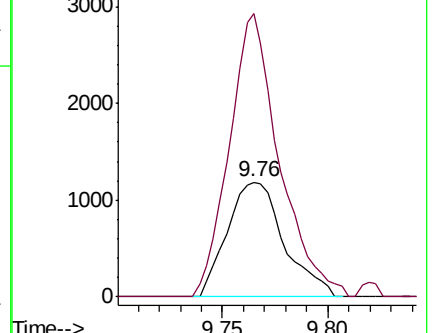
106 100

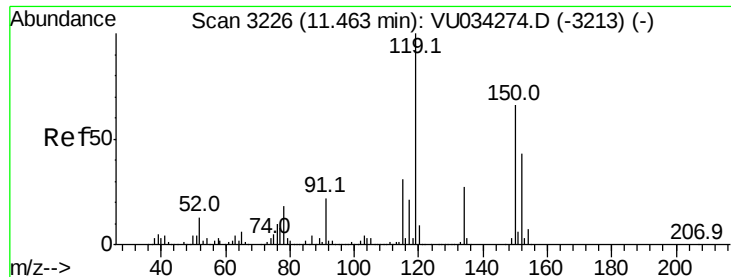
91 217.1 105.1 315.3



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VU0





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 11.46 min Scan# 3226

Delta R.T. -0.00 min

Lab File: VU034333.D

Acq: 06 Sep 2019 16:11

Instrument :

MSVOA_U

ClientSampleId :

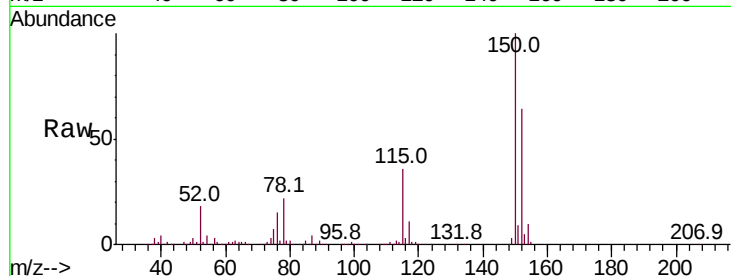
Tot Ion:152 Resp: 270829

Ion Ratio Lower Upper

152 100

115 55.9 39.1 117.3

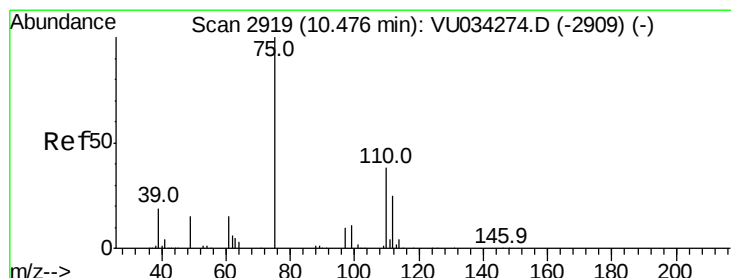
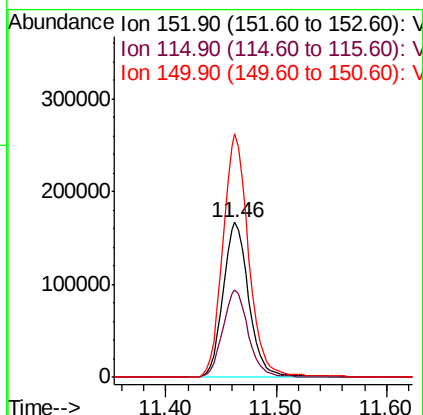
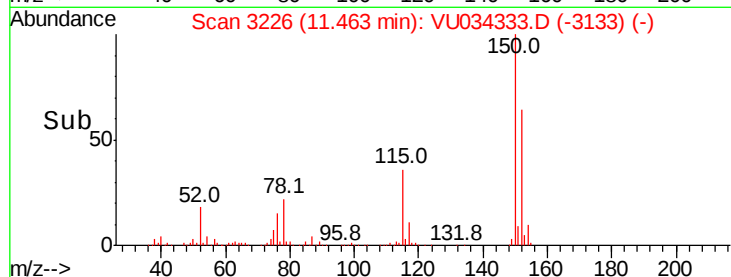
150 157.5 0.0 345.4



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



#76

1,2,3-Trichloropropane

Concen: 21.960 ug/l

RT: 10.29 min Scan# 2861

Delta R.T. -0.19 min

Lab File: VU034333.D

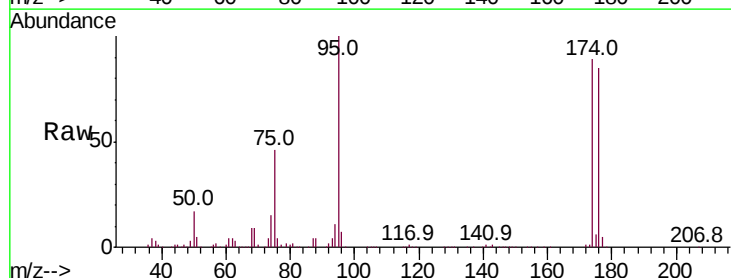
Acq: 06 Sep 2019 16:11

Tgt Ion: 75 Resp: 129821

Ion Ratio Lower Upper

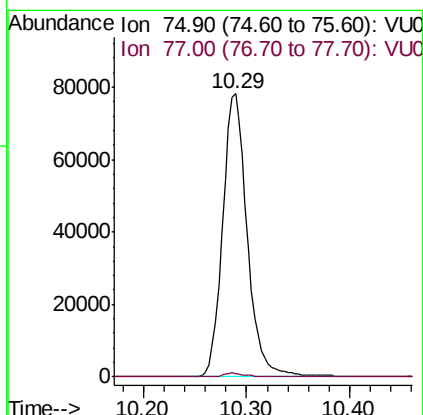
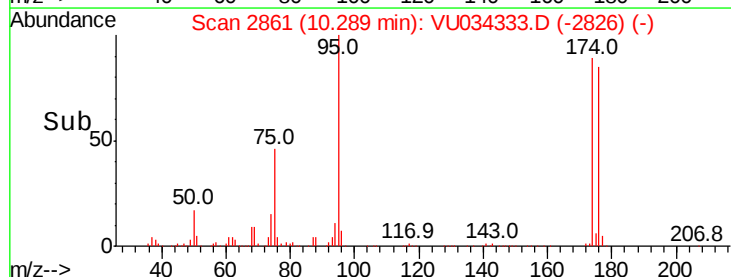
75 100

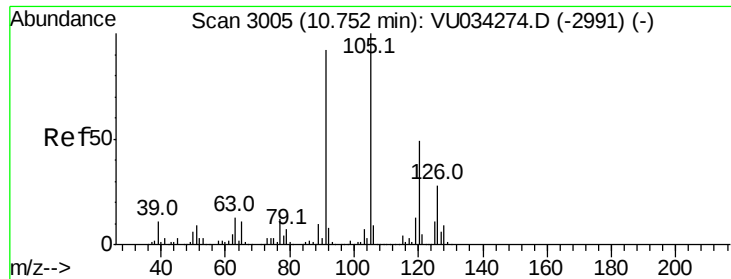
77 1.3 20.8 62.2#



Abundance Ion 74.90 (74.60 to 75.60): VU0

Ion 77.00 (76.70 to 77.70): VU0





#80

1,3,5-Trimethylbenzene

Concen: 0.484 ug/l

RT: 10.76 min Scan# 3006

Delta R.T. 0.00 min

Lab File: VU034333.D

Acq: 06 Sep 2019 16:11

Instrument :

MSVOA_U

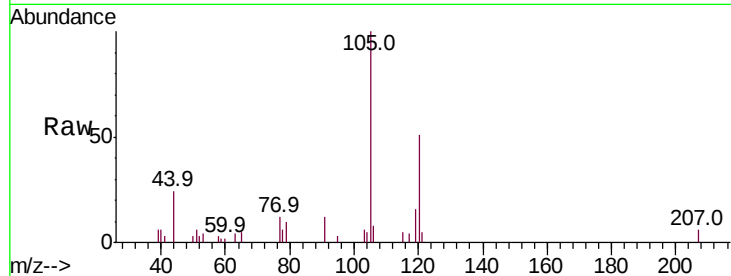
ClientSampled :

Tot Ion:105 Resp: 7131

Ion Ratio Lower Upper

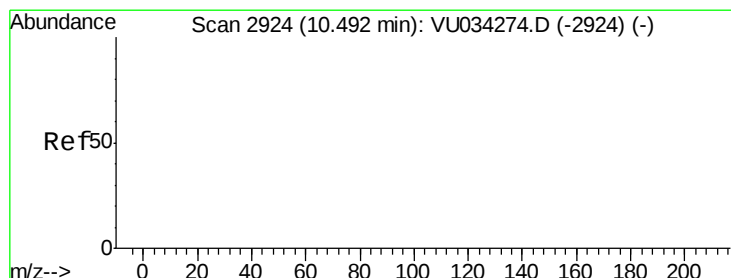
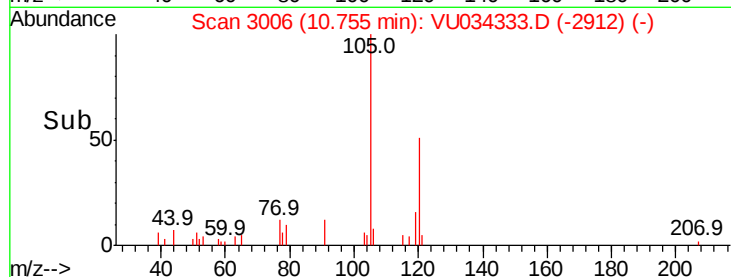
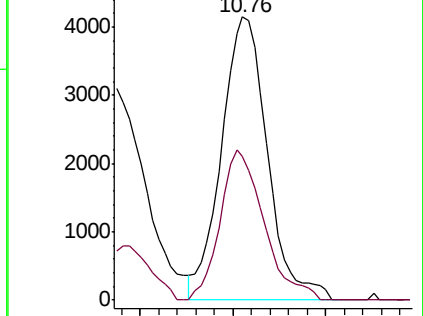
105 100

120 50.6 24.9 74.7



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#81

trans-1,4-Dichloro-2-butene

Concen: 73.850 ug/l

RT: 10.29 min Scan# 2861

Delta R.T. -0.20 min

Lab File: VU034333.D

Acq: 06 Sep 2019 16:11

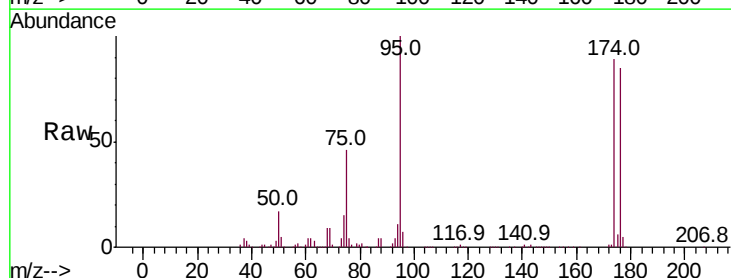
Tgt Ion: 75 Resp: 129821

Ion Ratio Lower Upper

75 100

53 0.0 0.0 0.0#

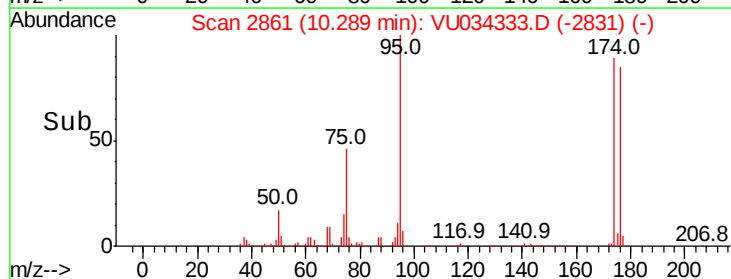
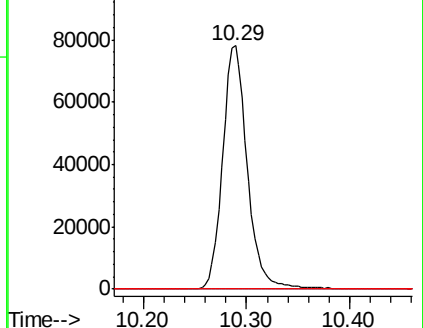
89 0.0 0.0 0.0

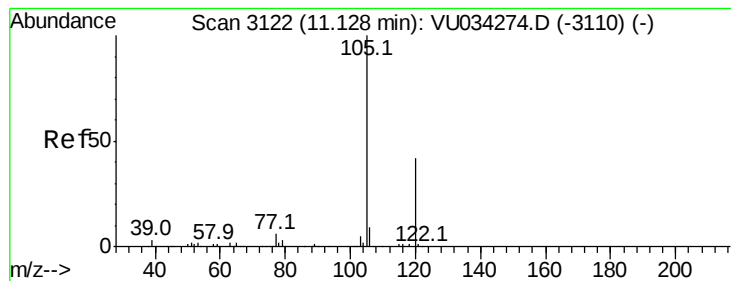


Abundance Ion 74.90 (74.60 to 75.60): VU0

Ion 53.00 (52.70 to 53.70): VU0

Ion 88.90 (88.60 to 89.60): VU0





#84

1,2,4-Trimethylbenzene

Concen: 1.219 ug/l

RT: 11.13 min Scan# 3123

Delta R.T. 0.00 min

Lab File: VU034333.D

Acq: 06 Sep 2019 16:11

Instrument :

MSVOA_U

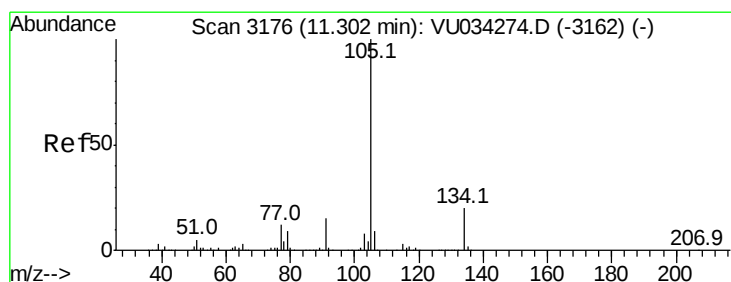
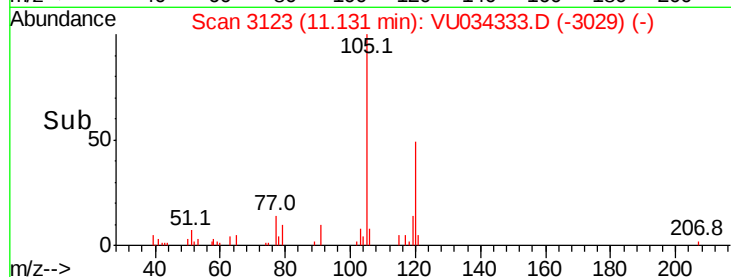
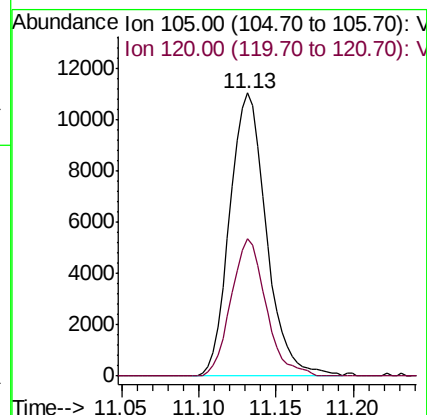
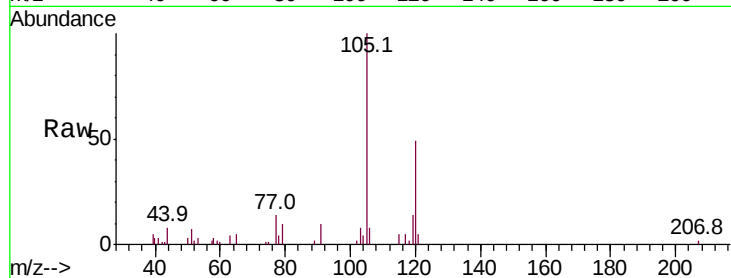
ClientSampleId :

Tot Ion:105 Resp: 18085

Ion Ratio Lower Upper

105 100

120 46.3 22.9 68.8



#85

sec-Butylbenzene

Concen: 1.039 ug/l

RT: 11.13 min Scan# 3123

Delta R.T. -0.17 min

Lab File: VU034333.D

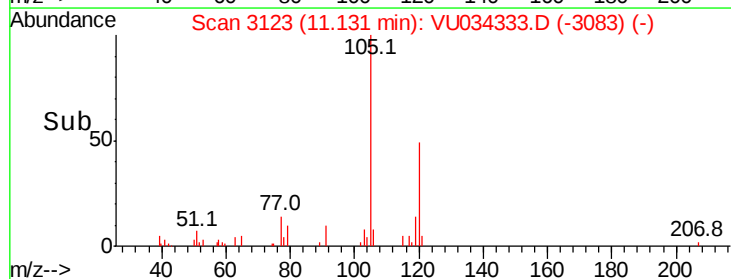
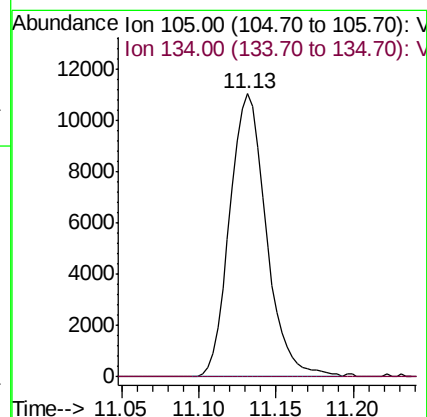
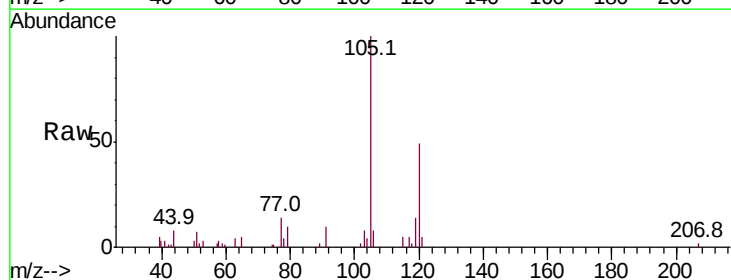
Acq: 06 Sep 2019 16:11

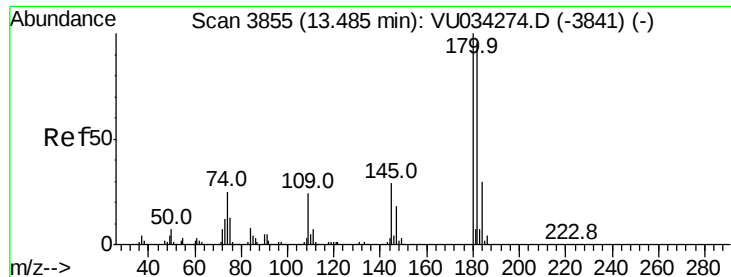
Tgt Ion:105 Resp: 18085

Ion Ratio Lower Upper

105 100

134 0.0 10.1 30.3#





#93

1,2,4-Trichlorobenzene

Concen: 3.469 ug/l

RT: 13.49 min Scan# 3857

Delta R.T. 0.01 min

Lab File: VU034333.D

Acq: 06 Sep 2019 16:11

Instrument :

MSVOA_U

ClientSampleId :

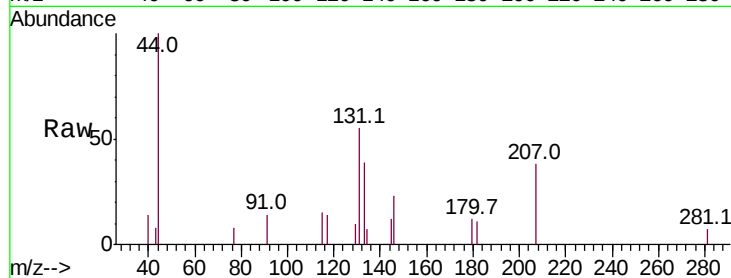
Tot Ion:180 Resp: 119

Ion Ratio Lower Upper

180 100

182 184.9 47.9 143.8#

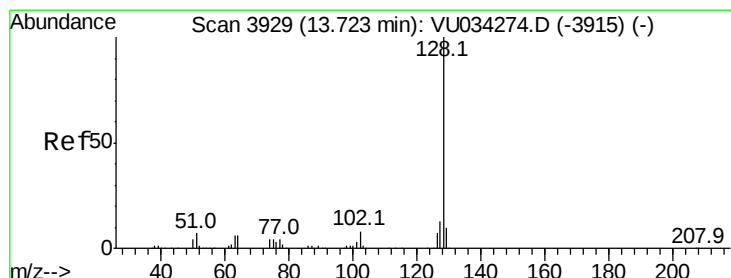
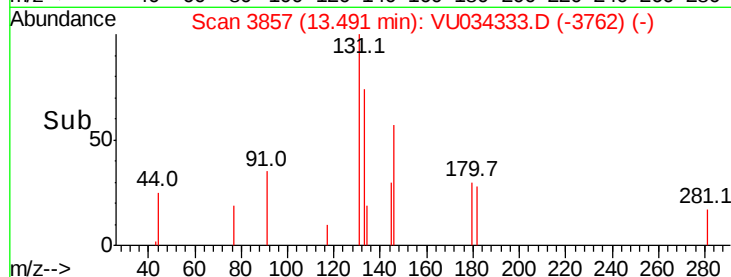
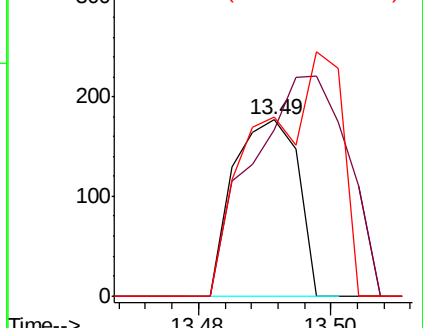
145 176.5 14.4 43.0#



Abundance Ion 179.80 (179.50 to 180.50): V

Ion 181.80 (181.50 to 182.50): V

Ion 144.80 (144.50 to 145.50): V



#95

Naphthalene

Concen: 31.760 ug/l

RT: 13.73 min Scan# 3930

Delta R.T. 0.00 min

Lab File: VU034333.D

Acq: 06 Sep 2019 16:11

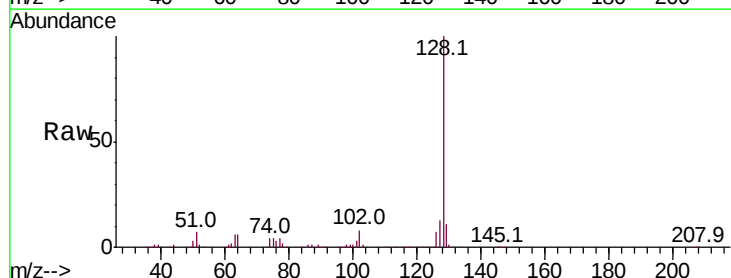
Tgt Ion:128 Resp: 544911

Ion Ratio Lower Upper

128 100

127 12.7 10.6 15.8

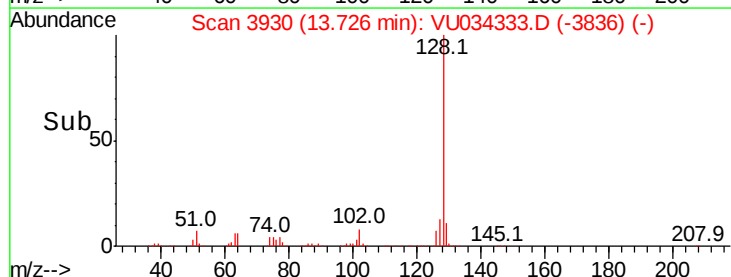
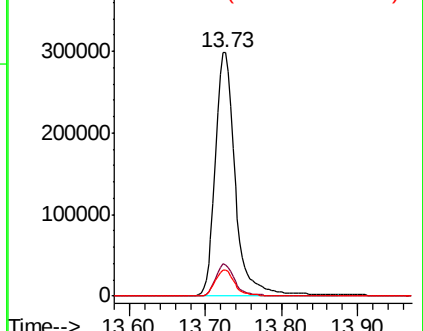
129 10.8 8.4 12.6

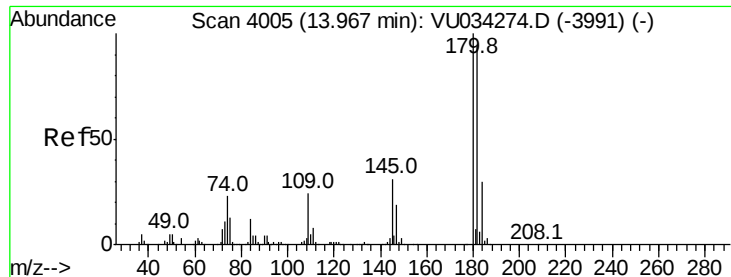


Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

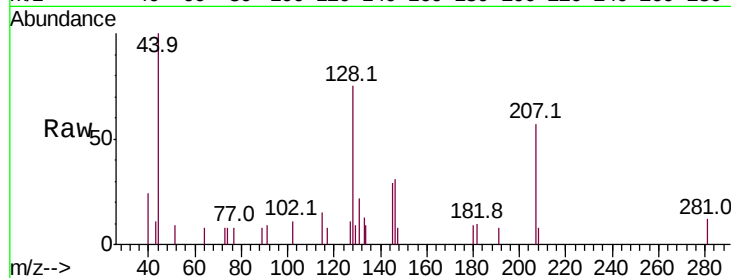




#96
 1,2,3-Trichlorobenzene
 Concen: 2.652 ug/l
 RT: 13.97 min Scan# 4005
 Delta R.T. 0.00 min
 Lab File: VU034333.D
 Acq: 06 Sep 2019 16:11

Instrument :
 MSVOA_U
 ClientSampleId :

Tot Ion:180 Resp: 88
 Ion Ratio Lower Upper
 180 100
 182 237.5 48.4 145.0#
 145 0.0 15.4 46.4#



Abundance Ion 179.80 (179.50 to 180.50): V
 Ion 181.80 (181.50 to 182.50): V
 Ion 144.90 (144.60 to 145.60): V

