

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD112019\
 Data File : VD064319.D
 Acq On : 20 Nov 2019 18:09
 Operator : VA/SY
 Sample : K5957-05
 Misc : 4.60G/5.00ml/MSVOA D/SOIL
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :

Quant Time: Nov 21 07:05:42 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D110819S.M
 Quant Title : SW846 8260
 QLast Update : Tue Nov 12 02:43:24 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.98	168	1448891	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.87	114	2051336	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.65	117	1762619	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.58	152	865423	50.00	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.34	65	576224	48.36	ug/l	0.00
Spiked Amount	50.000		Recovery	=	96.72%	
35) Dibromofluoromethane	7.92	113	599494	50.91	ug/l	0.00
Spiked Amount	50.000		Recovery	=	101.82%	
50) Toluene-d8	10.34	98	2372836	53.42	ug/l	0.00
Spiked Amount	50.000		Recovery	=	106.84%	
62) 4-Bromofluorobenzene	12.64	95	830637	54.00	ug/l	0.00
Spiked Amount	50.000		Recovery	=	108.00%	

Target Compounds

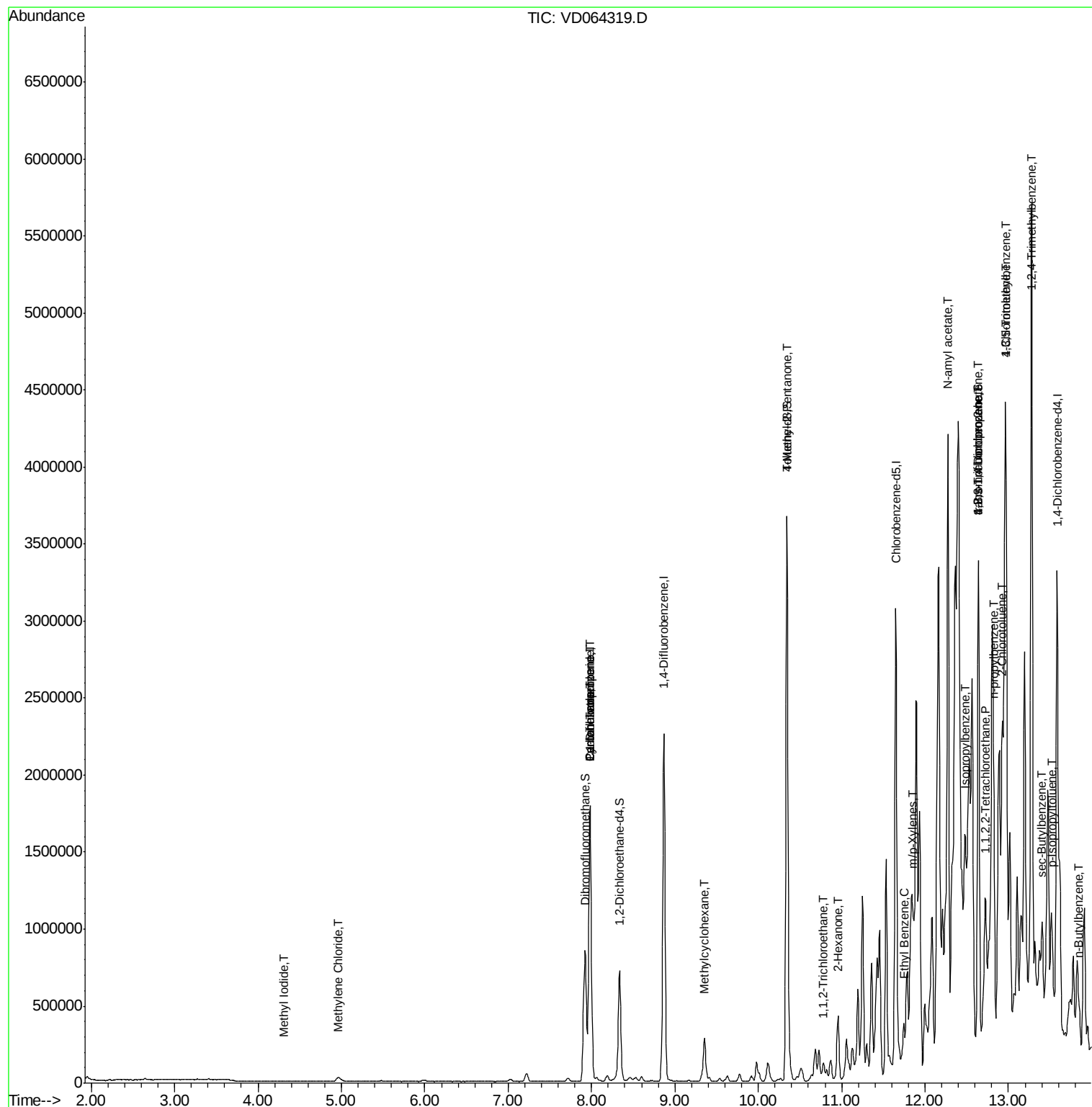
						Qvalue
10) Methyl Iodide	4.30	142	275	2.049	ug/l #	41
20) Methylene Chloride	4.97	84	17896	1.255	ug/l #	89
31) Cyclohexane	7.98	56	43358	1.854	ug/l #	44
36) 1,1-Dichloropropene	7.98	75	93495	4.938	ug/l #	50
38) Carbon Tetrachloride	7.98	117	128069	6.322	ug/l #	16
39) Methylcyclohexane	9.36	83	119213	4.976	ug/l	98
51) 4-Methyl-2-Pentanone	10.34	43	23003	2.917	ug/l #	23
55) 1,1,2-Trichloroethane	10.77	97	45951	5.024	ug/l #	22
59) 2-Hexanone	10.96	43	160428	28.595	ug/l #	31
67) Ethyl Benzene	11.75	91	136502	2.105	ug/l	99
68) m/p-Xylenes	11.86	106	243316	9.791	ug/l	99
73) Isopropylbenzene	12.48	105	373536	5.880	ug/l	100
74) N-amyl acetate	12.27	43	828728	55.247	ug/l #	58
75) 1,1,2,2-Tetrachloroethane	12.72	83	52013	5.434	ug/l #	94
76) 1,2,3-Trichloropropane	12.64	75	389564	55.886	ug/l #	100
78) n-propylbenzene	12.83	91	839224	11.564	ug/l	99
79) 2-Chlorotoluene	12.92	91	96076	2.345	ug/l #	39
80) 1,3,5-Trimethylbenzene	12.97	105	914359	17.518	ug/l	99
81) trans-1,4-Dichloro-2-buten	12.64	75	389564	111.011	ug/l #	13
82) 4-Chlorotoluene	12.97	91	104806	2.452	ug/l #	56
84) 1,2,4-Trimethylbenzene	13.28	105	3030964	58.818	ug/l	99
85) sec-Butylbenzene	13.41	105	269391	4.358	ug/l #	70
86) p-Isopropyltoluene	13.53	119	217688	3.704	ug/l	99
89) n-Butylbenzene	13.85	91	185815	3.500	ug/l #	71

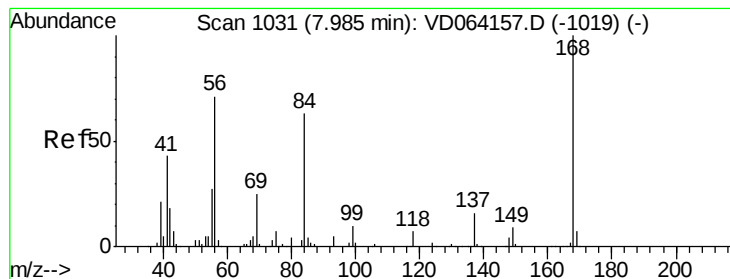
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Time: Nov 21 07:05:42 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_D\METHOD\82D110819S.M
Quant Title : SW846 8260
QLast Update : Tue Nov 12 02:43:24 2019
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.98 min Scan# 1031

Delta R.T. -0.00 min

Lab File: VD064319.D

Acq: 20 Nov 2019 18:09

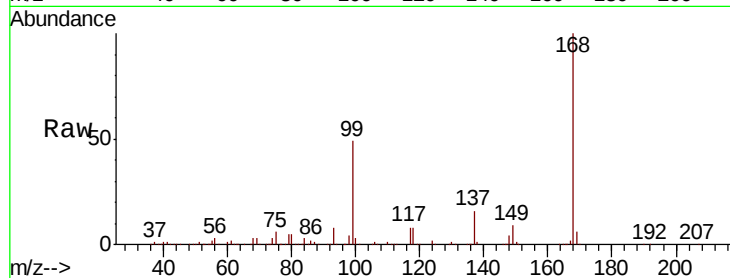
Instrument :
MSVOA_D
ClientSampleId :

Tot Ion:168 Resp: 1448891

Ion Ratio Lower Upper

168 100

99 48.9 41.6 62.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): V

7.98

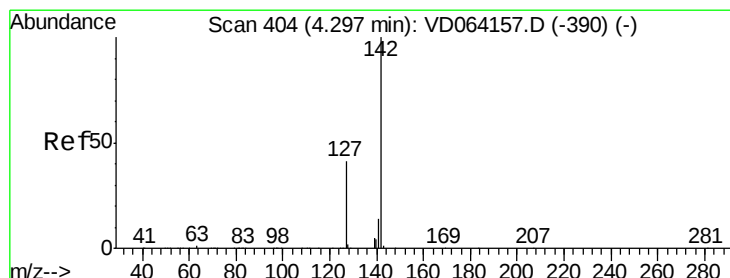
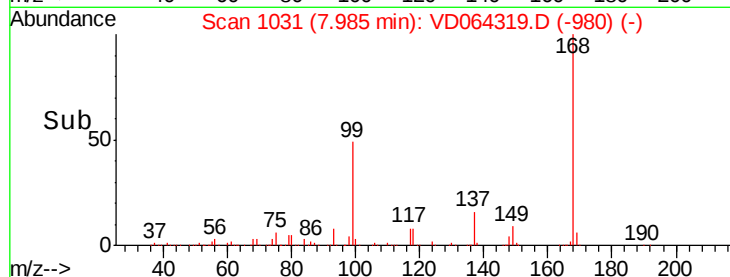
600000

400000

200000

0

Time-->



#10

Methyl Iodide

Concen: 2.049 ug/l

RT: 4.30 min Scan# 405

Delta R.T. 0.01 min

Lab File: VD064319.D

Acq: 20 Nov 2019 18:09

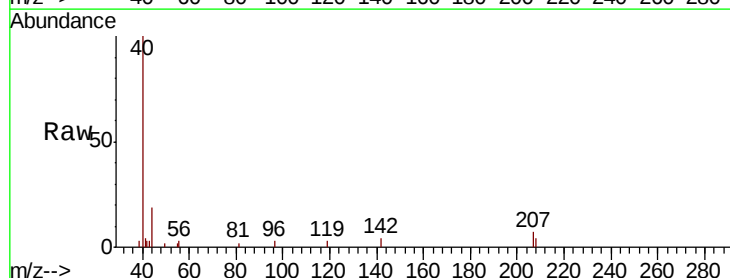
Tgt Ion:142 Resp: 275

Ion Ratio Lower Upper

142 100

127 0.0 34.4 51.6#

141 0.0 11.2 16.8#



Abundance Ion 141.80 (141.50 to 142.50): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.80 (140.50 to 141.50): V

4.30

400

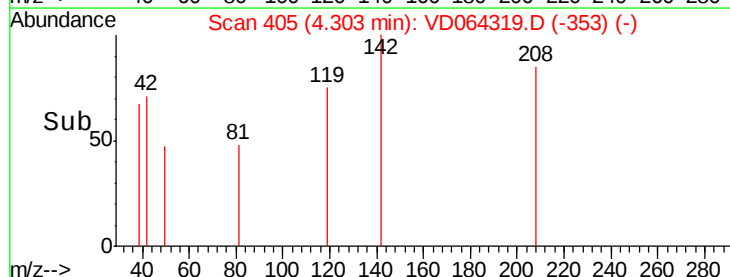
300

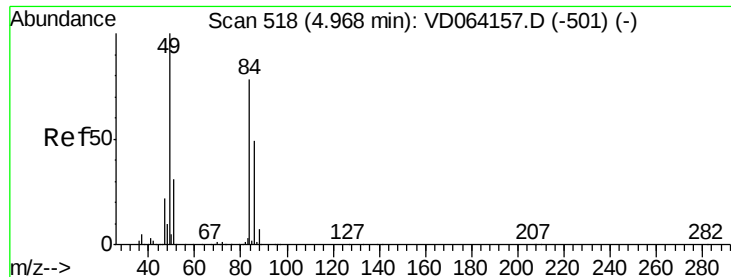
200

100

0

Time-->

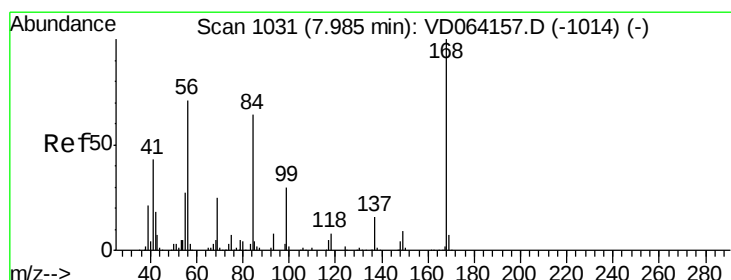
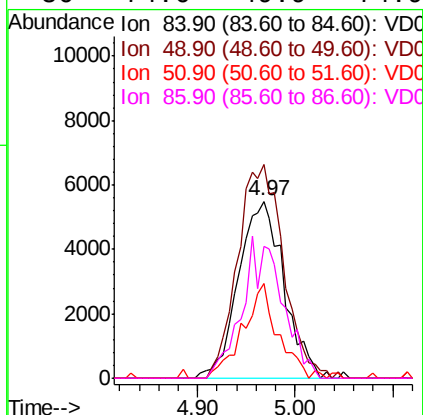
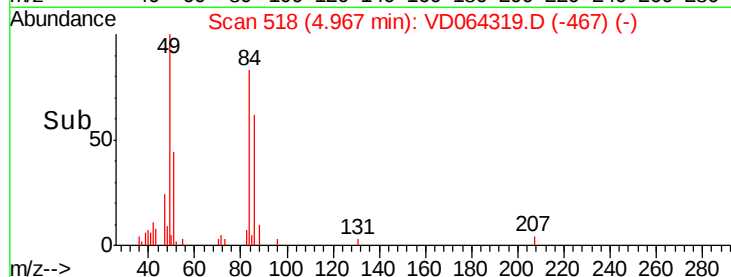
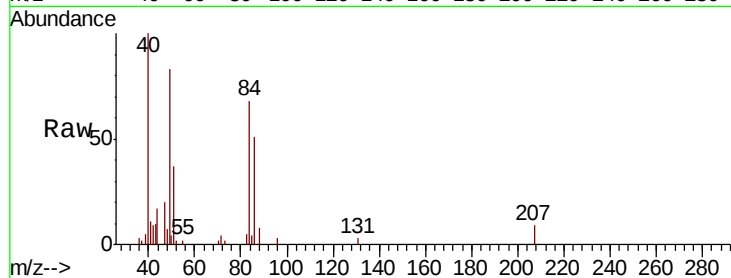




#20
Methvlene Chloride
Concen: 1.255 ug/l
RT: 4.97 min Scan# 518
Delta R.T. -0.00 min
Lab File: VD064319.D
Acq: 20 Nov 2019 18:09

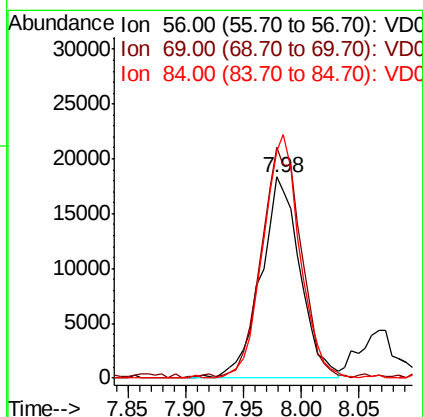
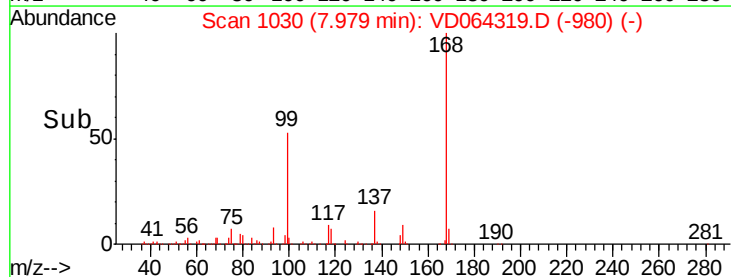
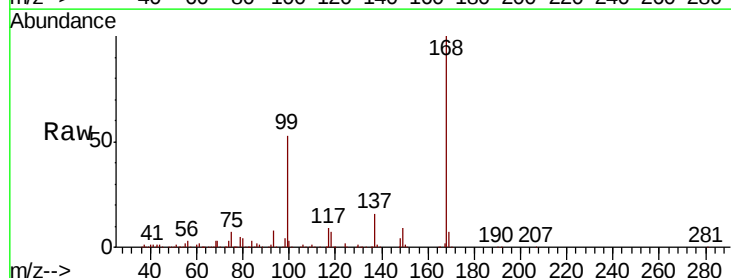
Instrument :
MSVOA_D
ClientSampleId :

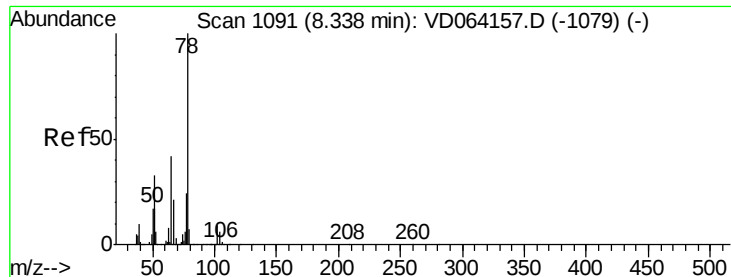
Tot Ion: 84 Resp: 17896
Ion Ratio Lower Upper
84 100
49 120.8 102.1 153.1
51 53.6 32.2 48.2#
86 74.6 49.9 74.9



#31
Cyclohexane
Concen: 1.854 ug/l
RT: 7.98 min Scan# 1030
Delta R.T. -0.01 min
Lab File: VD064319.D
Acq: 20 Nov 2019 18:09

Tgt Ion: 56 Resp: 43358
Ion Ratio Lower Upper
56 100
69 114.0 28.2 42.4#
84 112.9 71.8 107.6#

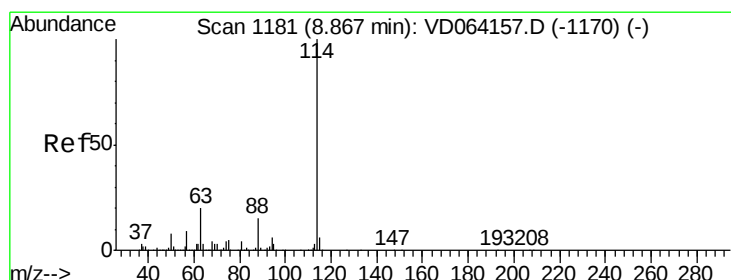
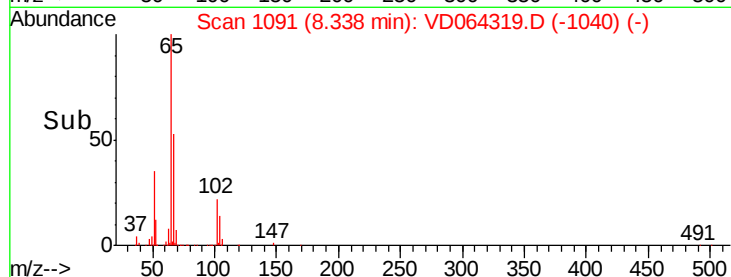
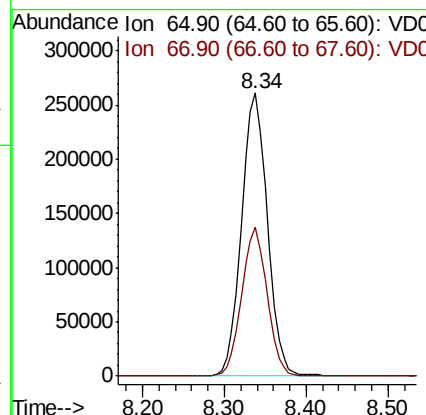
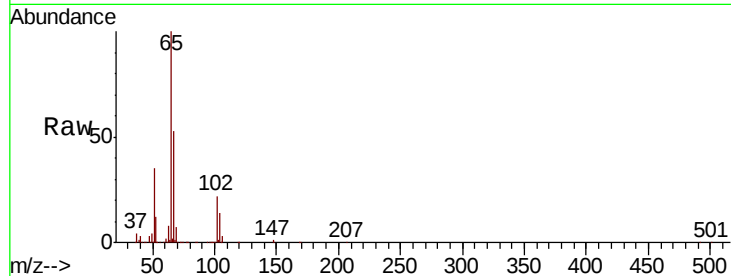




#33
 1,2-Dichloroethane-d4
 Concen: 48.356 ug/l
 RT: 8.34 min Scan# 1091
 Delta R.T. -0.00 min
 Lab File: VD064319.D
 Acq: 20 Nov 2019 18:09

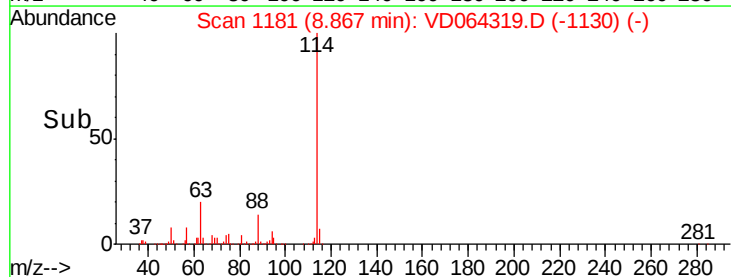
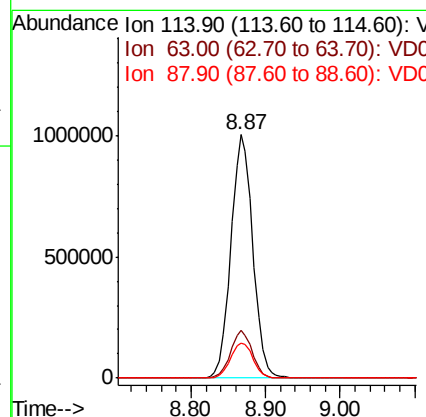
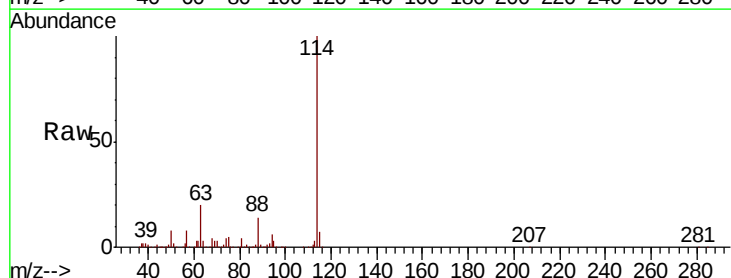
Instrument :
 MSVOA_D
 ClientSampleId :

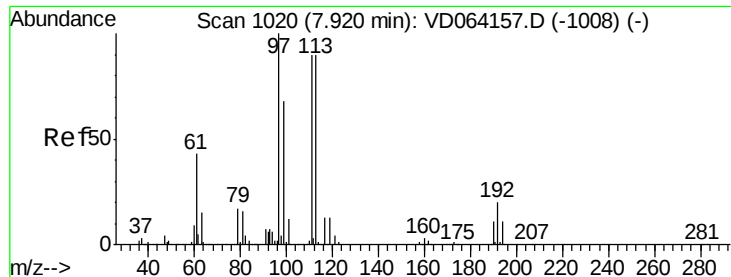
Tot Ion: 65 Resp: 576224
 Ion Ratio Lower Upper
 65 100
 67 51.8 0.0 104.4



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.87 min Scan# 1181
 Delta R.T. -0.00 min
 Lab File: VD064319.D
 Acq: 20 Nov 2019 18:09

Tgt Ion: 114 Resp: 2051336
 Ion Ratio Lower Upper
 114 100
 63 19.7 0.0 40.0
 88 14.5 0.0 30.2

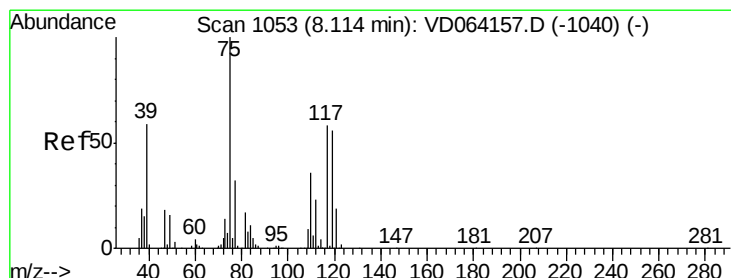
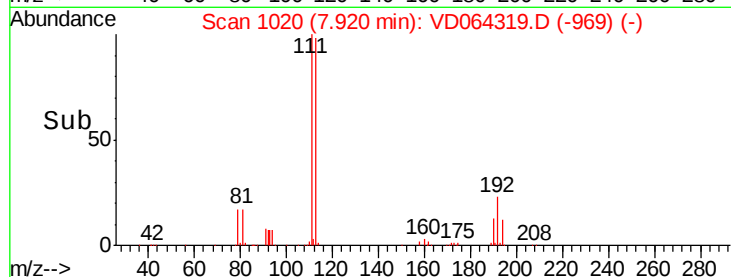
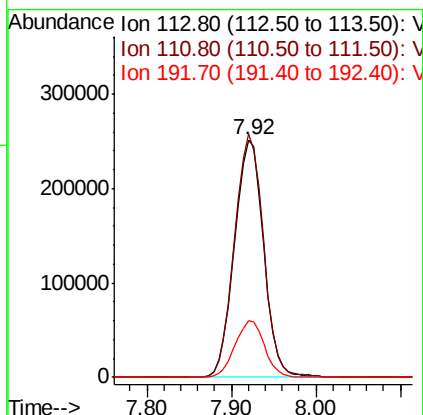
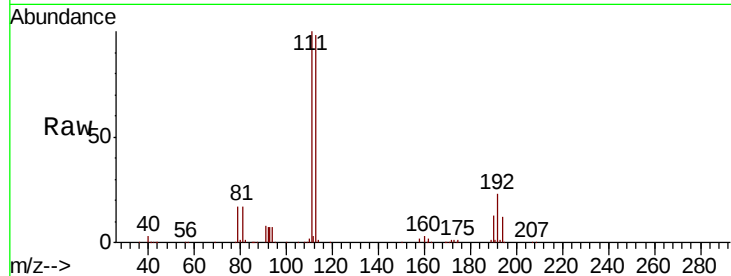




#35
 Dibromofluoromethane
 Concen: 50.912 ug/l
 RT: 7.92 min Scan# 1020
 Delta R.T. -0.00 min
 Lab File: VD064319.D
 Acq: 20 Nov 2019 18:09

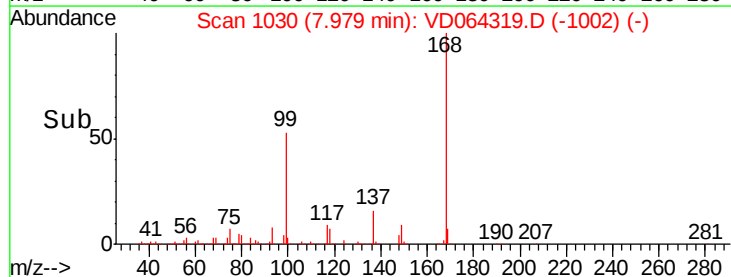
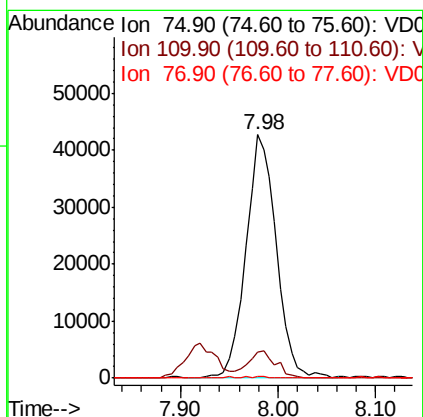
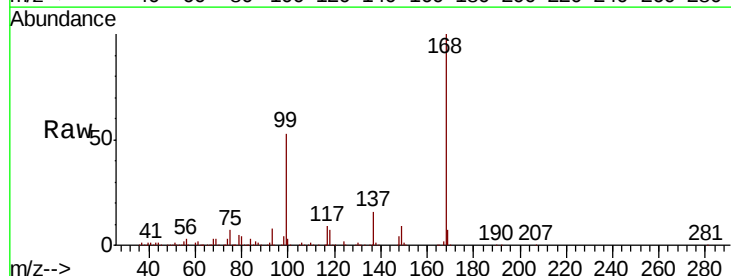
Instrument :
 MSVOA_D
 ClientSampleId :

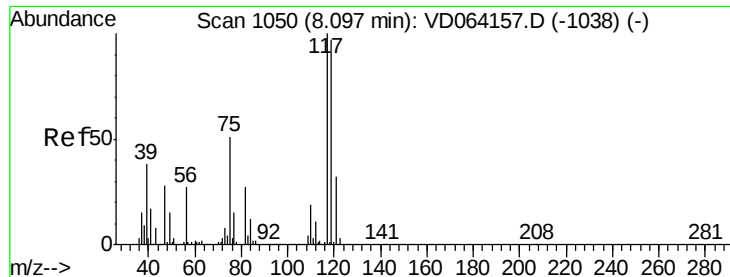
Tot Ion	Ratio	Lower	Upper
113	100		
111	102.2	81.5	122.3
192	24.1	18.8	28.2



#36
 1,1-Dichloropropene
 Concen: 4.938 ug/l
 RT: 7.98 min Scan# 1030
 Delta R.T. -0.14 min
 Lab File: VD064319.D
 Acq: 20 Nov 2019 18:09

Tgt Ion	Ratio	Lower	Upper
75	100		
110	10.2	18.3	54.9#
77	0.5	25.0	37.6#





#38

Carbon Tetrachloride

Concen: 6.322 ug/l

RT: 7.98 min Scan# 1031

Delta R.T. -0.11 min

Lab File: VD064319.D

Acq: 20 Nov 2019 18:09

Instrument :

MSVOA_D

ClientSampleId :

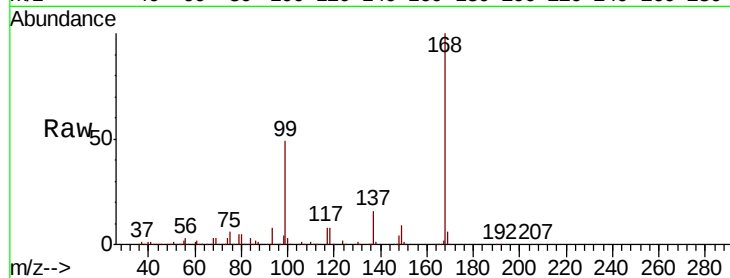
Tot Ion:117 Resp: 128069

Ion Ratio Lower Upper

117 100

119 5.2 77.2 115.8#

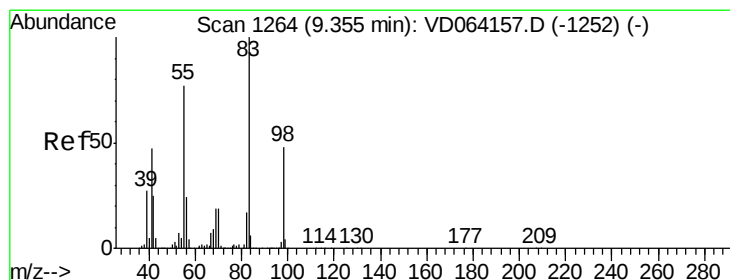
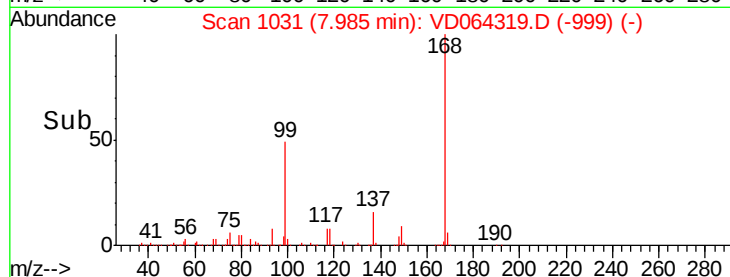
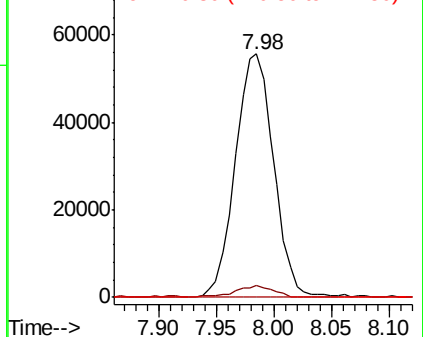
121 0.0 25.5 38.3#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#39

Methylcyclohexane

Concen: 4.976 ug/l

RT: 9.36 min Scan# 1264

Delta R.T. -0.00 min

Lab File: VD064319.D

Acq: 20 Nov 2019 18:09

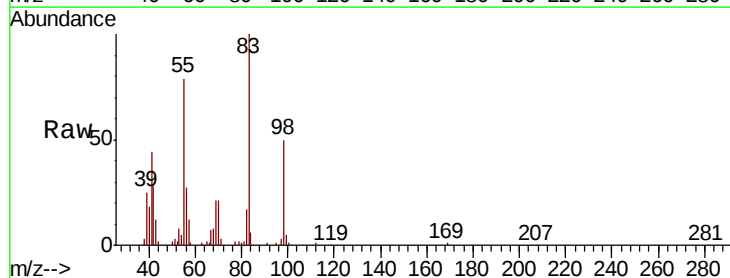
Tgt Ion: 83 Resp: 119213

Ion Ratio Lower Upper

83 100

55 78.8 61.7 92.5

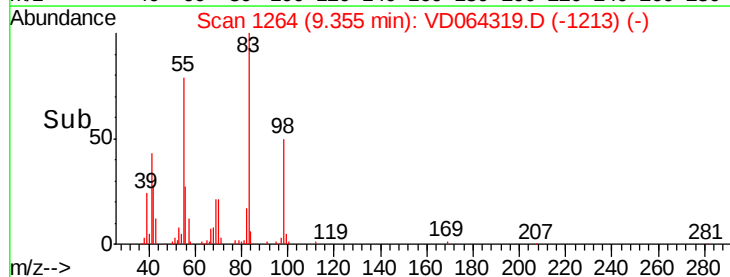
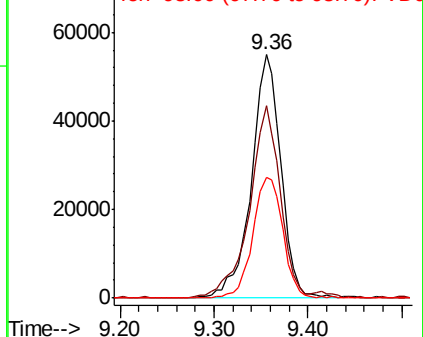
98 49.7 38.6 58.0

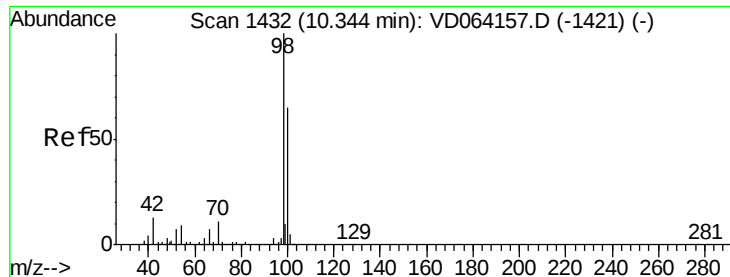


Abundance Ion 83.00 (82.70 to 83.70): VDC

Ion 55.00 (54.70 to 55.70): VDC

Ion 98.00 (97.70 to 98.70): VDC





#50

Toluene-d8

Concen: 53.418 ug/l

RT: 10.34 min Scan# 1432

Delta R.T. -0.00 min

Lab File: VD064319.D

Acq: 20 Nov 2019 18:09

Instrument :

MSVOA_D

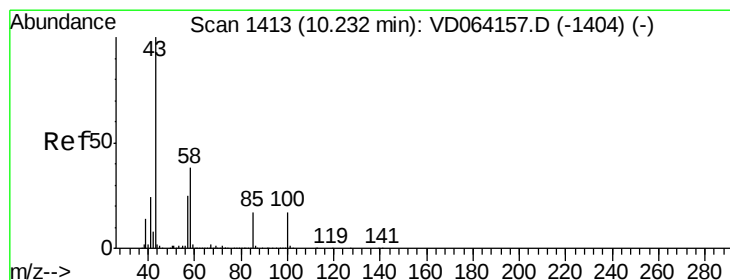
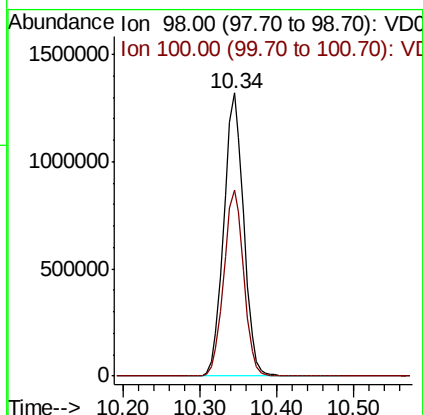
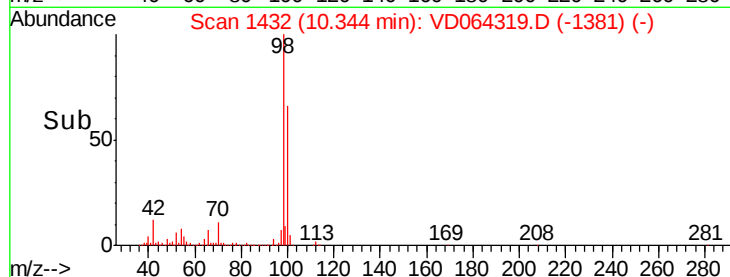
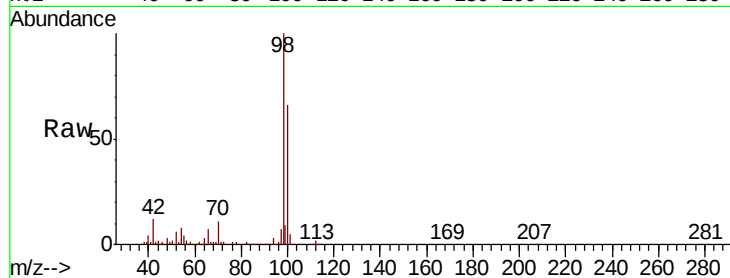
ClientSampleId :

Tot Ion: 98 Resp: 2372836

Ion Ratio Lower Upper

98 100

100 65.9 52.6 78.8



#51

4-Methyl-2-Pentanone

Concen: 2.917 ug/l

RT: 10.34 min Scan# 1431

Delta R.T. 0.11 min

Lab File: VD064319.D

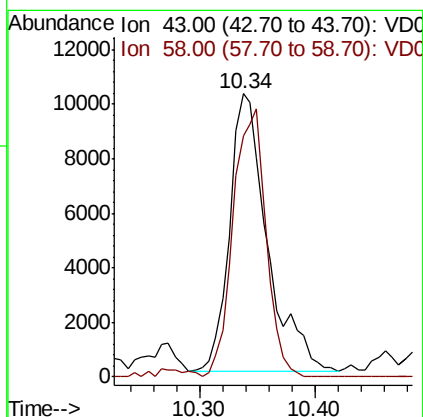
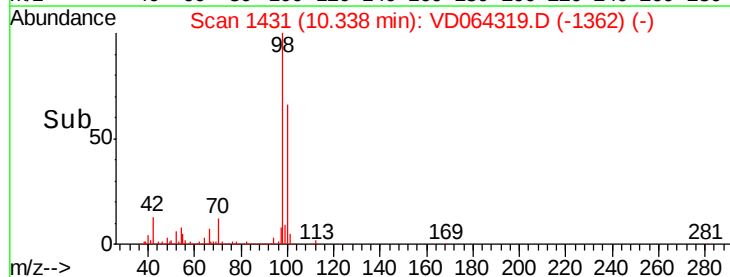
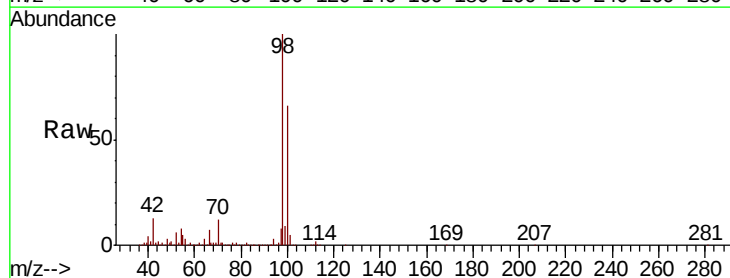
Acq: 20 Nov 2019 18:09

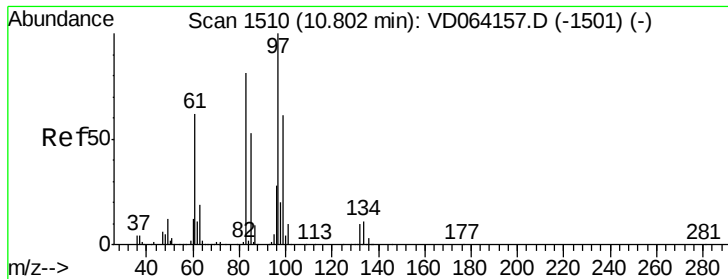
Tgt Ion: 43 Resp: 23003

Ion Ratio Lower Upper

43 100

58 83.9 30.2 45.4#

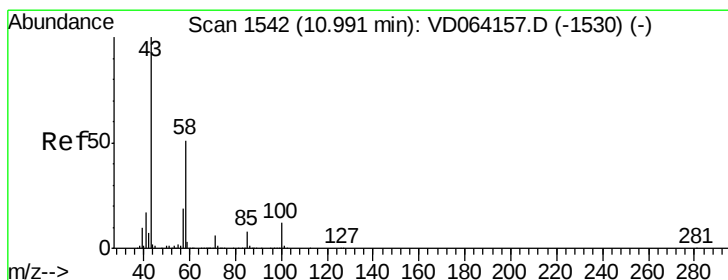
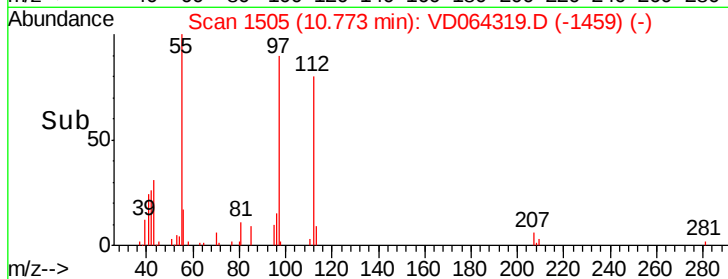
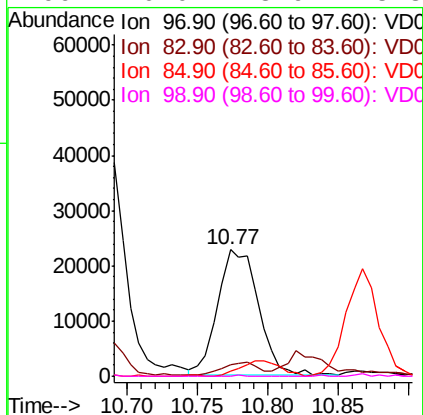
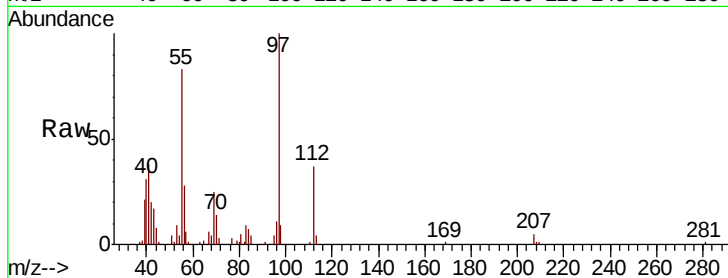




#55
 1,1,2-Trichloroethane
 Concen: 5.024 ug/l
 RT: 10.77 min Scan# 1505
 Delta R.T. -0.03 min
 Lab File: VD064319.D
 Acq: 20 Nov 2019 18:09

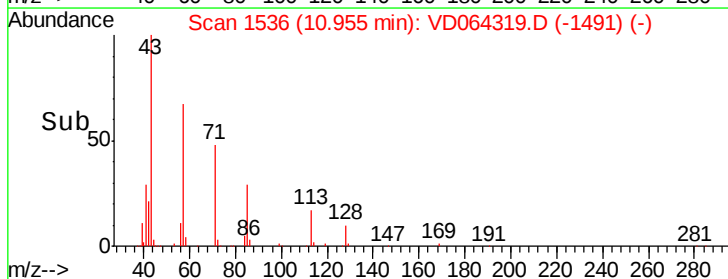
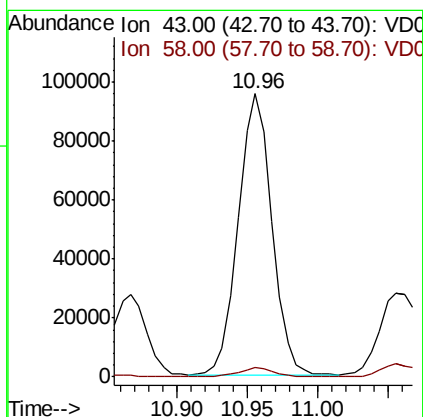
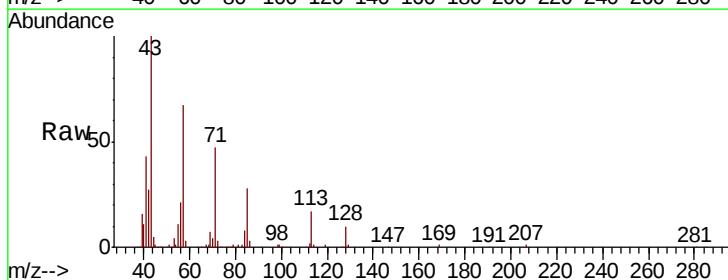
Instrument :
 MSVOA_D
 ClientSampled :

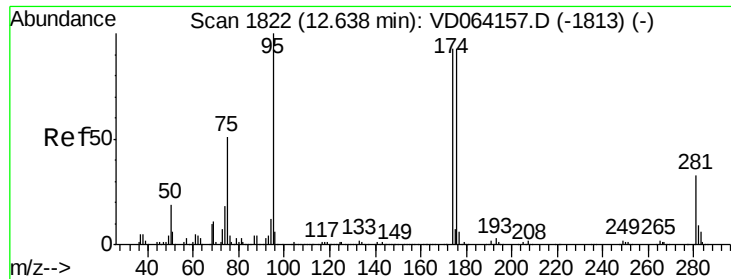
Tot Ion: 97 Resp: 45951
 Ion Ratio Lower Upper
 97 100
 83 8.0 65.1 97.7#
 85 2.9 42.0 63.0#
 99 0.0 48.9 73.3#



#59
 2-Hexanone
 Concen: 28.595 ug/l
 RT: 10.96 min Scan# 1536
 Delta R.T. -0.04 min
 Lab File: VD064319.D
 Acq: 20 Nov 2019 18:09

Tgt Ion: 43 Resp: 160428
 Ion Ratio Lower Upper
 43 100
 58 3.4 25.9 77.7#





#62

4-Bromofluorobenzene

Concen: 53.997 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. -0.00 min

Lab File: VD064319.D

Acq: 20 Nov 2019 18:09

Instrument :

MSVOA_D

ClientSampleId :

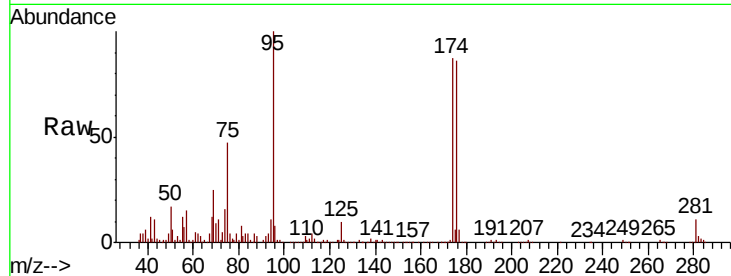
Tot Ion: 95 Resp: 830637

Ion Ratio Lower Upper

95 100

174 87.7 0.0 183.6

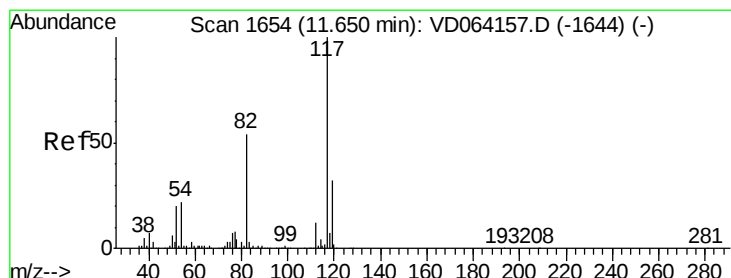
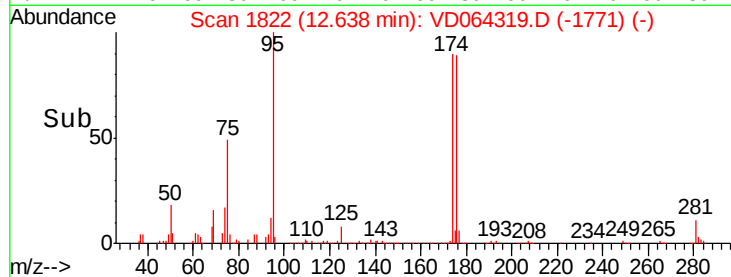
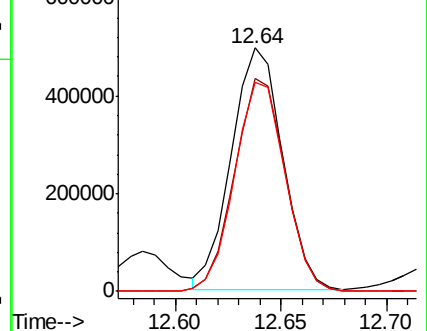
176 86.1 0.0 180.2



Abundance Ion 94.90 (94.60 to 95.60): V

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.65 min Scan# 1654

Delta R.T. -0.00 min

Lab File: VD064319.D

Acq: 20 Nov 2019 18:09

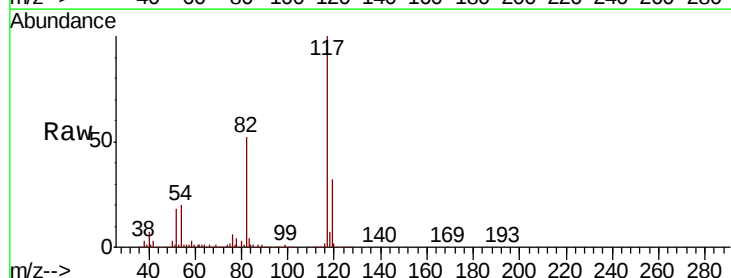
Tgt Ion: 117 Resp: 1762619

Ion Ratio Lower Upper

117 100

82 51.4 42.8 64.2

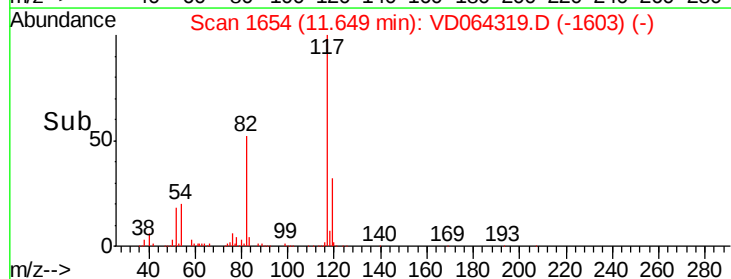
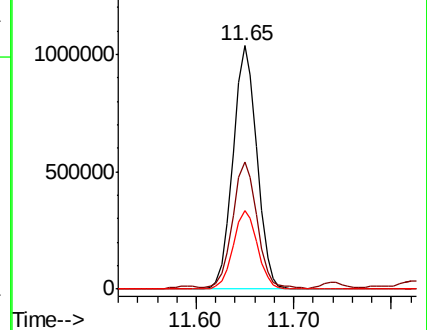
119 31.9 25.6 38.4

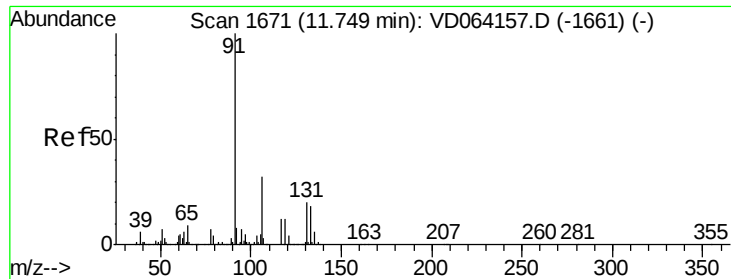


Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): V

Ion 118.90 (118.60 to 119.60): V

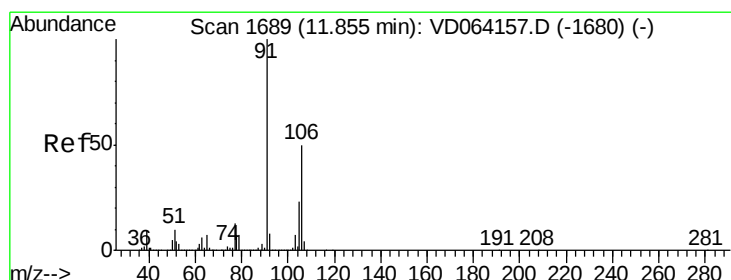
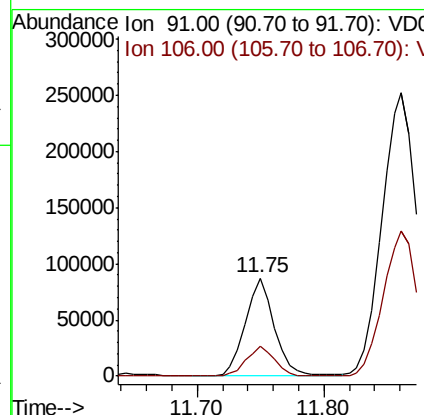
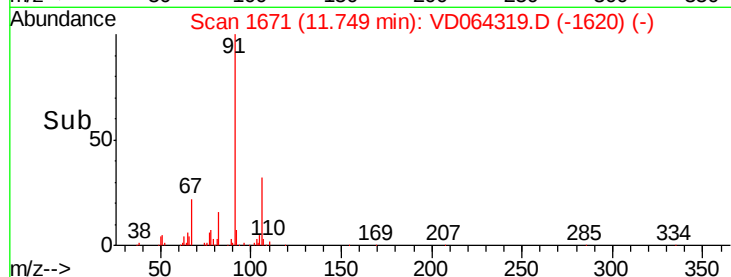
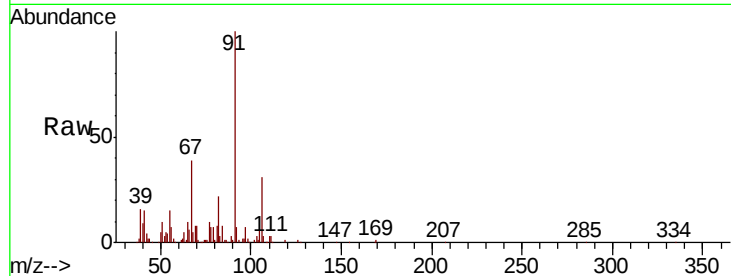




#67
Ethyl Benzene
Concen: 2.105 ug/l
RT: 11.75 min Scan# 1671
Delta R.T. -0.00 min
Lab File: VD064319.D
Acq: 20 Nov 2019 18:09

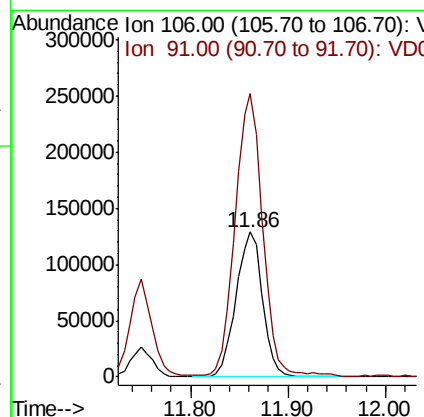
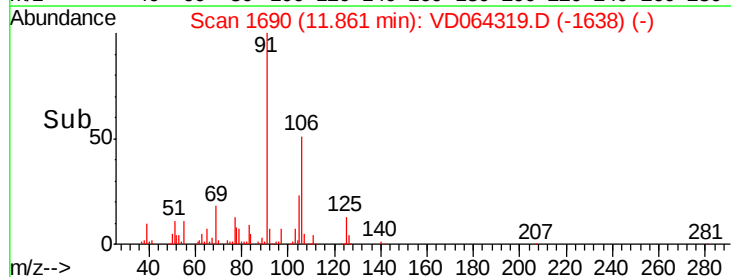
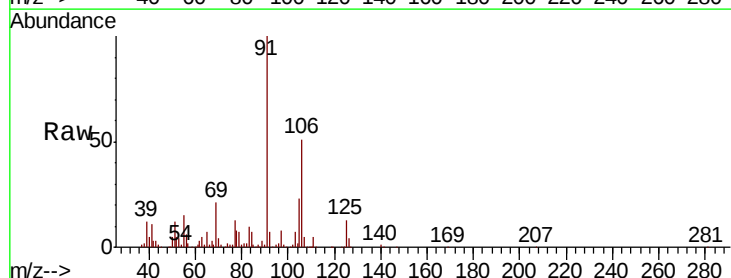
Instrument :
MSVOA_D
ClientSampled :

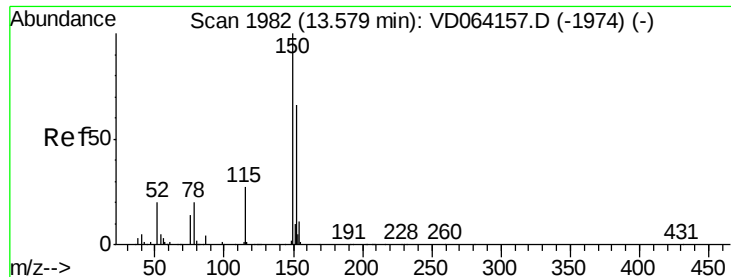
Tot Ion: 91 Resp: 136502
Ion Ratio Lower Upper
91 100
106 31.2 25.5 38.3



#68
m/p-Xylenes
Concen: 9.791 ug/l
RT: 11.86 min Scan# 1690
Delta R.T. 0.01 min
Lab File: VD064319.D
Acq: 20 Nov 2019 18:09

Tgt Ion: 106 Resp: 243316
Ion Ratio Lower Upper
106 100
91 199.6 160.3 240.5



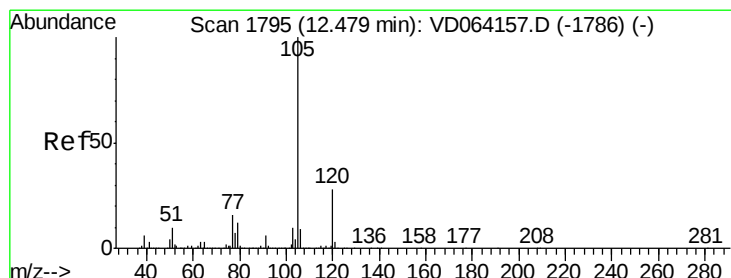
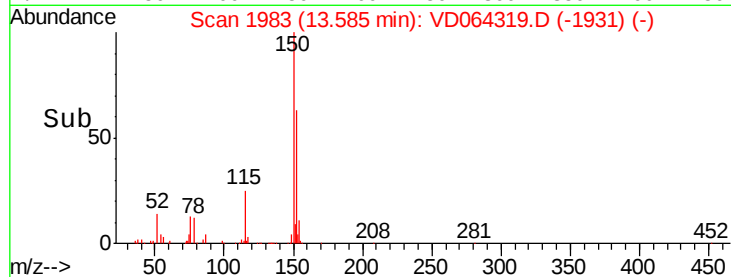
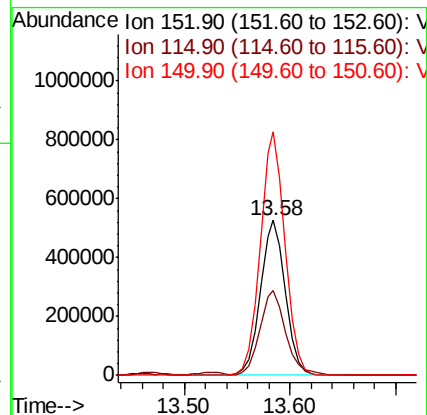
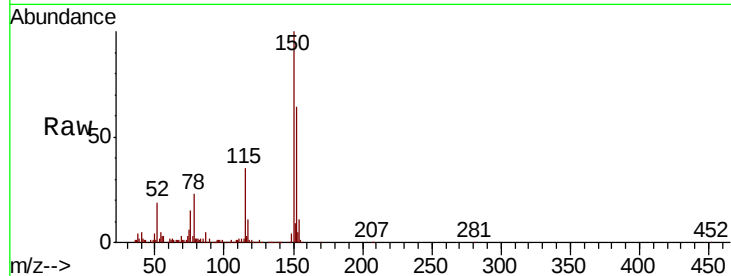


#72

1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.58 min Scan# 1983
Delta R.T. 0.01 min
Lab File: VD064319.D
Acq: 20 Nov 2019 18:09

Instrument :
MSVOA_D
ClientSampleId :

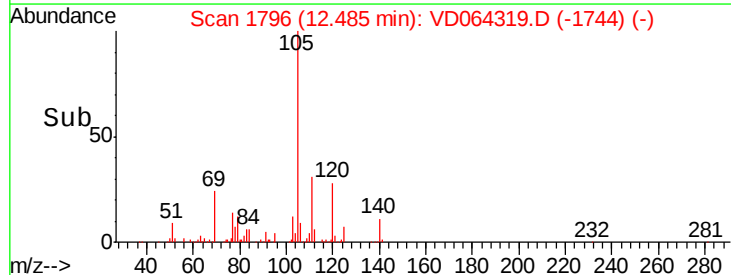
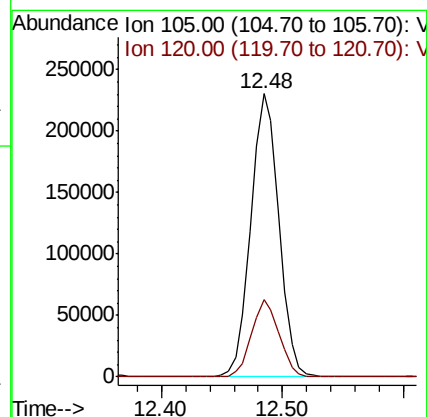
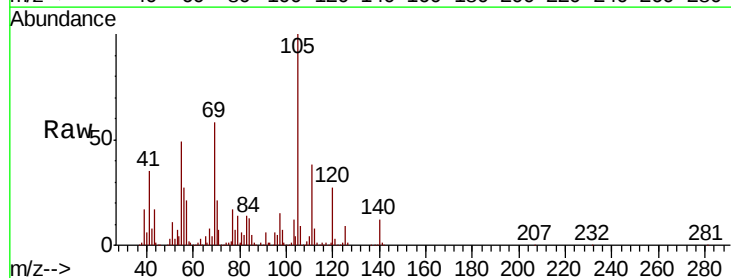
Tot Ion:152 Resp: 865423
Ion Ratio Lower Upper
152 100
115 56.9 27.4 82.2
150 155.0 0.0 351.6

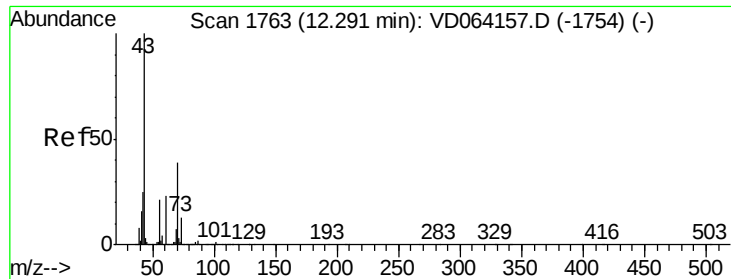


#73

Isopropylbenzene
Concen: 5.880 ug/l
RT: 12.48 min Scan# 1796
Delta R.T. 0.01 min
Lab File: VD064319.D
Acq: 20 Nov 2019 18:09

Tgt Ion:105 Resp: 373536
Ion Ratio Lower Upper
105 100
120 27.0 13.6 40.8





#74

N-amvl acetate

Concen: 55.247 ug/l

RT: 12.27 min Scan# 1760

Delta R.T. -0.02 min

Lab File: VD064319.D

Acq: 20 Nov 2019 18:09

Instrument :

MSVOA_D

ClientSampleId :

Tot Ion: 43 Resp: 828728

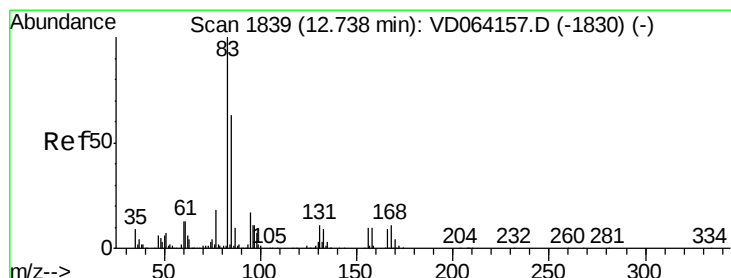
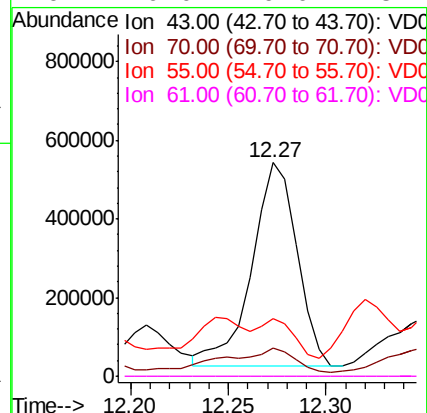
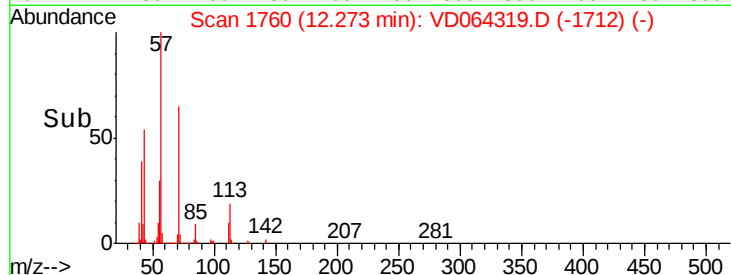
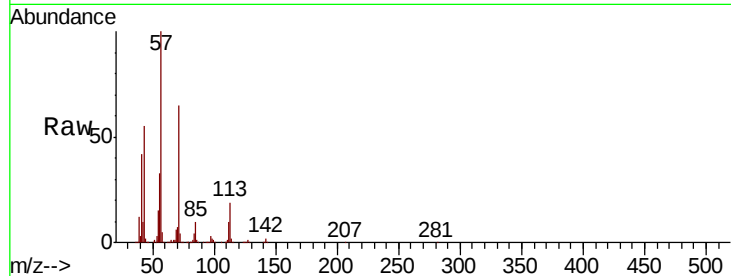
Ion Ratio Lower Upper

43 100

70 17.8 32.4 48.6#

55 0.0 17.9 26.9#

61 0.0 19.0 28.4#



#75

1,1,2,2-Tetrachloroethane

Concen: 5.434 ug/l

RT: 12.72 min Scan# 1836

Delta R.T. -0.02 min

Lab File: VD064319.D

Acq: 20 Nov 2019 18:09

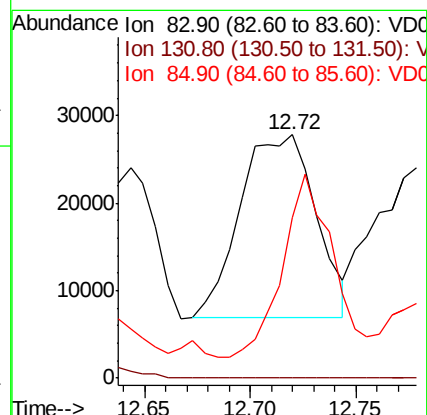
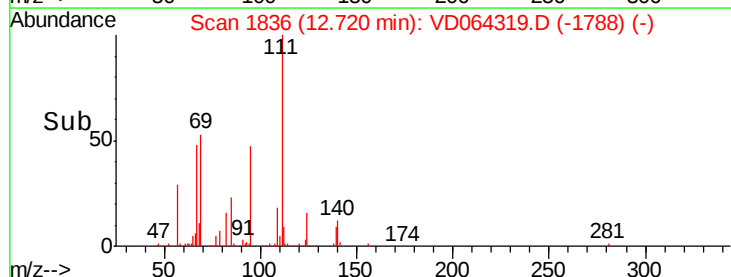
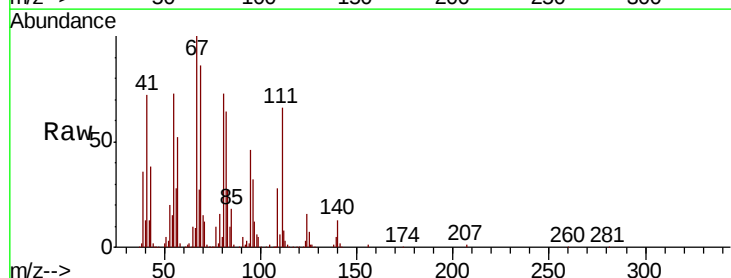
Tgt Ion: 83 Resp: 52013

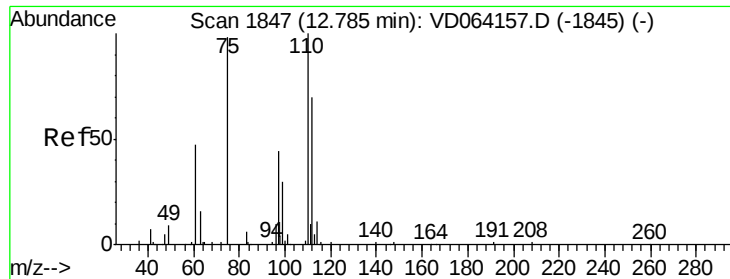
Ion Ratio Lower Upper

83 100

131 0.0 5.9 17.7#

85 66.0 32.5 97.5





#76

1,2,3-Trichloropropane

Concen: 55.886 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. -0.15 min

Lab File: VD064319.D

Acq: 20 Nov 2019 18:09

Instrument :

MSVOA_D

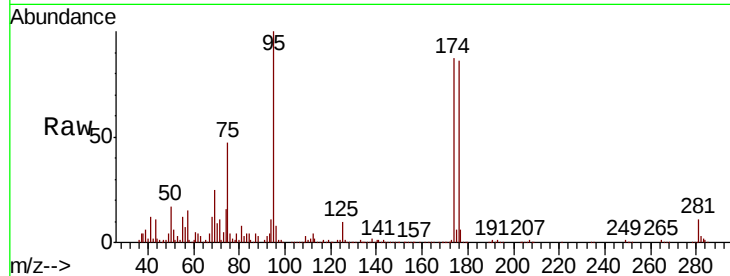
ClientSampled :

Tot Ion: 75 Resp: 389564

Ion Ratio Lower Upper

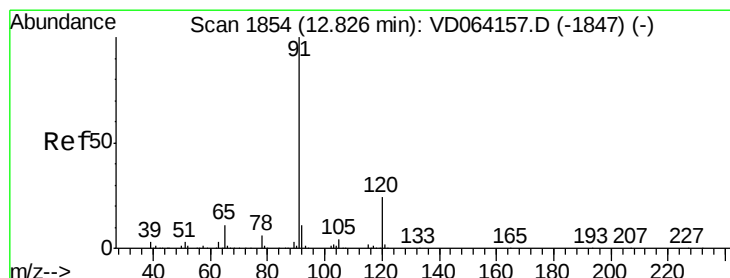
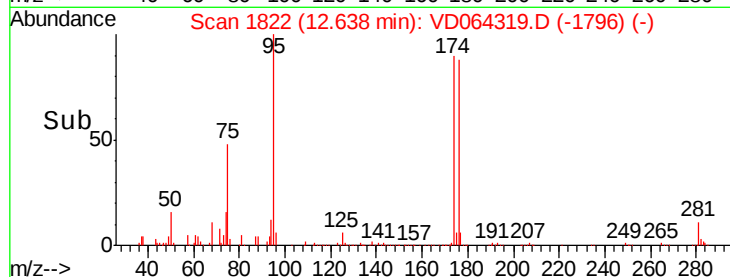
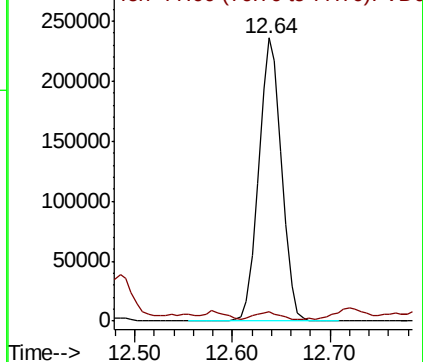
75 100

77 3.0 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VDC

Ion 77.00 (76.70 to 77.70): VDC



#78

n-propylbenzene

Concen: 11.564 ug/l

RT: 12.83 min Scan# 1854

Delta R.T. -0.00 min

Lab File: VD064319.D

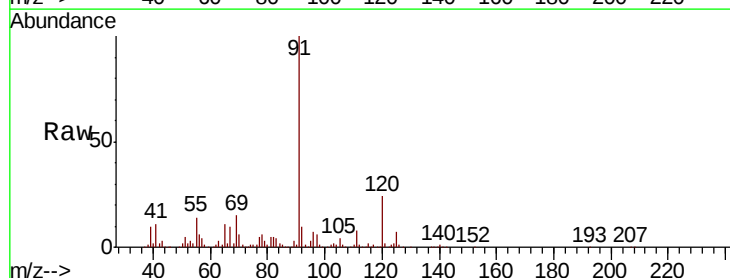
Acq: 20 Nov 2019 18:09

Tgt Ion: 91 Resp: 839224

Ion Ratio Lower Upper

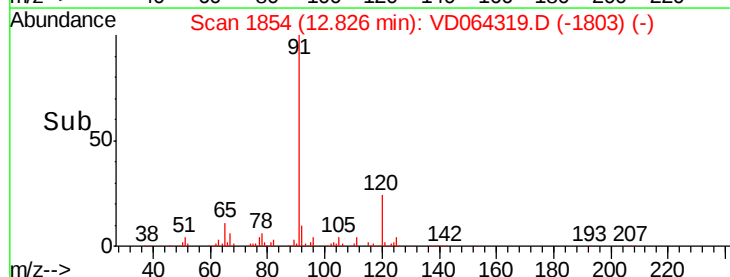
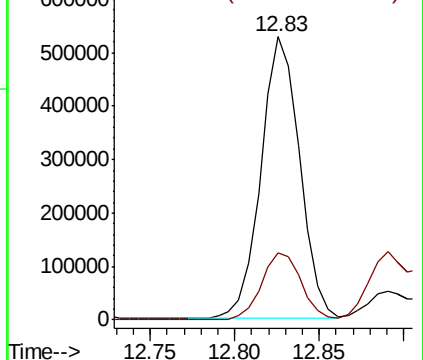
91 100

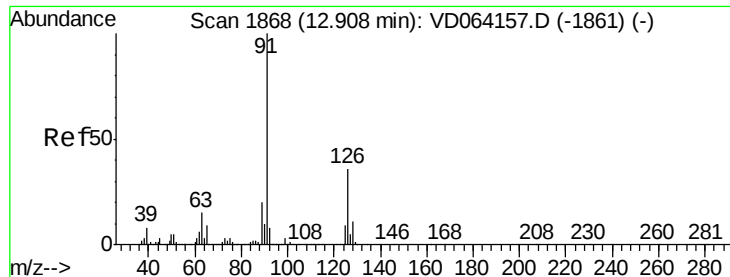
120 24.1 11.8 35.4



Abundance Ion 91.00 (90.70 to 91.70): VDC

Ion 120.00 (119.70 to 120.70): VDC

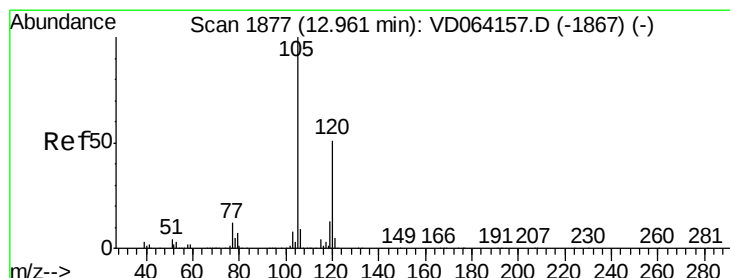
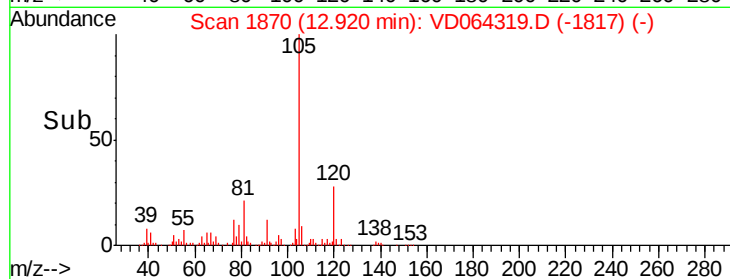
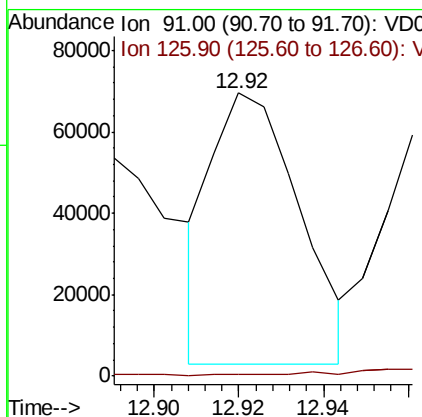
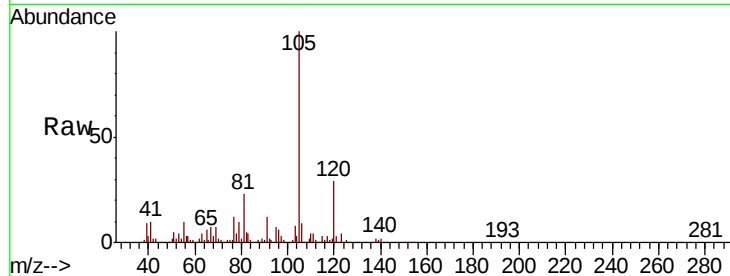




#79
 2-Chlorotoluene
 Concen: 2.345 ug/l
 RT: 12.92 min Scan# 1870
 Delta R.T. 0.01 min
 Lab File: VD064319.D
 Acq: 20 Nov 2019 18:09

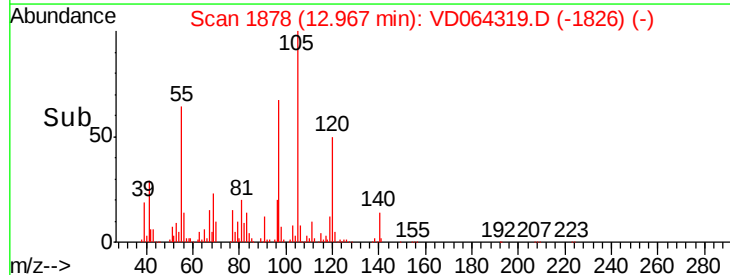
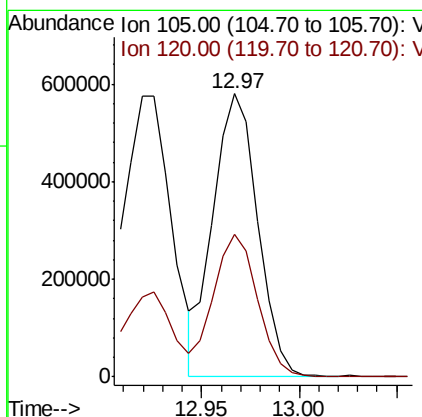
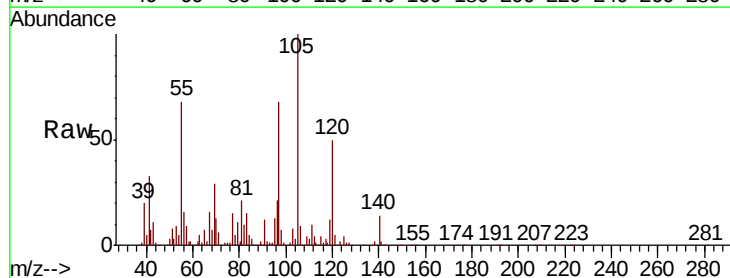
Instrument :
 MSVOA_D
 ClientSampled :

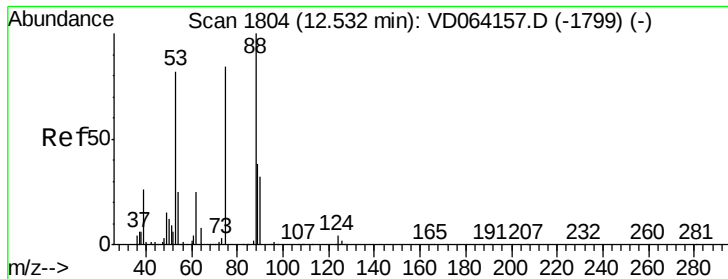
Tot Ion: 91 Resp: 96076
 Ion Ratio Lower Upper
 91 100
 126 0.0 17.7 53.1#



#80
 1,3,5-Trimethylbenzene
 Concen: 17.518 ug/l
 RT: 12.97 min Scan# 1878
 Delta R.T. 0.01 min
 Lab File: VD064319.D
 Acq: 20 Nov 2019 18:09

Tgt Ion: 105 Resp: 914359
 Ion Ratio Lower Upper
 105 100
 120 49.9 25.4 76.4





#81

trans-1,4-Dichloro-2-butene

Concen: 111.011 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. 0.11 min

Lab File: VD064319.D

Acq: 20 Nov 2019 18:09

Instrument :

MSVOA_D

ClientSampleId :

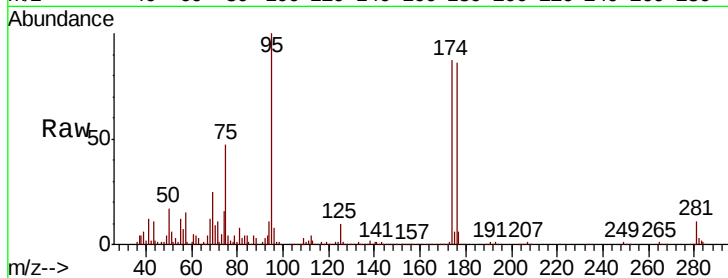
Tot Ion: 75 Resp: 389564

Ion Ratio Lower Upper

75 100

53 5.1 79.4 119.0#

89 0.1 36.6 55.0#



Abundance Ion 74.90 (74.60 to 75.60): VDC

Ion 53.00 (52.70 to 53.70): VDC

Ion 88.90 (88.60 to 89.60): VDC

300000

250000

200000

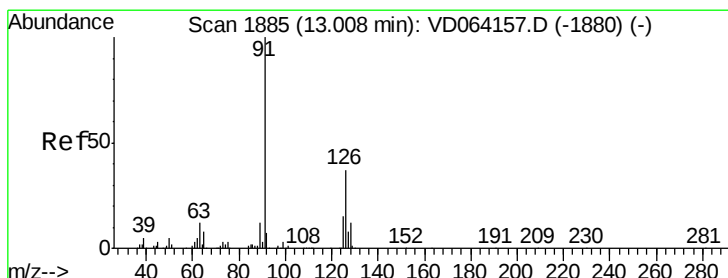
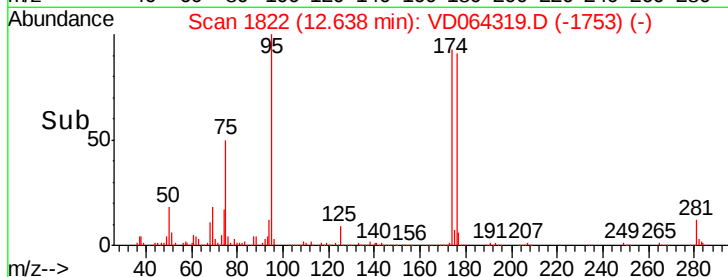
150000

100000

50000

0

Time--> 12.50 12.60 12.70



#82

4-Chlorotoluene

Concen: 2.452 ug/l

RT: 12.97 min Scan# 1878

Delta R.T. -0.04 min

Lab File: VD064319.D

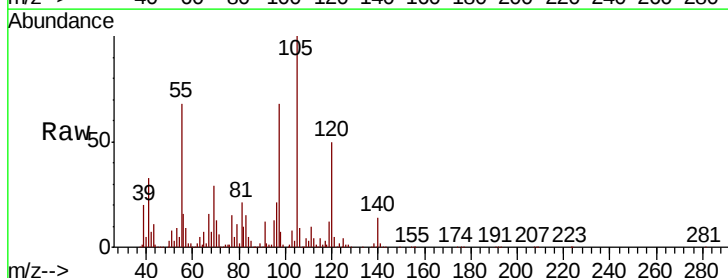
Acq: 20 Nov 2019 18:09

Tgt Ion: 91 Resp: 104806

Ion Ratio Lower Upper

91 100

126 9.7 17.8 53.4#



Abundance Ion 91.00 (90.70 to 91.70): VDC

Ion 125.90 (125.60 to 126.60): V

80000

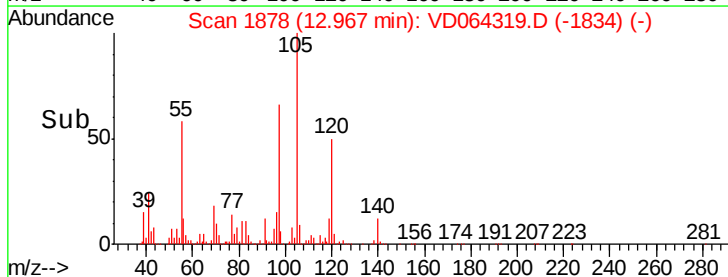
60000

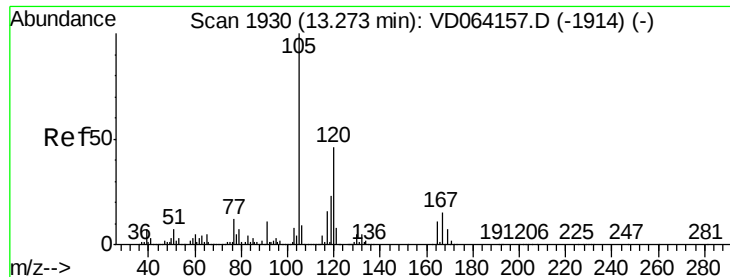
40000

20000

0

Time--> 12.95 13.00





#84

1,2,4-Trimethylbenzene

Concen: 58.818 ug/l

RT: 13.28 min Scan# 1931

Delta R.T. 0.01 min

Lab File: VD064319.D

Acq: 20 Nov 2019 18:09

Instrument :

MSVOA_D

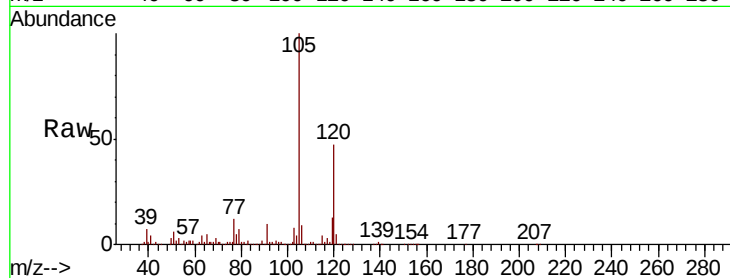
ClientSampleId :

Tot Ion:105 Resp: 3030964

Ion Ratio Lower Upper

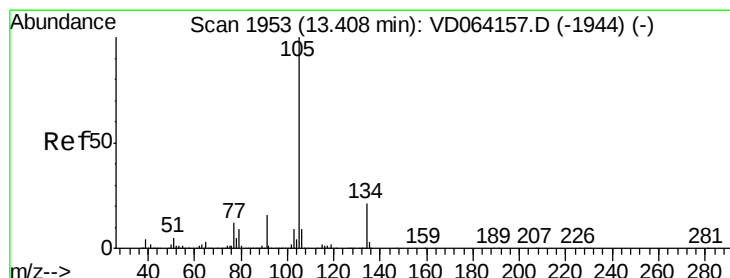
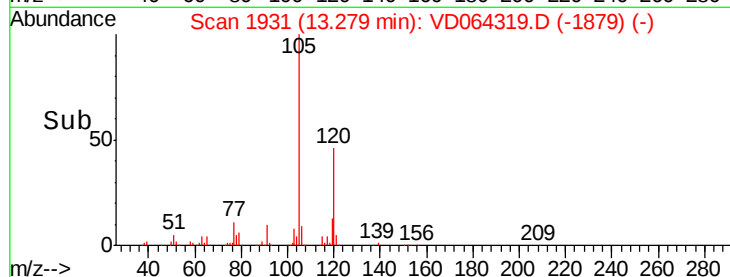
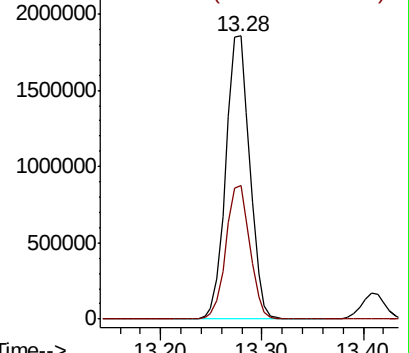
105 100

120 47.4 23.3 69.8



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#85

sec-Butylbenzene

Concen: 4.358 ug/l

RT: 13.41 min Scan# 1953

Delta R.T. -0.00 min

Lab File: VD064319.D

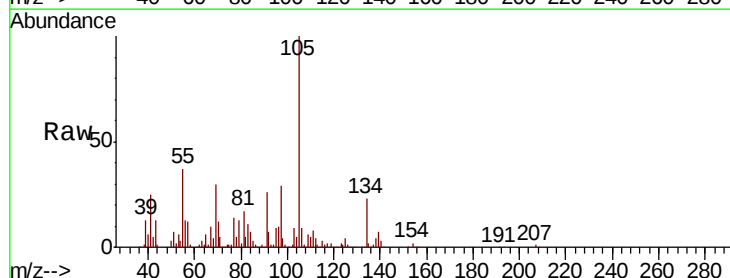
Acq: 20 Nov 2019 18:09

Tgt Ion:105 Resp: 269391

Ion Ratio Lower Upper

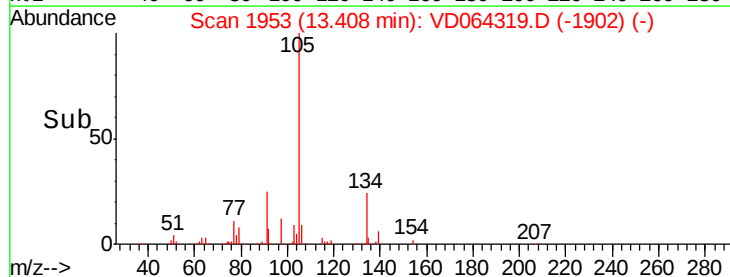
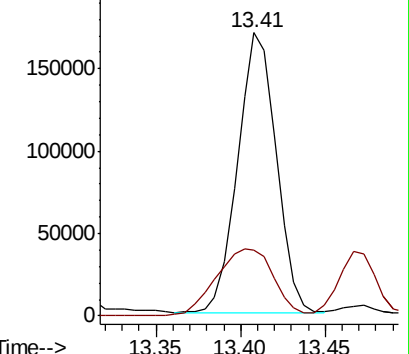
105 100

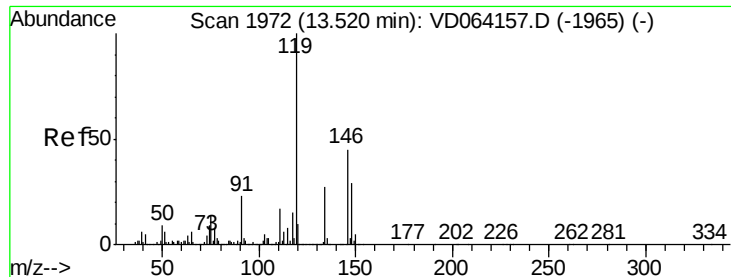
134 35.3 10.7 31.9#



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 134.00 (133.70 to 134.70): V

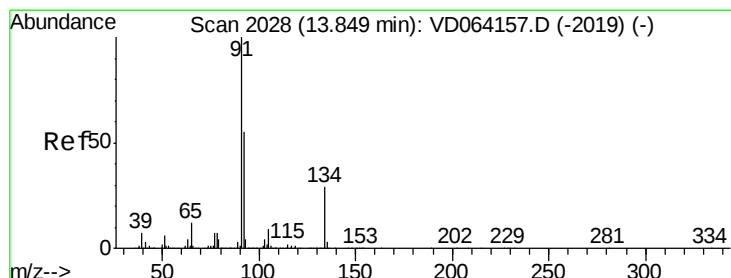
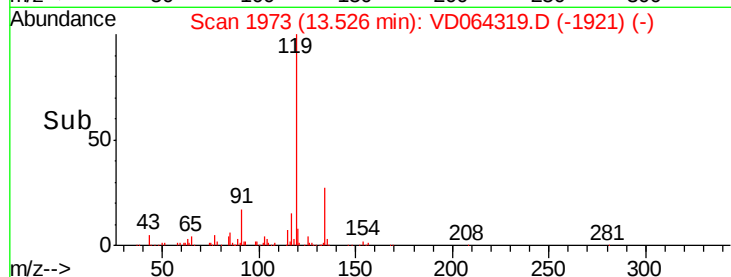
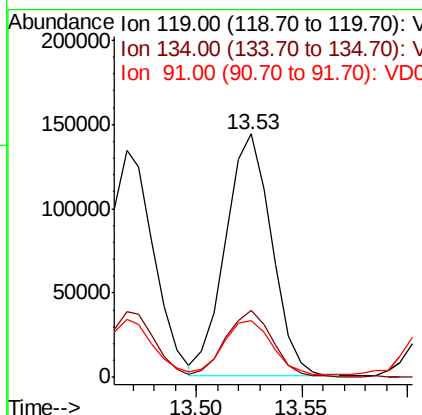
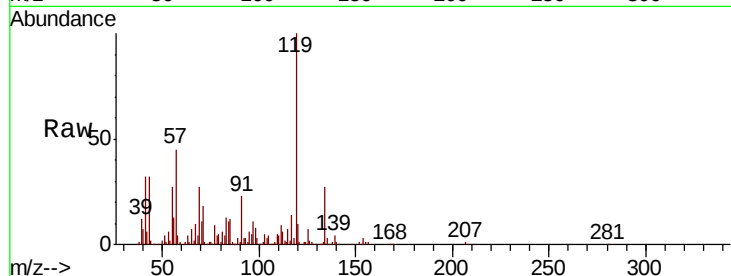




#86
 p-Isopropyltoluene
 Concen: 3.704 ug/l
 RT: 13.53 min Scan# 1973
 Delta R.T. 0.01 min
 Lab File: VD064319.D
 Acq: 20 Nov 2019 18:09

Instrument :
 MSVOA_D
 ClientSampleId :

Tot Ion	Ratio	Lower	Upper
119	100		
134	27.5	13.5	40.5
91	23.3	11.5	34.4



#89
 n-Butylbenzene
 Concen: 3.500 ug/l
 RT: 13.85 min Scan# 2028
 Delta R.T. -0.00 min
 Lab File: VD064319.D
 Acq: 20 Nov 2019 18:09

Tgt Ion	Ratio	Lower	Upper
91	100		
92	43.2	27.3	81.8
134	0.0	14.1	42.4

