

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD052219\
 Data File : VD062506.D
 Acq On : 22 May 2019 16:48
 Operator : VA/AP
 Sample : K2996-05
 Misc : 5.42g/5ml/MSVOA D/SOIL
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :
 P-3(4.5-5.0)

Manual Integrations
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 5/23/2019 11:21:28 AM

Quant Time: May 23 04:11:51 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D052019S.M
 Quant Title : SW846 8260
 QLast Update : Tue May 21 03:32:39 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.11	168	165052m	50.00	ug/l	0.05
34) 1,4-Difluorobenzene	8.30	114	187891m	50.00	ug/l	0.06
63) Chlorobenzene-d5	12.48	117	149475	50.00	ug/l	0.10
72) 1,4-Dichlorobenzene-d4	14.52	152	4454	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	7.52	65	27992m	15.84	ug/l	0.05
Spiked Amount			Recovery	=	31.68%	
35) Dibromofluoromethane	6.99	113	154666m	91.25	ug/l	0.04
Spiked Amount			Recovery	=	182.50%	
50) Toluene-d8	10.67	98	475401m	128.16	ug/l	0.24
Spiked Amount			Recovery	=	256.32%	
62) 4-Bromofluorobenzene	13.58	95	161083m	99.27	ug/l	0.01
Spiked Amount			Recovery	=	198.54%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chloromethane	1.82	50	190764	166.839	ug/l #	69
17) Carbon Disulfide	3.35	76	45314m	12.241	ug/l	
31) Cyclohexane	7.12	56	10396613m	6232.290	ug/l	
39) Methylcyclohexane	9.13	83	32174920m	21715.688	ug/l	
40) Benzene	7.63	78	36106472m	10247.043	ug/l	
52) Toluene	10.80	92	54886806m	22753.830	ug/l	
67) Ethyl Benzene	12.68	91	75819904m	15313.784	ug/l	
68) m/p-Xylenes	12.83	106	43445620m	24445.465	ug/l	
69) o-Xylene	13.16	106	15833490	9442.231	ug/l	58
73) Isopropylbenzene	13.44	105	10410868	37082.017	ug/l	95
78) n-propylbenzene	13.80	91	11953313	36756.242	ug/l	99
80) 1,3,5-Trimethylbenzene	13.96	105	8828869	36319.424	ug/l	91
83) tert-Butylbenzene	14.20	119	59082m	219.111	ug/l	
84) 1,2,4-Trimethylbenzene	14.27	105	15985091	64174.497	ug/l	79
85) sec-Butylbenzene	14.38	105	722625	2570.142	ug/l	98
86) p-Isopropyltoluene	14.50	119	215776	846.858	ug/l	88
89) n-Butylbenzene	14.80	91	358441m	1457.672	ug/l	
95) Naphthalene	16.12	128	189007	1468.915	ug/l	99

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

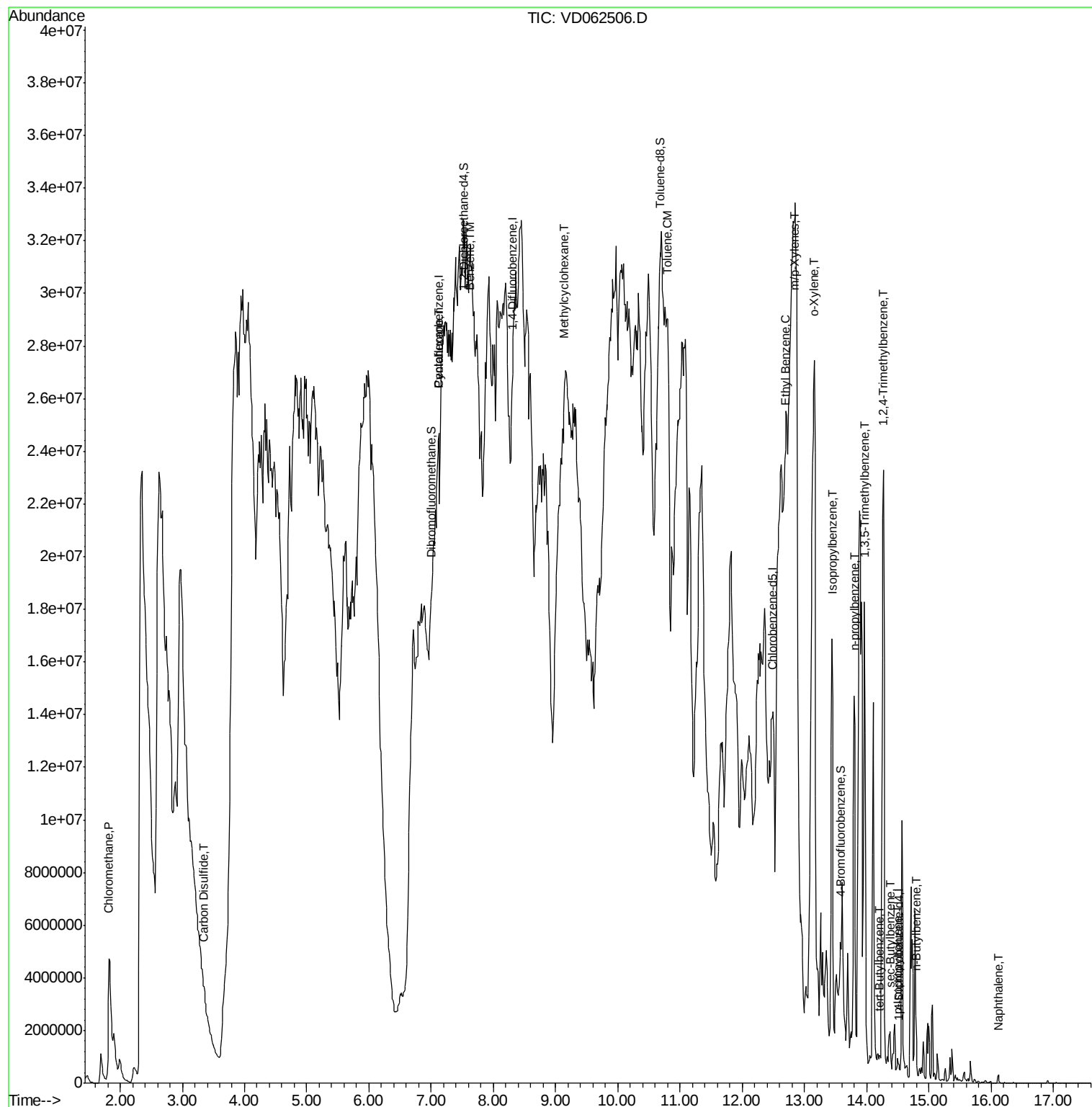
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD052219\
Data File : VD062506.D
Acq On : 22 May 2019 16:48
Operator : VA/AP
Sample : K2996-05
Misc : 5.42g/5ml/MSVOA D/SOIL
ALS Vial : 12 Sample Multiplier: 1

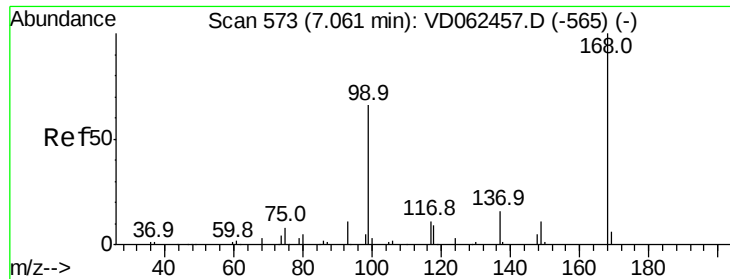
Instrument :
MSVOA_D
ClientSampleId :
P-3(4.5-5.0)

Manual Integrations
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Quant Time: May 23 04:11:51 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_D\METHOD\82D052019S.M
Quant Title : SW846 8260
QLast Update : Tue May 21 03:32:39 2019
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l m

RT: 7.11 min Scan# 578

Delta R.T. 0.05 min

Lab File: VD062506.D

Acq: 22 May 2019 16:48

Instrument :

MSVOA_D

ClientSampleId :

P-3(4.5-5.0)

Tot Ion:168 Resp: 165052

Ion Ratio Lower Upper

168 100

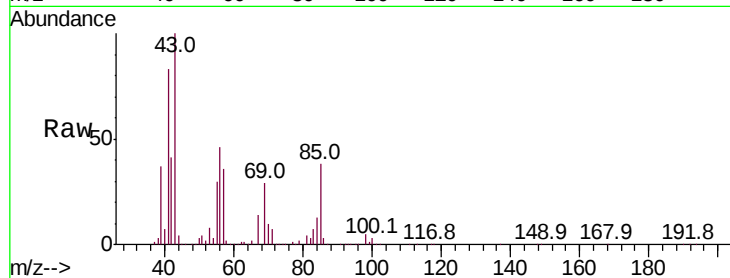
99 238.7 46.5 69.7#

Manual Integrations

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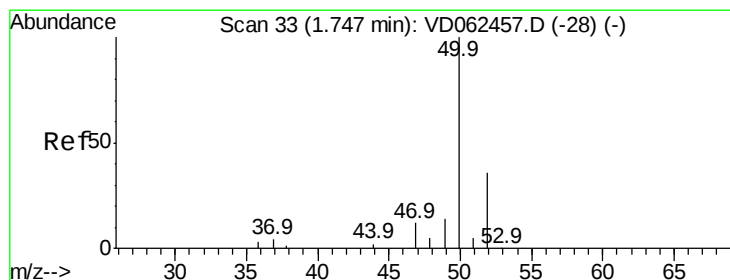
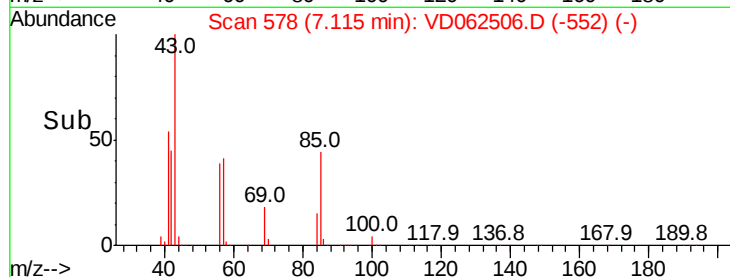
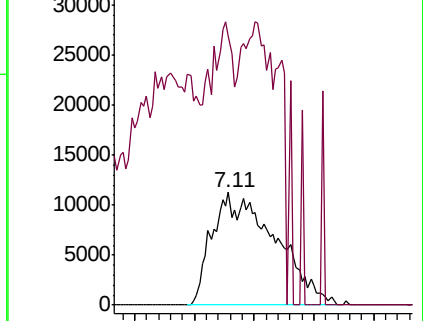
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Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC



#3

Chloromethane

Concen: 166.839 ug/l

RT: 1.82 min Scan# 40

Delta R.T. 0.07 min

Lab File: VD062506.D

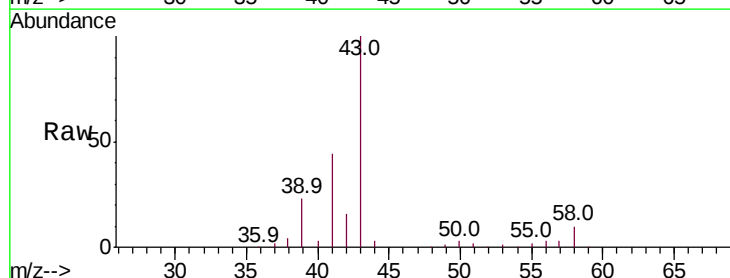
Acq: 22 May 2019 16:48

Tgt Ion: 50 Resp: 190764

Ion Ratio Lower Upper

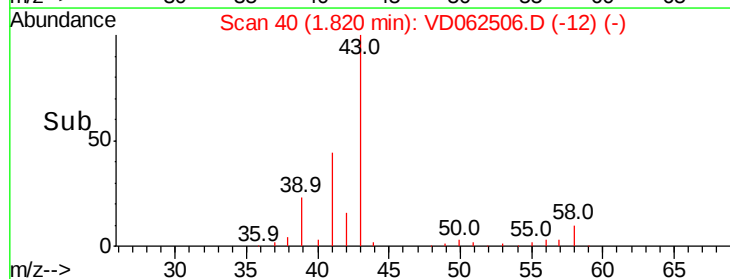
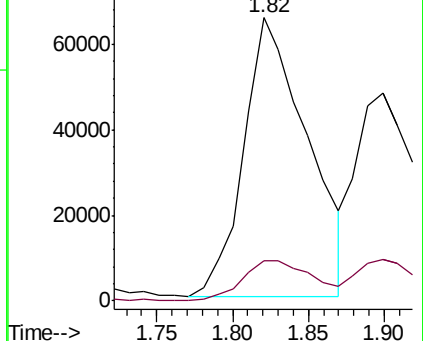
50 100

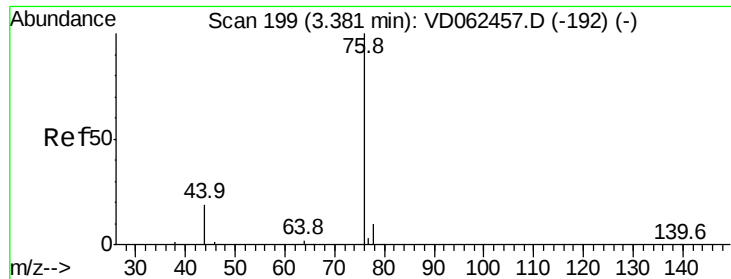
52 14.2 25.2 37.8#



Abundance Ion 49.90 (49.60 to 50.60): VDC

Ion 51.90 (51.60 to 52.60): VDC





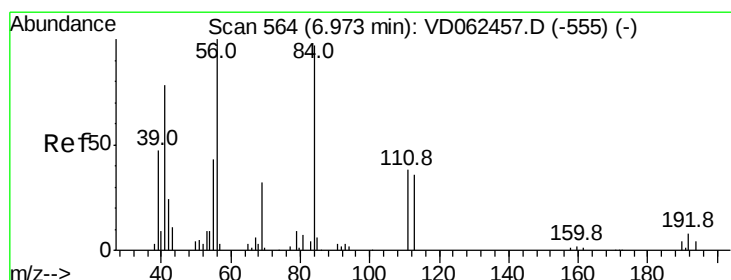
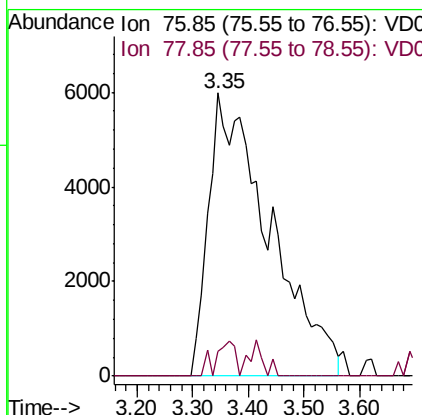
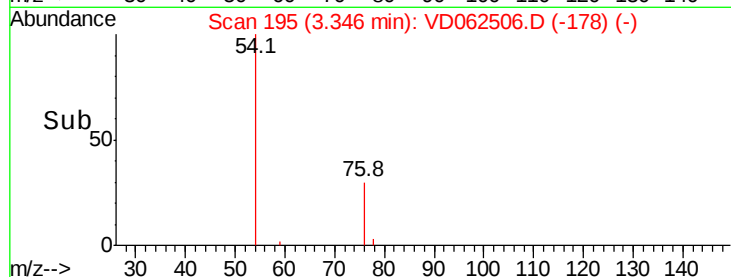
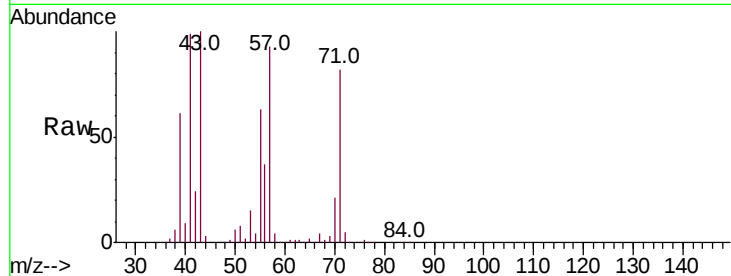
#17
Carbon Disulfide
Concen: 12.241 ug/l m
RT: 3.35 min Scan# 195
Delta R.T. -0.04 min
Lab File: VD062506.D
Acq: 22 May 2019 16:48

Instrument :
MSVOA_D
ClientSampleId :
P-3(4.5-5.0)

Tot Ion: 76 Resp: 45314
Ion Ratio Lower Upper
76 100
78 8.9 7.2 10.8

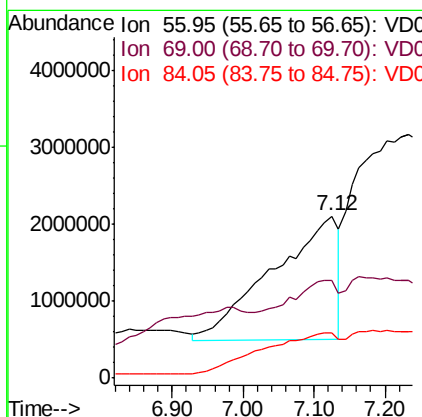
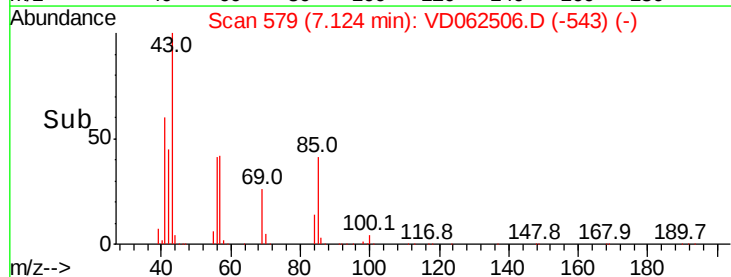
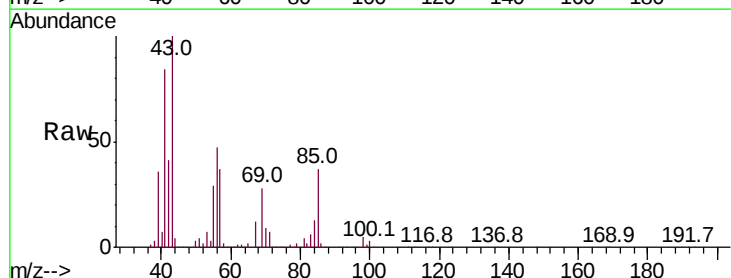
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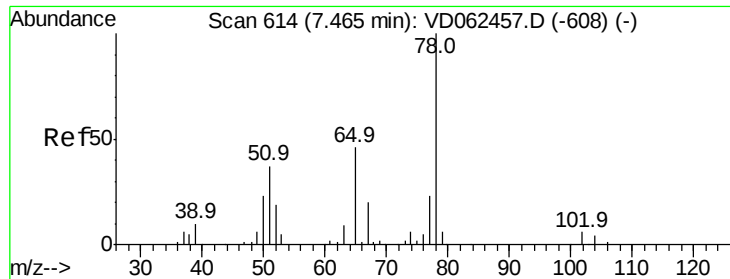
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#31
Cyclohexane
Concen: 6232.290 ug/l m
RT: 7.12 min Scan# 579
Delta R.T. 0.15 min
Lab File: VD062506.D
Acq: 22 May 2019 16:48

Tgt Ion: 56 Resp: 10396613
Ion Ratio Lower Upper
56 100
69 60.2 25.8 38.6#
84 27.8 72.2 108.4#





#33

1,2-Dichloroethane-d4

Concen: 15.844 ug/l m

RT: 7.52 min Scan# 619

Delta R.T. 0.05 min

Lab File: VD062506.D

Acq: 22 May 2019 16:48

Instrument :

MSVOA_D

ClientSampled :

P-3(4.5-5.0)

Tot Ion: 65 Resp: 27992

Ion Ratio Lower Upper

65 100

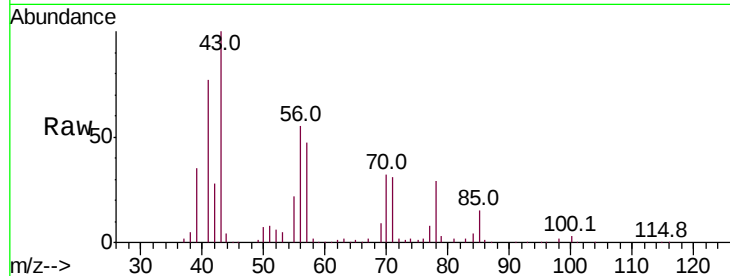
67 181.1 0.0 98.0#

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Abundance Ion 64.95 (64.65 to 65.65): VDC

Ion 66.90 (66.60 to 67.60): VDC

150000

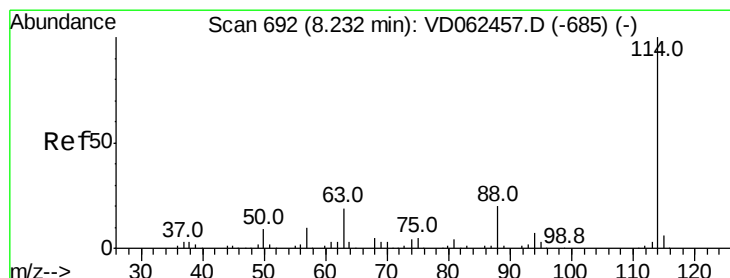
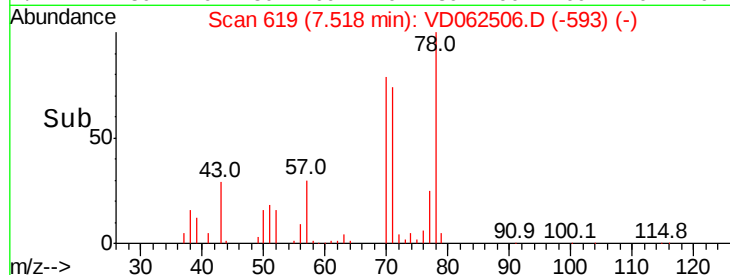
100000

50000

0

7.50 7.55

Time-->



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l m

RT: 8.30 min Scan# 698

Delta R.T. 0.06 min

Lab File: VD062506.D

Acq: 22 May 2019 16:48

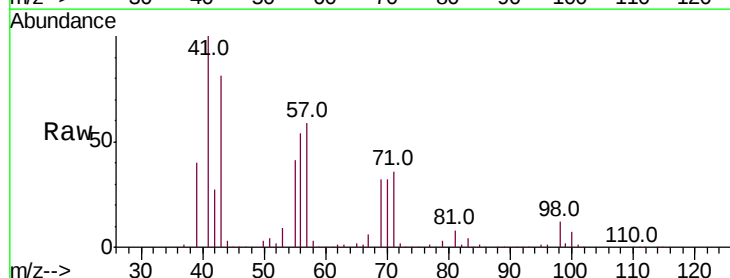
Tgt Ion:114 Resp: 187891

Ion Ratio Lower Upper

114 100

63 335.2 0.0 32.4#

88 18.0 0.0 33.6



Abundance Ion 114.00 (113.70 to 114.70): V

Ion 62.95 (62.65 to 63.65): VDC

Ion 87.90 (87.60 to 88.60): VDC

150000

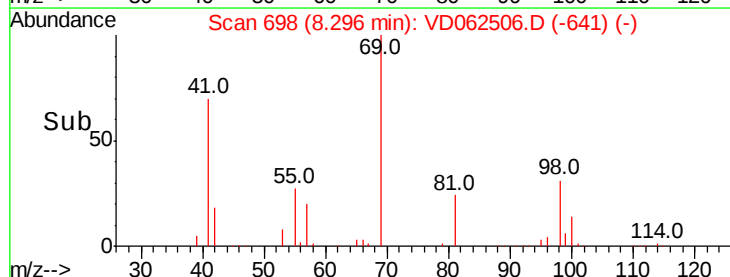
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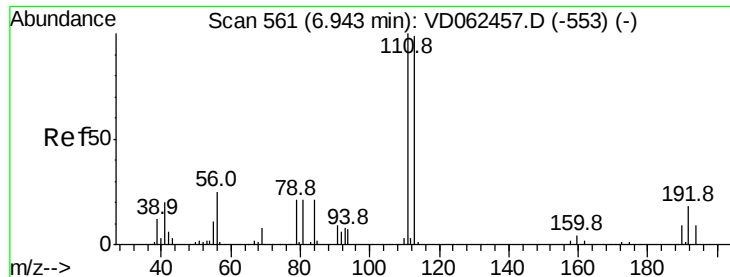
50000

0

8.00 8.20 8.40 8.60

Time-->





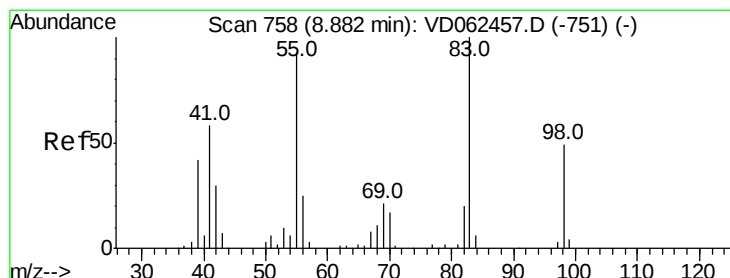
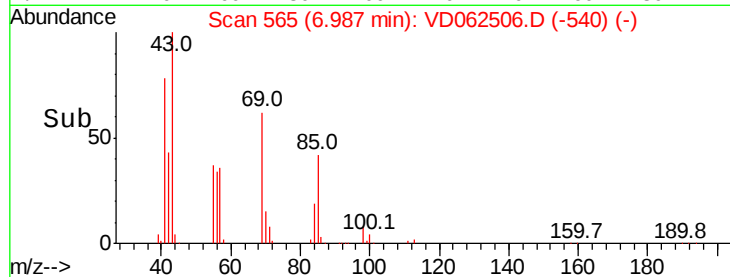
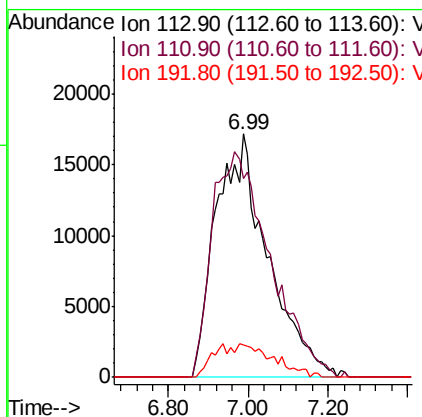
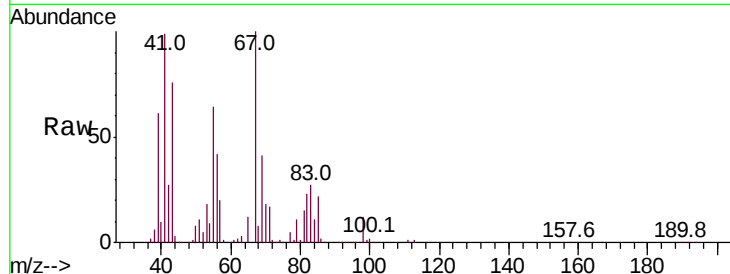
#35
Dibromofluoromethane
Concen: 91.248 ug/l m
RT: 6.99 min Scan# 565
Delta R.T. 0.04 min
Lab File: VD062506.D
Acq: 22 May 2019 16:48

Instrument :
MSVOA_D
ClientSampleId :
P-3(4.5-5.0)

Tot Ion	Ratio	Lower	Upper
113	100		
111	81.4	78.5	117.7
192	13.2	13.0	19.4

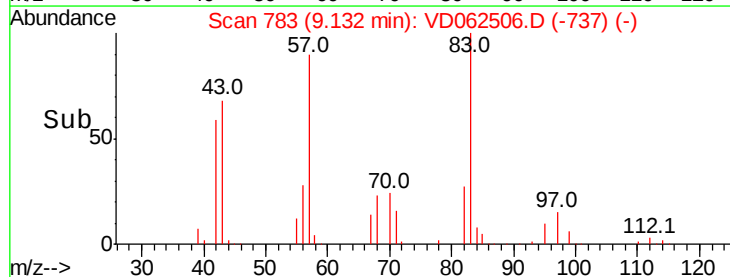
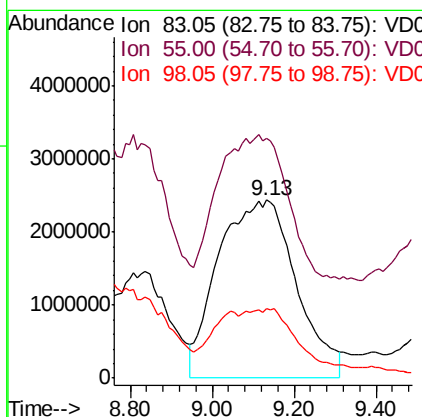
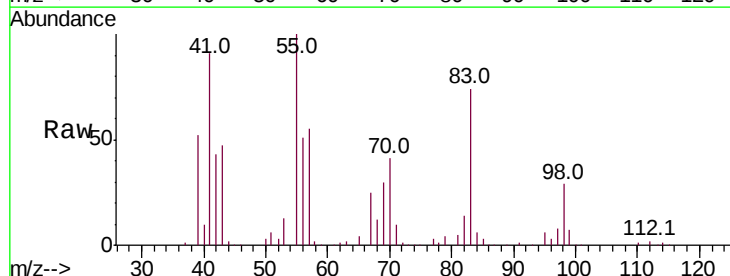
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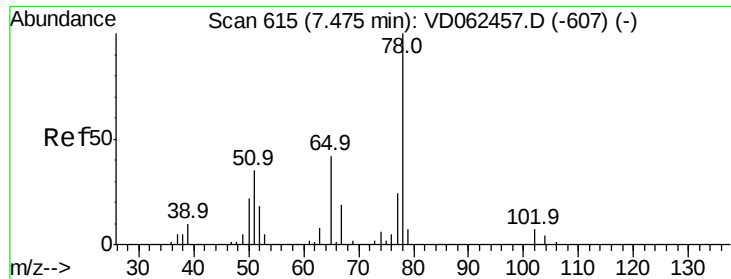
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#39
Methylcyclohexane
Concen: 21715.688 ug/l m
RT: 9.13 min Scan# 783
Delta R.T. 0.25 min
Lab File: VD062506.D
Acq: 22 May 2019 16:48

Tgt Ion	Ratio	Lower	Upper
83	100		
55	134.8	68.2	102.4#
98	39.1	38.2	57.4





#40

Benzene

Concen: 10247.043 ug/l m

RT: 7.63 min Scan# 630

Delta R.T. 0.15 min

Lab File: VD062506.D

Acq: 22 May 2019 16:48

Instrument :

MSVOA_D

ClientSampled :

P-3(4.5-5.0)

Tot Ion: 78 Resp: 36106472

Ion Ratio Lower Upper

78 100

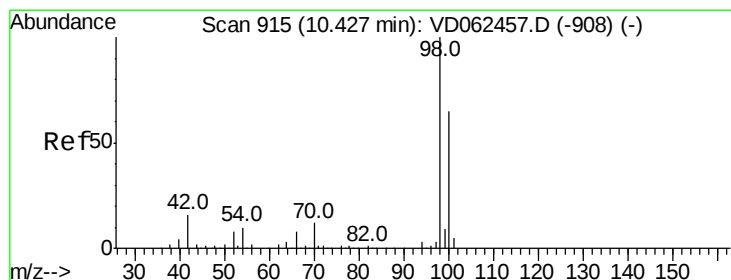
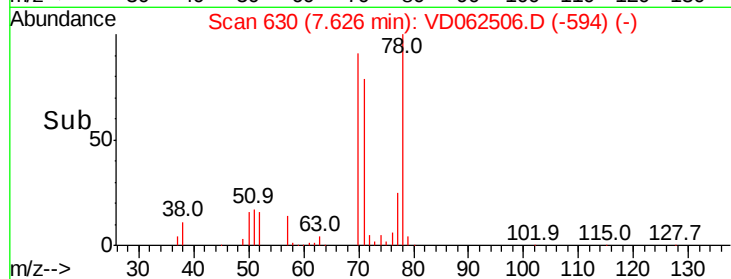
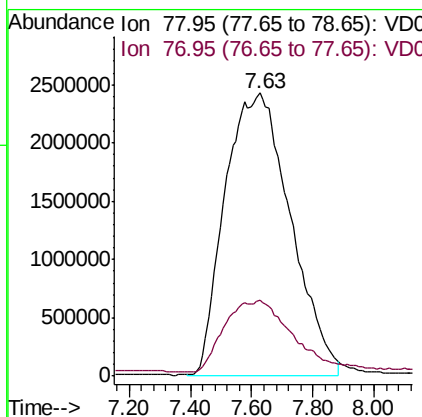
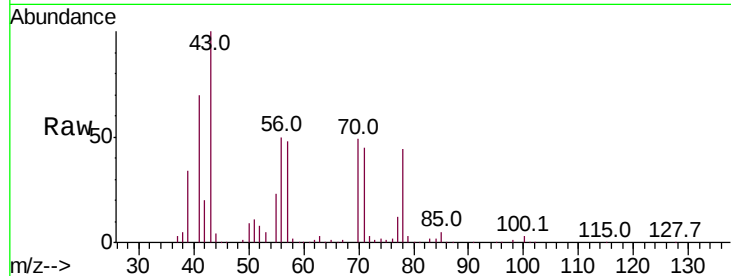
77 26.7 19.7 29.5

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#50

Toluene-d8

Concen: 128.163 ug/l m

RT: 10.67 min Scan# 939

Delta R.T. 0.24 min

Lab File: VD062506.D

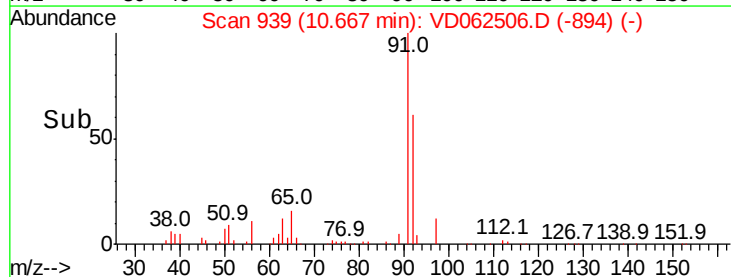
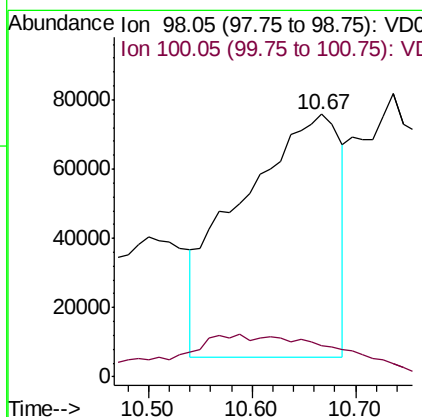
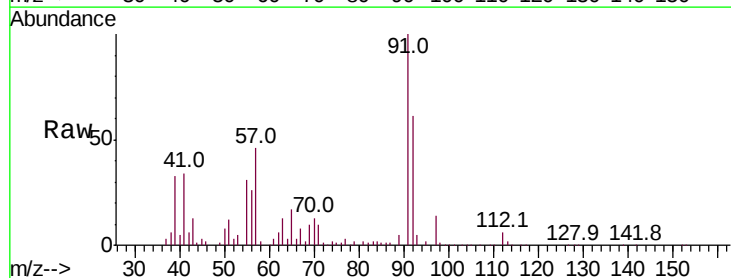
Acq: 22 May 2019 16:48

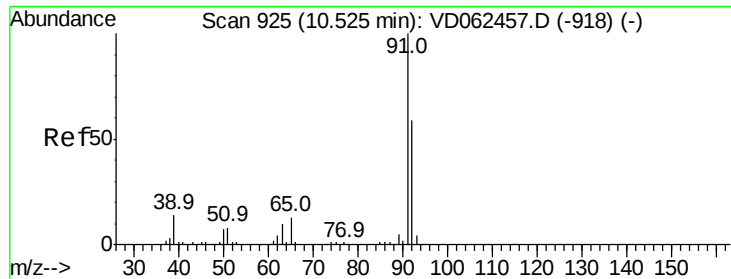
Tgt Ion: 98 Resp: 475401

Ion Ratio Lower Upper

98 100

100 11.9 53.8 80.8#





#52

Toluene

Concen: 22753.830 ug/l m

RT: 10.80 min Scan# 952

Delta R.T. 0.27 min

Lab File: VD062506.D

Acq: 22 May 2019 16:48

Instrument :

MSVOA_D

ClientSampleId :

P-3(4.5-5.0)

Tot Ion: 92 Resp: 54886806

Ion Ratio Lower Upper

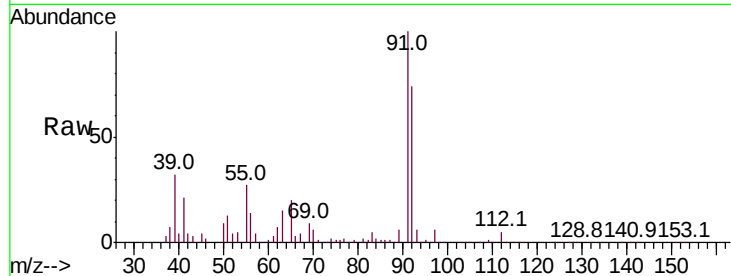
92 100

91 135.7 136.6 204.8#

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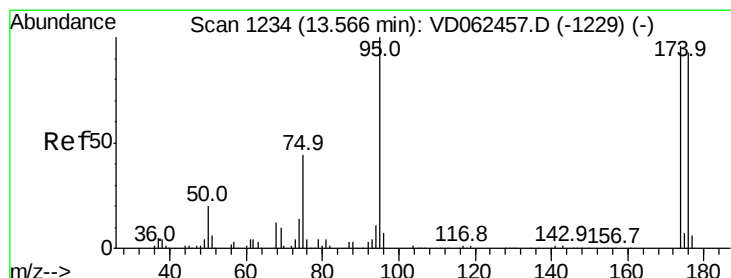
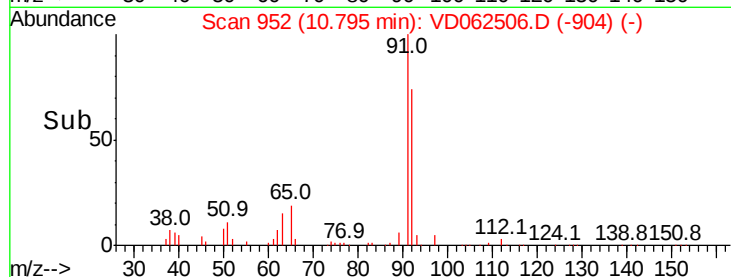
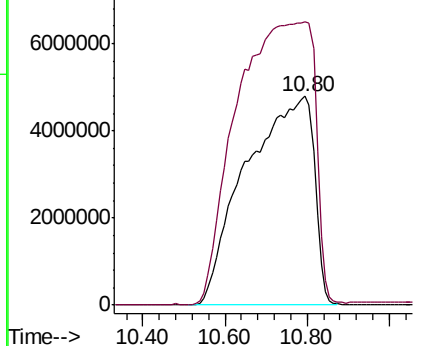
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Abundance Ion 92.00 (91.70 to 92.70): VDC

Ion 91.00 (90.70 to 91.70): VDC



#62

4-Bromofluorobenzene

Concen: 99.275 ug/l m

RT: 13.58 min Scan# 1235

Delta R.T. 0.01 min

Lab File: VD062506.D

Acq: 22 May 2019 16:48

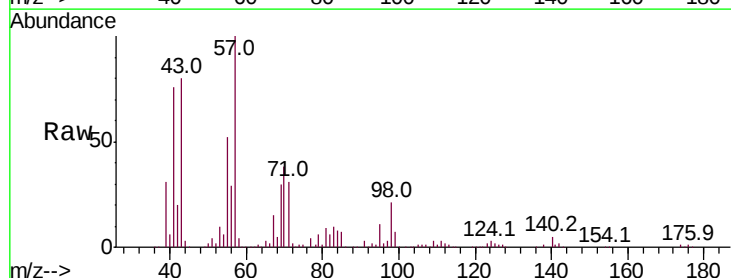
Tgt Ion: 95 Resp: 161083

Ion Ratio Lower Upper

95 100

174 13.0 0.0 181.8

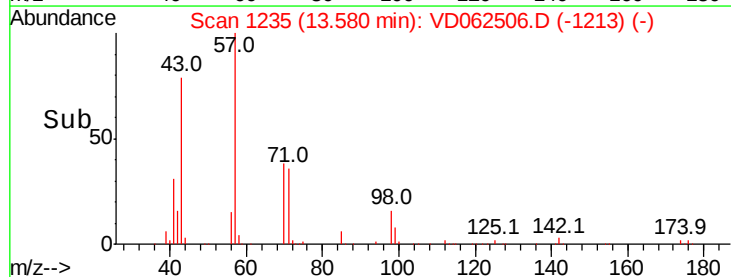
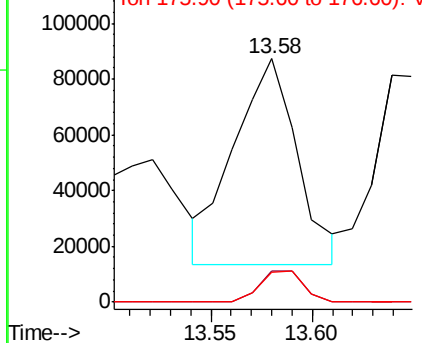
176 12.5 0.0 174.4

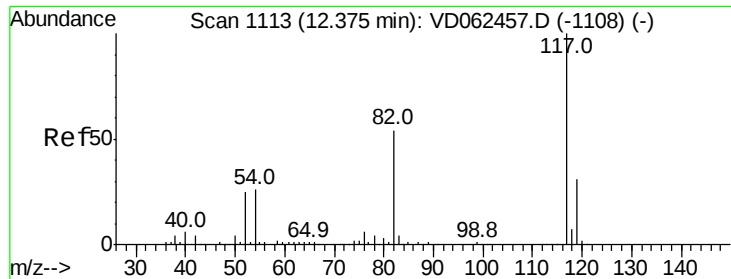


Abundance Ion 95.00 (94.70 to 95.70): VDC

Ion 173.90 (173.60 to 174.60): V

Ion 175.90 (175.60 to 176.60): V





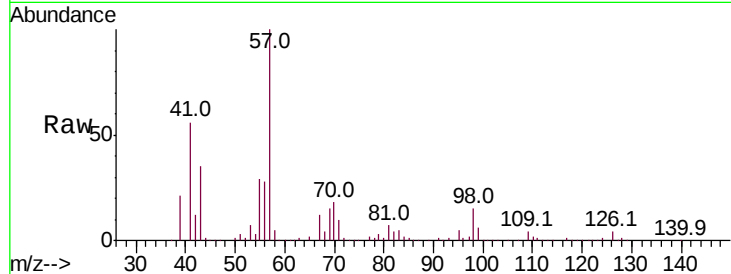
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 12.48 min Scan# 1123
Delta R.T. 0.10 min
Lab File: VD062506.D
Acq: 22 May 2019 16:48

Instrument :
MSVOA_D
ClientSampleId :
P-3(4.5-5.0)

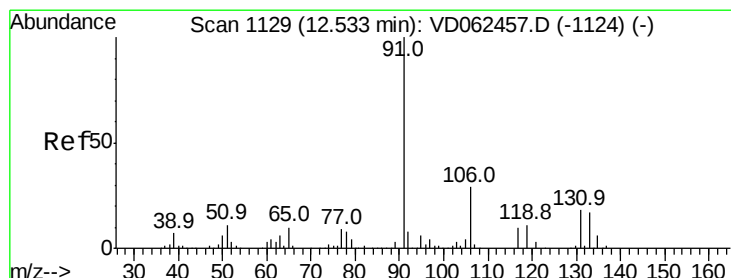
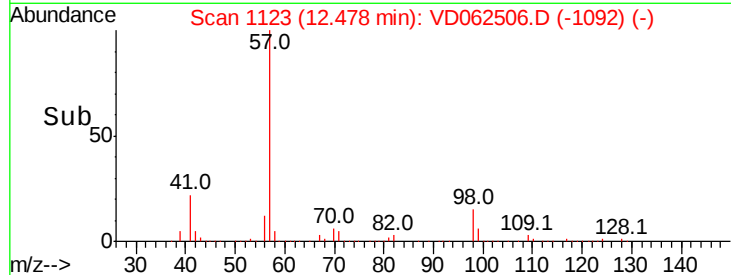
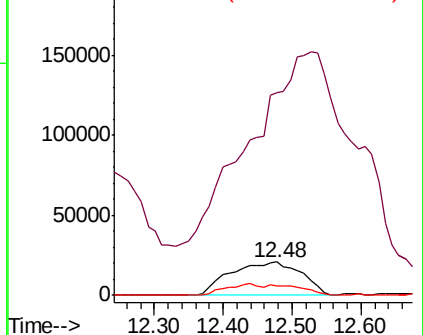
Tot Ion	Ion	Ratio	Lower	Upper
117	100			
82	611.0	36.2	54.2#	
119	29.1	26.2	39.4	

Manual Integrations
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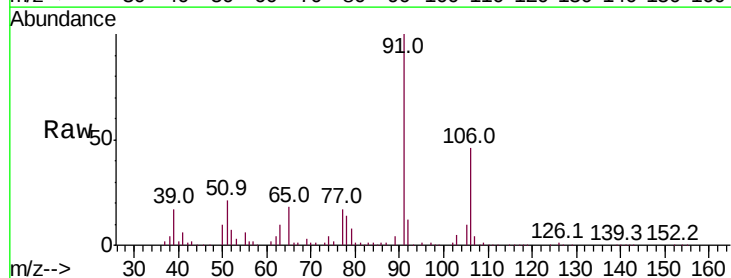


Abundance Ion 116.95 (116.65 to 117.65): V
Ion 82.05 (81.75 to 82.75): V
Ion 118.95 (118.65 to 119.65): V

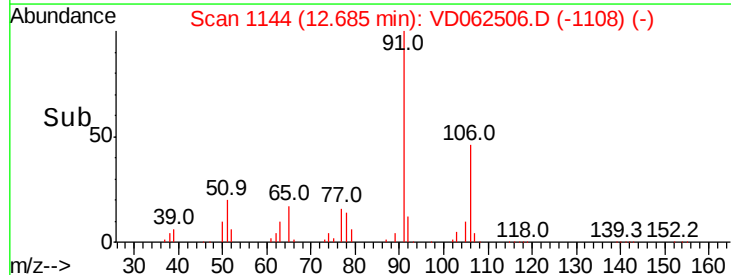
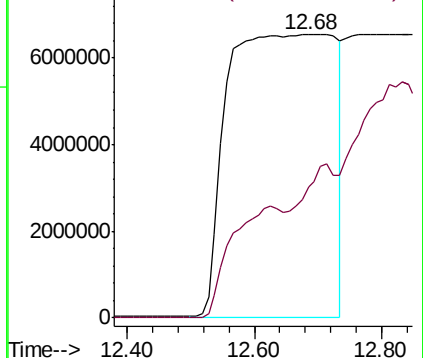


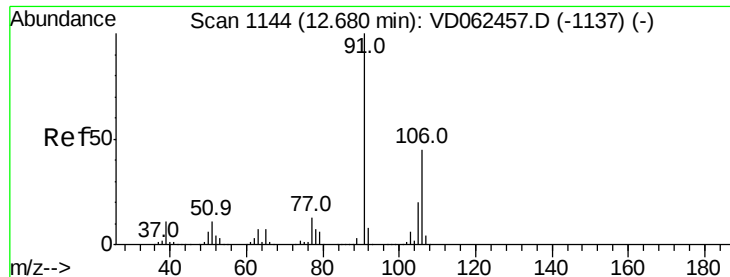
#67
Ethyl Benzene
Concen: 15313.784 ug/l m
RT: 12.68 min Scan# 1144
Delta R.T. 0.15 min
Lab File: VD062506.D
Acq: 22 May 2019 16:48

Tgt Ion	Ion	Ratio	Lower	Upper
91	100			
106	46.1	24.7	37.1#	



Abundance Ion 91.00 (90.70 to 91.70): V
Ion 106.05 (105.75 to 106.75): V





#68

m/p-Xvlenes

Concen: 24445.465 ug/l m

RT: 12.83 min Scan# 1159

Delta R.T. 0.15 min

Lab File: VD062506.D

Acq: 22 May 2019 16:48

Instrument :

MSVOA_D

ClientSampled :

P-3(4.5-5.0)

Tot Ion:106 Resp:43445620

Ion Ratio Lower Upper

106 100

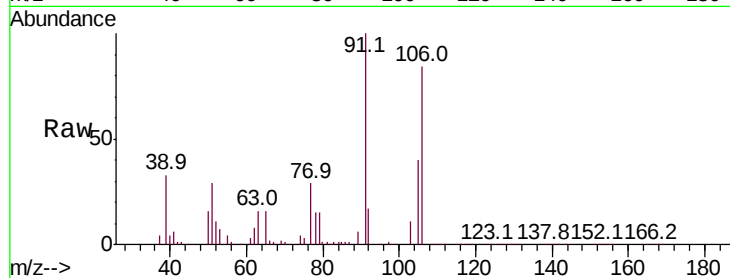
91 119.6 164.0 246.0#

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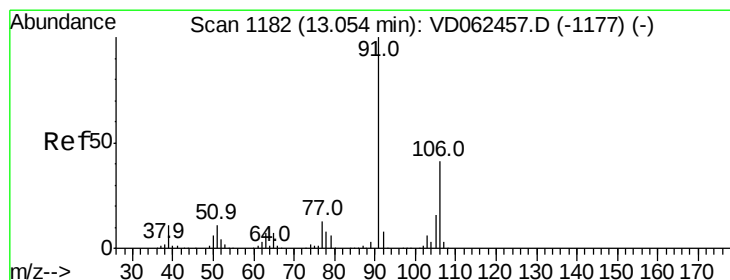
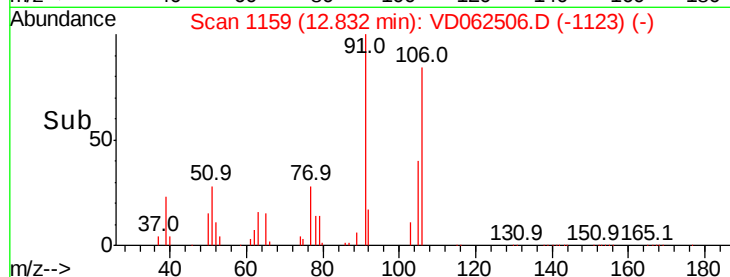
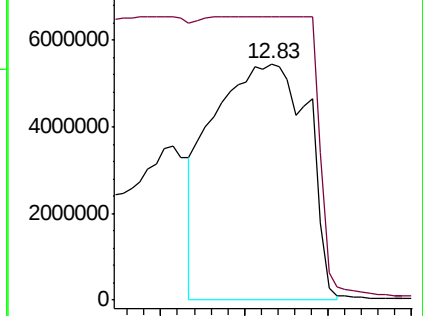
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Abundance Ion 106.05 (105.75 to 106.75): V

Ion 91.00 (90.70 to 91.70): VDC



#69

o-Xylene

Concen: 9442.231 ug/l

RT: 13.16 min Scan# 1192

Delta R.T. 0.10 min

Lab File: VD062506.D

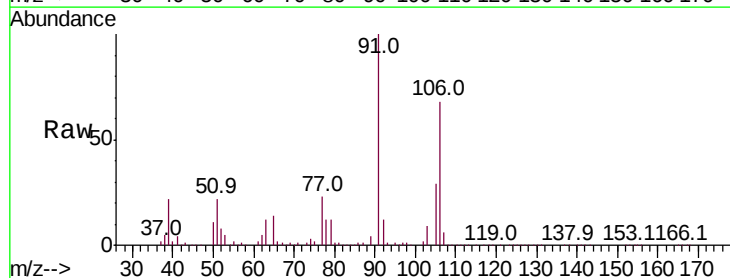
Acq: 22 May 2019 16:48

Tgt Ion:106 Resp:15833490

Ion Ratio Lower Upper

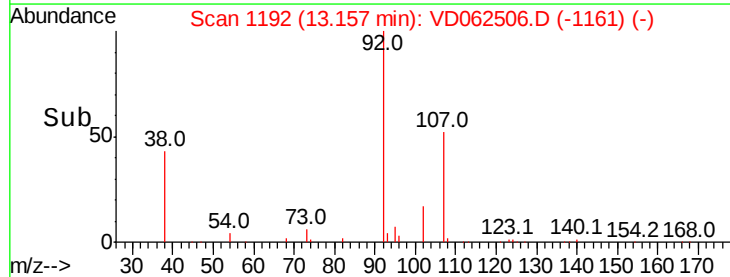
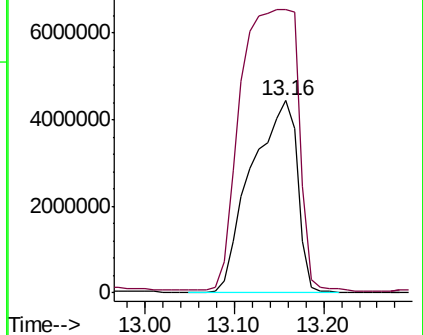
106 100

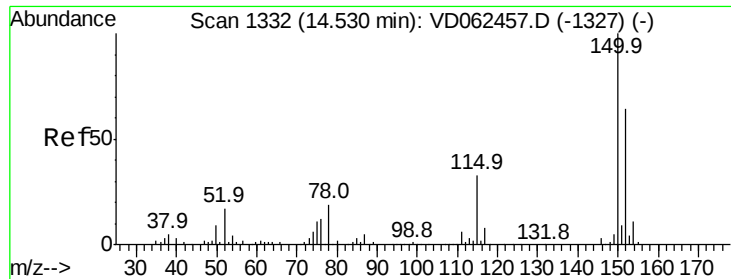
91 147.4 106.7 319.9



Abundance Ion 106.05 (105.75 to 106.75): V

Ion 91.00 (90.70 to 91.70): VDC





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 14.52 min Scan# 1331

Delta R.T. -0.01 min

Lab File: VD062506.D

Acq: 22 May 2019 16:48

Instrument :

MSVOA_D

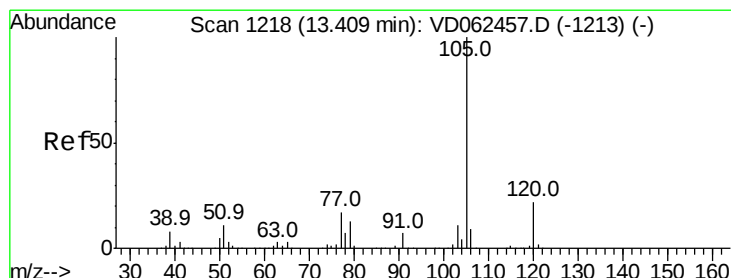
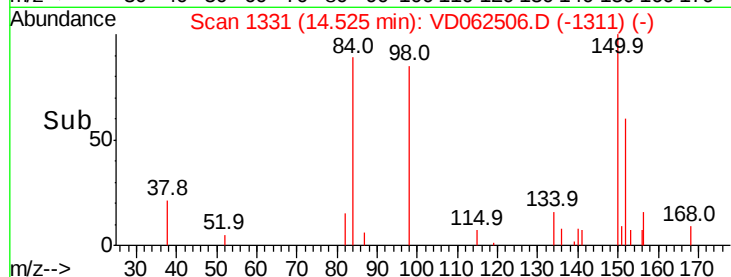
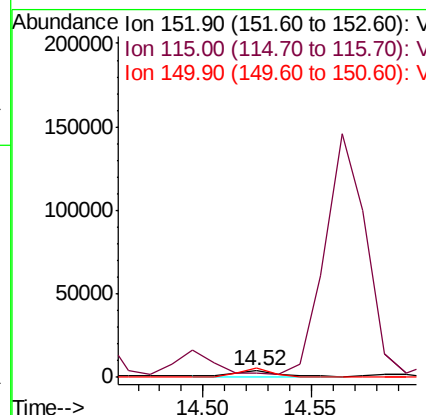
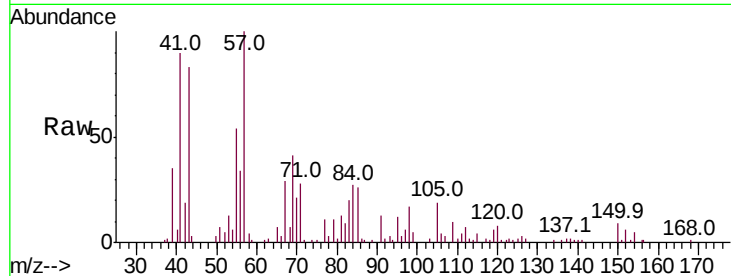
ClientSampleId :

P-3(4.5-5.0)

Tot Ion:	152	Resp:	4454
Ion Ratio	Lower	Upper	
152	100		
115	62.4	30.9	92.7
150	143.6	0.0	314.8

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#73

Isopropylbenzene

Concen: 37082.017 ug/l

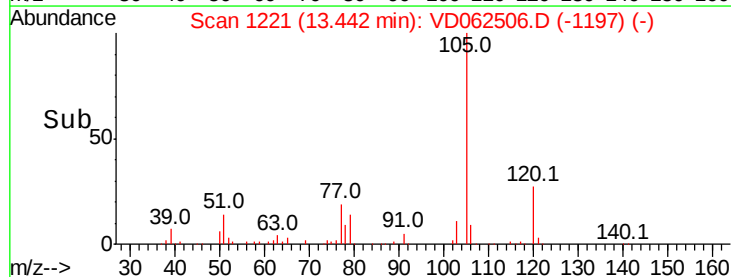
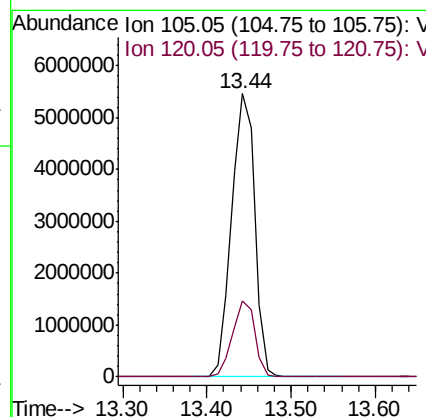
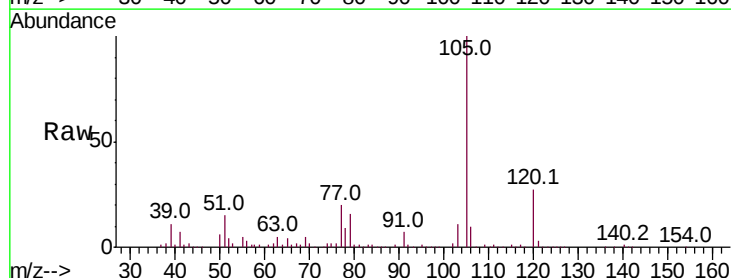
RT: 13.44 min Scan# 1221

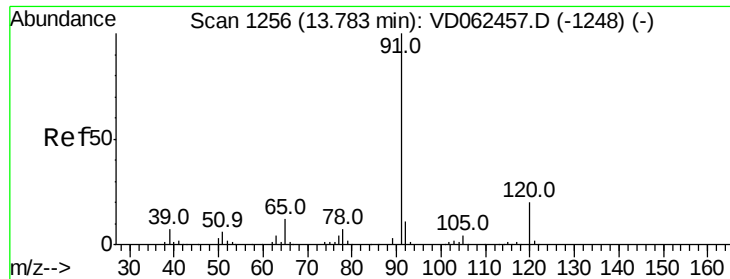
Delta R.T. 0.03 min

Lab File: VD062506.D

Acq: 22 May 2019 16:48

Tgt Ion:	105	Resp:	10410868
Ion Ratio	Lower	Upper	
105	100		
120	26.6	12.0	36.1





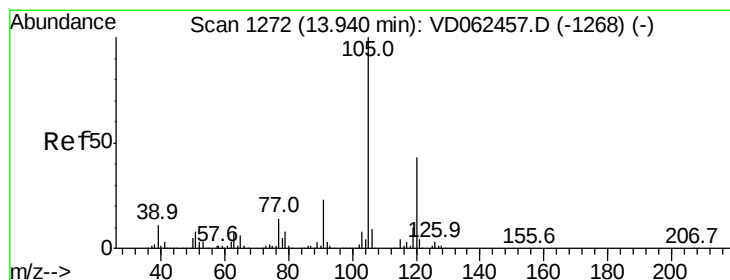
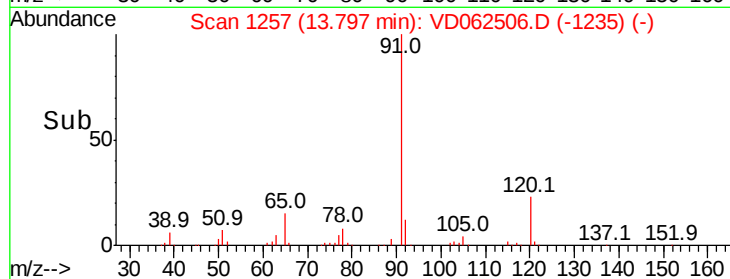
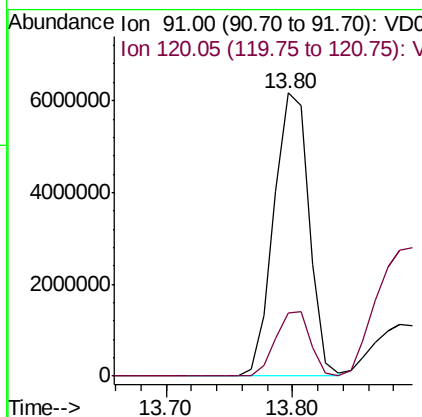
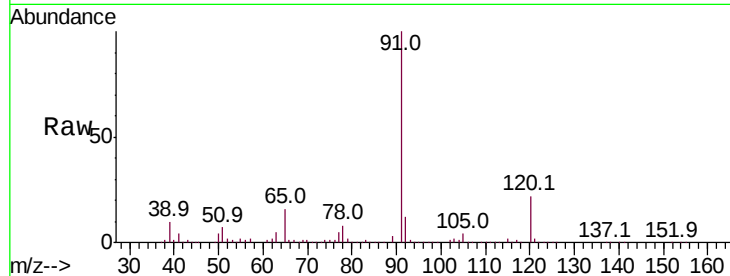
#78
 n-propylbenzene
 Concen: 36756.242 ug/l
 RT: 13.80 min Scan# 1257
 Delta R.T. 0.01 min
 Lab File: VD062506.D
 Acq: 22 May 2019 16:48

Instrument :
 MSVOA_D
 ClientSampleId :
 P-3(4.5-5.0)

Tot Ion: 91 Resp: 11953313
 Ion Ratio Lower Upper
 91 100
 120 22.5 11.1 33.1

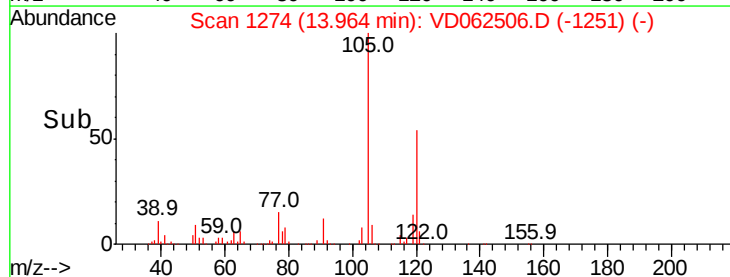
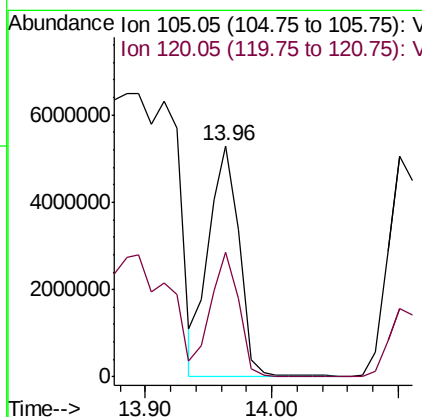
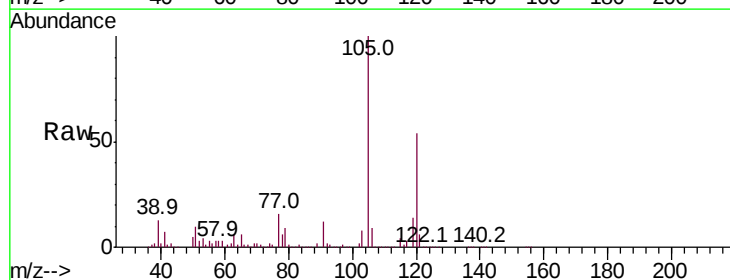
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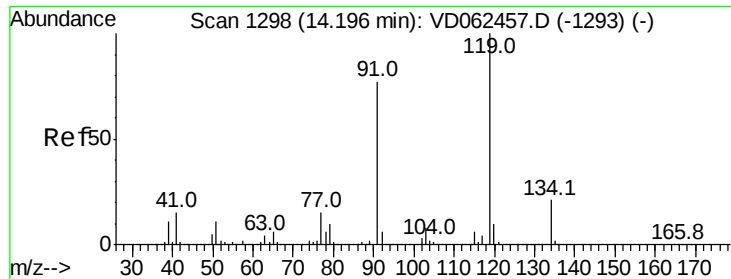
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#80
 1,3,5-Trimethylbenzene
 Concen: 36319.424 ug/l
 RT: 13.96 min Scan# 1274
 Delta R.T. 0.02 min
 Lab File: VD062506.D
 Acq: 22 May 2019 16:48

Tgt Ion: 105 Resp: 8828869
 Ion Ratio Lower Upper
 105 100
 120 53.8 24.0 72.0





#83

tert-Butylbenzene

Concen: 219.111 ug/l m

RT: 14.20 min Scan# 1298

Delta R.T. 0.00 min

Lab File: VD062506.D

Acq: 22 May 2019 16:48

Instrument :

MSVOA_D

ClientSampleId :

P-3(4.5-5.0)

Tot Ion:119 Resp: 59082

Ion Ratio Lower Upper

119 100

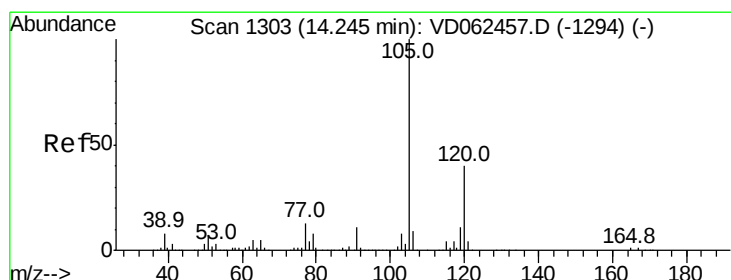
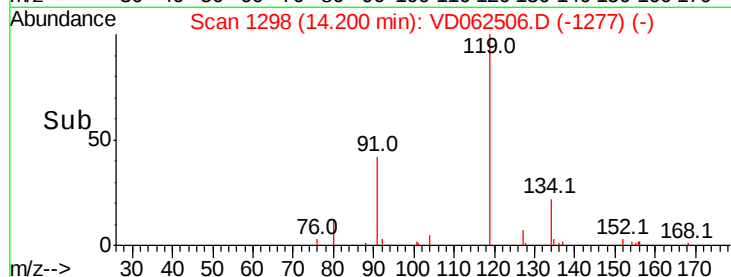
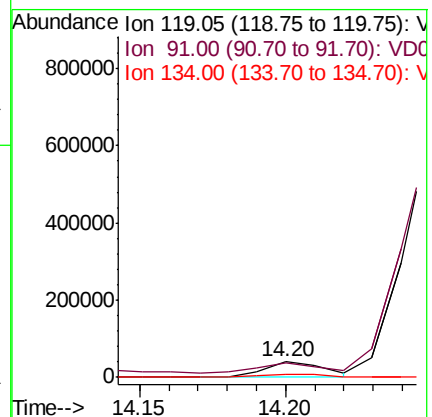
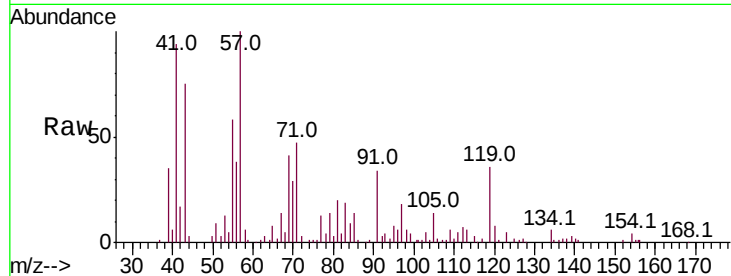
91 93.0 34.2 102.6

134 17.5 12.0 36.0

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#84

1,2,4-Trimethylbenzene

Concen: 64174.497 ug/l

RT: 14.27 min Scan# 1305

Delta R.T. 0.02 min

Lab File: VD062506.D

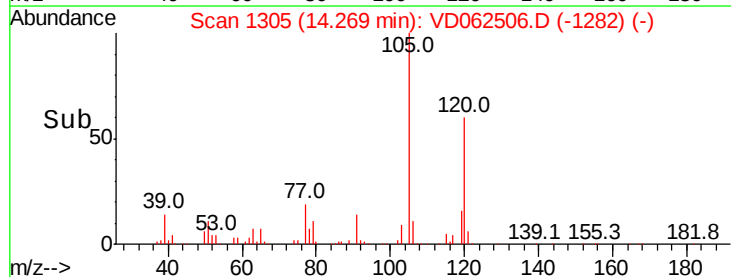
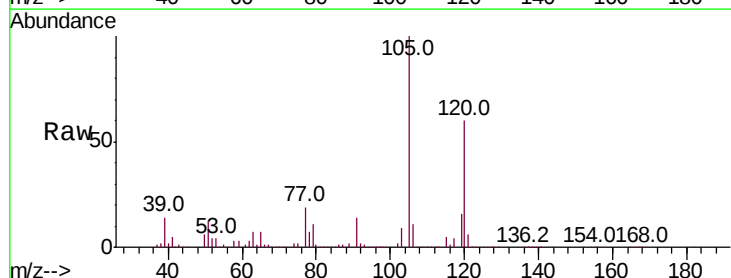
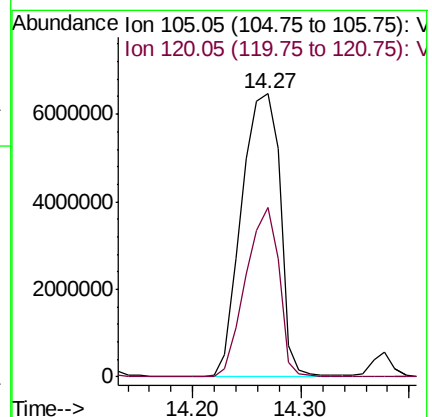
Acq: 22 May 2019 16:48

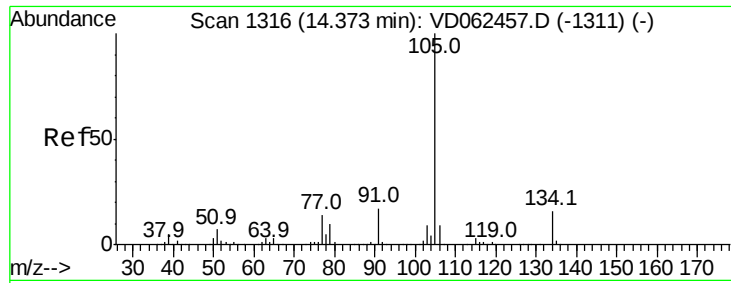
Tgt Ion:105 Resp:15985091

Ion Ratio Lower Upper

105 100

120 59.8 23.1 69.2





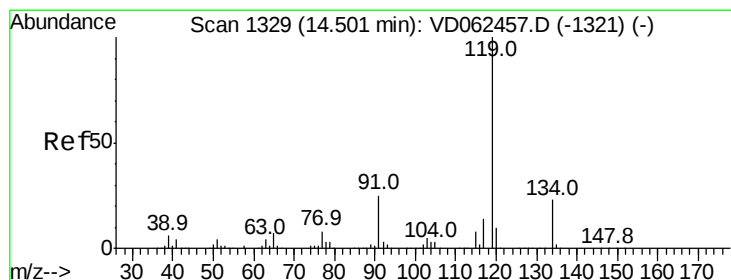
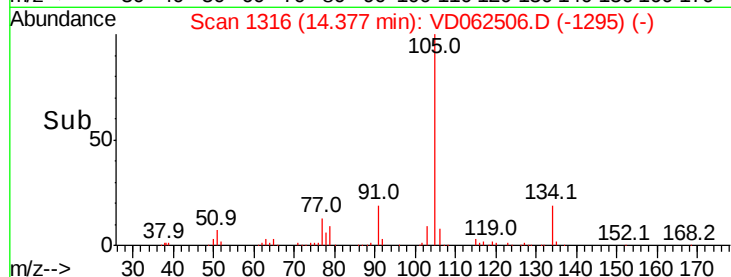
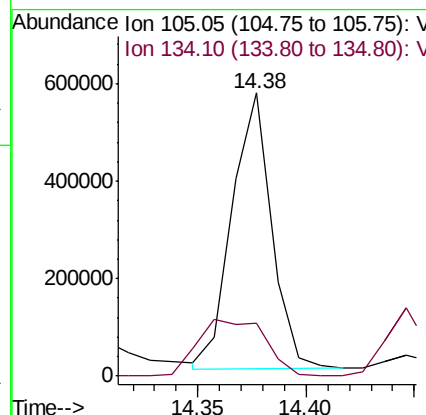
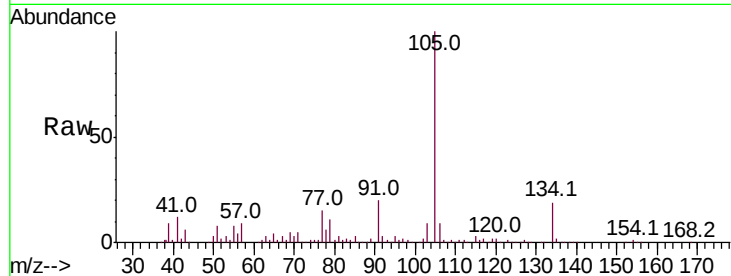
#85
 sec-Butylbenzene
 Concen: 2570.142 ug/l
 RT: 14.38 min Scan# 1316
 Delta R.T. 0.00 min
 Lab File: VD062506.D
 Acq: 22 May 2019 16:48

Instrument :
 MSVOA_D
 ClientSampleId :
 P-3(4.5-5.0)

Tot Ion	Ratio	Lower	Upper
105	100		
134	18.5	8.9	26.7

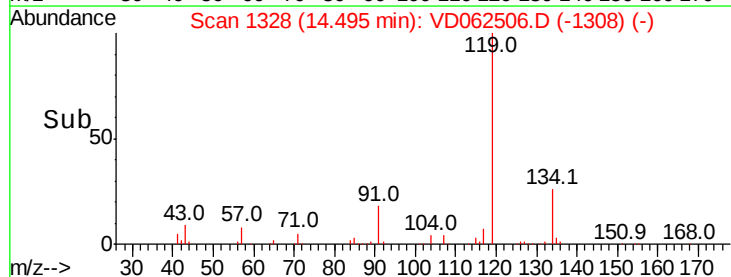
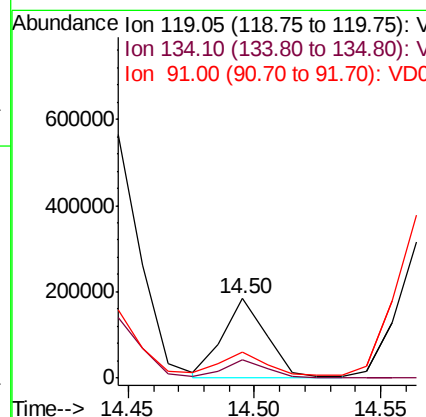
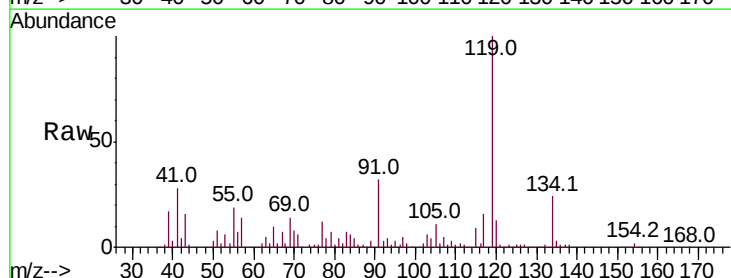
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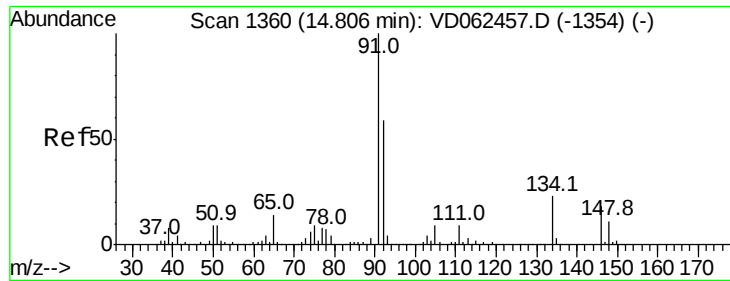
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#86
 p-Isopropyltoluene
 Concen: 846.858 ug/l
 RT: 14.50 min Scan# 1328
 Delta R.T. -0.01 min
 Lab File: VD062506.D
 Acq: 22 May 2019 16:48

Tgt Ion	Ratio	Lower	Upper
119	100		
134	23.5	12.8	38.3
91	31.9	10.7	32.1





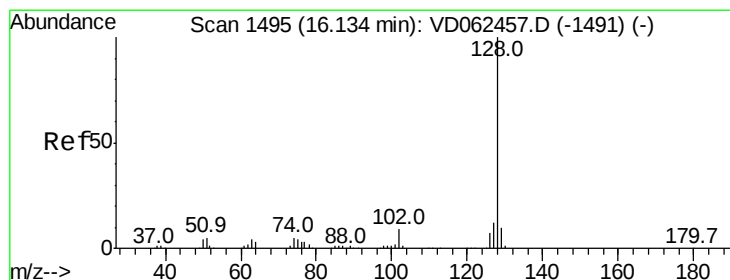
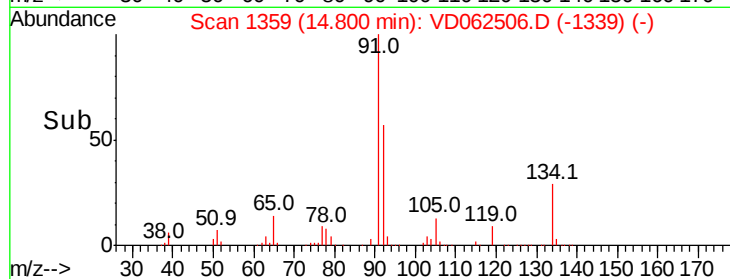
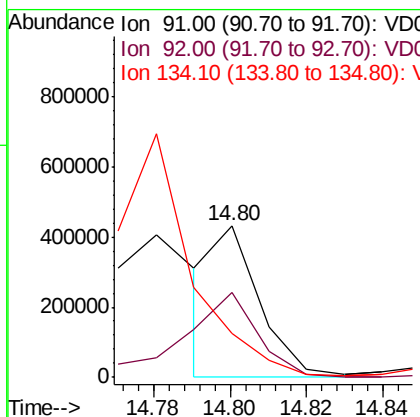
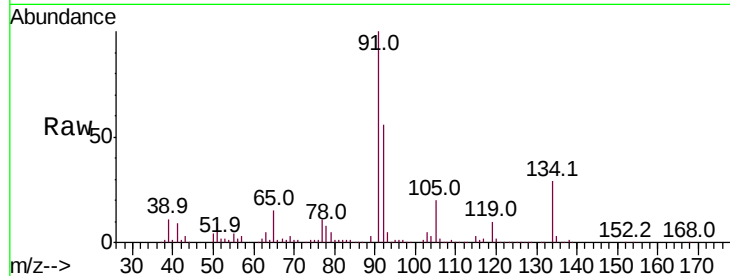
#89
n-Butylbenzene
Concen: 1457.672 ug/l m
RT: 14.80 min Scan# 1359
Delta R.T. -0.01 min
Lab File: VD062506.D
Acq: 22 May 2019 16:48

Instrument :
MSVOA_D
ClientSampleId :
P-3(4.5-5.0)

Tot Ion	Ratio	Lower	Upper
91	100		
92	56.1	30.3	91.0
134	28.7	14.5	43.6

Manual Integrations
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#95
Naphthalene
Concen: 1468.915 ug/l
RT: 16.12 min Scan# 1493
Delta R.T. -0.02 min
Lab File: VD062506.D
Acq: 22 May 2019 16:48

Tgt Ion	Ratio	Lower	Upper
128	100		
127	12.9	9.8	14.8
129	10.8	8.8	13.2

