

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN081019\
 Data File : VN057174.D
 Acq On : 10 Aug 2019 14:15
 Operator : JC/SP
 Sample : K4271-01
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 EFF-WW

Manual Integrations
 APPROVED

MMDadoda
 8/12/2019 3:55:56 PM

Quant Time: Aug 12 01:26:14 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA N\METHODS\624N081019W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sun Aug 11 03:53:25 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	6.59	128	178852	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	8.01	114	970500	30.00	ug/l	0.00
57) Chlorobenzene-d5	10.91	117	821717	30.00	ug/l	0.00

System Monitoring Compounds

27) 1,2-Dichloroethane-d4	7.44	65	346041	29.68	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	98.93%
60) 4-Bromofluorobenzene	11.92	95	328781	26.87	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	89.57%
63) Toluene-d8	9.56	98	1152292	30.38	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	101.27%

Target Compounds

					Ovalue
12) Methyl Acetate	3.89	43	1721676	161.213	ug/l 99
15) Acetone	3.47	58	2462599	1665.322	ug/l 96
16) Carbon Disulfide	3.72	76	11997	0.434	ug/l 97
20) Diisopropyl ether	5.31	45	60641m	1.967	ug/l
25) Chloroform	6.76	83	299713	15.183	ug/l 99
30) 2-Butanone	6.21	43	114411	19.912	ug/l 97
41) Bromodichloromethane	8.85	83	42466	2.889	ug/l # 90
47) n-amyl Acetate	11.58	43	3892	0.275	ug/l # 75
53) Dibromochloromethane	10.39	129	6400	0.538	ug/l 99
59) 2-Hexanone	10.24	43	270869	35.691	ug/l 98
61) Tetrachloroethene	10.11	164	7770	0.616	ug/l 94
67) m/p-Xylenes	11.13	106	4729	0.250	ug/l 89
82) p-Isopropyltoluene	12.82	119	14625	0.355	ug/l 92
83) 1,3-Dichlorobenzene	12.81	146	6113	0.313	ug/l 94
84) 1,4-Dichlorobenzene	12.90	146	8497	0.468	ug/l 94
85) n-Butylbenzene	13.15	91	16221	0.545	ug/l 96
87) 1,2-Dichlorobenzene	13.19	146	7040	0.364	ug/l 96
89) 1,2,4-Trichlorobenzene	14.45	180	9936	9.909	ug/l 96
91) Naphthalene	14.67	128	19883	1.354	ug/l # 95
92) 1,2,3-Trichlorobenzene	14.84	180	13086	9.627	ug/l 91

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

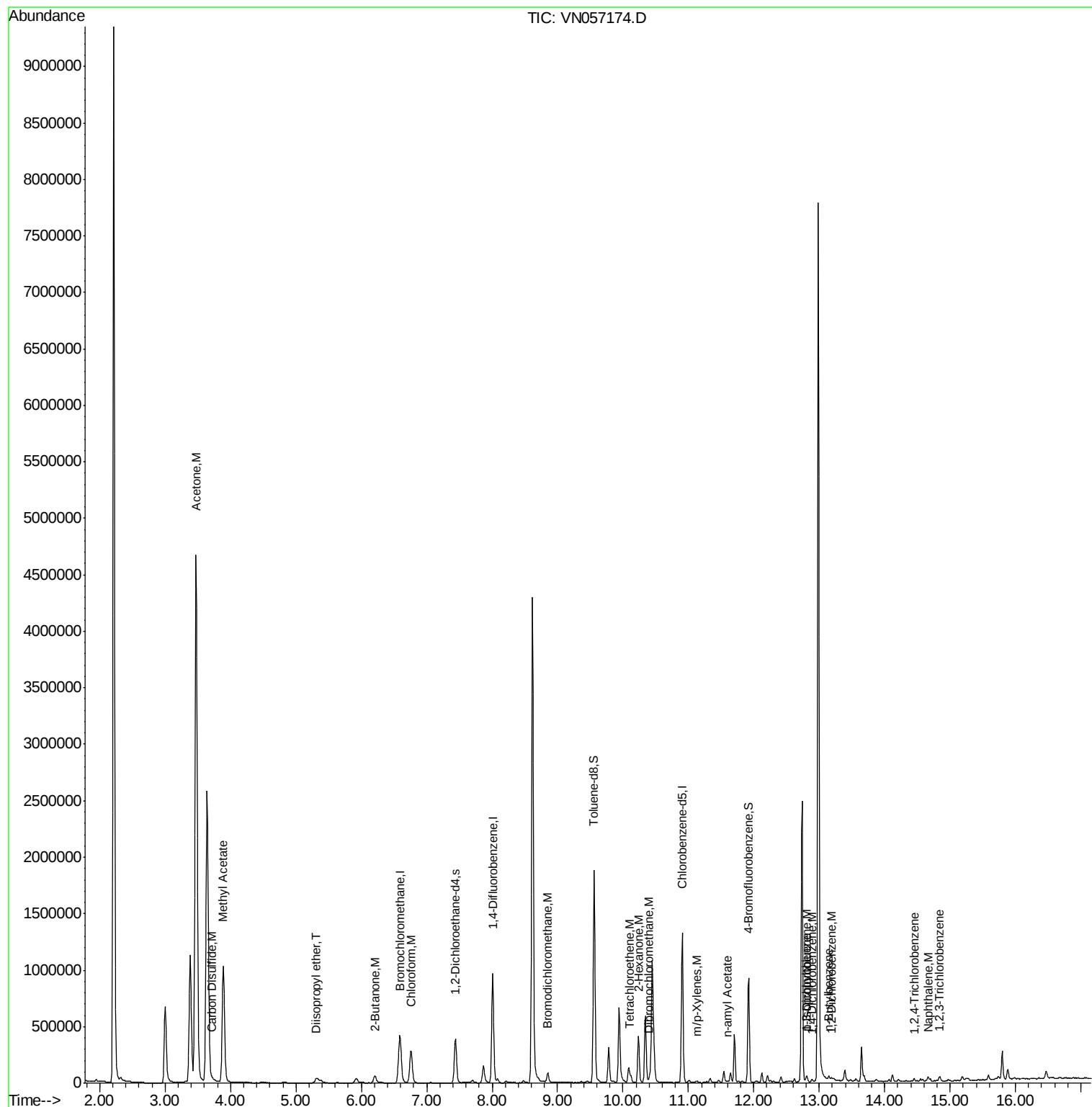
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN081019\
Data File : VN057174.D
Acq On : 10 Aug 2019 14:15
Operator : JC/SP
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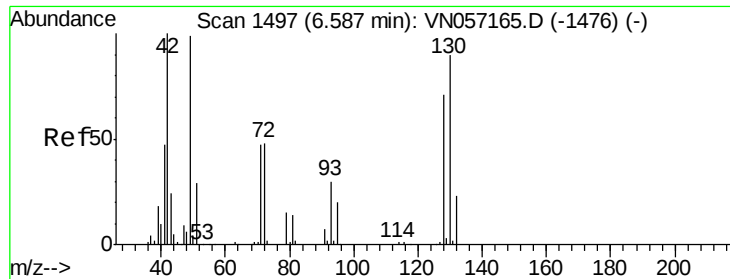
Instrument :
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ClientSampleId :
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Quant Time: Aug 12 01:26:14 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA N\METHODS\624N081019W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
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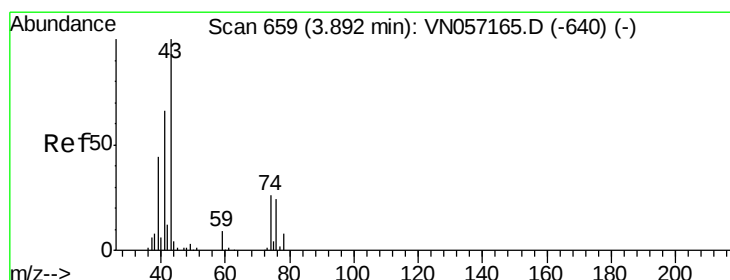
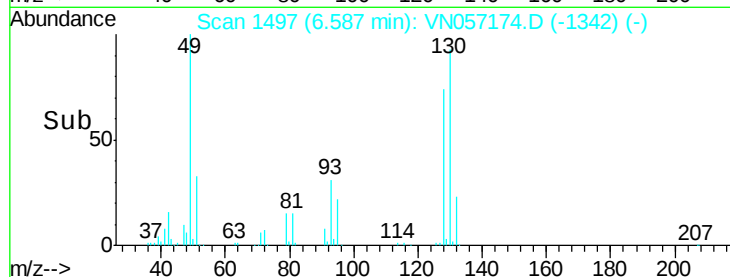
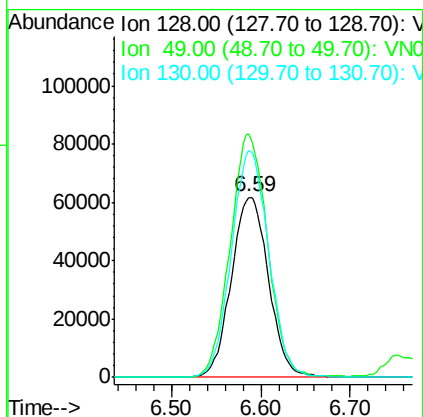
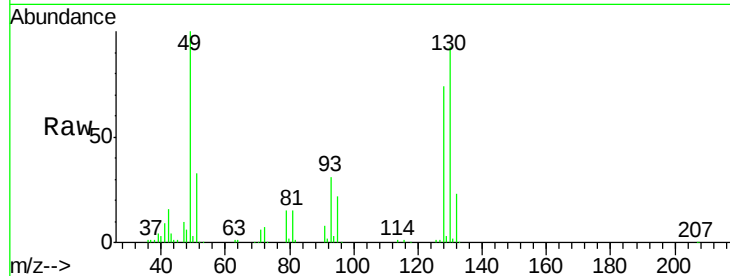
#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 6.59 min Scan# 1497
Delta R.T. -0.00 min
Lab File: VN057174.D
Acq: 10 Aug 2019 14:15

Instrument :
MSVOA_N
ClientSampleId :
EFF-WW

Tot Ion	Ratio	Resp	Lower	Upper
128	100	178852		
49	134.8	0.0	361.0	
130	126.2	0.0	329.5	

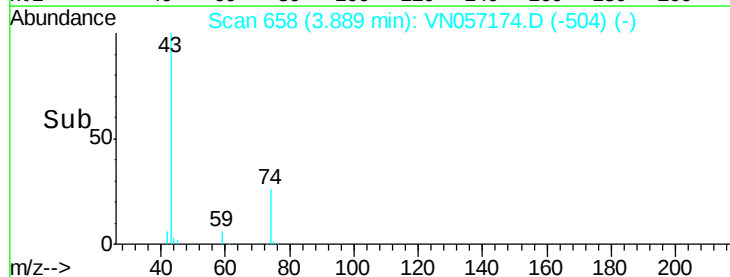
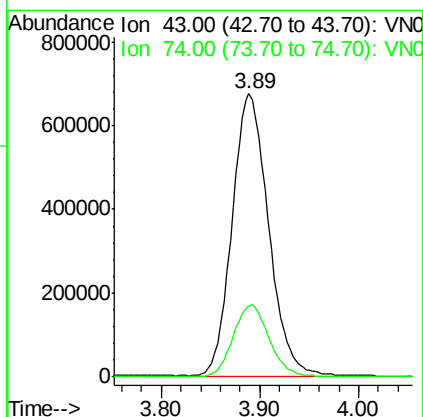
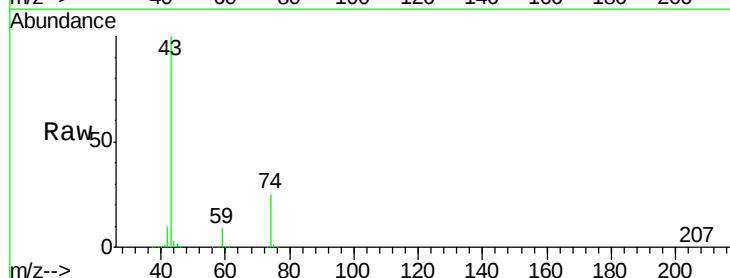
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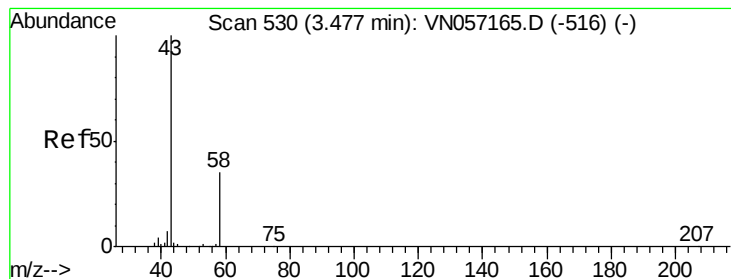
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#12
Methyl Acetate
Concen: 161.213 ug/l
RT: 3.89 min Scan# 658
Delta R.T. -0.00 min
Lab File: VN057174.D
Acq: 10 Aug 2019 14:15

Tgt Ion	Ratio	Resp	Lower	Upper
43	100	1721676		
74	25.3	20.5	30.7	





#15

Acetone

Concen: 1665.322 ug/l

RT: 3.47 min Scan# 529

Delta R.T. -0.00 min

Lab File: VN057174.D

Acq: 10 Aug 2019 14:15

Instrument :

MSVOA_N

ClientSampleId :

EFF-WW

Tot Ion: 58 Resp: 2462599

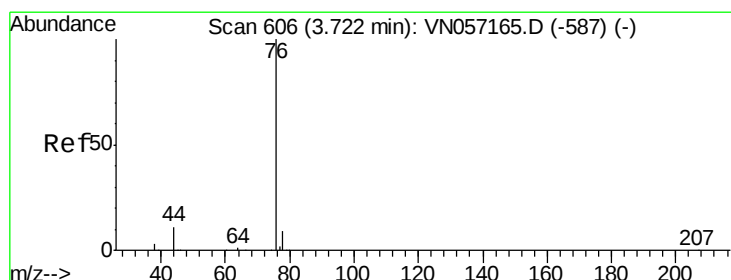
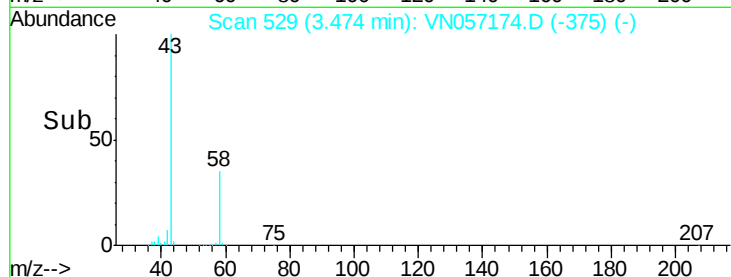
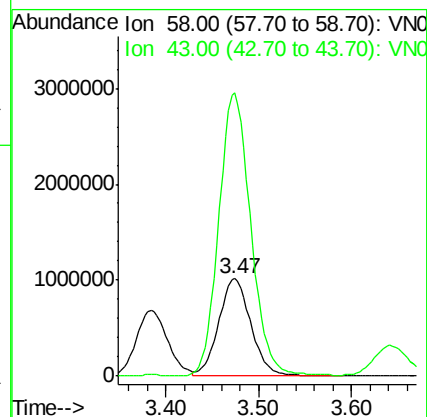
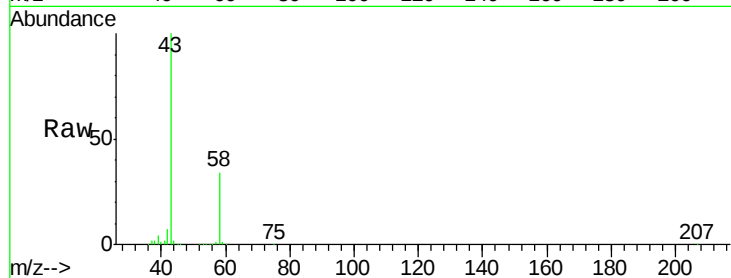
Ion Ratio Lower Upper

58 100

43 290.0 226.2 339.2

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#16

Carbon Disulfide

Concen: 0.434 ug/l

RT: 3.72 min Scan# 606

Delta R.T. -0.00 min

Lab File: VN057174.D

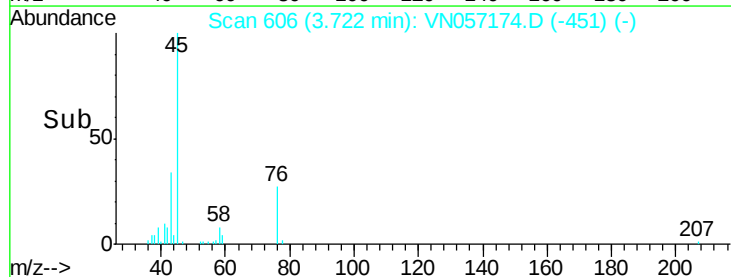
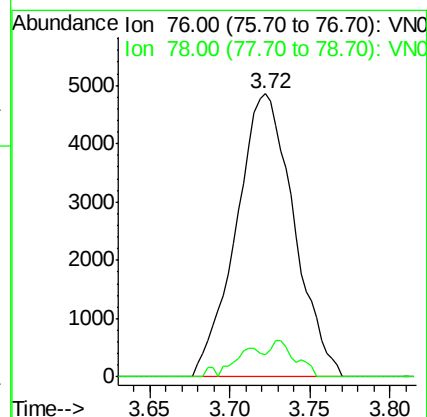
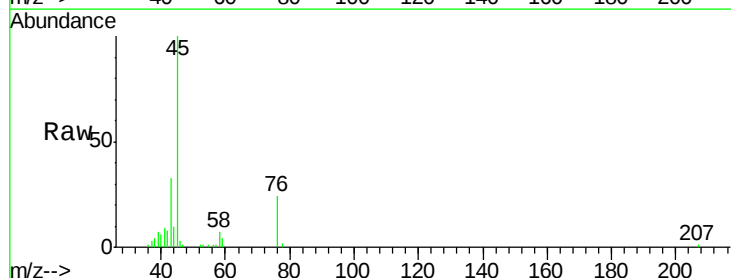
Acq: 10 Aug 2019 14:15

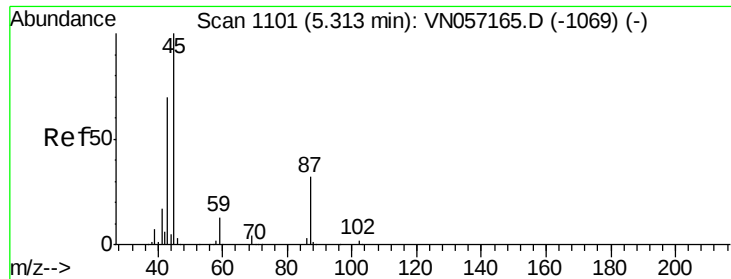
Tgt Ion: 76 Resp: 11997

Ion Ratio Lower Upper

76 100

78 7.9 7.3 10.9





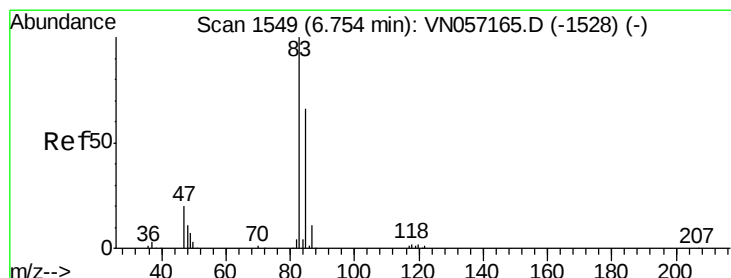
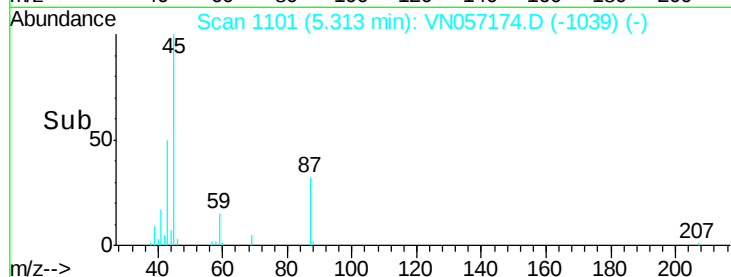
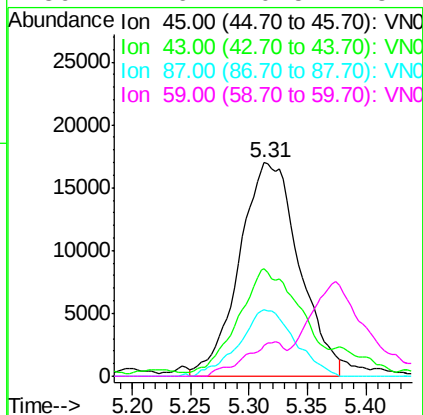
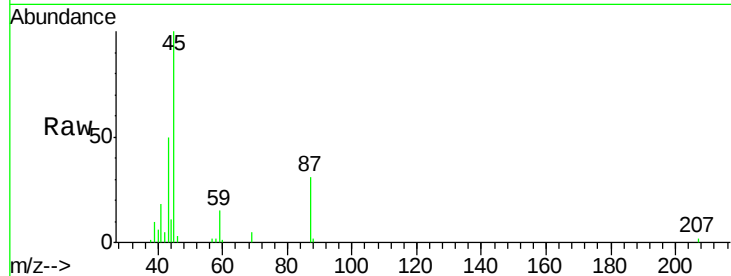
#20
Diisopropyl ether
Concen: 1.967 ug/l m
RT: 5.31 min Scan# 1101
Delta R.T. -0.00 min
Lab File: VN057174.D
Acq: 10 Aug 2019 14:15

Instrument :
MSVOA_N
ClientSampleId :
EFF-WW

Tot Ion	Ion	Ratio	Resp	Lower	Upper
45	100		60641		
43	50.3	60.0	90.0#		
87	31.2	25.9	38.9		
59	14.6	10.5	15.7		

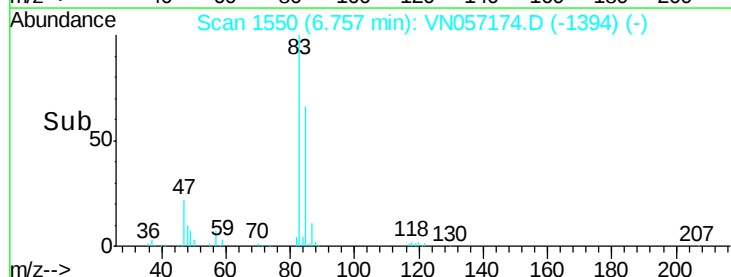
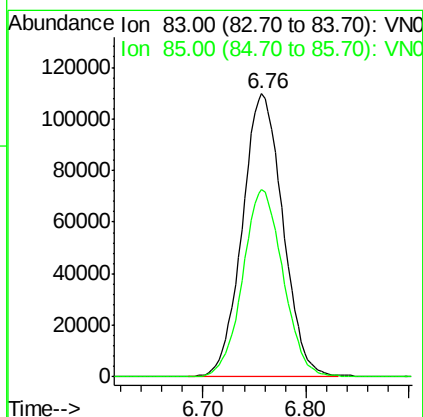
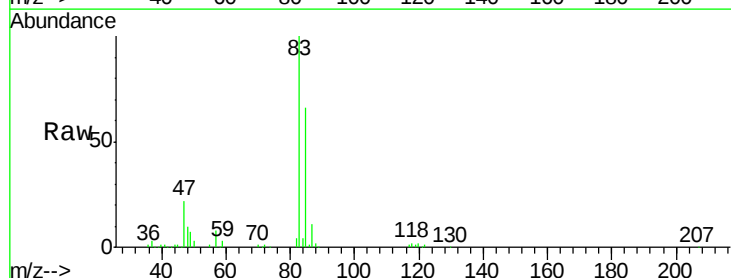
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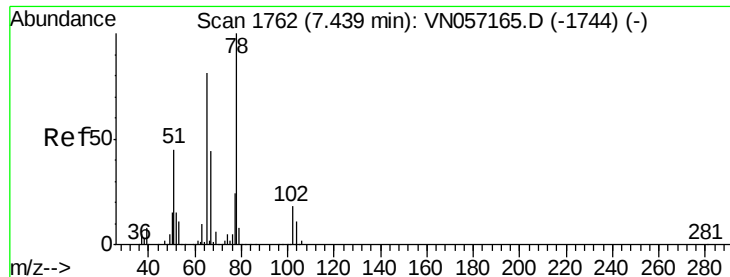
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#25
Chloroform
Concen: 15.183 ug/l
RT: 6.76 min Scan# 1550
Delta R.T. 0.00 min
Lab File: VN057174.D
Acq: 10 Aug 2019 14:15

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
83	100		299713		
85	66.3	52.5	78.7		





#27

1,2-Dichloroethane-d4

Concen: 29.681 ug/l

RT: 7.44 min Scan# 1762

Delta R.T. -0.00 min

Lab File: VN057174.D

Acq: 10 Aug 2019 14:15

Instrument :

MSVOA_N

ClientSampleId :

EFF-WW

Tot Ion: 65 Resp: 346041

Ion Ratio Lower Upper

65 100

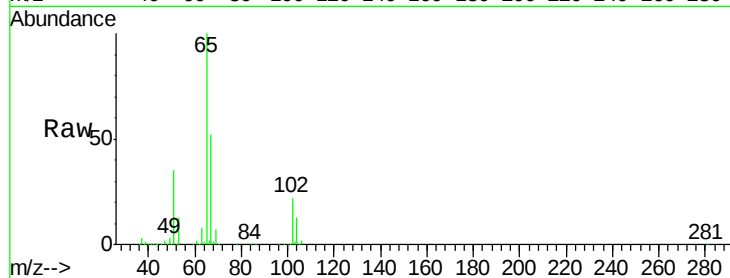
67 53.8 42.4 63.6

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Abundance Ion 65.00 (64.70 to 65.70): VN057174.D (-1607) (-)

Ion 67.00 (66.70 to 67.70): VN057174.D (-1607) (-)

7.44

150000

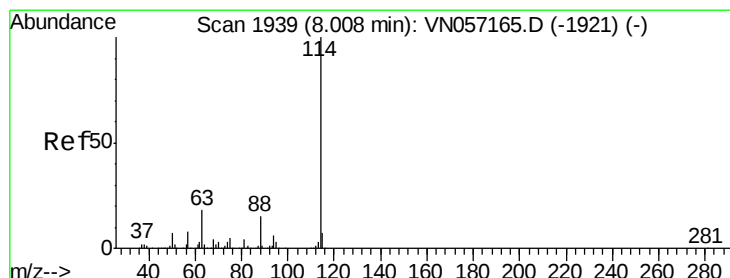
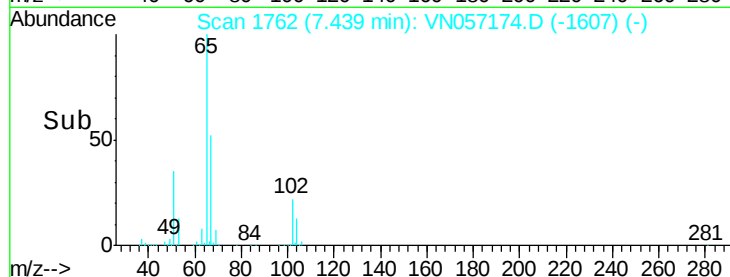
100000

50000

0

7.40 7.50

Time-->



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 8.01 min Scan# 1939

Delta R.T. -0.00 min

Lab File: VN057174.D

Acq: 10 Aug 2019 14:15

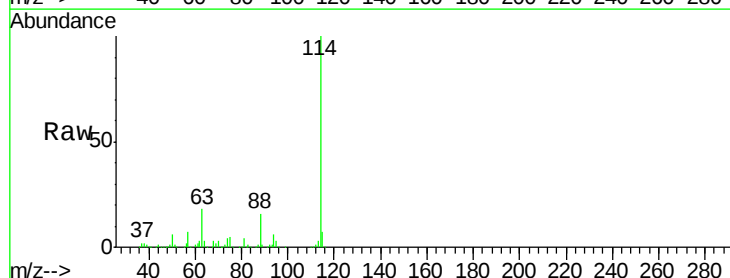
Tgt Ion: 114 Resp: 970500

Ion Ratio Lower Upper

114 100

63 18.2 14.6 21.8

88 15.7 12.2 18.2



Abundance Ion 114.00 (113.70 to 114.70): VN057174.D (-1784) (-)

Ion 63.00 (62.70 to 63.70): VN057174.D (-1784) (-)

Ion 88.00 (87.70 to 88.70): VN057174.D (-1784) (-)

8.01

600000

500000

400000

300000

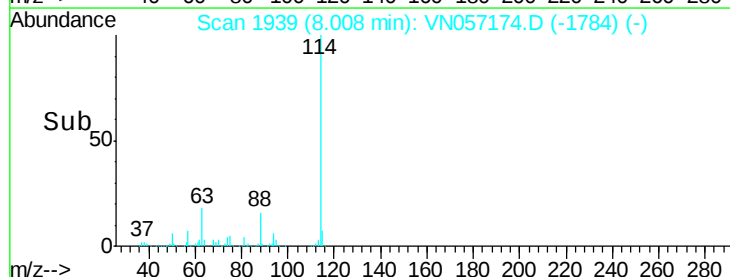
200000

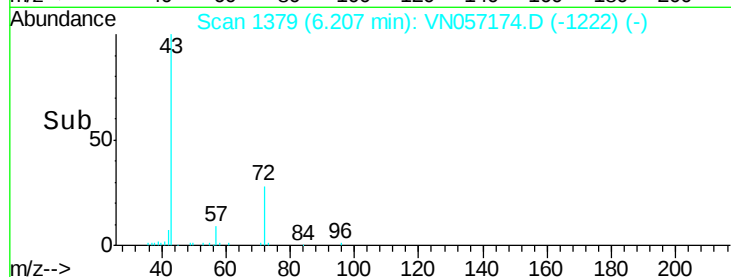
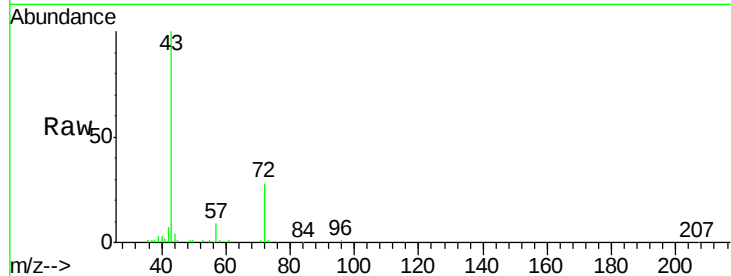
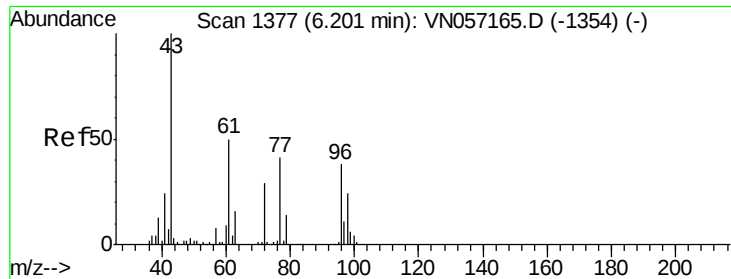
100000

0

7.90 8.00 8.10

Time-->





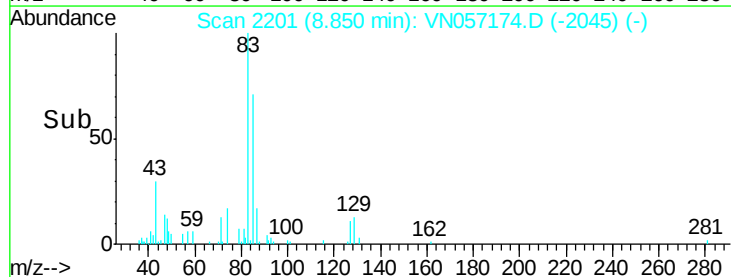
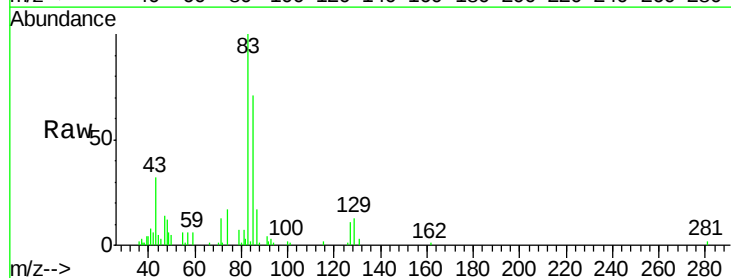
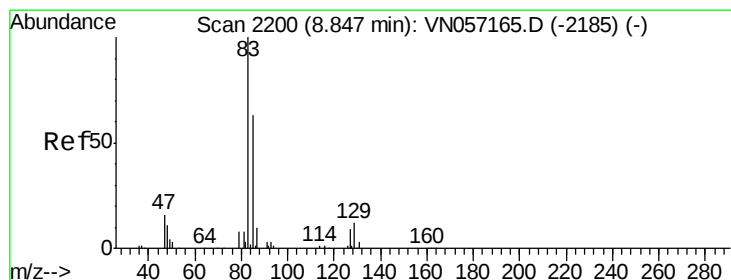
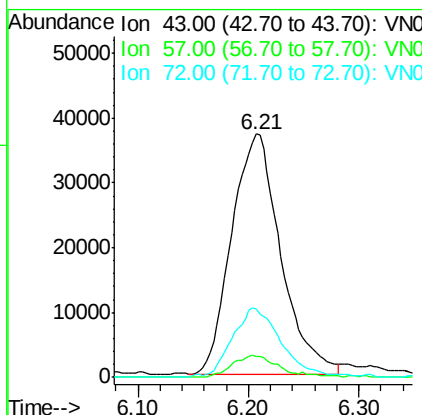
#30
2-Butanone
Concen: 19.912 ug/l
RT: 6.21 min Scan# 1379
Delta R.T. 0.01 min
Lab File: VN057174.D
Acq: 10 Aug 2019 14:15

Tot Ion	Ratio	Resp	Lower	Upper
43	100	114411		
57	8.1		6.8	10.2
72	27.1		23.0	34.6

Instrument :
MSVOA_N
ClientSampleId :
EFF-WW

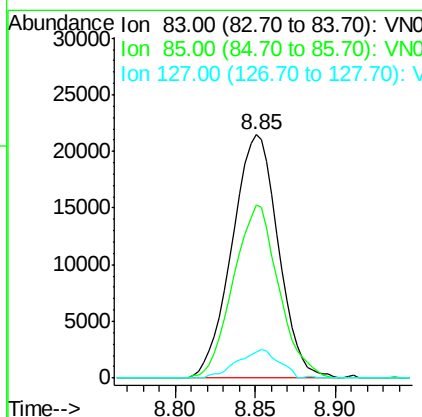
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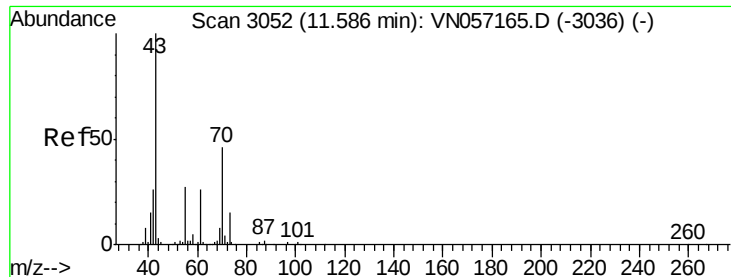
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#41
Bromodichloromethane
Concen: 2.889 ug/l
RT: 8.85 min Scan# 2201
Delta R.T. 0.00 min
Lab File: VN057174.D
Acq: 10 Aug 2019 14:15

Tgt Ion	Ratio	Resp	Lower	Upper
83	100	42466		
85	71.2		50.6	76.0
127	10.9		7.0	10.6





#47

n-amvl Acetate

Concen: 0.275 ug/l

RT: 11.58 min Scan# 3051

Delta R.T. -0.00 min

Lab File: VN057174.D

Acq: 10 Aug 2019 14:15

Instrument :

MSVOA_N

ClientSampleId :

EFF-WW

Tot Ion: 43 Resp: 3892

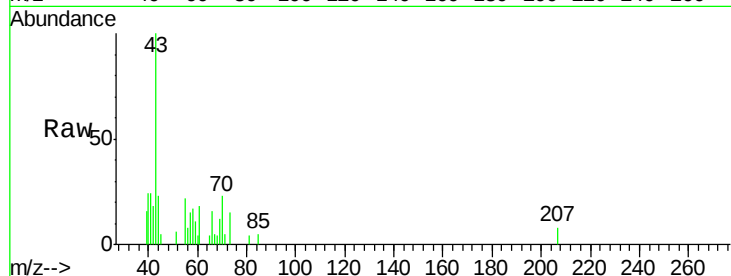
Ion Ratio Lower Upper

43 100

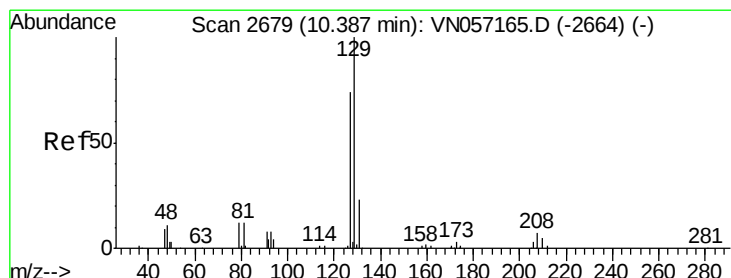
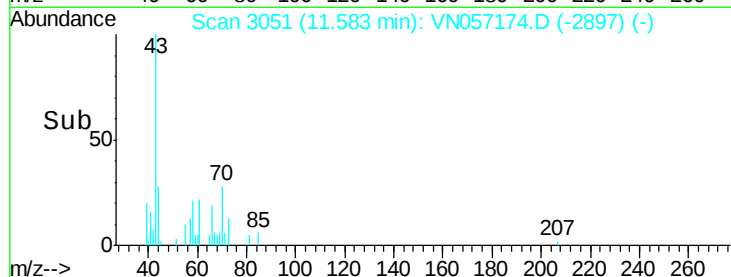
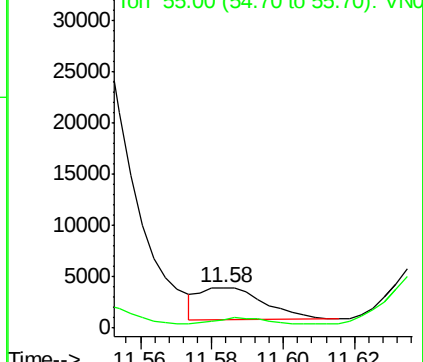
55 13.3 20.7 31.1#

Manual Integrations
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Abundance Ion 43.00 (42.70 to 43.70): VN057165.D (-3036) (-)



#53

Dibromochloromethane

Concen: 0.538 ug/l

RT: 10.39 min Scan# 2680

Delta R.T. 0.00 min

Lab File: VN057174.D

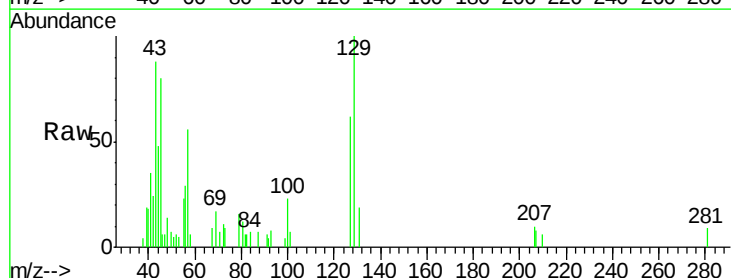
Acq: 10 Aug 2019 14:15

Tgt Ion: 129 Resp: 6400

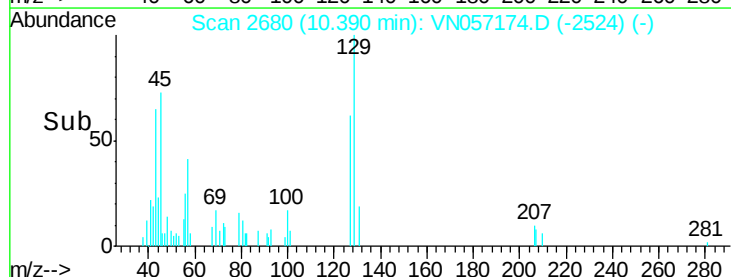
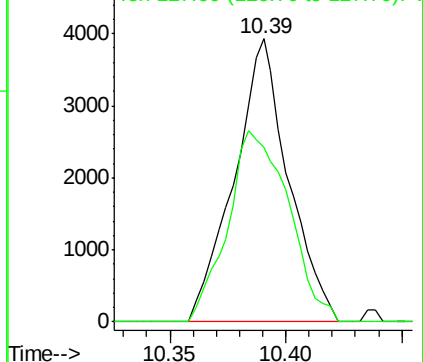
Ion Ratio Lower Upper

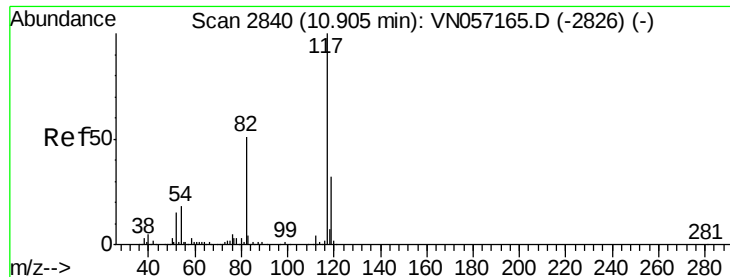
129 100

127 75.5 38.2 114.6



Abundance Ion 129.00 (128.70 to 129.70): VN057165.D (-2664) (-)





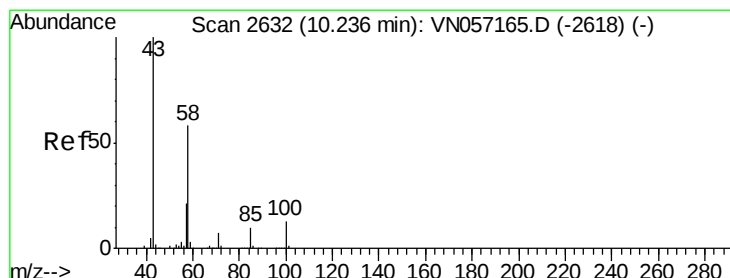
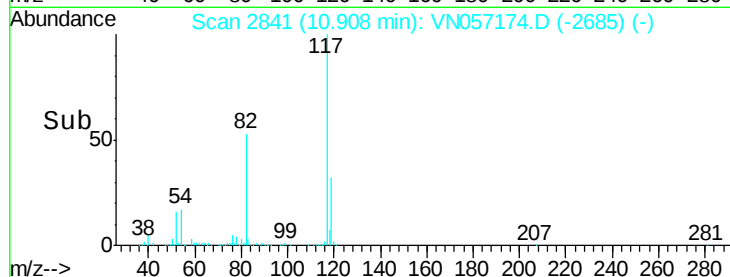
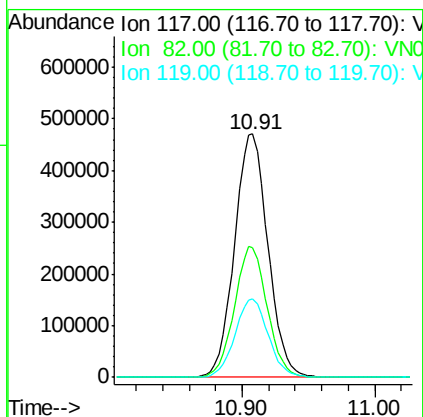
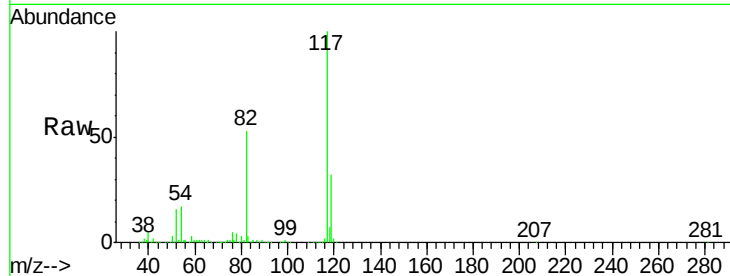
#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 10.91 min Scan# 2841
Delta R.T. 0.00 min
Lab File: VN057174.D
Acq: 10 Aug 2019 14:15

Instrument :
MSVOA_N
ClientSampleId :
EFF-WW

Tot Ion	Ratio	Resp	Lower	Upper
117	100	821717		
82	52.8		41.5	62.3
119	32.1		26.1	39.1

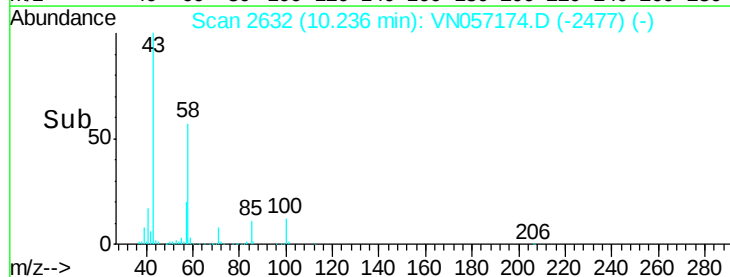
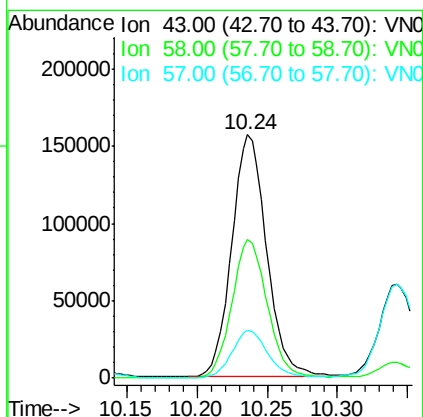
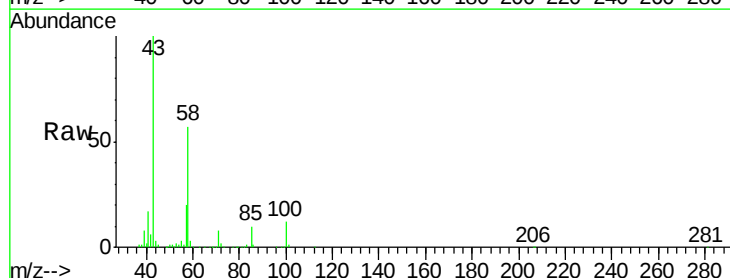
Manual Integrations
APPROVED

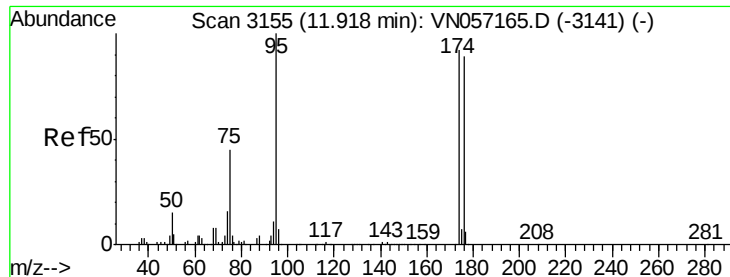
MMDadoda
8/12/2019 3:55:56 PM



#59
2-Hexanone
Concen: 35.691 ug/l
RT: 10.24 min Scan# 2632
Delta R.T. -0.00 min
Lab File: VN057174.D
Acq: 10 Aug 2019 14:15

Tgt Ion	Ratio	Resp	Lower	Upper
43	100	270869		
58	58.4		45.4	68.2
57	19.8		16.1	24.1





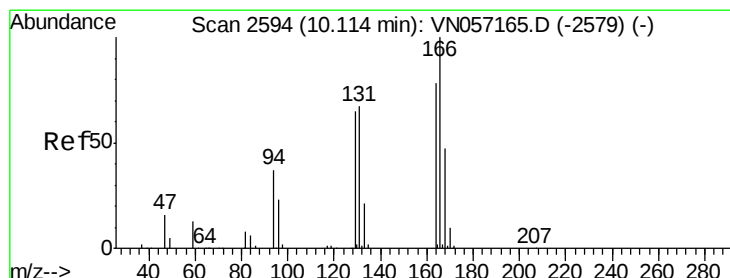
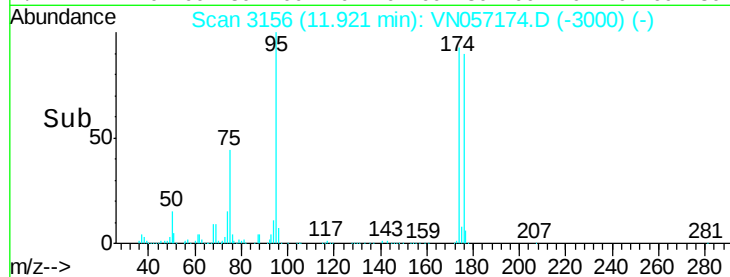
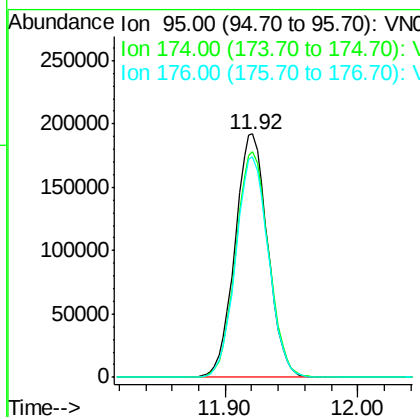
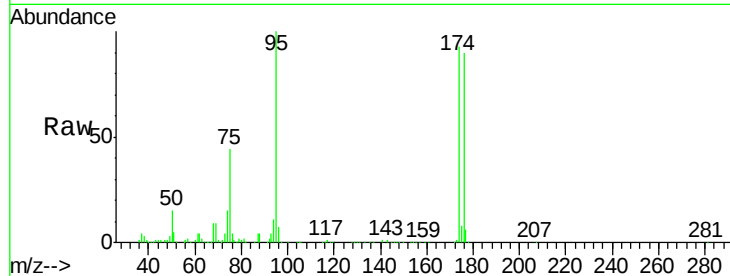
#60
4-Bromofluorobenzene
Concen: 26.871 ug/l
RT: 11.92 min Scan# 3156
Delta R.T. 0.00 min
Lab File: VN057174.D
Acq: 10 Aug 2019 14:15

Instrument :
MSVOA_N
ClientSampleId :
EFF-WW

Tot Ion:	95	Resp:	328781
Ion Ratio	Lower	Upper	
95	100		
174	93.3	74.9	112.3
176	90.3	72.1	108.1

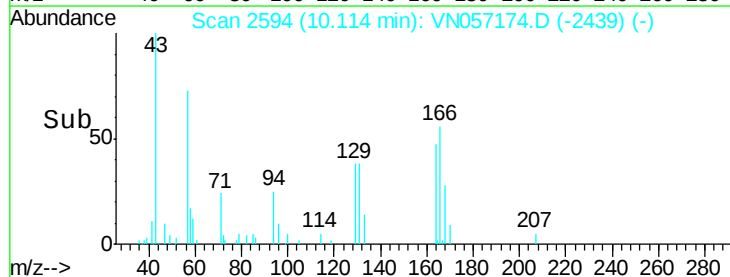
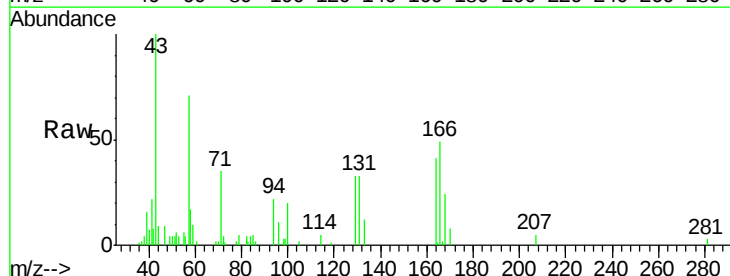
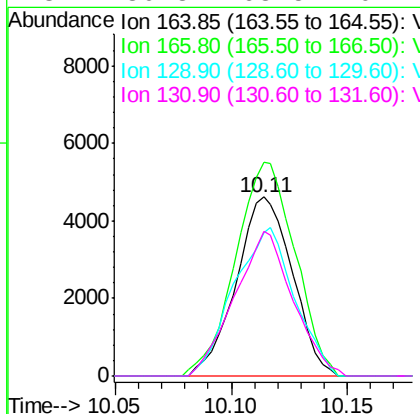
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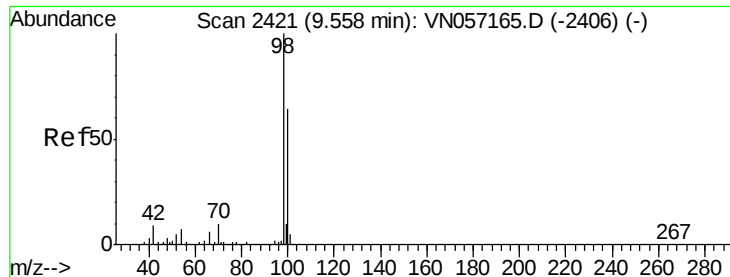
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#61
Tetrachloroethene
Concen: 0.616 ug/l
RT: 10.11 min Scan# 2594
Delta R.T. -0.00 min
Lab File: VN057174.D
Acq: 10 Aug 2019 14:15

Tgt Ion:	164	Resp:	7770
Ion Ratio	Lower	Upper	
164	100		
166	119.3	103.0	154.6
129	80.3	67.3	100.9
131	80.8	68.5	102.7





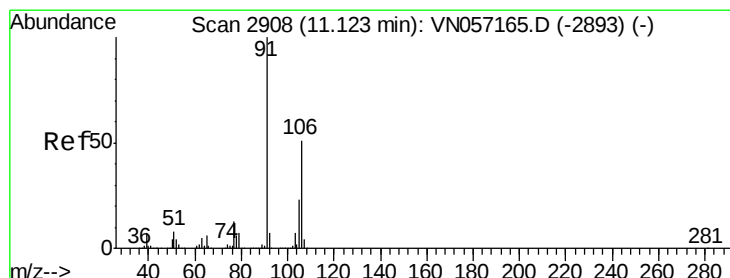
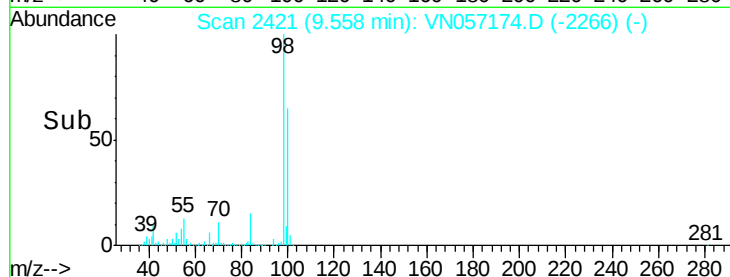
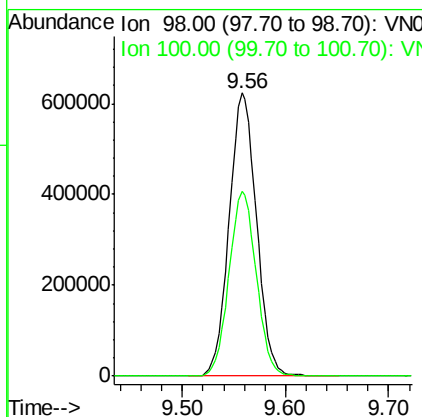
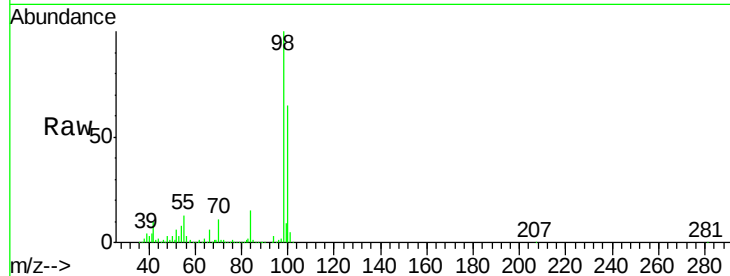
#63
Toluene-d8
Concen: 30.377 ug/l
RT: 9.56 min Scan# 2421
Delta R.T. -0.00 min
Lab File: VN057174.D
Acq: 10 Aug 2019 14:15

Instrument :
MSVOA_N
ClientSampleId :
EFF-WW

Tot Ion: 98 Resp: 1152292
Ion Ratio Lower Upper
98 100
100 65.3 52.4 78.6

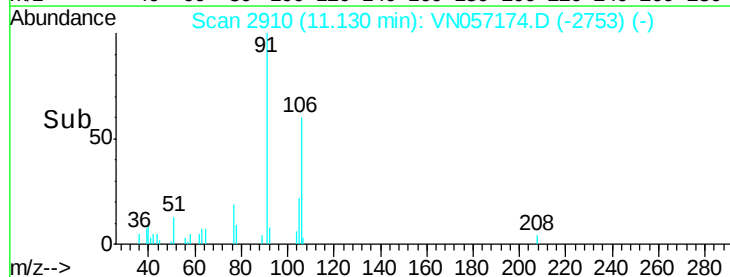
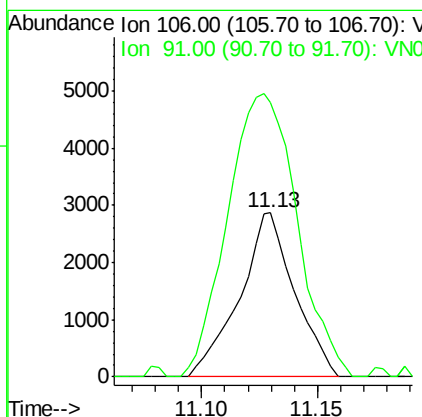
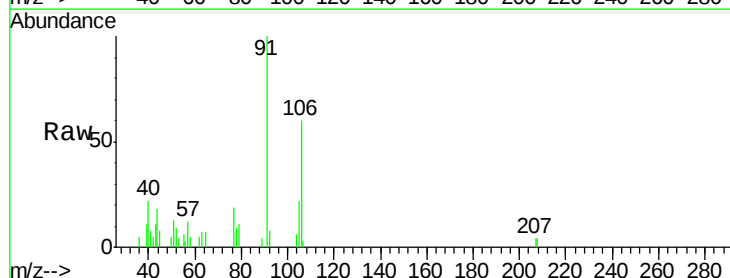
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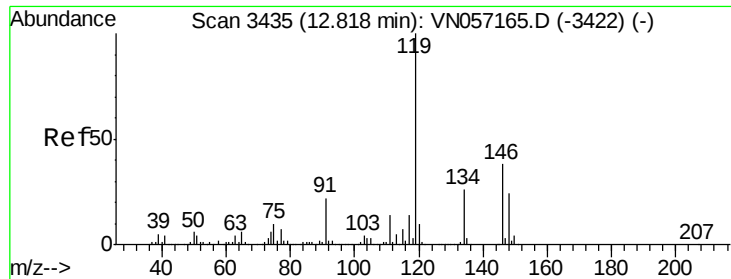
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#67
m/p-Xylenes
Concen: 0.250 ug/l
RT: 11.13 min Scan# 2910
Delta R.T. 0.01 min
Lab File: VN057174.D
Acq: 10 Aug 2019 14:15

Tgt Ion:106 Resp: 4729
Ion Ratio Lower Upper
106 100
91 217.3 160.5 240.7





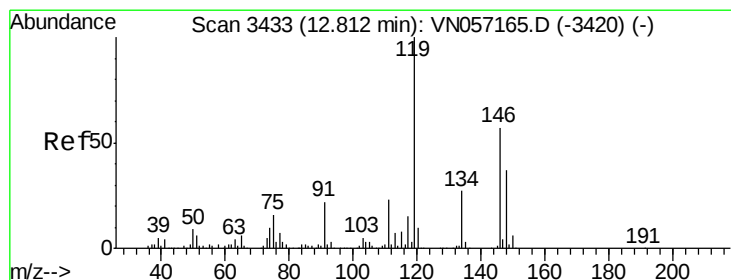
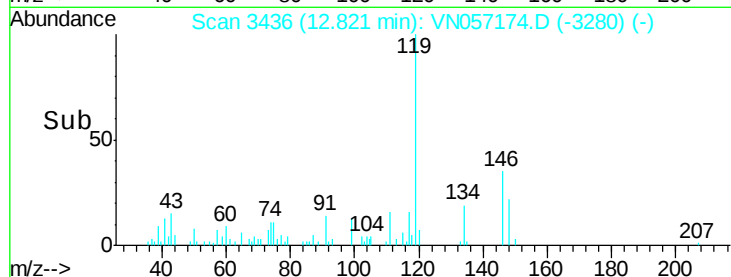
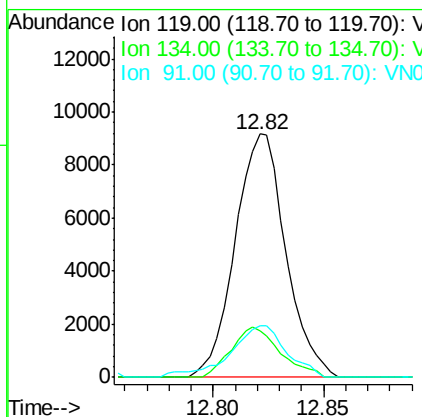
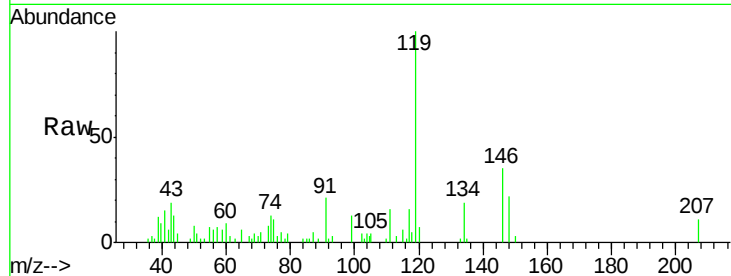
#82
p-Isopropyltoluene
Concen: 0.355 ug/l
RT: 12.82 min Scan# 3436
Delta R.T. 0.00 min
Lab File: VN057174.D
Acq: 10 Aug 2019 14:15

Instrument :
MSVOA_N
ClientSampleId :
EFF-WW

Tot Ion	Ratio	Resp	Lower	Upper
119	100	14625		
134	20.0	0.0	54.2	
91	22.6	0.0	44.4	

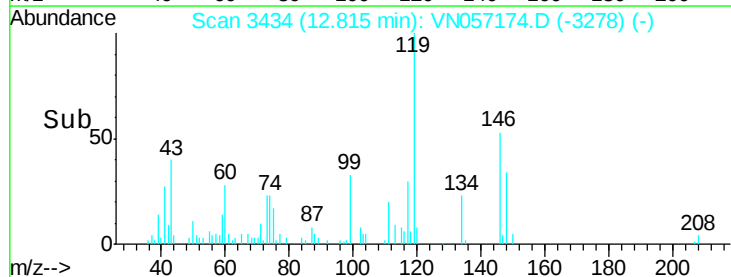
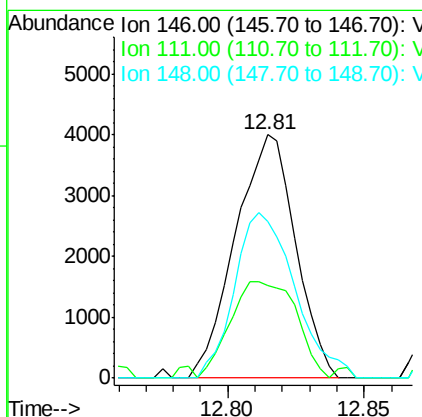
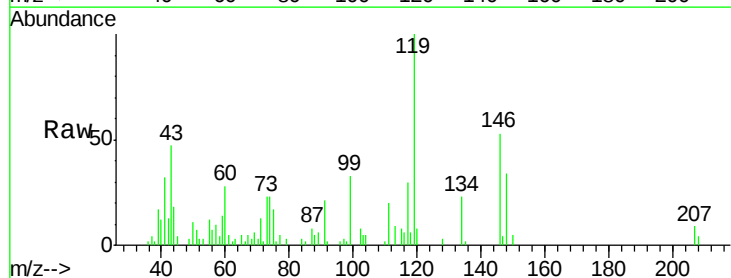
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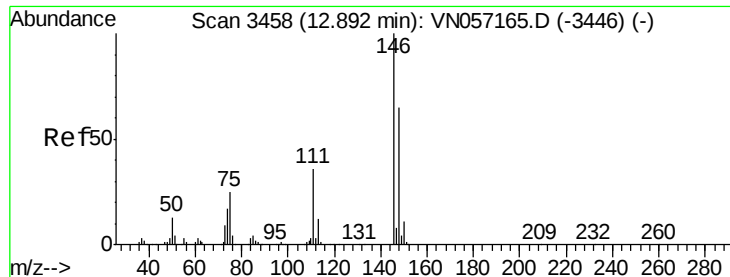
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#83
1,3-Dichlorobenzene
Concen: 0.313 ug/l
RT: 12.81 min Scan# 3434
Delta R.T. 0.00 min
Lab File: VN057174.D
Acq: 10 Aug 2019 14:15

Tgt Ion	Ratio	Resp	Lower	Upper
146	100	6113		
111	43.5	19.1	57.1	
148	68.3	32.6	97.8	





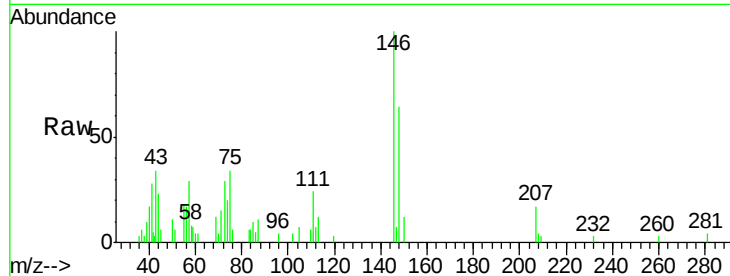
#84
 1,4-Dichlorobenzene
 Concen: 0.468 ug/l
 RT: 12.90 min Scan# 3459
 Delta R.T. 0.00 min
 Lab File: VN057174.D
 Acq: 10 Aug 2019 14:15

Instrument :
 MSVOA_N
 ClientSampleId :
 EFF-WW

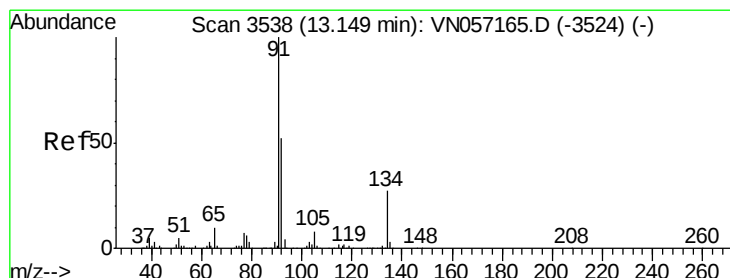
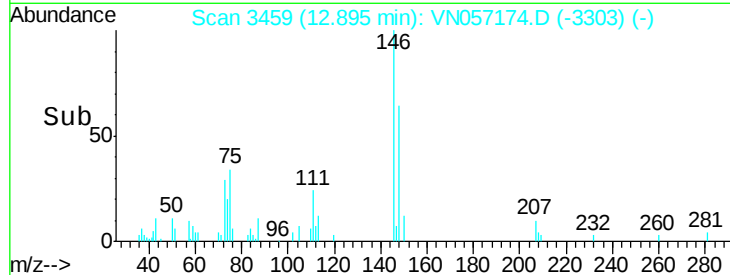
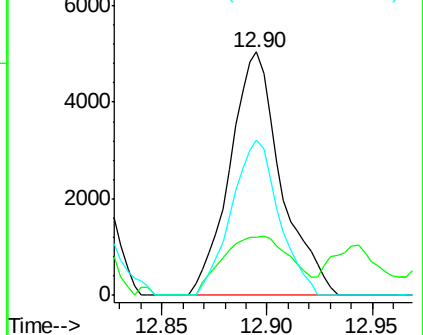
Tot Ion	Ratio	Lower	Upper
146	100		
111	33.4	18.0	54.0
148	59.2	32.3	96.9

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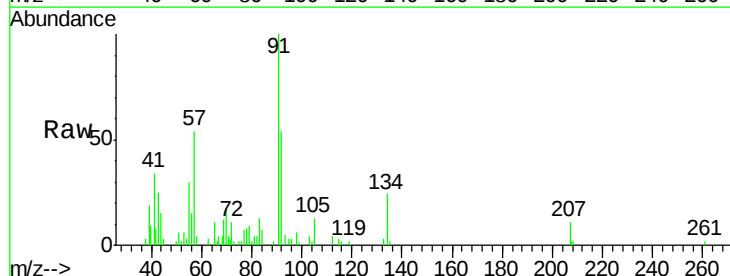


Abundance Ion 146.00 (145.70 to 146.70): V
 Ion 111.00 (110.70 to 111.70): V
 Ion 148.00 (147.70 to 148.70): V

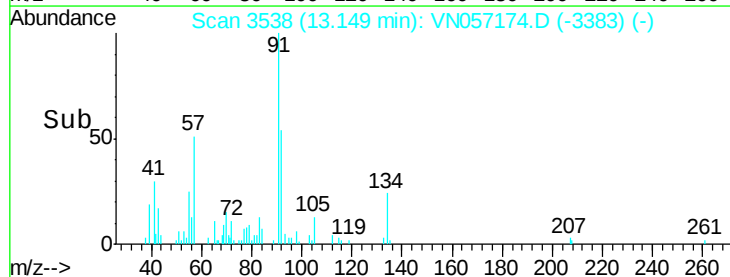
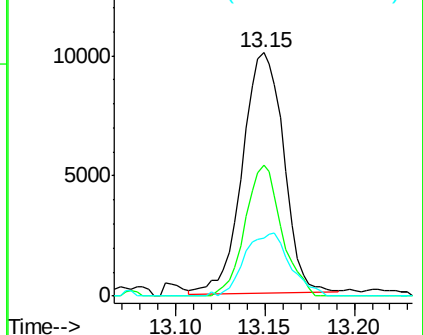


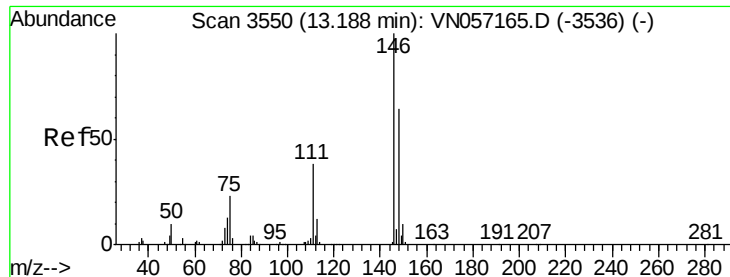
#85
 n-Butylbenzene
 Concen: 0.545 ug/l
 RT: 13.15 min Scan# 3538
 Delta R.T. -0.00 min
 Lab File: VN057174.D
 Acq: 10 Aug 2019 14:15

Tgt Ion	Ratio	Lower	Upper
91	100		
92	48.3	0.0	104.4
134	28.5	0.0	55.0



Abundance Ion 91.00 (90.70 to 91.70): VN
 Ion 92.00 (91.70 to 92.70): VN
 Ion 134.00 (133.70 to 134.70): V





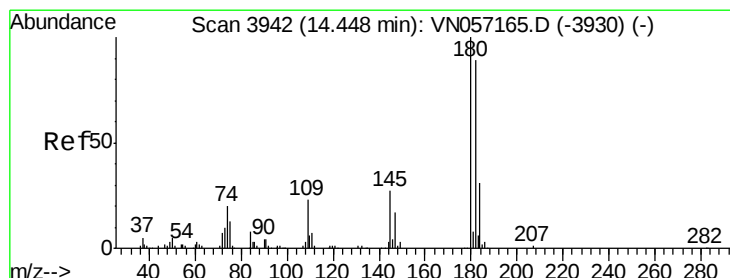
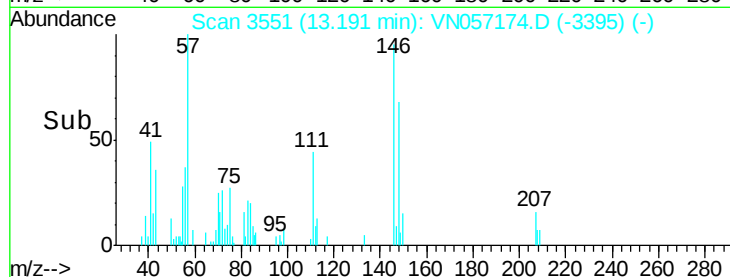
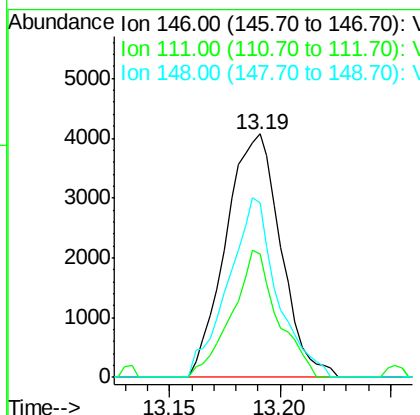
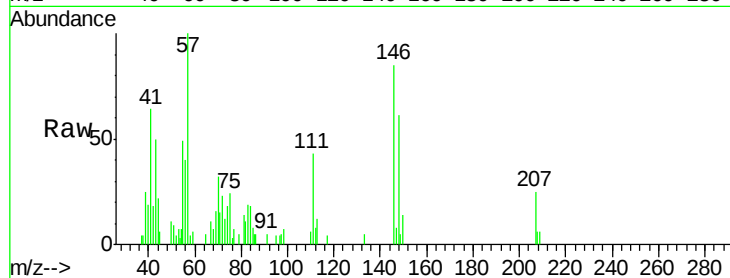
#87
 1,2-Dichlorobenzene
 Concen: 0.364 ug/l
 RT: 13.19 min Scan# 3551
 Delta R.T. 0.00 min
 Lab File: VN057174.D
 Acq: 10 Aug 2019 14:15

Instrument :
 MSVOA_N
 ClientSampled :
 EFF-WW

Tot Ion	Ratio	Lower	Upper
146	100		
111	43.4	18.9	56.5
148	65.9	32.4	97.0

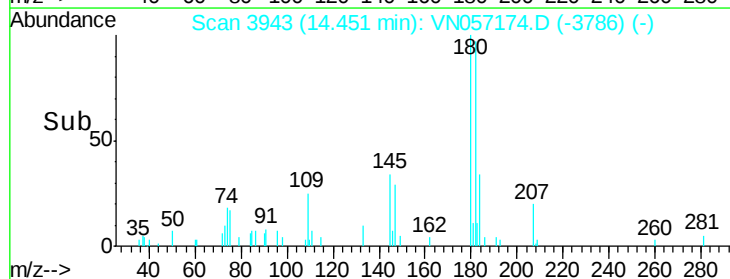
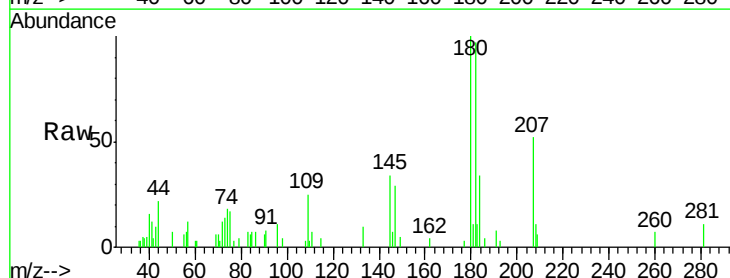
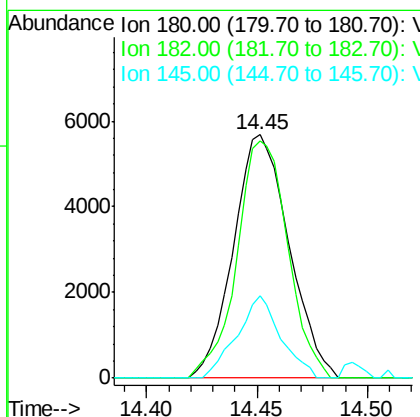
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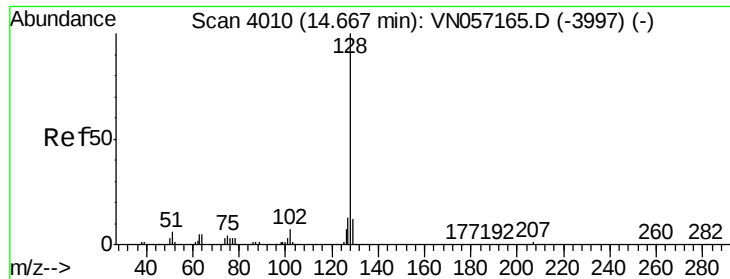
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#89
 1,2,4-Trichlorobenzene
 Concen: 9.909 ug/l
 RT: 14.45 min Scan# 3943
 Delta R.T. 0.00 min
 Lab File: VN057174.D
 Acq: 10 Aug 2019 14:15

Tgt Ion	Ratio	Lower	Upper
180	100		
182	89.3	75.0	112.6
145	26.7	21.7	32.5





#91

Naphthalene

Concen: 1.354 ug/l

RT: 14.67 min Scan# 4011

Delta R.T. 0.00 min

Lab File: VN057174.D

Acq: 10 Aug 2019 14:15

Instrument :

MSVOA_N

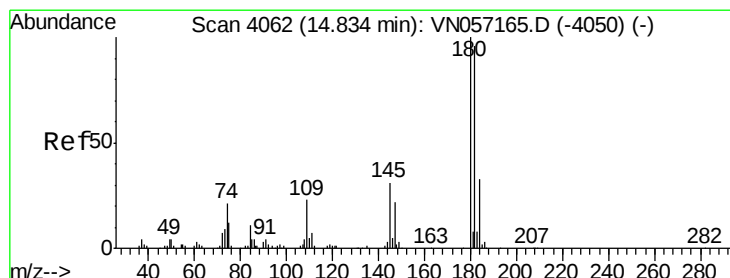
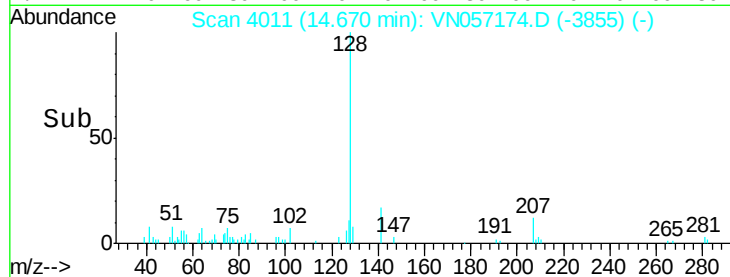
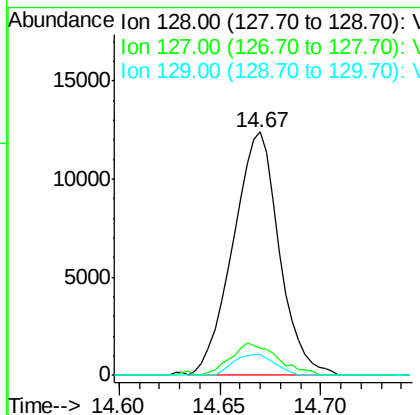
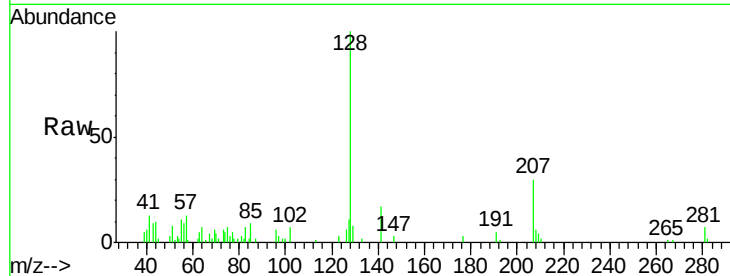
ClientSampleId :

EFF-WW

Tot Ion:	128	Resp:	19883
Ion Ratio	Lower	Upper	
128	100		
127	13.4	10.2	15.4
129	7.7	8.6	13.0#

Manual Integrations
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#92

1,2,3-Trichlorobenzene

Concen: 9.627 ug/l

RT: 14.84 min Scan# 4063

Delta R.T. 0.00 min

Lab File: VN057174.D

Acq: 10 Aug 2019 14:15

Tgt Ion:	180	Resp:	13086
Ion Ratio	Lower	Upper	
180	100		
182	86.3	0.0	195.8
145	31.9	0.0	61.2

