

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN111419\
 Data File : VN059240.D
 Acq On : 14 Nov 2019 17:34
 Operator : JC/SP
 Sample : K5842-04
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 24 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 S36-0163

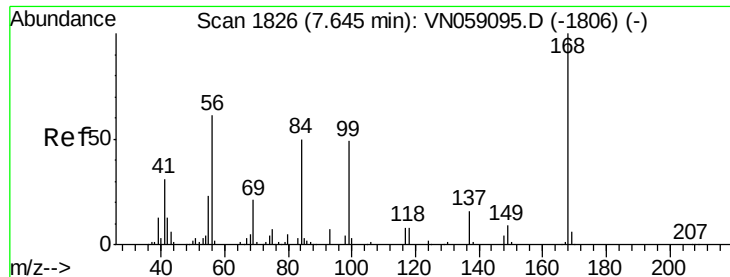
Manual Integrations
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MMDadoda
 11/15/2019 11:39:48 AM

Quant Time: Nov 15 08:00:49 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N110619W.M
 Quant Title : SW846 8260
 QLast Update : Thu Nov 07 04:00:41 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.64	168	475112	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.57	114	725450	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.40	117	658970	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.34	152	294754	50.00	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.00	65	281000	48.11	ug/l	0.00
Spiked Amount	50.000		Recovery	=	96.22%	
35) Dibromofluoromethane	7.57	113	219206	50.61	ug/l	0.00
Spiked Amount	50.000		Recovery	=	101.22%	
50) Toluene-d8	10.08	98	884148	51.82	ug/l	0.00
Spiked Amount	50.000		Recovery	=	103.64%	
62) 4-Bromofluorobenzene	12.40	95	328757	53.44	ug/l	0.00
Spiked Amount	50.000		Recovery	=	106.88%	
Target Compounds						
					Qvalue	
4) Vinyl Chloride	2.17	62	10277	1.629	ug/l	96
16) Acetone	3.80	43	6270	2.064	ug/l #	84
21) trans-1,2-Dichloroethene	5.01	96	14048	2.953	ug/l	98
27) cis-1,2-Dichloroethene	6.82	96	5770m	1.045	ug/l	
29) Tetrahydrofuran	7.19	42	32760	12.881	ug/l	99
31) Cyclohexane	7.63	56	107605	11.835	ug/l #	93
39) Methylcyclohexane	9.07	83	41422	5.263	ug/l	95
40) Benzene	8.02	78	3280473	160.654	ug/l	99
44) Trichloroethene	8.82	130	3303	0.658	ug/l	99
65) Chlorobenzene	11.43	112	9016706	701.913	ug/l #	10
67) Ethyl Benzene	11.51	91	1756433	77.065	ug/l	98
68) m/p-Xylenes	11.62	106	29388	3.442	ug/l	99
69) o-Xylene	11.95	106	17693	2.144	ug/l	98
73) Isopropylbenzene	12.25	105	236341	11.023	ug/l	100
78) n-propylbenzene	12.59	91	261130	10.637	ug/l	100
79) 2-Chlorotoluene	12.67	91	13270	0.871	ug/l	92
80) 1,3,5-Trimethylbenzene	12.73	105	6844m	0.377	ug/l	
83) tert-Butylbenzene	12.99	119	14755	0.940	ug/l	94
84) 1,2,4-Trimethylbenzene	13.04	105	19416	1.105	ug/l	97
85) sec-Butylbenzene	13.17	105	49025	2.403	ug/l	81
87) 1,3-Dichlorobenzene	13.28	146	74031	8.026	ug/l	97
88) 1,4-Dichlorobenzene	13.36	146	560378	60.718	ug/l	99
89) n-Butylbenzene	13.62	91	4725m	0.300	ug/l	
91) 1,2-Dichlorobenzene	13.65	146	9728m	1.072	ug/l	
95) Naphthalene	15.13	128	194940	15.030	ug/l	99

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.64 min Scan# 1826

Delta R.T. -0.00 min

Lab File: VN059240.D

Acq: 14 Nov 2019 17:34

Instrument :

MSVOA_N

ClientSampleId :

S36-0163

Tot Ion:168 Resp: 475112

Ion Ratio Lower Upper

168 100

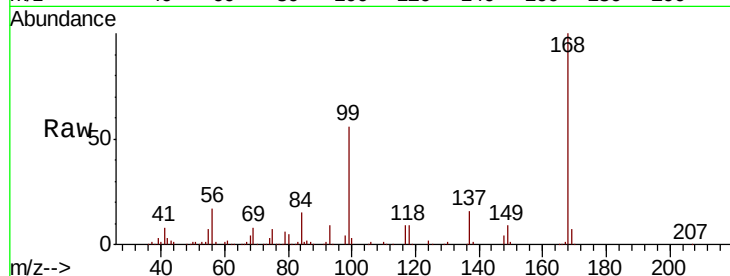
99 55.8 45.7 68.5

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Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO

7.64

200000

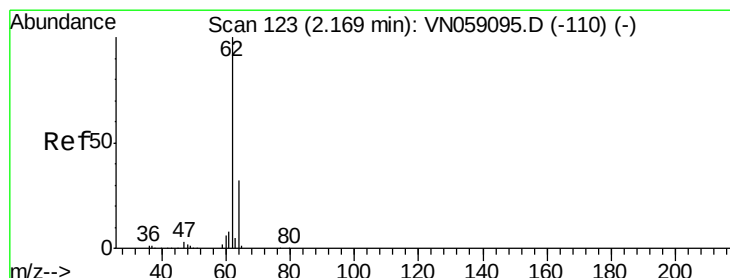
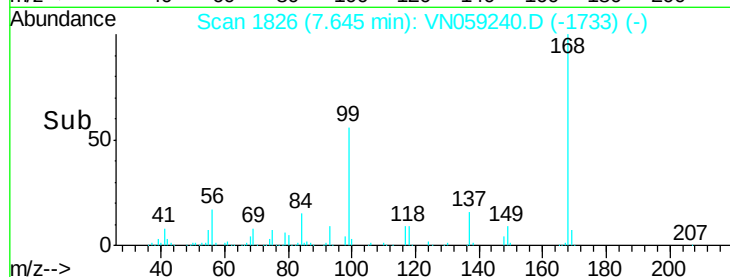
150000

100000

50000

0

Time--> 7.50 7.60 7.70



#4

Vinyl Chloride

Concen: 1.629 ug/l

RT: 2.17 min Scan# 123

Delta R.T. -0.00 min

Lab File: VN059240.D

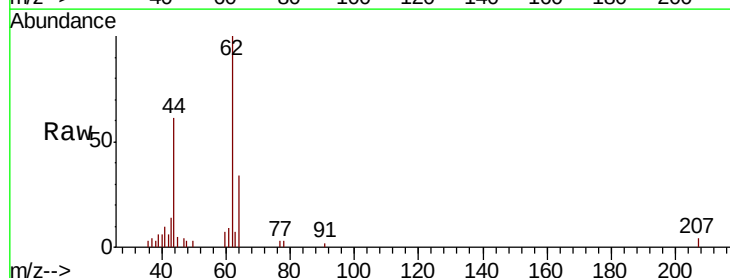
Acq: 14 Nov 2019 17:34

Tgt Ion: 62 Resp: 10277

Ion Ratio Lower Upper

62 100

64 34.1 25.4 38.2



Abundance Ion 61.90 (61.60 to 62.60): VNO

Ion 63.90 (63.60 to 64.60): VNO

2.17

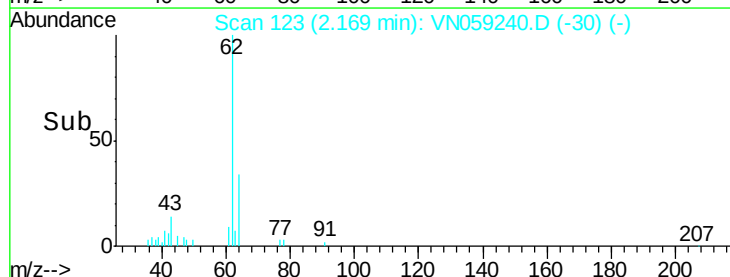
6000

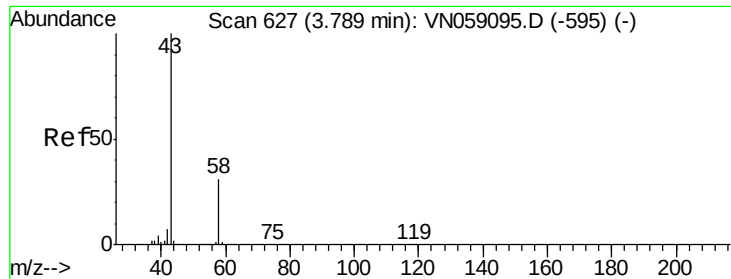
4000

2000

0

Time--> 2.15 2.20





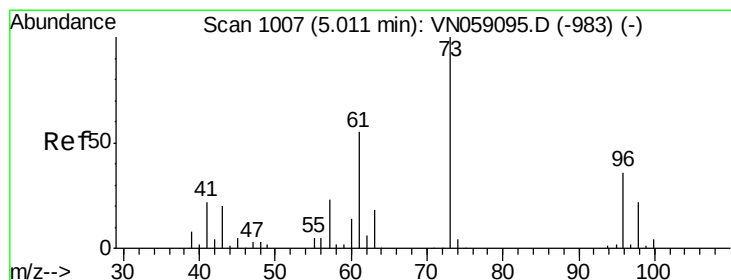
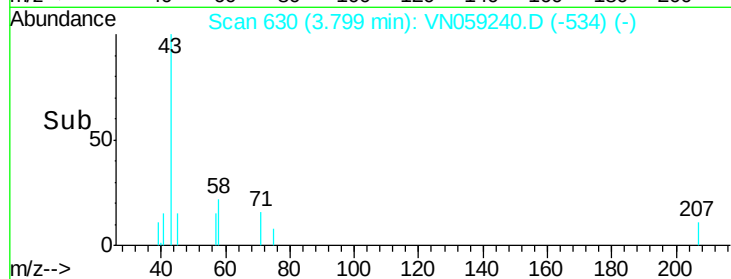
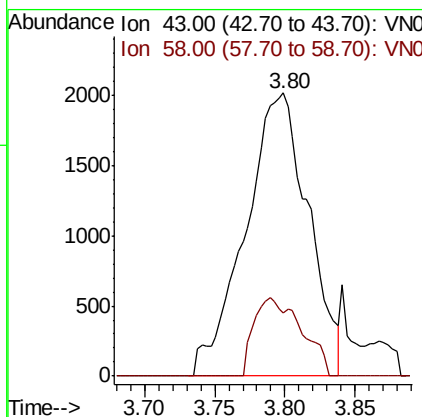
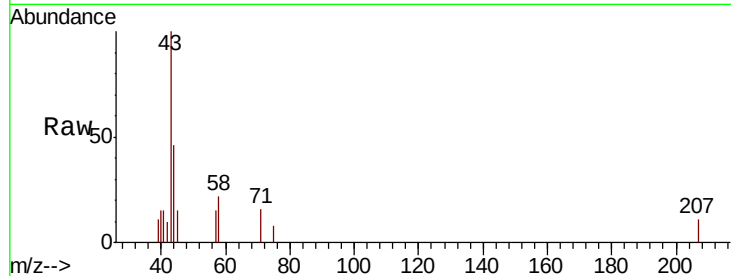
#16
Acetone
Concen: 2.064 ug/l
RT: 3.80 min Scan# 630
Delta R.T. 0.01 min
Lab File: VN059240.D
Acq: 14 Nov 2019 17:34

Instrument :
MSVOA_N
ClientSampleId :
S36-0163

Tot Ion: 43 Resp: 6270
Ion Ratio Lower Upper
43 100
58 22.4 24.9 37.3#

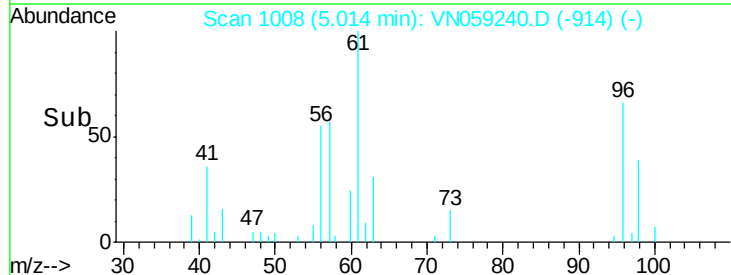
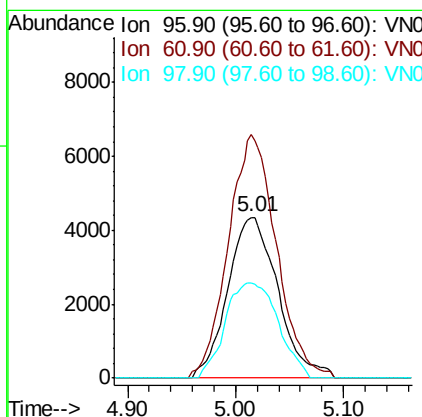
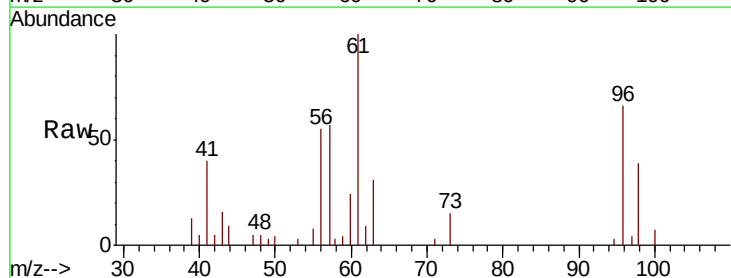
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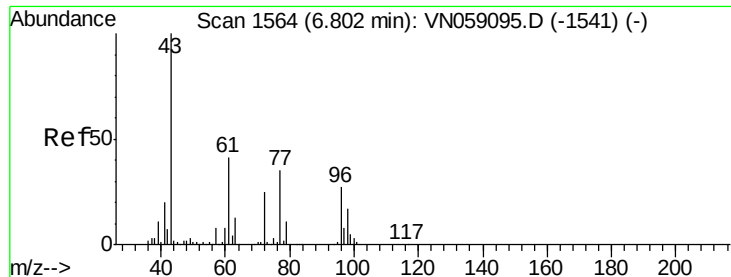
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#21
trans-1,2-Dichloroethene
Concen: 2.953 ug/l
RT: 5.01 min Scan# 1008
Delta R.T. 0.00 min
Lab File: VN059240.D
Acq: 14 Nov 2019 17:34

Tgt Ion: 96 Resp: 14048
Ion Ratio Lower Upper
96 100
61 151.3 122.6 183.8
98 59.5 50.3 75.5





#27

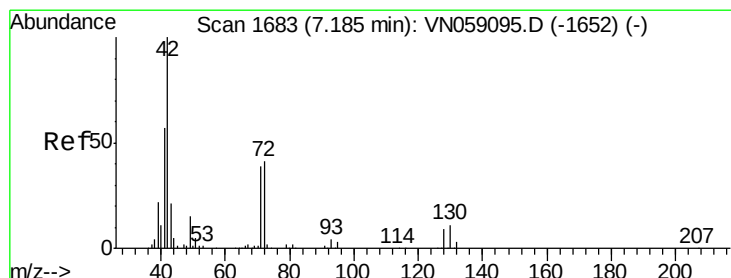
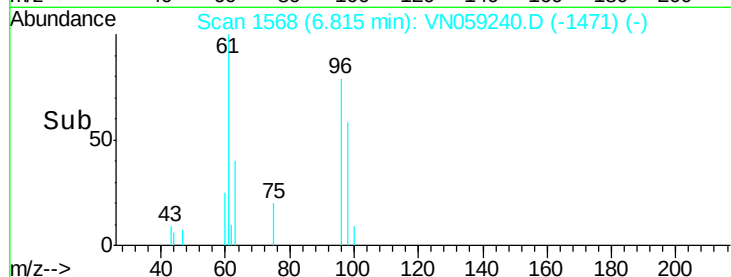
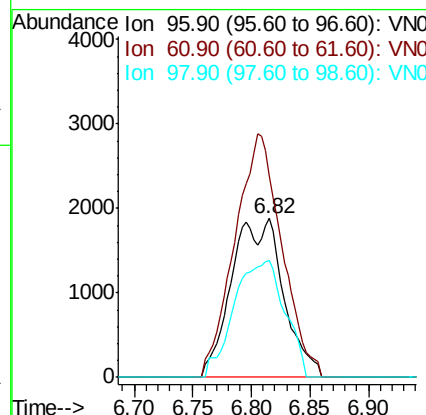
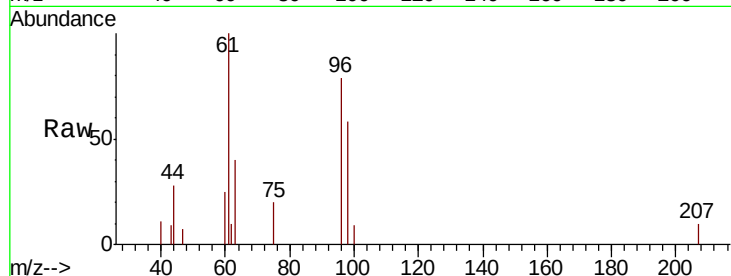
cis-1,2-Dichloroethene
Concen: 1.045 ug/l m
RT: 6.82 min Scan# 1568
Delta R.T. 0.01 min
Lab File: VN059240.D
Acq: 14 Nov 2019 17:34

Instrument :
MSVOA_N
ClientSampled :
S36-0163

Tot Ion	Ratio	Resp	Lower	Upper
96	100	5770		
61	139.1		0.0	311.6
98	71.8		0.0	129.8

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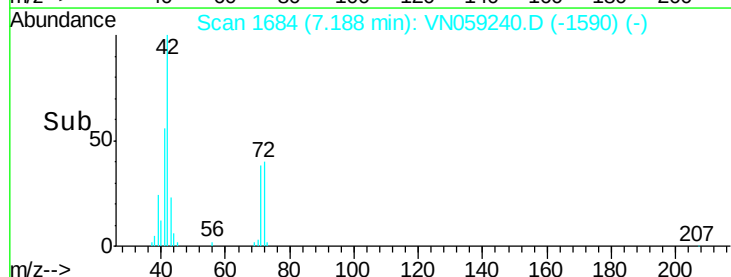
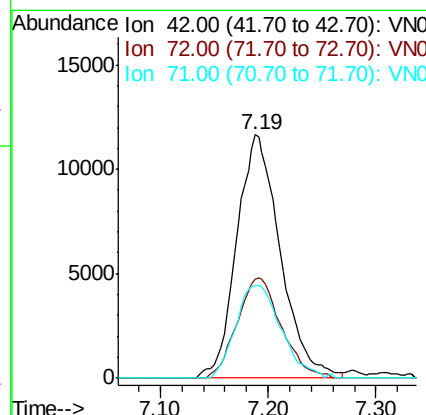
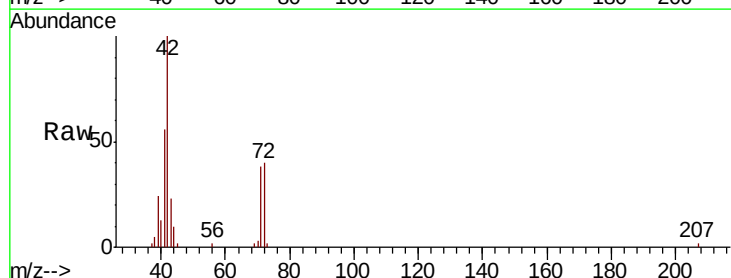
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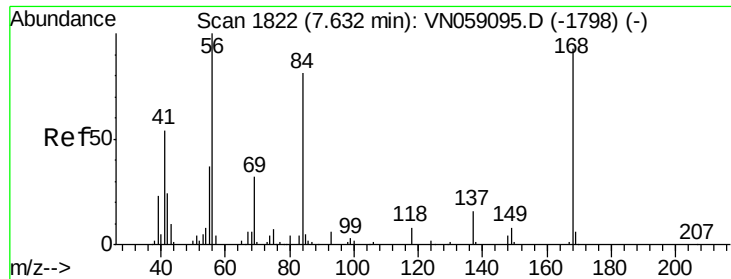


#29

Tetrahydrofuran
Concen: 12.881 ug/l
RT: 7.19 min Scan# 1684
Delta R.T. 0.00 min
Lab File: VN059240.D
Acq: 14 Nov 2019 17:34

Tgt Ion	Ratio	Resp	Lower	Upper
42	100	32760		
72	41.6		33.1	49.7
71	39.5		30.9	46.3





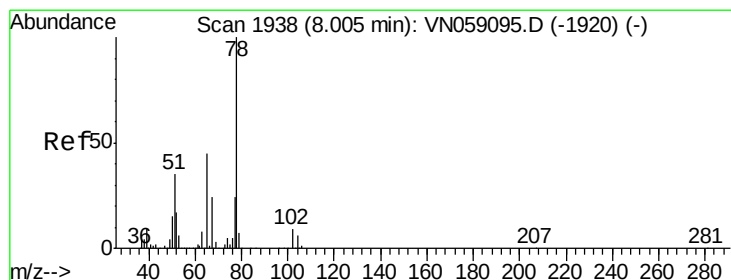
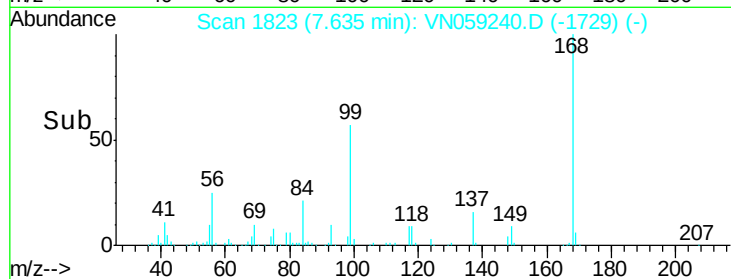
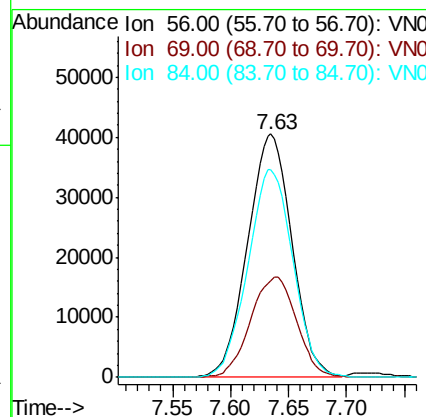
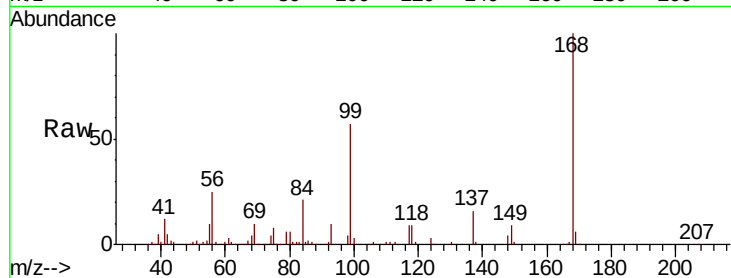
#31
Cyclohexane
Concen: 11.835 ug/l
RT: 7.63 min Scan# 1823
Delta R.T. 0.00 min
Lab File: VN059240.D
Acq: 14 Nov 2019 17:34

Instrument :
MSVOA_N
ClientSampleId :
S36-0163

Tot Ion	Ratio	Lower	Upper
56	100		
69	39.6	25.8	38.8#
84	85.2	65.0	97.4

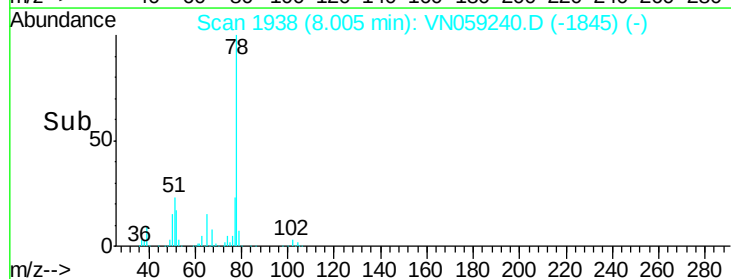
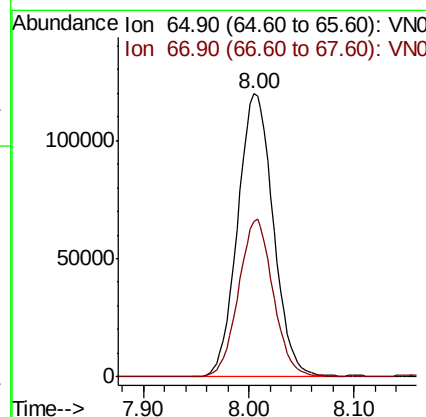
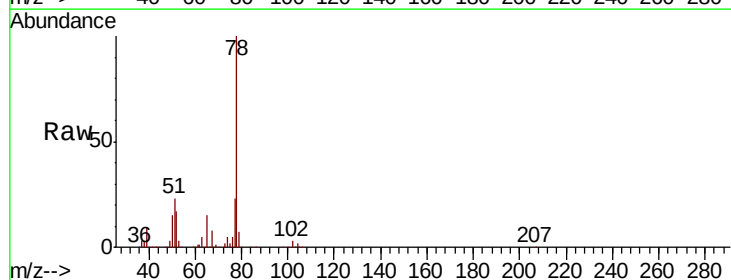
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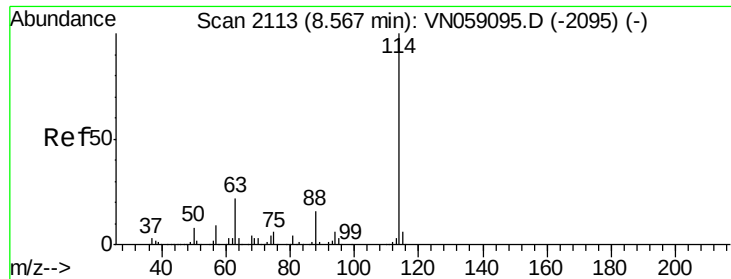
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#33
1,2-Dichloroethane-d4
Concen: 48.114 ug/l
RT: 8.00 min Scan# 1938
Delta R.T. -0.00 min
Lab File: VN059240.D
Acq: 14 Nov 2019 17:34

Tgt Ion	Ratio	Lower	Upper
65	100		
67	54.3	0.0	107.4





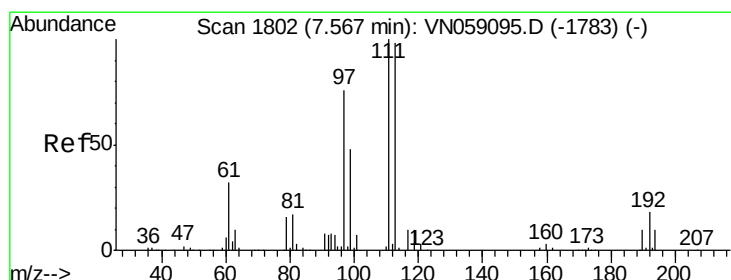
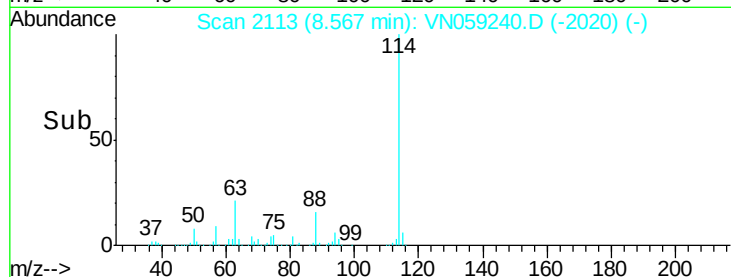
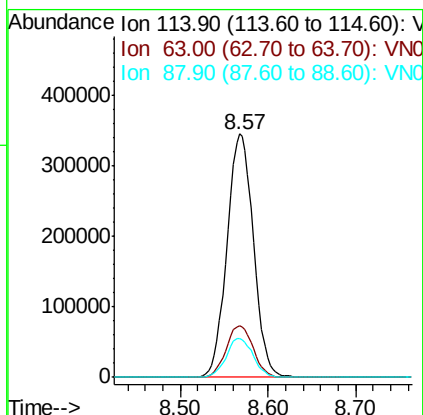
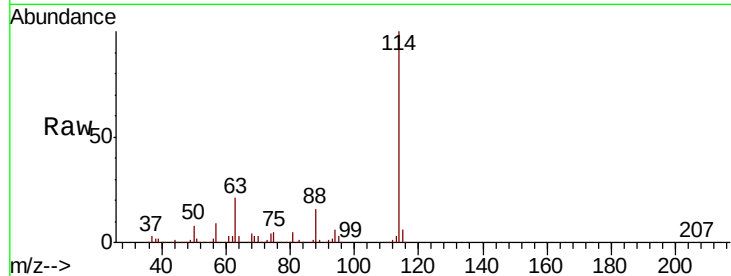
#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.57 min Scan# 2113
 Delta R.T. -0.00 min
 Lab File: VN059240.D
 Acq: 14 Nov 2019 17:34

Instrument :
 MSVOA_N
 ClientSampleId :
 S36-0163

Tot Ion	Ratio	Resp Lower	Upper
114	100		
63	21.3	0.0	43.4
88	16.1	0.0	32.2

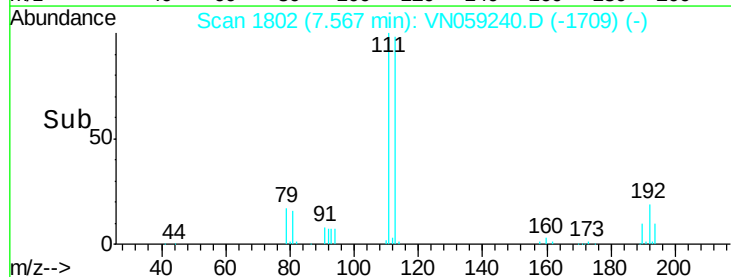
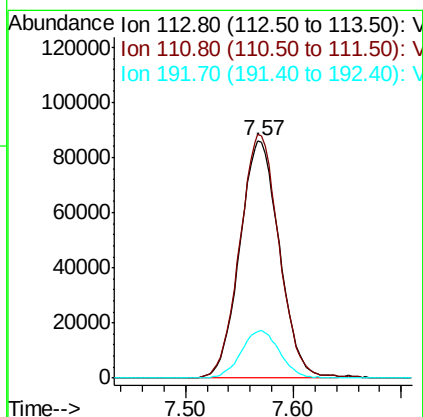
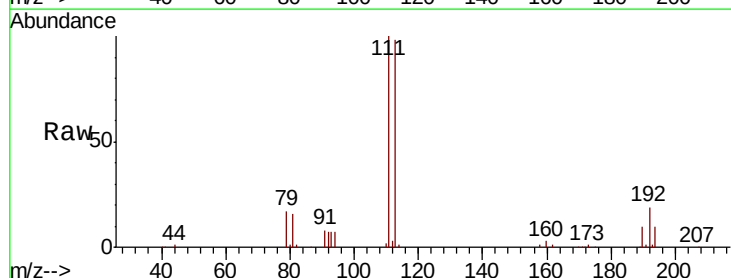
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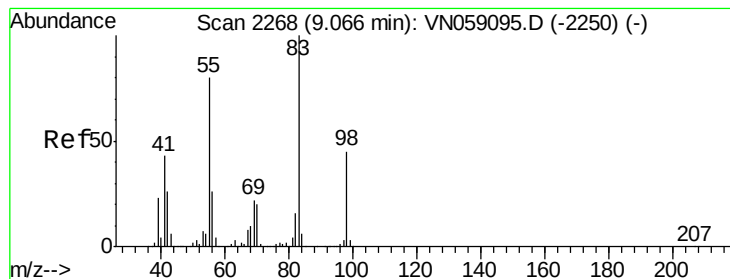
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#35
 Dibromofluoromethane
 Concen: 50.606 ug/l
 RT: 7.57 min Scan# 1802
 Delta R.T. -0.00 min
 Lab File: VN059240.D
 Acq: 14 Nov 2019 17:34

Tgt Ion	Ratio	Resp Lower	Upper
113	100		
111	102.4	82.8	124.2
192	19.4	16.1	24.1





#39

Methylvlcyclohexane

Concen: 5.263 ug/l

RT: 9.07 min Scan# 2268

Delta R.T. -0.00 min

Lab File: VN059240.D

Acq: 14 Nov 2019 17:34

Instrument :

MSVOA_N

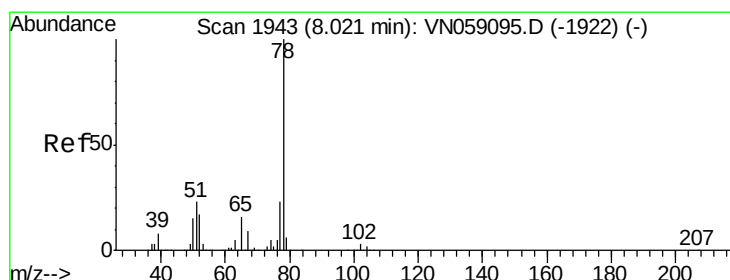
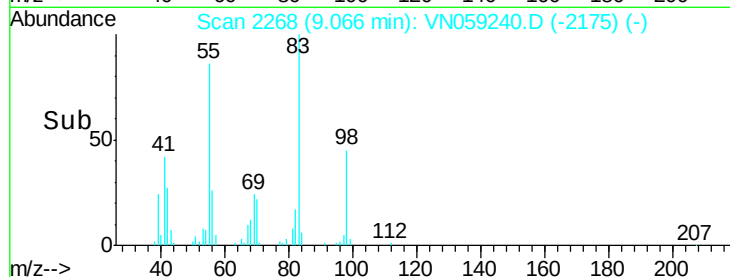
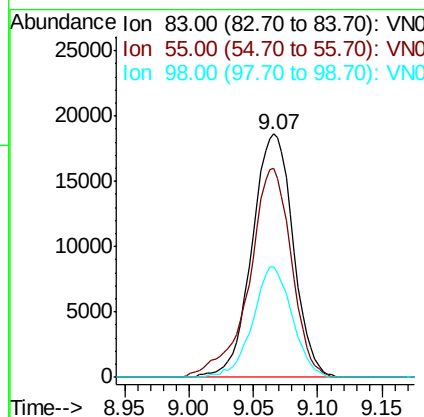
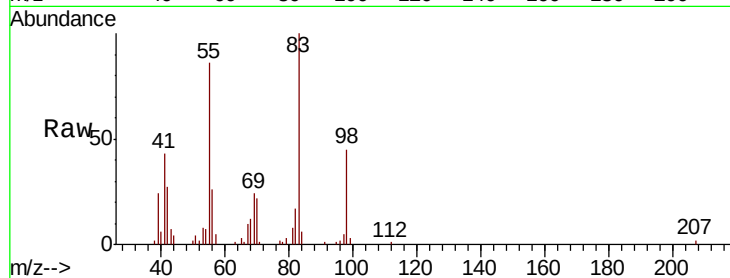
ClientSampled :

S36-0163

Tot Ion:	83	Resp:	41422
Ion	Ratio	Lower	Upper
83	100		
55	85.7	63.9	95.9
98	45.3	35.6	53.4

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11/15/2019 11:39:48 AM



#40

Benzene

Concen: 160.654 ug/l

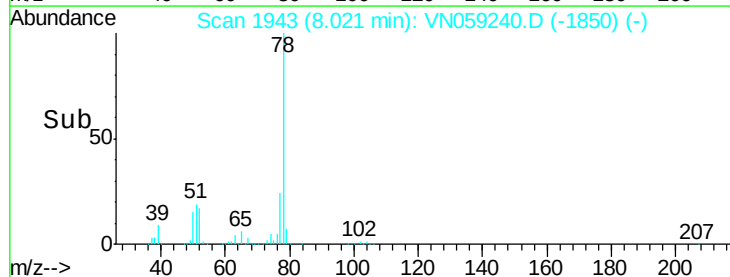
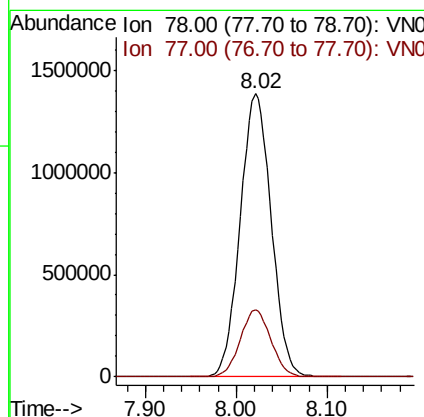
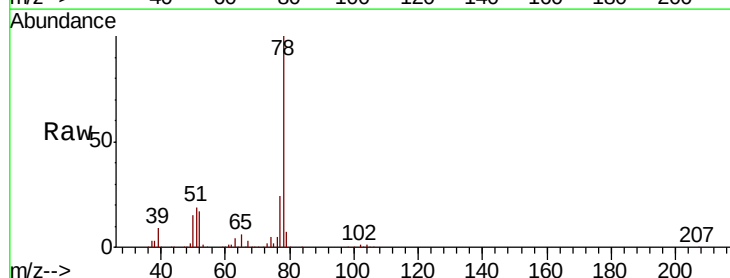
RT: 8.02 min Scan# 1943

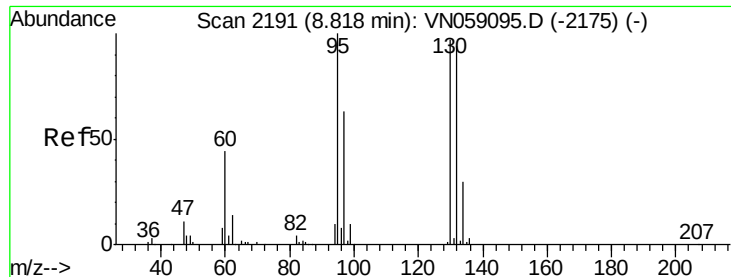
Delta R.T. -0.00 min

Lab File: VN059240.D

Acq: 14 Nov 2019 17:34

Tgt Ion:	78	Resp:	3280473
Ion	Ratio	Lower	Upper
78	100		
77	23.9	18.8	28.2





#44

Trichloroethene

Concen: 0.658 ug/l

RT: 8.82 min Scan# 2193

Delta R.T. 0.01 min

Lab File: VN059240.D

Acq: 14 Nov 2019 17:34

Instrument :

MSVOA_N

ClientSampleId :

S36-0163

Tot Ion:130 Resp: 3303

Ion Ratio Lower Upper

130 100

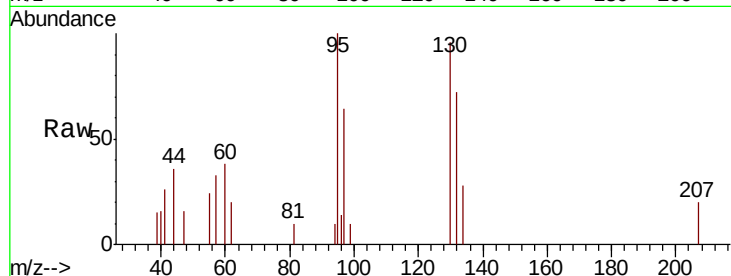
95 104.5 0.0 206.4

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Abundance Ion 129.80 (129.50 to 130.50): VN059095.D (-2175) (-)

Ion 94.90 (94.60 to 95.60): VN059095.D (-2175) (-)

8.82

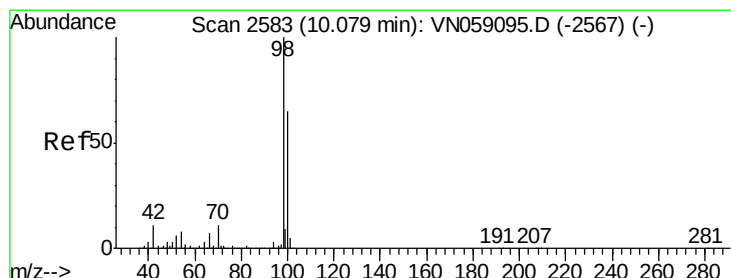
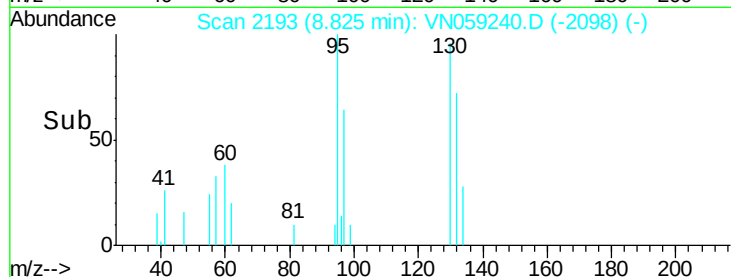
1500

1000

500

0

Time--> 8.75 8.80 8.85



#50

Toluene-d8

Concen: 51.820 ug/l

RT: 10.08 min Scan# 2583

Delta R.T. -0.00 min

Lab File: VN059240.D

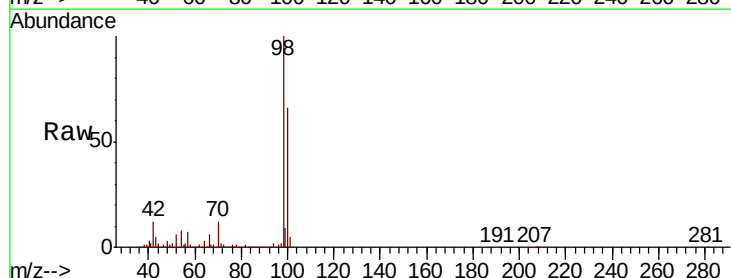
Acq: 14 Nov 2019 17:34

Tgt Ion: 98 Resp: 884148

Ion Ratio Lower Upper

98 100

100 69.9 52.2 78.2



Abundance Ion 98.00 (97.70 to 98.70): VN059095.D (-2567) (-)

Ion 100.00 (99.70 to 100.70): VN059095.D (-2567) (-)

10.08

500000

400000

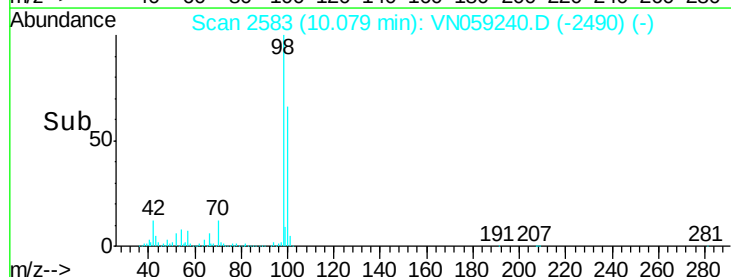
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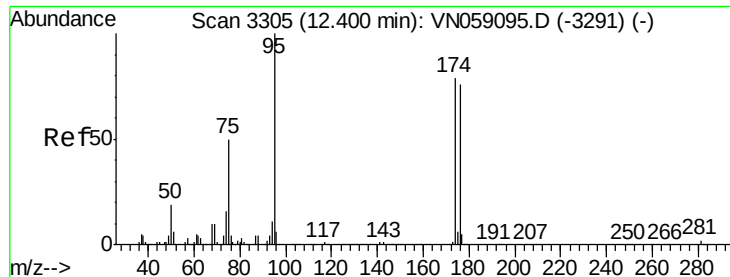
200000

100000

0

Time--> 10.00 10.10





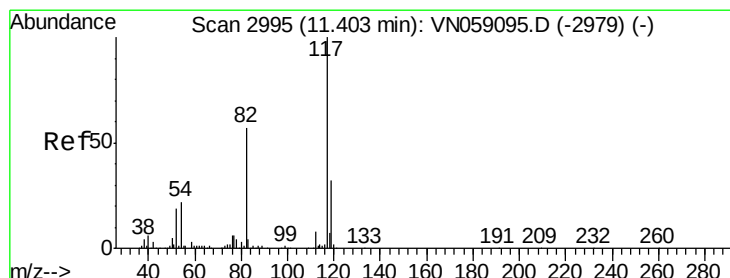
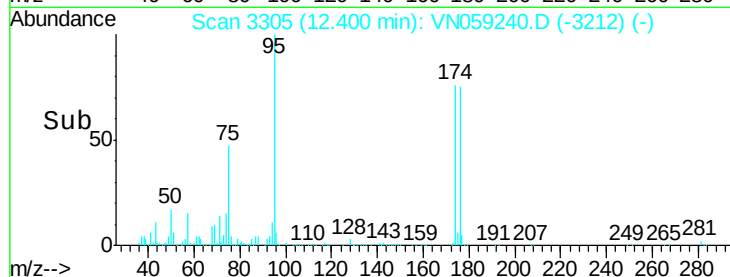
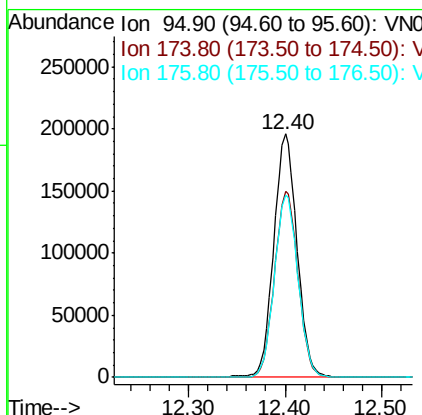
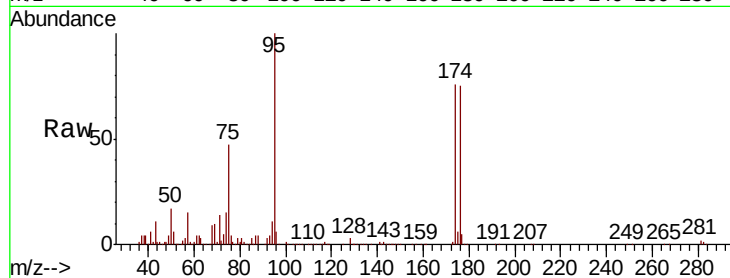
#62
4-Bromofluorobenzene
Concen: 53.440 ug/l
RT: 12.40 min Scan# 3305
Delta R.T. -0.00 min
Lab File: VN059240.D
Acq: 14 Nov 2019 17:34

Instrument :
MSVOA_N
ClientSampled :
S36-0163

Tot Ion	Ratio	Resp	Lower	Upper
95	100	328757		
174	76.7	0.0	158.2	
176	75.5	0.0	151.8	

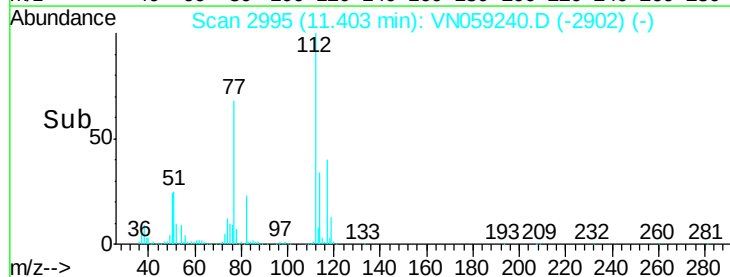
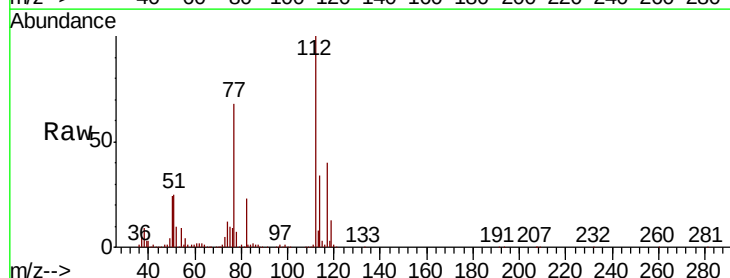
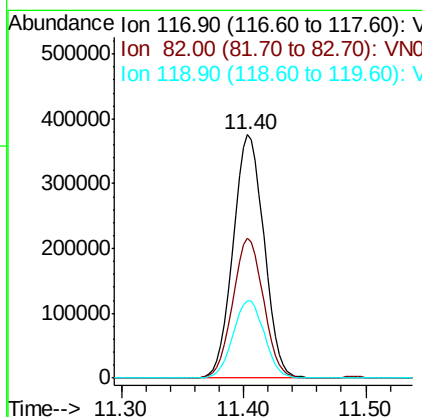
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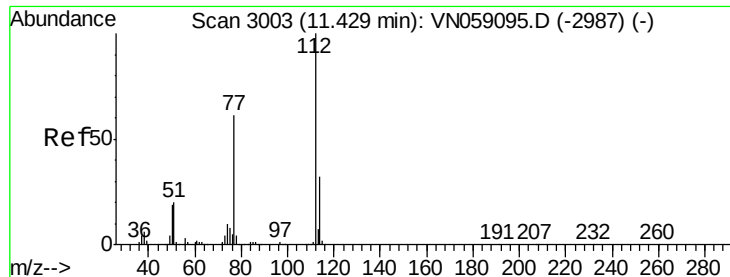
MMDadoda
11/15/2019 11:39:48 AM



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.40 min Scan# 2995
Delta R.T. -0.00 min
Lab File: VN059240.D
Acq: 14 Nov 2019 17:34

Tgt Ion	Ratio	Resp	Lower	Upper
117	100	658970		
82	57.4	45.8	68.8	
119	32.0	25.8	38.6	





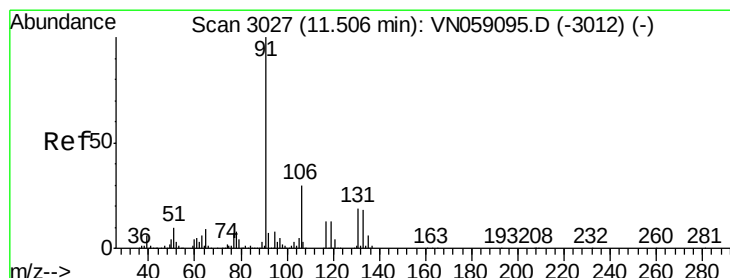
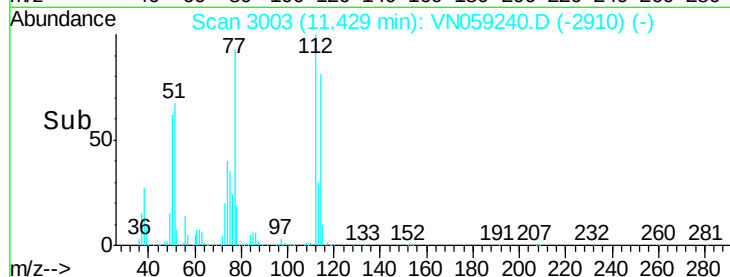
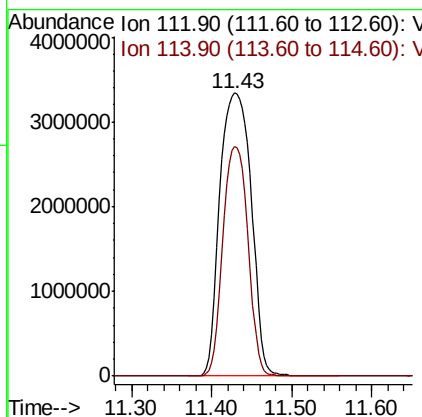
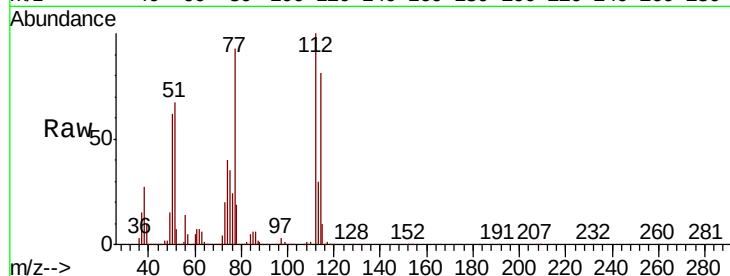
#65
Chlorobenzene
Concen: 701.913 ug/l
RT: 11.43 min Scan# 3003
Delta R.T. -0.00 min
Lab File: VN059240.D
Acq: 14 Nov 2019 17:34

Instrument :
MSVOA_N
ClientSampleId :
S36-0163

Tot Ion:112 Resp: 9016706
Ion Ratio Lower Upper
112 100
114 81.2 25.2 37.8#

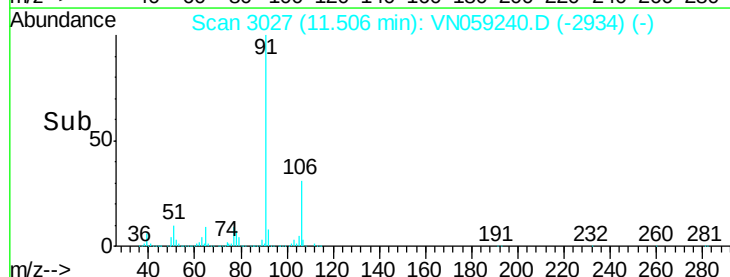
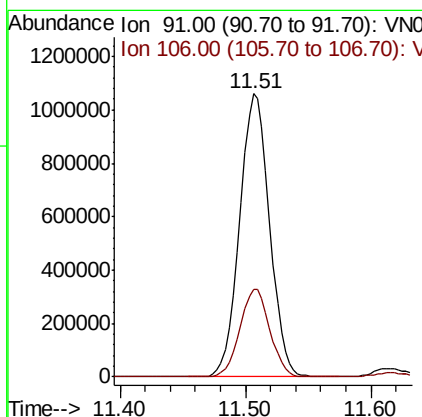
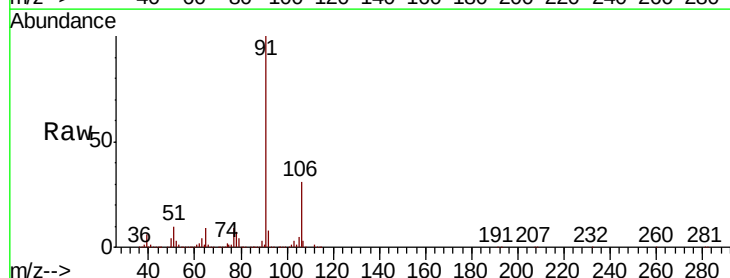
Manual Integrations
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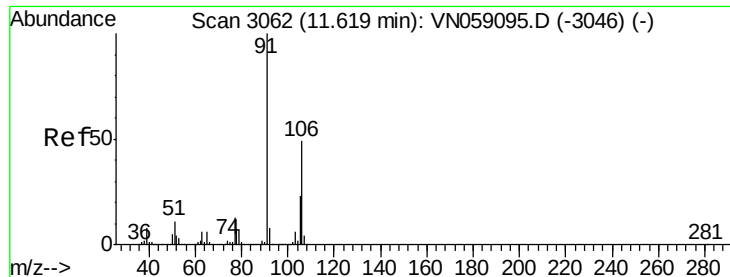
MMDadoda
11/15/2019 11:39:48 AM



#67
Ethyl Benzene
Concen: 77.065 ug/l
RT: 11.51 min Scan# 3027
Delta R.T. -0.00 min
Lab File: VN059240.D
Acq: 14 Nov 2019 17:34

Tgt Ion: 91 Resp: 1756433
Ion Ratio Lower Upper
91 100
106 31.1 24.1 36.1





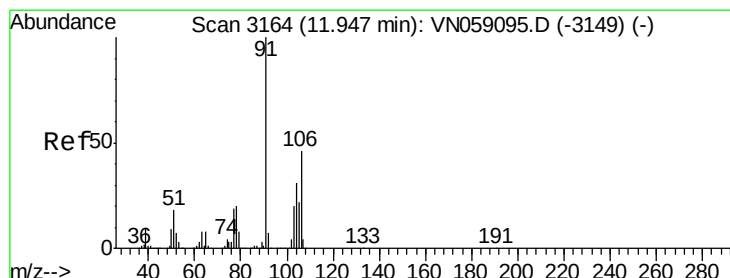
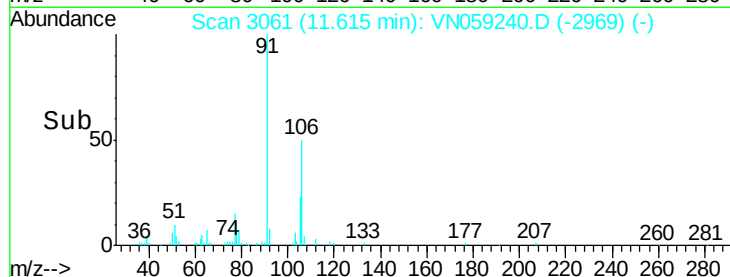
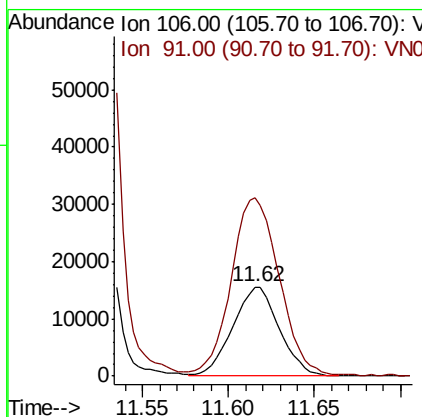
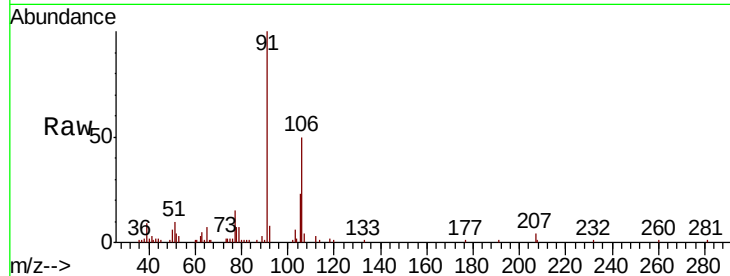
#68
m/p-Xylenes
Concen: 3.442 ug/l
RT: 11.62 min Scan# 3061
Delta R.T. -0.00 min
Lab File: VN059240.D
Acq: 14 Nov 2019 17:34

Instrument :
MSVOA_N
ClientSampleId :
S36-0163

Tot Ion:106 Resp: 29388
Ion Ratio Lower Upper
106 100
91 204.8 164.7 247.1

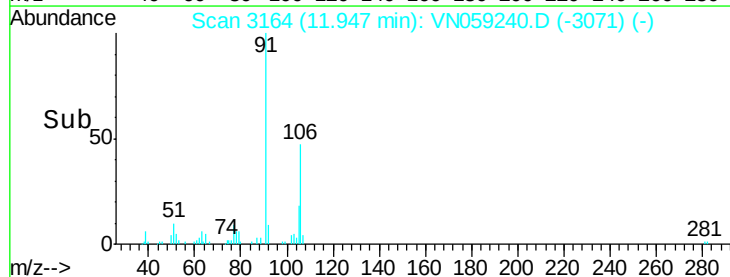
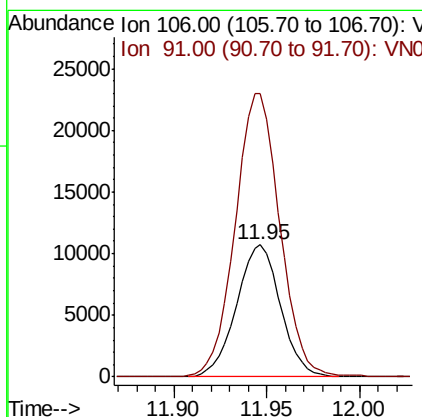
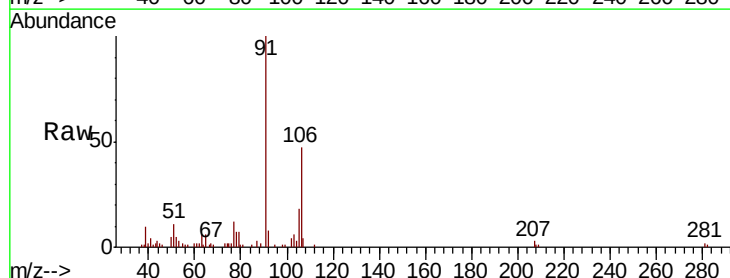
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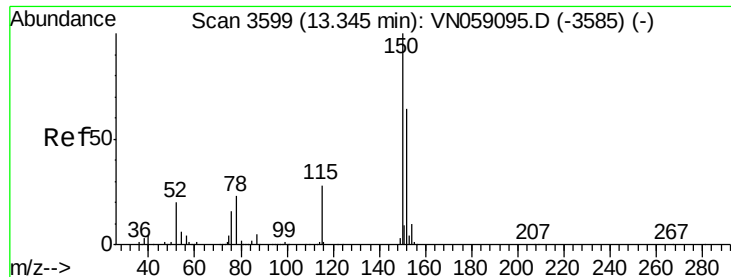
MMDadoda
11/15/2019 11:39:48 AM



#69
o-Xylene
Concen: 2.144 ug/l
RT: 11.95 min Scan# 3164
Delta R.T. -0.00 min
Lab File: VN059240.D
Acq: 14 Nov 2019 17:34

Tgt Ion:106 Resp: 17693
Ion Ratio Lower Upper
106 100
91 217.2 110.1 330.3





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.34 min Scan# 3598

Delta R.T. -0.00 min

Lab File: VN059240.D

Acq: 14 Nov 2019 17:34

Instrument :

MSVOA_N

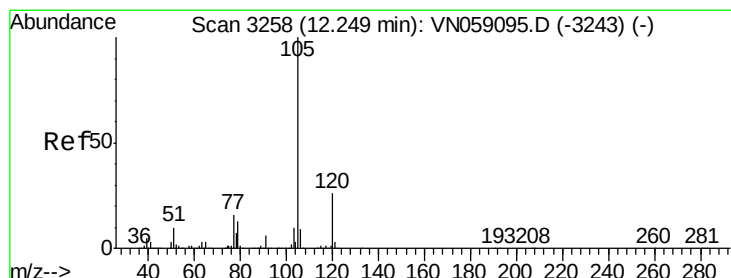
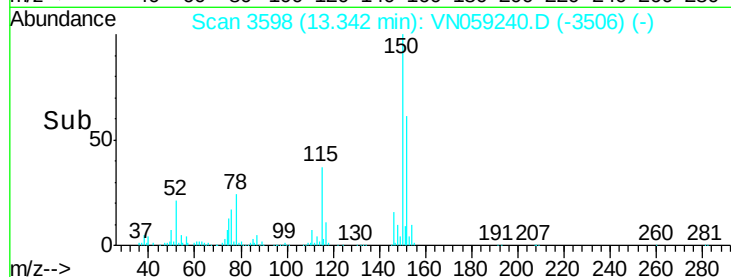
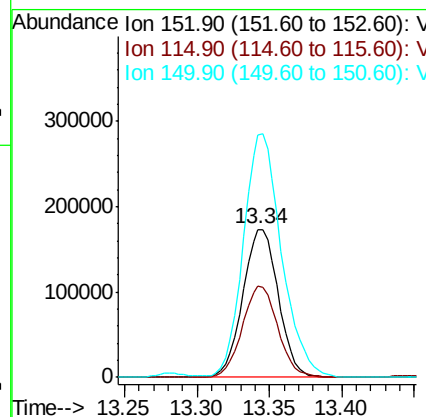
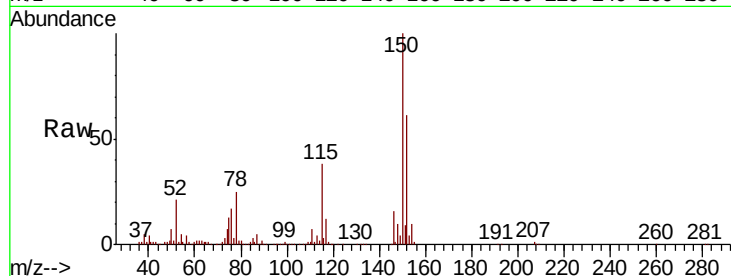
ClientSampleId :

S36-0163

Tot Ion:	152	Resp:	294754
Ion Ratio	Lower	Upper	
152	100		
115	61.2	29.4	88.2
150	176.6	0.0	345.8

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#73

Isopropylbenzene

Concen: 11.023 ug/l

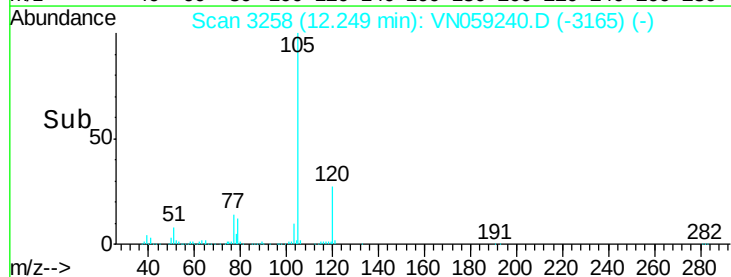
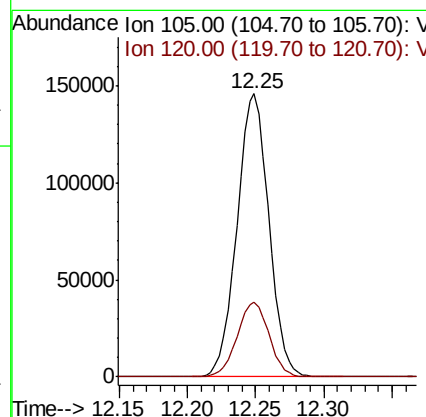
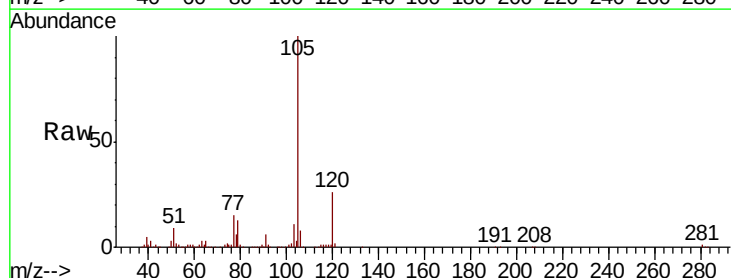
RT: 12.25 min Scan# 3258

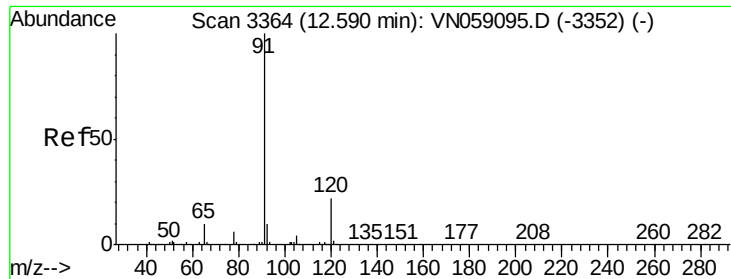
Delta R.T. -0.00 min

Lab File: VN059240.D

Acq: 14 Nov 2019 17:34

Tgt Ion:	105	Resp:	236341
Ion Ratio	Lower	Upper	
105	100		
120	26.4	13.1	39.3





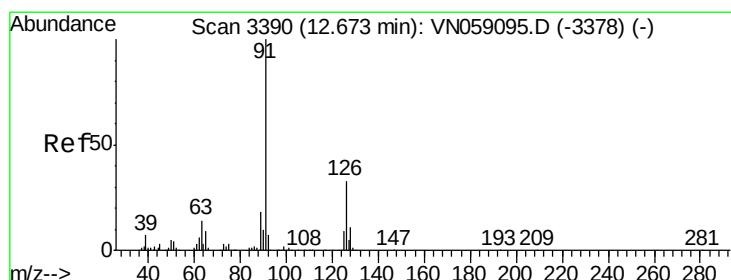
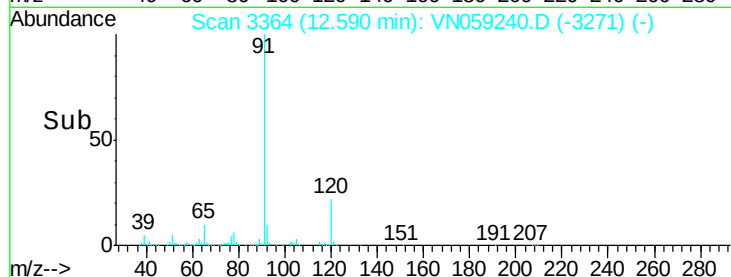
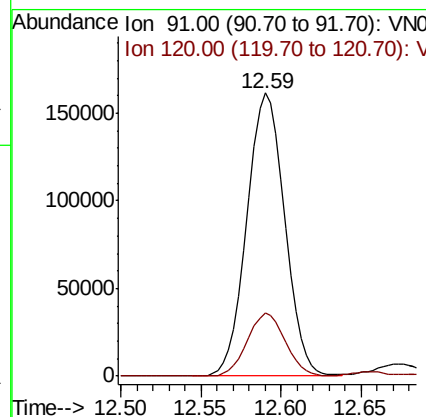
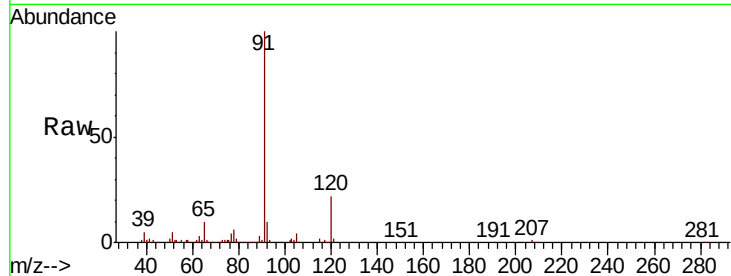
#78
n-propylbenzene
Concen: 10.637 ug/l
RT: 12.59 min Scan# 3364
Delta R.T. -0.00 min
Lab File: VN059240.D
Acq: 14 Nov 2019 17:34

Instrument :
MSVOA_N
ClientSampleId :
S36-0163

Tot Ion	Ratio	Lower	Upper
91	100		
120	22.2	11.2	33.5

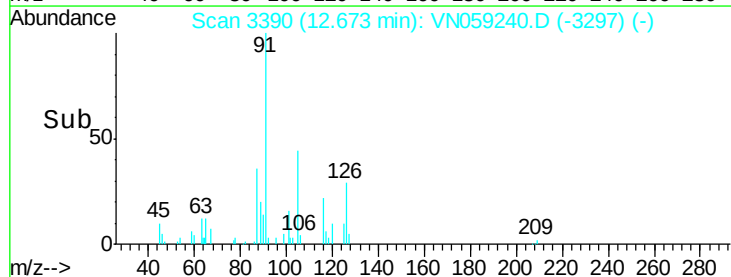
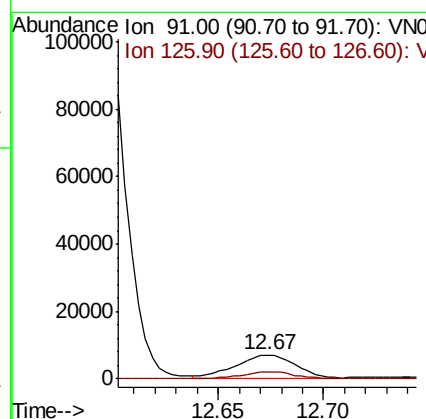
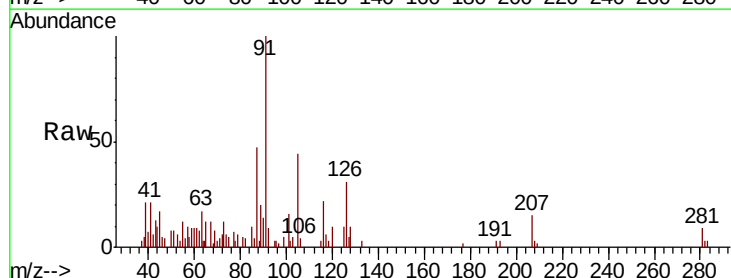
Manual Integrations
APPROVED

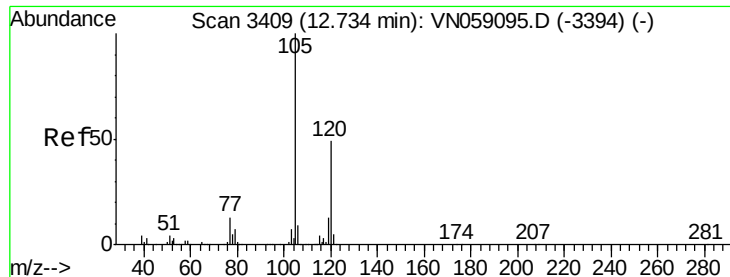
MMDadoda
11/15/2019 11:39:48 AM



#79
2-Chlorotoluene
Concen: 0.871 ug/l
RT: 12.67 min Scan# 3390
Delta R.T. -0.00 min
Lab File: VN059240.D
Acq: 14 Nov 2019 17:34

Tgt Ion	Ratio	Lower	Upper
91	100		
126	28.7	16.7	50.1





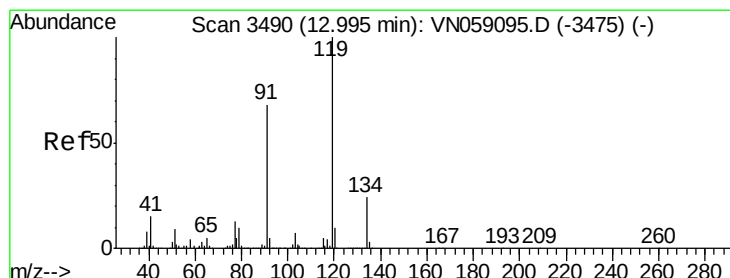
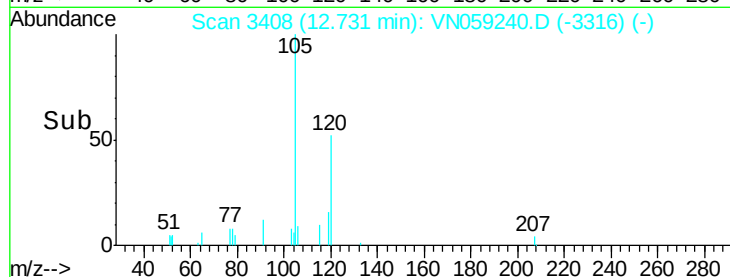
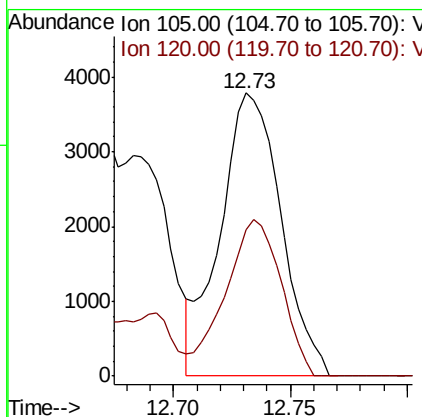
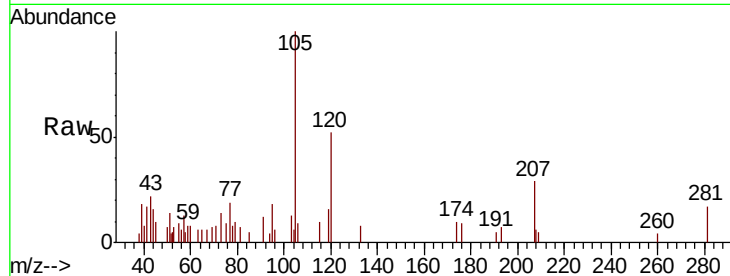
#80
 1,3,5-Trimethylbenzene
 Concen: 0.377 ug/l m
 RT: 12.73 min Scan# 3408
 Delta R.T. -0.00 min
 Lab File: VN059240.D
 Acq: 14 Nov 2019 17:34

Instrument :
 MSVOA_N
 ClientSampleId :
 S36-0163

Tot Ion:105 Resp: 6844
 Ion Ratio Lower Upper
 105 100
 120 1056.7 24.0 72.0

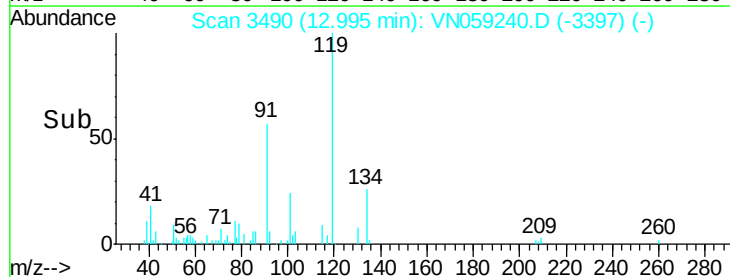
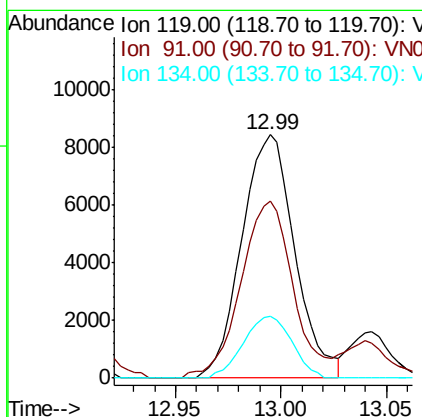
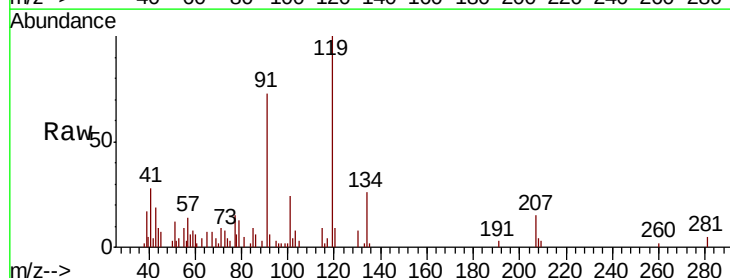
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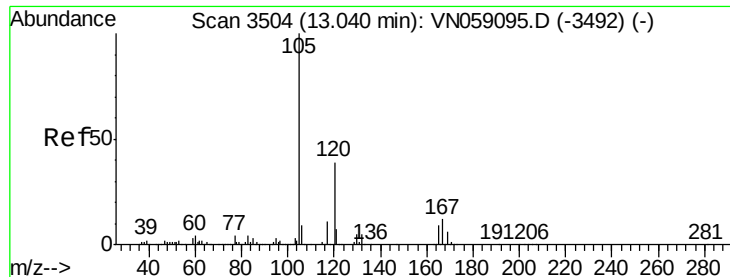
MMDadoda
 11/15/2019 11:39:48 AM



#83
 tert-Butylbenzene
 Concen: 0.940 ug/l
 RT: 12.99 min Scan# 3490
 Delta R.T. -0.00 min
 Lab File: VN059240.D
 Acq: 14 Nov 2019 17:34

Tgt Ion:119 Resp: 14755
 Ion Ratio Lower Upper
 119 100
 91 71.4 33.2 99.6
 134 23.3 12.7 38.1





#84

1,2,4-Trimethylbenzene

Concen: 1.105 ug/l

RT: 13.04 min Scan# 3504

Delta R.T. -0.00 min

Lab File: VN059240.D

Acq: 14 Nov 2019 17:34

Instrument :

MSVOA_N

ClientSampleId :

S36-0163

Tot Ion:105 Resp: 19416

Ion Ratio Lower Upper

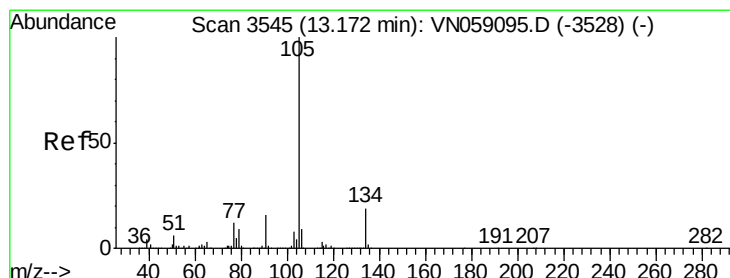
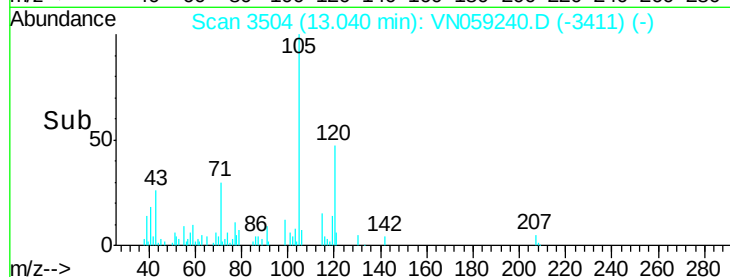
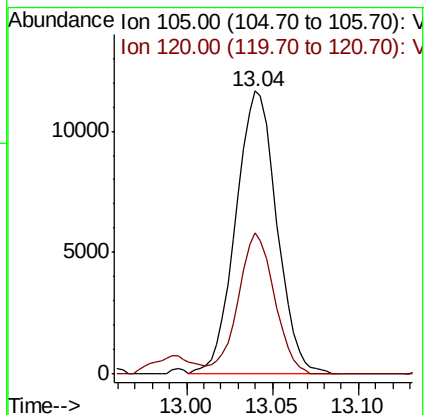
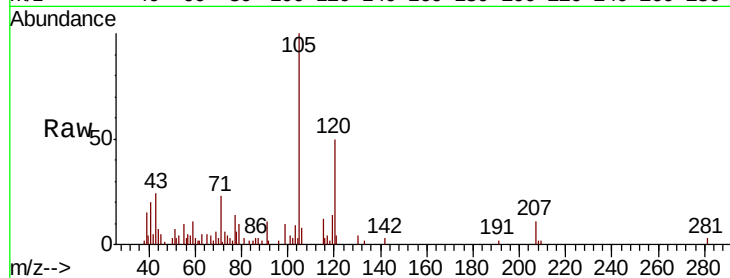
105 100

120 43.9 22.8 68.4

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#85

sec-Butylbenzene

Concen: 2.403 ug/l

RT: 13.17 min Scan# 3545

Delta R.T. -0.00 min

Lab File: VN059240.D

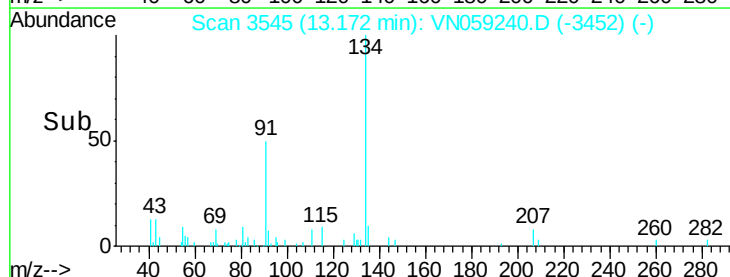
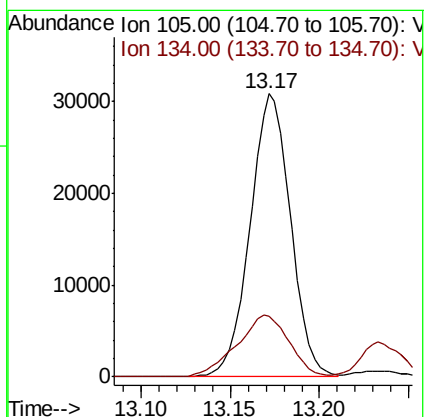
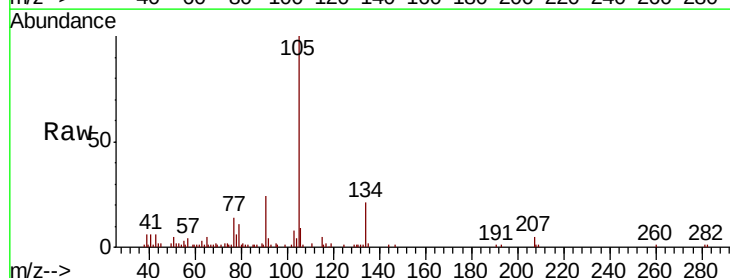
Acq: 14 Nov 2019 17:34

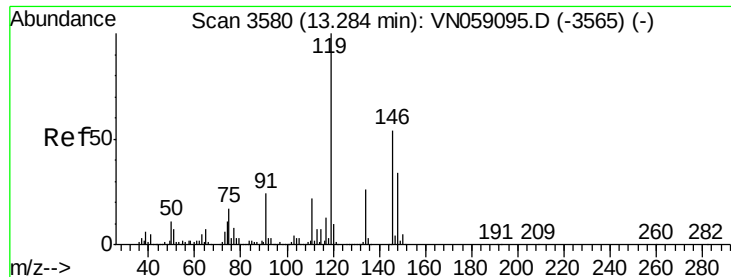
Tgt Ion:105 Resp: 49025

Ion Ratio Lower Upper

105 100

134 27.9 9.7 29.1





#87

1,3-Dichlorobenzene

Concen: 8.026 ug/l

RT: 13.28 min Scan# 3580

Delta R.T. -0.00 min

Lab File: VN059240.D

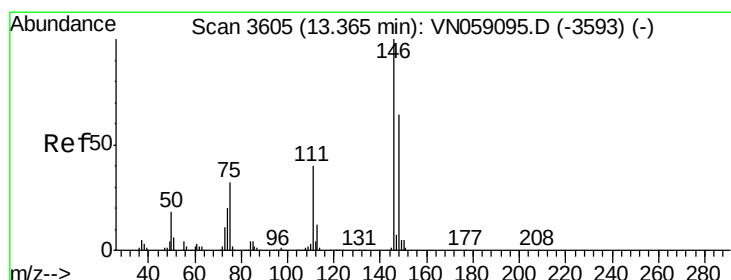
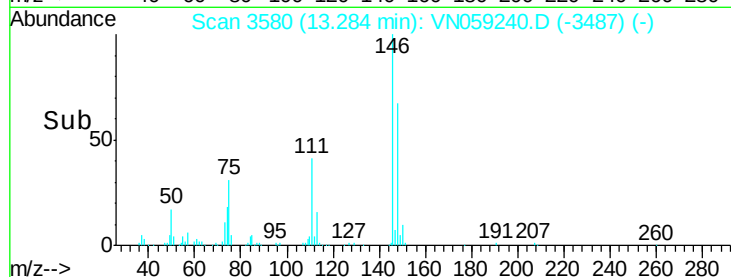
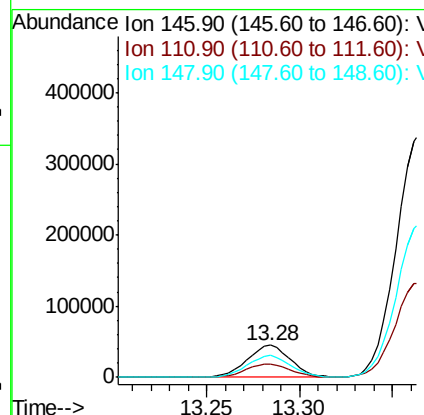
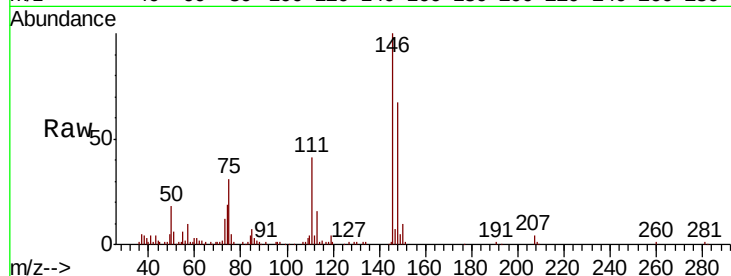
Acq: 14 Nov 2019 17:34

Instrument :
MSVOA_N
ClientSampleId :
S36-0163

Tot Ion	Ratio	Lower	Upper
146	100		
111	42.3	20.4	61.3
148	66.6	32.2	96.6

Manual Integrations
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#88

1,4-Dichlorobenzene

Concen: 60.718 ug/l

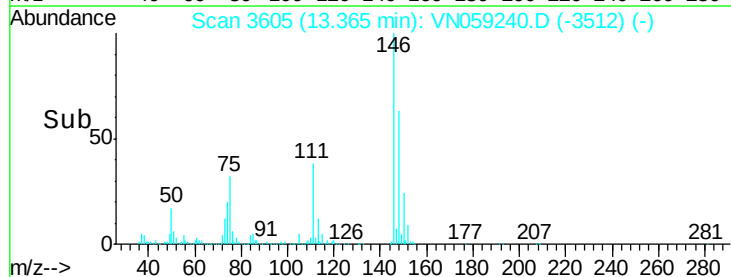
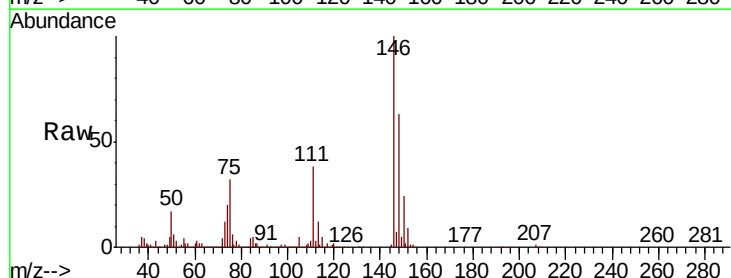
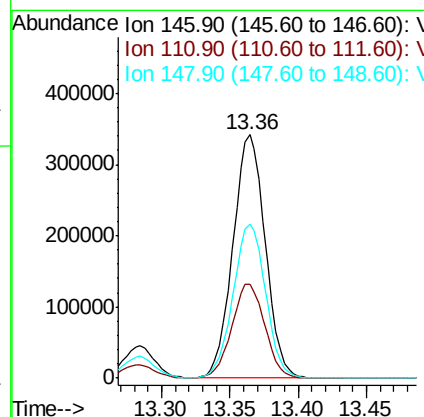
RT: 13.36 min Scan# 3605

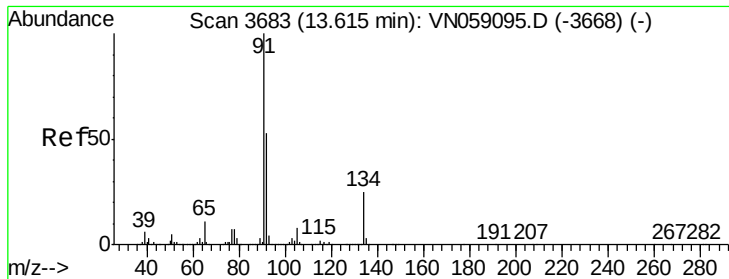
Delta R.T. -0.00 min

Lab File: VN059240.D

Acq: 14 Nov 2019 17:34

Tgt Ion	Ratio	Lower	Upper
146	100		
111	39.6	20.3	60.9
148	63.6	31.9	95.7





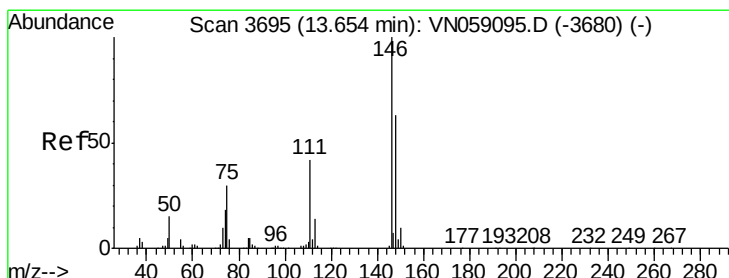
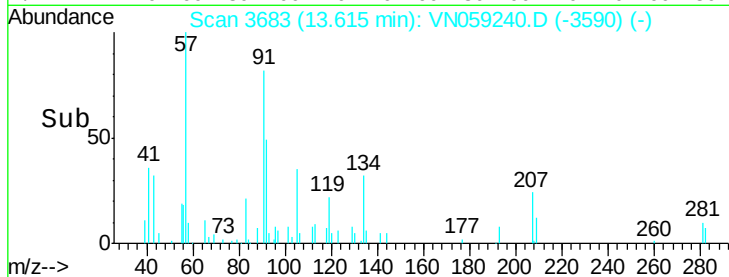
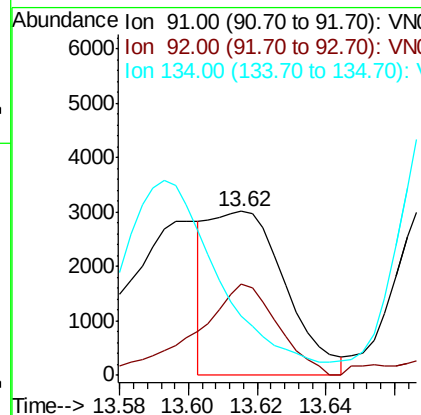
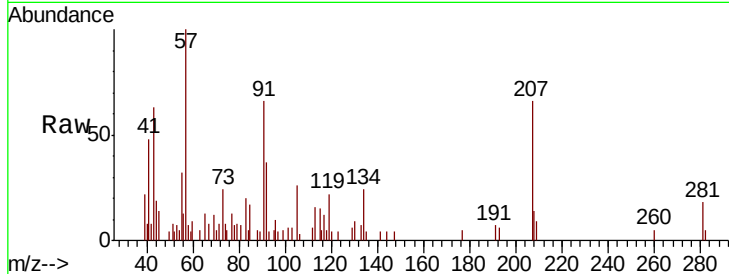
#89
n-Butylbenzene
Concen: 0.300 ug/l m
RT: 13.62 min Scan# 3683
Delta R.T. -0.00 min
Lab File: VN059240.D
Acq: 14 Nov 2019 17:34

Instrument :
MSVOA_N
ClientSampled :
S36-0163

Tot Ion	Ratio	Lower	Upper
91	100		
92	59.2	26.1	78.3
134	0.0	12.6	37.8#

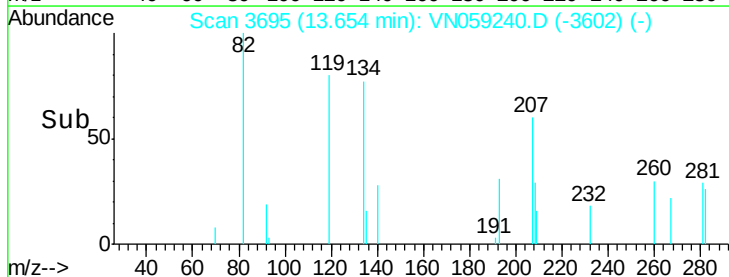
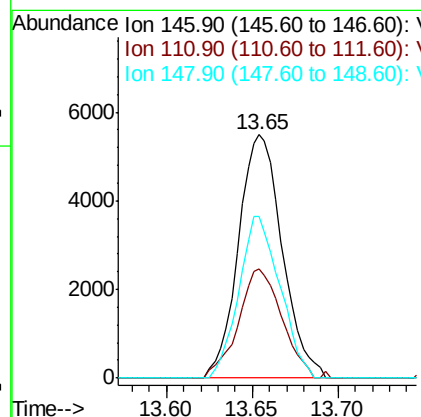
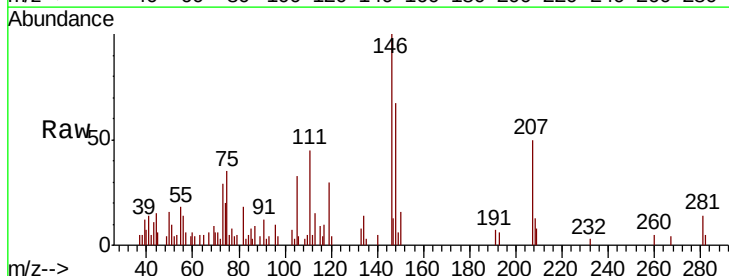
Manual Integrations
APPROVED

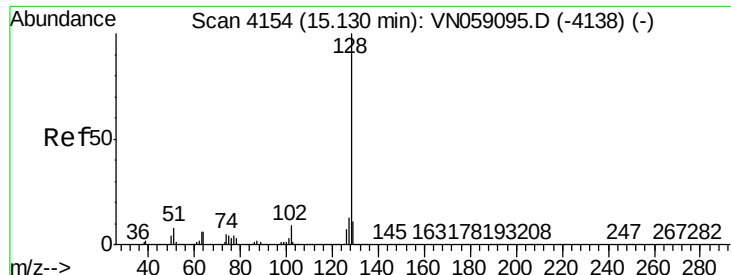
MMDadoda
11/15/2019 11:39:48 AM



#91
1,2-Dichlorobenzene
Concen: 1.072 ug/l m
RT: 13.65 min Scan# 3695
Delta R.T. -0.00 min
Lab File: VN059240.D
Acq: 14 Nov 2019 17:34

Tgt Ion	Ratio	Lower	Upper
146	100		
111	0.0	21.2	63.6#
148	0.0	31.6	94.7#





#95
Naphthalene
Concen: 15.030 ug/l
RT: 15.13 min Scan# 4153
Delta R.T. -0.00 min
Lab File: VN059240.D
Acq: 14 Nov 2019 17:34

Instrument :
MSVOA_N
ClientSampled :
S36-0163

Tot Ion	Ratio	Resp Lower	Upper
128	100		
127	13.1	10.2	15.2
129	11.1	8.6	12.8

Manual Integrations
APPROVED

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11/15/2019 11:39:48 AM

