

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN051420\
 Data File : VN061404.D
 Acq On : 14 May 2020 20:02
 Operator : JC/MD
 Sample : L2642-01
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 400513791-VOA

Manual Integrations
 APPROVED

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 5/15/2020 2:11:09 PM

Quant Time: May 15 07:36:56 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA N\METHODS\624N051420W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Thu May 14 16:04:10 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.15	128	18633	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	8.55	114	106810	30.00	ug/l	0.00
57) Chlorobenzene-d5	11.38	117	92990	30.00	ug/l	0.00

System Monitoring Compounds

27) 1,2-Dichloroethane-d4	7.99	65	50788	30.44	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	101.47%
60) 4-Bromofluorobenzene	12.38	95	46342	29.19	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	97.30%
63) Toluene-d8	10.06	98	134007	31.12	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	103.73%

Target Compounds

					Ovalue
4) Vinyl Chloride	2.16	62	1176	0.566	ug/l 97
8) Diethyl Ether	3.37	74	2850	4.027	ug/l 82
15) Acetone	3.78	58	6791	49.565	ug/l 87
23) tert-Butyl Alcohol	4.73	59	1089001	5954.379	ug/l # 100
24) Methyl tert-Butyl Ether	4.99	73	14862m	3.659	ug/l
30) 2-Butanone	6.78	43	64710	81.616	ug/l # 71
31) 2,2-Dichloropropane	6.77	77	74948	34.227	ug/l # 53
34) Benzene	8.00	78	38906	7.337	ug/l # 81
45) 1,4-Dioxane	9.17	88	2160	166.458	ug/l 97
62) Toluene	10.12	91	41232	7.647	ug/l 98
64) Chlorobenzene	11.41	112	6101	1.912	ug/l 100
66) Ethyl Benzene	11.48	91	41424	6.694	ug/l 100
67) m/p-Xylenes	11.59	106	33555	14.685	ug/l 100
68) o-Xylene	11.92	106	20555	9.425	ug/l 97
70) Isopropylbenzene	12.22	105	5265	0.891	ug/l 95
74) n-propylbenzene	12.56	91	1963	0.279	ug/l 93
76) 1,3,5-Trimethylbenzene	12.71	105	5858	1.181	ug/l 97
80) 1,2,4-Trimethylbenzene	13.01	105	24271	4.904	ug/l 98
82) p-Isopropyltoluene	13.26	119	19187	3.755	ug/l 97
84) 1,4-Dichlorobenzene	13.34	146	14755	6.536	ug/l 96
87) 1,2-Dichlorobenzene	13.63	146	1877	0.867	ug/l 93
91) Naphthalene	15.10	128	140339	35.891	ug/l 99

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

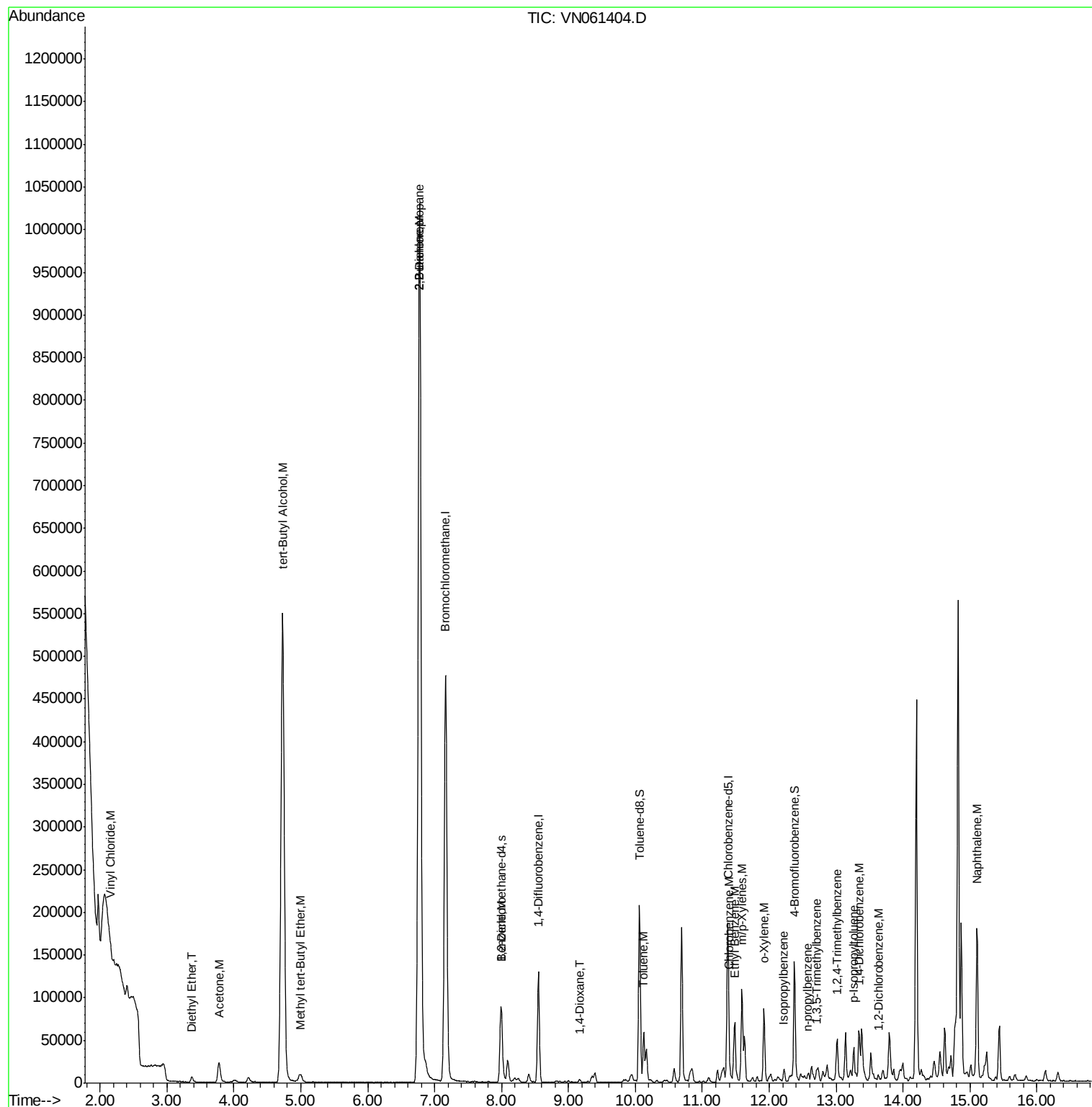
Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN051420\
Data File : VN061404.D
Acq On : 14 May 2020 20:02
Operator : JC/MD
Sample : L2642-01
Misc : 5.00mL/MSVOA N/WATER
ALS Vial : 16 Sample Multiplier: 1

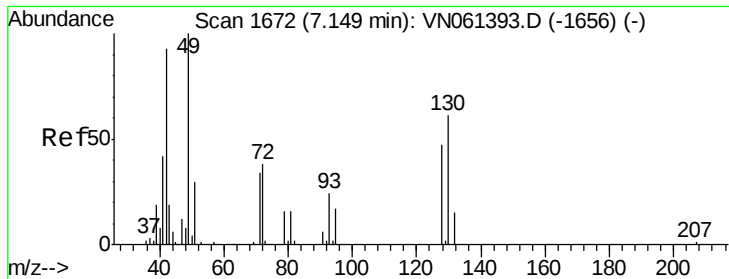
Instrument :
MSVOA_N
ClientSampleId :
400513791-VOA

Manual Integrations
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Quant Time: May 15 07:36:56 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA N\METHODS\624N051420W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Thu May 14 16:04:10 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 7.15 min Scan# 1673

Delta R.T. 0.00 min

Lab File: VN061404.D

Acq: 14 May 2020 20:02

Instrument :

MSVOA_N

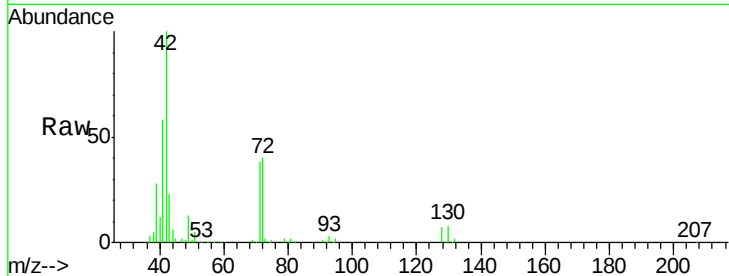
ClientSampleId :

400513791-VOA

Tot Ion:	128	Resp:	18633
Ion	Ratio	Lower	Upper
128	100		
49	214.2	0.0	453.5
130	127.3	0.0	314.2

Manual Integrations
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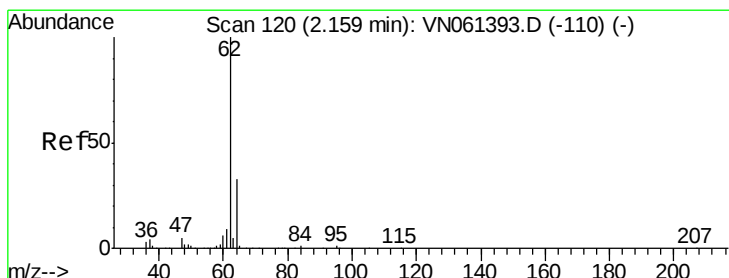
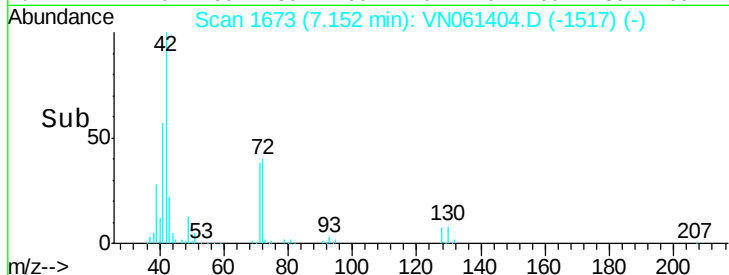
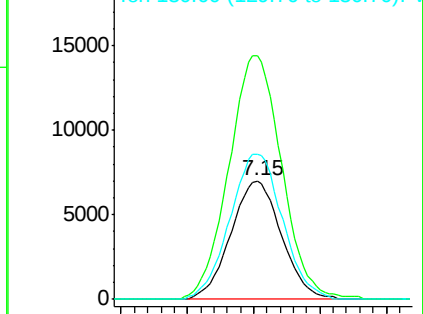
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Abundance Ion 128.00 (127.70 to 128.70): V

Ion 49.00 (48.70 to 49.70): VNO

Ion 130.00 (129.70 to 130.70): V



#4

Vinyl Chloride

Concen: 0.566 ug/l

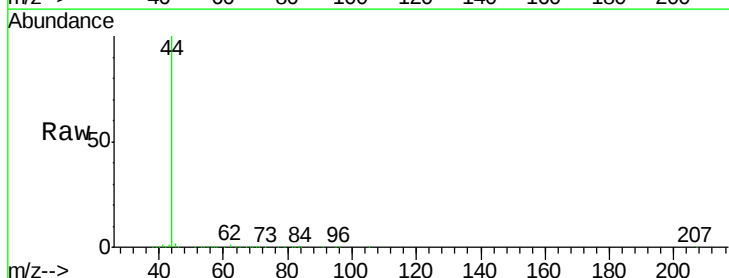
RT: 2.16 min Scan# 121

Delta R.T. 0.00 min

Lab File: VN061404.D

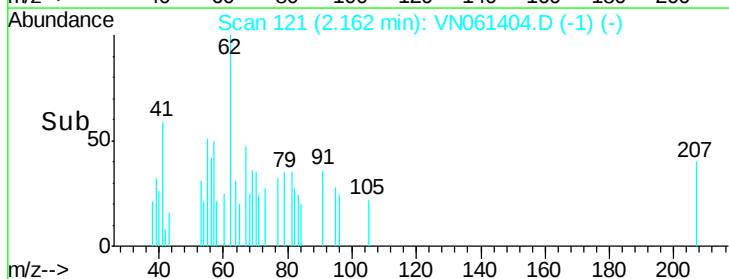
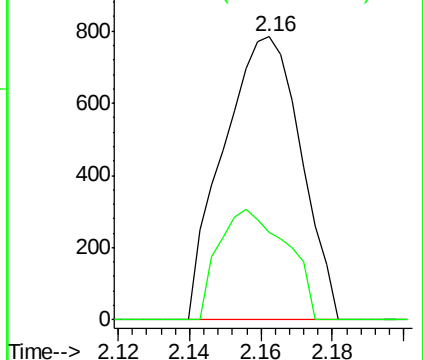
Acq: 14 May 2020 20:02

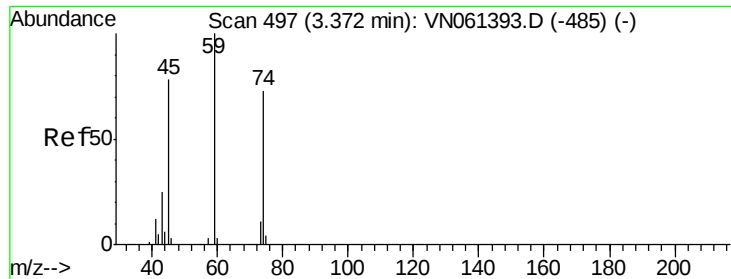
Tgt Ion:	62	Resp:	1176
Ion	Ratio	Lower	Upper
62	100		
64	30.7	26.1	39.1



Abundance Ion 62.00 (61.70 to 62.70): VNO

Ion 64.00 (63.70 to 64.70): VNO





#8

Diethyl Ether

Concen: 4.027 ug/l

RT: 3.37 min Scan# 497

Delta R.T. -0.00 min

Lab File: VN061404.D

Acq: 14 May 2020 20:02

Instrument :

MSVOA_N

ClientSampleId :

400513791-VOA

Tot Ion: 74 Resp: 2850

Ion Ratio Lower Upper

74 100

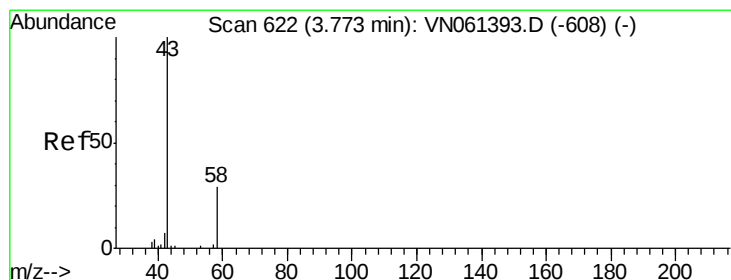
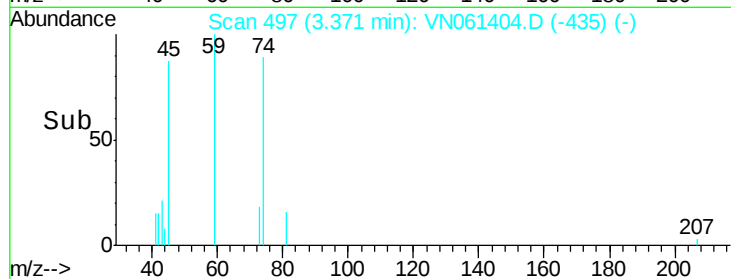
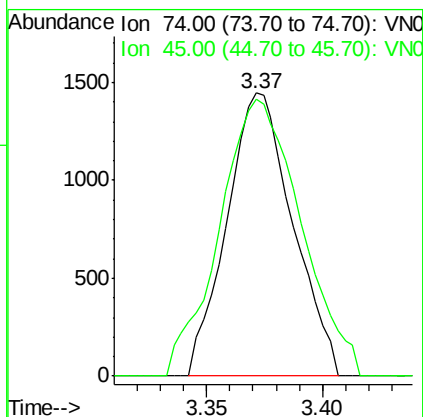
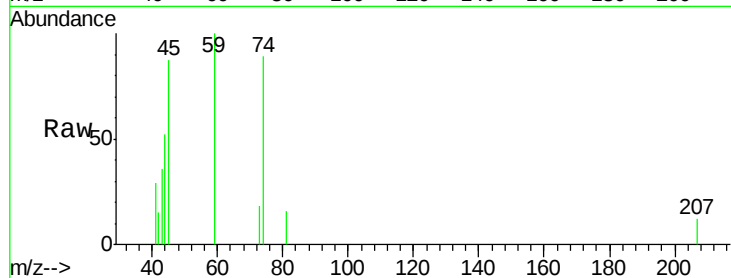
45 121.1 20.6 185.8

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#15

Acetone

Concen: 49.565 ug/l

RT: 3.78 min Scan# 623

Delta R.T. 0.00 min

Lab File: VN061404.D

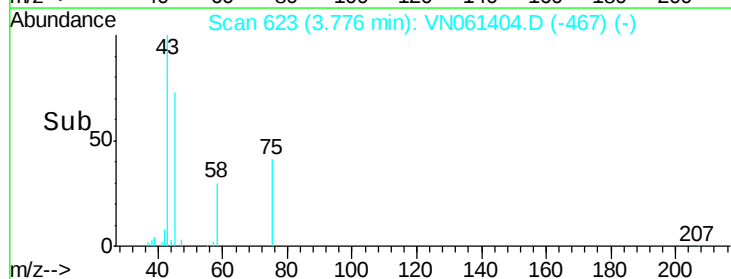
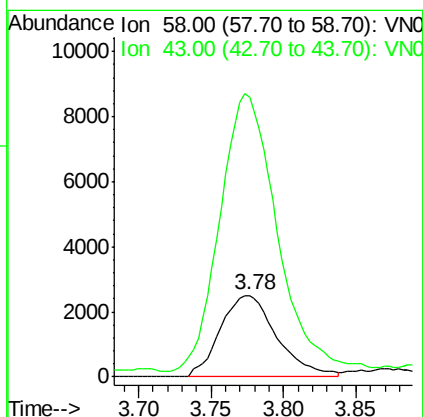
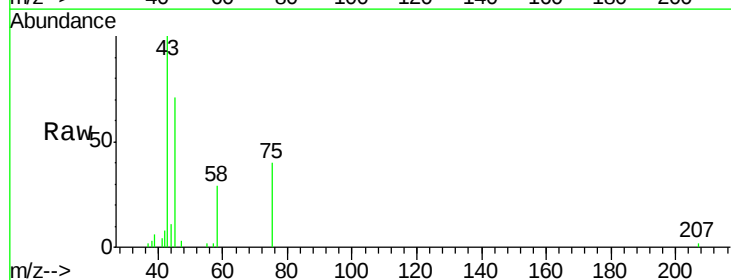
Acq: 14 May 2020 20:02

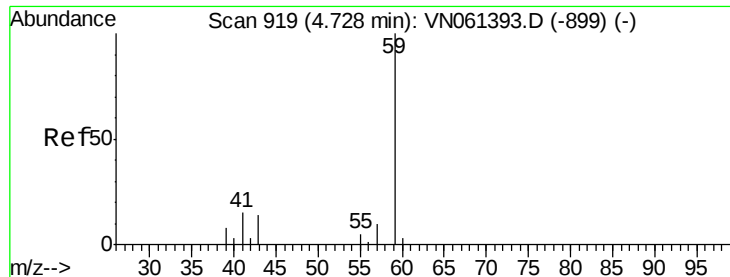
Tgt Ion: 58 Resp: 6791

Ion Ratio Lower Upper

58 100

43 323.6 281.7 422.5





#23

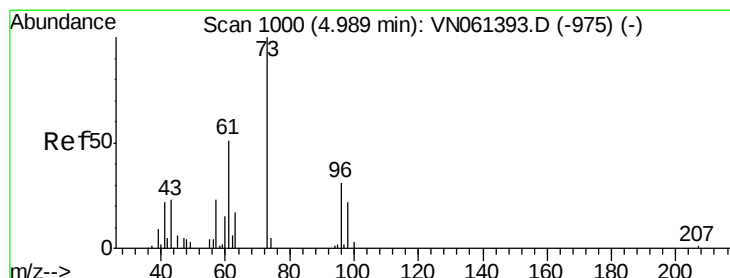
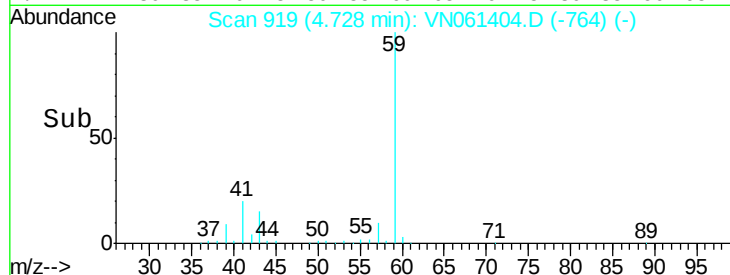
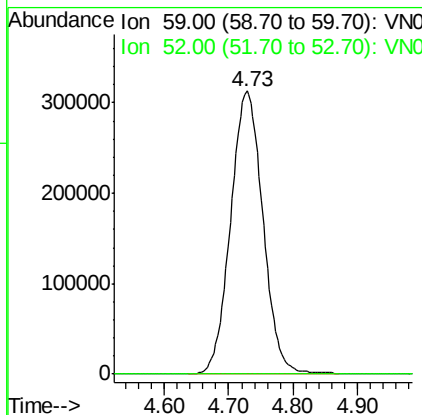
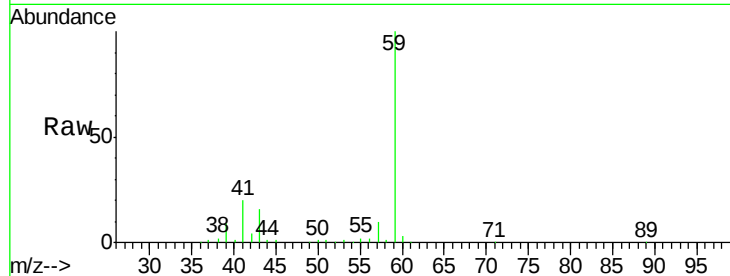
tert-Butyl Alcohol
 Concen: 5954.379 ug/l
 RT: 4.73 min Scan# 919
 Delta R.T. -0.00 min
 Lab File: VN061404.D
 Acq: 14 May 2020 20:02

Instrument :
 MSVOA_N
 ClientSampleId :
 400513791-VOA

Tot Ion: 59 Resp: 1089001
 Ion Ratio Lower Upper
 59 100
 52 0.1 0.0 0.0#

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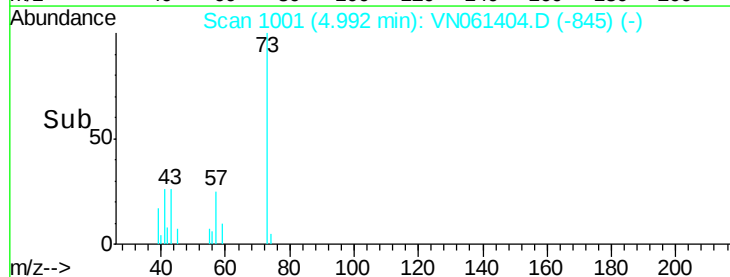
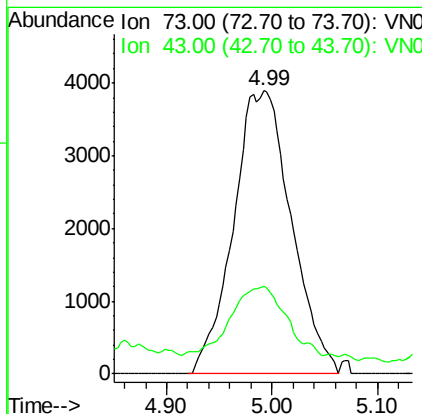
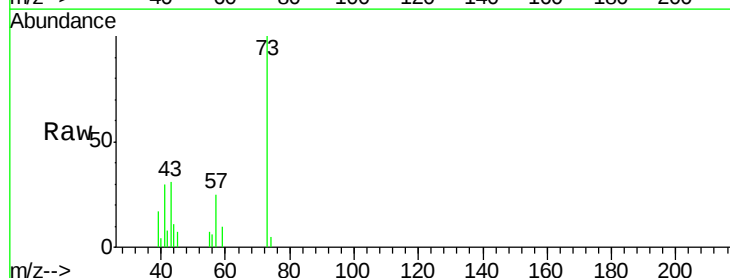
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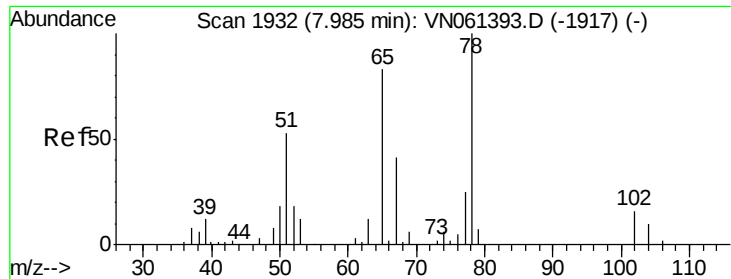


#24

Methyl tert-Butyl Ether
 Concen: 3.659 ug/l m
 RT: 4.99 min Scan# 1001
 Delta R.T. 0.00 min
 Lab File: VN061404.D
 Acq: 14 May 2020 20:02

Tgt Ion: 73 Resp: 14862
 Ion Ratio Lower Upper
 73 100
 43 19.7 17.9 26.9





#27

1,2-Dichloroethane-d4

Concen: 30.437 ug/l

RT: 7.99 min Scan# 1933

Delta R.T. 0.00 min

Lab File: VN061404.D

Acq: 14 May 2020 20:02

Instrument :

MSVOA_N

ClientSampleId :

400513791-VOA

Tot Ion: 65 Resp: 50788

Ion Ratio Lower Upper

65 100

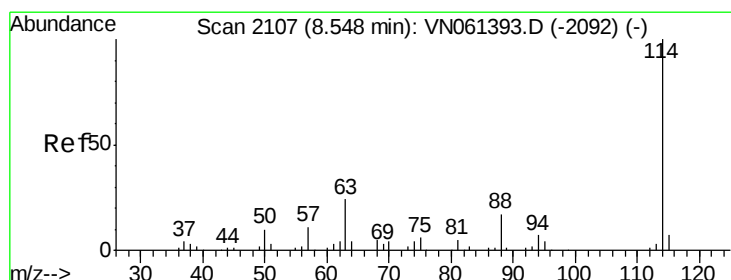
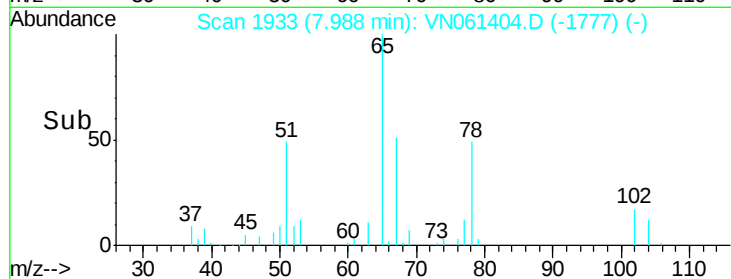
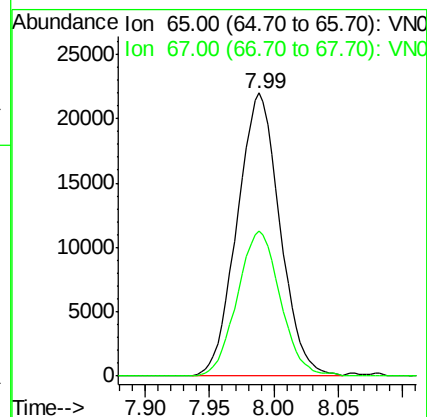
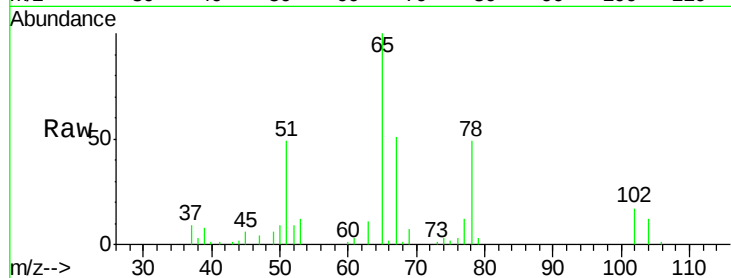
67 51.3 41.5 62.3

Manual Integrations

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#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 8.55 min Scan# 2108

Delta R.T. 0.00 min

Lab File: VN061404.D

Acq: 14 May 2020 20:02

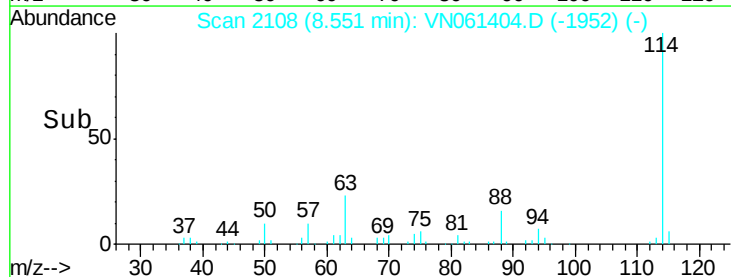
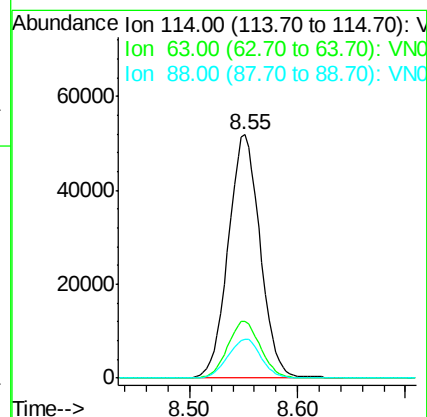
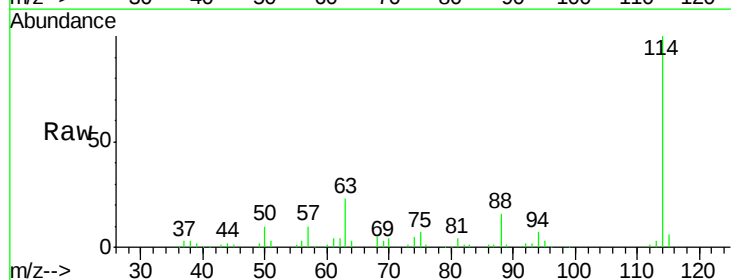
Tgt Ion: 114 Resp: 106810

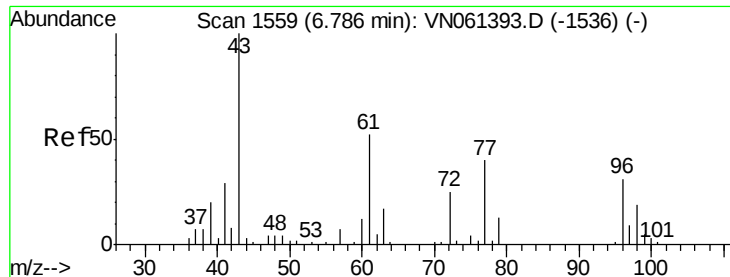
Ion Ratio Lower Upper

114 100

63 23.9 18.1 27.1

88 16.6 13.0 19.4





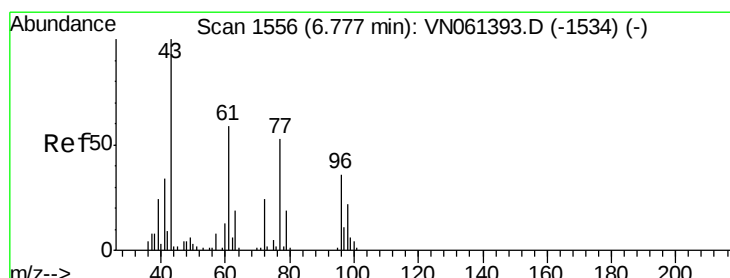
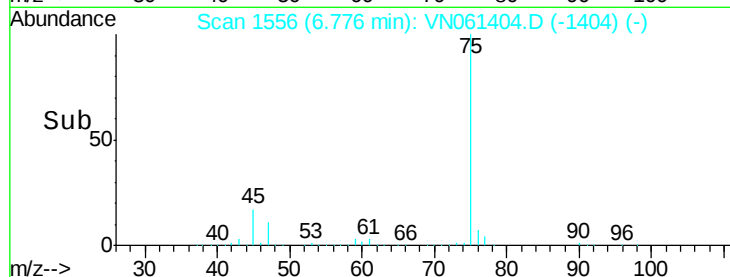
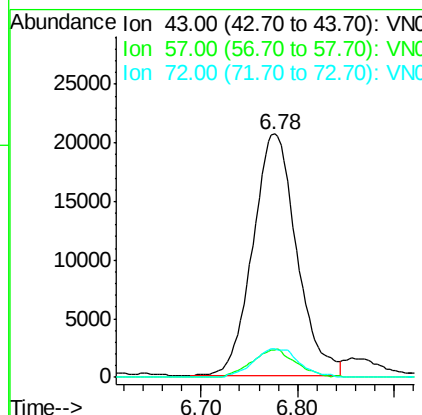
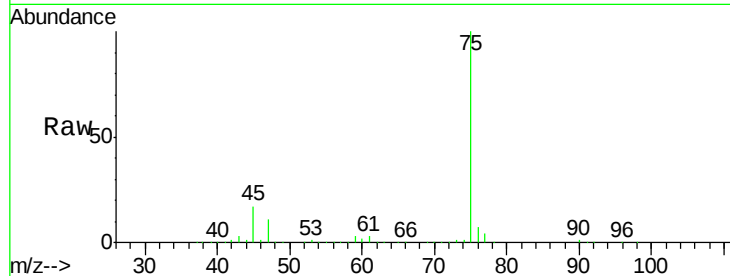
#30
 2-Butanone
 Concen: 81.616 ug/l
 RT: 6.78 min Scan# 1556
 Delta R.T. -0.01 min
 Lab File: VN061404.D
 Acq: 14 May 2020 20:02

Instrument :
 MSVOA_N
 ClientSampleId :
 400513791-VOA

Tot Ion	Ratio	Lower	Upper
43	100		
57	11.7	6.5	9.7#
72	7.5	20.1	30.1#

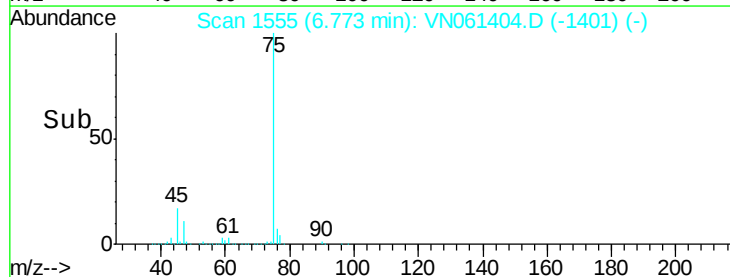
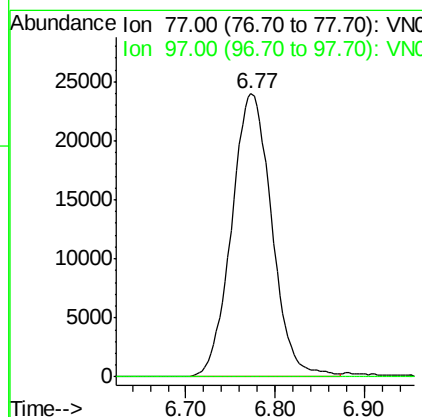
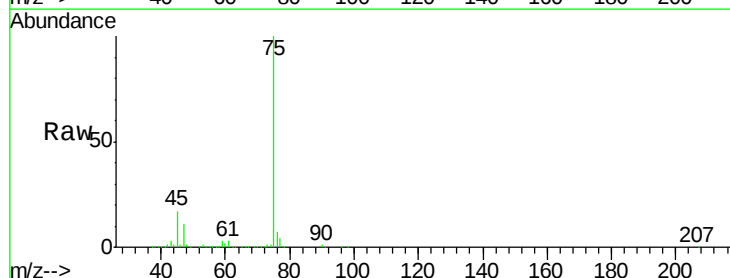
Manual Integrations
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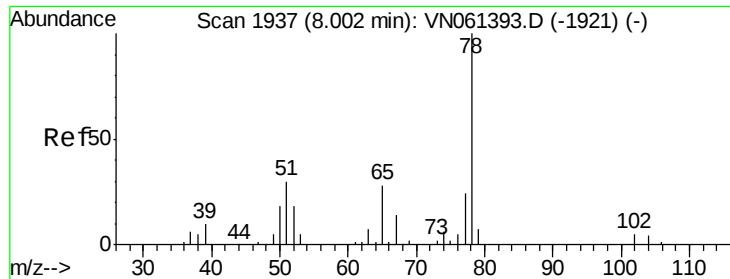
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#31
 2,2-Dichloropropane
 Concen: 34.227 ug/l
 RT: 6.77 min Scan# 1555
 Delta R.T. -0.00 min
 Lab File: VN061404.D
 Acq: 14 May 2020 20:02

Tgt Ion	Ratio	Lower	Upper
77	100		
97	0.0	17.9	26.9#





#34

Benzene

Concen: 7.337 ug/l

RT: 8.00 min Scan# 1938

Delta R.T. 0.00 min

Lab File: VN061404.D

Acq: 14 May 2020 20:02

Instrument :

MSVOA_N

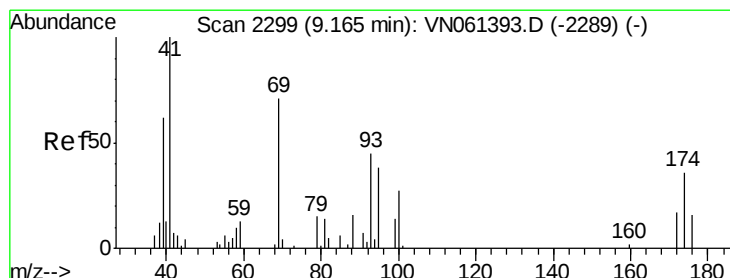
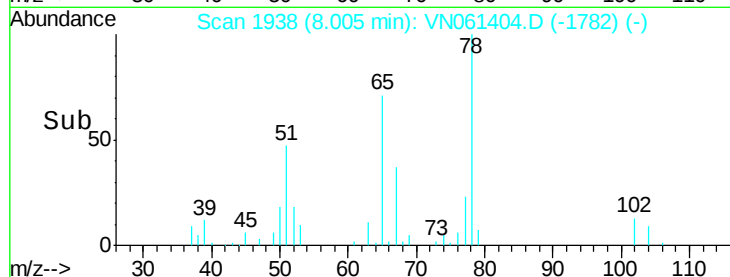
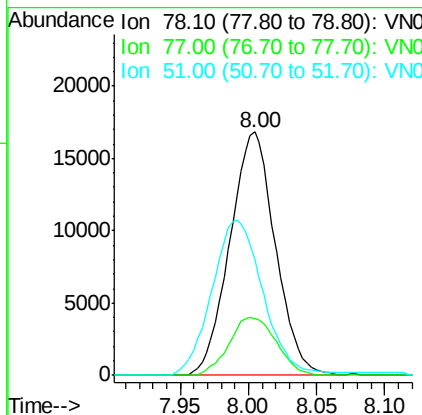
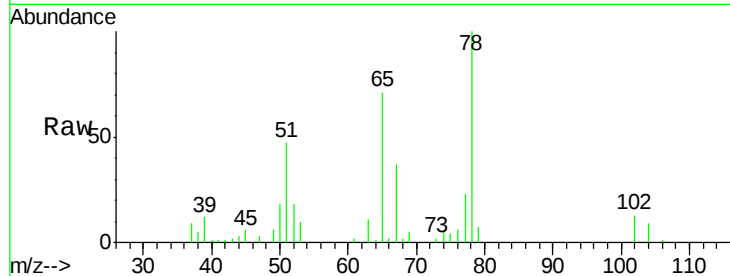
ClientSampleId :

400513791-VOA

Tot Ion:	78	Resp:	38906
Ion	Ratio	Lower	Upper
78	100		
77	23.4	19.2	28.8
51	46.1	22.1	33.1#

Manual Integrations
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#45

1,4-Dioxane

Concen: 166.458 ug/l

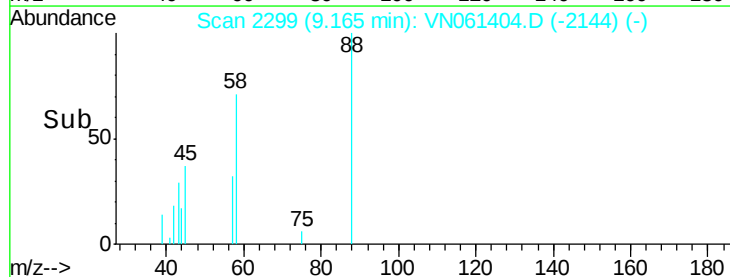
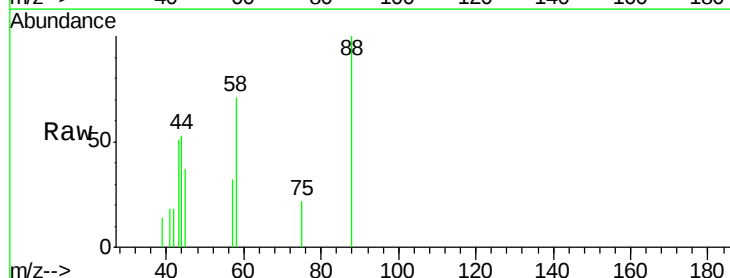
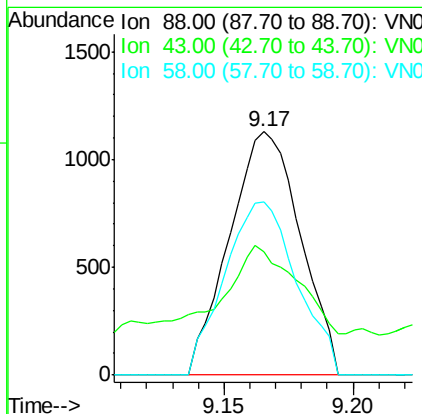
RT: 9.17 min Scan# 2299

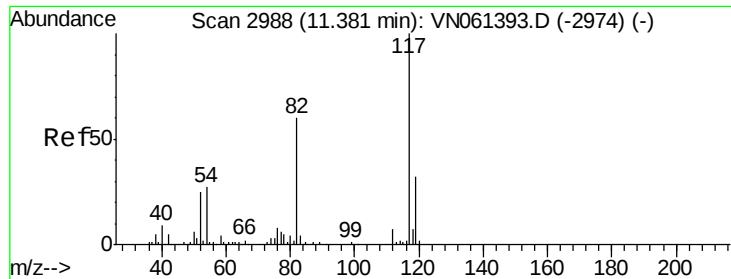
Delta R.T. -0.00 min

Lab File: VN061404.D

Acq: 14 May 2020 20:02

Tgt Ion:	88	Resp:	2160
Ion	Ratio	Lower	Upper
88	100		
43	32.8	29.8	44.8
58	72.5	58.2	87.4





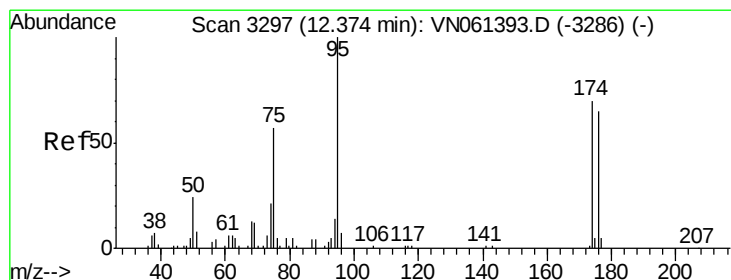
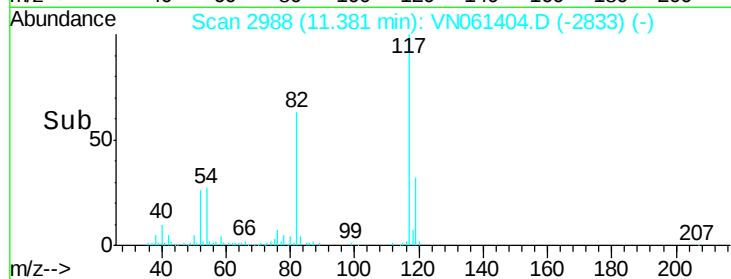
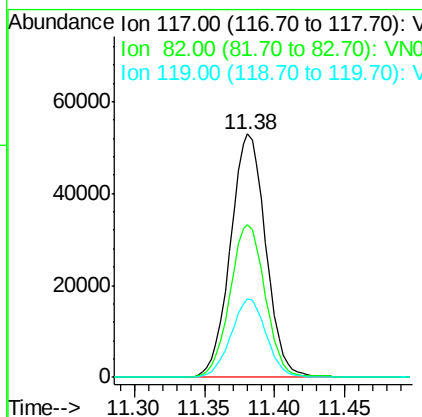
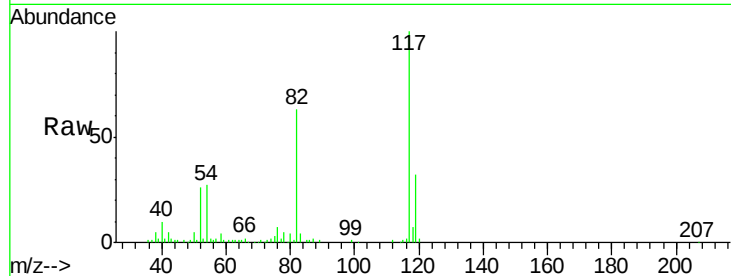
#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.38 min Scan# 2988
Delta R.T. -0.00 min
Lab File: VN061404.D
Acq: 14 May 2020 20:02

Instrument :
MSVOA_N
ClientSampleId :
400513791-VOA

Tot Ion	Ratio	Lower	Upper
117	100		
82	62.3	46.9	70.3
119	32.0	25.8	38.6

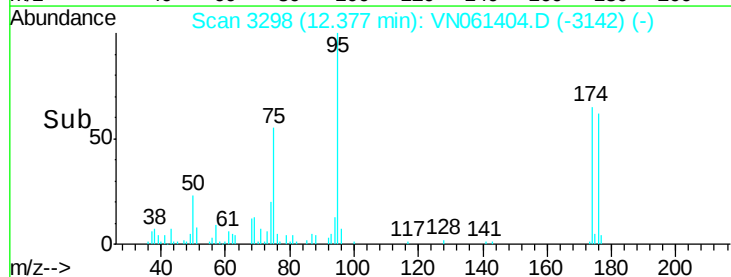
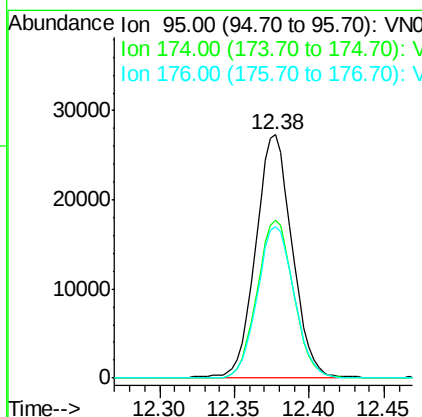
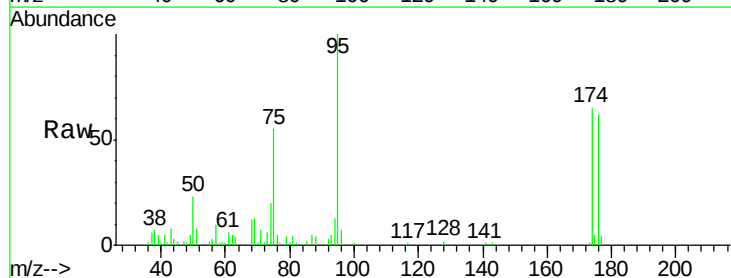
Manual Integrations
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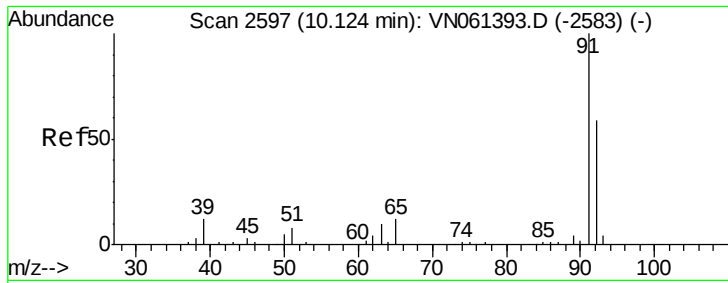
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#60
4-Bromofluorobenzene
Concen: 29.191 ug/l
RT: 12.38 min Scan# 3298
Delta R.T. 0.00 min
Lab File: VN061404.D
Acq: 14 May 2020 20:02

Tgt Ion	Ratio	Lower	Upper
95	100		
174	64.9	59.9	89.9
176	62.8	58.3	87.5





#62

Toluene

Concen: 7.647 ug/l

RT: 10.12 min Scan# 2597

Delta R.T. -0.00 min

Lab File: VN061404.D

Acq: 14 May 2020 20:02

Instrument :

MSVOA_N

ClientSampleId :

400513791-VOA

Tot Ion: 91 Resp: 41232

Ion Ratio Lower Upper

91 100

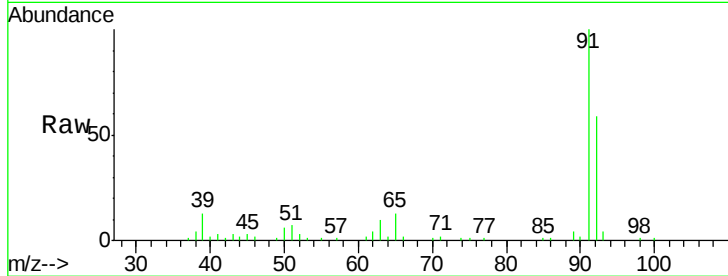
92 58.4 45.4 68.2

Manual Integrations

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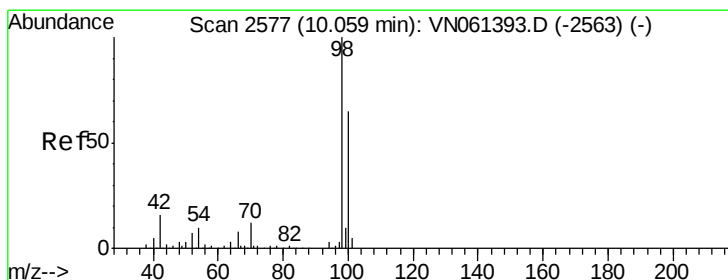
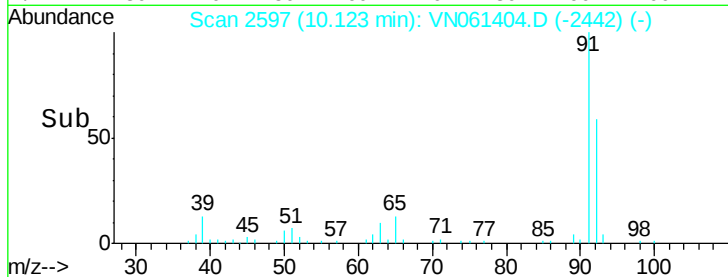
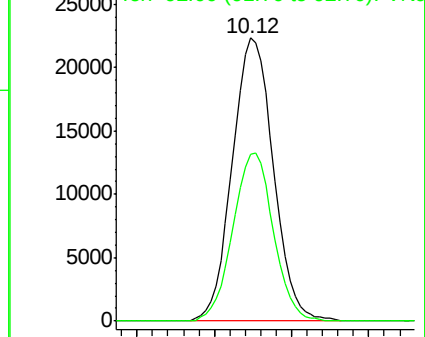
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Abundance Ion 91.00 (90.70 to 91.70): VN0

Ion 92.00 (91.70 to 92.70): VN0



#63

Toluene-d8

Concen: 31.124 ug/l

RT: 10.06 min Scan# 2577

Delta R.T. -0.00 min

Lab File: VN061404.D

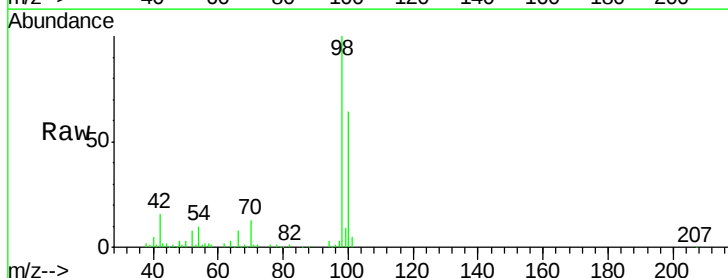
Acq: 14 May 2020 20:02

Tgt Ion: 98 Resp: 134007

Ion Ratio Lower Upper

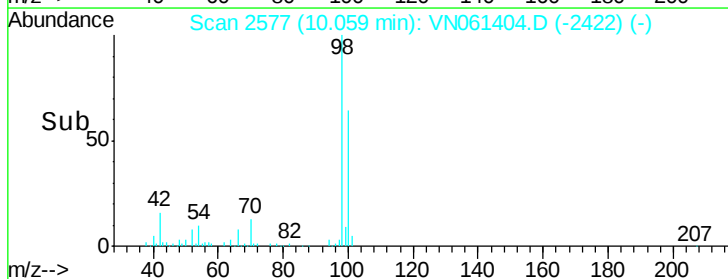
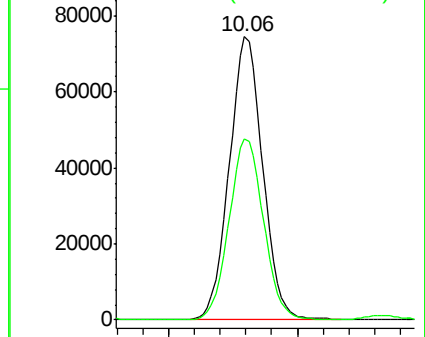
98 100

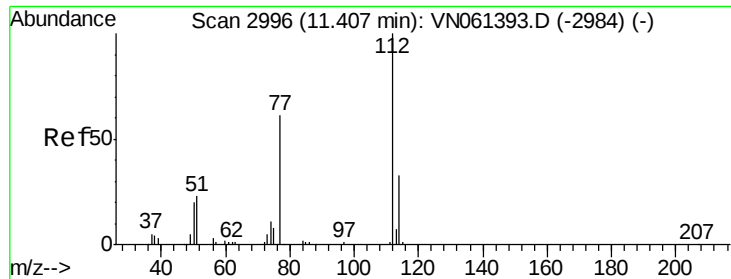
100 66.1 50.6 75.8



Abundance Ion 98.00 (97.70 to 98.70): VN0

Ion 100.00 (99.70 to 100.70): VN0





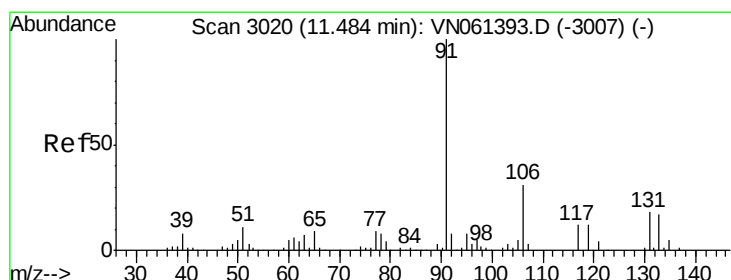
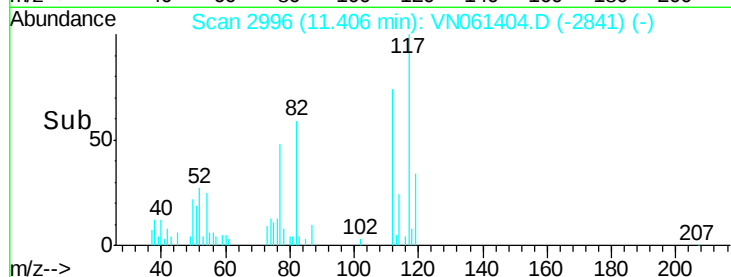
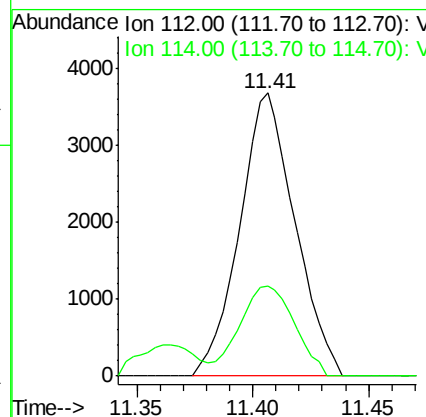
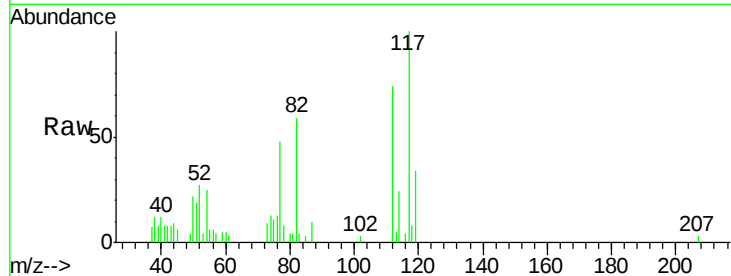
#64
Chlorobenzene
Concen: 1.912 ug/l
RT: 11.41 min Scan# 2996
Delta R.T. -0.00 min
Lab File: VN061404.D
Acq: 14 May 2020 20:02

Instrument :
MSVOA_N
ClientSampleId :
400513791-VOA

Tot Ion:112 Resp: 6101
Ion Ratio Lower Upper
112 100
114 31.8 25.7 38.5

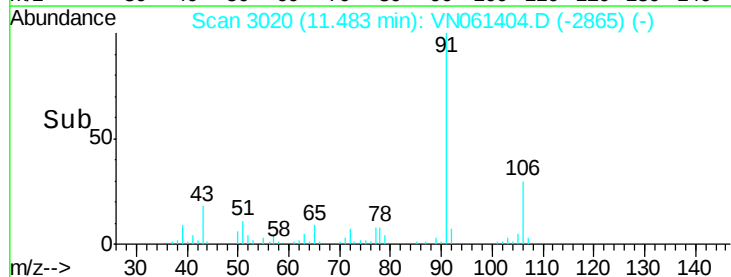
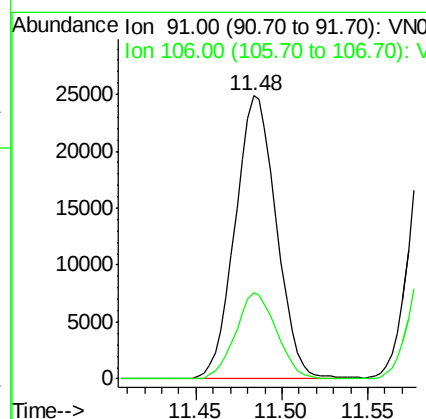
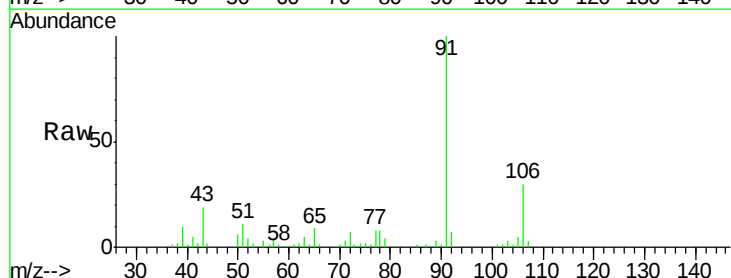
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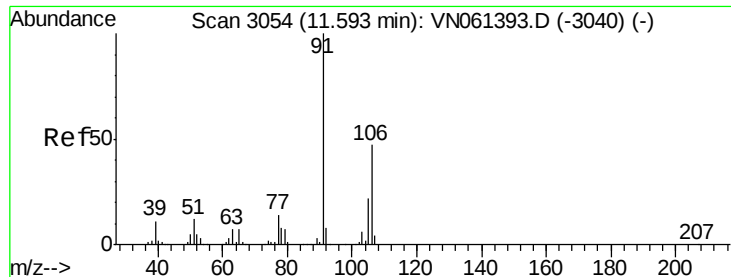
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#66
Ethyl Benzene
Concen: 6.694 ug/l
RT: 11.48 min Scan# 3020
Delta R.T. -0.00 min
Lab File: VN061404.D
Acq: 14 May 2020 20:02

Tgt Ion: 91 Resp: 41424
Ion Ratio Lower Upper
91 100
106 30.3 24.2 36.4





#67

m/p-Xvlenes

Concen: 14.685 ug/l

RT: 11.59 min Scan# 3054

Delta R.T. -0.00 min

Lab File: VN061404.D

Acq: 14 May 2020 20:02

Instrument :

MSVOA_N

ClientSampleId :

400513791-VOA

Tot Ion:106 Resp: 33555

Ion Ratio Lower Upper

106 100

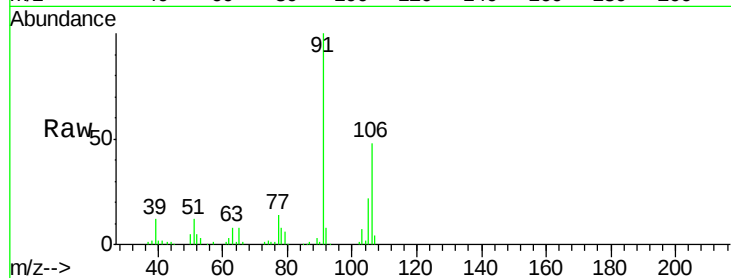
91 206.8 165.6 248.4

Manual Integrations

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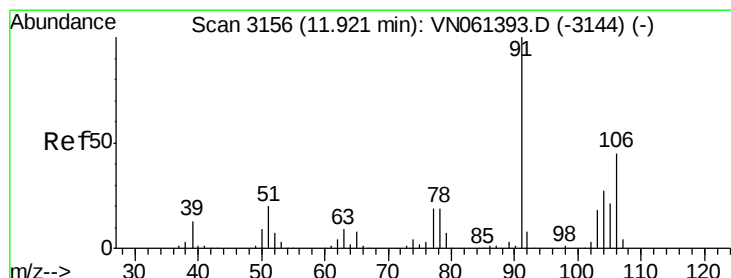
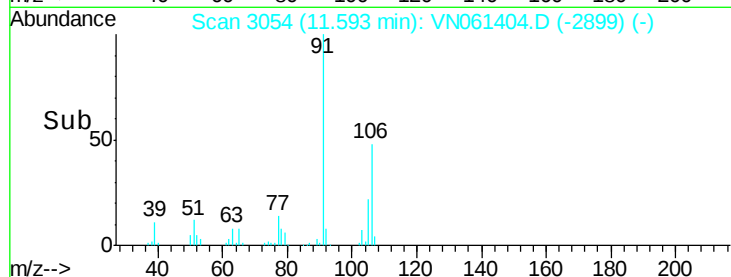
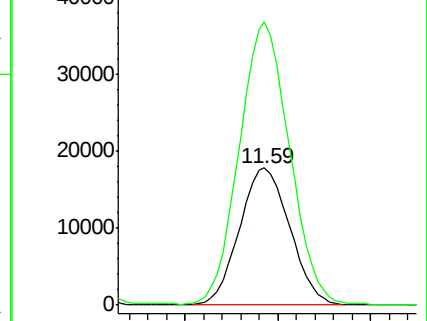
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Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VN0



#68

o-Xylene

Concen: 9.425 ug/l

RT: 11.92 min Scan# 3156

Delta R.T. -0.00 min

Lab File: VN061404.D

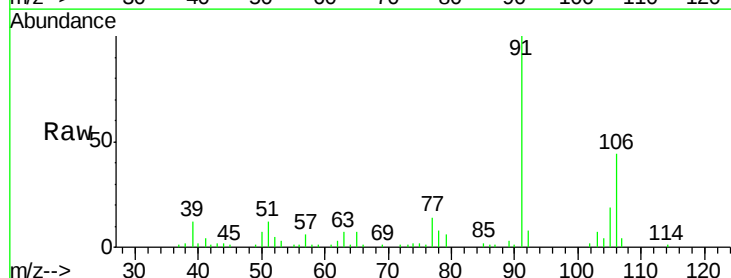
Acq: 14 May 2020 20:02

Tgt Ion:106 Resp: 20555

Ion Ratio Lower Upper

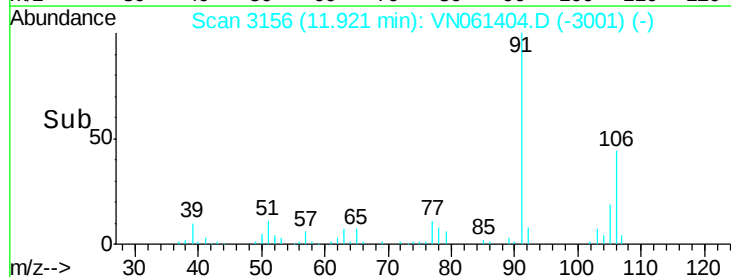
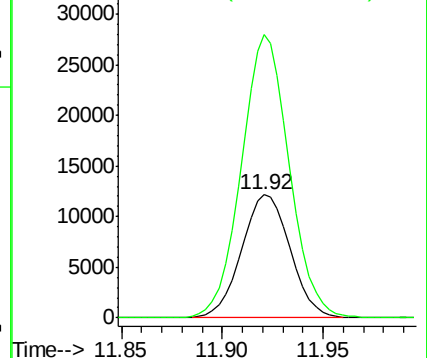
106 100

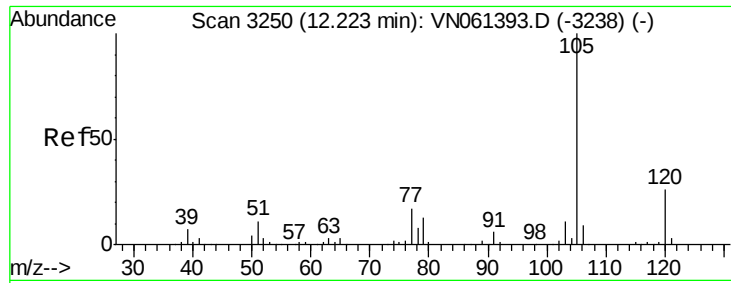
91 225.1 109.8 329.4



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VN0





#70

Isopropylbenzene

Concen: 0.891 ug/l

RT: 12.22 min Scan# 3250

Delta R.T. -0.00 min

Lab File: VN061404.D

Acq: 14 May 2020 20:02

Instrument :

MSVOA_N

ClientSampleId :

400513791-VOA

Tot Ion: 105 Resp: 5265

Ion Ratio Lower Upper

105 100

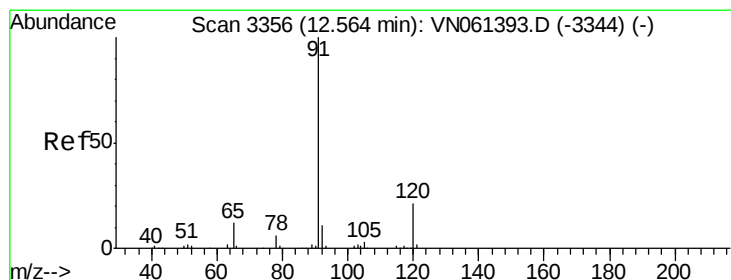
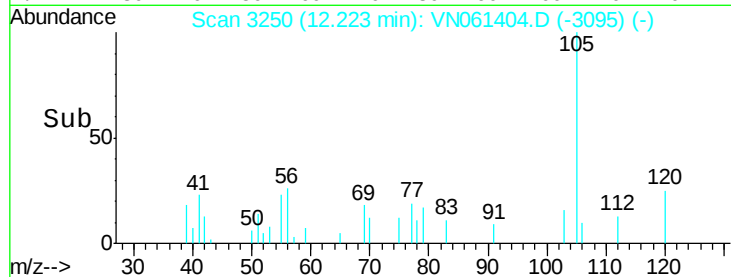
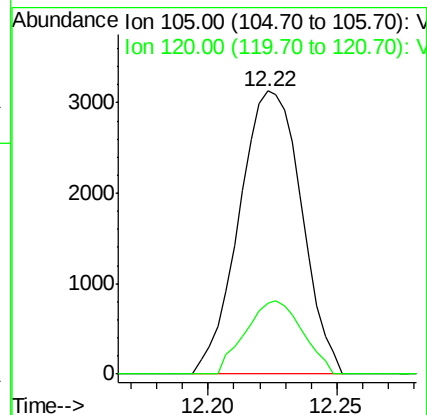
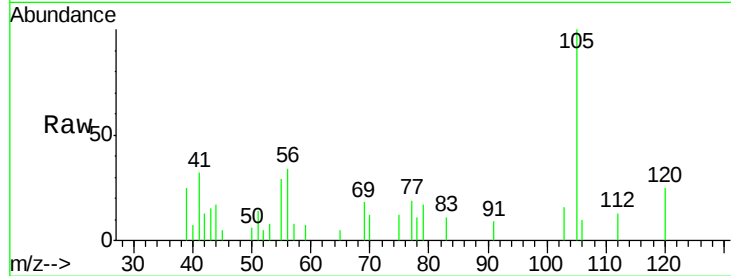
120 23.8 18.4 34.2

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#74

n-propylbenzene

Concen: 0.279 ug/l

RT: 12.56 min Scan# 3355

Delta R.T. -0.00 min

Lab File: VN061404.D

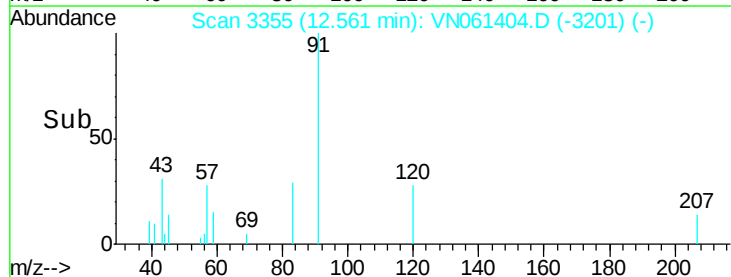
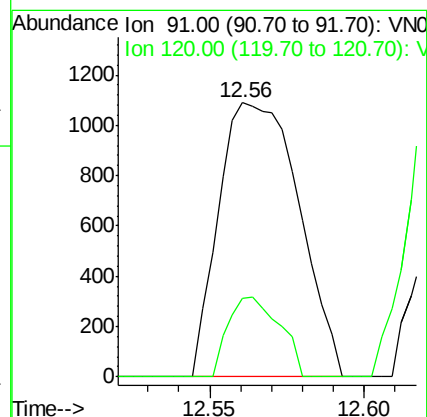
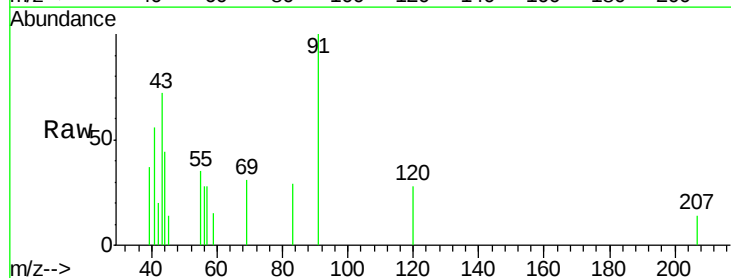
Acq: 14 May 2020 20:02

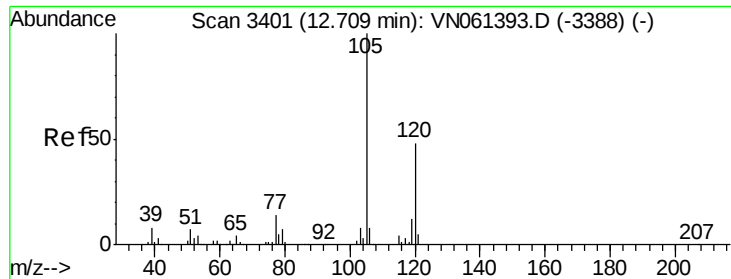
Tgt Ion: 91 Resp: 1963

Ion Ratio Lower Upper

91 100

120 18.6 0.0 43.6





#76

1,3,5-Trimethylbenzene

Concen: 1.181 ug/l

RT: 12.71 min Scan# 3401

Delta R.T. -0.00 min

Lab File: VN061404.D

Acq: 14 May 2020 20:02

Instrument :

MSVOA_N

ClientSampleId :

400513791-VOA

Tot Ion:105 Resp: 5858

Ion Ratio Lower Upper

105 100

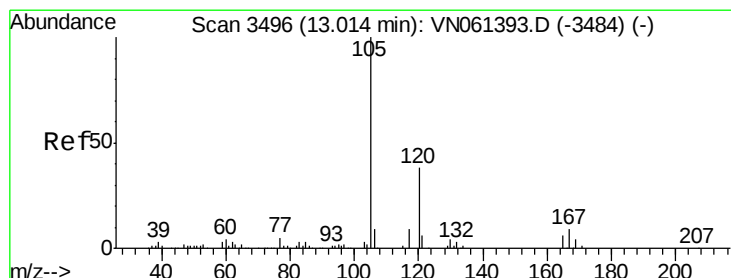
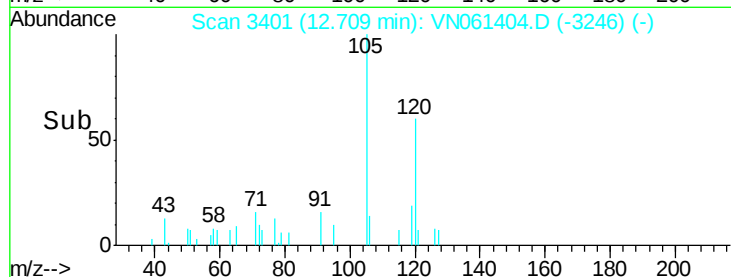
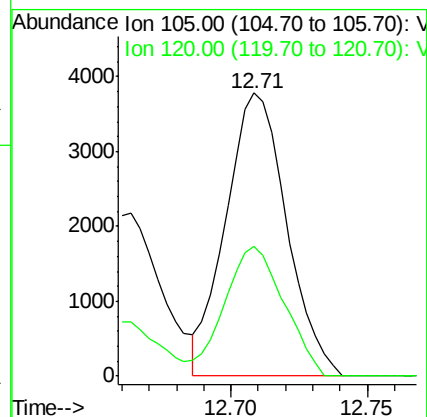
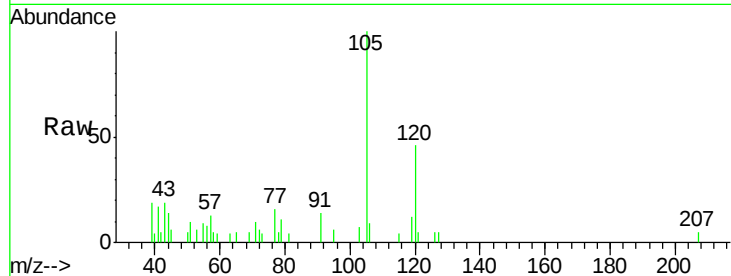
120 45.2 0.0 94.0

Manual Integrations

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#80

1,2,4-Trimethylbenzene

Concen: 4.904 ug/l

RT: 13.01 min Scan# 3496

Delta R.T. -0.00 min

Lab File: VN061404.D

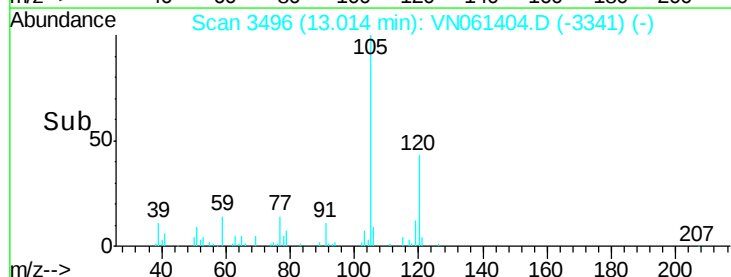
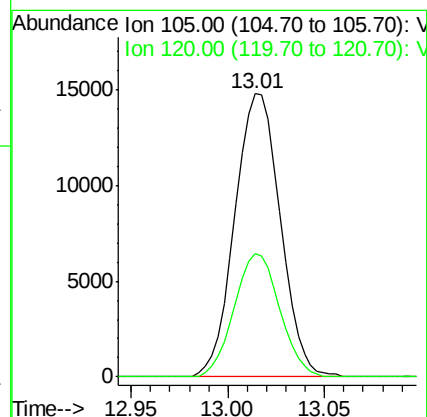
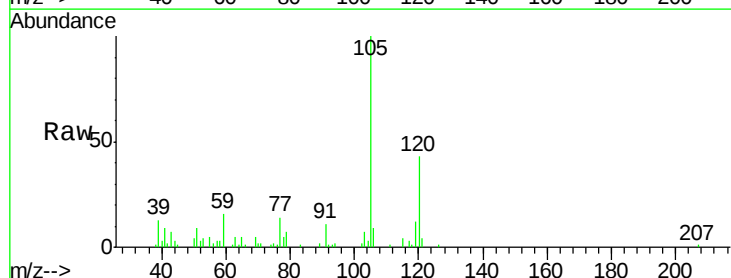
Acq: 14 May 2020 20:02

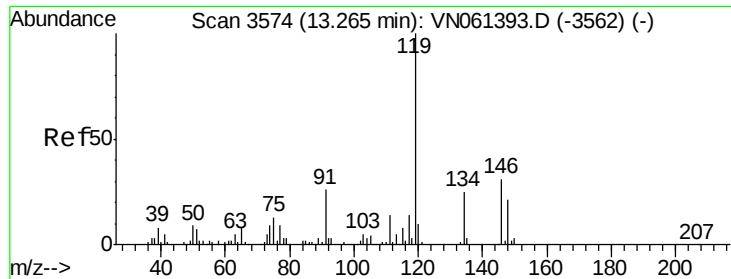
Tgt Ion:105 Resp: 24271

Ion Ratio Lower Upper

105 100

120 43.3 0.0 89.2





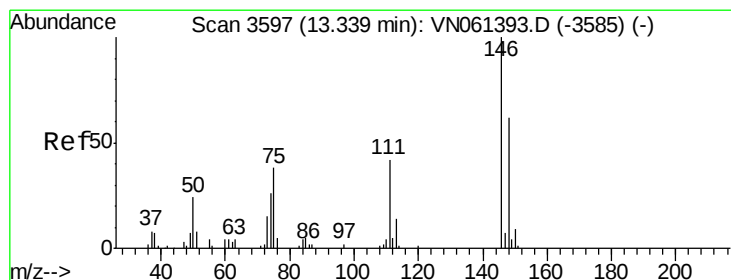
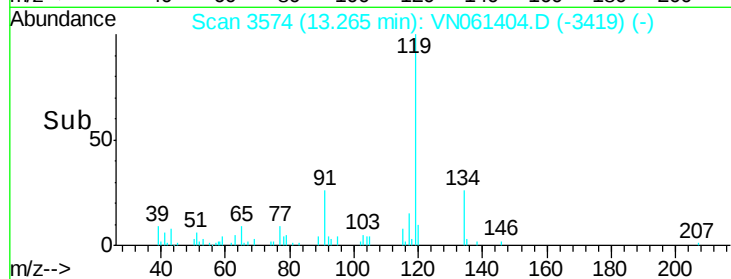
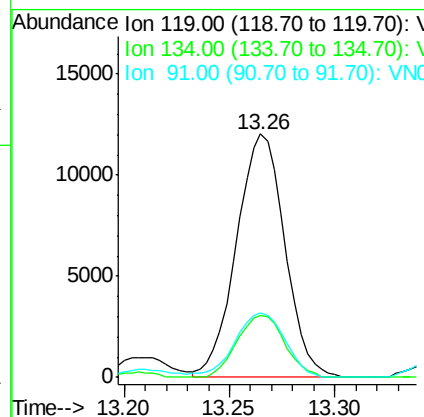
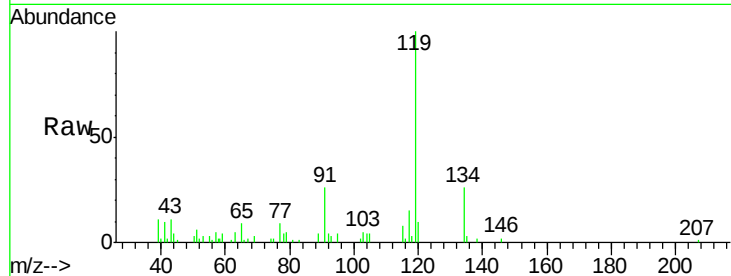
#82
 p-Isopropyltoluene
 Concen: 3.755 ug/l
 RT: 13.26 min Scan# 3574
 Delta R.T. -0.00 min
 Lab File: VN061404.D
 Acq: 14 May 2020 20:02

Instrument :
 MSVOA_N
 ClientSampleId :
 400513791-VOA

Tot Ion	Ratio	Resp	Lower	Upper
119	100	19187		
134	24.9	0.0	50.8	
91	27.6	0.0	49.4	

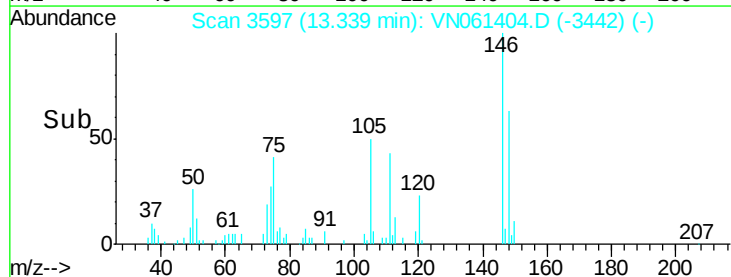
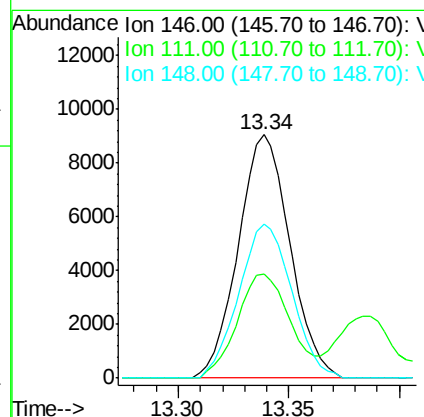
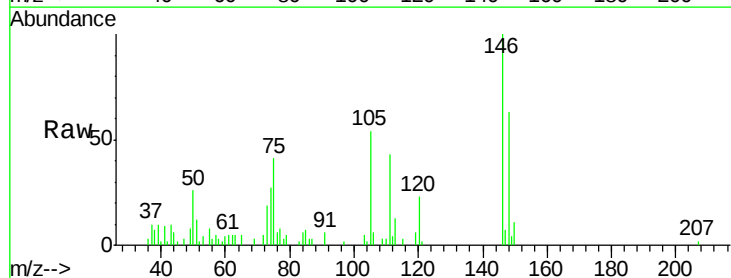
Manual Integrations
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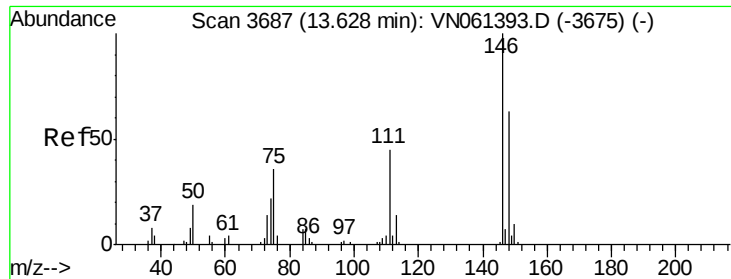
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#84
 1,4-Dichlorobenzene
 Concen: 6.536 ug/l
 RT: 13.34 min Scan# 3597
 Delta R.T. -0.00 min
 Lab File: VN061404.D
 Acq: 14 May 2020 20:02

Tgt Ion	Ratio	Resp	Lower	Upper
146	100	14755		
111	44.5	19.8	59.4	
148	64.7	31.6	94.8	





#87

1,2-Dichlorobenzene

Concen: 0.867 ug/l

RT: 13.63 min Scan# 3687

Delta R.T. -0.00 min

Lab File: VN061404.D

Acq: 14 May 2020 20:02

Instrument :

MSVOA_N

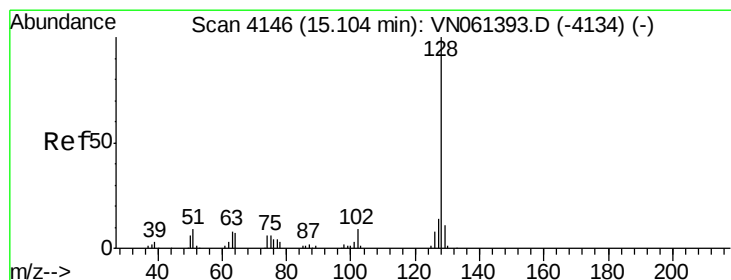
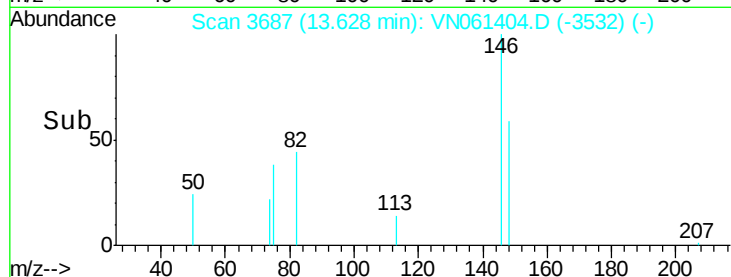
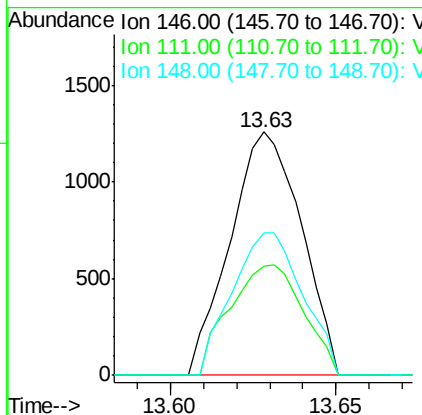
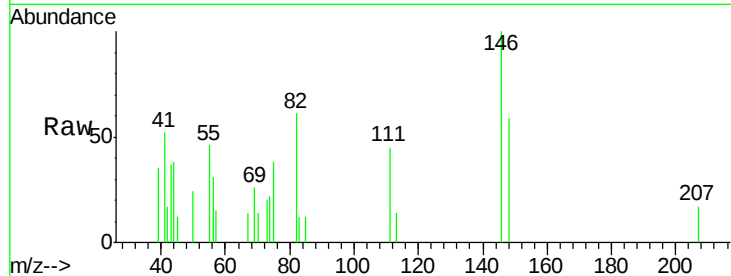
ClientSampleId :

400513791-VOA

Tot Ion:	146	Resp:	1877
Ion	Ratio	Lower	Upper
146	100		
111	46.9	21.8	65.4
148	58.2	32.1	96.5

Manual Integrations
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#91

Naphthalene

Concen: 35.891 ug/l

RT: 15.10 min Scan# 4146

Delta R.T. -0.00 min

Lab File: VN061404.D

Acq: 14 May 2020 20:02

Tgt Ion:	128	Resp:	140339
Ion	Ratio	Lower	Upper
128	100		
127	13.1	10.2	15.2
129	10.7	8.6	13.0

