

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL120219\
 Data File : VL034448.D
 Acq On : 3 Dec 2019 5:13
 Operator : SY/AP
 Sample : K6097-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-1A

Manual Integrations
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Quant Time: Dec 03 14:20:48 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111919AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Nov 19 14:15:35 2019
 QLast Update : Tue Nov 19 14:15:35 2019
 Response via : Initial Calibration

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.69	49	729372	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.21	114	1404647	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.15	117	1419051	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.48	95	1235807	10.35	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.50%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.02	85	354880	2.690	ppbv	96
10) Heptane	8.16	43	153343	1.471	ppbv	98
11) Trichlorofluoromethane	3.94	101	47203	0.359	ppbv	86
13) Ethanol	3.61	45	24104m	2.142	ppbv	
15) Acetone	3.85	43	137269	1.314	ppbv #	70
20) Methylene Chloride	4.34	84	46609m	1.258	ppbv	
26) Hexane	5.71	57	163407	2.040	ppbv #	38
29) Chloroform	5.77	83	118183	0.911	ppbv	97
31) cis-1,2-Dichloroethene	5.56	61	25711	0.311	ppbv #	74
34) 2-Butanone	5.26	43	239495	2.071	ppbv	97
35) Carbon Tetrachloride	7.05	117	6911m	0.057	ppbv	
36) Benzene	6.93	78	34146m	0.243	ppbv	
38) Trichloroethene	7.87	130	215680	3.743	ppbv	97
50) 4-Methyl-2-Pentanone	8.80	43	17126m	0.102	ppbv	
51) 2-Hexanone	10.20	43	87508	0.625	ppbv #	95
52) Tetrachloroethene	11.29	164	5805503	95.558	ppbv	89
53) Toluene	9.85	91	395285	2.478	ppbv	98
58) Ethyl Benzene	12.78	91	140529	0.638	ppbv	92
59) m/p-Xylene	13.03	91	629913m	3.309	ppbv	
60) o-Xylene	13.76	91	250437	1.331	ppbv	95
72) 4-Ethyltoluene	15.91	105	34580m	0.159	ppbv	
74) 1,2,4-Trimethylbenzene	16.84	105	31684m	0.140	ppbv	

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

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Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

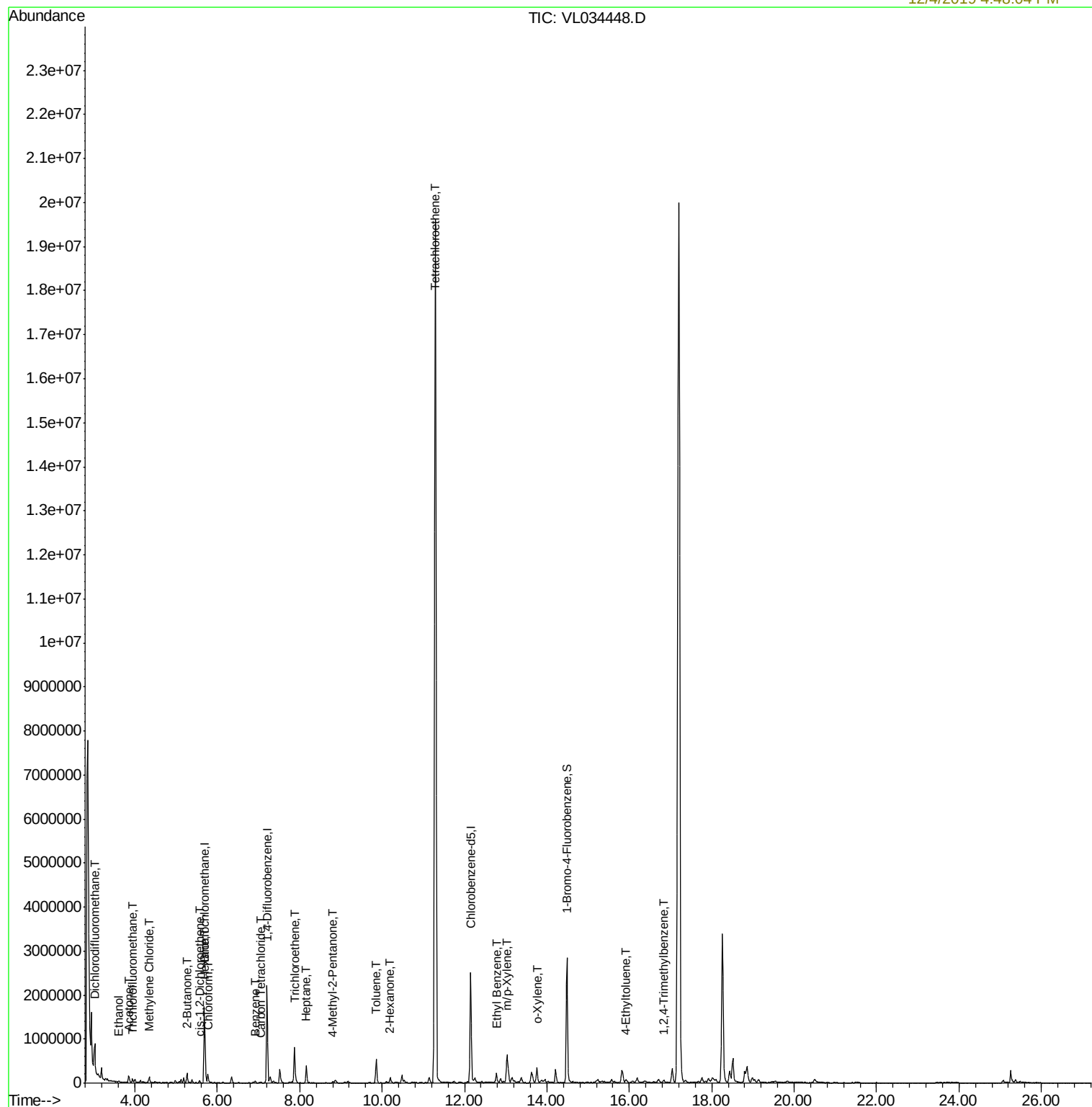
Instrument :
MSVOA_L
ClientSampleId :
SV-1A

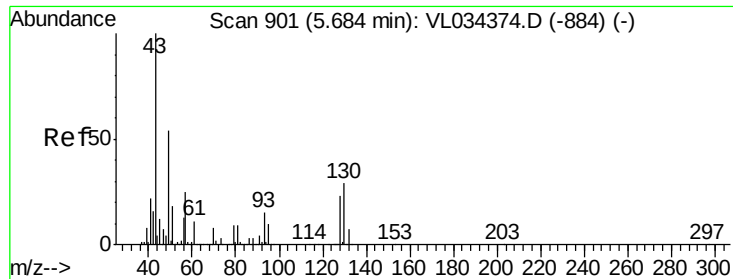
Manual Integrations
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Quant Time: Dec 03 14:20:48 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL111919AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue Nov
QLast Update : Tue Nov 19 14:15:35 2019
Response via : Initial Calibration

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.69 min Scan# 902

Delta R.T. 0.00 min

Lab File: VL034448.D

Acq: 3 Dec 2019 5:13

Instrument :

MSVOA_L

ClientSampled :

SV-1A

Tot Ion: 49 Resp: 729372

Ion Ratio Lower Upper

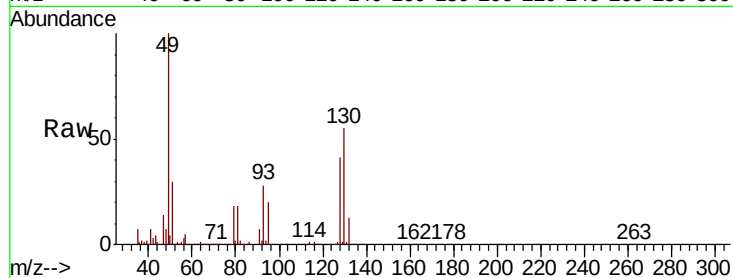
49 100

128 42.7 21.8 65.3

130 54.7 28.0 84.0

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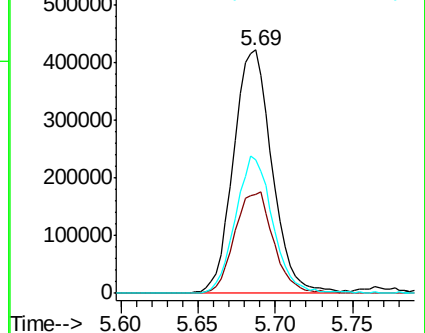
anatel



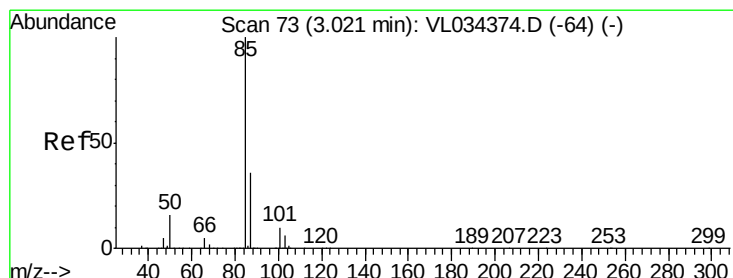
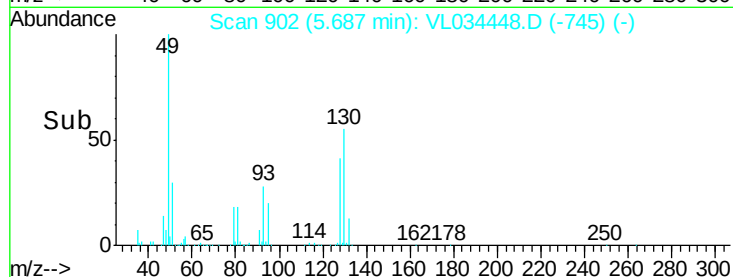
Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



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#2

Dichlorodifluoromethane

Concen: 2.690 ppbv

RT: 3.02 min Scan# 74

Delta R.T. 0.00 min

Lab File: VL034448.D

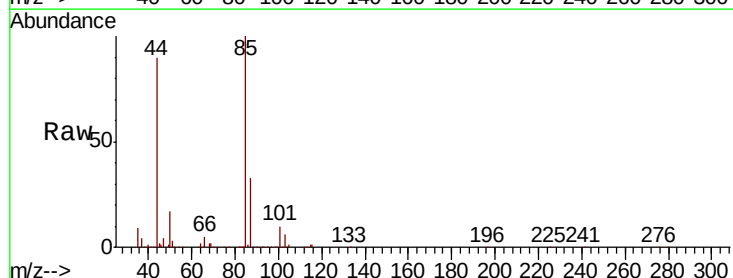
Acq: 3 Dec 2019 5:13

Tgt Ion: 85 Resp: 354880

Ion Ratio Lower Upper

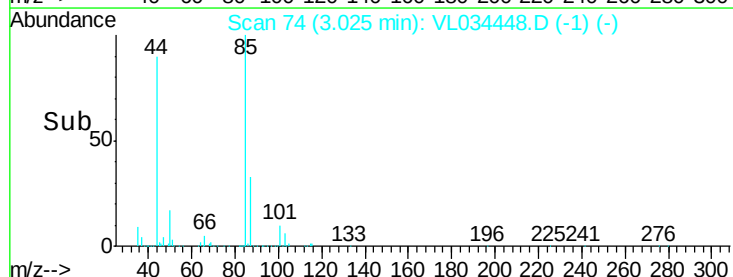
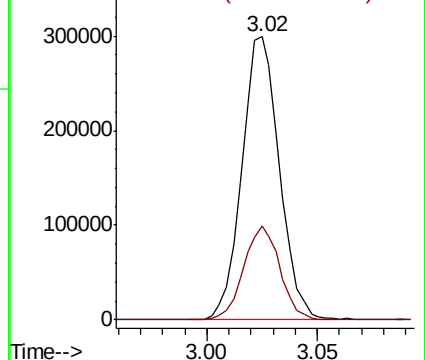
85 100

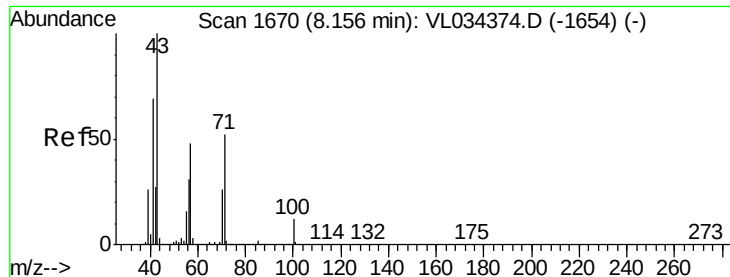
87 33.1 28.5 42.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





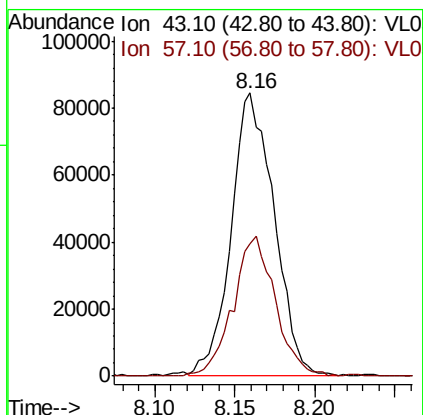
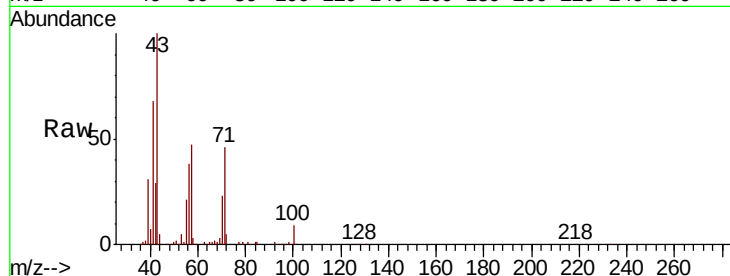
#10
 Heptane
 Concen: 1.471 ppbv
 RT: 8.16 min Scan# 1671
 Delta R.T. 0.00 min
 Lab File: VL034448.D
 Acq: 3 Dec 2019 5:13

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-1A

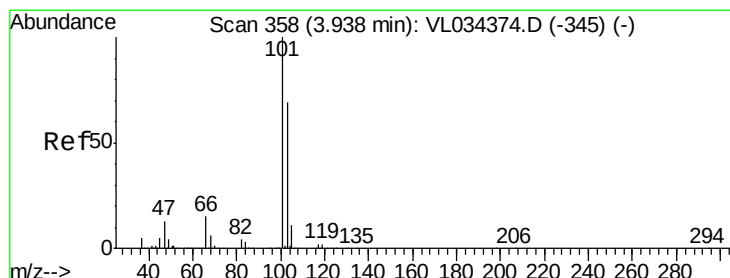
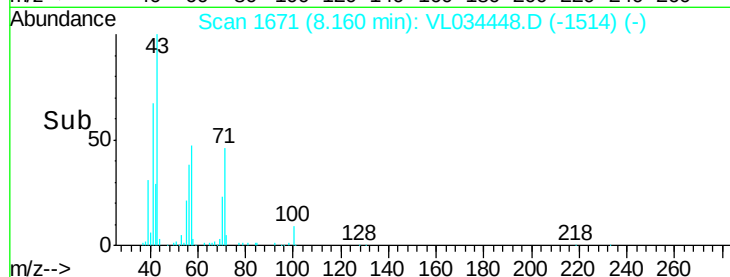
Tot Ion	Ratio	Lower	Upper
43	100		
57	49.1	40.2	60.2

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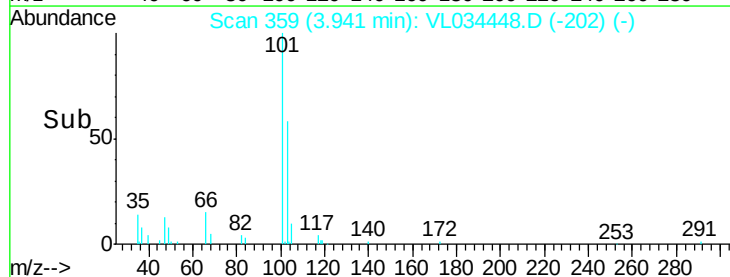
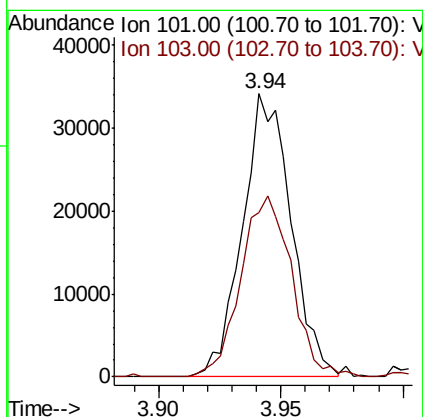
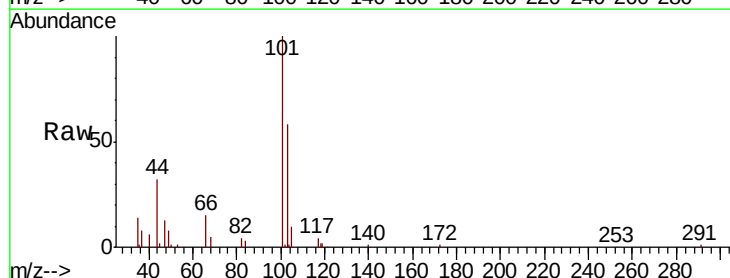


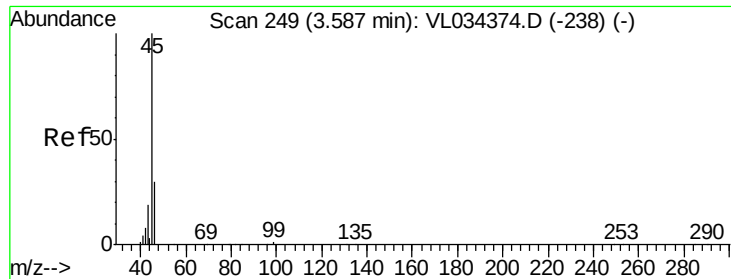
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#11
 Trichlorofluoromethane
 Concen: 0.359 ppbv
 RT: 3.94 min Scan# 359
 Delta R.T. 0.00 min
 Lab File: VL034448.D
 Acq: 3 Dec 2019 5:13

Tgt Ion	Ratio	Lower	Upper
101	100		
103	58.0	55.4	83.0





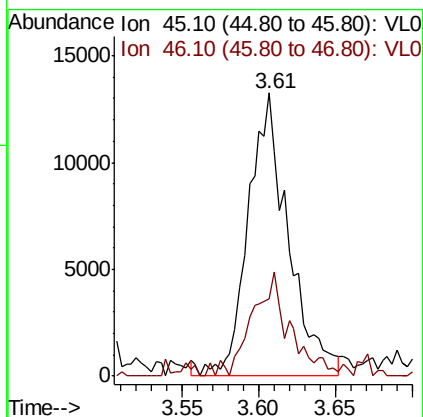
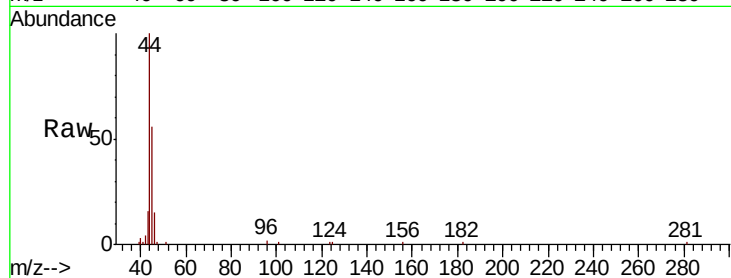
#13
Ethanol
Concen: 2.142 ppbv m
RT: 3.61 min Scan# 255
Delta R.T. 0.02 min
Lab File: VL034448.D
Acq: 3 Dec 2019 5:13

Instrument :
MSVOA_L
ClientSampleId :
SV-1A

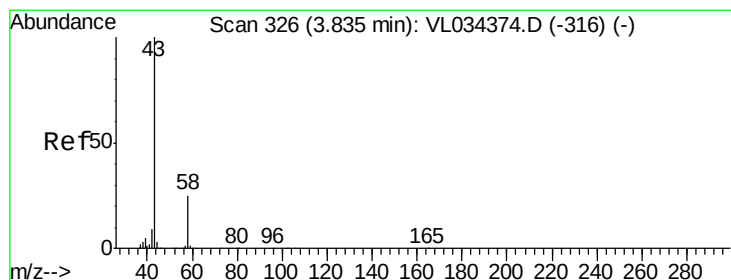
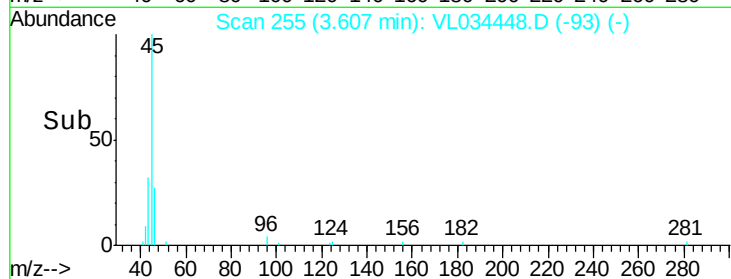
Tot Ion	Ratio	Lower	Upper
45	100		
46	0.0	13.8	55.4#

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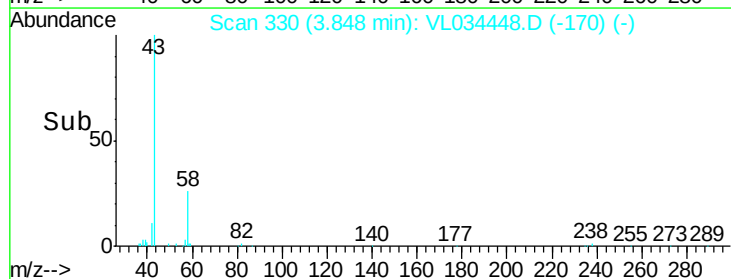
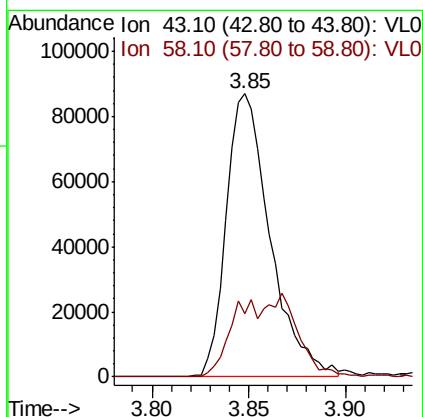
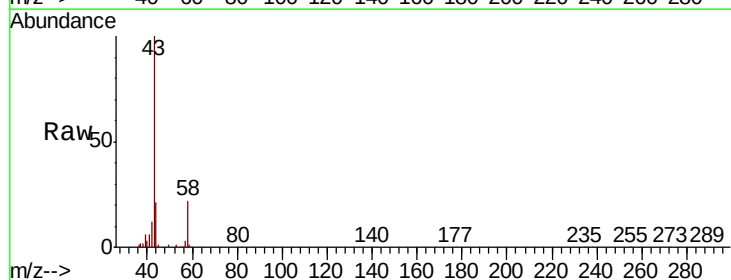


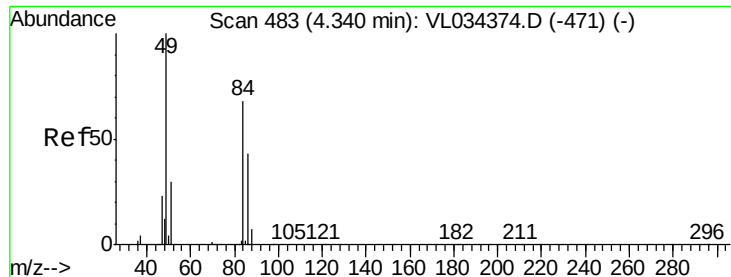
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#15
Acetone
Concen: 1.314 ppbv
RT: 3.85 min Scan# 330
Delta R.T. 0.01 min
Lab File: VL034448.D
Acq: 3 Dec 2019 5:13

Tgt Ion	Ratio	Lower	Upper
43	100		
58	40.4	20.2	30.4#





#20
Methylene Chloride
Concen: 1.258 ppbv
RT: 4.34 min Scan# 484
Delta R.T. 0.00 min
Lab File: VL034448.D
Acq: 3 Dec 2019 5:13

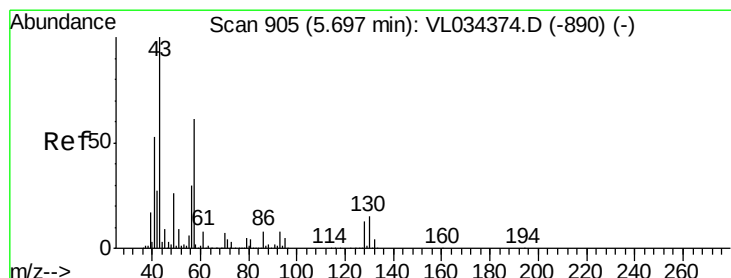
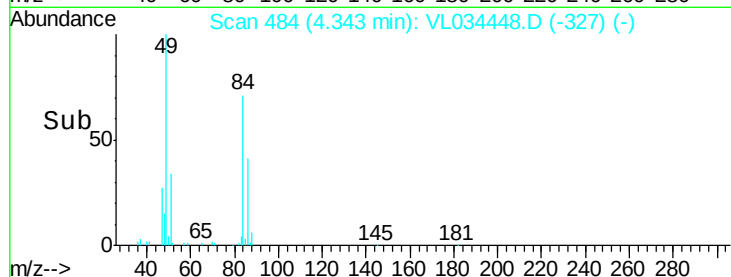
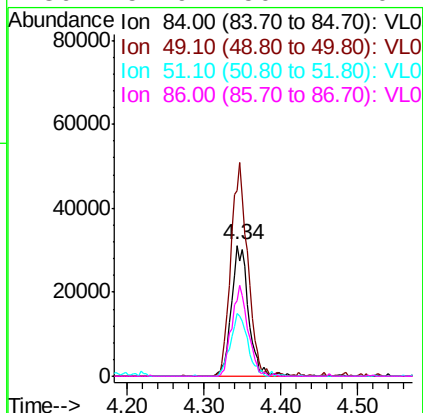
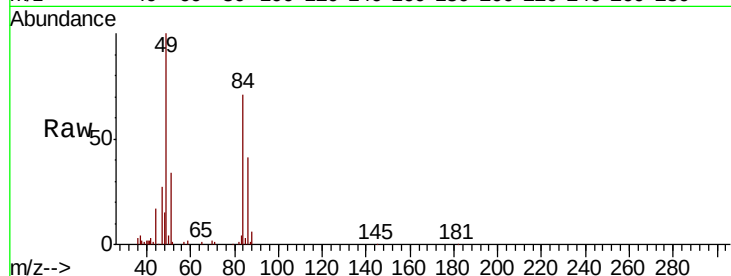
Instrument :
MSVOA_L
ClientSampleId :
SV-1A

Tot Ion	84	Resp	46609
Ion	Ratio	Lower	Upper
84	100		
49	141.3	116.8	175.2
51	48.0	35.6	53.4
86	57.9	50.7	76.1

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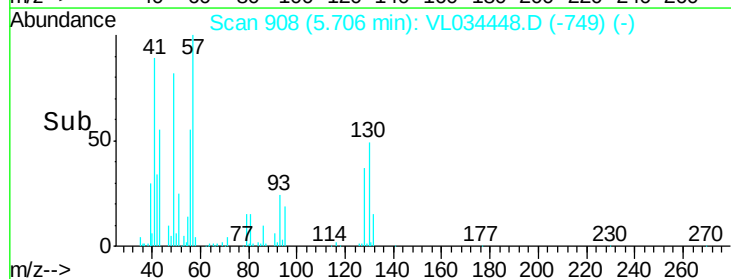
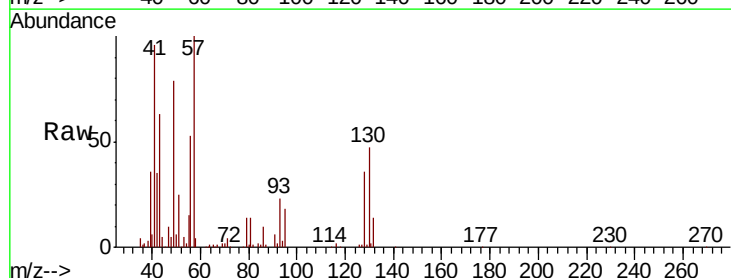
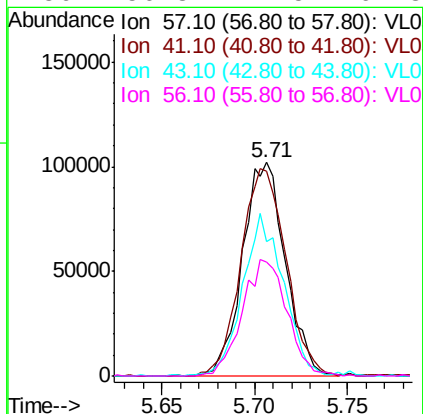
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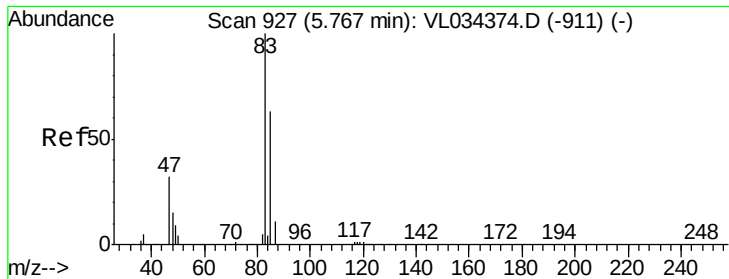
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#26
Hexane
Concen: 2.040 ppbv
RT: 5.71 min Scan# 908
Delta R.T. 0.01 min
Lab File: VL034448.D
Acq: 3 Dec 2019 5:13

Tgt Ion	57	Resp	163407
Ion	Ratio	Lower	Upper
57	100		
41	102.9	75.0	112.4
43	73.5	186.6	279.8#
56	56.8	41.5	62.3





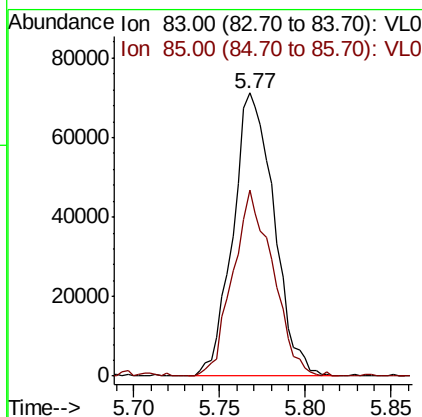
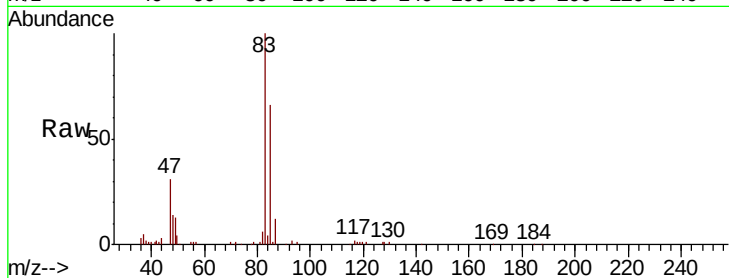
#29
Chloroform
Concen: 0.911 ppbv
RT: 5.77 min Scan# 927
Delta R.T. 0.00 min
Lab File: VL034448.D
Acq: 3 Dec 2019 5:13

Instrument :
MSVOA_L
ClientSampleId :
SV-1A

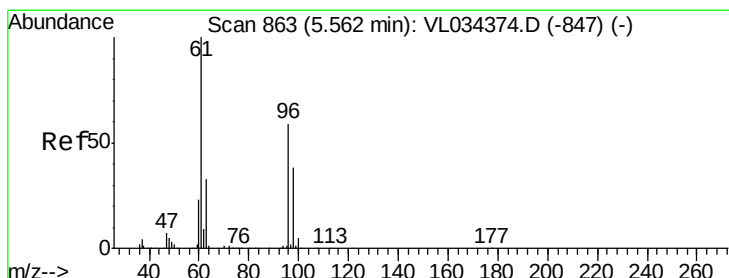
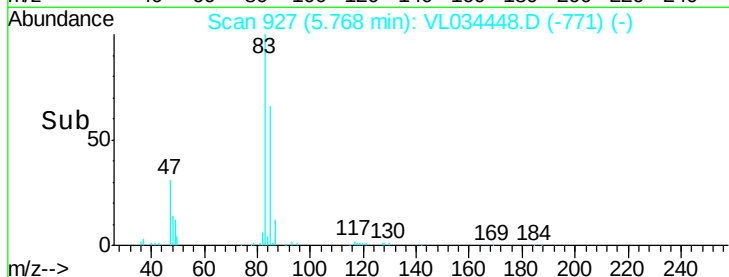
Tot Ion	83	Resp	118183
Ion Ratio	100	Lower	Upper
85	65.6	50.4	75.6

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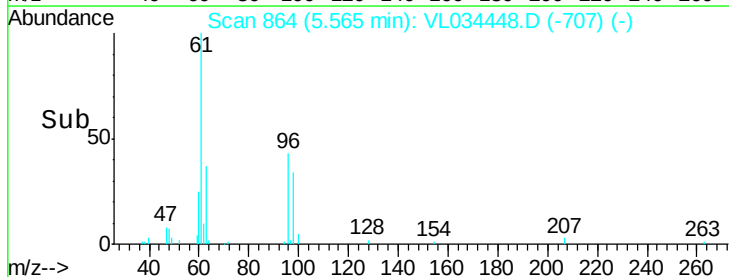
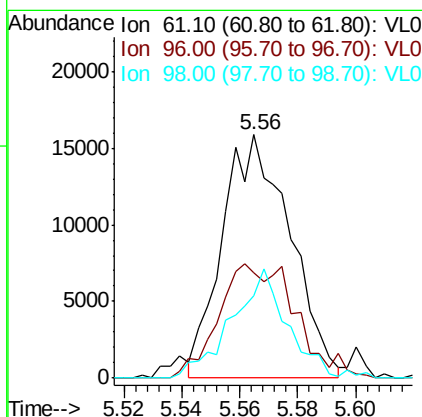
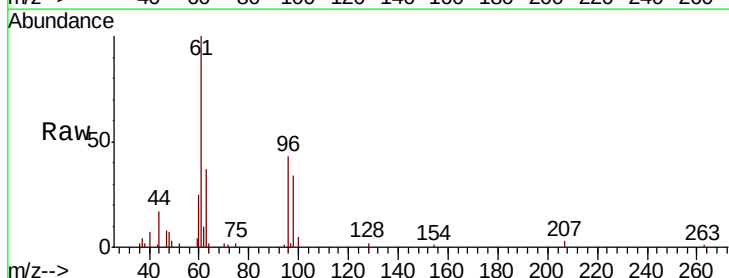


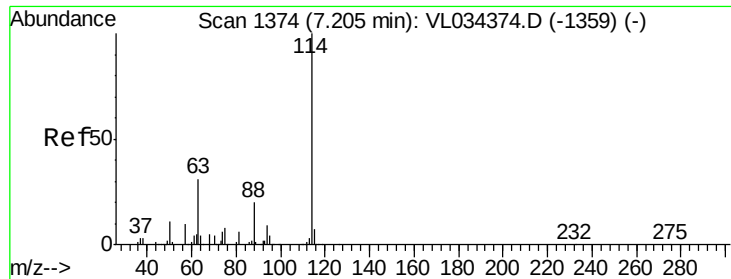
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#31
cis-1,2-Dichloroethene
Concen: 0.311 ppbv
RT: 5.56 min Scan# 864
Delta R.T. 0.00 min
Lab File: VL034448.D
Acq: 3 Dec 2019 5:13

Tgt Ion	61	Resp	25711
Ion Ratio	100	Lower	Upper
96	33.2	47.4	71.2#
98	31.1	30.6	45.8





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.21 min Scan# 1375

Delta R.T. 0.00 min

Lab File: VL034448.D

Acq: 3 Dec 2019 5:13

Instrument :

MSVOA_L

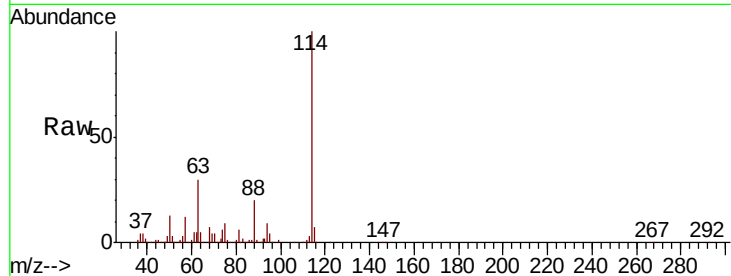
ClientSampleId :

SV-1A

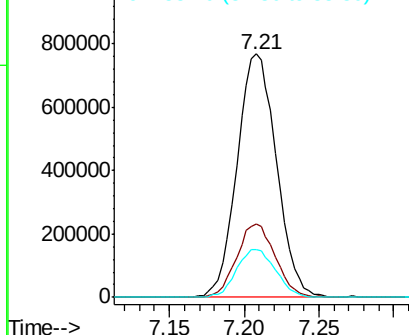
Tot Ion:	114	Resp:	1404647
Ion	Ratio	Lower	Upper
114	100		
63	29.8	24.2	36.4
88	19.7	15.9	23.9

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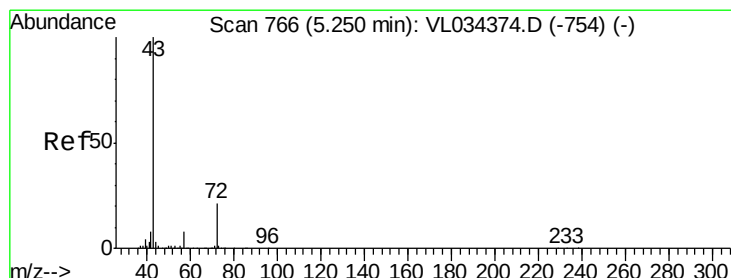
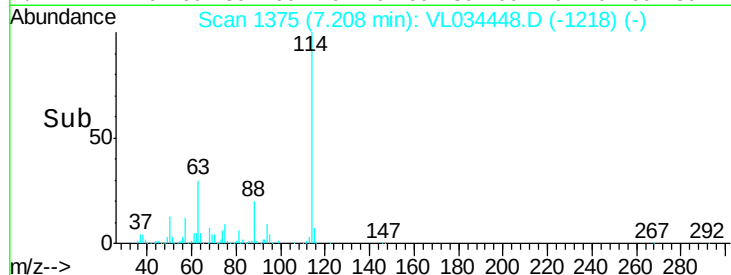
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Abundance Ion 114.10 (113.80 to 114.80): VL0
Ion 63.10 (62.80 to 63.80): VL0
Ion 88.10 (87.80 to 88.80): VL0



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#34

2-Butanone

Concen: 2.071 ppbv

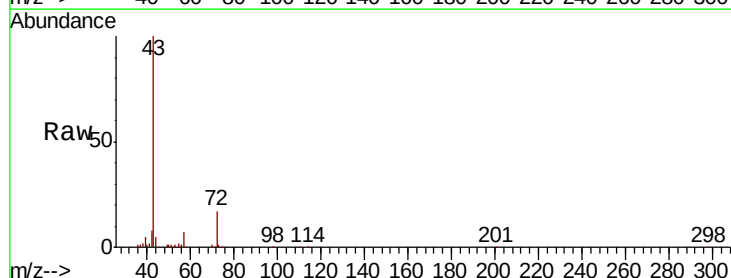
RT: 5.26 min Scan# 769

Delta R.T. 0.01 min

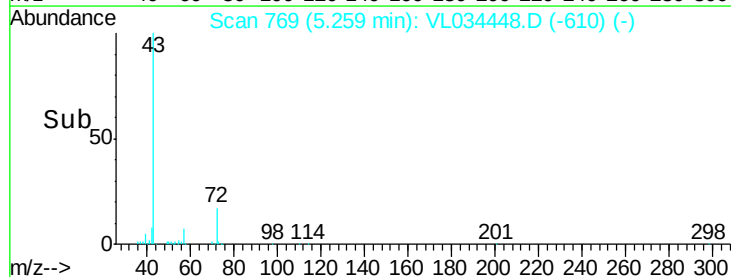
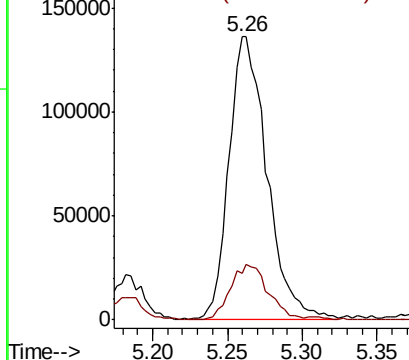
Lab File: VL034448.D

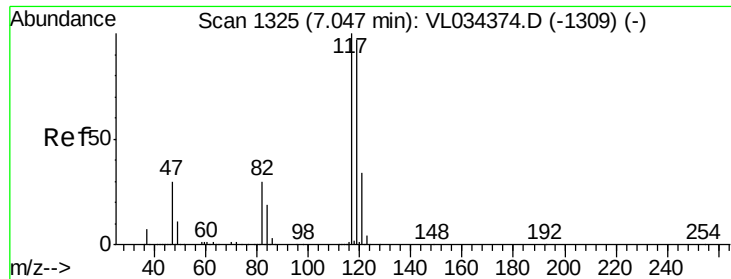
Acq: 3 Dec 2019 5:13

Tgt Ion:	43	Resp:	239495
Ion	Ratio	Lower	Upper
43	100		
72	20.1	17.0	25.6



Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 72.10 (71.80 to 72.80): VL0





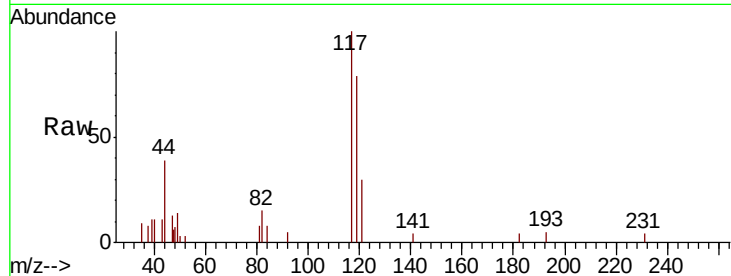
#35
Carbon Tetrachloride
Concen: 0.057 ppbv m
RT: 7.05 min Scan# 1326
Delta R.T. 0.00 min
Lab File: VL034448.D
Acq: 3 Dec 2019 5:13

Instrument :
MSVOA_L
ClientSampleId :
SV-1A

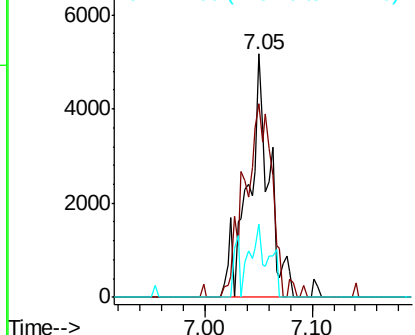
Tot Ion	Ratio	Lower	Upper
117	100		
119	79.4	77.3	115.9
121	30.0	27.4	41.2

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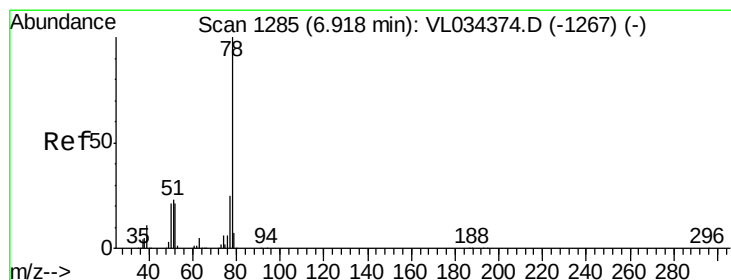
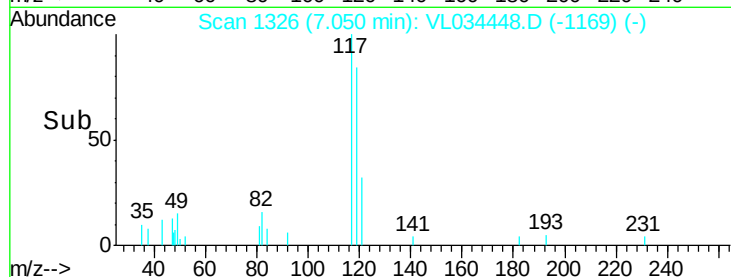
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Abundance Ion 117.00 (116.70 to 117.70): V
Ion 119.00 (118.70 to 119.70): V
Ion 121.00 (120.70 to 121.70): V

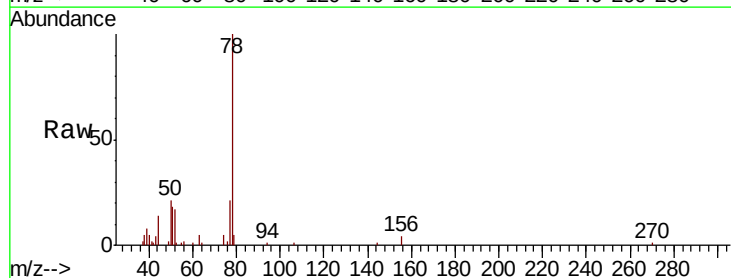


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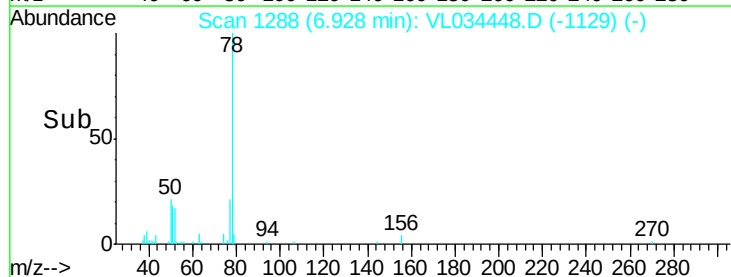
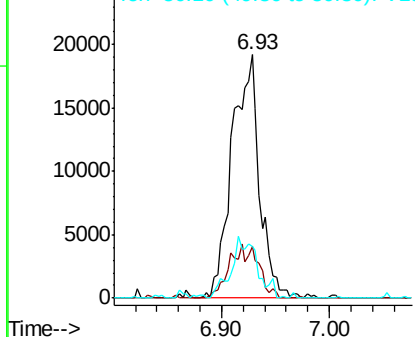


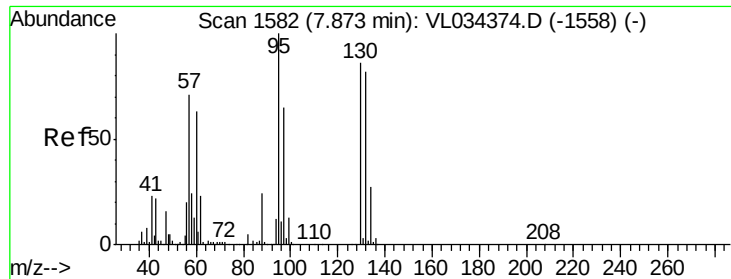
#36
Benzene
Concen: 0.243 ppbv m
RT: 6.93 min Scan# 1288
Delta R.T. 0.01 min
Lab File: VL034448.D
Acq: 3 Dec 2019 5:13

Tgt Ion	Ratio	Lower	Upper
78	100		
77	21.2	20.2	30.4
50	21.1	17.1	25.7



Abundance Ion 78.10 (77.80 to 78.80): VL0
Ion 77.10 (76.80 to 77.80): VL0
Ion 50.10 (49.80 to 50.80): VL0





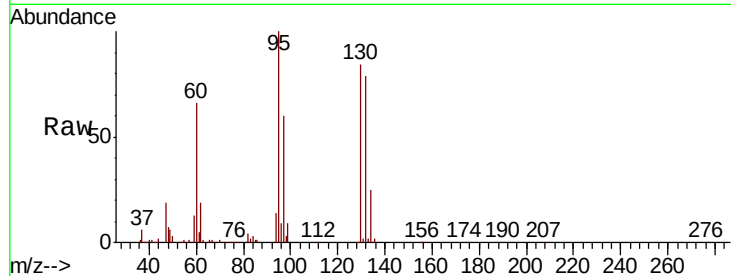
#38
 Trichloroethene
 Concen: 3.743 ppbv
 RT: 7.87 min Scan# 1582
 Delta R.T. 0.00 min
 Lab File: VL034448.D
 Acq: 3 Dec 2019 5:13

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-1A

Tot Ion	Ratio	Lower	Upper
130	100		
95	119.2	93.4	140.0
132	94.4	76.4	114.6
97	71.1	61.1	91.7

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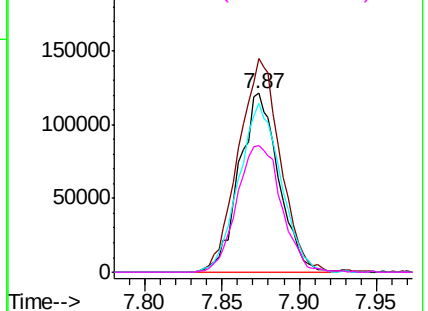


Abundance Ion 130.00 (129.70 to 130.70): V

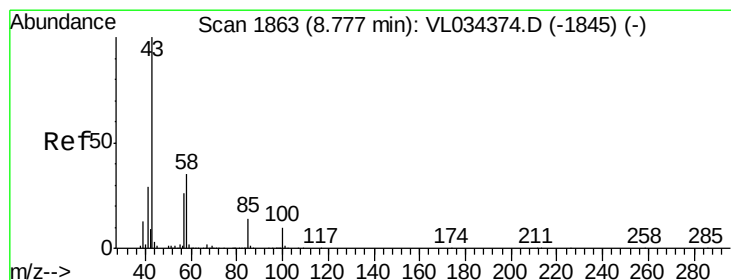
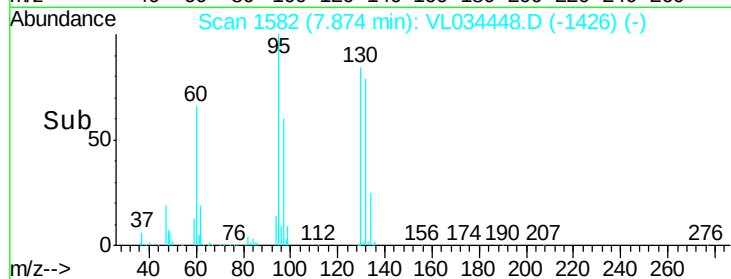
Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0

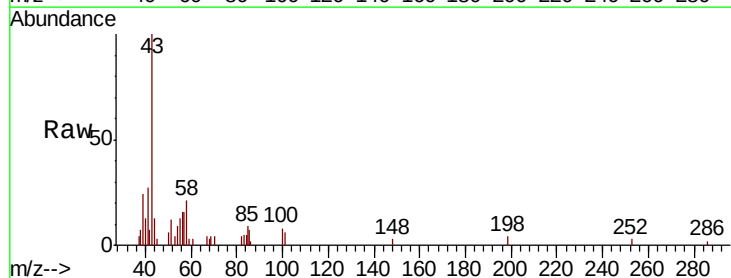


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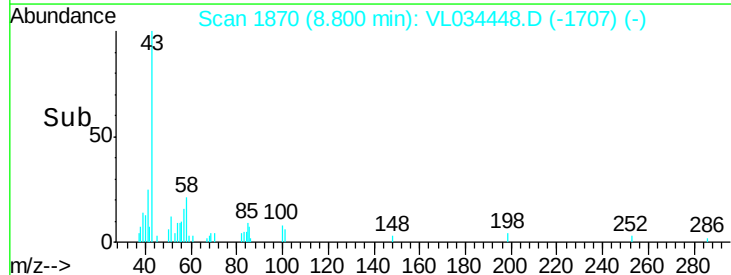
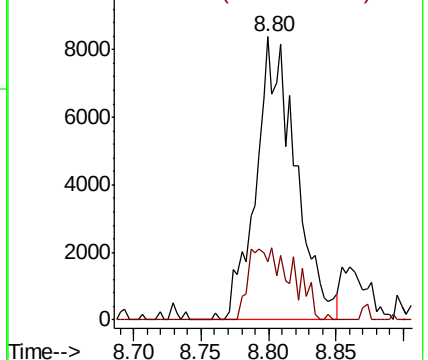
#50
 4-Methyl-2-Pentanone
 Concen: 0.102 ppbv m
 RT: 8.80 min Scan# 1870
 Delta R.T. 0.02 min
 Lab File: VL034448.D
 Acq: 3 Dec 2019 5:13

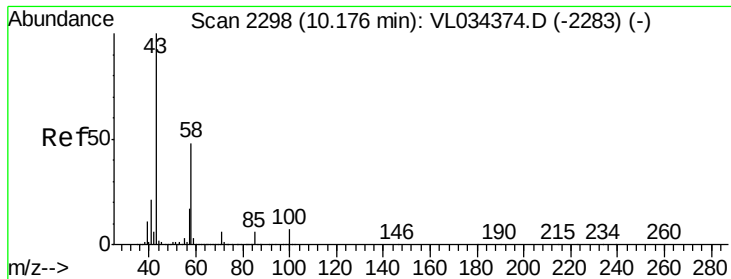
Tgt Ion	Ratio	Lower	Upper
43	100		
58	28.2	27.9	41.9



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





#51

2-Hexanone

Concen: 0.625 ppbv

RT: 10.20 min Scan# 2305

Delta R.T. 0.02 min

Lab File: VL034448.D

Acq: 3 Dec 2019 5:13

Instrument :

MSVOA_L

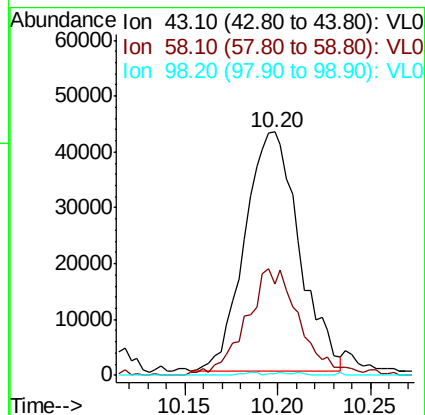
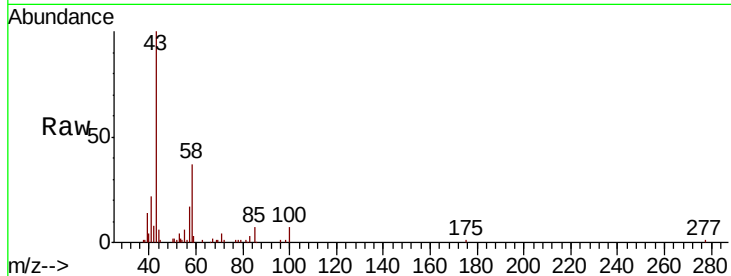
ClientSampleId :

SV-1A

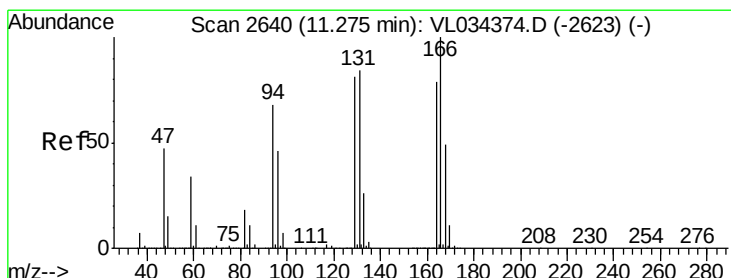
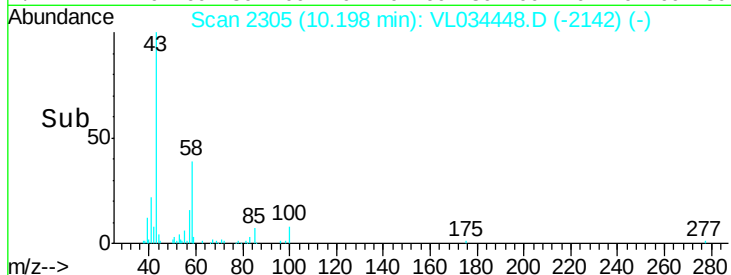
Tot Ion:	43	Resp:	87508
Ion Ratio	Lower	Upper	
43	100		
58	44.3	38.2	57.4
98	1.0	0.2	0.2#

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#52

Tetrachloroethene

Concen: 95.558 ppbv

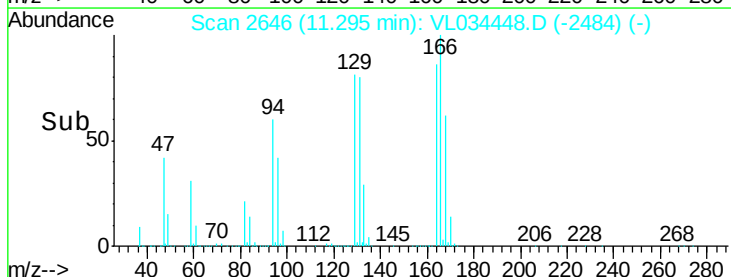
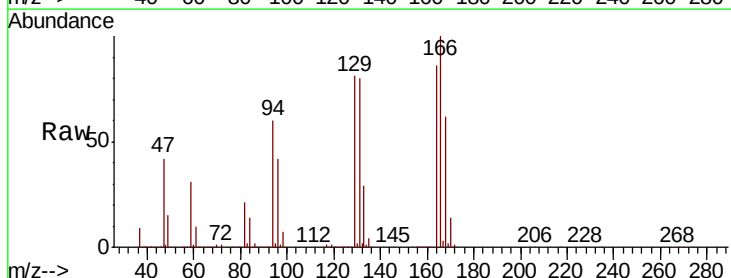
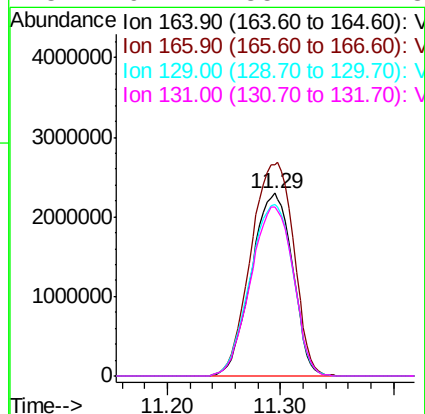
RT: 11.29 min Scan# 2646

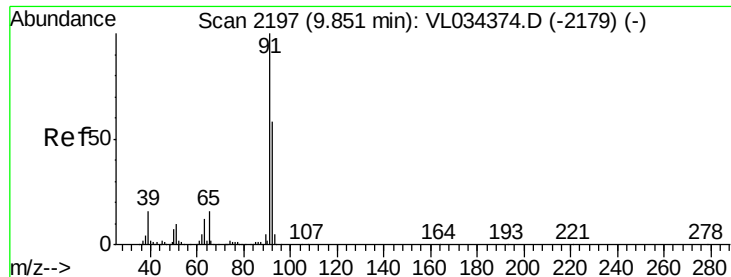
Delta R.T. 0.02 min

Lab File: VL034448.D

Acq: 3 Dec 2019 5:13

Tgt Ion:	164	Resp:	5805503
Ion Ratio	Lower	Upper	
164	100		
166	115.7	101.7	152.5
129	94.0	82.6	123.8
131	92.7	85.2	127.8





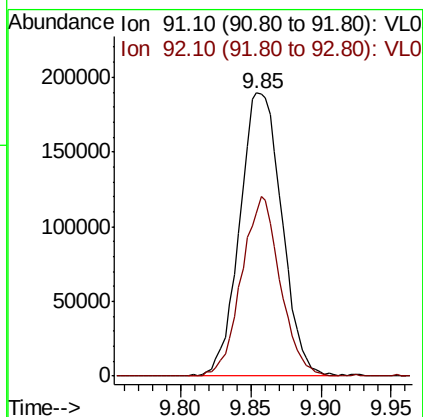
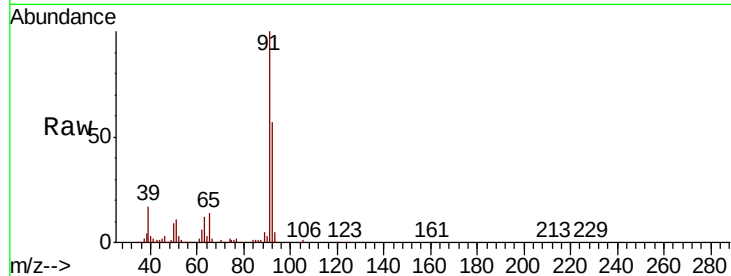
#53
Toluene
Concen: 2.478 ppbv
RT: 9.85 min Scan# 2198
Delta R.T. 0.00 min
Lab File: VL034448.D
Acq: 3 Dec 2019 5:13

Instrument :
MSVOA_L
ClientSampleId :
SV-1A

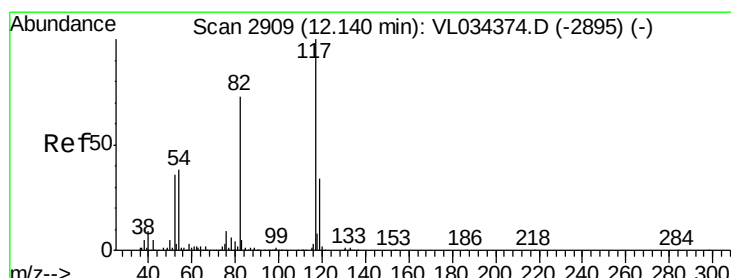
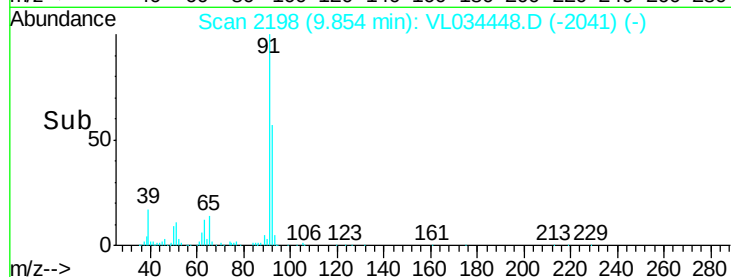
Tot Ion	Ion	Ratio	Lower	Upper
91	100			
92	58.4	47.9	71.9	

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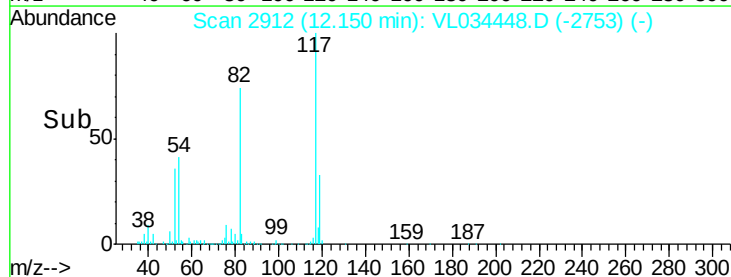
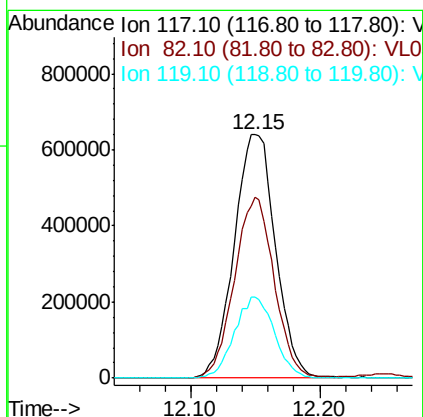
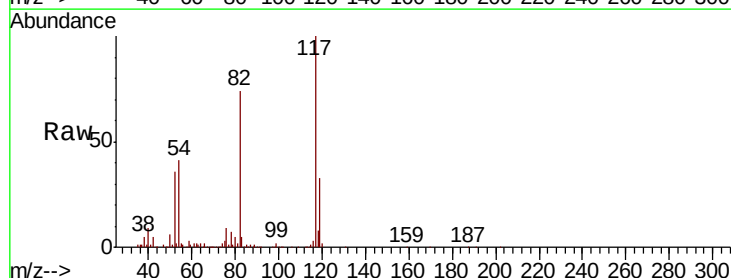


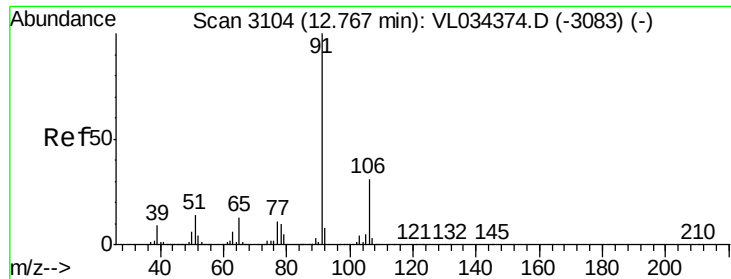
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#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.15 min Scan# 2912
Delta R.T. 0.01 min
Lab File: VL034448.D
Acq: 3 Dec 2019 5:13

Tgt Ion	Ion	Ratio	Lower	Upper
117	100			
82	71.6	57.5	86.3	
119	32.4	25.4	38.2	





#58

Ethyl Benzene

Concen: 0.638 ppbv

RT: 12.78 min Scan# 3107

Delta R.T. 0.01 min

Lab File: VL034448.D

Acq: 3 Dec 2019 5:13

Instrument :

MSVOA_L

ClientSampleId :

SV-1A

Tot Ion: 91 Resp: 140529

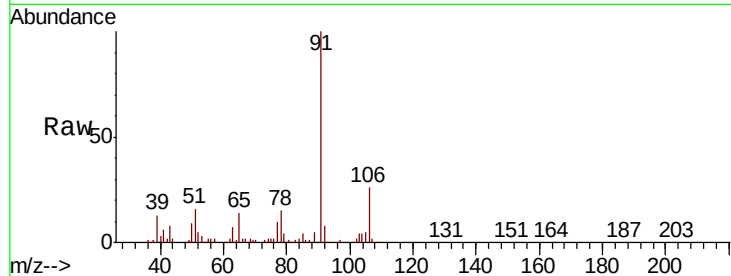
Ion Ratio Lower Upper

91 100

106 26.6 24.8 37.2

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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

12.78

80000

60000

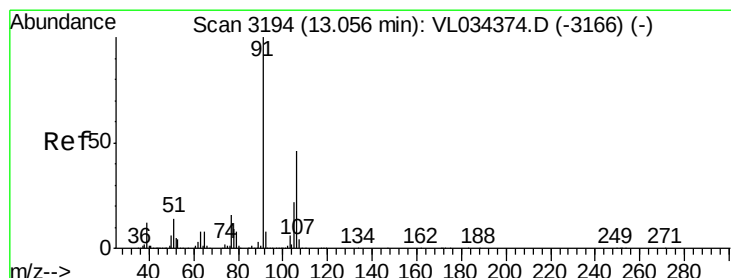
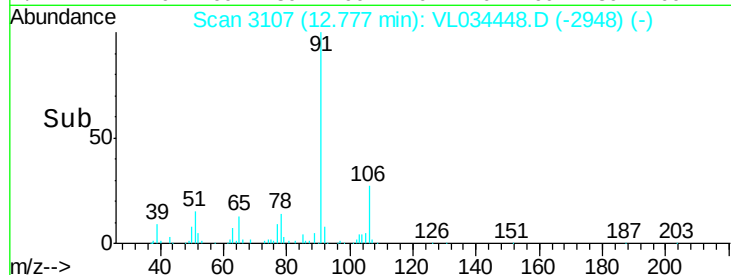
40000

20000

0

Time--> 12.70 12.75 12.80

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#59

m/p-Xylene

Concen: 3.309 ppbv m

RT: 13.03 min Scan# 3186

Delta R.T. -0.03 min

Lab File: VL034448.D

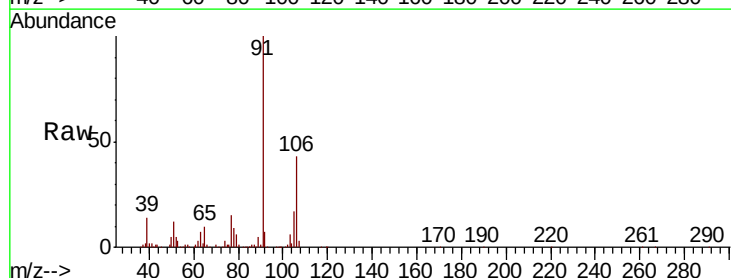
Acq: 3 Dec 2019 5:13

Tgt Ion: 91 Resp: 629913

Ion Ratio Lower Upper

91 100

106 0.0 34.6 51.8#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

13.03

250000

200000

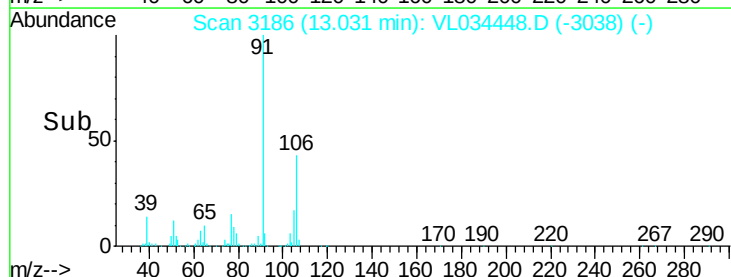
150000

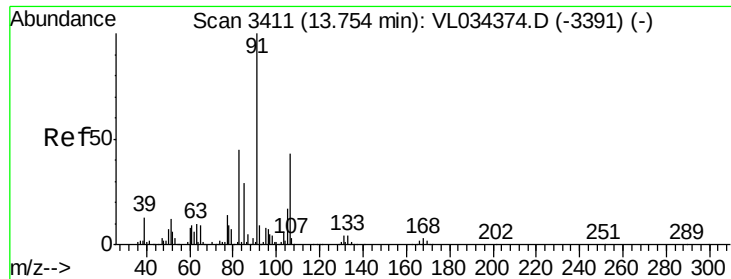
100000

50000

0

Time--> 13.00 13.20





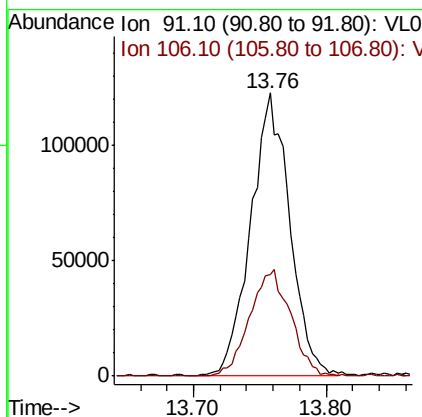
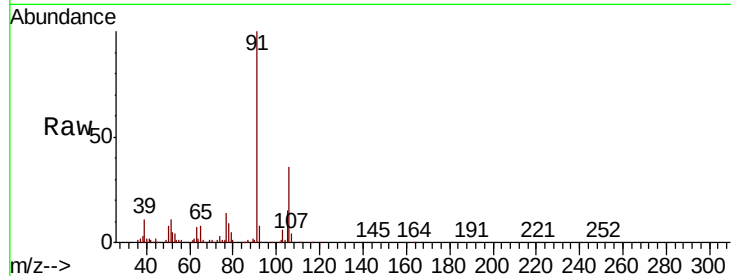
#60
o-Xylene
Concen: 1.331 ppbv
RT: 13.76 min Scan# 3412
Delta R.T. 0.00 min
Lab File: VL034448.D
Acq: 3 Dec 2019 5:13

Instrument :
MSVOA_L
ClientSampleId :
SV-1A

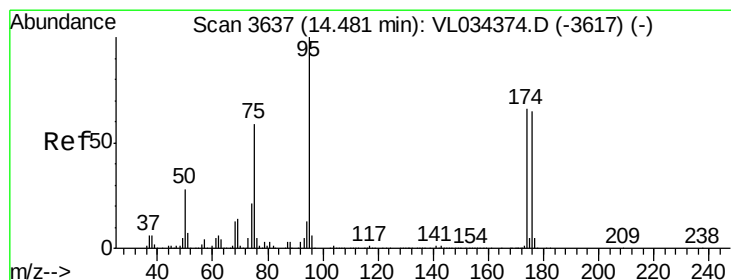
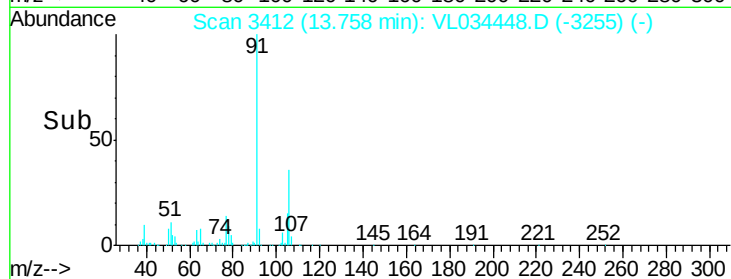
Tot Ion	Ion	Ratio	Lower	Upper
91	100			
106	39.4	21.3	64.0	

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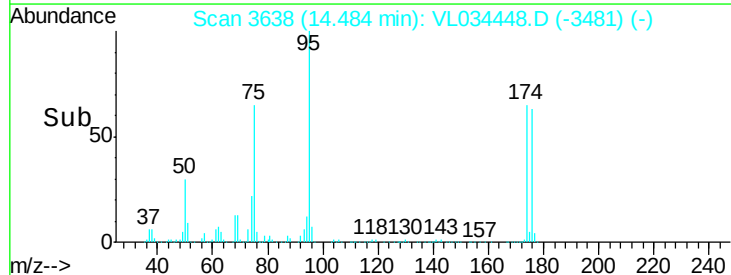
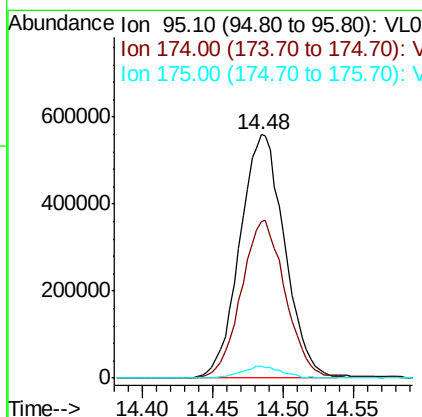
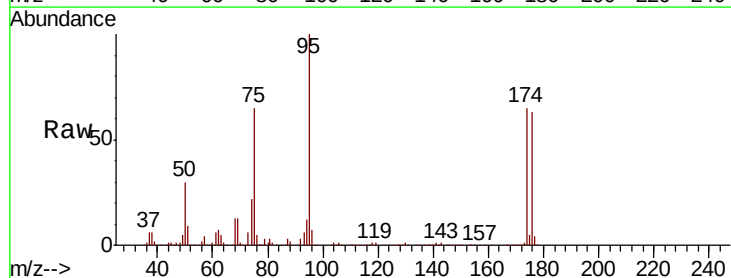


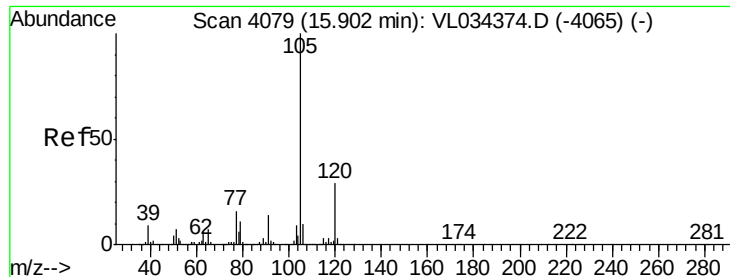
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.352 ppbv
RT: 14.48 min Scan# 3638
Delta R.T. 0.00 min
Lab File: VL034448.D
Acq: 3 Dec 2019 5:13

Tgt Ion	Ion	Ratio	Lower	Upper
95	100			
174	64.6	52.2	78.2	
175	4.5	3.8	5.8	





#72

4-Ethyltoluene

Concen: 0.159 ppbv m

RT: 15.91 min Scan# 4083

Delta R.T. 0.01 min

Lab File: VL034448.D

Acq: 3 Dec 2019 5:13

Instrument :

MSVOA_L

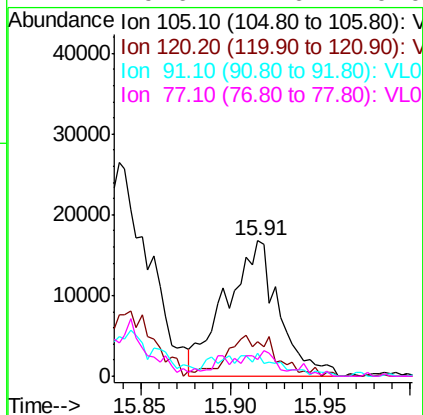
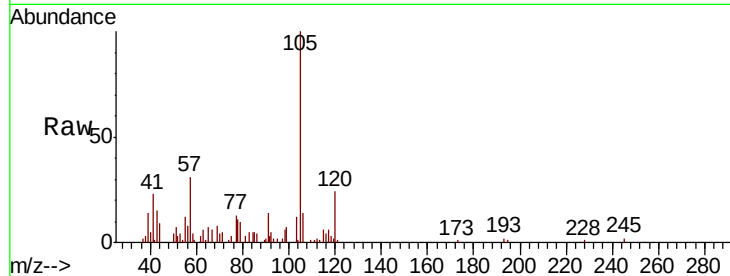
ClientSampleId :

SV-1A

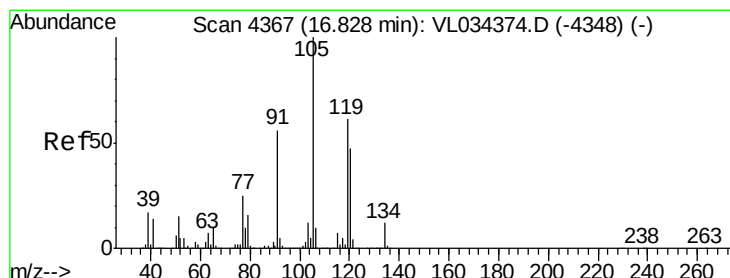
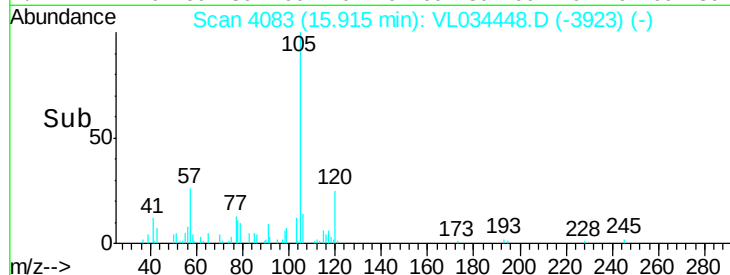
Tot Ion	Ratio	Resp	Lower	Upper
105	100	34580		
120	28.1	23.5	35.3	
91	20.7	11.4	17.0#	
77	19.6	12.6	19.0#	

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#74

1,2,4-Trimethylbenzene

Concen: 0.140 ppbv m

RT: 16.84 min Scan# 4371

Delta R.T. 0.01 min

Lab File: VL034448.D

Acq: 3 Dec 2019 5:13

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	31684		
120	46.5	37.4	56.0	
91	12.3	46.3	69.5#	
77	18.1	20.6	30.8#	

