

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL120418\
 Data File : VL032898.D
 Acq On : 5 Dec 2018 5:16
 Operator : SY/AP
 Sample : J6177-02
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSV-6

Manual Integrations
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 12/10/2018 1:01:53 PM

Quant Time: Dec 05 16:15:06 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111418AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov 14 07:00:23 2018
 QLast Update : Wed Nov 14 07:00:23 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	1271676	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	3418681	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	3533325	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.59	95	2570595	9.73	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.30%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	88996	0.487	ppbv	98
3) Chlorodifluoromethane	3.02	51	62104	0.616	ppbv	92
4) Chloromethane	3.17	50	27758	0.497	ppbv	89
9) Propene	3.04	41	801331	19.861	ppbv	95
10) Heptane	8.25	43	173832	1.129	ppbv	97
11) Trichlorofluoromethane	4.01	101	38100	0.221	ppbv	98
13) Ethanol	3.66	45	574222	43.452	ppbv	100
15) Acetone	3.90	43	8213015	70.721	ppbv #	86
20) Methylene Chloride	4.42	84	41793	0.695	ppbv #	87
27) Carbon Disulfide	4.62	76	167409	1.096	ppbv	99
29) Chloroform	5.86	83	74639	0.348	ppbv	98
34) 2-Butanone	5.33	43	9084954	51.236	ppbv	96
35) Carbon Tetrachloride	7.14	117	18454m	0.067	ppbv	
36) Benzene	7.01	78	1697343	6.235	ppbv	98
44) 2,2,4-Trimethylpentane	7.99	57	174718m	0.384	ppbv	
51) 2-Hexanone	10.27	43	1026428	5.753	ppbv #	99
52) Tetrachloroethene	11.38	164	12632m	0.133	ppbv	
53) Toluene	9.95	91	1885273	6.638	ppbv	100
58) Ethyl Benzene	12.87	91	428080	1.007	ppbv	96
59) m/p-Xylene	13.13	91	820050	2.166	ppbv	96
60) o-Xylene	13.86	91	486211	1.277	ppbv	99
69) p-Isopropyltoluene	17.82	119	63501	0.120	ppbv #	69
73) 1,3,5-Trimethylbenzene	16.17	105	83724m	0.205	ppbv	
74) 1,2,4-Trimethylbenzene	16.94	105	163167m	0.374	ppbv	

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

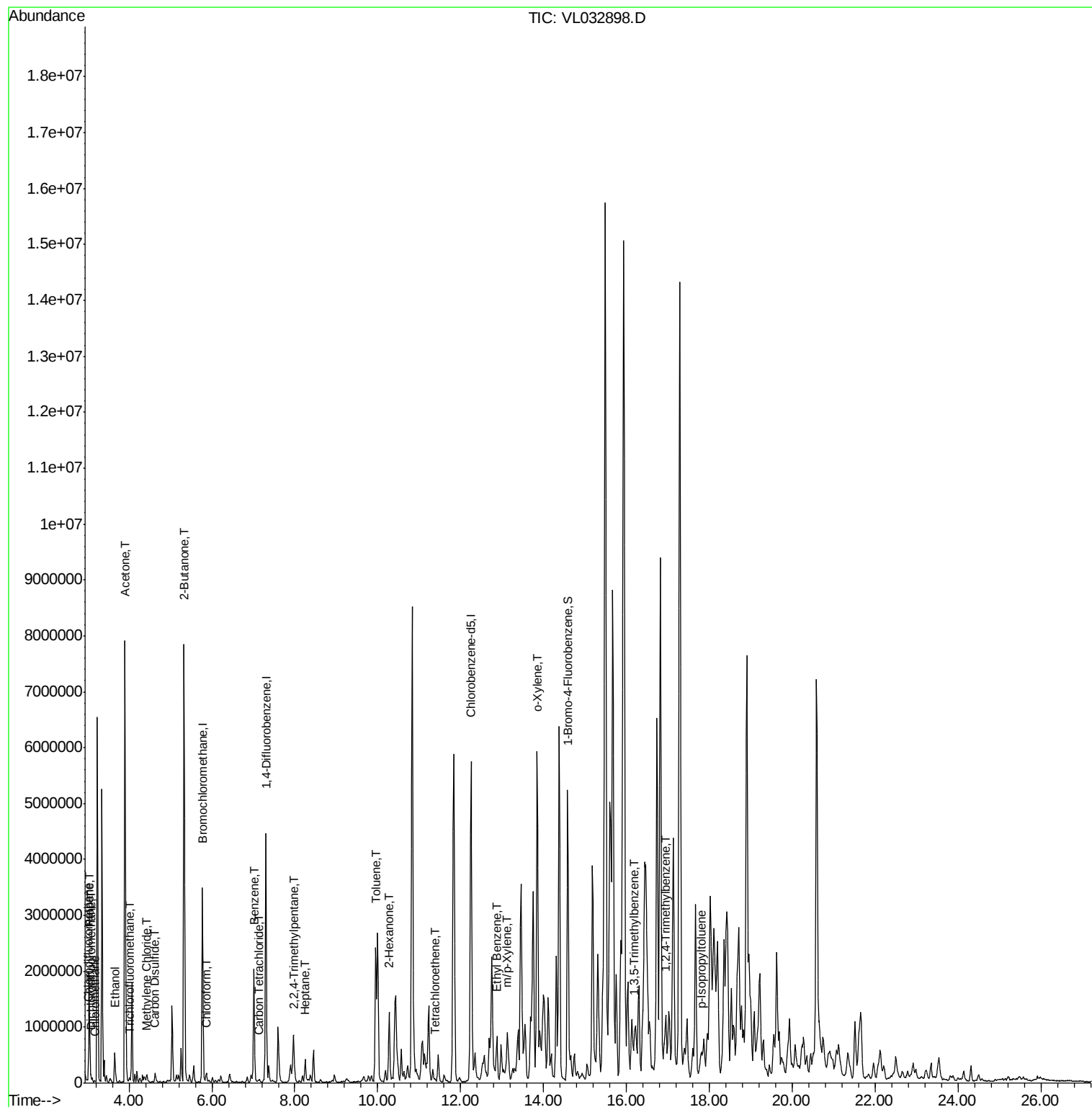
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL120418\
Data File : VL032898.D
Acq On : 5 Dec 2018 5:16
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Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

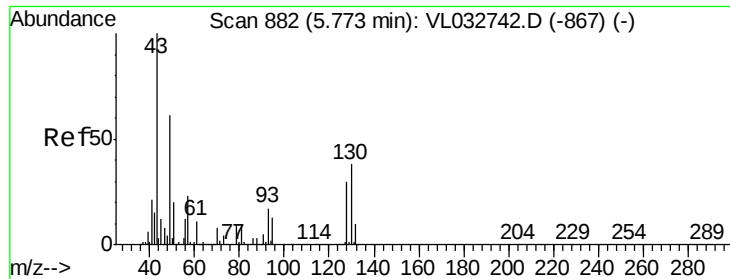
Instrument :
MSVOA_L
ClientSampleId :
VSV-6

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Quant Time: Dec 05 16:15:06 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL111418AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov
QLast Update : Wed Nov 14 07:00:23 2018
Response via : Initial Calibration





#1

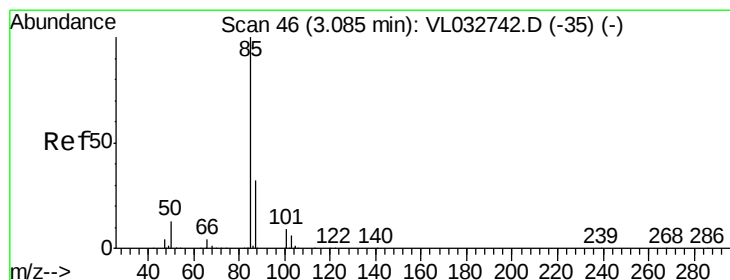
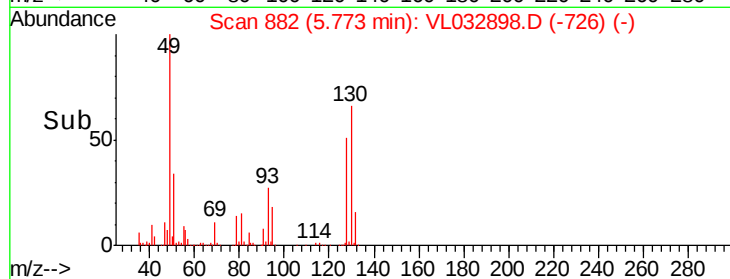
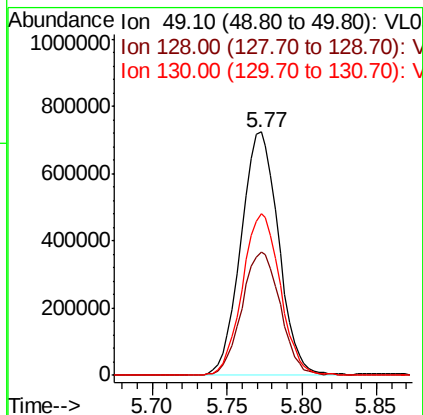
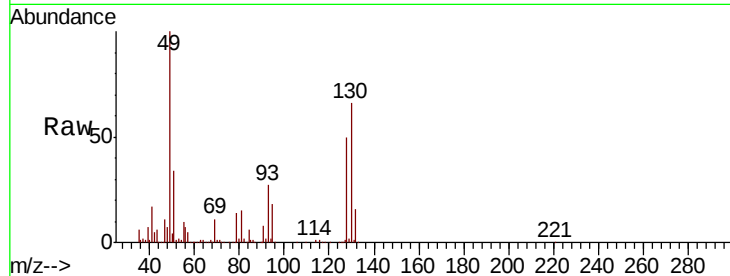
Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.77 min Scan# 882
 Delta R.T. -0.00 min
 Lab File: VL032898.D
 Acq: 5 Dec 2018 5:16

Instrument :
 MSVOA_L
 ClientSampled :
 VSV-6

Tot Ion: 49 Resp: 1271676
 Ion Ratio Lower Upper
 49 100
 128 52.1 24.9 74.6
 130 67.0 31.4 94.2

Manual Integrations
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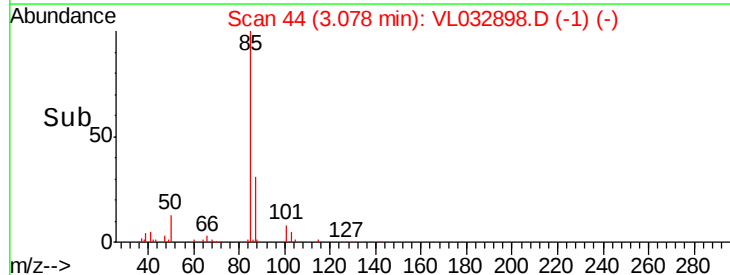
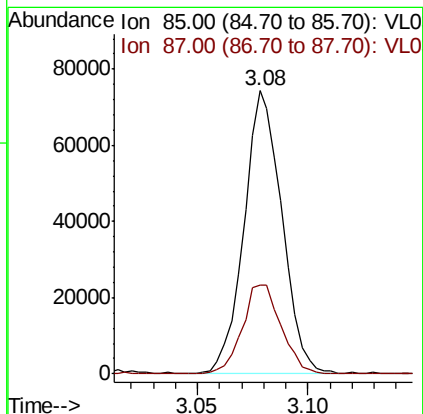
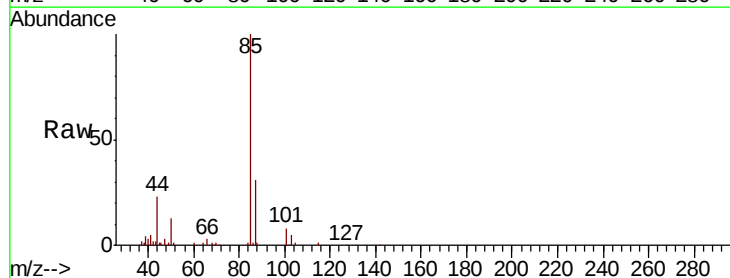
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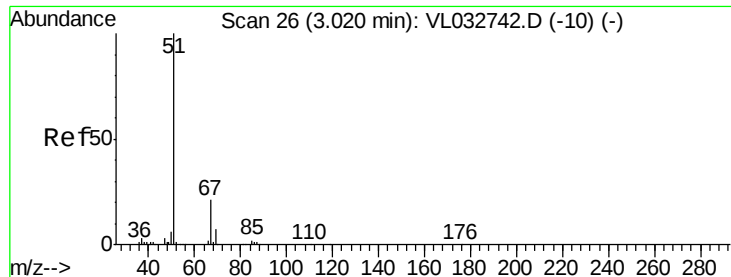


#2

Dichlorodifluoromethane
 Concen: 0.487 ppbv
 RT: 3.08 min Scan# 44
 Delta R.T. -0.01 min
 Lab File: VL032898.D
 Acq: 5 Dec 2018 5:16

Tgt Ion: 85 Resp: 88996
 Ion Ratio Lower Upper
 85 100
 87 31.2 26.0 39.0





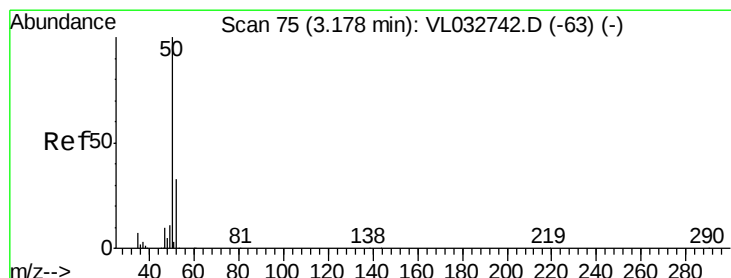
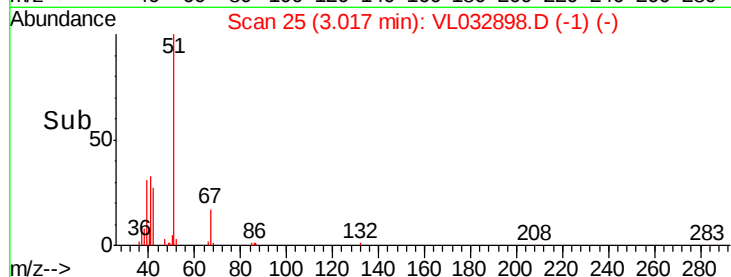
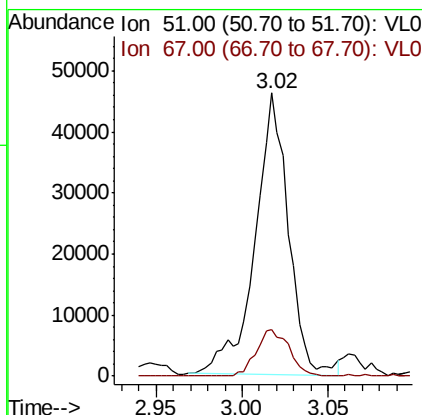
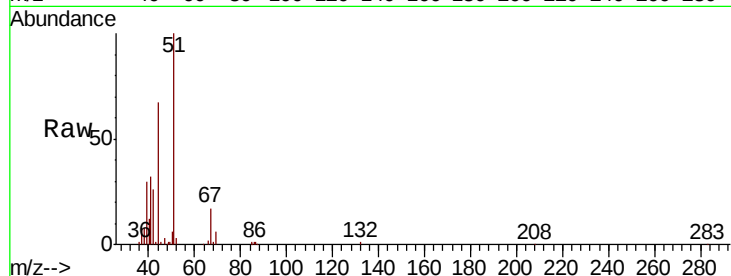
#3
Chlorodifluoromethane
Concen: 0.616 ppbv
RT: 3.02 min Scan# 25
Delta R.T. -0.00 min
Lab File: VL032898.D
Acq: 5 Dec 2018 5:16

Instrument :
MSVOA_L
ClientSampleId :
VSV-6

Tot Ion	Ion	Ratio	Lower	Upper
51	51	100		
67	67	16.3	16.1	24.1

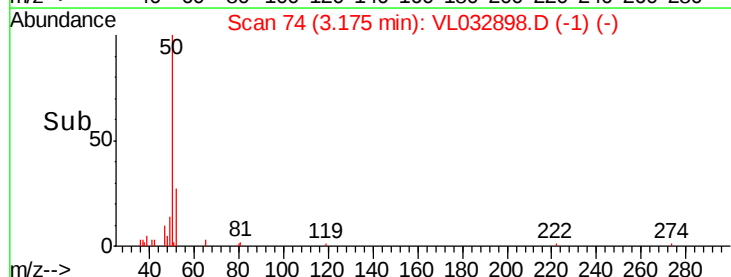
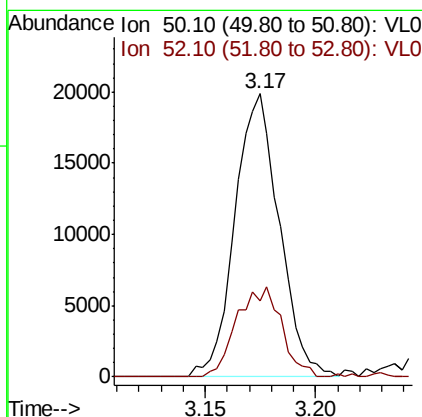
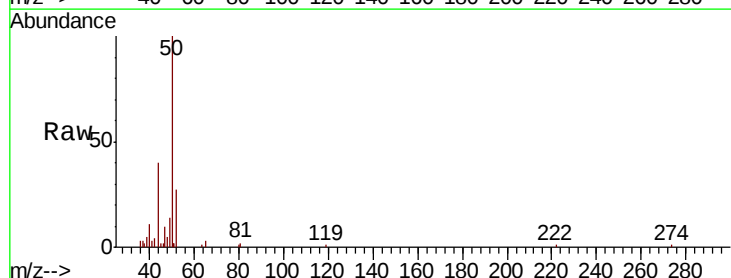
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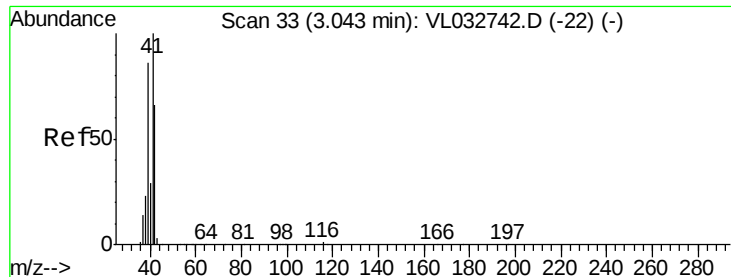
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#4
Chloromethane
Concen: 0.497 ppbv
RT: 3.17 min Scan# 74
Delta R.T. -0.00 min
Lab File: VL032898.D
Acq: 5 Dec 2018 5:16

Tgt Ion	Ion	Ratio	Lower	Upper
50	50	100		
52	52	26.9	26.6	40.0





#9

Propene

Concen: 19.861 ppbv

RT: 3.04 min Scan# 32

Delta R.T. -0.00 min

Lab File: VL032898.D

Acq: 5 Dec 2018 5:16

Instrument :

MSVOA_L

ClientSampleId :

VSV-6

Tot Ion: 41 Resp: 801331

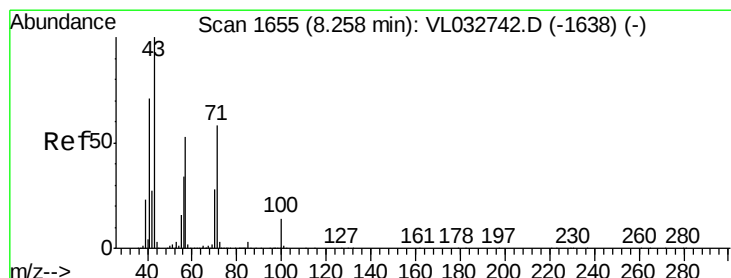
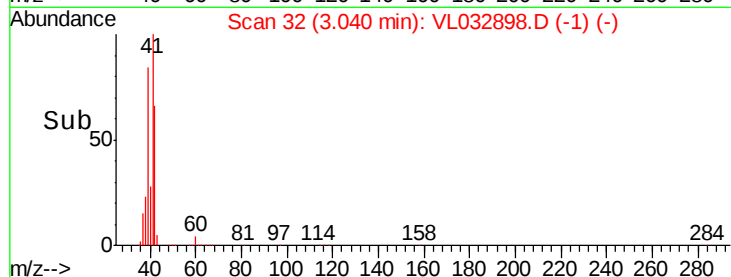
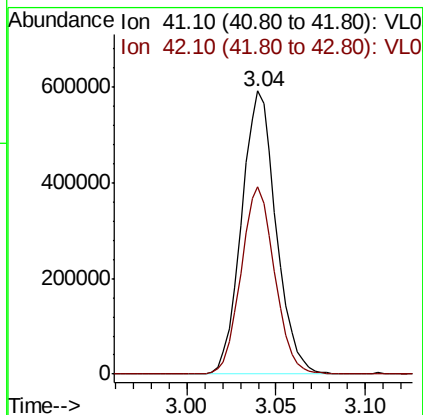
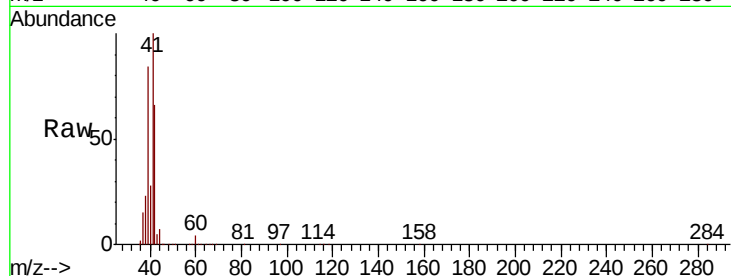
Ion Ratio Lower Upper

41 100

42 65.0 55.0 82.6

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#10

Heptane

Concen: 1.129 ppbv

RT: 8.25 min Scan# 1652

Delta R.T. -0.01 min

Lab File: VL032898.D

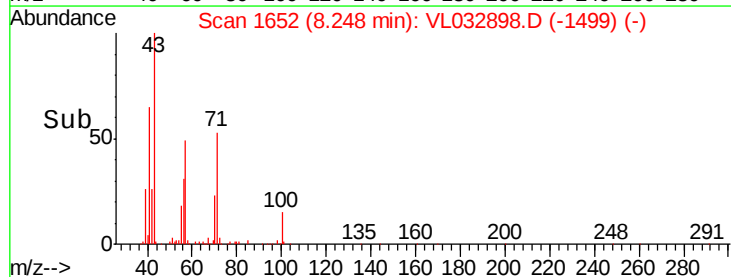
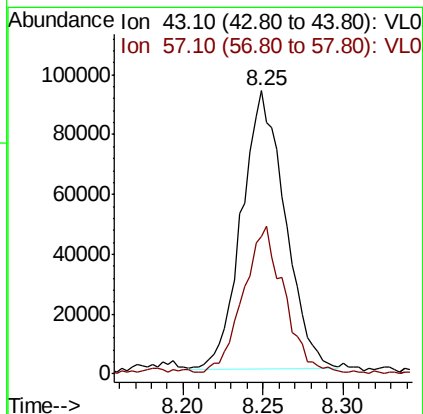
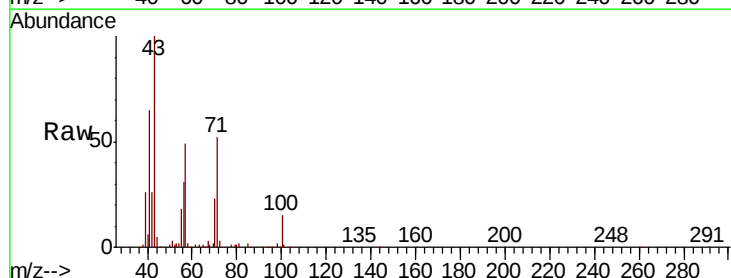
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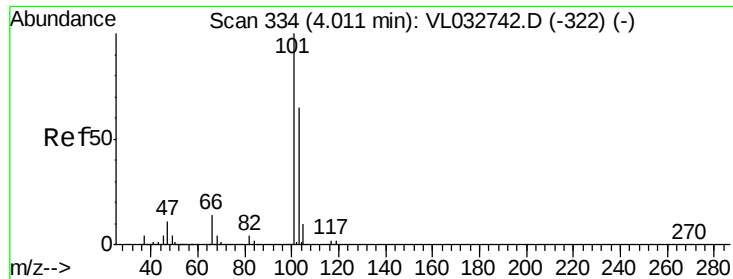
Tgt Ion: 43 Resp: 173832

Ion Ratio Lower Upper

43 100

57 50.5 41.8 62.8





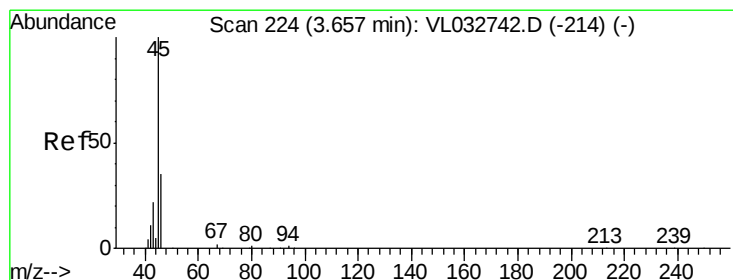
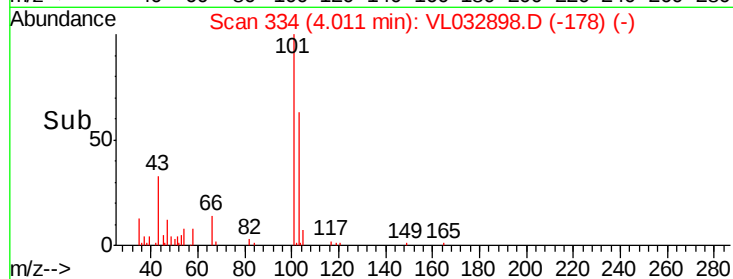
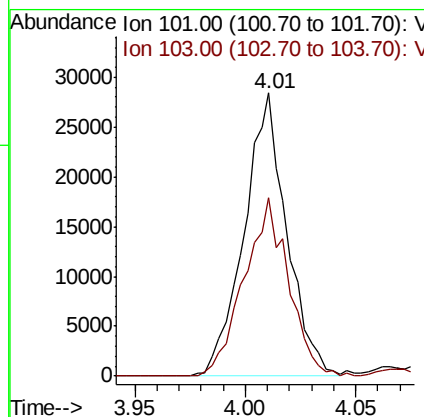
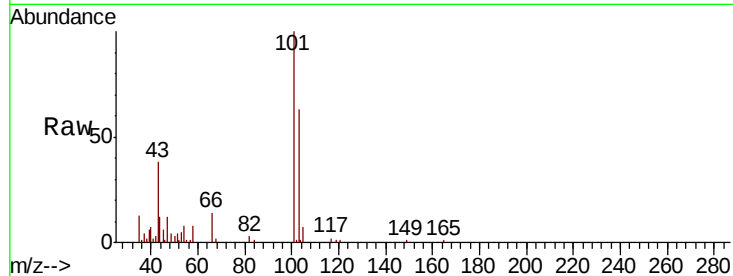
#11
Trichlorofluoromethane
Concen: 0.221 ppbv
RT: 4.01 min Scan# 334
Delta R.T. -0.00 min
Lab File: VL032898.D
Acq: 5 Dec 2018 5:16

Instrument :
MSVOA_L
ClientSampled :
VSV-6

Tot Ion:101 Resp: 38100
Ion Ratio Lower Upper
101 100
103 63.2 51.6 77.4

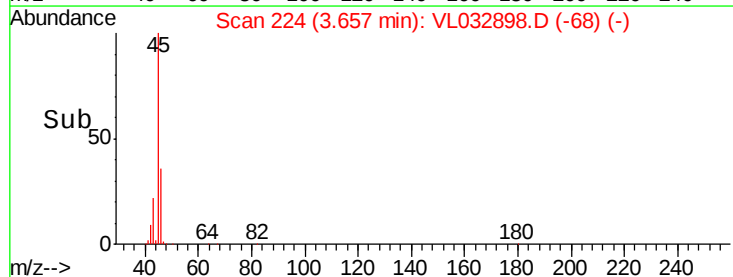
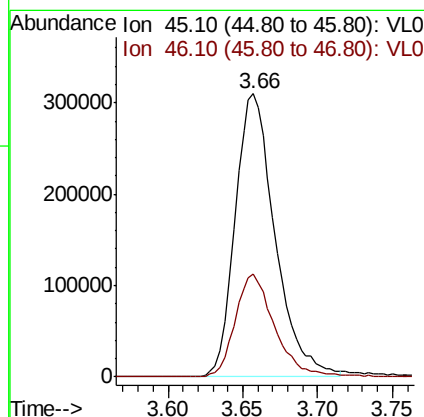
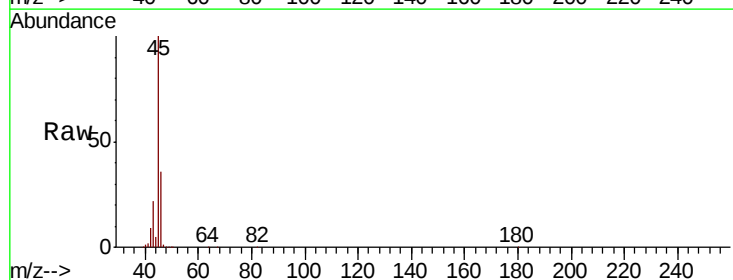
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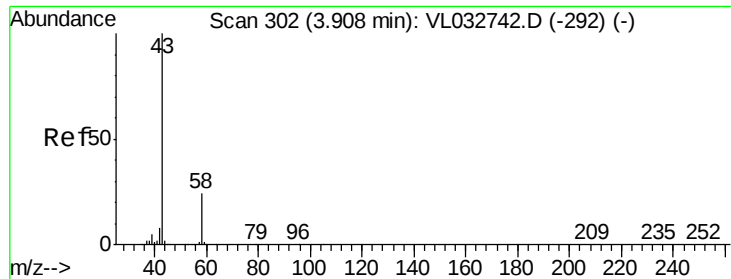
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#13
Ethanol
Concen: 43.452 ppbv
RT: 3.66 min Scan# 224
Delta R.T. -0.00 min
Lab File: VL032898.D
Acq: 5 Dec 2018 5:16

Tgt Ion: 45 Resp: 574222
Ion Ratio Lower Upper
45 100
46 36.2 14.5 57.9





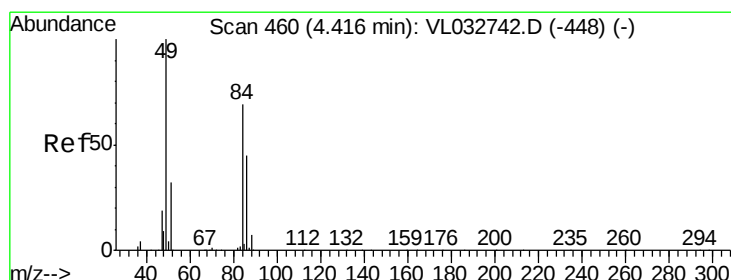
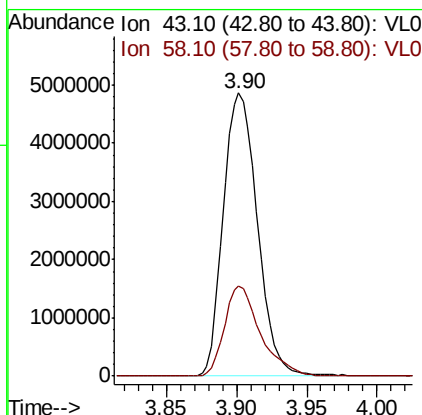
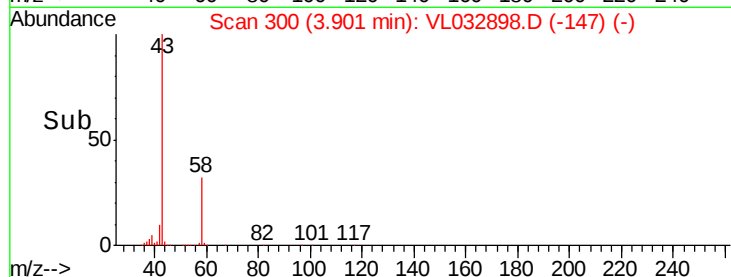
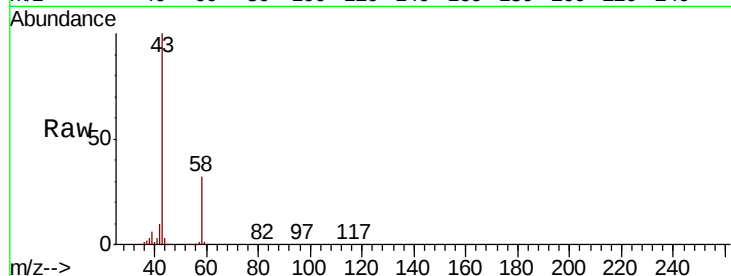
#15
Acetone
Concen: 70.721 ppbv
RT: 3.90 min Scan# 300
Delta R.T. -0.01 min
Lab File: VL032898.D
Acq: 5 Dec 2018 5:16

Instrument :
MSVOA_L
ClientSampleId :
VSV-6

Tot Ion: 43 Resp: 8213015
Ion Ratio Lower Upper
43 100
58 33.8 21.1 31.7#

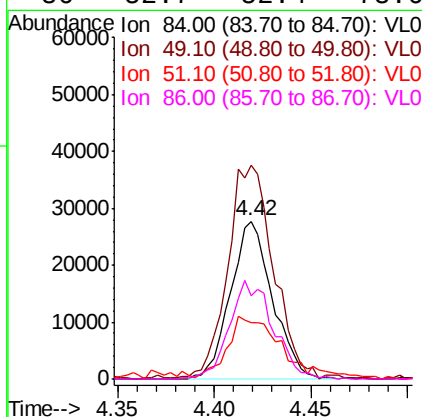
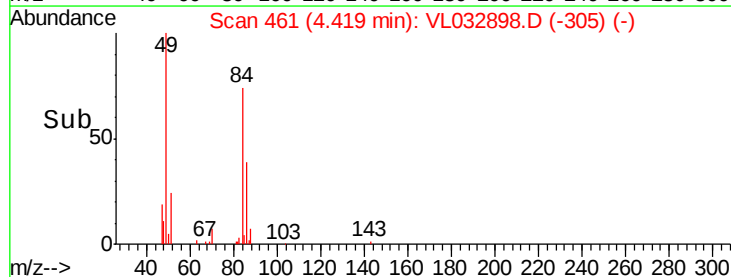
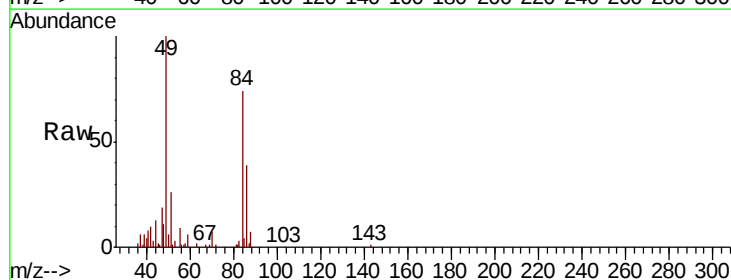
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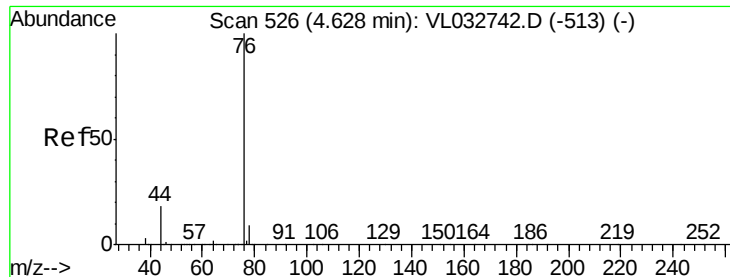
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#20
Methylene Chloride
Concen: 0.695 ppbv
RT: 4.42 min Scan# 461
Delta R.T. 0.00 min
Lab File: VL032898.D
Acq: 5 Dec 2018 5:16

Tgt Ion: 84 Resp: 41793
Ion Ratio Lower Upper
84 100
49 133.8 115.8 173.6
51 33.2 36.9 55.3#
86 52.7 52.4 78.6





#27

Carbon Disulfide

Concen: 1.096 ppbv

RT: 4.62 min Scan# 525

Delta R.T. -0.00 min

Lab File: VL032898.D

Acq: 5 Dec 2018 5:16

Instrument :

MSVOA_L

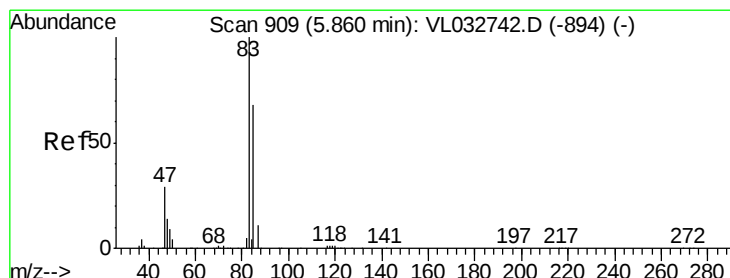
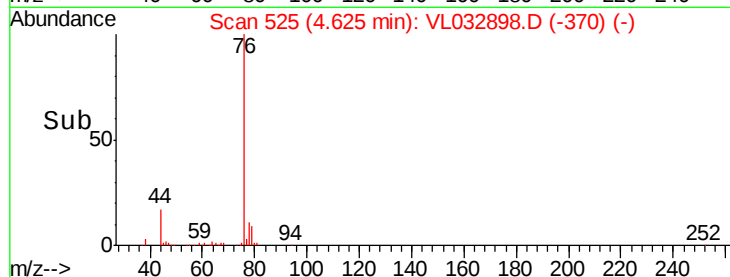
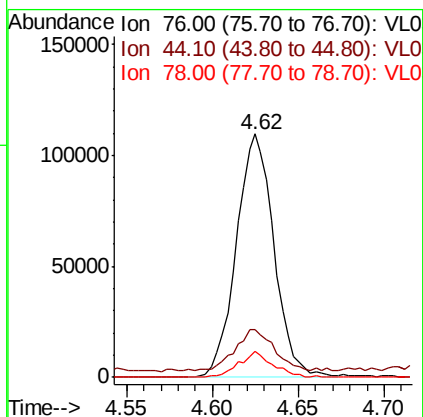
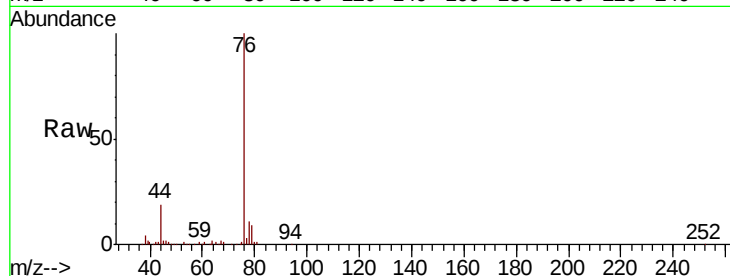
ClientSampleId :

VSV-6

Tot Ion:	76	Resp:	167409
Ion	Ratio	Lower	Upper
76	100		
44	18.9	14.4	21.6
78	9.8	7.7	11.5

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#29

Chloroform

Concen: 0.348 ppbv

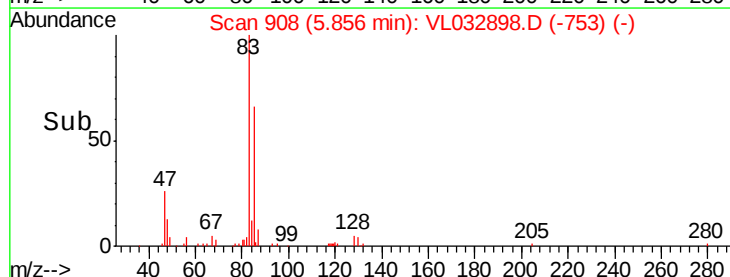
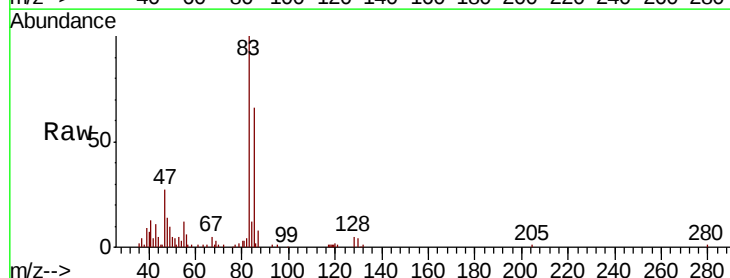
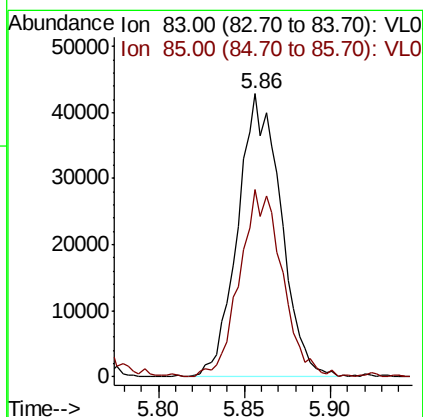
RT: 5.86 min Scan# 908

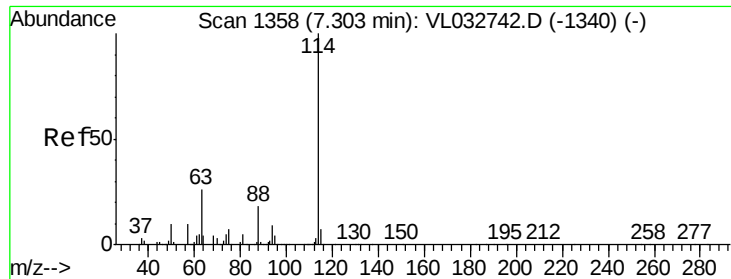
Delta R.T. -0.00 min

Lab File: VL032898.D

Acq: 5 Dec 2018 5:16

Tgt Ion:	83	Resp:	74639
Ion	Ratio	Lower	Upper
83	100		
85	66.1	54.2	81.4





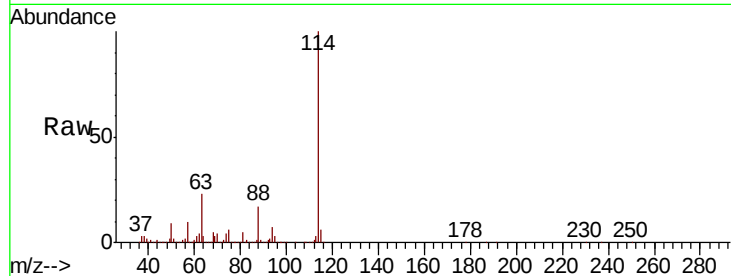
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.30 min Scan# 1357
 Delta R.T. -0.00 min
 Lab File: VL032898.D
 Acq: 5 Dec 2018 5:16

Instrument :
 MSVOA_L
 ClientSampleId :
 VSV-6

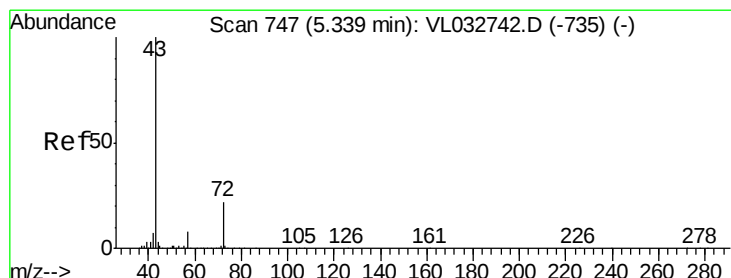
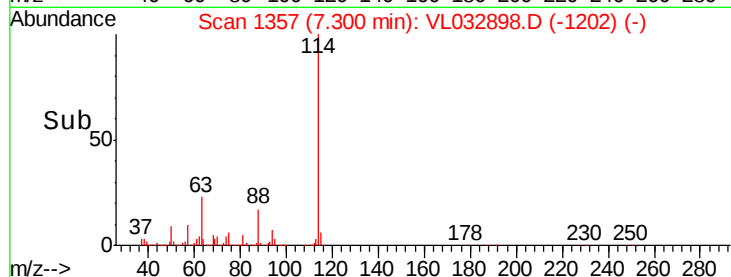
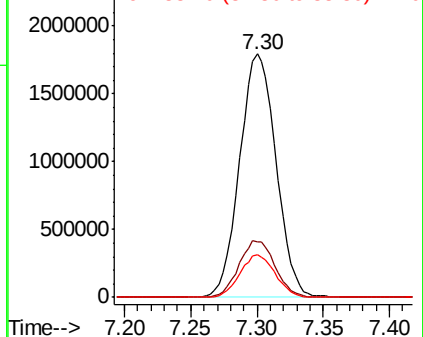
Tot Ion	Ratio	Lower	Upper
114	100		
63	23.3	20.9	31.3
88	17.0	14.4	21.6

Manual Integrations
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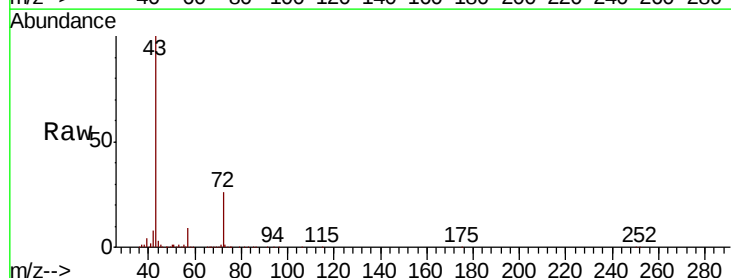


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

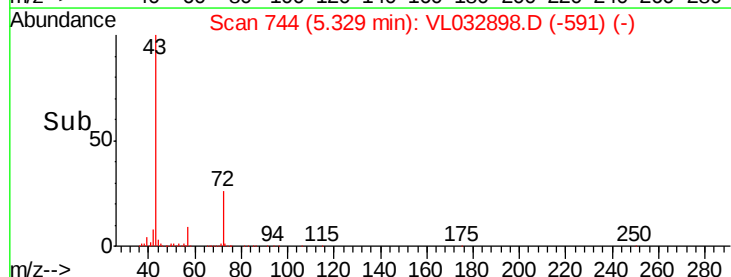
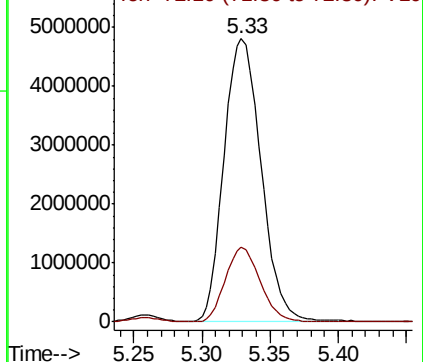


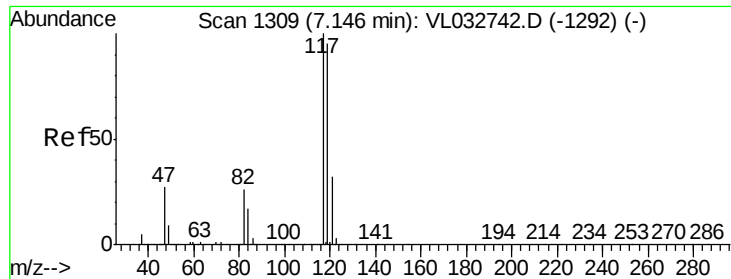
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 2-Butanone
 Concen: 51.236 ppbv
 RT: 5.33 min Scan# 744
 Delta R.T. -0.01 min
 Lab File: VL032898.D
 Acq: 5 Dec 2018 5:16

Tgt Ion	Ratio	Lower	Upper
43	100		
72	25.0	18.4	27.6



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





#35

Carbon Tetrachloride

Concen: 0.067 ppbv m

RT: 7.14 min Scan# 1307

Delta R.T. -0.01 min

Lab File: VL032898.D

Acq: 5 Dec 2018 5:16

Instrument :

MSVOA_L

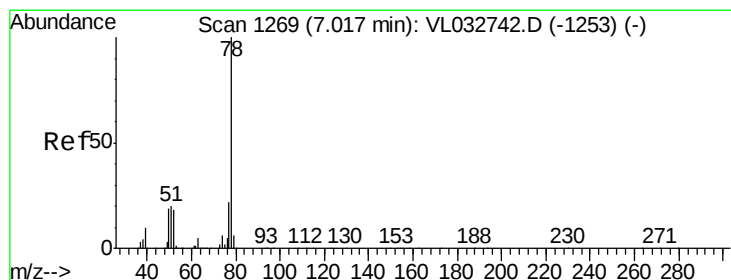
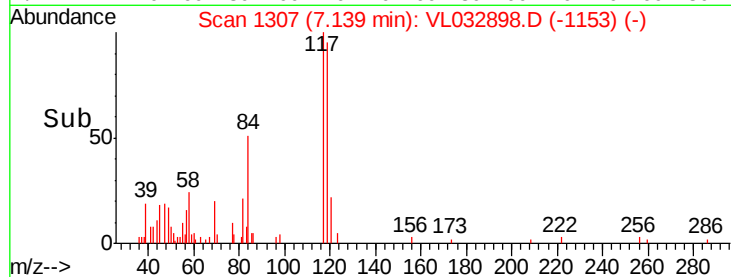
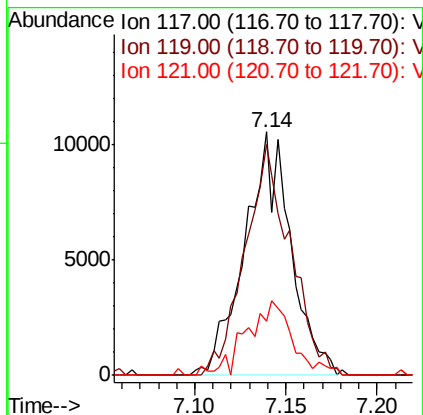
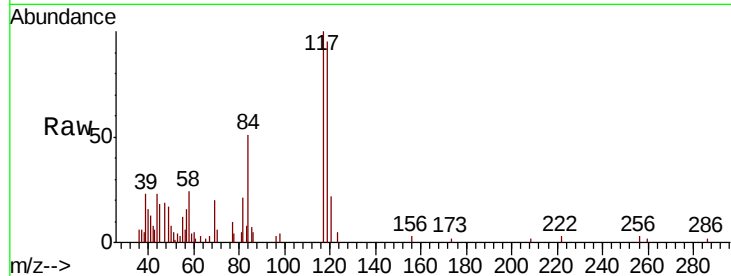
ClientSampled :

VSV-6

Tot Ion	Ratio	Lower	Upper
117	100		
119	94.6	76.1	114.1
121	22.2	25.4	38.0#

Manual Integrations
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#36

Benzene

Concen: 6.235 ppbv

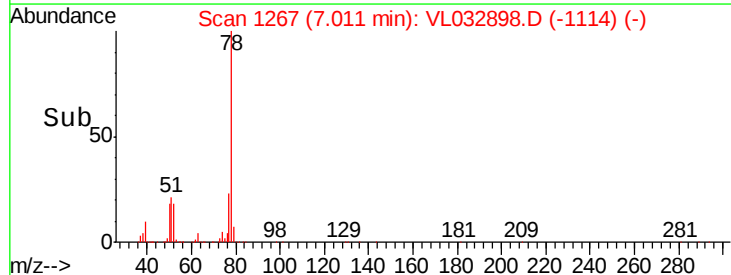
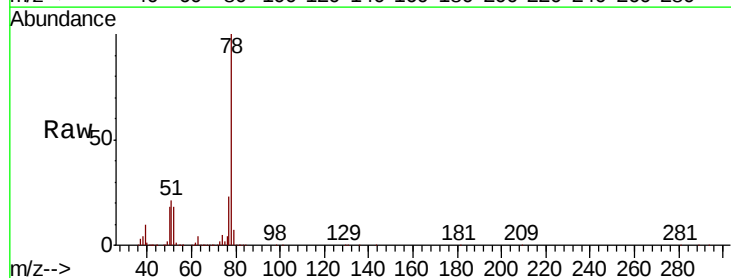
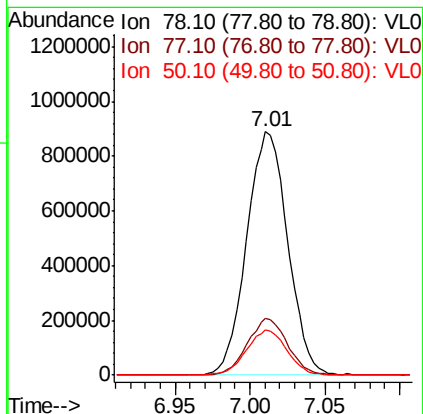
RT: 7.01 min Scan# 1267

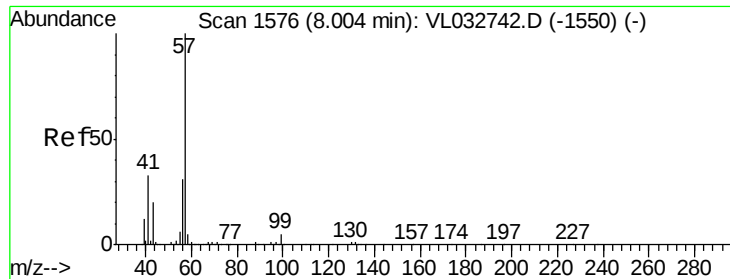
Delta R.T. -0.01 min

Lab File: VL032898.D

Acq: 5 Dec 2018 5:16

Tgt Ion	Ratio	Lower	Upper
78	100		
77	23.3	17.8	26.8
50	18.3	15.4	23.0





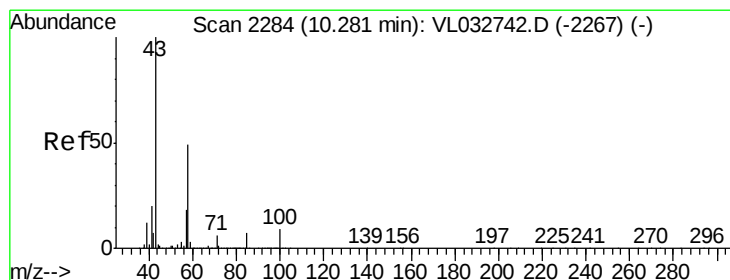
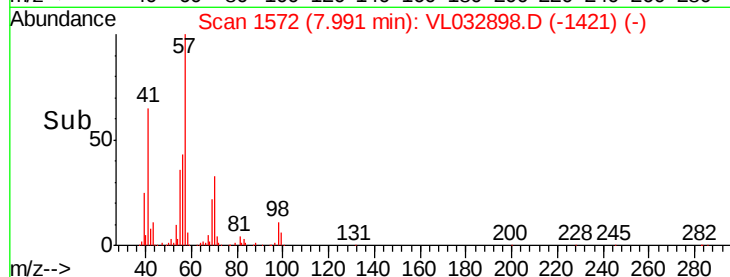
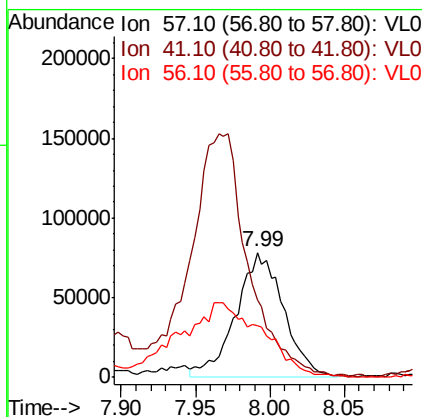
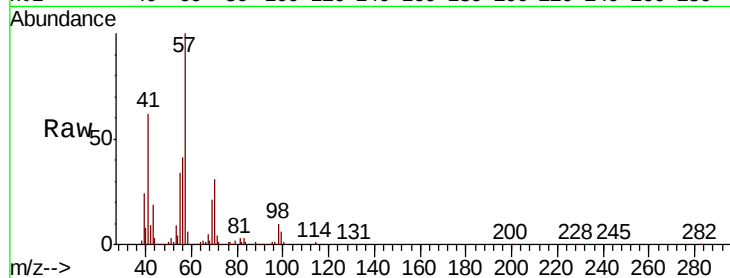
#44
 2,2,4-Trimethylpentane
 Concen: 0.384 ppbv m
 RT: 7.99 min Scan# 1572
 Delta R.T. -0.01 min
 Lab File: VL032898.D
 Acq: 5 Dec 2018 5:16

Instrument :
 MSVOA_L
 ClientSampled :
 VSV-6

Tot Ion	Ratio	Lower	Upper
57	100		
41	237.0	26.6	39.8#
56	104.8	24.8	37.2#

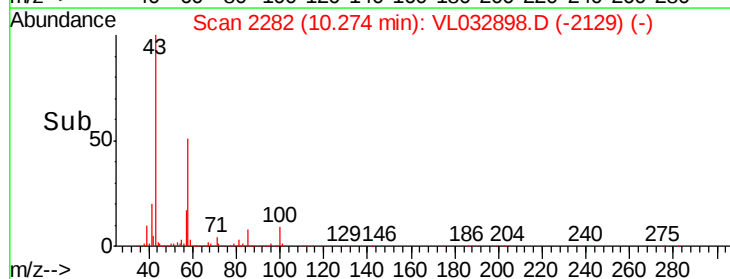
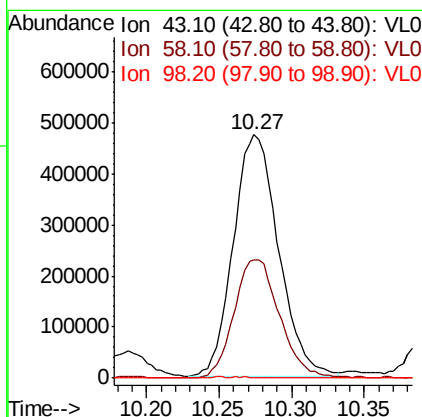
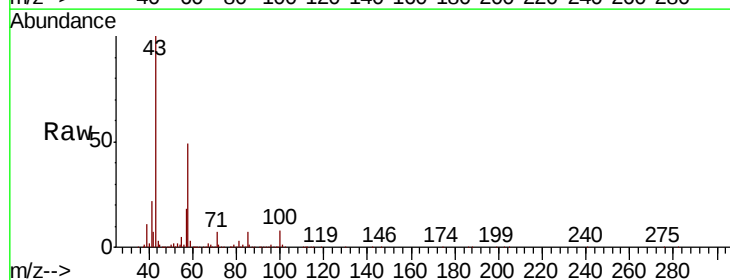
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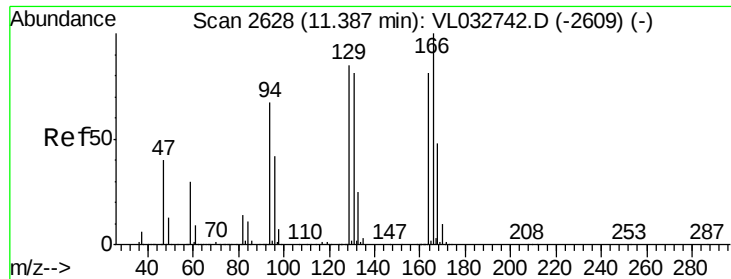
MMDadoda
 12/10/2018 1:01:53 PM



#51
 2-Hexanone
 Concen: 5.753 ppbv
 RT: 10.27 min Scan# 2282
 Delta R.T. -0.01 min
 Lab File: VL032898.D
 Acq: 5 Dec 2018 5:16

Tgt Ion	Ratio	Lower	Upper
43	100		
58	49.6	38.9	58.3
98	0.7	0.2	0.4#





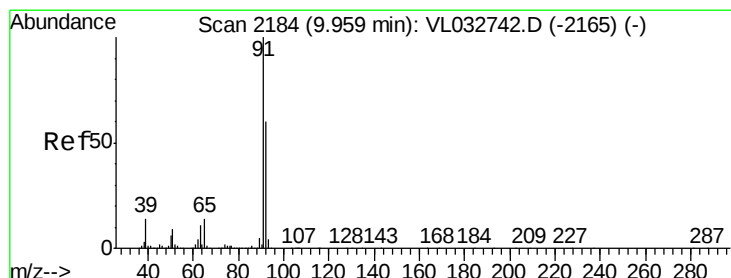
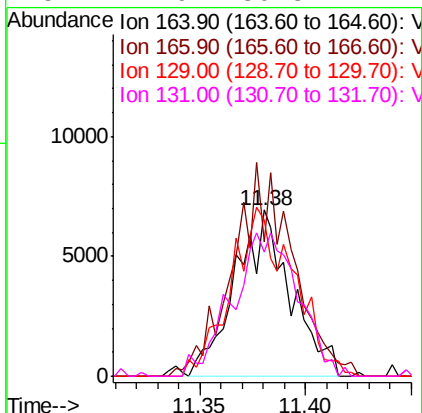
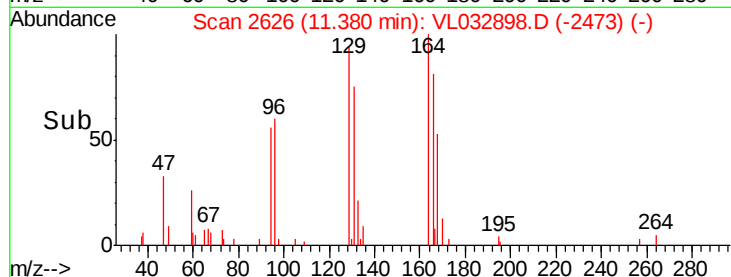
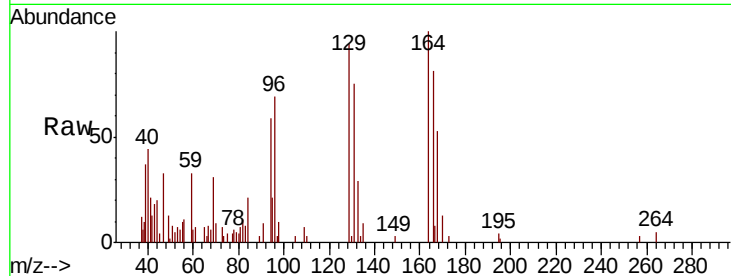
#52
Tetrachloroethene
Concen: 0.133 ppbv m
RT: 11.38 min Scan# 2626
Delta R.T. -0.01 min
Lab File: VL032898.D
Acq: 5 Dec 2018 5:16

Instrument :
MSVOA_L
ClientSampleId :
VSV-6

Tot Ion	Ratio	Lower	Upper
164	100		
166	81.2	99.3	148.9#
129	94.2	83.9	125.9
131	74.6	80.8	121.2#

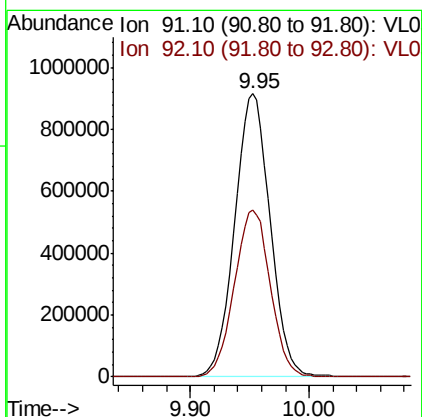
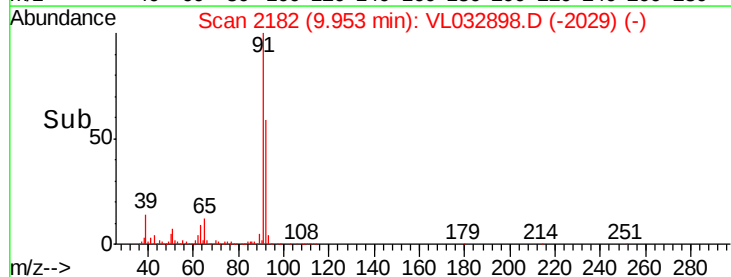
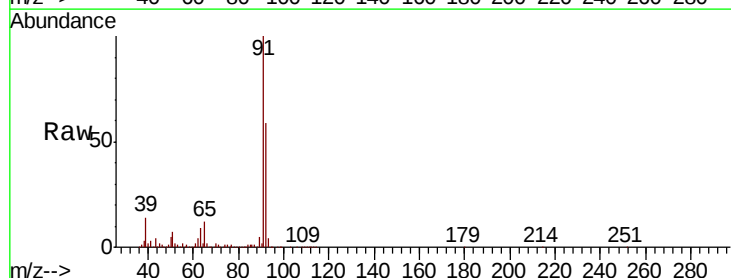
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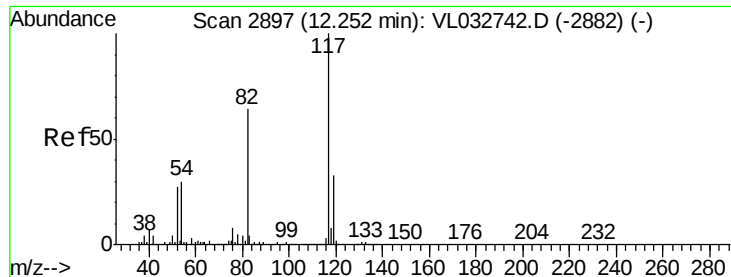
MMDadoda
12/10/2018 1:01:53 PM



#53
Toluene
Concen: 6.638 ppbv
RT: 9.95 min Scan# 2182
Delta R.T. -0.01 min
Lab File: VL032898.D
Acq: 5 Dec 2018 5:16

Tgt Ion	Ratio	Lower	Upper
91	100		
92	59.9	47.9	71.9





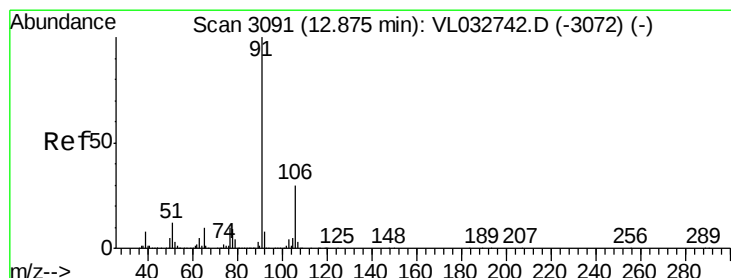
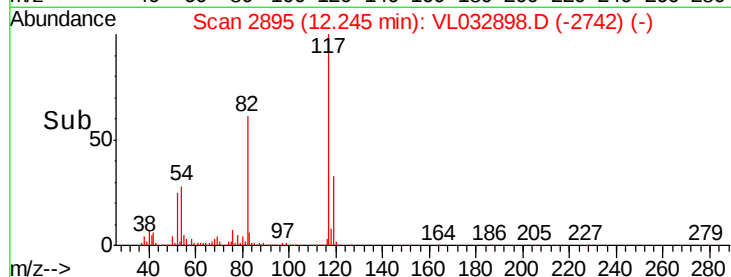
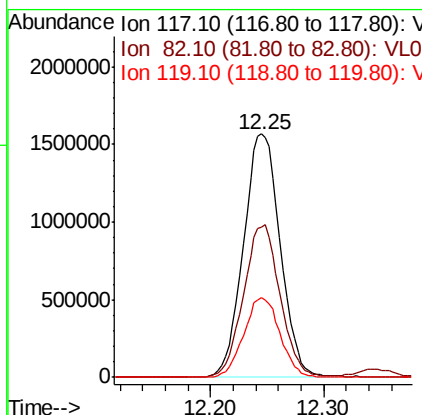
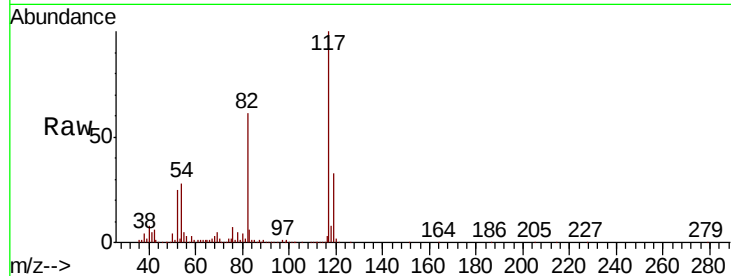
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.25 min Scan# 2895
Delta R.T. -0.01 min
Lab File: VL032898.D
Acq: 5 Dec 2018 5:16

Instrument :
MSVOA_L
ClientSampleId :
VSV-6

Tot Ion	Ratio	Lower	Upper
117	100		
82	62.5	51.0	76.6
119	32.4	28.0	42.0

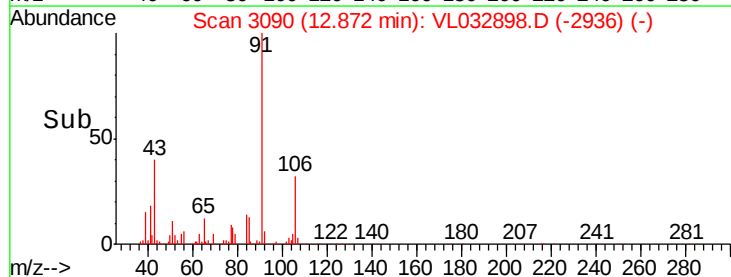
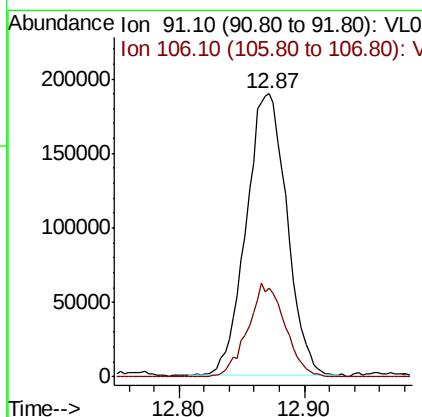
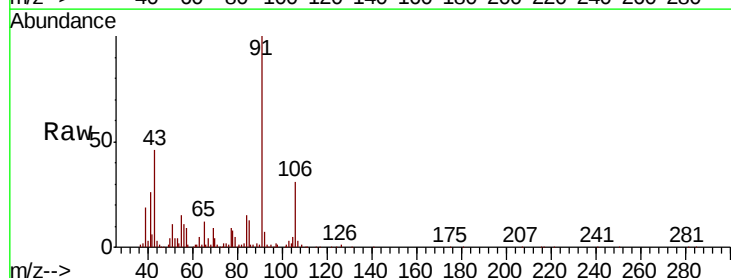
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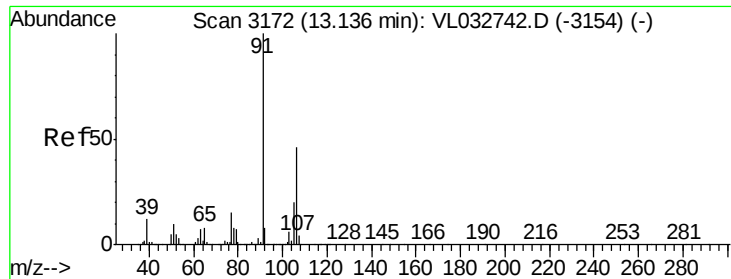
MMDadoda
12/10/2018 1:01:53 PM



#58
Ethyl Benzene
Concen: 1.007 ppbv
RT: 12.87 min Scan# 3090
Delta R.T. -0.00 min
Lab File: VL032898.D
Acq: 5 Dec 2018 5:16

Tgt Ion	Ratio	Lower	Upper
91	100		
106	31.6	23.6	35.4





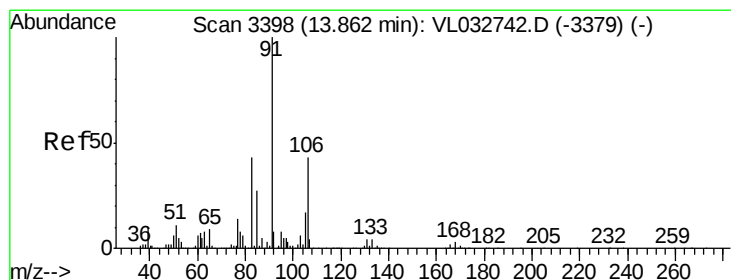
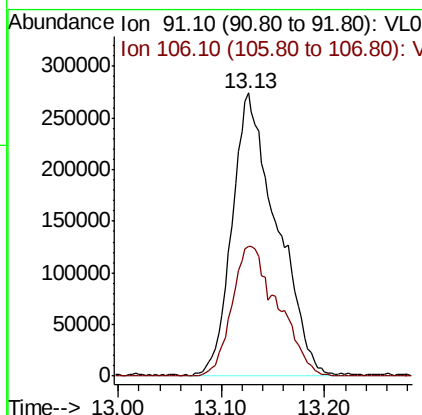
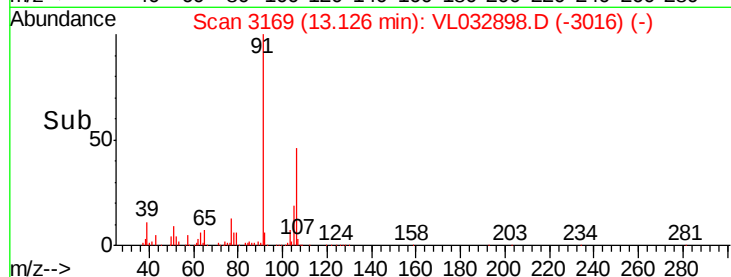
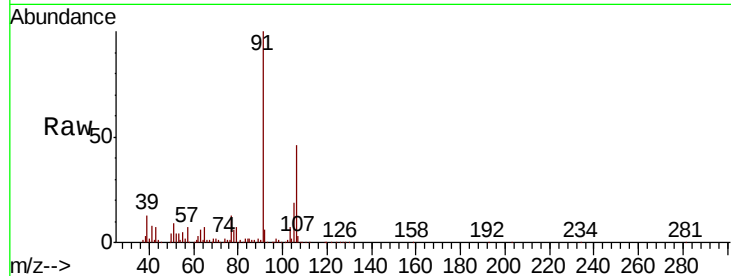
#59
m/p-Xylene
Concen: 2.166 ppbv
RT: 13.13 min Scan# 3169
Delta R.T. -0.01 min
Lab File: VL032898.D
Acq: 5 Dec 2018 5:16

Instrument :
MSVOA_L
ClientSampleId :
VSV-6

Tot Ion: 91 Resp: 820050
Ion Ratio Lower Upper
91 100
106 47.7 36.1 54.1

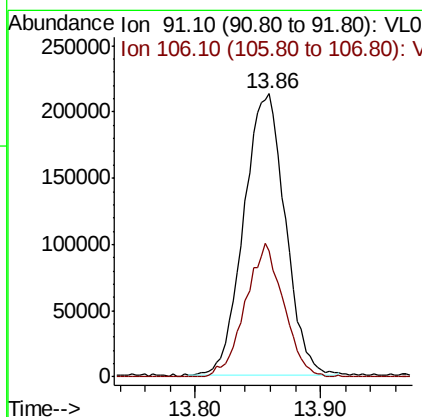
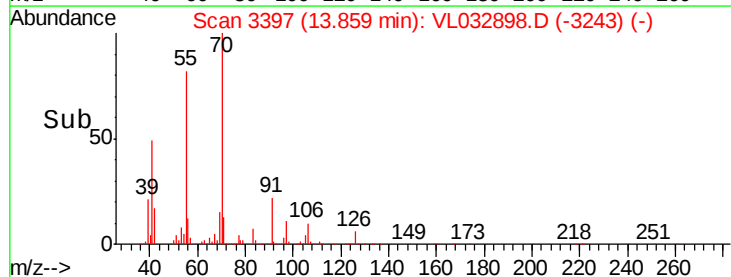
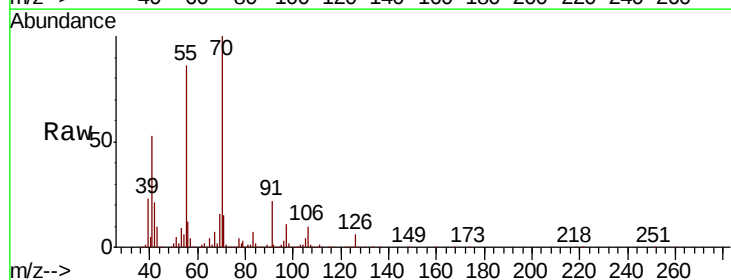
Manual Integrations
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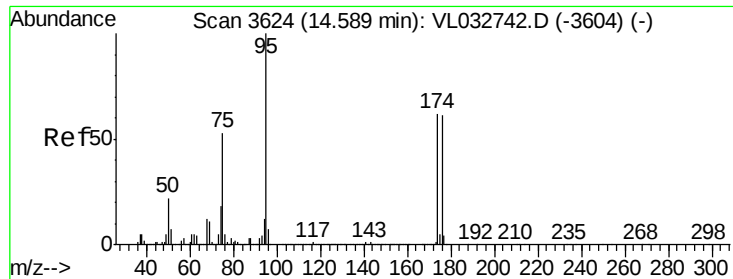
MMDadoda
12/10/2018 1:01:53 PM



#60
o-Xylene
Concen: 1.277 ppbv
RT: 13.86 min Scan# 3397
Delta R.T. -0.00 min
Lab File: VL032898.D
Acq: 5 Dec 2018 5:16

Tgt Ion: 91 Resp: 486211
Ion Ratio Lower Upper
91 100
106 44.2 21.9 65.7





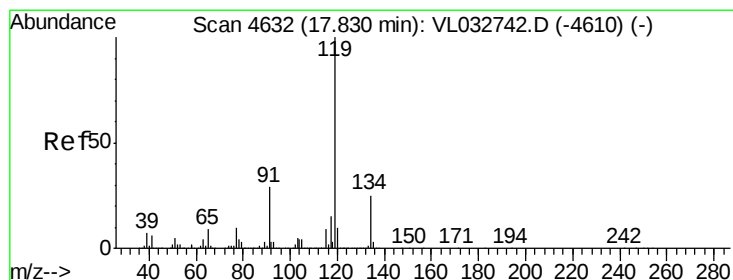
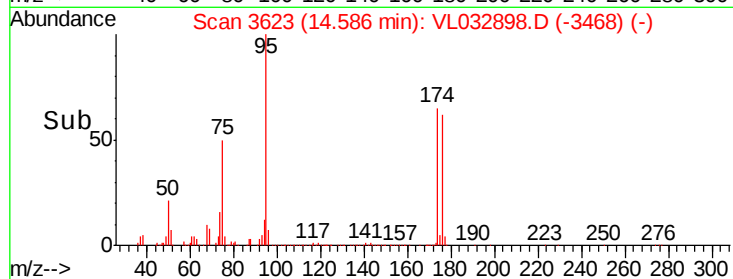
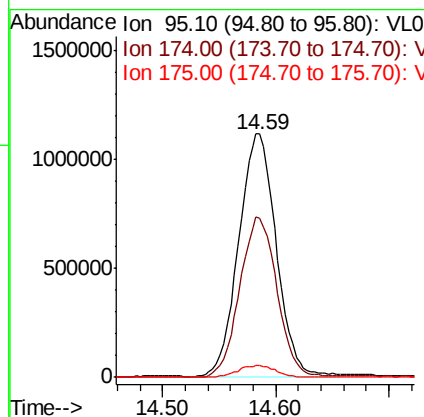
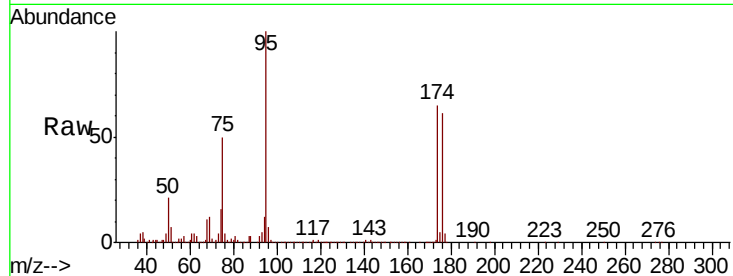
#68
1-Bromo-4-Fluorobenzene
Concen: 9.727 ppbv
RT: 14.59 min Scan# 3623
Delta R.T. -0.00 min
Lab File: VL032898.D
Acq: 5 Dec 2018 5:16

Instrument :
MSVOA_L
ClientSampled :
VSV-6

Tot Ion: 95 Resp: 2570595
Ion Ratio Lower Upper
95 100
174 67.0 50.7 76.1
175 5.0 3.8 5.6

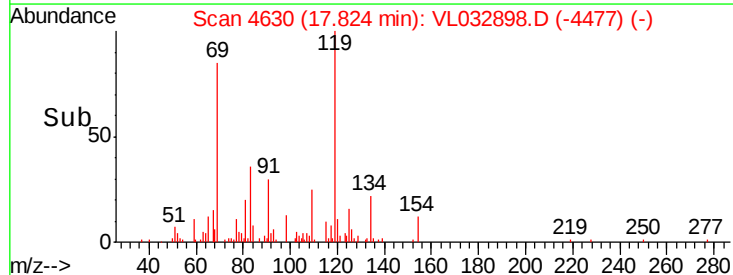
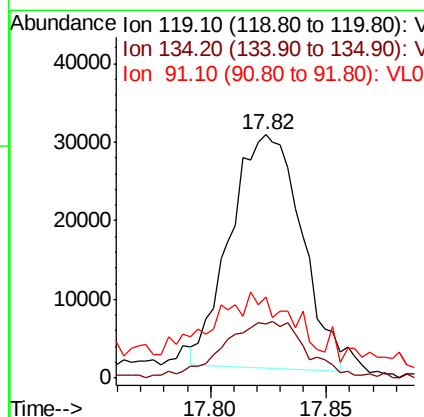
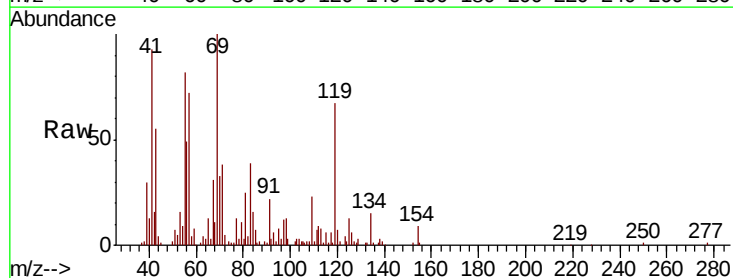
Manual Integrations
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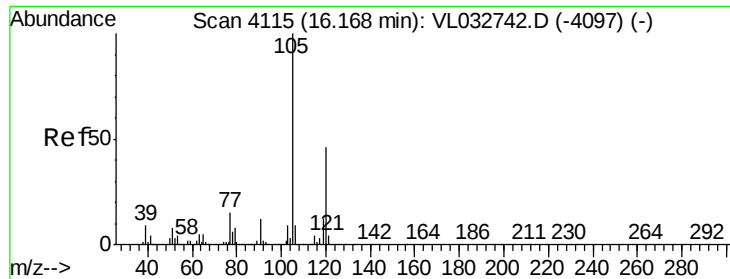
MMDadoda
12/10/2018 1:01:53 PM



#69
p-Isopropyltoluene
Concen: 0.120 ppbv
RT: 17.82 min Scan# 4630
Delta R.T. -0.01 min
Lab File: VL032898.D
Acq: 5 Dec 2018 5:16

Tgt Ion: 119 Resp: 63501
Ion Ratio Lower Upper
119 100
134 29.6 20.2 30.4
91 56.9 23.5 35.3#





#73

1,3,5-Trimethylbenzene

Concen: 0.205 ppbv m

RT: 16.17 min Scan# 4116

Delta R.T. 0.00 min

Lab File: VL032898.D

Acq: 5 Dec 2018 5:16

Instrument :

MSVOA_L

ClientSampled :

VSV-6

Tot Ion:105 Resp: 83724

Ion Ratio Lower Upper

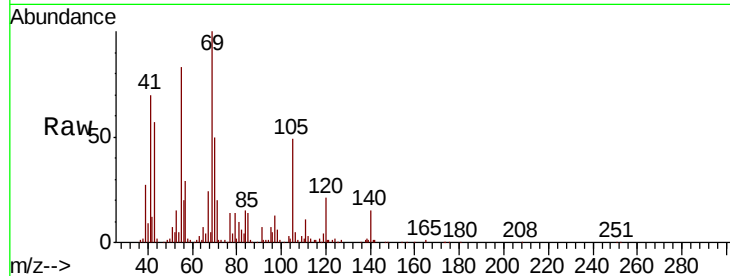
105 100

120 43.7 36.6 55.0

Manual Integrations
APPROVED

MMDadoda

12/10/2018 1:01:53 PM



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

16.17

40000

30000

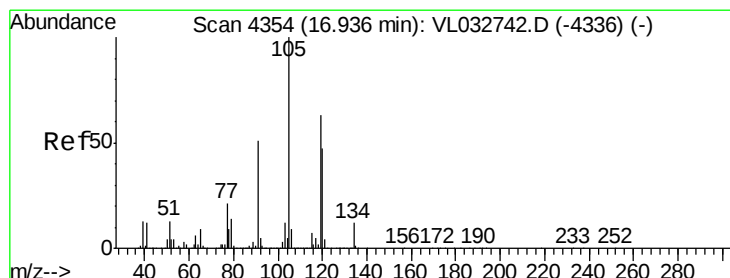
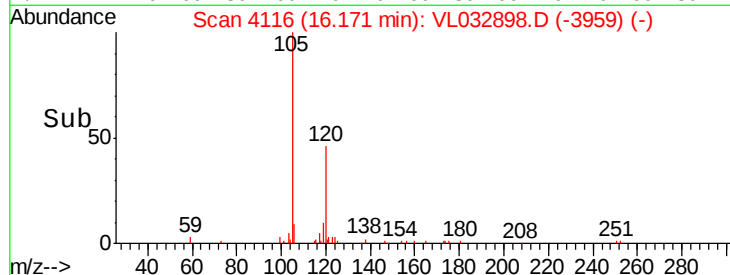
20000

10000

0

16.10 16.15 16.20

Time-->



#74

1,2,4-Trimethylbenzene

Concen: 0.374 ppbv m

RT: 16.94 min Scan# 4354

Delta R.T. -0.00 min

Lab File: VL032898.D

Acq: 5 Dec 2018 5:16

Tgt Ion:105 Resp: 163167

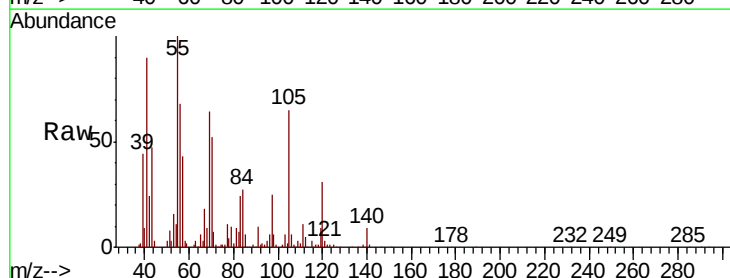
Ion Ratio Lower Upper

105 100

120 47.4 37.6 56.4

91 16.1 42.5 63.7#

77 16.6 17.4 26.2#



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

16.94

100000

80000

60000

40000

20000

0

16.85 16.90 16.95 17.00

Time-->

