

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032719\
 Data File : VL033485.D
 Acq On : 28 Mar 2019 2:12
 Operator : SY/AP
 Sample : K1991-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VMP-2

Manual Integrations
 APPROVED

MMDadoda
 4/1/2019 1:26:03 AM

Quant Time: Mar 28 09:46:40 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032519AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Mar 28 09:46:40 2019
 QLast Update : Tue Mar 26 16:00:50 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.75	49	808016	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.28	114	1892796	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.23	117	1922198	10.00	ppbv	0.00

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.57	95	1490372	9.89	ppbv	0.00	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.90%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	31470	0.267	ppbv #	87
3) Chlorodifluoromethane	3.01	51	21318m	0.229	ppbv	
4) Chloromethane	3.17	50	24368	0.495	ppbv #	85
9) Propene	3.04	41	18527	0.474	ppbv #	80
10) Heptane	8.24	43	56477	0.541	ppbv	98
11) Trichlorofluoromethane	4.00	101	31521	0.217	ppbv	86
13) Ethanol	3.65	45	3962312	391.954	ppbv	65
15) Acetone	3.89	43	1628678	16.764	ppbv	100
17) tert-Butyl alcohol	4.38	59	14824m	0.830	ppbv	
20) Methylene Chloride	4.40	84	48986	1.188	ppbv	91
26) Hexane	5.77	57	94057	1.174	ppbv #	46
29) Chloroform	5.84	83	111359	0.811	ppbv	98
30) Cyclohexane	7.24	84	28019	0.442	ppbv	86
34) 2-Butanone	5.32	43	156691	1.378	ppbv	99
35) Carbon Tetrachloride	7.13	117	7578	0.057	ppbv #	87
36) Benzene	7.00	78	19890m	0.125	ppbv	
38) Trichloroethene	7.95	130	10091m	0.169	ppbv	
41) Tetrahydrofuran	6.15	42	30434	0.487	ppbv	95
53) Toluene	9.94	91	156859	0.850	ppbv	98
59) m/p-Xylene	13.12	91	33972m	0.148	ppbv	

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

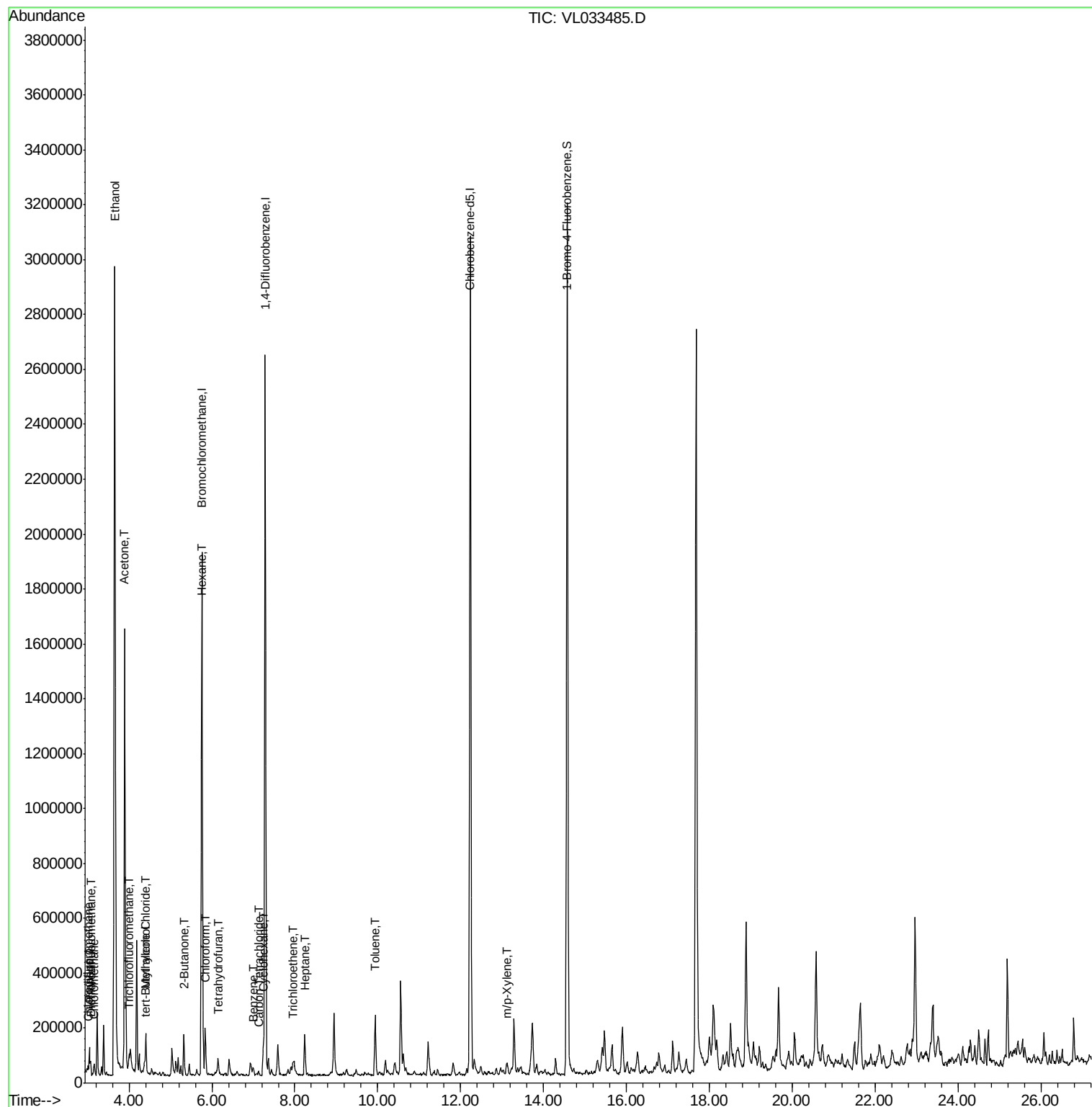
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL032719\
Data File : VL033485.D
Acq On : 28 Mar 2019 2:12
Operator : SY/AP
Sample : K1991-03
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

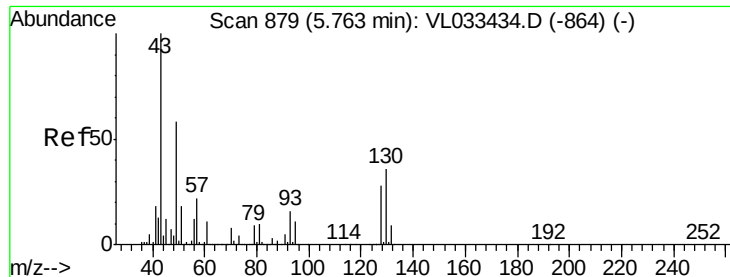
Instrument :
MSVOA_L
ClientSampleId :
VMP-2

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Quant Time: Mar 28 09:46:40 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032519AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Mar
QLast Update : Tue Mar 26 16:00:50 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.75 min Scan# 876

Delta R.T. -0.01 min

Lab File: VL033485.D

Acq: 28 Mar 2019 2:12

Instrument :

MSVOA_L

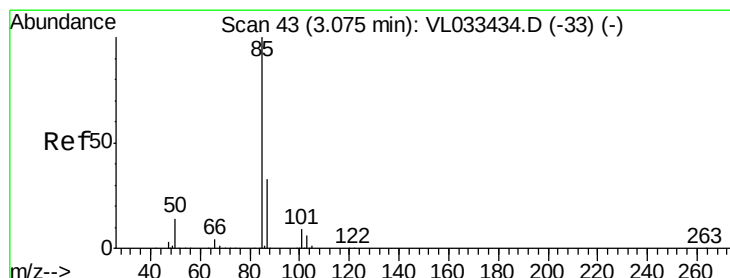
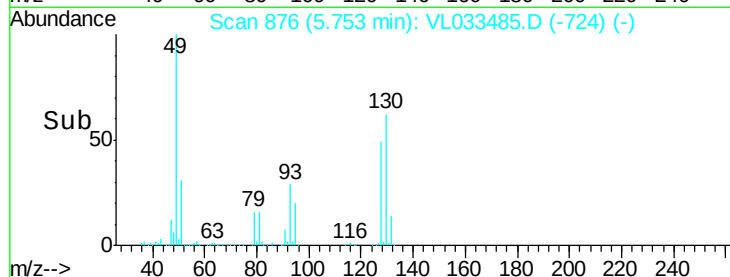
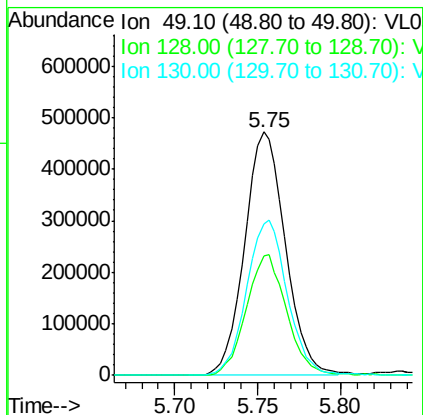
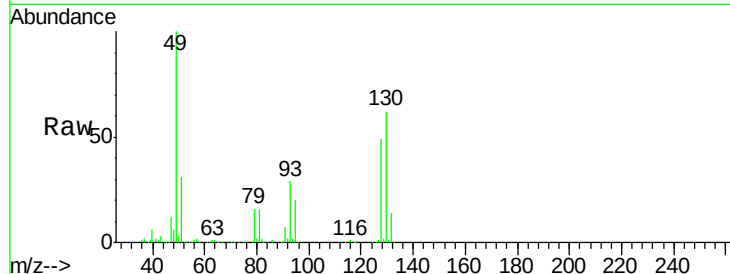
ClientSampleId :

VMP-2

Tot Ion	49	Resp	808016
Ion	Ratio	Lower	Upper
49	100		
128	49.5	24.0	72.0
130	64.3	31.2	93.6

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#2

Dichlorodifluoromethane

Concen: 0.267 ppbv

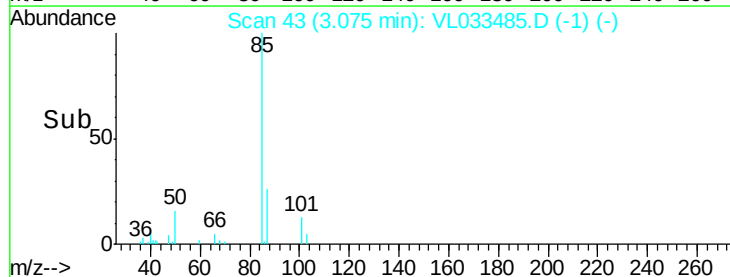
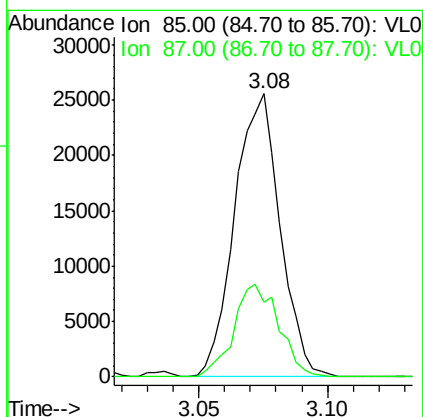
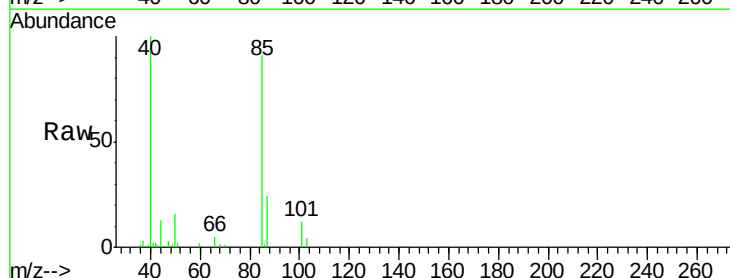
RT: 3.08 min Scan# 43

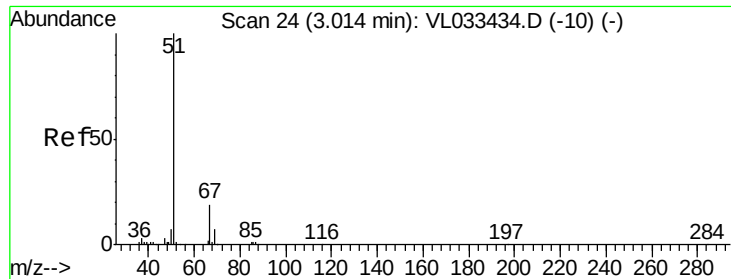
Delta R.T. -0.00 min

Lab File: VL033485.D

Acq: 28 Mar 2019 2:12

Tgt Ion	85	Resp	31470
Ion	Ratio	Lower	Upper
85	100		
87	26.2	26.7	40.1#





#3

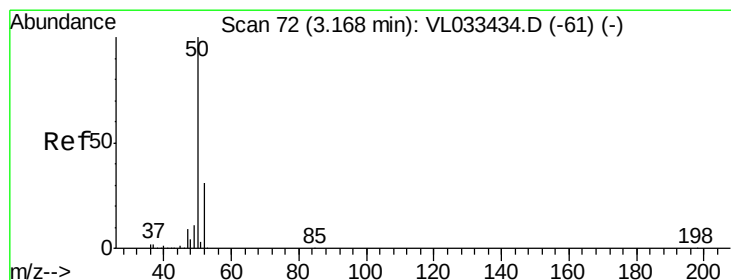
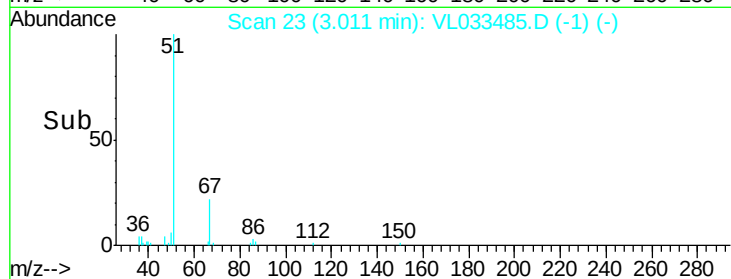
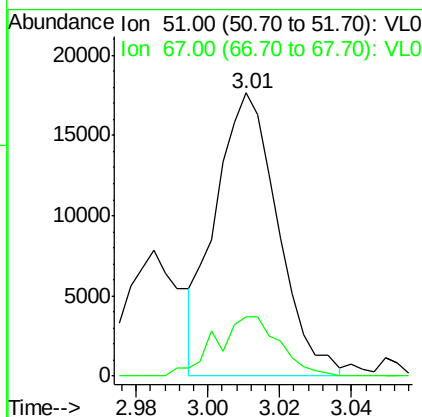
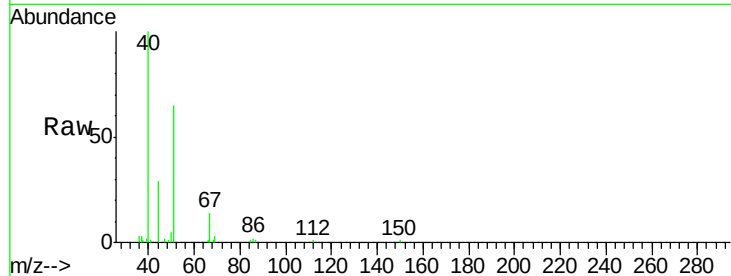
Chlorodifluoromethane
 Concen: 0.229 ppbv
 RT: 3.01 min Scan# 23
 Delta R.T. -0.00 min
 Lab File: VL033485.D
 Acq: 28 Mar 2019 2:12

Instrument :
 MSVOA_L
 ClientSampleId :
 VMP-2

Tot Ion	Ratio	Lower	Upper
51	100		
67	21.5	15.7	23.5

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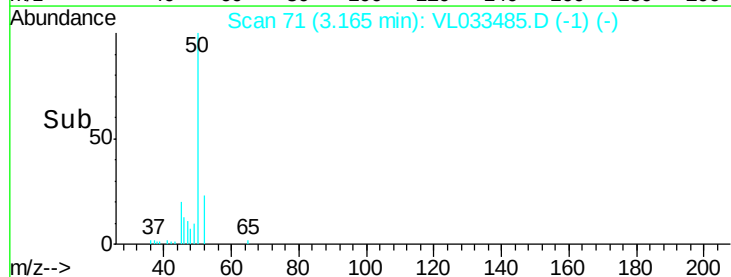
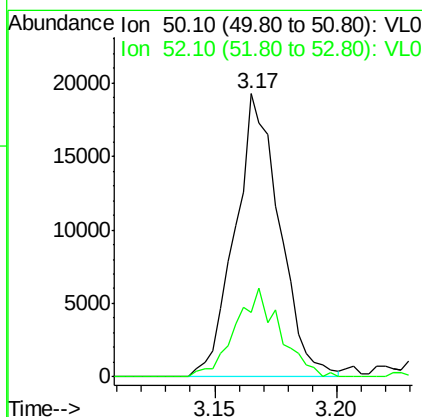
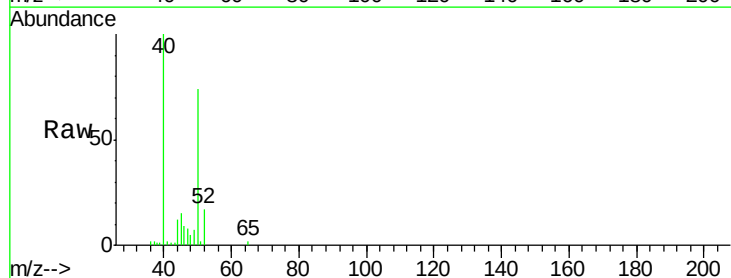
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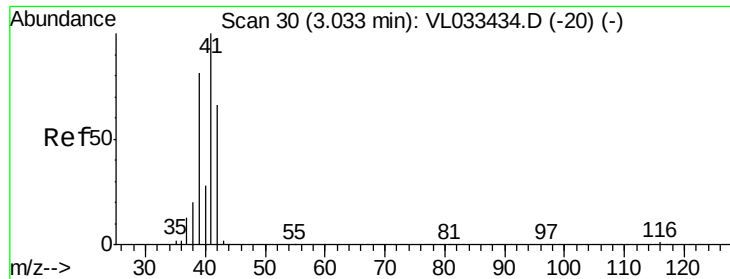


#4

Chloromethane
 Concen: 0.495 ppbv
 RT: 3.17 min Scan# 71
 Delta R.T. -0.00 min
 Lab File: VL033485.D
 Acq: 28 Mar 2019 2:12

Tgt Ion	Ratio	Lower	Upper
50	100		
52	22.9	25.0	37.6#





#9

Propene

Concen: 0.474 ppbv

RT: 3.04 min Scan# 33

Delta R.T. 0.01 min

Lab File: VL033485.D

Acq: 28 Mar 2019 2:12

Instrument :

MSVOA_L

ClientSampleId :

VMP-2

Tot Ion: 41 Resp: 18527

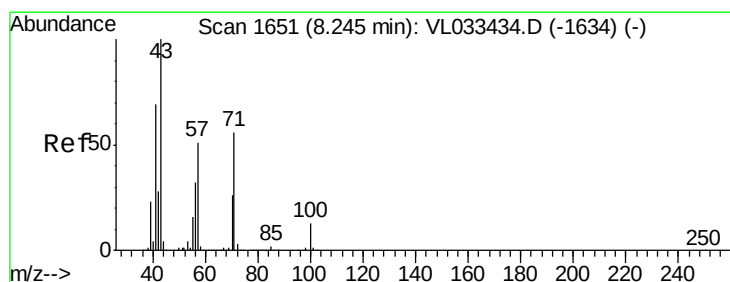
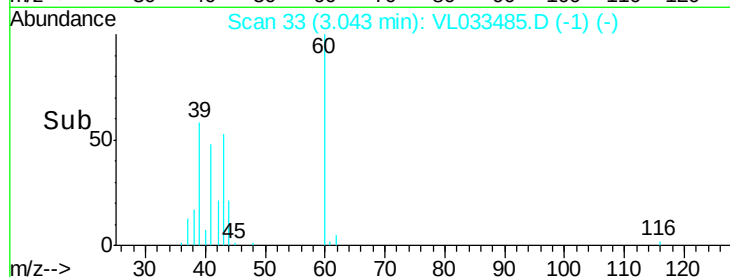
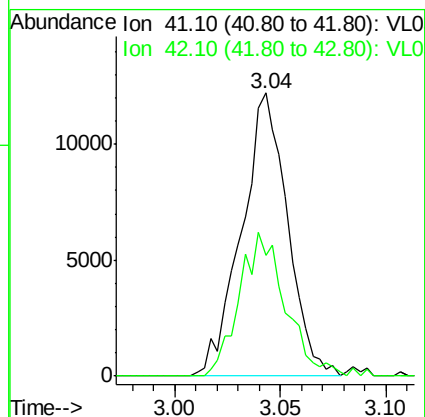
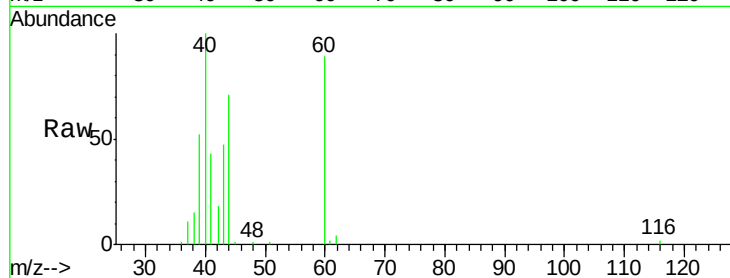
Ion Ratio Lower Upper

41 100

42 51.4 53.9 80.9#

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#10

Heptane

Concen: 0.541 ppbv

RT: 8.24 min Scan# 1650

Delta R.T. -0.00 min

Lab File: VL033485.D

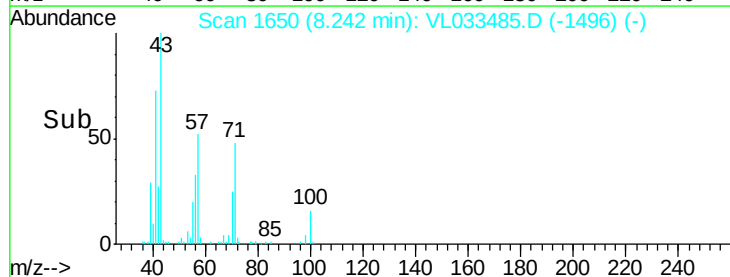
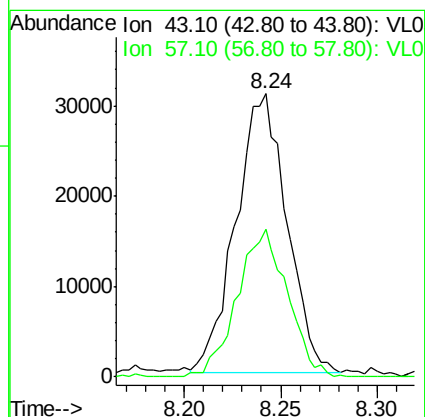
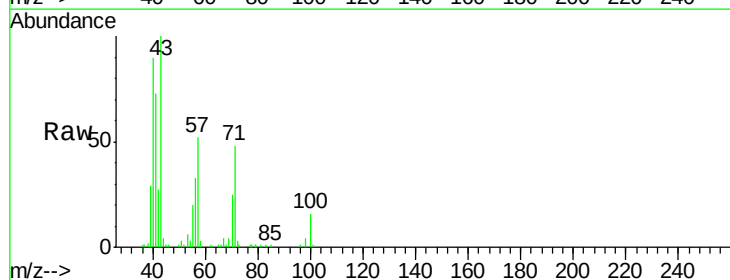
Acq: 28 Mar 2019 2:12

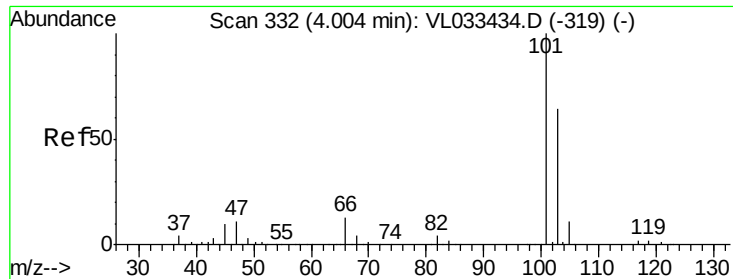
Tgt Ion: 43 Resp: 56477

Ion Ratio Lower Upper

43 100

57 52.0 40.6 60.8





#11

Trichlorofluoromethane

Concen: 0.217 ppbv

RT: 4.00 min Scan# 331

Delta R.T. -0.00 min

Lab File: VL033485.D

Acq: 28 Mar 2019 2:12

Instrument :

MSVOA_L

ClientSampleId :

VMP-2

Tot Ion:101 Resp: 31521

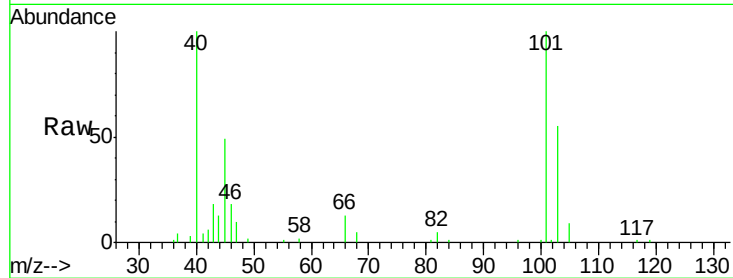
Ion Ratio Lower Upper

101 100

103 53.1 51.3 76.9

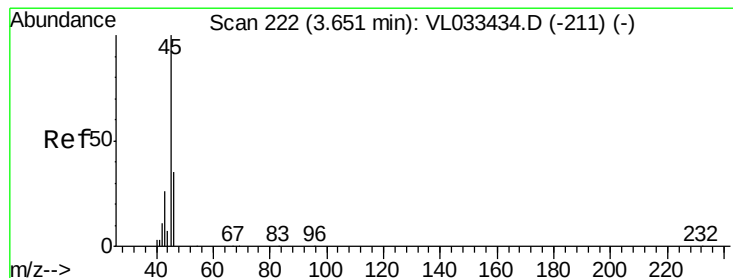
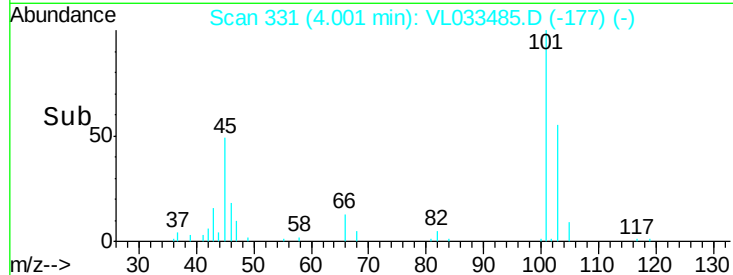
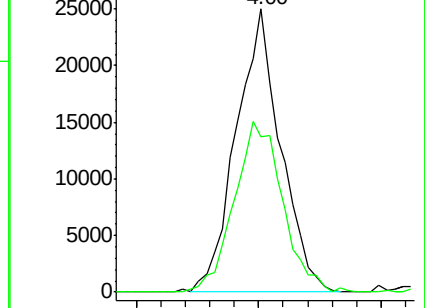
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Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#13

Ethanol

Concen: 391.954 ppbv

RT: 3.65 min Scan# 223

Delta R.T. 0.00 min

Lab File: VL033485.D

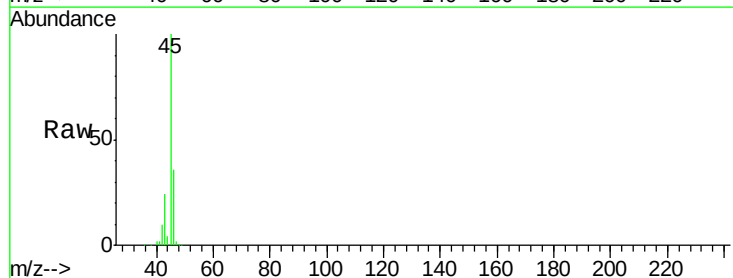
Acq: 28 Mar 2019 2:12

Tgt Ion: 45 Resp: 3962312

Ion Ratio Lower Upper

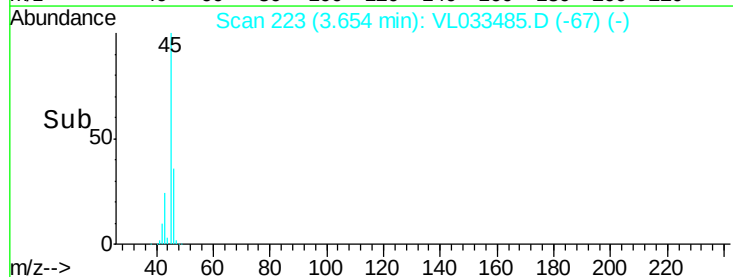
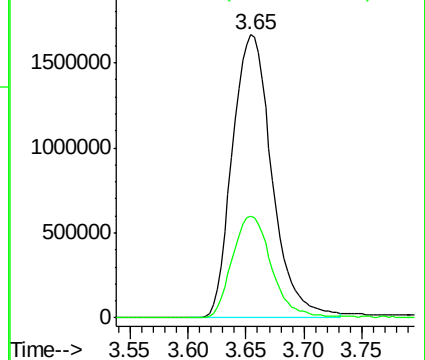
45 100

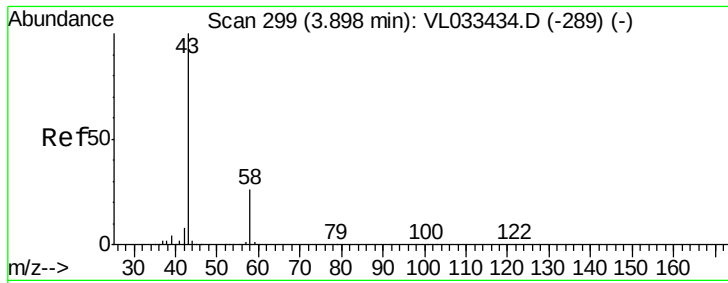
46 36.3 25.4 101.8



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 16.764 ppbv

RT: 3.89 min Scan# 297

Delta R.T. -0.01 min

Lab File: VL033485.D

Acq: 28 Mar 2019 2:12

Instrument :

MSVOA_L

ClientSampleId :

VMP-2

Tot Ion: 43 Resp: 1628678

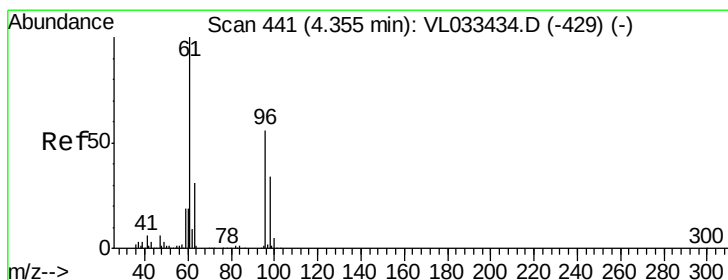
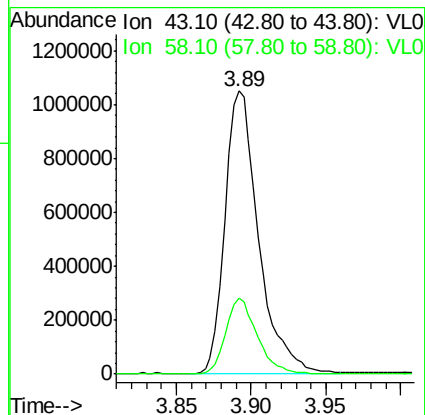
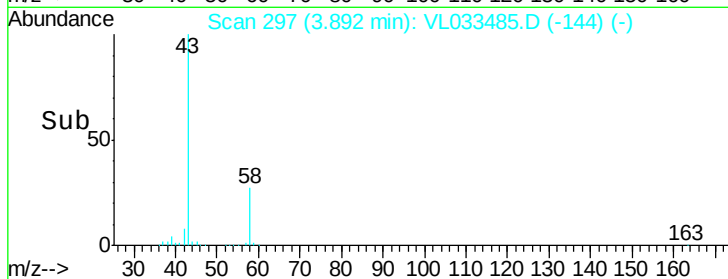
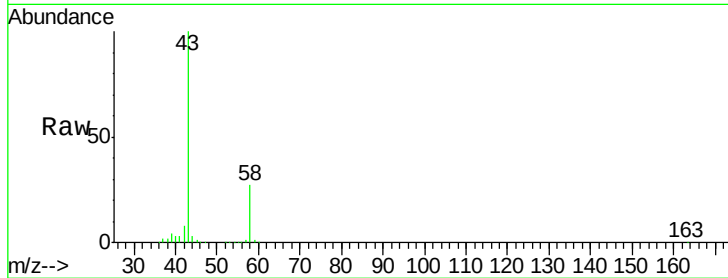
Ion Ratio Lower Upper

43 100

58 25.8 20.5 30.7

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#17

tert-Butyl alcohol

Concen: 0.830 ppbv m

RT: 4.38 min Scan# 448

Delta R.T. 0.02 min

Lab File: VL033485.D

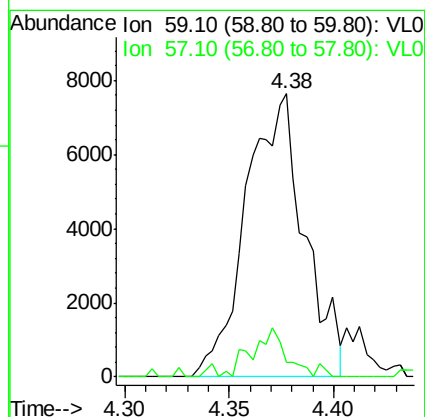
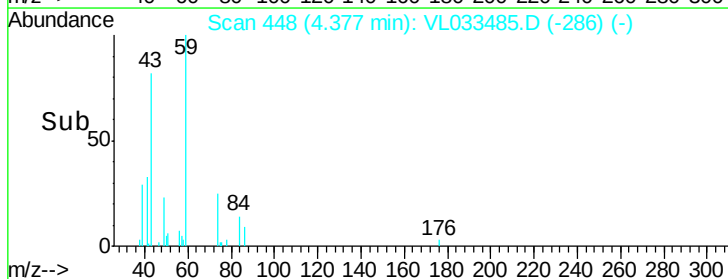
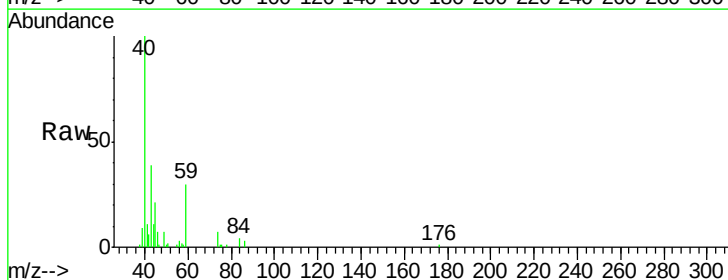
Acq: 28 Mar 2019 2:12

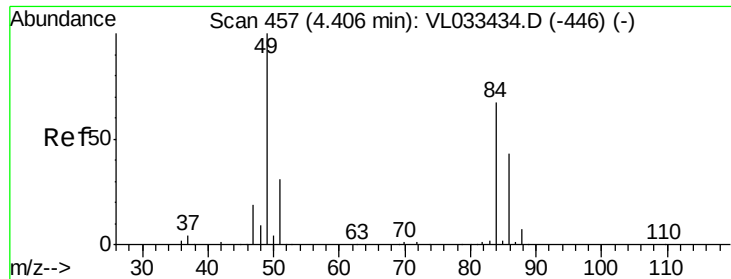
Tgt Ion: 59 Resp: 14824

Ion Ratio Lower Upper

59 100

57 0.0 7.8 11.8#





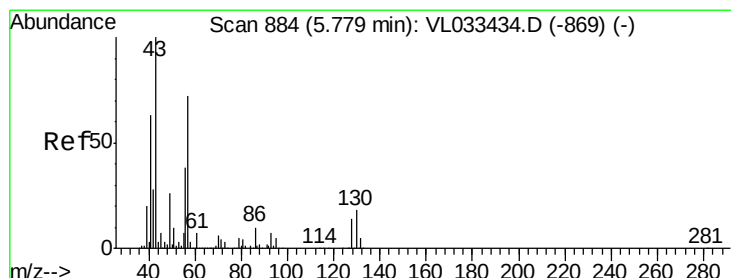
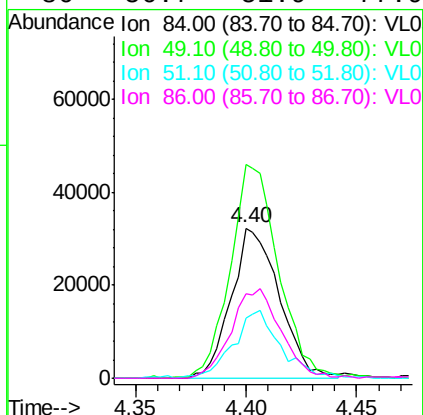
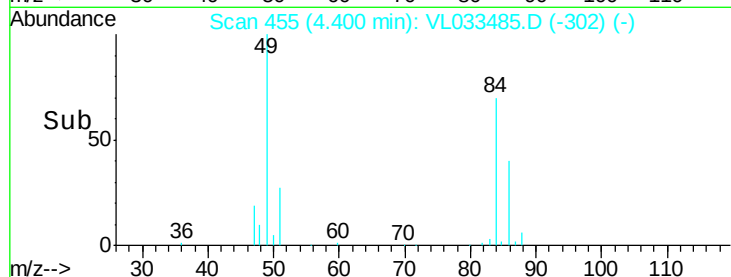
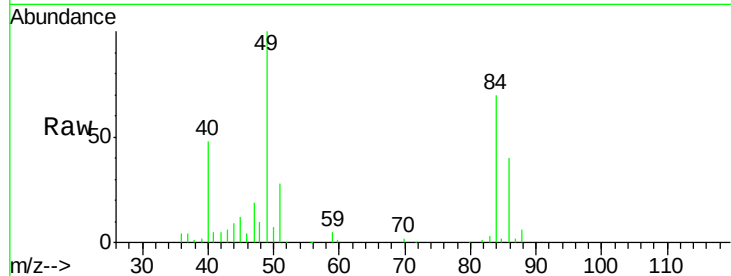
#20
Methvlene Chloride
Concen: 1.188 ppbv
RT: 4.40 min Scan# 455
Delta R.T. -0.01 min
Lab File: VL033485.D
Acq: 28 Mar 2019 2:12

Instrument :
MSVOA_L
ClientSampleId :
VMP-2

Tot Ion:	84	Resp:	48986
Ion	Ratio	Lower	Upper
84	100		
49	140.8	120.0	180.0
51	38.2	36.7	55.1
86	56.7	51.9	77.9

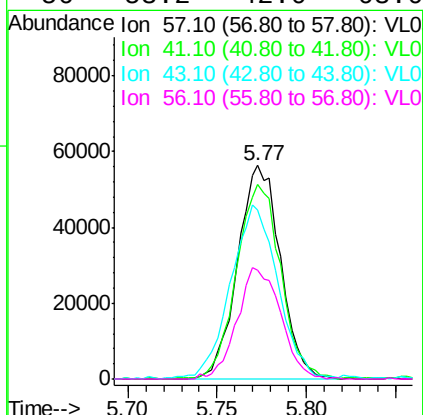
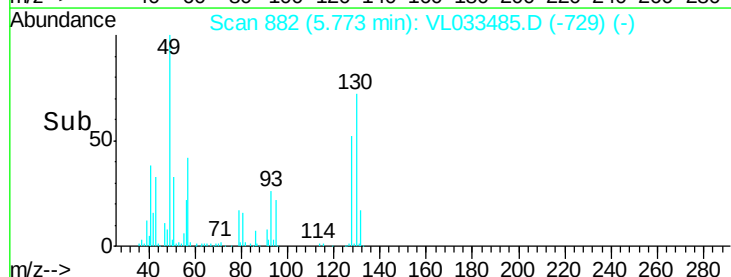
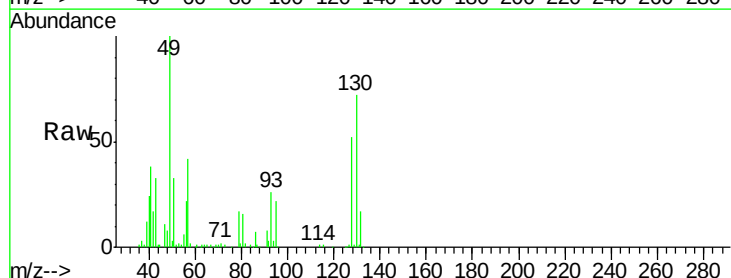
Manual Integrations
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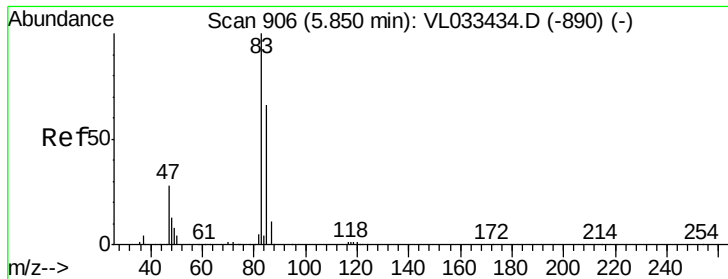
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#26
Hexane
Concen: 1.174 ppbv
RT: 5.77 min Scan# 882
Delta R.T. -0.01 min
Lab File: VL033485.D
Acq: 28 Mar 2019 2:12

Tgt Ion:	57	Resp:	94057
Ion	Ratio	Lower	Upper
57	100		
41	95.0	70.7	106.1
43	89.7	182.6	274.0#
56	53.2	42.0	63.0





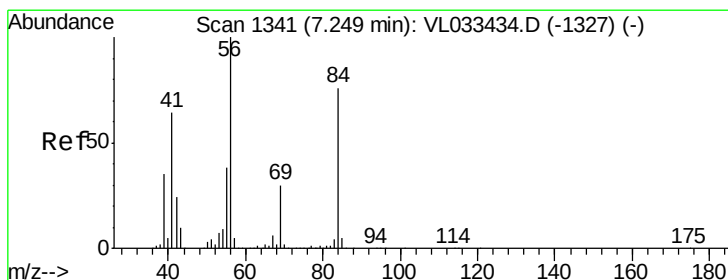
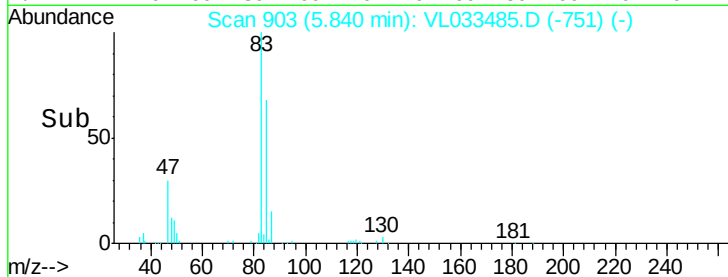
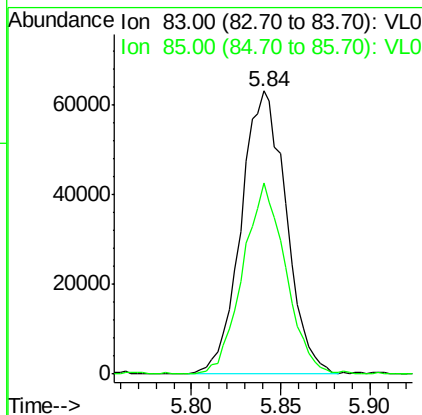
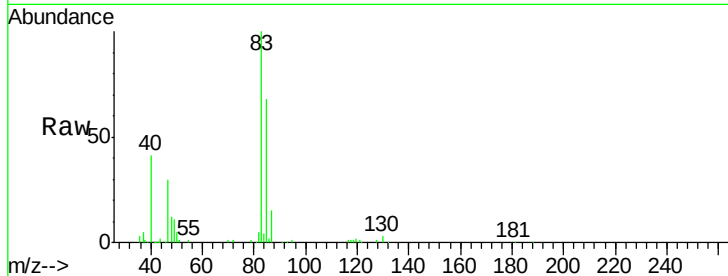
#29
Chloroform
Concen: 0.811 ppbv
RT: 5.84 min Scan# 903
Delta R.T. -0.01 min
Lab File: VL033485.D
Acq: 28 Mar 2019 2:12

Instrument :
MSVOA_L
ClientSampleId :
VMP-2

Tot Ion: 83 Resp: 111359
Ion Ratio Lower Upper
83 100
85 67.6 52.6 79.0

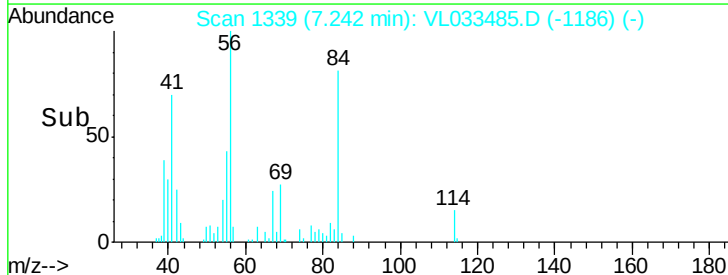
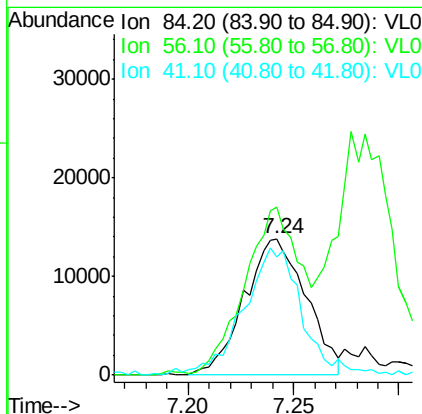
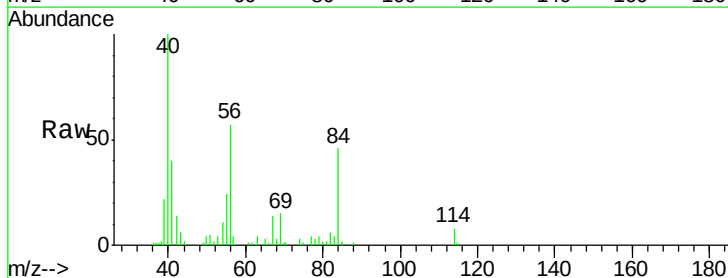
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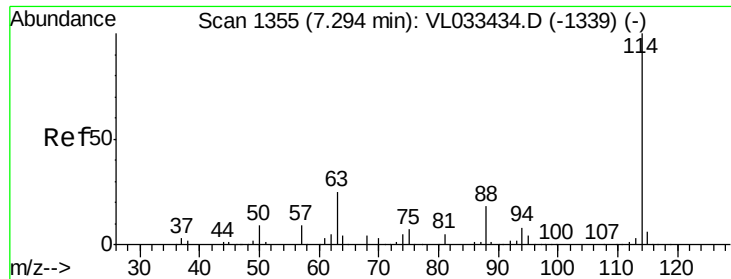
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#30
Cyclohexane
Concen: 0.442 ppbv
RT: 7.24 min Scan# 1339
Delta R.T. -0.01 min
Lab File: VL033485.D
Acq: 28 Mar 2019 2:12

Tgt Ion: 84 Resp: 28019
Ion Ratio Lower Upper
84 100
56 112.3 109.7 164.5
41 89.0 68.2 102.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.28 min Scan# 1352

Delta R.T. -0.01 min

Lab File: VL033485.D

Acq: 28 Mar 2019 2:12

Instrument :

MSVOA_L

ClientSampled :

VMP-2

Tot Ion:114 Resp: 1892796

Ion Ratio Lower Upper

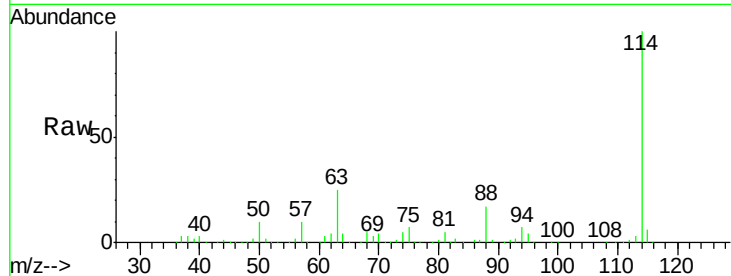
114 100

63 25.9 21.5 32.3

88 17.9 14.5 21.7

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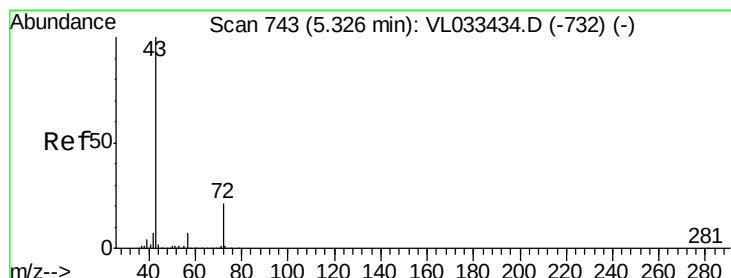
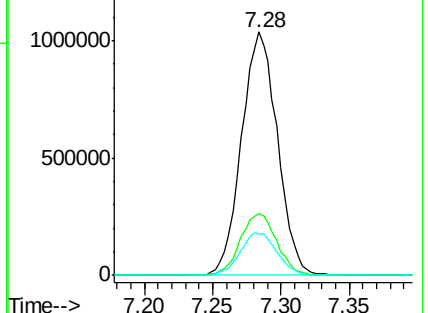
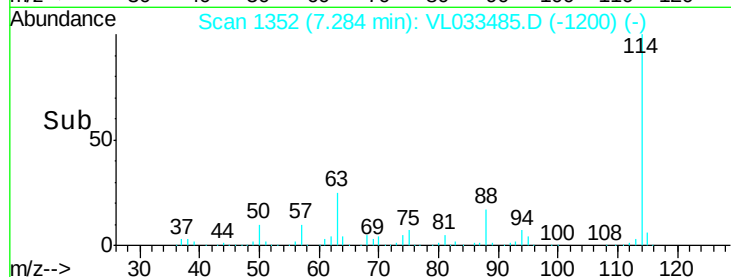
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Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 1.378 ppbv

RT: 5.32 min Scan# 741

Delta R.T. -0.01 min

Lab File: VL033485.D

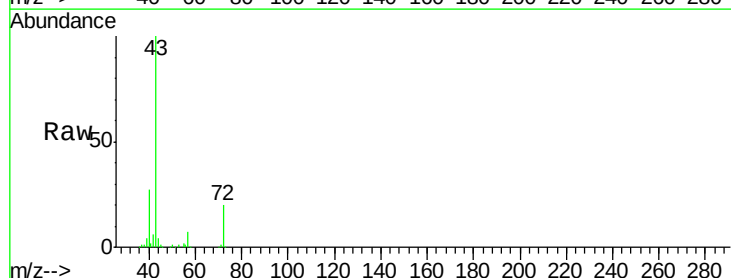
Acq: 28 Mar 2019 2:12

Tgt Ion: 43 Resp: 156691

Ion Ratio Lower Upper

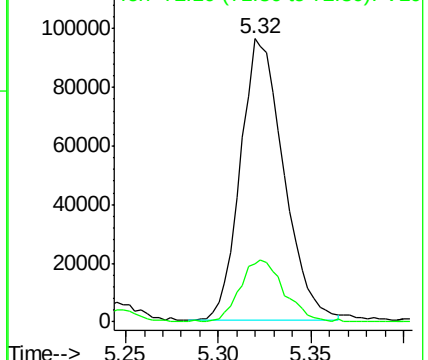
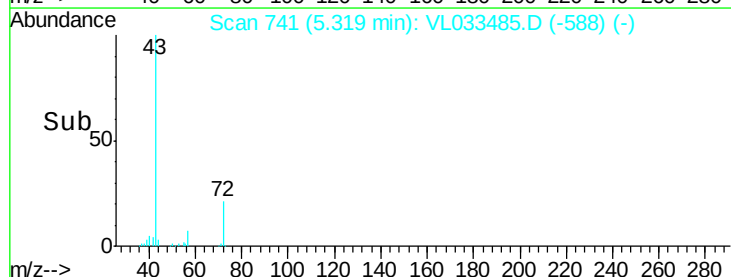
43 100

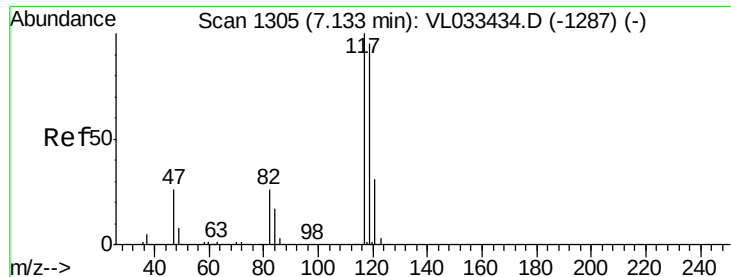
72 22.5 17.4 26.2



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

RT: 7.13 min Scan# 1304

Delta R.T. -0.00 min

Lab File: VL033485.D

Acq: 28 Mar 2019 2:12

Instrument :

MSVOA_L

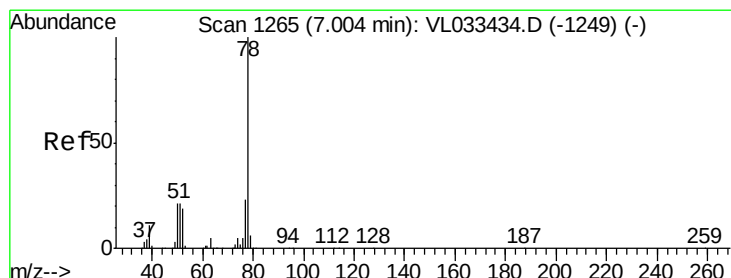
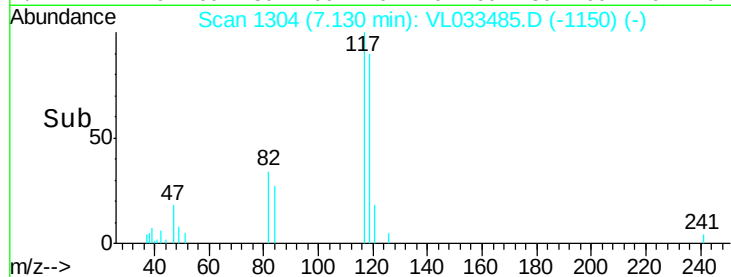
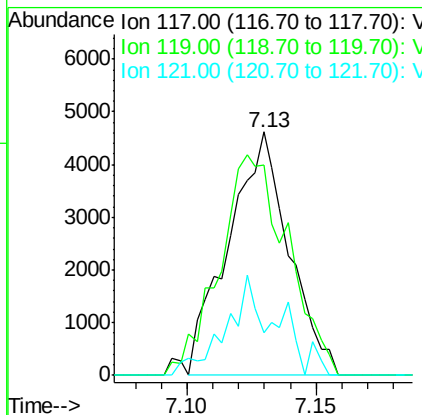
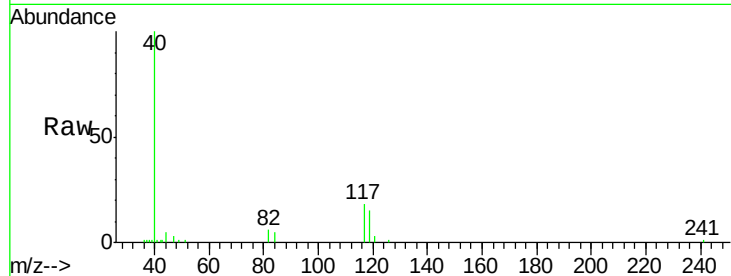
ClientSampleId :

VMP-2

Tot Ion	Ratio	Lower	Upper
117	100		
119	86.2	75.8	113.8
121	17.5	24.7	37.1#

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4/1/2019 1:26:03 AM



#36

Benzene

Concen: 0.125 ppbv m

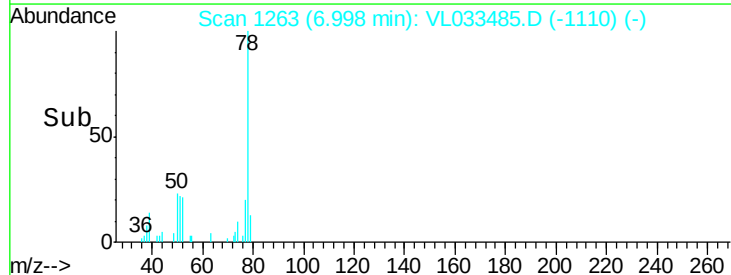
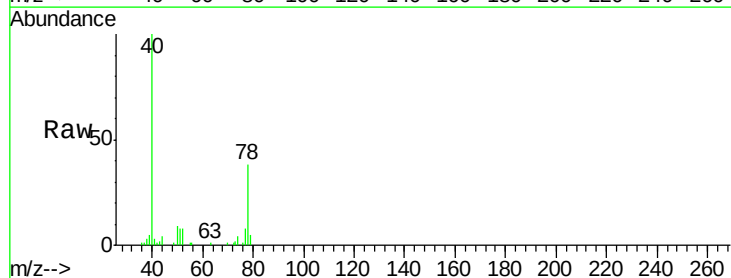
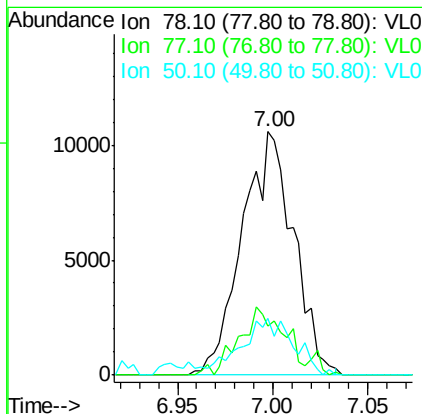
RT: 7.00 min Scan# 1263

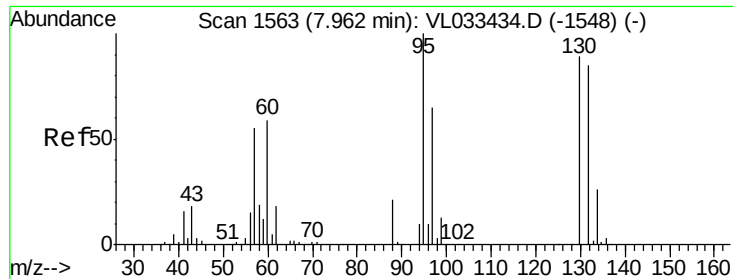
Delta R.T. -0.01 min

Lab File: VL033485.D

Acq: 28 Mar 2019 2:12

Tgt Ion	Ratio	Lower	Upper
78	100		
77	20.1	18.1	27.1
50	23.1	16.7	25.1





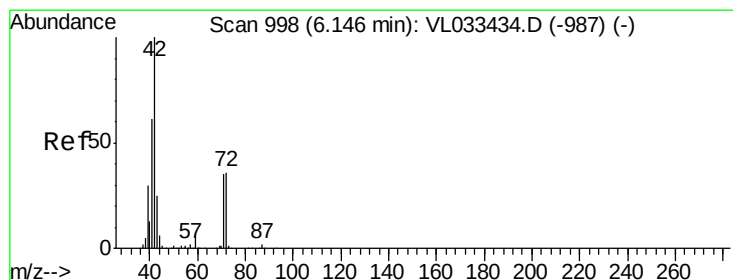
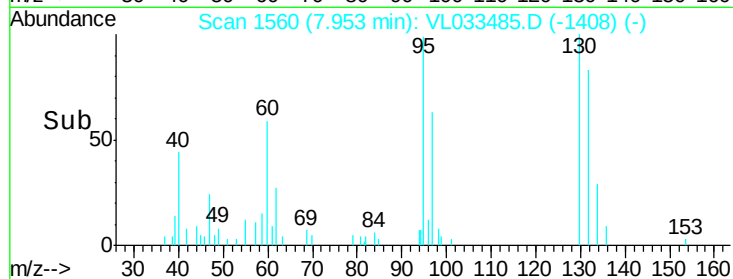
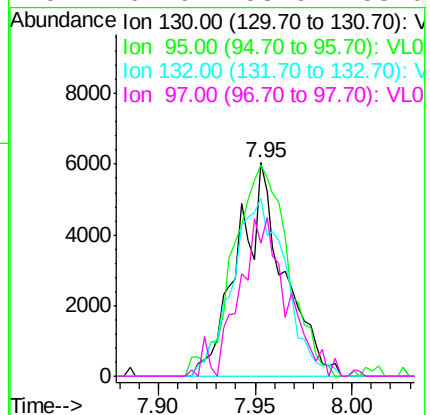
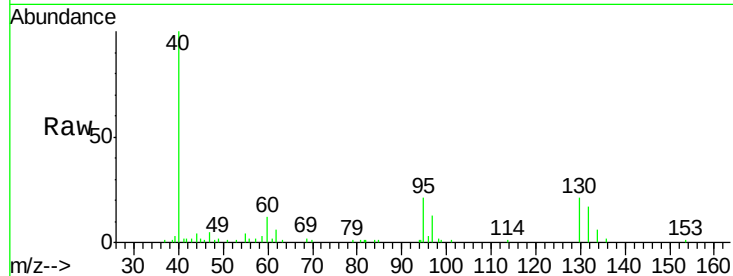
#38
 Trichloroethene
 Concen: 0.169 ppbv m
 RT: 7.95 min Scan# 1560
 Delta R.T. -0.01 min
 Lab File: VL033485.D
 Acq: 28 Mar 2019 2:12

Instrument :
 MSVOA_L
 ClientSampleId :
 VMP-2

Tot Ion	Ion	Ratio	Resp	Lower	Upper
130	100				
95	98.9	89.8	134.8		
132	83.0	76.6	115.0		
97	62.6	58.6	88.0		

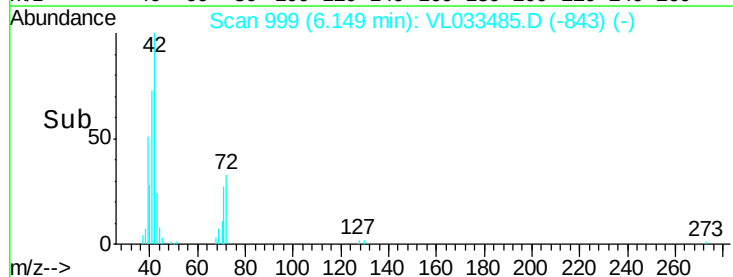
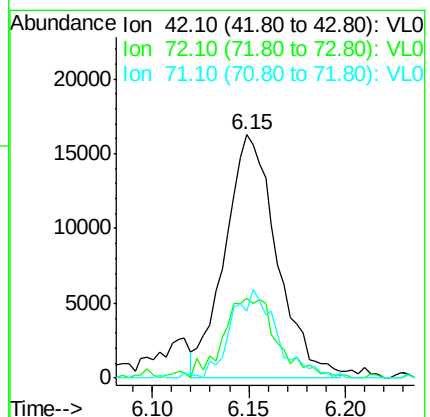
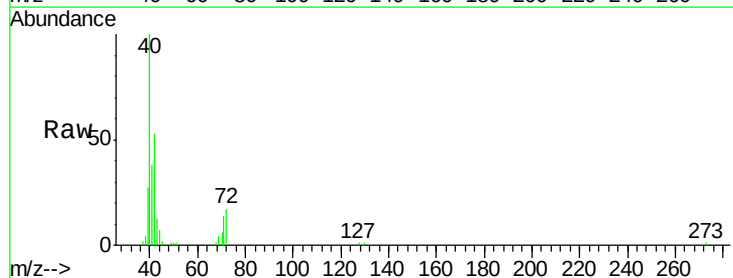
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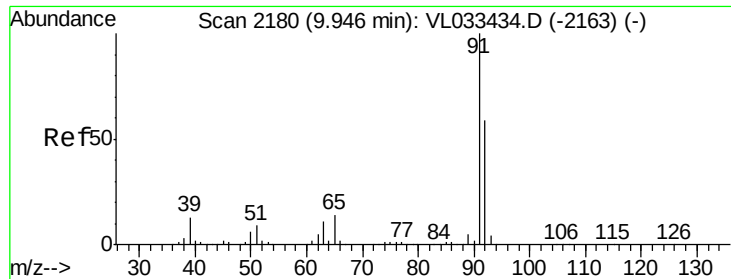
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#41
 Tetrahydrofuran
 Concen: 0.487 ppbv
 RT: 6.15 min Scan# 999
 Delta R.T. 0.00 min
 Lab File: VL033485.D
 Acq: 28 Mar 2019 2:12

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
42	100				
72	36.5	30.2	45.2		
71	32.5	29.4	44.2		





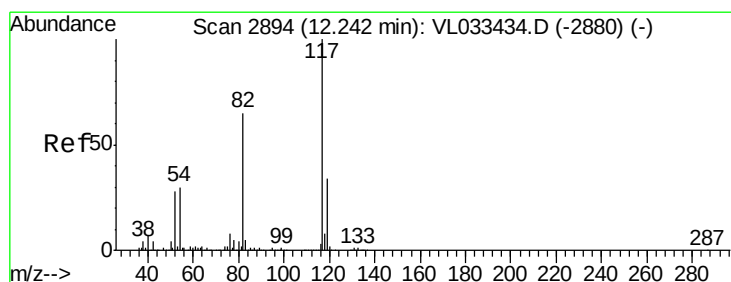
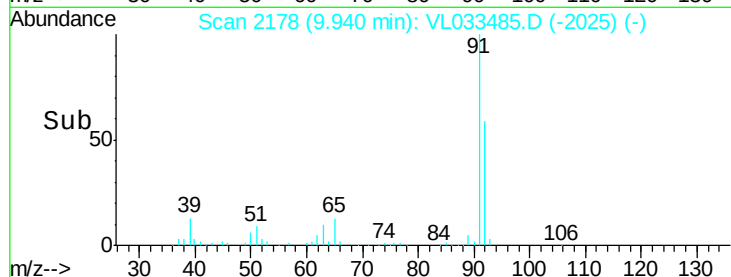
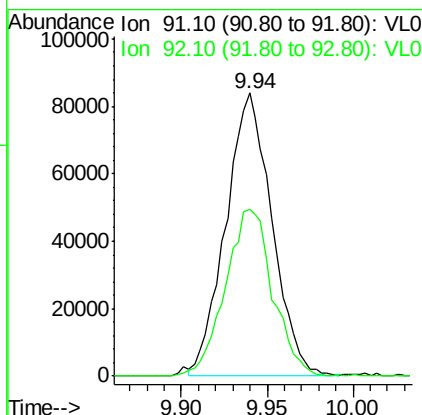
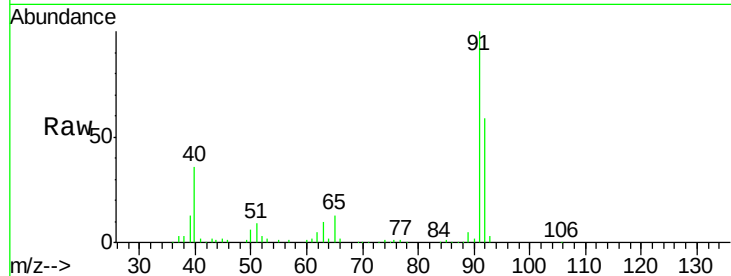
#53
Toluene
Concen: 0.850 ppbv
RT: 9.94 min Scan# 2178
Delta R.T. -0.01 min
Lab File: VL033485.D
Acq: 28 Mar 2019 2:12

Instrument :
MSVOA_L
ClientSampleId :
VMP-2

Tot Ion: 91 Resp: 156859
Ion Ratio Lower Upper
91 100
92 60.6 47.4 71.0

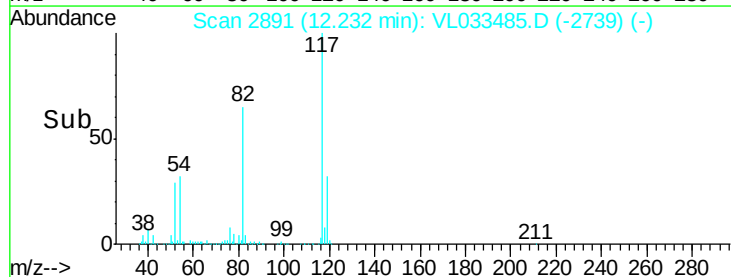
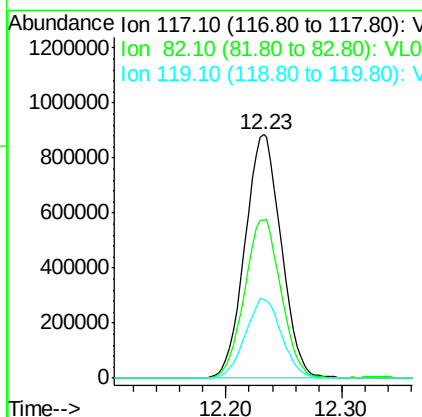
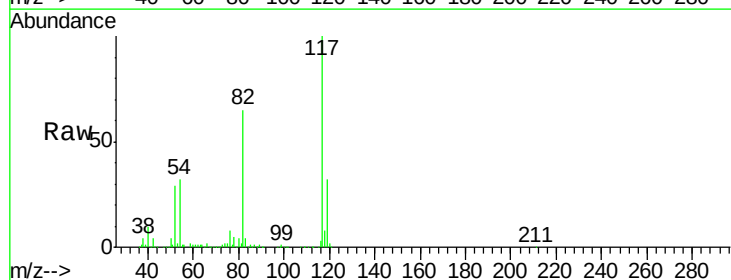
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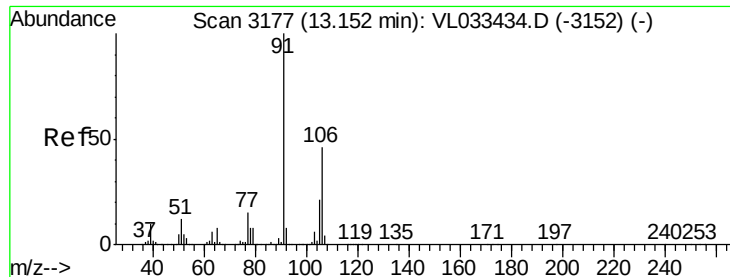
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4/1/2019 1:26:03 AM



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.23 min Scan# 2891
Delta R.T. -0.01 min
Lab File: VL033485.D
Acq: 28 Mar 2019 2:12

Tgt Ion: 117 Resp: 1922198
Ion Ratio Lower Upper
117 100
82 65.6 51.5 77.3
119 32.6 25.5 38.3





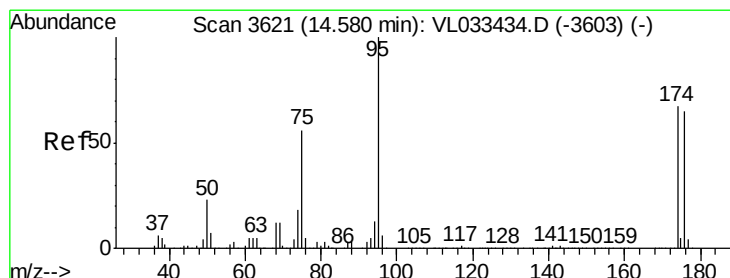
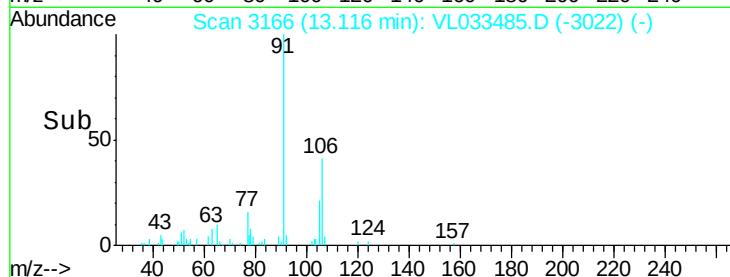
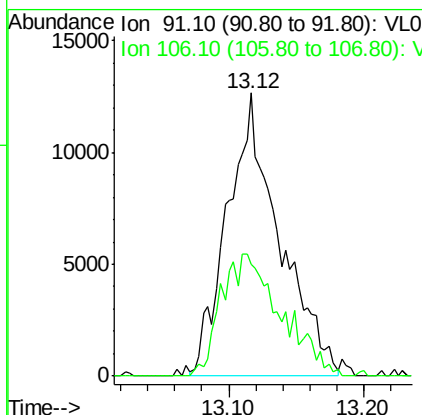
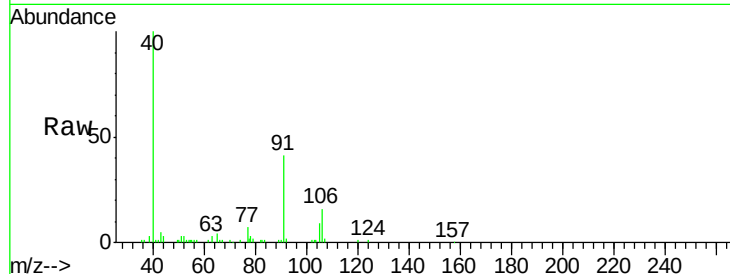
#59
m/p-Xylene
Concen: 0.148 ppbv m
RT: 13.12 min Scan# 3166
Delta R.T. -0.04 min
Lab File: VL033485.D
Acq: 28 Mar 2019 2:12

Instrument :
MSVOA_L
ClientSampleId :
VMP-2

Tot Ion	Ratio	Lower	Upper
91	100		
106	0.0	0.0	0.0

Manual Integrations
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4/1/2019 1:26:03 AM



#68
1-Bromo-4-Fluorobenzene
Concen: 9.890 ppbv
RT: 14.57 min Scan# 3618
Delta R.T. -0.01 min
Lab File: VL033485.D
Acq: 28 Mar 2019 2:12

Tgt Ion	Ratio	Lower	Upper
95	100		
174	67.1	52.9	79.3
175	4.7	3.8	5.6

