

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL122017\
 Data File : VL031279.D
 Acq On : 20 Dec 2017 21:21
 Operator : SY/AP
 Sample : I7005-04
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 EP1-SV-3

Manual Integrations
 APPROVED

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 12/22/2017 4:54:55 PM

Quant Time: Dec 22 05:41:44 2017
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL121317AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Dec 14 2017
 QLast Update : Thu Dec 14 04:29:58 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.91	49	1564902	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.46	114	3693664	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.42	117	3474954	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.76	95	2703684	10.94	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	109.40%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.18	85	33925	0.26	ppbv	95
3) Chlorodifluoromethane	3.12	51	56152	0.32	ppbv	99
4) Chloromethane	3.28	50	21299	0.22	ppbv	94
9) Propene	3.14	41	971070	11.12	ppbv	100
10) Heptane	8.40	43	161925m	0.61	ppbv	
11) Trichlorofluoromethane	4.13	101	67638	0.31	ppbv	97
13) Ethanol	3.77	45	158810	6.31	ppbv	96
15) Acetone	4.02	43	3596781	17.42	ppbv #	53
17) tert-Butyl alcohol	4.51	59	176930	1.53	ppbv #	94
20) Methylene Chloride	4.55	84	118849	1.74	ppbv	96
26) Hexane	5.93	57	242103	1.21	ppbv #	5
27) Carbon Disulfide	4.76	76	354993	1.77	ppbv	98
30) Cyclohexane	7.41	84	38465	0.22	ppbv #	1
34) 2-Butanone	5.47	43	10461690	40.10	ppbv	96
36) Benzene	7.17	78	311150	0.79	ppbv	95
38) Trichloroethene	8.13	130	440683	2.89	ppbv	97
44) 2,2,4-Trimethylpentane	8.16	57	190687	0.32	ppbv #	73
51) 2-Hexanone	10.46	43	391308	1.28	ppbv #	98
52) Tetrachloroethene	11.60	164	27219279	188.47	ppbv	93
53) Toluene	10.12	91	1828937	4.31	ppbv	97
58) Ethyl Benzene	13.04	91	494994	0.86	ppbv	97
59) m/p-Xylene	13.30	91	743695	1.62	ppbv	99
60) o-Xylene	14.03	91	277362	0.60	ppbv	99
61) Styrene	13.86	104	55537m	0.42	ppbv	
62) Isopropylbenzene	15.01	105	76858m	0.13	ppbv	
72) 4-Ethyltoluene	16.17	105	66108	0.13	ppbv #	95
73) 1,3,5-Trimethylbenzene	16.33	105	60195	0.13	ppbv	97
74) 1,2,4-Trimethylbenzene	17.10	105	103078m	0.22	ppbv	

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

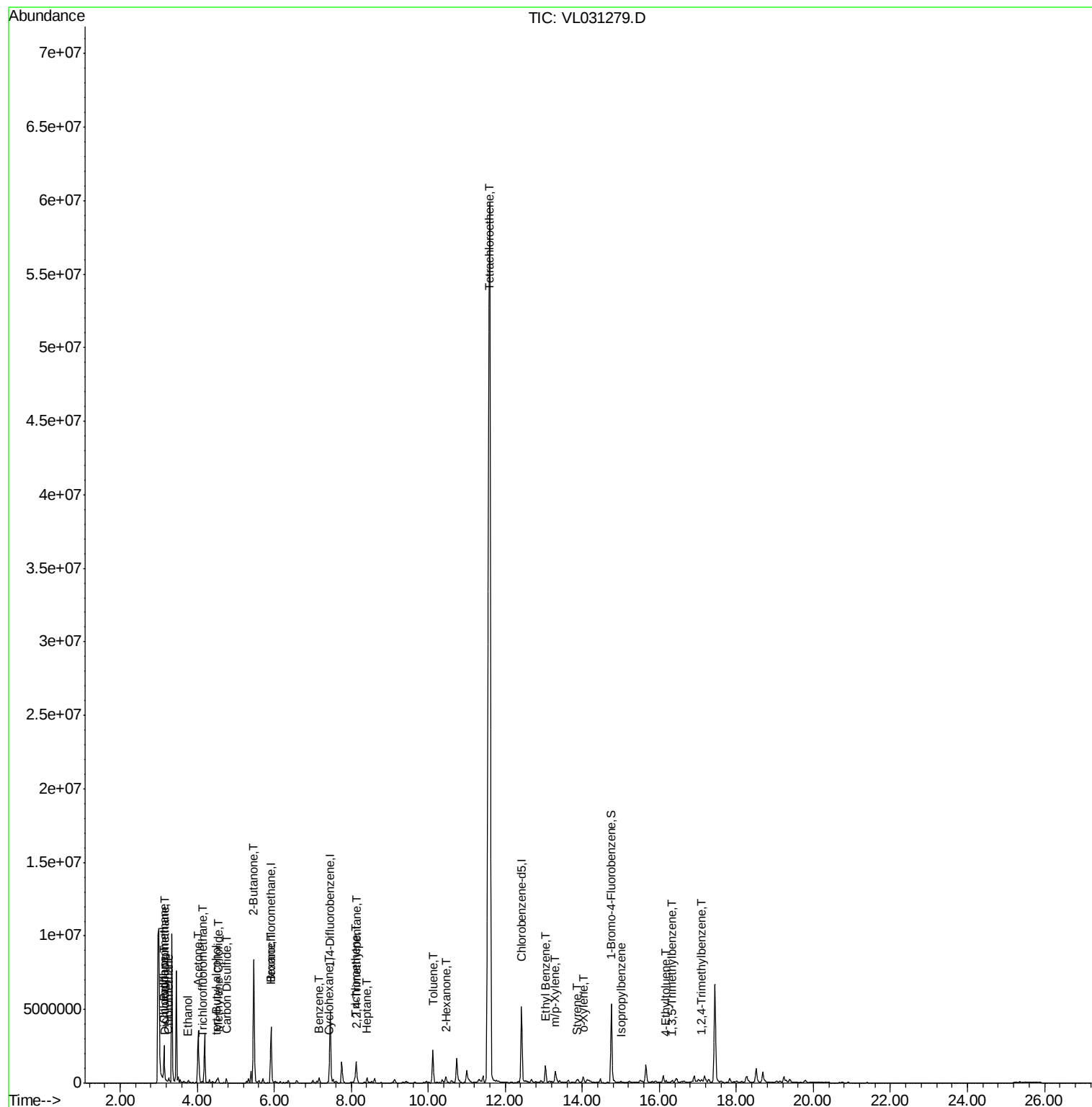
Data Path : W:\HPCHEM1\MSVOA L\DATA\VL122017\
Data File : VL031279.D
Acq On : 20 Dec 2017 21:21
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Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

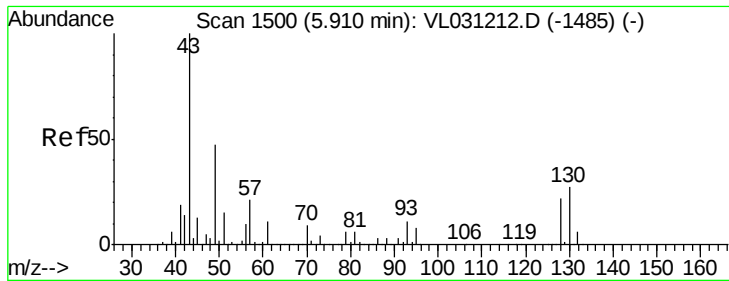
Instrument :
MSVOA_L
ClientSampleId :
EP1-SV-3

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Quant Time: Dec 22 05:41:44 2017
Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL121317AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Dec
QLast Update : Thu Dec 14 04:29:58 2017
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.91 min Scan# 1501

Delta R.T. 0.00 min

Lab File: VL031279.D

Acq: 20 Dec 2017 21:21

Instrument :

MSVOA_L

ClientSampleId :

EP1-SV-3

Tot Ion: 49 Resp: 1564902

Ion Ratio Lower Upper

49 100

128 48.2 23.2 69.5

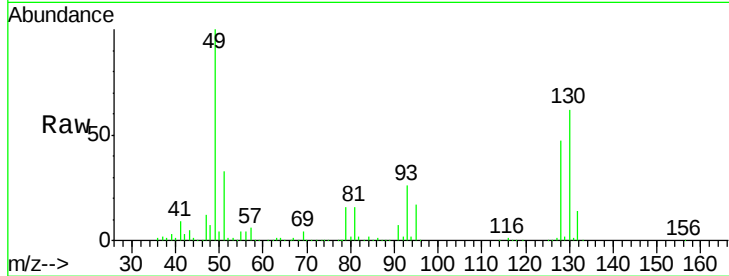
130 61.7 29.6 88.8

Manual Integrations

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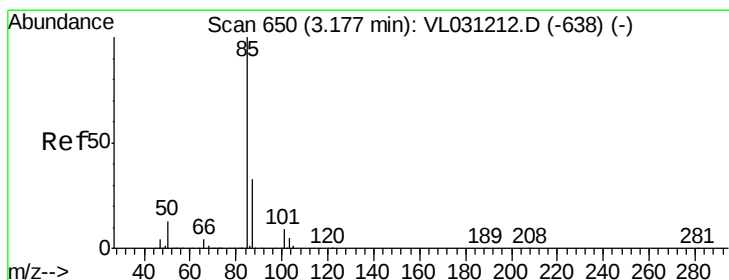
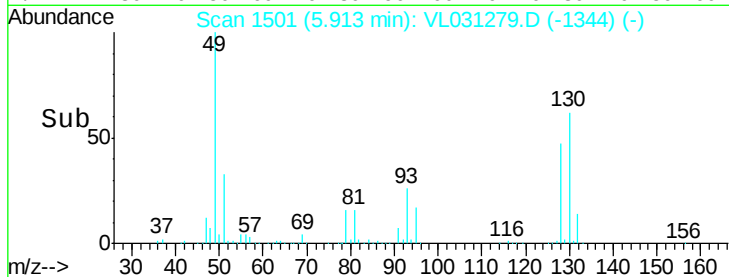
Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0

5.91

Time-->



#2

Dichlorodifluoromethane

Concen: 0.26 ppbv

RT: 3.18 min Scan# 651

Delta R.T. 0.00 min

Lab File: VL031279.D

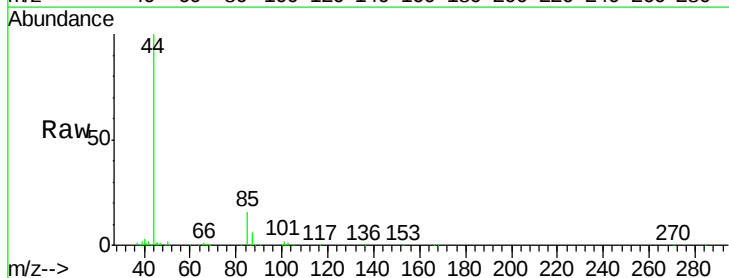
Acq: 20 Dec 2017 21:21

Tgt Ion: 85 Resp: 33925

Ion Ratio Lower Upper

85 100

87 35.5 26.2 39.2

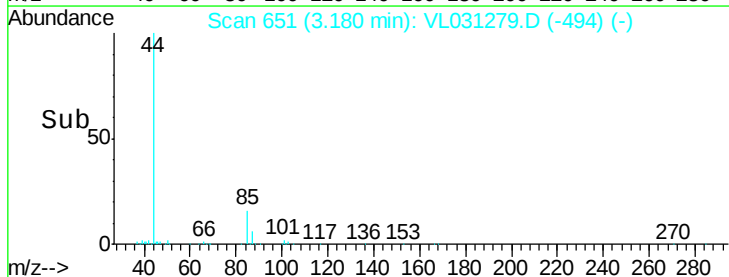


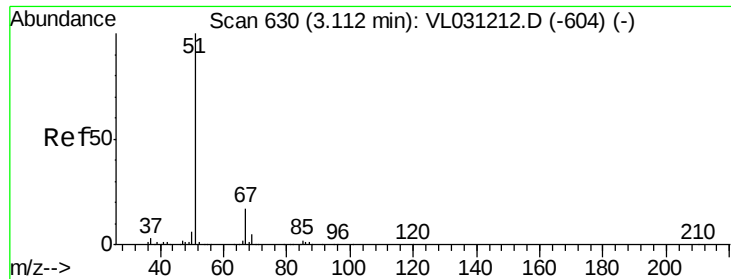
Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

3.18

Time-->





#3

Chlorodifluoromethane

Concen: 0.32 ppbv

RT: 3.12 min Scan# 631

Delta R.T. 0.00 min

Lab File: VL031279.D

Acq: 20 Dec 2017 21:21

Instrument :

MSVOA_L

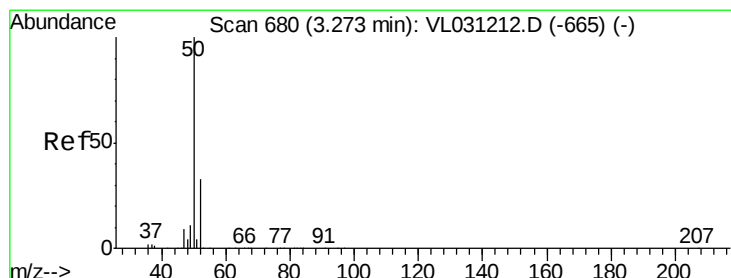
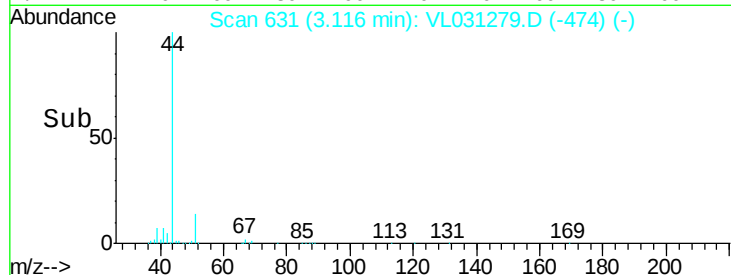
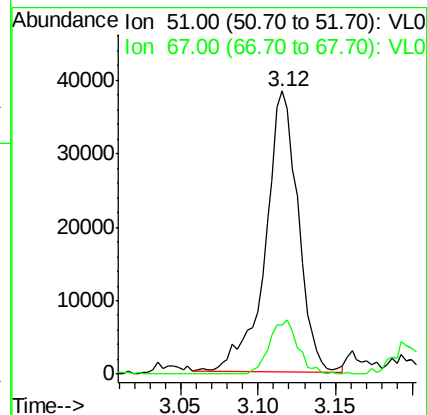
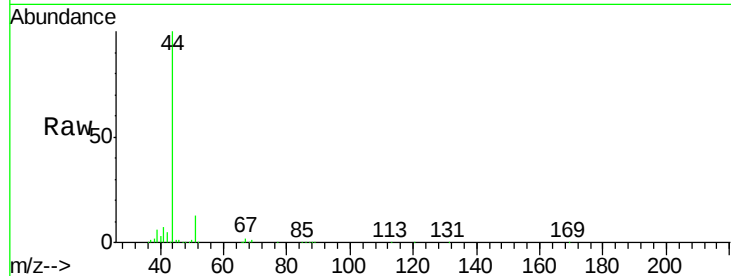
ClientSampleId :

EP1-SV-3

Tot Ion	Ratio	Lower	Upper
51	100		
67	16.8	13.8	20.6

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#4

Chloromethane

Concen: 0.22 ppbv

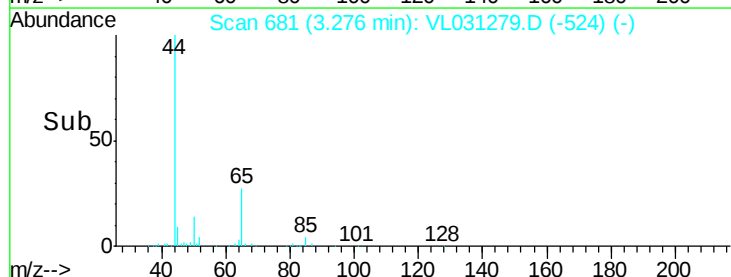
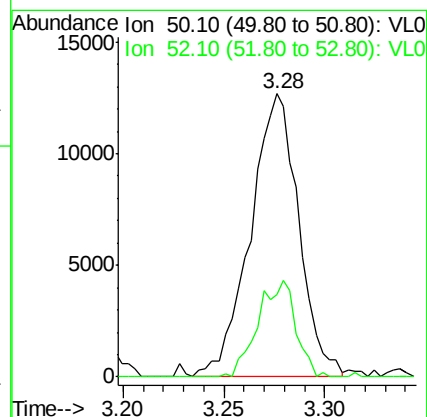
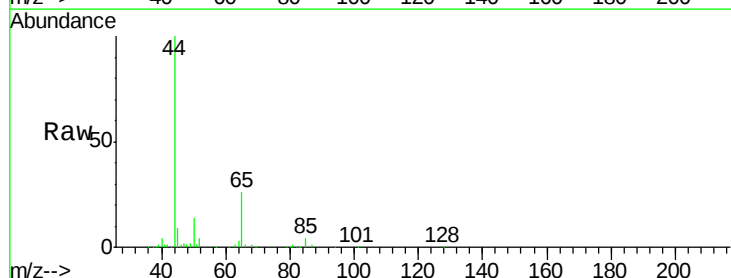
RT: 3.28 min Scan# 681

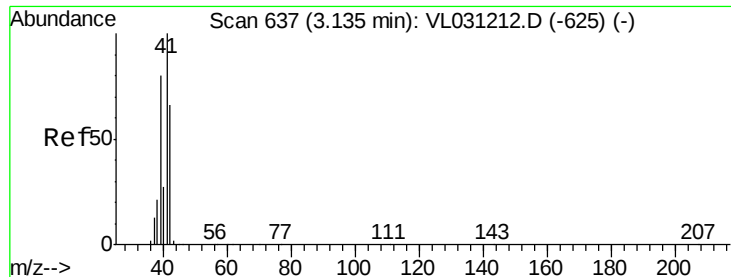
Delta R.T. 0.00 min

Lab File: VL031279.D

Acq: 20 Dec 2017 21:21

Tgt Ion	Ratio	Lower	Upper
50	100		
52	29.7	26.5	39.7





#9

Propene

Concen: 11.12 ppbv

RT: 3.14 min Scan# 638

Delta R.T. 0.00 min

Lab File: VL031279.D

Acq: 20 Dec 2017 21:21

Instrument :

MSVOA_L

ClientSampleId :

EP1-SV-3

Tot Ion: 41 Resp: 971070

Ion Ratio Lower Upper

41 100

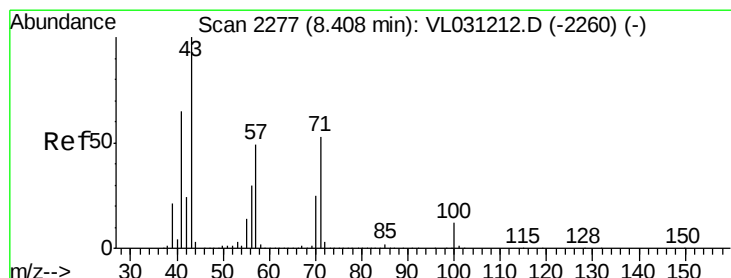
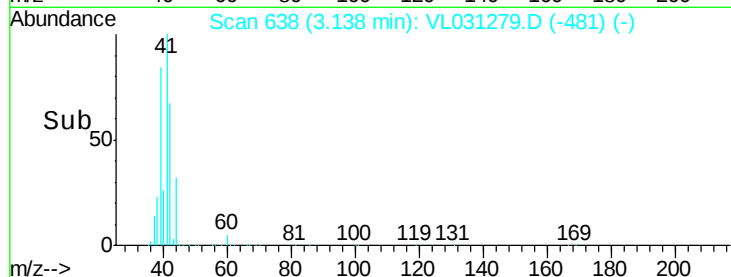
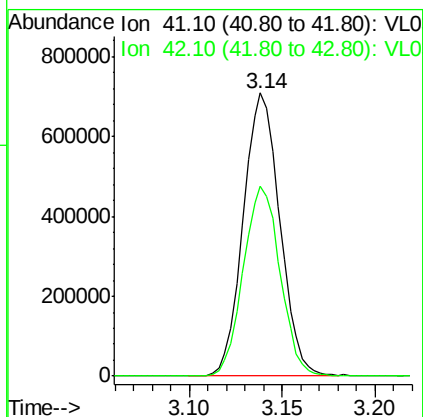
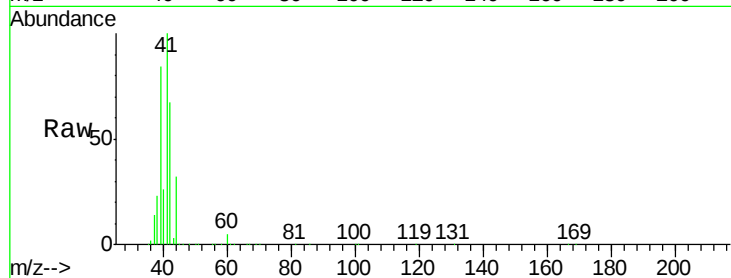
42 67.7 54.3 81.5

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#10

Heptane

Concen: 0.61 ppbv m

RT: 8.40 min Scan# 2276

Delta R.T. -0.00 min

Lab File: VL031279.D

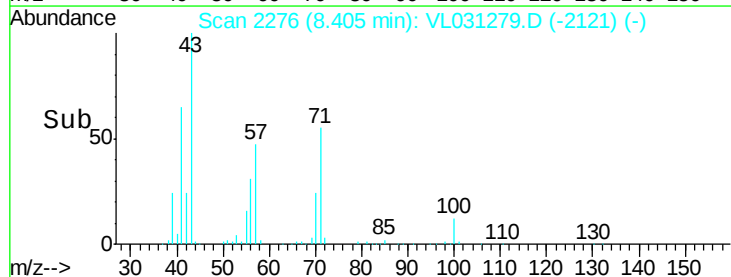
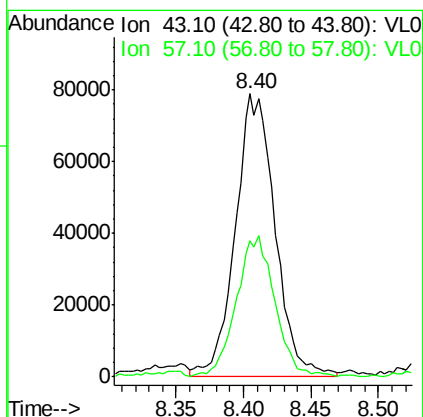
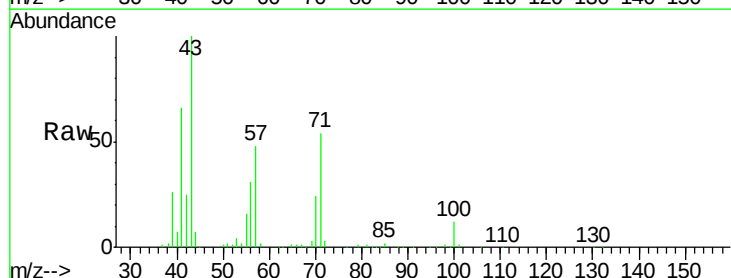
Acq: 20 Dec 2017 21:21

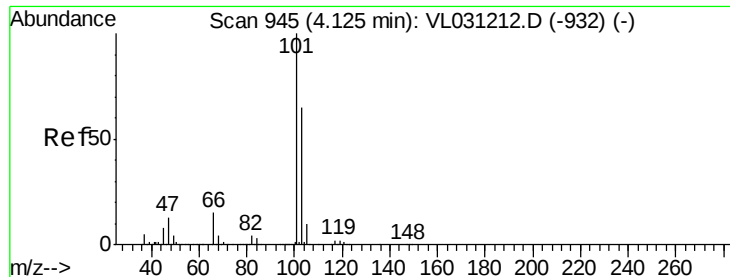
Tgt Ion: 43 Resp: 161925

Ion Ratio Lower Upper

43 100

57 48.9 39.8 59.8





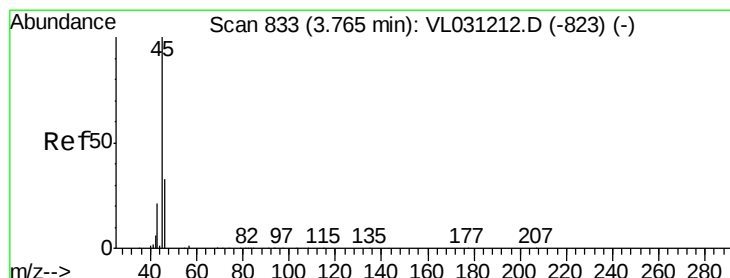
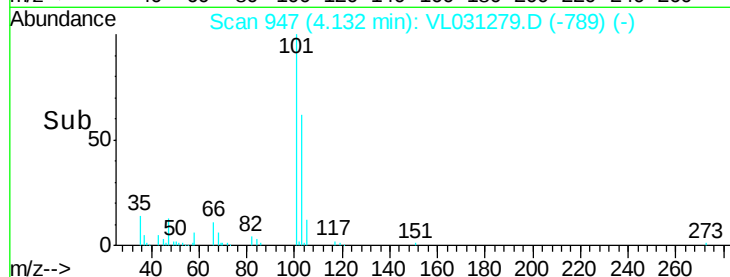
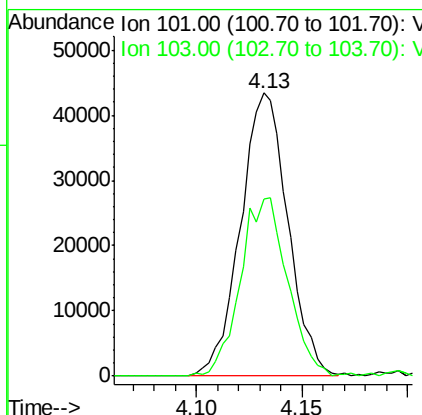
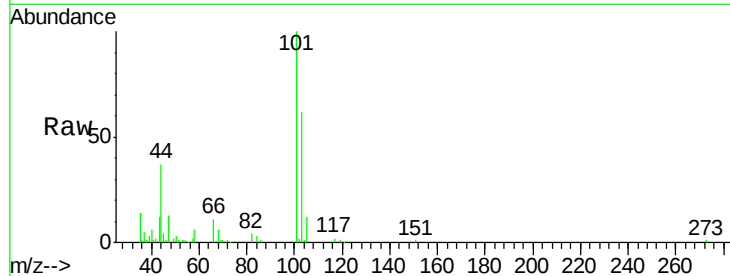
#11
Trichlorofluoromethane
Concen: 0.31 ppbv
RT: 4.13 min Scan# 947
Delta R.T. 0.01 min
Lab File: VL031279.D
Acq: 20 Dec 2017 21:21

Instrument :
MSVOA_L
ClientSampleId :
EP1-SV-3

Tot Ion	Ratio	Lower	Upper
101	100		
103	62.5	51.8	77.8

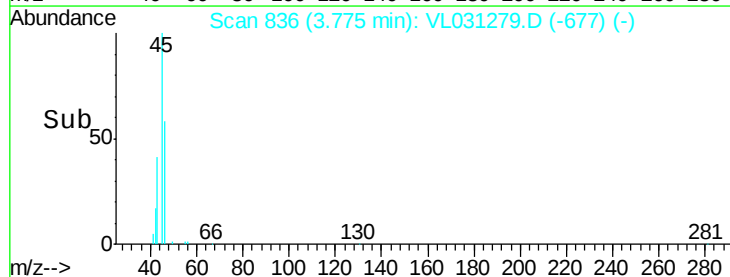
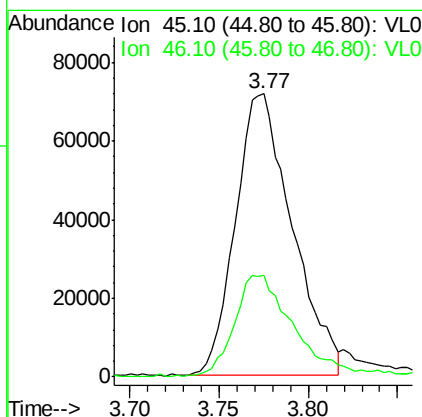
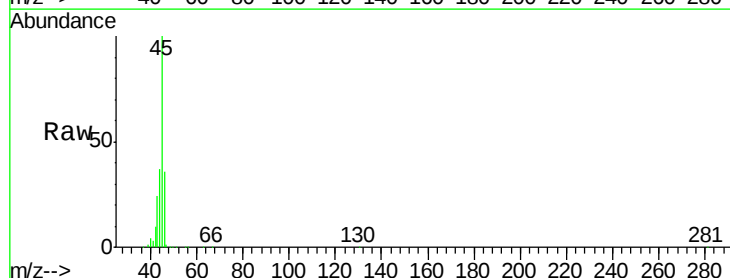
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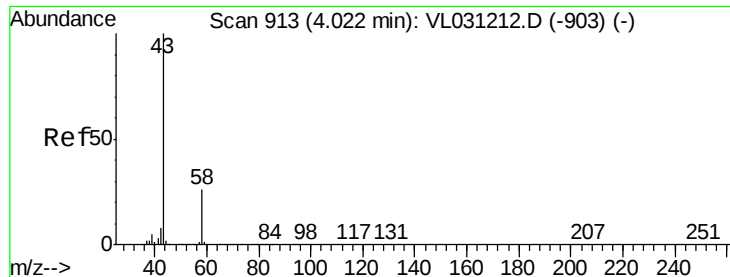
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#13
Ethanol
Concen: 6.31 ppbv
RT: 3.77 min Scan# 836
Delta R.T. 0.01 min
Lab File: VL031279.D
Acq: 20 Dec 2017 21:21

Tgt Ion	Ratio	Lower	Upper
45	100		
46	38.9	14.6	58.4





#15

Acetone

Concen: 17.42 ppbv

RT: 4.02 min Scan# 913

Delta R.T. 0.00 min

Lab File: VL031279.D

Acq: 20 Dec 2017 21:21

Instrument :

MSVOA_L

ClientSampled :

EP1-SV-3

Tot Ion: 43 Resp: 3596781

Ion Ratio Lower Upper

43 100

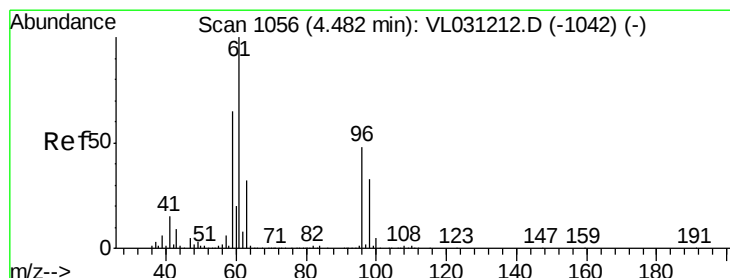
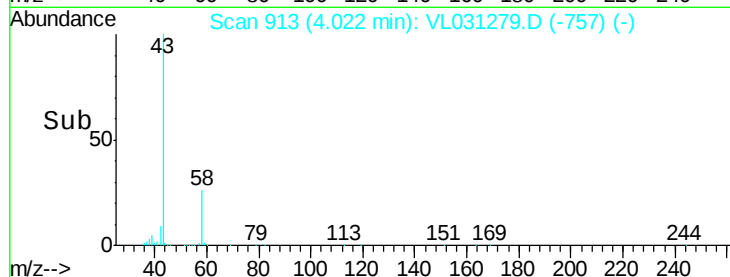
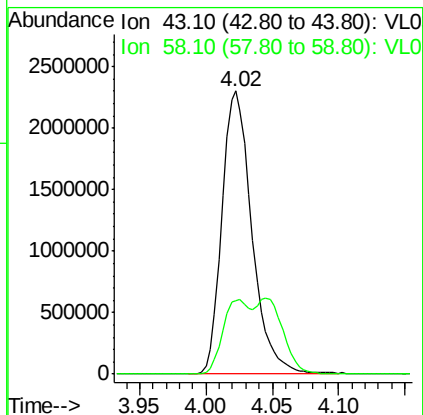
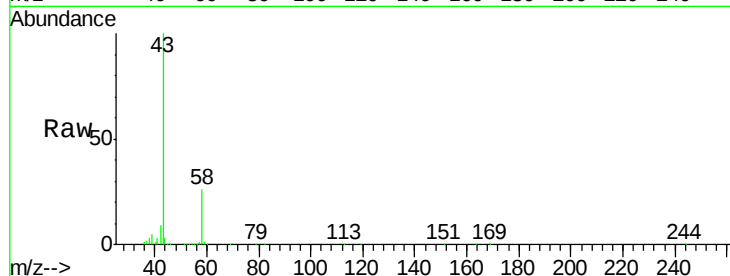
58 49.3 20.3 30.5#

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#17

tert-Butyl alcohol

Concen: 1.53 ppbv

RT: 4.51 min Scan# 1064

Delta R.T. 0.03 min

Lab File: VL031279.D

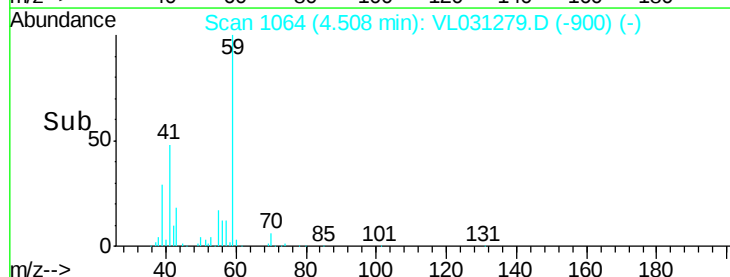
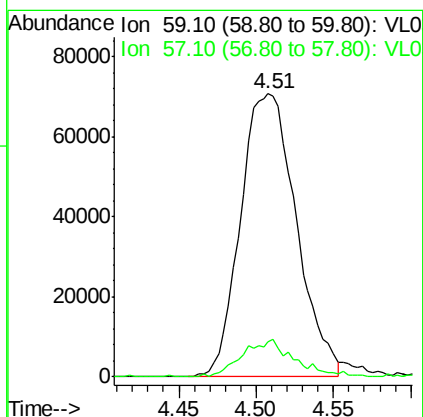
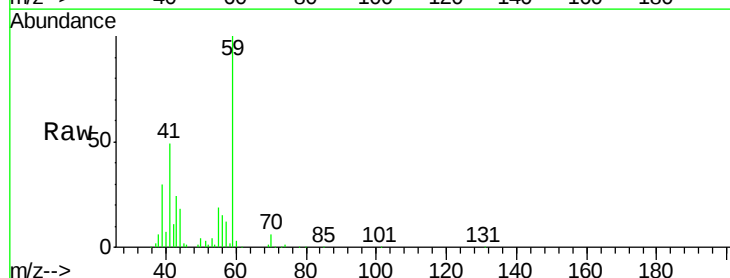
Acq: 20 Dec 2017 21:21

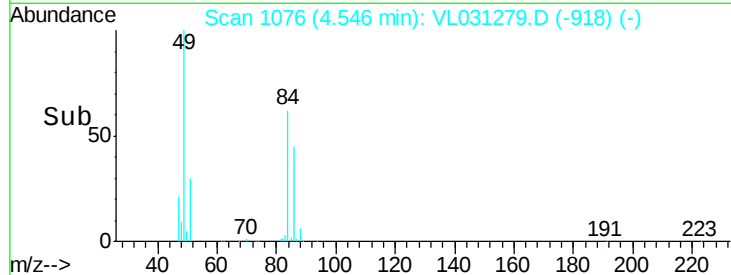
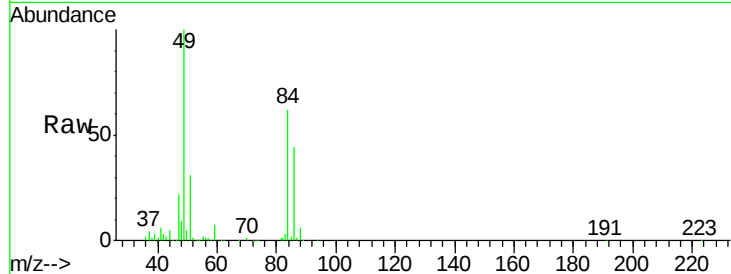
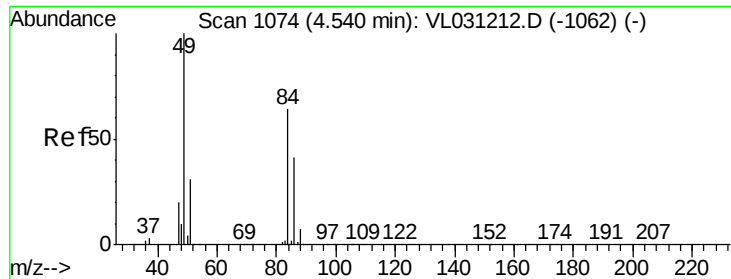
Tgt Ion: 59 Resp: 176930

Ion Ratio Lower Upper

59 100

57 12.3 8.2 12.2#





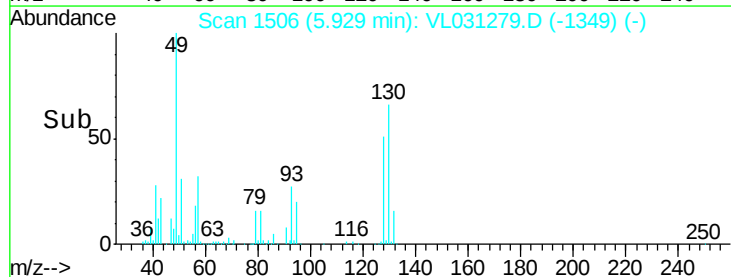
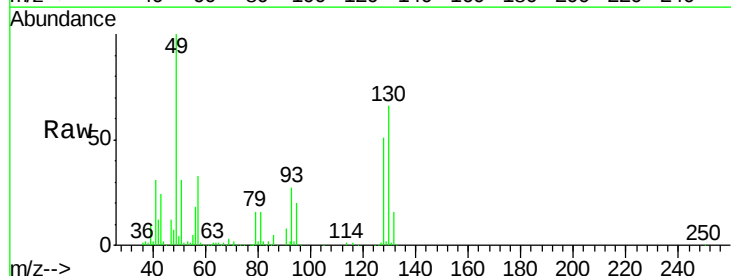
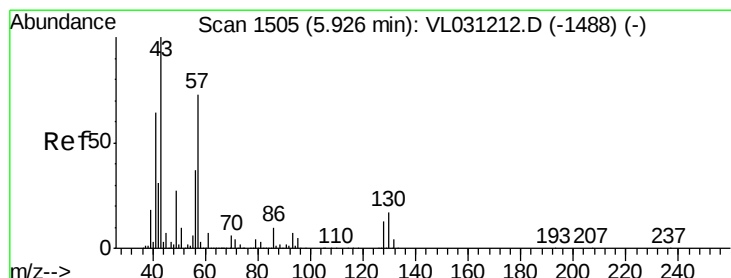
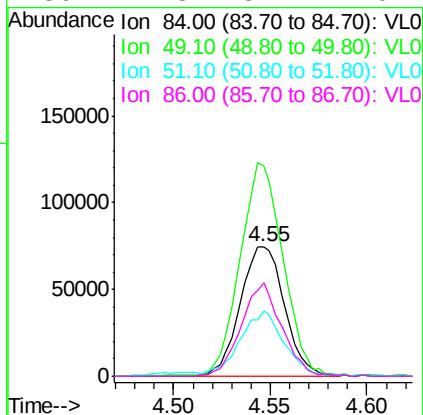
#20
Methvlene Chloride
Concen: 1.74 ppbv
RT: 4.55 min Scan# 1076
Delta R.T. 0.01 min
Lab File: VL031279.D
Acq: 20 Dec 2017 21:21

Tot Ion	84	Resp	118849
Ion	Ratio	Lower	Upper
84	100		
49	160.5	125.8	188.6
51	49.8	39.3	58.9
86	71.8	51.1	76.7

Instrument :
MSVOA_L
ClientSampleId :
EP1-SV-3

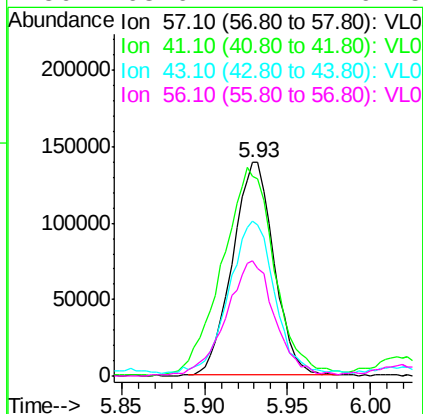
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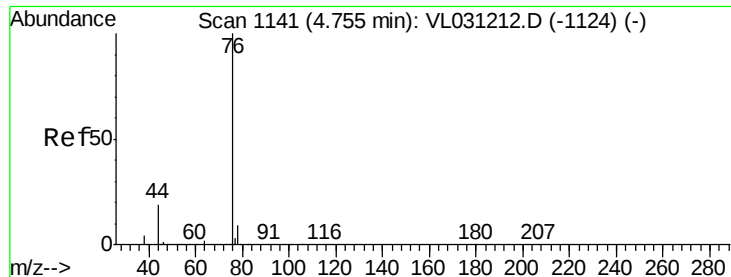
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#26
Hexane
Concen: 1.21 ppbv
RT: 5.93 min Scan# 1506
Delta R.T. 0.00 min
Lab File: VL031279.D
Acq: 20 Dec 2017 21:21

Tgt Ion	57	Resp	242103
Ion	Ratio	Lower	Upper
57	100		
41	123.5	70.3	105.5#
43	0.0	173.8	260.8#
56	63.6	41.7	62.5#





#27

Carbon Disulfide

Concen: 1.77 ppbv

RT: 4.76 min Scan# 1142

Delta R.T. 0.00 min

Lab File: VL031279.D

Acq: 20 Dec 2017 21:21

Instrument :

MSVOA_L

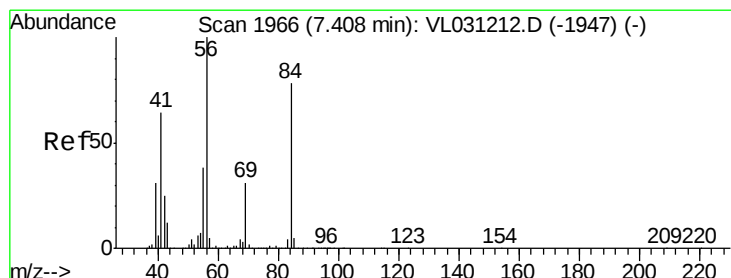
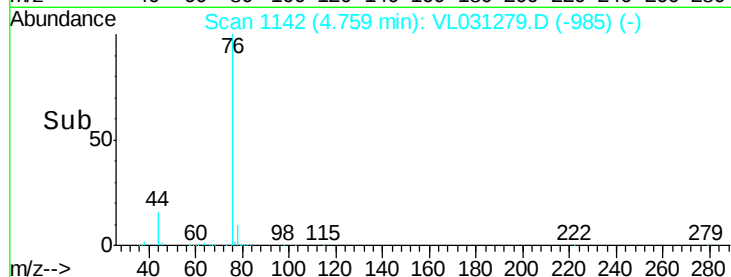
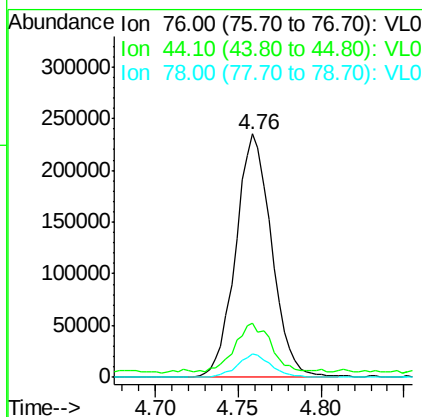
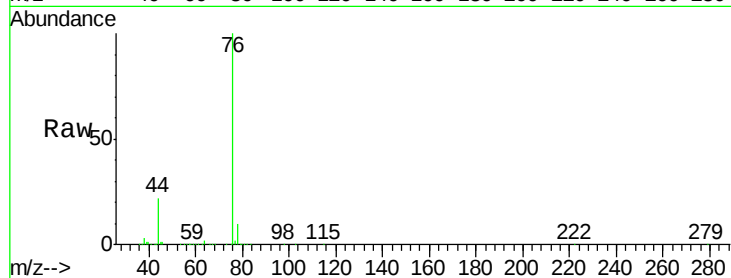
ClientSampleId :

EP1-SV-3

Tot Ion:	76	Resp:	354993
Ion	Ratio	Lower	Upper
76	100		
44	21.1	16.0	24.0
78	9.2	7.5	11.3

Manual Integrations
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#30

Cyclohexane

Concen: 0.22 ppbv

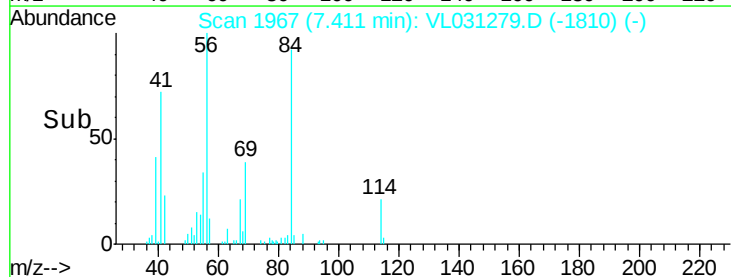
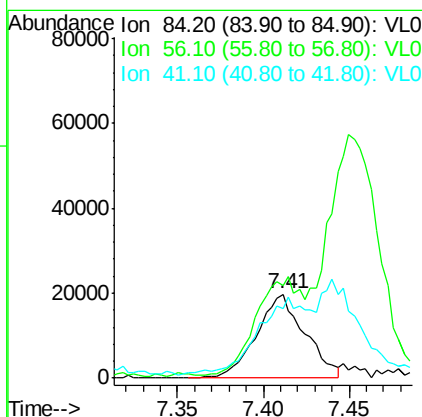
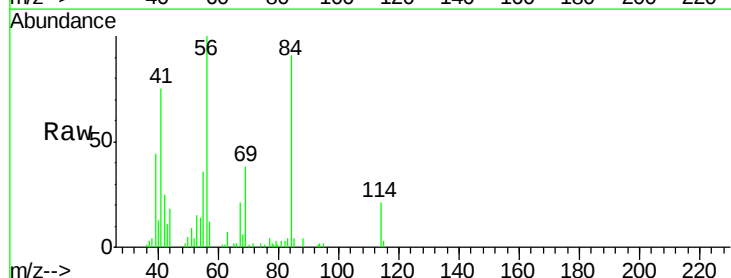
RT: 7.41 min Scan# 1967

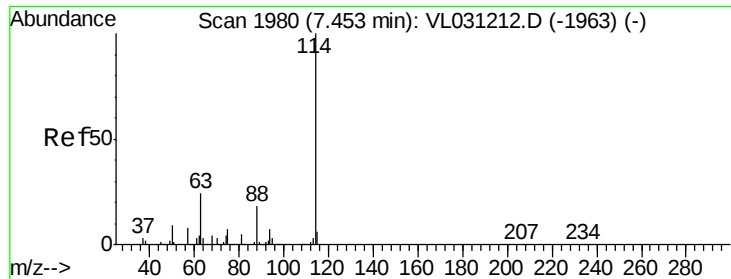
Delta R.T. 0.00 min

Lab File: VL031279.D

Acq: 20 Dec 2017 21:21

Tgt Ion:	84	Resp:	38465
Ion	Ratio	Lower	Upper
84	100		
56	0.0	108.0	162.0#
41	0.0	66.2	99.4#





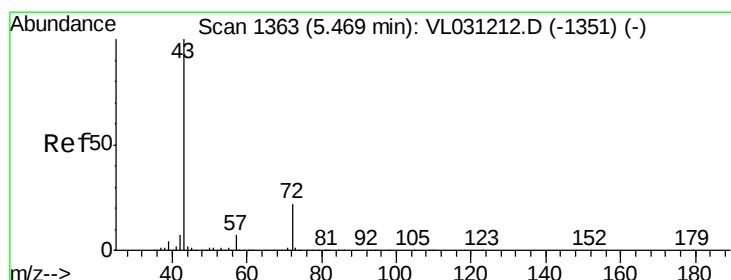
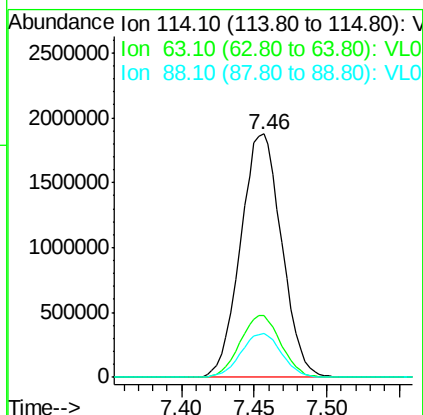
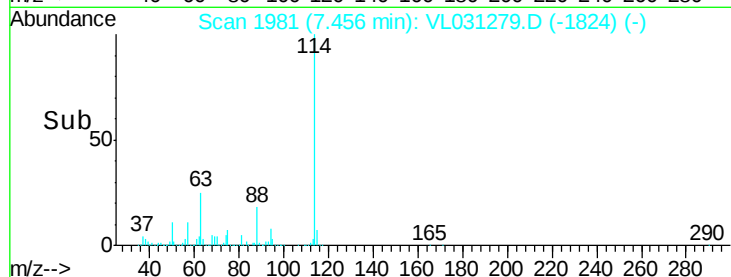
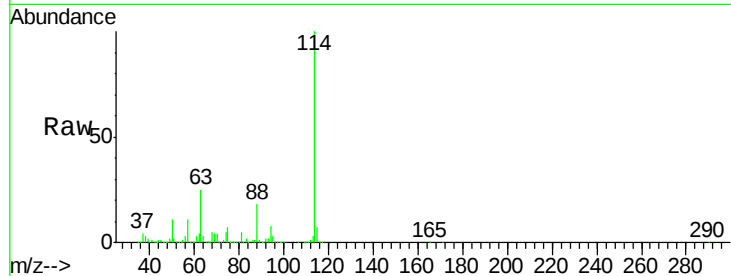
#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 7.46 min Scan# 1981
 Delta R.T. 0.00 min
 Lab File: VL031279.D
 Acq: 20 Dec 2017 21:21

Instrument :
 MSVOA_L
 ClientSampleId :
 EP1-SV-3

Tot Ion	Ratio	Lower	Upper
114	100		
63	25.3	19.8	29.8
88	17.9	14.2	21.4

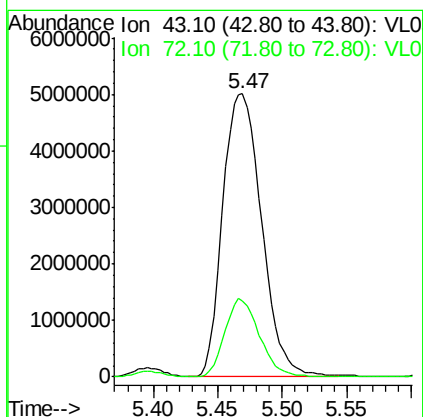
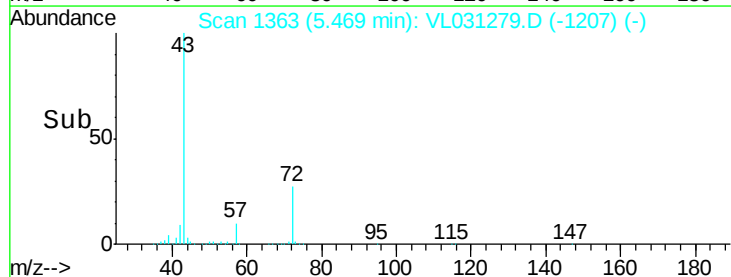
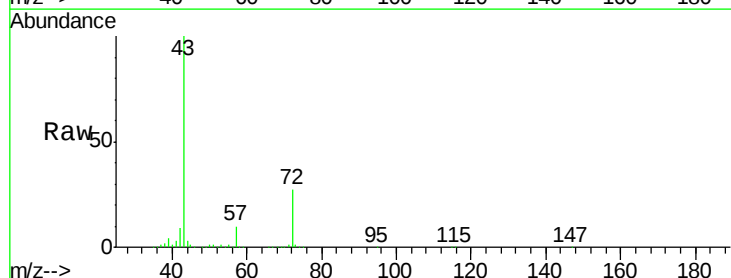
Manual Integrations
 APPROVED

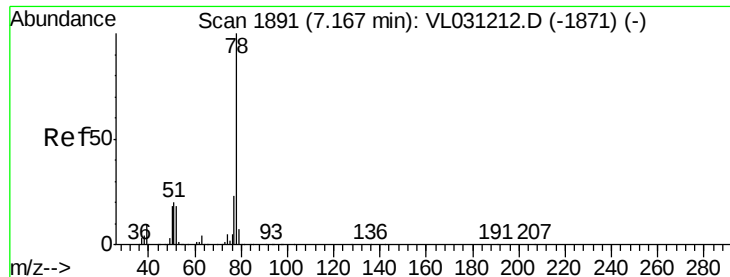
MMDadoda
 12/22/2017 4:54:55 PM



#34
 2-Butanone
 Concen: 40.10 ppbv
 RT: 5.47 min Scan# 1363
 Delta R.T. 0.00 min
 Lab File: VL031279.D
 Acq: 20 Dec 2017 21:21

Tgt Ion	Ratio	Lower	Upper
43	100		
72	24.7	18.1	27.1





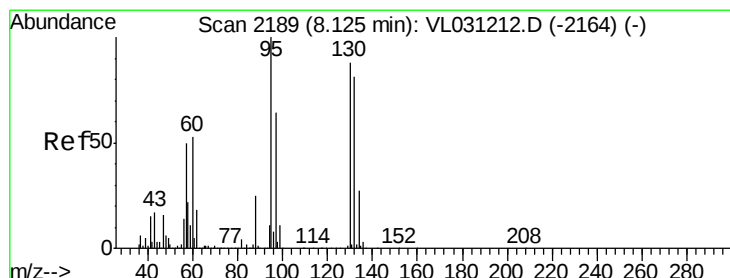
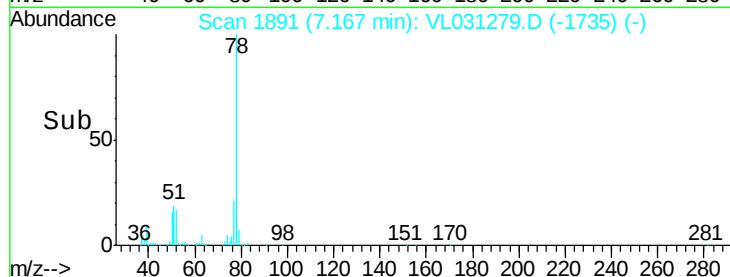
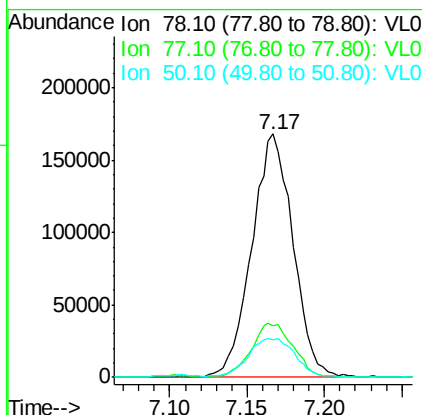
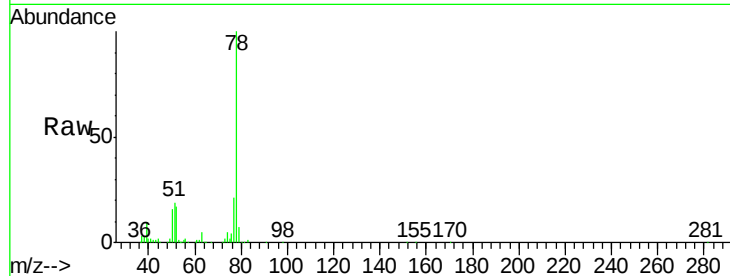
#36
Benzene
Concen: 0.79 ppbv
RT: 7.17 min Scan# 1891
Delta R.T. 0.00 min
Lab File: VL031279.D
Acq: 20 Dec 2017 21:21

Instrument :
MSVOA_L
ClientSampleId :
EP1-SV-3

Tot Ion	Ratio	Lower	Upper
78	100		
77	21.1	18.1	27.1
50	15.3	14.6	21.8

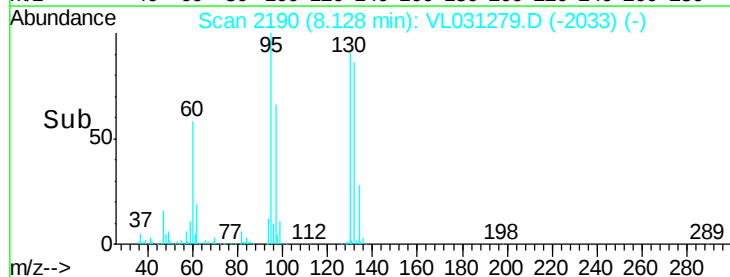
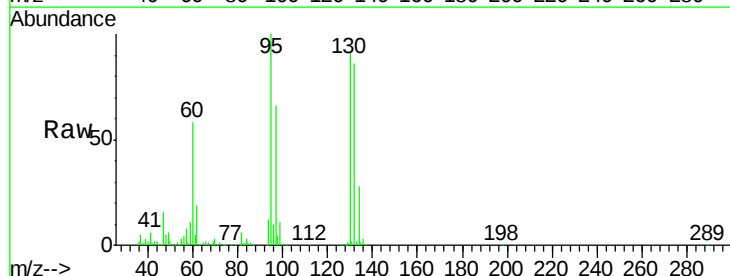
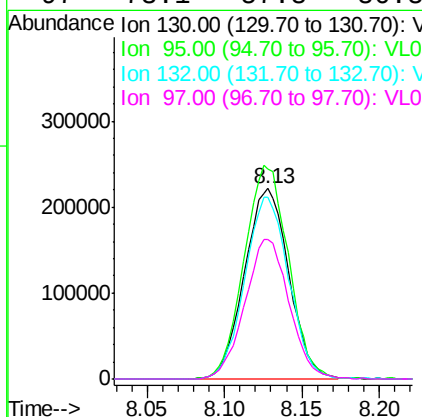
Manual Integrations
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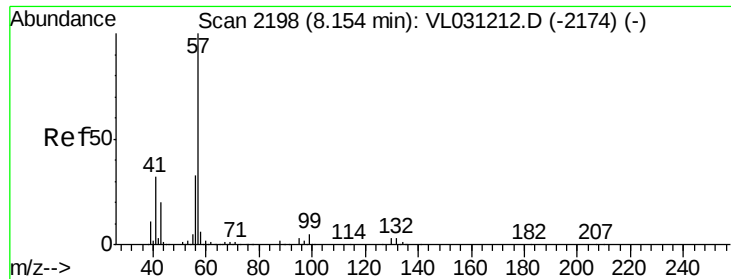
MMDadoda
12/22/2017 4:54:55 PM



#38
Trichloroethene
Concen: 2.89 ppbv
RT: 8.13 min Scan# 2190
Delta R.T. 0.00 min
Lab File: VL031279.D
Acq: 20 Dec 2017 21:21

Tgt Ion	Ratio	Lower	Upper
130	100		
95	110.2	90.6	135.8
132	95.3	73.5	110.3
97	73.1	57.8	86.8





#44

2,2,4-Trimethylpentane

Concen: 0.32 ppbv

RT: 8.16 min Scan# 2199

Delta R.T. 0.00 min

Lab File: VL031279.D

Acq: 20 Dec 2017 21:21

Instrument :

MSVOA_L

ClientSampleId :

EP1-SV-3

Tot Ion: 57 Resp: 190687

Ion Ratio Lower Upper

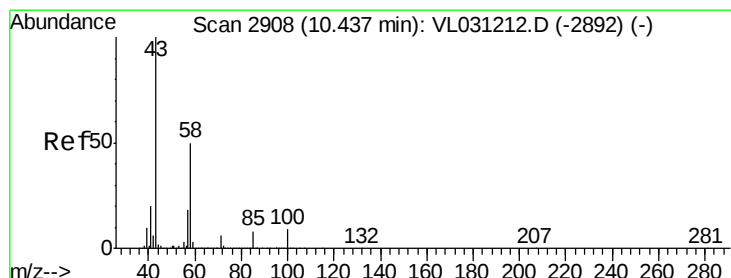
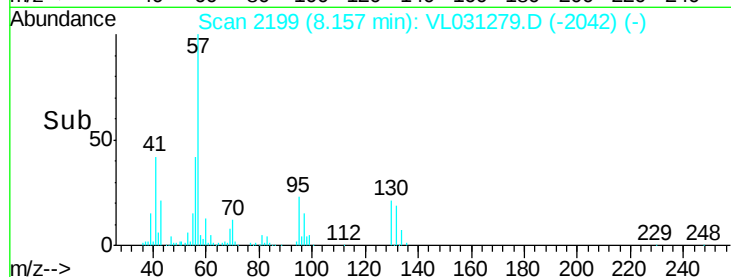
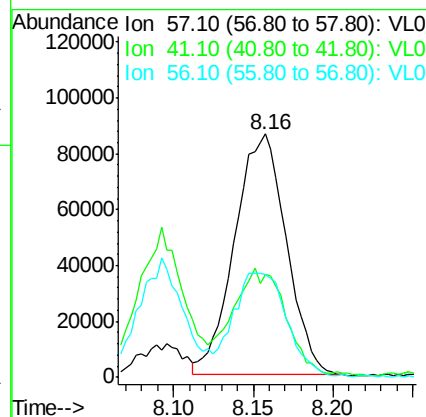
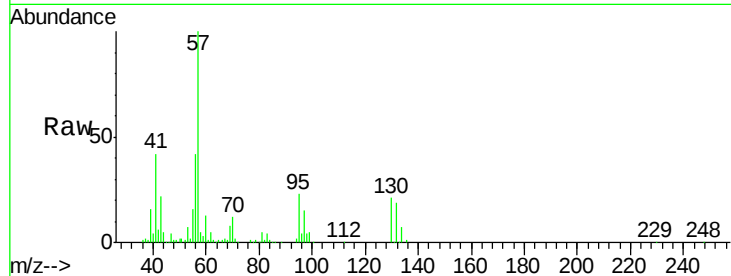
57 100

41 46.5 25.5 38.3#

56 46.5 25.0 37.6#

Manual Integrations
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#51

2-Hexanone

Concen: 1.28 ppbv

RT: 10.46 min Scan# 2914

Delta R.T. 0.02 min

Lab File: VL031279.D

Acq: 20 Dec 2017 21:21

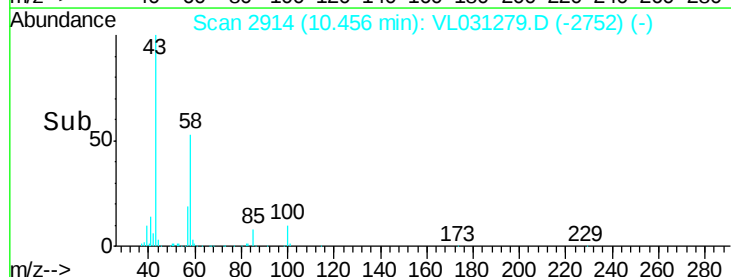
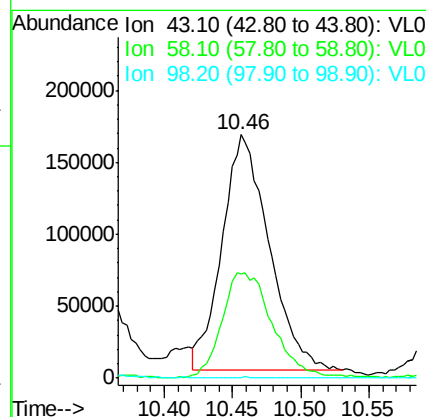
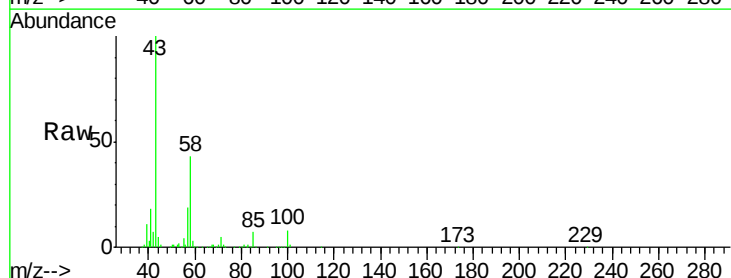
Tgt Ion: 43 Resp: 391308

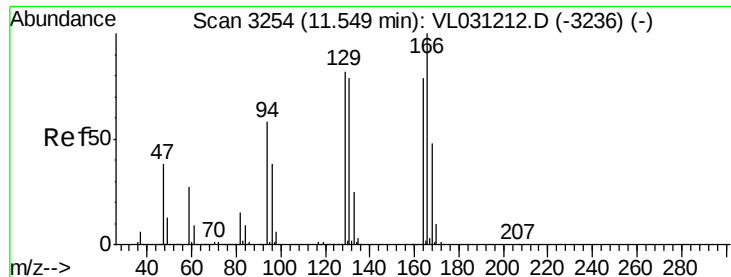
Ion Ratio Lower Upper

43 100

58 48.5 39.8 59.6

98 0.3 0.0 0.0#





#52

Tetrachloroethene

Concen: 188.47 ppbv

RT: 11.60 min Scan# 3269

Delta R.T. 0.05 min

Lab File: VL031279.D

Acq: 20 Dec 2017 21:21

Instrument :

MSVOA_L

ClientSampleId :

EP1-SV-3

Tot Ion:164 Resp:27219279

Ion Ratio Lower Upper

164 100

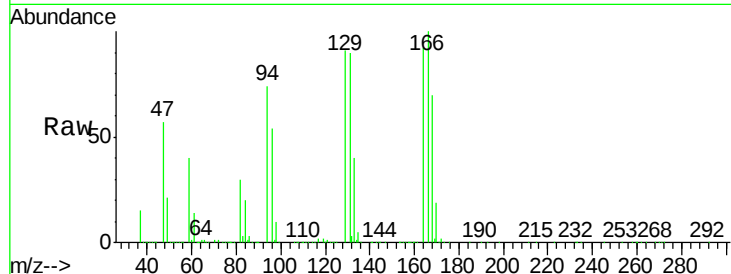
166 109.0 100.6 151.0

129 99.6 82.9 124.3

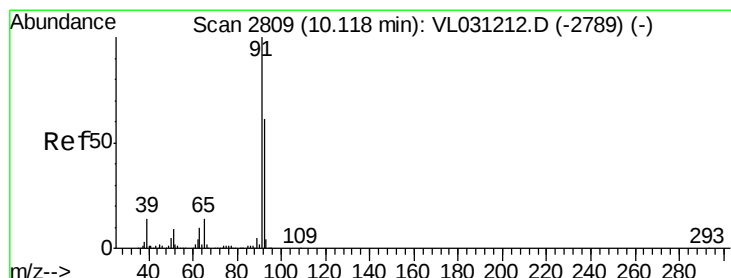
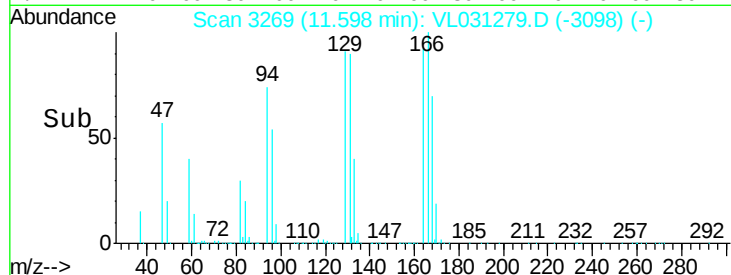
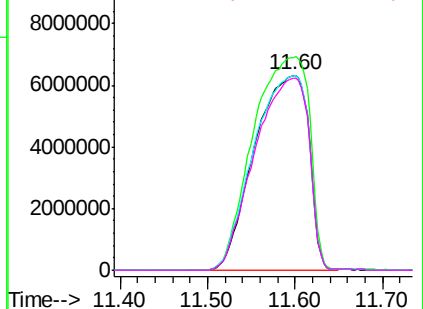
131 98.4 79.2 118.8

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Abundance Ion 163.90 (163.60 to 164.60): V
Ion 165.90 (165.60 to 166.60): V
Ion 129.00 (128.70 to 129.70): V
Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 4.31 ppbv

RT: 10.12 min Scan# 2809

Delta R.T. 0.00 min

Lab File: VL031279.D

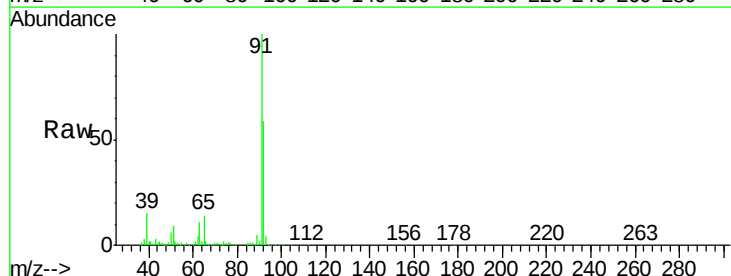
Acq: 20 Dec 2017 21:21

Tgt Ion: 91 Resp: 1828937

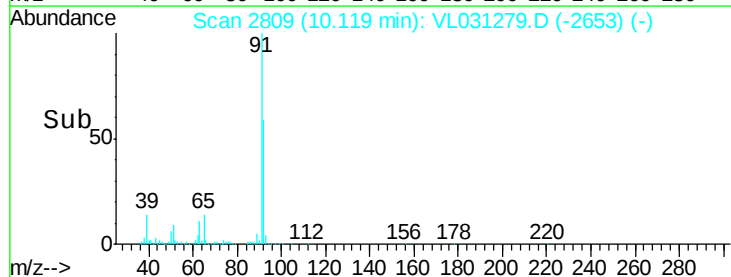
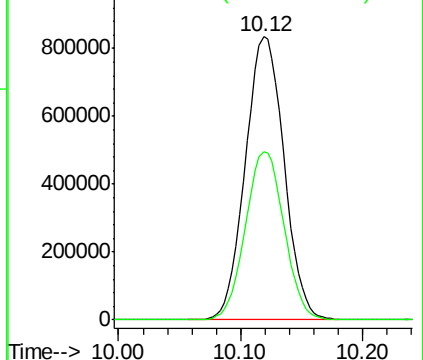
Ion Ratio Lower Upper

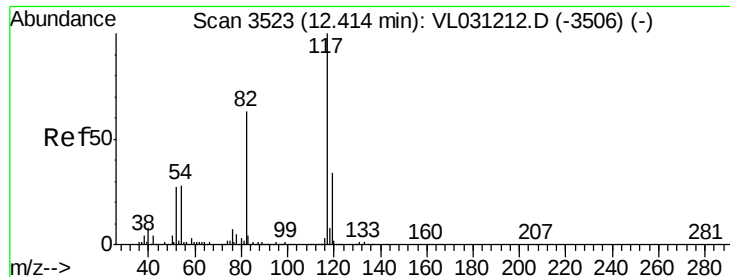
91 100

92 59.3 49.1 73.7



Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 92.10 (91.80 to 92.80): VL0





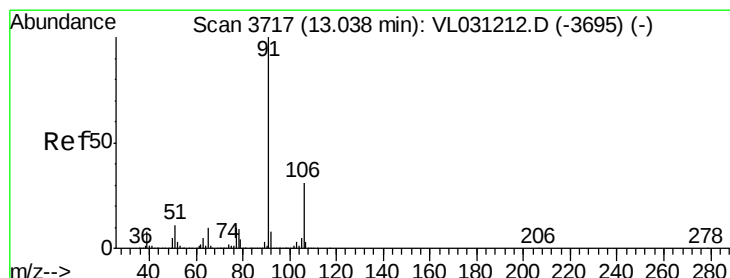
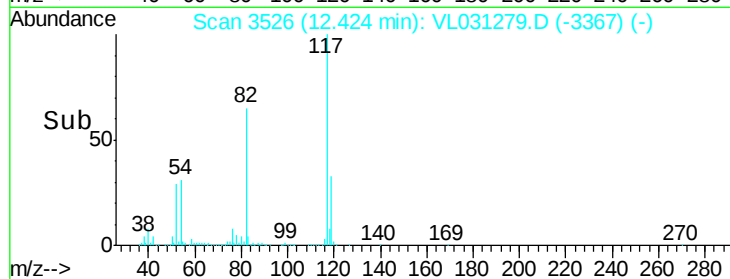
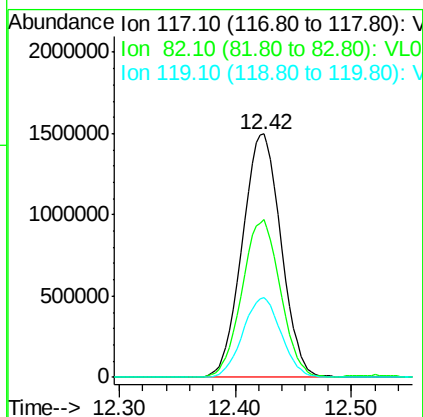
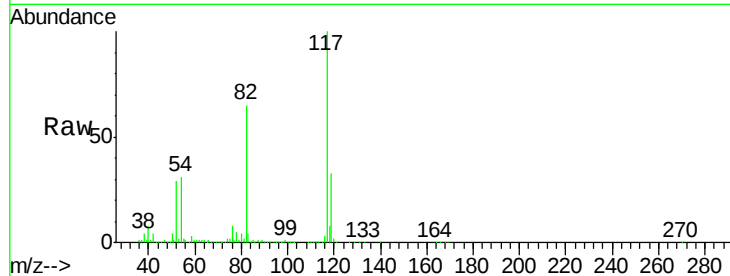
#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 12.42 min Scan# 3526
Delta R.T. 0.01 min
Lab File: VL031279.D
Acq: 20 Dec 2017 21:21

Instrument :
MSVOA_L
ClientSampleId :
EP1-SV-3

Tot Ion	Ratio	Lower	Upper
117	100		
82	64.5	48.1	72.1
119	32.6	23.1	34.7

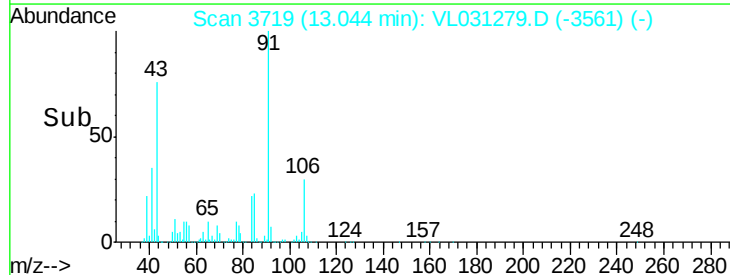
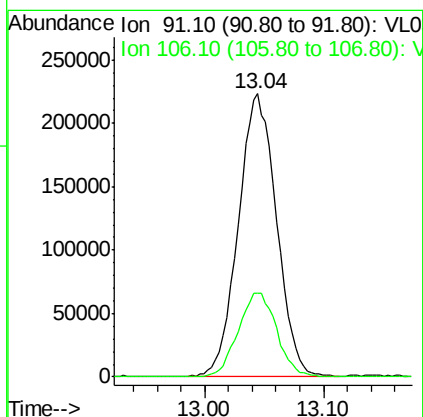
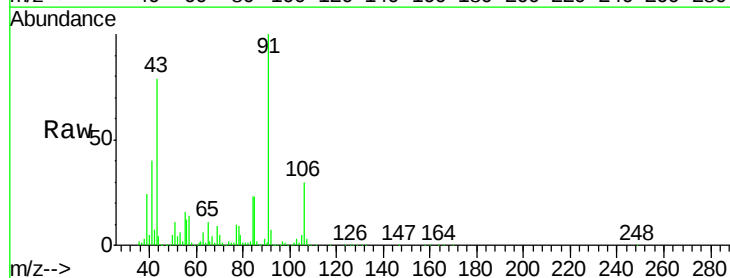
Manual Integrations
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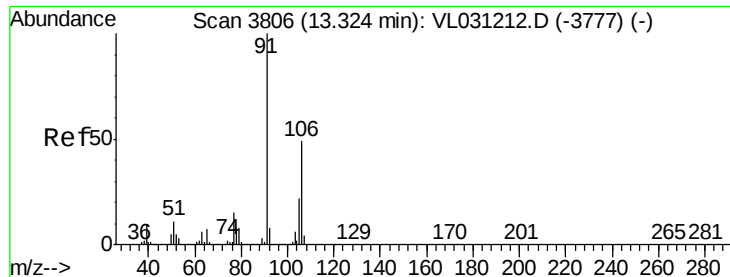
MMDadoda
12/22/2017 4:54:55 PM



#58
Ethyl Benzene
Concen: 0.86 ppbv
RT: 13.04 min Scan# 3719
Delta R.T. 0.01 min
Lab File: VL031279.D
Acq: 20 Dec 2017 21:21

Tgt Ion	Ratio	Lower	Upper
91	100		
106	29.6	25.1	37.7





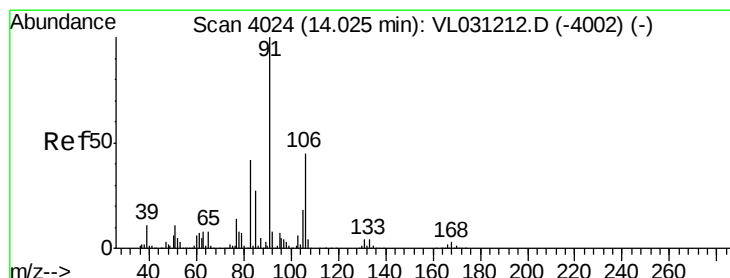
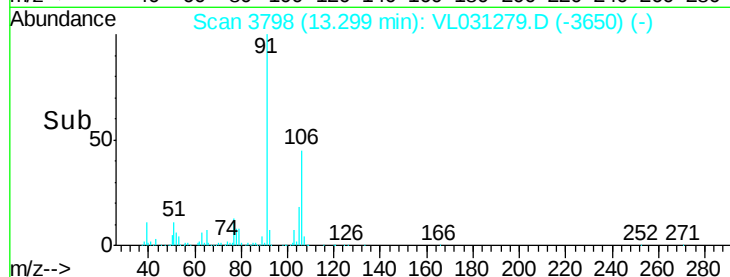
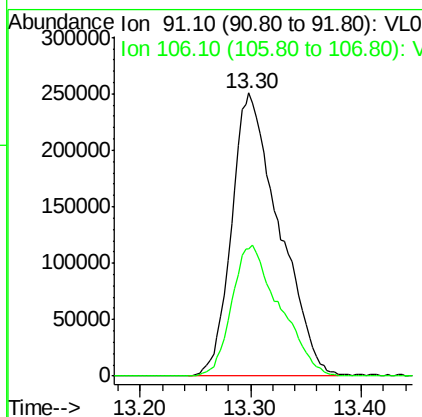
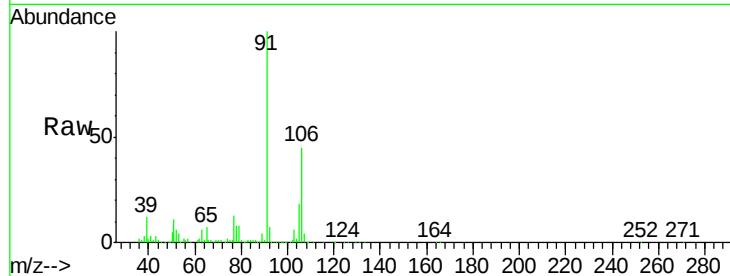
#59
m/p-Xylene
Concen: 1.62 ppbv
RT: 13.30 min Scan# 3798
Delta R.T. -0.03 min
Lab File: VL031279.D
Acq: 20 Dec 2017 21:21

Instrument :
MSVOA_L
ClientSampled :
EP1-SV-3

Tot Ion: 91 Resp: 743695
Ion Ratio Lower Upper
91 100
106 47.1 38.5 57.7

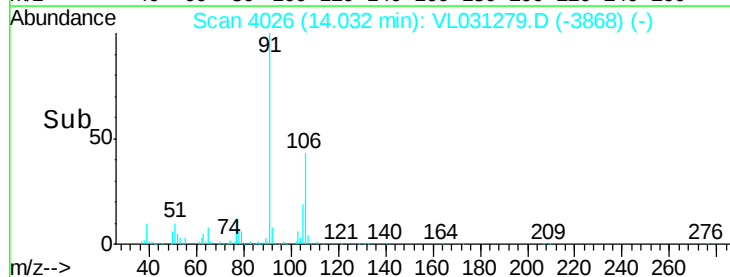
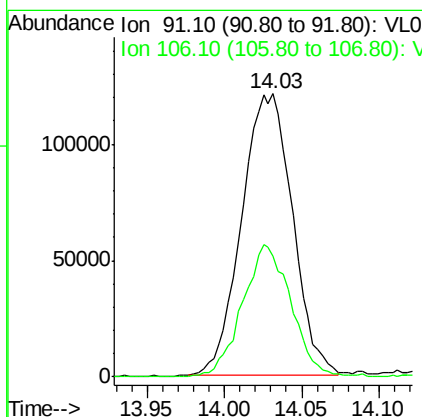
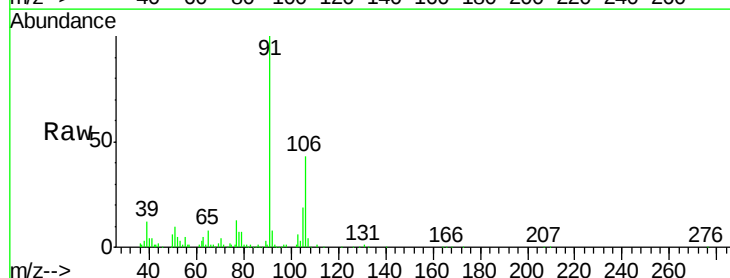
Manual Integrations
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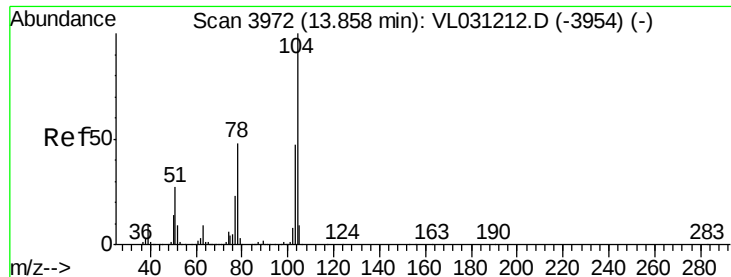
MMDadoda
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#60
o-Xylene
Concen: 0.60 ppbv
RT: 14.03 min Scan# 4026
Delta R.T. 0.01 min
Lab File: VL031279.D
Acq: 20 Dec 2017 21:21

Tgt Ion: 91 Resp: 277362
Ion Ratio Lower Upper
91 100
106 44.7 22.7 68.1





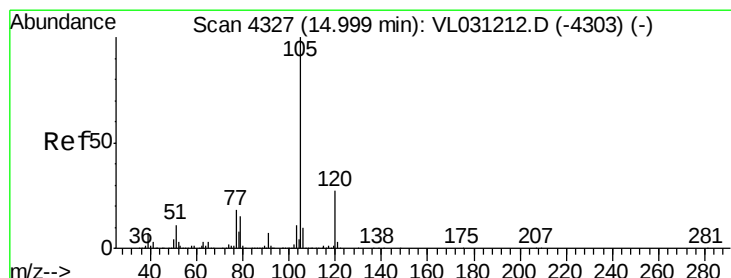
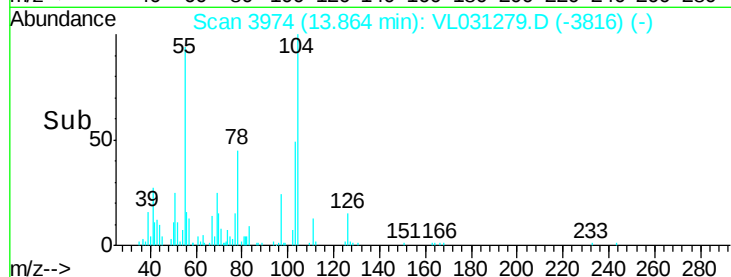
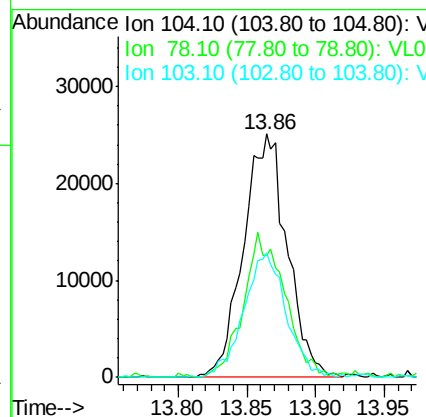
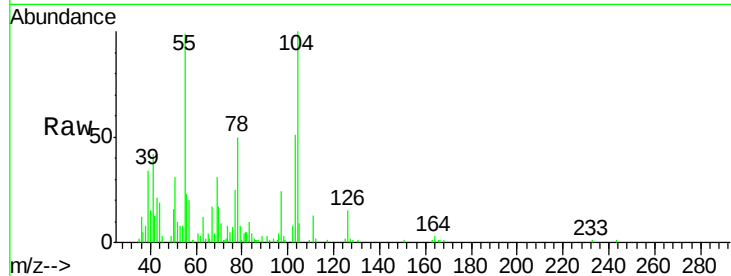
#61
Stvrene
Concen: 0.42 ppbv m
RT: 13.86 min Scan# 3974
Delta R.T. 0.01 min
Lab File: VL031279.D
Acq: 20 Dec 2017 21:21

Instrument :
MSVOA_L
ClientSampleId :
EP1-SV-3

Tot Ion	Ratio	Lower	Upper
104	100		
78	0.0	39.1	58.7#
103	50.4	37.3	55.9

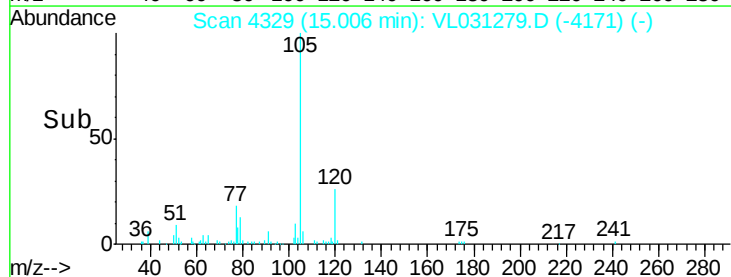
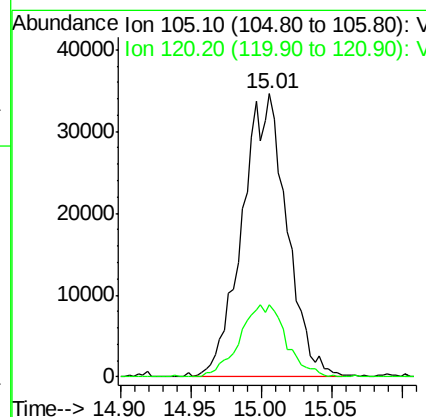
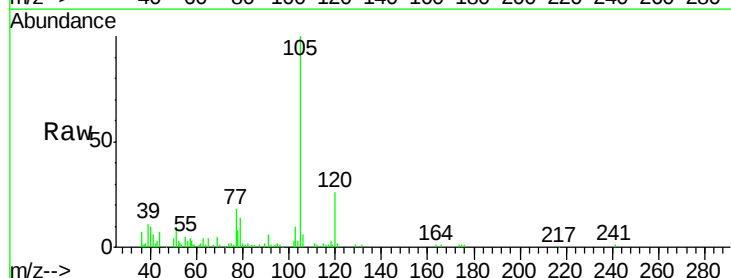
Manual Integrations
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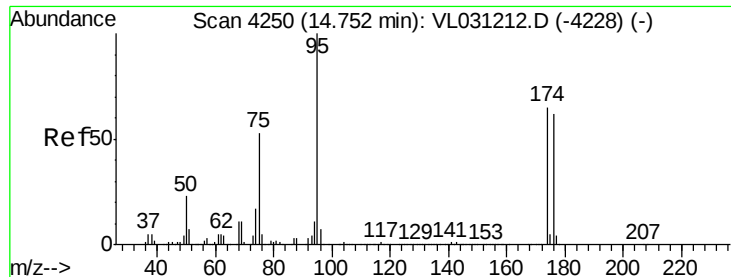
MMDadoda
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#62
Isopropylbenzene
Concen: 0.13 ppbv m
RT: 15.01 min Scan# 4329
Delta R.T. 0.01 min
Lab File: VL031279.D
Acq: 20 Dec 2017 21:21

Tgt Ion	Ratio	Lower	Upper
105	100		
120	26.5	21.0	31.6





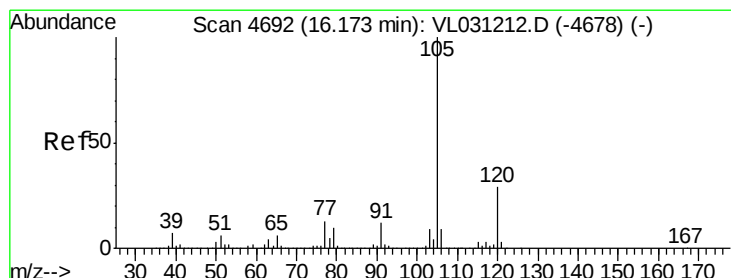
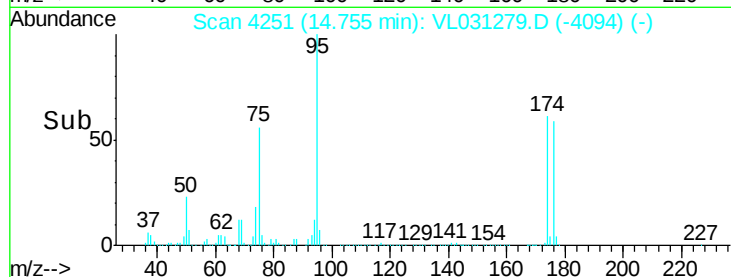
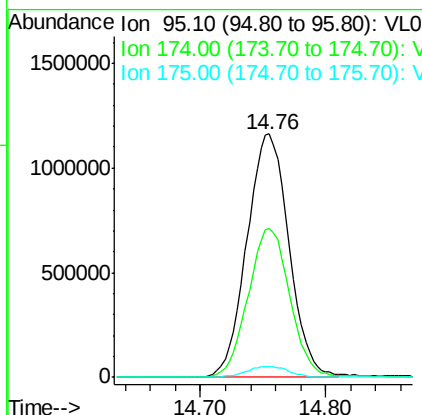
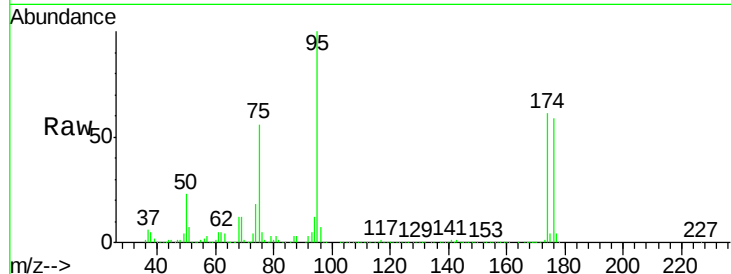
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.94 ppbv
 RT: 14.76 min Scan# 4251
 Delta R.T. 0.00 min
 Lab File: VL031279.D
 Acq: 20 Dec 2017 21:21

Instrument :
 MSVOA_L
 ClientSampleId :
 EP1-SV-3

Tot Ion: 95 Resp: 2703684
 Ion Ratio Lower Upper
 95 100
 174 61.4 52.5 78.7
 175 4.6 4.1 6.1

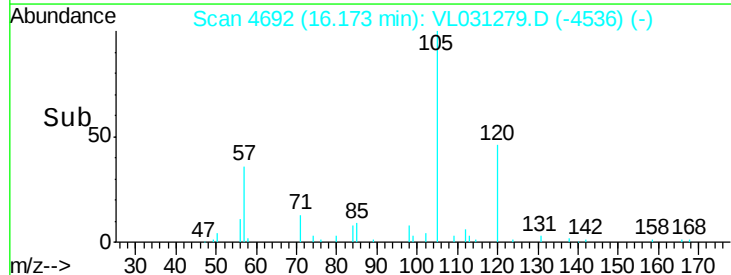
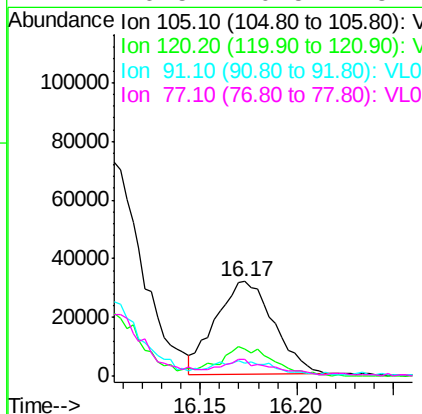
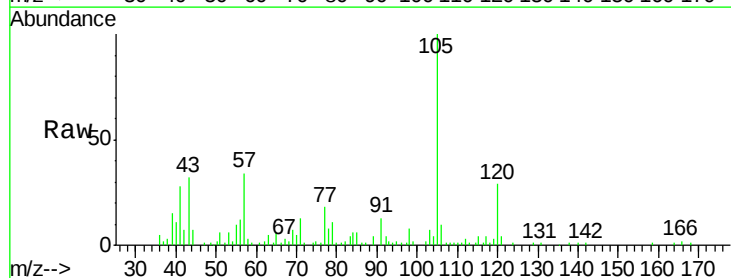
Manual Integrations
 APPROVED

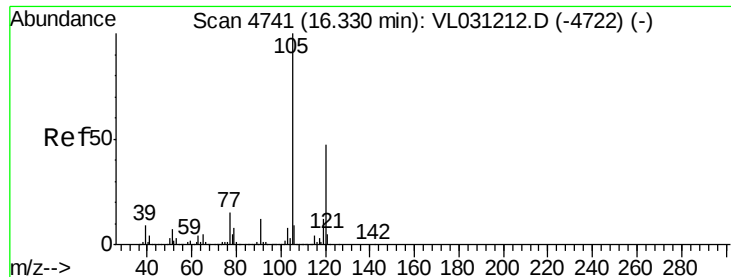
MMDadoda
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#72
 4-Ethyltoluene
 Concen: 0.13 ppbv
 RT: 16.17 min Scan# 4692
 Delta R.T. 0.00 min
 Lab File: VL031279.D
 Acq: 20 Dec 2017 21:21

Tgt Ion: 105 Resp: 66108
 Ion Ratio Lower Upper
 105 100
 120 31.0 24.2 36.2
 91 16.3 9.8 14.8#
 77 16.5 10.5 15.7#





#73

1,3,5-Trimethylbenzene

Concen: 0.13 ppbv

RT: 16.33 min Scan# 4740

Delta R.T. -0.00 min

Lab File: VL031279.D

Acq: 20 Dec 2017 21:21

Instrument :

MSVOA_L

ClientSampleId :

EP1-SV-3

Tot Ion:105 Resp: 60195

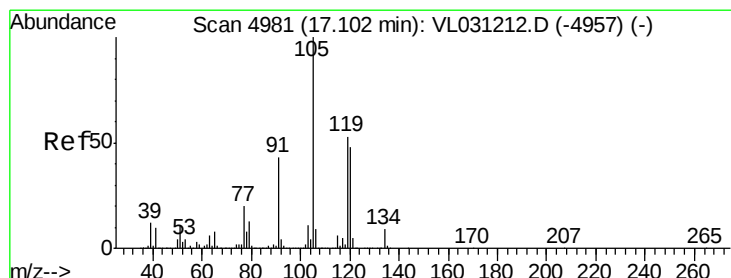
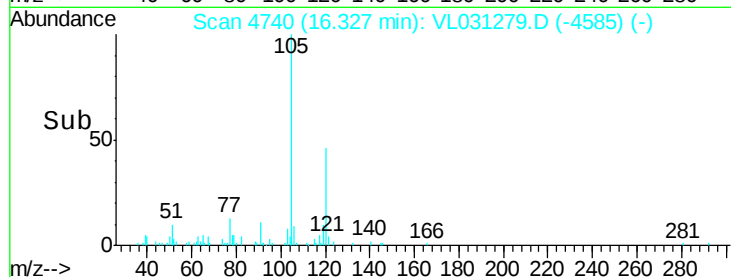
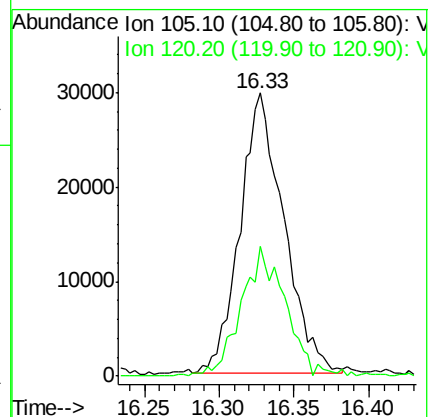
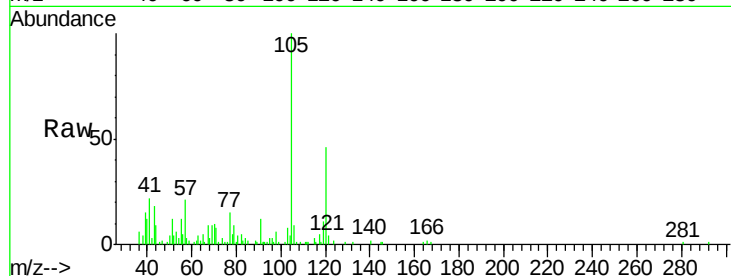
Ion Ratio Lower Upper

105 100

120 45.5 37.8 56.6

Manual Integrations
APPROVED

MMDadoda
12/22/2017 4:54:55 PM



#74

1,2,4-Trimethylbenzene

Concen: 0.22 ppbv m

RT: 17.10 min Scan# 4979

Delta R.T. -0.01 min

Lab File: VL031279.D

Acq: 20 Dec 2017 21:21

Tgt Ion:105 Resp: 103078

Ion Ratio Lower Upper

105 100

120 42.7 38.6 58.0

91 11.5 34.2 51.4#

77 17.3 16.1 24.1

