

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL062419\
 Data File : VL033948.D
 Acq On : 24 Jun 2019 22:37
 Operator : SY/AP
 Sample : K3481-05
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 TZC-SSDS-AREA-C-1

Manual Integrations
 APPROVED

MMDadoda
 6/26/2019 8:15:47 AM

Quant Time: Jun 25 04:54:50 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL060719AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun 0
 QLast Update : Fri Jun 07 08:53:27 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.74	49	1004279	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.27	114	2528055	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.21	117	2552916	10.00	ppbv	-0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.54	95	2012210	9.60	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	96.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.07	85	54623	0.335	ppbv	99
3) Chlorodifluoromethane	3.00	51	137650m	1.164	ppbv	
4) Chloromethane	3.16	50	24915	0.369	ppbv	91
11) Trichlorofluoromethane	3.99	101	58544	0.278	ppbv	95
13) Ethanol	3.64	45	67508	4.690	ppbv	99
15) Acetone	3.89	43	1374345	9.383	ppbv	97
17) tert-Butyl alcohol	4.37	59	16924m	0.148	ppbv	
19) Isopropyl Alcohol	4.03	45	44430	0.531	ppbv #	94
20) Methylene Chloride	4.39	84	64328	1.126	ppbv	92
26) Hexane	5.76	57	150914	1.486	ppbv #	42
34) 2-Butanone	5.32	43	115819	0.812	ppbv	99
35) Carbon Tetrachloride	7.11	117	11407m	0.058	ppbv	
36) Benzene	6.98	78	21592m	0.112	ppbv	
52) Tetrachloroethene	11.34	164	11780m	0.173	ppbv	
53) Toluene	9.91	91	1977165	9.252	ppbv	99
58) Ethyl Benzene	12.84	91	292694	1.017	ppbv	98
59) m/p-Xylene	13.09	91	1212890	4.634	ppbv	97
60) o-Xylene	13.82	91	394023	1.458	ppbv	100
74) 1,2,4-Trimethylbenzene	16.89	105	54560	0.156	ppbv #	76

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

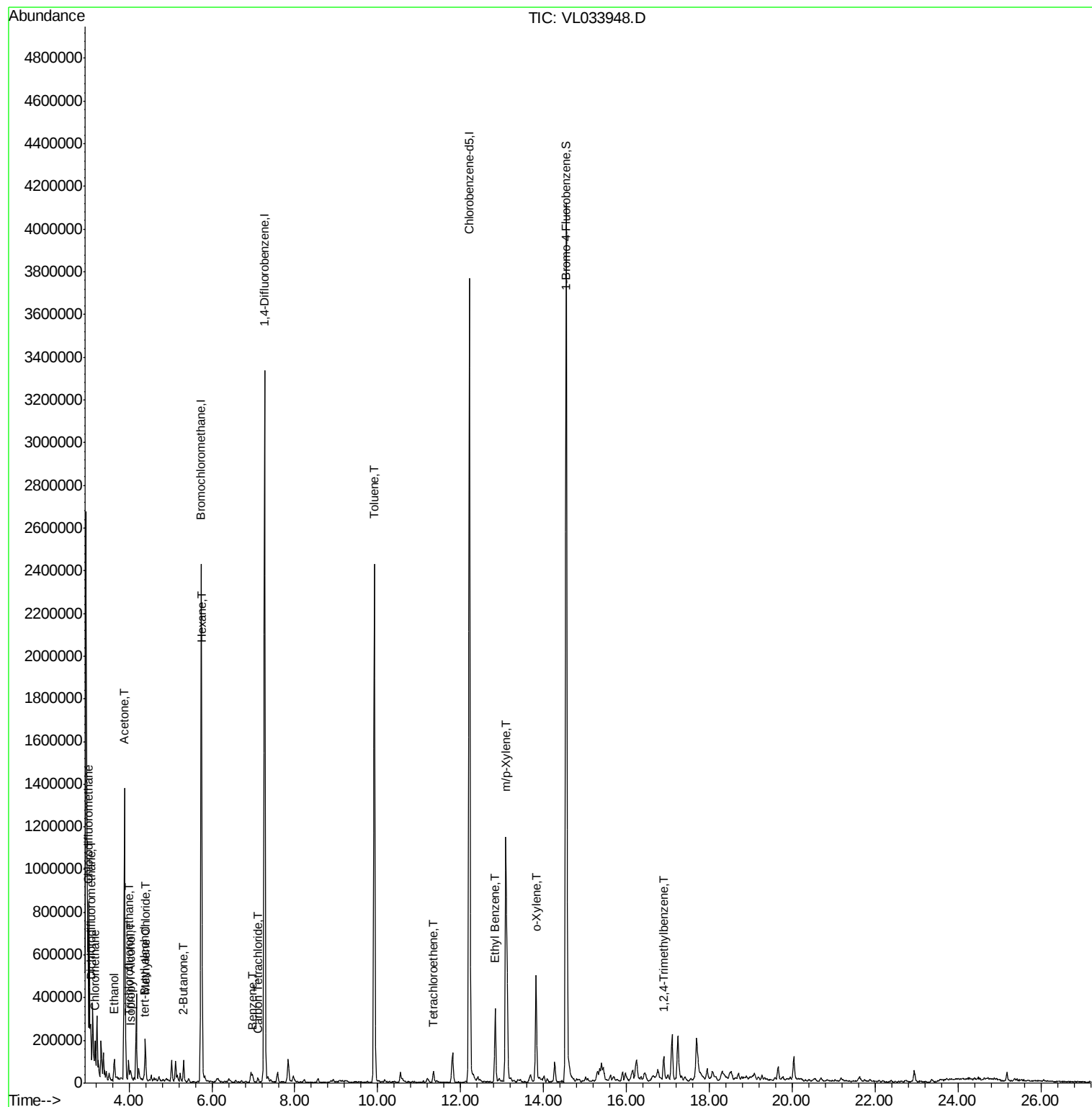
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL062419\
Data File : VL033948.D
Acq On : 24 Jun 2019 22:37
Operator : SY/AP
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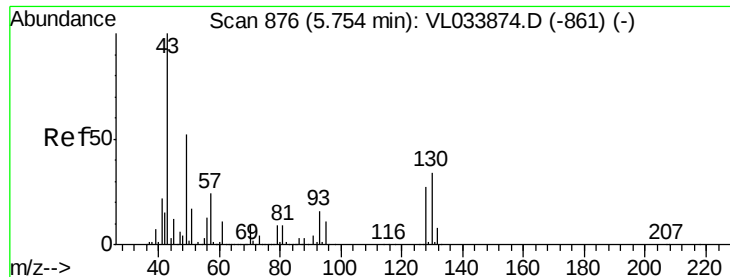
Instrument :
MSVOA_L
ClientSampleId :
TZC-SSDS-AREA-C-1

Manual Integrations
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MMDadoda
6/26/2019 8:15:47 AM

Quant Time: Jun 25 04:54:50 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL060719AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun
QLast Update : Fri Jun 07 08:53:27 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.74 min Scan# 872

Delta R.T. -0.01 min

Lab File: VL033948.D

Acq: 24 Jun 2019 22:37

Instrument :

MSVOA_L

ClientSampleId :

TZC-SSDS-AREA-C-1

Tot Ion: 49 Resp: 1004279

Ion Ratio Lower Upper

49 100

128 53.6 25.5 76.5

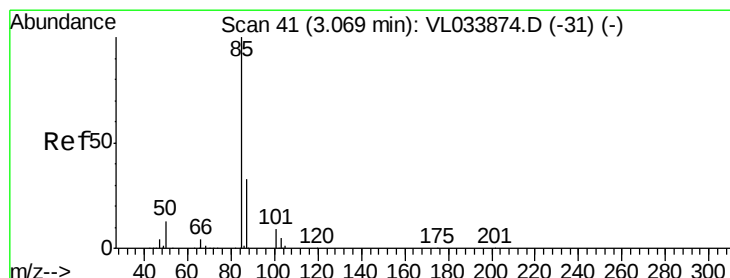
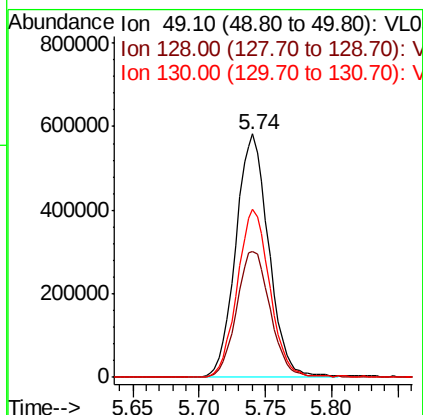
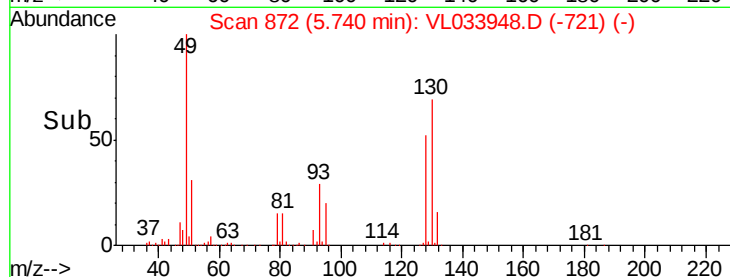
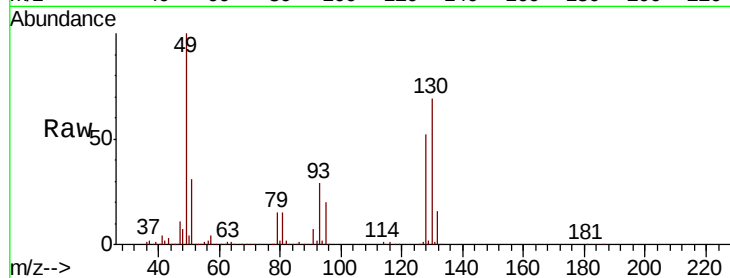
130 69.2 32.5 97.4

Manual Integrations

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#2

Dichlorodifluoromethane

Concen: 0.335 ppbv

RT: 3.07 min Scan# 41

Delta R.T. -0.00 min

Lab File: VL033948.D

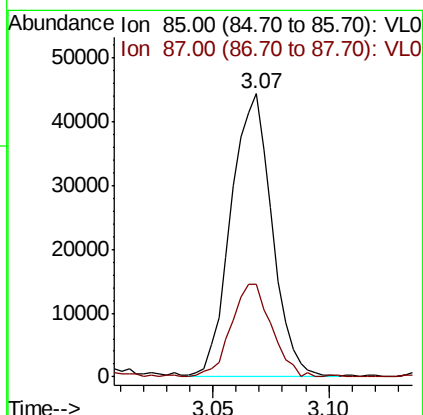
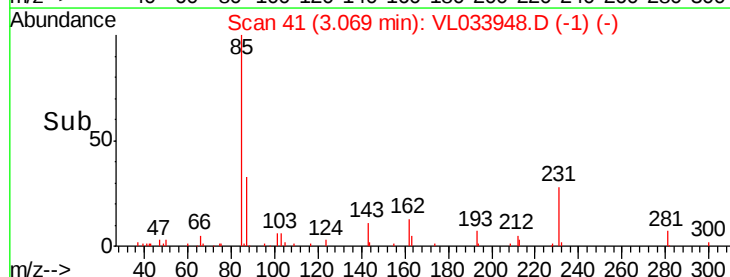
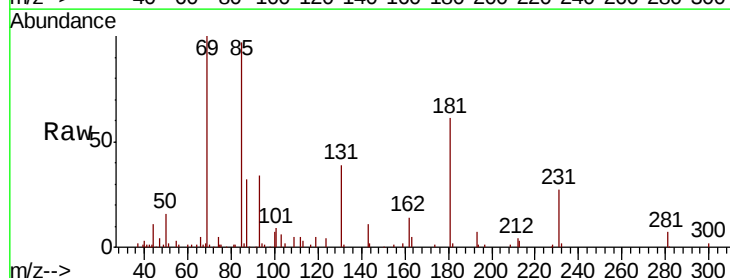
Acq: 24 Jun 2019 22:37

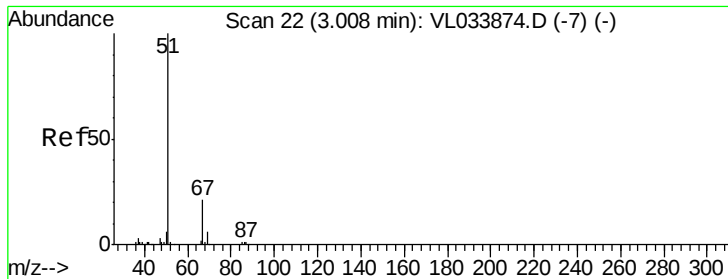
Tgt Ion: 85 Resp: 54623

Ion Ratio Lower Upper

85 100

87 32.7 26.6 40.0





#3

Chlorodifluoromethane

Concen: 1.164 ppbv

RT: 3.00 min Scan# 21

Delta R.T. -0.00 min

Lab File: VL033948.D

Acq: 24 Jun 2019 22:37

Instrument :

MSVOA_L

ClientSampleId :

TZC-SSDS-AREA-C-1

Tot Ion: 51 Resp: 137650

Ion Ratio Lower Upper

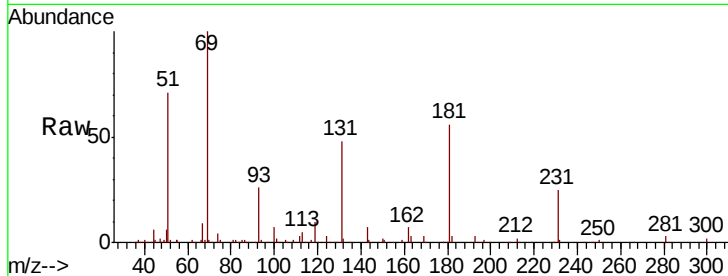
51 100

67 14.4 16.4 24.6#

Manual Integrations
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

120000

100000

80000

60000

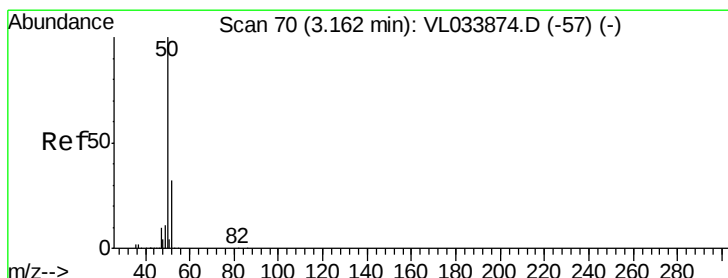
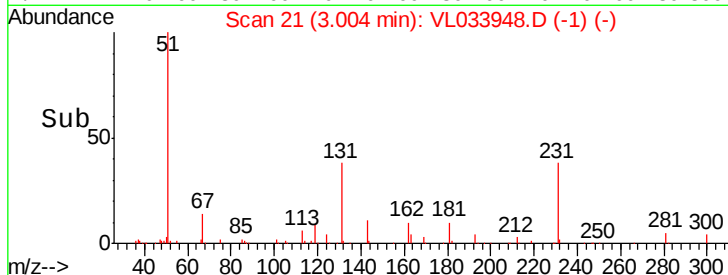
40000

20000

0

Time-->

2.96 2.98 3.00 3.02 3.04



#4

Chloromethane

Concen: 0.369 ppbv

RT: 3.16 min Scan# 69

Delta R.T. -0.00 min

Lab File: VL033948.D

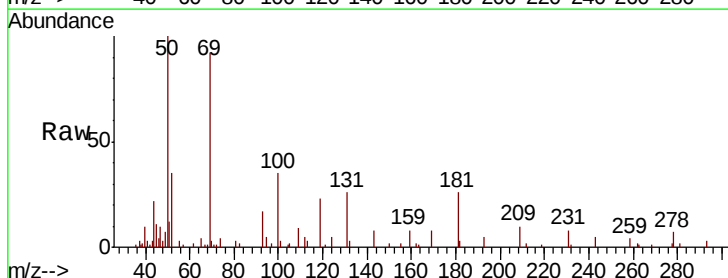
Acq: 24 Jun 2019 22:37

Tgt Ion: 50 Resp: 24915

Ion Ratio Lower Upper

50 100

52 36.6 25.4 38.0



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

20000

15000

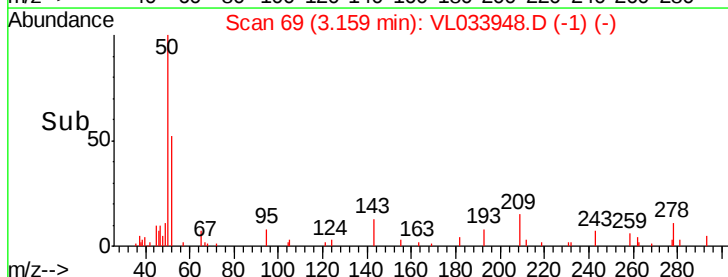
10000

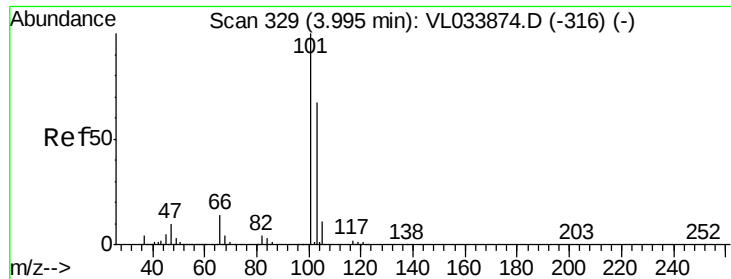
5000

0

Time-->

3.15 3.16 3.17 3.18 3.19 3.20





#11

Trichlorofluoromethane

Concen: 0.278 ppbv

RT: 3.99 min Scan# 327

Delta R.T. -0.01 min

Lab File: VL033948.D

Acq: 24 Jun 2019 22:37

Instrument :

MSVOA_L

ClientSampleId :

TZC-SSDS-AREA-C-1

Tot Ion:101 Resp: 58544

Ion Ratio Lower Upper

101 100

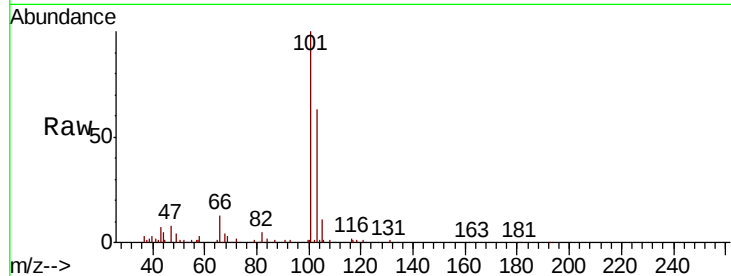
103 62.6 53.6 80.4

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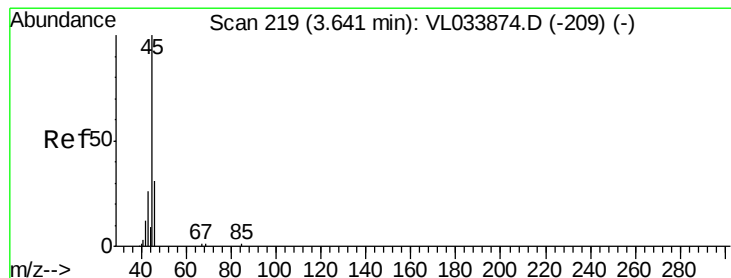
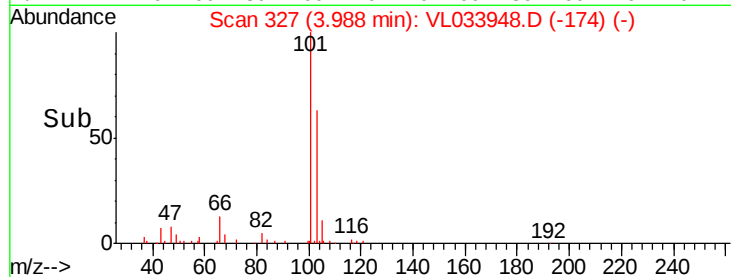
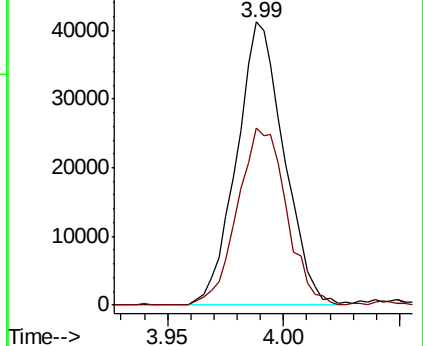
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Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#13

Ethanol

Concen: 4.690 ppbv

RT: 3.64 min Scan# 220

Delta R.T. 0.00 min

Lab File: VL033948.D

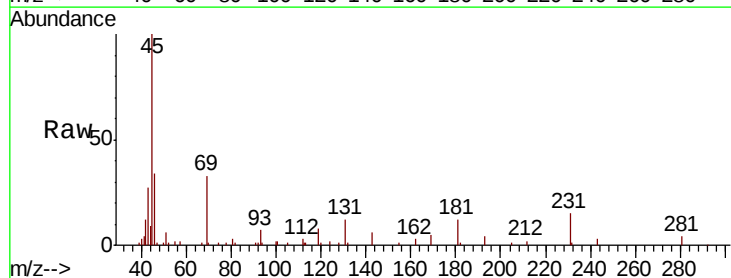
Acq: 24 Jun 2019 22:37

Tgt Ion: 45 Resp: 67508

Ion Ratio Lower Upper

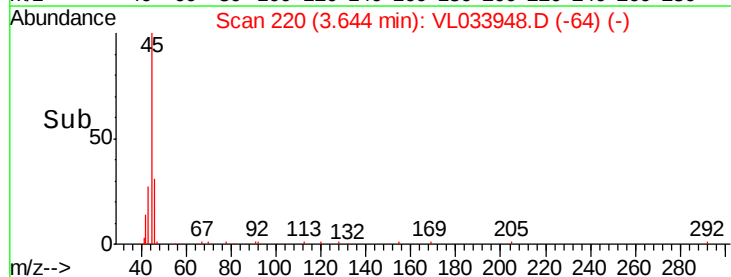
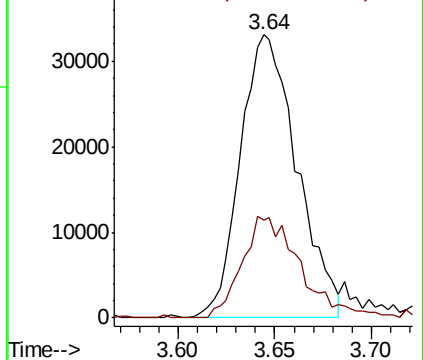
45 100

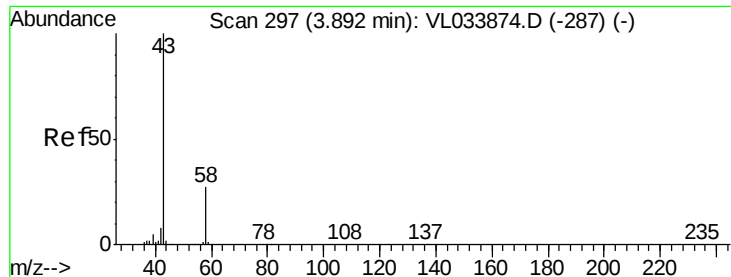
46 37.5 15.3 61.1



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





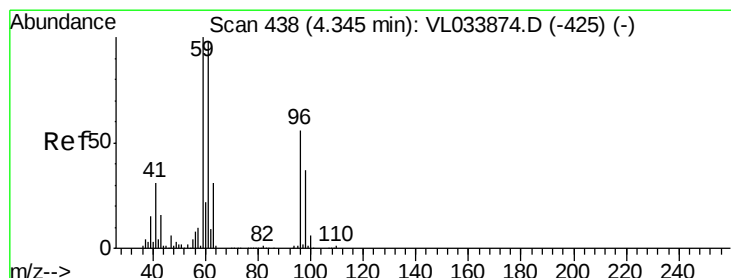
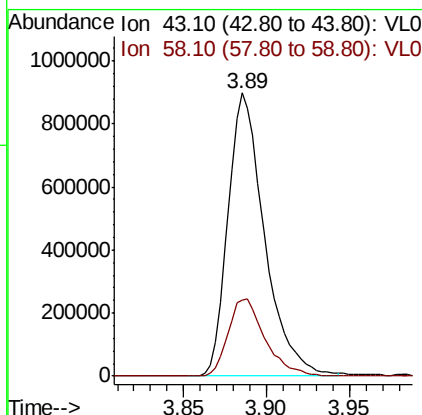
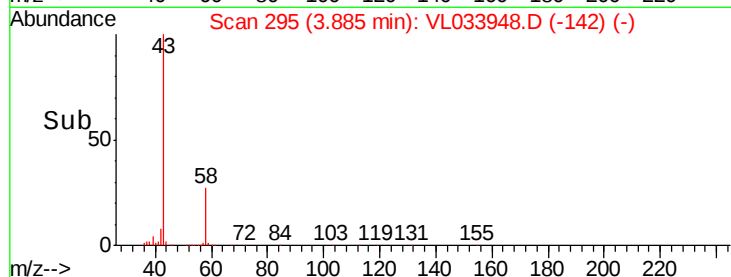
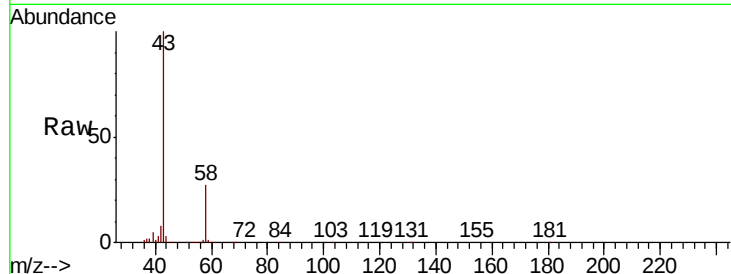
#15
Acetone
Concen: 9.383 ppbv
RT: 3.89 min Scan# 295
Delta R.T. -0.01 min
Lab File: VL033948.D
Acq: 24 Jun 2019 22:37

Instrument :
MSVOA_L
ClientSampleId :
TZC-SSDS-AREA-C-1

Tot Ion: 43 Resp: 1374345
Ion Ratio Lower Upper
43 100
58 28.0 21.3 31.9

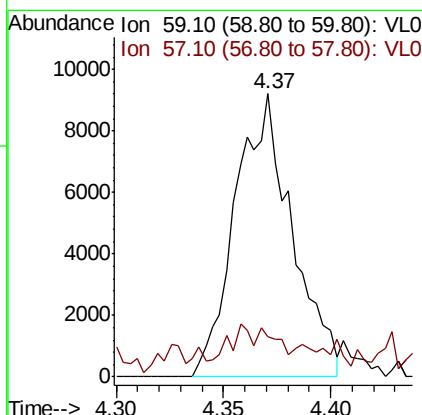
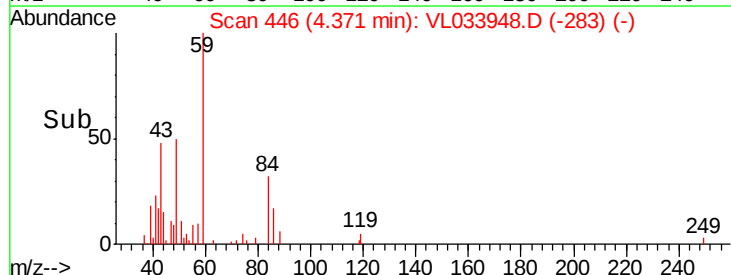
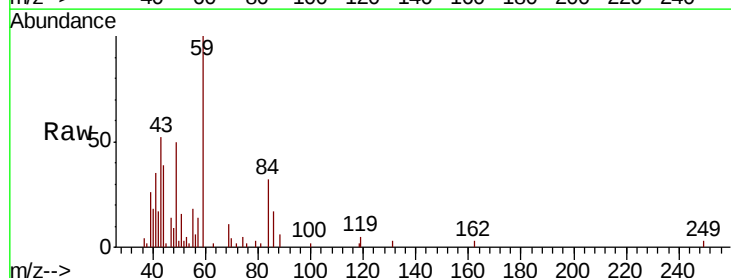
Manual Integrations
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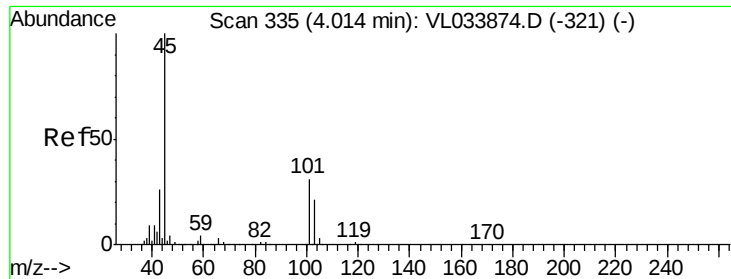
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#17
tert-Butyl alcohol
Concen: 0.148 ppbv m
RT: 4.37 min Scan# 446
Delta R.T. 0.03 min
Lab File: VL033948.D
Acq: 24 Jun 2019 22:37

Tgt Ion: 59 Resp: 16924
Ion Ratio Lower Upper
59 100
57 47.1 8.4 12.6#





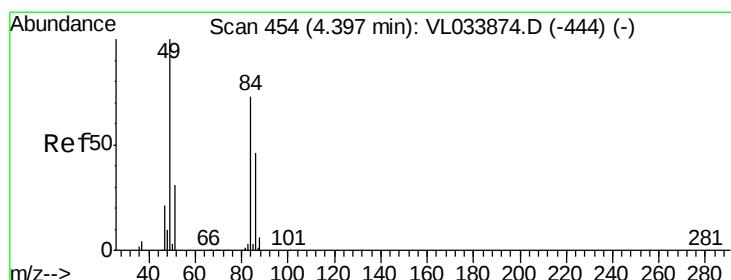
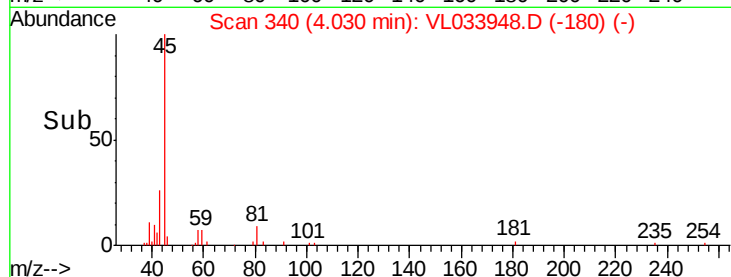
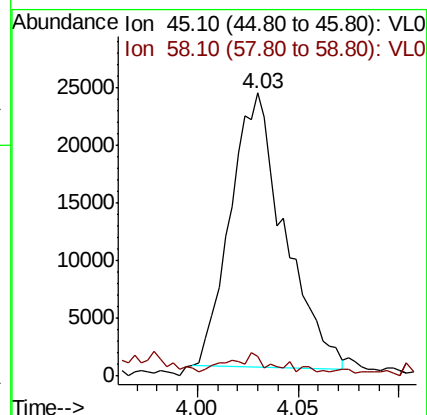
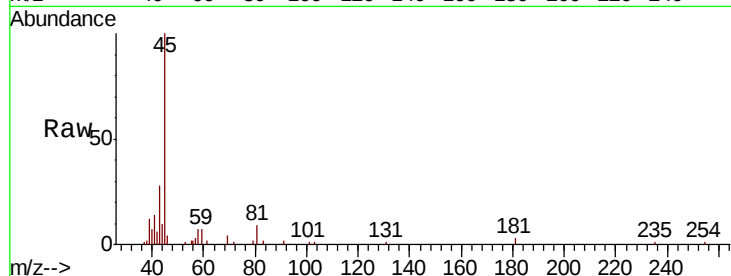
#19
Isopropyl Alcohol
Concen: 0.531 ppbv
RT: 4.03 min Scan# 340
Delta R.T. 0.02 min
Lab File: VL033948.D
Acq: 24 Jun 2019 22:37

Instrument :
MSVOA_L
ClientSampleId :
TZC-SSDS-AREA-C-1

Tot Ion: 45 Resp: 44430
Ion Ratio Lower Upper
45 100
58 0.0 1.8 2.6#

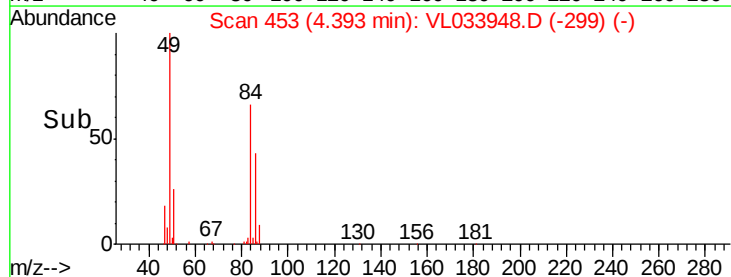
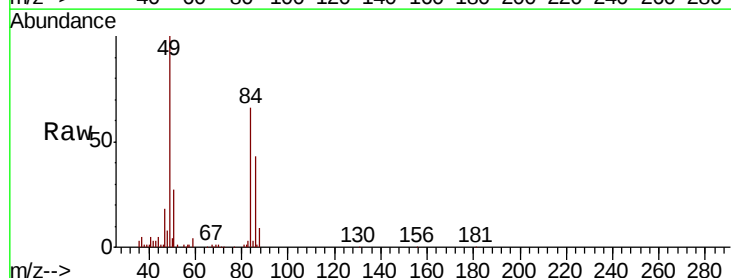
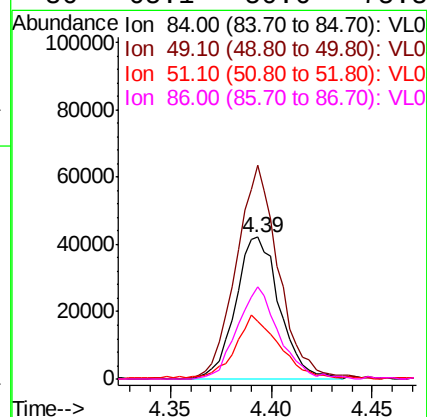
Manual Integrations
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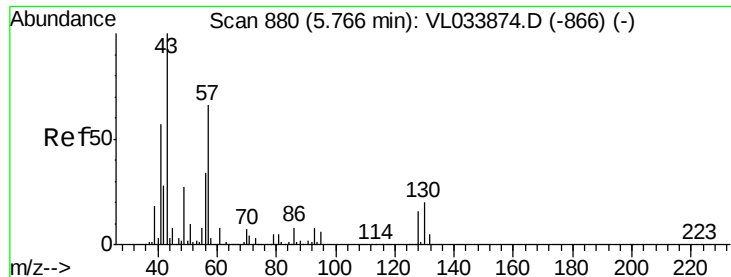
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#20
Methylene Chloride
Concen: 1.126 ppbv
RT: 4.39 min Scan# 453
Delta R.T. -0.00 min
Lab File: VL033948.D
Acq: 24 Jun 2019 22:37

Tgt Ion: 84 Resp: 64328
Ion Ratio Lower Upper
84 100
49 150.0 110.0 165.0
51 39.5 34.6 51.8
86 65.1 50.6 75.8





#26

Hexane

Concen: 1.486 ppbv

RT: 5.76 min Scan# 878

Delta R.T. -0.01 min

Lab File: VL033948.D

Acq: 24 Jun 2019 22:37

Instrument :

MSVOA_L

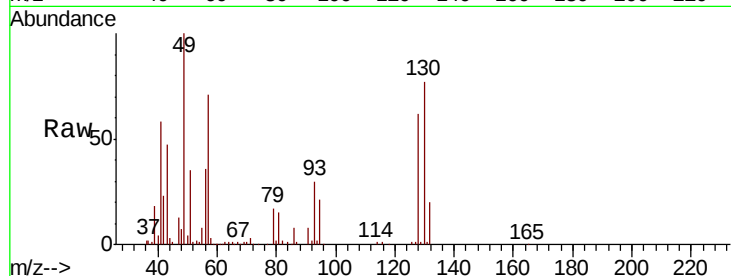
ClientSampleId :

TZC-SSDS-AREA-C-1

Tot Ion	57	Resp	150914
Ion Ratio	Lower	Upper	
57	100		
41	88.8	71.4	107.2
43	74.4	183.7	275.5#
56	54.6	42.7	64.1

Manual Integrations
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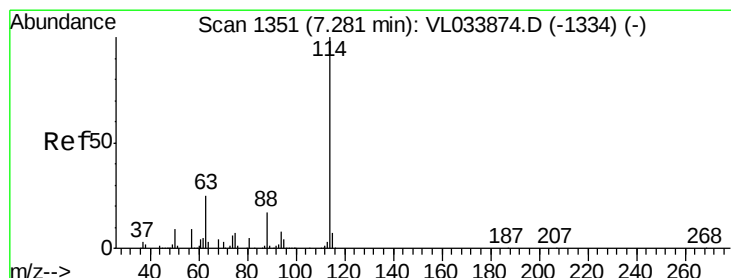
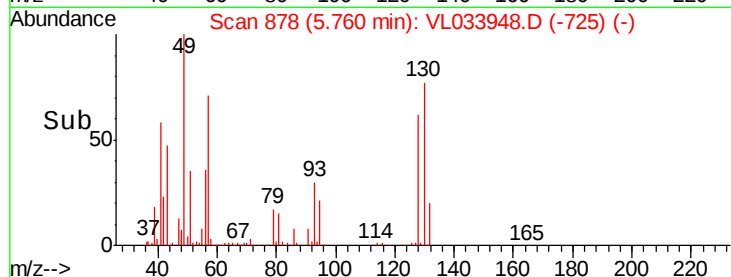
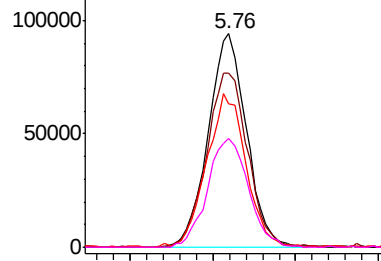
Abundance

Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

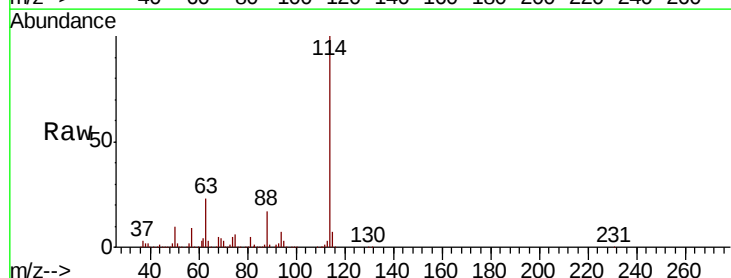
RT: 7.27 min Scan# 1347

Delta R.T. -0.01 min

Lab File: VL033948.D

Acq: 24 Jun 2019 22:37

Tgt Ion	114	Resp	2528055
Ion Ratio	Lower	Upper	
114	100		
63	23.6	21.1	31.7
88	17.2	14.2	21.4

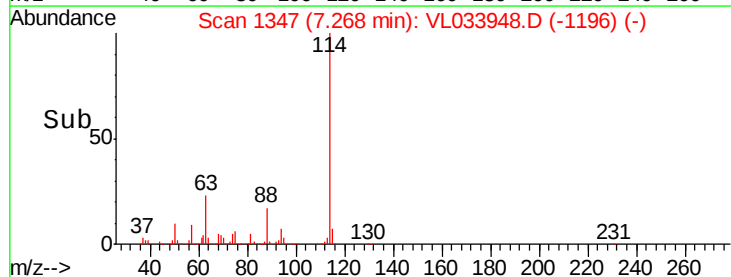
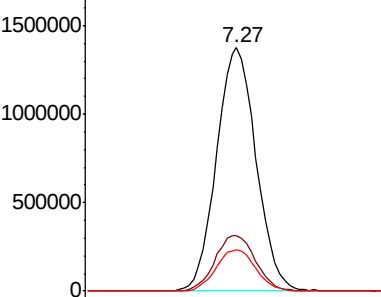


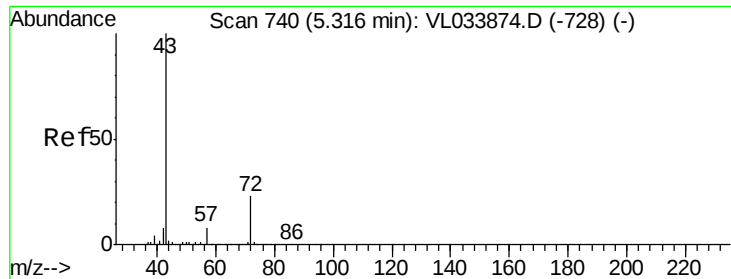
Abundance

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





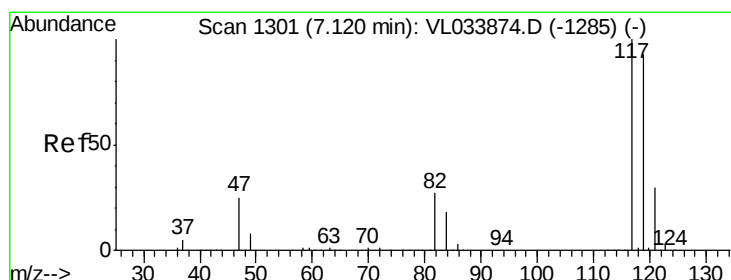
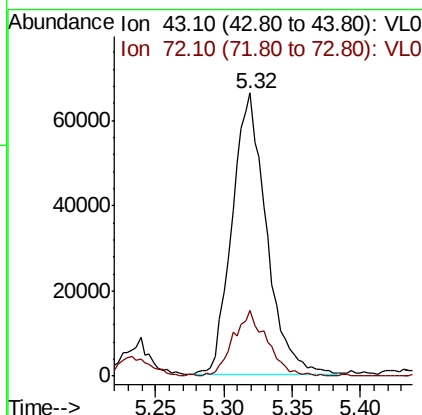
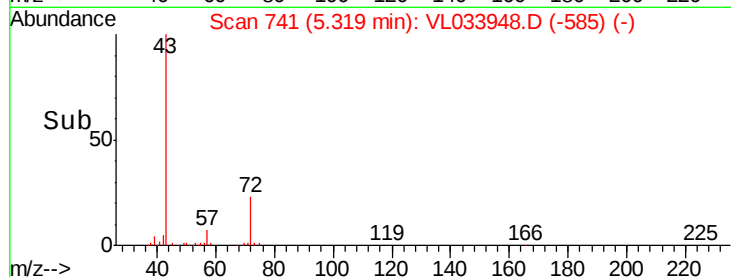
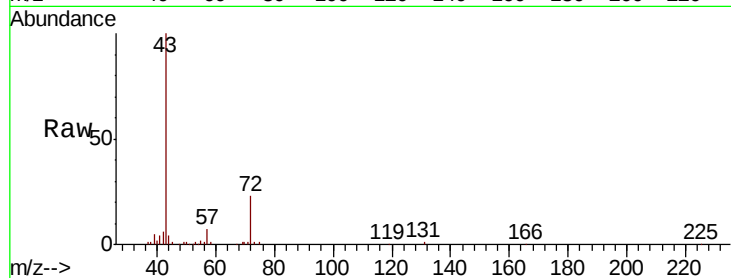
#34
2-Butanone
Concen: 0.812 ppbv
RT: 5.32 min Scan# 741
Delta R.T. 0.00 min
Lab File: VL033948.D
Acq: 24 Jun 2019 22:37

Instrument :
MSVOA_L
ClientSampleId :
TZC-SSDS-AREA-C-1

Tot Ion: 43 Resp: 115819
Ion Ratio Lower Upper
43 100
72 22.9 17.9 26.9

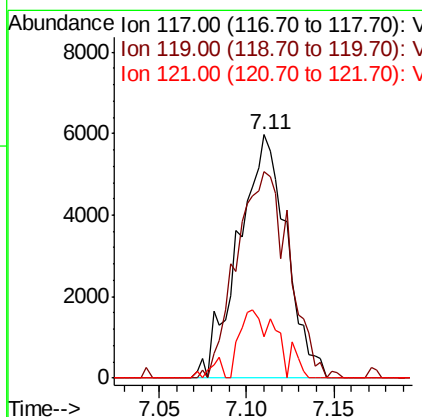
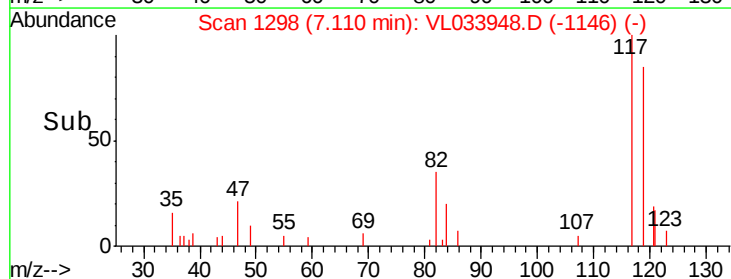
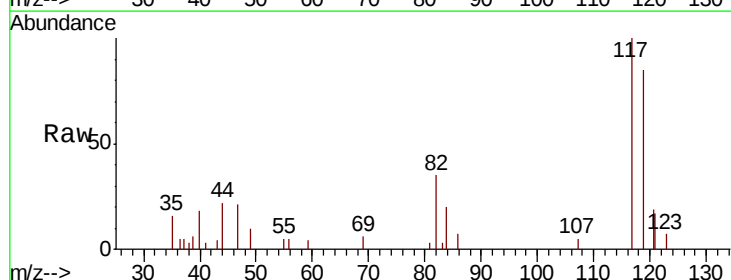
Manual Integrations
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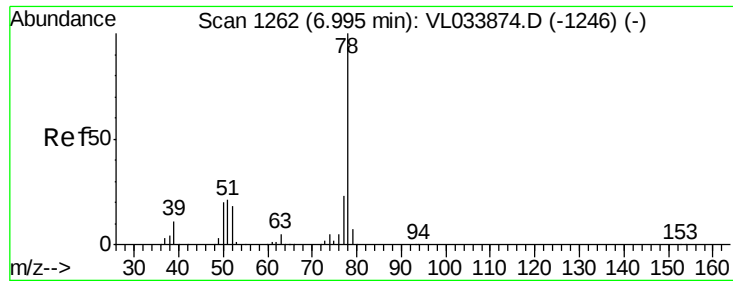
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#35
Carbon Tetrachloride
Concen: 0.058 ppbv m
RT: 7.11 min Scan# 1298
Delta R.T. -0.01 min
Lab File: VL033948.D
Acq: 24 Jun 2019 22:37

Tgt Ion: 117 Resp: 11407
Ion Ratio Lower Upper
117 100
119 84.6 74.6 111.8
121 17.2 24.0 36.0#





#36

Benzene

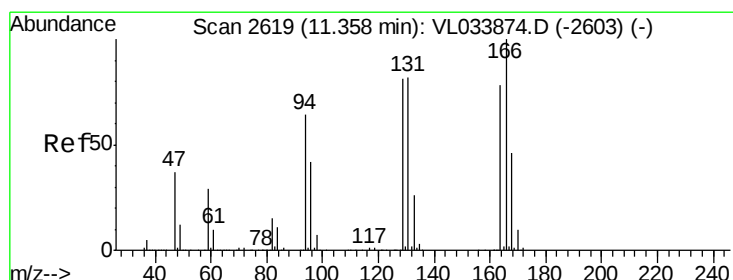
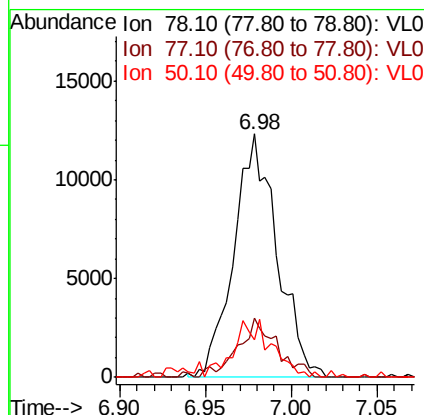
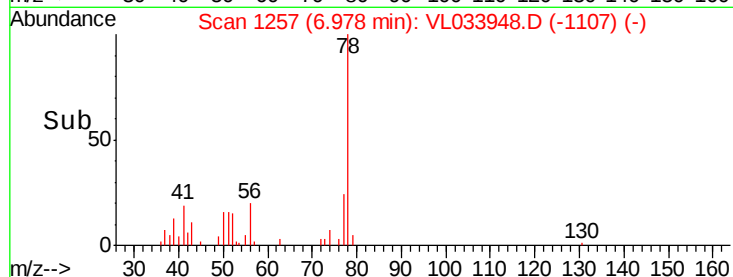
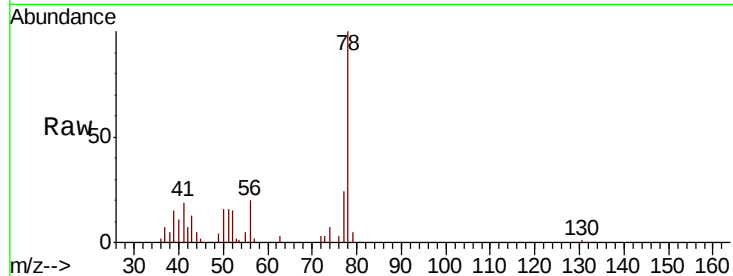
Concen: 0.112 ppbv m
RT: 6.98 min Scan# 1257
Delta R.T. -0.02 min
Lab File: VL033948.D
Acq: 24 Jun 2019 22:37

Instrument :
MSVOA_L
ClientSampleId :
TZC-SSDS-AREA-C-1

Tot Ion	Ratio	Lower	Upper
78	100		
77	24.2	18.2	27.2
50	15.5	15.9	23.9#

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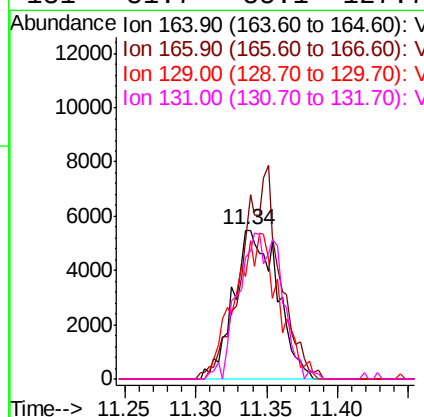
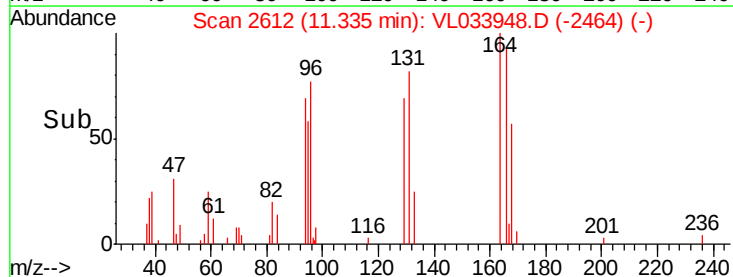
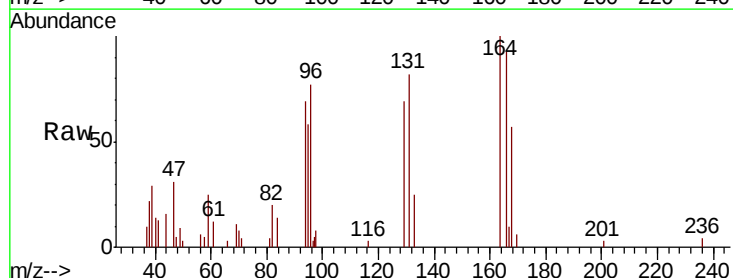


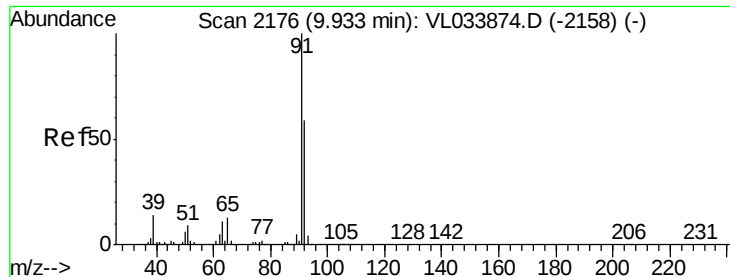
#52

Tetrachloroethene

Concen: 0.173 ppbv m
RT: 11.34 min Scan# 2612
Delta R.T. -0.02 min
Lab File: VL033948.D
Acq: 24 Jun 2019 22:37

Tgt Ion	Ratio	Lower	Upper
164	100		
166	93.3	103.1	154.7#
129	69.0	83.9	125.9#
131	81.7	85.1	127.7#





#53

Toluene

Concen: 9.252 ppbv

RT: 9.91 min Scan# 2170

Delta R.T. -0.02 min

Lab File: VL033948.D

Acq: 24 Jun 2019 22:37

Instrument :

MSVOA_L

ClientSampleId :

TZC-SSDS-AREA-C-1

Tot Ion: 91 Resp: 1977165

Ion Ratio Lower Upper

91 100

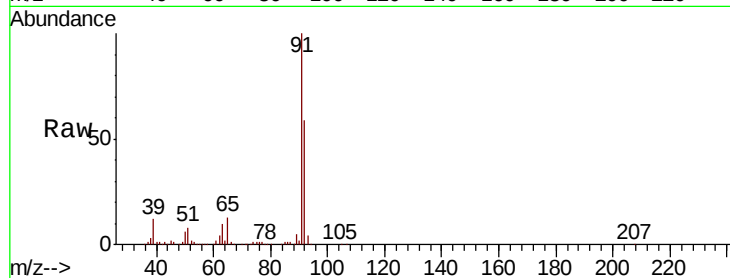
92 59.3 47.0 70.6

Manual Integrations

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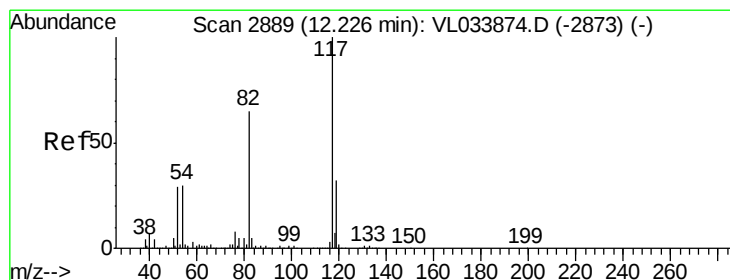
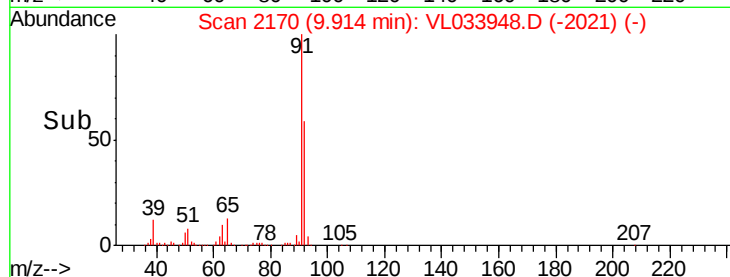
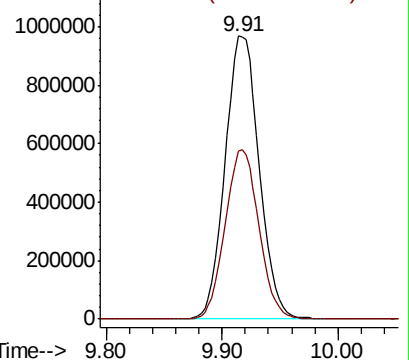
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.21 min Scan# 2883

Delta R.T. -0.02 min

Lab File: VL033948.D

Acq: 24 Jun 2019 22:37

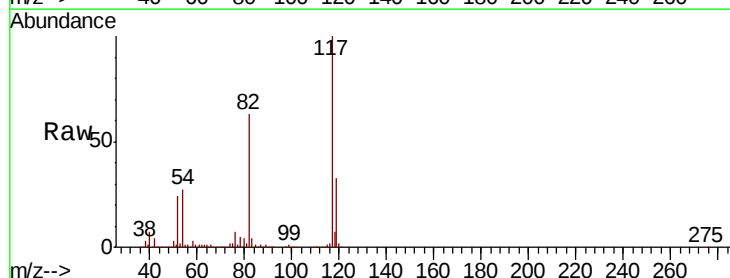
Tgt Ion: 117 Resp: 2552916

Ion Ratio Lower Upper

117 100

82 61.8 50.2 75.2

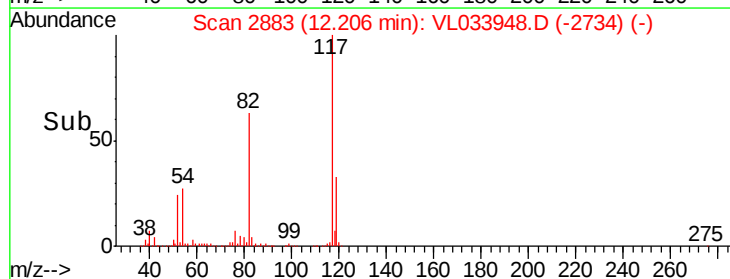
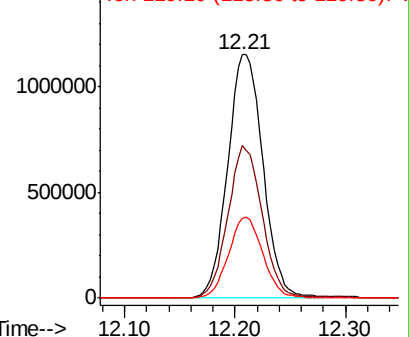
119 32.8 24.8 37.2

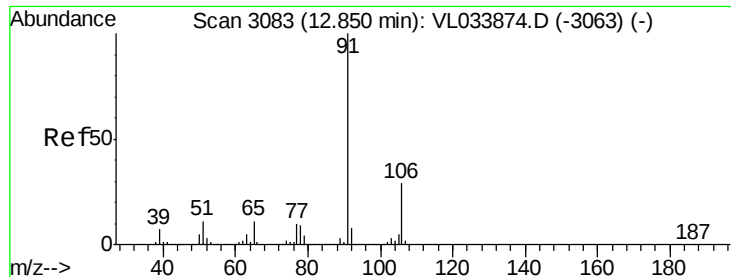


Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V





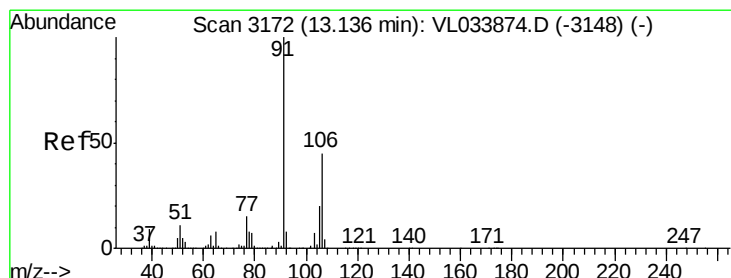
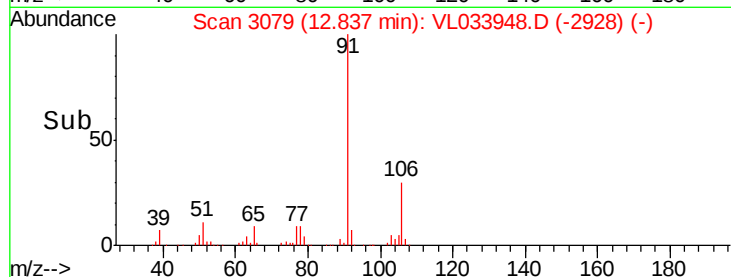
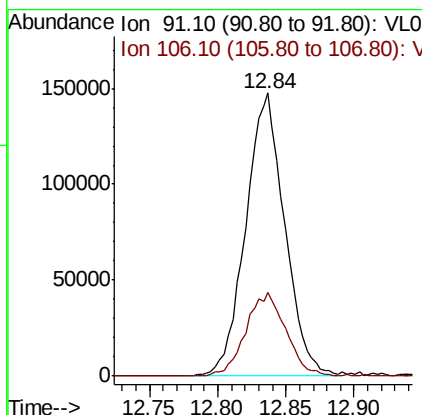
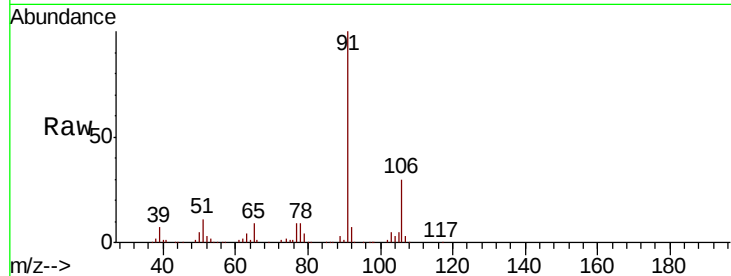
#58
Ethyl Benzene
Concen: 1.017 ppbv
RT: 12.84 min Scan# 3079
Delta R.T. -0.01 min
Lab File: VL033948.D
Acq: 24 Jun 2019 22:37

Instrument :
MSVOA_L
ClientSampleId :
TZC-SSDS-AREA-C-1

Tot Ion: 91 Resp: 292694
Ion Ratio Lower Upper
91 100
106 29.7 23.0 34.6

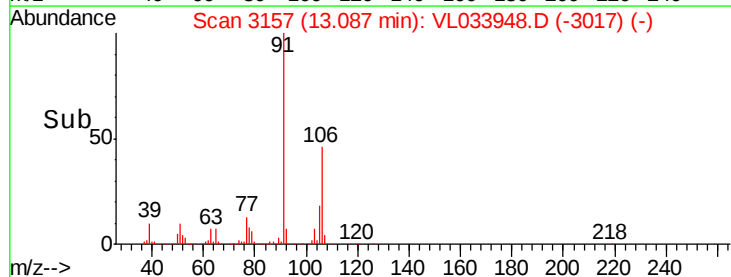
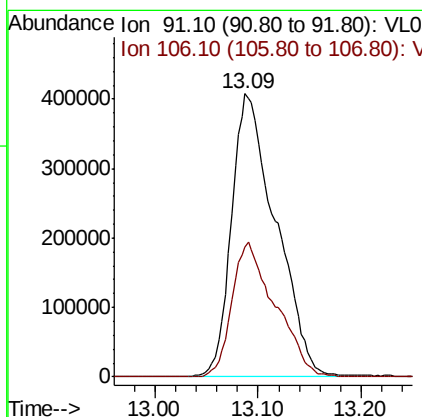
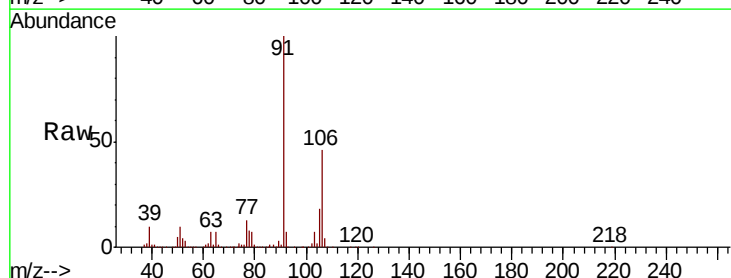
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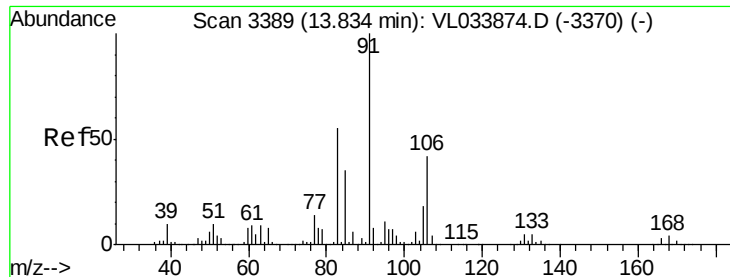
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#59
m/p-Xylene
Concen: 4.634 ppbv
RT: 13.09 min Scan# 3157
Delta R.T. -0.05 min
Lab File: VL033948.D
Acq: 24 Jun 2019 22:37

Tgt Ion: 91 Resp: 1212890
Ion Ratio Lower Upper
91 100
106 46.9 35.8 53.8





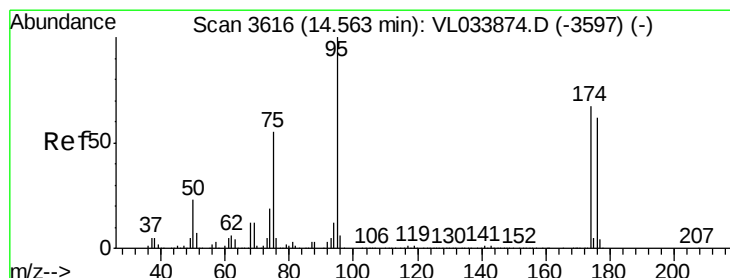
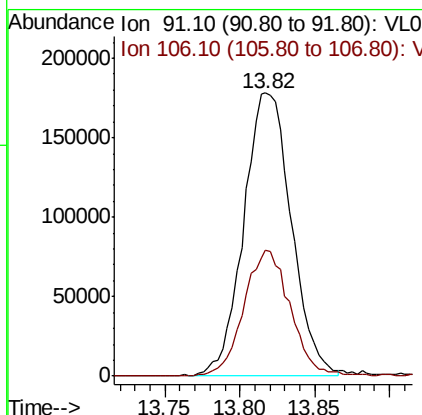
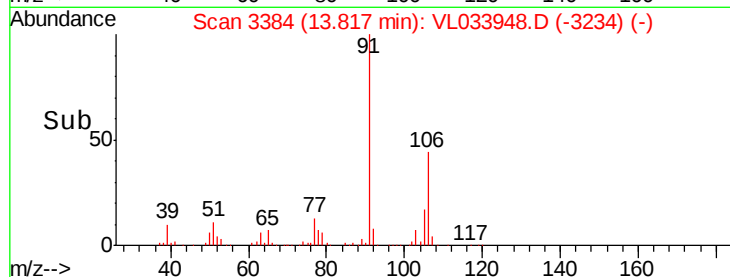
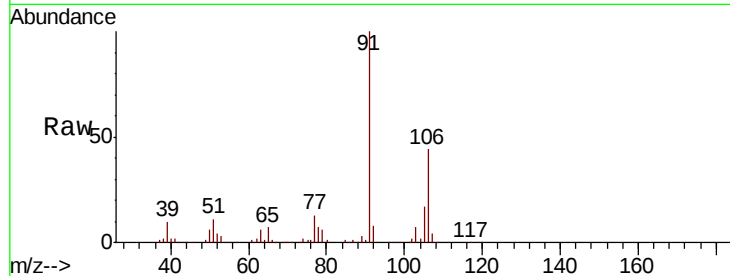
#60
o-Xylene
Concen: 1.458 ppbv
RT: 13.82 min Scan# 3384
Delta R.T. -0.02 min
Lab File: VL033948.D
Acq: 24 Jun 2019 22:37

Instrument :
MSVOA_L
ClientSampleId :
TZC-SSDS-AREA-C-1

Tot Ion: 91 Resp: 394023
Ion Ratio Lower Upper
91 100
106 43.5 21.7 65.1

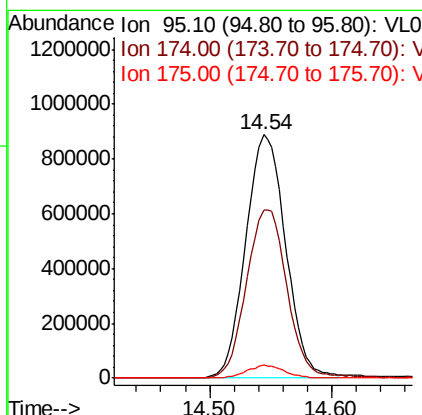
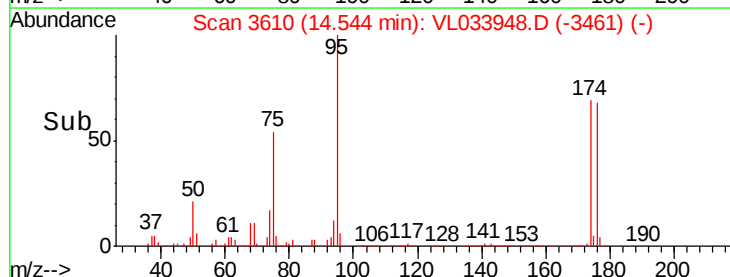
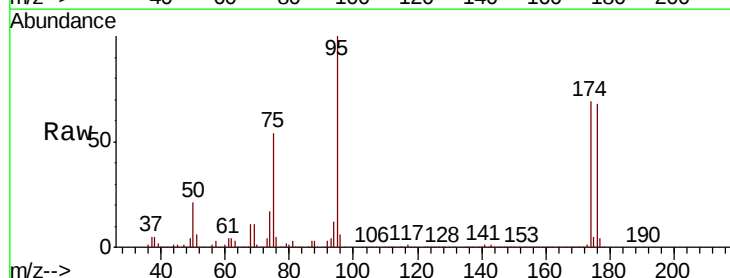
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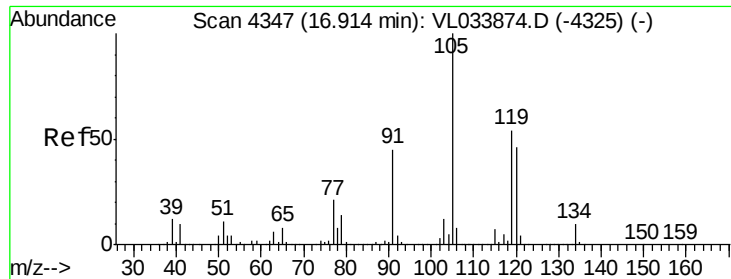
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#68
1-Bromo-4-Fluorobenzene
Concen: 9.596 ppbv
RT: 14.54 min Scan# 3610
Delta R.T. -0.02 min
Lab File: VL033948.D
Acq: 24 Jun 2019 22:37

Tgt Ion: 95 Resp: 2012210
Ion Ratio Lower Upper
95 100
174 70.8 54.0 81.0
175 5.1 3.8 5.8





#74
 1,2,4-Trimethylbenzene
 Concen: 0.156 ppbv
 RT: 16.89 min Scan# 4341
 Delta R.T. -0.02 min
 Lab File: VL033948.D
 Acq: 24 Jun 2019 22:37

Instrument :
 MSVOA_L
 ClientSampleId :
 TZC-SSDS-AREA-C-1

Tot Ion:	105	Resp:	54560
Ion Ratio	Lower	Upper	
105	100		
120	52.2	36.7	55.1
91	14.0	35.8	53.8
77	17.7	16.9	25.3

Manual Integrations
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