

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL052919\
 Data File : VL033850.D
 Acq On : 30 May 2019 00:54
 Operator : SY/AP
 Sample : K3067-04
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-7-20190523-1

Manual Integrations
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Quant Time: May 30 02:55:10 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL051719AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri May 1
 QLast Update : Fri May 17 08:15:41 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.75	49	729754	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.28	114	1685984	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.23	117	1741801	10.00	ppbv	0.00

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.57	95	1386820	9.82	ppbv	0.00	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.20%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.07	85	15700	0.102	ppbv	90
3) Chlorodifluoromethane	3.01	51	31597m	0.378	ppbv	
4) Chloromethane	3.17	50	9475	0.198	ppbv	97
9) Propene	3.04	41	13691m	0.385	ppbv	
11) Trichlorofluoromethane	4.00	101	54580	0.372	ppbv	91
13) Ethanol	3.65	45	199498	17.360	ppbv	100
15) Acetone	3.89	43	893928	8.829	ppbv	99
17) tert-Butyl alcohol	4.36	59	19658m	0.240	ppbv	
19) Isopropyl Alcohol	4.03	45	135876m	2.081	ppbv	
20) Methylene Chloride	4.41	84	27945	0.717	ppbv	88
26) Hexane	5.77	57	109897m	1.437	ppbv	
27) Carbon Disulfide	4.62	76	204593	1.950	ppbv	98
29) Chloroform	5.84	83	197793	1.404	ppbv	97
32) 1,1,1-Trichloroethane	6.61	97	34145	0.243	ppbv	98
34) 2-Butanone	5.33	43	179985	1.722	ppbv	98
35) Carbon Tetrachloride	7.12	117	6282m	0.047	ppbv	
36) Benzene	6.99	78	20692	0.135	ppbv #	91
38) Trichloroethene	7.95	130	10035m	0.176	ppbv	
50) 4-Methvl-2-Pentanone	8.88	43	31450m	0.196	ppbv	
52) Tetrachloroethene	11.37	164	660021	12.243	ppbv	98
53) Toluene	9.94	91	64205	0.388	ppbv	98
59) m/p-Xylene	13.12	91	22411m	0.111	ppbv	
74) 1,2,4-Trimethylbenzene	16.91	105	7961	0.032	ppbv #	70

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

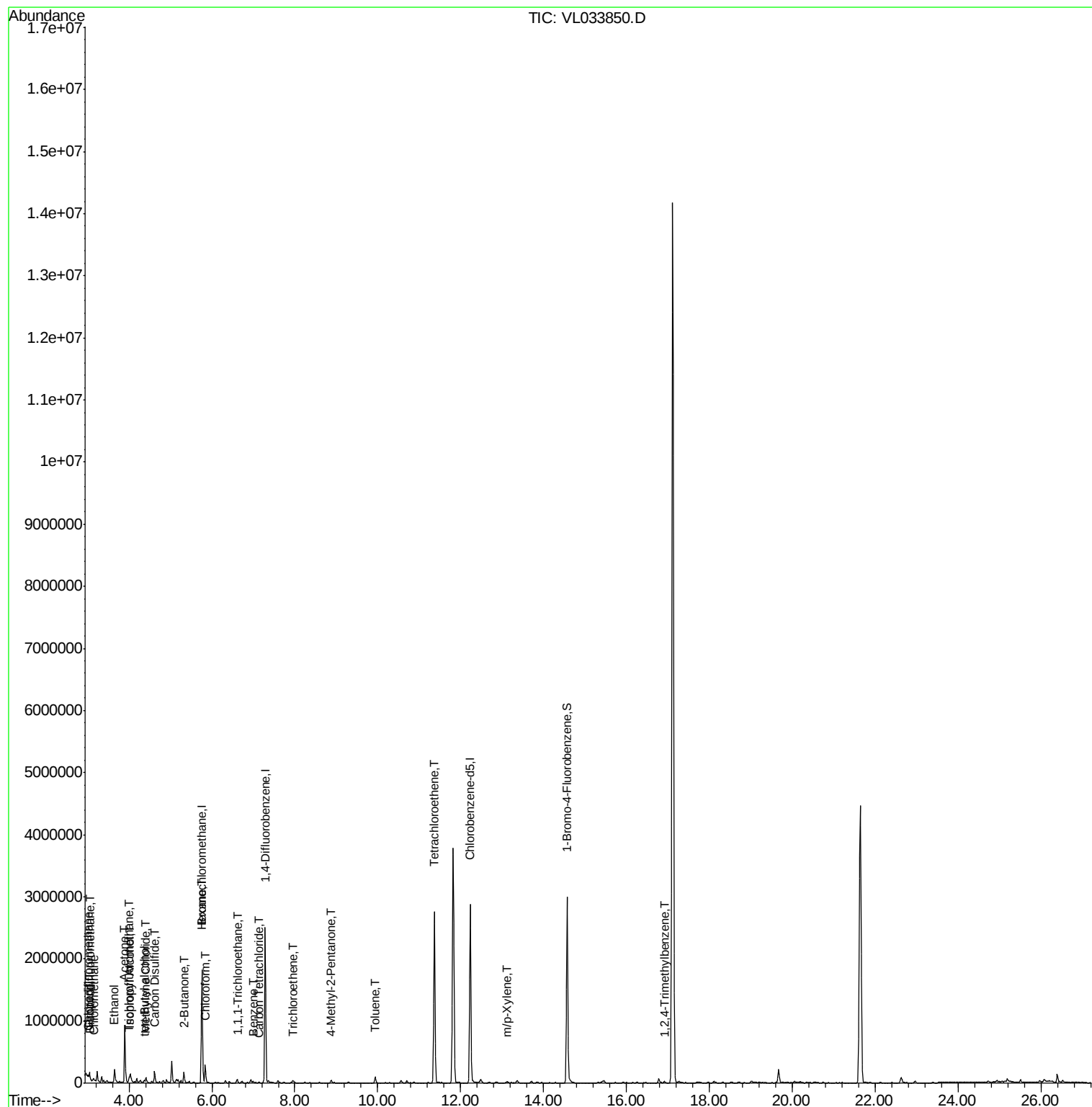
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL052919\
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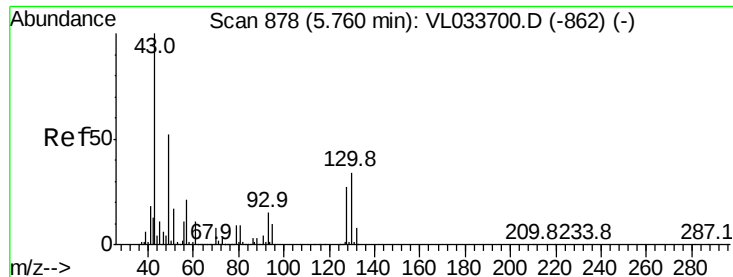
Instrument :
MSVOA_L
ClientSampleId :
SG-7-20190523-1

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Quant Time: May 30 02:55:10 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL051719AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri May
QLast Update : Fri May 17 08:15:41 2019
Response via : Initial Calibration





#1

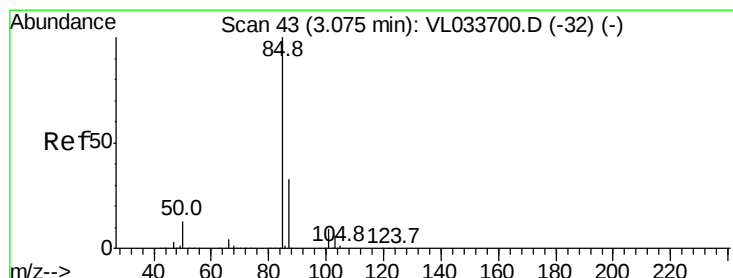
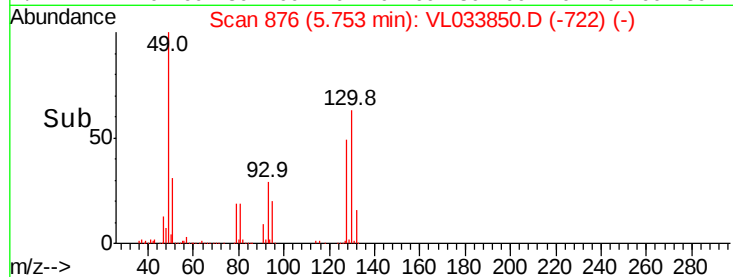
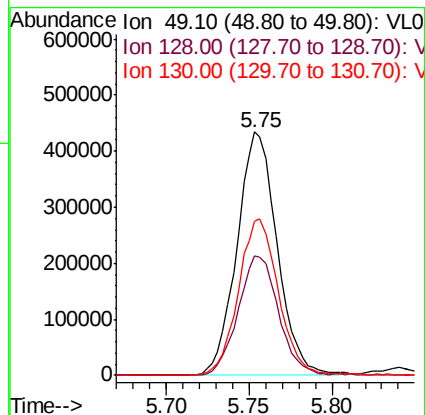
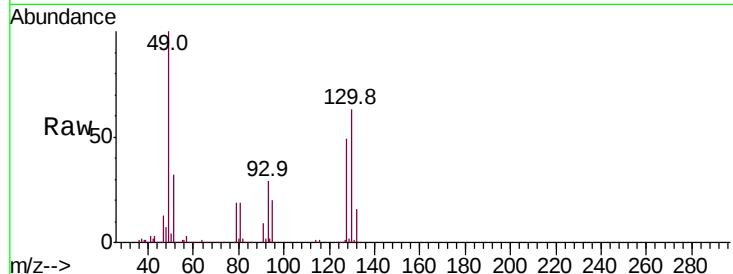
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.75 min Scan# 876
Delta R.T. -0.01 min
Lab File: VL033850.D
Acq: 30 May 2019 00:54

Instrument :
MSVOA_L
ClientSampleId :
SG-7-20190523-1

Tot Ion	Ratio	Lower	Upper
49	100		
128	49.7	25.2	75.6
130	64.8	32.5	97.5

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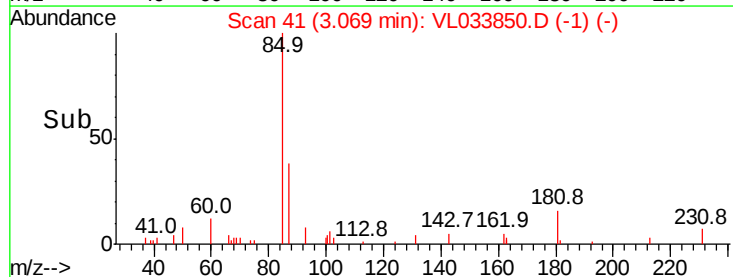
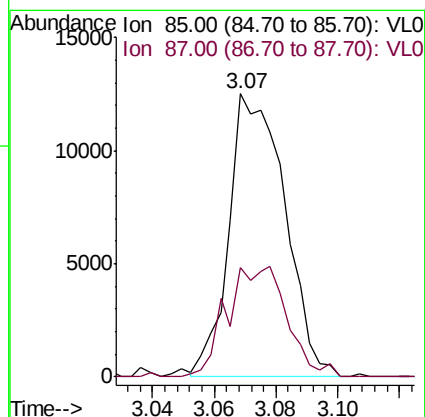
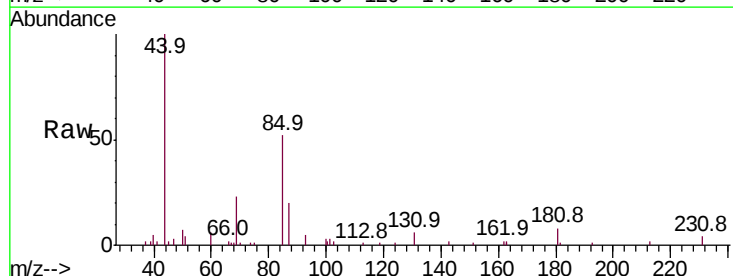
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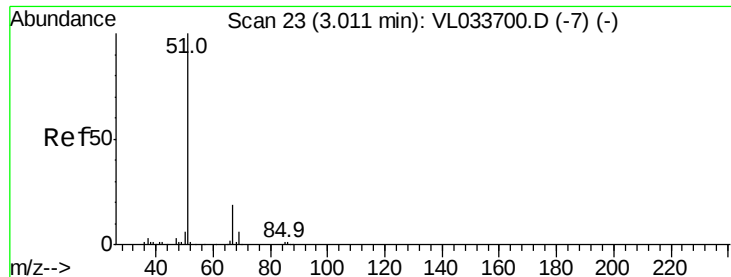


#2

Dichlorodifluoromethane
Concen: 0.102 ppbv
RT: 3.07 min Scan# 41
Delta R.T. -0.01 min
Lab File: VL033850.D
Acq: 30 May 2019 00:54

Tgt Ion	Ratio	Lower	Upper
85	100		
87	38.4	26.3	39.5





#3

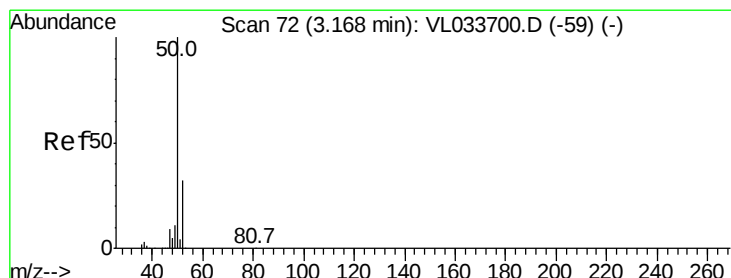
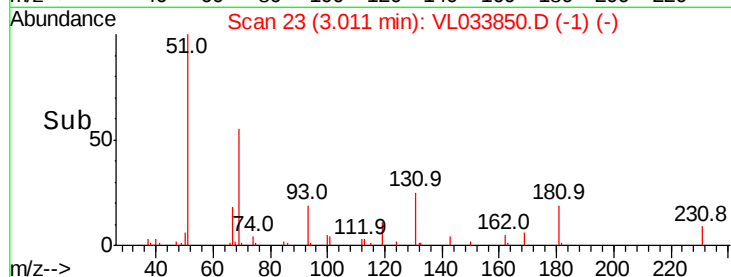
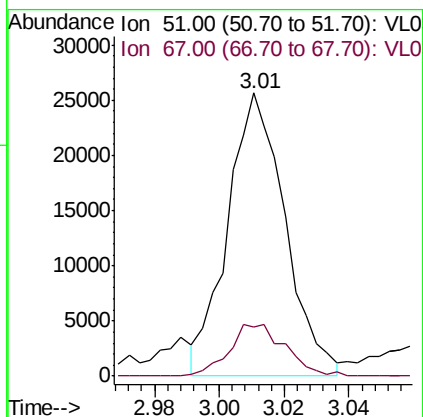
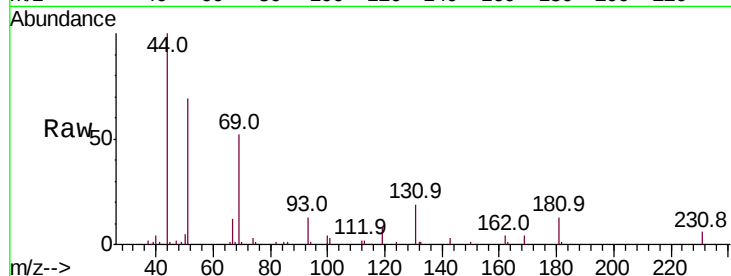
Chlorodifluoromethane
 Concen: 0.378 ppbv
 RT: 3.01 min Scan# 23
 Delta R.T. 0.00 min
 Lab File: VL033850.D
 Acq: 30 May 2019 00:54

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-7-20190523-1

Tot Ion: 51 Resp: 31597
 Ion Ratio Lower Upper
 51 100
 67 18.0 15.6 23.4

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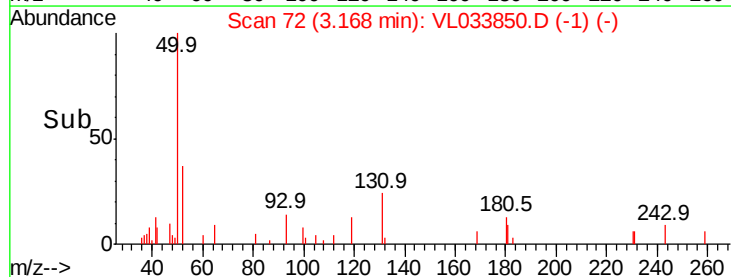
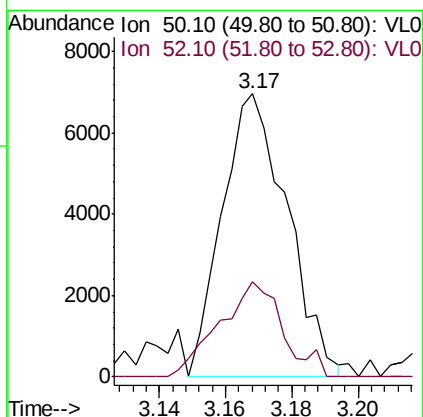
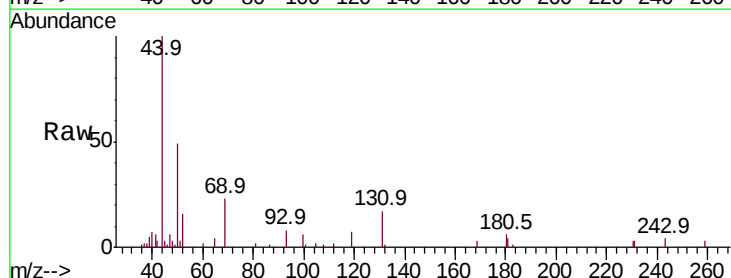
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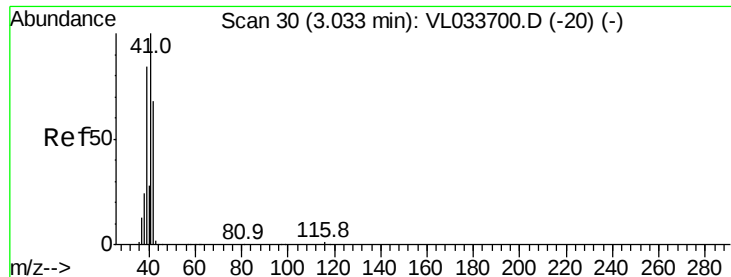


#4

Chloromethane
 Concen: 0.198 ppbv
 RT: 3.17 min Scan# 72
 Delta R.T. 0.00 min
 Lab File: VL033850.D
 Acq: 30 May 2019 00:54

Tgt Ion: 50 Resp: 9475
 Ion Ratio Lower Upper
 50 100
 52 33.8 25.7 38.5





#9

Propene

Concen: 0.385 ppbv m

RT: 3.04 min Scan# 31

Delta R.T. 0.00 min

Lab File: VL033850.D

Acq: 30 May 2019 00:54

Instrument :

MSVOA_L

ClientSampleId :

SG-7-20190523-1

Tot Ion: 41 Resp: 13691

Ion Ratio Lower Upper

41 100

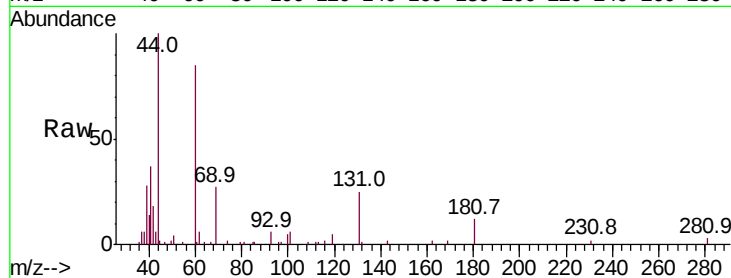
42 65.6 56.1 84.1

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Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

12000

10000

8000

6000

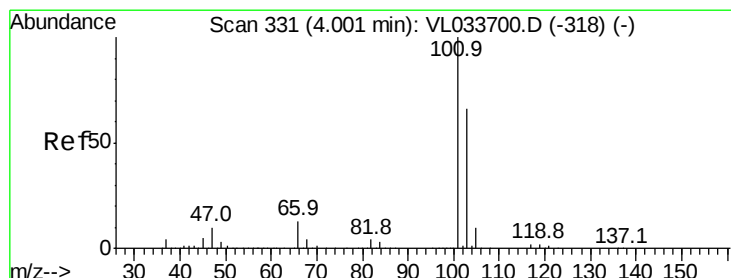
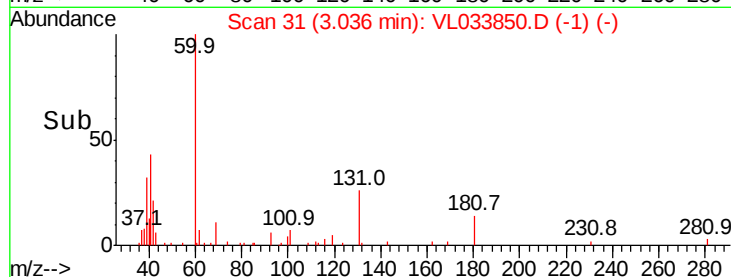
4000

2000

0

3.00 3.02 3.04 3.06 3.08

Time-->



#11

Trichlorofluoromethane

Concen: 0.372 ppbv

RT: 4.00 min Scan# 331

Delta R.T. 0.00 min

Lab File: VL033850.D

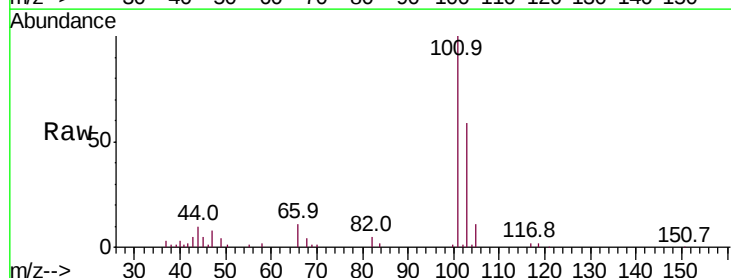
Acq: 30 May 2019 00:54

Tgt Ion: 101 Resp: 54580

Ion Ratio Lower Upper

101 100

103 58.5 52.6 78.8



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V

40000

30000

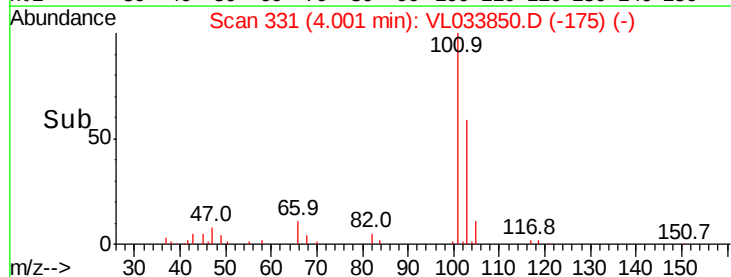
20000

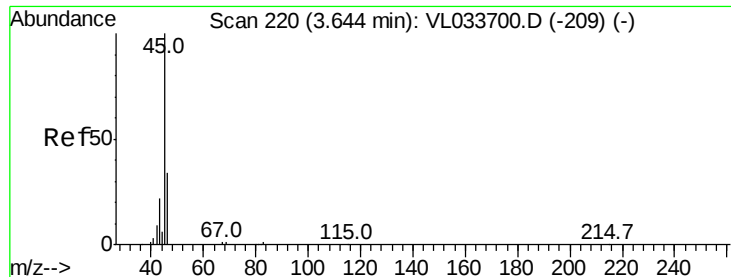
10000

0

3.95 4.00 4.05

Time-->





#13

Ethanol

Concen: 17.360 ppbv

RT: 3.65 min Scan# 222

Delta R.T. 0.01 min

Lab File: VL033850.D

Acq: 30 May 2019 00:54

Instrument :

MSVOA_L

ClientSampleId :

SG-7-20190523-1

Tot Ion: 45 Resp: 199498

Ion Ratio Lower Upper

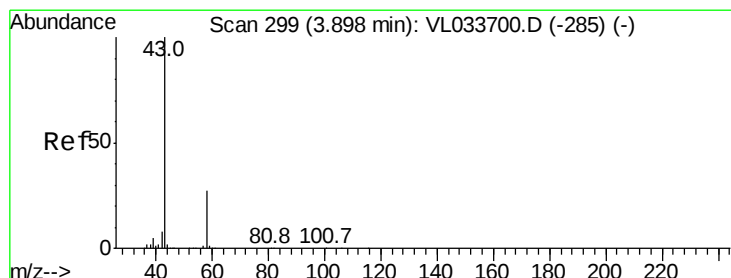
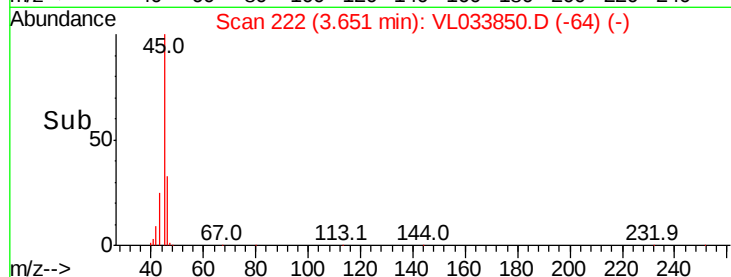
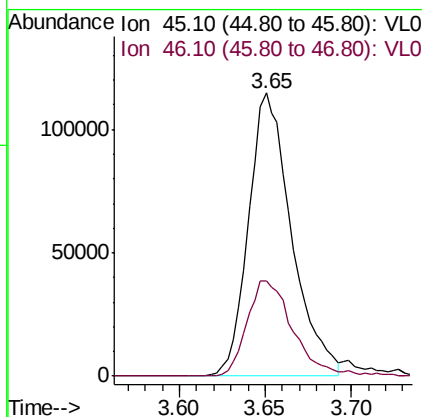
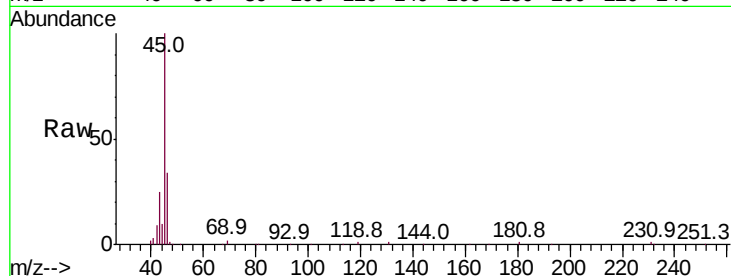
45 100

46 36.8 14.8 59.0

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#15

Acetone

Concen: 8.829 ppbv

RT: 3.89 min Scan# 298

Delta R.T. -0.00 min

Lab File: VL033850.D

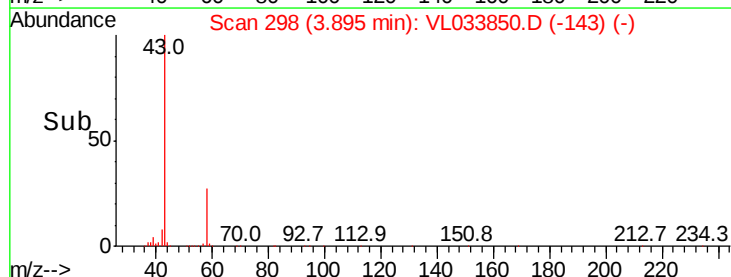
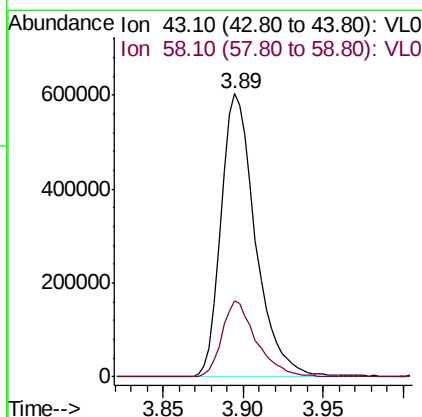
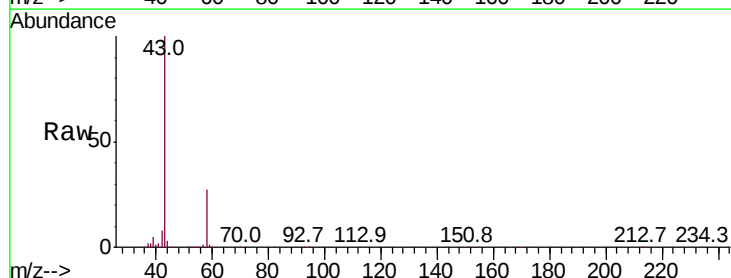
Acq: 30 May 2019 00:54

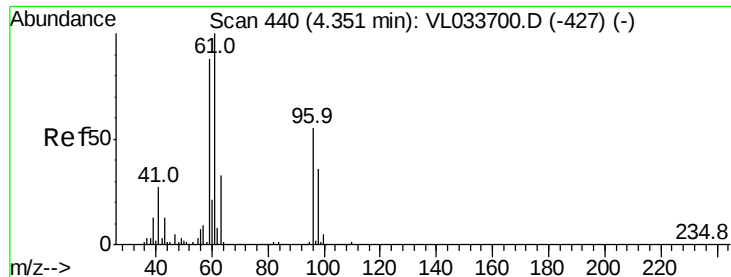
Tgt Ion: 43 Resp: 893928

Ion Ratio Lower Upper

43 100

58 27.1 21.3 31.9





#17

tert-Butyl alcohol

Concen: 0.240 ppbv m

RT: 4.36 min Scan# 444

Delta R.T. 0.01 min

Lab File: VL033850.D

Acq: 30 May 2019 00:54

Instrument :

MSVOA_L

ClientSampleId :

SG-7-20190523-1

Tot Ion: 59 Resp: 19658

Ion Ratio Lower Upper

59 100

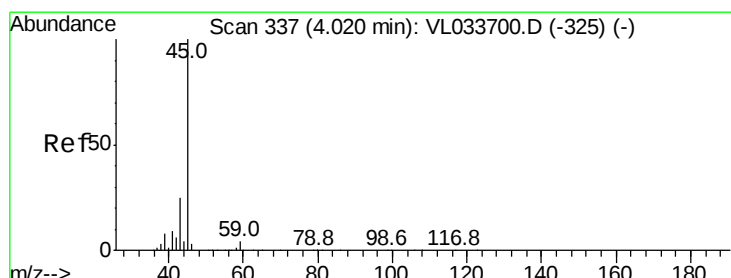
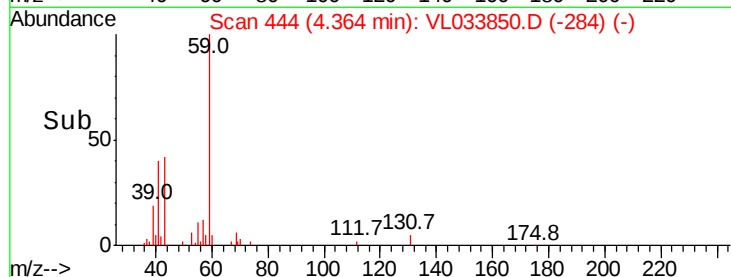
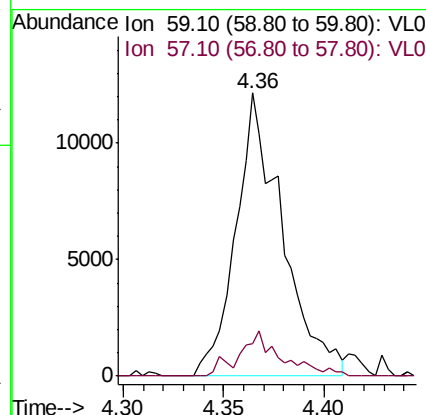
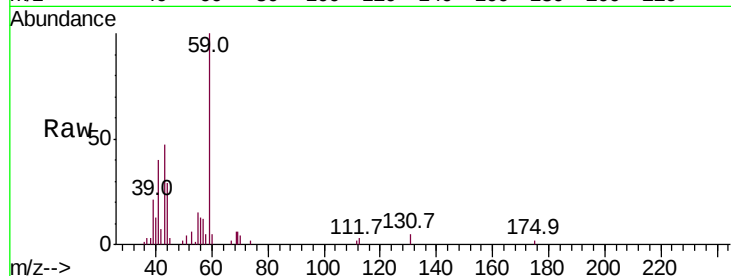
57 14.3 8.4 12.6#

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#19

Isopropyl Alcohol

Concen: 2.081 ppbv m

RT: 4.03 min Scan# 340

Delta R.T. 0.01 min

Lab File: VL033850.D

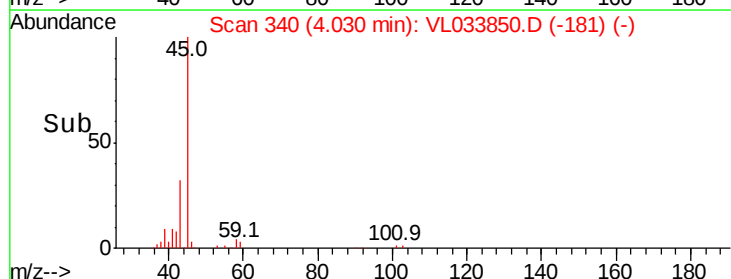
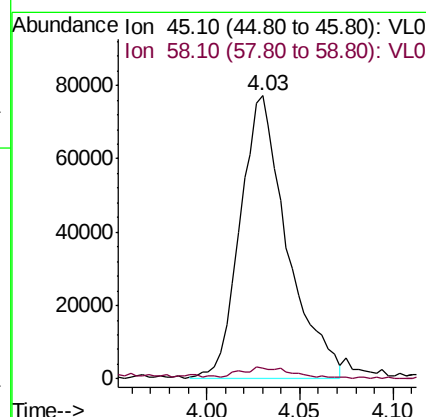
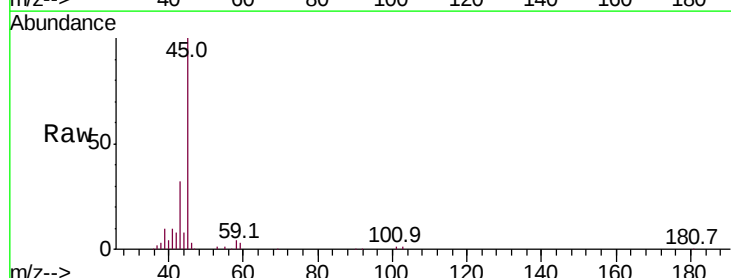
Acq: 30 May 2019 00:54

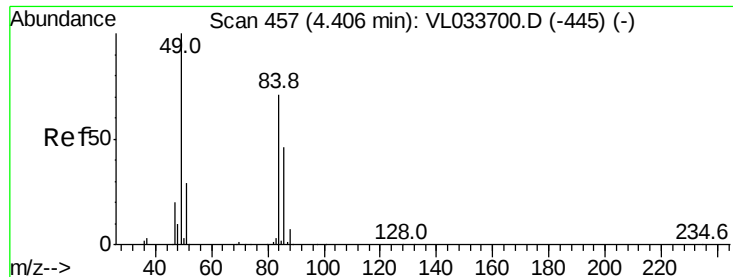
Tgt Ion: 45 Resp: 135876

Ion Ratio Lower Upper

45 100

58 0.0 1.6 2.4#





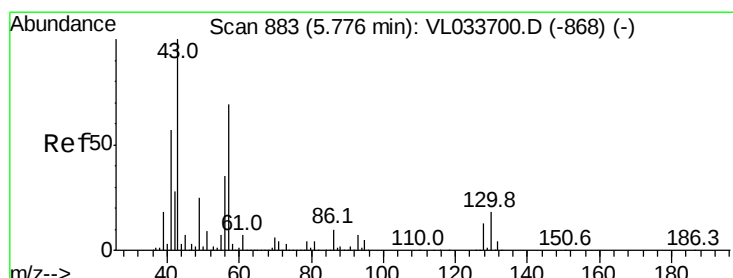
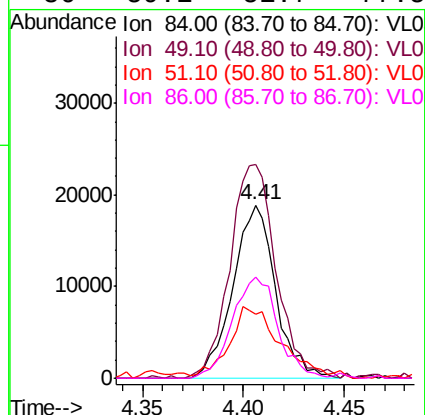
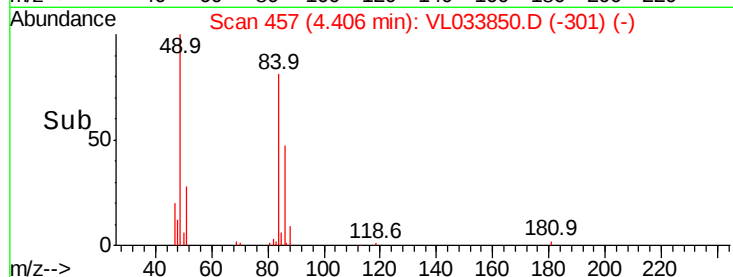
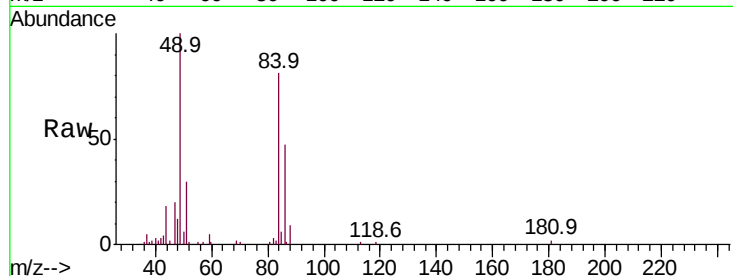
#20
Methvlene Chloride
Concen: 0.717 ppbv
RT: 4.41 min Scan# 457
Delta R.T. 0.00 min
Lab File: VL033850.D
Acq: 30 May 2019 00:54

Instrument :
MSVOA_L
ClientSampleId :
SG-7-20190523-1

Tot Ion:	84	Resp:	27945
Ion	Ratio	Lower	Upper
84	100		
49	123.4	112.8	169.2
51	35.6	33.4	50.0
86	59.1	51.7	77.5

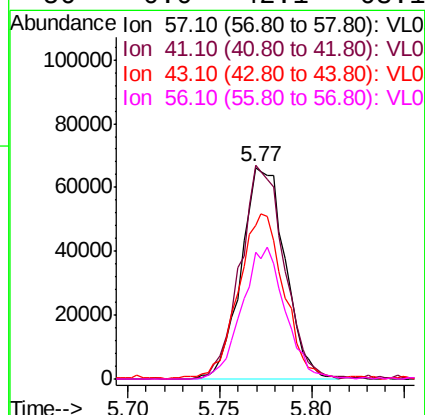
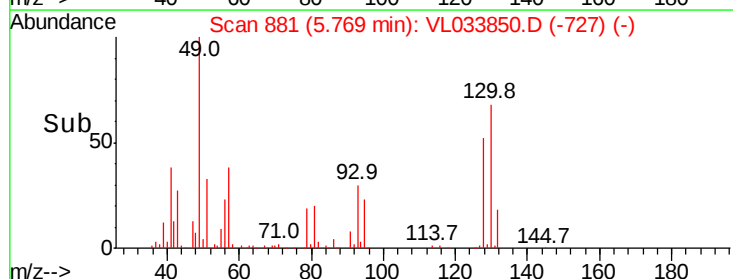
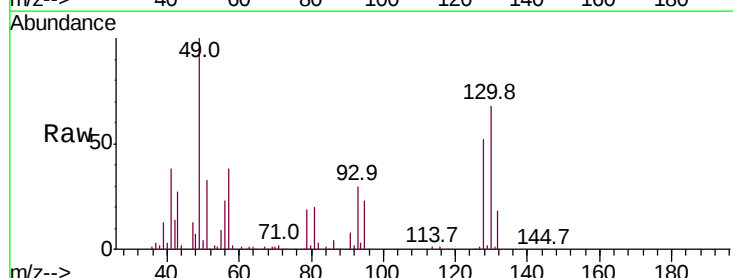
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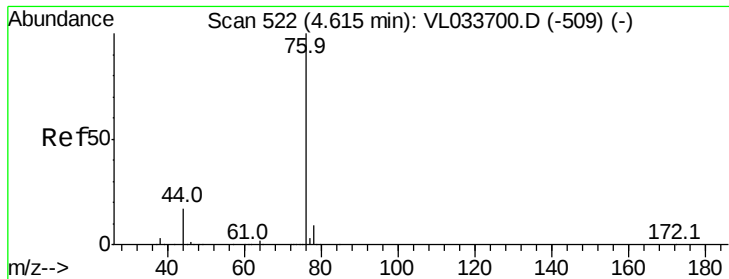
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#26
Hexane
Concen: 1.437 ppbv m
RT: 5.77 min Scan# 881
Delta R.T. -0.01 min
Lab File: VL033850.D
Acq: 30 May 2019 00:54

Tgt Ion:	57	Resp:	109897
Ion	Ratio	Lower	Upper
57	100		
41	101.0	69.8	104.6
43	0.0	181.8	272.6#
56	0.0	42.1	63.1#





#27

Carbon Disulfide

Concen: 1.950 ppbv

RT: 4.62 min Scan# 523

Delta R.T. 0.00 min

Lab File: VL033850.D

Acq: 30 May 2019 00:54

Instrument :

MSVOA_L

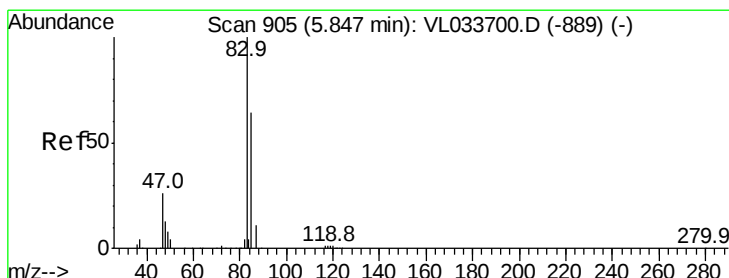
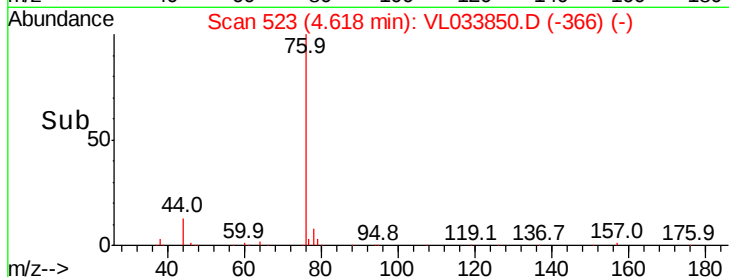
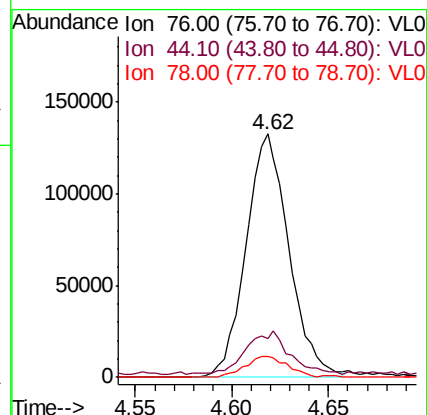
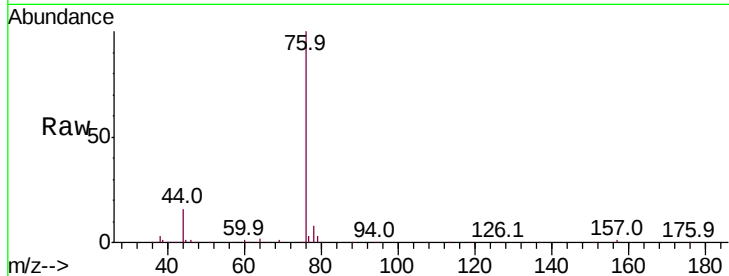
ClientSampleId :

SG-7-20190523-1

Tot Ion:	76	Resp:	204593
Ion Ratio	Lower	Upper	
76	100		
44	18.8	13.8	20.8
78	9.0	7.4	11.0

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#29

Chloroform

Concen: 1.404 ppbv

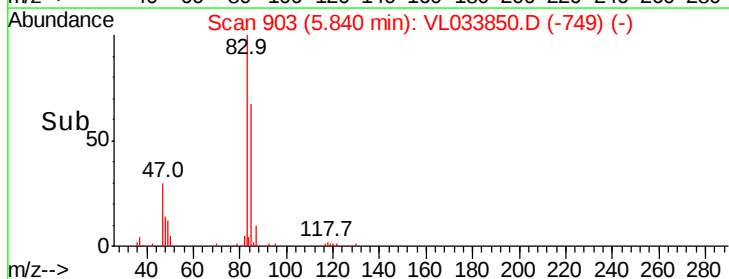
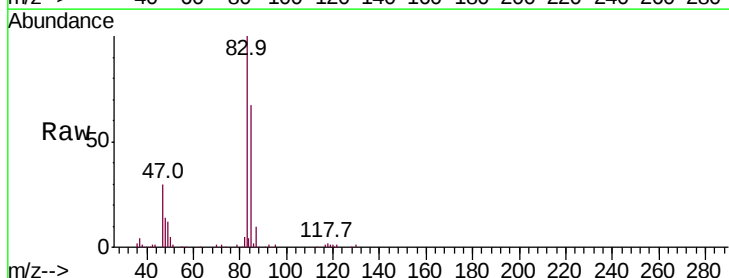
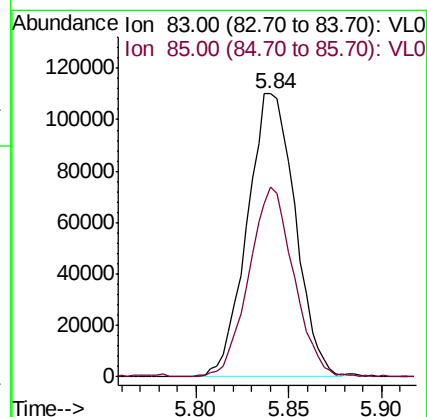
RT: 5.84 min Scan# 903

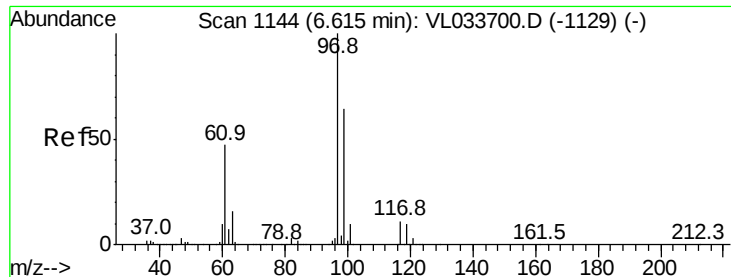
Delta R.T. -0.01 min

Lab File: VL033850.D

Acq: 30 May 2019 00:54

Tgt Ion:	83	Resp:	197793
Ion Ratio	Lower	Upper	
83	100		
85	67.0	51.5	77.3





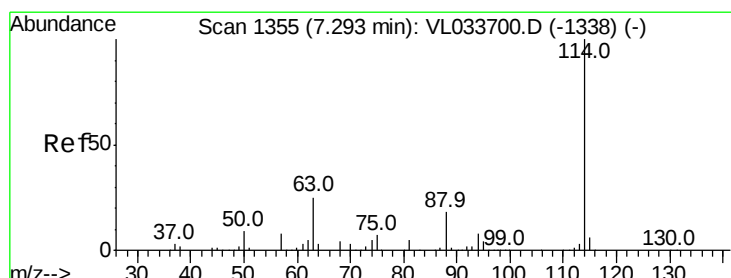
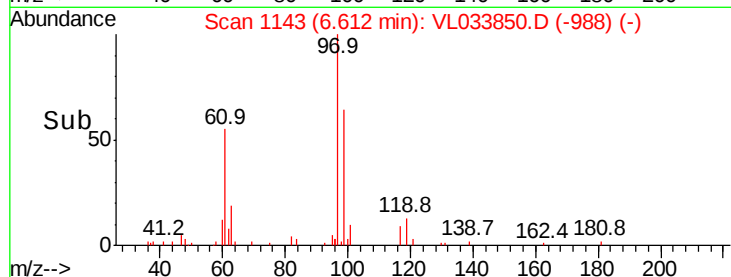
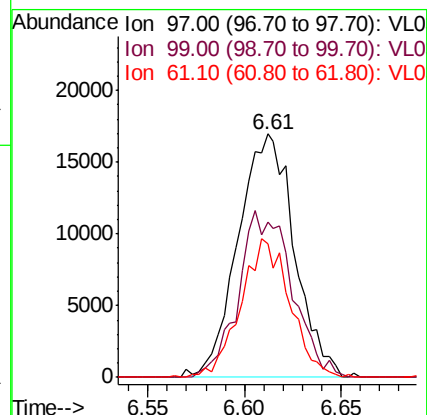
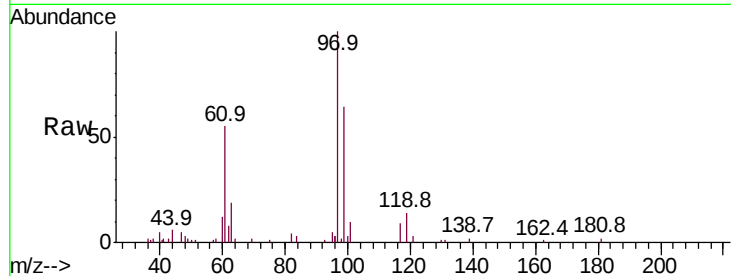
#32
 1,1,1-Trichloroethane
 Concen: 0.243 ppbv
 RT: 6.61 min Scan# 1143
 Delta R.T. -0.00 min
 Lab File: VL033850.D
 Acq: 30 May 2019 00:54

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-7-20190523-1

Tot Ion	Ratio	Lower	Upper
97	100		
99	65.0	51.5	77.3
61	49.9	37.8	56.8

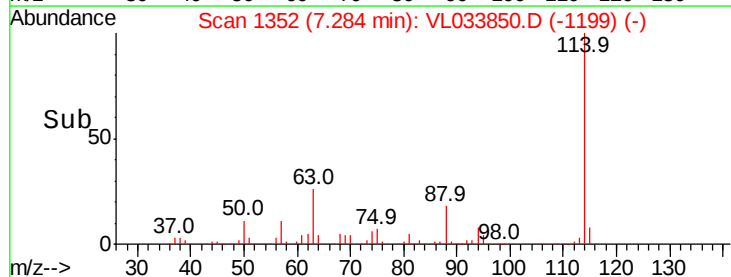
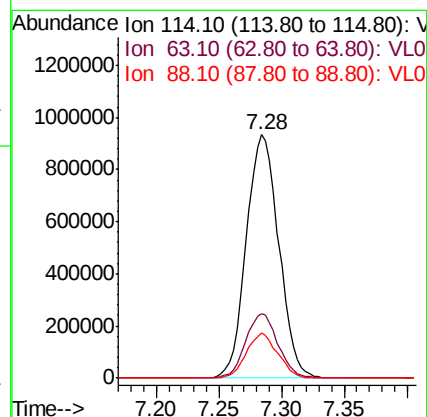
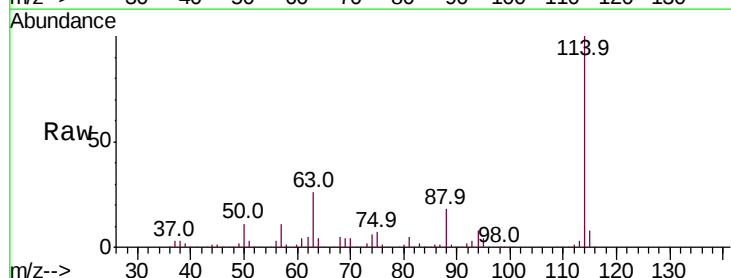
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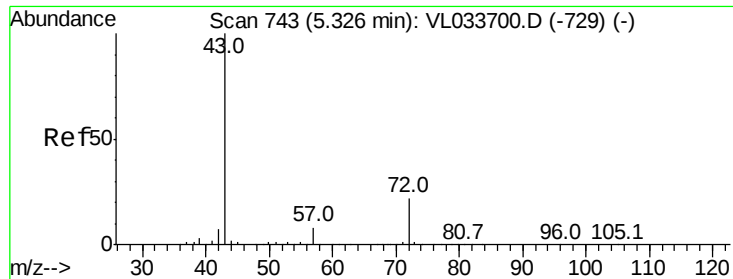
apatel
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#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.28 min Scan# 1352
 Delta R.T. -0.01 min
 Lab File: VL033850.D
 Acq: 30 May 2019 00:54

Tgt Ion	Ratio	Lower	Upper
114	100		
63	26.4	20.9	31.3
88	17.8	14.3	21.5





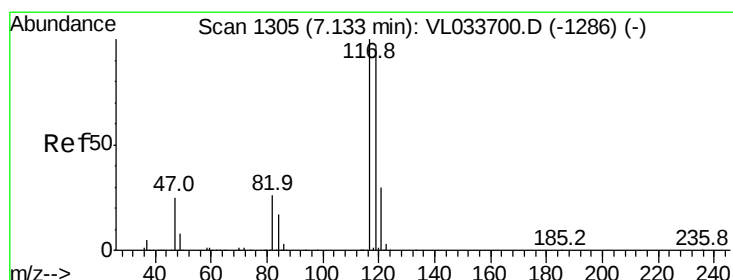
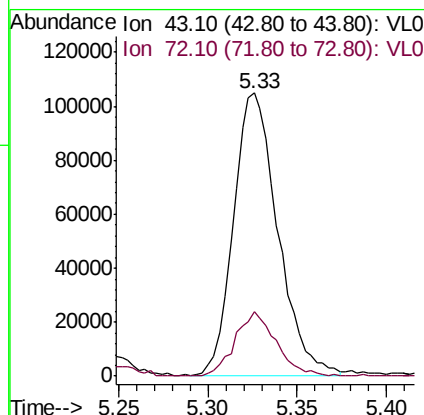
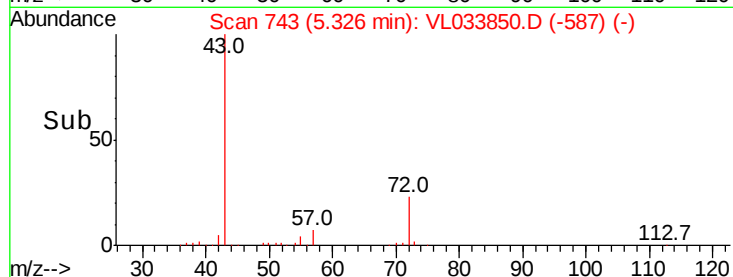
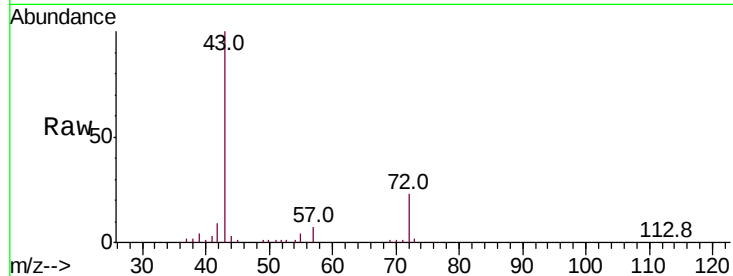
#34
2-Butanone
Concen: 1.722 ppbv
RT: 5.33 min Scan# 743
Delta R.T. 0.00 min
Lab File: VL033850.D
Acq: 30 May 2019 00:54

Instrument :
MSVOA_L
ClientSampleId :
SG-7-20190523-1

Tot Ion: 43 Resp: 179985
Ion Ratio Lower Upper
43 100
72 21.5 17.8 26.6

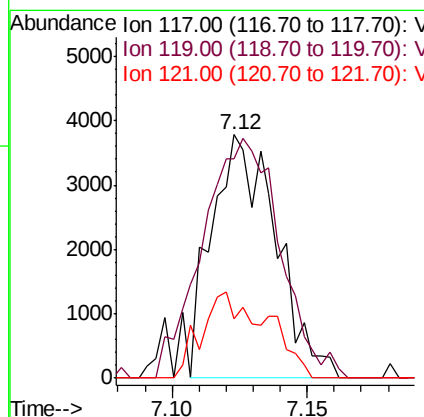
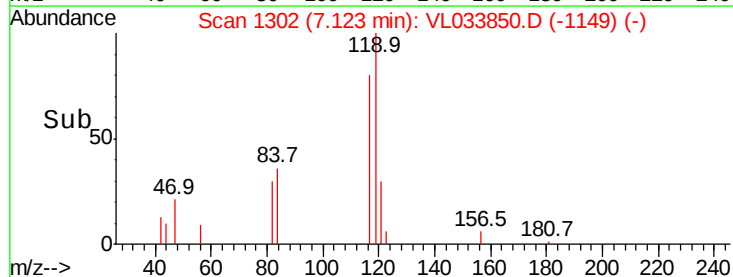
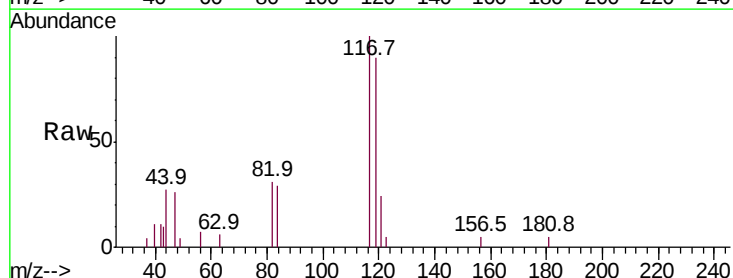
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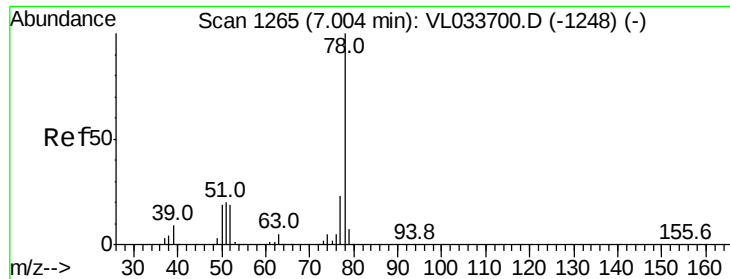
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#35
Carbon Tetrachloride
Concen: 0.047 ppbv m
RT: 7.12 min Scan# 1302
Delta R.T. -0.01 min
Lab File: VL033850.D
Acq: 30 May 2019 00:54

Tgt Ion: 117 Resp: 6282
Ion Ratio Lower Upper
117 100
119 90.3 77.2 115.8
121 24.4 24.1 36.1





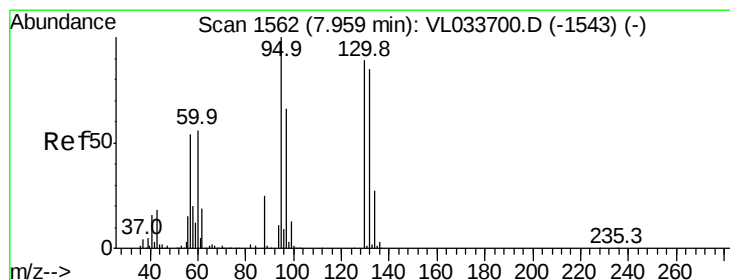
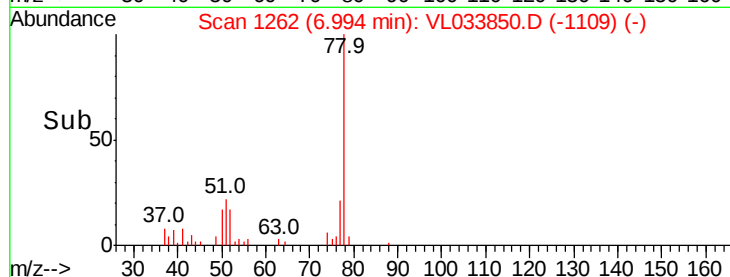
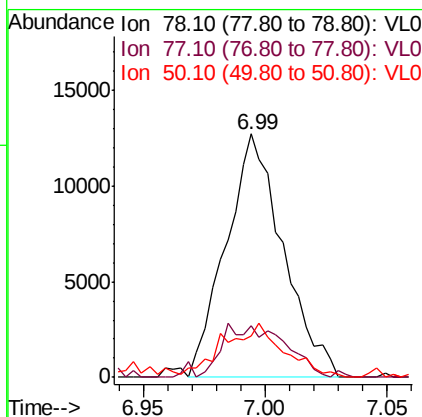
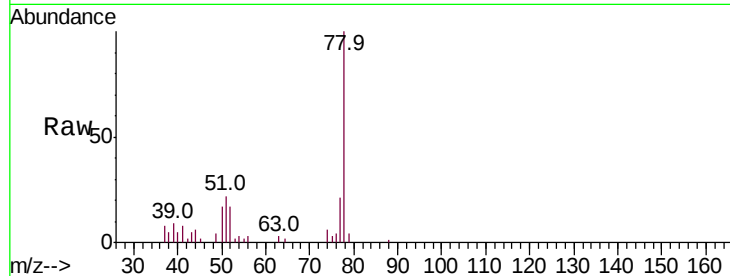
#36
Benzene
Concen: 0.135 ppbv
RT: 6.99 min Scan# 1262
Delta R.T. -0.01 min
Lab File: VL033850.D
Acq: 30 May 2019 00:54

Instrument :
MSVOA_L
ClientSampleId :
SG-7-20190523-1

Tot Ion	Ratio	Lower	Upper
78	100		
77	18.2	18.4	27.6#
50	15.6	15.5	23.3

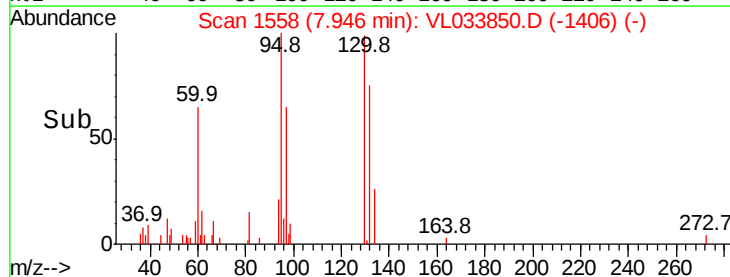
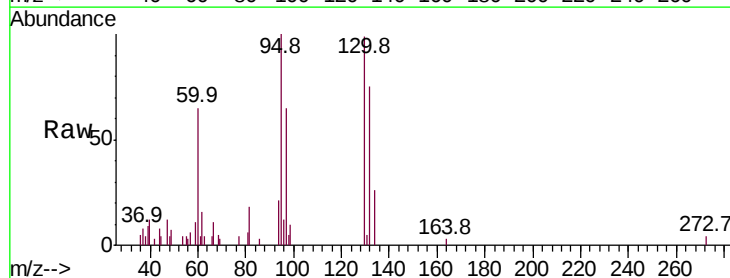
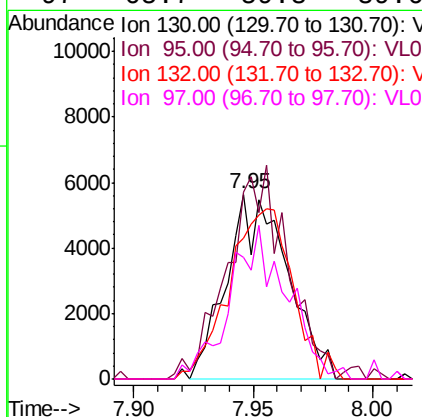
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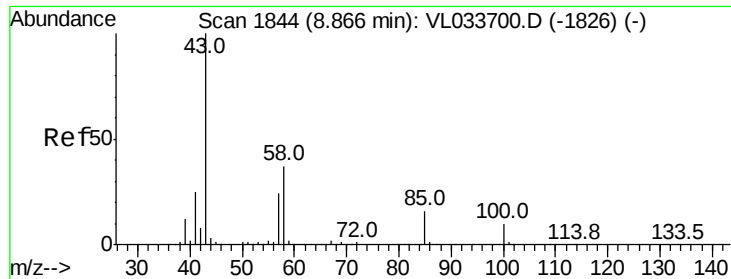
apatel
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#38
Trichloroethene
Concen: 0.176 ppbv m
RT: 7.95 min Scan# 1558
Delta R.T. -0.01 min
Lab File: VL033850.D
Acq: 30 May 2019 00:54

Tgt Ion	Ratio	Lower	Upper
130	100		
95	100.9	90.2	135.4
132	75.9	76.4	114.6#
97	65.7	59.8	89.6





#50

4-Methyl-2-Pentanone

Concen: 0.196 ppbv m

RT: 8.88 min Scan# 1848

Delta R.T. 0.01 min

Lab File: VL033850.D

Acq: 30 May 2019 00:54

Instrument :

MSVOA_L

ClientSampleId :

SG-7-20190523-1

Tot Ion: 43 Resp: 31450

Ion Ratio Lower Upper

43 100

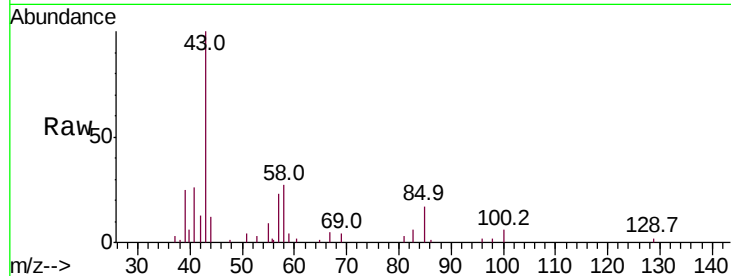
58 31.6 28.6 43.0

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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

8.88

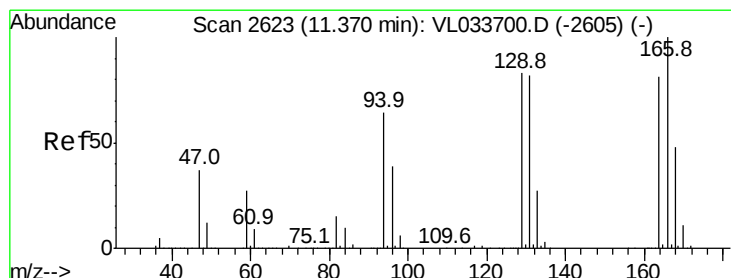
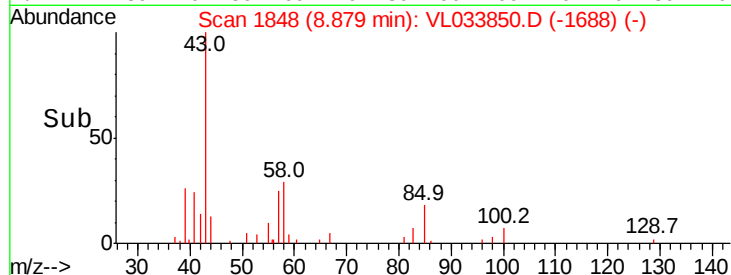
15000

10000

5000

0

Time-->



#52

Tetrachloroethene

Concen: 12.243 ppbv

RT: 11.37 min Scan# 2622

Delta R.T. -0.00 min

Lab File: VL033850.D

Acq: 30 May 2019 00:54

Tgt Ion: 164 Resp: 660021

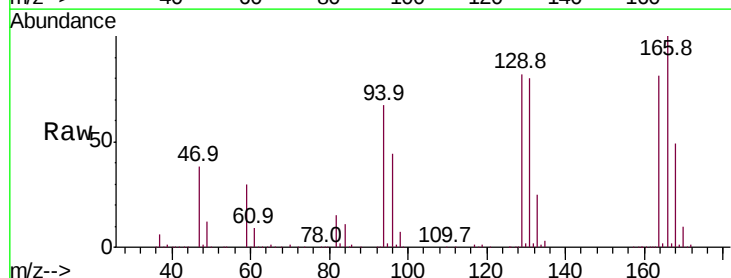
Ion Ratio Lower Upper

164 100

166 123.3 98.9 148.3

129 100.9 81.8 122.6

131 98.0 81.1 121.7



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

600000

500000

400000

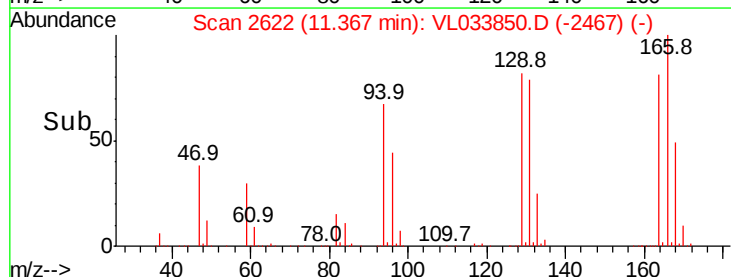
300000

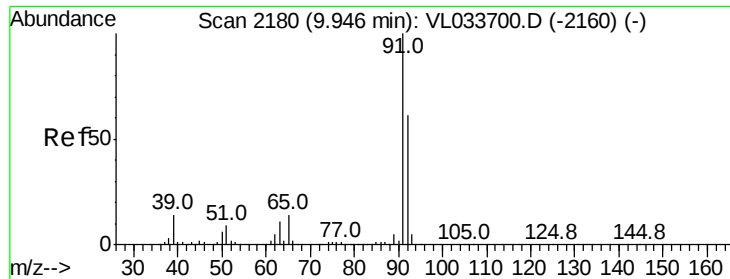
200000

100000

0

Time-->





#53

Toluene

Concen: 0.388 ppbv

RT: 9.94 min Scan# 2178

Delta R.T. -0.01 min

Lab File: VL033850.D

Acq: 30 May 2019 00:54

Instrument :

MSVOA_L

ClientSampleId :

SG-7-20190523-1

Tot Ion: 91 Resp: 64205

Ion Ratio Lower Upper

91 100

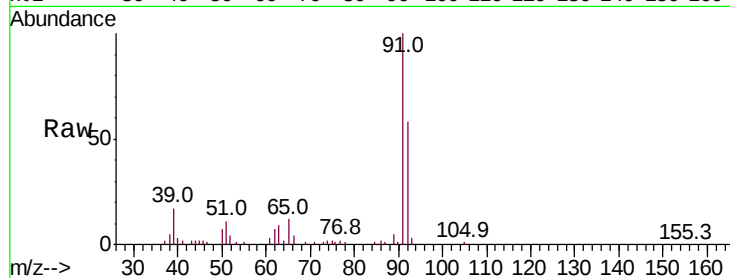
92 60.9 47.6 71.4

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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

9.94

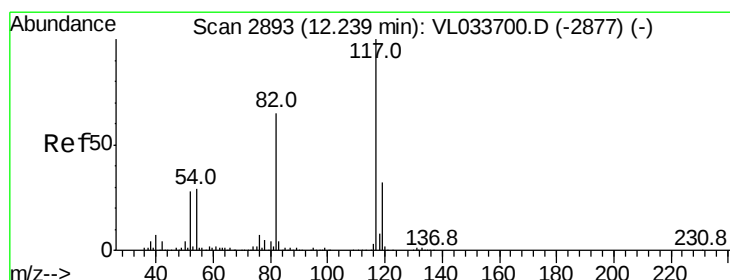
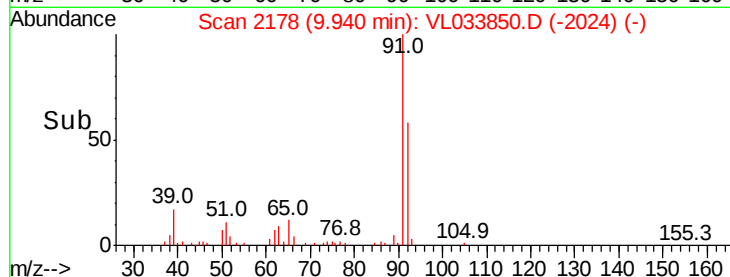
30000

20000

10000

0

Time-->



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.23 min Scan# 2891

Delta R.T. -0.01 min

Lab File: VL033850.D

Acq: 30 May 2019 00:54

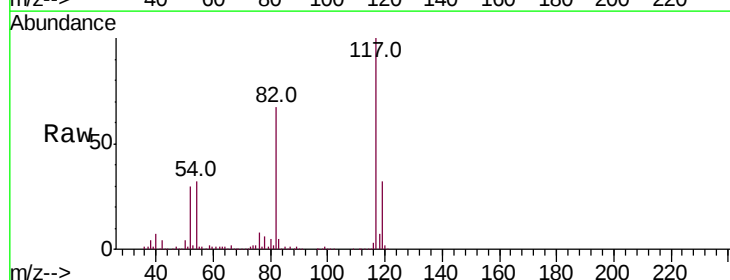
Tgt Ion: 117 Resp: 1741801

Ion Ratio Lower Upper

117 100

82 67.1 49.4 74.0

119 32.4 24.9 37.3



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

12.23

1000000

800000

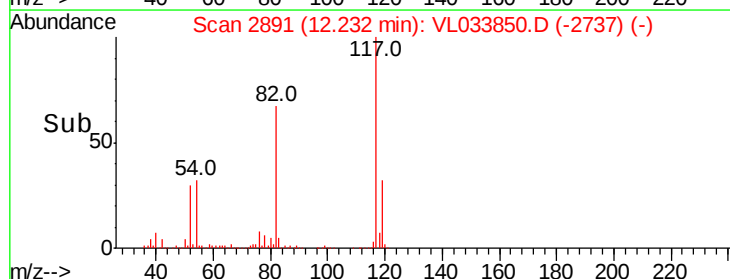
600000

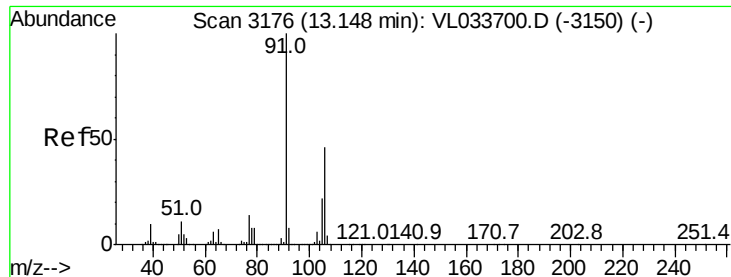
400000

200000

0

Time-->





#59

m/p-Xylene

Concen: 0.111 ppbv m

RT: 13.12 min Scan# 3166

Delta R.T. -0.03 min

Lab File: VL033850.D

Acq: 30 May 2019 00:54

Instrument :

MSVOA_L

ClientSampleId :

SG-7-20190523-1

Tot Ion: 91 Resp: 22411

Ion Ratio Lower Upper

91 100

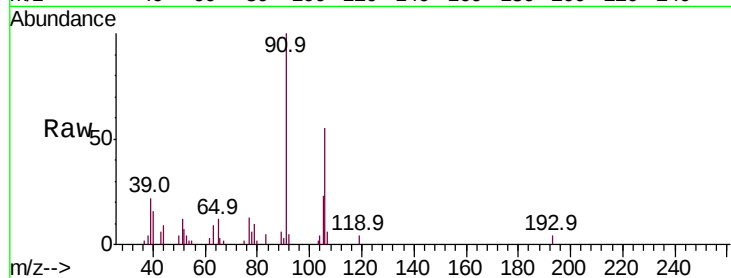
106 0.0 35.8 53.6#

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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

13.12

8000

6000

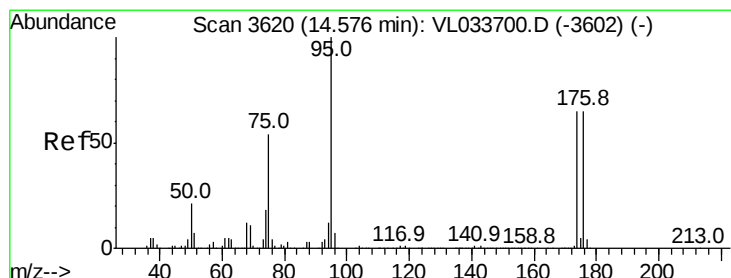
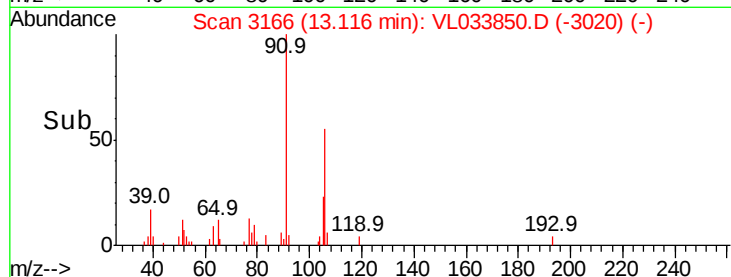
4000

2000

0

13.05 13.10 13.15 13.20

Time-->



#68

1-Bromo-4-Fluorobenzene

Concen: 9.821 ppbv

RT: 14.57 min Scan# 3617

Delta R.T. -0.01 min

Lab File: VL033850.D

Acq: 30 May 2019 00:54

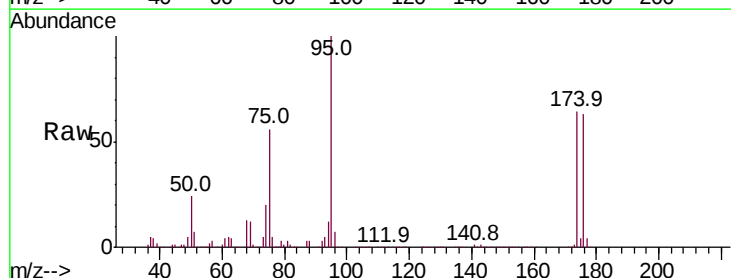
Tgt Ion: 95 Resp: 1386820

Ion Ratio Lower Upper

95 100

174 66.0 53.9 80.9

175 4.6 3.8 5.8



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

800000

600000

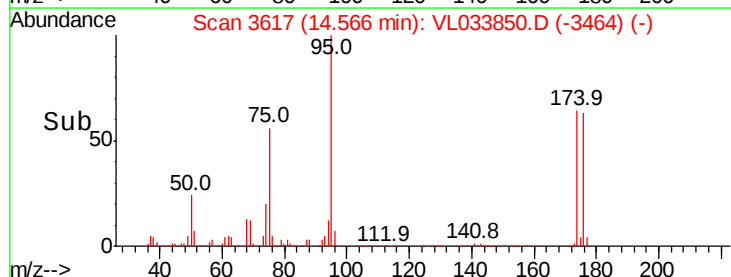
400000

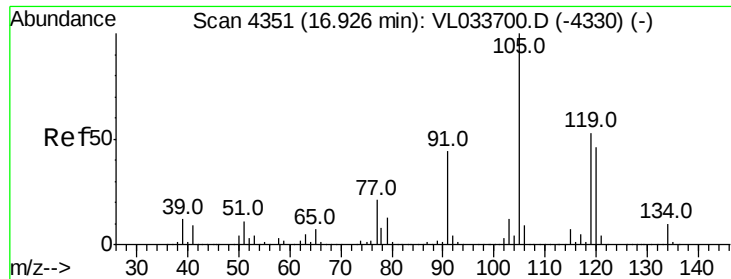
200000

0

14.50 14.55 14.60

Time-->





#74
 1,2,4-Trimethylbenzene
 Concen: 0.032 ppbv
 RT: 16.91 min Scan# 4347
 Delta R.T. -0.01 min
 Lab File: VL033850.D
 Acq: 30 May 2019 00:54

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-7-20190523-1

Tot Ion:	105	Resp:	7961
Ion Ratio	Lower	Upper	
105	100		
120	44.3	36.8	55.2
91	8.1	35.4	53.0#
77	4.5	16.8	25.2#

Manual Integrations
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