

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL081219\
 Data File : VL034112.D
 Acq On : 12 Aug 2019 22:16
 Operator : SY/AP
 Sample : K4296-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SRS-0807-VI1

Manual Integrations
 APPROVED

MMDadoda
 8/16/2019 8:54:34 AM

Quant Time: Aug 13 13:44:35 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL080519AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Aug 0
 QLast Update : Mon Aug 05 17:09:48 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.71	49	1119383	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.24	114	2097735	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.17	117	2163762	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.52	95	1862045	10.61	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	106.10%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.05	85	38464	0.279	ppbv	94
3) Chlorodifluoromethane	2.98	51	52649	0.407	ppbv	96
4) Chloromethane	3.14	50	37633	0.451	ppbv #	82
9) Propene	3.02	41	34301	0.449	ppbv #	77
10) Heptane	8.19	43	21346	0.108	ppbv	98
11) Trichlorofluoromethane	3.97	101	36833	0.226	ppbv	88
13) Ethanol	3.62	45	311674	14.492	ppbv	98
15) Acetone	3.86	43	1459107	9.122	ppbv	99
19) Isopropyl Alcohol	3.99	45	141170m	1.133	ppbv	
20) Methylene Chloride	4.37	84	171726	3.580	ppbv	92
26) Hexane	5.73	57	229303	1.719	ppbv #	59
30) Cyclohexane	7.19	84	13484m	0.128	ppbv	
34) 2-Butanone	5.29	43	102401	0.525	ppbv	98
35) Carbon Tetrachloride	7.08	117	10711m	0.067	ppbv	
36) Benzene	6.95	78	40637	0.170	ppbv #	92
43) Methyl Methacrylate	8.08	69	9733m	0.100	ppbv	
44) 2,2,4-Trimethylpentane	7.94	57	45793m	0.107	ppbv	
53) Toluene	9.88	91	3808578	13.842	ppbv	99
58) Ethyl Benzene	12.80	91	42656m	0.117	ppbv	
59) m/p-Xylene	13.06	91	81913m	0.280	ppbv	
60) o-Xylene	13.78	91	35401m	0.121	ppbv	
74) 1,2,4-Trimethylbenzene	16.86	105	53697m	0.156	ppbv	
79) Naphthalene	22.33	128	41167m	0.115	ppbv	

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

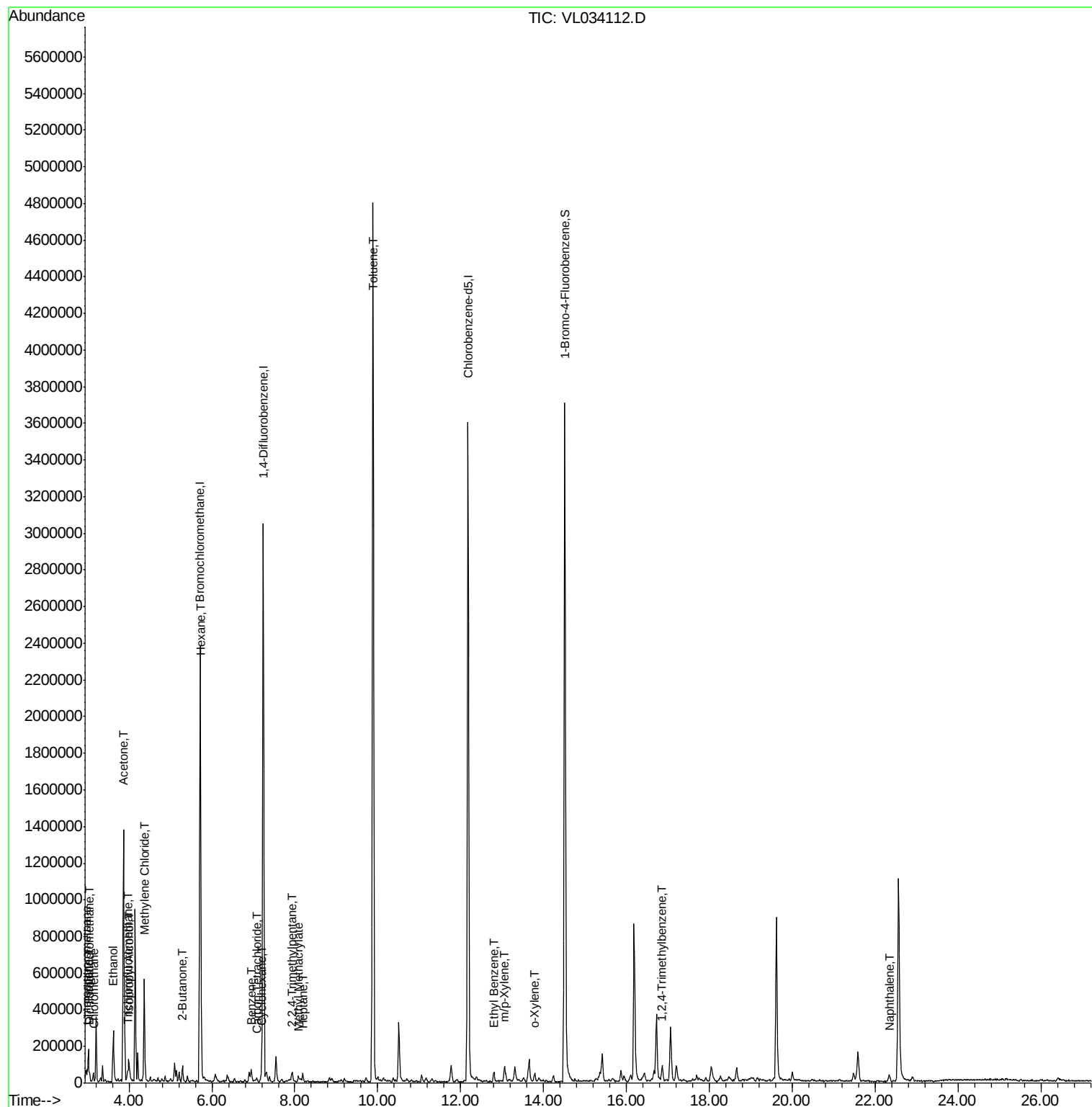
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL081219\
Data File : VL034112.D
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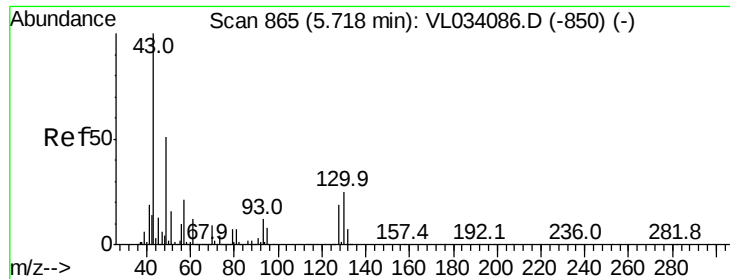
Instrument :
MSVOA_L
ClientSampleId :
SRS-0807-VI1

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Quant Time: Aug 13 13:44:35 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL080519AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Aug
QLast Update : Mon Aug 05 17:09:48 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.71 min Scan# 863

Delta R.T. -0.01 min

Lab File: VL034112.D

Acq: 12 Aug 2019 22:16

Instrument :

MSVOA_L

ClientSampleId :

SRS-0807-VI1

Tot Ion: 49 Resp: 1119383

Ion Ratio Lower Upper

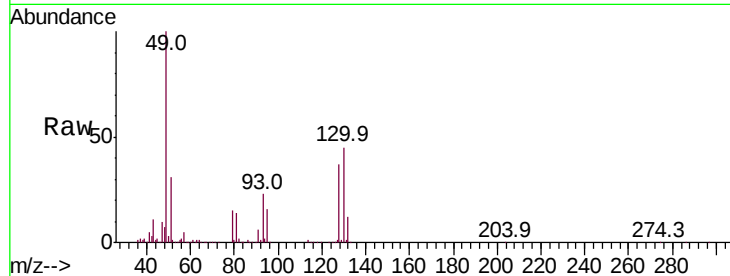
49 100

128 37.6 19.5 58.5

130 47.8 25.4 76.0

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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V

800000

600000

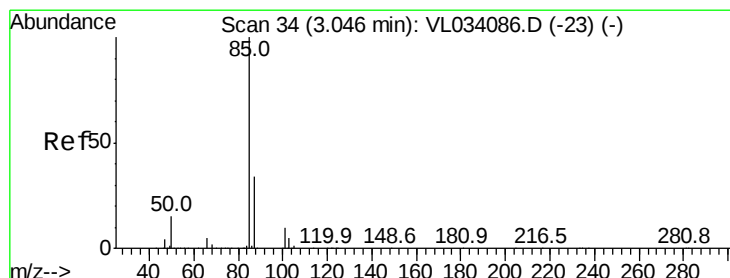
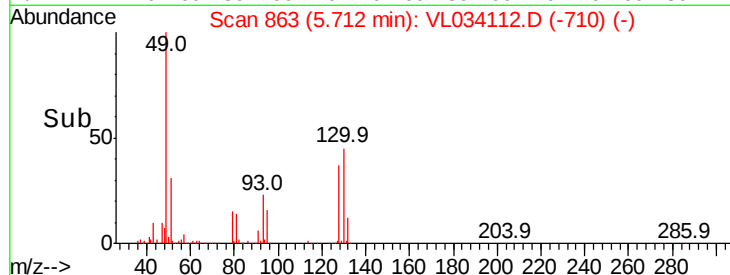
400000

200000

0

5.65 5.70 5.75

Time-->



#2

Dichlorodifluoromethane

Concen: 0.279 ppbv

RT: 3.05 min Scan# 35

Delta R.T. 0.00 min

Lab File: VL034112.D

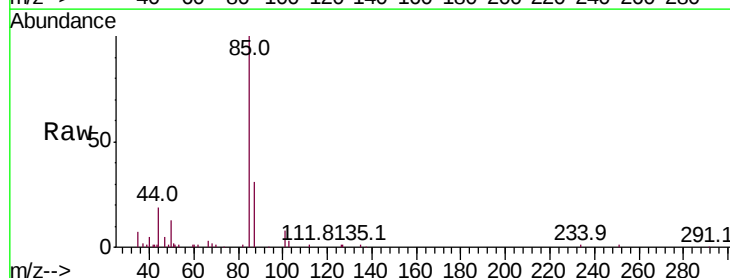
Acq: 12 Aug 2019 22:16

Tgt Ion: 85 Resp: 38464

Ion Ratio Lower Upper

85 100

87 30.7 27.1 40.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

40000

30000

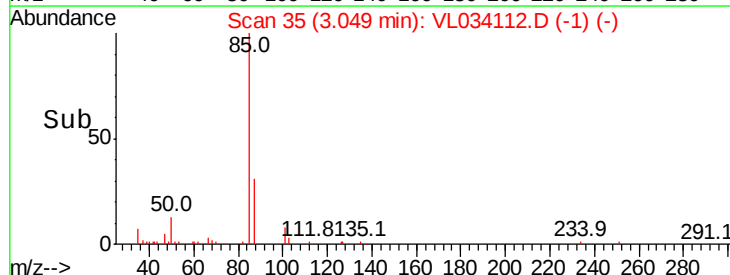
20000

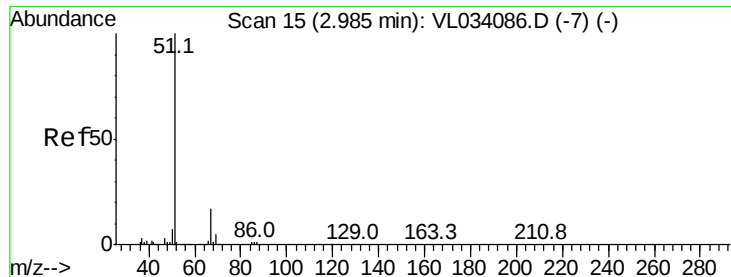
10000

0

3.00 3.05 3.10

Time-->





#3

Chlorodifluoromethane

Concen: 0.407 ppbv

RT: 2.98 min Scan# 14

Delta R.T. -0.00 min

Lab File: VL034112.D

Acq: 12 Aug 2019 22:16

Instrument :

MSVOA_L

ClientSampleId :

SRS-0807-VI1

Tot Ion: 51 Resp: 52649

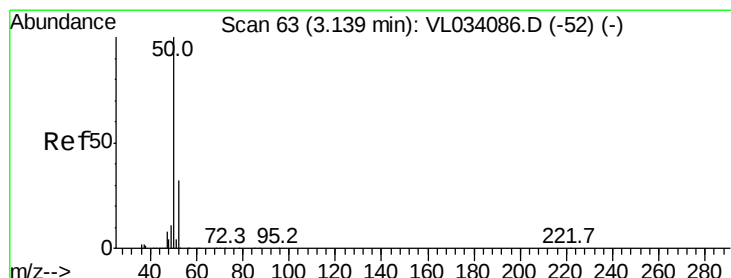
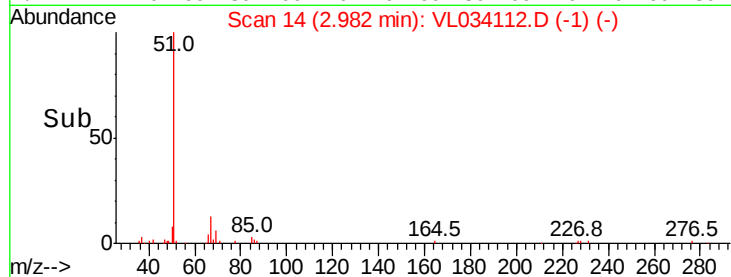
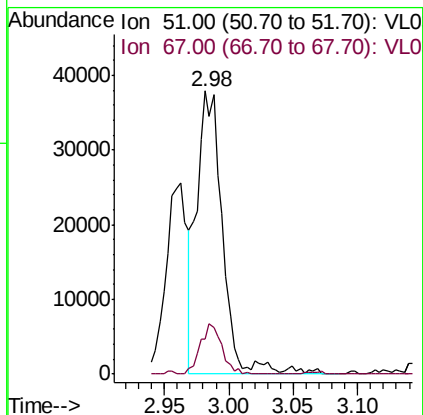
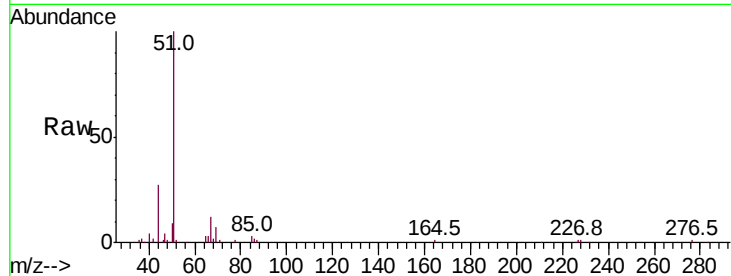
Ion Ratio Lower Upper

51 100

67 14.9 13.3 19.9

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#4

Chloromethane

Concen: 0.451 ppbv

RT: 3.14 min Scan# 63

Delta R.T. -0.00 min

Lab File: VL034112.D

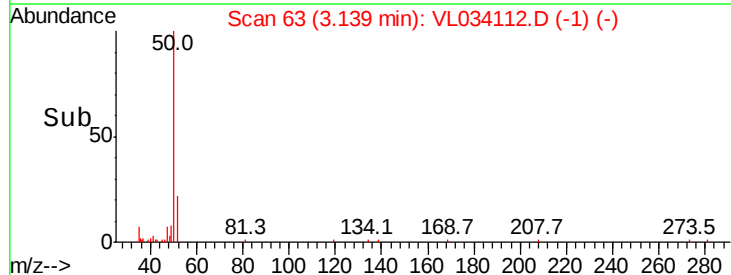
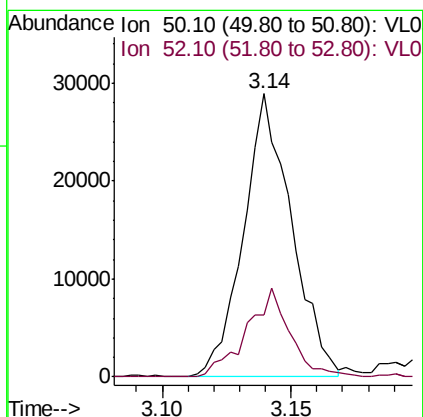
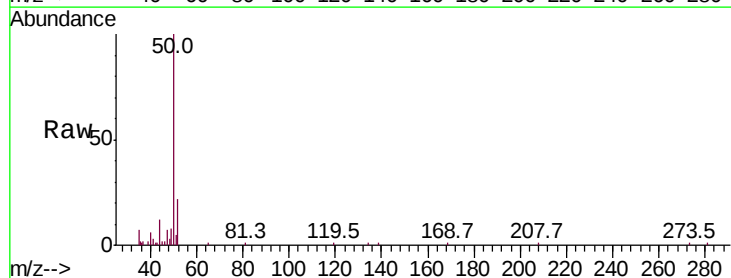
Acq: 12 Aug 2019 22:16

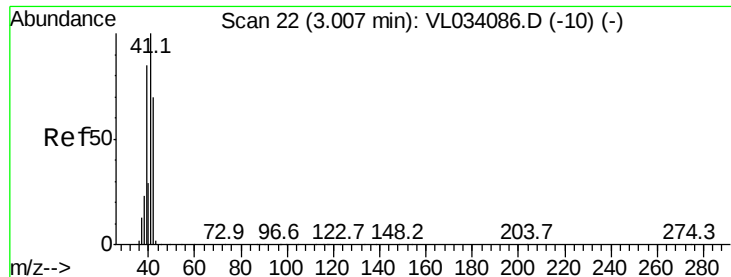
Tgt Ion: 50 Resp: 37633

Ion Ratio Lower Upper

50 100

52 22.1 25.7 38.5#





#9

Propene

Concen: 0.449 ppbv

RT: 3.02 min Scan# 26

Delta R.T. 0.01 min

Lab File: VL034112.D

Acq: 12 Aug 2019 22:16

Instrument :

MSVOA_L

ClientSampleId :

SRS-0807-VI1

Tot Ion: 41 Resp: 34301

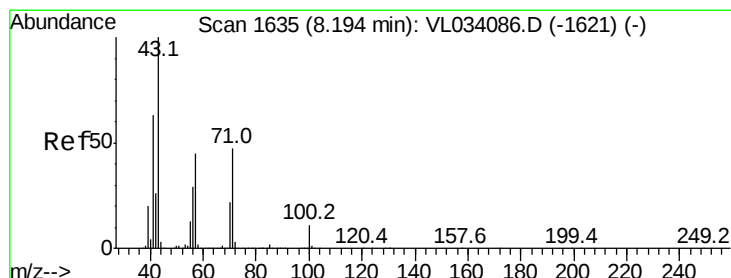
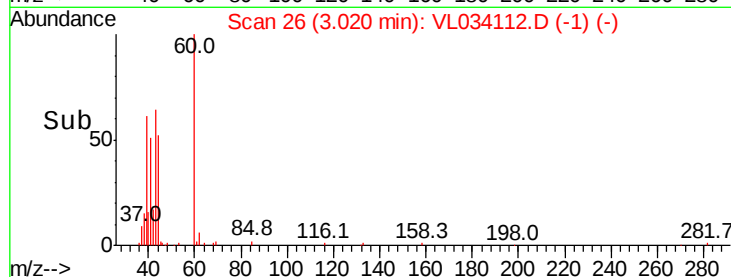
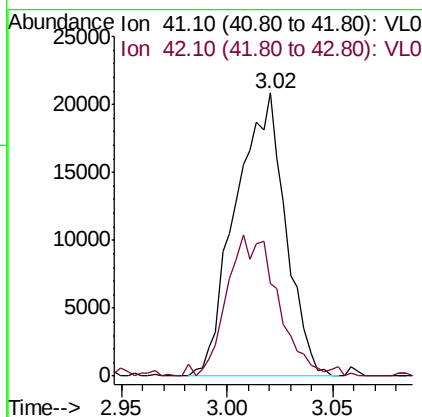
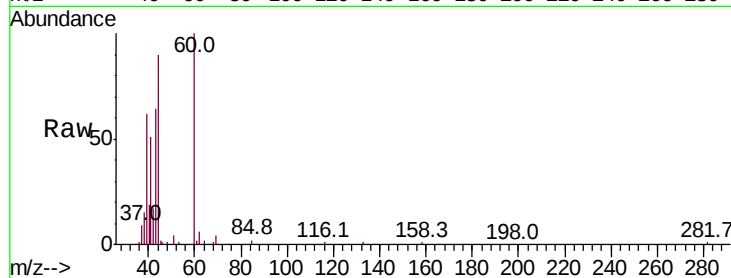
Ion Ratio Lower Upper

41 100

42 51.2 55.8 83.6#

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#10

Heptane

Concen: 0.108 ppbv

RT: 8.19 min Scan# 1634

Delta R.T. -0.00 min

Lab File: VL034112.D

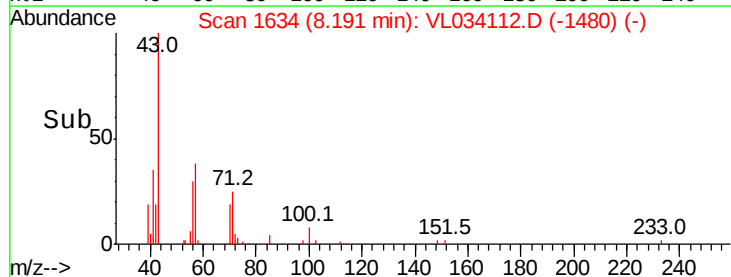
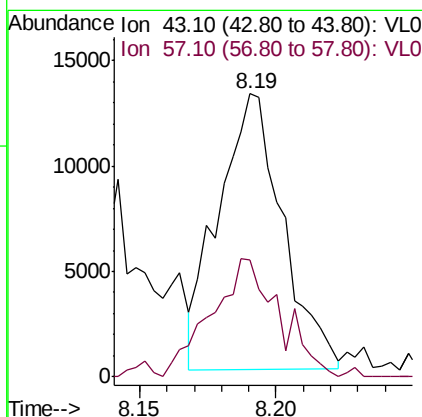
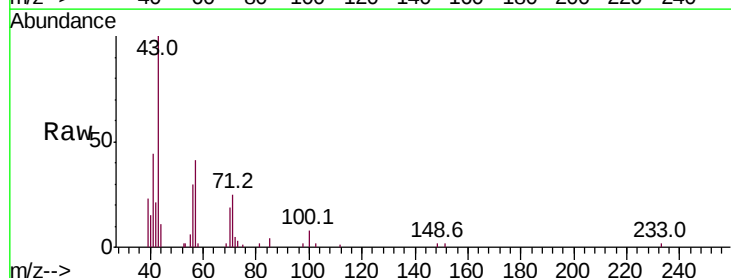
Acq: 12 Aug 2019 22:16

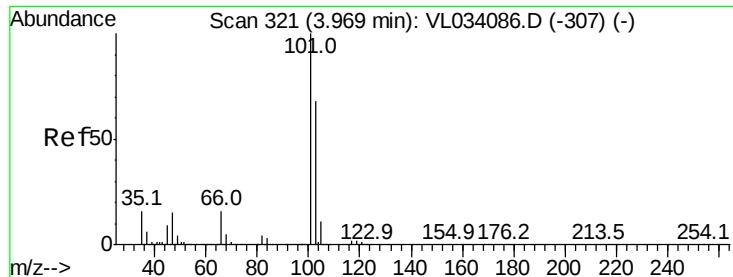
Tgt Ion: 43 Resp: 21346

Ion Ratio Lower Upper

43 100

57 47.5 37.2 55.8





#11

Trichlorofluoromethane

Concen: 0.226 ppbv

RT: 3.97 min Scan# 320

Delta R.T. -0.00 min

Lab File: VL034112.D

Acq: 12 Aug 2019 22:16

Instrument :

MSVOA_L

ClientSampleId :

SRS-0807-VI1

Tot Ion:101 Resp: 36833

Ion Ratio Lower Upper

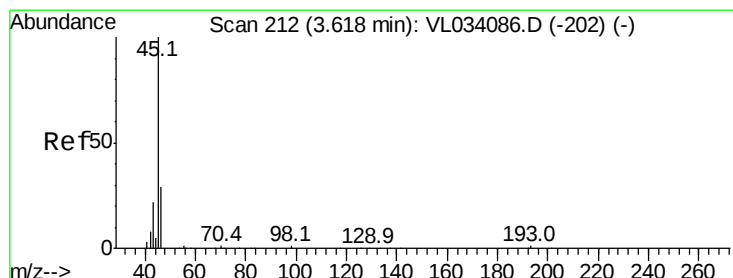
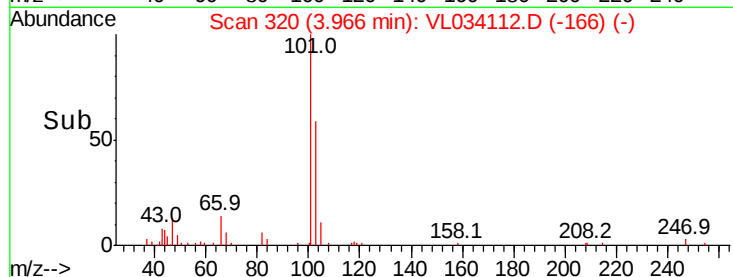
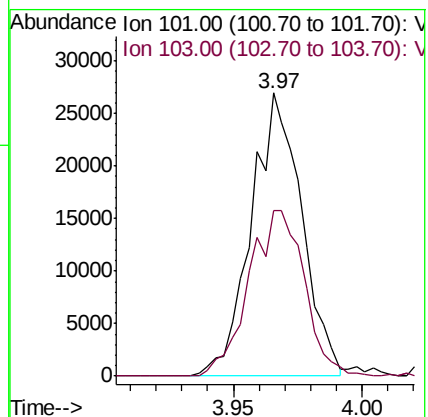
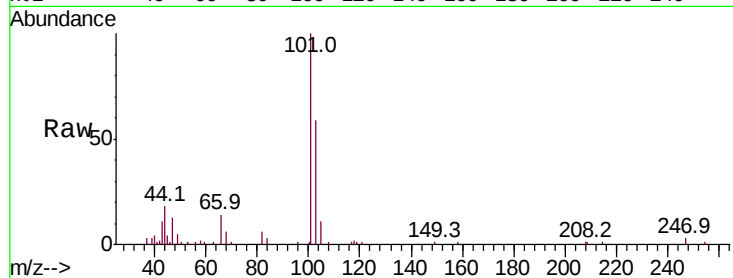
101 100

103 58.6 54.3 81.5

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#13

Ethanol

Concen: 14.492 ppbv

RT: 3.62 min Scan# 212

Delta R.T. -0.00 min

Lab File: VL034112.D

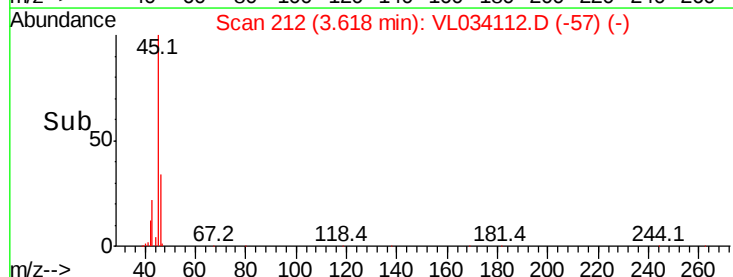
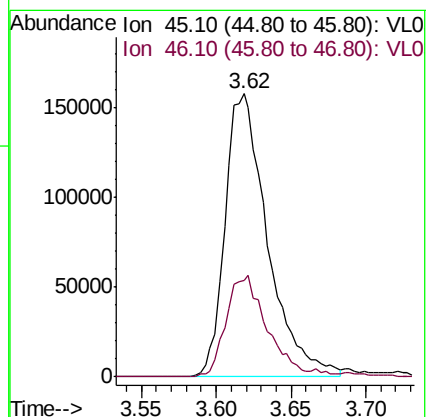
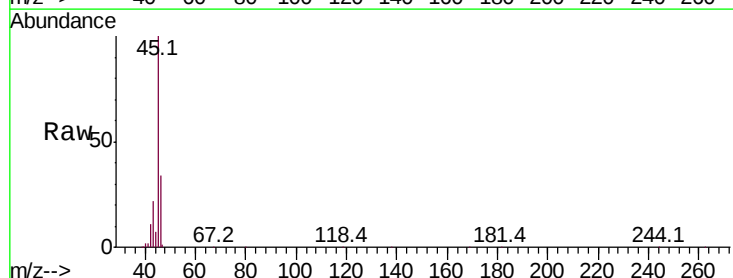
Acq: 12 Aug 2019 22:16

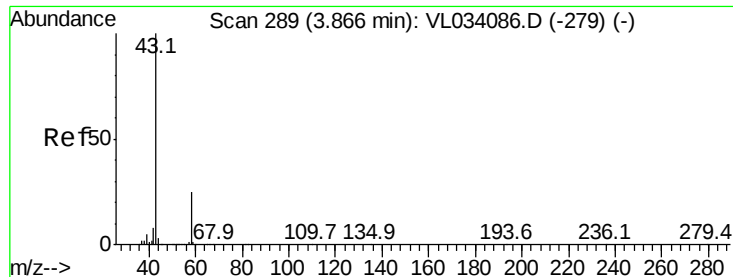
Tgt Ion: 45 Resp: 311674

Ion Ratio Lower Upper

45 100

46 36.0 14.9 59.5





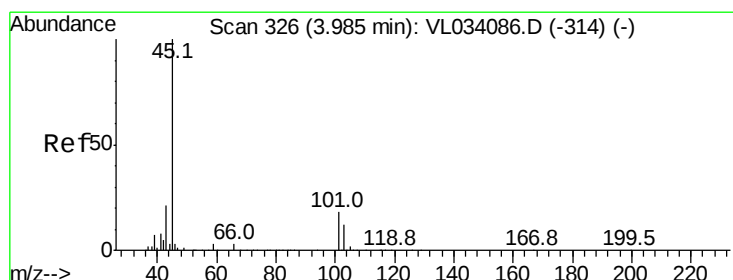
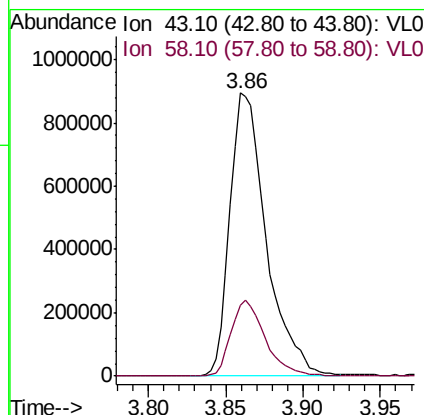
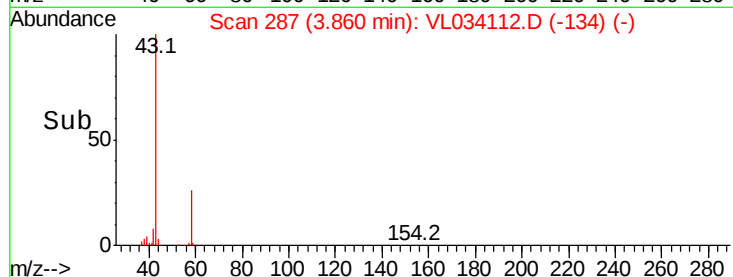
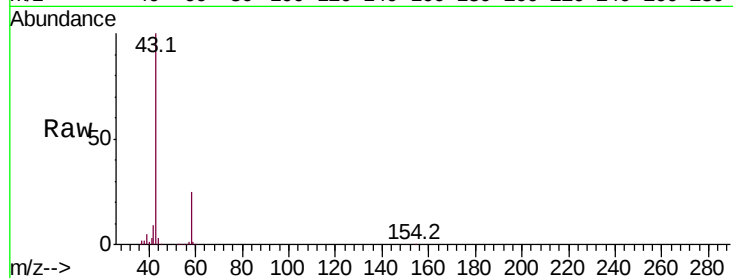
#15
Acetone
Concen: 9.122 ppbv
RT: 3.86 min Scan# 287
Delta R.T. -0.01 min
Lab File: VL034112.D
Acq: 12 Aug 2019 22:16

Instrument :
MSVOA_L
ClientSampleId :
SRS-0807-VI1

Tot Ion: 43 Resp: 1459107
Ion Ratio Lower Upper
43 100
58 25.1 20.6 30.8

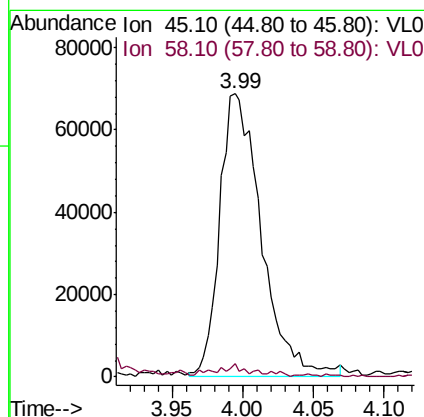
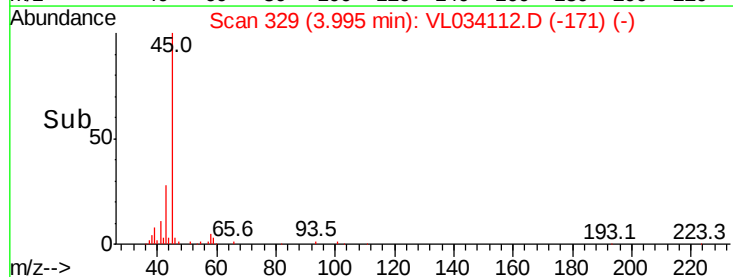
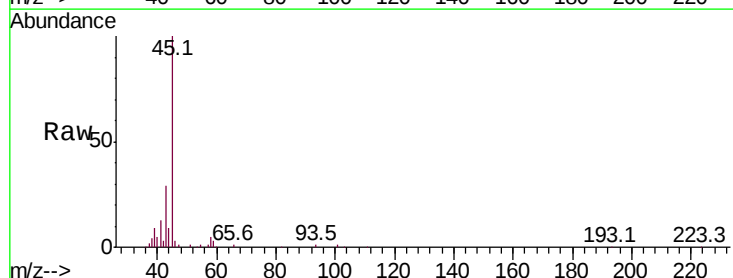
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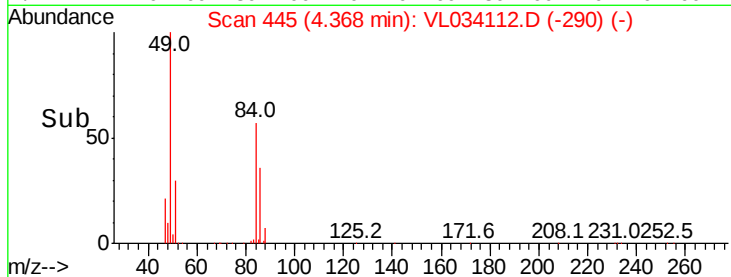
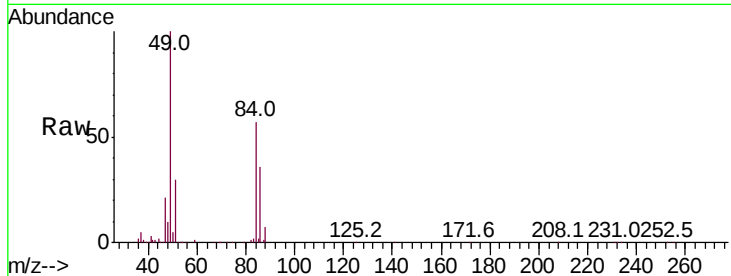
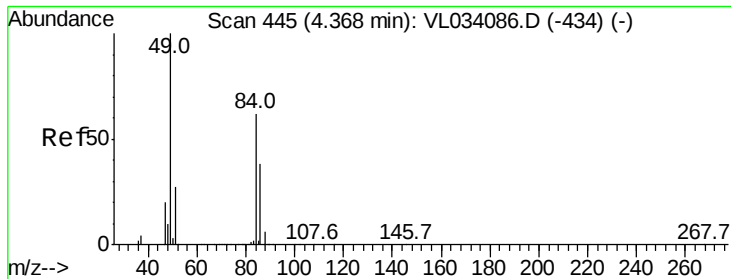
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#19
Isopropyl Alcohol
Concen: 1.133 ppbv m
RT: 3.99 min Scan# 329
Delta R.T. 0.01 min
Lab File: VL034112.D
Acq: 12 Aug 2019 22:16

Tgt Ion: 45 Resp: 141170
Ion Ratio Lower Upper
45 100
58 0.0 24.6 37.0#





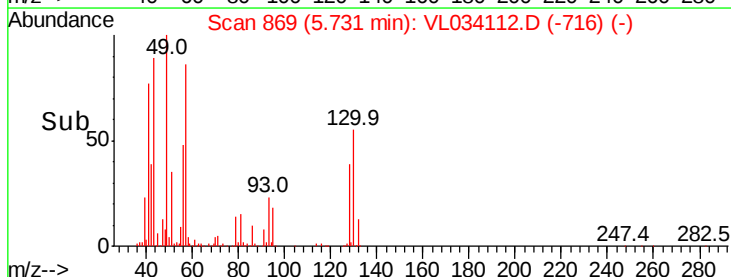
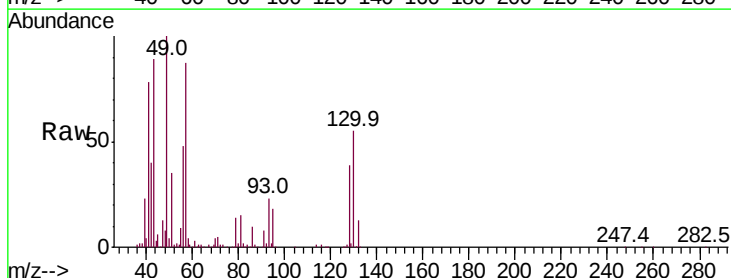
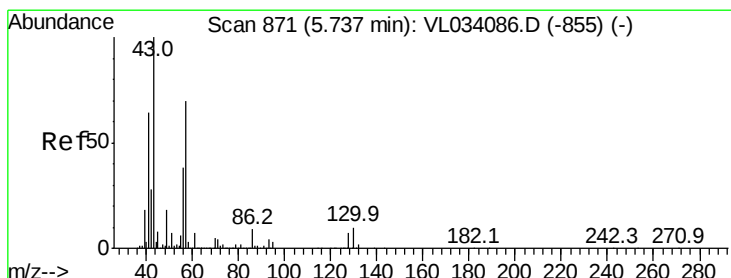
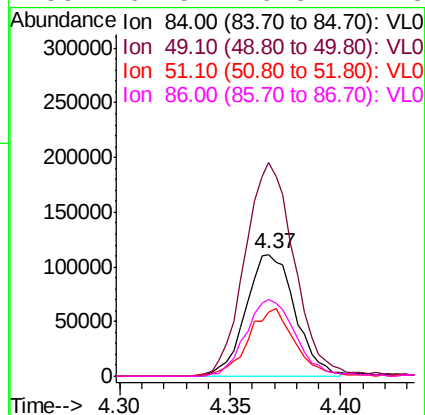
#20
Methvlene Chloride
Concen: 3.580 ppbv
RT: 4.37 min Scan# 445
Delta R.T. -0.00 min
Lab File: VL034112.D
Acq: 12 Aug 2019 22:16

Tot Ion	Ion	Ratio	Lower	Upper
84	100			
49	174.5	129.7	194.5	
51	52.4	35.8	53.8	
86	62.5	49.8	74.8	

Instrument :
MSVOA_L
ClientSampleId :
SRS-0807-VI1

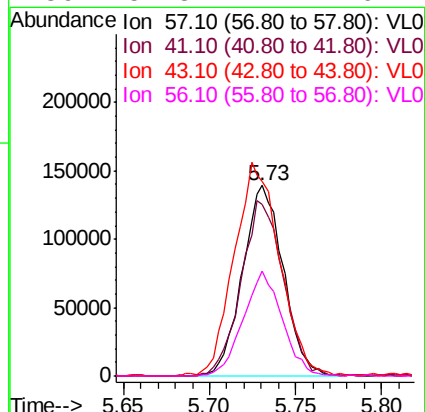
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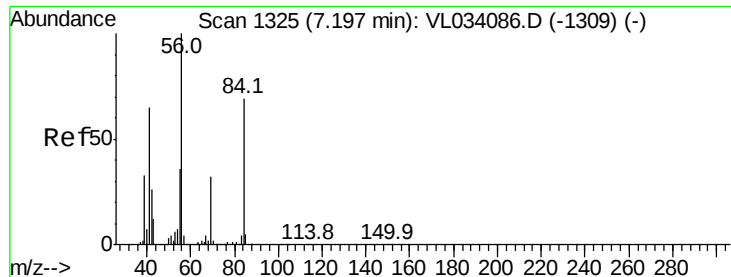
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#26
Hexane
Concen: 1.719 ppbv
RT: 5.73 min Scan# 869
Delta R.T. -0.01 min
Lab File: VL034112.D
Acq: 12 Aug 2019 22:16

Tgt Ion	Ion	Ratio	Lower	Upper
57	100			
41	95.3	75.7	113.5	
43	126.0	189.8	284.8#	
56	52.8	42.7	64.1	





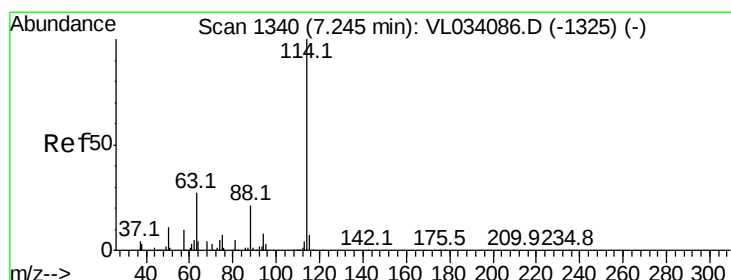
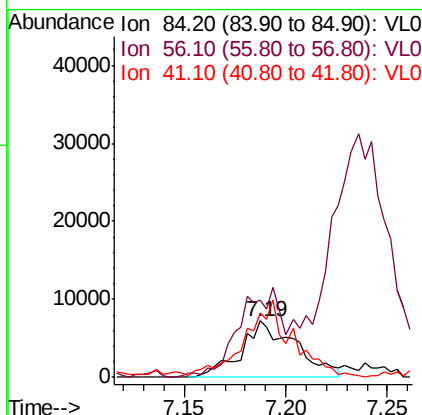
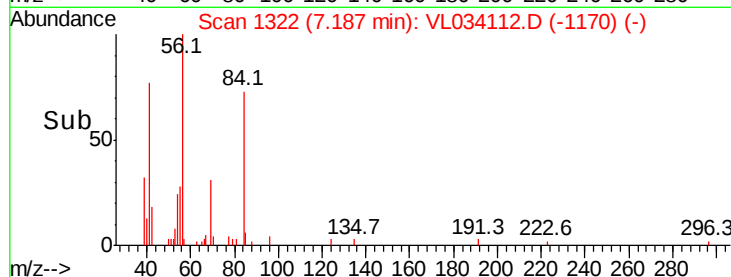
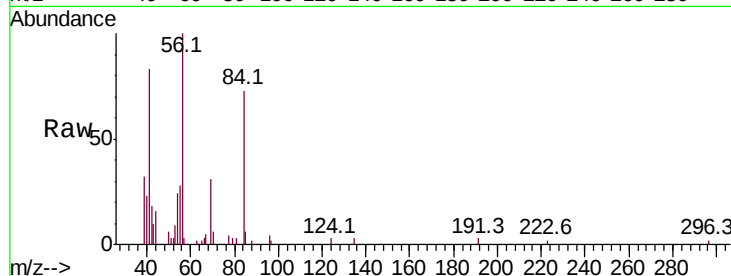
#30
Cvclohexane
Concen: 0.128 ppbv m
RT: 7.19 min Scan# 1322
Delta R.T. -0.01 min
Lab File: VL034112.D
Acq: 12 Aug 2019 22:16

Instrument :
MSVOA_L
ClientSampleId :
SRS-0807-VI1

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	122.6	184.0#
41	0.0	80.1	120.1#

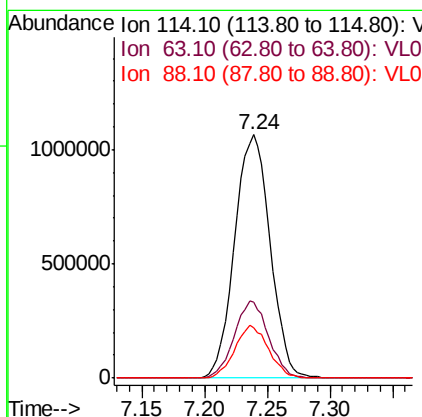
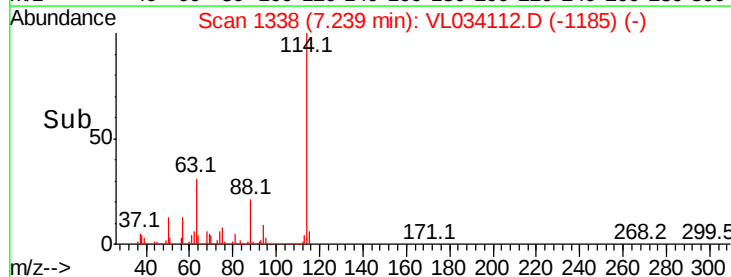
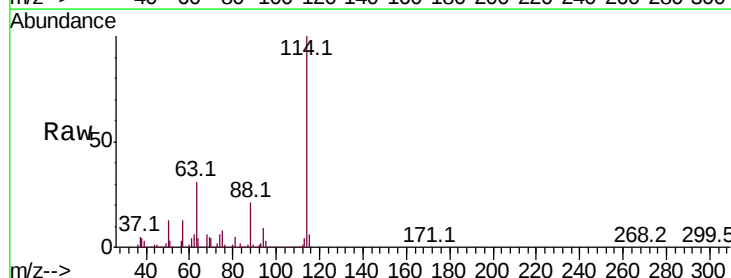
Manual Integrations
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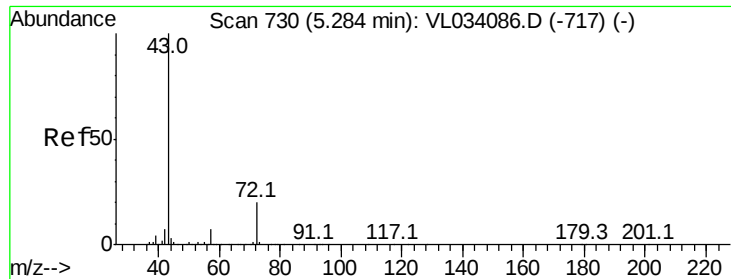
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.24 min Scan# 1338
Delta R.T. -0.01 min
Lab File: VL034112.D
Acq: 12 Aug 2019 22:16

Tgt Ion	Ratio	Lower	Upper
114	100		
63	30.6	22.5	33.7
88	20.6	15.7	23.5





#34

2-Butanone

Concen: 0.525 ppbv

RT: 5.29 min Scan# 731

Delta R.T. 0.00 min

Lab File: VL034112.D

Acq: 12 Aug 2019 22:16

Instrument :

MSVOA_L

ClientSampleId :

SRS-0807-VI1

Tot Ion: 43 Resp: 102401

Ion Ratio Lower Upper

43 100

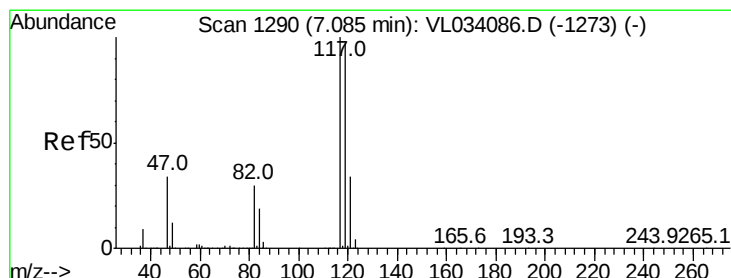
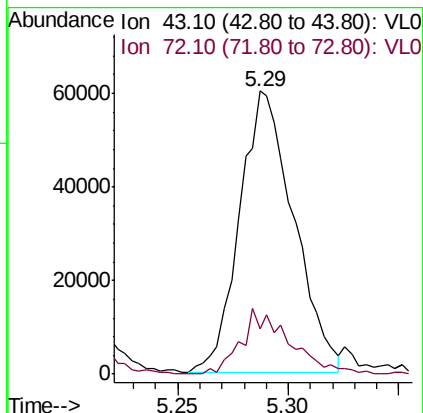
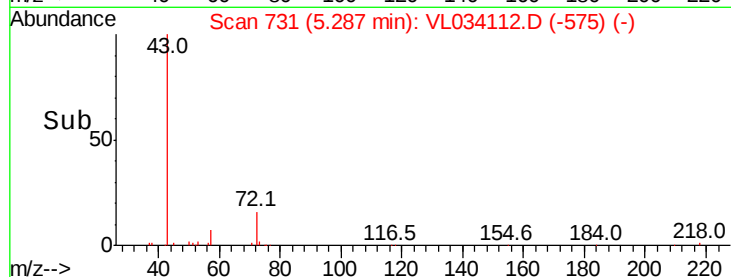
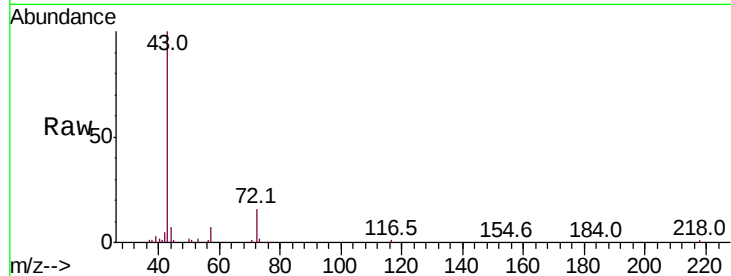
72 20.9 16.0 24.0

Manual Integrations

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#35

Carbon Tetrachloride

Concen: 0.067 ppbv m

RT: 7.08 min Scan# 1289

Delta R.T. -0.00 min

Lab File: VL034112.D

Acq: 12 Aug 2019 22:16

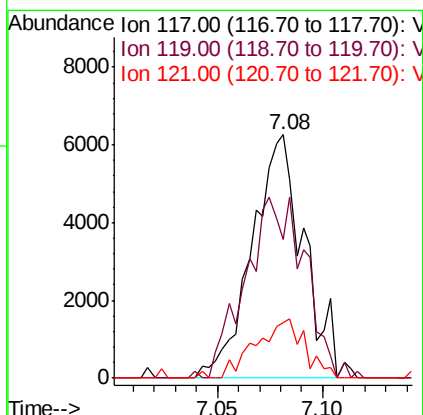
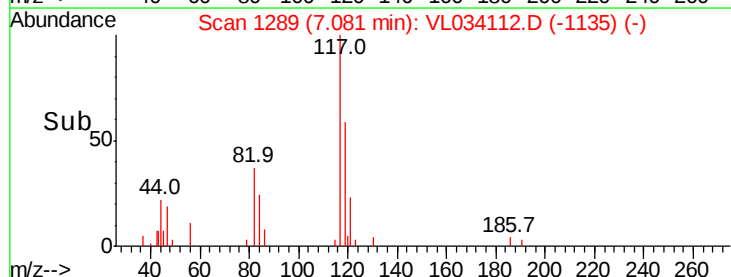
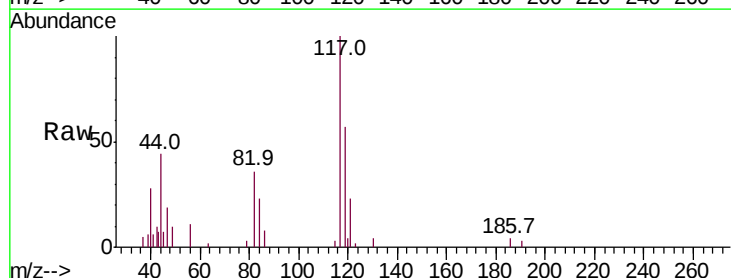
Tgt Ion: 117 Resp: 10711

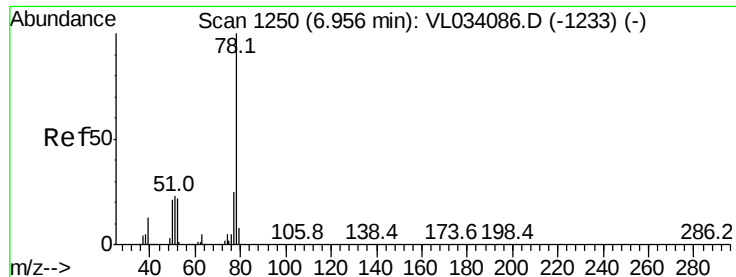
Ion Ratio Lower Upper

117 100

119 57.1 77.8 116.6#

121 22.7 27.4 41.2#





#36

Benzene

Concen: 0.170 ppbv

RT: 6.95 min Scan# 1248

Delta R.T. -0.01 min

Lab File: VL034112.D

Acq: 12 Aug 2019 22:16

Instrument :

MSVOA_L

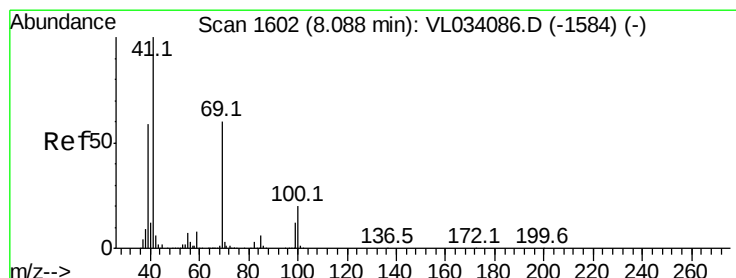
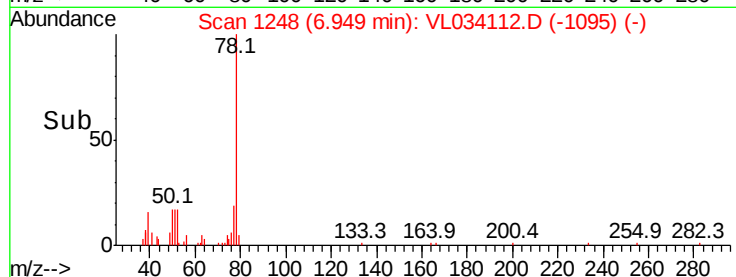
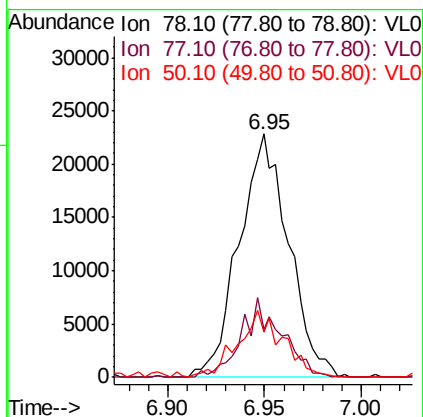
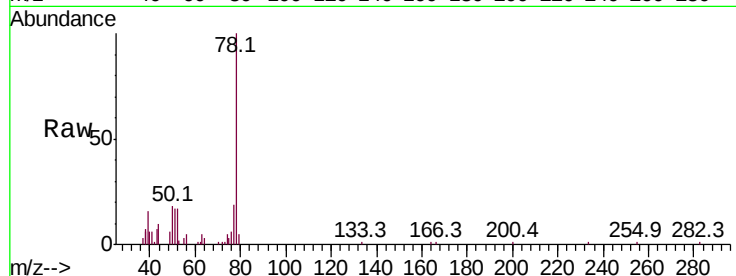
ClientSampleId :

SRS-0807-VI1

Tot Ion:	78	Resp:	40637
Ion Ratio	Lower	Upper	
78	100		
77	19.4	19.9	29.9#
50	18.3	16.7	25.1

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#43

Methyl Methacrylate

Concen: 0.100 ppbv m

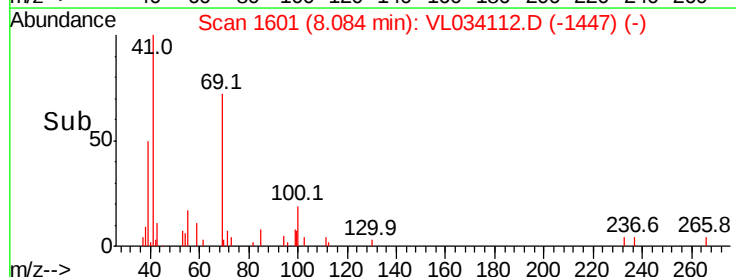
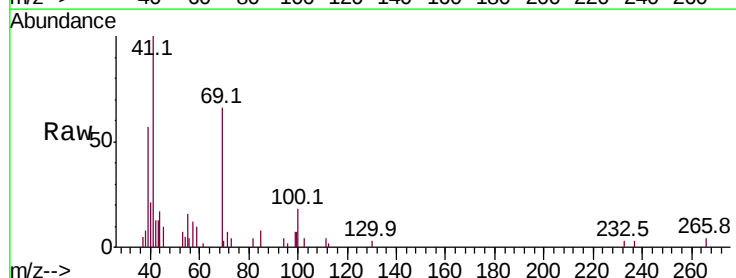
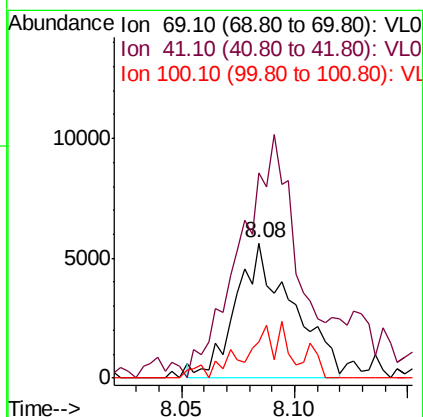
RT: 8.08 min Scan# 1601

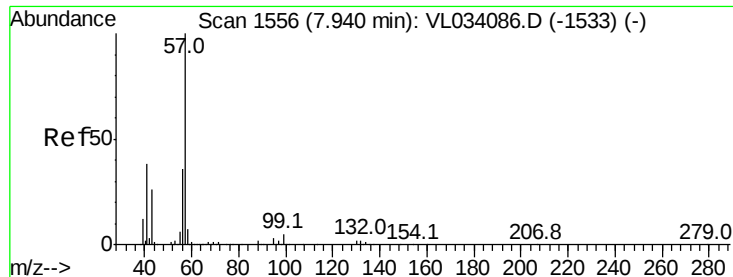
Delta R.T. -0.00 min

Lab File: VL034112.D

Acq: 12 Aug 2019 22:16

Tgt Ion:	69	Resp:	9733
Ion Ratio	Lower	Upper	
69	100		
41	0.0	132.9	199.3#
100	0.0	25.8	38.8#





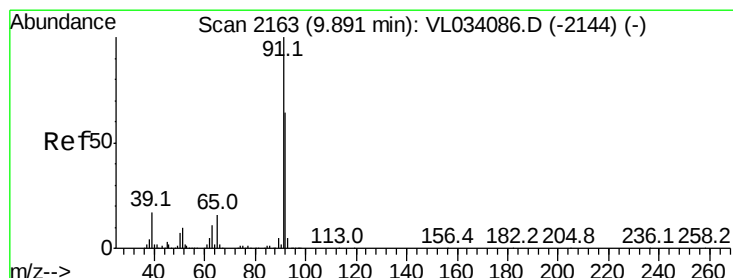
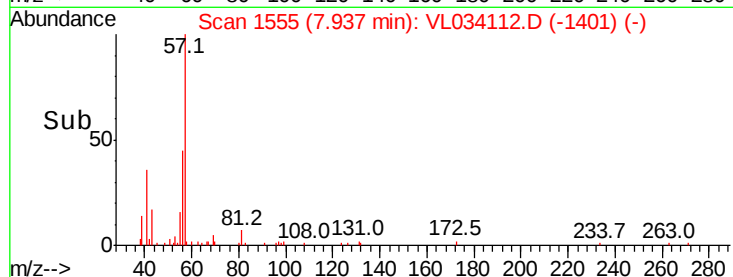
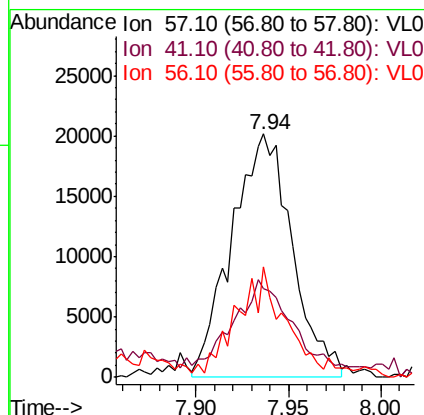
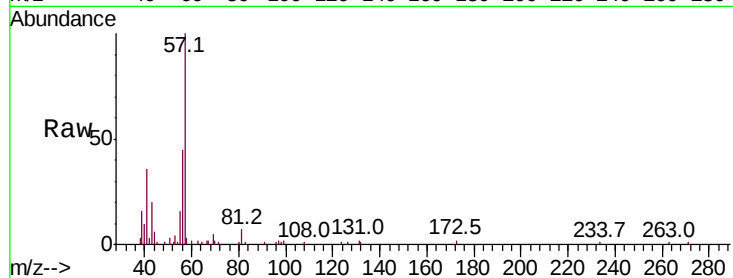
#44
 2,2,4-Trimethylpentane
 Concen: 0.107 ppbv m
 RT: 7.94 min Scan# 1555
 Delta R.T. -0.00 min
 Lab File: VL034112.D
 Acq: 12 Aug 2019 22:16

Instrument :
 MSVOA_L
 ClientSampleId :
 SRS-0807-VI1

Tot Ion	Ratio	Lower	Upper
57	100		
41	47.3	29.2	43.8#
56	38.6	26.7	40.1

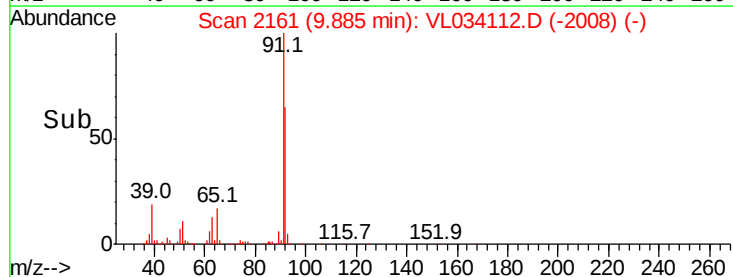
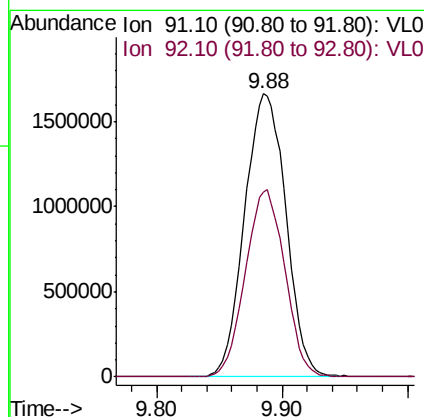
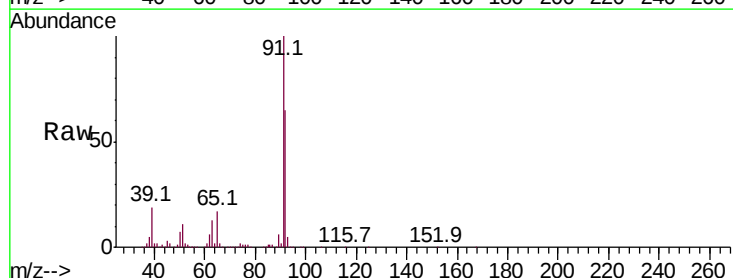
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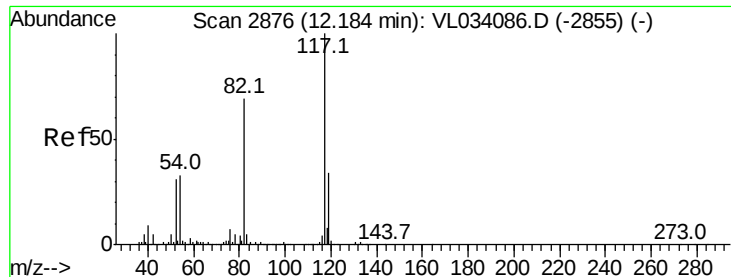
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#53
 Toluene
 Concen: 13.842 ppbv
 RT: 9.88 min Scan# 2161
 Delta R.T. -0.01 min
 Lab File: VL034112.D
 Acq: 12 Aug 2019 22:16

Tgt Ion	Ratio	Lower	Upper
91	100		
92	63.4	50.3	75.5





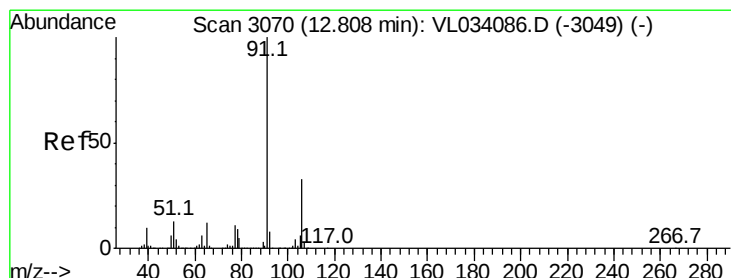
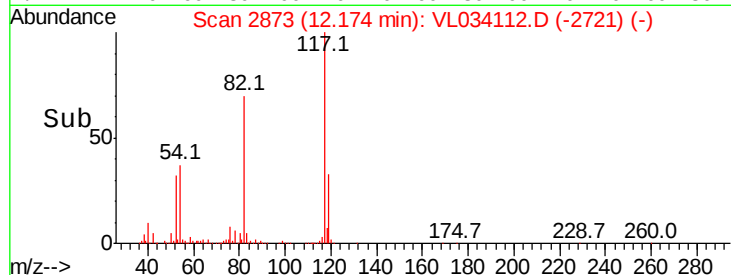
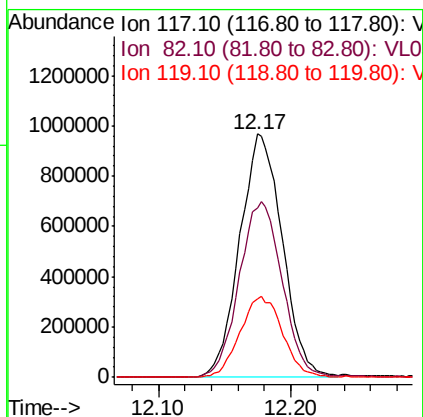
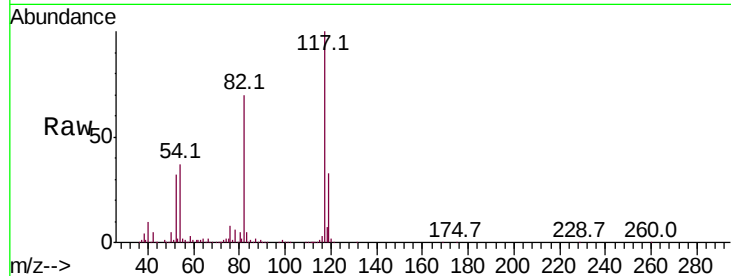
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.17 min Scan# 2873
Delta R.T. -0.01 min
Lab File: VL034112.D
Acq: 12 Aug 2019 22:16

Instrument :
MSVOA_L
ClientSampleId :
SRS-0807-VI1

Tot Ion:117 Resp: 2163762
Ion Ratio Lower Upper
117 100
82 73.7 52.2 78.4
119 33.5 44.8 67.2#

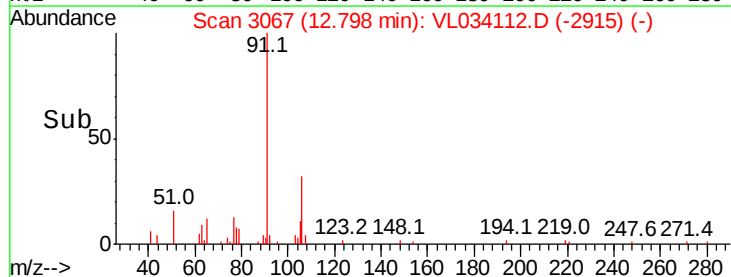
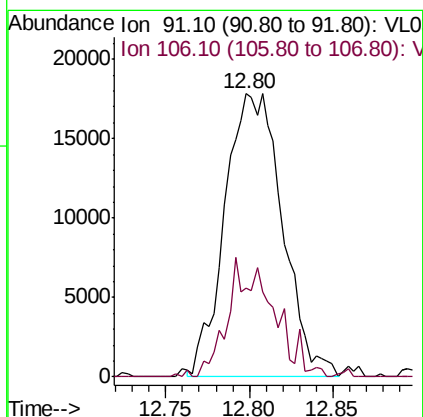
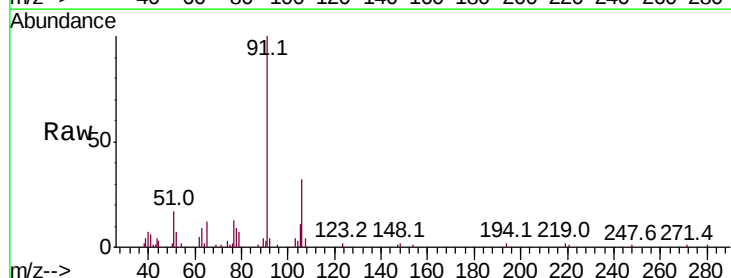
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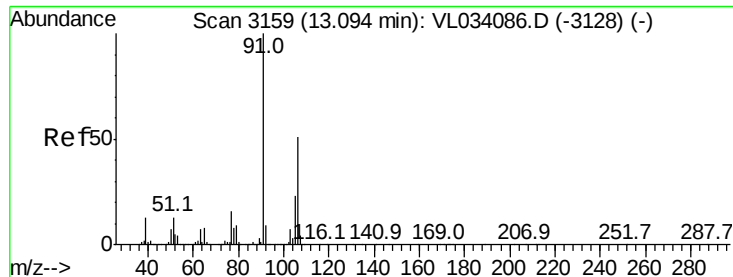
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#58
Ethyl Benzene
Concen: 0.117 ppbv m
RT: 12.80 min Scan# 3067
Delta R.T. -0.01 min
Lab File: VL034112.D
Acq: 12 Aug 2019 22:16

Tgt Ion: 91 Resp: 42656
Ion Ratio Lower Upper
91 100
106 31.5 26.0 39.0





#59

m/p-Xylene

Concen: 0.280 ppbv m

RT: 13.06 min Scan# 3147

Delta R.T. -0.04 min

Lab File: VL034112.D

Acq: 12 Aug 2019 22:16

Instrument :

MSVOA_L

ClientSampleId :

SRS-0807-VI1

Tot Ion: 91 Resp: 81913

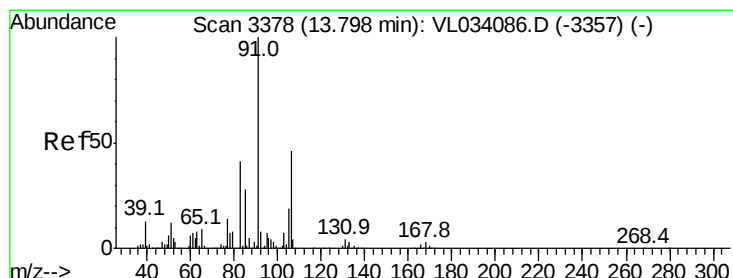
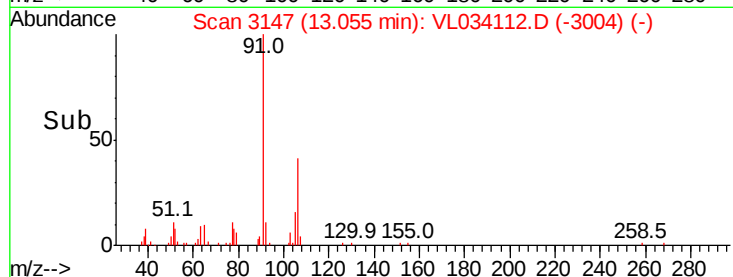
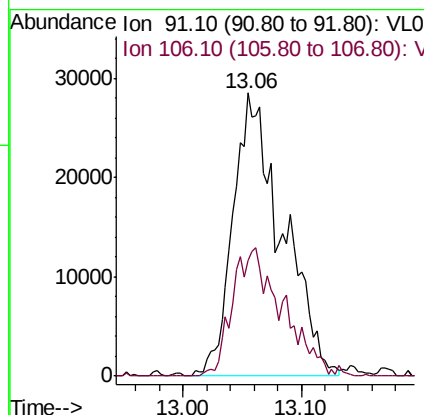
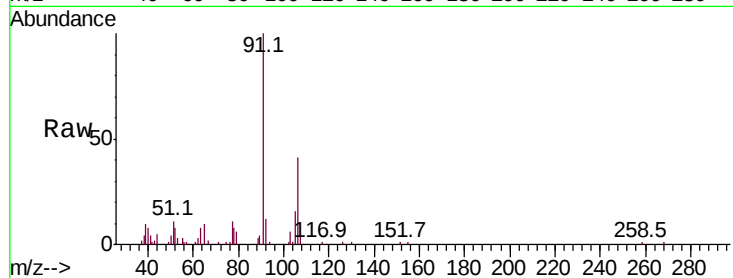
Ion Ratio Lower Upper

91 100

106 0.0 38.7 58.1#

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#60

o-Xylene

Concen: 0.121 ppbv m

RT: 13.78 min Scan# 3372

Delta R.T. -0.02 min

Lab File: VL034112.D

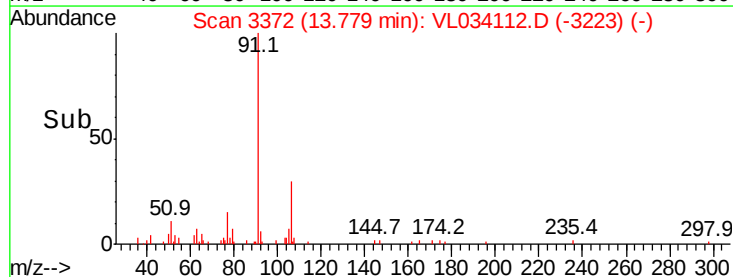
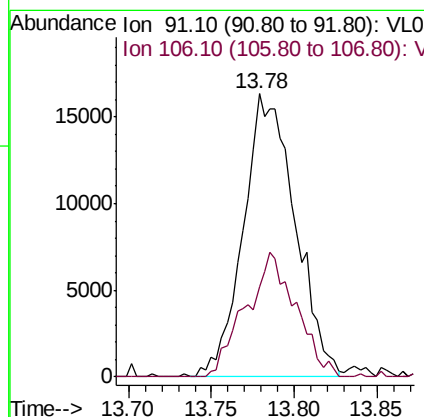
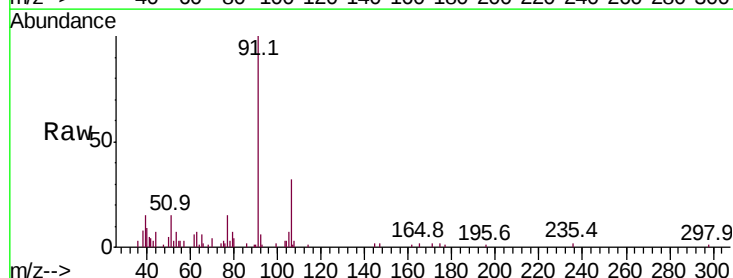
Acq: 12 Aug 2019 22:16

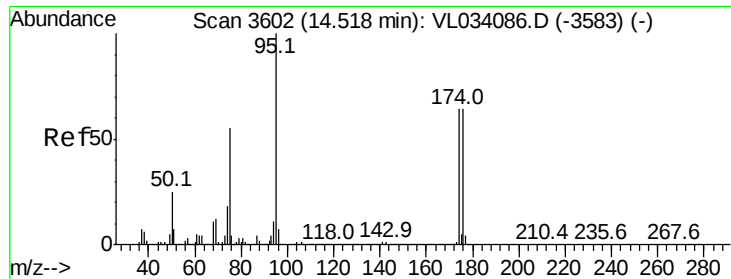
Tgt Ion: 91 Resp: 35401

Ion Ratio Lower Upper

91 100

106 42.9 22.6 67.7





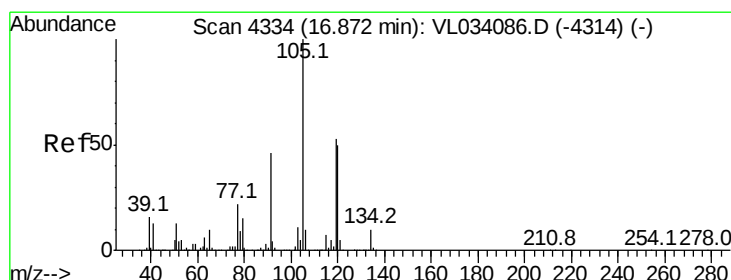
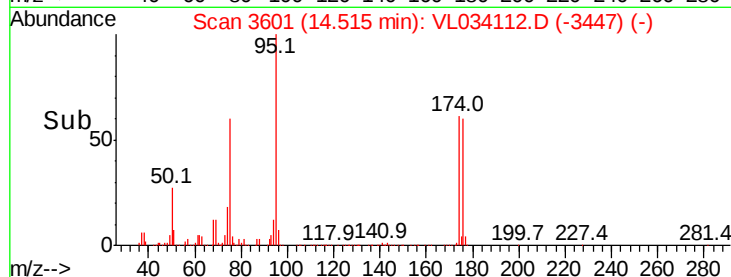
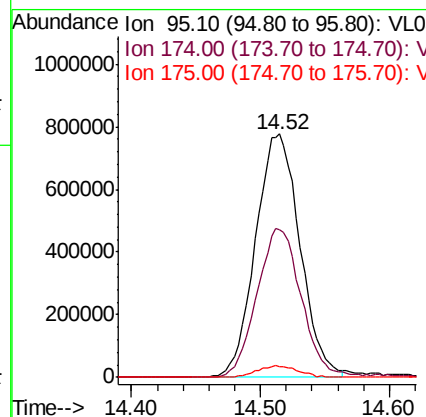
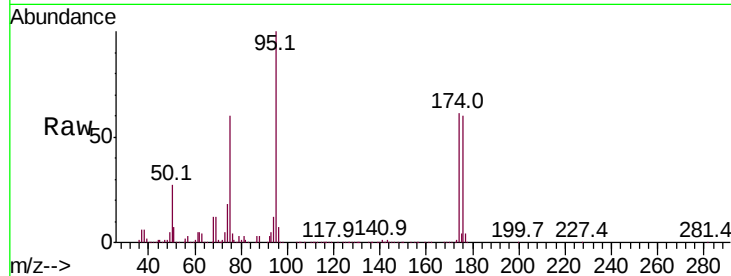
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.606 ppbv
 RT: 14.52 min Scan# 3601
 Delta R.T. -0.00 min
 Lab File: VL034112.D
 Acq: 12 Aug 2019 22:16

Instrument :
 MSVOA_L
 ClientSampleId :
 SRS-0807-VI1

Tot Ion: 95 Resp: 1862045
 Ion Ratio Lower Upper
 95 100
 174 62.3 53.0 79.6
 175 4.5 4.2 6.2

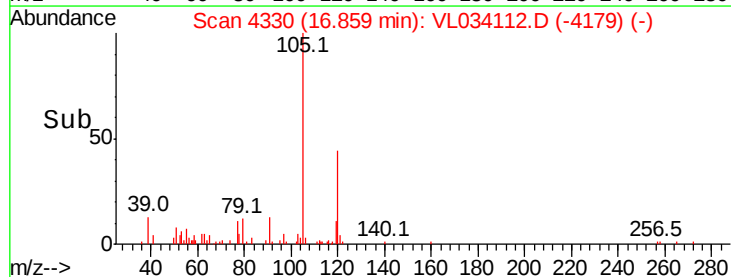
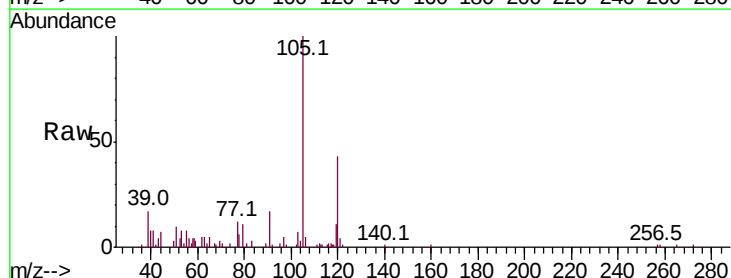
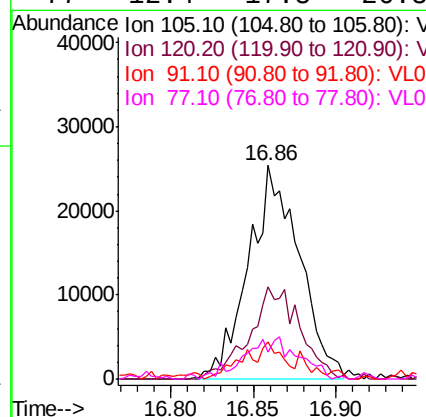
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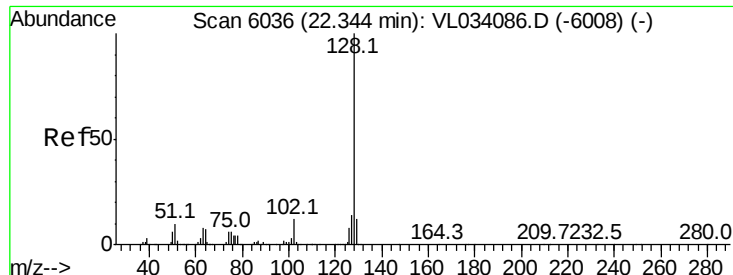
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#74
 1,2,4-Trimethylbenzene
 Concen: 0.156 ppbv m
 RT: 16.86 min Scan# 4330
 Delta R.T. -0.01 min
 Lab File: VL034112.D
 Acq: 12 Aug 2019 22:16

Tgt Ion:105 Resp: 53697
 Ion Ratio Lower Upper
 105 100
 120 43.3 40.2 60.4
 91 17.4 38.1 57.1#
 77 12.4 17.8 26.8#





#79

Naphthalene

Concen: 0.115 ppbv m

RT: 22.33 min Scan# 6032

Delta R.T. -0.01 min

Lab File: VL034112.D

Acq: 12 Aug 2019 22:16

Instrument :

MSVOA_L

ClientSampleId :

SRS-0807-VI1

Tot Ion:	128	Resp:	41167
Ion Ratio	Lower	Upper	
128	100		
127	8.7	11.0	16.6#
129	7.6	9.2	13.8#

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