

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL121719\
 Data File : VL034496.D
 Acq On : 17 Dec 2019 17:13
 Operator : SY/AP
 Sample : K6319-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 LIHA-IAH

Manual Integrations
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 12/19/2019 3:47:00 PM

Quant Time: Dec 18 05:03:29 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111919AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue Nov 19 14:15:35 2019
 QLast Update : Tue Nov 19 14:15:35 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	903945	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.20	114	1803352	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.13	117	1798530m	10.00	ppbv	0.00

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.47	95	1558517	10.30	ppbv	-0.01	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.00%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.02	85	83763	0.512	ppbv	98
3) Chlorodifluoromethane	2.96	51	34880m	0.309	ppbv	
4) Chloromethane	3.11	50	28750	0.432	ppbv	98
9) Propene	3.00	41	89314m	1.784	ppbv	
10) Heptane	8.15	43	37364	0.289	ppbv	99
11) Trichlorofluoromethane	3.94	101	41723	0.256	ppbv	91
13) Ethanol	3.60	45	5520784	395.806	ppbv	92
15) Acetone	3.83	43	869321	6.716	ppbv	92
17) tert-Butyl alcohol	4.31	59	28705m	0.264	ppbv	
19) Isopropyl Alcohol	3.98	45	102664	1.237	ppbv #	89
20) Methylene Chloride	4.34	84	55740	1.214	ppbv #	94
26) Hexane	5.70	57	32970	0.332	ppbv #	64
29) Chloroform	5.76	83	111181	0.692	ppbv	97
34) 2-Butanone	5.26	43	34315m	0.231	ppbv	
35) Carbon Tetrachloride	7.04	117	12387m	0.080	ppbv	
36) Benzene	6.92	78	33577	0.186	ppbv	97
52) Tetrachloroethene	11.27	164	7328m	0.094	ppbv	
53) Toluene	9.84	91	172430	0.842	ppbv	97
59) m/p-Xylene	13.01	91	36932m	0.153	ppbv	

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

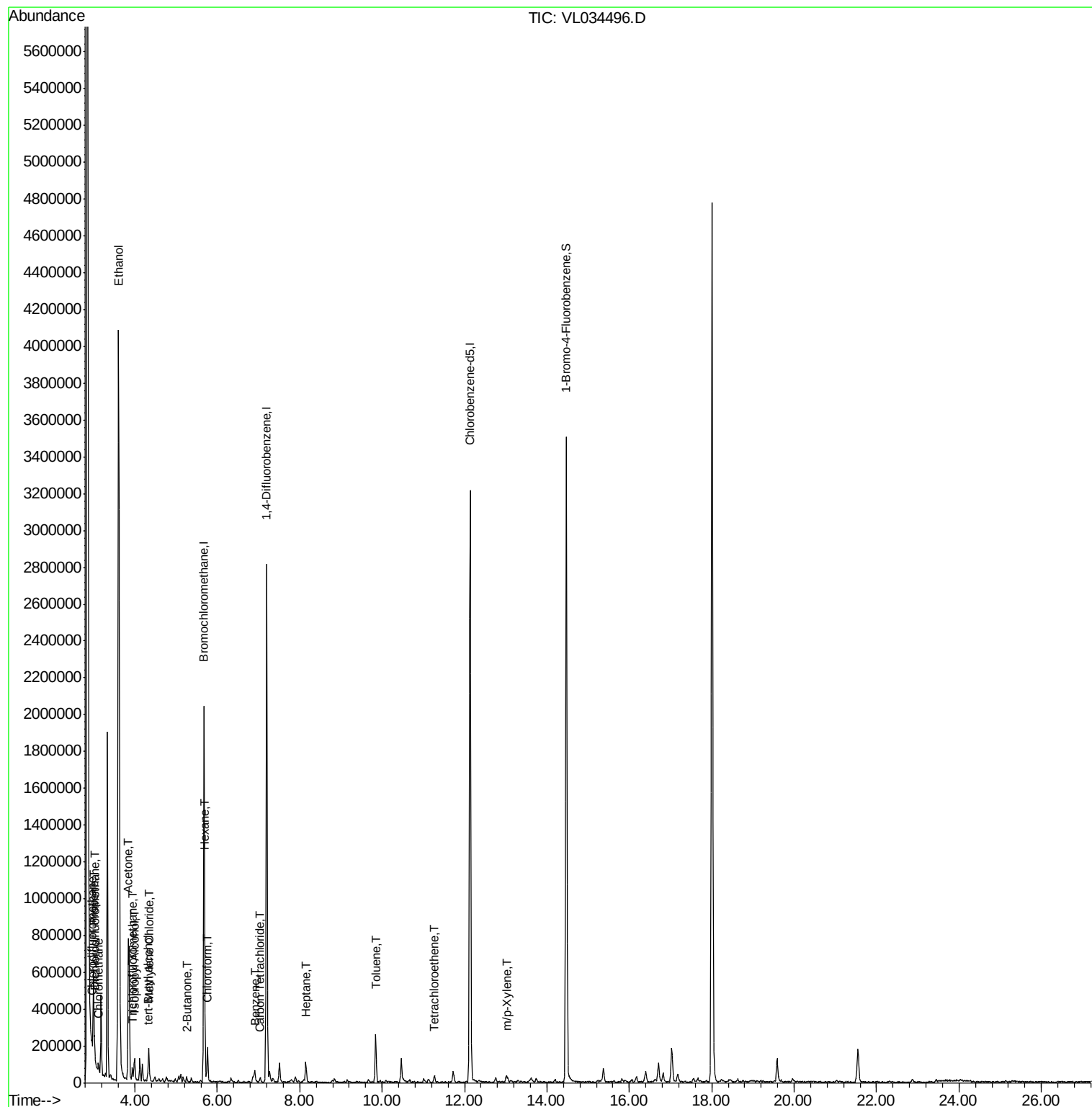
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL121719\
Data File : VL034496.D
Acq On : 17 Dec 2019 17:13
Operator : SY/AP
Sample : K6319-01
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

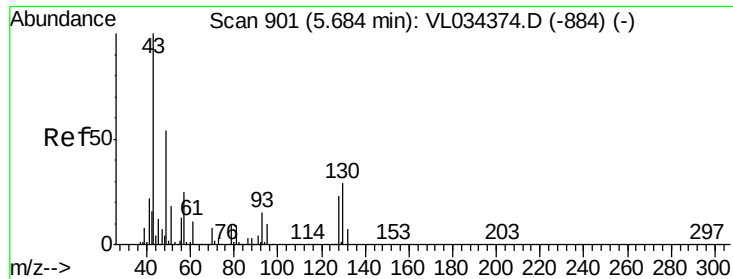
Instrument :
MSVOA_L
ClientSampleId :
LIHA-IAH

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Quant Time: Dec 18 05:03:29 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL111919AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Nov
QLast Update : Tue Nov 19 14:15:35 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 898

Delta R.T. -0.01 min

Lab File: VL034496.D

Acq: 17 Dec 2019 17:13

Instrument :

MSVOA_L

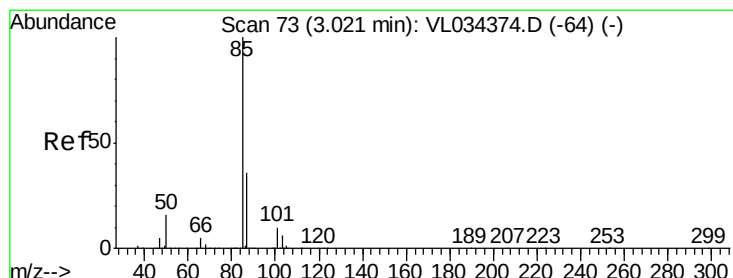
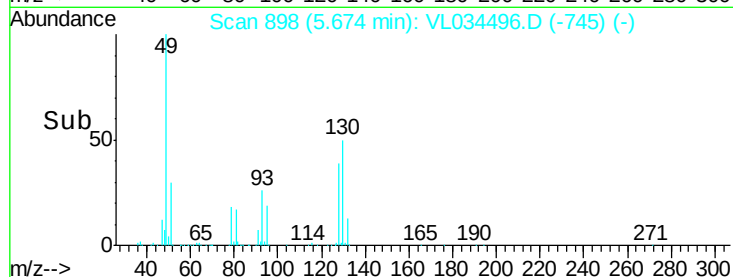
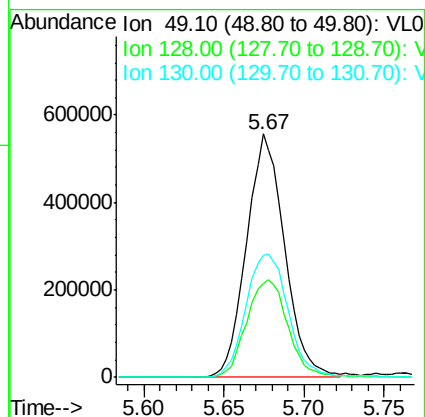
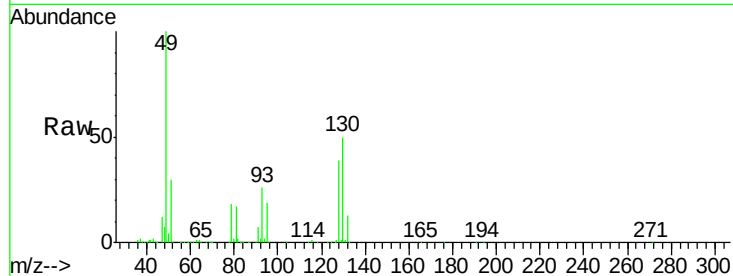
ClientSampleId :

LIHA-IAH

Tot Ion:	49	Resp:	903945
Ion Ratio	Lower	Upper	
49	100		
128	43.9	21.8	65.3
130	56.9	28.0	84.0

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#2

Dichlorodifluoromethane

Concen: 0.512 ppbv

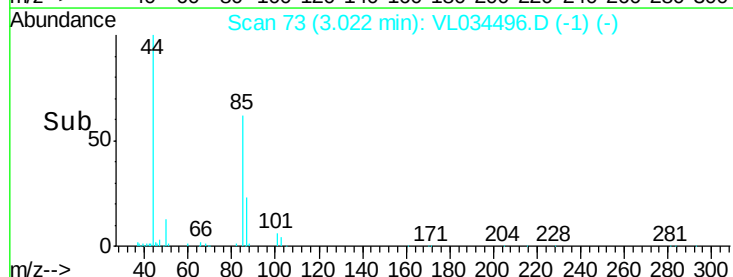
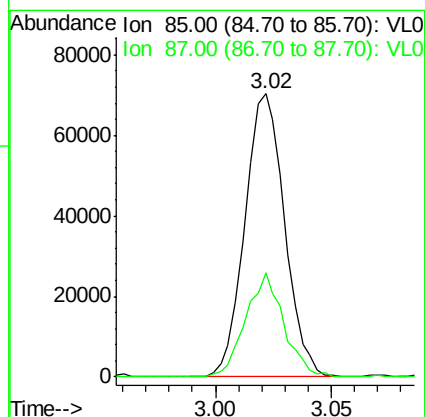
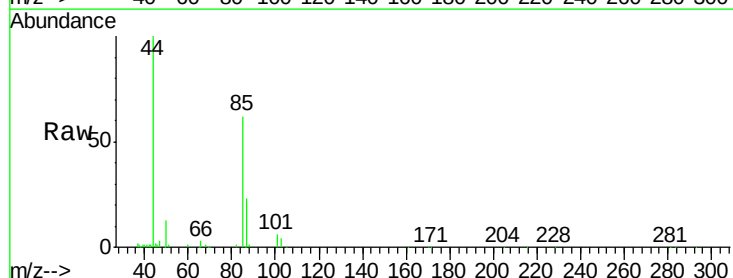
RT: 3.02 min Scan# 73

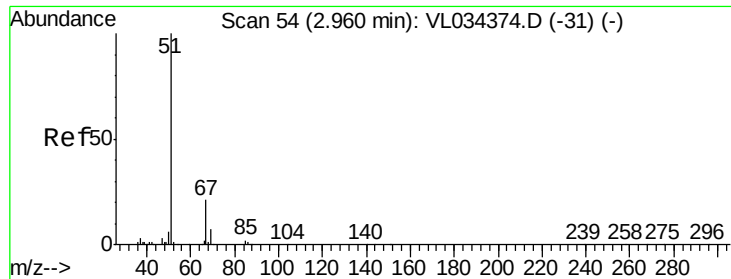
Delta R.T. 0.00 min

Lab File: VL034496.D

Acq: 17 Dec 2019 17:13

Tgt Ion:	85	Resp:	83763
Ion Ratio	Lower	Upper	
85	100		
87	36.7	28.5	42.7





#3

Chlorodifluoromethane

Concen: 0.309 ppbv m

RT: 2.96 min Scan# 54

Delta R.T. 0.00 min

Lab File: VL034496.D

Acq: 17 Dec 2019 17:13

Instrument :

MSVOA_L

ClientSampleId :

LIHA-IAH

Tot Ion: 51 Resp: 34880

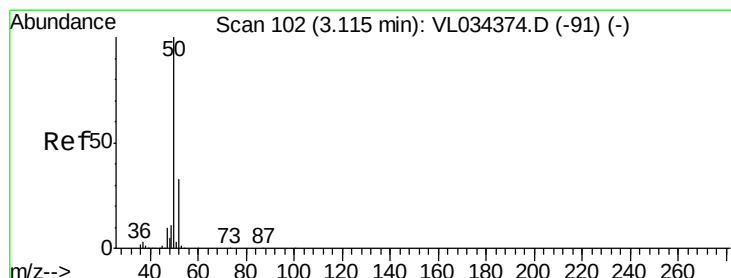
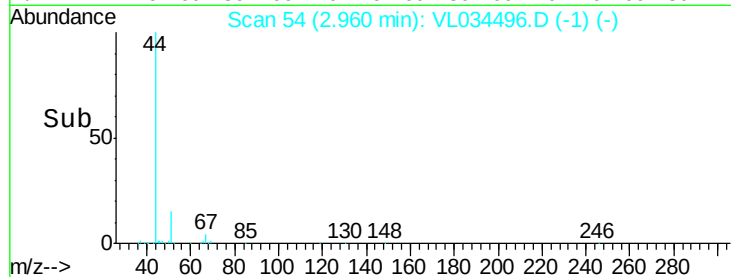
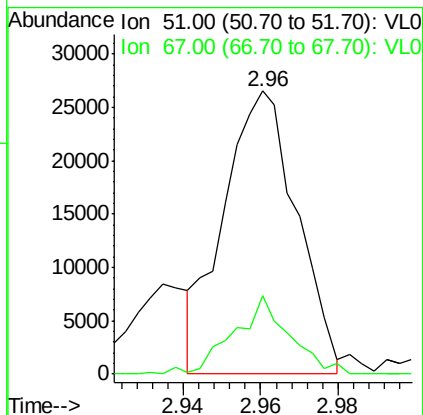
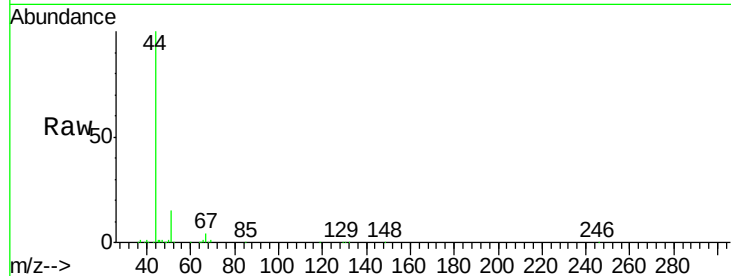
Ion Ratio Lower Upper

51 100

67 1.1 16.2 24.2#

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#4

Chloromethane

Concen: 0.432 ppbv

RT: 3.11 min Scan# 102

Delta R.T. 0.00 min

Lab File: VL034496.D

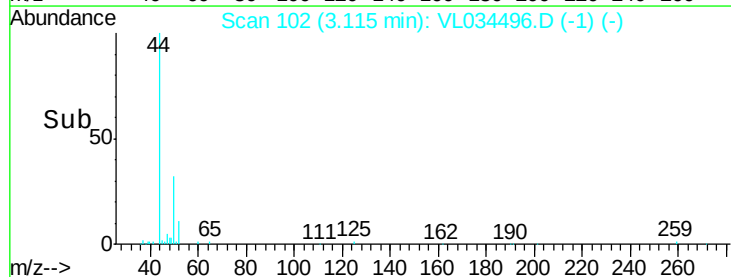
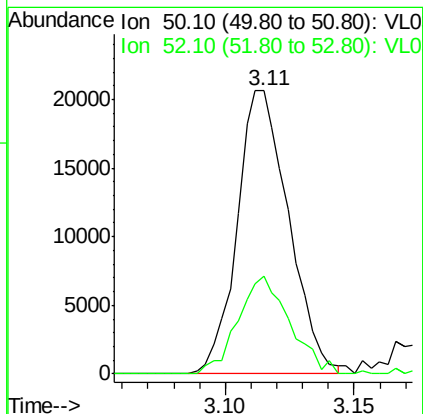
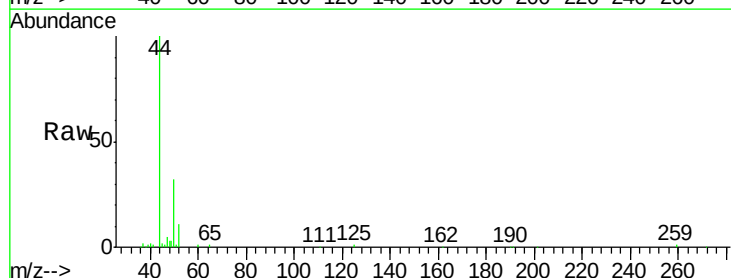
Acq: 17 Dec 2019 17:13

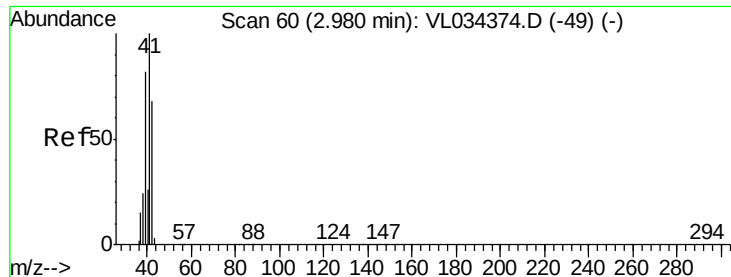
Tgt Ion: 50 Resp: 28750

Ion Ratio Lower Upper

50 100

52 34.6 26.8 40.2





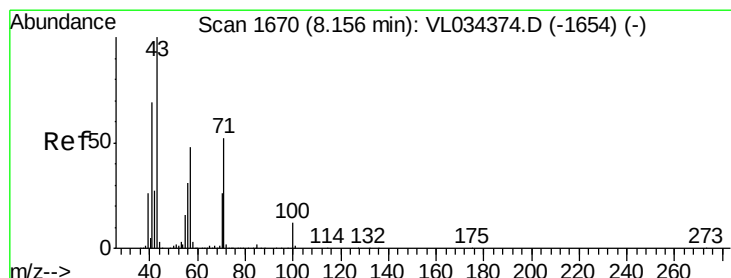
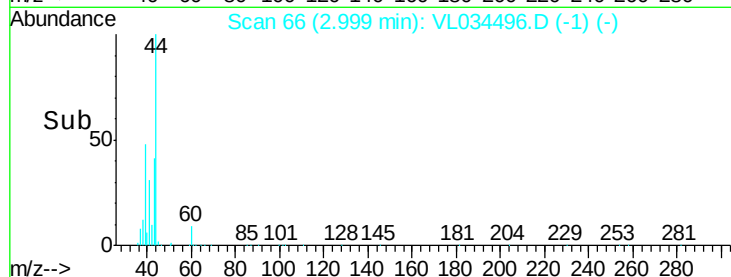
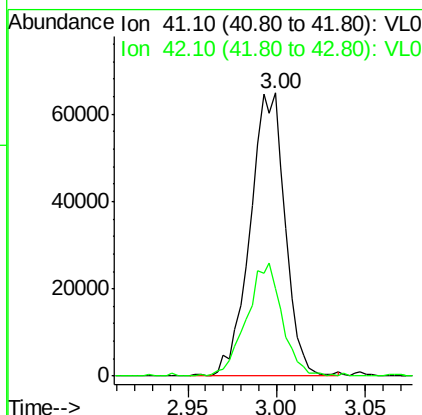
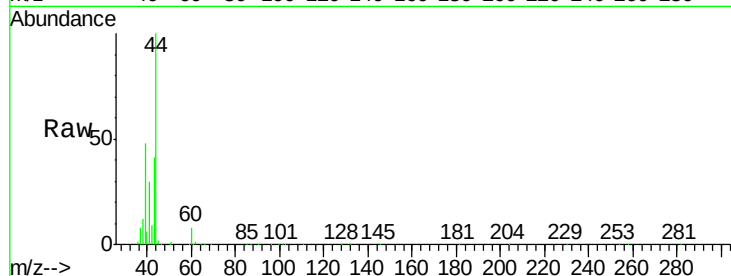
#9
 Propene
 Concen: 1.784 ppbv m
 RT: 3.00 min Scan# 66
 Delta R.T. 0.02 min
 Lab File: VL034496.D
 Acq: 17 Dec 2019 17:13

Instrument :
 MSVOA_L
 ClientSampleId :
 LIHA-IAH

Tot Ion	41	Resp	89314
Ion Ratio	100	Lower	Upper
42	80.0	54.6	82.0

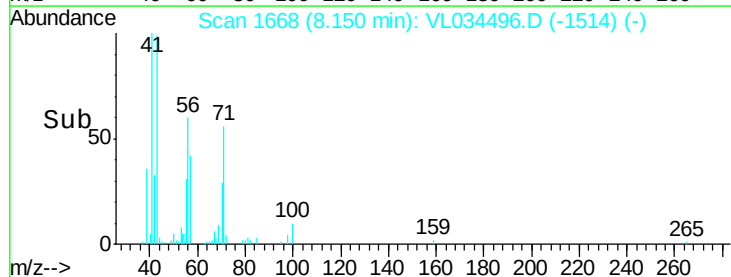
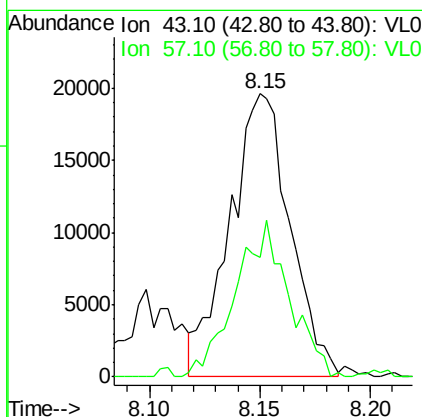
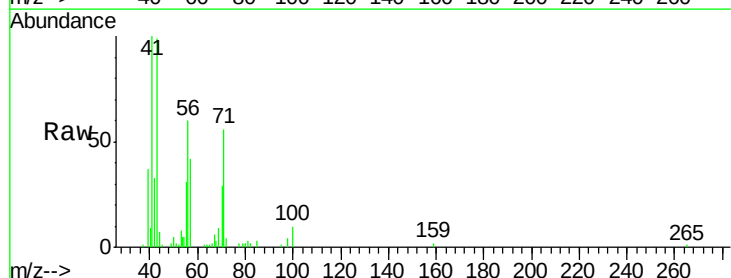
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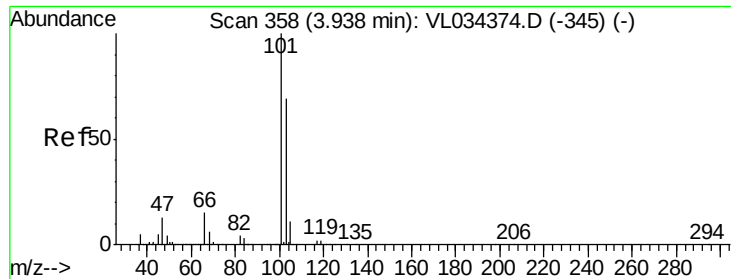
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#10
 Heptane
 Concen: 0.289 ppbv
 RT: 8.15 min Scan# 1668
 Delta R.T. -0.01 min
 Lab File: VL034496.D
 Acq: 17 Dec 2019 17:13

Tgt Ion	43	Resp	37364
Ion Ratio	100	Lower	Upper
57	49.6	40.2	60.2





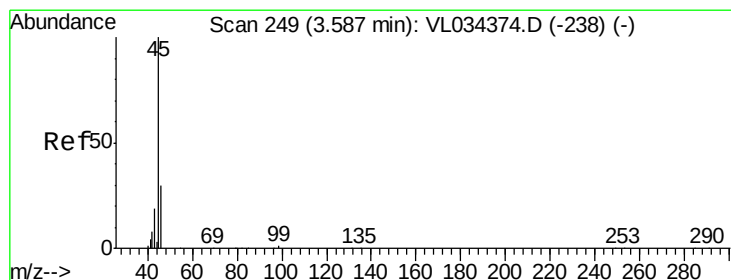
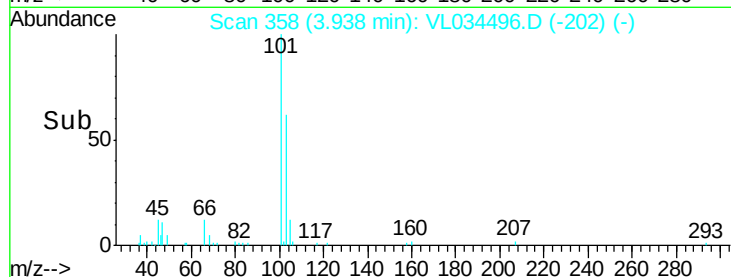
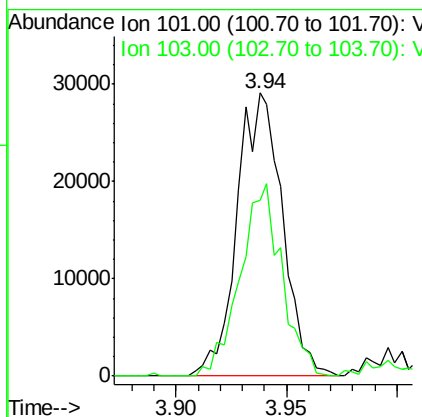
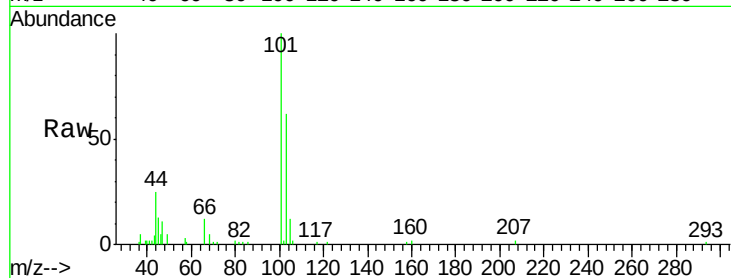
#11
Trichlorofluoromethane
Concen: 0.256 ppbv
RT: 3.94 min Scan# 358
Delta R.T. 0.00 min
Lab File: VL034496.D
Acq: 17 Dec 2019 17:13

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IAH

Tot Ion:101 Resp: 41723
Ion Ratio Lower Upper
101 100
103 61.9 55.4 83.0

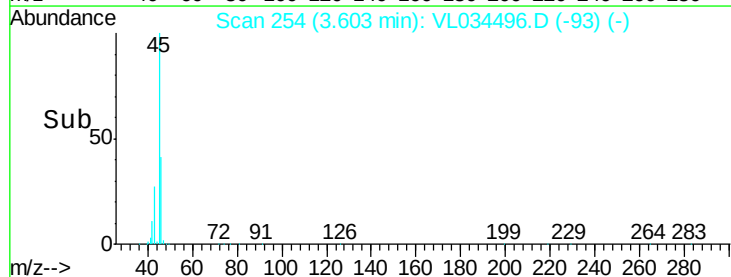
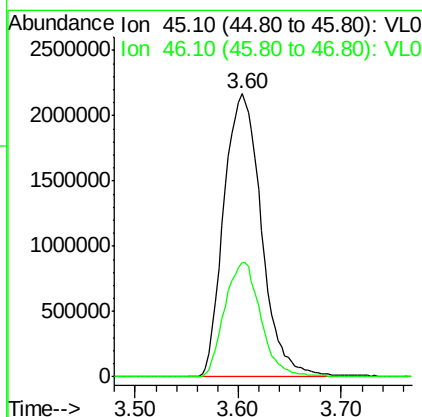
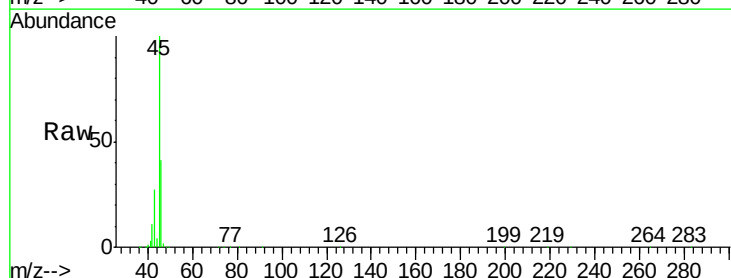
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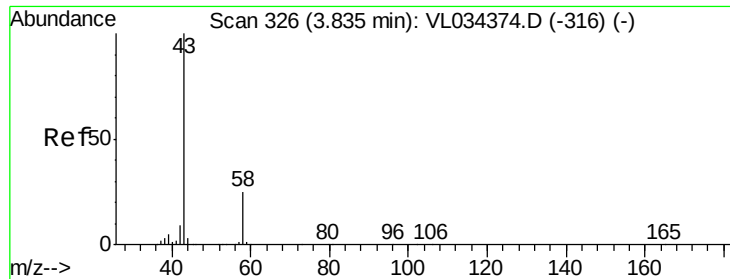
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#13
Ethanol
Concen: 395.806 ppbv
RT: 3.60 min Scan# 254
Delta R.T. 0.02 min
Lab File: VL034496.D
Acq: 17 Dec 2019 17:13

Tgt Ion: 45 Resp: 5520784
Ion Ratio Lower Upper
45 100
46 39.3 13.8 55.4





#15

Acetone

Concen: 6.716 ppbv

RT: 3.83 min Scan# 326

Delta R.T. 0.00 min

Lab File: VL034496.D

Acq: 17 Dec 2019 17:13

Instrument :

MSVOA_L

ClientSampleId :

LIHA-IAH

Tot Ion: 43 Resp: 869321

Ion Ratio Lower Upper

43 100

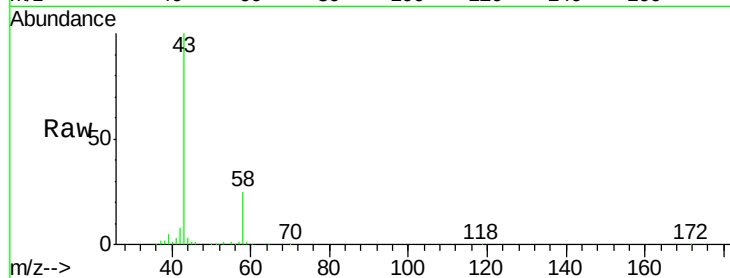
58 21.4 20.2 30.4

Manual Integrations

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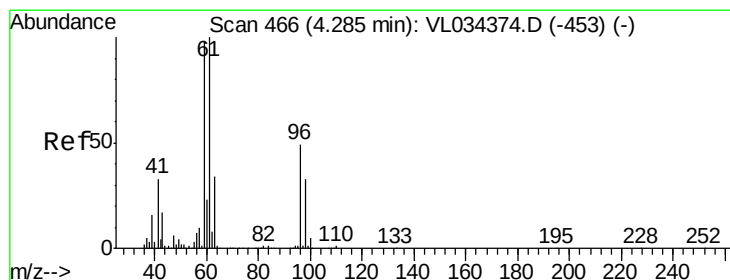
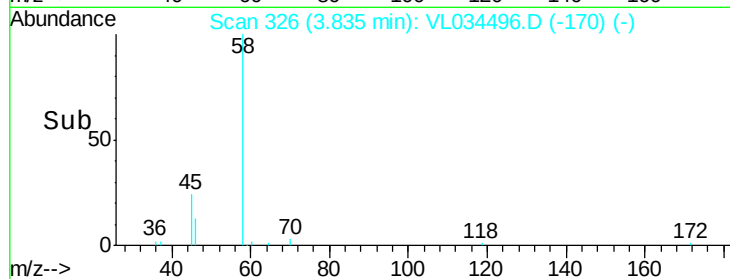
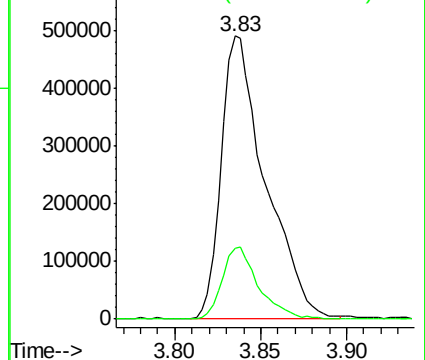
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#17

tert-Butyl alcohol

Concen: 0.264 ppbv m

RT: 4.31 min Scan# 474

Delta R.T. 0.03 min

Lab File: VL034496.D

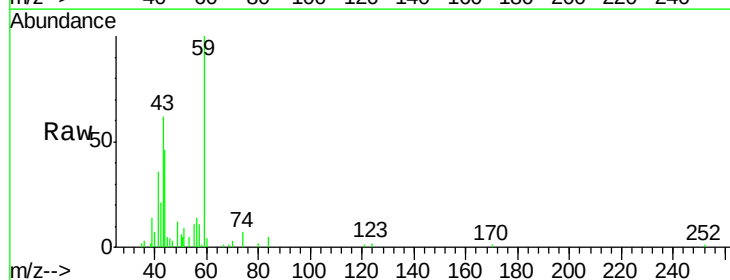
Acq: 17 Dec 2019 17:13

Tgt Ion: 59 Resp: 28705

Ion Ratio Lower Upper

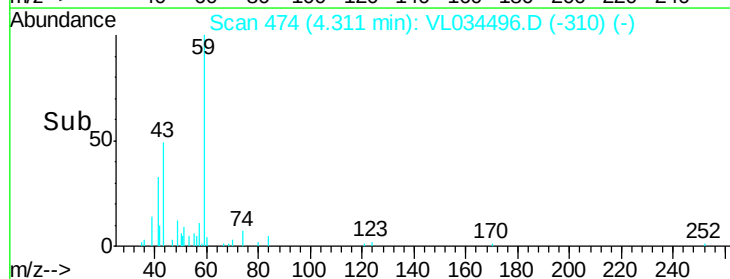
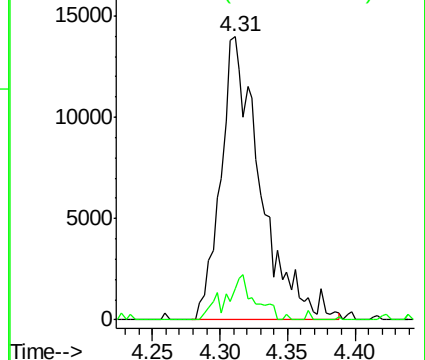
59 100

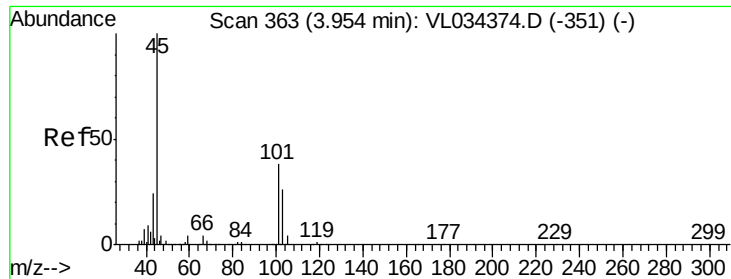
57 0.0 8.8 13.2#



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





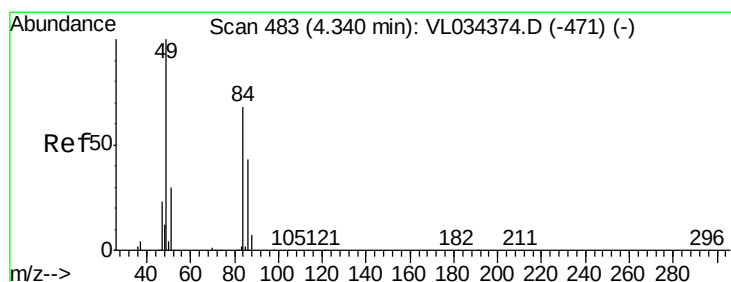
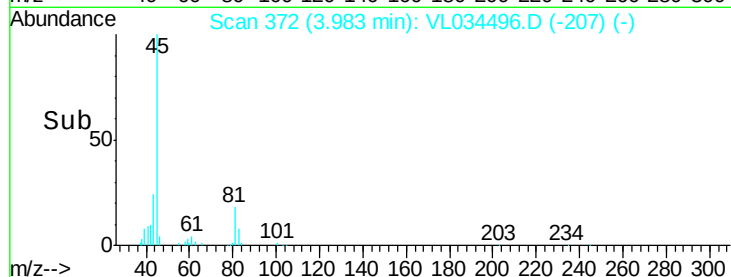
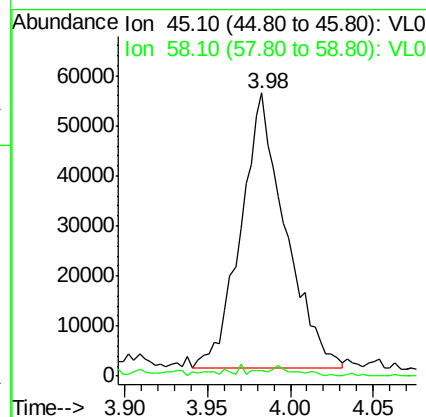
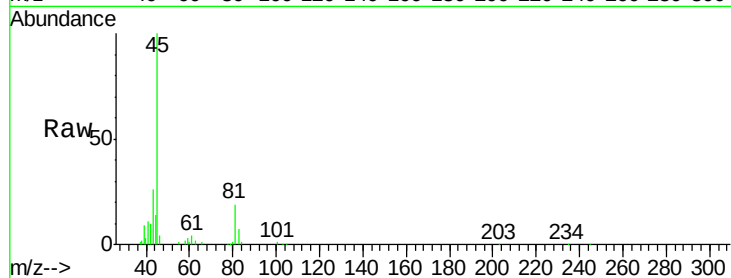
#19
Isopropyl Alcohol
Concen: 1.237 ppbv
RT: 3.98 min Scan# 372
Delta R.T. 0.03 min
Lab File: VL034496.D
Acq: 17 Dec 2019 17:13

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IAH

Tot Ion	Ratio	Lower	Upper
45	100		
58	5.8	1.3	1.9#

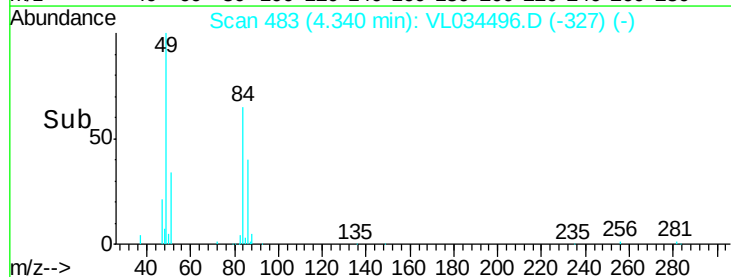
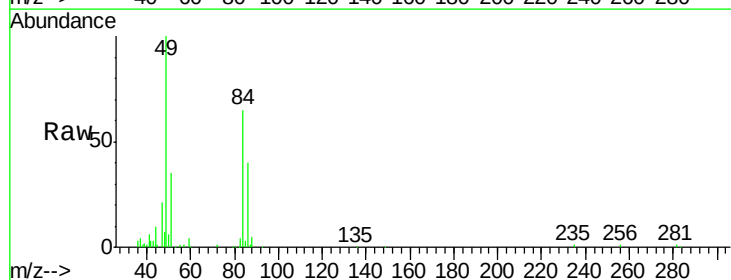
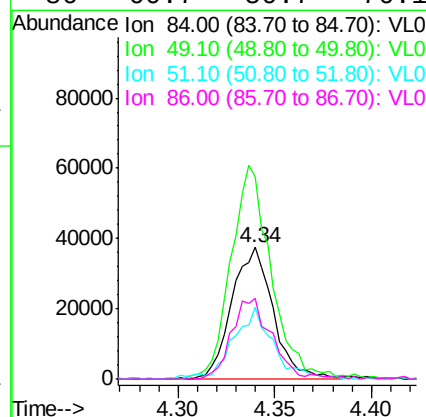
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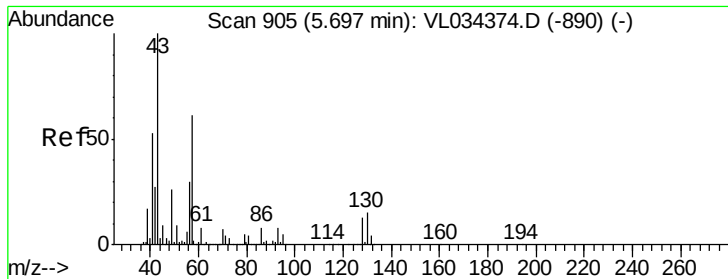
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#20
Methylene Chloride
Concen: 1.214 ppbv
RT: 4.34 min Scan# 483
Delta R.T. 0.00 min
Lab File: VL034496.D
Acq: 17 Dec 2019 17:13

Tgt Ion	Ratio	Lower	Upper
84	100		
49	151.2	116.8	175.2
51	54.2	35.6	53.4#
86	60.7	50.7	76.1





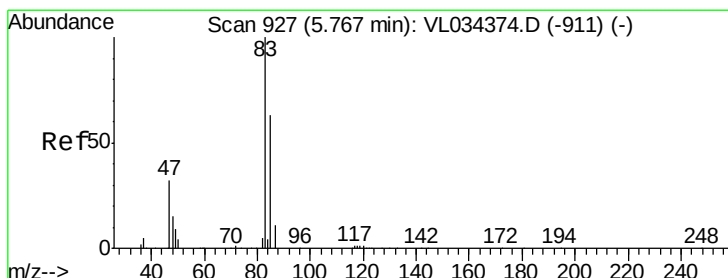
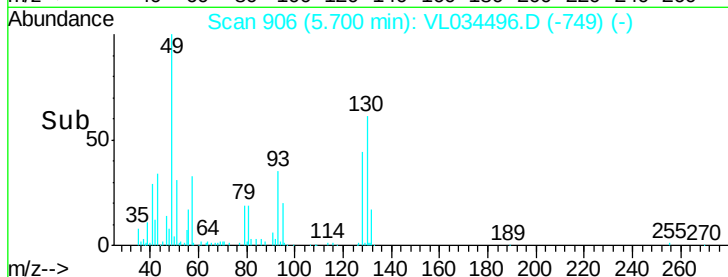
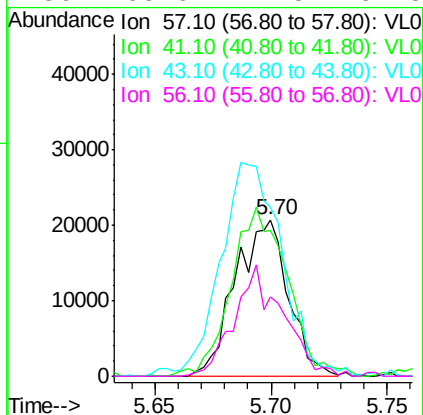
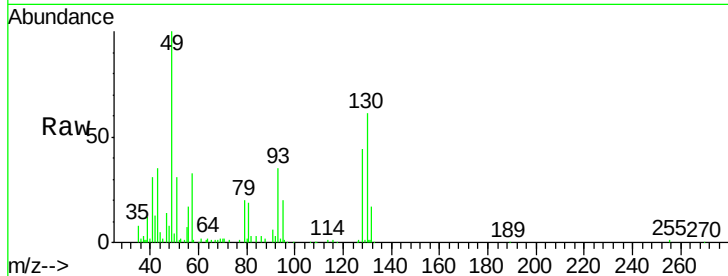
#26
Hexane
Concen: 0.332 ppbv
RT: 5.70 min Scan# 906
Delta R.T. 0.00 min
Lab File: VL034496.D
Acq: 17 Dec 2019 17:13

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IAH

Tot Ion: 57 Resp: 32970
Ion Ratio Lower Upper
57 100
41 114.7 75.0 112.4#
43 158.8 186.6 279.8#
56 65.6 41.5 62.3#

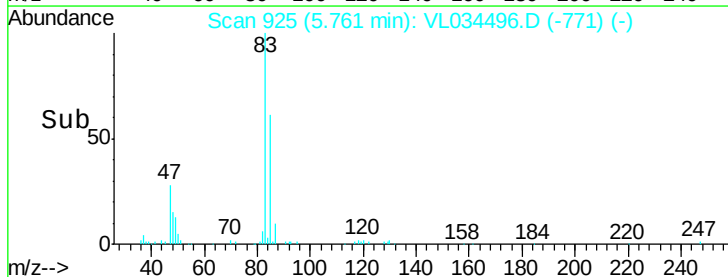
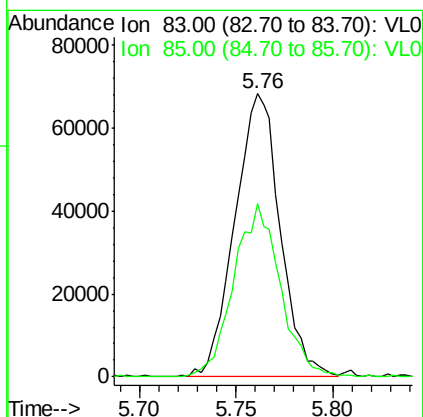
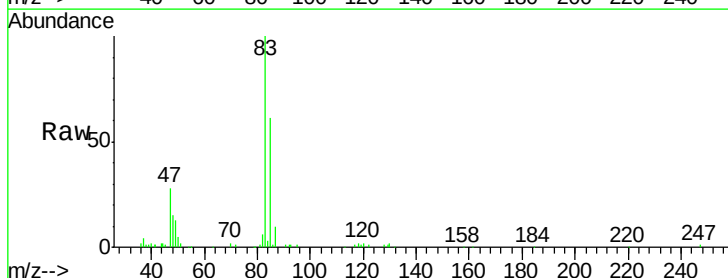
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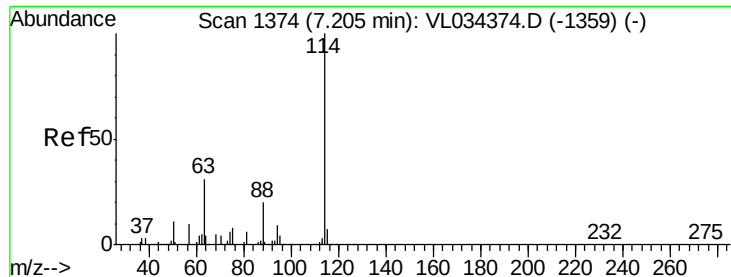
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#29
Chloroform
Concen: 0.692 ppbv
RT: 5.76 min Scan# 925
Delta R.T. -0.01 min
Lab File: VL034496.D
Acq: 17 Dec 2019 17:13

Tgt Ion: 83 Resp: 111181
Ion Ratio Lower Upper
83 100
85 60.7 50.4 75.6





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.20 min Scan# 1372

Delta R.T. -0.01 min

Lab File: VL034496.D

Acq: 17 Dec 2019 17:13

Instrument :

MSVOA_L

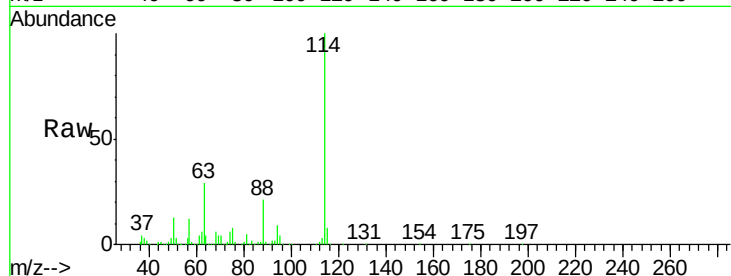
ClientSampleId :

LIHA-IAH

Tot Ion:	114	Resp:	1803352
Ion	Ratio	Lower	Upper
114	100		
63	29.7	24.2	36.4
88	19.6	15.9	23.9

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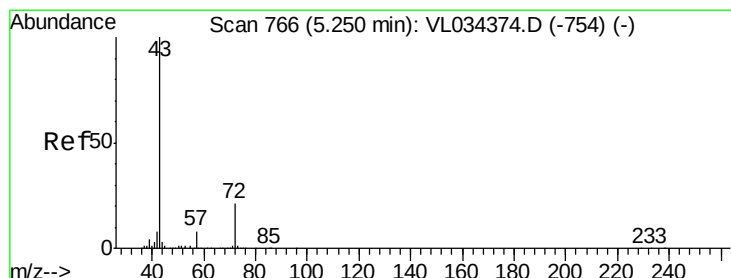
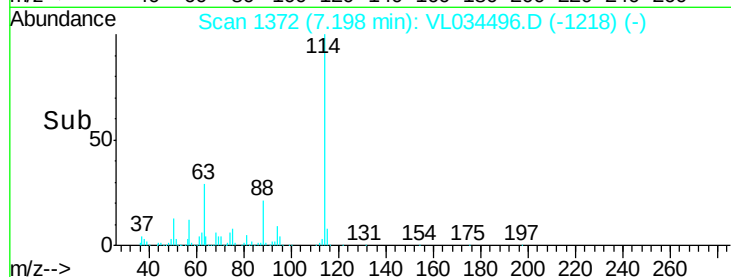
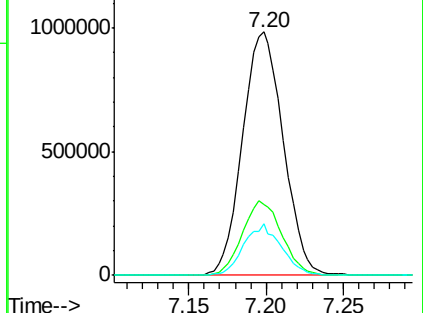
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Abundance Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 0.231 ppbv m

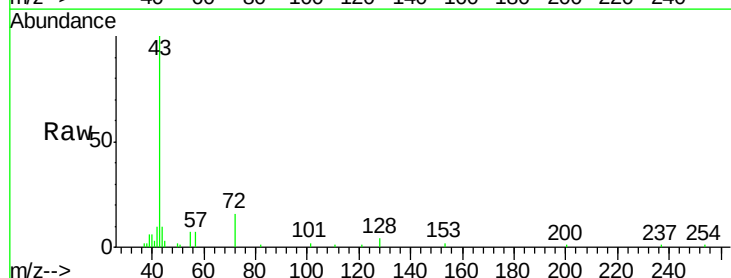
RT: 5.26 min Scan# 768

Delta R.T. 0.01 min

Lab File: VL034496.D

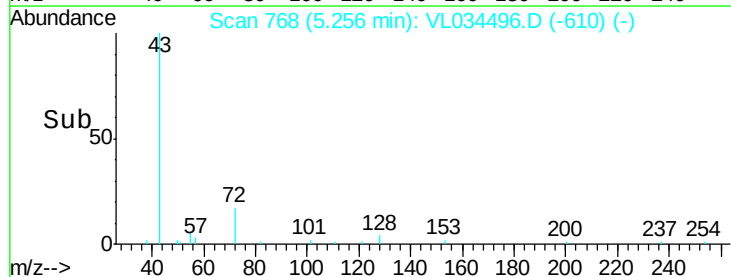
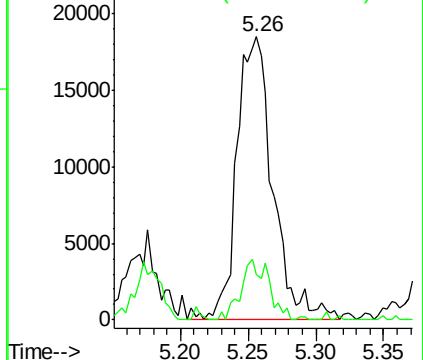
Acq: 17 Dec 2019 17:13

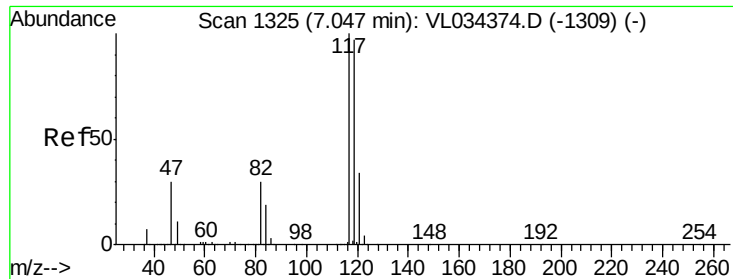
Tgt Ion:	43	Resp:	34315
Ion	Ratio	Lower	Upper
43	100		
72	0.0	17.0	25.6#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





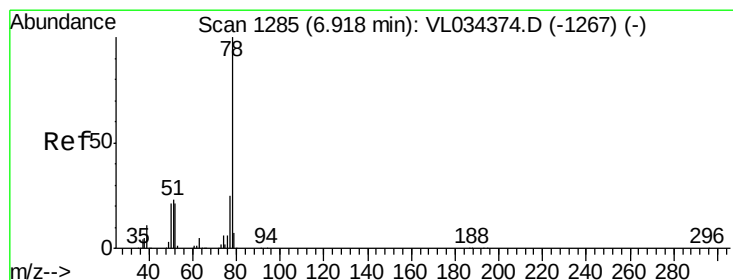
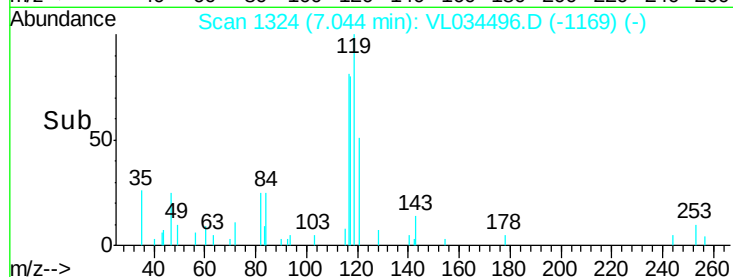
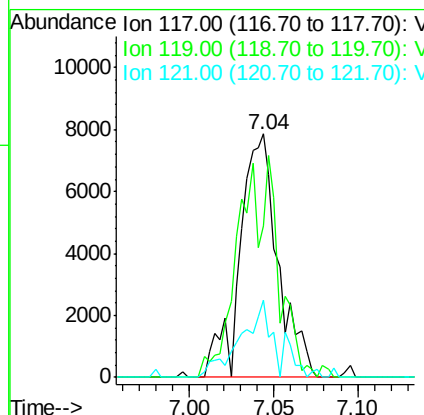
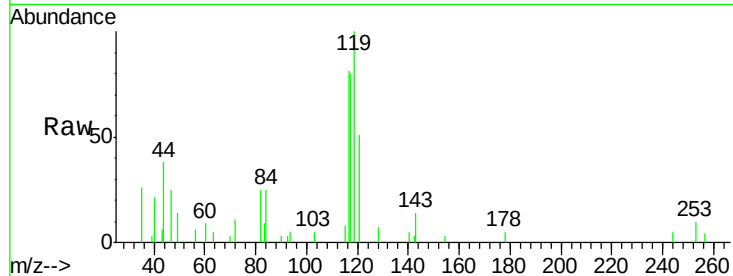
#35
Carbon Tetrachloride
Concen: 0.080 ppbv m
RT: 7.04 min Scan# 1324
Delta R.T. -0.00 min
Lab File: VL034496.D
Acq: 17 Dec 2019 17:13

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IAH

Tot Ion	Ratio	Lower	Upper
117	100		
119	124.1	77.3	115.9#
121	63.1	27.4	41.2#

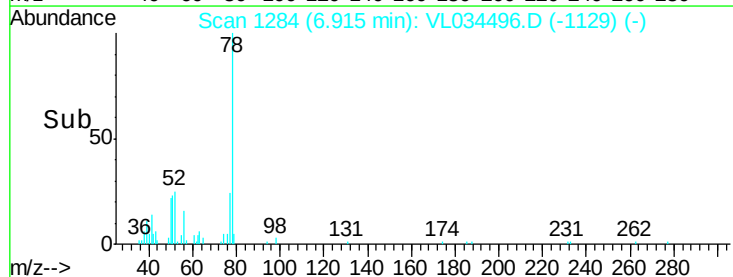
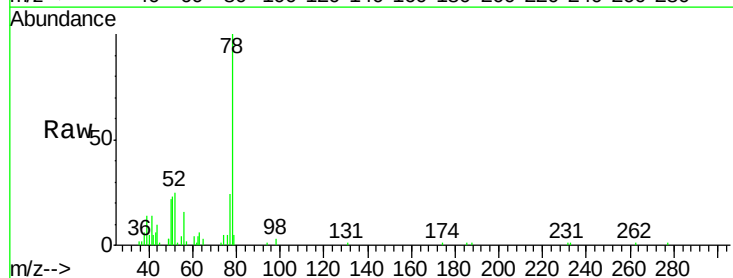
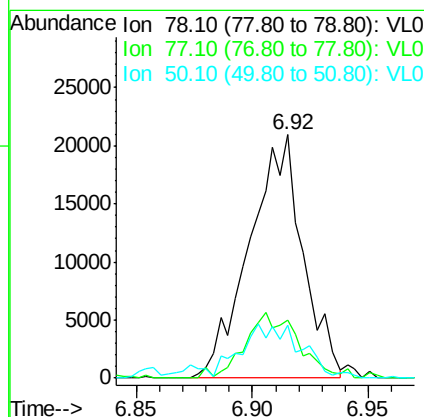
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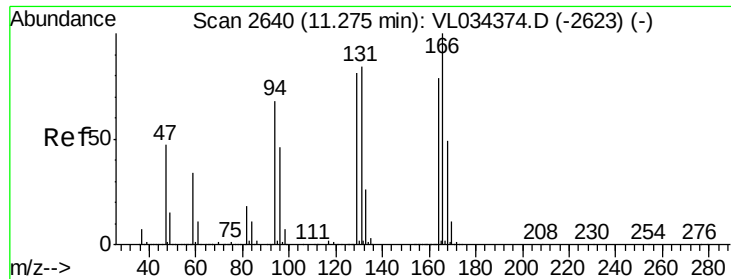
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#36
Benzene
Concen: 0.186 ppbv
RT: 6.92 min Scan# 1284
Delta R.T. -0.00 min
Lab File: VL034496.D
Acq: 17 Dec 2019 17:13

Tgt Ion	Ratio	Lower	Upper
78	100		
77	23.7	20.2	30.4
50	19.8	17.1	25.7





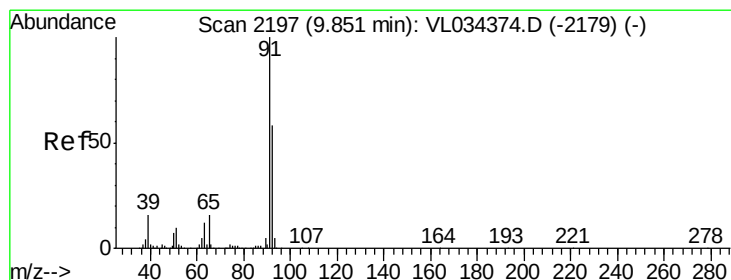
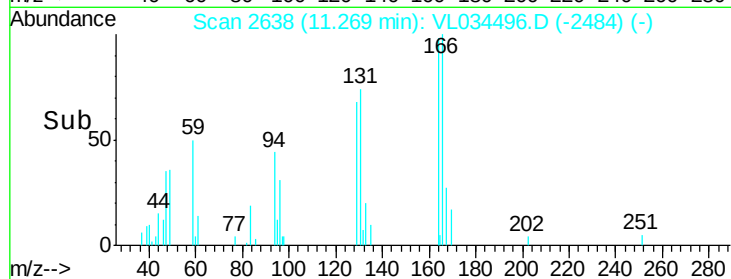
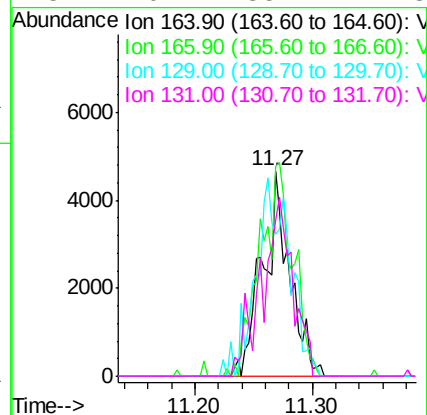
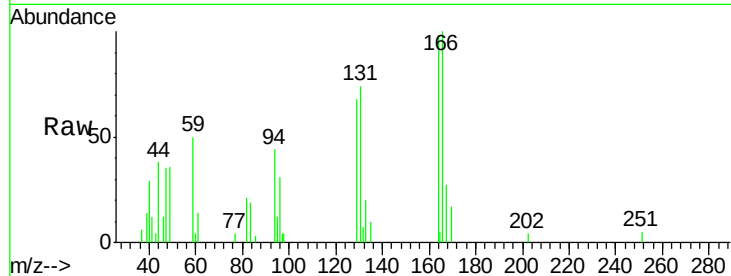
#52
Tetrachloroethene
Concen: 0.094 ppbv m
RT: 11.27 min Scan# 2638
Delta R.T. -0.01 min
Lab File: VL034496.D
Acq: 17 Dec 2019 17:13

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IAH

Tot Ion	Ratio	Lower	Upper
164	100		
166	102.4	101.7	152.5
129	69.5	82.6	123.8#
131	76.2	85.2	127.8#

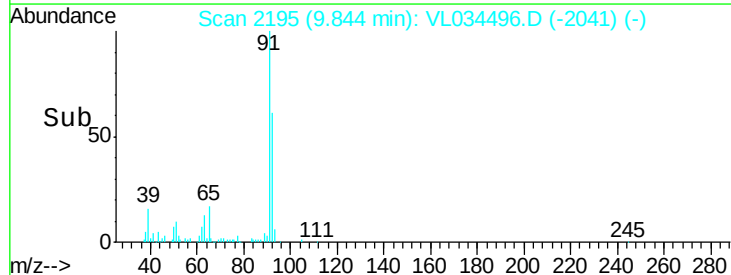
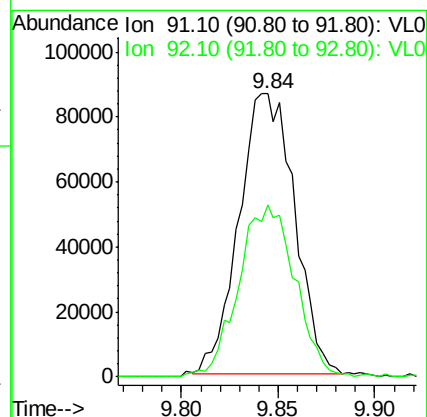
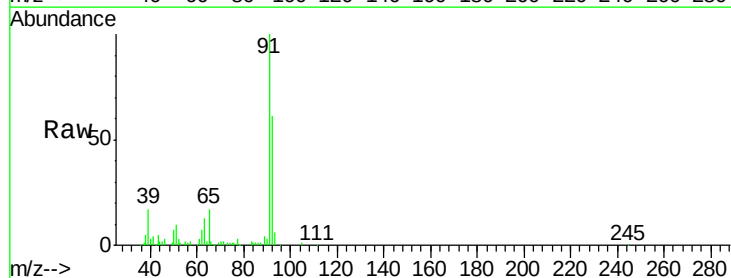
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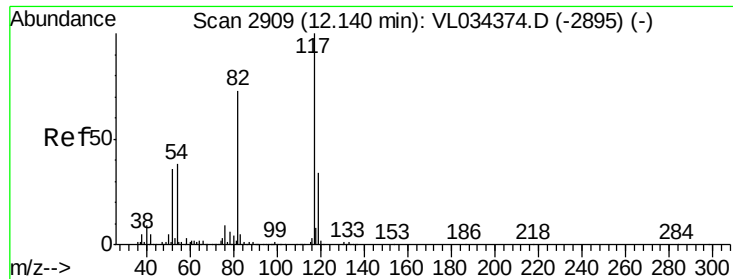
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#53
Toluene
Concen: 0.842 ppbv
RT: 9.84 min Scan# 2195
Delta R.T. -0.01 min
Lab File: VL034496.D
Acq: 17 Dec 2019 17:13

Tgt Ion	Ratio	Lower	Upper
91	100		
92	62.3	47.9	71.9





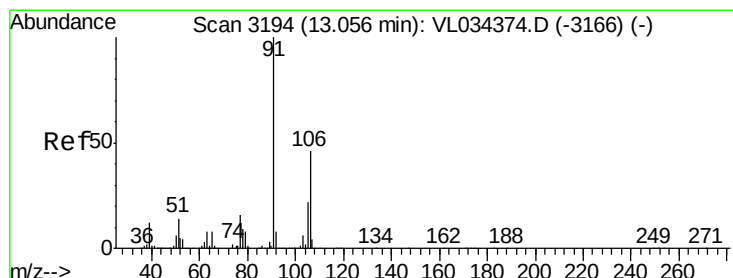
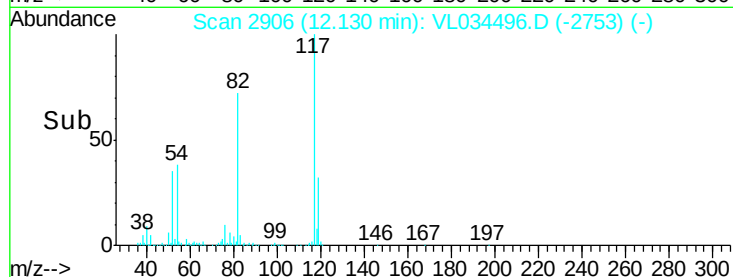
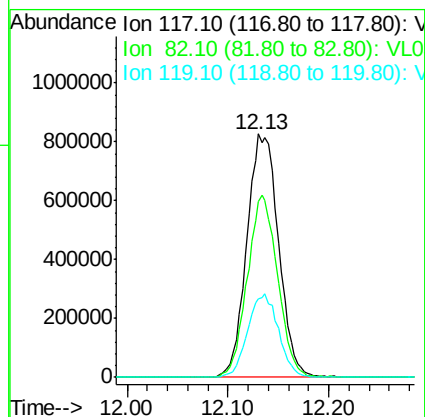
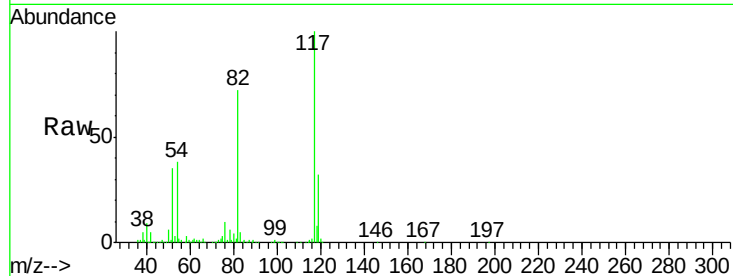
#55
Chlorobenzene-d5
Concen: 10.000 ppbv m
RT: 12.13 min Scan# 2906
Delta R.T. -0.01 min
Lab File: VL034496.D
Acq: 17 Dec 2019 17:13

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IAH

Tot Ion:117 Resp: 1798530
Ion Ratio Lower Upper
117 100
82 0.0 57.5 86.3#
119 0.0 25.4 38.2#

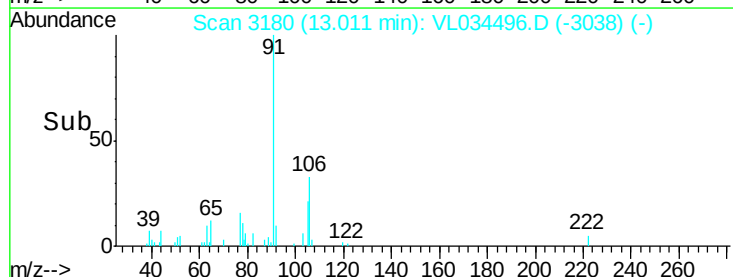
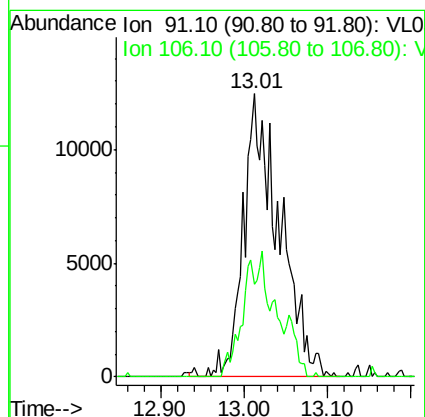
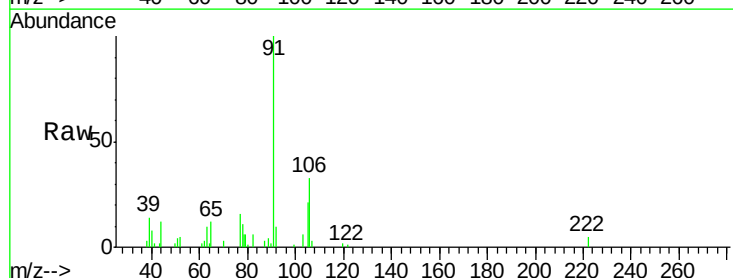
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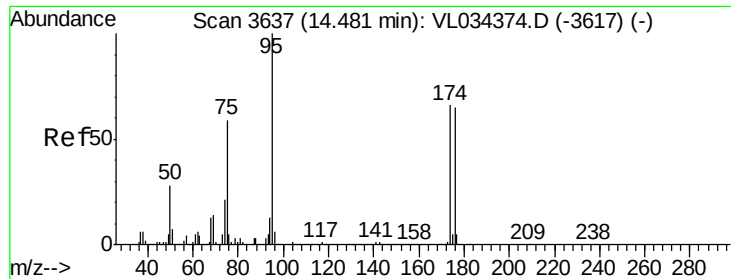
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#59
m/p-Xylene
Concen: 0.153 ppbv m
RT: 13.01 min Scan# 3180
Delta R.T. -0.04 min
Lab File: VL034496.D
Acq: 17 Dec 2019 17:13

Tgt Ion: 91 Resp: 36932
Ion Ratio Lower Upper
91 100
106 0.0 34.6 51.8#





#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.300 ppbv
 RT: 14.47 min Scan# 3633
 Delta R.T. -0.01 min
 Lab File: VL034496.D
 Acq: 17 Dec 2019 17:13

Instrument :
 MSVOA_L
 ClientSampleId :
 LIHA-IAH

Tot Ion: 95 Resp: 1558517
 Ion Ratio Lower Upper
 95 100
 174 64.3 52.2 78.2
 175 4.6 3.8 5.8

Manual Integrations
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 12/19/2019 3:47:00 PM

