

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL101719\
 Data File : VL034325.D
 Acq On : 17 Oct 2019 20:42
 Operator : SY/AP
 Sample : K5409-01DL 10X
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1DL

Quant Time: Oct 18 04:35:12 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL101619AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Thu Oct 17 05:12:37 2019
 QLast Update : Thu Oct 17 05:12:37 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.69	49	952307	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.21	114	2006568	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.15	117	2037183	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.49	95	1680581	9.74	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.40%

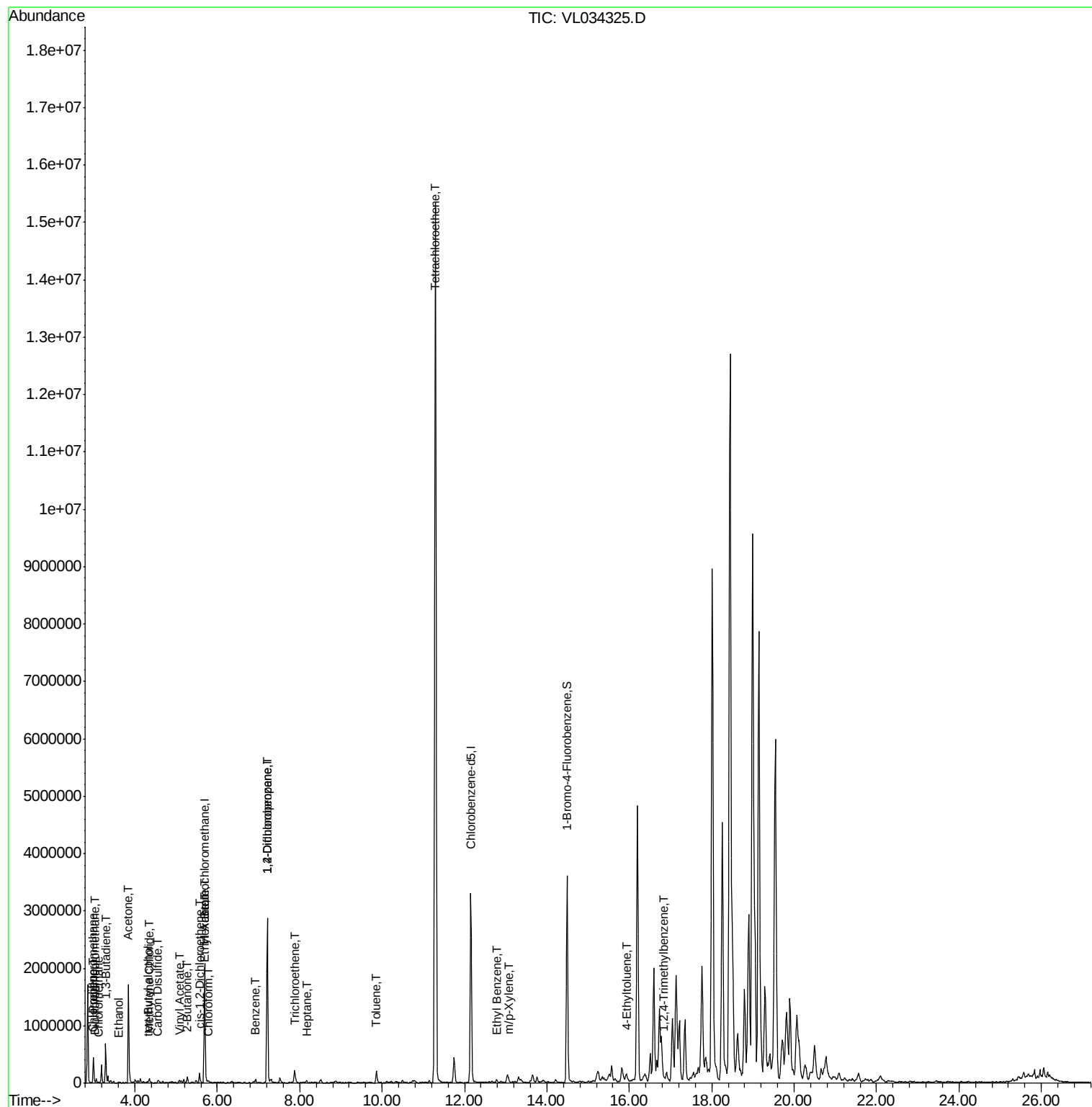
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.03	85	9606	0.059	ppbv #	73
3) Chlorodifluoromethane	2.97	51	6951	0.062	ppbv #	90
4) Chloromethane	3.12	50	9382	0.142	ppbv #	62
9) Propene	2.99	41	170099	3.438	ppbv	94
10) Heptane	8.16	43	5435	0.043	ppbv #	28
13) Ethanol	3.60	45	7780	0.702	ppbv #	36
15) Acetone	3.84	43	1685344	12.373	ppbv	96
16) 1,3-Butadiene	3.29	39	190025	3.433	ppbv #	19
17) tert-Butyl alcohol	4.32	59	8206	0.094	ppbv #	83
20) Methylene Chloride	4.35	84	22204	0.451	ppbv	91
23) Vinyl Acetate	5.08	43	23355	0.137	ppbv #	70
25) Ethyl Acetate	5.71	43	20821	0.091	ppbv #	83
26) Hexane	5.71	57	20296	0.207	ppbv #	41
27) Carbon Disulfide	4.56	76	36302	0.357	ppbv #	89
29) Chloroform	5.77	83	6209	0.040	ppbv	97
31) cis-1,2-Dichloroethene	5.56	61	90480	0.910	ppbv #	94
34) 2-Butanone	5.27	43	117042	0.714	ppbv	98
36) Benzene	6.93	78	21725	0.113	ppbv	94
38) Trichloroethene	7.88	130	66673	0.863	ppbv #	81
39) 1,2-Dichloropropane	7.21	63	555648	6.703	ppbv #	20
52) Tetrachloroethene	11.29	164	4389537	58.167	ppbv	96
53) Toluene	9.86	91	151028	0.711	ppbv	96
58) Ethyl Benzene	12.78	91	19229	0.068	ppbv	99
59) m/p-Xylene	13.08	91	15310	0.062	ppbv #	32
72) 4-Ethyltoluene	15.92	105	8798	0.032	ppbv #	46
74) 1,2,4-Trimethylbenzene	16.84	105	20020	0.070	ppbv #	69

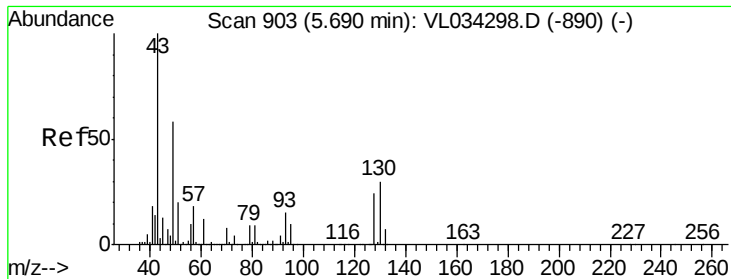
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Thu Oct 17 05:12:37 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.69 min Scan# 902

Delta R.T. -0.00 min

Lab File: VL034325.D

Acq: 17 Oct 2019 20:42

Instrument :

MSVOA_L

ClientSampleId :

SV1DL

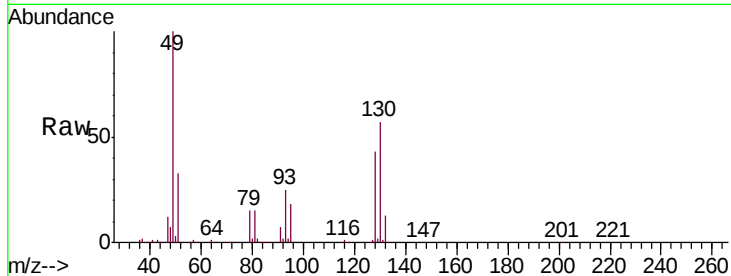
Tgt Ion: 49 Resp: 952307

Ion Ratio Lower Upper

49 100

128 44.2 20.6 61.8

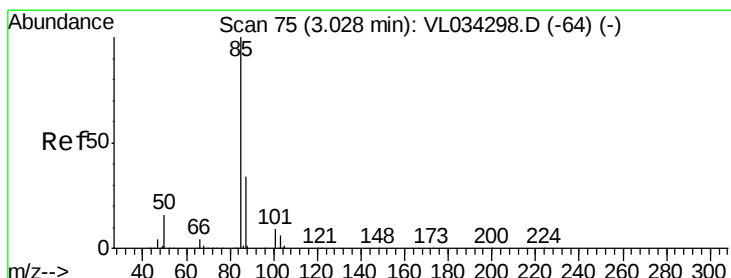
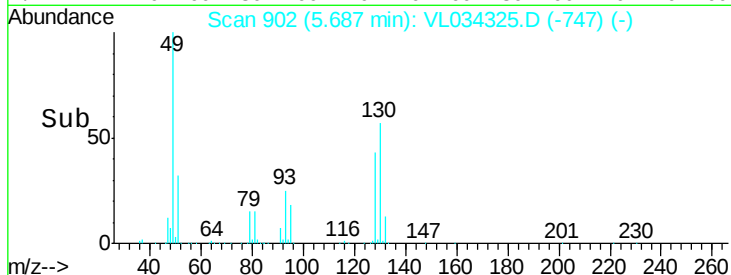
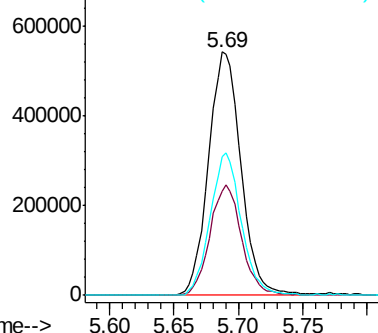
130 56.7 26.2 78.5



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.059 ppbv

RT: 3.03 min Scan# 75

Delta R.T. 0.00 min

Lab File: VL034325.D

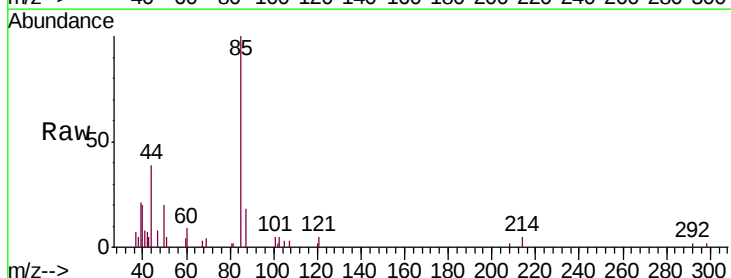
Acq: 17 Oct 2019 20:42

Tgt Ion: 85 Resp: 9606

Ion Ratio Lower Upper

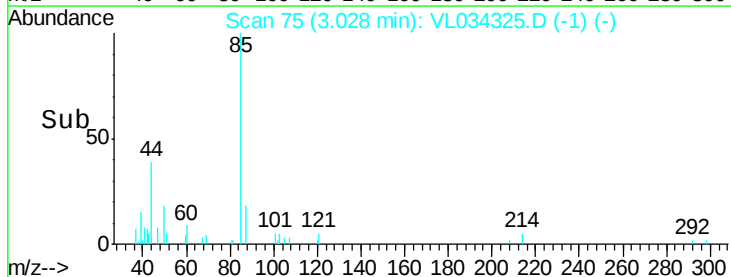
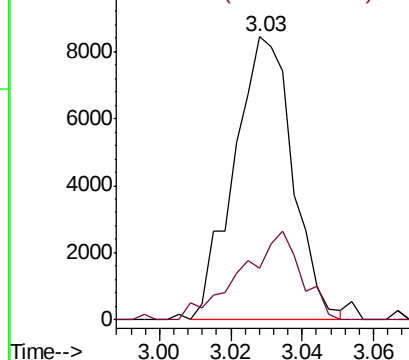
85 100

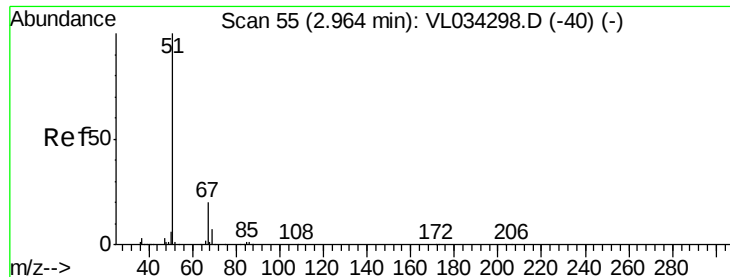
87 18.5 27.0 40.6#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

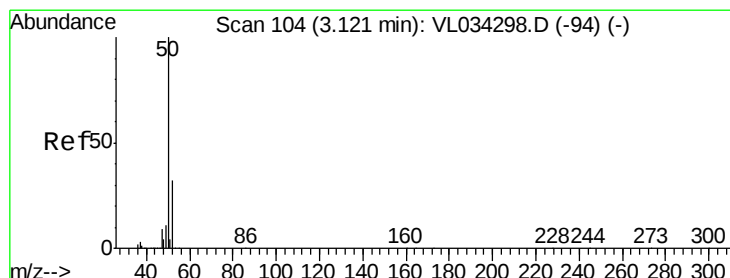
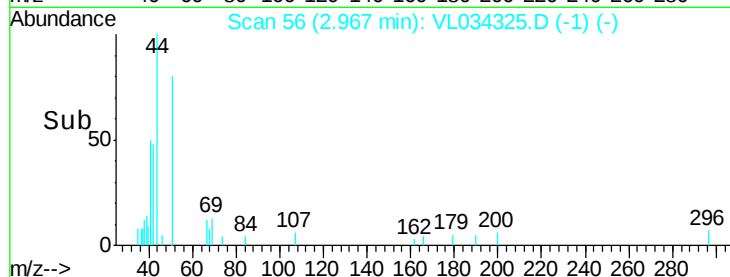
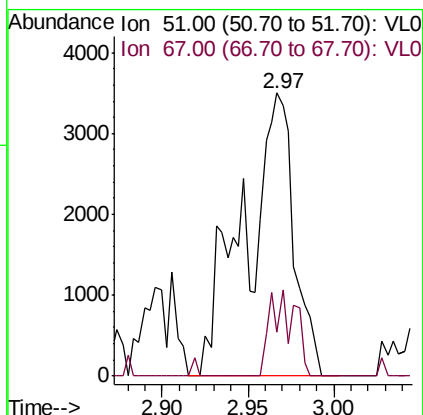
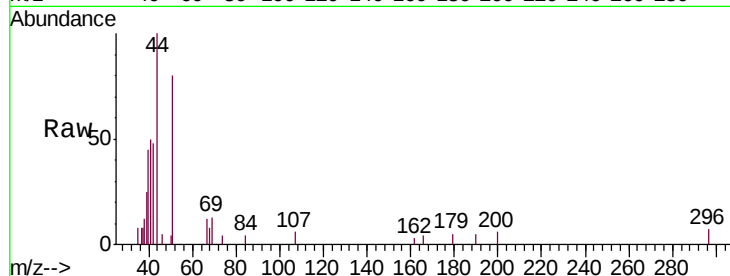




#3
Chlorodifluoromethane
Concen: 0.062 ppbv
RT: 2.97 min Scan# 56
Delta R.T. 0.00 min
Lab File: VL034325.D
Acq: 17 Oct 2019 20:42

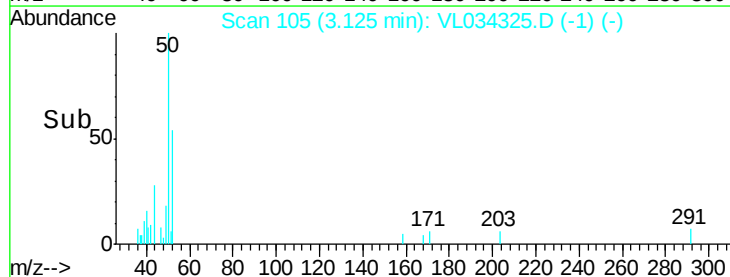
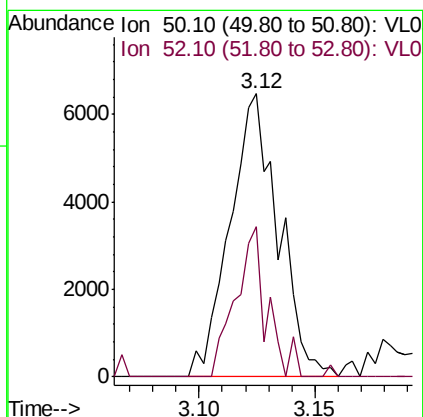
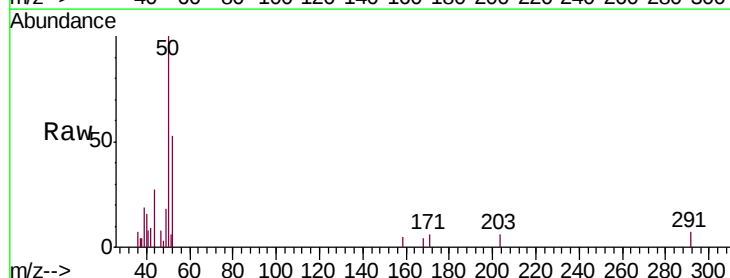
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

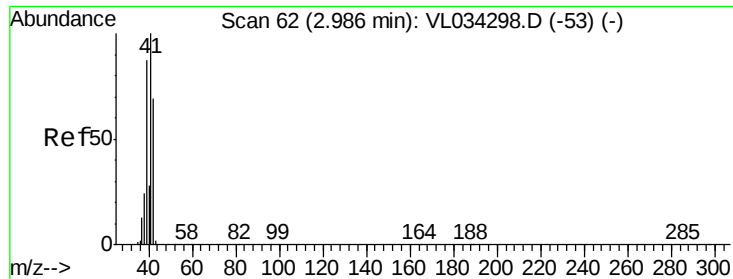
Tgt Ion: 51 Resp: 6951
Ion Ratio Lower Upper
51 100
67 15.1 15.8 23.8#



#4
Chloromethane
Concen: 0.142 ppbv
RT: 3.12 min Scan# 105
Delta R.T. 0.00 min
Lab File: VL034325.D
Acq: 17 Oct 2019 20:42

Tgt Ion: 50 Resp: 9382
Ion Ratio Lower Upper
50 100
52 52.9 25.4 38.2#





#9

Propene

Concen: 3.438 ppbv

RT: 2.99 min Scan# 63

Delta R.T. 0.00 min

Lab File: VL034325.D

Acq: 17 Oct 2019 20:42

Instrument :

MSVOA_L

ClientSampled :

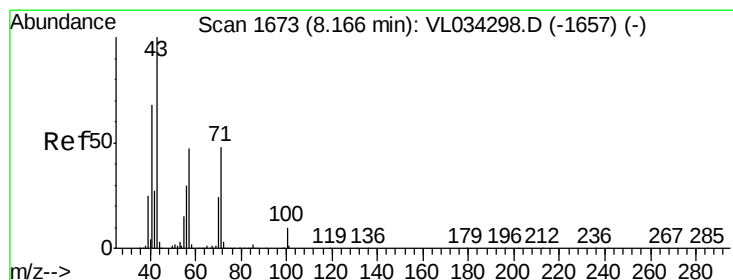
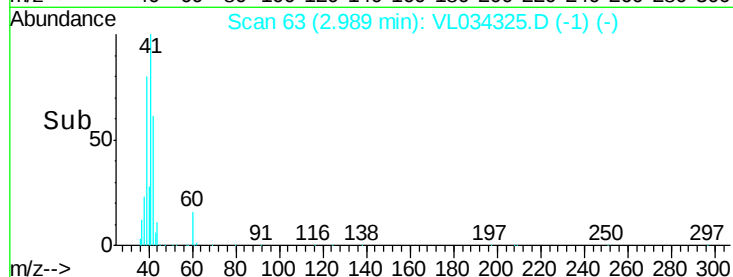
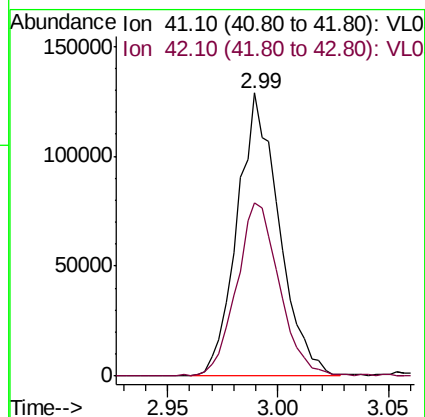
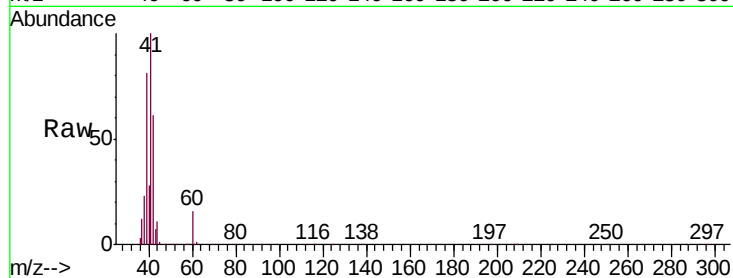
SV1DL

Tgt Ion: 41 Resp: 170099

Ion Ratio Lower Upper

41 100

42 62.9 53.9 80.9



#10

Heptane

Concen: 0.043 ppbv

RT: 8.16 min Scan# 1670

Delta R.T. -0.01 min

Lab File: VL034325.D

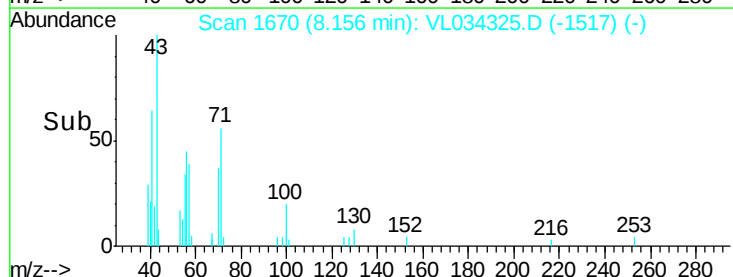
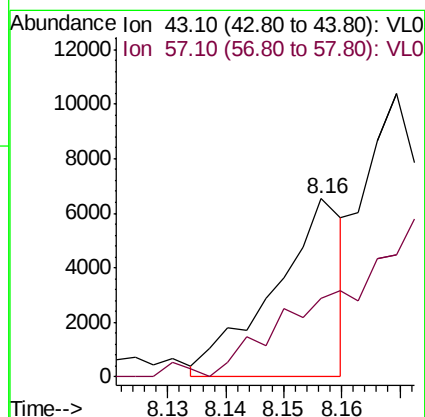
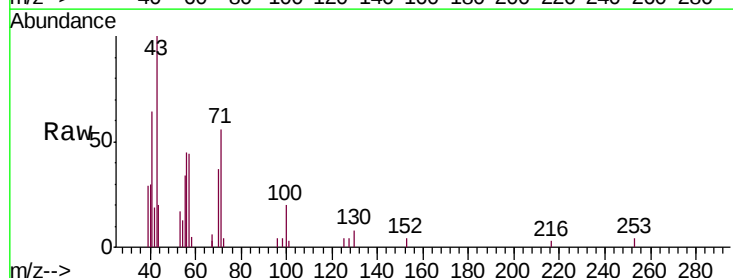
Acq: 17 Oct 2019 20:42

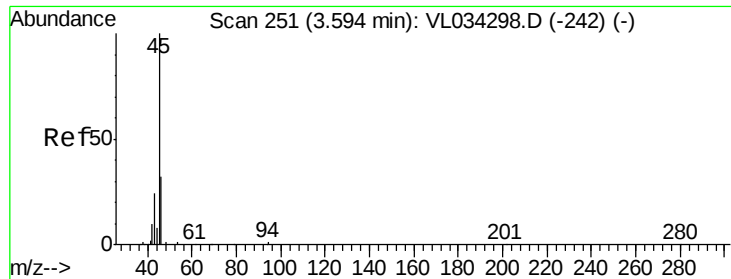
Tgt Ion: 43 Resp: 5435

Ion Ratio Lower Upper

43 100

57 0.0 39.5 59.3#

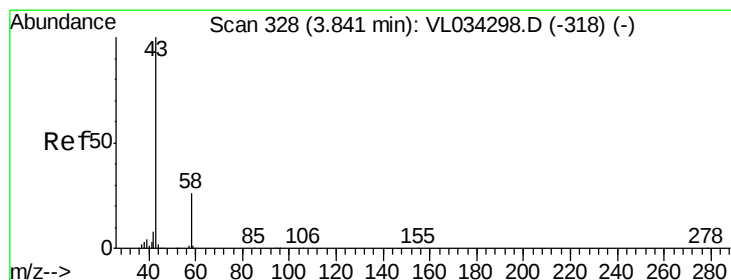
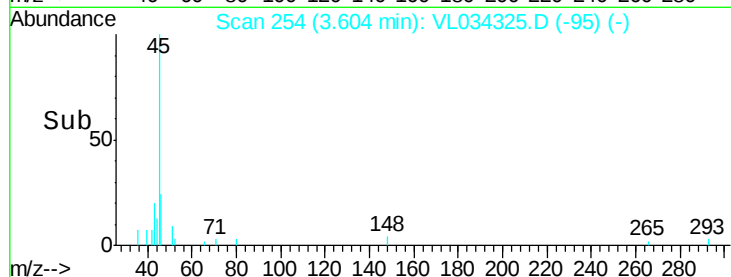
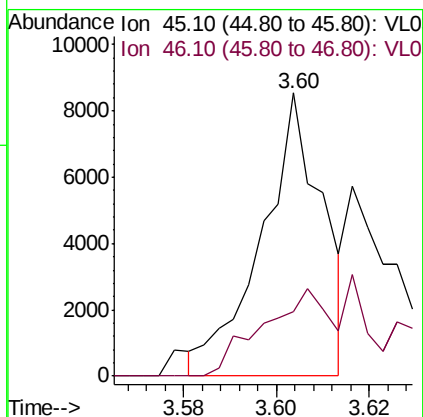
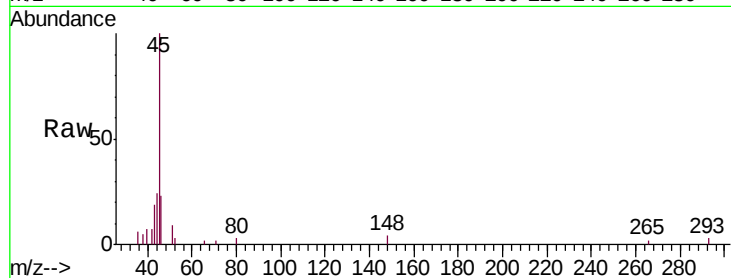




#13
Ethanol
Concen: 0.702 ppbv
RT: 3.60 min Scan# 254
Delta R.T. 0.01 min
Lab File: VL034325.D
Acq: 17 Oct 2019 20:42

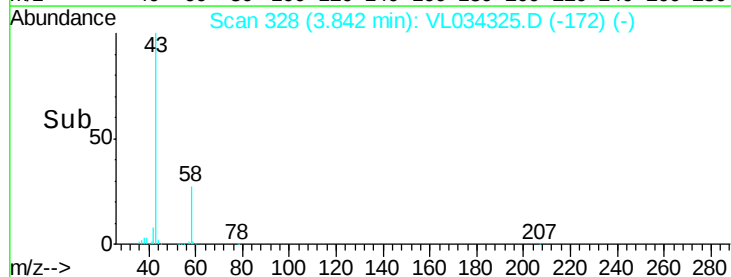
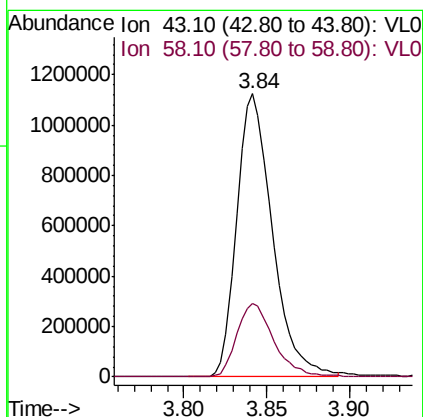
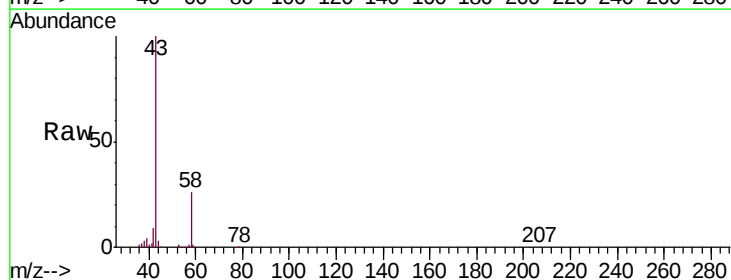
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

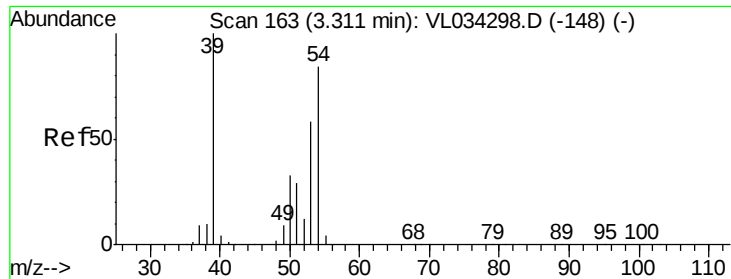
Tgt Ion: 45 Resp: 7780
Ion Ratio Lower Upper
45 100
46 0.0 15.8 63.2#



#15
Acetone
Concen: 12.373 ppbv
RT: 3.84 min Scan# 328
Delta R.T. 0.00 min
Lab File: VL034325.D
Acq: 17 Oct 2019 20:42

Tgt Ion: 43 Resp: 1685344
Ion Ratio Lower Upper
43 100
58 27.4 20.4 30.6

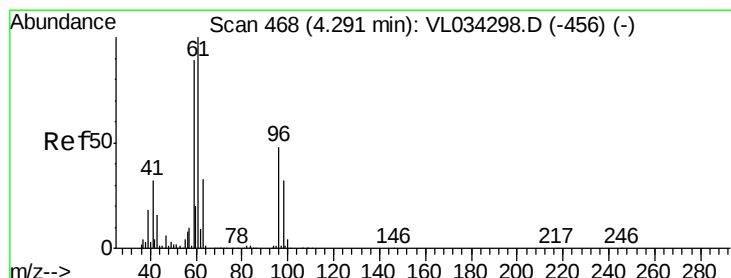
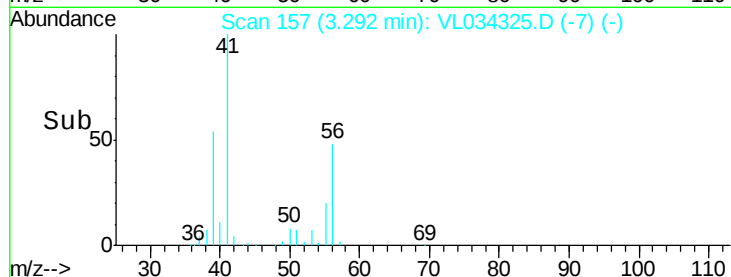
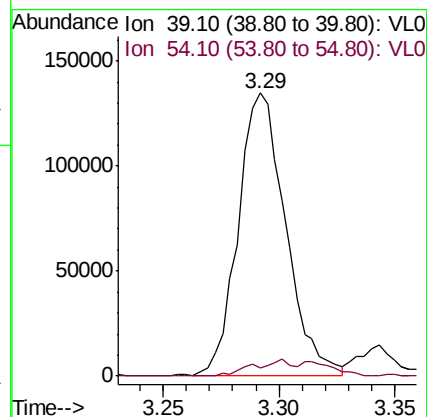
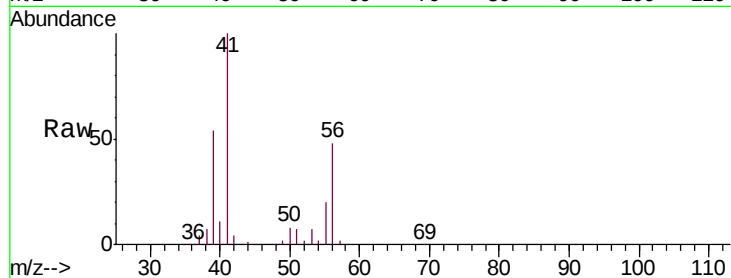




#16
1,3-Butadiene
Concen: 3.433 ppbv
RT: 3.29 min Scan# 157
Delta R.T. -0.02 min
Lab File: VL034325.D
Acq: 17 Oct 2019 20:42

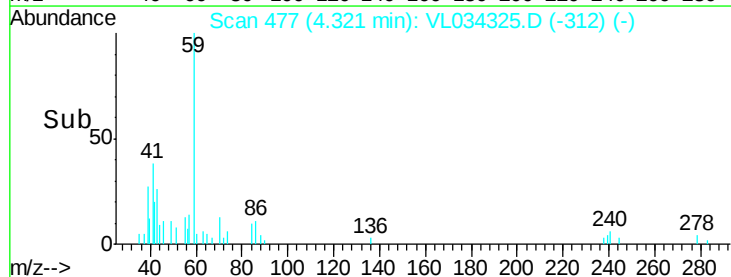
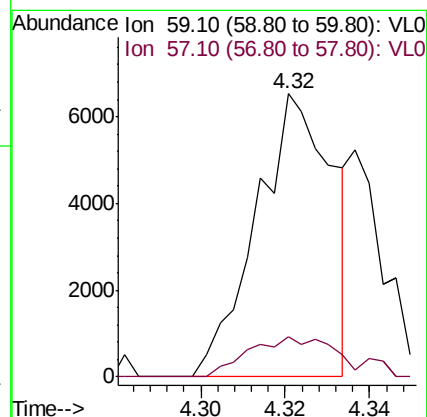
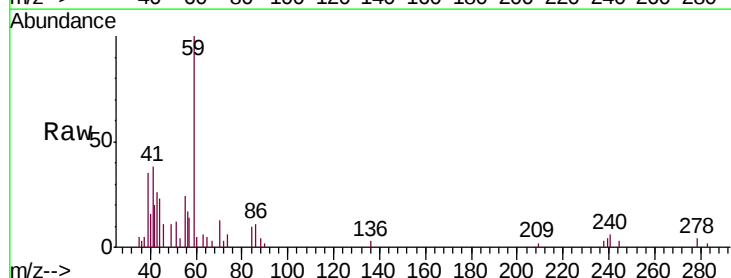
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

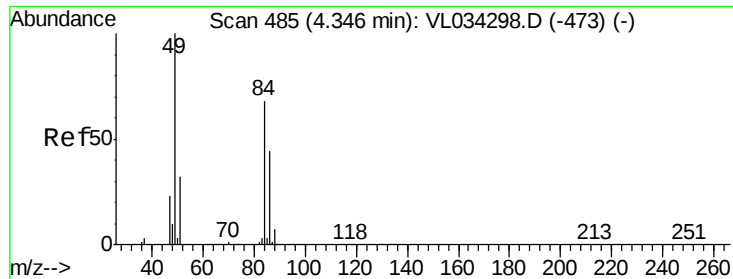
Tgt Ion: 39 Resp: 190025
Ion Ratio Lower Upper
39 100
54 8.7 63.9 95.9#



#17
tert-Butyl alcohol
Concen: 0.094 ppbv
RT: 4.32 min Scan# 477
Delta R.T. 0.03 min
Lab File: VL034325.D
Acq: 17 Oct 2019 20:42

Tgt Ion: 59 Resp: 8206
Ion Ratio Lower Upper
59 100
57 17.4 8.8 13.2#

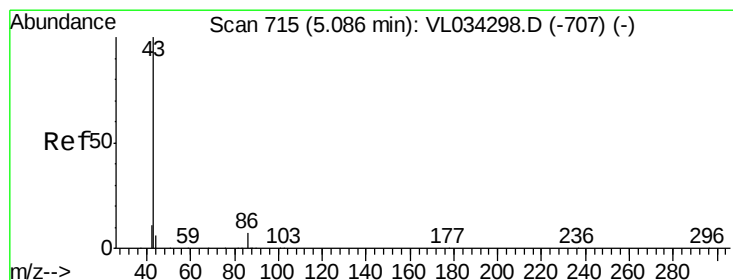
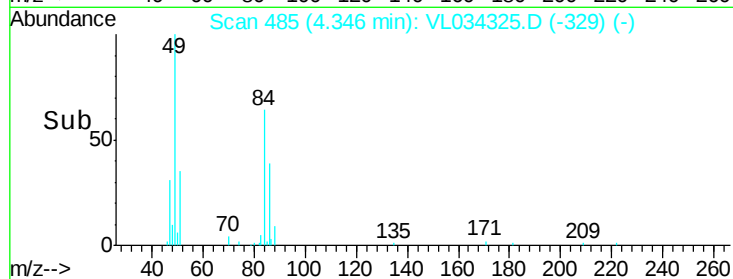
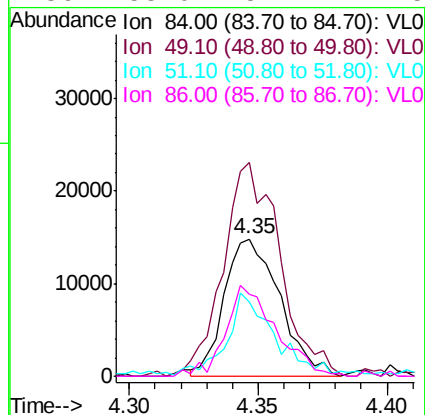
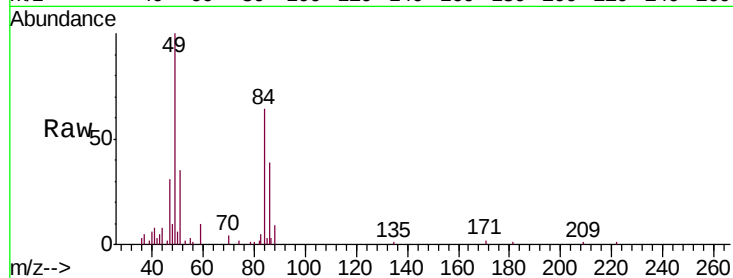




#20
Methylene Chloride
Concen: 0.451 ppbv
RT: 4.35 min Scan# 485
Delta R.T. 0.00 min
Lab File: VL034325.D
Acq: 17 Oct 2019 20:42

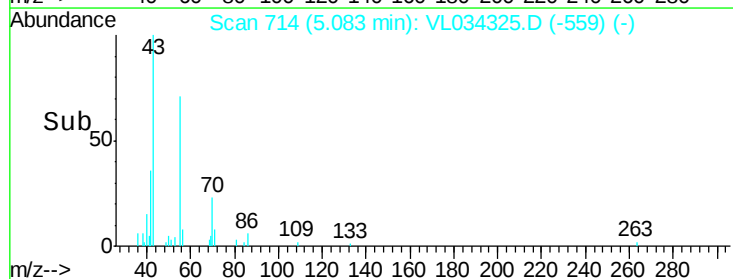
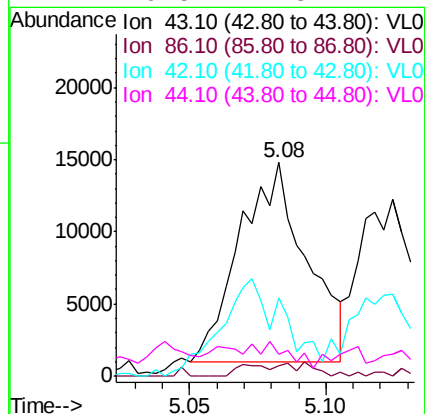
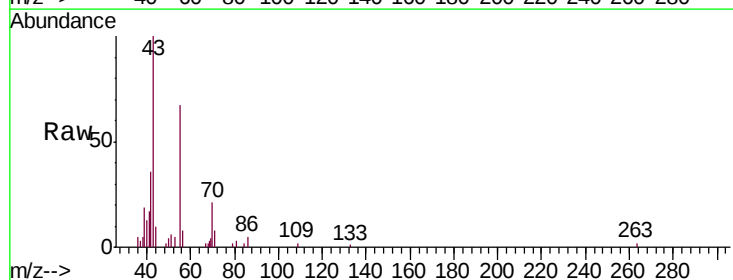
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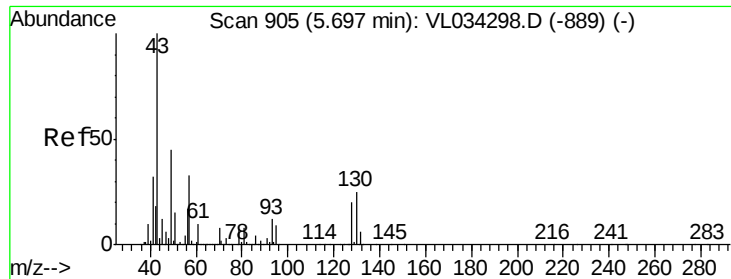
Tgt Ion: 84 Resp: 22204
Ion Ratio Lower Upper
84 100
49 163.5 118.5 177.7
51 50.3 38.8 58.2
86 58.0 51.7 77.5



#23
Vinyl Acetate
Concen: 0.137 ppbv
RT: 5.08 min Scan# 714
Delta R.T. -0.00 min
Lab File: VL034325.D
Acq: 17 Oct 2019 20:42

Tgt Ion: 43 Resp: 23355
Ion Ratio Lower Upper
43 100
86 6.1 5.0 7.4
42 31.7 8.6 13.0#
44 0.5 4.8 7.2#

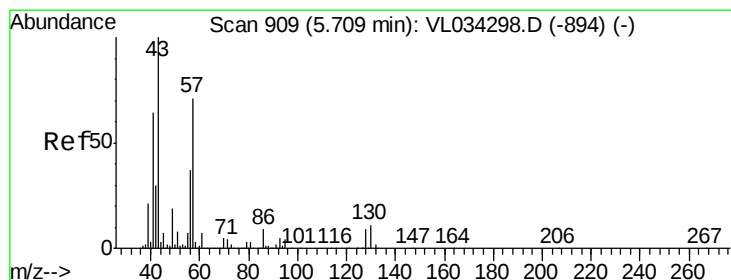
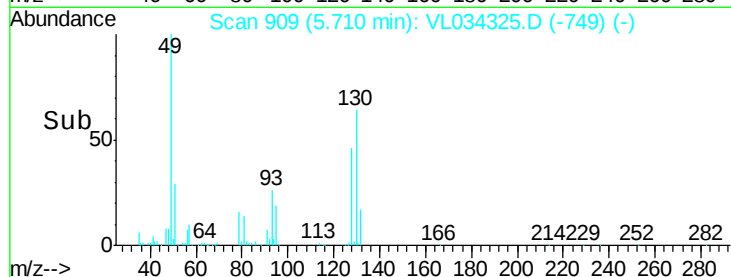
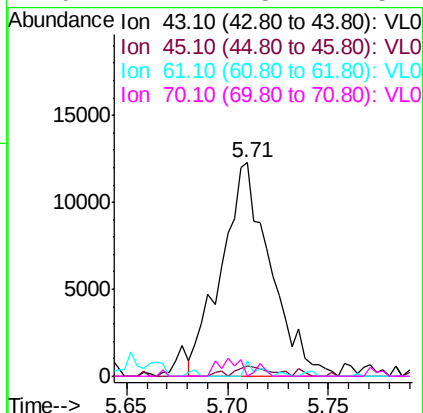
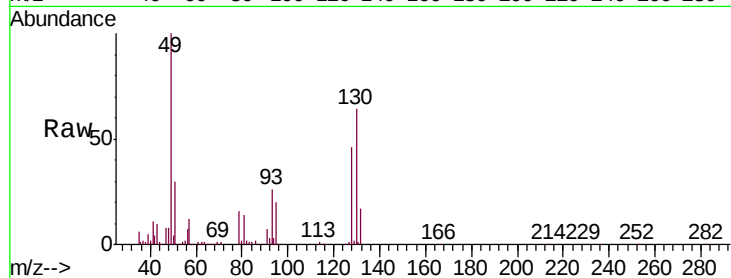




#25
Ethyl Acetate
Concen: 0.091 ppbv
RT: 5.71 min Scan# 909
Delta R.T. 0.01 min
Lab File: VL034325.D
Acq: 17 Oct 2019 20:42

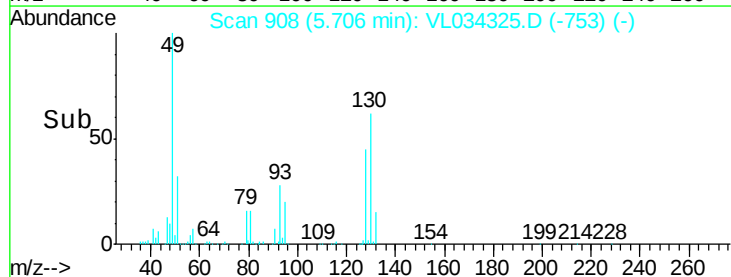
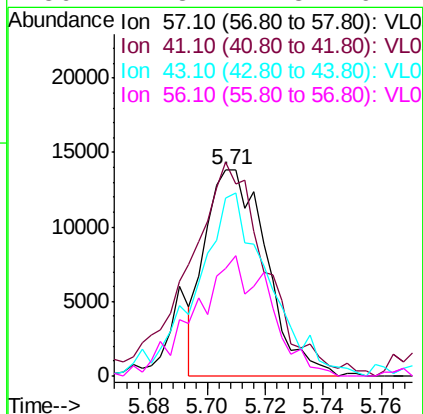
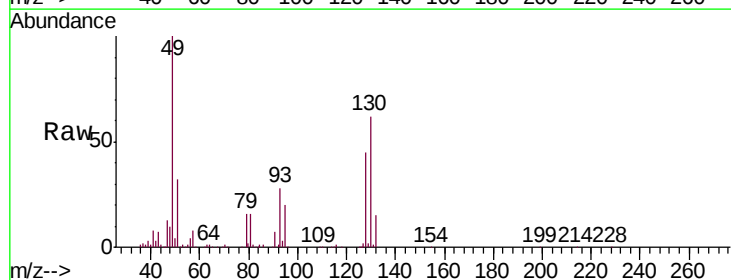
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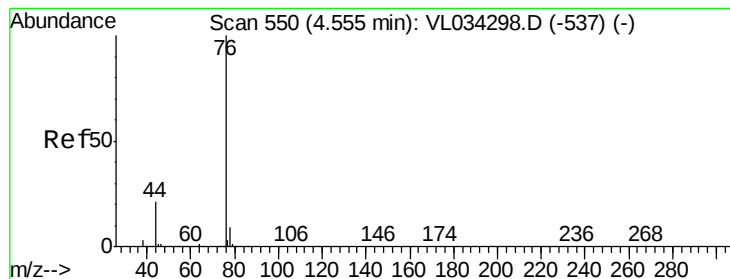
Tgt Ion:	43	Resp:	20821
Ion	Ratio	Lower	Upper
43	100		
45	4.5	8.3	12.5#
61	0.0	7.7	11.5#
70	4.7	5.4	8.2#



#26
Hexane
Concen: 0.207 ppbv
RT: 5.71 min Scan# 908
Delta R.T. -0.00 min
Lab File: VL034325.D
Acq: 17 Oct 2019 20:42

Tgt Ion:	57	Resp:	20296
Ion	Ratio	Lower	Upper
57	100		
41	135.7	76.5	114.7#
43	110.1	188.5	282.7#
56	71.3	42.8	64.2#





#27

Carbon Disulfide

Concen: 0.357 ppbv

RT: 4.56 min Scan# 551

Delta R.T. 0.00 min

Lab File: VL034325.D

Acq: 17 Oct 2019 20:42

Instrument :

MSVOA_L

ClientSampleId :

SV1DL

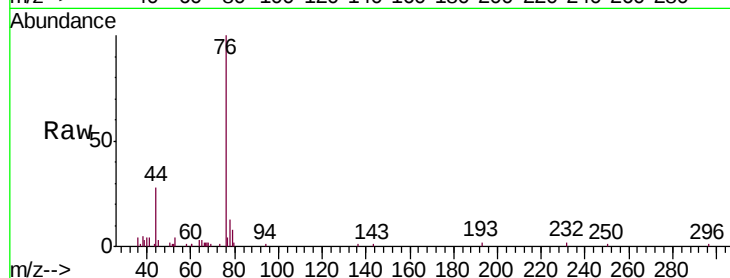
Tgt Ion: 76 Resp: 36302

Ion Ratio Lower Upper

76 100

44 28.6 17.3 25.9#

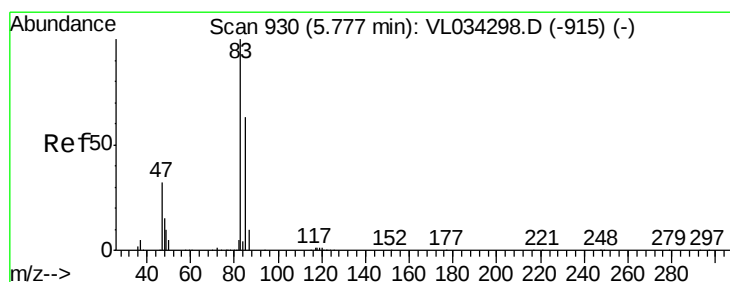
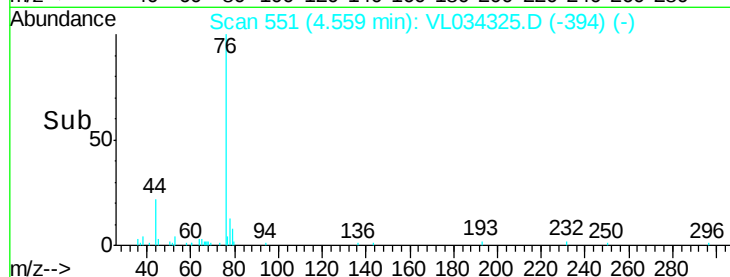
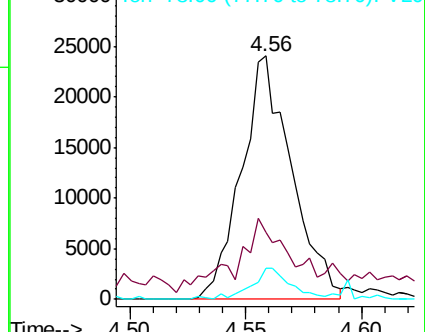
78 10.3 7.8 11.6



Abundance Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0



#29

Chloroform

Concen: 0.040 ppbv

RT: 5.77 min Scan# 929

Delta R.T. -0.00 min

Lab File: VL034325.D

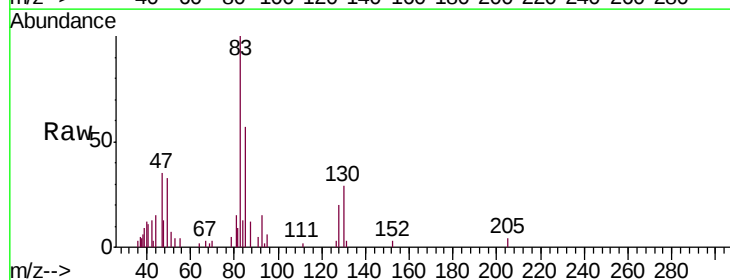
Acq: 17 Oct 2019 20:42

Tgt Ion: 83 Resp: 6209

Ion Ratio Lower Upper

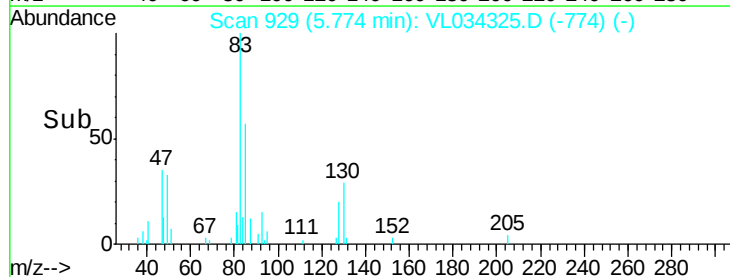
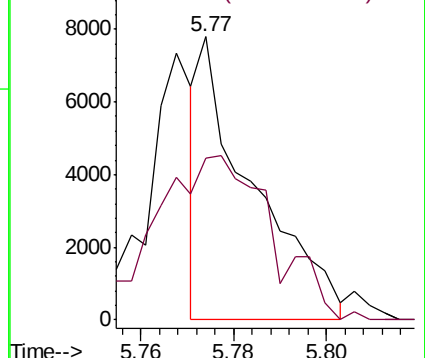
83 100

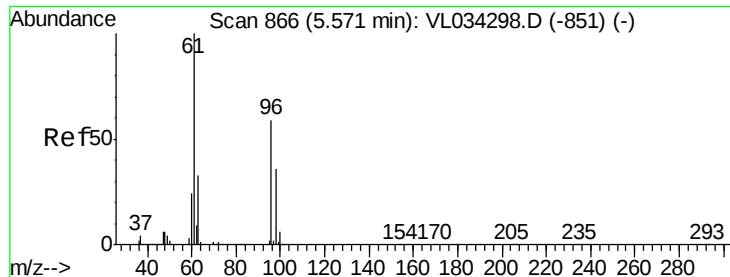
85 61.0 50.5 75.7



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0



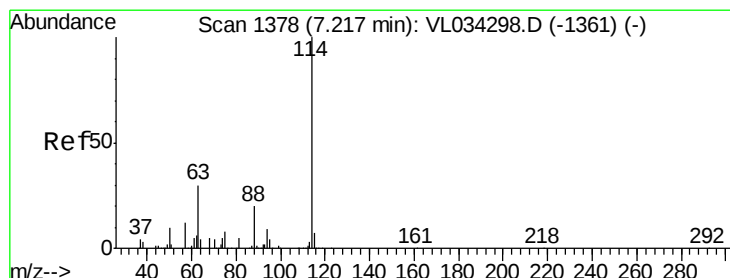
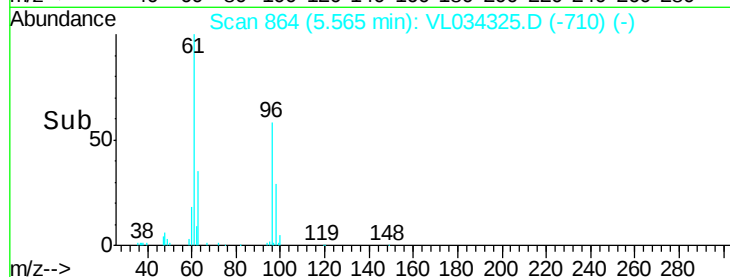
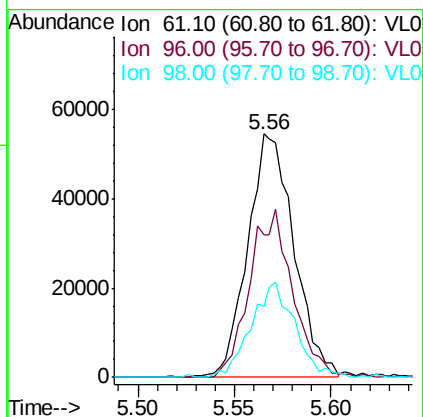
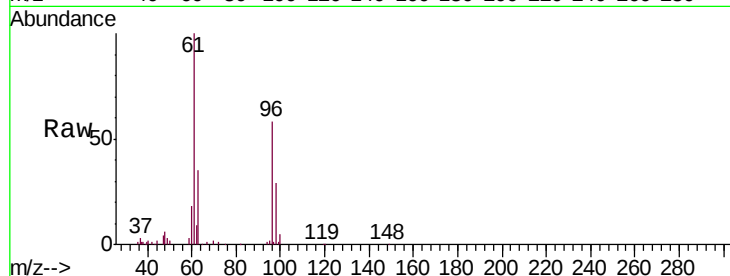


#31

cis-1,2-Dichloroethene
 Concen: 0.910 ppbv
 RT: 5.56 min Scan# 864
 Delta R.T. -0.01 min
 Lab File: VL034325.D
 Acq: 17 Oct 2019 20:42

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1DL

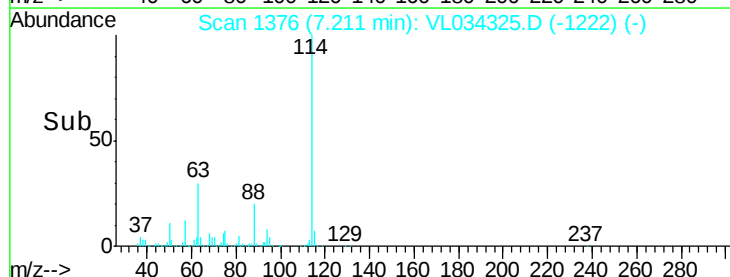
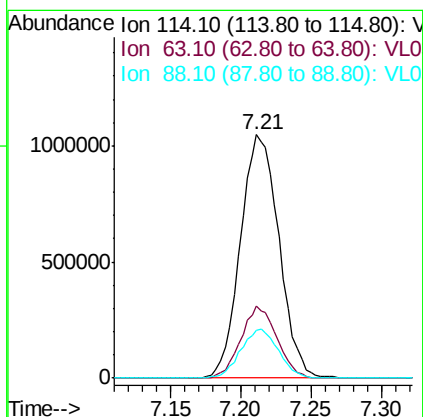
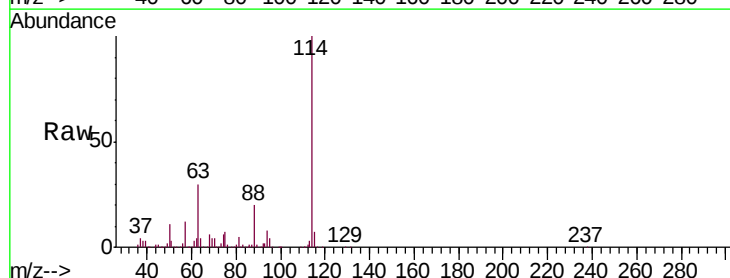
Tgt Ion	Ratio	Lower	Upper
61	100		
96	58.4	47.5	71.3
98	27.8	28.8	43.2#

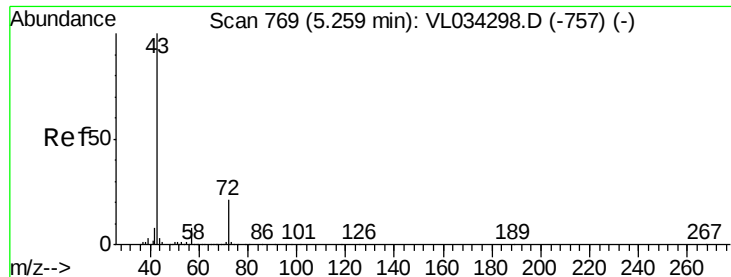


#33

1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.21 min Scan# 1376
 Delta R.T. -0.01 min
 Lab File: VL034325.D
 Acq: 17 Oct 2019 20:42

Tgt Ion	Ratio	Lower	Upper
114	100		
63	27.8	25.2	37.8
88	19.9	16.0	24.0

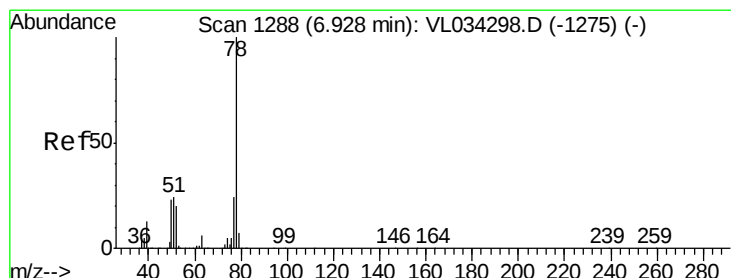
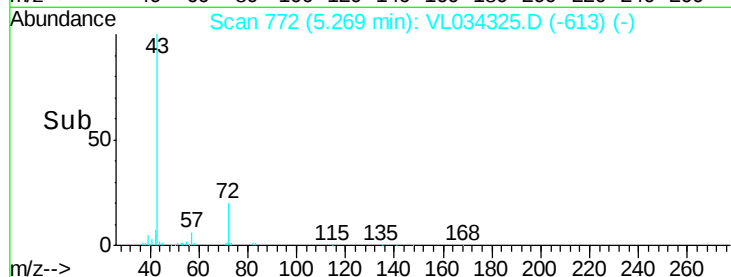
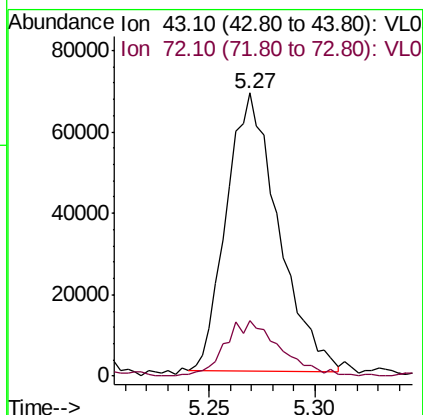
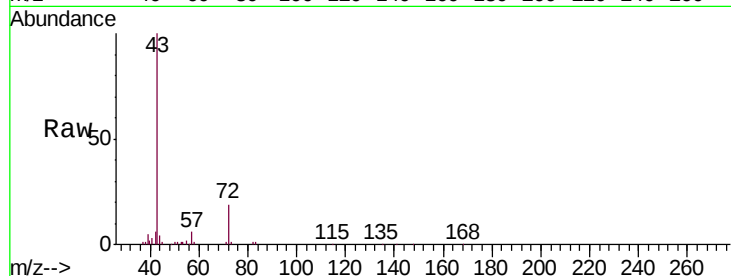




#34
2-Butanone
Concen: 0.714 ppbv
RT: 5.27 min Scan# 772
Delta R.T. 0.01 min
Lab File: VL034325.D
Acq: 17 Oct 2019 20:42

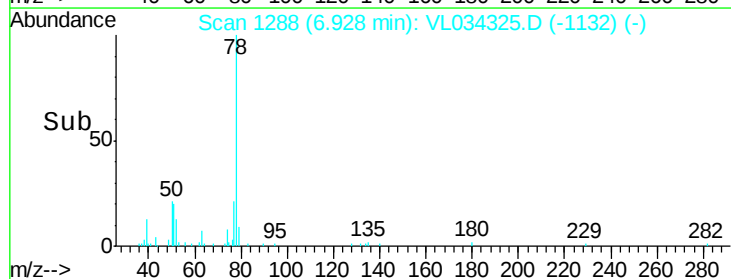
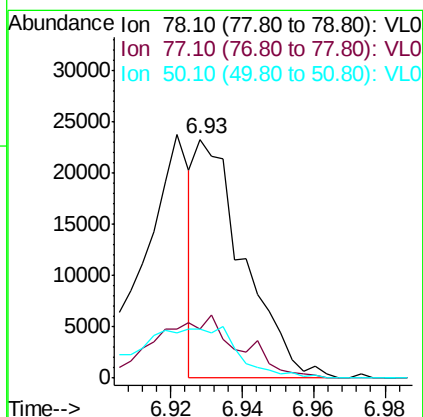
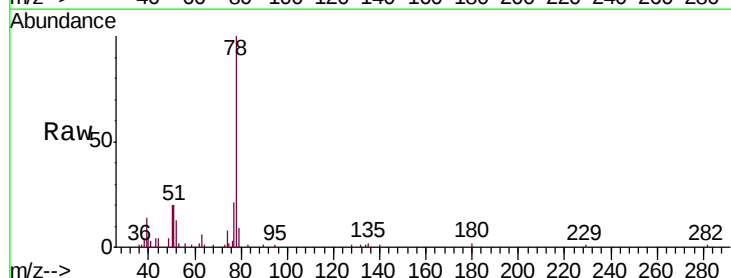
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

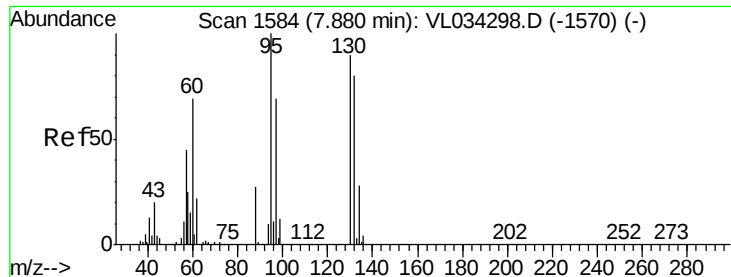
Tgt Ion: 43 Resp: 117042
Ion Ratio Lower Upper
43 100
72 21.3 16.3 24.5



#36
Benzene
Concen: 0.113 ppbv
RT: 6.93 min Scan# 1288
Delta R.T. 0.00 min
Lab File: VL034325.D
Acq: 17 Oct 2019 20:42

Tgt Ion: 78 Resp: 21725
Ion Ratio Lower Upper
78 100
77 20.8 19.0 28.4
50 20.3 18.6 27.8

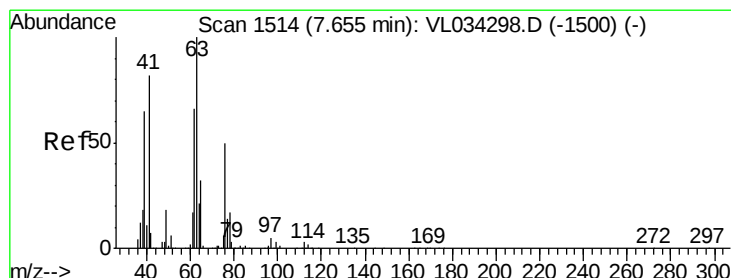
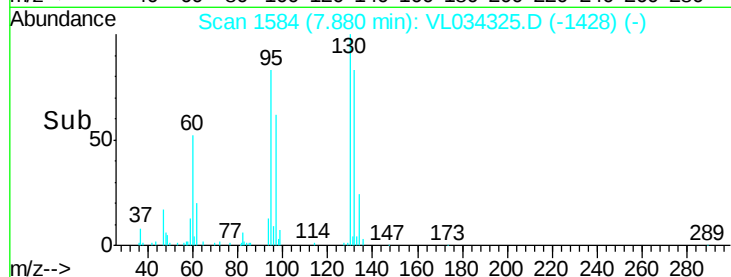
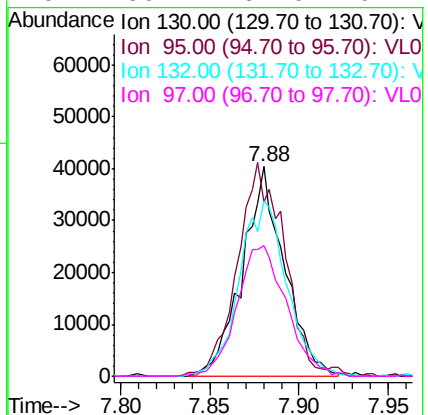
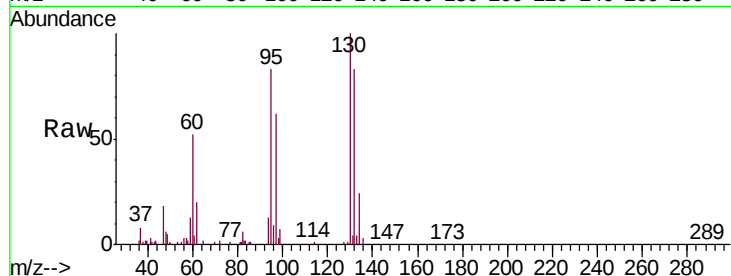




#38
 Trichloroethene
 Concen: 0.863 ppbv
 RT: 7.88 min Scan# 1584
 Delta R.T. 0.00 min
 Lab File: VL034325.D
 Acq: 17 Oct 2019 20:42

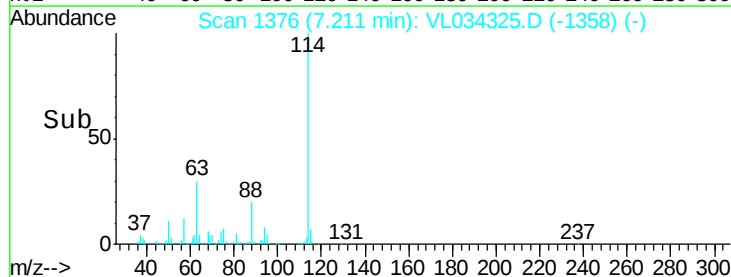
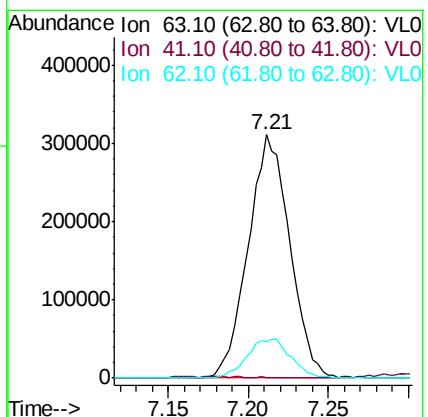
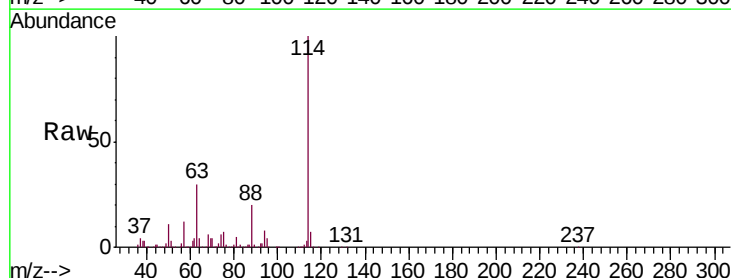
Instrument :
 MSVOA_L
 ClientSampleId :
 SV1DL

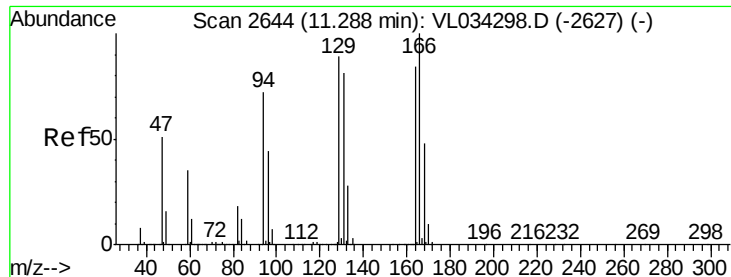
Tgt Ion: 130 Resp: 66673
 Ion Ratio Lower Upper
 130 100
 95 80.8 88.6 132.8#
 132 82.4 71.2 106.8
 97 60.4 61.0 91.4#



#39
 1,2-Dichloropropane
 Concen: 6.703 ppbv
 RT: 7.21 min Scan# 1376
 Delta R.T. -0.44 min
 Lab File: VL034325.D
 Acq: 17 Oct 2019 20:42

Tgt Ion: 63 Resp: 555648
 Ion Ratio Lower Upper
 63 100
 41 0.1 65.6 98.4#
 62 14.7 53.0 79.6#





#52

Tetrachloroethene

Concen: 58.167 ppbv

RT: 11.29 min Scan# 2646

Delta R.T. 0.01 min

Lab File: VL034325.D

Acq: 17 Oct 2019 20:42

Instrument :

MSVOA_L

ClientSampleId :

SV1DL

Tgt Ion:164 Resp: 4389537

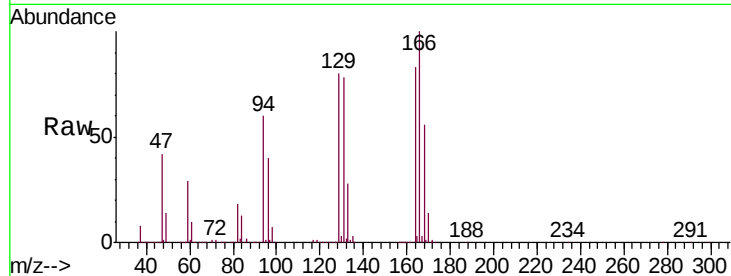
Ion Ratio Lower Upper

164 100

166 120.4 95.3 142.9

129 96.1 84.5 126.7

131 93.4 77.3 115.9

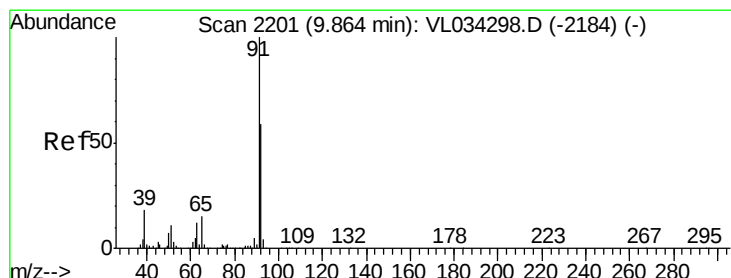
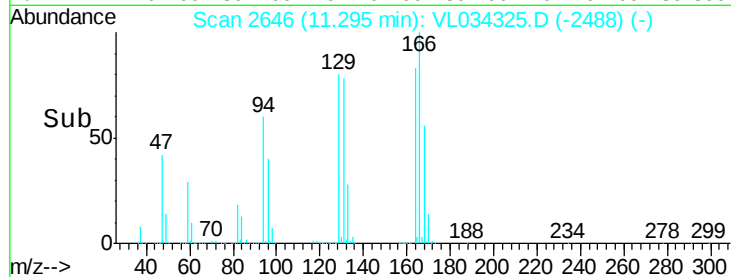
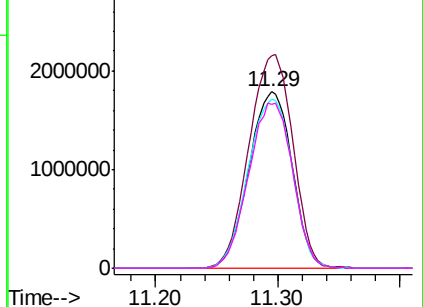


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 0.711 ppbv

RT: 9.86 min Scan# 2201

Delta R.T. 0.00 min

Lab File: VL034325.D

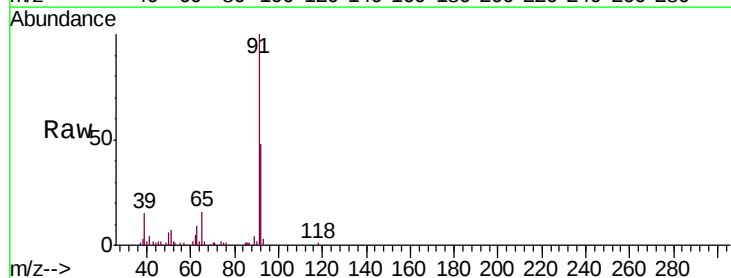
Acq: 17 Oct 2019 20:42

Tgt Ion: 91 Resp: 151028

Ion Ratio Lower Upper

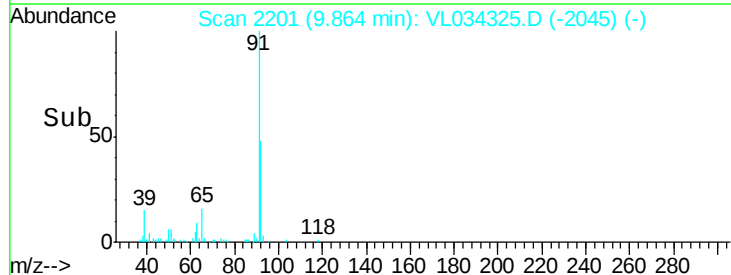
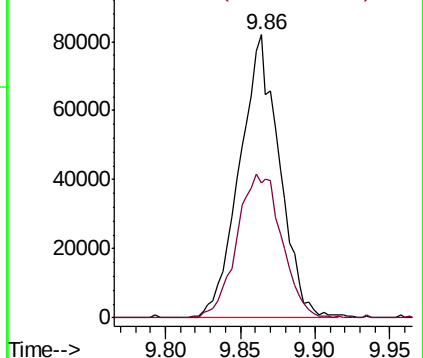
91 100

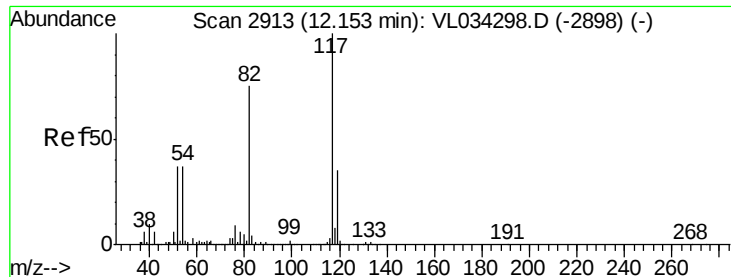
92 57.5 48.4 72.6



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

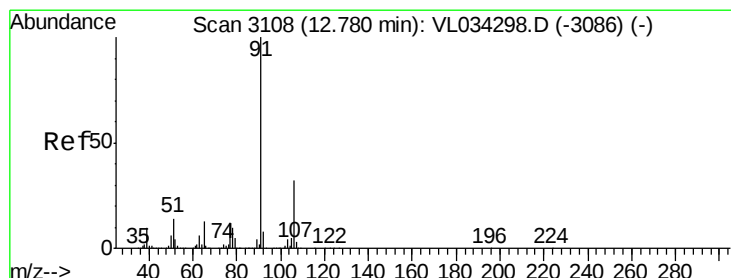
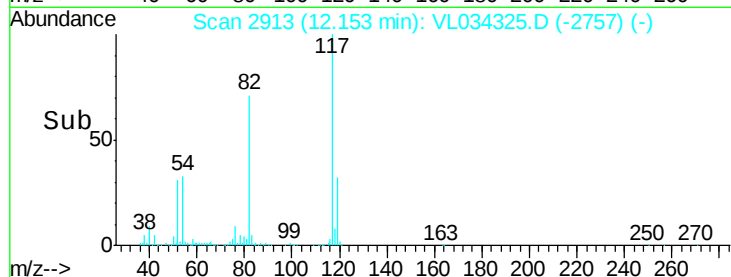
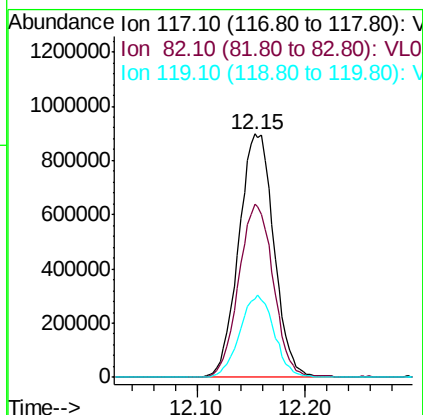
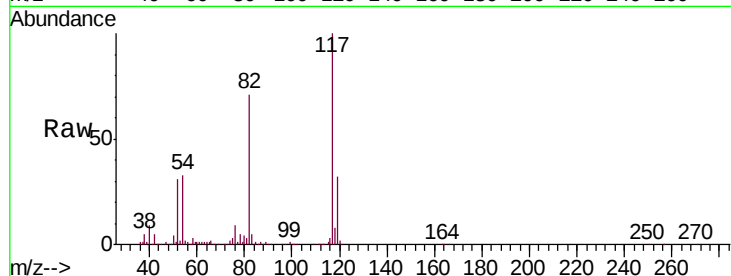




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.15 min Scan# 2913
Delta R.T. 0.00 min
Lab File: VL034325.D
Acq: 17 Oct 2019 20:42

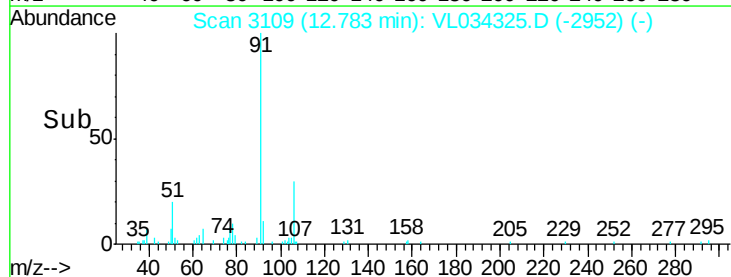
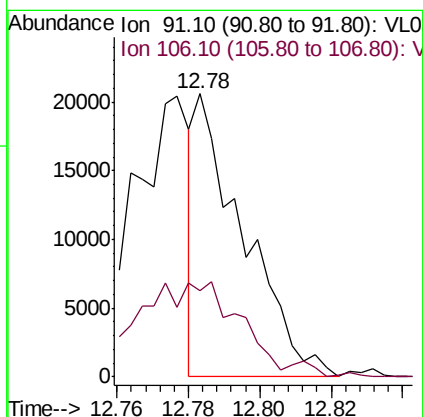
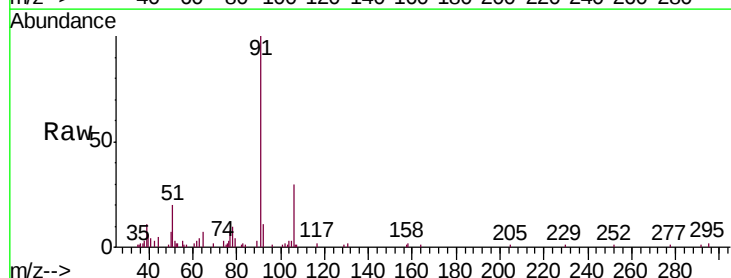
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

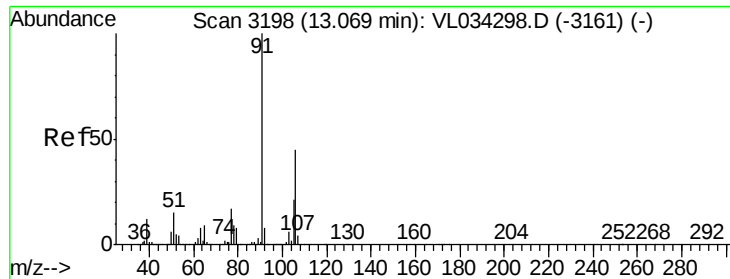
Tgt Ion: 117 Resp: 2037183
Ion Ratio Lower Upper
117 100
82 70.3 55.5 83.3
119 33.2 26.5 39.7



#58
Ethyl Benzene
Concen: 0.068 ppbv
RT: 12.78 min Scan# 3109
Delta R.T. 0.00 min
Lab File: VL034325.D
Acq: 17 Oct 2019 20:42

Tgt Ion: 91 Resp: 19229
Ion Ratio Lower Upper
91 100
106 30.9 25.3 37.9

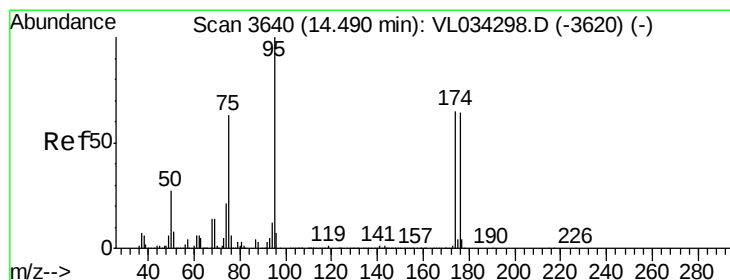
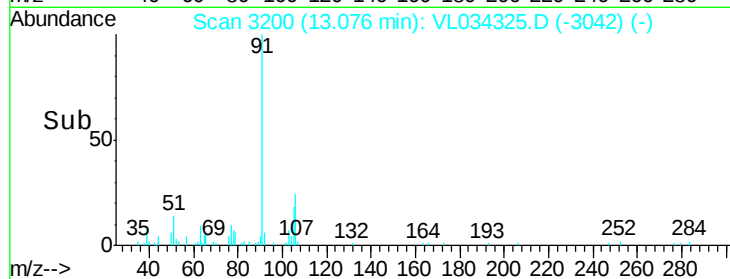
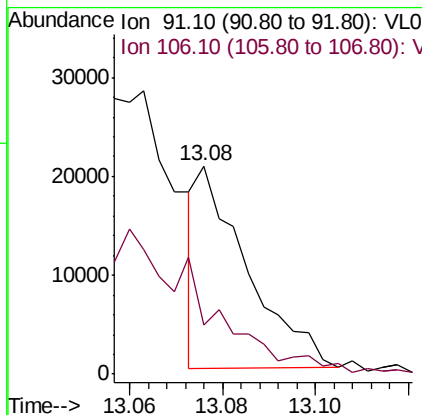
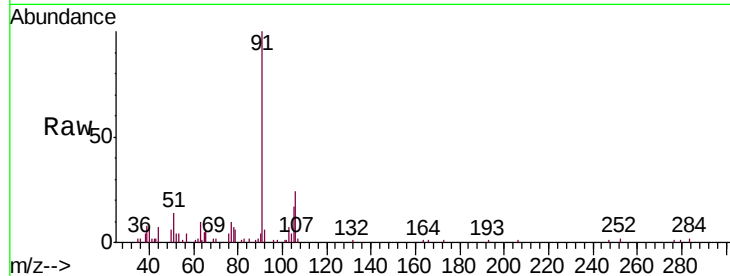




#59
m/p-Xylene
Concen: 0.062 ppbv
RT: 13.08 min Scan# 3200
Delta R.T. 0.01 min
Lab File: VL034325.D
Acq: 17 Oct 2019 20:42

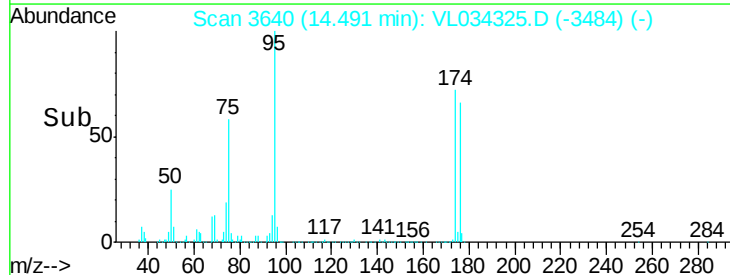
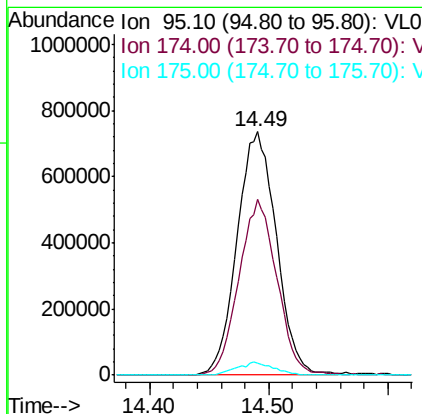
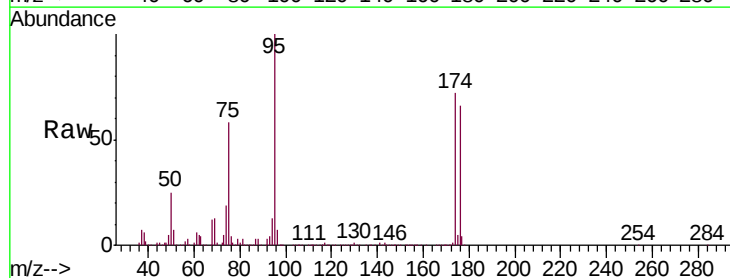
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

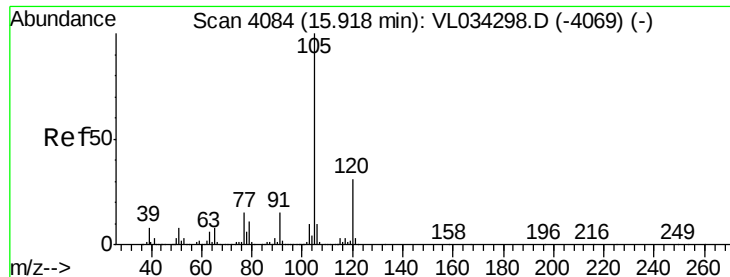
Tgt Ion: 91 Resp: 15310
Ion Ratio Lower Upper
91 100
106 0.0 35.4 53.2#



#68
1-Bromo-4-Fluorobenzene
Concen: 9.740 ppbv
RT: 14.49 min Scan# 3640
Delta R.T. 0.00 min
Lab File: VL034325.D
Acq: 17 Oct 2019 20:42

Tgt Ion: 95 Resp: 1680581
Ion Ratio Lower Upper
95 100
174 70.0 52.6 78.8
175 5.0 3.8 5.6





#72

4-Ethyltoluene

Concen: 0.032 ppbv

RT: 15.92 min Scan# 4084

Delta R.T. 0.00 min

Lab File: VL034325.D

Acq: 17 Oct 2019 20:42

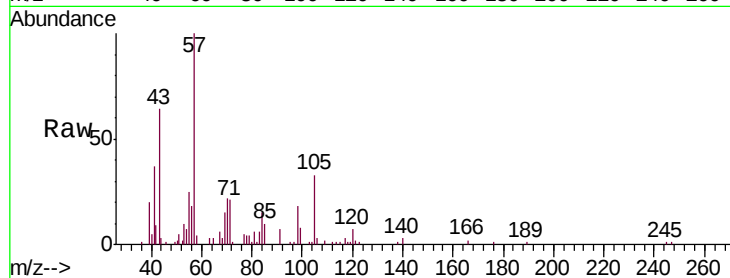
Instrument :

MSVOA_L

ClientSampleId :

SV1DL

Tgt Ion:	105	Resp:	8798
Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.8	35.8#
91	43.0	11.2	16.8#
77	0.0	12.8	19.2#



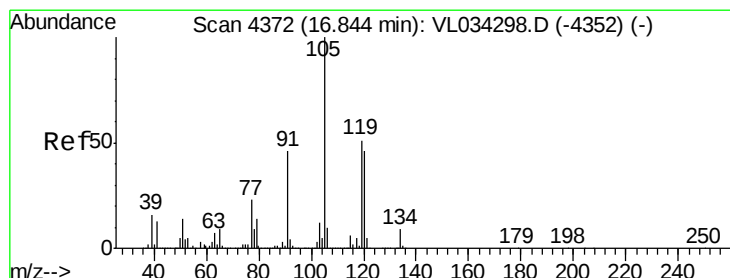
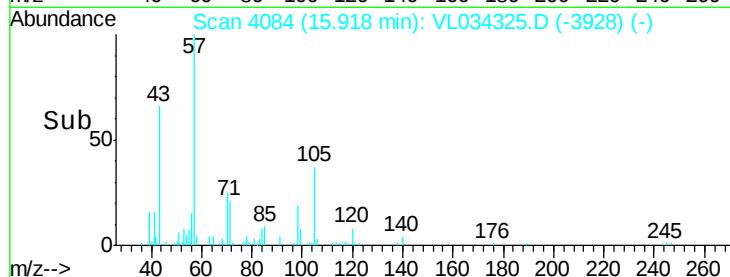
Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Time--> 15.90 15.92 15.94 15.96



#74

1,2,4-Trimethylbenzene

Concen: 0.070 ppbv

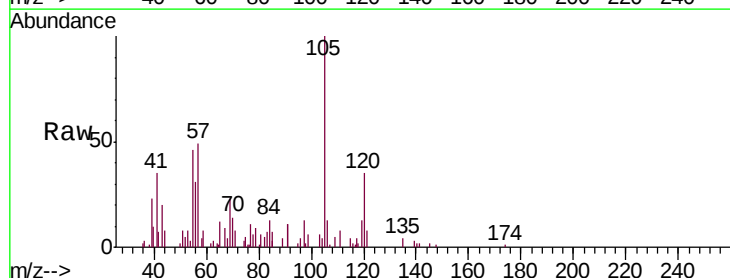
RT: 16.84 min Scan# 4371

Delta R.T. -0.00 min

Lab File: VL034325.D

Acq: 17 Oct 2019 20:42

Tgt Ion:	105	Resp:	20020
Ion	Ratio	Lower	Upper
105	100		
120	36.4	37.0	55.6#
91	15.4	38.2	57.2#
77	9.6	19.0	28.4#



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Time--> 16.80 16.84 16.88

