

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL021820\
 Data File : VL034635.D
 Acq On : 18 Feb 2020 22:20
 Operator : SY/AP
 Sample : L1532-09
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IR-BRSS

Manual Integrations
 APPROVED

MMDadoda
 2/21/2020 3:26:18 PM

Quant Time: Feb 19 07:20:33 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL013020AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Jan 30 2020
 QLast Update : Thu Jan 30 17:16:44 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	897533	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	1802151	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.11	117	1794217	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.45	95	1580380	10.42	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.20%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.01	85	47834	0.242	ppbv	97
3) Chlorodifluoromethane	2.95	51	49724m	0.458	ppbv	
4) Chloromethane	3.11	50	14504	0.219	ppbv #	85
9) Propene	2.98	41	48721	1.154	ppbv #	75
11) Trichlorofluoromethane	3.92	101	45964	0.256	ppbv	96
13) Ethanol	3.57	45	270921	23.953	ppbv	99
15) Acetone	3.82	43	1298462	9.844	ppbv	98
19) Isopropyl Alcohol	3.95	45	57621m	0.749	ppbv	
20) Methylene Chloride	4.32	84	75683	1.507	ppbv	92
26) Hexane	5.67	57	61657	0.689	ppbv #	39
29) Chloroform	5.74	83	24189	0.153	ppbv #	74
31) cis-1,2-Dichloroethene	5.54	61	442302	4.759	ppbv	95
34) 2-Butanone	5.23	43	53314	0.407	ppbv	97
35) Carbon Tetrachloride	7.02	117	9738m	0.057	ppbv	
36) Benzene	6.89	78	18270	0.114	ppbv #	73
38) Trichloroethene	7.84	130	80355	1.189	ppbv	91
52) Tetrachloroethene	11.25	164	967785	15.032	ppbv	97
53) Toluene	9.83	91	77466	0.440	ppbv	98
59) m/p-Xylene	13.00	91	26792m	0.126	ppbv	

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

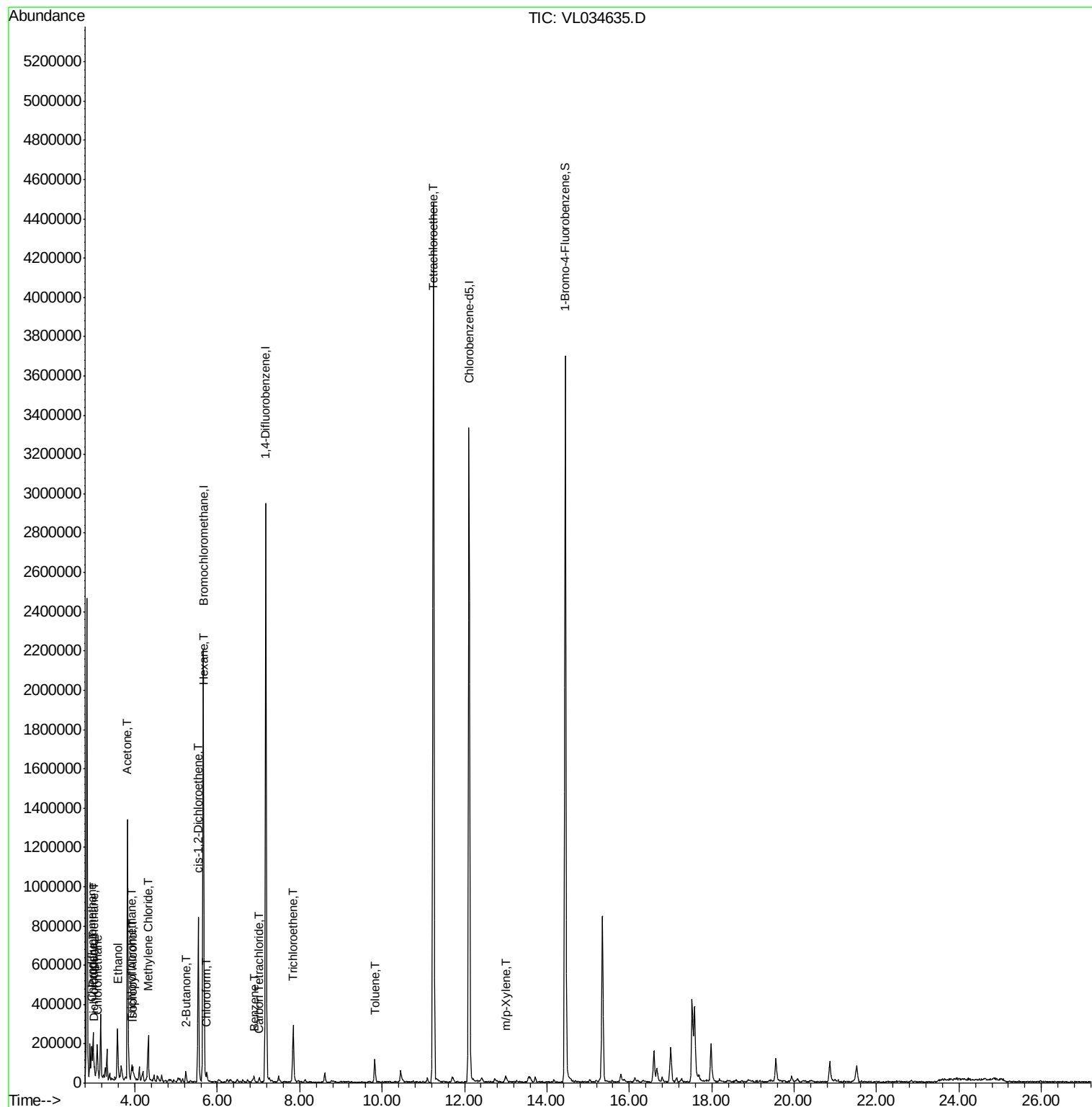
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL021820\
Data File : VL034635.D
Acq On : 18 Feb 2020 22:20
Operator : SY/AP
Sample : L1532-09
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

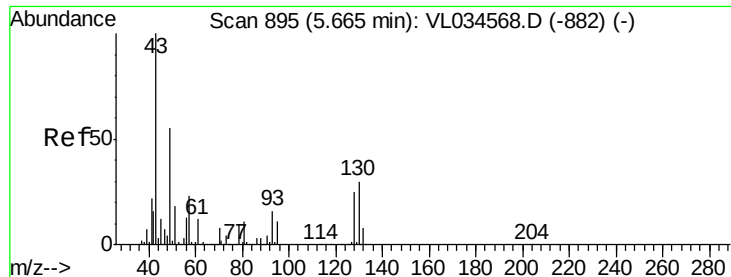
Instrument :
MSVOA_L
ClientSampleId :
IR-BRSS

Manual Integrations
APPROVED

MMDadoda
2/21/2020 3:26:18 PM

Quant Time: Feb 19 07:20:33 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL013020AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Jan
QLast Update : Thu Jan 30 17:16:44 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 893

Delta R.T. -0.01 min

Lab File: VL034635.D

Acq: 18 Feb 2020 22:20

Instrument :

MSVOA_L

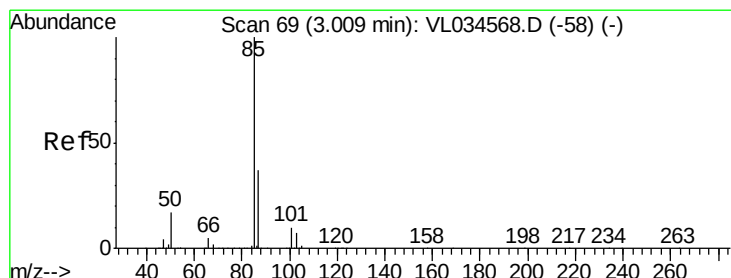
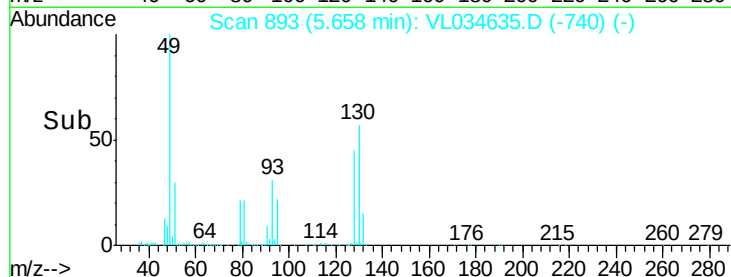
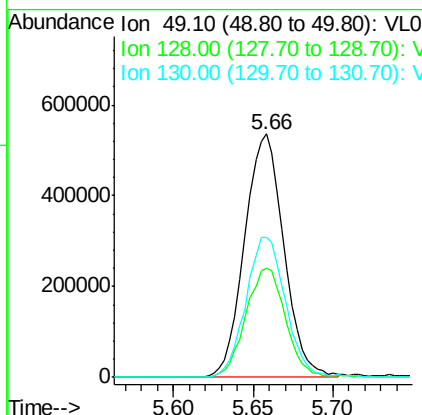
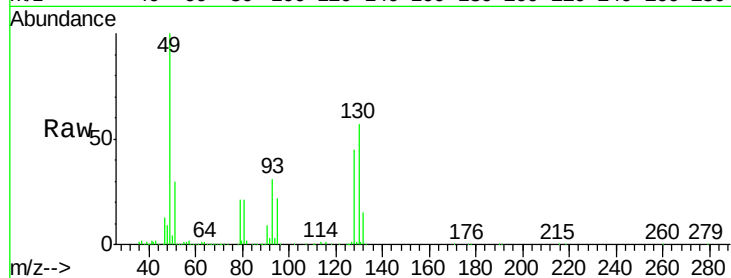
ClientSampled :

IR-BRSS

Tot Ion:	49	Resp:	897533
Ion	Ratio	Lower	Upper
49	100		
128	45.7	22.7	68.1
130	58.6	28.6	85.8

Manual Integrations
APPROVED

MMDadoda
2/21/2020 3:26:18 PM



#2

Dichlorodifluoromethane

Concen: 0.242 ppbv

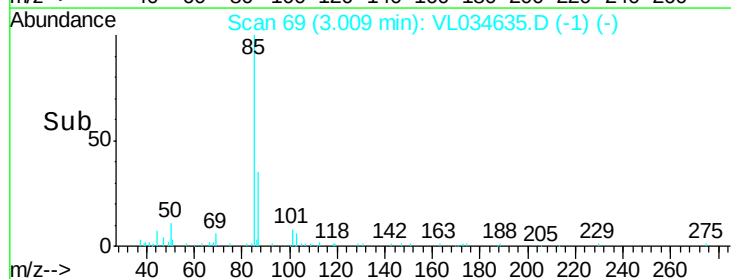
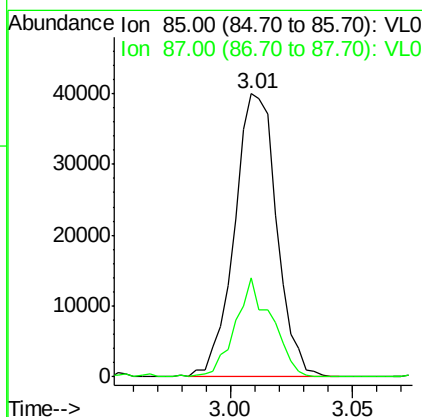
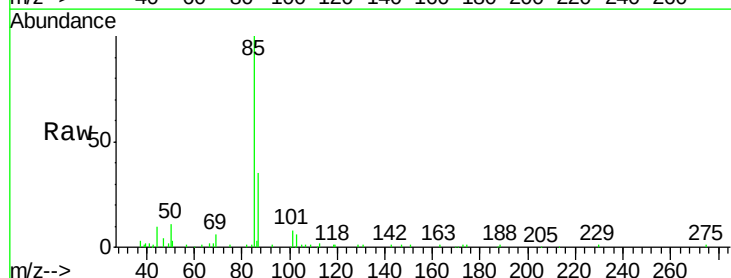
RT: 3.01 min Scan# 69

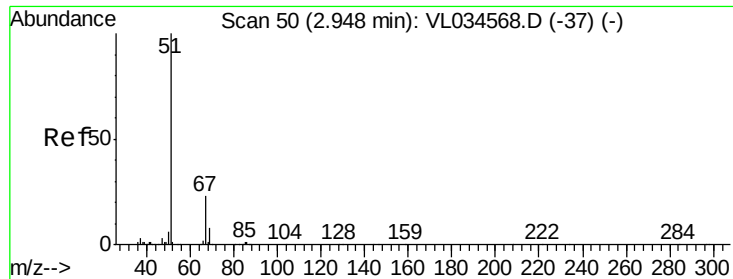
Delta R.T. -0.00 min

Lab File: VL034635.D

Acq: 18 Feb 2020 22:20

Tgt Ion:	85	Resp:	47834
Ion	Ratio	Lower	Upper
85	100		
87	34.9	29.5	44.3





#3

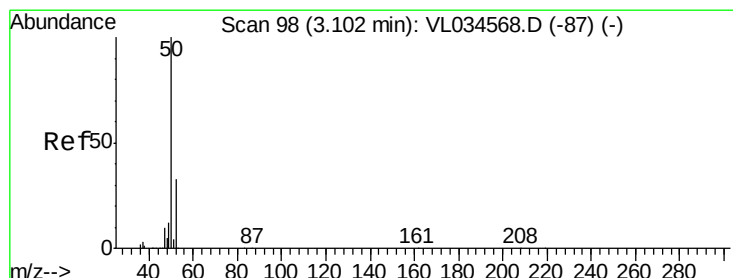
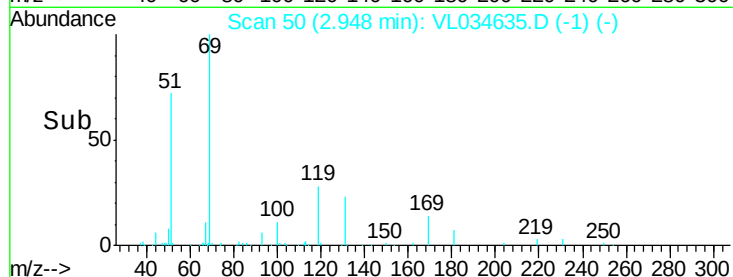
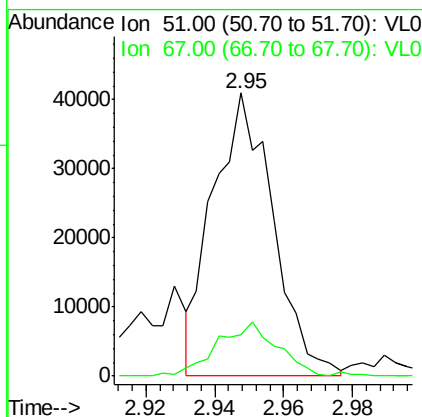
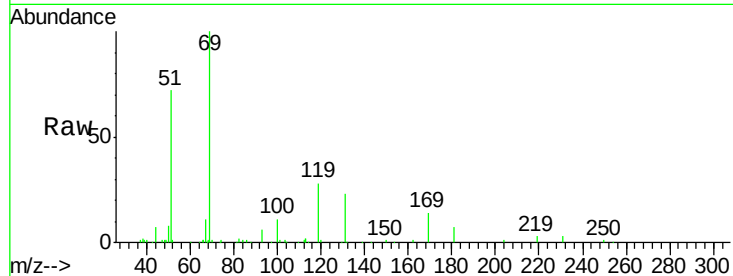
Chlorodifluoromethane
 Concen: 0.458 ppbv
 RT: 2.95 min Scan# 50
 Delta R.T. -0.00 min
 Lab File: VL034635.D
 Acq: 18 Feb 2020 22:20

Instrument :
 MSVOA_L
 ClientSampleId :
 IR-BRSS

Tot Ion	Ratio	Lower	Upper
51	100		
67	19.5	17.8	26.8

Manual Integrations
 APPROVED

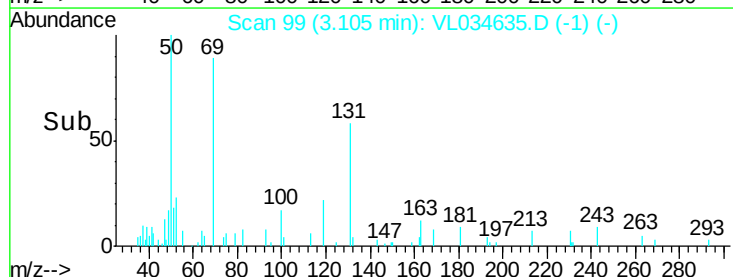
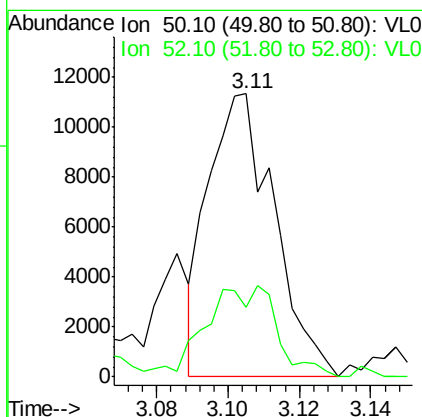
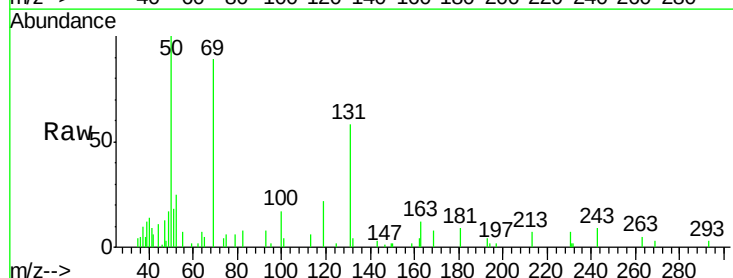
MMDadoda
 2/21/2020 3:26:18 PM

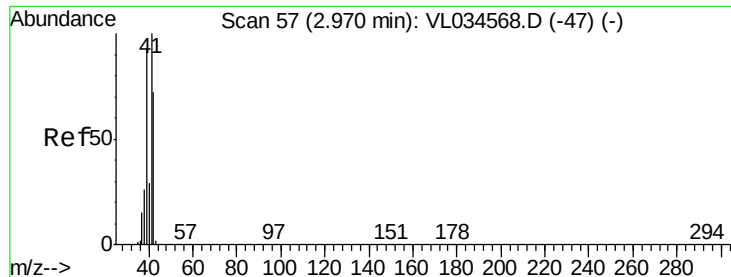


#4

Chloromethane
 Concen: 0.219 ppbv
 RT: 3.11 min Scan# 99
 Delta R.T. 0.00 min
 Lab File: VL034635.D
 Acq: 18 Feb 2020 22:20

Tgt Ion	Ratio	Lower	Upper
50	100		
52	24.5	26.6	39.8#





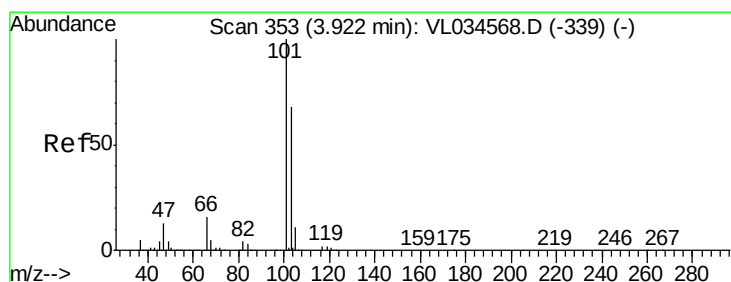
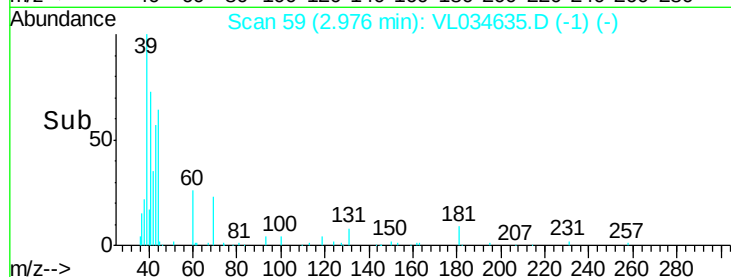
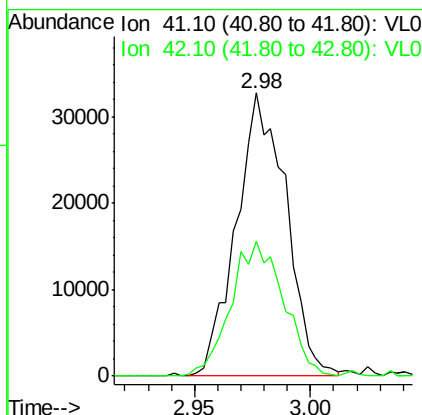
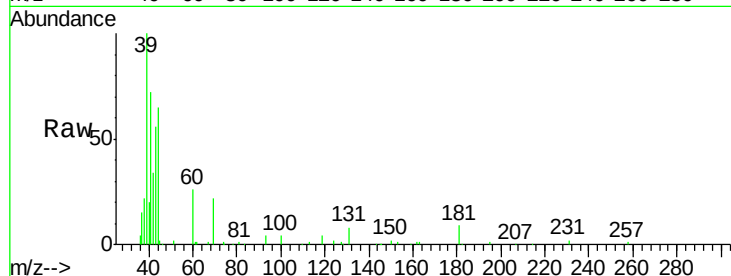
#9
 Propene
 Concen: 1.154 ppbv
 RT: 2.98 min Scan# 59
 Delta R.T. 0.01 min
 Lab File: VL034635.D
 Acq: 18 Feb 2020 22:20

Instrument :
 MSVOA_L
 ClientSampleId :
 IR-BRSS

Tot Ion: 41 Resp: 48721
 Ion Ratio Lower Upper
 41 100
 42 50.8 57.0 85.4#

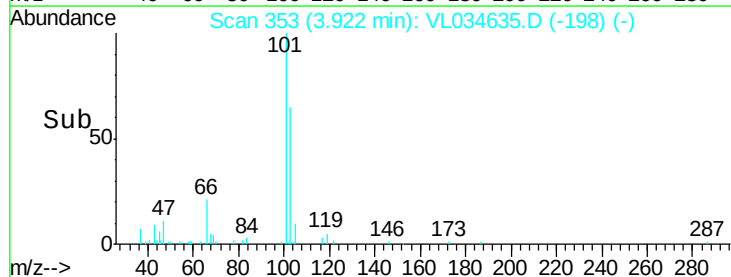
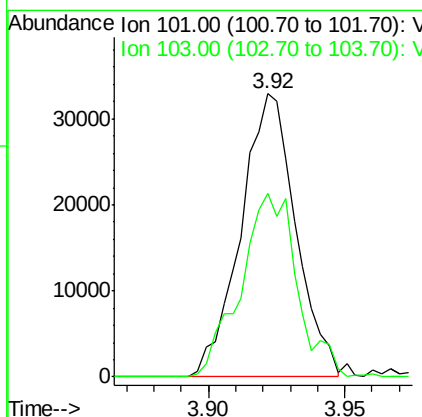
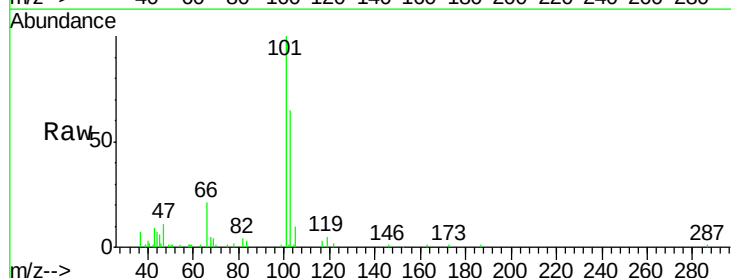
Manual Integrations
 APPROVED

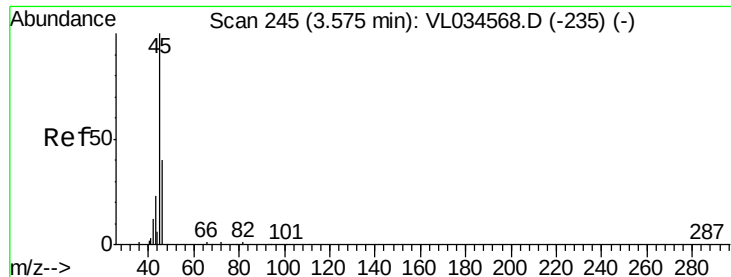
MMDadoda
 2/21/2020 3:26:18 PM



#11
 Trichlorofluoromethane
 Concen: 0.256 ppbv
 RT: 3.92 min Scan# 353
 Delta R.T. -0.00 min
 Lab File: VL034635.D
 Acq: 18 Feb 2020 22:20

Tgt Ion: 101 Resp: 45964
 Ion Ratio Lower Upper
 101 100
 103 65.0 54.4 81.6





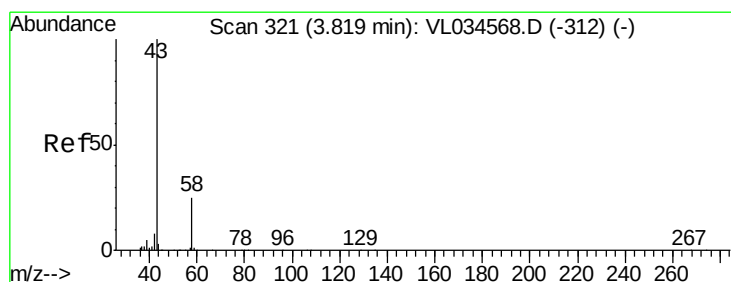
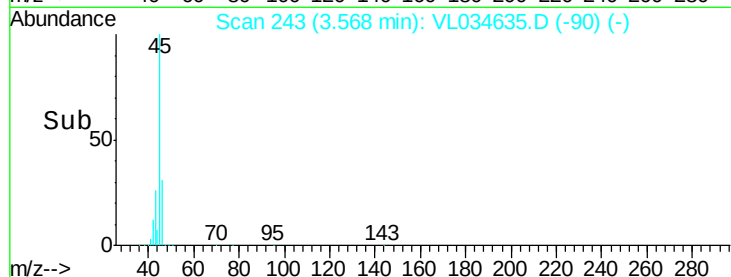
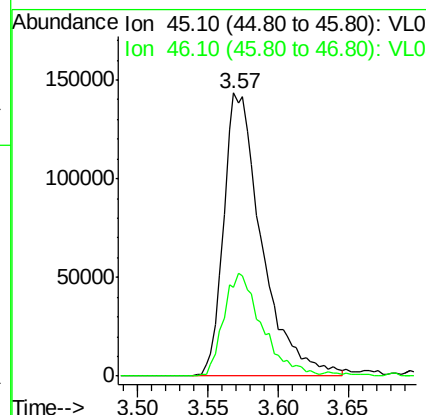
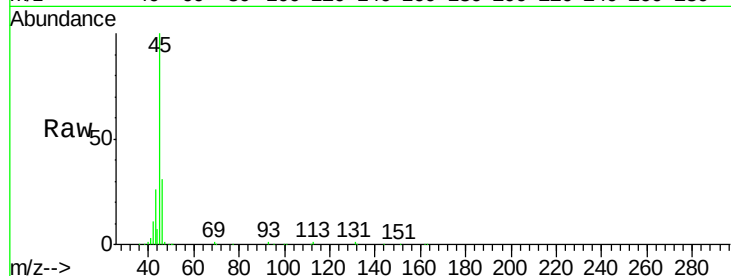
#13
Ethanol
Concen: 23.953 ppbv
RT: 3.57 min Scan# 243
Delta R.T. -0.01 min
Lab File: VL034635.D
Acq: 18 Feb 2020 22:20

Instrument :
MSVOA_L
ClientSampleId :
IR-BRSS

Tot Ion	Ratio	Lower	Upper
45	100		
46	37.6	14.8	59.2

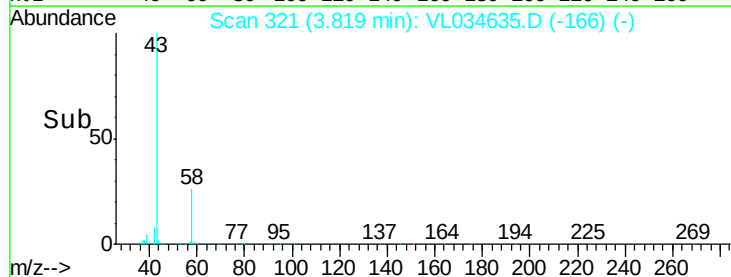
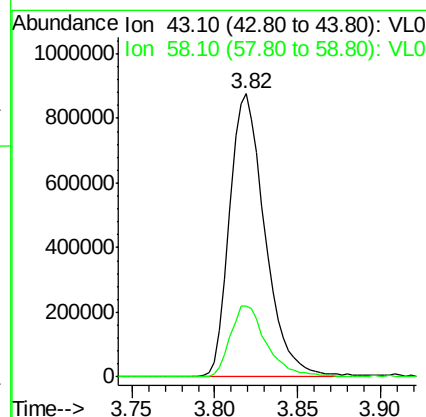
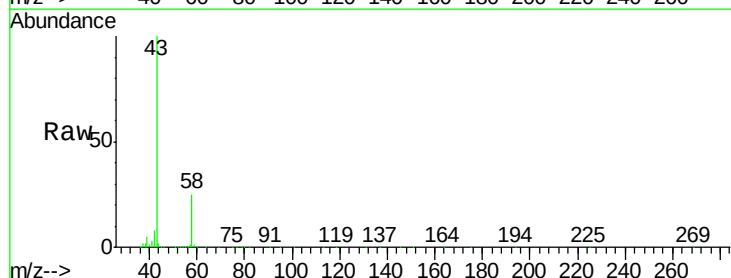
Manual Integrations
APPROVED

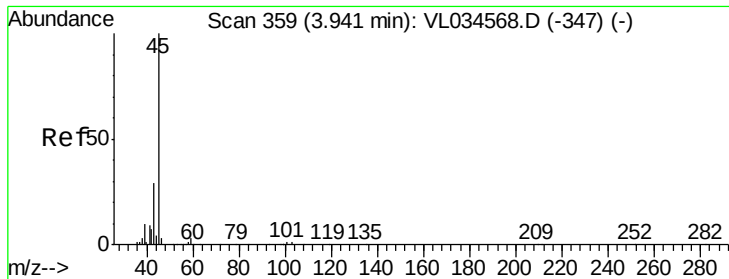
MMDadoda
2/21/2020 3:26:18 PM



#15
Acetone
Concen: 9.844 ppbv
RT: 3.82 min Scan# 321
Delta R.T. -0.00 min
Lab File: VL034635.D
Acq: 18 Feb 2020 22:20

Tgt Ion	Ratio	Lower	Upper
43	100		
58	26.2	20.3	30.5





#19

Isopropyl Alcohol

Concen: 0.749 ppbv m

RT: 3.95 min Scan# 361

Delta R.T. 0.01 min

Lab File: VL034635.D

Acq: 18 Feb 2020 22:20

Instrument :

MSVOA_L

ClientSampleId :

IR-BRSS

Tot Ion: 45 Resp: 57621

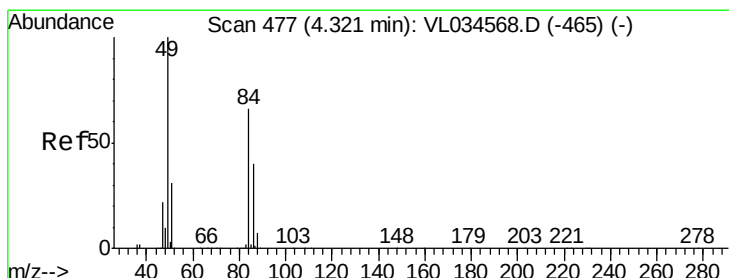
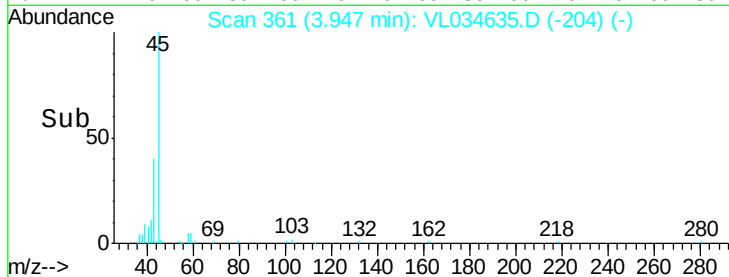
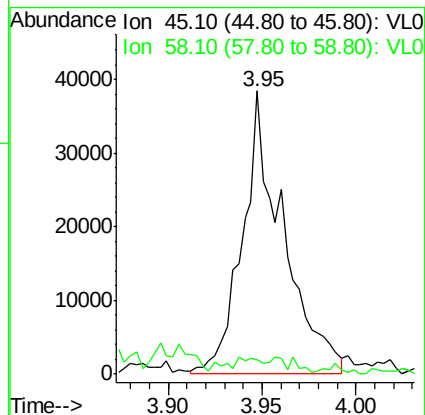
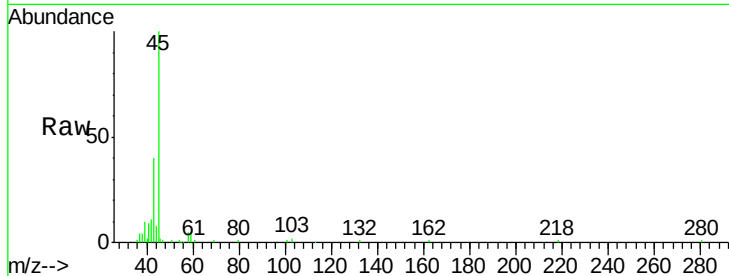
Ion Ratio Lower Upper

45 100

58 0.0 1.7 2.5#

Manual Integrations
APPROVED

MMDadoda
2/21/2020 3:26:18 PM



#20

Methylene Chloride

Concen: 1.507 ppbv

RT: 4.32 min Scan# 478

Delta R.T. 0.00 min

Lab File: VL034635.D

Acq: 18 Feb 2020 22:20

Tgt Ion: 84 Resp: 75683

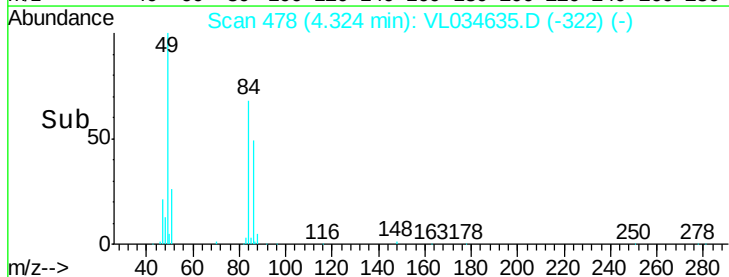
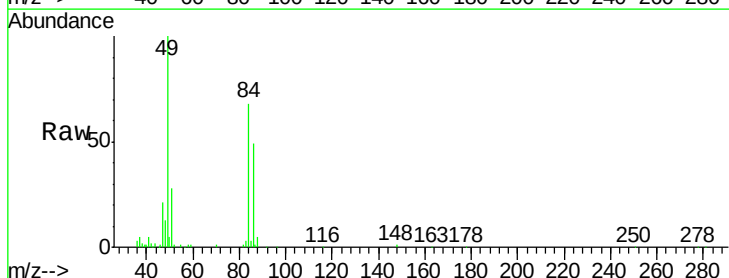
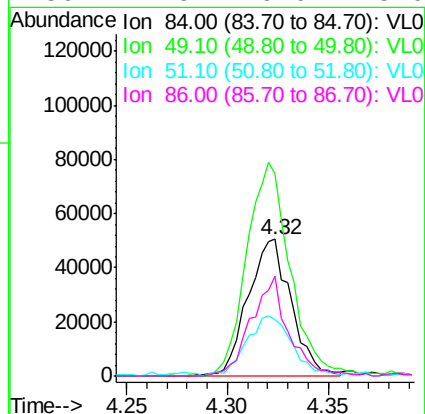
Ion Ratio Lower Upper

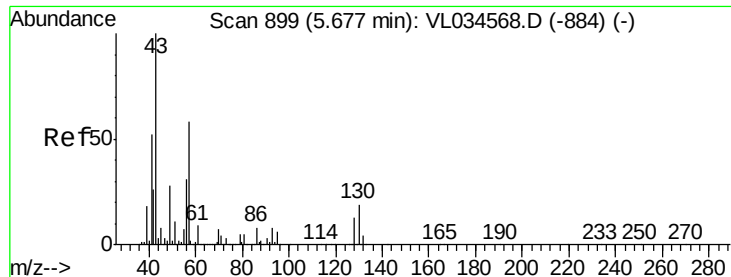
84 100

49 147.2 122.4 183.6

51 40.5 38.6 57.8

86 72.9 49.0 73.6





#26

Hexane

Concen: 0.689 ppbv

RT: 5.67 min Scan# 898

Delta R.T. -0.00 min

Lab File: VL034635.D

Acq: 18 Feb 2020 22:20

Instrument :

MSVOA_L

ClientSampleId :

IR-BRSS

Tot Ion: 57 Resp: 61657

Ion Ratio Lower Upper

57 100

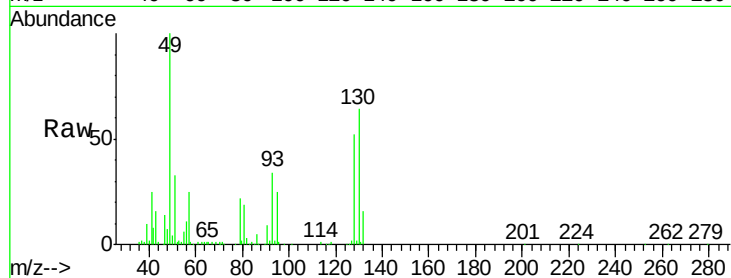
41 102.9 76.2 114.2

43 79.2 189.9 284.9#

56 62.9 43.6 65.4

Manual Integrations
APPROVED

MMDadoda
2/21/2020 3:26:18 PM

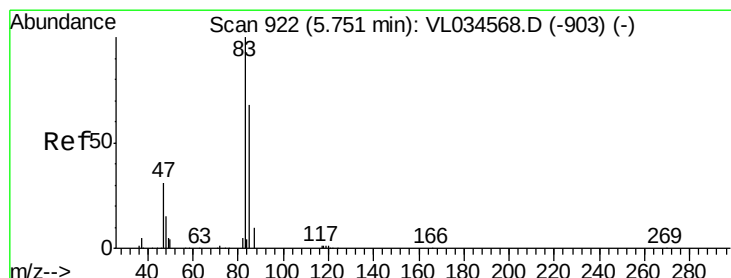
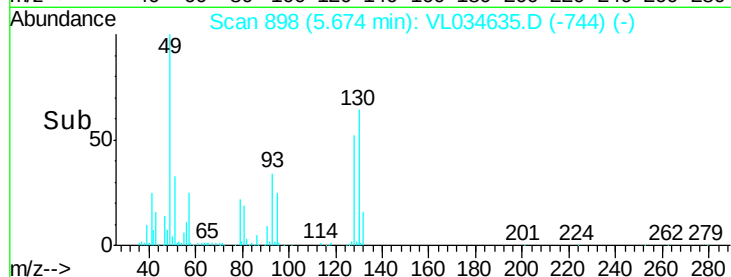
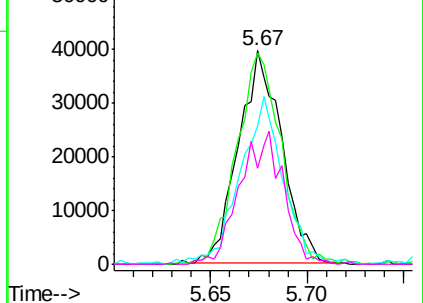


Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



#29

Chloroform

Concen: 0.153 ppbv

RT: 5.74 min Scan# 919

Delta R.T. -0.01 min

Lab File: VL034635.D

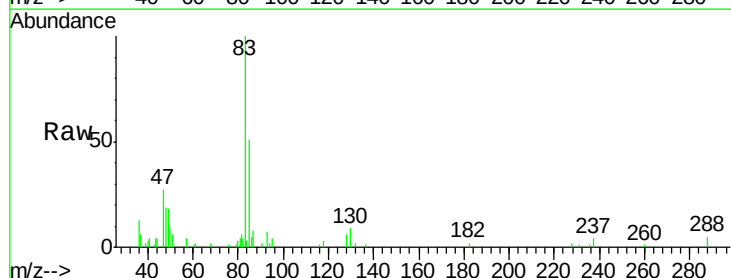
Acq: 18 Feb 2020 22:20

Tgt Ion: 83 Resp: 24189

Ion Ratio Lower Upper

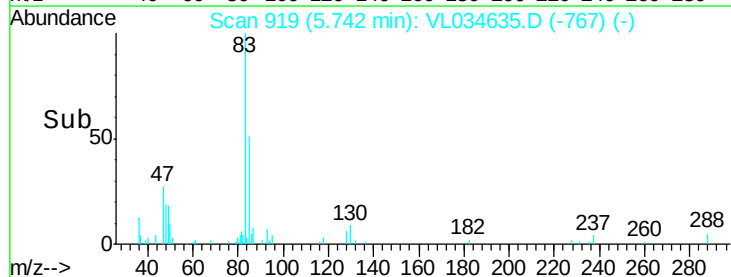
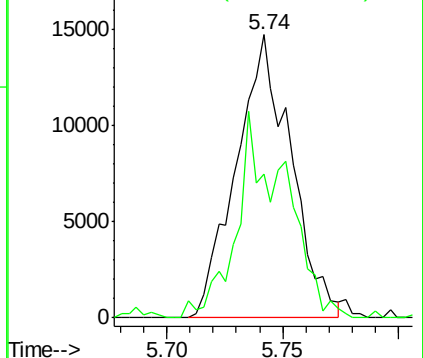
83 100

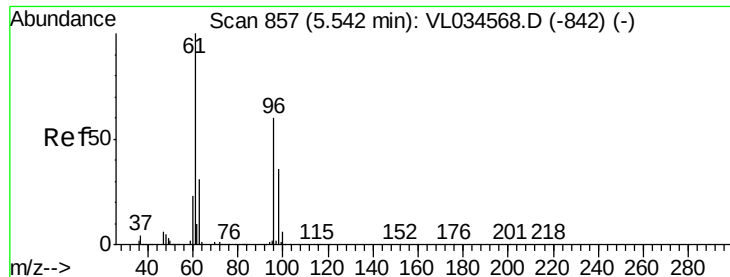
85 46.3 54.0 81.0#



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: 4.759 ppbv

RT: 5.54 min Scan# 856

Delta R.T. -0.00 min

Lab File: VL034635.D

Acq: 18 Feb 2020 22:20

Instrument :

MSVOA_L

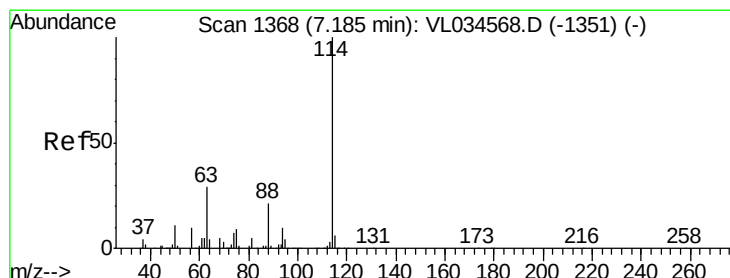
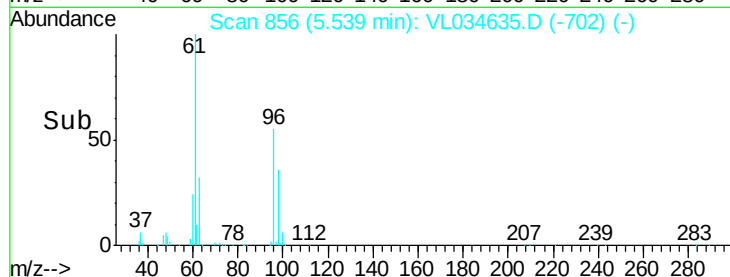
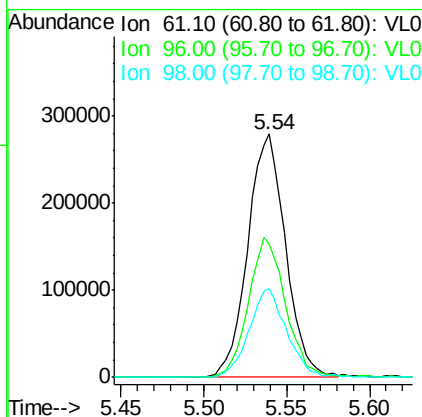
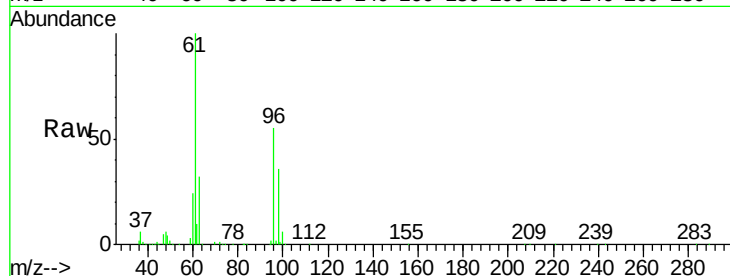
ClientSampleId :

IR-BRSS

Tot Ion	61	Resp	442302
Ion	Ratio	Lower	Upper
61	100		
96	54.8	48.0	72.0
98	36.3	28.6	43.0

Manual Integrations
APPROVED

MMDadoda
2/21/2020 3:26:18 PM



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

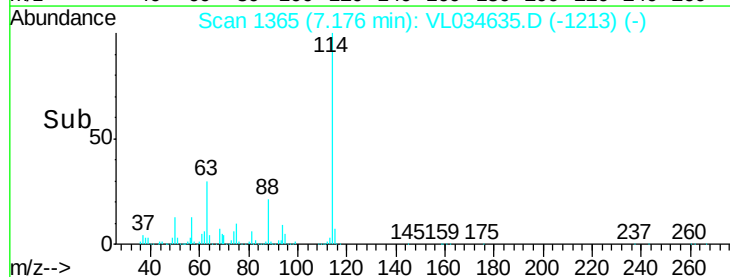
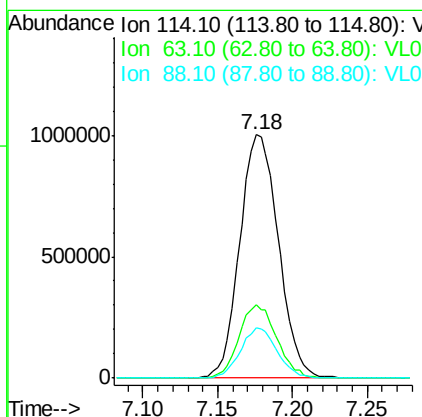
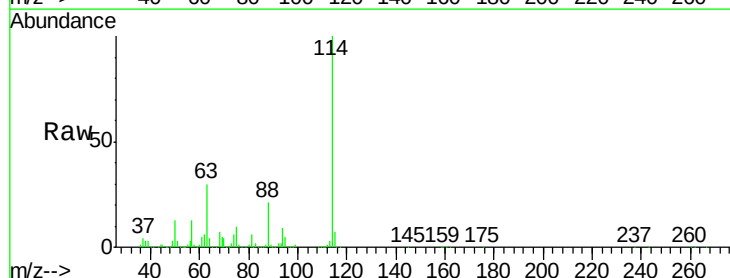
RT: 7.18 min Scan# 1365

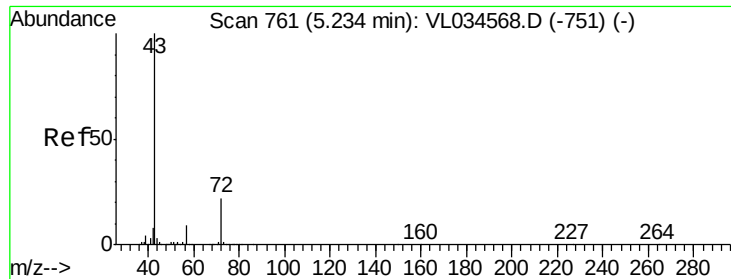
Delta R.T. -0.01 min

Lab File: VL034635.D

Acq: 18 Feb 2020 22:20

Tgt Ion	114	Resp	1802151
Ion	Ratio	Lower	Upper
114	100		
63	29.4	24.1	36.1
88	19.7	15.9	23.9





#34

2-Butanone

Concen: 0.407 ppbv

RT: 5.23 min Scan# 761

Delta R.T. -0.00 min

Lab File: VL034635.D

Acq: 18 Feb 2020 22:20

Instrument :

MSVOA_L

ClientSampleId :

IR-BRSS

Tot Ion: 43 Resp: 53314

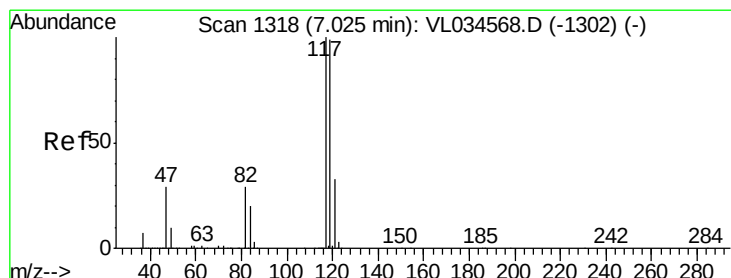
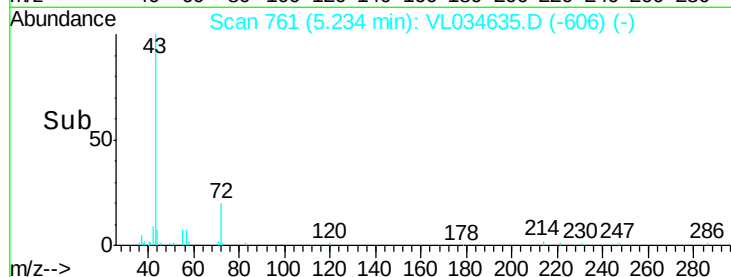
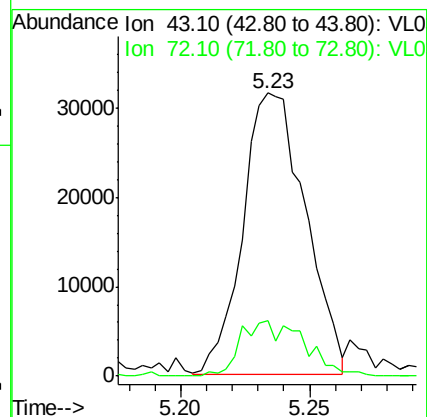
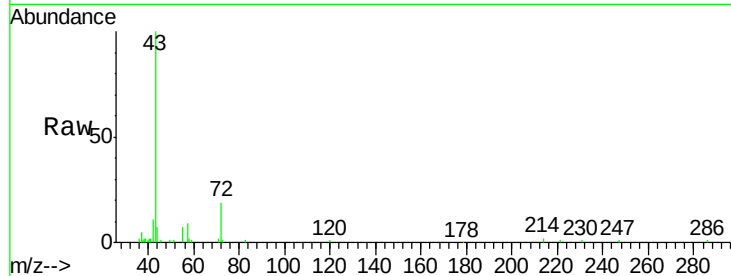
Ion Ratio Lower Upper

43 100

72 19.9 17.2 25.8

Manual Integrations
APPROVED

MMDadoda
2/21/2020 3:26:18 PM



#35

Carbon Tetrachloride

Concen: 0.057 ppbv m

RT: 7.02 min Scan# 1316

Delta R.T. -0.01 min

Lab File: VL034635.D

Acq: 18 Feb 2020 22:20

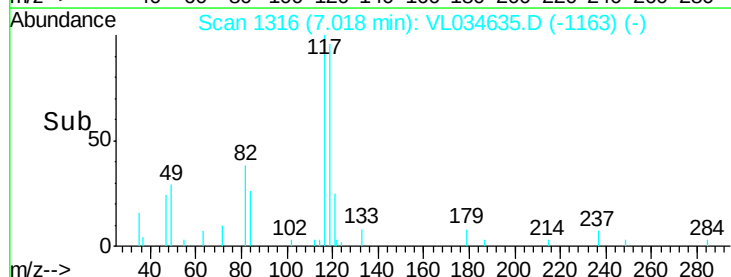
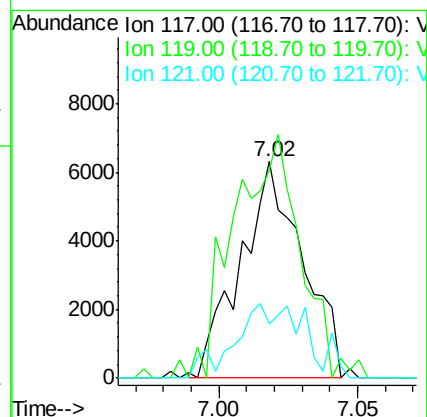
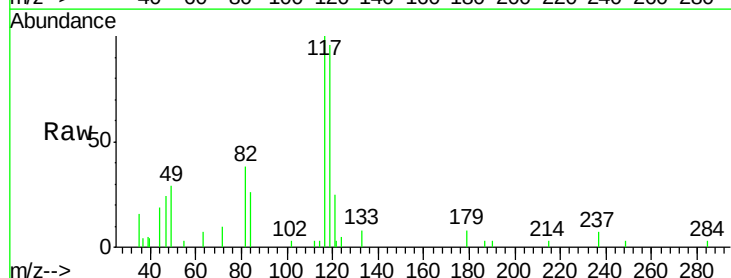
Tgt Ion: 117 Resp: 9738

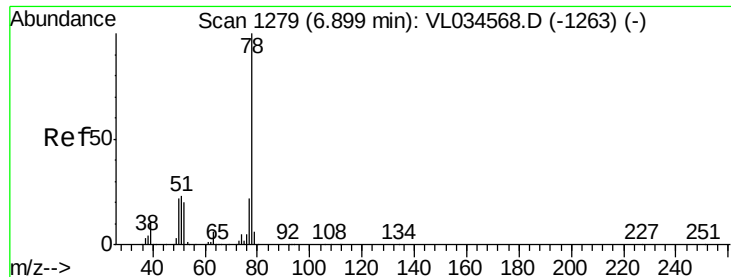
Ion Ratio Lower Upper

117 100

119 96.2 79.5 119.3

121 24.9 26.2 39.2#





#36

Benzene

Concen: 0.114 ppbv

RT: 6.89 min Scan# 1276

Delta R.T. -0.01 min

Lab File: VL034635.D

Acq: 18 Feb 2020 22:20

Instrument :

MSVOA_L

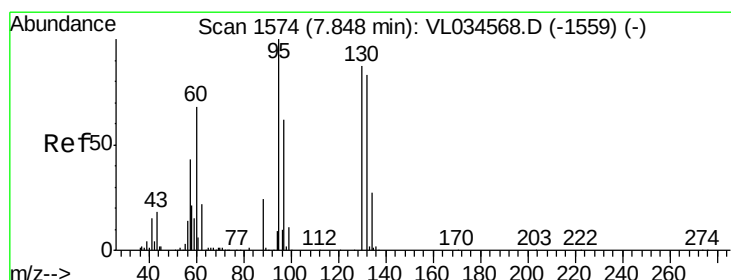
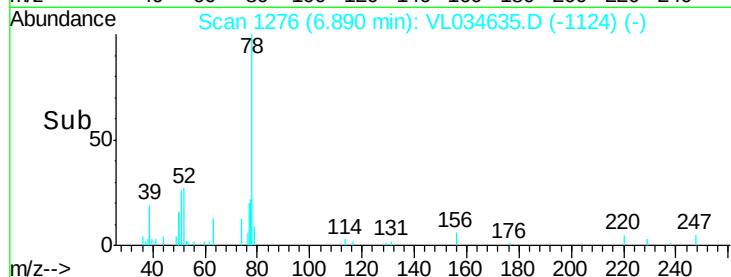
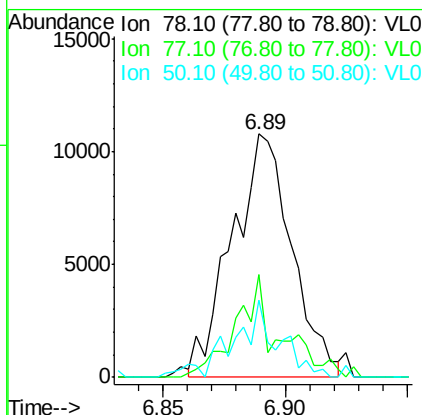
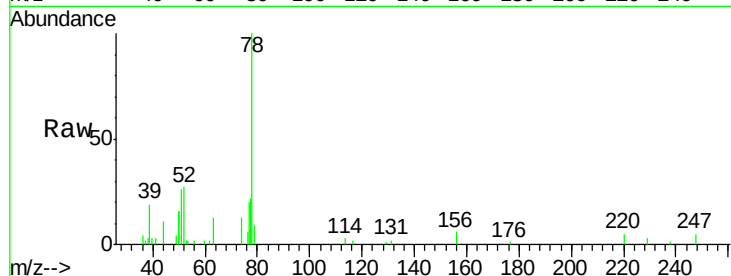
ClientSampleId :

IR-BRSS

Tot Ion:	78	Resp:	18270
Ion Ratio	Lower	Upper	
78	100		
77	41.9	17.3	25.9#
50	27.6	17.4	26.2#

Manual Integrations
APPROVED

MMDadoda
2/21/2020 3:26:18 PM



#38

Trichloroethene

Concen: 1.189 ppbv

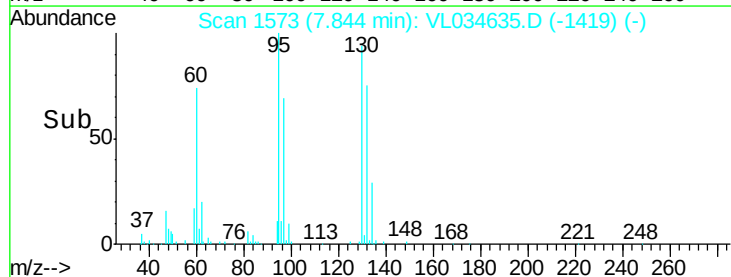
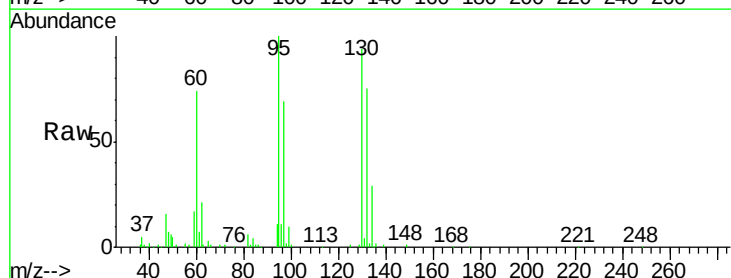
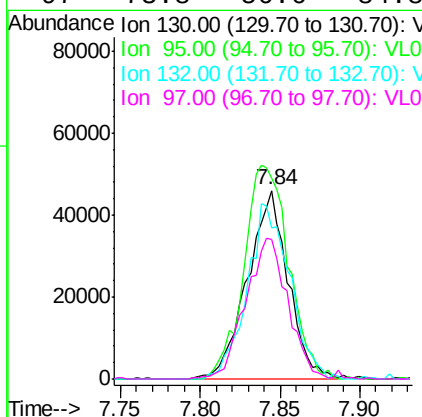
RT: 7.84 min Scan# 1573

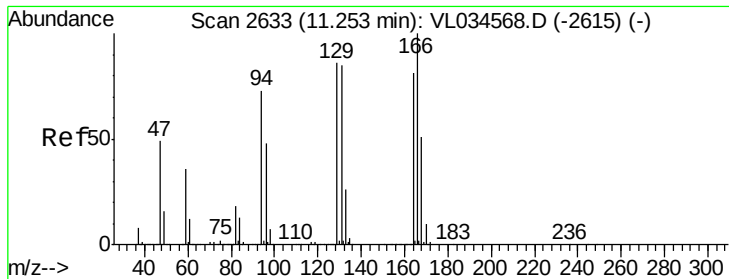
Delta R.T. -0.00 min

Lab File: VL034635.D

Acq: 18 Feb 2020 22:20

Tgt Ion:	130	Resp:	80355
Ion Ratio	Lower	Upper	
130	100		
95	106.9	91.6	137.4
132	80.1	76.1	114.1
97	73.8	56.6	84.8





#52

Tetrachloroethene

Concen: 15.032 ppbv

RT: 11.25 min Scan# 2631

Delta R.T. -0.01 min

Lab File: VL034635.D

Acq: 18 Feb 2020 22:20

Instrument :

MSVOA_L

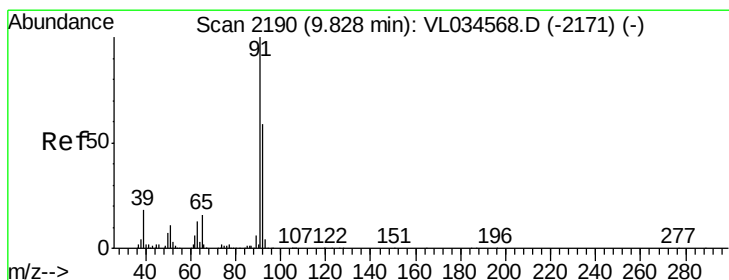
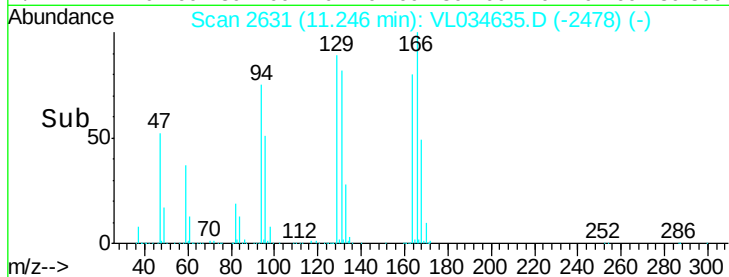
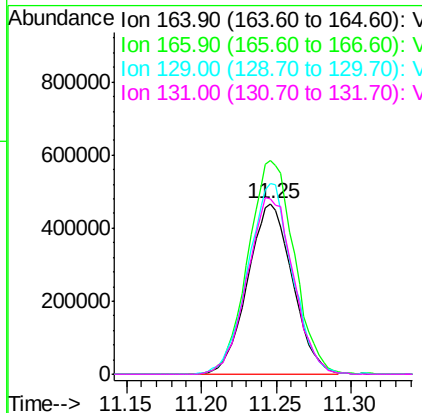
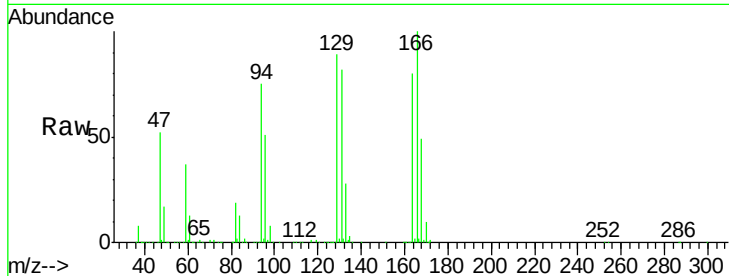
ClientSampleId :

IR-BRSS

Tot Ion	Ratio	Resp	Lower	Upper
164	100			
166	125.4	99.0	148.4	
129	111.8	85.3	127.9	
131	103.2	84.2	126.2	

Manual Integrations
APPROVED

MMDadoda
2/21/2020 3:26:18 PM



#53

Toluene

Concen: 0.440 ppbv

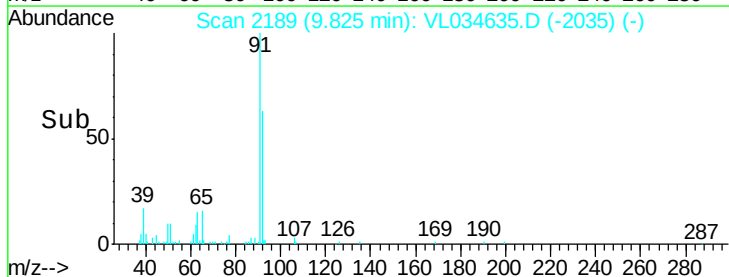
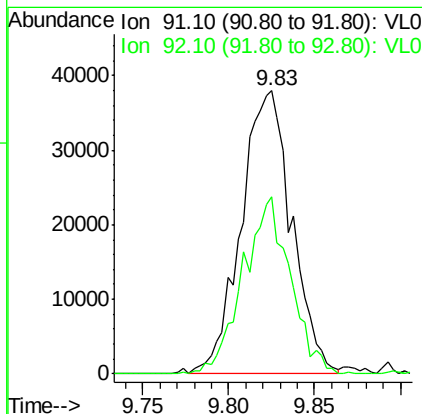
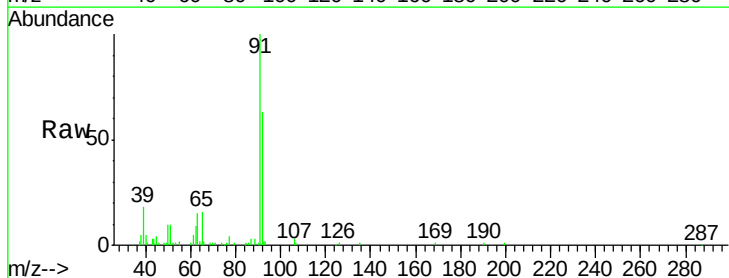
RT: 9.83 min Scan# 2189

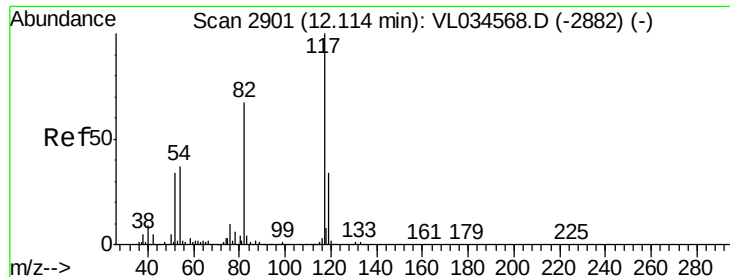
Delta R.T. -0.00 min

Lab File: VL034635.D

Acq: 18 Feb 2020 22:20

Tgt Ion	Ratio	Resp	Lower	Upper
91	100			
92	58.4	48.2	72.2	





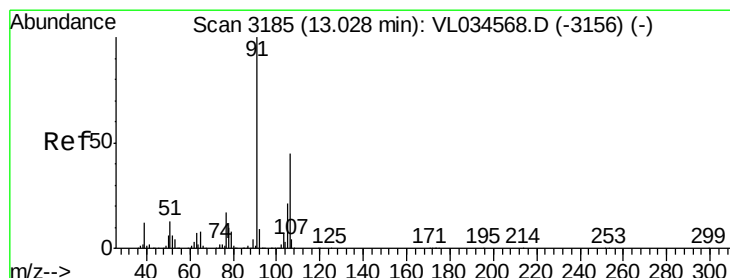
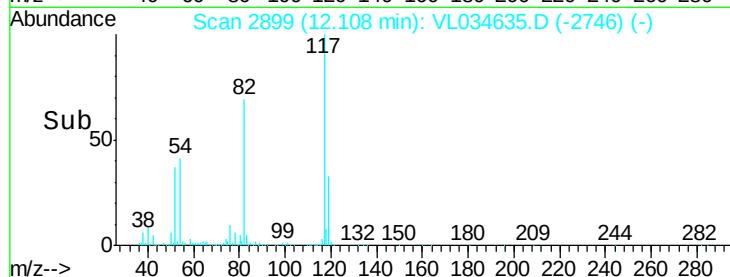
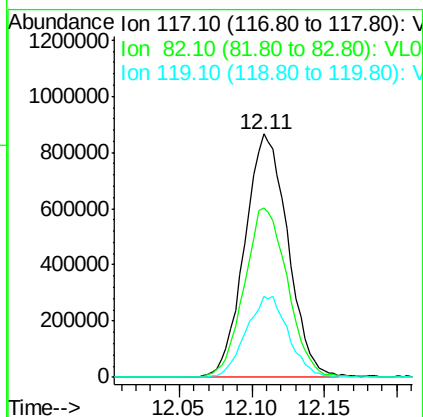
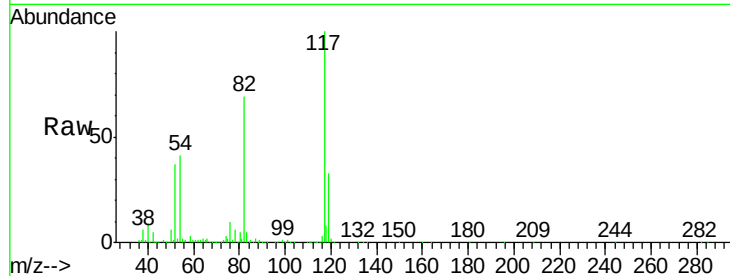
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.11 min Scan# 2899
Delta R.T. -0.01 min
Lab File: VL034635.D
Acq: 18 Feb 2020 22:20

Instrument :
MSVOA_L
ClientSampleId :
IR-BRSS

Tot Ion	Ratio	Lower	Upper
117	100		
82	70.3	54.2	81.4
119	32.8	26.1	39.1

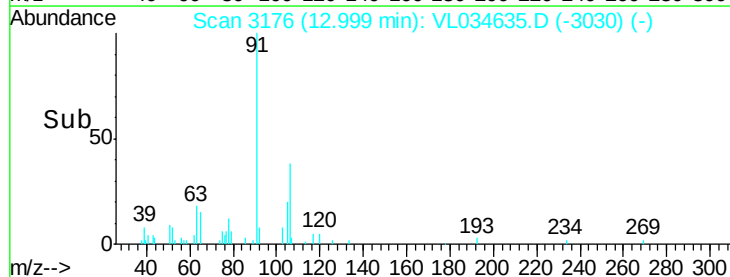
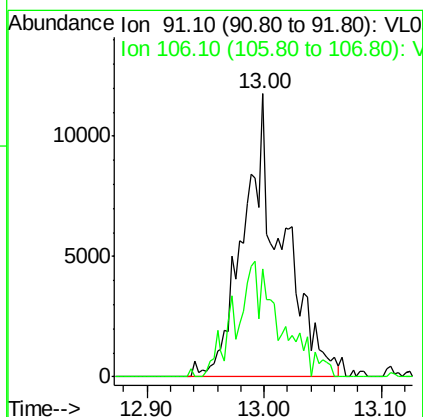
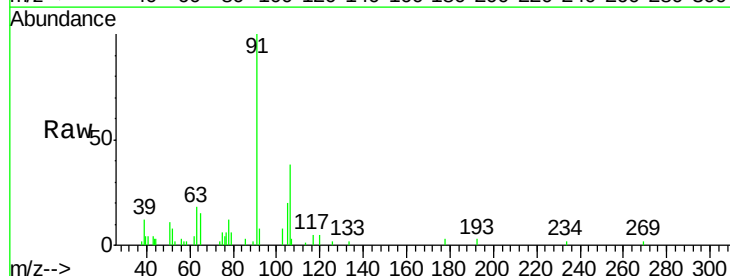
Manual Integrations
APPROVED

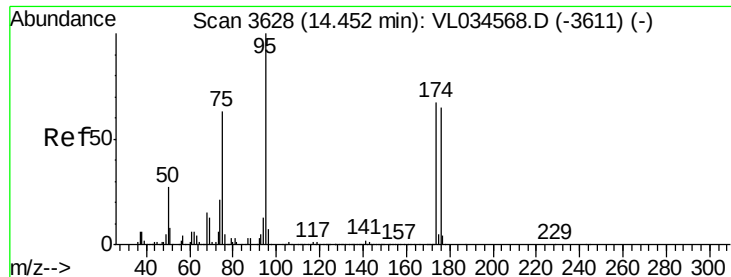
MMDadoda
2/21/2020 3:26:18 PM



#59
m/p-Xylene
Concen: 0.126 ppbv m
RT: 13.00 min Scan# 3176
Delta R.T. -0.03 min
Lab File: VL034635.D
Acq: 18 Feb 2020 22:20

Tgt Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.3	52.9





#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.422 ppbv
 RT: 14.45 min Scan# 3626
 Delta R.T. -0.01 min
 Lab File: VL034635.D
 Acq: 18 Feb 2020 22:20

Instrument :
 MSVOA_L
 ClientSampleId :
 IR-BRSS

Tot Ion	Ratio	Lower	Upper
95	100		
174	64.7	52.3	78.5
175	4.4	3.8	5.6

Manual Integrations
 APPROVED

MMDadoda
 2/21/2020 3:26:18 PM

