

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL051719\
 Data File : VL033718.D
 Acq On : 17 May 2019 16:02
 Operator : SY/AP
 Sample : K2904-02DL 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 S-02DL

Manual Integrations
 APPROVED

MMDadoda
 5/20/2019 12:06:26 PM

Quant Time: May 18 01:38:55 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL051719AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri May 18 01:38:55 2019
 QLast Update : Fri May 17 08:15:41 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	1112603	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	2634851	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	2612080	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.57	95	2089258	9.87	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
3) Chlorodifluoromethane	3.01	51	101869m	0.799	ppbv	
11) Trichlorofluoromethane	4.00	101	45984	0.205	ppbv	97
13) Ethanol	3.65	45	298407	17.032	ppbv	98
15) Acetone	3.91	43	160825	1.042	ppbv	97
20) Methylene Chloride	4.41	84	76543	1.288	ppbv	95
26) Hexane	5.78	57	39189	0.336	ppbv #	42
27) Carbon Disulfide	4.62	76	20258	0.127	ppbv #	57
29) Chloroform	5.84	83	149467	0.696	ppbv	99
38) Trichloroethene	7.96	130	38606	0.434	ppbv	86

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

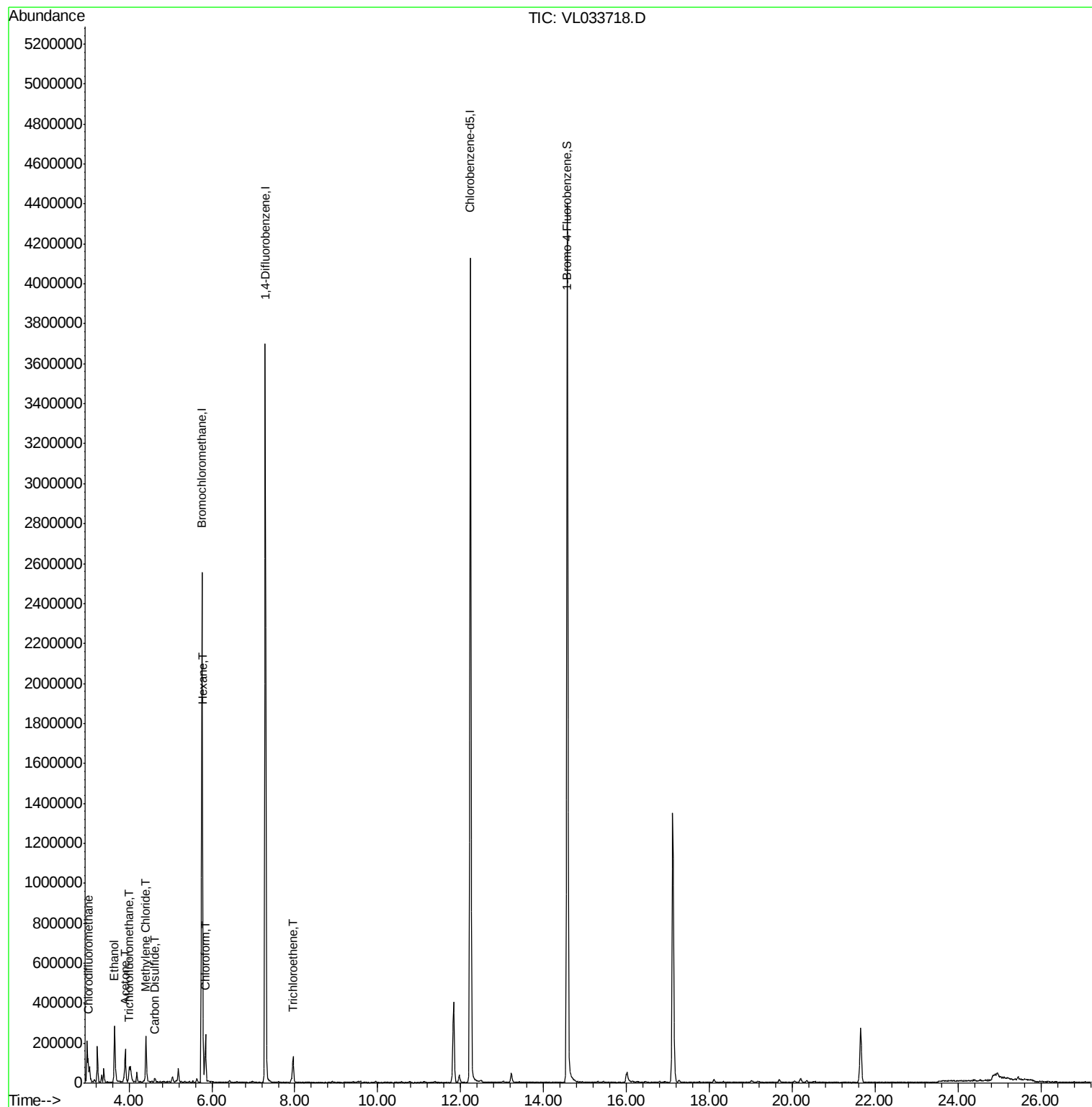
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL051719\
Data File : VL033718.D
Acq On : 17 May 2019 16:02
Operator : SY/AP
Sample : K2904-02DL 10X
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

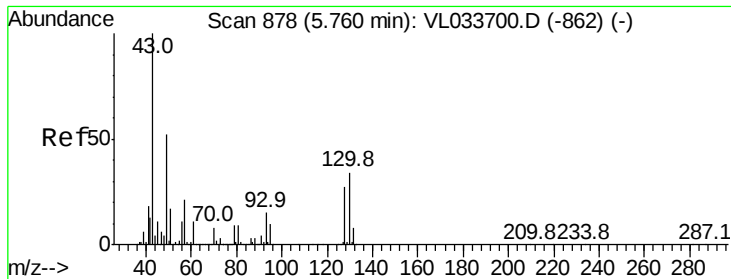
Instrument :
MSVOA_L
ClientSampleId :
S-02DL

Manual Integrations
APPROVED

MMDadoda
5/20/2019 12:06:26 PM

Quant Time: May 18 01:38:55 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL051719AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri May
QLast Update : Fri May 17 08:15:41 2019
Response via : Initial Calibration





#1

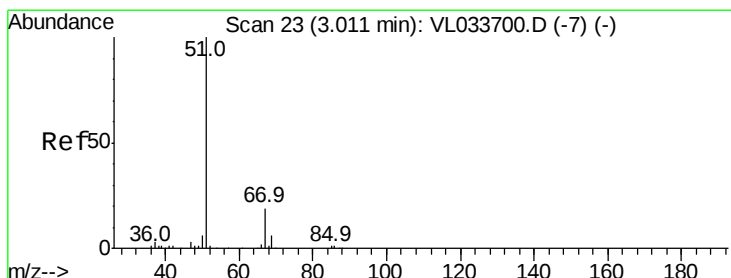
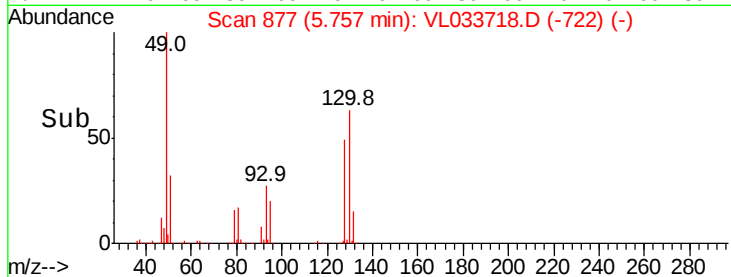
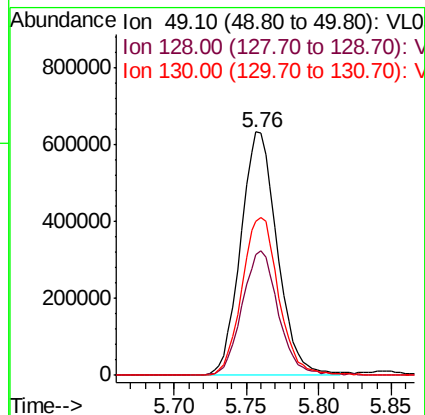
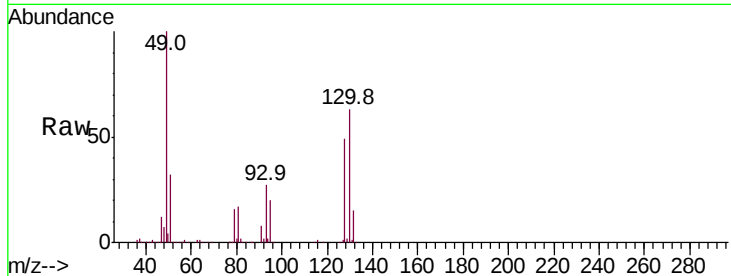
Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.76 min Scan# 877
 Delta R.T. -0.00 min
 Lab File: VL033718.D
 Acq: 17 May 2019 16:02

Instrument :
 MSVOA_L
 ClientSampleId :
 S-02DL

Tot Ion: 49 Resp: 1112603
 Ion Ratio Lower Upper
 49 100
 128 51.1 25.2 75.6
 130 66.0 32.5 97.5

Manual Integrations
 APPROVED

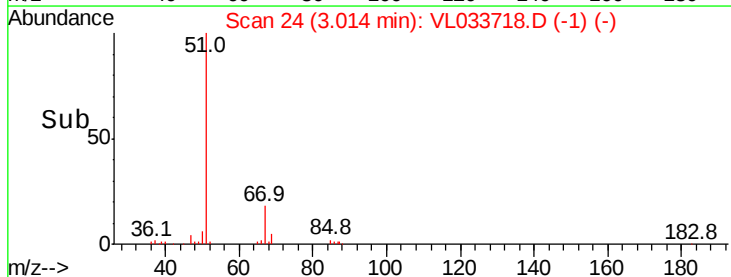
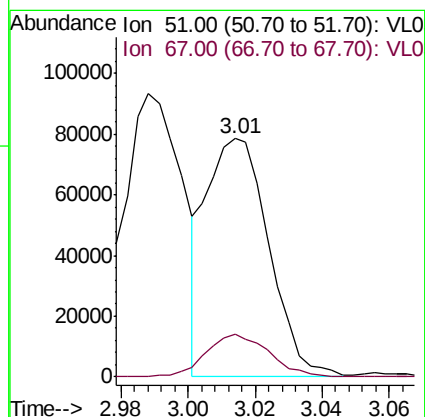
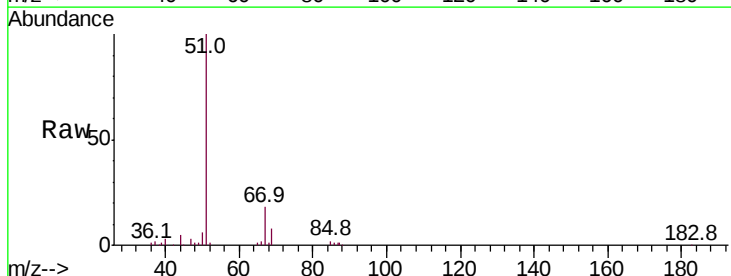
MMDadoda
 5/20/2019 12:06:26 PM

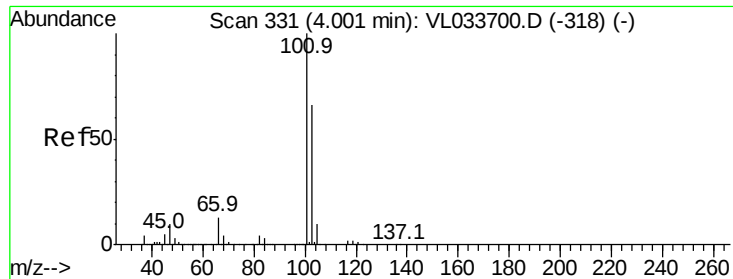


#3

Chlorodifluoromethane
 Concen: 0.799 ppbv m
 RT: 3.01 min Scan# 24
 Delta R.T. 0.00 min
 Lab File: VL033718.D
 Acq: 17 May 2019 16:02

Tgt Ion: 51 Resp: 101869
 Ion Ratio Lower Upper
 51 100
 67 17.9 15.6 23.4





#11

Trichlorofluoromethane

Concen: 0.205 ppbv

RT: 4.00 min Scan# 332

Delta R.T. 0.00 min

Lab File: VL033718.D

Acq: 17 May 2019 16:02

Instrument :

MSVOA_L

ClientSampleId :

S-02DL

Tot Ion:101 Resp: 45984

Ion Ratio Lower Upper

101 100

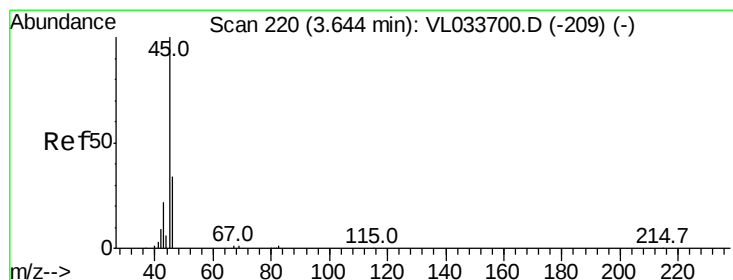
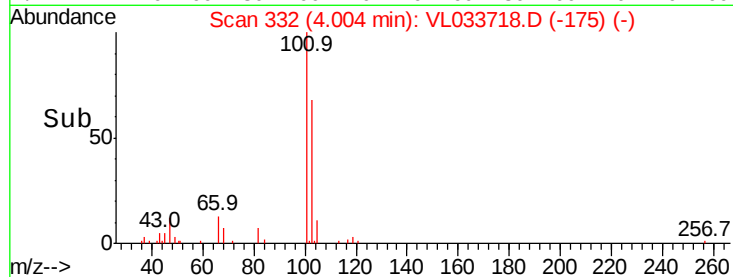
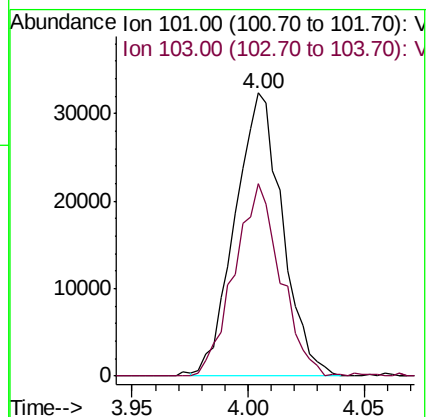
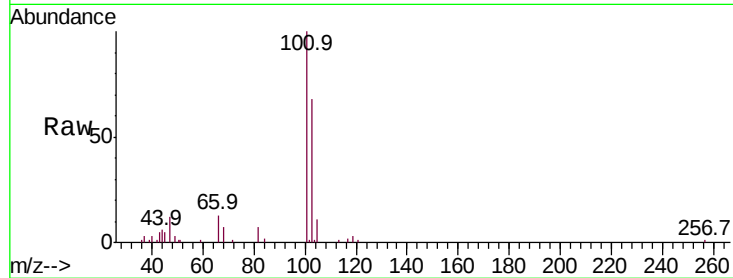
103 68.1 52.6 78.8

Manual Integrations

APPROVED

MMDadoda

5/20/2019 12:06:26 PM



#13

Ethanol

Concen: 17.032 ppbv

RT: 3.65 min Scan# 222

Delta R.T. 0.01 min

Lab File: VL033718.D

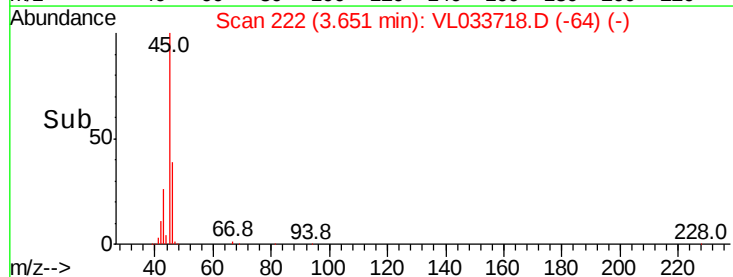
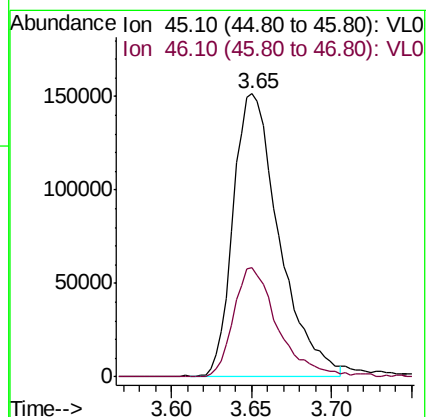
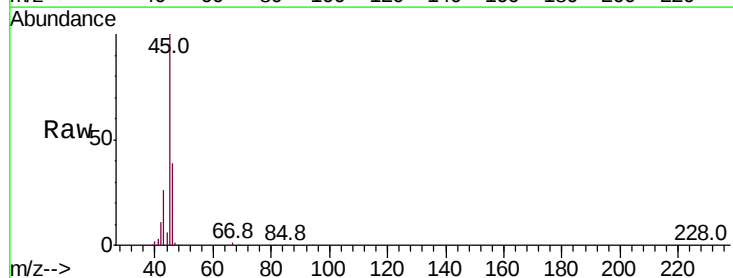
Acq: 17 May 2019 16:02

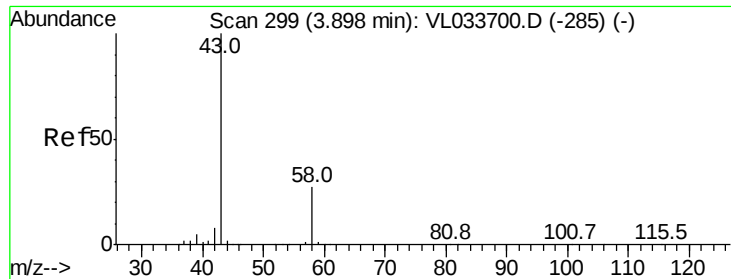
Tgt Ion: 45 Resp: 298407

Ion Ratio Lower Upper

45 100

46 38.0 14.8 59.0





#15

Acetone

Concen: 1.042 ppbv

RT: 3.91 min Scan# 302

Delta R.T. 0.01 min

Lab File: VL033718.D

Acq: 17 May 2019 16:02

Instrument :

MSVOA_L

ClientSampled :

S-02DL

Tot Ion: 43 Resp: 160825

Ion Ratio Lower Upper

43 100

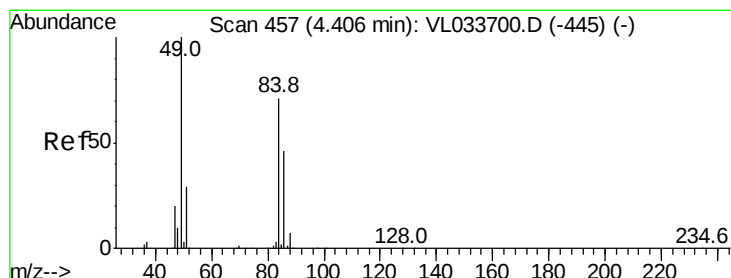
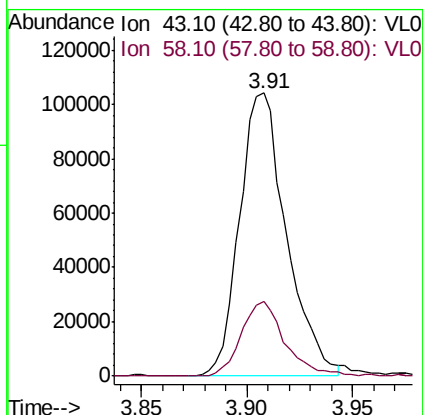
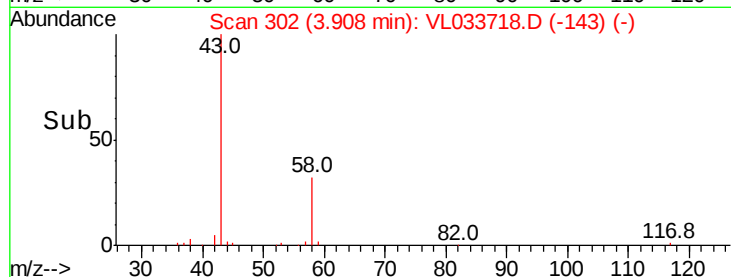
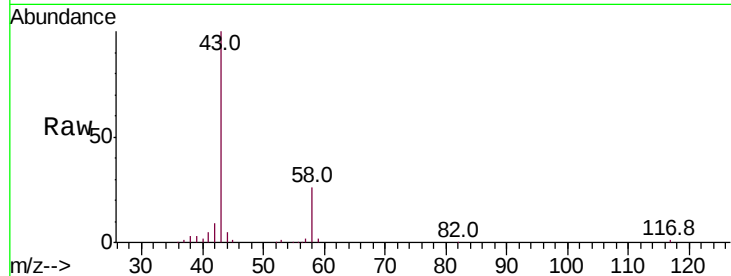
58 24.9 21.3 31.9

Manual Integrations

APPROVED

MMDadoda

5/20/2019 12:06:26 PM



#20

Methylene Chloride

Concen: 1.288 ppbv

RT: 4.41 min Scan# 458

Delta R.T. 0.00 min

Lab File: VL033718.D

Acq: 17 May 2019 16:02

Tgt Ion: 84 Resp: 76543

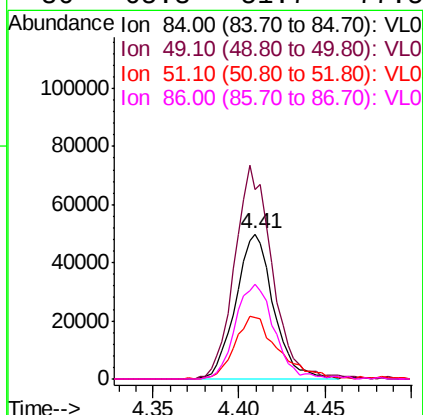
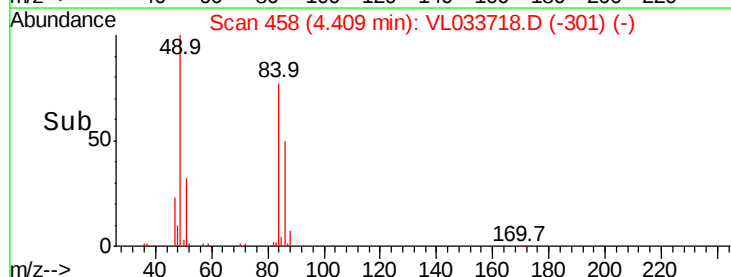
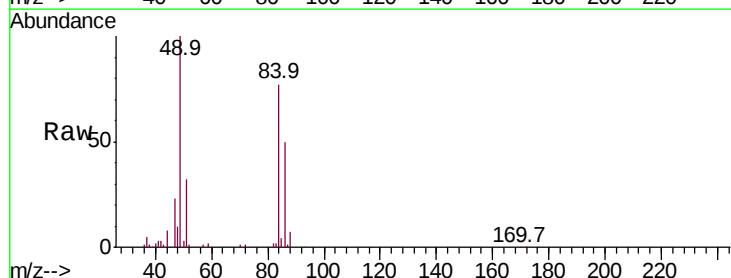
Ion Ratio Lower Upper

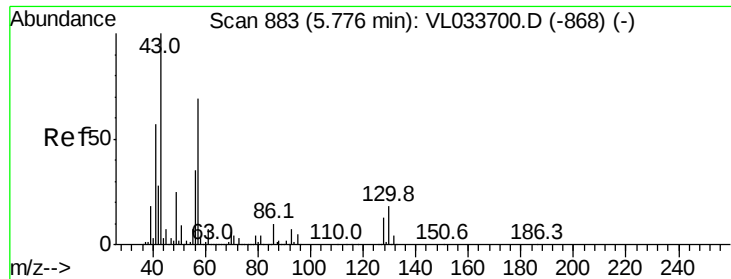
84 100

49 130.4 112.8 169.2

51 41.1 33.4 50.0

86 65.3 51.7 77.5





#26

Hexane

Concen: 0.336 ppbv

RT: 5.78 min Scan# 884

Delta R.T. 0.00 min

Lab File: VL033718.D

Acq: 17 May 2019 16:02

Instrument :

MSVOA_L

ClientSampled :

S-02DL

Tot Ion: 57 Resp: 39189

Ion Ratio Lower Upper

57 100

41 94.8 69.8 104.6

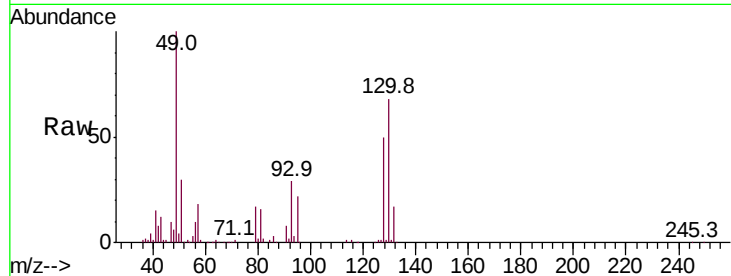
43 80.6 181.8 272.6#

56 57.1 42.1 63.1

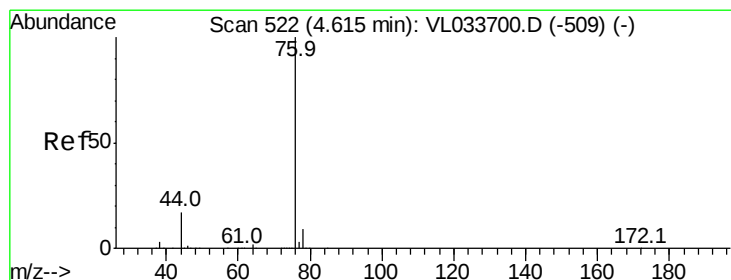
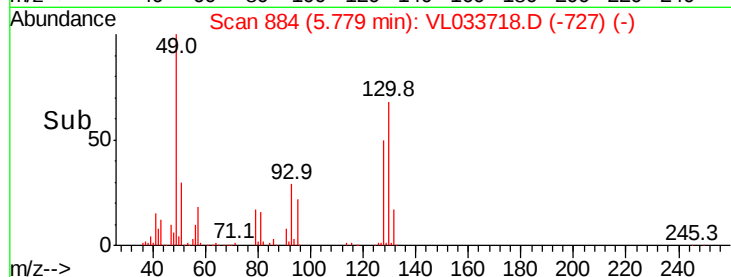
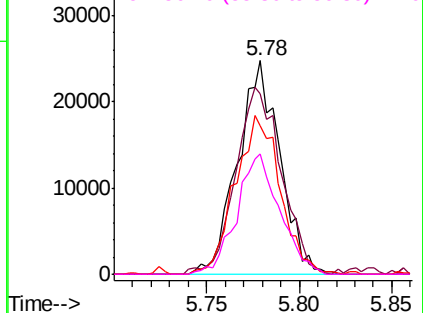
Manual Integrations
APPROVED

MMDadoda

5/20/2019 12:06:26 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



#27

Carbon Disulfide

Concen: 0.127 ppbv

RT: 4.62 min Scan# 524

Delta R.T. 0.01 min

Lab File: VL033718.D

Acq: 17 May 2019 16:02

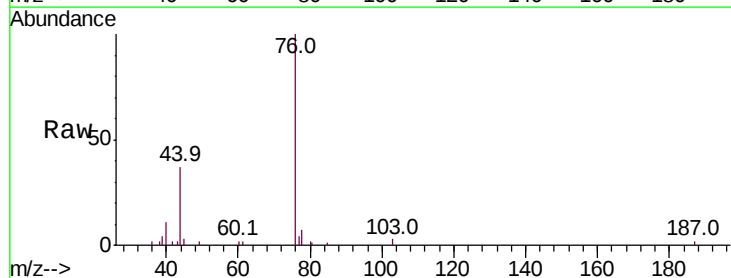
Tgt Ion: 76 Resp: 20258

Ion Ratio Lower Upper

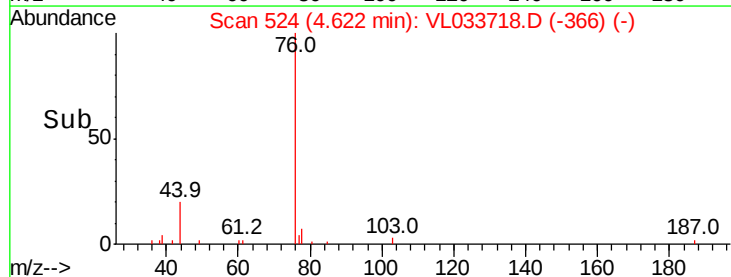
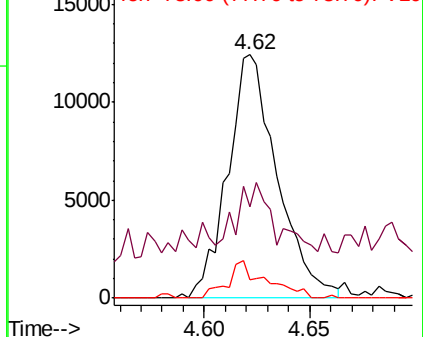
76 100

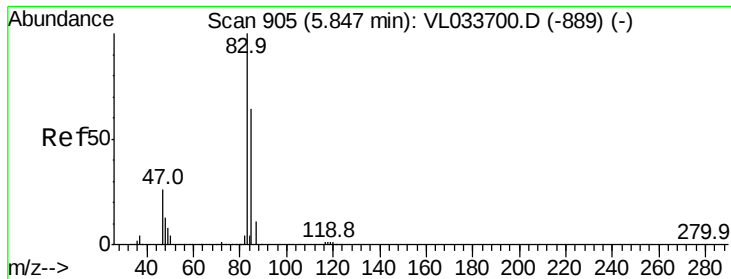
44 44.3 13.8 20.8#

78 11.7 7.4 11.0#



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: 0.696 ppbv

RT: 5.84 min Scan# 904

Delta R.T. -0.00 min

Lab File: VL033718.D

Acq: 17 May 2019 16:02

Instrument :

MSVOA_L

ClientSampleId :

S-02DL

Tot Ion: 83 Resp: 149467

Ion Ratio Lower Upper

83 100

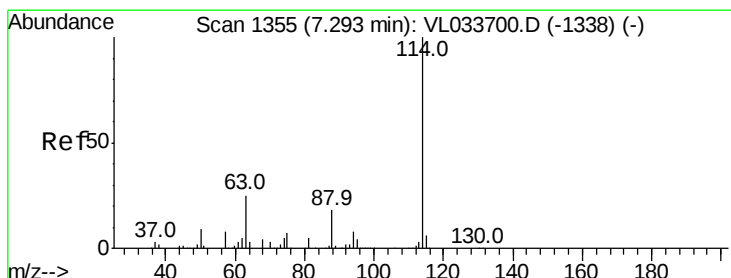
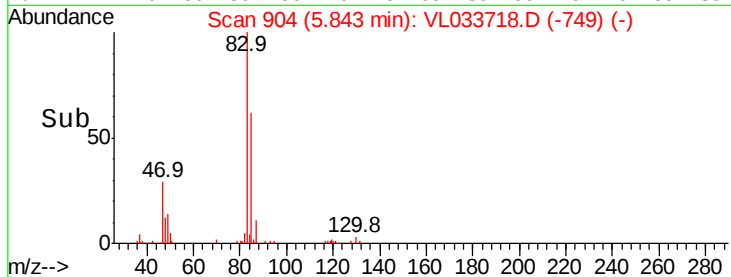
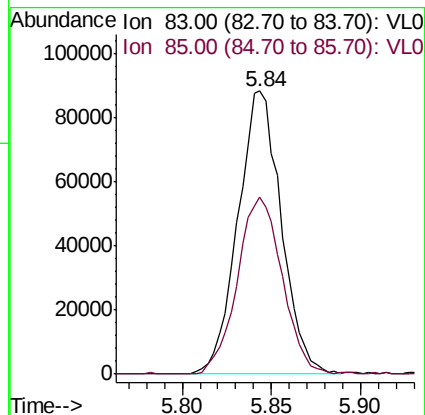
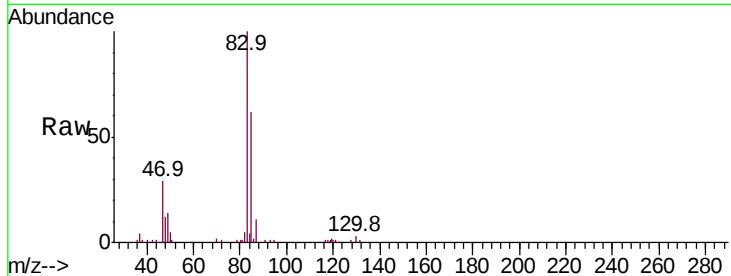
85 63.9 51.5 77.3

Manual Integrations

APPROVED

MMDadoda

5/20/2019 12:06:26 PM



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.29 min Scan# 1353

Delta R.T. -0.01 min

Lab File: VL033718.D

Acq: 17 May 2019 16:02

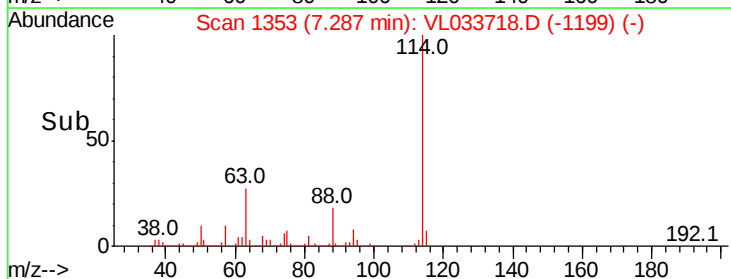
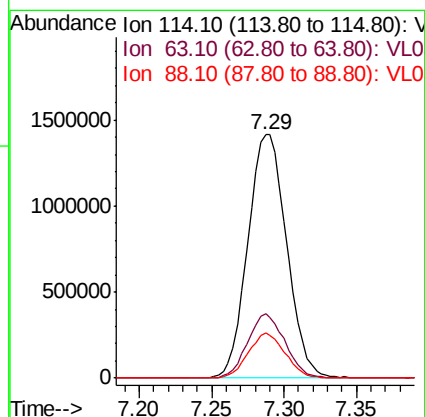
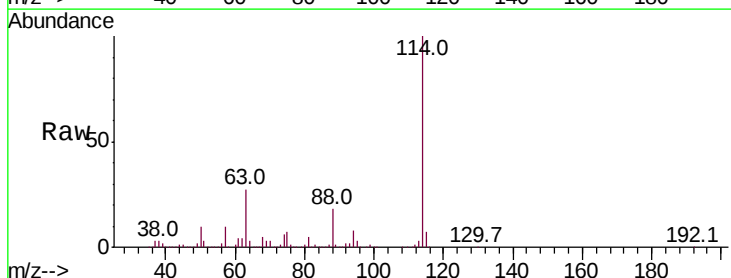
Tgt Ion: 114 Resp: 2634851

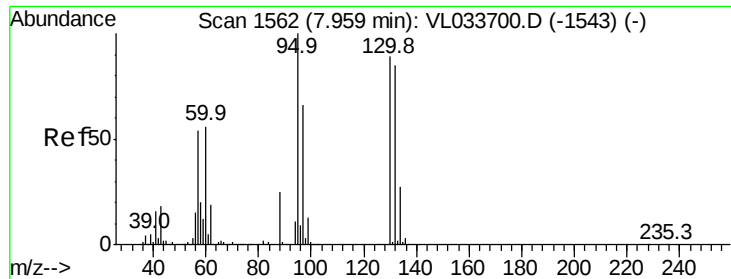
Ion Ratio Lower Upper

114 100

63 25.5 20.9 31.3

88 17.7 14.3 21.5





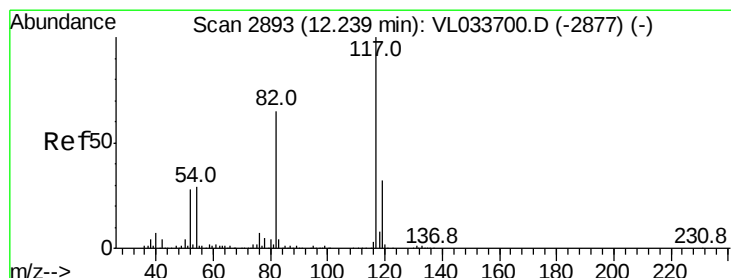
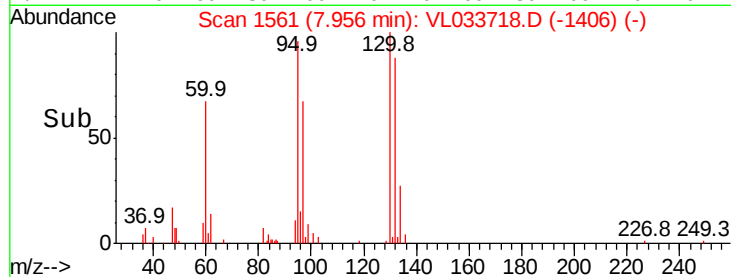
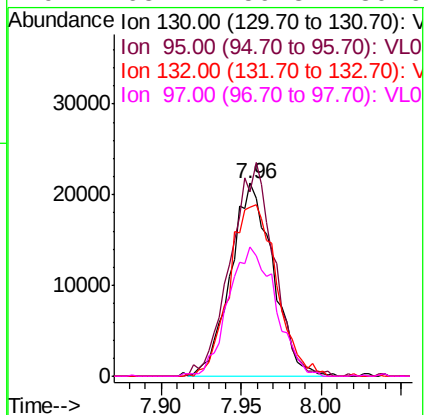
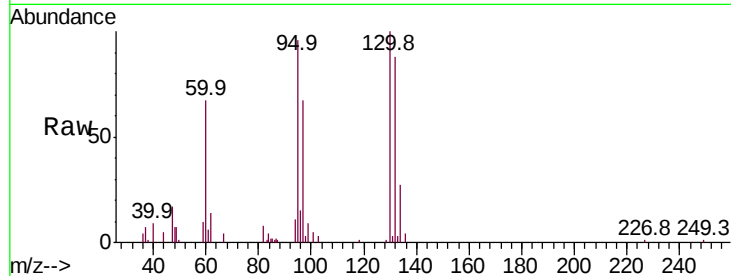
#38
 Trichloroethene
 Concen: 0.434 ppbv
 RT: 7.96 min Scan# 1561
 Delta R.T. -0.00 min
 Lab File: VL033718.D
 Acq: 17 May 2019 16:02

Instrument :
 MSVOA_L
 ClientSampleID :
 S-02DL

Tot Ion	Ratio	Lower	Upper
130	100		
95	92.7	90.2	135.4
132	85.1	76.4	114.6
97	65.1	59.8	89.6

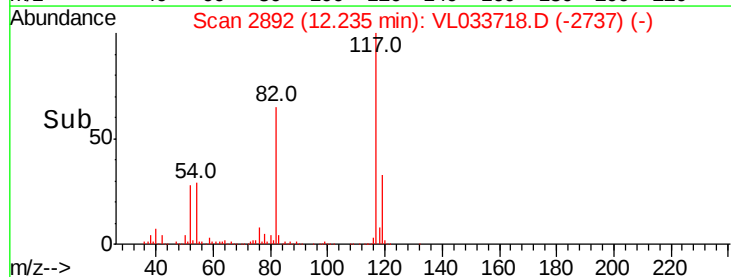
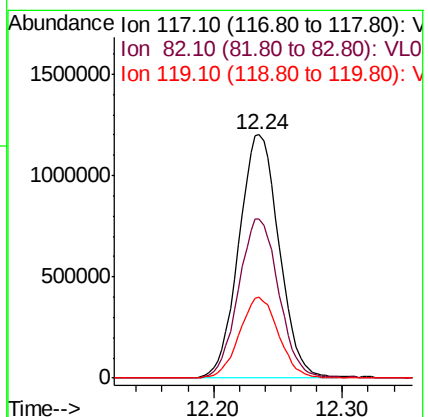
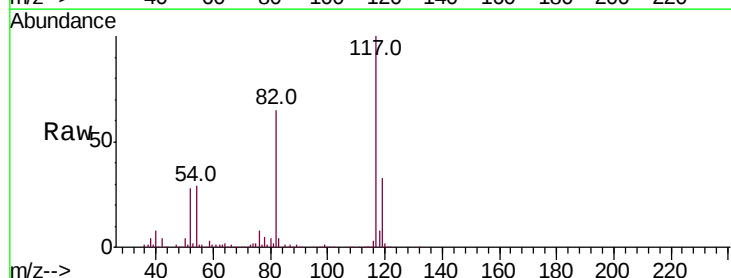
Manual Integrations
 APPROVED

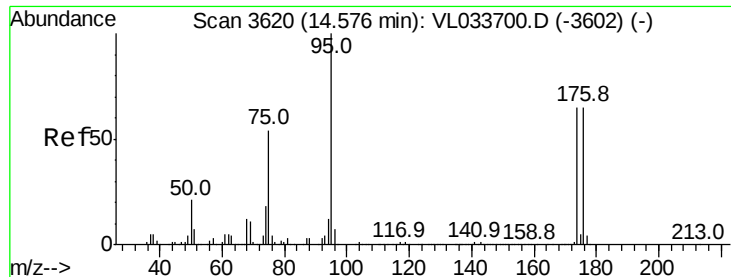
MMDadoda
 5/20/2019 12:06:26 PM



#55
 Chlorobenzene-d5
 Concen: 10.000 ppbv
 RT: 12.24 min Scan# 2892
 Delta R.T. -0.00 min
 Lab File: VL033718.D
 Acq: 17 May 2019 16:02

Tgt Ion	Ratio	Lower	Upper
117	100		
82	65.9	49.4	74.0
119	32.4	24.9	37.3





#68

1-Bromo-4-Fluorobenzene

Concen: 9.866 ppbv

RT: 14.57 min Scan# 3619

Delta R.T. -0.00 min

Lab File: VL033718.D

Acq: 17 May 2019 16:02

Instrument :

MSVOA_L

ClientSampleId :

S-02DL

Tot Ion: 95 Resp: 2089258

Ion Ratio Lower Upper

95 100

174 68.0 53.9 80.9

175 4.9 3.8 5.8

Manual Integrations

APPROVED

MMDadoda

5/20/2019 12:06:26 PM

