

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL062419\
 Data File : VL033954.D
 Acq On : 25 Jun 2019 2:35
 Operator : SY/AP
 Sample : K3474-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 EFFLUENT

Manual Integrations
 APPROVED

MMDadoda
 6/26/2019 8:15:53 AM

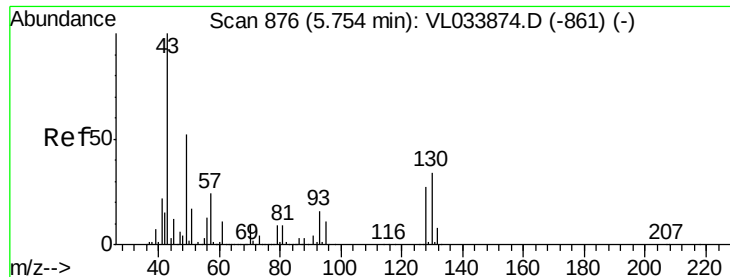
Quant Time: Jun 25 05:12:12 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL060719AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun 0
 QLast Update : Fri Jun 07 08:53:27 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.74	49	960782	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.26	114	2393592	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.21	117	2467381	10.00	ppbv	-0.02

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.54	95	1929671	9.52	ppbv	-0.02	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	95.20%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.07	85	55576	0.356	ppbv	96
3) Chlorodifluoromethane	3.00	51	81031m	0.716	ppbv	
4) Chloromethane	3.16	50	38098	0.591	ppbv	99
9) Propene	3.03	41	79710	1.883	ppbv #	82
11) Trichlorofluoromethane	3.99	101	59881	0.298	ppbv	91
13) Ethanol	3.64	45	687037	49.894	ppbv	97
15) Acetone	3.89	43	995607	7.105	ppbv	93
17) tert-Butyl alcohol	4.35	59	43987	0.402	ppbv #	92
19) Isopropyl Alcohol	4.02	45	573121	7.160	ppbv	99
20) Methylene Chloride	4.39	84	42047	0.769	ppbv	91
26) Hexane	5.76	57	61545	0.633	ppbv #	47
32) 1,1,1-Trichloroethane	6.60	97	103707	0.646	ppbv	97
34) 2-Butanone	5.31	43	133354	0.988	ppbv	99
35) Carbon Tetrachloride	7.11	117	9570m	0.052	ppbv	
36) Benzene	6.98	78	28876	0.158	ppbv	96
41) Tetrahydrofuran	6.14	42	71859	1.048	ppbv	98
44) 2,2,4-Trimethylpentane	7.97	57	52046	0.160	ppbv #	60
52) Tetrachloroethene	11.34	164	6358m	0.099	ppbv	
53) Toluene	9.92	91	194586	0.962	ppbv	99
58) Ethyl Benzene	12.83	91	22748m	0.082	ppbv	
59) m/p-Xylene	13.09	91	58688m	0.232	ppbv	
60) o-Xylene	13.81	91	26624m	0.102	ppbv	

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.74 min Scan# 872

Delta R.T. -0.01 min

Lab File: VL033954.D

Acq: 25 Jun 2019 2:35

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENT

Tot Ion: 49 Resp: 960782

Ion Ratio Lower Upper

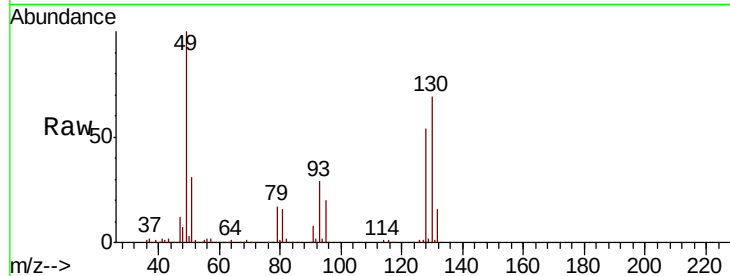
49 100

128 52.8 25.5 76.5

130 67.9 32.5 97.4

Manual Integrations
APPROVED

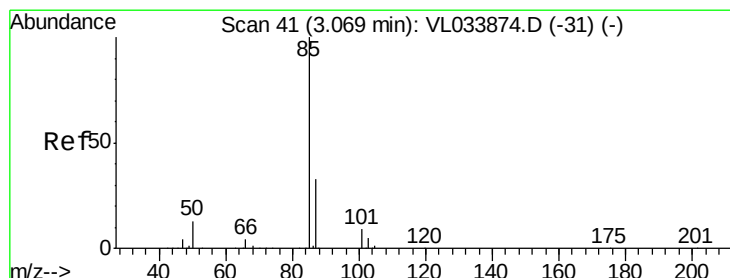
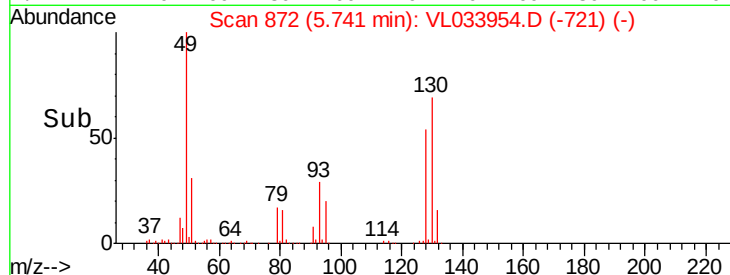
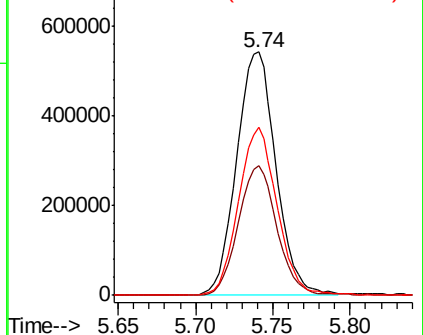
MMDadoda
6/26/2019 8:15:53 AM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.356 ppbv

RT: 3.07 min Scan# 40

Delta R.T. -0.00 min

Lab File: VL033954.D

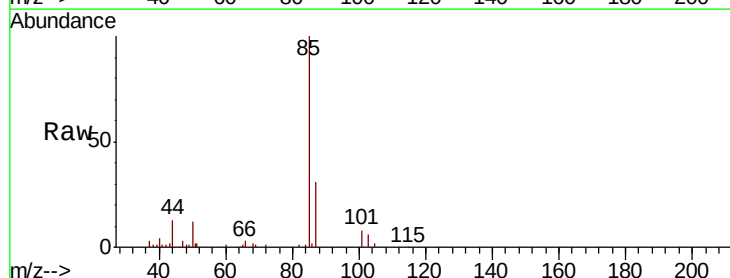
Acq: 25 Jun 2019 2:35

Tgt Ion: 85 Resp: 55576

Ion Ratio Lower Upper

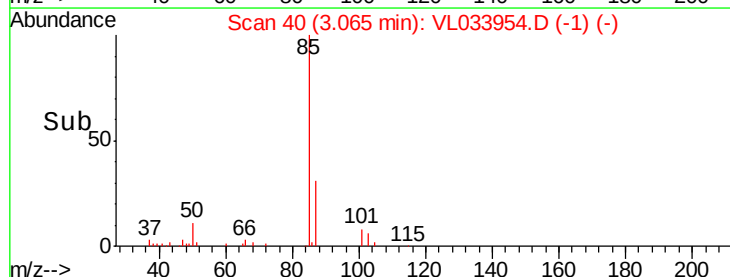
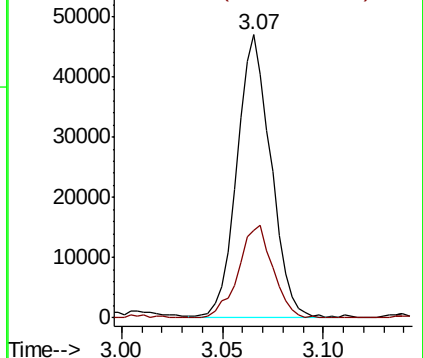
85 100

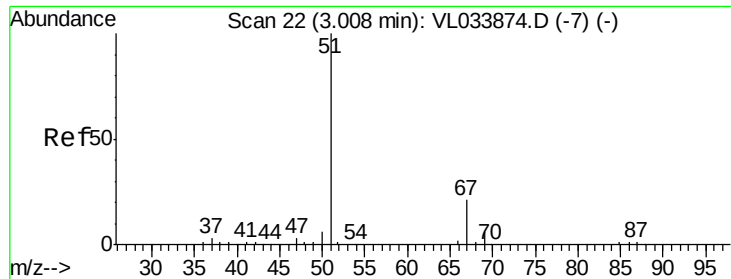
87 30.8 26.6 40.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





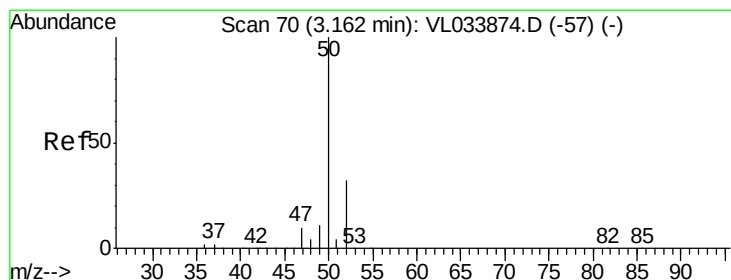
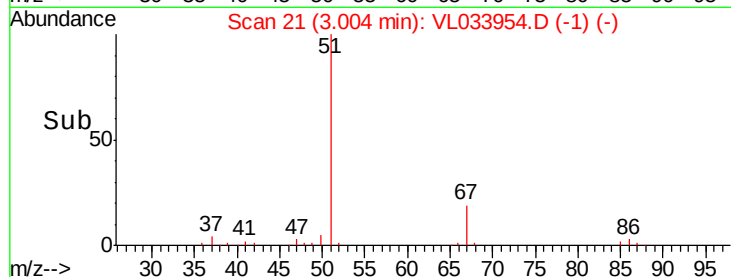
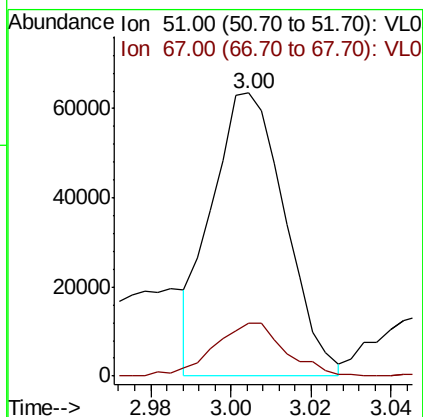
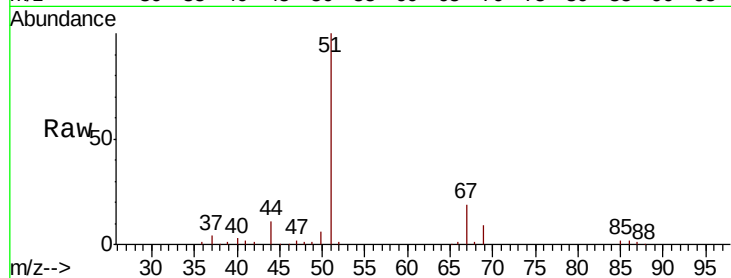
#3
Chlorodifluoromethane
Concen: 0.716 ppbv
RT: 3.00 min Scan# 21
Delta R.T. -0.00 min
Lab File: VL033954.D
Acq: 25 Jun 2019 2:35

Instrument :
MSVOA_L
ClientSampled :
EFFLUENT

Tot Ion	51	Ratio	Lower	Upper
81031	100			
67	18.5	16.4	24.6	

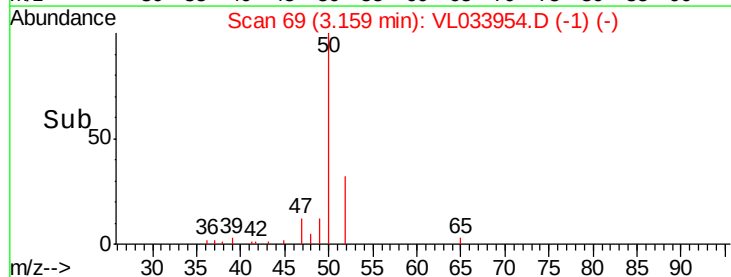
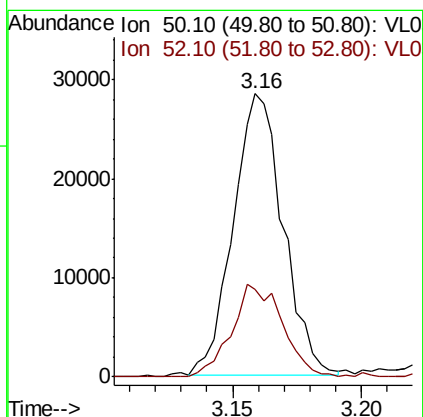
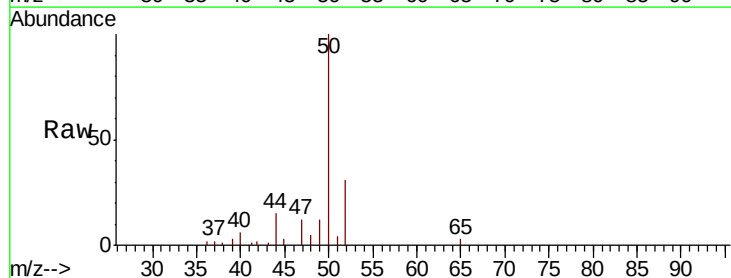
Manual Integrations
APPROVED

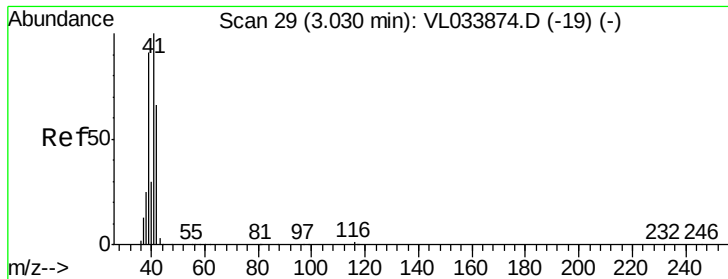
MMDadoda
6/26/2019 8:15:53 AM



#4
Chloromethane
Concen: 0.591 ppbv
RT: 3.16 min Scan# 69
Delta R.T. -0.00 min
Lab File: VL033954.D
Acq: 25 Jun 2019 2:35

Tgt Ion	50	Ratio	Lower	Upper
38098	100			
52	31.2	25.4	38.0	





#9

Propene

Concen: 1.883 ppbv

RT: 3.03 min Scan# 30

Delta R.T. 0.00 min

Lab File: VL033954.D

Acq: 25 Jun 2019 2:35

Instrument :

MSVOA_L

ClientSampled :

EFFLUENT

Tot Ion: 41 Resp: 79710

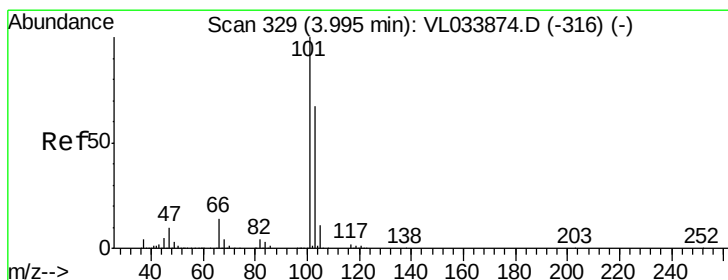
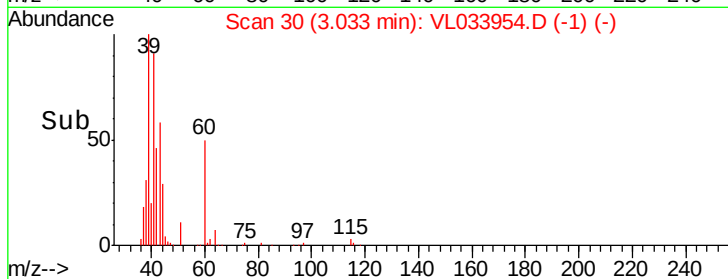
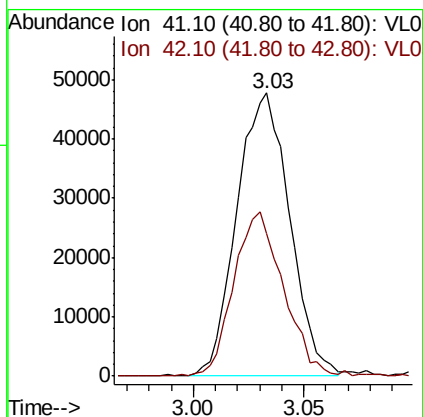
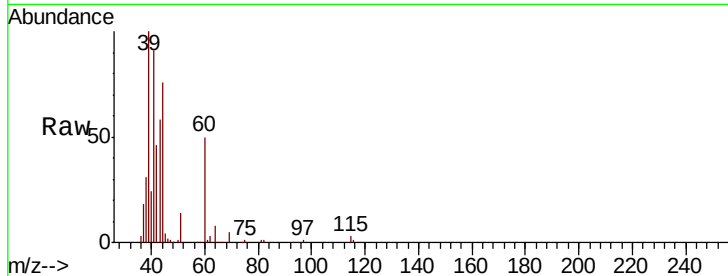
Ion Ratio Lower Upper

41 100

42 55.3 56.3 84.5#

Manual Integrations
APPROVED

MMDadoda
6/26/2019 8:15:53 AM



#11

Trichlorofluoromethane

Concen: 0.298 ppbv

RT: 3.99 min Scan# 328

Delta R.T. -0.00 min

Lab File: VL033954.D

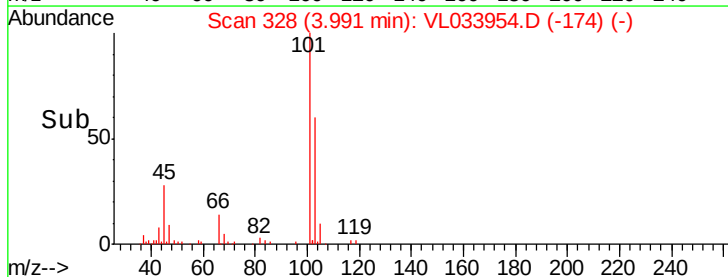
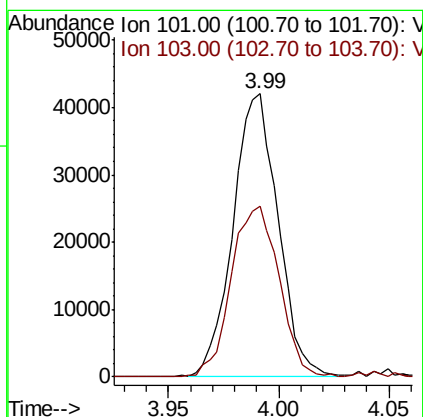
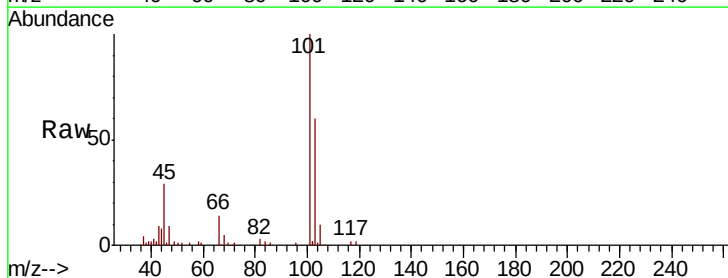
Acq: 25 Jun 2019 2:35

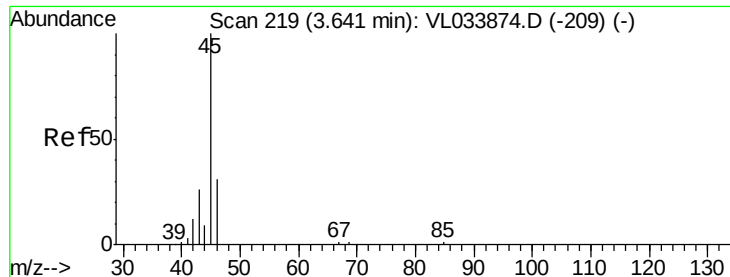
Tgt Ion: 101 Resp: 59881

Ion Ratio Lower Upper

101 100

103 60.1 53.6 80.4





#13

Ethanol

Concen: 49.894 ppbv

RT: 3.64 min Scan# 219

Delta R.T. -0.00 min

Lab File: VL033954.D

Acq: 25 Jun 2019 2:35

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENT

Tot Ion: 45 Resp: 687037

Ion Ratio Lower Upper

45 100

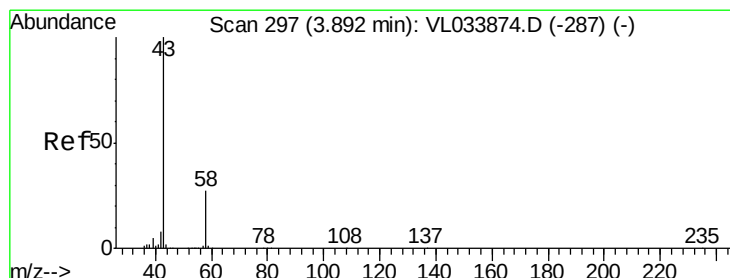
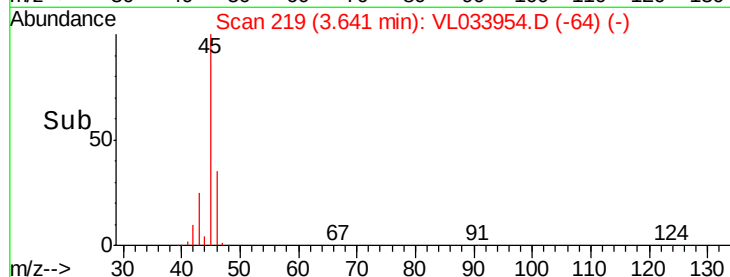
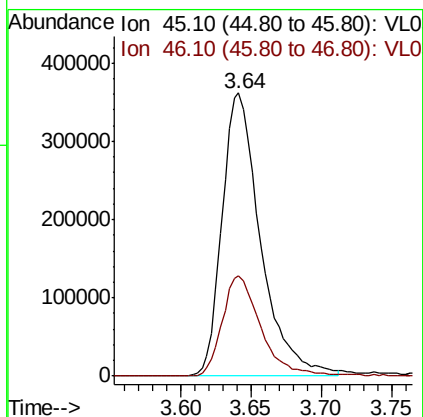
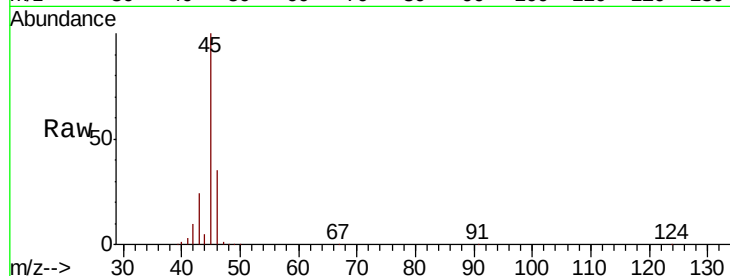
46 36.4 15.3 61.1

Manual Integrations

APPROVED

MMDadoda

6/26/2019 8:15:53 AM



#15

Acetone

Concen: 7.105 ppbv

RT: 3.89 min Scan# 295

Delta R.T. -0.01 min

Lab File: VL033954.D

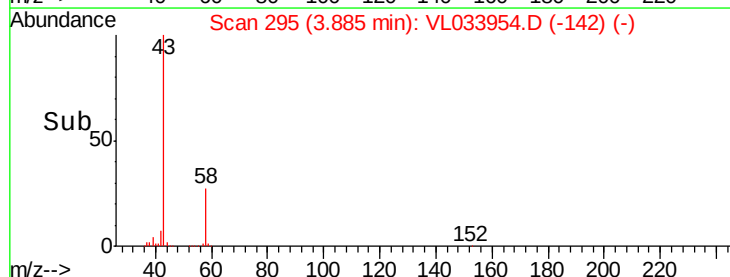
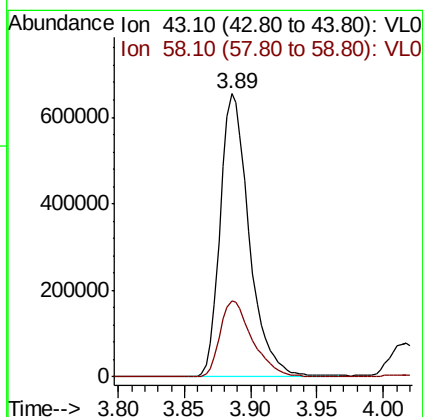
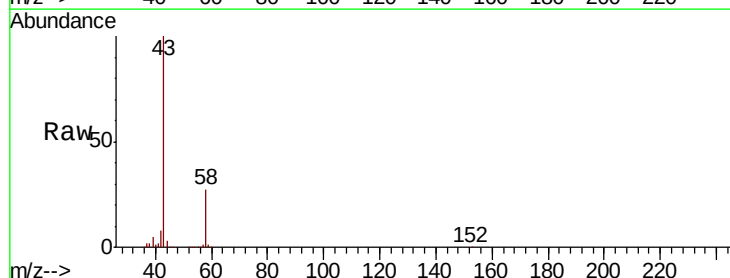
Acq: 25 Jun 2019 2:35

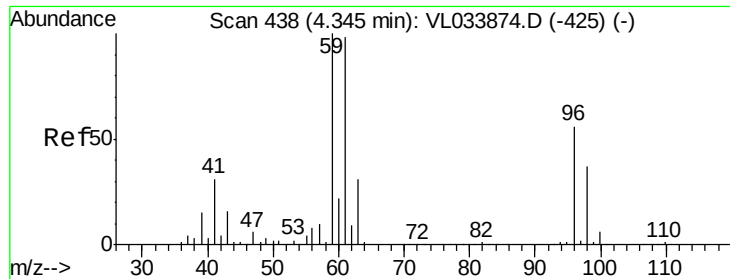
Tgt Ion: 43 Resp: 995607

Ion Ratio Lower Upper

43 100

58 30.1 21.3 31.9





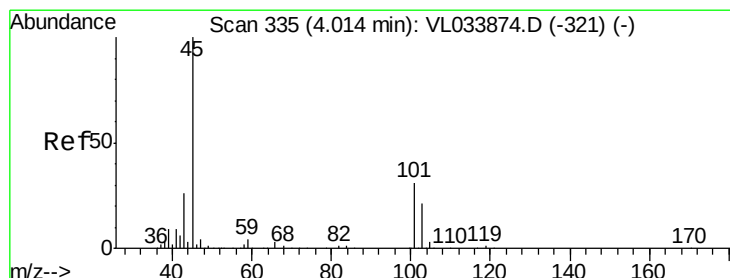
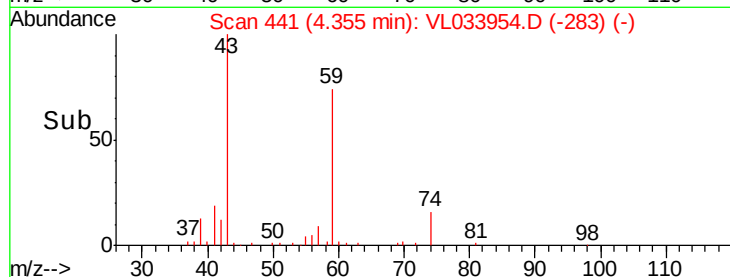
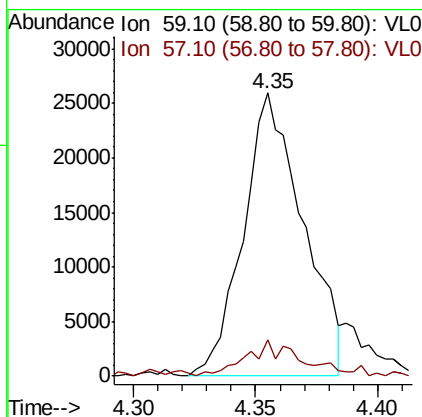
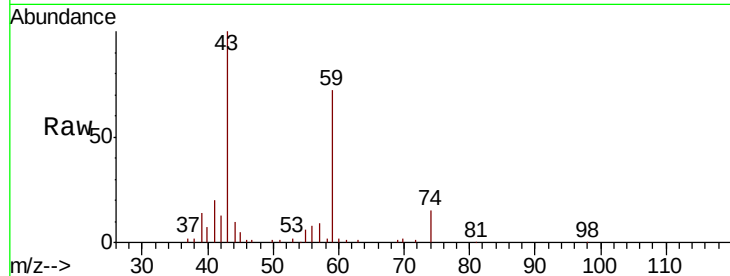
#17
 tert-Butyl alcohol
 Concen: 0.402 ppbv
 RT: 4.35 min Scan# 441
 Delta R.T. 0.01 min
 Lab File: VL033954.D
 Acq: 25 Jun 2019 2:35

Instrument :
 MSVOA_L
 ClientSampled :
 EFFLUENT

Tot Ion: 59 Resp: 43987
 Ion Ratio Lower Upper
 59 100
 57 13.4 8.4 12.6#

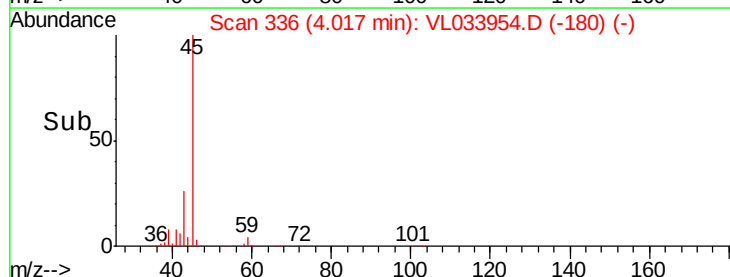
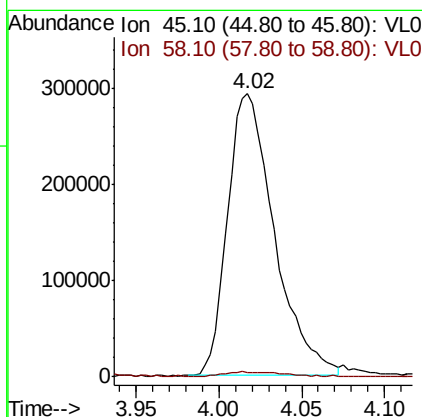
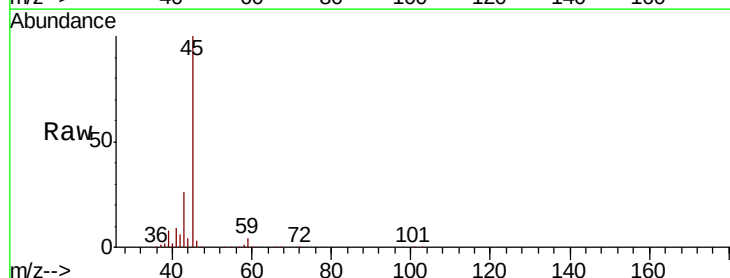
Manual Integrations
 APPROVED

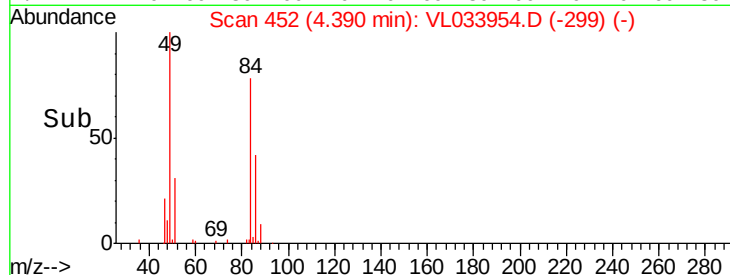
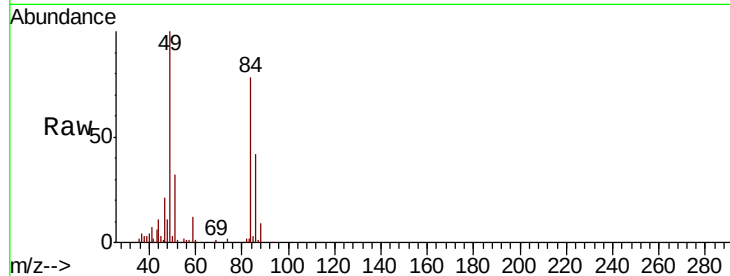
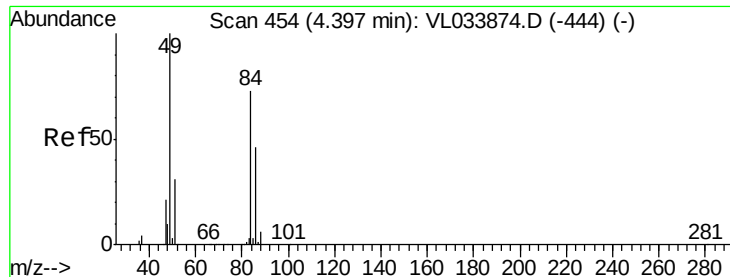
MMDadoda
 6/26/2019 8:15:53 AM



#19
 Isopropyl Alcohol
 Concen: 7.160 ppbv
 RT: 4.02 min Scan# 336
 Delta R.T. 0.00 min
 Lab File: VL033954.D
 Acq: 25 Jun 2019 2:35

Tgt Ion: 45 Resp: 573121
 Ion Ratio Lower Upper
 45 100
 58 2.4 1.8 2.6





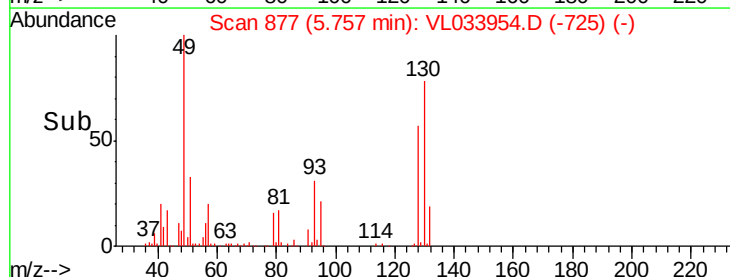
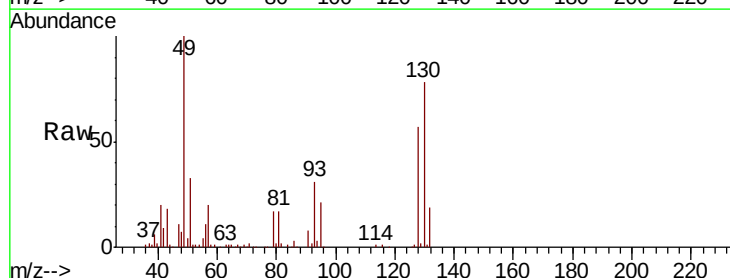
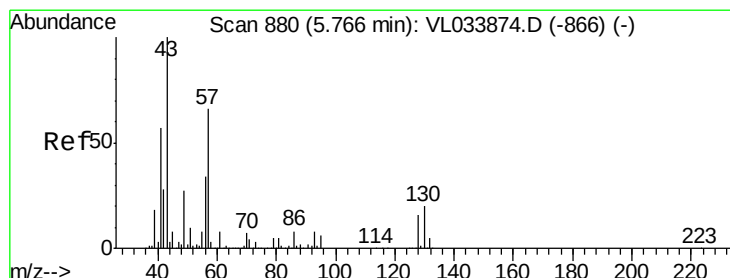
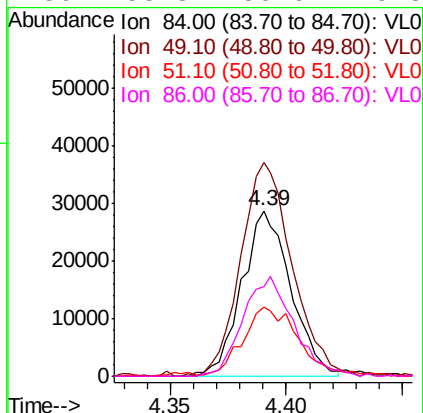
#20
Methylene Chloride
Concen: 0.769 ppbv
RT: 4.39 min Scan# 452
Delta R.T. -0.01 min
Lab File: VL033954.D
Acq: 25 Jun 2019 2:35

Tot Ion	Ratio	Lower	Upper
84	100		
49	127.1	110.0	165.0
51	39.4	34.6	51.8
86	53.8	50.6	75.8

Instrument :
MSVOA_L
ClientSampleId :
EFFLUENT

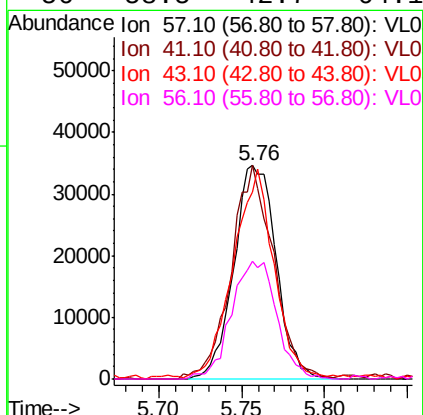
Manual Integrations
APPROVED

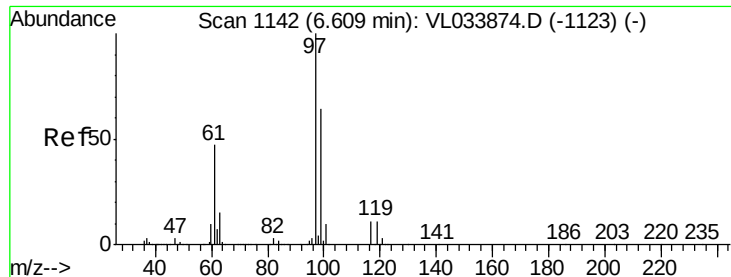
MMDadoda
6/26/2019 8:15:53 AM



#26
Hexane
Concen: 0.633 ppbv
RT: 5.76 min Scan# 877
Delta R.T. -0.01 min
Lab File: VL033954.D
Acq: 25 Jun 2019 2:35

Tgt Ion	Ratio	Lower	Upper
57	100		
41	102.2	71.4	107.2
43	98.0	183.7	275.5
56	58.5	42.7	64.1





#32

1,1,1-Trichloroethane

Concen: 0.646 ppbv

RT: 6.60 min Scan# 1138

Delta R.T. -0.01 min

Lab File: VL033954.D

Acq: 25 Jun 2019 2:35

Instrument :

MSVOA_L

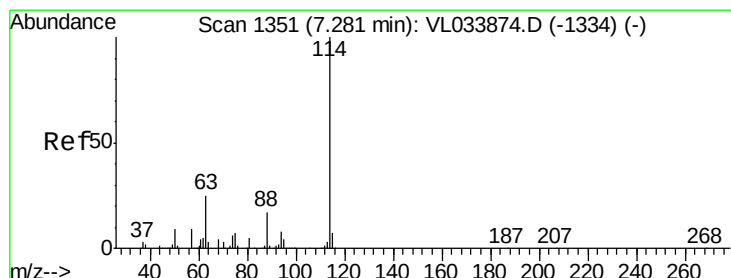
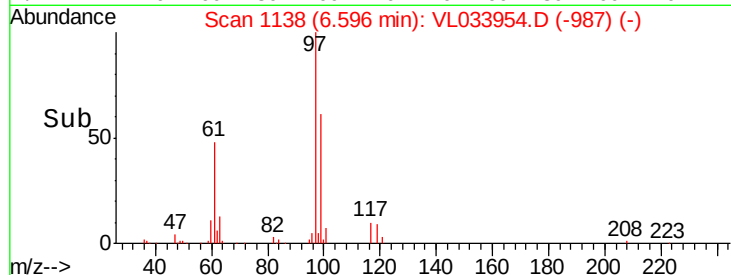
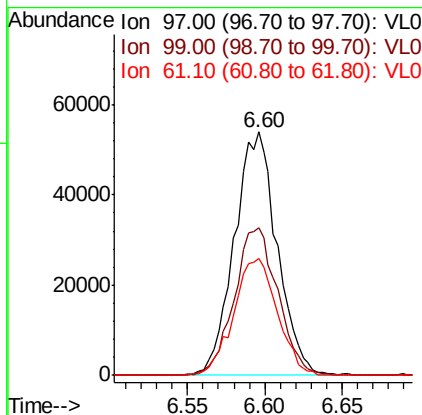
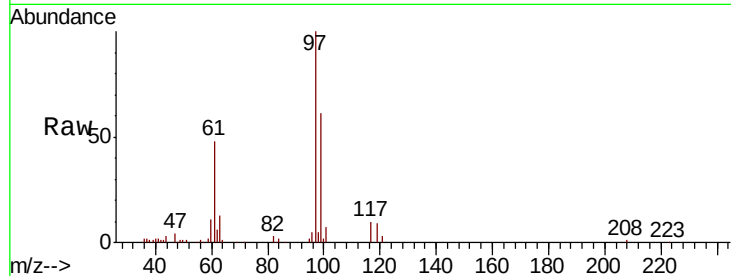
ClientSampled :

EFFLUENT

Tot Ion:	97	Resp:	103707
Ion Ratio	Lower	Upper	
97	100		
99	61.7	51.7	77.5
61	49.1	37.7	56.5

Manual Integrations
APPROVED

MMDadoda
6/26/2019 8:15:53 AM



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

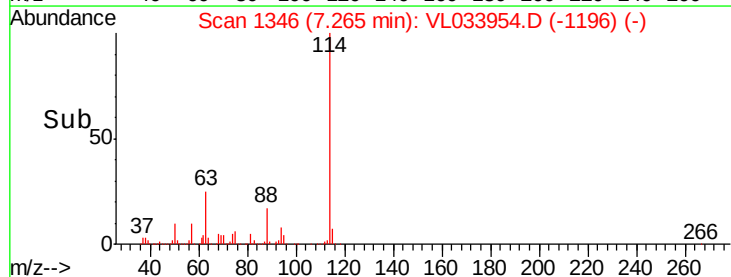
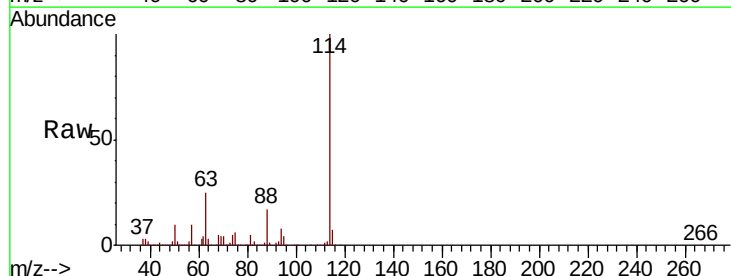
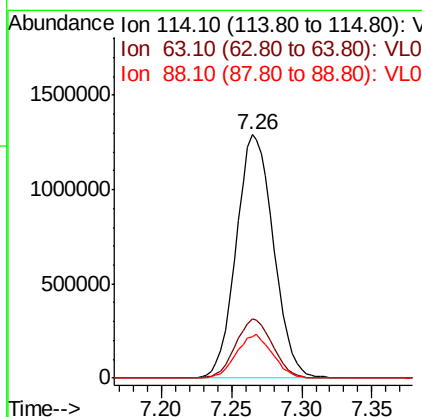
RT: 7.26 min Scan# 1346

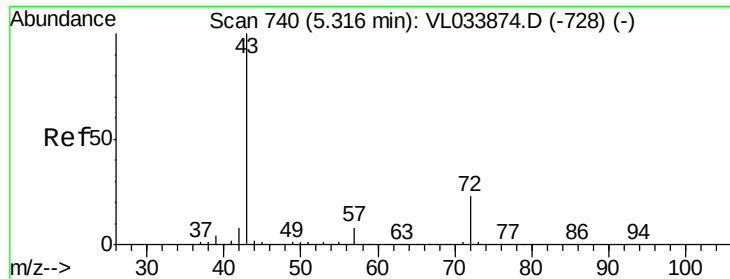
Delta R.T. -0.02 min

Lab File: VL033954.D

Acq: 25 Jun 2019 2:35

Tgt Ion:	114	Resp:	2393592
Ion Ratio	Lower	Upper	
114	100		
63	24.2	21.1	31.7
88	17.4	14.2	21.4





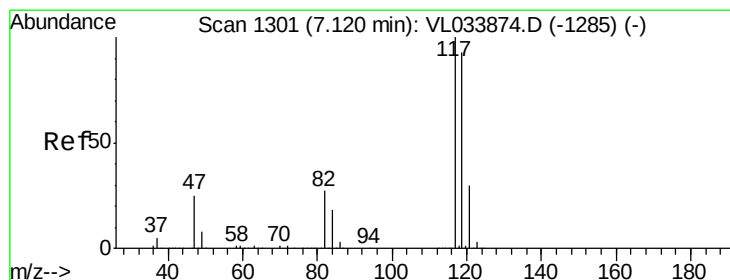
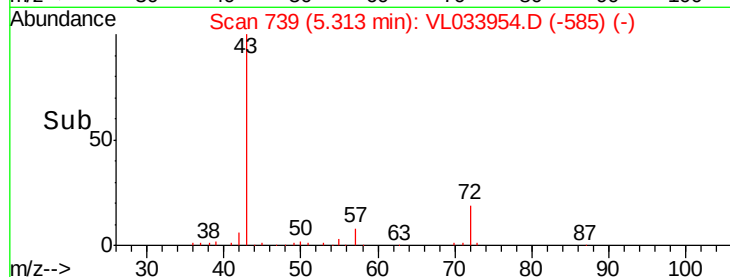
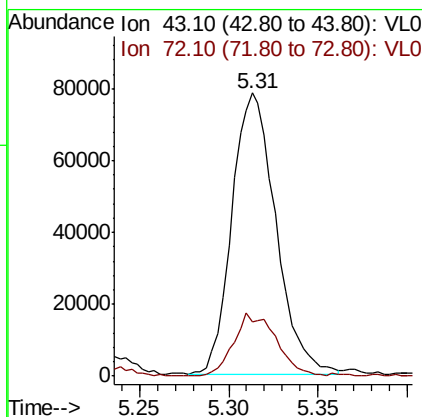
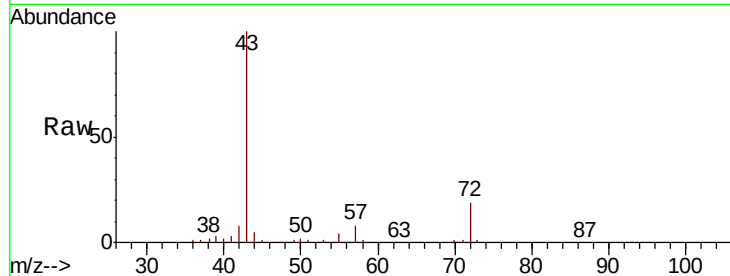
#34
2-Butanone
Concen: 0.988 ppbv
RT: 5.31 min Scan# 739
Delta R.T. -0.00 min
Lab File: VL033954.D
Acq: 25 Jun 2019 2:35

Instrument :
MSVOA_L
ClientSampleId :
EFFLUENT

Tot Ion	43	Resp	133354
Ion Ratio	Lower	Upper	
43	100		
72	22.0	17.9	26.9

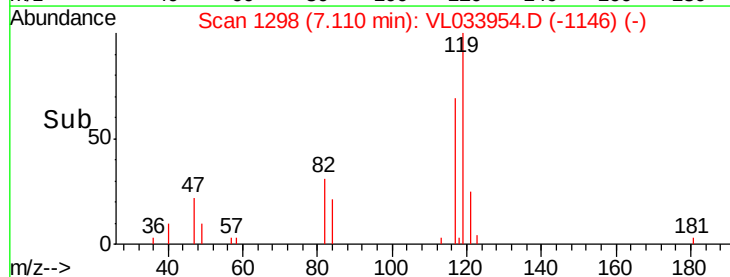
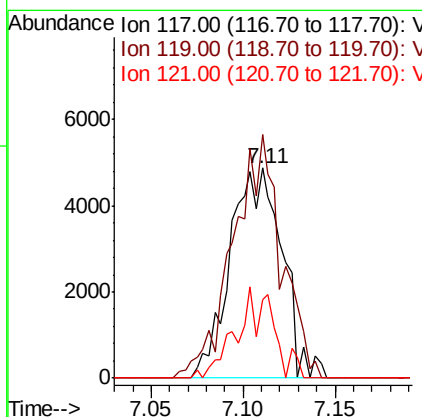
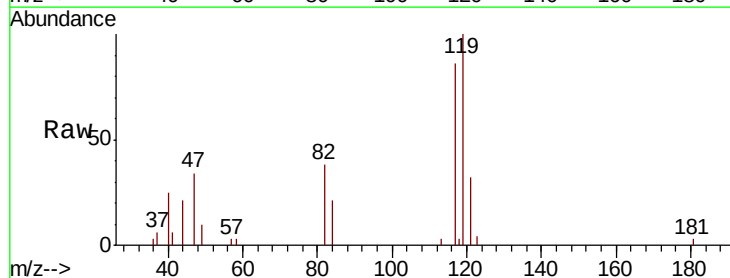
Manual Integrations
APPROVED

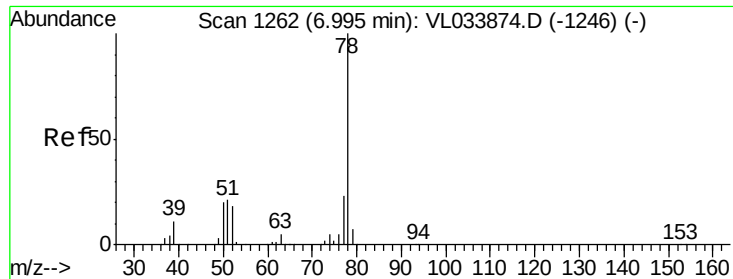
MMDadoda
6/26/2019 8:15:53 AM



#35
Carbon Tetrachloride
Concen: 0.052 ppbv m
RT: 7.11 min Scan# 1298
Delta R.T. -0.01 min
Lab File: VL033954.D
Acq: 25 Jun 2019 2:35

Tgt Ion	117	Resp	9570
Ion Ratio	Lower	Upper	
117	100		
119	115.9	74.6	111.8#
121	37.1	24.0	36.0#





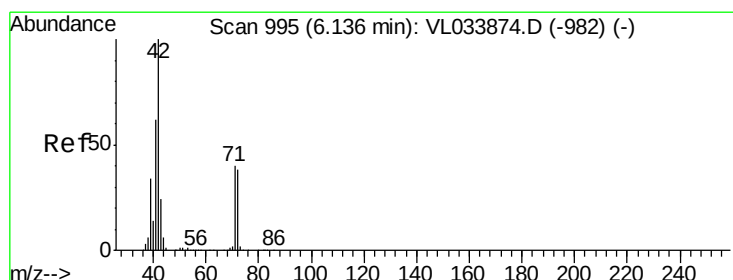
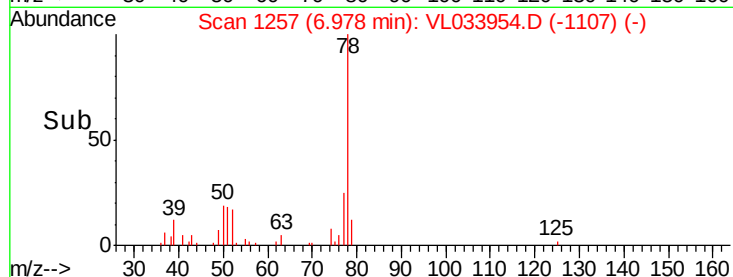
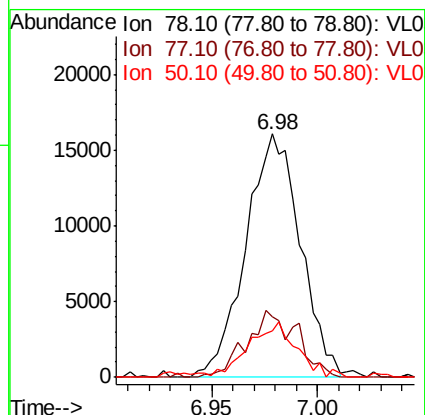
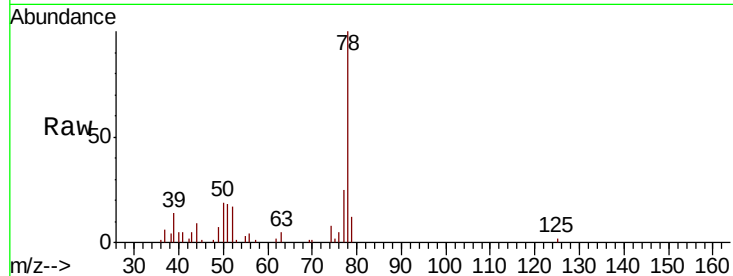
#36
Benzene
Concen: 0.158 ppbv
RT: 6.98 min Scan# 1257
Delta R.T. -0.02 min
Lab File: VL033954.D
Acq: 25 Jun 2019 2:35

Instrument :
MSVOA_L
ClientSampleId :
EFFLUENT

Tot Ion	Ratio	Lower	Upper
78	100		
77	25.0	18.2	27.2
50	18.2	15.9	23.9

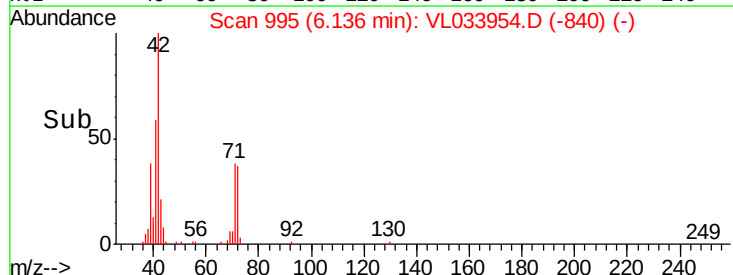
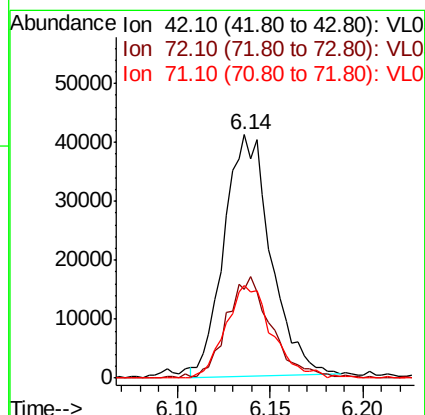
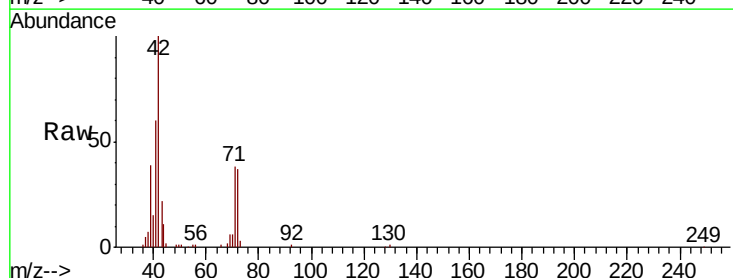
Manual Integrations
APPROVED

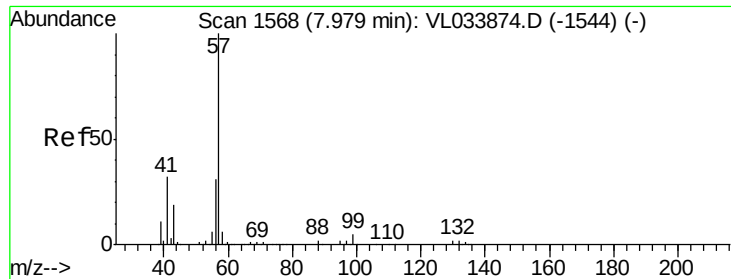
MMDadoda
6/26/2019 8:15:53 AM



#41
Tetrahydrofuran
Concen: 1.048 ppbv
RT: 6.14 min Scan# 995
Delta R.T. -0.00 min
Lab File: VL033954.D
Acq: 25 Jun 2019 2:35

Tgt Ion	Ratio	Lower	Upper
42	100		
72	40.9	32.2	48.4
71	38.2	31.7	47.5





#44

2,2,4-Trimethylpentane

Concen: 0.160 ppbv

RT: 7.97 min Scan# 1565

Delta R.T. -0.01 min

Lab File: VL033954.D

Acq: 25 Jun 2019 2:35

Instrument :

MSVOA_L

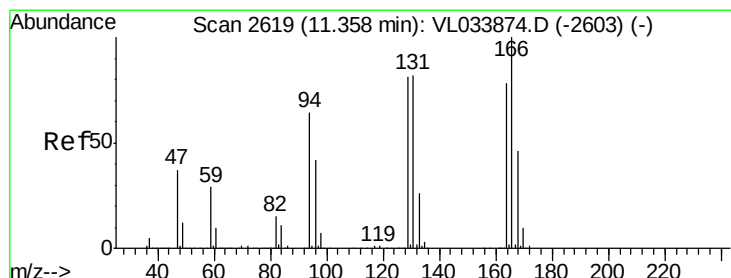
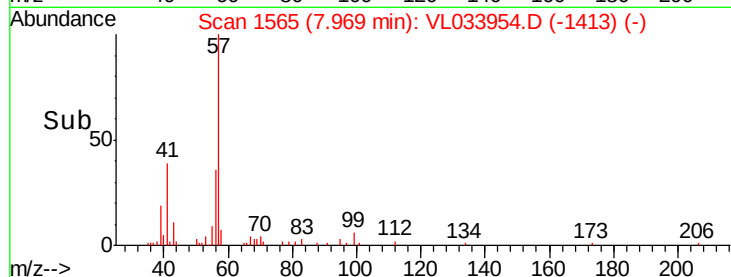
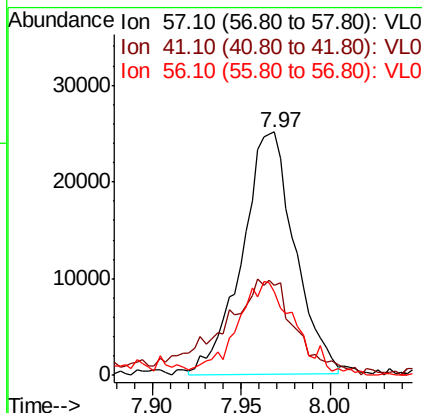
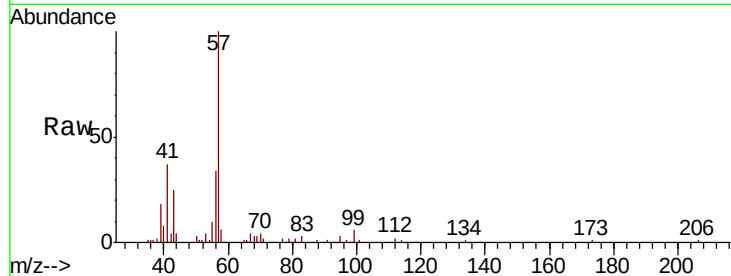
ClientSampleId :

EFFLUENT

Tot Ion:	57	Resp:	52046
Ion Ratio	Lower	Upper	
57	100		
41	65.2	26.1	39.1#
56	42.7	24.6	36.8#

Manual Integrations
APPROVED

MMDadoda
6/26/2019 8:15:53 AM



#52

Tetrachloroethene

Concen: 0.099 ppbv m

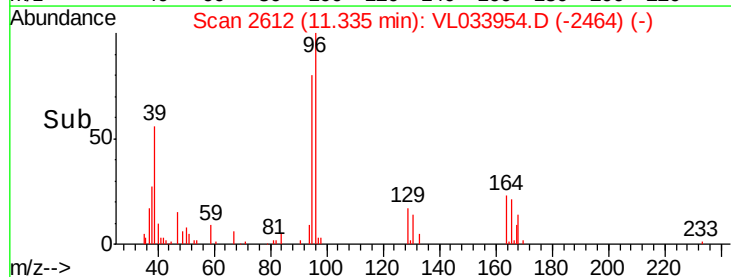
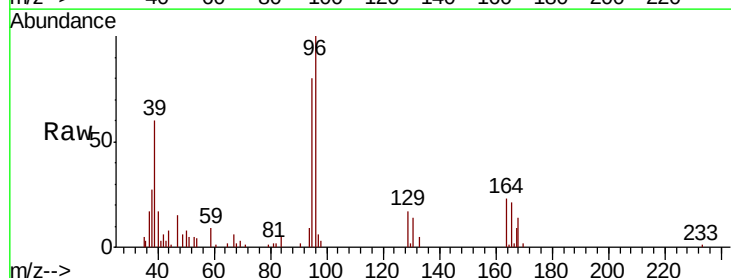
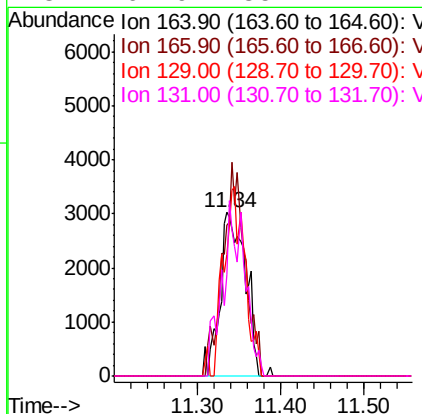
RT: 11.34 min Scan# 2612

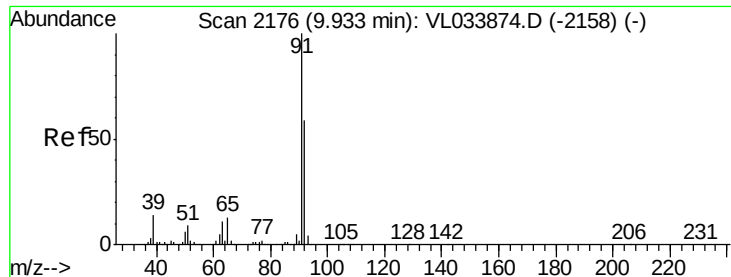
Delta R.T. -0.02 min

Lab File: VL033954.D

Acq: 25 Jun 2019 2:35

Tgt Ion:	164	Resp:	6358
Ion Ratio	Lower	Upper	
164	100		
166	92.1	103.1	154.7#
129	74.7	83.9	125.9#
131	61.9	85.1	127.7#





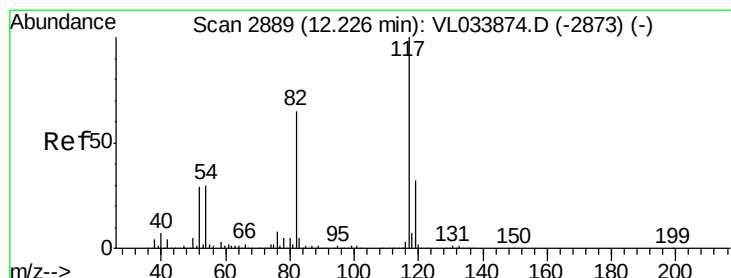
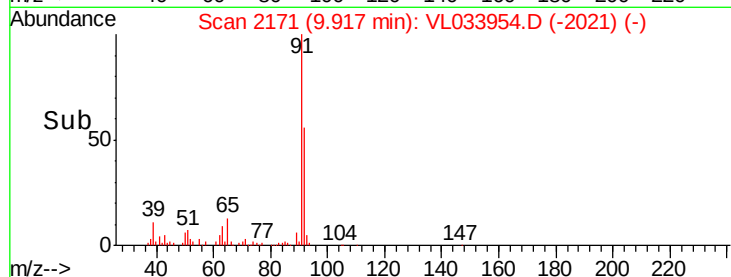
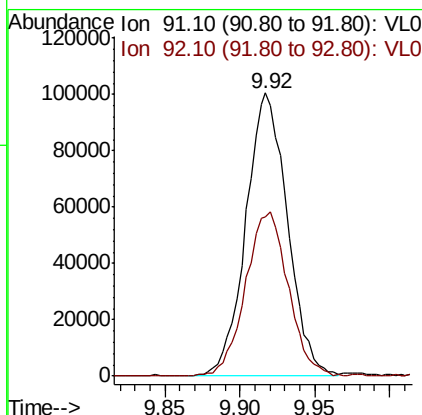
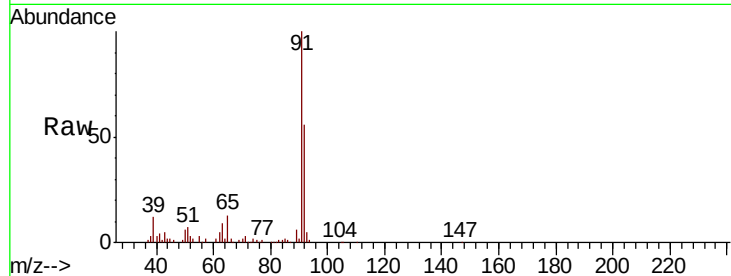
#53
Toluene
Concen: 0.962 ppbv
RT: 9.92 min Scan# 2171
Delta R.T. -0.02 min
Lab File: VL033954.D
Acq: 25 Jun 2019 2:35

Instrument :
MSVOA_L
ClientSampled :
EFFLUENT

Tot Ion	Ratio	Resp	Lower	Upper
91	100	194586		
92	59.8	47.0	70.6	

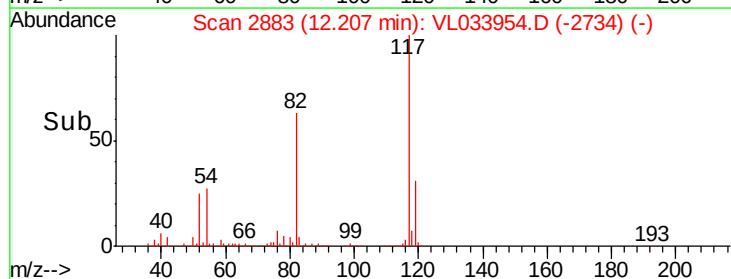
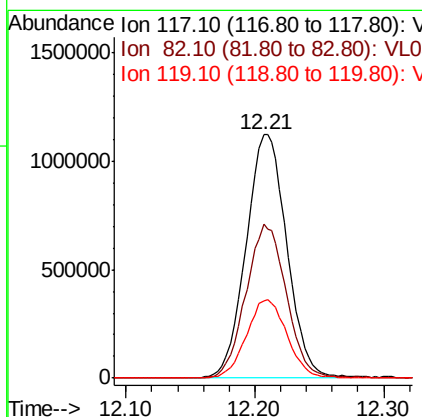
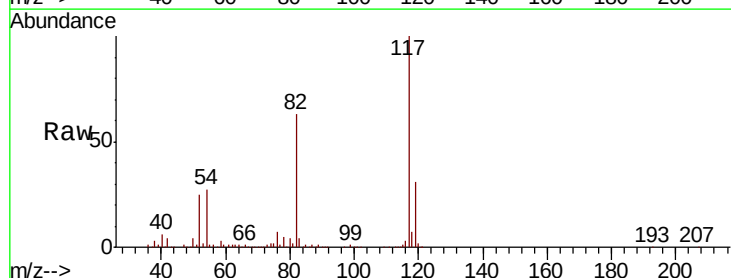
Manual Integrations
APPROVED

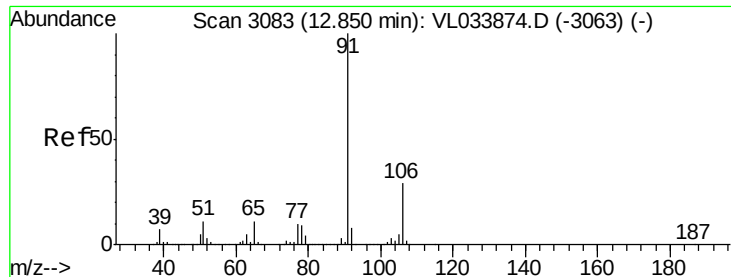
MMDadoda
6/26/2019 8:15:53 AM



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.21 min Scan# 2883
Delta R.T. -0.02 min
Lab File: VL033954.D
Acq: 25 Jun 2019 2:35

Tgt Ion	Ratio	Resp	Lower	Upper
117	100	2467381		
82	63.3	50.2	75.2	
119	32.5	24.8	37.2	





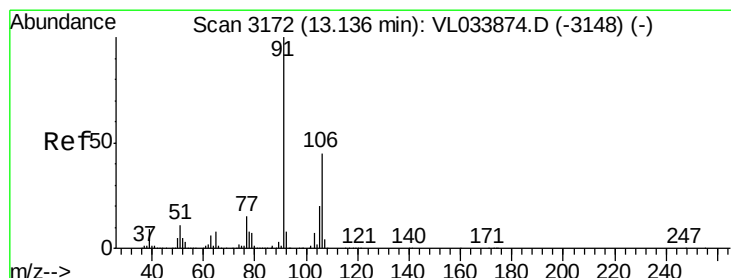
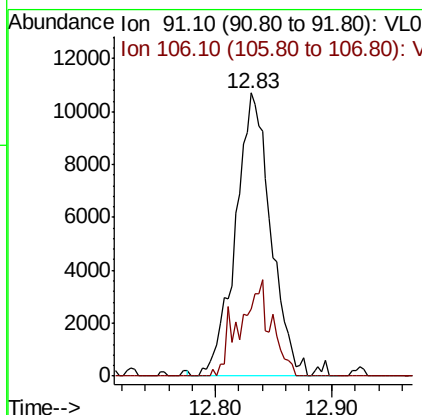
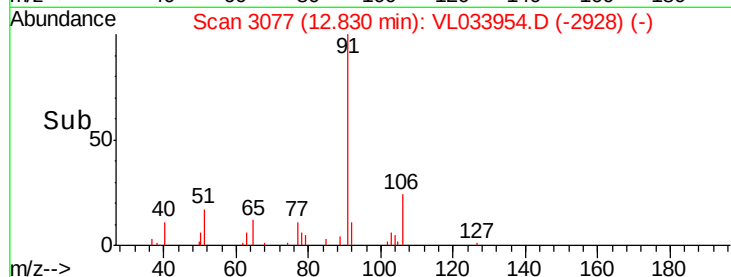
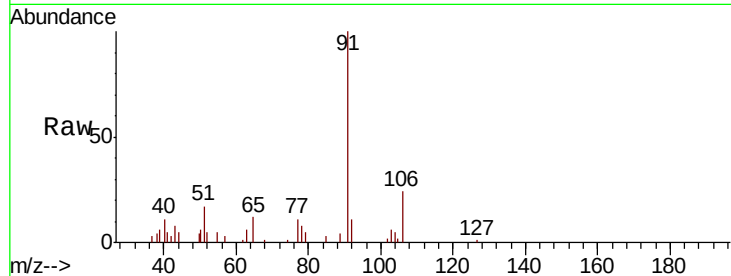
#58
Ethyl Benzene
Concen: 0.082 ppbv m
RT: 12.83 min Scan# 3077
Delta R.T. -0.02 min
Lab File: VL033954.D
Acq: 25 Jun 2019 2:35

Instrument :
MSVOA_L
ClientSampled :
EFFLUENT

Tot Ion: 91 Resp: 22748
Ion Ratio Lower Upper
91 100
106 23.8 23.0 34.6

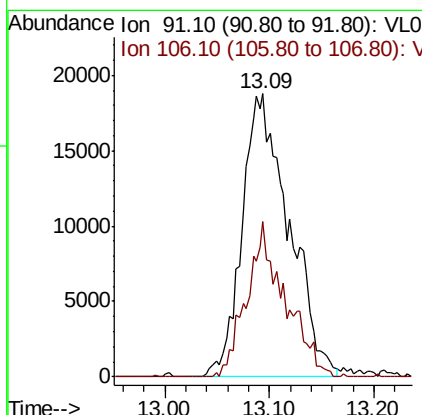
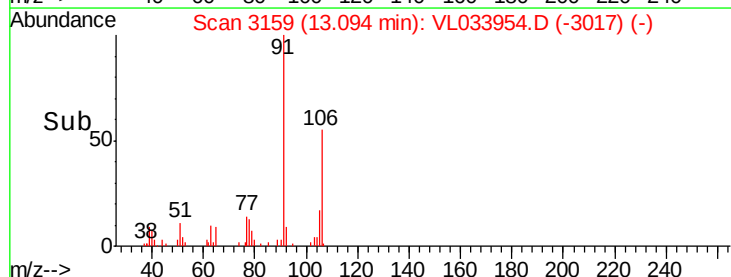
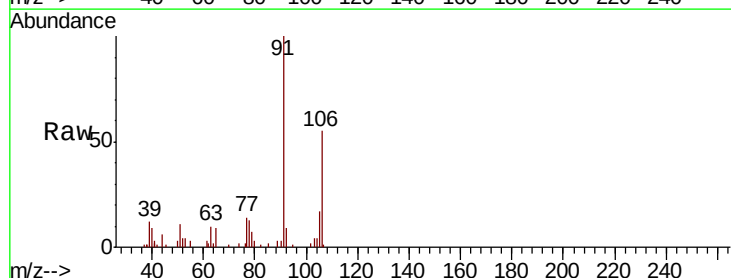
Manual Integrations
APPROVED

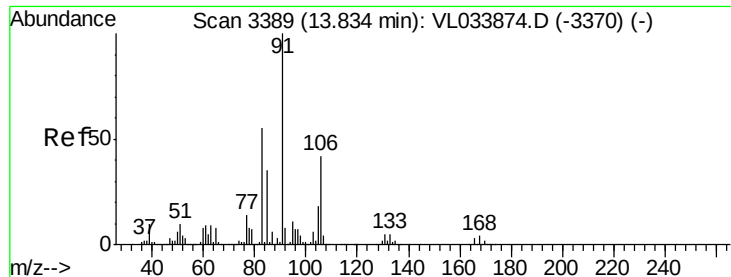
MMDadoda
6/26/2019 8:15:53 AM



#59
m/p-Xylene
Concen: 0.232 ppbv m
RT: 13.09 min Scan# 3159
Delta R.T. -0.04 min
Lab File: VL033954.D
Acq: 25 Jun 2019 2:35

Tgt Ion: 91 Resp: 58688
Ion Ratio Lower Upper
91 100
106 0.0 35.8 53.8#





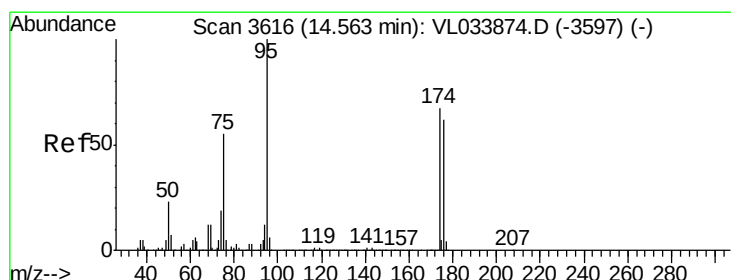
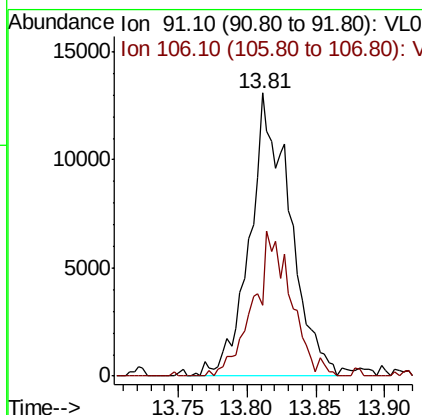
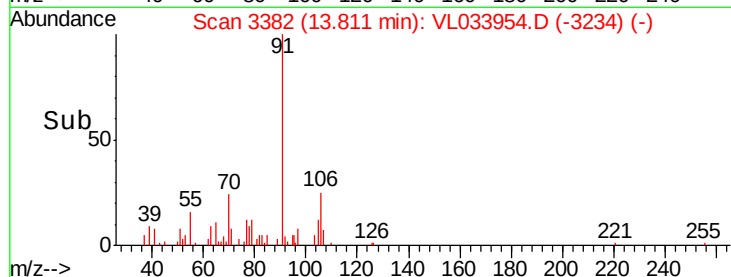
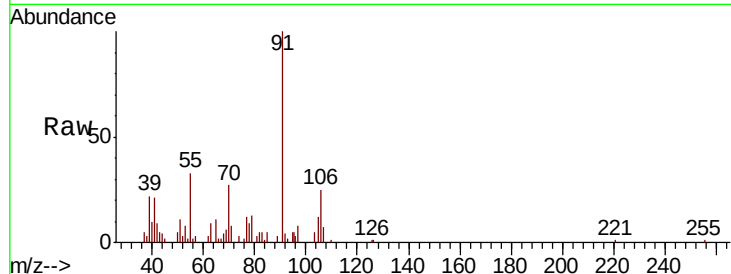
#60
o-Xylene
Concen: 0.102 ppbv m
RT: 13.81 min Scan# 3382
Delta R.T. -0.02 min
Lab File: VL033954.D
Acq: 25 Jun 2019 2:35

Instrument :
MSVOA_L
ClientSampled :
EFFLUENT

Tot Ion: 91 Resp: 26624
Ion Ratio Lower Upper
91 100
106 48.1 21.7 65.1

Manual Integrations
APPROVED

MMDadoda
6/26/2019 8:15:53 AM



#68
1-Bromo-4-Fluorobenzene
Concen: 9.521 ppbv
RT: 14.54 min Scan# 3610
Delta R.T. -0.02 min
Lab File: VL033954.D
Acq: 25 Jun 2019 2:35

Tgt Ion: 95 Resp: 1929671
Ion Ratio Lower Upper
95 100
174 69.7 54.0 81.0
175 5.0 3.8 5.8

