

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL102015\
 Data File : VL026224.D
 Acq On : 21 Oct 2015 2:58
 Operator : SY/MD
 Sample : G4086-02 60X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ERD45INFLUENT-101415

Manual Integrations
 APPROVED

MMDadoda
 10/22/2015 4:32:29 PM

Quant Time: Oct 21 16:55:59 2015
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL102015AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Oct 21 2015
 QLast Update : Wed Oct 21 01:20:55 2015
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	6.63	49	601345	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	8.32	114	1743766	10.00	ppbv	0.01
55) Chlorobenzene-d5	13.73	117	1918465	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	16.26	95	1557004	10.52	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.20%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
3) Chlorodifluoromethane	3.56	51	52157m	0.68	ppbv	
5) Vinyl Chloride	3.88	62	177506	4.11	ppbv	100
9) Propene	3.58	41	17784	0.50	ppbv	94
10) Heptane	9.35	43	31419	0.26	ppbv	95
13) Ethanol	4.33	45	71340	13.34	ppbv	98
15) Acetone	4.59	43	2391908	27.02	ppbv	99
17) tert-Butyl alcohol	5.17	59	20880m	0.35	ppbv	
18) 1,1-Dichloroethene	5.07	96	22982	0.61	ppbv	93
19) Isopropyl Alcohol	4.76	45	128349	3.71	ppbv #	27
22) trans-1,2-Dichloroethene	5.75	96	112302	2.31	ppbv	98
27) Carbon Disulfide	5.37	76	39194	0.37	ppbv #	61
31) cis-1,2-Dichloroethene	6.50	61	4476121	59.45	ppbv	99
34) 2-Butanone	6.23	43	834404	8.47	ppbv	100
36) Benzene	8.02	78	29102	0.16	ppbv	97
38) Trichloroethene	9.09	130	17750826	206.01	ppbv	94
51) 2-Hexanone	11.63	43	16231	0.13	ppbv #	95
52) Tetrachloroethene	12.78	164	35683	0.35	ppbv	96
53) Toluene	11.23	91	102351	0.42	ppbv	99
59) m/p-Xylene	14.66	91	72344	0.30	ppbv	97
60) o-Xylene	15.46	91	29365	0.12	ppbv	98
73) 1,3,5-Trimethylbenzene	17.96	105	32682	0.12	ppbv	96
74) 1,2,4-Trimethylbenzene	18.80	105	84179	0.29	ppbv #	73

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

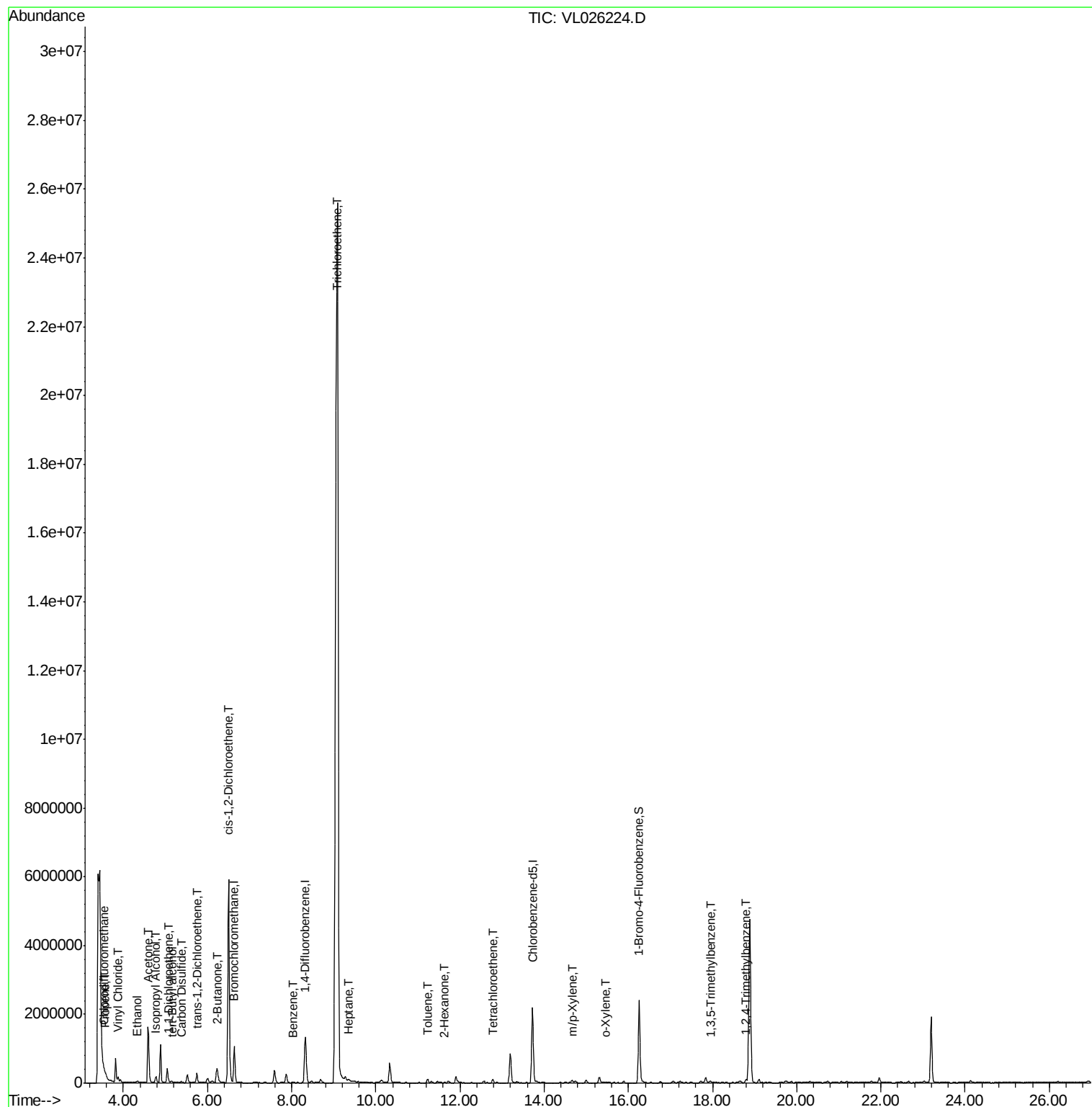
Data Path : W:\HPCHEM1\MSVOA L\DATA\VL102015\
Data File : VL026224.D
Acq On : 21 Oct 2015 2:58
Operator : SY/MD
Sample : G4086-02 60X
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

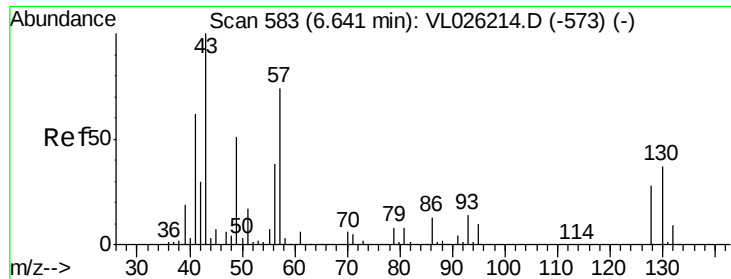
Instrument :
MSVOA_L
ClientSampleId :
ERD45INFLUENT-101415

Manual Integrations
APPROVED

MMDadoda
10/22/2015 4:32:29 PM

Quant Time: Oct 21 16:55:59 2015
Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL102015AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Oct
QLast Update : Wed Oct 21 01:20:55 2015
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 6.63 min Scan# 582

Delta R.T. -0.01 min

Lab File: VL026224.D

Acq: 21 Oct 2015 2:58

Instrument :

MSVOA_L

ClientSampleId :

ERD45INFLUENT-101415

Tot Ion: 49 Resp: 601345

Ion Ratio Lower Upper

49 100

128 55.1 28.2 84.7

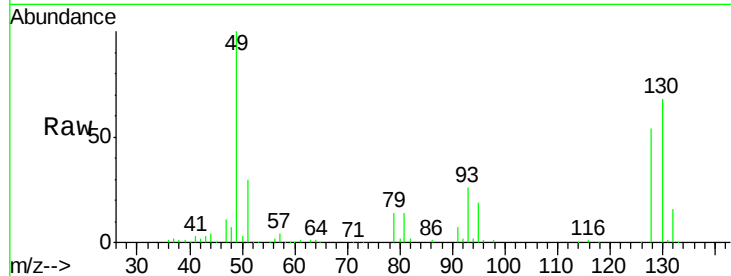
130 70.9 36.0 108.1

Manual Integrations

APPROVED

MMDadoda

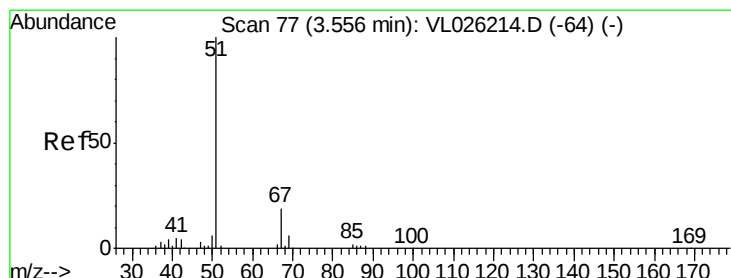
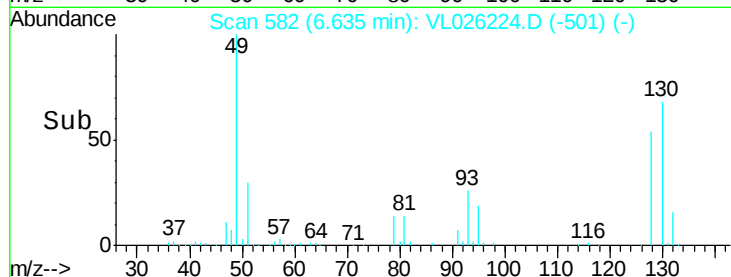
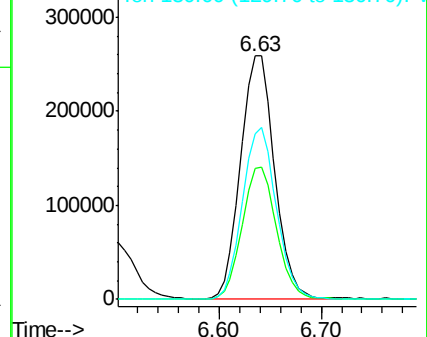
10/22/2015 4:32:29 PM



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



#3

Chlorodifluoromethane

Concen: 0.68 ppbv m

RT: 3.56 min Scan# 77

Delta R.T. 0.00 min

Lab File: VL026224.D

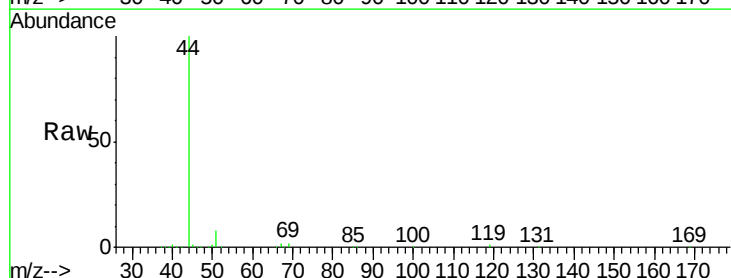
Acq: 21 Oct 2015 2:58

Tgt Ion: 51 Resp: 52157

Ion Ratio Lower Upper

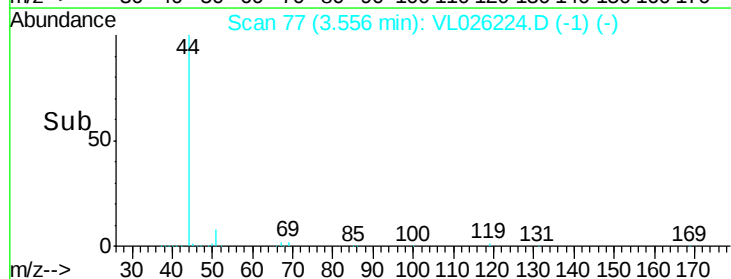
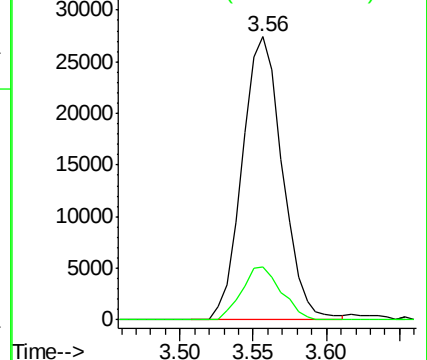
51 100

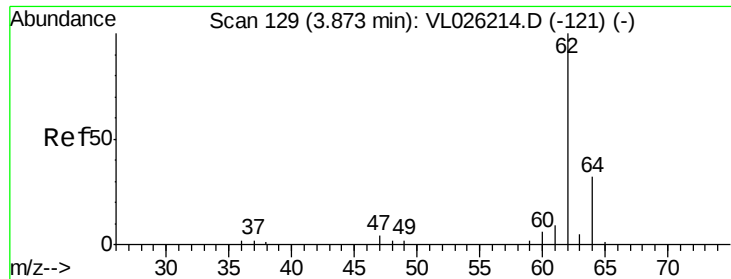
67 18.4 15.3 22.9



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#5

Vinyl Chloride

Concen: 4.11 ppbv

RT: 3.88 min Scan# 130

Delta R.T. 0.01 min

Lab File: VL026224.D

Acq: 21 Oct 2015 2:58

Instrument :

MSVOA_L

ClientSampleId :

ERD45INFLUENT-101415

Tot Ion: 62 Resp: 177506

Ion Ratio Lower Upper

62 100

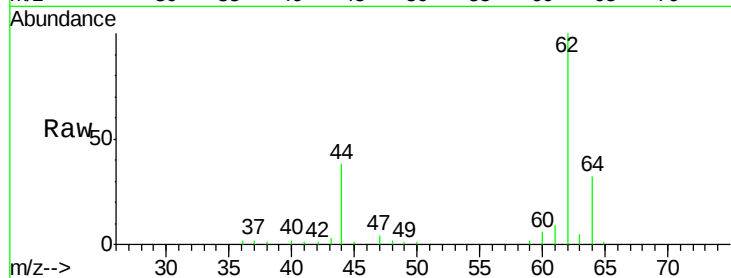
64 32.2 25.6 38.4

Manual Integrations

APPROVED

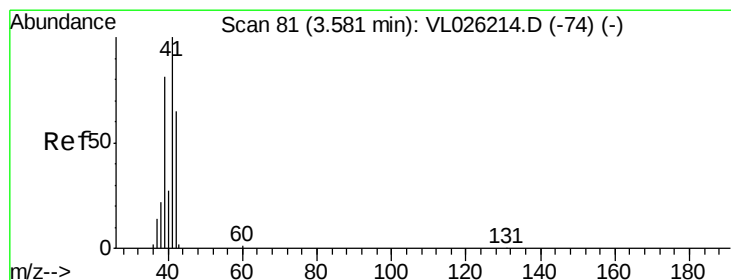
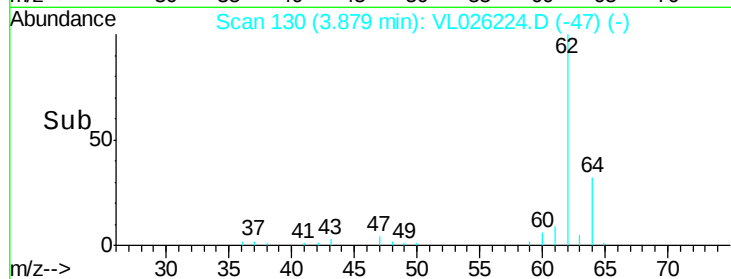
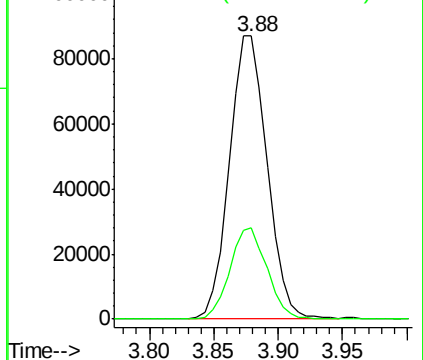
MMDadoda

10/22/2015 4:32:29 PM



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#9

Propene

Concen: 0.50 ppbv

RT: 3.58 min Scan# 81

Delta R.T. 0.00 min

Lab File: VL026224.D

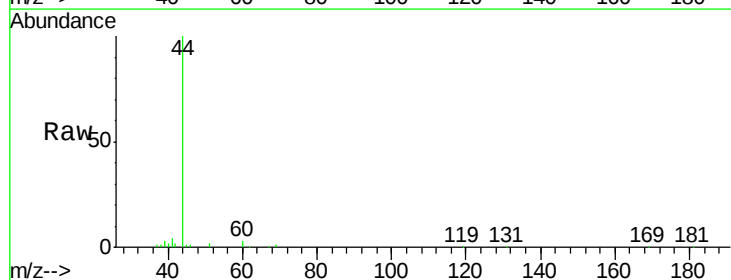
Acq: 21 Oct 2015 2:58

Tgt Ion: 41 Resp: 17784

Ion Ratio Lower Upper

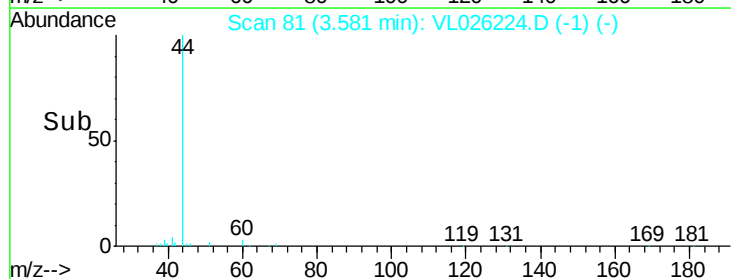
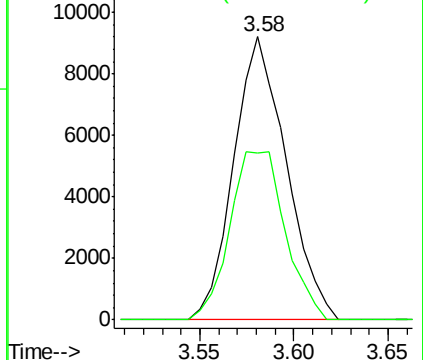
41 100

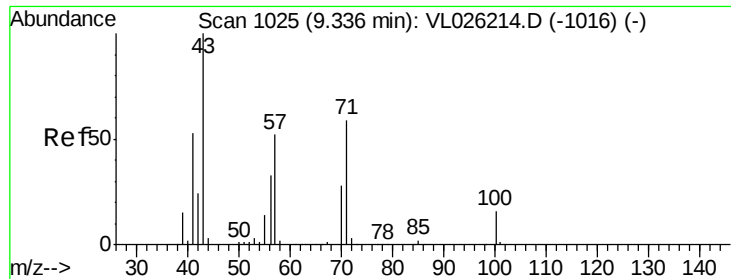
42 62.6 53.8 80.8



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





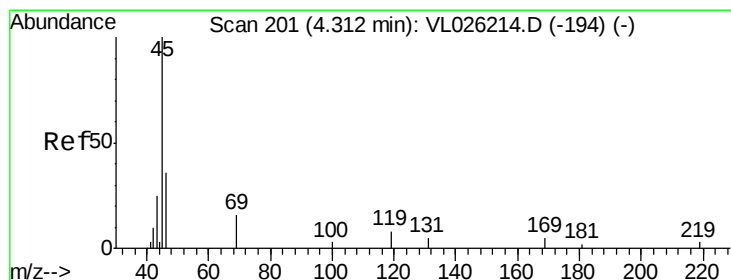
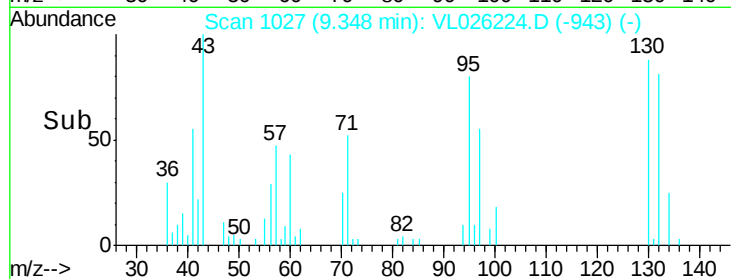
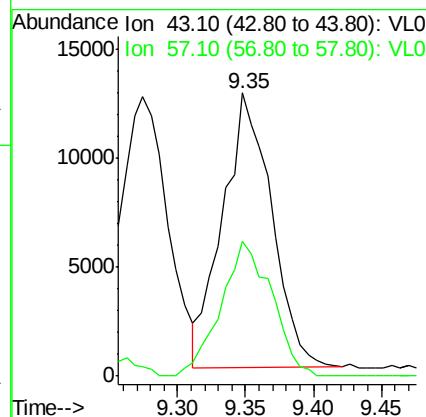
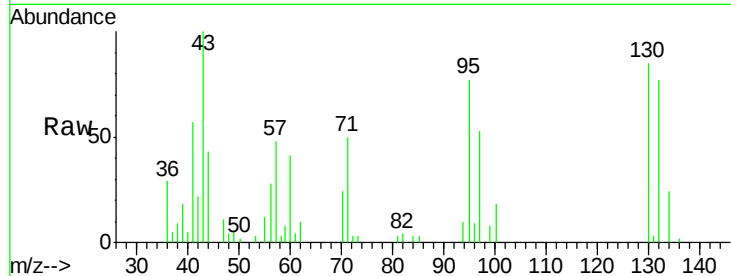
#10
Heptane
Concen: 0.26 ppbv
RT: 9.35 min Scan# 1027
Delta R.T. 0.01 min
Lab File: VL026224.D
Acq: 21 Oct 2015 2:58

Instrument :
MSVOA_L
ClientSampleId :
ERD45INFLUENT-101415

Tot Ion: 43 Resp: 31419
Ion Ratio Lower Upper
43 100
57 51.2 43.7 65.5

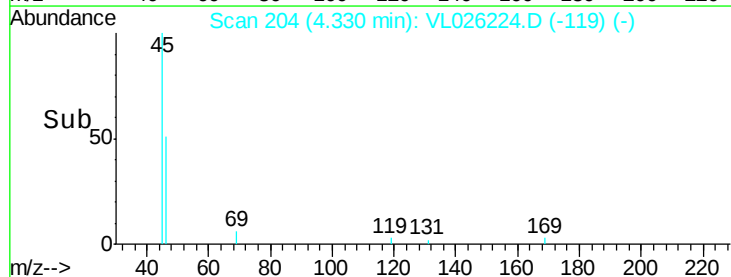
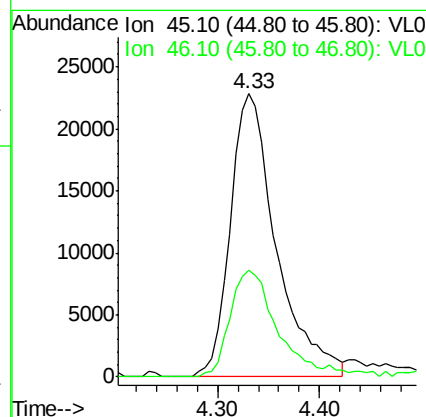
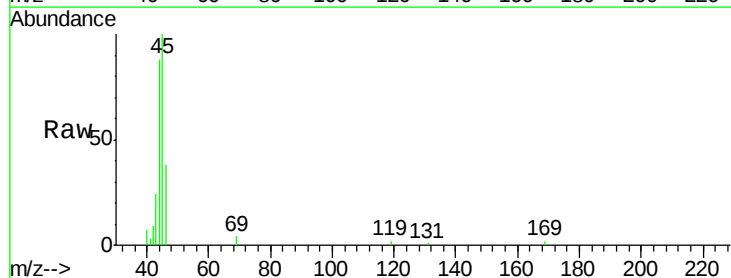
Manual Integrations
APPROVED

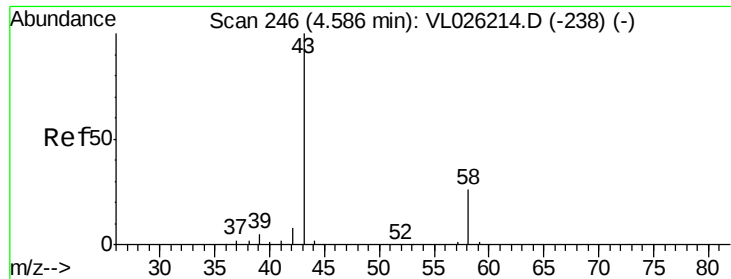
MMDadoda
10/22/2015 4:32:29 PM



#13
Ethanol
Concen: 13.34 ppbv
RT: 4.33 min Scan# 204
Delta R.T. 0.02 min
Lab File: VL026224.D
Acq: 21 Oct 2015 2:58

Tgt Ion: 45 Resp: 71340
Ion Ratio Lower Upper
45 100
46 40.9 15.8 63.0





#15

Acetone

Concen: 27.02 ppbv

RT: 4.59 min Scan# 247

Delta R.T. 0.01 min

Lab File: VL026224.D

Acq: 21 Oct 2015 2:58

Instrument :

MSVOA_L

ClientSampleId :

ERD45INFLUENT-101415

Tot Ion: 43 Resp: 2391908

Ion Ratio Lower Upper

43 100

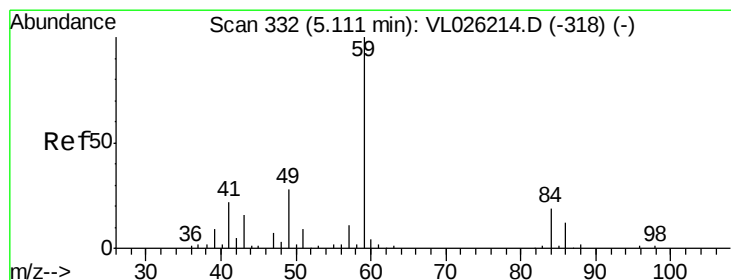
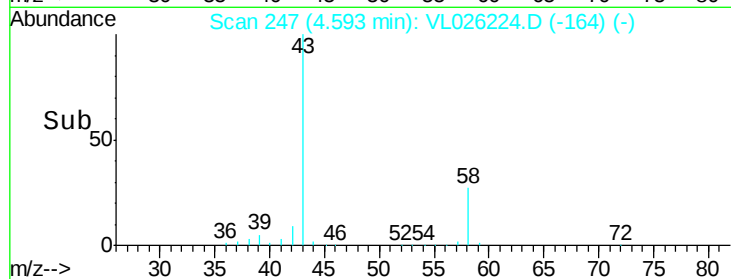
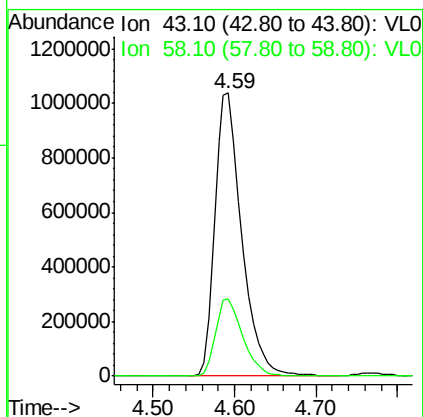
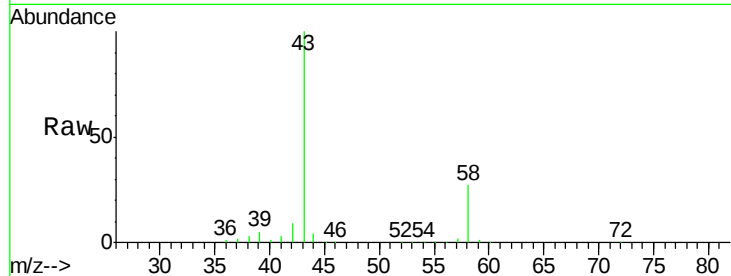
58 27.9 21.8 32.6

Manual Integrations

APPROVED

MMDadoda

10/22/2015 4:32:29 PM



#17

tert-Butyl alcohol

Concen: 0.35 ppbv m

RT: 5.17 min Scan# 341

Delta R.T. 0.05 min

Lab File: VL026224.D

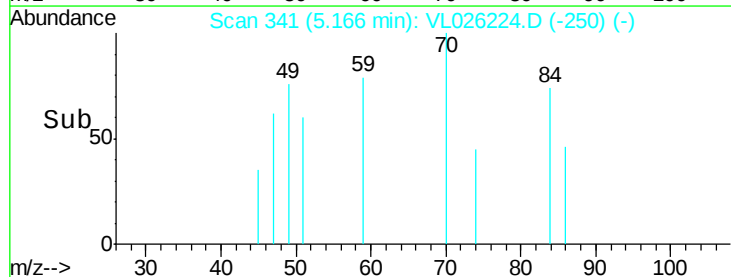
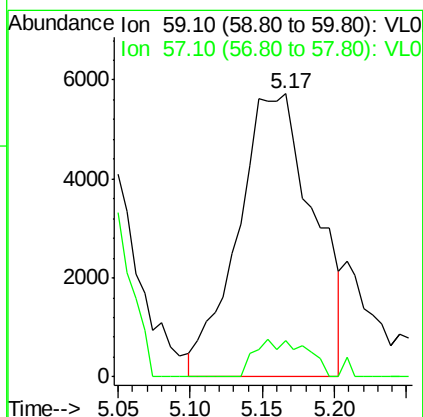
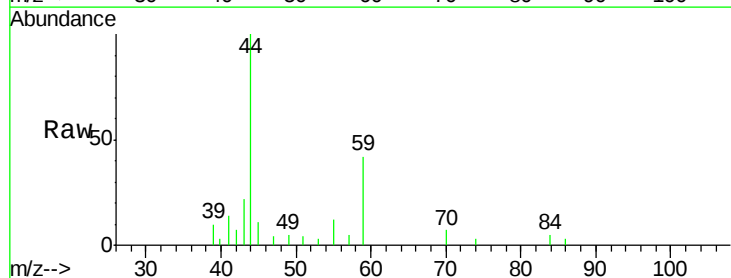
Acq: 21 Oct 2015 2:58

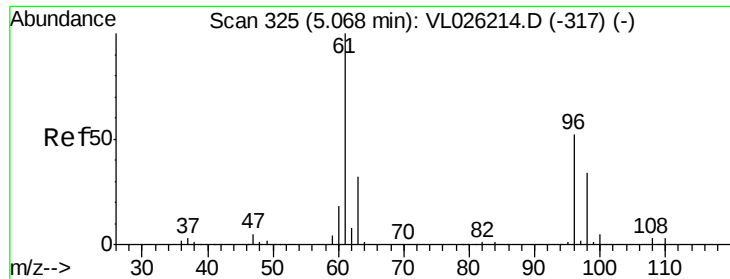
Tgt Ion: 59 Resp: 20880

Ion Ratio Lower Upper

59 100

57 0.0 8.5 12.7#





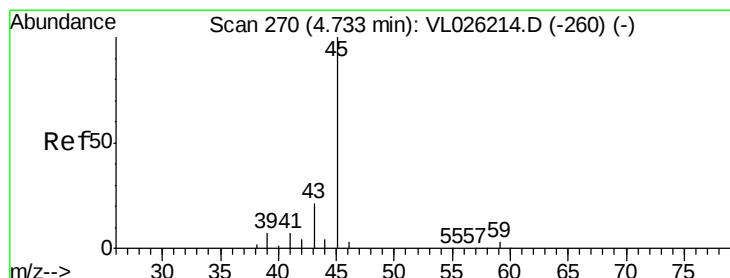
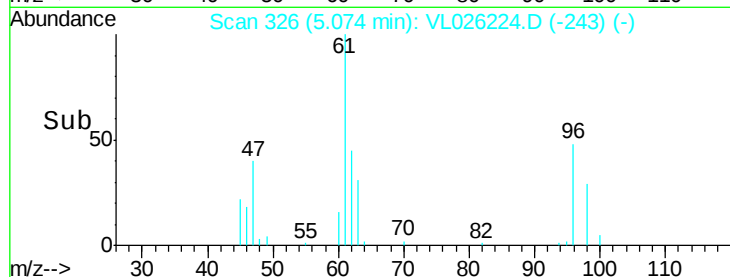
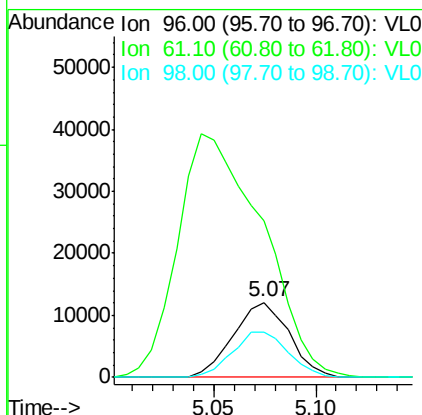
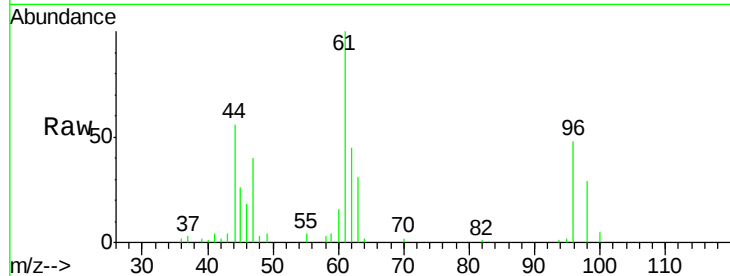
#18
 1,1-Dichloroethene
 Concen: 0.61 ppbv
 RT: 5.07 min Scan# 326
 Delta R.T. 0.01 min
 Lab File: VL026224.D
 Acq: 21 Oct 2015 2:58

Instrument :
 MSVOA_L
 ClientSampleId :
 ERD45INFLUENT-101415

Tot Ion	Ion	Ratio	Lower	Upper
96	100			
61	203.5	153.7	230.5	
98	59.9	51.6	77.4	

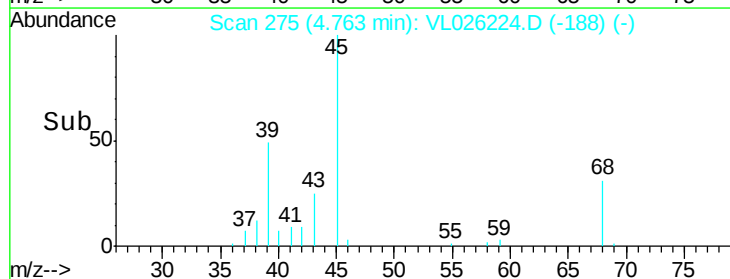
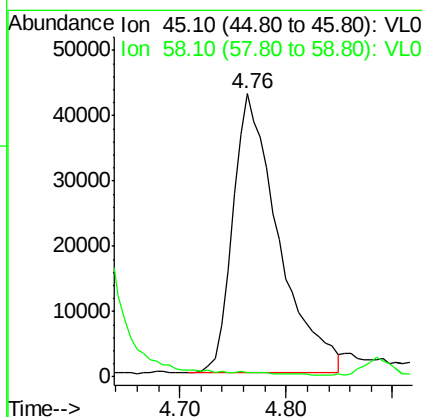
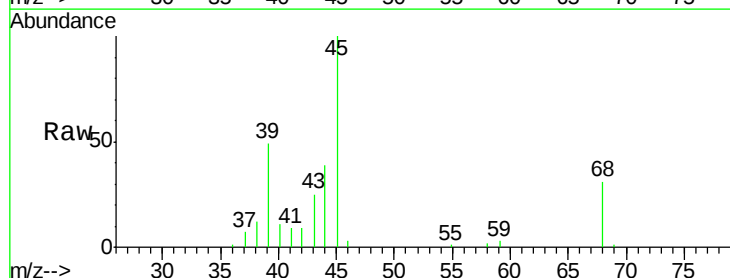
Manual Integrations
 APPROVED

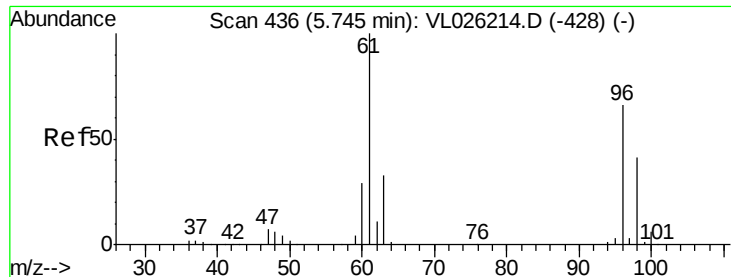
MMDadoda
 10/22/2015 4:32:29 PM



#19
 Isopropyl Alcohol
 Concen: 3.71 ppbv
 RT: 4.76 min Scan# 275
 Delta R.T. 0.03 min
 Lab File: VL026224.D
 Acq: 21 Oct 2015 2:58

Tgt Ion	Ion	Ratio	Lower	Upper
45	100			
58	0.0	40.3	60.5	





#22

trans-1,2-Dichloroethene

Concen: 2.31 ppbv

RT: 5.75 min Scan# 437

Delta R.T. 0.01 min

Lab File: VL026224.D

Acq: 21 Oct 2015 2:58

Instrument :

MSVOA_L

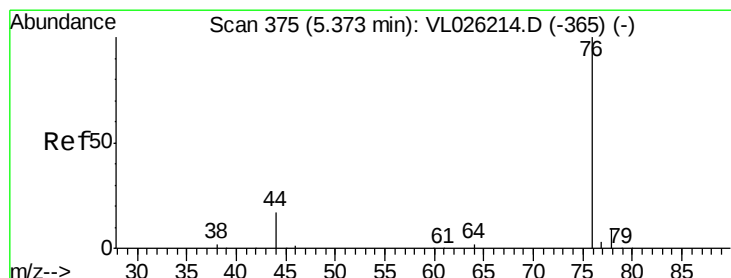
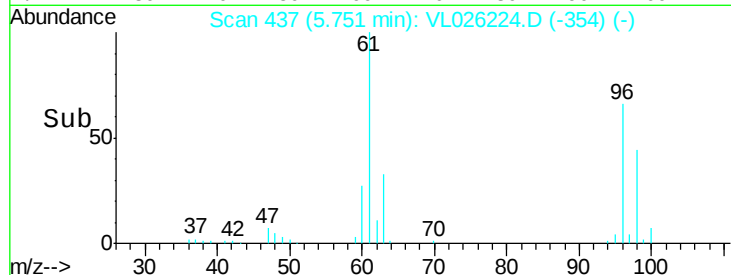
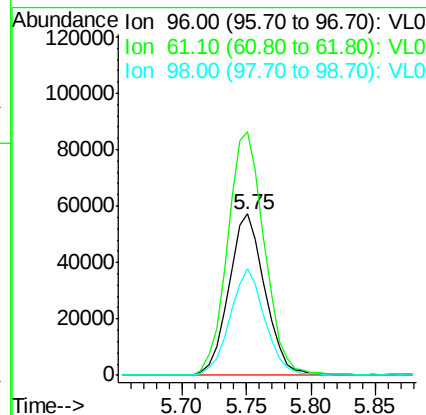
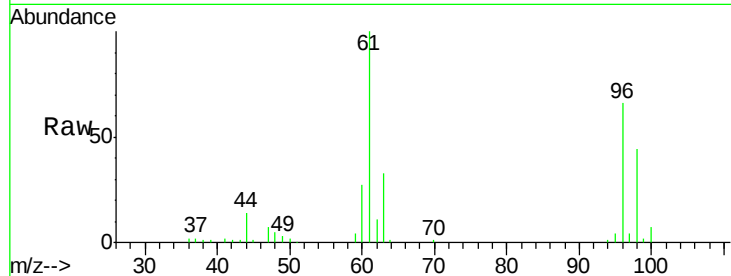
ClientSampleId :

ERD45INFLUENT-101415

Tot Ion:	96	Resp:	112302
Ion Ratio	Lower	Upper	
96	100		
61	150.4	121.5	182.3
98	66.5	49.7	74.5

Manual Integrations
APPROVED

MMDadoda
10/22/2015 4:32:29 PM



#27

Carbon Disulfide

Concen: 0.37 ppbv

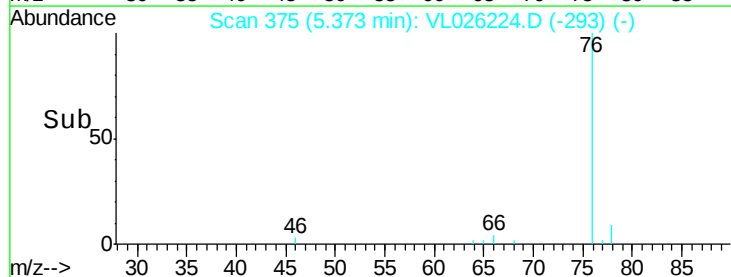
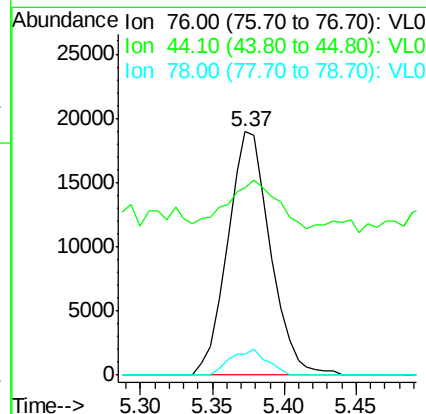
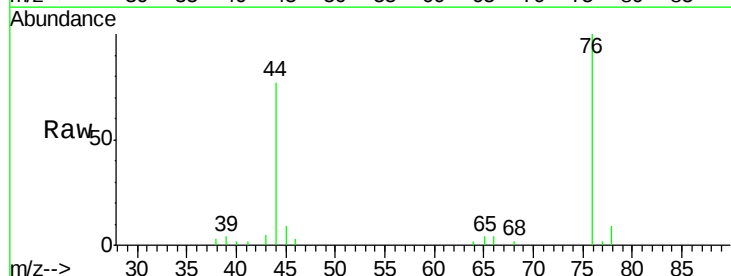
RT: 5.37 min Scan# 375

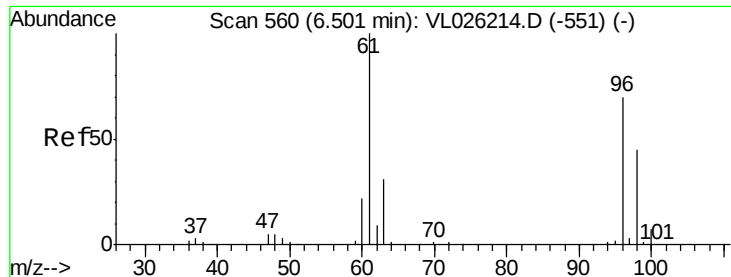
Delta R.T. 0.00 min

Lab File: VL026224.D

Acq: 21 Oct 2015 2:58

Tgt Ion:	76	Resp:	39194
Ion Ratio	Lower	Upper	
76	100		
44	43.4	14.0	21.0#
78	8.9	7.4	11.2





#31

cis-1,2-Dichloroethene

Concen: 59.45 ppbv

RT: 6.50 min Scan# 560

Delta R.T. 0.00 min

Lab File: VL026224.D

Acq: 21 Oct 2015 2:58

Instrument :

MSVOA_L

ClientSampleId :

ERD45INFLUENT-101415

Tot Ion: 61 Resp: 4476121

Ion Ratio Lower Upper

61 100

96 69.2 56.0 84.0

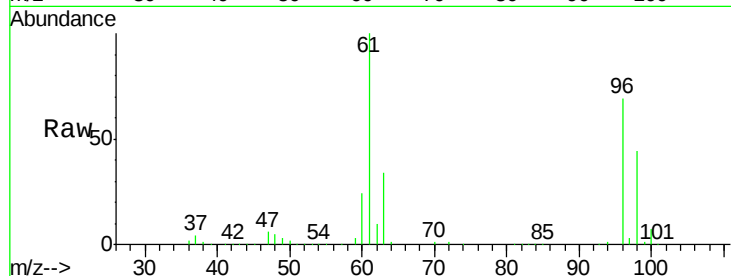
98 44.4 36.1 54.1

Manual Integrations

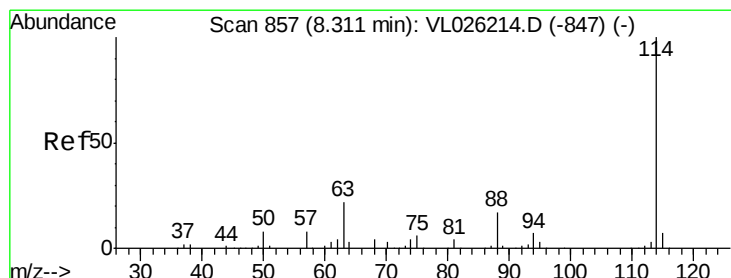
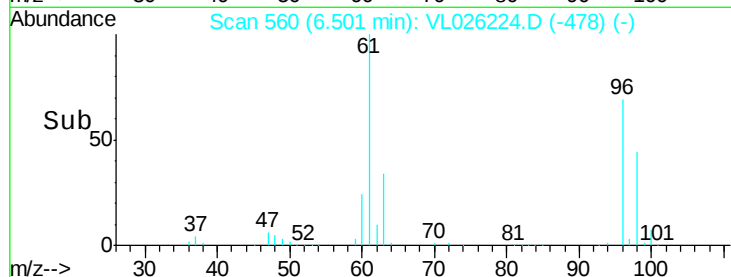
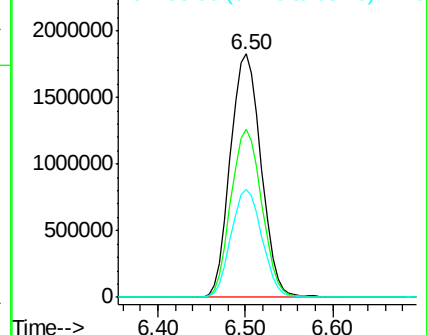
APPROVED

MMDadoda

10/22/2015 4:32:29 PM



Abundance Ion 61.10 (60.80 to 61.80): VL0
Ion 96.00 (95.70 to 96.70): VL0
Ion 98.00 (97.70 to 98.70): VL0



#33

1,4-Difluorobenzene

Concen: 10.00 ppbv

RT: 8.32 min Scan# 859

Delta R.T. 0.01 min

Lab File: VL026224.D

Acq: 21 Oct 2015 2:58

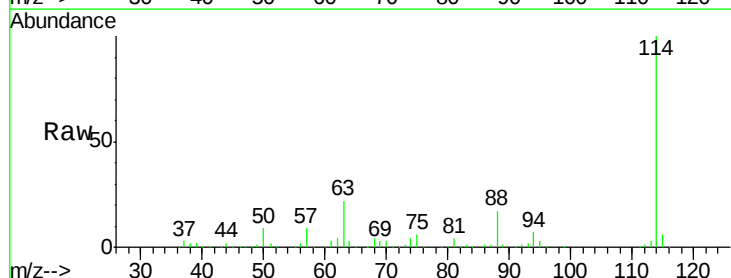
Tgt Ion: 114 Resp: 1743766

Ion Ratio Lower Upper

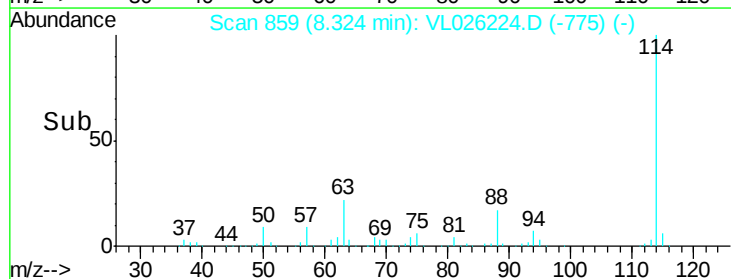
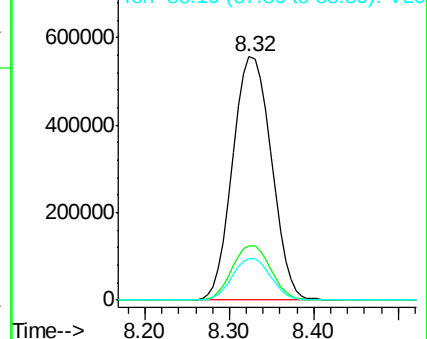
114 100

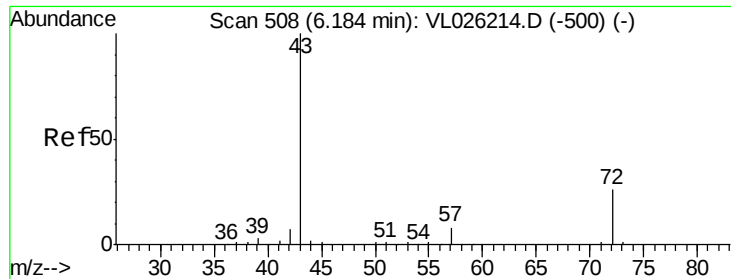
63 22.3 18.2 27.4

88 16.8 13.5 20.3



Abundance Ion 114.10 (113.80 to 114.80): V
Ion 63.10 (62.80 to 63.80): VL0
Ion 88.10 (87.80 to 88.80): VL0





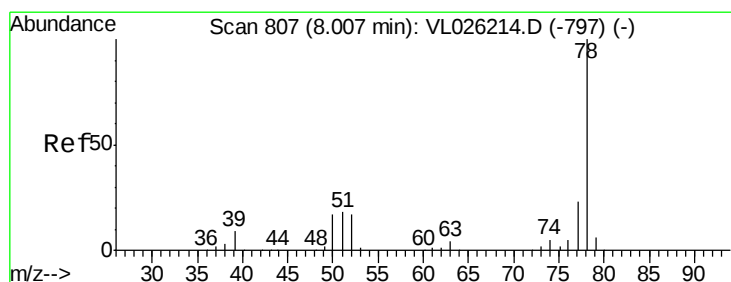
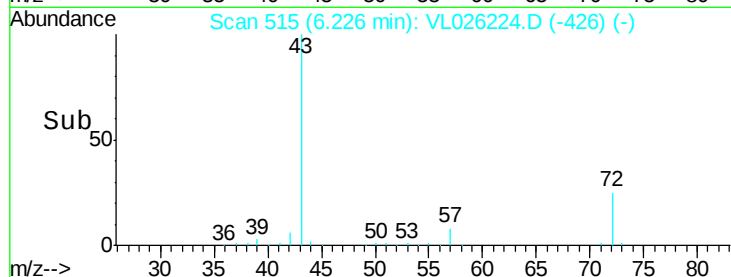
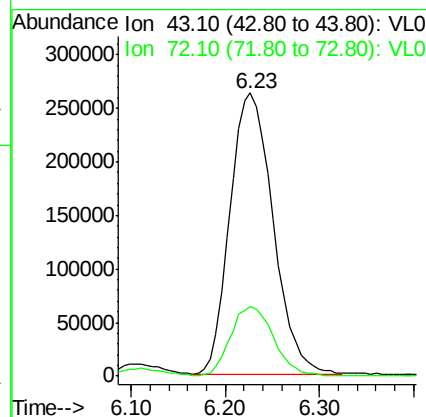
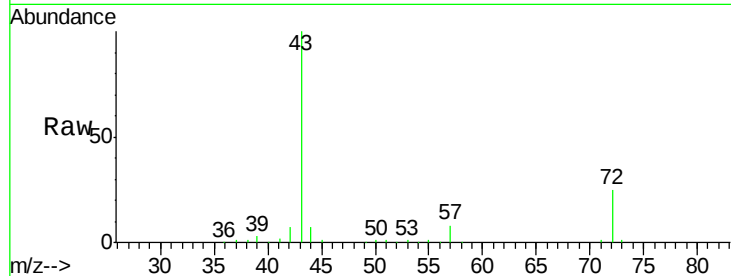
#34
2-Butanone
Concen: 8.47 ppbv
RT: 6.23 min Scan# 515
Delta R.T. 0.04 min
Lab File: VL026224.D
Acq: 21 Oct 2015 2:58

Instrument :
MSVOA_L
ClientSampleId :
ERD45INFLUENT-101415

Tot Ion: 43 Resp: 834404
Ion Ratio Lower Upper
43 100
72 25.2 20.1 30.1

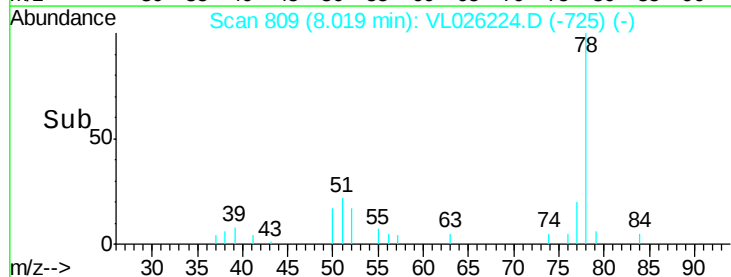
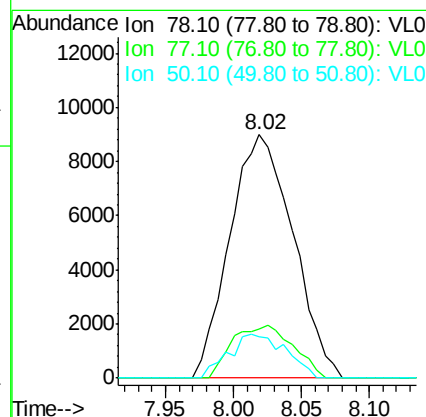
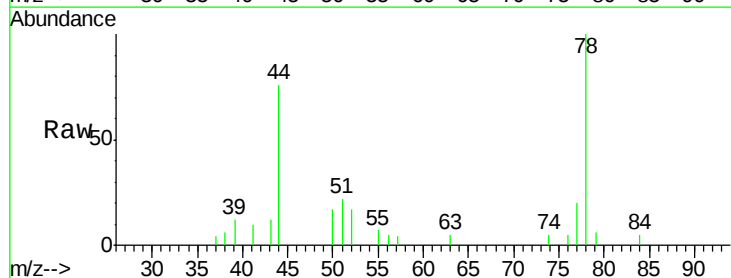
Manual Integrations
APPROVED

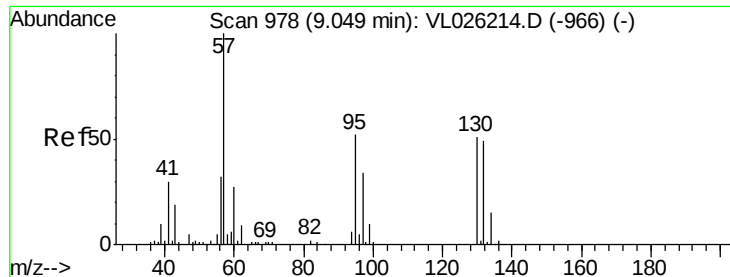
MMDadoda
10/22/2015 4:32:29 PM



#36
Benzene
Concen: 0.16 ppbv
RT: 8.02 min Scan# 809
Delta R.T. 0.01 min
Lab File: VL026224.D
Acq: 21 Oct 2015 2:58

Tgt Ion: 78 Resp: 29102
Ion Ratio Lower Upper
78 100
77 20.2 18.1 27.1
50 17.0 13.8 20.8





#38

Trichloroethene

Concen: 206.01 ppbv

RT: 9.09 min Scan# 984

Delta R.T. 0.04 min

Lab File: VL026224.D

Acq: 21 Oct 2015 2:58

Instrument :

MSVOA_L

ClientSampleId :

ERD45INFLUENT-101415

Tot Ion:130 Resp:17750826

Ion Ratio Lower Upper

130 100

95 98.4 81.0 121.4

132 98.7 76.5 114.7

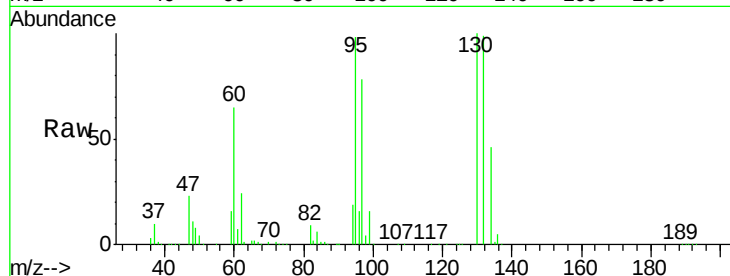
97 78.2 52.5 78.7

Manual Integrations

APPROVED

MMDadoda

10/22/2015 4:32:29 PM

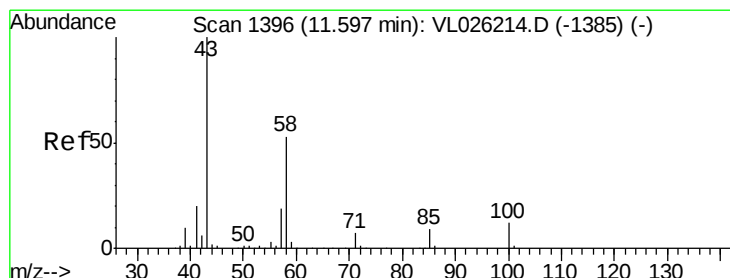
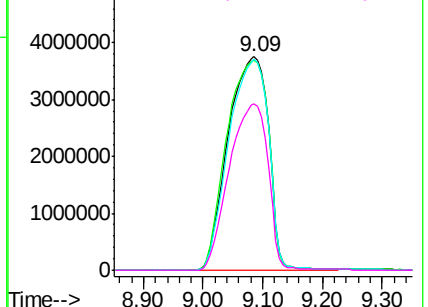
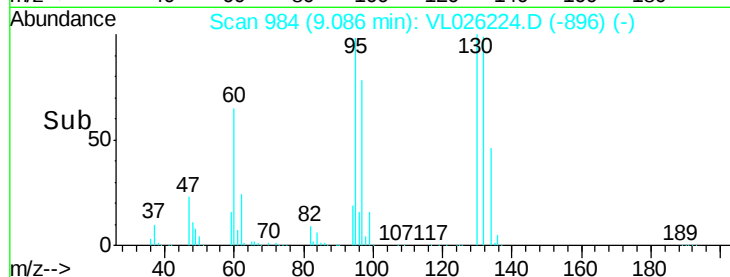


Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0



#51

2-Hexanone

Concen: 0.13 ppbv

RT: 11.63 min Scan# 1401

Delta R.T. 0.03 min

Lab File: VL026224.D

Acq: 21 Oct 2015 2:58

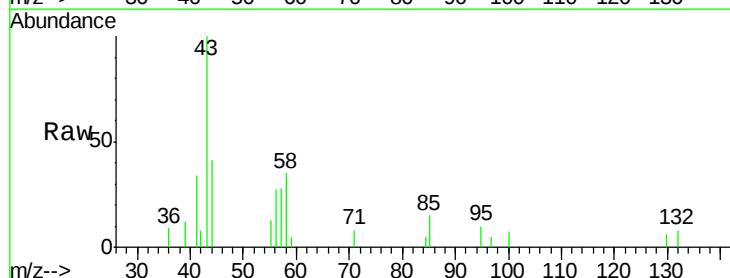
Tgt Ion: 43 Resp: 16231

Ion Ratio Lower Upper

43 100

58 50.6 43.2 64.8

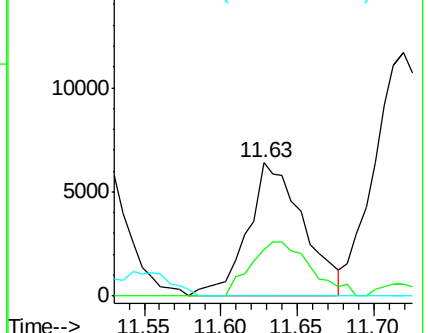
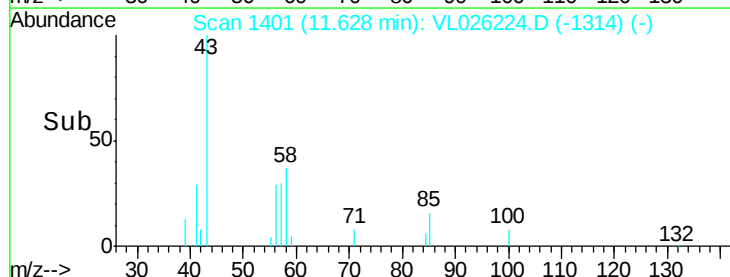
98 0.0 0.0 0.0

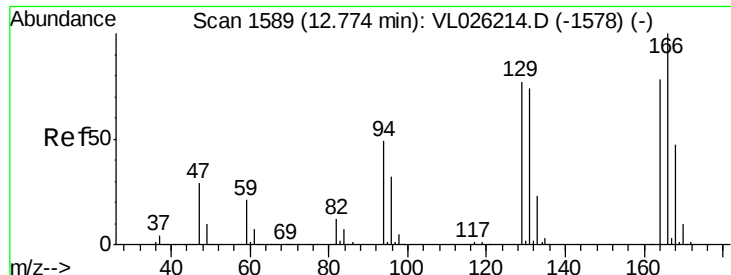


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

Ion 98.20 (97.90 to 98.90): VL0





#52

Tetrachloroethene

Concen: 0.35 ppbv

RT: 12.78 min Scan# 1590

Delta R.T. 0.01 min

Lab File: VL026224.D

Acq: 21 Oct 2015 2:58

Instrument :

MSVOA_L

ClientSampleId :

ERD45INFLUENT-101415

Tot Ion:164 Resp: 35683

Ion Ratio Lower Upper

164 100

166 125.0 102.3 153.5

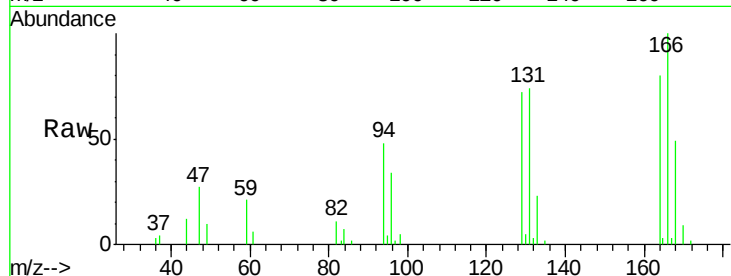
129 90.0 78.2 117.4

131 92.3 75.7 113.5

Manual Integrations
APPROVED

MMDadoda

10/22/2015 4:32:29 PM

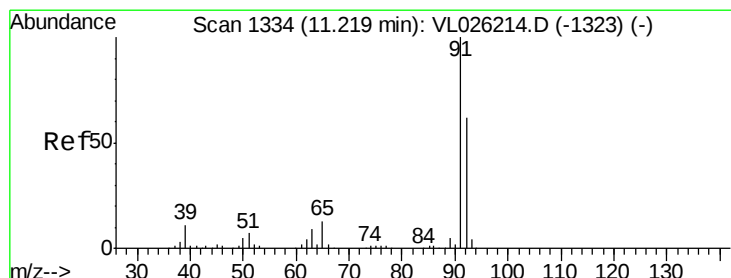
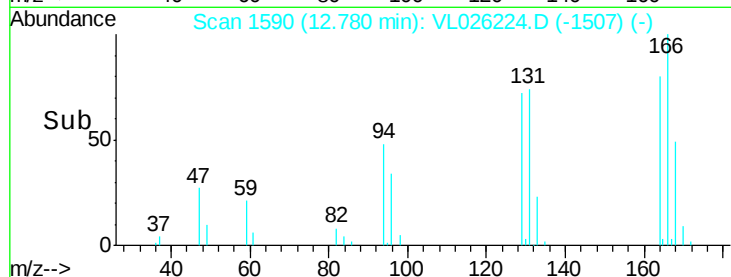
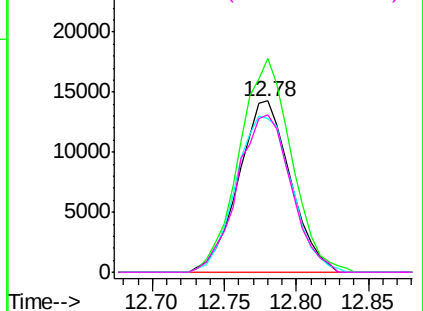


Abundance Ion 163.90 (163.60 to 164.60): V

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: 0.42 ppbv

RT: 11.23 min Scan# 1336

Delta R.T. 0.01 min

Lab File: VL026224.D

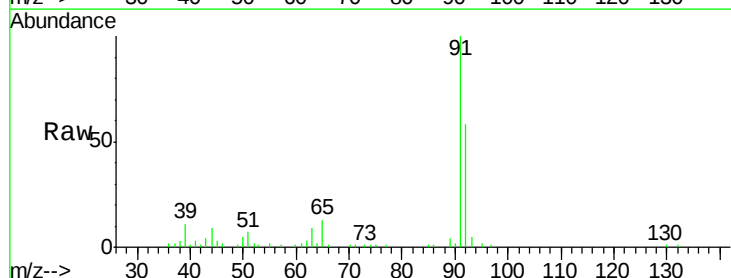
Acq: 21 Oct 2015 2:58

Tgt Ion: 91 Resp: 102351

Ion Ratio Lower Upper

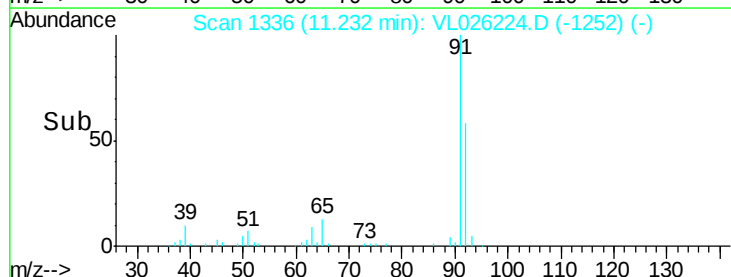
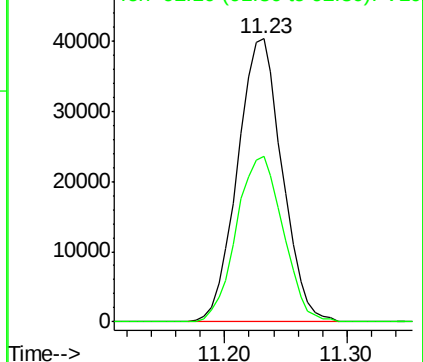
91 100

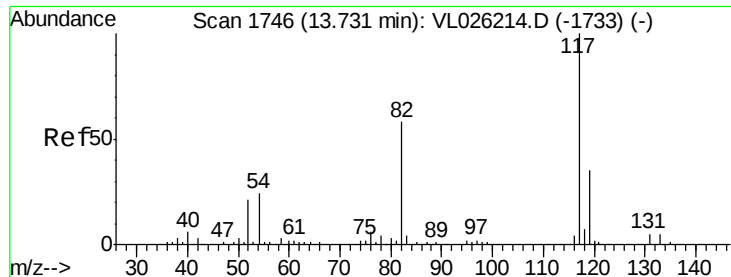
92 60.9 49.2 73.8



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





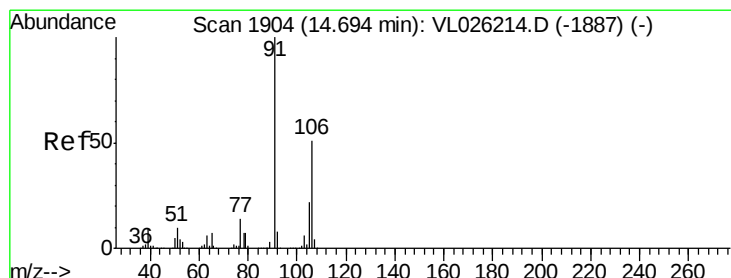
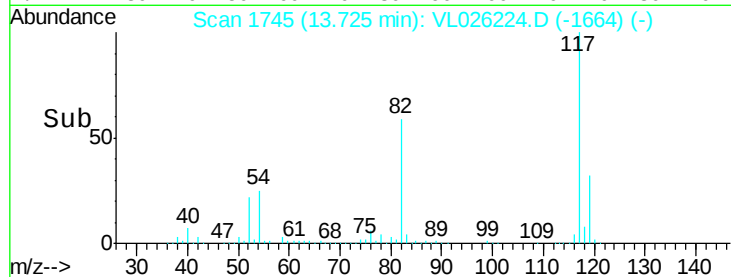
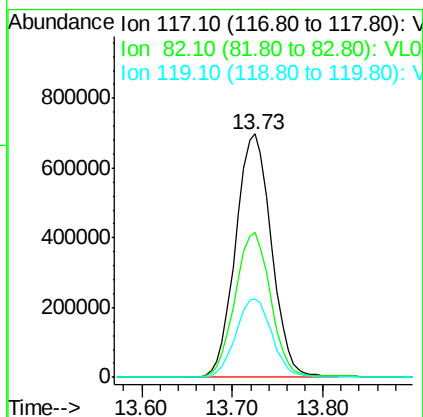
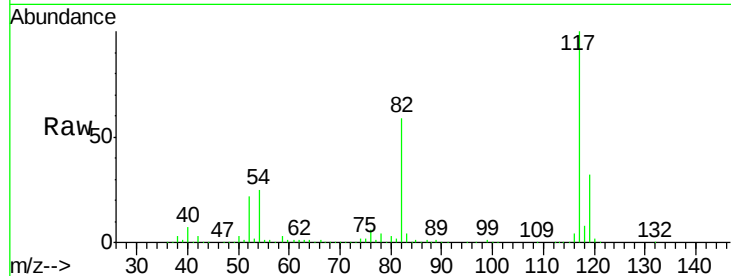
#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 13.73 min Scan# 1745
Delta R.T. -0.01 min
Lab File: VL026224.D
Acq: 21 Oct 2015 2:58

Instrument :
MSVOA_L
ClientSampleId :
ERD45INFLUENT-101415

Tot Ion	Ratio	Lower	Upper
117	100		
82	60.2	45.8	68.8
119	32.6	45.0	67.4

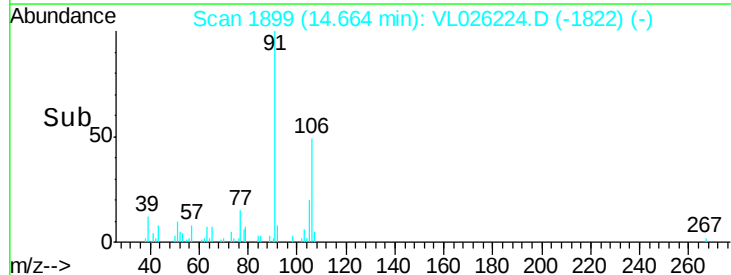
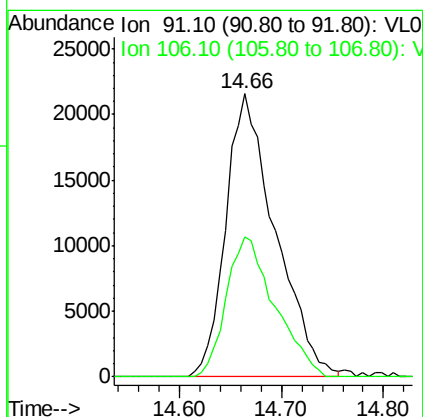
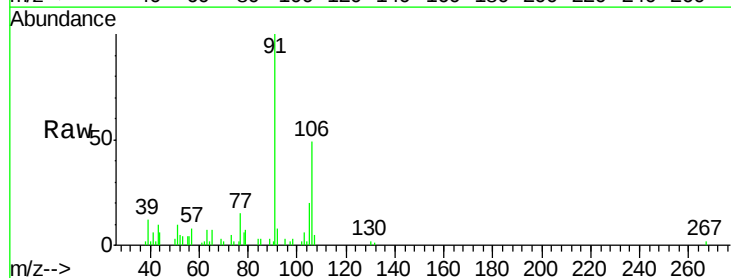
Manual Integrations
APPROVED

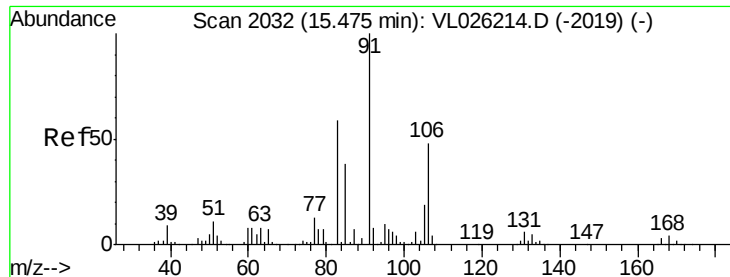
MMDadoda
10/22/2015 4:32:29 PM



#59
m/p-Xylene
Concen: 0.30 ppbv
RT: 14.66 min Scan# 1899
Delta R.T. -0.03 min
Lab File: VL026224.D
Acq: 21 Oct 2015 2:58

Tgt Ion	Ratio	Lower	Upper
91	100		
106	48.5	40.6	61.0





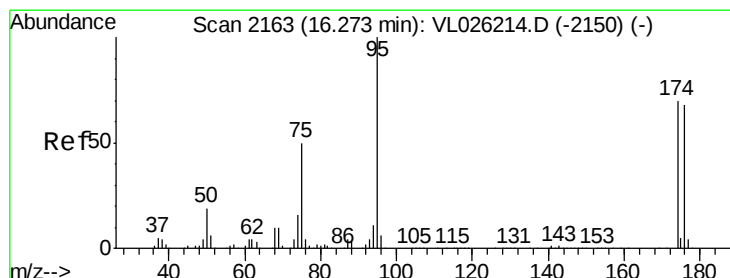
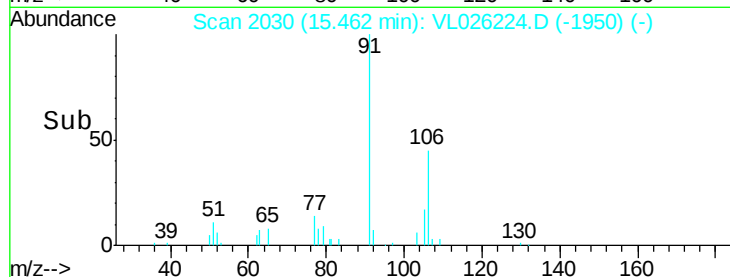
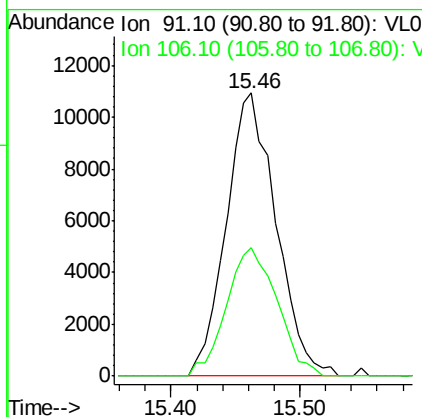
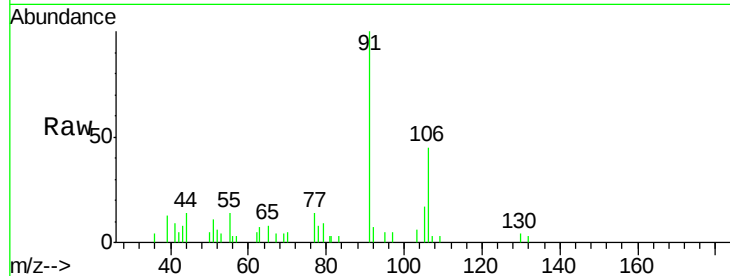
#60
o-Xylene
Concen: 0.12 ppbv
RT: 15.46 min Scan# 2030
Delta R.T. -0.01 min
Lab File: VL026224.D
Acq: 21 Oct 2015 2:58

Instrument :
MSVOA_L
ClientSampleId :
ERD45INFLUENT-101415

Tot Ion: 91 Resp: 29365
Ion Ratio Lower Upper
91 100
106 46.2 23.8 71.5

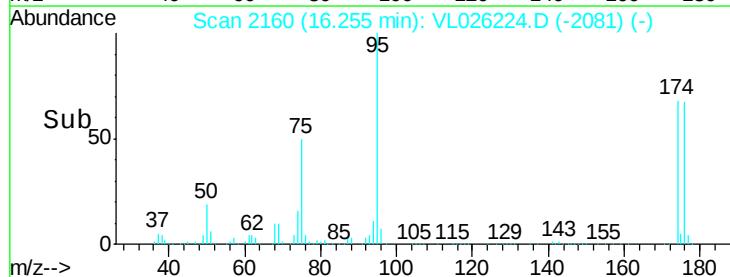
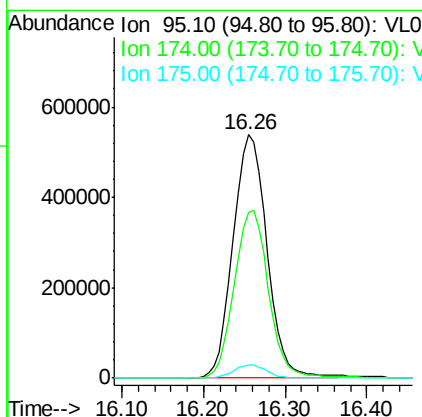
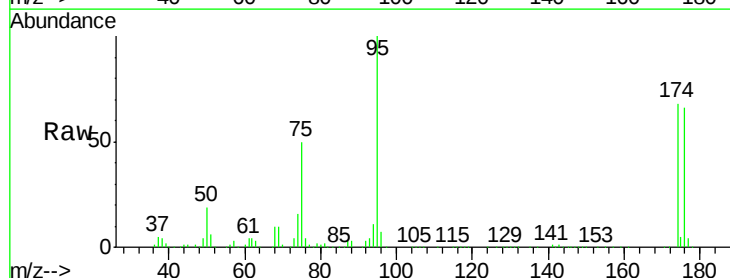
Manual Integrations
APPROVED

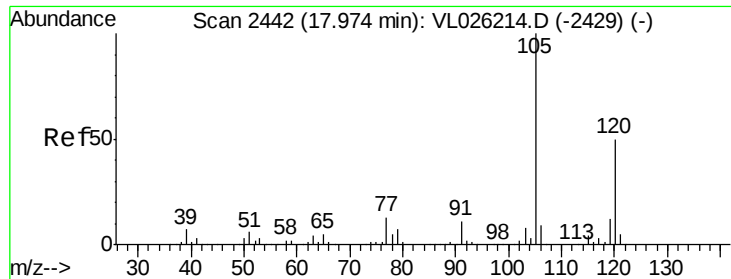
MMDadoda
10/22/2015 4:32:29 PM



#68
1-Bromo-4-Fluorobenzene
Concen: 10.52 ppbv
RT: 16.26 min Scan# 2160
Delta R.T. -0.02 min
Lab File: VL026224.D
Acq: 21 Oct 2015 2:58

Tgt Ion: 95 Resp: 1557004
Ion Ratio Lower Upper
95 100
174 70.1 55.8 83.8
175 5.3 4.3 6.5





#73

1,3,5-Trimethylbenzene

Concen: 0.12 ppbv

RT: 17.96 min Scan# 2439

Delta R.T. -0.02 min

Lab File: VL026224.D

Acq: 21 Oct 2015 2:58

Instrument :

MSVOA_L

ClientSampleId :

ERD45INFLUENT-101415

Tot Ion:105 Resp: 32682

Ion Ratio Lower Upper

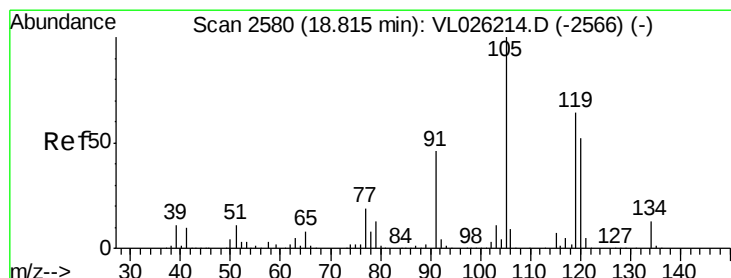
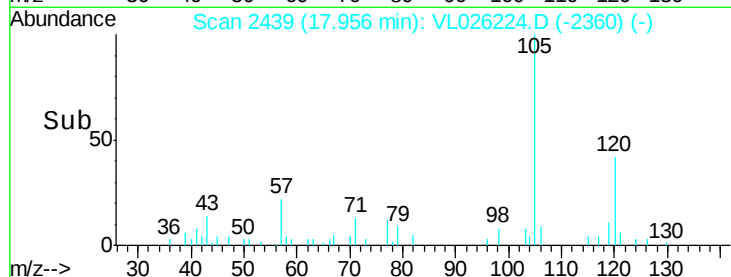
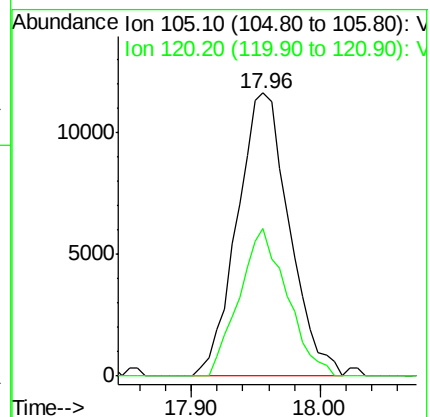
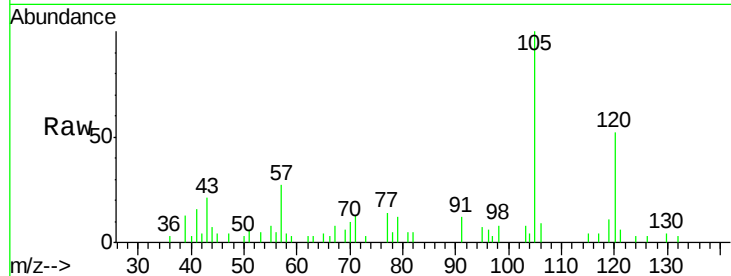
105 100

120 52.1 39.8 59.6

Manual Integrations
APPROVED

MMDadoda

10/22/2015 4:32:29 PM



#74

1,2,4-Trimethylbenzene

Concen: 0.29 ppbv

RT: 18.80 min Scan# 2577

Delta R.T. -0.02 min

Lab File: VL026224.D

Acq: 21 Oct 2015 2:58

Tgt Ion:105 Resp: 84179

Ion Ratio Lower Upper

105 100

120 46.9 41.2 61.8

91 9.4 37.2 55.8#

77 12.9 15.6 23.4#

