

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL030819\
 Data File : VL033262.D
 Acq On : 8 Mar 2019 16:36
 Operator : SY/AP
 Sample : VSTDIC015
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Manual Integrations
 APPROVED

MMDadoda
 3/11/2019 10:10:19 AM

Quant Time: Mar 08 18:27:13 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL030819AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Mar 08 18:27:13 2019
 QLast Update : Fri Mar 08 16:12:14 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	1032919	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	2389318	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	2543188	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	1925788	9.98	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.80%

Target Compounds

					Ovalue
2) Dichlorodifluoromethane	3.08	85	2231020	15.290	ppbv 100
3) Chlorodifluoromethane	3.01	51	1400993	11.852	ppbv 99
4) Chloromethane	3.17	50	763368	12.544	ppbv 96
5) Vinyl Chloride	3.29	62	737844	10.813	ppbv 97
6) Bromomethane	3.52	94	460565	11.802	ppbv 99
7) Chloroethane	3.60	64	282545	12.392	ppbv 96
8) Dichlorotetrafluoroethane	3.22	85	1807676	12.533	ppbv 100
9) Propene	3.04	41	632724	12.011	ppbv 98
10) Heptane	8.25	43	1960261	13.677	ppbv 99
11) Trichlorofluoromethane	4.00	101	2095929	12.233	ppbv 99
12) 1,1,2-Trichlorotrifluoroet	4.55	101	1365437	12.293	ppbv 99
13) Ethanol	3.65	45	119863	7.610	ppbv 100
14) Bromoethene	3.79	108	601039	12.844	ppbv 99
15) Acetone	3.90	43	1393285	10.482	ppbv 100
16) 1,3-Butadiene	3.36	39	639792	12.053	ppbv 92
17) tert-Butyl alcohol	4.36	59	225580	10.413	ppbv 100
18) 1,1-Dichloroethene	4.35	96	620619	12.549	ppbv 94
19) Isopropyl Alcohol	4.02	45	788004	9.972	ppbv 100
20) Methylene Chloride	4.41	84	544812	10.815	ppbv 97
21) Allyl Chloride	4.48	41	975474	13.150	ppbv 100
22) trans-1,2-Dichloroethene	4.96	96	652038	12.916	ppbv 97
23) Vinyl Acetate	5.16	43	2347988	11.975	ppbv 99
24) 1,1-Dichloroethane	5.09	63	1589871	11.373	ppbv 100
25) Ethyl Acetate	5.77	43	3156130	12.951	ppbv 100
26) Hexane	5.78	57	1443706	12.673	ppbv 99
27) Carbon Disulfide	4.62	76	1583703	14.422	ppbv 100
28) Methyl tert-Butyl Ether	5.11	73	1830849	11.653	ppbv 100
29) Chloroform	5.85	83	2338702	13.200	ppbv 96
30) Cyclohexane	7.25	84	1221586	14.322	ppbv 97
31) cis-1,2-Dichloroethene	5.64	61	1580611	14.365	ppbv 99
32) 1,1,1-Trichloroethane	6.62	97	2386866	13.887	ppbv 99
34) 2-Butanone	5.33	43	1845788	11.149	ppbv 100
35) Carbon Tetrachloride	7.13	117	2511118m	13.895	ppbv
36) Benzene	7.00	78	3048887	13.596	ppbv 98
37) 1,2-Dichloroethane	6.42	62	1945544	13.938	ppbv 99
38) Trichloroethene	7.96	130	1114787	13.163	ppbv 94
39) 1,2-Dichloropropane	7.74	63	1163617	13.290	ppbv 97
40) 1,4-Dioxane	7.96	88	378623m	11.656	ppbv
41) Tetrahydrofuran	6.15	42	1240869	13.643	ppbv 99
42) Bromodichloromethane	7.92	83	2668350	13.519	ppbv 95
43) Methyl Methacrylate	8.14	69	1274904	14.053	ppbv 98

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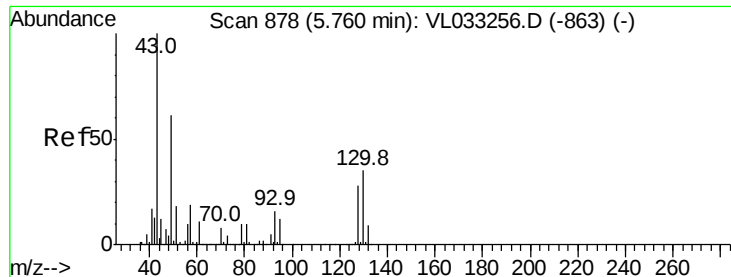
Manual Integrations
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MMDadoda
 3/11/2019 10:10:19 AM

Quant Time: Mar 08 18:27:13 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL030819AIR.M
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 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,2,4-Trimethylpentane	7.99	57	4996153	12.599	ppbv	100
45) t-1,3-Dichloropropene	9.42	75	1674569	15.254	ppbv	100
46) cis-1,3-Dichloropropene	8.84	75	1891917	14.448	ppbv	96
47) 1,1,2-Trichloroethane	9.62	97	1213464	12.878	ppbv	94
48) Dibromochloromethane	10.45	129	2118774	13.882	ppbv	100
49) Bromoform	13.20	173	1851248	15.188	ppbv	97
50) 4-Methyl-2-Pentanone	8.87	43	3126702	12.769	ppbv	100
51) 2-Hexanone	10.27	43	2449602	13.374	ppbv #	100
52) Tetrachloroethene	11.37	164	1106876	13.244	ppbv	99
53) Toluene	9.95	91	3468098	13.376	ppbv	99
54) 1,2-Dibromoethane	10.76	107	1913238m	13.366	ppbv	
56) 1,1,1,2-Tetrachloroethane	12.28	131	1474625	13.357	ppbv	89
57) Chlorobenzene	12.30	112	2481446	12.532	ppbv	98
58) Ethyl Benzene	12.87	91	4828693	13.727	ppbv	97
59) m/p-Xylene	13.15	91	7931721m	26.460	ppbv	
60) o-Xylene	13.85	91	3878802	13.571	ppbv	100
61) Styrene	13.69	104	2946325	14.658	ppbv	97
62) Isopropylbenzene	14.82	105	5270985	13.228	ppbv	99
63) 1,1,2,2-Tetrachloroethane	13.84	83	2466083	12.125	ppbv	98
64) n-propylbenzene	15.72	120	1399378	14.167	ppbv	98
65) tert-Butylbenzene	16.91	119	4453344m	13.090	ppbv	
66) Benzyl Chloride	17.16	91	2431440	18.477	ppbv	99
67) sec-Butylbenzene	17.45	105	6384392m	13.164	ppbv	
69) p-Isopropyltoluene	17.82	119	5453070m	13.904	ppbv	
70) n-Butylbenzene	18.72	91	5779438	13.453	ppbv	99
71) 2-Chlorotoluene	15.62	91	4046459	13.281	ppbv	99
72) 4-Ethyltoluene	16.01	105	4347533	13.919	ppbv	100
73) 1,3,5-Trimethylbenzene	16.16	105	4157584	13.867	ppbv	98
74) 1,2,4-Trimethylbenzene	16.93	105	4139788	13.136	ppbv	93
75) 1,3-Dichlorobenzene	17.16	146	2405990m	13.054	ppbv	
76) 1,4-Dichlorobenzene	17.31	146	2469056	13.517	ppbv	98
77) 1,2-Dichlorobenzene	17.99	146	2405182	13.442	ppbv	99
78) Hexachloro-1,3-Butadiene	23.55	225	1719703	13.581	ppbv	100
79) Naphthalene	22.42	128	6220955	16.144	ppbv	99
80) Naphthalene, 2-methyl-	25.11	142	2450642	21.286	ppbv	99
81) 1,2,4-Trichlorobenzene	22.14	180	2802469	14.474	ppbv	96

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 879

Delta R.T. 0.00 min

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MSVOA_L

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VSTDIC015

Tot Ion: 49 Resp: 1032919

Ion Ratio Lower Upper

49 100

128 44.9 22.5 67.5

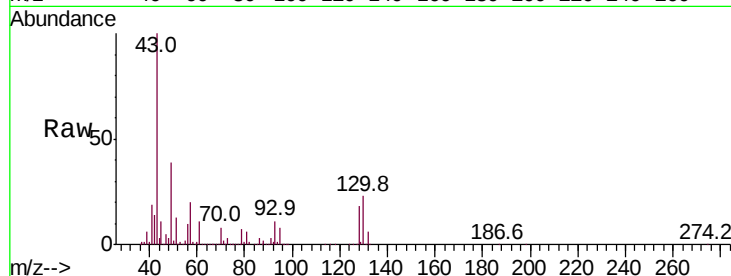
130 57.2 29.1 87.4

Manual Integrations

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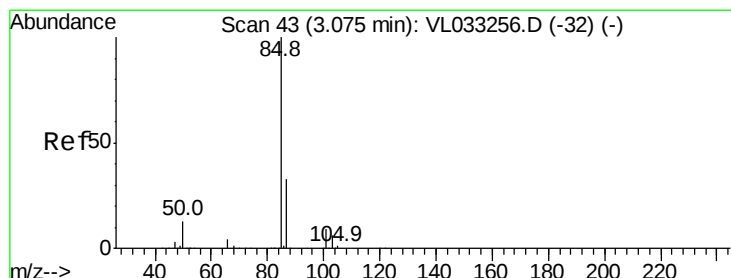
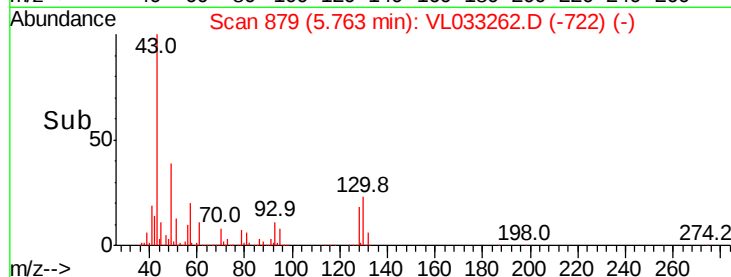
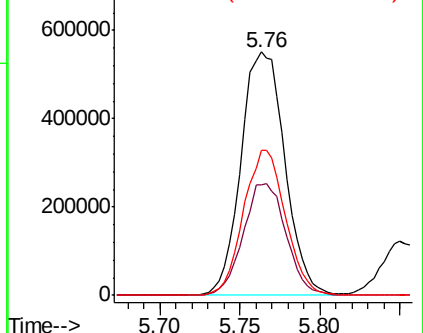
3/11/2019 10:10:19 AM



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: 15.290 ppbv

RT: 3.08 min Scan# 44

Delta R.T. 0.00 min

Lab File: VL033262.D

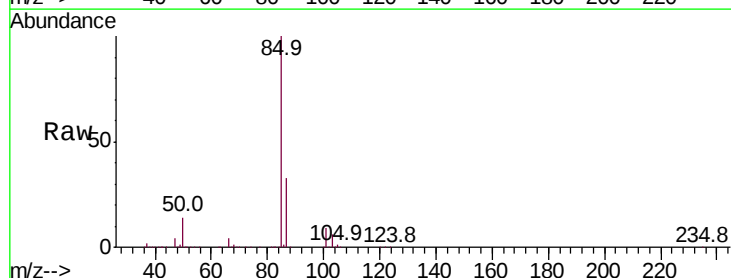
Acq: 8 Mar 2019 16:36

Tgt Ion: 85 Resp: 2231020

Ion Ratio Lower Upper

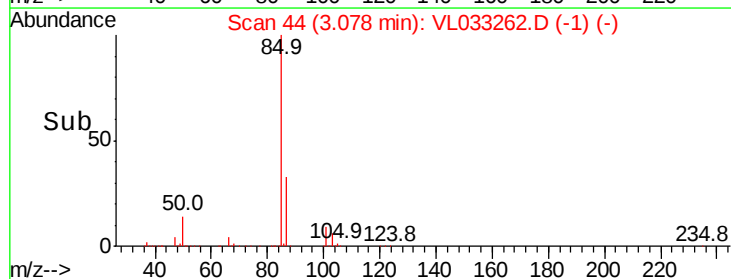
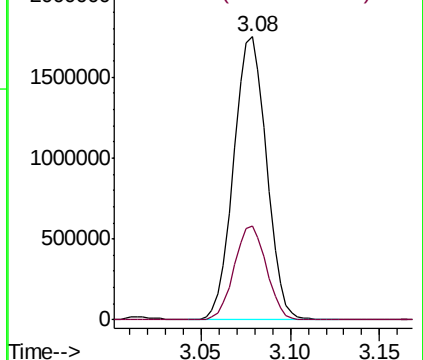
85 100

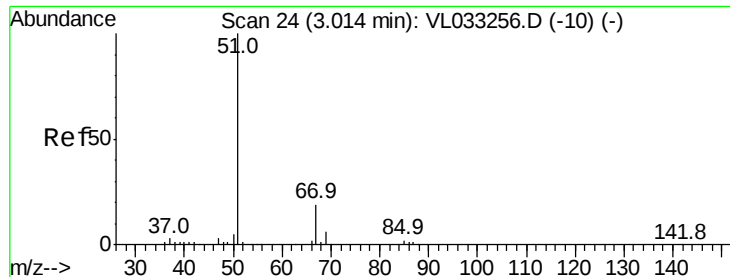
87 33.0 26.2 39.4



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 11.852 ppbv

RT: 3.01 min Scan# 24

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 51 Resp: 1400993

Ion Ratio Lower Upper

51 100

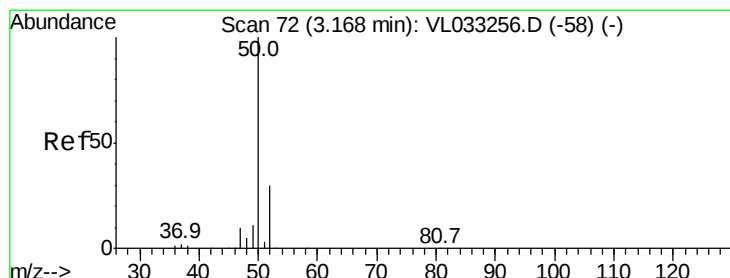
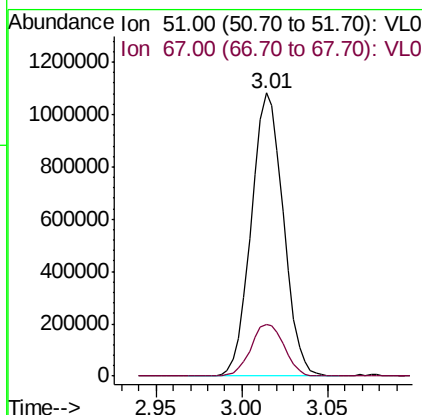
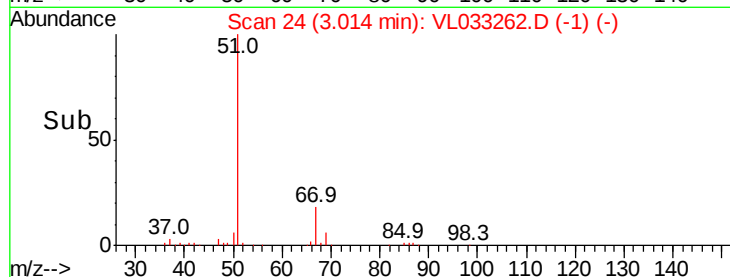
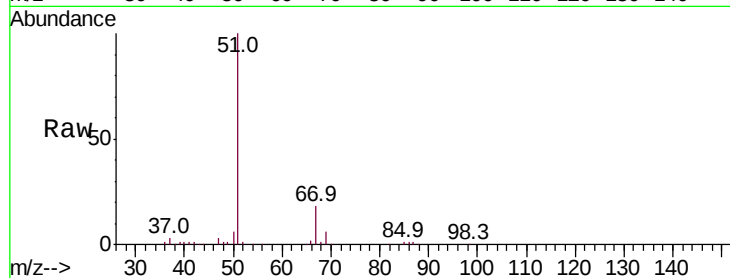
67 19.2 15.0 22.6

Manual Integrations

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#4

Chloromethane

Concen: 12.544 ppbv

RT: 3.17 min Scan# 73

Delta R.T. 0.00 min

Lab File: VL033262.D

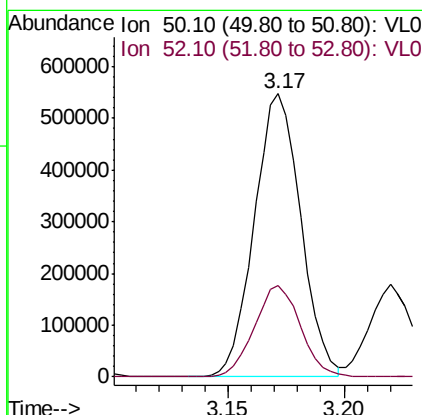
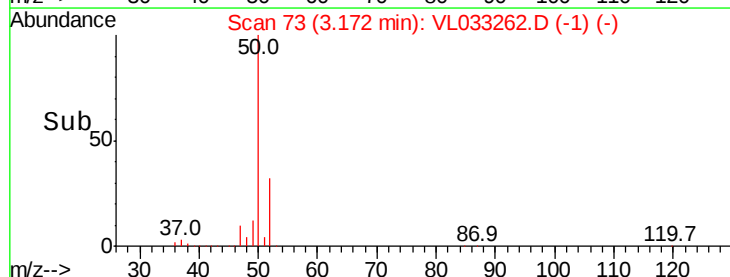
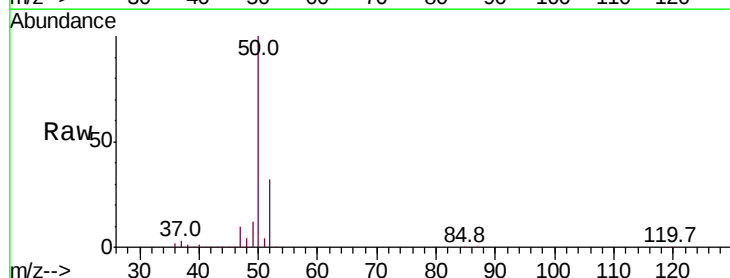
Acq: 8 Mar 2019 16:36

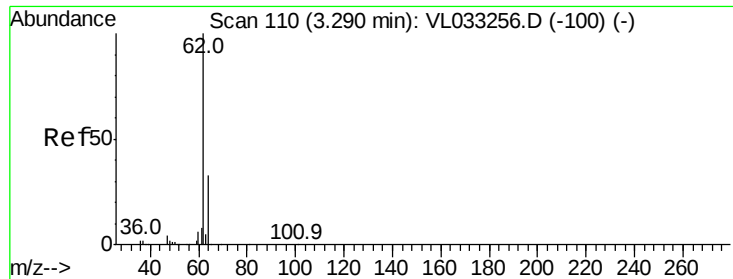
Tgt Ion: 50 Resp: 763368

Ion Ratio Lower Upper

50 100

52 32.4 24.2 36.2





#5

Vinyl Chloride

Concen: 10.813 ppbv

RT: 3.29 min Scan# 110

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 62 Resp: 737844

Ion Ratio Lower Upper

62 100

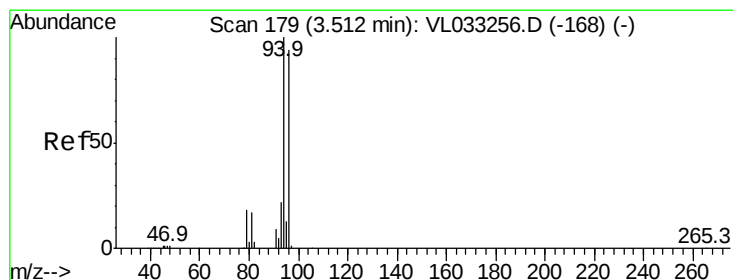
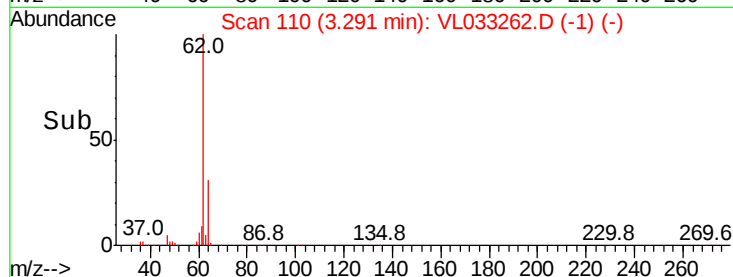
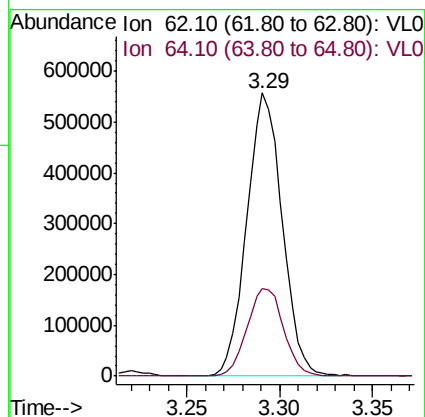
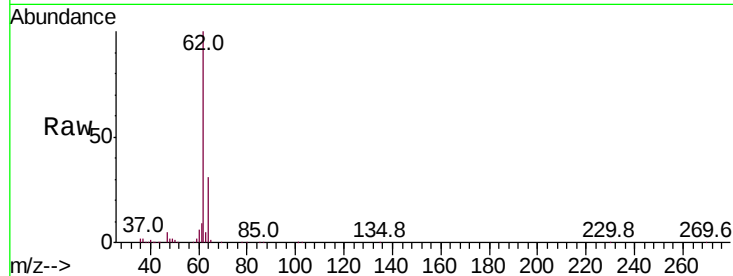
64 31.2 26.4 39.6

Manual Integrations

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#6

Bromomethane

Concen: 11.802 ppbv

RT: 3.52 min Scan# 180

Delta R.T. 0.00 min

Lab File: VL033262.D

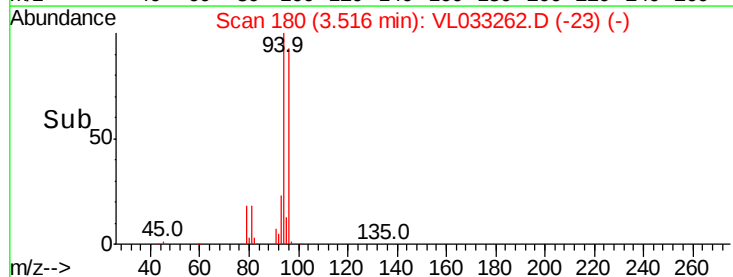
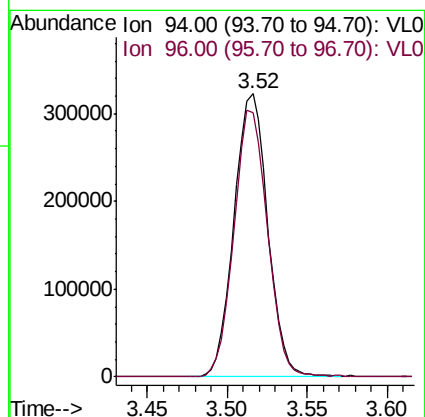
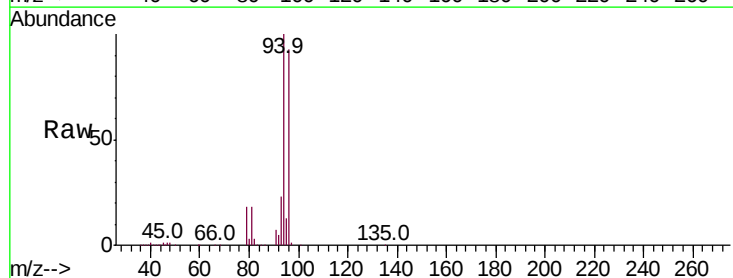
Acq: 8 Mar 2019 16:36

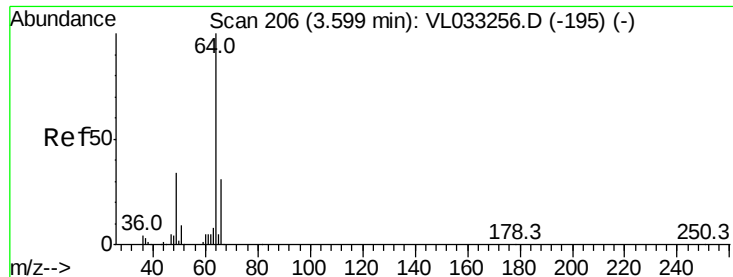
Tgt Ion: 94 Resp: 460565

Ion Ratio Lower Upper

94 100

96 93.4 75.3 112.9





#7

Chloroethane

Concen: 12.392 ppbv

RT: 3.60 min Scan# 206

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 64 Resp: 282545

Ion Ratio Lower Upper

64 100

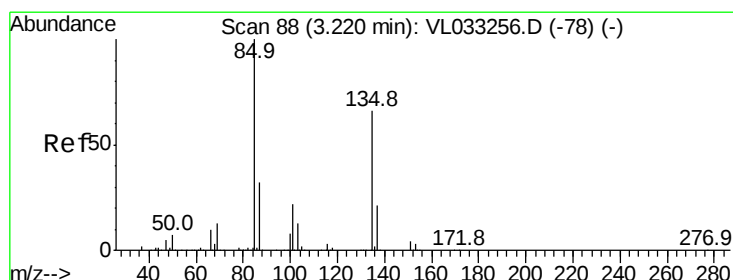
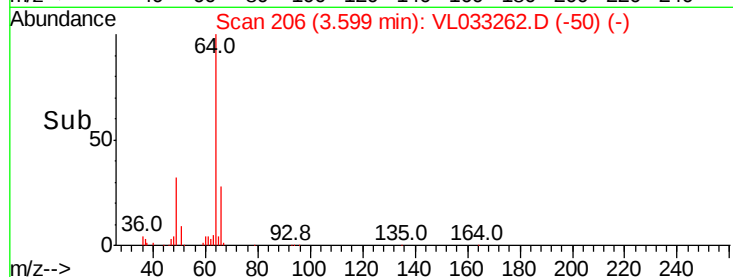
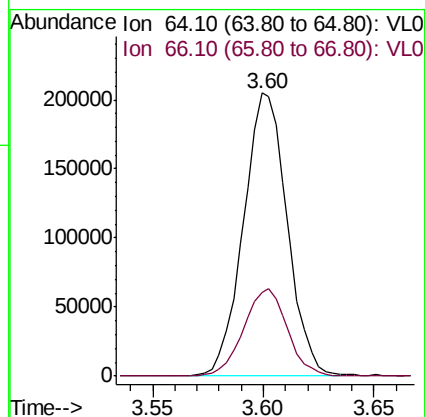
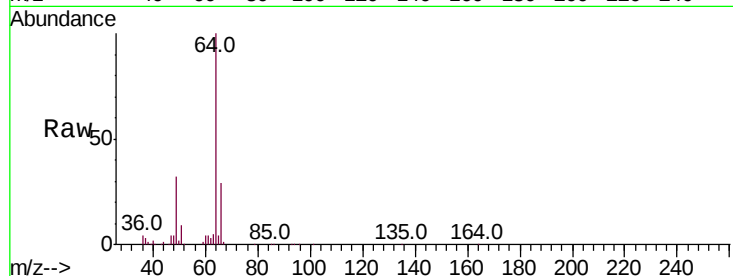
66 29.5 25.2 37.8

Manual Integrations

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#8

Dichlorotetrafluoroethane

Concen: 12.533 ppbv

RT: 3.22 min Scan# 88

Delta R.T. 0.00 min

Lab File: VL033262.D

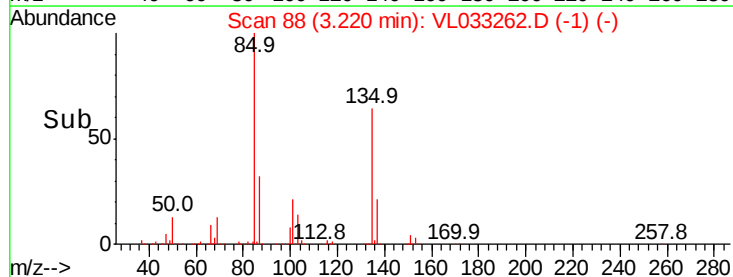
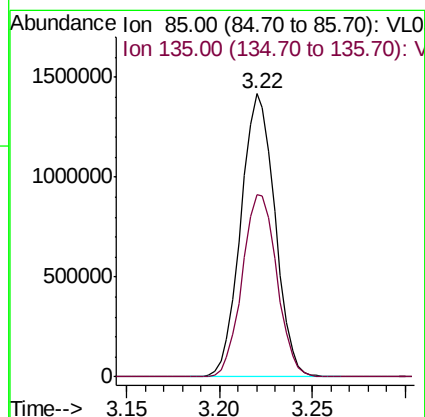
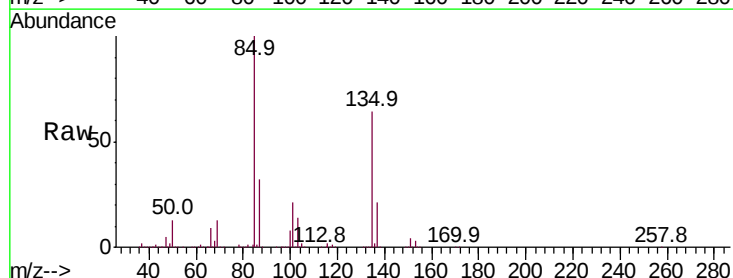
Acq: 8 Mar 2019 16:36

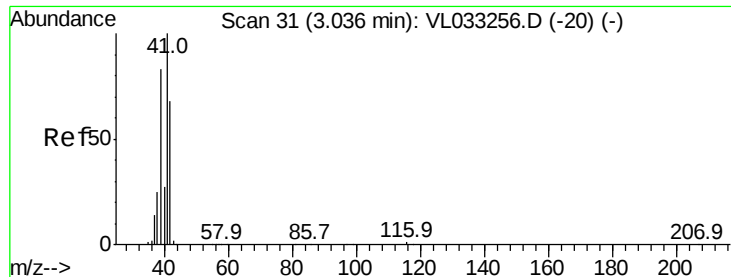
Tgt Ion: 85 Resp: 1807676

Ion Ratio Lower Upper

85 100

135 65.7 52.3 78.5





#9

Propene

Concen: 12.011 ppbv

RT: 3.04 min Scan# 31

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Instrument :

MSVOA_L

ClientSampled :

VSTDIC015

Tot Ion: 41 Resp: 632724

Ion Ratio Lower Upper

41 100

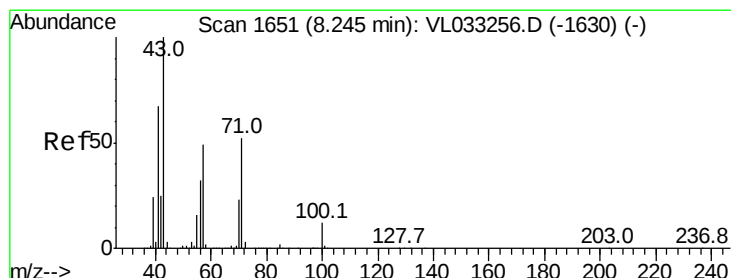
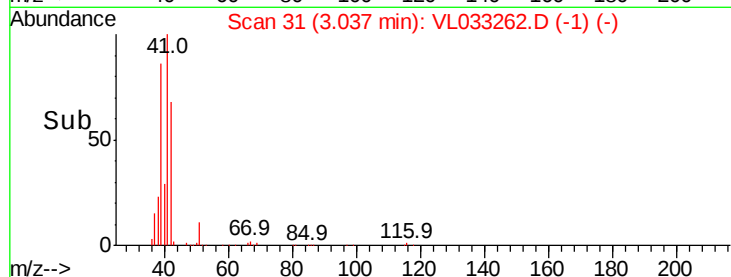
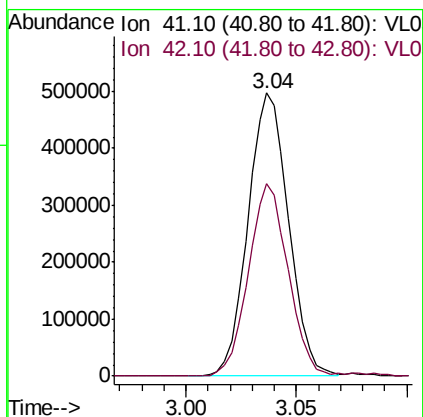
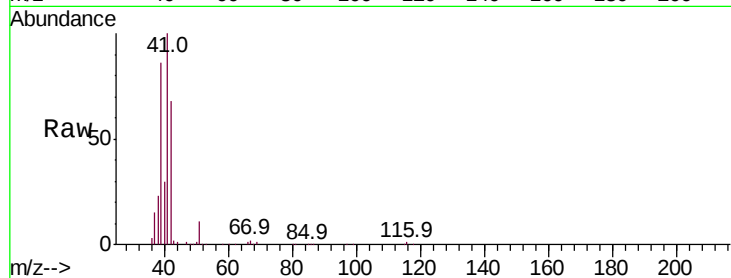
42 67.6 55.2 82.8

Manual Integrations

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#10

Heptane

Concen: 13.677 ppbv

RT: 8.25 min Scan# 1651

Delta R.T. 0.00 min

Lab File: VL033262.D

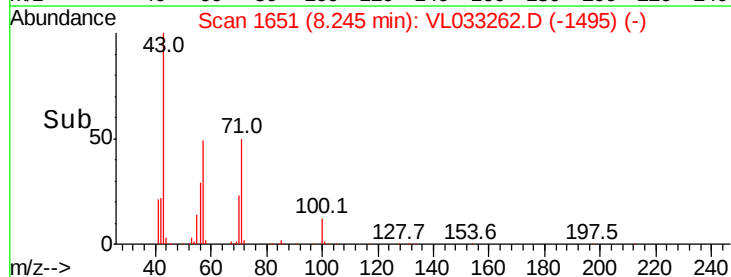
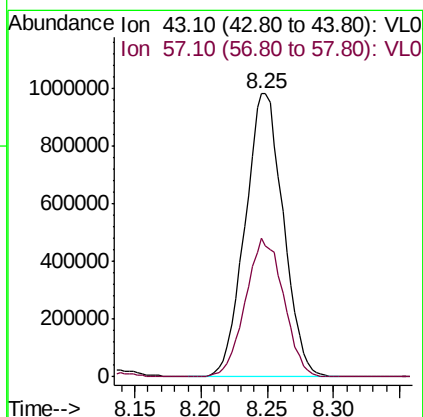
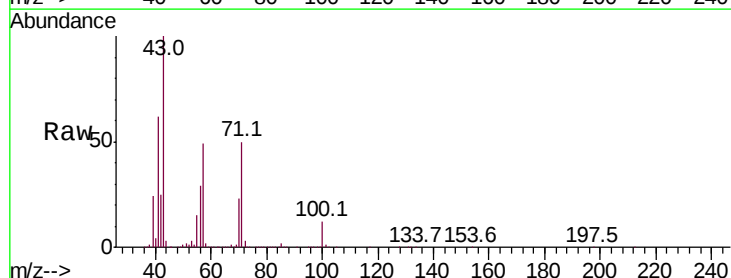
Acq: 8 Mar 2019 16:36

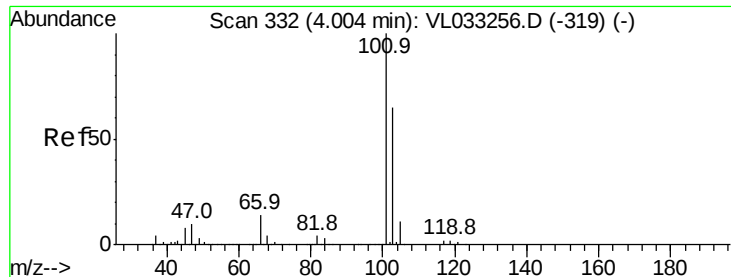
Tgt Ion: 43 Resp: 1960261

Ion Ratio Lower Upper

43 100

57 49.0 40.0 60.0





#11

Trichlorofluoromethane

Concen: 12.233 ppbv

RT: 4.00 min Scan# 332

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion:101 Resp: 2095929

Ion Ratio Lower Upper

101 100

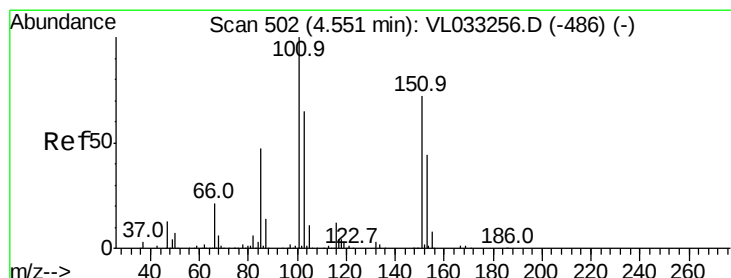
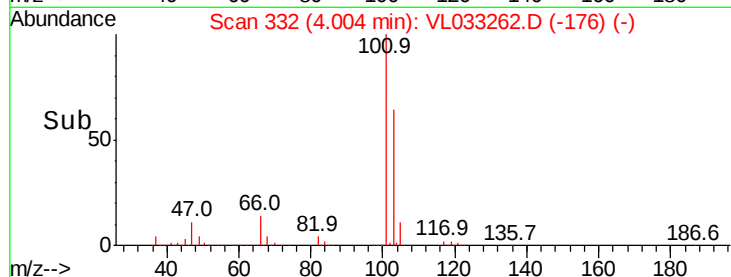
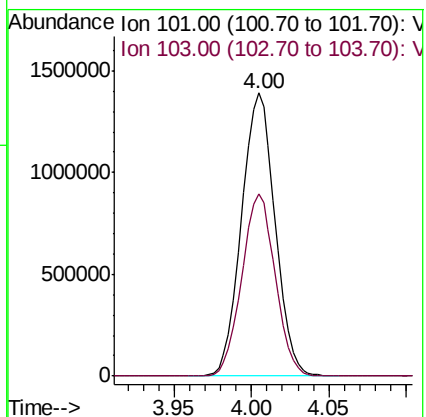
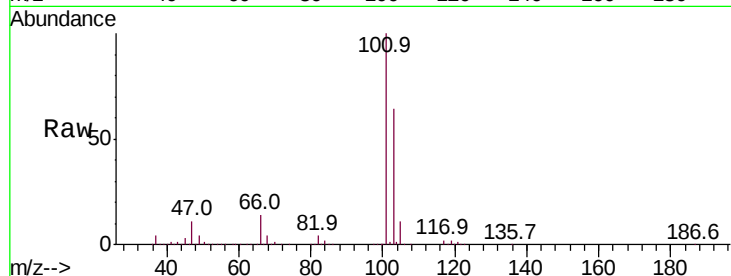
103 64.4 51.9 77.9

Manual Integrations

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#12

1,1,2-Trichlorotrifluoroethane

Concen: 12.293 ppbv

RT: 4.55 min Scan# 502

Delta R.T. 0.00 min

Lab File: VL033262.D

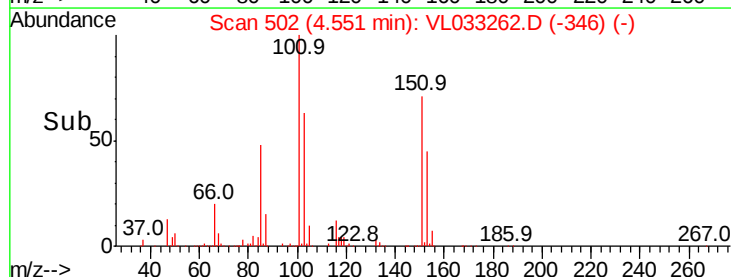
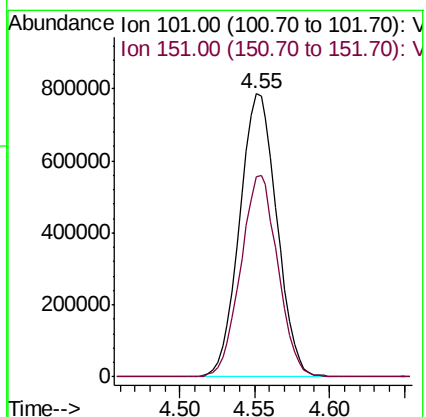
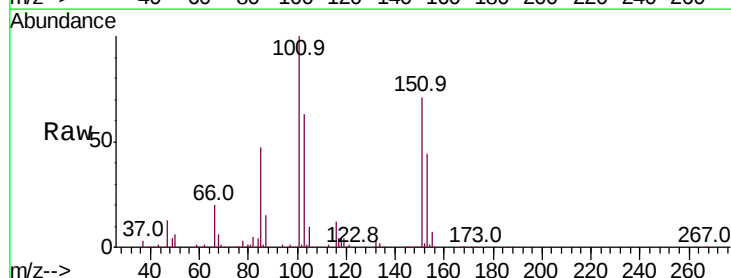
Acq: 8 Mar 2019 16:36

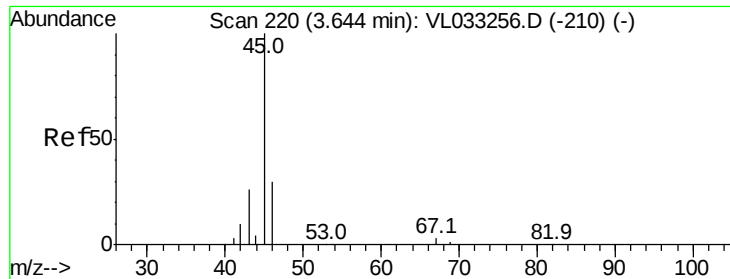
Tgt Ion:101 Resp: 1365437

Ion Ratio Lower Upper

101 100

151 70.9 57.2 85.8





#13

Ethanol

Concen: 7.610 ppbv

RT: 3.65 min Scan# 222

Delta R.T. 0.01 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 45 Resp: 119863

Ion Ratio Lower Upper

45 100

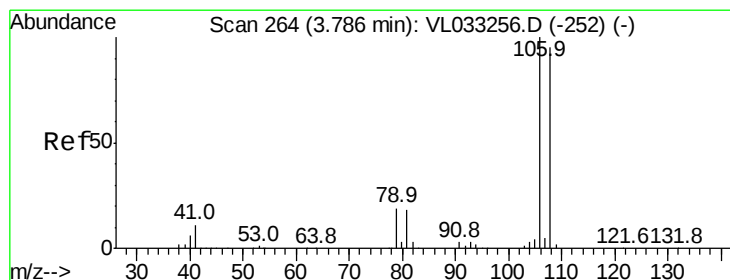
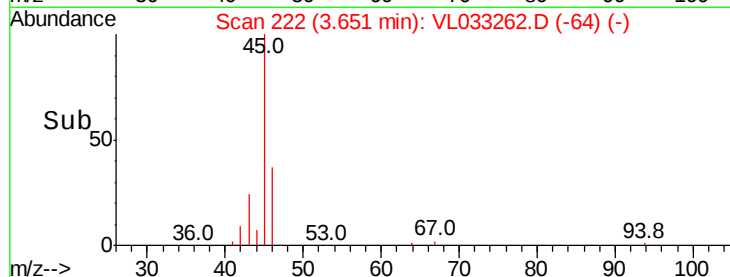
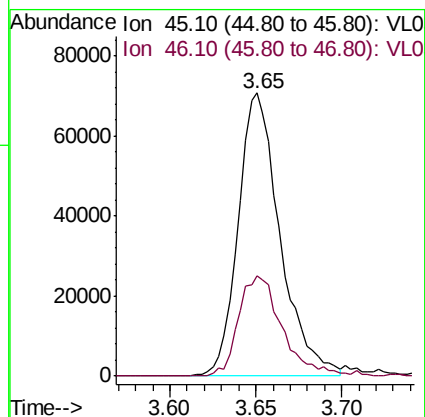
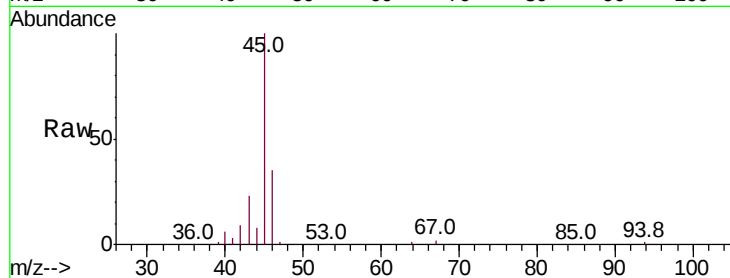
46 37.3 14.9 59.7

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#14

Bromoethene

Concen: 12.844 ppbv

RT: 3.79 min Scan# 264

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

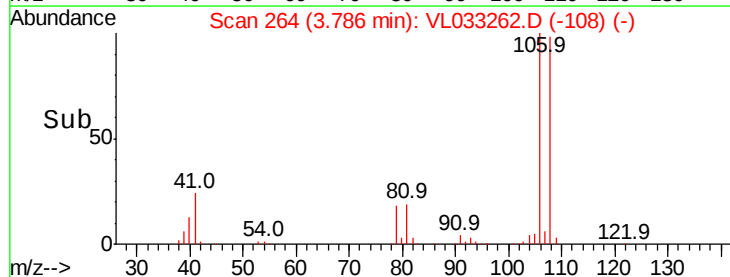
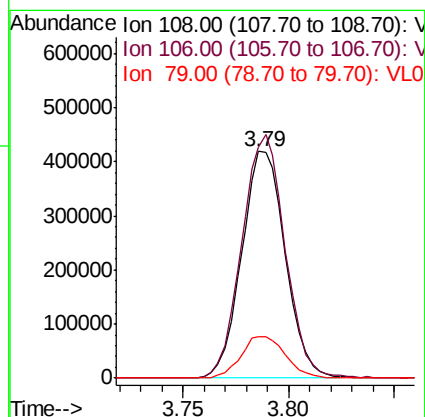
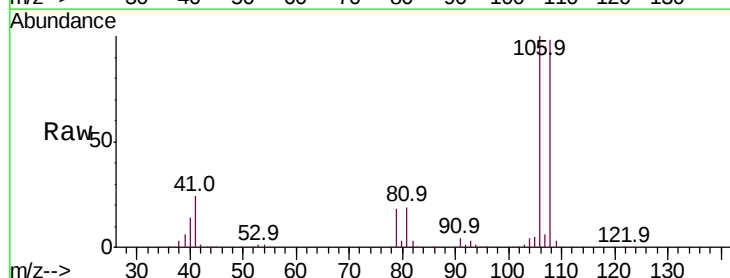
Tgt Ion: 108 Resp: 601039

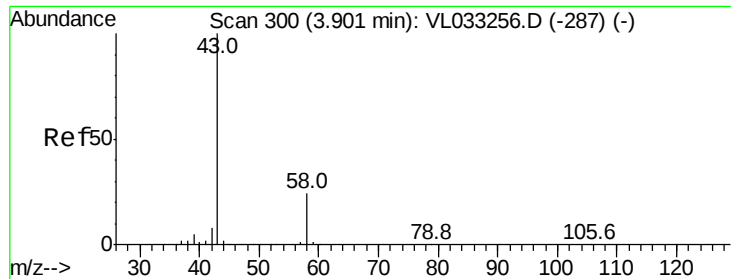
Ion Ratio Lower Upper

108 100

106 107.3 86.9 130.3

79 19.1 15.8 23.6





#15

Acetone

Concen: 10.482 ppbv

RT: 3.90 min Scan# 300

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Tot Ion: 43 Resp: 1393285

Ion Ratio Lower Upper

43 100

58 25.2 20.2 30.2

Instrument :

MSVOA_L

ClientSampleId :

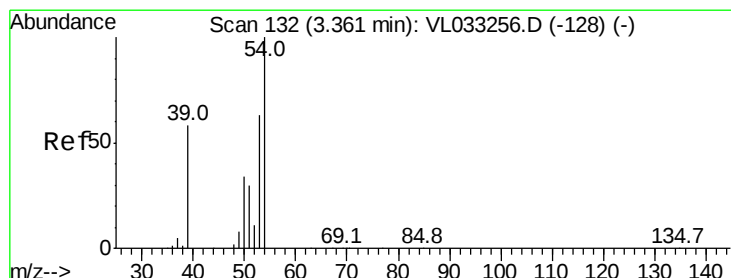
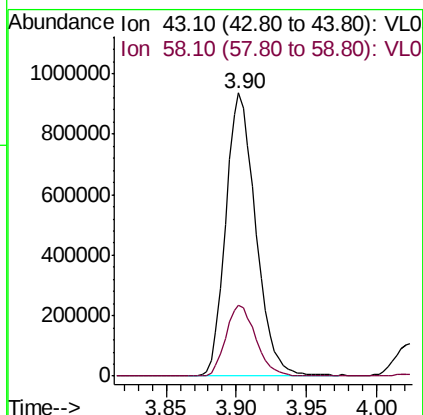
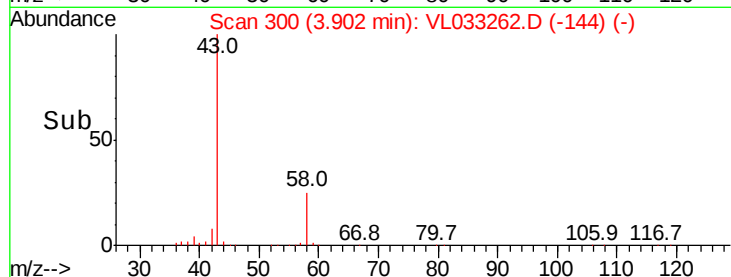
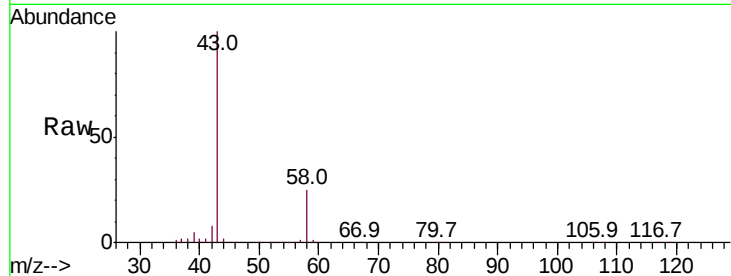
VSTDIC015

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#16

1,3-Butadiene

Concen: 12.053 ppbv

RT: 3.36 min Scan# 133

Delta R.T. 0.00 min

Lab File: VL033262.D

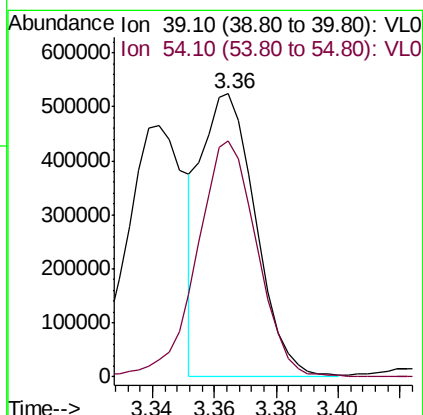
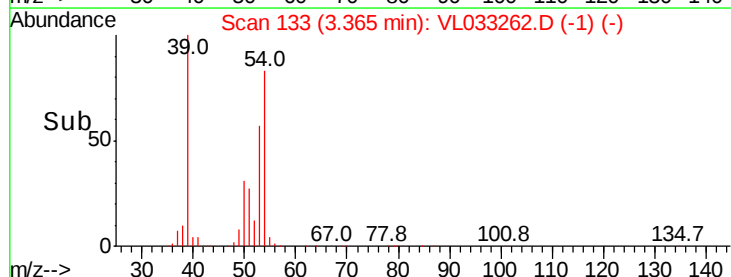
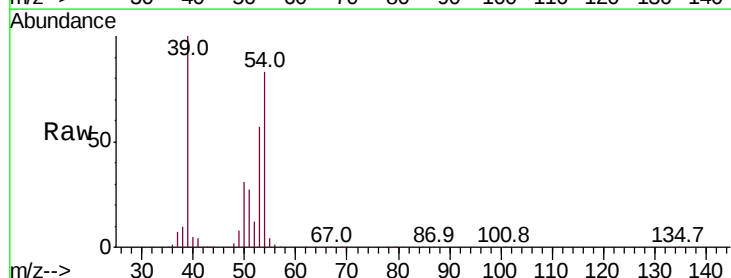
Acq: 8 Mar 2019 16:36

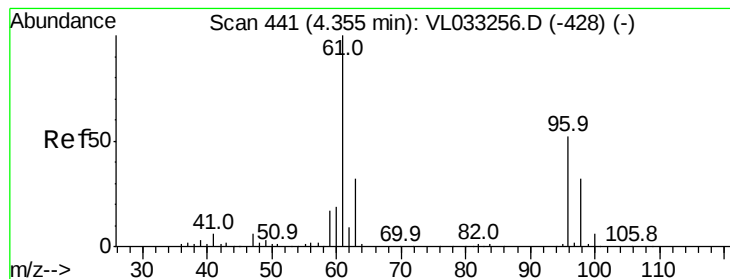
Tgt Ion: 39 Resp: 639792

Ion Ratio Lower Upper

39 100

54 92.7 68.6 103.0





#17

tert-Butyl alcohol

Concen: 10.413 ppbv

RT: 4.36 min Scan# 442

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 59 Resp: 225580

Ion Ratio Lower Upper

59 100

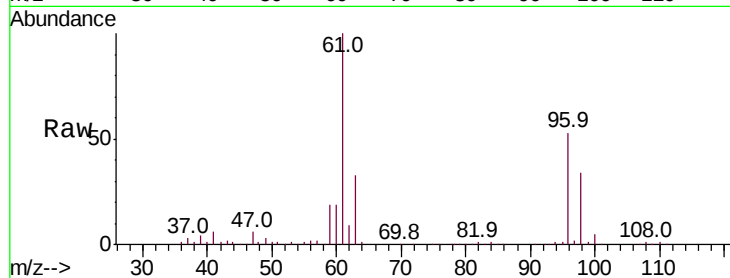
57 9.0 7.2 10.8

Manual Integrations

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Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

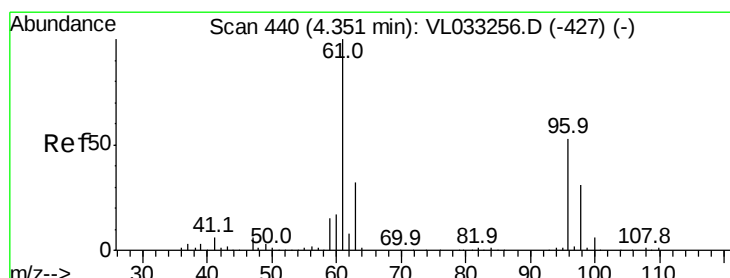
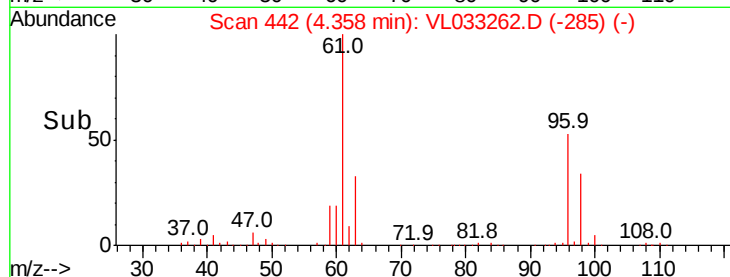
4.36

100000

50000

0

Time-->



#18

1,1-Dichloroethene

Concen: 12.549 ppbv

RT: 4.35 min Scan# 440

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

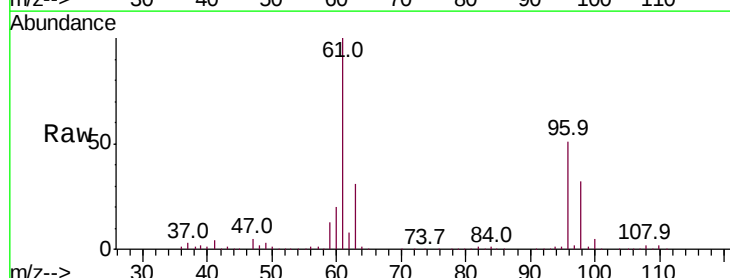
Tgt Ion: 96 Resp: 620619

Ion Ratio Lower Upper

96 100

61 196.9 150.6 226.0

98 63.4 47.0 70.4



Abundance Ion 96.00 (95.70 to 96.70): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

1000000

800000

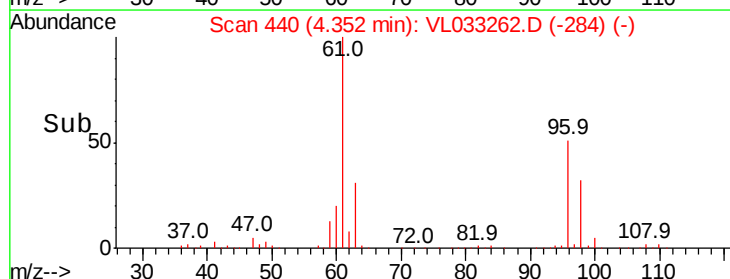
600000

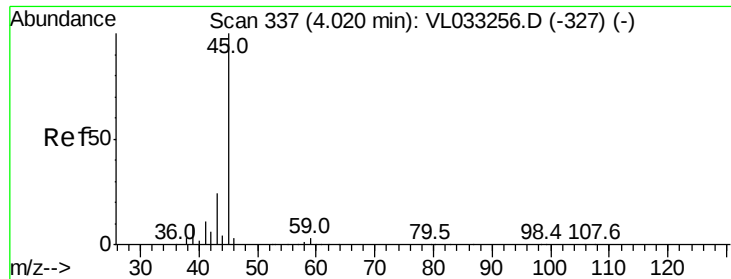
400000

200000

0

Time-->





#19

Isopropyl Alcohol

Concen: 9.972 ppbv

RT: 4.02 min Scan# 338

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 45 Resp: 788004

Ion Ratio Lower Upper

45 100

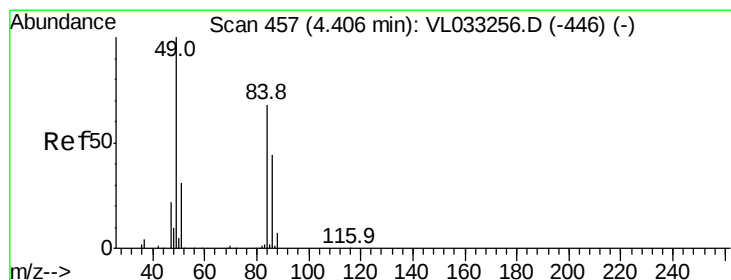
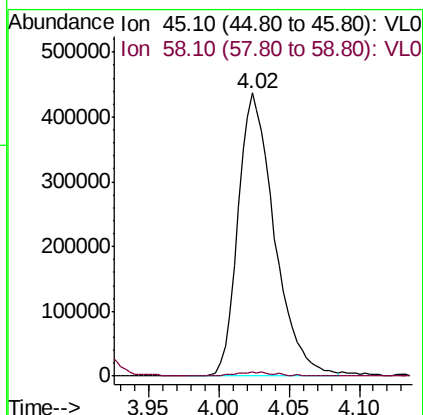
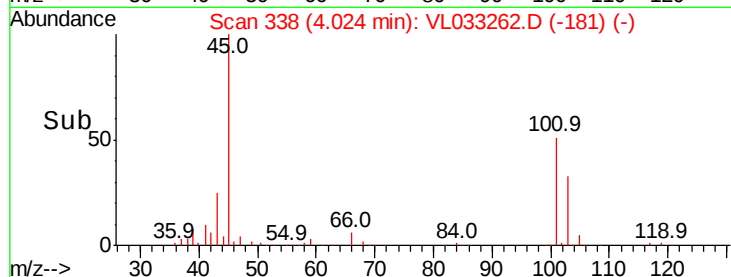
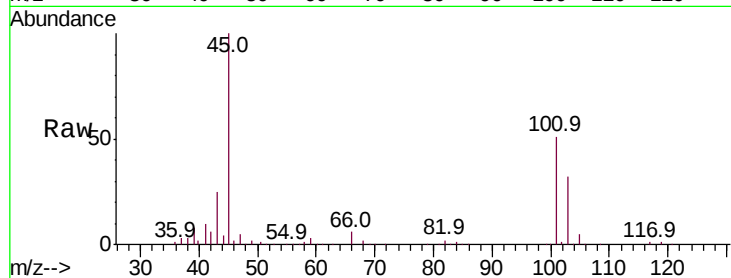
58 2.0 1.5 2.3

Manual Integrations

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#20

Methylene Chloride

Concen: 10.815 ppbv

RT: 4.41 min Scan# 458

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Tgt Ion: 84 Resp: 544812

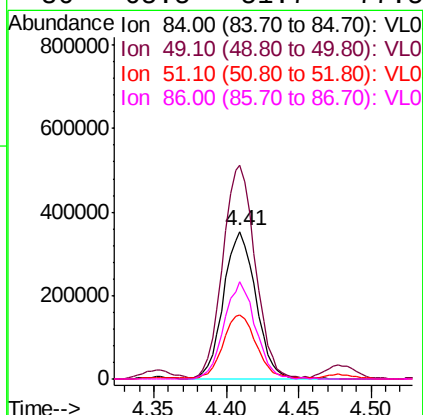
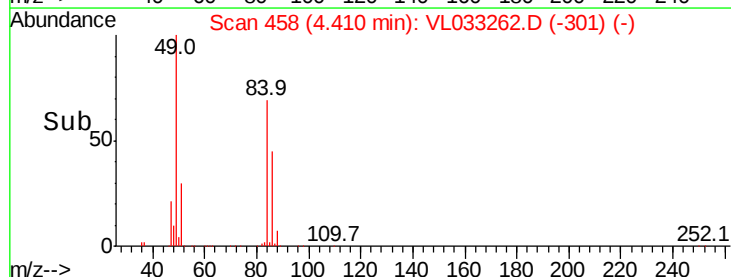
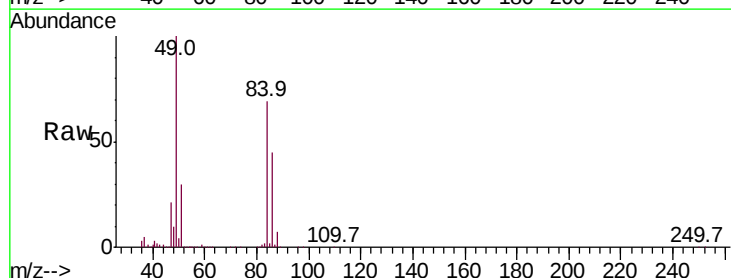
Ion Ratio Lower Upper

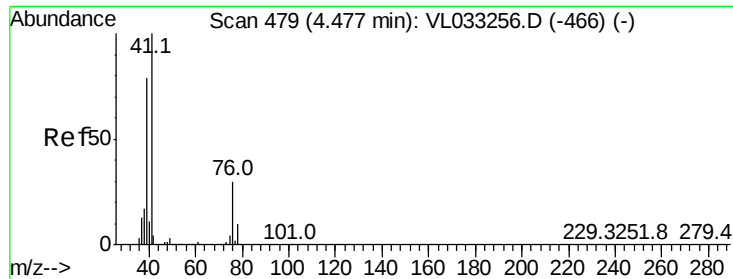
84 100

49 143.9 117.8 176.6

51 43.1 36.9 55.3

86 65.5 51.7 77.5





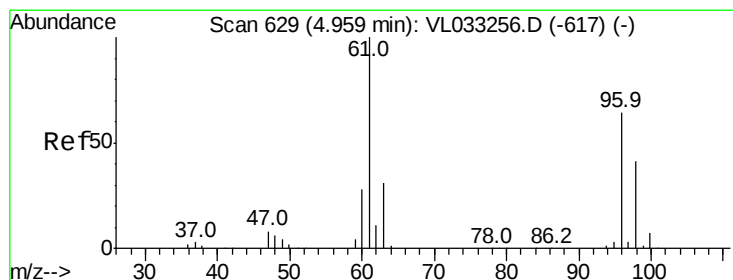
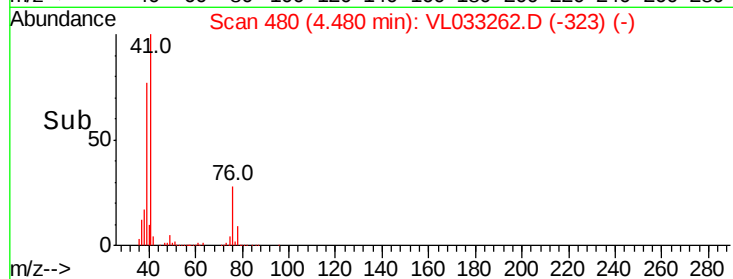
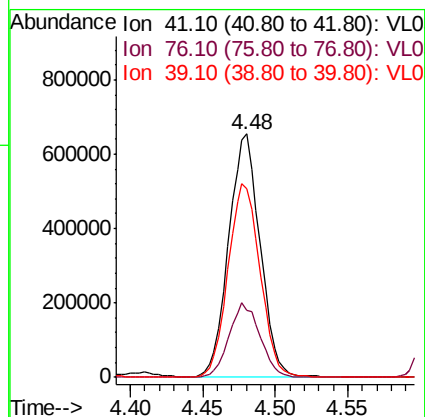
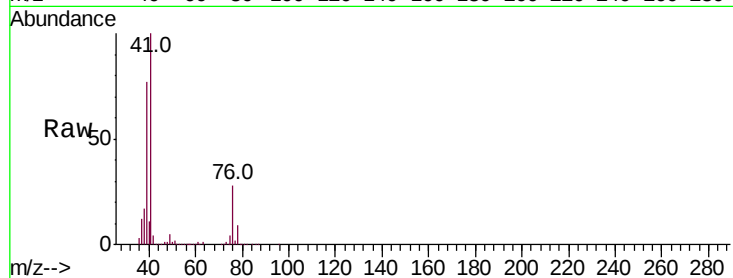
#21
Allvl Chloride
Concen: 13.150 ppbv
RT: 4.48 min Scan# 480
Delta R.T. 0.00 min
Lab File: VL033262.D
Acq: 8 Mar 2019 16:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion	Ratio	Lower	Upper
41	100		
76	30.5	24.5	36.7
39	81.5	65.3	97.9

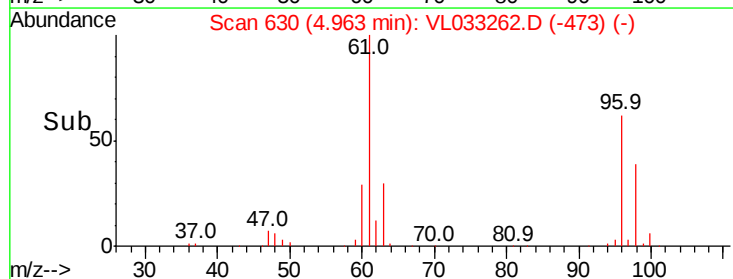
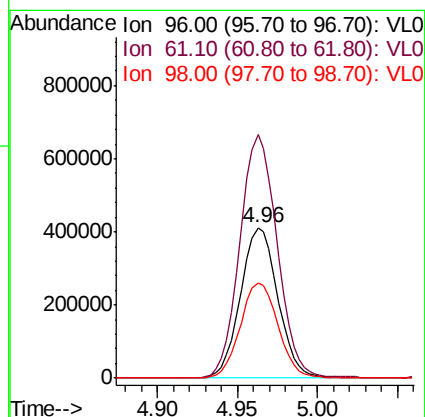
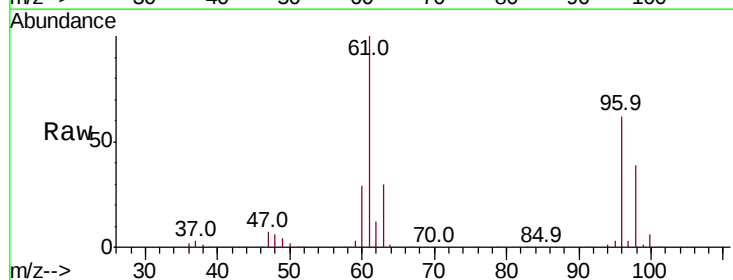
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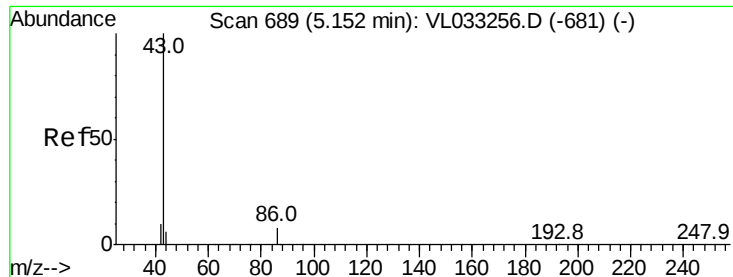
MMDadoda
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#22
trans-1,2-Dichloroethene
Concen: 12.916 ppbv
RT: 4.96 min Scan# 630
Delta R.T. 0.00 min
Lab File: VL033262.D
Acq: 8 Mar 2019 16:36

Tgt Ion	Ratio	Lower	Upper
96	100		
61	161.9	125.7	188.5
98	63.4	52.1	78.1





#23

Vinyl Acetate

Concen: 11.975 ppbv

RT: 5.16 min Scan# 690

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Tot Ion: 43 Resp: 2347988

Ion Ratio Lower Upper

43 100

86 7.2 5.6 8.4

42 10.2 8.1 12.1

44 5.1 4.3 6.5

Instrument :

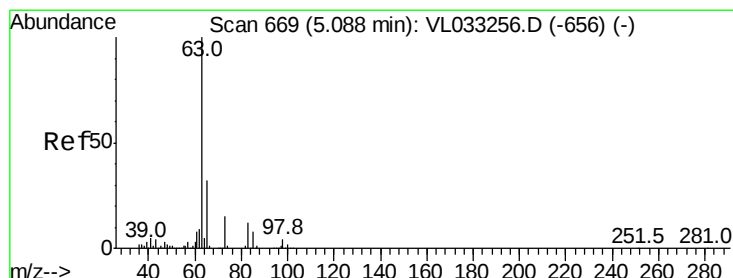
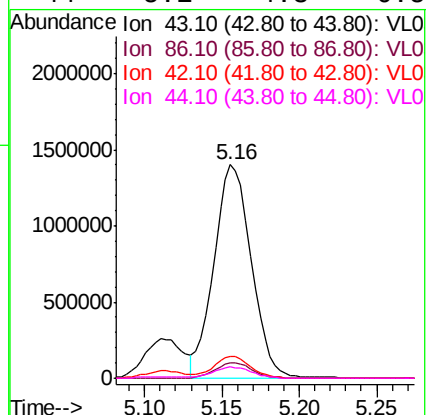
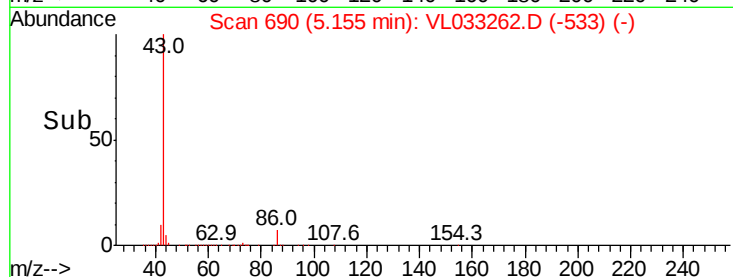
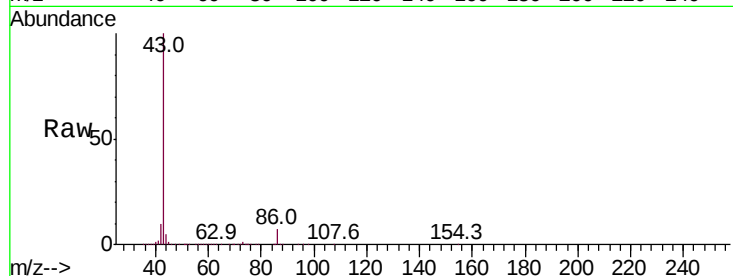
MSVOA_L

ClientSampleId :

VSTDIC015

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#24

1,1-Dichloroethane

Concen: 11.373 ppbv

RT: 5.09 min Scan# 670

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

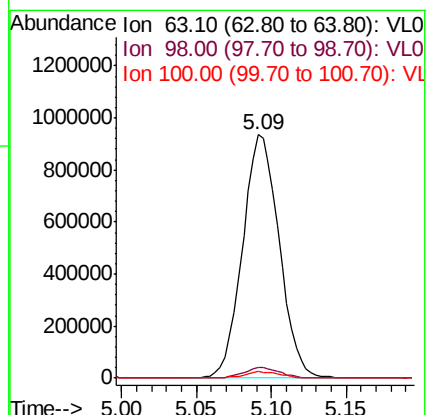
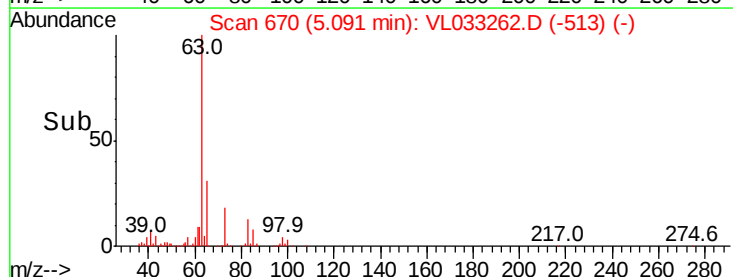
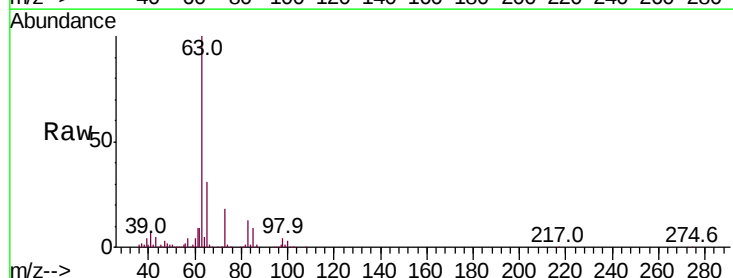
Tgt Ion: 63 Resp: 1589871

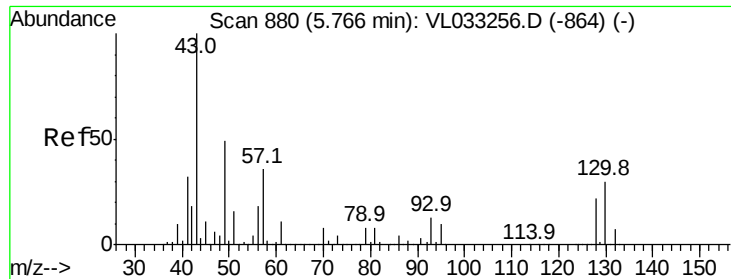
Ion Ratio Lower Upper

63 100

98 4.1 2.1 6.2

100 2.7 1.3 3.8





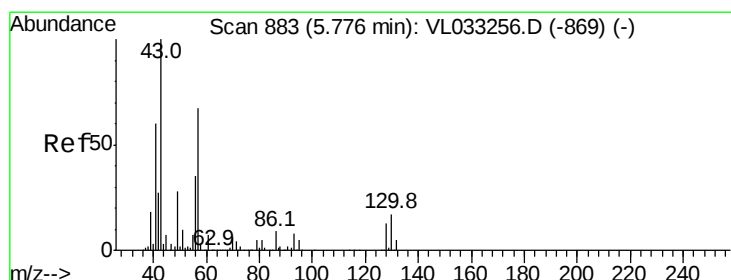
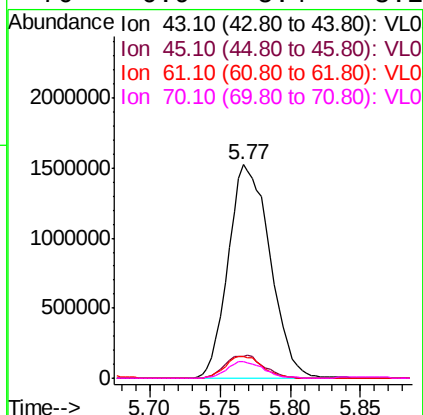
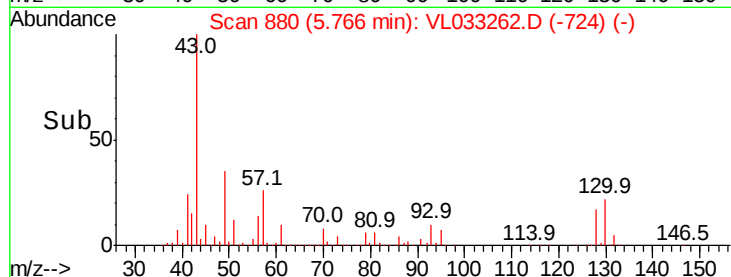
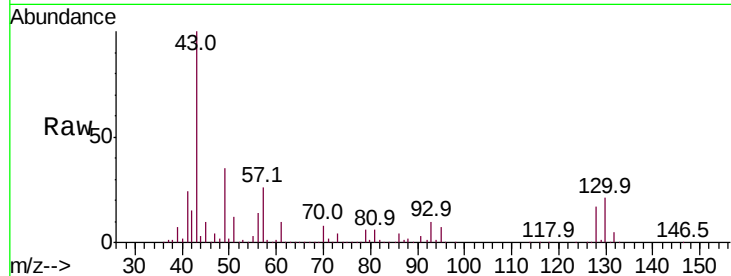
#25
Ethyl Acetate
Concen: 12.951 ppbv
RT: 5.77 min Scan# 880
Delta R.T. 0.00 min
Lab File: VL033262.D
Acq: 8 Mar 2019 16:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion	43	45	61	70
Ion	Ratio	Lower	Upper	
43	100			
45	10.0	7.8	11.8	
61	9.2	7.4	11.0	
70	6.9	5.4	8.2	

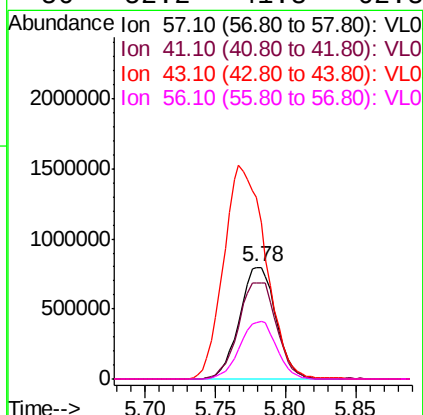
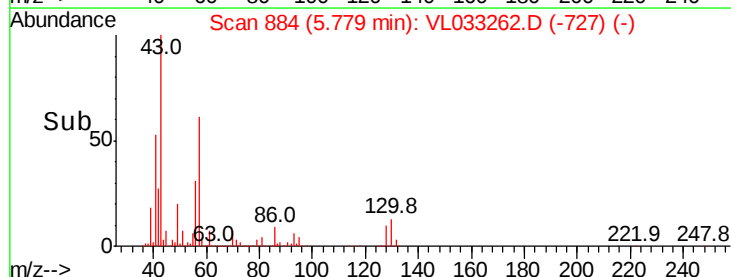
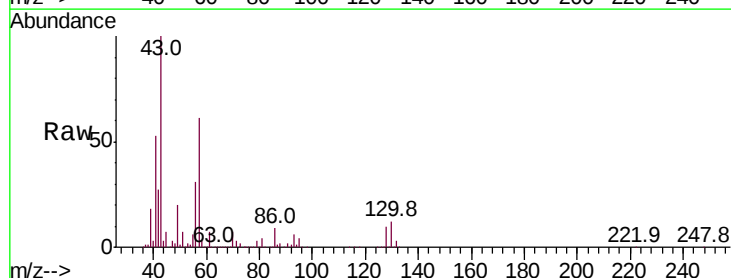
Manual Integrations
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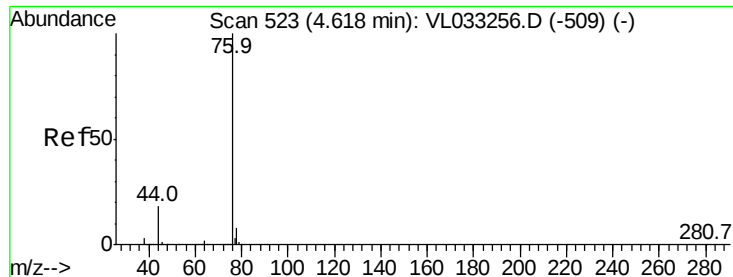
MMDadoda
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#26
Hexane
Concen: 12.673 ppbv
RT: 5.78 min Scan# 884
Delta R.T. 0.00 min
Lab File: VL033262.D
Acq: 8 Mar 2019 16:36

Tgt Ion	57	41	43	56
Ion	Ratio	Lower	Upper	
57	100			
41	90.3	72.2	108.4	
43	220.2	179.0	268.4	
56	52.2	41.8	62.8	





#27

Carbon Disulfide

Concen: 14.422 ppbv

RT: 4.62 min Scan# 523

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Tot Ion: 76 Resp: 1583703

Ion Ratio Lower Upper

76 100

44 18.7 14.8 22.2

78 9.0 7.2 10.8

Instrument :

MSVOA_L

ClientSampleId :

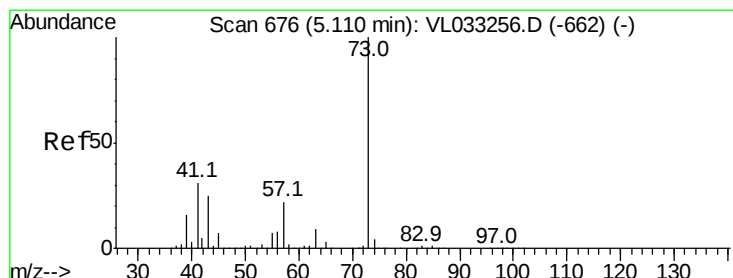
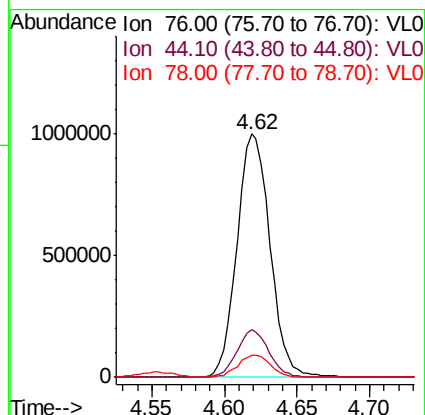
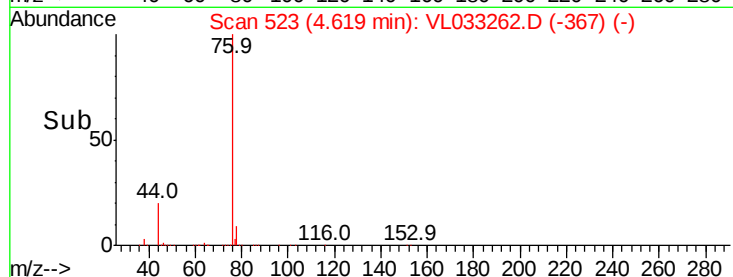
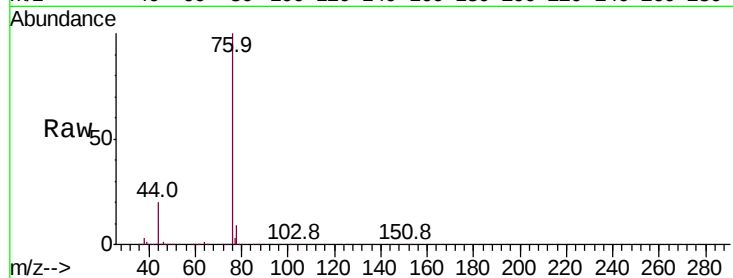
VSTDIC015

Manual Integrations

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#28

Methyl tert-Butyl Ether

Concen: 11.653 ppbv

RT: 5.11 min Scan# 676

Delta R.T. 0.00 min

Lab File: VL033262.D

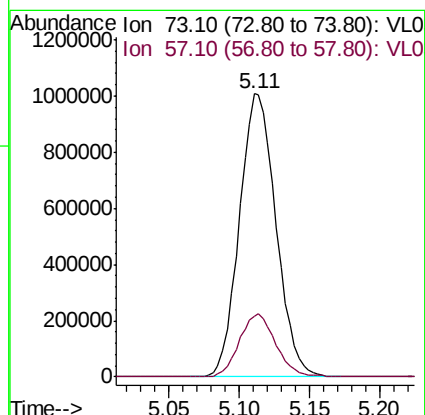
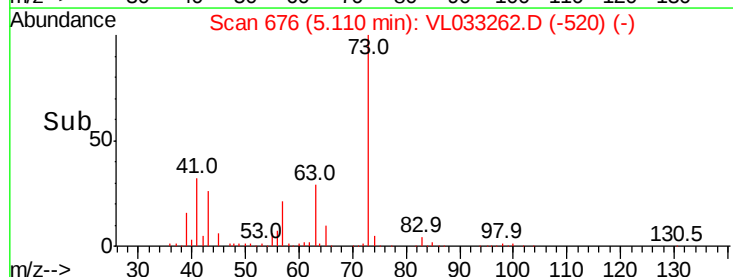
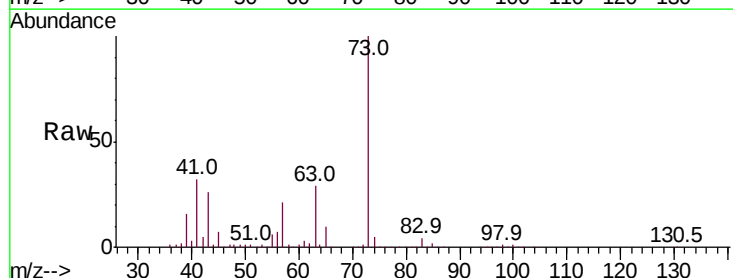
Acq: 8 Mar 2019 16:36

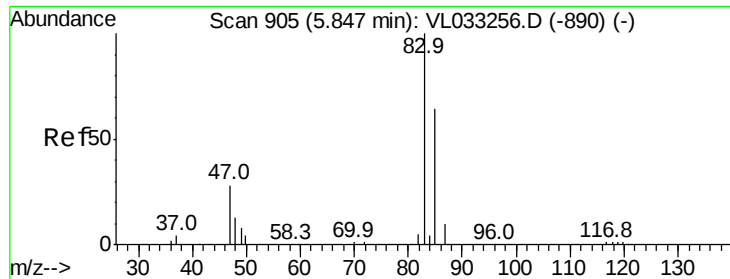
Tgt Ion: 73 Resp: 1830849

Ion Ratio Lower Upper

73 100

57 22.2 17.7 26.5





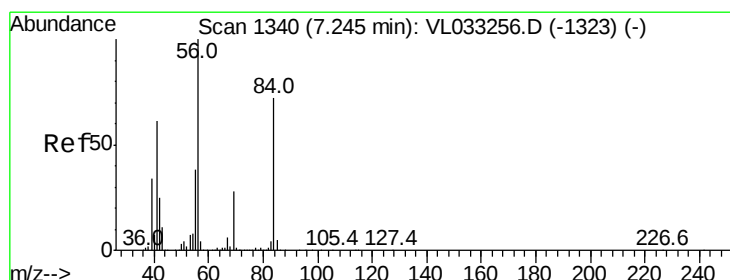
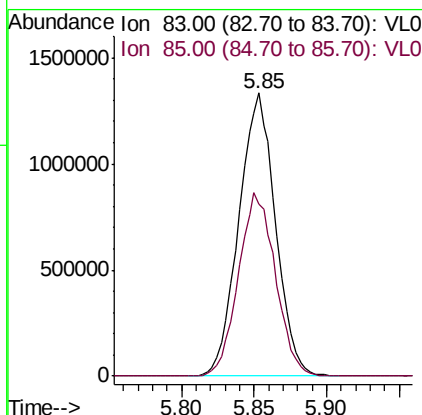
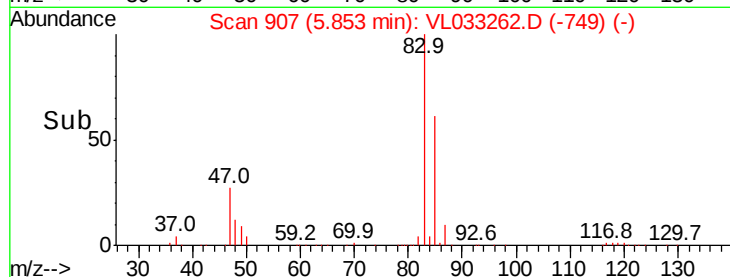
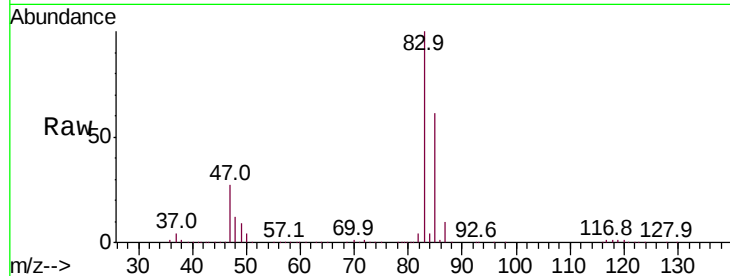
#29
Chloroform
Concen: 13.200 ppbv
RT: 5.85 min Scan# 907
Delta R.T. 0.01 min
Lab File: VL033262.D
Acq: 8 Mar 2019 16:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion: 83 Resp: 2338702
Ion Ratio Lower Upper
83 100
85 60.8 51.0 76.6

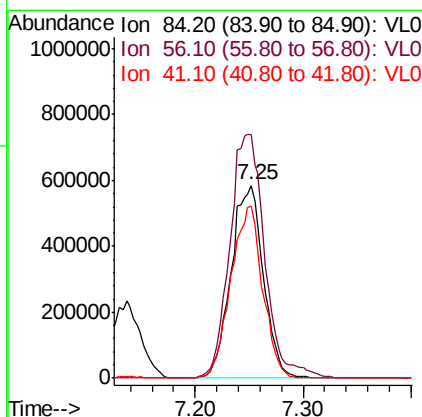
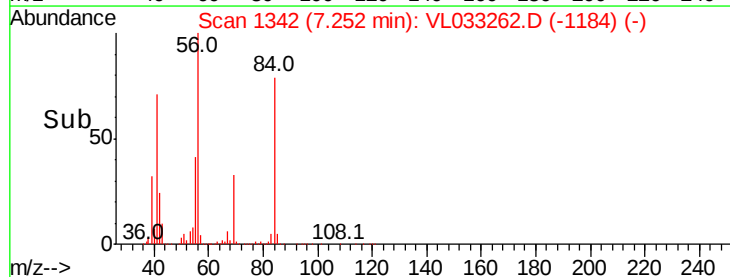
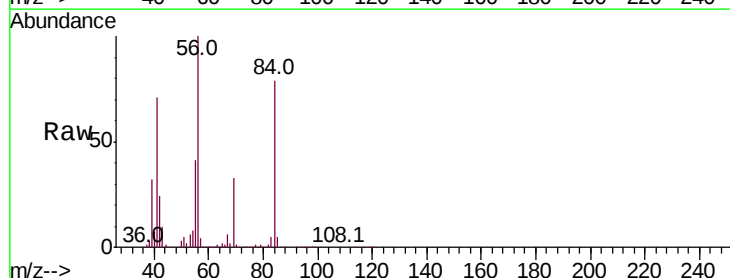
Manual Integrations
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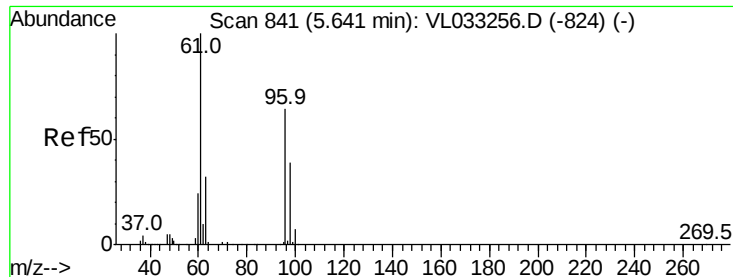
MMDadoda
3/11/2019 10:10:19 AM



#30
Cyclohexane
Concen: 14.322 ppbv
RT: 7.25 min Scan# 1342
Delta R.T. 0.01 min
Lab File: VL033262.D
Acq: 8 Mar 2019 16:36

Tgt Ion: 84 Resp: 1221586
Ion Ratio Lower Upper
84 100
56 136.8 113.4 170.2
41 87.5 70.2 105.4





#31

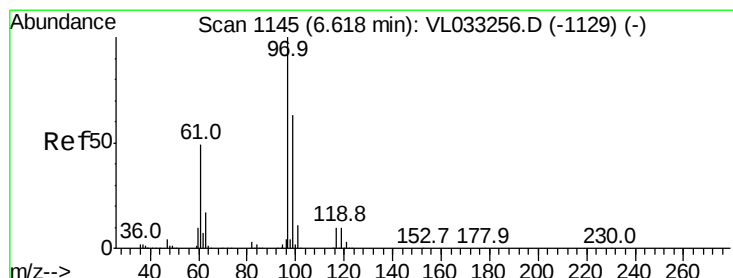
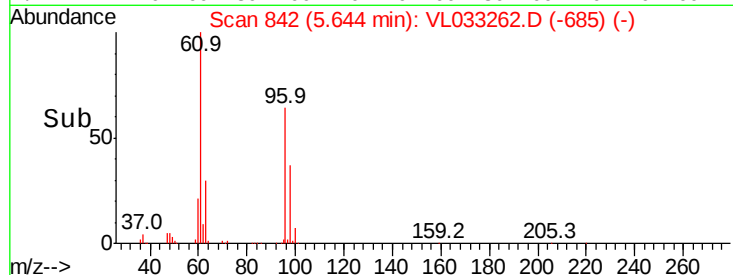
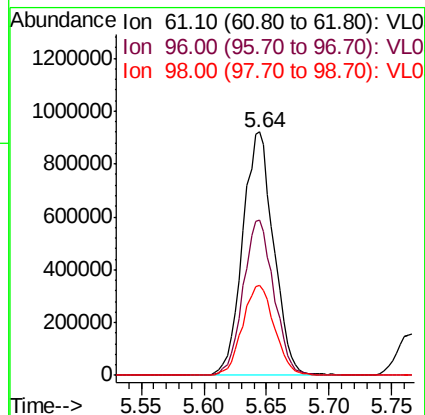
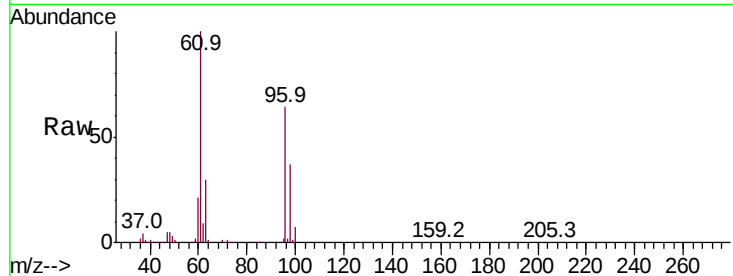
cis-1,2-Dichloroethene
Concen: 14.365 ppbv
RT: 5.64 min Scan# 842
Delta R.T. 0.00 min
Lab File: VL033262.D
Acq: 8 Mar 2019 16:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion	Ratio	Lower	Upper
61	100		
96	64.0	51.2	76.8
98	37.1	30.8	46.2

Manual Integrations
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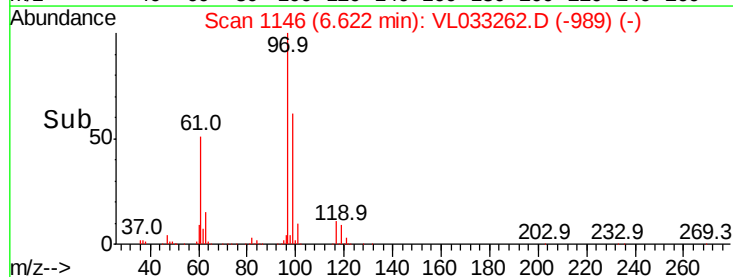
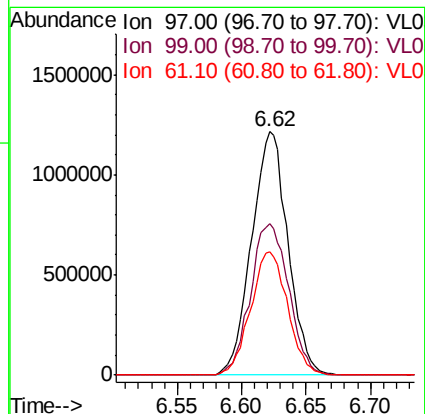
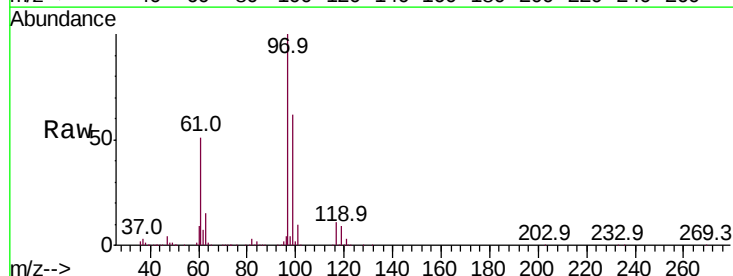
MMDadoda
3/11/2019 10:10:19 AM

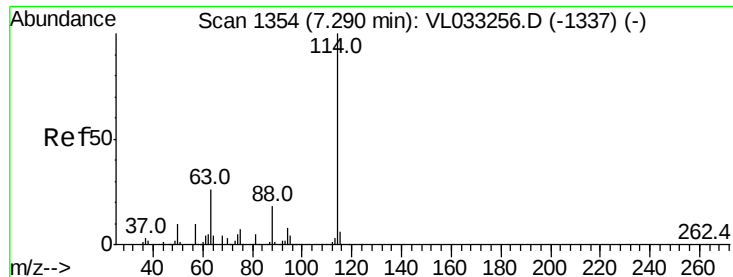


#32

1,1,1-Trichloroethane
Concen: 13.887 ppbv
RT: 6.62 min Scan# 1146
Delta R.T. 0.00 min
Lab File: VL033262.D
Acq: 8 Mar 2019 16:36

Tgt Ion	Ratio	Lower	Upper
97	100		
99	65.6	51.6	77.4
61	51.6	40.8	61.2





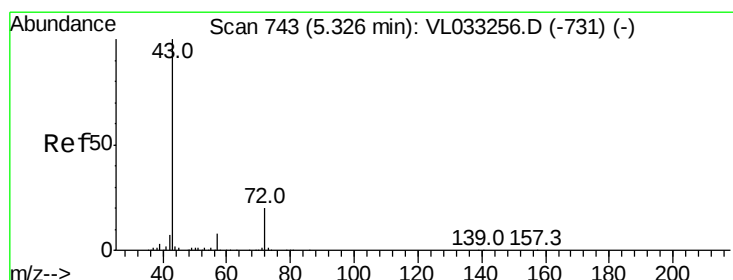
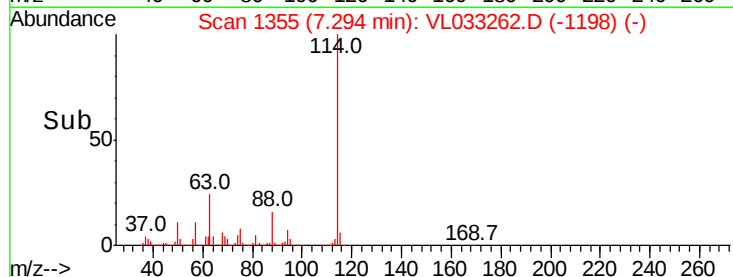
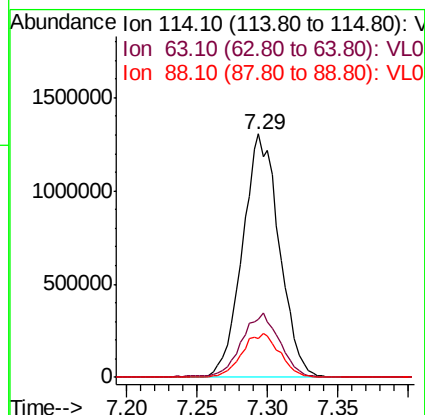
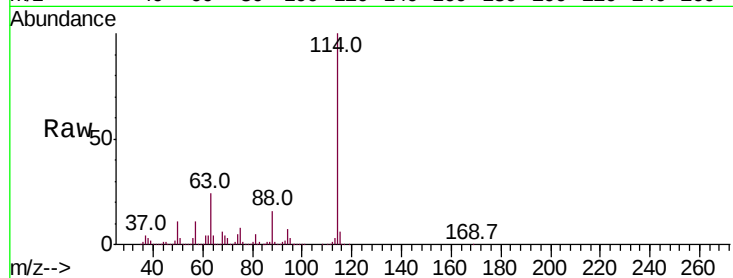
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.29 min Scan# 1355
 Delta R.T. 0.00 min
 Lab File: VL033262.D
 Acq: 8 Mar 2019 16:36

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tot Ion	Ratio	Lower	Upper
114	100		
63	27.5	22.2	33.2
88	18.5	14.6	22.0

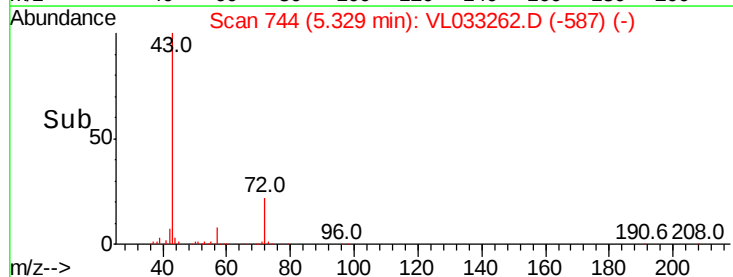
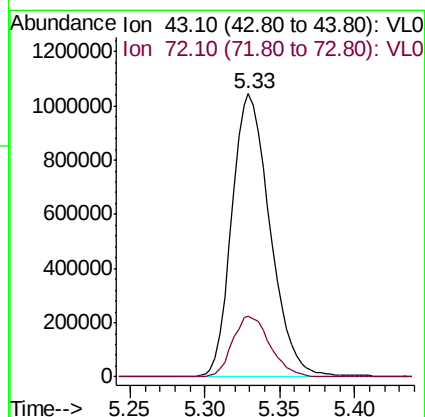
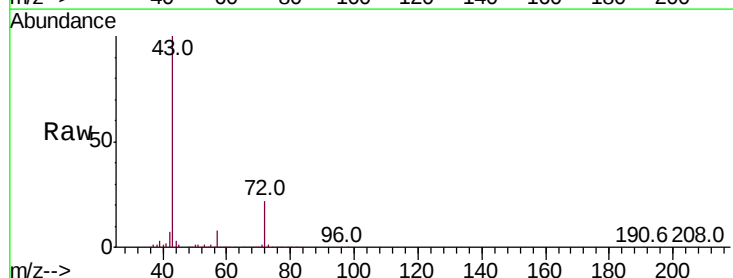
Manual Integrations
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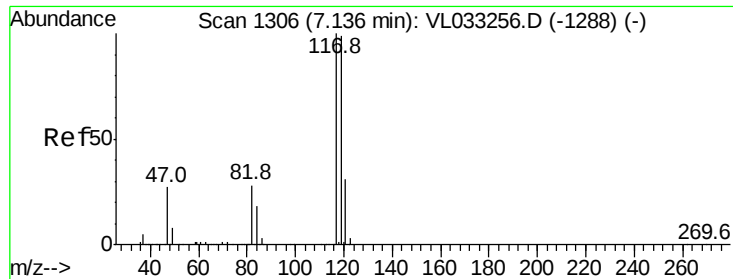
MMDadoda
 3/11/2019 10:10:19 AM



#34
 2-Butanone
 Concen: 11.149 ppbv
 RT: 5.33 min Scan# 744
 Delta R.T. 0.00 min
 Lab File: VL033262.D
 Acq: 8 Mar 2019 16:36

Tgt Ion	Ratio	Lower	Upper
43	100		
72	21.3	16.9	25.3





#35

Carbon Tetrachloride

Concen: 13.895 ppbv m

RT: 7.13 min Scan# 1305

Delta R.T. -0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion:117 Resp: 2511118

Ion Ratio Lower Upper

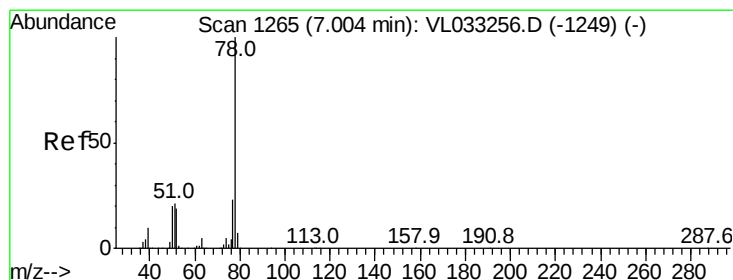
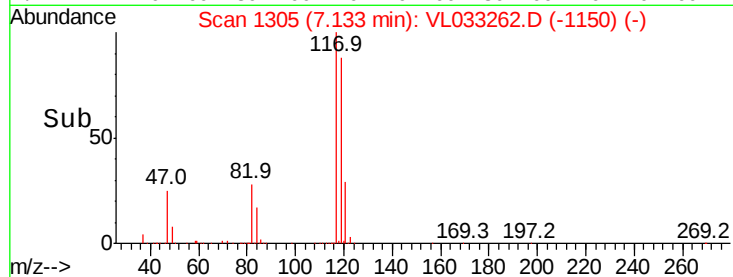
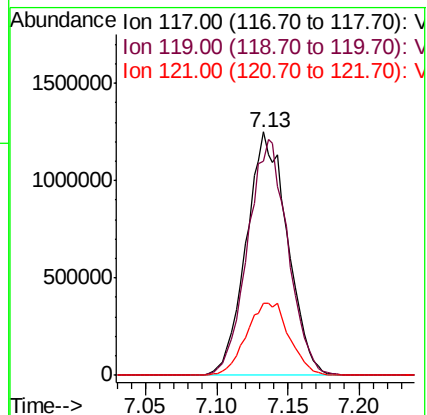
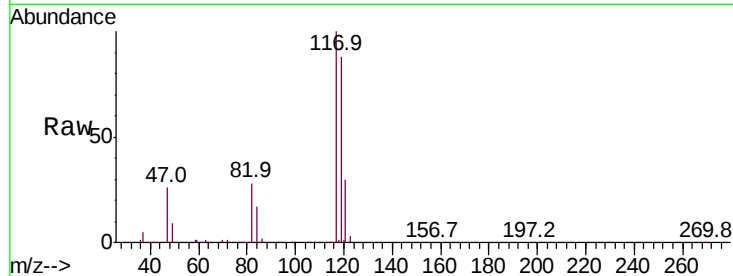
117 100

119 88.0 79.0 118.6

121 29.7 24.7 37.1

Manual Integrations
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MMDadoda
3/11/2019 10:10:19 AM



#36

Benzene

Concen: 13.596 ppbv

RT: 7.00 min Scan# 1265

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

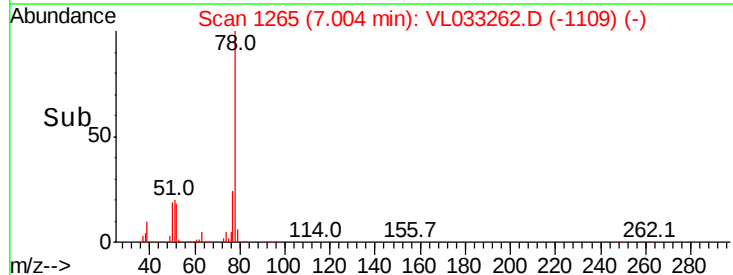
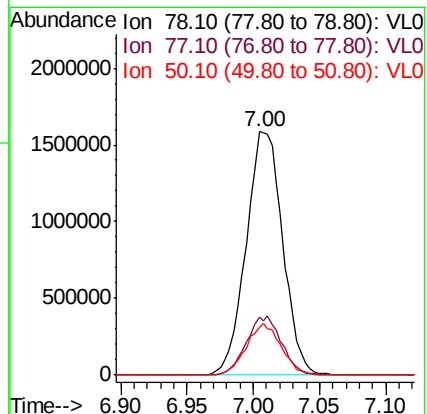
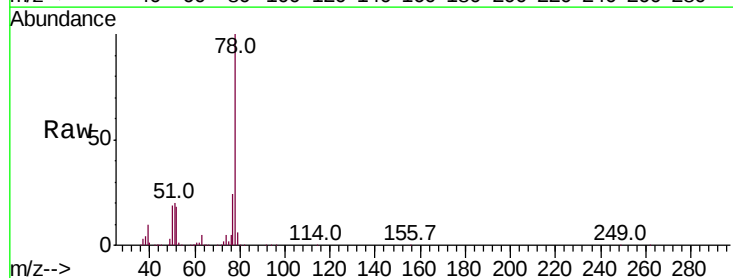
Tgt Ion: 78 Resp: 3048887

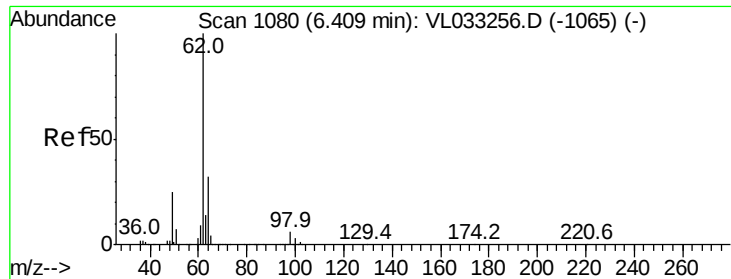
Ion Ratio Lower Upper

78 100

77 23.7 18.2 27.2

50 19.5 16.2 24.2





#37

1,2-Dichloroethane

Concen: 13.938 ppbv

RT: 6.42 min Scan# 1082

Delta R.T. 0.01 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 62 Resp: 1945544

Ion Ratio Lower Upper

62 100

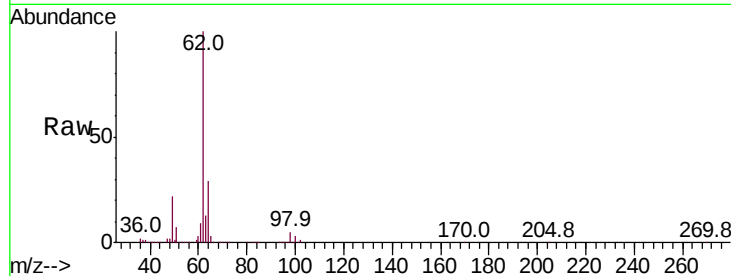
98 5.3 4.5 6.7

Manual Integrations

APPROVED

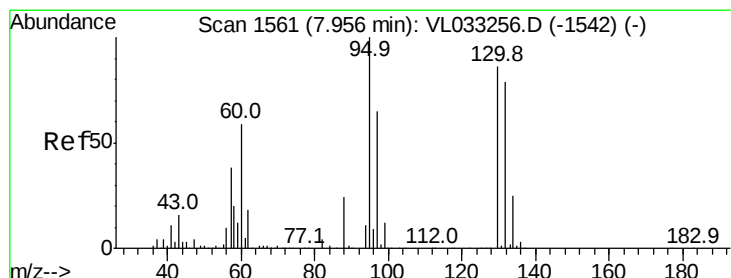
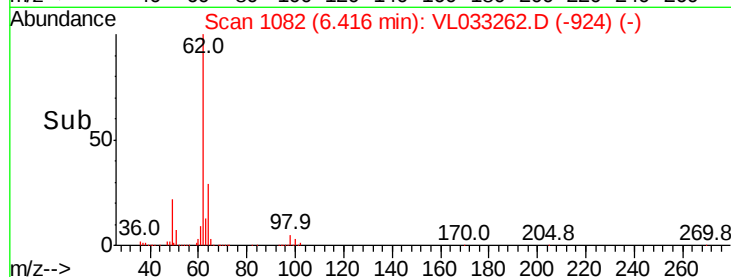
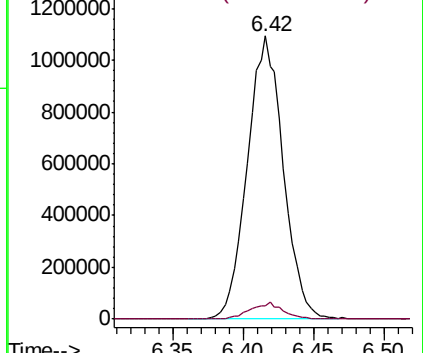
MMDadoda

3/11/2019 10:10:19 AM



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 98.00 (97.70 to 98.70): VL0



#38

Trichloroethene

Concen: 13.163 ppbv

RT: 7.96 min Scan# 1563

Delta R.T. 0.01 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Tgt Ion:130 Resp: 1114787

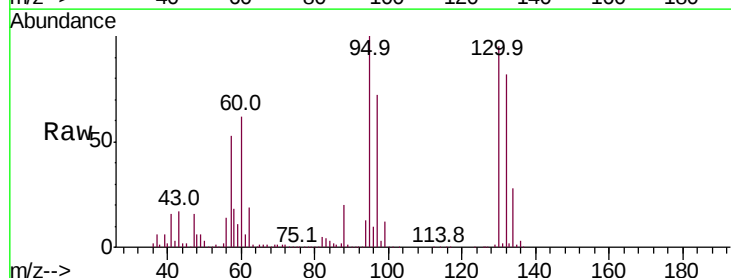
Ion Ratio Lower Upper

130 100

95 105.7 93.4 140.0

132 86.8 74.0 111.0

97 76.3 60.9 91.3

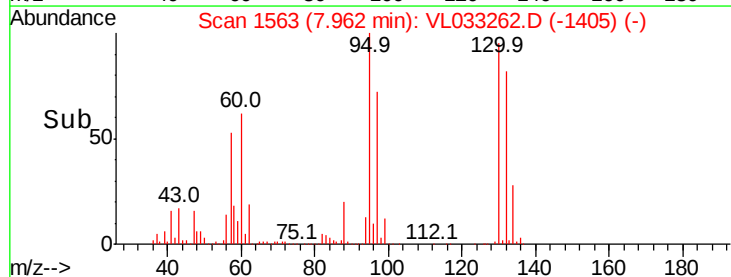
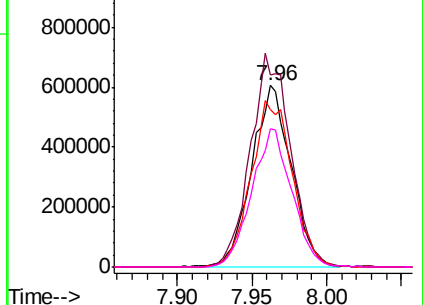


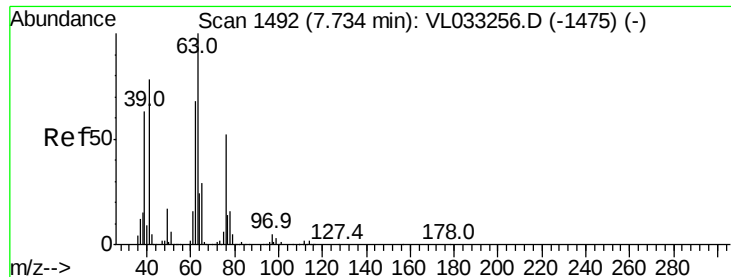
Abundance Ion 130.00 (129.70 to 130.70): V

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





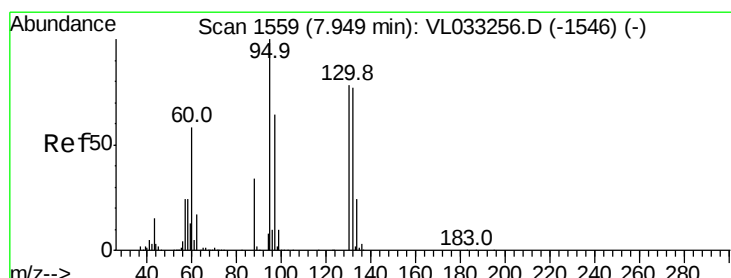
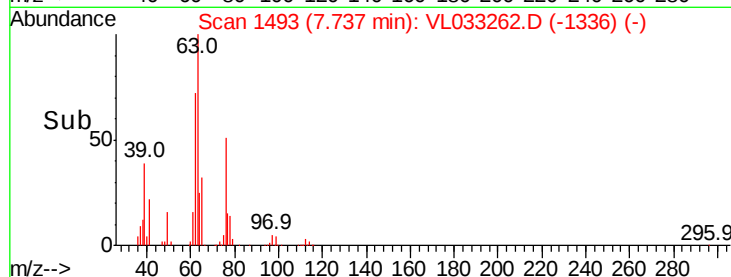
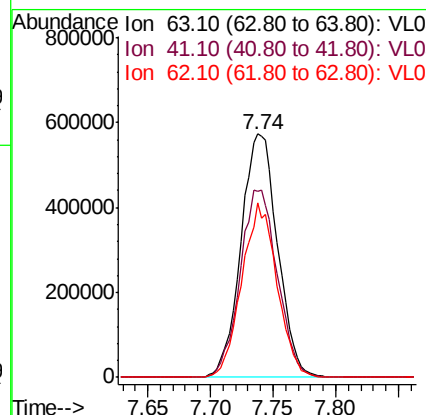
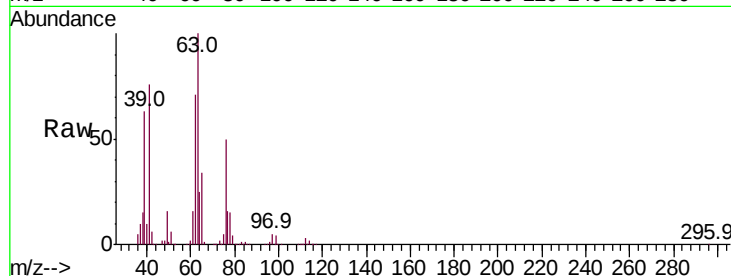
#39
 1,2-Dichloropropane
 Concen: 13.290 ppbv
 RT: 7.74 min Scan# 1493
 Delta R.T. 0.00 min
 Lab File: VL033262.D
 Acq: 8 Mar 2019 16:36

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tot Ion: 63 Resp: 1163617
 Ion Ratio Lower Upper
 63 100
 41 76.3 62.6 94.0
 62 71.4 54.6 81.8

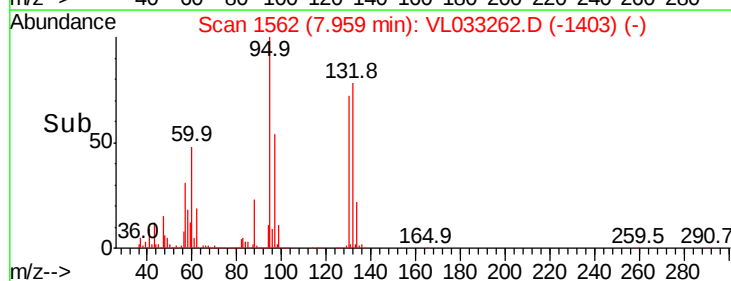
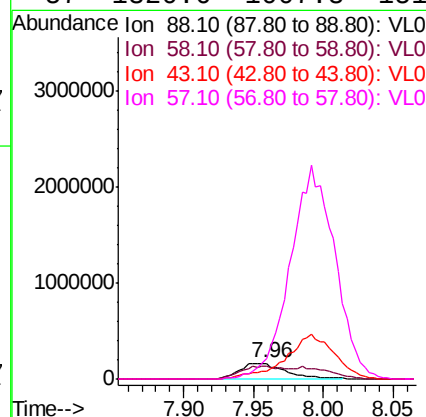
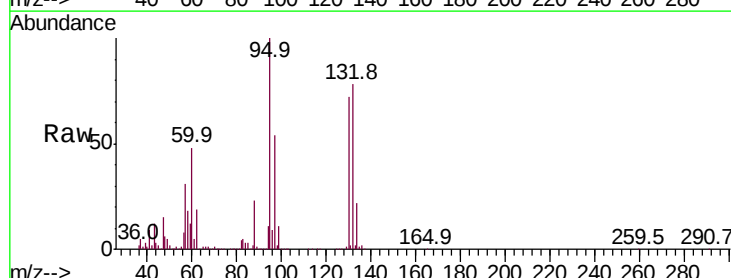
Manual Integrations
 APPROVED

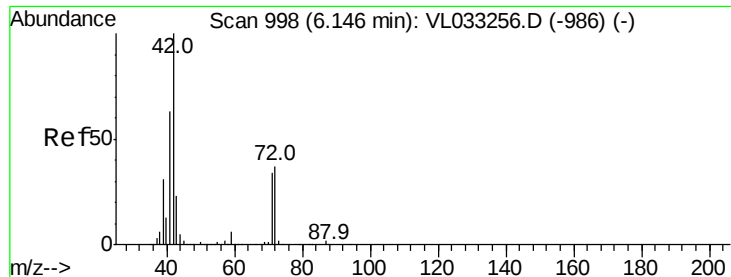
MMDadoda
 3/11/2019 10:10:19 AM



#40
 1,4-Dioxane
 Concen: 11.656 ppbv m
 RT: 7.96 min Scan# 1562
 Delta R.T. 0.01 min
 Lab File: VL033262.D
 Acq: 8 Mar 2019 16:36

Tgt Ion: 88 Resp: 378623
 Ion Ratio Lower Upper
 88 100
 58 138.7 108.4 162.6
 43 301.2 232.3 348.5
 57 1320.6 1007.8 1511.8





#41

Tetrahydrofuran

Concen: 13.643 ppbv

RT: 6.15 min Scan# 998

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 42 Resp: 1240869

Ion Ratio Lower Upper

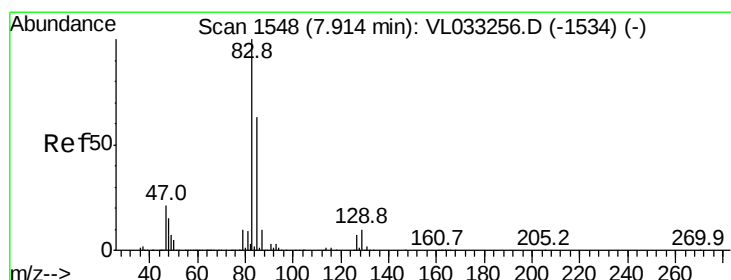
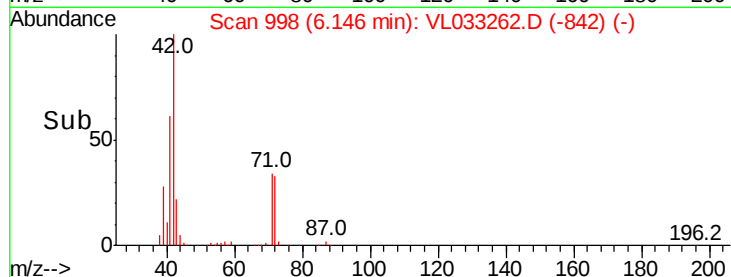
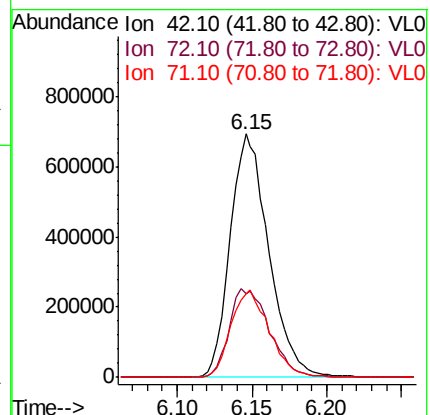
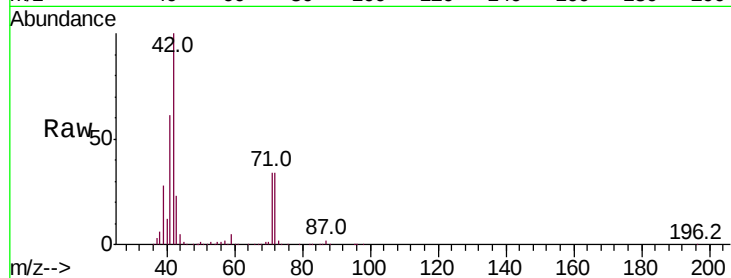
42 100

72 38.3 30.2 45.2

71 36.2 29.0 43.6

Manual Integrations
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MMDadoda
3/11/2019 10:10:19 AM



#42

Bromodichloromethane

Concen: 13.519 ppbv

RT: 7.92 min Scan# 1550

Delta R.T. 0.01 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

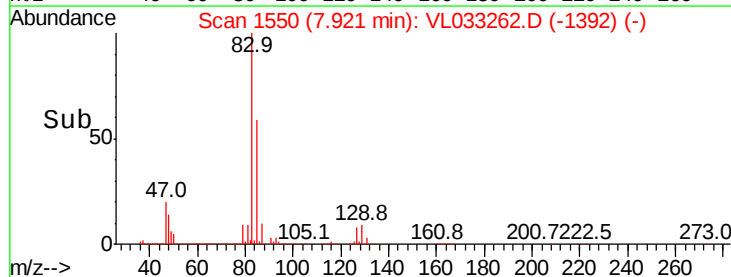
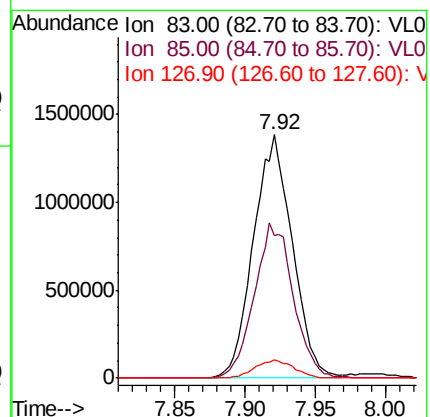
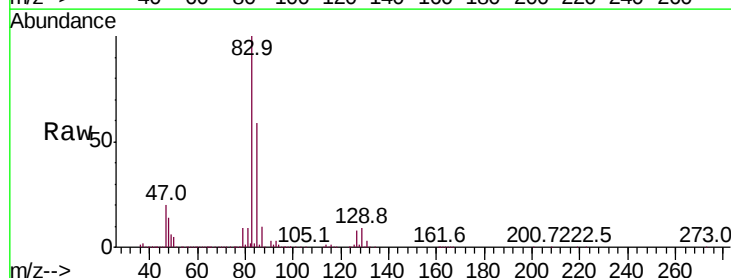
Tgt Ion: 83 Resp: 2668350

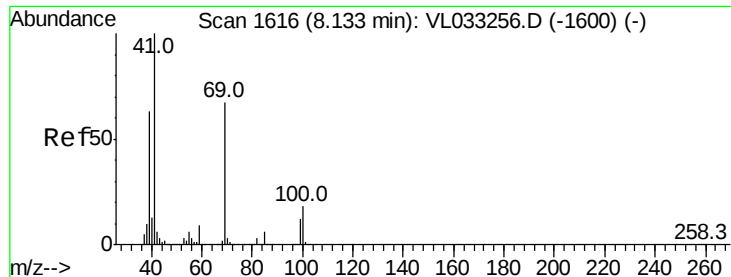
Ion Ratio Lower Upper

83 100

85 58.6 50.1 75.1

127 7.7 5.9 8.9





#43

Methyl Methacrylate

Concen: 14.053 ppbv

RT: 8.14 min Scan# 1618

Delta R.T. 0.01 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

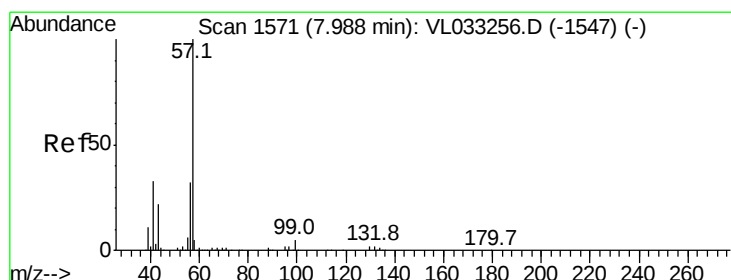
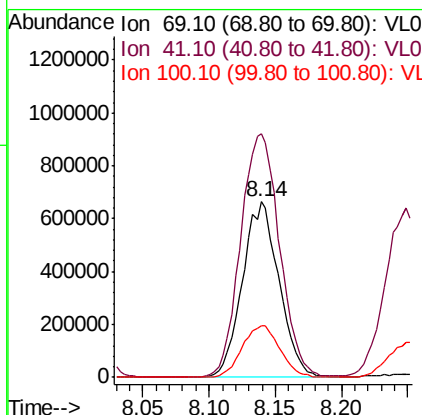
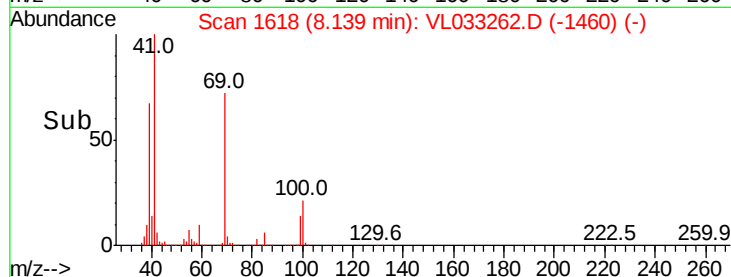
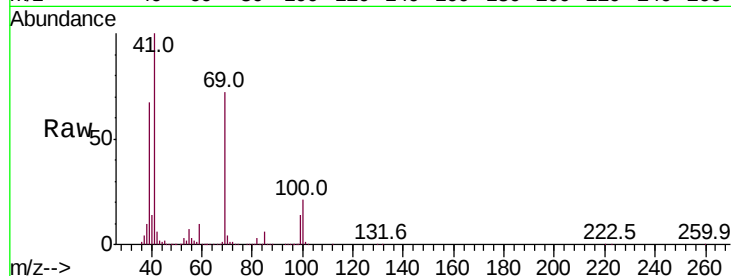
Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion: 69 Resp: 1274904

Ion	Ratio	Lower	Upper
69	100		
41	147.4	120.3	180.5
100	30.3	23.5	35.3

Manual Integrations
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MMDadoda
3/11/2019 10:10:19 AM



#44

2,2,4-Trimethylpentane

Concen: 12.599 ppbv

RT: 7.99 min Scan# 1572

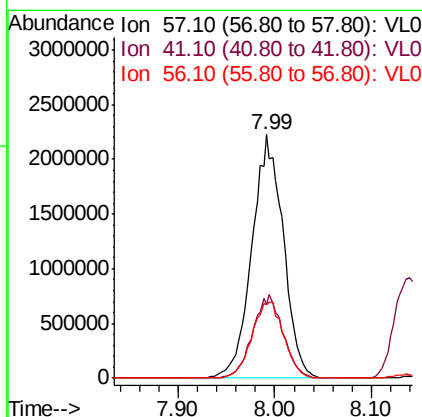
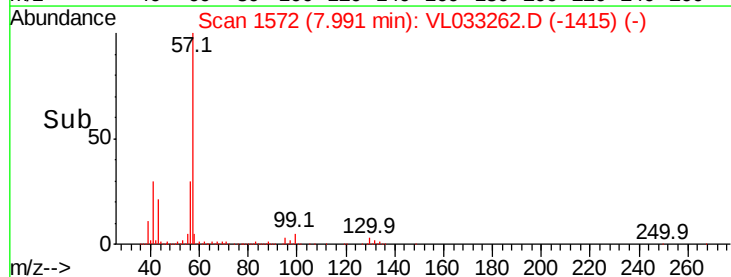
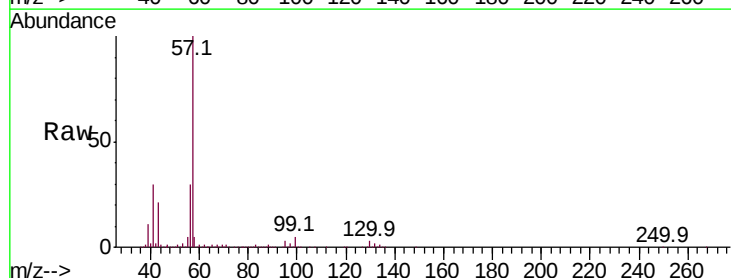
Delta R.T. 0.00 min

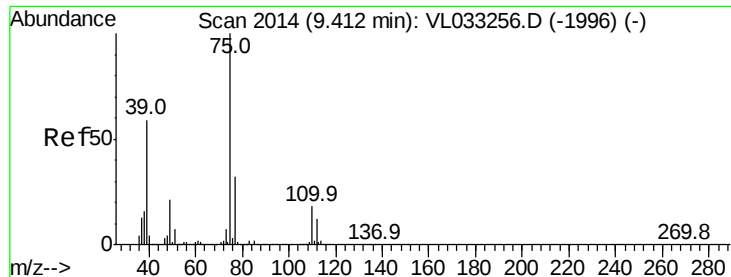
Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Tgt Ion: 57 Resp: 4996153

Ion	Ratio	Lower	Upper
57	100		
41	32.9	26.4	39.6
56	31.8	25.1	37.7





#45

t-1,3-Dichloropropene

Concen: 15.254 ppbv

RT: 9.42 min Scan# 2016

Delta R.T. 0.01 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 75 Resp: 1674569

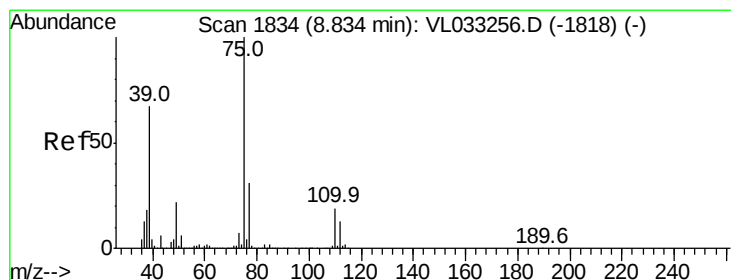
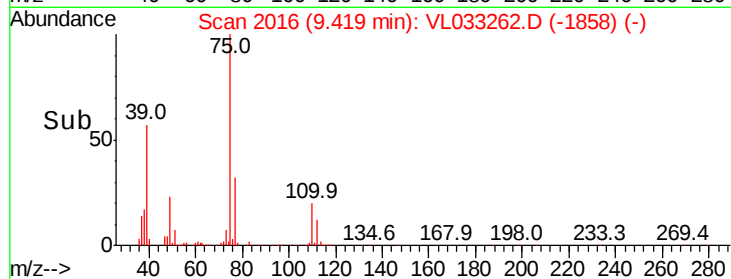
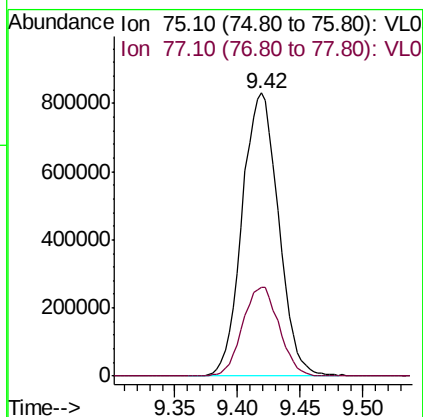
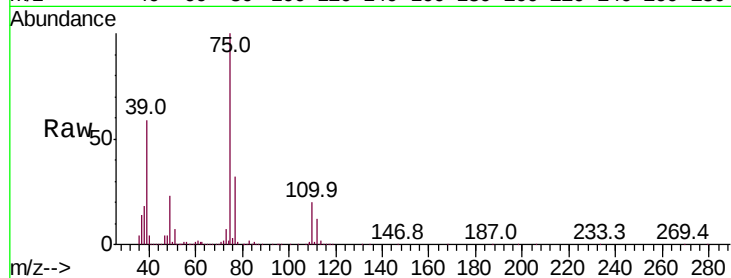
Ion Ratio Lower Upper

75 100

77 31.6 25.4 38.0

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#46

cis-1,3-Dichloropropene

Concen: 14.448 ppbv

RT: 8.84 min Scan# 1836

Delta R.T. 0.01 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

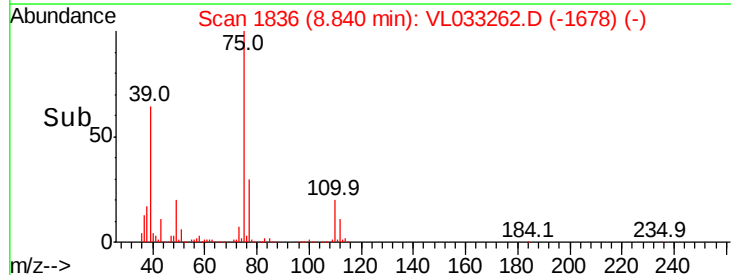
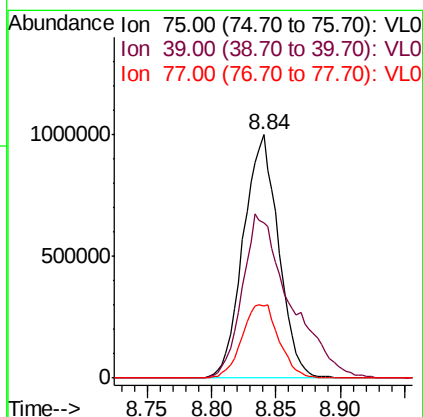
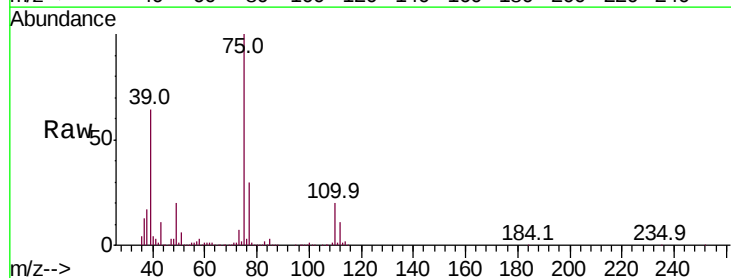
Tgt Ion: 75 Resp: 1891917

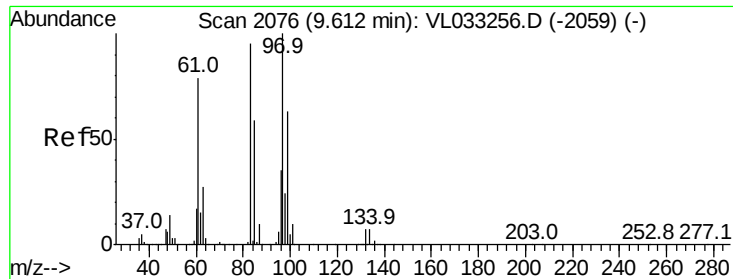
Ion Ratio Lower Upper

75 100

39 63.8 53.8 80.6

77 29.8 25.0 37.6





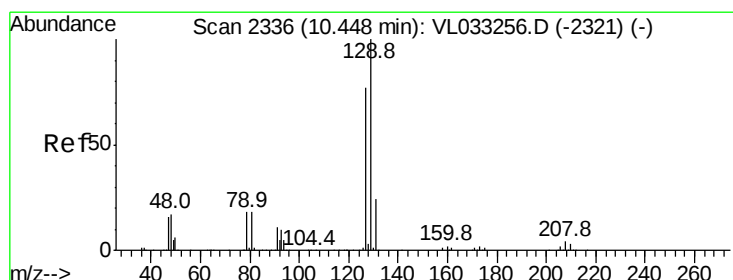
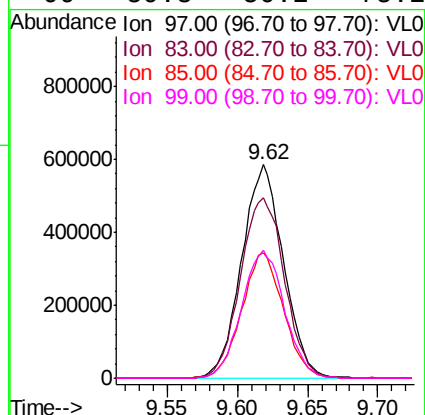
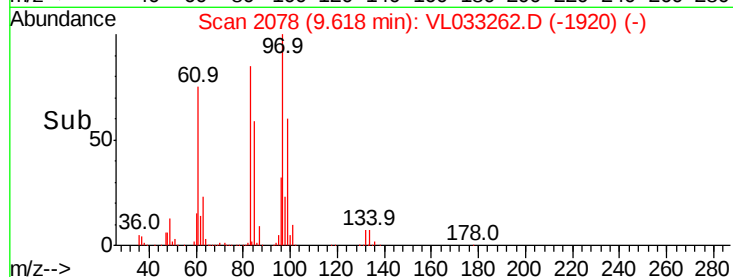
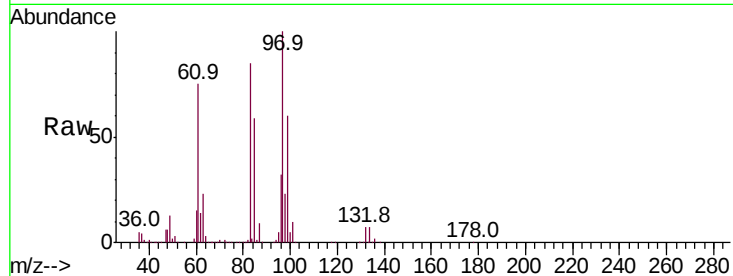
#47
 1,1,2-Trichloroethane
 Concen: 12.878 ppbv
 RT: 9.62 min Scan# 2078
 Delta R.T. 0.01 min
 Lab File: VL033262.D
 Acq: 8 Mar 2019 16:36

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tot Ion	Ratio	Lower	Upper
97	100		
83	84.6	75.8	113.8
85	58.5	47.5	71.3
99	59.8	50.2	75.2

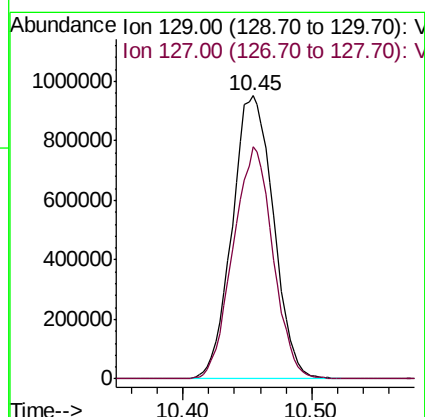
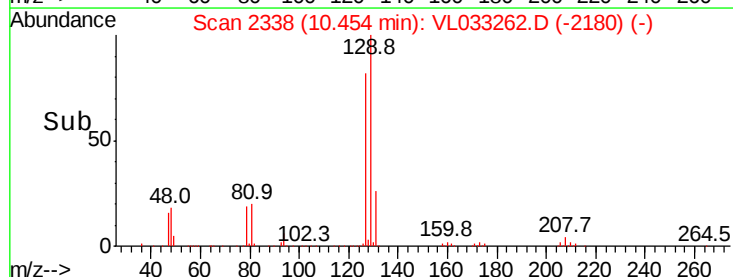
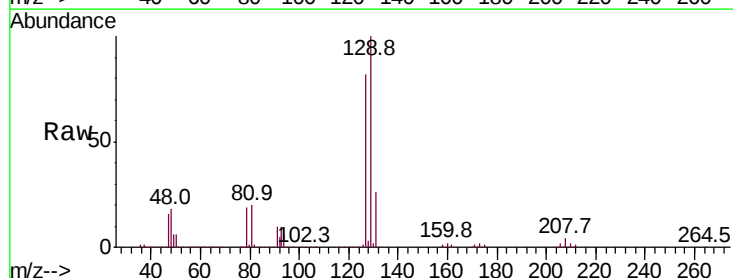
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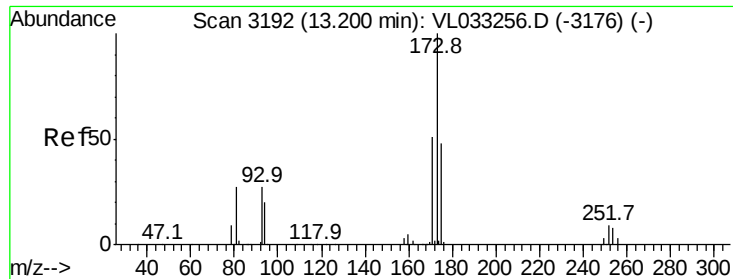
MMDadoda
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#48
 Dibromochloromethane
 Concen: 13.882 ppbv
 RT: 10.45 min Scan# 2338
 Delta R.T. 0.01 min
 Lab File: VL033262.D
 Acq: 8 Mar 2019 16:36

Tgt Ion	Ratio	Lower	Upper
129	100		
127	79.0	39.4	118.2





#49

Bromoform

Concen: 15.188 ppbv

RT: 13.20 min Scan# 3193

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Instrument :

MSVOA_L

ClientSampled :

VSTDIC015

Tot Ion:173 Resp: 1851248

Ion Ratio Lower Upper

173 100

175 46.7 38.8 58.2

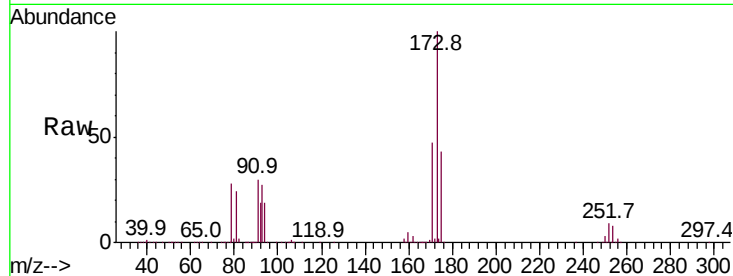
171 50.1 41.5 62.3

Manual Integrations

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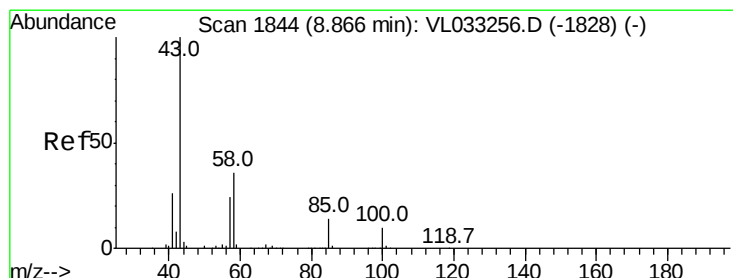
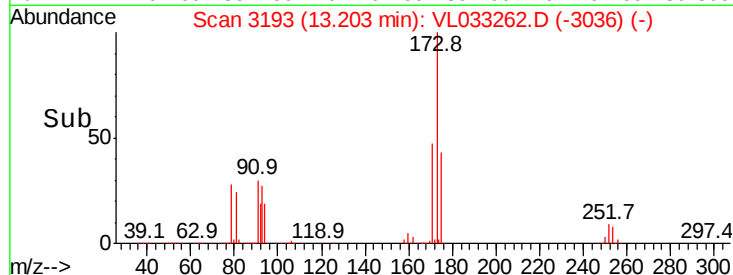
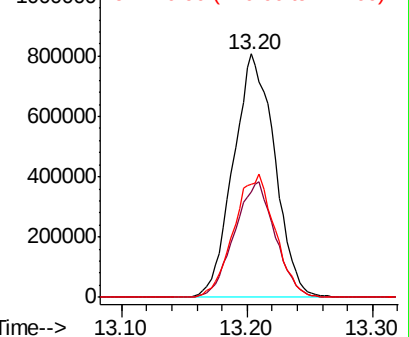
3/11/2019 10:10:19 AM



Abundance Ion 172.90 (172.60 to 173.60): V

Ion 174.90 (174.60 to 175.60): V

Ion 170.90 (170.60 to 171.60): V



#50

4-Methyl-2-Pentanone

Concen: 12.769 ppbv

RT: 8.87 min Scan# 1845

Delta R.T. 0.00 min

Lab File: VL033262.D

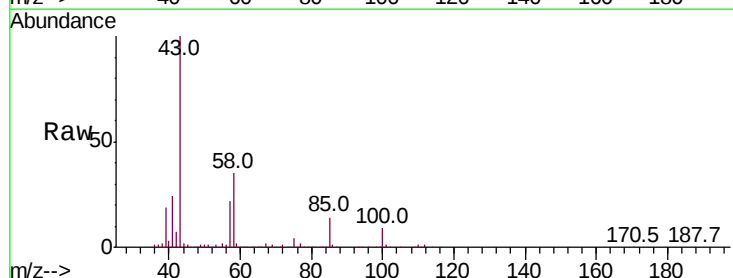
Acq: 8 Mar 2019 16:36

Tgt Ion: 43 Resp: 3126702

Ion Ratio Lower Upper

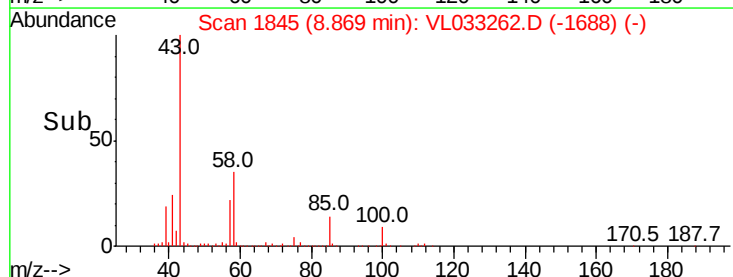
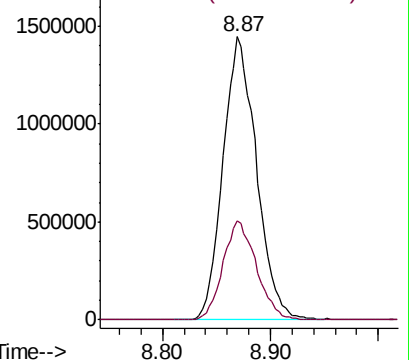
43 100

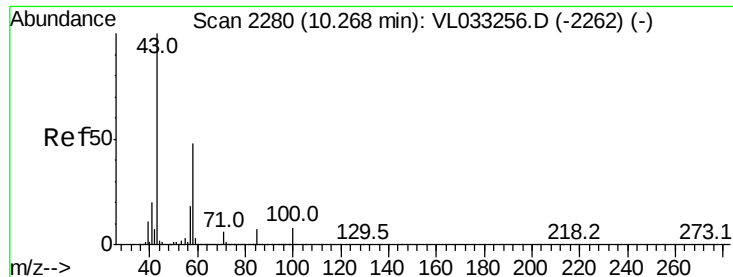
58 35.0 28.1 42.1



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





#51

2-Hexanone

Concen: 13.374 ppbv

RT: 10.27 min Scan# 2281

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 43 Resp: 2449602

Ion Ratio Lower Upper

43 100

58 47.4 38.1 57.1

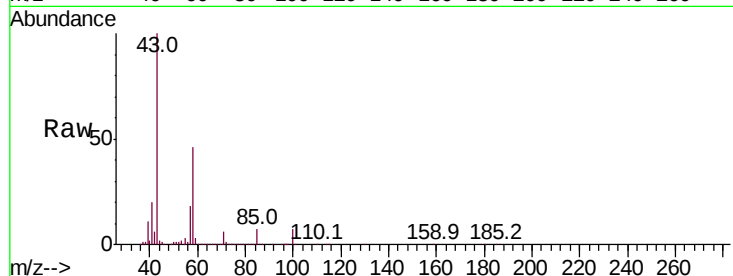
98 0.2 0.2 0.4#

Manual Integrations

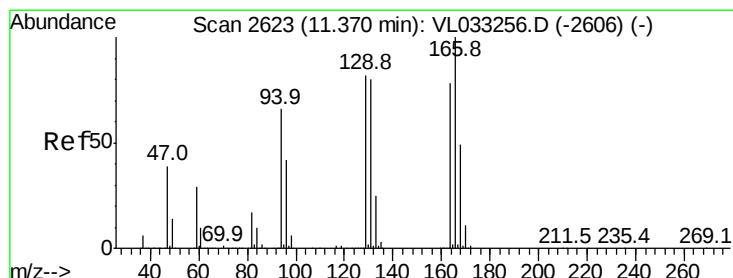
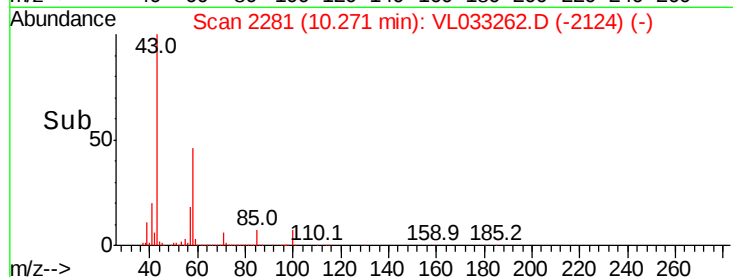
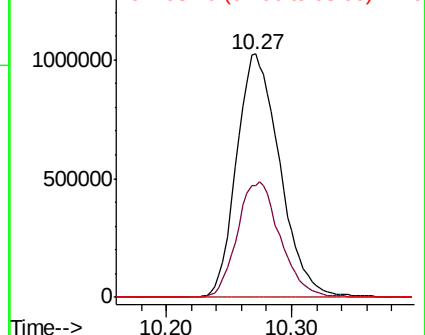
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Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 58.10 (57.80 to 58.80): VL0
Ion 98.20 (97.90 to 98.90): VL0



#52

Tetrachloroethene

Concen: 13.244 ppbv

RT: 11.37 min Scan# 2624

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Tgt Ion: 164 Resp: 1106876

Ion Ratio Lower Upper

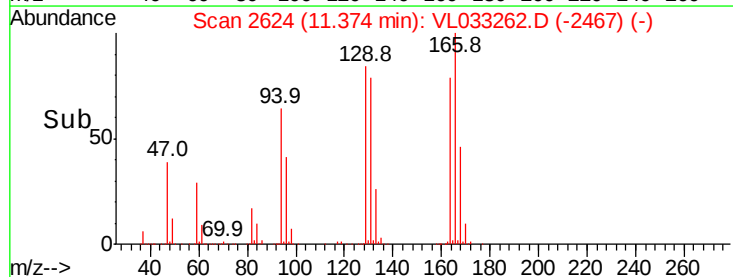
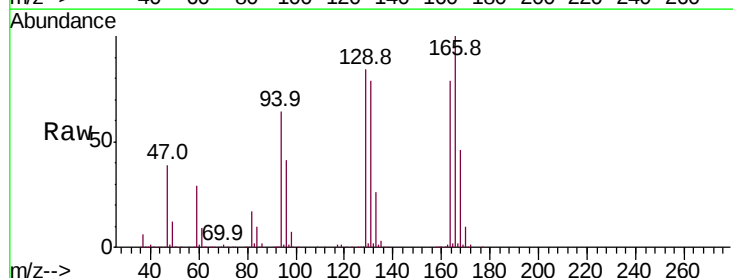
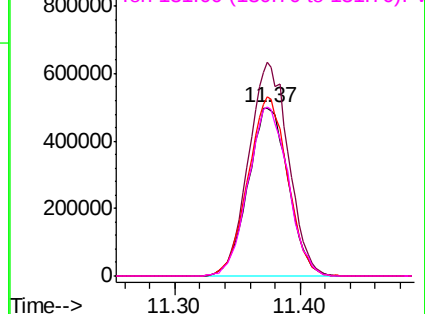
164 100

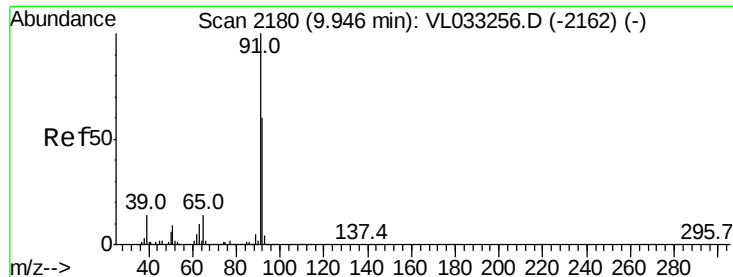
166 127.0 102.0 153.0

129 106.3 83.2 124.8

131 100.3 81.4 122.0

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: 13.376 ppbv

RT: 9.95 min Scan# 2182

Delta R.T. 0.01 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 91 Resp: 3468098

Ion Ratio Lower Upper

91 100

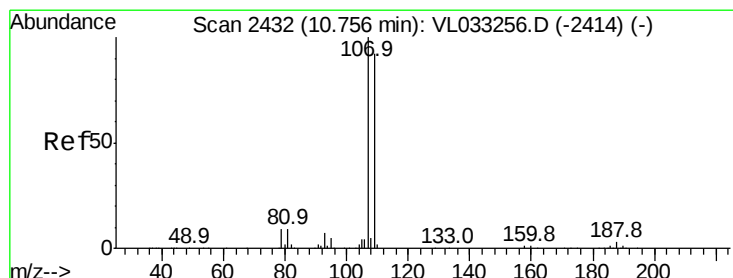
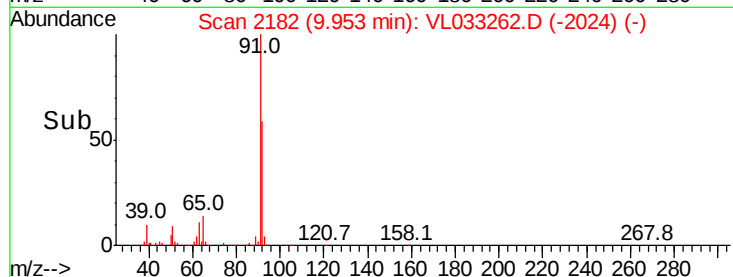
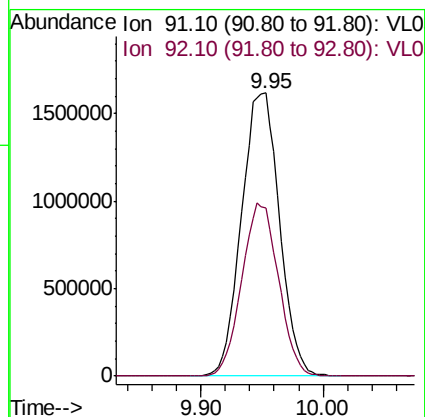
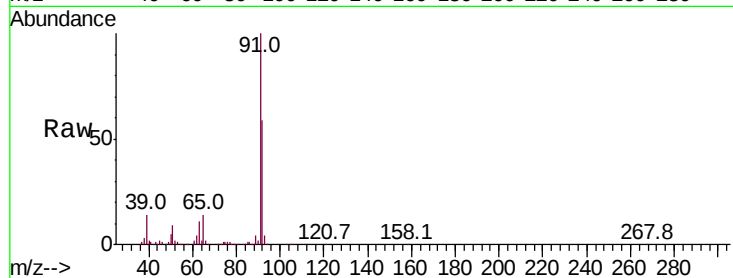
92 59.2 47.7 71.5

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#54

1,2-Dibromoethane

Concen: 13.366 ppbv m

RT: 10.76 min Scan# 2433

Delta R.T. 0.00 min

Lab File: VL033262.D

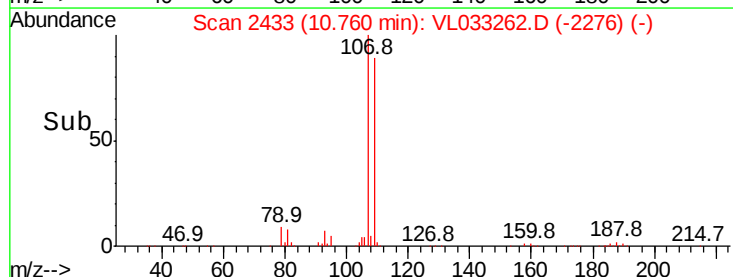
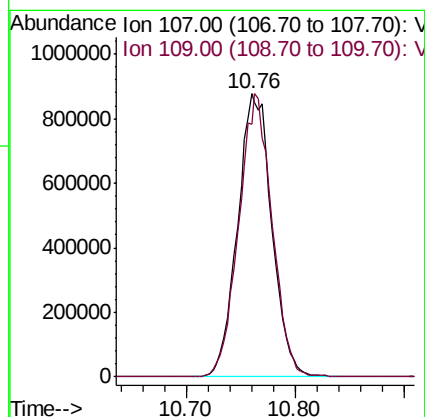
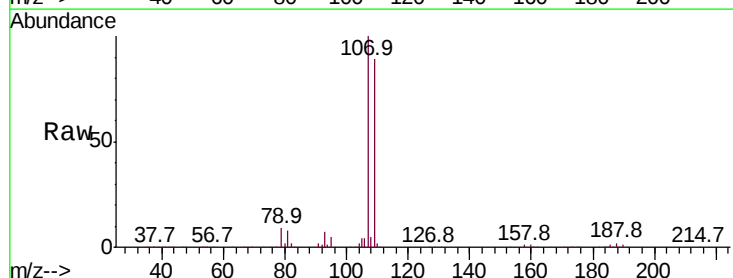
Acq: 8 Mar 2019 16:36

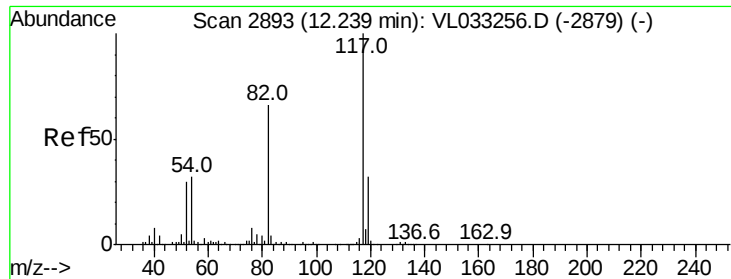
Tgt Ion: 107 Resp: 1913238

Ion Ratio Lower Upper

107 100

109 89.4 73.9 110.9





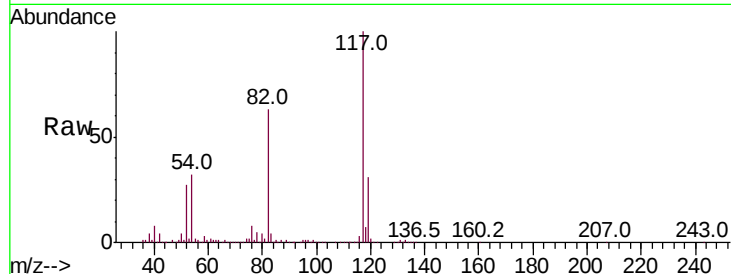
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.24 min Scan# 2894
Delta R.T. 0.00 min
Lab File: VL033262.D
Acq: 8 Mar 2019 16:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

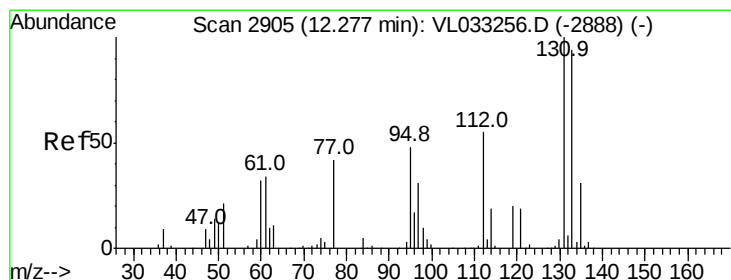
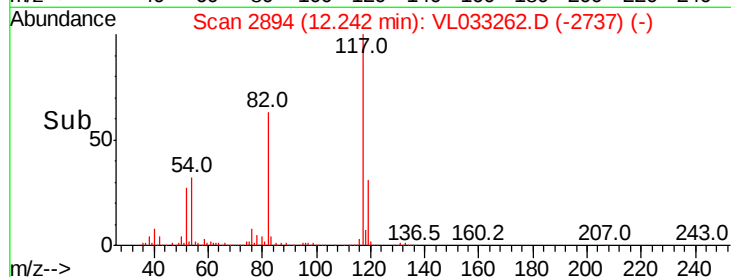
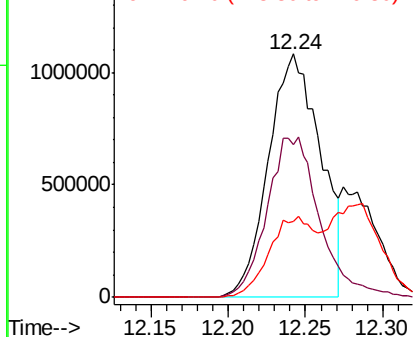
Tot Ion:117 Resp: 2543188
Ion Ratio Lower Upper
117 100
82 66.8 52.2 78.4
119 26.4 43.4 65.2#

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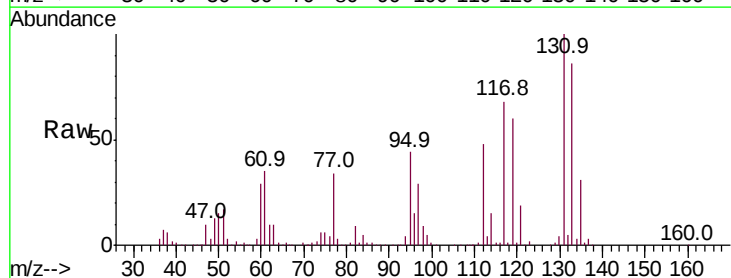


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V

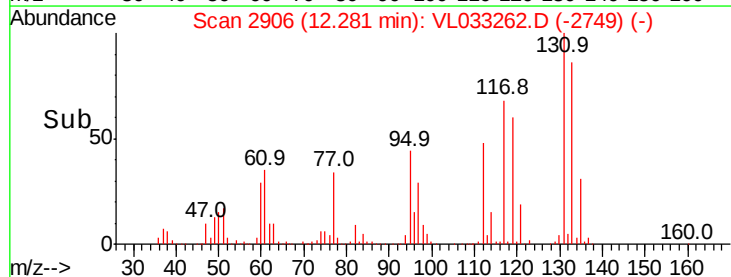
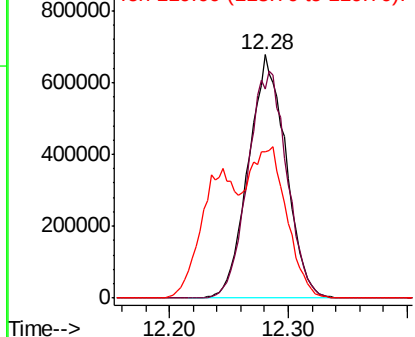


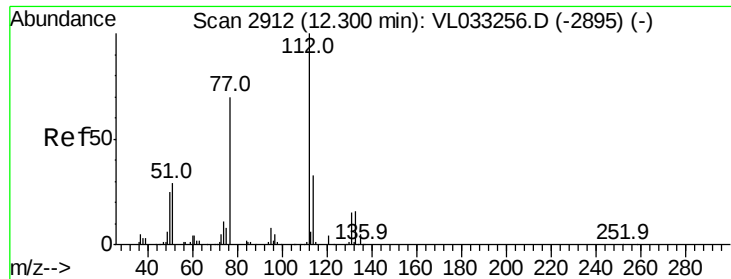
#56
1,1,1,2-Tetrachloroethane
Concen: 13.357 ppbv
RT: 12.28 min Scan# 2906
Delta R.T. 0.00 min
Lab File: VL033262.D
Acq: 8 Mar 2019 16:36

Tgt Ion:131 Resp: 1474625
Ion Ratio Lower Upper
131 100
133 97.2 76.3 114.5
119 115.0 109.2 163.8



Abundance Ion 131.00 (130.70 to 131.70): V
Ion 133.00 (132.70 to 133.70): V
Ion 119.00 (118.70 to 119.70): V





#57

Chlorobenzene

Concen: 12.532 ppbv

RT: 12.30 min Scan# 2913

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion:112 Resp: 2481446

Ion Ratio Lower Upper

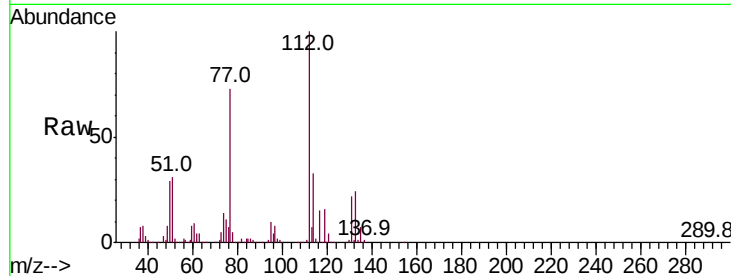
112 100

77 73.0 56.8 85.2

114 32.6 29.5 36.1

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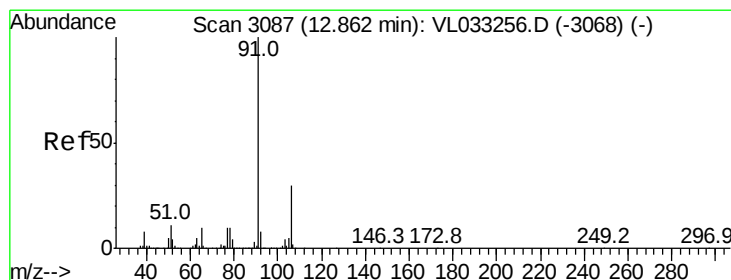
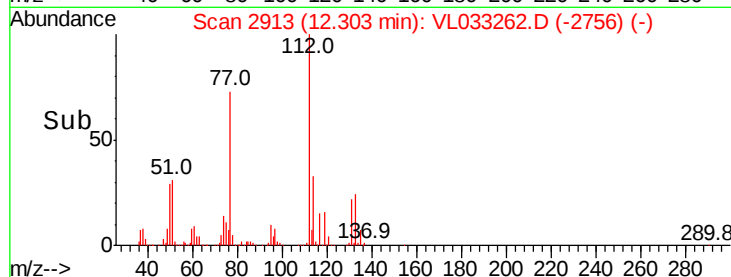
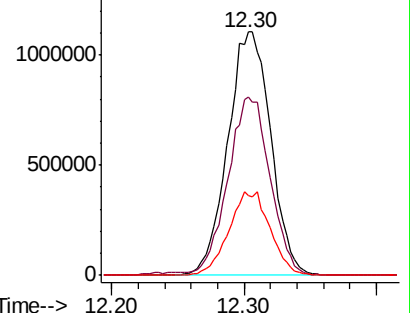
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Abundance Ion 112.10 (111.80 to 112.80): V

1500000 Ion 77.10 (76.80 to 77.80): VL0

Ion 114.10 (113.80 to 114.80): V



#58

Ethyl Benzene

Concen: 13.727 ppbv

RT: 12.87 min Scan# 3088

Delta R.T. 0.00 min

Lab File: VL033262.D

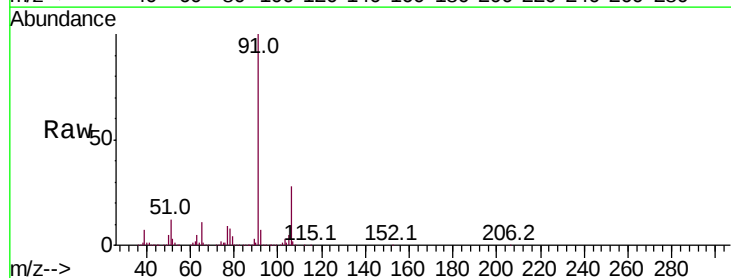
Acq: 8 Mar 2019 16:36

Tgt Ion: 91 Resp: 4828693

Ion Ratio Lower Upper

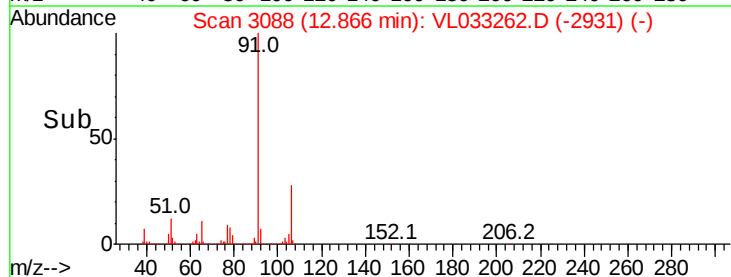
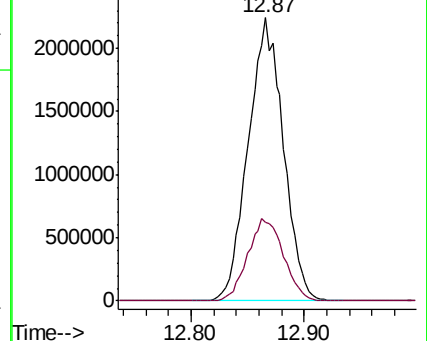
91 100

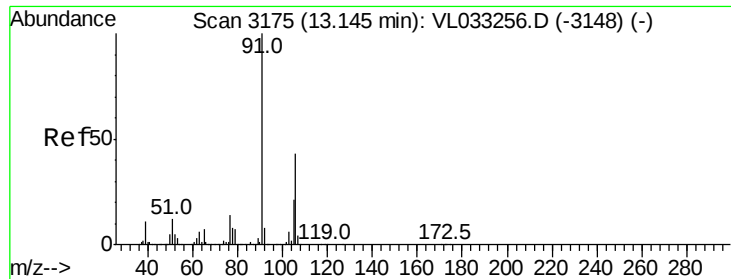
106 27.8 23.7 35.5



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





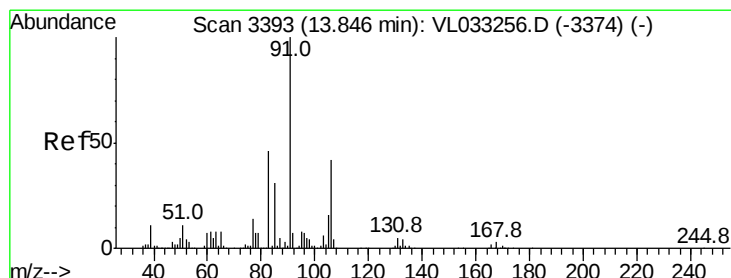
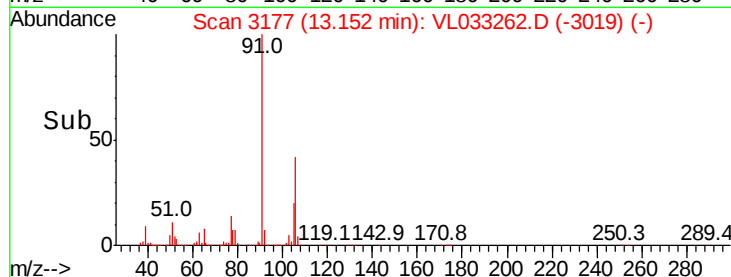
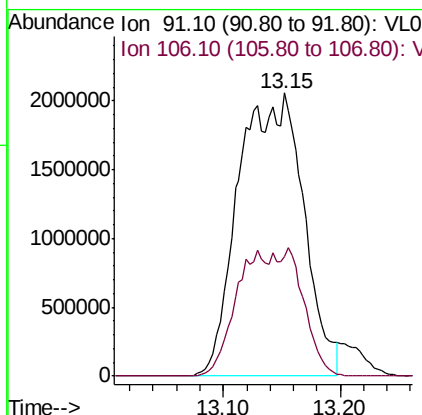
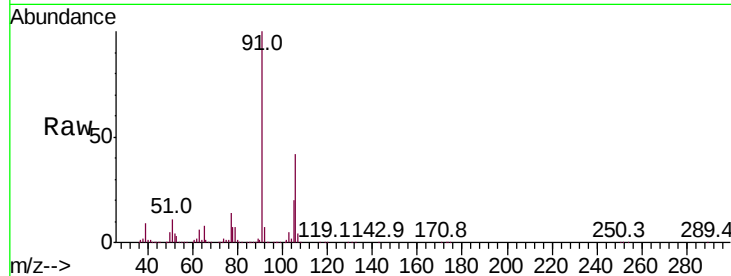
#59
m/p-Xylene
Concen: 26.460 ppbv m
RT: 13.15 min Scan# 3177
Delta R.T. 0.01 min
Lab File: VL033262.D
Acq: 8 Mar 2019 16:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion: 91 Resp: 7931721
Ion Ratio Lower Upper
91 100
106 44.4 35.0 52.4

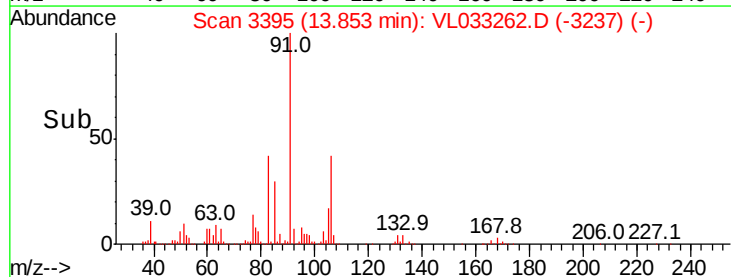
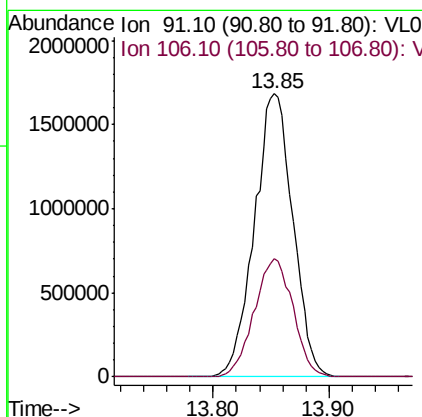
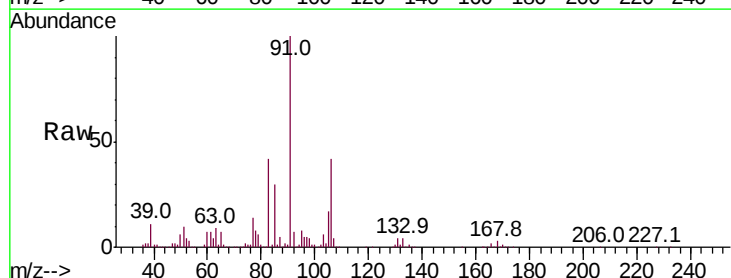
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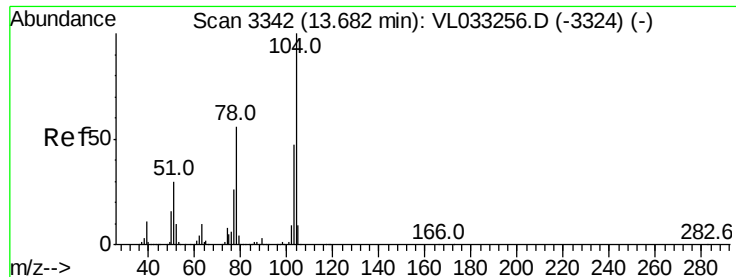
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#60
o-Xylene
Concen: 13.571 ppbv
RT: 13.85 min Scan# 3395
Delta R.T. 0.01 min
Lab File: VL033262.D
Acq: 8 Mar 2019 16:36

Tgt Ion: 91 Resp: 3878802
Ion Ratio Lower Upper
91 100
106 42.1 21.1 63.4





#61

Stvrene

Concen: 14.658 ppbv

RT: 13.69 min Scan# 3344

Delta R.T. 0.01 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion:104 Resp: 2946325

Ion Ratio Lower Upper

104 100

78 53.1 43.9 65.9

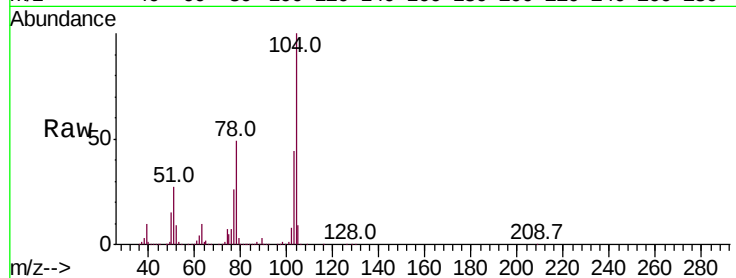
103 46.1 38.3 57.5

Manual Integrations

APPROVED

MMDadoda

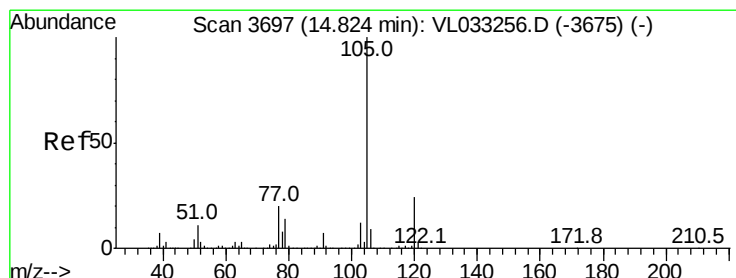
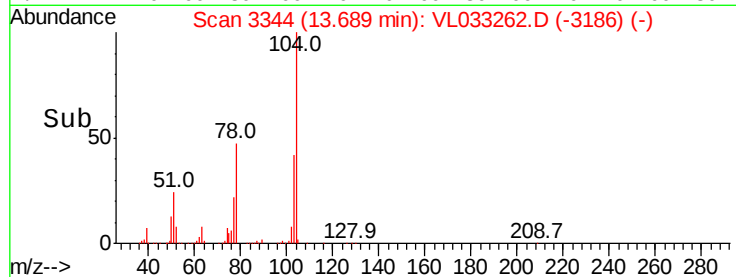
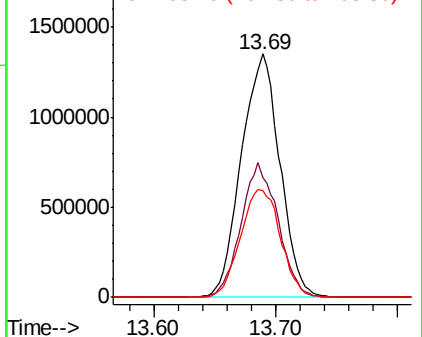
3/11/2019 10:10:19 AM



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V



#62

Isopropylbenzene

Concen: 13.228 ppbv

RT: 14.82 min Scan# 3697

Delta R.T. 0.00 min

Lab File: VL033262.D

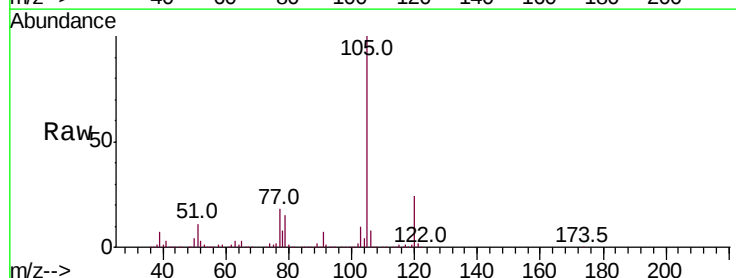
Acq: 8 Mar 2019 16:36

Tgt Ion:105 Resp: 5270985

Ion Ratio Lower Upper

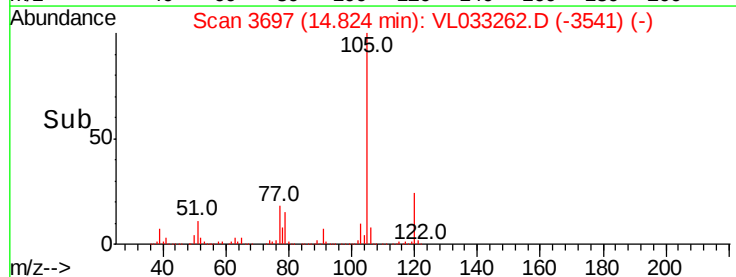
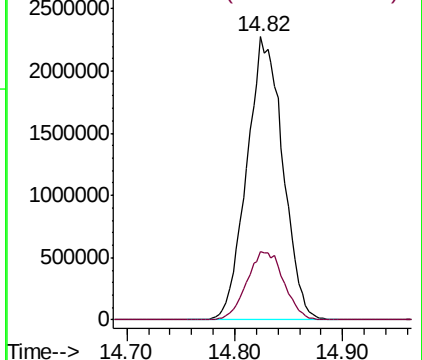
105 100

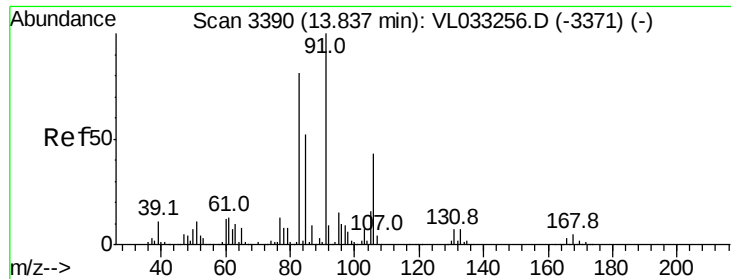
120 24.9 19.7 29.5



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





#63
 1,1,2,2-Tetrachloroethane
 Concen: 12.125 ppbv
 RT: 13.84 min Scan# 3391
 Delta R.T. 0.00 min
 Lab File: VL033262.D
 Acq: 8 Mar 2019 16:36

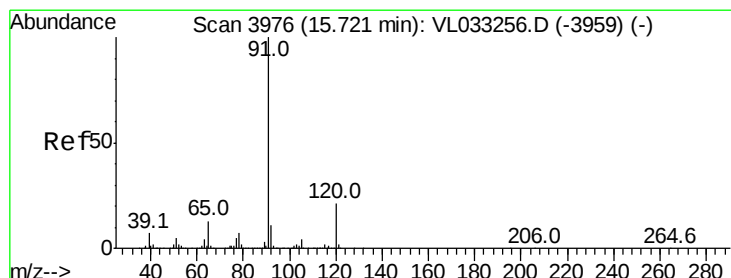
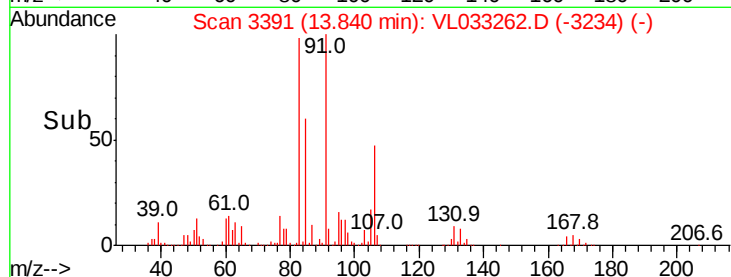
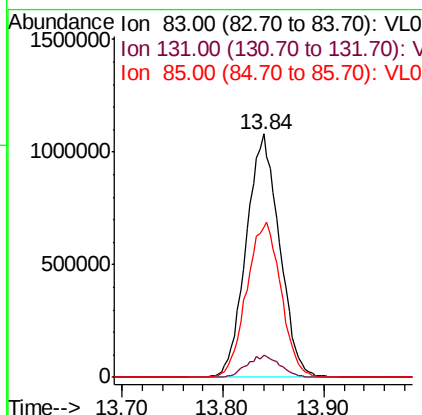
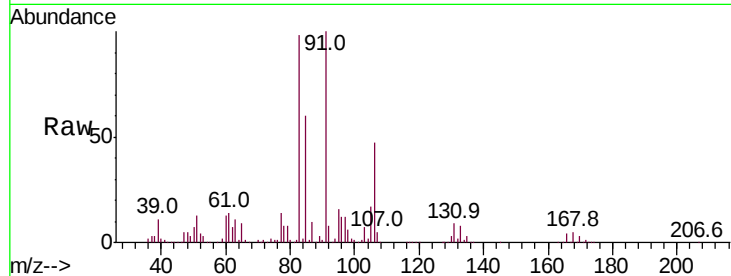
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tot Ion: 83 Resp: 2466083

Ion	Ratio	Lower	Upper
83	100		
131	8.9	4.7	14.0
85	66.0	32.4	97.0

Manual Integrations
 APPROVED

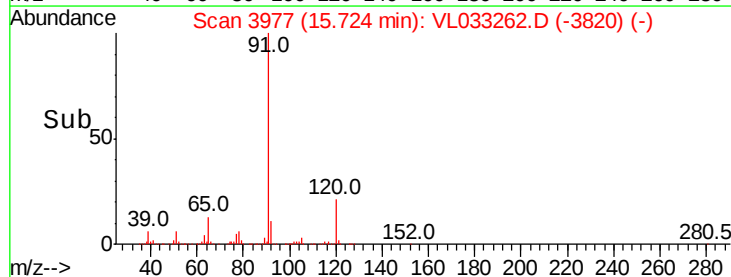
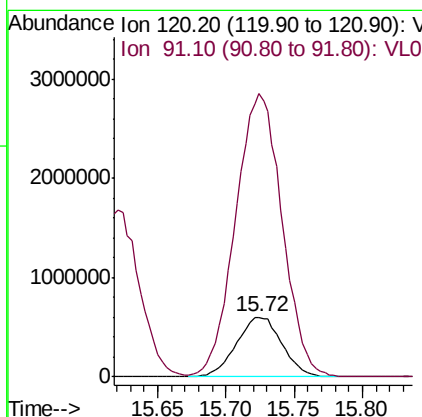
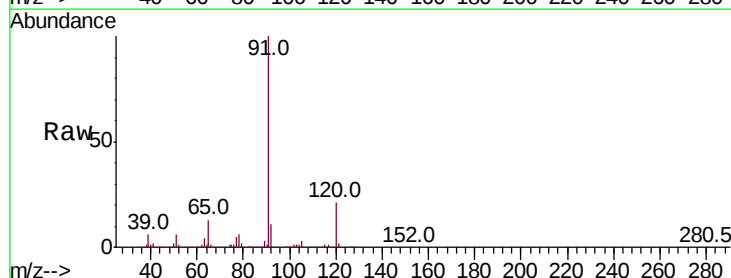
MMDadoda
 3/11/2019 10:10:19 AM

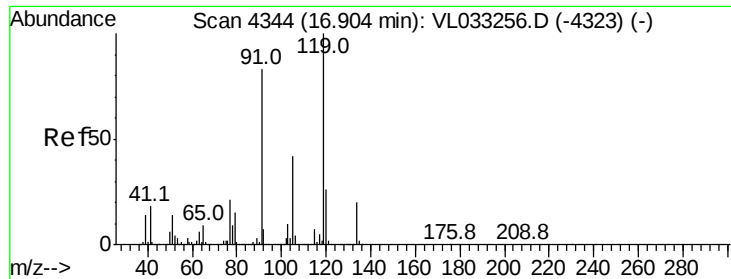


#64
 n-propylbenzene
 Concen: 14.167 ppbv
 RT: 15.72 min Scan# 3977
 Delta R.T. 0.00 min
 Lab File: VL033262.D
 Acq: 8 Mar 2019 16:36

Tgt Ion:120 Resp: 1399378

Ion	Ratio	Lower	Upper
120	100		
91	484.8	392.8	589.2





#65

tert-Butylbenzene

Concen: 13.090 ppbv

RT: 16.91 min Scan# 4347

Delta R.T. 0.01 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion:119 Resp: 4453344

Ion Ratio Lower Upper

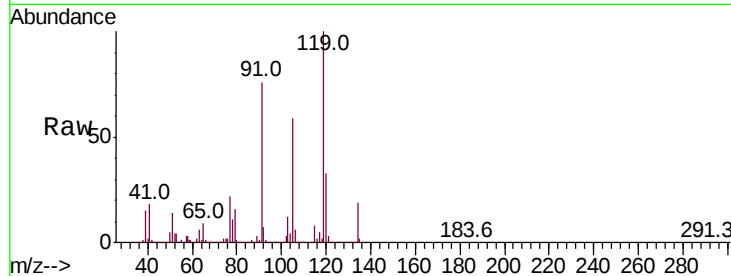
119 100

91 84.0 67.3 100.9

134 19.7 15.5 23.3

Manual Integrations
APPROVED

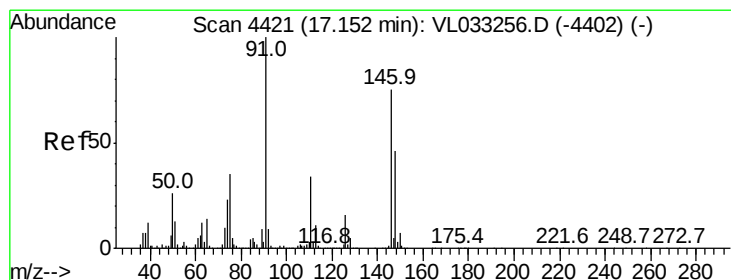
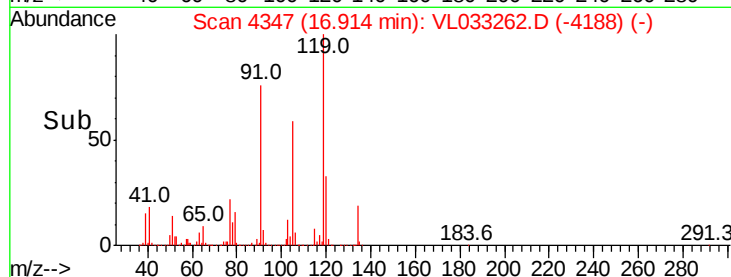
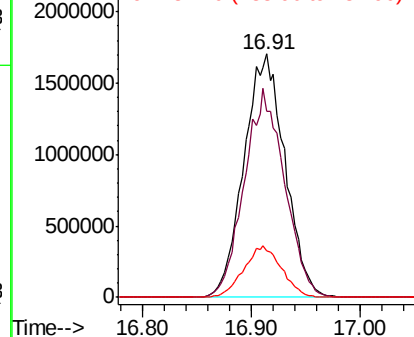
MMDadoda
3/11/2019 10:10:19 AM



Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V



#66

Benzyl Chloride

Concen: 18.477 ppbv

RT: 17.16 min Scan# 4424

Delta R.T. 0.01 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

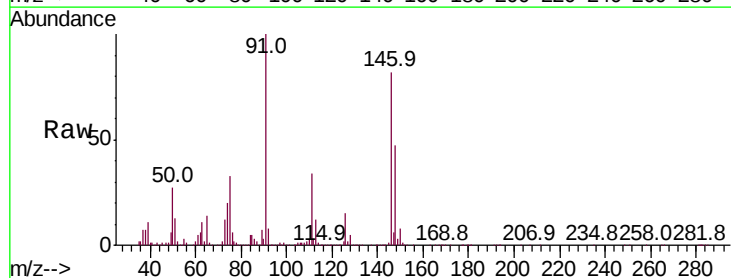
Tgt Ion: 91 Resp: 2431440

Ion Ratio Lower Upper

91 100

126 16.0 13.0 19.6

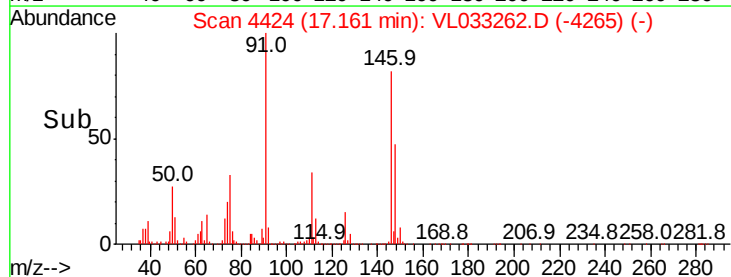
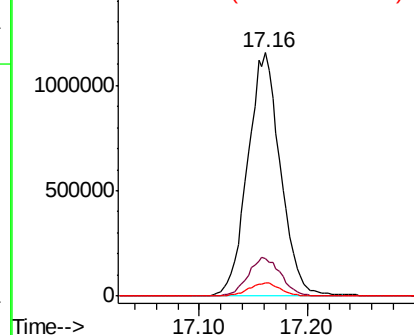
128 5.3 4.2 6.2

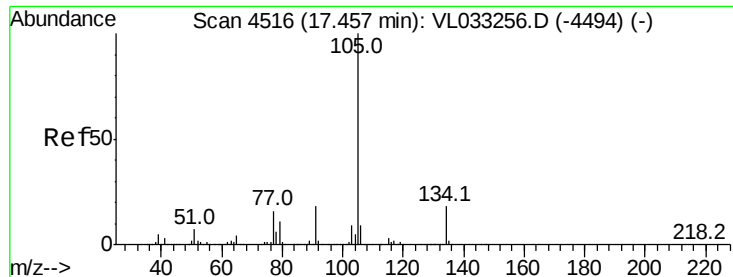


Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V

Ion 128.10 (127.80 to 128.80): V





#67

sec-Butylbenzene

Concen: 13.164 ppbv m

RT: 17.45 min Scan# 4515

Delta R.T. -0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion:105 Resp: 6384392

Ion Ratio Lower Upper

105 100

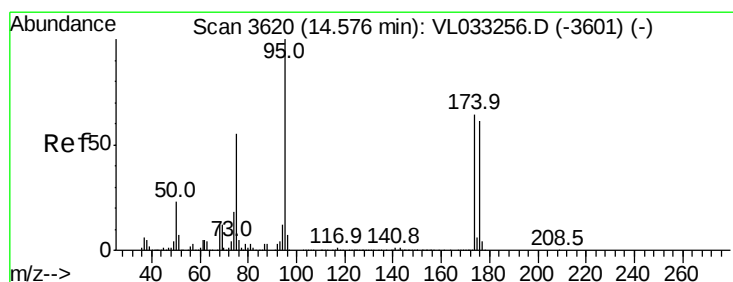
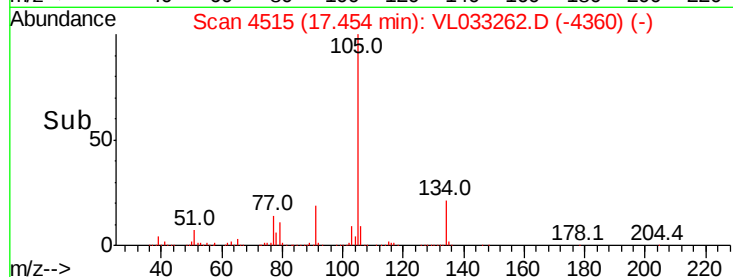
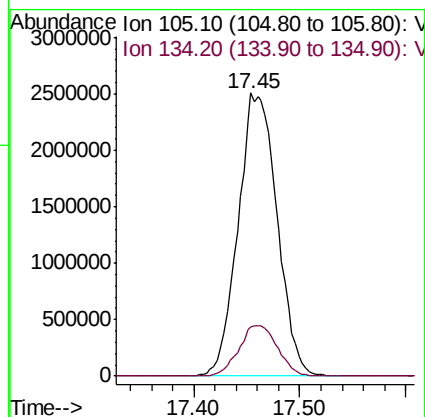
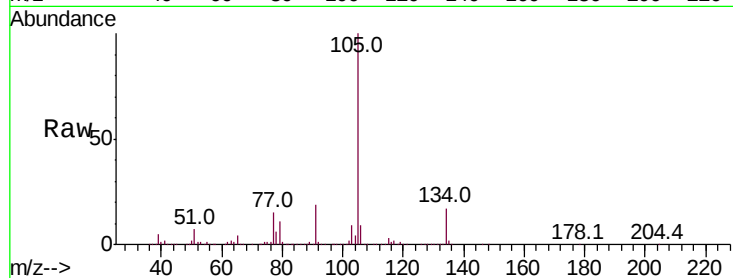
134 17.9 14.0 21.0

Manual Integrations

APPROVED

MMDadoda

3/11/2019 10:10:19 AM



#68

1-Bromo-4-Fluorobenzene

Concen: 9.979 ppbv

RT: 14.58 min Scan# 3621

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

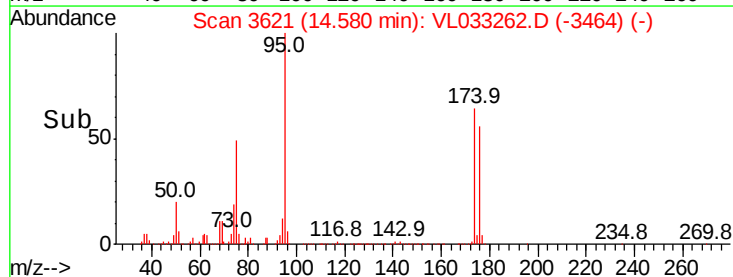
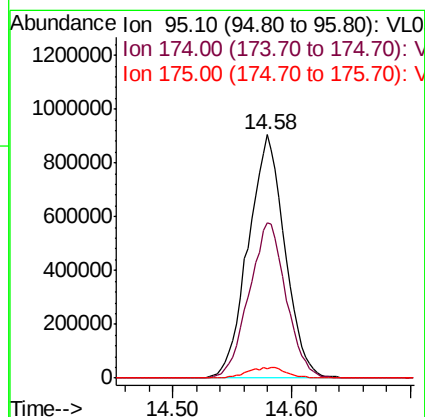
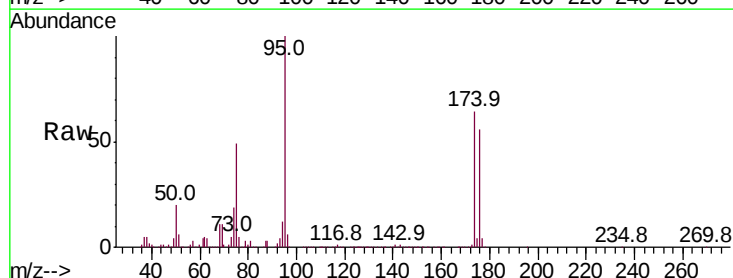
Tgt Ion: 95 Resp: 1925788

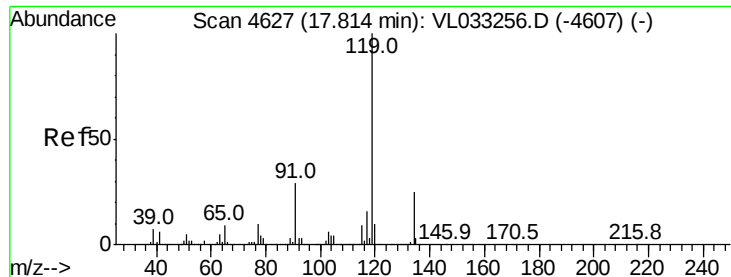
Ion Ratio Lower Upper

95 100

174 64.7 51.7 77.5

175 4.7 3.8 5.8





#69

p-Isopropyltoluene

Concen: 13.904 ppbv

RT: 17.82 min Scan# 4629

Delta R.T. 0.01 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 119 Resp: 5453070

Ion Ratio Lower Upper

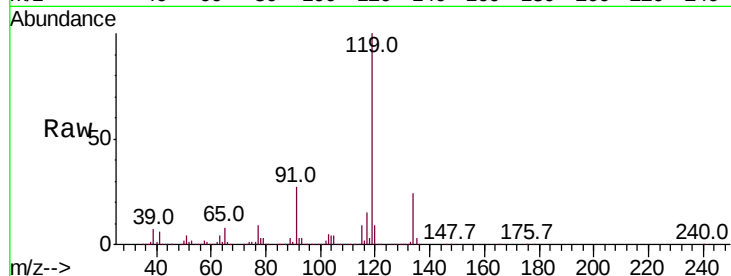
119 100

134 24.3 19.8 29.8

91 28.3 23.9 35.9

Manual Integrations
APPROVED

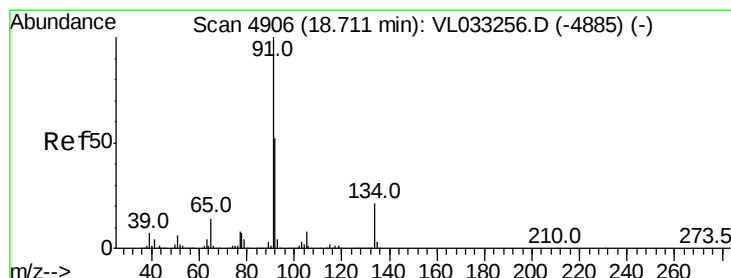
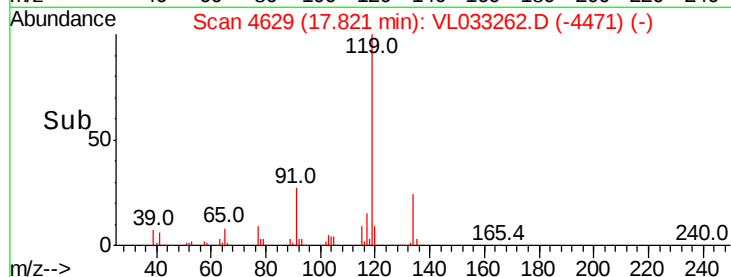
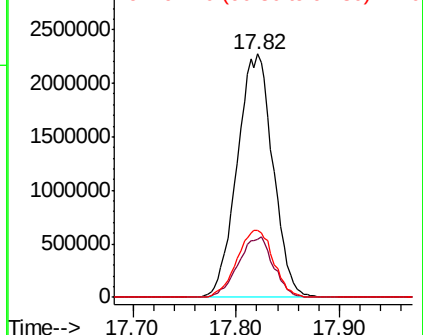
MMDadoda
3/11/2019 10:10:19 AM



Abundance Ion 119.10 (118.80 to 119.80): V

Ion 134.20 (133.90 to 134.90): V

Ion 91.10 (90.80 to 91.80): V



#70

n-Butylbenzene

Concen: 13.453 ppbv

RT: 18.72 min Scan# 4908

Delta R.T. 0.01 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

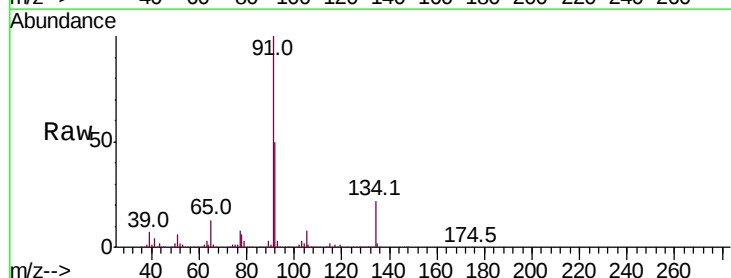
Tgt Ion: 91 Resp: 5779438

Ion Ratio Lower Upper

91 100

92 53.5 42.6 63.8

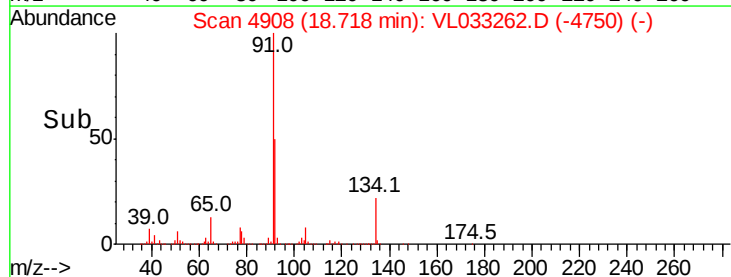
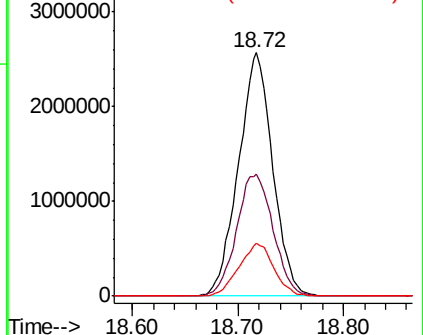
134 22.1 17.3 25.9

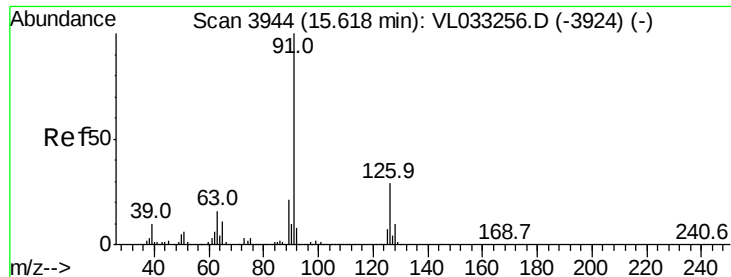


Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

Ion 134.20 (133.90 to 134.90): V





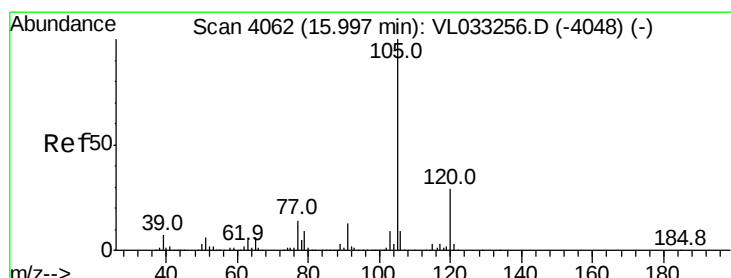
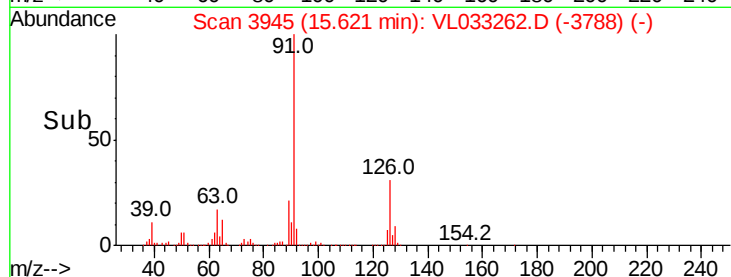
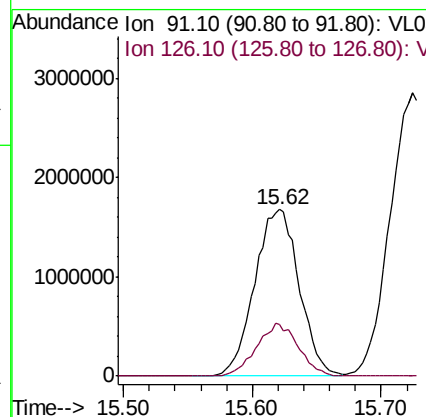
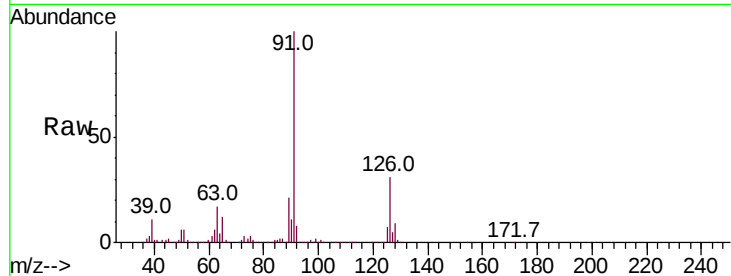
#71
2-Chlorotoluene
Concen: 13.281 ppbv
RT: 15.62 min Scan# 3945
Delta R.T. 0.00 min
Lab File: VL033262.D
Acq: 8 Mar 2019 16:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion: 91 Resp: 4046459
Ion Ratio Lower Upper
91 100
126 29.8 11.7 46.9

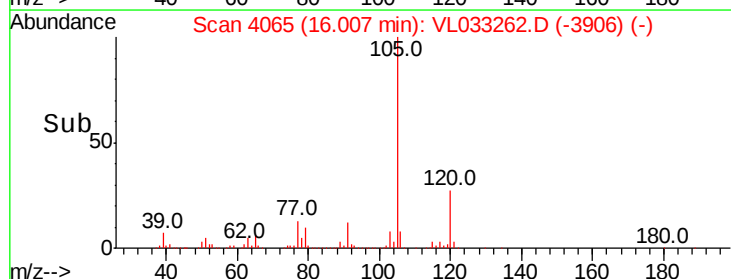
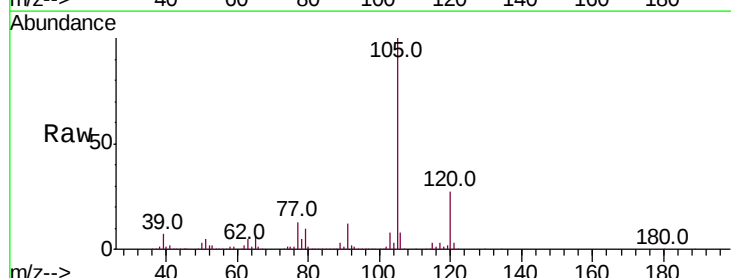
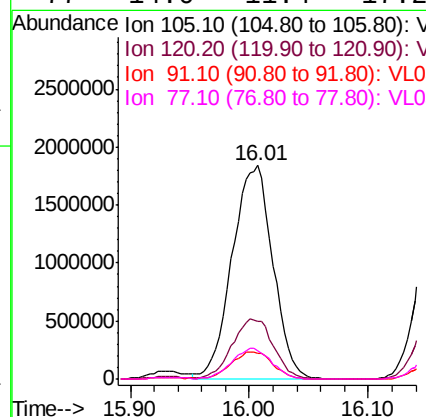
Manual Integrations
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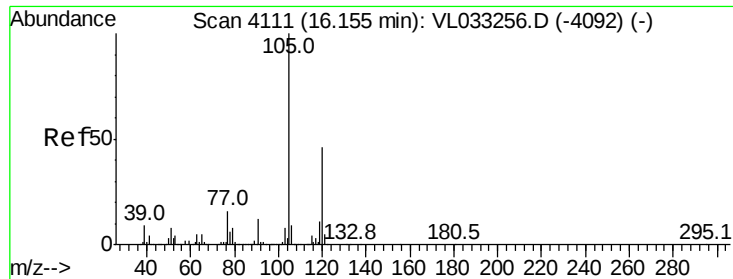
MMDadoda
3/11/2019 10:10:19 AM



#72
4-Ethyltoluene
Concen: 13.919 ppbv
RT: 16.01 min Scan# 4065
Delta R.T. 0.01 min
Lab File: VL033262.D
Acq: 8 Mar 2019 16:36

Tgt Ion: 105 Resp: 4347533
Ion Ratio Lower Upper
105 100
120 28.5 22.9 34.3
91 13.0 10.4 15.6
77 14.0 11.4 17.2





#73

1,3,5-Trimethylbenzene

Concen: 13.867 ppbv

RT: 16.16 min Scan# 4113

Delta R.T. 0.01 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion:105 Resp: 4157584

Ion Ratio Lower Upper

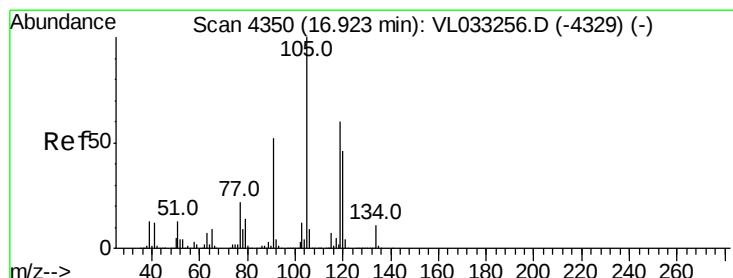
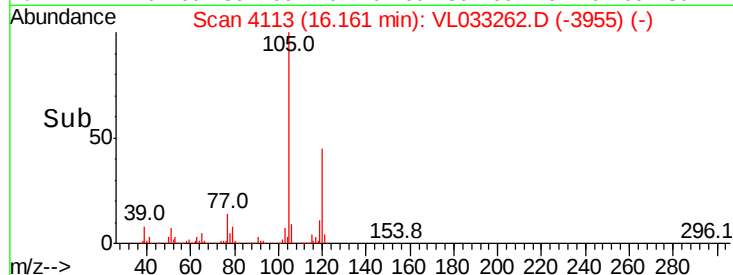
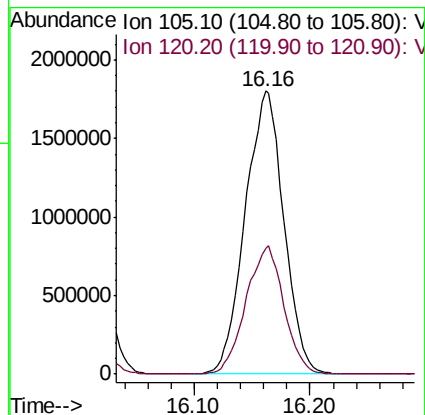
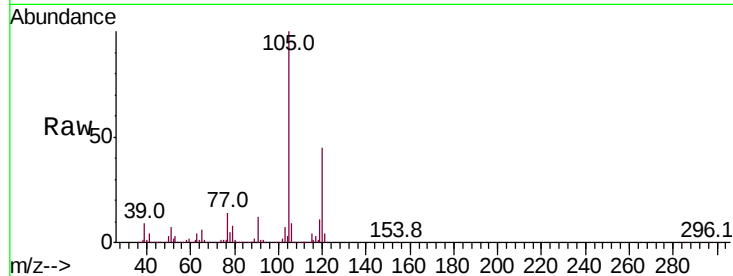
105 100

120 44.6 36.6 55.0

Manual Integrations
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3/11/2019 10:10:19 AM



#74

1,2,4-Trimethylbenzene

Concen: 13.136 ppbv

RT: 16.93 min Scan# 4352

Delta R.T. 0.01 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Tgt Ion:105 Resp: 4139788

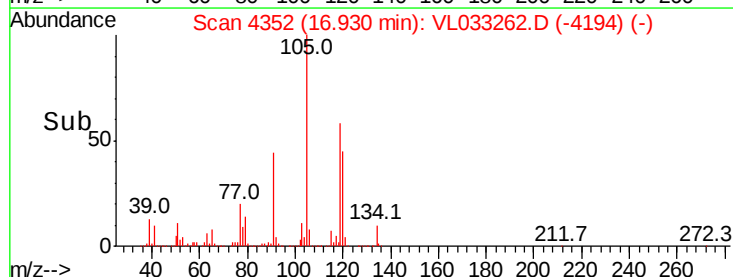
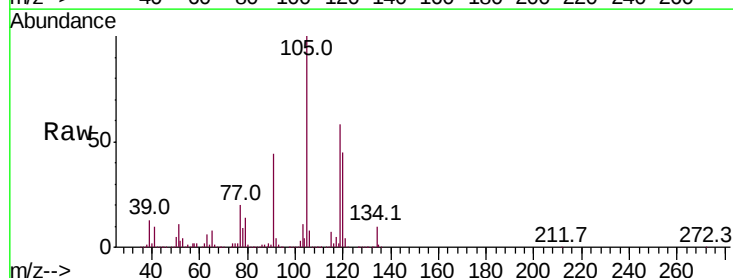
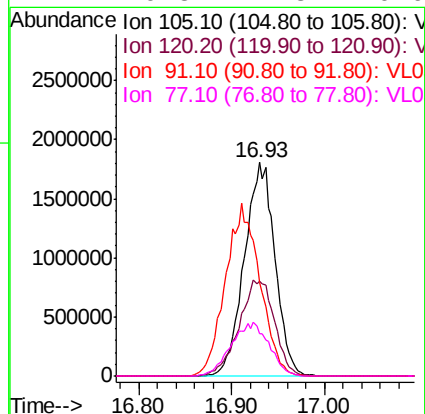
Ion Ratio Lower Upper

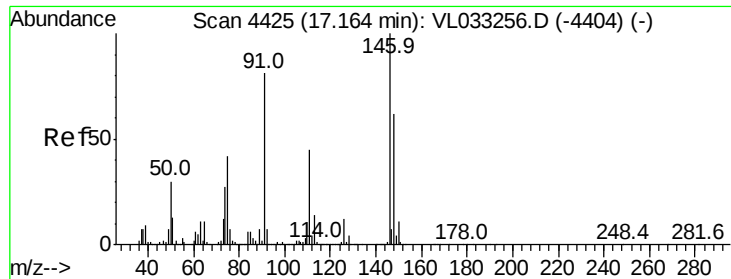
105 100

120 44.6 36.7 55.1

91 43.7 42.1 63.1

77 19.8 17.8 26.6





#75

1,3-Dichlorobenzene

Concen: 13.054 ppbv m

RT: 17.16 min Scan# 4425

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion:146 Resp: 2405990

Ion Ratio Lower Upper

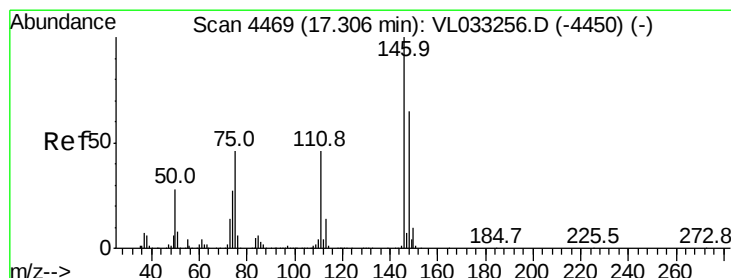
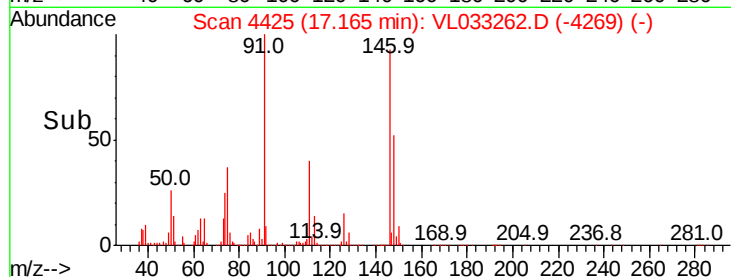
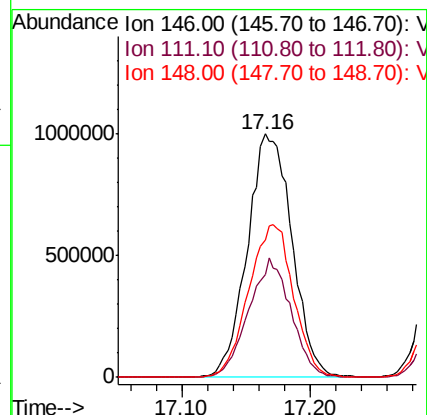
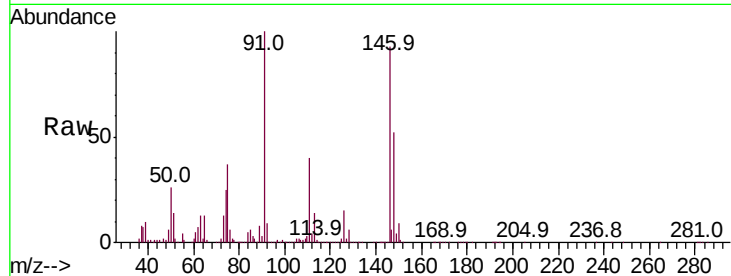
146 100

111 46.2 22.9 68.7

148 63.1 31.6 94.7

Manual Integrations
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MMDadoda
3/11/2019 10:10:19 AM



#76

1,4-Dichlorobenzene

Concen: 13.517 ppbv

RT: 17.31 min Scan# 4469

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

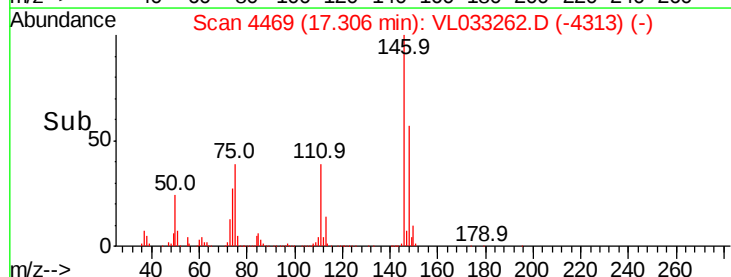
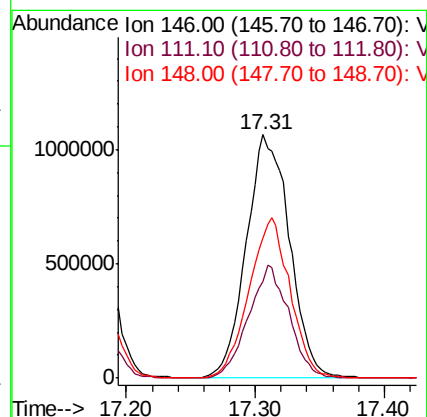
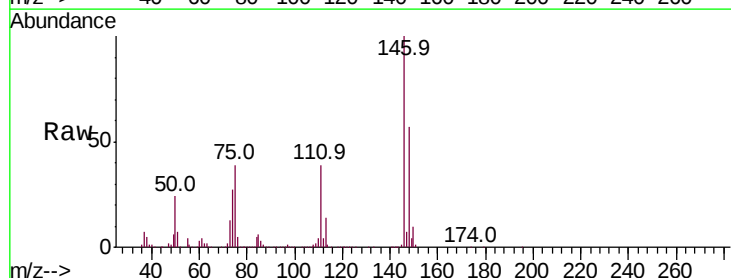
Tgt Ion:146 Resp: 2469056

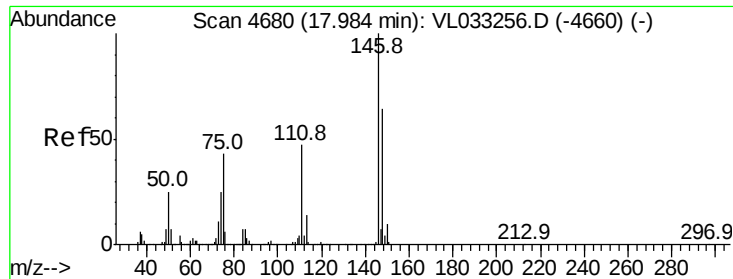
Ion Ratio Lower Upper

146 100

111 43.7 22.6 67.7

148 63.4 32.3 96.9





#77

1,2-Dichlorobenzene

Concen: 13.442 ppbv

RT: 17.99 min Scan# 4682

Delta R.T. 0.01 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion:146 Resp: 2405182

Ion Ratio Lower Upper

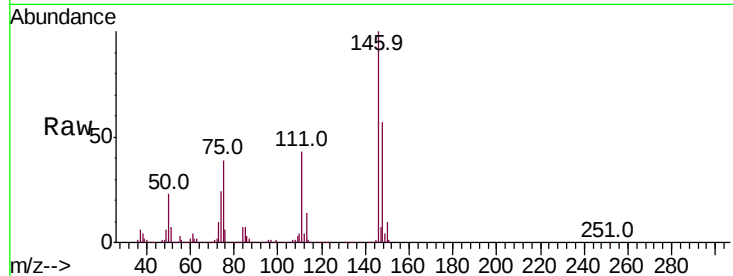
146 100

111 47.0 23.8 71.2

148 63.0 32.0 96.2

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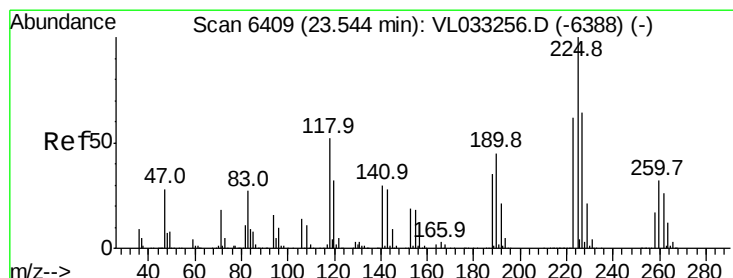
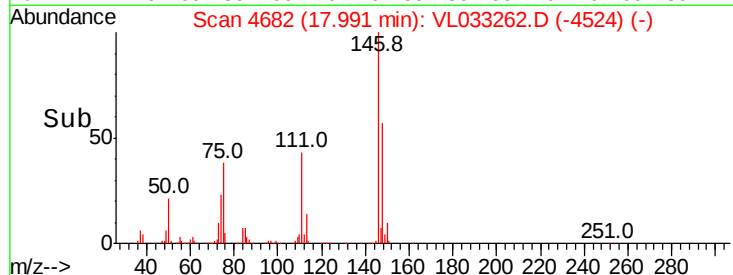
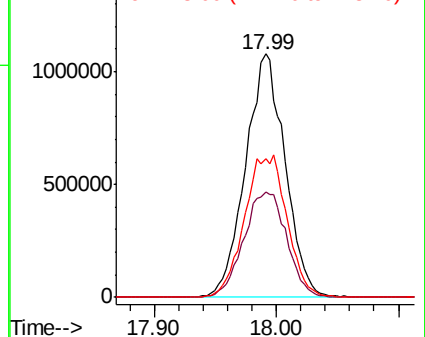


Abundance

Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V



#78

Hexachloro-1,3-Butadiene

Concen: 13.581 ppbv

RT: 23.55 min Scan# 6410

Delta R.T. 0.00 min

Lab File: VL033262.D

Acq: 8 Mar 2019 16:36

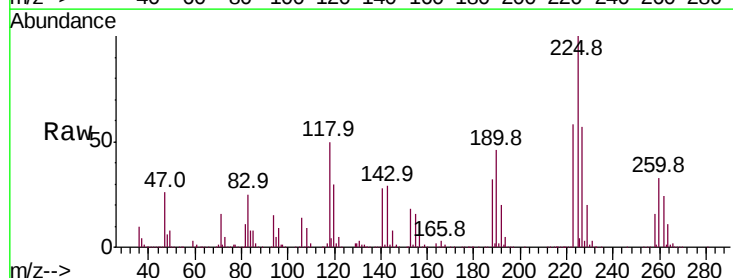
Tgt Ion:225 Resp: 1719703

Ion Ratio Lower Upper

225 100

223 63.1 50.4 75.6

227 64.7 51.4 77.0

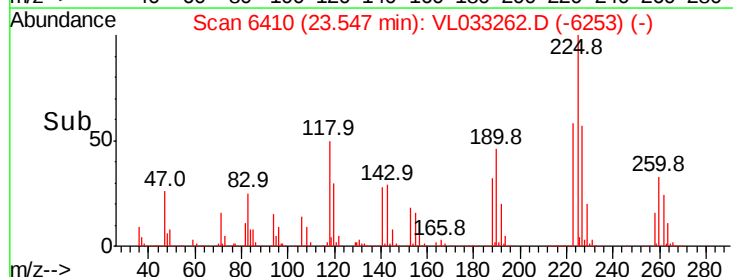
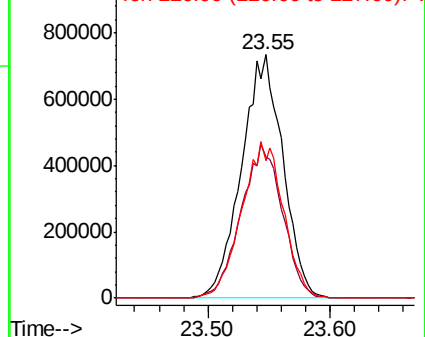


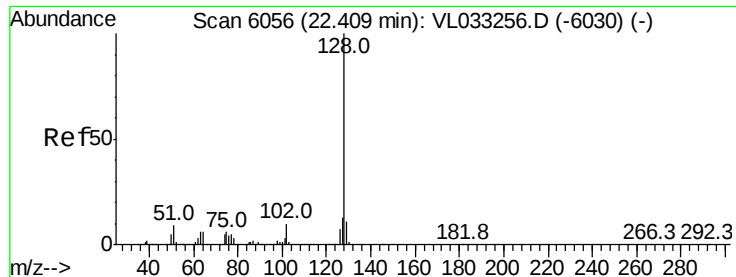
Abundance

Ion 224.90 (224.60 to 225.60): V

Ion 222.90 (222.60 to 223.60): V

Ion 226.90 (226.60 to 227.60): V





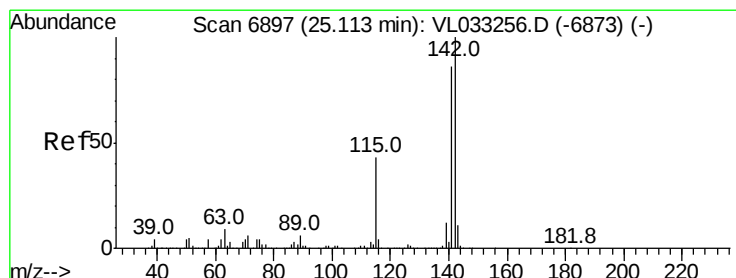
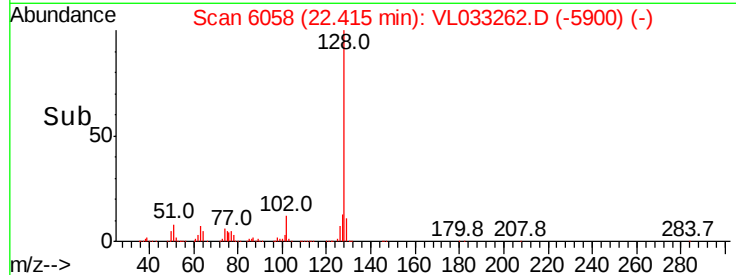
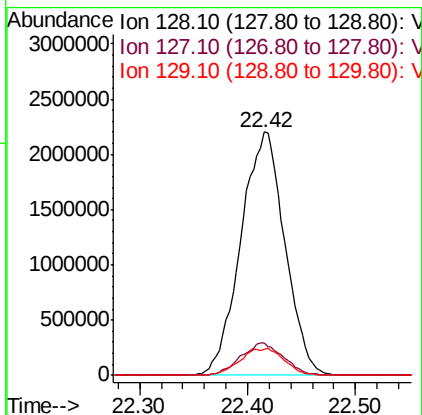
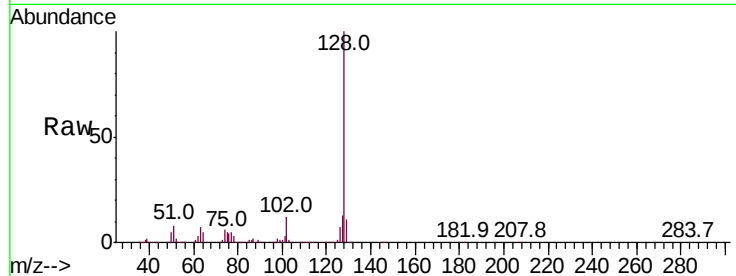
#79
Naphthalene
Concen: 16.144 ppbv
RT: 22.42 min Scan# 6058
Delta R.T. 0.01 min
Lab File: VL033262.D
Acq: 8 Mar 2019 16:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion	Ratio	Lower	Upper
128	100		
127	13.1	10.3	15.5
129	10.5	8.6	13.0

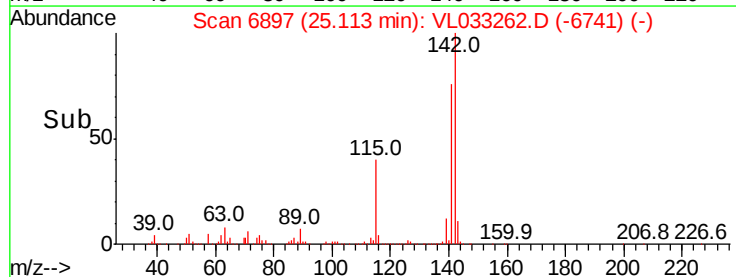
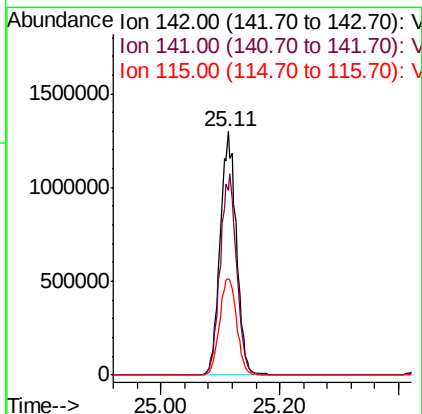
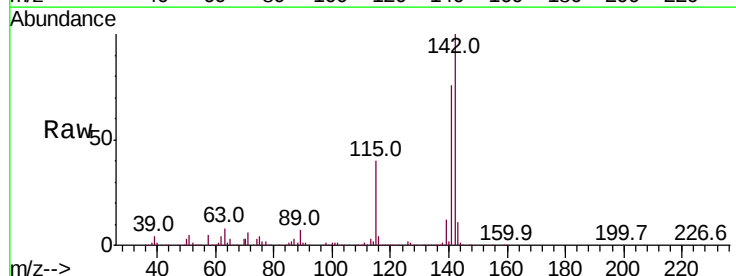
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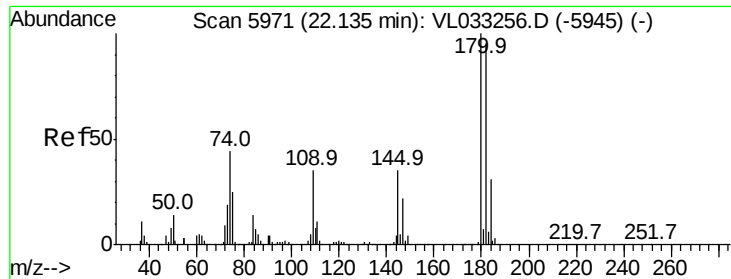
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#80
Naphthalene, 2-methyl-
Concen: 21.286 ppbv
RT: 25.11 min Scan# 6897
Delta R.T. 0.00 min
Lab File: VL033262.D
Acq: 8 Mar 2019 16:36

Tgt Ion	Ratio	Lower	Upper
142	100		
141	83.8	67.6	101.4
115	41.7	33.9	50.9





#81
 1,2,4-Trichlorobenzene
 Concen: 14.474 ppbv
 RT: 22.14 min Scan# 5972
 Delta R.T. 0.00 min
 Lab File: VL033262.D
 Acq: 8 Mar 2019 16:36

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tot Ion	Ratio	Lower	Upper
180	100		
182	101.1	76.3	114.5
184	30.5	24.6	36.8

Manual Integrations
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