

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL122018\
 Data File : VL033037.D
 Acq On : 20 Dec 2018 22:43
 Operator : SY/AP
 Sample : J6480-03DUP
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 EFFLUENTDUP

Manual Integrations
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 12/24/2018 8:26:28 AM

Quant Time: Dec 21 06:56:36 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL120718AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Dec 0
 QLast Update : Fri Dec 07 09:35:17 2018
 Response via : Initial Calibration

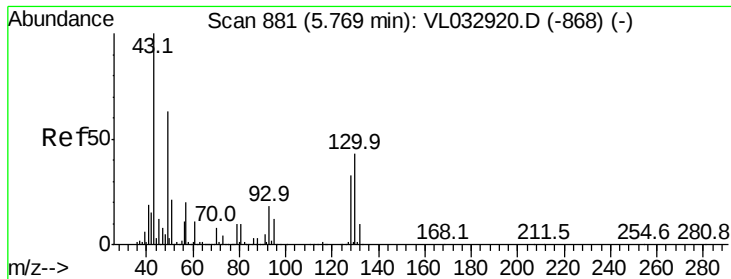
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	1376496	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	3203044	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	2115561	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	2333246	14.93	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	149.30%#

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	79740	0.434	ppbv	94
3) Chlorodifluoromethane	3.02	51	30342m	0.291	ppbv	
4) Chloromethane	3.17	50	14356	0.237	ppbv	97
7) Chloroethane	3.60	64	30749	1.389	ppbv	93
9) Propene	3.05	41	24505m	0.594	ppbv	
11) Trichlorofluoromethane	4.01	101	65509	0.378	ppbv	99
12) 1,1,2-Trichlorotrifluoroet	4.56	101	131673	0.891	ppbv	100
13) Ethanol	3.66	45	84133m	5.928	ppbv	
15) Acetone	3.91	43	516597	4.372	ppbv	90
17) tert-Butyl alcohol	4.37	59	43556m	1.448	ppbv	
18) 1,1-Dichloroethene	4.36	96	72908	1.260	ppbv	100
19) Isopropyl Alcohol	4.03	45	367049	4.947	ppbv #	98
20) Methylene Chloride	4.41	84	62676	1.085	ppbv	93
22) trans-1,2-Dichloroethene	4.97	96	132208	1.841	ppbv	95
24) 1,1-Dichloroethane	5.10	63	1957957	11.256	ppbv	99
26) Hexane	5.78	57	67076	0.521	ppbv #	50
29) Chloroform	5.85	83	29401m	0.128	ppbv	
32) 1,1,1-Trichloroethane	6.62	97	15157574	62.306	ppbv	93
34) 2-Butanone	5.35	43	69902	0.501	ppbv	96
38) Trichloroethene	7.97	130	9380m	0.096	ppbv	
53) Toluene	9.95	91	731309	2.927	ppbv	99
58) Ethyl Benzene	12.87	91	39600m	0.175	ppbv	
59) m/p-Xylene	13.13	91	160843m	0.786	ppbv	
60) o-Xylene	13.85	91	75357	0.365	ppbv	99
69) p-Isopropyltoluene	17.82	119	241578	0.757	ppbv	95
74) 1,2,4-Trimethylbenzene	16.93	105	142888	0.562	ppbv #	65

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 881

Delta R.T. 0.00 min

Lab File: VL033037.D

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Instrument :

MSVOA_L

ClientSampleId :

EFFLUENTDUP

Tot Ion: 49 Resp: 1376496

Ion Ratio Lower Upper

49 100

128 53.2 26.3 78.8

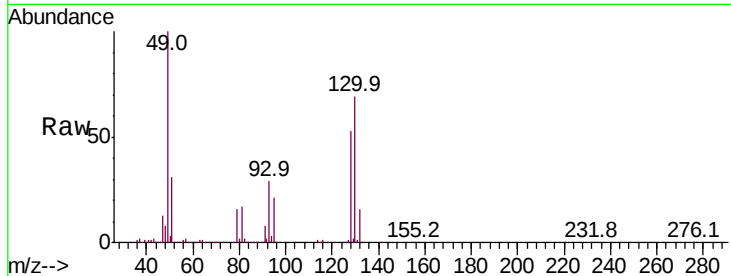
130 68.7 33.9 101.7

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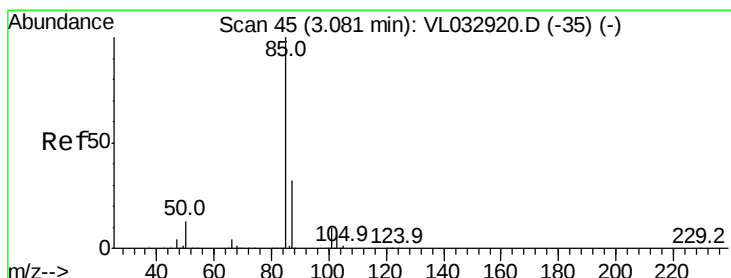
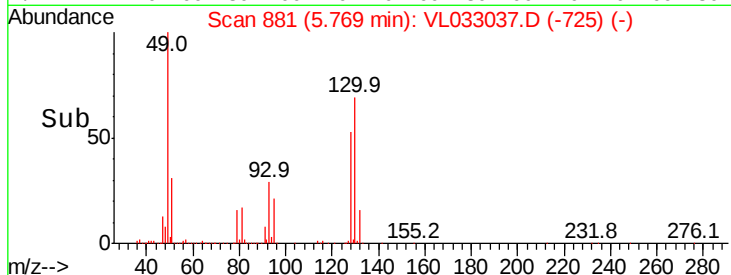
Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V

5.77

Time-->



#2

Dichlorodifluoromethane

Concen: 0.434 ppbv

RT: 3.08 min Scan# 45

Delta R.T. 0.00 min

Lab File: VL033037.D

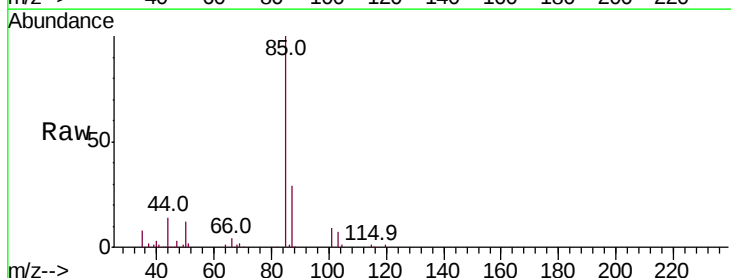
Acq: 20 Dec 2018 22:43

Tgt Ion: 85 Resp: 79740

Ion Ratio Lower Upper

85 100

87 28.7 25.7 38.5

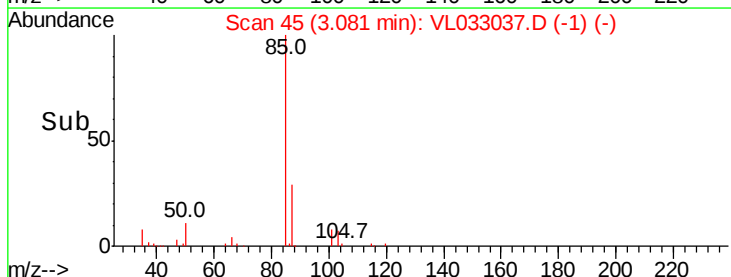


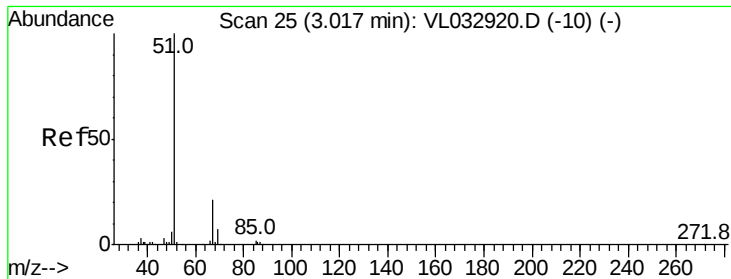
Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

3.08

Time-->





#3

Chlorodifluoromethane

Concen: 0.291 ppbv

RT: 3.02 min Scan# 25

Delta R.T. 0.00 min

Lab File: VL033037.D

Acq: 20 Dec 2018 22:43

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENTDUP

Tot Ion: 51 Resp: 30342

Ion Ratio Lower Upper

51 100

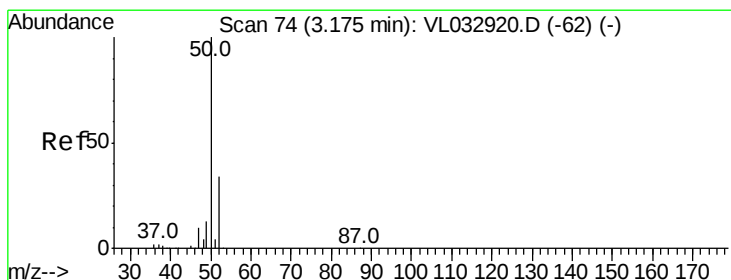
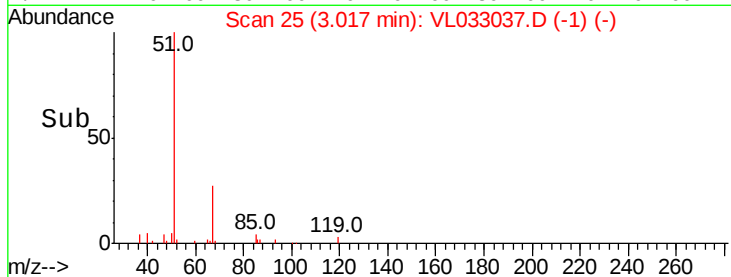
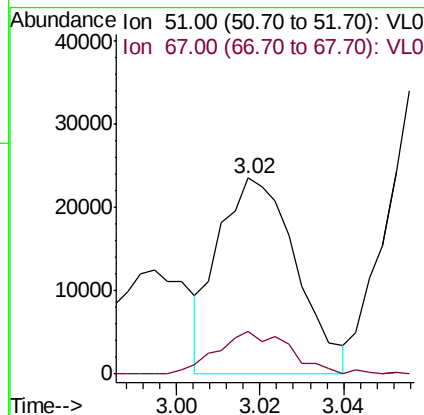
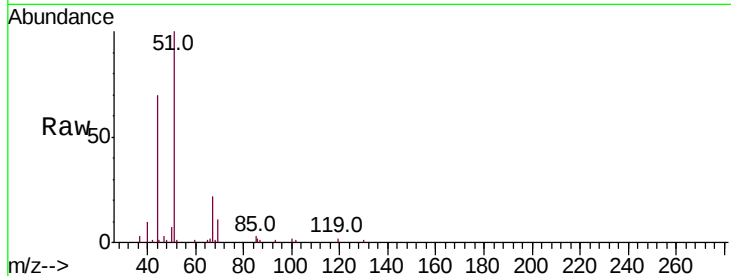
67 20.8 16.8 25.2

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#4

Chloromethane

Concen: 0.237 ppbv

RT: 3.17 min Scan# 74

Delta R.T. 0.00 min

Lab File: VL033037.D

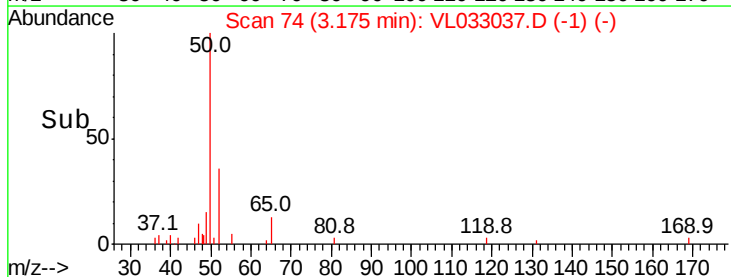
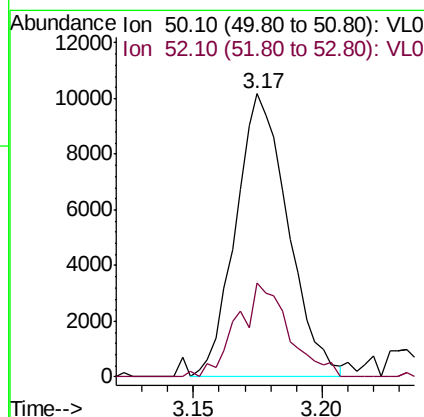
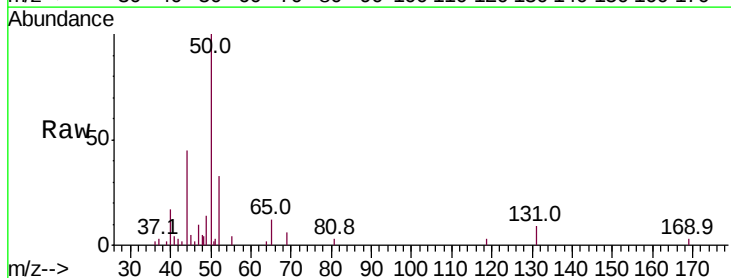
Acq: 20 Dec 2018 22:43

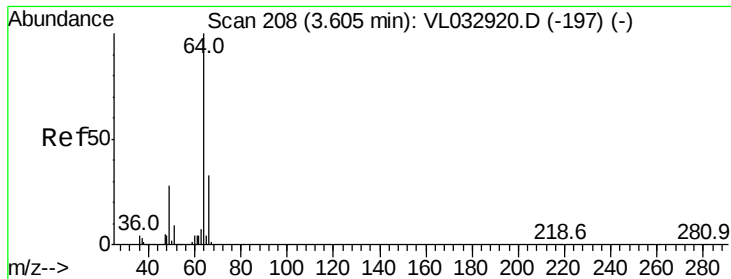
Tgt Ion: 50 Resp: 14356

Ion Ratio Lower Upper

50 100

52 32.6 27.3 40.9





#7

Chloroethane

Concen: 1.389 ppbv

RT: 3.60 min Scan# 207

Delta R.T. -0.00 min

Lab File: VL033037.D

Acq: 20 Dec 2018 22:43

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENTDUP

Tot Ion: 64 Resp: 30749

Ion Ratio Lower Upper

64 100

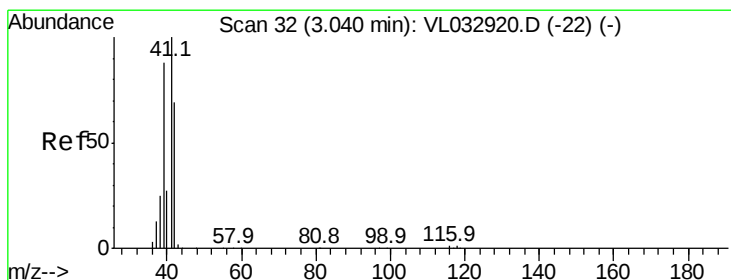
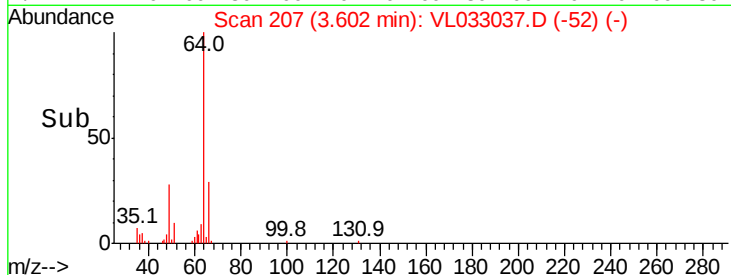
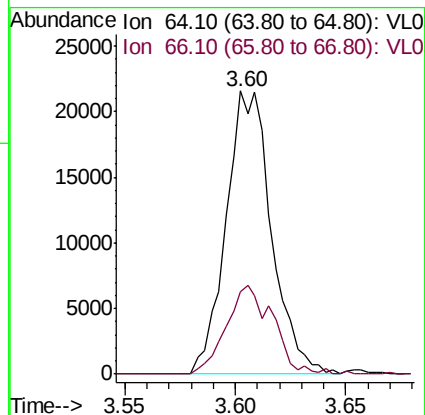
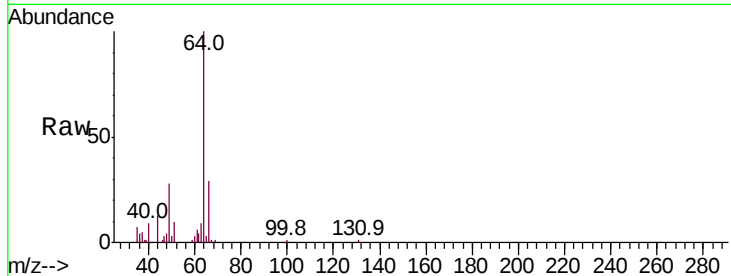
66 29.1 26.6 40.0

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#9

Propene

Concen: 0.594 ppbv m

RT: 3.05 min Scan# 36

Delta R.T. 0.01 min

Lab File: VL033037.D

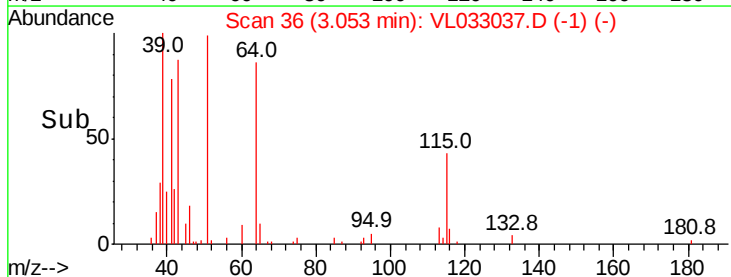
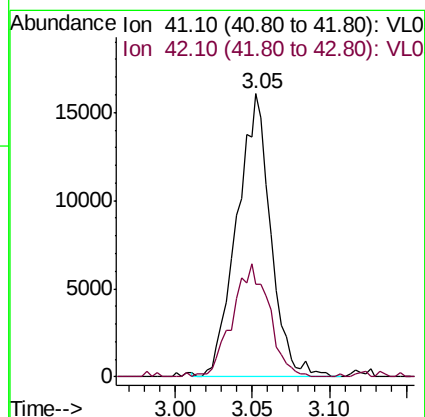
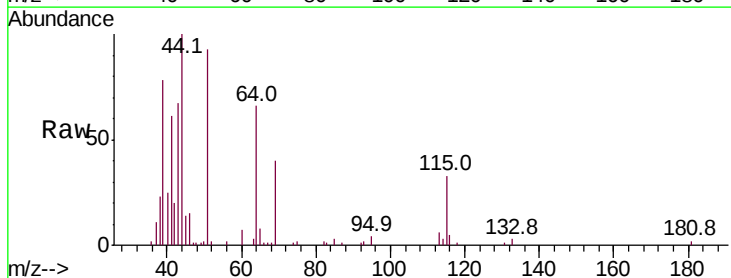
Acq: 20 Dec 2018 22:43

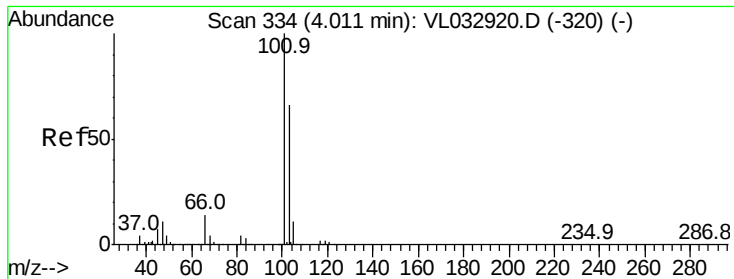
Tgt Ion: 41 Resp: 24505

Ion Ratio Lower Upper

41 100

42 173.0 56.2 84.2#





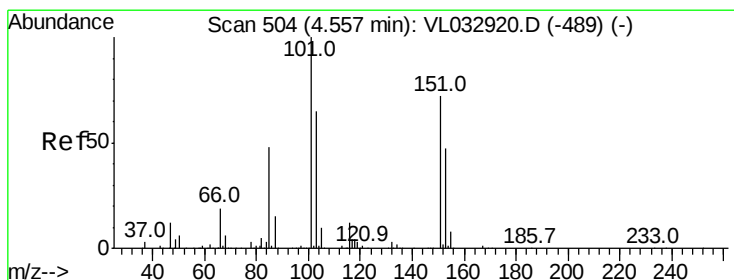
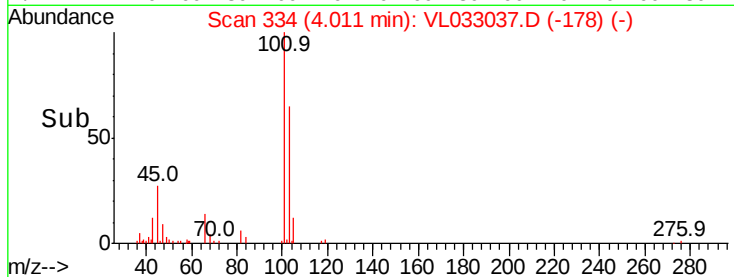
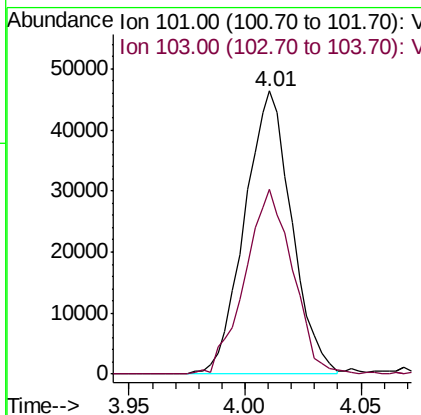
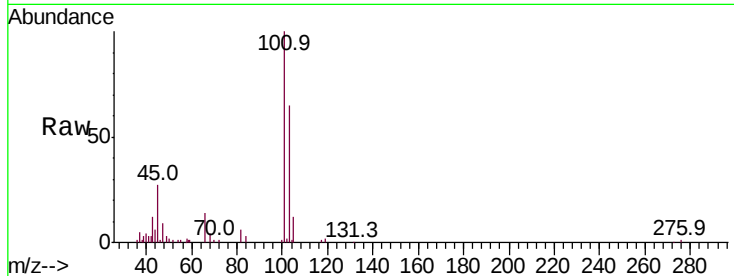
#11
 Trichlorofluoromethane
 Concen: 0.378 ppbv
 RT: 4.01 min Scan# 334
 Delta R.T. 0.00 min
 Lab File: VL033037.D
 Acq: 20 Dec 2018 22:43

Instrument :
 MSVOA_L
 ClientSampleId :
 EFFLUENTDUP

Tot Ion	Ratio	Lower	Upper
101	100		
103	65.3	52.7	79.1

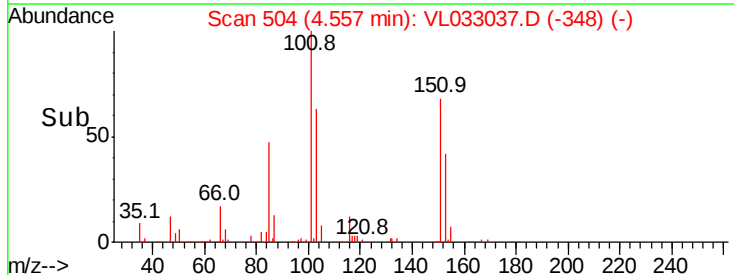
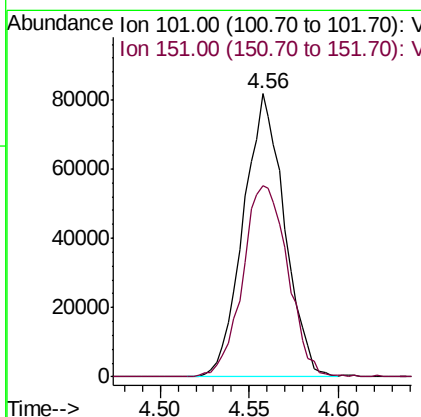
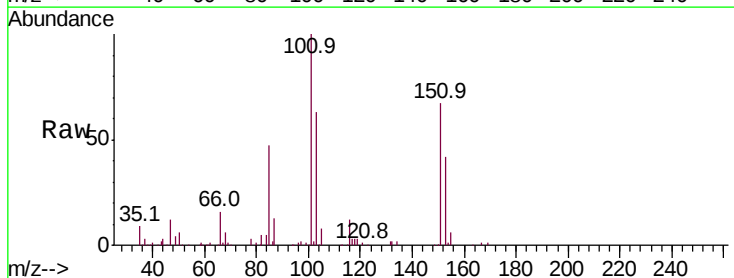
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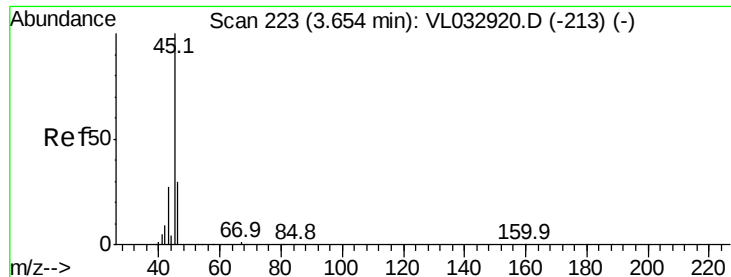
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#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.891 ppbv
 RT: 4.56 min Scan# 504
 Delta R.T. 0.00 min
 Lab File: VL033037.D
 Acq: 20 Dec 2018 22:43

Tgt Ion	Ratio	Lower	Upper
101	100		
151	74.5	59.3	88.9





#13

Ethanol

Concen: 5.928 ppbv m

RT: 3.66 min Scan# 225

Delta R.T. 0.01 min

Lab File: VL033037.D

Acq: 20 Dec 2018 22:43

Tot Ion: 45 Resp: 84133

Ion Ratio Lower Upper

45 100

46 37.9 13.8 55.4

Instrument :

MSVOA_L

ClientSampleId :

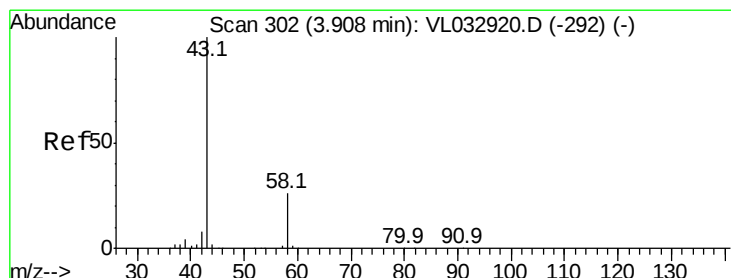
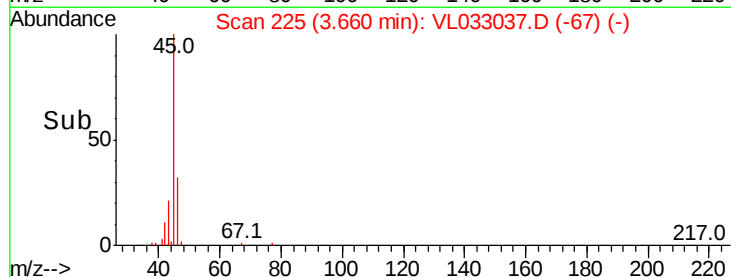
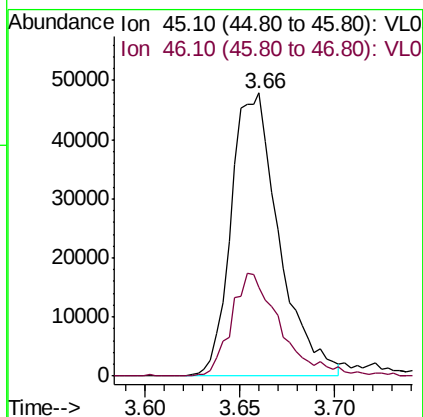
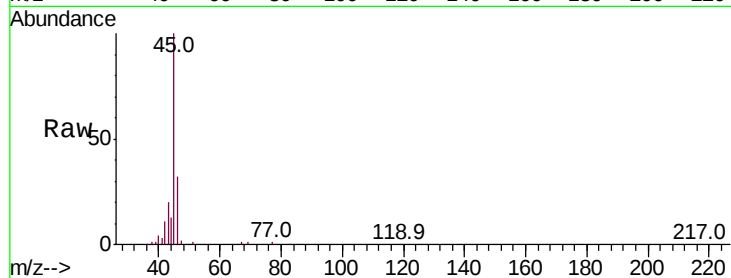
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#15

Acetone

Concen: 4.372 ppbv

RT: 3.91 min Scan# 304

Delta R.T. 0.01 min

Lab File: VL033037.D

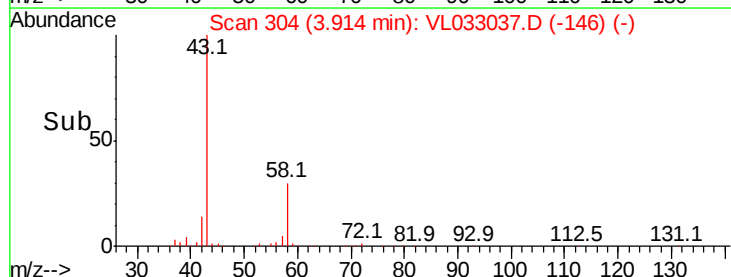
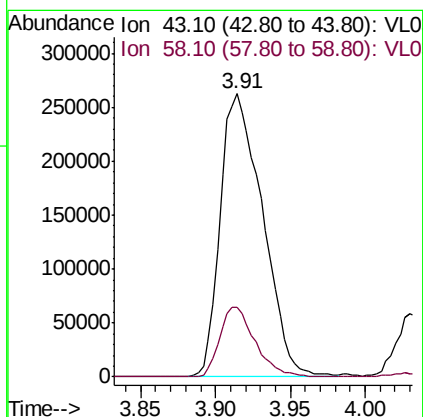
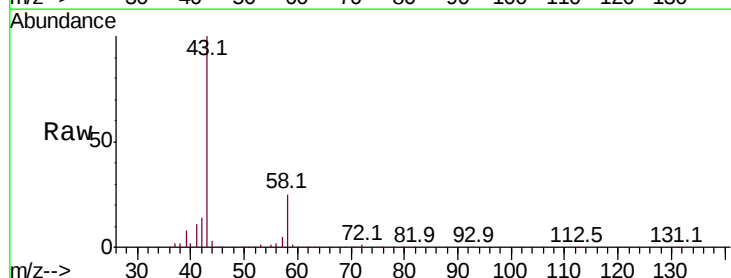
Acq: 20 Dec 2018 22:43

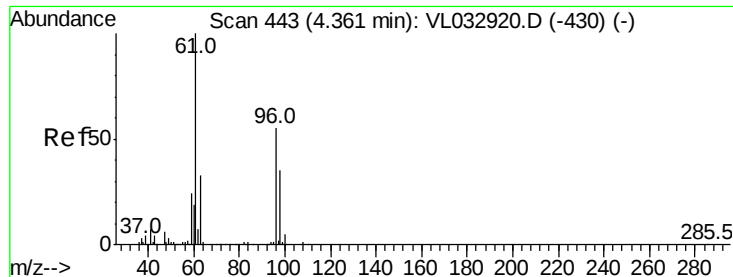
Tgt Ion: 43 Resp: 516597

Ion Ratio Lower Upper

43 100

58 20.9 20.6 30.8





#17

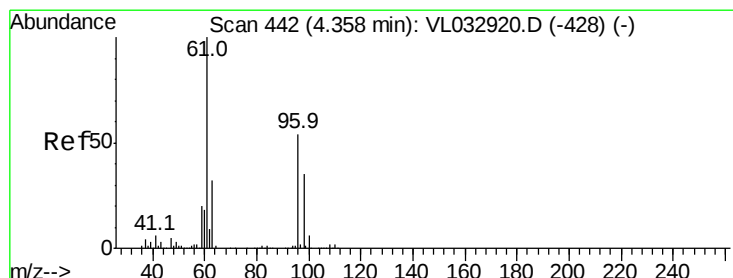
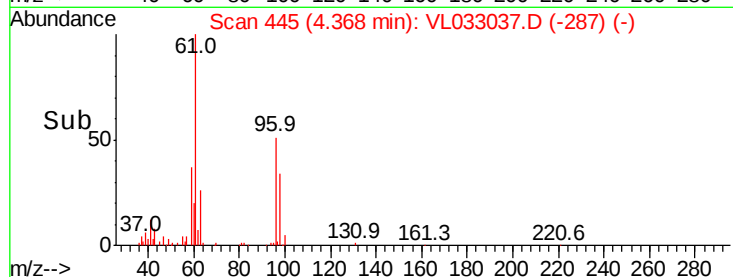
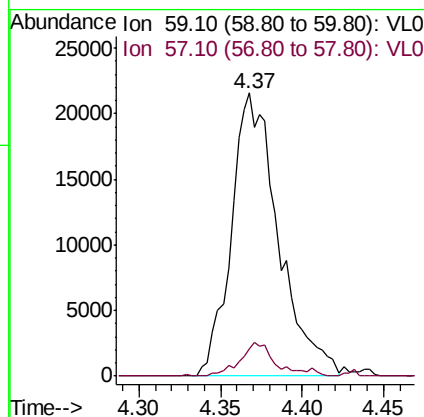
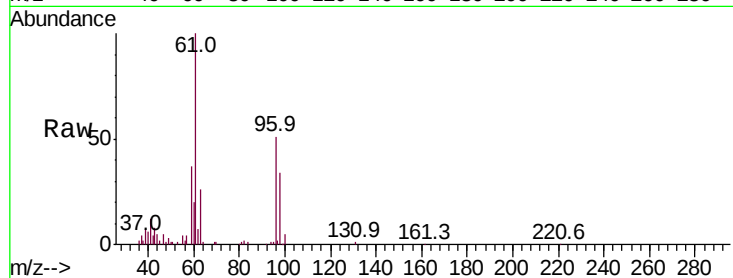
tert-Butyl alcohol
Concen: 1.448 ppbv
RT: 4.37 min Scan# 445
Delta R.T. 0.01 min
Lab File: VL033037.D
Acq: 20 Dec 2018 22:43

Instrument :
MSVOA_L
ClientSampleID :
EFFLUENTDUP

Tot Ion: 59 Resp: 43556
Ion Ratio Lower Upper
59 100
57 0.0 0.6 1.0#

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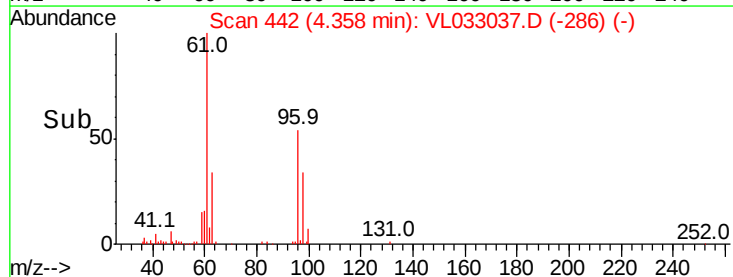
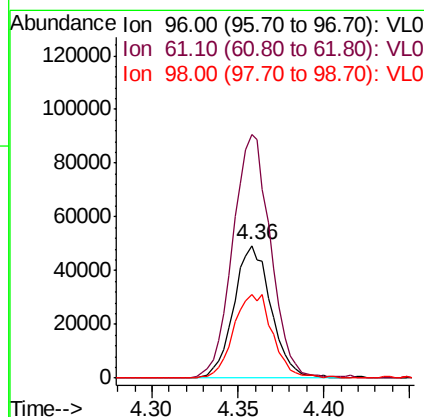
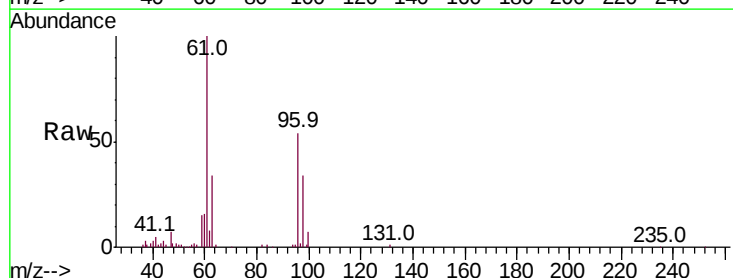
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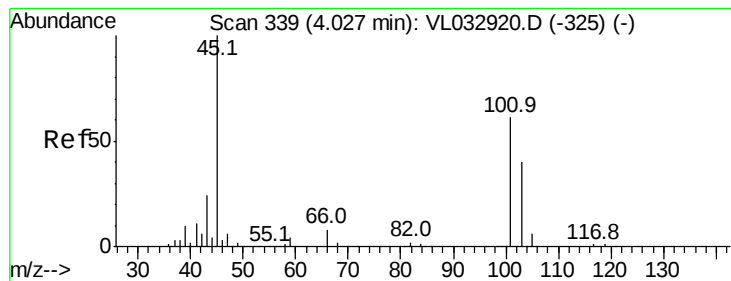


#18

1,1-Dichloroethene
Concen: 1.260 ppbv
RT: 4.36 min Scan# 442
Delta R.T. 0.00 min
Lab File: VL033037.D
Acq: 20 Dec 2018 22:43

Tgt Ion: 96 Resp: 72908
Ion Ratio Lower Upper
96 100
61 184.0 147.0 220.4
98 63.5 50.7 76.1





#19

Isopropyl Alcohol

Concen: 4.947 ppbv

RT: 4.03 min Scan# 341

Delta R.T. 0.01 min

Lab File: VL033037.D

Acq: 20 Dec 2018 22:43

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENTDUP

Tot Ion: 45 Resp: 367049

Ion Ratio Lower Upper

45 100

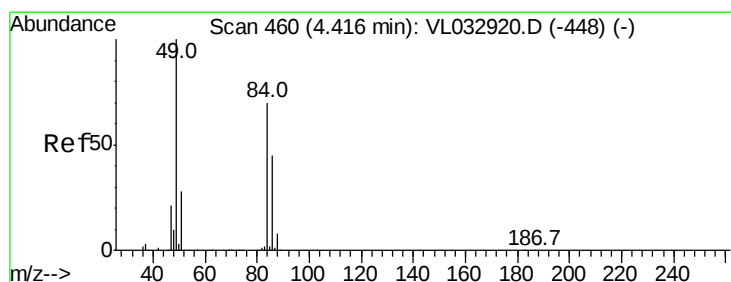
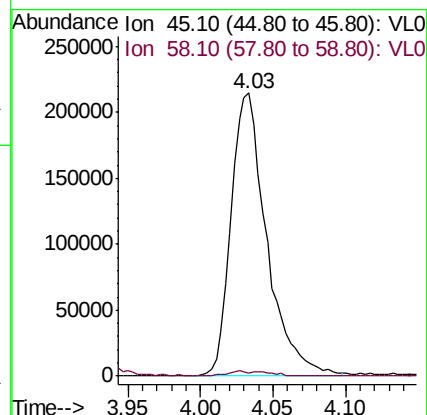
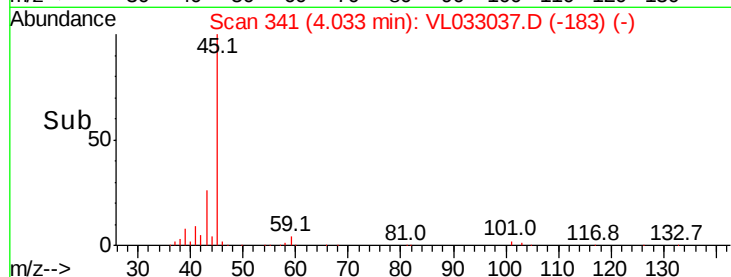
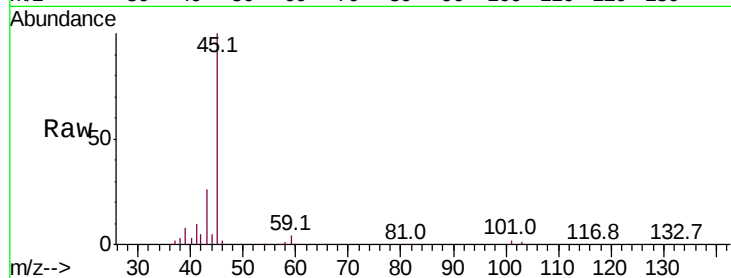
58 2.4 1.4 2.2#

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#20

Methylene Chloride

Concen: 1.085 ppbv

RT: 4.41 min Scan# 459

Delta R.T. -0.00 min

Lab File: VL033037.D

Acq: 20 Dec 2018 22:43

Tgt Ion: 84 Resp: 62676

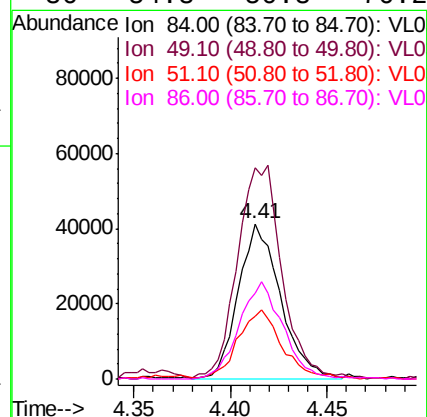
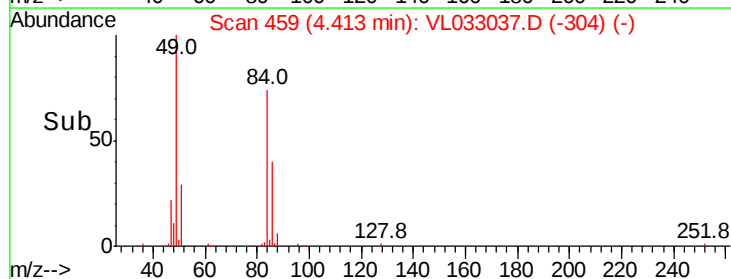
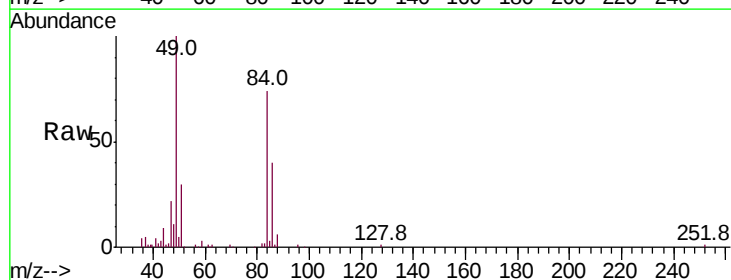
Ion Ratio Lower Upper

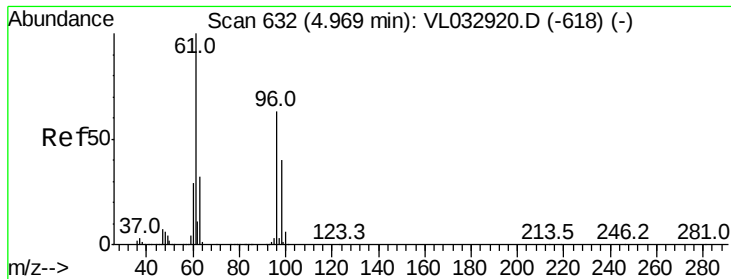
84 100

49 134.7 113.8 170.8

51 39.6 31.8 47.8

86 54.8 50.8 76.2





#22

trans-1,2-Dichloroethene

Concen: 1.841 ppbv

RT: 4.97 min Scan# 633

Delta R.T. 0.00 min

Lab File: VL033037.D

Acq: 20 Dec 2018 22:43

Instrument :

MSVOA_L

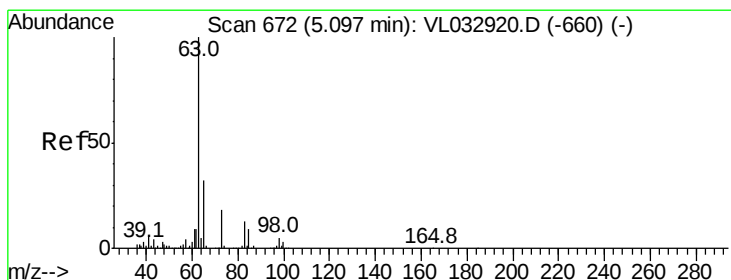
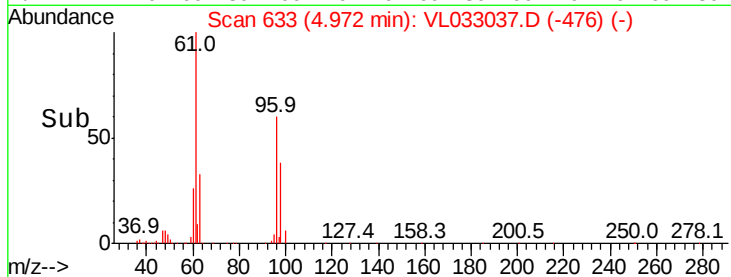
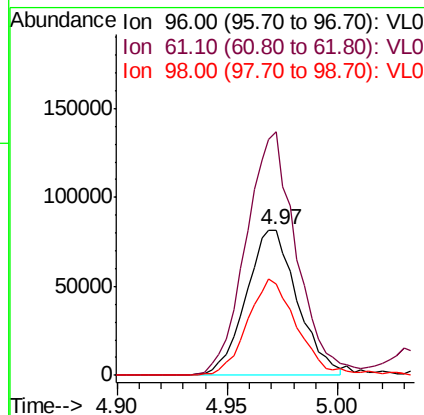
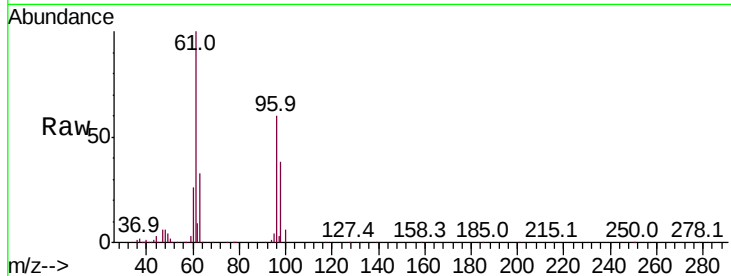
ClientSampleId :

EFFLUENTDUP

Tot Ion:	96	Resp:	132208
Ion Ratio	Lower	Upper	
96	100		
61	167.2	127.1	190.7
98	62.5	51.3	76.9

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#24

1,1-Dichloroethane

Concen: 11.256 ppbv

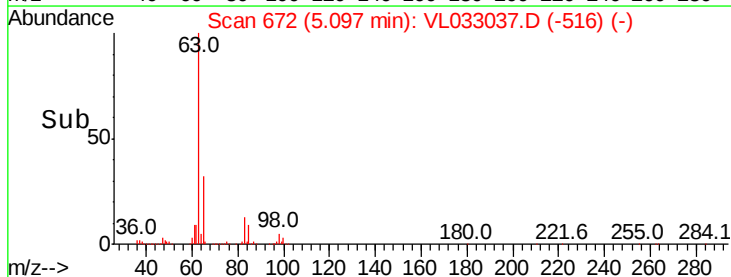
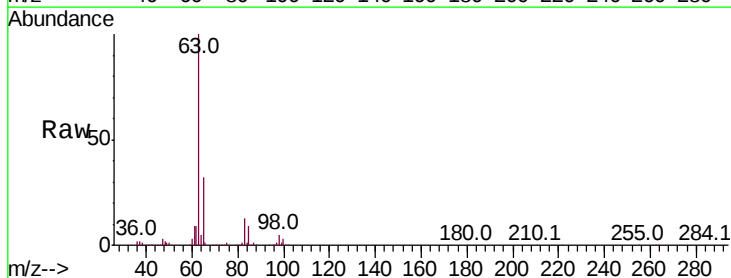
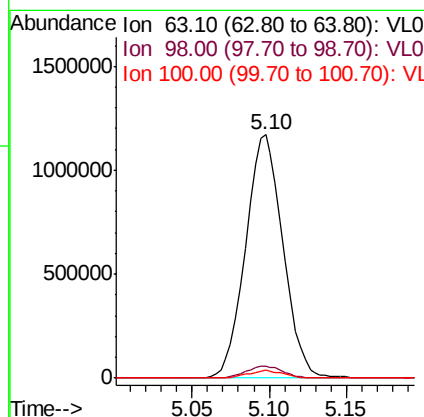
RT: 5.10 min Scan# 672

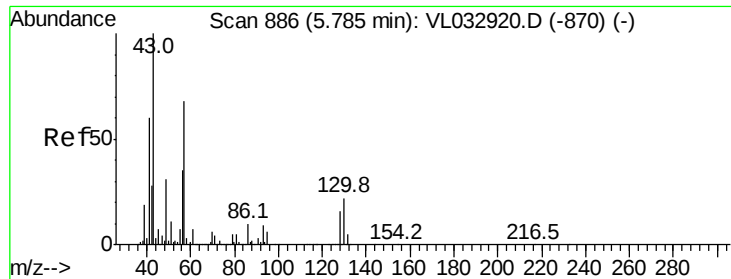
Delta R.T. 0.00 min

Lab File: VL033037.D

Acq: 20 Dec 2018 22:43

Tgt Ion:	63	Resp:	1957957
Ion Ratio	Lower	Upper	
63	100		
98	4.9	2.5	7.5
100	3.2	1.4	4.2





#26

Hexane

Concen: 0.521 ppbv

RT: 5.78 min Scan# 885

Delta R.T. -0.00 min

Lab File: VL033037.D

Acq: 20 Dec 2018 22:43

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENTDUP

Tot Ion: 57 Resp: 67076

Ion Ratio Lower Upper

57 100

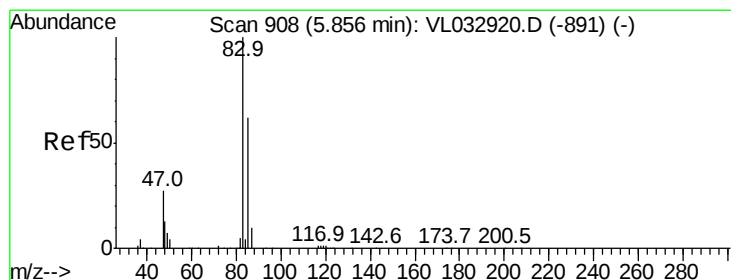
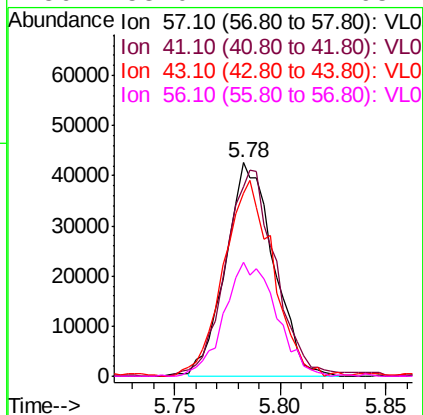
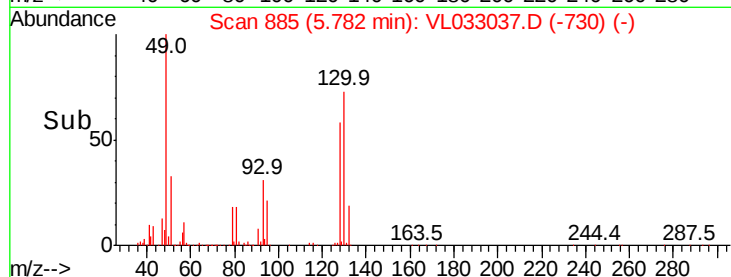
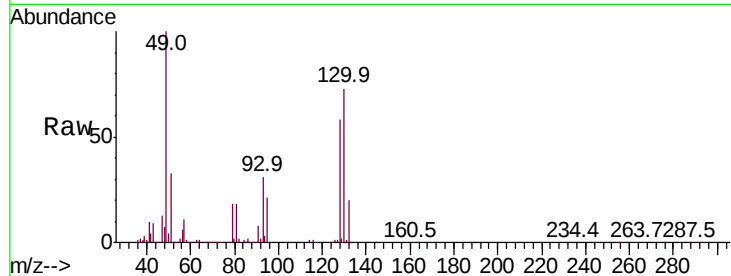
41 102.4 72.2 108.2

43 95.7 171.9 257.9#

56 58.0 42.2 63.2

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#29

Chloroform

Concen: 0.128 ppbv m

RT: 5.85 min Scan# 907

Delta R.T. -0.00 min

Lab File: VL033037.D

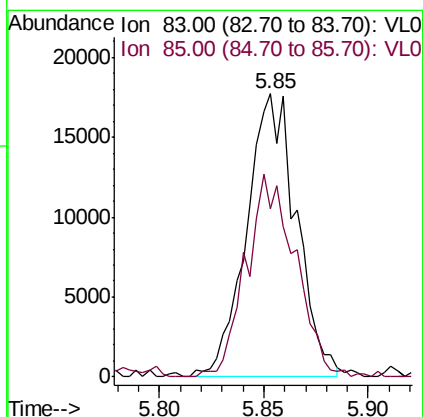
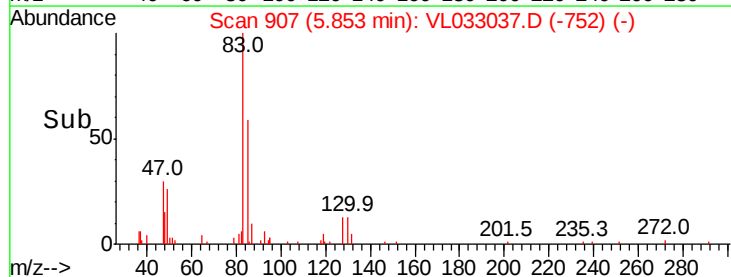
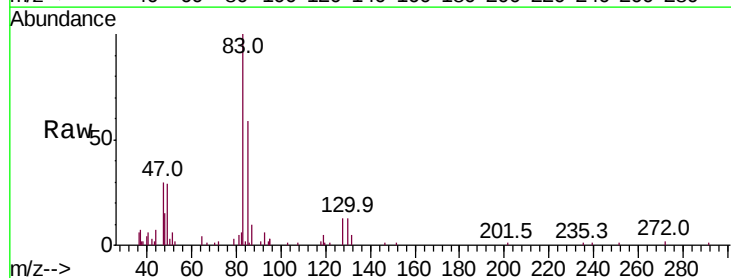
Acq: 20 Dec 2018 22:43

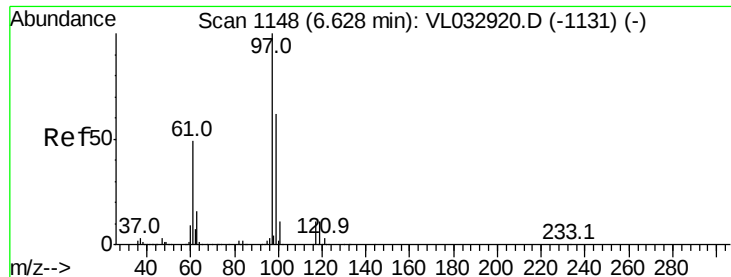
Tgt Ion: 83 Resp: 29401

Ion Ratio Lower Upper

83 100

85 59.3 49.8 74.8





#32

1,1,1-Trichloroethane

Concen: 62.306 ppbv

RT: 6.62 min Scan# 1147

Delta R.T. -0.00 min

Lab File: VL033037.D

Acq: 20 Dec 2018 22:43

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENTDUP

Tot Ion: 97 Resp: 15157574

Ion Ratio Lower Upper

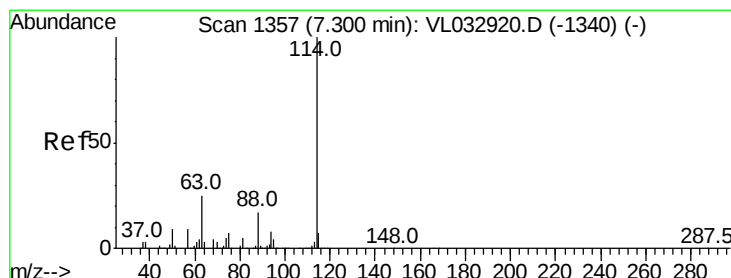
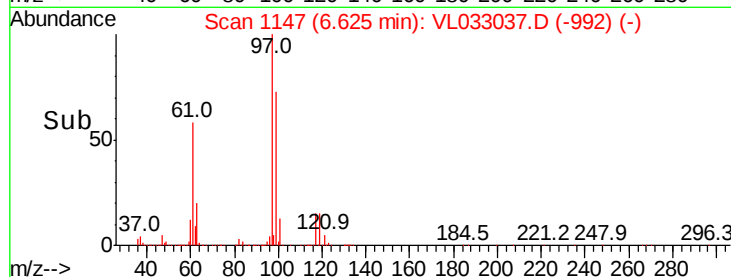
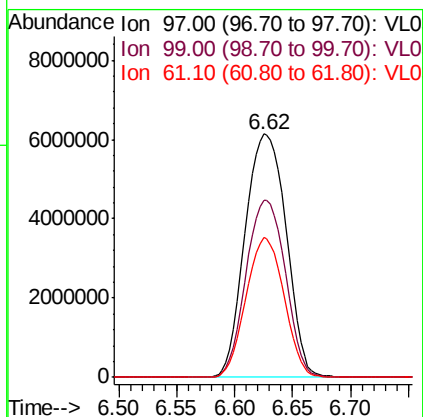
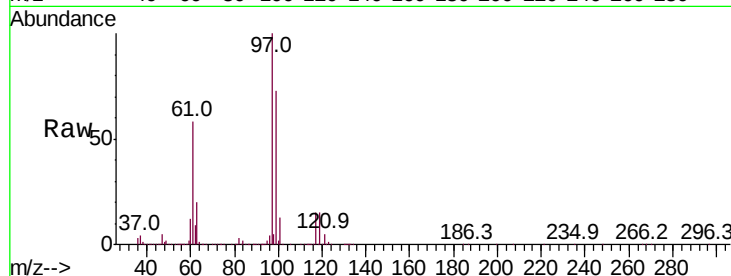
97 100

99 69.8 51.1 76.7

61 53.2 39.3 58.9

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#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.30 min Scan# 1356

Delta R.T. -0.00 min

Lab File: VL033037.D

Acq: 20 Dec 2018 22:43

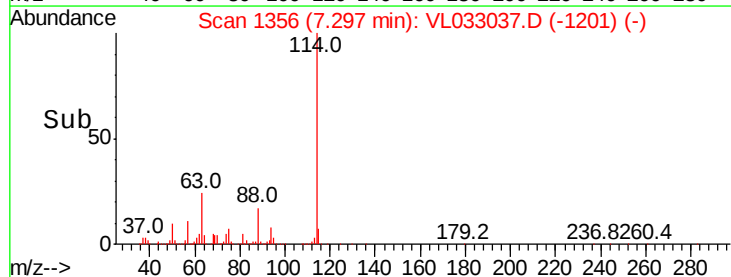
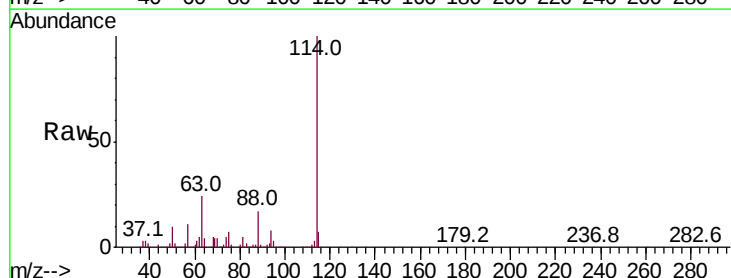
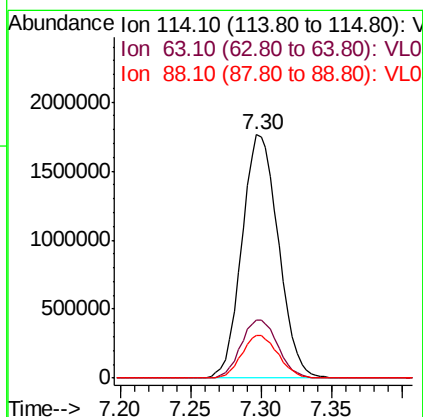
Tgt Ion: 114 Resp: 3203044

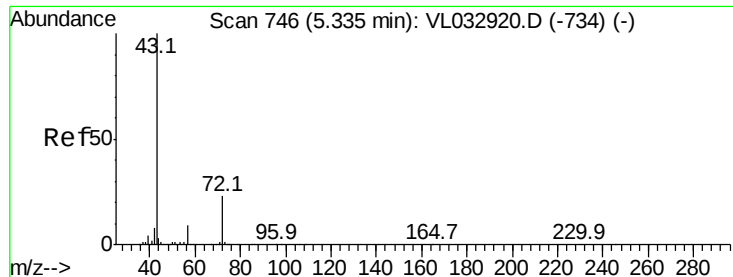
Ion Ratio Lower Upper

114 100

63 24.2 20.1 30.1

88 17.5 14.2 21.4





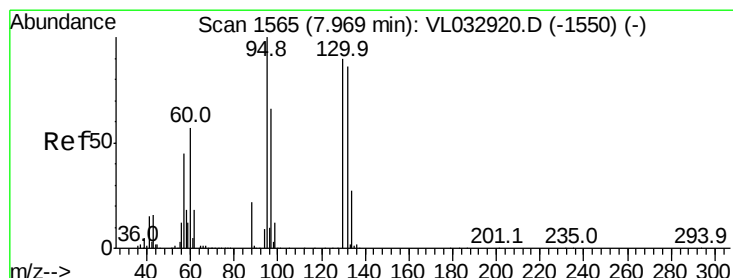
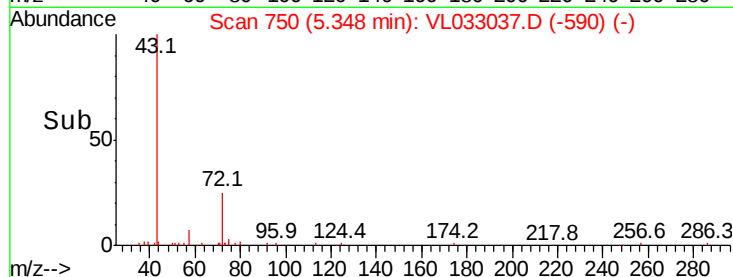
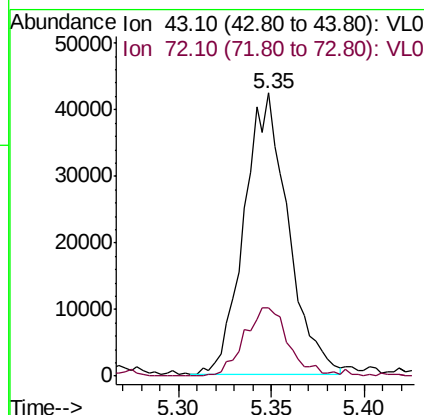
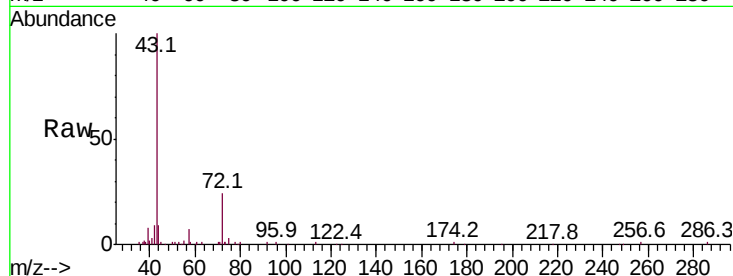
#34
2-Butanone
Concen: 0.501 ppbv
RT: 5.35 min Scan# 750
Delta R.T. 0.01 min
Lab File: VL033037.D
Acq: 20 Dec 2018 22:43

Instrument :
MSVOA_L
ClientSampleId :
EFFLUENTDUP

Tot Ion	Ratio	Lower	Upper
43	100		
72	25.3	18.8	28.2

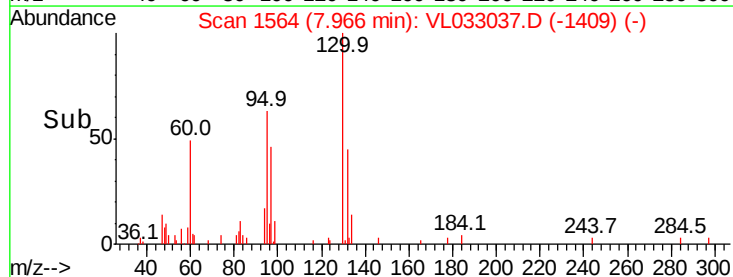
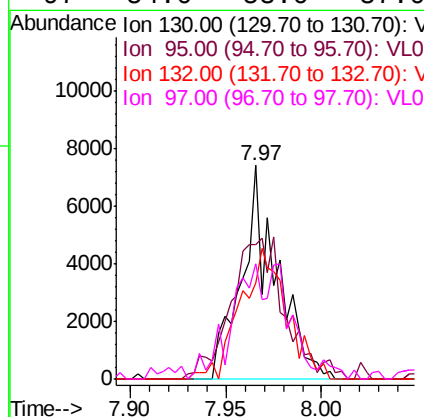
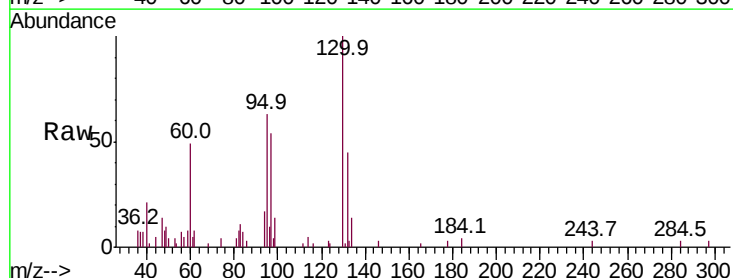
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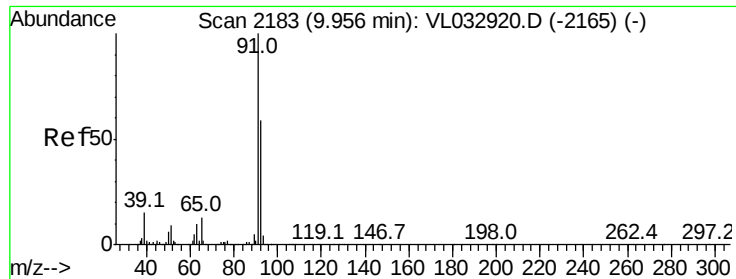
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#38
Trichloroethene
Concen: 0.096 ppbv m
RT: 7.97 min Scan# 1564
Delta R.T. -0.00 min
Lab File: VL033037.D
Acq: 20 Dec 2018 22:43

Tgt Ion	Ratio	Lower	Upper
130	100		
95	62.7	88.6	132.8#
132	44.9	76.1	114.1#
97	54.0	58.0	87.0#





#53

Toluene

Concen: 2.927 ppbv

RT: 9.95 min Scan# 2182

Delta R.T. -0.00 min

Lab File: VL033037.D

Acq: 20 Dec 2018 22:43

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENTDUP

Tot Ion: 91 Resp: 731309

Ion Ratio Lower Upper

91 100

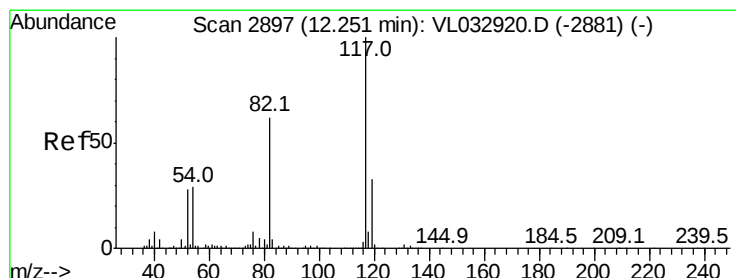
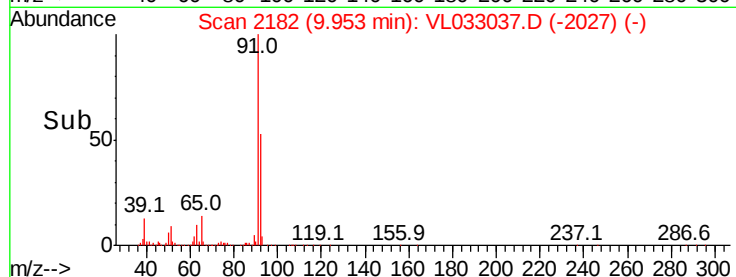
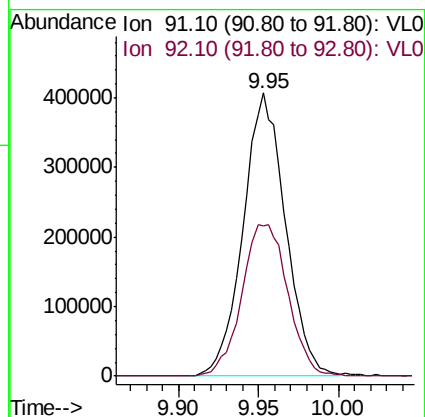
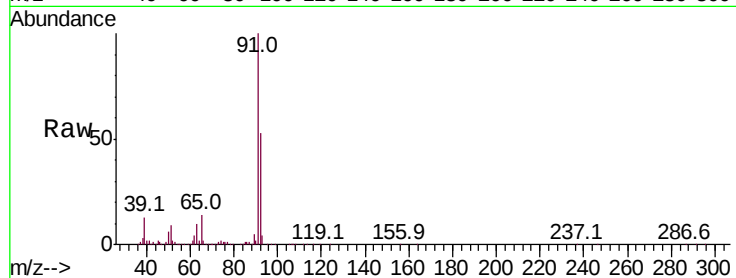
92 58.8 47.4 71.0

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.25 min Scan# 2895

Delta R.T. -0.01 min

Lab File: VL033037.D

Acq: 20 Dec 2018 22:43

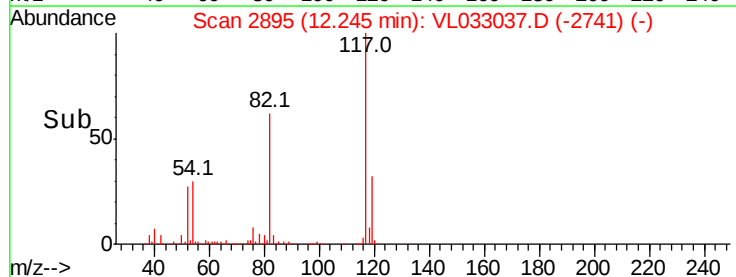
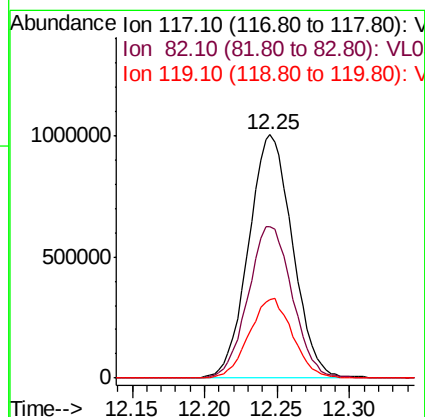
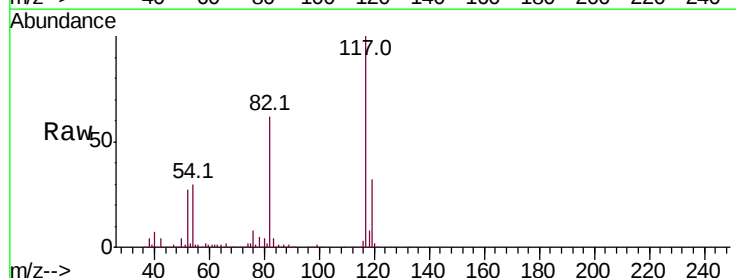
Tgt Ion: 117 Resp: 2115561

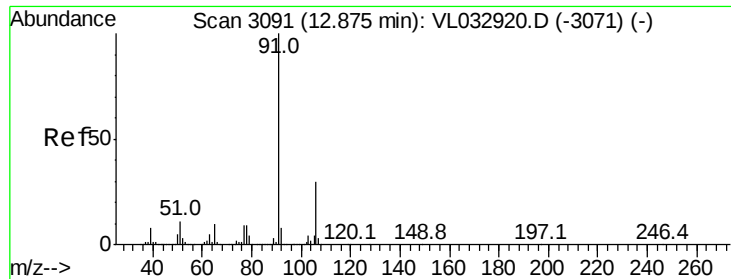
Ion Ratio Lower Upper

117 100

82 63.3 47.8 71.8

119 32.3 43.1 64.7#





#58

Ethyl Benzene

Concen: 0.175 ppbv m

RT: 12.87 min Scan# 3090

Delta R.T. -0.00 min

Lab File: VL033037.D

Acq: 20 Dec 2018 22:43

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENTDUP

Tot Ion: 91 Resp: 39600

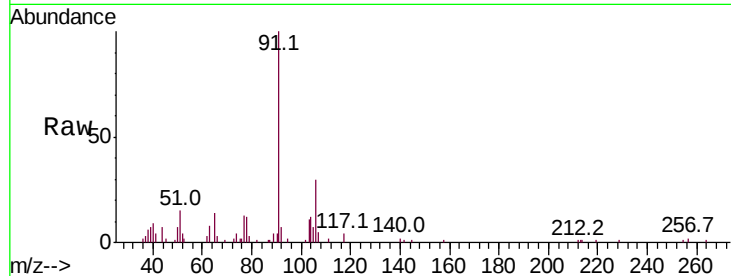
Ion Ratio Lower Upper

91 100

106 29.8 23.9 35.9

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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

20000

15000

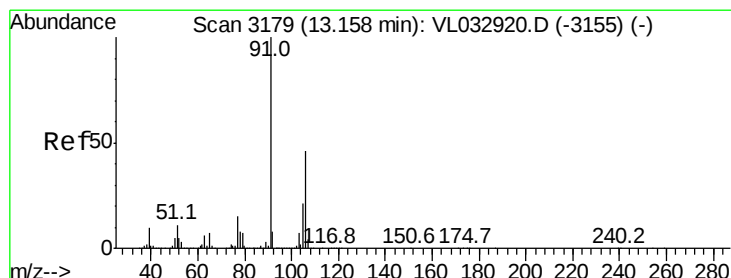
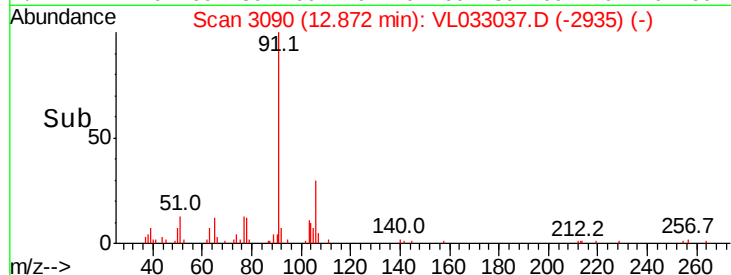
10000

5000

0

12.80 12.85 12.90 12.95

Time-->



#59

m/p-Xylene

Concen: 0.786 ppbv m

RT: 13.13 min Scan# 3170

Delta R.T. -0.03 min

Lab File: VL033037.D

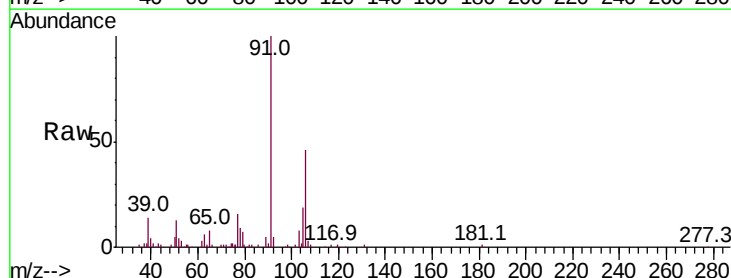
Acq: 20 Dec 2018 22:43

Tgt Ion: 91 Resp: 160843

Ion Ratio Lower Upper

91 100

106 44.1 0.0 0.0#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

60000

50000

40000

30000

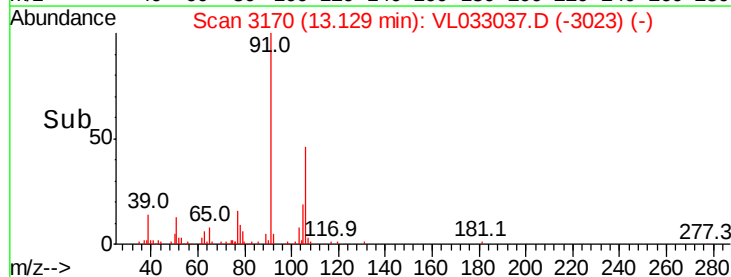
20000

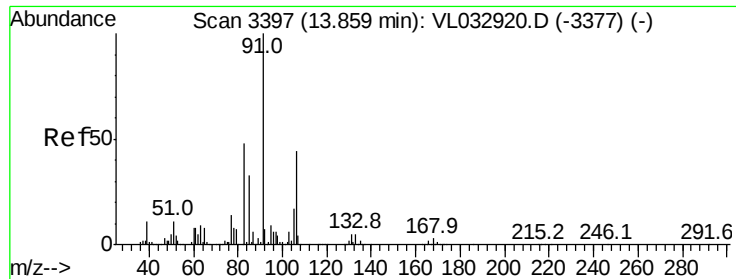
10000

0

13.00 13.10 13.20

Time-->





#60

o-Xylene

Concen: 0.365 ppbv

RT: 13.85 min Scan# 3395

Delta R.T. -0.01 min

Lab File: VL033037.D

Acq: 20 Dec 2018 22:43

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENTDUP

Tot Ion: 91 Resp: 75357

Ion Ratio Lower Upper

91 100

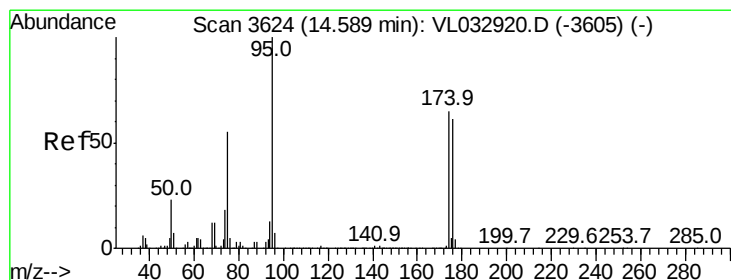
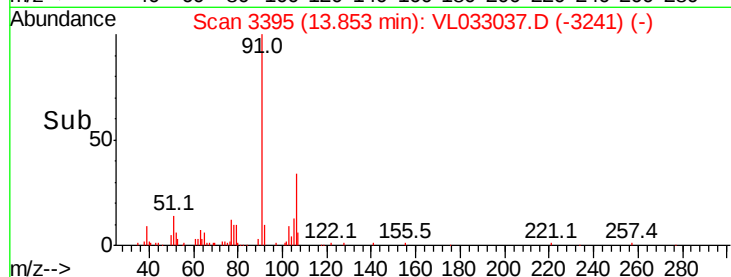
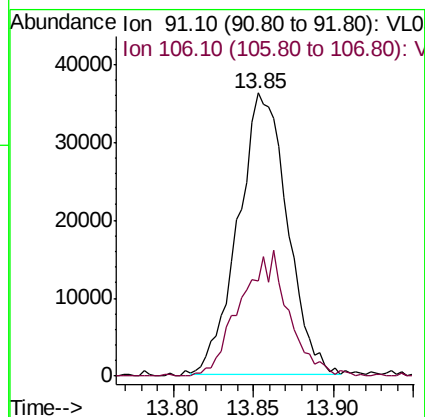
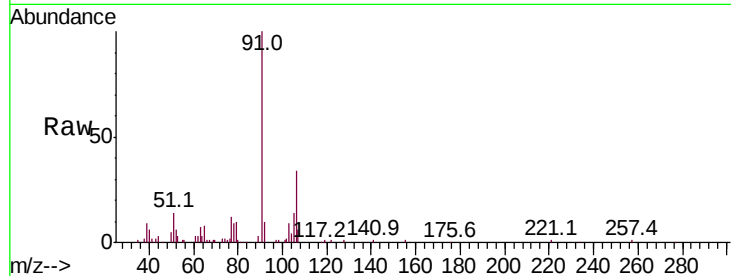
106 44.5 21.9 65.8

Manual Integrations

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#68

1-Bromo-4-Fluorobenzene

Concen: 14.928 ppbv

RT: 14.58 min Scan# 3622

Delta R.T. -0.01 min

Lab File: VL033037.D

Acq: 20 Dec 2018 22:43

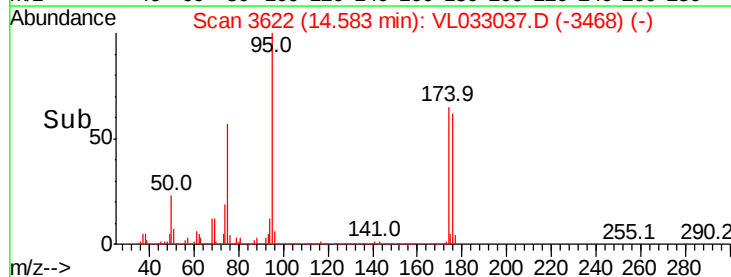
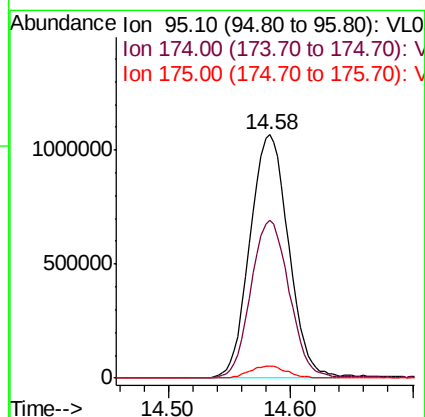
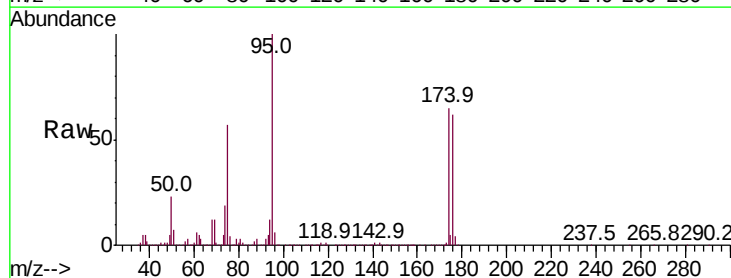
Tgt Ion: 95 Resp: 2333246

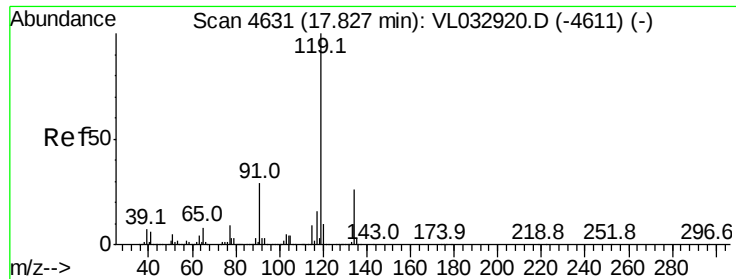
Ion Ratio Lower Upper

95 100

174 65.5 51.4 77.0

175 5.0 3.8 5.6





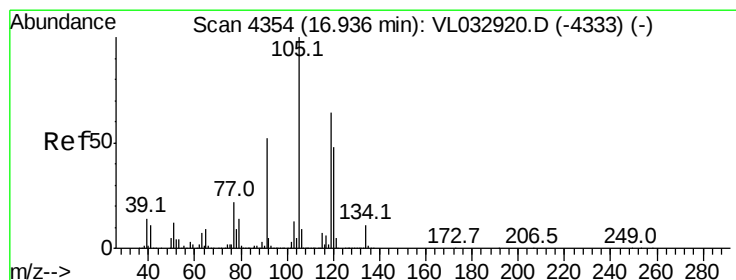
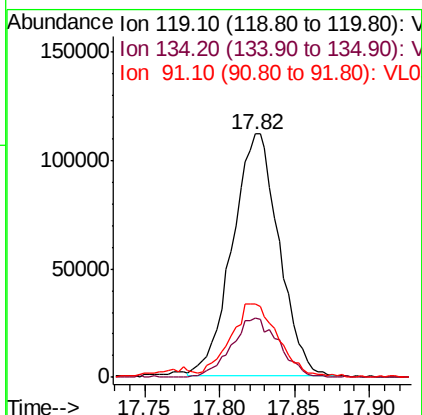
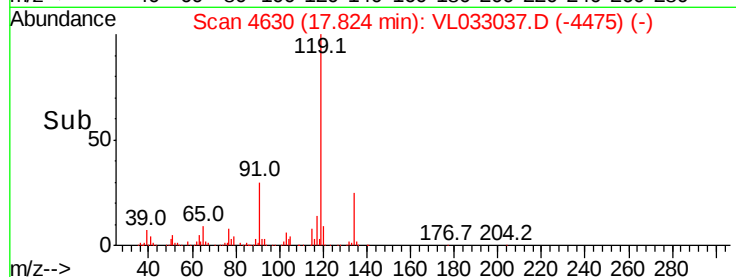
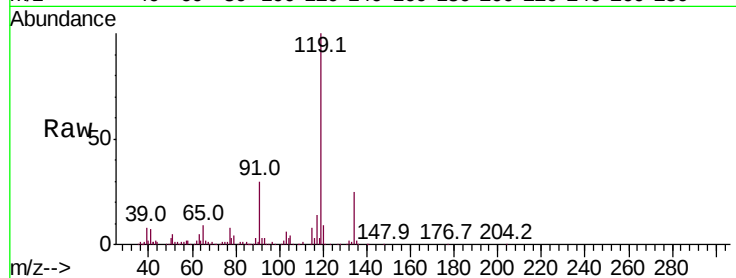
#69
 p-Isopropyltoluene
 Concen: 0.757 ppbv
 RT: 17.82 min Scan# 4630
 Delta R.T. -0.00 min
 Lab File: VL033037.D
 Acq: 20 Dec 2018 22:43

Instrument :
 MSVOA_L
 ClientSampleID :
 EFFLUENTDUP

Tot Ion	119	Resp	241578
Ion Ratio	Lower	Upper	
119	100		
134	25.2	20.2	30.2
91	33.3	22.9	34.3

Manual Integrations
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#74
 1,2,4-Trimethylbenzene
 Concen: 0.562 ppbv
 RT: 16.93 min Scan# 4351
 Delta R.T. -0.01 min
 Lab File: VL033037.D
 Acq: 20 Dec 2018 22:43

Tgt Ion	105	Resp	142888
Ion Ratio	Lower	Upper	
105	100		
120	34.7	38.6	58.0#
91	12.7	41.7	62.5#
77	13.4	17.4	26.2#

