

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL122018\
 Data File : VL033036.D
 Acq On : 20 Dec 2018 22:02
 Operator : SY/AP
 Sample : J6480-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 EFFLUENT

Manual Integrations
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 12/24/2018 8:26:27 AM

Quant Time: Dec 21 06:45:31 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	1132721	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	2690799	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	2054566	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	2125630	14.00	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	140.00%#

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	71367	0.472	ppbv	98
3) Chlorodifluoromethane	3.01	51	28363m	0.331	ppbv	
4) Chloromethane	3.17	50	11886	0.238	ppbv #	83
7) Chloroethane	3.61	64	28421	1.560	ppbv	95
9) Propene	3.05	41	19229m	0.567	ppbv	
11) Trichlorofluoromethane	4.01	101	63791	0.448	ppbv	97
12) 1,1,2-Trichlorotrifluoroet	4.56	101	127355	1.048	ppbv	98
13) Ethanol	3.66	45	59899	5.129	ppbv	95
15) Acetone	3.91	43	480580	4.943	ppbv #	90
17) tert-Butyl alcohol	4.37	59	34701	1.402	ppbv #	78
18) 1,1-Dichloroethene	4.35	96	67974	1.428	ppbv	93
19) Isopropyl Alcohol	4.03	45	290149	4.752	ppbv #	97
20) Methylene Chloride	4.41	84	58016	1.221	ppbv	98
22) trans-1,2-Dichloroethene	4.97	96	108430	1.835	ppbv	96
24) 1,1-Dichloroethane	5.09	63	1576704	11.015	ppbv	98
26) Hexane	5.79	57	49599	0.468	ppbv #	47
29) Chloroform	5.85	83	22139	0.117	ppbv	96
31) cis-1,2-Dichloroethene	5.64	61	13666	0.140	ppbv #	73
32) 1,1,1-Trichloroethane	6.62	97	13724087	68.555	ppbv	94
34) 2-Butanone	5.34	43	53356m	0.455	ppbv	
38) Trichloroethene	7.96	130	6681	0.081	ppbv	86
53) Toluene	9.95	91	531766	2.533	ppbv	99
58) Ethyl Benzene	12.87	91	37539m	0.171	ppbv	
59) m/p-Xylene	13.13	91	141110m	0.710	ppbv	
60) o-Xylene	13.86	91	64828	0.323	ppbv	97
69) p-Isopropyltoluene	17.83	119	224974	0.725	ppbv	95
74) 1,2,4-Trimethylbenzene	16.93	105	126438	0.512	ppbv #	67

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

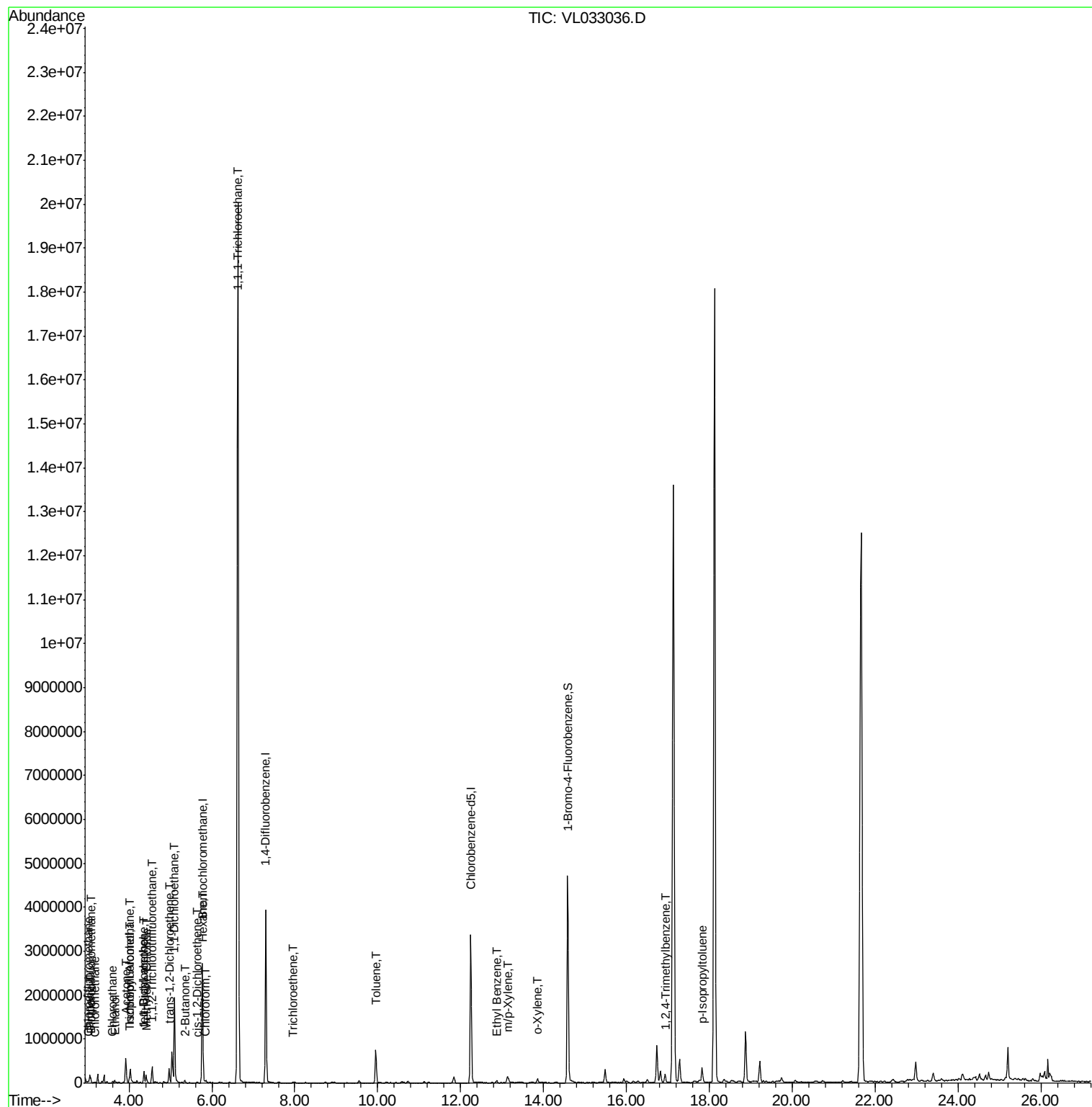
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL122018\
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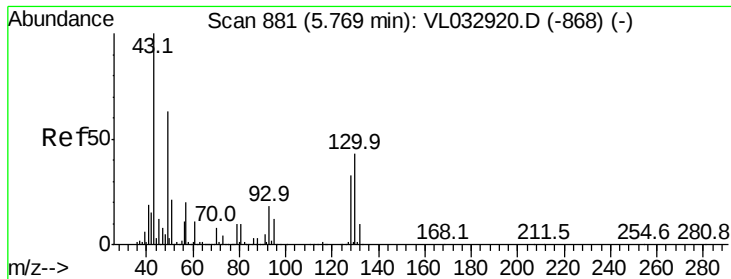
Instrument :
MSVOA_L
ClientSampleId :
EFFLUENT

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Quant Time: Dec 21 06:45:31 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL120718AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Dec
QLast Update : Fri Dec 07 09:35:17 2018
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 881

Delta R.T. 0.00 min

Lab File: VL033036.D

Acq: 20 Dec 2018 22:02

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENT

Tot Ion: 49 Resp: 1132721

Ion Ratio Lower Upper

49 100

128 52.8 26.3 78.8

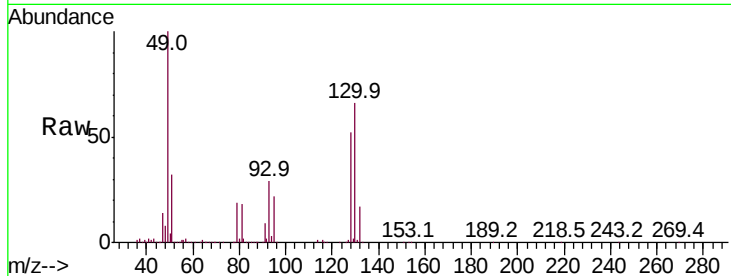
130 67.4 33.9 101.7

Manual Integrations

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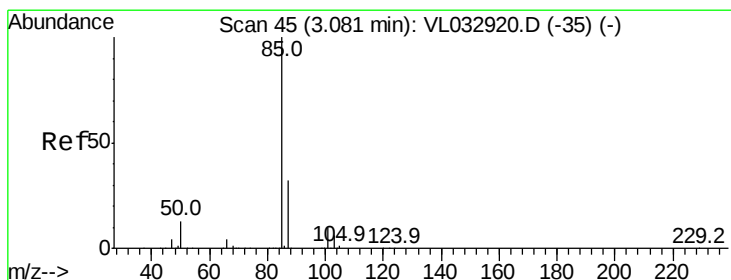
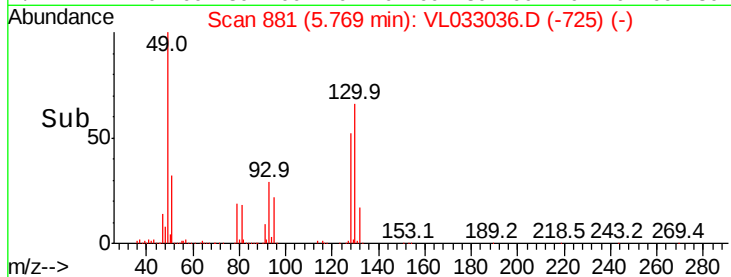
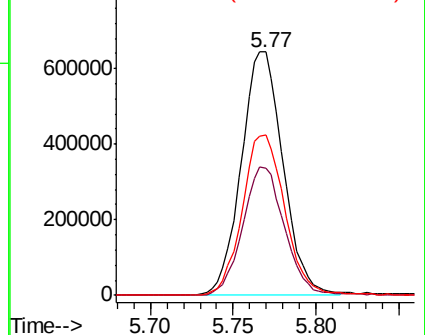
12/24/2018 8:26:27 AM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.472 ppbv

RT: 3.08 min Scan# 44

Delta R.T. -0.00 min

Lab File: VL033036.D

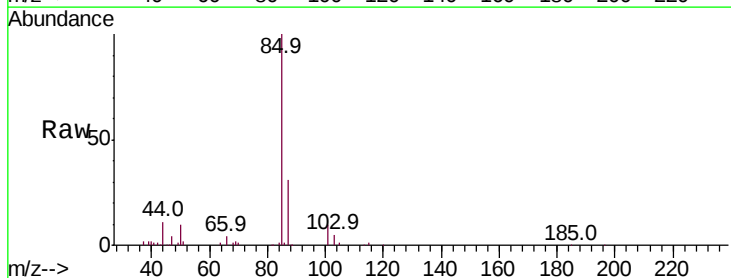
Acq: 20 Dec 2018 22:02

Tgt Ion: 85 Resp: 71367

Ion Ratio Lower Upper

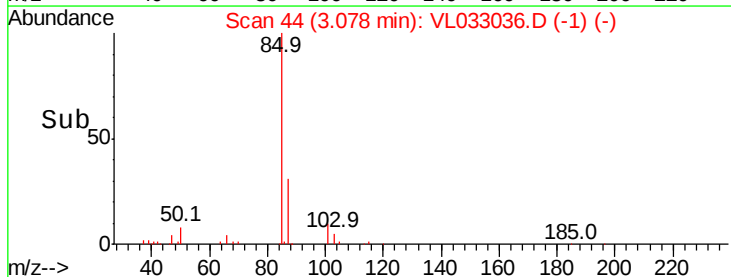
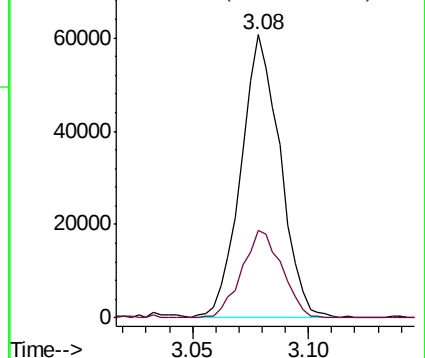
85 100

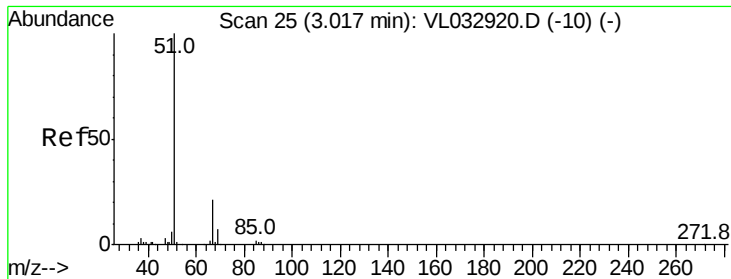
87 30.8 25.7 38.5



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.331 ppbv

RT: 3.01 min Scan# 24

Delta R.T. -0.00 min

Lab File: VL033036.D

Acq: 20 Dec 2018 22:02

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENT

Tot Ion: 51 Resp: 28363

Ion Ratio Lower Upper

51 100

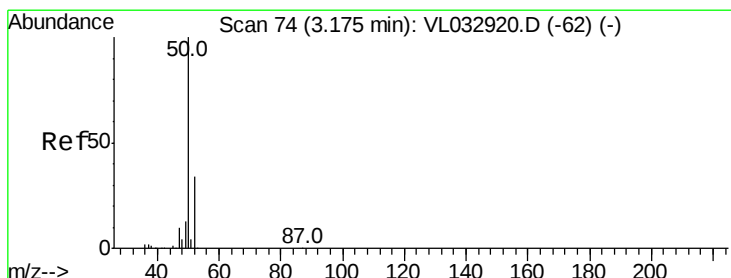
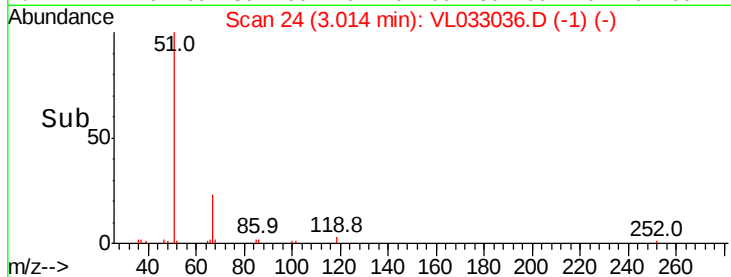
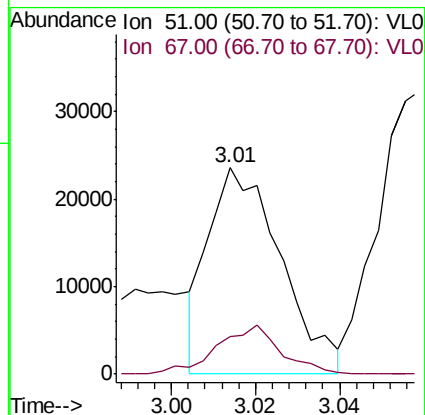
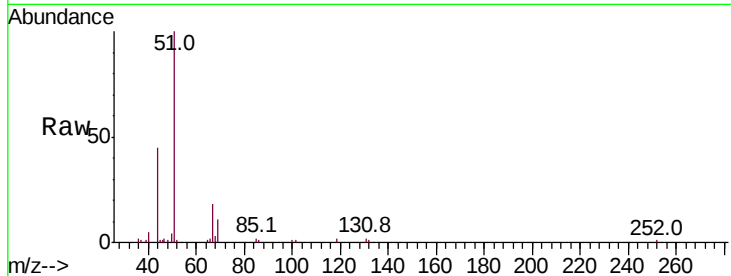
67 20.8 16.8 25.2

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#4

Chloromethane

Concen: 0.238 ppbv

RT: 3.17 min Scan# 73

Delta R.T. -0.00 min

Lab File: VL033036.D

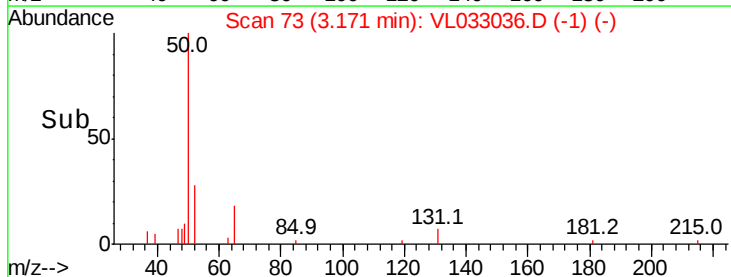
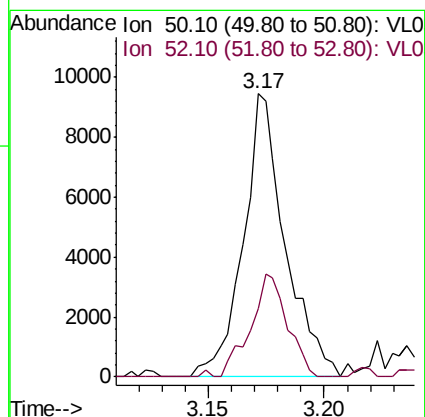
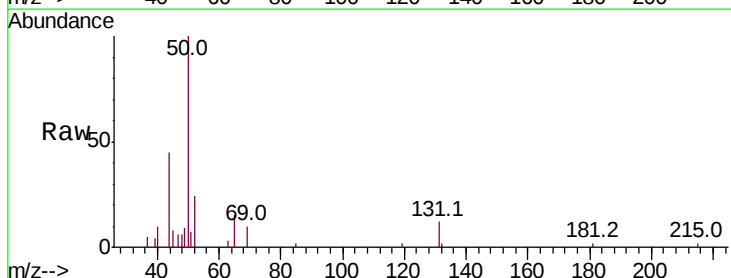
Acq: 20 Dec 2018 22:02

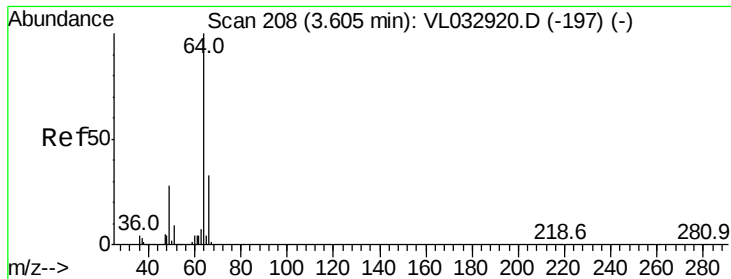
Tgt Ion: 50 Resp: 11886

Ion Ratio Lower Upper

50 100

52 24.2 27.3 40.9#





#7

Chloroethane

Concen: 1.560 ppbv

RT: 3.61 min Scan# 208

Delta R.T. 0.00 min

Lab File: VL033036.D

Acq: 20 Dec 2018 22:02

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENT

Tot Ion: 64 Resp: 28421

Ion Ratio Lower Upper

64 100

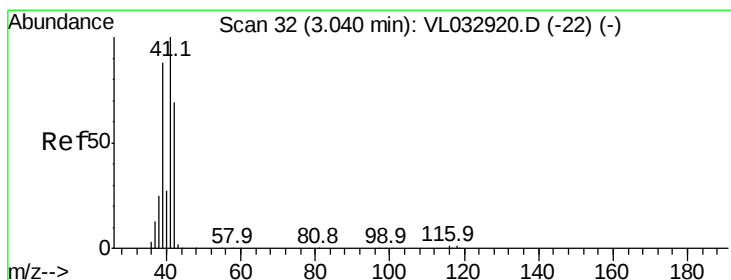
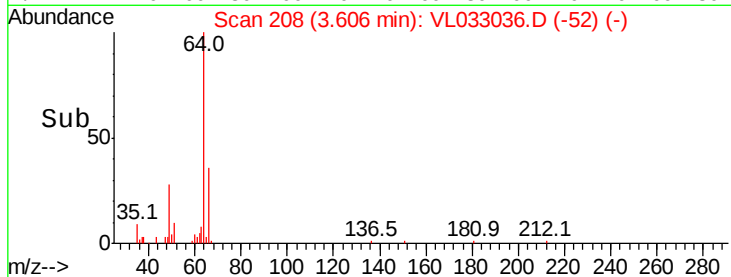
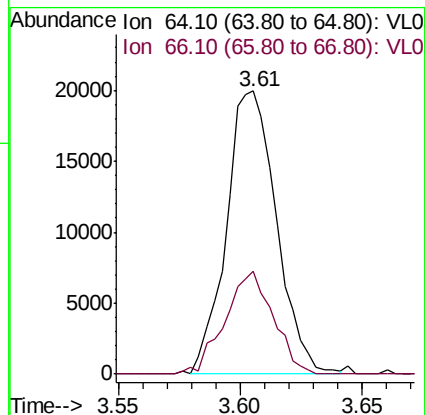
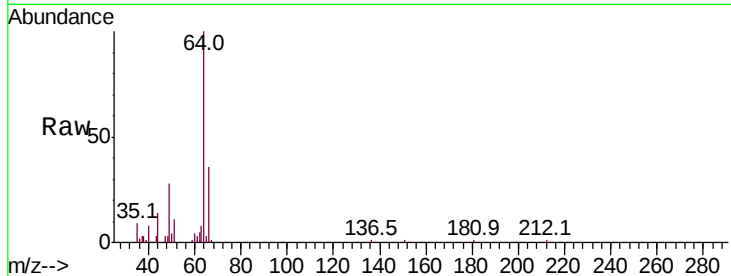
66 36.4 26.6 40.0

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#9

Propene

Concen: 0.567 ppbv m

RT: 3.05 min Scan# 36

Delta R.T. 0.01 min

Lab File: VL033036.D

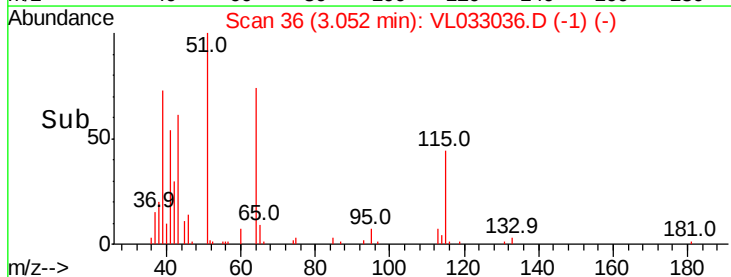
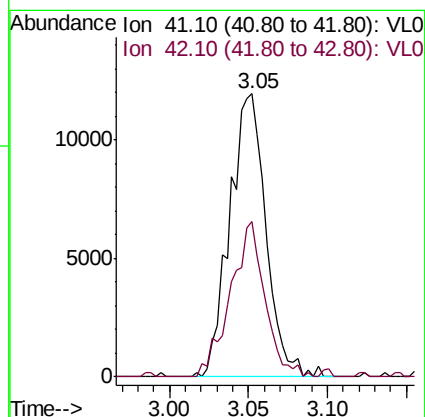
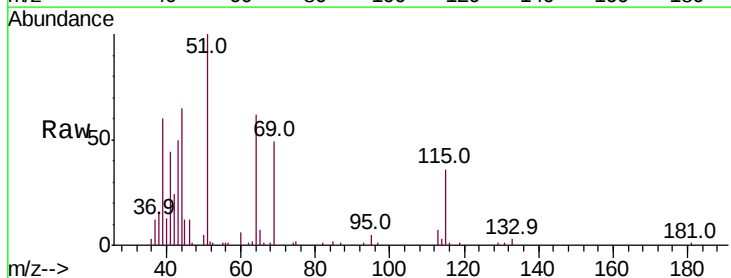
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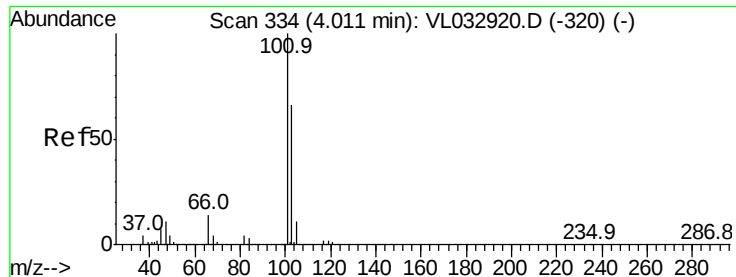
Tgt Ion: 41 Resp: 19229

Ion Ratio Lower Upper

41 100

42 180.2 56.2 84.2#





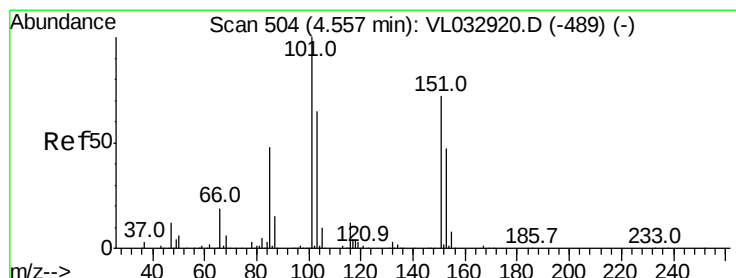
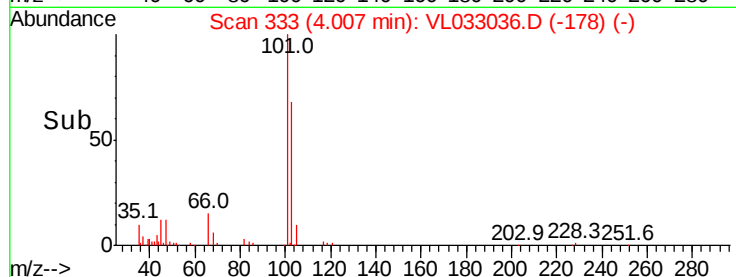
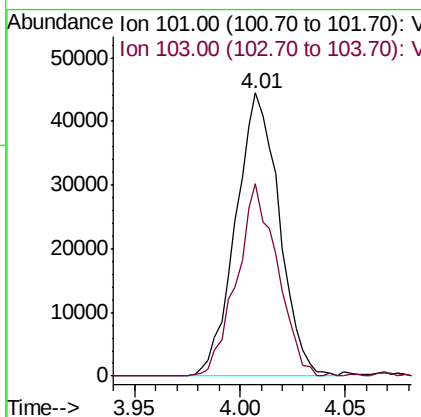
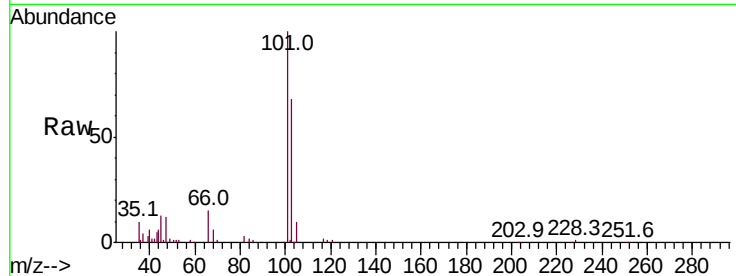
#11
 Trichlorofluoromethane
 Concen: 0.448 ppbv
 RT: 4.01 min Scan# 333
 Delta R.T. -0.00 min
 Lab File: VL033036.D
 Acq: 20 Dec 2018 22:02

Instrument :
 MSVOA_L
 ClientSampleId :
 EFFLUENT

Tot Ion:101 Resp: 63791
 Ion Ratio Lower Upper
 101 100
 103 68.0 52.7 79.1

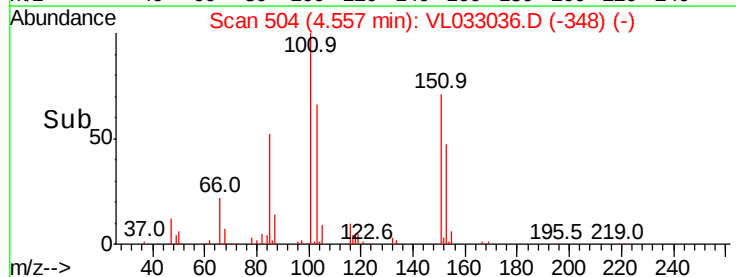
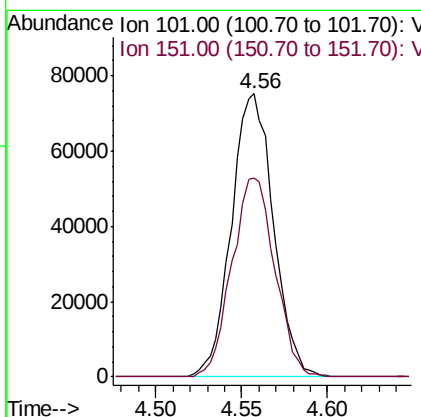
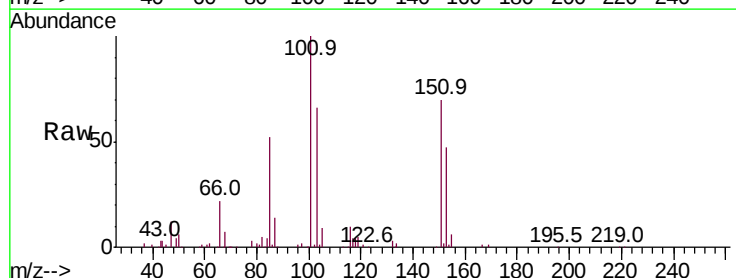
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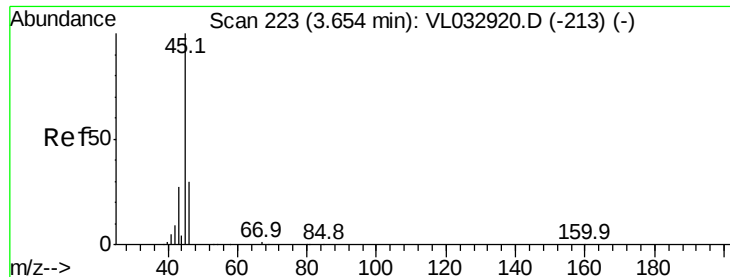
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#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 1.048 ppbv
 RT: 4.56 min Scan# 504
 Delta R.T. 0.00 min
 Lab File: VL033036.D
 Acq: 20 Dec 2018 22:02

Tgt Ion:101 Resp: 127355
 Ion Ratio Lower Upper
 101 100
 151 72.0 59.3 88.9





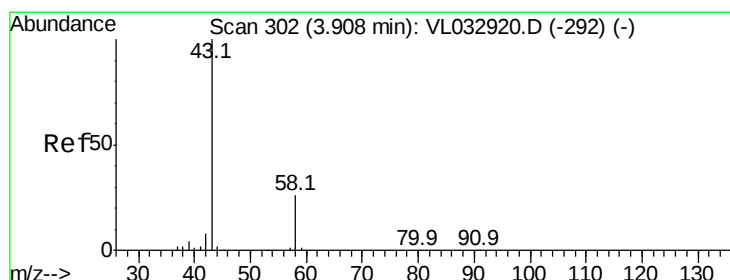
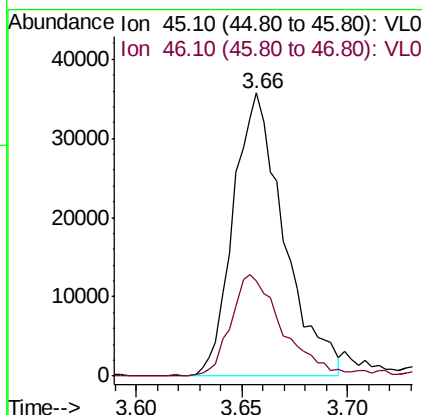
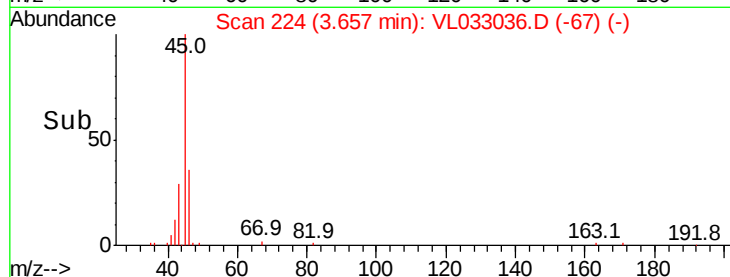
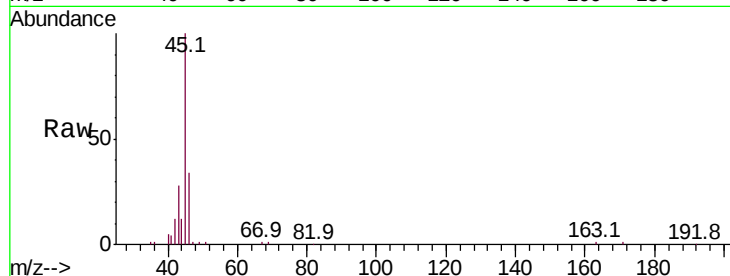
#13
Ethanol
Concen: 5.129 ppbv
RT: 3.66 min Scan# 224
Delta R.T. 0.00 min
Lab File: VL033036.D
Acq: 20 Dec 2018 22:02

Instrument :
MSVOA_L
ClientSampleId :
EFFLUENT

Tot Ion: 45 Resp: 59899
Ion Ratio Lower Upper
45 100
46 37.5 13.8 55.4

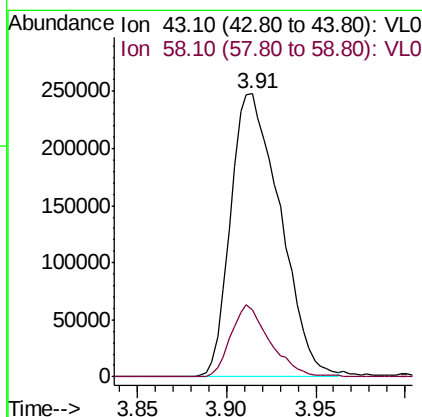
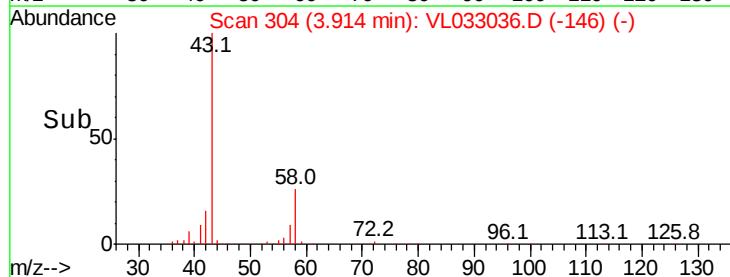
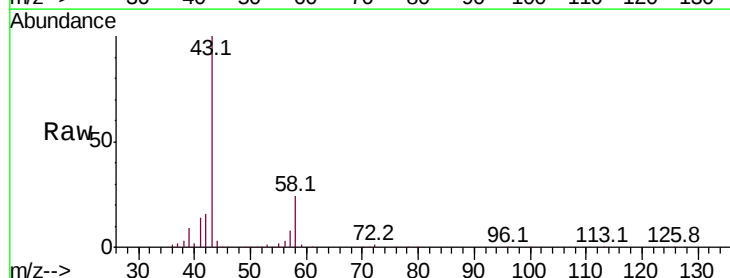
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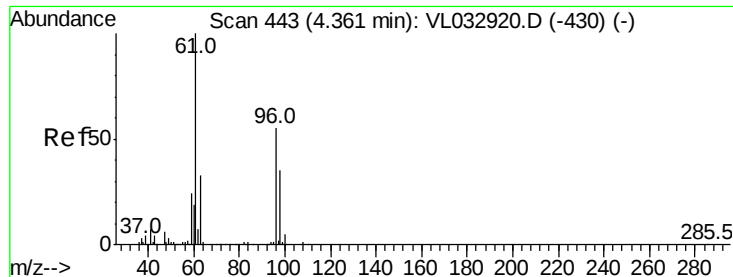
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#15
Acetone
Concen: 4.943 ppbv
RT: 3.91 min Scan# 304
Delta R.T. 0.01 min
Lab File: VL033036.D
Acq: 20 Dec 2018 22:02

Tgt Ion: 43 Resp: 480580
Ion Ratio Lower Upper
43 100
58 20.4 20.6 30.8#





#17

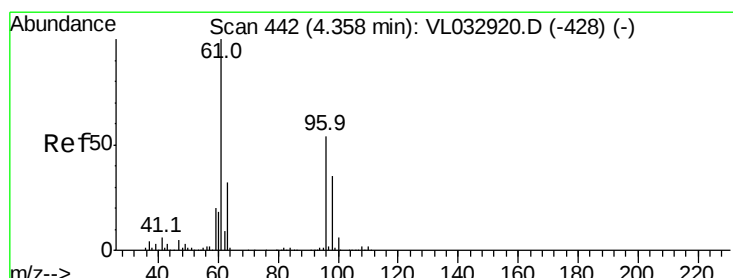
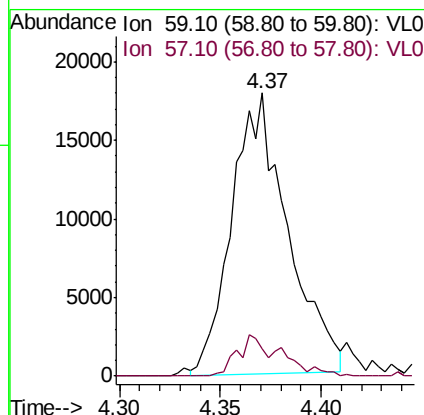
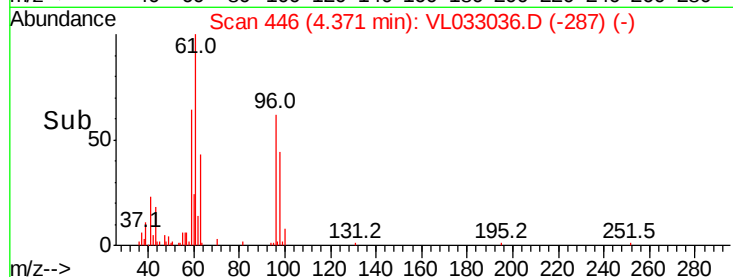
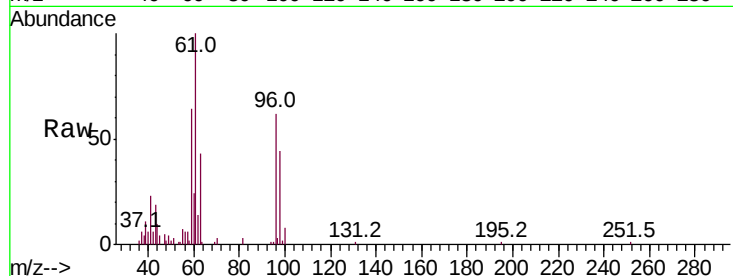
tert-Butyl alcohol
Concen: 1.402 ppbv
RT: 4.37 min Scan# 446
Delta R.T. 0.01 min
Lab File: VL033036.D
Acq: 20 Dec 2018 22:02

Instrument :
MSVOA_L
ClientSampleId :
EFFLUENT

Tot Ion: 59 Resp: 34701
Ion Ratio Lower Upper
59 100
57 11.5 0.6 1.0#

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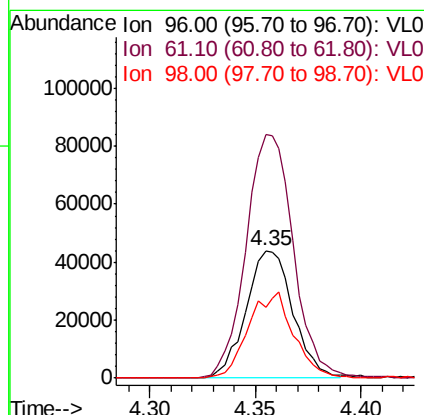
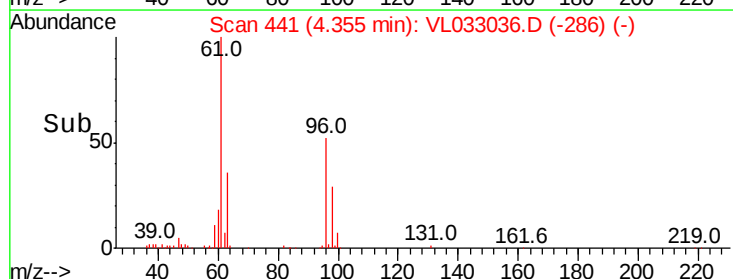
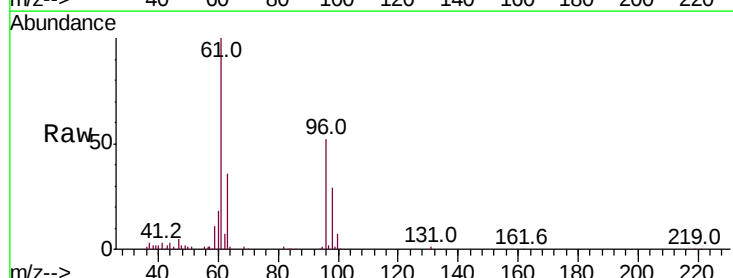
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12/24/2018 8:26:27 AM

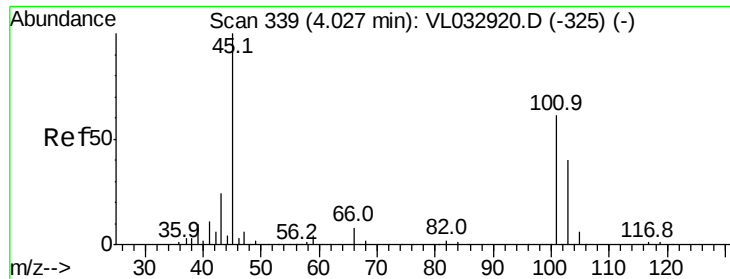


#18

1,1-Dichloroethene
Concen: 1.428 ppbv
RT: 4.35 min Scan# 441
Delta R.T. -0.00 min
Lab File: VL033036.D
Acq: 20 Dec 2018 22:02

Tgt Ion: 96 Resp: 67974
Ion Ratio Lower Upper
96 100
61 191.4 147.0 220.4
98 55.7 50.7 76.1





#19

Isopropyl Alcohol

Concen: 4.752 ppbv

RT: 4.03 min Scan# 340

Delta R.T. 0.00 min

Lab File: VL033036.D

Acq: 20 Dec 2018 22:02

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENT

Tot Ion: 45 Resp: 290149

Ion Ratio Lower Upper

45 100

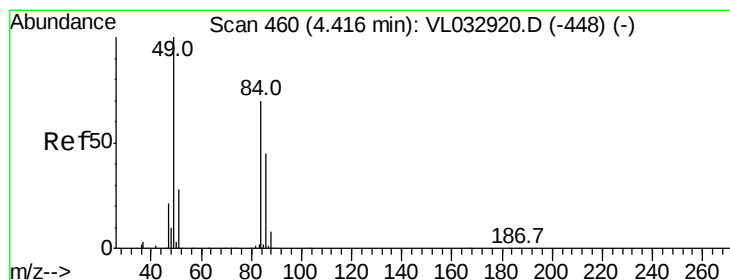
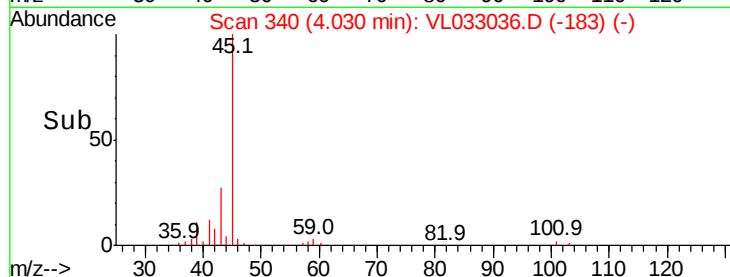
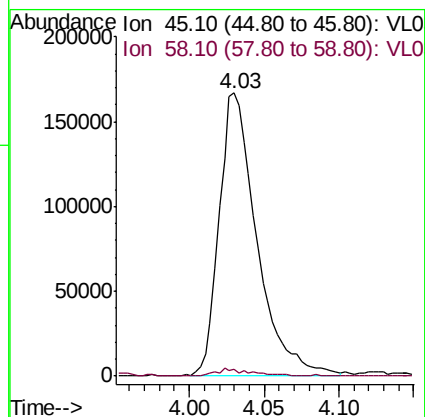
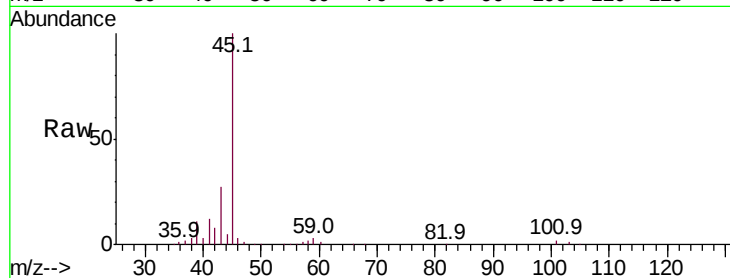
58 3.0 1.4 2.2#

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#20

Methylene Chloride

Concen: 1.221 ppbv

RT: 4.41 min Scan# 459

Delta R.T. -0.00 min

Lab File: VL033036.D

Acq: 20 Dec 2018 22:02

Tgt Ion: 84 Resp: 58016

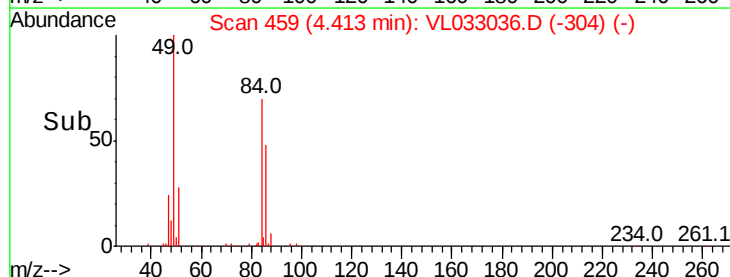
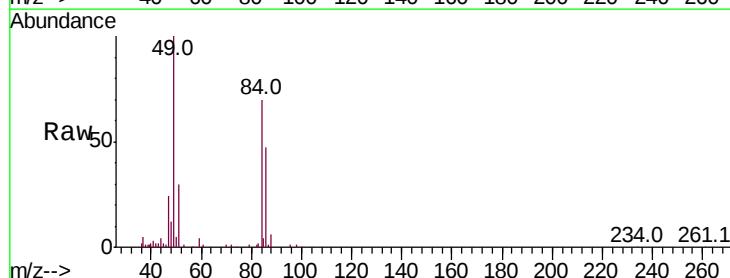
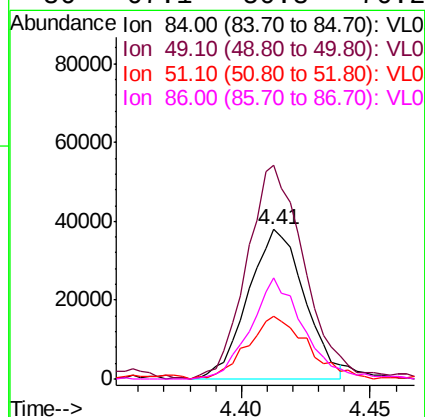
Ion Ratio Lower Upper

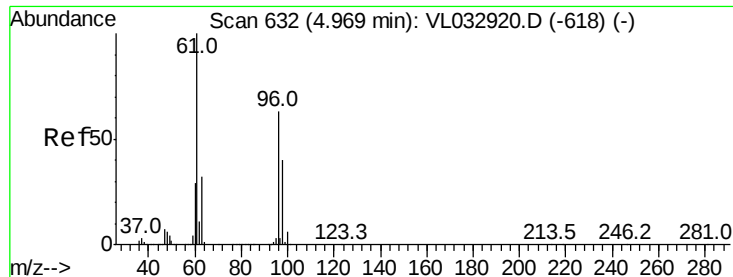
84 100

49 141.8 113.8 170.8

51 42.3 31.8 47.8

86 67.1 50.8 76.2





#22

trans-1,2-Dichloroethene

Concen: 1.835 ppbv

RT: 4.97 min Scan# 632

Delta R.T. 0.00 min

Lab File: VL033036.D

Acq: 20 Dec 2018 22:02

Instrument :

MSVOA_L

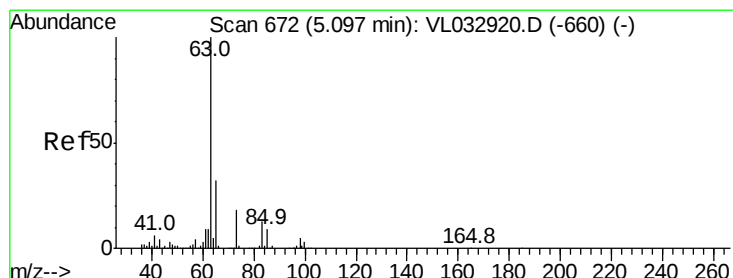
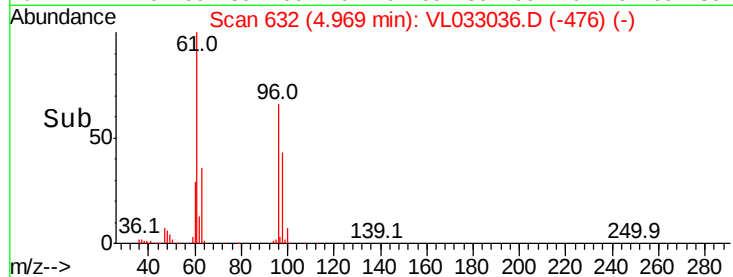
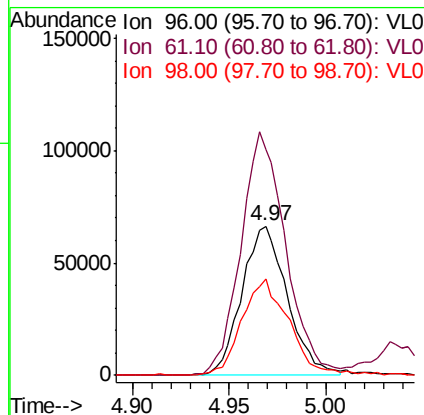
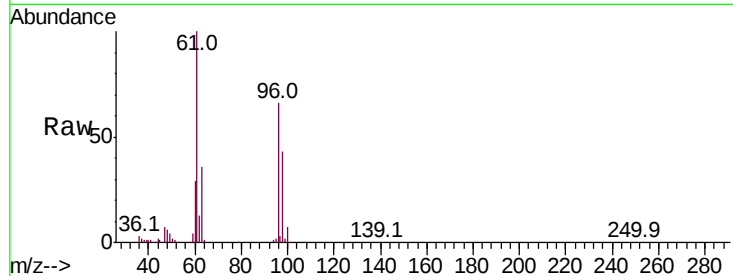
ClientSampleId :

EFFLUENT

Tot Ion:	96	Resp:	108430
Ion Ratio	Lower	Upper	
96	100		
61	151.1	127.1	190.7
98	64.4	51.3	76.9

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#24

1,1-Dichloroethane

Concen: 11.015 ppbv

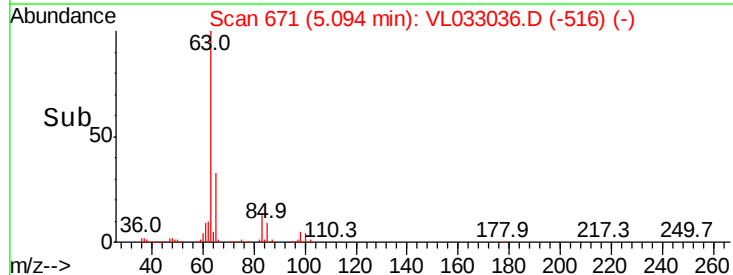
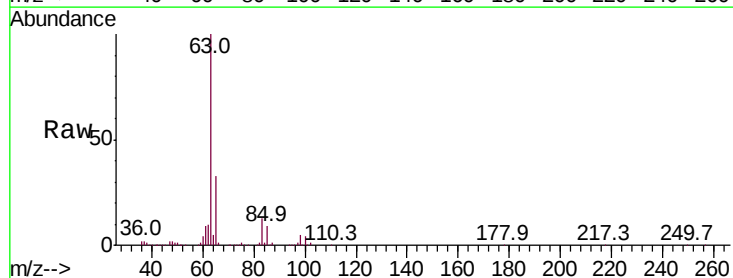
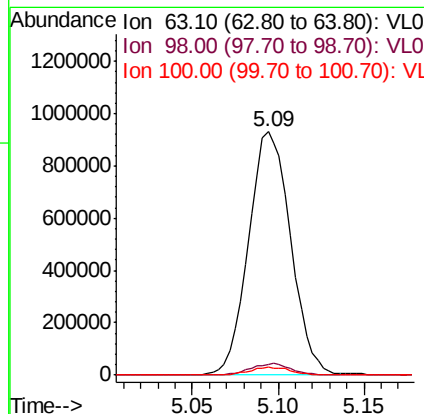
RT: 5.09 min Scan# 671

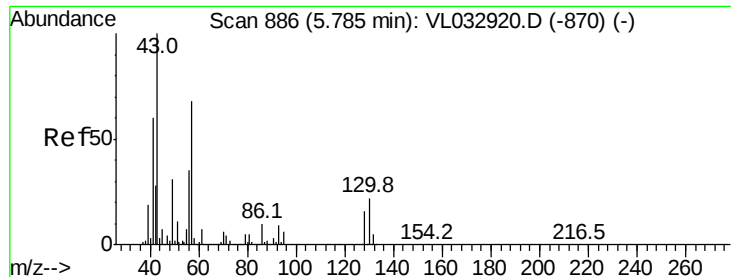
Delta R.T. -0.00 min

Lab File: VL033036.D

Acq: 20 Dec 2018 22:02

Tgt Ion:	63	Resp:	1576704
Ion Ratio	Lower	Upper	
63	100		
98	4.6	2.5	7.5
100	3.5	1.4	4.2





#26

Hexane

Concen: 0.468 ppbv

RT: 5.79 min Scan# 886

Delta R.T. 0.00 min

Lab File: VL033036.D

Acq: 20 Dec 2018 22:02

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENT

Tot Ion: 57 Resp: 49599

Ion Ratio Lower Upper

57 100

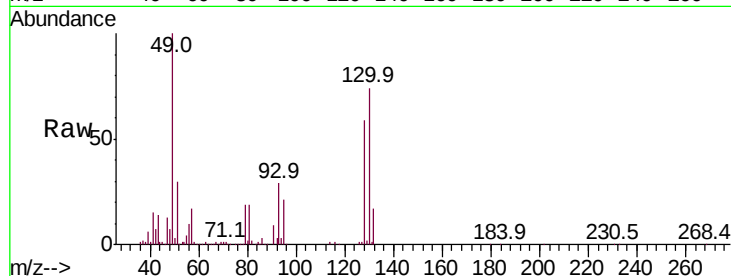
41 109.5 72.2 108.2#

43 94.1 171.9 257.9#

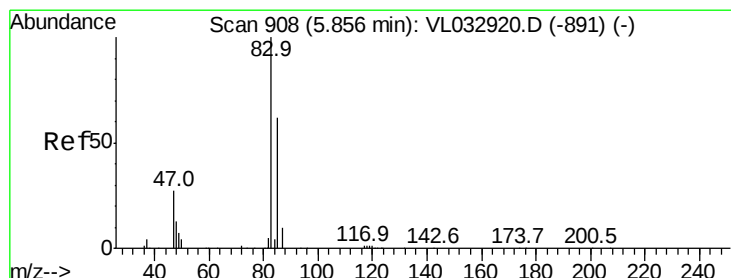
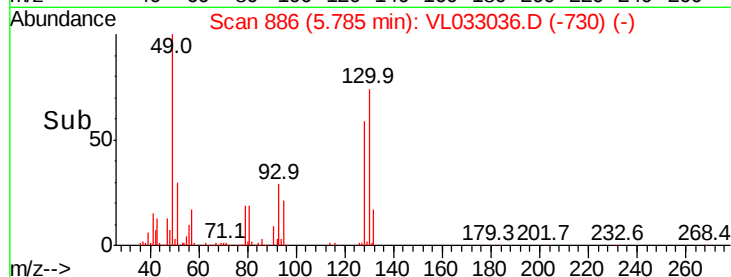
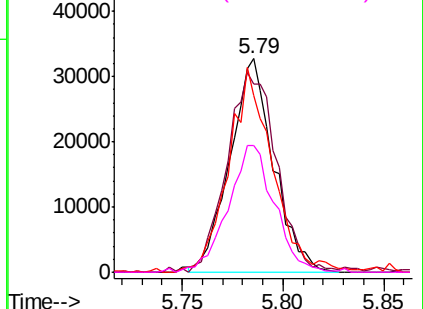
56 63.4 42.2 63.2#

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Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0



#29

Chloroform

Concen: 0.117 ppbv

RT: 5.85 min Scan# 906

Delta R.T. -0.01 min

Lab File: VL033036.D

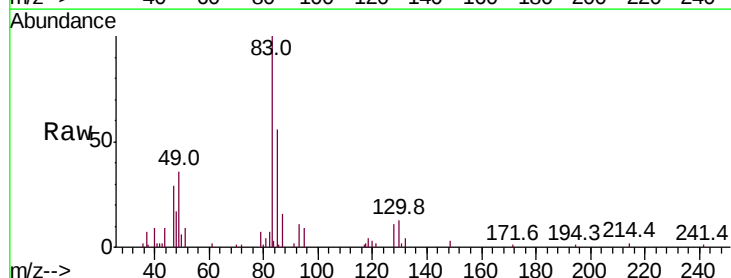
Acq: 20 Dec 2018 22:02

Tgt Ion: 83 Resp: 22139

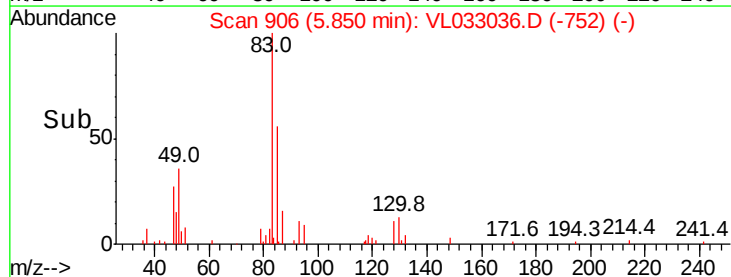
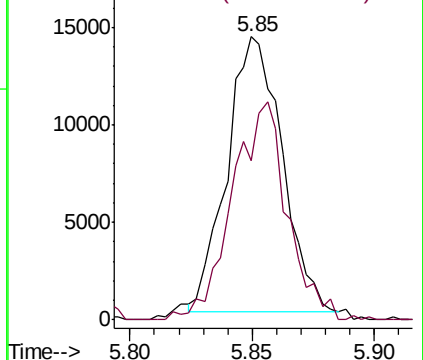
Ion Ratio Lower Upper

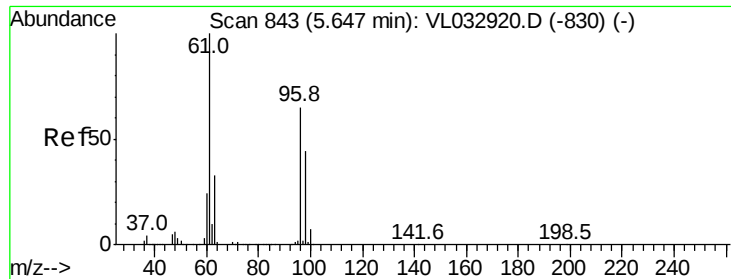
83 100

85 59.3 49.8 74.8



Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0





#31

cis-1,2-Dichloroethene

Concen: 0.140 ppbv

RT: 5.64 min Scan# 842

Delta R.T. -0.00 min

Lab File: VL033036.D

Acq: 20 Dec 2018 22:02

Instrument :

MSVOA_L

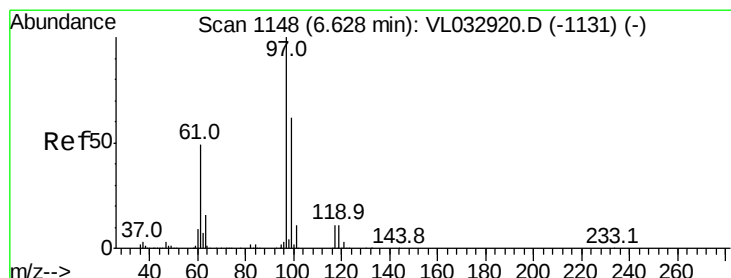
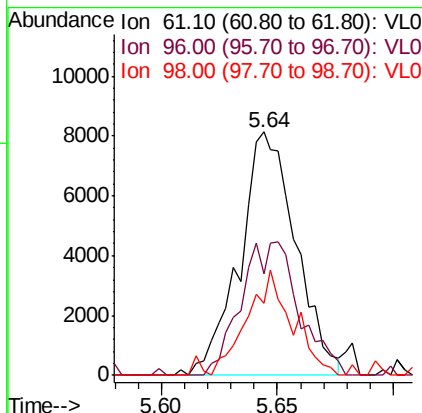
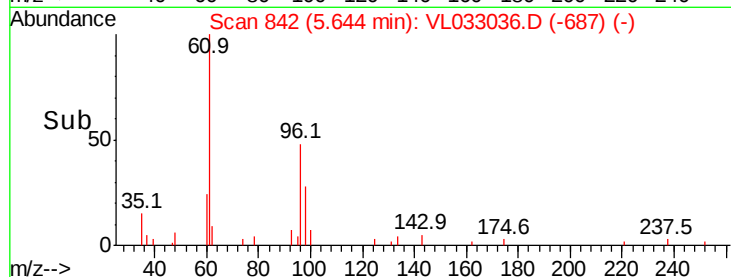
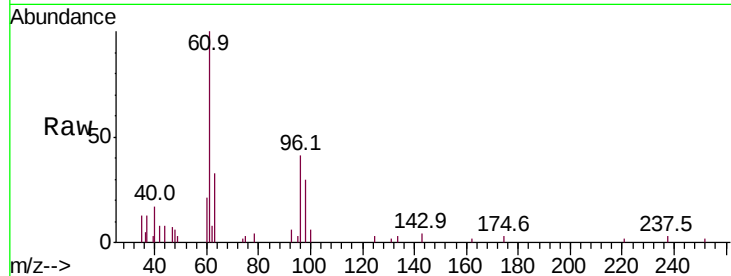
ClientSampled :

EFFLUENT

Tot Ion:	61	Resp:	13666
Ion Ratio	Lower	Upper	
61	100		
96	41.5	51.9	77.9#
98	29.6	35.0	52.4#

Manual Integrations
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#32

1,1,1-Trichloroethane

Concen: 68.555 ppbv

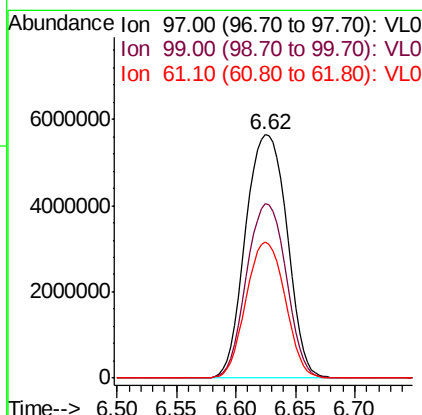
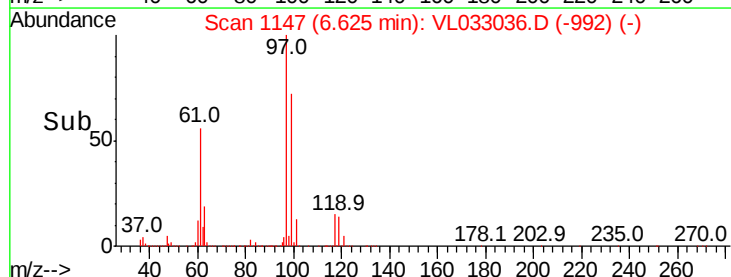
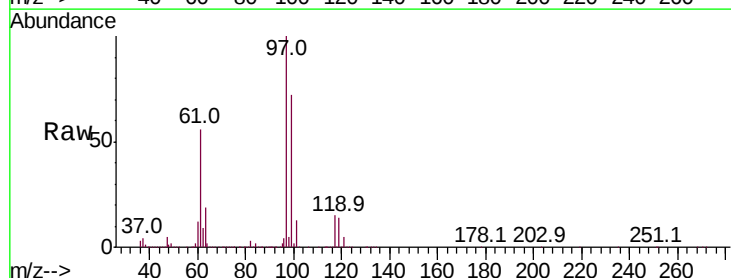
RT: 6.62 min Scan# 1147

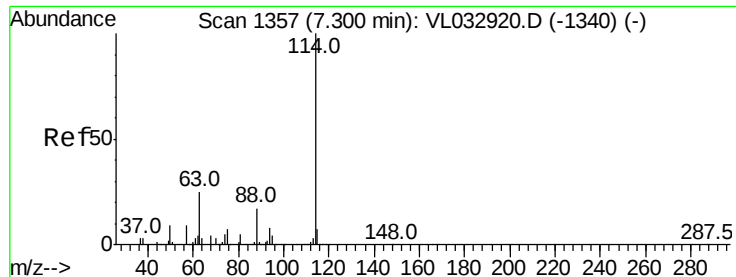
Delta R.T. -0.00 min

Lab File: VL033036.D

Acq: 20 Dec 2018 22:02

Tgt Ion:	97	Resp:	13724087
Ion Ratio	Lower	Upper	
97	100		
99	68.7	51.1	76.7
61	52.7	39.3	58.9





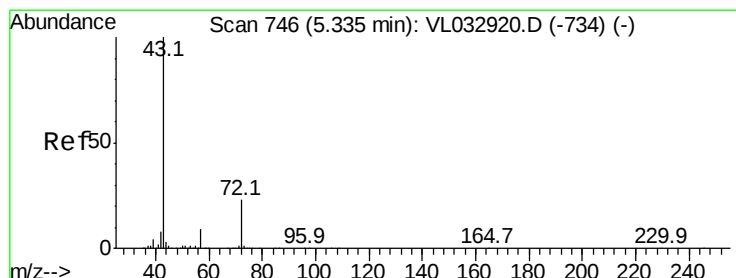
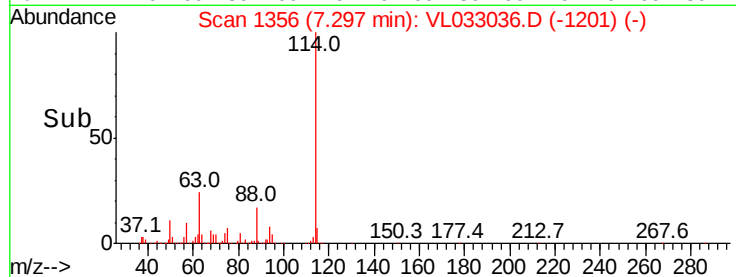
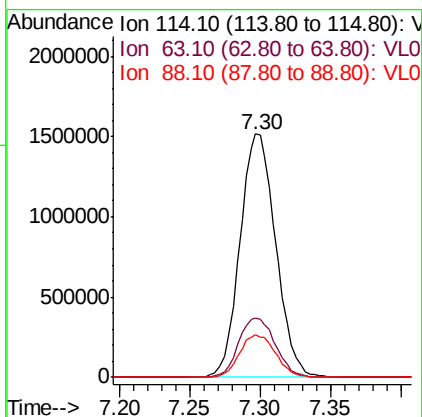
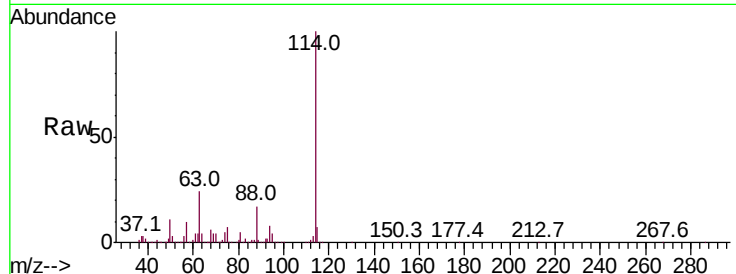
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.30 min Scan# 1356
 Delta R.T. -0.00 min
 Lab File: VL033036.D
 Acq: 20 Dec 2018 22:02

Instrument :
 MSVOA_L
 ClientSampleId :
 EFFLUENT

Tot Ion	Ratio	Lower	Upper
114	100		
63	25.1	20.1	30.1
88	17.7	14.2	21.4

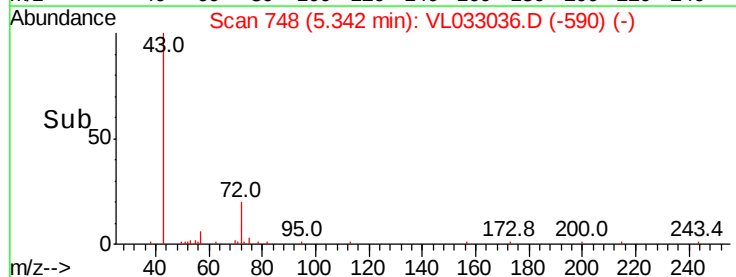
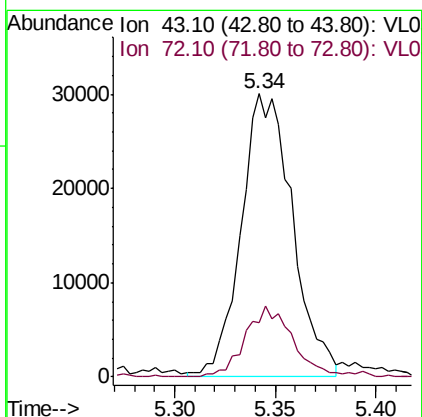
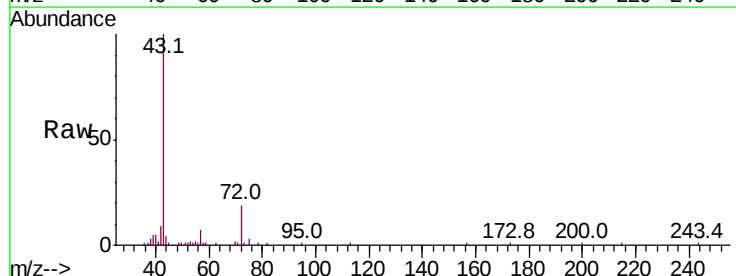
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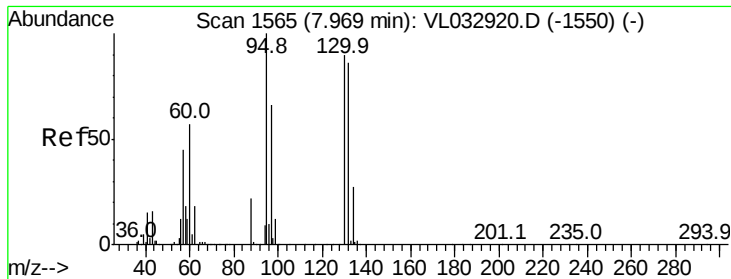
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#34
 2-Butanone
 Concen: 0.455 ppbv m
 RT: 5.34 min Scan# 748
 Delta R.T. 0.01 min
 Lab File: VL033036.D
 Acq: 20 Dec 2018 22:02

Tgt Ion	Ratio	Lower	Upper
43	100		
72	0.0	18.8	28.2#





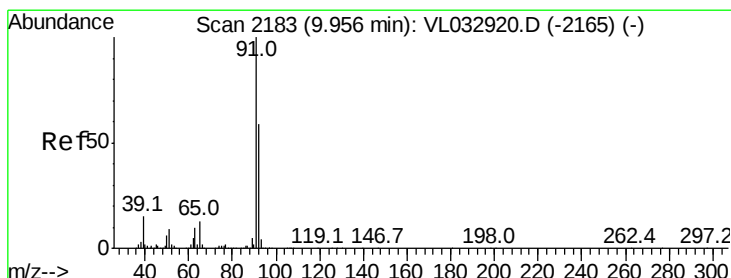
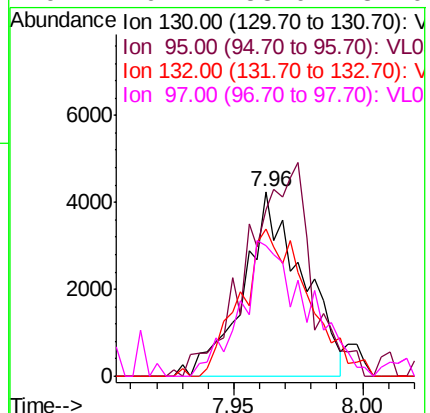
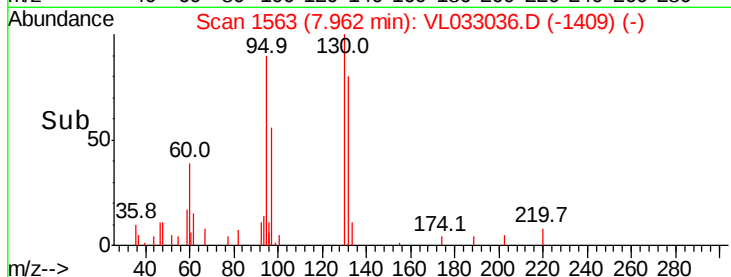
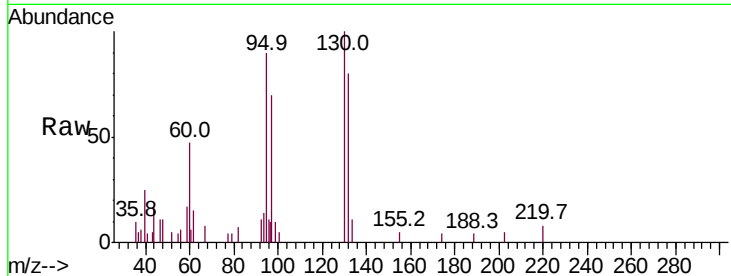
#38
 Trichloroethene
 Concen: 0.081 ppbv
 RT: 7.96 min Scan# 1563
 Delta R.T. -0.01 min
 Lab File: VL033036.D
 Acq: 20 Dec 2018 22:02

Instrument :
 MSVOA_L
 ClientSampleId :
 EFFLUENT

Tot Ion:	130	Resp:	6681
Ion Ratio	Lower	Upper	
130	100		
95	88.6	88.6	132.8
132	79.8	76.1	114.1
97	70.4	58.0	87.0

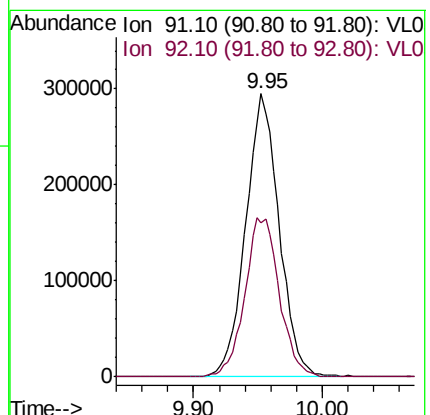
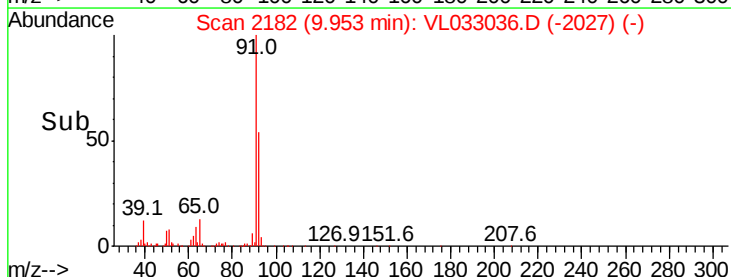
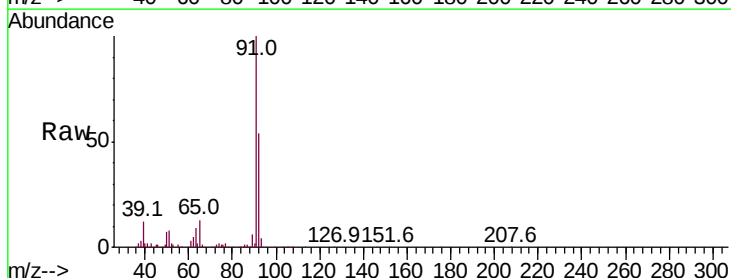
Manual Integrations
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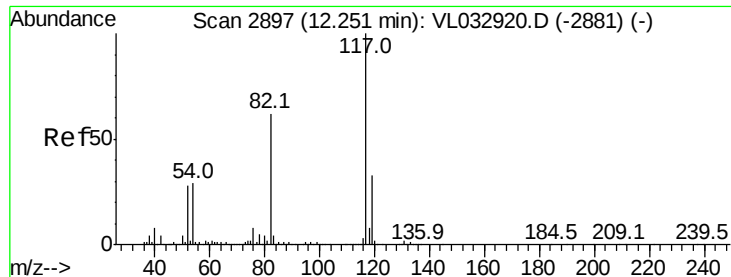
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#53
 Toluene
 Concen: 2.533 ppbv
 RT: 9.95 min Scan# 2182
 Delta R.T. -0.00 min
 Lab File: VL033036.D
 Acq: 20 Dec 2018 22:02

Tgt Ion:	91	Resp:	531766
Ion Ratio	Lower	Upper	
91	100		
92	58.3	47.4	71.0





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.25 min Scan# 2895

Delta R.T. -0.01 min

Lab File: VL033036.D

Acq: 20 Dec 2018 22:02

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENT

Tot Ion:117 Resp: 2054566

Ion Ratio Lower Upper

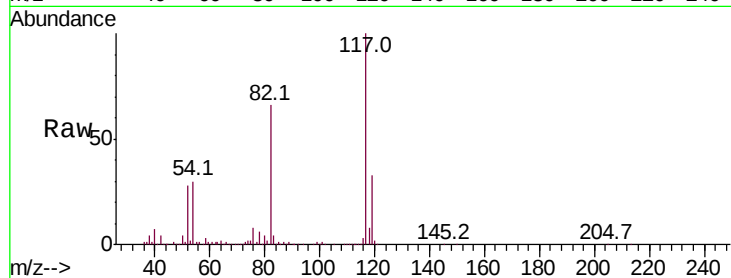
117 100

82 64.1 47.8 71.8

119 32.5 43.1 64.7#

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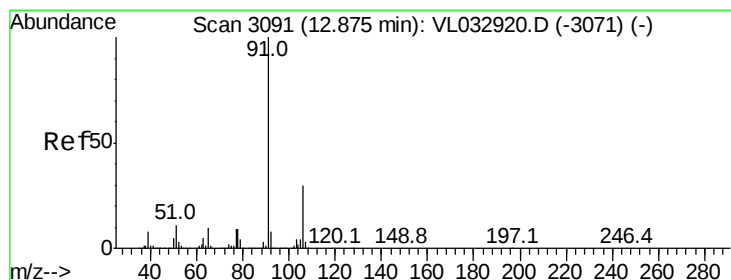
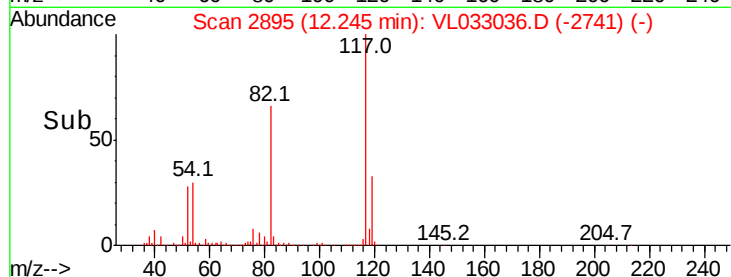
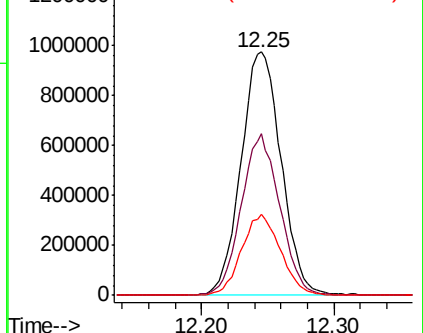
MMDadoda
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Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#58

Ethyl Benzene

Concen: 0.171 ppbv m

RT: 12.87 min Scan# 3089

Delta R.T. -0.01 min

Lab File: VL033036.D

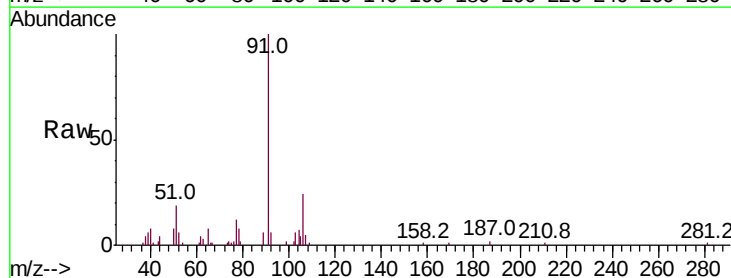
Acq: 20 Dec 2018 22:02

Tgt Ion: 91 Resp: 37539

Ion Ratio Lower Upper

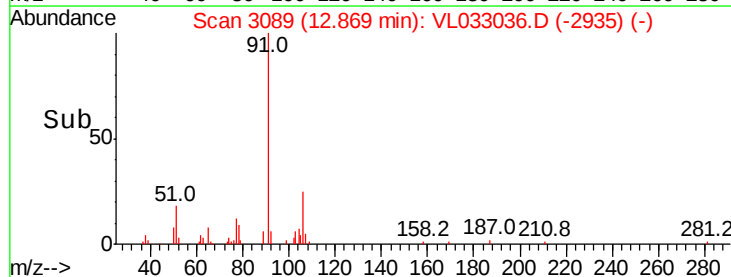
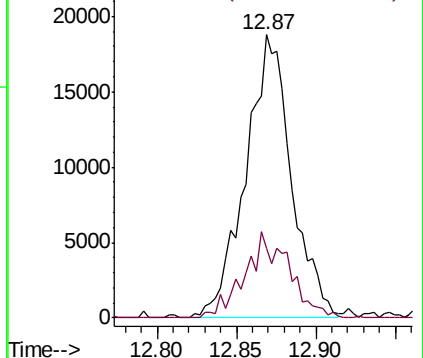
91 100

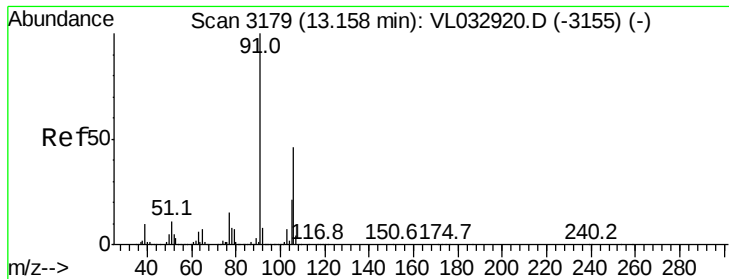
106 24.5 23.9 35.9



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





#59

m/p-Xylene

Concen: 0.710 ppbv m

RT: 13.13 min Scan# 3170

Delta R.T. -0.03 min

Lab File: VL033036.D

Acq: 20 Dec 2018 22:02

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENT

Tot Ion: 91 Resp: 141110

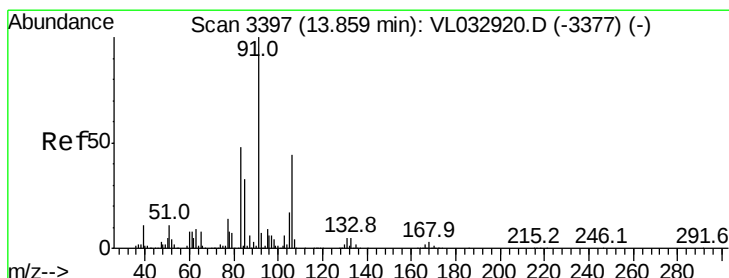
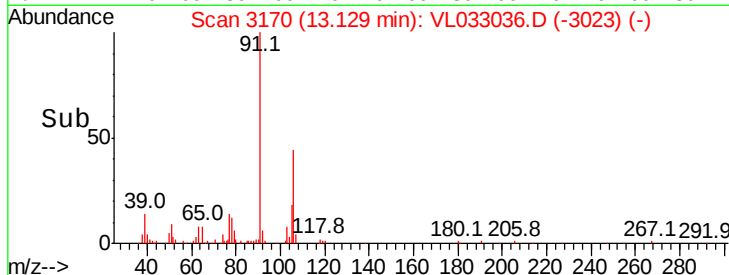
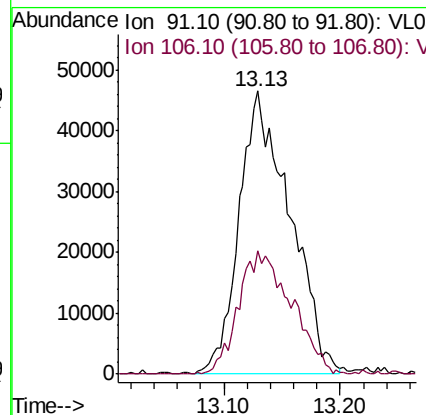
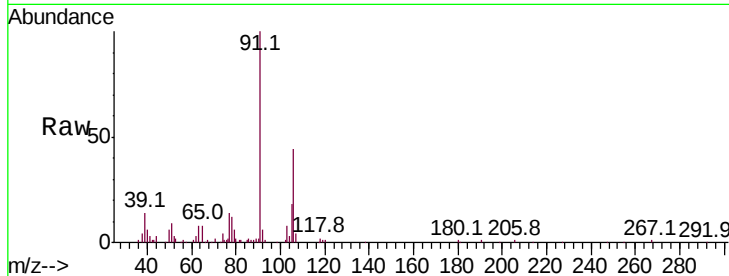
Ion Ratio Lower Upper

91 100

106 0.0 0.0 0.0

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#60

o-Xylene

Concen: 0.323 ppbv

RT: 13.86 min Scan# 3396

Delta R.T. -0.00 min

Lab File: VL033036.D

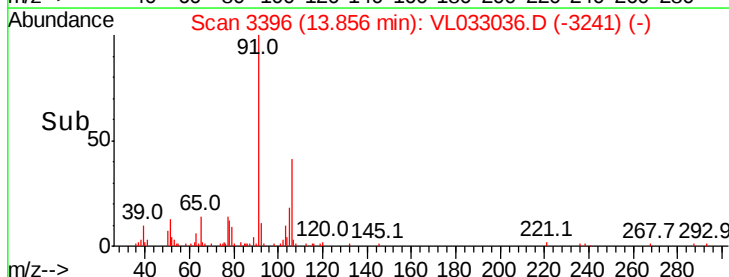
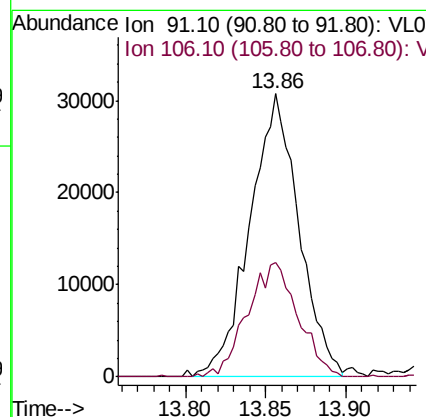
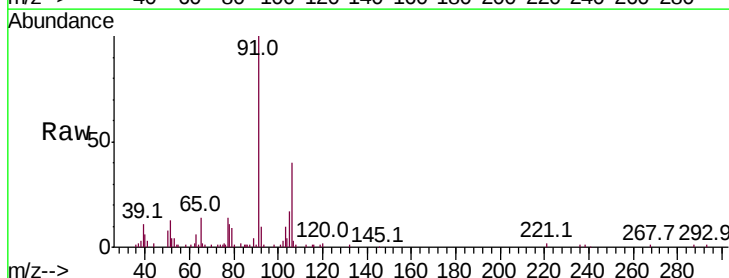
Acq: 20 Dec 2018 22:02

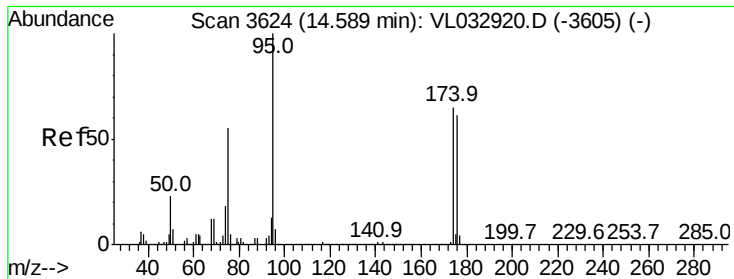
Tgt Ion: 91 Resp: 64828

Ion Ratio Lower Upper

91 100

106 41.8 21.9 65.8





#68

1-Bromo-4-Fluorobenzene

Concen: 14.004 ppbv

RT: 14.58 min Scan# 3622

Delta R.T. -0.01 min

Lab File: VL033036.D

Acq: 20 Dec 2018 22:02

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENT

Tot Ion: 95 Resp: 2125630

Ion Ratio Lower Upper

95 100

174 65.6 51.4 77.0

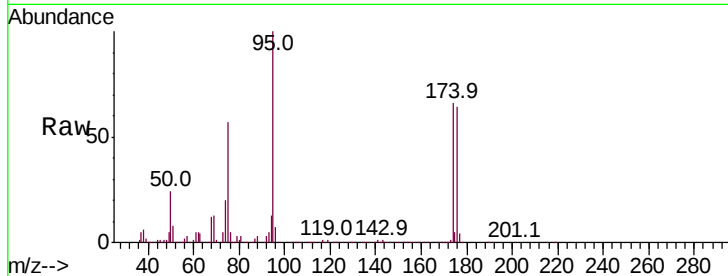
175 4.8 3.8 5.6

Manual Integrations

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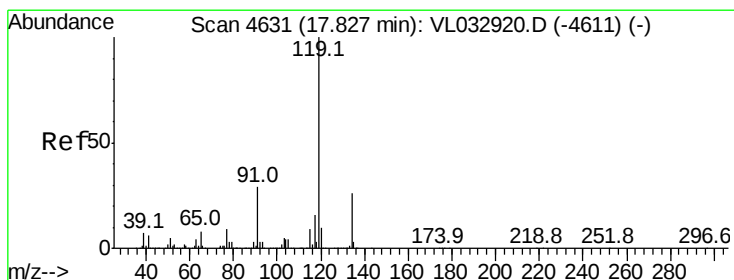
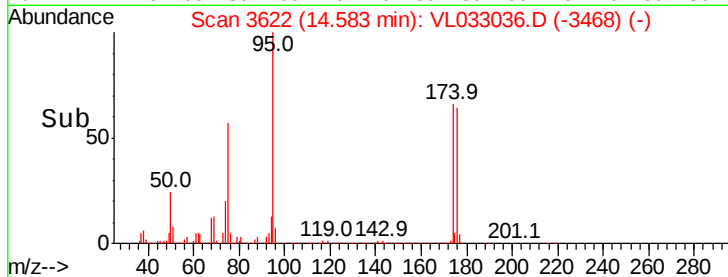
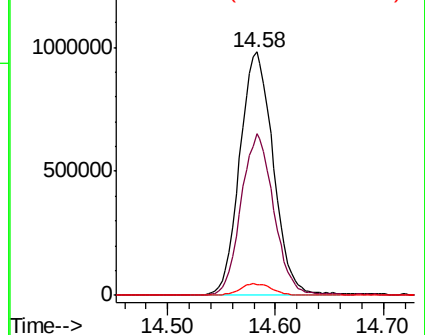
12/24/2018 8:26:27 AM



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V



#69

p-Isopropyltoluene

Concen: 0.725 ppbv

RT: 17.83 min Scan# 4631

Delta R.T. 0.00 min

Lab File: VL033036.D

Acq: 20 Dec 2018 22:02

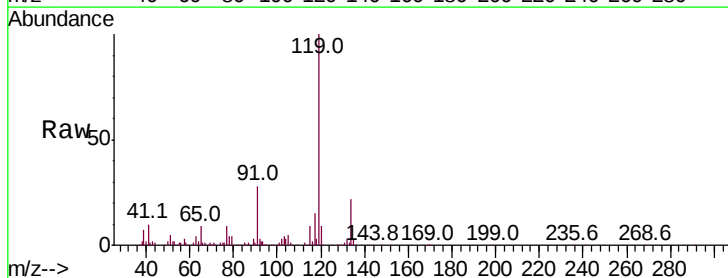
Tgt Ion: 119 Resp: 224974

Ion Ratio Lower Upper

119 100

134 24.6 20.2 30.2

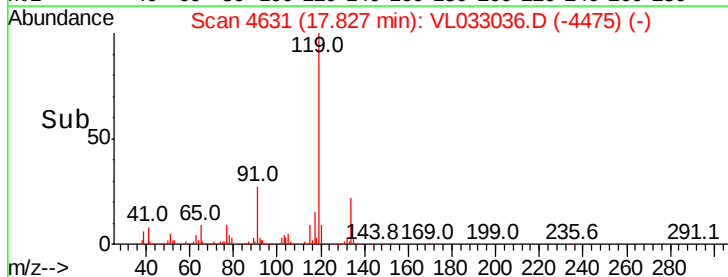
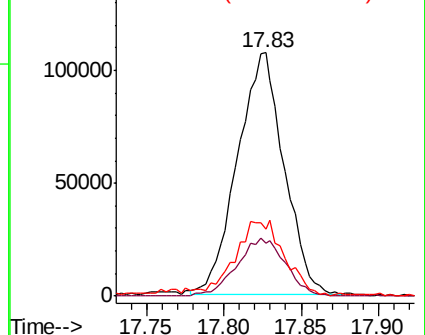
91 32.9 22.9 34.3

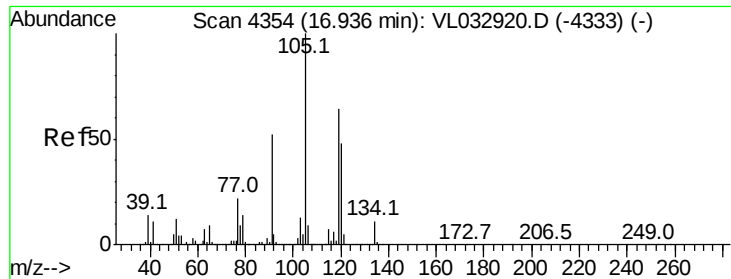


Abundance Ion 119.10 (118.80 to 119.80): V

Ion 134.20 (133.90 to 134.90): V

Ion 91.10 (90.80 to 91.80): VL0





#74

1,2,4-Trimethylbenzene

Concen: 0.512 ppbv

RT: 16.93 min Scan# 4352

Delta R.T. -0.01 min

Lab File: VL033036.D

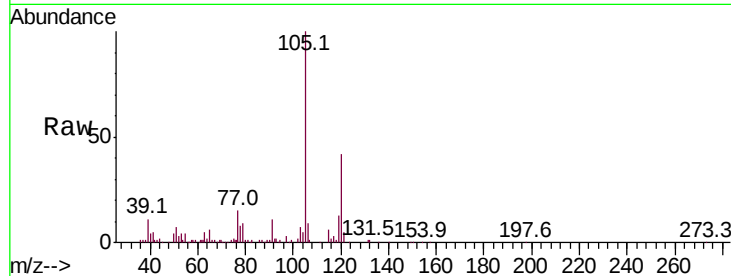
Acq: 20 Dec 2018 22:02

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENT



Tot Ion:105 Resp: 126438

Ion Ratio Lower Upper

105 100

120 41.2 38.6 58.0

91 9.4 41.7 62.5#

77 14.3 17.4 26.2#

Manual Integrations
APPROVED

MMDadoda
12/24/2018 8:26:27 AM

