

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL081121\
 Data File : VL037397.D
 Acq On : 11 Aug 2021 19:55
 Operator : SY/AP
 Sample : M3157-06
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 OFFSITE-DDC-INTERMEDIATE-2

Manual Integrations
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 8/12/2021 10:17:15 AM

Quant Time: Aug 12 05:57:29 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL081121AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Aug 11 2021
 QLast Update : Wed Aug 11 09:01:07 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1166660	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	3539420	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	3048050	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.41	95	2136564	9.40	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	94.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.05	85	42122	0.200	ppbv	98
3) Chlorodifluoromethane	2.98	51	73702m	0.340	ppbv	
4) Chloromethane	3.14	50	42849m	0.536	ppbv	
9) Propene	3.02	41	79105	1.071	ppbv #	78
10) Heptane	8.12	43	47770m	0.273	ppbv	
11) Trichlorofluoromethane	3.95	101	38879m	0.219	ppbv	
13) Ethanol	3.61	45	395778	44.398	ppbv	98
15) Acetone	3.85	43	1304807	11.739	ppbv	90
17) tert-Butyl alcohol	4.30	59	13026m	0.131	ppbv	
19) Isopropyl Alcohol	3.97	45	171791m	2.684	ppbv	
20) Methylene Chloride	4.34	84	2697521	44.691	ppbv	93
26) Hexane	5.68	57	1961103	13.608	ppbv #	53
30) Cyclohexane	7.12	84	32519m	0.273	ppbv	
34) 2-Butanone	5.24	43	154705	1.150	ppbv	100
35) Carbon Tetrachloride	7.02	117	10825m	0.055	ppbv	
36) Benzene	6.88	78	119424m	0.425	ppbv	
44) 2,2,4-Trimethylpentane	7.86	57	113660m	0.243	ppbv	
50) 4-Methyl-2-Pentanone	8.77	43	80532m	0.458	ppbv	
52) Tetrachloroethene	11.23	164	5388m	0.047	ppbv	
53) Toluene	9.80	91	366767	1.126	ppbv	97
58) Ethyl Benzene	12.71	91	50138m	0.123	ppbv	
59) m/p-Xylene	12.96	91	133425m	0.381	ppbv	
60) o-Xylene	13.69	91	45489m	0.140	ppbv	
61) Styrene	13.52	104	18328m	0.109	ppbv	
74) 1,2,4-Trimethylbenzene	16.76	105	58385m	0.163	ppbv	

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

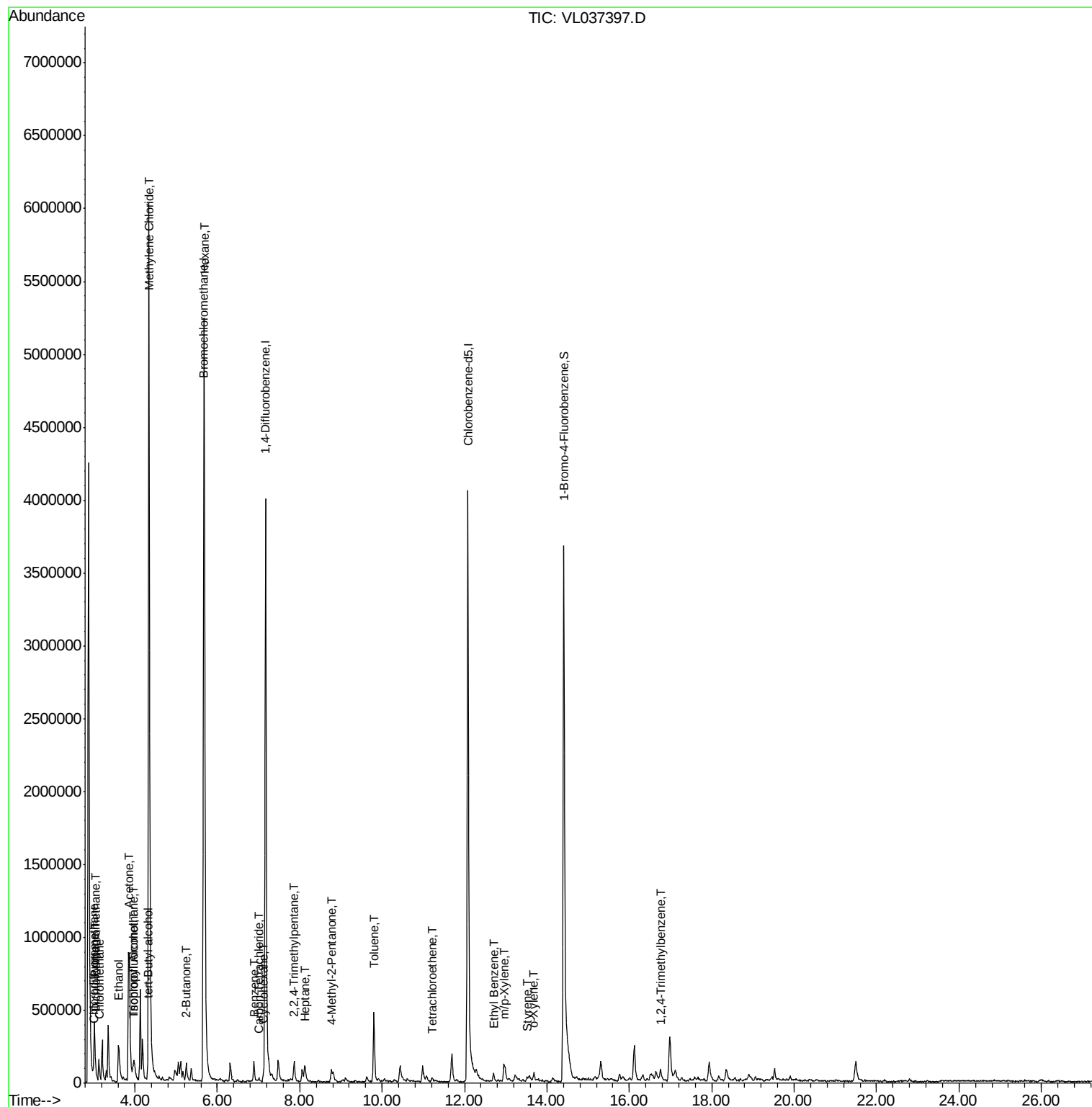
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL081121\
Data File : VL037397.D
Acq On : 11 Aug 2021 19:55
Operator : SY/AP
Sample : M3157-06
Misc : 400mL/MSVOA L
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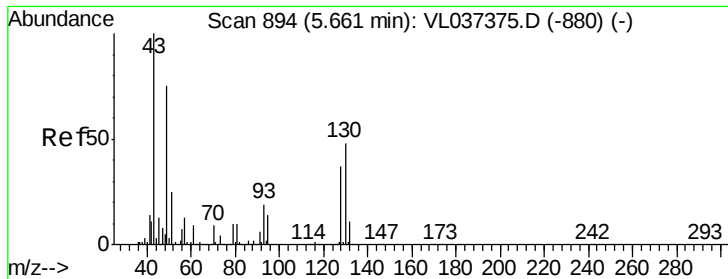
Instrument :
MSVOA_L
ClientSampleId :
OFFSITE-DDC-INTERMEDIATE-2

Manual Integrations
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8/12/2021 10:17:15 AM

Quant Time: Aug 12 05:57:29 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL081121AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Aug
QLast Update : Wed Aug 11 09:01:07 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 894

Delta R.T. 0.00 min

Lab File: VL037397.D

Acq: 11 Aug 2021 19:55

Instrument :

MSVOA_L

ClientSampleId :

OFFSITE-DDC-INTERMEDIATE-2

Tot Ion: 49 Resp: 1166660

Ion Ratio Lower Upper

49 100

128 54.9 28.1 84.4

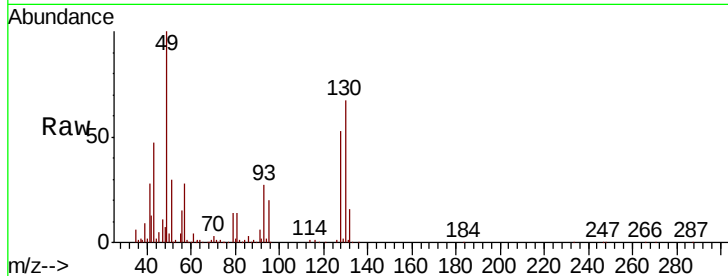
130 72.6 34.3 102.8

Manual Integrations

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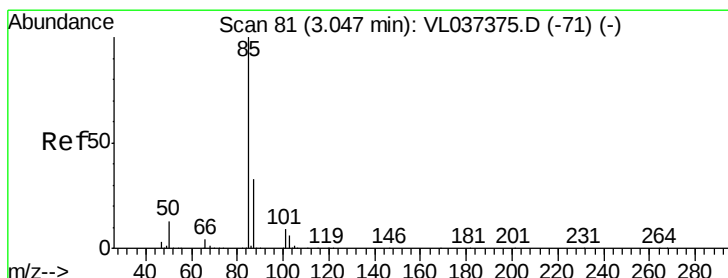
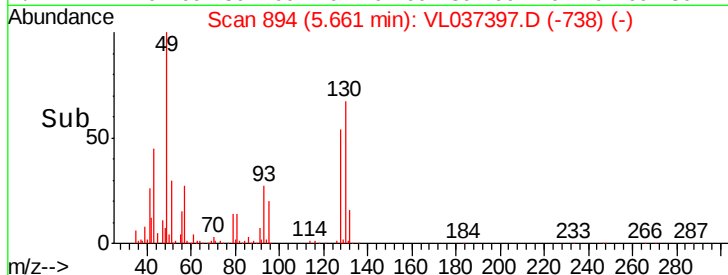
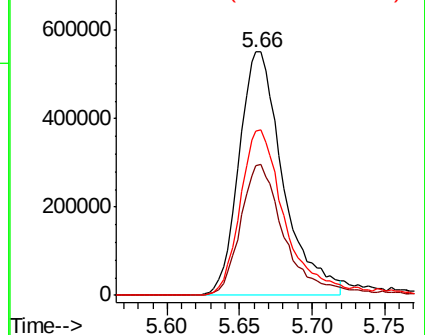
8/12/2021 10:17:15 AM



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: 0.200 ppbv

RT: 3.05 min Scan# 81

Delta R.T. 0.00 min

Lab File: VL037397.D

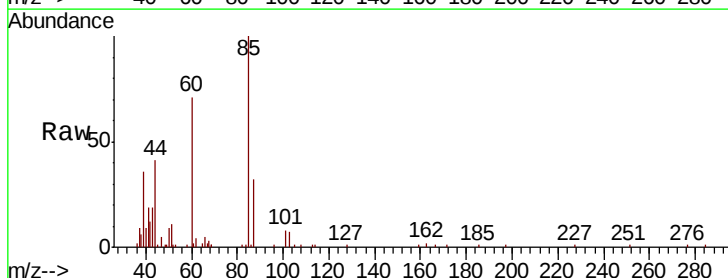
Acq: 11 Aug 2021 19:55

Tgt Ion: 85 Resp: 42122

Ion Ratio Lower Upper

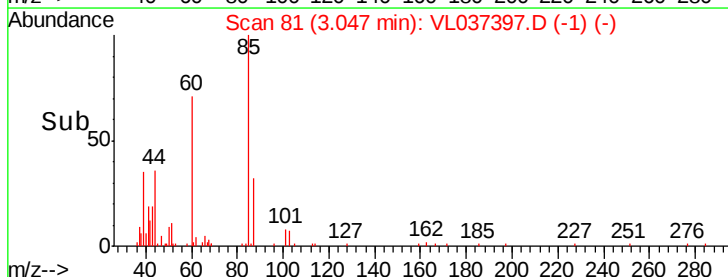
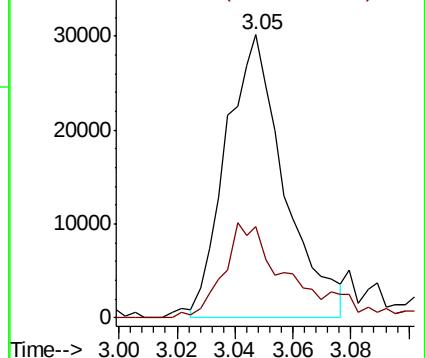
85 100

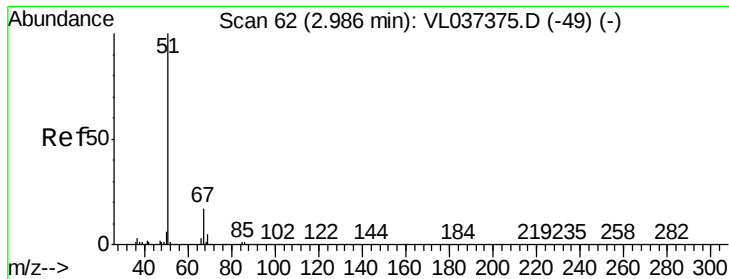
87 32.3 26.6 39.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.340 ppbv m

RT: 2.98 min Scan# 61

Delta R.T. -0.00 min

Lab File: VL037397.D

Acq: 11 Aug 2021 19:55

Instrument :

MSVOA_L

ClientSampleId :

OFFSITE-DDC-INTERMEDIATE-2

Tot Ion: 51 Resp: 73702

Ion Ratio Lower Upper

51 100

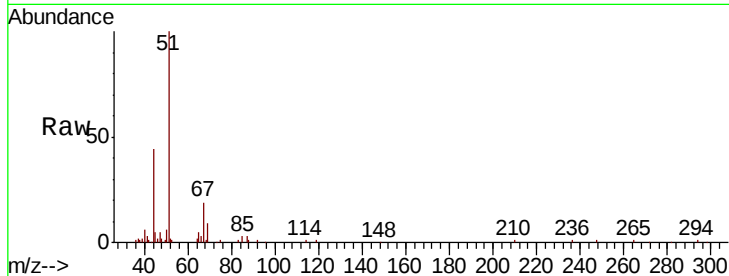
67 1.2 14.3 21.5#

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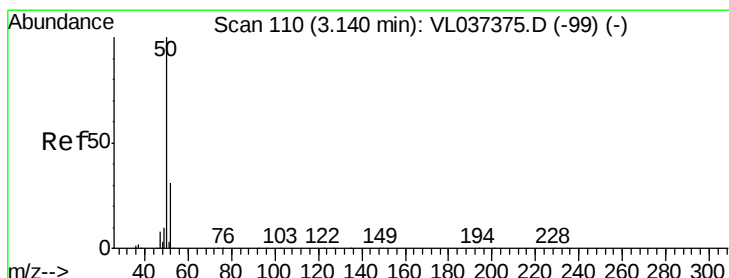
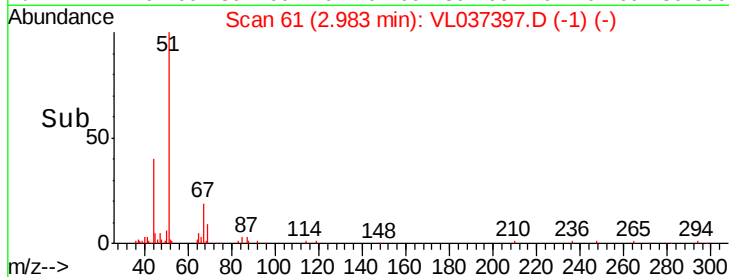
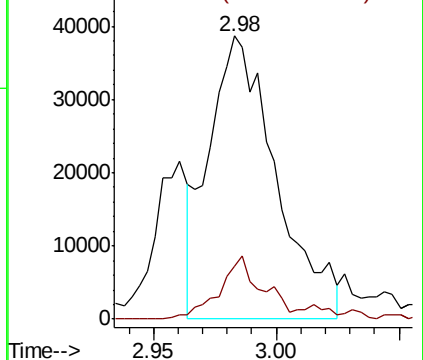
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.536 ppbv m

RT: 3.14 min Scan# 110

Delta R.T. 0.00 min

Lab File: VL037397.D

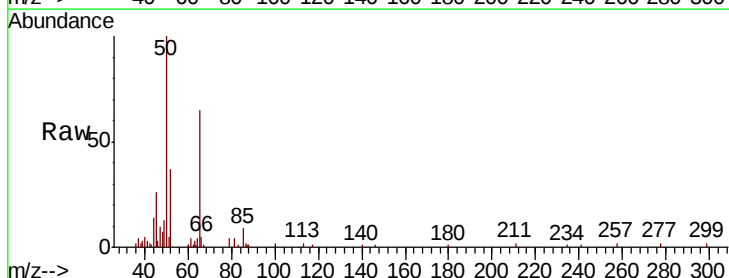
Acq: 11 Aug 2021 19:55

Tgt Ion: 50 Resp: 42849

Ion Ratio Lower Upper

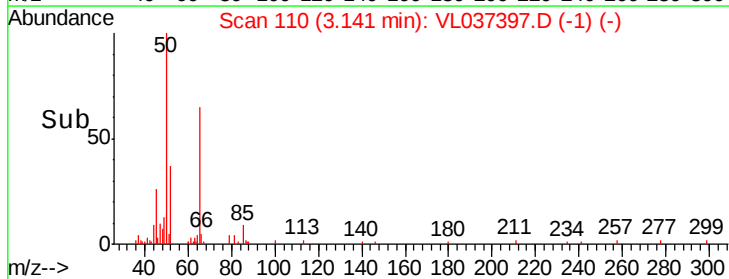
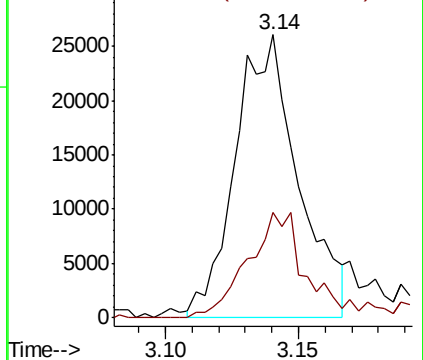
50 100

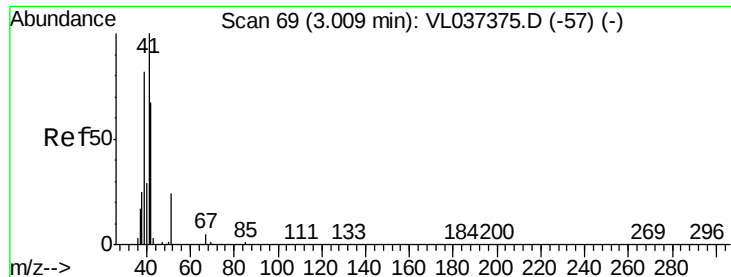
52 37.3 25.0 37.4



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





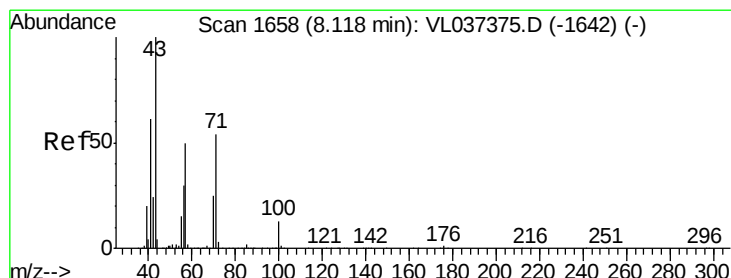
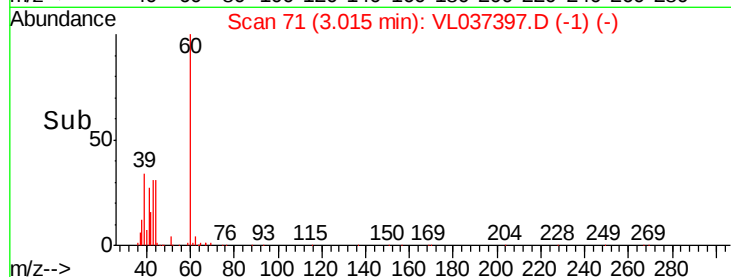
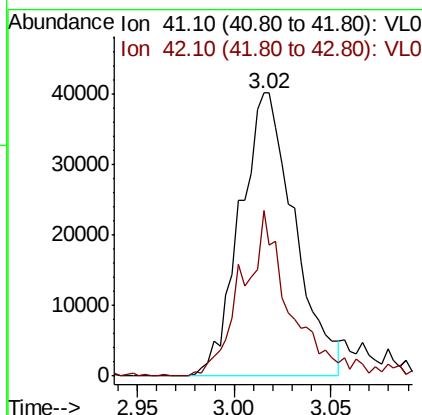
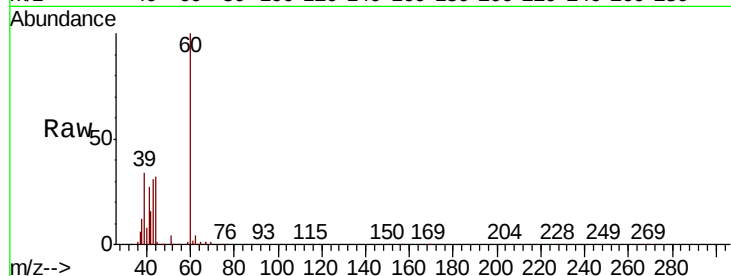
#9
 Propene
 Concen: 1.071 ppbv
 RT: 3.02 min Scan# 71
 Delta R.T. 0.01 min
 Lab File: VL037397.D
 Acq: 11 Aug 2021 19:55

Instrument :
 MSVOA_L
 ClientSampleId :
 OFFSITE-DDC-INTERMEDIATE-2

Tot Ion	41	Resp	79105
Ion Ratio	100	Lower	Upper
42	51.2	55.5	83.3#

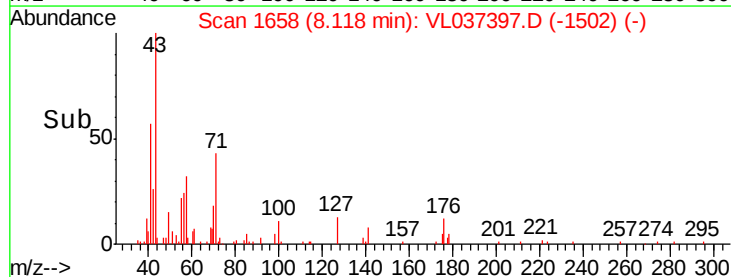
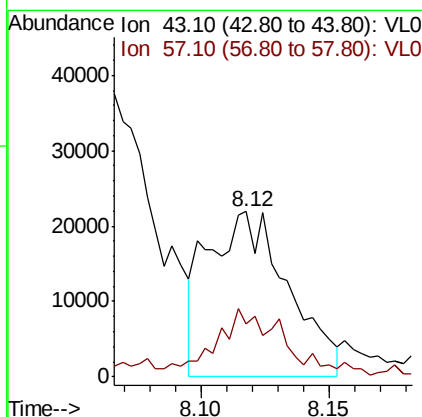
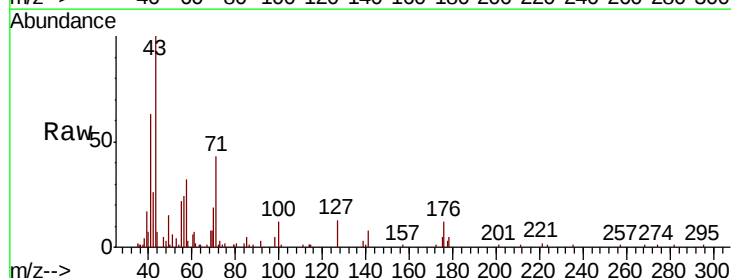
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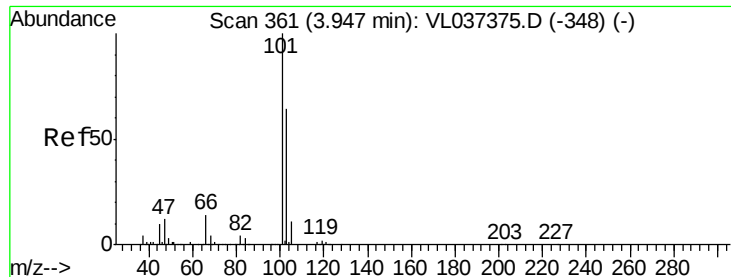
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#10
 Heptane
 Concen: 0.273 ppbv m
 RT: 8.12 min Scan# 1658
 Delta R.T. 0.00 min
 Lab File: VL037397.D
 Acq: 11 Aug 2021 19:55

Tgt Ion	43	Resp	47770
Ion Ratio	100	Lower	Upper
57	44.5	40.2	60.2





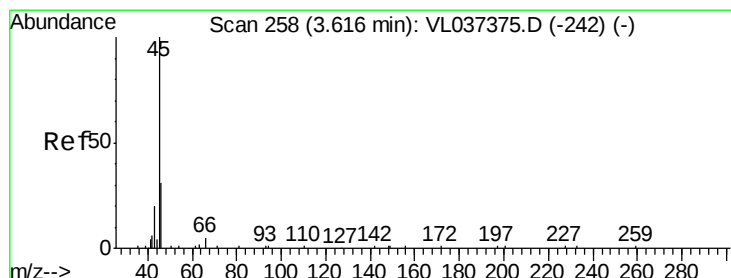
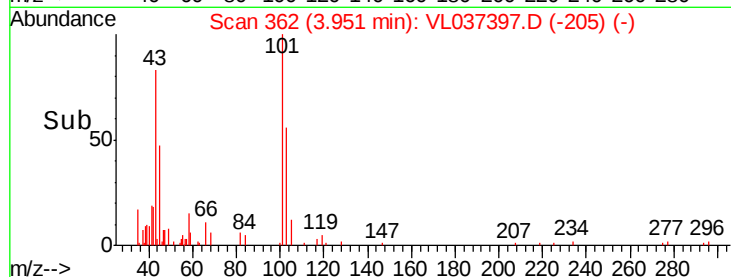
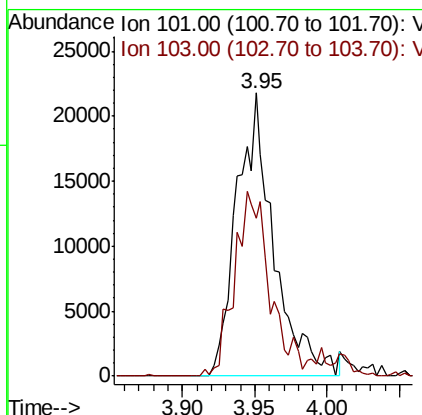
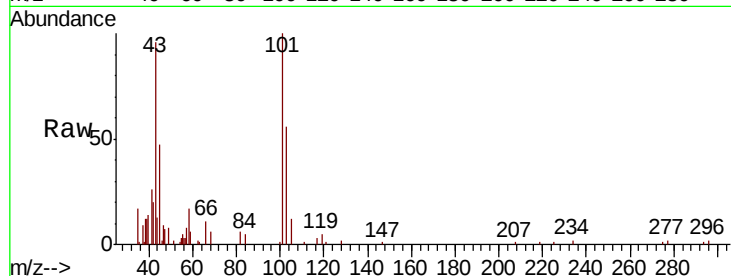
#11
 Trichlorofluoromethane
 Concen: 0.219 ppbv m
 RT: 3.95 min Scan# 362
 Delta R.T. 0.00 min
 Lab File: VL037397.D
 Acq: 11 Aug 2021 19:55

Instrument :
 MSVOA_L
 ClientSampleId :
 OFFSITE-DDC-INTERMEDIATE-2

Tot Ion	Ion	Ratio	Resp	Lower	Upper
101	100		38879		
103	55.9	51.2	76.8		

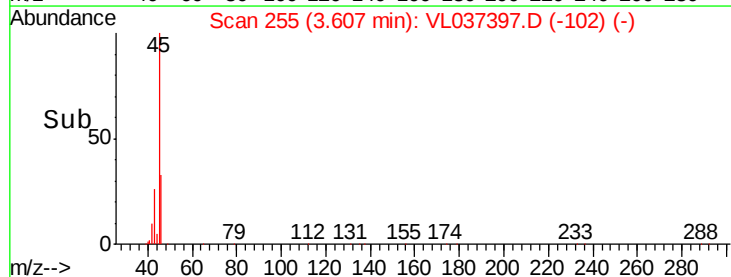
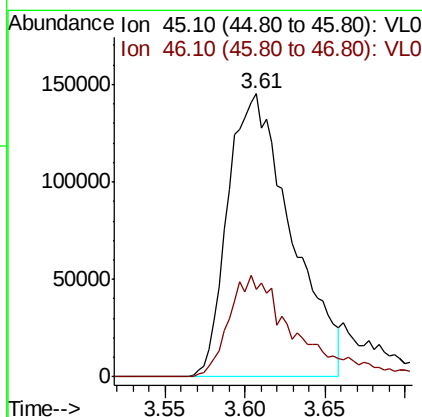
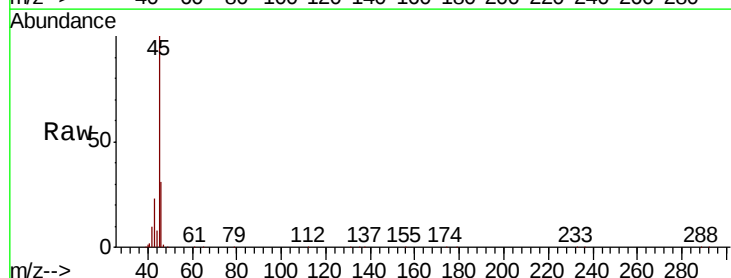
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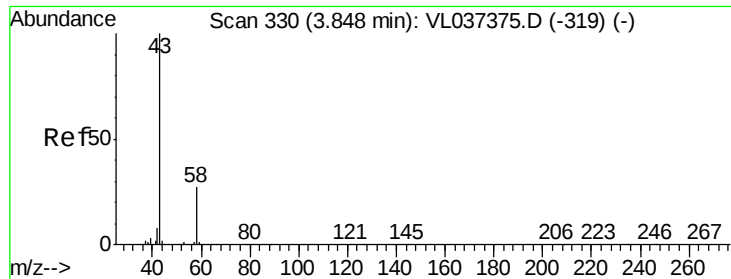
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#13
 Ethanol
 Concen: 44.398 ppbv
 RT: 3.61 min Scan# 255
 Delta R.T. -0.01 min
 Lab File: VL037397.D
 Acq: 11 Aug 2021 19:55

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
45	100		395778		
46	38.2	15.8	63.4		





#15

Acetone

Concen: 11.739 ppbv

RT: 3.85 min Scan# 330

Delta R.T. 0.00 min

Lab File: VL037397.D

Acq: 11 Aug 2021 19:55

Tot Ion: 43 Resp: 1304807

Ion Ratio Lower Upper

43 100

58 25.1 24.6 37.0

Instrument :

MSVOA_L

ClientSampleId :

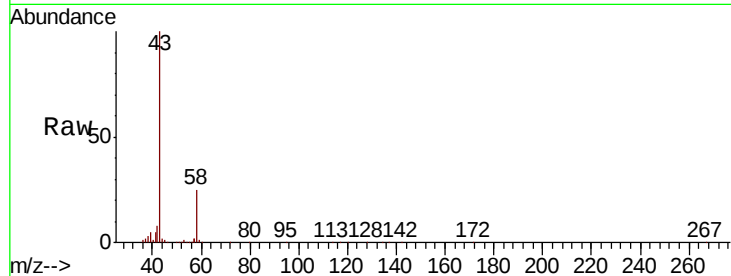
OFFSITE-DDC-INTERMEDIATE-2

Manual Integrations

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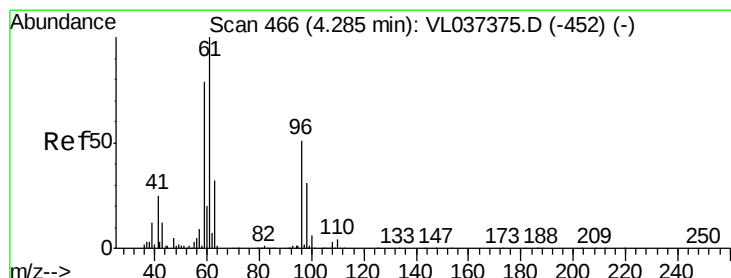
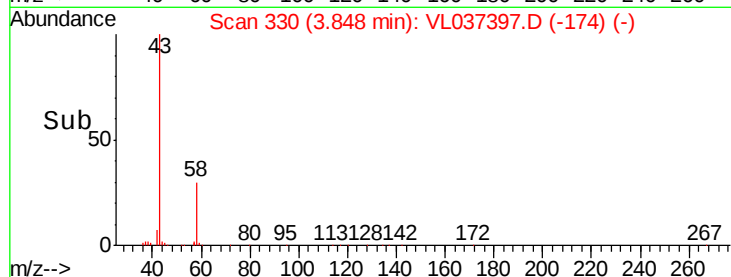
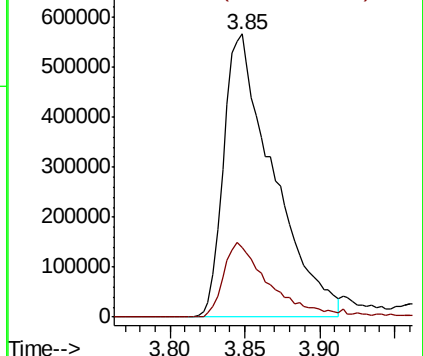
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#17

tert-Butyl alcohol

Concen: 0.131 ppbv m

RT: 4.30 min Scan# 472

Delta R.T. 0.02 min

Lab File: VL037397.D

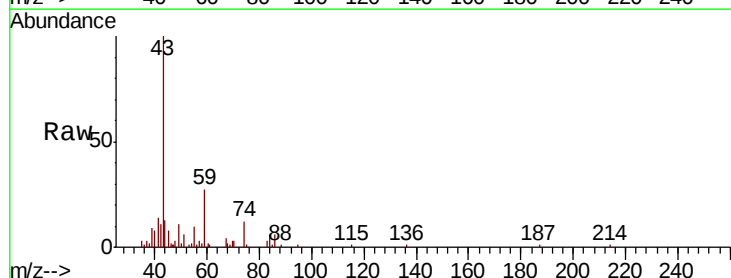
Acq: 11 Aug 2021 19:55

Tgt Ion: 59 Resp: 13026

Ion Ratio Lower Upper

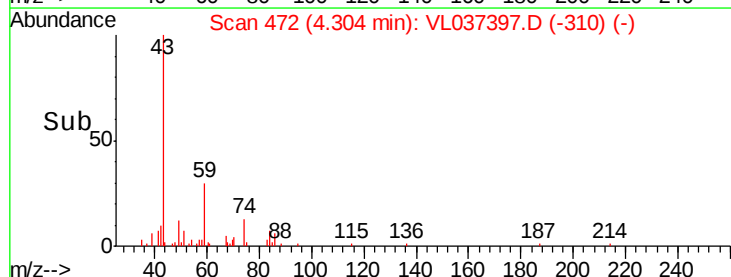
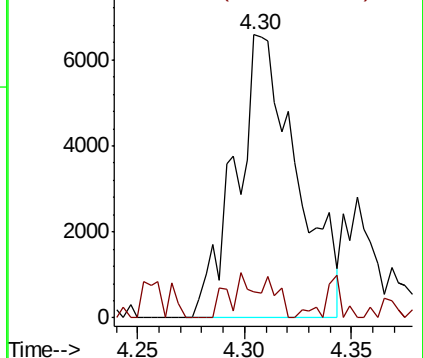
59 100

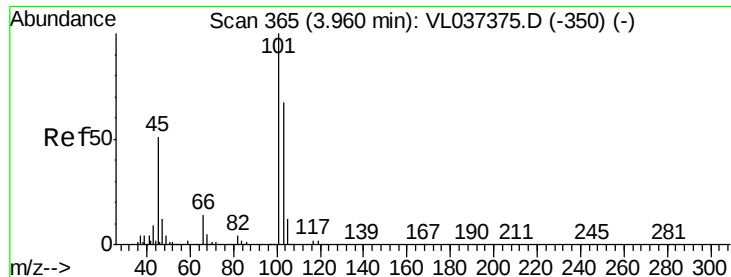
57 0.0 8.6 13.0#



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





#19

Isopropyl Alcohol

Concen: 2.684 ppbv m

RT: 3.97 min Scan# 368

Delta R.T. 0.01 min

Lab File: VL037397.D

Acq: 11 Aug 2021 19:55

Instrument :

MSVOA_L

ClientSampleId :

OFFSITE-DDC-INTERMEDIATE-2

Tot Ion: 45 Resp: 171791

Ion Ratio Lower Upper

45 100

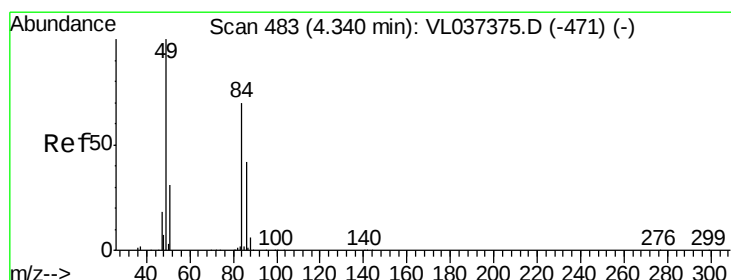
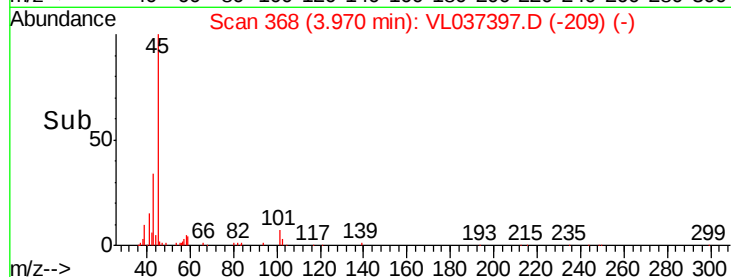
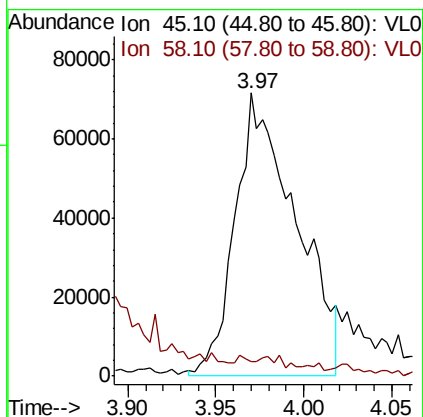
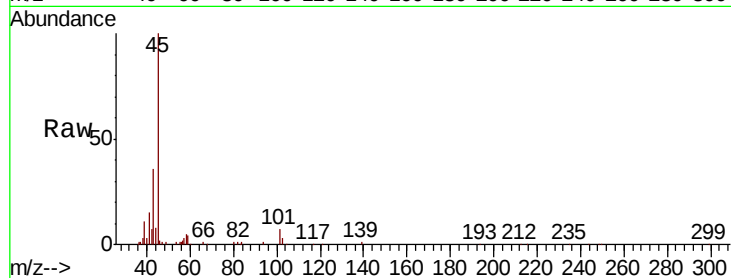
58 0.0 38.7 58.1#

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#20

Methylene Chloride

Concen: 44.691 ppbv

RT: 4.34 min Scan# 483

Delta R.T. 0.00 min

Lab File: VL037397.D

Acq: 11 Aug 2021 19:55

Tgt Ion: 84 Resp: 2697521

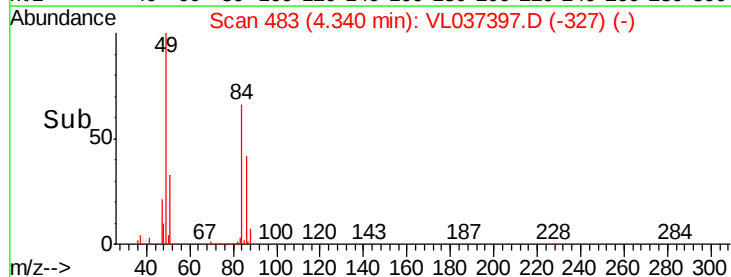
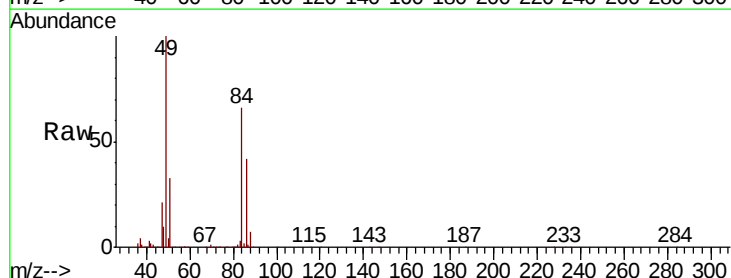
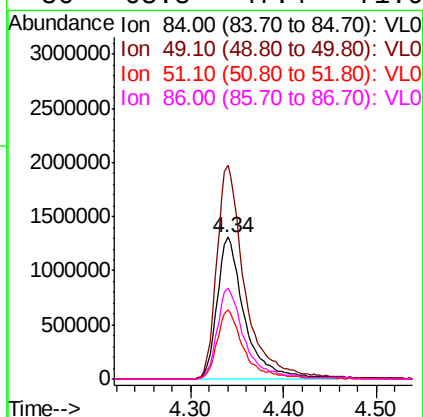
Ion Ratio Lower Upper

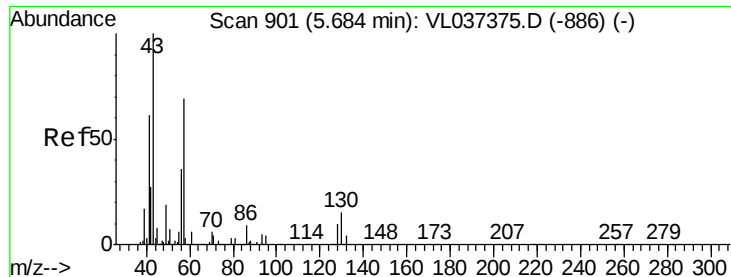
84 100

49 150.9 113.8 170.6

51 49.1 34.7 52.1

86 63.8 47.4 71.0





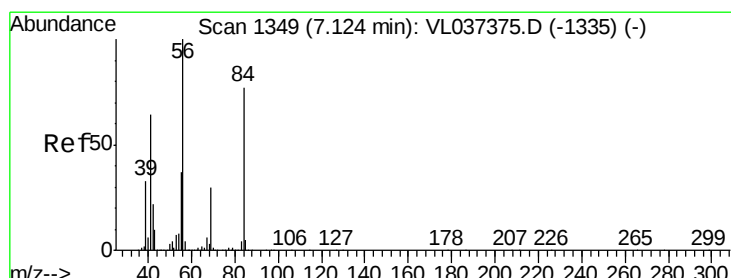
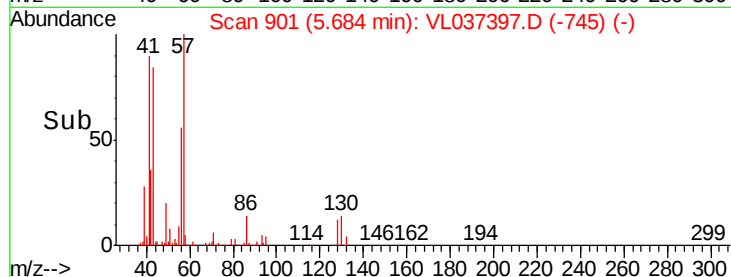
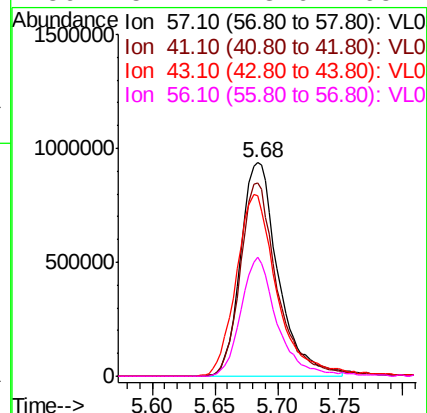
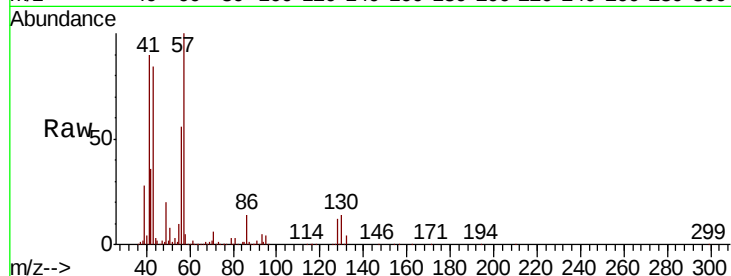
#26
Hexane
Concen: 13.608 ppbv
RT: 5.68 min Scan# 901
Delta R.T. 0.00 min
Lab File: VL037397.D
Acq: 11 Aug 2021 19:55

Instrument :
MSVOA_L
ClientSampleId :
OFFSITE-DDC-INTERMEDIATE-2

Tot Ion	Ratio	Lower	Upper
57	100		
41	90.0	73.4	110.0
43	93.5	174.4	261.6#
56	54.1	43.6	65.4

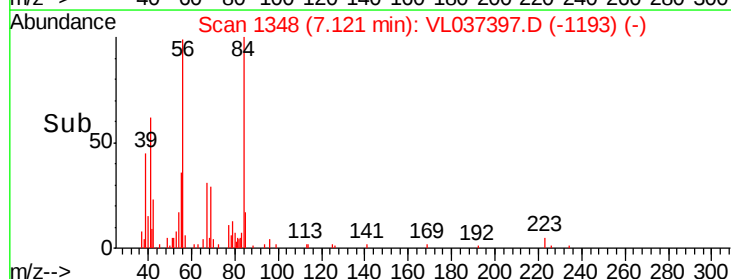
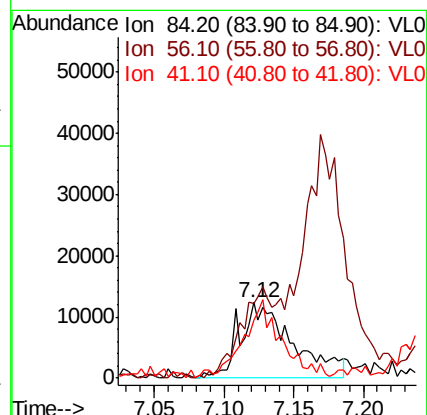
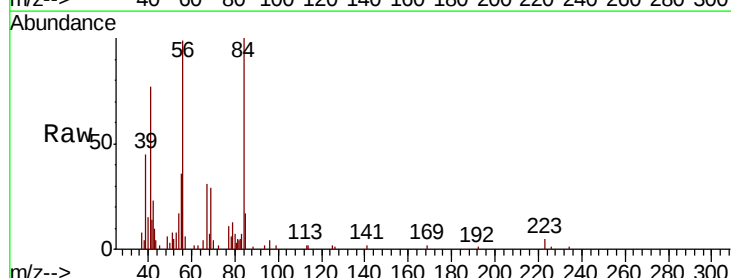
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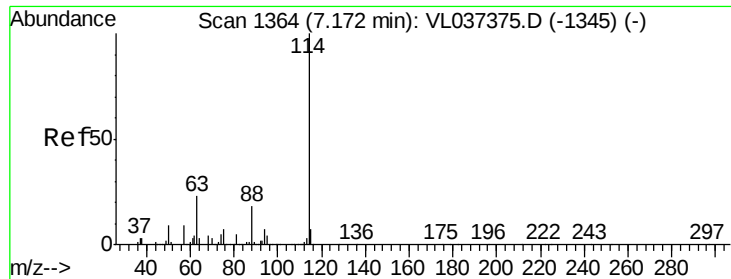
apatel
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#30
Cyclohexane
Concen: 0.273 ppbv m
RT: 7.12 min Scan# 1348
Delta R.T. -0.00 min
Lab File: VL037397.D
Acq: 11 Aug 2021 19:55

Tgt Ion	Ratio	Lower	Upper
84	100		
56	0.0	109.4	164.0#
41	67.5	66.2	99.2





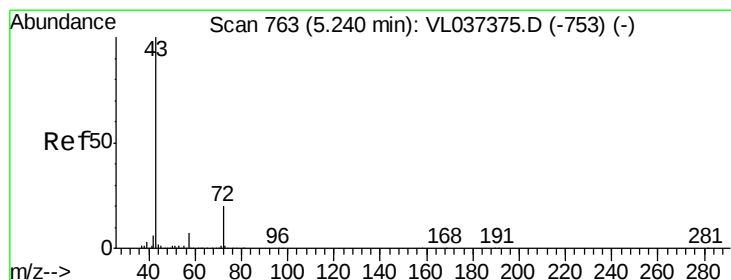
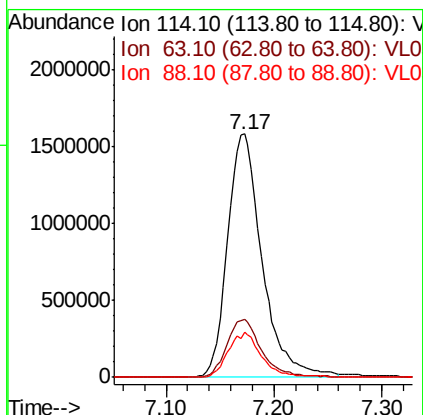
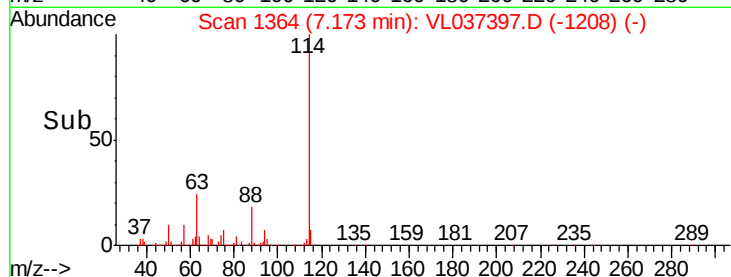
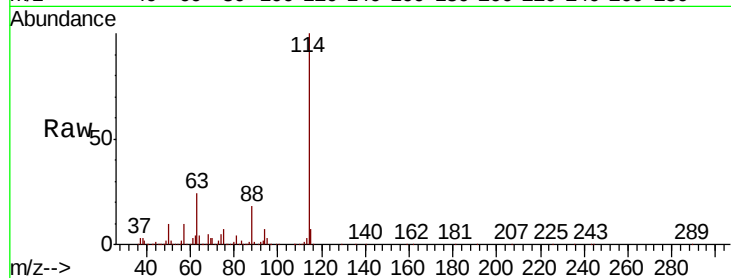
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.17 min Scan# 1364
 Delta R.T. 0.00 min
 Lab File: VL037397.D
 Acq: 11 Aug 2021 19:55

Instrument :
 MSVOA_L
 ClientSampleId :
 OFFSITE-DDC-INTERMEDIATE-2

Tot Ion	Ratio	Lower	Upper
114	100		
63	24.3	19.5	29.3
88	18.0	14.3	21.5

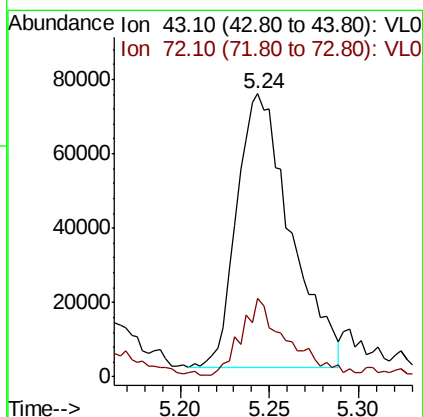
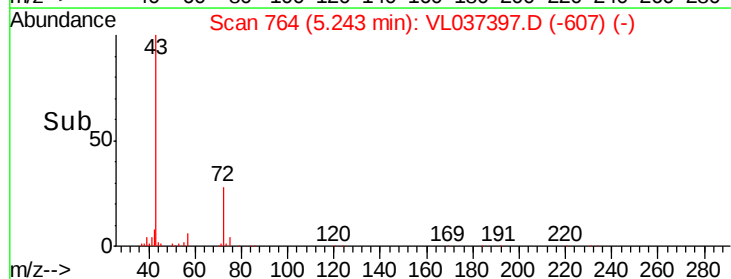
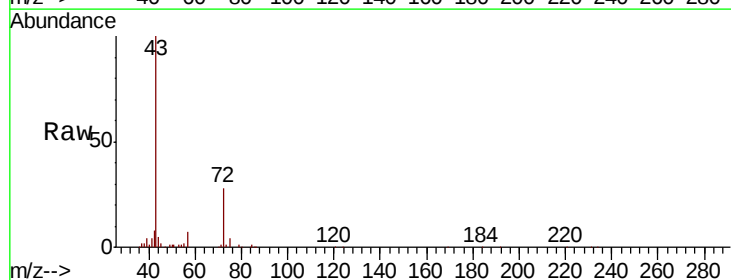
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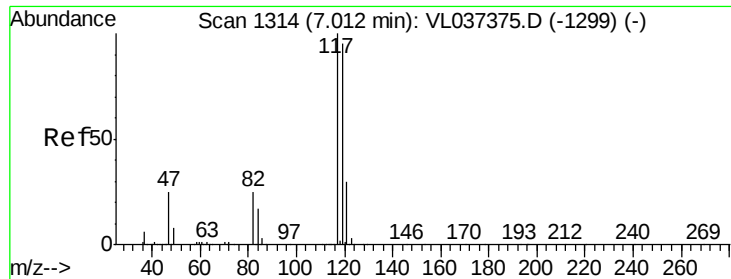
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#34
 2-Butanone
 Concen: 1.150 ppbv
 RT: 5.24 min Scan# 764
 Delta R.T. 0.00 min
 Lab File: VL037397.D
 Acq: 11 Aug 2021 19:55

Tgt Ion	Ratio	Lower	Upper
43	100		
72	24.3	19.6	29.4





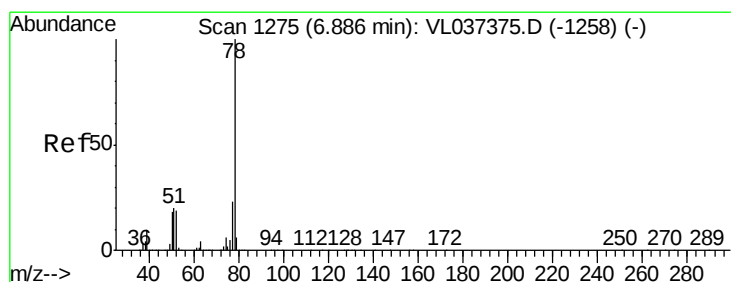
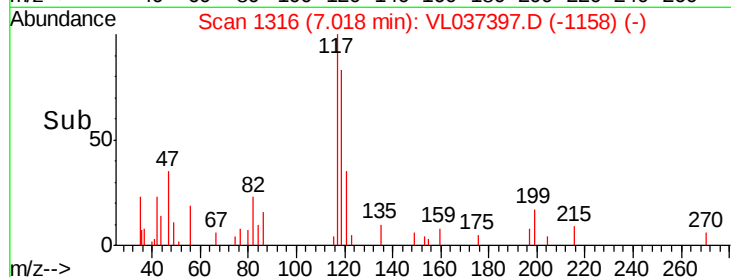
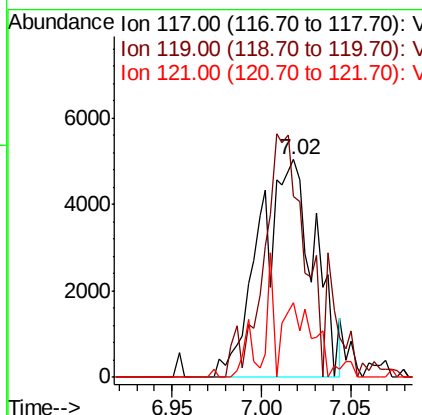
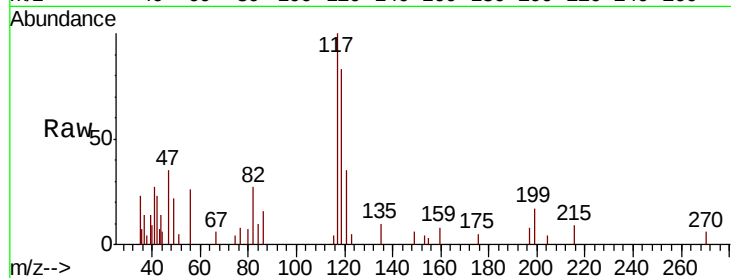
#35
Carbon Tetrachloride
Concen: 0.055 ppbv m
RT: 7.02 min Scan# 1316
Delta R.T. 0.01 min
Lab File: VL037397.D
Acq: 11 Aug 2021 19:55

Instrument :
MSVOA_L
ClientSampleId :
OFFSITE-DDC-INTERMEDIATE-2

Tot Ion	Ratio	Lower	Upper
117	100		
119	83.3	76.1	114.1
121	34.5	24.4	36.6

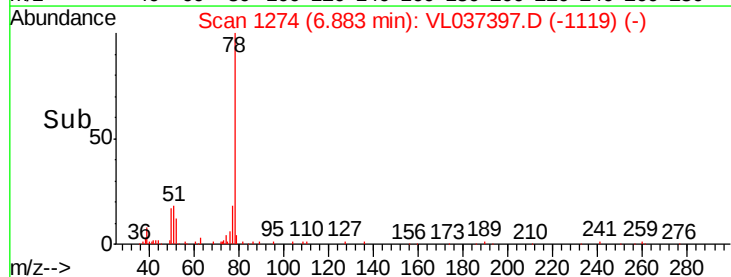
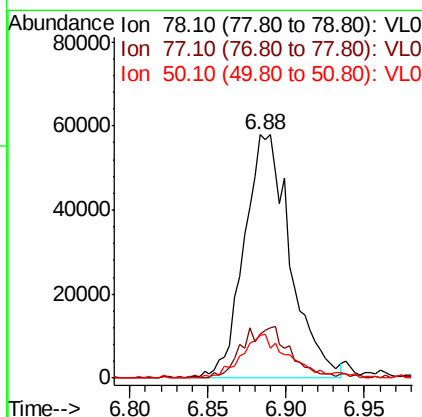
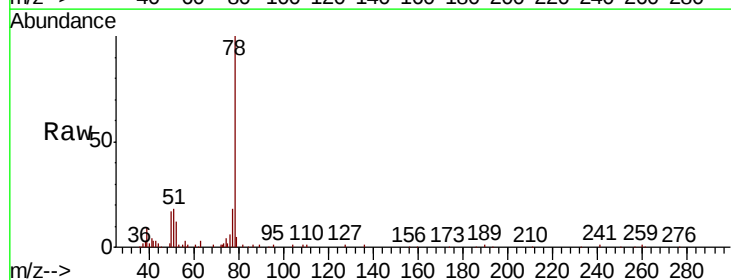
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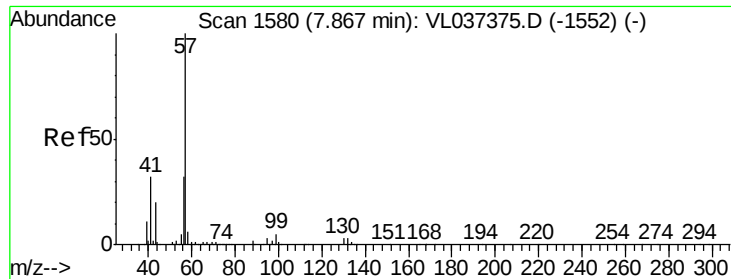
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#36
Benzene
Concen: 0.425 ppbv m
RT: 6.88 min Scan# 1274
Delta R.T. -0.00 min
Lab File: VL037397.D
Acq: 11 Aug 2021 19:55

Tgt Ion	Ratio	Lower	Upper
78	100		
77	17.8	18.6	28.0#
50	17.4	14.3	21.5





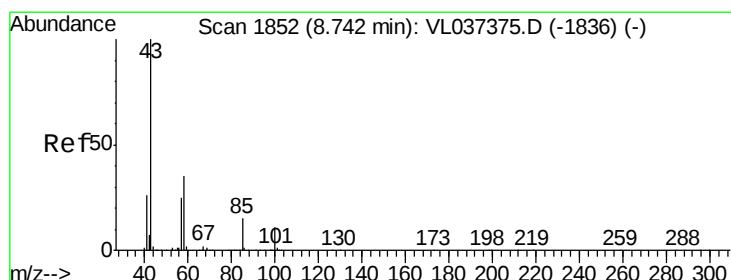
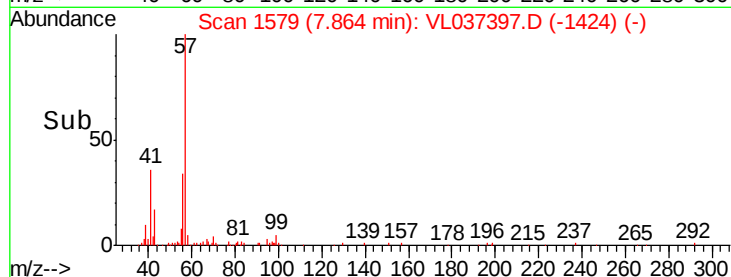
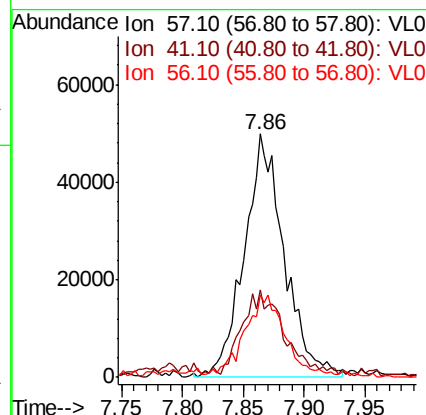
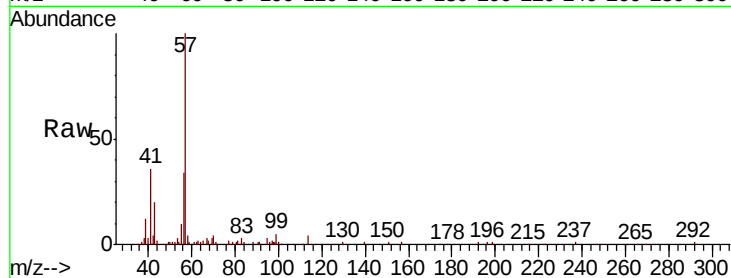
#44
 2,2,4-Trimethylpentane
 Concen: 0.243 ppbv m
 RT: 7.86 min Scan# 1579
 Delta R.T. -0.00 min
 Lab File: VL037397.D
 Acq: 11 Aug 2021 19:55

Instrument :
 MSVOA_L
 ClientSampleId :
 OFFSITE-DDC-INTERMEDIATE-2

Tot Ion	Ratio	Lower	Upper
57	100		
41	40.2	26.1	39.1#
56	36.2	25.1	37.7

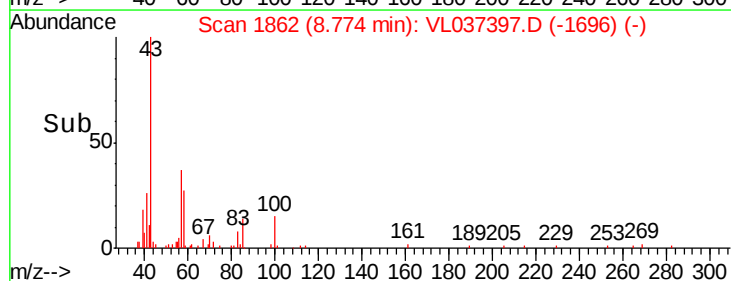
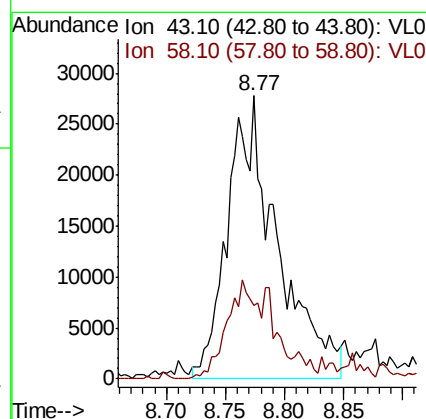
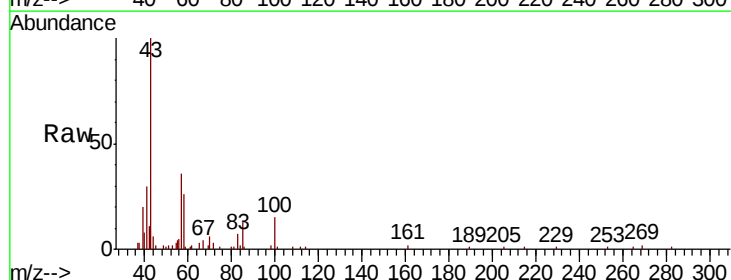
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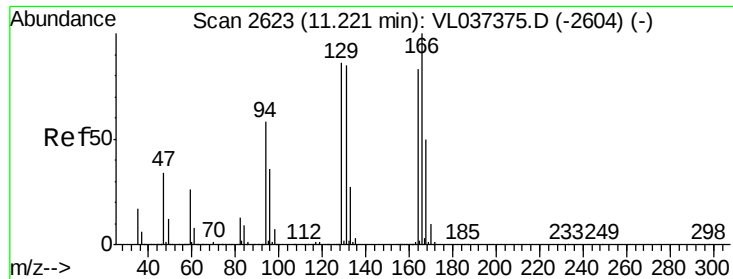
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#50
 4-Methyl-2-Pentanone
 Concen: 0.458 ppbv m
 RT: 8.77 min Scan# 1862
 Delta R.T. 0.03 min
 Lab File: VL037397.D
 Acq: 11 Aug 2021 19:55

Tgt Ion	Ratio	Lower	Upper
43	100		
58	32.7	29.4	44.2





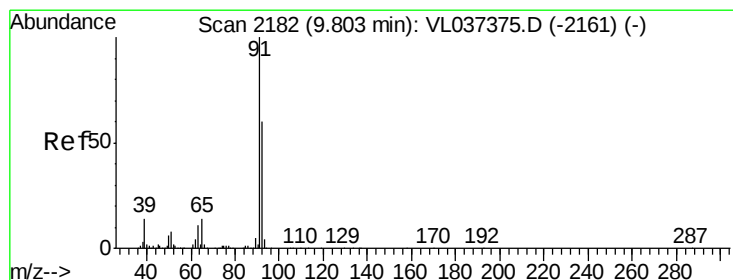
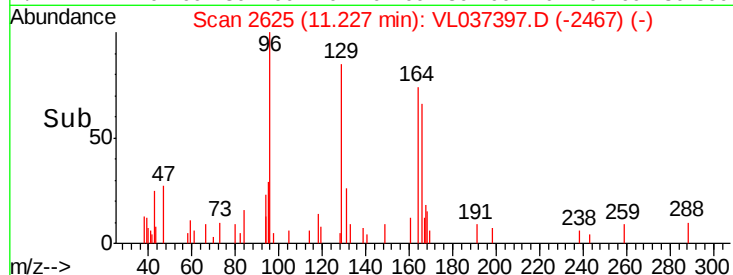
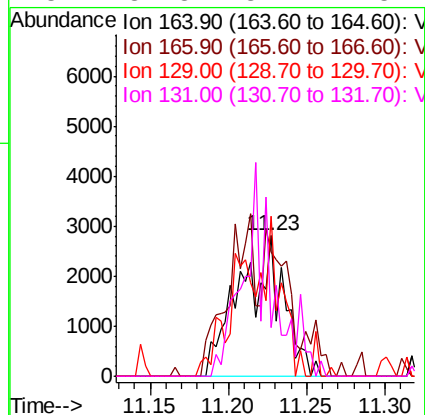
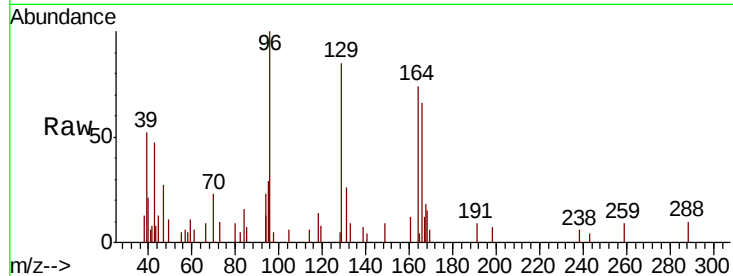
#52
Tetrachloroethene
Concen: 0.047 ppbv m
RT: 11.23 min Scan# 2625
Delta R.T. 0.01 min
Lab File: VL037397.D
Acq: 11 Aug 2021 19:55

Instrument :
MSVOA_L
ClientSampleId :
OFFSITE-DDC-INTERMEDIATE-2

Tot Ion	Ratio	Lower	Upper
164	100		
166	88.6	96.5	144.7#
129	113.7	83.2	124.8
131	34.8	82.2	123.2#

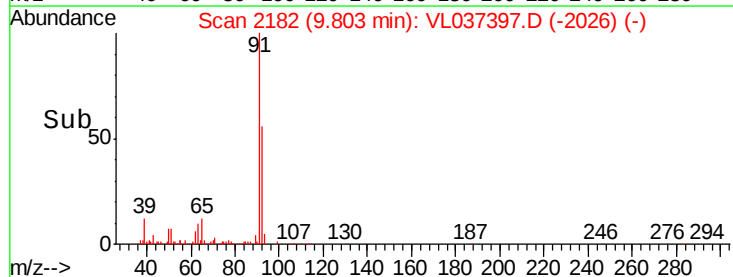
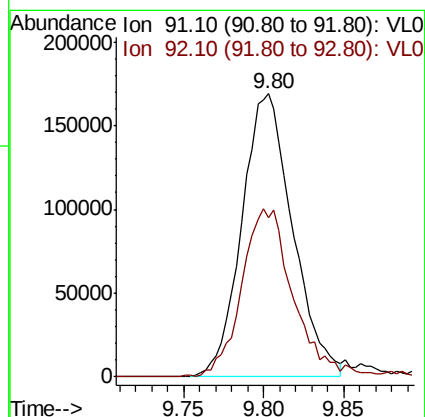
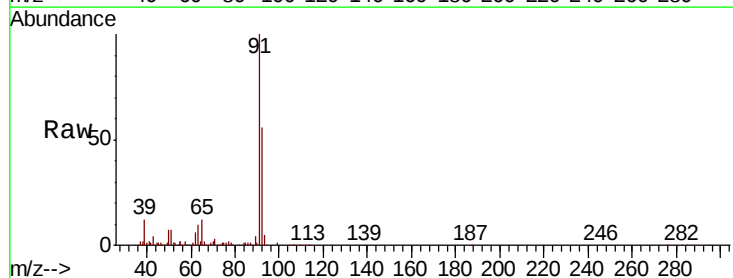
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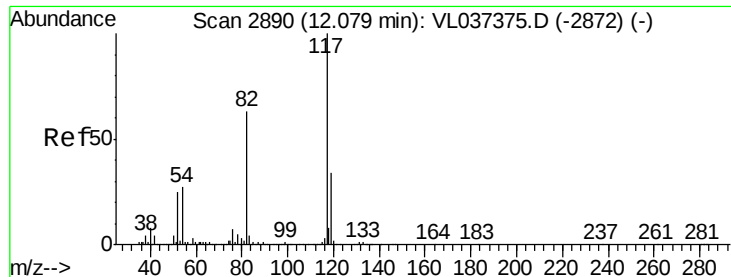
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#53
Toluene
Concen: 1.126 ppbv
RT: 9.80 min Scan# 2182
Delta R.T. 0.00 min
Lab File: VL037397.D
Acq: 11 Aug 2021 19:55

Tgt Ion	Ratio	Lower	Upper
91	100		
92	62.6	48.1	72.1





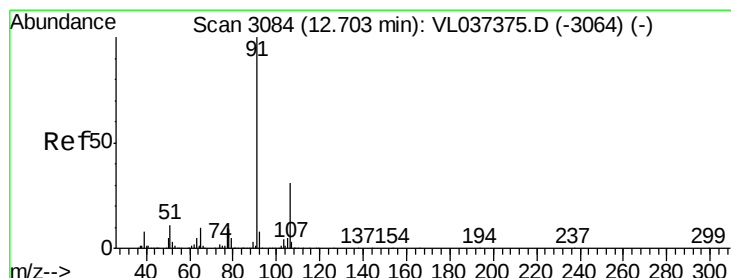
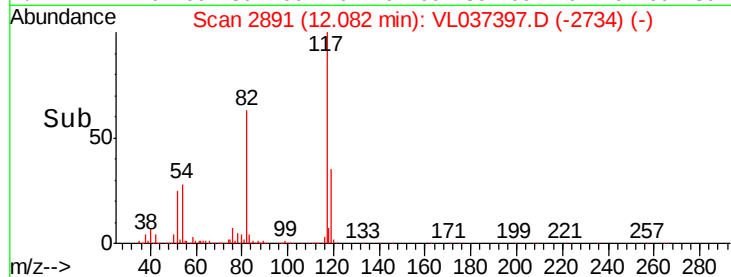
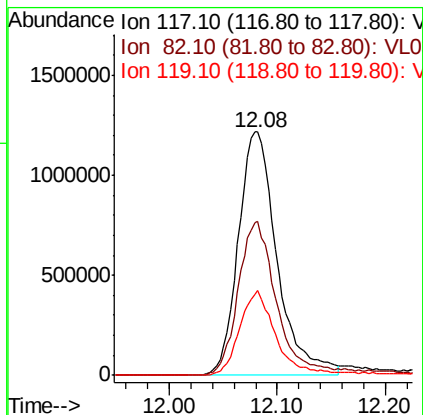
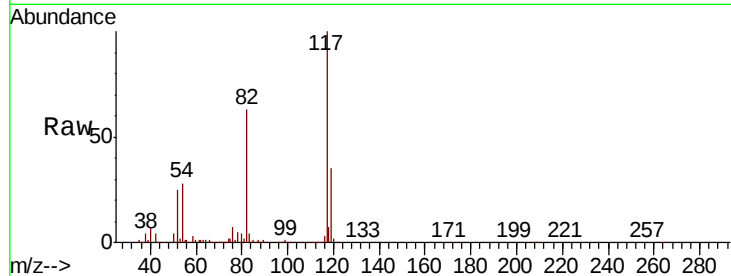
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.08 min Scan# 2891
Delta R.T. 0.00 min
Lab File: VL037397.D
Acq: 11 Aug 2021 19:55

Instrument :
MSVOA_L
ClientSampleId :
OFFSITE-DDC-INTERMEDIATE-2

Tot Ion	Ratio	Lower	Upper
117	100		
82	66.0	52.6	78.8
119	33.5	46.7	70.1#

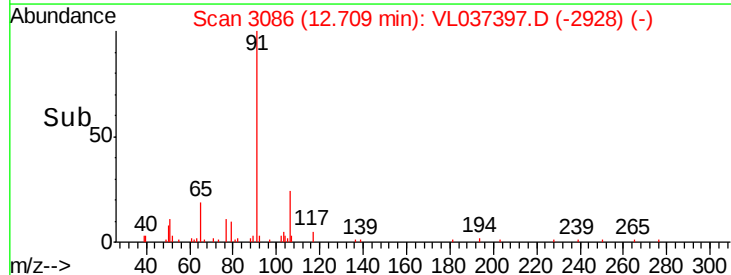
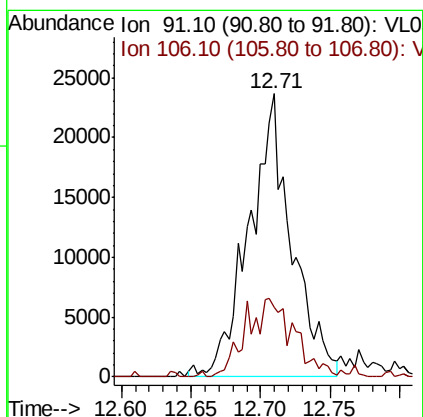
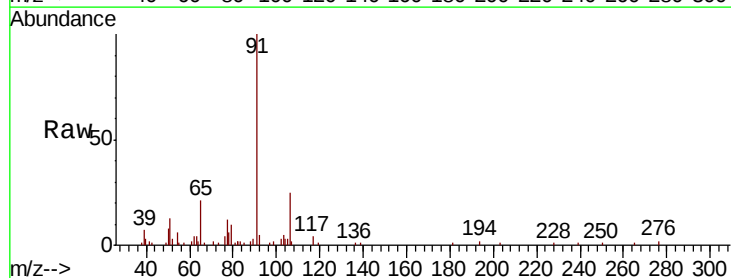
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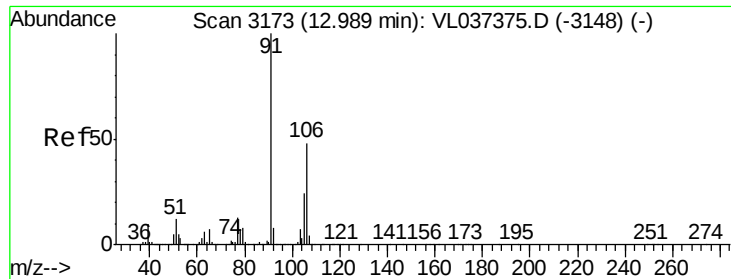
apatel
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#58
Ethyl Benzene
Concen: 0.123 ppbv m
RT: 12.71 min Scan# 3086
Delta R.T. 0.01 min
Lab File: VL037397.D
Acq: 11 Aug 2021 19:55

Tgt Ion	Ratio	Lower	Upper
91	100		
106	24.6	24.6	36.8





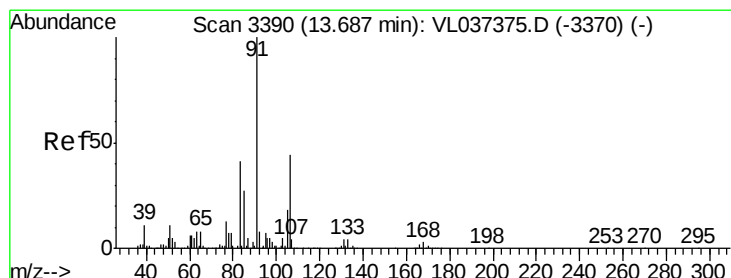
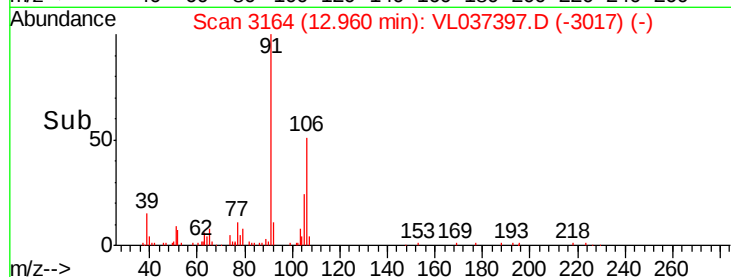
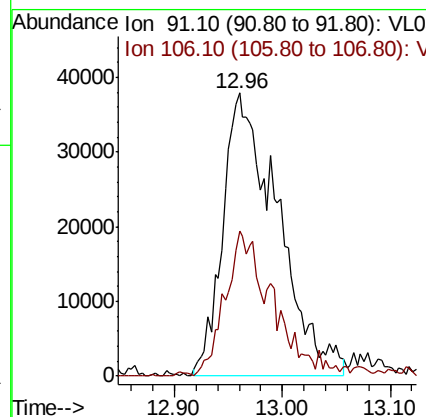
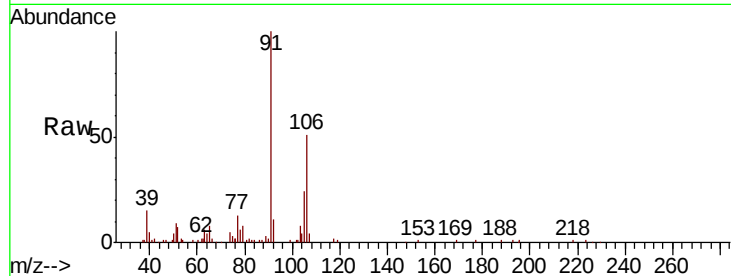
#59
m/p-Xylene
Concen: 0.381 ppbv m
RT: 12.96 min Scan# 3164
Delta R.T. -0.03 min
Lab File: VL037397.D
Acq: 11 Aug 2021 19:55

Instrument :
MSVOA_L
ClientSampleId :
OFFSITE-DDC-INTERMEDIATE-2

Tot Ion: 91 Resp: 133425
Ion Ratio Lower Upper
91 100
106 0.0 36.6 55.0#

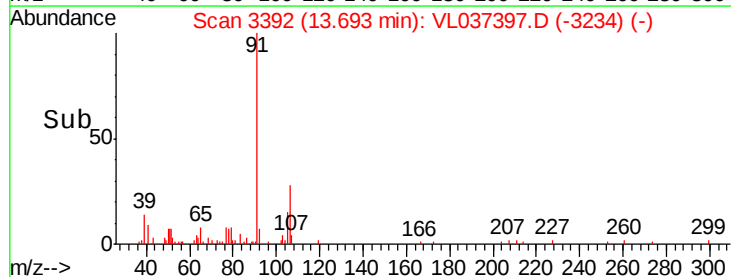
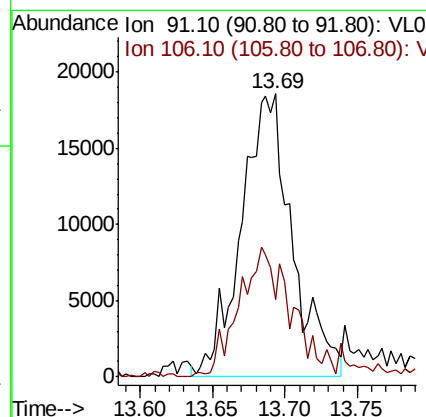
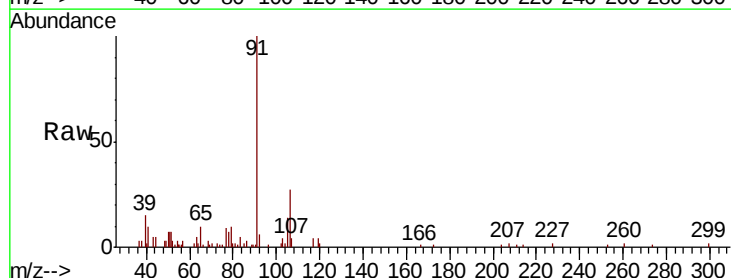
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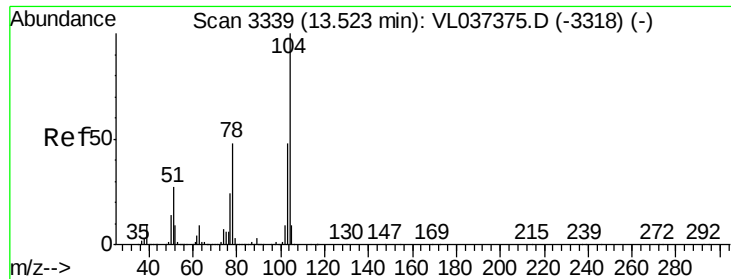
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#60
o-Xylene
Concen: 0.140 ppbv m
RT: 13.69 min Scan# 3392
Delta R.T. 0.01 min
Lab File: VL037397.D
Acq: 11 Aug 2021 19:55

Tgt Ion: 91 Resp: 45489
Ion Ratio Lower Upper
91 100
106 0.0 23.2 69.6#





#61

Stvrene

Concen: 0.109 ppbv m

RT: 13.52 min Scan# 3339

Delta R.T. 0.00 min

Lab File: VL037397.D

Acq: 11 Aug 2021 19:55

Instrument :

MSVOA_L

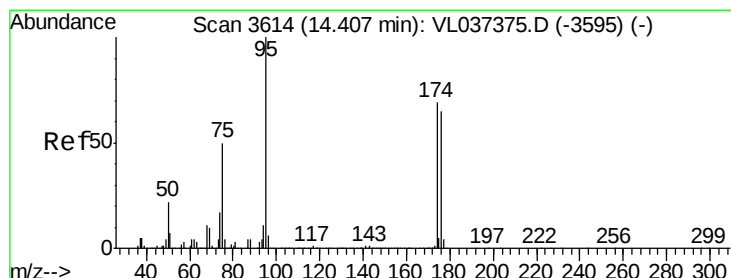
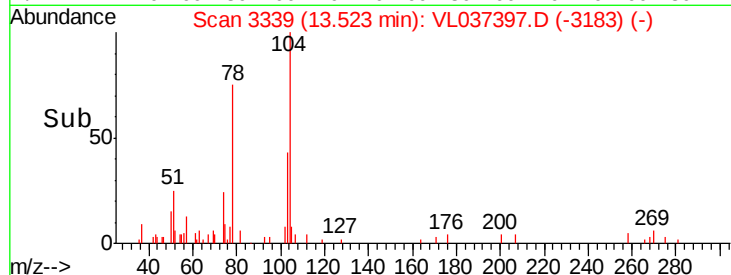
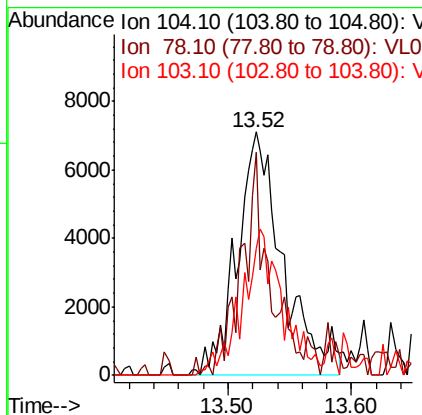
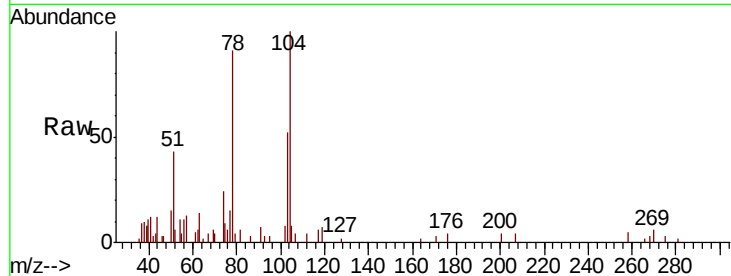
ClientSampleId :

OFFSITE-DDC-INTERMEDIATE-2

Tot Ion	Ratio	Lower	Upper
104	100		
78	64.0	41.4	62.0
103	52.6	40.6	61.0

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#68

1-Bromo-4-Fluorobenzene

Concen: 9.399 ppbv

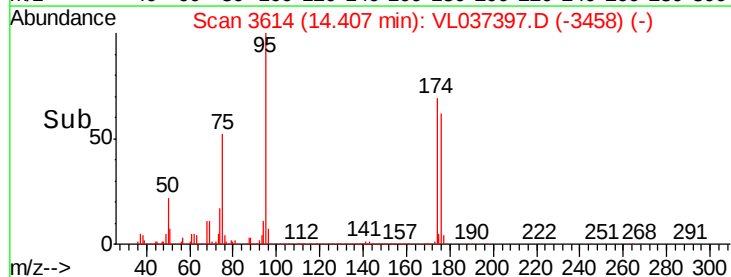
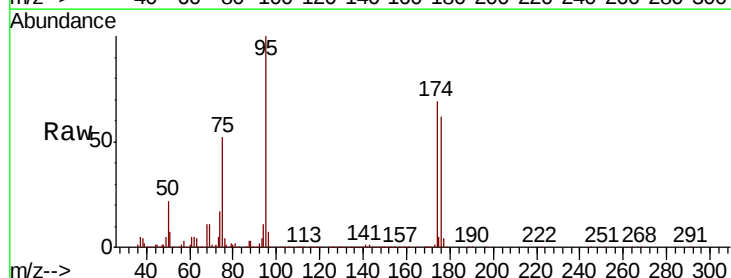
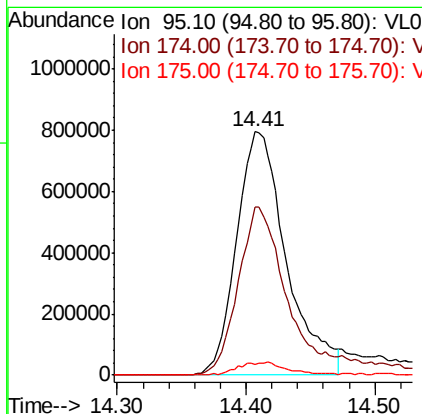
RT: 14.41 min Scan# 3614

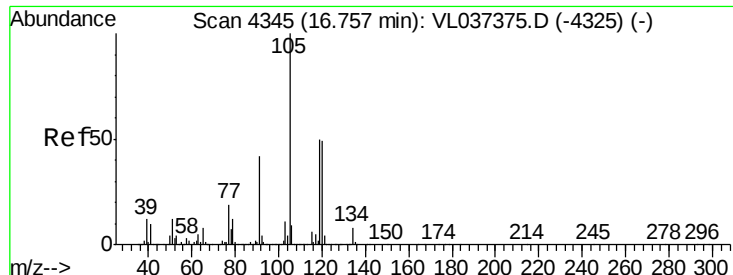
Delta R.T. 0.00 min

Lab File: VL037397.D

Acq: 11 Aug 2021 19:55

Tgt Ion	Ratio	Lower	Upper
95	100		
174	76.5	58.3	87.5
175	5.2	4.3	6.5





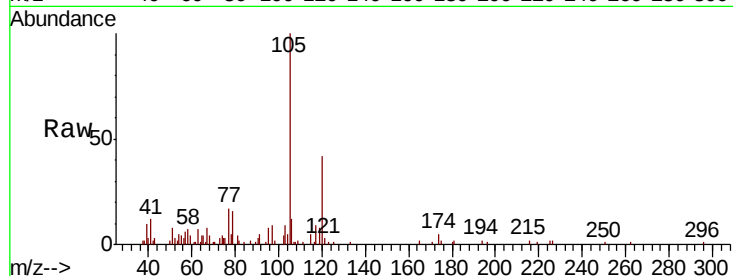
#74
 1,2,4-Trimethylbenzene
 Concen: 0.163 ppbv m
 RT: 16.76 min Scan# 4346
 Delta R.T. 0.00 min
 Lab File: VL037397.D
 Acq: 11 Aug 2021 19:55

Instrument :
 MSVOA_L
 ClientSampleId :
 OFFSITE-DDC-INTERMEDIATE-2

Tot Ion:	105	Resp:	58385
Ion Ratio	Lower	Upper	
105	100		
120	42.3	39.0	58.4
91	5.2	34.4	51.6#
77	16.8	15.7	23.5

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Abundance Ion 105.10 (104.80 to 105.80): V
 Ion 120.20 (119.90 to 120.90): V
 Ion 91.10 (90.80 to 91.80): VL0
 Ion 77.10 (76.80 to 77.80): VL0

