

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL051921\
 Data File : VL036995.D
 Acq On : 19 May 2021 17:10
 Operator : SY/AP
 Sample : M2424-11
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 KIA-01

Manual Integrations
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MMDadoda
 5/24/2021 3:01:37 PM

Quant Time: May 21 16:59:44 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue May 18 2021
 QLast Update : Tue May 18 12:00:15 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1187606	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.15	114	3683991	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.06	117	3385145	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.39	95	2525559	9.93	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.30%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.03	85	34865	0.173	ppbv #	87
3) Chlorodifluoromethane	2.97	51	75769m	0.348	ppbv	
4) Chloromethane	3.12	50	42687	0.577	ppbv	98
9) Propene	3.01	41	230808m	2.963	ppbv	
10) Heptane	8.10	43	24067m	0.124	ppbv	
11) Trichlorofluoromethane	3.93	101	90879	0.487	ppbv	86
13) Ethanol	3.60	45	8357888	804.036	ppbv	95
15) Acetone	3.83	43	2264327	18.615	ppbv	93
19) Isopropyl Alcohol	3.97	45	586959	8.976	ppbv #	35
20) Methylene Chloride	4.33	84	4310192	66.102	ppbv	94
26) Hexane	5.67	57	3878706	25.975	ppbv #	47
29) Chloroform	5.74	83	81748	0.387	ppbv	88
30) Cyclohexane	7.11	84	27949	0.220	ppbv #	20
34) 2-Butanone	5.23	43	103903	0.775	ppbv	99
35) Carbon Tetrachloride	7.00	117	23265m	0.095	ppbv	
36) Benzene	6.87	78	97781	0.308	ppbv	99
44) 2,2,4-Trimethylpentane	7.85	57	83494m	0.153	ppbv	
50) 4-Methyl-2-Pentanone	8.74	43	49760m	0.225	ppbv	
52) Tetrachloroethene	11.21	164	12197m	0.097	ppbv	
53) Toluene	9.78	91	387638	1.027	ppbv	98
58) Ethyl Benzene	12.68	91	54611m	0.114	ppbv	
59) m/p-Xylene	12.95	91	109689m	0.278	ppbv	
60) o-Xylene	13.66	91	43046	0.114	ppbv	99
61) Styrene	13.50	104	22574m	0.106	ppbv	
69) p-Isopropyltoluene	17.63	119	114523m	0.200	ppbv	
73) 1,3,5-Trimethylbenzene	15.97	105	75885m	0.181	ppbv	
74) 1,2,4-Trimethylbenzene	16.74	105	150965m	0.348	ppbv	

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

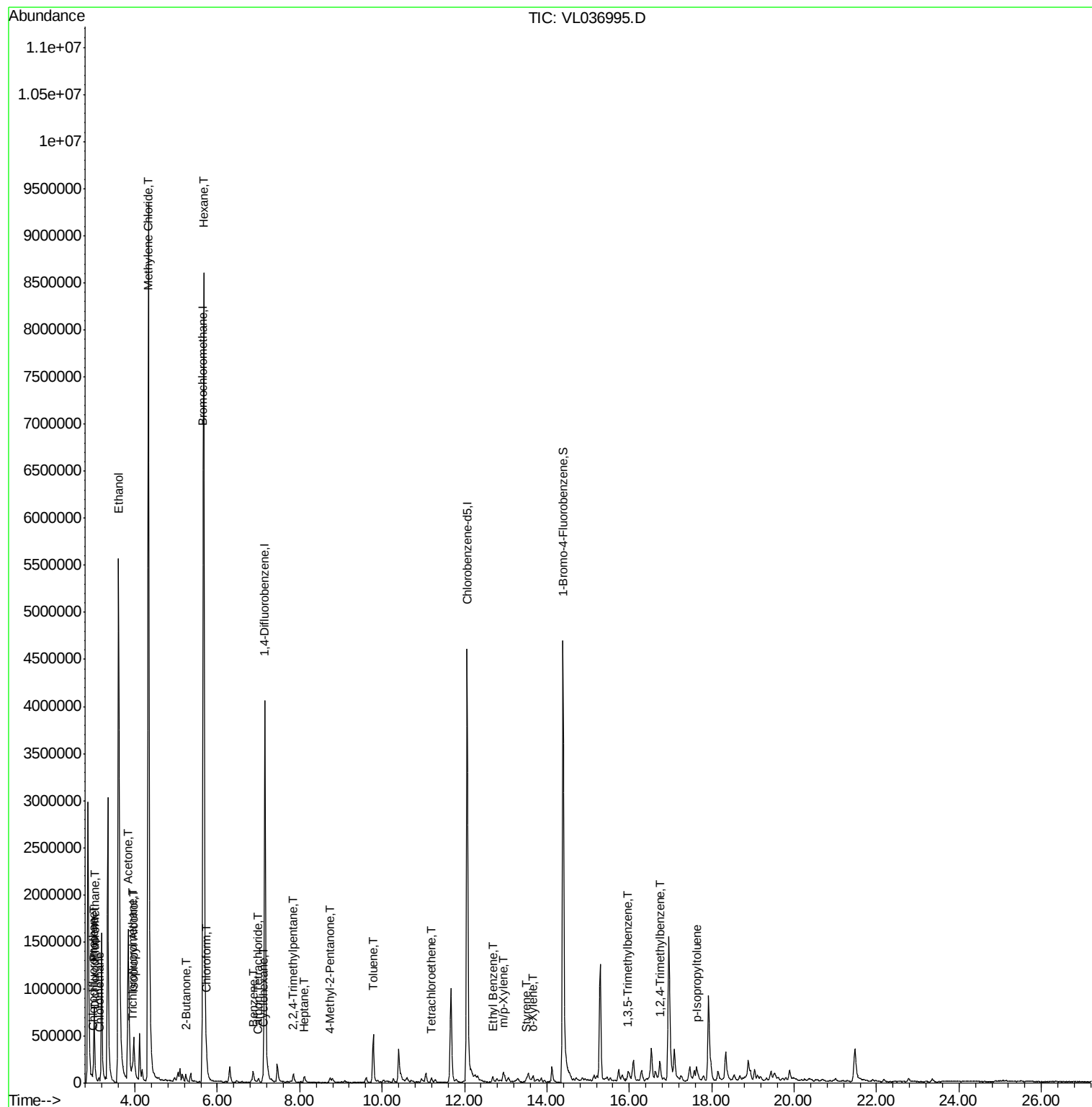
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL051921\
Data File : VL036995.D
Acq On : 19 May 2021 17:10
Operator : SY/AP
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Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

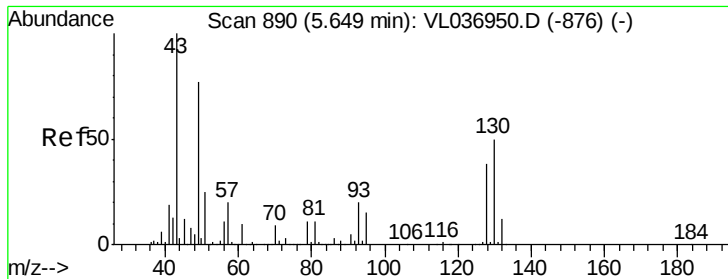
Instrument :
MSVOA_L
ClientSampleId :
KIA-01

Manual Integrations
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5/24/2021 3:01:37 PM

Quant Time: May 21 16:59:44 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue May
QLast Update : Tue May 18 12:00:15 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 889

Delta R.T. -0.00 min

Lab File: VL036995.D

Acq: 19 May 2021 17:10

Instrument :

MSVOA_L

ClientSampled :

KIA-01

Tot Ion: 49 Resp: 1187606

Ion Ratio Lower Upper

49 100

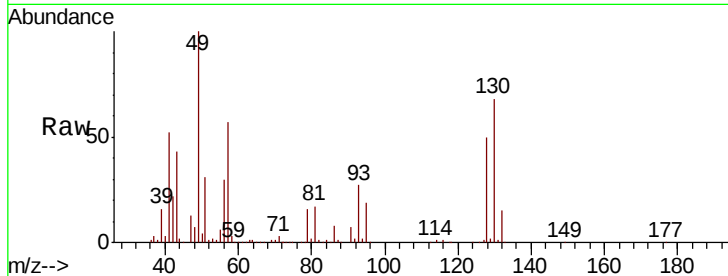
128 54.0 26.9 80.7

130 69.6 33.8 101.4

Manual Integrations
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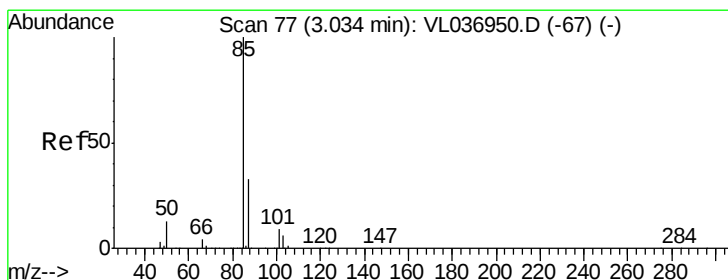
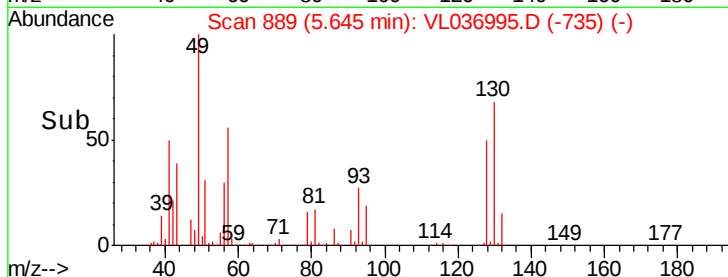
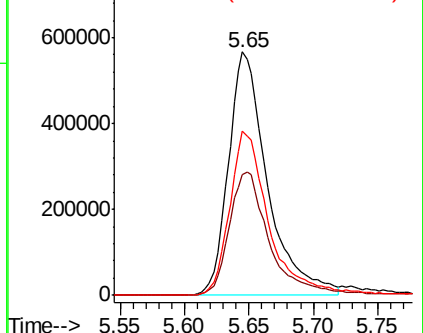
5/24/2021 3:01:37 PM



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: 0.173 ppbv

RT: 3.03 min Scan# 77

Delta R.T. -0.00 min

Lab File: VL036995.D

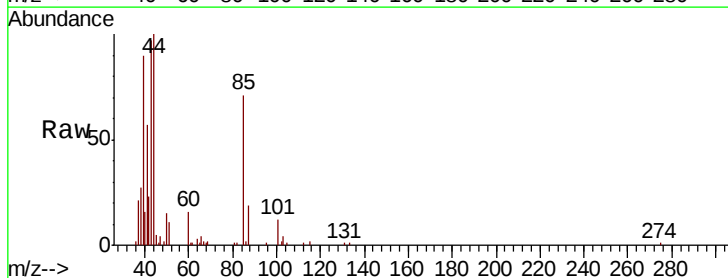
Acq: 19 May 2021 17:10

Tgt Ion: 85 Resp: 34865

Ion Ratio Lower Upper

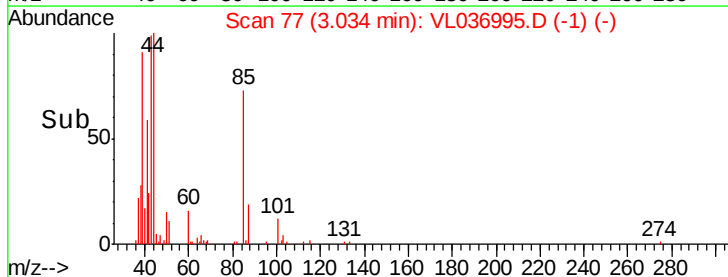
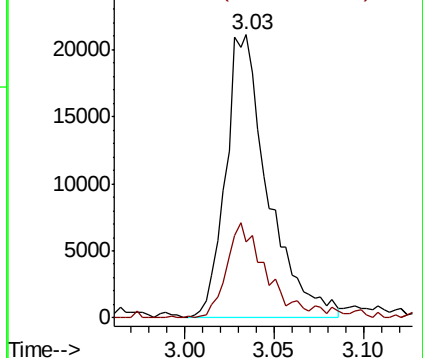
85 100

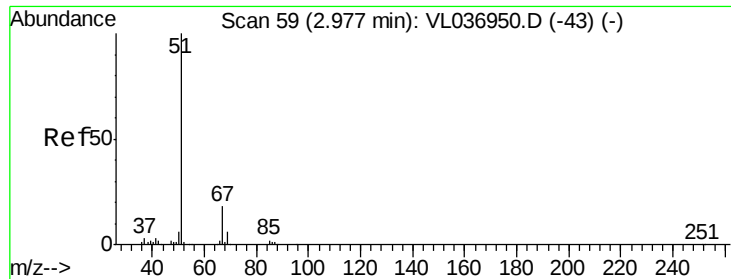
87 25.9 26.6 39.8#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.348 ppbv

RT: 2.97 min Scan# 57

Delta R.T. -0.01 min

Lab File: VL036995.D

Acq: 19 May 2021 17:10

Instrument :

MSVOA_L

ClientSampled :

KIA-01

Tot Ion: 51 Resp: 75769

Ion Ratio Lower Upper

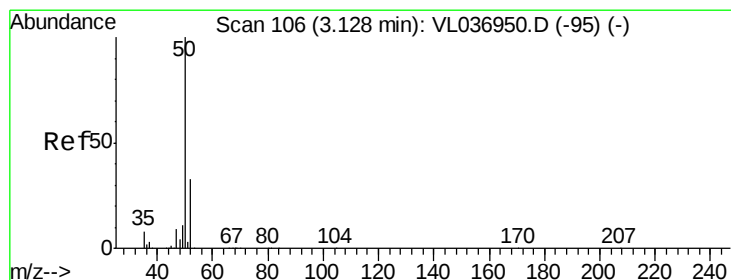
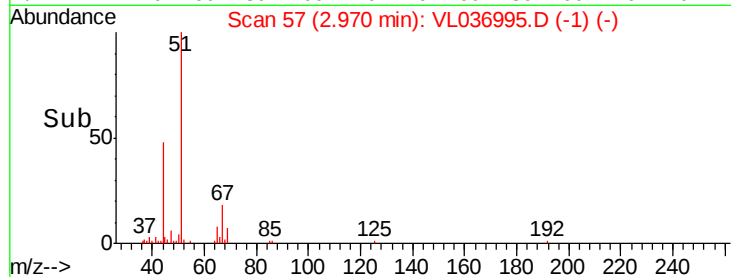
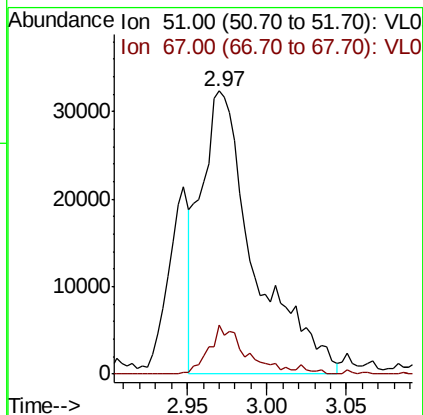
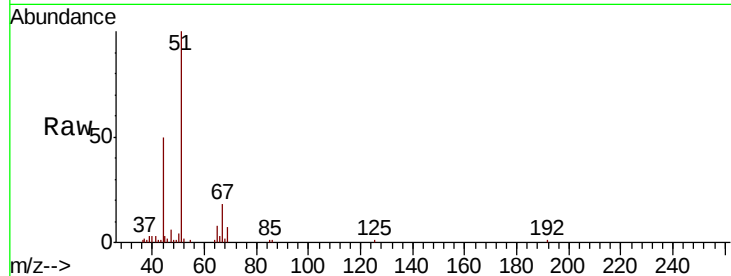
51 100

67 12.6 14.6 21.8#

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#4

Chloromethane

Concen: 0.577 ppbv

RT: 3.12 min Scan# 105

Delta R.T. -0.00 min

Lab File: VL036995.D

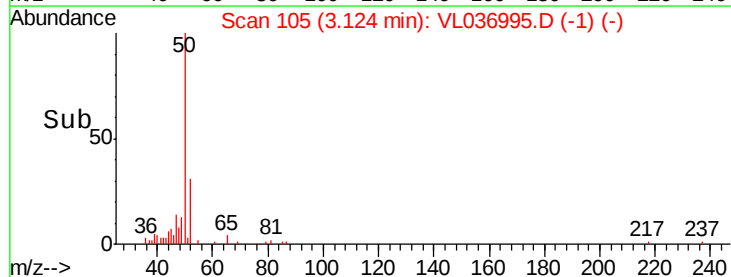
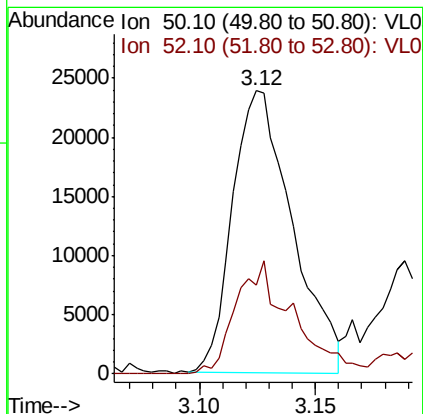
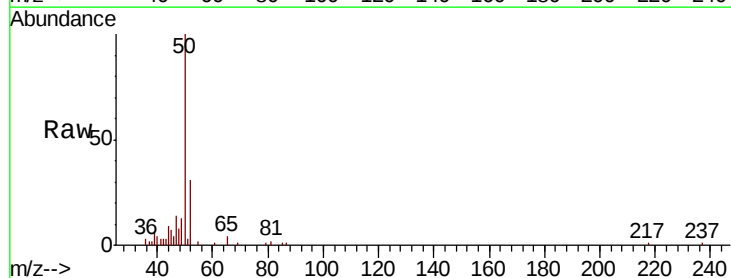
Acq: 19 May 2021 17:10

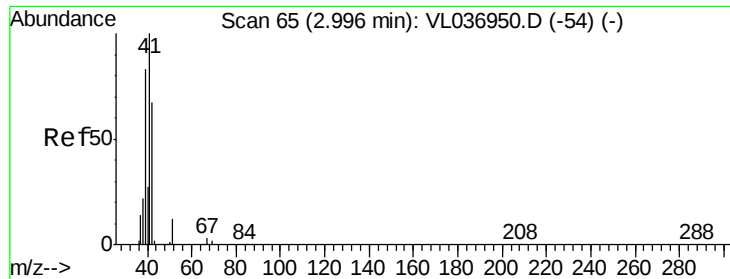
Tgt Ion: 50 Resp: 42687

Ion Ratio Lower Upper

50 100

52 31.5 26.1 39.1





#9

Propene

Concen: 2.963 ppbv m

RT: 3.01 min Scan# 68

Delta R.T. 0.01 min

Lab File: VL036995.D

Acq: 19 May 2021 17:10

Instrument :

MSVOA_L

ClientSampled :

KIA-01

Tot Ion: 41 Resp: 230808

Ion Ratio Lower Upper

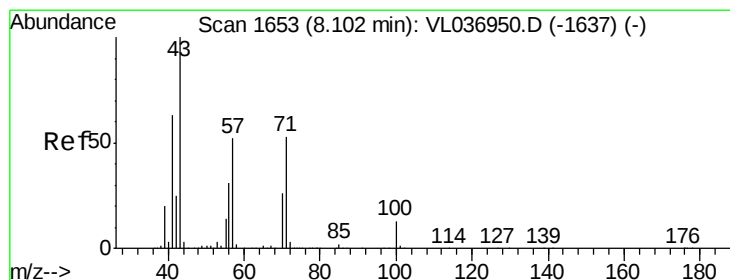
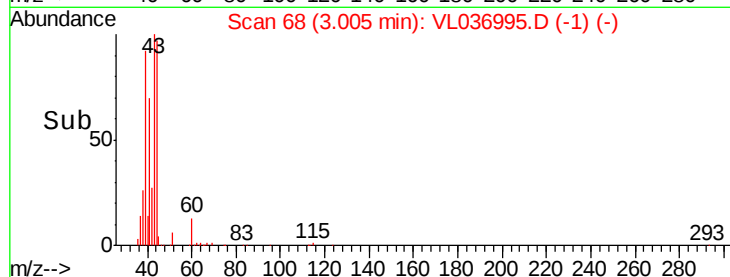
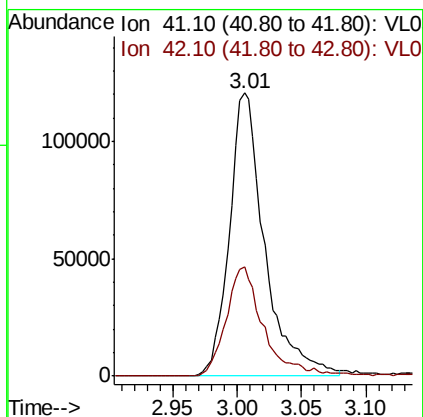
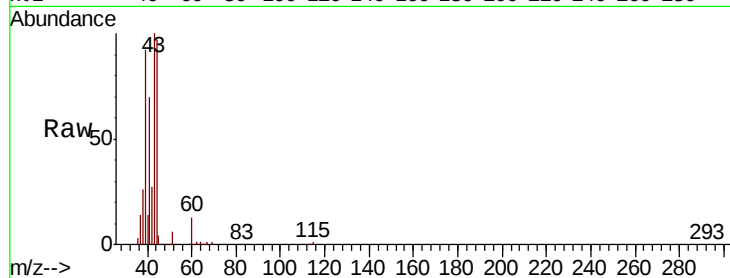
41 100

42 161.2 53.9 80.9#

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#10

Heptane

Concen: 0.124 ppbv m

RT: 8.10 min Scan# 1652

Delta R.T. -0.00 min

Lab File: VL036995.D

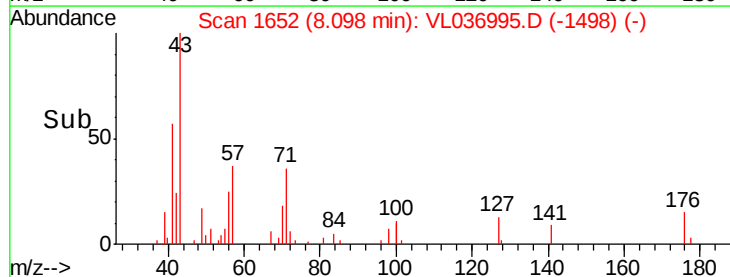
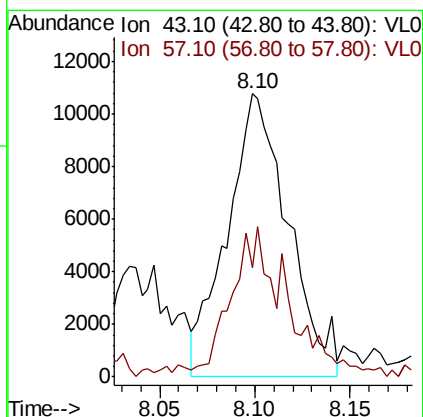
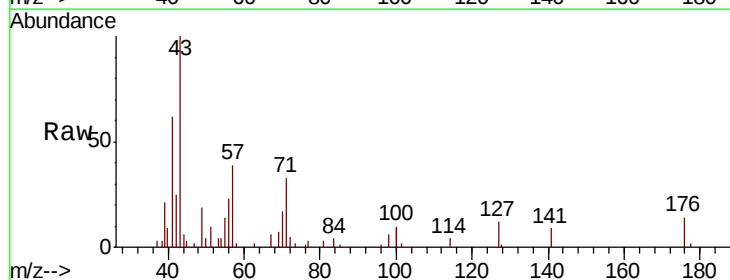
Acq: 19 May 2021 17:10

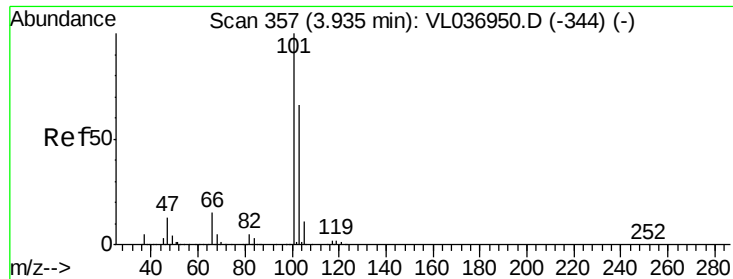
Tgt Ion: 43 Resp: 24067

Ion Ratio Lower Upper

43 100

57 50.6 41.0 61.6





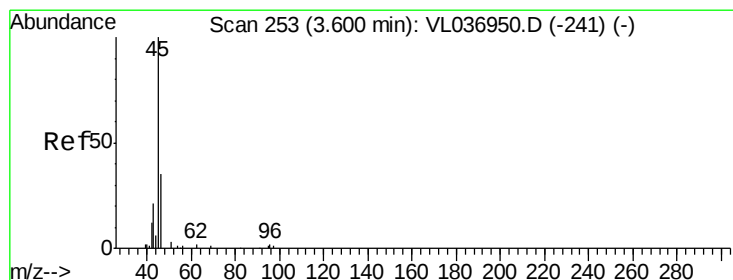
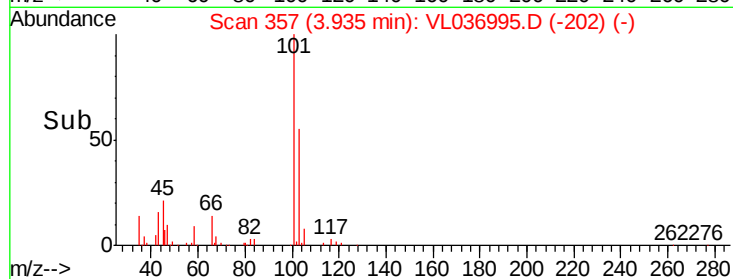
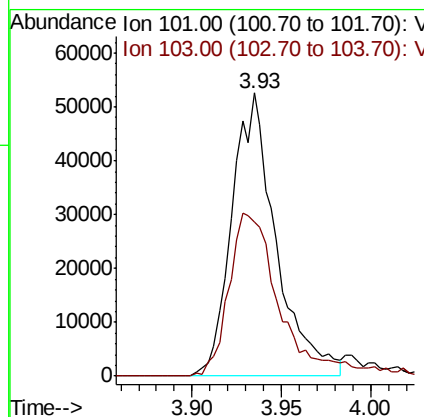
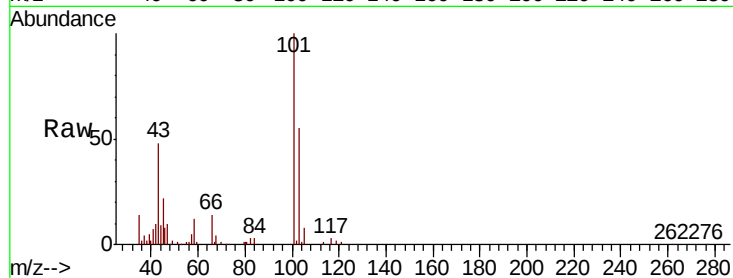
#11
 Trichlorofluoromethane
 Concen: 0.487 ppbv
 RT: 3.93 min Scan# 357
 Delta R.T. -0.00 min
 Lab File: VL036995.D
 Acq: 19 May 2021 17:10

Instrument :
 MSVOA_L
 ClientSampled :
 KIA-01

Tot Ion:101 Resp: 90879
 Ion Ratio Lower Upper
 101 100
 103 54.6 52.6 79.0

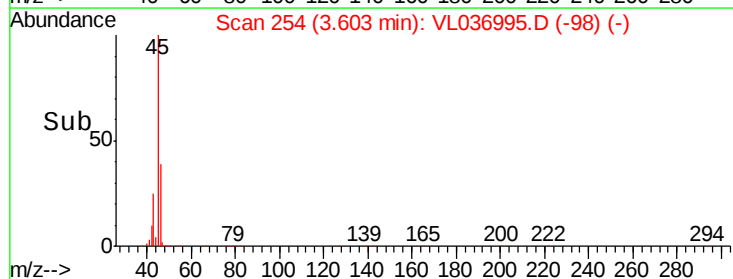
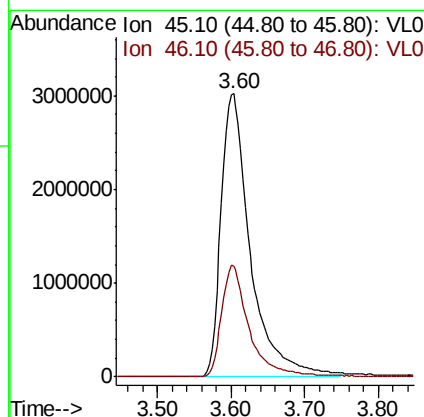
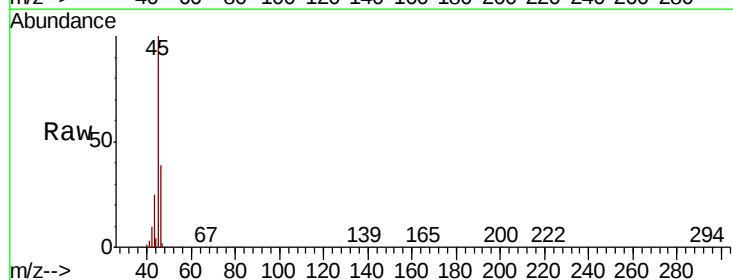
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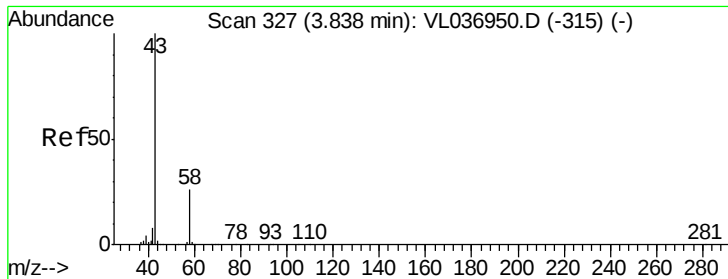
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#13
 Ethanol
 Concen: 804.036 ppbv
 RT: 3.60 min Scan# 254
 Delta R.T. 0.00 min
 Lab File: VL036995.D
 Acq: 19 May 2021 17:10

Tgt Ion: 45 Resp: 8357888
 Ion Ratio Lower Upper
 45 100
 46 37.8 16.3 65.3





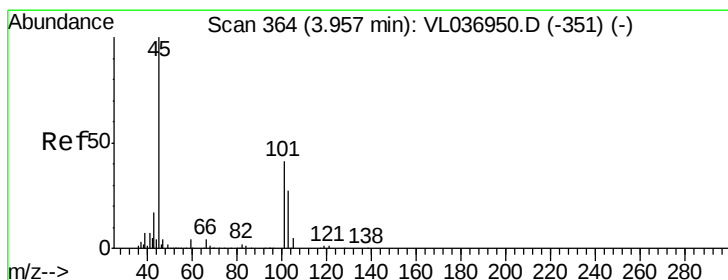
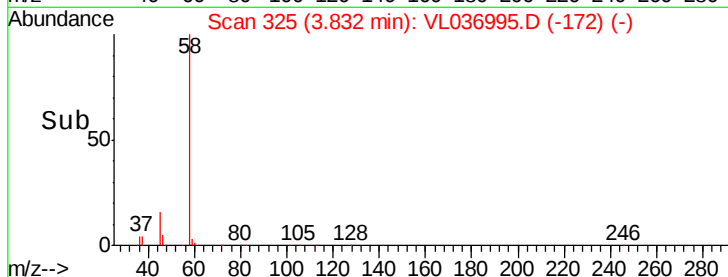
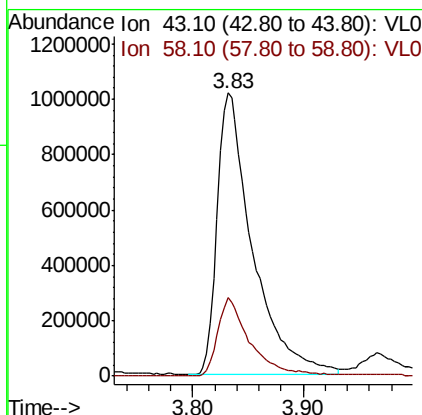
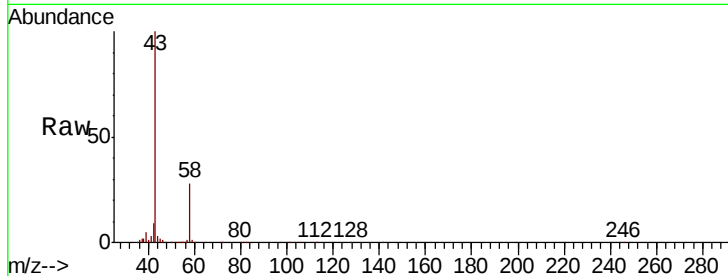
#15
Acetone
Concen: 18.615 ppbv
RT: 3.83 min Scan# 325
Delta R.T. -0.01 min
Lab File: VL036995.D
Acq: 19 May 2021 17:10

Instrument :
MSVOA_L
ClientSampled :
KIA-01

Tot Ion: 43 Resp: 2264327
Ion Ratio Lower Upper
43 100
58 26.0 24.0 36.0

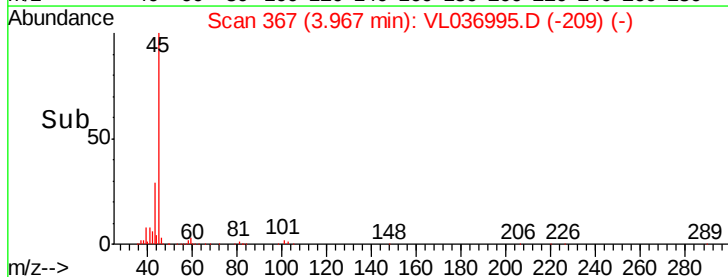
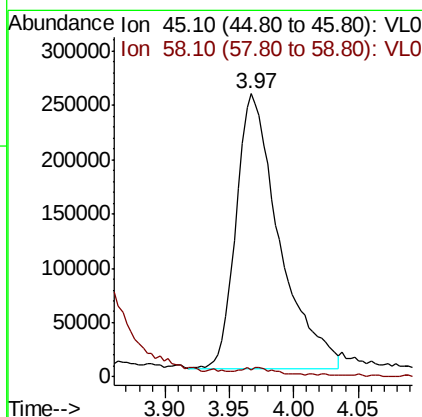
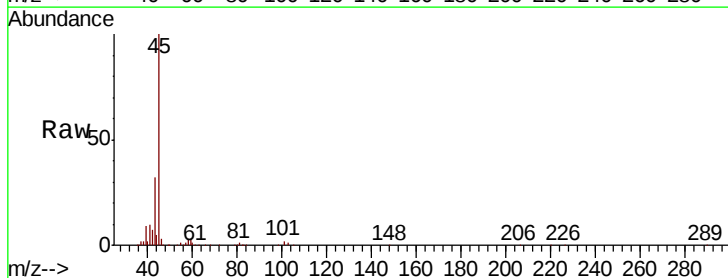
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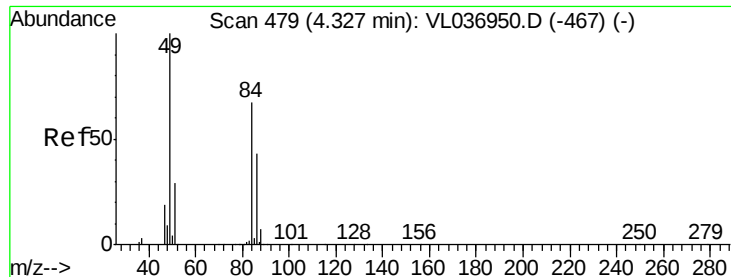
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#19
Isopropyl Alcohol
Concen: 8.976 ppbv
RT: 3.97 min Scan# 367
Delta R.T. 0.01 min
Lab File: VL036995.D
Acq: 19 May 2021 17:10

Tgt Ion: 45 Resp: 586959
Ion Ratio Lower Upper
45 100
58 3.6 37.2 55.8#





#20
Methvlene Chloride
Concen: 66.102 ppbv
RT: 4.33 min Scan# 479
Delta R.T. -0.00 min
Lab File: VL036995.D
Acq: 19 May 2021 17:10

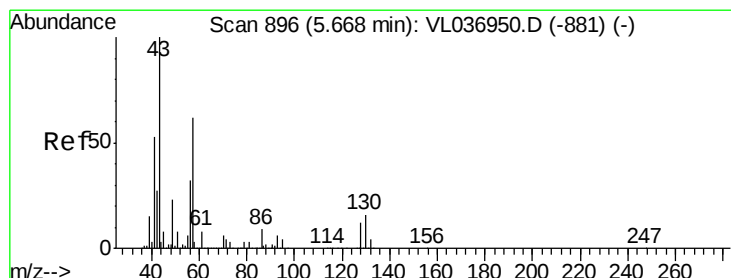
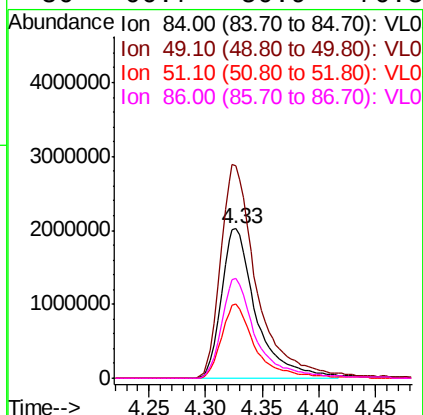
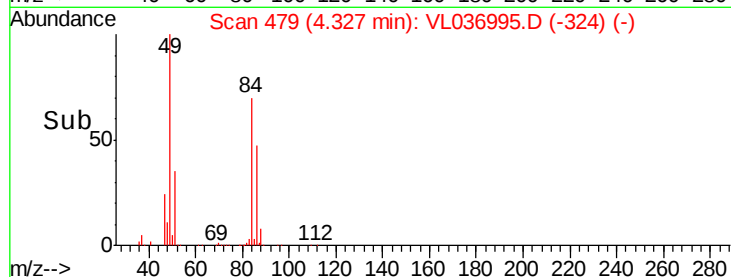
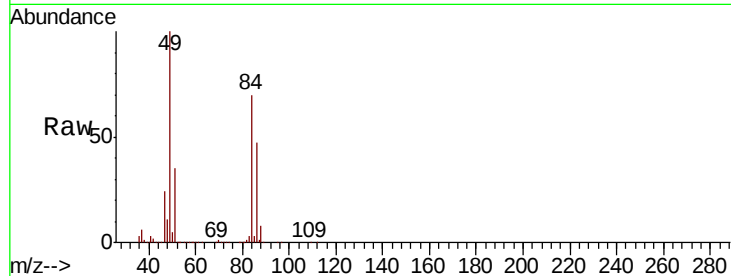
Instrument :
MSVOA_L
ClientSampleId :
KIA-01

Tot Ion: 84 Resp: 4310192

Ion	Ratio	Lower	Upper
84	100		
49	142.4	119.8	179.6
51	49.6	35.1	52.7
86	66.7	50.9	76.3

Manual Integrations
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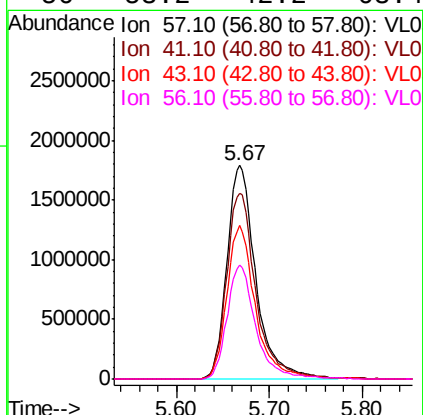
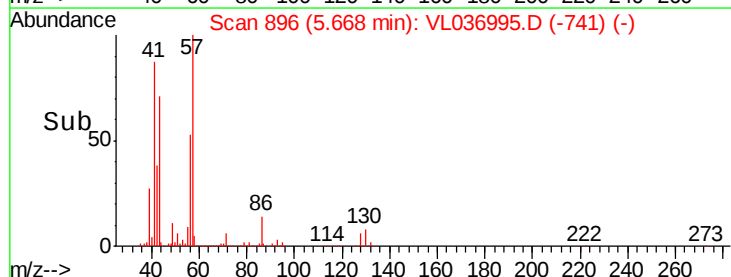
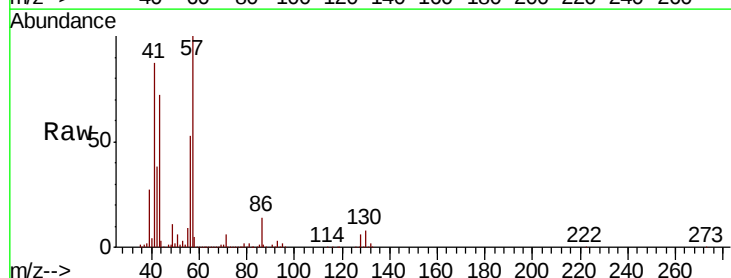
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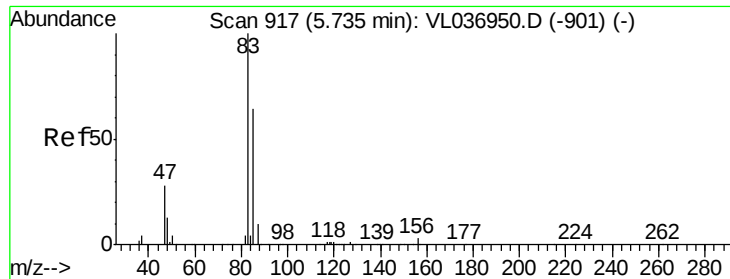


#26
Hexane
Concen: 25.975 ppbv
RT: 5.67 min Scan# 896
Delta R.T. -0.00 min
Lab File: VL036995.D
Acq: 19 May 2021 17:10

Tgt Ion: 57 Resp: 3878706

Ion	Ratio	Lower	Upper
57	100		
41	89.0	70.5	105.7
43	71.4	165.8	248.8#
56	53.2	42.2	63.4





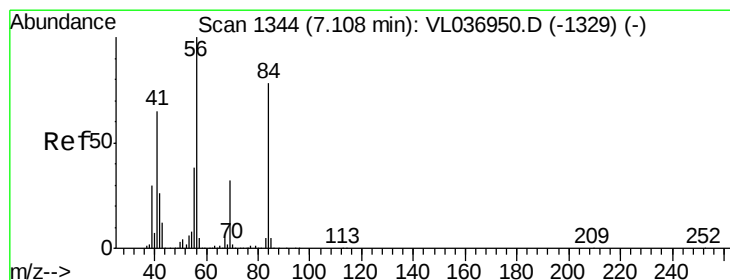
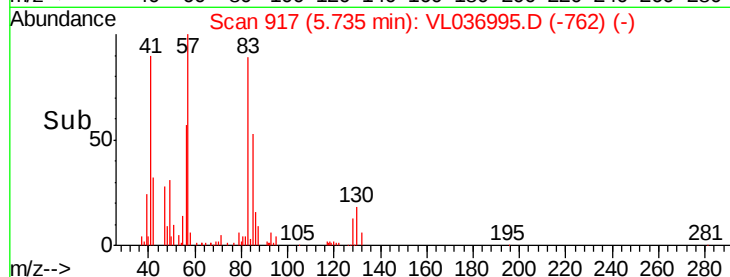
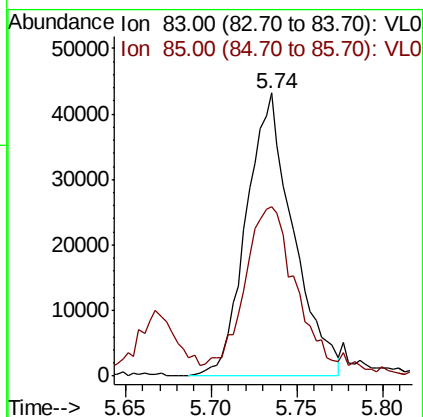
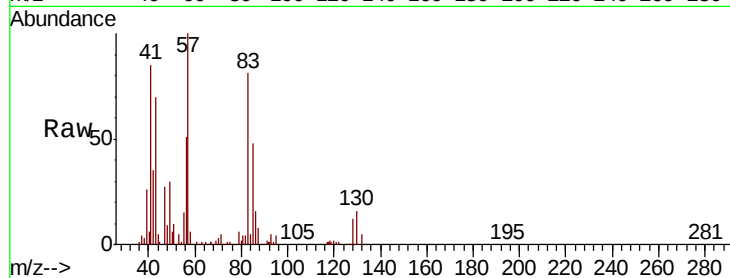
#29
Chloroform
Concen: 0.387 ppbv
RT: 5.74 min Scan# 917
Delta R.T. -0.00 min
Lab File: VL036995.D
Acq: 19 May 2021 17:10

Instrument :
MSVOA_L
ClientSampleId :
KIA-01

Tot Ion	83	Resp	81748
Ion Ratio	Lower	Upper	
83	100		
85	54.9	51.1	76.7

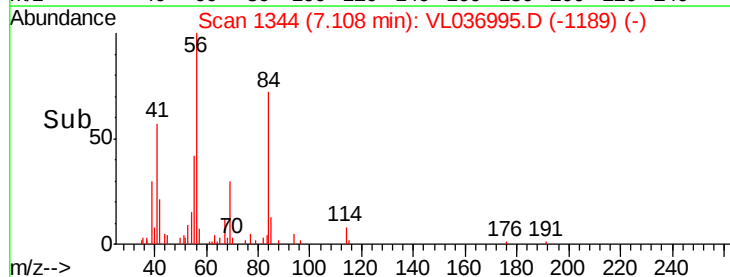
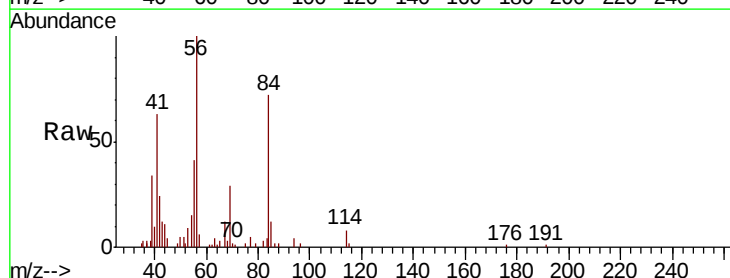
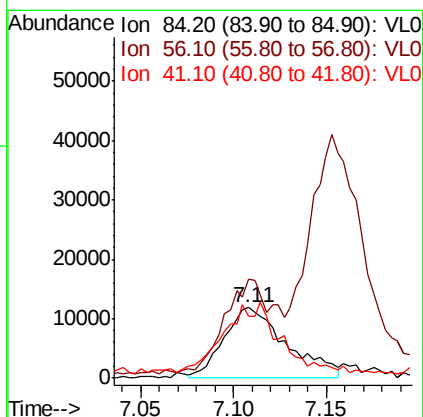
Manual Integrations
APPROVED

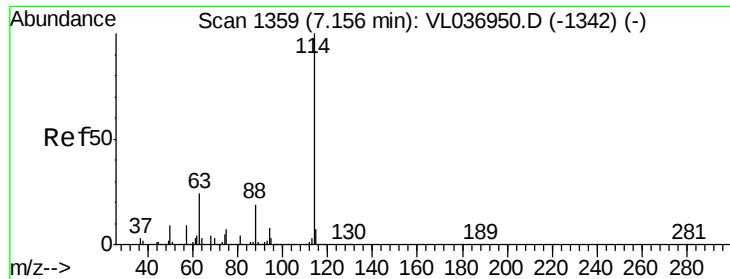
MMDadoda
5/24/2021 3:01:37 PM



#30
Cyclohexane
Concen: 0.220 ppbv
RT: 7.11 min Scan# 1344
Delta R.T. -0.00 min
Lab File: VL036995.D
Acq: 19 May 2021 17:10

Tgt Ion	84	Resp	27949
Ion Ratio	Lower	Upper	
84	100		
56	0.0	107.9	161.9#
41	105.1	65.5	98.3#





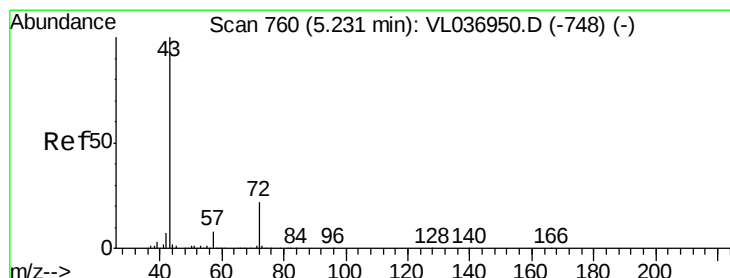
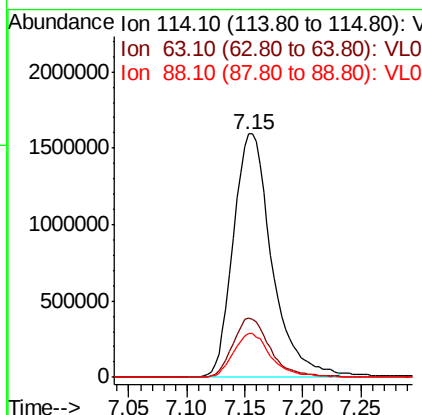
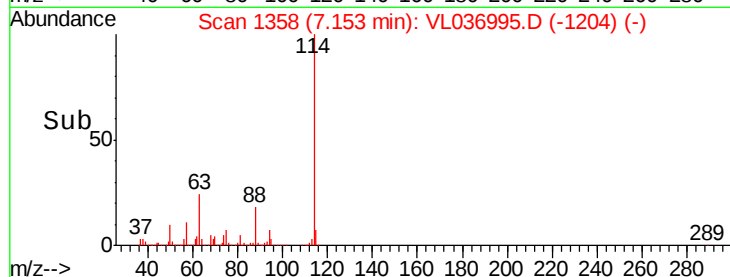
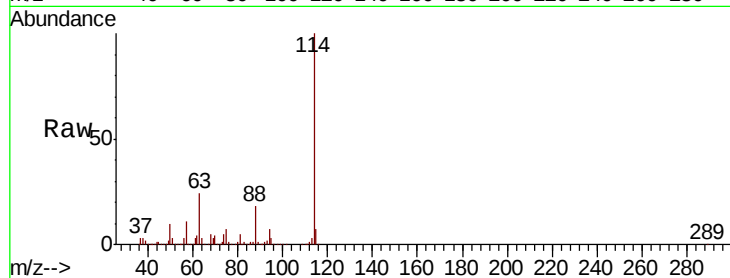
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.15 min Scan# 1358
 Delta R.T. -0.00 min
 Lab File: VL036995.D
 Acq: 19 May 2021 17:10

Instrument :
 MSVOA_L
 ClientSampleId :
 KIA-01

Tot Ion	Ratio	Lower	Upper
114	100		
63	24.1	19.6	29.4
88	18.1	14.6	21.8

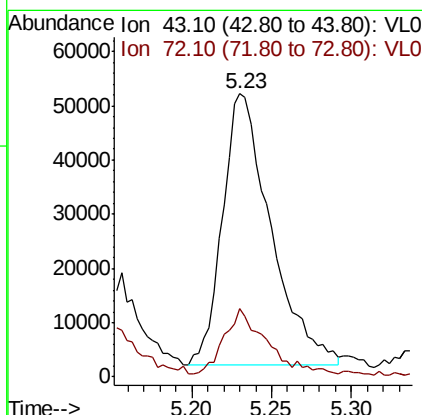
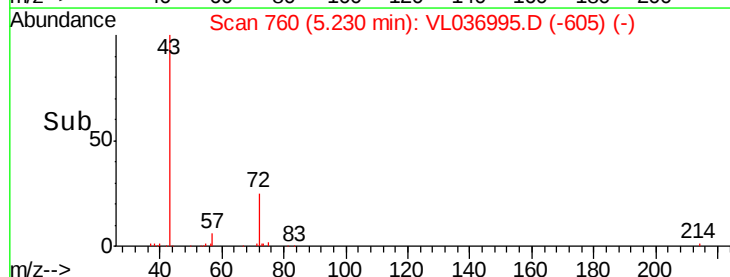
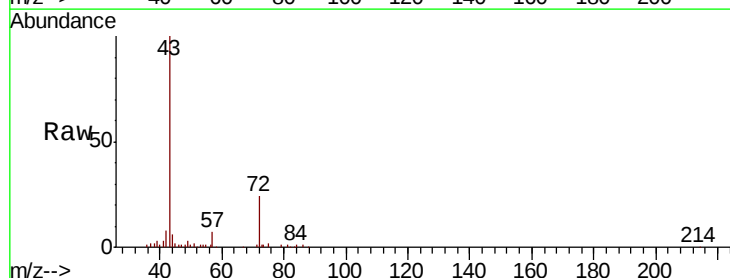
Manual Integrations
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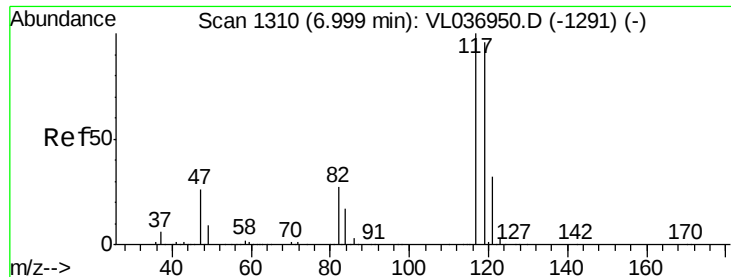
MMDadoda
 5/24/2021 3:01:37 PM



#34
 2-Butanone
 Concen: 0.775 ppbv
 RT: 5.23 min Scan# 760
 Delta R.T. -0.00 min
 Lab File: VL036995.D
 Acq: 19 May 2021 17:10

Tgt Ion	Ratio	Lower	Upper
43	100		
72	24.4	19.0	28.4





#35

Carbon Tetrachloride

Concen: 0.095 ppbv m

RT: 7.00 min Scan# 1309

Delta R.T. -0.00 min

Lab File: VL036995.D

Acq: 19 May 2021 17:10

Instrument :

MSVOA_L

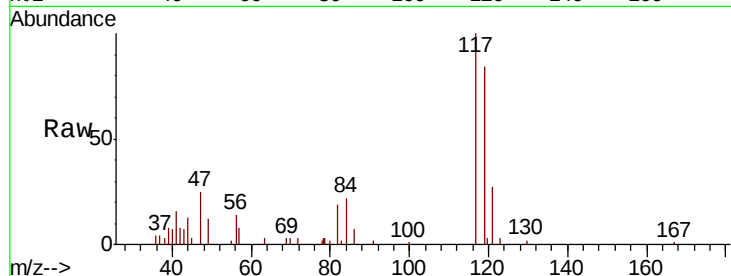
ClientSampleId :

KIA-01

Tot Ion	Ratio	Lower	Upper
117	100		
119	83.6	76.6	114.8
121	27.5	25.8	38.6

Manual Integrations
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MMDadoda
5/24/2021 3:01:37 PM

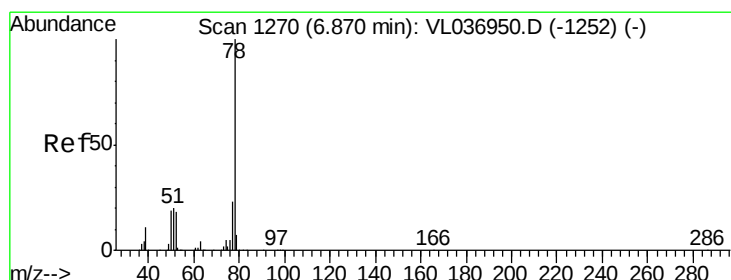
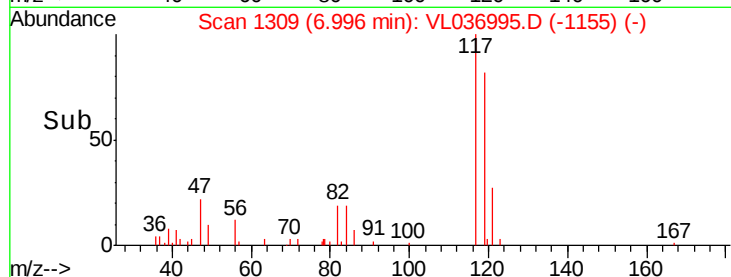
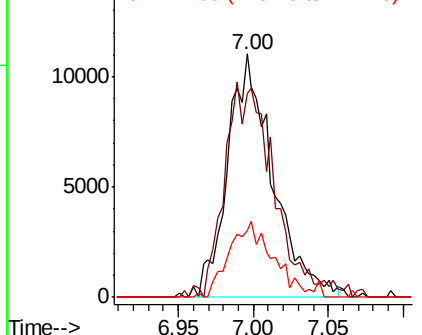


Abundance

Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 0.308 ppbv

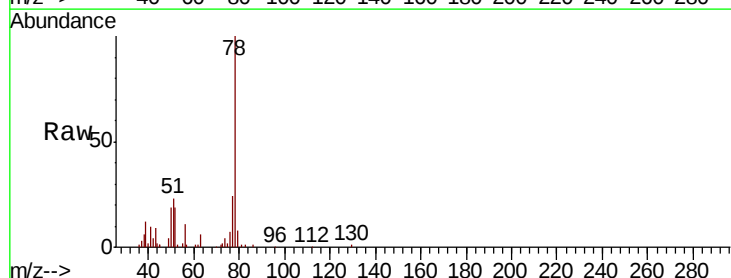
RT: 6.87 min Scan# 1270

Delta R.T. -0.00 min

Lab File: VL036995.D

Acq: 19 May 2021 17:10

Tgt Ion	Ratio	Lower	Upper
78	100		
77	23.2	18.6	28.0
50	19.1	15.0	22.4

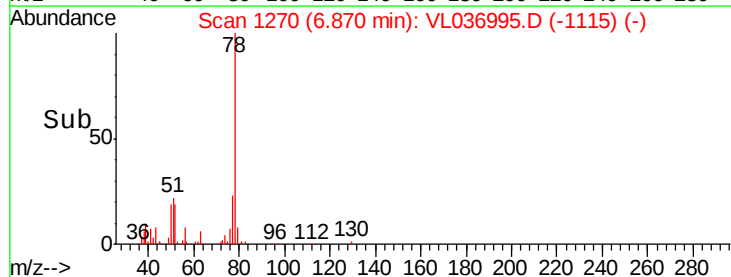
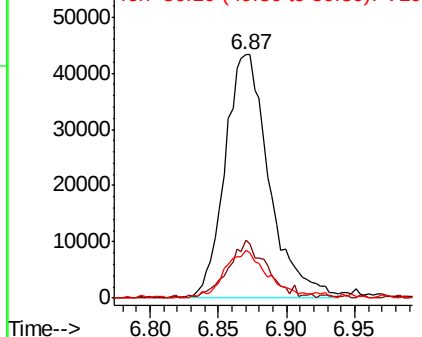


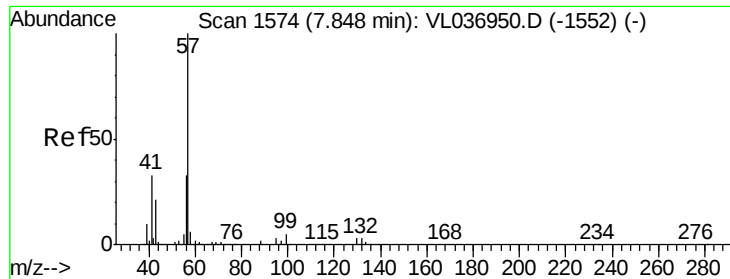
Abundance

Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





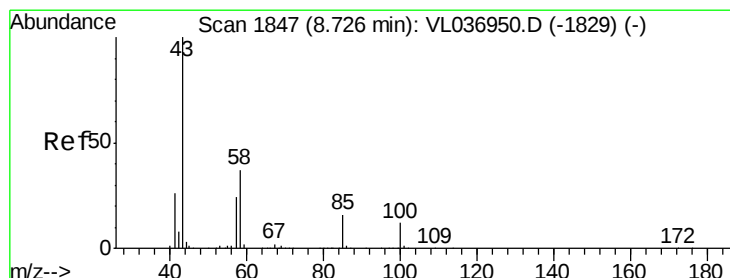
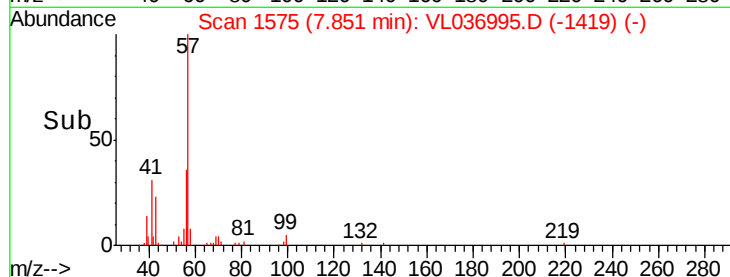
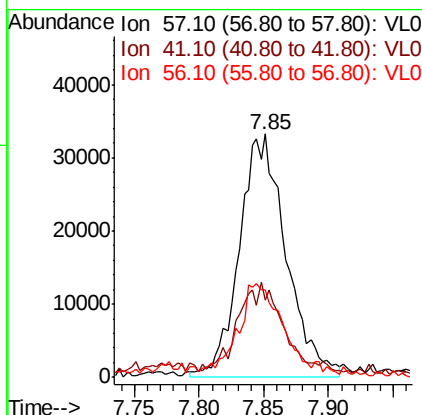
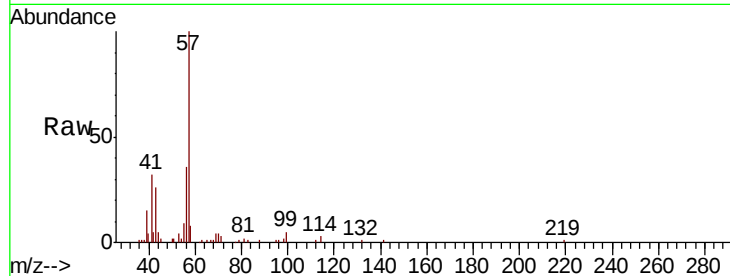
#44
 2,2,4-Trimethylpentane
 Concen: 0.153 ppbv m
 RT: 7.85 min Scan# 1575
 Delta R.T. 0.00 min
 Lab File: VL036995.D
 Acq: 19 May 2021 17:10

Instrument :
 MSVOA_L
 ClientSampleId :
 KIA-01

Tot Ion	Ratio	Lower	Upper
57	100		
41	0.0	27.0	40.4#
56	38.9	25.4	38.2#

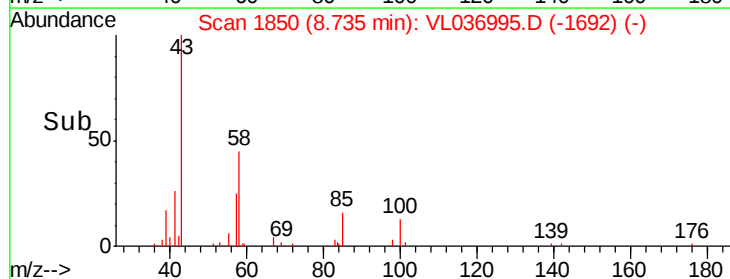
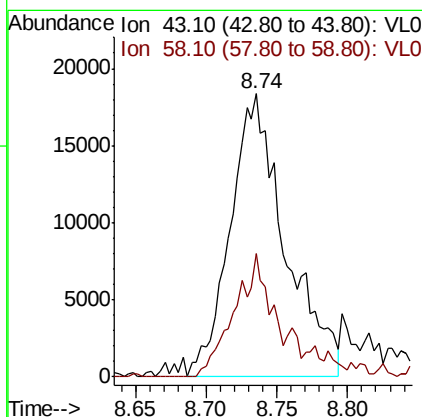
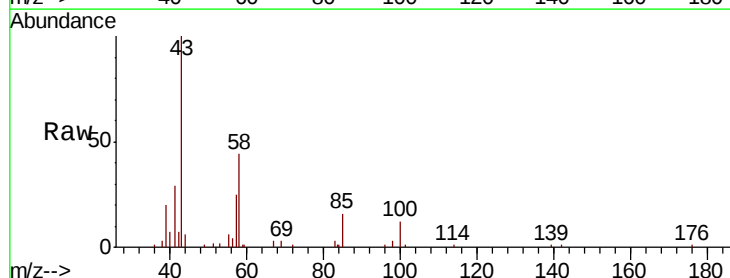
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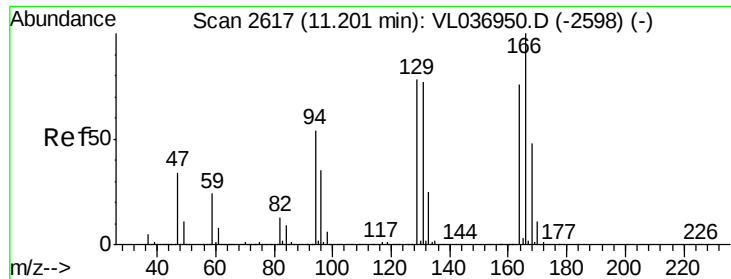
MMDadoda
 5/24/2021 3:01:37 PM



#50
 4-Methyl-2-Pentanone
 Concen: 0.225 ppbv m
 RT: 8.74 min Scan# 1850
 Delta R.T. 0.01 min
 Lab File: VL036995.D
 Acq: 19 May 2021 17:10

Tgt Ion	Ratio	Lower	Upper
43	100		
58	39.0	29.4	44.2





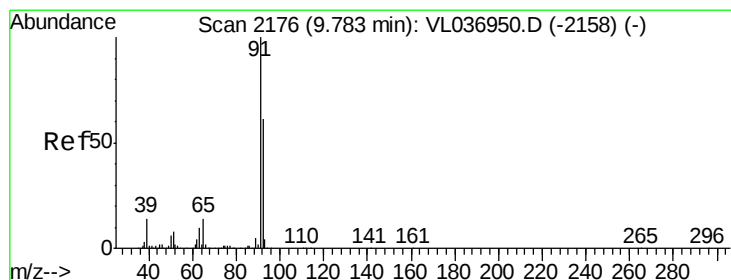
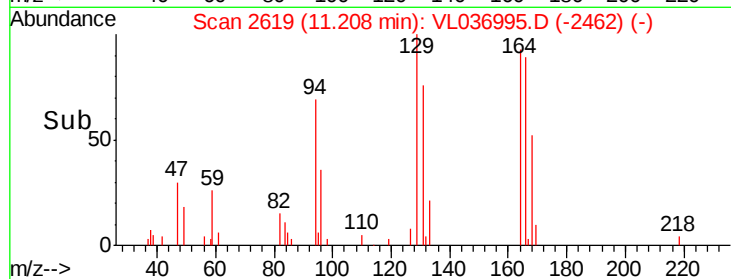
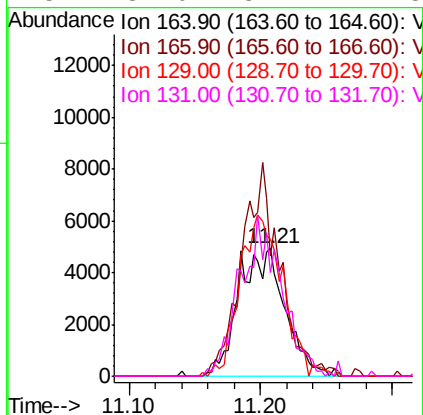
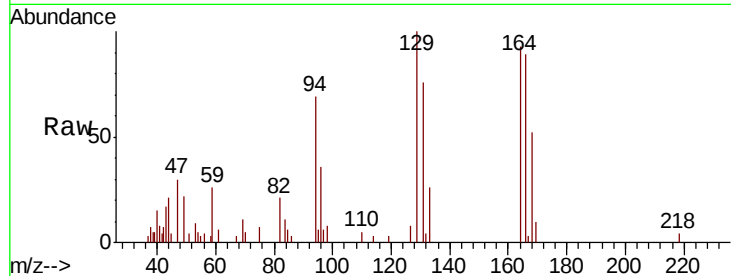
#52
Tetrachloroethene
Concen: 0.097 ppbv m
RT: 11.21 min Scan# 2619
Delta R.T. 0.01 min
Lab File: VL036995.D
Acq: 19 May 2021 17:10

Instrument :
MSVOA_L
ClientSampled :
KIA-01

Tot Ion	Ratio	Lower	Upper
164	100		
166	94.9	105.5	158.3#
129	107.2	81.8	122.8
131	81.0	81.2	121.8#

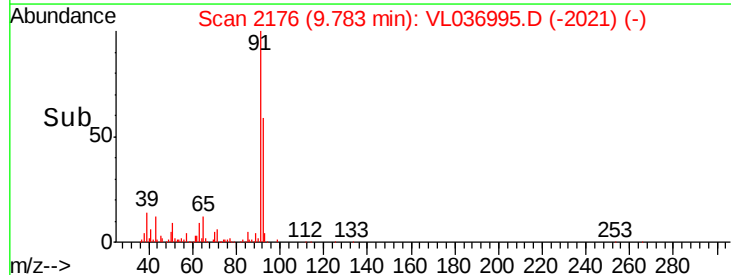
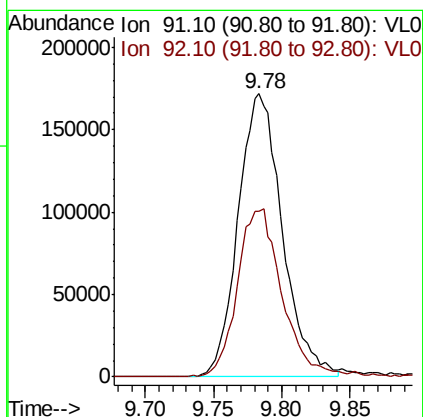
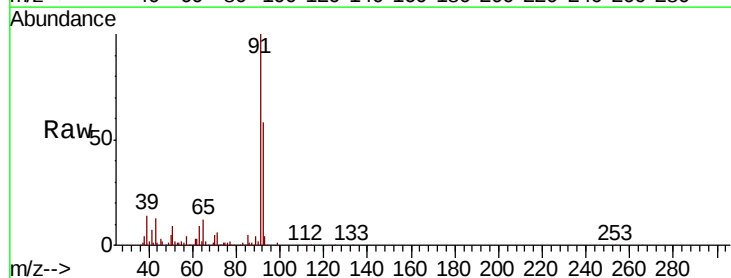
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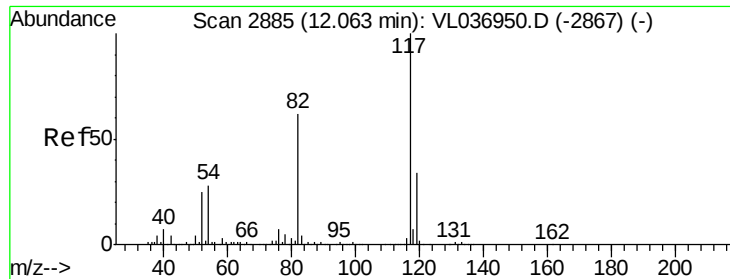
MMDadoda
5/24/2021 3:01:37 PM



#53
Toluene
Concen: 1.027 ppbv
RT: 9.78 min Scan# 2176
Delta R.T. -0.00 min
Lab File: VL036995.D
Acq: 19 May 2021 17:10

Tgt Ion	Ratio	Lower	Upper
91	100		
92	60.4	49.5	74.3





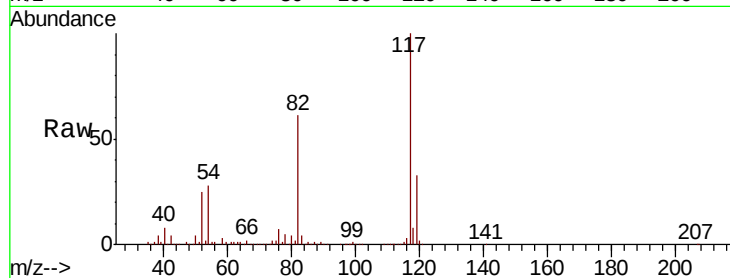
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.06 min Scan# 2885
Delta R.T. -0.00 min
Lab File: VL036995.D
Acq: 19 May 2021 17:10

Instrument :
MSVOA_L
ClientSampleId :
KIA-01

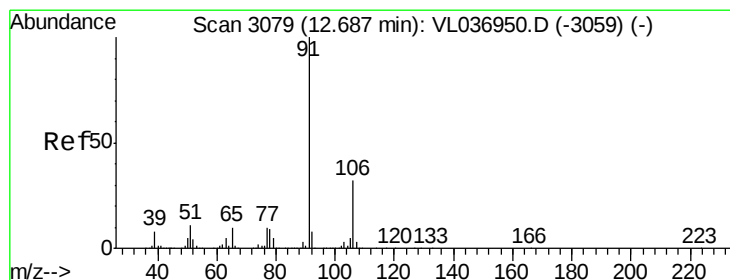
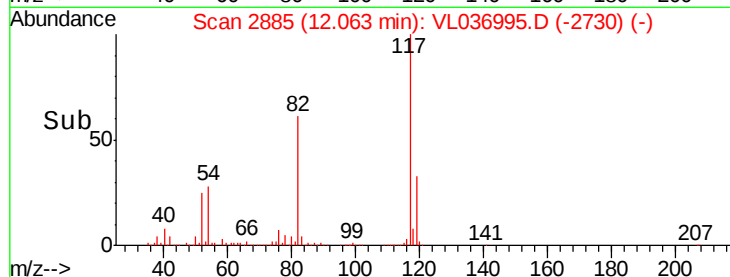
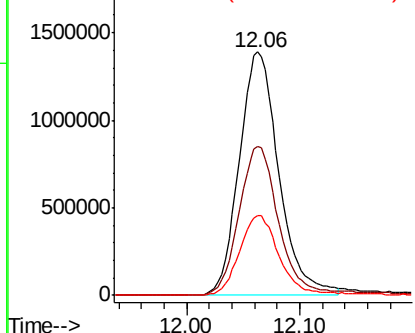
Tot Ion	Ratio	Lower	Upper
117	100		
82	63.6	52.6	79.0
119	33.7	46.6	70.0#

Manual Integrations
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5/24/2021 3:01:37 PM

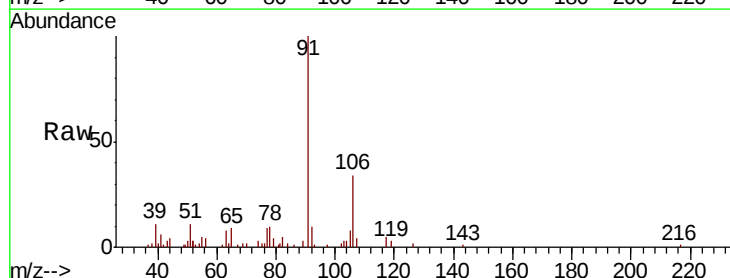


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V

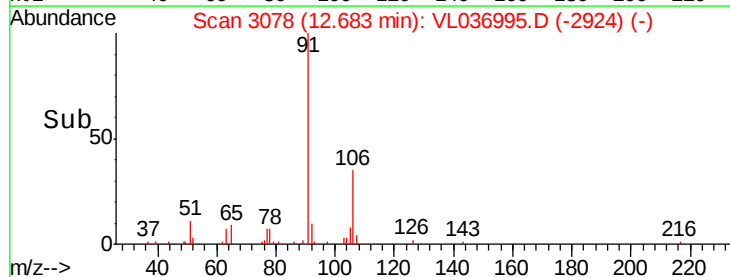
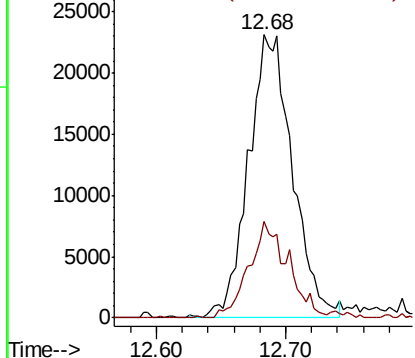


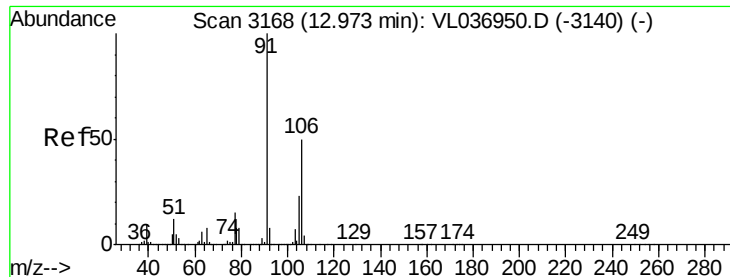
#58
Ethyl Benzene
Concen: 0.114 ppbv m
RT: 12.68 min Scan# 3078
Delta R.T. -0.00 min
Lab File: VL036995.D
Acq: 19 May 2021 17:10

Tgt Ion	Ratio	Lower	Upper
91	100		
106	34.3	25.6	38.4



Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 106.10 (105.80 to 106.80): V





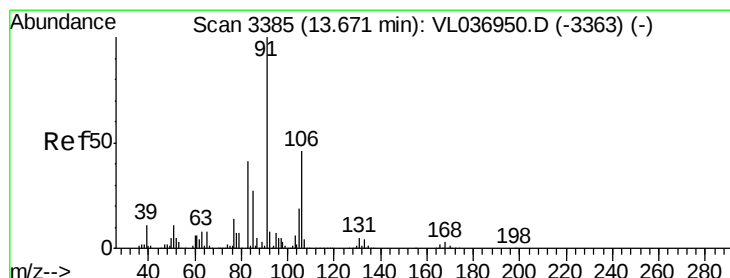
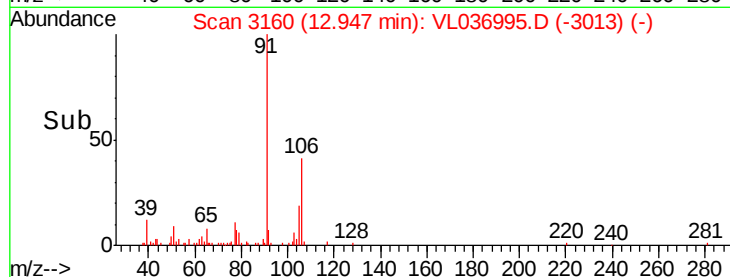
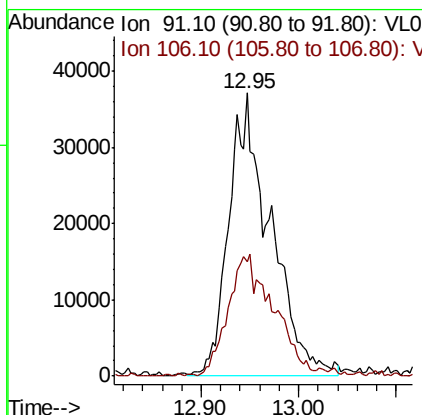
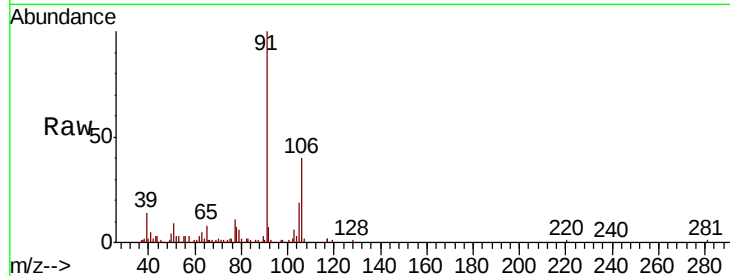
#59
m/p-Xylene
Concen: 0.278 ppbv m
RT: 12.95 min Scan# 3160
Delta R.T. -0.03 min
Lab File: VL036995.D
Acq: 19 May 2021 17:10

Instrument :
MSVOA_L
ClientSampled :
KIA-01

Tot Ion: 91 Resp: 109689
Ion Ratio Lower Upper
91 100
106 0.0 37.4 56.2#

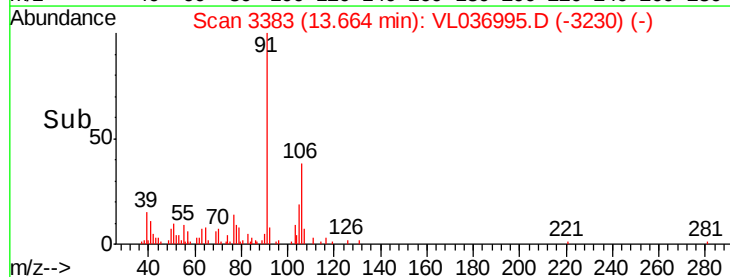
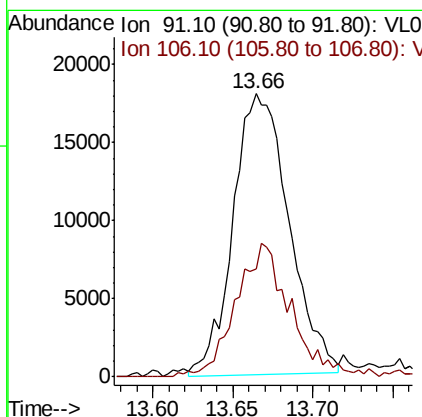
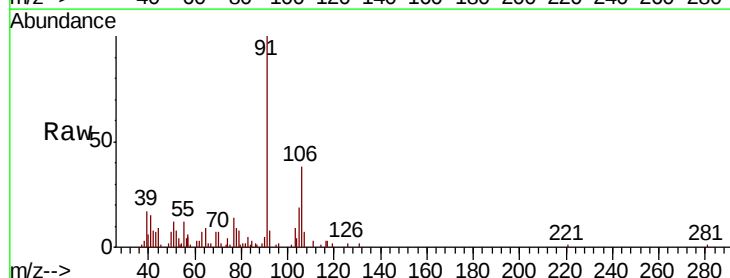
Manual Integrations
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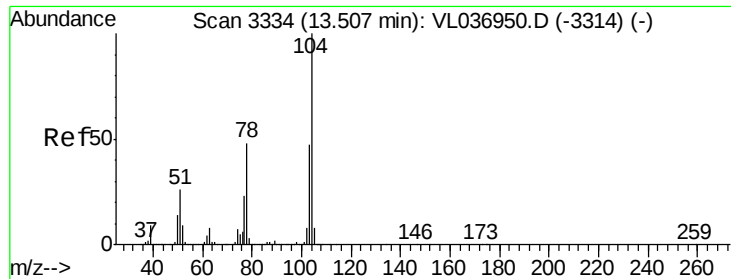
MMDadoda
5/24/2021 3:01:37 PM



#60
o-Xylene
Concen: 0.114 ppbv
RT: 13.66 min Scan# 3383
Delta R.T. -0.01 min
Lab File: VL036995.D
Acq: 19 May 2021 17:10

Tgt Ion: 91 Resp: 43046
Ion Ratio Lower Upper
91 100
106 47.5 23.4 70.3





#61

Stvrene

Concen: 0.106 ppbv m

RT: 13.50 min Scan# 3332

Delta R.T. -0.01 min

Lab File: VL036995.D

Acq: 19 May 2021 17:10

Instrument :

MSVOA_L

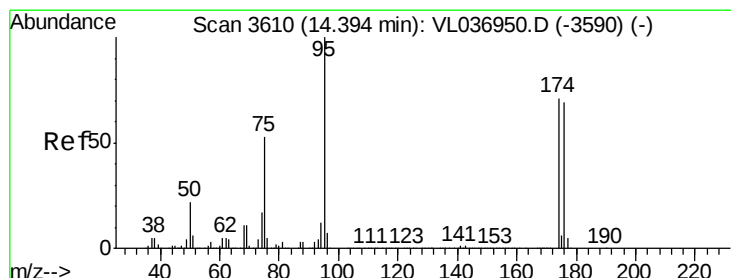
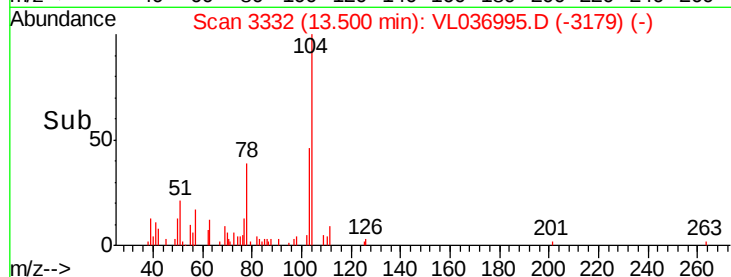
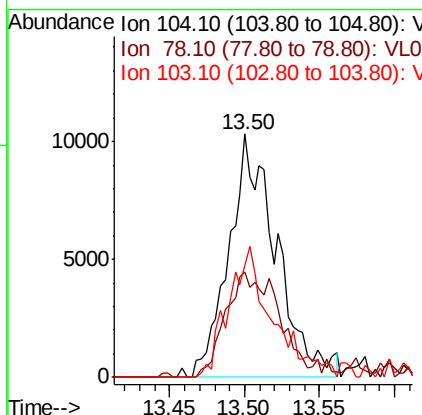
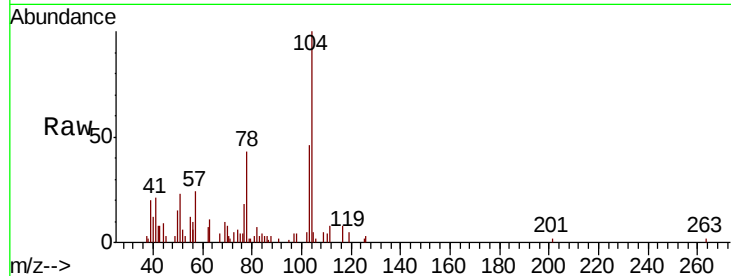
ClientSampled :

KIA-01

Tot Ion:	104	Resp:	22574
Ion Ratio	Lower	Upper	
104	100		
78	0.0	39.0	58.6#
103	0.0	38.0	57.0#

Manual Integrations
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MMDadoda
5/24/2021 3:01:37 PM



#68

1-Bromo-4-Fluorobenzene

Concen: 9.931 ppbv

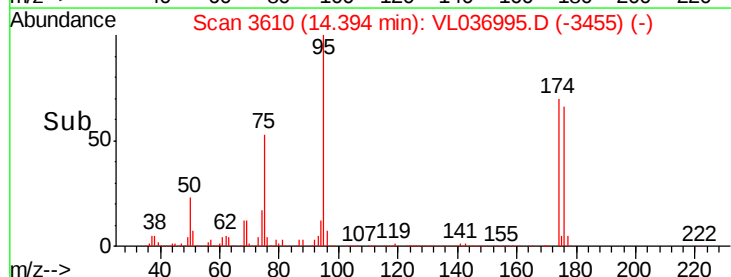
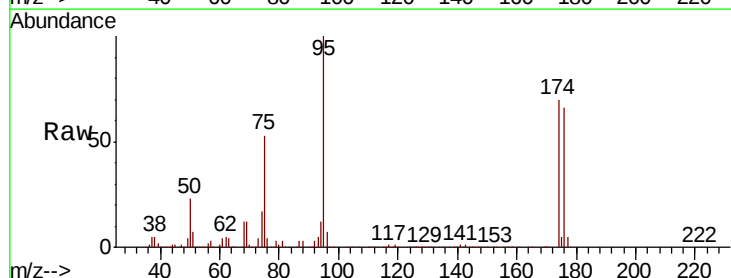
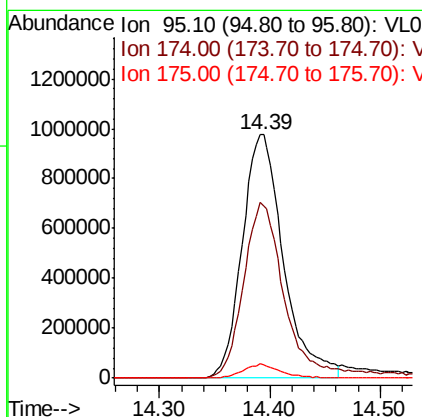
RT: 14.39 min Scan# 3610

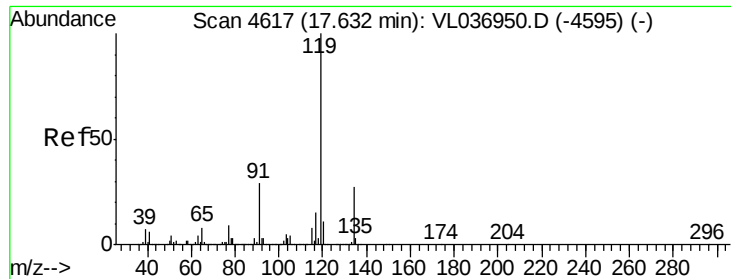
Delta R.T. -0.00 min

Lab File: VL036995.D

Acq: 19 May 2021 17:10

Tgt Ion:	95	Resp:	2525559
Ion Ratio	Lower	Upper	
95	100		
174	75.5	58.4	87.6
175	5.3	4.4	6.6





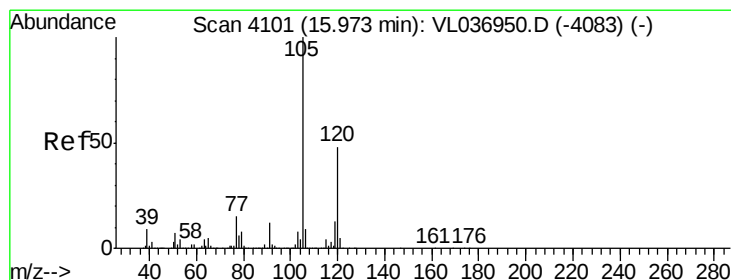
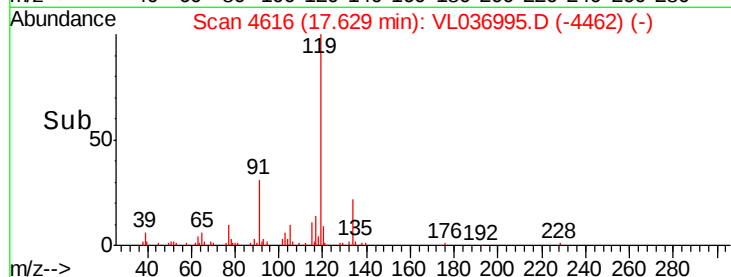
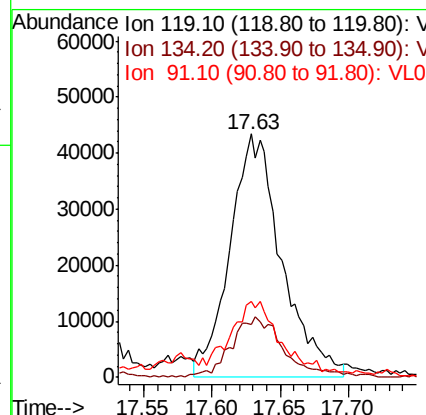
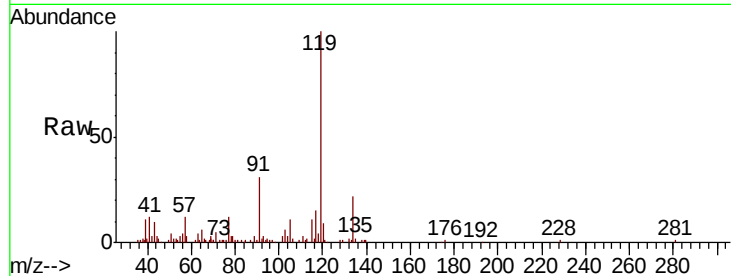
#69
 p-Isopropyltoluene
 Concen: 0.200 ppbv m
 RT: 17.63 min Scan# 4616
 Delta R.T. -0.00 min
 Lab File: VL036995.D
 Acq: 19 May 2021 17:10

Instrument :
 MSVOA_L
 ClientSampled :
 KIA-01

Tot Ion	Ratio	Lower	Upper
119	100		
134	25.6	21.2	31.8
91	0.0	22.2	33.4

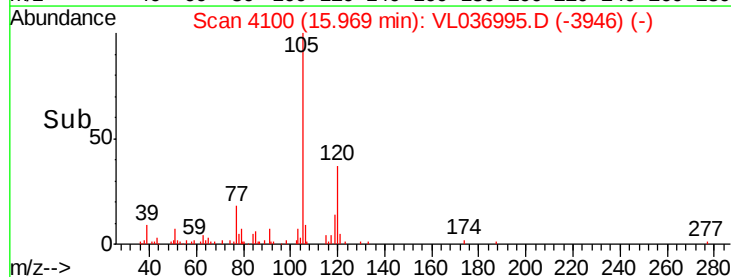
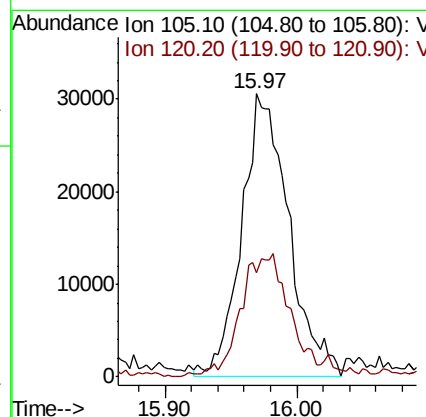
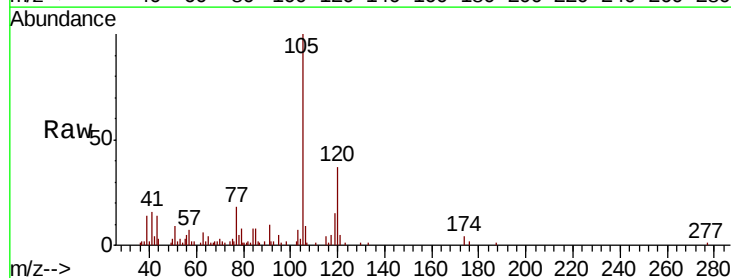
Manual Integrations
 APPROVED

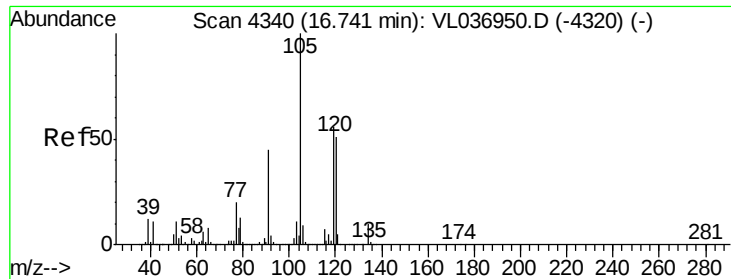
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#73
 1,3,5-Trimethylbenzene
 Concen: 0.181 ppbv m
 RT: 15.97 min Scan# 4100
 Delta R.T. -0.00 min
 Lab File: VL036995.D
 Acq: 19 May 2021 17:10

Tgt Ion	Ratio	Lower	Upper
105	100		
120	36.9	38.6	58.0





#74
 1,2,4-Trimethylbenzene
 Concen: 0.348 ppbv m
 RT: 16.74 min Scan# 4340
 Delta R.T. -0.00 min
 Lab File: VL036995.D
 Acq: 19 May 2021 17:10

Instrument :
 MSVOA_L
 ClientSampleId :
 KIA-01

Tot Ion	Ratio	Resp Lower	Upper
105	100		
120	42.7	40.6	61.0
91	13.7	37.4	56.0#
77	10.5	16.2	24.4#

Manual Integrations
 APPROVED

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