

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL020916\
 Data File : VL026849.D
 Acq On : 10 Feb 2016 10:54
 Operator : SY/AP
 Sample : H1385-04
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 KBD-T402-EFF-AIR

Manual Integrations
 APPROVED

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 2/11/2016 1:25:06 PM

Quant Time: Feb 11 02:52:50 2016
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL020916AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Feb 10 03:14:04 2016
 QLast Update : Wed Feb 10 03:14:04 2016
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	6.69	49	1417680	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	8.36	114	4232294	10.00	ppbv	-0.02
55) Chlorobenzene-d5	13.79	117	3094010	10.00	ppbv	-0.01

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	16.33	95	2536495	11.42	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	114.20%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.67	85	121093	0.40	ppbv	96
3) Chlorodifluoromethane	3.59	51	657340	2.86	ppbv	98
4) Chloromethane	3.78	50	49449	0.54	ppbv	100
9) Propene	3.64	41	333734m	5.37	ppbv	
11) Trichlorofluoromethane	4.73	101	98144	0.27	ppbv	91
13) Ethanol	4.35	45	120112	11.24	ppbv	98
15) Acetone	4.62	43	3711974	19.06	ppbv	98
17) tert-Butyl alcohol	5.15	59	5053420	39.30	ppbv	99
20) Methylene Chloride	5.18	84	907679	8.99	ppbv	93
26) Hexane	6.70	57	703148	4.27	ppbv #	51
27) Carbon Disulfide	5.42	76	605912	2.14	ppbv	98
28) Methyl tert-Butyl Ether	5.98	73	8781263	34.12	ppbv	96
29) Chloroform	6.78	83	42983	0.17	ppbv	98
34) 2-Butanone	6.23	43	517059	2.49	ppbv	93
35) Carbon Tetrachloride	8.20	117	22012	0.07	ppbv	90
36) Benzene	8.06	78	107950	0.32	ppbv #	95
50) 4-Methyl-2-Pentanone	10.14	43	33351	0.14	ppbv	96
52) Tetrachloroethene	12.83	164	74523	0.56	ppbv	94
53) Toluene	11.27	91	738528	1.95	ppbv	99
61) Styrene	15.35	104	135380	1.15	ppbv	98
62) Isopropylbenzene	16.59	105	154109	0.37	ppbv	97
64) n-propylbenzene	17.56	120	54400	0.51	ppbv	80
65) tert-Butylbenzene	18.85	119	43001	0.11	ppbv #	95
67) sec-Butylbenzene	19.45	105	255943	0.51	ppbv	99
70) n-Butylbenzene	20.79	91	65659	0.17	ppbv #	73
74) 1,2,4-Trimethylbenzene	18.87	105	44684	0.13	ppbv #	84

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

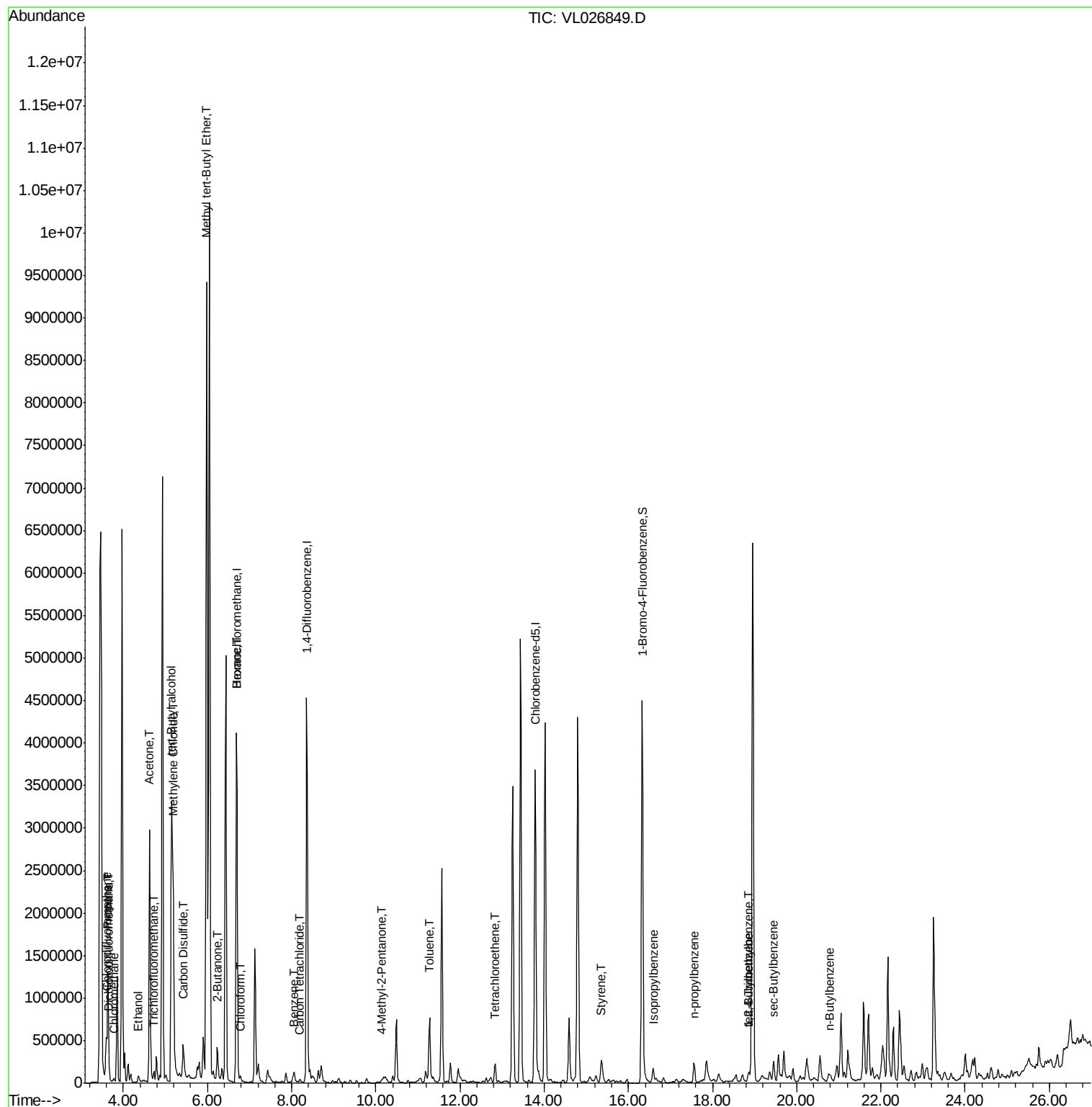
Data Path : W:\HPCHEM1\MSVOA L\DATA\VL020916\
Data File : VL026849.D
Acq On : 10 Feb 2016 10:54
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ALS Vial : 1 Sample Multiplier: 1

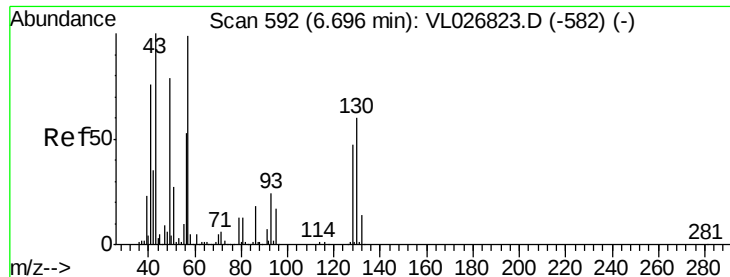
Instrument :
MSVOA_L
ClientSampleId :
KBD-T402-EFF-AIR

Manual Integrations
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Quant Time: Feb 11 02:52:50 2016
Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL020916AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Feb
QLast Update : Wed Feb 10 03:14:04 2016
Response via : Initial Calibration





#1

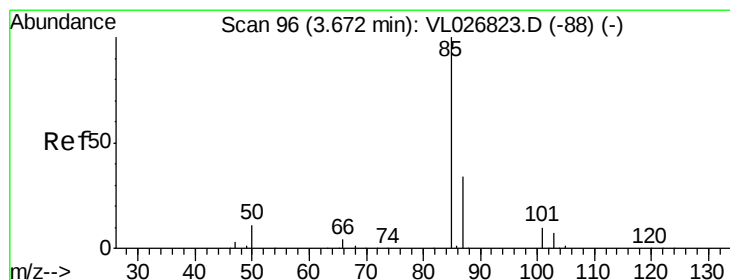
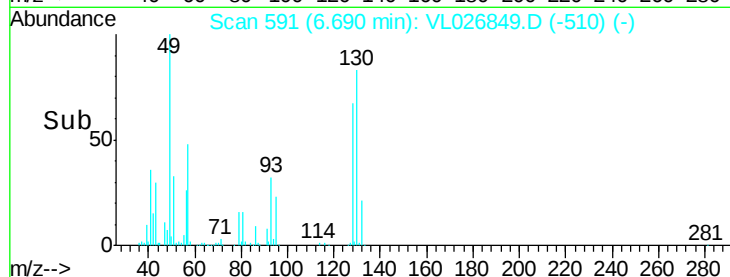
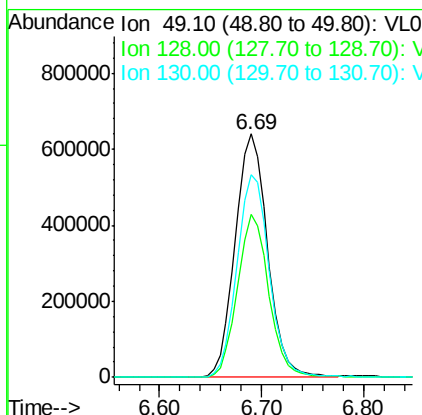
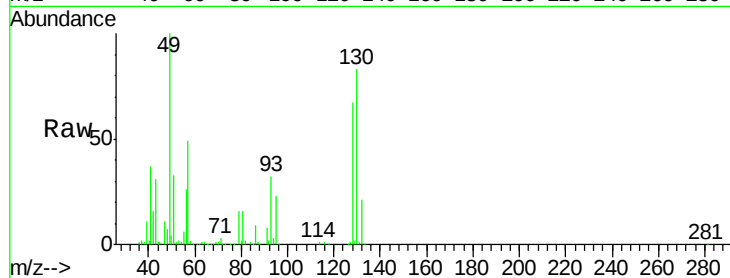
Bromochloromethane
 Concen: 10.00 ppbv
 RT: 6.69 min Scan# 591
 Delta R.T. -0.01 min
 Lab File: VL026849.D
 Acq: 10 Feb 2016 10:54

Instrument :
 MSVOA_L
 ClientSampleId :
 KBD-T402-EFF-AIR

Tot Ion: 49 Resp: 1417680
 Ion Ratio Lower Upper
 49 100
 128 65.5 29.7 89.1
 130 83.9 38.3 114.8

Manual Integrations
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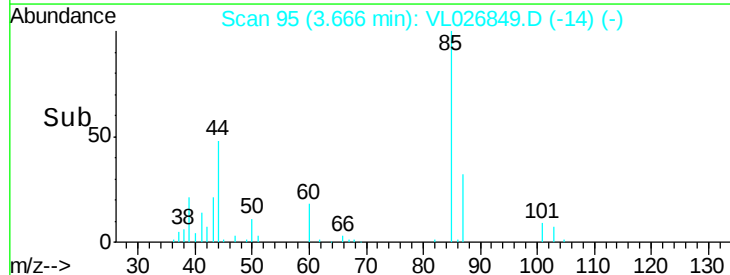
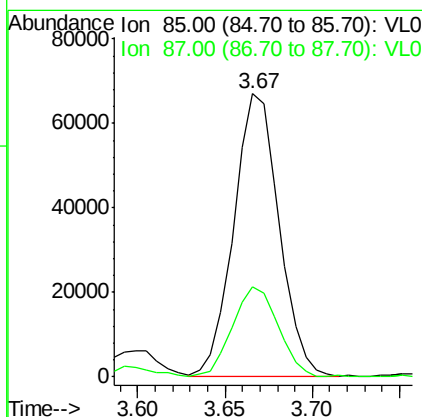
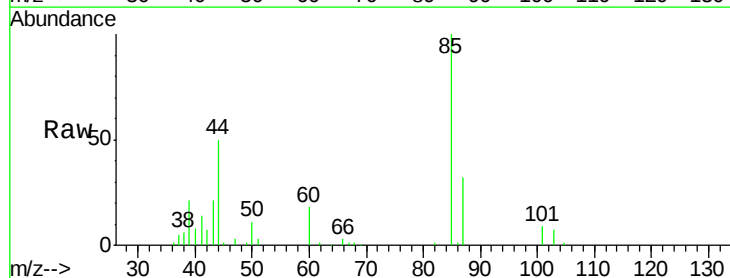
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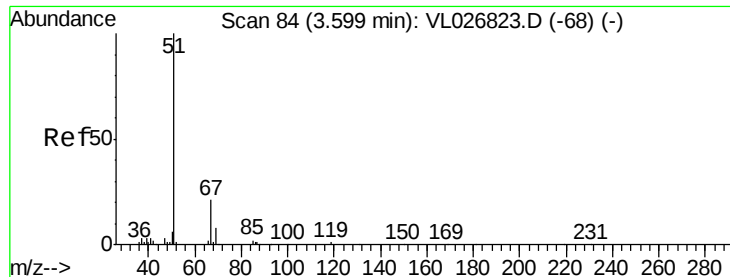


#2

Dichlorodifluoromethane
 Concen: 0.40 ppbv
 RT: 3.67 min Scan# 95
 Delta R.T. -0.01 min
 Lab File: VL026849.D
 Acq: 10 Feb 2016 10:54

Tgt Ion: 85 Resp: 121093
 Ion Ratio Lower Upper
 85 100
 87 31.9 27.3 40.9





#3

Chlorodifluoromethane

Concen: 2.86 ppbv

RT: 3.59 min Scan# 83

Delta R.T. -0.01 min

Lab File: VL026849.D

Acq: 10 Feb 2016 10:54

Instrument :

MSVOA_L

ClientSampleId :

KBD-T402-EFF-AIR

Tot Ion: 51 Resp: 657340

Ion Ratio Lower Upper

51 100

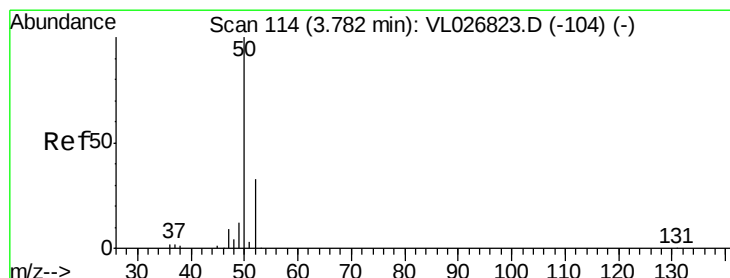
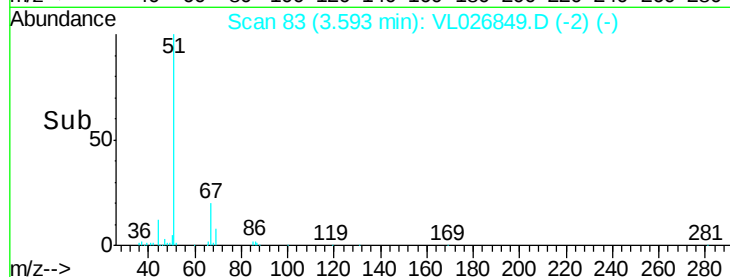
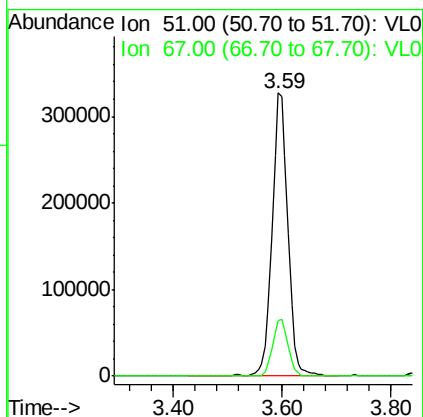
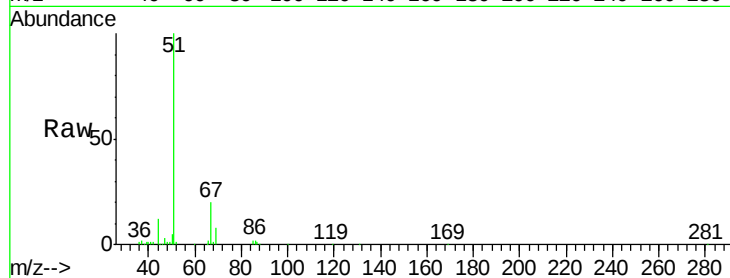
67 19.6 16.4 24.6

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#4

Chloromethane

Concen: 0.54 ppbv

RT: 3.78 min Scan# 113

Delta R.T. -0.01 min

Lab File: VL026849.D

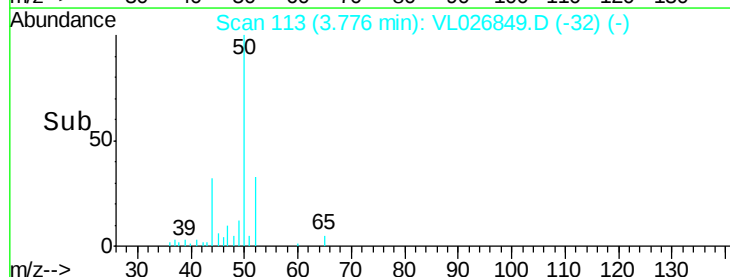
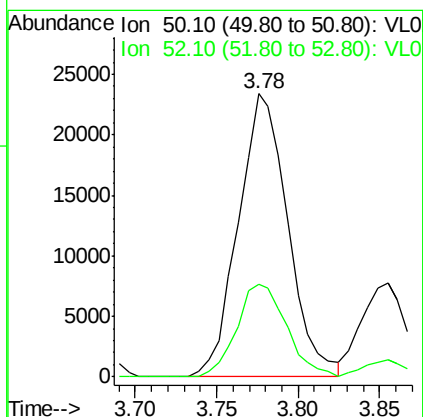
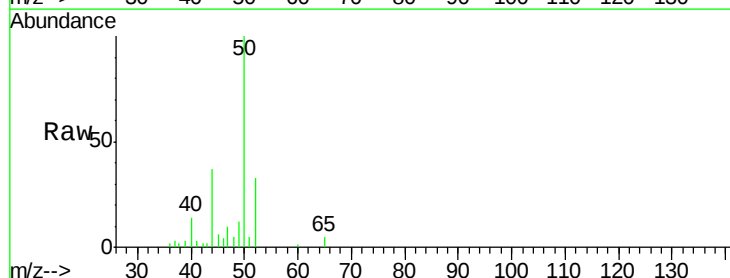
Acq: 10 Feb 2016 10:54

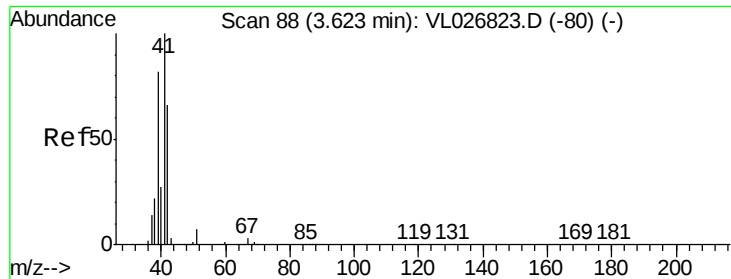
Tgt Ion: 50 Resp: 49449

Ion Ratio Lower Upper

50 100

52 32.9 26.3 39.5





#9

Propene

Concen: 5.37 ppbv m

RT: 3.64 min Scan# 90

Delta R.T. 0.01 min

Lab File: VL026849.D

Acq: 10 Feb 2016 10:54

Instrument :

MSVOA_L

ClientSampleId :

KBD-T402-EFF-AIR

Tot Ion: 41 Resp: 333734

Ion Ratio Lower Upper

41 100

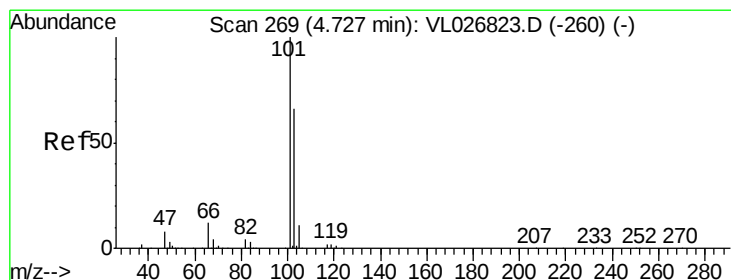
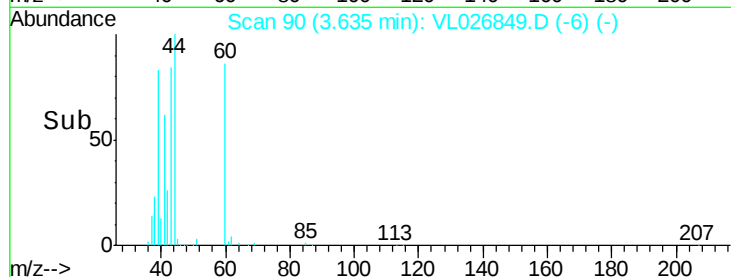
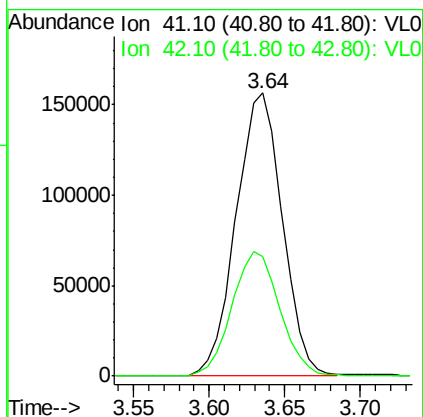
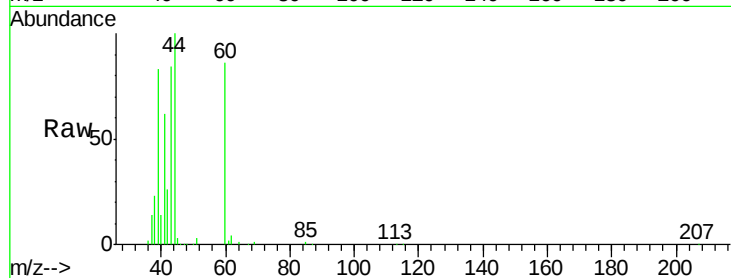
42 93.5 52.8 79.2#

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#11

Trichlorofluoromethane

Concen: 0.27 ppbv

RT: 4.73 min Scan# 269

Delta R.T. -0.00 min

Lab File: VL026849.D

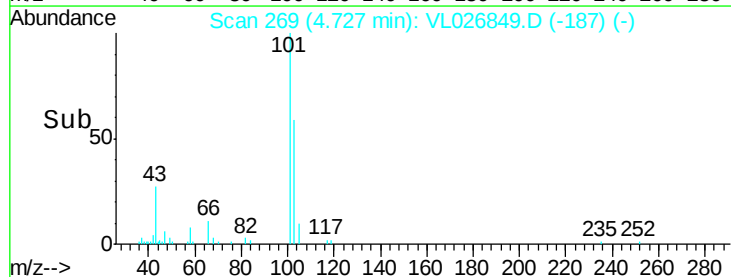
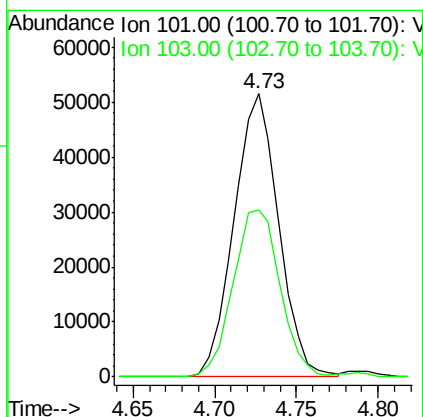
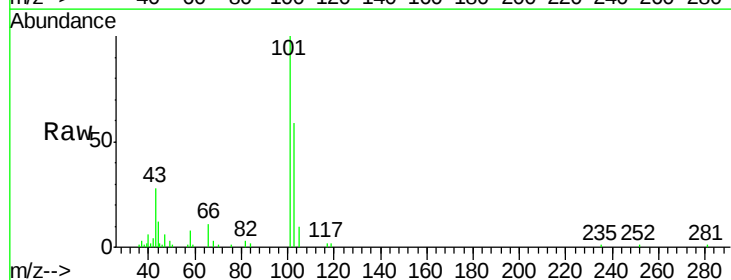
Acq: 10 Feb 2016 10:54

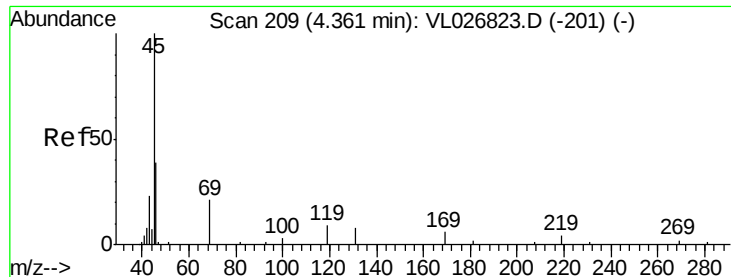
Tgt Ion: 101 Resp: 98144

Ion Ratio Lower Upper

101 100

103 58.8 52.7 79.1





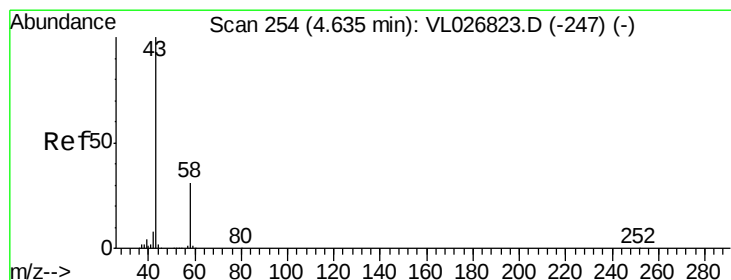
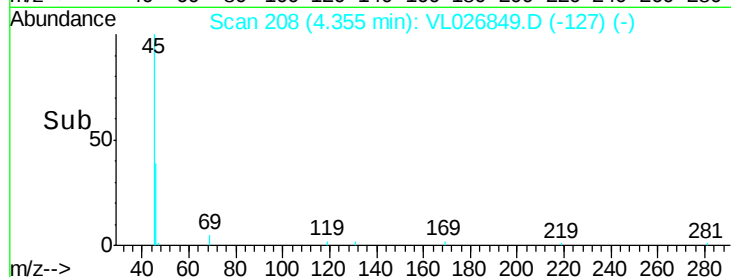
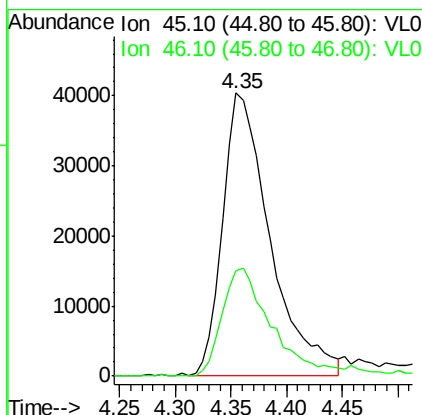
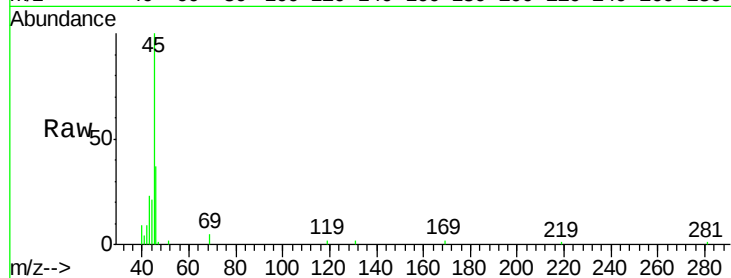
#13
Ethanol
Concen: 11.24 ppbv
RT: 4.35 min Scan# 208
Delta R.T. -0.01 min
Lab File: VL026849.D
Acq: 10 Feb 2016 10:54

Instrument :
MSVOA_L
ClientSampleId :
KBD-T402-EFF-AIR

Tot Ion	45	Resp	120112
Ion Ratio	Lower	Upper	
45	100		
46	41.0	15.8	63.4

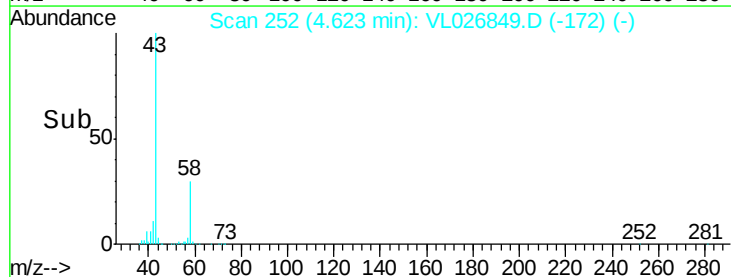
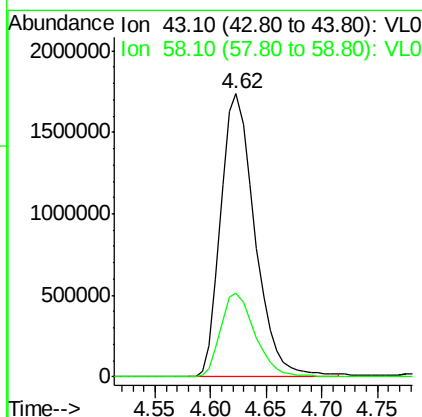
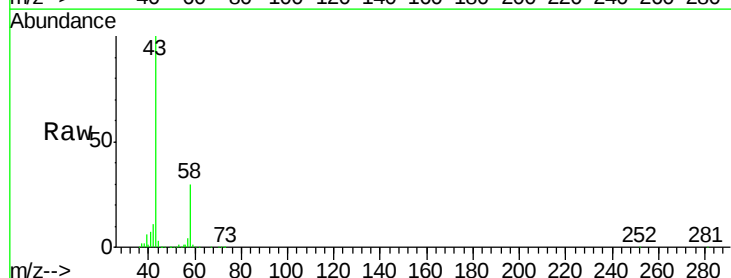
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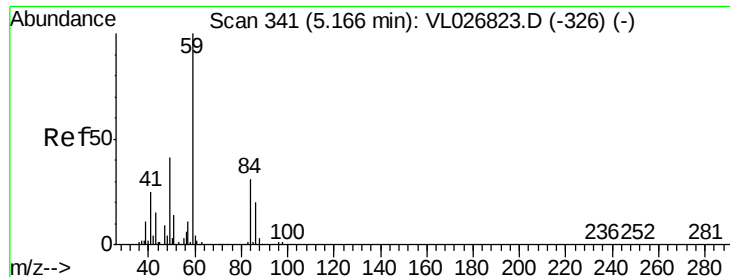
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#15
Acetone
Concen: 19.06 ppbv
RT: 4.62 min Scan# 252
Delta R.T. -0.01 min
Lab File: VL026849.D
Acq: 10 Feb 2016 10:54

Tgt Ion	43	Resp	3711974
Ion Ratio	Lower	Upper	
43	100		
58	30.5	25.2	37.8





#17

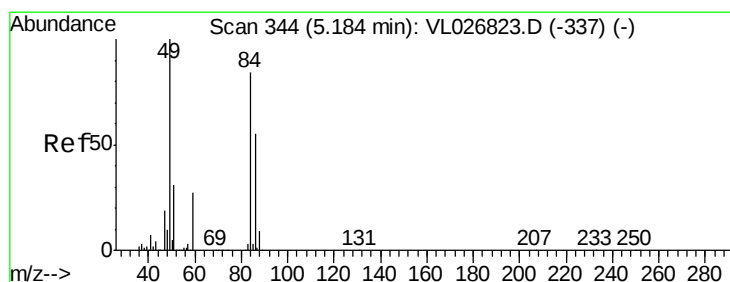
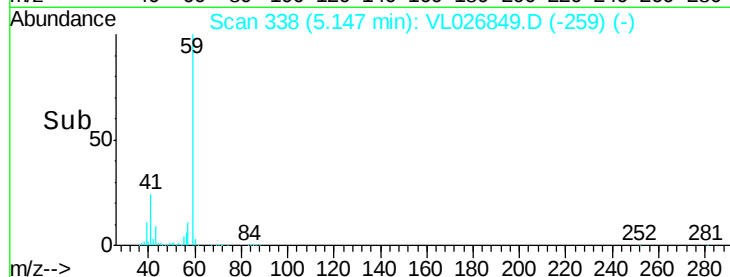
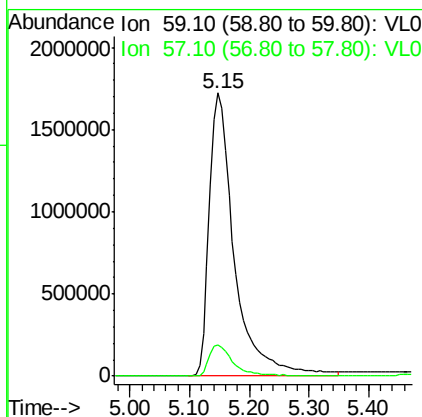
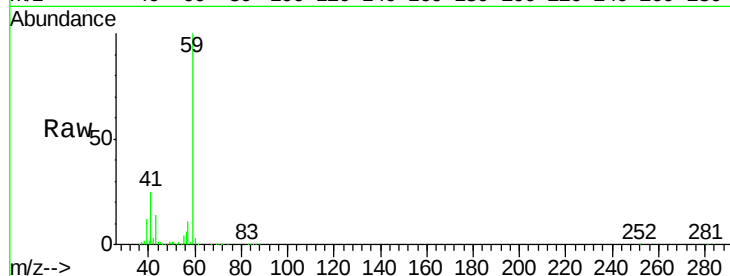
tert-Butyl alcohol
 Concen: 39.30 ppbv
 RT: 5.15 min Scan# 338
 Delta R.T. -0.02 min
 Lab File: VL026849.D
 Acq: 10 Feb 2016 10:54

Instrument :
 MSVOA_L
 ClientSampleId :
 KBD-T402-EFF-AIR

Tot Ion: 59 Resp: 5053420
 Ion Ratio Lower Upper
 59 100
 57 11.1 8.5 12.7

Manual Integrations
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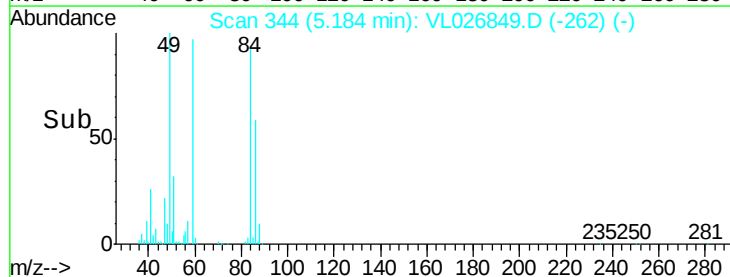
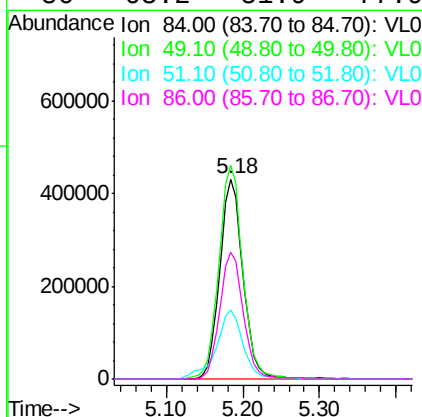
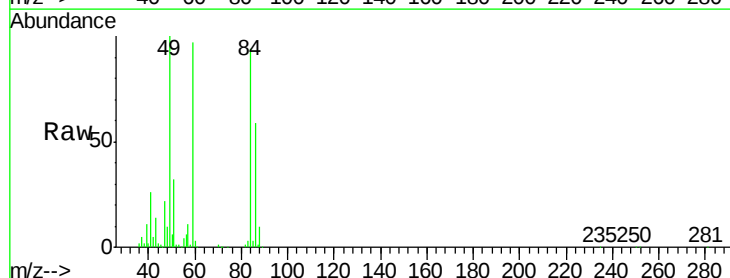
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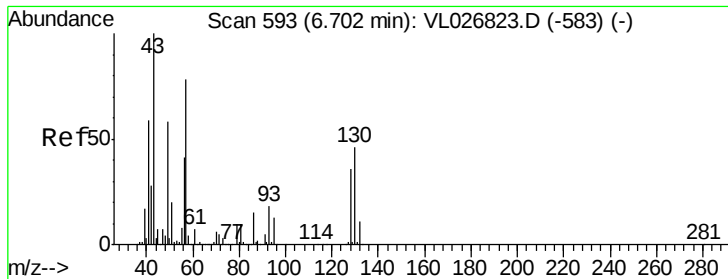


#20

Methylene Chloride
 Concen: 8.99 ppbv
 RT: 5.18 min Scan# 344
 Delta R.T. -0.00 min
 Lab File: VL026849.D
 Acq: 10 Feb 2016 10:54

Tgt Ion: 84 Resp: 907679
 Ion Ratio Lower Upper
 84 100
 49 106.4 94.9 142.3
 51 34.5 29.5 44.3
 86 63.2 51.9 77.9





#26

Hexane

Concen: 4.27 ppbv

RT: 6.70 min Scan# 592

Delta R.T. -0.01 min

Lab File: VL026849.D

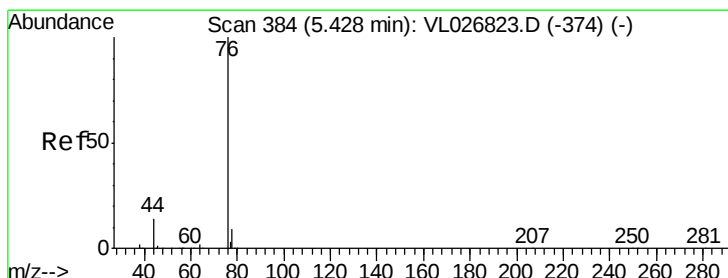
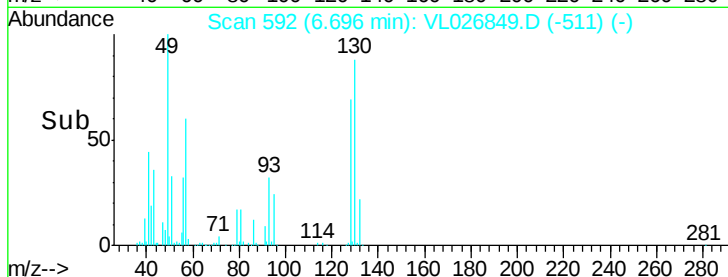
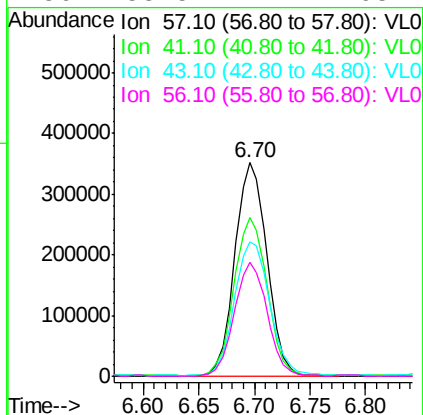
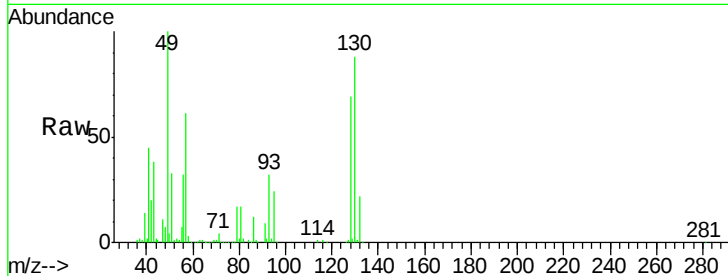
Acq: 10 Feb 2016 10:54

Instrument :
MSVOA_L
ClientSampleId :
KBD-T402-EFF-AIR

Tot Ion	57	Resp	703148
Ion	Ratio	Lower	Upper
57	100		
41	76.8	63.3	94.9
43	70.4	151.4	227.2#
56	55.5	42.2	63.2

Manual Integrations
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#27

Carbon Disulfide

Concen: 2.14 ppbv

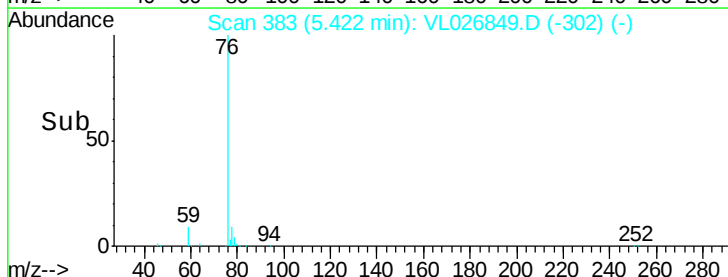
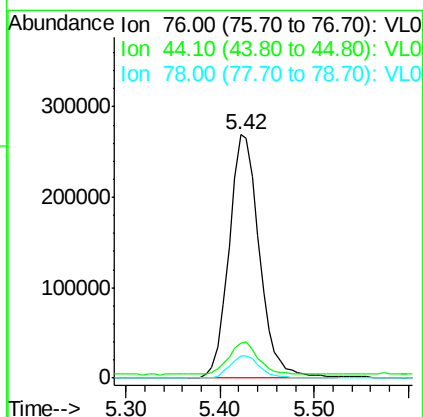
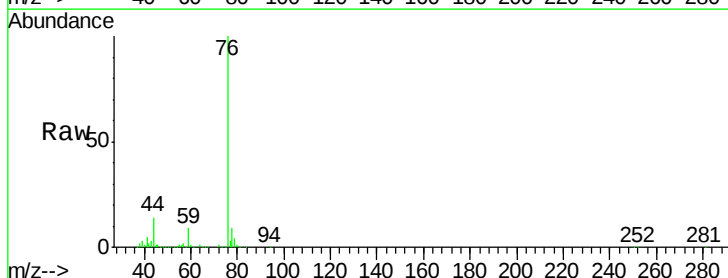
RT: 5.42 min Scan# 383

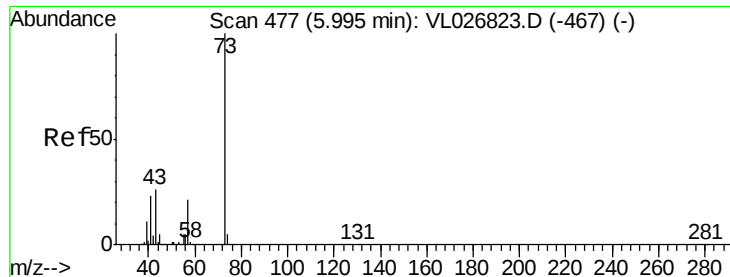
Delta R.T. -0.01 min

Lab File: VL026849.D

Acq: 10 Feb 2016 10:54

Tgt Ion	76	Resp	605912
Ion	Ratio	Lower	Upper
76	100		
44	13.5	12.1	18.1
78	9.6	7.7	11.5





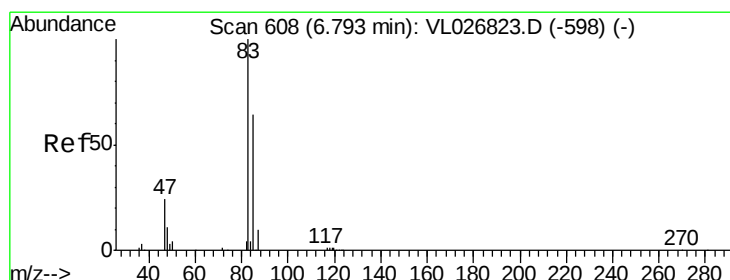
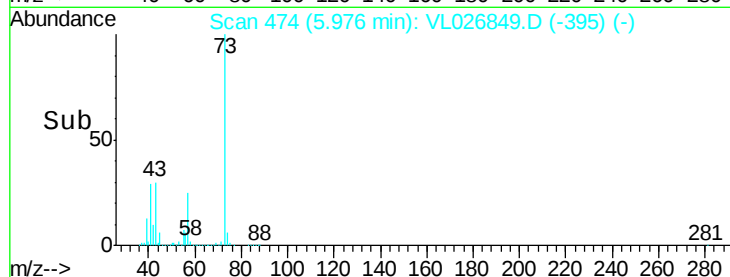
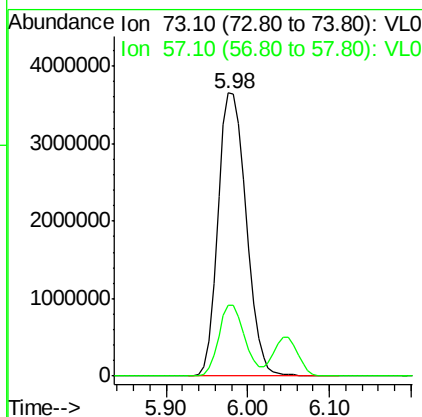
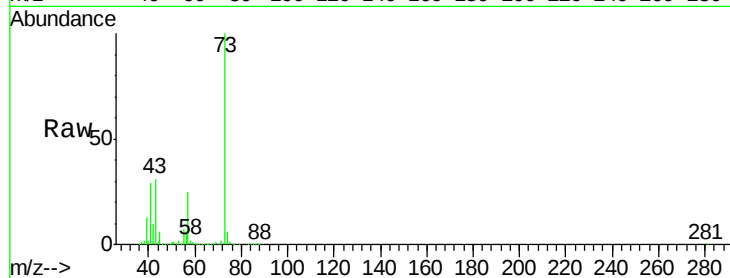
#28
Methvl tert-Butvl Ether
Concen: 34.12 ppbv
RT: 5.98 min Scan# 474
Delta R.T. -0.02 min
Lab File: VL026849.D
Acq: 10 Feb 2016 10:54

Instrument :
MSVOA_L
ClientSampleId :
KBD-T402-EFF-AIR

Tot Ion: 73 Resp: 8781263
Ion Ratio Lower Upper
73 100
57 23.3 17.0 25.6

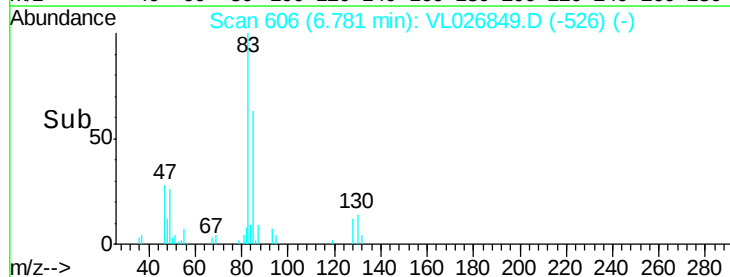
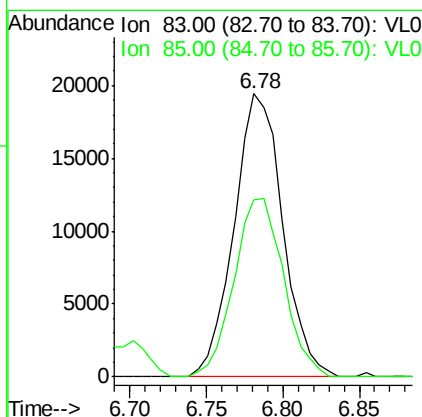
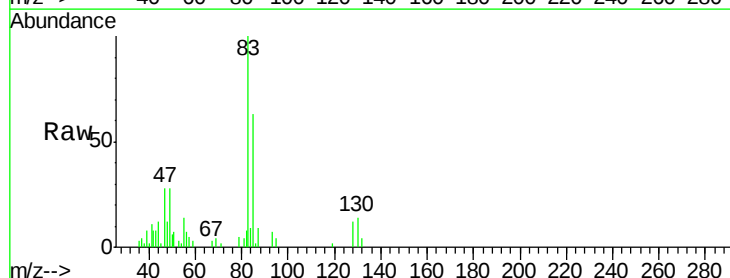
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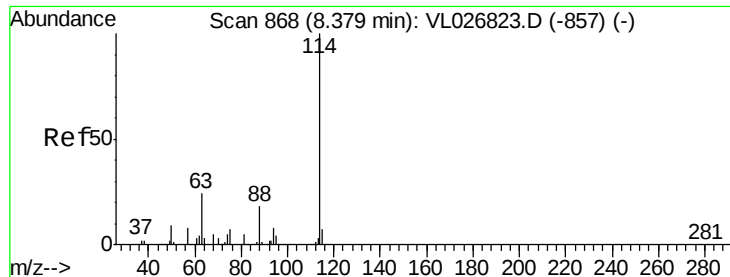
MMDadoda
2/11/2016 1:25:06 PM



#29
Chloroform
Concen: 0.17 ppbv
RT: 6.78 min Scan# 606
Delta R.T. -0.01 min
Lab File: VL026849.D
Acq: 10 Feb 2016 10:54

Tgt Ion: 83 Resp: 42983
Ion Ratio Lower Upper
83 100
85 62.5 51.5 77.3





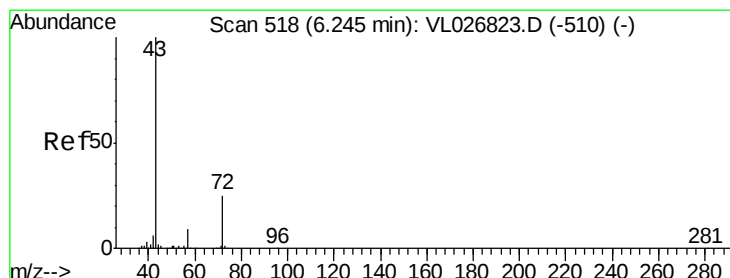
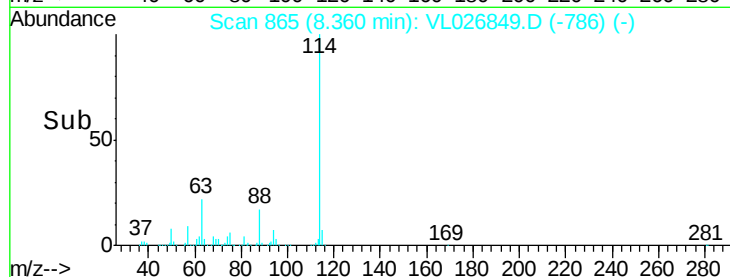
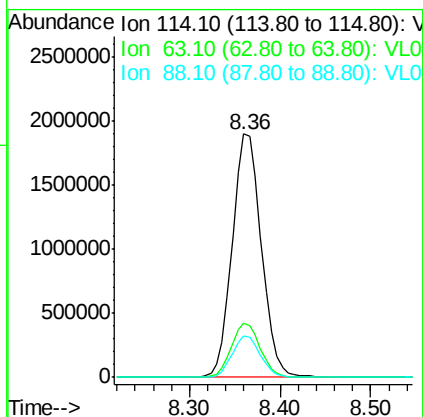
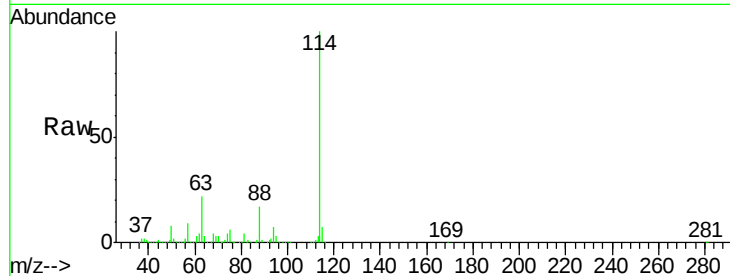
#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 8.36 min Scan# 865
 Delta R.T. -0.02 min
 Lab File: VL026849.D
 Acq: 10 Feb 2016 10:54

Instrument :
 MSVOA_L
 ClientSampleId :
 KBD-T402-EFF-AIR

Tot Ion:114 Resp: 4232294
 Ion Ratio Lower Upper
 114 100
 63 22.1 19.7 29.5
 88 16.5 13.8 20.6

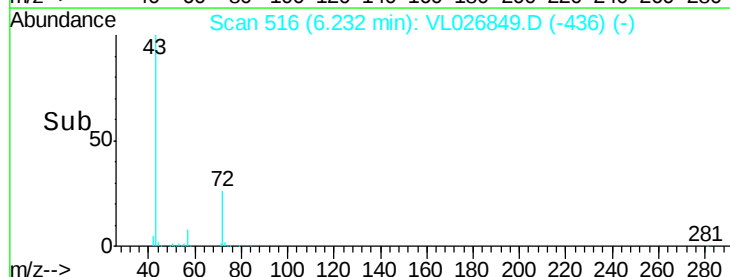
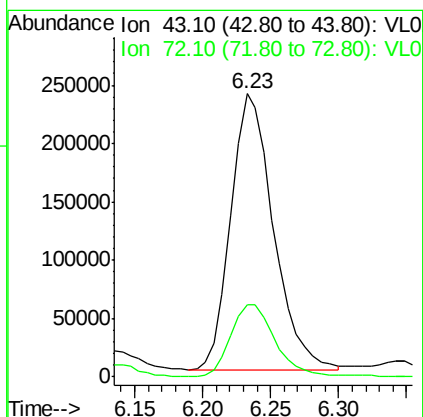
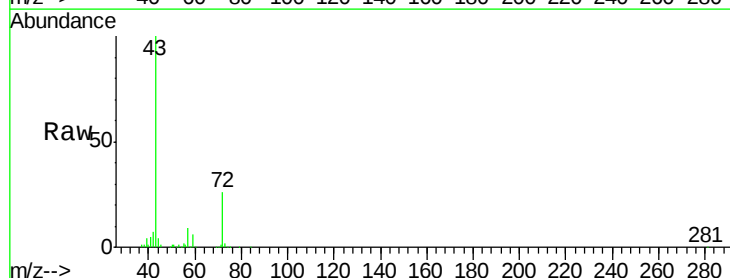
Manual Integrations
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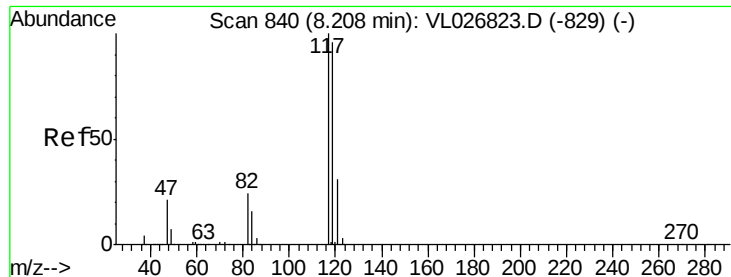
MMDadoda
 2/11/2016 1:25:06 PM



#34
 2-Butanone
 Concen: 2.49 ppbv
 RT: 6.23 min Scan# 516
 Delta R.T. -0.01 min
 Lab File: VL026849.D
 Acq: 10 Feb 2016 10:54

Tgt Ion: 43 Resp: 517059
 Ion Ratio Lower Upper
 43 100
 72 28.5 19.8 29.8





#35

Carbon Tetrachloride

Concen: 0.07 ppbv

RT: 8.20 min Scan# 838

Delta R.T. -0.01 min

Lab File: VL026849.D

Acq: 10 Feb 2016 10:54

Instrument :

MSVOA_L

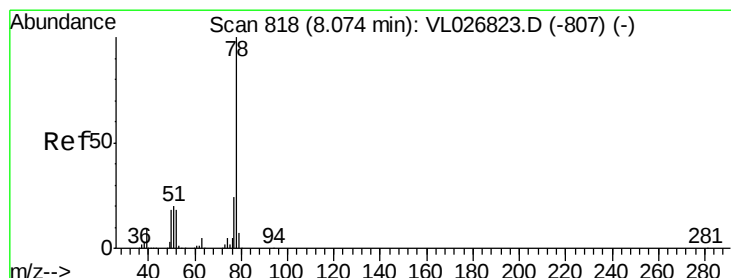
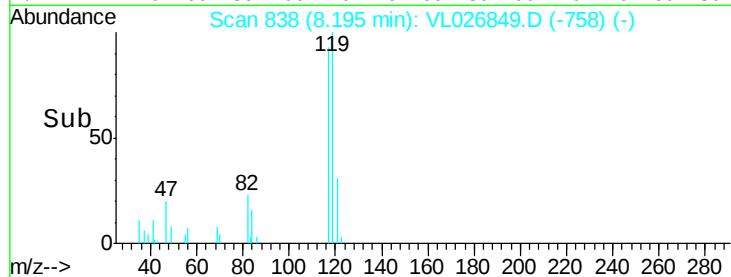
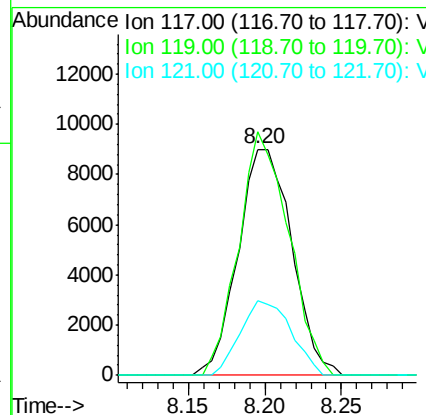
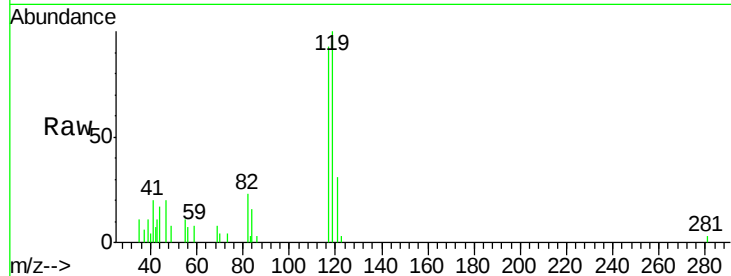
ClientSampleId :

KBD-T402-EFF-AIR

Tot Ion:	117	Resp:	22012
Ion	Ratio	Lower	Upper
117	100		
119	107.6	76.6	115.0
121	32.8	25.0	37.4

Manual Integrations
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#36

Benzene

Concen: 0.32 ppbv

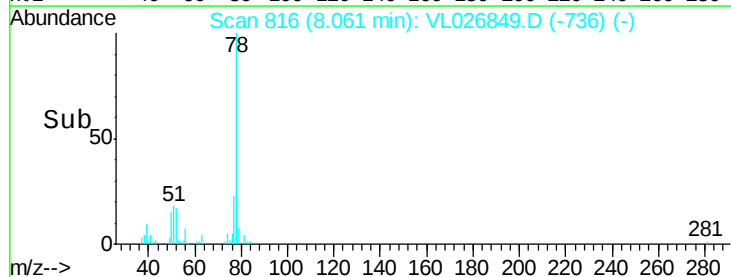
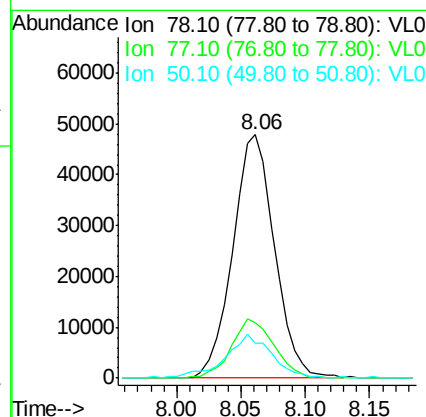
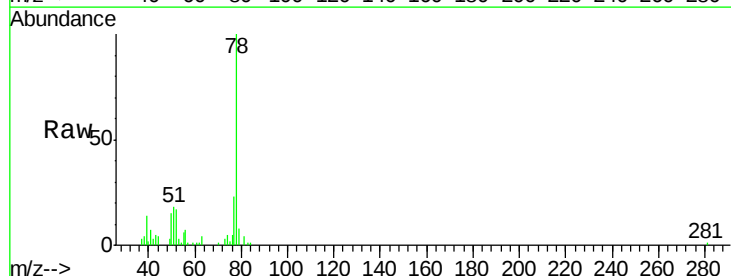
RT: 8.06 min Scan# 816

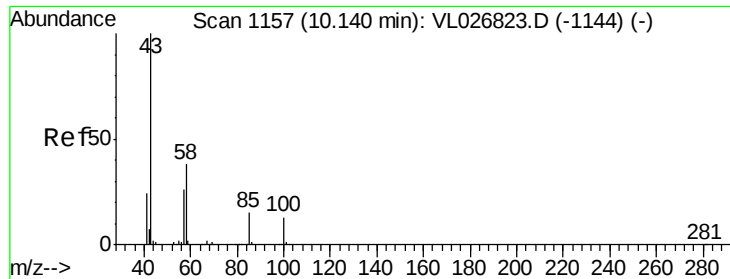
Delta R.T. -0.01 min

Lab File: VL026849.D

Acq: 10 Feb 2016 10:54

Tgt Ion:	78	Resp:	107950
Ion	Ratio	Lower	Upper
78	100		
77	23.0	19.0	28.6
50	13.7	14.2	21.4#





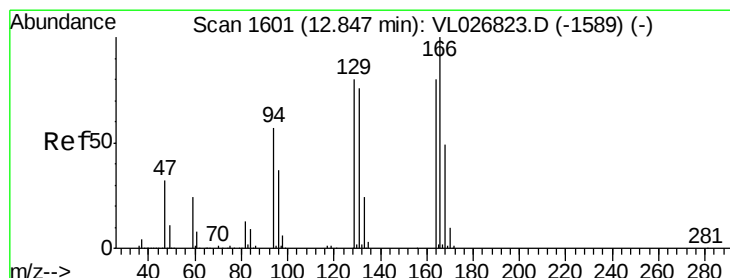
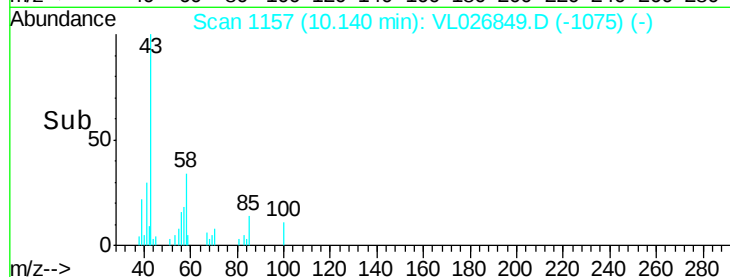
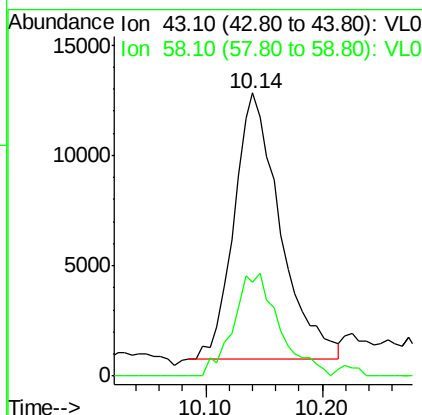
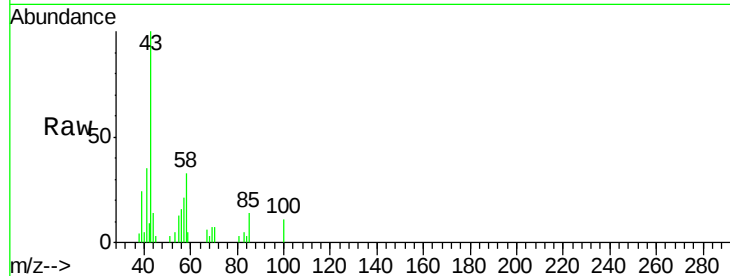
#50
4-Methyl-2-Pentanone
Concen: 0.14 ppbv
RT: 10.14 min Scan# 1157
Delta R.T. -0.00 min
Lab File: VL026849.D
Acq: 10 Feb 2016 10:54

Instrument :
MSVOA_L
ClientSampleId :
KBD-T402-EFF-AIR

Tot Ion	Ratio	Lower	Upper
43	100		
58	40.1	30.3	45.5

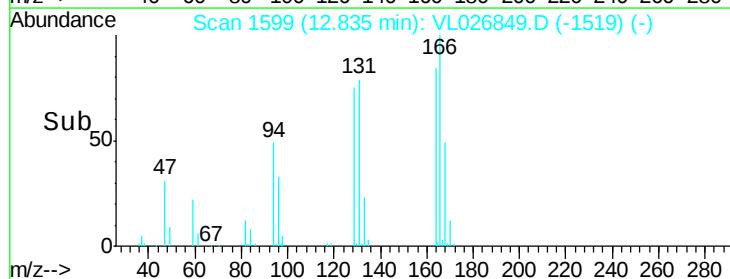
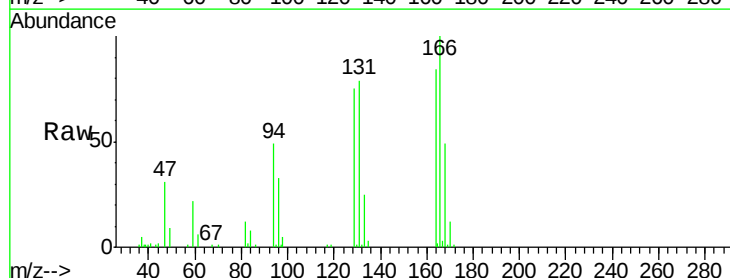
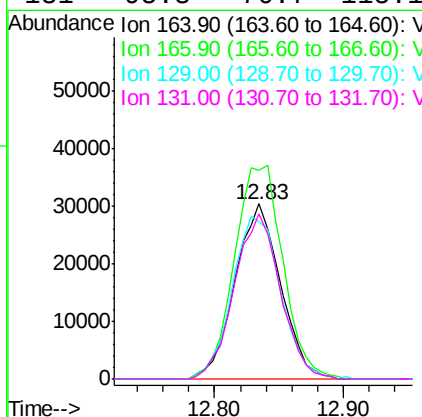
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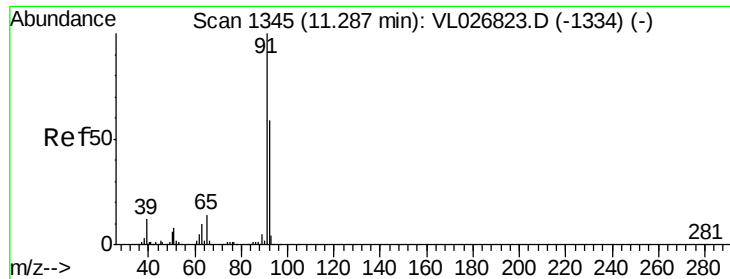
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#52
Tetrachloroethene
Concen: 0.56 ppbv
RT: 12.83 min Scan# 1599
Delta R.T. -0.01 min
Lab File: VL026849.D
Acq: 10 Feb 2016 10:54

Tgt Ion	Ratio	Lower	Upper
164	100		
166	119.2	100.3	150.5
129	89.6	80.0	120.0
131	95.3	76.7	115.1





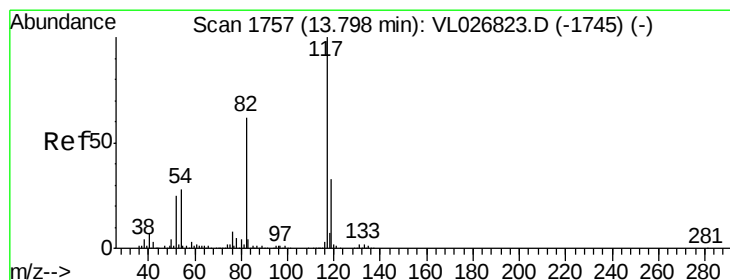
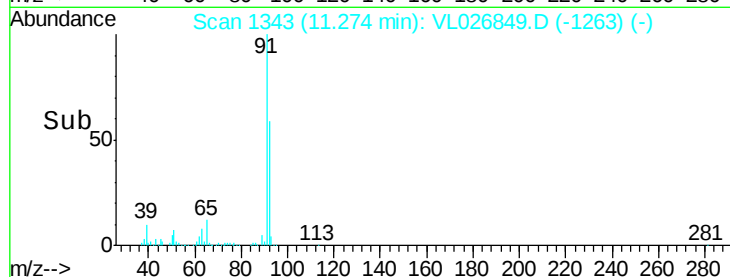
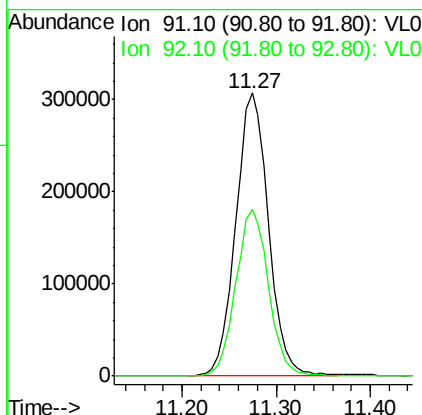
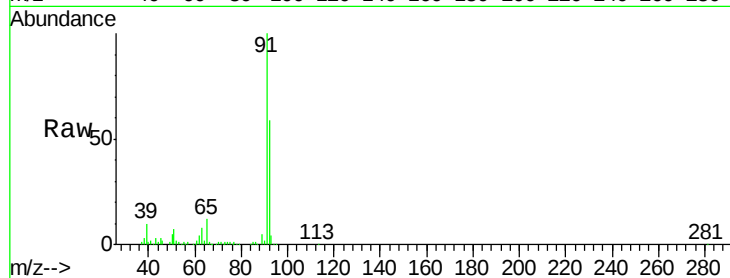
#53
Toluene
Concen: 1.95 ppbv
RT: 11.27 min Scan# 1343
Delta R.T. -0.01 min
Lab File: VL026849.D
Acq: 10 Feb 2016 10:54

Instrument :
MSVOA_L
ClientSampleId :
KBD-T402-EFF-AIR

Tot Ion	Ratio	Lower	Upper
91	100		
92	60.0	47.3	70.9

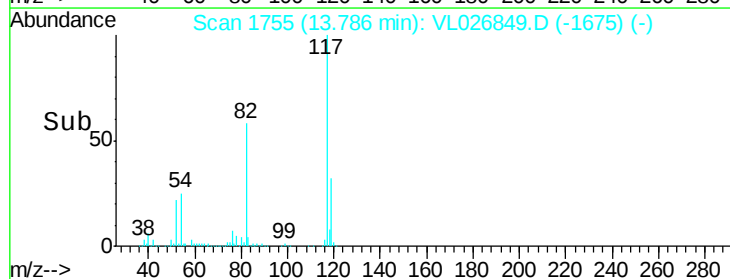
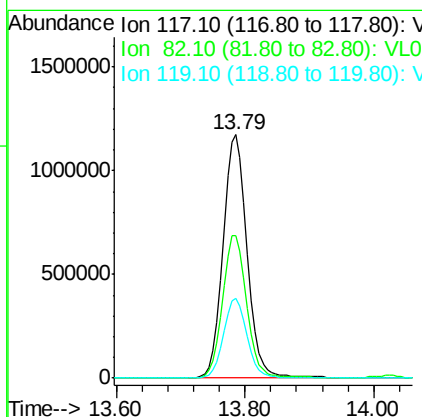
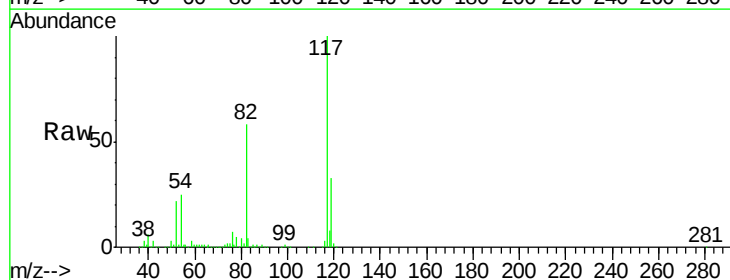
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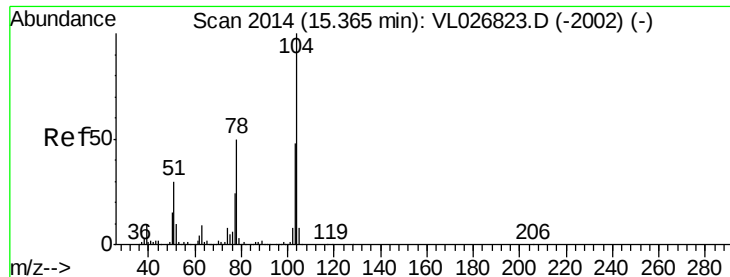
MMDadoda
2/11/2016 1:25:06 PM



#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 13.79 min Scan# 1755
Delta R.T. -0.01 min
Lab File: VL026849.D
Acq: 10 Feb 2016 10:54

Tgt Ion	Ratio	Lower	Upper
117	100		
82	59.5	51.9	77.9
119	32.6	48.5	72.7#





#61

Stvrene

Concen: 1.15 ppbv

RT: 15.35 min Scan# 2012

Delta R.T. -0.01 min

Lab File: VL026849.D

Acq: 10 Feb 2016 10:54

Instrument :

MSVOA_L

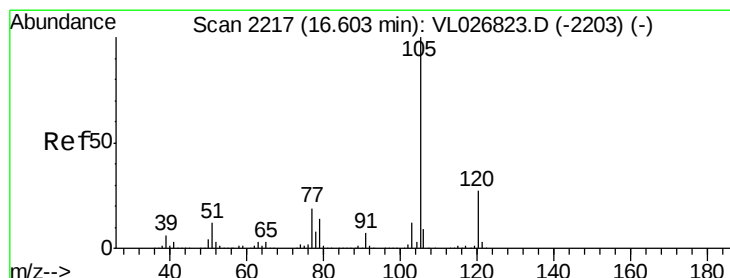
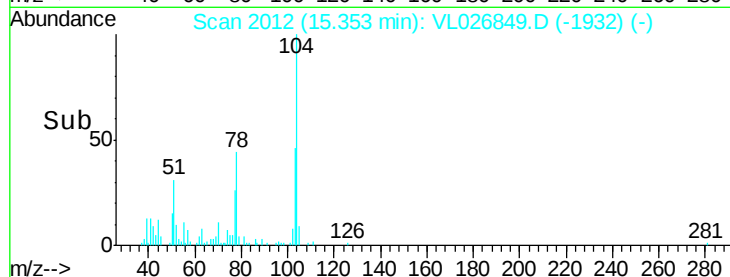
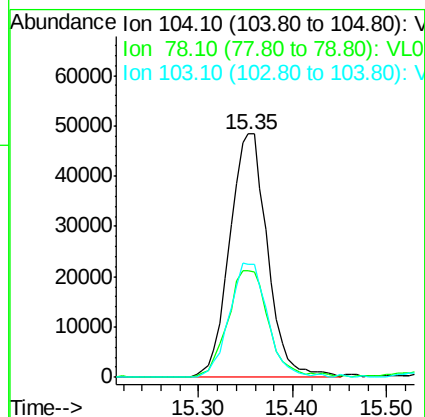
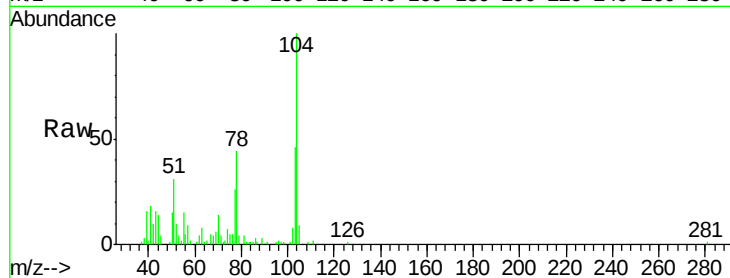
ClientSampleId :

KBD-T402-EFF-AIR

Tot Ion:	104	Resp:	135380
Ion Ratio	Lower	Upper	
104	100		
78	47.6	39.8	59.6
103	47.2	38.2	57.4

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#62

Isopropylbenzene

Concen: 0.37 ppbv

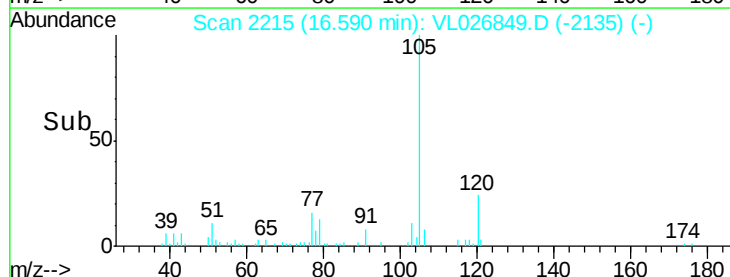
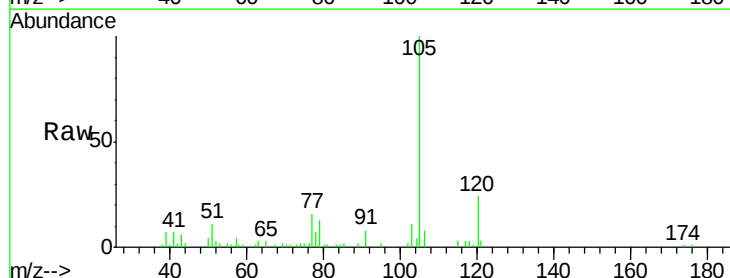
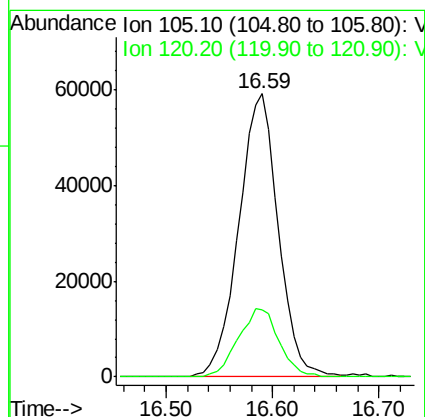
RT: 16.59 min Scan# 2215

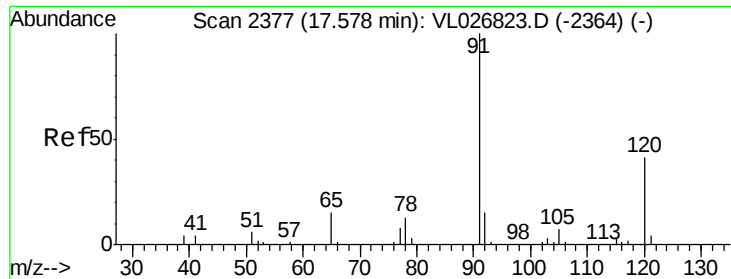
Delta R.T. -0.01 min

Lab File: VL026849.D

Acq: 10 Feb 2016 10:54

Tgt Ion:	105	Resp:	154109
Ion Ratio	Lower	Upper	
105	100		
120	24.8	21.0	31.4





#64

n-propylbenzene

Concen: 0.51 ppbv

RT: 17.56 min Scan# 2374

Delta R.T. -0.02 min

Lab File: VL026849.D

Acq: 10 Feb 2016 10:54

Instrument :

MSVOA_L

ClientSampleId :

KBD-T402-EFF-AIR

Tot Ion:120 Resp: 54400

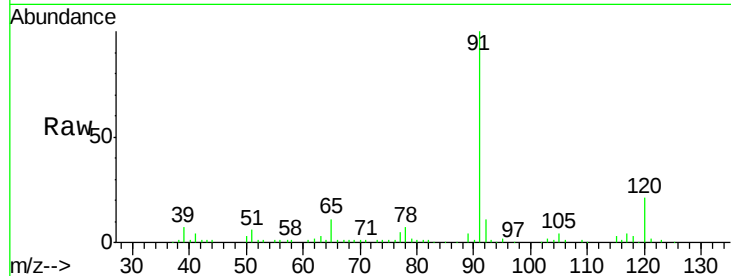
Ion Ratio Lower Upper

120 100

91 505.0 363.0 544.6

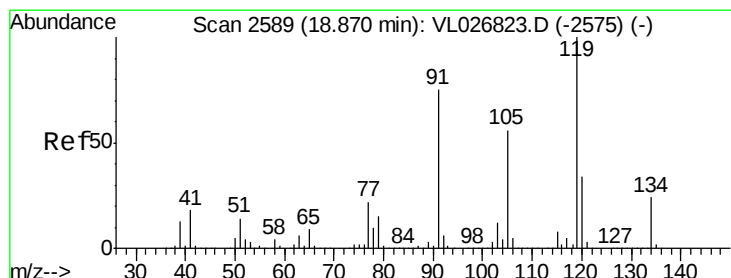
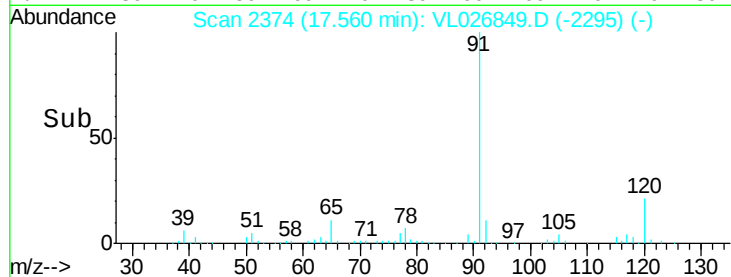
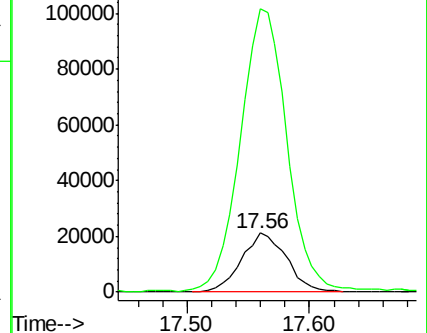
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Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0



#65

tert-Butylbenzene

Concen: 0.11 ppbv

RT: 18.85 min Scan# 2586

Delta R.T. -0.02 min

Lab File: VL026849.D

Acq: 10 Feb 2016 10:54

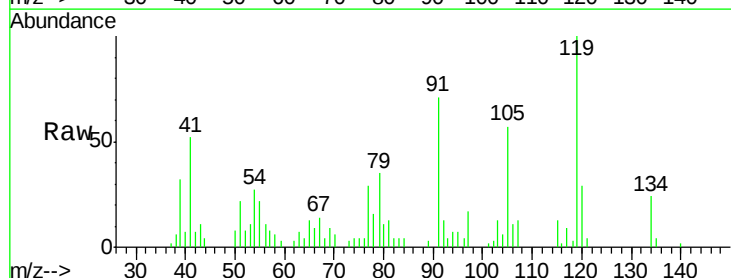
Tgt Ion:119 Resp: 43001

Ion Ratio Lower Upper

119 100

91 79.5 61.5 92.3

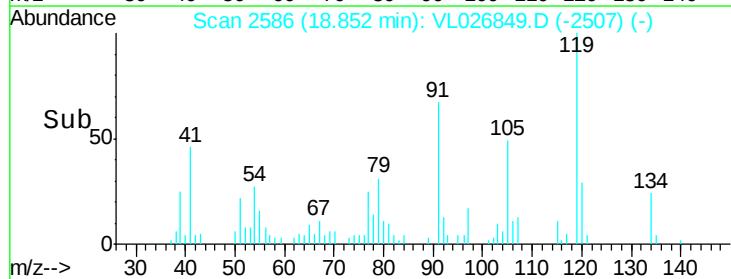
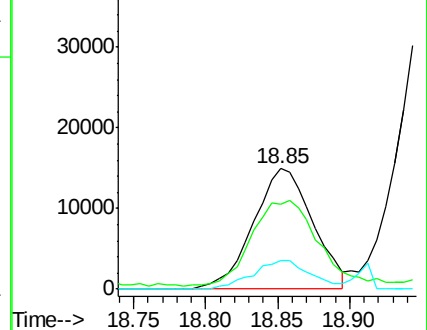
134 28.5 17.9 26.9#

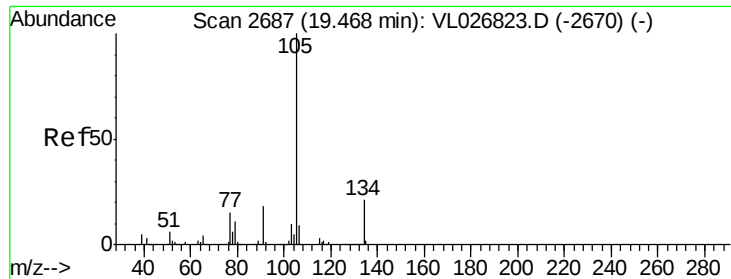


Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V





#67

sec-Butylbenzene

Concen: 0.51 ppbv

RT: 19.45 min Scan# 2684

Delta R.T. -0.02 min

Lab File: VL026849.D

Acq: 10 Feb 2016 10:54

Instrument :

MSVOA_L

ClientSampleId :

KBD-T402-EFF-AIR

Tot Ion: 105 Resp: 255943

Ion Ratio Lower Upper

105 100

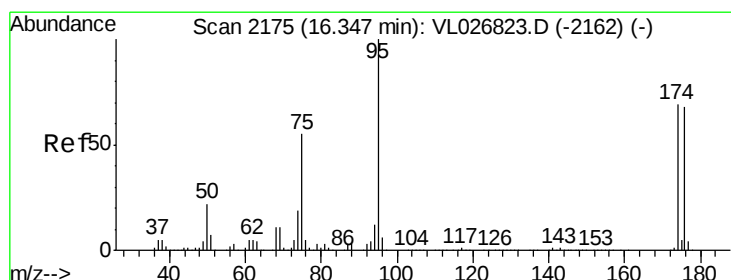
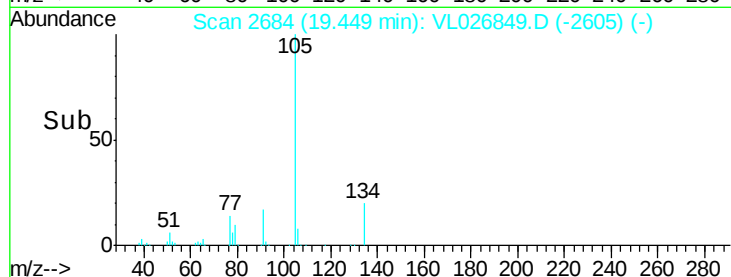
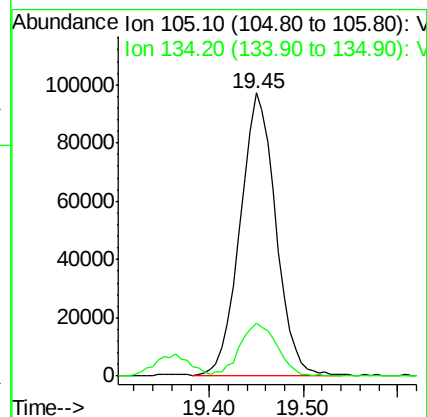
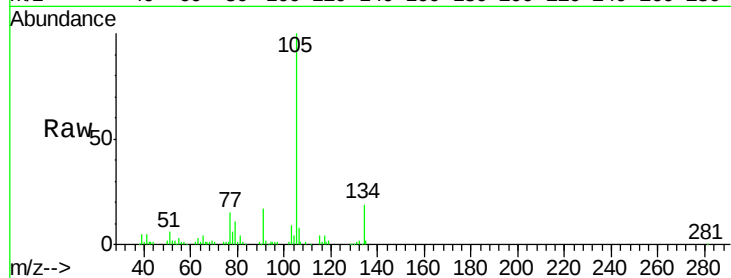
134 19.5 16.1 24.1

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#68

1-Bromo-4-Fluorobenzene

Concen: 11.42 ppbv

RT: 16.33 min Scan# 2172

Delta R.T. -0.02 min

Lab File: VL026849.D

Acq: 10 Feb 2016 10:54

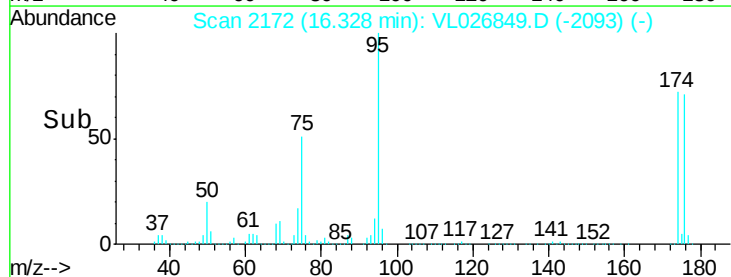
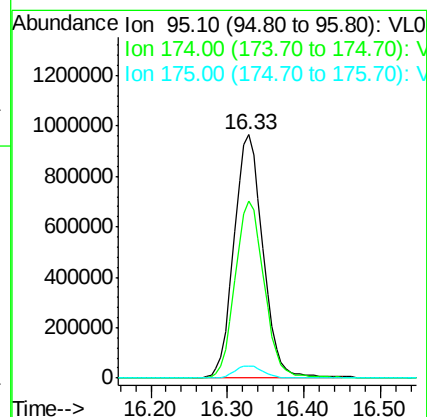
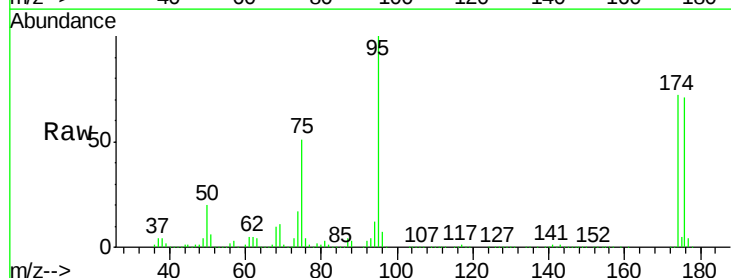
Tgt Ion: 95 Resp: 2536495

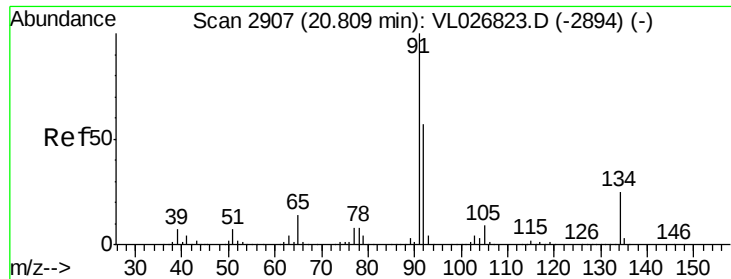
Ion Ratio Lower Upper

95 100

174 73.6 55.6 83.4

175 5.1 3.9 5.9





#70

n-Butylbenzene

Concen: 0.17 ppbv

RT: 20.79 min Scan# 2904

Delta R.T. -0.02 min

Lab File: VL026849.D

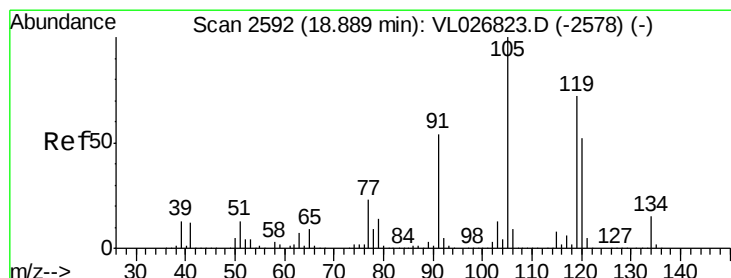
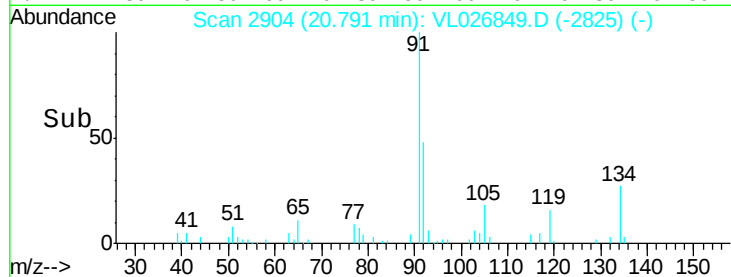
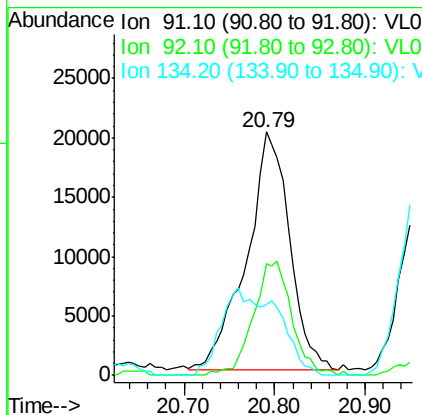
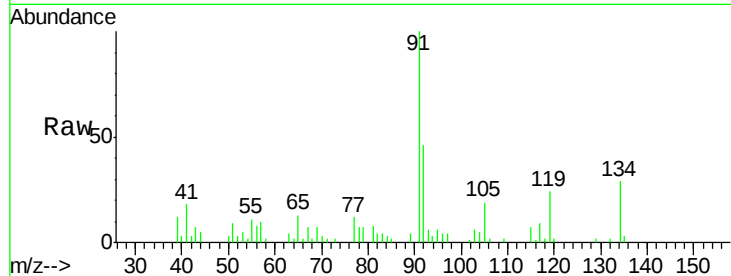
Acq: 10 Feb 2016 10:54

Instrument :
MSVOA_L
ClientSampleId :
KBD-T402-EFF-AIR

Tot Ion:	91	Resp:	65659
Ion Ratio	Lower	Upper	
91	100		
92	43.0	44.2	66.4#
134	48.8	19.3	28.9#

Manual Integrations
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#74

1,2,4-Trimethylbenzene

Concen: 0.13 ppbv

RT: 18.87 min Scan# 2589

Delta R.T. -0.02 min

Lab File: VL026849.D

Acq: 10 Feb 2016 10:54

Tgt Ion:	105	Resp:	44684
Ion Ratio	Lower	Upper	
105	100		
120	40.4	41.3	61.9#
91	42.0	43.3	64.9#
77	16.4	18.3	27.5#

