Quantitation Report (Not Reviewed)

Data Path : W:\HPCHEM1\MSVOA_L\DATA\VL072715\
Data File : VL025776.D
Acq On : 28 Jul 2015 6:20
Operator : SY/MD
Sample : G3040-07 120X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument : MSVOA_L
ClientSampleId : DIN46-INFLUENT-072315

Quant Time: Jul 28 07:19:44 2015
Quant Method : W:\HPCHEM1\MSVOA_L\METHODS\VL070715AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Jul 08 02:22:55 2015
QLast Update : Wed Jul 08 02:22:55 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	6.65	49	573492	10.00	ppbv		0.00
33) 1,4-Difluorobenzene	8.34	114	1590541	10.00	ppbv		0.00
55) Chlorobenzene-d5	13.76	117	2178587	10.00	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	16.29	95	1965203	10.69	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 106.90%				
Target Compounds							Qvalue
5) Vinyl Chloride	3.89	62	3075	0.08	ppbv	#	78
9) Propene	3.59	41	1707	0.06	ppbv	#	17
10) Heptane	9.37	43	22737	0.22	ppbv		97
13) Ethanol	4.35	45	831	0.20	ppbv	#	35
15) Acetone	4.62	43	249379	2.46	ppbv		97
16) 1,3-Butadiene	3.95	39	7300	0.18	ppbv	#	12
18) 1,1-Dichloroethene	5.08	96	9389	0.22	ppbv		95
20) Methylene Chloride	5.15	84	6194	0.15	ppbv	#	84
22) trans-1,2-Dichloroethene	5.76	96	4867	0.11	ppbv	#	78
23) Vinyl Acetate	6.01	43	20977	0.14	ppbv	#	76
24) 1,1-Dichloroethane	5.91	63	26614	0.26	ppbv		96
25) Ethyl Acetate	6.65	43	7879	0.05	ppbv	#	76
26) Hexane	6.65	57	11907	0.16	ppbv	#	45
27) Carbon Disulfide	5.39	76	9581	0.08	ppbv	#	69
29) Chloroform	6.74	83	5177	0.04	ppbv		93
30) Cyclohexane	8.29	84	7172	0.10	ppbv	#	14
31) cis-1,2-Dichloroethene	6.51	61	183424	2.56	ppbv		97
32) 1,1,1-Trichloroethane	7.59	97	6733	0.04	ppbv		95
34) 2-Butanone	6.24	43	35713	0.40	ppbv		97
36) Benzene	8.04	78	17863	0.12	ppbv		97
38) Trichloroethene	9.08	130	14702470	207.58	ppbv		90
39) 1,2-Dichloropropane	9.07	63	52789	0.94	ppbv	#	1
42) Bromodichloromethane	9.09	83	278357	1.77	ppbv	#	95
52) Tetrachloroethene	12.83	164	18365102	240.38	ppbv		85
53) Toluene	11.26	91	44162	0.21	ppbv		98
57) Chlorobenzene	13.86	112	10140	0.04	ppbv	#	40
58) Ethyl Benzene	14.43	91	53494	0.15	ppbv		94
59) m/p-Xylene	14.71	91	120986	0.38	ppbv		97
60) o-Xylene	15.50	91	39874	0.12	ppbv		93
64) n-propylbenzene	17.53	120	4989	0.04	ppbv	#	38
65) tert-Butylbenzene	18.83	119	32883	0.08	ppbv	#	42
67) sec-Butylbenzene	19.41	105	18982	0.03	ppbv		97
70) n-Butylbenzene	20.76	91	37058	0.07	ppbv	#	19
72) 4-Ethyltoluene	17.83	105	33241	0.09	ppbv	#	88
73) 1,3,5-Trimethylbenzene	17.99	105	136066	0.37	ppbv		99
74) 1,2,4-Trimethylbenzene	18.83	105	270832	0.65	ppbv	#	67

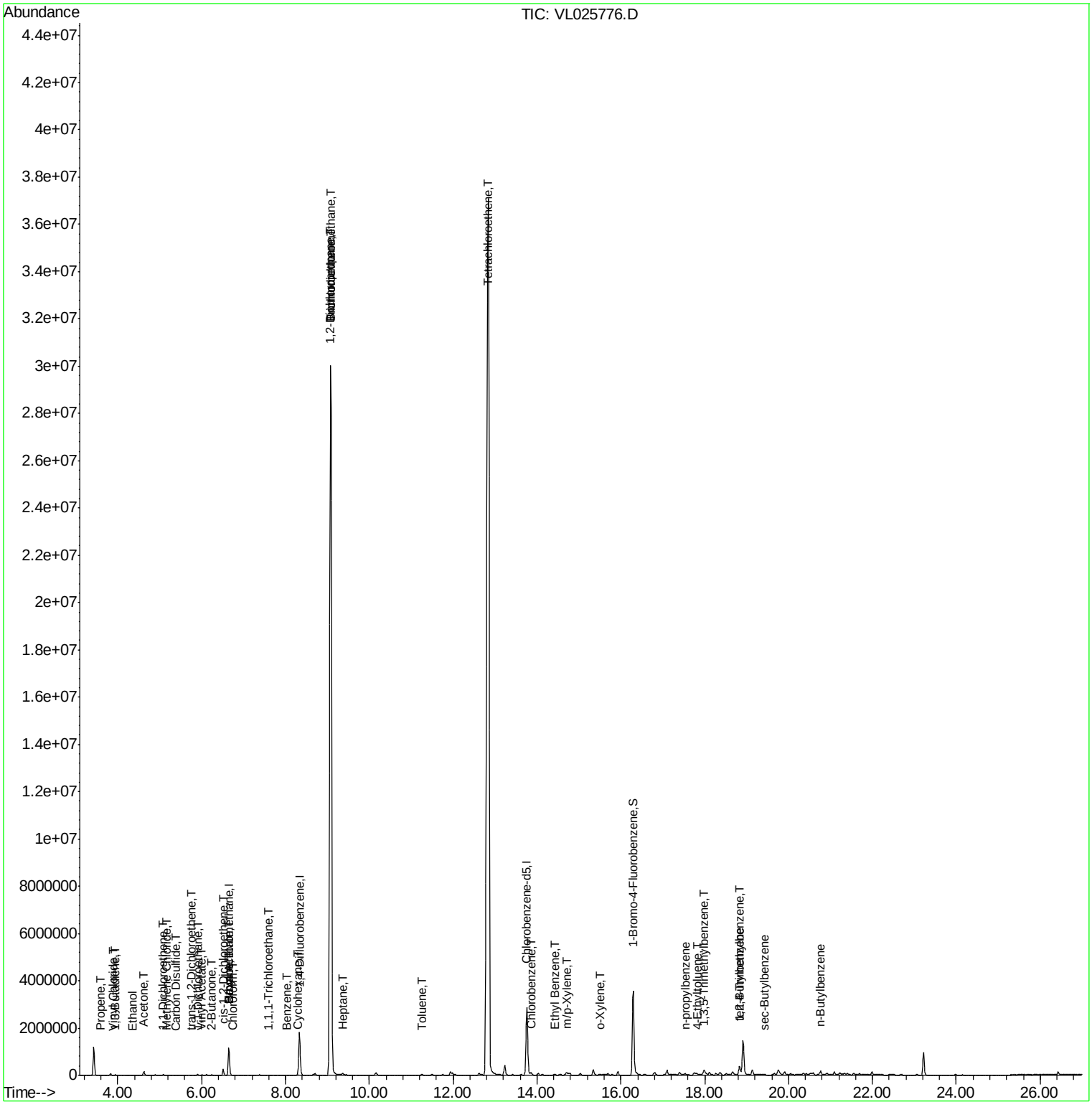
(#) = qualifier out of range (m) = manual integration (+) = signals summed

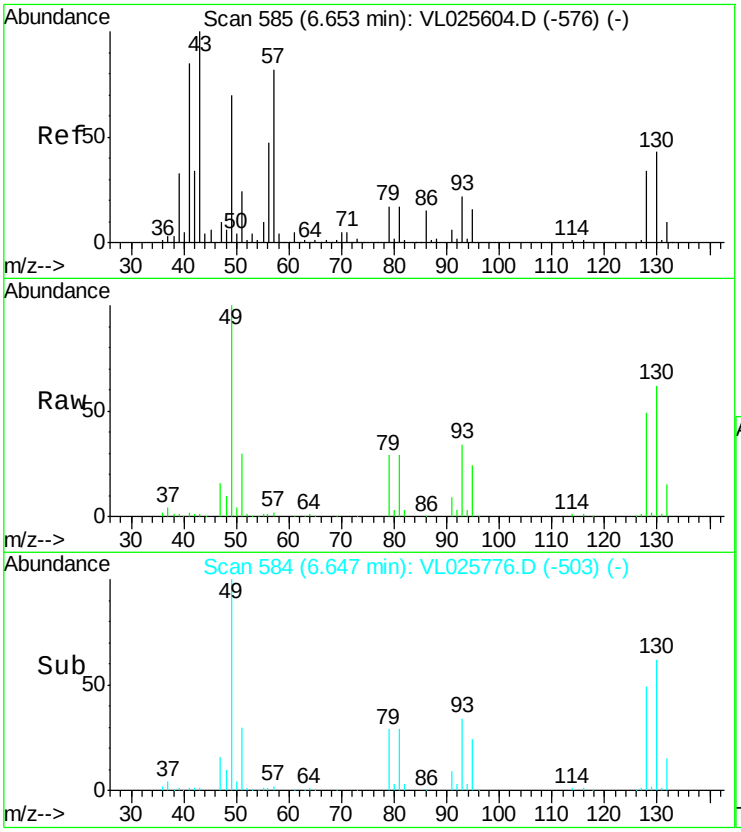
Quantitation Report (Not Reviewed)

Data Path : W:\HPCHEM1\MSVOA_L\DATA\VL072715\
Data File : VL025776.D
Acq On : 28 Jul 2015 6:20
Operator : SY/MD
Sample : G3040-07 120X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
DIN46-INFLUENT-072315

Quant Time: Jul 28 07:19:44 2015
Quant Method : W:\HPCHEM1\MSVOA_L\METHODS\VL070715AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Jul 08 02:22:55 2015
QLast Update : Wed Jul 08 02:22:55 2015
Response via : Initial Calibration



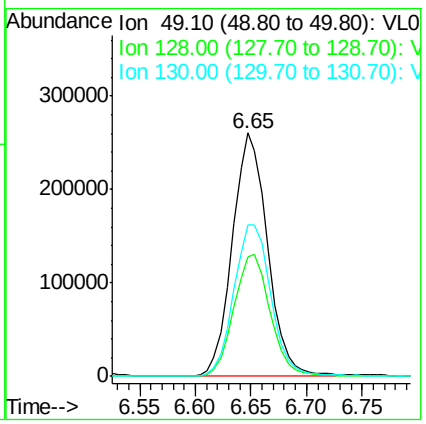


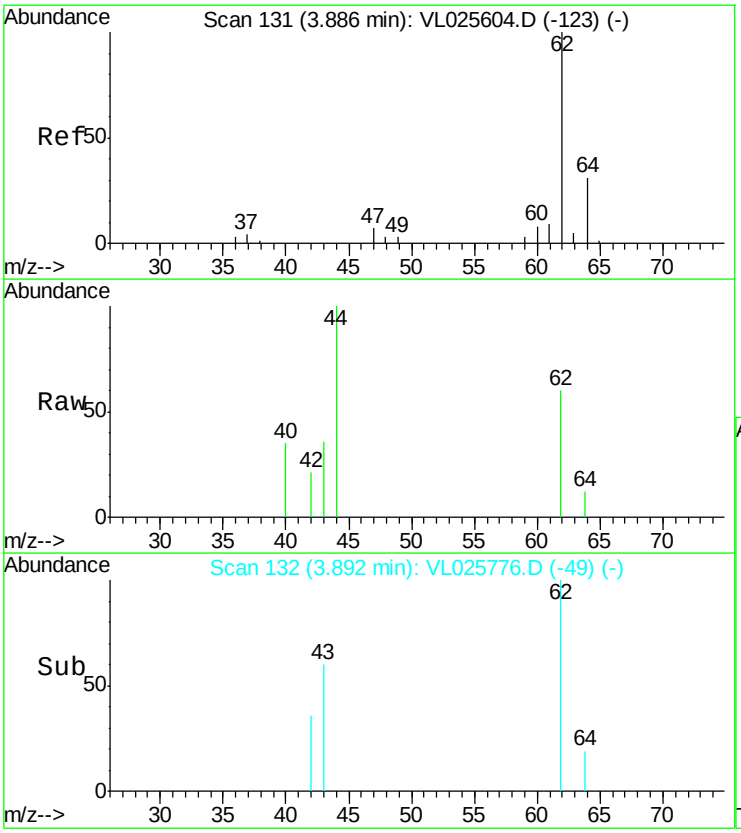
#1
Bromochloromethane
Concen: 10.00 ppbv
RT: 6.65 min Scan# 584
Delta R.T. -0.01 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Instrument :
MSVOA_L
ClientSampleId :
DIN46-INFLUENT-072315

Tgt Ion: 49 Resp: 573492

Ion	Ratio	Lower	Upper
49	100		
128	52.2	25.4	76.0
130	66.2	31.9	95.9

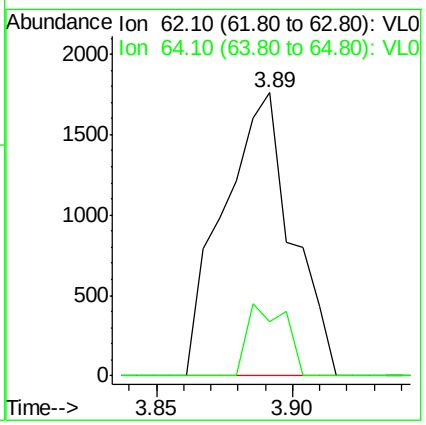


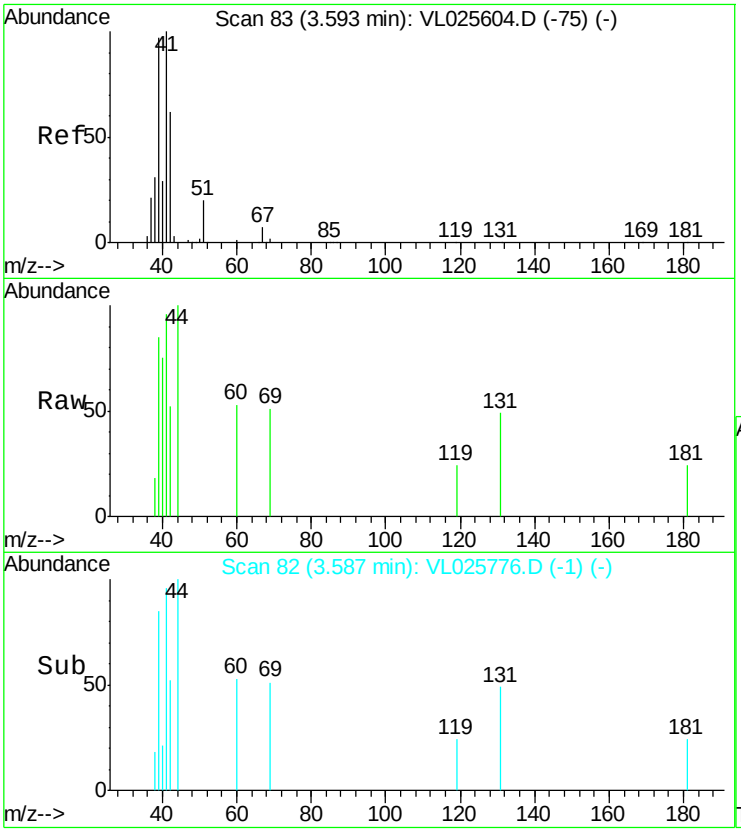


#5
Vinyl Chloride
Concen: 0.08 ppbv
RT: 3.89 min Scan# 132
Delta R.T. 0.01 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Tgt Ion: 62 Resp: 3075

Ion	Ratio	Lower	Upper
62	100		
64	19.1	25.0	37.6#



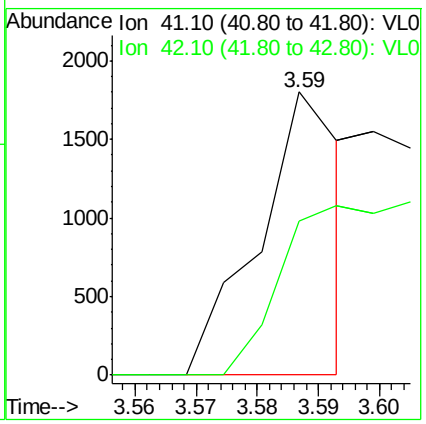


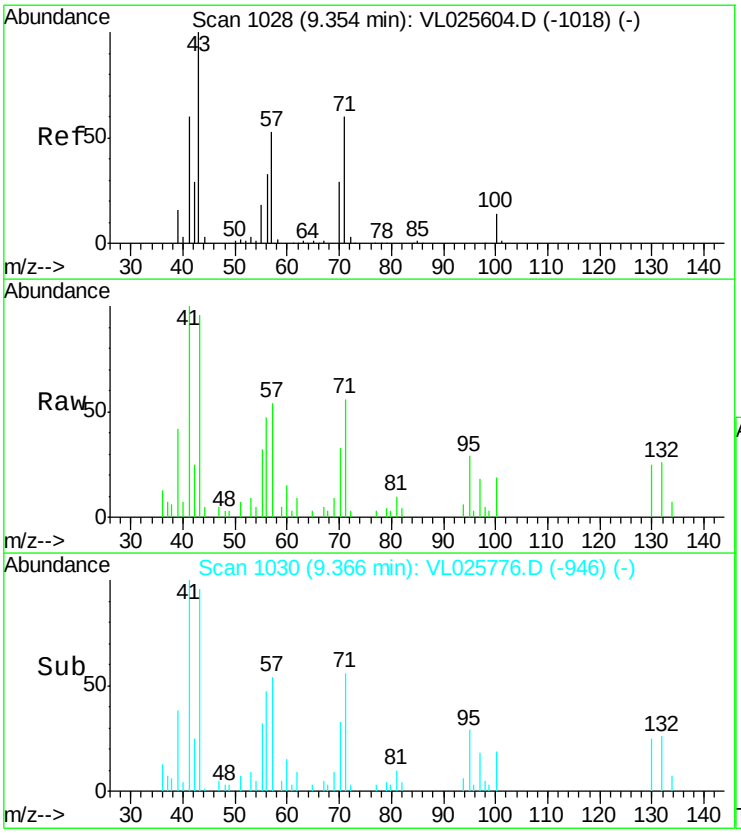
#9
Propene
Concen: 0.06 ppbv
RT: 3.59 min Scan# 82
Delta R.T. -0.01 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Instrument :
MSVOA_L
ClientSampleId :
DIN46-INFLUENT-072315

Tgt Ion: 41 Resp: 1707

Ion	Ratio	Lower	Upper
41	100		
42	0.0	52.4	78.6#

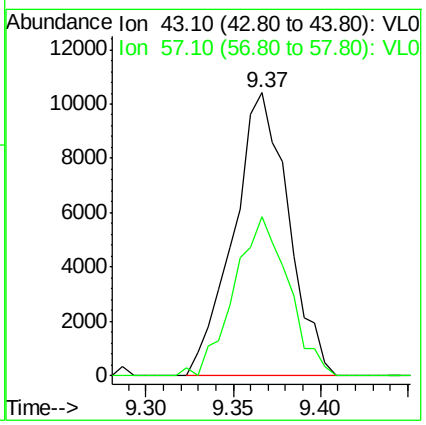


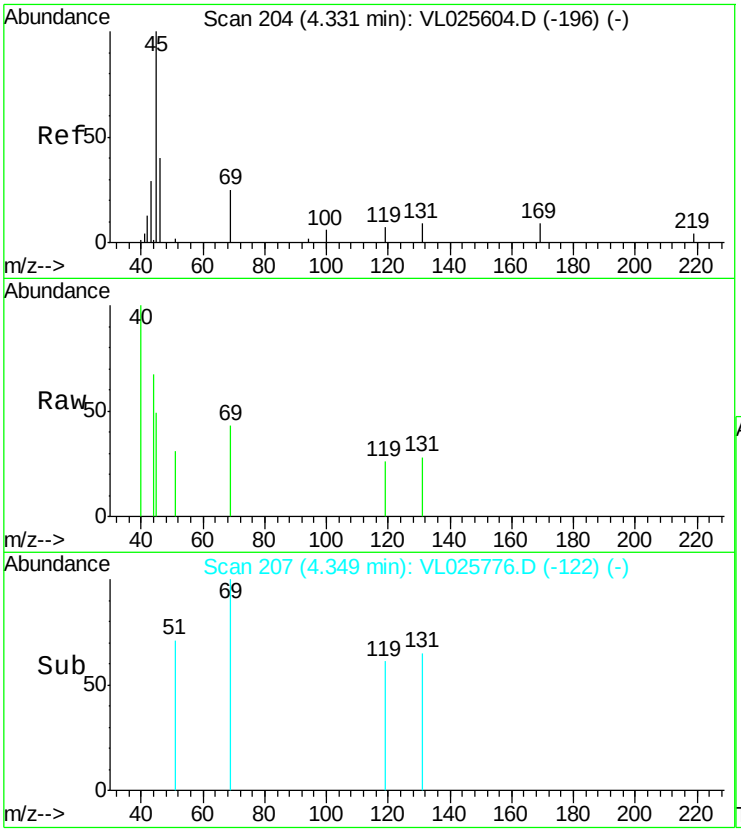


#10
Heptane
Concen: 0.22 ppbv
RT: 9.37 min Scan# 1030
Delta R.T. 0.01 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Tgt Ion: 43 Resp: 22737

Ion	Ratio	Lower	Upper
43	100		
57	55.5	42.6	64.0



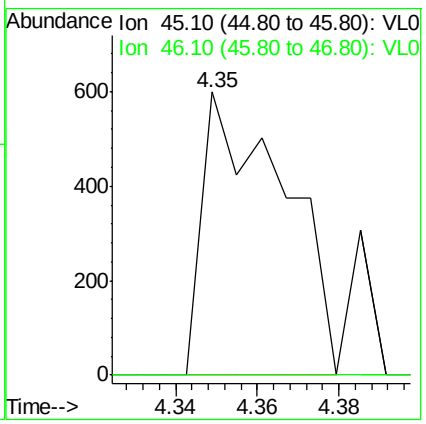


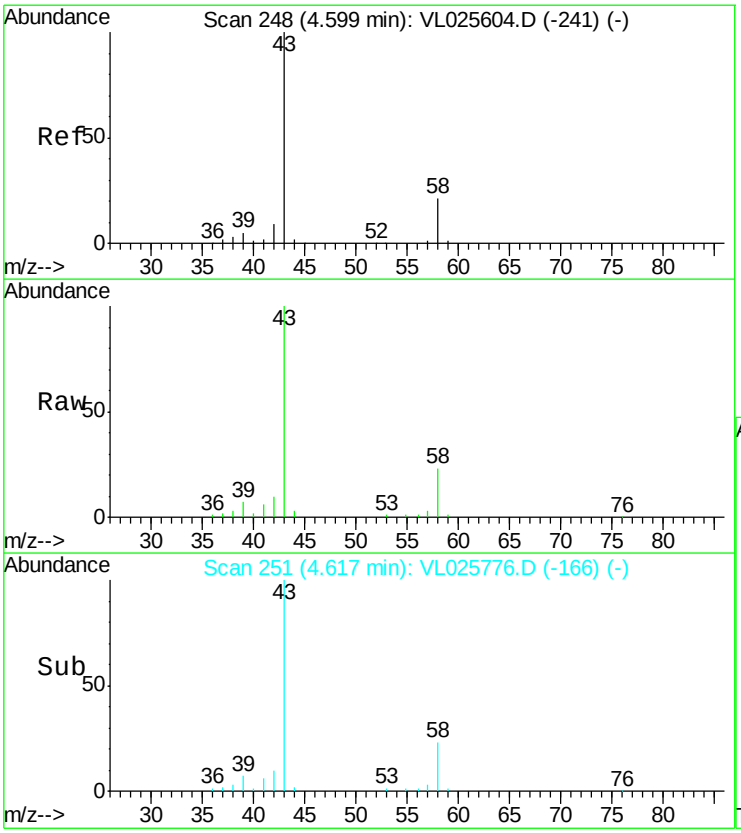
#13
Ethanol
Concen: 0.20 ppbv
RT: 4.35 min Scan# 207
Delta R.T. 0.02 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Instrument :
MSVOA_L
ClientSampleId :
DIN46-INFLUENT-072315

Tgt Ion: 45 Resp: 831

Ion	Ratio	Lower	Upper
45	100		
46	0.0	16.0	64.0#

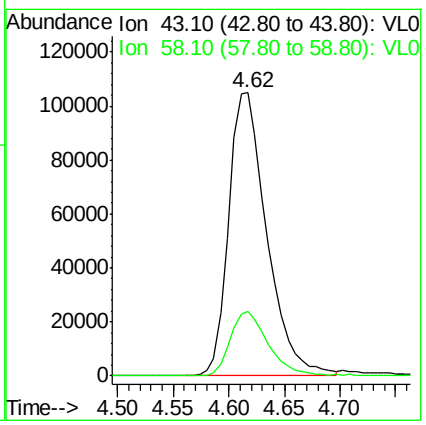


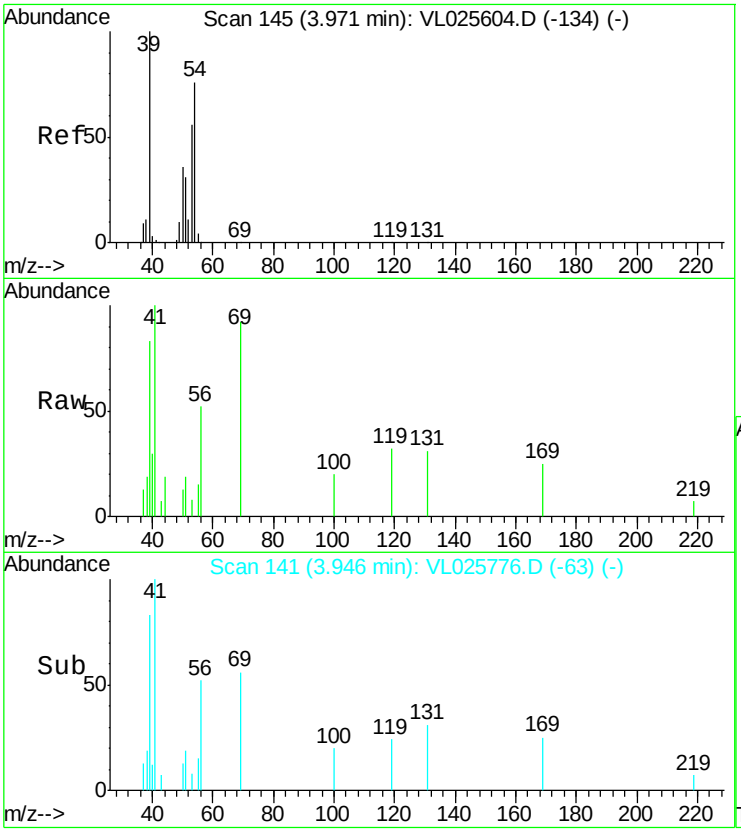


#15
Acetone
Concen: 2.46 ppbv
RT: 4.62 min Scan# 251
Delta R.T. 0.02 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Tgt Ion: 43 Resp: 249379

Ion	Ratio	Lower	Upper
43	100		
58	22.7	17.2	25.8



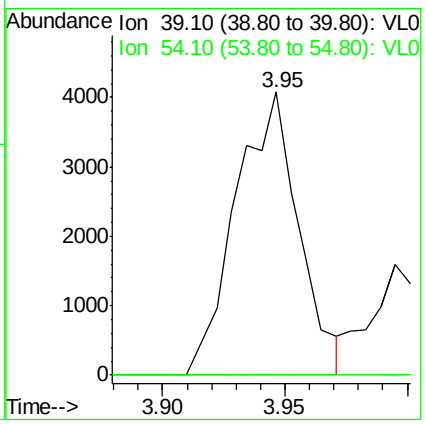


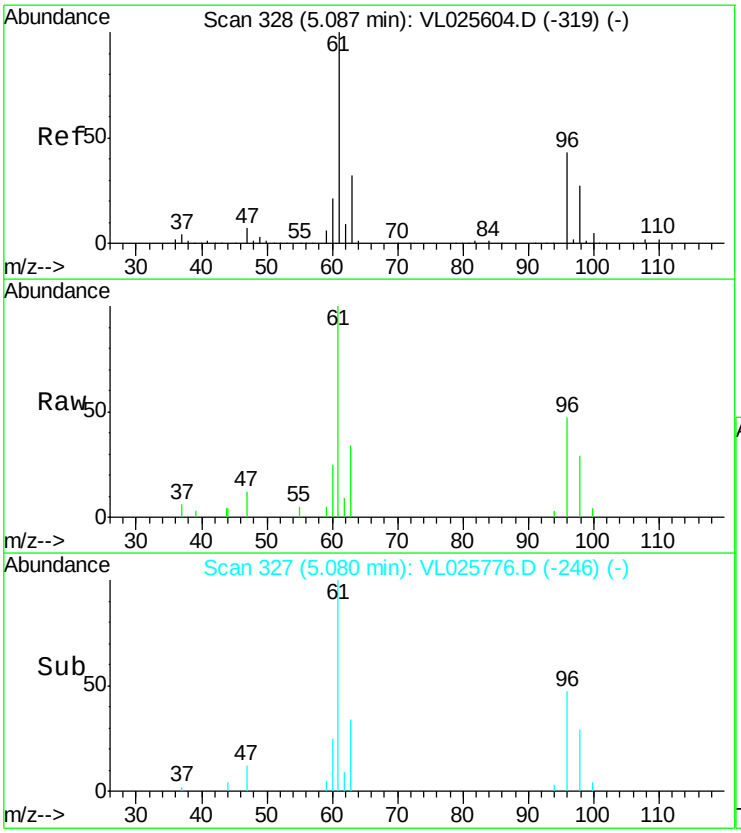
#16
1,3-Butadiene
Concen: 0.18 ppbv
RT: 3.95 min Scan# 141
Delta R.T. -0.02 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Instrument :
MSVOA_L
ClientSampleId :
DIN46-INFLUENT-072315

Tgt Ion: 39 Resp: 7300

Ion	Ratio	Lower	Upper
39	100		
54	0.0	59.3	88.9#

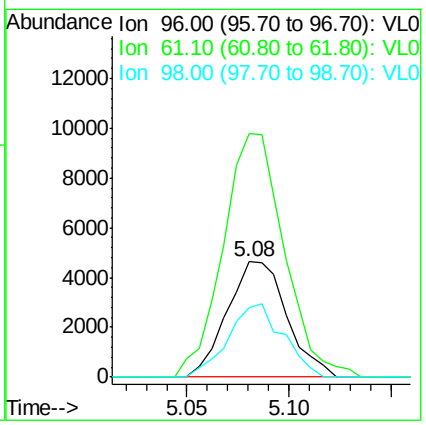


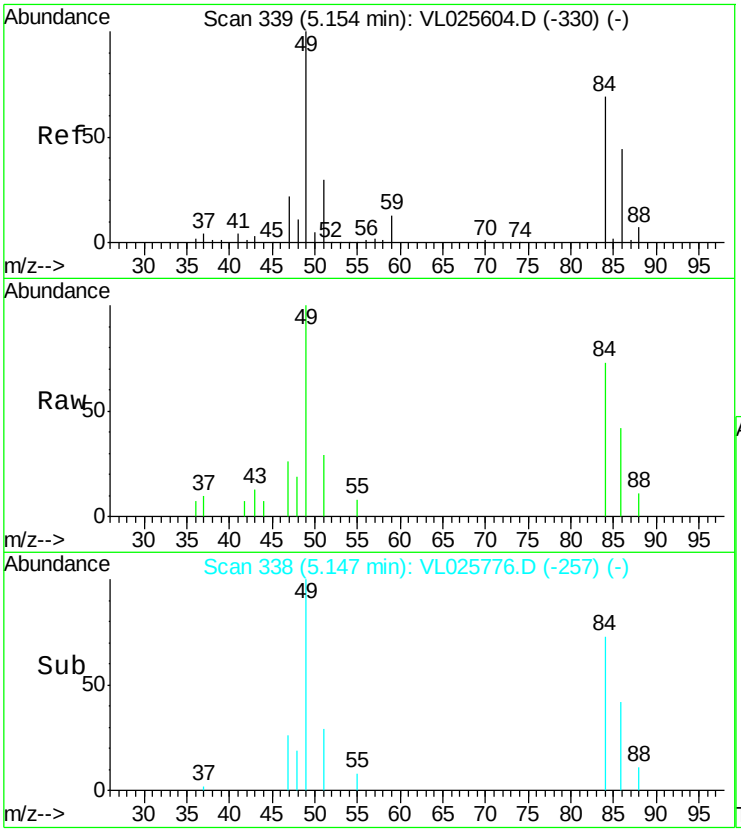


#18
1,1-Dichloroethene
Concen: 0.22 ppbv
RT: 5.08 min Scan# 327
Delta R.T. -0.01 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Tgt Ion: 96 Resp: 9389

Ion	Ratio	Lower	Upper
96	100		
61	220.5	184.1	276.1
98	60.6	50.0	75.0



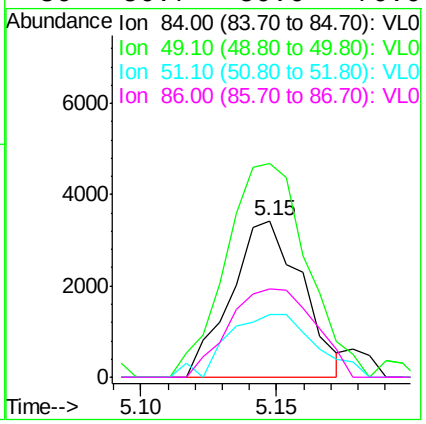


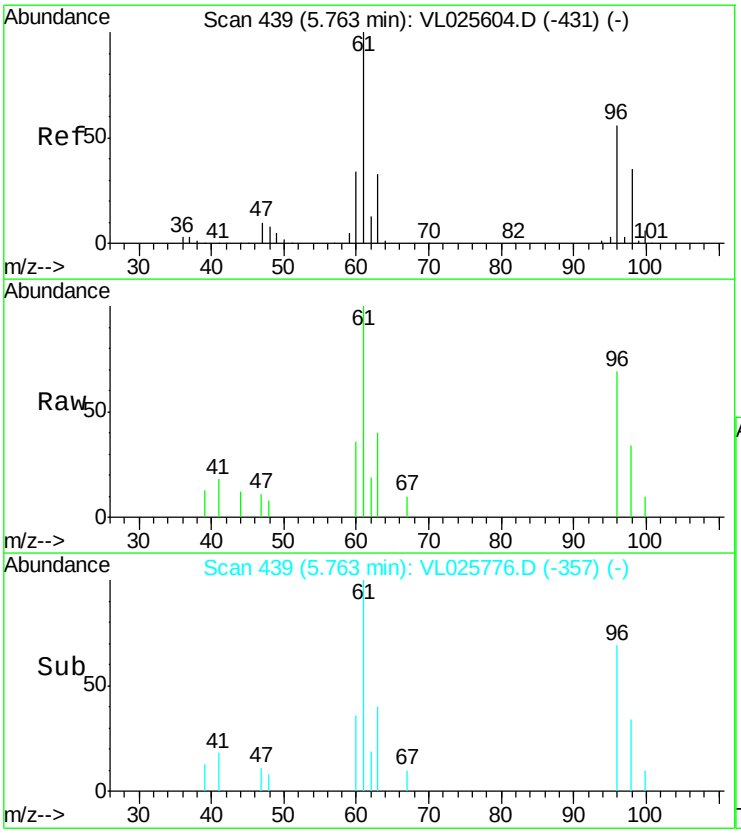
#20
Methylene Chloride
Concen: 0.15 ppbv
RT: 5.15 min Scan# 338
Delta R.T. -0.01 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Instrument : MSVOA_L
ClientSampleId : DIN46-INFLUENT-072315

Tgt Ion: 84 Resp: 6194

Ion	Ratio	Lower	Upper
84	100		
49	120.8	115.2	172.8
51	30.9	35.0	52.6#
86	56.7	50.6	76.0

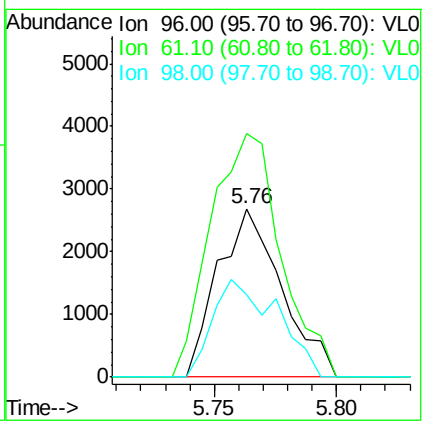


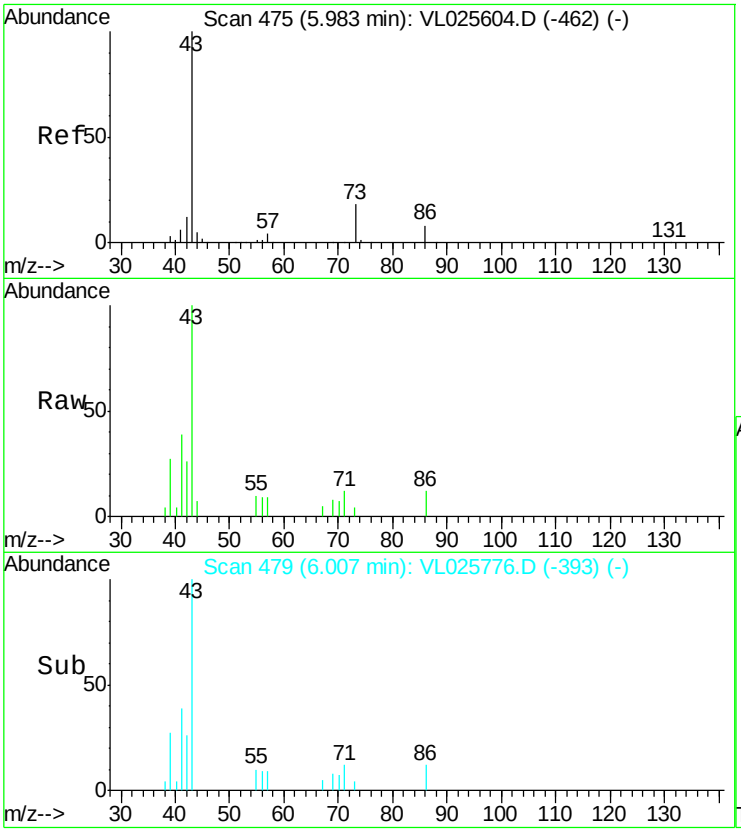


#22
trans-1,2-Dichloroethene
Concen: 0.11 ppbv
RT: 5.76 min Scan# 439
Delta R.T. -0.00 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Tgt Ion: 96 Resp: 4867

Ion	Ratio	Lower	Upper
96	100		
61	144.4	141.8	212.6
98	48.6	49.0	73.6#



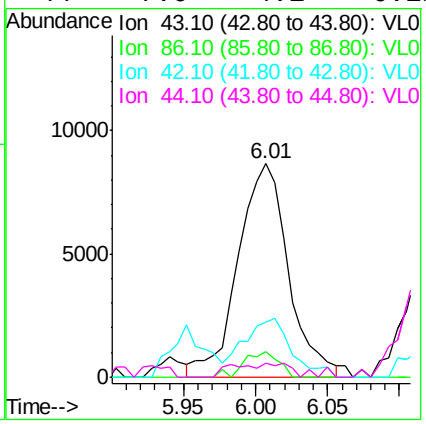


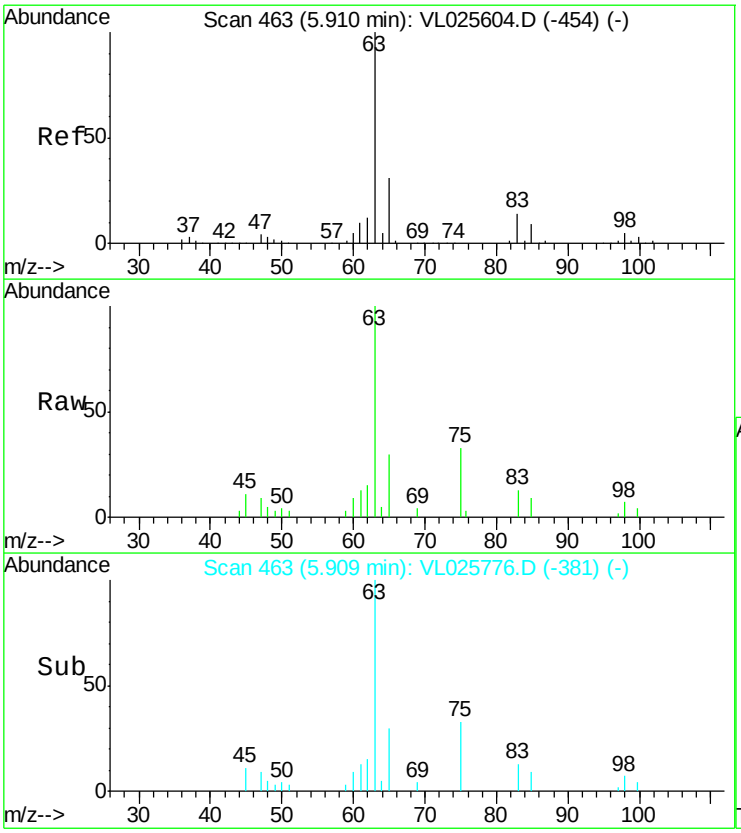
#23
Vinyl Acetate
Concen: 0.14 ppbv
RT: 6.01 min Scan# 479
Delta R.T. 0.02 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Instrument : MSVOA_L
ClientSampleId : DIN46-INFLUENT-072315

Tgt Ion: 43 Resp: 20977

Ion	Ratio	Lower	Upper
43	100		
86	12.6	6.7	10.1#
42	27.5	9.8	14.6#
44	7.0	4.1	6.1#

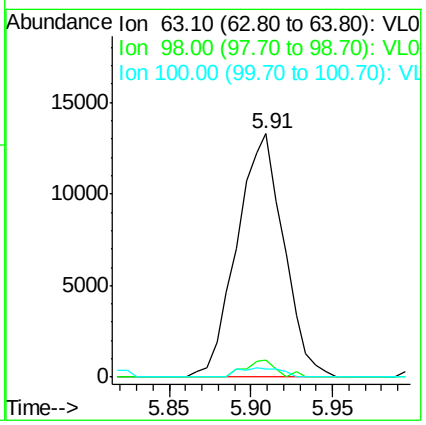


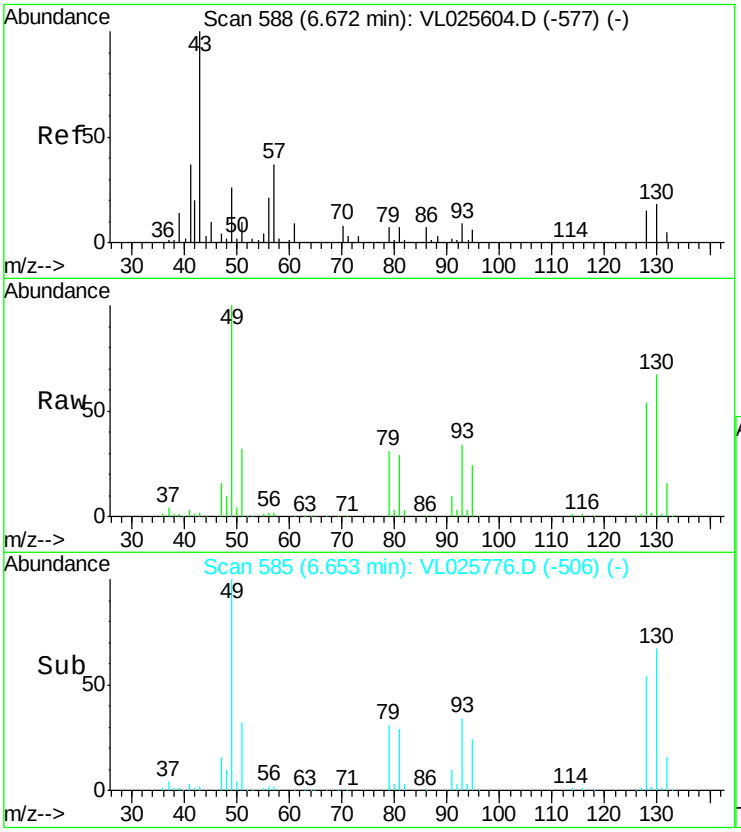


#24
1,1-Dichloroethane
Concen: 0.26 ppbv
RT: 5.91 min Scan# 463
Delta R.T. -0.00 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Tgt Ion: 63 Resp: 26614

Ion	Ratio	Lower	Upper
63	100		
98	7.1	2.6	8.0
100	3.5	1.6	4.7



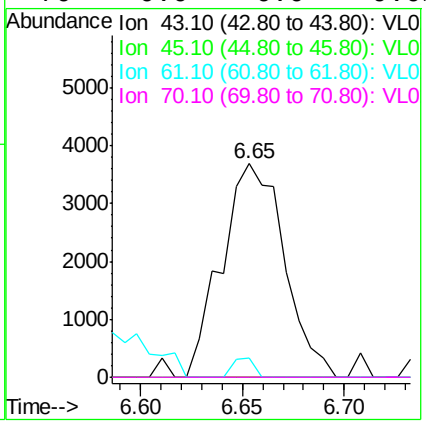


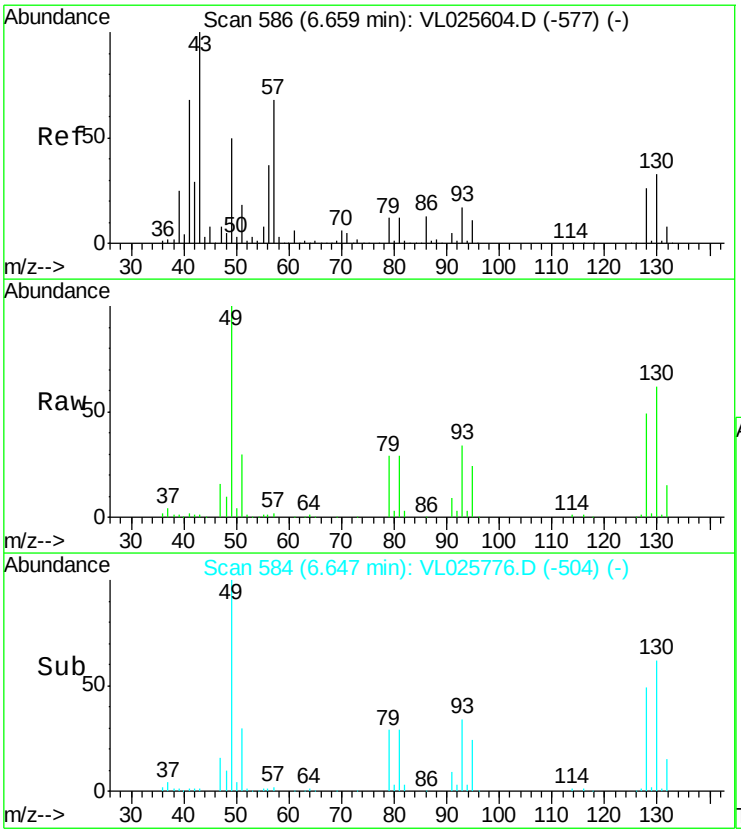
#25
Ethyl Acetate
Concen: 0.05 ppbv
RT: 6.65 min Scan# 585
Delta R.T. -0.02 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Instrument :
MSVOA_L
ClientSampleId :
DIN46-INFLUENT-072315

Tgt Ion: 43 Resp: 7879

Ion	Ratio	Lower	Upper
43	100		
45	0.0	7.5	11.3#
61	0.0	6.6	10.0#
70	0.0	6.0	9.0#

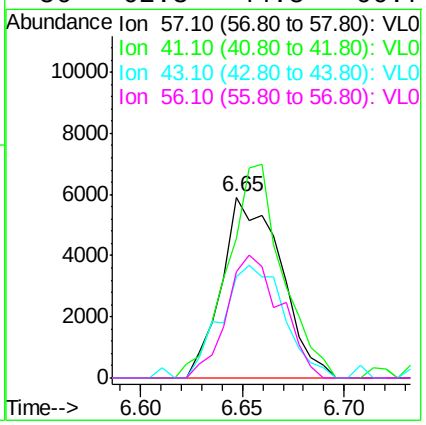


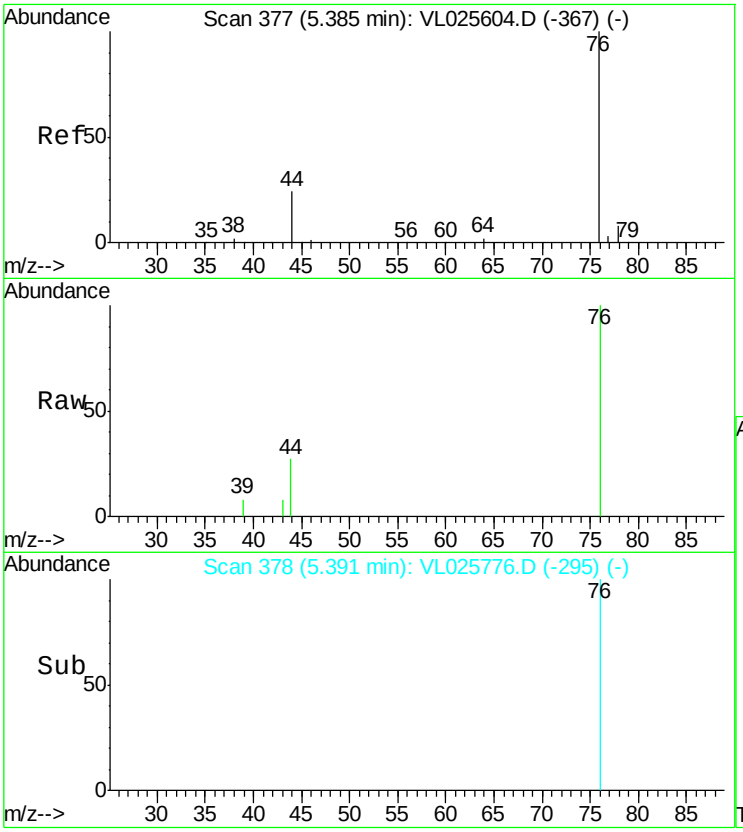


#26
Hexane
Concen: 0.16 ppbv
RT: 6.65 min Scan# 584
Delta R.T. -0.01 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Tgt Ion: 57 Resp: 11907

Ion	Ratio	Lower	Upper
57	100		
41	112.6	81.4	122.2
43	73.9	171.4	257.2#
56	62.3	44.5	66.7



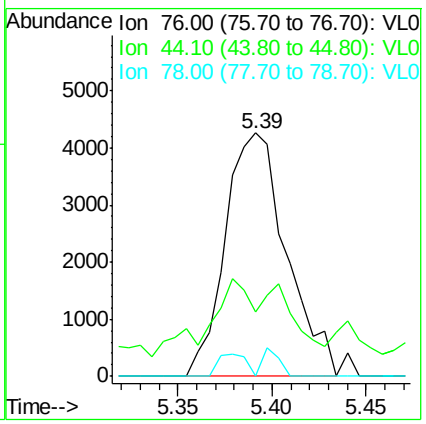


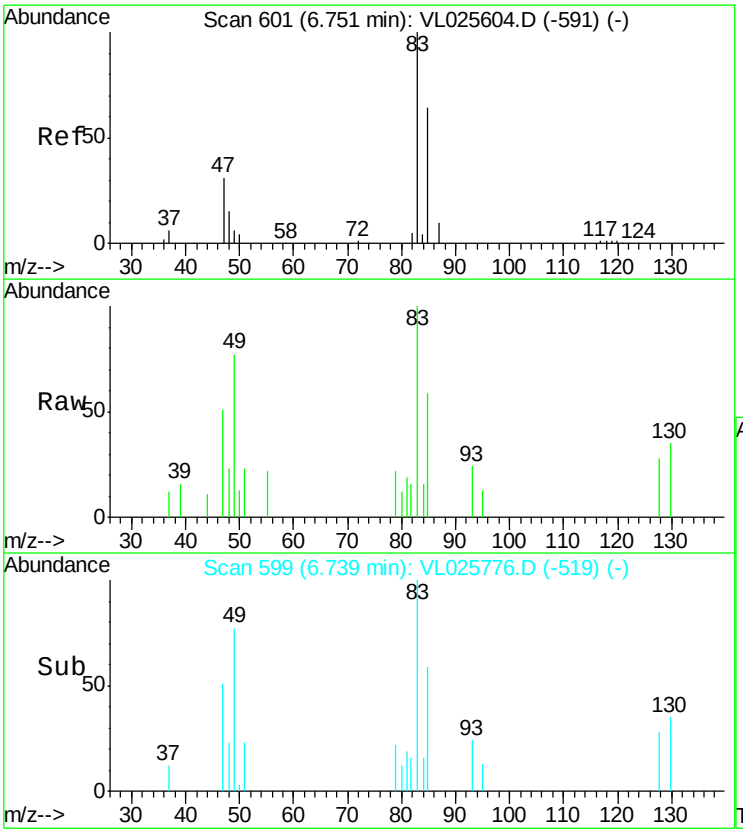
#27
Carbon Disulfide
Concen: 0.08 ppbv
RT: 5.39 min Scan# 378
Delta R.T. 0.01 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Instrument :
MSVOA_L
ClientSampleId :
DIN46-INFLUENT-072315

Tgt Ion: 76 Resp: 9581

Ion	Ratio	Lower	Upper
76	100		
44	45.6	20.2	30.4#
78	7.3	7.4	11.2#

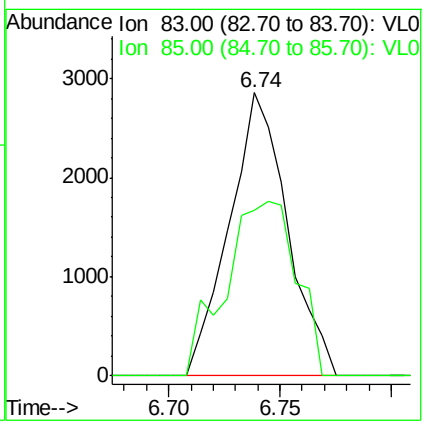


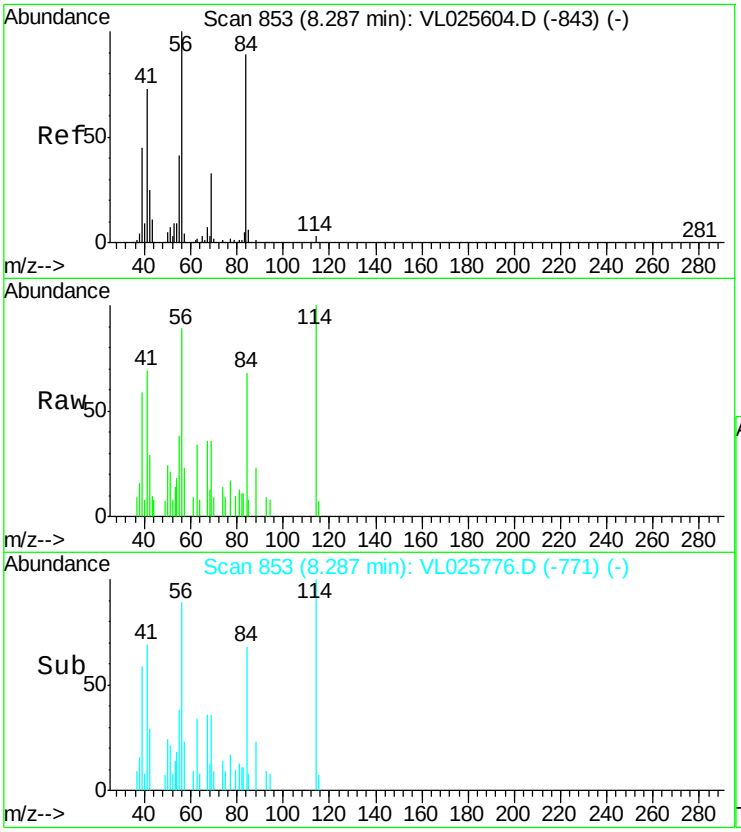


#29
Chloroform
Concen: 0.04 ppbv
RT: 6.74 min Scan# 599
Delta R.T. -0.01 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Tgt Ion: 83 Resp: 5177

Ion	Ratio	Lower	Upper
83	100		
85	58.6	51.6	77.4



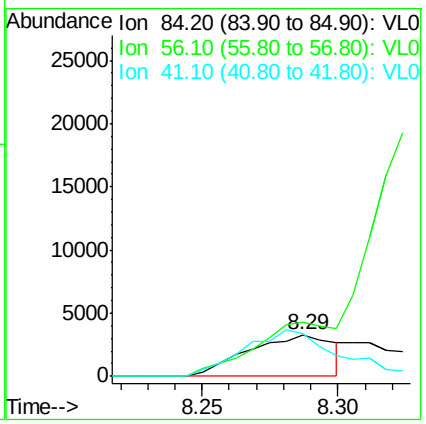


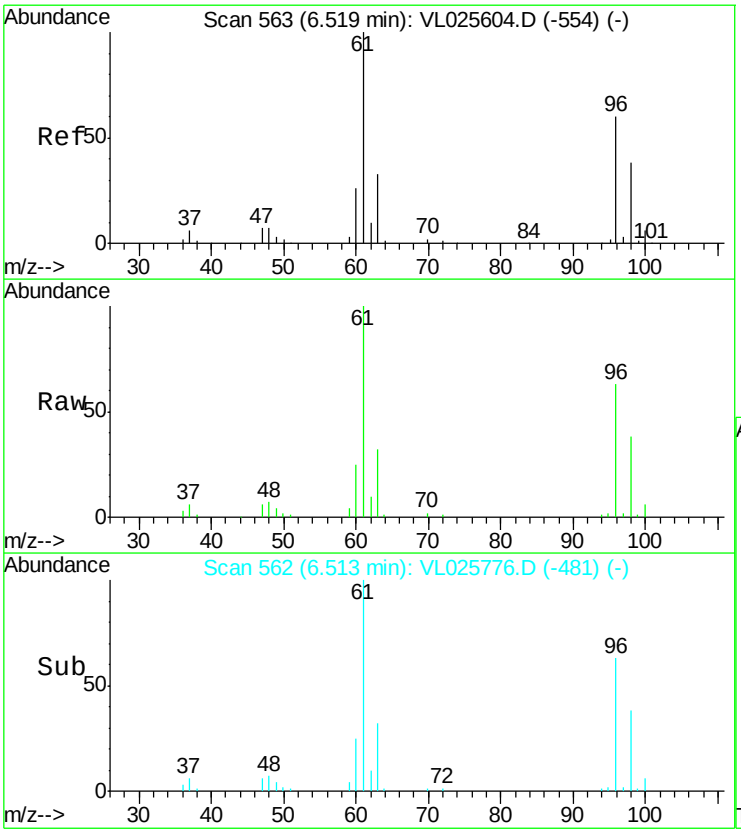
#30
Cyclohexane
Concen: 0.10 ppbv
RT: 8.29 min Scan# 853
Delta R.T. -0.00 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Instrument :
MSVOA_L
ClientSampleId :
DIN46-INFLUENT-072315

Tgt Ion: 84 Resp: 7172

Ion	Ratio	Lower	Upper
84	100		
56	0.0	97.5	146.3#
41	129.1	65.4	98.2#

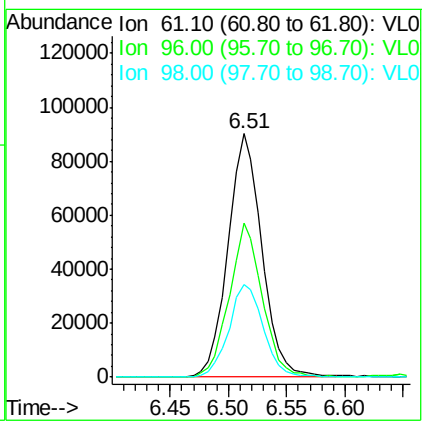


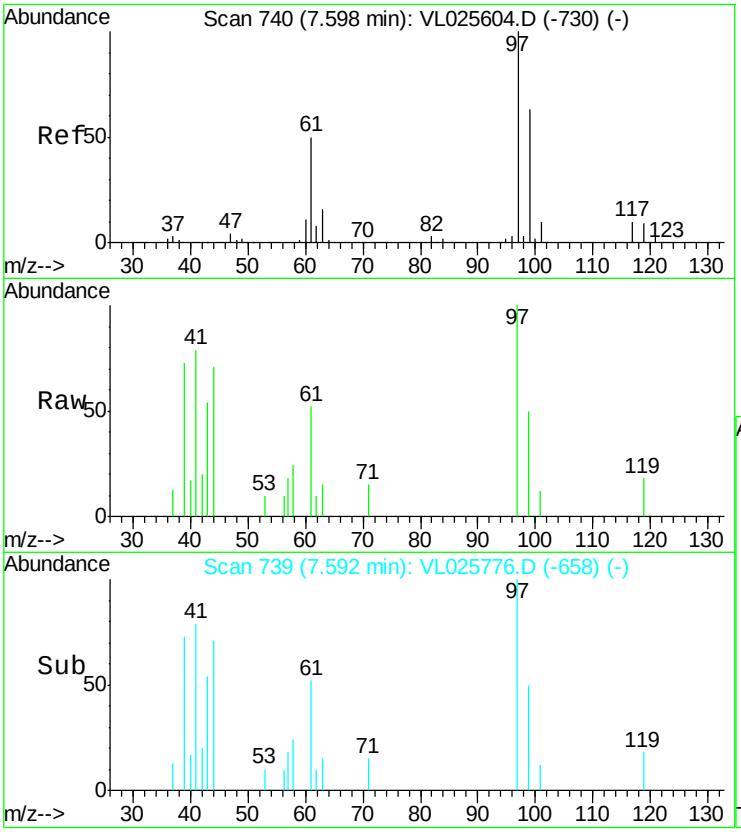


#31
cis-1,2-Dichloroethene
Concen: 2.56 ppbv
RT: 6.51 min Scan# 562
Delta R.T. -0.01 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Tgt Ion: 61 Resp: 183424

Ion	Ratio	Lower	Upper
61	100		
96	63.3	48.1	72.1
98	38.2	30.7	46.1



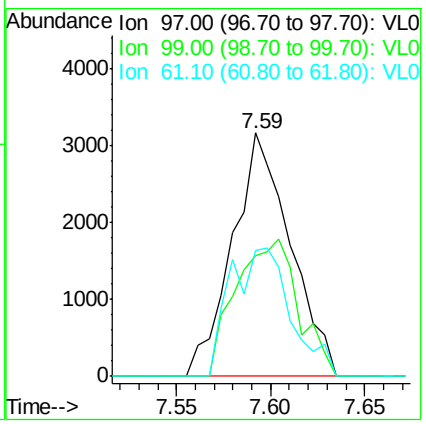


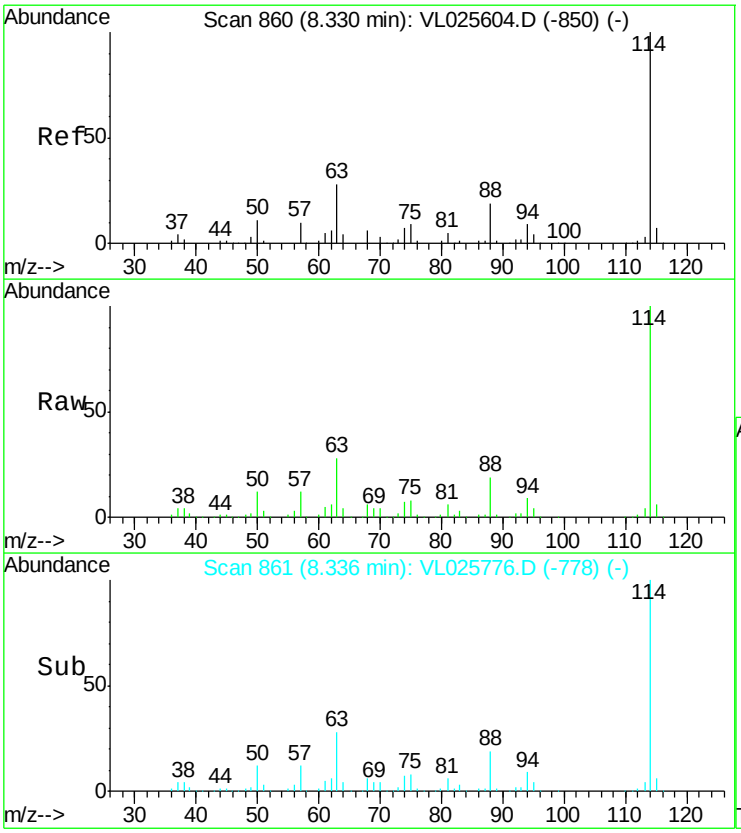
#32
1,1,1-Trichloroethane
Concen: 0.04 ppbv
RT: 7.59 min Scan# 739
Delta R.T. -0.01 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Instrument :
MSVOA_L
ClientSampleId :
DIN46-INFLUENT-072315

Tgt Ion: 97 Resp: 6733

Ion	Ratio	Lower	Upper
97	100		
99	60.7	51.2	76.8
61	55.2	40.4	60.6

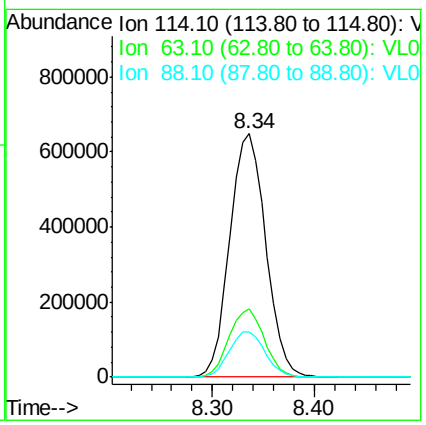


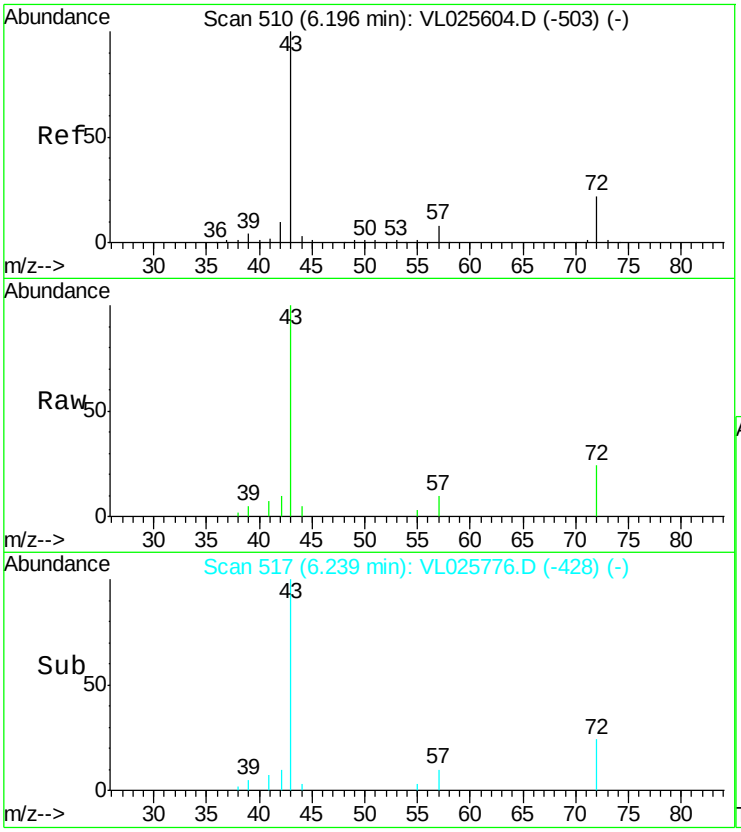


#33
1,4-Difluorobenzene
Concen: 10.00 ppbv
RT: 8.34 min Scan# 861
Delta R.T. 0.01 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Tgt Ion:114 Resp: 1590541

Ion	Ratio	Lower	Upper
114	100		
63	27.6	22.4	33.6
88	18.6	15.0	22.4



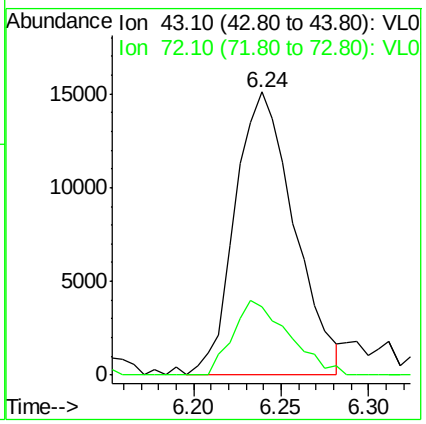


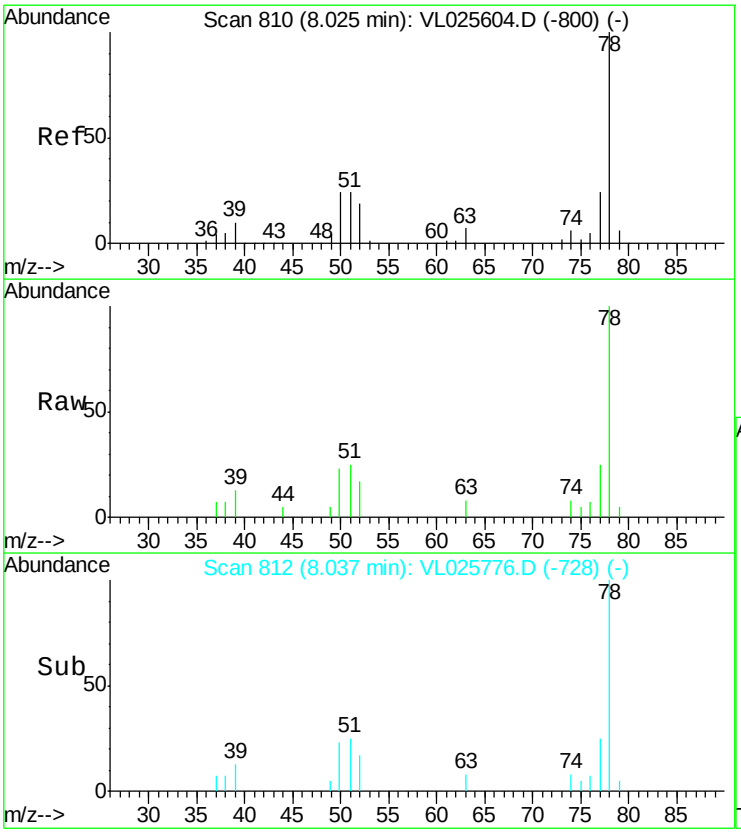
#34
2-Butanone
Concen: 0.40 ppbv
RT: 6.24 min Scan# 517
Delta R.T. 0.04 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Instrument :
MSVOA_L
ClientSampleId :
DIN46-INFLUENT-072315

Tgt Ion: 43 Resp: 35713

Ion	Ratio	Lower	Upper
43	100		
72	24.8	18.6	28.0

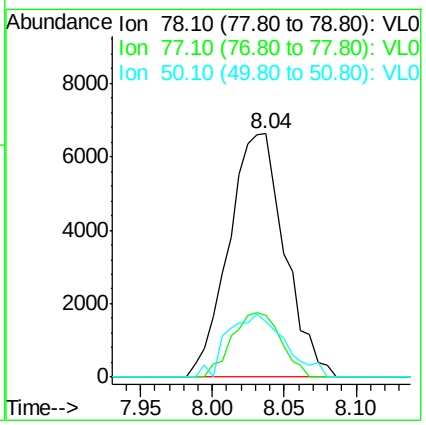


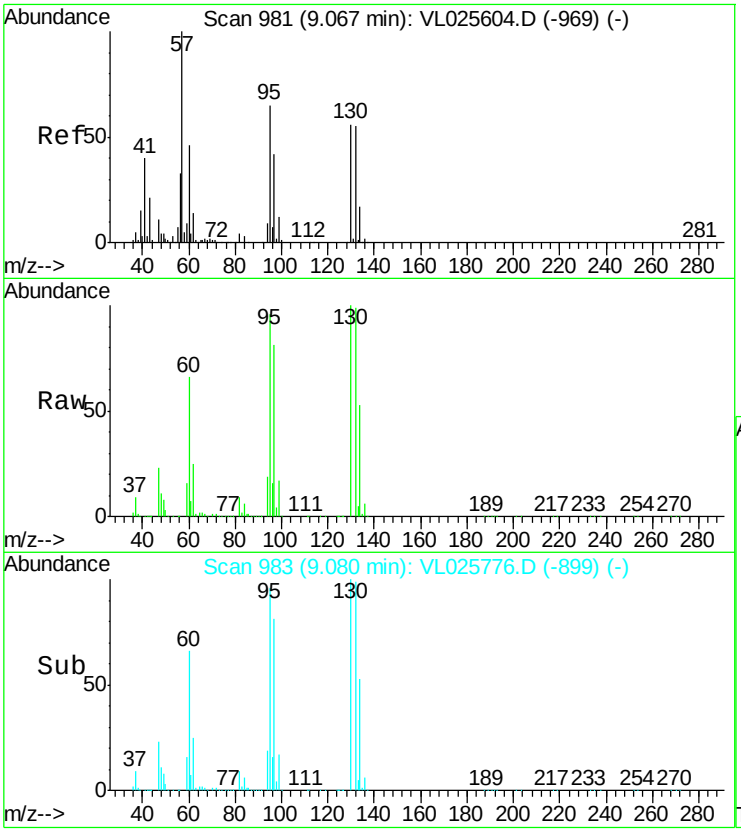


#36
Benzene
Concen: 0.12 ppbv
RT: 8.04 min Scan# 812
Delta R.T. 0.01 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Tgt Ion: 78 Resp: 17863

Ion	Ratio	Lower	Upper
78	100		
77	25.5	19.0	28.4
50	22.5	19.2	28.8



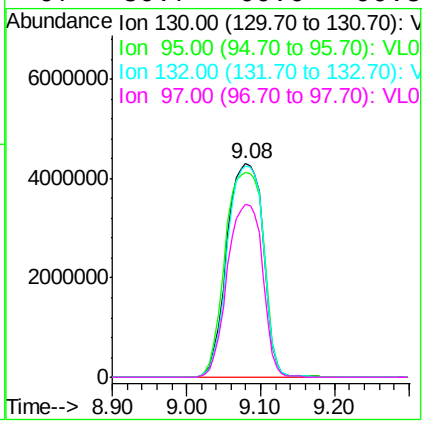


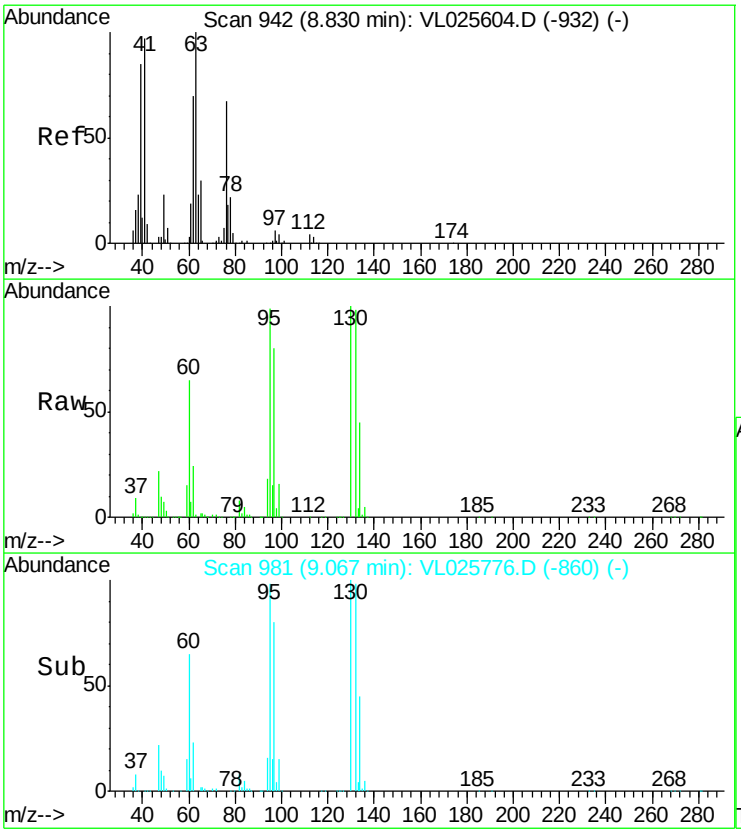
#38
Trichloroethene
Concen: 207.58 ppbv
RT: 9.08 min Scan# 983
Delta R.T. 0.01 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Instrument :
MSVOA_L
ClientSampleId :
DIN46-INFLUENT-072315

Tgt Ion:130 Resp:14702470

Ion	Ratio	Lower	Upper
130	100		
95	96.2	94.2	141.4
132	98.7	78.6	118.0
97	80.7	60.6	90.8

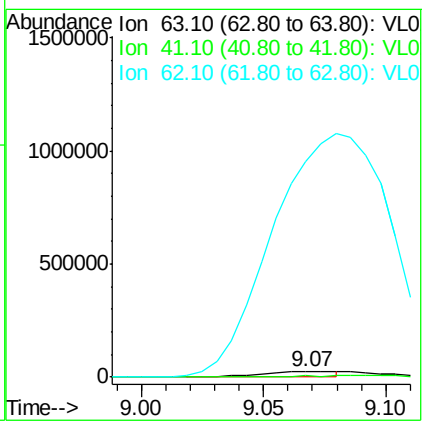


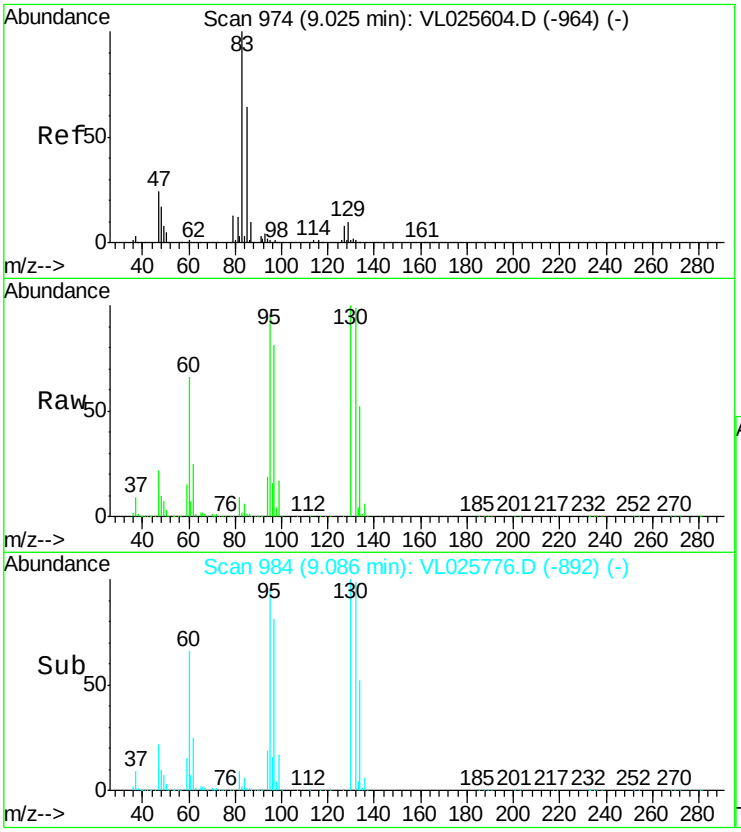


#39
1,2-Dichloropropane
Concen: 0.94 ppbv
RT: 9.07 min Scan# 981
Delta R.T. 0.24 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Tgt Ion: 63 Resp: 52789

Ion	Ratio	Lower	Upper
63	100		
41	17.9	78.0	117.0#
62	4022.1	55.7	83.5#



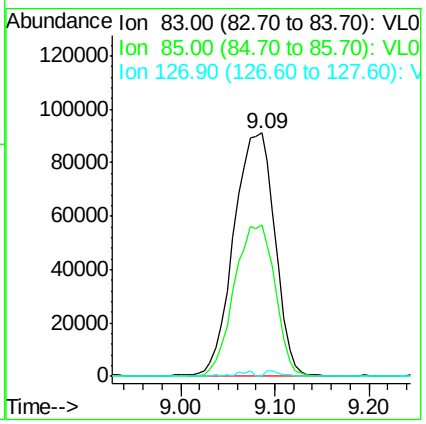


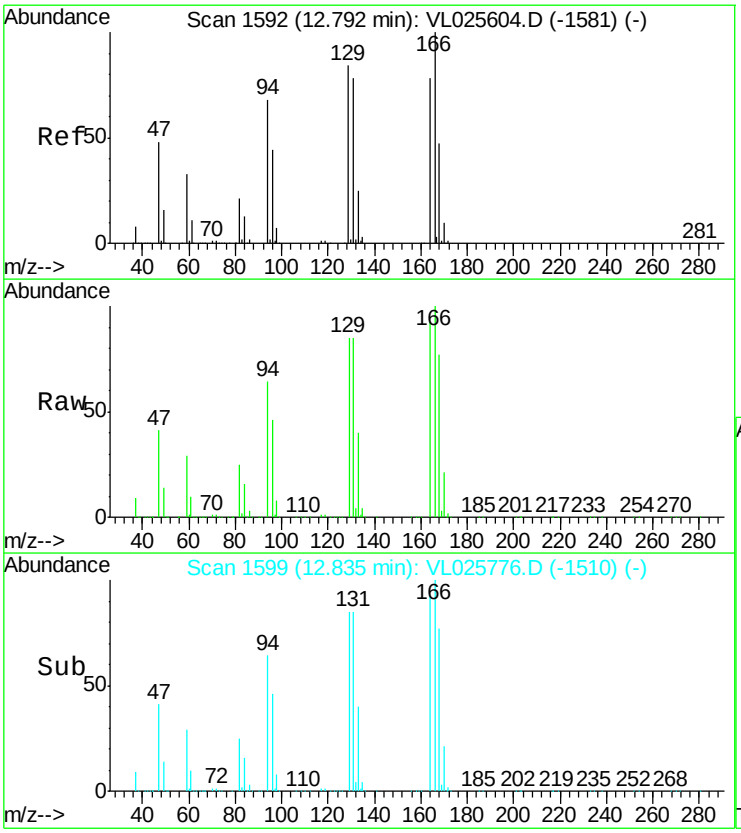
#42
Bromodichloromethane
Concen: 1.77 ppbv
RT: 9.09 min Scan# 984
Delta R.T. 0.06 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Instrument :
MSVOA_L
ClientSampleId :
DIN46-INFLUENT-072315

Tgt Ion: 83 Resp: 278357

Ion	Ratio	Lower	Upper
83	100		
85	62.0	51.3	76.9
127	0.0	6.0	9.0#

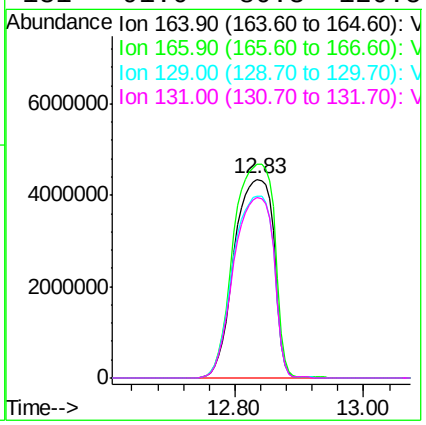


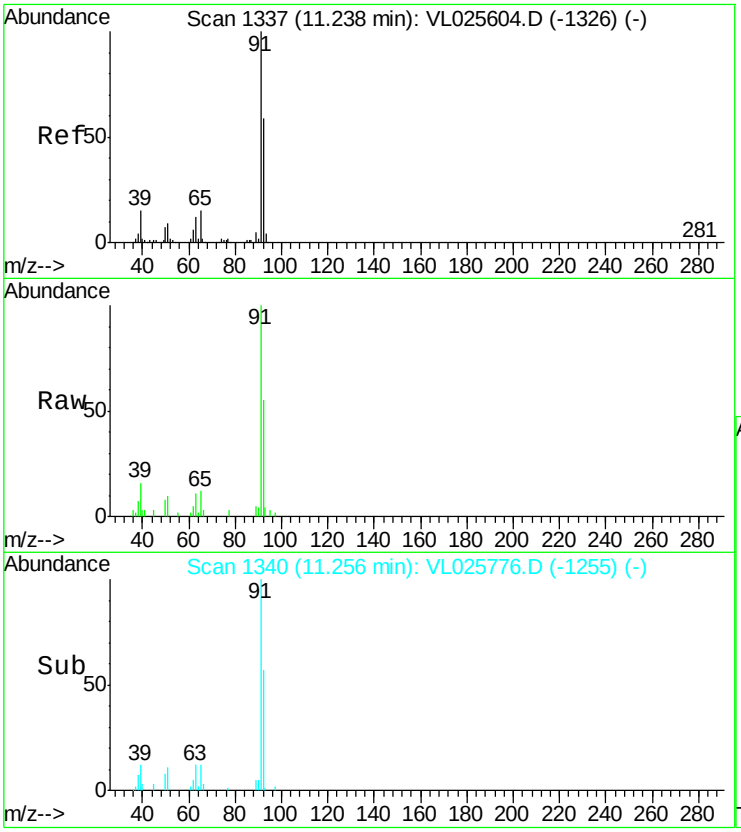


#52
Tetrachloroethene
Concen: 240.38 ppbv
RT: 12.83 min Scan# 1599
Delta R.T. 0.04 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Tgt Ion:164 Resp:18365102

Ion	Ratio	Lower	Upper
164	100		
166	107.4	102.3	153.5
129	91.5	86.2	129.4
131	91.0	80.3	120.5



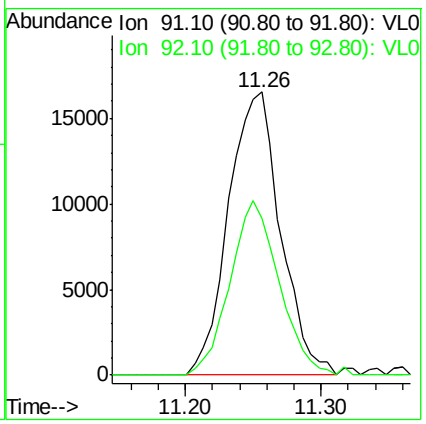


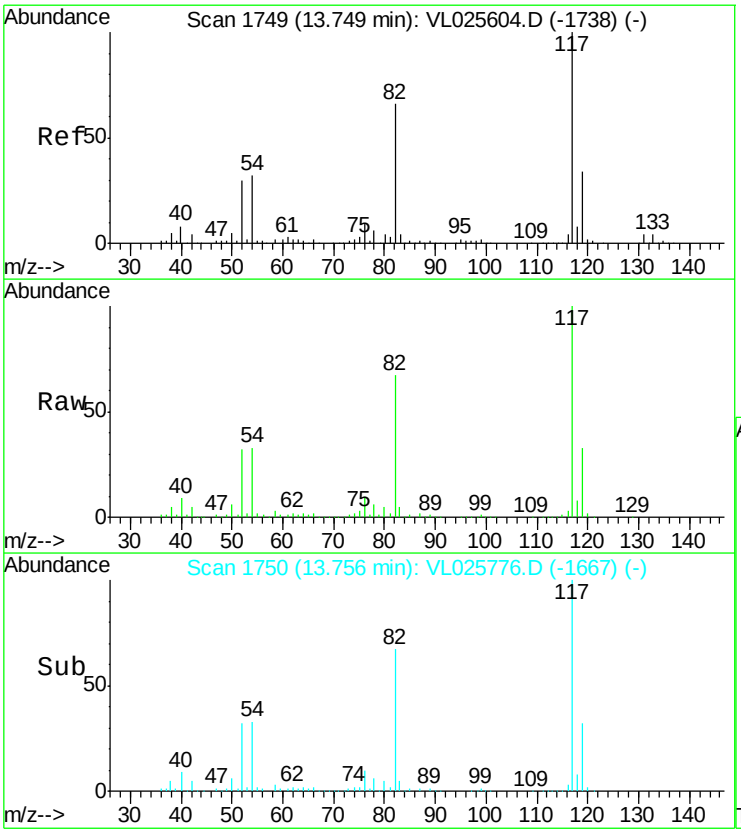
#53
Toluene
Concen: 0.21 ppbv
RT: 11.26 min Scan# 1340
Delta R.T. 0.02 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Instrument :
MSVOA_L
ClientSampleId :
DIN46-INFLUENT-072315

Tgt Ion: 91 Resp: 44162

Ion	Ratio	Lower	Upper
91	100		
92	58.5	48.2	72.2

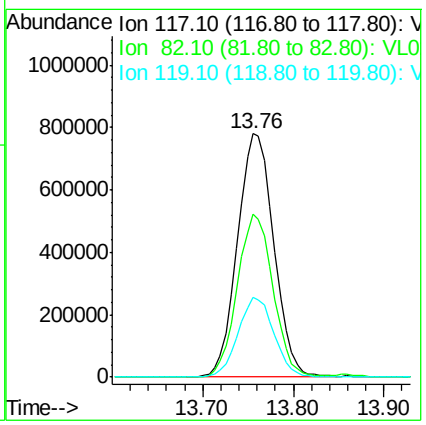


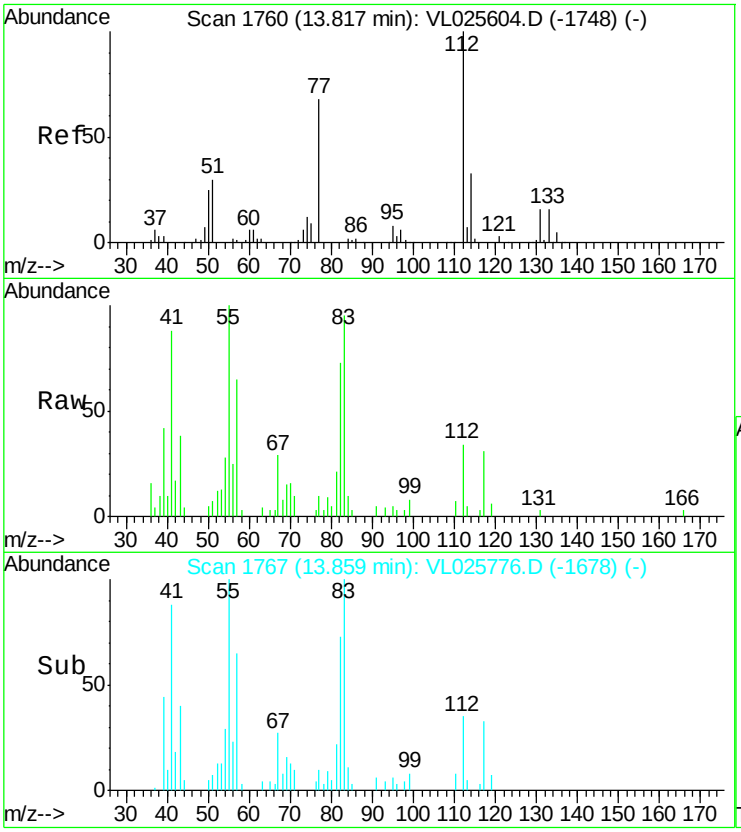


#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 13.76 min Scan# 1750
Delta R.T. 0.01 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Tgt Ion:117 Resp: 2178587

Ion	Ratio	Lower	Upper
117	100		
82	67.0	50.5	75.7
119	32.5	45.1	67.7#



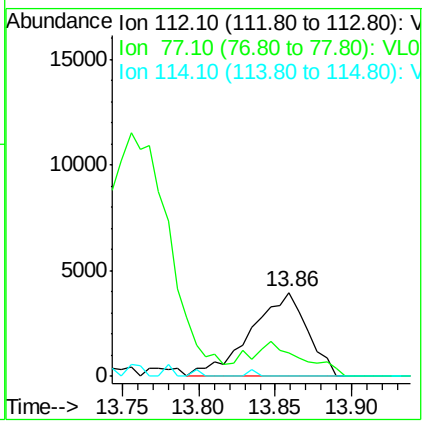


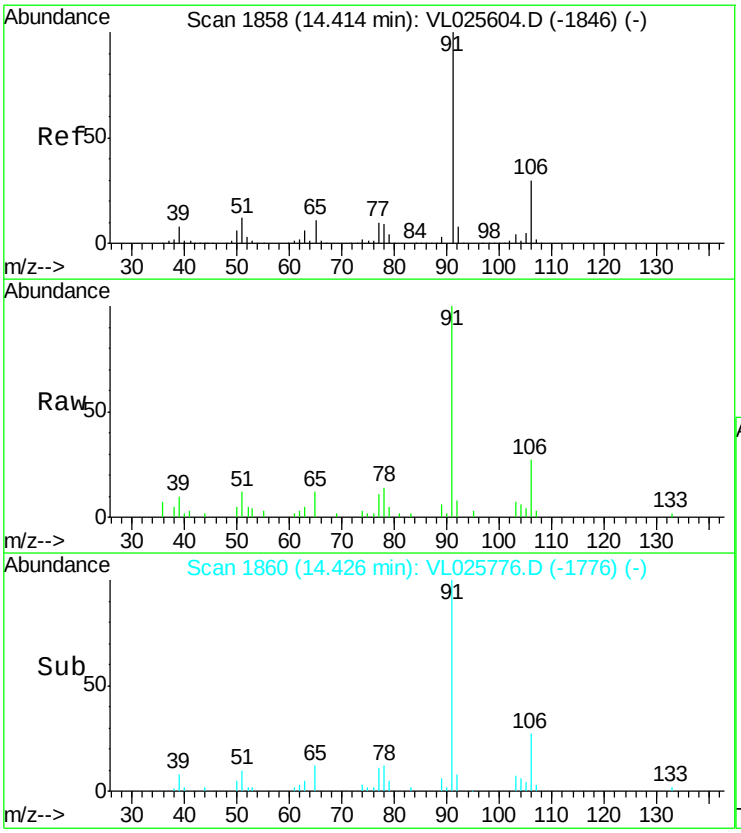
#57
Chlorobenzene
Concen: 0.04 ppbv
RT: 13.86 min Scan# 1767
Delta R.T. 0.04 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Instrument :
MSVOA_L
ClientSampleId :
DIN46-INFLUENT-072315

Tgt Ion:112 Resp: 10140

Ion	Ratio	Lower	Upper
112	100		
77	19.5	55.2	82.8#
114	0.0	29.4	36.0#

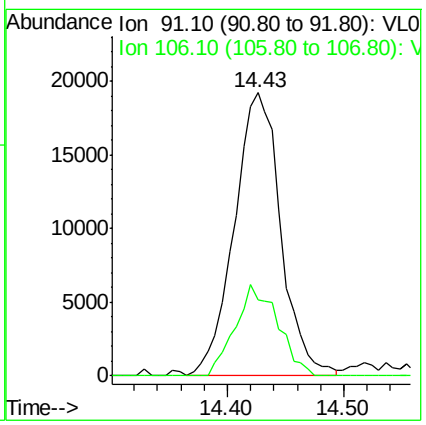


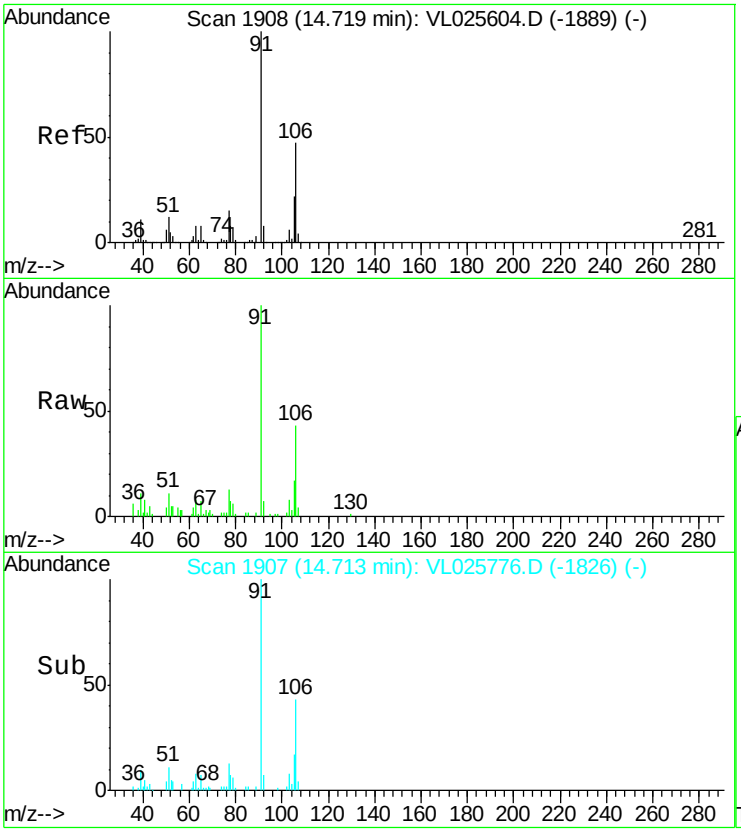


#58
Ethyl Benzene
Concen: 0.15 ppbv
RT: 14.43 min Scan# 1860
Delta R.T. 0.01 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Tgt Ion: 91 Resp: 53494

Ion	Ratio	Lower	Upper
91	100		
106	26.9	24.2	36.2



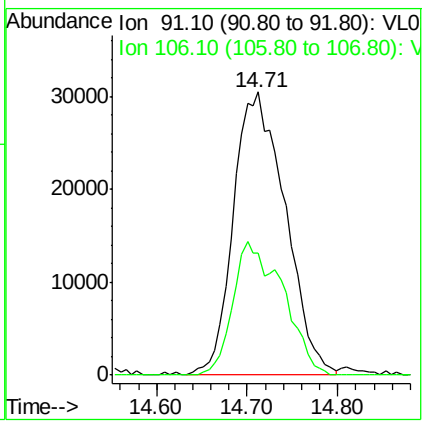


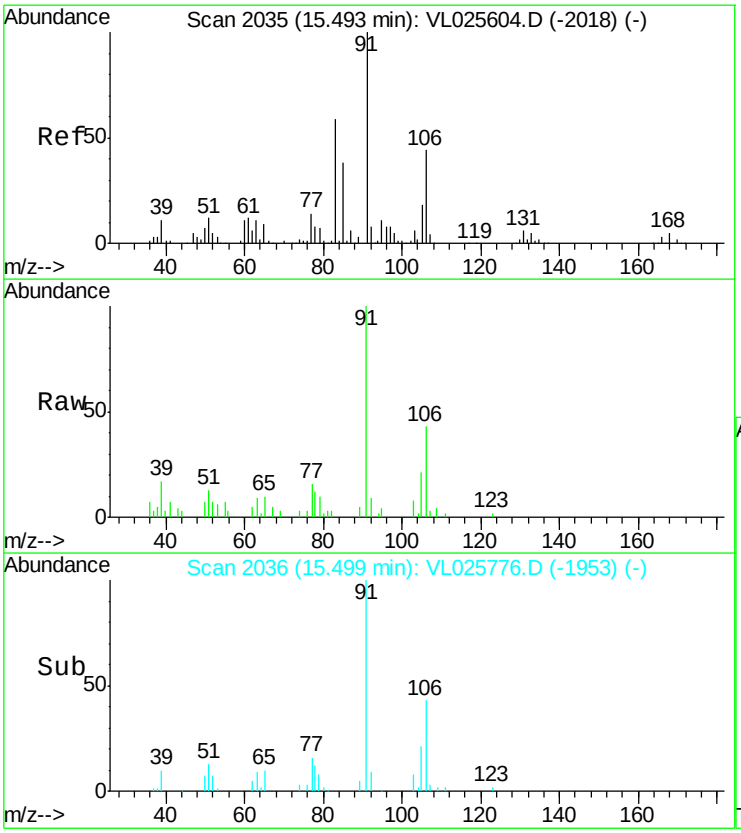
#59
m/p-Xylene
Concen: 0.38 ppbv
RT: 14.71 min Scan# 1907
Delta R.T. -0.01 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Instrument :
MSVOA_L
ClientSampleId :
DIN46-INFLUENT-072315

Tgt Ion: 91 Resp: 120986

Ion	Ratio	Lower	Upper
91	100		
106	45.5	37.9	56.9

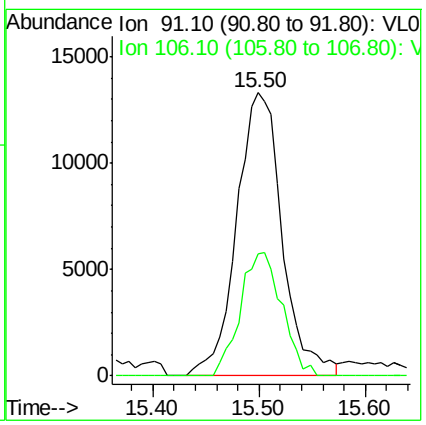


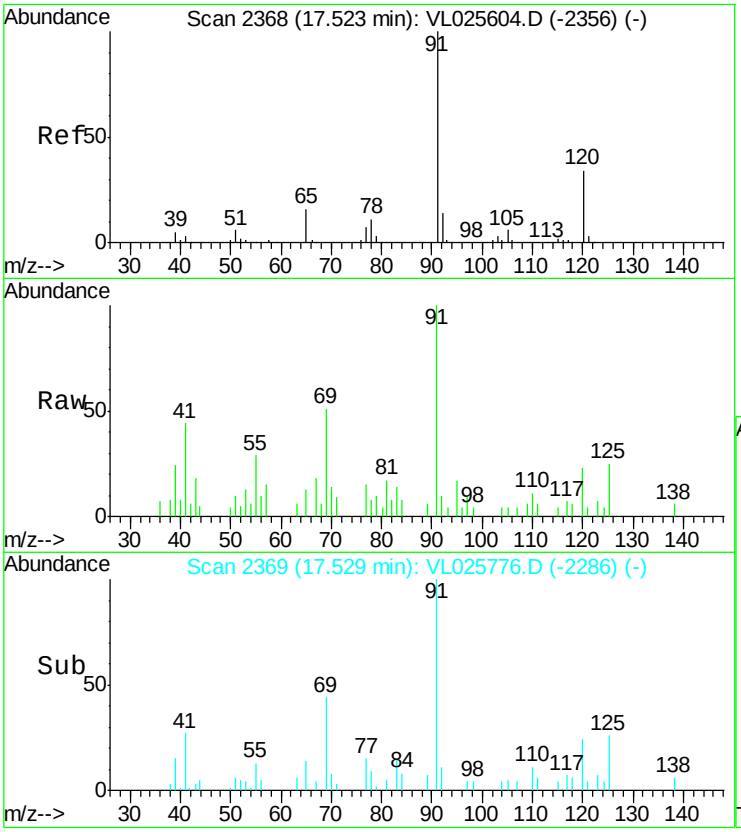


#60
o-Xylene
Concen: 0.12 ppbv
RT: 15.50 min Scan# 2036
Delta R.T. 0.01 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Tgt Ion: 91 Resp: 39874

Ion	Ratio	Lower	Upper
91	100		
106	39.9	22.1	66.1



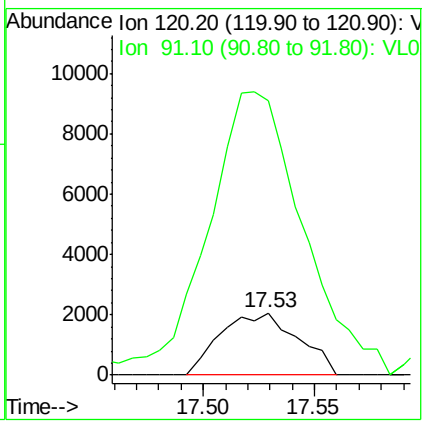


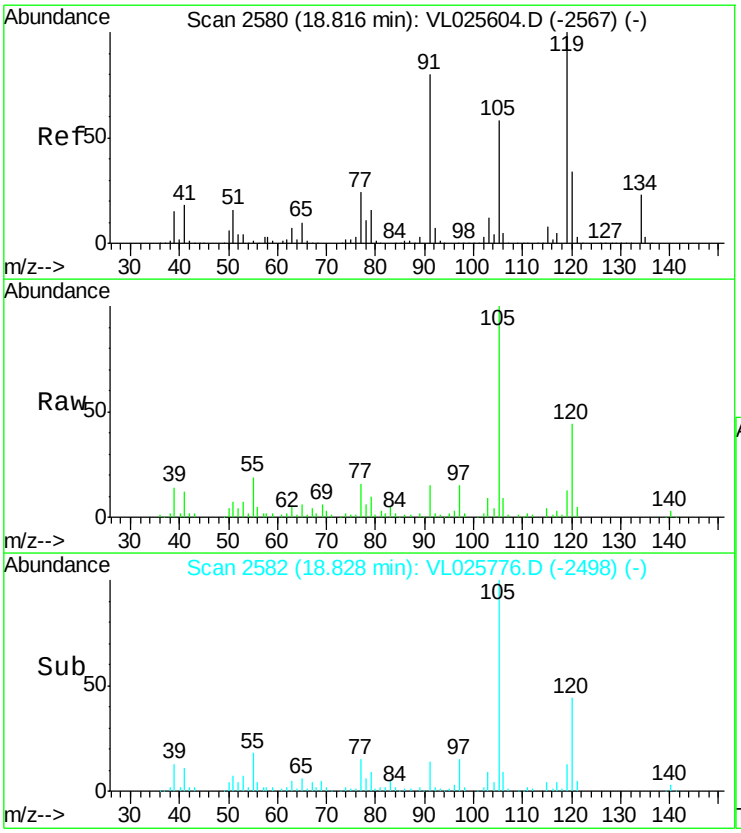
#64
n-propylbenzene
Concen: 0.04 ppbv
RT: 17.53 min Scan# 2369
Delta R.T. 0.01 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Instrument :
MSVOA_L
ClientSampleId :
DIN46-INFLUENT-072315

Tgt Ion:120 Resp: 4989

Ion	Ratio	Lower	Upper
120	100		
91	624.5	370.5	555.7#

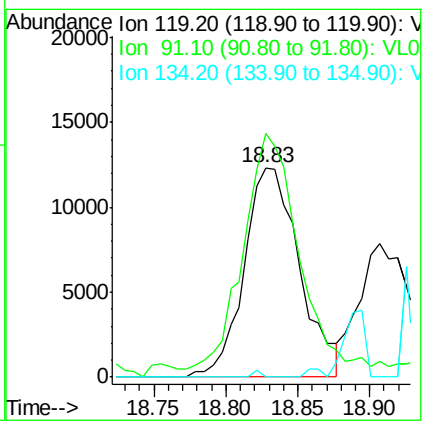


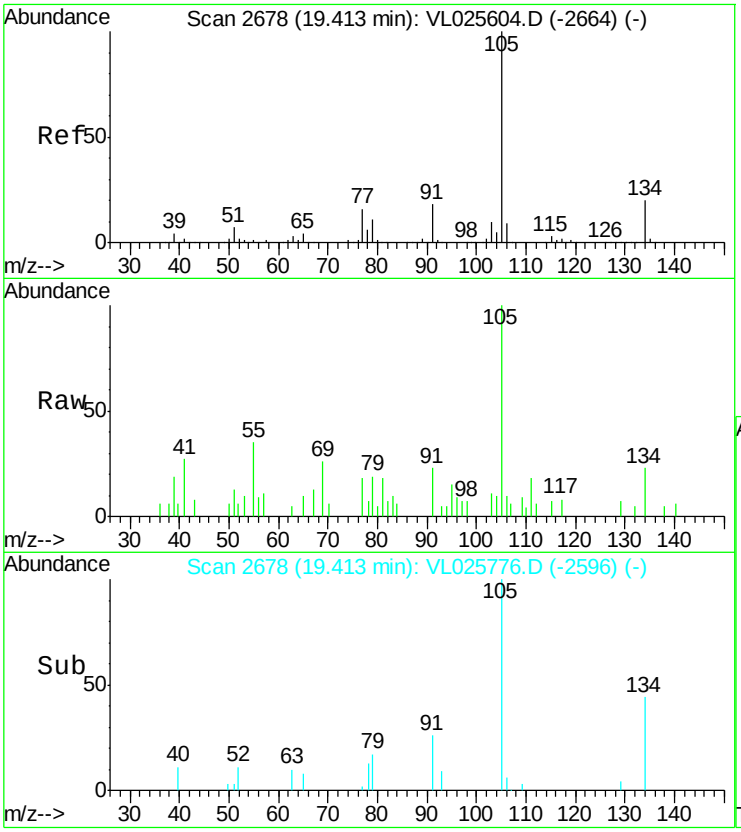


#65
tert-Butylbenzene
Concen: 0.08 ppbv
RT: 18.83 min Scan# 2582
Delta R.T. 0.01 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Tgt Ion:119 Resp: 32883

Ion	Ratio	Lower	Upper
119	100		
91	134.6	64.5	96.7#
134	0.0	17.4	26.0#



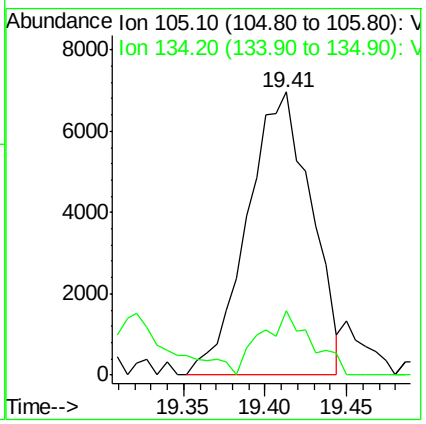


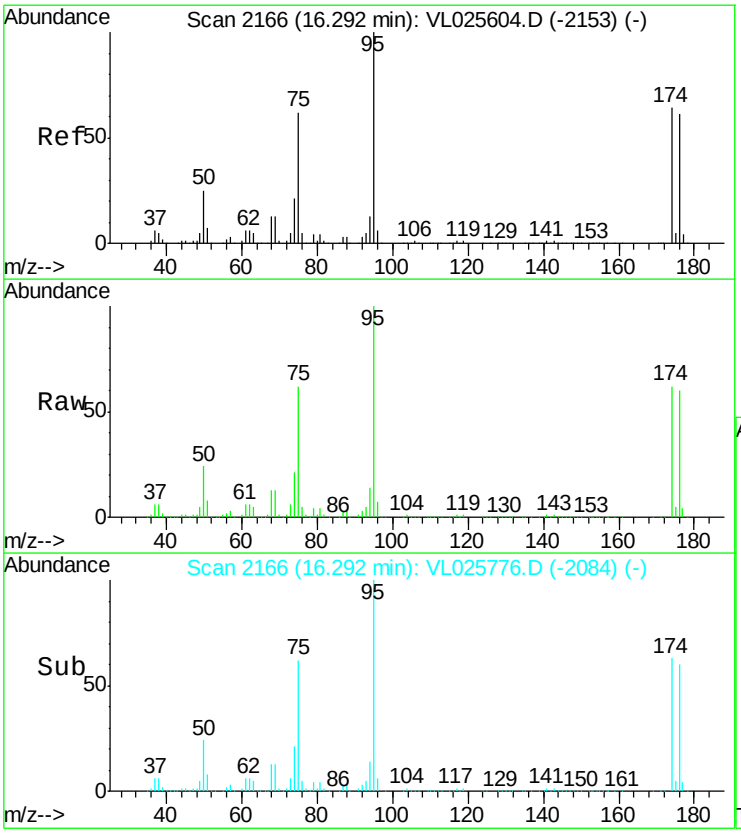
#67
sec-Butylbenzene
Concen: 0.03 ppbv
RT: 19.41 min Scan# 2678
Delta R.T. -0.00 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Instrument :
MSVOA_L
ClientSampleId :
DIN46-INFLUENT-072315

Tgt Ion:105 Resp: 18982

Ion	Ratio	Lower	Upper
105	100		
134	17.8	15.4	23.2

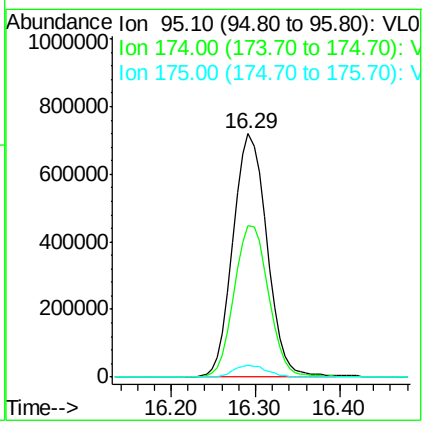


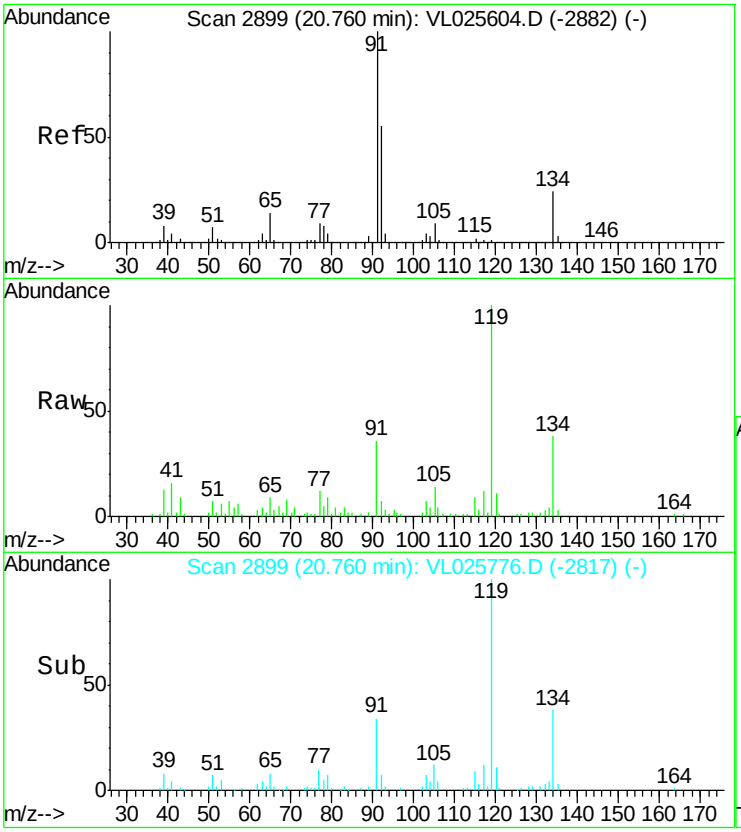


#68
1-Bromo-4-Fluorobenzene
Concen: 10.69 ppbv
RT: 16.29 min Scan# 2166
Delta R.T. -0.00 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Tgt Ion: 95 Resp: 1965203

Ion	Ratio	Lower	Upper
95	100		
174	63.6	52.0	78.0
175	4.9	3.9	5.9



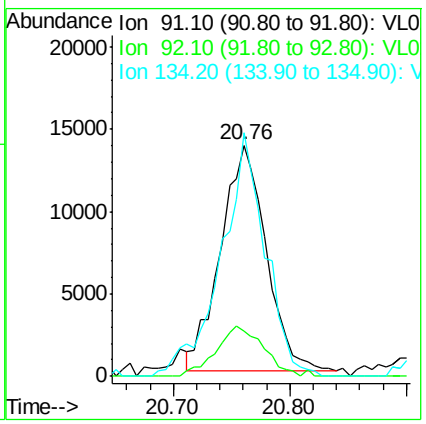


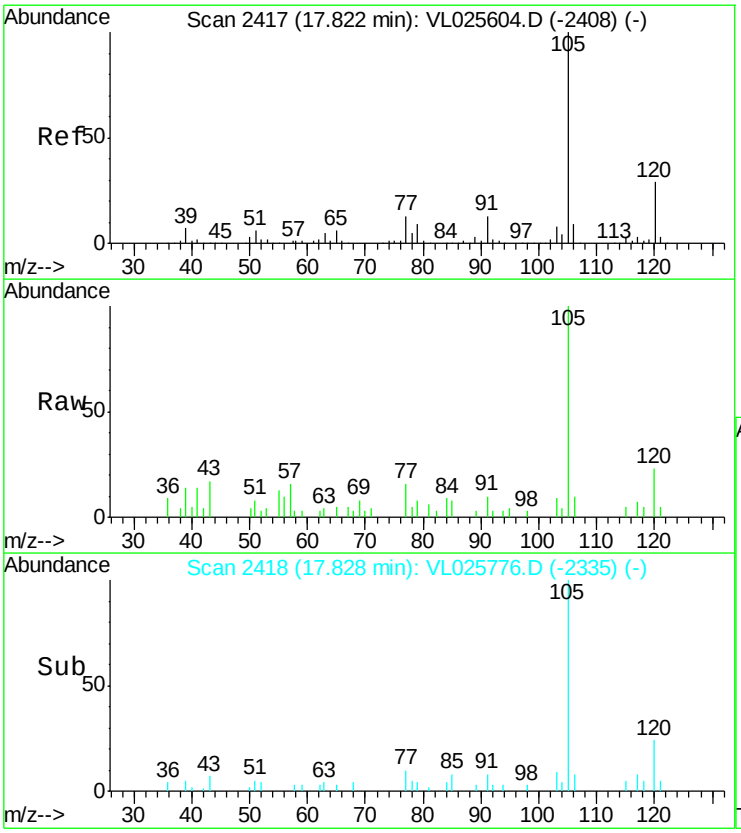
#70
n-Butylbenzene
Concen: 0.07 ppbv
RT: 20.76 min Scan# 2899
Delta R.T. -0.00 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Instrument :
MSVOA_L
ClientSampleId :
DIN46-INFLUENT-072315

Tgt Ion: 91 Resp: 37058

Ion	Ratio	Lower	Upper
91	100		
92	23.5	44.3	66.5#
134	105.7	19.4	29.2#

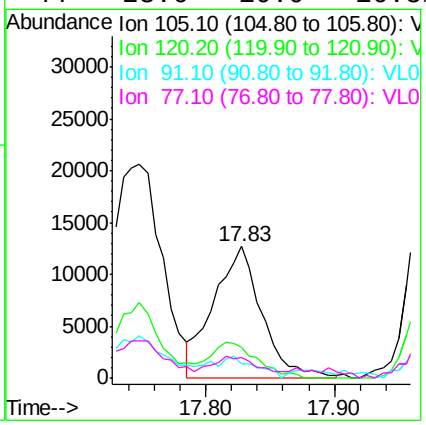


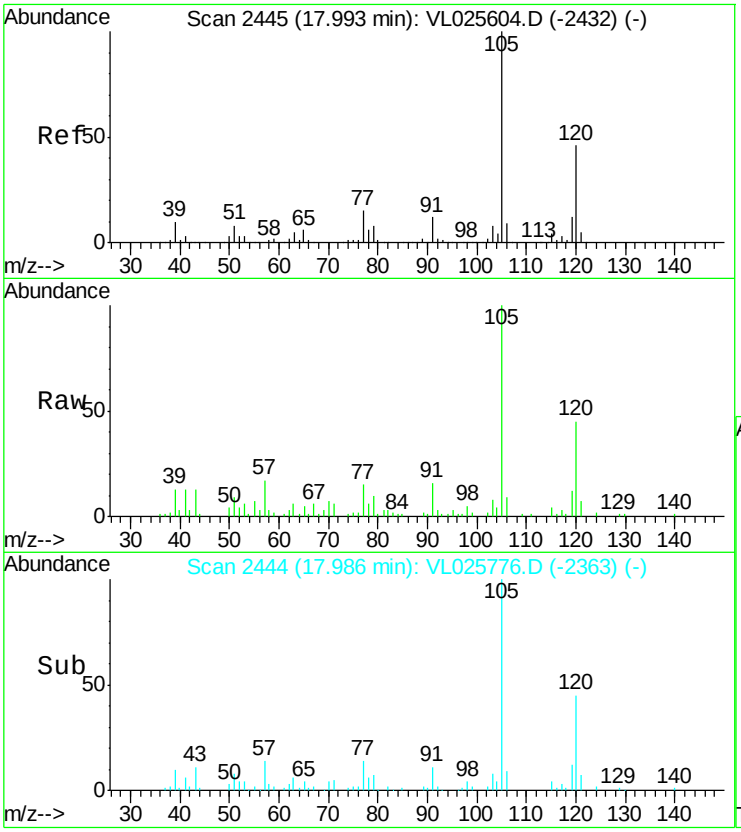


#72
4-Ethyltoluene
Concen: 0.09 ppbv
RT: 17.83 min Scan# 2418
Delta R.T. 0.01 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Tgt Ion:105 Resp: 33241

Ion	Ratio	Lower	Upper
105	100		
120	27.8	23.9	35.9
91	5.9	10.3	15.5#
77	23.6	10.9	16.3#



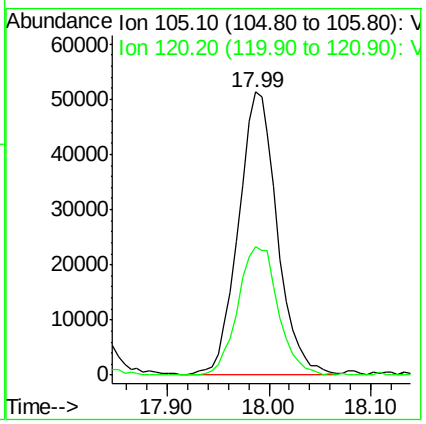


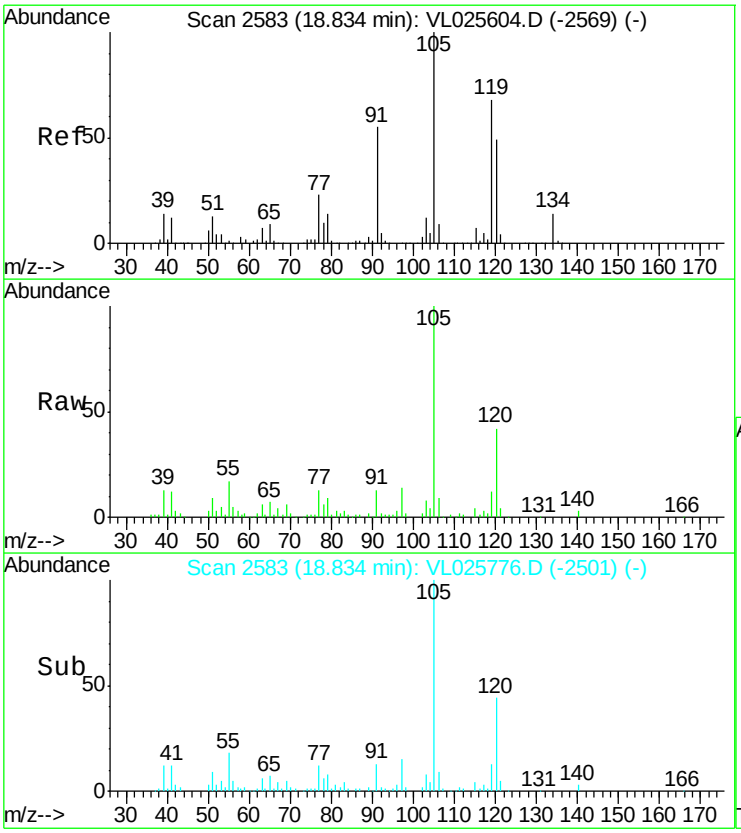
#73
1,3,5-Trimethylbenzene
Concen: 0.37 ppbv
RT: 17.99 min Scan# 2444
Delta R.T. -0.01 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Instrument :
MSVOA_L
ClientSampleId :
DIN46-INFLUENT-072315

Tgt Ion:105 Resp: 136066

Ion	Ratio	Lower	Upper
105	100		
120	45.5	37.0	55.4





#74
1,2,4-Trimethylbenzene
Concen: 0.65 ppbv
RT: 18.83 min Scan# 2583
Delta R.T. -0.00 min
Lab File: VL025776.D
Acq: 28 Jul 2015 6:20

Tgt Ion:105 Resp: 270832

Ion	Ratio	Lower	Upper
105	100		
120	41.7	39.3	58.9
91	12.7	43.8	65.6#
77	12.3	18.3	27.5#