ATAS Evolution Workstation , Method *'Large Volume'*

General	
Method Name	Method1
Equilibration Time (sec)	5
End Time (sec)	300

- Name of the method and it will be displayed on the status view during the time that the method is active.
- Time that the OPTIC will stabilize its parameters after they are set to their initial values and after the ready input signal is received from the gas chromatograph.
- Method run time. Normally this is set equal to the GC run time.

Inlet Temperature	
Initial Temperature (°C)	35
Ramp Rate (°C/sec)	5,0
Final Temperature (°C)	200
Hold Time (sec)	137
Temperature Control	Keep Until End

- The temperature is normally set to about 5ºC - 10ºC or more below the atmospheric boiling point of the solvent.
- Do not use a too fast ramp rate, this will have the same effect as a hot injection. Normally 5ºC/sec is a good value for LVI.
- Final temperature of the OPTIC. Do not exceed the maximum temperature of the liner. ('A' type liner 325ºC and 8270 liner 305ºC) the maximum temperature of the liners can be found on our website, www.atasgl.com
- Time when floating point starts. (Floating = heater turned off, no cooling)
- Normally 'Keep Until End' will be used. However if you would like to cool the injector before the end of the GC run, you can select 'Floating'. (This will save cooling gas and electrical power.)
  (Please remember, there is no set-point for the final temperature, in this case it is called 'Floating')

Septum Purge Flow	
Septum Purge Flow (ml/min)	5

- Septum purge flow should be set here, normal setting would be 5 ml/min. The flow is controlled with a mass flow controller. (not a fixed restrictor.)

Solvent Venting	
Vent Mode	Threshold
Vent Time (sec)	30
Solvent Monitor Level (%)	10
Solvent Monitor Threshold	25

- For a large volume injection most of the solvent needs to be vented off. This can be done by time or by making use of the solvent sensor. 'Fixed Time': is a mode that uses user defined time to vent the solvent out. The injector will switch to the splitless state after vent time is elapsed. 'Solvent Level': the sensor is used and the injector will be switched to splitless depending on the level of the sensor. (solvent peak) 'Threshold': the sensor is used and the injector will switch to splitless depending on the threshold set for the sensor. (solvent peak)
- Time that the solvent will be vented. The 'Vent Flow' is active during this time. (most stable vent mode)
- The OPTIC will switch from vent flow to splitless when the sensor has reached the relative level (%) of the solvent peak. (relative vent mode)
- The OPTIC will switch from vent flow to splitless when the sensor has reached the threshold value of the negative slope of the solvent peak. (absolute vent mode) Start with value 100 and optimize.

Column Flow/Injector Pressure	
Carrier Control Mode	Flow
Transfer Time (sec)	180
Sample Sweep Column Flow (ml/mir	1,0
Transfer Column Flow (ml/min)	1,0
Start Column Flow (ml/min)	1,0
End Column Flow (ml/min)	1,0
Sample Sweep Injector Pressure (kF	50,0
Transfer Injector Pressure (kPa)	50,0
Start Injector Pressure (kPa)	50,0
End Injector Pressure (kPa)	50,0

- Select here Flow or Pressure. (the flow mode
- Time during which the 'Transfer Column Flow' is active. It is important to set this time not too short. If this time is too short, high boilers will be lost. 180 sec is sufficient in most applications.
- Column flow at the moment of injection and during the vent time.
- The column flow at the time that the compounds are transferred into the column. This flow can be increased to improve the sample transfer. (also called pressure pulse)
- Starting column flow. This should be set to an appropriate flow for the installed column.
- Column flow at the end of the run. Can be used to force the high-boilers out of the column. This is normally set equal to the initial column flow.

Split Flow	
Vent Flow (ml/min)	50
Split Flow (ml/min)	25

- Split flow during injection and 'Vent Time'.
- Split flow after the 'Transfer Time' is elapsed. (normal split flow)

Cryotrap section is only visible when it is selected in the Configuration/System Configuration

Cryotrap	
Cryotrap Low Temperature (°C)	30
Low Temperature Hold Time (sec)	0
Cryotrap High Temperature (°C)	35
Cryotrap Heat Ramp Rate (°C/sec)	15.0

Beginning temperature of the Cryotrap in the method. When LN2 is used -110°C will be fine for many compounds. With CO2 as a coolant the lowest temperature is -70°C.

Time that the trap is cold after the start in signal. This time should be longer than the delay time + time to ramp the inlet till the maximum set point.

Upper temperature of the trap. This should not be higher as the maximum temperature of the column.

Ramp rate of the Cryotrap from low to high. Normally set to 60°C/sec.

Auxiliary section is only visible when it is selected in the Configuration/System Configuration

Auxiliary Flow/Pressure	
Start Aux Flow 1 (ml/min)	10
Aux Gas Control Time 1 (sec)	600
End Aux Flow 1 (ml/min)	10
Start Aux Flow 2 (ml/min)	0
Aux Gas Control Time 2 (sec)	0
End Aux Flow 2 (ml/min)	0
[illegible]	0
[illegible]	[illegible]
End Aux Flow 7 (ml/min)	[illegible]
Start Aux Flow 8 (ml/min)	0
Aux Gas Control Time 8 (sec)	0
End Aux Flow 8 (ml/min)	0
Start Aux Flow 9 (ml/min)	0
Aux Gas Control Time 9 (sec)	0
End Aux Flow 9 (ml/min)	0

Start flow of the auxiliary flow module. Usually used for Inlet Backflush.

Time that step 1 is active.

End of step 1 flow.

To add a flow step: point with the computer mouse in the graphic display on the aux flow profile where you like to add a step and ‘right click’ with the mouse and select ‘Add Step’.